



# PROVINCIA DI REGGIO EMILIA

Corso Garibaldi, 59 - 42121 Reggio Emilia (RE)



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**MISSIONE 4  
COMPONENTE 1  
INVESTIMENTO 1.3**



titolo del progetto

**AMPLIAMENTO DELL'ISTITUTO MOTTI PER LA REALIZZAZIONE DI UNA PALESTRA**  
CUP: C84E22000030006  
**PROGETTO DEFINITIVO**

committente

PROVINCIA DI REGGIO EMILIA - Corso Garibaldi, 59 - 42121 Reggio Emilia  
IL DIRIGENTE Ing. Azzio Gatti IL RUP Arch. Ilaria Martini

titolo della tavola

**RELAZIONE DI CALCOLO DELLE STRUTTURE – FONDAZIONI**

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B	MAGGIO 2023	EFFETTUATE VERIFICHE CON SPETTRI DA RISPOSTA SISMICA LOCALE	LB

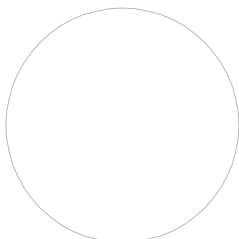


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AZIENDA CON  
SISTEMA DI GESTIONE  
CERTIFICATO DA DNV  
ISO 9001 • ISO 14001

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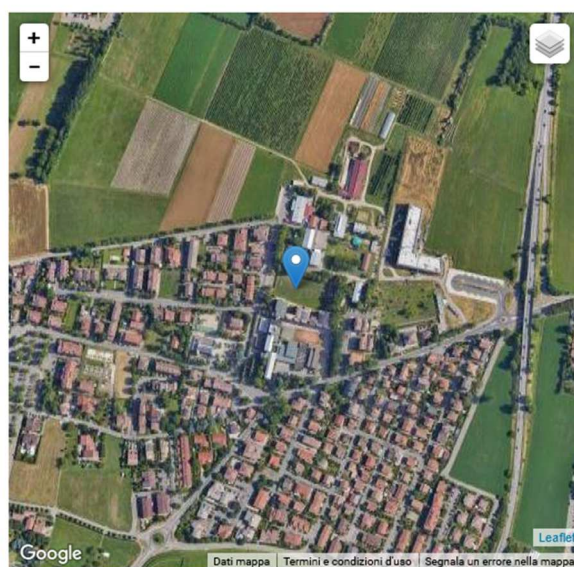
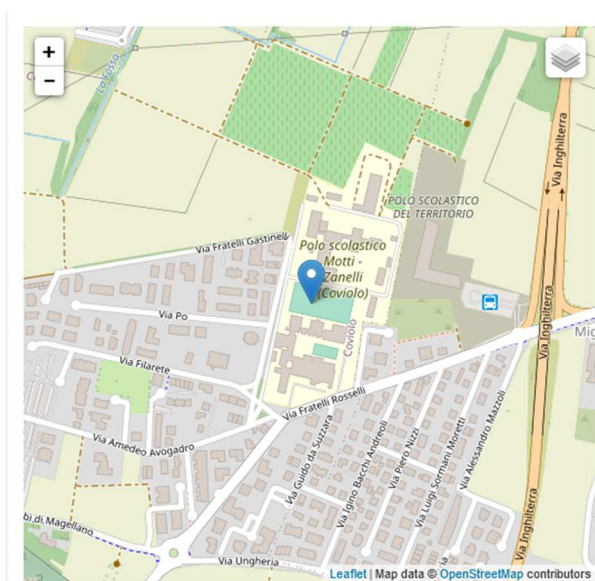


# 1. ILLUSTRAZIONE SINTETICA DEGLI ELEMENTI ESSENZIALI DEL PROGETTO STRUTTURALE

## 1.1. DESCRIZIONE DEL CONTESTO EDILIZIO E DELLE CARATTERISTICHE DEL TERRENO

Descrizione del contesto edilizio e delle caratteristiche geologiche, morfologiche e idrogeologiche del sito oggetto di intervento e con l'indicazione, per entrambe le tematiche, di eventuali problematiche riscontrate e delle soluzioni ipotizzate, tenuto conto anche delle indicazioni degli strumenti di pianificazione territoriale e urbanistica.

Il presente progetto si riferisce ad un impianto sportivo di nuova costruzione da destinarsi a PALESTRA SCOLASTICA ISTITUTO SUPERIORE MOTTI – LOC. COVIOLO REGGIO EMILIA.



## CARATTERIZZAZIONE GEOTECNICA (estratto dalla Relazione Geologica)

CARATTERIZZAZIONE GEOTECNICA						
Strato	Profondità [m]	Descrizione	$\gamma$ [ton/m <sup>3</sup> ]	$c_{uk}$ [daN/cm <sup>2</sup> ]	$\phi'_k$ [°]	$M_{ok}$ [daN/cm <sup>2</sup> ]
I	0.0 – 0.5	Terreno vegetale	---	---	---	---
II	0.5 – 2.0	Limi e argille	1.85	1.09	---	93
III	2.0 – 4.6	Ghiaie	1.85	---	35	561
IV	4.6 – 11.6	Argille consistenti con livelli di limi sabbiosi/sabbie	1.28	0.82	---	65
V	11.6 – 14.0	Ghiaie con sabbie	1.10	---	38	807
VI	14.0 – 15.0	Argille consistenti	0.94	0.97	---	86

Quota falda -9.00 m da p.c.

## CATEGORIA DI SOTTOSUOLO (estratto dalla Relazione Geologica)

Ai fini della definizione dell'azione sismica di progetto sono stati esaminati i dati ottenuti dalle prospezioni MASW (campagna geofisica preliminare svolta nel 2007), che permettono di caratterizzare il sottosuolo basandosi sulla misura diretta dei valori della velocità media delle onde di taglio  $V_s$ .

Da tale analisi si sono ottenuti i relativi valori di velocità delle onde  $V_s$ , per i vari strati individuati, di seguito riassunti:



ZN_A				
STRATO	Profondità	Spessore	Vs	Vs30
	[m]	[m]	[m/sec]	[m/sec]
1	p.c. – 0.36	0.36	134	312
2	0.36 – 1.48	1.12	156	
3	1.48 – 3.29	1.81	242	
4	3.29 – 7.00	3.71	330	
5	7.00 – 13.52	6.52	320	
6	13.52 – 30.00	16.48	349	

ZN_B				
STRATO	Profondità	Spessore	Vs	Vs30
	[m]	[m]	[m/sec]	[m/sec]
1	p.c. – 0.74	0.74	156	302
2	0.74 – 2.05	1.31	172	
3	2.05 – 5.07	3.02	275	
4	5.07 – 7.41	2.34	326	
5	7.41 – 12.86	5.45	301	
6	12.86 – 30.00	17.14	338	

In base a quanto sopra, ai vari strati sismostratigrafici individuati è stato associato il valore della velocità Vs direttamente misurata, consentendo di ottenere la VS30, cioè la velocità media di propagazione delle onde di taglio nei primi 30 m di sottosuolo, dall'espressione:

$$V_{s30} = \frac{30}{\sum \frac{h_i}{V_{Si}}}$$

dove

$h_i$  = spessore dello strato i-esimo

$V_{Si}$  = velocità onde S nello stato i-esimo

N = numero strati considerati

Ottenendo in base ai dati sopra esposti:

**ZN\_A - Vs30= 312 m/sec**

**ZN\_B - Vs30= 302 m/sec**

Da cui si evince un'elevata congruenza e convergenza dei dati, cui è quindi possibile associare una categoria del suolo di fondazione di tipo: **C - Depositi di terreni a grana grossa mediamente addensati o terreni a grana fina mediamente consistenti** con profondità del substrato superiori a 30 m, caratterizzati da un miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 180 m/s e 360 m/s.



Inoltre, ai fini della definizione dell'azione sismica di progetto nel sito definitivo di ubicazione del nuovo polo scolastico, sono stati esaminati i dati ottenuti dalla prospezione DH. Utilizzando le metodologie e le formule di cui all'elaborato fuori testo relativo all'indagine Down Hole, è possibile individuare la seguente sezione di sintesi dal piano di campagna:

Profondità	Vp	Vs	Ydin	v	E	G
[m]	[m/sec]	[m/sec]	[kN]		[MPa]	[MPa]
3.00	648.65	276.10	17.11	0.39	369.68	135.66
6.00	725.39	457.91	17.48	0.17	873.77	381.17
11.00	1206.97	192.94	19.26	0.49	217.38	74.54
23.00	1485.55	275.10	20.03	0.48	458.31	157.65
30.00	1874.28	333.60	20.94	0.48	705.03	242.29
34.00	1604.87	458.02	20.33	0.46	1266.06	443.45

In base a quanto sopra, ai vari strati sismostratigrafici individuati è stato associato il valore della velocità Vs direttamente misurata, consentendo di ottenere la VS30, cioè la velocità media di propagazione delle onde di taglio nei primi 30 m di sottosuolo, dall'espressione:

$$V_{s30} = \frac{30}{\sum \frac{h_i}{V_{Si}}}$$

dove

$h_i$  = spessore dello strato i-esimo

$V_{Si}$  = velocità onde S nello strato i-esimo

N = numero strati considerati

Ottenendo in base ai dati sopra esposti:

**Vs30= 277.94 m/sec**

Valore al quale è possibile associare una categoria del suolo di fondazione di tipo: **C - Depositi di terreni a grana grossa mediamente addensati o terreni a grana fina mediamente consistenti** con profondità del substrato superiori a 30 m, caratterizzati da un miglioramento delle proprietà meccaniche con la profondità e da valori di velocità equivalente compresi tra 180 m/s e 360 m/s.

**In accordo con il §3.2.2 NTC2018, poiché le condizioni stratigrafiche e le proprietà dei terreni sono chiaramente riconducibili alla categoria C, ai fini della definizione dell'azione sismica si può fare riferimento all'approccio semplificato che si basa sulla classificazione del sottosuolo in funzione dei valori della velocità di propagazione delle onde di taglio Vs.**

**A favore di sicurezza, come richiesto dalla Provincia di Reggio Emilia con prot.2023/16807 del 10/05/2023, sono state effettuate le verifiche considerando anche gli spettri di risposta derivanti dalle analisi di Risposta Sismica Locale forniti dal geologo. Tutte le verifiche effettuate risultano soddisfatte. Per brevità nella presente relazione si riportano i risultati delle verifiche svolte utilizzando l'approccio semplificato.**



## 1.2. DESCRIZIONE GENERALE DELLA STRUTTURA

*Descrizione generale della struttura, sia in elevazione che in fondazione, e della tipologia di intervento, con indicazione delle destinazioni d'uso previste per la costruzione, dettagliate per ogni livello entro e fuori terra, e dei vincoli imposti dal progetto architettonico.*

### FONDAZIONI

Come fondazioni è prevista la realizzazione di plinti al di sotto dei pilastri prefabbricati dell'US1 Servizi e dell'US2 Palestra e di un reticolo di travi a sezione rettangolare in corrispondenza dell'US3 Collegamento.

Al fine di evitare spostamenti differenziali alla base dei pilastri, i plinti saranno connessi tra loro mediante travi di collegamento. Le travi di collegamento perimetrali avranno anche la funzione di sorreggere i pannelli verticali prefabbricati della palestra e del corpo servizi.

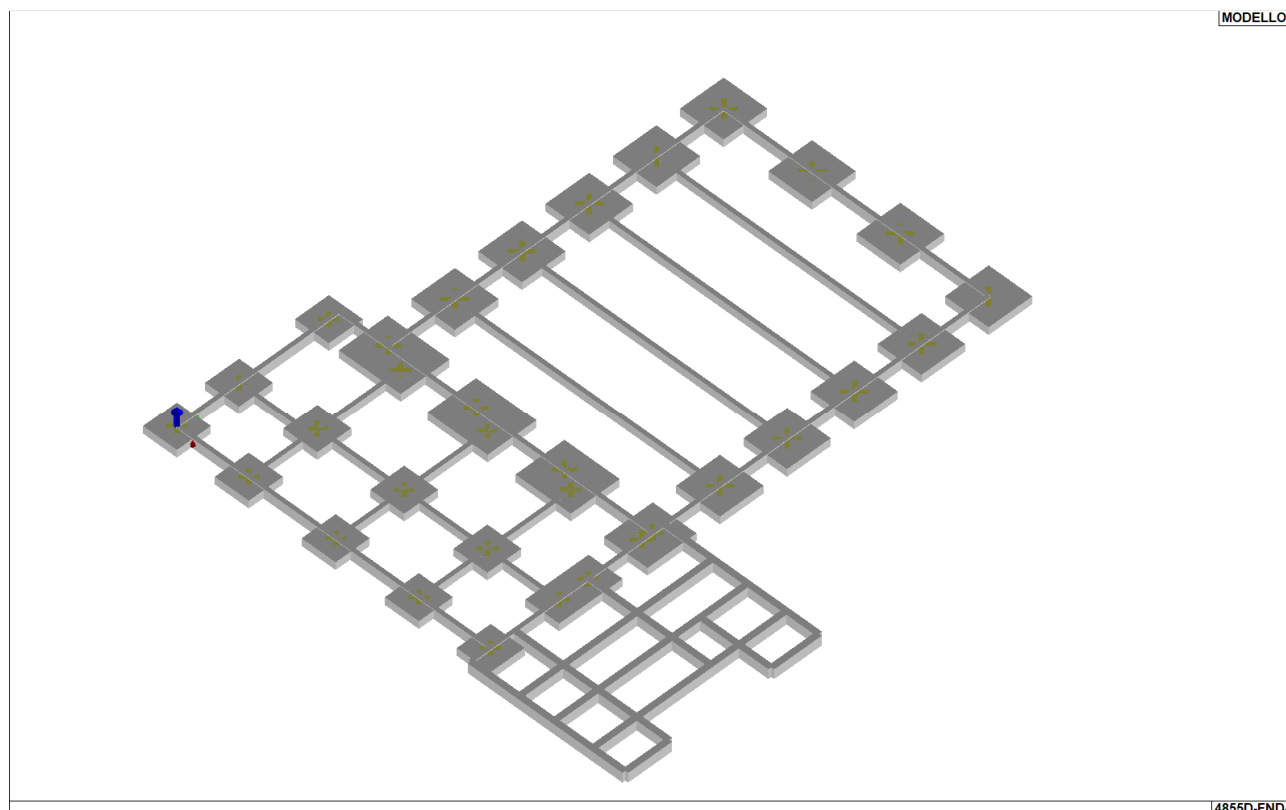


Figura 1 – Modello Fondazioni

## 1.3. NORMATIVA TECNICA DI RIFERIMENTO

*Normativa tecnica e riferimenti tecnici utilizzati, tra cui le eventuali prescrizioni sismiche contenute negli strumenti di pianificazione territoriale e urbanistica.*

- **D.M. 17/01/2018** “Aggiornamento delle Norme Tecniche per le Costruzioni”
- **Circolare C.S.LL.PP. n.7 del 21/01/2019** “Istruzioni per l'applicazione dell'Aggiornamento delle Norme Tecniche per le Costruzioni di cui al D.M. 17/01/2018”



## 1.4. AZIONI DI PROGETTO

Definizione dei parametri di progetto che concorrono alla definizione dell'azione sismica di base del sito (vita nominale  $V_N$ , classe d'uso, periodo di riferimento  $V_R$ , categoria del sottosuolo, categoria topografica, amplificazione topografica, zona sismica del sito, coordinate geografiche del sito), delle azioni considerate sulla costruzione e degli eventuali scenari di azioni eccezionali.

### 1.4.1. AZIONE SISMICA

L'azione sismica sulle costruzioni è valutata a partire dalla "pericolosità sismica di base", in condizioni ideali di sito di riferimento rigido con superficie topografica orizzontale.

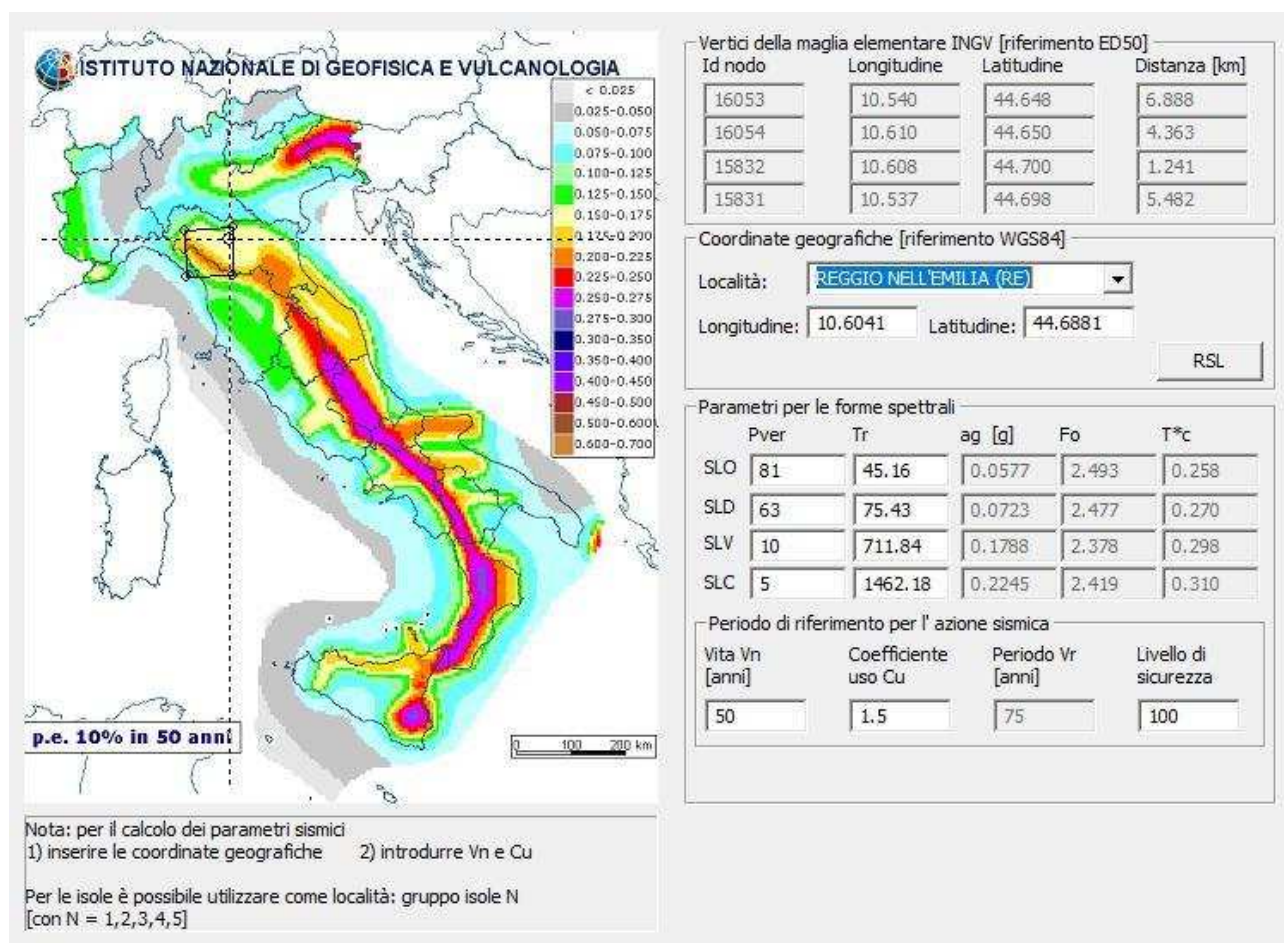
Allo stato attuale, la pericolosità sismica su reticolo di riferimento nell'intervallo di riferimento è fornita dai dati pubblicati sul sito <http://esse1.mi.ingv.it/>. Per punti non coincidenti con il reticolo di riferimento e periodi di ritorno non contemplati direttamente si opera come indicato nell'allegato alle NTC (rispettivamente media pesata e interpolazione).

L'azione sismica viene definita in relazione ad un periodo di riferimento  $V_R$  che si ricava, per ciascun tipo di costruzione, moltiplicandone la vita nominale per il coefficiente d'uso (vedi tabella Parametri della struttura). Fissato il periodo di riferimento  $V_R$  e la probabilità di superamento  $P_{ver}$  associata a ciascuno degli stati limite considerati, si ottiene il periodo di ritorno  $T_r$  e i relativi parametri di pericolosità sismica (vedi tabella successiva):

ag: accelerazione orizzontale massima del terreno;

Fo: valore massimo del fattore di amplificazione dello spettro in accelerazione orizzontale;

$T^*c$ : periodo di inizio del tratto a velocità costante dello spettro in accelerazione orizzontale;



#### PARAMETRI DELLA STRUTTURA

Classe d'uso	Vita $V_N$ [anni]	Coeff. Uso	Periodo $V_R$ [anni]	Tipo di suolo	Categoria topografica
III	50.0	1.5	75.0	C	T1



Individuati su reticolo di riferimento i parametri di pericolosità sismica si valutano i parametri spettrali riportati in tabella:

S è il coefficiente che tiene conto della categoria di sottosuolo e delle condizioni topografiche mediante la relazione seguente  $S = S_s \cdot S_t$  (3.2.3)

$F_o$  è il fattore che quantifica l'amplificazione spettrale massima, su sito di riferimento rigido orizzontale

$F_v$  è il fattore che quantifica l'amplificazione spettrale massima verticale, in termini di accelerazione orizzontale massima del terreno  $a_g$  su sito di riferimento rigido orizzontale

$T_b$  è il periodo corrispondente all'inizio del tratto dello spettro ad accelerazione costante.

$T_c$  è il periodo corrispondente all'inizio del tratto dello spettro a velocità costante.

$T_d$  è il periodo corrispondente all'inizio del tratto dello spettro a spostamento costante.

Lo spettro di risposta elastico in accelerazione della componente orizzontale del moto sismico,  $S_e$ , è definito dalle seguenti espressioni:

$$\begin{aligned}
 0 \leq T \leq T_b & \quad S_{e(T)} = a_g \cdot S \cdot \eta \cdot F_o \cdot \left[ \frac{T}{T_b} + \frac{1}{\eta \cdot F_o} \cdot \left( 1 - \frac{T}{T_b} \right) \right] \\
 T_b \leq T \leq T_c & \quad S_{e(T)} = a_g \cdot S \cdot \eta \cdot F_o \\
 T_c \leq T \leq T_d & \quad S_{e(T)} = a_g \cdot S \cdot \eta \cdot F_o \cdot \left( \frac{T_c}{T} \right) \\
 T_d \leq T & \quad S_{e(T)} = a_g \cdot S \cdot \eta \cdot F_o \cdot \left( \frac{T_c \cdot T_d}{T^2} \right)
 \end{aligned}$$

Dove per sottosuolo di categoria **A** i coefficienti  $S_s$  e  $C_c$  valgono 1; mentre per le categorie di sottosuolo B, C, D, E i coefficienti  $S_s$  e  $C_c$  vengono calcolati mediante le espressioni riportate nella seguente Tabella

Categoria sottosuolo	$S_s$	$C_c$
<b>A</b>	1.00	1.00
<b>B</b>	$1.00 \leq 1.40 - 0.40 \cdot F_o \cdot \frac{a_g}{g} \leq 1.20$	$1.10 \cdot (T_c^*)^{-0.20}$
<b>C</b>	$1.00 \leq 1.70 - 0.60 \cdot F_o \cdot \frac{a_g}{g} \leq 1.50$	$1.05 \cdot (T_c^*)^{-0.33}$
<b>D</b>	$0.90 \leq 2.40 - 1.50 \cdot F_o \cdot \frac{a_g}{g} \leq 1.80$	$1.25 \cdot (T_c^*)^{-0.50}$
<b>E</b>	$1.00 \leq 2.00 - 1.10 \cdot F_o \cdot \frac{a_g}{g} \leq 1.60$	$1.15 \cdot (T_c^*)^{-0.40}$

Per tenere conto delle condizioni topografiche e in assenza di specifiche analisi di risposta sismica locale, si utilizzano i valori del coefficiente topografico  $S_T$  riportati nella seguente Tabella

Categoria topografica	Ubicazione dell'opera o dell'intervento	$S_T$
<b>T1</b>	---	1.0
<b>T2</b>	In corrispondenza della sommità del pendio	1.2
<b>T3</b>	In corrispondenza della cresta di un rilievo con pendenza media minore o uguale a 30°	1.2
<b>T4</b>	In corrispondenza della cresta di un rilievo con pendenza media maggiore di 30°	1.4

Lo spettro di risposta elastico in accelerazione della componente verticale del moto sismico,  $S_{ve}$ , è definito dalle espressioni:

$$\begin{aligned}
 0 \leq T \leq T_b & \quad S_{ve(T)} = a_g \cdot S \cdot \eta \cdot F_v \cdot \left[ \frac{T}{T_b} + \frac{1}{\eta \cdot F_o} \cdot \left( 1 - \frac{T}{T_b} \right) \right] \\
 T_b \leq T \leq T_c & \quad S_{ve(T)} = a_g \cdot S \cdot \eta \cdot F_v \\
 T_c \leq T \leq T_d & \quad S_{ve(T)} = a_g \cdot S \cdot \eta \cdot F_v \cdot \left( \frac{T_c}{T} \right) \\
 T_d \leq T & \quad S_{ve(T)} = a_g \cdot S \cdot \eta \cdot F_v \cdot \left( \frac{T_c \cdot T_d}{T^2} \right)
 \end{aligned}$$



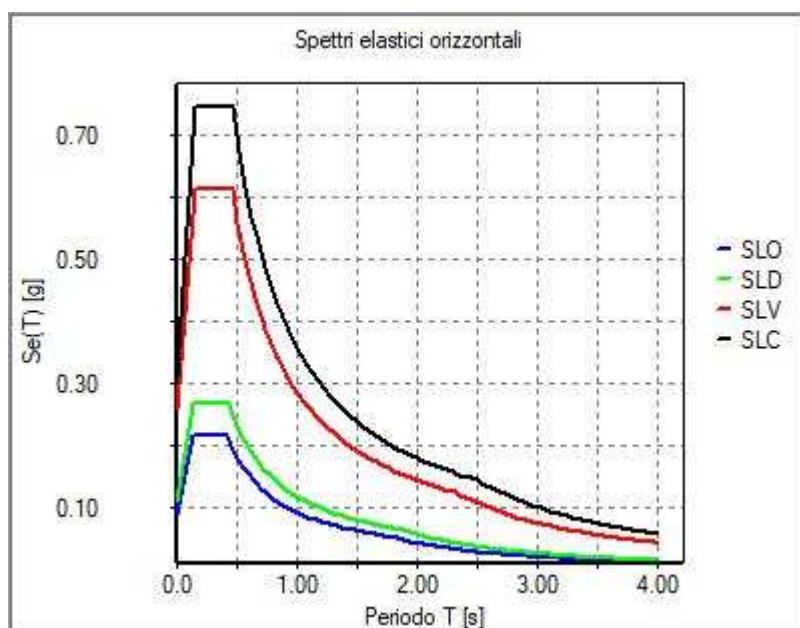
I valori di  $S_s$ ,  $T_B$ ,  $T_C$  e  $T_D$ , sono riportati nella seguente Tabella

Categoria sottosuolo	$S_s$	$T_B$	$T_C$	$T_D$
		[sec]	[sec]	[sec]
A, B, C, D, E	1.00	0.05	0.15	1.00

COORDINATE GEOGRAFICHE			
Id nodo	Longitudine	Latitudine	Distanza
	[WGS84]	[WGS84]	[km]
Loc.	10.604	44.688	
16053	10.540	44.648	6.888
16054	10.610	44.650	4.363
15832	10.608	44.700	1.241
15831	10.537	44.698	5.482

PARAMETRI SISMICI					
SL	Pver	Tr	ag	Fo	T*c
	[%]	[anni]	[g]		[sec]
SLO	81.0	45.2	0.058	2.493	0.258
SLD	63.0	75.4	0.072	2.477	0.270
SLV	10.0	711.8	0.179	2.378	0.298
SLC	5.0	1462.2	0.225	2.419	0.310

SPETTRI ELASTICI							
SL	ag	S	Fo	Fv	Tb	Tc	Td
	[g]				[sec]	[sec]	[sec]
SLO	0.058	1.500	2.493	0.808	0.141	0.424	1.831
SLD	0.072	1.500	2.477	0.899	0.146	0.437	1.889
SLV	0.179	1.445	2.378	1.357	0.156	0.467	2.315
SLC	0.225	1.374	2.419	1.547	0.160	0.479	2.498



In accordo con il §7.2.2 delle NTC2018 la componente verticale dell'azione sismica non viene considerata poiché non sono presenti elementi pressoché orizzontali di luce superiore a 20 m, elementi precompressi, elementi a mensola di luce superiore a 4 m, strutture di tipo spingente, pilastri in falso e piani sospesi.



### 1.4.2. CARICHI PERMANENTI NON STRUTTURALI

#### PANNELLI PREFABBRICATI

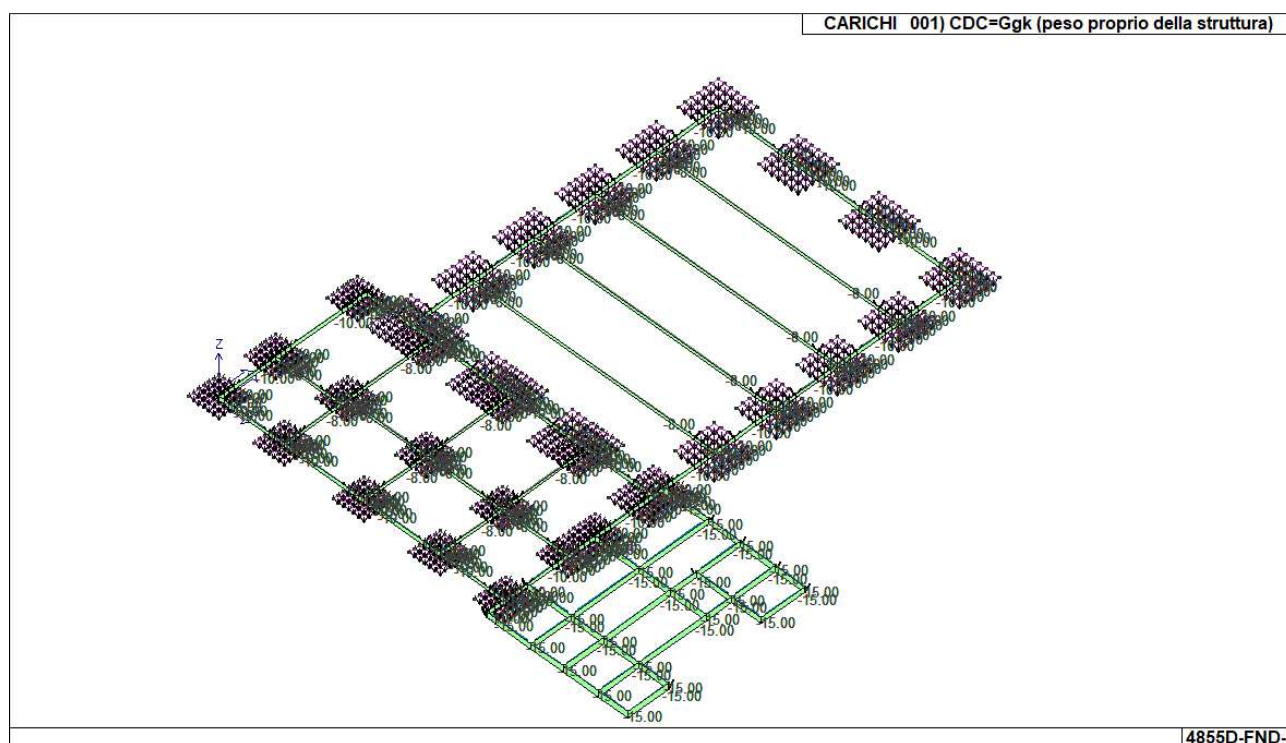
Peso pannelli prefabbricati

**g2 = 400 [daN/mq]**

### 1.4.3. MODELLAZIONE DELLE AZIONI

#### PESO PROPRIO FONDAZIONI

Calcolati in automatico dal programma



#### CARICHI PANNELLI

##### PANNELLI US1

Peso pannelli in fondazione  $400 \text{ daN/mq} \times 6.40 \text{ m} = 2560 \text{ daN/m}$

##### PANNELLI US2

Peso pannelli in fondazione:

Testata alta  $400 \text{ daN/mq} \times 12.30 \text{ m} = 4920 \text{ daN/m}$

Testata bassa  $400 \text{ daN/mq} \times 9.80 \text{ m} = 3920 \text{ daN/m}$

Tamponamenti laterali variabile da 4920 daN/m a 3920 daN/m

##### TAMPONAMENTI US3

Intonaco	1	[cm]	450	[cm]	1800	[daN/mc]	=	81	[daN/m]
Poroton	30	[cm]	450	[cm]	1100	[daN/mc]	=	1485	[daN/m]
Isolante	15	[cm]	450	[cm]	35	[daN/mc]	=	24	[daN/m]
Intonaco	1	[cm]	450	[cm]	1800	[daN/mc]	=	81	[daN/m]
								<hr/>	
								1671	[daN/m]

Peso tamponamenti in fondazione  $1700 \text{ daN/m}$







## 1.5. DESCRIZIONE DEI MATERIALI UTILIZZATI

Descrizione dei materiali e dei prodotti per uso strutturale, dei requisiti di resistenza meccanica e di durabilità considerati.

### CALCESTRUZZO FONDAZIONI

Classe di resistenza			C28/35
Classe di esposizione			XC2
Classe di consistenza			S4
Resistenza caratteristica cubica a compressione	$R_{ck}$	=	350 [daN/cm <sup>2</sup> ]
Resistenza caratteristica cilindrica a compressione	$f_{ck}$	=	290 [daN/cm <sup>2</sup> ]
Resistenza a trazione media	$f_{ctm}$	=	28.3 [daN/cm <sup>2</sup> ]
Modulo elastico istantaneo iniziale	E	=	325749 [daN/cm <sup>2</sup> ]
Modulo di elasticità tangenziale	G	=	145424 [daN/cm <sup>2</sup> ]
Coefficiente di contrazione trasversale (Poisson)	$\nu$	=	0.20
Coefficiente di dilatazione termica	$\alpha$	=	0.000050 [1/°C]
Peso specifico	$\rho$	=	2500 [daN/m <sup>3</sup> ]

### CALCESTRUZZO STRUTTURE PREFABBRICATE

Classe di resistenza			C35/45
Classe di esposizione			XC3
Classe di consistenza			S4
Resistenza caratteristica cubica a compressione	$R_{ck}$	=	450 [daN/cm <sup>2</sup> ]
Resistenza caratteristica cilindrica a compressione	$f_{ck}$	=	373 [daN/cm <sup>2</sup> ]
Resistenza a trazione media	$f_{ctm}$	=	33.5 [daN/cm <sup>2</sup> ]
Modulo elastico istantaneo iniziale	E	=	346140 [daN/cm <sup>2</sup> ]
Modulo di elasticità tangenziale	G	=	154527 [daN/cm <sup>2</sup> ]
Coefficiente di contrazione trasversale (Poisson)	$\nu$	=	0.20
Coefficiente di dilatazione termica	$\alpha$	=	0.000050 [1/°C]
Peso specifico	$\rho$	=	2500 [daN/m <sup>3</sup> ]

### CALCESTRUZZO GETTI INTEGRATIVI/SOLETTE COLLABORANTI

Classe di resistenza			C28/35
Classe di esposizione			XC3
Classe di consistenza			S4
Resistenza caratteristica cubica a compressione	$R_{ck}$	=	350 [daN/cm <sup>2</sup> ]
Resistenza caratteristica cilindrica a compressione	$f_{ck}$	=	290 [daN/cm <sup>2</sup> ]
Resistenza a trazione media	$f_{ctm}$	=	28.3 [daN/cm <sup>2</sup> ]
Modulo elastico istantaneo iniziale	E	=	325749 [daN/cm <sup>2</sup> ]
Modulo di elasticità tangenziale	G	=	145424 [daN/cm <sup>2</sup> ]
Coefficiente di contrazione trasversale (Poisson)	$\nu$	=	0.20
Coefficiente di dilatazione termica	$\alpha$	=	0.000050 [1/°C]
Peso specifico	$\rho$	=	2500 [daN/m <sup>3</sup> ]

### ACCIAIO PER C.A.

Tipo			B450C
Tensione caratteristica di snervamento	$f_{yk}$	=	4500 [daN/cm <sup>2</sup> ]
Tensione caratteristica di rottura	$f_{tk}$	=	5400 [daN/cm <sup>2</sup> ]
Deformazione di rottura	$\epsilon_{uk}$	=	7.5 [%]
Modulo elastico	E	=	2000000 [daN/cm <sup>2</sup> ]
Modulo di elasticità tangenziale	G	=	770000 [daN/cm <sup>2</sup> ]
Coefficiente di contrazione trasversale (Poisson)	$\nu$	=	0.30
Peso specifico	$\rho$	=	7850 [daN/m <sup>3</sup> ]



**ACCIAIO PER CARPENTERIA**

Tipo

S275

SPESSORI NOMINALI FINO A 40 mm

Tensione caratteristica di snervamento

 $f_{yk} = 2750$  [daN/cm<sup>2</sup>]

Tensione caratteristica di rottura

 $f_{tk} = 4300$  [daN/cm<sup>2</sup>]

SPESSORI NOMINALI SUPERIORI A 40 mm

Tensione caratteristica di snervamento

 $f_{yk} = 2550$  [daN/cm<sup>2</sup>]

Tensione caratteristica di rottura

 $f_{tk} = 4100$  [daN/cm<sup>2</sup>]

Modulo elastico

 $E = 2100000$  [daN/cm<sup>2</sup>]

Modulo di elasticità tangenziale

 $G = 807692$  [daN/cm<sup>2</sup>]

Coefficiente di contrazione trasversale (Poisson)

 $\nu = 0.30$ 

Peso specifico

 $\rho = 7850$  [daN/m<sup>3</sup>]**BULLONI**

Classe

8.8

Tensione di snervamento

 $f_{yb} = 6400$  [daN/cm<sup>2</sup>]

Tensione di rottura

 $f_{tb} = 8000$  [daN/cm<sup>2</sup>]**LEGNO LAMELLARE**

Classe di resistenza

GL24h

Resistenza caratteristica a flessione

 $f_{mk} = 240$  [daN/cm<sup>2</sup>]

Resistenza caratteristica a trazione in direzione parallela alle fibre

 $f_{t0k} = 192$  [daN/cm<sup>2</sup>]

Resistenza caratteristica a trazione in direzione perpendicolare alle fibre

 $f_{t90k} = 5$  [daN/cm<sup>2</sup>]

Resistenza caratteristica a compressione in direzione parallela alle fibre

 $f_{c0k} = 240$  [daN/cm<sup>2</sup>]

Resistenza caratteristica a compressione in direzione perpendicolare alle fibre

 $f_{c90k} = 25$  [daN/cm<sup>2</sup>]

Resistenza caratteristica a taglio

 $f_{vk} = 35$  [daN/cm<sup>2</sup>]

Modulo elastico medio in direzione parallela alle fibre

 $E_{0m} = 115000$  [daN/cm<sup>2</sup>]

Modulo elastico medio in direzione perpendicolare alle fibre

 $E_{90m} = 3000$  [daN/cm<sup>2</sup>]

Modulo elastico caratteristico in direzione parallela alle fibre

 $E_{005} = 96000$  [daN/cm<sup>2</sup>]

Modulo elastico tangenziale medio

 $G_m = 6500$  [daN/cm<sup>2</sup>]

Coefficiente di dilatazione termica

 $\alpha = 0.00001$  [1/°C]

Massa volumica caratteristica

 $\rho_k = 385$  [daN/m<sup>3</sup>]

Massa volumica media

 $\rho_m = 420$  [daN/m<sup>3</sup>]



## 1.6. CRITERI DI PROGETTAZIONE E MODELLAZIONE

*Illustrazione dei criteri di progettazione e di modellazione: classe di duttilità CD, regolarità in pianta ed in alzato, tipologia strutturale, fattore di struttura q e relativa giustificazione, stati limite indagati, giunti di separazione fra strutture contigue, criteri per la valutazione degli elementi non strutturali e degli impianti, requisiti delle fondazioni e collegamenti tra fondazioni, vincolamenti interni e/o esterni, schemi statici adottati.*

CRITERI DI PROGETTAZIONE E MODELLAZIONE	
<b>Classe di Duttilità</b>	In accordo con il §7.2.5 delle NTC2018 le strutture di fondazione sono progettate assumendo un comportamento non dissipativo delle strutture in elevazione.
<b>Regolarità in pianta</b>	Vedere relazione di calcolo della struttura in elevazione
<b>Regolarità in altezza</b>	Vedere relazione di calcolo della struttura in elevazione
<b>Tipologia strutturale</b>	Fondazione superficiale
<b>Fattore di comportamento</b>	Vedere relazione di calcolo della struttura in elevazione
<b>Stati Limite indagati</b>	SLU – SLE (condizioni statiche) SLV – SLD – SLO (condizioni sismiche)
<b>Giunti di separazione</b>	Vedere relazione di calcolo della struttura in elevazione
<b>Elementi non strutturali ed impianti</b>	Vedere relazione di calcolo della struttura in elevazione
<b>Fondazioni</b>	In accordo con il §7.2.5 delle NTC2018, le azioni trasmesse in fondazione derivano dall'analisi del comportamento dell'intera opera, in genere condotta esaminando la sola struttura in elevazione alla quale sono applicate le pertinenti combinazioni delle azioni. Il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno vengono eseguiti assumendo come azione in fondazione <u>quelle derivante dall'analisi strutturale delle strutture in elevazione ipotizzando un comportamento non dissipativo.</u>
<b>Vincolamenti interni e/o esterni</b>	Le travi costituenti il reticolo di fondazione sono incastrate tra loro. Esternamente la fondazione risulta appoggiata su suolo elastico alla Winkler. Le travi di fondazione in corrispondenza della sovrapposizione con i plinti sono prive di costante di sottofondo alla Winkler e non concorrono alla distribuzione dei carichi sul terreno in tali zone.
<b>Schemi statici adottati</b>	Le strutture di fondazione sono state modellate come travi su suolo elastico con costante di sottofondo. Le azioni derivanti dalla struttura in elevazione sono state modellate come carichi nodali concentrati (forze e momenti).



## 1.7. COMBINAZIONE DELLE AZIONI

Indicazione delle principali combinazioni delle azioni in relazione agli SLU e SLE indagati: coefficienti parziali per le azioni, coefficienti di combinazione.

Ai fini delle verifiche agli stati limite si definiscono le seguenti combinazioni delle azioni:

- **Combinazione fondamentale**, generalmente impiegata per gli stati limite ultimi (SLU):

$$\gamma_{G1} \cdot G_1 + \gamma_{G2} \cdot G_2 + \gamma_P \cdot P + \gamma_{Qki} \cdot Q_{ki} + \sum \gamma_{Qkj} \cdot \psi_{0j} \cdot Q_{kj}$$

- **Combinazione caratteristica (rara)**, generalmente impiegata per gli stati limite di esercizio (SLE) irreversibili:

$$G_1 + G_2 + P + Q_{ki} + \sum \psi_{0j} \cdot Q_{kj}$$

- **Combinazione frequente**, generalmente impiegata per gli stati limite di esercizio (SLE) reversibili:

$$G_1 + G_2 + P + \psi_{1i} \cdot Q_{ki} + \sum \psi_{2j} \cdot Q_{kj}$$

- **Combinazione quasi permanente** (SLE), generalmente impiegata per gli effetti a lungo termine:

$$G_1 + G_2 + P + \sum \psi_{2i} \cdot Q_{ki}$$

- **Combinazione sismica**, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E:

$$E + G_1 + G_2 + P + \sum \psi_{2i} \cdot Q_{ki}$$

- **Combinazione eccezionale**, impiegata per gli stati limite ultimi connessi alle azioni eccezionali di progetto  $A_d$ :

$$G_1 + G_2 + P + A_d + \sum \psi_{2i} \cdot Q_{ki}$$

dove

$G_1$  carico permanente strutturale

$G_2$  carico permanente non strutturale

$Q_{ki}$  carico variabile dominante per ogni combinazione considerata

$Q_{kj}$  carico variabile agente contemporaneamente al carico variabile dominante

$\gamma$  coefficienti parziali di sicurezza

$\psi$  coefficienti di combinazione

Per quanto riguarda i valori dei coefficienti parziali da impiegare per la determinazione degli effetti delle azioni nelle verifiche agli stati limite ultimi, nella presente relazione si adotta l'approccio progettuale *Approccio 2* (§2.6.1 delle NTC2018) nel quale impiega un'unica combinazione dei gruppi di coefficienti parziali definiti per le Azioni ( $\gamma_F$ ), per la resistenza dei materiali ( $\gamma_M$ ) e, eventualmente, per la resistenza globale ( $\gamma_R$ ). In tale approccio, per le azioni si impiegano i coefficienti  $\gamma_F$  riportati nella colonna A1.

Tab. 2.6.I delle NTC2018

		Coefficiente $\gamma_F$	EQU	A1	A2
Carichi permanenti G1	Favorevoli	$\gamma_{G1}$	0.9	1.0	1.0
	Sfavorevoli		1.1	1.3	1.0
Carichi permanenti non strutturali G2	Favorevoli	$\gamma_{G2}$	0.8	0.8	0.8
	Sfavorevoli		1.5	1.5	1.3
Azioni variabili Q	Favorevoli	$\gamma_{Qi}$	0.0	0.0	0.0
	Sfavorevoli		1.5	1.5	1.3
Nel caso in cui l'intensità dei carichi permanenti non strutturali o di una parte di essi (ad es. carichi permanenti portati) sia ben definita in fase di progetto, per detti carichi o per la parte di essi nota si potranno adottare gli stessi coefficienti parziali validi per le azioni permanenti.					



## VALORI DEI COEFFICIENTI DI COMBINAZIONE (Tab. 2.5.I delle NTC2018)

Categoria/Azione variabile	$\Psi_{0j}$	$\Psi_{1j}$	$\Psi_{2j}$
Categoria A – Ambienti ad uso residenziale	0.7	0.5	0.3
Categoria B – Uffici	0.7	0.5	0.3
Categoria C – Ambienti suscettibili di affollamento	0.7	0.7	0.6
Categoria D – Ambienti ad uso commerciale	0.7	0.7	0.6
Categoria E – Aree per immagazzinamento, uso commerciale e uso industriale, biblioteche, archivi, magazzini e ambienti ad uso industriale	1.0	0.9	0.8
Categoria F – Rimesse, parcheggi ed aree per il traffico dei veicoli (per autoveicoli di peso $\leq 30$ kN)	0.7	0.7	0.6
Categoria G – Rimesse, parcheggi ed aree per il traffico dei veicoli (per autoveicoli di peso $> 30$ kN)	0.7	0.5	0.3
Categoria H – Coperture accessibili per sola manutenzione	0.0	0.0	0.0
Categoria I – Coperture praticabili	da valutarsi caso per caso		
Categoria K – Coperture per usi speciali (impianti, eliporti, ...)			
Vento	0.6	0.2	0.0
Neve (a quota $\leq 1000$ m s.l.m.)	0.5	0.2	0.0
Neve (a quota $> 1000$ m s.l.m.)	0.7	0.5	0.2
Variazioni termiche	0.6	0.5	0.0

COMBINAZIONI DEI CASI DI CARICO	
<b>APPROCCIO PROGETTUALE</b>	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	SI
SLC	NO
SLD	SI
SLO	SI
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO



## 1.8. METODO DI ANALISI

Indicazione motivata del metodo di analisi seguito per l'esecuzione della stessa: analisi lineare o non lineare (precisazione del fattore  $\theta = Pd/Vh$ ), analisi statica o dinamica (periodo  $T_1 < 2.5T_C$  o  $T_D$ , regolarità in altezza)

Nel dettaglio deve essere esplicitato se trattasi di:

- analisi lineare statica,
- analisi lineare dinamica (numero di modi considerati e relative masse partecipanti),
- analisi non lineare statica (distribuzioni di carico adottate e rapporti di sovraresistenza  $\alpha_u/\alpha_1$ ),
- analisi non lineare dinamica (accelerogrammi adottati),
- altro,

riportando la sintesi dei principali risultati.

TIPO DI ANALISI STRUTTURALE	
Sismica statica lineare	NO
Sismica dinamica lineare	SI
Sismica statica non lineare (prop. masse)	NO
Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	NO
Analisi lineare	SI

Per la progettazione delle fondazioni è stata eseguita un'analisi lineare statica.

Come già esplicitato precedentemente, le combinazioni Sismiche sono state anch'esse combinate con calcolo statico lineare, utilizzando i valori dei carichi al piede (già fattorizzati) combinati con le azioni agenti sulle fondazioni moltiplicate per i relativi coefficienti di partecipazione sismica ( $\psi_2$ ).

## 1.9. CRITERI DI VERIFICA IN PRESENZA DI AZIONE SISMICA

Criteri di verifica agli stati limite indagati, in presenza di azione sismica:

- stati limite ultimi, in termini di resistenza, di duttilità e di capacità di deformazione,
- stati limite di esercizio, in termini di resistenza e di contenimento del danno agli elementi non strutturali.

In accordo con il §7.2.5 delle NTC2018, le azioni trasmesse in fondazione derivano dall'analisi del comportamento dell'intera opera, in genere condotta esaminando la sola struttura in elevazione alla quale sono applicate le pertinenti combinazioni delle azioni.

Il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- quella derivante dalla capacità di resistenza a flessione degli elementi congiuntamente al taglio determinato da considerazioni di equilibrio;
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD“A” e 1,10 in CD“B”.

Per la fondazione in esame si è optato di assumere come azione di progetto quelle derivante dall'analisi strutturale delle strutture in elevazione ipotizzando un comportamento non dissipativo.

## FONDAZIONI SUPERFICIALI

Le strutture delle fondazioni superficiali devono essere progettate per le azioni definite al precedente capoverso, assumendo un comportamento non dissipativo; non sono quindi necessarie armature specifiche per ottenere un comportamento duttile.



Le platee di fondazione in calcestruzzo armato devono avere armature longitudinali, secondo due direzioni ortogonali e per l'intera estensione, in percentuale non inferiore allo 0.1% dell'area della sezione trasversale della platea, sia inferiormente sia superiormente.

Le travi di fondazione in calcestruzzo armato devono avere, per l'intera lunghezza, armature longitudinali in percentuale non inferiore allo 0.2% dell'area della sezione trasversale della trave, sia inferiormente che superiormente.



## 1.10. SINTESI DELLE VERIFICHE DI SICUREZZA

Rappresentazione delle configurazioni deformate e delle caratteristiche di sollecitazione delle strutture più significative, così come emergenti dai risultati dell'analisi, sintesi delle verifiche di sicurezza, e giudizio motivato di accettabilità dei risultati.

### 1.10.1. DEFORMATE

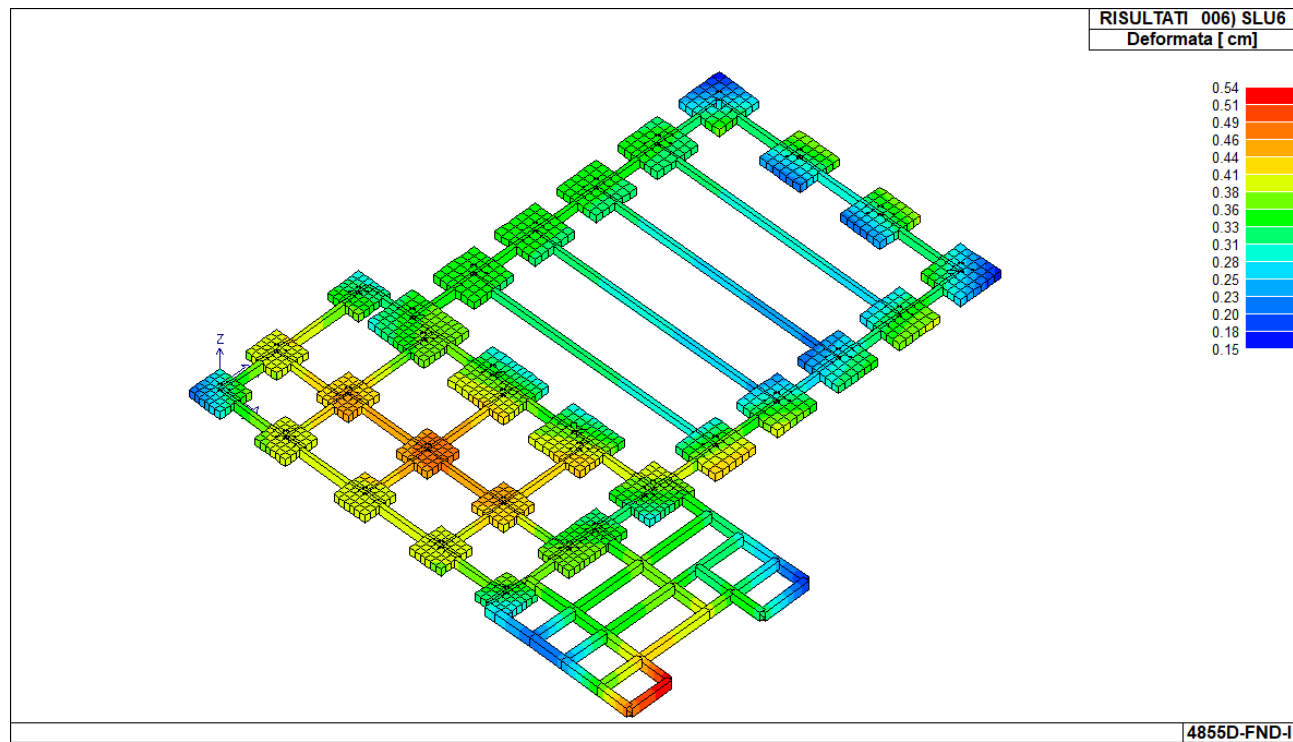


Figura 2 – Deformata max SLU

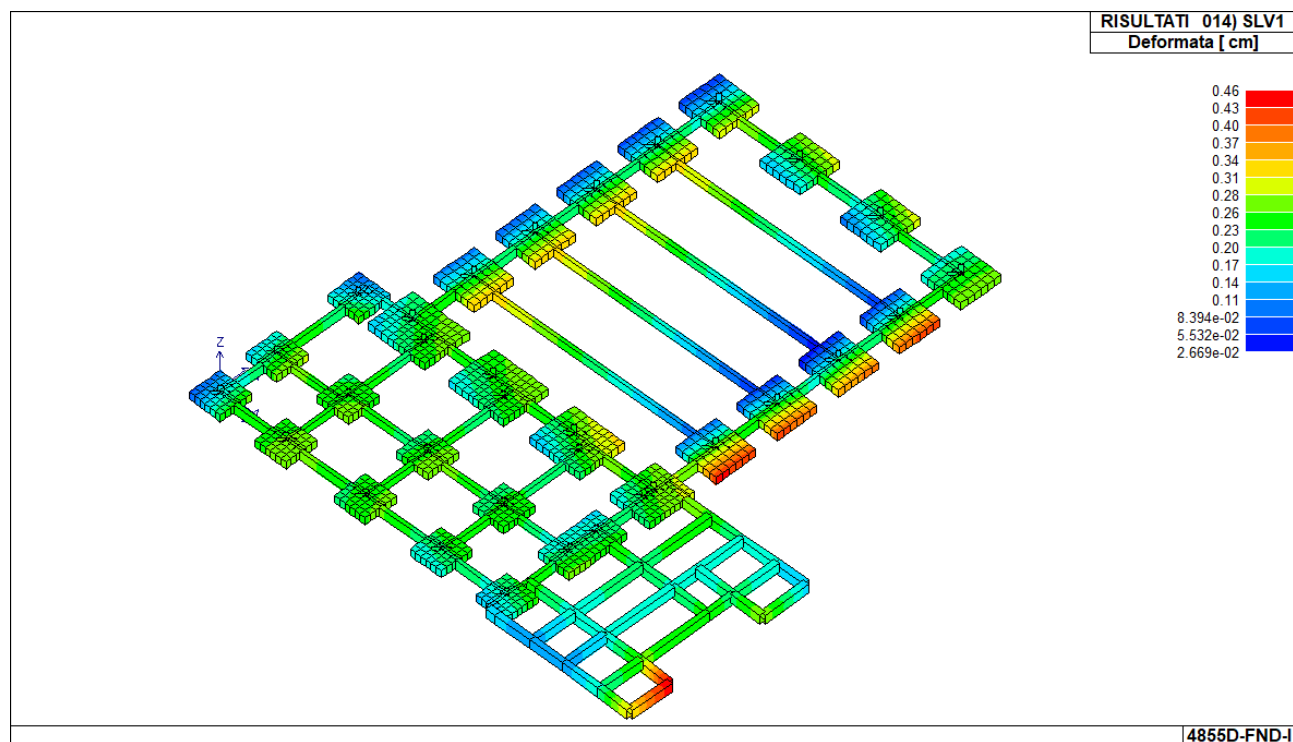


Figura 3 – Deformata max SLV



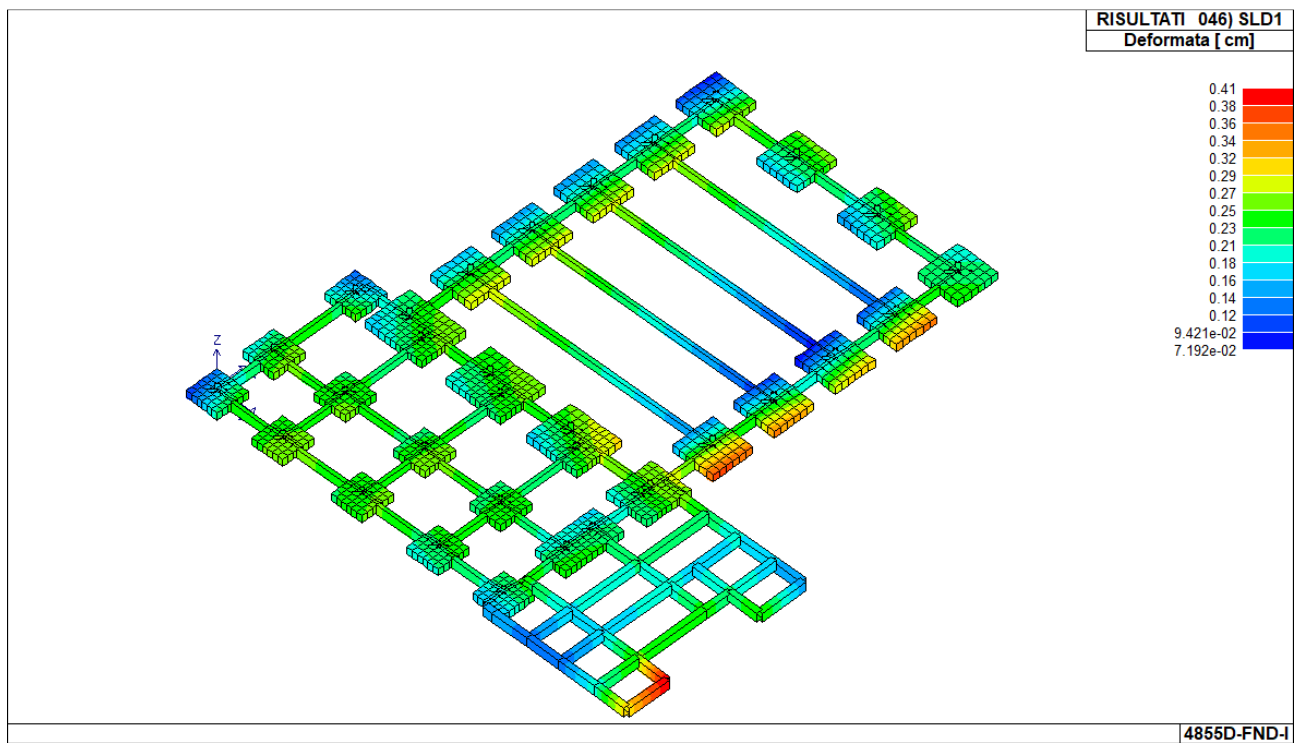


Figura 4 – Deformata max SLD

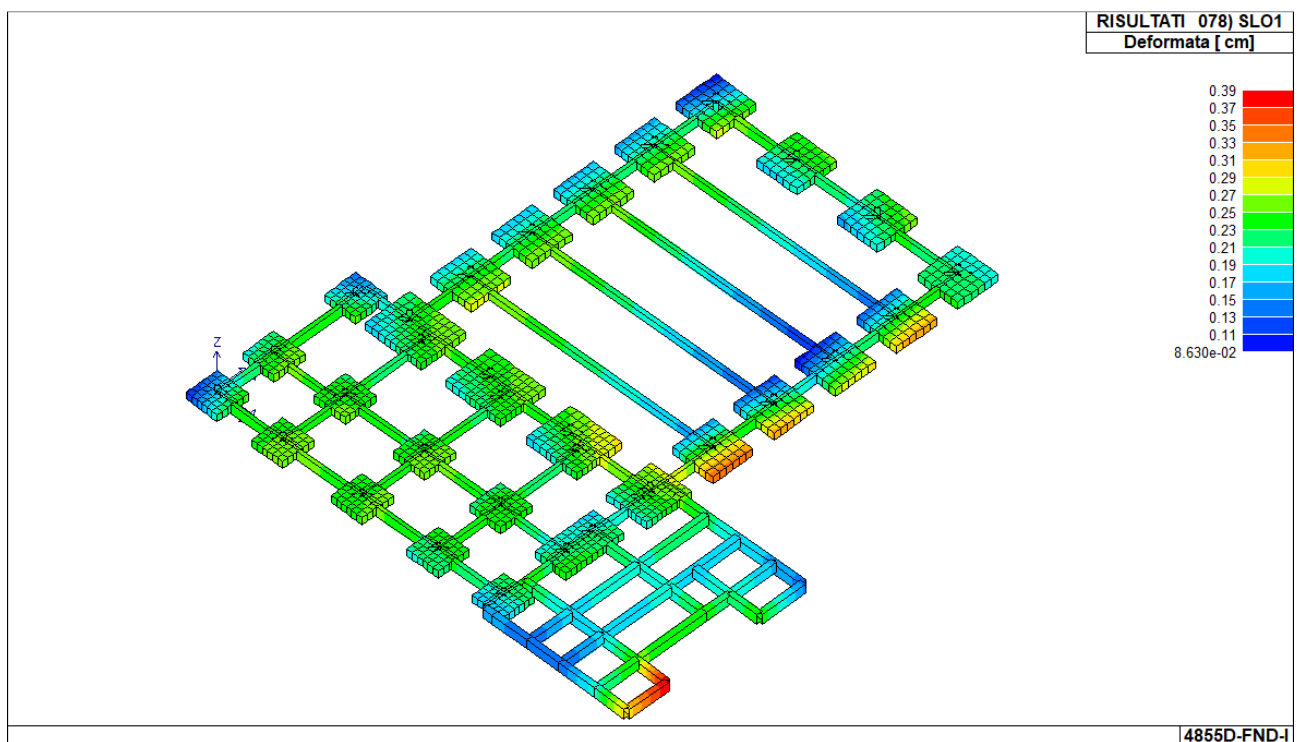


Figura 5 – Deformata max SLO



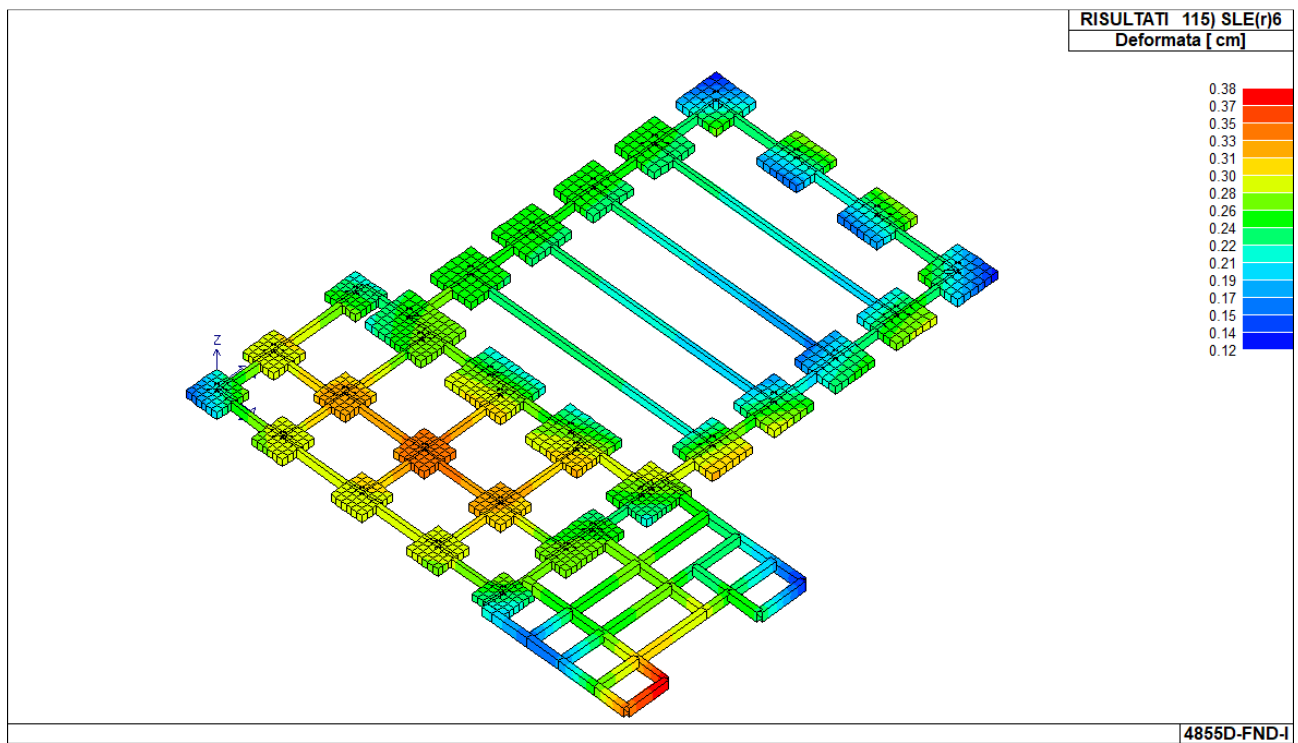


Figura 6 – Deformata max SLE rare

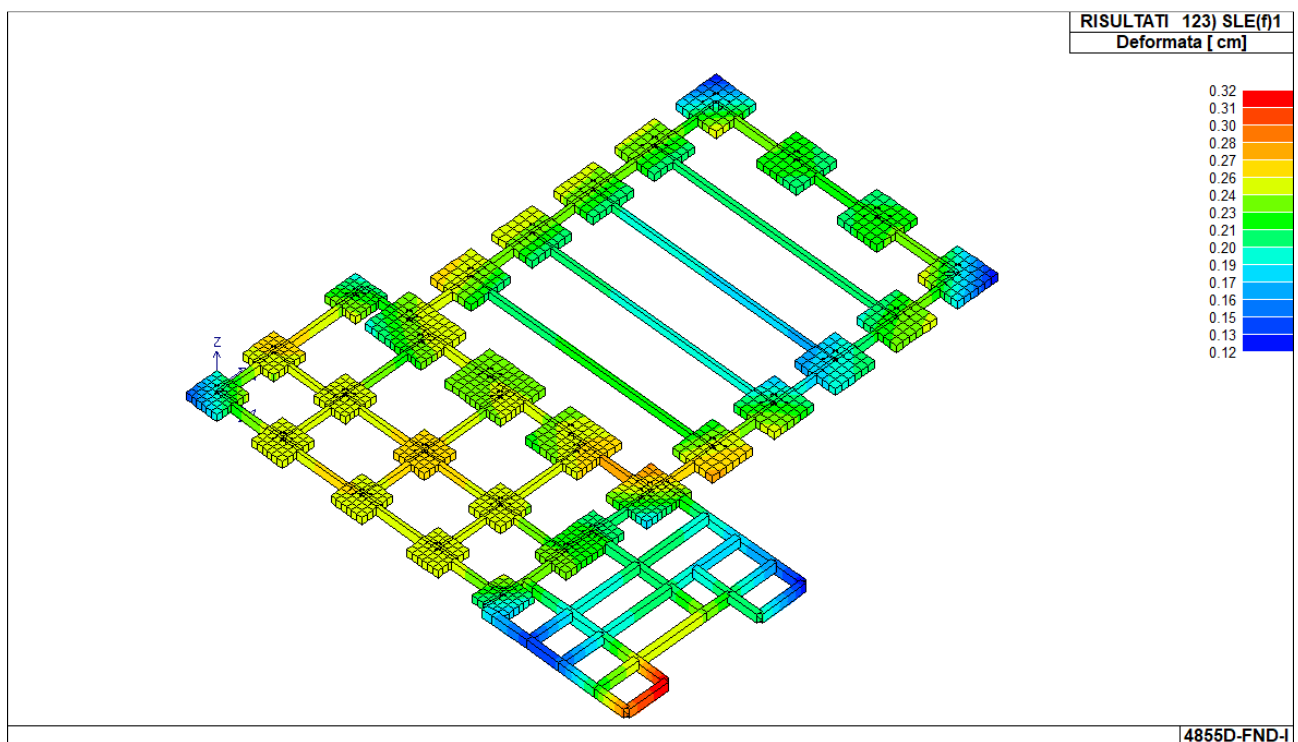


Figura 7 – Deformata max SLE frequenti



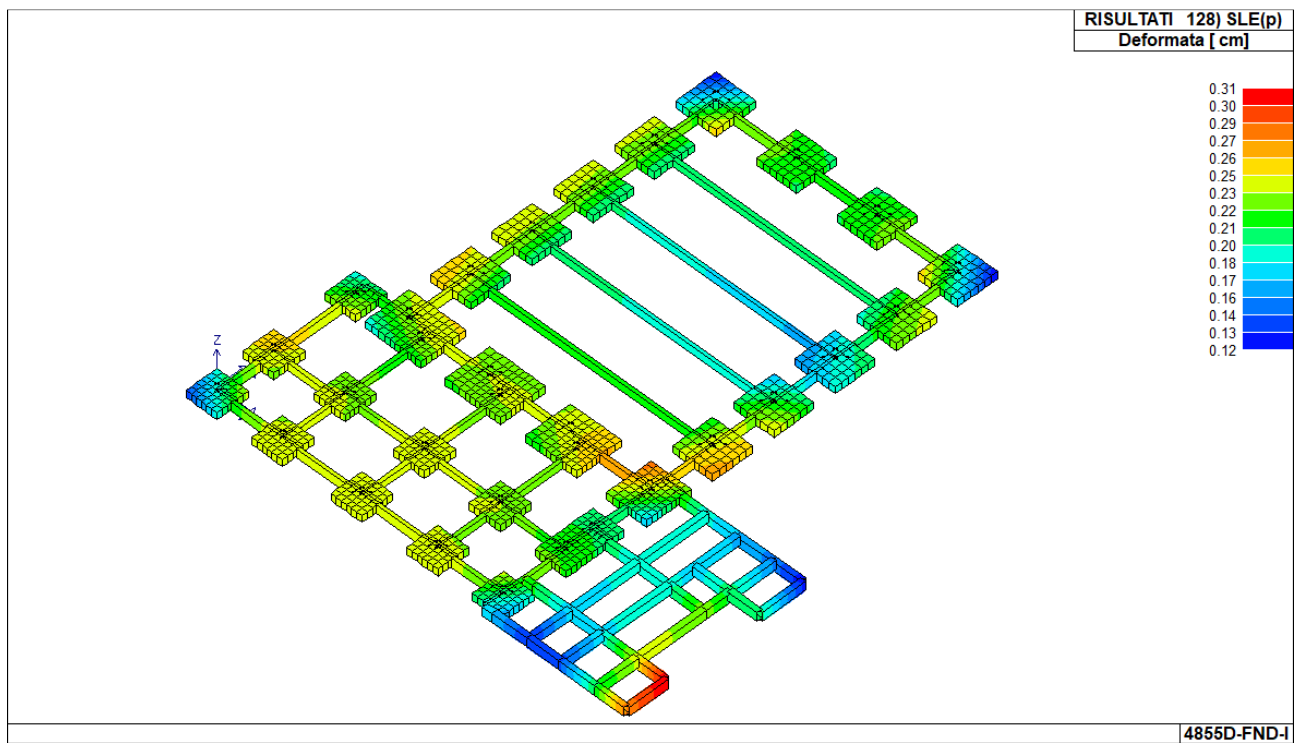


Figura 8 – Deformata max SLE quasi permanenti

### 1.10.2. INVILUPPI DELLE SOLLECITAZIONI

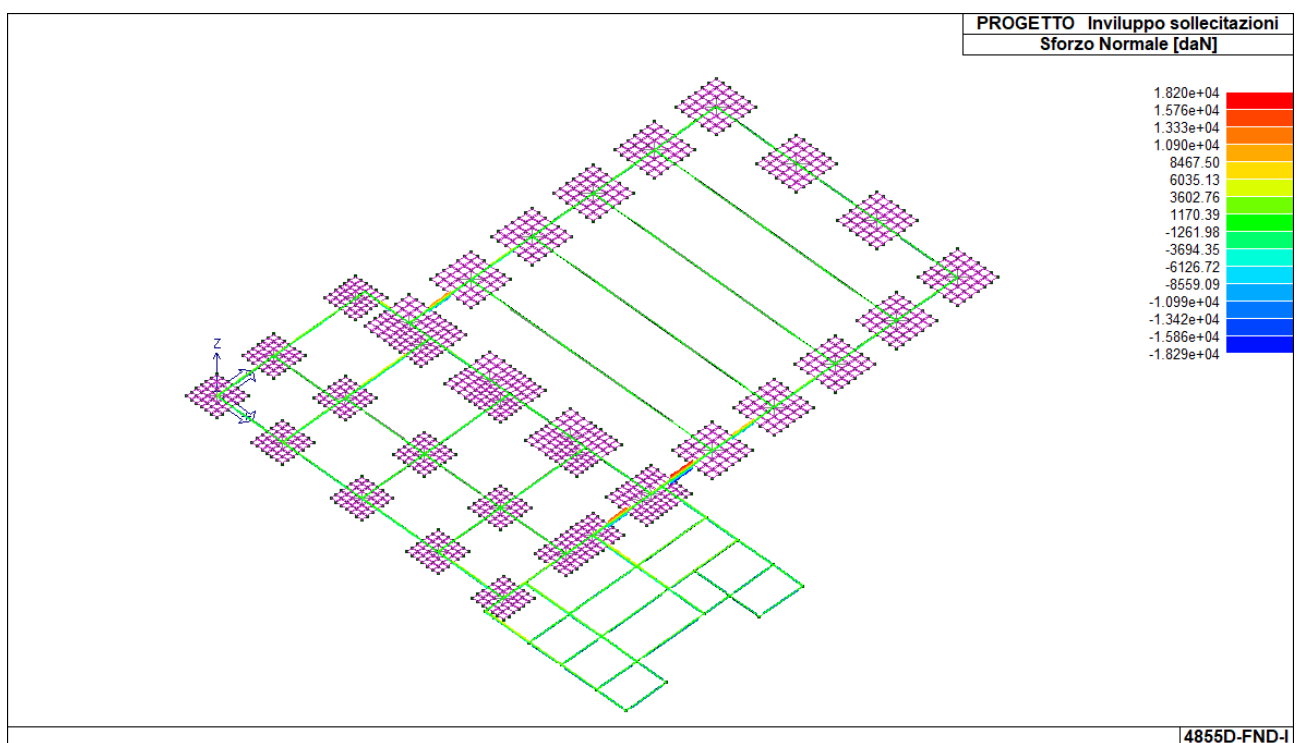


Figura 9 – TRAVI: involucro sforzo normale N



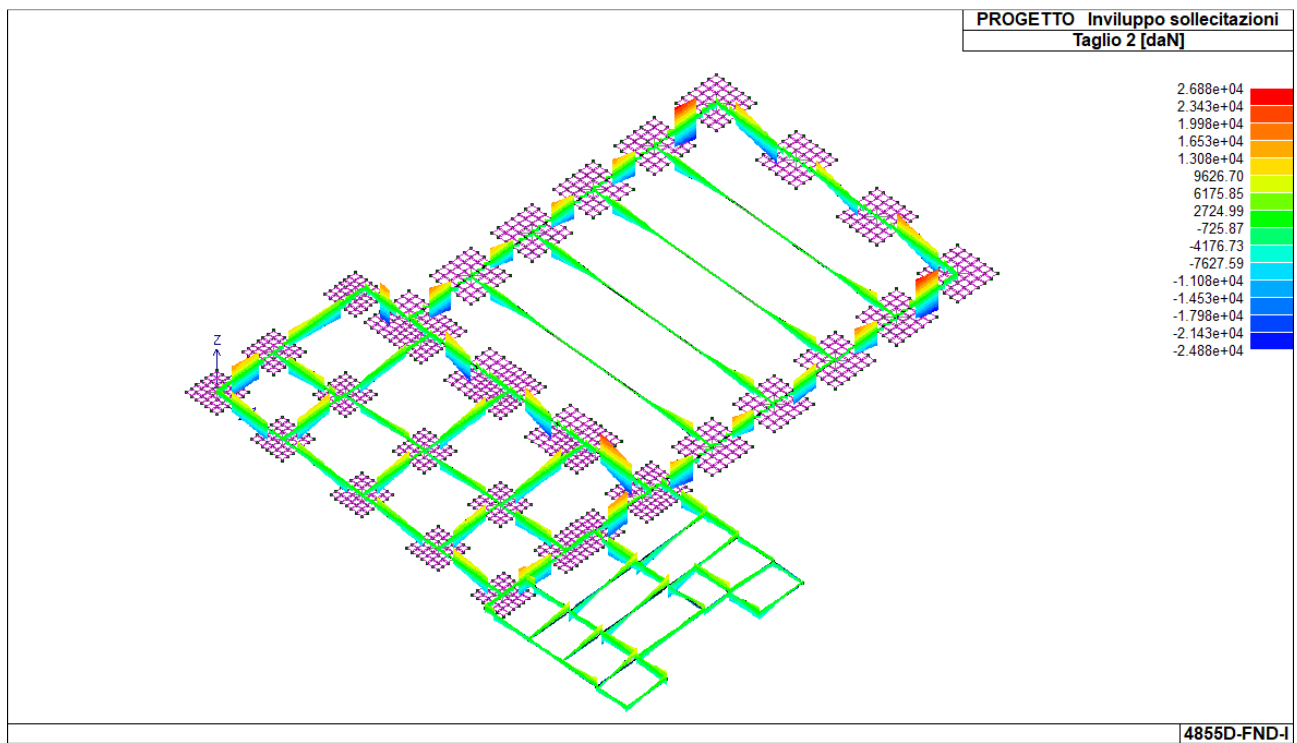


Figura 10 – TRAVI: involucro Taglio V2

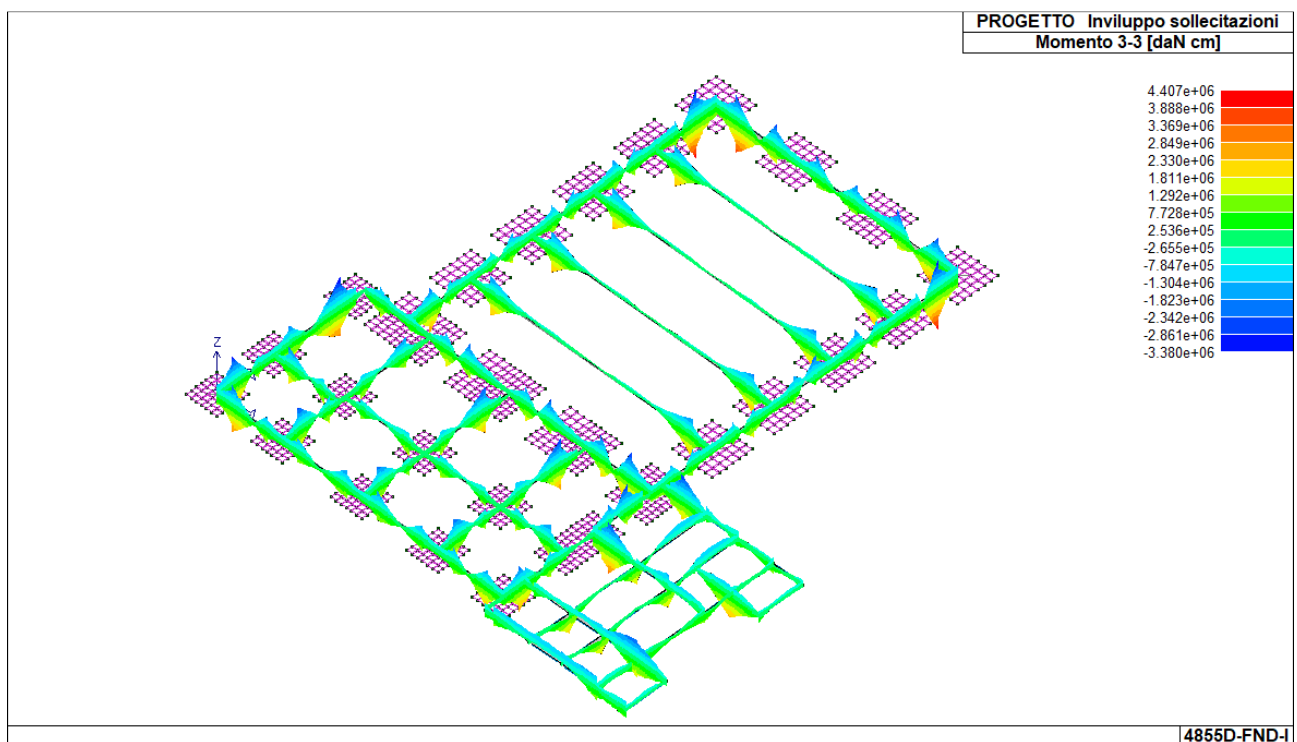


Figura 11 – TRAVI: involucro Momento flettente M3-3



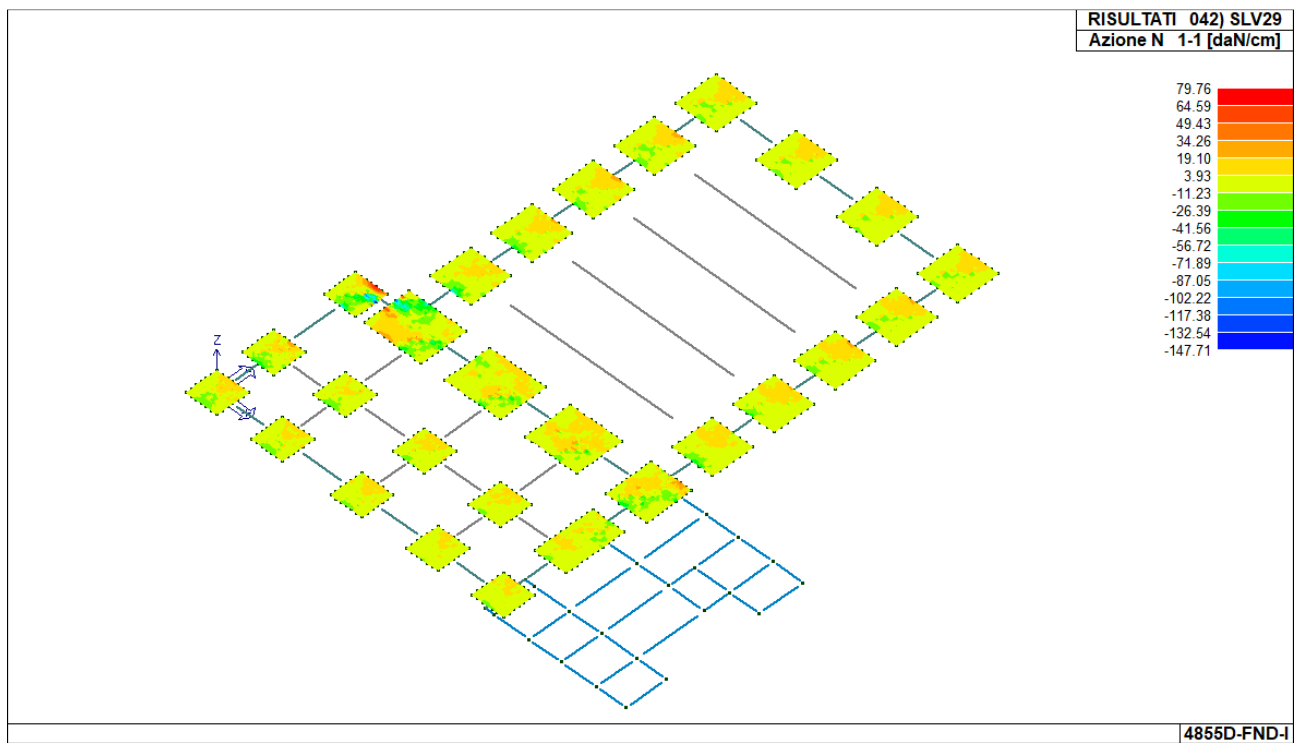


Figura 12 – SOLETTE: azione N 1-1 |max|

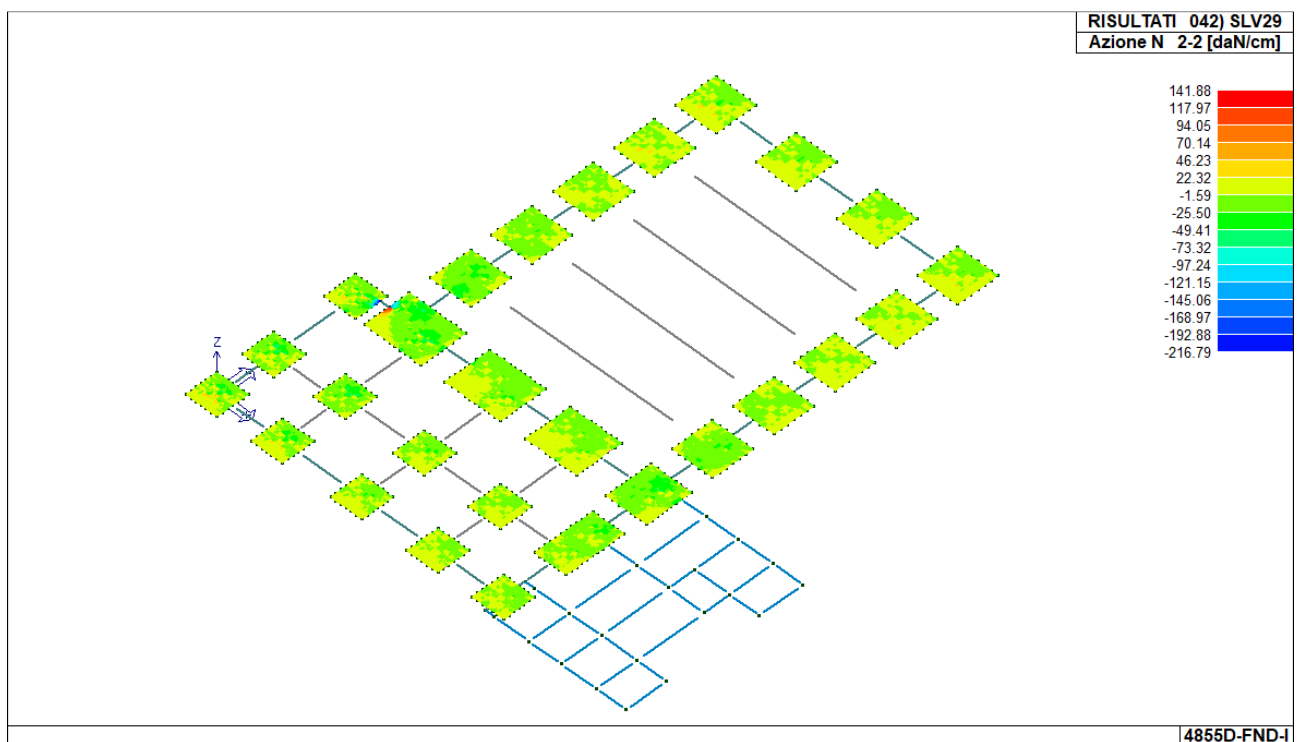


Figura 13 – SOLETTE: azione N 2-2 |max|



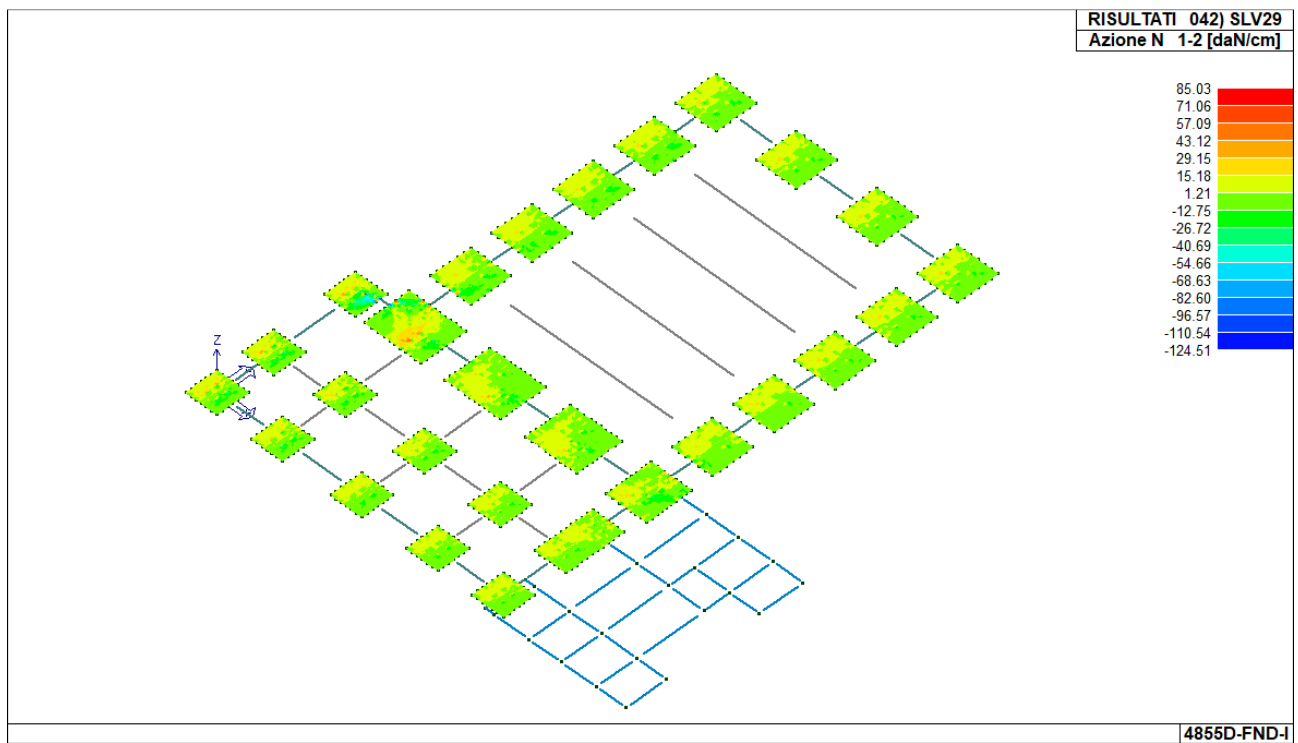


Figura 14 – SOLETTE: azione N 1-2 |max|

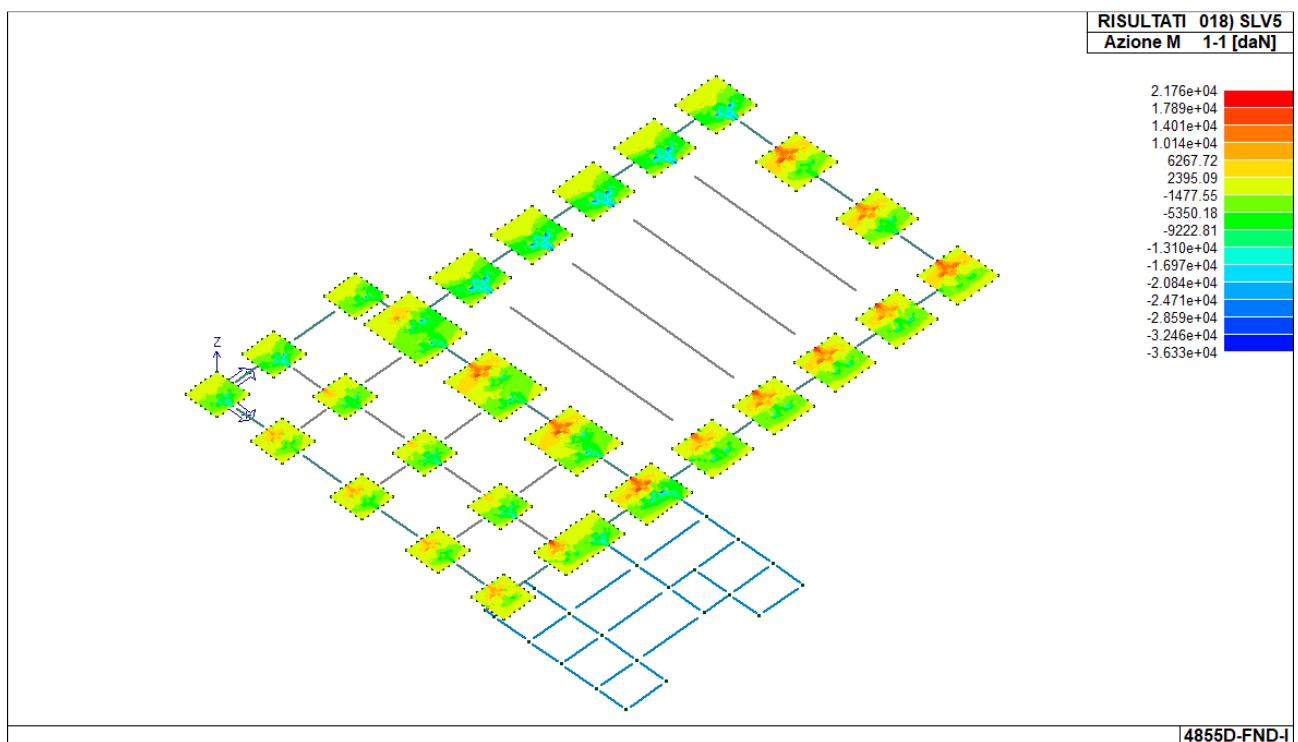


Figura 15 – SOLETTE: azione M 1-1 |max|



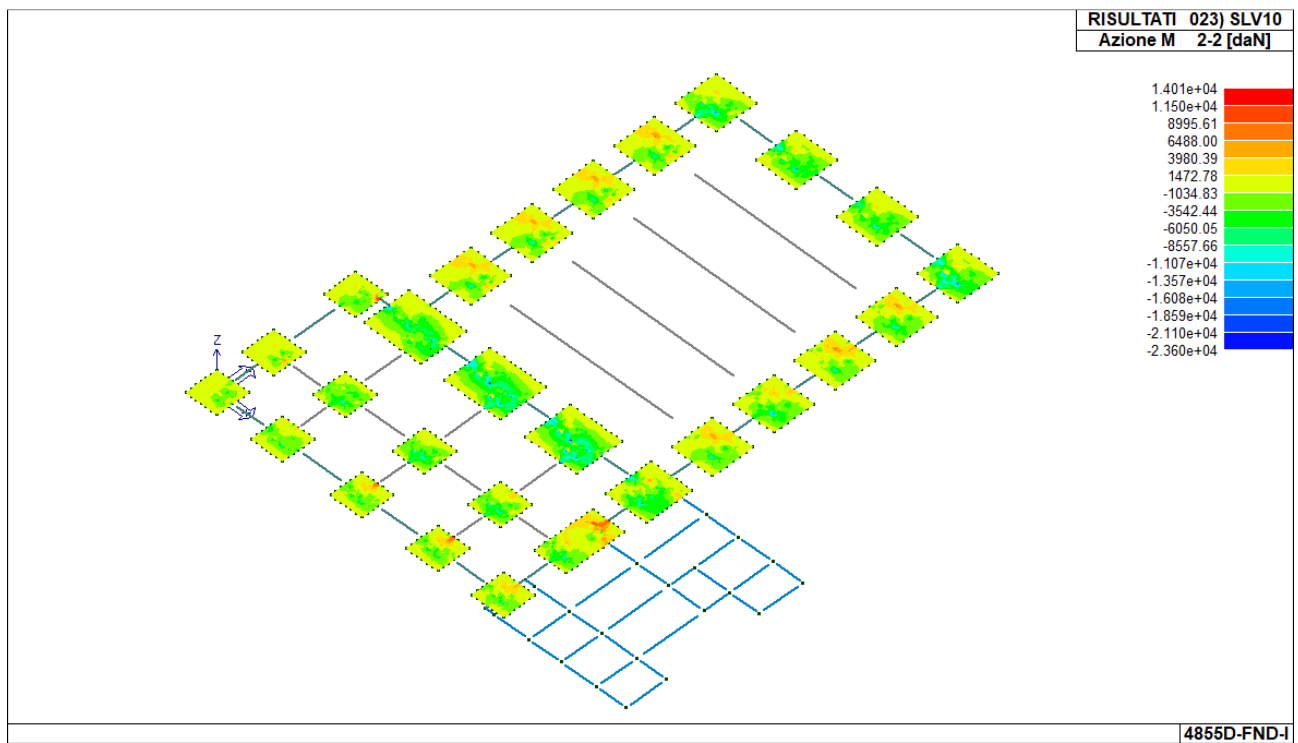


Figura 16 – SOLETTE: azione M 2-2 [max]

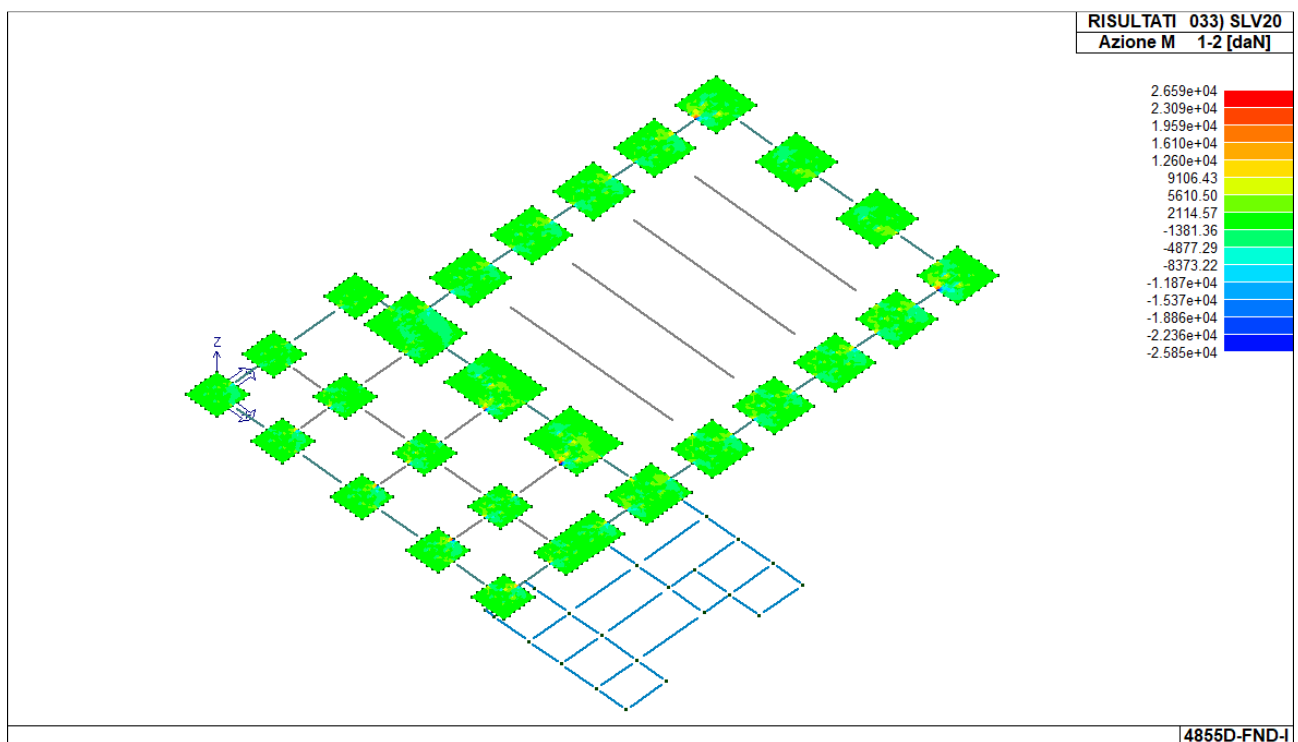


Figura 17 – SOLETTE: azione M 1-2 [max]



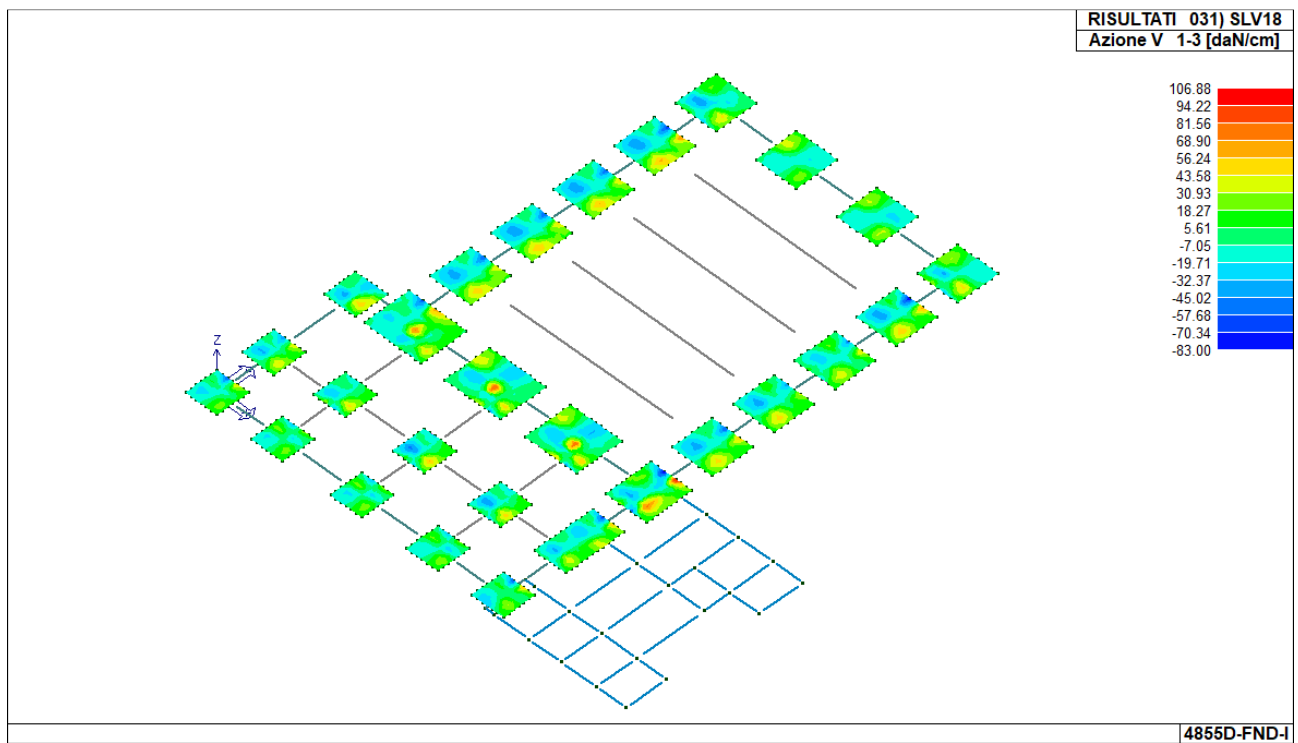


Figura 18 – SOLETTE: azione V 1-3 |max|

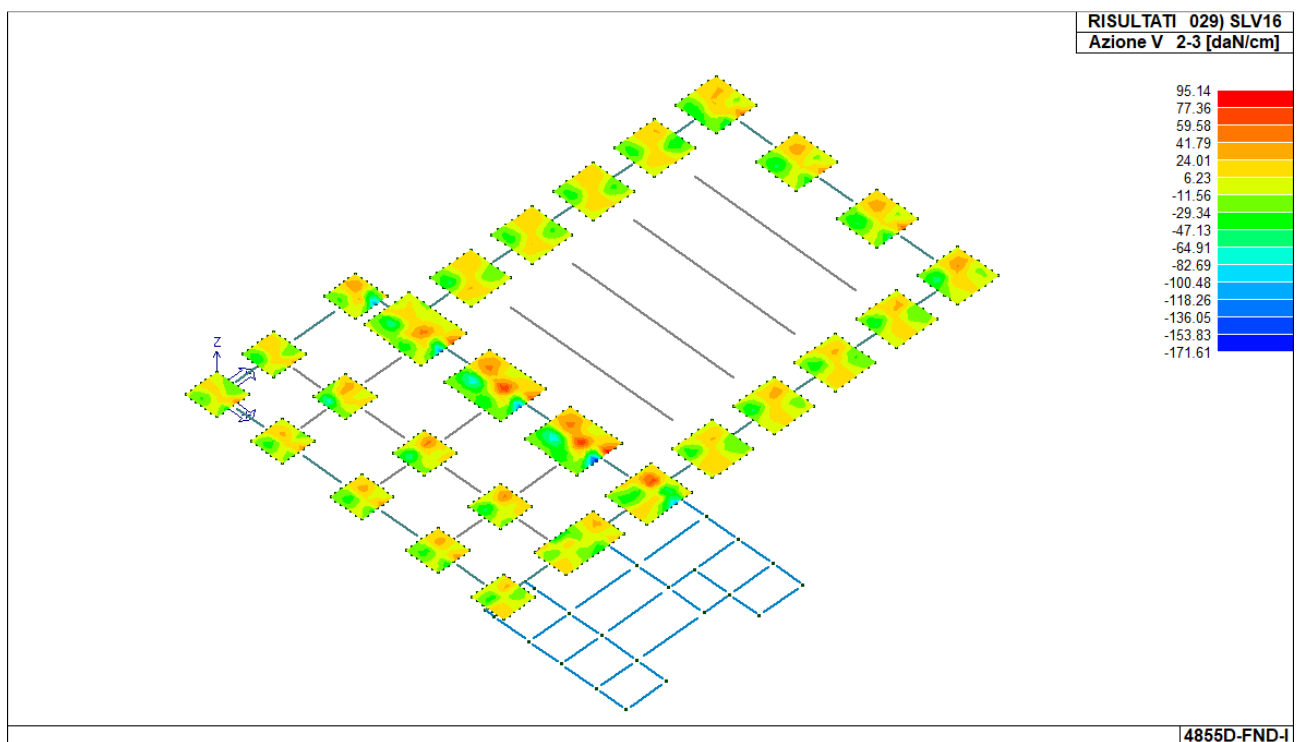


Figura 19 – SOLETTE: azione V 2-3 |max|



### 1.10.3. SINTESI DELLE VERIFICHE AGLI SLU/SLV

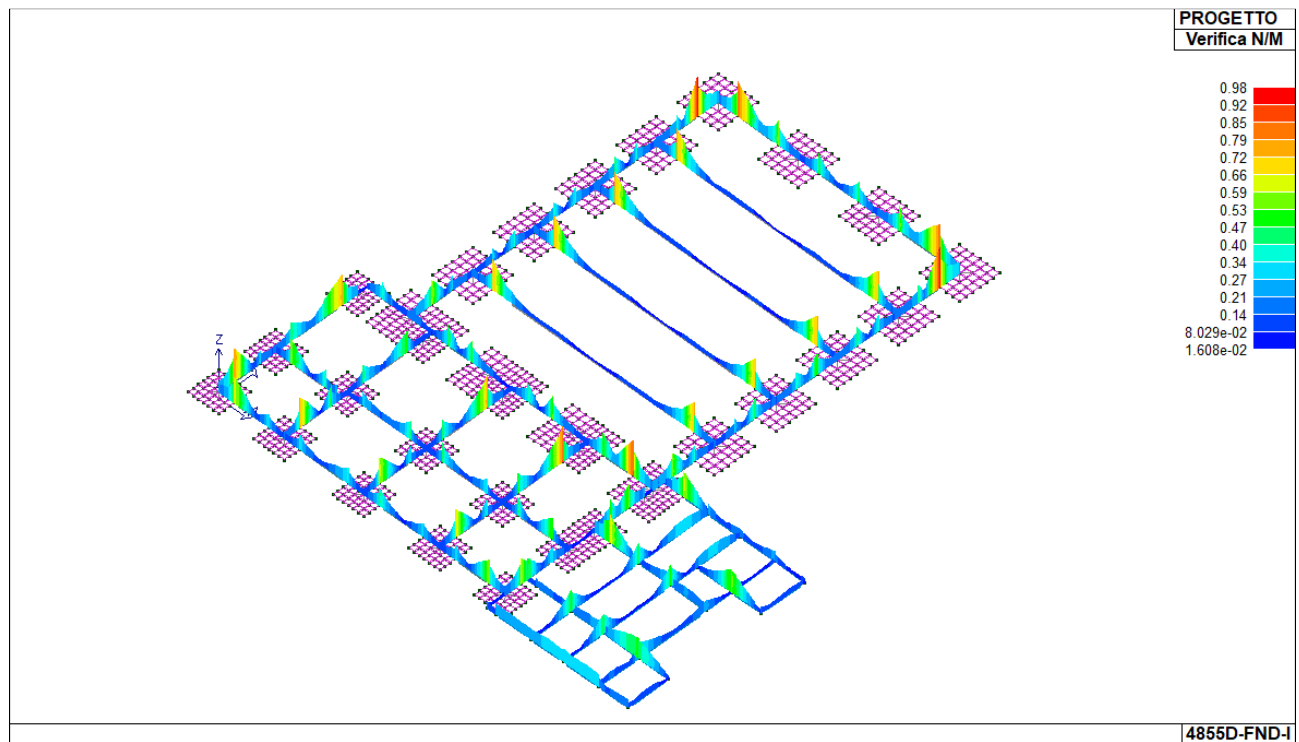


Figura 20 – TRAVI: verifica a pressoflessione SLU/SLV

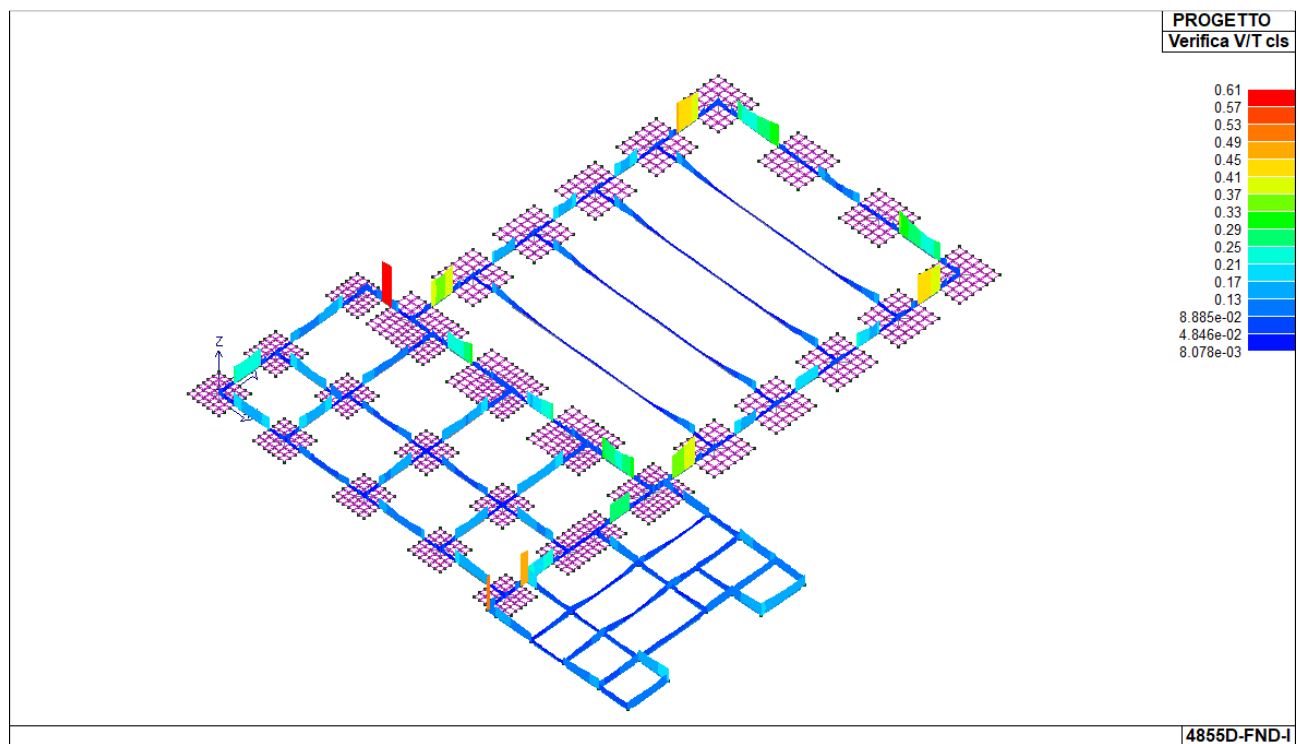


Figura 21 – TRAVI: verifica a taglio-torsione calcestruzzo SLU/SLV



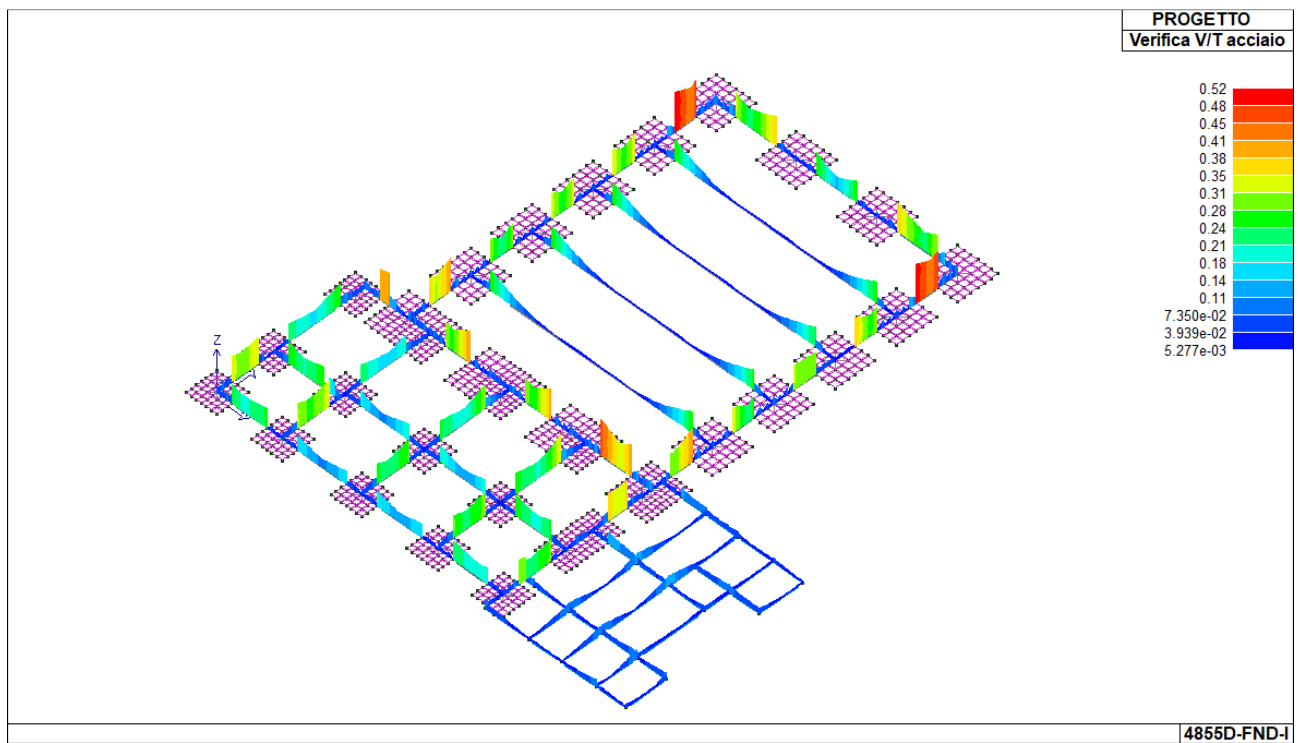


Figura 22 – TRAVI: verifica a taglio-torsione acciaio SLU/SLV

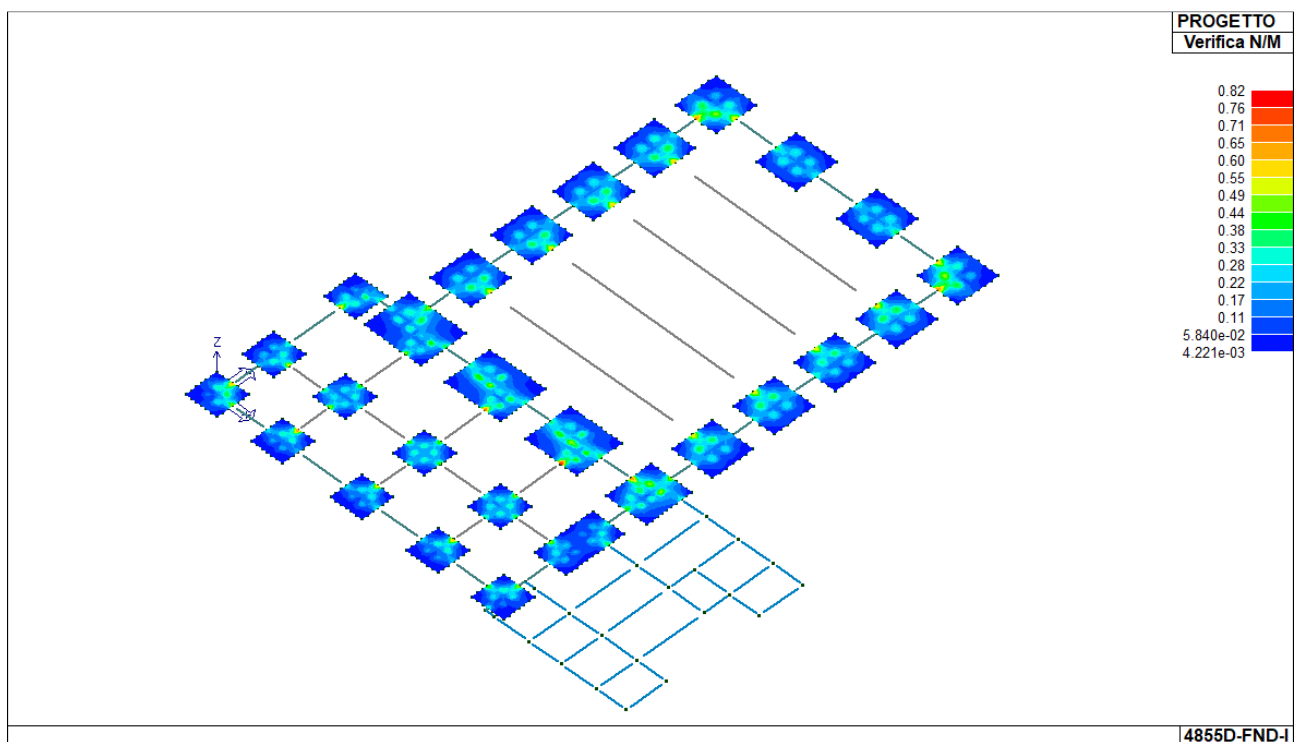


Figura 23 – SOLETTE: verifica a pressoflessione SLU/SLV



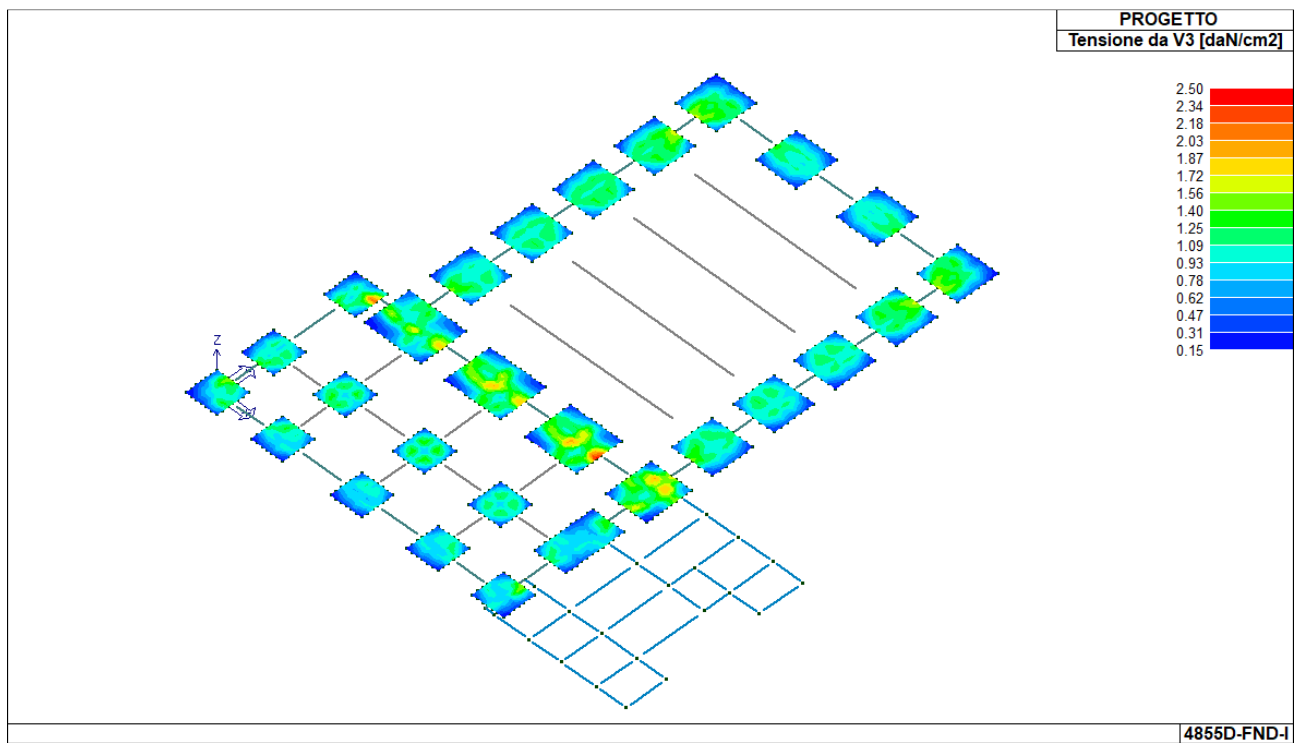


Figura 24 – SOLETTE: tensione da V3 SLV

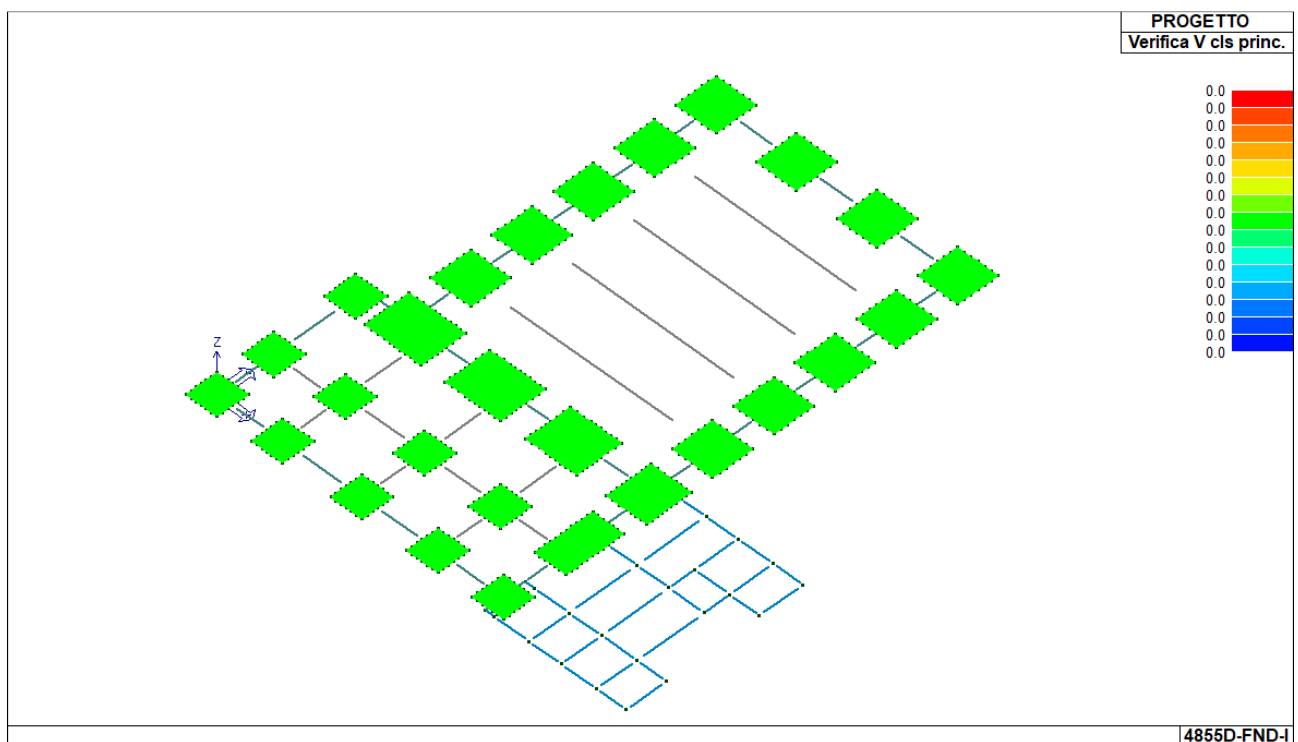


Figura 25 – SOLETTE: verifica a taglio calcestruzzo dir. principale SLU/SLV



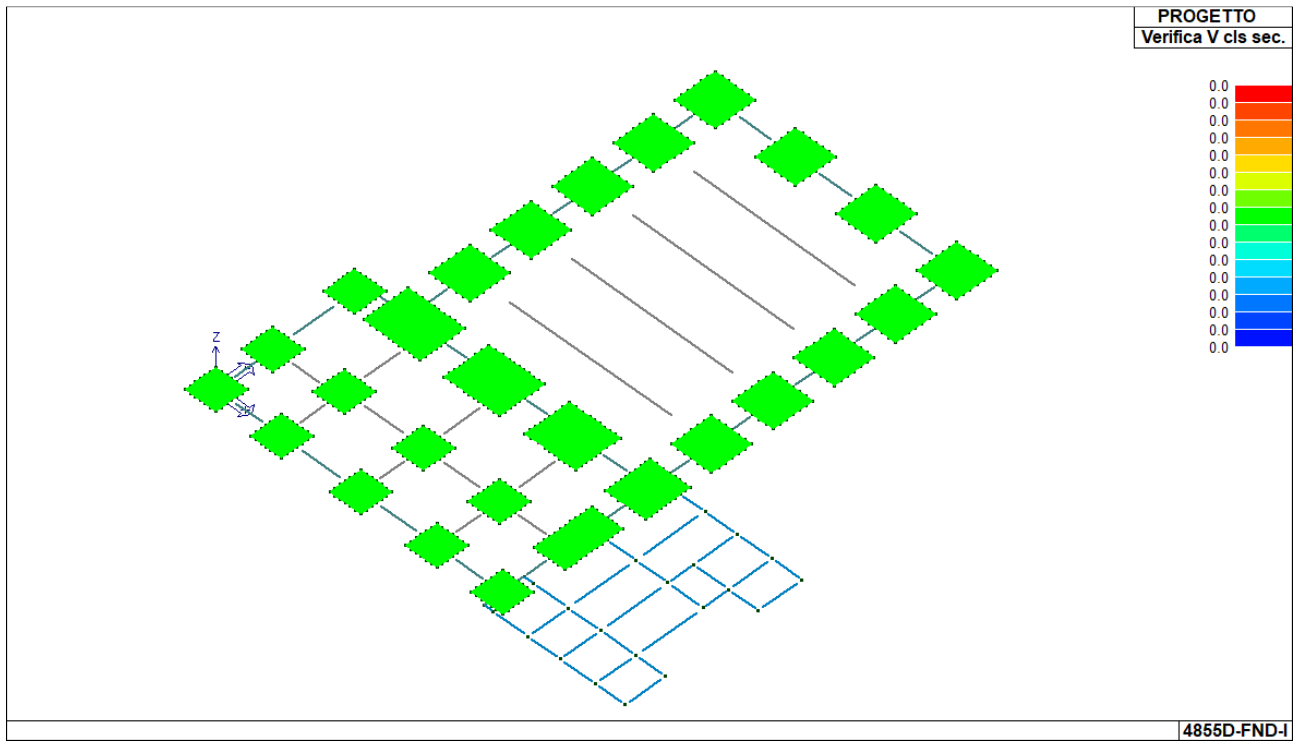


Figura 26 – SOLETTE: verifica a taglio calcestruzzo dir. secondaria SLU/SLV



## VERIFICHE TRAVI DI COLLEGAMENTO PER AZIONI ASSIALI (§7.2.5 NTC2018)

### DATI

Categoria di sottosuolo				C
Accelerazione massima per SLC su sito di riferimento rigido	$a_{gSLC}$	=	0.225	[g]
Coefficiente di amplificazione stratigrafica	$S_s$	=	1.374	
Coefficiente di amplificazione topografica	$S_T$	=	1.000	
Forza verticale max US1	$N_{US1}$	=	124600	[daN]
Forza verticale max US2	$N_{US2}$	=	62460	[daN]
Forza verticale max US3	$N_{US3}$	=	36720	[daN]
Forza verticale max	$N_{sd}$	=	$\max(N_{USi})$	= 124600 [daN]
	$a_{max}$	=	$a_{gSLC} S_s S_T$	= 0.309 [g]
Sollecitazione di progetto	$N_{Ed}$	=	$0.4 N_{sd} a_{max}$	= 15408 [daN]

### VERIFICA A TRAZIONE

Numero ferri armatura	$n$	=	8	
Diametro ferri armatura	$\emptyset$	=	20	[mm]
Area armatura	$A_s$	=	$n \emptyset^2 \pi / 4$	= 25.13 [cm <sup>2</sup> ]
Resistenza caratteristica a snervamento	$f_{yk}$	=	4500	[daN/cm <sup>2</sup> ]
Coefficiente parziale di sicurezza	$\gamma_s$	=	1.15	
Resistenza a trazione	$N_{Rd}$	=	$A_s f_{yk} / \gamma_s$	= 113097 [daN]
Verifica a trazione	$N_{Ed} / N_{Rd}$	=	0.14	$\leq 1.00$ OK

### VERIFICA A COMPRESSIONE

Base trave di collegamento	$b$	=	40	[cm]
Altezza trave di collegamento	$h$	=	80	[cm]
Area trave di collegamento	$A_c$	=	$bh$	= 3200 [cm <sup>2</sup> ]
Resistenza caratteristica cilindrica a compressione	$f_{ck}$	=	280	[daN/cm <sup>2</sup> ]
Coefficiente riduttivo per lunga durata	$\alpha_{cc}$	=	0.85	
Coefficiente parziale di sicurezza	$\gamma_c$	=	1.5	
Resistenza a compressione	$N_{Rd}$	=	$A_c \alpha_{cc} f_{ck} / \gamma_c$	= 507733 [daN]
Verifica a compressione	$N_{Ed} / N_{Rd}$	=	0.03	$\leq 1.00$ OK



#### 1.10.4. SINTESI DELLE VERIFICHE AGLI SLD

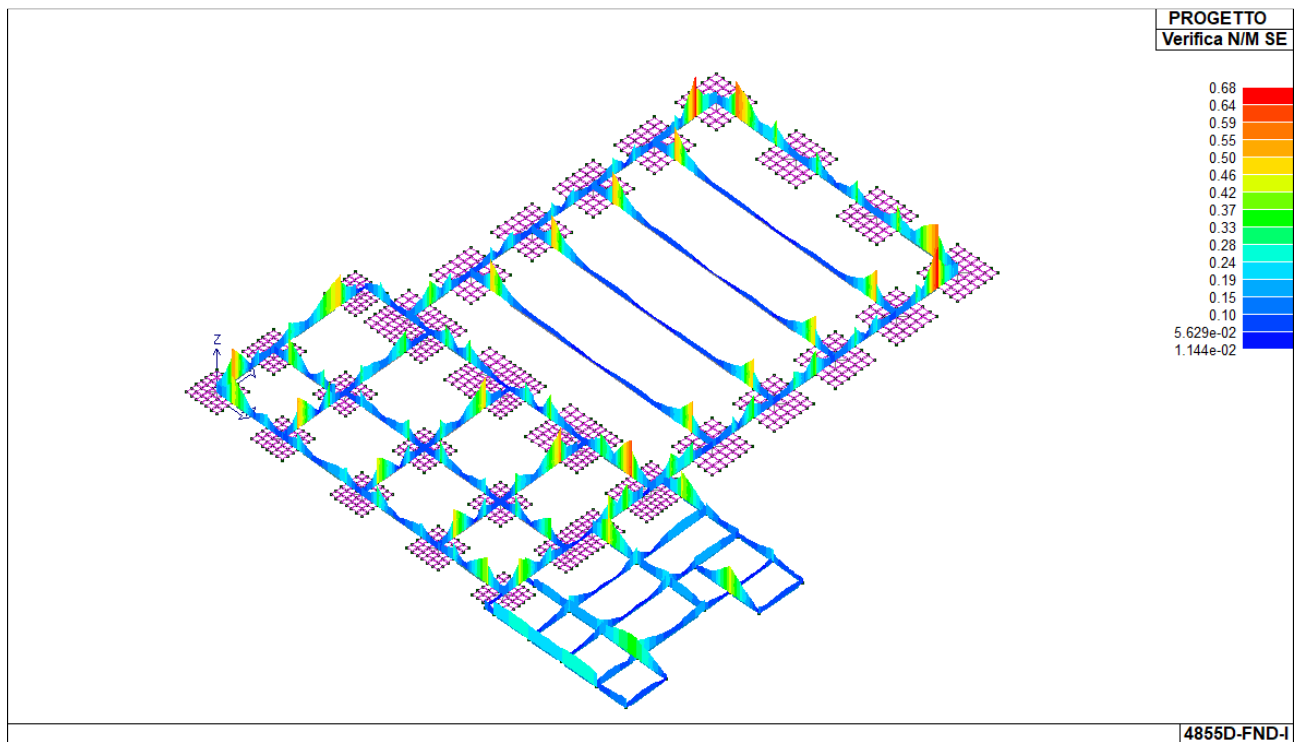


Figura 27 – TRAVI: verifica a pressoflessione SLD

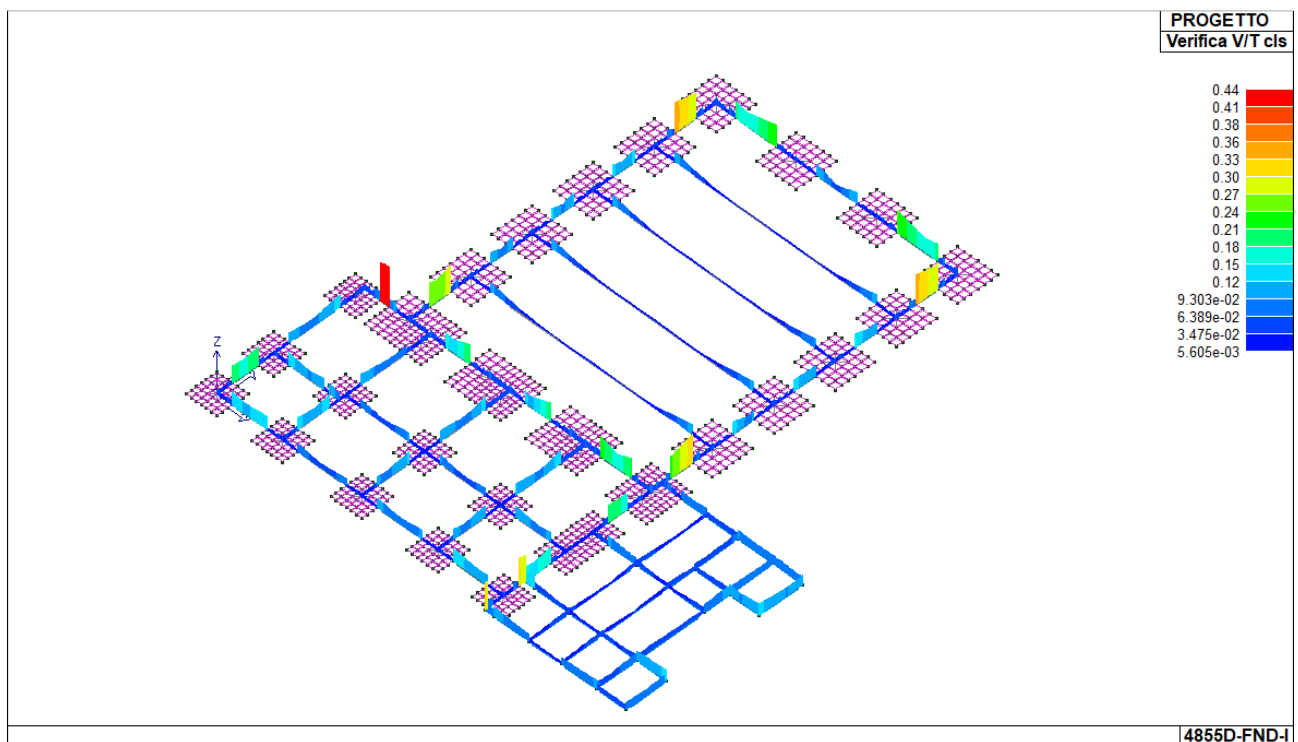


Figura 28 – TRAVI: verifica a taglio calcestruzzo SLD



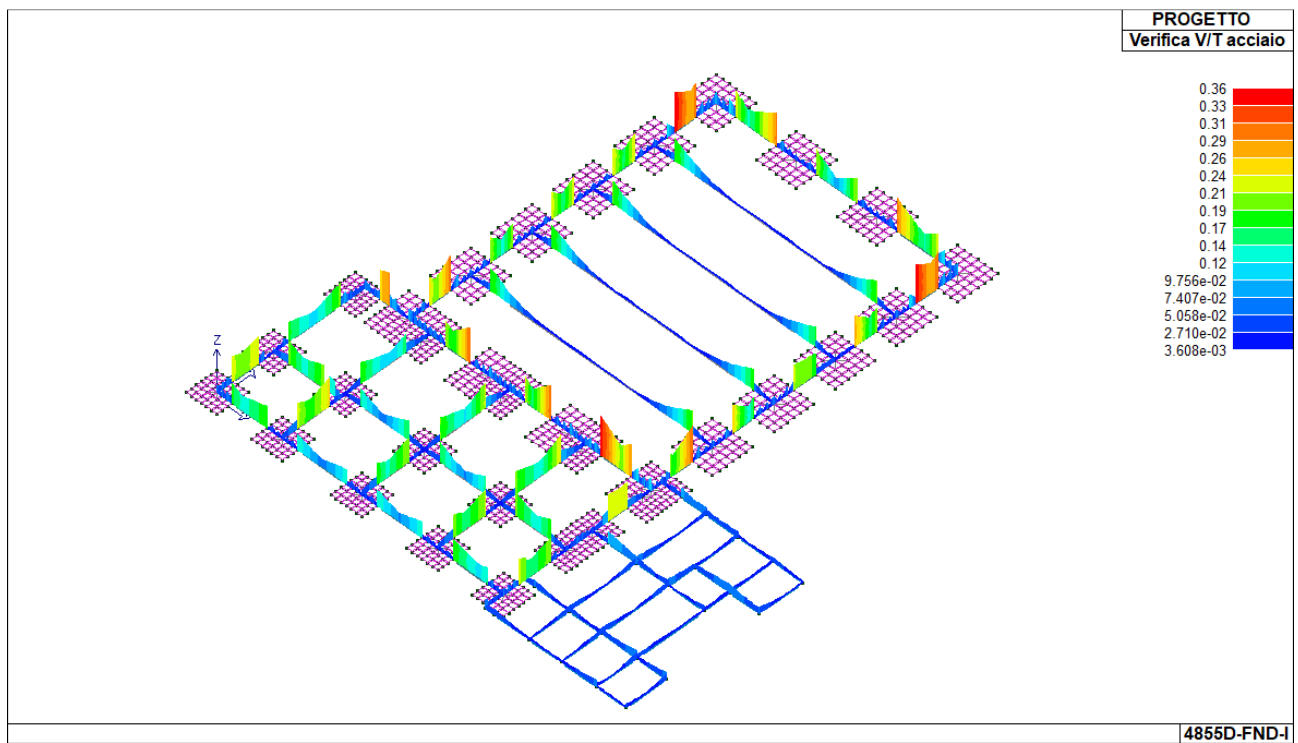


Figura 29 – TRAVI: verifica a taglio acciaio SLD

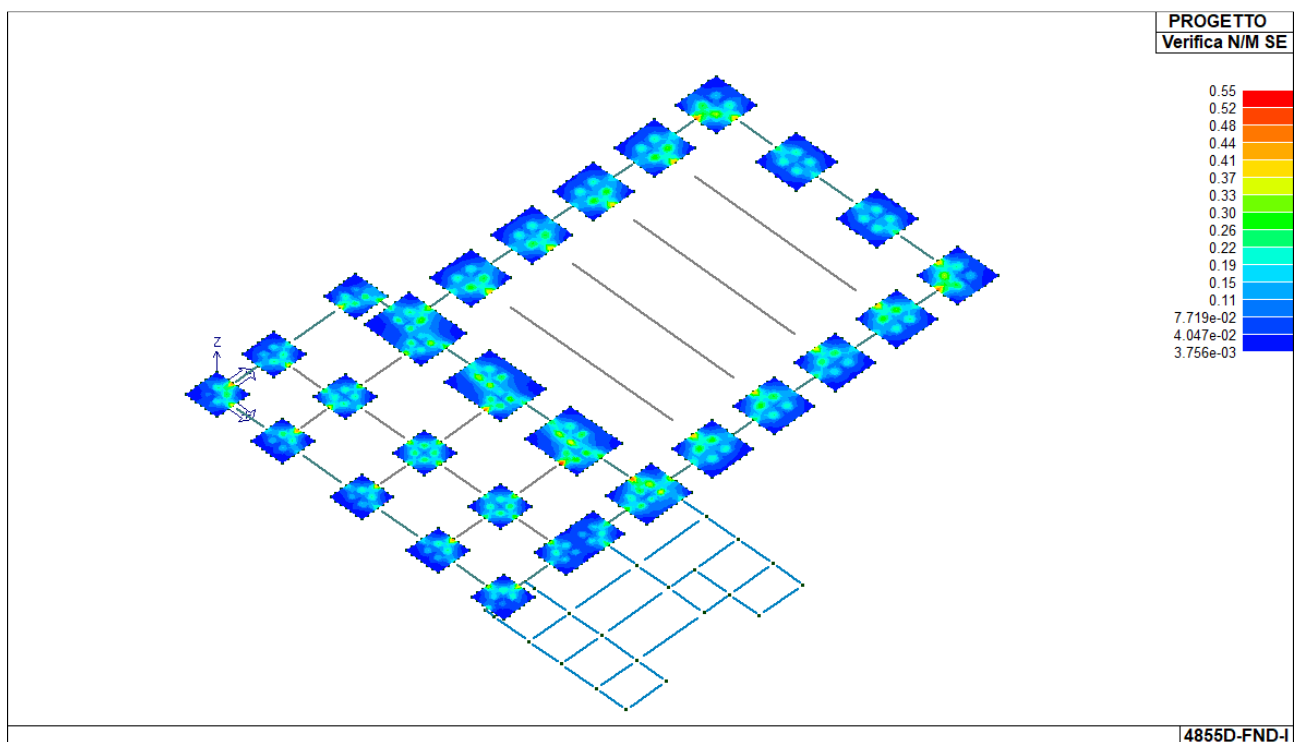


Figura 30 – SOLETTE: verifica a pressoflessione SLD



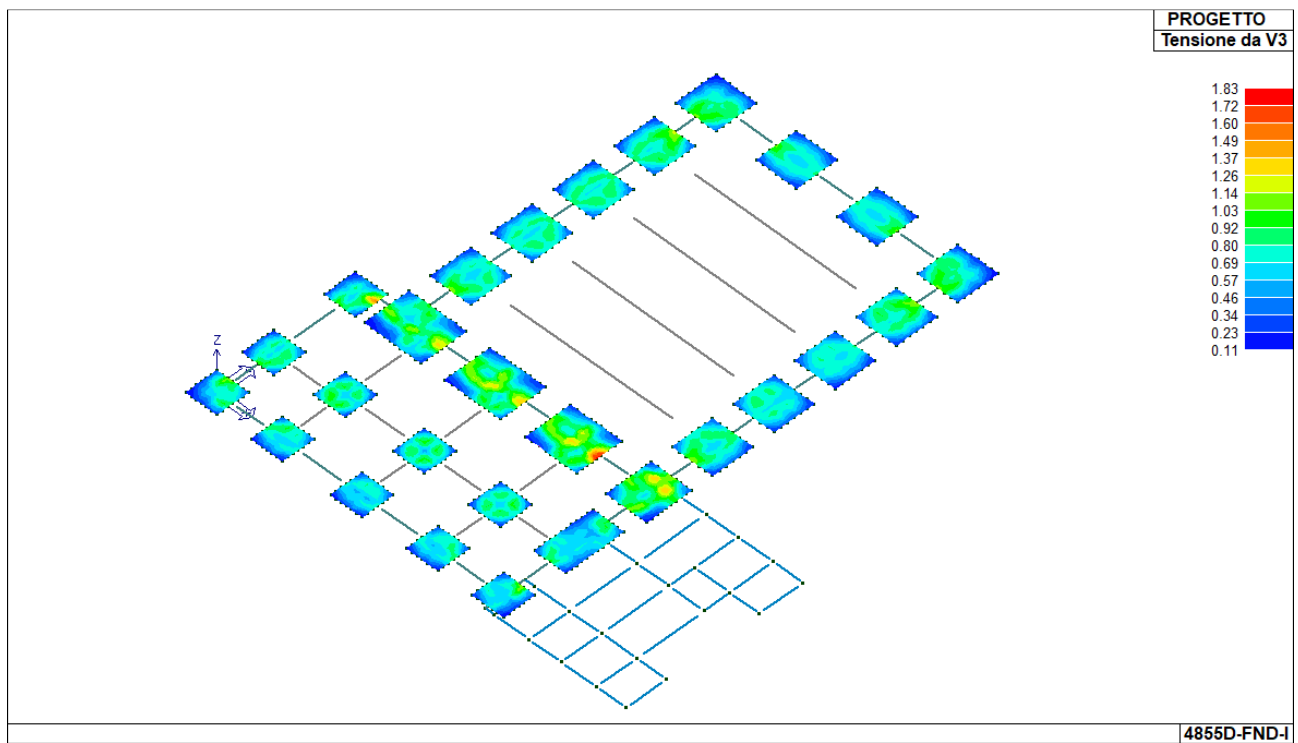


Figura 31 – SOLETTE: tensione da V3 SLD

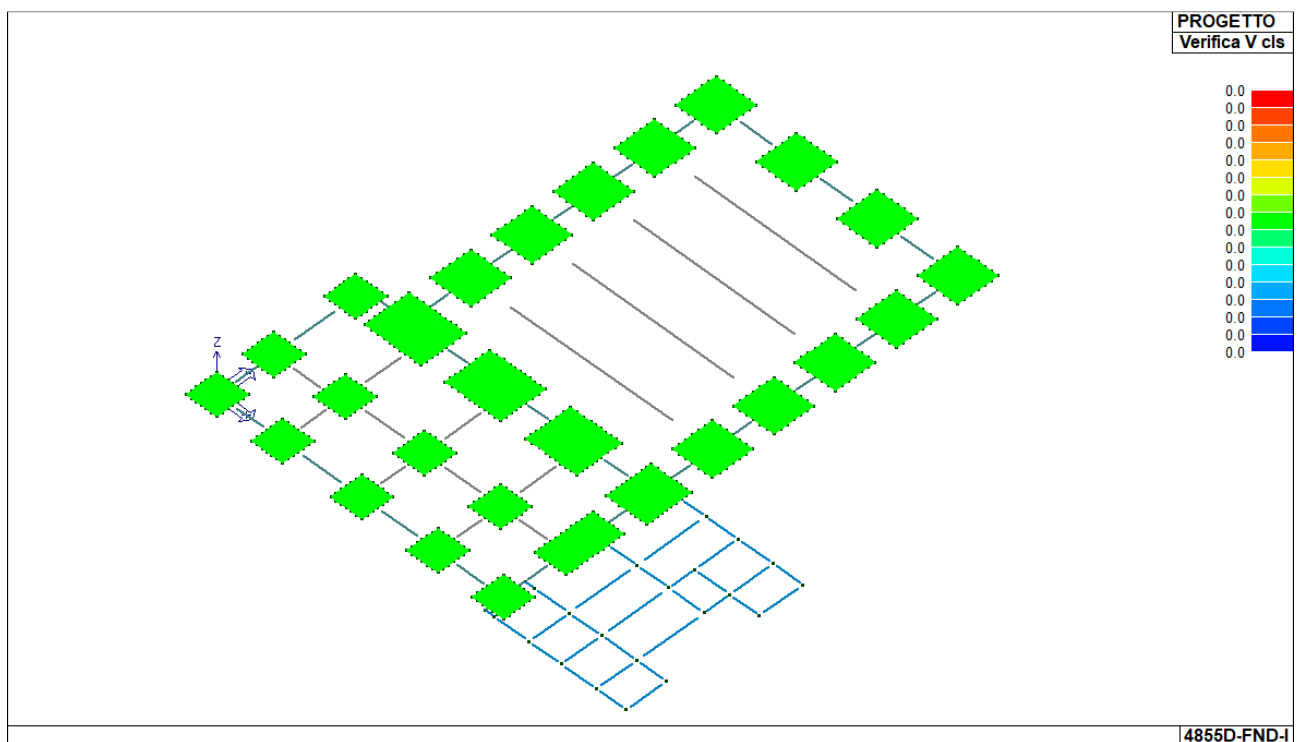


Figura 32 – SOLETTE: verifica a taglio calcestruzzo SLD



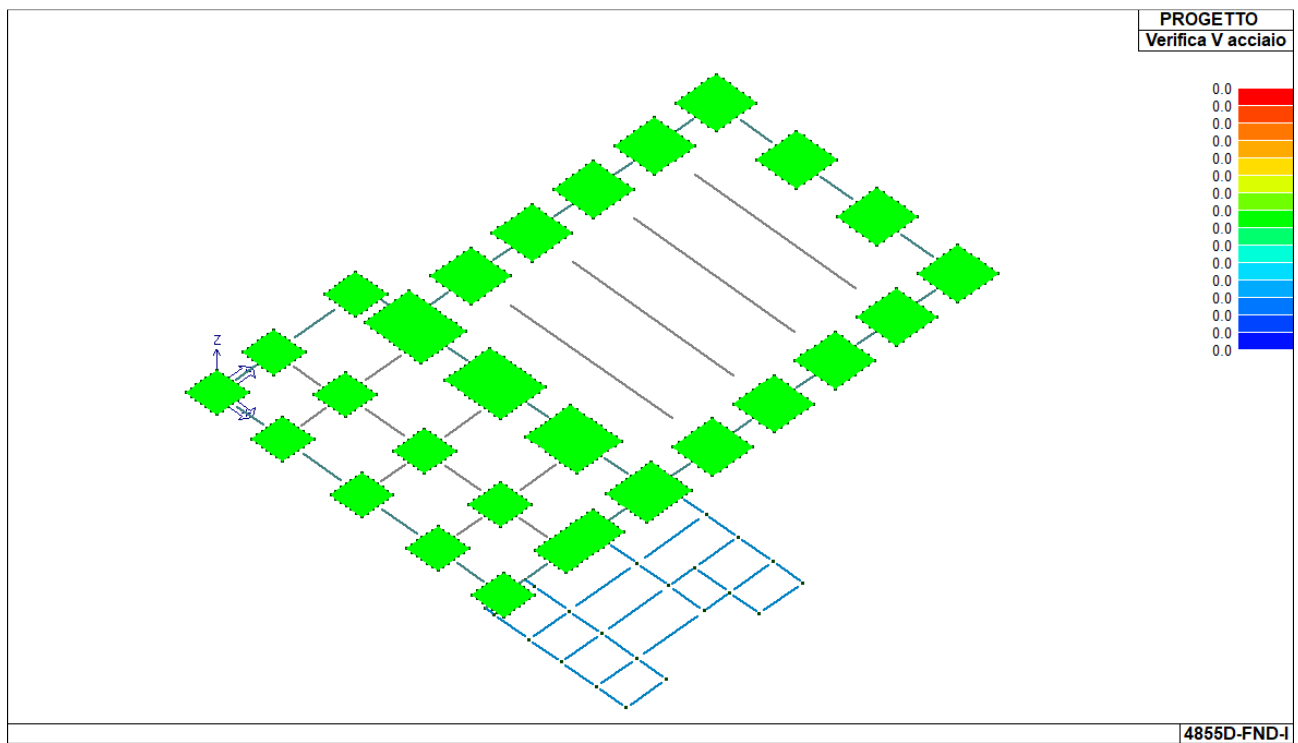


Figura 33 – SOLETTE: verifica a taglio acciaio SLD

#### 1.10.5. SINTESI DELLE VERIFICHE AGLI SLE

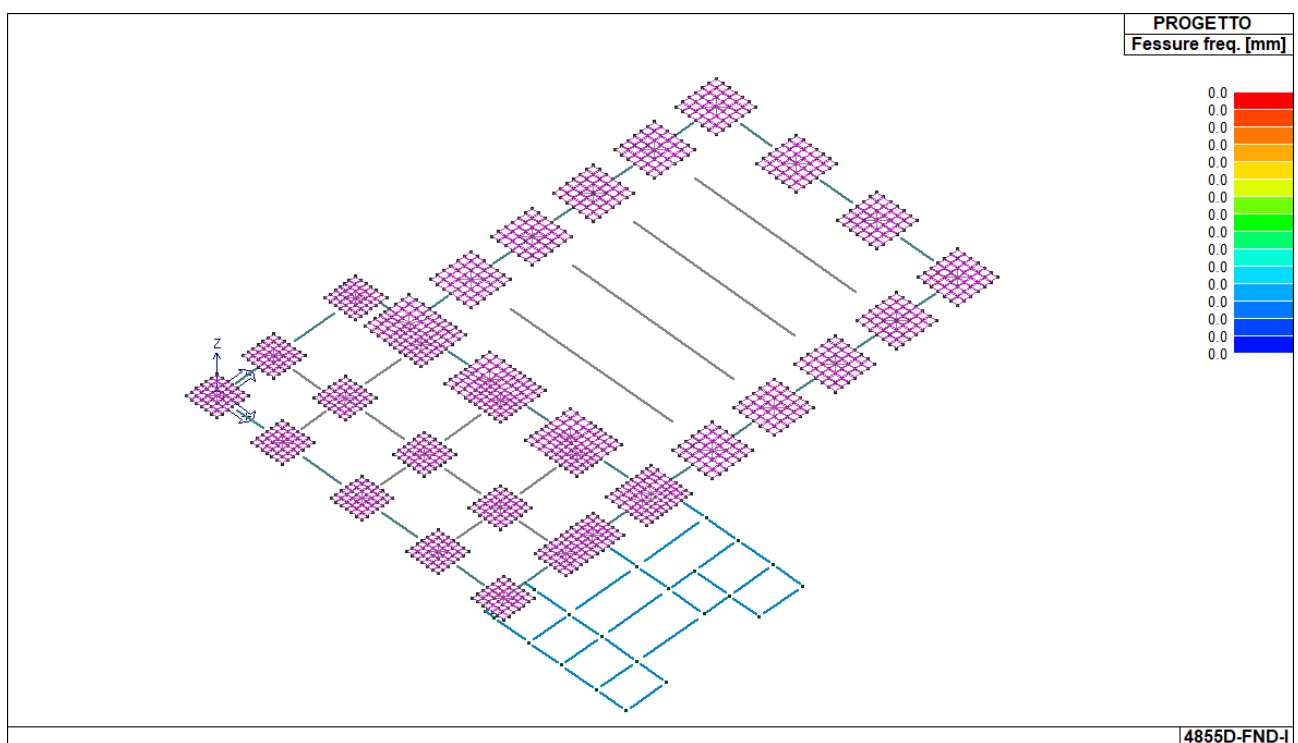


Figura 34 – TRAVI: verifica a fessurazione SLE frequenti ( $\leq 0.4 \text{ mm}$ )







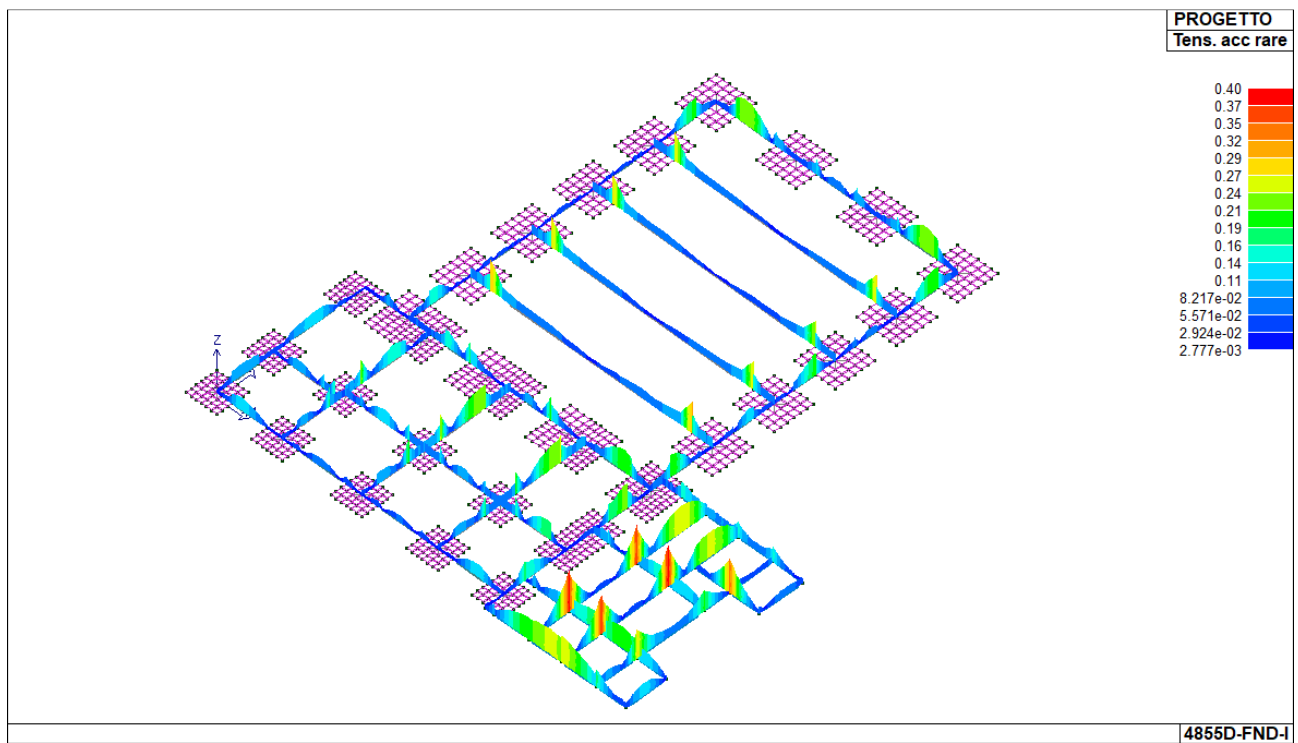


Figura 37 – TRAVI: verifica tensione in esercizio acciaio SLE rare

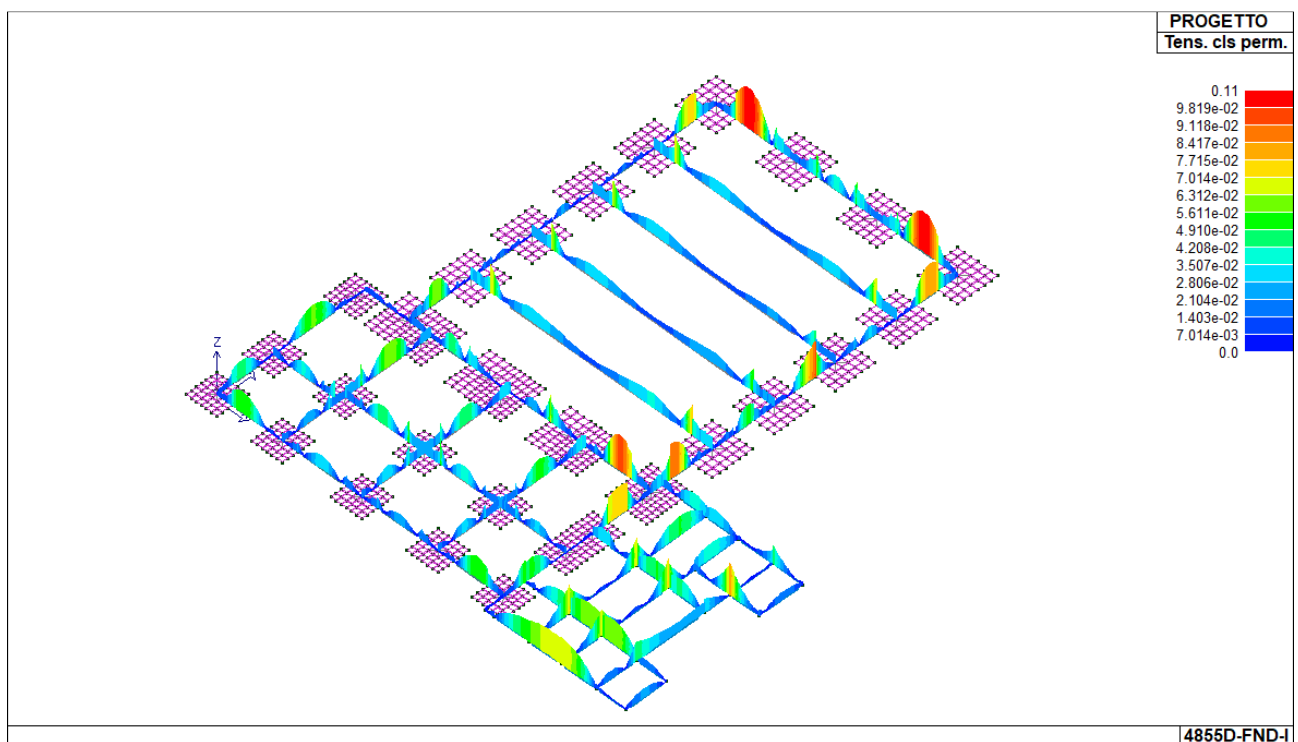


Figura 38 – TRAVI: verifica tensione in esercizio calcestruzzo SLE quasi permanente



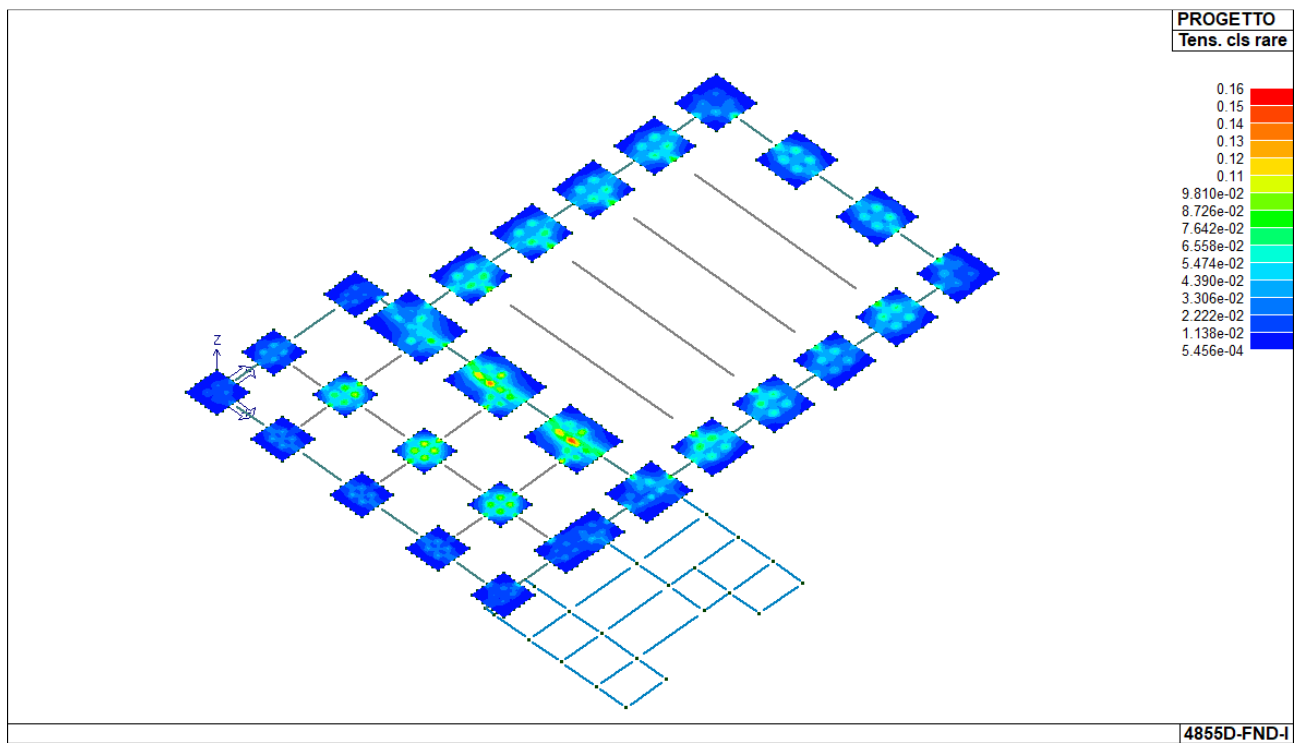


Figura 39 – SOLETTE: verifica tensione in esercizio calcestruzzo SLE rare

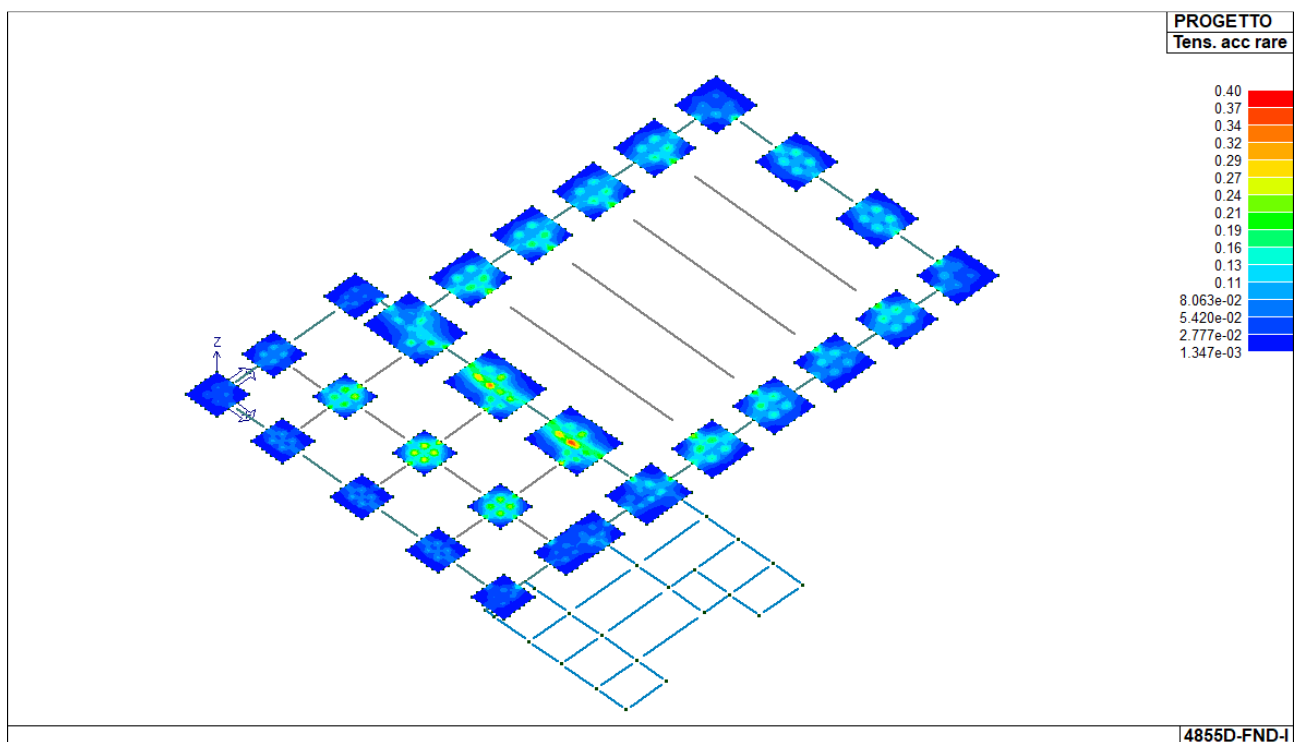


Figura 40 – SOLETTE: verifica tensione in esercizio acciaio SLE rare



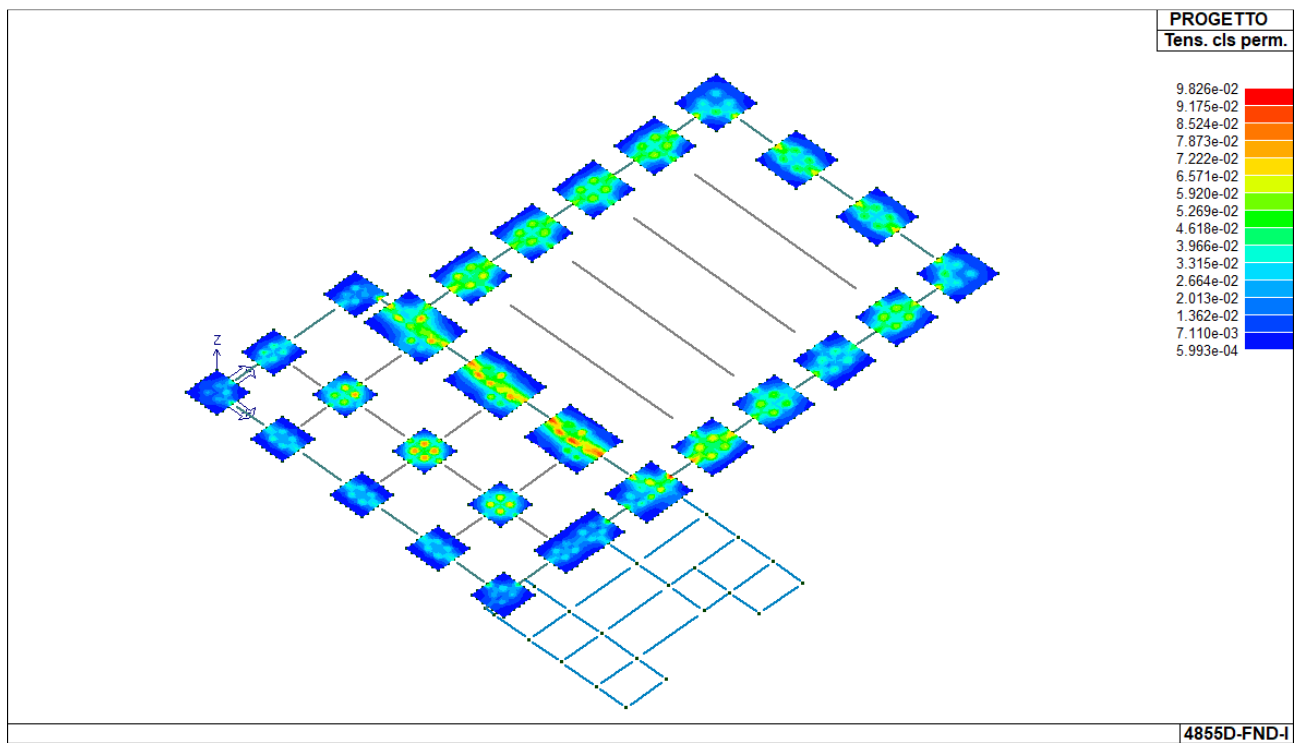


Figura 41 – SOLETTE: verifica tensione in esercizio calcestruzzo SLE quasi permanenti



### 1.10.6. GIUDIZIO MOTIVATO DI ACCETTABILITÀ DEI RISULTATI

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l'elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.).

Il sottoscritto progettista, avendo compiuto analisi di larga massima attraverso semplici schemi statici, visto il confronto dei risultati tra l'elaborazione manuale e l'elaborazione con calcolo automatico, ritiene in generale accettabili i risultati proposti dal calcolatore automatico utilizzato nella modellazione della presente struttura.

#### VERIFICA PRESSIONE TERRENO

Combinazione SLU1

Pilastro US1 incrocio filo A e filo 1

#### CARICO DA SOLAIO

$$(\gamma_{G1}G_1 + \gamma_{G2}G_2 + \gamma_{Q}Q) A_{influenza} = (1.3 \times 400 + 1.5 \times 180 + 1.5 \times 510) \times (7.30/2 \times 6.36/2) = 26928 \text{ daN}$$

#### PESO PROPRIO TRAVE

$$\gamma_{G1}A_c\gamma_{cls} L/2 = 1.3 \times (0.3 \times 0.2 + 0.45 \times 0.70) \times 2500 \times 6.36/2 = 7131 \text{ daN}$$

#### PESO PROPRIO PILASTRO

$$\gamma_{G1}A_c\gamma_{cls} L = 1.3 \times (0.60 \times 0.60) \times 2500 \times 3.70 = 4329 \text{ daN}$$

#### PESO PROPRIO PLINTO

$$\gamma_{G1}V_c\gamma_{cls} = 1.3 \times (3.50 \times 3.50 \times 0.80) \times 2500 = 31850 \text{ daN}$$

#### PESO PANNELLI

$$\gamma_{G1}H_{pan}L_{infl} \times 400 = 1.5 \times 6.40 \times (6.36/2 + 7.30/2) \times 400 = 26227 \text{ daN}$$

#### TOTALE

96465 daN

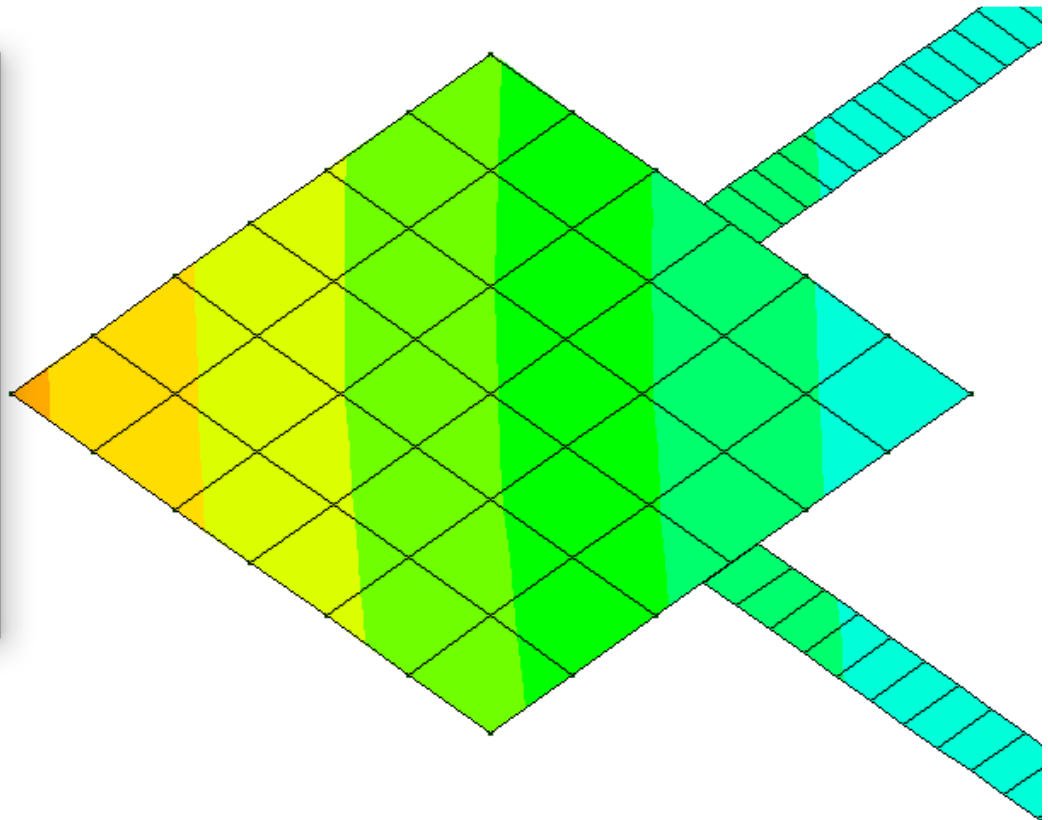
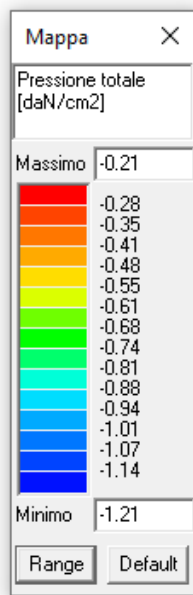
#### PRESSIONE MEDIA SUL TERRENEO DA CALCOLI MANUALI

$$96465/(350 \times 350) = 0.79 \text{ daN/cm}^2$$

#### PRESSIONE SUL TERRENO DA MODELLO DI CALCOLO

Variabile da -0.41 daN/cm<sup>2</sup> a -0.94 daN/cm<sup>2</sup>







## 1.11. CARATTERISTICHE E AFFIDABILITÀ DEL CODICE DI CALCOLO

### DICHIARAZIONE DI AFFIDABILITÀ

Dichiarazione del produttore-distributore di PRO\_SAP PROfessional SAP riguardante l'affidabilità del codice (NTC 2018 - Paragrafo 10.2)

#### Origine e caratteristiche dei codici di calcolo

**Titolo:** PRO\_SAP PROfessional Structural Analysis Program

**Autore-Produttore:** 2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara

#### Affidabilità dei codici

##### - Inquadramento teorico della metodologia

L'analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo si basa sulla schematizzazione della struttura in elementi connessi in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. L'analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensiodeformativo indotto da carichi statici.

L'analisi strutturale è condotta con il metodo dell'analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensiodeformativo indotto da carichi dinamici (tra i quali quelli di tipo sismico).

Gli elementi, lineari e non lineari, utilizzati per la modellazione dello schema statico della struttura sono i seguenti:

**Elemento TRUSS (asta)**

**Elemento BEAM (trave)**

**Elemento MEMBRANE (membrana)**

**Elemento PLATE (piastra-guscio)**

**Elemento BRICK (solido)**

**Elemento CINGHIA**

**Elemento BOUNDARY (molla)**

**Elemento STIFFNESS  
(matrice di rigidità)**

##### - Casi prova che consentano un riscontro dell'affidabilità

2S.I. ha verificato, in collaborazione con il DISTART dell'Università di Bologna e con il Dipartimento di Ingegneria dell'Università di Ferrara, l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.

E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: <http://www.2si.it/affidabilita.php>

##### - Filtri di autodiagnostica

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione.

Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi.

##### Garanzia di qualità

Dal 1 dicembre 1999 2S.I. ha prodotto un manuale di qualità in funzione dei requisiti della norma di riferimento UNI EN ISO 9001.

Tutte le attività dell'azienda sono regolate dalla documentazione e dalle procedure in esso contenute.

In relazione alla attività di validazione dei prodotti software si dichiara inoltre quanto segue:

- la fase di progetto degli algoritmi è preceduta dalla ricerca di risultati di confronto reperibili in bibliografia o riproducibili con calcoli manuali;

- la fase di implementazione degli algoritmi è continuamente validata con strumenti automatici (tools di sviluppo) e attraverso confronti;

- il software che implementa gli algoritmi è testato, confrontato e controllato anche da tecnici qualificati che non sono intervenuti nelle precedenti fasi.

Nella produzione del solutore FEM 2S.I. implementa componenti sviluppati da CM2 - Computing Objects SARL spin-off dell'École Centrale Paris, France. E' disponibile la documentazione di affidabilità di tali componenti all'indirizzo web:

[http://www.2si.it/software/download/manuali/pro\\_sap\\_quaderni/Affidabilita/benchmarks\\_e\\_sap.zip](http://www.2si.it/software/download/manuali/pro_sap_quaderni/Affidabilita/benchmarks_e_sap.zip)

Rev. del 15/03/2018



INFORMAZIONI SUL CODICE DI CALCOLO	
<b>Titolo</b>	PRO_SAP PROfessional Structural Analysis Program
<b>Versione</b>	PRO_SAP 22.5.0 (build 2022-06-196)
<b>Produttore-Distributore</b>	2S.I. Software e Servizi per l'Ingegneria s.r.l. Via Garibaldi n.90 – 44121 Ferrara (FE) Tel. +39 0532 200091 <a href="http://www.2si.it">www.2si.it</a>
<b>Codice Licenza</b>	dsi5294



## 1.12. STRUTTURE DI FONDAZIONE

Con riferimento alle strutture geotecniche o di fondazione: fasi di realizzazione dell'opera (se pertinenti), sintesi delle massime pressioni attese, cedimenti e spostamenti assoluti/differenziali, distorsioni angolari, verifiche di stabilità terreno-fondazione eseguite, ed altri aspetti e risultati significativi della progettazione di opere particolari.

### 1.12.1. COSTANTE DI SOTTOFONDO

La fondazione è stata modellata come una platea/travi su suolo elastico con costante di sottofondo.

Per la determinazione della costante di sottofondo è stata utilizzata la seguente formulazione di Bowles:

$$k_s = 0.4 \cdot q_{lim}$$

dove  $q_{lim}$  è il carico limite del terreno espresso in  $\text{daN/cm}^2$  e calcolato secondo la ben nota formula trinomia.

Peso di volume terreno al di sopra del piano di imposta	$\gamma$	=	1850	[ $\text{daN/m}^3$ ]
Coesione non drenata	$c_u$	=	1.09	[ $\text{daN/cm}^2$ ]
Profondità del piano di imposta	$D$	=	140	[cm]
Fattori di capacità portante	$N_c$	=	$2+\pi$	= 5.14
Carico limite	$q_{lim}$	=	$N_c c_u + \gamma D$	= 5.9 [daN/cm <sup>2</sup> ]
Costante di sottofondo	$k$	=	$0.4 q_{lim}$	= 2.3 [daN/cm <sup>3</sup> ]

### 1.12.2. PRESSIONI ATTESE

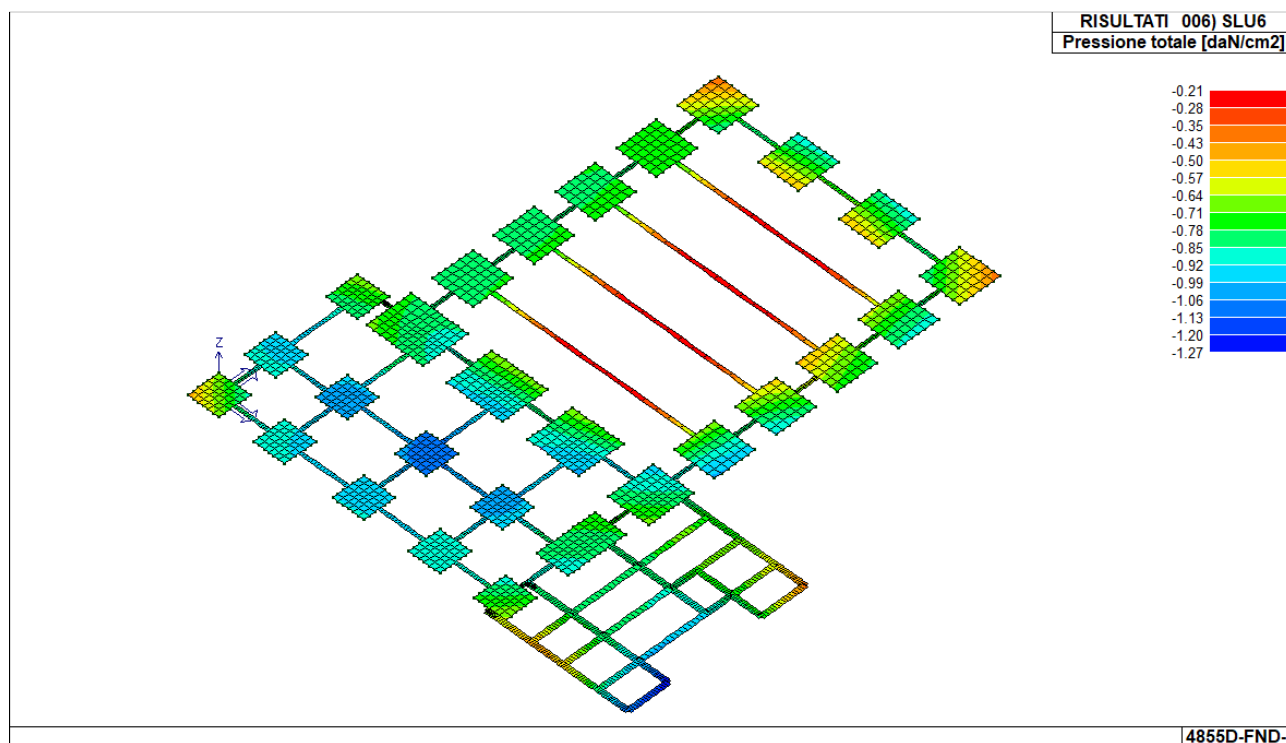


Figura 42 – Pressioni max SLU



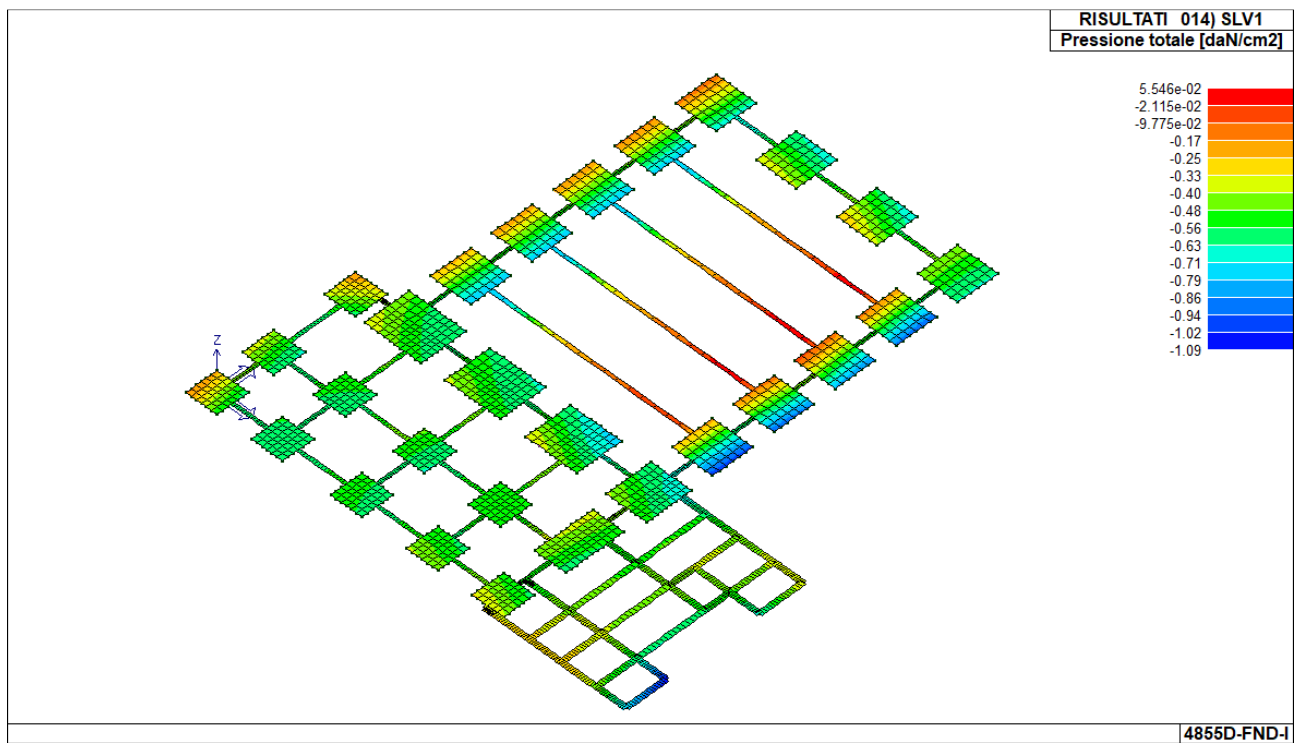


Figura 43 – Pressioni max SLV

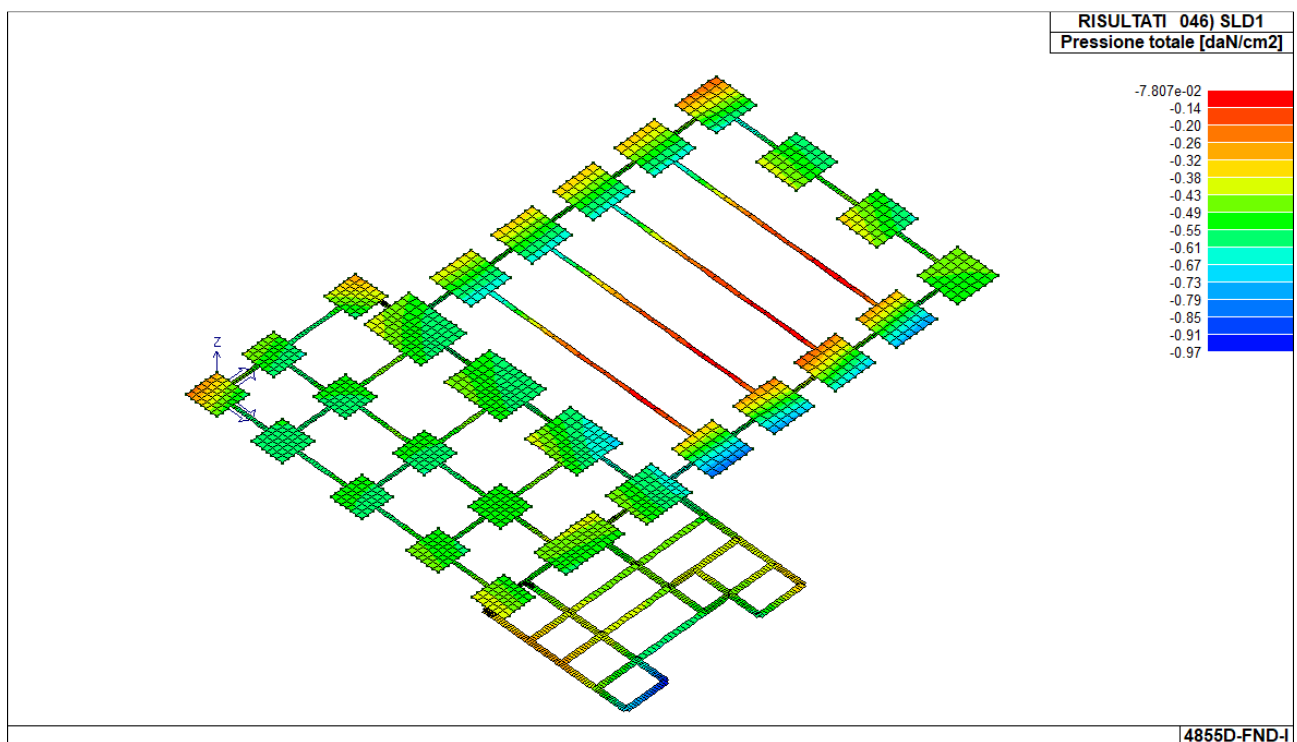


Figura 44 – Pressioni max SLD



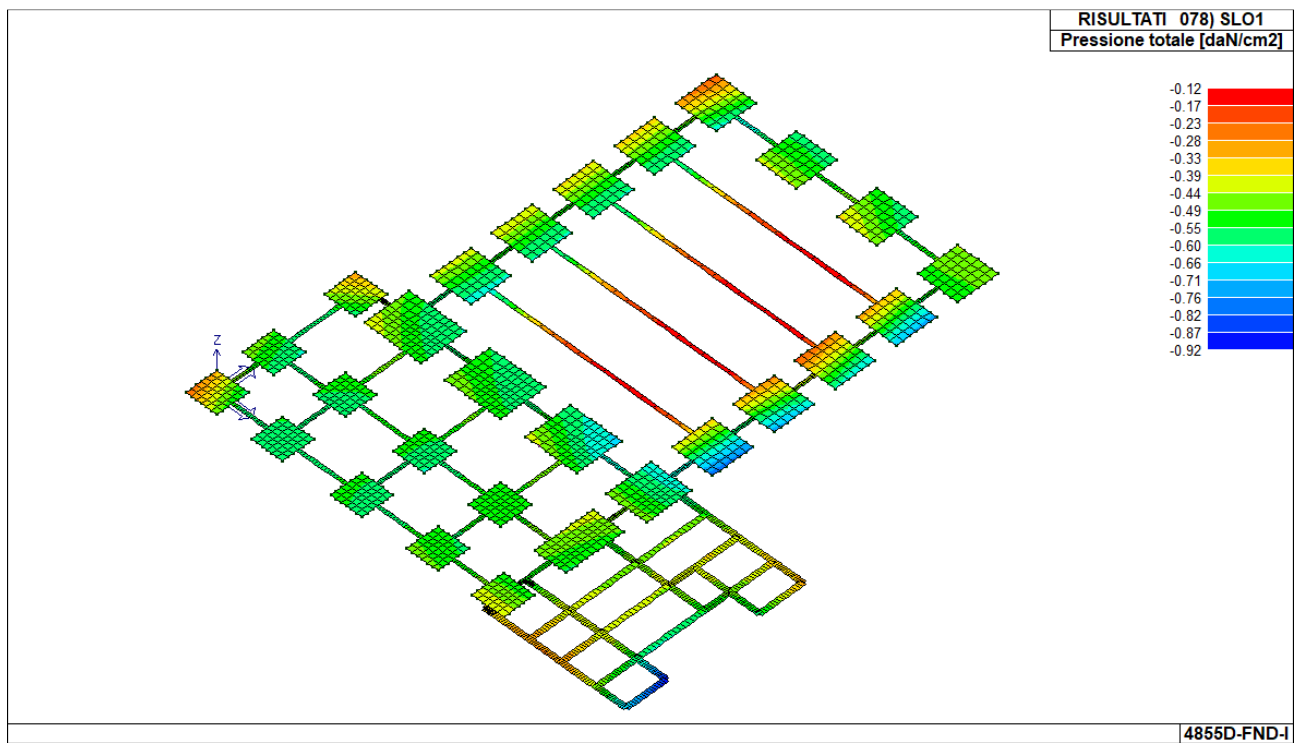


Figura 45 – Pressioni max SLO

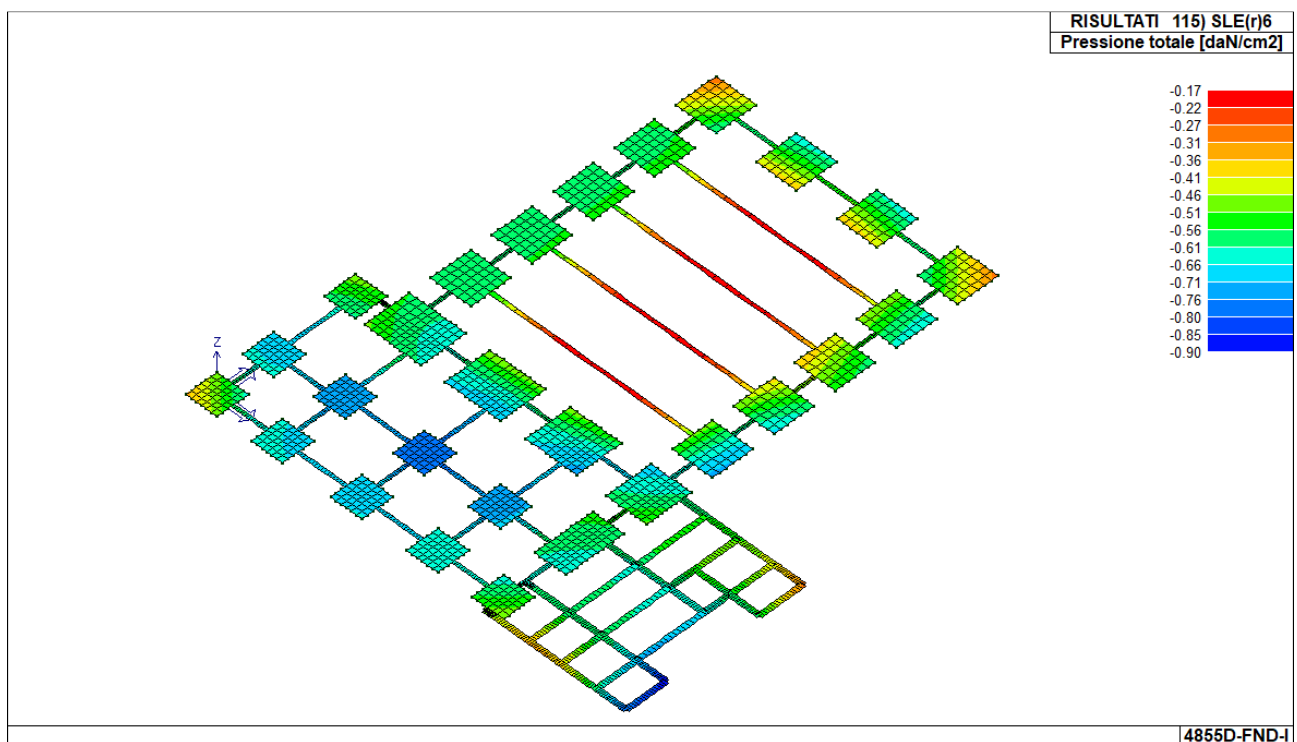


Figura 46 – Pressioni max SLE rare



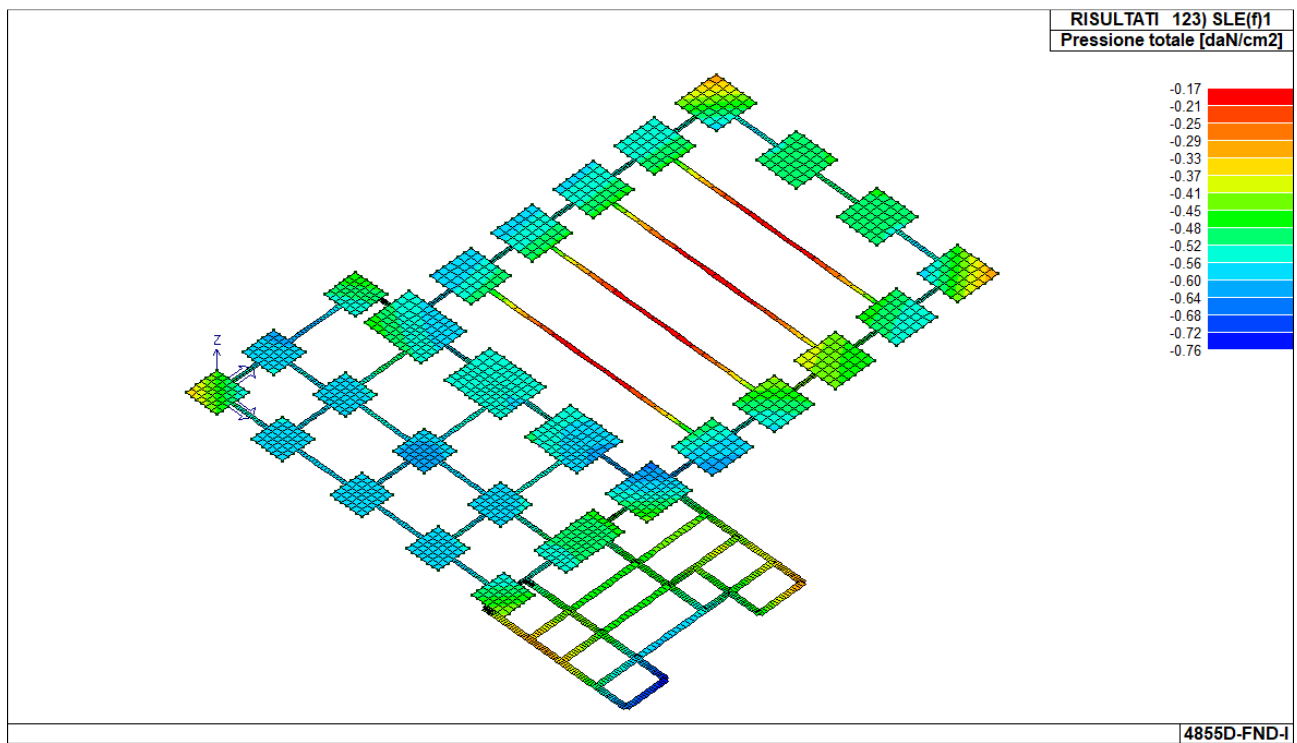


Figura 47 – Pressioni max SLE frequenti

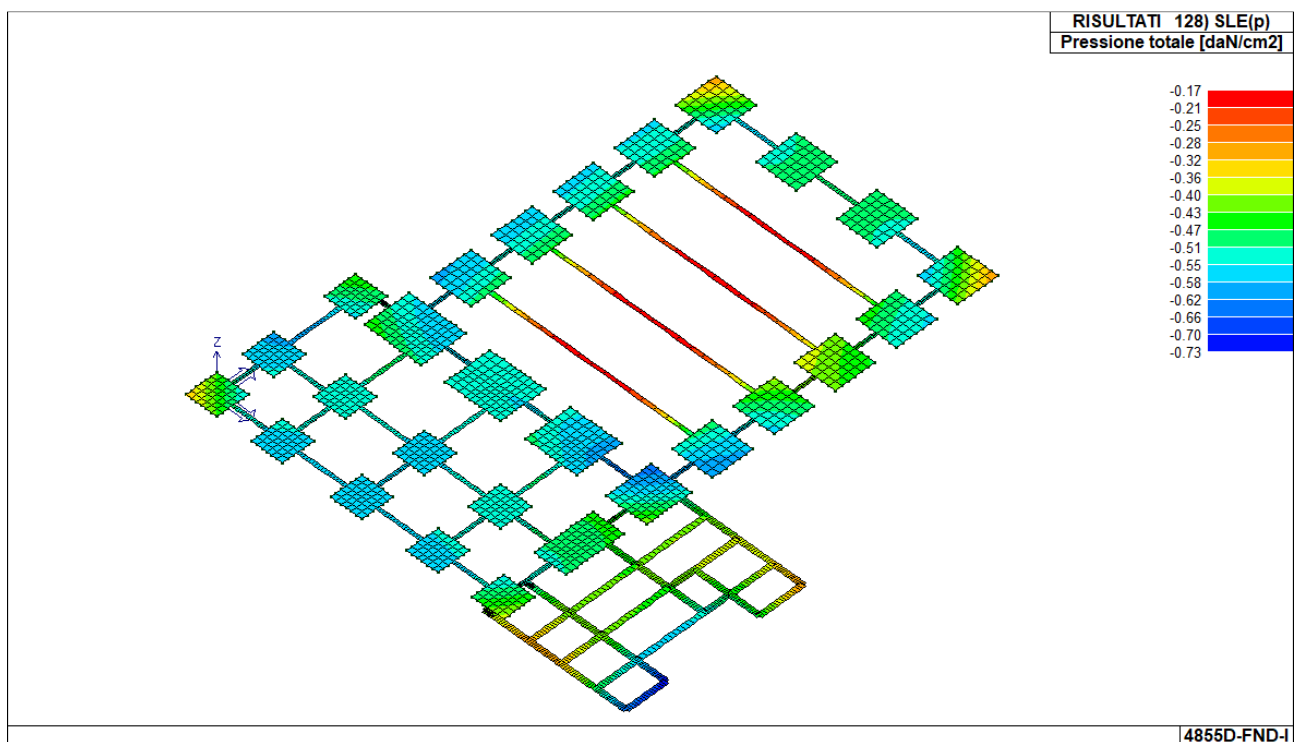


Figura 48 – Pressioni max SLE quasi permanenti



### 1.12.3. SINTESI VERIFICHE GEOTECNICHE

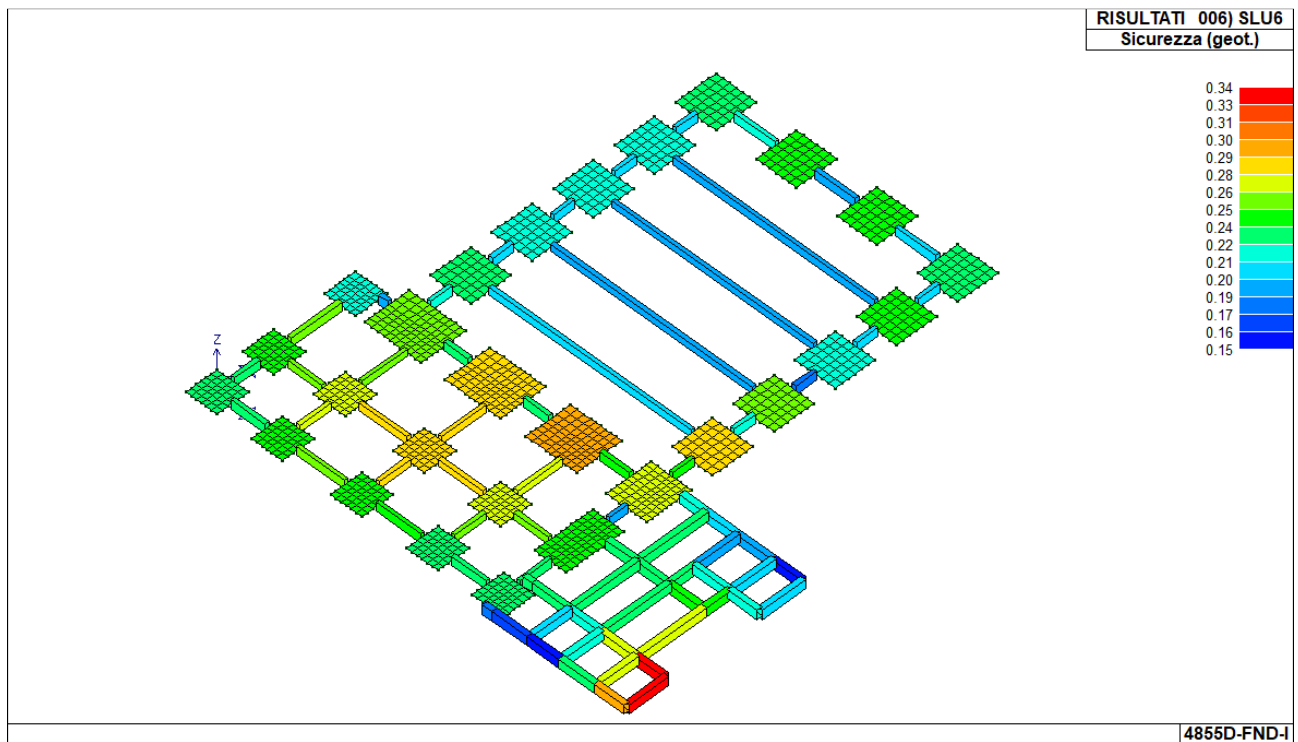


Figura 49 – Verifiche geotecniche di sicurezza SLU

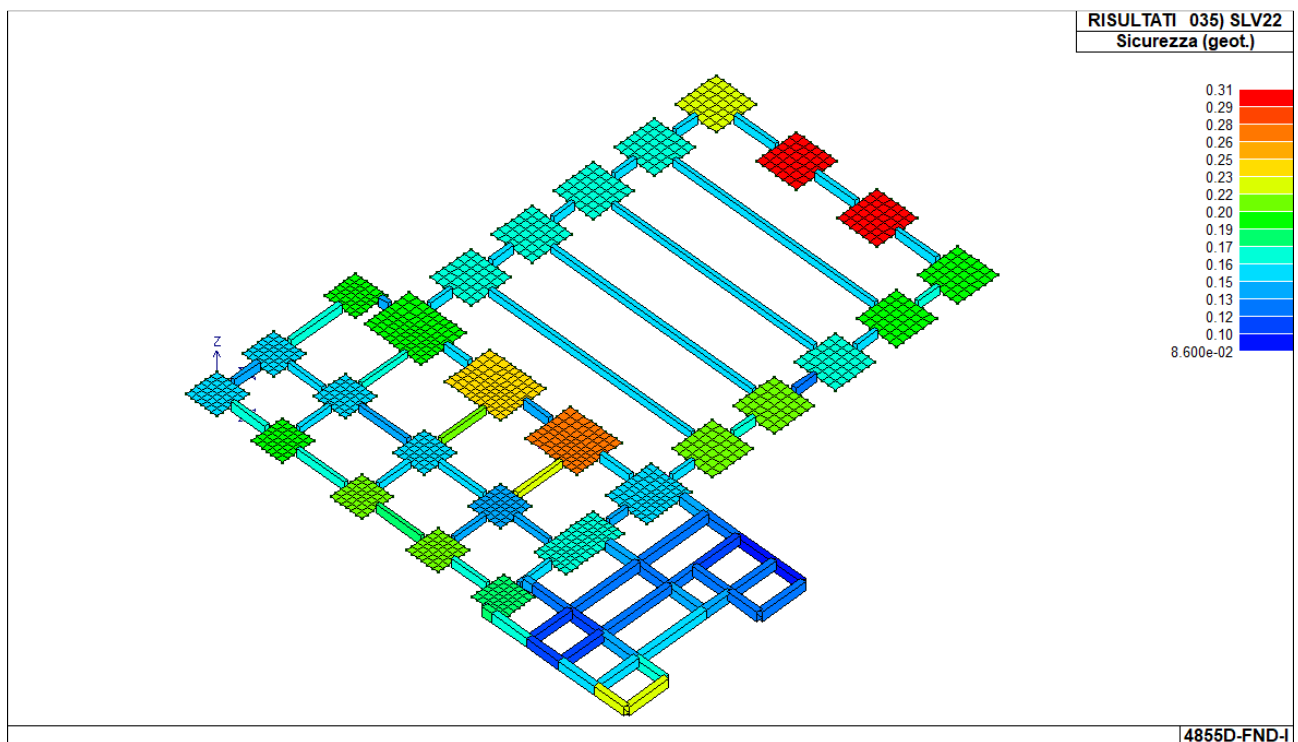


Figura 50 – Verifiche geotecniche di sicurezza SLV



## **2. TABULATI DI CALCOLO**









**Relazione di calcolo strutturale impostata e redatta secondo le modalità previste nel D.M. 17 Gennaio 2018 cap. 10 “Redazione dei progetti strutturali esecutivi e delle relazioni di calcolo”.**

Origine e Caratteristiche dei Codici di Calcolo	
Codice di calcolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2022-06-196)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l. Via Garibaldi, 90 44121 Ferrara FE ( Italy) Tel. +39 0532 200091 www.2si.it
Codice Licenza:	Licenza dsi5294

Descrizione	
Progetto	
Ubicazione	Comune di REGGIO NELL'EMILIA (RE) (Regione EMILIA-ROMAGNA)
	Località REGGIO NELL'EMILIA
	Longitudine 10.604, Latitudine 44.688
Progettista	

In merito al punto 10.2 delle Norme Tecniche per le Costruzioni (*Affidabilità dei codici utilizzati*), si fa riferimento al **Documento di Affidabilità** “Test di validazione del software di calcolo PRO\_SAP e dei moduli aggiuntivi PRO\_SAP Modulo Geotecnico, PRO\_CAD nodi acciaio e PRO\_MST” disponibile per il download sul sito: <https://www.2si.it/it/prodotti/affidabilita/>



# INTESTAZIONE E CONTENUTI DELLA RELAZIONE

## Progetto

Contenuti della relazione:

### RELAZIONE DI CALCOLO STRUTTURALE

- *Origine e Caratteristiche dei Codici di Calcolo*
- *Affidabilità dei codici utilizzati*
- *Validazione dei codici*
- *Tipo di analisi svolta*
- *Modalità di presentazione dei risultati*
- *Informazioni generali sull'elaborazione*
- *Giudizio motivato di accettabilità dei risultati*

### STAMPA DEI DATI DI INGRESSO

- *Normative prese a riferimento*
- *Criteri adottati per le misure di sicurezza*
- *Criteri seguiti nella schematizzazione della struttura, dei vincoli e delle sconnessioni*
- *Interazione tra terreno e struttura*
- *Legami costitutivi adottati per la modellazione dei materiali e dei terreni*
- *Schematizzazione delle azioni, condizioni e combinazioni di carico*
- *Metodologie numeriche utilizzate per l'analisi strutturale*
- *Metodologie numeriche utilizzate per la progettazione e la verifica degli elementi strutturali*

### STAMPA DEI RISULTATI

Il Progettista:







31 maggio 2023

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# RELAZIONE DI CALCOLO STRUTTURALE

## Premessa

La presente relazione di calcolo strutturale, in conformità al §10.1 del DM 17/01/18, è comprensiva di una descrizione generale dell'opera e dei criteri generali di analisi e verifica. Segue inoltre le indicazioni fornite al §10.2 del DM stesso per quanto concerne analisi e verifiche svolte con l'ausilio di codici di calcolo.

Nella presente parte sono riportati i principali elementi di inquadramento del progetto esecutivo riguardante le strutture, in relazione agli strumenti urbanistici, al progetto architettonico, al progetto delle componenti tecnologiche in generale ed alle prestazioni attese dalla struttura.

\*Completare\*

## Descrizione generale dell'opera

\*Completare\*

Descrizione generale dell'opera	
Fabbricato ad uso	
Ubicazione	Comune di REGGIO NELL'EMILIA (RE) (Regione EMILIA-ROMAGNA)
	Località REGGIO NELL'EMILIA
	Longitudine 10.604, Latitudine 44.688
Numero di piani	Fuori terra
	Interrati
	le dimensioni dell'opera in pianta sono racchiuse in un rettangolo di
Numero vani scale	
Numero vani ascensore	
Tipo di fondazione	

Principali caratteristiche della struttura	
Struttura regolare in pianta	
Struttura regolare in altezza	
Classe di duttilità	
Travi: ricalate o in spessore	
Pilastrì	
Pilastrì in falso	
Tipo di fondazione	
Condizioni per cui è necessario considerare la componente verticale del sisma	

Parametri della struttura			
Classe d'uso	Vita Vn [anni]	Coeff. Uso	Periodo Vr [anni]
III	50.0	1.5	75.0



## Fattore di struttura/comportamento

\*Completare\*

## Quadro normativo di riferimento adottato

Le norme ed i documenti assunti quale riferimento per la progettazione strutturale vengono indicati di seguito.

Nel capitolo “normativa di riferimento” è comunque presente l’elenco completo delle normative disponibili.

### Progetto-verifica degli elementi

Progetto cemento armato	D.M. 17-01-2018
Progetto acciaio	D.M. 17-01-2018
Progetto legno	D.M. 17-01-2018
Progetto muratura	D.M. 17-01-2018
<b>Azione sismica</b>	
Norma applicata per l’azione sismica	D.M. 17-01-2018

## Azioni di progetto sulla costruzione

Nei capitoli “modellazione delle azioni” e “schematizzazione dei casi di carico” sono indicate le azioni sulla costruzioni.

Nel prosieguo si indicano tipo di analisi strutturale condotta (statico,dinamico, lineare o non lineare) e il metodo adottato per la risoluzione del problema strutturale nonché le metodologie seguite per la verifica o per il progetto-verifica delle sezioni. Si riportano le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti; le configurazioni studiate per la struttura in esame *sono risultate effettivamente esaustive per la progettazione-verifica*.

La verifica della sicurezza degli elementi strutturali avviene con i metodi della scienza delle costruzioni. L’analisi strutturale è condotta con il metodo degli spostamenti per la valutazione dello stato tensodeformativo indotto da carichi statici. L’analisi strutturale è condotta con il metodo dell’analisi modale e dello spettro di risposta in termini di accelerazione per la valutazione dello stato tensodeformativo indotto da carichi dinamici (tra cui quelli di tipo sismico).

L’analisi strutturale viene effettuata con il metodo degli elementi finiti. Il metodo sopraindicato si basa sulla schematizzazione della struttura in elementi connessi solo in corrispondenza di un numero prefissato di punti denominati nodi. I nodi sono definiti dalle tre coordinate cartesiane in un sistema di riferimento globale. Le incognite del problema (nell’ambito del metodo degli spostamenti) sono le componenti di spostamento dei nodi riferite al sistema di riferimento globale (traslazioni secondo X, Y, Z, rotazioni attorno X, Y, Z). La soluzione del problema si ottiene con un sistema di equazioni algebriche lineari i cui termini noti sono costituiti dai carichi agenti sulla struttura opportunamente concentrati ai nodi:

$$\mathbf{K} \cdot \mathbf{u} = \mathbf{F} \quad \text{dove} \quad \mathbf{K} = \text{matrice di rigidezza}$$
$$\mathbf{u} = \text{vettore spostamenti nodali}$$
$$\mathbf{F} = \text{vettore forze nodali}$$

Dagli spostamenti ottenuti con la risoluzione del sistema vengono quindi dedotte le sollecitazioni e/o le tensioni di ogni elemento, riferite generalmente ad una terna locale all’elemento stesso.

Il sistema di riferimento utilizzato è costituito da una terna cartesiana destrorsa XYZ. Si assume l’asse Z verticale ed orientato verso l’alto.

Gli elementi utilizzati per la modellazione dello schema statico della struttura sono i seguenti:



Elemento tipo <b>TRUSS</b>	(biella-D2)
Elemento tipo <b>BEAM</b>	(trave-D2)
Elemento tipo <b>MEMBRANE</b>	(membrana-D3)
Elemento tipo <b>PLATE</b>	(piastra-guscio-D3)
Elemento tipo <b>BOUNDARY</b>	(molla)
Elemento tipo <b>STIFFNESS</b>	(matrice di rigidità)
Elemento tipo <b>BRICK</b>	(elemento solido)
Elemento tipo <b>SOLAIO</b>	(macro elemento composto da più membrane)

## Modello numerico

In questa parte viene descritto il modello numerico utilizzato (o i modelli numerici utilizzati) per l'analisi della struttura. La presentazione delle informazioni deve essere, coerentemente con le prescrizioni del paragrafo 10.2 e relativi sottoparagrafi delle NTC-18, tale da garantirne la leggibilità, la corretta interpretazione e la riproducibilità

**\*Completare\***

Tipo di analisi strutturale	
Sismica statica lineare	NO
Sismica dinamica lineare	NO
Sismica statica non lineare (prop. masse)	NO
Sismica statica non lineare (prop. modo)	NO
Sismica statica non lineare (triangolare)	NO
Non linearità geometriche (fattore P delta)	NO
Analisi lineare	SI

Di seguito si indicano l'origine e le caratteristiche dei codici di calcolo utilizzati riportando titolo, produttore e distributore, versione, estremi della licenza d'uso:

Informazioni sul codice di calcolo	
Titolo:	PRO_SAP PROfessional Structural Analysis Program
Versione:	PROFESSIONAL (build 2022-06-196)
Produttore-Distributore:	2S.I. Software e Servizi per l'Ingegneria s.r.l., Ferrara
Dati utente finale:	***** COMPLETARE *****
Codice Utente:	***** COMPLETARE *****
Codice Licenza:	Licenza dsi5294



Un attento esame preliminare della documentazione a corredo del software **ha consentito di valutarne l'affidabilità e soprattutto l'idoneità al caso specifico**. La documentazione, fornita dal produttore e distributore del software, contiene una esauriente descrizione delle basi teoriche e degli algoritmi impiegati, l'individuazione dei campi d'impiego, nonché casi prova interamente risolti e commentati, corredati dei file di input necessari a riprodurre l'elaborazione:

Affidabilità dei codici utilizzati	
2S.I. ha verificato l'affidabilità e la robustezza del codice di calcolo attraverso un numero significativo di casi prova in cui i risultati dell'analisi numerica sono stati confrontati con soluzioni teoriche.	
E' possibile reperire la documentazione contenente alcuni dei più significativi casi trattati al seguente link: <a href="https://www.2si.it/it/prodotti/affidabilita/">https://www.2si.it/it/prodotti/affidabilita/</a>	

Modellazione della geometria e proprietà meccaniche:	
nodi	1552
elementi D2 (per aste, travi, pilastri...)	472
elementi D3 (per pareti, platee, gusci...)	1153
elementi solaio	0
elementi solidi	0
Dimensione del modello strutturale [cm]:	
X min =	-175.00
Xmax =	4825.00
Ymin =	-207.50
Ymax =	5354.00
Zmin =	0.00
Zmax =	0.00
Strutture verticali:	
Elementi di tipo asta	NO
Pilastri	NO
Pareti	NO
Setti (a comportamento membranale)	NO
Strutture non verticali:	
Elementi di tipo asta	NO
Travi	SI
Gusci	NO
Membrane	NO
Orizzontamenti:	
Solai con la proprietà piano rigido	NO
Solai senza la proprietà piano rigido	NO



Tipo di vincoli:	
Nodi vincolati rigidamente	NO
Nodi vincolati elasticamente	NO
Nodi con isolatori sismici	NO
Fondazioni puntuali (plinti/plinti su palo)	NO
Fondazioni di tipo trave	SI
Fondazioni di tipo platea	SI
Fondazioni con elementi solidi	NO

## Modellazione delle azioni

Si veda il capitolo **“Schematizzazione dei casi di carico”** per le informazioni necessarie alla comprensione ed alla ricostruzione delle azioni applicate al modello numerico, coerentemente con quanto indicato nella parte *“2.6. Azioni di progetto sulla costruzione”*.

## Combinazioni e/o percorsi di carico

Si veda il capitolo **“Definizione delle combinazioni”** in cui sono indicate le combinazioni di carico adottate e, nel caso di calcoli non lineari, i percorsi di carico seguiti.

Combinazioni dei casi di carico	
APPROCCIO PROGETTUALE	Approccio 2
Tensioni ammissibili	NO
SLU	SI
SLV (SLU con sisma)	NO
SLC	NO
SLD	SI
SLO	NO
SLU GEO A2 (per approccio 1)	NO
SLU EQU	NO
Combinazione caratteristica (rara)	SI
Combinazione frequente	SI
Combinazione quasi permanente (SLE)	SI
SLA (accidentale quale incendio)	NO

Principali risultati
I risultati devono costituire una sintesi completa ed efficace, presentata in modo da riassumere il comportamento della struttura, per ogni tipo di analisi svolta.



Nella presente relazione di calcolo sono riportati i seguenti risultati che il progettista ritiene di interesse per la descrizione e la comprensione del/i modello/i e del comportamento della struttura:

per l'analisi modale:

- periodi dei modi di vibrare della struttura
- masse eccitate dai singoli modi
- massa eccitata totale

deformate e sollecitazioni:

- spostamenti e rotazioni dei singoli nodi della struttura
- reazioni vincolari (nel caso siano presenti nodi vincolati rigidamente)
- pressioni sul terreno (nel caso siano presenti elementi di fondazione)
- sollecitazioni sugli elementi d2 nelle combinazioni di calcolo più significative
- tensioni sugli elementi d3 nelle combinazioni di calcolo più significative
- sollecitazioni sui macroelementi da elementi d3 nelle combinazioni di calcolo più significative

altri risultati significativi:

- **\*Completare\***

La presente relazione, oltre ad illustrare in modo esaustivo i dati in ingresso ed i risultati delle analisi in forma tabellare, riporta una serie di immagini:

per i dati in ingresso:

- modello solido della struttura
- numerazione di nodi e ed elementi
- configurazioni di carico statiche
- configurazioni di carico sismiche con baricentri delle masse e eccentricità

per le combinazioni più significative (statisticamente più gravose per la struttura):

- configurazioni deformate
- diagrammi e involuppi delle azioni interne
- mappe delle tensioni
- reazioni vincolari
- mappe delle pressioni sul terreno

per il progetto-verifica degli elementi:

- diagrammi di armatura
- percentuali di sfruttamento
- mappe delle verifiche più significative per i vari stati limite



### Informazioni generali sull'elaborazione e giudizio motivato di accettabilità dei risultati.

Il programma prevede una serie di controlli automatici (check) che consentono l'individuazione di errori di modellazione. Al termine dell'analisi un controllo automatico identifica la presenza di spostamenti o rotazioni abnormi. Si può pertanto asserire che l'elaborazione sia corretta e completa. I risultati delle elaborazioni sono stati sottoposti a controlli che ne comprovano l'attendibilità. Tale valutazione ha compreso il confronto con i risultati di semplici calcoli, eseguiti con metodi tradizionali e adottati, anche in fase di primo proporzionamento della struttura. Inoltre, sulla base di considerazioni riguardanti gli stati tensionali e deformativi determinati, si è valutata la validità delle scelte operate in sede di schematizzazione e di modellazione della struttura e delle azioni. Si allega al termine della presente relazione elenco sintetico dei controlli svolti (verifiche di equilibrio tra reazioni vincolari e carichi applicati, comparazioni tra i risultati delle analisi e quelli di valutazioni semplificate, etc.) .

\*Completare\*

## Verifiche agli stati limite ultimi

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLU vengono indicate, con riferimento alla normativa adottata, le modalità ed i criteri seguiti per valutare la sicurezza della struttura nei confronti delle possibili situazioni di crisi ed i risultati delle valutazioni svolte. In via generale, oltre alle verifiche di resistenza e di spostamento, devono essere prese in considerazione verifiche nei confronti dei fenomeni di instabilità, locale e globale, di fatica, di duttilità, di degrado.

## Verifiche agli stati limite di esercizio

Nel capitolo relativo alla progettazione degli elementi strutturali agli SLE vengono indicate, con riferimento alla normativa adottata, le modalità seguite per valutare l'affidabilità della struttura nei confronti delle possibili situazioni di perdita di funzionalità (per eccessive deformazioni, fessurazioni, vibrazioni, etc.) ed i risultati delle valutazioni svolte.

## RELAZIONE SUI MATERIALI

Il capitolo Materiali riporta informazioni esaustive relative all'elenco dei materiali impiegati e loro modalità di posa in opera e ai valori di calcolo.



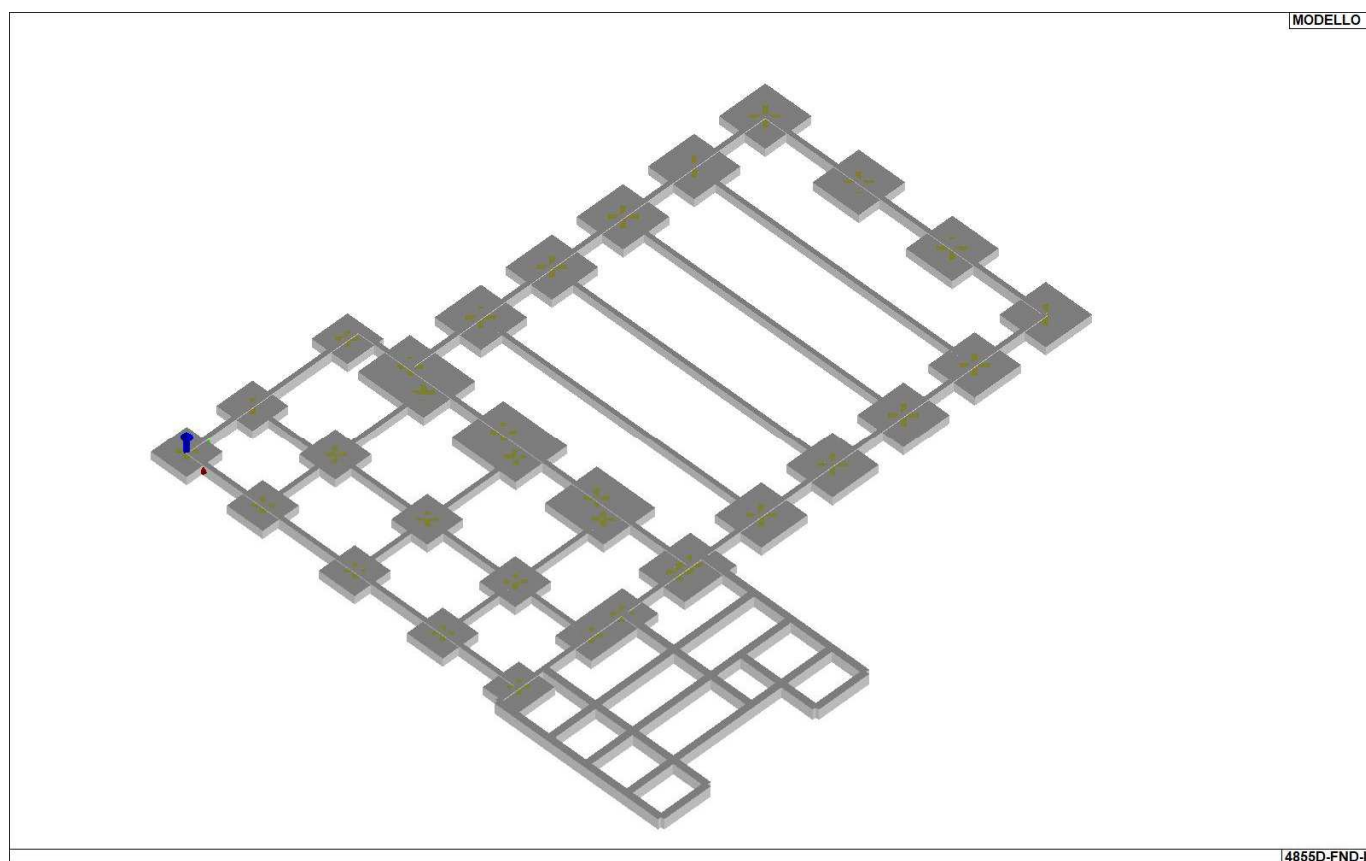
## NORMATIVA DI RIFERIMENTO

1. D.Min. Infrastrutture Min. Interni e Prot. Civile 17 Gennaio 2018 e allegate "Norme tecniche per le costruzioni".
2. Circolare 21/01/19, n. 7 C.S.LL.PP. "Istruzioni per l'applicazione dell'aggiornamento delle Norme Tecniche delle Costruzioni di cui al decreto ministeriale 17 gennaio 2018"
3. D.Min. Infrastrutture e trasporti 14 Settembre 2005 e allegate "Norme tecniche per le costruzioni".
4. D.M. LL.PP. 9 Gennaio 1996 "Norme tecniche per il calcolo, l'esecuzione ed il collaudo delle strutture in cemento armato, normale e precompresso e per le strutture metalliche".
5. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>".
6. D.M. LL.PP. 16 Gennaio 1996 "Norme tecniche per le costruzioni in zone sismiche".
7. Circolare 4/07/96, n.156AA.GG./STC. istruzioni per l'applicazione delle "Norme tecniche relative ai <<Criteri generali per la verifica di sicurezza delle costruzioni e dei carichi e sovraccarichi>>" di cui al D.M. 16/01/96.
8. Circolare 10/04/97, n.65AA.GG. istruzioni per l'applicazione delle "Norme tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/96.
9. D.M. LL.PP. 20 Novembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
10. Circolare 4 Gennaio 1989 n. 30787 "Istruzioni in merito alle norme tecniche per la progettazione, esecuzione e collaudo degli edifici in muratura e per il loro consolidamento".
11. D.M. LL.PP. 11 Marzo 1988 "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione".
12. D.M. LL.PP. 3 Dicembre 1987 "Norme tecniche per la progettazione, esecuzione e collaudo delle costruzioni prefabbricate".
13. UNI 9502 - Procedimento analitico per valutare la resistenza al fuoco degli elementi costruttivi di conglomerato cementizio armato, normale e precompresso - edizione maggio 2001
14. Ordinanza del Presidente del Consiglio dei Ministri n. 3274 del 20 marzo 2003 "Primi elementi in materia di criteri generali per la classificazione sismica del territorio nazionale e di normative tecniche per le costruzioni in zona sismica" e successive modificazioni e integrazioni.
15. UNI EN 1990:2006 13/04/2006 Eurocodice 0 - Criteri generali di progettazione strutturale.
16. UNI EN 1991-1-1:2004 01/08/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-1: Azioni in generale - Pesì per unità di volume, pesì propri e sovraccarichi per gli edifici.
17. UNI EN 1991-2:2005 01/03/2005 Eurocodice 1 - Azioni sulle strutture - Parte 2: Carichi da traffico sui ponti.
18. UNI EN 1991-1-3:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-3: Azioni in generale - Carichi da neve.
19. UNI EN 1991-1-4:2005 01/07/2005 Eurocodice 1 - Azioni sulle strutture - Parte 1-4: Azioni in generale - Azioni del vento.
20. UNI EN 1991-1-5:2004 01/10/2004 Eurocodice 1 - Azioni sulle strutture - Parte 1-5: Azioni in generale - Azioni termiche.
21. UNI EN 1992-1-1:2005 24/11/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
22. UNI EN 1992-1-2:2005 01/04/2005 Eurocodice 2 - Progettazione delle strutture di calcestruzzo - Parte 1-2: Regole generali - Progettazione strutturale contro l'incendio.
23. UNI EN 1993-1-1:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-1: Regole generali e regole per gli edifici.
24. UNI EN 1993-1-8:2005 01/08/2005 Eurocodice 3 - Progettazione delle strutture di acciaio - Parte 1-8: Progettazione dei collegamenti.
25. UNI EN 1994-1-1:2005 01/03/2005 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 1-1: Regole generali e regole per gli edifici.
26. UNI EN 1994-2:2006 12/01/2006 Eurocodice 4 - Progettazione delle strutture composte acciaio-calcestruzzo - Parte 2: Regole generali e regole per i ponti.
27. UNI EN 1995-1-1:2005 01/02/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 1-1: Regole generali - Regole comuni e regole per gli edifici.
28. UNI EN 1995-2:2005 01/01/2005 Eurocodice 5 - Progettazione delle strutture di legno - Parte 2: Ponti.
29. UNI EN 1996-1-1:2006 26/01/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 1-1: Regole generali per strutture di muratura armata e non armata.
30. UNI EN 1996-3:2006 09/03/2006 Eurocodice 6 - Progettazione delle strutture di muratura - Parte 3: Metodi di calcolo semplificato per strutture di muratura non armata.



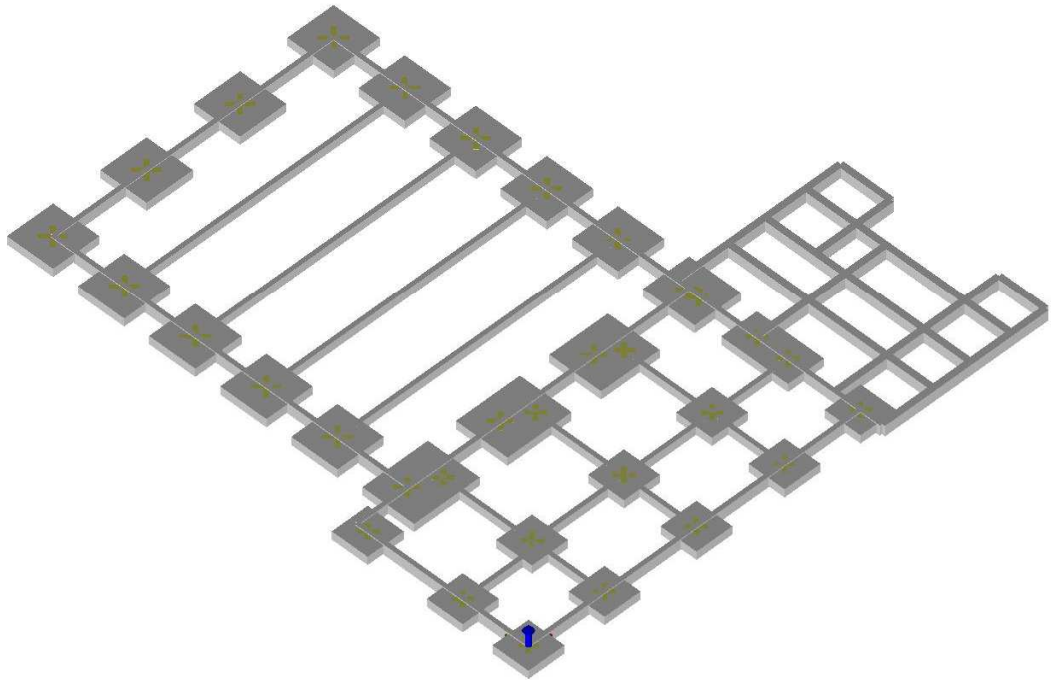
31. UNI EN 1997-1:2005 01/02/2005 Eurocodice 7 - Progettazione geotecnica - Parte 1: Regole generali.
32. UNI EN 1998-1:2005 01/03/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 1: Regole generali, azioni sismiche e regole per gli edifici.
33. UNI EN 1998-3:2005 01/08/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 3: Valutazione e adeguamento degli edifici.
34. UNI EN 1998-5:2005 01/01/2005 Eurocodice 8 - Progettazione delle strutture per la resistenza sismica - Parte 5: Fondazioni, strutture di contenimento ed aspetti geotecnici.

**NOTA il capitolo "normativa di riferimento": riporta l'elenco delle normative implementate nel software. Le norme utilizzate per la struttura oggetto della presente relazione sono indicate nel precedente capitolo "RELAZIONE DI CALCOLO STRUTTURALE" "ANALISI E VERIFICHE SVOLTE CON L'AUSILIO DI CODICI DI CALCOLO".** Laddove nei capitoli successivi vengano richiamate norme antecedenti al DM 17.01.18 è dovuto o a progettazione simulata di edificio esistente.

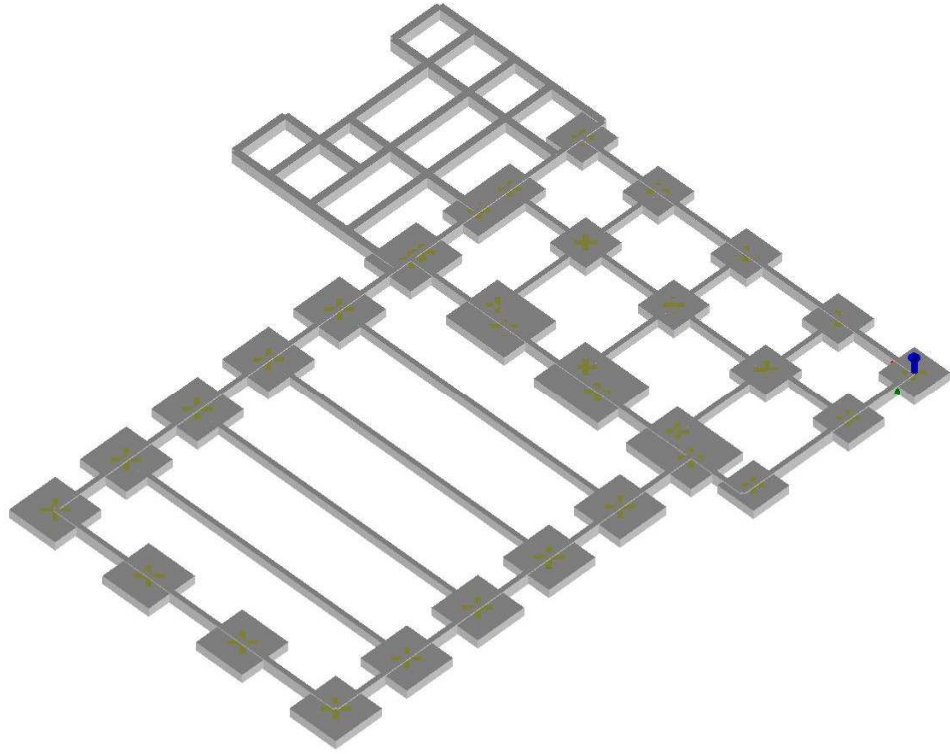


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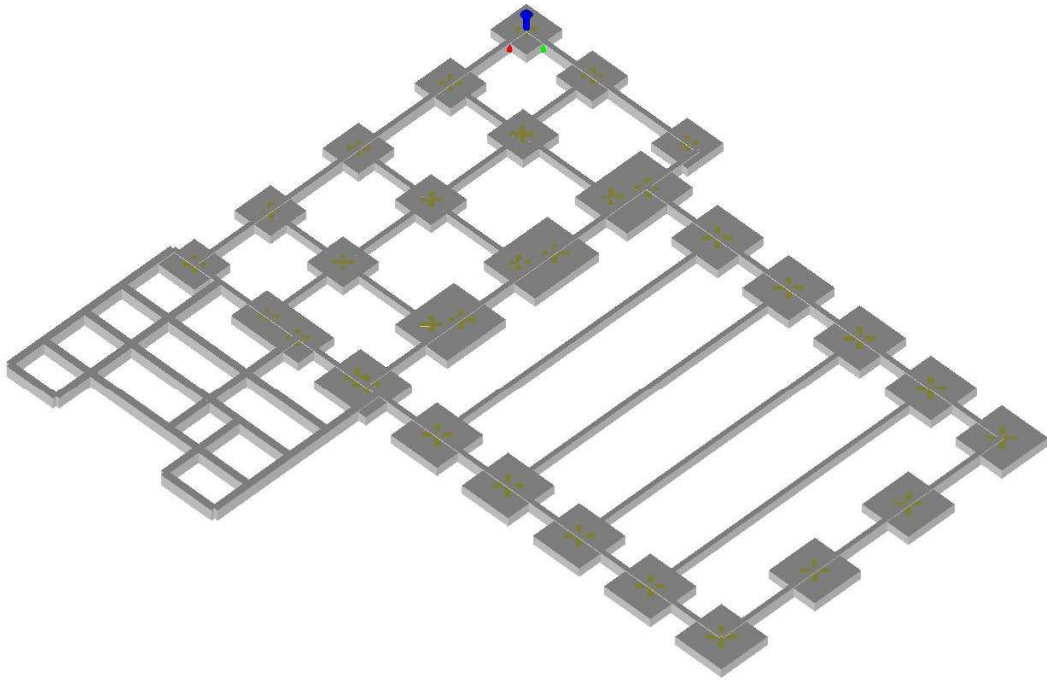














# CARATTERISTICHE MATERIALI UTILIZZATI

## LEGENDA TABELLA DATI MATERIALI

Il programma consente l'uso di materiali diversi. Sono previsti i seguenti tipi di materiale:

1	materiale tipo cemento armato
2	materiale tipo acciaio
3	materiale tipo muratura
4	materiale tipo legno
5	materiale tipo generico

I materiali utilizzati nella modellazione sono individuati da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni materiale vengono riportati in tabella i seguenti dati:

Young	modulo di elasticità normale E
Poisson	coefficiente di contrazione trasversale $\nu$
G	modulo di elasticità tangenziale
Gamma	peso specifico
Alfa	coefficiente di dilatazione termica
Fattore di confidenza FC m	Fattore di confidenza specifico per materiale; (è riportato solo se diverso da quello globale della struttura)
Fattore di confidenza FC a	Fattore di confidenza specifico per l'armatura (è riportato solo se diverso da quello globale della struttura)
Elasto-plastico	Materiale elastico perfettamente plastico per aste non lineari
Massima compressione	Massima tensione di compressione per aste non lineari
Massima trazione	Massima tensione di trazione per aste non lineari
Fattore attrito	Coefficiente di attrito per aste non lineari
Rapporto HRDb	Rapporto di hardening a flessione
Rapporto HRDv	Rapporto di hardening a taglio

I dati soprariportati vengono utilizzati per la modellazione dello schema statico e per la determinazione dei carichi inerziali e termici. In relazione al tipo di materiale vengono riportati inoltre:

1	c.a.	Resistenza Rc	resistenza a compressione cubica
		Resistenza fctm	resistenza media a trazione semplice
		Coefficiente ksb	Coefficiente di riduzione della resistenza a compressione da utilizzare nello stress block
2	acciaio	Tensione ft	Valore della tensione di rottura
		Tensione fy	Valore della tensione di snervamento
		Resistenza fd	Resistenza di calcolo per SL CNR-UNI 10011
		Resistenza fd (>40)	Resistenza di calcolo per SL CNR-UNI 10011 per spessori > 40mm
		Tensione ammissibile	Tensione ammissibile CNR-UNI 10011
		Tensione ammissibile(>40)	Tensione ammissibile CNR-UNI 10011 per spessori > 40mm
3	muratura		
	a		

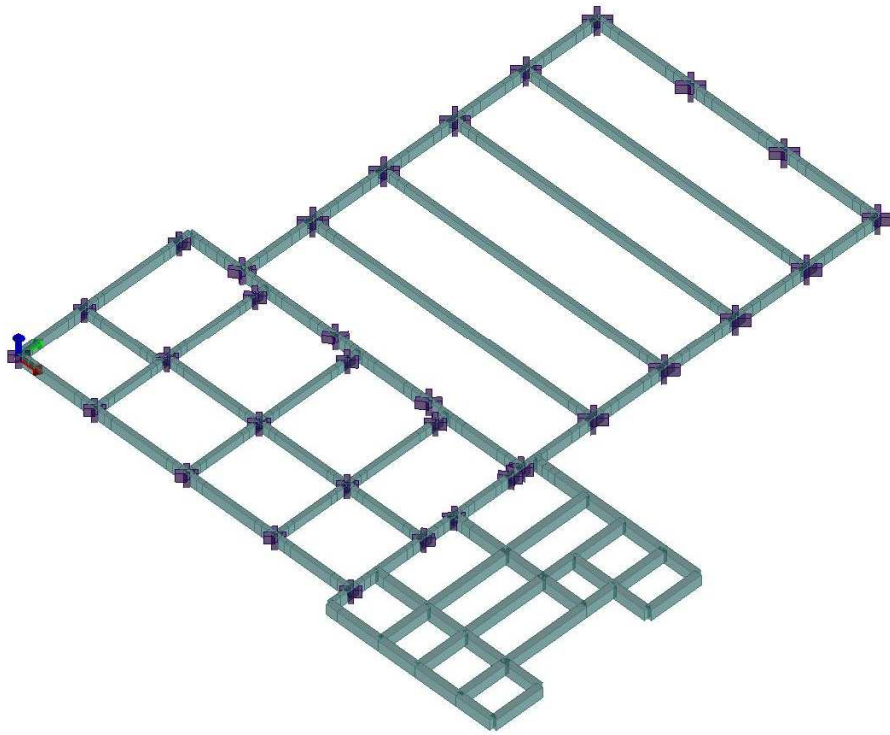


4 legno

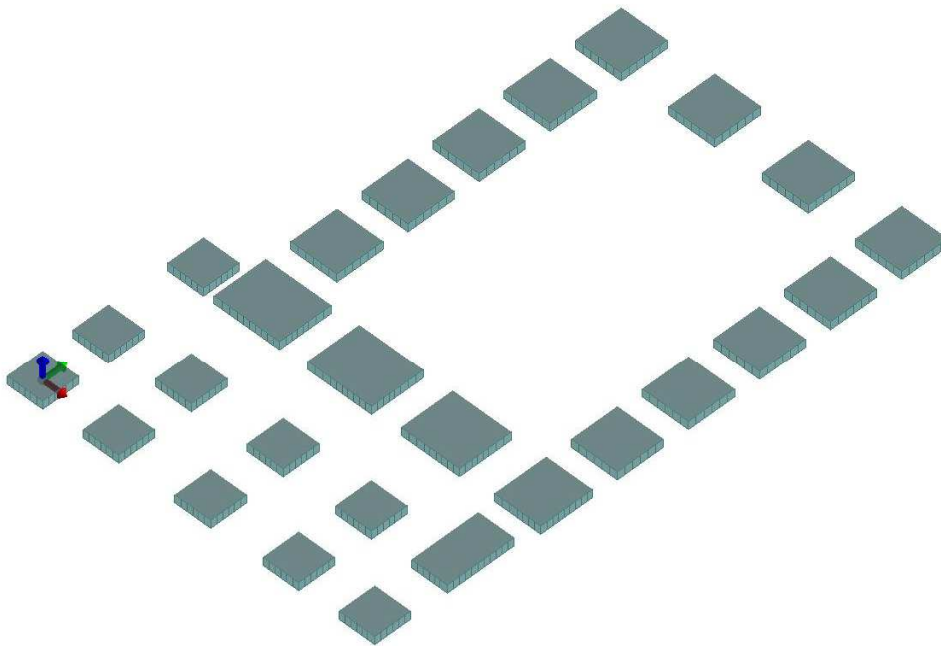
Vengono inoltre riportate le tabelle contenenti il riassunto delle informazioni assegnate nei criteri di progetto in uso.

[illegible]









## 11\_MOD\_MATERIALI\_D3

Gusci c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
<b>Armatura</b>						
Inclinazione Ax [ gradi ]	0.0	0.0				
Angolo Ax-Ay [ gradi ]	90.00	90.00				
Minima tesa	0.31	0.10				
Massima tesa	0.78	4.00				
Maglia unica centrale	NO	NO				
Copriferro [ cm ]	2.00	4.00				
<b>Maglia x</b>						
diametro	10	20				
passo	20	15				
diametro aggiuntivi	12	20				
<b>Maglia y</b>						
diametro	10	20				
passo	20	15				
diametro aggiuntivi	12	20				
<b>Stati limite ultimi</b>						
Tensione fy [daN/cm2 ]	4500.00	4500.00				
Tipo acciaio	tipo C	tipo C				
Coefficiente gamma s	1.15	1.15				
Coefficiente gamma c	1.50	1.50				
Verifiche con N costante	SI	SI				
Applica SLU da DIN	NO	NO				
<b>Tensioni ammissibili</b>						
Tensione amm. cls [daN/cm2 ]	97.50	97.50				
Tensione amm. acciaio [daN/cm2 ]	2600.00	2600.00				
Rapporto omogeneizzazione N	15.00	15.00				
Massimo rapporto area compressa/tesa	1.00	1.00				
<b>Resistenza al fuoco</b>						
3- intradosso	NO	NO				
3+ estradosso	NO	NO				
Tempo di esposizione R	15	15				



Travi c.a.	1/7/..	2/8/..	3/9/..	4/10/..	5/11/..	6/12/..
<b>Generalità</b>						
Progetta a filo	NO	NO				
Af inf: da q*L*L /	0.0	0.0				
<b>Armatura</b>						
Minima tesa	0.31	0.20				
Minima compressa	0.31	0.20				
Massima tesa	0.78	4.00				
Da sezione	SI	SI				
Usa armatura teorica	NO	NO				
<b>Stati limite ultimi</b>						
Tensione fy [daN/cm2 ]	4500.00	4500.00				
Tensione fy staffe [daN/cm2 ]	4500.00	4500.00				
Tipo acciaio	tipo C	tipo C				
Coefficiente gamma s	1.15	1.15				
Coefficiente gamma c	1.50	1.50				
Verifiche con N costante	SI	SI				
Fattore di ridistribuzione	0.0	0.0				
<b>Modello per il confinamento</b>						
Relazione tensio-deformativa	Mander	Mander				
Incrudimento acciaio	5.000e-03	5.000e-03				
Fattore lambda	1.00	1.00				
epsilon max,s	4.000e-02	4.000e-02				
epsilon cu2	4.500e-03	4.500e-03				
epsilon c2	0.0	0.0				
epsilon cy	0.0	0.0				
<b>Tensioni ammissibili</b>						
Tensione amm. cls [daN/cm2 ]	97.50	97.50				
Tensione amm. acciaio [daN/cm2 ]	2600.00	2600.00				
Rapporto omogeneizzazione N	15.00	15.00				
Massimo rapporto area compressa/tesa	1.00	1.00				
<b>Staffe</b>						
Diametro staffe	0.0	0.0				
Passo minimo [ cm ]	4.00	4.00				
Passo massimo [ cm ]	30.00	25.00				
Passo raffittito [ cm ]	15.00	25.00				
Lunghezza zona raffittita [ cm ]	50.00	25.00				
Ctg(Teta) Max	2.50	2.50				
Percentuale sagomati	0.0	0.0				
Luce di taglio per GR [ cm ]	1.00	1.00				
Adotta scorrimento medio	NO	NO				
Torsione non essenziale inclusa	SI	NO				



# MODELLAZIONE DELLE SEZIONI

## LEGENDA TABELLA DATI SEZIONI

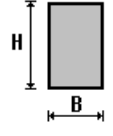
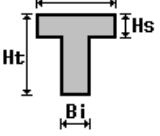
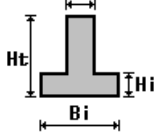
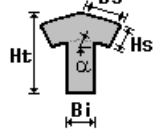
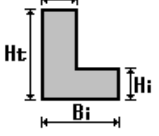
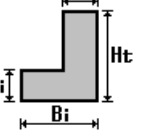
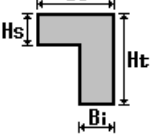
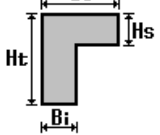
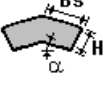
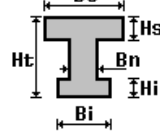
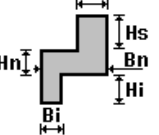
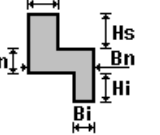
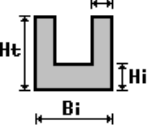
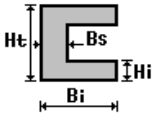
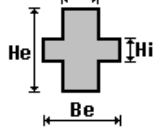
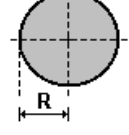
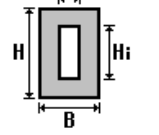
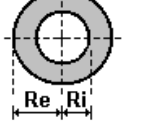
Il programma consente l'uso di sezioni diverse. Sono previsti i seguenti tipi di sezione:

1. sezione di tipo generico
2. profilati semplici
3. profilati accoppiati e speciali

Le sezioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni sezione vengono riportati in tabella i seguenti dati:

<b>Area</b>	area della sezione
<b>A V2</b>	area della sezione/fattore di taglio (per il taglio in direzione 2)
<b>A V3</b>	area della sezione/fattore di taglio (per il taglio in direzione 3)
<b>Jt</b>	fattore torsionale di rigidezza
<b>J2-2</b>	momento d'inerzia della sezione riferito all'asse 2
<b>J3-3</b>	momento d'inerzia della sezione riferito all'asse 3
<b>W2-2</b>	modulo di resistenza della sezione riferito all'asse 2
<b>W3-3</b>	modulo di resistenza della sezione riferito all'asse 3
<b>Wp2-2</b>	modulo di resistenza plastico della sezione riferito all'asse 2
<b>Wp3-3</b>	modulo di resistenza plastico della sezione riferito all'asse 3

I dati sopra riportati vengono utilizzati per la determinazione dei carichi inerziali e per la definizione delle rigidezze degli elementi strutturali; qualora il valore di Area V2 (e/o Area V3) sia nullo la deformabilità per taglio V2 (e/o V3) è trascurata. La valutazione delle caratteristiche inerziali delle sezioni è condotta nel riferimento 2-3 dell'elemento.

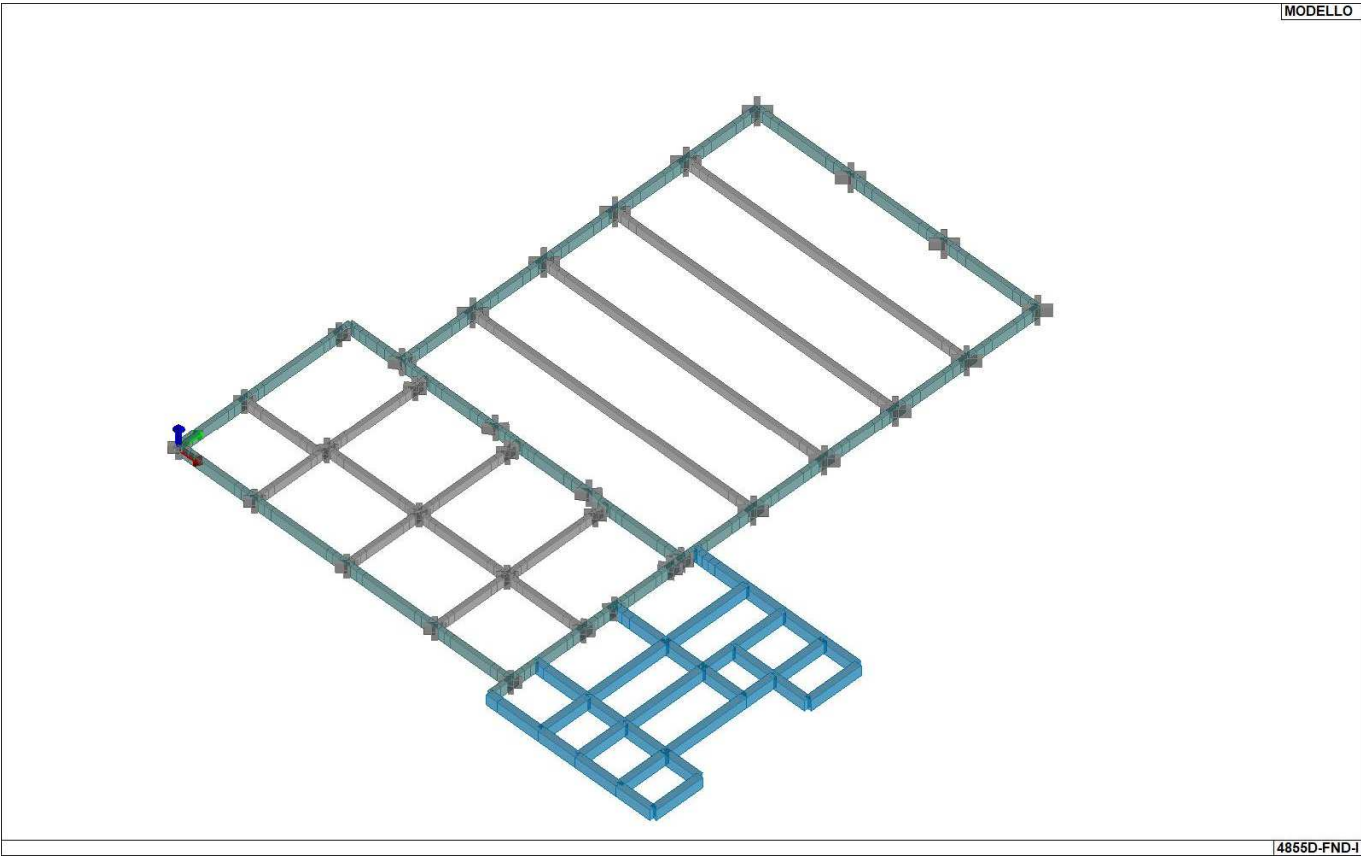
 rettangolare	 a T	 a T rovescia	 a T di colmo	 a L	 a L specchiata
 a L specchiata rovescia	 a L rovescia	 a L di colmo	 a doppio T	 a quattro specchiata	 a quattro
 a U	 a C	 a croce	 circolare	 rettangolare cava	 circolare cava



Per quanto concerne i profilati semplici ed accoppiati l'asse 2 del riferimento coincide con l'asse x riportato nei più diffusi profilati.

Per quanto concerne le sezioni di tipo generico (tipo 1.):  
i valori dimensionali con prefisso B sono riferiti all'asse 2  
i valori dimensionali con prefisso H sono riferiti all'asse 3

Id	Tipo	Area	A V2	A V3	Jt	J 2-2	J 3-3	W 2-2	W 3-3	Wp 2-2	Wp 3-3
		cm2	cm2	cm2	cm4	cm4	cm4	cm3	cm3	cm3	cm3
1	Fnd.40x80-Rettangolare: b=40 h=80	3200.00	2666.67	2666.67	1.169e+06	4.267e+05	1.707e+06	2.133e+04	4.267e+04	3.200e+04	6.400e+04
2	Fnd. 60x100- Rettangolare: b=60 h=100	6000.00	5000.00	5000.00	4.478e+06	1.800e+06	5.000e+06	6.000e+04	1.000e+05	9.000e+04	1.500e+05
3	Fnd. 40x100- Rettangolare: b=40 h=100	4000.00	3333.33	3333.33	1.596e+06	5.333e+05	3.333e+06	2.667e+04	6.667e+04	4.000e+04	1.000e+05





# MODELLAZIONE STRUTTURA: NODI

## LEGENDA TABELLA DATI NODI

Il programma utilizza per la modellazione nodi strutturali.

Ogni nodo è individuato dalle coordinate cartesiane nel sistema di riferimento globale (X Y Z).

Ad ogni nodo è eventualmente associato un codice di vincolamento rigido, un codice di fondazione speciale, ed un set di sei molle (tre per le traslazioni, tre per le rotazioni). Le tabelle sottoriportate riflettono le succitate possibilità. In particolare per ogni nodo viene indicato in tabella:

<b>Nodo</b>	numero del nodo.
<b>X</b>	valore della coordinata X
<b>Y</b>	valore della coordinata Y
<b>Z</b>	valore della coordinata Z

Per i nodi ai quali sia associato un codice di vincolamento rigido, un codice di fondazione speciale o un set di molle viene indicato in tabella:

<b>Nodo</b>	numero del nodo.
<b>X</b>	valore della coordinata X
<b>Y</b>	valore della coordinata Y
<b>Z</b>	valore della coordinata Z
<b>Note</b>	eventuale codice di vincolo (es. v=110010 sei valori relativi ai sei gradi di libertà previsti per il nodo TxTyTzRxRyRz, il valore 1 indica che lo spostamento o rotazione relativo è impedito, il valore 0 indica che lo spostamento o rotazione relativo è libero).
<b>Note</b>	(FS = 1, 2,...) eventuale codice del tipo di fondazione speciale (1, 2,... fanno riferimento alle tipologie: plinto, palo, plinto su pali,...) che è collegato al nodo. (ISO = "id SIGLA") indice e sigla identificativa dell' eventuale isolatore sismico assegnato al nodo
<b>Rig. TX</b>	valore della rigidezza dei vincoli elastici eventualmente applicati al nodo, nello specifico TX (idem per TY, TZ, RX, RY, RZ).

Per strutture sismicamente isolate viene inoltre inserita la tabella delle caratteristiche per gli isolatori utilizzati; le caratteristiche sono indicate in conformità al cap. 7.10 del D.M. 17/01/18

## TABELLA DATI NODI

Nodo	X	Y	Z	Nodo	X	Y	Z	Nodo	X	Y	Z
	cm	cm	cm		cm	cm	cm		cm	cm	cm
1	3232.0	-207.5	0.0	2	3335.0	-207.5	0.0	3	3732.5	-207.5	0.0
4	4092.5	-207.5	0.0	5	4490.0	-207.5	0.0	6	4825.0	-207.5	0.0
7	-175.0	-175.0	0.0	8	-115.0	-175.0	0.0	9	-55.0	-175.0	0.0
10	0.0	-175.0	0.0	11	55.0	-175.0	0.0	12	115.0	-175.0	0.0
13	175.0	-175.0	0.0	14	565.0	-175.0	0.0	15	625.0	-175.0	0.0
16	685.0	-175.0	0.0	17	740.0	-175.0	0.0	18	795.0	-175.0	0.0
19	855.0	-175.0	0.0	20	915.0	-175.0	0.0	21	1460.0	-175.0	0.0
22	1520.0	-175.0	0.0	23	1580.0	-175.0	0.0	24	1635.0	-175.0	0.0
25	1690.0	-175.0	0.0	26	1750.0	-175.0	0.0	27	1810.0	-175.0	0.0
28	2317.0	-175.0	0.0	29	2377.0	-175.0	0.0	30	2437.0	-175.0	0.0
31	2492.0	-175.0	0.0	32	2547.0	-175.0	0.0	33	2607.0	-175.0	0.0
34	2667.0	-175.0	0.0	35	3057.0	-175.0	0.0	36	3117.0	-175.0	0.0
37	3177.0	-175.0	0.0	38	3232.0	-175.0	0.0	39	3283.5	-175.0	0.0
40	3335.0	-175.0	0.0	41	3407.0	-175.0	0.0	42	-175.0	-115.0	0.0
43	-115.0	-115.0	0.0	44	-55.0	-115.0	0.0	45	0.0	-115.0	0.0
46	55.0	-115.0	0.0	47	115.0	-115.0	0.0	48	175.0	-115.0	0.0
49	565.0	-115.0	0.0	50	625.0	-115.0	0.0	51	685.0	-115.0	0.0
52	740.0	-115.0	0.0	53	795.0	-115.0	0.0	54	855.0	-115.0	0.0
55	915.0	-115.0	0.0	56	1460.0	-115.0	0.0	57	1520.0	-115.0	0.0
58	1580.0	-115.0	0.0	59	1635.0	-115.0	0.0	60	1690.0	-115.0	0.0



61	1750.0	-115.0	0.0	62	1810.0	-115.0	0.0	63	2317.0	-115.0	0.0
64	2377.0	-115.0	0.0	65	2437.0	-115.0	0.0	66	2492.0	-115.0	0.0
67	2547.0	-115.0	0.0	68	2607.0	-115.0	0.0	69	2667.0	-115.0	0.0
70	3057.0	-115.0	0.0	71	3117.0	-115.0	0.0	72	3177.0	-115.0	0.0
73	3232.0	-115.0	0.0	74	3283.5	-115.0	0.0	75	3335.0	-115.0	0.0
76	3407.0	-115.0	0.0	77	-175.0	-55.0	0.0	78	-115.0	-55.0	0.0
79	-55.0	-55.0	0.0	80	0.0	-55.0	0.0	81	55.0	-55.0	0.0
82	115.0	-55.0	0.0	83	175.0	-55.0	0.0	84	565.0	-55.0	0.0
85	625.0	-55.0	0.0	86	685.0	-55.0	0.0	87	740.0	-55.0	0.0
88	795.0	-55.0	0.0	89	855.0	-55.0	0.0	90	915.0	-55.0	0.0
91	1460.0	-55.0	0.0	92	1520.0	-55.0	0.0	93	1580.0	-55.0	0.0
94	1635.0	-55.0	0.0	95	1690.0	-55.0	0.0	96	1750.0	-55.0	0.0
97	1810.0	-55.0	0.0	98	2317.0	-55.0	0.0	99	2377.0	-55.0	0.0
100	2437.0	-55.0	0.0	101	2492.0	-55.0	0.0	102	2547.0	-55.0	0.0
103	2607.0	-55.0	0.0	104	2667.0	-55.0	0.0	105	3057.0	-55.0	0.0
106	3117.0	-55.0	0.0	107	3177.0	-55.0	0.0	108	3232.0	-55.0	0.0
109	3283.5	-55.0	0.0	110	3335.0	-55.0	0.0	111	3407.0	-55.0	0.0
112	-175.0	0.0	0.0	113	-115.0	0.0	0.0	114	-55.0	0.0	0.0
115	0.0	0.0	0.0	116	55.0	0.0	0.0	117	115.0	0.0	0.0
118	175.0	0.0	0.0	119	565.0	0.0	0.0	120	625.0	0.0	0.0
121	685.0	0.0	0.0	122	740.0	0.0	0.0	123	795.0	0.0	0.0
124	855.0	0.0	0.0	125	915.0	0.0	0.0	126	1460.0	0.0	0.0
127	1520.0	0.0	0.0	128	1580.0	0.0	0.0	129	1635.0	0.0	0.0
130	1690.0	0.0	0.0	131	1750.0	0.0	0.0	132	1810.0	0.0	0.0
133	2317.0	0.0	0.0	134	2377.0	0.0	0.0	135	2437.0	0.0	0.0
136	2492.0	0.0	0.0	137	2547.0	0.0	0.0	138	2607.0	0.0	0.0
139	2667.0	0.0	0.0	140	3057.0	0.0	0.0	141	3117.0	0.0	0.0
142	3177.0	0.0	0.0	143	3232.0	0.0	0.0	144	3283.5	0.0	0.0
145	3335.0	0.0	0.0	146	3407.0	0.0	0.0	147	-175.0	55.0	0.0
148	-115.0	55.0	0.0	149	-55.0	55.0	0.0	150	0.0	55.0	0.0
151	55.0	55.0	0.0	152	115.0	55.0	0.0	153	175.0	55.0	0.0
154	565.0	55.0	0.0	155	625.0	55.0	0.0	156	685.0	55.0	0.0
157	740.0	55.0	0.0	158	795.0	55.0	0.0	159	855.0	55.0	0.0
160	915.0	55.0	0.0	161	1460.0	55.0	0.0	162	1520.0	55.0	0.0
163	1580.0	55.0	0.0	164	1635.0	55.0	0.0	165	1690.0	55.0	0.0
166	1750.0	55.0	0.0	167	1810.0	55.0	0.0	168	2317.0	55.0	0.0
169	2377.0	55.0	0.0	170	2437.0	55.0	0.0	171	2492.0	55.0	0.0
172	2547.0	55.0	0.0	173	2607.0	55.0	0.0	174	2667.0	55.0	0.0
175	3057.0	55.0	0.0	176	3117.0	55.0	0.0	177	3177.0	55.0	0.0
178	3232.0	55.0	0.0	179	3283.5	55.0	0.0	180	3335.0	55.0	0.0
181	3407.0	55.0	0.0	182	-175.0	115.0	0.0	183	-115.0	115.0	0.0
184	-55.0	115.0	0.0	185	0.0	115.0	0.0	186	55.0	115.0	0.0
187	115.0	115.0	0.0	188	175.0	115.0	0.0	189	565.0	115.0	0.0
190	625.0	115.0	0.0	191	685.0	115.0	0.0	192	740.0	115.0	0.0
193	795.0	115.0	0.0	194	855.0	115.0	0.0	195	915.0	115.0	0.0
196	1460.0	115.0	0.0	197	1520.0	115.0	0.0	198	1580.0	115.0	0.0
199	1635.0	115.0	0.0	200	1690.0	115.0	0.0	201	1750.0	115.0	0.0
202	1810.0	115.0	0.0	203	2317.0	115.0	0.0	204	2377.0	115.0	0.0
205	2437.0	115.0	0.0	206	2492.0	115.0	0.0	207	2547.0	115.0	0.0
208	2607.0	115.0	0.0	209	2667.0	115.0	0.0	210	3057.0	115.0	0.0
211	3117.0	115.0	0.0	212	3177.0	115.0	0.0	213	3232.0	115.0	0.0
214	3283.5	115.0	0.0	215	3335.0	115.0	0.0	216	3407.0	115.0	0.0
217	-175.0	175.0	0.0	218	-115.0	175.0	0.0	219	-55.0	175.0	0.0
220	0.0	175.0	0.0	221	55.0	175.0	0.0	222	115.0	175.0	0.0
223	175.0	175.0	0.0	224	565.0	175.0	0.0	225	625.0	175.0	0.0
226	685.0	175.0	0.0	227	740.0	175.0	0.0	228	795.0	175.0	0.0
229	855.0	175.0	0.0	230	915.0	175.0	0.0	231	1460.0	175.0	0.0
232	1520.0	175.0	0.0	233	1580.0	175.0	0.0	234	1635.0	175.0	0.0
235	1690.0	175.0	0.0	236	1750.0	175.0	0.0	237	1810.0	175.0	0.0
238	2317.0	175.0	0.0	239	2377.0	175.0	0.0	240	2437.0	175.0	0.0
241	2492.0	175.0	0.0	242	2547.0	175.0	0.0	243	2607.0	175.0	0.0
244	2667.0	175.0	0.0	245	3057.0	175.0	0.0	246	3117.0	175.0	0.0
247	3177.0	175.0	0.0	248	3232.0	175.0	0.0	249	3283.5	175.0	0.0
250	3335.0	175.0	0.0	251	3407.0	175.0	0.0	252	3232.0	246.0	0.0
253	3335.0	246.0	0.0	254	3732.5	246.0	0.0	255	4092.5	246.0	0.0
256	4490.0	246.0	0.0	257	4825.0	246.0	0.0	258	-175.0	465.0	0.0
259	-115.0	465.0	0.0	260	-55.0	465.0	0.0	261	0.0	465.0	0.0
262	55.0	465.0	0.0	263	115.0	465.0	0.0	264	175.0	465.0	0.0
265	-175.0	525.0	0.0	266	-115.0	525.0	0.0	267	-55.0	525.0	0.0
268	0.0	525.0	0.0	269	55.0	525.0	0.0	270	115.0	525.0	0.0
271	175.0	525.0	0.0	272	565.0	531.0	0.0	273	625.0	531.0	0.0
274	685.0	531.0	0.0	275	740.0	531.0	0.0	276	795.0	531.0	0.0
277	855.0	531.0	0.0	278	915.0	531.0	0.0	279	1460.0	531.0	0.0
280	1520.0	531.0	0.0	281	1580.0	531.0	0.0	282	1635.0	531.0	0.0
283	1690.0	531.0	0.0	284	1750.0	531.0	0.0	285	1810.0	531.0	0.0
286	2317.0	531.0	0.0	287	2377.0	531.0	0.0	288	2437.0	531.0	0.0
289	2492.0	531.0	0.0	290	2547.0	531.0	0.0	291	2607.0	531.0	0.0



292	2667.0	531.0	0.0	293	3057.0	531.0	0.0	294	3117.0	531.0	0.0
295	3177.0	531.0	0.0	296	3232.0	531.0	0.0	297	3283.5	531.0	0.0
298	3335.0	531.0	0.0	299	3407.0	531.0	0.0	300	-175.0	585.0	0.0
301	-115.0	585.0	0.0	302	-55.0	585.0	0.0	303	0.0	585.0	0.0
304	55.0	585.0	0.0	305	115.0	585.0	0.0	306	175.0	585.0	0.0
307	565.0	585.5	0.0	308	625.0	585.5	0.0	309	685.0	585.5	0.0
310	740.0	585.5	0.0	311	795.0	585.5	0.0	312	855.0	585.5	0.0
313	915.0	585.5	0.0	314	1460.0	591.0	0.0	315	1520.0	591.0	0.0
316	1580.0	591.0	0.0	317	1635.0	591.0	0.0	318	1690.0	591.0	0.0
319	1750.0	591.0	0.0	320	1810.0	591.0	0.0	321	2317.0	591.0	0.0
322	2377.0	591.0	0.0	323	2437.0	591.0	0.0	324	2492.0	591.0	0.0
325	2547.0	591.0	0.0	326	2607.0	591.0	0.0	327	2667.0	591.0	0.0
328	3057.0	591.0	0.0	329	3117.0	591.0	0.0	330	3177.0	591.0	0.0
331	3232.0	591.0	0.0	332	3283.5	591.0	0.0	333	3335.0	591.0	0.0
334	3407.0	591.0	0.0	335	-175.0	640.0	0.0	336	-115.0	640.0	0.0
337	-55.0	640.0	0.0	338	0.0	640.0	0.0	339	55.0	640.0	0.0
340	115.0	640.0	0.0	341	175.0	640.0	0.0	342	565.0	640.0	0.0
343	625.0	640.0	0.0	344	685.0	640.0	0.0	345	740.0	640.0	0.0
346	795.0	640.0	0.0	347	855.0	640.0	0.0	348	915.0	640.0	0.0
349	1460.0	651.0	0.0	350	1520.0	651.0	0.0	351	1580.0	651.0	0.0
352	1635.0	651.0	0.0	353	1690.0	651.0	0.0	354	1750.0	651.0	0.0
355	1810.0	651.0	0.0	356	2317.0	651.0	0.0	357	2377.0	651.0	0.0
358	2437.0	651.0	0.0	359	2492.0	651.0	0.0	360	2547.0	651.0	0.0
361	2607.0	651.0	0.0	362	2667.0	651.0	0.0	363	3057.0	651.0	0.0
364	3117.0	651.0	0.0	365	3177.0	651.0	0.0	366	3232.0	651.0	0.0
367	3283.5	651.0	0.0	368	3335.0	651.0	0.0	369	3407.0	651.0	0.0
370	-175.0	695.0	0.0	371	-115.0	695.0	0.0	372	-55.0	695.0	0.0
373	0.0	695.0	0.0	374	55.0	695.0	0.0	375	115.0	695.0	0.0
376	175.0	695.0	0.0	377	565.0	706.0	0.0	378	625.0	706.0	0.0
379	685.0	706.0	0.0	380	740.0	706.0	0.0	381	795.0	706.0	0.0
382	855.0	706.0	0.0	383	915.0	706.0	0.0	384	1460.0	706.0	0.0
385	1520.0	706.0	0.0	386	1580.0	706.0	0.0	387	1635.0	706.0	0.0
388	1690.0	706.0	0.0	389	1750.0	706.0	0.0	390	1810.0	706.0	0.0
391	2317.0	706.0	0.0	392	2377.0	706.0	0.0	393	2437.0	706.0	0.0
394	2492.0	706.0	0.0	395	2547.0	706.0	0.0	396	2607.0	706.0	0.0
397	2667.0	706.0	0.0	398	3057.0	706.0	0.0	399	3117.0	706.0	0.0
400	3177.0	706.0	0.0	401	3232.0	706.0	0.0	402	3283.5	706.0	0.0
403	3335.0	706.0	0.0	404	3407.0	706.0	0.0	405	-175.0	755.0	0.0
406	-115.0	755.0	0.0	407	-55.0	755.0	0.0	408	0.0	755.0	0.0
409	55.0	755.0	0.0	410	115.0	755.0	0.0	411	175.0	755.0	0.0
412	565.0	761.0	0.0	413	625.0	761.0	0.0	414	685.0	761.0	0.0
415	740.0	761.0	0.0	416	795.0	761.0	0.0	417	855.0	761.0	0.0
418	915.0	761.0	0.0	419	1460.0	761.0	0.0	420	1520.0	761.0	0.0
421	1580.0	761.0	0.0	422	1635.0	761.0	0.0	423	1690.0	761.0	0.0
424	1750.0	761.0	0.0	425	1810.0	761.0	0.0	426	2317.0	761.0	0.0
427	2377.0	761.0	0.0	428	2437.0	761.0	0.0	429	2492.0	761.0	0.0
430	2547.0	761.0	0.0	431	2607.0	761.0	0.0	432	2667.0	761.0	0.0
433	3057.0	766.4	0.0	434	3117.0	766.4	0.0	435	3177.0	766.4	0.0
436	3232.0	766.4	0.0	437	3283.5	766.4	0.0	438	3335.0	766.4	0.0
439	3407.0	766.4	0.0	440	-175.0	815.0	0.0	441	-115.0	815.0	0.0
442	-55.0	815.0	0.0	443	0.0	815.0	0.0	444	55.0	815.0	0.0
445	115.0	815.0	0.0	446	175.0	815.0	0.0	447	565.0	821.0	0.0
448	625.0	821.0	0.0	449	685.0	821.0	0.0	450	740.0	821.0	0.0
451	795.0	821.0	0.0	452	855.0	821.0	0.0	453	915.0	821.0	0.0
454	1460.0	821.0	0.0	455	1520.0	821.0	0.0	456	1580.0	821.0	0.0
457	1635.0	821.0	0.0	458	1690.0	821.0	0.0	459	1750.0	821.0	0.0
460	1810.0	821.0	0.0	461	2317.0	821.0	0.0	462	2377.0	821.0	0.0
463	2437.0	821.0	0.0	464	2492.0	821.0	0.0	465	2547.0	821.0	0.0
466	2607.0	821.0	0.0	467	2667.0	821.0	0.0	468	3057.0	826.8	0.0
469	3117.0	826.8	0.0	470	3177.0	826.8	0.0	471	3232.0	826.8	0.0
472	3283.5	826.8	0.0	473	3335.0	826.8	0.0	474	3407.0	826.8	0.0
475	565.0	881.0	0.0	476	625.0	881.0	0.0	477	685.0	881.0	0.0
478	740.0	881.0	0.0	479	795.0	881.0	0.0	480	855.0	881.0	0.0
481	915.0	881.0	0.0	482	1460.0	881.0	0.0	483	1520.0	881.0	0.0
484	1580.0	881.0	0.0	485	1635.0	881.0	0.0	486	1690.0	881.0	0.0
487	1750.0	881.0	0.0	488	1810.0	881.0	0.0	489	2317.0	881.0	0.0
490	2377.0	881.0	0.0	491	2437.0	881.0	0.0	492	2492.0	881.0	0.0
493	2547.0	881.0	0.0	494	2607.0	881.0	0.0	495	2667.0	881.0	0.0
496	3057.0	887.2	0.0	497	3117.0	887.2	0.0	498	3177.0	887.2	0.0
499	3232.0	887.2	0.0	500	3283.5	887.2	0.0	501	3335.0	887.2	0.0
502	3407.0	887.2	0.0	503	3057.0	947.6	0.0	504	3117.0	947.6	0.0
505	3177.0	947.6	0.0	506	3232.0	947.6	0.0	507	3283.5	947.6	0.0
508	3335.0	947.6	0.0	509	3407.0	947.6	0.0	510	3057.0	1008.0	0.0
511	3117.0	1008.0	0.0	512	3177.0	1008.0	0.0	513	3232.0	1008.0	0.0
514	3283.5	1008.0	0.0	515	3335.0	1008.0	0.0	516	3407.0	1008.0	0.0
517	3732.5	1008.0	0.0	518	4092.5	1008.0	0.0	519	4490.0	1008.0	0.0
520	3057.0	1063.0	0.0	521	3117.0	1063.0	0.0	522	3177.0	1063.0	0.0



523	3232.0	1063.0	0.0	524	3283.5	1063.0	0.0	525	3335.0	1063.0	0.0
526	3407.0	1063.0	0.0	527	3057.0	1123.0	0.0	528	3117.0	1123.0	0.0
529	3177.0	1123.0	0.0	530	3232.0	1123.0	0.0	531	3283.5	1123.0	0.0
532	3335.0	1123.0	0.0	533	3407.0	1123.0	0.0	534	3057.0	1183.0	0.0
535	3117.0	1183.0	0.0	536	3177.0	1183.0	0.0	537	3232.0	1183.0	0.0
538	3283.5	1183.0	0.0	539	3335.0	1183.0	0.0	540	3407.0	1183.0	0.0
541	4092.5	1298.0	0.0	542	4490.0	1298.0	0.0	543	4825.0	1298.0	0.0
544	-175.0	1390.0	0.0	545	-115.0	1390.0	0.0	546	-55.0	1390.0	0.0
547	0.0	1390.0	0.0	548	55.0	1390.0	0.0	549	115.0	1390.0	0.0
550	175.0	1390.0	0.0	551	277.0	1390.0	0.0	552	352.0	1390.0	0.0
553	427.0	1390.0	0.0	554	502.0	1390.0	0.0	555	561.5	1390.0	0.0
556	621.0	1390.0	0.0	557	680.5	1390.0	0.0	558	740.0	1390.0	0.0
559	795.0	1390.0	0.0	560	855.0	1390.0	0.0	561	915.0	1390.0	0.0
562	1187.0	1390.0	0.0	563	1262.0	1390.0	0.0	564	1337.0	1390.0	0.0
565	1412.0	1390.0	0.0	566	1467.8	1390.0	0.0	567	1523.5	1390.0	0.0
568	1579.2	1390.0	0.0	569	1635.0	1390.0	0.0	570	1690.0	1390.0	0.0
571	1750.0	1390.0	0.0	572	1810.0	1390.0	0.0	573	2097.0	1390.0	0.0
574	2172.0	1390.0	0.0	575	2247.0	1390.0	0.0	576	2322.0	1390.0	0.0
577	2377.0	1390.0	0.0	578	2437.0	1390.0	0.0	579	2492.0	1390.0	0.0
580	2547.0	1390.0	0.0	581	2607.0	1390.0	0.0	582	2667.0	1390.0	0.0
583	3007.0	1390.0	0.0	584	3082.0	1390.0	0.0	585	3157.0	1390.0	0.0
586	3232.0	1390.0	0.0	587	3283.5	1390.0	0.0	588	3335.0	1390.0	0.0
589	3396.0	1390.0	0.0	590	3457.0	1390.0	0.0	591	-175.0	1450.0	0.0
592	-115.0	1450.0	0.0	593	-55.0	1450.0	0.0	594	0.0	1450.0	0.0
595	55.0	1450.0	0.0	596	115.0	1450.0	0.0	597	175.0	1450.0	0.0
598	277.0	1450.0	0.0	599	352.0	1450.0	0.0	600	427.0	1450.0	0.0
601	502.0	1450.0	0.0	602	561.5	1450.0	0.0	603	621.0	1450.0	0.0
604	680.5	1450.0	0.0	605	740.0	1450.0	0.0	606	795.0	1450.0	0.0
607	855.0	1450.0	0.0	608	915.0	1450.0	0.0	609	1187.0	1450.0	0.0
610	1262.0	1450.0	0.0	611	1337.0	1450.0	0.0	612	1412.0	1450.0	0.0
613	1467.8	1450.0	0.0	614	1523.5	1450.0	0.0	615	1579.2	1450.0	0.0
616	1635.0	1450.0	0.0	617	1690.0	1450.0	0.0	618	1750.0	1450.0	0.0
619	1810.0	1450.0	0.0	620	2097.0	1450.0	0.0	621	2172.0	1450.0	0.0
622	2247.0	1450.0	0.0	623	2322.0	1450.0	0.0	624	2377.0	1450.0	0.0
625	2437.0	1450.0	0.0	626	2492.0	1450.0	0.0	627	2547.0	1450.0	0.0
628	2607.0	1450.0	0.0	629	2667.0	1450.0	0.0	630	3007.0	1450.0	0.0
631	3082.0	1450.0	0.0	632	3157.0	1450.0	0.0	633	3232.0	1450.0	0.0
634	3283.5	1450.0	0.0	635	3335.0	1450.0	0.0	636	3396.0	1450.0	0.0
637	3457.0	1450.0	0.0	638	-175.0	1510.0	0.0	639	-115.0	1510.0	0.0
640	-55.0	1510.0	0.0	641	0.0	1510.0	0.0	642	55.0	1510.0	0.0
643	115.0	1510.0	0.0	644	175.0	1510.0	0.0	645	277.0	1510.0	0.0
646	352.0	1510.0	0.0	647	427.0	1510.0	0.0	648	502.0	1510.0	0.0
649	561.5	1510.0	0.0	650	621.0	1510.0	0.0	651	680.5	1510.0	0.0
652	740.0	1510.0	0.0	653	795.0	1510.0	0.0	654	855.0	1510.0	0.0
655	915.0	1510.0	0.0	656	1187.0	1510.0	0.0	657	1262.0	1510.0	0.0
658	1337.0	1510.0	0.0	659	1412.0	1510.0	0.0	660	1467.8	1510.0	0.0
661	1523.5	1510.0	0.0	662	1579.2	1510.0	0.0	663	1635.0	1510.0	0.0
664	1690.0	1510.0	0.0	665	1750.0	1510.0	0.0	666	1810.0	1510.0	0.0
667	2097.0	1510.0	0.0	668	2172.0	1510.0	0.0	669	2247.0	1510.0	0.0
670	2322.0	1510.0	0.0	671	2377.0	1510.0	0.0	672	2437.0	1510.0	0.0
673	2492.0	1510.0	0.0	674	2547.0	1510.0	0.0	675	2607.0	1510.0	0.0
676	2667.0	1510.0	0.0	677	3007.0	1510.0	0.0	678	3082.0	1510.0	0.0
679	3157.0	1510.0	0.0	680	3232.0	1510.0	0.0	681	3283.5	1510.0	0.0
682	3335.0	1510.0	0.0	683	3396.0	1510.0	0.0	684	3457.0	1510.0	0.0
685	-175.0	1565.0	0.0	686	-115.0	1565.0	0.0	687	-55.0	1565.0	0.0
688	0.0	1565.0	0.0	689	55.0	1565.0	0.0	690	115.0	1565.0	0.0
691	175.0	1565.0	0.0	692	277.0	1565.0	0.0	693	352.0	1565.0	0.0
694	427.0	1565.0	0.0	695	502.0	1565.0	0.0	696	561.5	1565.0	0.0
697	621.0	1565.0	0.0	698	680.5	1565.0	0.0	699	740.0	1565.0	0.0
700	795.0	1565.0	0.0	701	855.0	1565.0	0.0	702	915.0	1565.0	0.0
703	1187.0	1565.0	0.0	704	1262.0	1565.0	0.0	705	1337.0	1565.0	0.0
706	1412.0	1565.0	0.0	707	1467.8	1565.0	0.0	708	1523.5	1565.0	0.0
709	1579.2	1565.0	0.0	710	1635.0	1565.0	0.0	711	1690.0	1565.0	0.0
712	1750.0	1565.0	0.0	713	1810.0	1565.0	0.0	714	2097.0	1565.0	0.0
715	2172.0	1565.0	0.0	716	2247.0	1565.0	0.0	717	2322.0	1565.0	0.0
718	2377.0	1565.0	0.0	719	2437.0	1565.0	0.0	720	2492.0	1565.0	0.0
721	2547.0	1565.0	0.0	722	2607.0	1565.0	0.0	723	2667.0	1565.0	0.0
724	3007.0	1565.0	0.0	725	3082.0	1565.0	0.0	726	3157.0	1565.0	0.0
727	3232.0	1565.0	0.0	728	3283.5	1565.0	0.0	729	3335.0	1565.0	0.0
730	3396.0	1565.0	0.0	731	3457.0	1565.0	0.0	732	-175.0	1617.0	0.0
733	-115.0	1617.0	0.0	734	-55.0	1617.0	0.0	735	0.0	1617.0	0.0
736	55.0	1617.0	0.0	737	115.0	1617.0	0.0	738	175.0	1617.0	0.0
739	277.0	1617.0	0.0	740	352.0	1617.0	0.0	741	427.0	1617.0	0.0
742	502.0	1617.0	0.0	743	561.5	1617.0	0.0	744	621.0	1617.0	0.0
745	680.5	1617.0	0.0	746	740.0	1617.0	0.0	747	795.0	1617.0	0.0
748	855.0	1617.0	0.0	749	915.0	1617.0	0.0	750	1187.0	1617.0	0.0
751	1262.0	1617.0	0.0	752	1337.0	1617.0	0.0	753	1412.0	1617.0	0.0



754	1467.8	1617.0	0.0	755	1523.5	1617.0	0.0	756	1579.2	1617.0	0.0
757	1635.0	1617.0	0.0	758	1690.0	1617.0	0.0	759	1750.0	1617.0	0.0
760	1810.0	1617.0	0.0	761	2097.0	1617.0	0.0	762	2172.0	1617.0	0.0
763	2247.0	1617.0	0.0	764	2322.0	1617.0	0.0	765	2377.0	1617.0	0.0
766	2437.0	1617.0	0.0	767	2492.0	1617.0	0.0	768	2547.0	1617.0	0.0
769	2607.0	1617.0	0.0	770	2667.0	1617.0	0.0	771	3007.0	1617.0	0.0
772	3082.0	1617.0	0.0	773	3157.0	1617.0	0.0	774	3232.0	1617.0	0.0
775	3283.5	1617.0	0.0	776	3335.0	1617.0	0.0	777	3396.0	1617.0	0.0
778	3457.0	1617.0	0.0	779	-175.0	1669.0	0.0	780	-115.0	1669.0	0.0
781	-55.0	1669.0	0.0	782	0.0	1669.0	0.0	783	55.0	1669.0	0.0
784	115.0	1669.0	0.0	785	175.0	1669.0	0.0	786	277.0	1669.0	0.0
787	352.0	1669.0	0.0	788	427.0	1669.0	0.0	789	502.0	1669.0	0.0
790	561.5	1669.0	0.0	791	621.0	1669.0	0.0	792	680.5	1669.0	0.0
793	740.0	1669.0	0.0	794	795.0	1669.0	0.0	795	855.0	1669.0	0.0
796	915.0	1669.0	0.0	797	1187.0	1669.0	0.0	798	1262.0	1669.0	0.0
799	1337.0	1669.0	0.0	800	1412.0	1669.0	0.0	801	1467.8	1669.0	0.0
802	1523.5	1669.0	0.0	803	1579.2	1669.0	0.0	804	1635.0	1669.0	0.0
805	1690.0	1669.0	0.0	806	1750.0	1669.0	0.0	807	1810.0	1669.0	0.0
808	2097.0	1669.0	0.0	809	2172.0	1669.0	0.0	810	2247.0	1669.0	0.0
811	2322.0	1669.0	0.0	812	2377.0	1669.0	0.0	813	2437.0	1669.0	0.0
814	2492.0	1669.0	0.0	815	2547.0	1669.0	0.0	816	2607.0	1669.0	0.0
817	2667.0	1669.0	0.0	818	3007.0	1669.0	0.0	819	3082.0	1669.0	0.0
820	3157.0	1669.0	0.0	821	3232.0	1669.0	0.0	822	3283.5	1669.0	0.0
823	3335.0	1669.0	0.0	824	3396.0	1669.0	0.0	825	3457.0	1669.0	0.0
826	3007.0	1728.5	0.0	827	3082.0	1728.5	0.0	828	3157.0	1728.5	0.0
829	3232.0	1728.5	0.0	830	3283.5	1728.5	0.0	831	3335.0	1728.5	0.0
832	3396.0	1728.5	0.0	833	3457.0	1728.5	0.0	834	-175.0	1740.0	0.0
835	-115.0	1740.0	0.0	836	-55.0	1740.0	0.0	837	0.0	1740.0	0.0
838	55.0	1740.0	0.0	839	115.0	1740.0	0.0	840	175.0	1740.0	0.0
841	277.0	1744.0	0.0	842	352.0	1744.0	0.0	843	427.0	1744.0	0.0
844	502.0	1744.0	0.0	845	561.5	1744.0	0.0	846	621.0	1744.0	0.0
847	680.5	1744.0	0.0	848	740.0	1744.0	0.0	849	795.0	1744.0	0.0
850	855.0	1744.0	0.0	851	915.0	1744.0	0.0	852	1187.0	1744.0	0.0
853	1262.0	1744.0	0.0	854	1337.0	1744.0	0.0	855	1412.0	1744.0	0.0
856	1467.8	1744.0	0.0	857	1523.5	1744.0	0.0	858	1579.2	1744.0	0.0
859	1635.0	1744.0	0.0	860	1690.0	1744.0	0.0	861	1750.0	1744.0	0.0
862	1810.0	1744.0	0.0	863	2097.0	1744.0	0.0	864	2172.0	1744.0	0.0
865	2247.0	1744.0	0.0	866	2322.0	1744.0	0.0	867	2377.0	1744.0	0.0
868	2437.0	1744.0	0.0	869	2492.0	1744.0	0.0	870	2547.0	1744.0	0.0
871	2607.0	1744.0	0.0	872	2667.0	1744.0	0.0	873	3007.0	1788.0	0.0
874	3082.0	1788.0	0.0	875	3157.0	1788.0	0.0	876	3232.0	1788.0	0.0
877	3283.5	1788.0	0.0	878	3335.0	1788.0	0.0	879	3396.0	1788.0	0.0
880	3457.0	1788.0	0.0	881	3732.5	1788.0	0.0	882	4092.5	1788.0	0.0
883	4490.0	1788.0	0.0	884	4825.0	1788.0	0.0	885	277.0	1819.0	0.0
886	352.0	1819.0	0.0	887	427.0	1819.0	0.0	888	502.0	1819.0	0.0
889	561.5	1819.0	0.0	890	621.0	1819.0	0.0	891	680.5	1819.0	0.0
892	740.0	1819.0	0.0	893	795.0	1819.0	0.0	894	855.0	1819.0	0.0
895	915.0	1819.0	0.0	896	1187.0	1819.0	0.0	897	1262.0	1819.0	0.0
898	1337.0	1819.0	0.0	899	1412.0	1819.0	0.0	900	1467.8	1819.0	0.0
901	1523.5	1819.0	0.0	902	1579.2	1819.0	0.0	903	1635.0	1819.0	0.0
904	1690.0	1819.0	0.0	905	1750.0	1819.0	0.0	906	1810.0	1819.0	0.0
907	2097.0	1819.0	0.0	908	2172.0	1819.0	0.0	909	2247.0	1819.0	0.0
910	2322.0	1819.0	0.0	911	2377.0	1819.0	0.0	912	2437.0	1819.0	0.0
913	2492.0	1819.0	0.0	914	2547.0	1819.0	0.0	915	2607.0	1819.0	0.0
916	2667.0	1819.0	0.0	917	3007.0	1841.0	0.0	918	3082.0	1841.0	0.0
919	3157.0	1841.0	0.0	920	3232.0	1841.0	0.0	921	3283.5	1841.0	0.0
922	3335.0	1841.0	0.0	923	3396.0	1841.0	0.0	924	3457.0	1841.0	0.0
925	277.0	1894.0	0.0	926	352.0	1894.0	0.0	927	427.0	1894.0	0.0
928	502.0	1894.0	0.0	929	561.5	1894.0	0.0	930	621.0	1894.0	0.0
931	680.5	1894.0	0.0	932	740.0	1894.0	0.0	933	795.0	1894.0	0.0
934	855.0	1894.0	0.0	935	915.0	1894.0	0.0	936	1187.0	1894.0	0.0
937	1262.0	1894.0	0.0	938	1337.0	1894.0	0.0	939	1412.0	1894.0	0.0
940	1467.8	1894.0	0.0	941	1523.5	1894.0	0.0	942	1579.2	1894.0	0.0
943	1635.0	1894.0	0.0	944	1690.0	1894.0	0.0	945	1750.0	1894.0	0.0
946	1810.0	1894.0	0.0	947	2097.0	1894.0	0.0	948	2172.0	1894.0	0.0
949	2247.0	1894.0	0.0	950	2322.0	1894.0	0.0	951	2377.0	1894.0	0.0
952	2437.0	1894.0	0.0	953	2492.0	1894.0	0.0	954	2547.0	1894.0	0.0
955	2607.0	1894.0	0.0	956	2667.0	1894.0	0.0	957	3007.0	1894.0	0.0
958	3082.0	1894.0	0.0	959	3157.0	1894.0	0.0	960	3232.0	1894.0	0.0
961	3283.5	1894.0	0.0	962	3335.0	1894.0	0.0	963	3396.0	1894.0	0.0
964	3457.0	1894.0	0.0	965	277.0	2136.0	0.0	966	352.0	2136.0	0.0
967	427.0	2136.0	0.0	968	502.0	2136.0	0.0	969	577.0	2136.0	0.0
970	652.0	2136.0	0.0	971	727.0	2136.0	0.0	972	3007.0	2136.0	0.0
973	3082.0	2136.0	0.0	974	3157.0	2136.0	0.0	975	3232.0	2136.0	0.0
976	3307.0	2136.0	0.0	977	3382.0	2136.0	0.0	978	3457.0	2136.0	0.0
979	277.0	2211.0	0.0	980	352.0	2211.0	0.0	981	427.0	2211.0	0.0
982	502.0	2211.0	0.0	983	577.0	2211.0	0.0	984	652.0	2211.0	0.0



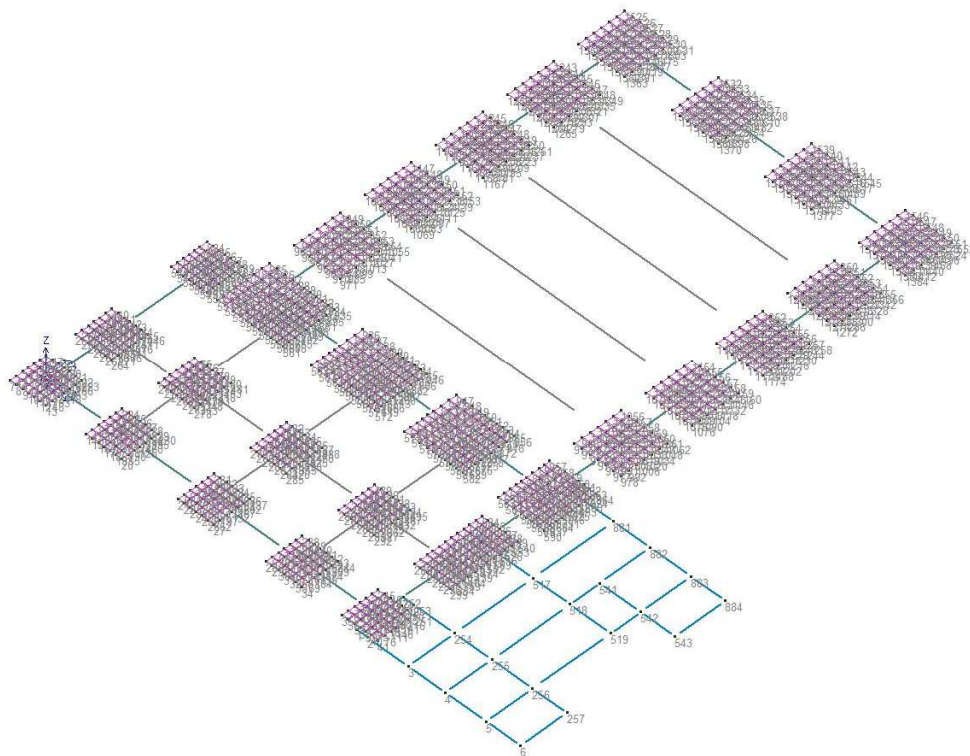
985	727.0	2211.0	0.0	986	3007.0	2211.0	0.0	987	3082.0	2211.0	0.0
988	3157.0	2211.0	0.0	989	3232.0	2211.0	0.0	990	3307.0	2211.0	0.0
991	3382.0	2211.0	0.0	992	3457.0	2211.0	0.0	993	277.0	2286.0	0.0
994	352.0	2286.0	0.0	995	427.0	2286.0	0.0	996	502.0	2286.0	0.0
997	577.0	2286.0	0.0	998	652.0	2286.0	0.0	999	727.0	2286.0	0.0
1000	3007.0	2286.0	0.0	1001	3082.0	2286.0	0.0	1002	3157.0	2286.0	0.0
1003	3232.0	2286.0	0.0	1004	3307.0	2286.0	0.0	1005	3382.0	2286.0	0.0
1006	3457.0	2286.0	0.0	1007	277.0	2361.0	0.0	1008	352.0	2361.0	0.0
1009	427.0	2361.0	0.0	1010	502.0	2361.0	0.0	1011	577.0	2361.0	0.0
1012	652.0	2361.0	0.0	1013	727.0	2361.0	0.0	1014	3007.0	2361.0	0.0
1015	3082.0	2361.0	0.0	1016	3157.0	2361.0	0.0	1017	3232.0	2361.0	0.0
1018	3307.0	2361.0	0.0	1019	3382.0	2361.0	0.0	1020	3457.0	2361.0	0.0
1021	277.0	2436.0	0.0	1022	352.0	2436.0	0.0	1023	427.0	2436.0	0.0
1024	502.0	2436.0	0.0	1025	577.0	2436.0	0.0	1026	652.0	2436.0	0.0
1027	727.0	2436.0	0.0	1028	3007.0	2436.0	0.0	1029	3082.0	2436.0	0.0
1030	3157.0	2436.0	0.0	1031	3232.0	2436.0	0.0	1032	3307.0	2436.0	0.0
1033	3382.0	2436.0	0.0	1034	3457.0	2436.0	0.0	1035	277.0	2511.0	0.0
1036	352.0	2511.0	0.0	1037	427.0	2511.0	0.0	1038	502.0	2511.0	0.0
1039	577.0	2511.0	0.0	1040	652.0	2511.0	0.0	1041	727.0	2511.0	0.0
1042	3007.0	2511.0	0.0	1043	3082.0	2511.0	0.0	1044	3157.0	2511.0	0.0
1045	3232.0	2511.0	0.0	1046	3307.0	2511.0	0.0	1047	3382.0	2511.0	0.0
1048	3457.0	2511.0	0.0	1049	277.0	2586.0	0.0	1050	352.0	2586.0	0.0
1051	427.0	2586.0	0.0	1052	502.0	2586.0	0.0	1053	577.0	2586.0	0.0
1054	652.0	2586.0	0.0	1055	727.0	2586.0	0.0	1056	3007.0	2586.0	0.0
1057	3082.0	2586.0	0.0	1058	3157.0	2586.0	0.0	1059	3232.0	2586.0	0.0
1060	3307.0	2586.0	0.0	1061	3382.0	2586.0	0.0	1062	3457.0	2586.0	0.0
1063	277.0	2828.0	0.0	1064	352.0	2828.0	0.0	1065	427.0	2828.0	0.0
1066	502.0	2828.0	0.0	1067	577.0	2828.0	0.0	1068	652.0	2828.0	0.0
1069	727.0	2828.0	0.0	1070	3007.0	2828.0	0.0	1071	3082.0	2828.0	0.0
1072	3157.0	2828.0	0.0	1073	3232.0	2828.0	0.0	1074	3307.0	2828.0	0.0
1075	3382.0	2828.0	0.0	1076	3457.0	2828.0	0.0	1077	277.0	2903.0	0.0
1078	352.0	2903.0	0.0	1079	427.0	2903.0	0.0	1080	502.0	2903.0	0.0
1081	577.0	2903.0	0.0	1082	652.0	2903.0	0.0	1083	727.0	2903.0	0.0
1084	3007.0	2903.0	0.0	1085	3082.0	2903.0	0.0	1086	3157.0	2903.0	0.0
1087	3232.0	2903.0	0.0	1088	3307.0	2903.0	0.0	1089	3382.0	2903.0	0.0
1090	3457.0	2903.0	0.0	1091	277.0	2978.0	0.0	1092	352.0	2978.0	0.0
1093	427.0	2978.0	0.0	1094	502.0	2978.0	0.0	1095	577.0	2978.0	0.0
1096	652.0	2978.0	0.0	1097	727.0	2978.0	0.0	1098	3007.0	2978.0	0.0
1099	3082.0	2978.0	0.0	1100	3157.0	2978.0	0.0	1101	3232.0	2978.0	0.0
1102	3307.0	2978.0	0.0	1103	3382.0	2978.0	0.0	1104	3457.0	2978.0	0.0
1105	277.0	3053.0	0.0	1106	352.0	3053.0	0.0	1107	427.0	3053.0	0.0
1108	502.0	3053.0	0.0	1109	577.0	3053.0	0.0	1110	652.0	3053.0	0.0
1111	727.0	3053.0	0.0	1112	3007.0	3053.0	0.0	1113	3082.0	3053.0	0.0
1114	3157.0	3053.0	0.0	1115	3232.0	3053.0	0.0	1116	3307.0	3053.0	0.0
1117	3382.0	3053.0	0.0	1118	3457.0	3053.0	0.0	1119	277.0	3128.0	0.0
1120	352.0	3128.0	0.0	1121	427.0	3128.0	0.0	1122	502.0	3128.0	0.0
1123	577.0	3128.0	0.0	1124	652.0	3128.0	0.0	1125	727.0	3128.0	0.0
1126	3007.0	3128.0	0.0	1127	3082.0	3128.0	0.0	1128	3157.0	3128.0	0.0
1129	3232.0	3128.0	0.0	1130	3307.0	3128.0	0.0	1131	3382.0	3128.0	0.0
1132	3457.0	3128.0	0.0	1133	277.0	3203.0	0.0	1134	352.0	3203.0	0.0
1135	427.0	3203.0	0.0	1136	502.0	3203.0	0.0	1137	577.0	3203.0	0.0
1138	652.0	3203.0	0.0	1139	727.0	3203.0	0.0	1140	3007.0	3203.0	0.0
1141	3082.0	3203.0	0.0	1142	3157.0	3203.0	0.0	1143	3232.0	3203.0	0.0
1144	3307.0	3203.0	0.0	1145	3382.0	3203.0	0.0	1146	3457.0	3203.0	0.0
1147	277.0	3278.0	0.0	1148	352.0	3278.0	0.0	1149	427.0	3278.0	0.0
1150	502.0	3278.0	0.0	1151	577.0	3278.0	0.0	1152	652.0	3278.0	0.0
1153	727.0	3278.0	0.0	1154	3007.0	3278.0	0.0	1155	3082.0	3278.0	0.0
1156	3157.0	3278.0	0.0	1157	3232.0	3278.0	0.0	1158	3307.0	3278.0	0.0
1159	3382.0	3278.0	0.0	1160	3457.0	3278.0	0.0	1161	277.0	3520.0	0.0
1162	352.0	3520.0	0.0	1163	427.0	3520.0	0.0	1164	502.0	3520.0	0.0
1165	577.0	3520.0	0.0	1166	652.0	3520.0	0.0	1167	727.0	3520.0	0.0
1168	3007.0	3520.0	0.0	1169	3082.0	3520.0	0.0	1170	3157.0	3520.0	0.0
1171	3232.0	3520.0	0.0	1172	3307.0	3520.0	0.0	1173	3382.0	3520.0	0.0
1174	3457.0	3520.0	0.0	1175	277.0	3595.0	0.0	1176	352.0	3595.0	0.0
1177	427.0	3595.0	0.0	1178	502.0	3595.0	0.0	1179	577.0	3595.0	0.0
1180	652.0	3595.0	0.0	1181	727.0	3595.0	0.0	1182	3007.0	3595.0	0.0
1183	3082.0	3595.0	0.0	1184	3157.0	3595.0	0.0	1185	3232.0	3595.0	0.0
1186	3307.0	3595.0	0.0	1187	3382.0	3595.0	0.0	1188	3457.0	3595.0	0.0
1189	277.0	3670.0	0.0	1190	352.0	3670.0	0.0	1191	427.0	3670.0	0.0
1192	502.0	3670.0	0.0	1193	577.0	3670.0	0.0	1194	652.0	3670.0	0.0
1195	727.0	3670.0	0.0	1196	3007.0	3670.0	0.0	1197	3082.0	3670.0	0.0
1198	3157.0	3670.0	0.0	1199	3232.0	3670.0	0.0	1200	3307.0	3670.0	0.0
1201	3382.0	3670.0	0.0	1202	3457.0	3670.0	0.0	1203	277.0	3745.0	0.0
1204	352.0	3745.0	0.0	1205	427.0	3745.0	0.0	1206	502.0	3745.0	0.0
1207	577.0	3745.0	0.0	1208	652.0	3745.0	0.0	1209	727.0	3745.0	0.0
1210	3007.0	3745.0	0.0	1211	3082.0	3745.0	0.0	1212	3157.0	3745.0	0.0
1213	3232.0	3745.0	0.0	1214	3307.0	3745.0	0.0	1215	3382.0	3745.0	0.0



1216	3457.0	3745.0	0.0	1217	277.0	3820.0	0.0	1218	352.0	3820.0	0.0
1219	427.0	3820.0	0.0	1220	502.0	3820.0	0.0	1221	577.0	3820.0	0.0
1222	652.0	3820.0	0.0	1223	727.0	3820.0	0.0	1224	3007.0	3820.0	0.0
1225	3082.0	3820.0	0.0	1226	3157.0	3820.0	0.0	1227	3232.0	3820.0	0.0
1228	3307.0	3820.0	0.0	1229	3382.0	3820.0	0.0	1230	3457.0	3820.0	0.0
1231	277.0	3895.0	0.0	1232	352.0	3895.0	0.0	1233	427.0	3895.0	0.0
1234	502.0	3895.0	0.0	1235	577.0	3895.0	0.0	1236	652.0	3895.0	0.0
1237	727.0	3895.0	0.0	1238	3007.0	3895.0	0.0	1239	3082.0	3895.0	0.0
1240	3157.0	3895.0	0.0	1241	3232.0	3895.0	0.0	1242	3307.0	3895.0	0.0
1243	3382.0	3895.0	0.0	1244	3457.0	3895.0	0.0	1245	277.0	3970.0	0.0
1246	352.0	3970.0	0.0	1247	427.0	3970.0	0.0	1248	502.0	3970.0	0.0
1249	577.0	3970.0	0.0	1250	652.0	3970.0	0.0	1251	727.0	3970.0	0.0
1252	3007.0	3970.0	0.0	1253	3082.0	3970.0	0.0	1254	3157.0	3970.0	0.0
1255	3232.0	3970.0	0.0	1256	3307.0	3970.0	0.0	1257	3382.0	3970.0	0.0
1258	3457.0	3970.0	0.0	1259	277.0	4212.0	0.0	1260	352.0	4212.0	0.0
1261	427.0	4212.0	0.0	1262	502.0	4212.0	0.0	1263	577.0	4212.0	0.0
1264	652.0	4212.0	0.0	1265	727.0	4212.0	0.0	1266	3007.0	4212.0	0.0
1267	3082.0	4212.0	0.0	1268	3157.0	4212.0	0.0	1269	3232.0	4212.0	0.0
1270	3307.0	4212.0	0.0	1271	3382.0	4212.0	0.0	1272	3457.0	4212.0	0.0
1273	277.0	4287.0	0.0	1274	352.0	4287.0	0.0	1275	427.0	4287.0	0.0
1276	502.0	4287.0	0.0	1277	577.0	4287.0	0.0	1278	652.0	4287.0	0.0
1279	727.0	4287.0	0.0	1280	3007.0	4287.0	0.0	1281	3082.0	4287.0	0.0
1282	3157.0	4287.0	0.0	1283	3232.0	4287.0	0.0	1284	3307.0	4287.0	0.0
1285	3382.0	4287.0	0.0	1286	3457.0	4287.0	0.0	1287	277.0	4362.0	0.0
1288	352.0	4362.0	0.0	1289	427.0	4362.0	0.0	1290	502.0	4362.0	0.0
1291	577.0	4362.0	0.0	1292	652.0	4362.0	0.0	1293	727.0	4362.0	0.0
1294	3007.0	4362.0	0.0	1295	3082.0	4362.0	0.0	1296	3157.0	4362.0	0.0
1297	3232.0	4362.0	0.0	1298	3307.0	4362.0	0.0	1299	3382.0	4362.0	0.0
1300	3457.0	4362.0	0.0	1301	277.0	4437.0	0.0	1302	352.0	4437.0	0.0
1303	427.0	4437.0	0.0	1304	502.0	4437.0	0.0	1305	577.0	4437.0	0.0
1306	652.0	4437.0	0.0	1307	727.0	4437.0	0.0	1308	3007.0	4437.0	0.0
1309	3082.0	4437.0	0.0	1310	3157.0	4437.0	0.0	1311	3232.0	4437.0	0.0
1312	3307.0	4437.0	0.0	1313	3382.0	4437.0	0.0	1314	3457.0	4437.0	0.0
1315	277.0	4512.0	0.0	1316	352.0	4512.0	0.0	1317	427.0	4512.0	0.0
1318	502.0	4512.0	0.0	1319	577.0	4512.0	0.0	1320	652.0	4512.0	0.0
1321	727.0	4512.0	0.0	1322	3007.0	4512.0	0.0	1323	3082.0	4512.0	0.0
1324	3157.0	4512.0	0.0	1325	3232.0	4512.0	0.0	1326	3307.0	4512.0	0.0
1327	3382.0	4512.0	0.0	1328	3457.0	4512.0	0.0	1329	277.0	4587.0	0.0
1330	352.0	4587.0	0.0	1331	427.0	4587.0	0.0	1332	502.0	4587.0	0.0
1333	577.0	4587.0	0.0	1334	652.0	4587.0	0.0	1335	727.0	4587.0	0.0
1336	3007.0	4587.0	0.0	1337	3082.0	4587.0	0.0	1338	3157.0	4587.0	0.0
1339	3232.0	4587.0	0.0	1340	3307.0	4587.0	0.0	1341	3382.0	4587.0	0.0
1342	3457.0	4587.0	0.0	1343	277.0	4662.0	0.0	1344	352.0	4662.0	0.0
1345	427.0	4662.0	0.0	1346	502.0	4662.0	0.0	1347	577.0	4662.0	0.0
1348	652.0	4662.0	0.0	1349	727.0	4662.0	0.0	1350	3007.0	4662.0	0.0
1351	3082.0	4662.0	0.0	1352	3157.0	4662.0	0.0	1353	3232.0	4662.0	0.0
1354	3307.0	4662.0	0.0	1355	3382.0	4662.0	0.0	1356	3457.0	4662.0	0.0
1357	277.0	4904.0	0.0	1358	352.0	4904.0	0.0	1359	427.0	4904.0	0.0
1360	502.0	4904.0	0.0	1361	577.0	4904.0	0.0	1362	652.0	4904.0	0.0
1363	727.0	4904.0	0.0	1364	1187.0	4904.0	0.0	1365	1262.0	4904.0	0.0
1366	1337.0	4904.0	0.0	1367	1412.0	4904.0	0.0	1368	1487.0	4904.0	0.0
1369	1562.0	4904.0	0.0	1370	1637.0	4904.0	0.0	1371	2097.0	4904.0	0.0
1372	2172.0	4904.0	0.0	1373	2247.0	4904.0	0.0	1374	2322.0	4904.0	0.0
1375	2397.0	4904.0	0.0	1376	2472.0	4904.0	0.0	1377	2547.0	4904.0	0.0
1378	3007.0	4904.0	0.0	1379	3082.0	4904.0	0.0	1380	3157.0	4904.0	0.0
1381	3232.0	4904.0	0.0	1382	3307.0	4904.0	0.0	1383	3382.0	4904.0	0.0
1384	3457.0	4904.0	0.0	1385	277.0	4979.0	0.0	1386	352.0	4979.0	0.0
1387	427.0	4979.0	0.0	1388	502.0	4979.0	0.0	1389	577.0	4979.0	0.0
1390	652.0	4979.0	0.0	1391	727.0	4979.0	0.0	1392	1187.0	4979.0	0.0
1393	1262.0	4979.0	0.0	1394	1337.0	4979.0	0.0	1395	1412.0	4979.0	0.0
1396	1487.0	4979.0	0.0	1397	1562.0	4979.0	0.0	1398	1637.0	4979.0	0.0
1399	2097.0	4979.0	0.0	1400	2172.0	4979.0	0.0	1401	2247.0	4979.0	0.0
1402	2322.0	4979.0	0.0	1403	2397.0	4979.0	0.0	1404	2472.0	4979.0	0.0
1405	2547.0	4979.0	0.0	1406	3007.0	4979.0	0.0	1407	3082.0	4979.0	0.0
1408	3157.0	4979.0	0.0	1409	3232.0	4979.0	0.0	1410	3307.0	4979.0	0.0
1411	3382.0	4979.0	0.0	1412	3457.0	4979.0	0.0	1413	277.0	5054.0	0.0
1414	352.0	5054.0	0.0	1415	427.0	5054.0	0.0	1416	502.0	5054.0	0.0
1417	577.0	5054.0	0.0	1418	652.0	5054.0	0.0	1419	727.0	5054.0	0.0
1420	1187.0	5054.0	0.0	1421	1262.0	5054.0	0.0	1422	1337.0	5054.0	0.0
1423	1412.0	5054.0	0.0	1424	1487.0	5054.0	0.0	1425	1562.0	5054.0	0.0
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1435	3082.0	5054.0	0.0	1436	3157.0	5054.0	0.0	1437	3232.0	5054.0	0.0
1438	3307.0	5054.0	0.0	1439	3382.0	5054.0	0.0	1440	3457.0	5054.0	0.0
1441	277.0	5129.0	0.0	1442	352.0	5129.0	0.0	1443	427.0	5129.0	0.0
1444	502.0	5129.0	0.0	1445	577.0	5129.0	0.0	1446	652.0	5129.0	0.0



1447	727.0	5129.0	0.0	1448	1187.0	5129.0	0.0	1449	1262.0	5129.0	0.0
1450	1337.0	5129.0	0.0	1451	1412.0	5129.0	0.0	1452	1487.0	5129.0	0.0
1453	1562.0	5129.0	0.0	1454	1637.0	5129.0	0.0	1455	2097.0	5129.0	0.0
1456	2172.0	5129.0	0.0	1457	2247.0	5129.0	0.0	1458	2322.0	5129.0	0.0
1459	2397.0	5129.0	0.0	1460	2472.0	5129.0	0.0	1461	2547.0	5129.0	0.0
1462	3007.0	5129.0	0.0	1463	3082.0	5129.0	0.0	1464	3157.0	5129.0	0.0
1465	3232.0	5129.0	0.0	1466	3307.0	5129.0	0.0	1467	3382.0	5129.0	0.0
1468	3457.0	5129.0	0.0	1469	277.0	5204.0	0.0	1470	352.0	5204.0	0.0
1471	427.0	5204.0	0.0	1472	502.0	5204.0	0.0	1473	577.0	5204.0	0.0
1474	652.0	5204.0	0.0	1475	727.0	5204.0	0.0	1476	1187.0	5204.0	0.0
1477	1262.0	5204.0	0.0	1478	1337.0	5204.0	0.0	1479	1412.0	5204.0	0.0
1480	1487.0	5204.0	0.0	1481	1562.0	5204.0	0.0	1482	1637.0	5204.0	0.0
1483	2097.0	5204.0	0.0	1484	2172.0	5204.0	0.0	1485	2247.0	5204.0	0.0
1486	2322.0	5204.0	0.0	1487	2397.0	5204.0	0.0	1488	2472.0	5204.0	0.0
1489	2547.0	5204.0	0.0	1490	3007.0	5204.0	0.0	1491	3082.0	5204.0	0.0
1492	3157.0	5204.0	0.0	1493	3232.0	5204.0	0.0	1494	3307.0	5204.0	0.0
1495	3382.0	5204.0	0.0	1496	3457.0	5204.0	0.0	1497	277.0	5279.0	0.0
1498	352.0	5279.0	0.0	1499	427.0	5279.0	0.0	1500	502.0	5279.0	0.0
1501	577.0	5279.0	0.0	1502	652.0	5279.0	0.0	1503	727.0	5279.0	0.0
1504	1187.0	5279.0	0.0	1505	1262.0	5279.0	0.0	1506	1337.0	5279.0	0.0
1507	1412.0	5279.0	0.0	1508	1487.0	5279.0	0.0	1509	1562.0	5279.0	0.0
1510	1637.0	5279.0	0.0	1511	2097.0	5279.0	0.0	1512	2172.0	5279.0	0.0
1513	2247.0	5279.0	0.0	1514	2322.0	5279.0	0.0	1515	2397.0	5279.0	0.0
1516	2472.0	5279.0	0.0	1517	2547.0	5279.0	0.0	1518	3007.0	5279.0	0.0
1519	3082.0	5279.0	0.0	1520	3157.0	5279.0	0.0	1521	3232.0	5279.0	0.0
1522	3307.0	5279.0	0.0	1523	3382.0	5279.0	0.0	1524	3457.0	5279.0	0.0
1525	277.0	5354.0	0.0	1526	352.0	5354.0	0.0	1527	427.0	5354.0	0.0
1528	502.0	5354.0	0.0	1529	577.0	5354.0	0.0	1530	652.0	5354.0	0.0
1531	727.0	5354.0	0.0	1532	1187.0	5354.0	0.0	1533	1262.0	5354.0	0.0
1534	1337.0	5354.0	0.0	1535	1412.0	5354.0	0.0	1536	1487.0	5354.0	0.0
1537	1562.0	5354.0	0.0	1538	1637.0	5354.0	0.0	1539	2097.0	5354.0	0.0
1540	2172.0	5354.0	0.0	1541	2247.0	5354.0	0.0	1542	2322.0	5354.0	0.0
1543	2397.0	5354.0	0.0	1544	2472.0	5354.0	0.0	1545	2547.0	5354.0	0.0
1546	3007.0	5354.0	0.0	1547	3082.0	5354.0	0.0	1548	3157.0	5354.0	0.0
1549	3232.0	5354.0	0.0	1550	3307.0	5354.0	0.0	1551	3382.0	5354.0	0.0
1552	3457.0	5354.0	0.0								



MODELLO

4855D-FND-I







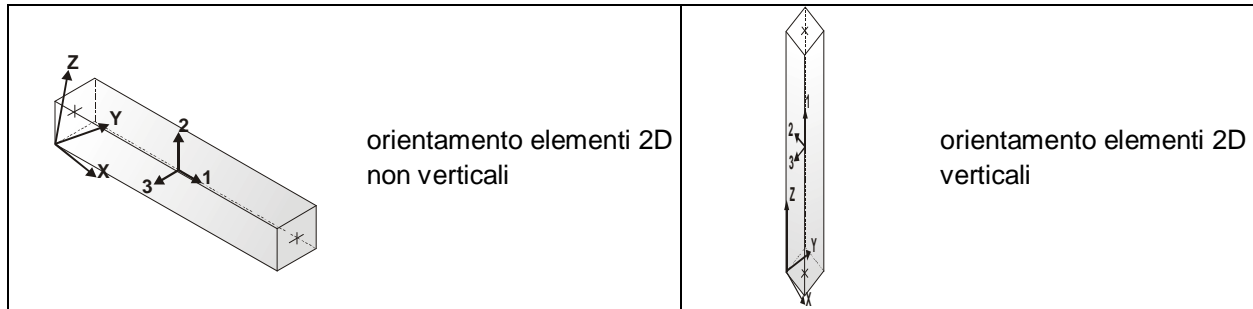
# MODELLAZIONE STRUTTURA: ELEMENTI TRAVE

## TABELLA DATI TRAVI

Il programma utilizza per la modellazione elementi a due nodi denominati in generale travi.

Ogni elemento trave è individuato dal nodo iniziale e dal nodo finale.

Ogni elemento è caratterizzato da un insieme di proprietà riportate in tabella che ne completano la modellazione.



In particolare per ogni elemento viene indicato in tabella:

<b>Elem.</b>	numero dell'elemento
<b>Note</b>	codice di comportamento: trave, trave di fondazione, pilastro, asta, asta tesa, asta compressa,
<b>Nodo I (J)</b>	numero del nodo iniziale (finale)
<b>Mat.</b>	codice del materiale assegnato all'elemento
<b>Sez.</b>	codice della sezione assegnata all'elemento
<b>Rotaz.</b>	valore della rotazione dell'elemento, attorno al proprio asse, nel caso in cui l'orientamento di default non sia adottabile; l'orientamento di default prevede per gli elementi non verticali l'asse 2 contenuto nel piano verticale e l'asse 3 orizzontale, per gli elementi verticali l'asse 2 diretto secondo X negativo e l'asse 3 diretto secondo Y negativo
<b>Svincolo I (J)</b>	codici di svincolo per le azioni interne; i primi sei codici si riferiscono al nodo iniziale, i restanti sei al nodo finale (il valore 1 indica che la relativa azione interna non è attiva)
<b>Wink V</b>	costante di sottofondo (coefficiente di Winkler) per la modellazione della trave su suolo elastico
<b>Wink O</b>	costante di sottofondo (coefficiente di Winkler) per la modellazione del suolo elastico orizzontale



Elem.	Note	Nodo I	Nodo J	Mat.	Sez.	Crit.	Rotaz. gradi	Svincolo I	Svincolo J	Wink V daN/cm3	Wink O daN/cm3
1	Trave f.	1	2	3	2	2				2.30	2.30
2	Trave f.	2	3	3	2	2				2.30	2.30
3	Trave f.	3	4	3	2	2				2.30	2.30
4	Trave f.	4	5	3	2	2				2.30	2.30
5	Trave f.	5	6	3	2	2				2.30	2.30
6	Trave f.	1	38	3	3	2				2.30	2.30
7	Trave	38	73	3	3	2					
8	Trave	73	108	3	3	2					
9	Trave	79	115	157	1	2					
10	Trave	115	81	157	1	2					
11	Trave	86	122	157	1	2					
12	Trave	122	88	157	1	2					
13	Trave	93	129	157	1	2					
14	Trave	129	95	157	1	2					
15	Trave	100	136	157	1	2					
16	Trave	136	102	157	1	2					
17	Trave	107	143	157	1	2					
18	Trave	108	143	3	3	2					
19	Trave	143	109	157	1	2					
20	Trave	115	116	3	3	2					
21	Trave	116	117	3	3	2					
22	Trave	117	118	3	3	2					
23	Trave f.	118	119	3	3	2				2.30	2.30
24	Trave	119	120	3	3	2					
25	Trave	120	121	3	3	2					
26	Trave	121	122	3	3	2					
27	Trave	122	123	3	3	2					
28	Trave	123	124	3	3	2					
29	Trave	124	125	3	3	2					
30	Trave f.	125	126	3	3	2				2.30	2.30
31	Trave	126	127	3	3	2					
32	Trave	127	128	3	3	2					
33	Trave	128	129	3	3	2					
34	Trave	129	130	3	3	2					
35	Trave	130	131	3	3	2					
36	Trave	131	132	3	3	2					
37	Trave f.	132	133	3	3	2				2.30	2.30
38	Trave	133	134	3	3	2					
39	Trave	134	135	3	3	2					
40	Trave	135	136	3	3	2					
41	Trave	136	137	3	3	2					
42	Trave	137	138	3	3	2					
43	Trave	138	139	3	3	2					
44	Trave f.	139	140	3	3	2				2.30	2.30
45	Trave	140	141	3	3	2					
46	Trave	141	142	3	3	2					
47	Trave	142	143	3	3	2					
48	Trave f.	3	254	3	2	2				2.30	2.30
49	Trave f.	4	255	3	2	2				2.30	2.30
50	Trave f.	5	256	3	2	2				2.30	2.30
51	Trave f.	6	257	3	2	2				2.30	2.30
52	Trave	149	115	157	1	2					
53	Trave	115	150	3	3	2					
54	Trave	115	151	157	1	2					
55	Trave	156	122	157	1	2					
56	Trave	122	157	3	1	2					
57	Trave	122	158	157	1	2					
58	Trave	163	129	157	1	2					
59	Trave	129	164	3	1	2					
60	Trave	129	165	157	1	2					
61	Trave	170	136	157	1	2					
62	Trave	136	171	3	1	2					
63	Trave	136	172	157	1	2					
64	Trave	177	143	157	1	2					
65	Trave	143	178	3	3	2					
66	Trave	143	179	157	1	2					
67	Trave	150	185	3	3	2					
68	Trave	157	192	3	1	2					
69	Trave	164	199	3	1	2					
70	Trave	171	206	3	1	2					
71	Trave	178	213	3	3	2					
72	Trave	185	220	3	3	2					
73	Trave	192	227	3	1	2					



74	Trave	199	234	3	1	2		
75	Trave	206	241	3	1	2		
76	Trave	213	248	3	3	2		
77	Trave f.	248	252	3	3	2	2.30	2.30
78	Trave f.	252	253	3	2	2	2.30	2.30
79	Trave f.	253	254	3	2	2	2.30	2.30
80	Trave f.	254	255	3	2	2	2.30	2.30
81	Trave f.	255	256	3	2	2	2.30	2.30
82	Trave f.	256	257	3	2	2	2.30	2.30
83	Trave f.	220	261	3	3	2	2.30	2.30
84	Trave f.	227	275	3	1	2	2.30	2.30
85	Trave f.	234	282	3	1	2	2.30	2.30
86	Trave f.	241	289	3	1	2	2.30	2.30
87	Trave f.	252	296	3	3	2	2.30	2.30
88	Trave	261	268	3	3	2		
89	Trave	268	303	3	3	2		
90	Trave	275	310	3	1	2		
91	Trave	282	317	3	1	2		
92	Trave	289	324	3	1	2		
93	Trave	296	331	3	3	2		
94	Trave	302	338	157	1	2		
95	Trave	303	338	3	3	2		
96	Trave	338	304	157	1	2		
97	Trave	310	345	3	1	2		
98	Trave	317	352	3	1	2		
99	Trave	324	359	3	1	2		
100	Trave	331	366	3	3	2		
101	Trave f.	254	517	3	2	2	2.30	2.30
102	Trave f.	255	518	3	2	2	2.30	2.30
103	Trave f.	256	519	3	2	2	2.30	2.30
104	Trave	338	339	3	1	2		
105	Trave	339	340	3	1	2		
106	Trave	340	341	3	1	2		
107	Trave f.	341	342	3	1	2	2.30	2.30
108	Trave	342	343	3	1	2		
109	Trave	343	344	3	1	2		
110	Trave	344	345	3	1	2		
111	Trave	372	338	157	1	2		
112	Trave	338	373	3	3	2		
113	Trave	338	374	157	1	2		
114	Trave	344	380	157	1	2		
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116	Trave	380	346	157	1	2		
117	Trave	351	387	157	1	2		
118	Trave	352	387	3	1	2		
119	Trave	387	353	157	1	2		
120	Trave	358	394	157	1	2		
121	Trave	359	394	3	1	2		
122	Trave	394	360	157	1	2		
123	Trave	365	401	157	1	2		
124	Trave	366	401	3	3	2		
125	Trave	401	367	157	1	2		
126	Trave	380	381	3	1	2		
127	Trave	381	382	3	1	2		
128	Trave	382	383	3	1	2		
129	Trave f.	383	384	3	1	2	2.30	2.30
130	Trave	384	385	3	1	2		
131	Trave	385	386	3	1	2		
132	Trave	386	387	3	1	2		
133	Trave	387	388	3	1	2		
134	Trave	388	389	3	1	2		
135	Trave	389	390	3	1	2		
136	Trave f.	390	391	3	1	2	2.30	2.30
137	Trave	391	392	3	1	2		
138	Trave	392	393	3	1	2		
139	Trave	393	394	3	1	2		
140	Trave	394	395	3	1	2		
141	Trave	395	396	3	1	2		
142	Trave	396	397	3	1	2		
143	Trave f.	397	398	3	1	2	2.30	2.30
144	Trave	398	399	3	1	2		
145	Trave	399	400	3	1	2		
146	Trave	400	401	3	1	2		
147	Trave	373	408	3	3	2		
148	Trave	414	380	157	1	2		
149	Trave	380	415	3	1	2		
150	Trave	380	416	157	1	2		



151	Trave	421	387	157	1	2		
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153	Trave	387	423	157	1	2		
154	Trave	428	394	157	1	2		
155	Trave	394	429	3	1	2		
156	Trave	394	430	157	1	2		
157	Trave	435	401	157	1	2		
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161	Trave	415	450	3	1	2		
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163	Trave	429	464	3	1	2		
164	Trave	436	471	3	3	2		
165	Trave	450	478	3	1	2		
166	Trave	457	485	3	1	2		
167	Trave	464	492	3	1	2		
168	Trave	471	499	3	3	2		
169	Trave	499	506	3	3	2		
170	Trave	505	513	157	1	2		
171	Trave	506	513	3	3	2		
172	Trave	513	507	157	1	2		
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174	Trave	514	515	3	2	2		
175	Trave	515	516	3	2	2		
176	Trave f.	516	517	3	2	2	2.30	2.30
177	Trave f.	517	518	3	2	2	2.30	2.30
178	Trave f.	518	519	3	2	2	2.30	2.30
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183	Trave f.	443	547	3	3	2	2.30	2.30
184	Trave f.	478	558	3	1	2	2.30	2.30
185	Trave f.	485	569	3	1	2	2.30	2.30
186	Trave f.	492	579	3	1	2	2.30	2.30
187	Trave	530	537	3	3	2		
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191	Trave f.	541	542	3	2	2	2.30	2.30
192	Trave f.	542	543	3	2	2	2.30	2.30
193	Trave f.	517	881	3	2	2	2.30	2.30
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197	Trave	579	626	3	1	2		
198	Trave	586	633	3	3	2		
199	Trave	594	641	3	3	2		
200	Trave	605	652	3	1	2		
201	Trave	616	663	3	1	2		
202	Trave	626	673	3	1	2		
203	Trave	633	680	3	3	2		
204	Trave	640	688	157	1	2		
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206	Trave	688	642	157	1	2		
207	Trave	651	699	157	1	2		
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209	Trave	699	653	157	1	2		
210	Trave	662	710	157	1	2		
211	Trave	663	710	3	1	2		
212	Trave	710	664	157	1	2		
213	Trave	672	720	157	1	2		
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215	Trave	720	674	157	1	2		
216	Trave	679	727	157	1	2		
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219	Trave f.	541	882	3	2	2	2.30	2.30
220	Trave f.	542	883	3	2	2	2.30	2.30
221	Trave f.	543	884	3	2	2	2.30	2.30
222	Trave	734	688	157	1	2		
223	Trave	688	735	3	3	2		
224	Trave	688	736	157	1	2		
225	Trave	745	699	157	1	2		
226	Trave	699	746	3	1	2		
227	Trave	699	747	157	1	2		



228	Trave	756	710	157	1	2		
229	Trave	710	757	3	1	2		
230	Trave	710	758	157	1	2		
231	Trave	766	720	157	1	2		
232	Trave	720	767	3	1	2		
233	Trave	720	768	157	1	2		
234	Trave	773	727	157	1	2		
235	Trave	727	774	3	3	2		
236	Trave	727	775	157	1	2		
237	Trave	735	782	3	3	2		
238	Trave	741	789	157	1	2		
239	Trave	789	743	157	1	2		
240	Trave	746	793	3	1	2		
241	Trave	752	800	157	1	2		
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248	Trave	774	821	3	3	2		
249	Trave	821	775	157	1	2		
250	Trave	782	783	3	3	2		
251	Trave	783	784	3	3	2		
252	Trave	784	785	3	3	2		
253	Trave f.	785	786	3	3	2	2.30	2.30
254	Trave	786	787	3	3	2		
255	Trave	787	788	3	3	2		
256	Trave	788	789	3	3	2		
257	Trave	789	790	3	3	2		
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259	Trave	791	792	3	3	2		
260	Trave	792	793	3	3	2		
261	Trave	793	794	3	3	2		
262	Trave	794	795	3	3	2		
263	Trave	795	796	3	3	2		
264	Trave f.	796	797	3	3	2	2.30	2.30
265	Trave	797	798	3	3	2		
266	Trave	798	799	3	3	2		
267	Trave	799	800	3	3	2		
268	Trave	800	801	3	3	2		
269	Trave	801	802	3	3	2		
270	Trave	802	803	3	3	2		
271	Trave	803	804	3	3	2		
272	Trave	804	805	3	3	2		
273	Trave	805	806	3	3	2		
274	Trave	806	807	3	3	2		
275	Trave f.	807	808	3	3	2	2.30	2.30
276	Trave	808	809	3	3	2		
277	Trave	809	810	3	3	2		
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282	Trave	814	815	3	3	2		
283	Trave	815	816	3	3	2		
284	Trave	816	817	3	3	2		
285	Trave f.	817	818	3	3	2	2.30	2.30
286	Trave	818	819	3	3	2		
287	Trave	819	820	3	3	2		
288	Trave	820	821	3	3	2		
289	Trave	828	821	157	1	2		
290	Trave	821	829	3	3	2		
291	Trave	821	830	157	1	2		
292	Trave	843	789	157	1	2		
293	Trave	789	844	3	3	2		
294	Trave	789	845	157	1	2		
295	Trave	854	800	157	1	2		
296	Trave	800	856	157	1	2		
297	Trave	865	811	157	1	2		
298	Trave	811	867	157	1	2		
299	Trave	829	876	3	3	2		
300	Trave	844	888	3	3	2		
301	Trave	876	877	3	2	2		
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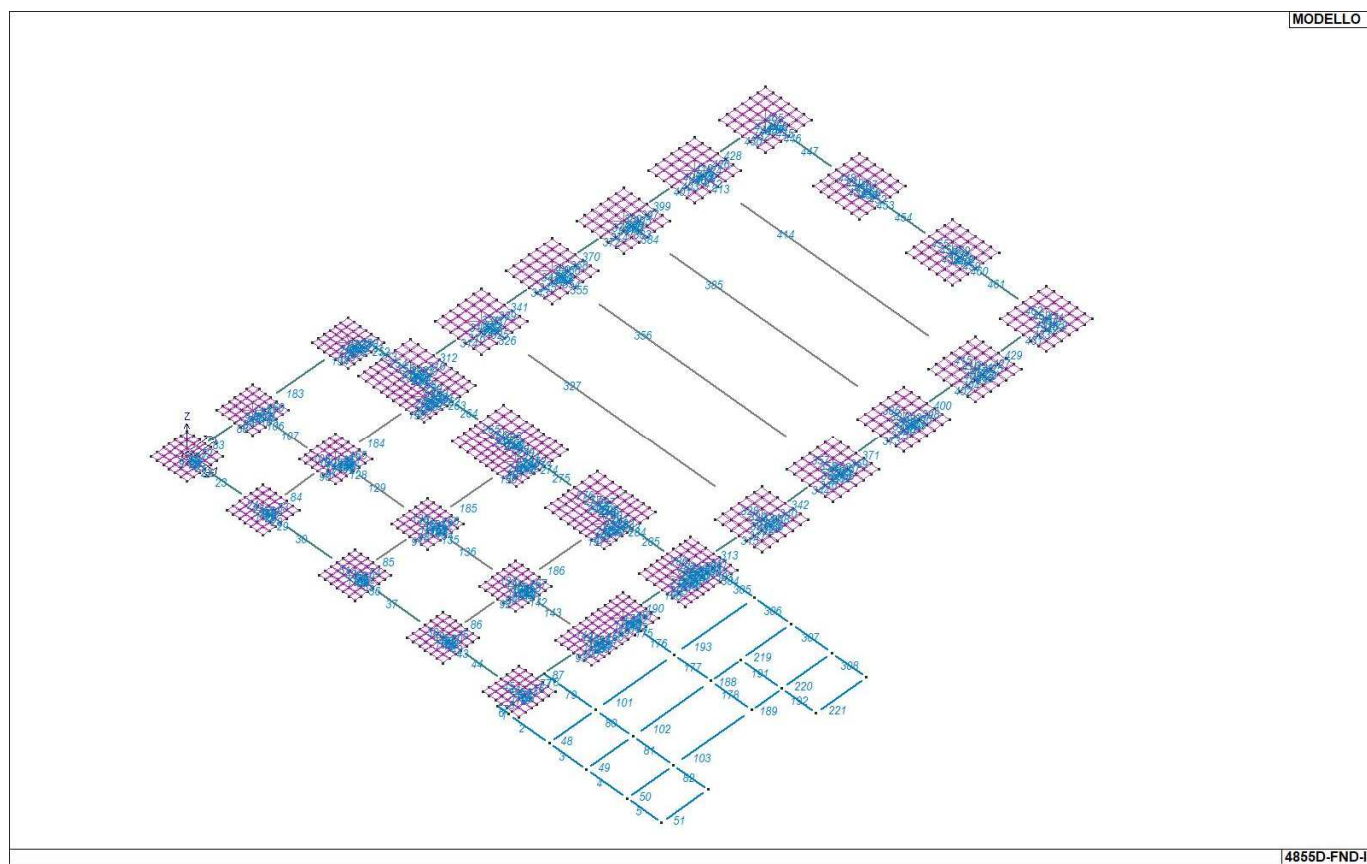
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308	Trave f.	883	884	3	2	2	2.30	2.30
309	Trave	876	920	3	3	2		
310	Trave	888	928	3	3	2		
311	Trave	920	960	3	3	2		
312	Trave f.	928	968	3	3	2	2.30	2.30
313	Trave f.	960	975	3	3	2	2.30	2.30
314	Trave	968	982	3	3	2		
315	Trave	975	989	3	3	2		
316	Trave	982	996	3	3	2		
317	Trave	989	1003	3	3	2		
318	Trave	995	1010	157	1	2		
319	Trave	996	1010	3	3	2		
320	Trave	1010	997	157	1	2		
321	Trave	1002	1017	157	1	2		
322	Trave	1003	1017	3	3	2		
323	Trave	1017	1004	157	1	2		
324	Trave	1010	1011	3	1	2		
325	Trave	1011	1012	3	1	2		
326	Trave	1012	1013	3	1	2		
327	Trave f.	1013	1014	3	1	2	2.30	2.30
328	Trave	1014	1015	3	1	2		
329	Trave	1015	1016	3	1	2		
330	Trave	1016	1017	3	1	2		
331	Trave	1023	1010	157	1	2		
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333	Trave	1010	1025	157	1	2		
334	Trave	1030	1017	157	1	2		
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336	Trave	1017	1032	157	1	2		
337	Trave	1024	1038	3	3	2		
338	Trave	1031	1045	3	3	2		
339	Trave	1038	1052	3	3	2		
340	Trave	1045	1059	3	3	2		
341	Trave f.	1052	1066	3	3	2	2.30	2.30
342	Trave f.	1059	1073	3	3	2	2.30	2.30
343	Trave	1066	1080	3	3	2		
344	Trave	1073	1087	3	3	2		
345	Trave	1080	1094	3	3	2		
346	Trave	1087	1101	3	3	2		
347	Trave	1093	1108	157	1	2		
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371	Trave f.	1157	1171	3	3	2	2.30	2.30
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374	Trave	1178	1192	3	3	2		
375	Trave	1185	1199	3	3	2		
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379	Trave	1198	1213	157	1	2		
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382	Trave	1206	1207	3	1	2		
383	Trave	1207	1208	3	1	2		
384	Trave	1208	1209	3	1	2		
385	Trave f.	1209	1210	3	1	2	2.30	2.30
386	Trave	1210	1211	3	1	2		
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388	Trave	1212	1213	3	1	2		
389	Trave	1219	1206	157	1	2		
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391	Trave	1206	1221	157	1	2		
392	Trave	1226	1213	157	1	2		
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394	Trave	1213	1228	157	1	2		
395	Trave	1220	1234	3	3	2		
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397	Trave	1234	1248	3	3	2		
398	Trave	1241	1255	3	3	2		
399	Trave f.	1248	1262	3	3	2	2.30	2.30
400	Trave f.	1255	1269	3	3	2	2.30	2.30
401	Trave	1262	1276	3	3	2		
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412	Trave	1305	1306	3	1	2		
413	Trave	1306	1307	3	1	2		
414	Trave f.	1307	1308	3	1	2	2.30	2.30
415	Trave	1308	1309	3	1	2		
416	Trave	1309	1310	3	1	2		
417	Trave	1310	1311	3	1	2		
418	Trave	1317	1304	157	1	2		
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425	Trave	1325	1339	3	3	2		
426	Trave	1332	1346	3	3	2		
427	Trave	1339	1353	3	3	2		
428	Trave f.	1346	1360	3	3	2	2.30	2.30
429	Trave f.	1353	1381	3	3	2	2.30	2.30
430	Trave	1360	1388	3	3	2		
431	Trave	1381	1409	3	3	2		
432	Trave	1388	1416	3	3	2		
433	Trave	1409	1437	3	3	2		
434	Trave	1415	1444	157	1	2		
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437	Trave	1422	1451	157	1	2		
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439	Trave	1429	1458	157	1	2		
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444	Trave	1444	1445	3	3	2		
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447	Trave f.	1447	1448	3	3	2	2.30	2.30
448	Trave	1448	1449	3	3	2		
449	Trave	1449	1450	3	3	2		
450	Trave	1450	1451	3	3	2		
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452	Trave	1452	1453	3	3	2		
453	Trave	1453	1454	3	3	2		
454	Trave f.	1454	1455	3	3	2	2.30	2.30
455	Trave	1455	1456	3	3	2		
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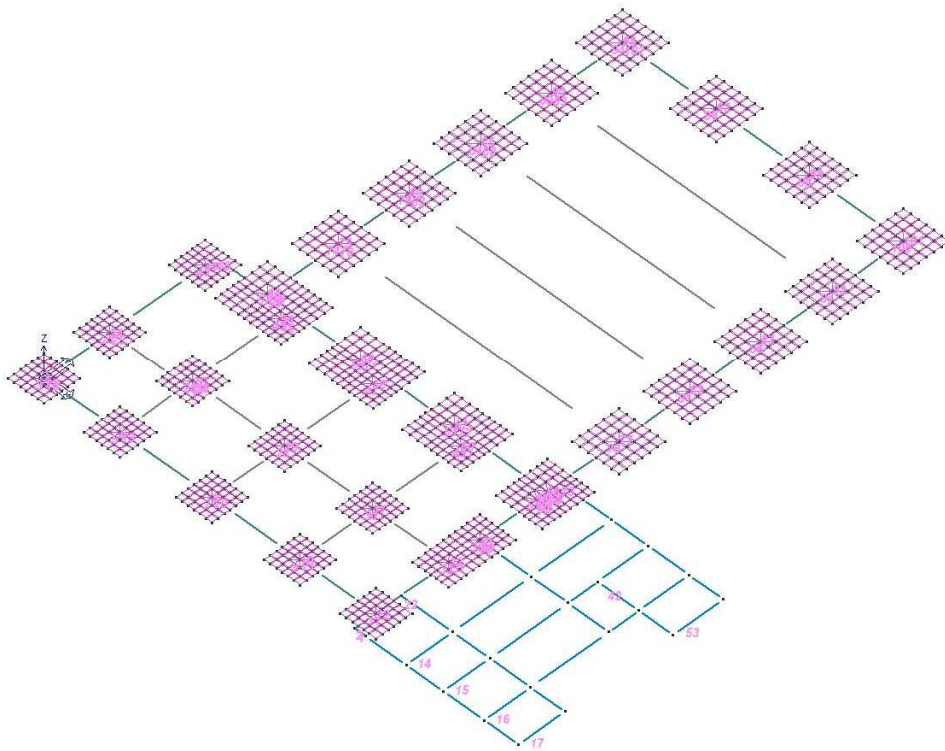


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462	Trave	1462	1463	3	3	2		
463	Trave	1463	1464	3	3	2		
464	Trave	1464	1465	3	3	2		
465	Trave	1471	1444	157	1	2		
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470	Trave	1458	1487	157	1	2		
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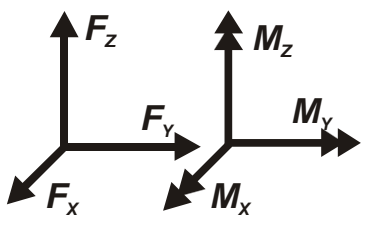
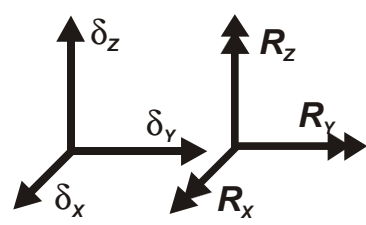
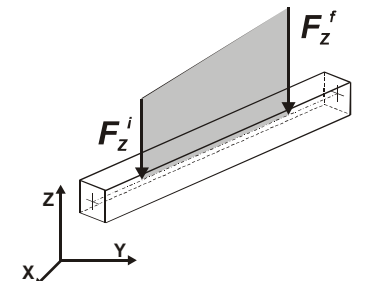
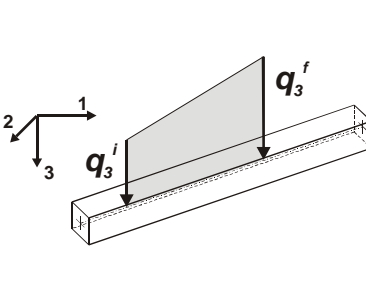
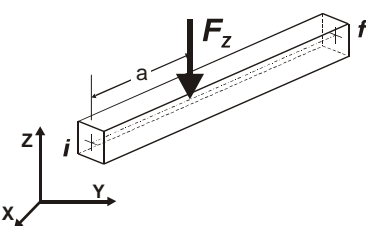
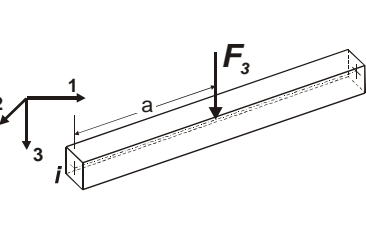
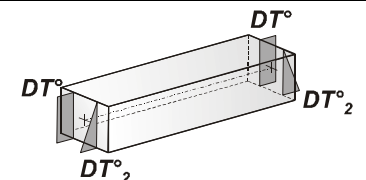
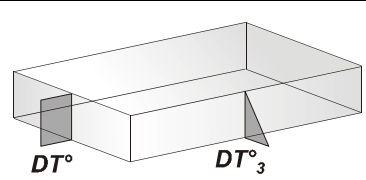
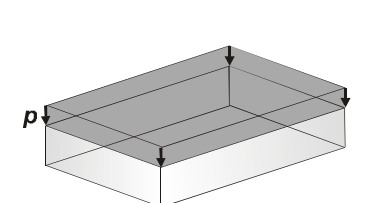
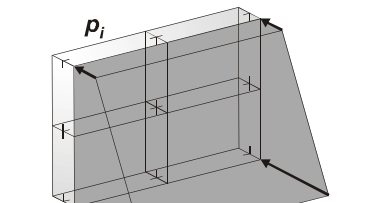
# MODELLAZIONE DELLE AZIONI

## LEGENDA TABELLA DATI AZIONI

Il programma consente l'uso di diverse tipologie di carico (azioni). Le azioni utilizzate nella modellazione sono individuate da una sigla identificativa ed un codice numerico (gli elementi strutturali richiamano quest'ultimo nella propria descrizione). Per ogni azione applicata alla struttura viene di riportato il codice, il tipo e la sigla identificativa. Le tabelle successive dettagliano i valori caratteristici di ogni azione in relazione al tipo. Le tabelle riportano infatti i seguenti dati in relazione al tipo:

<b>1</b>	<b>carico concentrato nodale</b> 6 dati (forza $F_x$ , $F_y$ , $F_z$ , momento $M_x$ , $M_y$ , $M_z$ )
<b>2</b>	<b>spostamento nodale impresso</b> 6 dati (spostamento $T_x$ , $T_y$ , $T_z$ , rotazione $R_x$ , $R_y$ , $R_z$ )
<b>3</b>	<b>carico distribuito globale su elemento tipo trave</b> 7 dati ( $f_x$ , $f_y$ , $f_z$ , $m_x$ , $m_y$ , $m_z$ , ascissa di inizio carico) 7 dati ( $f_x$ , $f_y$ , $f_z$ , $m_x$ , $m_y$ , $m_z$ , ascissa di fine carico)
<b>4</b>	<b>carico distribuito locale su elemento tipo trave</b> 7 dati ( $f_1$ , $f_2$ , $f_3$ , $m_1$ , $m_2$ , $m_3$ , ascissa di inizio carico) 7 dati ( $f_1$ , $f_2$ , $f_3$ , $m_1$ , $m_2$ , $m_3$ , ascissa di fine carico)
<b>5</b>	<b>carico concentrato globale su elemento tipo trave</b> 7 dati ( $F_x$ , $F_y$ , $F_z$ , $M_x$ , $M_y$ , $M_z$ , ascissa di carico)
<b>6</b>	<b>carico concentrato locale su elemento tipo trave</b> 7 dati ( $F_1$ , $F_2$ , $F_3$ , $M_1$ , $M_2$ , $M_3$ , ascissa di carico)
<b>7</b>	<b>variazione termica applicata ad elemento tipo trave</b> 7 dati (variazioni termiche: uniforme, media e differenza in altezza e larghezza al nodo iniziale e finale)
<b>8</b>	<b>carico di pressione uniforme su elemento tipo piastra</b> 1 dato (pressione)
<b>9</b>	<b>carico di pressione variabile su elemento tipo piastra</b> 4 dati (pressione, quota, pressione, quota)
<b>10</b>	<b>variazione termica applicata ad elemento tipo piastra</b> 2 dati (variazioni termiche: media e differenza nello spessore)
<b>11</b>	<b>carico variabile generale su elementi tipo trave e piastra</b> 1 dato descrizione della tipologia 4 dati per segmento (posizione, valore, posizione, valore) la tipologia precisa l'ascissa di definizione, la direzione del carico, la modalità di carico e la larghezza d'influenza per gli elementi tipo trave
<b>12</b>	<b>gruppo di carichi con impronta su piastra</b> 9 dati (numero di ripetizioni in direzione X e Y, valore di ciascun carico, posizione centrale del primo, dimensioni dell'impronta, interasse tra i carichi)



 <p>Carico concentrato nodale</p>	 <p>Spostamento impresso</p>
 <p>Carico distribuito globale</p>	 <p>Carico distribuito locale</p>
 <p>Carico concentrato globale</p>	 <p>Carico concentrato locale</p>
 <p>Carico termico 2D</p>	 <p>Carico termico 3D</p>
 <p>Carico pressione uniforme</p>	 <p>Carico pressione variabile</p>

Tipo carico concentrato nodale

Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
		daN	daN	daN	daN cm	daN cm	daN cm
6	reac per cdc 3 - nodo 115	0.0	0.0	-2.664e+04	0.0	0.0	0.0
7	reac per cdc 4 - nodo 115	360.38	-0.96	-1.758e+04	356.29	1.333e+05	0.0
8	reac per cdc 5 - nodo 115	-331.14	-11.71	-1.758e+04	4331.72	-1.225e+05	0.0
9	reac per cdc 6 - nodo 115	-55.22	828.13	-1.758e+04	-3.064e+05	-2.043e+04	0.0
10	reac per cdc 7 - nodo 115	-45.23	-823.72	-1.758e+04	3.048e+05	-1.673e+04	0.0
11	reac per cdc 8 - nodo 115	216.23	-0.58	-2.664e+04	213.78	8.001e+04	0.0
12	reac per cdc 9 - nodo 115	-198.68	-7.02	-2.664e+04	2599.03	-7.351e+04	0.0
13	reac per cdc 10 - nodo 115	-33.13	496.88	-2.664e+04	-1.838e+05	-1.226e+04	0.0
14	reac per cdc 11 - nodo 115	-27.14	-494.23	-2.664e+04	1.829e+05	-1.004e+04	0.0
15	reac per cdc 12 - nodo 115	360.38	-0.96	-2.211e+04	356.29	1.333e+05	0.0
16	reac per cdc 13 - nodo 115	-331.14	-11.71	-2.211e+04	4331.72	-1.225e+05	0.0
17	reac per cdc 14 - nodo 115	-55.22	828.13	-2.211e+04	-3.064e+05	-2.043e+04	0.0
18	reac per cdc 15 - nodo 115	-45.23	-823.72	-2.211e+04	3.048e+05	-1.673e+04	0.0
19	reac per cdc 16 - nodo 115	1.400e+04	-2846.66	-1.320e+04	1.053e+06	5.182e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
20	reac per cdc 17 - nodo 115	1.286e+04	-8896.31	-1.320e+04	3.292e+06	4.758e+06	0.0
21	reac per cdc 18 - nodo 115	-1.286e+04	8896.31	-1.320e+04	-3.292e+06	-4.758e+06	0.0
22	reac per cdc 19 - nodo 115	-1.400e+04	2846.66	-1.320e+04	-1.053e+06	-5.182e+06	0.0
23	reac per cdc 20 - nodo 115	1.211e+04	-519.16	-1.320e+04	1.921e+05	4.481e+06	0.0
24	reac per cdc 21 - nodo 115	1.476e+04	-1.122e+04	-1.320e+04	4.153e+06	5.460e+06	0.0
25	reac per cdc 22 - nodo 115	-1.476e+04	1.122e+04	-1.320e+04	-4.153e+06	-5.460e+06	0.0
26	reac per cdc 23 - nodo 115	-1.211e+04	519.16	-1.320e+04	-1.921e+05	-4.481e+06	0.0
27	reac per cdc 24 - nodo 115	1.235e+04	5572.09	-1.320e+04	-2.062e+06	4.569e+06	0.0
28	reac per cdc 25 - nodo 115	1.121e+04	-477.56	-1.320e+04	1.767e+05	4.146e+06	0.0
29	reac per cdc 26 - nodo 115	-1.121e+04	477.56	-1.320e+04	-1.767e+05	-4.146e+06	0.0
30	reac per cdc 27 - nodo 115	-1.235e+04	-5572.09	-1.320e+04	2.062e+06	-4.569e+06	0.0
31	reac per cdc 28 - nodo 115	1.045e+04	7899.59	-1.320e+04	-2.923e+06	3.868e+06	0.0
32	reac per cdc 29 - nodo 115	1.310e+04	-2805.06	-1.320e+04	1.038e+06	4.847e+06	0.0
33	reac per cdc 30 - nodo 115	-1.310e+04	2805.06	-1.320e+04	-1.038e+06	-4.847e+06	0.0
34	reac per cdc 31 - nodo 115	-1.045e+04	-7899.59	-1.320e+04	2.923e+06	-3.868e+06	0.0
35	reac per cdc 32 - nodo 115	5936.38	8321.30	-1.320e+04	-3.079e+06	2.196e+06	0.0
36	reac per cdc 33 - nodo 115	2123.20	-1.184e+04	-1.320e+04	4.382e+06	7.856e+05	0.0
37	reac per cdc 34 - nodo 115	-2123.20	1.184e+04	-1.320e+04	-4.382e+06	-7.856e+05	0.0
38	reac per cdc 35 - nodo 115	-5936.38	-8321.30	-1.320e+04	3.079e+06	-2.196e+06	0.0
39	reac per cdc 36 - nodo 115	5439.97	1.085e+04	-1.320e+04	-4.013e+06	2.013e+06	0.0
40	reac per cdc 37 - nodo 115	1626.79	-9318.57	-1.320e+04	3.448e+06	6.019e+05	0.0
41	reac per cdc 38 - nodo 115	-1626.79	9318.57	-1.320e+04	-3.448e+06	-6.019e+05	0.0
42	reac per cdc 39 - nodo 115	-5439.97	-1.085e+04	-1.320e+04	4.013e+06	-2.013e+06	0.0
43	reac per cdc 40 - nodo 115	-380.72	1.608e+04	-1.320e+04	-5.949e+06	-1.409e+05	0.0
44	reac per cdc 41 - nodo 115	8440.30	-1.960e+04	-1.320e+04	7.253e+06	3.123e+06	0.0
45	reac per cdc 42 - nodo 115	-8440.30	1.960e+04	-1.320e+04	-7.253e+06	-3.123e+06	0.0
46	reac per cdc 43 - nodo 115	380.72	-1.608e+04	-1.320e+04	5.949e+06	1.409e+05	0.0
47	reac per cdc 44 - nodo 115	-877.13	1.861e+04	-1.320e+04	-6.884e+06	-3.245e+05	0.0
48	reac per cdc 45 - nodo 115	7943.89	-1.708e+04	-1.320e+04	6.318e+06	2.939e+06	0.0
49	reac per cdc 46 - nodo 115	-7943.89	1.708e+04	-1.320e+04	-6.318e+06	-2.939e+06	0.0
50	reac per cdc 47 - nodo 115	877.13	-1.861e+04	-1.320e+04	6.884e+06	3.245e+05	0.0
51	reac per cdc 48 - nodo 115	9185.53	-1867.11	-1.320e+04	6.908e+05	3.399e+06	0.0
52	reac per cdc 49 - nodo 115	8435.22	-5835.03	-1.320e+04	2.159e+06	3.121e+06	0.0
53	reac per cdc 50 - nodo 115	-8435.22	5835.03	-1.320e+04	-2.159e+06	-3.121e+06	0.0
54	reac per cdc 51 - nodo 115	-9185.53	1867.11	-1.320e+04	6.908e+05	-3.399e+06	0.0
55	reac per cdc 52 - nodo 115	7942.53	-340.51	-1.320e+04	1.260e+05	2.939e+06	0.0
56	reac per cdc 53 - nodo 115	9678.23	-7361.63	-1.320e+04	2.724e+06	3.581e+06	0.0
57	reac per cdc 54 - nodo 115	-9678.23	7361.63	-1.320e+04	-2.724e+06	-3.581e+06	0.0
58	reac per cdc 55 - nodo 115	-7942.53	340.51	-1.320e+04	-1.260e+05	-2.939e+06	0.0
59	reac per cdc 56 - nodo 115	8100.23	3654.70	-1.320e+04	-1.352e+06	2.997e+06	0.0
60	reac per cdc 57 - nodo 115	7349.91	-313.23	-1.320e+04	1.159e+05	2.719e+06	0.0
61	reac per cdc 58 - nodo 115	-7349.91	313.23	-1.320e+04	-1.159e+05	-2.719e+06	0.0
62	reac per cdc 59 - nodo 115	-8100.23	-3654.70	-1.320e+04	1.352e+06	-2.997e+06	0.0
63	reac per cdc 60 - nodo 115	6857.22	5181.29	-1.320e+04	-1.917e+06	2.537e+06	0.0
64	reac per cdc 61 - nodo 115	8592.92	-1839.82	-1.320e+04	6.807e+05	3.179e+06	0.0
65	reac per cdc 62 - nodo 115	-8592.92	1839.82	-1.320e+04	-6.807e+05	-3.179e+06	0.0
66	reac per cdc 63 - nodo 115	-6857.22	-5181.29	-1.320e+04	1.917e+06	-2.537e+06	0.0
67	reac per cdc 64 - nodo 115	3893.63	5457.89	-1.320e+04	-2.019e+06	1.441e+06	0.0
68	reac per cdc 65 - nodo 115	1392.59	-7768.53	-1.320e+04	2.874e+06	5.153e+05	0.0
69	reac per cdc 66 - nodo 115	-1392.59	7768.53	-1.320e+04	-2.874e+06	-5.153e+05	0.0
70	reac per cdc 67 - nodo 115	-3893.63	-5457.89	-1.320e+04	2.019e+06	-1.441e+06	0.0
71	reac per cdc 68 - nodo 115	3568.04	7114.43	-1.320e+04	-2.632e+06	1.320e+06	0.0
72	reac per cdc 69 - nodo 115	1067.00	-6111.99	-1.320e+04	2.261e+06	3.948e+05	0.0
73	reac per cdc 70 - nodo 115	-1067.00	6111.99	-1.320e+04	-2.261e+06	-3.948e+05	0.0
74	reac per cdc 71 - nodo 115	-3568.04	-7114.43	-1.320e+04	2.632e+06	-1.320e+06	0.0
75	reac per cdc 72 - nodo 115	-249.71	1.055e+04	-1.320e+04	-3.902e+06	-9.239e+04	0.0
76	reac per cdc 73 - nodo 115	5535.94	-1.286e+04	-1.320e+04	4.757e+06	2.048e+06	0.0
77	reac per cdc 74 - nodo 115	-5535.94	1.286e+04	-1.320e+04	-4.757e+06	-2.048e+06	0.0
78	reac per cdc 75 - nodo 115	249.71	-1.055e+04	-1.320e+04	3.902e+06	9.239e+04	0.0
79	reac per cdc 76 - nodo 115	-575.31	1.220e+04	-1.320e+04	-4.515e+06	-2.129e+05	0.0
80	reac per cdc 77 - nodo 115	5210.35	-1.120e+04	-1.320e+04	4.144e+06	1.928e+06	0.0
81	reac per cdc 78 - nodo 115	-5210.35	1.120e+04	-1.320e+04	-4.144e+06	-1.928e+06	0.0
82	reac per cdc 79 - nodo 115	575.31	-1.220e+04	-1.320e+04	4.515e+06	2.129e+05	0.0
83	reac per cdc 80 - nodo 115	7378.00	-1499.70	-1.320e+04	5.549e+05	2.730e+06	0.0
84	reac per cdc 81 - nodo 115	6775.33	-4686.81	-1.320e+04	1.734e+06	2.507e+06	0.0
85	reac per cdc 82 - nodo 115	-6775.33	4686.81	-1.320e+04	-1.734e+06	-2.507e+06	0.0
86	reac per cdc 83 - nodo 115	-7378.00	1499.70	-1.320e+04	5.549e+05	-2.730e+06	0.0
87	reac per cdc 84 - nodo 115	6379.59	-273.51	-1.320e+04	1.012e+05	2.360e+06	0.0
88	reac per cdc 85 - nodo 115	7773.74	-5913.00	-1.320e+04	2.188e+06	2.876e+06	0.0
89	reac per cdc 86 - nodo 115	-7773.74	5913.00	-1.320e+04	-2.188e+06	-2.876e+06	0.0
90	reac per cdc 87 - nodo 115	-6379.59	273.51	-1.320e+04	-1.012e+05	-2.360e+06	0.0
91	reac per cdc 88 - nodo 115	6506.26	2935.52	-1.320e+04	-1.086e+06	2.407e+06	0.0
92	reac per cdc 89 - nodo 115	5903.59	-251.59	-1.320e+04	9.309e+04	2.184e+06	0.0
93	reac per cdc 90 - nodo 115	-5903.59	251.59	-1.320e+04	-9.309e+04	-2.184e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
94	reac per cdc 91 - nodo 115	-6506.26	-2935.52	-1.320e+04	1.086e+06	-2.407e+06	0.0
95	reac per cdc 92 - nodo 115	5507.85	4161.71	-1.320e+04	-1.540e+06	2.038e+06	0.0
96	reac per cdc 93 - nodo 115	6902.00	-1477.78	-1.320e+04	5.468e+05	2.554e+06	0.0
97	reac per cdc 94 - nodo 115	-6902.00	1477.78	-1.320e+04	-5.468e+05	-2.554e+06	0.0
98	reac per cdc 95 - nodo 115	-5507.85	-4161.71	-1.320e+04	1.540e+06	-2.038e+06	0.0
99	reac per cdc 96 - nodo 115	3127.44	4383.89	-1.320e+04	-1.622e+06	1.157e+06	0.0
100	reac per cdc 97 - nodo 115	1118.56	-6239.84	-1.320e+04	2.309e+06	4.139e+05	0.0
101	reac per cdc 98 - nodo 115	-1118.56	6239.84	-1.320e+04	-2.309e+06	-4.139e+05	0.0
102	reac per cdc 99 - nodo 115	-3127.44	-4383.89	-1.320e+04	1.622e+06	-1.157e+06	0.0
103	reac per cdc 100 - nodo 115	2865.92	5714.45	-1.320e+04	-2.114e+06	1.060e+06	0.0
104	reac per cdc 101 - nodo 115	857.04	-4909.27	-1.320e+04	1.816e+06	3.171e+05	0.0
105	reac per cdc 102 - nodo 115	-857.04	4909.27	-1.320e+04	-1.816e+06	-3.171e+05	0.0
106	reac per cdc 103 - nodo 115	-2865.92	-5714.45	-1.320e+04	2.114e+06	-1.060e+06	0.0
107	reac per cdc 104 - nodo 115	-200.57	8471.18	-1.320e+04	-3.134e+06	-7.421e+04	0.0
108	reac per cdc 105 - nodo 115	4446.57	-1.033e+04	-1.320e+04	3.821e+06	1.645e+06	0.0
109	reac per cdc 106 - nodo 115	-4446.57	1.033e+04	-1.320e+04	-3.821e+06	-1.645e+06	0.0
110	reac per cdc 107 - nodo 115	200.57	-8471.18	-1.320e+04	3.134e+06	7.421e+04	0.0
111	reac per cdc 108 - nodo 115	-462.10	9801.75	-1.320e+04	-3.627e+06	-1.710e+05	0.0
112	reac per cdc 109 - nodo 115	4185.05	-8996.57	-1.320e+04	3.329e+06	1.548e+06	0.0
113	reac per cdc 110 - nodo 115	-4185.05	8996.57	-1.320e+04	-3.329e+06	-1.548e+06	0.0
114	reac per cdc 111 - nodo 115	462.10	-9801.75	-1.320e+04	3.627e+06	1.710e+05	0.0
115	reac per cdc 112 - nodo 115	0.0	0.0	-1.924e+04	0.0	0.0	0.0
116	reac per cdc 113 - nodo 115	240.26	-0.64	-1.320e+04	237.53	8.889e+04	0.0
117	reac per cdc 114 - nodo 115	-220.76	-7.80	-1.320e+04	2887.81	-8.168e+04	0.0
118	reac per cdc 115 - nodo 115	-36.81	552.09	-1.320e+04	-2.043e+05	-1.362e+04	0.0
119	reac per cdc 116 - nodo 115	-30.15	-549.15	-1.320e+04	2.032e+05	-1.116e+04	0.0
120	reac per cdc 117 - nodo 115	144.15	-0.39	-1.924e+04	142.52	5.334e+04	0.0
121	reac per cdc 118 - nodo 115	-132.46	-4.68	-1.924e+04	1732.69	-4.901e+04	0.0
122	reac per cdc 119 - nodo 115	-22.09	331.25	-1.924e+04	-1.226e+05	-8172.22	0.0
123	reac per cdc 120 - nodo 115	-18.09	-329.49	-1.924e+04	1.219e+05	-6693.97	0.0
124	reac per cdc 121 - nodo 115	240.26	-0.64	-1.622e+04	237.53	8.889e+04	0.0
125	reac per cdc 122 - nodo 115	-220.76	-7.80	-1.622e+04	2887.81	-8.168e+04	0.0
126	reac per cdc 123 - nodo 115	-36.81	552.09	-1.622e+04	-2.043e+05	-1.362e+04	0.0
127	reac per cdc 124 - nodo 115	-30.15	-549.15	-1.622e+04	2.032e+05	-1.116e+04	0.0
128	reac per cdc 125 - nodo 115	0.0	0.0	-1.440e+04	0.0	0.0	0.0
129	reac per cdc 126 - nodo 115	48.05	-0.13	-1.320e+04	47.51	1.778e+04	0.0
130	reac per cdc 127 - nodo 115	-44.15	-1.56	-1.320e+04	577.56	-1.634e+04	0.0
131	reac per cdc 128 - nodo 115	-7.36	110.42	-1.320e+04	-4.085e+04	-2724.07	0.0
132	reac per cdc 129 - nodo 115	-6.03	-109.83	-1.320e+04	4.064e+04	-2231.32	0.0
133	reac per cdc 130 - nodo 115	0.0	0.0	-1.320e+04	0.0	0.0	0.0
134	reac per cdc 3 - nodo 122	0.0	0.0	-5.419e+04	0.0	0.0	0.0
135	reac per cdc 4 - nodo 122	347.50	-9.02	-3.212e+04	3335.81	1.286e+05	0.0
136	reac per cdc 5 - nodo 122	-330.69	-11.45	-3.212e+04	4234.66	-1.224e+05	0.0
137	reac per cdc 6 - nodo 122	-40.43	836.29	-3.212e+04	-3.094e+05	-1.496e+04	0.0
138	reac per cdc 7 - nodo 122	-16.40	-827.15	-3.212e+04	3.060e+05	-6069.09	0.0
139	reac per cdc 8 - nodo 122	208.50	-5.41	-5.419e+04	2001.49	7.715e+04	0.0
140	reac per cdc 9 - nodo 122	-198.42	-6.87	-5.419e+04	2540.80	-7.341e+04	0.0
141	reac per cdc 10 - nodo 122	-24.26	501.78	-5.419e+04	-1.856e+05	-8975.41	0.0
142	reac per cdc 11 - nodo 122	-9.84	-496.29	-5.419e+04	1.836e+05	-3641.45	0.0
143	reac per cdc 12 - nodo 122	347.50	-9.02	-4.316e+04	3335.81	1.286e+05	0.0
144	reac per cdc 13 - nodo 122	-330.69	-11.45	-4.316e+04	4234.66	-1.224e+05	0.0
145	reac per cdc 14 - nodo 122	-40.43	836.29	-4.316e+04	-3.094e+05	-1.496e+04	0.0
146	reac per cdc 15 - nodo 122	-16.40	-827.15	-4.316e+04	3.060e+05	-6069.09	0.0
147	reac per cdc 16 - nodo 122	1.410e+04	-369.49	-2.391e+04	1.367e+05	5.219e+06	0.0
148	reac per cdc 17 - nodo 122	1.297e+04	-7030.40	-2.390e+04	2.601e+06	4.798e+06	0.0
149	reac per cdc 18 - nodo 122	-1.297e+04	7030.40	-2.391e+04	-2.601e+06	-4.798e+06	0.0
150	reac per cdc 19 - nodo 122	-1.410e+04	369.49	-2.391e+04	-1.367e+05	-5.219e+06	0.0
151	reac per cdc 20 - nodo 122	1.219e+04	666.72	-2.390e+04	-2.467e+05	4.512e+06	0.0
152	reac per cdc 21 - nodo 122	1.488e+04	-8066.60	-2.391e+04	2.985e+06	5.505e+06	0.0
153	reac per cdc 22 - nodo 122	-1.488e+04	8066.60	-2.391e+04	-2.985e+06	-5.505e+06	0.0
154	reac per cdc 23 - nodo 122	-1.219e+04	-666.72	-2.391e+04	2.467e+05	-4.512e+06	0.0
155	reac per cdc 24 - nodo 122	1.247e+04	4864.29	-2.391e+04	-1.800e+06	4.613e+06	0.0
156	reac per cdc 25 - nodo 122	1.133e+04	-1796.62	-2.391e+04	6.647e+05	4.192e+06	0.0
157	reac per cdc 26 - nodo 122	-1.133e+04	1796.62	-2.391e+04	-6.647e+05	-4.192e+06	0.0
158	reac per cdc 27 - nodo 122	-1.247e+04	-4864.29	-2.390e+04	1.800e+06	-4.613e+06	0.0
159	reac per cdc 28 - nodo 122	1.056e+04	5900.50	-2.391e+04	-2.183e+06	3.906e+06	0.0
160	reac per cdc 29 - nodo 122	1.324e+04	-2832.83	-2.391e+04	1.048e+06	4.899e+06	0.0
161	reac per cdc 30 - nodo 122	-1.324e+04	2832.83	-2.390e+04	-1.048e+06	-4.899e+06	0.0
162	reac per cdc 31 - nodo 122	-1.056e+04	-5900.50	-2.391e+04	2.183e+06	-3.906e+06	0.0
163	reac per cdc 32 - nodo 122	5957.78	9991.53	-2.391e+04	-3.697e+06	2.204e+06	0.0
164	reac per cdc 33 - nodo 122	2163.45	-1.221e+04	-2.390e+04	4.518e+06	8.005e+05	0.0
165	reac per cdc 34 - nodo 122	-2163.45	1.221e+04	-2.391e+04	-4.518e+06	-8.005e+05	0.0
166	reac per cdc 35 - nodo 122	-5957.78	-9991.53	-2.390e+04	3.697e+06	-2.204e+06	0.0
167	reac per cdc 36 - nodo 122	5466.84	1.156e+04	-2.391e+04	-4.278e+06	2.023e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
168	reac per cdc 37 - nodo 122	1672.51	-1.064e+04	-2.390e+04	3.937e+06	6.188e+05	0.0
169	reac per cdc 38 - nodo 122	-1672.51	1.064e+04	-2.391e+04	-3.937e+06	-6.188e+05	0.0
170	reac per cdc 39 - nodo 122	-5466.84	-1.156e+04	-2.390e+04	4.278e+06	-2.023e+06	0.0
171	reac per cdc 40 - nodo 122	-412.29	1.345e+04	-2.390e+04	-4.975e+06	-1.525e+05	0.0
172	reac per cdc 41 - nodo 122	8533.51	-1.567e+04	-2.391e+04	5.796e+06	3.157e+06	0.0
173	reac per cdc 42 - nodo 122	-8533.51	1.567e+04	-2.390e+04	-5.796e+06	-3.157e+06	0.0
174	reac per cdc 43 - nodo 122	412.29	-1.345e+04	-2.391e+04	4.975e+06	1.525e+05	0.0
175	reac per cdc 44 - nodo 122	-903.23	1.502e+04	-2.390e+04	-5.556e+06	-3.342e+05	0.0
176	reac per cdc 45 - nodo 122	8042.58	-1.410e+04	-2.391e+04	5.215e+06	2.976e+06	0.0
177	reac per cdc 46 - nodo 122	-8042.58	1.410e+04	-2.390e+04	-5.215e+06	-2.976e+06	0.0
178	reac per cdc 47 - nodo 122	903.23	-1.502e+04	-2.391e+04	5.556e+06	3.342e+05	0.0
179	reac per cdc 48 - nodo 122	9251.07	-242.34	-2.391e+04	8.967e+04	3.423e+06	0.0
180	reac per cdc 49 - nodo 122	8504.46	-4611.19	-2.390e+04	1.706e+06	3.147e+06	0.0
181	reac per cdc 50 - nodo 122	-8504.46	4611.19	-2.391e+04	-1.706e+06	-3.147e+06	0.0
182	reac per cdc 51 - nodo 122	-9251.07	242.34	-2.391e+04	-8.967e+04	-3.423e+06	0.0
183	reac per cdc 52 - nodo 122	7997.64	437.30	-2.390e+04	-1.618e+05	2.959e+06	0.0
184	reac per cdc 53 - nodo 122	9757.89	-5290.84	-2.391e+04	1.958e+06	3.610e+06	0.0
185	reac per cdc 54 - nodo 122	-9757.89	5290.84	-2.391e+04	-1.958e+06	-3.610e+06	0.0
186	reac per cdc 55 - nodo 122	-7997.64	-437.30	-2.391e+04	1.618e+05	-2.959e+06	0.0
187	reac per cdc 56 - nodo 122	8177.73	3190.46	-2.391e+04	-1.180e+06	3.026e+06	0.0
188	reac per cdc 57 - nodo 122	7431.13	-1178.39	-2.391e+04	4.360e+05	2.750e+06	0.0
189	reac per cdc 58 - nodo 122	-7431.13	1178.39	-2.391e+04	-4.360e+05	-2.750e+06	0.0
190	reac per cdc 59 - nodo 122	-8177.73	-3190.46	-2.391e+04	1.180e+06	-3.026e+06	0.0
191	reac per cdc 60 - nodo 122	6924.30	3870.10	-2.391e+04	-1.432e+06	2.562e+06	0.0
192	reac per cdc 61 - nodo 122	8684.55	-1858.03	-2.391e+04	6.875e+05	3.213e+06	0.0
193	reac per cdc 62 - nodo 122	-8684.55	1858.03	-2.391e+04	-6.875e+05	-3.213e+06	0.0
194	reac per cdc 63 - nodo 122	-6924.30	-3870.10	-2.391e+04	1.432e+06	-2.562e+06	0.0
195	reac per cdc 64 - nodo 122	3907.67	6553.39	-2.391e+04	-2.425e+06	1.446e+06	0.0
196	reac per cdc 65 - nodo 122	1418.99	-8009.45	-2.390e+04	2.963e+06	5.250e+05	0.0
197	reac per cdc 66 - nodo 122	-1418.99	8009.45	-2.391e+04	-2.963e+06	-5.250e+05	0.0
198	reac per cdc 67 - nodo 122	-3907.67	-6553.39	-2.390e+04	2.425e+06	-1.446e+06	0.0
199	reac per cdc 68 - nodo 122	3585.67	7583.23	-2.391e+04	-2.806e+06	1.327e+06	0.0
200	reac per cdc 69 - nodo 122	1096.99	-6979.61	-2.390e+04	2.582e+06	4.059e+05	0.0
201	reac per cdc 70 - nodo 122	-1096.99	6979.61	-2.391e+04	-2.582e+06	-4.059e+05	0.0
202	reac per cdc 71 - nodo 122	-3585.67	-7583.23	-2.390e+04	2.806e+06	-1.327e+06	0.0
203	reac per cdc 72 - nodo 122	-270.42	8818.86	-2.390e+04	-3.263e+06	-1.001e+05	0.0
204	reac per cdc 73 - nodo 122	5597.08	-1.027e+04	-2.391e+04	3.802e+06	2.071e+06	0.0
205	reac per cdc 74 - nodo 122	-5597.08	1.027e+04	-2.390e+04	-3.802e+06	-2.071e+06	0.0
206	reac per cdc 75 - nodo 122	270.42	-8818.86	-2.391e+04	3.263e+06	1.001e+05	0.0
207	reac per cdc 76 - nodo 122	-592.42	9848.70	-2.390e+04	-3.644e+06	-2.192e+05	0.0
208	reac per cdc 77 - nodo 122	5275.08	-9245.08	-2.391e+04	3.421e+06	1.952e+06	0.0
209	reac per cdc 78 - nodo 122	-5275.08	9245.08	-2.390e+04	-3.421e+06	-1.952e+06	0.0
210	reac per cdc 79 - nodo 122	592.42	-9848.70	-2.391e+04	3.644e+06	2.192e+05	0.0
211	reac per cdc 80 - nodo 122	7430.64	-194.65	-2.391e+04	7.202e+04	2.749e+06	0.0
212	reac per cdc 81 - nodo 122	6830.95	-3703.80	-2.390e+04	1.370e+06	2.527e+06	0.0
213	reac per cdc 82 - nodo 122	-6830.95	3703.80	-2.391e+04	-1.370e+06	-2.527e+06	0.0
214	reac per cdc 83 - nodo 122	-7430.64	194.65	-2.391e+04	-7.202e+04	-2.749e+06	0.0
215	reac per cdc 84 - nodo 122	6423.86	351.25	-2.391e+04	-1.300e+05	2.377e+06	0.0
216	reac per cdc 85 - nodo 122	7837.73	-4249.70	-2.391e+04	1.572e+06	2.900e+06	0.0
217	reac per cdc 86 - nodo 122	-7837.73	4249.70	-2.391e+04	-1.572e+06	-2.900e+06	0.0
218	reac per cdc 87 - nodo 122	-6423.86	-351.25	-2.391e+04	1.300e+05	-2.377e+06	0.0
219	reac per cdc 88 - nodo 122	6568.51	2562.64	-2.391e+04	-9.482e+05	2.430e+06	0.0
220	reac per cdc 89 - nodo 122	5968.82	-946.51	-2.391e+04	3.502e+05	2.208e+06	0.0
221	reac per cdc 90 - nodo 122	-5968.82	946.51	-2.391e+04	-3.502e+05	-2.208e+06	0.0
222	reac per cdc 91 - nodo 122	-6568.51	-2562.64	-2.391e+04	9.482e+05	-2.430e+06	0.0
223	reac per cdc 92 - nodo 122	5561.73	3108.54	-2.391e+04	-1.150e+06	2.058e+06	0.0
224	reac per cdc 93 - nodo 122	6975.60	-1492.41	-2.391e+04	5.522e+05	2.581e+06	0.0
225	reac per cdc 94 - nodo 122	-6975.60	1492.41	-2.391e+04	-5.522e+05	-2.581e+06	0.0
226	reac per cdc 95 - nodo 122	-5561.73	-3108.54	-2.391e+04	1.150e+06	-2.058e+06	0.0
227	reac per cdc 96 - nodo 122	3138.72	5263.81	-2.391e+04	-1.948e+06	1.161e+06	0.0
228	reac per cdc 97 - nodo 122	1139.76	-6433.34	-2.390e+04	2.380e+06	4.217e+05	0.0
229	reac per cdc 98 - nodo 122	-1139.76	6433.34	-2.391e+04	-2.380e+06	-4.217e+05	0.0
230	reac per cdc 99 - nodo 122	-3138.72	-5263.81	-2.390e+04	1.948e+06	-1.161e+06	0.0
231	reac per cdc 100 - nodo 122	2880.08	6090.99	-2.391e+04	-2.254e+06	1.066e+06	0.0
232	reac per cdc 101 - nodo 122	881.12	-5606.16	-2.390e+04	2.074e+06	3.260e+05	0.0
233	reac per cdc 102 - nodo 122	-881.12	5606.16	-2.391e+04	-2.074e+06	-3.260e+05	0.0
234	reac per cdc 103 - nodo 122	-2880.08	-6090.99	-2.390e+04	2.254e+06	-1.066e+06	0.0
235	reac per cdc 104 - nodo 122	-217.21	7083.48	-2.390e+04	-2.621e+06	-8.037e+04	0.0
236	reac per cdc 105 - nodo 122	4495.68	-8253.01	-2.391e+04	3.054e+06	1.663e+06	0.0
237	reac per cdc 106 - nodo 122	-4495.68	8253.01	-2.390e+04	-3.054e+06	-1.663e+06	0.0
238	reac per cdc 107 - nodo 122	217.21	-7083.48	-2.391e+04	2.621e+06	8.037e+04	0.0
239	reac per cdc 108 - nodo 122	-475.84	7910.67	-2.390e+04	-2.927e+06	-1.761e+05	0.0
240	reac per cdc 109 - nodo 122	4237.05	-7425.83	-2.391e+04	2.748e+06	1.568e+06	0.0
241	reac per cdc 110 - nodo 122	-4237.05	7425.83	-2.390e+04	-2.748e+06	-1.568e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
242	reac per cdc 111 - nodo 122	475.84	-7910.67	-2.391e+04	2.927e+06	1.761e+05	0.0
243	reac per cdc 112 - nodo 122	0.0	0.0	-3.862e+04	0.0	0.0	0.0
244	reac per cdc 113 - nodo 122	231.67	-6.01	-2.391e+04	2223.87	8.572e+04	0.0
245	reac per cdc 114 - nodo 122	-220.46	-7.63	-2.391e+04	2823.11	-8.157e+04	0.0
246	reac per cdc 115 - nodo 122	-26.95	557.53	-2.391e+04	-2.063e+05	-9972.68	0.0
247	reac per cdc 116 - nodo 122	-10.94	-551.43	-2.391e+04	2.040e+05	-4046.06	0.0
248	reac per cdc 117 - nodo 122	139.00	-3.61	-3.862e+04	1334.32	5.143e+04	0.0
249	reac per cdc 118 - nodo 122	-132.28	-4.58	-3.862e+04	1693.87	-4.894e+04	0.0
250	reac per cdc 119 - nodo 122	-16.17	334.52	-3.862e+04	-1.238e+05	-5983.61	0.0
251	reac per cdc 120 - nodo 122	-6.56	-330.86	-3.862e+04	1.224e+05	-2427.64	0.0
252	reac per cdc 121 - nodo 122	231.67	-6.01	-3.127e+04	2223.87	8.572e+04	0.0
253	reac per cdc 122 - nodo 122	-220.46	-7.63	-3.127e+04	2823.11	-8.157e+04	0.0
254	reac per cdc 123 - nodo 122	-26.95	557.53	-3.127e+04	-2.063e+05	-9972.68	0.0
255	reac per cdc 124 - nodo 122	-10.94	-551.43	-3.127e+04	2.040e+05	-4046.06	0.0
256	reac per cdc 125 - nodo 122	0.0	0.0	-2.685e+04	0.0	0.0	0.0
257	reac per cdc 126 - nodo 122	46.33	-1.20	-2.391e+04	444.77	1.714e+04	0.0
258	reac per cdc 127 - nodo 122	-44.09	-1.53	-2.391e+04	564.62	-1.631e+04	0.0
259	reac per cdc 128 - nodo 122	-5.39	111.51	-2.391e+04	-4.126e+04	-1994.54	0.0
260	reac per cdc 129 - nodo 122	-2.19	-110.29	-2.391e+04	4.081e+04	-809.21	0.0
261	reac per cdc 130 - nodo 122	0.0	0.0	-2.391e+04	0.0	0.0	0.0
262	reac per cdc 3 - nodo 129	0.0	0.0	-5.740e+04	0.0	0.0	0.0
263	reac per cdc 4 - nodo 129	336.50	-11.93	-3.375e+04	4413.27	1.245e+05	0.0
264	reac per cdc 5 - nodo 129	-335.38	-10.13	-3.375e+04	3749.04	-1.241e+05	0.0
265	reac per cdc 6 - nodo 129	-34.05	818.01	-3.375e+04	-3.027e+05	-1.260e+04	0.0
266	reac per cdc 7 - nodo 129	29.82	-807.54	-3.375e+04	2.988e+05	1.103e+04	0.0
267	reac per cdc 8 - nodo 129	201.90	-7.16	-5.740e+04	2647.96	7.470e+04	0.0
268	reac per cdc 9 - nodo 129	-201.23	-6.08	-5.740e+04	2249.43	-7.445e+04	0.0
269	reac per cdc 10 - nodo 129	-20.43	490.81	-5.740e+04	-1.816e+05	-7558.35	0.0
270	reac per cdc 11 - nodo 129	17.89	-484.52	-5.740e+04	1.793e+05	6620.12	0.0
271	reac per cdc 12 - nodo 129	336.50	-11.93	-4.558e+04	4413.27	1.245e+05	0.0
272	reac per cdc 13 - nodo 129	-335.38	-10.13	-4.558e+04	3749.04	-1.241e+05	0.0
273	reac per cdc 14 - nodo 129	-34.05	818.01	-4.558e+04	-3.027e+05	-1.260e+04	0.0
274	reac per cdc 15 - nodo 129	29.82	-807.54	-4.558e+04	2.988e+05	1.103e+04	0.0
275	reac per cdc 16 - nodo 129	1.409e+04	1543.81	-2.510e+04	-5.712e+05	5.212e+06	0.0
276	reac per cdc 17 - nodo 129	1.300e+04	-5949.88	-2.511e+04	2.201e+06	4.809e+06	0.0
277	reac per cdc 18 - nodo 129	-1.300e+04	5949.88	-2.510e+04	-2.201e+06	-4.809e+06	0.0
278	reac per cdc 19 - nodo 129	-1.409e+04	-1543.81	-2.510e+04	5.712e+05	-5.212e+06	0.0
279	reac per cdc 20 - nodo 129	1.219e+04	1103.28	-2.510e+04	-4.082e+05	4.510e+06	0.0
280	reac per cdc 21 - nodo 129	1.489e+04	-5509.35	-2.511e+04	2.038e+06	5.510e+06	0.0
281	reac per cdc 22 - nodo 129	-1.489e+04	5509.35	-2.510e+04	-2.038e+06	-5.510e+06	0.0
282	reac per cdc 23 - nodo 129	-1.219e+04	-1103.28	-2.510e+04	4.082e+05	-4.510e+06	0.0
283	reac per cdc 24 - nodo 129	1.250e+04	2757.76	-2.510e+04	-1.020e+06	4.626e+06	0.0
284	reac per cdc 25 - nodo 129	1.141e+04	-4735.93	-2.511e+04	1.752e+06	4.223e+06	0.0
285	reac per cdc 26 - nodo 129	-1.141e+04	4735.93	-2.510e+04	-1.752e+06	-4.223e+06	0.0
286	reac per cdc 27 - nodo 129	-1.250e+04	-2757.76	-2.511e+04	1.020e+06	-4.626e+06	0.0
287	reac per cdc 28 - nodo 129	1.061e+04	2317.24	-2.510e+04	-8.574e+05	3.924e+06	0.0
288	reac per cdc 29 - nodo 129	1.331e+04	-4295.40	-2.511e+04	1.589e+06	4.924e+06	0.0
289	reac per cdc 30 - nodo 129	-1.331e+04	4295.40	-2.510e+04	-1.589e+06	-4.924e+06	0.0
290	reac per cdc 31 - nodo 129	-1.061e+04	-2317.24	-2.510e+04	8.574e+05	-3.924e+06	0.0
291	reac per cdc 32 - nodo 129	5876.92	1.183e+04	-2.510e+04	-4.377e+06	2.174e+06	0.0
292	reac per cdc 33 - nodo 129	2247.73	-1.315e+04	-2.511e+04	4.866e+06	8.317e+05	0.0
293	reac per cdc 34 - nodo 129	-2247.73	1.315e+04	-2.510e+04	-4.866e+06	-8.317e+05	0.0
294	reac per cdc 35 - nodo 129	-5876.92	-1.183e+04	-2.511e+04	4.377e+06	-2.174e+06	0.0
295	reac per cdc 36 - nodo 129	5401.94	1.219e+04	-2.510e+04	-4.511e+06	1.999e+06	0.0
296	reac per cdc 37 - nodo 129	1772.75	-1.279e+04	-2.511e+04	4.731e+06	6.559e+05	0.0
297	reac per cdc 38 - nodo 129	-1772.75	1.279e+04	-2.510e+04	-4.731e+06	-6.559e+05	0.0
298	reac per cdc 39 - nodo 129	-5401.94	-1.219e+04	-2.511e+04	4.511e+06	-1.999e+06	0.0
299	reac per cdc 40 - nodo 129	-441.64	1.036e+04	-2.510e+04	-3.833e+06	-1.634e+05	0.0
300	reac per cdc 41 - nodo 129	8566.29	-1.168e+04	-2.511e+04	4.322e+06	3.170e+06	0.0
301	reac per cdc 42 - nodo 129	-8566.29	1.168e+04	-2.510e+04	-4.322e+06	-3.170e+06	0.0
302	reac per cdc 43 - nodo 129	441.64	-1.036e+04	-2.511e+04	3.833e+06	1.634e+05	0.0
303	reac per cdc 44 - nodo 129	-916.62	1.072e+04	-2.510e+04	-3.968e+06	-3.392e+05	0.0
304	reac per cdc 45 - nodo 129	8091.31	-1.132e+04	-2.511e+04	4.188e+06	2.994e+06	0.0
305	reac per cdc 46 - nodo 129	-8091.31	1.132e+04	-2.510e+04	-4.188e+06	-2.994e+06	0.0
306	reac per cdc 47 - nodo 129	916.62	-1.072e+04	-2.511e+04	3.968e+06	3.392e+05	0.0
307	reac per cdc 48 - nodo 129	9238.57	1012.58	-2.510e+04	-3.747e+05	3.418e+06	0.0
308	reac per cdc 49 - nodo 129	8524.46	-3902.49	-2.511e+04	1.444e+06	3.154e+06	0.0
309	reac per cdc 50 - nodo 129	-8524.46	3902.49	-2.510e+04	-1.444e+06	-3.154e+06	0.0
310	reac per cdc 51 - nodo 129	-9238.57	-1012.58	-2.510e+04	3.747e+05	-3.418e+06	0.0
311	reac per cdc 52 - nodo 129	7995.28	723.64	-2.510e+04	-2.677e+05	2.958e+06	0.0
312	reac per cdc 53 - nodo 129	9767.75	-3613.55	-2.511e+04	1.337e+06	3.614e+06	0.0
313	reac per cdc 54 - nodo 129	-9767.75	3613.55	-2.510e+04	-1.337e+06	-3.614e+06	0.0
314	reac per cdc 55 - nodo 129	-7995.28	-723.64	-2.510e+04	2.677e+05	-2.958e+06	0.0
315	reac per cdc 56 - nodo 129	8200.10	1808.80	-2.510e+04	-6.693e+05	3.034e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
316	reac per cdc 57 - nodo 129	7485.99	-3106.26	-2.511e+04	1.149e+06	2.770e+06	0.0
317	reac per cdc 58 - nodo 129	-7485.99	3106.26	-2.510e+04	-1.149e+06	-2.770e+06	0.0
318	reac per cdc 59 - nodo 129	-8200.10	-1808.80	-2.510e+04	6.693e+05	-3.034e+06	0.0
319	reac per cdc 60 - nodo 129	6956.81	1519.86	-2.510e+04	-5.623e+05	2.574e+06	0.0
320	reac per cdc 61 - nodo 129	8729.29	-2817.32	-2.511e+04	1.042e+06	3.230e+06	0.0
321	reac per cdc 62 - nodo 129	-8729.29	2817.32	-2.510e+04	-1.042e+06	-3.230e+06	0.0
322	reac per cdc 63 - nodo 129	-6956.81	-1519.86	-2.510e+04	5.623e+05	-2.574e+06	0.0
323	reac per cdc 64 - nodo 129	3854.64	7758.29	-2.510e+04	-2.871e+06	1.426e+06	0.0
324	reac per cdc 65 - nodo 129	1474.27	-8625.26	-2.511e+04	3.191e+06	5.455e+05	0.0
325	reac per cdc 66 - nodo 129	-1474.27	8625.26	-2.510e+04	-3.191e+06	-5.455e+05	0.0
326	reac per cdc 67 - nodo 129	-3854.64	-7758.29	-2.511e+04	2.871e+06	-1.426e+06	0.0
327	reac per cdc 68 - nodo 129	3543.10	7997.16	-2.510e+04	-2.959e+06	1.311e+06	0.0
328	reac per cdc 69 - nodo 129	1162.73	-8386.40	-2.511e+04	3.103e+06	4.302e+05	0.0
329	reac per cdc 70 - nodo 129	-1162.73	8386.40	-2.510e+04	-3.103e+06	-4.302e+05	0.0
330	reac per cdc 71 - nodo 129	-3543.10	-7997.16	-2.511e+04	2.959e+06	-1.311e+06	0.0
331	reac per cdc 72 - nodo 129	-289.67	6795.15	-2.510e+04	-2.514e+06	-1.072e+05	0.0
332	reac per cdc 73 - nodo 129	5618.58	-7662.13	-2.511e+04	2.835e+06	2.079e+06	0.0
333	reac per cdc 74 - nodo 129	-5618.58	7662.13	-2.510e+04	-2.835e+06	-2.079e+06	0.0
334	reac per cdc 75 - nodo 129	289.67	-6795.15	-2.511e+04	2.514e+06	1.072e+05	0.0
335	reac per cdc 76 - nodo 129	-601.21	7034.02	-2.510e+04	-2.603e+06	-2.224e+05	0.0
336	reac per cdc 77 - nodo 129	5307.04	-7423.26	-2.511e+04	2.747e+06	1.964e+06	0.0
337	reac per cdc 78 - nodo 129	-5307.04	7423.26	-2.510e+04	-2.747e+06	-1.964e+06	0.0
338	reac per cdc 79 - nodo 129	601.21	-7034.02	-2.511e+04	2.603e+06	2.224e+05	0.0
339	reac per cdc 80 - nodo 129	7420.60	813.32	-2.510e+04	-3.009e+05	2.746e+06	0.0
340	reac per cdc 81 - nodo 129	6847.01	-3134.55	-2.511e+04	1.160e+06	2.533e+06	0.0
341	reac per cdc 82 - nodo 129	-6847.01	3134.55	-2.510e+04	-1.160e+06	-2.533e+06	0.0
342	reac per cdc 83 - nodo 129	-7420.60	-813.32	-2.510e+04	3.009e+05	-2.746e+06	0.0
343	reac per cdc 84 - nodo 129	6421.96	581.24	-2.510e+04	-2.151e+05	2.376e+06	0.0
344	reac per cdc 85 - nodo 129	7845.65	-2902.47	-2.511e+04	1.074e+06	2.903e+06	0.0
345	reac per cdc 86 - nodo 129	-7845.65	2902.47	-2.510e+04	-1.074e+06	-2.903e+06	0.0
346	reac per cdc 87 - nodo 129	-6421.96	-581.24	-2.510e+04	2.151e+05	-2.376e+06	0.0
347	reac per cdc 88 - nodo 129	6586.48	1452.86	-2.510e+04	-5.376e+05	2.437e+06	0.0
348	reac per cdc 89 - nodo 129	6012.90	-2495.01	-2.511e+04	9.232e+05	2.225e+06	0.0
349	reac per cdc 90 - nodo 129	-6012.90	2495.01	-2.510e+04	-9.232e+05	-2.225e+06	0.0
350	reac per cdc 91 - nodo 129	-6586.48	-1452.86	-2.510e+04	5.376e+05	-2.437e+06	0.0
351	reac per cdc 92 - nodo 129	5587.85	1220.78	-2.510e+04	-4.517e+05	2.068e+06	0.0
352	reac per cdc 93 - nodo 129	7011.53	-2262.93	-2.510e+04	8.373e+05	2.594e+06	0.0
353	reac per cdc 94 - nodo 129	-7011.53	2262.93	-2.510e+04	-8.373e+05	-2.594e+06	0.0
354	reac per cdc 95 - nodo 129	-5587.85	-1220.78	-2.510e+04	4.517e+05	-2.068e+06	0.0
355	reac per cdc 96 - nodo 129	3096.12	6231.61	-2.510e+04	-2.306e+06	1.146e+06	0.0
356	reac per cdc 97 - nodo 129	1184.16	-6927.98	-2.511e+04	2.563e+06	4.381e+05	0.0
357	reac per cdc 98 - nodo 129	-1184.16	6927.98	-2.510e+04	-2.563e+06	-4.381e+05	0.0
358	reac per cdc 99 - nodo 129	-3096.12	-6231.61	-2.511e+04	2.306e+06	-1.146e+06	0.0
359	reac per cdc 100 - nodo 129	2845.88	6423.47	-2.510e+04	-2.377e+06	1.053e+06	0.0
360	reac per cdc 101 - nodo 129	933.93	-6736.12	-2.511e+04	2.492e+06	3.456e+05	0.0
361	reac per cdc 102 - nodo 129	-933.93	6736.12	-2.510e+04	-2.492e+06	-3.456e+05	0.0
362	reac per cdc 103 - nodo 129	-2845.88	-6423.47	-2.511e+04	2.377e+06	-1.053e+06	0.0
363	reac per cdc 104 - nodo 129	-232.67	5458.00	-2.510e+04	-2.019e+06	-8.609e+04	0.0
364	reac per cdc 105 - nodo 129	4512.95	-6154.37	-2.511e+04	2.277e+06	1.670e+06	0.0
365	reac per cdc 106 - nodo 129	-4512.95	6154.37	-2.510e+04	-2.277e+06	-1.670e+06	0.0
366	reac per cdc 107 - nodo 129	232.67	-5458.00	-2.511e+04	2.019e+06	8.609e+04	0.0
367	reac per cdc 108 - nodo 129	-482.90	5649.86	-2.510e+04	-2.090e+06	-1.787e+05	0.0
368	reac per cdc 109 - nodo 129	4262.72	-5962.51	-2.511e+04	2.206e+06	1.577e+06	0.0
369	reac per cdc 110 - nodo 129	-4262.72	5962.51	-2.510e+04	-2.206e+06	-1.577e+06	0.0
370	reac per cdc 111 - nodo 129	482.90	-5649.86	-2.511e+04	2.090e+06	1.787e+05	0.0
371	reac per cdc 112 - nodo 129	0.0	0.0	-4.087e+04	0.0	0.0	0.0
372	reac per cdc 113 - nodo 129	224.33	-7.95	-2.510e+04	2942.18	8.300e+04	0.0
373	reac per cdc 114 - nodo 129	-223.59	-6.76	-2.510e+04	2499.36	-8.273e+04	0.0
374	reac per cdc 115 - nodo 129	-22.70	545.34	-2.510e+04	-2.018e+05	-8398.17	0.0
375	reac per cdc 116 - nodo 129	19.88	-538.36	-2.510e+04	1.992e+05	7355.69	0.0
376	reac per cdc 117 - nodo 129	134.60	-4.77	-4.087e+04	1765.31	4.980e+04	0.0
377	reac per cdc 118 - nodo 129	-134.15	-4.05	-4.087e+04	1499.62	-4.964e+04	0.0
378	reac per cdc 119 - nodo 129	-13.62	327.20	-4.087e+04	-1.211e+05	-5038.90	0.0
379	reac per cdc 120 - nodo 129	11.93	-323.02	-4.087e+04	1.195e+05	4413.41	0.0
380	reac per cdc 121 - nodo 129	224.33	-7.95	-3.299e+04	2942.18	8.300e+04	0.0
381	reac per cdc 122 - nodo 129	-223.59	-6.76	-3.299e+04	2499.36	-8.273e+04	0.0
382	reac per cdc 123 - nodo 129	-22.70	545.34	-3.299e+04	-2.018e+05	-8398.17	0.0
383	reac per cdc 124 - nodo 129	19.88	-538.36	-3.299e+04	1.992e+05	7355.69	0.0
384	reac per cdc 125 - nodo 129	0.0	0.0	-2.826e+04	0.0	0.0	0.0
385	reac per cdc 126 - nodo 129	44.87	-1.59	-2.510e+04	588.44	1.660e+04	0.0
386	reac per cdc 127 - nodo 129	-44.72	-1.35	-2.510e+04	499.87	-1.655e+04	0.0
387	reac per cdc 128 - nodo 129	-4.54	109.07	-2.510e+04	-4.036e+04	-1679.63	0.0
388	reac per cdc 129 - nodo 129	3.98	-107.67	-2.510e+04	3.984e+04	1471.14	0.0
389	reac per cdc 130 - nodo 129	0.0	0.0	-2.510e+04	0.0	0.0	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
390	reac per cdc 3 - nodo 136	0.0	0.0	-5.315e+04	0.0	0.0	0.0
391	reac per cdc 4 - nodo 136	331.85	-12.82	-3.159e+04	4744.76	1.228e+05	0.0
392	reac per cdc 5 - nodo 136	-345.64	-8.88	-3.159e+04	3285.52	-1.279e+05	0.0
393	reac per cdc 6 - nodo 136	-28.37	765.77	-3.159e+04	-2.833e+05	-1.050e+04	0.0
394	reac per cdc 7 - nodo 136	74.55	-754.85	-3.159e+04	2.793e+05	2.758e+04	0.0
395	reac per cdc 8 - nodo 136	199.11	-7.69	-5.315e+04	2846.85	7.367e+04	0.0
396	reac per cdc 9 - nodo 136	-207.38	-5.33	-5.315e+04	1971.31	-7.673e+04	0.0
397	reac per cdc 10 - nodo 136	-17.02	459.46	-5.315e+04	-1.700e+05	-6299.10	0.0
398	reac per cdc 11 - nodo 136	44.73	-452.91	-5.315e+04	1.676e+05	1.655e+04	0.0
399	reac per cdc 12 - nodo 136	331.85	-12.82	-4.237e+04	4744.76	1.228e+05	0.0
400	reac per cdc 13 - nodo 136	-345.64	-8.88	-4.237e+04	3285.52	-1.279e+05	0.0
401	reac per cdc 14 - nodo 136	-28.37	765.77	-4.237e+04	-2.833e+05	-1.050e+04	0.0
402	reac per cdc 15 - nodo 136	74.55	-754.85	-4.237e+04	2.793e+05	2.758e+04	0.0
403	reac per cdc 16 - nodo 136	1.399e+04	7772.15	-2.352e+04	-2.876e+06	5.175e+06	0.0
404	reac per cdc 17 - nodo 136	1.296e+04	-457.34	-2.352e+04	1.692e+05	4.796e+06	0.0
405	reac per cdc 18 - nodo 136	-1.296e+04	457.34	-2.352e+04	-1.692e+05	-4.796e+06	0.0
406	reac per cdc 19 - nodo 136	-1.399e+04	-7772.15	-2.352e+04	2.876e+06	-5.175e+06	0.0
407	reac per cdc 20 - nodo 136	1.213e+04	6298.05	-2.352e+04	-2.330e+06	4.489e+06	0.0
408	reac per cdc 21 - nodo 136	1.481e+04	1016.77	-2.352e+04	-3.762e+05	5.481e+06	0.0
409	reac per cdc 22 - nodo 136	-1.481e+04	-1016.77	-2.352e+04	3.762e+05	-5.481e+06	0.0
410	reac per cdc 23 - nodo 136	-1.213e+04	-6298.05	-2.352e+04	2.330e+06	-4.489e+06	0.0
411	reac per cdc 24 - nodo 136	1.244e+04	2378.86	-2.352e+04	-8.802e+05	4.604e+06	0.0
412	reac per cdc 25 - nodo 136	1.142e+04	-5850.63	-2.352e+04	2.165e+06	4.225e+06	0.0
413	reac per cdc 26 - nodo 136	-1.142e+04	5850.63	-2.352e+04	-2.165e+06	-4.225e+06	0.0
414	reac per cdc 27 - nodo 136	-1.244e+04	-2378.86	-2.352e+04	8.802e+05	-4.604e+06	0.0
415	reac per cdc 28 - nodo 136	1.059e+04	904.75	-2.352e+04	-3.348e+05	3.919e+06	0.0
416	reac per cdc 29 - nodo 136	1.327e+04	-4376.52	-2.352e+04	1.619e+06	4.910e+06	0.0
417	reac per cdc 30 - nodo 136	-1.327e+04	4376.52	-2.352e+04	-1.619e+06	-4.910e+06	0.0
418	reac per cdc 31 - nodo 136	-1.059e+04	-904.75	-2.352e+04	3.348e+05	-3.919e+06	0.0
419	reac per cdc 32 - nodo 136	5749.41	1.481e+04	-2.352e+04	-5.481e+06	2.127e+06	0.0
420	reac per cdc 33 - nodo 136	2334.50	-1.262e+04	-2.352e+04	4.669e+06	8.638e+05	0.0
421	reac per cdc 34 - nodo 136	-2334.50	1.262e+04	-2.352e+04	-4.669e+06	-8.638e+05	0.0
422	reac per cdc 35 - nodo 136	-5749.41	-1.481e+04	-2.352e+04	5.481e+06	-2.127e+06	0.0
423	reac per cdc 36 - nodo 136	5286.90	1.320e+04	-2.352e+04	-4.882e+06	1.956e+06	0.0
424	reac per cdc 37 - nodo 136	1871.98	-1.424e+04	-2.352e+04	5.268e+06	6.926e+05	0.0
425	reac per cdc 38 - nodo 136	-1871.98	1.424e+04	-2.352e+04	-5.268e+06	-6.926e+05	0.0
426	reac per cdc 39 - nodo 136	-5286.90	-1.320e+04	-2.352e+04	4.882e+06	-1.956e+06	0.0
427	reac per cdc 40 - nodo 136	-424.84	9899.35	-2.352e+04	-3.663e+06	-1.572e+05	0.0
428	reac per cdc 41 - nodo 136	8508.75	-7704.90	-2.352e+04	2.851e+06	3.148e+06	0.0
429	reac per cdc 42 - nodo 136	-8508.75	7704.90	-2.352e+04	-2.851e+06	-3.148e+06	0.0
430	reac per cdc 43 - nodo 136	424.84	-9899.35	-2.352e+04	3.663e+06	1.572e+05	0.0
431	reac per cdc 44 - nodo 136	-887.36	8281.36	-2.352e+04	-3.064e+06	-3.283e+05	0.0
432	reac per cdc 45 - nodo 136	8046.24	-9322.89	-2.352e+04	3.449e+06	2.977e+06	0.0
433	reac per cdc 46 - nodo 136	-8046.24	9322.89	-2.352e+04	-3.449e+06	-2.977e+06	0.0
434	reac per cdc 47 - nodo 136	887.36	-8281.36	-2.352e+04	3.064e+06	3.283e+05	0.0
435	reac per cdc 48 - nodo 136	9172.95	5097.71	-2.352e+04	-1.886e+06	3.394e+06	0.0
436	reac per cdc 49 - nodo 136	8501.00	-299.96	-2.352e+04	1.110e+05	3.145e+06	0.0
437	reac per cdc 50 - nodo 136	-8501.00	299.96	-2.352e+04	-1.110e+05	-3.145e+06	0.0
438	reac per cdc 51 - nodo 136	-9172.95	-5097.71	-2.352e+04	1.886e+06	-3.394e+06	0.0
439	reac per cdc 52 - nodo 136	7958.05	4130.85	-2.352e+04	-1.528e+06	2.944e+06	0.0
440	reac per cdc 53 - nodo 136	9715.90	666.89	-2.352e+04	-2.468e+05	3.595e+06	0.0
441	reac per cdc 54 - nodo 136	-9715.90	-666.89	-2.352e+04	2.468e+05	-3.595e+06	0.0
442	reac per cdc 55 - nodo 136	-7958.05	-4130.85	-2.352e+04	1.528e+06	-2.944e+06	0.0
443	reac per cdc 56 - nodo 136	8161.75	1560.28	-2.352e+04	-5.773e+05	3.020e+06	0.0
444	reac per cdc 57 - nodo 136	7489.80	-3837.39	-2.352e+04	1.420e+06	2.771e+06	0.0
445	reac per cdc 58 - nodo 136	-7489.80	3837.39	-2.352e+04	-1.420e+06	-2.771e+06	0.0
446	reac per cdc 59 - nodo 136	-8161.75	-1560.28	-2.352e+04	5.773e+05	-3.020e+06	0.0
447	reac per cdc 60 - nodo 136	6946.85	593.42	-2.352e+04	-2.196e+05	2.570e+06	0.0
448	reac per cdc 61 - nodo 136	8704.70	-2870.53	-2.352e+04	1.062e+06	3.221e+06	0.0
449	reac per cdc 62 - nodo 136	-8704.70	2870.53	-2.352e+04	-1.062e+06	-3.221e+06	0.0
450	reac per cdc 63 - nodo 136	-6946.85	-593.42	-2.352e+04	2.196e+05	-2.570e+06	0.0
451	reac per cdc 64 - nodo 136	3771.00	9715.78	-2.352e+04	-3.595e+06	1.395e+06	0.0
452	reac per cdc 65 - nodo 136	1531.18	-8276.46	-2.352e+04	3.062e+06	5.665e+05	0.0
453	reac per cdc 66 - nodo 136	-1531.18	8276.46	-2.352e+04	-3.062e+06	-5.665e+05	0.0
454	reac per cdc 67 - nodo 136	-3771.00	-9715.78	-2.352e+04	3.595e+06	-1.395e+06	0.0
455	reac per cdc 68 - nodo 136	3467.64	8654.55	-2.352e+04	-3.202e+06	1.283e+06	0.0
456	reac per cdc 69 - nodo 136	1227.82	-9337.69	-2.352e+04	3.455e+06	4.543e+05	0.0
457	reac per cdc 70 - nodo 136	-1227.82	9337.69	-2.352e+04	-3.455e+06	-4.543e+05	0.0
458	reac per cdc 71 - nodo 136	-3467.64	-8654.55	-2.352e+04	3.202e+06	-1.283e+06	0.0
459	reac per cdc 72 - nodo 136	-278.65	6492.92	-2.352e+04	-2.402e+06	-1.031e+05	0.0
460	reac per cdc 73 - nodo 136	5580.84	-5053.60	-2.352e+04	1.870e+06	2.065e+06	0.0
461	reac per cdc 74 - nodo 136	-5580.84	5053.60	-2.352e+04	-1.870e+06	-2.065e+06	0.0
462	reac per cdc 75 - nodo 136	278.65	-6492.92	-2.352e+04	2.402e+06	1.031e+05	0.0
463	reac per cdc 76 - nodo 136	-582.01	5431.69	-2.352e+04	-2.010e+06	-2.153e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
464	reac per cdc 77 - nodo 136	5277.48	-6114.83	-2.352e+04	2.262e+06	1.953e+06	0.0
465	reac per cdc 78 - nodo 136	-5277.48	6114.83	-2.352e+04	-2.262e+06	-1.953e+06	0.0
466	reac per cdc 79 - nodo 136	582.01	-5431.69	-2.352e+04	2.010e+06	2.153e+05	0.0
467	reac per cdc 80 - nodo 136	7367.89	4094.58	-2.352e+04	-1.515e+06	2.726e+06	0.0
468	reac per cdc 81 - nodo 136	6828.17	-240.94	-2.352e+04	8.915e+04	2.526e+06	0.0
469	reac per cdc 82 - nodo 136	-6828.17	240.94	-2.352e+04	-8.915e+04	-2.526e+06	0.0
470	reac per cdc 83 - nodo 136	-7367.89	-4094.58	-2.352e+04	1.515e+06	-2.726e+06	0.0
471	reac per cdc 84 - nodo 136	6392.06	3317.98	-2.352e+04	-1.228e+06	2.365e+06	0.0
472	reac per cdc 85 - nodo 136	7804.00	535.66	-2.352e+04	-1.982e+05	2.887e+06	0.0
473	reac per cdc 86 - nodo 136	-7804.00	-535.66	-2.352e+04	1.982e+05	-2.887e+06	0.0
474	reac per cdc 87 - nodo 136	-6392.06	-3317.98	-2.352e+04	1.228e+06	-2.365e+06	0.0
475	reac per cdc 88 - nodo 136	6555.68	1253.25	-2.352e+04	-4.637e+05	2.426e+06	0.0
476	reac per cdc 89 - nodo 136	6015.95	-3082.27	-2.352e+04	1.140e+06	2.226e+06	0.0
477	reac per cdc 90 - nodo 136	-6015.95	3082.27	-2.352e+04	-1.140e+06	-2.226e+06	0.0
478	reac per cdc 91 - nodo 136	-6555.68	-1253.25	-2.352e+04	4.637e+05	-2.426e+06	0.0
479	reac per cdc 92 - nodo 136	5579.85	476.65	-2.352e+04	-1.764e+05	2.065e+06	0.0
480	reac per cdc 93 - nodo 136	6991.78	-2305.67	-2.352e+04	8.531e+05	2.587e+06	0.0
481	reac per cdc 94 - nodo 136	-6991.78	2305.67	-2.352e+04	-8.531e+05	-2.587e+06	0.0
482	reac per cdc 95 - nodo 136	-5579.85	-476.65	-2.352e+04	1.764e+05	-2.065e+06	0.0
483	reac per cdc 96 - nodo 136	3028.94	7803.90	-2.352e+04	-2.887e+06	1.121e+06	0.0
484	reac per cdc 97 - nodo 136	1229.88	-6647.81	-2.352e+04	2.460e+06	4.551e+05	0.0
485	reac per cdc 98 - nodo 136	-1229.88	6647.81	-2.352e+04	-2.460e+06	-4.551e+05	0.0
486	reac per cdc 99 - nodo 136	-3028.94	-7803.90	-2.352e+04	2.887e+06	-1.121e+06	0.0
487	reac per cdc 100 - nodo 136	2785.28	6951.51	-2.352e+04	-2.572e+06	1.031e+06	0.0
488	reac per cdc 101 - nodo 136	986.21	-7500.21	-2.352e+04	2.775e+06	3.649e+05	0.0
489	reac per cdc 102 - nodo 136	-986.21	7500.21	-2.352e+04	-2.775e+06	-3.649e+05	0.0
490	reac per cdc 103 - nodo 136	-2785.28	-6951.51	-2.352e+04	2.572e+06	-1.031e+06	0.0
491	reac per cdc 104 - nodo 136	-223.82	5215.24	-2.352e+04	-1.930e+06	-8.281e+04	0.0
492	reac per cdc 105 - nodo 136	4482.64	-4059.15	-2.352e+04	1.502e+06	1.659e+06	0.0
493	reac per cdc 106 - nodo 136	-4482.64	4059.15	-2.352e+04	-1.502e+06	-1.659e+06	0.0
494	reac per cdc 107 - nodo 136	223.82	-5215.24	-2.352e+04	1.930e+06	8.281e+04	0.0
495	reac per cdc 108 - nodo 136	-467.48	4362.84	-2.352e+04	-1.614e+06	-1.730e+05	0.0
496	reac per cdc 109 - nodo 136	4238.97	-4911.55	-2.352e+04	1.817e+06	1.568e+06	0.0
497	reac per cdc 110 - nodo 136	-4238.97	4911.55	-2.352e+04	-1.817e+06	-1.568e+06	0.0
498	reac per cdc 111 - nodo 136	467.48	-4362.84	-2.352e+04	1.614e+06	1.730e+05	0.0
499	reac per cdc 112 - nodo 136	0.0	0.0	-3.789e+04	0.0	0.0	0.0
500	reac per cdc 113 - nodo 136	221.24	-8.55	-2.352e+04	3163.17	8.186e+04	0.0
501	reac per cdc 114 - nodo 136	-230.42	-5.92	-2.352e+04	2190.35	-8.526e+04	0.0
502	reac per cdc 115 - nodo 136	-18.92	510.51	-2.352e+04	-1.889e+05	-6999.00	0.0
503	reac per cdc 116 - nodo 136	49.70	-503.23	-2.352e+04	1.862e+05	1.839e+04	0.0
504	reac per cdc 117 - nodo 136	132.74	-5.13	-3.789e+04	1897.90	4.911e+04	0.0
505	reac per cdc 118 - nodo 136	-138.25	-3.55	-3.789e+04	1314.21	-5.115e+04	0.0
506	reac per cdc 119 - nodo 136	-11.35	306.31	-3.789e+04	-1.133e+05	-4199.40	0.0
507	reac per cdc 120 - nodo 136	29.82	-301.94	-3.789e+04	1.117e+05	1.103e+04	0.0
508	reac per cdc 121 - nodo 136	221.24	-8.55	-3.071e+04	3163.17	8.186e+04	0.0
509	reac per cdc 122 - nodo 136	-230.42	-5.92	-3.071e+04	2190.35	-8.526e+04	0.0
510	reac per cdc 123 - nodo 136	-18.92	510.51	-3.071e+04	-1.889e+05	-6999.00	0.0
511	reac per cdc 124 - nodo 136	49.70	-503.23	-3.071e+04	1.862e+05	1.839e+04	0.0
512	reac per cdc 125 - nodo 136	0.0	0.0	-2.639e+04	0.0	0.0	0.0
513	reac per cdc 126 - nodo 136	44.25	-1.71	-2.352e+04	632.63	1.637e+04	0.0
514	reac per cdc 127 - nodo 136	-46.08	-1.18	-2.352e+04	438.07	-1.705e+04	0.0
515	reac per cdc 128 - nodo 136	-3.78	102.10	-2.352e+04	-3.778e+04	-1399.80	0.0
516	reac per cdc 129 - nodo 136	9.94	-100.65	-2.352e+04	3.724e+04	3677.99	0.0
517	reac per cdc 130 - nodo 136	0.0	0.0	-2.352e+04	0.0	0.0	0.0
518	reac per cdc 3 - nodo 143	0.0	0.0	-2.894e+04	0.0	0.0	0.0
519	reac per cdc 4 - nodo 143	333.31	-10.46	-1.895e+04	3869.81	1.233e+05	0.0
520	reac per cdc 5 - nodo 143	-359.82	-4.42	-1.895e+04	1637.14	-1.331e+05	0.0
521	reac per cdc 6 - nodo 143	-12.93	696.22	-1.895e+04	-2.576e+05	-4783.61	0.0
522	reac per cdc 7 - nodo 143	103.27	-687.94	-1.895e+04	2.545e+05	3.821e+04	0.0
523	reac per cdc 8 - nodo 143	199.99	-6.28	-2.894e+04	2321.88	7.400e+04	0.0
524	reac per cdc 9 - nodo 143	-215.89	-2.65	-2.894e+04	982.28	-7.988e+04	0.0
525	reac per cdc 10 - nodo 143	-7.76	417.73	-2.894e+04	-1.546e+05	-2870.17	0.0
526	reac per cdc 11 - nodo 143	61.96	-412.76	-2.894e+04	1.527e+05	2.293e+04	0.0
527	reac per cdc 12 - nodo 143	333.31	-10.46	-2.395e+04	3869.81	1.233e+05	0.0
528	reac per cdc 13 - nodo 143	-359.82	-4.42	-2.395e+04	1637.14	-1.331e+05	0.0
529	reac per cdc 14 - nodo 143	-12.93	696.22	-2.395e+04	-2.576e+05	-4783.61	0.0
530	reac per cdc 15 - nodo 143	103.27	-687.94	-2.395e+04	2.545e+05	3.821e+04	0.0
531	reac per cdc 16 - nodo 143	1.389e+04	1.017e+04	-1.422e+04	-3.762e+06	5.138e+06	0.0
532	reac per cdc 17 - nodo 143	1.289e+04	1377.30	-1.421e+04	-5.096e+05	4.771e+06	0.0
533	reac per cdc 18 - nodo 143	-1.289e+04	-1377.30	-1.421e+04	5.096e+05	-4.771e+06	0.0
534	reac per cdc 19 - nodo 143	-1.389e+04	-1.017e+04	-1.421e+04	3.762e+06	-5.138e+06	0.0
535	reac per cdc 20 - nodo 143	1.207e+04	8343.56	-1.422e+04	-3.087e+06	4.464e+06	0.0
536	reac per cdc 21 - nodo 143	1.471e+04	3200.79	-1.421e+04	-1.184e+06	5.444e+06	0.0
537	reac per cdc 22 - nodo 143	-1.471e+04	-3200.79	-1.421e+04	1.184e+06	-5.444e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
538	reac per cdc 23 - nodo 143	-1.207e+04	-8343.56	-1.421e+04	3.087e+06	-4.464e+06	0.0
539	reac per cdc 24 - nodo 143	1.235e+04	1728.21	-1.421e+04	-6.394e+05	4.570e+06	0.0
540	reac per cdc 25 - nodo 143	1.136e+04	-7061.55	-1.421e+04	2.613e+06	4.203e+06	0.0
541	reac per cdc 26 - nodo 143	-1.136e+04	7061.55	-1.422e+04	-2.613e+06	-4.203e+06	0.0
542	reac per cdc 27 - nodo 143	-1.235e+04	-1728.21	-1.421e+04	6.394e+05	-4.570e+06	0.0
543	reac per cdc 28 - nodo 143	1.053e+04	-95.28	-1.421e+04	3.525e+04	3.897e+06	0.0
544	reac per cdc 29 - nodo 143	1.318e+04	-5238.05	-1.421e+04	1.938e+06	4.877e+06	0.0
545	reac per cdc 30 - nodo 143	-1.318e+04	5238.05	-1.422e+04	-1.938e+06	-4.877e+06	0.0
546	reac per cdc 31 - nodo 143	-1.053e+04	95.28	-1.421e+04	-3.525e+04	-3.897e+06	0.0
547	reac per cdc 32 - nodo 143	5671.61	1.638e+04	-1.422e+04	-6.061e+06	2.098e+06	0.0
548	reac per cdc 33 - nodo 143	2362.30	-1.292e+04	-1.421e+04	4.780e+06	8.740e+05	0.0
549	reac per cdc 34 - nodo 143	-2362.30	1.292e+04	-1.422e+04	-4.780e+06	-8.740e+05	0.0
550	reac per cdc 35 - nodo 143	-5671.61	-1.638e+04	-1.421e+04	6.061e+06	-2.098e+06	0.0
551	reac per cdc 36 - nodo 143	5211.41	1.385e+04	-1.422e+04	-5.124e+06	1.928e+06	0.0
552	reac per cdc 37 - nodo 143	1902.10	-1.545e+04	-1.421e+04	5.716e+06	7.038e+05	0.0
553	reac per cdc 38 - nodo 143	-1902.10	1.545e+04	-1.422e+04	-5.716e+06	-7.038e+05	0.0
554	reac per cdc 39 - nodo 143	-5211.41	-1.385e+04	-1.421e+04	5.124e+06	-1.928e+06	0.0
555	reac per cdc 40 - nodo 143	-398.13	1.030e+04	-1.422e+04	-3.812e+06	-1.473e+05	0.0
556	reac per cdc 41 - nodo 143	8432.04	-6839.63	-1.421e+04	2.531e+06	3.120e+06	0.0
557	reac per cdc 42 - nodo 143	-8432.04	6839.63	-1.421e+04	-2.531e+06	-3.120e+06	0.0
558	reac per cdc 43 - nodo 143	398.13	-1.030e+04	-1.421e+04	3.812e+06	1.473e+05	0.0
559	reac per cdc 44 - nodo 143	-858.33	7771.28	-1.421e+04	-2.875e+06	-3.176e+05	0.0
560	reac per cdc 45 - nodo 143	7971.84	-9371.28	-1.421e+04	3.467e+06	2.950e+06	0.0
561	reac per cdc 46 - nodo 143	-7971.84	9371.28	-1.422e+04	-3.467e+06	-2.950e+06	0.0
562	reac per cdc 47 - nodo 143	858.33	-7771.28	-1.421e+04	2.875e+06	3.176e+05	0.0
563	reac per cdc 48 - nodo 143	9107.90	6668.51	-1.422e+04	-2.467e+06	3.370e+06	0.0
564	reac per cdc 49 - nodo 143	8456.73	903.36	-1.421e+04	-3.342e+05	3.129e+06	0.0
565	reac per cdc 50 - nodo 143	-8456.73	-903.36	-1.421e+04	3.342e+05	-3.129e+06	0.0
566	reac per cdc 51 - nodo 143	-9107.90	-6668.51	-1.421e+04	2.467e+06	-3.370e+06	0.0
567	reac per cdc 52 - nodo 143	7913.57	5472.49	-1.421e+04	-2.025e+06	2.928e+06	0.0
568	reac per cdc 53 - nodo 143	9651.07	2099.38	-1.421e+04	-7.768e+05	3.571e+06	0.0
569	reac per cdc 54 - nodo 143	-9651.07	-2099.38	-1.421e+04	7.768e+05	-3.571e+06	0.0
570	reac per cdc 55 - nodo 143	-7913.57	-5472.49	-1.421e+04	2.025e+06	-2.928e+06	0.0
571	reac per cdc 56 - nodo 143	8101.76	1133.53	-1.421e+04	-4.194e+05	2.998e+06	0.0
572	reac per cdc 57 - nodo 143	7450.59	-4631.62	-1.421e+04	1.714e+06	2.757e+06	0.0
573	reac per cdc 58 - nodo 143	-7450.59	4631.62	-1.422e+04	-1.714e+06	-2.757e+06	0.0
574	reac per cdc 59 - nodo 143	-8101.76	-1133.53	-1.421e+04	4.194e+05	-2.998e+06	0.0
575	reac per cdc 60 - nodo 143	6907.43	-62.49	-1.421e+04	2.312e+04	2.556e+06	0.0
576	reac per cdc 61 - nodo 143	8644.92	-3435.61	-1.421e+04	1.271e+06	3.199e+06	0.0
577	reac per cdc 62 - nodo 143	-8644.92	3435.61	-1.421e+04	-1.271e+06	-3.199e+06	0.0
578	reac per cdc 63 - nodo 143	-6907.43	62.49	-1.421e+04	-2.312e+04	-2.556e+06	0.0
579	reac per cdc 64 - nodo 143	3719.97	1.074e+04	-1.422e+04	-3.975e+06	1.376e+06	0.0
580	reac per cdc 65 - nodo 143	1549.41	-8472.80	-1.421e+04	3.135e+06	5.733e+05	0.0
581	reac per cdc 66 - nodo 143	-1549.41	8472.80	-1.422e+04	-3.135e+06	-5.733e+05	0.0
582	reac per cdc 67 - nodo 143	-3719.97	-1.074e+04	-1.421e+04	3.975e+06	-1.376e+06	0.0
583	reac per cdc 68 - nodo 143	3418.13	9083.87	-1.422e+04	-3.361e+06	1.265e+06	0.0
584	reac per cdc 69 - nodo 143	1247.57	-1.013e+04	-1.421e+04	3.749e+06	4.616e+05	0.0
585	reac per cdc 70 - nodo 143	-1247.57	1.013e+04	-1.422e+04	-3.749e+06	-4.616e+05	0.0
586	reac per cdc 71 - nodo 143	-3418.13	-9083.87	-1.421e+04	3.361e+06	-1.265e+06	0.0
587	reac per cdc 72 - nodo 143	-261.13	6757.63	-1.422e+04	-2.500e+06	-9.662e+04	0.0
588	reac per cdc 73 - nodo 143	5530.52	-4486.07	-1.421e+04	1.660e+06	2.046e+06	0.0
589	reac per cdc 74 - nodo 143	-5530.52	4486.07	-1.421e+04	-1.660e+06	-2.046e+06	0.0
590	reac per cdc 75 - nodo 143	261.13	-6757.63	-1.421e+04	2.500e+06	9.662e+04	0.0
591	reac per cdc 76 - nodo 143	-562.97	5097.14	-1.421e+04	-1.886e+06	-2.083e+05	0.0
592	reac per cdc 77 - nodo 143	5228.68	-6146.57	-1.421e+04	2.274e+06	1.935e+06	0.0
593	reac per cdc 78 - nodo 143	-5228.68	6146.57	-1.421e+04	-2.274e+06	-1.935e+06	0.0
594	reac per cdc 79 - nodo 143	562.97	-5097.14	-1.421e+04	1.886e+06	2.083e+05	0.0
595	reac per cdc 80 - nodo 143	7315.64	5356.28	-1.422e+04	-1.982e+06	2.707e+06	0.0
596	reac per cdc 81 - nodo 143	6792.61	725.60	-1.421e+04	-2.685e+05	2.513e+06	0.0
597	reac per cdc 82 - nodo 143	-6792.61	-725.60	-1.421e+04	2.685e+05	-2.513e+06	0.0
598	reac per cdc 83 - nodo 143	-7315.64	-5356.28	-1.421e+04	1.982e+06	-2.707e+06	0.0
599	reac per cdc 84 - nodo 143	6356.33	4395.61	-1.421e+04	-1.626e+06	2.352e+06	0.0
600	reac per cdc 85 - nodo 143	7751.92	1686.26	-1.421e+04	-6.239e+05	2.868e+06	0.0
601	reac per cdc 86 - nodo 143	-7751.92	-1686.26	-1.421e+04	6.239e+05	-2.868e+06	0.0
602	reac per cdc 87 - nodo 143	-6356.33	-4395.61	-1.421e+04	1.626e+06	-2.352e+06	0.0
603	reac per cdc 88 - nodo 143	6507.49	910.47	-1.421e+04	-3.369e+05	2.408e+06	0.0
604	reac per cdc 89 - nodo 143	5984.46	-3720.21	-1.421e+04	1.376e+06	2.214e+06	0.0
605	reac per cdc 90 - nodo 143	-5984.46	3720.21	-1.422e+04	-1.376e+06	-2.214e+06	0.0
606	reac per cdc 91 - nodo 143	-6507.49	-910.47	-1.421e+04	3.369e+05	-2.408e+06	0.0
607	reac per cdc 92 - nodo 143	5548.18	-50.20	-1.421e+04	1.857e+04	2.053e+06	0.0
608	reac per cdc 93 - nodo 143	6943.77	-2759.55	-1.421e+04	1.021e+06	2.569e+06	0.0
609	reac per cdc 94 - nodo 143	-6943.77	2759.55	-1.421e+04	-1.021e+06	-2.569e+06	0.0
610	reac per cdc 95 - nodo 143	-5548.18	50.20	-1.421e+04	-1.857e+04	-2.053e+06	0.0
611	reac per cdc 96 - nodo 143	2987.96	8630.08	-1.422e+04	-3.193e+06	1.106e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
612	reac per cdc 97 - nodo 143	1244.52	-6805.52	-1.421e+04	2.518e+06	4.605e+05	0.0
613	reac per cdc 98 - nodo 143	-1244.52	6805.52	-1.422e+04	-2.518e+06	-4.605e+05	0.0
614	reac per cdc 99 - nodo 143	-2987.96	-8630.08	-1.421e+04	3.193e+06	-1.106e+06	0.0
615	reac per cdc 100 - nodo 143	2745.51	7296.34	-1.422e+04	-2.700e+06	1.016e+06	0.0
616	reac per cdc 101 - nodo 143	1002.08	-8139.26	-1.421e+04	3.012e+06	3.708e+05	0.0
617	reac per cdc 102 - nodo 143	-1002.08	8139.26	-1.422e+04	-3.012e+06	-3.708e+05	0.0
618	reac per cdc 103 - nodo 143	-2745.51	-7296.34	-1.421e+04	2.700e+06	-1.016e+06	0.0
619	reac per cdc 104 - nodo 143	-209.74	5427.86	-1.421e+04	-2.008e+06	-7.761e+04	0.0
620	reac per cdc 105 - nodo 143	4442.22	-3603.30	-1.421e+04	1.333e+06	1.644e+06	0.0
621	reac per cdc 106 - nodo 143	-4442.22	3603.30	-1.421e+04	-1.333e+06	-1.644e+06	0.0
622	reac per cdc 107 - nodo 143	209.74	-5427.86	-1.421e+04	2.008e+06	7.761e+04	0.0
623	reac per cdc 108 - nodo 143	-452.19	4094.12	-1.421e+04	-1.515e+06	-1.673e+05	0.0
624	reac per cdc 109 - nodo 143	4199.78	-4937.04	-1.421e+04	1.827e+06	1.554e+06	0.0
625	reac per cdc 110 - nodo 143	-4199.78	4937.04	-1.421e+04	-1.827e+06	-1.554e+06	0.0
626	reac per cdc 111 - nodo 143	452.19	-4094.12	-1.421e+04	1.515e+06	1.673e+05	0.0
627	reac per cdc 112 - nodo 143	0.0	0.0	-2.088e+04	0.0	0.0	0.0
628	reac per cdc 113 - nodo 143	222.21	-6.97	-1.421e+04	2579.87	8.222e+04	0.0
629	reac per cdc 114 - nodo 143	-239.88	-2.95	-1.421e+04	1091.43	-8.876e+04	0.0
630	reac per cdc 115 - nodo 143	-8.62	464.14	-1.421e+04	-1.717e+05	-3189.07	0.0
631	reac per cdc 116 - nodo 143	68.85	-458.63	-1.421e+04	1.697e+05	2.547e+04	0.0
632	reac per cdc 117 - nodo 143	133.32	-4.18	-2.088e+04	1547.92	4.933e+04	0.0
633	reac per cdc 118 - nodo 143	-143.93	-1.77	-2.088e+04	654.86	-5.325e+04	0.0
634	reac per cdc 119 - nodo 143	-5.17	278.49	-2.088e+04	-1.030e+05	-1913.44	0.0
635	reac per cdc 120 - nodo 143	41.31	-275.18	-2.088e+04	1.018e+05	1.528e+04	0.0
636	reac per cdc 121 - nodo 143	222.21	-6.97	-1.755e+04	2579.87	8.222e+04	0.0
637	reac per cdc 122 - nodo 143	-239.88	-2.95	-1.755e+04	1091.43	-8.876e+04	0.0
638	reac per cdc 123 - nodo 143	-8.62	464.14	-1.755e+04	-1.717e+05	-3189.07	0.0
639	reac per cdc 124 - nodo 143	68.85	-458.63	-1.755e+04	1.697e+05	2.547e+04	0.0
640	reac per cdc 125 - nodo 143	0.0	0.0	-1.555e+04	0.0	0.0	0.0
641	reac per cdc 126 - nodo 143	44.44	-1.39	-1.421e+04	515.97	1.644e+04	0.0
642	reac per cdc 127 - nodo 143	-47.98	-0.59	-1.421e+04	218.29	-1.775e+04	0.0
643	reac per cdc 128 - nodo 143	-1.72	92.83	-1.421e+04	-3.435e+04	-637.81	0.0
644	reac per cdc 129 - nodo 143	13.77	-91.73	-1.421e+04	3.394e+04	5094.86	0.0
645	reac per cdc 130 - nodo 143	0.0	0.0	-1.421e+04	0.0	0.0	0.0
646	reac per cdc 3 - nodo 338	0.0	0.0	-5.889e+04	0.0	0.0	0.0
647	reac per cdc 4 - nodo 338	371.43	4.94	-3.674e+04	-1826.63	1.374e+05	0.0
648	reac per cdc 5 - nodo 338	-337.69	-6.00	-3.674e+04	2221.34	-1.249e+05	0.0
649	reac per cdc 6 - nodo 338	-54.11	825.01	-3.674e+04	-3.053e+05	-2.002e+04	0.0
650	reac per cdc 7 - nodo 338	-50.65	-826.07	-3.674e+04	3.056e+05	-1.874e+04	0.0
651	reac per cdc 8 - nodo 338	222.86	2.96	-5.889e+04	-1095.98	8.246e+04	0.0
652	reac per cdc 9 - nodo 338	-202.61	-3.60	-5.889e+04	1332.81	-7.497e+04	0.0
653	reac per cdc 10 - nodo 338	-32.46	495.00	-5.889e+04	-1.832e+05	-1.201e+04	0.0
654	reac per cdc 11 - nodo 338	-30.39	-495.64	-5.889e+04	1.834e+05	-1.124e+04	0.0
655	reac per cdc 12 - nodo 338	371.43	4.94	-4.781e+04	-1826.63	1.374e+05	0.0
656	reac per cdc 13 - nodo 338	-337.69	-6.00	-4.781e+04	2221.34	-1.249e+05	0.0
657	reac per cdc 14 - nodo 338	-54.11	825.01	-4.781e+04	-3.053e+05	-2.002e+04	0.0
658	reac per cdc 15 - nodo 338	-50.65	-826.07	-4.781e+04	3.056e+05	-1.874e+04	0.0
659	reac per cdc 16 - nodo 338	1.231e+04	-2858.26	-2.746e+04	1.058e+06	4.554e+06	0.0
660	reac per cdc 17 - nodo 338	1.195e+04	-8922.41	-2.746e+04	3.301e+06	4.420e+06	0.0
661	reac per cdc 18 - nodo 338	-1.195e+04	8922.41	-2.746e+04	-3.301e+06	-4.420e+06	0.0
662	reac per cdc 19 - nodo 338	-1.231e+04	2858.26	-2.746e+04	1.058e+06	4.554e+06	0.0
663	reac per cdc 20 - nodo 338	1.170e+04	-526.22	-2.746e+04	1.947e+05	4.329e+06	0.0
664	reac per cdc 21 - nodo 338	1.255e+04	-1.125e+04	-2.746e+04	4.164e+06	4.645e+06	0.0
665	reac per cdc 22 - nodo 338	-1.255e+04	1.125e+04	-2.746e+04	-4.164e+06	-4.645e+06	0.0
666	reac per cdc 23 - nodo 338	-1.170e+04	526.22	-2.746e+04	-1.947e+05	-4.329e+06	0.0
667	reac per cdc 24 - nodo 338	1.271e+04	5579.30	-2.746e+04	-2.064e+06	4.702e+06	0.0
668	reac per cdc 25 - nodo 338	1.235e+04	-484.85	-2.746e+04	1.794e+05	4.568e+06	0.0
669	reac per cdc 26 - nodo 338	-1.235e+04	484.85	-2.746e+04	-1.794e+05	-4.568e+06	0.0
670	reac per cdc 27 - nodo 338	-1.271e+04	-5579.30	-2.746e+04	2.064e+06	-4.702e+06	0.0
671	reac per cdc 28 - nodo 338	1.210e+04	7911.35	-2.746e+04	-2.927e+06	4.477e+06	0.0
672	reac per cdc 29 - nodo 338	1.295e+04	-2816.89	-2.746e+04	1.042e+06	4.793e+06	0.0
673	reac per cdc 30 - nodo 338	-1.295e+04	2816.89	-2.746e+04	-1.042e+06	-4.793e+06	0.0
674	reac per cdc 31 - nodo 338	-1.210e+04	-7911.35	-2.746e+04	2.927e+06	-4.477e+06	0.0
675	reac per cdc 32 - nodo 338	4238.34	8339.82	-2.746e+04	-3.086e+06	1.568e+06	0.0
676	reac per cdc 33 - nodo 338	3037.97	-1.187e+04	-2.746e+04	4.393e+06	1.124e+06	0.0
677	reac per cdc 34 - nodo 338	-3037.97	1.187e+04	-2.746e+04	-4.393e+06	-1.124e+06	0.0
678	reac per cdc 35 - nodo 338	-4238.34	-8339.82	-2.746e+04	3.086e+06	-1.568e+06	0.0
679	reac per cdc 36 - nodo 338	4358.28	1.087e+04	-2.746e+04	-4.022e+06	1.613e+06	0.0
680	reac per cdc 37 - nodo 338	3157.91	-9342.75	-2.746e+04	3.457e+06	1.168e+06	0.0
681	reac per cdc 38 - nodo 338	-3157.91	9342.75	-2.746e+04	-3.457e+06	-1.168e+06	0.0
682	reac per cdc 39 - nodo 338	-4358.28	-1.087e+04	-2.746e+04	4.022e+06	-1.613e+06	0.0
683	reac per cdc 40 - nodo 338	2216.99	1.611e+04	-2.746e+04	-5.962e+06	8.203e+05	0.0
684	reac per cdc 41 - nodo 338	5059.32	-1.965e+04	-2.746e+04	7.270e+06	1.872e+06	0.0
685	reac per cdc 42 - nodo 338	-5059.32	1.965e+04	-2.746e+04	-7.270e+06	-1.872e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
686	reac per cdc 43 - nodo 338	-2216.99	-1.611e+04	-2.746e+04	5.962e+06	-8.203e+05	0.0
687	reac per cdc 44 - nodo 338	2336.93	1.864e+04	-2.746e+04	-6.898e+06	8.647e+05	0.0
688	reac per cdc 45 - nodo 338	5179.27	-1.712e+04	-2.746e+04	6.333e+06	1.916e+06	0.0
689	reac per cdc 46 - nodo 338	-5179.27	1.712e+04	-2.746e+04	-6.333e+06	-1.916e+06	0.0
690	reac per cdc 47 - nodo 338	-2336.93	-1.864e+04	-2.746e+04	6.898e+06	-8.647e+05	0.0
691	reac per cdc 48 - nodo 338	8072.24	-1874.72	-2.746e+04	6.936e+05	2.987e+06	0.0
692	reac per cdc 49 - nodo 338	7836.05	-5852.15	-2.746e+04	2.165e+06	2.899e+06	0.0
693	reac per cdc 50 - nodo 338	-7836.05	5852.15	-2.746e+04	-2.165e+06	-2.899e+06	0.0
694	reac per cdc 51 - nodo 338	-8072.24	1874.72	-2.746e+04	-6.936e+05	-2.987e+06	0.0
695	reac per cdc 52 - nodo 338	7674.51	-345.14	-2.746e+04	1.277e+05	2.840e+06	0.0
696	reac per cdc 53 - nodo 338	8233.79	-7381.73	-2.746e+04	2.731e+06	3.047e+06	0.0
697	reac per cdc 54 - nodo 338	-8233.79	7381.73	-2.746e+04	-2.731e+06	-3.047e+06	0.0
698	reac per cdc 55 - nodo 338	-7674.51	345.14	-2.746e+04	-1.277e+05	-2.840e+06	0.0
699	reac per cdc 56 - nodo 338	8334.48	3659.43	-2.746e+04	-1.354e+06	3.084e+06	0.0
700	reac per cdc 57 - nodo 338	8098.28	-318.01	-2.746e+04	1.177e+05	2.996e+06	0.0
701	reac per cdc 58 - nodo 338	-8098.28	318.01	-2.746e+04	-1.177e+05	-2.996e+06	0.0
702	reac per cdc 59 - nodo 338	-8334.48	-3659.43	-2.746e+04	1.354e+06	-3.084e+06	0.0
703	reac per cdc 60 - nodo 338	7936.74	5189.00	-2.746e+04	-1.920e+06	2.937e+06	0.0
704	reac per cdc 61 - nodo 338	8496.02	-1847.58	-2.746e+04	6.836e+05	3.144e+06	0.0
705	reac per cdc 62 - nodo 338	-8496.02	1847.58	-2.746e+04	-6.836e+05	-3.144e+06	0.0
706	reac per cdc 63 - nodo 338	-7936.74	-5189.00	-2.746e+04	1.920e+06	-2.937e+06	0.0
707	reac per cdc 64 - nodo 338	2779.90	5470.03	-2.746e+04	-2.024e+06	1.029e+06	0.0
708	reac per cdc 65 - nodo 338	1992.59	-7788.10	-2.746e+04	2.882e+06	7.372e+05	0.0
709	reac per cdc 66 - nodo 338	-1992.59	7788.10	-2.746e+04	-2.882e+06	-7.372e+05	0.0
710	reac per cdc 67 - nodo 338	-2779.90	-5470.03	-2.746e+04	2.024e+06	-1.029e+06	0.0
711	reac per cdc 68 - nodo 338	2858.57	7130.28	-2.746e+04	-2.638e+06	1.058e+06	0.0
712	reac per cdc 69 - nodo 338	2071.26	-6127.85	-2.746e+04	2.267e+06	7.664e+05	0.0
713	reac per cdc 70 - nodo 338	-2071.26	6127.85	-2.746e+04	-2.267e+06	-7.664e+05	0.0
714	reac per cdc 71 - nodo 338	-2858.57	-7130.28	-2.746e+04	2.638e+06	-1.058e+06	0.0
715	reac per cdc 72 - nodo 338	1454.11	1.057e+04	-2.746e+04	-3.910e+06	5.380e+05	0.0
716	reac per cdc 73 - nodo 338	3318.38	-1.289e+04	-2.746e+04	4.768e+06	1.228e+06	0.0
717	reac per cdc 74 - nodo 338	-3318.38	1.289e+04	-2.746e+04	-4.768e+06	-1.228e+06	0.0
718	reac per cdc 75 - nodo 338	-1454.11	-1.057e+04	-2.746e+04	3.910e+06	-5.380e+05	0.0
719	reac per cdc 76 - nodo 338	1532.78	1.223e+04	-2.746e+04	-4.525e+06	5.671e+05	0.0
720	reac per cdc 77 - nodo 338	3397.05	-1.123e+04	-2.746e+04	4.154e+06	1.257e+06	0.0
721	reac per cdc 78 - nodo 338	-3397.05	1.123e+04	-2.746e+04	-4.154e+06	-1.257e+06	0.0
722	reac per cdc 79 - nodo 338	-1532.78	-1.223e+04	-2.746e+04	4.525e+06	-5.671e+05	0.0
723	reac per cdc 80 - nodo 338	6483.78	-1505.81	-2.746e+04	5.571e+05	2.399e+06	0.0
724	reac per cdc 81 - nodo 338	6294.07	-4700.56	-2.746e+04	1.739e+06	2.329e+06	0.0
725	reac per cdc 82 - nodo 338	-6294.07	4700.56	-2.746e+04	-1.739e+06	-2.329e+06	0.0
726	reac per cdc 83 - nodo 338	-6483.78	1505.81	-2.746e+04	-5.571e+05	-2.399e+06	0.0
727	reac per cdc 84 - nodo 338	6164.31	-277.23	-2.746e+04	1.026e+05	2.281e+06	0.0
728	reac per cdc 85 - nodo 338	6613.54	-5929.15	-2.746e+04	2.194e+06	2.447e+06	0.0
729	reac per cdc 86 - nodo 338	-6613.54	5929.15	-2.746e+04	-2.194e+06	-2.447e+06	0.0
730	reac per cdc 87 - nodo 338	-6164.31	277.23	-2.746e+04	-1.026e+05	-2.281e+06	0.0
731	reac per cdc 88 - nodo 338	6694.41	2939.32	-2.746e+04	-1.088e+06	2.477e+06	0.0
732	reac per cdc 89 - nodo 338	6504.70	-255.43	-2.746e+04	9.451e+04	2.407e+06	0.0
733	reac per cdc 90 - nodo 338	-6504.70	255.43	-2.746e+04	-9.451e+04	-2.407e+06	0.0
734	reac per cdc 91 - nodo 338	-6694.41	-2939.32	-2.746e+04	1.088e+06	-2.477e+06	0.0
735	reac per cdc 92 - nodo 338	6374.94	4167.91	-2.746e+04	-1.542e+06	2.359e+06	0.0
736	reac per cdc 93 - nodo 338	6824.17	-1484.01	-2.746e+04	5.491e+05	2.525e+06	0.0
737	reac per cdc 94 - nodo 338	-6824.17	1484.01	-2.746e+04	-5.491e+05	-2.525e+06	0.0
738	reac per cdc 95 - nodo 338	-6374.94	-4167.91	-2.746e+04	1.542e+06	-2.359e+06	0.0
739	reac per cdc 96 - nodo 338	2232.87	4393.64	-2.746e+04	-1.626e+06	8.262e+05	0.0
740	reac per cdc 97 - nodo 338	1600.48	-6255.55	-2.746e+04	2.315e+06	5.922e+05	0.0
741	reac per cdc 98 - nodo 338	-1600.48	6255.55	-2.746e+04	-2.315e+06	-5.922e+05	0.0
742	reac per cdc 99 - nodo 338	-2232.87	-4393.64	-2.746e+04	1.626e+06	-8.262e+05	0.0
743	reac per cdc 100 - nodo 338	2296.06	5727.18	-2.746e+04	-2.119e+06	8.495e+05	0.0
744	reac per cdc 101 - nodo 338	1663.67	-4922.01	-2.746e+04	1.821e+06	6.156e+05	0.0
745	reac per cdc 102 - nodo 338	-1663.67	4922.01	-2.746e+04	-1.821e+06	-6.156e+05	0.0
746	reac per cdc 103 - nodo 338	-2296.06	-5727.18	-2.746e+04	2.119e+06	-8.495e+05	0.0
747	reac per cdc 104 - nodo 338	1167.97	8488.91	-2.746e+04	-3.141e+06	4.321e+05	0.0
748	reac per cdc 105 - nodo 338	2665.39	-1.035e+04	-2.746e+04	3.830e+06	9.862e+05	0.0
749	reac per cdc 106 - nodo 338	-2665.39	1.035e+04	-2.746e+04	-3.830e+06	-9.862e+05	0.0
750	reac per cdc 107 - nodo 338	-1167.97	-8488.91	-2.746e+04	3.141e+06	-4.321e+05	0.0
751	reac per cdc 108 - nodo 338	1231.16	9822.45	-2.746e+04	-3.634e+06	4.555e+05	0.0
752	reac per cdc 109 - nodo 338	2728.57	-9017.28	-2.746e+04	3.336e+06	1.010e+06	0.0
753	reac per cdc 110 - nodo 338	-2728.57	9017.28	-2.746e+04	-3.336e+06	-1.010e+06	0.0
754	reac per cdc 111 - nodo 338	-1231.16	-9822.45	-2.746e+04	3.634e+06	-4.555e+05	0.0
755	reac per cdc 112 - nodo 338	0.0	0.0	-4.222e+04	0.0	0.0	0.0
756	reac per cdc 113 - nodo 338	247.62	3.29	-2.746e+04	-1217.75	9.162e+04	0.0
757	reac per cdc 114 - nodo 338	-225.13	-4.00	-2.746e+04	1480.90	-8.330e+04	0.0
758	reac per cdc 115 - nodo 338	-36.07	550.00	-2.746e+04	-2.035e+05	-1.335e+04	0.0
759	reac per cdc 116 - nodo 338	-33.77	-550.71	-2.746e+04	2.038e+05	-1.249e+04	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
760	reac per cdc 117 - nodo 338	148.57	1.97	-4.222e+04	-730.65	5.497e+04	0.0
761	reac per cdc 118 - nodo 338	-135.08	-2.40	-4.222e+04	888.54	-4.998e+04	0.0
762	reac per cdc 119 - nodo 338	-21.64	330.00	-4.222e+04	-1.221e+05	-8007.81	0.0
763	reac per cdc 120 - nodo 338	-20.26	-330.43	-4.222e+04	1.223e+05	-7496.12	0.0
764	reac per cdc 121 - nodo 338	247.62	3.29	-3.484e+04	-1217.75	9.162e+04	0.0
765	reac per cdc 122 - nodo 338	-225.13	-4.00	-3.484e+04	1480.90	-8.330e+04	0.0
766	reac per cdc 123 - nodo 338	-36.07	550.00	-3.484e+04	-2.035e+05	-1.335e+04	0.0
767	reac per cdc 124 - nodo 338	-33.77	-550.71	-3.484e+04	2.038e+05	-1.249e+04	0.0
768	reac per cdc 125 - nodo 338	0.0	0.0	-3.041e+04	0.0	0.0	0.0
769	reac per cdc 126 - nodo 338	49.52	0.66	-2.746e+04	-243.55	1.832e+04	0.0
770	reac per cdc 127 - nodo 338	-45.03	-0.80	-2.746e+04	296.18	-1.666e+04	0.0
771	reac per cdc 128 - nodo 338	-7.21	110.00	-2.746e+04	-4.070e+04	-2669.27	0.0
772	reac per cdc 129 - nodo 338	-6.75	-110.14	-2.746e+04	4.075e+04	-2498.71	0.0
773	reac per cdc 130 - nodo 338	0.0	0.0	-2.746e+04	0.0	0.0	0.0
774	reac per cdc 3 - nodo 380	0.0	0.0	-1.149e+05	0.0	0.0	0.0
775	reac per cdc 4 - nodo 380	354.24	1.40	-6.593e+04	-517.76	1.311e+05	0.0
776	reac per cdc 5 - nodo 380	-334.75	-2.54	-6.593e+04	937.97	-1.239e+05	0.0
777	reac per cdc 6 - nodo 380	-31.21	829.28	-6.593e+04	-3.068e+05	-1.155e+04	0.0
778	reac per cdc 7 - nodo 380	-28.02	-829.44	-6.593e+04	3.069e+05	-1.037e+04	0.0
779	reac per cdc 8 - nodo 380	212.55	0.84	-1.149e+05	-310.66	7.864e+04	0.0
780	reac per cdc 9 - nodo 380	-200.85	-1.52	-1.149e+05	562.78	-7.431e+04	0.0
781	reac per cdc 10 - nodo 380	-18.73	497.57	-1.149e+05	-1.841e+05	-6929.20	0.0
782	reac per cdc 11 - nodo 380	-16.81	-497.67	-1.149e+05	1.841e+05	-6219.93	0.0
783	reac per cdc 12 - nodo 380	354.24	1.40	-9.040e+04	-517.76	1.311e+05	0.0
784	reac per cdc 13 - nodo 380	-334.75	-2.54	-9.040e+04	937.97	-1.239e+05	0.0
785	reac per cdc 14 - nodo 380	-31.21	829.28	-9.040e+04	-3.068e+05	-1.155e+04	0.0
786	reac per cdc 15 - nodo 380	-28.02	-829.44	-9.040e+04	3.069e+05	-1.037e+04	0.0
787	reac per cdc 16 - nodo 380	1.216e+04	-367.37	-4.893e+04	1.359e+05	4.499e+06	0.0
788	reac per cdc 17 - nodo 380	1.181e+04	-7033.17	-4.894e+04	2.602e+06	4.369e+06	0.0
789	reac per cdc 18 - nodo 380	-1.181e+04	7033.17	-4.894e+04	-2.602e+06	-4.369e+06	0.0
790	reac per cdc 19 - nodo 380	-1.216e+04	367.37	-4.895e+04	-1.359e+05	-4.499e+06	0.0
791	reac per cdc 20 - nodo 380	1.160e+04	668.19	-4.893e+04	-2.472e+05	4.294e+06	0.0
792	reac per cdc 21 - nodo 380	1.236e+04	-8068.73	-4.894e+04	2.985e+06	4.574e+06	0.0
793	reac per cdc 22 - nodo 380	-1.236e+04	8068.73	-4.894e+04	-2.985e+06	-4.574e+06	0.0
794	reac per cdc 23 - nodo 380	-1.160e+04	-668.19	-4.895e+04	2.472e+05	-4.294e+06	0.0
795	reac per cdc 24 - nodo 380	1.277e+04	4866.85	-4.894e+04	-1.801e+06	4.726e+06	0.0
796	reac per cdc 25 - nodo 380	1.242e+04	-1798.96	-4.895e+04	6.656e+05	4.596e+06	0.0
797	reac per cdc 26 - nodo 380	-1.242e+04	1798.96	-4.894e+04	-6.656e+05	-4.596e+06	0.0
798	reac per cdc 27 - nodo 380	-1.277e+04	-4866.85	-4.894e+04	1.801e+06	-4.726e+06	0.0
799	reac per cdc 28 - nodo 380	1.222e+04	5902.40	-4.894e+04	-2.184e+06	4.520e+06	0.0
800	reac per cdc 29 - nodo 380	1.298e+04	-2834.52	-4.895e+04	1.049e+06	4.801e+06	0.0
801	reac per cdc 30 - nodo 380	-1.298e+04	2834.52	-4.894e+04	-1.049e+06	-4.801e+06	0.0
802	reac per cdc 31 - nodo 380	-1.222e+04	-5902.40	-4.894e+04	2.184e+06	-4.520e+06	0.0
803	reac per cdc 32 - nodo 380	4180.77	9999.59	-4.893e+04	-3.700e+06	1.547e+06	0.0
804	reac per cdc 33 - nodo 380	3009.47	-1.222e+04	-4.896e+04	4.521e+06	1.114e+06	0.0
805	reac per cdc 34 - nodo 380	-3009.47	1.222e+04	-4.893e+04	-4.521e+06	-1.114e+06	0.0
806	reac per cdc 35 - nodo 380	-4180.77	-9999.59	-4.896e+04	3.700e+06	-1.547e+06	0.0
807	reac per cdc 36 - nodo 380	4364.57	1.157e+04	-4.893e+04	-4.281e+06	1.615e+06	0.0
808	reac per cdc 37 - nodo 380	3193.26	-1.065e+04	-4.896e+04	3.940e+06	1.182e+06	0.0
809	reac per cdc 38 - nodo 380	-3193.26	1.065e+04	-4.893e+04	-3.940e+06	-1.182e+06	0.0
810	reac per cdc 39 - nodo 380	-4364.57	-1.157e+04	-4.896e+04	4.281e+06	-1.615e+06	0.0
811	reac per cdc 40 - nodo 380	2331.72	1.345e+04	-4.893e+04	-4.977e+06	8.627e+05	0.0
812	reac per cdc 41 - nodo 380	4858.52	-1.567e+04	-4.895e+04	5.798e+06	1.798e+06	0.0
813	reac per cdc 42 - nodo 380	-4858.52	1.567e+04	-4.893e+04	-5.798e+06	-1.798e+06	0.0
814	reac per cdc 43 - nodo 380	-2331.72	-1.345e+04	-4.896e+04	4.977e+06	-8.627e+05	0.0
815	reac per cdc 44 - nodo 380	2515.51	1.502e+04	-4.893e+04	-5.558e+06	9.307e+05	0.0
816	reac per cdc 45 - nodo 380	5042.32	-1.410e+04	-4.896e+04	5.218e+06	1.866e+06	0.0
817	reac per cdc 46 - nodo 380	-5042.32	1.410e+04	-4.893e+04	-5.218e+06	-1.866e+06	0.0
818	reac per cdc 47 - nodo 380	-2515.51	-1.502e+04	-4.896e+04	5.558e+06	-9.307e+05	0.0
819	reac per cdc 48 - nodo 380	7975.29	-240.96	-4.894e+04	8.915e+04	2.951e+06	0.0
820	reac per cdc 49 - nodo 380	7744.82	-4613.02	-4.894e+04	1.707e+06	2.866e+06	0.0
821	reac per cdc 50 - nodo 380	-7744.82	4613.02	-4.894e+04	-1.707e+06	-2.866e+06	0.0
822	reac per cdc 51 - nodo 380	-7975.29	240.96	-4.895e+04	-8.915e+04	-2.951e+06	0.0
823	reac per cdc 52 - nodo 380	7611.46	438.26	-4.894e+04	-1.622e+05	2.816e+06	0.0
824	reac per cdc 53 - nodo 380	8108.65	-5292.23	-4.894e+04	1.958e+06	3.000e+06	0.0
825	reac per cdc 54 - nodo 380	-8108.65	5292.23	-4.894e+04	-1.958e+06	-3.000e+06	0.0
826	reac per cdc 55 - nodo 380	-7611.46	-438.26	-4.895e+04	1.622e+05	-2.816e+06	0.0
827	reac per cdc 56 - nodo 380	8377.13	3192.13	-4.894e+04	-1.181e+06	3.100e+06	0.0
828	reac per cdc 57 - nodo 380	8146.65	-1179.93	-4.895e+04	4.366e+05	3.014e+06	0.0
829	reac per cdc 58 - nodo 380	-8146.65	1179.93	-4.894e+04	-4.366e+05	-3.014e+06	0.0
830	reac per cdc 59 - nodo 380	-8377.13	-3192.13	-4.894e+04	1.181e+06	-3.100e+06	0.0
831	reac per cdc 60 - nodo 380	8013.29	3871.35	-4.894e+04	-1.432e+06	2.965e+06	0.0
832	reac per cdc 61 - nodo 380	8510.49	-1859.14	-4.895e+04	6.879e+05	3.149e+06	0.0
833	reac per cdc 62 - nodo 380	-8510.49	1859.14	-4.894e+04	-6.879e+05	-3.149e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
834	reac per cdc 63 - nodo 380	-8013.29	-3871.35	-4.894e+04	1.432e+06	-2.965e+06	0.0
835	reac per cdc 64 - nodo 380	2742.14	6558.67	-4.893e+04	-2.427e+06	1.015e+06	0.0
836	reac per cdc 65 - nodo 380	1973.89	-8014.86	-4.895e+04	2.965e+06	7.303e+05	0.0
837	reac per cdc 66 - nodo 380	-1973.89	8014.86	-4.893e+04	-2.965e+06	-7.303e+05	0.0
838	reac per cdc 67 - nodo 380	-2742.14	-6558.67	-4.895e+04	2.427e+06	-1.015e+06	0.0
839	reac per cdc 68 - nodo 380	2862.69	7588.60	-4.893e+04	-2.808e+06	1.059e+06	0.0
840	reac per cdc 69 - nodo 380	2094.44	-6984.94	-4.895e+04	2.584e+06	7.749e+05	0.0
841	reac per cdc 70 - nodo 380	-2094.44	6984.94	-4.893e+04	-2.584e+06	-7.749e+05	0.0
842	reac per cdc 71 - nodo 380	-2862.69	-7588.60	-4.895e+04	2.808e+06	-1.059e+06	0.0
843	reac per cdc 72 - nodo 380	1529.36	8822.73	-4.893e+04	-3.264e+06	5.659e+05	0.0
844	reac per cdc 73 - nodo 380	3186.67	-1.028e+04	-4.895e+04	3.803e+06	1.179e+06	0.0
845	reac per cdc 74 - nodo 380	-3186.67	1.028e+04	-4.893e+04	-3.803e+06	-1.179e+06	0.0
846	reac per cdc 75 - nodo 380	-1529.36	-8822.73	-4.895e+04	3.264e+06	-5.659e+05	0.0
847	reac per cdc 76 - nodo 380	1649.91	9852.65	-4.893e+04	-3.645e+06	6.105e+05	0.0
848	reac per cdc 77 - nodo 380	3307.22	-9248.99	-4.895e+04	3.422e+06	1.224e+06	0.0
849	reac per cdc 78 - nodo 380	-3307.22	9248.99	-4.893e+04	-3.422e+06	-1.224e+06	0.0
850	reac per cdc 79 - nodo 380	-1649.91	-9852.65	-4.895e+04	3.645e+06	-6.105e+05	0.0
851	reac per cdc 80 - nodo 380	6405.91	-193.54	-4.894e+04	7.161e+04	2.370e+06	0.0
852	reac per cdc 81 - nodo 380	6220.79	-3705.26	-4.894e+04	1.371e+06	2.302e+06	0.0
853	reac per cdc 82 - nodo 380	-6220.79	3705.26	-4.894e+04	-1.371e+06	-2.302e+06	0.0
854	reac per cdc 83 - nodo 380	-6405.91	193.54	-4.895e+04	-7.161e+04	-2.370e+06	0.0
855	reac per cdc 84 - nodo 380	6113.67	352.02	-4.894e+04	-1.302e+05	2.262e+06	0.0
856	reac per cdc 85 - nodo 380	6513.03	-4250.82	-4.894e+04	1.573e+06	2.410e+06	0.0
857	reac per cdc 86 - nodo 380	-6513.03	4250.82	-4.894e+04	-1.573e+06	-2.410e+06	0.0
858	reac per cdc 87 - nodo 380	-6113.67	-352.02	-4.895e+04	1.302e+05	-2.262e+06	0.0
859	reac per cdc 88 - nodo 380	6728.67	2563.98	-4.894e+04	-9.487e+05	2.490e+06	0.0
860	reac per cdc 89 - nodo 380	6543.55	-947.74	-4.895e+04	3.507e+05	2.421e+06	0.0
861	reac per cdc 90 - nodo 380	-6543.55	947.74	-4.894e+04	-3.507e+05	-2.421e+06	0.0
862	reac per cdc 91 - nodo 380	-6728.67	-2563.98	-4.894e+04	9.487e+05	-2.490e+06	0.0
863	reac per cdc 92 - nodo 380	6436.43	3109.54	-4.894e+04	-1.151e+06	2.381e+06	0.0
864	reac per cdc 93 - nodo 380	6835.79	-1493.30	-4.894e+04	5.525e+05	2.529e+06	0.0
865	reac per cdc 94 - nodo 380	-6835.79	1493.30	-4.894e+04	-5.525e+05	-2.529e+06	0.0
866	reac per cdc 95 - nodo 380	-6436.43	-3109.54	-4.894e+04	1.151e+06	-2.381e+06	0.0
867	reac per cdc 96 - nodo 380	2202.54	5268.05	-4.893e+04	-1.949e+06	8.149e+05	0.0
868	reac per cdc 97 - nodo 380	1585.47	-6437.69	-4.895e+04	2.382e+06	5.866e+05	0.0
869	reac per cdc 98 - nodo 380	-1585.47	6437.69	-4.893e+04	-2.382e+06	-5.866e+05	0.0
870	reac per cdc 99 - nodo 380	-2202.54	-5268.05	-4.895e+04	1.949e+06	-8.149e+05	0.0
871	reac per cdc 100 - nodo 380	2299.37	6095.31	-4.893e+04	-2.255e+06	8.508e+05	0.0
872	reac per cdc 101 - nodo 380	1682.30	-5610.44	-4.895e+04	2.076e+06	6.224e+05	0.0
873	reac per cdc 102 - nodo 380	-1682.30	5610.44	-4.893e+04	-2.076e+06	-6.224e+05	0.0
874	reac per cdc 103 - nodo 380	-2299.37	-6095.31	-4.895e+04	2.255e+06	-8.508e+05	0.0
875	reac per cdc 104 - nodo 380	1228.41	7086.59	-4.893e+04	-2.622e+06	4.545e+05	0.0
876	reac per cdc 105 - nodo 380	2559.60	-8256.23	-4.895e+04	3.055e+06	9.471e+05	0.0
877	reac per cdc 106 - nodo 380	-2559.60	8256.23	-4.894e+04	-3.055e+06	-9.471e+05	0.0
878	reac per cdc 107 - nodo 380	-1228.41	-7086.59	-4.895e+04	2.622e+06	-4.545e+05	0.0
879	reac per cdc 108 - nodo 380	1325.24	7913.84	-4.893e+04	-2.928e+06	4.903e+05	0.0
880	reac per cdc 109 - nodo 380	2656.43	-7428.97	-4.895e+04	2.749e+06	9.829e+05	0.0
881	reac per cdc 110 - nodo 380	-2656.43	7428.97	-4.893e+04	-2.749e+06	-9.829e+05	0.0
882	reac per cdc 111 - nodo 380	-1325.24	-7913.84	-4.895e+04	2.928e+06	-4.903e+05	0.0
883	reac per cdc 112 - nodo 380	0.0	0.0	-8.157e+04	0.0	0.0	0.0
884	reac per cdc 113 - nodo 380	236.16	0.93	-4.894e+04	-345.17	8.738e+04	0.0
885	reac per cdc 114 - nodo 380	-223.17	-1.69	-4.894e+04	625.31	-8.257e+04	0.0
886	reac per cdc 115 - nodo 380	-20.81	552.86	-4.894e+04	-2.046e+05	-7699.12	0.0
887	reac per cdc 116 - nodo 380	-18.68	-552.96	-4.894e+04	2.046e+05	-6911.03	0.0
888	reac per cdc 117 - nodo 380	141.70	0.56	-8.157e+04	-207.10	5.243e+04	0.0
889	reac per cdc 118 - nodo 380	-133.90	-1.01	-8.157e+04	375.19	-4.954e+04	0.0
890	reac per cdc 119 - nodo 380	-12.49	331.71	-8.157e+04	-1.227e+05	-4619.47	0.0
891	reac per cdc 120 - nodo 380	-11.21	-331.78	-8.157e+04	1.228e+05	-4146.62	0.0
892	reac per cdc 121 - nodo 380	236.16	0.93	-6.525e+04	-345.17	8.738e+04	0.0
893	reac per cdc 122 - nodo 380	-223.17	-1.69	-6.525e+04	625.31	-8.257e+04	0.0
894	reac per cdc 123 - nodo 380	-20.81	552.86	-6.525e+04	-2.046e+05	-7699.12	0.0
895	reac per cdc 124 - nodo 380	-18.68	-552.96	-6.525e+04	2.046e+05	-6911.03	0.0
896	reac per cdc 125 - nodo 380	0.0	0.0	-5.547e+04	0.0	0.0	0.0
897	reac per cdc 126 - nodo 380	47.23	0.19	-4.894e+04	-69.03	1.748e+04	0.0
898	reac per cdc 127 - nodo 380	-44.63	-0.34	-4.894e+04	125.06	-1.651e+04	0.0
899	reac per cdc 128 - nodo 380	-4.16	110.57	-4.894e+04	-4.091e+04	-1539.82	0.0
900	reac per cdc 129 - nodo 380	-3.74	-110.59	-4.894e+04	4.092e+04	-1382.21	0.0
901	reac per cdc 130 - nodo 380	0.0	0.0	-4.894e+04	0.0	0.0	0.0
902	reac per cdc 3 - nodo 387	0.0	0.0	-1.246e+05	0.0	0.0	0.0
903	reac per cdc 4 - nodo 387	340.63	-1.77	-7.217e+04	654.28	1.260e+05	0.0
904	reac per cdc 5 - nodo 387	-339.05	-0.06	-7.217e+04	21.89	-1.254e+05	0.0
905	reac per cdc 6 - nodo 387	-5.74	811.07	-7.217e+04	-3.001e+05	-2124.74	0.0
906	reac per cdc 7 - nodo 387	0.73	-810.18	-7.217e+04	2.998e+05	269.67	0.0
907	reac per cdc 8 - nodo 387	204.38	-1.06	-1.246e+05	392.57	7.562e+04	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
908	reac per cdc 9 - nodo 387	-203.43	-0.04	-1.246e+05	13.13	-7.527e+04	0.0
909	reac per cdc 10 - nodo 387	-3.45	486.64	-1.246e+05	-1.801e+05	-1274.84	0.0
910	reac per cdc 11 - nodo 387	0.44	-486.11	-1.246e+05	1.799e+05	161.80	0.0
911	reac per cdc 12 - nodo 387	340.63	-1.77	-9.839e+04	654.28	1.260e+05	0.0
912	reac per cdc 13 - nodo 387	-339.05	-0.06	-9.839e+04	21.89	-1.254e+05	0.0
913	reac per cdc 14 - nodo 387	-5.74	811.07	-9.839e+04	-3.001e+05	-2124.74	0.0
914	reac per cdc 15 - nodo 387	0.73	-810.18	-9.839e+04	2.998e+05	269.67	0.0
915	reac per cdc 16 - nodo 387	1.215e+04	1545.04	-5.361e+04	-5.717e+05	4.495e+06	0.0
916	reac per cdc 17 - nodo 387	1.180e+04	-5956.04	-5.362e+04	2.204e+06	4.365e+06	0.0
917	reac per cdc 18 - nodo 387	-1.180e+04	5956.04	-5.362e+04	-2.204e+06	-4.365e+06	0.0
918	reac per cdc 19 - nodo 387	-1.215e+04	-1545.04	-5.362e+04	5.717e+05	-4.495e+06	0.0
919	reac per cdc 20 - nodo 387	1.159e+04	1103.57	-5.361e+04	-4.083e+05	4.290e+06	0.0
920	reac per cdc 21 - nodo 387	1.235e+04	-5514.57	-5.361e+04	2.040e+06	4.571e+06	0.0
921	reac per cdc 22 - nodo 387	-1.235e+04	5514.57	-5.362e+04	-2.040e+06	-4.571e+06	0.0
922	reac per cdc 23 - nodo 387	-1.159e+04	-1103.57	-5.362e+04	4.083e+05	-4.290e+06	0.0
923	reac per cdc 24 - nodo 387	1.276e+04	2760.83	-5.361e+04	-1.022e+06	4.722e+06	0.0
924	reac per cdc 25 - nodo 387	1.241e+04	-4740.25	-5.362e+04	1.754e+06	4.592e+06	0.0
925	reac per cdc 26 - nodo 387	-1.241e+04	4740.25	-5.361e+04	-1.754e+06	-4.592e+06	0.0
926	reac per cdc 27 - nodo 387	-1.276e+04	-2760.83	-5.362e+04	1.022e+06	-4.722e+06	0.0
927	reac per cdc 28 - nodo 387	1.221e+04	2319.36	-5.361e+04	-8.582e+05	4.517e+06	0.0
928	reac per cdc 29 - nodo 387	1.297e+04	-4298.78	-5.362e+04	1.591e+06	4.798e+06	0.0
929	reac per cdc 30 - nodo 387	-1.297e+04	4298.78	-5.361e+04	-1.591e+06	-4.798e+06	0.0
930	reac per cdc 31 - nodo 387	-1.221e+04	-2319.36	-5.362e+04	8.582e+05	-4.517e+06	0.0
931	reac per cdc 32 - nodo 387	4179.09	1.184e+04	-5.361e+04	-4.381e+06	1.546e+06	0.0
932	reac per cdc 33 - nodo 387	3004.99	-1.316e+04	-5.362e+04	4.870e+06	1.112e+06	0.0
933	reac per cdc 34 - nodo 387	-3004.99	1.316e+04	-5.361e+04	-4.870e+06	-1.112e+06	0.0
934	reac per cdc 35 - nodo 387	-4179.09	-1.184e+04	-5.363e+04	4.381e+06	-1.546e+06	0.0
935	reac per cdc 36 - nodo 387	4363.11	1.220e+04	-5.361e+04	-4.516e+06	1.614e+06	0.0
936	reac per cdc 37 - nodo 387	3189.01	-1.280e+04	-5.362e+04	4.736e+06	1.180e+06	0.0
937	reac per cdc 38 - nodo 387	-3189.01	1.280e+04	-5.361e+04	-4.736e+06	-1.180e+06	0.0
938	reac per cdc 39 - nodo 387	-4363.11	-1.220e+04	-5.363e+04	4.516e+06	-1.614e+06	0.0
939	reac per cdc 40 - nodo 387	2327.48	1.037e+04	-5.361e+04	-3.836e+06	8.612e+05	0.0
940	reac per cdc 41 - nodo 387	4856.60	-1.169e+04	-5.362e+04	4.326e+06	1.797e+06	0.0
941	reac per cdc 42 - nodo 387	-4856.60	1.169e+04	-5.361e+04	-4.326e+06	-1.797e+06	0.0
942	reac per cdc 43 - nodo 387	-2327.48	-1.037e+04	-5.362e+04	3.836e+06	-8.612e+05	0.0
943	reac per cdc 44 - nodo 387	2511.51	1.073e+04	-5.361e+04	-3.971e+06	9.293e+05	0.0
944	reac per cdc 45 - nodo 387	5040.62	-1.133e+04	-5.362e+04	4.191e+06	1.865e+06	0.0
945	reac per cdc 46 - nodo 387	-5040.62	1.133e+04	-5.361e+04	-4.191e+06	-1.865e+06	0.0
946	reac per cdc 47 - nodo 387	-2511.51	-1.073e+04	-5.362e+04	3.971e+06	-9.293e+05	0.0
947	reac per cdc 48 - nodo 387	7968.83	1013.38	-5.361e+04	-3.750e+05	2.948e+06	0.0
948	reac per cdc 49 - nodo 387	7737.81	-3906.53	-5.362e+04	1.445e+06	2.863e+06	0.0
949	reac per cdc 50 - nodo 387	-7737.81	3906.53	-5.362e+04	-1.445e+06	-2.863e+06	0.0
950	reac per cdc 51 - nodo 387	-7968.83	-1013.38	-5.362e+04	3.750e+05	-2.948e+06	0.0
951	reac per cdc 52 - nodo 387	7604.49	723.83	-5.361e+04	-2.678e+05	2.814e+06	0.0
952	reac per cdc 53 - nodo 387	8102.14	-3616.97	-5.361e+04	1.338e+06	2.998e+06	0.0
953	reac per cdc 54 - nodo 387	-8102.14	3616.97	-5.362e+04	-1.338e+06	-2.998e+06	0.0
954	reac per cdc 55 - nodo 387	-7604.49	-723.83	-5.362e+04	2.678e+05	-2.814e+06	0.0
955	reac per cdc 56 - nodo 387	8371.17	1810.81	-5.361e+04	-6.700e+05	3.097e+06	0.0
956	reac per cdc 57 - nodo 387	8140.15	-3109.10	-5.362e+04	1.150e+06	3.012e+06	0.0
957	reac per cdc 58 - nodo 387	-8140.15	3109.10	-5.361e+04	-1.150e+06	-3.012e+06	0.0
958	reac per cdc 59 - nodo 387	-8371.17	-1810.81	-5.362e+04	6.700e+05	-3.097e+06	0.0
959	reac per cdc 60 - nodo 387	8006.83	1521.25	-5.361e+04	-5.629e+05	2.963e+06	0.0
960	reac per cdc 61 - nodo 387	8504.48	-2819.54	-5.362e+04	1.043e+06	3.147e+06	0.0
961	reac per cdc 62 - nodo 387	-8504.48	2819.54	-5.362e+04	-1.043e+06	-3.147e+06	0.0
962	reac per cdc 63 - nodo 387	-8006.83	-1521.25	-5.362e+04	5.629e+05	-2.963e+06	0.0
963	reac per cdc 64 - nodo 387	2741.04	7765.88	-5.361e+04	-2.873e+06	1.014e+06	0.0
964	reac per cdc 65 - nodo 387	1970.95	-8633.83	-5.362e+04	3.195e+06	7.293e+05	0.0
965	reac per cdc 66 - nodo 387	-1970.95	8633.83	-5.361e+04	-3.195e+06	-7.293e+05	0.0
966	reac per cdc 67 - nodo 387	-2741.04	-7765.88	-5.362e+04	2.873e+06	-1.014e+06	0.0
967	reac per cdc 68 - nodo 387	2861.74	8005.11	-5.361e+04	-2.962e+06	1.059e+06	0.0
968	reac per cdc 69 - nodo 387	2091.66	-8394.60	-5.362e+04	3.106e+06	7.739e+05	0.0
969	reac per cdc 70 - nodo 387	-2091.66	8394.60	-5.361e+04	-3.106e+06	-7.739e+05	0.0
970	reac per cdc 71 - nodo 387	-2861.74	-8005.11	-5.362e+04	2.962e+06	-1.059e+06	0.0
971	reac per cdc 72 - nodo 387	1526.58	6800.69	-5.361e+04	-2.516e+06	5.648e+05	0.0
972	reac per cdc 73 - nodo 387	3185.41	-7668.63	-5.362e+04	2.837e+06	1.179e+06	0.0
973	reac per cdc 74 - nodo 387	-3185.41	7668.63	-5.361e+04	-2.837e+06	-1.179e+06	0.0
974	reac per cdc 75 - nodo 387	-1526.58	-6800.69	-5.362e+04	2.516e+06	-5.648e+05	0.0
975	reac per cdc 76 - nodo 387	1647.28	7039.92	-5.361e+04	-2.605e+06	6.095e+05	0.0
976	reac per cdc 77 - nodo 387	3306.11	-7429.40	-5.362e+04	2.749e+06	1.223e+06	0.0
977	reac per cdc 78 - nodo 387	-3306.11	7429.40	-5.361e+04	-2.749e+06	-1.223e+06	0.0
978	reac per cdc 79 - nodo 387	-1647.28	-7039.92	-5.362e+04	2.605e+06	-6.095e+05	0.0
979	reac per cdc 80 - nodo 387	6400.72	813.97	-5.361e+04	-3.012e+05	2.368e+06	0.0
980	reac per cdc 81 - nodo 387	6215.15	-3137.80	-5.362e+04	1.161e+06	2.300e+06	0.0
981	reac per cdc 82 - nodo 387	-6215.15	3137.80	-5.362e+04	-1.161e+06	-2.300e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
982	reac per cdc 83 - nodo 387	-6400.72	-813.97	-5.362e+04	3.012e+05	-2.368e+06	0.0
983	reac per cdc 84 - nodo 387	6108.08	581.39	-5.361e+04	-2.151e+05	2.260e+06	0.0
984	reac per cdc 85 - nodo 387	6507.80	-2905.22	-5.362e+04	1.075e+06	2.408e+06	0.0
985	reac per cdc 86 - nodo 387	-6507.80	2905.22	-5.362e+04	-1.075e+06	-2.408e+06	0.0
986	reac per cdc 87 - nodo 387	-6108.08	-581.39	-5.362e+04	2.151e+05	-2.260e+06	0.0
987	reac per cdc 88 - nodo 387	6723.89	1454.48	-5.361e+04	-5.382e+05	2.488e+06	0.0
988	reac per cdc 89 - nodo 387	6538.32	-2497.29	-5.362e+04	9.240e+05	2.419e+06	0.0
989	reac per cdc 90 - nodo 387	-6538.32	2497.29	-5.361e+04	-9.240e+05	-2.419e+06	0.0
990	reac per cdc 91 - nodo 387	-6723.89	-1454.48	-5.362e+04	5.382e+05	-2.488e+06	0.0
991	reac per cdc 92 - nodo 387	6431.24	1221.90	-5.361e+04	-4.521e+05	2.380e+06	0.0
992	reac per cdc 93 - nodo 387	6830.97	-2264.71	-5.362e+04	8.379e+05	2.527e+06	0.0
993	reac per cdc 94 - nodo 387	-6830.97	2264.71	-5.362e+04	-8.379e+05	-2.527e+06	0.0
994	reac per cdc 95 - nodo 387	-6431.24	-1221.90	-5.362e+04	4.521e+05	-2.380e+06	0.0
995	reac per cdc 96 - nodo 387	2201.66	6237.71	-5.361e+04	-2.308e+06	8.146e+05	0.0
996	reac per cdc 97 - nodo 387	1583.11	-6934.86	-5.362e+04	2.566e+06	5.857e+05	0.0
997	reac per cdc 98 - nodo 387	-1583.11	6934.86	-5.361e+04	-2.566e+06	-5.857e+05	0.0
998	reac per cdc 99 - nodo 387	-2201.66	-6237.71	-5.362e+04	2.308e+06	-8.146e+05	0.0
999	reac per cdc 100 - nodo 387	2298.61	6429.86	-5.361e+04	-2.379e+06	8.505e+05	0.0
1000	reac per cdc 101 - nodo 387	1680.06	-6742.70	-5.362e+04	2.495e+06	6.216e+05	0.0
1001	reac per cdc 102 - nodo 387	-1680.06	6742.70	-5.361e+04	-2.495e+06	-6.216e+05	0.0
1002	reac per cdc 103 - nodo 387	-2298.61	-6429.86	-5.362e+04	2.379e+06	-8.505e+05	0.0
1003	reac per cdc 104 - nodo 387	1226.18	5462.44	-5.361e+04	-2.021e+06	4.537e+05	0.0
1004	reac per cdc 105 - nodo 387	2558.58	-6159.59	-5.362e+04	2.279e+06	9.467e+05	0.0
1005	reac per cdc 106 - nodo 387	-2558.58	6159.59	-5.361e+04	-2.279e+06	-9.467e+05	0.0
1006	reac per cdc 107 - nodo 387	-1226.18	-5462.44	-5.362e+04	2.021e+06	-4.537e+05	0.0
1007	reac per cdc 108 - nodo 387	1323.13	5654.60	-5.361e+04	-2.092e+06	4.896e+05	0.0
1008	reac per cdc 109 - nodo 387	2655.53	-5967.44	-5.362e+04	2.208e+06	9.825e+05	0.0
1009	reac per cdc 110 - nodo 387	-2655.53	5967.44	-5.361e+04	-2.208e+06	-9.825e+05	0.0
1010	reac per cdc 111 - nodo 387	-1323.13	-5654.60	-5.362e+04	2.092e+06	-4.896e+05	0.0
1011	reac per cdc 112 - nodo 387	0.0	0.0	-8.857e+04	0.0	0.0	0.0
1012	reac per cdc 113 - nodo 387	227.08	-1.18	-5.362e+04	436.19	8.402e+04	0.0
1013	reac per cdc 114 - nodo 387	-226.04	-0.04	-5.362e+04	14.59	-8.363e+04	0.0
1014	reac per cdc 115 - nodo 387	-3.83	540.71	-5.362e+04	-2.001e+05	-1416.49	0.0
1015	reac per cdc 116 - nodo 387	0.49	-540.12	-5.362e+04	1.998e+05	179.78	0.0
1016	reac per cdc 117 - nodo 387	136.25	-0.71	-8.857e+04	261.71	5.041e+04	0.0
1017	reac per cdc 118 - nodo 387	-135.62	-0.02	-8.857e+04	8.75	-5.018e+04	0.0
1018	reac per cdc 119 - nodo 387	-2.30	324.43	-8.857e+04	-1.200e+05	-849.90	0.0
1019	reac per cdc 120 - nodo 387	0.29	-324.07	-8.857e+04	1.199e+05	107.87	0.0
1020	reac per cdc 121 - nodo 387	227.08	-1.18	-7.110e+04	436.19	8.402e+04	0.0
1021	reac per cdc 122 - nodo 387	-226.04	-0.04	-7.110e+04	14.59	-8.363e+04	0.0
1022	reac per cdc 123 - nodo 387	-3.83	540.71	-7.110e+04	-2.001e+05	-1416.49	0.0
1023	reac per cdc 124 - nodo 387	0.49	-540.12	-7.110e+04	1.998e+05	179.78	0.0
1024	reac per cdc 125 - nodo 387	0.0	0.0	-6.061e+04	0.0	0.0	0.0
1025	reac per cdc 126 - nodo 387	45.42	-0.24	-5.362e+04	87.24	1.680e+04	0.0
1026	reac per cdc 127 - nodo 387	-45.21	-7.89e-03	-5.362e+04	2.92	-1.673e+04	0.0
1027	reac per cdc 128 - nodo 387	-0.77	108.14	-5.362e+04	-4.001e+04	-283.30	0.0
1028	reac per cdc 129 - nodo 387	0.10	-108.02	-5.362e+04	3.997e+04	35.96	0.0
1029	reac per cdc 130 - nodo 387	0.0	0.0	-5.362e+04	0.0	0.0	0.0
1030	reac per cdc 3 - nodo 394	0.0	0.0	-1.126e+05	0.0	0.0	0.0
1031	reac per cdc 4 - nodo 394	334.53	-3.63	-6.475e+04	1343.91	1.238e+05	0.0
1032	reac per cdc 5 - nodo 394	-350.27	1.45	-6.475e+04	-535.44	-1.296e+05	0.0
1033	reac per cdc 6 - nodo 394	18.24	758.64	-6.475e+04	-2.807e+05	6749.65	0.0
1034	reac per cdc 7 - nodo 394	28.61	-756.99	-6.475e+04	2.801e+05	1.058e+04	0.0
1035	reac per cdc 8 - nodo 394	200.72	-2.18	-1.126e+05	806.35	7.426e+04	0.0
1036	reac per cdc 9 - nodo 394	-210.16	0.87	-1.126e+05	-321.26	-7.776e+04	0.0
1037	reac per cdc 10 - nodo 394	10.95	455.19	-1.126e+05	-1.684e+05	4049.79	0.0
1038	reac per cdc 11 - nodo 394	17.16	-454.20	-1.126e+05	1.681e+05	6350.44	0.0
1039	reac per cdc 12 - nodo 394	334.53	-3.63	-8.865e+04	1343.91	1.238e+05	0.0
1040	reac per cdc 13 - nodo 394	-350.27	1.45	-8.865e+04	-535.44	-1.296e+05	0.0
1041	reac per cdc 14 - nodo 394	18.24	758.64	-8.865e+04	-2.807e+05	6749.65	0.0
1042	reac per cdc 15 - nodo 394	28.61	-756.99	-8.865e+04	2.801e+05	1.058e+04	0.0
1043	reac per cdc 16 - nodo 394	1.209e+04	7779.69	-4.808e+04	-2.878e+06	4.475e+06	0.0
1044	reac per cdc 17 - nodo 394	1.174e+04	-454.88	-4.808e+04	1.683e+05	4.344e+06	0.0
1045	reac per cdc 18 - nodo 394	-1.174e+04	454.88	-4.807e+04	-1.683e+05	-4.344e+06	0.0
1046	reac per cdc 19 - nodo 394	-1.209e+04	-7779.69	-4.808e+04	2.878e+06	-4.475e+06	0.0
1047	reac per cdc 20 - nodo 394	1.154e+04	6304.95	-4.808e+04	-2.333e+06	4.270e+06	0.0
1048	reac per cdc 21 - nodo 394	1.230e+04	1019.86	-4.808e+04	-3.773e+05	4.549e+06	0.0
1049	reac per cdc 22 - nodo 394	-1.230e+04	-1019.86	-4.808e+04	3.773e+05	-4.549e+06	0.0
1050	reac per cdc 23 - nodo 394	-1.154e+04	-6304.95	-4.808e+04	2.333e+06	-4.270e+06	0.0
1051	reac per cdc 24 - nodo 394	1.271e+04	2382.64	-4.808e+04	-8.816e+05	4.702e+06	0.0
1052	reac per cdc 25 - nodo 394	1.236e+04	-5851.94	-4.808e+04	2.165e+06	4.572e+06	0.0
1053	reac per cdc 26 - nodo 394	-1.236e+04	5851.94	-4.807e+04	-2.165e+06	-4.572e+06	0.0
1054	reac per cdc 27 - nodo 394	-1.271e+04	-2382.64	-4.808e+04	8.816e+05	-4.702e+06	0.0
1055	reac per cdc 28 - nodo 394	1.215e+04	907.90	-4.808e+04	-3.359e+05	4.497e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1056	reac per cdc 29 - nodo 394	1.291e+04	-4377.19	-4.808e+04	1.620e+06	4.777e+06	0.0
1057	reac per cdc 30 - nodo 394	-1.291e+04	4377.19	-4.808e+04	-1.620e+06	-4.777e+06	0.0
1058	reac per cdc 31 - nodo 394	-1.215e+04	-907.90	-4.808e+04	3.359e+05	-4.497e+06	0.0
1059	reac per cdc 32 - nodo 394	4162.51	1.482e+04	-4.807e+04	-5.485e+06	1.540e+06	0.0
1060	reac per cdc 33 - nodo 394	2988.04	-1.263e+04	-4.809e+04	4.671e+06	1.106e+06	0.0
1061	reac per cdc 34 - nodo 394	-2988.04	1.263e+04	-4.807e+04	-4.671e+06	-1.106e+06	0.0
1062	reac per cdc 35 - nodo 394	-4162.51	-1.482e+04	-4.809e+04	5.485e+06	-1.540e+06	0.0
1063	reac per cdc 36 - nodo 394	4346.80	1.320e+04	-4.807e+04	-4.885e+06	1.608e+06	0.0
1064	reac per cdc 37 - nodo 394	3172.33	-1.424e+04	-4.809e+04	5.271e+06	1.174e+06	0.0
1065	reac per cdc 38 - nodo 394	-3172.33	1.424e+04	-4.807e+04	-5.271e+06	-1.174e+06	0.0
1066	reac per cdc 39 - nodo 394	-4346.80	-1.320e+04	-4.809e+04	4.885e+06	-1.608e+06	0.0
1067	reac per cdc 40 - nodo 394	2314.48	9907.21	-4.808e+04	-3.666e+06	8.564e+05	0.0
1068	reac per cdc 41 - nodo 394	4836.08	-7709.77	-4.808e+04	2.853e+06	1.789e+06	0.0
1069	reac per cdc 42 - nodo 394	-4836.08	7709.77	-4.807e+04	-2.853e+06	-1.789e+06	0.0
1070	reac per cdc 43 - nodo 394	-2314.48	-9907.21	-4.808e+04	3.666e+06	-8.564e+05	0.0
1071	reac per cdc 44 - nodo 394	2498.76	8288.09	-4.808e+04	-3.067e+06	9.245e+05	0.0
1072	reac per cdc 45 - nodo 394	5020.36	-9328.88	-4.808e+04	3.452e+06	1.858e+06	0.0
1073	reac per cdc 46 - nodo 394	-5020.36	9328.88	-4.807e+04	-3.452e+06	-1.858e+06	0.0
1074	reac per cdc 47 - nodo 394	-2498.76	-8288.09	-4.808e+04	3.067e+06	-9.245e+05	0.0
1075	reac per cdc 48 - nodo 394	7932.23	5102.65	-4.808e+04	-1.888e+06	2.935e+06	0.0
1076	reac per cdc 49 - nodo 394	7701.13	-298.36	-4.808e+04	1.104e+05	2.849e+06	0.0
1077	reac per cdc 50 - nodo 394	-7701.13	298.36	-4.808e+04	-1.104e+05	-2.849e+06	0.0
1078	reac per cdc 51 - nodo 394	-7932.23	-5102.65	-4.808e+04	1.888e+06	-2.935e+06	0.0
1079	reac per cdc 52 - nodo 394	7568.59	4135.38	-4.808e+04	-1.530e+06	2.800e+06	0.0
1080	reac per cdc 53 - nodo 394	8064.76	668.92	-4.808e+04	-2.475e+05	2.984e+06	0.0
1081	reac per cdc 54 - nodo 394	-8064.76	-668.92	-4.808e+04	2.475e+05	-2.984e+06	0.0
1082	reac per cdc 55 - nodo 394	-7568.59	-4135.38	-4.808e+04	1.530e+06	-2.800e+06	0.0
1083	reac per cdc 56 - nodo 394	8335.13	1562.76	-4.808e+04	-5.782e+05	3.084e+06	0.0
1084	reac per cdc 57 - nodo 394	8104.03	-3838.25	-4.808e+04	1.420e+06	2.998e+06	0.0
1085	reac per cdc 58 - nodo 394	-8104.03	3838.25	-4.808e+04	-1.420e+06	-2.998e+06	0.0
1086	reac per cdc 59 - nodo 394	-8335.13	-1562.76	-4.808e+04	5.782e+05	-3.084e+06	0.0
1087	reac per cdc 60 - nodo 394	7971.50	595.49	-4.808e+04	-2.203e+05	2.949e+06	0.0
1088	reac per cdc 61 - nodo 394	8467.67	-2870.97	-4.808e+04	1.062e+06	3.133e+06	0.0
1089	reac per cdc 62 - nodo 394	-8467.67	2870.97	-4.808e+04	-1.062e+06	-3.133e+06	0.0
1090	reac per cdc 63 - nodo 394	-7971.50	-595.49	-4.808e+04	2.203e+05	-2.949e+06	0.0
1091	reac per cdc 64 - nodo 394	2730.17	9722.33	-4.808e+04	-3.597e+06	1.010e+06	0.0
1092	reac per cdc 65 - nodo 394	1959.84	-8281.04	-4.809e+04	3.064e+06	7.251e+05	0.0
1093	reac per cdc 66 - nodo 394	-1959.84	8281.04	-4.807e+04	-3.064e+06	-7.251e+05	0.0
1094	reac per cdc 67 - nodo 394	-2730.17	-9722.33	-4.808e+04	3.597e+06	-1.010e+06	0.0
1095	reac per cdc 68 - nodo 394	2851.04	8660.36	-4.807e+04	-3.204e+06	1.055e+06	0.0
1096	reac per cdc 69 - nodo 394	2080.71	-9343.00	-4.809e+04	3.457e+06	7.699e+05	0.0
1097	reac per cdc 70 - nodo 394	-2080.71	9343.00	-4.807e+04	-3.457e+06	-7.699e+05	0.0
1098	reac per cdc 71 - nodo 394	-2851.04	-8660.36	-4.808e+04	3.204e+06	-1.055e+06	0.0
1099	reac per cdc 72 - nodo 394	1518.05	6498.08	-4.808e+04	-2.404e+06	5.617e+05	0.0
1100	reac per cdc 73 - nodo 394	3171.95	-5056.79	-4.808e+04	1.871e+06	1.174e+06	0.0
1101	reac per cdc 74 - nodo 394	-3171.95	5056.79	-4.808e+04	-1.871e+06	-1.174e+06	0.0
1102	reac per cdc 75 - nodo 394	-1518.05	-6498.08	-4.808e+04	2.404e+06	-5.617e+05	0.0
1103	reac per cdc 76 - nodo 394	1638.92	5436.11	-4.808e+04	-2.011e+06	6.064e+05	0.0
1104	reac per cdc 77 - nodo 394	3292.82	-6118.76	-4.808e+04	2.264e+06	1.218e+06	0.0
1105	reac per cdc 78 - nodo 394	-3292.82	6118.76	-4.808e+04	-2.264e+06	-1.218e+06	0.0
1106	reac per cdc 79 - nodo 394	-1638.92	-5436.11	-4.808e+04	2.011e+06	-6.064e+05	0.0
1107	reac per cdc 80 - nodo 394	6371.32	4098.55	-4.808e+04	-1.516e+06	2.357e+06	0.0
1108	reac per cdc 81 - nodo 394	6185.70	-239.64	-4.808e+04	8.867e+04	2.289e+06	0.0
1109	reac per cdc 82 - nodo 394	-6185.70	239.64	-4.808e+04	-8.867e+04	-2.289e+06	0.0
1110	reac per cdc 83 - nodo 394	-6371.32	-4098.55	-4.808e+04	1.516e+06	-2.357e+06	0.0
1111	reac per cdc 84 - nodo 394	6079.24	3321.62	-4.808e+04	-1.229e+06	2.249e+06	0.0
1112	reac per cdc 85 - nodo 394	6477.77	537.29	-4.808e+04	-1.988e+05	2.397e+06	0.0
1113	reac per cdc 86 - nodo 394	-6477.77	-537.29	-4.808e+04	1.988e+05	-2.397e+06	0.0
1114	reac per cdc 87 - nodo 394	-6079.24	-3321.62	-4.808e+04	1.229e+06	-2.249e+06	0.0
1115	reac per cdc 88 - nodo 394	6694.94	1255.24	-4.808e+04	-4.644e+05	2.477e+06	0.0
1116	reac per cdc 89 - nodo 394	6509.32	-3082.96	-4.808e+04	1.141e+06	2.408e+06	0.0
1117	reac per cdc 90 - nodo 394	-6509.32	3082.96	-4.808e+04	-1.141e+06	-2.408e+06	0.0
1118	reac per cdc 91 - nodo 394	-6694.94	-1255.24	-4.808e+04	4.644e+05	-2.477e+06	0.0
1119	reac per cdc 92 - nodo 394	6402.86	478.31	-4.808e+04	-1.770e+05	2.369e+06	0.0
1120	reac per cdc 93 - nodo 394	6801.40	-2306.02	-4.808e+04	8.532e+05	2.517e+06	0.0
1121	reac per cdc 94 - nodo 394	-6801.40	2306.02	-4.808e+04	-8.532e+05	-2.517e+06	0.0
1122	reac per cdc 95 - nodo 394	-6402.86	-478.31	-4.808e+04	1.770e+05	-2.369e+06	0.0
1123	reac per cdc 96 - nodo 394	2192.92	7809.16	-4.808e+04	-2.889e+06	8.114e+05	0.0
1124	reac per cdc 97 - nodo 394	1574.18	-6651.49	-4.808e+04	2.461e+06	5.824e+05	0.0
1125	reac per cdc 98 - nodo 394	-1574.18	6651.49	-4.807e+04	-2.461e+06	-5.824e+05	0.0
1126	reac per cdc 99 - nodo 394	-2192.92	-7809.16	-4.808e+04	2.889e+06	-8.114e+05	0.0
1127	reac per cdc 100 - nodo 394	2290.01	6956.17	-4.808e+04	-2.574e+06	8.473e+05	0.0
1128	reac per cdc 101 - nodo 394	1671.27	-7504.48	-4.808e+04	2.777e+06	6.184e+05	0.0
1129	reac per cdc 102 - nodo 394	-1671.27	7504.48	-4.808e+04	-2.777e+06	-6.184e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1130	reac per cdc 103 - nodo 394	-2290.01	-6956.17	-4.808e+04	2.574e+06	-8.473e+05	0.0
1131	reac per cdc 104 - nodo 394	1219.33	5219.38	-4.808e+04	-1.931e+06	4.512e+05	0.0
1132	reac per cdc 105 - nodo 394	2547.78	-4061.71	-4.808e+04	1.503e+06	9.427e+05	0.0
1133	reac per cdc 106 - nodo 394	-2547.78	4061.71	-4.808e+04	-1.503e+06	-9.427e+05	0.0
1134	reac per cdc 107 - nodo 394	-1219.33	-5219.38	-4.808e+04	1.931e+06	-4.512e+05	0.0
1135	reac per cdc 108 - nodo 394	1316.42	4366.39	-4.808e+04	-1.616e+06	4.871e+05	0.0
1136	reac per cdc 109 - nodo 394	2644.86	-4914.70	-4.808e+04	1.818e+06	9.786e+05	0.0
1137	reac per cdc 110 - nodo 394	-2644.86	4914.70	-4.808e+04	-1.818e+06	-9.786e+05	0.0
1138	reac per cdc 111 - nodo 394	-1316.42	-4366.39	-4.808e+04	1.616e+06	-4.871e+05	0.0
1139	reac per cdc 112 - nodo 394	0.0	0.0	-7.995e+04	0.0	0.0	0.0
1140	reac per cdc 113 - nodo 394	223.02	-2.42	-4.808e+04	895.94	8.252e+04	0.0
1141	reac per cdc 114 - nodo 394	-233.51	0.96	-4.808e+04	-356.96	-8.640e+04	0.0
1142	reac per cdc 115 - nodo 394	12.16	505.76	-4.808e+04	-1.871e+05	4499.77	0.0
1143	reac per cdc 116 - nodo 394	19.07	-504.66	-4.808e+04	1.867e+05	7056.05	0.0
1144	reac per cdc 117 - nodo 394	133.81	-1.45	-7.995e+04	537.56	4.951e+04	0.0
1145	reac per cdc 118 - nodo 394	-140.11	0.58	-7.995e+04	-214.18	-5.184e+04	0.0
1146	reac per cdc 119 - nodo 394	7.30	303.46	-7.995e+04	-1.123e+05	2699.86	0.0
1147	reac per cdc 120 - nodo 394	11.44	-302.80	-7.995e+04	1.120e+05	4233.63	0.0
1148	reac per cdc 121 - nodo 394	223.02	-2.42	-6.401e+04	895.94	8.252e+04	0.0
1149	reac per cdc 122 - nodo 394	-233.51	0.96	-6.401e+04	-356.96	-8.640e+04	0.0
1150	reac per cdc 123 - nodo 394	12.16	505.76	-6.401e+04	-1.871e+05	4499.77	0.0
1151	reac per cdc 124 - nodo 394	19.07	-504.66	-6.401e+04	1.867e+05	7056.05	0.0
1152	reac per cdc 125 - nodo 394	0.0	0.0	-5.445e+04	0.0	0.0	0.0
1153	reac per cdc 126 - nodo 394	44.60	-0.48	-4.808e+04	179.19	1.650e+04	0.0
1154	reac per cdc 127 - nodo 394	-46.70	0.19	-4.808e+04	-71.39	-1.728e+04	0.0
1155	reac per cdc 128 - nodo 394	2.43	101.15	-4.808e+04	-3.743e+04	899.95	0.0
1156	reac per cdc 129 - nodo 394	3.81	-100.93	-4.808e+04	3.734e+04	1411.21	0.0
1157	reac per cdc 130 - nodo 394	0.0	0.0	-4.808e+04	0.0	0.0	0.0
1158	reac per cdc 3 - nodo 401	0.0	0.0	-3.947e+04	0.0	0.0	0.0
1159	reac per cdc 4 - nodo 401	335.45	-4.17	-2.520e+04	1544.27	1.241e+05	0.0
1160	reac per cdc 5 - nodo 401	-364.72	2.11	-2.520e+04	-782.10	-1.349e+05	0.0
1161	reac per cdc 6 - nodo 401	40.99	690.91	-2.520e+04	-2.556e+05	1.516e+04	0.0
1162	reac per cdc 7 - nodo 401	50.64	-688.71	-2.520e+04	2.548e+05	1.874e+04	0.0
1163	reac per cdc 8 - nodo 401	201.27	-2.50	-3.947e+04	926.56	7.447e+04	0.0
1164	reac per cdc 9 - nodo 401	-218.83	1.27	-3.947e+04	-469.26	-8.097e+04	0.0
1165	reac per cdc 10 - nodo 401	24.59	414.55	-3.947e+04	-1.534e+05	9098.81	0.0
1166	reac per cdc 11 - nodo 401	30.38	-413.22	-3.947e+04	1.529e+05	1.124e+04	0.0
1167	reac per cdc 12 - nodo 401	335.45	-4.17	-3.234e+04	1544.27	1.241e+05	0.0
1168	reac per cdc 13 - nodo 401	-364.72	2.11	-3.234e+04	-782.10	-1.349e+05	0.0
1169	reac per cdc 14 - nodo 401	40.99	690.91	-3.234e+04	-2.556e+05	1.516e+04	0.0
1170	reac per cdc 15 - nodo 401	50.64	-688.71	-3.234e+04	2.548e+05	1.874e+04	0.0
1171	reac per cdc 16 - nodo 401	1.202e+04	1.018e+04	-1.887e+04	-3.766e+06	4.447e+06	0.0
1172	reac per cdc 17 - nodo 401	1.167e+04	1384.82	-1.887e+04	-5.124e+05	4.318e+06	0.0
1173	reac per cdc 18 - nodo 401	-1.167e+04	-1384.82	-1.887e+04	5.124e+05	-4.318e+06	0.0
1174	reac per cdc 19 - nodo 401	-1.202e+04	-1.018e+04	-1.887e+04	3.766e+06	-4.447e+06	0.0
1175	reac per cdc 20 - nodo 401	1.147e+04	8353.49	-1.887e+04	-3.091e+06	4.243e+06	0.0
1176	reac per cdc 21 - nodo 401	1.222e+04	3208.59	-1.887e+04	-1.187e+06	4.522e+06	0.0
1177	reac per cdc 22 - nodo 401	-1.222e+04	-3208.59	-1.887e+04	1.187e+06	-4.522e+06	0.0
1178	reac per cdc 23 - nodo 401	-1.147e+04	-8353.49	-1.887e+04	3.091e+06	-4.243e+06	0.0
1179	reac per cdc 24 - nodo 401	1.263e+04	1737.50	-1.887e+04	-6.429e+05	4.674e+06	0.0
1180	reac per cdc 25 - nodo 401	1.228e+04	-7054.95	-1.887e+04	2.610e+06	4.544e+06	0.0
1181	reac per cdc 26 - nodo 401	-1.228e+04	7054.95	-1.887e+04	-2.610e+06	-4.544e+06	0.0
1182	reac per cdc 27 - nodo 401	-1.263e+04	-1737.50	-1.887e+04	6.429e+05	-4.674e+06	0.0
1183	reac per cdc 28 - nodo 401	1.208e+04	-86.28	-1.887e+04	3.192e+04	4.470e+06	0.0
1184	reac per cdc 29 - nodo 401	1.283e+04	-5231.17	-1.887e+04	1.936e+06	4.748e+06	0.0
1185	reac per cdc 30 - nodo 401	-1.283e+04	5231.17	-1.887e+04	-1.936e+06	-4.748e+06	0.0
1186	reac per cdc 31 - nodo 401	-1.208e+04	86.28	-1.887e+04	-3.192e+04	-4.470e+06	0.0
1187	reac per cdc 32 - nodo 401	4135.96	1.639e+04	-1.887e+04	-6.064e+06	1.530e+06	0.0
1188	reac per cdc 33 - nodo 401	2970.56	-1.292e+04	-1.887e+04	4.780e+06	1.099e+06	0.0
1189	reac per cdc 34 - nodo 401	-2970.56	1.292e+04	-1.887e+04	-4.780e+06	-1.099e+06	0.0
1190	reac per cdc 35 - nodo 401	-4135.96	-1.639e+04	-1.887e+04	6.064e+06	-1.530e+06	0.0
1191	reac per cdc 36 - nodo 401	4319.77	1.386e+04	-1.887e+04	-5.127e+06	1.598e+06	0.0
1192	reac per cdc 37 - nodo 401	3154.37	-1.545e+04	-1.887e+04	5.717e+06	1.167e+06	0.0
1193	reac per cdc 38 - nodo 401	-3154.37	1.545e+04	-1.887e+04	-5.717e+06	-1.167e+06	0.0
1194	reac per cdc 39 - nodo 401	-4319.77	-1.386e+04	-1.887e+04	5.127e+06	-1.598e+06	0.0
1195	reac per cdc 40 - nodo 401	2298.35	1.031e+04	-1.887e+04	-3.814e+06	8.504e+05	0.0
1196	reac per cdc 41 - nodo 401	4808.17	-6840.51	-1.887e+04	2.531e+06	1.779e+06	0.0
1197	reac per cdc 42 - nodo 401	-4808.17	6840.51	-1.887e+04	-2.531e+06	-1.779e+06	0.0
1198	reac per cdc 43 - nodo 401	-2298.35	-1.031e+04	-1.887e+04	3.814e+06	-8.504e+05	0.0
1199	reac per cdc 44 - nodo 401	2482.16	7777.21	-1.887e+04	-2.878e+06	9.184e+05	0.0
1200	reac per cdc 45 - nodo 401	4991.98	-9372.44	-1.887e+04	3.468e+06	1.847e+06	0.0
1201	reac per cdc 46 - nodo 401	-4991.98	9372.44	-1.887e+04	-3.468e+06	-1.847e+06	0.0
1202	reac per cdc 47 - nodo 401	-2482.16	-7777.21	-1.887e+04	2.878e+06	-9.184e+05	0.0
1203	reac per cdc 48 - nodo 401	7883.20	6675.21	-1.887e+04	-2.470e+06	2.917e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1204	reac per cdc 49 - nodo 401	7653.89	908.29	-1.887e+04	-3.361e+05	2.832e+06	0.0
1205	reac per cdc 50 - nodo 401	-7653.89	-908.29	-1.887e+04	3.361e+05	-2.832e+06	0.0
1206	reac per cdc 51 - nodo 401	-7883.20	-6675.21	-1.887e+04	2.470e+06	-2.917e+06	0.0
1207	reac per cdc 52 - nodo 401	7521.62	5479.00	-1.887e+04	-2.027e+06	2.783e+06	0.0
1208	reac per cdc 53 - nodo 401	8015.47	2104.50	-1.887e+04	-7.787e+05	2.966e+06	0.0
1209	reac per cdc 54 - nodo 401	-8015.47	-2104.50	-1.887e+04	7.787e+05	-2.966e+06	0.0
1210	reac per cdc 55 - nodo 401	-7521.62	-5479.00	-1.887e+04	2.027e+06	-2.783e+06	0.0
1211	reac per cdc 56 - nodo 401	8285.06	1139.62	-1.887e+04	-4.217e+05	3.065e+06	0.0
1212	reac per cdc 57 - nodo 401	8055.74	-4627.30	-1.887e+04	1.712e+06	2.981e+06	0.0
1213	reac per cdc 58 - nodo 401	-8055.74	4627.30	-1.887e+04	-1.712e+06	-2.981e+06	0.0
1214	reac per cdc 59 - nodo 401	-8285.06	-1139.62	-1.887e+04	4.217e+05	-3.065e+06	0.0
1215	reac per cdc 60 - nodo 401	7923.48	-56.59	-1.887e+04	2.094e+04	2.932e+06	0.0
1216	reac per cdc 61 - nodo 401	8417.33	-3431.09	-1.887e+04	1.270e+06	3.114e+06	0.0
1217	reac per cdc 62 - nodo 401	-8417.33	3431.09	-1.887e+04	-1.270e+06	-3.114e+06	0.0
1218	reac per cdc 63 - nodo 401	-7923.48	56.59	-1.887e+04	-2.094e+04	-2.932e+06	0.0
1219	reac per cdc 64 - nodo 401	2712.75	1.075e+04	-1.887e+04	-3.977e+06	1.004e+06	0.0
1220	reac per cdc 65 - nodo 401	1948.38	-8474.00	-1.887e+04	3.135e+06	7.209e+05	0.0
1221	reac per cdc 66 - nodo 401	-1948.38	8474.00	-1.887e+04	-3.135e+06	-7.209e+05	0.0
1222	reac per cdc 67 - nodo 401	-2712.75	-1.075e+04	-1.887e+04	3.977e+06	-1.004e+06	0.0
1223	reac per cdc 68 - nodo 401	2833.31	9088.37	-1.887e+04	-3.363e+06	1.048e+06	0.0
1224	reac per cdc 69 - nodo 401	2068.93	-1.013e+04	-1.887e+04	3.750e+06	7.655e+05	0.0
1225	reac per cdc 70 - nodo 401	-2068.93	1.013e+04	-1.887e+04	-3.750e+06	-7.655e+05	0.0
1226	reac per cdc 71 - nodo 401	-2833.31	-9088.37	-1.887e+04	3.363e+06	-1.048e+06	0.0
1227	reac per cdc 72 - nodo 401	1507.48	6761.70	-1.887e+04	-2.502e+06	5.578e+05	0.0
1228	reac per cdc 73 - nodo 401	3153.65	-4486.65	-1.887e+04	1.660e+06	1.167e+06	0.0
1229	reac per cdc 74 - nodo 401	-3153.65	4486.65	-1.887e+04	-1.660e+06	-1.167e+06	0.0
1230	reac per cdc 75 - nodo 401	-1507.48	-6761.70	-1.887e+04	2.502e+06	-5.578e+05	0.0
1231	reac per cdc 76 - nodo 401	1628.03	5101.02	-1.887e+04	-1.887e+06	6.024e+05	0.0
1232	reac per cdc 77 - nodo 401	3274.21	-6147.33	-1.887e+04	2.275e+06	1.211e+06	0.0
1233	reac per cdc 78 - nodo 401	-3274.21	6147.33	-1.887e+04	-2.275e+06	-1.211e+06	0.0
1234	reac per cdc 79 - nodo 401	-1628.03	-5101.02	-1.887e+04	1.887e+06	-6.024e+05	0.0
1235	reac per cdc 80 - nodo 401	6331.94	5361.66	-1.887e+04	-1.984e+06	2.343e+06	0.0
1236	reac per cdc 81 - nodo 401	6147.75	729.56	-1.887e+04	-2.699e+05	2.275e+06	0.0
1237	reac per cdc 82 - nodo 401	-6147.75	-729.56	-1.887e+04	2.699e+05	-2.275e+06	0.0
1238	reac per cdc 83 - nodo 401	-6331.94	-5361.66	-1.887e+04	1.984e+06	-2.343e+06	0.0
1239	reac per cdc 84 - nodo 401	6041.51	4400.84	-1.887e+04	-1.628e+06	2.235e+06	0.0
1240	reac per cdc 85 - nodo 401	6438.18	1690.37	-1.887e+04	-6.254e+05	2.382e+06	0.0
1241	reac per cdc 86 - nodo 401	-6438.18	-1690.37	-1.887e+04	6.254e+05	-2.382e+06	0.0
1242	reac per cdc 87 - nodo 401	-6041.51	-4400.84	-1.887e+04	1.628e+06	-2.235e+06	0.0
1243	reac per cdc 88 - nodo 401	6654.72	915.36	-1.887e+04	-3.387e+05	2.462e+06	0.0
1244	reac per cdc 89 - nodo 401	6470.53	-3716.74	-1.887e+04	1.375e+06	2.394e+06	0.0
1245	reac per cdc 90 - nodo 401	-6470.53	3716.74	-1.887e+04	-1.375e+06	-2.394e+06	0.0
1246	reac per cdc 91 - nodo 401	-6654.72	-915.36	-1.887e+04	3.387e+05	-2.462e+06	0.0
1247	reac per cdc 92 - nodo 401	6364.29	-45.45	-1.887e+04	1.682e+04	2.355e+06	0.0
1248	reac per cdc 93 - nodo 401	6760.96	-2755.92	-1.887e+04	1.020e+06	2.502e+06	0.0
1249	reac per cdc 94 - nodo 401	-6760.96	2755.92	-1.887e+04	-1.020e+06	-2.502e+06	0.0
1250	reac per cdc 95 - nodo 401	-6364.29	45.45	-1.887e+04	-1.682e+04	-2.355e+06	0.0
1251	reac per cdc 96 - nodo 401	2178.94	8633.85	-1.887e+04	-3.195e+06	8.062e+05	0.0
1252	reac per cdc 97 - nodo 401	1564.97	-6806.48	-1.887e+04	2.518e+06	5.790e+05	0.0
1253	reac per cdc 98 - nodo 401	-1564.97	6806.48	-1.887e+04	-2.518e+06	-5.790e+05	0.0
1254	reac per cdc 99 - nodo 401	-2178.94	-8633.85	-1.887e+04	3.195e+06	-8.062e+05	0.0
1255	reac per cdc 100 - nodo 401	2275.77	7299.96	-1.887e+04	-2.701e+06	8.420e+05	0.0
1256	reac per cdc 101 - nodo 401	1661.81	-8140.37	-1.887e+04	3.012e+06	6.149e+05	0.0
1257	reac per cdc 102 - nodo 401	-1661.81	8140.37	-1.887e+04	-3.012e+06	-6.149e+05	0.0
1258	reac per cdc 103 - nodo 401	-2275.77	-7299.96	-1.887e+04	2.701e+06	-8.420e+05	0.0
1259	reac per cdc 104 - nodo 401	1210.83	5431.13	-1.887e+04	-2.010e+06	4.480e+05	0.0
1260	reac per cdc 105 - nodo 401	2533.07	-3603.76	-1.887e+04	1.333e+06	9.372e+05	0.0
1261	reac per cdc 106 - nodo 401	-2533.07	3603.76	-1.887e+04	-1.333e+06	-9.372e+05	0.0
1262	reac per cdc 107 - nodo 401	-1210.83	-5431.13	-1.887e+04	2.010e+06	-4.480e+05	0.0
1263	reac per cdc 108 - nodo 401	1307.67	4097.24	-1.887e+04	-1.516e+06	4.838e+05	0.0
1264	reac per cdc 109 - nodo 401	2629.91	-4937.65	-1.887e+04	1.827e+06	9.731e+05	0.0
1265	reac per cdc 110 - nodo 401	-2629.91	4937.65	-1.887e+04	-1.827e+06	-9.731e+05	0.0
1266	reac per cdc 111 - nodo 401	-1307.67	-4097.24	-1.887e+04	1.516e+06	-4.838e+05	0.0
1267	reac per cdc 112 - nodo 401	0.0	0.0	-2.838e+04	0.0	0.0	0.0
1268	reac per cdc 113 - nodo 401	223.63	-2.78	-1.887e+04	1029.52	8.274e+04	0.0
1269	reac per cdc 114 - nodo 401	-243.15	1.41	-1.887e+04	-521.40	-8.997e+04	0.0
1270	reac per cdc 115 - nodo 401	27.32	460.61	-1.887e+04	-1.704e+05	1.011e+04	0.0
1271	reac per cdc 116 - nodo 401	33.76	-459.14	-1.887e+04	1.699e+05	1.249e+04	0.0
1272	reac per cdc 117 - nodo 401	134.18	-1.67	-2.838e+04	617.71	4.965e+04	0.0
1273	reac per cdc 118 - nodo 401	-145.89	0.85	-2.838e+04	-312.84	-5.398e+04	0.0
1274	reac per cdc 119 - nodo 401	16.39	276.36	-2.838e+04	-1.023e+05	6065.87	0.0
1275	reac per cdc 120 - nodo 401	20.25	-275.48	-2.838e+04	1.019e+05	7494.22	0.0
1276	reac per cdc 121 - nodo 401	223.63	-2.78	-2.363e+04	1029.52	8.274e+04	0.0
1277	reac per cdc 122 - nodo 401	-243.15	1.41	-2.363e+04	-521.40	-8.997e+04	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1278	reac per cdc 123 - nodo 401	27.32	460.61	-2.363e+04	-1.704e+05	1.011e+04	0.0
1279	reac per cdc 124 - nodo 401	33.76	-459.14	-2.363e+04	1.699e+05	1.249e+04	0.0
1280	reac per cdc 125 - nodo 401	0.0	0.0	-2.077e+04	0.0	0.0	0.0
1281	reac per cdc 126 - nodo 401	44.73	-0.56	-1.887e+04	205.90	1.655e+04	0.0
1282	reac per cdc 127 - nodo 401	-48.63	0.28	-1.887e+04	-104.28	-1.799e+04	0.0
1283	reac per cdc 128 - nodo 401	5.46	92.12	-1.887e+04	-3.408e+04	2021.96	0.0
1284	reac per cdc 129 - nodo 401	6.75	-91.83	-1.887e+04	3.398e+04	2498.07	0.0
1285	reac per cdc 130 - nodo 401	0.0	0.0	-1.887e+04	0.0	0.0	0.0
1286	reac per cdc 3 - nodo 513	0.0	0.0	-3.891e+04	0.0	0.0	0.0
1287	reac per cdc 4 - nodo 513	335.37	-1.20	-2.675e+04	443.19	1.241e+05	0.0
1288	reac per cdc 5 - nodo 513	-364.36	4.98	-2.675e+04	-1842.95	-1.348e+05	0.0
1289	reac per cdc 6 - nodo 513	60.06	689.33	-2.675e+04	-2.551e+05	2.222e+04	0.0
1290	reac per cdc 7 - nodo 513	31.04	-689.87	-2.675e+04	2.553e+05	1.148e+04	0.0
1291	reac per cdc 8 - nodo 513	201.22	-0.72	-3.891e+04	265.92	7.445e+04	0.0
1292	reac per cdc 9 - nodo 513	-218.61	2.99	-3.891e+04	-1105.77	-8.089e+04	0.0
1293	reac per cdc 10 - nodo 513	36.04	413.60	-3.891e+04	-1.530e+05	1.333e+04	0.0
1294	reac per cdc 11 - nodo 513	18.62	-413.92	-3.891e+04	1.532e+05	6890.77	0.0
1295	reac per cdc 12 - nodo 513	335.37	-1.20	-3.283e+04	443.19	1.241e+05	0.0
1296	reac per cdc 13 - nodo 513	-364.36	4.98	-3.283e+04	-1842.95	-1.348e+05	0.0
1297	reac per cdc 14 - nodo 513	60.06	689.33	-3.283e+04	-2.551e+05	2.222e+04	0.0
1298	reac per cdc 15 - nodo 513	31.04	-689.87	-3.283e+04	2.553e+05	1.148e+04	0.0
1299	reac per cdc 16 - nodo 513	1.095e+04	1.018e+04	-2.014e+04	-3.765e+06	4.053e+06	0.0
1300	reac per cdc 17 - nodo 513	1.151e+04	1388.15	-2.014e+04	-5.136e+05	4.259e+06	0.0
1301	reac per cdc 18 - nodo 513	-1.151e+04	-1388.15	-2.014e+04	5.136e+05	-4.259e+06	0.0
1302	reac per cdc 19 - nodo 513	-1.095e+04	-1.018e+04	-2.014e+04	3.765e+06	-4.053e+06	0.0
1303	reac per cdc 20 - nodo 513	1.175e+04	8353.83	-2.014e+04	-3.091e+06	4.346e+06	0.0
1304	reac per cdc 21 - nodo 513	1.072e+04	3211.32	-2.014e+04	-1.188e+06	3.966e+06	0.0
1305	reac per cdc 22 - nodo 513	-1.072e+04	-3211.32	-2.014e+04	1.188e+06	-3.966e+06	0.0
1306	reac per cdc 23 - nodo 513	-1.175e+04	-8353.83	-2.014e+04	3.091e+06	-4.346e+06	0.0
1307	reac per cdc 24 - nodo 513	1.242e+04	1742.38	-2.014e+04	-6.447e+05	4.596e+06	0.0
1308	reac per cdc 25 - nodo 513	1.298e+04	-7046.46	-2.014e+04	2.607e+06	4.802e+06	0.0
1309	reac per cdc 26 - nodo 513	-1.298e+04	7046.46	-2.014e+04	-2.607e+06	-4.802e+06	0.0
1310	reac per cdc 27 - nodo 513	-1.242e+04	-1742.38	-2.014e+04	6.447e+05	-4.596e+06	0.0
1311	reac per cdc 28 - nodo 513	1.321e+04	-80.78	-2.014e+04	2.989e+04	4.889e+06	0.0
1312	reac per cdc 29 - nodo 513	1.219e+04	-5223.29	-2.014e+04	1.933e+06	4.509e+06	0.0
1313	reac per cdc 30 - nodo 513	-1.219e+04	5223.29	-2.014e+04	-1.933e+06	-4.509e+06	0.0
1314	reac per cdc 31 - nodo 513	-1.321e+04	80.78	-2.014e+04	-2.989e+04	-4.889e+06	0.0
1315	reac per cdc 32 - nodo 513	2443.99	1.638e+04	-2.014e+04	-6.062e+06	9.043e+05	0.0
1316	reac per cdc 33 - nodo 513	4295.51	-1.291e+04	-2.014e+04	4.778e+06	1.589e+06	0.0
1317	reac per cdc 34 - nodo 513	-4295.51	1.291e+04	-2.014e+04	-4.778e+06	-1.589e+06	0.0
1318	reac per cdc 35 - nodo 513	-2443.99	-1.638e+04	-2.014e+04	6.062e+06	-9.043e+05	0.0
1319	reac per cdc 36 - nodo 513	2884.38	1.385e+04	-2.014e+04	-5.125e+06	1.067e+06	0.0
1320	reac per cdc 37 - nodo 513	4735.90	-1.544e+04	-2.014e+04	5.714e+06	1.752e+06	0.0
1321	reac per cdc 38 - nodo 513	-4735.90	1.544e+04	-2.014e+04	-5.714e+06	-1.752e+06	0.0
1322	reac per cdc 39 - nodo 513	-2884.38	-1.385e+04	-2.014e+04	5.125e+06	-1.067e+06	0.0
1323	reac per cdc 40 - nodo 513	5083.63	1.031e+04	-2.014e+04	-3.813e+06	1.881e+06	0.0
1324	reac per cdc 41 - nodo 513	1655.87	-6836.08	-2.014e+04	2.529e+06	6.127e+05	0.0
1325	reac per cdc 42 - nodo 513	-1655.87	6836.08	-2.014e+04	-2.529e+06	-6.127e+05	0.0
1326	reac per cdc 43 - nodo 513	-5083.63	-1.031e+04	-2.014e+04	3.813e+06	-1.881e+06	0.0
1327	reac per cdc 44 - nodo 513	5524.02	7775.24	-2.014e+04	-2.877e+06	2.044e+06	0.0
1328	reac per cdc 45 - nodo 513	2096.26	-9366.46	-2.014e+04	3.466e+06	7.756e+05	0.0
1329	reac per cdc 46 - nodo 513	-2096.26	9366.46	-2.014e+04	-3.466e+06	-7.756e+05	0.0
1330	reac per cdc 47 - nodo 513	-5524.02	-7775.24	-2.014e+04	2.877e+06	-2.044e+06	0.0
1331	reac per cdc 48 - nodo 513	7185.17	6675.03	-2.014e+04	-2.470e+06	2.659e+06	0.0
1332	reac per cdc 49 - nodo 513	7549.49	910.48	-2.014e+04	-3.369e+05	2.793e+06	0.0
1333	reac per cdc 50 - nodo 513	-7549.49	-910.48	-2.014e+04	3.369e+05	-2.793e+06	0.0
1334	reac per cdc 51 - nodo 513	-7185.17	-6675.03	-2.014e+04	2.470e+06	-2.659e+06	0.0
1335	reac per cdc 52 - nodo 513	7704.56	5479.22	-2.014e+04	-2.027e+06	2.851e+06	0.0
1336	reac per cdc 53 - nodo 513	7030.09	2106.28	-2.014e+04	-7.793e+05	2.601e+06	0.0
1337	reac per cdc 54 - nodo 513	-7030.09	-2106.28	-2.014e+04	7.793e+05	-2.601e+06	0.0
1338	reac per cdc 55 - nodo 513	-7704.56	-5479.22	-2.014e+04	2.027e+06	-2.851e+06	0.0
1339	reac per cdc 56 - nodo 513	8147.99	1142.82	-2.014e+04	-4.228e+05	3.015e+06	0.0
1340	reac per cdc 57 - nodo 513	8512.32	-4621.73	-2.014e+04	1.710e+06	3.150e+06	0.0
1341	reac per cdc 58 - nodo 513	-8512.32	4621.73	-2.014e+04	-1.710e+06	-3.150e+06	0.0
1342	reac per cdc 59 - nodo 513	-8147.99	-1142.82	-2.014e+04	4.228e+05	-3.015e+06	0.0
1343	reac per cdc 60 - nodo 513	8667.39	-52.98	-2.014e+04	1.960e+04	3.207e+06	0.0
1344	reac per cdc 61 - nodo 513	7992.92	-3425.93	-2.014e+04	1.268e+06	2.957e+06	0.0
1345	reac per cdc 62 - nodo 513	-7992.92	3425.93	-2.014e+04	-1.268e+06	-2.957e+06	0.0
1346	reac per cdc 63 - nodo 513	-8667.39	52.98	-2.014e+04	-1.960e+04	-3.207e+06	0.0
1347	reac per cdc 64 - nodo 513	1602.99	1.075e+04	-2.014e+04	-3.976e+06	5.931e+05	0.0
1348	reac per cdc 65 - nodo 513	2817.40	-8469.76	-2.014e+04	3.134e+06	1.042e+06	0.0
1349	reac per cdc 66 - nodo 513	-2817.40	8469.76	-2.014e+04	-3.134e+06	-1.042e+06	0.0
1350	reac per cdc 67 - nodo 513	-1602.99	-1.075e+04	-2.014e+04	3.976e+06	-5.931e+05	0.0
1351	reac per cdc 68 - nodo 513	1891.84	9085.75	-2.014e+04	-3.362e+06	7.000e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1352	reac per cdc 69 - nodo 513	3106.25	-1.013e+04	-2.014e+04	3.748e+06	1.149e+06	0.0
1353	reac per cdc 70 - nodo 513	-3106.25	1.013e+04	-2.014e+04	-3.748e+06	-1.149e+06	0.0
1354	reac per cdc 71 - nodo 513	-1891.84	-9085.75	-2.014e+04	3.362e+06	-7.000e+05	0.0
1355	reac per cdc 72 - nodo 513	3334.32	6759.39	-2.014e+04	-2.501e+06	1.234e+06	0.0
1356	reac per cdc 73 - nodo 513	1086.07	-4483.74	-2.014e+04	1.659e+06	4.018e+05	0.0
1357	reac per cdc 74 - nodo 513	-1086.07	4483.74	-2.014e+04	-1.659e+06	-4.018e+05	0.0
1358	reac per cdc 75 - nodo 513	-3334.32	-6759.39	-2.014e+04	2.501e+06	-1.234e+06	0.0
1359	reac per cdc 76 - nodo 513	3623.17	5099.73	-2.014e+04	-1.887e+06	1.341e+06	0.0
1360	reac per cdc 77 - nodo 513	1374.92	-6143.40	-2.014e+04	2.273e+06	5.087e+05	0.0
1361	reac per cdc 78 - nodo 513	-1374.92	6143.40	-2.014e+04	-2.273e+06	-5.087e+05	0.0
1362	reac per cdc 79 - nodo 513	-3623.17	-5099.73	-2.014e+04	1.887e+06	-1.341e+06	0.0
1363	reac per cdc 80 - nodo 513	5771.27	5361.51	-2.014e+04	-1.984e+06	2.135e+06	0.0
1364	reac per cdc 81 - nodo 513	6063.90	731.31	-2.014e+04	-2.706e+05	2.244e+06	0.0
1365	reac per cdc 82 - nodo 513	-6063.90	-731.31	-2.014e+04	2.706e+05	-2.244e+06	0.0
1366	reac per cdc 83 - nodo 513	-5771.27	-5361.51	-2.014e+04	1.984e+06	-2.135e+06	0.0
1367	reac per cdc 84 - nodo 513	6188.46	4401.02	-2.014e+04	-1.628e+06	2.290e+06	0.0
1368	reac per cdc 85 - nodo 513	5646.70	1691.81	-2.014e+04	-6.260e+05	2.089e+06	0.0
1369	reac per cdc 86 - nodo 513	-5646.70	-1691.81	-2.014e+04	6.260e+05	-2.089e+06	0.0
1370	reac per cdc 87 - nodo 513	-6188.46	-4401.02	-2.014e+04	1.628e+06	-2.290e+06	0.0
1371	reac per cdc 88 - nodo 513	6544.63	917.94	-2.014e+04	-3.396e+05	2.422e+06	0.0
1372	reac per cdc 89 - nodo 513	6837.26	-3712.26	-2.014e+04	1.374e+06	2.530e+06	0.0
1373	reac per cdc 90 - nodo 513	-6837.26	3712.26	-2.014e+04	-1.374e+06	-2.530e+06	0.0
1374	reac per cdc 91 - nodo 513	-6544.63	-917.94	-2.014e+04	3.396e+05	-2.422e+06	0.0
1375	reac per cdc 92 - nodo 513	6961.82	-42.56	-2.014e+04	1.575e+04	2.576e+06	0.0
1376	reac per cdc 93 - nodo 513	6420.07	-2751.77	-2.014e+04	1.018e+06	2.375e+06	0.0
1377	reac per cdc 94 - nodo 513	-6420.07	2751.77	-2.014e+04	-1.018e+06	-2.375e+06	0.0
1378	reac per cdc 95 - nodo 513	-6961.82	42.56	-2.014e+04	-1.575e+04	-2.576e+06	0.0
1379	reac per cdc 96 - nodo 513	1287.56	8630.92	-2.014e+04	-3.193e+06	4.764e+05	0.0
1380	reac per cdc 97 - nodo 513	2262.99	-6803.07	-2.014e+04	2.517e+06	8.373e+05	0.0
1381	reac per cdc 98 - nodo 513	-2262.99	6803.07	-2.014e+04	-2.517e+06	-8.373e+05	0.0
1382	reac per cdc 99 - nodo 513	-1287.56	-8630.92	-2.014e+04	3.193e+06	-4.764e+05	0.0
1383	reac per cdc 100 - nodo 513	1519.57	7297.85	-2.014e+04	-2.700e+06	5.622e+05	0.0
1384	reac per cdc 101 - nodo 513	2495.00	-8136.15	-2.014e+04	3.010e+06	9.232e+05	0.0
1385	reac per cdc 102 - nodo 513	-2495.00	8136.15	-2.014e+04	-3.010e+06	-9.232e+05	0.0
1386	reac per cdc 103 - nodo 513	-1519.57	-7297.85	-2.014e+04	2.700e+06	-5.622e+05	0.0
1387	reac per cdc 104 - nodo 513	2678.19	5429.28	-2.014e+04	-2.009e+06	9.909e+05	0.0
1388	reac per cdc 105 - nodo 513	872.35	-3601.43	-2.014e+04	1.333e+06	3.228e+05	0.0
1389	reac per cdc 106 - nodo 513	-872.35	3601.43	-2.014e+04	-1.333e+06	-3.228e+05	0.0
1390	reac per cdc 107 - nodo 513	-2678.19	-5429.28	-2.014e+04	2.009e+06	-9.909e+05	0.0
1391	reac per cdc 108 - nodo 513	2910.20	4096.20	-2.014e+04	-1.516e+06	1.077e+06	0.0
1392	reac per cdc 109 - nodo 513	1104.36	-4934.50	-2.014e+04	1.826e+06	4.086e+05	0.0
1393	reac per cdc 110 - nodo 513	-1104.36	4934.50	-2.014e+04	-1.826e+06	-4.086e+05	0.0
1394	reac per cdc 111 - nodo 513	-2910.20	-4096.20	-2.014e+04	1.516e+06	-1.077e+06	0.0
1395	reac per cdc 112 - nodo 513	0.0	0.0	-2.824e+04	0.0	0.0	0.0
1396	reac per cdc 113 - nodo 513	223.58	-0.80	-2.014e+04	295.46	8.272e+04	0.0
1397	reac per cdc 114 - nodo 513	-242.90	3.32	-2.014e+04	-1228.63	-8.987e+04	0.0
1398	reac per cdc 115 - nodo 513	40.04	459.55	-2.014e+04	-1.700e+05	1.481e+04	0.0
1399	reac per cdc 116 - nodo 513	20.69	-459.92	-2.014e+04	1.702e+05	7656.41	0.0
1400	reac per cdc 117 - nodo 513	134.15	-0.48	-2.824e+04	177.28	4.963e+04	0.0
1401	reac per cdc 118 - nodo 513	-145.74	1.99	-2.824e+04	-737.18	-5.392e+04	0.0
1402	reac per cdc 119 - nodo 513	24.02	275.73	-2.824e+04	-1.020e+05	8888.66	0.0
1403	reac per cdc 120 - nodo 513	12.42	-275.95	-2.824e+04	1.021e+05	4593.84	0.0
1404	reac per cdc 121 - nodo 513	223.58	-0.80	-2.419e+04	295.46	8.272e+04	0.0
1405	reac per cdc 122 - nodo 513	-242.90	3.32	-2.419e+04	-1228.63	-8.987e+04	0.0
1406	reac per cdc 123 - nodo 513	40.04	459.55	-2.419e+04	-1.700e+05	1.481e+04	0.0
1407	reac per cdc 124 - nodo 513	20.69	-459.92	-2.419e+04	1.702e+05	7656.41	0.0
1408	reac per cdc 125 - nodo 513	0.0	0.0	-2.176e+04	0.0	0.0	0.0
1409	reac per cdc 126 - nodo 513	44.72	-0.16	-2.014e+04	59.09	1.654e+04	0.0
1410	reac per cdc 127 - nodo 513	-48.58	0.66	-2.014e+04	-245.73	-1.797e+04	0.0
1411	reac per cdc 128 - nodo 513	8.01	91.91	-2.014e+04	-3.401e+04	2962.89	0.0
1412	reac per cdc 129 - nodo 513	4.14	-91.98	-2.014e+04	3.403e+04	1531.28	0.0
1413	reac per cdc 130 - nodo 513	0.0	0.0	-2.014e+04	0.0	0.0	0.0
1414	reac per cdc 3 - nodo 688	0.0	0.0	-3.658e+04	0.0	0.0	0.0
1415	reac per cdc 4 - nodo 688	369.94	13.55	-2.348e+04	-5012.54	1.369e+05	0.0
1416	reac per cdc 5 - nodo 688	-339.13	2.35	-2.348e+04	-867.86	-1.255e+05	0.0
1417	reac per cdc 6 - nodo 688	-45.23	822.88	-2.348e+04	-3.045e+05	-1.674e+04	0.0
1418	reac per cdc 7 - nodo 688	-58.14	-831.94	-2.348e+04	3.078e+05	-2.151e+04	0.0
1419	reac per cdc 8 - nodo 688	221.96	8.13	-3.658e+04	-3007.52	8.213e+04	0.0
1420	reac per cdc 9 - nodo 688	-203.48	1.41	-3.658e+04	-520.71	-7.529e+04	0.0
1421	reac per cdc 10 - nodo 688	-27.14	493.73	-3.658e+04	-1.827e+05	-1.004e+04	0.0
1422	reac per cdc 11 - nodo 688	-34.88	-499.16	-3.658e+04	1.847e+05	-1.291e+04	0.0
1423	reac per cdc 12 - nodo 688	369.94	13.55	-3.003e+04	-5012.54	1.369e+05	0.0
1424	reac per cdc 13 - nodo 688	-339.13	2.35	-3.003e+04	-867.86	-1.255e+05	0.0
1425	reac per cdc 14 - nodo 688	-45.23	822.88	-3.003e+04	-3.045e+05	-1.674e+04	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1426	reac per cdc 15 - nodo 688	-58.14	-831.94	-3.003e+04	3.078e+05	-2.151e+04	0.0
1427	reac per cdc 16 - nodo 688	9685.12	-2864.78	-1.759e+04	1.060e+06	3.583e+06	0.0
1428	reac per cdc 17 - nodo 688	1.110e+04	-8925.73	-1.759e+04	3.303e+06	4.107e+06	0.0
1429	reac per cdc 18 - nodo 688	-1.110e+04	8925.73	-1.759e+04	-3.303e+06	-4.107e+06	0.0
1430	reac per cdc 19 - nodo 688	-9685.12	2864.78	-1.759e+04	-1.060e+06	-3.583e+06	0.0
1431	reac per cdc 20 - nodo 688	1.175e+04	-533.15	-1.759e+04	1.973e+05	4.346e+06	0.0
1432	reac per cdc 21 - nodo 688	9040.99	-1.126e+04	-1.759e+04	4.165e+06	3.345e+06	0.0
1433	reac per cdc 22 - nodo 688	-9040.99	1.126e+04	-1.759e+04	-4.165e+06	-3.345e+06	0.0
1434	reac per cdc 23 - nodo 688	-1.175e+04	533.15	-1.759e+04	-1.973e+05	-4.346e+06	0.0
1435	reac per cdc 24 - nodo 688	1.272e+04	5570.71	-1.759e+04	-2.061e+06	4.706e+06	0.0
1436	reac per cdc 25 - nodo 688	1.414e+04	-490.24	-1.759e+04	1.814e+05	5.230e+06	0.0
1437	reac per cdc 26 - nodo 688	-1.414e+04	490.24	-1.759e+04	-1.814e+05	-5.230e+06	0.0
1438	reac per cdc 27 - nodo 688	-1.272e+04	-5570.71	-1.759e+04	2.061e+06	-4.706e+06	0.0
1439	reac per cdc 28 - nodo 688	1.478e+04	7902.35	-1.759e+04	-2.924e+06	5.469e+06	0.0
1440	reac per cdc 29 - nodo 688	1.208e+04	-2821.87	-1.759e+04	1.044e+06	4.468e+06	0.0
1441	reac per cdc 30 - nodo 688	-1.208e+04	2821.87	-1.759e+04	-1.044e+06	-4.468e+06	0.0
1442	reac per cdc 31 - nodo 688	-1.478e+04	-7902.35	-1.759e+04	2.924e+06	-5.469e+06	0.0
1443	reac per cdc 32 - nodo 688	757.61	8333.00	-1.759e+04	-3.083e+06	2.803e+05	0.0
1444	reac per cdc 33 - nodo 688	5478.32	-1.187e+04	-1.759e+04	4.392e+06	2.027e+06	0.0
1445	reac per cdc 34 - nodo 688	-5478.32	1.187e+04	-1.759e+04	-4.392e+06	-2.027e+06	0.0
1446	reac per cdc 35 - nodo 688	-757.61	-8333.00	-1.759e+04	3.083e+06	-2.803e+05	0.0
1447	reac per cdc 36 - nodo 688	1668.04	1.086e+04	-1.759e+04	-4.020e+06	6.172e+05	0.0
1448	reac per cdc 37 - nodo 688	6388.75	-9339.51	-1.759e+04	3.456e+06	2.364e+06	0.0
1449	reac per cdc 38 - nodo 688	-6388.75	9339.51	-1.759e+04	-3.456e+06	-2.364e+06	0.0
1450	reac per cdc 39 - nodo 688	-1668.04	-1.086e+04	-1.759e+04	4.020e+06	-6.172e+05	0.0
1451	reac per cdc 40 - nodo 688	7625.41	1.611e+04	-1.759e+04	-5.959e+06	2.821e+06	0.0
1452	reac per cdc 41 - nodo 688	-1389.47	-1.964e+04	-1.759e+04	7.268e+06	-5.141e+05	0.0
1453	reac per cdc 42 - nodo 688	1389.47	1.964e+04	-1.759e+04	-7.268e+06	5.141e+05	0.0
1454	reac per cdc 43 - nodo 688	-7625.41	-1.611e+04	-1.759e+04	5.959e+06	-2.821e+06	0.0
1455	reac per cdc 44 - nodo 688	8535.84	1.864e+04	-1.759e+04	-6.895e+06	3.158e+06	0.0
1456	reac per cdc 45 - nodo 688	-479.04	-1.711e+04	-1.759e+04	6.331e+06	-1.772e+05	0.0
1457	reac per cdc 46 - nodo 688	479.04	1.711e+04	-1.759e+04	-6.331e+06	1.772e+05	0.0
1458	reac per cdc 47 - nodo 688	-8535.84	-1.864e+04	-1.759e+04	6.895e+06	-3.158e+06	0.0
1459	reac per cdc 48 - nodo 688	6352.41	-1878.99	-1.759e+04	6.952e+05	2.350e+06	0.0
1460	reac per cdc 49 - nodo 688	7281.30	-5854.33	-1.759e+04	2.166e+06	2.694e+06	0.0
1461	reac per cdc 50 - nodo 688	-7281.30	5854.33	-1.759e+04	-2.166e+06	-2.694e+06	0.0
1462	reac per cdc 51 - nodo 688	-6352.41	1878.99	-1.759e+04	-6.952e+05	-2.350e+06	0.0
1463	reac per cdc 52 - nodo 688	7703.77	-349.69	-1.759e+04	1.294e+05	2.850e+06	0.0
1464	reac per cdc 53 - nodo 688	5929.93	-7383.64	-1.759e+04	2.732e+06	2.194e+06	0.0
1465	reac per cdc 54 - nodo 688	-5929.93	7383.64	-1.759e+04	-2.732e+06	-2.194e+06	0.0
1466	reac per cdc 55 - nodo 688	-7703.77	349.69	-1.759e+04	-1.294e+05	-2.850e+06	0.0
1467	reac per cdc 56 - nodo 688	8342.89	3653.80	-1.759e+04	-1.352e+06	3.087e+06	0.0
1468	reac per cdc 57 - nodo 688	9271.78	-321.54	-1.759e+04	1.190e+05	3.431e+06	0.0
1469	reac per cdc 58 - nodo 688	-9271.78	321.54	-1.759e+04	-1.190e+05	-3.431e+06	0.0
1470	reac per cdc 59 - nodo 688	-8342.89	-3653.80	-1.759e+04	1.352e+06	-3.087e+06	0.0
1471	reac per cdc 60 - nodo 688	9694.25	5183.10	-1.759e+04	-1.918e+06	3.587e+06	0.0
1472	reac per cdc 61 - nodo 688	7920.41	-1850.85	-1.759e+04	6.848e+05	2.931e+06	0.0
1473	reac per cdc 62 - nodo 688	-7920.41	1850.85	-1.759e+04	-6.848e+05	-2.931e+06	0.0
1474	reac per cdc 63 - nodo 688	-9694.25	-5183.10	-1.759e+04	1.918e+06	-3.587e+06	0.0
1475	reac per cdc 64 - nodo 688	496.91	5465.57	-1.759e+04	-2.022e+06	1.839e+05	0.0
1476	reac per cdc 65 - nodo 688	3593.20	-7785.56	-1.759e+04	2.881e+06	1.329e+06	0.0
1477	reac per cdc 66 - nodo 688	-3593.20	7785.56	-1.759e+04	-2.881e+06	-1.329e+06	0.0
1478	reac per cdc 67 - nodo 688	-496.91	-5465.57	-1.759e+04	2.022e+06	-1.839e+05	0.0
1479	reac per cdc 68 - nodo 688	1094.06	7125.40	-1.759e+04	-2.636e+06	4.048e+05	0.0
1480	reac per cdc 69 - nodo 688	4190.34	-6125.73	-1.759e+04	2.267e+06	1.550e+06	0.0
1481	reac per cdc 70 - nodo 688	-4190.34	6125.73	-1.759e+04	-2.267e+06	-1.550e+06	0.0
1482	reac per cdc 71 - nodo 688	-1094.06	-7125.40	-1.759e+04	2.636e+06	-4.048e+05	0.0
1483	reac per cdc 72 - nodo 688	5001.46	1.056e+04	-1.759e+04	-3.908e+06	1.850e+06	0.0
1484	reac per cdc 73 - nodo 688	-911.35	-1.288e+04	-1.759e+04	4.767e+06	-3.372e+05	0.0
1485	reac per cdc 74 - nodo 688	911.35	1.288e+04	-1.759e+04	-4.767e+06	3.372e+05	0.0
1486	reac per cdc 75 - nodo 688	-5001.46	-1.056e+04	-1.759e+04	3.908e+06	-1.850e+06	0.0
1487	reac per cdc 76 - nodo 688	5598.60	1.222e+04	-1.759e+04	-4.523e+06	2.071e+06	0.0
1488	reac per cdc 77 - nodo 688	-314.20	-1.122e+04	-1.759e+04	4.153e+06	-1.163e+05	0.0
1489	reac per cdc 78 - nodo 688	314.20	1.122e+04	-1.759e+04	-4.153e+06	1.163e+05	0.0
1490	reac per cdc 79 - nodo 688	-5598.60	-1.222e+04	-1.759e+04	4.523e+06	-2.071e+06	0.0
1491	reac per cdc 80 - nodo 688	5102.38	-1509.24	-1.759e+04	5.584e+05	1.888e+06	0.0
1492	reac per cdc 81 - nodo 688	5848.48	-4702.31	-1.759e+04	1.740e+06	2.164e+06	0.0
1493	reac per cdc 82 - nodo 688	-5848.48	4702.31	-1.759e+04	-1.740e+06	-2.164e+06	0.0
1494	reac per cdc 83 - nodo 688	-5102.38	1509.24	-1.759e+04	-5.584e+05	-1.888e+06	0.0
1495	reac per cdc 84 - nodo 688	6187.82	-280.88	-1.759e+04	1.039e+05	2.289e+06	0.0
1496	reac per cdc 85 - nodo 688	4763.04	-5930.68	-1.759e+04	2.194e+06	1.762e+06	0.0
1497	reac per cdc 86 - nodo 688	-4763.04	5930.68	-1.759e+04	-2.194e+06	-1.762e+06	0.0
1498	reac per cdc 87 - nodo 688	-6187.82	280.88	-1.759e+04	-1.039e+05	-2.289e+06	0.0
1499	reac per cdc 88 - nodo 688	6701.17	2934.80	-1.759e+04	-1.086e+06	2.479e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1500	reac per cdc 89 - nodo 688	7447.27	-258.27	-1.759e+04	9.556e+04	2.755e+06	0.0
1501	reac per cdc 90 - nodo 688	-7447.27	258.27	-1.759e+04	-9.556e+04	-2.755e+06	0.0
1502	reac per cdc 91 - nodo 688	-6701.17	-2934.80	-1.759e+04	1.086e+06	-2.479e+06	0.0
1503	reac per cdc 92 - nodo 688	7786.61	4163.17	-1.759e+04	-1.540e+06	2.881e+06	0.0
1504	reac per cdc 93 - nodo 688	6361.83	-1486.64	-1.759e+04	5.501e+05	2.354e+06	0.0
1505	reac per cdc 94 - nodo 688	-6361.83	1486.64	-1.759e+04	-5.501e+05	-2.354e+06	0.0
1506	reac per cdc 95 - nodo 688	-7786.61	-4163.17	-1.759e+04	1.540e+06	-2.881e+06	0.0
1507	reac per cdc 96 - nodo 688	399.13	4390.05	-1.759e+04	-1.624e+06	1.477e+05	0.0
1508	reac per cdc 97 - nodo 688	2886.13	-6253.52	-1.759e+04	2.314e+06	1.068e+06	0.0
1509	reac per cdc 98 - nodo 688	-2886.13	6253.52	-1.759e+04	-2.314e+06	-1.068e+06	0.0
1510	reac per cdc 99 - nodo 688	-399.13	-4390.05	-1.759e+04	1.624e+06	-1.477e+05	0.0
1511	reac per cdc 100 - nodo 688	878.77	5723.26	-1.759e+04	-2.118e+06	3.251e+05	0.0
1512	reac per cdc 101 - nodo 688	3365.76	-4920.30	-1.759e+04	1.821e+06	1.245e+06	0.0
1513	reac per cdc 102 - nodo 688	-3365.76	4920.30	-1.759e+04	-1.821e+06	-1.245e+06	0.0
1514	reac per cdc 103 - nodo 688	-878.77	-5723.26	-1.759e+04	2.118e+06	-3.251e+05	0.0
1515	reac per cdc 104 - nodo 688	4017.27	8484.61	-1.759e+04	-3.139e+06	1.486e+06	0.0
1516	reac per cdc 105 - nodo 688	-732.01	-1.035e+04	-1.759e+04	3.829e+06	-2.708e+05	0.0
1517	reac per cdc 106 - nodo 688	732.01	1.035e+04	-1.759e+04	-3.829e+06	2.708e+05	0.0
1518	reac per cdc 107 - nodo 688	-4017.27	-8484.61	-1.759e+04	3.139e+06	-1.486e+06	0.0
1519	reac per cdc 108 - nodo 688	4496.91	9817.82	-1.759e+04	-3.633e+06	1.664e+06	0.0
1520	reac per cdc 109 - nodo 688	-252.37	-9014.86	-1.759e+04	3.335e+06	-9.338e+04	0.0
1521	reac per cdc 110 - nodo 688	252.37	9014.86	-1.759e+04	-3.335e+06	9.338e+04	0.0
1522	reac per cdc 111 - nodo 688	-4496.91	-9817.82	-1.759e+04	3.633e+06	-1.664e+06	0.0
1523	reac per cdc 112 - nodo 688	0.0	0.0	-2.632e+04	0.0	0.0	0.0
1524	reac per cdc 113 - nodo 688	246.62	9.03	-1.759e+04	-3341.69	9.125e+04	0.0
1525	reac per cdc 114 - nodo 688	-226.09	1.56	-1.759e+04	-578.57	-8.365e+04	0.0
1526	reac per cdc 115 - nodo 688	-30.15	548.59	-1.759e+04	-2.030e+05	-1.116e+04	0.0
1527	reac per cdc 116 - nodo 688	-38.76	-554.63	-1.759e+04	2.052e+05	-1.434e+04	0.0
1528	reac per cdc 117 - nodo 688	147.97	5.42	-2.632e+04	-2005.02	5.475e+04	0.0
1529	reac per cdc 118 - nodo 688	-135.65	0.94	-2.632e+04	-347.14	-5.019e+04	0.0
1530	reac per cdc 119 - nodo 688	-18.09	329.15	-2.632e+04	-1.218e+05	-6694.10	0.0
1531	reac per cdc 120 - nodo 688	-23.25	-332.78	-2.632e+04	1.231e+05	-8604.20	0.0
1532	reac per cdc 121 - nodo 688	246.62	9.03	-2.195e+04	-3341.69	9.125e+04	0.0
1533	reac per cdc 122 - nodo 688	-226.09	1.56	-2.195e+04	-578.57	-8.365e+04	0.0
1534	reac per cdc 123 - nodo 688	-30.15	548.59	-2.195e+04	-2.030e+05	-1.116e+04	0.0
1535	reac per cdc 124 - nodo 688	-38.76	-554.63	-2.195e+04	2.052e+05	-1.434e+04	0.0
1536	reac per cdc 125 - nodo 688	0.0	0.0	-1.934e+04	0.0	0.0	0.0
1537	reac per cdc 126 - nodo 688	49.32	1.81	-1.759e+04	-668.34	1.825e+04	0.0
1538	reac per cdc 127 - nodo 688	-45.22	0.31	-1.759e+04	-115.71	-1.673e+04	0.0
1539	reac per cdc 128 - nodo 688	-6.03	109.72	-1.759e+04	-4.060e+04	-2231.37	0.0
1540	reac per cdc 129 - nodo 688	-7.75	-110.93	-1.759e+04	4.104e+04	-2868.07	0.0
1541	reac per cdc 130 - nodo 688	0.0	0.0	-1.759e+04	0.0	0.0	0.0
1542	reac per cdc 3 - nodo 699	0.0	0.0	-6.500e+04	0.0	0.0	0.0
1543	reac per cdc 4 - nodo 699	354.75	14.10	-3.814e+04	-5217.58	1.313e+05	0.0
1544	reac per cdc 5 - nodo 699	-336.73	8.23	-3.814e+04	-3046.33	-1.246e+05	0.0
1545	reac per cdc 6 - nodo 699	-16.99	826.37	-3.814e+04	-3.058e+05	-6286.02	0.0
1546	reac per cdc 7 - nodo 699	-42.06	-837.84	-3.814e+04	3.100e+05	-1.556e+04	0.0
1547	reac per cdc 8 - nodo 699	212.85	8.46	-6.500e+04	-3130.55	7.875e+04	0.0
1548	reac per cdc 9 - nodo 699	-202.04	4.94	-6.500e+04	-1827.80	-7.475e+04	0.0
1549	reac per cdc 10 - nodo 699	-10.19	495.82	-6.500e+04	-1.835e+05	-3771.61	0.0
1550	reac per cdc 11 - nodo 699	-25.24	-502.70	-6.500e+04	1.860e+05	-9337.41	0.0
1551	reac per cdc 12 - nodo 699	354.75	14.10	-5.157e+04	-5217.58	1.313e+05	0.0
1552	reac per cdc 13 - nodo 699	-336.73	8.23	-5.157e+04	-3046.33	-1.246e+05	0.0
1553	reac per cdc 14 - nodo 699	-16.99	826.37	-5.157e+04	-3.058e+05	-6286.02	0.0
1554	reac per cdc 15 - nodo 699	-42.06	-837.84	-5.157e+04	3.100e+05	-1.556e+04	0.0
1555	reac per cdc 16 - nodo 699	9720.71	-365.75	-2.837e+04	1.353e+05	3.597e+06	0.0
1556	reac per cdc 17 - nodo 699	1.112e+04	-7017.94	-2.837e+04	2.597e+06	4.115e+06	0.0
1557	reac per cdc 18 - nodo 699	-1.112e+04	7017.94	-2.837e+04	-2.597e+06	-4.115e+06	0.0
1558	reac per cdc 19 - nodo 699	-9720.71	365.75	-2.837e+04	-1.353e+05	-3.597e+06	0.0
1559	reac per cdc 20 - nodo 699	1.178e+04	668.04	-2.837e+04	-2.472e+05	4.358e+06	0.0
1560	reac per cdc 21 - nodo 699	9065.03	-8051.72	-2.836e+04	2.979e+06	3.354e+06	0.0
1561	reac per cdc 22 - nodo 699	-9065.03	8051.72	-2.837e+04	-2.979e+06	-3.354e+06	0.0
1562	reac per cdc 23 - nodo 699	-1.178e+04	-668.04	-2.837e+04	2.472e+05	-4.358e+06	0.0
1563	reac per cdc 24 - nodo 699	1.270e+04	4858.68	-2.837e+04	-1.798e+06	4.700e+06	0.0
1564	reac per cdc 25 - nodo 699	1.410e+04	-1793.52	-2.837e+04	6.636e+05	5.218e+06	0.0
1565	reac per cdc 26 - nodo 699	-1.410e+04	1793.52	-2.837e+04	-6.636e+05	-5.218e+06	0.0
1566	reac per cdc 27 - nodo 699	-1.270e+04	-4858.68	-2.837e+04	1.798e+06	-4.700e+06	0.0
1567	reac per cdc 28 - nodo 699	1.476e+04	5892.46	-2.837e+04	-2.180e+06	5.461e+06	0.0
1568	reac per cdc 29 - nodo 699	1.205e+04	-2827.30	-2.837e+04	1.046e+06	4.457e+06	0.0
1569	reac per cdc 30 - nodo 699	-1.205e+04	2827.30	-2.837e+04	-1.046e+06	-4.457e+06	0.0
1570	reac per cdc 31 - nodo 699	-1.476e+04	-5892.46	-2.836e+04	2.180e+06	-5.461e+06	0.0
1571	reac per cdc 32 - nodo 699	790.36	9979.43	-2.837e+04	-3.692e+06	2.924e+05	0.0
1572	reac per cdc 33 - nodo 699	5462.56	-1.219e+04	-2.836e+04	4.512e+06	2.021e+06	0.0
1573	reac per cdc 34 - nodo 699	-5462.56	1.219e+04	-2.837e+04	-4.512e+06	-2.021e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1574	reac per cdc 35 - nodo 699	-790.36	-9979.43	-2.837e+04	3.692e+06	-2.924e+05	0.0
1575	reac per cdc 36 - nodo 699	1684.68	1.155e+04	-2.837e+04	-4.272e+06	6.233e+05	0.0
1576	reac per cdc 37 - nodo 699	6356.89	-1.063e+04	-2.837e+04	3.932e+06	2.352e+06	0.0
1577	reac per cdc 38 - nodo 699	-6356.89	1.063e+04	-2.837e+04	-3.932e+06	-2.352e+06	0.0
1578	reac per cdc 39 - nodo 699	-1684.68	-1.155e+04	-2.836e+04	4.272e+06	-6.233e+05	0.0
1579	reac per cdc 40 - nodo 699	7648.14	1.343e+04	-2.837e+04	-4.967e+06	2.830e+06	0.0
1580	reac per cdc 41 - nodo 699	-1395.22	-1.564e+04	-2.836e+04	5.787e+06	-5.162e+05	0.0
1581	reac per cdc 42 - nodo 699	1395.22	1.564e+04	-2.837e+04	-5.787e+06	5.162e+05	0.0
1582	reac per cdc 43 - nodo 699	-7648.14	-1.343e+04	-2.836e+04	4.967e+06	-2.830e+06	0.0
1583	reac per cdc 44 - nodo 699	8542.47	1.499e+04	-2.837e+04	-5.547e+06	3.161e+06	0.0
1584	reac per cdc 45 - nodo 699	-500.90	-1.407e+04	-2.836e+04	5.207e+06	-1.853e+05	0.0
1585	reac per cdc 46 - nodo 699	500.90	1.407e+04	-2.837e+04	-5.207e+06	1.853e+05	0.0
1586	reac per cdc 47 - nodo 699	-8542.47	-1.499e+04	-2.836e+04	5.547e+06	-3.161e+06	0.0
1587	reac per cdc 48 - nodo 699	6375.75	-239.89	-2.837e+04	8.876e+04	2.359e+06	0.0
1588	reac per cdc 49 - nodo 699	7295.09	-4603.02	-2.837e+04	1.703e+06	2.699e+06	0.0
1589	reac per cdc 50 - nodo 699	-7295.09	4603.02	-2.837e+04	-1.703e+06	-2.699e+06	0.0
1590	reac per cdc 51 - nodo 699	-6375.75	239.89	-2.837e+04	-8.876e+04	-2.359e+06	0.0
1591	reac per cdc 52 - nodo 699	7725.15	438.16	-2.837e+04	-1.621e+05	2.858e+06	0.0
1592	reac per cdc 53 - nodo 699	5945.70	-5281.07	-2.837e+04	1.954e+06	2.200e+06	0.0
1593	reac per cdc 54 - nodo 699	-5945.70	5281.07	-2.837e+04	-1.954e+06	-2.200e+06	0.0
1594	reac per cdc 55 - nodo 699	-7725.15	-438.16	-2.837e+04	1.621e+05	-2.858e+06	0.0
1595	reac per cdc 56 - nodo 699	8331.02	3186.78	-2.837e+04	-1.179e+06	3.082e+06	0.0
1596	reac per cdc 57 - nodo 699	9250.36	-1176.36	-2.837e+04	4.353e+05	3.423e+06	0.0
1597	reac per cdc 58 - nodo 699	-9250.36	1176.36	-2.837e+04	-4.353e+05	-3.423e+06	0.0
1598	reac per cdc 59 - nodo 699	-8331.02	-3186.78	-2.837e+04	1.179e+06	-3.082e+06	0.0
1599	reac per cdc 60 - nodo 699	9680.42	3864.83	-2.837e+04	-1.430e+06	3.582e+06	0.0
1600	reac per cdc 61 - nodo 699	7900.97	-1854.41	-2.837e+04	6.861e+05	2.923e+06	0.0
1601	reac per cdc 62 - nodo 699	-7900.97	1854.41	-2.837e+04	-6.861e+05	-2.923e+06	0.0
1602	reac per cdc 63 - nodo 699	-9680.42	-3864.83	-2.837e+04	1.430e+06	-3.582e+06	0.0
1603	reac per cdc 64 - nodo 699	518.39	6545.45	-2.837e+04	-2.422e+06	1.918e+05	0.0
1604	reac per cdc 65 - nodo 699	3582.86	-7998.32	-2.837e+04	2.959e+06	1.326e+06	0.0
1605	reac per cdc 66 - nodo 699	-3582.86	7998.32	-2.837e+04	-2.959e+06	-1.326e+06	0.0
1606	reac per cdc 67 - nodo 699	-518.39	-6545.45	-2.837e+04	2.422e+06	-1.918e+05	0.0
1607	reac per cdc 68 - nodo 699	1104.97	7573.45	-2.837e+04	-2.802e+06	4.088e+05	0.0
1608	reac per cdc 69 - nodo 699	4169.44	-6970.32	-2.837e+04	2.579e+06	1.543e+06	0.0
1609	reac per cdc 70 - nodo 699	-4169.44	6970.32	-2.837e+04	-2.579e+06	-1.543e+06	0.0
1610	reac per cdc 71 - nodo 699	-1104.97	-7573.45	-2.837e+04	2.802e+06	-4.088e+05	0.0
1611	reac per cdc 72 - nodo 699	5016.37	8805.62	-2.837e+04	-3.258e+06	1.856e+06	0.0
1612	reac per cdc 73 - nodo 699	-915.12	-1.026e+04	-2.836e+04	3.796e+06	-3.386e+05	0.0
1613	reac per cdc 74 - nodo 699	915.12	1.026e+04	-2.837e+04	-3.796e+06	3.386e+05	0.0
1614	reac per cdc 75 - nodo 699	-5016.37	-8805.62	-2.836e+04	3.258e+06	-1.856e+06	0.0
1615	reac per cdc 76 - nodo 699	5602.95	9833.62	-2.837e+04	-3.638e+06	2.073e+06	0.0
1616	reac per cdc 77 - nodo 699	-328.54	-9230.50	-2.836e+04	3.415e+06	-1.216e+05	0.0
1617	reac per cdc 78 - nodo 699	328.54	9230.50	-2.837e+04	-3.415e+06	1.216e+05	0.0
1618	reac per cdc 79 - nodo 699	-5602.95	-9833.62	-2.836e+04	3.638e+06	-2.073e+06	0.0
1619	reac per cdc 80 - nodo 699	5121.13	-192.68	-2.837e+04	7.129e+04	1.895e+06	0.0
1620	reac per cdc 81 - nodo 699	5859.56	-3697.24	-2.837e+04	1.368e+06	2.168e+06	0.0
1621	reac per cdc 82 - nodo 699	-5859.56	3697.24	-2.837e+04	-1.368e+06	-2.168e+06	0.0
1622	reac per cdc 83 - nodo 699	-5121.13	192.68	-2.837e+04	-7.129e+04	-1.895e+06	0.0
1623	reac per cdc 84 - nodo 699	6204.99	351.94	-2.837e+04	-1.302e+05	2.296e+06	0.0
1624	reac per cdc 85 - nodo 699	4775.70	-4241.86	-2.837e+04	1.569e+06	1.767e+06	0.0
1625	reac per cdc 86 - nodo 699	-4775.70	4241.86	-2.837e+04	-1.569e+06	-1.767e+06	0.0
1626	reac per cdc 87 - nodo 699	-6204.99	-351.94	-2.837e+04	1.302e+05	-2.296e+06	0.0
1627	reac per cdc 88 - nodo 699	6691.64	2559.68	-2.837e+04	-9.471e+05	2.476e+06	0.0
1628	reac per cdc 89 - nodo 699	7430.07	-944.87	-2.837e+04	3.496e+05	2.749e+06	0.0
1629	reac per cdc 90 - nodo 699	-7430.07	944.87	-2.837e+04	-3.496e+05	-2.749e+06	0.0
1630	reac per cdc 91 - nodo 699	-6691.64	-2559.68	-2.837e+04	9.471e+05	-2.476e+06	0.0
1631	reac per cdc 92 - nodo 699	7775.50	3104.30	-2.837e+04	-1.149e+06	2.877e+06	0.0
1632	reac per cdc 93 - nodo 699	6346.21	-1489.50	-2.837e+04	5.511e+05	2.348e+06	0.0
1633	reac per cdc 94 - nodo 699	-6346.21	1489.50	-2.837e+04	-5.511e+05	-2.348e+06	0.0
1634	reac per cdc 95 - nodo 699	-7775.50	-3104.30	-2.837e+04	1.149e+06	-2.877e+06	0.0
1635	reac per cdc 96 - nodo 699	416.38	5257.43	-2.837e+04	-1.945e+06	1.541e+05	0.0
1636	reac per cdc 97 - nodo 699	2877.82	-6424.41	-2.837e+04	2.377e+06	1.065e+06	0.0
1637	reac per cdc 98 - nodo 699	-2877.82	6424.41	-2.837e+04	-2.377e+06	-1.065e+06	0.0
1638	reac per cdc 99 - nodo 699	-416.38	-5257.43	-2.837e+04	1.945e+06	-1.541e+05	0.0
1639	reac per cdc 100 - nodo 699	887.54	6083.14	-2.837e+04	-2.251e+06	3.284e+05	0.0
1640	reac per cdc 101 - nodo 699	3348.98	-5598.70	-2.837e+04	2.072e+06	1.239e+06	0.0
1641	reac per cdc 102 - nodo 699	-3348.98	5598.70	-2.837e+04	-2.072e+06	-1.239e+06	0.0
1642	reac per cdc 103 - nodo 699	-887.54	-6083.14	-2.837e+04	2.251e+06	-3.284e+05	0.0
1643	reac per cdc 104 - nodo 699	4029.25	7072.85	-2.837e+04	-2.617e+06	1.491e+06	0.0
1644	reac per cdc 105 - nodo 699	-735.04	-8239.82	-2.836e+04	3.049e+06	-2.720e+05	0.0
1645	reac per cdc 106 - nodo 699	735.04	8239.82	-2.837e+04	-3.049e+06	2.720e+05	0.0
1646	reac per cdc 107 - nodo 699	-4029.25	-7072.85	-2.836e+04	2.617e+06	-1.491e+06	0.0
1647	reac per cdc 108 - nodo 699	4500.40	7898.56	-2.837e+04	-2.922e+06	1.665e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1648	reac per cdc 109 - nodo 699	-263.89	-7414.11	-2.836e+04	2.743e+06	-9.764e+04	0.0
1649	reac per cdc 110 - nodo 699	263.89	7414.11	-2.837e+04	-2.743e+06	9.764e+04	0.0
1650	reac per cdc 111 - nodo 699	-4500.40	-7898.56	-2.836e+04	2.922e+06	-1.665e+06	0.0
1651	reac per cdc 112 - nodo 699	0.0	0.0	-4.627e+04	0.0	0.0	0.0
1652	reac per cdc 113 - nodo 699	236.50	9.40	-2.837e+04	-3478.39	8.750e+04	0.0
1653	reac per cdc 114 - nodo 699	-224.49	5.49	-2.837e+04	-2030.88	-8.306e+04	0.0
1654	reac per cdc 115 - nodo 699	-11.33	550.91	-2.837e+04	-2.038e+05	-4190.68	0.0
1655	reac per cdc 116 - nodo 699	-28.04	-558.56	-2.837e+04	2.067e+05	-1.037e+04	0.0
1656	reac per cdc 117 - nodo 699	141.90	5.64	-4.627e+04	-2087.03	5.250e+04	0.0
1657	reac per cdc 118 - nodo 699	-134.69	3.29	-4.627e+04	-1218.53	-4.984e+04	0.0
1658	reac per cdc 119 - nodo 699	-6.80	330.55	-4.627e+04	-1.223e+05	-2514.41	0.0
1659	reac per cdc 120 - nodo 699	-16.82	-335.14	-4.627e+04	1.240e+05	-6224.94	0.0
1660	reac per cdc 121 - nodo 699	236.50	9.40	-3.732e+04	-3478.39	8.750e+04	0.0
1661	reac per cdc 122 - nodo 699	-224.49	5.49	-3.732e+04	-2030.88	-8.306e+04	0.0
1662	reac per cdc 123 - nodo 699	-11.33	550.91	-3.732e+04	-2.038e+05	-4190.68	0.0
1663	reac per cdc 124 - nodo 699	-28.04	-558.56	-3.732e+04	2.067e+05	-1.037e+04	0.0
1664	reac per cdc 125 - nodo 699	0.0	0.0	-3.195e+04	0.0	0.0	0.0
1665	reac per cdc 126 - nodo 699	47.30	1.88	-2.837e+04	-695.68	1.750e+04	0.0
1666	reac per cdc 127 - nodo 699	-44.90	1.10	-2.837e+04	-406.18	-1.661e+04	0.0
1667	reac per cdc 128 - nodo 699	-2.27	110.18	-2.837e+04	-4.077e+04	-838.14	0.0
1668	reac per cdc 129 - nodo 699	-5.61	-111.71	-2.837e+04	4.133e+04	-2074.98	0.0
1669	reac per cdc 130 - nodo 699	0.0	0.0	-2.837e+04	0.0	0.0	0.0
1670	reac per cdc 3 - nodo 710	0.0	0.0	-7.153e+04	0.0	0.0	0.0
1671	reac per cdc 4 - nodo 710	341.70	10.70	-4.275e+04	-3959.05	1.264e+05	0.0
1672	reac per cdc 5 - nodo 710	-339.60	12.09	-4.275e+04	-4474.90	-1.257e+05	0.0
1673	reac per cdc 6 - nodo 710	28.71	807.75	-4.275e+04	-2.989e+05	1.062e+04	0.0
1674	reac per cdc 7 - nodo 710	-34.70	-818.54	-4.275e+04	3.029e+05	-1.284e+04	0.0
1675	reac per cdc 8 - nodo 710	205.02	6.42	-7.153e+04	-2375.43	7.586e+04	0.0
1676	reac per cdc 9 - nodo 710	-203.76	7.26	-7.153e+04	-2684.94	-7.539e+04	0.0
1677	reac per cdc 10 - nodo 710	17.22	484.65	-7.153e+04	-1.793e+05	6373.15	0.0
1678	reac per cdc 11 - nodo 710	-20.82	-491.12	-7.153e+04	1.817e+05	-7703.35	0.0
1679	reac per cdc 12 - nodo 710	341.70	10.70	-5.714e+04	-3959.05	1.264e+05	0.0
1680	reac per cdc 13 - nodo 710	-339.60	12.09	-5.714e+04	-4474.90	-1.257e+05	0.0
1681	reac per cdc 14 - nodo 710	28.71	807.75	-5.714e+04	-2.989e+05	1.062e+04	0.0
1682	reac per cdc 15 - nodo 710	-34.70	-818.54	-5.714e+04	3.029e+05	-1.284e+04	0.0
1683	reac per cdc 16 - nodo 710	9743.61	1540.72	-3.184e+04	-5.701e+05	3.605e+06	0.0
1684	reac per cdc 17 - nodo 710	1.108e+04	-5943.73	-3.184e+04	2.199e+06	4.101e+06	0.0
1685	reac per cdc 18 - nodo 710	-1.108e+04	5943.73	-3.184e+04	-2.199e+06	-4.101e+06	0.0
1686	reac per cdc 19 - nodo 710	-9743.61	-1540.72	-3.184e+04	5.701e+05	-3.605e+06	0.0
1687	reac per cdc 20 - nodo 710	1.177e+04	1101.24	-3.184e+04	-4.075e+05	4.355e+06	0.0
1688	reac per cdc 21 - nodo 710	9056.32	-5504.25	-3.184e+04	2.037e+06	3.351e+06	0.0
1689	reac per cdc 22 - nodo 710	-9056.32	5504.25	-3.184e+04	-2.037e+06	-3.351e+06	0.0
1690	reac per cdc 23 - nodo 710	-1.177e+04	-1101.24	-3.184e+04	4.075e+05	-4.355e+06	0.0
1691	reac per cdc 24 - nodo 710	1.267e+04	2757.03	-3.184e+04	-1.020e+06	4.687e+06	0.0
1692	reac per cdc 25 - nodo 710	1.401e+04	-4727.42	-3.184e+04	1.749e+06	5.183e+06	0.0
1693	reac per cdc 26 - nodo 710	-1.401e+04	4727.42	-3.184e+04	-1.749e+06	-5.183e+06	0.0
1694	reac per cdc 27 - nodo 710	-1.267e+04	-2757.03	-3.184e+04	1.020e+06	-4.687e+06	0.0
1695	reac per cdc 28 - nodo 710	1.469e+04	2317.55	-3.184e+04	-8.575e+05	5.437e+06	0.0
1696	reac per cdc 29 - nodo 710	1.198e+04	-4287.94	-3.184e+04	1.587e+06	4.432e+06	0.0
1697	reac per cdc 30 - nodo 710	-1.198e+04	4287.94	-3.184e+04	-1.587e+06	-4.432e+06	0.0
1698	reac per cdc 31 - nodo 710	-1.469e+04	-2317.55	-3.184e+04	8.575e+05	-5.437e+06	0.0
1699	reac per cdc 32 - nodo 710	889.67	1.181e+04	-3.184e+04	-4.371e+06	3.292e+05	0.0
1700	reac per cdc 33 - nodo 710	5358.71	-1.313e+04	-3.185e+04	4.860e+06	1.983e+06	0.0
1701	reac per cdc 34 - nodo 710	-5358.71	1.313e+04	-3.184e+04	-4.860e+06	-1.983e+06	0.0
1702	reac per cdc 35 - nodo 710	-889.67	-1.181e+04	-3.185e+04	4.371e+06	-3.292e+05	0.0
1703	reac per cdc 36 - nodo 710	1766.51	1.218e+04	-3.184e+04	-4.506e+06	6.536e+05	0.0
1704	reac per cdc 37 - nodo 710	6235.55	-1.277e+04	-3.185e+04	4.725e+06	2.307e+06	0.0
1705	reac per cdc 38 - nodo 710	-6235.55	1.277e+04	-3.184e+04	-4.725e+06	-2.307e+06	0.0
1706	reac per cdc 39 - nodo 710	-1766.51	-1.218e+04	-3.185e+04	4.506e+06	-6.536e+05	0.0
1707	reac per cdc 40 - nodo 710	7649.66	1.035e+04	-3.184e+04	-3.829e+06	2.830e+06	0.0
1708	reac per cdc 41 - nodo 710	-1401.28	-1.167e+04	-3.184e+04	4.318e+06	-5.185e+05	0.0
1709	reac per cdc 42 - nodo 710	1401.28	1.167e+04	-3.184e+04	-4.318e+06	5.185e+05	0.0
1710	reac per cdc 43 - nodo 710	-7649.66	-1.035e+04	-3.184e+04	3.829e+06	-2.830e+06	0.0
1711	reac per cdc 44 - nodo 710	8526.50	1.071e+04	-3.184e+04	-3.964e+06	3.155e+06	0.0
1712	reac per cdc 45 - nodo 710	-524.44	-1.130e+04	-3.184e+04	4.183e+06	-1.940e+05	0.0
1713	reac per cdc 46 - nodo 710	524.44	1.130e+04	-3.184e+04	-4.183e+06	1.940e+05	0.0
1714	reac per cdc 47 - nodo 710	-8526.50	-1.071e+04	-3.184e+04	3.964e+06	-3.155e+06	0.0
1715	reac per cdc 48 - nodo 710	6390.77	1010.55	-3.184e+04	-3.739e+05	2.365e+06	0.0
1716	reac per cdc 49 - nodo 710	7270.14	-3898.45	-3.184e+04	1.442e+06	2.690e+06	0.0
1717	reac per cdc 50 - nodo 710	-7270.14	3898.45	-3.184e+04	-1.442e+06	-2.690e+06	0.0
1718	reac per cdc 51 - nodo 710	-6390.77	-1010.55	-3.184e+04	3.739e+05	-2.365e+06	0.0
1719	reac per cdc 52 - nodo 710	7720.93	722.30	-3.184e+04	-2.672e+05	2.857e+06	0.0
1720	reac per cdc 53 - nodo 710	5939.99	-3610.20	-3.184e+04	1.336e+06	2.198e+06	0.0
1721	reac per cdc 54 - nodo 710	-5939.99	3610.20	-3.184e+04	-1.336e+06	-2.198e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1722	reac per cdc 55 - nodo 710	-7720.93	-722.30	-3.184e+04	2.672e+05	-2.857e+06	0.0
1723	reac per cdc 56 - nodo 710	8307.82	1808.32	-3.184e+04	-6.691e+05	3.074e+06	0.0
1724	reac per cdc 57 - nodo 710	9187.19	-3100.68	-3.184e+04	1.147e+06	3.399e+06	0.0
1725	reac per cdc 58 - nodo 710	-9187.19	3100.68	-3.184e+04	-1.147e+06	-3.399e+06	0.0
1726	reac per cdc 59 - nodo 710	-8307.82	-1808.32	-3.184e+04	6.691e+05	-3.074e+06	0.0
1727	reac per cdc 60 - nodo 710	9637.97	1520.07	-3.184e+04	-5.624e+05	3.566e+06	0.0
1728	reac per cdc 61 - nodo 710	7857.04	-2812.43	-3.184e+04	1.041e+06	2.907e+06	0.0
1729	reac per cdc 62 - nodo 710	-7857.04	2812.43	-3.184e+04	-1.041e+06	-2.907e+06	0.0
1730	reac per cdc 63 - nodo 710	-9637.97	-1520.07	-3.184e+04	5.624e+05	-3.566e+06	0.0
1731	reac per cdc 64 - nodo 710	583.53	7748.49	-3.184e+04	-2.867e+06	2.159e+05	0.0
1732	reac per cdc 65 - nodo 710	3514.74	-8614.86	-3.184e+04	3.187e+06	1.300e+06	0.0
1733	reac per cdc 66 - nodo 710	-3514.74	8614.86	-3.184e+04	-3.187e+06	-1.300e+06	0.0
1734	reac per cdc 67 - nodo 710	-583.53	-7748.49	-3.184e+04	2.867e+06	-2.159e+05	0.0
1735	reac per cdc 68 - nodo 710	1158.64	7987.82	-3.184e+04	-2.955e+06	4.287e+05	0.0
1736	reac per cdc 69 - nodo 710	4089.86	-8375.53	-3.184e+04	3.099e+06	1.513e+06	0.0
1737	reac per cdc 70 - nodo 710	-4089.86	8375.53	-3.184e+04	-3.099e+06	-1.513e+06	0.0
1738	reac per cdc 71 - nodo 710	-1158.64	-7987.82	-3.184e+04	2.955e+06	-4.287e+05	0.0
1739	reac per cdc 72 - nodo 710	5017.37	6787.64	-3.184e+04	-2.511e+06	1.856e+06	0.0
1740	reac per cdc 73 - nodo 710	-919.09	-7654.02	-3.184e+04	2.832e+06	-3.401e+05	0.0
1741	reac per cdc 74 - nodo 710	919.09	7654.02	-3.184e+04	-2.832e+06	3.401e+05	0.0
1742	reac per cdc 75 - nodo 710	-5017.37	-6787.64	-3.184e+04	2.511e+06	-1.856e+06	0.0
1743	reac per cdc 76 - nodo 710	5592.48	7026.97	-3.184e+04	-2.600e+06	2.069e+06	0.0
1744	reac per cdc 77 - nodo 710	-343.98	-7414.68	-3.184e+04	2.743e+06	-1.273e+05	0.0
1745	reac per cdc 78 - nodo 710	343.98	7414.68	-3.184e+04	-2.743e+06	1.273e+05	0.0
1746	reac per cdc 79 - nodo 710	-5592.48	-7026.97	-3.184e+04	2.600e+06	-2.069e+06	0.0
1747	reac per cdc 80 - nodo 710	5133.19	811.69	-3.184e+04	-3.003e+05	1.899e+06	0.0
1748	reac per cdc 81 - nodo 710	5839.52	-3131.32	-3.184e+04	1.159e+06	2.161e+06	0.0
1749	reac per cdc 82 - nodo 710	-5839.52	3131.32	-3.184e+04	-1.159e+06	-2.161e+06	0.0
1750	reac per cdc 83 - nodo 710	-5133.19	-811.69	-3.184e+04	3.003e+05	-1.899e+06	0.0
1751	reac per cdc 84 - nodo 710	6201.60	580.16	-3.184e+04	-2.147e+05	2.295e+06	0.0
1752	reac per cdc 85 - nodo 710	4771.11	-2899.78	-3.184e+04	1.073e+06	1.765e+06	0.0
1753	reac per cdc 86 - nodo 710	-4771.11	2899.78	-3.184e+04	-1.073e+06	-1.765e+06	0.0
1754	reac per cdc 87 - nodo 710	-6201.60	-580.16	-3.184e+04	2.147e+05	-2.295e+06	0.0
1755	reac per cdc 88 - nodo 710	6673.01	1452.48	-3.184e+04	-5.374e+05	2.469e+06	0.0
1756	reac per cdc 89 - nodo 710	7379.33	-2490.53	-3.184e+04	9.215e+05	2.730e+06	0.0
1757	reac per cdc 90 - nodo 710	-7379.33	2490.53	-3.184e+04	-9.215e+05	-2.730e+06	0.0
1758	reac per cdc 91 - nodo 710	-6673.01	-1452.48	-3.184e+04	5.374e+05	-2.469e+06	0.0
1759	reac per cdc 92 - nodo 710	7741.41	1220.95	-3.184e+04	-4.518e+05	2.864e+06	0.0
1760	reac per cdc 93 - nodo 710	6310.92	-2259.00	-3.184e+04	8.358e+05	2.335e+06	0.0
1761	reac per cdc 94 - nodo 710	-6310.92	2259.00	-3.184e+04	-8.358e+05	-2.335e+06	0.0
1762	reac per cdc 95 - nodo 710	-7741.41	-1220.95	-3.184e+04	4.518e+05	-2.864e+06	0.0
1763	reac per cdc 96 - nodo 710	468.70	6223.74	-3.184e+04	-2.303e+06	1.734e+05	0.0
1764	reac per cdc 97 - nodo 710	2823.11	-6919.62	-3.184e+04	2.560e+06	1.045e+06	0.0
1765	reac per cdc 98 - nodo 710	-2823.11	6919.62	-3.184e+04	-2.560e+06	-1.045e+06	0.0
1766	reac per cdc 99 - nodo 710	-468.70	-6223.74	-3.184e+04	2.303e+06	-1.734e+05	0.0
1767	reac per cdc 100 - nodo 710	930.65	6415.97	-3.184e+04	-2.374e+06	3.443e+05	0.0
1768	reac per cdc 101 - nodo 710	3285.05	-6727.39	-3.184e+04	2.489e+06	1.215e+06	0.0
1769	reac per cdc 102 - nodo 710	-3285.05	6727.39	-3.184e+04	-2.489e+06	-1.215e+06	0.0
1770	reac per cdc 103 - nodo 710	-930.65	-6415.97	-3.184e+04	2.374e+06	-3.443e+05	0.0
1771	reac per cdc 104 - nodo 710	4030.05	5451.97	-3.184e+04	-2.017e+06	1.491e+06	0.0
1772	reac per cdc 105 - nodo 710	-738.23	-6147.85	-3.184e+04	2.275e+06	-2.731e+05	0.0
1773	reac per cdc 106 - nodo 710	738.23	6147.85	-3.184e+04	-2.275e+06	2.731e+05	0.0
1774	reac per cdc 107 - nodo 710	-4030.05	-5451.97	-3.184e+04	2.017e+06	-1.491e+06	0.0
1775	reac per cdc 108 - nodo 710	4491.99	5644.20	-3.184e+04	-2.088e+06	1.662e+06	0.0
1776	reac per cdc 109 - nodo 710	-276.29	-5955.62	-3.184e+04	2.204e+06	-1.022e+05	0.0
1777	reac per cdc 110 - nodo 710	276.29	5955.62	-3.184e+04	-2.204e+06	1.022e+05	0.0
1778	reac per cdc 111 - nodo 710	-4491.99	-5644.20	-3.184e+04	2.088e+06	-1.662e+06	0.0
1779	reac per cdc 112 - nodo 710	0.0	0.0	-5.103e+04	0.0	0.0	0.0
1780	reac per cdc 113 - nodo 710	227.80	7.13	-3.184e+04	-2639.36	8.429e+04	0.0
1781	reac per cdc 114 - nodo 710	-226.40	8.06	-3.184e+04	-2983.27	-8.377e+04	0.0
1782	reac per cdc 115 - nodo 710	19.14	538.50	-3.184e+04	-1.992e+05	7081.28	0.0
1783	reac per cdc 116 - nodo 710	-23.13	-545.69	-3.184e+04	2.019e+05	-8559.28	0.0
1784	reac per cdc 117 - nodo 710	136.68	4.28	-5.103e+04	-1583.62	5.057e+04	0.0
1785	reac per cdc 118 - nodo 710	-135.84	4.84	-5.103e+04	-1789.96	-5.026e+04	0.0
1786	reac per cdc 119 - nodo 710	11.48	323.10	-5.103e+04	-1.195e+05	4248.77	0.0
1787	reac per cdc 120 - nodo 710	-13.88	-327.42	-5.103e+04	1.211e+05	-5135.57	0.0
1788	reac per cdc 121 - nodo 710	227.80	7.13	-4.144e+04	-2639.36	8.429e+04	0.0
1789	reac per cdc 122 - nodo 710	-226.40	8.06	-4.144e+04	-2983.27	-8.377e+04	0.0
1790	reac per cdc 123 - nodo 710	19.14	538.50	-4.144e+04	-1.992e+05	7081.28	0.0
1791	reac per cdc 124 - nodo 710	-23.13	-545.69	-4.144e+04	2.019e+05	-8559.28	0.0
1792	reac per cdc 125 - nodo 710	0.0	0.0	-3.568e+04	0.0	0.0	0.0
1793	reac per cdc 126 - nodo 710	45.56	1.43	-3.184e+04	-527.87	1.686e+04	0.0
1794	reac per cdc 127 - nodo 710	-45.28	1.61	-3.184e+04	-596.65	-1.675e+04	0.0
1795	reac per cdc 128 - nodo 710	3.83	107.70	-3.184e+04	-3.985e+04	1416.26	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1796	reac per cdc 129 - nodo 710	-4.63	-109.14	-3.184e+04	4.038e+04	-1711.86	0.0
1797	reac per cdc 130 - nodo 710	0.0	0.0	-3.184e+04	0.0	0.0	0.0
1798	reac per cdc 3 - nodo 720	0.0	0.0	-6.373e+04	0.0	0.0	0.0
1799	reac per cdc 4 - nodo 720	335.07	7.61	-3.749e+04	-2814.18	1.240e+05	0.0
1800	reac per cdc 5 - nodo 720	-348.00	13.82	-3.749e+04	-5112.47	-1.288e+05	0.0
1801	reac per cdc 6 - nodo 720	73.32	755.82	-3.749e+04	-2.796e+05	2.713e+04	0.0
1802	reac per cdc 7 - nodo 720	-28.81	-765.37	-3.749e+04	2.832e+05	-1.066e+04	0.0
1803	reac per cdc 8 - nodo 720	201.04	4.56	-6.373e+04	-1688.51	7.439e+04	0.0
1804	reac per cdc 9 - nodo 720	-208.80	8.29	-6.373e+04	-3067.48	-7.726e+04	0.0
1805	reac per cdc 10 - nodo 720	43.99	453.49	-6.373e+04	-1.678e+05	1.628e+04	0.0
1806	reac per cdc 11 - nodo 720	-17.28	-459.22	-6.373e+04	1.699e+05	-6394.92	0.0
1807	reac per cdc 12 - nodo 720	335.07	7.61	-5.061e+04	-2814.18	1.240e+05	0.0
1808	reac per cdc 13 - nodo 720	-348.00	13.82	-5.061e+04	-5112.47	-1.288e+05	0.0
1809	reac per cdc 14 - nodo 720	73.32	755.82	-5.061e+04	-2.796e+05	2.713e+04	0.0
1810	reac per cdc 15 - nodo 720	-28.81	-765.37	-5.061e+04	2.832e+05	-1.066e+04	0.0
1811	reac per cdc 16 - nodo 720	9708.02	7766.24	-2.789e+04	-2.874e+06	3.592e+06	0.0
1812	reac per cdc 17 - nodo 720	1.097e+04	-449.84	-2.789e+04	1.664e+05	4.058e+06	0.0
1813	reac per cdc 18 - nodo 720	-1.097e+04	449.84	-2.789e+04	-1.664e+05	-4.058e+06	0.0
1814	reac per cdc 19 - nodo 720	-9708.02	-7766.24	-2.789e+04	2.874e+06	-3.592e+06	0.0
1815	reac per cdc 20 - nodo 720	1.168e+04	6295.35	-2.789e+04	-2.329e+06	4.321e+06	0.0
1816	reac per cdc 21 - nodo 720	8997.31	1021.06	-2.789e+04	-3.778e+05	3.329e+06	0.0
1817	reac per cdc 22 - nodo 720	-8997.31	-1021.06	-2.789e+04	3.778e+05	-3.329e+06	0.0
1818	reac per cdc 23 - nodo 720	-1.168e+04	-6295.35	-2.789e+04	2.329e+06	-4.321e+06	0.0
1819	reac per cdc 24 - nodo 720	1.258e+04	2381.40	-2.789e+04	-8.811e+05	4.656e+06	0.0
1820	reac per cdc 25 - nodo 720	1.384e+04	-5834.68	-2.789e+04	2.159e+06	5.122e+06	0.0
1821	reac per cdc 26 - nodo 720	-1.384e+04	5834.68	-2.789e+04	-2.159e+06	-5.122e+06	0.0
1822	reac per cdc 27 - nodo 720	-1.258e+04	-2381.40	-2.789e+04	8.811e+05	-4.656e+06	0.0
1823	reac per cdc 28 - nodo 720	1.456e+04	910.50	-2.789e+04	-3.369e+05	5.385e+06	0.0
1824	reac per cdc 29 - nodo 720	1.187e+04	-4363.79	-2.789e+04	1.615e+06	4.393e+06	0.0
1825	reac per cdc 30 - nodo 720	-1.187e+04	4363.79	-2.789e+04	-1.615e+06	-4.393e+06	0.0
1826	reac per cdc 31 - nodo 720	-1.456e+04	-910.50	-2.789e+04	3.369e+05	-5.385e+06	0.0
1827	reac per cdc 32 - nodo 720	1001.84	1.479e+04	-2.789e+04	-5.473e+06	3.707e+05	0.0
1828	reac per cdc 33 - nodo 720	5200.89	-1.260e+04	-2.789e+04	4.661e+06	1.924e+06	0.0
1829	reac per cdc 34 - nodo 720	-5200.89	1.260e+04	-2.789e+04	-4.661e+06	-1.924e+06	0.0
1830	reac per cdc 35 - nodo 720	-1001.84	-1.479e+04	-2.789e+04	5.473e+06	-3.707e+05	0.0
1831	reac per cdc 36 - nodo 720	1864.88	1.318e+04	-2.789e+04	-4.875e+06	6.900e+05	0.0
1832	reac per cdc 37 - nodo 720	6063.93	-1.421e+04	-2.789e+04	5.258e+06	2.244e+06	0.0
1833	reac per cdc 38 - nodo 720	-6063.93	1.421e+04	-2.789e+04	-5.258e+06	-2.244e+06	0.0
1834	reac per cdc 39 - nodo 720	-1864.88	-1.318e+04	-2.789e+04	4.875e+06	-6.900e+05	0.0
1835	reac per cdc 40 - nodo 720	7569.94	9887.93	-2.789e+04	-3.659e+06	2.801e+06	0.0
1836	reac per cdc 41 - nodo 720	-1367.22	-7693.01	-2.789e+04	2.846e+06	-5.059e+05	0.0
1837	reac per cdc 42 - nodo 720	1367.22	7693.01	-2.789e+04	-2.846e+06	5.059e+05	0.0
1838	reac per cdc 43 - nodo 720	-7569.94	-9887.93	-2.789e+04	3.659e+06	-2.801e+06	0.0
1839	reac per cdc 44 - nodo 720	8432.98	8272.48	-2.789e+04	-3.061e+06	3.120e+06	0.0
1840	reac per cdc 45 - nodo 720	-504.18	-9308.47	-2.789e+04	3.444e+06	-1.865e+05	0.0
1841	reac per cdc 46 - nodo 720	504.18	9308.47	-2.789e+04	-3.444e+06	1.865e+05	0.0
1842	reac per cdc 47 - nodo 720	-8432.98	-8272.48	-2.789e+04	3.061e+06	-3.120e+06	0.0
1843	reac per cdc 48 - nodo 720	6367.43	5093.83	-2.789e+04	-1.885e+06	2.356e+06	0.0
1844	reac per cdc 49 - nodo 720	7193.67	-295.05	-2.789e+04	1.092e+05	2.662e+06	0.0
1845	reac per cdc 50 - nodo 720	-7193.67	295.05	-2.789e+04	-1.092e+05	-2.662e+06	0.0
1846	reac per cdc 51 - nodo 720	-6367.43	-5093.83	-2.789e+04	1.885e+06	-2.356e+06	0.0
1847	reac per cdc 52 - nodo 720	7659.83	4129.08	-2.789e+04	-1.528e+06	2.834e+06	0.0
1848	reac per cdc 53 - nodo 720	5901.28	669.71	-2.789e+04	2.478e+05	2.183e+06	0.0
1849	reac per cdc 54 - nodo 720	-5901.28	-669.71	-2.789e+04	-2.478e+05	-2.183e+06	0.0
1850	reac per cdc 55 - nodo 720	-7659.83	-4129.08	-2.789e+04	1.528e+06	-2.834e+06	0.0
1851	reac per cdc 56 - nodo 720	8254.31	1561.94	-2.789e+04	-5.779e+05	3.054e+06	0.0
1852	reac per cdc 57 - nodo 720	9080.55	-3826.93	-2.789e+04	1.416e+06	3.360e+06	0.0
1853	reac per cdc 58 - nodo 720	-9080.55	3826.93	-2.789e+04	-1.416e+06	-3.360e+06	0.0
1854	reac per cdc 59 - nodo 720	-8254.31	-1561.94	-2.789e+04	5.779e+05	-3.054e+06	0.0
1855	reac per cdc 60 - nodo 720	9546.70	597.19	-2.789e+04	-2.210e+05	3.532e+06	0.0
1856	reac per cdc 61 - nodo 720	7788.15	-2862.18	-2.789e+04	1.059e+06	2.882e+06	0.0
1857	reac per cdc 62 - nodo 720	-7788.15	2862.18	-2.789e+04	-1.059e+06	-2.882e+06	0.0
1858	reac per cdc 63 - nodo 720	-9546.70	-597.19	-2.789e+04	2.210e+05	-3.532e+06	0.0
1859	reac per cdc 64 - nodo 720	657.10	9701.28	-2.789e+04	-3.589e+06	2.431e+05	0.0
1860	reac per cdc 65 - nodo 720	3411.23	-8261.64	-2.789e+04	3.057e+06	1.262e+06	0.0
1861	reac per cdc 66 - nodo 720	-3411.23	8261.64	-2.789e+04	-3.057e+06	-1.262e+06	0.0
1862	reac per cdc 67 - nodo 720	-657.10	-9701.28	-2.789e+04	3.589e+06	-2.431e+05	0.0
1863	reac per cdc 68 - nodo 720	1223.16	8641.71	-2.789e+04	-3.197e+06	4.526e+05	0.0
1864	reac per cdc 69 - nodo 720	3977.30	-9321.21	-2.789e+04	3.449e+06	1.472e+06	0.0
1865	reac per cdc 70 - nodo 720	-3977.30	9321.21	-2.789e+04	-3.449e+06	-1.472e+06	0.0
1866	reac per cdc 71 - nodo 720	-1223.16	-8641.71	-2.789e+04	3.197e+06	-4.526e+05	0.0
1867	reac per cdc 72 - nodo 720	4965.08	6485.44	-2.789e+04	-2.400e+06	1.837e+06	0.0
1868	reac per cdc 73 - nodo 720	-896.75	-5045.80	-2.789e+04	1.867e+06	-3.318e+05	0.0
1869	reac per cdc 74 - nodo 720	896.75	5045.80	-2.789e+04	-1.867e+06	3.318e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1870	reac per cdc 75 - nodo 720	-4965.08	-6485.44	-2.789e+04	2.400e+06	-1.837e+06	0.0
1871	reac per cdc 76 - nodo 720	5531.14	5425.87	-2.789e+04	-2.008e+06	2.047e+06	0.0
1872	reac per cdc 77 - nodo 720	-330.69	-6105.37	-2.789e+04	2.259e+06	-1.224e+05	0.0
1873	reac per cdc 78 - nodo 720	330.69	6105.37	-2.789e+04	-2.259e+06	1.224e+05	0.0
1874	reac per cdc 79 - nodo 720	-5531.14	-5425.87	-2.789e+04	2.008e+06	-2.047e+06	0.0
1875	reac per cdc 80 - nodo 720	5114.45	4091.46	-2.789e+04	-1.514e+06	1.892e+06	0.0
1876	reac per cdc 81 - nodo 720	5778.10	-236.99	-2.789e+04	8.768e+04	2.138e+06	0.0
1877	reac per cdc 82 - nodo 720	-5778.10	236.99	-2.789e+04	-8.768e+04	-2.138e+06	0.0
1878	reac per cdc 83 - nodo 720	-5114.45	-4091.46	-2.789e+04	1.514e+06	-1.892e+06	0.0
1879	reac per cdc 84 - nodo 720	6152.52	3316.56	-2.789e+04	-1.227e+06	2.276e+06	0.0
1880	reac per cdc 85 - nodo 720	4740.02	537.92	-2.789e+04	-1.990e+05	1.754e+06	0.0
1881	reac per cdc 86 - nodo 720	-4740.02	-537.92	-2.789e+04	1.990e+05	-1.754e+06	0.0
1882	reac per cdc 87 - nodo 720	-6152.52	-3316.56	-2.789e+04	1.227e+06	-2.276e+06	0.0
1883	reac per cdc 88 - nodo 720	6630.02	1254.58	-2.789e+04	-4.642e+05	2.453e+06	0.0
1884	reac per cdc 89 - nodo 720	7293.67	-3073.87	-2.789e+04	1.137e+06	2.699e+06	0.0
1885	reac per cdc 90 - nodo 720	-7293.67	3073.87	-2.789e+04	-1.137e+06	-2.699e+06	0.0
1886	reac per cdc 91 - nodo 720	-6630.02	-1254.58	-2.789e+04	4.642e+05	-2.453e+06	0.0
1887	reac per cdc 92 - nodo 720	7668.10	479.67	-2.789e+04	-1.775e+05	2.837e+06	0.0
1888	reac per cdc 93 - nodo 720	6255.60	-2298.96	-2.789e+04	8.506e+05	2.314e+06	0.0
1889	reac per cdc 94 - nodo 720	-6255.60	2298.96	-2.789e+04	-8.506e+05	-2.314e+06	0.0
1890	reac per cdc 95 - nodo 720	-7668.10	-479.67	-2.789e+04	1.775e+05	-2.837e+06	0.0
1891	reac per cdc 96 - nodo 720	527.79	7792.26	-2.789e+04	-2.883e+06	1.953e+05	0.0
1892	reac per cdc 97 - nodo 720	2739.97	-6635.91	-2.789e+04	2.455e+06	1.014e+06	0.0
1893	reac per cdc 98 - nodo 720	-2739.97	6635.91	-2.789e+04	-2.455e+06	-1.014e+06	0.0
1894	reac per cdc 99 - nodo 720	-527.79	-7792.26	-2.789e+04	2.883e+06	-1.953e+05	0.0
1895	reac per cdc 100 - nodo 720	982.47	6941.19	-2.789e+04	-2.568e+06	3.635e+05	0.0
1896	reac per cdc 101 - nodo 720	3194.64	-7486.98	-2.789e+04	2.770e+06	1.182e+06	0.0
1897	reac per cdc 102 - nodo 720	-3194.64	7486.98	-2.789e+04	-2.770e+06	-1.182e+06	0.0
1898	reac per cdc 103 - nodo 720	-982.47	-6941.19	-2.789e+04	2.568e+06	-3.635e+05	0.0
1899	reac per cdc 104 - nodo 720	3988.05	5209.23	-2.789e+04	-1.927e+06	1.476e+06	0.0
1900	reac per cdc 105 - nodo 720	-720.29	-4052.88	-2.789e+04	1.500e+06	-2.665e+05	0.0
1901	reac per cdc 106 - nodo 720	720.29	4052.88	-2.789e+04	-1.500e+06	2.665e+05	0.0
1902	reac per cdc 107 - nodo 720	-3988.05	-5209.23	-2.789e+04	1.927e+06	-1.476e+06	0.0
1903	reac per cdc 108 - nodo 720	4442.72	4358.16	-2.789e+04	-1.612e+06	1.644e+06	0.0
1904	reac per cdc 109 - nodo 720	-265.61	-4903.95	-2.789e+04	1.814e+06	-9.828e+04	0.0
1905	reac per cdc 110 - nodo 720	265.61	4903.95	-2.789e+04	-1.814e+06	9.828e+04	0.0
1906	reac per cdc 111 - nodo 720	-4442.72	-4358.16	-2.789e+04	1.612e+06	-1.644e+06	0.0
1907	reac per cdc 112 - nodo 720	0.0	0.0	-4.538e+04	0.0	0.0	0.0
1908	reac per cdc 113 - nodo 720	223.38	5.07	-2.789e+04	-1876.12	8.265e+04	0.0
1909	reac per cdc 114 - nodo 720	-232.00	9.21	-2.789e+04	-3408.31	-8.584e+04	0.0
1910	reac per cdc 115 - nodo 720	48.88	503.88	-2.789e+04	-1.864e+05	1.809e+04	0.0
1911	reac per cdc 116 - nodo 720	-19.20	-510.25	-2.789e+04	1.888e+05	-7105.47	0.0
1912	reac per cdc 117 - nodo 720	134.03	3.04	-4.538e+04	-1125.67	4.959e+04	0.0
1913	reac per cdc 118 - nodo 720	-139.20	5.53	-4.538e+04	-2044.99	-5.150e+04	0.0
1914	reac per cdc 119 - nodo 720	29.33	302.33	-4.538e+04	-1.119e+05	1.085e+04	0.0
1915	reac per cdc 120 - nodo 720	-11.52	-306.15	-4.538e+04	1.133e+05	-4263.28	0.0
1916	reac per cdc 121 - nodo 720	223.38	5.07	-3.664e+04	-1876.12	8.265e+04	0.0
1917	reac per cdc 122 - nodo 720	-232.00	9.21	-3.664e+04	-3408.31	-8.584e+04	0.0
1918	reac per cdc 123 - nodo 720	48.88	503.88	-3.664e+04	-1.864e+05	1.809e+04	0.0
1919	reac per cdc 124 - nodo 720	-19.20	-510.25	-3.664e+04	1.888e+05	-7105.47	0.0
1920	reac per cdc 125 - nodo 720	0.0	0.0	-3.139e+04	0.0	0.0	0.0
1921	reac per cdc 126 - nodo 720	44.68	1.01	-2.789e+04	-375.22	1.653e+04	0.0
1922	reac per cdc 127 - nodo 720	-46.40	1.84	-2.789e+04	-681.66	-1.717e+04	0.0
1923	reac per cdc 128 - nodo 720	9.78	100.78	-2.789e+04	-3.729e+04	3617.09	0.0
1924	reac per cdc 129 - nodo 720	-3.84	-102.05	-2.789e+04	3.776e+04	-1421.09	0.0
1925	reac per cdc 130 - nodo 720	0.0	0.0	-2.789e+04	0.0	0.0	0.0
1926	reac per cdc 3 - nodo 727	0.0	0.0	-2.838e+04	0.0	0.0	0.0
1927	reac per cdc 4 - nodo 727	333.98	3.67	-2.050e+04	-1357.86	1.236e+05	0.0
1928	reac per cdc 5 - nodo 727	-359.63	10.15	-2.050e+04	-3757.24	-1.331e+05	0.0
1929	reac per cdc 6 - nodo 727	102.97	688.52	-2.050e+04	-2.548e+05	3.810e+04	0.0
1930	reac per cdc 7 - nodo 727	-14.66	-693.84	-2.050e+04	2.567e+05	-5422.92	0.0
1931	reac per cdc 8 - nodo 727	200.39	2.20	-2.838e+04	-814.72	7.414e+04	0.0
1932	reac per cdc 9 - nodo 727	-215.78	6.09	-2.838e+04	-2254.34	-7.984e+04	0.0
1933	reac per cdc 10 - nodo 727	61.78	413.11	-2.838e+04	-1.529e+05	2.286e+04	0.0
1934	reac per cdc 11 - nodo 727	-8.79	-416.31	-2.838e+04	1.540e+05	-3253.75	0.0
1935	reac per cdc 12 - nodo 727	333.98	3.67	-2.444e+04	-1357.86	1.236e+05	0.0
1936	reac per cdc 13 - nodo 727	-359.63	10.15	-2.444e+04	-3757.24	-1.331e+05	0.0
1937	reac per cdc 14 - nodo 727	102.97	688.52	-2.444e+04	-2.548e+05	3.810e+04	0.0
1938	reac per cdc 15 - nodo 727	-14.66	-693.84	-2.444e+04	2.567e+05	-5422.92	0.0
1939	reac per cdc 16 - nodo 727	9625.46	1.017e+04	-1.548e+04	-3.762e+06	3.561e+06	0.0
1940	reac per cdc 17 - nodo 727	1.084e+04	1390.43	-1.548e+04	-5.145e+05	4.011e+06	0.0
1941	reac per cdc 18 - nodo 727	-1.084e+04	-1390.43	-1.548e+04	5.145e+05	-4.011e+06	0.0
1942	reac per cdc 19 - nodo 727	-9625.46	-1.017e+04	-1.548e+04	3.762e+06	-3.561e+06	0.0
1943	reac per cdc 20 - nodo 727	1.155e+04	8345.74	-1.548e+04	-3.088e+06	4.275e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
1944	reac per cdc 21 - nodo 727	8911.47	3211.14	-1.548e+04	-1.188e+06	3.297e+06	0.0
1945	reac per cdc 22 - nodo 727	-8911.47	-3211.14	-1.548e+04	1.188e+06	-3.297e+06	0.0
1946	reac per cdc 23 - nodo 727	-1.155e+04	-8345.74	-1.548e+04	3.088e+06	-4.275e+06	0.0
1947	reac per cdc 24 - nodo 727	1.248e+04	1745.97	-1.548e+04	-6.460e+05	4.617e+06	0.0
1948	reac per cdc 25 - nodo 727	1.369e+04	-7030.05	-1.548e+04	2.601e+06	5.066e+06	0.0
1949	reac per cdc 26 - nodo 727	-1.369e+04	7030.05	-1.548e+04	-2.601e+06	-5.066e+06	0.0
1950	reac per cdc 27 - nodo 727	-1.248e+04	-1745.97	-1.548e+04	6.460e+05	-4.617e+06	0.0
1951	reac per cdc 28 - nodo 727	1.441e+04	-74.74	-1.548e+04	2.765e+04	5.330e+06	0.0
1952	reac per cdc 29 - nodo 727	1.176e+04	-5209.34	-1.548e+04	1.927e+06	4.353e+06	0.0
1953	reac per cdc 30 - nodo 727	-1.176e+04	5209.34	-1.548e+04	-1.927e+06	-4.353e+06	0.0
1954	reac per cdc 31 - nodo 727	-1.441e+04	74.74	-1.548e+04	-2.765e+04	-5.330e+06	0.0
1955	reac per cdc 32 - nodo 727	1046.74	1.636e+04	-1.548e+04	-6.053e+06	3.873e+05	0.0
1956	reac per cdc 33 - nodo 727	5092.67	-1.289e+04	-1.548e+04	4.770e+06	1.884e+06	0.0
1957	reac per cdc 34 - nodo 727	-5092.67	1.289e+04	-1.548e+04	-4.770e+06	-1.884e+06	0.0
1958	reac per cdc 35 - nodo 727	-1046.74	-1.636e+04	-1.548e+04	6.053e+06	-3.873e+05	0.0
1959	reac per cdc 36 - nodo 727	1902.44	1.383e+04	-1.548e+04	-5.119e+06	7.039e+05	0.0
1960	reac per cdc 37 - nodo 727	5948.38	-1.542e+04	-1.548e+04	5.705e+06	2.201e+06	0.0
1961	reac per cdc 38 - nodo 727	-5948.38	1.542e+04	-1.548e+04	-5.705e+06	-2.201e+06	0.0
1962	reac per cdc 39 - nodo 727	-1902.44	-1.383e+04	-1.548e+04	5.119e+06	-7.039e+05	0.0
1963	reac per cdc 40 - nodo 727	7472.64	1.029e+04	-1.548e+04	-3.808e+06	2.765e+06	0.0
1964	reac per cdc 41 - nodo 727	-1333.23	-6824.13	-1.548e+04	2.525e+06	-4.933e+05	0.0
1965	reac per cdc 42 - nodo 727	1333.23	6824.13	-1.548e+04	-2.525e+06	4.933e+05	0.0
1966	reac per cdc 43 - nodo 727	-7472.64	-1.029e+04	-1.548e+04	3.808e+06	-2.765e+06	0.0
1967	reac per cdc 44 - nodo 727	8328.34	7765.06	-1.548e+04	-2.873e+06	3.081e+06	0.0
1968	reac per cdc 45 - nodo 727	-477.53	-9350.28	-1.548e+04	3.460e+06	-1.767e+05	0.0
1969	reac per cdc 46 - nodo 727	477.53	9350.28	-1.548e+04	-3.460e+06	1.767e+05	0.0
1970	reac per cdc 47 - nodo 727	-8328.34	-7765.06	-1.548e+04	2.873e+06	-3.081e+06	0.0
1971	reac per cdc 48 - nodo 727	6313.28	6668.11	-1.548e+04	-2.467e+06	2.336e+06	0.0
1972	reac per cdc 49 - nodo 727	7109.39	911.98	-1.548e+04	-3.374e+05	2.630e+06	0.0
1973	reac per cdc 50 - nodo 727	-7109.39	-911.98	-1.548e+04	3.374e+05	-2.630e+06	0.0
1974	reac per cdc 51 - nodo 727	-6313.28	-6668.11	-1.548e+04	2.467e+06	-2.336e+06	0.0
1975	reac per cdc 52 - nodo 727	7577.69	5473.92	-1.548e+04	-2.025e+06	2.804e+06	0.0
1976	reac per cdc 53 - nodo 727	5844.98	2106.17	-1.548e+04	-7.793e+05	2.163e+06	0.0
1977	reac per cdc 54 - nodo 727	-5844.98	-2106.17	-1.548e+04	7.793e+05	-2.163e+06	0.0
1978	reac per cdc 55 - nodo 727	-7577.69	-5473.92	-1.548e+04	2.025e+06	-2.804e+06	0.0
1979	reac per cdc 56 - nodo 727	8184.11	1145.17	-1.548e+04	-4.237e+05	3.028e+06	0.0
1980	reac per cdc 57 - nodo 727	8980.23	-4610.97	-1.548e+04	1.706e+06	3.323e+06	0.0
1981	reac per cdc 58 - nodo 727	-8980.23	4610.97	-1.548e+04	-1.706e+06	-3.323e+06	0.0
1982	reac per cdc 59 - nodo 727	-8184.11	-1145.17	-1.548e+04	4.237e+05	-3.028e+06	0.0
1983	reac per cdc 60 - nodo 727	9448.53	-49.02	-1.548e+04	1.814e+04	3.496e+06	0.0
1984	reac per cdc 61 - nodo 727	7715.81	-3416.77	-1.548e+04	1.264e+06	2.855e+06	0.0
1985	reac per cdc 62 - nodo 727	-7715.81	3416.77	-1.548e+04	-1.264e+06	-2.855e+06	0.0
1986	reac per cdc 63 - nodo 727	-9448.53	49.02	-1.548e+04	-1.814e+04	-3.496e+06	0.0
1987	reac per cdc 64 - nodo 727	686.55	1.073e+04	-1.548e+04	-3.970e+06	2.540e+05	0.0
1988	reac per cdc 65 - nodo 727	3340.25	-8456.55	-1.548e+04	3.129e+06	1.236e+06	0.0
1989	reac per cdc 66 - nodo 727	-3340.25	8456.55	-1.548e+04	-3.129e+06	-1.236e+06	0.0
1990	reac per cdc 67 - nodo 727	-686.55	-1.073e+04	-1.548e+04	3.970e+06	-2.540e+05	0.0
1991	reac per cdc 68 - nodo 727	1247.80	9073.69	-1.548e+04	-3.357e+06	4.617e+05	0.0
1992	reac per cdc 69 - nodo 727	3901.50	-1.011e+04	-1.548e+04	3.742e+06	1.444e+06	0.0
1993	reac per cdc 70 - nodo 727	-3901.50	1.011e+04	-1.548e+04	-3.742e+06	-1.444e+06	0.0
1994	reac per cdc 71 - nodo 727	-1247.80	-9073.69	-1.548e+04	3.357e+06	-4.617e+05	0.0
1995	reac per cdc 72 - nodo 727	4901.26	6749.94	-1.548e+04	-2.497e+06	1.813e+06	0.0
1996	reac per cdc 73 - nodo 727	-874.46	-4475.91	-1.548e+04	1.656e+06	-3.235e+05	0.0
1997	reac per cdc 74 - nodo 727	874.46	4475.91	-1.548e+04	-1.656e+06	3.235e+05	0.0
1998	reac per cdc 75 - nodo 727	-4901.26	-6749.94	-1.548e+04	2.497e+06	-1.813e+06	0.0
1999	reac per cdc 76 - nodo 727	5462.51	5093.05	-1.548e+04	-1.884e+06	2.021e+06	0.0
2000	reac per cdc 77 - nodo 727	-313.21	-6132.79	-1.548e+04	2.269e+06	-1.159e+05	0.0
2001	reac per cdc 78 - nodo 727	313.21	6132.79	-1.548e+04	-2.269e+06	1.159e+05	0.0
2002	reac per cdc 79 - nodo 727	-5462.51	-5093.05	-1.548e+04	1.884e+06	-2.021e+06	0.0
2003	reac per cdc 80 - nodo 727	5070.95	5355.96	-1.548e+04	-1.982e+06	1.876e+06	0.0
2004	reac per cdc 81 - nodo 727	5710.40	732.52	-1.548e+04	-2.710e+05	2.113e+06	0.0
2005	reac per cdc 82 - nodo 727	-5710.40	-732.52	-1.548e+04	2.710e+05	-2.113e+06	0.0
2006	reac per cdc 83 - nodo 727	-5070.95	-5355.96	-1.548e+04	1.982e+06	-1.876e+06	0.0
2007	reac per cdc 84 - nodo 727	6086.55	4396.76	-1.548e+04	-1.627e+06	2.252e+06	0.0
2008	reac per cdc 85 - nodo 727	4694.80	1691.72	-1.548e+04	-6.259e+05	1.737e+06	0.0
2009	reac per cdc 86 - nodo 727	-4694.80	-1691.72	-1.548e+04	6.259e+05	-1.737e+06	0.0
2010	reac per cdc 87 - nodo 727	-6086.55	-4396.76	-1.548e+04	1.627e+06	-2.252e+06	0.0
2011	reac per cdc 88 - nodo 727	6573.64	919.82	-1.548e+04	-3.403e+05	2.432e+06	0.0
2012	reac per cdc 89 - nodo 727	7213.09	-3703.62	-1.548e+04	1.370e+06	2.669e+06	0.0
2013	reac per cdc 90 - nodo 727	-7213.09	3703.62	-1.548e+04	-1.370e+06	-2.669e+06	0.0
2014	reac per cdc 91 - nodo 727	-6573.64	-919.82	-1.548e+04	3.403e+05	-2.432e+06	0.0
2015	reac per cdc 92 - nodo 727	7589.24	-39.37	-1.548e+04	1.457e+04	2.808e+06	0.0
2016	reac per cdc 93 - nodo 727	6197.49	-2744.42	-1.548e+04	1.015e+06	2.293e+06	0.0
2017	reac per cdc 94 - nodo 727	-6197.49	2744.42	-1.548e+04	-1.015e+06	-2.293e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2018	reac per cdc 95 - nodo 727	-7589.24	39.37	-1.548e+04	-1.457e+04	-2.808e+06	0.0
2019	reac per cdc 96 - nodo 727	551.45	8619.01	-1.548e+04	-3.189e+06	2.040e+05	0.0
2020	reac per cdc 97 - nodo 727	2682.96	-6792.47	-1.548e+04	2.513e+06	9.927e+05	0.0
2021	reac per cdc 98 - nodo 727	-2682.96	6792.47	-1.548e+04	-2.513e+06	-9.927e+05	0.0
2022	reac per cdc 99 - nodo 727	-551.45	-8619.01	-1.548e+04	3.189e+06	-2.040e+05	0.0
2023	reac per cdc 100 - nodo 727	1002.26	7288.17	-1.548e+04	-2.697e+06	3.708e+05	0.0
2024	reac per cdc 101 - nodo 727	3133.76	-8123.31	-1.548e+04	3.006e+06	1.159e+06	0.0
2025	reac per cdc 102 - nodo 727	-3133.76	8123.31	-1.548e+04	-3.006e+06	-1.159e+06	0.0
2026	reac per cdc 103 - nodo 727	-1002.26	-7288.17	-1.548e+04	2.697e+06	-3.708e+05	0.0
2027	reac per cdc 104 - nodo 727	3936.79	5421.68	-1.548e+04	-2.006e+06	1.457e+06	0.0
2028	reac per cdc 105 - nodo 727	-702.38	-3595.14	-1.548e+04	1.330e+06	-2.599e+05	0.0
2029	reac per cdc 106 - nodo 727	702.38	3595.14	-1.548e+04	-1.330e+06	2.599e+05	0.0
2030	reac per cdc 107 - nodo 727	-3936.79	-5421.68	-1.548e+04	2.006e+06	-1.457e+06	0.0
2031	reac per cdc 108 - nodo 727	4387.59	4090.84	-1.548e+04	-1.514e+06	1.623e+06	0.0
2032	reac per cdc 109 - nodo 727	-251.57	-4925.98	-1.548e+04	1.823e+06	-9.308e+04	0.0
2033	reac per cdc 110 - nodo 727	251.57	4925.98	-1.548e+04	-1.823e+06	9.308e+04	0.0
2034	reac per cdc 111 - nodo 727	-4387.59	-4090.84	-1.548e+04	1.514e+06	-1.623e+06	0.0
2035	reac per cdc 112 - nodo 727	0.0	0.0	-2.074e+04	0.0	0.0	0.0
2036	reac per cdc 113 - nodo 727	222.65	2.45	-1.548e+04	-905.24	8.238e+04	0.0
2037	reac per cdc 114 - nodo 727	-239.75	6.77	-1.548e+04	-2504.82	-8.871e+04	0.0
2038	reac per cdc 115 - nodo 727	68.64	459.01	-1.548e+04	-1.698e+05	2.540e+04	0.0
2039	reac per cdc 116 - nodo 727	-9.77	-462.56	-1.548e+04	1.711e+05	-3615.28	0.0
2040	reac per cdc 117 - nodo 727	133.59	1.47	-2.074e+04	-543.15	4.943e+04	0.0
2041	reac per cdc 118 - nodo 727	-143.85	4.06	-2.074e+04	-1502.89	-5.323e+04	0.0
2042	reac per cdc 119 - nodo 727	41.19	275.41	-2.074e+04	-1.019e+05	1.524e+04	0.0
2043	reac per cdc 120 - nodo 727	-5.86	-277.54	-2.074e+04	1.027e+05	-2169.17	0.0
2044	reac per cdc 121 - nodo 727	222.65	2.45	-1.811e+04	-905.24	8.238e+04	0.0
2045	reac per cdc 122 - nodo 727	-239.75	6.77	-1.811e+04	-2504.82	-8.871e+04	0.0
2046	reac per cdc 123 - nodo 727	68.64	459.01	-1.811e+04	-1.698e+05	2.540e+04	0.0
2047	reac per cdc 124 - nodo 727	-9.77	-462.56	-1.811e+04	1.711e+05	-3615.28	0.0
2048	reac per cdc 125 - nodo 727	0.0	0.0	-1.653e+04	0.0	0.0	0.0
2049	reac per cdc 126 - nodo 727	44.53	0.49	-1.548e+04	-181.05	1.648e+04	0.0
2050	reac per cdc 127 - nodo 727	-47.95	1.35	-1.548e+04	-500.96	-1.774e+04	0.0
2051	reac per cdc 128 - nodo 727	13.73	91.80	-1.548e+04	-3.397e+04	5079.61	0.0
2052	reac per cdc 129 - nodo 727	-1.95	-92.51	-1.548e+04	3.423e+04	-723.06	0.0
2053	reac per cdc 130 - nodo 727	0.0	0.0	-1.548e+04	0.0	0.0	0.0
2054	reac per cdc 131 - nodo 789	0.0	0.78	-3.289e+04	-859.49	0.0	0.0
2055	reac per cdc 132 - nodo 789	794.70	-7.48	-3.026e+04	8233.94	8.754e+05	0.0
2056	reac per cdc 133 - nodo 789	-793.03	-7.48	-3.026e+04	8233.94	-8.735e+05	0.0
2057	reac per cdc 134 - nodo 789	-3.62	465.38	-2.988e+04	-5.126e+05	-3982.58	0.0
2058	reac per cdc 135 - nodo 789	-3.62	-461.29	-3.011e+04	5.081e+05	-3982.58	0.0
2059	reac per cdc 136 - nodo 789	476.82	-3.89	-3.302e+04	4289.63	5.252e+05	0.0
2060	reac per cdc 137 - nodo 789	-475.82	-3.89	-3.302e+04	4289.63	-5.241e+05	0.0
2061	reac per cdc 138 - nodo 789	-2.17	279.82	-3.280e+04	-3.082e+05	-2389.55	0.0
2062	reac per cdc 139 - nodo 789	-2.17	-276.18	-3.293e+04	3.042e+05	-2389.55	0.0
2063	reac per cdc 140 - nodo 789	794.70	-7.24	-3.168e+04	7978.16	8.754e+05	0.0
2064	reac per cdc 141 - nodo 789	-793.03	-7.24	-3.168e+04	7978.16	-8.735e+05	0.0
2065	reac per cdc 142 - nodo 789	-3.62	465.62	-3.131e+04	-5.129e+05	-3982.58	0.0
2066	reac per cdc 143 - nodo 789	-3.62	-461.06	-3.153e+04	5.079e+05	-3982.58	0.0
2067	reac per cdc 144 - nodo 789	7603.67	1784.39	-2.306e+04	-1.966e+06	8.375e+06	0.0
2068	reac per cdc 145 - nodo 789	7603.67	-1783.90	-2.316e+04	1.965e+06	8.375e+06	0.0
2069	reac per cdc 146 - nodo 789	-7603.67	1784.39	-2.306e+04	-1.966e+06	-8.375e+06	0.0
2070	reac per cdc 147 - nodo 789	-7603.67	-1783.90	-2.316e+04	1.965e+06	-8.375e+06	0.0
2071	reac per cdc 148 - nodo 789	7603.67	2024.48	-2.303e+04	-2.230e+06	8.375e+06	0.0
2072	reac per cdc 149 - nodo 789	7603.67	-2024.00	-2.319e+04	2.229e+06	8.375e+06	0.0
2073	reac per cdc 150 - nodo 789	-7603.67	2024.48	-2.303e+04	-2.230e+06	-8.375e+06	0.0
2074	reac per cdc 151 - nodo 789	-7603.67	-2024.00	-2.319e+04	2.229e+06	-8.375e+06	0.0
2075	reac per cdc 152 - nodo 789	7603.67	1784.39	-2.306e+04	-1.966e+06	8.375e+06	0.0
2076	reac per cdc 153 - nodo 789	7603.67	-1783.90	-2.316e+04	1.965e+06	8.375e+06	0.0
2077	reac per cdc 154 - nodo 789	-7603.67	1784.39	-2.306e+04	-1.966e+06	-8.375e+06	0.0
2078	reac per cdc 155 - nodo 789	-7603.67	-1783.90	-2.316e+04	1.965e+06	-8.375e+06	0.0
2079	reac per cdc 156 - nodo 789	7603.67	2024.48	-2.303e+04	-2.230e+06	8.375e+06	0.0
2080	reac per cdc 157 - nodo 789	7603.67	-2024.00	-2.319e+04	2.229e+06	8.375e+06	0.0
2081	reac per cdc 158 - nodo 789	-7603.67	2024.48	-2.303e+04	-2.230e+06	-8.375e+06	0.0
2082	reac per cdc 159 - nodo 789	-7603.67	-2024.00	-2.319e+04	2.229e+06	-8.375e+06	0.0
2083	reac per cdc 160 - nodo 789	2281.10	5947.40	-2.295e+04	-6.551e+06	2.513e+06	0.0
2084	reac per cdc 161 - nodo 789	2281.10	-5946.91	-2.327e+04	6.551e+06	2.513e+06	0.0
2085	reac per cdc 162 - nodo 789	-2281.10	5947.40	-2.295e+04	-6.551e+06	-2.513e+06	0.0
2086	reac per cdc 163 - nodo 789	-2281.10	-5946.91	-2.327e+04	6.551e+06	-2.513e+06	0.0
2087	reac per cdc 164 - nodo 789	2281.10	5947.40	-2.295e+04	-6.551e+06	2.513e+06	0.0
2088	reac per cdc 165 - nodo 789	2281.10	-5946.91	-2.327e+04	6.551e+06	2.513e+06	0.0
2089	reac per cdc 166 - nodo 789	-2281.10	5947.40	-2.295e+04	-6.551e+06	-2.513e+06	0.0
2090	reac per cdc 167 - nodo 789	-2281.10	-5946.91	-2.327e+04	6.551e+06	-2.513e+06	0.0
2091	reac per cdc 168 - nodo 789	2281.10	6747.71	-2.284e+04	-7.433e+06	2.513e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2092	reac per cdc 169 - nodo 789	2281.10	-6747.22	-2.338e+04	7.432e+06	2.513e+06	0.0
2093	reac per cdc 170 - nodo 789	-2281.10	6747.71	-2.284e+04	-7.433e+06	-2.513e+06	0.0
2094	reac per cdc 171 - nodo 789	-2281.10	-6747.22	-2.338e+04	7.432e+06	-2.513e+06	0.0
2095	reac per cdc 172 - nodo 789	2281.10	6747.71	-2.284e+04	-7.433e+06	2.513e+06	0.0
2096	reac per cdc 173 - nodo 789	2281.10	-6747.22	-2.338e+04	7.432e+06	2.513e+06	0.0
2097	reac per cdc 174 - nodo 789	-2281.10	6747.71	-2.284e+04	-7.433e+06	-2.513e+06	0.0
2098	reac per cdc 175 - nodo 789	-2281.10	-6747.22	-2.338e+04	7.432e+06	-2.513e+06	0.0
2099	reac per cdc 176 - nodo 789	4669.25	1094.17	-2.308e+04	-1.205e+06	5.143e+06	0.0
2100	reac per cdc 177 - nodo 789	4669.25	-1093.68	-2.314e+04	1.205e+06	5.143e+06	0.0
2101	reac per cdc 178 - nodo 789	-4669.25	1094.17	-2.308e+04	-1.205e+06	-5.143e+06	0.0
2102	reac per cdc 179 - nodo 789	-4669.25	-1093.68	-2.314e+04	1.205e+06	-5.143e+06	0.0
2103	reac per cdc 180 - nodo 789	4669.25	1241.88	-2.306e+04	-1.368e+06	5.143e+06	0.0
2104	reac per cdc 181 - nodo 789	4669.25	-1241.40	-2.316e+04	1.367e+06	5.143e+06	0.0
2105	reac per cdc 182 - nodo 789	-4669.25	1241.88	-2.306e+04	-1.368e+06	-5.143e+06	0.0
2106	reac per cdc 183 - nodo 789	-4669.25	-1241.40	-2.316e+04	1.367e+06	-5.143e+06	0.0
2107	reac per cdc 184 - nodo 789	4669.25	1094.17	-2.308e+04	-1.205e+06	5.143e+06	0.0
2108	reac per cdc 185 - nodo 789	4669.25	-1093.68	-2.314e+04	1.205e+06	5.143e+06	0.0
2109	reac per cdc 186 - nodo 789	-4669.25	1094.17	-2.308e+04	-1.205e+06	-5.143e+06	0.0
2110	reac per cdc 187 - nodo 789	-4669.25	-1093.68	-2.314e+04	1.205e+06	-5.143e+06	0.0
2111	reac per cdc 188 - nodo 789	4669.25	1241.88	-2.306e+04	-1.368e+06	5.143e+06	0.0
2112	reac per cdc 189 - nodo 789	4669.25	-1241.40	-2.316e+04	1.367e+06	5.143e+06	0.0
2113	reac per cdc 190 - nodo 789	-4669.25	1241.88	-2.306e+04	-1.368e+06	-5.143e+06	0.0
2114	reac per cdc 191 - nodo 789	-4669.25	-1241.40	-2.316e+04	1.367e+06	-5.143e+06	0.0
2115	reac per cdc 192 - nodo 789	1400.78	3646.66	-2.301e+04	-4.017e+06	1.543e+06	0.0
2116	reac per cdc 193 - nodo 789	1400.78	-3646.18	-2.321e+04	4.016e+06	1.543e+06	0.0
2117	reac per cdc 194 - nodo 789	-1400.78	3646.66	-2.301e+04	-4.017e+06	-1.543e+06	0.0
2118	reac per cdc 195 - nodo 789	-1400.78	-3646.18	-2.321e+04	4.016e+06	-1.543e+06	0.0
2119	reac per cdc 196 - nodo 789	1400.78	3646.66	-2.301e+04	-4.017e+06	1.543e+06	0.0
2120	reac per cdc 197 - nodo 789	1400.78	-3646.18	-2.321e+04	4.016e+06	1.543e+06	0.0
2121	reac per cdc 198 - nodo 789	-1400.78	3646.66	-2.301e+04	-4.017e+06	-1.543e+06	0.0
2122	reac per cdc 199 - nodo 789	-1400.78	-3646.18	-2.321e+04	4.016e+06	-1.543e+06	0.0
2123	reac per cdc 200 - nodo 789	1400.78	4139.04	-2.294e+04	-4.559e+06	1.543e+06	0.0
2124	reac per cdc 201 - nodo 789	1400.78	-4138.55	-2.328e+04	4.559e+06	1.543e+06	0.0
2125	reac per cdc 202 - nodo 789	-1400.78	4139.04	-2.294e+04	-4.559e+06	-1.543e+06	0.0
2126	reac per cdc 203 - nodo 789	-1400.78	-4138.55	-2.328e+04	4.559e+06	-1.543e+06	0.0
2127	reac per cdc 204 - nodo 789	1400.78	4139.04	-2.294e+04	-4.559e+06	1.543e+06	0.0
2128	reac per cdc 205 - nodo 789	1400.78	-4138.55	-2.328e+04	4.559e+06	1.543e+06	0.0
2129	reac per cdc 206 - nodo 789	-1400.78	4139.04	-2.294e+04	-4.559e+06	-1.543e+06	0.0
2130	reac per cdc 207 - nodo 789	-1400.78	-4138.55	-2.328e+04	4.559e+06	-1.543e+06	0.0
2131	reac per cdc 208 - nodo 789	3638.46	853.34	-2.309e+04	-9.399e+05	4.008e+06	0.0
2132	reac per cdc 209 - nodo 789	3638.46	-852.85	-2.313e+04	9.394e+05	4.008e+06	0.0
2133	reac per cdc 210 - nodo 789	-3638.46	853.34	-2.309e+04	-9.399e+05	-4.008e+06	0.0
2134	reac per cdc 211 - nodo 789	-3638.46	-852.85	-2.313e+04	9.394e+05	-4.008e+06	0.0
2135	reac per cdc 212 - nodo 789	3638.46	967.99	-2.307e+04	-1.066e+06	4.008e+06	0.0
2136	reac per cdc 213 - nodo 789	3638.46	-967.51	-2.315e+04	1.066e+06	4.008e+06	0.0
2137	reac per cdc 214 - nodo 789	-3638.46	967.99	-2.307e+04	-1.066e+06	-4.008e+06	0.0
2138	reac per cdc 215 - nodo 789	-3638.46	-967.51	-2.315e+04	1.066e+06	-4.008e+06	0.0
2139	reac per cdc 216 - nodo 789	3638.46	853.34	-2.309e+04	-9.399e+05	4.008e+06	0.0
2140	reac per cdc 217 - nodo 789	3638.46	-852.85	-2.313e+04	9.394e+05	4.008e+06	0.0
2141	reac per cdc 218 - nodo 789	-3638.46	853.34	-2.309e+04	-9.399e+05	-4.008e+06	0.0
2142	reac per cdc 219 - nodo 789	-3638.46	-852.85	-2.313e+04	9.394e+05	-4.008e+06	0.0
2143	reac per cdc 220 - nodo 789	3638.46	967.99	-2.307e+04	-1.066e+06	4.008e+06	0.0
2144	reac per cdc 221 - nodo 789	3638.46	-967.51	-2.315e+04	1.066e+06	4.008e+06	0.0
2145	reac per cdc 222 - nodo 789	-3638.46	967.99	-2.307e+04	-1.066e+06	-4.008e+06	0.0
2146	reac per cdc 223 - nodo 789	-3638.46	-967.51	-2.315e+04	1.066e+06	-4.008e+06	0.0
2147	reac per cdc 224 - nodo 789	1091.54	2843.88	-2.303e+04	-3.133e+06	1.202e+06	0.0
2148	reac per cdc 225 - nodo 789	1091.54	-2843.40	-2.319e+04	3.132e+06	1.202e+06	0.0
2149	reac per cdc 226 - nodo 789	-1091.54	2843.88	-2.303e+04	-3.133e+06	-1.202e+06	0.0
2150	reac per cdc 227 - nodo 789	-1091.54	-2843.40	-2.319e+04	3.132e+06	-1.202e+06	0.0
2151	reac per cdc 228 - nodo 789	1091.54	2843.88	-2.303e+04	-3.133e+06	1.202e+06	0.0
2152	reac per cdc 229 - nodo 789	1091.54	-2843.40	-2.319e+04	3.132e+06	1.202e+06	0.0
2153	reac per cdc 230 - nodo 789	-1091.54	2843.88	-2.303e+04	-3.133e+06	-1.202e+06	0.0
2154	reac per cdc 231 - nodo 789	-1091.54	-2843.40	-2.319e+04	3.132e+06	-1.202e+06	0.0
2155	reac per cdc 232 - nodo 789	1091.54	3226.08	-2.298e+04	-3.554e+06	1.202e+06	0.0
2156	reac per cdc 233 - nodo 789	1091.54	-3225.60	-2.324e+04	3.553e+06	1.202e+06	0.0
2157	reac per cdc 234 - nodo 789	-1091.54	3226.08	-2.298e+04	-3.554e+06	-1.202e+06	0.0
2158	reac per cdc 235 - nodo 789	-1091.54	-3225.60	-2.324e+04	3.553e+06	-1.202e+06	0.0
2159	reac per cdc 236 - nodo 789	1091.54	3226.08	-2.298e+04	-3.554e+06	1.202e+06	0.0
2160	reac per cdc 237 - nodo 789	1091.54	-3225.60	-2.324e+04	3.553e+06	1.202e+06	0.0
2161	reac per cdc 238 - nodo 789	-1091.54	3226.08	-2.298e+04	-3.554e+06	-1.202e+06	0.0
2162	reac per cdc 239 - nodo 789	-1091.54	-3225.60	-2.324e+04	3.553e+06	-1.202e+06	0.0
2163	reac per cdc 240 - nodo 789	0.0	0.55	-2.501e+04	-608.68	0.0	0.0
2164	reac per cdc 241 - nodo 789	529.80	-4.95	-2.325e+04	5453.60	5.836e+05	0.0
2165	reac per cdc 242 - nodo 789	-528.69	-4.95	-2.325e+04	5453.60	-5.823e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2166	reac per cdc 243 - nodo 789	-2.41	310.29	-2.300e+04	-3.418e+05	-2655.06	0.0
2167	reac per cdc 244 - nodo 789	-2.41	-307.49	-2.315e+04	3.387e+05	-2655.06	0.0
2168	reac per cdc 245 - nodo 789	317.88	-2.56	-2.510e+04	2824.07	3.501e+05	0.0
2169	reac per cdc 246 - nodo 789	-317.21	-2.56	-2.510e+04	2824.07	-3.494e+05	0.0
2170	reac per cdc 247 - nodo 789	-1.45	186.58	-2.495e+04	-2.055e+05	-1593.03	0.0
2171	reac per cdc 248 - nodo 789	-1.45	-184.09	-2.504e+04	2.028e+05	-1593.03	0.0
2172	reac per cdc 249 - nodo 789	529.80	-4.80	-2.420e+04	5283.09	5.836e+05	0.0
2173	reac per cdc 250 - nodo 789	-528.69	-4.80	-2.420e+04	5283.09	-5.823e+05	0.0
2174	reac per cdc 251 - nodo 789	-2.41	310.44	-2.395e+04	-3.420e+05	-2655.06	0.0
2175	reac per cdc 252 - nodo 789	-2.41	-307.34	-2.410e+04	3.385e+05	-2655.06	0.0
2176	reac per cdc 253 - nodo 789	0.0	0.30	-2.349e+04	-335.85	0.0	0.0
2177	reac per cdc 254 - nodo 789	105.96	-0.80	-2.314e+04	876.61	1.167e+05	0.0
2178	reac per cdc 255 - nodo 789	-105.74	-0.80	-2.314e+04	876.61	-1.165e+05	0.0
2179	reac per cdc 256 - nodo 789	-0.48	62.25	-2.309e+04	-6.857e+04	-531.01	0.0
2180	reac per cdc 257 - nodo 789	-0.48	-61.30	-2.312e+04	6.753e+04	-531.01	0.0
2181	reac per cdc 258 - nodo 789	0.0	0.24	-2.311e+04	-267.64	0.0	0.0
2182	reac per cdc 131 - nodo 800	0.0	0.0	-4.000e+04	0.0	0.0	0.0
2183	reac per cdc 132 - nodo 800	793.25	-6142.50	-3.430e+04	6.766e+06	8.738e+05	0.0
2184	reac per cdc 133 - nodo 800	-792.69	-6142.50	-3.430e+04	6.766e+06	-8.731e+05	0.0
2185	reac per cdc 134 - nodo 800	-1.20	5460.00	-3.430e+04	-6.014e+06	-1327.03	0.0
2186	reac per cdc 135 - nodo 800	-1.20	-2730.00	-3.430e+04	3.007e+06	-1327.03	0.0
2187	reac per cdc 136 - nodo 800	475.95	-3685.50	-4.000e+04	4.060e+06	5.243e+05	0.0
2188	reac per cdc 137 - nodo 800	-475.61	-3685.50	-4.000e+04	4.060e+06	-5.239e+05	0.0
2189	reac per cdc 138 - nodo 800	-0.72	3276.00	-4.000e+04	-3.609e+06	-796.22	0.0
2190	reac per cdc 139 - nodo 800	-0.72	-1638.00	-4.000e+04	1.804e+06	-796.22	0.0
2191	reac per cdc 140 - nodo 800	793.25	-6142.50	-3.715e+04	6.766e+06	8.738e+05	0.0
2192	reac per cdc 141 - nodo 800	-792.69	-6142.50	-3.715e+04	6.766e+06	-8.731e+05	0.0
2193	reac per cdc 142 - nodo 800	-1.20	5460.00	-3.715e+04	-6.014e+06	-1327.03	0.0
2194	reac per cdc 143 - nodo 800	-1.20	-2730.00	-3.715e+04	3.007e+06	-1327.03	0.0
2195	reac per cdc 144 - nodo 800	7604.34	2291.28	-2.638e+04	-2.524e+06	8.376e+06	0.0
2196	reac per cdc 145 - nodo 800	7604.34	-2291.28	-2.638e+04	2.524e+06	8.376e+06	0.0
2197	reac per cdc 146 - nodo 800	-7604.34	2291.28	-2.638e+04	-2.524e+06	-8.376e+06	0.0
2198	reac per cdc 147 - nodo 800	-7604.34	-2291.28	-2.638e+04	2.524e+06	-8.376e+06	0.0
2199	reac per cdc 148 - nodo 800	7604.34	2443.91	-2.638e+04	-2.692e+06	8.376e+06	0.0
2200	reac per cdc 149 - nodo 800	7604.34	-2443.91	-2.638e+04	2.692e+06	8.376e+06	0.0
2201	reac per cdc 150 - nodo 800	-7604.34	2443.91	-2.638e+04	-2.692e+06	-8.376e+06	0.0
2202	reac per cdc 151 - nodo 800	-7604.34	-2443.91	-2.638e+04	2.692e+06	-8.376e+06	0.0
2203	reac per cdc 152 - nodo 800	7604.34	2291.28	-2.638e+04	-2.524e+06	8.376e+06	0.0
2204	reac per cdc 153 - nodo 800	7604.34	-2291.28	-2.638e+04	2.524e+06	8.376e+06	0.0
2205	reac per cdc 154 - nodo 800	-7604.34	2291.28	-2.638e+04	-2.524e+06	-8.376e+06	0.0
2206	reac per cdc 155 - nodo 800	-7604.34	-2291.28	-2.638e+04	2.524e+06	-8.376e+06	0.0
2207	reac per cdc 156 - nodo 800	7604.34	2443.91	-2.638e+04	-2.692e+06	8.376e+06	0.0
2208	reac per cdc 157 - nodo 800	7604.34	-2443.91	-2.638e+04	2.692e+06	8.376e+06	0.0
2209	reac per cdc 158 - nodo 800	-7604.34	2443.91	-2.638e+04	-2.692e+06	-8.376e+06	0.0
2210	reac per cdc 159 - nodo 800	-7604.34	-2443.91	-2.638e+04	2.692e+06	-8.376e+06	0.0
2211	reac per cdc 160 - nodo 800	2281.30	7637.60	-2.638e+04	-8.413e+06	2.513e+06	0.0
2212	reac per cdc 161 - nodo 800	2281.30	-7637.60	-2.638e+04	8.413e+06	2.513e+06	0.0
2213	reac per cdc 162 - nodo 800	-2281.30	7637.60	-2.638e+04	-8.413e+06	-2.513e+06	0.0
2214	reac per cdc 163 - nodo 800	-2281.30	-7637.60	-2.638e+04	8.413e+06	-2.513e+06	0.0
2215	reac per cdc 164 - nodo 800	2281.30	7637.60	-2.638e+04	-8.413e+06	2.513e+06	0.0
2216	reac per cdc 165 - nodo 800	2281.30	-7637.60	-2.638e+04	8.413e+06	2.513e+06	0.0
2217	reac per cdc 166 - nodo 800	-2281.30	7637.60	-2.638e+04	-8.413e+06	-2.513e+06	0.0
2218	reac per cdc 167 - nodo 800	-2281.30	-7637.60	-2.638e+04	8.413e+06	-2.513e+06	0.0
2219	reac per cdc 168 - nodo 800	2281.30	8146.39	-2.638e+04	-8.973e+06	2.513e+06	0.0
2220	reac per cdc 169 - nodo 800	2281.30	-8146.39	-2.638e+04	8.973e+06	2.513e+06	0.0
2221	reac per cdc 170 - nodo 800	-2281.30	8146.39	-2.638e+04	-8.973e+06	-2.513e+06	0.0
2222	reac per cdc 171 - nodo 800	-2281.30	-8146.39	-2.638e+04	8.973e+06	-2.513e+06	0.0
2223	reac per cdc 172 - nodo 800	2281.30	8146.39	-2.638e+04	-8.973e+06	2.513e+06	0.0
2224	reac per cdc 173 - nodo 800	2281.30	-8146.39	-2.638e+04	8.973e+06	2.513e+06	0.0
2225	reac per cdc 174 - nodo 800	-2281.30	8146.39	-2.638e+04	-8.973e+06	-2.513e+06	0.0
2226	reac per cdc 175 - nodo 800	-2281.30	-8146.39	-2.638e+04	8.973e+06	-2.513e+06	0.0
2227	reac per cdc 176 - nodo 800	4669.66	1406.95	-2.638e+04	-1.550e+06	5.144e+06	0.0
2228	reac per cdc 177 - nodo 800	4669.66	-1406.95	-2.638e+04	1.550e+06	5.144e+06	0.0
2229	reac per cdc 178 - nodo 800	-4669.66	1406.95	-2.638e+04	-1.550e+06	-5.144e+06	0.0
2230	reac per cdc 179 - nodo 800	-4669.66	-1406.95	-2.638e+04	1.550e+06	-5.144e+06	0.0
2231	reac per cdc 180 - nodo 800	4669.66	1499.22	-2.638e+04	-1.651e+06	5.144e+06	0.0
2232	reac per cdc 181 - nodo 800	4669.66	-1499.22	-2.638e+04	1.651e+06	5.144e+06	0.0
2233	reac per cdc 182 - nodo 800	-4669.66	1499.22	-2.638e+04	-1.651e+06	-5.144e+06	0.0
2234	reac per cdc 183 - nodo 800	-4669.66	-1499.22	-2.638e+04	1.651e+06	-5.144e+06	0.0
2235	reac per cdc 184 - nodo 800	4669.66	1406.95	-2.638e+04	-1.550e+06	5.144e+06	0.0
2236	reac per cdc 185 - nodo 800	4669.66	-1406.95	-2.638e+04	1.550e+06	5.144e+06	0.0
2237	reac per cdc 186 - nodo 800	-4669.66	1406.95	-2.638e+04	-1.550e+06	-5.144e+06	0.0
2238	reac per cdc 187 - nodo 800	-4669.66	-1406.95	-2.638e+04	1.550e+06	-5.144e+06	0.0
2239	reac per cdc 188 - nodo 800	4669.66	1499.22	-2.638e+04	-1.651e+06	5.144e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2240	reac per cdc 189 - nodo 800	4669.66	-1499.22	-2.638e+04	1.651e+06	5.144e+06	0.0
2241	reac per cdc 190 - nodo 800	-4669.66	1499.22	-2.638e+04	-1.651e+06	-5.144e+06	0.0
2242	reac per cdc 191 - nodo 800	-4669.66	-1499.22	-2.638e+04	1.651e+06	-5.144e+06	0.0
2243	reac per cdc 192 - nodo 800	1400.90	4689.84	-2.638e+04	-5.166e+06	1.543e+06	0.0
2244	reac per cdc 193 - nodo 800	1400.90	-4689.84	-2.638e+04	5.166e+06	1.543e+06	0.0
2245	reac per cdc 194 - nodo 800	-1400.90	4689.84	-2.638e+04	-5.166e+06	-1.543e+06	0.0
2246	reac per cdc 195 - nodo 800	-1400.90	-4689.84	-2.638e+04	5.166e+06	-1.543e+06	0.0
2247	reac per cdc 196 - nodo 800	1400.90	4689.84	-2.638e+04	-5.166e+06	1.543e+06	0.0
2248	reac per cdc 197 - nodo 800	1400.90	-4689.84	-2.638e+04	5.166e+06	1.543e+06	0.0
2249	reac per cdc 198 - nodo 800	-1400.90	4689.84	-2.638e+04	-5.166e+06	-1.543e+06	0.0
2250	reac per cdc 199 - nodo 800	-1400.90	-4689.84	-2.638e+04	5.166e+06	-1.543e+06	0.0
2251	reac per cdc 200 - nodo 800	1400.90	4997.39	-2.638e+04	-5.505e+06	1.543e+06	0.0
2252	reac per cdc 201 - nodo 800	1400.90	-4997.39	-2.638e+04	5.505e+06	1.543e+06	0.0
2253	reac per cdc 202 - nodo 800	-1400.90	4997.39	-2.638e+04	-5.505e+06	-1.543e+06	0.0
2254	reac per cdc 203 - nodo 800	-1400.90	-4997.39	-2.638e+04	5.505e+06	-1.543e+06	0.0
2255	reac per cdc 204 - nodo 800	1400.90	4997.39	-2.638e+04	-5.505e+06	1.543e+06	0.0
2256	reac per cdc 205 - nodo 800	1400.90	-4997.39	-2.638e+04	5.505e+06	1.543e+06	0.0
2257	reac per cdc 206 - nodo 800	-1400.90	4997.39	-2.638e+04	-5.505e+06	-1.543e+06	0.0
2258	reac per cdc 207 - nodo 800	-1400.90	-4997.39	-2.638e+04	5.505e+06	-1.543e+06	0.0
2259	reac per cdc 208 - nodo 800	3638.78	1096.13	-2.638e+04	-1.207e+06	4.008e+06	0.0
2260	reac per cdc 209 - nodo 800	3638.78	-1096.13	-2.638e+04	1.207e+06	4.008e+06	0.0
2261	reac per cdc 210 - nodo 800	-3638.78	1096.13	-2.638e+04	-1.207e+06	-4.008e+06	0.0
2262	reac per cdc 211 - nodo 800	-3638.78	-1096.13	-2.638e+04	1.207e+06	-4.008e+06	0.0
2263	reac per cdc 212 - nodo 800	3638.78	1168.39	-2.638e+04	-1.287e+06	4.008e+06	0.0
2264	reac per cdc 213 - nodo 800	3638.78	-1168.39	-2.638e+04	1.287e+06	4.008e+06	0.0
2265	reac per cdc 214 - nodo 800	-3638.78	1168.39	-2.638e+04	-1.287e+06	-4.008e+06	0.0
2266	reac per cdc 215 - nodo 800	-3638.78	-1168.39	-2.638e+04	1.287e+06	-4.008e+06	0.0
2267	reac per cdc 216 - nodo 800	3638.78	1096.13	-2.638e+04	-1.207e+06	4.008e+06	0.0
2268	reac per cdc 217 - nodo 800	3638.78	-1096.13	-2.638e+04	1.207e+06	4.008e+06	0.0
2269	reac per cdc 218 - nodo 800	-3638.78	1096.13	-2.638e+04	-1.207e+06	-4.008e+06	0.0
2270	reac per cdc 219 - nodo 800	-3638.78	-1096.13	-2.638e+04	1.207e+06	-4.008e+06	0.0
2271	reac per cdc 220 - nodo 800	3638.78	1168.39	-2.638e+04	-1.287e+06	4.008e+06	0.0
2272	reac per cdc 221 - nodo 800	3638.78	-1168.39	-2.638e+04	1.287e+06	4.008e+06	0.0
2273	reac per cdc 222 - nodo 800	-3638.78	1168.39	-2.638e+04	-1.287e+06	-4.008e+06	0.0
2274	reac per cdc 223 - nodo 800	-3638.78	-1168.39	-2.638e+04	1.287e+06	-4.008e+06	0.0
2275	reac per cdc 224 - nodo 800	1091.63	3653.76	-2.638e+04	-4.025e+06	1.202e+06	0.0
2276	reac per cdc 225 - nodo 800	1091.63	-3653.76	-2.638e+04	4.025e+06	1.202e+06	0.0
2277	reac per cdc 226 - nodo 800	-1091.63	3653.76	-2.638e+04	-4.025e+06	-1.202e+06	0.0
2278	reac per cdc 227 - nodo 800	-1091.63	-3653.76	-2.638e+04	4.025e+06	-1.202e+06	0.0
2279	reac per cdc 228 - nodo 800	1091.63	3653.76	-2.638e+04	-4.025e+06	1.202e+06	0.0
2280	reac per cdc 229 - nodo 800	1091.63	-3653.76	-2.638e+04	4.025e+06	1.202e+06	0.0
2281	reac per cdc 230 - nodo 800	-1091.63	3653.76	-2.638e+04	-4.025e+06	-1.202e+06	0.0
2282	reac per cdc 231 - nodo 800	-1091.63	-3653.76	-2.638e+04	4.025e+06	-1.202e+06	0.0
2283	reac per cdc 232 - nodo 800	1091.63	3894.65	-2.638e+04	-4.290e+06	1.202e+06	0.0
2284	reac per cdc 233 - nodo 800	1091.63	-3894.65	-2.638e+04	4.290e+06	1.202e+06	0.0
2285	reac per cdc 234 - nodo 800	-1091.63	3894.65	-2.638e+04	-4.290e+06	-1.202e+06	0.0
2286	reac per cdc 235 - nodo 800	-1091.63	-3894.65	-2.638e+04	4.290e+06	-1.202e+06	0.0
2287	reac per cdc 236 - nodo 800	1091.63	3894.65	-2.638e+04	-4.290e+06	1.202e+06	0.0
2288	reac per cdc 237 - nodo 800	1091.63	-3894.65	-2.638e+04	4.290e+06	1.202e+06	0.0
2289	reac per cdc 238 - nodo 800	-1091.63	3894.65	-2.638e+04	-4.290e+06	-1.202e+06	0.0
2290	reac per cdc 239 - nodo 800	-1091.63	-3894.65	-2.638e+04	4.290e+06	-1.202e+06	0.0
2291	reac per cdc 240 - nodo 800	0.0	0.0	-3.018e+04	0.0	0.0	0.0
2292	reac per cdc 241 - nodo 800	528.83	-4095.00	-2.638e+04	4.511e+06	5.825e+05	0.0
2293	reac per cdc 242 - nodo 800	-528.46	-4095.00	-2.638e+04	4.511e+06	-5.821e+05	0.0
2294	reac per cdc 243 - nodo 800	-0.80	3640.00	-2.638e+04	-4.009e+06	-884.68	0.0
2295	reac per cdc 244 - nodo 800	-0.80	-1820.00	-2.638e+04	2.005e+06	-884.68	0.0
2296	reac per cdc 245 - nodo 800	317.30	-2457.00	-3.018e+04	2.706e+06	3.495e+05	0.0
2297	reac per cdc 246 - nodo 800	-317.08	-2457.00	-3.018e+04	2.706e+06	-3.493e+05	0.0
2298	reac per cdc 247 - nodo 800	-0.48	2184.00	-3.018e+04	-2.406e+06	-530.81	0.0
2299	reac per cdc 248 - nodo 800	-0.48	-1092.00	-3.018e+04	1.203e+06	-530.81	0.0
2300	reac per cdc 249 - nodo 800	528.83	-4095.00	-2.828e+04	4.511e+06	5.825e+05	0.0
2301	reac per cdc 250 - nodo 800	-528.46	-4095.00	-2.828e+04	4.511e+06	-5.821e+05	0.0
2302	reac per cdc 251 - nodo 800	-0.80	3640.00	-2.828e+04	-4.009e+06	-884.68	0.0
2303	reac per cdc 252 - nodo 800	-0.80	-1820.00	-2.828e+04	2.005e+06	-884.68	0.0
2304	reac per cdc 253 - nodo 800	0.0	0.0	-2.714e+04	0.0	0.0	0.0
2305	reac per cdc 254 - nodo 800	105.77	-819.00	-2.638e+04	9.021e+05	1.165e+05	0.0
2306	reac per cdc 255 - nodo 800	-105.69	-819.00	-2.638e+04	9.021e+05	-1.164e+05	0.0
2307	reac per cdc 256 - nodo 800	-0.16	728.00	-2.638e+04	-8.019e+05	-176.94	0.0
2308	reac per cdc 257 - nodo 800	-0.16	-364.00	-2.638e+04	4.009e+05	-176.94	0.0
2309	reac per cdc 258 - nodo 800	0.0	0.0	-2.638e+04	0.0	0.0	0.0
2310	reac per cdc 131 - nodo 811	0.0	0.0	-4.000e+04	0.0	0.0	0.0
2311	reac per cdc 132 - nodo 811	792.69	-6142.50	-3.430e+04	6.766e+06	8.731e+05	0.0
2312	reac per cdc 133 - nodo 811	-793.25	-6142.50	-3.430e+04	6.766e+06	-8.738e+05	0.0
2313	reac per cdc 134 - nodo 811	1.20	5460.00	-3.430e+04	-6.014e+06	1327.03	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2314	reac per cdc 135 - nodo 811	1.20	-2730.00	-3.430e+04	3.007e+06	1327.03	0.0
2315	reac per cdc 136 - nodo 811	475.61	-3685.50	-4.000e+04	4.060e+06	5.239e+05	0.0
2316	reac per cdc 137 - nodo 811	-475.95	-3685.50	-4.000e+04	4.060e+06	-5.243e+05	0.0
2317	reac per cdc 138 - nodo 811	0.72	3276.00	-4.000e+04	-3.609e+06	796.22	0.0
2318	reac per cdc 139 - nodo 811	0.72	-1638.00	-4.000e+04	1.804e+06	796.22	0.0
2319	reac per cdc 140 - nodo 811	792.69	-6142.50	-3.715e+04	6.766e+06	8.731e+05	0.0
2320	reac per cdc 141 - nodo 811	-793.25	-6142.50	-3.715e+04	6.766e+06	-8.738e+05	0.0
2321	reac per cdc 142 - nodo 811	1.20	5460.00	-3.715e+04	-6.014e+06	1327.03	0.0
2322	reac per cdc 143 - nodo 811	1.20	-2730.00	-3.715e+04	3.007e+06	1327.03	0.0
2323	reac per cdc 144 - nodo 811	7604.34	2443.91	-2.638e+04	-2.692e+06	8.376e+06	0.0
2324	reac per cdc 145 - nodo 811	7604.34	-2443.91	-2.638e+04	2.692e+06	8.376e+06	0.0
2325	reac per cdc 146 - nodo 811	-7604.34	2443.91	-2.638e+04	-2.692e+06	-8.376e+06	0.0
2326	reac per cdc 147 - nodo 811	-7604.34	-2443.91	-2.638e+04	2.692e+06	-8.376e+06	0.0
2327	reac per cdc 148 - nodo 811	7604.34	2291.28	-2.638e+04	-2.524e+06	8.376e+06	0.0
2328	reac per cdc 149 - nodo 811	7604.34	-2291.28	-2.638e+04	2.524e+06	8.376e+06	0.0
2329	reac per cdc 150 - nodo 811	-7604.34	2291.28	-2.638e+04	-2.524e+06	-8.376e+06	0.0
2330	reac per cdc 151 - nodo 811	-7604.34	-2291.28	-2.638e+04	2.524e+06	-8.376e+06	0.0
2331	reac per cdc 152 - nodo 811	7604.34	2443.91	-2.638e+04	-2.692e+06	8.376e+06	0.0
2332	reac per cdc 153 - nodo 811	7604.34	-2443.91	-2.638e+04	2.692e+06	8.376e+06	0.0
2333	reac per cdc 154 - nodo 811	-7604.34	2443.91	-2.638e+04	-2.692e+06	-8.376e+06	0.0
2334	reac per cdc 155 - nodo 811	-7604.34	-2443.91	-2.638e+04	2.692e+06	-8.376e+06	0.0
2335	reac per cdc 156 - nodo 811	7604.34	2291.28	-2.638e+04	-2.524e+06	8.376e+06	0.0
2336	reac per cdc 157 - nodo 811	7604.34	-2291.28	-2.638e+04	2.524e+06	8.376e+06	0.0
2337	reac per cdc 158 - nodo 811	-7604.34	2291.28	-2.638e+04	-2.524e+06	-8.376e+06	0.0
2338	reac per cdc 159 - nodo 811	-7604.34	-2291.28	-2.638e+04	2.524e+06	-8.376e+06	0.0
2339	reac per cdc 160 - nodo 811	2281.30	8146.39	-2.638e+04	-8.973e+06	2.513e+06	0.0
2340	reac per cdc 161 - nodo 811	2281.30	-8146.39	-2.638e+04	8.973e+06	2.513e+06	0.0
2341	reac per cdc 162 - nodo 811	-2281.30	8146.39	-2.638e+04	-8.973e+06	-2.513e+06	0.0
2342	reac per cdc 163 - nodo 811	-2281.30	-8146.39	-2.638e+04	8.973e+06	-2.513e+06	0.0
2343	reac per cdc 164 - nodo 811	2281.30	8146.39	-2.638e+04	-8.973e+06	2.513e+06	0.0
2344	reac per cdc 165 - nodo 811	2281.30	-8146.39	-2.638e+04	8.973e+06	2.513e+06	0.0
2345	reac per cdc 166 - nodo 811	-2281.30	8146.39	-2.638e+04	-8.973e+06	-2.513e+06	0.0
2346	reac per cdc 167 - nodo 811	-2281.30	-8146.39	-2.638e+04	8.973e+06	-2.513e+06	0.0
2347	reac per cdc 168 - nodo 811	2281.30	7637.60	-2.638e+04	-8.413e+06	2.513e+06	0.0
2348	reac per cdc 169 - nodo 811	2281.30	-7637.60	-2.638e+04	8.413e+06	2.513e+06	0.0
2349	reac per cdc 170 - nodo 811	-2281.30	7637.60	-2.638e+04	-8.413e+06	-2.513e+06	0.0
2350	reac per cdc 171 - nodo 811	-2281.30	-7637.60	-2.638e+04	8.413e+06	-2.513e+06	0.0
2351	reac per cdc 172 - nodo 811	2281.30	7637.60	-2.638e+04	-8.413e+06	2.513e+06	0.0
2352	reac per cdc 173 - nodo 811	2281.30	-7637.60	-2.638e+04	8.413e+06	2.513e+06	0.0
2353	reac per cdc 174 - nodo 811	-2281.30	7637.60	-2.638e+04	-8.413e+06	-2.513e+06	0.0
2354	reac per cdc 175 - nodo 811	-2281.30	-7637.60	-2.638e+04	8.413e+06	-2.513e+06	0.0
2355	reac per cdc 176 - nodo 811	4669.66	1499.22	-2.638e+04	-1.651e+06	5.144e+06	0.0
2356	reac per cdc 177 - nodo 811	4669.66	-1499.22	-2.638e+04	1.651e+06	5.144e+06	0.0
2357	reac per cdc 178 - nodo 811	-4669.66	1499.22	-2.638e+04	-1.651e+06	-5.144e+06	0.0
2358	reac per cdc 179 - nodo 811	-4669.66	-1499.22	-2.638e+04	1.651e+06	-5.144e+06	0.0
2359	reac per cdc 180 - nodo 811	4669.66	1406.95	-2.638e+04	-1.550e+06	5.144e+06	0.0
2360	reac per cdc 181 - nodo 811	4669.66	-1406.95	-2.638e+04	1.550e+06	5.144e+06	0.0
2361	reac per cdc 182 - nodo 811	-4669.66	1406.95	-2.638e+04	-1.550e+06	-5.144e+06	0.0
2362	reac per cdc 183 - nodo 811	-4669.66	-1406.95	-2.638e+04	1.550e+06	-5.144e+06	0.0
2363	reac per cdc 184 - nodo 811	4669.66	1499.22	-2.638e+04	-1.651e+06	5.144e+06	0.0
2364	reac per cdc 185 - nodo 811	4669.66	-1499.22	-2.638e+04	1.651e+06	5.144e+06	0.0
2365	reac per cdc 186 - nodo 811	-4669.66	1499.22	-2.638e+04	-1.651e+06	-5.144e+06	0.0
2366	reac per cdc 187 - nodo 811	-4669.66	-1499.22	-2.638e+04	1.651e+06	-5.144e+06	0.0
2367	reac per cdc 188 - nodo 811	4669.66	1406.95	-2.638e+04	-1.550e+06	5.144e+06	0.0
2368	reac per cdc 189 - nodo 811	4669.66	-1406.95	-2.638e+04	1.550e+06	5.144e+06	0.0
2369	reac per cdc 190 - nodo 811	-4669.66	1406.95	-2.638e+04	-1.550e+06	-5.144e+06	0.0
2370	reac per cdc 191 - nodo 811	-4669.66	-1406.95	-2.638e+04	1.550e+06	-5.144e+06	0.0
2371	reac per cdc 192 - nodo 811	1400.90	4997.39	-2.638e+04	-5.505e+06	1.543e+06	0.0
2372	reac per cdc 193 - nodo 811	1400.90	-4997.39	-2.638e+04	5.505e+06	1.543e+06	0.0
2373	reac per cdc 194 - nodo 811	-1400.90	4997.39	-2.638e+04	-5.505e+06	-1.543e+06	0.0
2374	reac per cdc 195 - nodo 811	-1400.90	-4997.39	-2.638e+04	5.505e+06	-1.543e+06	0.0
2375	reac per cdc 196 - nodo 811	1400.90	4997.39	-2.638e+04	-5.505e+06	1.543e+06	0.0
2376	reac per cdc 197 - nodo 811	1400.90	-4997.39	-2.638e+04	5.505e+06	1.543e+06	0.0
2377	reac per cdc 198 - nodo 811	-1400.90	4997.39	-2.638e+04	-5.505e+06	-1.543e+06	0.0
2378	reac per cdc 199 - nodo 811	-1400.90	-4997.39	-2.638e+04	5.505e+06	-1.543e+06	0.0
2379	reac per cdc 200 - nodo 811	1400.90	4689.84	-2.638e+04	-5.166e+06	1.543e+06	0.0
2380	reac per cdc 201 - nodo 811	1400.90	-4689.84	-2.638e+04	5.166e+06	1.543e+06	0.0
2381	reac per cdc 202 - nodo 811	-1400.90	4689.84	-2.638e+04	-5.166e+06	-1.543e+06	0.0
2382	reac per cdc 203 - nodo 811	-1400.90	-4689.84	-2.638e+04	5.166e+06	-1.543e+06	0.0
2383	reac per cdc 204 - nodo 811	1400.90	4689.84	-2.638e+04	-5.166e+06	1.543e+06	0.0
2384	reac per cdc 205 - nodo 811	1400.90	-4689.84	-2.638e+04	5.166e+06	1.543e+06	0.0
2385	reac per cdc 206 - nodo 811	-1400.90	4689.84	-2.638e+04	-5.166e+06	-1.543e+06	0.0
2386	reac per cdc 207 - nodo 811	-1400.90	-4689.84	-2.638e+04	5.166e+06	-1.543e+06	0.0
2387	reac per cdc 208 - nodo 811	3638.78	1168.39	-2.638e+04	-1.287e+06	4.008e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2388	reac per cdc 209 - nodo 811	3638.78	-1168.39	-2.638e+04	1.287e+06	4.008e+06	0.0
2389	reac per cdc 210 - nodo 811	-3638.78	1168.39	-2.638e+04	-1.287e+06	-4.008e+06	0.0
2390	reac per cdc 211 - nodo 811	-3638.78	-1168.39	-2.638e+04	1.287e+06	-4.008e+06	0.0
2391	reac per cdc 212 - nodo 811	3638.78	1096.13	-2.638e+04	-1.207e+06	4.008e+06	0.0
2392	reac per cdc 213 - nodo 811	3638.78	-1096.13	-2.638e+04	1.207e+06	4.008e+06	0.0
2393	reac per cdc 214 - nodo 811	-3638.78	1096.13	-2.638e+04	-1.207e+06	-4.008e+06	0.0
2394	reac per cdc 215 - nodo 811	-3638.78	-1096.13	-2.638e+04	1.207e+06	-4.008e+06	0.0
2395	reac per cdc 216 - nodo 811	3638.78	1168.39	-2.638e+04	-1.287e+06	4.008e+06	0.0
2396	reac per cdc 217 - nodo 811	3638.78	-1168.39	-2.638e+04	1.287e+06	4.008e+06	0.0
2397	reac per cdc 218 - nodo 811	-3638.78	1168.39	-2.638e+04	-1.287e+06	-4.008e+06	0.0
2398	reac per cdc 219 - nodo 811	-3638.78	-1168.39	-2.638e+04	1.287e+06	-4.008e+06	0.0
2399	reac per cdc 220 - nodo 811	3638.78	1096.13	-2.638e+04	-1.207e+06	4.008e+06	0.0
2400	reac per cdc 221 - nodo 811	3638.78	-1096.13	-2.638e+04	1.207e+06	4.008e+06	0.0
2401	reac per cdc 222 - nodo 811	-3638.78	1096.13	-2.638e+04	-1.207e+06	-4.008e+06	0.0
2402	reac per cdc 223 - nodo 811	-3638.78	-1096.13	-2.638e+04	1.207e+06	-4.008e+06	0.0
2403	reac per cdc 224 - nodo 811	1091.63	3894.65	-2.638e+04	-4.290e+06	1.202e+06	0.0
2404	reac per cdc 225 - nodo 811	1091.63	-3894.65	-2.638e+04	4.290e+06	1.202e+06	0.0
2405	reac per cdc 226 - nodo 811	-1091.63	3894.65	-2.638e+04	-4.290e+06	-1.202e+06	0.0
2406	reac per cdc 227 - nodo 811	-1091.63	-3894.65	-2.638e+04	4.290e+06	-1.202e+06	0.0
2407	reac per cdc 228 - nodo 811	1091.63	3894.65	-2.638e+04	-4.290e+06	1.202e+06	0.0
2408	reac per cdc 229 - nodo 811	1091.63	-3894.65	-2.638e+04	4.290e+06	1.202e+06	0.0
2409	reac per cdc 230 - nodo 811	-1091.63	3894.65	-2.638e+04	-4.290e+06	-1.202e+06	0.0
2410	reac per cdc 231 - nodo 811	-1091.63	-3894.65	-2.638e+04	4.290e+06	-1.202e+06	0.0
2411	reac per cdc 232 - nodo 811	1091.63	3653.76	-2.638e+04	-4.025e+06	1.202e+06	0.0
2412	reac per cdc 233 - nodo 811	1091.63	-3653.76	-2.638e+04	4.025e+06	1.202e+06	0.0
2413	reac per cdc 234 - nodo 811	-1091.63	3653.76	-2.638e+04	-4.025e+06	-1.202e+06	0.0
2414	reac per cdc 235 - nodo 811	-1091.63	-3653.76	-2.638e+04	4.025e+06	-1.202e+06	0.0
2415	reac per cdc 236 - nodo 811	1091.63	3653.76	-2.638e+04	-4.025e+06	1.202e+06	0.0
2416	reac per cdc 237 - nodo 811	1091.63	-3653.76	-2.638e+04	4.025e+06	1.202e+06	0.0
2417	reac per cdc 238 - nodo 811	-1091.63	3653.76	-2.638e+04	-4.025e+06	-1.202e+06	0.0
2418	reac per cdc 239 - nodo 811	-1091.63	-3653.76	-2.638e+04	4.025e+06	-1.202e+06	0.0
2419	reac per cdc 240 - nodo 811	0.0	0.0	-3.018e+04	0.0	0.0	0.0
2420	reac per cdc 241 - nodo 811	528.46	-4095.00	-2.638e+04	4.511e+06	5.821e+05	0.0
2421	reac per cdc 242 - nodo 811	-528.83	-4095.00	-2.638e+04	4.511e+06	-5.825e+05	0.0
2422	reac per cdc 243 - nodo 811	0.80	3640.00	-2.638e+04	-4.009e+06	884.68	0.0
2423	reac per cdc 244 - nodo 811	0.80	-1820.00	-2.638e+04	2.005e+06	884.68	0.0
2424	reac per cdc 245 - nodo 811	317.08	-2457.00	-3.018e+04	2.706e+06	3.493e+05	0.0
2425	reac per cdc 246 - nodo 811	-317.30	-2457.00	-3.018e+04	2.706e+06	-3.495e+05	0.0
2426	reac per cdc 247 - nodo 811	0.48	2184.00	-3.018e+04	-2.406e+06	530.81	0.0
2427	reac per cdc 248 - nodo 811	0.48	-1092.00	-3.018e+04	1.203e+06	530.81	0.0
2428	reac per cdc 249 - nodo 811	528.46	-4095.00	-2.828e+04	4.511e+06	5.821e+05	0.0
2429	reac per cdc 250 - nodo 811	-528.83	-4095.00	-2.828e+04	4.511e+06	-5.825e+05	0.0
2430	reac per cdc 251 - nodo 811	0.80	3640.00	-2.828e+04	-4.009e+06	884.68	0.0
2431	reac per cdc 252 - nodo 811	0.80	-1820.00	-2.828e+04	2.005e+06	884.68	0.0
2432	reac per cdc 253 - nodo 811	0.0	0.0	-2.714e+04	0.0	0.0	0.0
2433	reac per cdc 254 - nodo 811	105.69	-819.00	-2.638e+04	9.021e+05	1.164e+05	0.0
2434	reac per cdc 255 - nodo 811	-105.77	-819.00	-2.638e+04	9.021e+05	-1.165e+05	0.0
2435	reac per cdc 256 - nodo 811	0.16	728.00	-2.638e+04	-8.019e+05	176.94	0.0
2436	reac per cdc 257 - nodo 811	0.16	-364.00	-2.638e+04	4.009e+05	176.94	0.0
2437	reac per cdc 258 - nodo 811	0.0	0.0	-2.638e+04	0.0	0.0	0.0
2438	reac per cdc 131 - nodo 821	0.0	0.78	-3.289e+04	-859.49	0.0	0.0
2439	reac per cdc 132 - nodo 821	793.03	-7.48	-3.026e+04	8233.94	8.735e+05	0.0
2440	reac per cdc 133 - nodo 821	-794.70	-7.48	-3.026e+04	8233.94	-8.754e+05	0.0
2441	reac per cdc 134 - nodo 821	3.62	465.38	-2.988e+04	-5.126e+05	3982.58	0.0
2442	reac per cdc 135 - nodo 821	3.62	-461.29	-3.011e+04	5.081e+05	3982.58	0.0
2443	reac per cdc 136 - nodo 821	475.82	-3.89	-3.302e+04	4289.63	5.241e+05	0.0
2444	reac per cdc 137 - nodo 821	-476.82	-3.89	-3.302e+04	4289.63	-5.252e+05	0.0
2445	reac per cdc 138 - nodo 821	2.17	279.82	-3.280e+04	-3.082e+05	2389.55	0.0
2446	reac per cdc 139 - nodo 821	2.17	-276.18	-3.293e+04	3.042e+05	2389.55	0.0
2447	reac per cdc 140 - nodo 821	793.03	-7.24	-3.168e+04	7978.16	8.735e+05	0.0
2448	reac per cdc 141 - nodo 821	-794.70	-7.24	-3.168e+04	7978.16	-8.754e+05	0.0
2449	reac per cdc 142 - nodo 821	3.62	465.62	-3.131e+04	-5.129e+05	3982.58	0.0
2450	reac per cdc 143 - nodo 821	3.62	-461.06	-3.153e+04	5.079e+05	3982.58	0.0
2451	reac per cdc 144 - nodo 821	7603.67	2024.48	-2.303e+04	-2.230e+06	8.375e+06	0.0
2452	reac per cdc 145 - nodo 821	7603.67	-2024.00	-2.319e+04	2.229e+06	8.375e+06	0.0
2453	reac per cdc 146 - nodo 821	-7603.67	2024.48	-2.303e+04	-2.230e+06	-8.375e+06	0.0
2454	reac per cdc 147 - nodo 821	-7603.67	-2024.00	-2.319e+04	2.229e+06	-8.375e+06	0.0
2455	reac per cdc 148 - nodo 821	7603.67	1784.39	-2.306e+04	-1.966e+06	8.375e+06	0.0
2456	reac per cdc 149 - nodo 821	7603.67	-1783.90	-2.316e+04	1.965e+06	8.375e+06	0.0
2457	reac per cdc 150 - nodo 821	-7603.67	1784.39	-2.306e+04	-1.966e+06	-8.375e+06	0.0
2458	reac per cdc 151 - nodo 821	-7603.67	-1783.90	-2.316e+04	1.965e+06	-8.375e+06	0.0
2459	reac per cdc 152 - nodo 821	7603.67	2024.48	-2.303e+04	-2.230e+06	8.375e+06	0.0
2460	reac per cdc 153 - nodo 821	7603.67	-2024.00	-2.319e+04	2.229e+06	8.375e+06	0.0
2461	reac per cdc 154 - nodo 821	-7603.67	2024.48	-2.303e+04	-2.230e+06	-8.375e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2462	reac per cdc 155 - nodo 821	-7603.67	-2024.00	-2.319e+04	2.229e+06	-8.375e+06	0.0
2463	reac per cdc 156 - nodo 821	7603.67	1784.39	-2.306e+04	-1.966e+06	8.375e+06	0.0
2464	reac per cdc 157 - nodo 821	7603.67	-1783.90	-2.316e+04	1.965e+06	8.375e+06	0.0
2465	reac per cdc 158 - nodo 821	-7603.67	1784.39	-2.306e+04	-1.966e+06	-8.375e+06	0.0
2466	reac per cdc 159 - nodo 821	-7603.67	-1783.90	-2.316e+04	1.965e+06	-8.375e+06	0.0
2467	reac per cdc 160 - nodo 821	2281.10	6747.71	-2.284e+04	-7.433e+06	2.513e+06	0.0
2468	reac per cdc 161 - nodo 821	2281.10	-6747.22	-2.338e+04	7.432e+06	2.513e+06	0.0
2469	reac per cdc 162 - nodo 821	-2281.10	6747.71	-2.284e+04	-7.433e+06	-2.513e+06	0.0
2470	reac per cdc 163 - nodo 821	-2281.10	-6747.22	-2.338e+04	7.432e+06	-2.513e+06	0.0
2471	reac per cdc 164 - nodo 821	2281.10	6747.71	-2.284e+04	-7.433e+06	2.513e+06	0.0
2472	reac per cdc 165 - nodo 821	2281.10	-6747.22	-2.338e+04	7.432e+06	2.513e+06	0.0
2473	reac per cdc 166 - nodo 821	-2281.10	6747.71	-2.284e+04	-7.433e+06	-2.513e+06	0.0
2474	reac per cdc 167 - nodo 821	-2281.10	-6747.22	-2.338e+04	7.432e+06	-2.513e+06	0.0
2475	reac per cdc 168 - nodo 821	2281.10	5947.40	-2.295e+04	-6.551e+06	2.513e+06	0.0
2476	reac per cdc 169 - nodo 821	2281.10	-5946.91	-2.327e+04	6.551e+06	2.513e+06	0.0
2477	reac per cdc 170 - nodo 821	-2281.10	5947.40	-2.295e+04	-6.551e+06	-2.513e+06	0.0
2478	reac per cdc 171 - nodo 821	-2281.10	-5946.91	-2.327e+04	6.551e+06	-2.513e+06	0.0
2479	reac per cdc 172 - nodo 821	2281.10	5947.40	-2.295e+04	-6.551e+06	2.513e+06	0.0
2480	reac per cdc 173 - nodo 821	2281.10	-5946.91	-2.327e+04	6.551e+06	2.513e+06	0.0
2481	reac per cdc 174 - nodo 821	-2281.10	5947.40	-2.295e+04	-6.551e+06	-2.513e+06	0.0
2482	reac per cdc 175 - nodo 821	-2281.10	-5946.91	-2.327e+04	6.551e+06	-2.513e+06	0.0
2483	reac per cdc 176 - nodo 821	4669.25	1241.88	-2.306e+04	-1.368e+06	5.143e+06	0.0
2484	reac per cdc 177 - nodo 821	4669.25	-1241.40	-2.316e+04	1.367e+06	5.143e+06	0.0
2485	reac per cdc 178 - nodo 821	-4669.25	1241.88	-2.306e+04	-1.368e+06	-5.143e+06	0.0
2486	reac per cdc 179 - nodo 821	-4669.25	-1241.40	-2.316e+04	1.367e+06	-5.143e+06	0.0
2487	reac per cdc 180 - nodo 821	4669.25	1094.17	-2.308e+04	-1.205e+06	5.143e+06	0.0
2488	reac per cdc 181 - nodo 821	4669.25	-1093.68	-2.314e+04	1.205e+06	5.143e+06	0.0
2489	reac per cdc 182 - nodo 821	-4669.25	1094.17	-2.308e+04	-1.205e+06	-5.143e+06	0.0
2490	reac per cdc 183 - nodo 821	-4669.25	-1093.68	-2.314e+04	1.205e+06	-5.143e+06	0.0
2491	reac per cdc 184 - nodo 821	4669.25	1241.88	-2.306e+04	-1.368e+06	5.143e+06	0.0
2492	reac per cdc 185 - nodo 821	4669.25	-1241.40	-2.316e+04	1.367e+06	5.143e+06	0.0
2493	reac per cdc 186 - nodo 821	-4669.25	1241.88	-2.306e+04	-1.368e+06	-5.143e+06	0.0
2494	reac per cdc 187 - nodo 821	-4669.25	-1241.40	-2.316e+04	1.367e+06	-5.143e+06	0.0
2495	reac per cdc 188 - nodo 821	4669.25	1094.17	-2.308e+04	-1.205e+06	5.143e+06	0.0
2496	reac per cdc 189 - nodo 821	4669.25	-1093.68	-2.314e+04	1.205e+06	5.143e+06	0.0
2497	reac per cdc 190 - nodo 821	-4669.25	1094.17	-2.308e+04	-1.205e+06	-5.143e+06	0.0
2498	reac per cdc 191 - nodo 821	-4669.25	-1093.68	-2.314e+04	1.205e+06	-5.143e+06	0.0
2499	reac per cdc 192 - nodo 821	1400.78	4139.04	-2.294e+04	-4.559e+06	1.543e+06	0.0
2500	reac per cdc 193 - nodo 821	1400.78	-4138.55	-2.328e+04	4.559e+06	1.543e+06	0.0
2501	reac per cdc 194 - nodo 821	-1400.78	4139.04	-2.294e+04	-4.559e+06	-1.543e+06	0.0
2502	reac per cdc 195 - nodo 821	-1400.78	-4138.55	-2.328e+04	4.559e+06	-1.543e+06	0.0
2503	reac per cdc 196 - nodo 821	1400.78	4139.04	-2.294e+04	-4.559e+06	1.543e+06	0.0
2504	reac per cdc 197 - nodo 821	1400.78	-4138.55	-2.328e+04	4.559e+06	1.543e+06	0.0
2505	reac per cdc 198 - nodo 821	-1400.78	4139.04	-2.294e+04	-4.559e+06	-1.543e+06	0.0
2506	reac per cdc 199 - nodo 821	-1400.78	-4138.55	-2.328e+04	4.559e+06	-1.543e+06	0.0
2507	reac per cdc 200 - nodo 821	1400.78	3646.66	-2.301e+04	-4.017e+06	1.543e+06	0.0
2508	reac per cdc 201 - nodo 821	1400.78	-3646.18	-2.321e+04	4.016e+06	1.543e+06	0.0
2509	reac per cdc 202 - nodo 821	-1400.78	3646.66	-2.301e+04	-4.017e+06	-1.543e+06	0.0
2510	reac per cdc 203 - nodo 821	-1400.78	-3646.18	-2.321e+04	4.016e+06	-1.543e+06	0.0
2511	reac per cdc 204 - nodo 821	1400.78	3646.66	-2.301e+04	-4.017e+06	1.543e+06	0.0
2512	reac per cdc 205 - nodo 821	1400.78	-3646.18	-2.321e+04	4.016e+06	1.543e+06	0.0
2513	reac per cdc 206 - nodo 821	-1400.78	3646.66	-2.301e+04	-4.017e+06	-1.543e+06	0.0
2514	reac per cdc 207 - nodo 821	-1400.78	-3646.18	-2.321e+04	4.016e+06	-1.543e+06	0.0
2515	reac per cdc 208 - nodo 821	3638.46	967.99	-2.307e+04	-1.066e+06	4.008e+06	0.0
2516	reac per cdc 209 - nodo 821	3638.46	-967.51	-2.315e+04	1.066e+06	4.008e+06	0.0
2517	reac per cdc 210 - nodo 821	-3638.46	967.99	-2.307e+04	-1.066e+06	-4.008e+06	0.0
2518	reac per cdc 211 - nodo 821	-3638.46	-967.51	-2.315e+04	1.066e+06	-4.008e+06	0.0
2519	reac per cdc 212 - nodo 821	3638.46	853.34	-2.309e+04	-9.399e+05	4.008e+06	0.0
2520	reac per cdc 213 - nodo 821	3638.46	-852.85	-2.313e+04	9.394e+05	4.008e+06	0.0
2521	reac per cdc 214 - nodo 821	-3638.46	853.34	-2.309e+04	-9.399e+05	-4.008e+06	0.0
2522	reac per cdc 215 - nodo 821	-3638.46	-852.85	-2.313e+04	9.394e+05	-4.008e+06	0.0
2523	reac per cdc 216 - nodo 821	3638.46	967.99	-2.307e+04	-1.066e+06	4.008e+06	0.0
2524	reac per cdc 217 - nodo 821	3638.46	-967.51	-2.315e+04	1.066e+06	4.008e+06	0.0
2525	reac per cdc 218 - nodo 821	-3638.46	967.99	-2.307e+04	-1.066e+06	-4.008e+06	0.0
2526	reac per cdc 219 - nodo 821	-3638.46	-967.51	-2.315e+04	1.066e+06	-4.008e+06	0.0
2527	reac per cdc 220 - nodo 821	3638.46	853.34	-2.309e+04	-9.399e+05	4.008e+06	0.0
2528	reac per cdc 221 - nodo 821	3638.46	-852.85	-2.313e+04	9.394e+05	4.008e+06	0.0
2529	reac per cdc 222 - nodo 821	-3638.46	853.34	-2.309e+04	-9.399e+05	-4.008e+06	0.0
2530	reac per cdc 223 - nodo 821	-3638.46	-852.85	-2.313e+04	9.394e+05	-4.008e+06	0.0
2531	reac per cdc 224 - nodo 821	1091.54	3226.08	-2.298e+04	-3.554e+06	1.202e+06	0.0
2532	reac per cdc 225 - nodo 821	1091.54	-3225.60	-2.324e+04	3.553e+06	1.202e+06	0.0
2533	reac per cdc 226 - nodo 821	-1091.54	3226.08	-2.298e+04	-3.554e+06	-1.202e+06	0.0
2534	reac per cdc 227 - nodo 821	-1091.54	-3225.60	-2.324e+04	3.553e+06	-1.202e+06	0.0
2535	reac per cdc 228 - nodo 821	1091.54	3226.08	-2.298e+04	-3.554e+06	1.202e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2536	reac per cdc 229 - nodo 821	1091.54	-3225.60	-2.324e+04	3.553e+06	1.202e+06	0.0
2537	reac per cdc 230 - nodo 821	-1091.54	3226.08	-2.298e+04	-3.554e+06	-1.202e+06	0.0
2538	reac per cdc 231 - nodo 821	-1091.54	-3225.60	-2.324e+04	3.553e+06	-1.202e+06	0.0
2539	reac per cdc 232 - nodo 821	1091.54	2843.88	-2.303e+04	-3.133e+06	1.202e+06	0.0
2540	reac per cdc 233 - nodo 821	1091.54	-2843.40	-2.319e+04	3.132e+06	1.202e+06	0.0
2541	reac per cdc 234 - nodo 821	-1091.54	2843.88	-2.303e+04	-3.133e+06	-1.202e+06	0.0
2542	reac per cdc 235 - nodo 821	-1091.54	-2843.40	-2.319e+04	3.132e+06	-1.202e+06	0.0
2543	reac per cdc 236 - nodo 821	1091.54	2843.88	-2.303e+04	-3.133e+06	1.202e+06	0.0
2544	reac per cdc 237 - nodo 821	1091.54	-2843.40	-2.319e+04	3.132e+06	1.202e+06	0.0
2545	reac per cdc 238 - nodo 821	-1091.54	2843.88	-2.303e+04	-3.133e+06	-1.202e+06	0.0
2546	reac per cdc 239 - nodo 821	-1091.54	-2843.40	-2.319e+04	3.132e+06	-1.202e+06	0.0
2547	reac per cdc 240 - nodo 821	0.0	0.55	-2.501e+04	-608.68	0.0	0.0
2548	reac per cdc 241 - nodo 821	528.69	-4.95	-2.325e+04	5453.60	5.823e+05	0.0
2549	reac per cdc 242 - nodo 821	-529.80	-4.95	-2.325e+04	5453.60	-5.836e+05	0.0
2550	reac per cdc 243 - nodo 821	2.41	310.29	-2.300e+04	-3.418e+05	2655.06	0.0
2551	reac per cdc 244 - nodo 821	2.41	-307.49	-2.315e+04	3.387e+05	2655.06	0.0
2552	reac per cdc 245 - nodo 821	317.21	-2.56	-2.510e+04	2824.07	3.494e+05	0.0
2553	reac per cdc 246 - nodo 821	-317.88	-2.56	-2.510e+04	2824.07	-3.501e+05	0.0
2554	reac per cdc 247 - nodo 821	1.45	186.58	-2.495e+04	-2.055e+05	1593.03	0.0
2555	reac per cdc 248 - nodo 821	1.45	-184.09	-2.504e+04	2.028e+05	1593.03	0.0
2556	reac per cdc 249 - nodo 821	528.69	-4.80	-2.420e+04	5283.09	5.823e+05	0.0
2557	reac per cdc 250 - nodo 821	-529.80	-4.80	-2.420e+04	5283.09	-5.836e+05	0.0
2558	reac per cdc 251 - nodo 821	2.41	310.44	-2.395e+04	-3.420e+05	2655.06	0.0
2559	reac per cdc 252 - nodo 821	2.41	-307.34	-2.410e+04	3.385e+05	2655.06	0.0
2560	reac per cdc 253 - nodo 821	0.0	0.30	-2.349e+04	-335.85	0.0	0.0
2561	reac per cdc 254 - nodo 821	105.74	-0.80	-2.314e+04	876.61	1.165e+05	0.0
2562	reac per cdc 255 - nodo 821	-105.96	-0.80	-2.314e+04	876.61	-1.167e+05	0.0
2563	reac per cdc 256 - nodo 821	0.48	62.25	-2.309e+04	-6.857e+04	531.01	0.0
2564	reac per cdc 257 - nodo 821	0.48	-61.30	-2.312e+04	6.753e+04	531.01	0.0
2565	reac per cdc 258 - nodo 821	0.0	0.24	-2.311e+04	-267.64	0.0	0.0
2566	reac per cdc 131 - nodo 1010	0.0	-1.05	-6.244e+04	1100.60	0.0	0.0
2567	reac per cdc 132 - nodo 1010	2992.98	-6.49	-4.541e+04	6836.42	3.289e+06	0.0
2568	reac per cdc 133 - nodo 1010	-3354.35	-6.49	-4.541e+04	6836.42	-3.395e+06	0.0
2569	reac per cdc 134 - nodo 1010	779.80	528.77	-4.545e+04	-5.568e+05	2.282e+05	0.0
2570	reac per cdc 135 - nodo 1010	779.80	-527.45	-4.537e+04	5.554e+05	2.282e+05	0.0
2571	reac per cdc 136 - nodo 1010	1795.79	-4.56	-6.244e+04	4798.05	1.973e+06	0.0
2572	reac per cdc 137 - nodo 1010	-2012.61	-4.56	-6.244e+04	4798.05	-2.037e+06	0.0
2573	reac per cdc 138 - nodo 1010	467.88	316.60	-6.246e+04	-3.334e+05	1.369e+05	0.0
2574	reac per cdc 139 - nodo 1010	467.88	-317.13	-6.241e+04	3.339e+05	1.369e+05	0.0
2575	reac per cdc 140 - nodo 1010	2992.98	-6.69	-5.392e+04	7049.72	3.289e+06	0.0
2576	reac per cdc 141 - nodo 1010	-3354.35	-6.69	-5.392e+04	7049.72	-3.395e+06	0.0
2577	reac per cdc 142 - nodo 1010	779.80	528.57	-5.396e+04	-5.566e+05	2.282e+05	0.0
2578	reac per cdc 143 - nodo 1010	779.80	-527.65	-5.389e+04	5.556e+05	2.282e+05	0.0
2579	reac per cdc 144 - nodo 1010	9456.28	2278.80	-3.487e+04	-2.231e+06	9.459e+06	0.0
2580	reac per cdc 145 - nodo 1010	9456.28	-2279.83	-3.500e+04	2.232e+06	9.459e+06	0.0
2581	reac per cdc 146 - nodo 1010	-9456.28	2278.85	-3.487e+04	-2.231e+06	-9.459e+06	0.0
2582	reac per cdc 147 - nodo 1010	-9456.28	-2279.78	-3.500e+04	2.232e+06	-9.459e+06	0.0
2583	reac per cdc 148 - nodo 1010	9456.28	2569.66	-3.487e+04	-2.525e+06	9.459e+06	0.0
2584	reac per cdc 149 - nodo 1010	9456.28	-2570.70	-3.499e+04	2.526e+06	9.459e+06	0.0
2585	reac per cdc 150 - nodo 1010	-9456.28	2569.71	-3.487e+04	-2.525e+06	-9.459e+06	0.0
2586	reac per cdc 151 - nodo 1010	-9456.28	-2570.64	-3.499e+04	2.526e+06	-9.459e+06	0.0
2587	reac per cdc 152 - nodo 1010	9456.28	2278.80	-3.487e+04	-2.231e+06	9.459e+06	0.0
2588	reac per cdc 153 - nodo 1010	9456.28	-2279.83	-3.500e+04	2.232e+06	9.459e+06	0.0
2589	reac per cdc 154 - nodo 1010	-9456.28	2278.85	-3.487e+04	-2.231e+06	-9.459e+06	0.0
2590	reac per cdc 155 - nodo 1010	-9456.28	-2279.78	-3.500e+04	2.232e+06	-9.459e+06	0.0
2591	reac per cdc 156 - nodo 1010	9456.28	2569.66	-3.487e+04	-2.525e+06	9.459e+06	0.0
2592	reac per cdc 157 - nodo 1010	9456.28	-2570.70	-3.499e+04	2.526e+06	9.459e+06	0.0
2593	reac per cdc 158 - nodo 1010	-9456.28	2569.71	-3.487e+04	-2.525e+06	-9.459e+06	0.0
2594	reac per cdc 159 - nodo 1010	-9456.28	-2570.64	-3.499e+04	2.526e+06	-9.459e+06	0.0
2595	reac per cdc 160 - nodo 1010	2836.88	7597.22	-3.472e+04	-7.437e+06	2.838e+06	0.0
2596	reac per cdc 161 - nodo 1010	2836.89	-7598.22	-3.515e+04	7.438e+06	2.838e+06	0.0
2597	reac per cdc 162 - nodo 1010	-2836.89	7597.23	-3.472e+04	-7.437e+06	-2.838e+06	0.0
2598	reac per cdc 163 - nodo 1010	-2836.88	-7598.20	-3.515e+04	7.438e+06	-2.838e+06	0.0
2599	reac per cdc 164 - nodo 1010	2836.88	7597.22	-3.472e+04	-7.437e+06	2.838e+06	0.0
2600	reac per cdc 165 - nodo 1010	2836.89	-7598.22	-3.515e+04	7.438e+06	2.838e+06	0.0
2601	reac per cdc 166 - nodo 1010	-2836.89	7597.23	-3.472e+04	-7.437e+06	-2.838e+06	0.0
2602	reac per cdc 167 - nodo 1010	-2836.88	-7598.20	-3.515e+04	7.438e+06	-2.838e+06	0.0
2603	reac per cdc 168 - nodo 1010	2836.88	8566.75	-3.473e+04	-8.419e+06	2.838e+06	0.0
2604	reac per cdc 169 - nodo 1010	2836.89	-8567.75	-3.513e+04	8.420e+06	2.838e+06	0.0
2605	reac per cdc 170 - nodo 1010	-2836.89	8566.77	-3.473e+04	-8.419e+06	-2.838e+06	0.0
2606	reac per cdc 171 - nodo 1010	-2836.88	-8567.74	-3.513e+04	8.420e+06	-2.838e+06	0.0
2607	reac per cdc 172 - nodo 1010	2836.88	8566.75	-3.473e+04	-8.419e+06	2.838e+06	0.0
2608	reac per cdc 173 - nodo 1010	2836.89	-8567.75	-3.513e+04	8.420e+06	2.838e+06	0.0
2609	reac per cdc 174 - nodo 1010	-2836.89	8566.77	-3.473e+04	-8.419e+06	-2.838e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2610	reac per cdc 175 - nodo 1010	-2836.88	-8567.74	-3.513e+04	8.420e+06	-2.838e+06	0.0
2611	reac per cdc 176 - nodo 1010	5801.83	1397.02	-3.489e+04	-1.368e+06	5.803e+06	0.0
2612	reac per cdc 177 - nodo 1010	5801.83	-1398.04	-3.497e+04	1.369e+06	5.803e+06	0.0
2613	reac per cdc 178 - nodo 1010	-5801.83	1397.06	-3.489e+04	-1.368e+06	-5.803e+06	0.0
2614	reac per cdc 179 - nodo 1010	-5801.83	-1398.01	-3.497e+04	1.369e+06	-5.803e+06	0.0
2615	reac per cdc 180 - nodo 1010	5801.83	1576.00	-3.489e+04	-1.549e+06	5.803e+06	0.0
2616	reac per cdc 181 - nodo 1010	5801.83	-1577.02	-3.497e+04	1.550e+06	5.803e+06	0.0
2617	reac per cdc 182 - nodo 1010	-5801.83	1576.03	-3.490e+04	-1.549e+06	-5.803e+06	0.0
2618	reac per cdc 183 - nodo 1010	-5801.83	-1576.98	-3.497e+04	1.550e+06	-5.803e+06	0.0
2619	reac per cdc 184 - nodo 1010	5801.83	1397.02	-3.489e+04	-1.368e+06	5.803e+06	0.0
2620	reac per cdc 185 - nodo 1010	5801.83	-1398.04	-3.497e+04	1.369e+06	5.803e+06	0.0
2621	reac per cdc 186 - nodo 1010	-5801.83	1397.06	-3.489e+04	-1.368e+06	-5.803e+06	0.0
2622	reac per cdc 187 - nodo 1010	-5801.83	-1398.01	-3.497e+04	1.369e+06	-5.803e+06	0.0
2623	reac per cdc 188 - nodo 1010	5801.83	1576.00	-3.489e+04	-1.549e+06	5.803e+06	0.0
2624	reac per cdc 189 - nodo 1010	5801.83	-1577.02	-3.497e+04	1.550e+06	5.803e+06	0.0
2625	reac per cdc 190 - nodo 1010	-5801.83	1576.03	-3.490e+04	-1.549e+06	-5.803e+06	0.0
2626	reac per cdc 191 - nodo 1010	-5801.83	-1576.98	-3.497e+04	1.550e+06	-5.803e+06	0.0
2627	reac per cdc 192 - nodo 1010	1740.55	4657.94	-3.480e+04	-4.560e+06	1.741e+06	0.0
2628	reac per cdc 193 - nodo 1010	1740.55	-4658.94	-3.506e+04	4.561e+06	1.741e+06	0.0
2629	reac per cdc 194 - nodo 1010	-1740.55	4657.95	-3.480e+04	-4.560e+06	-1.741e+06	0.0
2630	reac per cdc 195 - nodo 1010	-1740.55	-4658.93	-3.506e+04	4.561e+06	-1.741e+06	0.0
2631	reac per cdc 196 - nodo 1010	1740.55	4657.94	-3.480e+04	-4.560e+06	1.741e+06	0.0
2632	reac per cdc 197 - nodo 1010	1740.55	-4658.94	-3.506e+04	4.561e+06	1.741e+06	0.0
2633	reac per cdc 198 - nodo 1010	-1740.55	4657.95	-3.480e+04	-4.560e+06	-1.741e+06	0.0
2634	reac per cdc 199 - nodo 1010	-1740.55	-4658.93	-3.506e+04	4.561e+06	-1.741e+06	0.0
2635	reac per cdc 200 - nodo 1010	1740.55	5254.53	-3.481e+04	-5.164e+06	1.741e+06	0.0
2636	reac per cdc 201 - nodo 1010	1740.55	-5255.52	-3.505e+04	5.165e+06	1.741e+06	0.0
2637	reac per cdc 202 - nodo 1010	-1740.55	5254.54	-3.481e+04	-5.164e+06	-1.741e+06	0.0
2638	reac per cdc 203 - nodo 1010	-1740.55	-5255.52	-3.505e+04	5.165e+06	-1.741e+06	0.0
2639	reac per cdc 204 - nodo 1010	1740.55	5254.53	-3.481e+04	-5.164e+06	1.741e+06	0.0
2640	reac per cdc 205 - nodo 1010	1740.55	-5255.52	-3.505e+04	5.165e+06	1.741e+06	0.0
2641	reac per cdc 206 - nodo 1010	-1740.55	5254.54	-3.481e+04	-5.164e+06	-1.741e+06	0.0
2642	reac per cdc 207 - nodo 1010	-1740.55	-5255.52	-3.505e+04	5.165e+06	-1.741e+06	0.0
2643	reac per cdc 208 - nodo 1010	4518.30	1089.35	-3.490e+04	-1.066e+06	4.520e+06	0.0
2644	reac per cdc 209 - nodo 1010	4518.30	-1090.36	-3.496e+04	1.067e+06	4.520e+06	0.0
2645	reac per cdc 210 - nodo 1010	-4518.30	1089.38	-3.490e+04	-1.066e+06	-4.520e+06	0.0
2646	reac per cdc 211 - nodo 1010	-4518.30	-1090.34	-3.496e+04	1.067e+06	-4.520e+06	0.0
2647	reac per cdc 212 - nodo 1010	4518.30	1228.25	-3.490e+04	-1.207e+06	4.520e+06	0.0
2648	reac per cdc 213 - nodo 1010	4518.30	-1229.26	-3.496e+04	1.208e+06	4.520e+06	0.0
2649	reac per cdc 214 - nodo 1010	-4518.30	1228.27	-3.490e+04	-1.207e+06	-4.520e+06	0.0
2650	reac per cdc 215 - nodo 1010	-4518.30	-1229.23	-3.496e+04	1.208e+06	-4.520e+06	0.0
2651	reac per cdc 216 - nodo 1010	4518.30	1089.35	-3.490e+04	-1.066e+06	4.520e+06	0.0
2652	reac per cdc 217 - nodo 1010	4518.30	-1090.36	-3.496e+04	1.067e+06	4.520e+06	0.0
2653	reac per cdc 218 - nodo 1010	-4518.30	1089.38	-3.490e+04	-1.066e+06	-4.520e+06	0.0
2654	reac per cdc 219 - nodo 1010	-4518.30	-1090.34	-3.496e+04	1.067e+06	-4.520e+06	0.0
2655	reac per cdc 220 - nodo 1010	4518.30	1228.25	-3.490e+04	-1.207e+06	4.520e+06	0.0
2656	reac per cdc 221 - nodo 1010	4518.30	-1229.26	-3.496e+04	1.208e+06	4.520e+06	0.0
2657	reac per cdc 222 - nodo 1010	-4518.30	1228.27	-3.490e+04	-1.207e+06	-4.520e+06	0.0
2658	reac per cdc 223 - nodo 1010	-4518.30	-1229.23	-3.496e+04	1.208e+06	-4.520e+06	0.0
2659	reac per cdc 224 - nodo 1010	1355.49	3632.36	-3.483e+04	-3.556e+06	1.356e+06	0.0
2660	reac per cdc 225 - nodo 1010	1355.49	-3633.36	-3.503e+04	3.557e+06	1.356e+06	0.0
2661	reac per cdc 226 - nodo 1010	-1355.49	3632.37	-3.483e+04	-3.556e+06	-1.356e+06	0.0
2662	reac per cdc 227 - nodo 1010	-1355.49	-3633.35	-3.503e+04	3.557e+06	-1.356e+06	0.0
2663	reac per cdc 228 - nodo 1010	1355.49	3632.36	-3.483e+04	-3.556e+06	1.356e+06	0.0
2664	reac per cdc 229 - nodo 1010	1355.49	-3633.36	-3.503e+04	3.557e+06	1.356e+06	0.0
2665	reac per cdc 230 - nodo 1010	-1355.49	3632.37	-3.483e+04	-3.556e+06	-1.356e+06	0.0
2666	reac per cdc 231 - nodo 1010	-1355.49	-3633.35	-3.503e+04	3.557e+06	-1.356e+06	0.0
2667	reac per cdc 232 - nodo 1010	1355.49	4095.35	-3.484e+04	-4.025e+06	1.356e+06	0.0
2668	reac per cdc 233 - nodo 1010	1355.49	-4096.34	-3.503e+04	4.026e+06	1.356e+06	0.0
2669	reac per cdc 234 - nodo 1010	-1355.49	4095.36	-3.484e+04	-4.025e+06	-1.356e+06	0.0
2670	reac per cdc 235 - nodo 1010	-1355.49	-4096.34	-3.503e+04	4.026e+06	-1.356e+06	0.0
2671	reac per cdc 236 - nodo 1010	1355.49	4095.35	-3.484e+04	-4.025e+06	1.356e+06	0.0
2672	reac per cdc 237 - nodo 1010	1355.49	-4096.34	-3.503e+04	4.026e+06	1.356e+06	0.0
2673	reac per cdc 238 - nodo 1010	-1355.49	4095.36	-3.484e+04	-4.025e+06	-1.356e+06	0.0
2674	reac per cdc 239 - nodo 1010	-1355.49	-4096.34	-3.503e+04	4.026e+06	-1.356e+06	0.0
2675	reac per cdc 240 - nodo 1010	0.0	-0.76	-4.628e+04	802.86	0.0	0.0
2676	reac per cdc 241 - nodo 1010	1995.32	-4.39	-3.493e+04	4626.74	2.193e+06	0.0
2677	reac per cdc 242 - nodo 1010	-2236.23	-4.39	-3.493e+04	4626.74	-2.263e+06	0.0
2678	reac per cdc 243 - nodo 1010	519.87	352.45	-3.496e+04	-3.711e+05	1.521e+05	0.0
2679	reac per cdc 244 - nodo 1010	519.87	-351.70	-3.491e+04	3.703e+05	1.521e+05	0.0
2680	reac per cdc 245 - nodo 1010	1197.19	-3.10	-4.628e+04	3267.83	1.316e+06	0.0
2681	reac per cdc 246 - nodo 1010	-1341.74	-3.10	-4.628e+04	3267.83	-1.358e+06	0.0
2682	reac per cdc 247 - nodo 1010	311.92	211.00	-4.630e+04	-2.222e+05	9.129e+04	0.0
2683	reac per cdc 248 - nodo 1010	311.92	-211.49	-4.627e+04	2.227e+05	9.129e+04	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2684	reac per cdc 249 - nodo 1010	1995.32	-4.53	-4.061e+04	4768.94	2.193e+06	0.0
2685	reac per cdc 250 - nodo 1010	-2236.23	-4.53	-4.061e+04	4768.94	-2.263e+06	0.0
2686	reac per cdc 251 - nodo 1010	519.87	352.31	-4.063e+04	-3.710e+05	1.521e+05	0.0
2687	reac per cdc 252 - nodo 1010	519.87	-351.84	-4.058e+04	3.705e+05	1.521e+05	0.0
2688	reac per cdc 253 - nodo 1010	0.0	-0.55	-3.720e+04	575.35	0.0	0.0
2689	reac per cdc 254 - nodo 1010	399.06	-1.27	-3.493e+04	1340.13	4.385e+05	0.0
2690	reac per cdc 255 - nodo 1010	-447.25	-1.27	-3.493e+04	1340.13	-4.526e+05	0.0
2691	reac per cdc 256 - nodo 1010	103.97	70.10	-3.494e+04	-7.381e+04	3.043e+04	0.0
2692	reac per cdc 257 - nodo 1010	103.97	-70.73	-3.493e+04	7.448e+04	3.043e+04	0.0
2693	reac per cdc 258 - nodo 1010	0.0	-0.49	-3.493e+04	518.47	0.0	0.0
2694	reac per cdc 131 - nodo 1017	0.0	-1.05	-6.244e+04	1100.60	0.0	0.0
2695	reac per cdc 132 - nodo 1017	3354.35	-6.49	-4.541e+04	6836.42	3.395e+06	0.0
2696	reac per cdc 133 - nodo 1017	-2992.98	-6.49	-4.541e+04	6836.42	-3.289e+06	0.0
2697	reac per cdc 134 - nodo 1017	-779.80	528.77	-4.545e+04	-5.568e+05	-2.282e+05	0.0
2698	reac per cdc 135 - nodo 1017	-779.80	-527.45	-4.537e+04	5.554e+05	-2.282e+05	0.0
2699	reac per cdc 136 - nodo 1017	2012.61	-4.56	-6.244e+04	4798.05	2.037e+06	0.0
2700	reac per cdc 137 - nodo 1017	-1795.79	-4.56	-6.244e+04	4798.05	-1.973e+06	0.0
2701	reac per cdc 138 - nodo 1017	-467.88	316.60	-6.246e+04	-3.334e+05	-1.369e+05	0.0
2702	reac per cdc 139 - nodo 1017	-467.88	-317.13	-6.241e+04	3.339e+05	-1.369e+05	0.0
2703	reac per cdc 140 - nodo 1017	3354.35	-6.69	-5.392e+04	7049.72	3.395e+06	0.0
2704	reac per cdc 141 - nodo 1017	-2992.98	-6.69	-5.392e+04	7049.72	-3.289e+06	0.0
2705	reac per cdc 142 - nodo 1017	-779.80	528.57	-5.396e+04	-5.566e+05	-2.282e+05	0.0
2706	reac per cdc 143 - nodo 1017	-779.80	-527.65	-5.389e+04	5.556e+05	-2.282e+05	0.0
2707	reac per cdc 144 - nodo 1017	9456.28	2569.67	-3.487e+04	-2.525e+06	9.459e+06	0.0
2708	reac per cdc 145 - nodo 1017	9456.28	-2570.69	-3.499e+04	2.526e+06	9.459e+06	0.0
2709	reac per cdc 146 - nodo 1017	-9456.28	2569.71	-3.487e+04	-2.525e+06	-9.459e+06	0.0
2710	reac per cdc 147 - nodo 1017	-9456.28	-2570.66	-3.499e+04	2.526e+06	-9.459e+06	0.0
2711	reac per cdc 148 - nodo 1017	9456.28	2278.80	-3.487e+04	-2.231e+06	9.459e+06	0.0
2712	reac per cdc 149 - nodo 1017	9456.28	-2279.82	-3.500e+04	2.232e+06	9.459e+06	0.0
2713	reac per cdc 150 - nodo 1017	-9456.28	2278.84	-3.487e+04	-2.231e+06	-9.459e+06	0.0
2714	reac per cdc 151 - nodo 1017	-9456.28	-2279.79	-3.500e+04	2.232e+06	-9.459e+06	0.0
2715	reac per cdc 152 - nodo 1017	9456.28	2569.67	-3.487e+04	-2.525e+06	9.459e+06	0.0
2716	reac per cdc 153 - nodo 1017	9456.28	-2570.69	-3.499e+04	2.526e+06	9.459e+06	0.0
2717	reac per cdc 154 - nodo 1017	-9456.28	2569.71	-3.487e+04	-2.525e+06	-9.459e+06	0.0
2718	reac per cdc 155 - nodo 1017	-9456.28	-2570.66	-3.499e+04	2.526e+06	-9.459e+06	0.0
2719	reac per cdc 156 - nodo 1017	9456.28	2278.80	-3.487e+04	-2.231e+06	9.459e+06	0.0
2720	reac per cdc 157 - nodo 1017	9456.28	-2279.82	-3.500e+04	2.232e+06	9.459e+06	0.0
2721	reac per cdc 158 - nodo 1017	-9456.28	2278.84	-3.487e+04	-2.231e+06	-9.459e+06	0.0
2722	reac per cdc 159 - nodo 1017	-9456.28	-2279.79	-3.500e+04	2.232e+06	-9.459e+06	0.0
2723	reac per cdc 160 - nodo 1017	2836.88	8566.78	-3.473e+04	-8.419e+06	2.838e+06	0.0
2724	reac per cdc 161 - nodo 1017	2836.89	-8567.77	-3.513e+04	8.420e+06	2.838e+06	0.0
2725	reac per cdc 162 - nodo 1017	-2836.89	8566.79	-3.473e+04	-8.419e+06	-2.838e+06	0.0
2726	reac per cdc 163 - nodo 1017	-2836.88	-8567.76	-3.513e+04	8.420e+06	-2.838e+06	0.0
2727	reac per cdc 164 - nodo 1017	2836.88	8566.78	-3.473e+04	-8.419e+06	2.838e+06	0.0
2728	reac per cdc 165 - nodo 1017	2836.89	-8567.77	-3.513e+04	8.420e+06	2.838e+06	0.0
2729	reac per cdc 166 - nodo 1017	-2836.89	8566.79	-3.473e+04	-8.419e+06	-2.838e+06	0.0
2730	reac per cdc 167 - nodo 1017	-2836.88	-8567.76	-3.513e+04	8.420e+06	-2.838e+06	0.0
2731	reac per cdc 168 - nodo 1017	2836.88	7597.22	-3.472e+04	-7.437e+06	2.838e+06	0.0
2732	reac per cdc 169 - nodo 1017	2836.89	-7598.21	-3.515e+04	7.438e+06	2.838e+06	0.0
2733	reac per cdc 170 - nodo 1017	-2836.89	7597.23	-3.472e+04	-7.437e+06	-2.838e+06	0.0
2734	reac per cdc 171 - nodo 1017	-2836.88	-7598.20	-3.515e+04	7.438e+06	-2.838e+06	0.0
2735	reac per cdc 172 - nodo 1017	2836.88	7597.22	-3.472e+04	-7.437e+06	2.838e+06	0.0
2736	reac per cdc 173 - nodo 1017	2836.89	-7598.21	-3.515e+04	7.438e+06	2.838e+06	0.0
2737	reac per cdc 174 - nodo 1017	-2836.89	7597.23	-3.472e+04	-7.437e+06	-2.838e+06	0.0
2738	reac per cdc 175 - nodo 1017	-2836.88	-7598.20	-3.515e+04	7.438e+06	-2.838e+06	0.0
2739	reac per cdc 176 - nodo 1017	5801.83	1576.01	-3.489e+04	-1.549e+06	5.803e+06	0.0
2740	reac per cdc 177 - nodo 1017	5801.83	-1577.02	-3.497e+04	1.550e+06	5.803e+06	0.0
2741	reac per cdc 178 - nodo 1017	-5801.83	1576.03	-3.489e+04	-1.549e+06	-5.803e+06	0.0
2742	reac per cdc 179 - nodo 1017	-5801.83	-1576.99	-3.497e+04	1.550e+06	-5.803e+06	0.0
2743	reac per cdc 180 - nodo 1017	5801.83	1397.03	-3.489e+04	-1.368e+06	5.803e+06	0.0
2744	reac per cdc 181 - nodo 1017	5801.83	-1398.04	-3.497e+04	1.369e+06	5.803e+06	0.0
2745	reac per cdc 182 - nodo 1017	-5801.83	1397.05	-3.489e+04	-1.368e+06	-5.803e+06	0.0
2746	reac per cdc 183 - nodo 1017	-5801.83	-1398.01	-3.497e+04	1.369e+06	-5.803e+06	0.0
2747	reac per cdc 184 - nodo 1017	5801.83	1576.01	-3.489e+04	-1.549e+06	5.803e+06	0.0
2748	reac per cdc 185 - nodo 1017	5801.83	-1577.02	-3.497e+04	1.550e+06	5.803e+06	0.0
2749	reac per cdc 186 - nodo 1017	-5801.83	1576.03	-3.489e+04	-1.549e+06	-5.803e+06	0.0
2750	reac per cdc 187 - nodo 1017	-5801.83	-1576.99	-3.497e+04	1.550e+06	-5.803e+06	0.0
2751	reac per cdc 188 - nodo 1017	5801.83	1397.03	-3.489e+04	-1.368e+06	5.803e+06	0.0
2752	reac per cdc 189 - nodo 1017	5801.83	-1398.04	-3.497e+04	1.369e+06	5.803e+06	0.0
2753	reac per cdc 190 - nodo 1017	-5801.83	1397.05	-3.489e+04	-1.368e+06	-5.803e+06	0.0
2754	reac per cdc 191 - nodo 1017	-5801.83	-1398.01	-3.497e+04	1.369e+06	-5.803e+06	0.0
2755	reac per cdc 192 - nodo 1017	1740.55	5254.55	-3.481e+04	-5.164e+06	1.741e+06	0.0
2756	reac per cdc 193 - nodo 1017	1740.55	-5255.54	-3.505e+04	5.165e+06	1.741e+06	0.0
2757	reac per cdc 194 - nodo 1017	-1740.55	5254.55	-3.481e+04	-5.164e+06	-1.741e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2758	reac per cdc 195 - nodo 1017	-1740.55	-5255.53	-3.505e+04	5.165e+06	-1.741e+06	0.0
2759	reac per cdc 196 - nodo 1017	1740.55	5254.55	-3.481e+04	-5.164e+06	1.741e+06	0.0
2760	reac per cdc 197 - nodo 1017	1740.55	-5255.54	-3.505e+04	5.165e+06	1.741e+06	0.0
2761	reac per cdc 198 - nodo 1017	-1740.55	5254.55	-3.481e+04	-5.164e+06	-1.741e+06	0.0
2762	reac per cdc 199 - nodo 1017	-1740.55	-5255.53	-3.505e+04	5.165e+06	-1.741e+06	0.0
2763	reac per cdc 200 - nodo 1017	1740.55	4657.94	-3.480e+04	-4.560e+06	1.741e+06	0.0
2764	reac per cdc 201 - nodo 1017	1740.55	-4658.94	-3.506e+04	4.561e+06	1.741e+06	0.0
2765	reac per cdc 202 - nodo 1017	-1740.55	4657.95	-3.480e+04	-4.560e+06	-1.741e+06	0.0
2766	reac per cdc 203 - nodo 1017	-1740.55	-4658.93	-3.506e+04	4.561e+06	-1.741e+06	0.0
2767	reac per cdc 204 - nodo 1017	1740.55	4657.94	-3.480e+04	-4.560e+06	1.741e+06	0.0
2768	reac per cdc 205 - nodo 1017	1740.55	-4658.94	-3.506e+04	4.561e+06	1.741e+06	0.0
2769	reac per cdc 206 - nodo 1017	-1740.55	4657.95	-3.480e+04	-4.560e+06	-1.741e+06	0.0
2770	reac per cdc 207 - nodo 1017	-1740.55	-4658.93	-3.506e+04	4.561e+06	-1.741e+06	0.0
2771	reac per cdc 208 - nodo 1017	4518.30	1228.26	-3.490e+04	-1.207e+06	4.520e+06	0.0
2772	reac per cdc 209 - nodo 1017	4518.31	-1229.26	-3.496e+04	1.208e+06	4.520e+06	0.0
2773	reac per cdc 210 - nodo 1017	-4518.31	1228.27	-3.490e+04	-1.207e+06	-4.520e+06	0.0
2774	reac per cdc 211 - nodo 1017	-4518.30	-1229.24	-3.496e+04	1.208e+06	-4.520e+06	0.0
2775	reac per cdc 212 - nodo 1017	4518.30	1089.36	-3.490e+04	-1.066e+06	4.520e+06	0.0
2776	reac per cdc 213 - nodo 1017	4518.31	-1090.36	-3.496e+04	1.067e+06	4.520e+06	0.0
2777	reac per cdc 214 - nodo 1017	-4518.31	1089.37	-3.490e+04	-1.066e+06	-4.520e+06	0.0
2778	reac per cdc 215 - nodo 1017	-4518.30	-1090.34	-3.496e+04	1.067e+06	-4.520e+06	0.0
2779	reac per cdc 216 - nodo 1017	4518.30	1228.26	-3.490e+04	-1.207e+06	4.520e+06	0.0
2780	reac per cdc 217 - nodo 1017	4518.31	-1229.26	-3.496e+04	1.208e+06	4.520e+06	0.0
2781	reac per cdc 218 - nodo 1017	-4518.31	1228.27	-3.490e+04	-1.207e+06	-4.520e+06	0.0
2782	reac per cdc 219 - nodo 1017	-4518.30	-1229.24	-3.496e+04	1.208e+06	-4.520e+06	0.0
2783	reac per cdc 220 - nodo 1017	4518.30	1089.36	-3.490e+04	-1.066e+06	4.520e+06	0.0
2784	reac per cdc 221 - nodo 1017	4518.31	-1090.36	-3.496e+04	1.067e+06	4.520e+06	0.0
2785	reac per cdc 222 - nodo 1017	-4518.31	1089.37	-3.490e+04	-1.066e+06	-4.520e+06	0.0
2786	reac per cdc 223 - nodo 1017	-4518.30	-1090.34	-3.496e+04	1.067e+06	-4.520e+06	0.0
2787	reac per cdc 224 - nodo 1017	1355.49	4095.36	-3.484e+04	-4.025e+06	1.356e+06	0.0
2788	reac per cdc 225 - nodo 1017	1355.49	-4096.35	-3.503e+04	4.026e+06	1.356e+06	0.0
2789	reac per cdc 226 - nodo 1017	-1355.49	4095.37	-3.484e+04	-4.025e+06	-1.356e+06	0.0
2790	reac per cdc 227 - nodo 1017	-1355.49	-4096.35	-3.503e+04	4.026e+06	-1.356e+06	0.0
2791	reac per cdc 228 - nodo 1017	1355.49	4095.36	-3.484e+04	-4.025e+06	1.356e+06	0.0
2792	reac per cdc 229 - nodo 1017	1355.49	-4096.35	-3.503e+04	4.026e+06	1.356e+06	0.0
2793	reac per cdc 230 - nodo 1017	-1355.49	4095.37	-3.484e+04	-4.025e+06	-1.356e+06	0.0
2794	reac per cdc 231 - nodo 1017	-1355.49	-4096.35	-3.503e+04	4.026e+06	-1.356e+06	0.0
2795	reac per cdc 232 - nodo 1017	1355.49	3632.36	-3.483e+04	-3.556e+06	1.356e+06	0.0
2796	reac per cdc 233 - nodo 1017	1355.49	-3633.35	-3.503e+04	3.557e+06	1.356e+06	0.0
2797	reac per cdc 234 - nodo 1017	-1355.49	3632.37	-3.483e+04	-3.556e+06	-1.356e+06	0.0
2798	reac per cdc 235 - nodo 1017	-1355.49	-3633.35	-3.503e+04	3.557e+06	-1.356e+06	0.0
2799	reac per cdc 236 - nodo 1017	1355.49	3632.36	-3.483e+04	-3.556e+06	1.356e+06	0.0
2800	reac per cdc 237 - nodo 1017	1355.49	-3633.35	-3.503e+04	3.557e+06	1.356e+06	0.0
2801	reac per cdc 238 - nodo 1017	-1355.49	3632.37	-3.483e+04	-3.556e+06	-1.356e+06	0.0
2802	reac per cdc 239 - nodo 1017	-1355.49	-3633.35	-3.503e+04	3.557e+06	-1.356e+06	0.0
2803	reac per cdc 240 - nodo 1017	0.0	-0.76	-4.628e+04	802.86	0.0	0.0
2804	reac per cdc 241 - nodo 1017	2236.23	-4.39	-3.493e+04	4626.74	2.263e+06	0.0
2805	reac per cdc 242 - nodo 1017	-1995.32	-4.39	-3.493e+04	4626.74	-2.193e+06	0.0
2806	reac per cdc 243 - nodo 1017	-519.87	352.45	-3.496e+04	-3.711e+05	-1.521e+05	0.0
2807	reac per cdc 244 - nodo 1017	-519.87	-351.70	-3.491e+04	3.703e+05	-1.521e+05	0.0
2808	reac per cdc 245 - nodo 1017	1341.74	-3.10	-4.628e+04	3267.83	1.358e+06	0.0
2809	reac per cdc 246 - nodo 1017	-1197.19	-3.10	-4.628e+04	3267.83	-1.316e+06	0.0
2810	reac per cdc 247 - nodo 1017	-311.92	211.00	-4.630e+04	-2.222e+05	-9.129e+04	0.0
2811	reac per cdc 248 - nodo 1017	-311.92	-211.49	-4.627e+04	2.227e+05	-9.129e+04	0.0
2812	reac per cdc 249 - nodo 1017	2236.23	-4.53	-4.061e+04	4768.94	2.263e+06	0.0
2813	reac per cdc 250 - nodo 1017	-1995.32	-4.53	-4.061e+04	4768.94	-2.193e+06	0.0
2814	reac per cdc 251 - nodo 1017	-519.87	352.31	-4.063e+04	-3.710e+05	-1.521e+05	0.0
2815	reac per cdc 252 - nodo 1017	-519.87	-351.84	-4.058e+04	3.705e+05	-1.521e+05	0.0
2816	reac per cdc 253 - nodo 1017	0.0	-0.55	-3.720e+04	575.35	0.0	0.0
2817	reac per cdc 254 - nodo 1017	447.25	-1.27	-3.493e+04	1340.13	4.526e+05	0.0
2818	reac per cdc 255 - nodo 1017	-399.06	-1.27	-3.493e+04	1340.13	-4.385e+05	0.0
2819	reac per cdc 256 - nodo 1017	-103.97	70.10	-3.494e+04	-7.381e+04	-3.043e+04	0.0
2820	reac per cdc 257 - nodo 1017	-103.97	-70.73	-3.493e+04	7.448e+04	-3.043e+04	0.0
2821	reac per cdc 258 - nodo 1017	0.0	-0.49	-3.493e+04	518.47	0.0	0.0
2822	reac per cdc 131 - nodo 1108	0.0	-0.95	-6.166e+04	954.28	0.0	0.0
2823	reac per cdc 132 - nodo 1108	2983.80	-3.80	-4.464e+04	3818.21	3.136e+06	0.0
2824	reac per cdc 133 - nodo 1108	-3363.53	-3.80	-4.464e+04	3818.21	-3.240e+06	0.0
2825	reac per cdc 134 - nodo 1108	819.42	607.04	-4.468e+04	-6.098e+05	2.255e+05	0.0
2826	reac per cdc 135 - nodo 1108	819.42	-606.71	-4.460e+04	6.094e+05	2.255e+05	0.0
2827	reac per cdc 136 - nodo 1108	1790.28	-2.90	-6.166e+04	2911.77	1.881e+06	0.0
2828	reac per cdc 137 - nodo 1108	-2018.12	-2.90	-6.166e+04	2911.77	-1.944e+06	0.0
2829	reac per cdc 138 - nodo 1108	491.65	363.61	-6.169e+04	-3.652e+05	1.353e+05	0.0
2830	reac per cdc 139 - nodo 1108	491.65	-364.64	-6.164e+04	3.663e+05	1.353e+05	0.0
2831	reac per cdc 140 - nodo 1108	2983.80	-4.00	-5.315e+04	4017.48	3.136e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2832	reac per cdc 141 - nodo 1108	-3363.53	-4.00	-5.315e+04	4017.48	-3.240e+06	0.0
2833	reac per cdc 142 - nodo 1108	819.42	606.85	-5.319e+04	-6.096e+05	2.255e+05	0.0
2834	reac per cdc 143 - nodo 1108	819.42	-606.91	-5.311e+04	6.096e+05	2.255e+05	0.0
2835	reac per cdc 144 - nodo 1108	1.007e+04	2591.36	-3.430e+04	-2.438e+06	9.585e+06	0.0
2836	reac per cdc 145 - nodo 1108	1.007e+04	-2592.23	-3.437e+04	2.439e+06	9.585e+06	0.0
2837	reac per cdc 146 - nodo 1108	-1.007e+04	2591.38	-3.430e+04	-2.438e+06	-9.585e+06	0.0
2838	reac per cdc 147 - nodo 1108	-1.007e+04	-2592.21	-3.437e+04	2.439e+06	-9.585e+06	0.0
2839	reac per cdc 148 - nodo 1108	1.007e+04	2923.62	-3.431e+04	-2.761e+06	9.585e+06	0.0
2840	reac per cdc 149 - nodo 1108	1.007e+04	-2924.49	-3.437e+04	2.761e+06	9.585e+06	0.0
2841	reac per cdc 150 - nodo 1108	-1.007e+04	2923.64	-3.431e+04	-2.761e+06	-9.585e+06	0.0
2842	reac per cdc 151 - nodo 1108	-1.007e+04	-2924.47	-3.437e+04	2.761e+06	-9.585e+06	0.0
2843	reac per cdc 152 - nodo 1108	1.007e+04	2591.36	-3.430e+04	-2.438e+06	9.585e+06	0.0
2844	reac per cdc 153 - nodo 1108	1.007e+04	-2592.23	-3.437e+04	2.439e+06	9.585e+06	0.0
2845	reac per cdc 154 - nodo 1108	-1.007e+04	2591.38	-3.430e+04	-2.438e+06	-9.585e+06	0.0
2846	reac per cdc 155 - nodo 1108	-1.007e+04	-2592.21	-3.437e+04	2.439e+06	-9.585e+06	0.0
2847	reac per cdc 156 - nodo 1108	1.007e+04	2923.62	-3.431e+04	-2.761e+06	9.585e+06	0.0
2848	reac per cdc 157 - nodo 1108	1.007e+04	-2924.49	-3.437e+04	2.761e+06	9.585e+06	0.0
2849	reac per cdc 158 - nodo 1108	-1.007e+04	2923.64	-3.431e+04	-2.761e+06	-9.585e+06	0.0
2850	reac per cdc 159 - nodo 1108	-1.007e+04	-2924.47	-3.437e+04	2.761e+06	-9.585e+06	0.0
2851	reac per cdc 160 - nodo 1108	3021.86	8638.89	-3.422e+04	-8.129e+06	2.875e+06	0.0
2852	reac per cdc 161 - nodo 1108	3021.88	-8639.74	-3.446e+04	8.130e+06	2.875e+06	0.0
2853	reac per cdc 162 - nodo 1108	-3021.88	8638.89	-3.422e+04	-8.129e+06	-2.875e+06	0.0
2854	reac per cdc 163 - nodo 1108	-3021.86	-8639.74	-3.446e+04	8.130e+06	-2.875e+06	0.0
2855	reac per cdc 164 - nodo 1108	3021.86	8638.89	-3.422e+04	-8.129e+06	2.875e+06	0.0
2856	reac per cdc 165 - nodo 1108	3021.88	-8639.74	-3.446e+04	8.130e+06	2.875e+06	0.0
2857	reac per cdc 166 - nodo 1108	-3021.88	8638.89	-3.422e+04	-8.129e+06	-2.875e+06	0.0
2858	reac per cdc 167 - nodo 1108	-3021.86	-8639.74	-3.446e+04	8.130e+06	-2.875e+06	0.0
2859	reac per cdc 168 - nodo 1108	3021.86	9746.42	-3.424e+04	-9.203e+06	2.875e+06	0.0
2860	reac per cdc 169 - nodo 1108	3021.88	-9747.27	-3.443e+04	9.204e+06	2.875e+06	0.0
2861	reac per cdc 170 - nodo 1108	-3021.88	9746.42	-3.424e+04	-9.203e+06	-2.875e+06	0.0
2862	reac per cdc 171 - nodo 1108	-3021.86	-9747.27	-3.443e+04	9.204e+06	-2.875e+06	0.0
2863	reac per cdc 172 - nodo 1108	3021.86	9746.42	-3.424e+04	-9.203e+06	2.875e+06	0.0
2864	reac per cdc 173 - nodo 1108	3021.88	-9747.27	-3.443e+04	9.204e+06	2.875e+06	0.0
2865	reac per cdc 174 - nodo 1108	-3021.88	9746.42	-3.424e+04	-9.203e+06	-2.875e+06	0.0
2866	reac per cdc 175 - nodo 1108	-3021.86	-9747.27	-3.443e+04	9.204e+06	-2.875e+06	0.0
2867	reac per cdc 176 - nodo 1108	6177.77	1588.69	-3.432e+04	-1.495e+06	5.878e+06	0.0
2868	reac per cdc 177 - nodo 1108	6177.77	-1589.56	-3.436e+04	1.496e+06	5.878e+06	0.0
2869	reac per cdc 178 - nodo 1108	-6177.77	1588.70	-3.432e+04	-1.495e+06	-5.878e+06	0.0
2870	reac per cdc 179 - nodo 1108	-6177.77	-1589.55	-3.436e+04	1.496e+06	-5.878e+06	0.0
2871	reac per cdc 180 - nodo 1108	6177.77	1793.14	-3.432e+04	-1.693e+06	5.878e+06	0.0
2872	reac per cdc 181 - nodo 1108	6177.77	-1794.00	-3.435e+04	1.694e+06	5.878e+06	0.0
2873	reac per cdc 182 - nodo 1108	-6177.77	1793.15	-3.432e+04	-1.693e+06	-5.878e+06	0.0
2874	reac per cdc 183 - nodo 1108	-6177.77	-1793.99	-3.435e+04	1.694e+06	-5.878e+06	0.0
2875	reac per cdc 184 - nodo 1108	6177.77	1588.69	-3.432e+04	-1.495e+06	5.878e+06	0.0
2876	reac per cdc 185 - nodo 1108	6177.77	-1589.56	-3.436e+04	1.496e+06	5.878e+06	0.0
2877	reac per cdc 186 - nodo 1108	-6177.77	1588.70	-3.432e+04	-1.495e+06	-5.878e+06	0.0
2878	reac per cdc 187 - nodo 1108	-6177.77	-1589.55	-3.436e+04	1.496e+06	-5.878e+06	0.0
2879	reac per cdc 188 - nodo 1108	6177.77	1793.14	-3.432e+04	-1.693e+06	5.878e+06	0.0
2880	reac per cdc 189 - nodo 1108	6177.77	-1794.00	-3.435e+04	1.694e+06	5.878e+06	0.0
2881	reac per cdc 190 - nodo 1108	-6177.77	1793.15	-3.432e+04	-1.693e+06	-5.878e+06	0.0
2882	reac per cdc 191 - nodo 1108	-6177.77	-1793.99	-3.435e+04	1.694e+06	-5.878e+06	0.0
2883	reac per cdc 192 - nodo 1108	1853.32	5296.66	-3.426e+04	-4.984e+06	1.764e+06	0.0
2884	reac per cdc 193 - nodo 1108	1853.34	-5297.51	-3.441e+04	4.985e+06	1.764e+06	0.0
2885	reac per cdc 194 - nodo 1108	-1853.34	5296.66	-3.426e+04	-4.984e+06	-1.764e+06	0.0
2886	reac per cdc 195 - nodo 1108	-1853.32	-5297.51	-3.441e+04	4.985e+06	-1.764e+06	0.0
2887	reac per cdc 196 - nodo 1108	1853.32	5296.66	-3.426e+04	-4.984e+06	1.764e+06	0.0
2888	reac per cdc 197 - nodo 1108	1853.34	-5297.51	-3.441e+04	4.985e+06	1.764e+06	0.0
2889	reac per cdc 198 - nodo 1108	-1853.34	5296.66	-3.426e+04	-4.984e+06	-1.764e+06	0.0
2890	reac per cdc 199 - nodo 1108	-1853.32	-5297.51	-3.441e+04	4.985e+06	-1.764e+06	0.0
2891	reac per cdc 200 - nodo 1108	1853.33	5978.15	-3.428e+04	-5.645e+06	1.764e+06	0.0
2892	reac per cdc 201 - nodo 1108	1853.34	-5979.00	-3.439e+04	5.646e+06	1.764e+06	0.0
2893	reac per cdc 202 - nodo 1108	-1853.34	5978.15	-3.428e+04	-5.645e+06	-1.764e+06	0.0
2894	reac per cdc 203 - nodo 1108	-1853.33	-5979.00	-3.439e+04	5.645e+06	-1.764e+06	0.0
2895	reac per cdc 204 - nodo 1108	1853.33	5978.15	-3.428e+04	-5.645e+06	1.764e+06	0.0
2896	reac per cdc 205 - nodo 1108	1853.34	-5979.00	-3.439e+04	5.646e+06	1.764e+06	0.0
2897	reac per cdc 206 - nodo 1108	-1853.34	5978.15	-3.428e+04	-5.645e+06	-1.764e+06	0.0
2898	reac per cdc 207 - nodo 1108	-1853.33	-5979.00	-3.439e+04	5.645e+06	-1.764e+06	0.0
2899	reac per cdc 208 - nodo 1108	4815.98	1238.84	-3.432e+04	-1.166e+06	4.583e+06	0.0
2900	reac per cdc 209 - nodo 1108	4815.98	-1239.70	-3.435e+04	1.167e+06	4.583e+06	0.0
2901	reac per cdc 210 - nodo 1108	-4815.98	1238.85	-3.432e+04	-1.166e+06	-4.583e+06	0.0
2902	reac per cdc 211 - nodo 1108	-4815.98	-1239.69	-3.435e+04	1.167e+06	-4.583e+06	0.0
2903	reac per cdc 212 - nodo 1108	4815.98	1397.51	-3.432e+04	-1.320e+06	4.583e+06	0.0
2904	reac per cdc 213 - nodo 1108	4815.98	-1398.37	-3.435e+04	1.320e+06	4.583e+06	0.0
2905	reac per cdc 214 - nodo 1108	-4815.98	1397.51	-3.432e+04	-1.320e+06	-4.583e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2906	reac per cdc 215 - nodo 1108	-4815.98	-1398.36	-3.435e+04	1.320e+06	-4.583e+06	0.0
2907	reac per cdc 216 - nodo 1108	4815.98	1238.84	-3.432e+04	-1.166e+06	4.583e+06	0.0
2908	reac per cdc 217 - nodo 1108	4815.98	-1239.70	-3.435e+04	1.167e+06	4.583e+06	0.0
2909	reac per cdc 218 - nodo 1108	-4815.98	1238.85	-3.432e+04	-1.166e+06	-4.583e+06	0.0
2910	reac per cdc 219 - nodo 1108	-4815.98	-1239.69	-3.435e+04	1.167e+06	-4.583e+06	0.0
2911	reac per cdc 220 - nodo 1108	4815.98	1397.51	-3.432e+04	-1.320e+06	4.583e+06	0.0
2912	reac per cdc 221 - nodo 1108	4815.98	-1398.37	-3.435e+04	1.320e+06	4.583e+06	0.0
2913	reac per cdc 222 - nodo 1108	-4815.98	1397.51	-3.432e+04	-1.320e+06	-4.583e+06	0.0
2914	reac per cdc 223 - nodo 1108	-4815.98	-1398.36	-3.435e+04	1.320e+06	-4.583e+06	0.0
2915	reac per cdc 224 - nodo 1108	1444.79	4130.48	-3.428e+04	-3.887e+06	1.375e+06	0.0
2916	reac per cdc 225 - nodo 1108	1444.80	-4131.33	-3.439e+04	3.887e+06	1.375e+06	0.0
2917	reac per cdc 226 - nodo 1108	-1444.80	4130.48	-3.428e+04	-3.887e+06	-1.375e+06	0.0
2918	reac per cdc 227 - nodo 1108	-1444.79	-4131.33	-3.439e+04	3.887e+06	-1.375e+06	0.0
2919	reac per cdc 228 - nodo 1108	1444.79	4130.48	-3.428e+04	-3.887e+06	1.375e+06	0.0
2920	reac per cdc 229 - nodo 1108	1444.80	-4131.33	-3.439e+04	3.887e+06	1.375e+06	0.0
2921	reac per cdc 230 - nodo 1108	-1444.80	4130.48	-3.428e+04	-3.887e+06	-1.375e+06	0.0
2922	reac per cdc 231 - nodo 1108	-1444.79	-4131.33	-3.439e+04	3.887e+06	-1.375e+06	0.0
2923	reac per cdc 232 - nodo 1108	1444.79	4659.36	-3.429e+04	-4.399e+06	1.375e+06	0.0
2924	reac per cdc 233 - nodo 1108	1444.80	-4660.21	-3.438e+04	4.400e+06	1.375e+06	0.0
2925	reac per cdc 234 - nodo 1108	-1444.80	4659.36	-3.429e+04	-4.399e+06	-1.375e+06	0.0
2926	reac per cdc 235 - nodo 1108	-1444.79	-4660.21	-3.438e+04	4.400e+06	-1.375e+06	0.0
2927	reac per cdc 236 - nodo 1108	1444.79	4659.36	-3.429e+04	-4.399e+06	1.375e+06	0.0
2928	reac per cdc 237 - nodo 1108	1444.80	-4660.21	-3.438e+04	4.400e+06	1.375e+06	0.0
2929	reac per cdc 238 - nodo 1108	-1444.80	4659.36	-3.429e+04	-4.399e+06	-1.375e+06	0.0
2930	reac per cdc 239 - nodo 1108	-1444.79	-4660.21	-3.438e+04	4.400e+06	-1.375e+06	0.0
2931	reac per cdc 240 - nodo 1108	0.0	-0.69	-4.569e+04	693.19	0.0	0.0
2932	reac per cdc 241 - nodo 1108	1989.20	-2.59	-3.434e+04	2602.47	2.090e+06	0.0
2933	reac per cdc 242 - nodo 1108	-2242.36	-2.59	-3.434e+04	2602.47	-2.160e+06	0.0
2934	reac per cdc 243 - nodo 1108	546.28	404.64	-3.437e+04	-4.065e+05	1.504e+05	0.0
2935	reac per cdc 244 - nodo 1108	546.28	-404.53	-3.431e+04	4.063e+05	1.504e+05	0.0
2936	reac per cdc 245 - nodo 1108	1193.52	-1.99	-4.569e+04	1998.18	1.254e+06	0.0
2937	reac per cdc 246 - nodo 1108	-1345.41	-1.99	-4.569e+04	1998.18	-1.296e+06	0.0
2938	reac per cdc 247 - nodo 1108	327.77	242.35	-4.570e+04	-2.434e+05	9.022e+04	0.0
2939	reac per cdc 248 - nodo 1108	327.77	-243.15	-4.567e+04	2.442e+05	9.022e+04	0.0
2940	reac per cdc 249 - nodo 1108	1989.20	-2.72	-4.001e+04	2735.32	2.090e+06	0.0
2941	reac per cdc 250 - nodo 1108	-2242.36	-2.72	-4.001e+04	2735.32	-2.160e+06	0.0
2942	reac per cdc 251 - nodo 1108	546.28	404.51	-4.004e+04	-4.063e+05	1.504e+05	0.0
2943	reac per cdc 252 - nodo 1108	546.28	-404.66	-3.998e+04	4.065e+05	1.504e+05	0.0
2944	reac per cdc 253 - nodo 1108	0.0	-0.48	-3.661e+04	480.63	0.0	0.0
2945	reac per cdc 254 - nodo 1108	397.84	-0.86	-3.434e+04	862.48	4.181e+05	0.0
2946	reac per cdc 255 - nodo 1108	-448.47	-0.86	-3.434e+04	862.48	-4.320e+05	0.0
2947	reac per cdc 256 - nodo 1108	109.26	80.59	-3.434e+04	-8.095e+04	3.007e+04	0.0
2948	reac per cdc 257 - nodo 1108	109.26	-81.25	-3.433e+04	8.161e+04	3.007e+04	0.0
2949	reac per cdc 258 - nodo 1108	0.0	-0.43	-3.434e+04	427.49	0.0	0.0
2950	reac per cdc 131 - nodo 1115	0.0	-0.95	-6.166e+04	954.28	0.0	0.0
2951	reac per cdc 132 - nodo 1115	3363.53	-3.80	-4.464e+04	3818.21	3.240e+06	0.0
2952	reac per cdc 133 - nodo 1115	-2983.80	-3.80	-4.464e+04	3818.21	-3.136e+06	0.0
2953	reac per cdc 134 - nodo 1115	-819.42	607.04	-4.468e+04	-6.098e+05	-2.255e+05	0.0
2954	reac per cdc 135 - nodo 1115	-819.42	-606.71	-4.460e+04	6.094e+05	-2.255e+05	0.0
2955	reac per cdc 136 - nodo 1115	2018.12	-2.90	-6.166e+04	2911.77	1.944e+06	0.0
2956	reac per cdc 137 - nodo 1115	-1790.28	-2.90	-6.166e+04	2911.77	-1.881e+06	0.0
2957	reac per cdc 138 - nodo 1115	-491.65	363.61	-6.169e+04	-3.652e+05	-1.353e+05	0.0
2958	reac per cdc 139 - nodo 1115	-491.65	-364.64	-6.164e+04	3.663e+05	-1.353e+05	0.0
2959	reac per cdc 140 - nodo 1115	3363.53	-4.00	-5.315e+04	4017.48	3.240e+06	0.0
2960	reac per cdc 141 - nodo 1115	-2983.80	-4.00	-5.315e+04	4017.48	-3.136e+06	0.0
2961	reac per cdc 142 - nodo 1115	-819.42	606.85	-5.319e+04	-6.096e+05	-2.255e+05	0.0
2962	reac per cdc 143 - nodo 1115	-819.42	-606.91	-5.311e+04	6.096e+05	-2.255e+05	0.0
2963	reac per cdc 144 - nodo 1115	1.007e+04	2923.60	-3.431e+04	-2.761e+06	9.585e+06	0.0
2964	reac per cdc 145 - nodo 1115	1.007e+04	-2924.51	-3.437e+04	2.761e+06	9.585e+06	0.0
2965	reac per cdc 146 - nodo 1115	-1.007e+04	2923.66	-3.431e+04	-2.761e+06	-9.585e+06	0.0
2966	reac per cdc 147 - nodo 1115	-1.007e+04	-2924.45	-3.437e+04	2.761e+06	-9.585e+06	0.0
2967	reac per cdc 148 - nodo 1115	1.007e+04	2591.34	-3.430e+04	-2.438e+06	9.585e+06	0.0
2968	reac per cdc 149 - nodo 1115	1.007e+04	-2592.25	-3.437e+04	2.439e+06	9.585e+06	0.0
2969	reac per cdc 150 - nodo 1115	-1.007e+04	2591.40	-3.430e+04	-2.438e+06	-9.585e+06	0.0
2970	reac per cdc 151 - nodo 1115	-1.007e+04	-2592.19	-3.437e+04	2.439e+06	-9.585e+06	0.0
2971	reac per cdc 152 - nodo 1115	1.007e+04	2923.60	-3.431e+04	-2.761e+06	9.585e+06	0.0
2972	reac per cdc 153 - nodo 1115	1.007e+04	-2924.51	-3.437e+04	2.761e+06	9.585e+06	0.0
2973	reac per cdc 154 - nodo 1115	-1.007e+04	2923.66	-3.431e+04	-2.761e+06	-9.585e+06	0.0
2974	reac per cdc 155 - nodo 1115	-1.007e+04	-2924.45	-3.437e+04	2.761e+06	-9.585e+06	0.0
2975	reac per cdc 156 - nodo 1115	1.007e+04	2591.34	-3.430e+04	-2.438e+06	9.585e+06	0.0
2976	reac per cdc 157 - nodo 1115	1.007e+04	-2592.25	-3.437e+04	2.439e+06	9.585e+06	0.0
2977	reac per cdc 158 - nodo 1115	-1.007e+04	2591.40	-3.430e+04	-2.438e+06	-9.585e+06	0.0
2978	reac per cdc 159 - nodo 1115	-1.007e+04	-2592.19	-3.437e+04	2.439e+06	-9.585e+06	0.0
2979	reac per cdc 160 - nodo 1115	3021.85	9746.41	-3.424e+04	-9.203e+06	2.875e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
2980	reac per cdc 161 - nodo 1115	3021.88	-9747.28	-3.443e+04	9.204e+06	2.875e+06	0.0
2981	reac per cdc 162 - nodo 1115	-3021.88	9746.43	-3.424e+04	-9.203e+06	-2.875e+06	0.0
2982	reac per cdc 163 - nodo 1115	-3021.85	-9747.26	-3.443e+04	9.204e+06	-2.875e+06	0.0
2983	reac per cdc 164 - nodo 1115	3021.85	9746.41	-3.424e+04	-9.203e+06	2.875e+06	0.0
2984	reac per cdc 165 - nodo 1115	3021.88	-9747.28	-3.443e+04	9.204e+06	2.875e+06	0.0
2985	reac per cdc 166 - nodo 1115	-3021.88	9746.43	-3.424e+04	-9.203e+06	-2.875e+06	0.0
2986	reac per cdc 167 - nodo 1115	-3021.85	-9747.26	-3.443e+04	9.204e+06	-2.875e+06	0.0
2987	reac per cdc 168 - nodo 1115	3021.86	8638.88	-3.422e+04	-8.129e+06	2.875e+06	0.0
2988	reac per cdc 169 - nodo 1115	3021.87	-8639.75	-3.446e+04	8.130e+06	2.875e+06	0.0
2989	reac per cdc 170 - nodo 1115	-3021.87	8638.90	-3.422e+04	-8.129e+06	-2.875e+06	0.0
2990	reac per cdc 171 - nodo 1115	-3021.86	-8639.73	-3.446e+04	8.130e+06	-2.875e+06	0.0
2991	reac per cdc 172 - nodo 1115	3021.86	8638.88	-3.422e+04	-8.129e+06	2.875e+06	0.0
2992	reac per cdc 173 - nodo 1115	3021.87	-8639.75	-3.446e+04	8.130e+06	2.875e+06	0.0
2993	reac per cdc 174 - nodo 1115	-3021.87	8638.90	-3.422e+04	-8.129e+06	-2.875e+06	0.0
2994	reac per cdc 175 - nodo 1115	-3021.86	-8639.73	-3.446e+04	8.130e+06	-2.875e+06	0.0
2995	reac per cdc 176 - nodo 1115	6177.77	1793.13	-3.432e+04	-1.693e+06	5.878e+06	0.0
2996	reac per cdc 177 - nodo 1115	6177.77	-1794.02	-3.435e+04	1.694e+06	5.878e+06	0.0
2997	reac per cdc 178 - nodo 1115	-6177.77	1793.16	-3.432e+04	-1.693e+06	-5.878e+06	0.0
2998	reac per cdc 179 - nodo 1115	-6177.77	-1793.98	-3.435e+04	1.694e+06	-5.878e+06	0.0
2999	reac per cdc 180 - nodo 1115	6177.77	1588.68	-3.432e+04	-1.495e+06	5.878e+06	0.0
3000	reac per cdc 181 - nodo 1115	6177.77	-1589.57	-3.436e+04	1.496e+06	5.878e+06	0.0
3001	reac per cdc 182 - nodo 1115	-6177.77	1588.72	-3.432e+04	-1.495e+06	-5.878e+06	0.0
3002	reac per cdc 183 - nodo 1115	-6177.77	-1589.53	-3.436e+04	1.496e+06	-5.878e+06	0.0
3003	reac per cdc 184 - nodo 1115	6177.77	1793.13	-3.432e+04	-1.693e+06	5.878e+06	0.0
3004	reac per cdc 185 - nodo 1115	6177.77	-1794.02	-3.435e+04	1.694e+06	5.878e+06	0.0
3005	reac per cdc 186 - nodo 1115	-6177.77	1793.16	-3.432e+04	-1.693e+06	-5.878e+06	0.0
3006	reac per cdc 187 - nodo 1115	-6177.77	-1793.98	-3.435e+04	1.694e+06	-5.878e+06	0.0
3007	reac per cdc 188 - nodo 1115	6177.77	1588.68	-3.432e+04	-1.495e+06	5.878e+06	0.0
3008	reac per cdc 189 - nodo 1115	6177.77	-1589.57	-3.436e+04	1.496e+06	5.878e+06	0.0
3009	reac per cdc 190 - nodo 1115	-6177.77	1588.72	-3.432e+04	-1.495e+06	-5.878e+06	0.0
3010	reac per cdc 191 - nodo 1115	-6177.77	-1589.53	-3.436e+04	1.496e+06	-5.878e+06	0.0
3011	reac per cdc 192 - nodo 1115	1853.32	5978.14	-3.428e+04	-5.645e+06	1.764e+06	0.0
3012	reac per cdc 193 - nodo 1115	1853.34	-5979.00	-3.439e+04	5.646e+06	1.764e+06	0.0
3013	reac per cdc 194 - nodo 1115	-1853.34	5978.15	-3.428e+04	-5.645e+06	-1.764e+06	0.0
3014	reac per cdc 195 - nodo 1115	-1853.32	-5978.99	-3.439e+04	5.645e+06	-1.764e+06	0.0
3015	reac per cdc 196 - nodo 1115	1853.32	5978.14	-3.428e+04	-5.645e+06	1.764e+06	0.0
3016	reac per cdc 197 - nodo 1115	1853.34	-5979.00	-3.439e+04	5.646e+06	1.764e+06	0.0
3017	reac per cdc 198 - nodo 1115	-1853.34	5978.15	-3.428e+04	-5.645e+06	-1.764e+06	0.0
3018	reac per cdc 199 - nodo 1115	-1853.32	-5978.99	-3.439e+04	5.645e+06	-1.764e+06	0.0
3019	reac per cdc 200 - nodo 1115	1853.33	5296.65	-3.426e+04	-4.984e+06	1.764e+06	0.0
3020	reac per cdc 201 - nodo 1115	1853.33	-5297.52	-3.441e+04	4.985e+06	1.764e+06	0.0
3021	reac per cdc 202 - nodo 1115	-1853.33	5296.66	-3.426e+04	-4.984e+06	-1.764e+06	0.0
3022	reac per cdc 203 - nodo 1115	-1853.33	-5297.50	-3.441e+04	4.985e+06	-1.764e+06	0.0
3023	reac per cdc 204 - nodo 1115	1853.33	5296.65	-3.426e+04	-4.984e+06	1.764e+06	0.0
3024	reac per cdc 205 - nodo 1115	1853.33	-5297.52	-3.441e+04	4.985e+06	1.764e+06	0.0
3025	reac per cdc 206 - nodo 1115	-1853.33	5296.66	-3.426e+04	-4.984e+06	-1.764e+06	0.0
3026	reac per cdc 207 - nodo 1115	-1853.33	-5297.50	-3.441e+04	4.985e+06	-1.764e+06	0.0
3027	reac per cdc 208 - nodo 1115	4815.97	1397.50	-3.432e+04	-1.320e+06	4.583e+06	0.0
3028	reac per cdc 209 - nodo 1115	4815.98	-1398.38	-3.435e+04	1.320e+06	4.583e+06	0.0
3029	reac per cdc 210 - nodo 1115	-4815.98	1397.53	-3.432e+04	-1.320e+06	-4.583e+06	0.0
3030	reac per cdc 211 - nodo 1115	-4815.97	-1398.35	-3.435e+04	1.320e+06	-4.583e+06	0.0
3031	reac per cdc 212 - nodo 1115	4815.97	1238.83	-3.432e+04	-1.166e+06	4.583e+06	0.0
3032	reac per cdc 213 - nodo 1115	4815.98	-1239.71	-3.435e+04	1.167e+06	4.583e+06	0.0
3033	reac per cdc 214 - nodo 1115	-4815.98	1238.86	-3.432e+04	-1.166e+06	-4.583e+06	0.0
3034	reac per cdc 215 - nodo 1115	-4815.97	-1239.68	-3.435e+04	1.167e+06	-4.583e+06	0.0
3035	reac per cdc 216 - nodo 1115	4815.97	1397.50	-3.432e+04	-1.320e+06	4.583e+06	0.0
3036	reac per cdc 217 - nodo 1115	4815.98	-1398.38	-3.435e+04	1.320e+06	4.583e+06	0.0
3037	reac per cdc 218 - nodo 1115	-4815.98	1397.53	-3.432e+04	-1.320e+06	-4.583e+06	0.0
3038	reac per cdc 219 - nodo 1115	-4815.97	-1398.35	-3.435e+04	1.320e+06	-4.583e+06	0.0
3039	reac per cdc 220 - nodo 1115	4815.97	1238.83	-3.432e+04	-1.166e+06	4.583e+06	0.0
3040	reac per cdc 221 - nodo 1115	4815.98	-1239.71	-3.435e+04	1.167e+06	4.583e+06	0.0
3041	reac per cdc 222 - nodo 1115	-4815.98	1238.86	-3.432e+04	-1.166e+06	-4.583e+06	0.0
3042	reac per cdc 223 - nodo 1115	-4815.97	-1239.68	-3.435e+04	1.167e+06	-4.583e+06	0.0
3043	reac per cdc 224 - nodo 1115	1444.79	4659.36	-3.429e+04	-4.399e+06	1.375e+06	0.0
3044	reac per cdc 225 - nodo 1115	1444.80	-4660.22	-3.438e+04	4.400e+06	1.375e+06	0.0
3045	reac per cdc 226 - nodo 1115	-1444.80	4659.37	-3.429e+04	-4.399e+06	-1.375e+06	0.0
3046	reac per cdc 227 - nodo 1115	-1444.79	-4660.21	-3.438e+04	4.400e+06	-1.375e+06	0.0
3047	reac per cdc 228 - nodo 1115	1444.79	4659.36	-3.429e+04	-4.399e+06	1.375e+06	0.0
3048	reac per cdc 229 - nodo 1115	1444.80	-4660.22	-3.438e+04	4.400e+06	1.375e+06	0.0
3049	reac per cdc 230 - nodo 1115	-1444.80	4659.37	-3.429e+04	-4.399e+06	-1.375e+06	0.0
3050	reac per cdc 231 - nodo 1115	-1444.79	-4660.21	-3.438e+04	4.400e+06	-1.375e+06	0.0
3051	reac per cdc 232 - nodo 1115	1444.79	4130.47	-3.428e+04	-3.887e+06	1.375e+06	0.0
3052	reac per cdc 233 - nodo 1115	1444.79	-4131.33	-3.439e+04	3.887e+06	1.375e+06	0.0
3053	reac per cdc 234 - nodo 1115	-1444.79	4130.48	-3.428e+04	-3.887e+06	-1.375e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3054	reac per cdc 235 - nodo 1115	-1444.79	-4131.32	-3.439e+04	3.887e+06	-1.375e+06	0.0
3055	reac per cdc 236 - nodo 1115	1444.79	4130.47	-3.428e+04	-3.887e+06	1.375e+06	0.0
3056	reac per cdc 237 - nodo 1115	1444.79	-4131.33	-3.439e+04	3.887e+06	1.375e+06	0.0
3057	reac per cdc 238 - nodo 1115	-1444.79	4130.48	-3.428e+04	-3.887e+06	-1.375e+06	0.0
3058	reac per cdc 239 - nodo 1115	-1444.79	-4131.32	-3.439e+04	3.887e+06	-1.375e+06	0.0
3059	reac per cdc 240 - nodo 1115	0.0	-0.69	-4.569e+04	693.19	0.0	0.0
3060	reac per cdc 241 - nodo 1115	2242.36	-2.59	-3.434e+04	2602.47	2.160e+06	0.0
3061	reac per cdc 242 - nodo 1115	-1989.20	-2.59	-3.434e+04	2602.47	-2.090e+06	0.0
3062	reac per cdc 243 - nodo 1115	-546.28	404.64	-3.437e+04	-4.065e+05	-1.504e+05	0.0
3063	reac per cdc 244 - nodo 1115	-546.28	-404.53	-3.431e+04	4.063e+05	-1.504e+05	0.0
3064	reac per cdc 245 - nodo 1115	1345.41	-1.99	-4.569e+04	1998.18	1.296e+06	0.0
3065	reac per cdc 246 - nodo 1115	-1193.52	-1.99	-4.569e+04	1998.18	-1.254e+06	0.0
3066	reac per cdc 247 - nodo 1115	-327.77	242.35	-4.570e+04	-2.434e+05	-9.022e+04	0.0
3067	reac per cdc 248 - nodo 1115	-327.77	-243.15	-4.567e+04	2.442e+05	-9.022e+04	0.0
3068	reac per cdc 249 - nodo 1115	2242.36	-2.72	-4.001e+04	2735.32	2.160e+06	0.0
3069	reac per cdc 250 - nodo 1115	-1989.20	-2.72	-4.001e+04	2735.32	-2.090e+06	0.0
3070	reac per cdc 251 - nodo 1115	-546.28	404.51	-4.004e+04	-4.063e+05	-1.504e+05	0.0
3071	reac per cdc 252 - nodo 1115	-546.28	-404.66	-3.998e+04	4.065e+05	-1.504e+05	0.0
3072	reac per cdc 253 - nodo 1115	0.0	-0.48	-3.661e+04	480.63	0.0	0.0
3073	reac per cdc 254 - nodo 1115	448.47	-0.86	-3.434e+04	862.48	4.320e+05	0.0
3074	reac per cdc 255 - nodo 1115	-397.84	-0.86	-3.434e+04	862.48	-4.181e+05	0.0
3075	reac per cdc 256 - nodo 1115	-109.26	80.59	-3.434e+04	-8.095e+04	-3.007e+04	0.0
3076	reac per cdc 257 - nodo 1115	-109.26	-81.25	-3.433e+04	8.161e+04	-3.007e+04	0.0
3077	reac per cdc 258 - nodo 1115	0.0	-0.43	-3.434e+04	427.49	0.0	0.0
3078	reac per cdc 131 - nodo 1206	0.0	-0.81	-6.089e+04	776.76	0.0	0.0
3079	reac per cdc 132 - nodo 1206	2973.70	-0.16	-4.387e+04	148.84	2.983e+06	0.0
3080	reac per cdc 133 - nodo 1206	-3373.64	-0.16	-4.387e+04	148.84	-3.086e+06	0.0
3081	reac per cdc 134 - nodo 1206	863.02	702.54	-4.392e+04	-6.716e+05	2.224e+05	0.0
3082	reac per cdc 135 - nodo 1206	863.02	-703.52	-4.382e+04	6.726e+05	2.224e+05	0.0
3083	reac per cdc 136 - nodo 1206	1784.22	-0.65	-6.089e+04	617.82	1.790e+06	0.0
3084	reac per cdc 137 - nodo 1206	-2024.18	-0.65	-6.089e+04	617.82	-1.851e+06	0.0
3085	reac per cdc 138 - nodo 1206	517.81	420.97	-6.092e+04	-4.024e+05	1.334e+05	0.0
3086	reac per cdc 139 - nodo 1206	517.81	-422.67	-6.086e+04	4.041e+05	1.334e+05	0.0
3087	reac per cdc 140 - nodo 1206	2973.70	-0.35	-5.238e+04	330.35	2.983e+06	0.0
3088	reac per cdc 141 - nodo 1206	-3373.64	-0.35	-5.238e+04	330.35	-3.086e+06	0.0
3089	reac per cdc 142 - nodo 1206	863.02	702.35	-5.243e+04	-6.714e+05	2.224e+05	0.0
3090	reac per cdc 143 - nodo 1206	863.02	-703.71	-5.233e+04	6.728e+05	2.224e+05	0.0
3091	reac per cdc 144 - nodo 1206	1.077e+04	2968.53	-3.374e+04	-2.677e+06	9.721e+06	0.0
3092	reac per cdc 145 - nodo 1206	1.077e+04	-2969.22	-3.375e+04	2.678e+06	9.721e+06	0.0
3093	reac per cdc 146 - nodo 1206	-1.077e+04	2968.55	-3.374e+04	-2.677e+06	-9.721e+06	0.0
3094	reac per cdc 147 - nodo 1206	-1.077e+04	-2969.20	-3.375e+04	2.678e+06	-9.721e+06	0.0
3095	reac per cdc 148 - nodo 1206	1.077e+04	3351.04	-3.375e+04	-3.032e+06	9.721e+06	0.0
3096	reac per cdc 149 - nodo 1206	1.077e+04	-3351.72	-3.373e+04	3.032e+06	9.721e+06	0.0
3097	reac per cdc 150 - nodo 1206	-1.077e+04	3351.06	-3.375e+04	-3.032e+06	-9.721e+06	0.0
3098	reac per cdc 151 - nodo 1206	-1.077e+04	-3351.71	-3.373e+04	3.032e+06	-9.721e+06	0.0
3099	reac per cdc 152 - nodo 1206	1.077e+04	2968.53	-3.374e+04	-2.677e+06	9.721e+06	0.0
3100	reac per cdc 153 - nodo 1206	1.077e+04	-2969.22	-3.375e+04	2.678e+06	9.721e+06	0.0
3101	reac per cdc 154 - nodo 1206	-1.077e+04	2968.55	-3.374e+04	-2.677e+06	-9.721e+06	0.0
3102	reac per cdc 155 - nodo 1206	-1.077e+04	-2969.20	-3.375e+04	2.678e+06	-9.721e+06	0.0
3103	reac per cdc 156 - nodo 1206	1.077e+04	3351.04	-3.375e+04	-3.032e+06	9.721e+06	0.0
3104	reac per cdc 157 - nodo 1206	1.077e+04	-3351.72	-3.373e+04	3.032e+06	9.721e+06	0.0
3105	reac per cdc 158 - nodo 1206	-1.077e+04	3351.06	-3.375e+04	-3.032e+06	-9.721e+06	0.0
3106	reac per cdc 159 - nodo 1206	-1.077e+04	-3351.71	-3.373e+04	3.032e+06	-9.721e+06	0.0
3107	reac per cdc 160 - nodo 1206	3230.05	9895.92	-3.373e+04	-8.925e+06	2.916e+06	0.0
3108	reac per cdc 161 - nodo 1206	3230.03	-9896.59	-3.375e+04	8.926e+06	2.916e+06	0.0
3109	reac per cdc 162 - nodo 1206	-3230.03	9895.93	-3.373e+04	-8.925e+06	-2.916e+06	0.0
3110	reac per cdc 163 - nodo 1206	-3230.05	-9896.59	-3.375e+04	8.926e+06	-2.916e+06	0.0
3111	reac per cdc 164 - nodo 1206	3230.05	9895.92	-3.373e+04	-8.925e+06	2.916e+06	0.0
3112	reac per cdc 165 - nodo 1206	3230.03	-9896.59	-3.375e+04	8.926e+06	2.916e+06	0.0
3113	reac per cdc 166 - nodo 1206	-3230.03	9895.93	-3.373e+04	-8.925e+06	-2.916e+06	0.0
3114	reac per cdc 167 - nodo 1206	-3230.05	-9896.59	-3.375e+04	8.926e+06	-2.916e+06	0.0
3115	reac per cdc 168 - nodo 1206	3230.05	1.117e+04	-3.377e+04	-1.011e+07	2.916e+06	0.0
3116	reac per cdc 169 - nodo 1206	3230.03	-1.117e+04	-3.371e+04	1.011e+07	2.916e+06	0.0
3117	reac per cdc 170 - nodo 1206	-3230.03	1.117e+04	-3.377e+04	-1.011e+07	-2.916e+06	0.0
3118	reac per cdc 171 - nodo 1206	-3230.05	-1.117e+04	-3.371e+04	1.011e+07	-2.916e+06	0.0
3119	reac per cdc 172 - nodo 1206	3230.05	1.117e+04	-3.377e+04	-1.011e+07	2.916e+06	0.0
3120	reac per cdc 173 - nodo 1206	3230.03	-1.117e+04	-3.371e+04	1.011e+07	2.916e+06	0.0
3121	reac per cdc 174 - nodo 1206	-3230.03	1.117e+04	-3.377e+04	-1.011e+07	-2.916e+06	0.0
3122	reac per cdc 175 - nodo 1206	-3230.05	-1.117e+04	-3.371e+04	1.011e+07	-2.916e+06	0.0
3123	reac per cdc 176 - nodo 1206	6608.31	1819.99	-3.374e+04	-1.641e+06	5.966e+06	0.0
3124	reac per cdc 177 - nodo 1206	6608.31	-1820.67	-3.375e+04	1.642e+06	5.966e+06	0.0
3125	reac per cdc 178 - nodo 1206	-6608.31	1820.00	-3.374e+04	-1.641e+06	-5.966e+06	0.0
3126	reac per cdc 179 - nodo 1206	-6608.31	-1820.66	-3.375e+04	1.642e+06	-5.966e+06	0.0
3127	reac per cdc 180 - nodo 1206	6608.31	2055.35	-3.375e+04	-1.860e+06	5.966e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3128	reac per cdc 181 - nodo 1206	6608.31	-2056.03	-3.374e+04	1.860e+06	5.966e+06	0.0
3129	reac per cdc 182 - nodo 1206	-6608.31	2055.36	-3.375e+04	-1.860e+06	-5.966e+06	0.0
3130	reac per cdc 183 - nodo 1206	-6608.31	-2056.02	-3.374e+04	1.860e+06	-5.966e+06	0.0
3131	reac per cdc 184 - nodo 1206	6608.31	1819.99	-3.374e+04	-1.641e+06	5.966e+06	0.0
3132	reac per cdc 185 - nodo 1206	6608.31	-1820.67	-3.375e+04	1.642e+06	5.966e+06	0.0
3133	reac per cdc 186 - nodo 1206	-6608.31	1820.00	-3.374e+04	-1.641e+06	-5.966e+06	0.0
3134	reac per cdc 187 - nodo 1206	-6608.31	-1820.66	-3.375e+04	1.642e+06	-5.966e+06	0.0
3135	reac per cdc 188 - nodo 1206	6608.31	2055.35	-3.375e+04	-1.860e+06	5.966e+06	0.0
3136	reac per cdc 189 - nodo 1206	6608.31	-2056.03	-3.374e+04	1.860e+06	5.966e+06	0.0
3137	reac per cdc 190 - nodo 1206	-6608.31	2055.36	-3.375e+04	-1.860e+06	-5.966e+06	0.0
3138	reac per cdc 191 - nodo 1206	-6608.31	-2056.02	-3.374e+04	1.860e+06	-5.966e+06	0.0
3139	reac per cdc 192 - nodo 1206	1982.50	6067.43	-3.374e+04	-5.472e+06	1.790e+06	0.0
3140	reac per cdc 193 - nodo 1206	1982.49	-6068.10	-3.375e+04	5.473e+06	1.790e+06	0.0
3141	reac per cdc 194 - nodo 1206	-1982.49	6067.43	-3.374e+04	-5.472e+06	-1.790e+06	0.0
3142	reac per cdc 195 - nodo 1206	-1982.50	-6068.09	-3.375e+04	5.473e+06	-1.790e+06	0.0
3143	reac per cdc 196 - nodo 1206	1982.50	6067.43	-3.374e+04	-5.472e+06	1.790e+06	0.0
3144	reac per cdc 197 - nodo 1206	1982.49	-6068.10	-3.375e+04	5.473e+06	1.790e+06	0.0
3145	reac per cdc 198 - nodo 1206	-1982.49	6067.43	-3.374e+04	-5.472e+06	-1.790e+06	0.0
3146	reac per cdc 199 - nodo 1206	-1982.50	-6068.09	-3.375e+04	5.473e+06	-1.790e+06	0.0
3147	reac per cdc 200 - nodo 1206	1982.50	6851.96	-3.376e+04	-6.199e+06	1.790e+06	0.0
3148	reac per cdc 201 - nodo 1206	1982.49	-6852.63	-3.373e+04	6.200e+06	1.790e+06	0.0
3149	reac per cdc 202 - nodo 1206	-1982.49	6851.96	-3.376e+04	-6.199e+06	-1.790e+06	0.0
3150	reac per cdc 203 - nodo 1206	-1982.50	-6852.62	-3.373e+04	6.200e+06	-1.790e+06	0.0
3151	reac per cdc 204 - nodo 1206	1982.50	6851.96	-3.376e+04	-6.199e+06	1.790e+06	0.0
3152	reac per cdc 205 - nodo 1206	1982.49	-6852.63	-3.373e+04	6.200e+06	1.790e+06	0.0
3153	reac per cdc 206 - nodo 1206	-1982.49	6851.96	-3.376e+04	-6.199e+06	-1.790e+06	0.0
3154	reac per cdc 207 - nodo 1206	-1982.50	-6852.62	-3.373e+04	6.200e+06	-1.790e+06	0.0
3155	reac per cdc 208 - nodo 1206	5151.38	1419.24	-3.374e+04	-1.280e+06	4.651e+06	0.0
3156	reac per cdc 209 - nodo 1206	5151.38	-1419.91	-3.374e+04	1.281e+06	4.651e+06	0.0
3157	reac per cdc 210 - nodo 1206	-5151.38	1419.24	-3.374e+04	-1.280e+06	-4.651e+06	0.0
3158	reac per cdc 211 - nodo 1206	-5151.38	-1419.90	-3.374e+04	1.281e+06	-4.651e+06	0.0
3159	reac per cdc 212 - nodo 1206	5151.38	1601.90	-3.375e+04	-1.449e+06	4.651e+06	0.0
3160	reac per cdc 213 - nodo 1206	5151.38	-1602.57	-3.374e+04	1.450e+06	4.651e+06	0.0
3161	reac per cdc 214 - nodo 1206	-5151.38	1601.90	-3.375e+04	-1.449e+06	-4.651e+06	0.0
3162	reac per cdc 215 - nodo 1206	-5151.38	-1602.56	-3.374e+04	1.450e+06	-4.651e+06	0.0
3163	reac per cdc 216 - nodo 1206	5151.38	1419.24	-3.374e+04	-1.280e+06	4.651e+06	0.0
3164	reac per cdc 217 - nodo 1206	5151.38	-1419.91	-3.374e+04	1.281e+06	4.651e+06	0.0
3165	reac per cdc 218 - nodo 1206	-5151.38	1419.24	-3.374e+04	-1.280e+06	-4.651e+06	0.0
3166	reac per cdc 219 - nodo 1206	-5151.38	-1419.90	-3.374e+04	1.281e+06	-4.651e+06	0.0
3167	reac per cdc 220 - nodo 1206	5151.38	1601.90	-3.375e+04	-1.449e+06	4.651e+06	0.0
3168	reac per cdc 221 - nodo 1206	5151.38	-1602.57	-3.374e+04	1.450e+06	4.651e+06	0.0
3169	reac per cdc 222 - nodo 1206	-5151.38	1601.90	-3.375e+04	-1.449e+06	-4.651e+06	0.0
3170	reac per cdc 223 - nodo 1206	-5151.38	-1602.56	-3.374e+04	1.450e+06	-4.651e+06	0.0
3171	reac per cdc 224 - nodo 1206	1545.42	4731.58	-3.374e+04	-4.268e+06	1.395e+06	0.0
3172	reac per cdc 225 - nodo 1206	1545.41	-4732.24	-3.375e+04	4.268e+06	1.395e+06	0.0
3173	reac per cdc 226 - nodo 1206	-1545.41	4731.58	-3.374e+04	-4.268e+06	-1.395e+06	0.0
3174	reac per cdc 227 - nodo 1206	-1545.42	-4732.24	-3.375e+04	4.268e+06	-1.395e+06	0.0
3175	reac per cdc 228 - nodo 1206	1545.42	4731.58	-3.374e+04	-4.268e+06	1.395e+06	0.0
3176	reac per cdc 229 - nodo 1206	1545.41	-4732.24	-3.375e+04	4.268e+06	1.395e+06	0.0
3177	reac per cdc 230 - nodo 1206	-1545.41	4731.58	-3.374e+04	-4.268e+06	-1.395e+06	0.0
3178	reac per cdc 231 - nodo 1206	-1545.42	-4732.24	-3.375e+04	4.268e+06	-1.395e+06	0.0
3179	reac per cdc 232 - nodo 1206	1545.42	5340.44	-3.376e+04	-4.832e+06	1.395e+06	0.0
3180	reac per cdc 233 - nodo 1206	1545.41	-5341.11	-3.373e+04	4.832e+06	1.395e+06	0.0
3181	reac per cdc 234 - nodo 1206	-1545.41	5340.45	-3.376e+04	-4.832e+06	-1.395e+06	0.0
3182	reac per cdc 235 - nodo 1206	-1545.42	-5341.11	-3.373e+04	4.832e+06	-1.395e+06	0.0
3183	reac per cdc 236 - nodo 1206	1545.42	5340.44	-3.376e+04	-4.832e+06	1.395e+06	0.0
3184	reac per cdc 237 - nodo 1206	1545.41	-5341.11	-3.373e+04	4.832e+06	1.395e+06	0.0
3185	reac per cdc 238 - nodo 1206	-1545.41	5340.45	-3.376e+04	-4.832e+06	-1.395e+06	0.0
3186	reac per cdc 239 - nodo 1206	-1545.42	-5341.11	-3.373e+04	4.832e+06	-1.395e+06	0.0
3187	reac per cdc 240 - nodo 1206	0.0	-0.59	-4.509e+04	560.27	0.0	0.0
3188	reac per cdc 241 - nodo 1206	1982.46	-0.15	-3.374e+04	141.66	1.988e+06	0.0
3189	reac per cdc 242 - nodo 1206	-2249.09	-0.15	-3.374e+04	141.66	-2.057e+06	0.0
3190	reac per cdc 243 - nodo 1206	575.35	468.31	-3.378e+04	-4.477e+05	1.482e+05	0.0
3191	reac per cdc 244 - nodo 1206	575.35	-469.06	-3.371e+04	4.484e+05	1.482e+05	0.0
3192	reac per cdc 245 - nodo 1206	1189.48	-0.48	-4.509e+04	454.32	1.193e+06	0.0
3193	reac per cdc 246 - nodo 1206	-1349.45	-0.48	-4.509e+04	454.32	-1.234e+06	0.0
3194	reac per cdc 247 - nodo 1206	345.21	280.60	-4.511e+04	-2.683e+05	8.894e+04	0.0
3195	reac per cdc 248 - nodo 1206	345.21	-281.82	-4.507e+04	2.694e+05	8.894e+04	0.0
3196	reac per cdc 249 - nodo 1206	1982.46	-0.27	-3.942e+04	262.67	1.988e+06	0.0
3197	reac per cdc 250 - nodo 1206	-2249.09	-0.27	-3.942e+04	262.67	-2.057e+06	0.0
3198	reac per cdc 251 - nodo 1206	575.35	468.19	-3.945e+04	-4.476e+05	1.482e+05	0.0
3199	reac per cdc 252 - nodo 1206	575.35	-469.19	-3.939e+04	4.485e+05	1.482e+05	0.0
3200	reac per cdc 253 - nodo 1206	0.0	-0.38	-3.601e+04	366.66	0.0	0.0
3201	reac per cdc 254 - nodo 1206	396.49	-0.30	-3.374e+04	282.93	3.977e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3202	reac per cdc 255 - nodo 1206	-449.82	-0.30	-3.374e+04	282.93	-4.114e+05	0.0
3203	reac per cdc 256 - nodo 1206	115.07	93.40	-3.375e+04	-8.929e+04	2.965e+04	0.0
3204	reac per cdc 257 - nodo 1206	115.07	-94.08	-3.374e+04	8.994e+04	2.965e+04	0.0
3205	reac per cdc 258 - nodo 1206	0.0	-0.33	-3.374e+04	318.25	0.0	0.0
3206	reac per cdc 131 - nodo 1213	0.0	-0.81	-6.089e+04	776.76	0.0	0.0
3207	reac per cdc 132 - nodo 1213	3373.64	-0.16	-4.387e+04	148.84	3.086e+06	0.0
3208	reac per cdc 133 - nodo 1213	-2973.70	-0.16	-4.387e+04	148.84	-2.983e+06	0.0
3209	reac per cdc 134 - nodo 1213	-863.02	702.54	-4.392e+04	-6.716e+05	-2.224e+05	0.0
3210	reac per cdc 135 - nodo 1213	-863.02	-703.52	-4.382e+04	6.726e+05	-2.224e+05	0.0
3211	reac per cdc 136 - nodo 1213	2024.18	-0.65	-6.089e+04	617.82	1.851e+06	0.0
3212	reac per cdc 137 - nodo 1213	-1784.22	-0.65	-6.089e+04	617.82	-1.790e+06	0.0
3213	reac per cdc 138 - nodo 1213	-517.81	420.97	-6.092e+04	-4.024e+05	-1.334e+05	0.0
3214	reac per cdc 139 - nodo 1213	-517.81	-422.67	-6.086e+04	4.041e+05	-1.334e+05	0.0
3215	reac per cdc 140 - nodo 1213	3373.64	-0.35	-5.238e+04	330.35	3.086e+06	0.0
3216	reac per cdc 141 - nodo 1213	-2973.70	-0.35	-5.238e+04	330.35	-2.983e+06	0.0
3217	reac per cdc 142 - nodo 1213	-863.02	702.35	-5.243e+04	-6.714e+05	-2.224e+05	0.0
3218	reac per cdc 143 - nodo 1213	-863.02	-703.71	-5.233e+04	6.728e+05	-2.224e+05	0.0
3219	reac per cdc 144 - nodo 1213	1.077e+04	3351.02	-3.375e+04	-3.032e+06	9.721e+06	0.0
3220	reac per cdc 145 - nodo 1213	1.077e+04	-3351.74	-3.373e+04	3.032e+06	9.721e+06	0.0
3221	reac per cdc 146 - nodo 1213	-1.077e+04	3351.07	-3.375e+04	-3.032e+06	-9.721e+06	0.0
3222	reac per cdc 147 - nodo 1213	-1.077e+04	-3351.69	-3.373e+04	3.032e+06	-9.721e+06	0.0
3223	reac per cdc 148 - nodo 1213	1.077e+04	2968.52	-3.374e+04	-2.677e+06	9.721e+06	0.0
3224	reac per cdc 149 - nodo 1213	1.077e+04	-2969.23	-3.375e+04	2.678e+06	9.721e+06	0.0
3225	reac per cdc 150 - nodo 1213	-1.077e+04	2968.57	-3.374e+04	-2.677e+06	-9.721e+06	0.0
3226	reac per cdc 151 - nodo 1213	-1.077e+04	-2969.18	-3.375e+04	2.678e+06	-9.721e+06	0.0
3227	reac per cdc 152 - nodo 1213	1.077e+04	3351.02	-3.375e+04	-3.032e+06	9.721e+06	0.0
3228	reac per cdc 153 - nodo 1213	1.077e+04	-3351.74	-3.373e+04	3.032e+06	9.721e+06	0.0
3229	reac per cdc 154 - nodo 1213	-1.077e+04	3351.07	-3.375e+04	-3.032e+06	-9.721e+06	0.0
3230	reac per cdc 155 - nodo 1213	-1.077e+04	-3351.69	-3.373e+04	3.032e+06	-9.721e+06	0.0
3231	reac per cdc 156 - nodo 1213	1.077e+04	2968.52	-3.374e+04	-2.677e+06	9.721e+06	0.0
3232	reac per cdc 157 - nodo 1213	1.077e+04	-2969.23	-3.375e+04	2.678e+06	9.721e+06	0.0
3233	reac per cdc 158 - nodo 1213	-1.077e+04	2968.57	-3.374e+04	-2.677e+06	-9.721e+06	0.0
3234	reac per cdc 159 - nodo 1213	-1.077e+04	-2969.18	-3.375e+04	2.678e+06	-9.721e+06	0.0
3235	reac per cdc 160 - nodo 1213	3230.06	1.117e+04	-3.377e+04	-1.011e+07	2.916e+06	0.0
3236	reac per cdc 161 - nodo 1213	3230.03	-1.117e+04	-3.371e+04	1.011e+07	2.916e+06	0.0
3237	reac per cdc 162 - nodo 1213	-3230.03	1.117e+04	-3.377e+04	-1.011e+07	-2.916e+06	0.0
3238	reac per cdc 163 - nodo 1213	-3230.06	-1.117e+04	-3.371e+04	1.011e+07	-2.916e+06	0.0
3239	reac per cdc 164 - nodo 1213	3230.06	1.117e+04	-3.377e+04	-1.011e+07	2.916e+06	0.0
3240	reac per cdc 165 - nodo 1213	3230.03	-1.117e+04	-3.371e+04	1.011e+07	2.916e+06	0.0
3241	reac per cdc 166 - nodo 1213	-3230.03	1.117e+04	-3.377e+04	-1.011e+07	-2.916e+06	0.0
3242	reac per cdc 167 - nodo 1213	-3230.06	-1.117e+04	-3.371e+04	1.011e+07	-2.916e+06	0.0
3243	reac per cdc 168 - nodo 1213	3230.05	9895.91	-3.373e+04	-8.925e+06	2.916e+06	0.0
3244	reac per cdc 169 - nodo 1213	3230.03	-9896.59	-3.375e+04	8.926e+06	2.916e+06	0.0
3245	reac per cdc 170 - nodo 1213	-3230.03	9895.93	-3.373e+04	-8.925e+06	-2.916e+06	0.0
3246	reac per cdc 171 - nodo 1213	-3230.05	-9896.58	-3.375e+04	8.926e+06	-2.916e+06	0.0
3247	reac per cdc 172 - nodo 1213	3230.05	9895.91	-3.373e+04	-8.925e+06	2.916e+06	0.0
3248	reac per cdc 173 - nodo 1213	3230.03	-9896.59	-3.375e+04	8.926e+06	2.916e+06	0.0
3249	reac per cdc 174 - nodo 1213	-3230.03	9895.93	-3.373e+04	-8.925e+06	-2.916e+06	0.0
3250	reac per cdc 175 - nodo 1213	-3230.05	-9896.58	-3.375e+04	8.926e+06	-2.916e+06	0.0
3251	reac per cdc 176 - nodo 1213	6608.31	2055.34	-3.375e+04	-1.860e+06	5.966e+06	0.0
3252	reac per cdc 177 - nodo 1213	6608.31	-2056.03	-3.374e+04	1.860e+06	5.966e+06	0.0
3253	reac per cdc 178 - nodo 1213	-6608.31	2055.37	-3.375e+04	-1.860e+06	-5.966e+06	0.0
3254	reac per cdc 179 - nodo 1213	-6608.31	-2056.00	-3.374e+04	1.860e+06	-5.966e+06	0.0
3255	reac per cdc 180 - nodo 1213	6608.31	1819.98	-3.374e+04	-1.641e+06	5.966e+06	0.0
3256	reac per cdc 181 - nodo 1213	6608.31	-1820.68	-3.374e+04	1.642e+06	5.966e+06	0.0
3257	reac per cdc 182 - nodo 1213	-6608.31	1820.01	-3.374e+04	-1.641e+06	-5.966e+06	0.0
3258	reac per cdc 183 - nodo 1213	-6608.31	-1820.65	-3.375e+04	1.642e+06	-5.966e+06	0.0
3259	reac per cdc 184 - nodo 1213	6608.31	2055.34	-3.375e+04	-1.860e+06	5.966e+06	0.0
3260	reac per cdc 185 - nodo 1213	6608.31	-2056.03	-3.374e+04	1.860e+06	5.966e+06	0.0
3261	reac per cdc 186 - nodo 1213	-6608.31	2055.37	-3.375e+04	-1.860e+06	-5.966e+06	0.0
3262	reac per cdc 187 - nodo 1213	-6608.31	-2056.00	-3.374e+04	1.860e+06	-5.966e+06	0.0
3263	reac per cdc 188 - nodo 1213	6608.31	1819.98	-3.374e+04	-1.641e+06	5.966e+06	0.0
3264	reac per cdc 189 - nodo 1213	6608.31	-1820.68	-3.374e+04	1.642e+06	5.966e+06	0.0
3265	reac per cdc 190 - nodo 1213	-6608.31	1820.01	-3.374e+04	-1.641e+06	-5.966e+06	0.0
3266	reac per cdc 191 - nodo 1213	-6608.31	-1820.65	-3.375e+04	1.642e+06	-5.966e+06	0.0
3267	reac per cdc 192 - nodo 1213	1982.50	6851.95	-3.376e+04	-6.199e+06	1.790e+06	0.0
3268	reac per cdc 193 - nodo 1213	1982.48	-6852.62	-3.373e+04	6.200e+06	1.790e+06	0.0
3269	reac per cdc 194 - nodo 1213	-1982.48	6851.96	-3.376e+04	-6.199e+06	-1.790e+06	0.0
3270	reac per cdc 195 - nodo 1213	-1982.50	-6852.61	-3.373e+04	6.200e+06	-1.790e+06	0.0
3271	reac per cdc 196 - nodo 1213	1982.50	6851.95	-3.376e+04	-6.199e+06	1.790e+06	0.0
3272	reac per cdc 197 - nodo 1213	1982.48	-6852.62	-3.373e+04	6.200e+06	1.790e+06	0.0
3273	reac per cdc 198 - nodo 1213	-1982.48	6851.96	-3.376e+04	-6.199e+06	-1.790e+06	0.0
3274	reac per cdc 199 - nodo 1213	-1982.50	-6852.61	-3.373e+04	6.200e+06	-1.790e+06	0.0
3275	reac per cdc 200 - nodo 1213	1982.50	6067.42	-3.374e+04	-5.472e+06	1.790e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3276	reac per cdc 201 - nodo 1213	1982.49	-6068.10	-3.375e+04	5.473e+06	1.790e+06	0.0
3277	reac per cdc 202 - nodo 1213	-1982.49	6067.43	-3.374e+04	-5.472e+06	-1.790e+06	0.0
3278	reac per cdc 203 - nodo 1213	-1982.50	-6068.09	-3.375e+04	5.473e+06	-1.790e+06	0.0
3279	reac per cdc 204 - nodo 1213	1982.50	6067.42	-3.374e+04	-5.472e+06	1.790e+06	0.0
3280	reac per cdc 205 - nodo 1213	1982.49	-6068.10	-3.375e+04	5.473e+06	1.790e+06	0.0
3281	reac per cdc 206 - nodo 1213	-1982.49	6067.43	-3.374e+04	-5.472e+06	-1.790e+06	0.0
3282	reac per cdc 207 - nodo 1213	-1982.50	-6068.09	-3.375e+04	5.473e+06	-1.790e+06	0.0
3283	reac per cdc 208 - nodo 1213	5151.39	1601.89	-3.375e+04	-1.449e+06	4.651e+06	0.0
3284	reac per cdc 209 - nodo 1213	5151.38	-1602.58	-3.374e+04	1.450e+06	4.651e+06	0.0
3285	reac per cdc 210 - nodo 1213	-5151.38	1601.91	-3.375e+04	-1.449e+06	-4.651e+06	0.0
3286	reac per cdc 211 - nodo 1213	-5151.39	-1602.55	-3.374e+04	1.450e+06	-4.651e+06	0.0
3287	reac per cdc 212 - nodo 1213	5151.39	1419.23	-3.374e+04	-1.280e+06	4.651e+06	0.0
3288	reac per cdc 213 - nodo 1213	5151.38	-1419.92	-3.374e+04	1.281e+06	4.651e+06	0.0
3289	reac per cdc 214 - nodo 1213	-5151.38	1419.25	-3.374e+04	-1.280e+06	-4.651e+06	0.0
3290	reac per cdc 215 - nodo 1213	-5151.39	-1419.89	-3.374e+04	1.281e+06	-4.651e+06	0.0
3291	reac per cdc 216 - nodo 1213	5151.39	1601.89	-3.375e+04	-1.449e+06	4.651e+06	0.0
3292	reac per cdc 217 - nodo 1213	5151.38	-1602.58	-3.374e+04	1.450e+06	4.651e+06	0.0
3293	reac per cdc 218 - nodo 1213	-5151.38	1601.91	-3.375e+04	-1.449e+06	-4.651e+06	0.0
3294	reac per cdc 219 - nodo 1213	-5151.39	-1602.55	-3.374e+04	1.450e+06	-4.651e+06	0.0
3295	reac per cdc 220 - nodo 1213	5151.39	1419.23	-3.374e+04	-1.280e+06	4.651e+06	0.0
3296	reac per cdc 221 - nodo 1213	5151.38	-1419.92	-3.374e+04	1.281e+06	4.651e+06	0.0
3297	reac per cdc 222 - nodo 1213	-5151.38	1419.25	-3.374e+04	-1.280e+06	-4.651e+06	0.0
3298	reac per cdc 223 - nodo 1213	-5151.39	-1419.89	-3.374e+04	1.281e+06	-4.651e+06	0.0
3299	reac per cdc 224 - nodo 1213	1545.42	5340.44	-3.376e+04	-4.832e+06	1.395e+06	0.0
3300	reac per cdc 225 - nodo 1213	1545.41	-5341.11	-3.373e+04	4.832e+06	1.395e+06	0.0
3301	reac per cdc 226 - nodo 1213	-1545.41	5340.44	-3.376e+04	-4.832e+06	-1.395e+06	0.0
3302	reac per cdc 227 - nodo 1213	-1545.42	-5341.10	-3.373e+04	4.832e+06	-1.395e+06	0.0
3303	reac per cdc 228 - nodo 1213	1545.42	5340.44	-3.376e+04	-4.832e+06	1.395e+06	0.0
3304	reac per cdc 229 - nodo 1213	1545.41	-5341.11	-3.373e+04	4.832e+06	1.395e+06	0.0
3305	reac per cdc 230 - nodo 1213	-1545.41	5340.44	-3.376e+04	-4.832e+06	-1.395e+06	0.0
3306	reac per cdc 231 - nodo 1213	-1545.42	-5341.10	-3.373e+04	4.832e+06	-1.395e+06	0.0
3307	reac per cdc 232 - nodo 1213	1545.42	4731.57	-3.374e+04	-4.268e+06	1.395e+06	0.0
3308	reac per cdc 233 - nodo 1213	1545.41	-4732.24	-3.375e+04	4.268e+06	1.395e+06	0.0
3309	reac per cdc 234 - nodo 1213	-1545.41	4731.58	-3.374e+04	-4.268e+06	-1.395e+06	0.0
3310	reac per cdc 235 - nodo 1213	-1545.42	-4732.24	-3.375e+04	4.268e+06	-1.395e+06	0.0
3311	reac per cdc 236 - nodo 1213	1545.42	4731.57	-3.374e+04	-4.268e+06	1.395e+06	0.0
3312	reac per cdc 237 - nodo 1213	1545.41	-4732.24	-3.375e+04	4.268e+06	1.395e+06	0.0
3313	reac per cdc 238 - nodo 1213	-1545.41	4731.58	-3.374e+04	-4.268e+06	-1.395e+06	0.0
3314	reac per cdc 239 - nodo 1213	-1545.42	-4732.24	-3.375e+04	4.268e+06	-1.395e+06	0.0
3315	reac per cdc 240 - nodo 1213	0.0	-0.59	-4.509e+04	560.27	0.0	0.0
3316	reac per cdc 241 - nodo 1213	2249.09	-0.15	-3.374e+04	141.66	2.057e+06	0.0
3317	reac per cdc 242 - nodo 1213	-1982.46	-0.15	-3.374e+04	141.66	-1.988e+06	0.0
3318	reac per cdc 243 - nodo 1213	-575.35	468.31	-3.378e+04	-4.477e+05	-1.482e+05	0.0
3319	reac per cdc 244 - nodo 1213	-575.35	-469.06	-3.371e+04	4.484e+05	-1.482e+05	0.0
3320	reac per cdc 245 - nodo 1213	1349.45	-0.48	-4.509e+04	454.32	1.234e+06	0.0
3321	reac per cdc 246 - nodo 1213	-1189.48	-0.48	-4.509e+04	454.32	-1.193e+06	0.0
3322	reac per cdc 247 - nodo 1213	-345.21	280.60	-4.511e+04	-2.683e+05	-8.894e+04	0.0
3323	reac per cdc 248 - nodo 1213	-345.21	-281.82	-4.507e+04	2.694e+05	-8.894e+04	0.0
3324	reac per cdc 249 - nodo 1213	2249.09	-0.27	-3.942e+04	262.67	2.057e+06	0.0
3325	reac per cdc 250 - nodo 1213	-1982.46	-0.27	-3.942e+04	262.67	-1.988e+06	0.0
3326	reac per cdc 251 - nodo 1213	-575.35	468.19	-3.945e+04	-4.476e+05	-1.482e+05	0.0
3327	reac per cdc 252 - nodo 1213	-575.35	-469.19	-3.939e+04	4.485e+05	-1.482e+05	0.0
3328	reac per cdc 253 - nodo 1213	0.0	-0.38	-3.601e+04	366.66	0.0	0.0
3329	reac per cdc 254 - nodo 1213	449.82	-0.30	-3.374e+04	282.93	4.114e+05	0.0
3330	reac per cdc 255 - nodo 1213	-396.49	-0.30	-3.374e+04	282.93	-3.977e+05	0.0
3331	reac per cdc 256 - nodo 1213	-115.07	93.40	-3.375e+04	-8.929e+04	-2.965e+04	0.0
3332	reac per cdc 257 - nodo 1213	-115.07	-94.08	-3.374e+04	8.994e+04	-2.965e+04	0.0
3333	reac per cdc 258 - nodo 1213	0.0	-0.33	-3.374e+04	318.25	0.0	0.0
3334	reac per cdc 131 - nodo 1304	0.0	-0.62	-6.012e+04	560.11	0.0	0.0
3335	reac per cdc 132 - nodo 1304	2962.54	4.78	-4.309e+04	-4338.31	2.829e+06	0.0
3336	reac per cdc 133 - nodo 1304	-3384.79	4.78	-4.309e+04	-4338.31	-2.931e+06	0.0
3337	reac per cdc 134 - nodo 1304	911.17	820.36	-4.315e+04	-7.445e+05	2.185e+05	0.0
3338	reac per cdc 135 - nodo 1304	911.17	-823.13	-4.304e+04	7.470e+05	2.185e+05	0.0
3339	reac per cdc 136 - nodo 1304	1777.52	2.41	-6.012e+04	-2188.12	1.698e+06	0.0
3340	reac per cdc 137 - nodo 1304	-2030.88	2.41	-6.012e+04	-2188.12	-1.758e+06	0.0
3341	reac per cdc 138 - nodo 1304	546.70	491.76	-6.015e+04	-4.463e+05	1.311e+05	0.0
3342	reac per cdc 139 - nodo 1304	546.70	-494.34	-6.008e+04	4.486e+05	1.311e+05	0.0
3343	reac per cdc 140 - nodo 1304	2962.54	4.61	-5.161e+04	-4179.30	2.829e+06	0.0
3344	reac per cdc 141 - nodo 1304	-3384.79	4.61	-5.161e+04	-4179.30	-2.931e+06	0.0
3345	reac per cdc 142 - nodo 1304	911.17	820.18	-5.166e+04	-7.443e+05	2.185e+05	0.0
3346	reac per cdc 143 - nodo 1304	911.17	-823.31	-5.155e+04	7.472e+05	2.185e+05	0.0
3347	reac per cdc 144 - nodo 1304	1.155e+04	3428.86	-3.318e+04	-2.956e+06	9.865e+06	0.0
3348	reac per cdc 145 - nodo 1304	1.155e+04	-3429.42	-3.311e+04	2.956e+06	9.865e+06	0.0
3349	reac per cdc 146 - nodo 1304	-1.155e+04	3429.01	-3.318e+04	-2.956e+06	-9.865e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3350	reac per cdc 147 - nodo 1304	-1.155e+04	-3429.27	-3.311e+04	2.956e+06	-9.865e+06	0.0
3351	reac per cdc 148 - nodo 1304	1.155e+04	3873.03	-3.320e+04	-3.348e+06	9.865e+06	0.0
3352	reac per cdc 149 - nodo 1304	1.155e+04	-3873.59	-3.310e+04	3.348e+06	9.865e+06	0.0
3353	reac per cdc 150 - nodo 1304	-1.155e+04	3873.18	-3.320e+04	-3.348e+06	-9.865e+06	0.0
3354	reac per cdc 151 - nodo 1304	-1.155e+04	-3873.44	-3.310e+04	3.348e+06	-9.865e+06	0.0
3355	reac per cdc 152 - nodo 1304	1.155e+04	3428.86	-3.318e+04	-2.956e+06	9.865e+06	0.0
3356	reac per cdc 153 - nodo 1304	1.155e+04	-3429.42	-3.311e+04	2.956e+06	9.865e+06	0.0
3357	reac per cdc 154 - nodo 1304	-1.155e+04	3429.01	-3.318e+04	-2.956e+06	-9.865e+06	0.0
3358	reac per cdc 155 - nodo 1304	-1.155e+04	-3429.27	-3.311e+04	2.956e+06	-9.865e+06	0.0
3359	reac per cdc 156 - nodo 1304	1.155e+04	3873.03	-3.320e+04	-3.348e+06	9.865e+06	0.0
3360	reac per cdc 157 - nodo 1304	1.155e+04	-3873.59	-3.310e+04	3.348e+06	9.865e+06	0.0
3361	reac per cdc 158 - nodo 1304	-1.155e+04	3873.18	-3.320e+04	-3.348e+06	-9.865e+06	0.0
3362	reac per cdc 159 - nodo 1304	-1.155e+04	-3873.44	-3.310e+04	3.348e+06	-9.865e+06	0.0
3363	reac per cdc 160 - nodo 1304	3464.81	1.143e+04	-3.327e+04	-9.852e+06	2.959e+06	0.0
3364	reac per cdc 161 - nodo 1304	3464.82	-1.143e+04	-3.303e+04	9.853e+06	2.959e+06	0.0
3365	reac per cdc 162 - nodo 1304	-3464.82	1.143e+04	-3.327e+04	-9.852e+06	-2.959e+06	0.0
3366	reac per cdc 163 - nodo 1304	-3464.81	-1.143e+04	-3.303e+04	9.853e+06	-2.959e+06	0.0
3367	reac per cdc 164 - nodo 1304	3464.81	1.143e+04	-3.327e+04	-9.852e+06	2.959e+06	0.0
3368	reac per cdc 165 - nodo 1304	3464.82	-1.143e+04	-3.303e+04	9.853e+06	2.959e+06	0.0
3369	reac per cdc 166 - nodo 1304	-3464.82	1.143e+04	-3.327e+04	-9.852e+06	-2.959e+06	0.0
3370	reac per cdc 167 - nodo 1304	-3464.81	-1.143e+04	-3.303e+04	9.853e+06	-2.959e+06	0.0
3371	reac per cdc 168 - nodo 1304	3464.81	1.291e+04	-3.332e+04	-1.116e+07	2.959e+06	0.0
3372	reac per cdc 169 - nodo 1304	3464.83	-1.291e+04	-3.298e+04	1.116e+07	2.959e+06	0.0
3373	reac per cdc 170 - nodo 1304	-3464.83	1.291e+04	-3.332e+04	-1.116e+07	-2.959e+06	0.0
3374	reac per cdc 171 - nodo 1304	-3464.81	-1.291e+04	-3.298e+04	1.116e+07	-2.959e+06	0.0
3375	reac per cdc 172 - nodo 1304	3464.81	1.291e+04	-3.332e+04	-1.116e+07	2.959e+06	0.0
3376	reac per cdc 173 - nodo 1304	3464.83	-1.291e+04	-3.298e+04	1.116e+07	2.959e+06	0.0
3377	reac per cdc 174 - nodo 1304	-3464.83	1.291e+04	-3.332e+04	-1.116e+07	-2.959e+06	0.0
3378	reac per cdc 175 - nodo 1304	-3464.81	-1.291e+04	-3.298e+04	1.116e+07	-2.959e+06	0.0
3379	reac per cdc 176 - nodo 1304	7089.54	2102.28	-3.317e+04	-1.812e+06	6.055e+06	0.0
3380	reac per cdc 177 - nodo 1304	7089.54	-2102.78	-3.313e+04	1.812e+06	6.055e+06	0.0
3381	reac per cdc 178 - nodo 1304	-7089.54	2102.37	-3.317e+04	-1.812e+06	-6.055e+06	0.0
3382	reac per cdc 179 - nodo 1304	-7089.54	-2102.69	-3.313e+04	1.812e+06	-6.055e+06	0.0
3383	reac per cdc 180 - nodo 1304	7089.53	2375.58	-3.318e+04	-2.053e+06	6.055e+06	0.0
3384	reac per cdc 181 - nodo 1304	7089.54	-2376.08	-3.312e+04	2.054e+06	6.055e+06	0.0
3385	reac per cdc 182 - nodo 1304	-7089.54	2375.67	-3.318e+04	-2.053e+06	-6.055e+06	0.0
3386	reac per cdc 183 - nodo 1304	-7089.53	-2375.99	-3.312e+04	2.054e+06	-6.055e+06	0.0
3387	reac per cdc 184 - nodo 1304	7089.54	2102.28	-3.317e+04	-1.812e+06	6.055e+06	0.0
3388	reac per cdc 185 - nodo 1304	7089.54	-2102.78	-3.313e+04	1.812e+06	6.055e+06	0.0
3389	reac per cdc 186 - nodo 1304	-7089.54	2102.37	-3.317e+04	-1.812e+06	-6.055e+06	0.0
3390	reac per cdc 187 - nodo 1304	-7089.54	-2102.69	-3.313e+04	1.812e+06	-6.055e+06	0.0
3391	reac per cdc 188 - nodo 1304	7089.53	2375.58	-3.318e+04	-2.053e+06	6.055e+06	0.0
3392	reac per cdc 189 - nodo 1304	7089.54	-2376.08	-3.312e+04	2.054e+06	6.055e+06	0.0
3393	reac per cdc 190 - nodo 1304	-7089.54	2375.67	-3.318e+04	-2.053e+06	-6.055e+06	0.0
3394	reac per cdc 191 - nodo 1304	-7089.53	-2375.99	-3.312e+04	2.054e+06	-6.055e+06	0.0
3395	reac per cdc 192 - nodo 1304	2126.86	7008.22	-3.322e+04	-6.041e+06	1.817e+06	0.0
3396	reac per cdc 193 - nodo 1304	2126.86	-7008.66	-3.308e+04	6.041e+06	1.817e+06	0.0
3397	reac per cdc 194 - nodo 1304	-2126.86	7008.25	-3.322e+04	-6.041e+06	-1.817e+06	0.0
3398	reac per cdc 195 - nodo 1304	-2126.86	-7008.63	-3.308e+04	6.041e+06	-1.817e+06	0.0
3399	reac per cdc 196 - nodo 1304	2126.86	7008.22	-3.322e+04	-6.041e+06	1.817e+06	0.0
3400	reac per cdc 197 - nodo 1304	2126.86	-7008.66	-3.308e+04	6.041e+06	1.817e+06	0.0
3401	reac per cdc 198 - nodo 1304	-2126.86	7008.25	-3.322e+04	-6.041e+06	-1.817e+06	0.0
3402	reac per cdc 199 - nodo 1304	-2126.86	-7008.63	-3.308e+04	6.041e+06	-1.817e+06	0.0
3403	reac per cdc 200 - nodo 1304	2126.85	7919.21	-3.326e+04	-6.845e+06	1.817e+06	0.0
3404	reac per cdc 201 - nodo 1304	2126.87	-7919.65	-3.304e+04	6.845e+06	1.817e+06	0.0
3405	reac per cdc 202 - nodo 1304	-2126.87	7919.24	-3.326e+04	-6.845e+06	-1.817e+06	0.0
3406	reac per cdc 203 - nodo 1304	-2126.85	-7919.62	-3.304e+04	6.845e+06	-1.817e+06	0.0
3407	reac per cdc 204 - nodo 1304	2126.85	7919.21	-3.326e+04	-6.845e+06	1.817e+06	0.0
3408	reac per cdc 205 - nodo 1304	2126.87	-7919.65	-3.304e+04	6.845e+06	1.817e+06	0.0
3409	reac per cdc 206 - nodo 1304	-2126.87	7919.24	-3.326e+04	-6.845e+06	-1.817e+06	0.0
3410	reac per cdc 207 - nodo 1304	-2126.85	-7919.62	-3.304e+04	6.845e+06	-1.817e+06	0.0
3411	reac per cdc 208 - nodo 1304	5523.60	1639.41	-3.317e+04	-1.413e+06	4.718e+06	0.0
3412	reac per cdc 209 - nodo 1304	5523.60	-1639.89	-3.313e+04	1.413e+06	4.718e+06	0.0
3413	reac per cdc 210 - nodo 1304	-5523.60	1639.48	-3.317e+04	-1.413e+06	-4.718e+06	0.0
3414	reac per cdc 211 - nodo 1304	-5523.60	-1639.82	-3.313e+04	1.413e+06	-4.718e+06	0.0
3415	reac per cdc 212 - nodo 1304	5523.60	1851.52	-3.317e+04	-1.600e+06	4.718e+06	0.0
3416	reac per cdc 213 - nodo 1304	5523.60	-1852.00	-3.312e+04	1.601e+06	4.718e+06	0.0
3417	reac per cdc 214 - nodo 1304	-5523.60	1851.59	-3.317e+04	-1.600e+06	-4.718e+06	0.0
3418	reac per cdc 215 - nodo 1304	-5523.60	-1851.93	-3.312e+04	1.601e+06	-4.718e+06	0.0
3419	reac per cdc 216 - nodo 1304	5523.60	1639.41	-3.317e+04	-1.413e+06	4.718e+06	0.0
3420	reac per cdc 217 - nodo 1304	5523.60	-1639.89	-3.313e+04	1.413e+06	4.718e+06	0.0
3421	reac per cdc 218 - nodo 1304	-5523.60	1639.48	-3.317e+04	-1.413e+06	-4.718e+06	0.0
3422	reac per cdc 219 - nodo 1304	-5523.60	-1639.82	-3.313e+04	1.413e+06	-4.718e+06	0.0
3423	reac per cdc 220 - nodo 1304	5523.60	1851.52	-3.317e+04	-1.600e+06	4.718e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3424	reac per cdc 221 - nodo 1304	5523.60	-1852.00	-3.312e+04	1.601e+06	4.718e+06	0.0
3425	reac per cdc 222 - nodo 1304	-5523.60	1851.59	-3.317e+04	-1.600e+06	-4.718e+06	0.0
3426	reac per cdc 223 - nodo 1304	-5523.60	-1851.93	-3.312e+04	1.601e+06	-4.718e+06	0.0
3427	reac per cdc 224 - nodo 1304	1657.08	5465.28	-3.321e+04	-4.711e+06	1.415e+06	0.0
3428	reac per cdc 225 - nodo 1304	1657.08	-5465.71	-3.309e+04	4.711e+06	1.415e+06	0.0
3429	reac per cdc 226 - nodo 1304	-1657.08	5465.30	-3.320e+04	-4.711e+06	-1.415e+06	0.0
3430	reac per cdc 227 - nodo 1304	-1657.08	-5465.69	-3.309e+04	4.711e+06	-1.415e+06	0.0
3431	reac per cdc 228 - nodo 1304	1657.08	5465.28	-3.321e+04	-4.711e+06	1.415e+06	0.0
3432	reac per cdc 229 - nodo 1304	1657.08	-5465.71	-3.309e+04	4.711e+06	1.415e+06	0.0
3433	reac per cdc 230 - nodo 1304	-1657.08	5465.30	-3.320e+04	-4.711e+06	-1.415e+06	0.0
3434	reac per cdc 231 - nodo 1304	-1657.08	-5465.69	-3.309e+04	4.711e+06	-1.415e+06	0.0
3435	reac per cdc 232 - nodo 1304	1657.07	6172.31	-3.323e+04	-5.335e+06	1.415e+06	0.0
3436	reac per cdc 233 - nodo 1304	1657.09	-6172.74	-3.307e+04	5.335e+06	1.415e+06	0.0
3437	reac per cdc 234 - nodo 1304	-1657.09	6172.33	-3.323e+04	-5.335e+06	-1.415e+06	0.0
3438	reac per cdc 235 - nodo 1304	-1657.07	-6172.72	-3.307e+04	5.335e+06	-1.415e+06	0.0
3439	reac per cdc 236 - nodo 1304	1657.07	6172.31	-3.323e+04	-5.335e+06	1.415e+06	0.0
3440	reac per cdc 237 - nodo 1304	1657.09	-6172.74	-3.307e+04	5.335e+06	1.415e+06	0.0
3441	reac per cdc 238 - nodo 1304	-1657.09	6172.33	-3.323e+04	-5.335e+06	-1.415e+06	0.0
3442	reac per cdc 239 - nodo 1304	-1657.07	-6172.72	-3.307e+04	5.335e+06	-1.415e+06	0.0
3443	reac per cdc 240 - nodo 1304	0.0	-0.44	-4.450e+04	398.24	0.0	0.0
3444	reac per cdc 241 - nodo 1304	1975.03	3.16	-3.315e+04	-2867.38	1.886e+06	0.0
3445	reac per cdc 242 - nodo 1304	-2256.53	3.16	-3.315e+04	-2867.38	-1.954e+06	0.0
3446	reac per cdc 243 - nodo 1304	607.45	546.88	-3.319e+04	-4.963e+05	1.457e+05	0.0
3447	reac per cdc 244 - nodo 1304	607.45	-548.78	-3.311e+04	4.980e+05	1.457e+05	0.0
3448	reac per cdc 245 - nodo 1304	1185.02	1.58	-4.450e+04	-1433.92	1.132e+06	0.0
3449	reac per cdc 246 - nodo 1304	-1353.92	1.58	-4.450e+04	-1433.92	-1.172e+06	0.0
3450	reac per cdc 247 - nodo 1304	364.47	327.81	-4.452e+04	-2.975e+05	8.742e+04	0.0
3451	reac per cdc 248 - nodo 1304	364.47	-329.59	-4.448e+04	2.991e+05	8.742e+04	0.0
3452	reac per cdc 249 - nodo 1304	1975.03	3.04	-3.882e+04	-2761.37	1.886e+06	0.0
3453	reac per cdc 250 - nodo 1304	-2256.53	3.04	-3.882e+04	-2761.37	-1.954e+06	0.0
3454	reac per cdc 251 - nodo 1304	607.45	546.76	-3.886e+04	-4.962e+05	1.457e+05	0.0
3455	reac per cdc 252 - nodo 1304	607.45	-548.90	-3.879e+04	4.981e+05	1.457e+05	0.0
3456	reac per cdc 253 - nodo 1304	0.0	-0.25	-3.542e+04	228.62	0.0	0.0
3457	reac per cdc 254 - nodo 1304	395.01	0.47	-3.315e+04	-424.50	3.773e+05	0.0
3458	reac per cdc 255 - nodo 1304	-451.31	0.47	-3.315e+04	-424.50	-3.908e+05	0.0
3459	reac per cdc 256 - nodo 1304	121.49	109.21	-3.316e+04	-9.911e+04	2.914e+04	0.0
3460	reac per cdc 257 - nodo 1304	121.49	-109.92	-3.314e+04	9.975e+04	2.914e+04	0.0
3461	reac per cdc 258 - nodo 1304	0.0	-0.21	-3.315e+04	186.22	0.0	0.0
3462	reac per cdc 131 - nodo 1311	0.0	-0.62	-6.012e+04	560.11	0.0	0.0
3463	reac per cdc 132 - nodo 1311	3384.79	4.78	-4.309e+04	-4338.31	2.931e+06	0.0
3464	reac per cdc 133 - nodo 1311	-2962.54	4.78	-4.309e+04	-4338.31	-2.829e+06	0.0
3465	reac per cdc 134 - nodo 1311	-911.17	820.36	-4.315e+04	-7.445e+05	-2.185e+05	0.0
3466	reac per cdc 135 - nodo 1311	-911.17	-823.13	-4.304e+04	7.470e+05	-2.185e+05	0.0
3467	reac per cdc 136 - nodo 1311	2030.88	2.41	-6.012e+04	-2188.12	1.758e+06	0.0
3468	reac per cdc 137 - nodo 1311	-1777.52	2.41	-6.012e+04	-2188.12	-1.698e+06	0.0
3469	reac per cdc 138 - nodo 1311	-546.70	491.76	-6.015e+04	-4.463e+05	-1.311e+05	0.0
3470	reac per cdc 139 - nodo 1311	-546.70	-494.34	-6.008e+04	4.486e+05	-1.311e+05	0.0
3471	reac per cdc 140 - nodo 1311	3384.79	4.61	-5.161e+04	-4179.30	2.931e+06	0.0
3472	reac per cdc 141 - nodo 1311	-2962.54	4.61	-5.161e+04	-4179.30	-2.829e+06	0.0
3473	reac per cdc 142 - nodo 1311	-911.17	820.18	-5.166e+04	-7.443e+05	-2.185e+05	0.0
3474	reac per cdc 143 - nodo 1311	-911.17	-823.31	-5.155e+04	7.472e+05	-2.185e+05	0.0
3475	reac per cdc 144 - nodo 1311	1.155e+04	3873.09	-3.320e+04	-3.348e+06	9.865e+06	0.0
3476	reac per cdc 145 - nodo 1311	1.155e+04	-3873.53	-3.310e+04	3.348e+06	9.865e+06	0.0
3477	reac per cdc 146 - nodo 1311	-1.155e+04	3873.12	-3.320e+04	-3.348e+06	-9.865e+06	0.0
3478	reac per cdc 147 - nodo 1311	-1.155e+04	-3873.50	-3.310e+04	3.348e+06	-9.865e+06	0.0
3479	reac per cdc 148 - nodo 1311	1.155e+04	3428.91	-3.318e+04	-2.956e+06	9.865e+06	0.0
3480	reac per cdc 149 - nodo 1311	1.155e+04	-3429.36	-3.311e+04	2.956e+06	9.865e+06	0.0
3481	reac per cdc 150 - nodo 1311	-1.155e+04	3428.95	-3.318e+04	-2.956e+06	-9.865e+06	0.0
3482	reac per cdc 151 - nodo 1311	-1.155e+04	-3429.32	-3.311e+04	2.956e+06	-9.865e+06	0.0
3483	reac per cdc 152 - nodo 1311	1.155e+04	3873.09	-3.320e+04	-3.348e+06	9.865e+06	0.0
3484	reac per cdc 153 - nodo 1311	1.155e+04	-3873.53	-3.310e+04	3.348e+06	9.865e+06	0.0
3485	reac per cdc 154 - nodo 1311	-1.155e+04	3873.12	-3.320e+04	-3.348e+06	-9.865e+06	0.0
3486	reac per cdc 155 - nodo 1311	-1.155e+04	-3873.50	-3.310e+04	3.348e+06	-9.865e+06	0.0
3487	reac per cdc 156 - nodo 1311	1.155e+04	3428.91	-3.318e+04	-2.956e+06	9.865e+06	0.0
3488	reac per cdc 157 - nodo 1311	1.155e+04	-3429.36	-3.311e+04	2.956e+06	9.865e+06	0.0
3489	reac per cdc 158 - nodo 1311	-1.155e+04	3428.95	-3.318e+04	-2.956e+06	-9.865e+06	0.0
3490	reac per cdc 159 - nodo 1311	-1.155e+04	-3429.32	-3.311e+04	2.956e+06	-9.865e+06	0.0
3491	reac per cdc 160 - nodo 1311	3464.81	1.291e+04	-3.332e+04	-1.116e+07	2.959e+06	0.0
3492	reac per cdc 161 - nodo 1311	3464.82	-1.291e+04	-3.298e+04	1.116e+07	2.959e+06	0.0
3493	reac per cdc 162 - nodo 1311	-3464.82	1.291e+04	-3.332e+04	-1.116e+07	-2.959e+06	0.0
3494	reac per cdc 163 - nodo 1311	-3464.81	-1.291e+04	-3.298e+04	1.116e+07	-2.959e+06	0.0
3495	reac per cdc 164 - nodo 1311	3464.81	1.291e+04	-3.332e+04	-1.116e+07	2.959e+06	0.0
3496	reac per cdc 165 - nodo 1311	3464.82	-1.291e+04	-3.298e+04	1.116e+07	2.959e+06	0.0
3497	reac per cdc 166 - nodo 1311	-3464.82	1.291e+04	-3.332e+04	-1.116e+07	-2.959e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3498	reac per cdc 167 - nodo 1311	-3464.81	-1.291e+04	-3.298e+04	1.116e+07	-2.959e+06	0.0
3499	reac per cdc 168 - nodo 1311	3464.81	1.143e+04	-3.327e+04	-9.852e+06	2.959e+06	0.0
3500	reac per cdc 169 - nodo 1311	3464.82	-1.143e+04	-3.303e+04	9.853e+06	2.959e+06	0.0
3501	reac per cdc 170 - nodo 1311	-3464.82	1.143e+04	-3.327e+04	-9.852e+06	-2.959e+06	0.0
3502	reac per cdc 171 - nodo 1311	-3464.81	-1.143e+04	-3.303e+04	9.853e+06	-2.959e+06	0.0
3503	reac per cdc 172 - nodo 1311	3464.81	1.143e+04	-3.327e+04	-9.852e+06	2.959e+06	0.0
3504	reac per cdc 173 - nodo 1311	3464.82	-1.143e+04	-3.303e+04	9.853e+06	2.959e+06	0.0
3505	reac per cdc 174 - nodo 1311	-3464.82	1.143e+04	-3.327e+04	-9.852e+06	-2.959e+06	0.0
3506	reac per cdc 175 - nodo 1311	-3464.81	-1.143e+04	-3.303e+04	9.853e+06	-2.959e+06	0.0
3507	reac per cdc 176 - nodo 1311	7089.53	2375.62	-3.318e+04	-2.053e+06	6.055e+06	0.0
3508	reac per cdc 177 - nodo 1311	7089.53	-2376.05	-3.312e+04	2.054e+06	6.055e+06	0.0
3509	reac per cdc 178 - nodo 1311	-7089.53	2375.64	-3.318e+04	-2.053e+06	-6.055e+06	0.0
3510	reac per cdc 179 - nodo 1311	-7089.53	-2376.03	-3.312e+04	2.054e+06	-6.055e+06	0.0
3511	reac per cdc 180 - nodo 1311	7089.53	2102.32	-3.317e+04	-1.812e+06	6.055e+06	0.0
3512	reac per cdc 181 - nodo 1311	7089.53	-2102.75	-3.313e+04	1.812e+06	6.055e+06	0.0
3513	reac per cdc 182 - nodo 1311	-7089.53	2102.34	-3.317e+04	-1.812e+06	-6.055e+06	0.0
3514	reac per cdc 183 - nodo 1311	-7089.53	-2102.72	-3.313e+04	1.812e+06	-6.055e+06	0.0
3515	reac per cdc 184 - nodo 1311	7089.53	2375.62	-3.318e+04	-2.053e+06	6.055e+06	0.0
3516	reac per cdc 185 - nodo 1311	7089.53	-2376.05	-3.312e+04	2.054e+06	6.055e+06	0.0
3517	reac per cdc 186 - nodo 1311	-7089.53	2375.64	-3.318e+04	-2.053e+06	-6.055e+06	0.0
3518	reac per cdc 187 - nodo 1311	-7089.53	-2376.03	-3.312e+04	2.054e+06	-6.055e+06	0.0
3519	reac per cdc 188 - nodo 1311	7089.53	2102.32	-3.317e+04	-1.812e+06	6.055e+06	0.0
3520	reac per cdc 189 - nodo 1311	7089.53	-2102.75	-3.313e+04	1.812e+06	6.055e+06	0.0
3521	reac per cdc 190 - nodo 1311	-7089.53	2102.34	-3.317e+04	-1.812e+06	-6.055e+06	0.0
3522	reac per cdc 191 - nodo 1311	-7089.53	-2102.72	-3.313e+04	1.812e+06	-6.055e+06	0.0
3523	reac per cdc 192 - nodo 1311	2126.86	7919.23	-3.326e+04	-6.845e+06	1.817e+06	0.0
3524	reac per cdc 193 - nodo 1311	2126.86	-7919.65	-3.304e+04	6.845e+06	1.817e+06	0.0
3525	reac per cdc 194 - nodo 1311	-2126.86	7919.24	-3.326e+04	-6.845e+06	-1.817e+06	0.0
3526	reac per cdc 195 - nodo 1311	-2126.86	-7919.64	-3.304e+04	6.845e+06	-1.817e+06	0.0
3527	reac per cdc 196 - nodo 1311	2126.86	7919.23	-3.326e+04	-6.845e+06	1.817e+06	0.0
3528	reac per cdc 197 - nodo 1311	2126.86	-7919.65	-3.304e+04	6.845e+06	1.817e+06	0.0
3529	reac per cdc 198 - nodo 1311	-2126.86	7919.24	-3.326e+04	-6.845e+06	-1.817e+06	0.0
3530	reac per cdc 199 - nodo 1311	-2126.86	-7919.64	-3.304e+04	6.845e+06	-1.817e+06	0.0
3531	reac per cdc 200 - nodo 1311	2126.86	7008.23	-3.322e+04	-6.041e+06	1.817e+06	0.0
3532	reac per cdc 201 - nodo 1311	2126.86	-7008.64	-3.308e+04	6.041e+06	1.817e+06	0.0
3533	reac per cdc 202 - nodo 1311	-2126.86	7008.23	-3.322e+04	-6.041e+06	-1.817e+06	0.0
3534	reac per cdc 203 - nodo 1311	-2126.86	-7008.64	-3.308e+04	6.041e+06	-1.817e+06	0.0
3535	reac per cdc 204 - nodo 1311	2126.86	7008.23	-3.322e+04	-6.041e+06	1.817e+06	0.0
3536	reac per cdc 205 - nodo 1311	2126.86	-7008.64	-3.308e+04	6.041e+06	1.817e+06	0.0
3537	reac per cdc 206 - nodo 1311	-2126.86	7008.23	-3.322e+04	-6.041e+06	-1.817e+06	0.0
3538	reac per cdc 207 - nodo 1311	-2126.86	-7008.64	-3.308e+04	6.041e+06	-1.817e+06	0.0
3539	reac per cdc 208 - nodo 1311	5523.59	1851.55	-3.317e+04	-1.600e+06	4.718e+06	0.0
3540	reac per cdc 209 - nodo 1311	5523.60	-1851.97	-3.312e+04	1.601e+06	4.718e+06	0.0
3541	reac per cdc 210 - nodo 1311	-5523.60	1851.56	-3.317e+04	-1.600e+06	-4.718e+06	0.0
3542	reac per cdc 211 - nodo 1311	-5523.59	-1851.96	-3.312e+04	1.601e+06	-4.718e+06	0.0
3543	reac per cdc 212 - nodo 1311	5523.59	1639.43	-3.317e+04	-1.413e+06	4.718e+06	0.0
3544	reac per cdc 213 - nodo 1311	5523.60	-1639.86	-3.313e+04	1.413e+06	4.718e+06	0.0
3545	reac per cdc 214 - nodo 1311	-5523.60	1639.45	-3.317e+04	-1.413e+06	-4.718e+06	0.0
3546	reac per cdc 215 - nodo 1311	-5523.59	-1639.84	-3.313e+04	1.413e+06	-4.718e+06	0.0
3547	reac per cdc 216 - nodo 1311	5523.59	1851.55	-3.317e+04	-1.600e+06	4.718e+06	0.0
3548	reac per cdc 217 - nodo 1311	5523.60	-1851.97	-3.312e+04	1.601e+06	4.718e+06	0.0
3549	reac per cdc 218 - nodo 1311	-5523.60	1851.56	-3.317e+04	-1.600e+06	-4.718e+06	0.0
3550	reac per cdc 219 - nodo 1311	-5523.59	-1851.96	-3.312e+04	1.601e+06	-4.718e+06	0.0
3551	reac per cdc 220 - nodo 1311	5523.59	1639.43	-3.317e+04	-1.413e+06	4.718e+06	0.0
3552	reac per cdc 221 - nodo 1311	5523.60	-1639.86	-3.313e+04	1.413e+06	4.718e+06	0.0
3553	reac per cdc 222 - nodo 1311	-5523.60	1639.45	-3.317e+04	-1.413e+06	-4.718e+06	0.0
3554	reac per cdc 223 - nodo 1311	-5523.59	-1639.84	-3.313e+04	1.413e+06	-4.718e+06	0.0
3555	reac per cdc 224 - nodo 1311	1657.08	6172.32	-3.323e+04	-5.335e+06	1.415e+06	0.0
3556	reac per cdc 225 - nodo 1311	1657.08	-6172.74	-3.307e+04	5.335e+06	1.415e+06	0.0
3557	reac per cdc 226 - nodo 1311	-1657.08	6172.33	-3.323e+04	-5.335e+06	-1.415e+06	0.0
3558	reac per cdc 227 - nodo 1311	-1657.08	-6172.73	-3.307e+04	5.335e+06	-1.415e+06	0.0
3559	reac per cdc 228 - nodo 1311	1657.08	6172.32	-3.323e+04	-5.335e+06	1.415e+06	0.0
3560	reac per cdc 229 - nodo 1311	1657.08	-6172.74	-3.307e+04	5.335e+06	1.415e+06	0.0
3561	reac per cdc 230 - nodo 1311	-1657.08	6172.33	-3.323e+04	-5.335e+06	-1.415e+06	0.0
3562	reac per cdc 231 - nodo 1311	-1657.08	-6172.73	-3.307e+04	5.335e+06	-1.415e+06	0.0
3563	reac per cdc 232 - nodo 1311	1657.08	5465.28	-3.321e+04	-4.711e+06	1.415e+06	0.0
3564	reac per cdc 233 - nodo 1311	1657.08	-5465.70	-3.309e+04	4.711e+06	1.415e+06	0.0
3565	reac per cdc 234 - nodo 1311	-1657.08	5465.29	-3.321e+04	-4.711e+06	-1.415e+06	0.0
3566	reac per cdc 235 - nodo 1311	-1657.08	-5465.69	-3.309e+04	4.711e+06	-1.415e+06	0.0
3567	reac per cdc 236 - nodo 1311	1657.08	5465.28	-3.321e+04	-4.711e+06	1.415e+06	0.0
3568	reac per cdc 237 - nodo 1311	1657.08	-5465.70	-3.309e+04	4.711e+06	1.415e+06	0.0
3569	reac per cdc 238 - nodo 1311	-1657.08	5465.29	-3.321e+04	-4.711e+06	-1.415e+06	0.0
3570	reac per cdc 239 - nodo 1311	-1657.08	-5465.69	-3.309e+04	4.711e+06	-1.415e+06	0.0
3571	reac per cdc 240 - nodo 1311	0.0	-0.44	-4.450e+04	398.24	0.0	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3572	reac per cdc 241 - nodo 1311	2256.53	3.16	-3.315e+04	-2867.38	1.954e+06	0.0
3573	reac per cdc 242 - nodo 1311	-1975.03	3.16	-3.315e+04	-2867.38	-1.886e+06	0.0
3574	reac per cdc 243 - nodo 1311	-607.45	546.88	-3.319e+04	-4.963e+05	-1.457e+05	0.0
3575	reac per cdc 244 - nodo 1311	-607.45	-548.78	-3.311e+04	4.980e+05	-1.457e+05	0.0
3576	reac per cdc 245 - nodo 1311	1353.92	1.58	-4.450e+04	-1433.92	1.172e+06	0.0
3577	reac per cdc 246 - nodo 1311	-1185.02	1.58	-4.450e+04	-1433.92	-1.132e+06	0.0
3578	reac per cdc 247 - nodo 1311	-364.47	327.81	-4.452e+04	-2.975e+05	-8.742e+04	0.0
3579	reac per cdc 248 - nodo 1311	-364.47	-329.59	-4.448e+04	2.991e+05	-8.742e+04	0.0
3580	reac per cdc 249 - nodo 1311	2256.53	3.04	-3.882e+04	-2761.37	1.954e+06	0.0
3581	reac per cdc 250 - nodo 1311	-1975.03	3.04	-3.882e+04	-2761.37	-1.886e+06	0.0
3582	reac per cdc 251 - nodo 1311	-607.45	546.76	-3.886e+04	-4.962e+05	-1.457e+05	0.0
3583	reac per cdc 252 - nodo 1311	-607.45	-548.90	-3.879e+04	4.981e+05	-1.457e+05	0.0
3584	reac per cdc 253 - nodo 1311	0.0	-0.25	-3.542e+04	228.62	0.0	0.0
3585	reac per cdc 254 - nodo 1311	451.31	0.47	-3.315e+04	-424.50	3.908e+05	0.0
3586	reac per cdc 255 - nodo 1311	-395.01	0.47	-3.315e+04	-424.50	-3.773e+05	0.0
3587	reac per cdc 256 - nodo 1311	-121.49	109.21	-3.316e+04	-9.911e+04	-2.914e+04	0.0
3588	reac per cdc 257 - nodo 1311	-121.49	-109.92	-3.314e+04	9.975e+04	-2.914e+04	0.0
3589	reac per cdc 258 - nodo 1311	0.0	-0.21	-3.315e+04	186.22	0.0	0.0
3590	reac per cdc 131 - nodo 1444	0.0	2.64	-2.903e+04	-2271.74	0.0	0.0
3591	reac per cdc 132 - nodo 1444	796.12	13.14	-2.597e+04	-1.129e+04	6.839e+05	0.0
3592	reac per cdc 133 - nodo 1444	-792.60	13.14	-2.597e+04	-1.129e+04	-6.808e+05	0.0
3593	reac per cdc 134 - nodo 1444	-7.59	970.91	-2.615e+04	-8.340e+05	-6522.81	0.0
3594	reac per cdc 135 - nodo 1444	-7.59	-972.90	-2.630e+04	8.357e+05	-6522.81	0.0
3595	reac per cdc 136 - nodo 1444	477.67	9.58	-2.890e+04	-8233.29	4.103e+05	0.0
3596	reac per cdc 137 - nodo 1444	-475.56	9.58	-2.890e+04	-8233.29	-4.085e+05	0.0
3597	reac per cdc 138 - nodo 1444	-4.56	584.24	-2.901e+04	-5.019e+05	-3913.68	0.0
3598	reac per cdc 139 - nodo 1444	-4.56	-582.04	-2.911e+04	5.000e+05	-3913.68	0.0
3599	reac per cdc 140 - nodo 1444	796.12	13.68	-2.739e+04	-1.175e+04	6.839e+05	0.0
3600	reac per cdc 141 - nodo 1444	-792.60	13.68	-2.739e+04	-1.175e+04	-6.808e+05	0.0
3601	reac per cdc 142 - nodo 1444	-7.59	971.44	-2.758e+04	-8.345e+05	-6522.81	0.0
3602	reac per cdc 143 - nodo 1444	-7.59	-972.36	-2.773e+04	8.353e+05	-6522.81	0.0
3603	reac per cdc 144 - nodo 1444	1.022e+04	3741.13	-2.026e+04	-3.214e+06	8.778e+06	0.0
3604	reac per cdc 145 - nodo 1444	1.022e+04	-3738.70	-2.002e+04	3.212e+06	8.778e+06	0.0
3605	reac per cdc 146 - nodo 1444	-1.022e+04	3741.13	-2.025e+04	-3.214e+06	-8.778e+06	0.0
3606	reac per cdc 147 - nodo 1444	-1.022e+04	-3738.71	-2.002e+04	3.212e+06	-8.778e+06	0.0
3607	reac per cdc 148 - nodo 1444	1.022e+04	4244.21	-2.025e+04	-3.646e+06	8.778e+06	0.0
3608	reac per cdc 149 - nodo 1444	1.022e+04	-4241.78	-2.003e+04	3.644e+06	8.778e+06	0.0
3609	reac per cdc 150 - nodo 1444	-1.022e+04	4244.21	-2.025e+04	-3.646e+06	-8.778e+06	0.0
3610	reac per cdc 151 - nodo 1444	-1.022e+04	-4241.79	-2.003e+04	3.644e+06	-8.778e+06	0.0
3611	reac per cdc 152 - nodo 1444	1.022e+04	3741.13	-2.026e+04	-3.214e+06	8.778e+06	0.0
3612	reac per cdc 153 - nodo 1444	1.022e+04	-3738.70	-2.002e+04	3.212e+06	8.778e+06	0.0
3613	reac per cdc 154 - nodo 1444	-1.022e+04	3741.13	-2.025e+04	-3.214e+06	-8.778e+06	0.0
3614	reac per cdc 155 - nodo 1444	-1.022e+04	-3738.71	-2.002e+04	3.212e+06	-8.778e+06	0.0
3615	reac per cdc 156 - nodo 1444	1.022e+04	4244.21	-2.025e+04	-3.646e+06	8.778e+06	0.0
3616	reac per cdc 157 - nodo 1444	1.022e+04	-4241.78	-2.003e+04	3.644e+06	8.778e+06	0.0
3617	reac per cdc 158 - nodo 1444	-1.022e+04	4244.21	-2.025e+04	-3.646e+06	-8.778e+06	0.0
3618	reac per cdc 159 - nodo 1444	-1.022e+04	-4241.79	-2.003e+04	3.644e+06	-8.778e+06	0.0
3619	reac per cdc 160 - nodo 1444	3065.55	1.247e+04	-2.053e+04	-1.071e+07	2.633e+06	0.0
3620	reac per cdc 161 - nodo 1444	3065.55	-1.247e+04	-1.975e+04	1.071e+07	2.633e+06	0.0
3621	reac per cdc 162 - nodo 1444	-3065.55	1.247e+04	-2.052e+04	-1.071e+07	-2.633e+06	0.0
3622	reac per cdc 163 - nodo 1444	-3065.55	-1.247e+04	-1.975e+04	1.071e+07	-2.633e+06	0.0
3623	reac per cdc 164 - nodo 1444	3065.55	1.247e+04	-2.053e+04	-1.071e+07	2.633e+06	0.0
3624	reac per cdc 165 - nodo 1444	3065.55	-1.247e+04	-1.975e+04	1.071e+07	2.633e+06	0.0
3625	reac per cdc 166 - nodo 1444	-3065.55	1.247e+04	-2.052e+04	-1.071e+07	-2.633e+06	0.0
3626	reac per cdc 167 - nodo 1444	-3065.55	-1.247e+04	-1.975e+04	1.071e+07	-2.633e+06	0.0
3627	reac per cdc 168 - nodo 1444	3065.55	1.414e+04	-2.050e+04	-1.215e+07	2.633e+06	0.0
3628	reac per cdc 169 - nodo 1444	3065.55	-1.414e+04	-1.978e+04	1.215e+07	2.633e+06	0.0
3629	reac per cdc 170 - nodo 1444	-3065.55	1.414e+04	-2.050e+04	-1.215e+07	-2.633e+06	0.0
3630	reac per cdc 171 - nodo 1444	-3065.55	-1.414e+04	-1.978e+04	1.215e+07	-2.633e+06	0.0
3631	reac per cdc 172 - nodo 1444	3065.55	1.414e+04	-2.050e+04	-1.215e+07	2.633e+06	0.0
3632	reac per cdc 173 - nodo 1444	3065.55	-1.414e+04	-1.978e+04	1.215e+07	2.633e+06	0.0
3633	reac per cdc 174 - nodo 1444	-3065.55	1.414e+04	-2.050e+04	-1.215e+07	-2.633e+06	0.0
3634	reac per cdc 175 - nodo 1444	-3065.55	-1.414e+04	-1.978e+04	1.215e+07	-2.633e+06	0.0
3635	reac per cdc 176 - nodo 1444	6267.69	2294.30	-2.021e+04	-1.971e+06	5.384e+06	0.0
3636	reac per cdc 177 - nodo 1444	6267.69	-2291.87	-2.007e+04	1.969e+06	5.384e+06	0.0
3637	reac per cdc 178 - nodo 1444	-6267.69	2294.30	-2.021e+04	-1.971e+06	-5.384e+06	0.0
3638	reac per cdc 179 - nodo 1444	-6267.69	-2291.87	-2.007e+04	1.969e+06	-5.384e+06	0.0
3639	reac per cdc 180 - nodo 1444	6267.69	2603.81	-2.021e+04	-2.237e+06	5.384e+06	0.0
3640	reac per cdc 181 - nodo 1444	6267.69	-2601.38	-2.007e+04	2.235e+06	5.384e+06	0.0
3641	reac per cdc 182 - nodo 1444	-6267.69	2603.80	-2.021e+04	-2.237e+06	-5.384e+06	0.0
3642	reac per cdc 183 - nodo 1444	-6267.69	-2601.38	-2.007e+04	2.235e+06	-5.384e+06	0.0
3643	reac per cdc 184 - nodo 1444	6267.69	2294.30	-2.021e+04	-1.971e+06	5.384e+06	0.0
3644	reac per cdc 185 - nodo 1444	6267.69	-2291.87	-2.007e+04	1.969e+06	5.384e+06	0.0
3645	reac per cdc 186 - nodo 1444	-6267.69	2294.30	-2.021e+04	-1.971e+06	-5.384e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3646	reac per cdc 187 - nodo 1444	-6267.69	-2291.87	-2.007e+04	1.969e+06	-5.384e+06	0.0
3647	reac per cdc 188 - nodo 1444	6267.69	2603.81	-2.021e+04	-2.237e+06	5.384e+06	0.0
3648	reac per cdc 189 - nodo 1444	6267.69	-2601.38	-2.007e+04	2.235e+06	5.384e+06	0.0
3649	reac per cdc 190 - nodo 1444	-6267.69	2603.80	-2.021e+04	-2.237e+06	-5.384e+06	0.0
3650	reac per cdc 191 - nodo 1444	-6267.69	-2601.38	-2.007e+04	2.235e+06	-5.384e+06	0.0
3651	reac per cdc 192 - nodo 1444	1880.31	7644.82	-2.038e+04	-6.567e+06	1.615e+06	0.0
3652	reac per cdc 193 - nodo 1444	1880.31	-7642.40	-1.990e+04	6.565e+06	1.615e+06	0.0
3653	reac per cdc 194 - nodo 1444	-1880.31	7644.82	-2.038e+04	-6.567e+06	-1.615e+06	0.0
3654	reac per cdc 195 - nodo 1444	-1880.31	-7642.40	-1.990e+04	6.565e+06	-1.615e+06	0.0
3655	reac per cdc 196 - nodo 1444	1880.31	7644.82	-2.038e+04	-6.567e+06	1.615e+06	0.0
3656	reac per cdc 197 - nodo 1444	1880.31	-7642.40	-1.990e+04	6.565e+06	1.615e+06	0.0
3657	reac per cdc 198 - nodo 1444	-1880.31	7644.82	-2.038e+04	-6.567e+06	-1.615e+06	0.0
3658	reac per cdc 199 - nodo 1444	-1880.31	-7642.40	-1.990e+04	6.565e+06	-1.615e+06	0.0
3659	reac per cdc 200 - nodo 1444	1880.31	8676.52	-2.036e+04	-7.453e+06	1.615e+06	0.0
3660	reac per cdc 201 - nodo 1444	1880.31	-8674.10	-1.992e+04	7.451e+06	1.615e+06	0.0
3661	reac per cdc 202 - nodo 1444	-1880.31	8676.52	-2.036e+04	-7.453e+06	-1.615e+06	0.0
3662	reac per cdc 203 - nodo 1444	-1880.31	-8674.10	-1.992e+04	7.451e+06	-1.615e+06	0.0
3663	reac per cdc 204 - nodo 1444	1880.31	8676.52	-2.036e+04	-7.453e+06	1.615e+06	0.0
3664	reac per cdc 205 - nodo 1444	1880.31	-8674.10	-1.992e+04	7.451e+06	1.615e+06	0.0
3665	reac per cdc 206 - nodo 1444	-1880.31	8676.52	-2.036e+04	-7.453e+06	-1.615e+06	0.0
3666	reac per cdc 207 - nodo 1444	-1880.31	-8674.10	-1.992e+04	7.451e+06	-1.615e+06	0.0
3667	reac per cdc 208 - nodo 1444	4881.95	1789.46	-2.019e+04	-1.537e+06	4.194e+06	0.0
3668	reac per cdc 209 - nodo 1444	4881.95	-1787.04	-2.008e+04	1.535e+06	4.194e+06	0.0
3669	reac per cdc 210 - nodo 1444	-4881.95	1789.46	-2.019e+04	-1.537e+06	-4.194e+06	0.0
3670	reac per cdc 211 - nodo 1444	-4881.95	-1787.04	-2.008e+04	1.535e+06	-4.194e+06	0.0
3671	reac per cdc 212 - nodo 1444	4881.95	2029.71	-2.019e+04	-1.744e+06	4.194e+06	0.0
3672	reac per cdc 213 - nodo 1444	4881.95	-2027.29	-2.009e+04	1.741e+06	4.194e+06	0.0
3673	reac per cdc 214 - nodo 1444	-4881.95	2029.71	-2.019e+04	-1.744e+06	-4.194e+06	0.0
3674	reac per cdc 215 - nodo 1444	-4881.95	-2027.29	-2.009e+04	1.741e+06	-4.194e+06	0.0
3675	reac per cdc 216 - nodo 1444	4881.95	1789.46	-2.019e+04	-1.537e+06	4.194e+06	0.0
3676	reac per cdc 217 - nodo 1444	4881.95	-1787.04	-2.008e+04	1.535e+06	4.194e+06	0.0
3677	reac per cdc 218 - nodo 1444	-4881.95	1789.46	-2.019e+04	-1.537e+06	-4.194e+06	0.0
3678	reac per cdc 219 - nodo 1444	-4881.95	-1787.04	-2.008e+04	1.535e+06	-4.194e+06	0.0
3679	reac per cdc 220 - nodo 1444	4881.95	2029.71	-2.019e+04	-1.744e+06	4.194e+06	0.0
3680	reac per cdc 221 - nodo 1444	4881.95	-2027.29	-2.009e+04	1.741e+06	4.194e+06	0.0
3681	reac per cdc 222 - nodo 1444	-4881.95	2029.71	-2.019e+04	-1.744e+06	-4.194e+06	0.0
3682	reac per cdc 223 - nodo 1444	-4881.95	-2027.29	-2.009e+04	1.741e+06	-4.194e+06	0.0
3683	reac per cdc 224 - nodo 1444	1464.59	5962.04	-2.032e+04	-5.121e+06	1.258e+06	0.0
3684	reac per cdc 225 - nodo 1444	1464.59	-5959.61	-1.996e+04	5.119e+06	1.258e+06	0.0
3685	reac per cdc 226 - nodo 1444	-1464.59	5962.04	-2.032e+04	-5.121e+06	-1.258e+06	0.0
3686	reac per cdc 227 - nodo 1444	-1464.59	-5959.61	-1.996e+04	5.119e+06	-1.258e+06	0.0
3687	reac per cdc 228 - nodo 1444	1464.59	5962.04	-2.032e+04	-5.121e+06	1.258e+06	0.0
3688	reac per cdc 229 - nodo 1444	1464.59	-5959.61	-1.996e+04	5.119e+06	1.258e+06	0.0
3689	reac per cdc 230 - nodo 1444	-1464.59	5962.04	-2.032e+04	-5.121e+06	-1.258e+06	0.0
3690	reac per cdc 231 - nodo 1444	-1464.59	-5959.61	-1.996e+04	5.119e+06	-1.258e+06	0.0
3691	reac per cdc 232 - nodo 1444	1464.59	6762.88	-2.031e+04	-5.809e+06	1.258e+06	0.0
3692	reac per cdc 233 - nodo 1444	1464.59	-6760.45	-1.997e+04	5.807e+06	1.258e+06	0.0
3693	reac per cdc 234 - nodo 1444	-1464.59	6762.88	-2.031e+04	-5.809e+06	-1.258e+06	0.0
3694	reac per cdc 235 - nodo 1444	-1464.59	-6760.45	-1.997e+04	5.807e+06	-1.258e+06	0.0
3695	reac per cdc 236 - nodo 1444	1464.59	6762.88	-2.031e+04	-5.809e+06	1.258e+06	0.0
3696	reac per cdc 237 - nodo 1444	1464.59	-6760.45	-1.997e+04	5.807e+06	1.258e+06	0.0
3697	reac per cdc 238 - nodo 1444	-1464.59	6762.88	-2.031e+04	-5.809e+06	-1.258e+06	0.0
3698	reac per cdc 239 - nodo 1444	-1464.59	-6760.45	-1.997e+04	5.807e+06	-1.258e+06	0.0
3699	reac per cdc 240 - nodo 1444	0.0	1.92	-2.204e+04	-1653.43	0.0	0.0
3700	reac per cdc 241 - nodo 1444	530.75	8.92	-2.000e+04	-7665.96	4.559e+05	0.0
3701	reac per cdc 242 - nodo 1444	-528.40	8.92	-2.000e+04	-7665.96	-4.539e+05	0.0
3702	reac per cdc 243 - nodo 1444	-5.06	647.43	-2.012e+04	-5.561e+05	-4348.54	0.0
3703	reac per cdc 244 - nodo 1444	-5.06	-648.44	-2.022e+04	5.570e+05	-4348.54	0.0
3704	reac per cdc 245 - nodo 1444	318.45	6.55	-2.195e+04	-5627.79	2.735e+05	0.0
3705	reac per cdc 246 - nodo 1444	-317.04	6.55	-2.195e+04	-5627.79	-2.723e+05	0.0
3706	reac per cdc 247 - nodo 1444	-3.04	389.66	-2.203e+04	-3.347e+05	-2609.12	0.0
3707	reac per cdc 248 - nodo 1444	-3.04	-387.86	-2.209e+04	3.332e+05	-2609.12	0.0
3708	reac per cdc 249 - nodo 1444	530.75	9.28	-2.095e+04	-7971.67	4.559e+05	0.0
3709	reac per cdc 250 - nodo 1444	-528.40	9.28	-2.095e+04	-7971.67	-4.539e+05	0.0
3710	reac per cdc 251 - nodo 1444	-5.06	647.79	-2.107e+04	-5.565e+05	-4348.54	0.0
3711	reac per cdc 252 - nodo 1444	-5.06	-648.08	-2.117e+04	5.567e+05	-4348.54	0.0
3712	reac per cdc 253 - nodo 1444	0.0	1.36	-2.052e+04	-1164.30	0.0	0.0
3713	reac per cdc 254 - nodo 1444	106.15	2.76	-2.011e+04	-2366.81	9.118e+04	0.0
3714	reac per cdc 255 - nodo 1444	-105.68	2.76	-2.011e+04	-2366.81	-9.078e+04	0.0
3715	reac per cdc 256 - nodo 1444	-1.01	130.46	-2.014e+04	-1.121e+05	-869.71	0.0
3716	reac per cdc 257 - nodo 1444	-1.01	-128.72	-2.016e+04	1.106e+05	-869.71	0.0
3717	reac per cdc 258 - nodo 1444	0.0	1.21	-2.014e+04	-1042.02	0.0	0.0
3718	reac per cdc 131 - nodo 1451	0.0	0.0	-3.614e+04	0.0	0.0	0.0
3719	reac per cdc 132 - nodo 1451	793.06	6142.50	-3.044e+04	-5.276e+06	6.812e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3720	reac per cdc 133 - nodo 1451	-791.89	6142.50	-3.044e+04	-5.276e+06	-6.802e+05	0.0
3721	reac per cdc 134 - nodo 1451	-2.53	2730.00	-3.044e+04	-2.345e+06	-2172.54	0.0
3722	reac per cdc 135 - nodo 1451	-2.53	-5460.00	-3.044e+04	4.690e+06	-2172.54	0.0
3723	reac per cdc 136 - nodo 1451	475.84	3685.50	-3.614e+04	-3.166e+06	4.087e+05	0.0
3724	reac per cdc 137 - nodo 1451	-475.13	3685.50	-3.614e+04	-3.166e+06	-4.081e+05	0.0
3725	reac per cdc 138 - nodo 1451	-1.52	1638.00	-3.614e+04	-1.407e+06	-1303.53	0.0
3726	reac per cdc 139 - nodo 1451	-1.52	-3276.00	-3.614e+04	2.814e+06	-1303.53	0.0
3727	reac per cdc 140 - nodo 1451	793.06	6142.50	-3.329e+04	-5.276e+06	6.812e+05	0.0
3728	reac per cdc 141 - nodo 1451	-791.89	6142.50	-3.329e+04	-5.276e+06	-6.802e+05	0.0
3729	reac per cdc 142 - nodo 1451	-2.53	2730.00	-3.329e+04	-2.345e+06	-2172.54	0.0
3730	reac per cdc 143 - nodo 1451	-2.53	-5460.00	-3.329e+04	4.690e+06	-2172.54	0.0
3731	reac per cdc 144 - nodo 1451	1.022e+04	3081.18	-2.341e+04	-2.647e+06	8.779e+06	0.0
3732	reac per cdc 145 - nodo 1451	1.022e+04	-3081.17	-2.341e+04	2.647e+06	8.779e+06	0.0
3733	reac per cdc 146 - nodo 1451	-1.022e+04	3081.17	-2.341e+04	-2.647e+06	-8.779e+06	0.0
3734	reac per cdc 147 - nodo 1451	-1.022e+04	-3081.18	-2.341e+04	2.647e+06	-8.779e+06	0.0
3735	reac per cdc 148 - nodo 1451	1.022e+04	3283.54	-2.341e+04	-2.820e+06	8.779e+06	0.0
3736	reac per cdc 149 - nodo 1451	1.022e+04	-3283.54	-2.341e+04	2.820e+06	8.779e+06	0.0
3737	reac per cdc 150 - nodo 1451	-1.022e+04	3283.54	-2.341e+04	-2.820e+06	-8.779e+06	0.0
3738	reac per cdc 151 - nodo 1451	-1.022e+04	-3283.54	-2.341e+04	2.820e+06	-8.779e+06	0.0
3739	reac per cdc 152 - nodo 1451	1.022e+04	3081.18	-2.341e+04	-2.647e+06	8.779e+06	0.0
3740	reac per cdc 153 - nodo 1451	1.022e+04	-3081.17	-2.341e+04	2.647e+06	8.779e+06	0.0
3741	reac per cdc 154 - nodo 1451	-1.022e+04	3081.17	-2.341e+04	-2.647e+06	-8.779e+06	0.0
3742	reac per cdc 155 - nodo 1451	-1.022e+04	-3081.18	-2.341e+04	2.647e+06	-8.779e+06	0.0
3743	reac per cdc 156 - nodo 1451	1.022e+04	3283.54	-2.341e+04	-2.820e+06	8.779e+06	0.0
3744	reac per cdc 157 - nodo 1451	1.022e+04	-3283.54	-2.341e+04	2.820e+06	8.779e+06	0.0
3745	reac per cdc 158 - nodo 1451	-1.022e+04	3283.54	-2.341e+04	-2.820e+06	-8.779e+06	0.0
3746	reac per cdc 159 - nodo 1451	-1.022e+04	-3283.54	-2.341e+04	2.820e+06	-8.779e+06	0.0
3747	reac per cdc 160 - nodo 1451	3066.12	1.027e+04	-2.341e+04	-8.822e+06	2.634e+06	0.0
3748	reac per cdc 161 - nodo 1451	3066.12	-1.027e+04	-2.341e+04	8.822e+06	2.634e+06	0.0
3749	reac per cdc 162 - nodo 1451	-3066.12	1.027e+04	-2.341e+04	-8.822e+06	-2.634e+06	0.0
3750	reac per cdc 163 - nodo 1451	-3066.12	-1.027e+04	-2.341e+04	8.822e+06	-2.634e+06	0.0
3751	reac per cdc 164 - nodo 1451	3066.12	1.027e+04	-2.341e+04	-8.822e+06	2.634e+06	0.0
3752	reac per cdc 165 - nodo 1451	3066.12	-1.027e+04	-2.341e+04	8.822e+06	2.634e+06	0.0
3753	reac per cdc 166 - nodo 1451	-3066.12	1.027e+04	-2.341e+04	-8.822e+06	-2.634e+06	0.0
3754	reac per cdc 167 - nodo 1451	-3066.12	-1.027e+04	-2.341e+04	8.822e+06	-2.634e+06	0.0
3755	reac per cdc 168 - nodo 1451	3066.12	1.095e+04	-2.341e+04	-9.402e+06	2.634e+06	0.0
3756	reac per cdc 169 - nodo 1451	3066.12	-1.095e+04	-2.341e+04	9.402e+06	2.634e+06	0.0
3757	reac per cdc 170 - nodo 1451	-3066.12	1.095e+04	-2.341e+04	-9.402e+06	-2.634e+06	0.0
3758	reac per cdc 171 - nodo 1451	-3066.12	-1.095e+04	-2.341e+04	9.402e+06	-2.634e+06	0.0
3759	reac per cdc 172 - nodo 1451	3066.12	1.095e+04	-2.341e+04	-9.402e+06	2.634e+06	0.0
3760	reac per cdc 173 - nodo 1451	3066.12	-1.095e+04	-2.341e+04	9.402e+06	2.634e+06	0.0
3761	reac per cdc 174 - nodo 1451	-3066.12	1.095e+04	-2.341e+04	-9.402e+06	-2.634e+06	0.0
3762	reac per cdc 175 - nodo 1451	-3066.12	-1.095e+04	-2.341e+04	9.402e+06	-2.634e+06	0.0
3763	reac per cdc 176 - nodo 1451	6268.88	1890.09	-2.341e+04	-1.624e+06	5.385e+06	0.0
3764	reac per cdc 177 - nodo 1451	6268.88	-1890.09	-2.341e+04	1.624e+06	5.385e+06	0.0
3765	reac per cdc 178 - nodo 1451	-6268.88	1890.09	-2.341e+04	-1.624e+06	-5.385e+06	0.0
3766	reac per cdc 179 - nodo 1451	-6268.88	-1890.09	-2.341e+04	1.624e+06	-5.385e+06	0.0
3767	reac per cdc 180 - nodo 1451	6268.88	2014.34	-2.341e+04	-1.730e+06	5.385e+06	0.0
3768	reac per cdc 181 - nodo 1451	6268.88	-2014.34	-2.341e+04	1.730e+06	5.385e+06	0.0
3769	reac per cdc 182 - nodo 1451	-6268.88	2014.34	-2.341e+04	-1.730e+06	-5.385e+06	0.0
3770	reac per cdc 183 - nodo 1451	-6268.88	-2014.34	-2.341e+04	1.730e+06	-5.385e+06	0.0
3771	reac per cdc 184 - nodo 1451	6268.88	1890.09	-2.341e+04	-1.624e+06	5.385e+06	0.0
3772	reac per cdc 185 - nodo 1451	6268.88	-1890.09	-2.341e+04	1.624e+06	5.385e+06	0.0
3773	reac per cdc 186 - nodo 1451	-6268.88	1890.09	-2.341e+04	-1.624e+06	-5.385e+06	0.0
3774	reac per cdc 187 - nodo 1451	-6268.88	-1890.09	-2.341e+04	1.624e+06	-5.385e+06	0.0
3775	reac per cdc 188 - nodo 1451	6268.88	2014.34	-2.341e+04	-1.730e+06	5.385e+06	0.0
3776	reac per cdc 189 - nodo 1451	6268.88	-2014.34	-2.341e+04	1.730e+06	5.385e+06	0.0
3777	reac per cdc 190 - nodo 1451	-6268.88	2014.34	-2.341e+04	-1.730e+06	-5.385e+06	0.0
3778	reac per cdc 191 - nodo 1451	-6268.88	-2014.34	-2.341e+04	1.730e+06	-5.385e+06	0.0
3779	reac per cdc 192 - nodo 1451	1880.66	6300.30	-2.341e+04	-5.412e+06	1.615e+06	0.0
3780	reac per cdc 193 - nodo 1451	1880.66	-6300.30	-2.341e+04	5.412e+06	1.615e+06	0.0
3781	reac per cdc 194 - nodo 1451	-1880.66	6300.30	-2.341e+04	-5.412e+06	-1.615e+06	0.0
3782	reac per cdc 195 - nodo 1451	-1880.66	-6300.30	-2.341e+04	5.412e+06	-1.615e+06	0.0
3783	reac per cdc 196 - nodo 1451	1880.66	6300.30	-2.341e+04	-5.412e+06	1.615e+06	0.0
3784	reac per cdc 197 - nodo 1451	1880.66	-6300.30	-2.341e+04	5.412e+06	1.615e+06	0.0
3785	reac per cdc 198 - nodo 1451	-1880.66	6300.30	-2.341e+04	-5.412e+06	-1.615e+06	0.0
3786	reac per cdc 199 - nodo 1451	-1880.66	-6300.30	-2.341e+04	5.412e+06	-1.615e+06	0.0
3787	reac per cdc 200 - nodo 1451	1880.66	6714.45	-2.341e+04	-5.768e+06	1.615e+06	0.0
3788	reac per cdc 201 - nodo 1451	1880.66	-6714.45	-2.341e+04	5.768e+06	1.615e+06	0.0
3789	reac per cdc 202 - nodo 1451	-1880.66	6714.45	-2.341e+04	-5.768e+06	-1.615e+06	0.0
3790	reac per cdc 203 - nodo 1451	-1880.66	-6714.45	-2.341e+04	5.768e+06	-1.615e+06	0.0
3791	reac per cdc 204 - nodo 1451	1880.66	6714.45	-2.341e+04	-5.768e+06	1.615e+06	0.0
3792	reac per cdc 205 - nodo 1451	1880.66	-6714.45	-2.341e+04	5.768e+06	1.615e+06	0.0
3793	reac per cdc 206 - nodo 1451	-1880.66	6714.45	-2.341e+04	-5.768e+06	-1.615e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3794	reac per cdc 207 - nodo 1451	-1880.66	-6714.45	-2.341e+04	5.768e+06	-1.615e+06	0.0
3795	reac per cdc 208 - nodo 1451	4882.87	1471.77	-2.341e+04	-1.264e+06	4.194e+06	0.0
3796	reac per cdc 209 - nodo 1451	4882.87	-1471.77	-2.341e+04	1.264e+06	4.194e+06	0.0
3797	reac per cdc 210 - nodo 1451	-4882.87	1471.77	-2.341e+04	-1.264e+06	-4.194e+06	0.0
3798	reac per cdc 211 - nodo 1451	-4882.87	-1471.77	-2.341e+04	1.264e+06	-4.194e+06	0.0
3799	reac per cdc 212 - nodo 1451	4882.87	1568.01	-2.341e+04	-1.347e+06	4.194e+06	0.0
3800	reac per cdc 213 - nodo 1451	4882.87	-1568.01	-2.341e+04	1.347e+06	4.194e+06	0.0
3801	reac per cdc 214 - nodo 1451	-4882.87	1568.01	-2.341e+04	-1.347e+06	-4.194e+06	0.0
3802	reac per cdc 215 - nodo 1451	-4882.87	-1568.01	-2.341e+04	1.347e+06	-4.194e+06	0.0
3803	reac per cdc 216 - nodo 1451	4882.87	1471.77	-2.341e+04	-1.264e+06	4.194e+06	0.0
3804	reac per cdc 217 - nodo 1451	4882.87	-1471.77	-2.341e+04	1.264e+06	4.194e+06	0.0
3805	reac per cdc 218 - nodo 1451	-4882.87	1471.77	-2.341e+04	-1.264e+06	-4.194e+06	0.0
3806	reac per cdc 219 - nodo 1451	-4882.87	-1471.77	-2.341e+04	1.264e+06	-4.194e+06	0.0
3807	reac per cdc 220 - nodo 1451	4882.87	1568.01	-2.341e+04	-1.347e+06	4.194e+06	0.0
3808	reac per cdc 221 - nodo 1451	4882.87	-1568.01	-2.341e+04	1.347e+06	4.194e+06	0.0
3809	reac per cdc 222 - nodo 1451	-4882.87	1568.01	-2.341e+04	-1.347e+06	-4.194e+06	0.0
3810	reac per cdc 223 - nodo 1451	-4882.87	-1568.01	-2.341e+04	1.347e+06	-4.194e+06	0.0
3811	reac per cdc 224 - nodo 1451	1464.86	4905.91	-2.341e+04	-4.214e+06	1.258e+06	0.0
3812	reac per cdc 225 - nodo 1451	1464.86	-4905.91	-2.341e+04	4.214e+06	1.258e+06	0.0
3813	reac per cdc 226 - nodo 1451	-1464.86	4905.91	-2.341e+04	-4.214e+06	-1.258e+06	0.0
3814	reac per cdc 227 - nodo 1451	-1464.86	-4905.91	-2.341e+04	4.214e+06	-1.258e+06	0.0
3815	reac per cdc 228 - nodo 1451	1464.86	4905.91	-2.341e+04	-4.214e+06	1.258e+06	0.0
3816	reac per cdc 229 - nodo 1451	1464.86	-4905.91	-2.341e+04	4.214e+06	1.258e+06	0.0
3817	reac per cdc 230 - nodo 1451	-1464.86	4905.91	-2.341e+04	-4.214e+06	-1.258e+06	0.0
3818	reac per cdc 231 - nodo 1451	-1464.86	-4905.91	-2.341e+04	4.214e+06	-1.258e+06	0.0
3819	reac per cdc 232 - nodo 1451	1464.86	5226.70	-2.341e+04	-4.490e+06	1.258e+06	0.0
3820	reac per cdc 233 - nodo 1451	1464.86	-5226.70	-2.341e+04	4.490e+06	1.258e+06	0.0
3821	reac per cdc 234 - nodo 1451	-1464.86	5226.70	-2.341e+04	-4.490e+06	-1.258e+06	0.0
3822	reac per cdc 235 - nodo 1451	-1464.86	-5226.70	-2.341e+04	4.490e+06	-1.258e+06	0.0
3823	reac per cdc 236 - nodo 1451	1464.86	5226.70	-2.341e+04	-4.490e+06	1.258e+06	0.0
3824	reac per cdc 237 - nodo 1451	1464.86	-5226.70	-2.341e+04	4.490e+06	1.258e+06	0.0
3825	reac per cdc 238 - nodo 1451	-1464.86	5226.70	-2.341e+04	-4.490e+06	-1.258e+06	0.0
3826	reac per cdc 239 - nodo 1451	-1464.86	-5226.70	-2.341e+04	4.490e+06	-1.258e+06	0.0
3827	reac per cdc 240 - nodo 1451	0.0	0.0	-2.721e+04	0.0	0.0	0.0
3828	reac per cdc 241 - nodo 1451	528.71	4095.00	-2.341e+04	-3.518e+06	4.542e+05	0.0
3829	reac per cdc 242 - nodo 1451	-527.92	4095.00	-2.341e+04	-3.518e+06	-4.535e+05	0.0
3830	reac per cdc 243 - nodo 1451	-1.69	1820.00	-2.341e+04	-1.563e+06	-1448.36	0.0
3831	reac per cdc 244 - nodo 1451	-1.69	-3640.00	-2.341e+04	3.127e+06	-1448.36	0.0
3832	reac per cdc 245 - nodo 1451	317.22	2457.00	-2.721e+04	-2.111e+06	2.725e+05	0.0
3833	reac per cdc 246 - nodo 1451	-316.75	2457.00	-2.721e+04	-2.111e+06	-2.721e+05	0.0
3834	reac per cdc 247 - nodo 1451	-1.01	1092.00	-2.721e+04	-9.380e+05	-869.02	0.0
3835	reac per cdc 248 - nodo 1451	-1.01	-2184.00	-2.721e+04	1.876e+06	-869.02	0.0
3836	reac per cdc 249 - nodo 1451	528.71	4095.00	-2.531e+04	-3.518e+06	4.542e+05	0.0
3837	reac per cdc 250 - nodo 1451	-527.92	4095.00	-2.531e+04	-3.518e+06	-4.535e+05	0.0
3838	reac per cdc 251 - nodo 1451	-1.69	1820.00	-2.531e+04	-1.563e+06	-1448.36	0.0
3839	reac per cdc 252 - nodo 1451	-1.69	-3640.00	-2.531e+04	3.127e+06	-1448.36	0.0
3840	reac per cdc 253 - nodo 1451	0.0	0.0	-2.417e+04	0.0	0.0	0.0
3841	reac per cdc 254 - nodo 1451	105.74	819.00	-2.341e+04	-7.035e+05	9.083e+04	0.0
3842	reac per cdc 255 - nodo 1451	-105.58	819.00	-2.341e+04	-7.035e+05	-9.070e+04	0.0
3843	reac per cdc 256 - nodo 1451	-0.34	364.00	-2.341e+04	-3.127e+05	-289.67	0.0
3844	reac per cdc 257 - nodo 1451	-0.34	-728.00	-2.341e+04	6.254e+05	-289.67	0.0
3845	reac per cdc 258 - nodo 1451	0.0	0.0	-2.341e+04	0.0	0.0	0.0
3846	reac per cdc 131 - nodo 1458	0.0	0.0	-3.614e+04	0.0	0.0	0.0
3847	reac per cdc 132 - nodo 1458	791.89	6142.50	-3.044e+04	-5.276e+06	6.802e+05	0.0
3848	reac per cdc 133 - nodo 1458	-793.06	6142.50	-3.044e+04	-5.276e+06	-6.812e+05	0.0
3849	reac per cdc 134 - nodo 1458	2.53	2730.00	-3.044e+04	-2.345e+06	2172.54	0.0
3850	reac per cdc 135 - nodo 1458	2.53	-5460.00	-3.044e+04	4.690e+06	2172.54	0.0
3851	reac per cdc 136 - nodo 1458	475.13	3685.50	-3.614e+04	-3.166e+06	4.081e+05	0.0
3852	reac per cdc 137 - nodo 1458	-475.84	3685.50	-3.614e+04	-3.166e+06	-4.087e+05	0.0
3853	reac per cdc 138 - nodo 1458	1.52	1638.00	-3.614e+04	-1.407e+06	1303.53	0.0
3854	reac per cdc 139 - nodo 1458	1.52	-3276.00	-3.614e+04	2.814e+06	1303.53	0.0
3855	reac per cdc 140 - nodo 1458	791.89	6142.50	-3.329e+04	-5.276e+06	6.802e+05	0.0
3856	reac per cdc 141 - nodo 1458	-793.06	6142.50	-3.329e+04	-5.276e+06	-6.812e+05	0.0
3857	reac per cdc 142 - nodo 1458	2.53	2730.00	-3.329e+04	-2.345e+06	2172.54	0.0
3858	reac per cdc 143 - nodo 1458	2.53	-5460.00	-3.329e+04	4.690e+06	2172.54	0.0
3859	reac per cdc 144 - nodo 1458	1.022e+04	3283.54	-2.341e+04	-2.820e+06	8.779e+06	0.0
3860	reac per cdc 145 - nodo 1458	1.022e+04	-3283.54	-2.341e+04	2.820e+06	8.779e+06	0.0
3861	reac per cdc 146 - nodo 1458	-1.022e+04	3283.54	-2.341e+04	-2.820e+06	-8.779e+06	0.0
3862	reac per cdc 147 - nodo 1458	-1.022e+04	-3283.54	-2.341e+04	2.820e+06	-8.779e+06	0.0
3863	reac per cdc 148 - nodo 1458	1.022e+04	3081.18	-2.341e+04	-2.647e+06	8.779e+06	0.0
3864	reac per cdc 149 - nodo 1458	1.022e+04	-3081.17	-2.341e+04	2.647e+06	8.779e+06	0.0
3865	reac per cdc 150 - nodo 1458	-1.022e+04	3081.17	-2.341e+04	-2.647e+06	-8.779e+06	0.0
3866	reac per cdc 151 - nodo 1458	-1.022e+04	-3081.18	-2.341e+04	2.647e+06	-8.779e+06	0.0
3867	reac per cdc 152 - nodo 1458	1.022e+04	3283.54	-2.341e+04	-2.820e+06	8.779e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3868	reac per cdc 153 - nodo 1458	1.022e+04	-3283.54	-2.341e+04	2.820e+06	8.779e+06	0.0
3869	reac per cdc 154 - nodo 1458	-1.022e+04	3283.54	-2.341e+04	-2.820e+06	-8.779e+06	0.0
3870	reac per cdc 155 - nodo 1458	-1.022e+04	-3283.54	-2.341e+04	2.820e+06	-8.779e+06	0.0
3871	reac per cdc 156 - nodo 1458	1.022e+04	3081.18	-2.341e+04	-2.647e+06	8.779e+06	0.0
3872	reac per cdc 157 - nodo 1458	1.022e+04	-3081.17	-2.341e+04	2.647e+06	8.779e+06	0.0
3873	reac per cdc 158 - nodo 1458	-1.022e+04	3081.17	-2.341e+04	-2.647e+06	-8.779e+06	0.0
3874	reac per cdc 159 - nodo 1458	-1.022e+04	-3081.18	-2.341e+04	2.647e+06	-8.779e+06	0.0
3875	reac per cdc 160 - nodo 1458	3066.12	1.095e+04	-2.341e+04	-9.402e+06	2.634e+06	0.0
3876	reac per cdc 161 - nodo 1458	3066.12	-1.095e+04	-2.341e+04	9.402e+06	2.634e+06	0.0
3877	reac per cdc 162 - nodo 1458	-3066.12	1.095e+04	-2.341e+04	-9.402e+06	-2.634e+06	0.0
3878	reac per cdc 163 - nodo 1458	-3066.12	-1.095e+04	-2.341e+04	9.402e+06	-2.634e+06	0.0
3879	reac per cdc 164 - nodo 1458	3066.12	1.095e+04	-2.341e+04	-9.402e+06	2.634e+06	0.0
3880	reac per cdc 165 - nodo 1458	3066.12	-1.095e+04	-2.341e+04	9.402e+06	2.634e+06	0.0
3881	reac per cdc 166 - nodo 1458	-3066.12	1.095e+04	-2.341e+04	-9.402e+06	-2.634e+06	0.0
3882	reac per cdc 167 - nodo 1458	-3066.12	-1.095e+04	-2.341e+04	9.402e+06	-2.634e+06	0.0
3883	reac per cdc 168 - nodo 1458	3066.12	1.027e+04	-2.341e+04	-8.822e+06	2.634e+06	0.0
3884	reac per cdc 169 - nodo 1458	3066.12	-1.027e+04	-2.341e+04	8.822e+06	2.634e+06	0.0
3885	reac per cdc 170 - nodo 1458	-3066.12	1.027e+04	-2.341e+04	-8.822e+06	-2.634e+06	0.0
3886	reac per cdc 171 - nodo 1458	-3066.12	-1.027e+04	-2.341e+04	8.822e+06	-2.634e+06	0.0
3887	reac per cdc 172 - nodo 1458	3066.12	1.027e+04	-2.341e+04	-8.822e+06	2.634e+06	0.0
3888	reac per cdc 173 - nodo 1458	3066.12	-1.027e+04	-2.341e+04	8.822e+06	2.634e+06	0.0
3889	reac per cdc 174 - nodo 1458	-3066.12	1.027e+04	-2.341e+04	-8.822e+06	-2.634e+06	0.0
3890	reac per cdc 175 - nodo 1458	-3066.12	-1.027e+04	-2.341e+04	8.822e+06	-2.634e+06	0.0
3891	reac per cdc 176 - nodo 1458	6268.88	2014.34	-2.341e+04	-1.730e+06	5.385e+06	0.0
3892	reac per cdc 177 - nodo 1458	6268.88	-2014.34	-2.341e+04	1.730e+06	5.385e+06	0.0
3893	reac per cdc 178 - nodo 1458	-6268.88	2014.34	-2.341e+04	-1.730e+06	-5.385e+06	0.0
3894	reac per cdc 179 - nodo 1458	-6268.88	-2014.34	-2.341e+04	1.730e+06	-5.385e+06	0.0
3895	reac per cdc 180 - nodo 1458	6268.88	1890.09	-2.341e+04	-1.624e+06	5.385e+06	0.0
3896	reac per cdc 181 - nodo 1458	6268.88	-1890.09	-2.341e+04	1.624e+06	5.385e+06	0.0
3897	reac per cdc 182 - nodo 1458	-6268.88	1890.09	-2.341e+04	-1.624e+06	-5.385e+06	0.0
3898	reac per cdc 183 - nodo 1458	-6268.88	-1890.09	-2.341e+04	1.624e+06	-5.385e+06	0.0
3899	reac per cdc 184 - nodo 1458	6268.88	2014.34	-2.341e+04	-1.730e+06	5.385e+06	0.0
3900	reac per cdc 185 - nodo 1458	6268.88	-2014.34	-2.341e+04	1.730e+06	5.385e+06	0.0
3901	reac per cdc 186 - nodo 1458	-6268.88	2014.34	-2.341e+04	-1.730e+06	-5.385e+06	0.0
3902	reac per cdc 187 - nodo 1458	-6268.88	-2014.34	-2.341e+04	1.730e+06	-5.385e+06	0.0
3903	reac per cdc 188 - nodo 1458	6268.88	1890.09	-2.341e+04	-1.624e+06	5.385e+06	0.0
3904	reac per cdc 189 - nodo 1458	6268.88	-1890.09	-2.341e+04	1.624e+06	5.385e+06	0.0
3905	reac per cdc 190 - nodo 1458	-6268.88	1890.09	-2.341e+04	-1.624e+06	-5.385e+06	0.0
3906	reac per cdc 191 - nodo 1458	-6268.88	-1890.09	-2.341e+04	1.624e+06	-5.385e+06	0.0
3907	reac per cdc 192 - nodo 1458	1880.66	6714.45	-2.341e+04	-5.768e+06	1.615e+06	0.0
3908	reac per cdc 193 - nodo 1458	1880.66	-6714.45	-2.341e+04	5.768e+06	1.615e+06	0.0
3909	reac per cdc 194 - nodo 1458	-1880.66	6714.45	-2.341e+04	-5.768e+06	-1.615e+06	0.0
3910	reac per cdc 195 - nodo 1458	-1880.66	-6714.45	-2.341e+04	5.768e+06	-1.615e+06	0.0
3911	reac per cdc 196 - nodo 1458	1880.66	6714.45	-2.341e+04	-5.768e+06	1.615e+06	0.0
3912	reac per cdc 197 - nodo 1458	1880.66	-6714.45	-2.341e+04	5.768e+06	1.615e+06	0.0
3913	reac per cdc 198 - nodo 1458	-1880.66	6714.45	-2.341e+04	-5.768e+06	-1.615e+06	0.0
3914	reac per cdc 199 - nodo 1458	-1880.66	-6714.45	-2.341e+04	5.768e+06	-1.615e+06	0.0
3915	reac per cdc 200 - nodo 1458	1880.66	6300.30	-2.341e+04	-5.412e+06	1.615e+06	0.0
3916	reac per cdc 201 - nodo 1458	1880.66	-6300.30	-2.341e+04	5.412e+06	1.615e+06	0.0
3917	reac per cdc 202 - nodo 1458	-1880.66	6300.30	-2.341e+04	-5.412e+06	-1.615e+06	0.0
3918	reac per cdc 203 - nodo 1458	-1880.66	-6300.30	-2.341e+04	5.412e+06	-1.615e+06	0.0
3919	reac per cdc 204 - nodo 1458	1880.66	6300.30	-2.341e+04	-5.412e+06	1.615e+06	0.0
3920	reac per cdc 205 - nodo 1458	1880.66	-6300.30	-2.341e+04	5.412e+06	1.615e+06	0.0
3921	reac per cdc 206 - nodo 1458	-1880.66	6300.30	-2.341e+04	-5.412e+06	-1.615e+06	0.0
3922	reac per cdc 207 - nodo 1458	-1880.66	-6300.30	-2.341e+04	5.412e+06	-1.615e+06	0.0
3923	reac per cdc 208 - nodo 1458	4882.87	1568.01	-2.341e+04	-1.347e+06	4.194e+06	0.0
3924	reac per cdc 209 - nodo 1458	4882.87	-1568.01	-2.341e+04	1.347e+06	4.194e+06	0.0
3925	reac per cdc 210 - nodo 1458	-4882.87	1568.01	-2.341e+04	-1.347e+06	-4.194e+06	0.0
3926	reac per cdc 211 - nodo 1458	-4882.87	-1568.01	-2.341e+04	1.347e+06	-4.194e+06	0.0
3927	reac per cdc 212 - nodo 1458	4882.87	1471.77	-2.341e+04	-1.264e+06	4.194e+06	0.0
3928	reac per cdc 213 - nodo 1458	4882.87	-1471.77	-2.341e+04	1.264e+06	4.194e+06	0.0
3929	reac per cdc 214 - nodo 1458	-4882.87	1471.77	-2.341e+04	-1.264e+06	-4.194e+06	0.0
3930	reac per cdc 215 - nodo 1458	-4882.87	-1471.77	-2.341e+04	1.264e+06	-4.194e+06	0.0
3931	reac per cdc 216 - nodo 1458	4882.87	1568.01	-2.341e+04	-1.347e+06	4.194e+06	0.0
3932	reac per cdc 217 - nodo 1458	4882.87	-1568.01	-2.341e+04	1.347e+06	4.194e+06	0.0
3933	reac per cdc 218 - nodo 1458	-4882.87	1568.01	-2.341e+04	-1.347e+06	-4.194e+06	0.0
3934	reac per cdc 219 - nodo 1458	-4882.87	-1568.01	-2.341e+04	1.347e+06	-4.194e+06	0.0
3935	reac per cdc 220 - nodo 1458	4882.87	1471.77	-2.341e+04	-1.264e+06	4.194e+06	0.0
3936	reac per cdc 221 - nodo 1458	4882.87	-1471.77	-2.341e+04	1.264e+06	4.194e+06	0.0
3937	reac per cdc 222 - nodo 1458	-4882.87	1471.77	-2.341e+04	-1.264e+06	-4.194e+06	0.0
3938	reac per cdc 223 - nodo 1458	-4882.87	-1471.77	-2.341e+04	1.264e+06	-4.194e+06	0.0
3939	reac per cdc 224 - nodo 1458	1464.86	5226.70	-2.341e+04	-4.490e+06	1.258e+06	0.0
3940	reac per cdc 225 - nodo 1458	1464.86	-5226.70	-2.341e+04	4.490e+06	1.258e+06	0.0
3941	reac per cdc 226 - nodo 1458	-1464.86	5226.70	-2.341e+04	-4.490e+06	-1.258e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
3942	reac per cdc 227 - nodo 1458	-1464.86	-5226.70	-2.341e+04	4.490e+06	-1.258e+06	0.0
3943	reac per cdc 228 - nodo 1458	1464.86	5226.70	-2.341e+04	-4.490e+06	1.258e+06	0.0
3944	reac per cdc 229 - nodo 1458	1464.86	-5226.70	-2.341e+04	4.490e+06	1.258e+06	0.0
3945	reac per cdc 230 - nodo 1458	-1464.86	5226.70	-2.341e+04	-4.490e+06	-1.258e+06	0.0
3946	reac per cdc 231 - nodo 1458	-1464.86	-5226.70	-2.341e+04	4.490e+06	-1.258e+06	0.0
3947	reac per cdc 232 - nodo 1458	1464.86	4905.91	-2.341e+04	-4.214e+06	1.258e+06	0.0
3948	reac per cdc 233 - nodo 1458	1464.86	-4905.91	-2.341e+04	4.214e+06	1.258e+06	0.0
3949	reac per cdc 234 - nodo 1458	-1464.86	4905.91	-2.341e+04	-4.214e+06	-1.258e+06	0.0
3950	reac per cdc 235 - nodo 1458	-1464.86	-4905.91	-2.341e+04	4.214e+06	-1.258e+06	0.0
3951	reac per cdc 236 - nodo 1458	1464.86	4905.91	-2.341e+04	-4.214e+06	1.258e+06	0.0
3952	reac per cdc 237 - nodo 1458	1464.86	-4905.91	-2.341e+04	4.214e+06	1.258e+06	0.0
3953	reac per cdc 238 - nodo 1458	-1464.86	4905.91	-2.341e+04	-4.214e+06	-1.258e+06	0.0
3954	reac per cdc 239 - nodo 1458	-1464.86	-4905.91	-2.341e+04	4.214e+06	-1.258e+06	0.0
3955	reac per cdc 240 - nodo 1458	0.0	0.0	-2.721e+04	0.0	0.0	0.0
3956	reac per cdc 241 - nodo 1458	527.92	4095.00	-2.341e+04	-3.518e+06	4.535e+05	0.0
3957	reac per cdc 242 - nodo 1458	-528.71	4095.00	-2.341e+04	-3.518e+06	-4.542e+05	0.0
3958	reac per cdc 243 - nodo 1458	1.69	1820.00	-2.341e+04	-1.563e+06	1448.36	0.0
3959	reac per cdc 244 - nodo 1458	1.69	-3640.00	-2.341e+04	3.127e+06	1448.36	0.0
3960	reac per cdc 245 - nodo 1458	316.75	2457.00	-2.721e+04	-2.111e+06	2.721e+05	0.0
3961	reac per cdc 246 - nodo 1458	-317.22	2457.00	-2.721e+04	-2.111e+06	-2.725e+05	0.0
3962	reac per cdc 247 - nodo 1458	1.01	1092.00	-2.721e+04	-9.380e+05	869.02	0.0
3963	reac per cdc 248 - nodo 1458	1.01	-2184.00	-2.721e+04	1.876e+06	869.02	0.0
3964	reac per cdc 249 - nodo 1458	527.92	4095.00	-2.531e+04	-3.518e+06	4.535e+05	0.0
3965	reac per cdc 250 - nodo 1458	-528.71	4095.00	-2.531e+04	-3.518e+06	-4.542e+05	0.0
3966	reac per cdc 251 - nodo 1458	1.69	1820.00	-2.531e+04	-1.563e+06	1448.36	0.0
3967	reac per cdc 252 - nodo 1458	1.69	-3640.00	-2.531e+04	3.127e+06	1448.36	0.0
3968	reac per cdc 253 - nodo 1458	0.0	0.0	-2.417e+04	0.0	0.0	0.0
3969	reac per cdc 254 - nodo 1458	105.58	819.00	-2.341e+04	-7.035e+05	9.070e+04	0.0
3970	reac per cdc 255 - nodo 1458	-105.74	819.00	-2.341e+04	-7.035e+05	-9.083e+04	0.0
3971	reac per cdc 256 - nodo 1458	0.34	364.00	-2.341e+04	-3.127e+05	289.67	0.0
3972	reac per cdc 257 - nodo 1458	0.34	-728.00	-2.341e+04	6.254e+05	289.67	0.0
3973	reac per cdc 258 - nodo 1458	0.0	0.0	-2.341e+04	0.0	0.0	0.0
3974	reac per cdc 131 - nodo 1465	0.0	2.64	-2.903e+04	-2271.74	0.0	0.0
3975	reac per cdc 132 - nodo 1465	792.60	13.14	-2.597e+04	-1.129e+04	6.808e+05	0.0
3976	reac per cdc 133 - nodo 1465	-796.12	13.14	-2.597e+04	-1.129e+04	-6.839e+05	0.0
3977	reac per cdc 134 - nodo 1465	7.59	970.91	-2.615e+04	-8.340e+05	6522.81	0.0
3978	reac per cdc 135 - nodo 1465	7.59	-972.90	-2.630e+04	8.357e+05	6522.81	0.0
3979	reac per cdc 136 - nodo 1465	475.56	9.58	-2.890e+04	-8233.29	4.085e+05	0.0
3980	reac per cdc 137 - nodo 1465	-477.67	9.58	-2.890e+04	-8233.29	-4.103e+05	0.0
3981	reac per cdc 138 - nodo 1465	4.56	584.24	-2.901e+04	-5.019e+05	3913.68	0.0
3982	reac per cdc 139 - nodo 1465	4.56	-582.04	-2.911e+04	5.000e+05	3913.68	0.0
3983	reac per cdc 140 - nodo 1465	792.60	13.68	-2.739e+04	-1.175e+04	6.808e+05	0.0
3984	reac per cdc 141 - nodo 1465	-796.12	13.68	-2.739e+04	-1.175e+04	-6.839e+05	0.0
3985	reac per cdc 142 - nodo 1465	7.59	971.44	-2.758e+04	-8.345e+05	6522.81	0.0
3986	reac per cdc 143 - nodo 1465	7.59	-972.36	-2.773e+04	8.353e+05	6522.81	0.0
3987	reac per cdc 144 - nodo 1465	1.022e+04	4244.21	-2.025e+04	-3.646e+06	8.778e+06	0.0
3988	reac per cdc 145 - nodo 1465	1.022e+04	-4241.78	-2.003e+04	3.644e+06	8.778e+06	0.0
3989	reac per cdc 146 - nodo 1465	-1.022e+04	4244.21	-2.025e+04	-3.646e+06	-8.778e+06	0.0
3990	reac per cdc 147 - nodo 1465	-1.022e+04	-4241.79	-2.003e+04	3.644e+06	-8.778e+06	0.0
3991	reac per cdc 148 - nodo 1465	1.022e+04	3741.13	-2.026e+04	-3.214e+06	8.778e+06	0.0
3992	reac per cdc 149 - nodo 1465	1.022e+04	-3738.71	-2.002e+04	3.212e+06	8.778e+06	0.0
3993	reac per cdc 150 - nodo 1465	-1.022e+04	3741.13	-2.025e+04	-3.214e+06	-8.778e+06	0.0
3994	reac per cdc 151 - nodo 1465	-1.022e+04	-3738.71	-2.002e+04	3.212e+06	-8.778e+06	0.0
3995	reac per cdc 152 - nodo 1465	1.022e+04	4244.21	-2.025e+04	-3.646e+06	8.778e+06	0.0
3996	reac per cdc 153 - nodo 1465	1.022e+04	-4241.78	-2.003e+04	3.644e+06	8.778e+06	0.0
3997	reac per cdc 154 - nodo 1465	-1.022e+04	4244.21	-2.025e+04	-3.646e+06	-8.778e+06	0.0
3998	reac per cdc 155 - nodo 1465	-1.022e+04	-4241.79	-2.003e+04	3.644e+06	-8.778e+06	0.0
3999	reac per cdc 156 - nodo 1465	1.022e+04	3741.13	-2.026e+04	-3.214e+06	8.778e+06	0.0
4000	reac per cdc 157 - nodo 1465	1.022e+04	-3738.71	-2.002e+04	3.212e+06	8.778e+06	0.0
4001	reac per cdc 158 - nodo 1465	-1.022e+04	3741.13	-2.025e+04	-3.214e+06	-8.778e+06	0.0
4002	reac per cdc 159 - nodo 1465	-1.022e+04	-3738.71	-2.002e+04	3.212e+06	-8.778e+06	0.0
4003	reac per cdc 160 - nodo 1465	3065.55	1.414e+04	-2.050e+04	-1.215e+07	2.633e+06	0.0
4004	reac per cdc 161 - nodo 1465	3065.55	-1.414e+04	-1.978e+04	1.215e+07	2.633e+06	0.0
4005	reac per cdc 162 - nodo 1465	-3065.55	1.414e+04	-2.050e+04	-1.215e+07	-2.633e+06	0.0
4006	reac per cdc 163 - nodo 1465	-3065.55	-1.414e+04	-1.978e+04	1.215e+07	-2.633e+06	0.0
4007	reac per cdc 164 - nodo 1465	3065.55	1.414e+04	-2.050e+04	-1.215e+07	2.633e+06	0.0
4008	reac per cdc 165 - nodo 1465	3065.55	-1.414e+04	-1.978e+04	1.215e+07	2.633e+06	0.0
4009	reac per cdc 166 - nodo 1465	-3065.55	1.414e+04	-2.050e+04	-1.215e+07	-2.633e+06	0.0
4010	reac per cdc 167 - nodo 1465	-3065.55	-1.414e+04	-1.978e+04	1.215e+07	-2.633e+06	0.0
4011	reac per cdc 168 - nodo 1465	3065.55	1.247e+04	-2.052e+04	-1.071e+07	2.633e+06	0.0
4012	reac per cdc 169 - nodo 1465	3065.55	-1.247e+04	-1.975e+04	1.071e+07	2.633e+06	0.0
4013	reac per cdc 170 - nodo 1465	-3065.55	1.247e+04	-2.052e+04	-1.071e+07	-2.633e+06	0.0
4014	reac per cdc 171 - nodo 1465	-3065.55	-1.247e+04	-1.975e+04	1.071e+07	-2.633e+06	0.0
4015	reac per cdc 172 - nodo 1465	3065.55	1.247e+04	-2.052e+04	-1.071e+07	2.633e+06	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4016	reac per cdc 173 - nodo 1465	3065.55	-1.247e+04	-1.975e+04	1.071e+07	2.633e+06	0.0
4017	reac per cdc 174 - nodo 1465	-3065.55	1.247e+04	-2.052e+04	-1.071e+07	-2.633e+06	0.0
4018	reac per cdc 175 - nodo 1465	-3065.55	-1.247e+04	-1.975e+04	1.071e+07	-2.633e+06	0.0
4019	reac per cdc 176 - nodo 1465	6267.69	2603.81	-2.021e+04	-2.237e+06	5.384e+06	0.0
4020	reac per cdc 177 - nodo 1465	6267.69	-2601.38	-2.007e+04	2.235e+06	5.384e+06	0.0
4021	reac per cdc 178 - nodo 1465	-6267.69	2603.81	-2.021e+04	-2.237e+06	-5.384e+06	0.0
4022	reac per cdc 179 - nodo 1465	-6267.69	-2601.38	-2.007e+04	2.235e+06	-5.384e+06	0.0
4023	reac per cdc 180 - nodo 1465	6267.69	2294.30	-2.021e+04	-1.971e+06	5.384e+06	0.0
4024	reac per cdc 181 - nodo 1465	6267.69	-2291.87	-2.007e+04	1.969e+06	5.384e+06	0.0
4025	reac per cdc 182 - nodo 1465	-6267.69	2294.30	-2.021e+04	-1.971e+06	-5.384e+06	0.0
4026	reac per cdc 183 - nodo 1465	-6267.69	-2291.87	-2.007e+04	1.969e+06	-5.384e+06	0.0
4027	reac per cdc 184 - nodo 1465	6267.69	2603.81	-2.021e+04	-2.237e+06	5.384e+06	0.0
4028	reac per cdc 185 - nodo 1465	6267.69	-2601.38	-2.007e+04	2.235e+06	5.384e+06	0.0
4029	reac per cdc 186 - nodo 1465	-6267.69	2603.81	-2.021e+04	-2.237e+06	-5.384e+06	0.0
4030	reac per cdc 187 - nodo 1465	-6267.69	-2601.38	-2.007e+04	2.235e+06	-5.384e+06	0.0
4031	reac per cdc 188 - nodo 1465	6267.69	2294.30	-2.021e+04	-1.971e+06	5.384e+06	0.0
4032	reac per cdc 189 - nodo 1465	6267.69	-2291.87	-2.007e+04	1.969e+06	5.384e+06	0.0
4033	reac per cdc 190 - nodo 1465	-6267.69	2294.30	-2.021e+04	-1.971e+06	-5.384e+06	0.0
4034	reac per cdc 191 - nodo 1465	-6267.69	-2291.87	-2.007e+04	1.969e+06	-5.384e+06	0.0
4035	reac per cdc 192 - nodo 1465	1880.31	8676.52	-2.036e+04	-7.453e+06	1.615e+06	0.0
4036	reac per cdc 193 - nodo 1465	1880.31	-8674.10	-1.992e+04	7.451e+06	1.615e+06	0.0
4037	reac per cdc 194 - nodo 1465	-1880.31	8676.52	-2.036e+04	-7.453e+06	-1.615e+06	0.0
4038	reac per cdc 195 - nodo 1465	-1880.31	-8674.10	-1.992e+04	7.451e+06	-1.615e+06	0.0
4039	reac per cdc 196 - nodo 1465	1880.31	8676.52	-2.036e+04	-7.453e+06	1.615e+06	0.0
4040	reac per cdc 197 - nodo 1465	1880.31	-8674.10	-1.992e+04	7.451e+06	1.615e+06	0.0
4041	reac per cdc 198 - nodo 1465	-1880.31	8676.52	-2.036e+04	-7.453e+06	-1.615e+06	0.0
4042	reac per cdc 199 - nodo 1465	-1880.31	-8674.10	-1.992e+04	7.451e+06	-1.615e+06	0.0
4043	reac per cdc 200 - nodo 1465	1880.31	7644.82	-2.038e+04	-6.567e+06	1.615e+06	0.0
4044	reac per cdc 201 - nodo 1465	1880.31	-7642.40	-1.990e+04	6.565e+06	1.615e+06	0.0
4045	reac per cdc 202 - nodo 1465	-1880.31	7644.82	-2.038e+04	-6.567e+06	-1.615e+06	0.0
4046	reac per cdc 203 - nodo 1465	-1880.31	-7642.40	-1.990e+04	6.565e+06	-1.615e+06	0.0
4047	reac per cdc 204 - nodo 1465	1880.31	7644.82	-2.038e+04	-6.567e+06	1.615e+06	0.0
4048	reac per cdc 205 - nodo 1465	1880.31	-7642.40	-1.990e+04	6.565e+06	1.615e+06	0.0
4049	reac per cdc 206 - nodo 1465	-1880.31	7644.82	-2.038e+04	-6.567e+06	-1.615e+06	0.0
4050	reac per cdc 207 - nodo 1465	-1880.31	-7642.40	-1.990e+04	6.565e+06	-1.615e+06	0.0
4051	reac per cdc 208 - nodo 1465	4881.95	2029.71	-2.019e+04	-1.744e+06	4.194e+06	0.0
4052	reac per cdc 209 - nodo 1465	4881.95	-2027.29	-2.009e+04	1.741e+06	4.194e+06	0.0
4053	reac per cdc 210 - nodo 1465	-4881.95	2029.71	-2.019e+04	-1.744e+06	-4.194e+06	0.0
4054	reac per cdc 211 - nodo 1465	-4881.95	-2027.29	-2.009e+04	1.741e+06	-4.194e+06	0.0
4055	reac per cdc 212 - nodo 1465	4881.95	1789.46	-2.019e+04	-1.537e+06	4.194e+06	0.0
4056	reac per cdc 213 - nodo 1465	4881.95	-1787.04	-2.008e+04	1.535e+06	4.194e+06	0.0
4057	reac per cdc 214 - nodo 1465	-4881.95	1789.46	-2.019e+04	-1.537e+06	-4.194e+06	0.0
4058	reac per cdc 215 - nodo 1465	-4881.95	-1787.04	-2.008e+04	1.535e+06	-4.194e+06	0.0
4059	reac per cdc 216 - nodo 1465	4881.95	2029.71	-2.019e+04	-1.744e+06	4.194e+06	0.0
4060	reac per cdc 217 - nodo 1465	4881.95	-2027.29	-2.009e+04	1.741e+06	4.194e+06	0.0
4061	reac per cdc 218 - nodo 1465	-4881.95	2029.71	-2.019e+04	-1.744e+06	-4.194e+06	0.0
4062	reac per cdc 219 - nodo 1465	-4881.95	-2027.29	-2.009e+04	1.741e+06	-4.194e+06	0.0
4063	reac per cdc 220 - nodo 1465	4881.95	1789.46	-2.019e+04	-1.537e+06	4.194e+06	0.0
4064	reac per cdc 221 - nodo 1465	4881.95	-1787.04	-2.008e+04	1.535e+06	4.194e+06	0.0
4065	reac per cdc 222 - nodo 1465	-4881.95	1789.46	-2.019e+04	-1.537e+06	-4.194e+06	0.0
4066	reac per cdc 223 - nodo 1465	-4881.95	-1787.04	-2.008e+04	1.535e+06	-4.194e+06	0.0
4067	reac per cdc 224 - nodo 1465	1464.59	6762.88	-2.031e+04	-5.809e+06	1.258e+06	0.0
4068	reac per cdc 225 - nodo 1465	1464.59	-6760.45	-1.997e+04	5.807e+06	1.258e+06	0.0
4069	reac per cdc 226 - nodo 1465	-1464.59	6762.88	-2.031e+04	-5.809e+06	-1.258e+06	0.0
4070	reac per cdc 227 - nodo 1465	-1464.59	-6760.45	-1.997e+04	5.807e+06	-1.258e+06	0.0
4071	reac per cdc 228 - nodo 1465	1464.59	6762.88	-2.031e+04	-5.809e+06	1.258e+06	0.0
4072	reac per cdc 229 - nodo 1465	1464.59	-6760.45	-1.997e+04	5.807e+06	1.258e+06	0.0
4073	reac per cdc 230 - nodo 1465	-1464.59	6762.88	-2.031e+04	-5.809e+06	-1.258e+06	0.0
4074	reac per cdc 231 - nodo 1465	-1464.59	-6760.45	-1.997e+04	5.807e+06	-1.258e+06	0.0
4075	reac per cdc 232 - nodo 1465	1464.59	5962.04	-2.032e+04	-5.121e+06	1.258e+06	0.0
4076	reac per cdc 233 - nodo 1465	1464.59	-5959.61	-1.996e+04	5.119e+06	1.258e+06	0.0
4077	reac per cdc 234 - nodo 1465	-1464.59	5962.04	-2.032e+04	-5.121e+06	-1.258e+06	0.0
4078	reac per cdc 235 - nodo 1465	-1464.59	-5959.61	-1.996e+04	5.119e+06	-1.258e+06	0.0
4079	reac per cdc 236 - nodo 1465	1464.59	5962.04	-2.032e+04	-5.121e+06	1.258e+06	0.0
4080	reac per cdc 237 - nodo 1465	1464.59	-5959.61	-1.996e+04	5.119e+06	1.258e+06	0.0
4081	reac per cdc 238 - nodo 1465	-1464.59	5962.04	-2.032e+04	-5.121e+06	-1.258e+06	0.0
4082	reac per cdc 239 - nodo 1465	-1464.59	-5959.61	-1.996e+04	5.119e+06	-1.258e+06	0.0
4083	reac per cdc 240 - nodo 1465	0.0	1.92	-2.204e+04	-1653.43	0.0	0.0
4084	reac per cdc 241 - nodo 1465	528.40	8.92	-2.000e+04	-7665.96	4.539e+05	0.0
4085	reac per cdc 242 - nodo 1465	-530.75	8.92	-2.000e+04	-7665.96	-4.559e+05	0.0
4086	reac per cdc 243 - nodo 1465	5.06	647.43	-2.012e+04	-5.561e+05	4348.54	0.0
4087	reac per cdc 244 - nodo 1465	5.06	-648.44	-2.022e+04	5.570e+05	4348.54	0.0
4088	reac per cdc 245 - nodo 1465	317.04	6.55	-2.195e+04	-5627.79	2.723e+05	0.0
4089	reac per cdc 246 - nodo 1465	-318.45	6.55	-2.195e+04	-5627.79	-2.735e+05	0.0



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4090	reac per cdc 247 - nodo 1465	3.04	389.66	-2.203e+04	-3.347e+05	2609.12	0.0
4091	reac per cdc 248 - nodo 1465	3.04	-387.86	-2.209e+04	3.332e+05	2609.12	0.0
4092	reac per cdc 249 - nodo 1465	528.40	9.28	-2.095e+04	-7971.67	4.539e+05	0.0
4093	reac per cdc 250 - nodo 1465	-530.75	9.28	-2.095e+04	-7971.67	-4.559e+05	0.0
4094	reac per cdc 251 - nodo 1465	5.06	647.79	-2.107e+04	-5.565e+05	4348.54	0.0
4095	reac per cdc 252 - nodo 1465	5.06	-648.08	-2.117e+04	5.567e+05	4348.54	0.0
4096	reac per cdc 253 - nodo 1465	0.0	1.36	-2.052e+04	-1164.30	0.0	0.0
4097	reac per cdc 254 - nodo 1465	105.68	2.76	-2.011e+04	-2366.81	9.078e+04	0.0
4098	reac per cdc 255 - nodo 1465	-106.15	2.76	-2.011e+04	-2366.81	-9.118e+04	0.0
4099	reac per cdc 256 - nodo 1465	1.01	130.46	-2.014e+04	-1.121e+05	869.71	0.0
4100	reac per cdc 257 - nodo 1465	1.01	-128.72	-2.016e+04	1.106e+05	869.71	0.0
4101	reac per cdc 258 - nodo 1465	0.0	1.21	-2.014e+04	-1042.02	0.0	0.0
4102	reac per cdc 259 - nodo 2	-3593.12	-1114.50	-1.152e+04	2.228e+05	-4.728e+05	3700.33
4103	reac per cdc 260 - nodo 2	-864.29	-481.25	-5459.68	9.579e+04	-2.336e+04	-1464.34
4104	reac per cdc 261 - nodo 2	-2476.96	-497.00	-5953.91	9.942e+04	-4.173e+05	-503.45
4105	reac per cdc 262 - nodo 2	-1511.59	-113.13	-5327.26	7959.84	-1.861e+05	5900.76
4106	reac per cdc 263 - nodo 2	-1832.94	-856.87	-6080.66	1.853e+05	-2.555e+05	-1016.54
4107	reac per cdc 264 - nodo 2	-3109.34	-1111.57	-1.137e+04	2.222e+05	-3.546e+05	1825.81
4108	reac per cdc 265 - nodo 2	-4076.95	-1121.02	-1.167e+04	2.243e+05	-5.909e+05	2402.34
4109	reac per cdc 266 - nodo 2	-3497.72	-890.70	-1.129e+04	1.695e+05	-4.522e+05	6244.87
4110	reac per cdc 267 - nodo 2	-3690.53	-1336.94	-1.174e+04	2.759e+05	-4.938e+05	2094.49
4111	reac per cdc 268 - nodo 2	-1825.56	-795.44	-8365.84	1.588e+05	-1.496e+05	-444.11
4112	reac per cdc 269 - nodo 2	-3438.23	-811.19	-8860.08	1.624e+05	-5.435e+05	516.79
4113	reac per cdc 270 - nodo 2	-2472.86	-427.32	-8233.42	7.093e+04	-3.123e+05	6921.00
4114	reac per cdc 271 - nodo 2	-2794.20	-1171.06	-8986.82	2.482e+05	-3.817e+05	3.70
4115	reac per cdc 272 - nodo 2	1513.36	-572.89	-3304.66	1.224e+05	5.188e+05	1.276e+04
4116	reac per cdc 273 - nodo 2	1099.06	-1751.65	-4417.66	4.036e+05	4.197e+05	7362.91
4117	reac per cdc 274 - nodo 2	-3617.97	1020.55	-4203.04	-2.579e+05	-7.520e+05	-4866.64
4118	reac per cdc 275 - nodo 2	-4032.26	-158.21	-5316.04	2.329e+04	-8.511e+05	-1.027e+04
4119	reac per cdc 276 - nodo 2	1053.64	-489.02	-3294.49	1.024e+05	4.029e+05	6037.36
4120	reac per cdc 277 - nodo 2	1558.78	-1835.52	-4427.83	4.236e+05	5.356e+05	1.409e+04
4121	reac per cdc 278 - nodo 2	-4077.69	1104.42	-4192.87	-2.779e+05	-8.679e+05	-1.159e+04
4122	reac per cdc 279 - nodo 2	-3572.55	-242.08	-5326.21	4.328e+04	-7.352e+05	-3541.08
4123	reac per cdc 280 - nodo 2	734.86	853.44	-2882.73	-2.178e+05	3.215e+05	-2901.94
4124	reac per cdc 281 - nodo 2	320.57	-325.32	-3995.73	6.337e+04	2.224e+05	-8301.87
4125	reac per cdc 282 - nodo 2	-2839.47	-405.78	-4624.98	8.231e+04	-5.547e+05	1.080e+04
4126	reac per cdc 283 - nodo 2	-3253.77	-1584.54	-5737.98	3.635e+05	-6.538e+05	5398.22
4127	reac per cdc 284 - nodo 2	275.14	937.31	-2872.56	-2.378e+05	2.056e+05	-9627.42
4128	reac per cdc 285 - nodo 2	780.28	-409.19	-4005.90	8.336e+04	3.383e+05	-1576.39
4129	reac per cdc 286 - nodo 2	-3299.19	-321.91	-4614.81	6.233e+04	-6.706e+05	4072.66
4130	reac per cdc 287 - nodo 2	-2794.05	-1668.41	-5748.14	3.835e+05	-5.379e+05	1.212e+04
4131	reac per cdc 288 - nodo 2	200.73	1360.03	-2320.60	-3.388e+05	1.896e+05	1.289e+04
4132	reac per cdc 289 - nodo 2	-1180.24	-2569.16	-6030.59	5.985e+05	-1.407e+05	-5107.31
4133	reac per cdc 290 - nodo 2	-1338.66	1838.06	-2590.11	-4.529e+05	-1.916e+05	7603.59
4134	reac per cdc 291 - nodo 2	-2719.64	-2091.13	-6300.11	4.845e+05	-5.219e+05	-1.040e+04
4135	reac per cdc 292 - nodo 2	-32.82	1787.93	-2194.02	-4.408e+05	1.304e+05	8193.00
4136	reac per cdc 293 - nodo 2	-1413.79	-2141.26	-5904.01	4.965e+05	-1.999e+05	-9806.75
4137	reac per cdc 294 - nodo 2	-1105.12	1410.16	-2716.69	-3.508e+05	-1.324e+05	1.230e+04
4138	reac per cdc 295 - nodo 2	-2486.09	-2519.03	-6426.69	5.865e+05	-4.627e+05	-5696.72
4139	reac per cdc 296 - nodo 2	-1331.65	1639.61	-2286.70	-4.054e+05	-1.967e+05	-9525.83
4140	reac per cdc 297 - nodo 2	352.14	-2848.74	-6064.49	6.652e+05	2.456e+05	1.731e+04
4141	reac per cdc 298 - nodo 2	-2871.05	2117.64	-2556.21	-5.195e+05	-5.779e+05	-1.481e+04
4142	reac per cdc 299 - nodo 2	-1187.26	-2370.71	-6334.00	5.511e+05	-1.356e+05	1.202e+04
4143	reac per cdc 300 - nodo 2	-1565.20	2067.51	-2160.12	-5.075e+05	-2.559e+05	-1.423e+04
4144	reac per cdc 301 - nodo 2	118.59	-2420.84	-5937.91	5.631e+05	1.864e+05	1.261e+04
4145	reac per cdc 302 - nodo 2	-2637.50	1689.74	-2682.79	-4.174e+05	-5.187e+05	-1.012e+04
4146	reac per cdc 303 - nodo 2	-953.71	-2798.61	-6460.58	6.531e+05	-7.645e+04	1.672e+04
4147	reac per cdc 304 - nodo 2	559.25	-501.54	-3650.68	1.053e+05	2.831e+05	8800.56
4148	reac per cdc 305 - nodo 2	287.45	-1274.68	-4380.74	2.898e+05	2.181e+05	5258.78
4149	reac per cdc 306 - nodo 2	-2806.36	543.58	-4239.96	-1.441e+05	-5.504e+05	-2762.51
4150	reac per cdc 307 - nodo 2	-3078.16	-229.56	-4970.02	4.034e+04	-6.154e+05	-6304.28
4151	reac per cdc 308 - nodo 2	257.68	-446.53	-3644.01	9.223e+04	2.071e+05	4389.35
4152	reac per cdc 309 - nodo 2	589.02	-1329.69	-4387.41	3.029e+05	2.941e+05	9669.99
4153	reac per cdc 310 - nodo 2	-3107.93	598.60	-4233.29	-1.572e+05	-6.264e+05	-7173.71
4154	reac per cdc 311 - nodo 2	-2776.59	-284.57	-4976.69	5.345e+04	-5.394e+05	-1893.08
4155	reac per cdc 312 - nodo 2	48.65	433.98	-3373.95	-1.178e+05	1.537e+05	-1473.88
4156	reac per cdc 313 - nodo 2	-223.16	-339.16	-4104.01	6.663e+04	8.871e+04	-5015.65
4157	reac per cdc 314 - nodo 2	-2295.75	-391.94	-4516.70	7.905e+04	-4.210e+05	7511.93
4158	reac per cdc 315 - nodo 2	-2567.55	-1165.08	-5246.76	2.635e+05	-4.860e+05	3970.15
4159	reac per cdc 316 - nodo 2	-252.93	488.99	-3367.28	-1.309e+05	7.769e+04	-5885.08
4160	reac per cdc 317 - nodo 2	78.42	-394.17	-4110.68	7.974e+04	1.647e+05	-604.45
4161	reac per cdc 318 - nodo 2	-2597.33	-336.92	-4510.03	6.594e+04	-4.970e+05	3100.72
4162	reac per cdc 319 - nodo 2	-2265.98	-1220.09	-5253.43	2.766e+05	-4.100e+05	8381.35
4163	reac per cdc 320 - nodo 2	-301.61	766.25	-3005.19	-1.971e+05	6.722e+04	8885.55



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4164	reac per cdc 321 - nodo 2	-1207.62	-1810.89	-5438.73	4.176e+05	-1.495e+05	-2920.36
4165	reac per cdc 322 - nodo 2	-1311.29	1079.79	-3181.98	-2.720e+05	-1.828e+05	5416.63
4166	reac per cdc 323 - nodo 2	-2217.30	-1497.35	-5615.51	3.428e+05	-3.995e+05	-6389.28
4167	reac per cdc 324 - nodo 2	-454.79	1046.91	-2922.17	-2.641e+05	2.840e+04	5803.22
4168	reac per cdc 325 - nodo 2	-1360.80	-1530.23	-5355.70	3.507e+05	-1.883e+05	-6002.69
4169	reac per cdc 326 - nodo 2	-1158.11	799.13	-3265.00	-2.050e+05	-1.440e+05	8498.96
4170	reac per cdc 327 - nodo 2	-2064.12	-1778.01	-5698.53	4.098e+05	-3.607e+05	-3306.95
4171	reac per cdc 328 - nodo 2	-1306.85	949.62	-2982.96	-2.408e+05	-1.862e+05	-5818.45
4172	reac per cdc 329 - nodo 2	-202.37	-1994.26	-5460.96	4.613e+05	1.039e+05	1.178e+04
4173	reac per cdc 330 - nodo 2	-2316.53	1263.16	-3159.74	-3.157e+05	-4.362e+05	-9287.37
4174	reac per cdc 331 - nodo 2	-1212.06	-1680.72	-5637.74	3.865e+05	-1.461e+05	8314.73
4175	reac per cdc 332 - nodo 2	-1460.03	1230.28	-2899.94	-3.078e+05	-2.250e+05	-8900.78
4176	reac per cdc 333 - nodo 2	-355.56	-1713.60	-5377.94	3.944e+05	6.510e+04	8701.32
4177	reac per cdc 334 - nodo 2	-2163.35	982.51	-3242.76	-2.487e+05	-3.974e+05	-6205.04
4178	reac per cdc 335 - nodo 2	-1058.88	-1961.38	-5720.76	4.535e+05	-1.073e+05	1.140e+04
4179	reac per cdc 336 - nodo 2	201.45	-474.78	-3780.32	9.894e+04	1.947e+05	7314.39
4180	reac per cdc 337 - nodo 2	-17.01	-1095.78	-4366.82	2.471e+05	1.425e+05	4469.57
4181	reac per cdc 338 - nodo 2	-2501.90	364.69	-4253.88	-1.014e+05	-4.748e+05	-1973.30
4182	reac per cdc 339 - nodo 2	-2720.36	-256.32	-4840.38	4.674e+04	-5.270e+05	-4818.11
4183	reac per cdc 340 - nodo 2	-40.88	-430.59	-3774.97	8.841e+04	1.337e+05	3771.22
4184	reac per cdc 341 - nodo 2	225.32	-1139.97	-4372.18	2.576e+05	2.036e+05	8012.74
4185	reac per cdc 342 - nodo 2	-2744.23	408.87	-4248.53	-1.119e+05	-5.359e+05	-5516.46
4186	reac per cdc 343 - nodo 2	-2478.03	-300.51	-4845.74	5.727e+04	-4.660e+05	-1274.94
4187	reac per cdc 344 - nodo 2	-208.65	276.65	-3558.08	-8.029e+04	9.078e+04	-938.24
4188	reac per cdc 345 - nodo 2	-427.11	-344.36	-4144.58	6.785e+04	3.856e+04	-3783.06
4189	reac per cdc 346 - nodo 2	-2091.80	-386.74	-4476.12	7.783e+04	-3.709e+05	6279.33
4190	reac per cdc 347 - nodo 2	-2310.26	-1007.75	-5062.62	2.260e+05	-4.231e+05	3434.51
4191	reac per cdc 348 - nodo 2	-450.98	320.84	-3552.73	-9.082e+04	2.972e+04	-4481.41
4192	reac per cdc 349 - nodo 2	-184.78	-388.54	-4149.94	7.838e+04	9.962e+04	-239.89
4193	reac per cdc 350 - nodo 2	-2334.13	-342.56	-4470.77	6.730e+04	-4.319e+05	2736.16
4194	reac per cdc 351 - nodo 2	-2067.93	-1051.93	-5067.98	2.365e+05	-3.620e+05	6977.68
4195	reac per cdc 352 - nodo 2	-489.85	543.54	-3261.82	-1.440e+05	2.132e+04	7382.65
4196	reac per cdc 353 - nodo 2	-1218.05	-1526.48	-5216.81	3.498e+05	-1.528e+05	-2100.07
4197	reac per cdc 354 - nodo 2	-1300.86	795.38	-3403.89	-2.041e+05	-1.795e+05	4596.35
4198	reac per cdc 355 - nodo 2	-2029.06	-1274.64	-5358.88	2.897e+05	-3.536e+05	-4886.38
4199	reac per cdc 356 - nodo 2	-612.88	768.97	-3195.15	-1.978e+05	-9868.08	4906.86
4200	reac per cdc 357 - nodo 2	-1341.08	-1301.05	-5150.14	2.960e+05	-1.839e+05	-4575.86
4201	reac per cdc 358 - nodo 2	-1177.83	569.95	-3470.56	-1.503e+05	-1.484e+05	7072.14
4202	reac per cdc 359 - nodo 2	-1906.03	-1500.07	-5425.56	3.435e+05	-3.224e+05	-2410.59
4203	reac per cdc 360 - nodo 2	-1297.62	690.83	-3243.97	-1.791e+05	-1.822e+05	-4427.91
4204	reac per cdc 361 - nodo 2	-410.29	-1673.76	-5234.67	3.849e+05	5.078e+04	9710.49
4205	reac per cdc 362 - nodo 2	-2108.62	942.67	-3386.04	-2.392e+05	-3.831e+05	-7214.22
4206	reac per cdc 363 - nodo 2	-1221.29	-1421.92	-5376.73	3.248e+05	-1.501e+05	6924.19
4207	reac per cdc 364 - nodo 2	-1420.64	916.25	-3177.30	-2.329e+05	-2.134e+05	-6903.70
4208	reac per cdc 365 - nodo 2	-533.32	-1448.34	-5167.99	3.311e+05	1.959e+04	7234.70
4209	reac per cdc 366 - nodo 2	-1985.59	717.24	-3452.71	-1.854e+05	-3.519e+05	-4738.43
4210	reac per cdc 367 - nodo 2	-1098.26	-1647.35	-5443.41	3.786e+05	-1.189e+05	9399.97
4211	reac per cdc 368 - nodo 2	-2541.14	-784.47	-8185.24	1.568e+05	-3.344e+05	2608.45
4212	reac per cdc 369 - nodo 2	-721.93	-362.30	-4147.15	7.211e+04	-3.482e+04	-834.67
4213	reac per cdc 370 - nodo 2	-1797.04	-372.80	-4476.65	7.454e+04	-2.975e+05	-194.07
4214	reac per cdc 371 - nodo 2	-1153.46	-116.89	-4058.88	1.356e+04	-1.433e+05	4075.40
4215	reac per cdc 372 - nodo 2	-1367.69	-612.71	-4561.14	1.318e+05	-1.896e+05	-536.13
4216	reac per cdc 373 - nodo 2	-2218.63	-782.52	-8087.32	1.564e+05	-2.556e+05	1358.77
4217	reac per cdc 374 - nodo 2	-2863.70	-788.82	-8285.02	1.578e+05	-4.132e+05	1743.12
4218	reac per cdc 375 - nodo 2	-2477.55	-635.27	-8034.35	1.212e+05	-3.207e+05	4304.81
4219	reac per cdc 376 - nodo 2	-2606.09	-932.77	-8335.71	1.922e+05	-3.485e+05	1537.89
4220	reac per cdc 377 - nodo 2	-1362.77	-571.76	-6084.60	1.141e+05	-1.190e+05	-154.51
4221	reac per cdc 378 - nodo 2	-2437.88	-582.26	-6414.09	1.165e+05	-3.816e+05	486.09
4222	reac per cdc 379 - nodo 2	-1794.30	-326.35	-5996.32	5.554e+04	-2.275e+05	4755.56
4223	reac per cdc 380 - nodo 2	-2008.54	-822.17	-6498.59	1.737e+05	-2.737e+05	144.02
4224	reac per cdc 381 - nodo 2	-1515.79	-449.33	-5085.33	8.963e+04	-1.998e+05	1520.20
4225	reac per cdc 382 - nodo 2	-1151.95	-364.90	-4277.71	7.270e+04	-1.399e+05	831.58
4226	reac per cdc 383 - nodo 2	-1366.97	-367.00	-4343.61	7.318e+04	-1.924e+05	959.70
4227	reac per cdc 384 - nodo 2	-1238.26	-315.82	-4260.06	6.099e+04	-1.616e+05	1813.59
4228	reac per cdc 385 - nodo 2	-1281.10	-414.98	-4360.51	8.463e+04	-1.708e+05	891.28
4229	reac per cdc 386 - nodo 2	-1259.45	-365.55	-4310.35	7.284e+04	-1.661e+05	1248.14
4230	reac per cdc 259 - nodo 5	3465.40	-1412.29	-1.769e+04	2.381e+05	5.132e+05	2406.14
4231	reac per cdc 260 - nodo 5	2568.39	-584.33	-7979.56	1.005e+05	4.558e+05	1320.93
4232	reac per cdc 261 - nodo 5	626.53	-580.92	-8647.98	9.765e+04	1.643e+04	2347.16
4233	reac per cdc 262 - nodo 5	1702.25	-3.56	-7624.09	-3.395e+04	2.630e+05	1869.70
4234	reac per cdc 263 - nodo 5	1493.03	-1152.98	-8995.65	2.299e+05	2.094e+05	-206.16
4235	reac per cdc 264 - nodo 5	4048.19	-1415.22	-1.749e+04	2.394e+05	6.451e+05	2568.99
4236	reac per cdc 265 - nodo 5	2883.07	-1413.18	-1.789e+04	2.377e+05	3.814e+05	3184.73
4237	reac per cdc 266 - nodo 5	3528.51	-1066.76	-1.728e+04	1.588e+05	5.294e+05	2898.26



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4238	reac per cdc 267 - nodo 5	3402.98	-1756.42	-1.810e+04	3.171e+05	4.972e+05	1652.74
4239	reac per cdc 268 - nodo 5	3502.55	-1000.76	-1.267e+04	1.704e+05	5.944e+05	1999.25
4240	reac per cdc 269 - nodo 5	1560.69	-997.35	-1.334e+04	1.676e+05	1.550e+05	3025.47
4241	reac per cdc 270 - nodo 5	2636.42	-419.98	-1.231e+04	3.596e+04	4.016e+05	2548.01
4242	reac per cdc 271 - nodo 5	2427.20	-1569.41	-1.369e+04	2.998e+05	3.480e+05	472.15
4243	reac per cdc 272 - nodo 5	4161.48	533.39	-4491.57	-1.523e+05	8.461e+05	1.232e+04
4244	reac per cdc 273 - nodo 5	4737.44	-582.85	-5802.83	1.096e+05	9.698e+05	6778.73
4245	reac per cdc 274 - nodo 5	-2330.66	-286.56	-6733.63	3.791e+04	-6.141e+05	-5204.02
4246	reac per cdc 275 - nodo 5	-1754.69	-1402.80	-8044.89	2.998e+05	-4.904e+05	-1.075e+04
4247	reac per cdc 276 - nodo 5	4030.10	454.58	-4591.14	-1.327e+05	8.177e+05	5434.39
4248	reac per cdc 277 - nodo 5	4868.82	-504.04	-5703.26	8.998e+04	9.982e+05	1.367e+04
4249	reac per cdc 278 - nodo 5	-2462.04	-365.37	-6833.19	5.752e+04	-6.425e+05	-1.209e+04
4250	reac per cdc 279 - nodo 5	-1623.32	-1323.99	-7945.32	2.802e+05	-4.620e+05	-3859.67
4251	reac per cdc 280 - nodo 5	3097.36	-222.04	-4701.13	2.241e+04	6.092e+05	-3291.29
4252	reac per cdc 281 - nodo 5	3673.33	-1338.27	-6012.39	2.843e+05	7.329e+05	-8835.37
4253	reac per cdc 282 - nodo 5	-1266.55	468.86	-6524.07	-1.368e+05	-3.772e+05	1.041e+04
4254	reac per cdc 283 - nodo 5	-690.58	-647.38	-7835.33	1.251e+05	-2.535e+05	4866.01
4255	reac per cdc 284 - nodo 5	2965.99	-300.84	-4800.69	4.202e+04	5.808e+05	-1.018e+04
4256	reac per cdc 285 - nodo 5	3804.71	-1259.46	-5912.82	2.647e+05	7.613e+05	-1946.95
4257	reac per cdc 286 - nodo 5	-1397.92	390.05	-6623.64	-1.172e+05	-4.056e+05	3521.66
4258	reac per cdc 287 - nodo 5	-559.21	-568.57	-7735.76	1.055e+05	-2.251e+05	1.175e+04
4259	reac per cdc 288 - nodo 5	1217.27	1548.68	-3746.49	-3.913e+05	1.907e+05	1.266e+04
4260	reac per cdc 289 - nodo 5	3137.16	-2172.11	-8117.35	4.817e+05	6.031e+05	-5823.74
4261	reac per cdc 290 - nodo 5	-730.38	1302.70	-4419.10	-3.342e+05	-2.474e+05	7398.46
4262	reac per cdc 291 - nodo 5	1189.52	-2418.09	-8789.97	5.388e+05	1.651e+05	-1.108e+04
4263	reac per cdc 292 - nodo 5	898.03	1322.05	-3809.35	-3.389e+05	1.196e+05	7972.28
4264	reac per cdc 293 - nodo 5	2817.93	-2398.74	-8180.22	5.341e+05	5.320e+05	-1.051e+04
4265	reac per cdc 294 - nodo 5	-411.14	1529.32	-4356.24	-3.866e+05	-1.763e+05	1.208e+04
4266	reac per cdc 295 - nodo 5	1508.75	-2191.47	-8727.10	4.864e+05	2.361e+05	-6397.56
4267	reac per cdc 296 - nodo 5	779.35	1285.99	-4078.38	-3.259e+05	9.601e+04	-1.030e+04
4268	reac per cdc 297 - nodo 5	3575.07	-1909.42	-7785.46	4.163e+05	6.978e+05	1.714e+04
4269	reac per cdc 298 - nodo 5	-1168.29	1040.00	-4751.00	-2.688e+05	-3.420e+05	-1.556e+04
4270	reac per cdc 299 - nodo 5	1627.43	-2155.40	-8458.07	4.734e+05	2.597e+05	1.188e+04
4271	reac per cdc 300 - nodo 5	460.12	1059.36	-4141.25	-2.735e+05	2.494e+04	-1.499e+04
4272	reac per cdc 301 - nodo 5	3255.84	-2136.04	-7848.32	4.688e+05	6.267e+05	1.245e+04
4273	reac per cdc 302 - nodo 5	-849.06	1266.63	-4688.13	-3.213e+05	-2.710e+05	-1.088e+04
4274	reac per cdc 303 - nodo 5	1946.67	-1928.78	-8395.21	4.210e+05	3.308e+05	1.656e+04
4275	reac per cdc 304 - nodo 5	3143.56	200.26	-5102.87	-7.452e+04	6.161e+05	8353.38
4276	reac per cdc 305 - nodo 5	3521.38	-531.87	-5963.02	9.726e+04	6.973e+05	4717.06
4277	reac per cdc 306 - nodo 5	-1114.59	-337.54	-6573.43	5.024e+04	-3.416e+05	-3142.35
4278	reac per cdc 307 - nodo 5	-736.78	-1069.67	-7433.58	2.220e+05	-2.604e+05	-6778.67
4279	reac per cdc 308 - nodo 5	3057.39	148.57	-5168.19	-6.166e+04	5.975e+05	3835.32
4280	reac per cdc 309 - nodo 5	3607.55	-480.18	-5897.71	8.440e+04	7.159e+05	9235.13
4281	reac per cdc 310 - nodo 5	-1200.76	-389.23	-6638.74	6.310e+04	-3.602e+05	-7660.41
4282	reac per cdc 311 - nodo 5	-650.61	-1017.99	-7368.27	2.092e+05	-2.418e+05	-2260.60
4283	reac per cdc 312 - nodo 5	2445.61	-295.22	-5240.30	4.007e+04	4.608e+05	-1887.81
4284	reac per cdc 313 - nodo 5	2823.43	-1027.35	-6100.45	2.118e+05	5.419e+05	-5524.13
4285	reac per cdc 314 - nodo 5	-416.65	157.94	-6436.01	-6.435e+04	-1.862e+05	7098.84
4286	reac per cdc 315 - nodo 5	-38.83	-574.20	-7296.16	1.074e+05	-1.051e+05	3462.53
4287	reac per cdc 316 - nodo 5	2359.44	-346.90	-5305.61	5.294e+04	4.421e+05	-6405.87
4288	reac per cdc 317 - nodo 5	2909.60	-975.66	-6035.14	1.990e+05	5.605e+05	-1006.06
4289	reac per cdc 318 - nodo 5	-502.82	106.25	-6501.32	-5.149e+04	-2.048e+05	2580.78
4290	reac per cdc 319 - nodo 5	47.34	-522.51	-7230.85	9.456e+04	-8.643e+04	7980.59
4291	reac per cdc 320 - nodo 5	1212.42	866.19	-4614.06	-2.313e+05	1.862e+05	572.25
4292	reac per cdc 321 - nodo 5	2471.81	-1574.26	-7481.23	3.413e+05	4.568e+05	-3548.81
4293	reac per cdc 322 - nodo 5	-65.03	704.85	-5055.23	-1.938e+05	-1.011e+05	5123.53
4294	reac per cdc 323 - nodo 5	1194.37	-1735.60	-7922.40	3.788e+05	1.695e+05	-6997.53
4295	reac per cdc 324 - nodo 5	1003.03	717.54	-4655.29	-1.969e+05	1.396e+05	5499.89
4296	reac per cdc 325 - nodo 5	2262.43	-1722.90	-7522.46	3.757e+05	4.102e+05	-6621.17
4297	reac per cdc 326 - nodo 5	144.36	853.49	-5014.00	-2.282e+05	-5.446e+04	8195.89
4298	reac per cdc 327 - nodo 5	1403.75	-1586.96	-7881.17	3.444e+05	2.161e+05	-3925.18
4299	reac per cdc 328 - nodo 5	925.18	693.89	-4831.77	-1.884e+05	1.242e+05	-6487.97
4300	reac per cdc 329 - nodo 5	2759.05	-1401.96	-7263.52	2.985e+05	5.189e+05	1.151e+04
4301	reac per cdc 330 - nodo 5	-352.26	532.55	-5272.93	-1.510e+05	-1.632e+05	-9936.69
4302	reac per cdc 331 - nodo 5	1481.60	-1563.30	-7704.69	3.359e+05	2.315e+05	8062.68
4303	reac per cdc 332 - nodo 5	715.80	545.25	-4872.99	-1.540e+05	7.755e+04	-9560.32
4304	reac per cdc 333 - nodo 5	2549.66	-1550.61	-7304.75	3.328e+05	4.723e+05	8439.05
4305	reac per cdc 334 - nodo 5	-142.88	681.19	-5231.70	-1.853e+05	-1.165e+05	-6864.33
4306	reac per cdc 335 - nodo 5	1690.98	-1414.66	-7663.46	3.015e+05	2.782e+05	1.114e+04
4307	reac per cdc 336 - nodo 5	2761.72	75.31	-5332.03	-4.534e+04	5.299e+05	6864.52
4308	reac per cdc 337 - nodo 5	3065.28	-512.75	-6023.13	9.263e+04	5.951e+05	3943.77
4309	reac per cdc 338 - nodo 5	-658.50	-356.66	-6513.33	5.487e+04	-2.394e+05	-2369.05
4310	reac per cdc 339 - nodo 5	-354.94	-944.73	-7204.43	1.928e+05	-1.742e+05	-5289.80
4311	reac per cdc 340 - nodo 5	2692.51	33.80	-5384.50	-3.501e+04	5.149e+05	3235.53



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4312	reac per cdc 341 - nodo 5	3134.50	-471.23	-5970.65	8.230e+04	6.100e+05	7572.76
4313	reac per cdc 342 - nodo 5	-727.72	-398.18	-6565.80	6.520e+04	-2.543e+05	-5998.04
4314	reac per cdc 343 - nodo 5	-285.72	-903.21	-7151.95	1.825e+05	-1.592e+05	-1660.82
4315	reac per cdc 344 - nodo 5	2201.11	-322.66	-5442.31	4.670e+04	4.051e+05	-1361.40
4316	reac per cdc 345 - nodo 5	2504.66	-910.73	-6133.41	1.847e+05	4.703e+05	-4282.15
4317	reac per cdc 346 - nodo 5	-97.88	41.32	-6403.04	-3.718e+04	-1.146e+05	5856.87
4318	reac per cdc 347 - nodo 5	205.68	-546.75	-7094.14	1.008e+05	-4.938e+04	2936.12
4319	reac per cdc 348 - nodo 5	2131.89	-364.18	-5494.78	5.703e+04	3.901e+05	-4990.39
4320	reac per cdc 349 - nodo 5	2573.88	-869.21	-6080.94	1.743e+05	4.852e+05	-653.17
4321	reac per cdc 350 - nodo 5	-167.10	-0.20	-6455.52	-2.684e+04	-1.295e+05	2227.88
4322	reac per cdc 351 - nodo 5	274.89	-505.23	-7041.67	9.047e+04	-3.441e+04	6565.10
4323	reac per cdc 352 - nodo 5	1210.49	610.20	-4939.20	-1.712e+05	1.846e+05	7040.31
4324	reac per cdc 353 - nodo 5	2222.36	-1350.02	-7242.87	2.887e+05	4.019e+05	-2695.52
4325	reac per cdc 354 - nodo 5	184.43	480.61	-5293.59	-1.412e+05	-4.620e+04	4270.24
4326	reac per cdc 355 - nodo 5	1196.29	-1479.61	-7597.26	3.187e+05	1.711e+05	-5465.60
4327	reac per cdc 356 - nodo 5	1042.31	490.81	-4972.28	-1.436e+05	1.471e+05	4572.53
4328	reac per cdc 357 - nodo 5	2054.17	-1469.41	-7275.95	3.163e+05	3.645e+05	-5163.30
4329	reac per cdc 358 - nodo 5	352.61	600.00	-5260.50	-1.688e+05	-8757.21	6738.02
4330	reac per cdc 359 - nodo 5	1364.48	-1360.22	-7564.17	2.911e+05	2.086e+05	-2997.82
4331	reac per cdc 360 - nodo 5	979.77	471.81	-5114.11	-1.368e+05	1.347e+05	-5056.31
4332	reac per cdc 361 - nodo 5	2453.08	-1211.63	-7067.95	2.542e+05	4.518e+05	9401.09
4333	reac per cdc 362 - nodo 5	-46.29	342.22	-5468.50	-1.067e+05	-9.607e+04	-7826.38
4334	reac per cdc 363 - nodo 5	1427.01	-1341.22	-7422.35	2.843e+05	2.210e+05	6631.02
4335	reac per cdc 364 - nodo 5	811.59	352.42	-5147.19	-1.092e+05	9.727e+04	-7524.08
4336	reac per cdc 365 - nodo 5	2284.89	-1331.03	-7101.04	2.819e+05	4.143e+05	6933.32
4337	reac per cdc 366 - nodo 5	121.89	461.61	-5435.41	-1.344e+05	-5.863e+04	-5358.60
4338	reac per cdc 367 - nodo 5	1595.20	-1221.83	-7389.26	2.567e+05	2.584e+05	9098.80
4339	reac per cdc 368 - nodo 5	2448.95	-989.94	-1.252e+04	1.670e+05	3.626e+05	1691.78
4340	reac per cdc 369 - nodo 5	1850.94	-437.97	-6046.74	7.521e+04	3.244e+05	968.31
4341	reac per cdc 370 - nodo 5	556.37	-435.70	-6492.35	7.334e+04	3.143e+04	1652.46
4342	reac per cdc 371 - nodo 5	1273.52	-50.79	-5809.75	-1.439e+04	1.958e+05	1334.16
4343	reac per cdc 372 - nodo 5	1134.04	-817.07	-6724.13	1.615e+05	1.601e+05	-49.75
4344	reac per cdc 373 - nodo 5	2837.47	-991.90	-1.239e+04	1.678e+05	4.505e+05	1800.36
4345	reac per cdc 374 - nodo 5	2060.73	-990.54	-1.266e+04	1.667e+05	2.748e+05	2210.85
4346	reac per cdc 375 - nodo 5	2491.02	-759.59	-1.225e+04	1.141e+05	3.734e+05	2019.86
4347	reac per cdc 376 - nodo 5	2407.33	-1219.36	-1.279e+04	2.196e+05	3.519e+05	1189.52
4348	reac per cdc 377 - nodo 5	2473.72	-715.59	-9173.07	1.218e+05	4.168e+05	1420.53
4349	reac per cdc 378 - nodo 5	1179.14	-713.32	-9618.69	1.200e+05	1.238e+05	2104.68
4350	reac per cdc 379 - nodo 5	1896.29	-328.41	-8936.09	3.221e+04	2.882e+05	1786.37
4351	reac per cdc 380 - nodo 5	1756.81	-1094.69	-9850.47	2.081e+05	2.524e+05	402.46
4352	reac per cdc 381 - nodo 5	1452.50	-545.75	-7518.76	9.239e+04	2.148e+05	968.24
4353	reac per cdc 382 - nodo 5	1332.90	-435.36	-6223.93	7.404e+04	2.072e+05	823.55
4354	reac per cdc 383 - nodo 5	1073.99	-434.90	-6313.05	7.367e+04	1.486e+05	960.38
4355	reac per cdc 384 - nodo 5	1217.42	-357.92	-6176.53	5.612e+04	1.815e+05	896.72
4356	reac per cdc 385 - nodo 5	1189.52	-511.18	-6359.41	9.130e+04	1.743e+05	619.94
4357	reac per cdc 386 - nodo 5	1203.39	-434.71	-6268.23	7.375e+04	1.779e+05	787.36
4358	reac per cdc 259 - nodo 6	-186.93	-1113.98	-4168.90	1.888e+05	2208.73	2896.91
4359	reac per cdc 260 - nodo 6	576.66	-537.16	-2846.21	9.205e+04	1.769e+05	2272.64
4360	reac per cdc 261 - nodo 6	-746.55	-457.66	-1694.46	7.541e+04	-1.754e+05	4008.30
4361	reac per cdc 262 - nodo 6	19.14	178.90	-1628.42	-6.699e+04	2.760e+04	961.16
4362	reac per cdc 263 - nodo 6	-186.94	-1167.82	-2909.95	2.330e+05	-2.551e+04	432.20
4363	reac per cdc 264 - nodo 6	210.17	-1139.32	-4515.54	1.942e+05	1.079e+05	3493.77
4364	reac per cdc 265 - nodo 6	-583.76	-1091.62	-3824.48	1.842e+05	-1.034e+05	4535.17
4365	reac per cdc 266 - nodo 6	-124.35	-709.68	-3784.86	9.876e+04	1.834e+04	2706.88
4366	reac per cdc 267 - nodo 6	-248.00	-1517.72	-4553.78	2.788e+05	-1.352e+04	2389.50
4367	reac per cdc 268 - nodo 6	525.78	-846.68	-3796.42	1.449e+05	1.777e+05	3082.16
4368	reac per cdc 269 - nodo 6	-797.43	-767.19	-2644.66	1.283e+05	-1.746e+05	4817.82
4369	reac per cdc 270 - nodo 6	-31.75	-130.62	-2578.63	-1.414e+04	2.835e+04	1770.68
4370	reac per cdc 271 - nodo 6	-237.82	-1477.35	-3860.16	2.859e+05	-2.476e+04	1241.71
4371	reac per cdc 272 - nodo 6	2277.70	776.40	-2923.18	-2.027e+05	6.253e+05	1.182e+04
4372	reac per cdc 273 - nodo 6	1932.89	-377.58	-3904.96	6.397e+04	5.329e+05	6355.18
4373	reac per cdc 274 - nodo 6	-2061.39	-368.32	464.05	6.129e+04	-5.319e+05	-4436.76
4374	reac per cdc 275 - nodo 6	-2406.20	-1522.30	-517.73	3.280e+05	-6.243e+05	-9903.82
4375	reac per cdc 276 - nodo 6	1861.39	691.20	-2878.32	-1.800e+05	5.133e+05	5051.07
4376	reac per cdc 277 - nodo 6	2349.20	-292.37	-3949.82	4.126e+04	6.450e+05	1.313e+04
4377	reac per cdc 278 - nodo 6	-2477.70	-453.52	508.91	8.400e+04	-6.440e+05	-1.121e+04
4378	reac per cdc 279 - nodo 6	-1989.89	-1437.09	-562.59	3.053e+05	-5.123e+05	-3132.65
4379	reac per cdc 280 - nodo 6	1591.75	-228.07	-2496.02	2.881e+04	4.418e+05	-3235.80
4380	reac per cdc 281 - nodo 6	1246.94	-1382.05	-3477.80	2.955e+05	3.494e+05	-8702.86
4381	reac per cdc 282 - nodo 6	-1375.44	636.15	36.89	-1.703e+05	-3.484e+05	1.062e+04
4382	reac per cdc 283 - nodo 6	-1720.25	-517.82	-944.89	9.645e+04	-4.408e+05	5154.22
4383	reac per cdc 284 - nodo 6	1175.44	-313.28	-2451.16	5.151e+04	3.297e+05	-1.001e+04
4384	reac per cdc 285 - nodo 6	1663.25	-1296.85	-3522.66	2.728e+05	4.614e+05	-1931.68
4385	reac per cdc 286 - nodo 6	-1791.75	550.95	81.75	-1.476e+05	-4.604e+05	3850.11



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4386	reac per cdc 287 - nodo 6	-1303.94	-432.62	-989.75	7.375e+04	-3.287e+05	1.193e+04
4387	reac per cdc 288 - nodo 6	1161.30	1722.06	-592.24	-4.215e+05	3.280e+05	1.251e+04
4388	reac per cdc 289 - nodo 6	11.93	-2124.54	-3864.84	4.676e+05	2.017e+04	-5713.70
4389	reac per cdc 290 - nodo 6	-140.43	1378.64	423.93	-3.423e+05	-1.917e+04	7632.12
4390	reac per cdc 291 - nodo 6	-1289.80	-2467.95	-2848.67	5.468e+05	-3.270e+05	-1.059e+04
4391	reac per cdc 292 - nodo 6	955.52	1420.71	-464.09	-3.520e+05	2.729e+05	7992.41
4392	reac per cdc 293 - nodo 6	-193.85	-2425.88	-3736.69	5.370e+05	-3.489e+04	-1.023e+04
4393	reac per cdc 294 - nodo 6	65.36	1679.98	295.78	-4.118e+05	3.590e+04	1.215e+04
4394	reac per cdc 295 - nodo 6	-1084.01	-2166.61	-2976.82	4.773e+05	-2.719e+05	-6073.99
4395	reac per cdc 296 - nodo 6	-226.40	1438.04	-442.70	-3.458e+05	-4.539e+04	-1.006e+04
4396	reac per cdc 297 - nodo 6	1399.63	-1840.52	-4014.38	3.919e+05	3.936e+05	1.686e+04
4397	reac per cdc 298 - nodo 6	-1528.13	1094.63	573.47	-2.666e+05	-3.926e+05	-1.494e+04
4398	reac per cdc 299 - nodo 6	97.91	-2183.94	-2998.21	4.711e+05	4.639e+04	1.198e+04
4399	reac per cdc 300 - nodo 6	-432.19	1136.70	-314.55	-2.764e+05	-1.005e+05	-1.458e+04
4400	reac per cdc 301 - nodo 6	1193.85	-2141.86	-3886.23	4.613e+05	3.385e+05	1.234e+04
4401	reac per cdc 302 - nodo 6	-1322.35	1395.97	445.32	-3.361e+05	-3.375e+05	-1.042e+04
4402	reac per cdc 303 - nodo 6	303.69	-1882.60	-3126.36	4.016e+05	1.015e+05	1.650e+04
4403	reac per cdc 304 - nodo 6	1471.82	380.90	-2509.30	-1.114e+05	4.103e+05	8084.20
4404	reac per cdc 305 - nodo 6	1245.66	-375.98	-3153.27	6.351e+04	3.497e+05	4498.40
4405	reac per cdc 306 - nodo 6	-1374.16	-369.91	-287.64	6.175e+04	-3.487e+05	-2579.97
4406	reac per cdc 307 - nodo 6	-1600.32	-1126.80	-931.60	2.367e+05	-4.093e+05	-6165.78
4407	reac per cdc 308 - nodo 6	1198.77	325.02	-2479.88	-9.654e+04	3.368e+05	3643.03
4408	reac per cdc 309 - nodo 6	1518.72	-320.10	-3182.69	4.862e+04	4.232e+05	8939.56
4409	reac per cdc 310 - nodo 6	-1647.21	-425.80	-258.22	7.664e+04	-4.222e+05	-7021.14
4410	reac per cdc 311 - nodo 6	-1327.26	-1070.91	-961.03	2.218e+05	-3.358e+05	-1724.61
4411	reac per cdc 312 - nodo 6	1021.91	-277.92	-2229.14	4.045e+04	2.899e+05	-1792.28
4412	reac per cdc 313 - nodo 6	795.75	-1034.81	-2873.10	2.154e+05	2.293e+05	-5378.08
4413	reac per cdc 314 - nodo 6	-924.25	288.92	-567.81	-9.012e+04	-2.283e+05	7296.50
4414	reac per cdc 315 - nodo 6	-1150.41	-467.97	-1211.77	8.481e+04	-2.889e+05	3710.70
4415	reac per cdc 316 - nodo 6	748.86	-333.81	-2199.71	5.534e+04	2.164e+05	-6233.44
4416	reac per cdc 317 - nodo 6	1068.81	-978.93	-2902.52	2.005e+05	3.028e+05	-936.91
4417	reac per cdc 318 - nodo 6	-1197.31	233.03	-538.39	-7.523e+04	-3.018e+05	2855.33
4418	reac per cdc 319 - nodo 6	-877.36	-412.09	-1241.20	6.992e+04	-2.154e+05	8151.86
4419	reac per cdc 320 - nodo 6	739.58	1001.15	-980.43	-2.549e+05	2.153e+05	8535.18
4420	reac per cdc 321 - nodo 6	-14.28	-1521.80	-3126.98	3.282e+05	1.340e+04	-3417.51
4421	reac per cdc 322 - nodo 6	-114.21	775.91	-313.93	-2.030e+05	-1.240e+04	5335.93
4422	reac per cdc 323 - nodo 6	-868.08	-1747.05	-2460.48	3.802e+05	-2.143e+05	-6616.76
4423	reac per cdc 324 - nodo 6	604.61	803.51	-896.38	-2.093e+05	1.792e+05	5572.23
4424	reac per cdc 325 - nodo 6	-149.26	-1719.45	-3042.93	3.738e+05	-2.271e+04	-6380.45
4425	reac per cdc 326 - nodo 6	20.76	973.56	-397.98	-2.485e+05	2.372e+04	8298.87
4426	reac per cdc 327 - nodo 6	-733.11	-1549.40	-2544.53	3.346e+05	-1.782e+05	-3653.82
4427	reac per cdc 328 - nodo 6	-170.60	814.87	-882.35	-2.053e+05	-2.960e+04	-6268.71
4428	reac per cdc 329 - nodo 6	895.90	-1335.53	-3225.06	2.786e+05	2.583e+05	1.139e+04
4429	reac per cdc 330 - nodo 6	-1024.39	589.63	-215.85	-1.533e+05	-2.573e+05	-9467.97
4430	reac per cdc 331 - nodo 6	42.10	-1560.77	-2558.56	3.305e+05	3.060e+04	8187.14
4431	reac per cdc 332 - nodo 6	-305.57	617.23	-798.30	-1.597e+05	-6.571e+04	-9231.66
4432	reac per cdc 333 - nodo 6	760.92	-1533.17	-3141.01	3.241e+05	2.222e+05	8423.44
4433	reac per cdc 334 - nodo 6	-889.42	787.28	-299.90	-1.989e+05	-2.212e+05	-6505.02
4434	reac per cdc 335 - nodo 6	177.07	-1363.12	-2642.61	2.850e+05	6.671e+04	1.115e+04
4435	reac per cdc 336 - nodo 6	1169.56	232.56	-2354.07	-7.718e+04	3.297e+05	6682.13
4436	reac per cdc 337 - nodo 6	987.90	-375.39	-2871.35	6.333e+04	2.810e+05	3801.95
4437	reac per cdc 338 - nodo 6	-1116.39	-370.51	-569.56	6.193e+04	-2.800e+05	-1883.53
4438	reac per cdc 339 - nodo 6	-1298.05	-978.46	-1086.84	2.024e+05	-3.287e+05	-4763.71
4439	reac per cdc 340 - nodo 6	950.24	187.68	-2330.43	-6.522e+04	2.706e+05	3114.90
4440	reac per cdc 341 - nodo 6	1207.22	-330.50	-2894.98	5.137e+04	3.400e+05	7369.18
4441	reac per cdc 342 - nodo 6	-1335.71	-415.39	-545.93	7.389e+04	-3.390e+05	-5450.76
4442	reac per cdc 343 - nodo 6	-1078.73	-933.57	-1110.48	1.905e+05	-2.696e+05	-1196.48
4443	reac per cdc 344 - nodo 6	808.18	-296.62	-2129.03	4.481e+04	2.330e+05	-1250.85
4444	reac per cdc 345 - nodo 6	626.53	-904.57	-2646.31	1.853e+05	1.843e+05	-4131.02
4445	reac per cdc 346 - nodo 6	-755.02	158.67	-794.60	-6.007e+04	-1.833e+05	6049.44
4446	reac per cdc 347 - nodo 6	-936.68	-449.27	-1311.88	8.045e+04	-2.320e+05	3169.26
4447	reac per cdc 348 - nodo 6	588.86	-341.51	-2105.40	5.677e+04	1.740e+05	-4818.07
4448	reac per cdc 349 - nodo 6	845.85	-859.68	-2669.95	1.734e+05	2.433e+05	-563.80
4449	reac per cdc 350 - nodo 6	-974.34	113.79	-770.96	-4.811e+04	-2.423e+05	2482.22
4450	reac per cdc 351 - nodo 6	-717.36	-404.39	-1335.51	6.849e+04	-1.730e+05	6736.49
4451	reac per cdc 352 - nodo 6	581.41	730.76	-1125.99	-1.924e+05	1.730e+05	7044.36
4452	reac per cdc 353 - nodo 6	-24.12	-1295.73	-2850.27	2.760e+05	1.086e+04	-2556.24
4453	reac per cdc 354 - nodo 6	-104.38	549.84	-590.64	-1.507e+05	-9861.19	4474.66
4454	reac per cdc 355 - nodo 6	-709.90	-1476.65	-2314.91	3.177e+05	-1.720e+05	-5125.94
4455	reac per cdc 356 - nodo 6	472.99	572.00	-1058.48	-1.558e+05	1.440e+05	4664.47
4456	reac per cdc 357 - nodo 6	-132.53	-1454.49	-2782.76	3.126e+05	-1.815e+04	-4936.13
4457	reac per cdc 358 - nodo 6	4.03	708.59	-658.15	-1.873e+05	1.915e+04	6854.55
4458	reac per cdc 359 - nodo 6	-601.49	-1317.90	-2382.43	2.811e+05	-1.430e+05	-2746.05
4459	reac per cdc 360 - nodo 6	-149.66	581.14	-1047.22	-1.526e+05	-2.367e+04	-4846.40



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4460	reac per cdc 361 - nodo 6	706.95	-1146.12	-2929.04	2.361e+05	2.076e+05	9334.51
4461	reac per cdc 362 - nodo 6	-835.44	400.22	-511.87	-1.108e+05	-2.066e+05	-7416.09
4462	reac per cdc 363 - nodo 6	21.16	-1327.04	-2393.69	2.778e+05	2.467e+04	6764.82
4463	reac per cdc 364 - nodo 6	-258.07	422.39	-979.71	-1.160e+05	-5.268e+04	-7226.29
4464	reac per cdc 365 - nodo 6	598.54	-1304.87	-2861.53	2.727e+05	1.786e+05	6954.62
4465	reac per cdc 366 - nodo 6	-727.03	558.97	-579.38	-1.474e+05	-1.776e+05	-5036.20
4466	reac per cdc 367 - nodo 6	129.57	-1168.28	-2461.20	2.412e+05	5.368e+04	9144.71
4467	reac per cdc 368 - nodo 6	-132.09	-785.65	-2987.40	1.331e+05	1499.86	2038.56
4468	reac per cdc 369 - nodo 6	376.97	-401.10	-2105.61	6.857e+04	1.180e+05	1622.38
4469	reac per cdc 370 - nodo 6	-505.17	-348.11	-1337.77	5.748e+04	-1.169e+05	2779.49
4470	reac per cdc 371 - nodo 6	5.29	76.27	-1293.75	-3.745e+04	1.843e+04	748.06
4471	reac per cdc 372 - nodo 6	-132.10	-821.55	-2148.10	1.626e+05	-1.698e+04	395.42
4472	reac per cdc 373 - nodo 6	132.64	-802.54	-3218.49	1.367e+05	7.199e+04	2436.47
4473	reac per cdc 374 - nodo 6	-396.65	-770.74	-2757.79	1.300e+05	-6.894e+04	3130.73
4474	reac per cdc 375 - nodo 6	-90.37	-516.12	-2731.38	7.304e+04	1.226e+04	1911.88
4475	reac per cdc 376 - nodo 6	-172.80	-1054.81	-3243.99	1.931e+05	-8987.57	1700.29
4476	reac per cdc 377 - nodo 6	343.05	-607.45	-2739.08	1.038e+05	1.185e+05	2162.06
4477	reac per cdc 378 - nodo 6	-539.09	-554.46	-1971.24	9.271e+04	-1.164e+05	3319.17
4478	reac per cdc 379 - nodo 6	-28.64	-130.08	-1927.22	-2222.26	1.893e+04	1287.74
4479	reac per cdc 380 - nodo 6	-166.02	-1027.90	-2781.57	1.978e+05	-1.648e+04	935.10
4480	reac per cdc 381 - nodo 6	-77.82	-455.49	-1973.84	7.672e+04	700.33	1175.08
4481	reac per cdc 382 - nodo 6	24.00	-378.58	-1797.49	6.382e+04	2.400e+04	1091.85
4482	reac per cdc 383 - nodo 6	-152.43	-367.98	-1643.92	6.160e+04	-2.298e+04	1323.27
4483	reac per cdc 384 - nodo 6	-50.34	-283.10	-1635.11	4.261e+04	4085.91	916.98
4484	reac per cdc 385 - nodo 6	-77.82	-462.67	-1805.98	8.262e+04	-2995.36	846.45
4485	reac per cdc 386 - nodo 6	-64.25	-372.95	-1720.45	6.263e+04	500.45	959.21
4486	reac per cdc 259 - nodo 253	-199.22	-1587.69	-1.600e+04	2.891e+05	-9132.08	3007.38
4487	reac per cdc 260 - nodo 253	578.96	-685.96	-6987.78	1.244e+05	1.746e+05	1089.42
4488	reac per cdc 261 - nodo 253	-729.76	-702.09	-7892.38	1.279e+05	-1.786e+05	1578.26
4489	reac per cdc 262 - nodo 253	-29.05	-252.79	-7598.10	2.752e+04	1.041e+04	2962.09
4490	reac per cdc 263 - nodo 253	-128.00	-1128.88	-7290.92	2.234e+05	-1.618e+04	-282.86
4491	reac per cdc 264 - nodo 253	193.97	-1584.21	-1.573e+04	2.883e+05	9.700e+04	2862.33
4492	reac per cdc 265 - nodo 253	-591.27	-1593.89	-1.627e+04	2.904e+05	-1.149e+05	3155.63
4493	reac per cdc 266 - nodo 253	-170.84	-1324.31	-1.610e+04	2.302e+05	-1514.71	3985.93
4494	reac per cdc 267 - nodo 253	-230.21	-1849.96	-1.591e+04	3.477e+05	-1.747e+04	2038.96
4495	reac per cdc 268 - nodo 253	517.53	-1133.92	-1.127e+04	2.061e+05	1.712e+05	1927.52
4496	reac per cdc 269 - nodo 253	-791.19	-1150.05	-1.217e+04	2.096e+05	-1.821e+05	2416.36
4497	reac per cdc 270 - nodo 253	-90.48	-700.75	-1.188e+04	1.092e+05	6985.47	3800.19
4498	reac per cdc 271 - nodo 253	-189.43	-1576.84	-1.157e+04	3.051e+05	-1.960e+04	555.24
4499	reac per cdc 272 - nodo 253	1942.11	-767.50	-4268.50	1.498e+05	5.383e+05	1.361e+04
4500	reac per cdc 273 - nodo 253	1757.36	-2160.21	-3597.89	4.612e+05	4.883e+05	7850.12
4501	reac per cdc 274 - nodo 253	-1871.63	1119.88	-7623.15	-2.722e+05	-4.917e+05	-5849.94
4502	reac per cdc 275 - nodo 253	-2056.39	-272.83	-6952.54	3.912e+04	-5.416e+05	-1.161e+04
4503	reac per cdc 276 - nodo 253	1720.55	-668.55	-4355.33	1.277e+05	4.783e+05	6440.20
4504	reac per cdc 277 - nodo 253	1978.91	-2259.16	-3511.05	4.833e+05	5.483e+05	1.502e+04
4505	reac per cdc 278 - nodo 253	-2093.19	1218.83	-7709.99	-2.943e+05	-5.516e+05	-1.302e+04
4506	reac per cdc 279 - nodo 253	-1834.83	-371.78	-6865.70	6.123e+04	-4.817e+05	-4440.02
4507	reac per cdc 280 - nodo 253	1573.61	919.03	-4990.88	-2.271e+05	4.387e+05	-3122.89
4508	reac per cdc 281 - nodo 253	1388.86	-473.68	-4320.27	8.417e+04	3.887e+05	-8880.62
4509	reac per cdc 282 - nodo 253	-1503.13	-566.65	-6900.77	1.048e+05	-3.921e+05	1.088e+04
4510	reac per cdc 283 - nodo 253	-1687.89	-1959.36	-6230.16	4.161e+05	-4.420e+05	5123.07
4511	reac per cdc 284 - nodo 253	1352.06	1017.98	-5077.71	-2.493e+05	3.787e+05	-1.029e+04
4512	reac per cdc 285 - nodo 253	1610.41	-572.63	-4233.43	1.063e+05	4.487e+05	-1712.97
4513	reac per cdc 286 - nodo 253	-1724.69	-467.70	-6987.60	8.267e+04	-4.520e+05	3713.15
4514	reac per cdc 287 - nodo 253	-1466.33	-2058.31	-6143.32	4.382e+05	-3.821e+05	1.229e+04
4515	reac per cdc 288 - nodo 253	822.85	1517.92	-6225.00	-3.611e+05	2.360e+05	1.351e+04
4516	reac per cdc 289 - nodo 253	207.00	-3124.47	-3989.64	6.766e+05	6.959e+04	-5677.46
4517	reac per cdc 290 - nodo 253	-321.28	2084.14	-7231.40	-4.877e+05	-7.295e+04	7677.64
4518	reac per cdc 291 - nodo 253	-937.12	-2558.25	-4996.03	5.500e+05	-2.394e+05	-1.151e+04
4519	reac per cdc 292 - nodo 253	712.30	2023.88	-6441.72	-4.742e+05	2.062e+05	8495.75
4520	reac per cdc 293 - nodo 253	96.45	-2618.51	-4206.35	5.636e+05	3.971e+04	-1.070e+04
4521	reac per cdc 294 - nodo 253	-210.73	1578.18	-7014.68	-3.746e+05	-4.307e+04	1.270e+04
4522	reac per cdc 295 - nodo 253	-826.57	-3064.21	-4779.32	6.631e+05	-2.095e+05	-6495.57
4523	reac per cdc 296 - nodo 253	84.33	1847.75	-6514.46	-4.348e+05	3.626e+04	-1.038e+04
4524	reac per cdc 297 - nodo 253	945.52	-3454.30	-3700.19	7.504e+05	2.694e+05	1.821e+04
4525	reac per cdc 298 - nodo 253	-1059.80	2413.97	-7520.85	-5.614e+05	-2.727e+05	-1.621e+04
4526	reac per cdc 299 - nodo 253	-198.60	-2888.08	-4706.58	6.237e+05	-3.962e+04	1.238e+04
4527	reac per cdc 300 - nodo 253	-26.22	2353.71	-6731.17	-5.479e+05	6375.38	-1.540e+04
4528	reac per cdc 301 - nodo 253	834.97	-2948.34	-3916.90	6.373e+05	2.395e+05	1.320e+04
4529	reac per cdc 302 - nodo 253	-949.25	1908.01	-7304.14	-4.483e+05	-2.429e+05	-1.120e+04
4530	reac per cdc 303 - nodo 253	-88.05	-3394.04	-4489.87	7.368e+05	-9735.15	1.740e+04
4531	reac per cdc 304 - nodo 253	1254.16	-682.39	-4730.30	1.308e+05	3.525e+05	9269.44
4532	reac per cdc 305 - nodo 253	1132.98	-1595.86	-4290.44	3.350e+05	3.197e+05	5492.99
4533	reac per cdc 306 - nodo 253	-1247.25	555.53	-6930.59	-1.460e+05	-3.231e+05	-3492.81



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4534	reac per cdc 307 - nodo 253	-1368.43	-357.94	-6490.74	5.817e+04	-3.558e+05	-7269.26
4535	reac per cdc 308 - nodo 253	1108.84	-617.49	-4787.25	1.163e+05	3.132e+05	4568.23
4536	reac per cdc 309 - nodo 253	1278.30	-1660.76	-4233.49	3.495e+05	3.590e+05	1.019e+04
4537	reac per cdc 310 - nodo 253	-1392.57	620.43	-6987.55	-1.605e+05	-3.624e+05	-8194.02
4538	reac per cdc 311 - nodo 253	-1223.12	-422.84	-6433.79	7.267e+04	-3.165e+05	-2568.05
4539	reac per cdc 312 - nodo 253	1012.46	423.80	-5204.10	-1.165e+05	2.871e+05	-1704.15
4540	reac per cdc 313 - nodo 253	891.28	-489.68	-4764.25	8.772e+04	2.544e+05	-5480.60
4541	reac per cdc 314 - nodo 253	-1005.56	-550.65	-6456.79	1.012e+05	-2.577e+05	7480.78
4542	reac per cdc 315 - nodo 253	-1126.74	-1464.13	-6016.94	3.054e+05	-2.905e+05	3704.33
4543	reac per cdc 316 - nodo 253	867.14	488.70	-5261.06	-1.310e+05	2.478e+05	-6405.36
4544	reac per cdc 317 - nodo 253	1036.60	-554.58	-4707.30	1.022e+05	2.937e+05	-779.39
4545	reac per cdc 318 - nodo 253	-1150.87	-485.75	-6513.74	8.673e+04	-2.971e+05	2779.57
4546	reac per cdc 319 - nodo 253	-981.42	-1529.03	-5959.98	3.199e+05	-2.512e+05	8405.54
4547	reac per cdc 320 - nodo 253	520.04	816.61	-6013.56	-2.043e+05	1.542e+05	9208.52
4548	reac per cdc 321 - nodo 253	116.11	-2228.31	-4547.39	4.763e+05	4.507e+04	-3379.66
4549	reac per cdc 322 - nodo 253	-230.38	1187.98	-6673.65	-2.874e+05	-4.843e+04	5379.84
4550	reac per cdc 323 - nodo 253	-634.31	-1856.94	-5207.48	3.933e+05	-1.576e+05	-7208.34
4551	reac per cdc 324 - nodo 253	447.53	1148.46	-6155.70	-2.785e+05	1.346e+05	5916.44
4552	reac per cdc 325 - nodo 253	43.60	-1896.46	-4689.53	4.021e+05	2.547e+04	-6671.74
4553	reac per cdc 326 - nodo 253	-157.88	856.13	-6531.50	-2.132e+05	-2.883e+04	8671.92
4554	reac per cdc 327 - nodo 253	-561.80	-2188.79	-5065.34	4.675e+05	-1.380e+05	-3916.26
4555	reac per cdc 328 - nodo 253	35.65	1032.94	-6203.41	-2.527e+05	2.320e+04	-6462.19
4556	reac per cdc 329 - nodo 253	600.50	-2444.65	-4357.54	5.247e+05	1.761e+05	1.229e+04
4557	reac per cdc 330 - nodo 253	-714.77	1404.32	-6863.49	-3.357e+05	-1.795e+05	-1.029e+04
4558	reac per cdc 331 - nodo 253	-149.92	-2073.27	-5017.63	4.416e+05	-2.656e+04	8462.37
4559	reac per cdc 332 - nodo 253	-36.86	1364.79	-6345.55	-3.268e+05	3603.67	-9754.27
4560	reac per cdc 333 - nodo 253	527.99	-2112.79	-4499.68	4.505e+05	1.565e+05	8998.97
4561	reac per cdc 334 - nodo 253	-642.27	1072.46	-6721.35	-2.615e+05	-1.599e+05	-6998.79
4562	reac per cdc 335 - nodo 253	-77.41	-2405.12	-4875.49	5.158e+05	-6963.43	1.175e+04
4563	reac per cdc 336 - nodo 253	996.12	-650.46	-4903.51	1.236e+05	2.828e+05	7642.18
4564	reac per cdc 337 - nodo 253	898.79	-1384.19	-4550.21	2.877e+05	2.565e+05	4608.87
4565	reac per cdc 338 - nodo 253	-1013.06	343.86	-6670.83	-9.870e+04	-2.598e+05	-2608.69
4566	reac per cdc 339 - nodo 253	-1110.39	-389.87	-6317.53	6.531e+04	-2.861e+05	-5642.00
4567	reac per cdc 340 - nodo 253	879.40	-598.34	-4949.25	1.120e+05	2.512e+05	3866.08
4568	reac per cdc 341 - nodo 253	1015.51	-1436.32	-4504.46	2.993e+05	2.881e+05	8384.97
4569	reac per cdc 342 - nodo 253	-1129.78	395.98	-6716.57	-1.104e+05	-2.914e+05	-6384.79
4570	reac per cdc 343 - nodo 253	-993.67	-442.00	-6271.78	7.696e+04	-2.546e+05	-1865.90
4571	reac per cdc 344 - nodo 253	801.98	238.05	-5284.07	-7.496e+04	2.303e+05	-1172.02
4572	reac per cdc 345 - nodo 253	704.65	-495.68	-4930.78	8.905e+04	2.040e+05	-4205.33
4573	reac per cdc 346 - nodo 253	-818.93	-544.65	-6290.26	9.991e+04	-2.074e+05	6205.51
4574	reac per cdc 347 - nodo 253	-916.26	-1278.38	-5936.96	2.639e+05	-2.337e+05	3172.20
4575	reac per cdc 348 - nodo 253	685.26	290.17	-5329.82	-8.661e+04	1.987e+05	-4948.12
4576	reac per cdc 349 - nodo 253	821.37	-547.81	-4885.03	1.007e+05	2.356e+05	-429.23
4577	reac per cdc 350 - nodo 253	-935.65	-492.52	-6336.01	8.826e+04	-2.389e+05	2429.41
4578	reac per cdc 351 - nodo 253	-799.54	-1330.50	-5891.22	2.756e+05	-2.021e+05	6948.30
4579	reac per cdc 352 - nodo 253	406.46	553.56	-5934.25	-1.455e+05	1.236e+05	7593.24
4580	reac per cdc 353 - nodo 253	82.02	-1892.19	-4756.59	4.012e+05	3.587e+04	-2517.80
4581	reac per cdc 354 - nodo 253	-196.29	851.86	-6464.45	-2.122e+05	-3.923e+04	4517.98
4582	reac per cdc 355 - nodo 253	-520.74	-1593.89	-5286.79	3.345e+05	-1.269e+05	-5593.06
4583	reac per cdc 356 - nodo 253	348.22	820.11	-6048.42	-2.051e+05	1.078e+05	4948.98
4584	reac per cdc 357 - nodo 253	23.78	-1625.64	-4870.76	3.416e+05	2.013e+04	-5162.06
4585	reac per cdc 358 - nodo 253	-138.05	585.31	-6350.28	-1.526e+05	-2.349e+04	7162.24
4586	reac per cdc 359 - nodo 253	-462.50	-1860.45	-5172.62	3.941e+05	-1.112e+05	-2948.80
4587	reac per cdc 360 - nodo 253	17.39	727.32	-6086.74	-1.844e+05	1.831e+04	-4993.76
4588	reac per cdc 361 - nodo 253	471.09	-2065.95	-4604.10	4.400e+05	1.411e+05	1.007e+04
4589	reac per cdc 362 - nodo 253	-585.36	1025.62	-6616.93	-2.511e+05	-1.445e+05	-8069.02
4590	reac per cdc 363 - nodo 253	-131.67	-1767.65	-5134.30	3.733e+05	-2.167e+04	6993.94
4591	reac per cdc 364 - nodo 253	-40.85	993.87	-6200.91	-2.439e+05	2564.28	-7638.02
4592	reac per cdc 365 - nodo 253	142.85	-1799.40	-4718.27	3.804e+05	1.254e+05	7424.94
4593	reac per cdc 366 - nodo 253	-527.12	759.06	-6502.76	-1.915e+05	-1.287e+05	-5424.76
4594	reac per cdc 367 - nodo 253	-73.43	-2034.20	-5020.13	4.329e+05	-5924.04	9638.20
4595	reac per cdc 368 - nodo 253	-139.05	-1117.45	-1.132e+04	2.034e+05	-6242.45	2117.56
4596	reac per cdc 369 - nodo 253	379.74	-516.29	-5307.36	9.363e+04	1.162e+05	838.92
4597	reac per cdc 370 - nodo 253	-492.74	-527.05	-5910.42	9.599e+04	-1.193e+05	1164.81
4598	reac per cdc 371 - nodo 253	-25.60	-227.51	-5714.24	2.905e+04	6783.86	2087.36
4599	reac per cdc 372 - nodo 253	-91.56	-811.57	-5509.45	1.596e+05	-1.094e+04	-75.94
4600	reac per cdc 373 - nodo 253	123.08	-1115.12	-1.114e+04	2.029e+05	6.451e+04	2020.85
4601	reac per cdc 374 - nodo 253	-400.41	-1121.58	-1.150e+04	2.043e+05	-7.679e+04	2216.39
4602	reac per cdc 375 - nodo 253	-120.12	-941.86	-1.138e+04	1.642e+05	-1164.20	2769.92
4603	reac per cdc 376 - nodo 253	-159.70	-1292.29	-1.126e+04	2.425e+05	-1.180e+04	1471.94
4604	reac per cdc 377 - nodo 253	338.79	-814.94	-8160.85	1.481e+05	1.140e+05	1397.65
4605	reac per cdc 378 - nodo 253	-533.69	-825.69	-8763.92	1.505e+05	-1.215e+05	1723.54
4606	reac per cdc 379 - nodo 253	-66.55	-526.16	-8567.74	8.352e+04	4502.58	2646.09
4607	reac per cdc 380 - nodo 253	-132.52	-1110.21	-8362.94	2.141e+05	-1.322e+04	482.80



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4608	reac per cdc 381 - nodo 253	-73.52	-639.62	-6751.92	1.163e+05	-2592.40	1223.58
4609	reac per cdc 382 - nodo 253	30.24	-519.39	-5549.89	9.431e+04	2.191e+04	967.86
4610	reac per cdc 383 - nodo 253	-144.26	-521.54	-5670.50	9.478e+04	-2.519e+04	1033.03
4611	reac per cdc 384 - nodo 253	-50.83	-461.64	-5631.26	8.139e+04	12.87	1217.54
4612	reac per cdc 385 - nodo 253	-64.02	-578.45	-5590.30	1.075e+05	-3532.10	784.88
4613	reac per cdc 386 - nodo 253	-57.14	-520.17	-5610.52	9.448e+04	-1679.88	1000.09
4614	reac per cdc 259 - nodo 254	252.69	-494.71	-3.199e+04	1.271e+05	5.403e+04	2968.36
4615	reac per cdc 260 - nodo 254	982.42	-105.43	-1.370e+04	3.974e+04	2.310e+05	1067.66
4616	reac per cdc 261 - nodo 254	-756.83	-176.84	-1.351e+04	4.988e+04	-1.825e+05	1570.43
4617	reac per cdc 262 - nodo 254	176.38	297.53	-1.357e+04	-5.858e+04	3.928e+04	2947.71
4618	reac per cdc 263 - nodo 254	44.52	-574.15	-1.364e+04	1.468e+05	8068.48	-322.67
4619	reac per cdc 264 - nodo 254	774.92	-474.50	-3.205e+04	1.243e+05	1.782e+05	2820.83
4620	reac per cdc 265 - nodo 254	-268.63	-517.34	-3.193e+04	1.304e+05	-6.992e+04	3122.49
4621	reac per cdc 266 - nodo 254	291.30	-232.73	-3.196e+04	6.535e+04	6.317e+04	3948.86
4622	reac per cdc 267 - nodo 254	212.18	-755.73	-3.201e+04	1.886e+05	4.445e+04	1986.63
4623	reac per cdc 268 - nodo 254	1052.75	-283.22	-2.289e+04	8.112e+04	2.460e+05	1895.06
4624	reac per cdc 269 - nodo 254	-686.51	-354.63	-2.270e+04	9.126e+04	-1.676e+05	2397.83
4625	reac per cdc 270 - nodo 254	246.71	119.73	-2.276e+04	-1.720e+04	5.427e+04	3775.11
4626	reac per cdc 271 - nodo 254	114.85	-751.95	-2.283e+04	1.882e+05	2.306e+04	504.73
4627	reac per cdc 272 - nodo 254	2753.24	-2.72	-1.050e+04	1.686e+04	6.520e+05	1.361e+04
4628	reac per cdc 273 - nodo 254	2508.25	-1087.06	-1.069e+04	2.790e+05	5.936e+05	7833.07
4629	reac per cdc 274 - nodo 254	-2339.75	882.41	-9750.31	-2.130e+05	-5.574e+05	-5859.48
4630	reac per cdc 275 - nodo 254	-2584.74	-201.93	-9945.43	4.914e+04	-6.158e+05	-1.163e+04
4631	reac per cdc 276 - nodo 254	2458.37	13.60	-1.048e+04	1.275e+04	5.817e+05	6422.69
4632	reac per cdc 277 - nodo 254	2803.13	-1103.38	-1.070e+04	2.831e+05	6.638e+05	1.502e+04
4633	reac per cdc 278 - nodo 254	-2634.63	898.73	-9738.73	-2.171e+05	-6.276e+05	-1.304e+04
4634	reac per cdc 279 - nodo 254	-2289.87	-218.25	-9957.00	5.325e+04	-5.456e+05	-4449.09
4635	reac per cdc 280 - nodo 254	2262.91	935.73	-1.034e+04	-2.116e+05	5.352e+05	-3142.59
4636	reac per cdc 281 - nodo 254	2017.92	-148.60	-1.053e+04	5.053e+04	4.769e+05	-8914.96
4637	reac per cdc 282 - nodo 254	-1849.42	-56.05	-9907.98	1.547e+04	-4.407e+05	1.089e+04
4638	reac per cdc 283 - nodo 254	-2094.41	-1140.38	-1.010e+04	2.776e+05	-4.991e+05	5116.19
4639	reac per cdc 284 - nodo 254	1968.03	952.05	-1.033e+04	-2.157e+05	4.650e+05	-1.033e+04
4640	reac per cdc 285 - nodo 254	2312.79	-164.92	-1.055e+04	5.464e+04	5.471e+05	-1732.21
4641	reac per cdc 286 - nodo 254	-2144.29	-39.73	-9896.41	1.137e+04	-5.109e+05	3705.81
4642	reac per cdc 287 - nodo 254	-1799.53	-1156.70	-1.011e+04	2.817e+05	-4.289e+05	1.230e+04
4643	reac per cdc 288 - nodo 254	1256.52	1572.14	-1.001e+04	-3.695e+05	2.968e+05	1.353e+04
4644	reac per cdc 289 - nodo 254	439.88	-2042.32	-1.066e+04	5.044e+05	1.022e+05	-5714.07
4645	reac per cdc 290 - nodo 254	-271.38	1837.67	-9783.81	-4.384e+05	-6.602e+04	7687.66
4646	reac per cdc 291 - nodo 254	-1088.02	-1776.79	-1.043e+04	4.355e+05	-2.606e+05	-1.155e+04
4647	reac per cdc 292 - nodo 254	1109.42	1853.67	-9960.34	-4.380e+05	2.618e+05	8502.73
4648	reac per cdc 293 - nodo 254	292.78	-1760.79	-1.061e+04	4.359e+05	6.716e+04	-1.074e+04
4649	reac per cdc 294 - nodo 254	-124.28	1556.14	-9831.11	-3.699e+05	-3.100e+04	1.271e+04
4650	reac per cdc 295 - nodo 254	-940.92	-2058.32	-1.048e+04	5.040e+05	-2.256e+05	-6529.13
4651	reac per cdc 296 - nodo 254	273.60	1626.54	-9969.07	-3.831e+05	6.274e+04	-1.042e+04
4652	reac per cdc 297 - nodo 254	1422.80	-2096.72	-1.070e+04	5.181e+05	3.362e+05	1.823e+04
4653	reac per cdc 298 - nodo 254	-1254.30	1892.07	-9745.23	-4.521e+05	-3.001e+05	-1.625e+04
4654	reac per cdc 299 - nodo 254	-105.10	-1831.19	-1.047e+04	4.491e+05	-2.658e+04	1.239e+04
4655	reac per cdc 300 - nodo 254	126.50	1908.07	-9921.76	-4.517e+05	2.773e+04	-1.544e+04
4656	reac per cdc 301 - nodo 254	1275.70	-1815.19	-1.065e+04	4.496e+05	3.012e+05	1.320e+04
4657	reac per cdc 302 - nodo 254	-1107.20	1610.54	-9792.53	-3.836e+05	-2.651e+05	-1.123e+04
4658	reac per cdc 303 - nodo 254	42.00	-2112.72	-1.052e+04	5.177e+05	8438.26	1.741e+04
4659	reac per cdc 304 - nodo 254	1834.83	-36.97	-1.040e+04	2.241e+04	4.338e+05	9263.28
4660	reac per cdc 305 - nodo 254	1674.14	-748.24	-1.053e+04	1.944e+05	3.955e+05	5477.23
4661	reac per cdc 306 - nodo 254	-1505.64	543.59	-9912.27	-1.284e+05	-3.594e+05	-3503.63
4662	reac per cdc 307 - nodo 254	-1666.33	-167.68	-1.004e+04	4.359e+04	-3.977e+05	-7289.68
4663	reac per cdc 308 - nodo 254	1641.42	-26.26	-1.039e+04	1.972e+04	3.878e+05	4552.16
4664	reac per cdc 309 - nodo 254	1867.55	-758.94	-1.054e+04	1.971e+05	4.416e+05	1.019e+04
4665	reac per cdc 310 - nodo 254	-1699.05	554.29	-9904.68	-1.311e+05	-4.054e+05	-8214.75
4666	reac per cdc 311 - nodo 254	-1472.92	-178.39	-1.005e+04	4.628e+04	-3.516e+05	-2578.57
4667	reac per cdc 312 - nodo 254	1513.22	578.57	-1.030e+04	-1.275e+05	3.573e+05	-1721.65
4668	reac per cdc 313 - nodo 254	1352.53	-132.70	-1.043e+04	4.450e+04	3.190e+05	-5507.70
4669	reac per cdc 314 - nodo 254	-1184.03	-71.95	-1.002e+04	2.150e+04	-2.828e+05	7481.30
4670	reac per cdc 315 - nodo 254	-1344.72	-783.22	-1.014e+04	1.935e+05	-3.211e+05	3695.24
4671	reac per cdc 316 - nodo 254	1319.81	589.28	-1.029e+04	-1.302e+05	3.112e+05	-6432.77
4672	reac per cdc 317 - nodo 254	1545.94	-143.40	-1.043e+04	4.719e+04	3.650e+05	-796.59
4673	reac per cdc 318 - nodo 254	-1377.44	-61.25	-1.001e+04	1.881e+04	-3.289e+05	2770.18
4674	reac per cdc 319 - nodo 254	-1151.31	-793.93	-1.015e+04	1.962e+05	-2.751e+05	8406.36
4675	reac per cdc 320 - nodo 254	853.13	996.04	-1.008e+04	-2.310e+05	2.009e+05	9211.92
4676	reac per cdc 321 - nodo 254	317.51	-1374.86	-1.051e+04	3.422e+05	7.324e+04	-3408.25
4677	reac per cdc 322 - nodo 254	-149.01	1170.21	-9934.23	-2.762e+05	-3.708e+04	5381.85
4678	reac per cdc 323 - nodo 254	-684.63	-1200.69	-1.036e+04	2.970e+05	-1.647e+05	-7238.32
4679	reac per cdc 324 - nodo 254	756.65	1180.70	-1.005e+04	-2.759e+05	1.779e+05	5916.44
4680	reac per cdc 325 - nodo 254	221.03	-1190.20	-1.048e+04	2.973e+05	5.028e+04	-6703.73
4681	reac per cdc 326 - nodo 254	-52.53	985.55	-9965.26	-2.313e+05	-1.411e+04	8677.32



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4682	reac per cdc 327 - nodo 254	-588.15	-1385.35	-1.039e+04	3.419e+05	-1.418e+05	-3942.84
4683	reac per cdc 328 - nodo 254	208.44	1031.72	-1.006e+04	-2.400e+05	4.738e+04	-6491.80
4684	reac per cdc 329 - nodo 254	962.20	-1410.54	-1.053e+04	3.512e+05	2.268e+05	1.230e+04
4685	reac per cdc 330 - nodo 254	-793.70	1205.89	-9908.93	-2.852e+05	-1.906e+05	-1.032e+04
4686	reac per cdc 331 - nodo 254	-39.94	-1236.38	-1.039e+04	3.060e+05	-1.121e+04	8465.39
4687	reac per cdc 332 - nodo 254	111.96	1216.39	-1.002e+04	-2.849e+05	2.441e+04	-9787.27
4688	reac per cdc 333 - nodo 254	865.72	-1225.88	-1.050e+04	3.062e+05	2.038e+05	8999.99
4689	reac per cdc 334 - nodo 254	-697.21	1021.23	-9939.96	-2.402e+05	-1.676e+05	-7026.39
4690	reac per cdc 335 - nodo 254	56.54	-1421.04	-1.042e+04	3.509e+05	1.176e+04	1.176e+04
4691	reac per cdc 336 - nodo 254	1490.35	-49.79	-1.037e+04	2.449e+04	3.520e+05	7634.62
4692	reac per cdc 337 - nodo 254	1361.28	-621.21	-1.047e+04	1.626e+05	3.213e+05	4593.60
4693	reac per cdc 338 - nodo 254	-1192.78	416.56	-9972.98	-9.662e+04	-2.851e+05	-2620.00
4694	reac per cdc 339 - nodo 254	-1321.85	-154.86	-1.008e+04	4.151e+04	-3.159e+05	-5661.02
4695	reac per cdc 340 - nodo 254	1335.00	-41.19	-1.036e+04	2.233e+04	3.150e+05	3850.57
4696	reac per cdc 341 - nodo 254	1516.63	-629.80	-1.047e+04	1.648e+05	3.583e+05	8377.65
4697	reac per cdc 342 - nodo 254	-1348.13	425.15	-9966.89	-9.878e+04	-3.221e+05	-6404.06
4698	reac per cdc 343 - nodo 254	-1166.50	-163.46	-1.008e+04	4.367e+04	-2.789e+05	-1876.97
4699	reac per cdc 344 - nodo 254	1232.03	444.67	-1.028e+04	-9.589e+04	2.905e+05	-1188.69
4700	reac per cdc 345 - nodo 254	1102.96	-126.75	-1.039e+04	4.224e+04	2.598e+05	-4229.71
4701	reac per cdc 346 - nodo 254	-934.46	-77.90	-1.006e+04	2.376e+04	-2.236e+05	6203.31
4702	reac per cdc 347 - nodo 254	-1063.53	-649.32	-1.016e+04	1.619e+05	-2.544e+05	3162.29
4703	reac per cdc 348 - nodo 254	1076.68	453.27	-1.028e+04	-9.806e+04	2.535e+05	-4972.74
4704	reac per cdc 349 - nodo 254	1258.31	-135.34	-1.039e+04	4.440e+04	2.968e+05	-445.66
4705	reac per cdc 350 - nodo 254	-1089.81	-69.31	-1.005e+04	2.160e+04	-2.606e+05	2419.25
4706	reac per cdc 351 - nodo 254	-908.18	-657.91	-1.016e+04	1.641e+05	-2.174e+05	6946.34
4707	reac per cdc 352 - nodo 254	701.83	780.08	-1.011e+04	-1.791e+05	1.649e+05	7593.35
4708	reac per cdc 353 - nodo 254	271.61	-1124.63	-1.045e+04	2.814e+05	6.239e+04	-2543.37
4709	reac per cdc 354 - nodo 254	-103.11	919.98	-9990.59	-2.154e+05	-2.623e+04	4516.97
4710	reac per cdc 355 - nodo 254	-533.33	-984.73	-1.033e+04	2.451e+05	-1.288e+05	-5619.76
4711	reac per cdc 356 - nodo 254	624.33	928.42	-1.008e+04	-2.152e+05	1.465e+05	4946.36
4712	reac per cdc 357 - nodo 254	194.11	-976.30	-1.043e+04	2.453e+05	4.394e+04	-5190.37
4713	reac per cdc 358 - nodo 254	-25.61	771.65	-1.002e+04	-1.793e+05	-7776.81	7163.96
4714	reac per cdc 359 - nodo 254	-455.83	-1133.07	-1.036e+04	2.812e+05	-1.103e+05	-2972.77
4715	reac per cdc 360 - nodo 254	184.00	808.74	-1.009e+04	-1.863e+05	4.161e+04	-5020.15
4716	reac per cdc 361 - nodo 254	789.43	-1153.29	-1.047e+04	2.886e+05	1.857e+05	1.007e+04
4717	reac per cdc 362 - nodo 254	-620.93	948.64	-9970.28	-2.226e+05	-1.495e+05	-8096.54
4718	reac per cdc 363 - nodo 254	-15.50	-1013.39	-1.035e+04	2.523e+05	-5447.45	6993.74
4719	reac per cdc 364 - nodo 254	106.51	957.07	-1.006e+04	-2.224e+05	2.316e+04	-7667.14
4720	reac per cdc 365 - nodo 254	711.94	-1004.95	-1.045e+04	2.525e+05	1.672e+05	7423.14
4721	reac per cdc 366 - nodo 254	-543.44	800.30	-9995.20	-1.865e+05	-1.311e+05	-5449.54
4722	reac per cdc 367 - nodo 254	61.99	-1161.72	-1.038e+04	2.884e+05	1.300e+04	9640.74
4723	reac per cdc 368 - nodo 254	178.02	-339.39	-2.247e+04	8.818e+04	3.808e+04	2090.00
4724	reac per cdc 369 - nodo 254	664.51	-79.86	-1.029e+04	2.994e+04	1.560e+05	822.87
4725	reac per cdc 370 - nodo 254	-495.00	-127.47	-1.016e+04	3.671e+04	-1.196e+05	1158.04
4726	reac per cdc 371 - nodo 254	127.15	188.77	-1.019e+04	-3.560e+04	2.824e+04	2076.23
4727	reac per cdc 372 - nodo 254	39.24	-392.35	-1.025e+04	1.013e+05	7431.31	-104.02
4728	reac per cdc 373 - nodo 254	526.17	-325.91	-2.251e+04	8.634e+04	1.208e+05	1991.64
4729	reac per cdc 374 - nodo 254	-169.53	-354.48	-2.244e+04	9.040e+04	-4.456e+04	2192.75
4730	reac per cdc 375 - nodo 254	203.76	-164.73	-2.246e+04	4.702e+04	4.417e+04	2743.66
4731	reac per cdc 376 - nodo 254	151.01	-513.40	-2.249e+04	1.292e+05	3.169e+04	1435.51
4732	reac per cdc 377 - nodo 254	711.39	-198.39	-1.641e+04	5.753e+04	1.660e+05	1374.47
4733	reac per cdc 378 - nodo 254	-448.11	-246.00	-1.628e+04	6.430e+04	-1.096e+05	1709.65
4734	reac per cdc 379 - nodo 254	174.03	70.24	-1.632e+04	-8010.93	3.823e+04	2627.84
4735	reac per cdc 380 - nodo 254	86.12	-510.88	-1.637e+04	1.289e+05	1.743e+04	447.58
4736	reac per cdc 381 - nodo 254	103.00	-149.74	-1.267e+04	4.404e+04	2.208e+04	1207.44
4737	reac per cdc 382 - nodo 254	200.30	-97.83	-1.023e+04	3.239e+04	4.567e+04	954.01
4738	reac per cdc 383 - nodo 254	-31.60	-107.35	-1.021e+04	3.374e+04	-9463.64	1021.05
4739	reac per cdc 384 - nodo 254	92.83	-44.11	-1.022e+04	1.928e+04	2.011e+04	1204.68
4740	reac per cdc 385 - nodo 254	75.25	-160.33	-1.023e+04	4.666e+04	1.595e+04	768.63
4741	reac per cdc 386 - nodo 254	84.25	-102.32	-1.022e+04	3.300e+04	1.808e+04	986.80
4742	reac per cdc 259 - nodo 255	128.55	-463.88	-3.187e+04	1.146e+05	3.656e+04	2923.54
4743	reac per cdc 260 - nodo 255	961.44	-136.65	-1.341e+04	4.091e+04	2.280e+05	1053.23
4744	reac per cdc 261 - nodo 255	-846.73	-120.91	-1.371e+04	3.801e+04	-1.953e+05	1525.36
4745	reac per cdc 262 - nodo 255	122.09	353.16	-1.351e+04	-7.454e+04	3.179e+04	2924.79
4746	reac per cdc 263 - nodo 255	-7.67	-605.17	-1.361e+04	1.521e+05	853.34	-348.82
4747	reac per cdc 264 - nodo 255	671.08	-469.78	-3.178e+04	1.158e+05	1.636e+05	2780.20
4748	reac per cdc 265 - nodo 255	-413.83	-460.33	-3.196e+04	1.140e+05	-9.043e+04	3063.47
4749	reac per cdc 266 - nodo 255	167.47	-175.89	-3.184e+04	4.649e+04	4.584e+04	3903.13
4750	reac per cdc 267 - nodo 255	89.61	-750.89	-3.190e+04	1.825e+05	2.728e+04	1938.96
4751	reac per cdc 268 - nodo 255	997.10	-305.18	-2.256e+04	7.872e+04	2.382e+05	1868.93
4752	reac per cdc 269 - nodo 255	-811.07	-289.44	-2.287e+04	7.582e+04	-1.852e+05	2341.06
4753	reac per cdc 270 - nodo 255	157.75	184.63	-2.266e+04	-3.673e+04	4.190e+04	3740.49
4754	reac per cdc 271 - nodo 255	27.99	-773.70	-2.277e+04	1.899e+05	1.097e+04	466.88
4755	reac per cdc 272 - nodo 255	2745.64	66.01	-1.044e+04	-9692.33	6.509e+05	1.355e+04



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4756	reac per cdc 273 - nodo 255	2481.27	-993.87	-1.064e+04	2.458e+05	5.898e+05	7777.65
4757	reac per cdc 274 - nodo 255	-2395.29	807.59	-9731.33	-1.878e+05	-5.653e+05	-5836.40
4758	reac per cdc 275 - nodo 255	-2659.66	-252.30	-9929.39	6.769e+04	-6.264e+05	-1.161e+04
4759	reac per cdc 276 - nodo 255	2433.91	33.12	-1.044e+04	-1399.44	5.784e+05	6369.24
4760	reac per cdc 277 - nodo 255	2792.99	-960.98	-1.064e+04	2.375e+05	6.624e+05	1.496e+04
4761	reac per cdc 278 - nodo 255	-2707.01	774.70	-9728.05	-1.795e+05	-6.378e+05	-1.302e+04
4762	reac per cdc 279 - nodo 255	-2347.93	-219.41	-9932.67	5.940e+04	-5.538e+05	-4427.98
4763	reac per cdc 280 - nodo 255	2227.43	107.69	-1.039e+04	-1.922e+04	5.302e+05	-3162.79
4764	reac per cdc 281 - nodo 255	1963.07	-952.20	-1.058e+04	2.362e+05	4.691e+05	-8934.15
4765	reac per cdc 282 - nodo 255	-1877.09	765.91	-9787.60	-1.782e+05	-4.446e+05	1.088e+04
4766	reac per cdc 283 - nodo 255	-2141.46	-293.98	-9985.65	7.722e+04	-5.057e+05	5104.05
4767	reac per cdc 284 - nodo 255	1915.71	74.80	-1.038e+04	-1.093e+04	4.577e+05	-1.034e+04
4768	reac per cdc 285 - nodo 255	2274.79	-919.30	-1.059e+04	2.279e+05	5.417e+05	-1754.38
4769	reac per cdc 286 - nodo 255	-2188.81	733.02	-9784.32	-1.699e+05	-5.171e+05	3695.63
4770	reac per cdc 287 - nodo 255	-1829.73	-261.08	-9988.93	6.893e+04	-4.331e+05	1.228e+04
4771	reac per cdc 288 - nodo 255	1254.74	1562.10	-9962.44	-3.700e+05	2.965e+05	1.350e+04
4772	reac per cdc 289 - nodo 255	373.52	-1970.86	-1.062e+04	4.815e+05	9.288e+04	-5740.49
4773	reac per cdc 290 - nodo 255	-287.54	1784.58	-9749.13	-4.235e+05	-6.833e+04	7681.74
4774	reac per cdc 291 - nodo 255	-1168.76	-1748.39	-1.041e+04	4.280e+05	-2.720e+05	-1.156e+04
4775	reac per cdc 292 - nodo 255	1099.28	1574.61	-9945.56	-3.729e+05	2.603e+05	8483.82
4776	reac per cdc 293 - nodo 255	218.06	-1958.36	-1.061e+04	4.786e+05	5.667e+04	-1.075e+04
4777	reac per cdc 294 - nodo 255	-132.08	1772.07	-9766.01	-4.206e+05	-3.212e+04	1.270e+04
4778	reac per cdc 295 - nodo 255	-1013.30	-1760.89	-1.043e+04	4.309e+05	-2.358e+05	-6542.57
4779	reac per cdc 296 - nodo 255	215.66	1452.46	-9951.51	-3.424e+05	5.471e+04	-1.044e+04
4780	reac per cdc 297 - nodo 255	1412.60	-1861.21	-1.063e+04	4.538e+05	3.347e+05	1.819e+04
4781	reac per cdc 298 - nodo 255	-1326.62	1674.93	-9738.20	-3.958e+05	-3.102e+05	-1.625e+04
4782	reac per cdc 299 - nodo 255	-129.68	-1638.74	-1.042e+04	4.004e+05	-3.016e+04	1.238e+04
4783	reac per cdc 300 - nodo 255	60.20	1464.96	-9934.63	-3.453e+05	1.849e+04	-1.545e+04
4784	reac per cdc 301 - nodo 255	1257.13	-1848.71	-1.062e+04	4.510e+05	2.985e+05	1.318e+04
4785	reac per cdc 302 - nodo 255	-1171.16	1662.43	-9755.08	-3.930e+05	-2.739e+05	-1.124e+04
4786	reac per cdc 303 - nodo 255	25.78	-1651.24	-1.044e+04	4.033e+05	6056.05	1.739e+04
4787	reac per cdc 304 - nodo 255	1815.64	11.26	-1.035e+04	3620.51	4.312e+05	9220.70
4788	reac per cdc 305 - nodo 255	1642.24	-683.97	-1.048e+04	1.712e+05	3.911e+05	5435.31
4789	reac per cdc 306 - nodo 255	-1556.27	497.69	-9887.77	-1.132e+05	-3.665e+05	-3494.06
4790	reac per cdc 307 - nodo 255	-1729.66	-197.55	-1.002e+04	5.438e+04	-4.066e+05	-7279.45
4791	reac per cdc 308 - nodo 255	1611.18	-10.31	-1.035e+04	9058.94	3.836e+05	4511.54
4792	reac per cdc 309 - nodo 255	1846.70	-662.40	-1.049e+04	1.657e+05	4.387e+05	1.014e+04
4793	reac per cdc 310 - nodo 255	-1760.72	476.12	-9885.61	-1.077e+05	-4.141e+05	-8203.22
4794	reac per cdc 311 - nodo 255	-1525.20	-175.98	-1.002e+04	4.894e+04	-3.590e+05	-2570.29
4795	reac per cdc 312 - nodo 255	1475.75	38.60	-1.032e+04	-2631.38	3.520e+05	-1740.46
4796	reac per cdc 313 - nodo 255	1302.36	-656.63	-1.045e+04	1.649e+05	3.119e+05	-5525.85
4797	reac per cdc 314 - nodo 255	-1216.38	470.35	-9924.70	-1.069e+05	-2.874e+05	7467.11
4798	reac per cdc 315 - nodo 255	-1389.78	-224.89	-1.005e+04	6.063e+04	-3.274e+05	3681.72
4799	reac per cdc 316 - nodo 255	1271.30	17.03	-1.032e+04	2807.05	3.044e+05	-6449.62
4800	reac per cdc 317 - nodo 255	1506.81	-635.07	-1.045e+04	1.595e+05	3.595e+05	-816.69
4801	reac per cdc 318 - nodo 255	-1420.84	448.78	-9922.54	-1.015e+05	-3.350e+05	2757.95
4802	reac per cdc 319 - nodo 255	-1185.32	-203.32	-1.006e+04	5.519e+04	-2.799e+05	8390.88
4803	reac per cdc 320 - nodo 255	837.77	992.62	-1.004e+04	-2.327e+05	1.987e+05	9186.83
4804	reac per cdc 321 - nodo 255	259.78	-1324.83	-1.047e+04	3.258e+05	6.514e+04	-3431.14
4805	reac per cdc 322 - nodo 255	-173.80	1138.55	-9899.42	-2.678e+05	-4.060e+04	5372.40
4806	reac per cdc 323 - nodo 255	-751.79	-1178.90	-1.033e+04	2.907e+05	-1.742e+05	-7245.57
4807	reac per cdc 324 - nodo 255	735.80	1000.82	-1.003e+04	-2.346e+05	1.750e+05	5898.48
4808	reac per cdc 325 - nodo 255	157.81	-1316.63	-1.046e+04	3.239e+05	4.139e+04	-6719.49
4809	reac per cdc 326 - nodo 255	-71.84	1130.35	-9910.50	-2.659e+05	-1.684e+04	8660.75
4810	reac per cdc 327 - nodo 255	-649.83	-1187.11	-1.034e+04	2.926e+05	-1.504e+05	-3957.22
4811	reac per cdc 328 - nodo 255	156.24	920.72	-1.003e+04	-2.146e+05	4.011e+04	-6510.38
4812	reac per cdc 329 - nodo 255	941.30	-1252.93	-1.048e+04	3.076e+05	2.238e+05	1.227e+04
4813	reac per cdc 330 - nodo 255	-855.33	1066.65	-9892.24	-2.497e+05	-1.992e+05	-1.032e+04
4814	reac per cdc 331 - nodo 255	-70.27	-1107.01	-1.034e+04	2.726e+05	-1.556e+04	8451.62
4815	reac per cdc 332 - nodo 255	54.28	928.92	-1.002e+04	-2.165e+05	1.635e+04	-9798.73
4816	reac per cdc 333 - nodo 255	839.34	-1244.73	-1.047e+04	3.058e+05	2.000e+05	8977.72
4817	reac per cdc 334 - nodo 255	-753.36	1058.45	-9903.32	-2.478e+05	-1.755e+05	-7036.46
4818	reac per cdc 335 - nodo 255	31.70	-1115.21	-1.035e+04	2.745e+05	8195.37	1.174e+04
4819	reac per cdc 336 - nodo 255	1466.82	-9.26	-1.032e+04	8612.07	3.487e+05	7597.24
4820	reac per cdc 337 - nodo 255	1327.54	-567.79	-1.043e+04	1.432e+05	3.166e+05	4556.75
4821	reac per cdc 338 - nodo 255	-1241.56	381.51	-9946.39	-8.521e+04	-2.920e+05	-2615.49
4822	reac per cdc 339 - nodo 255	-1380.84	-177.03	-1.005e+04	4.939e+04	-3.242e+05	-5655.98
4823	reac per cdc 340 - nodo 255	1302.59	-26.57	-1.032e+04	1.298e+04	3.105e+05	3814.75
4824	reac per cdc 341 - nodo 255	1491.76	-550.48	-1.043e+04	1.388e+05	3.548e+05	8339.23
4825	reac per cdc 342 - nodo 255	-1405.79	364.20	-9944.66	-8.084e+04	-3.302e+05	-6397.98
4826	reac per cdc 343 - nodo 255	-1216.61	-159.71	-1.005e+04	4.502e+04	-2.860e+05	-1873.50
4827	reac per cdc 344 - nodo 255	1193.81	12.70	-1.029e+04	3588.98	2.851e+05	-1206.98
4828	reac per cdc 345 - nodo 255	1054.54	-545.83	-1.040e+04	1.382e+05	2.530e+05	-4247.47
4829	reac per cdc 346 - nodo 255	-968.56	359.55	-9976.02	-8.019e+04	-2.284e+05	6188.73



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4830	reac per cdc 347 - nodo 255	-1107.84	-198.99	-1.008e+04	5.441e+04	-2.606e+05	3148.24
4831	reac per cdc 348 - nodo 255	1029.59	-4.61	-1.029e+04	7955.82	2.469e+05	-4989.47
4832	reac per cdc 349 - nodo 255	1218.76	-528.52	-1.040e+04	1.338e+05	2.912e+05	-464.99
4833	reac per cdc 350 - nodo 255	-1132.79	342.23	-9974.29	-7.582e+04	-2.666e+05	2406.24
4834	reac per cdc 351 - nodo 255	-943.61	-181.67	-1.008e+04	5.005e+04	-2.224e+05	6930.72
4835	reac per cdc 352 - nodo 255	681.37	779.13	-1.007e+04	-1.813e+05	1.620e+05	7570.02
4836	reac per cdc 353 - nodo 255	217.12	-1082.65	-1.042e+04	2.674e+05	5.474e+04	-2564.94
4837	reac per cdc 354 - nodo 255	-131.14	896.37	-9955.73	-2.094e+05	-3.019e+04	4506.20
4838	reac per cdc 355 - nodo 255	-595.39	-965.42	-1.030e+04	2.393e+05	-1.375e+05	-5628.76
4839	reac per cdc 356 - nodo 255	599.47	785.72	-1.006e+04	-1.828e+05	1.430e+05	4928.75
4840	reac per cdc 357 - nodo 255	135.22	-1076.06	-1.041e+04	2.659e+05	3.566e+04	-5206.21
4841	reac per cdc 358 - nodo 255	-49.24	889.78	-9964.62	-2.079e+05	-1.111e+04	7147.46
4842	reac per cdc 359 - nodo 255	-513.49	-972.01	-1.031e+04	2.408e+05	-1.184e+05	-2987.50
4843	reac per cdc 360 - nodo 255	133.96	721.42	-1.006e+04	-1.667e+05	3.463e+04	-5038.26
4844	reac per cdc 361 - nodo 255	764.53	-1024.94	-1.042e+04	2.528e+05	1.821e+05	1.004e+04
4845	reac per cdc 362 - nodo 255	-678.55	838.65	-9949.97	-1.948e+05	-1.576e+05	-8102.08
4846	reac per cdc 363 - nodo 255	-47.98	-907.71	-1.031e+04	2.247e+05	-1.008e+04	6979.52
4847	reac per cdc 364 - nodo 255	52.06	728.01	-1.005e+04	-1.682e+05	1.555e+04	-7679.53
4848	reac per cdc 365 - nodo 255	682.63	-1018.35	-1.041e+04	2.513e+05	1.631e+05	7402.07
4849	reac per cdc 366 - nodo 255	-596.65	832.06	-9958.86	-1.933e+05	-1.385e+05	-5460.81
4850	reac per cdc 367 - nodo 255	33.92	-914.30	-1.032e+04	2.262e+05	8997.56	9620.78
4851	reac per cdc 368 - nodo 255	90.54	-317.85	-2.239e+04	7.942e+04	2.576e+04	2058.23
4852	reac per cdc 369 - nodo 255	645.79	-99.70	-1.008e+04	3.028e+04	1.534e+05	811.36
4853	reac per cdc 370 - nodo 255	-559.65	-89.21	-1.029e+04	2.835e+04	-1.288e+05	1126.11
4854	reac per cdc 371 - nodo 255	86.23	226.84	-1.015e+04	-4.668e+04	2.258e+04	2059.06
4855	reac per cdc 372 - nodo 255	-0.28	-412.05	-1.022e+04	1.044e+05	1956.30	-123.35
4856	reac per cdc 373 - nodo 255	452.22	-321.79	-2.233e+04	8.019e+04	1.104e+05	1962.66
4857	reac per cdc 374 - nodo 255	-271.05	-315.49	-2.245e+04	7.903e+04	-5.890e+04	2151.52
4858	reac per cdc 375 - nodo 255	116.48	-125.86	-2.237e+04	3.401e+04	3.195e+04	2711.29
4859	reac per cdc 376 - nodo 255	64.57	-509.20	-2.241e+04	1.246e+05	1.957e+04	1401.84
4860	reac per cdc 377 - nodo 255	669.57	-212.06	-1.619e+04	5.549e+04	1.602e+05	1355.16
4861	reac per cdc 378 - nodo 255	-535.88	-201.56	-1.639e+04	5.356e+04	-1.221e+05	1669.91
4862	reac per cdc 379 - nodo 255	110.00	114.49	-1.625e+04	-2.147e+04	2.932e+04	2602.86
4863	reac per cdc 380 - nodo 255	23.49	-524.40	-1.632e+04	1.296e+05	8700.57	420.45
4864	reac per cdc 381 - nodo 255	52.50	-138.08	-1.263e+04	3.908e+04	1.497e+04	1188.15
4865	reac per cdc 382 - nodo 255	163.55	-94.45	-1.017e+04	2.926e+04	4.050e+04	938.77
4866	reac per cdc 383 - nodo 255	-77.54	-92.36	-1.021e+04	2.887e+04	-1.595e+04	1001.72
4867	reac per cdc 384 - nodo 255	51.64	-29.15	-1.018e+04	1.386e+04	1.433e+04	1188.32
4868	reac per cdc 385 - nodo 255	34.33	-156.92	-1.019e+04	4.408e+04	1.021e+04	751.83
4869	reac per cdc 386 - nodo 255	42.99	-93.14	-1.019e+04	2.900e+04	1.227e+04	970.63
4870	reac per cdc 259 - nodo 256	347.02	-980.37	-2.663e+04	1.778e+05	6.700e+04	2487.75
4871	reac per cdc 260 - nodo 256	611.04	-461.06	-1.007e+04	8.296e+04	1.794e+05	-1576.92
4872	reac per cdc 261 - nodo 256	-325.01	-432.49	-1.618e+04	7.686e+04	-1.229e+05	5651.35
4873	reac per cdc 262 - nodo 256	200.98	-10.45	-1.299e+04	-3.278e+04	4.291e+04	3747.85
4874	reac per cdc 263 - nodo 256	88.84	-876.62	-1.326e+04	1.913e+05	1.447e+04	-2142.27
4875	reac per cdc 264 - nodo 256	627.50	-990.38	-2.480e+04	1.799e+05	1.576e+05	884.45
4876	reac per cdc 265 - nodo 256	65.87	-973.23	-2.846e+04	1.763e+05	-2.376e+04	5221.41
4877	reac per cdc 266 - nodo 256	381.46	-720.01	-2.655e+04	1.105e+05	7.573e+04	4079.31
4878	reac per cdc 267 - nodo 256	314.18	-1239.71	-2.671e+04	2.449e+05	5.867e+04	545.24
4879	reac per cdc 268 - nodo 256	712.76	-729.06	-1.682e+04	1.321e+05	1.987e+05	-880.67
4880	reac per cdc 269 - nodo 256	-223.29	-700.48	-2.293e+04	1.260e+05	-1.036e+05	6347.60
4881	reac per cdc 270 - nodo 256	302.70	-278.44	-1.974e+04	1.641e+04	6.223e+04	4444.10
4882	reac per cdc 271 - nodo 256	190.57	-1144.62	-2.001e+04	2.405e+05	3.380e+04	-1446.02
4883	reac per cdc 272 - nodo 256	2148.80	668.88	-3044.54	-1.682e+05	5.595e+05	1.426e+04
4884	reac per cdc 273 - nodo 256	2022.32	-472.04	-1382.45	9.648e+04	5.218e+05	7150.47
4885	reac per cdc 274 - nodo 256	-1807.09	-198.34	-1.849e+04	2.326e+04	-4.793e+05	-5506.53
4886	reac per cdc 275 - nodo 256	-1933.57	-1339.26	-1.683e+04	2.880e+05	-5.170e+05	-1.262e+04
4887	reac per cdc 276 - nodo 256	1945.31	545.98	-3226.99	-1.420e+05	5.070e+05	5972.24
4888	reac per cdc 277 - nodo 256	2225.81	-349.13	-1200.00	7.030e+04	5.744e+05	1.544e+04
4889	reac per cdc 278 - nodo 256	-2010.58	-321.24	-1.867e+04	4.944e+04	-5.318e+05	-1.380e+04
4890	reac per cdc 279 - nodo 256	-1730.08	-1216.35	-1.665e+04	2.618e+05	-4.644e+05	-4328.31
4891	reac per cdc 280 - nodo 256	1892.82	-106.26	-5338.42	4898.55	4.772e+05	-2935.31
4892	reac per cdc 281 - nodo 256	1766.34	-1247.18	-3676.33	2.696e+05	4.395e+05	-1.005e+04
4893	reac per cdc 282 - nodo 256	-1551.11	576.81	-1.620e+04	-1.499e+05	-3.969e+05	1.169e+04
4894	reac per cdc 283 - nodo 256	-1677.59	-564.11	-1.454e+04	1.148e+05	-4.346e+05	4579.24
4895	reac per cdc 284 - nodo 256	1689.33	-229.17	-5520.88	3.108e+04	4.247e+05	-1.123e+04
4896	reac per cdc 285 - nodo 256	1969.83	-1124.28	-3493.88	2.434e+05	4.920e+05	-1757.09
4897	reac per cdc 286 - nodo 256	-1754.60	453.90	-1.638e+04	-1.237e+05	-4.495e+05	3401.02
4898	reac per cdc 287 - nodo 256	-1474.10	-441.20	-1.435e+04	8.866e+04	-3.821e+05	1.287e+04
4899	reac per cdc 288 - nodo 256	911.80	1696.43	-1.039e+04	-4.100e+05	2.399e+05	1.564e+04
4900	reac per cdc 289 - nodo 256	490.19	-2106.64	-4849.93	4.723e+05	1.143e+05	-8066.38
4901	reac per cdc 290 - nodo 256	-274.96	1436.26	-1.502e+04	-3.526e+05	-7.173e+04	9710.32
4902	reac per cdc 291 - nodo 256	-696.57	-2366.80	-9484.14	5.298e+05	-1.974e+05	-1.400e+04
4903	reac per cdc 292 - nodo 256	835.01	1463.88	-1.108e+04	-3.581e+05	2.152e+05	1.048e+04



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4904	reac per cdc 293 - nodo 256	413.40	-2339.18	-5538.09	5.243e+05	8.958e+04	-1.323e+04
4905	reac per cdc 294 - nodo 256	-198.17	1668.81	-1.434e+04	-4.045e+05	-4.703e+04	1.487e+04
4906	reac per cdc 295 - nodo 256	-619.78	-2134.26	-8795.97	4.778e+05	-1.727e+05	-8837.75
4907	reac per cdc 296 - nodo 256	233.51	1286.74	-1.100e+04	-3.227e+05	6.481e+04	-1.199e+04
4908	reac per cdc 297 - nodo 256	1168.49	-1696.95	-4241.75	3.850e+05	2.894e+05	1.957e+04
4909	reac per cdc 298 - nodo 256	-953.26	1026.58	-1.563e+04	-2.653e+05	-2.468e+05	-1.792e+04
4910	reac per cdc 299 - nodo 256	-18.28	-1957.11	-8875.96	4.425e+05	-2.226e+04	1.364e+04
4911	reac per cdc 300 - nodo 256	156.71	1054.20	-1.169e+04	-2.708e+05	4.011e+04	-1.715e+04
4912	reac per cdc 301 - nodo 256	1091.70	-1929.49	-4929.91	4.370e+05	2.647e+05	1.441e+04
4913	reac per cdc 302 - nodo 256	-876.46	1259.12	-1.494e+04	-3.172e+05	-2.221e+05	-1.277e+04
4914	reac per cdc 303 - nodo 256	58.52	-1724.57	-8187.79	3.906e+05	2436.28	1.880e+04
4915	reac per cdc 304 - nodo 256	1446.42	323.38	-5416.34	-8.973e+04	3.743e+05	9637.66
4916	reac per cdc 305 - nodo 256	1363.46	-424.95	-4326.19	8.388e+04	3.496e+05	4972.79
4917	reac per cdc 306 - nodo 256	-1148.23	-245.43	-1.555e+04	3.586e+04	-3.070e+05	-3328.86
4918	reac per cdc 307 - nodo 256	-1231.18	-993.75	-1.446e+04	2.095e+05	-3.318e+05	-7993.73
4919	reac per cdc 308 - nodo 256	1312.95	242.77	-5536.01	-7.256e+04	3.398e+05	4200.00
4920	reac per cdc 309 - nodo 256	1496.92	-344.33	-4206.52	6.671e+04	3.840e+05	1.041e+04
4921	reac per cdc 310 - nodo 256	-1281.69	-326.04	-1.567e+04	5.303e+04	-3.415e+05	-8766.51
4922	reac per cdc 311 - nodo 256	-1097.72	-913.14	-1.434e+04	1.923e+05	-2.973e+05	-2556.07
4923	reac per cdc 312 - nodo 256	1278.52	-185.03	-6920.88	2.381e+04	3.203e+05	-1642.41
4924	reac per cdc 313 - nodo 256	1195.56	-933.36	-5830.73	1.974e+05	2.956e+05	-6307.28
4925	reac per cdc 314 - nodo 256	-980.33	262.99	-1.404e+04	-7.769e+04	-2.530e+05	7951.22
4926	reac per cdc 315 - nodo 256	-1063.29	-485.34	-1.295e+04	9.593e+04	-2.778e+05	3286.35
4927	reac per cdc 316 - nodo 256	1145.06	-265.65	-7040.55	4.099e+04	2.858e+05	-7080.07
4928	reac per cdc 317 - nodo 256	1329.03	-852.75	-5711.06	1.803e+05	3.300e+05	-869.62
4929	reac per cdc 318 - nodo 256	-1113.80	182.37	-1.416e+04	-6.052e+04	-2.875e+05	2513.56
4930	reac per cdc 319 - nodo 256	-929.82	-404.73	-1.283e+04	7.876e+04	-2.433e+05	8724.00
4931	reac per cdc 320 - nodo 256	635.08	997.34	-1.023e+04	-2.483e+05	1.647e+05	1.054e+04
4932	reac per cdc 321 - nodo 256	358.55	-1497.07	-6600.48	3.304e+05	8.228e+04	-5007.84
4933	reac per cdc 322 - nodo 256	-143.32	826.70	-1.327e+04	-2.107e+05	-3.973e+04	6651.77
4934	reac per cdc 323 - nodo 256	-419.84	-1667.71	-9640.03	3.681e+05	-1.221e+05	-8897.79
4935	reac per cdc 324 - nodo 256	584.71	844.82	-1.069e+04	-2.143e+05	1.485e+05	7157.70
4936	reac per cdc 325 - nodo 256	308.18	-1649.60	-7051.85	3.645e+05	6.608e+04	-8391.86
4937	reac per cdc 326 - nodo 256	-92.95	979.22	-1.282e+04	-2.447e+05	-2.353e+04	1.004e+04
4938	reac per cdc 327 - nodo 256	-369.48	-1515.19	-9188.67	3.340e+05	-1.059e+05	-5513.77
4939	reac per cdc 328 - nodo 256	190.19	728.64	-1.063e+04	-1.911e+05	4.983e+04	-7583.80
4940	reac per cdc 329 - nodo 256	803.44	-1228.37	-6201.58	2.732e+05	1.971e+05	1.312e+04
4941	reac per cdc 330 - nodo 256	-588.20	557.99	-1.367e+04	-1.534e+05	-1.546e+05	-1.147e+04
4942	reac per cdc 331 - nodo 256	25.04	-1399.01	-9241.13	3.108e+05	-7282.07	9227.74
4943	reac per cdc 332 - nodo 256	139.82	576.11	-1.108e+04	-1.570e+05	3.363e+04	-1.097e+04
4944	reac per cdc 333 - nodo 256	753.07	-1380.89	-6652.94	3.072e+05	1.809e+05	9733.67
4945	reac per cdc 334 - nodo 256	-537.83	710.52	-1.322e+04	-1.875e+05	-1.384e+05	-8089.74
4946	reac per cdc 335 - nodo 256	75.41	-1246.48	-8789.76	2.768e+05	8917.79	1.261e+04
4947	reac per cdc 336 - nodo 256	1182.97	193.79	-6305.95	-6.029e+04	3.048e+05	7902.89
4948	reac per cdc 337 - nodo 256	1116.34	-407.28	-5430.32	7.916e+04	2.850e+05	4155.99
4949	reac per cdc 338 - nodo 256	-901.10	-263.09	-1.444e+04	4.058e+04	-2.424e+05	-2512.05
4950	reac per cdc 339 - nodo 256	-967.73	-864.16	-1.357e+04	1.800e+05	-2.623e+05	-6258.96
4951	reac per cdc 340 - nodo 256	1075.77	129.05	-6402.08	-4.650e+04	2.772e+05	3535.26
4952	reac per cdc 341 - nodo 256	1223.54	-342.54	-5334.20	6.537e+04	3.126e+05	8523.62
4953	reac per cdc 342 - nodo 256	-1008.30	-327.84	-1.454e+04	5.438e+04	-2.701e+05	-6879.68
4954	reac per cdc 343 - nodo 256	-860.53	-799.42	-1.347e+04	1.662e+05	-2.346e+05	-1891.33
4955	reac per cdc 344 - nodo 256	1048.11	-214.58	-7514.43	3.091e+04	2.615e+05	-1157.48
4956	reac per cdc 345 - nodo 256	981.48	-815.65	-6638.80	1.704e+05	2.416e+05	-4904.38
4957	reac per cdc 346 - nodo 256	-766.25	145.28	-1.324e+04	-5.062e+04	-1.991e+05	6548.32
4958	reac per cdc 347 - nodo 256	-832.88	-455.80	-1.236e+04	8.883e+04	-2.189e+05	2801.41
4959	reac per cdc 348 - nodo 256	940.91	-279.32	-7610.56	4.470e+04	2.338e+05	-5525.11
4960	reac per cdc 349 - nodo 256	1088.68	-750.91	-6542.67	1.566e+05	2.693e+05	-536.76
4961	reac per cdc 350 - nodo 256	-873.45	80.53	-1.333e+04	-3.683e+04	-2.267e+05	2180.69
4962	reac per cdc 351 - nodo 256	-725.68	-391.05	-1.226e+04	7.504e+04	-1.912e+05	7169.04
4963	reac per cdc 352 - nodo 256	531.28	735.14	-1.018e+04	-1.877e+05	1.365e+05	8629.05
4964	reac per cdc 353 - nodo 256	309.17	-1268.44	-7257.08	2.772e+05	7.027e+04	-3860.63
4965	reac per cdc 354 - nodo 256	-93.94	598.07	-1.262e+04	-1.574e+05	-2.773e+04	5504.56
4966	reac per cdc 355 - nodo 256	-316.05	-1405.51	-9698.50	3.074e+05	-9.391e+04	-6985.11
4967	reac per cdc 356 - nodo 256	490.82	612.63	-1.054e+04	-1.603e+05	1.234e+05	5910.94
4968	reac per cdc 357 - nodo 256	268.72	-1390.95	-7619.62	3.045e+05	5.726e+04	-6578.74
4969	reac per cdc 358 - nodo 256	-53.48	720.58	-1.225e+04	-1.848e+05	-1.471e+04	8222.67
4970	reac per cdc 359 - nodo 256	-275.59	-1283.00	-9335.96	2.801e+05	-8.089e+04	-4267.00
4971	reac per cdc 360 - nodo 256	173.94	519.32	-1.050e+04	-1.417e+05	4.421e+04	-5929.71
4972	reac per cdc 361 - nodo 256	666.51	-1052.62	-6936.66	2.312e+05	1.625e+05	1.070e+04
4973	reac per cdc 362 - nodo 256	-451.28	382.25	-1.294e+04	-1.114e+05	-1.200e+05	-9054.19
4974	reac per cdc 363 - nodo 256	41.29	-1189.69	-9378.09	2.615e+05	-1663.55	7573.64
4975	reac per cdc 364 - nodo 256	133.49	396.81	-1.086e+04	-1.143e+05	3.120e+04	-8647.82
4976	reac per cdc 365 - nodo 256	626.05	-1175.13	-7299.21	2.585e+05	1.495e+05	7980.02
4977	reac per cdc 366 - nodo 256	-410.82	504.76	-1.258e+04	-1.388e+05	-1.070e+05	-6336.08



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
4978	reac per cdc 367 - nodo 256	81.74	-1067.18	-9015.55	2.341e+05	1.135e+04	1.029e+04
4979	reac per cdc 368 - nodo 256	243.25	-692.51	-1.894e+04	1.255e+05	4.704e+04	1750.30
4980	reac per cdc 369 - nodo 256	419.26	-346.31	-7900.32	6.222e+04	1.219e+05	-959.48
4981	reac per cdc 370 - nodo 256	-204.77	-327.26	-1.197e+04	5.816e+04	-7.957e+04	3859.36
4982	reac per cdc 371 - nodo 256	145.89	-45.90	-9847.42	-1.494e+04	3.098e+04	2590.36
4983	reac per cdc 372 - nodo 256	71.13	-623.35	-1.003e+04	1.344e+05	1.202e+04	-1336.38
4984	reac per cdc 373 - nodo 256	430.24	-699.18	-1.772e+04	1.269e+05	1.074e+05	681.43
4985	reac per cdc 374 - nodo 256	55.82	-687.75	-2.016e+04	1.244e+05	-1.347e+04	3572.74
4986	reac per cdc 375 - nodo 256	266.21	-518.94	-1.889e+04	8.057e+04	5.286e+04	2811.34
4987	reac per cdc 376 - nodo 256	221.36	-865.41	-1.899e+04	1.702e+05	4.149e+04	455.29
4988	reac per cdc 377 - nodo 256	487.08	-524.97	-1.240e+04	9.502e+04	1.348e+05	-495.32
4989	reac per cdc 378 - nodo 256	-136.95	-505.92	-1.647e+04	9.095e+04	-6.669e+04	4323.53
4990	reac per cdc 379 - nodo 256	213.71	-224.56	-1.435e+04	1.786e+04	4.386e+04	3054.53
4991	reac per cdc 380 - nodo 256	138.95	-802.01	-1.453e+04	1.672e+05	2.490e+04	-872.22
4992	reac per cdc 381 - nodo 256	134.74	-406.65	-1.174e+04	7.299e+04	2.643e+04	1007.63
4993	reac per cdc 382 - nodo 256	169.95	-337.41	-9529.81	6.034e+04	4.141e+04	465.68
4994	reac per cdc 383 - nodo 256	45.14	-333.60	-1.034e+04	5.953e+04	1104.36	1429.45
4995	reac per cdc 384 - nodo 256	115.27	-277.33	-9919.23	4.491e+04	2.321e+04	1175.65
4996	reac per cdc 385 - nodo 256	100.32	-392.82	-9954.99	7.479e+04	1.942e+04	390.30
4997	reac per cdc 386 - nodo 256	107.62	-335.19	-9937.18	5.987e+04	2.127e+04	821.97
4998	reac per cdc 259 - nodo 257	306.39	366.49	-9453.57	-1.821e+04	6.120e+04	2119.52
4999	reac per cdc 260 - nodo 257	421.65	140.79	-8963.88	-2800.69	1.534e+05	-3908.93
5000	reac per cdc 261 - nodo 257	-136.40	201.44	-1787.61	-1.692e+04	-9.707e+04	2085.78
5001	reac per cdc 262 - nodo 257	190.37	454.79	-6061.26	-1.057e+05	4.143e+04	2445.10
5002	reac per cdc 263 - nodo 257	99.53	-108.94	-4698.50	8.513e+04	1.602e+04	470.50
5003	reac per cdc 264 - nodo 257	473.79	347.30	-1.161e+04	-1.375e+04	1.363e+05	-776.04
5004	reac per cdc 265 - nodo 257	138.96	383.69	-7299.37	-2.222e+04	-1.395e+04	2820.78
5005	reac per cdc 266 - nodo 257	335.02	535.71	-9863.56	-7.549e+04	6.915e+04	3036.38
5006	reac per cdc 267 - nodo 257	280.52	197.47	-9045.90	3.901e+04	5.391e+04	1851.62
5007	reac per cdc 268 - nodo 257	503.52	237.65	-1.100e+04	-6786.50	1.699e+05	-3307.68
5008	reac per cdc 269 - nodo 257	-54.53	298.30	-3825.42	-2.090e+04	-8.056e+04	2687.04
5009	reac per cdc 270 - nodo 257	272.24	551.65	-8099.08	-1.097e+05	5.794e+04	3046.36
5010	reac per cdc 271 - nodo 257	181.40	-12.07	-6736.31	8.115e+04	3.253e+04	1071.76
5011	reac per cdc 272 - nodo 257	1761.82	1357.61	-1.442e+04	-2.738e+05	4.959e+05	1.378e+04
5012	reac per cdc 273 - nodo 257	1647.34	112.67	-1.224e+04	-4460.71	4.660e+05	5000.62
5013	reac per cdc 274 - nodo 257	-1432.38	149.08	4038.20	-1.120e+04	-4.236e+05	-3628.82
5014	reac per cdc 275 - nodo 257	-1546.87	-1095.86	6217.95	2.581e+05	-4.535e+05	-1.241e+04
5015	reac per cdc 276 - nodo 257	1572.02	1117.25	-1.455e+04	-2.288e+05	4.508e+05	4339.01
5016	reac per cdc 277 - nodo 257	1837.14	353.03	-1.211e+04	-4.939e+04	5.111e+05	1.444e+04
5017	reac per cdc 278 - nodo 257	-1622.18	-91.29	3909.01	3.373e+04	-4.687e+05	-1.307e+04
5018	reac per cdc 279 - nodo 257	-1357.07	-855.50	6347.13	2.132e+05	-4.084e+05	-2967.22
5019	reac per cdc 280 - nodo 257	1588.43	269.43	-1.152e+04	-4.053e+04	4.272e+05	-1885.97
5020	reac per cdc 281 - nodo 257	1473.95	-975.51	-9338.28	2.288e+05	3.974e+05	-1.066e+04
5021	reac per cdc 282 - nodo 257	-1258.99	1237.25	1132.70	-2.444e+05	-3.549e+05	1.204e+04
5022	reac per cdc 283 - nodo 257	-1373.47	-7.69	3312.45	2.487e+04	-3.848e+05	3257.76
5023	reac per cdc 284 - nodo 257	1398.63	29.07	-1.165e+04	4396.56	3.822e+05	-1.133e+04
5024	reac per cdc 285 - nodo 257	1663.75	-735.15	-9209.09	1.838e+05	4.424e+05	-1224.36
5025	reac per cdc 286 - nodo 257	-1448.79	996.89	1003.51	-1.995e+05	-4.000e+05	2596.15
5026	reac per cdc 287 - nodo 257	-1183.68	232.67	3441.64	-2.006e+04	-3.397e+05	1.270e+04
5027	reac per cdc 288 - nodo 257	777.41	2387.05	-1.050e+04	-4.961e+05	2.089e+05	1.793e+04
5028	reac per cdc 289 - nodo 257	395.80	-1762.75	-3239.13	4.016e+05	1.094e+05	-1.133e+04
5029	reac per cdc 290 - nodo 257	-180.85	2024.49	-4966.45	-4.173e+05	-6.691e+04	1.271e+04
5030	reac per cdc 291 - nodo 257	-562.46	-2125.31	2299.39	4.804e+05	-1.665e+05	-1.656e+04
5031	reac per cdc 292 - nodo 257	725.40	2060.60	-9633.31	-4.261e+05	1.883e+05	1.323e+04
5032	reac per cdc 293 - nodo 257	343.79	-2089.20	-2367.48	4.716e+05	8.875e+04	-1.603e+04
5033	reac per cdc 294 - nodo 257	-128.83	2350.95	-5838.10	-4.873e+05	-4.631e+04	1.740e+04
5034	reac per cdc 295 - nodo 257	-510.44	-1798.85	1427.74	4.104e+05	-1.459e+05	-1.186e+04
5035	reac per cdc 296 - nodo 257	144.75	1585.85	-1.094e+04	-3.463e+05	5.870e+04	-1.354e+04
5036	reac per cdc 297 - nodo 257	1028.47	-961.55	-2808.50	2.519e+05	2.596e+05	2.013e+04
5037	reac per cdc 298 - nodo 257	-813.51	1223.29	-5397.07	-2.675e+05	-2.171e+05	-1.876e+04
5038	reac per cdc 299 - nodo 257	70.21	-1324.11	2730.01	3.306e+05	-1.627e+04	1.491e+04
5039	reac per cdc 300 - nodo 257	92.73	1259.40	-1.006e+04	-2.763e+05	3.810e+04	-1.824e+04
5040	reac per cdc 301 - nodo 257	976.45	-1288.00	-1936.85	3.218e+05	2.390e+05	1.543e+04
5041	reac per cdc 302 - nodo 257	-761.50	1549.74	-6268.72	-3.375e+05	-1.965e+05	-1.406e+04
5042	reac per cdc 303 - nodo 257	122.22	-997.65	1858.36	2.607e+05	4336.48	1.961e+04
5043	reac per cdc 304 - nodo 257	1192.55	935.48	-1.087e+04	-1.823e+05	3.326e+05	9273.62
5044	reac per cdc 305 - nodo 257	1117.46	118.93	-9442.41	-5620.07	3.130e+05	3515.90
5045	reac per cdc 306 - nodo 257	-902.51	142.81	1236.83	-1.004e+04	-2.705e+05	-2144.10
5046	reac per cdc 307 - nodo 257	-977.60	-673.74	2666.52	1.666e+05	-2.901e+05	-7901.82
5047	reac per cdc 308 - nodo 257	1068.06	777.83	-1.096e+04	-1.528e+05	3.030e+05	3081.95
5048	reac per cdc 309 - nodo 257	1241.95	276.58	-9357.68	-3.509e+04	3.425e+05	9707.57
5049	reac per cdc 310 - nodo 257	-1026.99	-14.84	1152.10	1.943e+04	-3.001e+05	-8335.77
5050	reac per cdc 311 - nodo 257	-853.11	-516.09	2751.25	1.371e+05	-2.606e+05	-1710.16
5051	reac per cdc 312 - nodo 257	1078.83	221.75	-8966.40	-2.928e+04	2.875e+05	-1000.98



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5052	reac per cdc 313 - nodo 257	1003.74	-594.80	-7536.71	1.474e+05	2.679e+05	-6758.70
5053	reac per cdc 314 - nodo 257	-788.78	856.54	-668.86	-1.630e+05	-2.255e+05	8130.49
5054	reac per cdc 315 - nodo 257	-863.87	39.99	760.82	1.362e+04	-2.451e+05	2372.77
5055	reac per cdc 316 - nodo 257	954.34	64.10	-9051.13	188.88	2.580e+05	-7192.64
5056	reac per cdc 317 - nodo 257	1128.22	-437.15	-7451.98	1.179e+05	2.975e+05	-567.03
5057	reac per cdc 318 - nodo 257	-913.27	698.89	-753.60	-1.335e+05	-2.551e+05	1938.83
5058	reac per cdc 319 - nodo 257	-739.38	197.64	845.55	-1.585e+04	-2.155e+05	8564.44
5059	reac per cdc 320 - nodo 257	546.88	1610.69	-8301.94	-3.281e+05	1.443e+05	1.199e+04
5060	reac per cdc 321 - nodo 257	296.59	-1111.14	-3536.32	2.607e+05	7.903e+04	-7197.65
5061	reac per cdc 322 - nodo 257	-81.64	1372.89	-4669.26	-2.764e+05	-3.659e+04	8569.44
5062	reac per cdc 323 - nodo 257	-331.93	-1348.94	96.36	3.124e+05	-1.019e+05	-1.062e+04
5063	reac per cdc 324 - nodo 257	512.76	1396.57	-7730.23	-2.822e+05	1.308e+05	8912.38
5064	reac per cdc 325 - nodo 257	262.47	-1325.26	-2964.61	3.066e+05	6.551e+04	-1.028e+04
5065	reac per cdc 326 - nodo 257	-47.52	1587.01	-5240.97	-3.223e+05	-2.307e+04	1.165e+04
5066	reac per cdc 327 - nodo 257	-297.81	-1134.83	-475.35	2.665e+05	-8.839e+04	-7540.58
5067	reac per cdc 328 - nodo 257	131.92	1085.19	-8584.38	-2.298e+05	4.581e+04	-8644.13
5068	reac per cdc 329 - nodo 257	711.55	-585.65	-3253.87	1.625e+05	1.776e+05	1.344e+04
5069	reac per cdc 330 - nodo 257	-496.59	847.39	-4951.70	-1.782e+05	-1.351e+05	-1.207e+04
5070	reac per cdc 331 - nodo 257	83.03	-823.45	378.80	2.142e+05	-3366.94	1.002e+04
5071	reac per cdc 332 - nodo 257	97.81	871.07	-8012.67	-1.839e+05	3.229e+04	-1.173e+04
5072	reac per cdc 333 - nodo 257	677.43	-799.76	-2682.16	2.084e+05	1.640e+05	1.036e+04
5073	reac per cdc 334 - nodo 257	-462.48	1061.51	-5523.41	-2.241e+05	-1.216e+05	-8987.07
5074	reac per cdc 335 - nodo 257	117.15	-609.33	-192.90	1.683e+05	1.015e+04	1.310e+04
5075	reac per cdc 336 - nodo 257	979.03	777.15	-9540.03	-1.479e+05	2.713e+05	7583.71
5076	reac per cdc 337 - nodo 257	918.72	121.28	-8391.68	-6054.98	2.556e+05	2959.01
5077	reac per cdc 338 - nodo 257	-703.76	140.46	186.10	-9604.28	-2.131e+05	-1587.21
5078	reac per cdc 339 - nodo 257	-764.07	-515.41	1334.45	1.323e+05	-2.289e+05	-6211.91
5079	reac per cdc 340 - nodo 257	879.04	650.53	-9608.09	-1.243e+05	2.476e+05	2610.45
5080	reac per cdc 341 - nodo 257	1018.71	247.91	-8323.62	-2.972e+04	2.793e+05	7932.27
5081	reac per cdc 342 - nodo 257	-803.75	13.84	118.04	1.406e+04	-2.369e+05	-6560.47
5082	reac per cdc 343 - nodo 257	-664.08	-388.78	1402.51	1.086e+05	-2.051e+05	-1238.66
5083	reac per cdc 344 - nodo 257	887.68	203.87	-8009.34	-2.506e+04	2.351e+05	-669.05
5084	reac per cdc 345 - nodo 257	827.37	-452.00	-6860.98	1.168e+05	2.194e+05	-5293.75
5085	reac per cdc 346 - nodo 257	-612.42	713.74	-1344.59	-1.325e+05	-1.769e+05	6665.55
5086	reac per cdc 347 - nodo 257	-672.73	57.87	-196.24	9399.62	-1.927e+05	2040.84
5087	reac per cdc 348 - nodo 257	787.69	77.25	-8077.40	-1389.90	2.114e+05	-5642.31
5088	reac per cdc 349 - nodo 257	927.36	-325.38	-6792.92	9.315e+04	2.431e+05	-320.49
5089	reac per cdc 350 - nodo 257	-712.41	587.12	-1412.65	-1.088e+05	-2.007e+05	1692.29
5090	reac per cdc 351 - nodo 257	-572.74	184.50	-128.18	-1.427e+04	-1.689e+05	7014.10
5091	reac per cdc 352 - nodo 257	460.41	1319.49	-7475.63	-2.650e+05	1.201e+05	9769.38
5092	reac per cdc 353 - nodo 257	259.38	-866.74	-3647.79	2.079e+05	6.765e+04	-5646.30
5093	reac per cdc 354 - nodo 257	-44.43	1128.48	-4557.79	-2.235e+05	-2.521e+04	7018.10
5094	reac per cdc 355 - nodo 257	-245.46	-1057.75	-729.95	2.494e+05	-7.768e+04	-8397.58
5095	reac per cdc 356 - nodo 257	433.01	1147.51	-7016.42	-2.282e+05	1.093e+05	7293.55
5096	reac per cdc 357 - nodo 257	231.98	-1038.72	-3188.58	2.447e+05	5.680e+04	-8122.13
5097	reac per cdc 358 - nodo 257	-17.02	1300.47	-5017.00	-2.604e+05	-1.436e+04	9493.93
5098	reac per cdc 359 - nodo 257	-218.05	-885.76	-1189.16	2.125e+05	-6.682e+04	-5921.75
5099	reac per cdc 360 - nodo 257	127.12	897.41	-7702.49	-1.861e+05	4.097e+04	-6808.16
5100	reac per cdc 361 - nodo 257	592.68	-444.66	-3420.92	1.290e+05	1.468e+05	1.093e+04
5101	reac per cdc 362 - nodo 257	-377.72	706.40	-4784.65	-1.446e+05	-1.044e+05	-9559.43
5102	reac per cdc 363 - nodo 257	87.84	-635.67	-503.08	1.705e+05	1470.60	8179.95
5103	reac per cdc 364 - nodo 257	99.71	725.43	-7243.28	-1.493e+05	3.011e+04	-9283.98
5104	reac per cdc 365 - nodo 257	565.27	-616.65	-2961.72	1.658e+05	1.359e+05	8455.40
5105	reac per cdc 366 - nodo 257	-350.32	878.39	-5243.86	-1.815e+05	-9.350e+04	-7083.61
5106	reac per cdc 367 - nodo 257	115.24	-463.68	-962.29	1.336e+05	1.232e+04	1.066e+04
5107	reac per cdc 368 - nodo 257	216.64	260.02	-6819.87	-1.314e+04	4.323e+04	1487.57
5108	reac per cdc 369 - nodo 257	293.48	109.55	-6493.41	-2868.60	1.047e+05	-2531.40
5109	reac per cdc 370 - nodo 257	-78.56	149.99	-1709.23	-1.228e+04	-6.228e+04	1465.08
5110	reac per cdc 371 - nodo 257	139.29	318.89	-4558.33	-7.146e+04	3.006e+04	1704.63
5111	reac per cdc 372 - nodo 257	78.73	-56.93	-3649.82	5.575e+04	1.312e+04	388.22
5112	reac per cdc 373 - nodo 257	328.24	247.23	-8254.24	-1.017e+04	9.332e+04	-442.81
5113	reac per cdc 374 - nodo 257	105.02	271.49	-5383.73	-1.581e+04	-6864.53	1955.08
5114	reac per cdc 375 - nodo 257	235.72	372.83	-7093.20	-5.133e+04	4.854e+04	2098.81
5115	reac per cdc 376 - nodo 257	199.39	147.34	-6548.09	2.501e+04	3.837e+04	1308.97
5116	reac per cdc 377 - nodo 257	348.06	174.13	-7851.95	-5525.81	1.157e+05	-2130.56
5117	reac per cdc 378 - nodo 257	-23.98	214.56	-3067.77	-1.494e+04	-5.127e+04	1865.91
5118	reac per cdc 379 - nodo 257	193.87	383.46	-5916.88	-7.412e+04	4.106e+04	2105.46
5119	reac per cdc 380 - nodo 257	133.31	7.65	-5008.37	5.310e+04	2.412e+04	789.06
5120	reac per cdc 381 - nodo 257	129.31	156.70	-4646.20	-8892.51	2.562e+04	846.23
5121	reac per cdc 382 - nodo 257	144.68	126.61	-4580.91	-6837.42	3.791e+04	42.44
5122	reac per cdc 383 - nodo 257	70.27	134.69	-3624.08	-8719.46	4520.06	841.73
5123	reac per cdc 384 - nodo 257	113.84	168.48	-4193.90	-2.056e+04	2.299e+04	889.64
5124	reac per cdc 385 - nodo 257	101.73	93.31	-4012.20	4886.93	1.960e+04	626.36
5125	reac per cdc 386 - nodo 257	107.48	130.87	-4102.79	-7829.63	2.122e+04	685.90



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5126	reac per cdc 259 - nodo 515	-353.23	-1091.67	-2.093e+04	2.201e+05	-4.791e+04	2910.96
5127	reac per cdc 260 - nodo 515	519.98	-470.84	-9143.17	9.459e+04	1.597e+05	1191.91
5128	reac per cdc 261 - nodo 515	-803.01	-476.93	-1.007e+04	9.603e+04	-1.976e+05	1389.24
5129	reac per cdc 262 - nodo 515	-167.56	-65.37	-9580.94	1488.86	-2.598e+04	2874.74
5130	reac per cdc 263 - nodo 515	-121.11	-884.26	-9633.02	1.895e+05	-1.345e+04	-266.99
5131	reac per cdc 264 - nodo 515	44.12	-1089.36	-2.065e+04	2.196e+05	5.938e+04	2851.52
5132	reac per cdc 265 - nodo 515	-749.67	-1093.01	-2.120e+04	2.205e+05	-1.550e+05	2969.92
5133	reac per cdc 266 - nodo 515	-368.40	-846.08	-2.091e+04	1.637e+05	-5.202e+04	3861.22
5134	reac per cdc 267 - nodo 515	-340.54	-1337.41	-2.094e+04	2.766e+05	-4.449e+04	1976.18
5135	reac per cdc 268 - nodo 515	414.49	-779.33	-1.480e+04	1.569e+05	1.453e+05	2001.90
5136	reac per cdc 269 - nodo 515	-908.49	-785.42	-1.573e+04	1.584e+05	-2.119e+05	2199.23
5137	reac per cdc 270 - nodo 515	-273.04	-373.86	-1.524e+04	6.381e+04	-4.037e+04	3684.74
5138	reac per cdc 271 - nodo 515	-226.59	-1192.75	-1.529e+04	2.519e+05	-2.783e+04	543.00
5139	reac per cdc 272 - nodo 515	1410.96	-596.16	-6115.25	1.266e+05	3.954e+05	1.382e+04
5140	reac per cdc 273 - nodo 515	1490.64	-1897.91	-6322.29	4.253e+05	4.169e+05	8085.03
5141	reac per cdc 274 - nodo 515	-1703.83	1184.09	-8152.40	-2.817e+05	-4.456e+05	-6145.00
5142	reac per cdc 275 - nodo 515	-1624.14	-117.66	-8359.44	1.693e+04	-4.241e+05	-1.188e+04
5143	reac per cdc 276 - nodo 515	1519.16	-503.72	-6084.59	1.054e+05	4.246e+05	6668.66
5144	reac per cdc 277 - nodo 515	1382.45	-1990.36	-6352.95	4.465e+05	3.877e+05	1.524e+04
5145	reac per cdc 278 - nodo 515	-1595.63	1276.54	-8121.74	-3.029e+05	-4.164e+05	-1.330e+04
5146	reac per cdc 279 - nodo 515	-1732.34	-210.11	-8390.10	3.816e+04	-4.533e+05	-4728.63
5147	reac per cdc 280 - nodo 515	1577.62	983.78	-5873.50	-2.358e+05	4.404e+05	-3031.59
5148	reac per cdc 281 - nodo 515	1657.30	-317.97	-6080.53	6.283e+04	4.620e+05	-8771.04
5149	reac per cdc 282 - nodo 515	-1870.48	-395.85	-8394.16	8.074e+04	-4.906e+05	1.071e+04
5150	reac per cdc 283 - nodo 515	-1790.80	-1697.60	-8601.19	3.794e+05	-4.691e+05	4971.62
5151	reac per cdc 284 - nodo 515	1685.81	1076.22	-5842.83	-2.570e+05	4.697e+05	-1.019e+04
5152	reac per cdc 285 - nodo 515	1549.10	-410.42	-6111.20	8.406e+04	4.327e+05	-1615.21
5153	reac per cdc 286 - nodo 515	-1762.29	-303.40	-8363.50	5.952e+04	-4.614e+05	3555.24
5154	reac per cdc 287 - nodo 515	-1898.99	-1790.05	-8631.86	4.006e+05	-4.983e+05	1.213e+04
5155	reac per cdc 288 - nodo 515	227.82	1545.63	-6586.71	-3.647e+05	7.593e+04	1.353e+04
5156	reac per cdc 289 - nodo 515	493.43	-2793.54	-7276.83	6.308e+05	1.477e+05	-5600.31
5157	reac per cdc 290 - nodo 515	-706.61	2079.71	-7197.86	-4.872e+05	-1.764e+05	7540.34
5158	reac per cdc 291 - nodo 515	-441.00	-2259.46	-7887.98	5.083e+05	-1.046e+05	-1.159e+04
5159	reac per cdc 292 - nodo 515	277.82	2019.62	-6514.19	-4.734e+05	8.944e+04	8474.37
5160	reac per cdc 293 - nodo 515	543.43	-2319.55	-7204.31	5.220e+05	1.612e+05	-1.066e+04
5161	reac per cdc 294 - nodo 515	-756.61	1605.73	-7270.39	-3.785e+05	-1.899e+05	1.260e+04
5162	reac per cdc 295 - nodo 515	-491.00	-2733.44	-7960.51	6.170e+05	-1.181e+05	-6534.33
5163	reac per cdc 296 - nodo 515	588.48	1853.79	-6484.50	-4.354e+05	1.734e+05	-1.032e+04
5164	reac per cdc 297 - nodo 515	132.78	-3101.69	-7379.05	7.015e+05	5.025e+04	1.825e+04
5165	reac per cdc 298 - nodo 515	-345.96	2387.87	-7095.64	-5.580e+05	-7.892e+04	-1.631e+04
5166	reac per cdc 299 - nodo 515	-801.66	-2567.62	-7990.19	5.790e+05	-2.020e+05	1.226e+04
5167	reac per cdc 300 - nodo 515	638.47	2327.77	-6411.97	-5.442e+05	1.869e+05	-1.538e+04
5168	reac per cdc 301 - nodo 515	182.78	-2627.71	-7306.52	5.928e+05	6.376e+04	1.320e+04
5169	reac per cdc 302 - nodo 515	-395.96	1913.88	-7168.17	-4.492e+05	-9.242e+04	-1.126e+04
5170	reac per cdc 303 - nodo 515	-851.65	-3041.60	-8062.72	6.878e+05	-2.156e+05	1.732e+04
5171	reac per cdc 304 - nodo 515	888.76	-513.84	-6501.37	1.078e+05	2.544e+05	9401.18
5172	reac per cdc 305 - nodo 515	941.03	-1367.65	-6637.17	3.036e+05	2.685e+05	5636.72
5173	reac per cdc 306 - nodo 515	-1154.21	653.82	-7837.52	-1.601e+05	-2.972e+05	-3696.68
5174	reac per cdc 307 - nodo 515	-1101.94	-199.99	-7973.32	3.581e+04	-2.831e+05	-7461.15
5175	reac per cdc 308 - nodo 515	959.73	-453.20	-6481.26	9.384e+04	2.736e+05	4707.72
5176	reac per cdc 309 - nodo 515	870.06	-1428.28	-6657.28	3.176e+05	2.494e+05	1.033e+04
5177	reac per cdc 310 - nodo 515	-1083.24	714.46	-7817.41	-1.740e+05	-2.780e+05	-8390.14
5178	reac per cdc 311 - nodo 515	-1172.91	-260.63	-7993.43	4.973e+04	-3.023e+05	-2767.69
5179	reac per cdc 312 - nodo 515	998.07	522.44	-6342.81	-1.300e+05	2.839e+05	-1654.62
5180	reac per cdc 313 - nodo 515	1050.33	-331.37	-6478.60	6.591e+04	2.981e+05	-5419.08
5181	reac per cdc 314 - nodo 515	-1263.52	-382.45	-7996.09	7.766e+04	-3.267e+05	7359.11
5182	reac per cdc 315 - nodo 515	-1211.25	-1236.27	-8131.89	2.735e+05	-3.126e+05	3594.65
5183	reac per cdc 316 - nodo 515	1069.04	583.07	-6322.69	-1.439e+05	3.031e+05	-6348.08
5184	reac per cdc 317 - nodo 515	979.37	-392.01	-6498.71	7.983e+04	2.789e+05	-725.62
5185	reac per cdc 318 - nodo 515	-1192.55	-321.82	-7975.98	6.374e+04	-3.076e+05	2665.66
5186	reac per cdc 319 - nodo 515	-1282.22	-1296.90	-8152.00	2.874e+05	-3.318e+05	8288.11
5187	reac per cdc 320 - nodo 515	112.75	890.96	-6810.60	-2.145e+05	4.487e+04	9208.80
5188	reac per cdc 321 - nodo 515	286.96	-1955.08	-7263.25	4.384e+05	9.195e+04	-3339.41
5189	reac per cdc 322 - nodo 515	-500.14	1241.26	-7211.45	-2.949e+05	-1.206e+05	5279.44
5190	reac per cdc 323 - nodo 515	-325.93	-1604.79	-7664.09	3.581e+05	-7.354e+04	-7268.77
5191	reac per cdc 324 - nodo 515	145.54	1201.84	-6763.03	-2.858e+05	5.373e+04	5892.06
5192	reac per cdc 325 - nodo 515	319.75	-1644.20	-7215.68	3.671e+05	1.008e+05	-6656.15
5193	reac per cdc 326 - nodo 515	-532.93	930.37	-7259.02	-2.235e+05	-1.295e+05	8596.18
5194	reac per cdc 327 - nodo 515	-358.72	-1915.67	-7711.66	4.294e+05	-8.240e+04	-3952.03
5195	reac per cdc 328 - nodo 515	349.30	1093.08	-6743.56	-2.609e+05	1.088e+05	-6436.06
5196	reac per cdc 329 - nodo 515	50.41	-2157.20	-7330.29	4.848e+05	2.802e+04	1.231e+04
5197	reac per cdc 330 - nodo 515	-263.59	1443.37	-7144.40	-3.413e+05	-5.669e+04	-1.037e+04
5198	reac per cdc 331 - nodo 515	-562.48	-1806.90	-7731.13	4.045e+05	-1.375e+05	8376.09
5199	reac per cdc 332 - nodo 515	382.09	1403.96	-6695.99	-3.322e+05	1.177e+05	-9752.80



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5200	reac per cdc 333 - nodo 515	83.20	-1846.32	-7282.72	4.135e+05	3.688e+04	8988.71
5201	reac per cdc 334 - nodo 515	-296.38	1132.49	-7191.98	-2.699e+05	-6.555e+04	-7048.68
5202	reac per cdc 335 - nodo 515	-595.27	-2117.78	-7778.70	4.758e+05	-1.463e+05	1.169e+04
5203	reac per cdc 336 - nodo 515	692.90	-482.95	-6646.20	1.007e+05	2.015e+05	7742.08
5204	reac per cdc 337 - nodo 515	734.88	-1168.76	-6755.27	2.580e+05	2.129e+05	4718.40
5205	reac per cdc 338 - nodo 515	-948.06	454.93	-7719.42	-1.144e+05	-2.415e+05	-2778.37
5206	reac per cdc 339 - nodo 515	-906.08	-230.87	-7828.49	4.289e+04	-2.302e+05	-5802.05
5207	reac per cdc 340 - nodo 515	749.90	-434.25	-6630.04	8.950e+04	2.169e+05	3972.21
5208	reac per cdc 341 - nodo 515	677.87	-1217.46	-6771.43	2.692e+05	1.975e+05	8488.27
5209	reac per cdc 342 - nodo 515	-891.06	503.63	-7703.27	-1.256e+05	-2.261e+05	-6548.24
5210	reac per cdc 343 - nodo 515	-963.08	-279.58	-7844.65	5.407e+04	-2.456e+05	-2032.18
5211	reac per cdc 344 - nodo 515	780.70	349.40	-6518.83	-9.026e+04	2.252e+05	-1138.15
5212	reac per cdc 345 - nodo 515	822.67	-336.40	-6627.91	6.707e+04	2.366e+05	-4161.83
5213	reac per cdc 346 - nodo 515	-1035.86	-377.43	-7846.78	7.650e+04	-2.653e+05	6101.86
5214	reac per cdc 347 - nodo 515	-993.88	-1063.23	-7955.86	2.338e+05	-2.539e+05	3078.18
5215	reac per cdc 348 - nodo 515	837.70	398.10	-6502.68	-1.014e+05	2.406e+05	-4908.02
5216	reac per cdc 349 - nodo 515	765.67	-385.10	-6644.06	7.825e+04	2.212e+05	-391.96
5217	reac per cdc 350 - nodo 515	-978.85	-328.72	-7830.63	6.532e+04	-2.499e+05	2331.99
5218	reac per cdc 351 - nodo 515	-1050.88	-1111.93	-7972.01	2.450e+05	-2.693e+05	6848.06
5219	reac per cdc 352 - nodo 515	69.59	645.41	-6894.57	-1.582e+05	3.322e+04	7587.55
5220	reac per cdc 353 - nodo 515	209.52	-1640.60	-7258.15	3.663e+05	7.103e+04	-2491.38
5221	reac per cdc 354 - nodo 515	-422.70	926.77	-7216.54	-2.227e+05	-9.970e+04	4431.41
5222	reac per cdc 355 - nodo 515	-282.77	-1359.23	-7580.12	3.017e+05	-6.189e+04	-5647.52
5223	reac per cdc 356 - nodo 515	95.93	895.11	-6856.36	-2.155e+05	4.034e+04	4923.48
5224	reac per cdc 357 - nodo 515	235.86	-1390.89	-7219.94	3.090e+05	7.815e+04	-5155.45
5225	reac per cdc 358 - nodo 515	-449.04	677.07	-7254.75	-1.654e+05	-1.068e+05	7095.48
5226	reac per cdc 359 - nodo 515	-309.11	-1608.94	-7618.33	3.590e+05	-6.900e+04	-2983.45
5227	reac per cdc 360 - nodo 515	259.59	807.75	-6840.73	-1.954e+05	8.456e+04	-4978.69
5228	reac per cdc 361 - nodo 515	19.51	-1802.94	-7312.00	4.035e+05	1.969e+04	1.007e+04
5229	reac per cdc 362 - nodo 515	-232.70	1089.11	-7162.69	-2.600e+05	-4.836e+04	-8134.82
5230	reac per cdc 363 - nodo 515	-472.77	-1521.58	-7633.96	3.390e+05	-1.132e+05	6918.72
5231	reac per cdc 364 - nodo 515	285.93	1057.45	-6802.52	-2.527e+05	9.168e+04	-7642.76
5232	reac per cdc 365 - nodo 515	45.85	-1553.23	-7273.79	3.463e+05	2.680e+04	7410.78
5233	reac per cdc 366 - nodo 515	-259.04	839.41	-7200.90	-2.027e+05	-5.547e+04	-5470.75
5234	reac per cdc 367 - nodo 515	-499.11	-1771.28	-7672.17	3.963e+05	-1.203e+05	9582.79
5235	reac per cdc 368 - nodo 515	-247.23	-768.23	-1.478e+04	1.549e+05	-3.351e+04	2050.00
5236	reac per cdc 369 - nodo 515	334.90	-354.35	-6929.15	7.119e+04	1.049e+05	903.97
5237	reac per cdc 370 - nodo 515	-547.08	-358.41	-7543.81	7.215e+04	-1.333e+05	1035.52
5238	reac per cdc 371 - nodo 515	-123.45	-84.03	-7221.00	9123.02	-1.889e+04	2025.86
5239	reac per cdc 372 - nodo 515	-92.49	-629.96	-7255.72	1.345e+05	-1.054e+04	-68.64
5240	reac per cdc 373 - nodo 515	17.66	-766.69	-1.460e+04	1.545e+05	3.802e+04	2010.37
5241	reac per cdc 374 - nodo 515	-511.53	-769.13	-1.497e+04	1.551e+05	-1.049e+05	2089.30
5242	reac per cdc 375 - nodo 515	-257.35	-604.50	-1.478e+04	1.173e+05	-3.625e+04	2683.51
5243	reac per cdc 376 - nodo 515	-238.77	-932.06	-1.480e+04	1.925e+05	-3.124e+04	1426.81
5244	reac per cdc 377 - nodo 515	264.58	-560.01	-1.070e+04	1.127e+05	9.529e+04	1443.96
5245	reac per cdc 378 - nodo 515	-617.40	-564.07	-1.132e+04	1.137e+05	-1.429e+05	1575.51
5246	reac per cdc 379 - nodo 515	-193.77	-289.69	-1.099e+04	5.067e+04	-2.848e+04	2565.85
5247	reac per cdc 380 - nodo 515	-162.81	-835.62	-1.103e+04	1.760e+05	-2.013e+04	471.36
5248	reac per cdc 381 - nodo 515	-134.72	-439.18	-8746.86	8.841e+04	-1.817e+04	1186.01
5249	reac per cdc 382 - nodo 515	-18.29	-356.40	-7175.71	7.167e+04	9509.18	956.81
5250	reac per cdc 383 - nodo 515	-194.69	-357.21	-7298.64	7.186e+04	-3.812e+04	983.12
5251	reac per cdc 384 - nodo 515	-109.96	-302.34	-7234.08	5.925e+04	-1.525e+04	1181.18
5252	reac per cdc 385 - nodo 515	-103.77	-411.52	-7241.02	8.433e+04	-1.358e+04	762.29
5253	reac per cdc 386 - nodo 515	-106.59	-356.91	-7237.35	7.179e+04	-1.433e+04	970.02
5254	reac per cdc 259 - nodo 517	82.04	-1512.17	-3.670e+04	2.701e+05	1.302e+04	2901.26
5255	reac per cdc 260 - nodo 517	920.21	-647.87	-1.541e+04	1.157e+05	2.157e+05	1201.94
5256	reac per cdc 261 - nodo 517	-846.83	-636.50	-1.537e+04	1.141e+05	-2.038e+05	1379.88
5257	reac per cdc 262 - nodo 517	3.61	-169.15	-1.537e+04	7130.85	-1876.37	2864.20
5258	reac per cdc 263 - nodo 517	66.02	-1117.84	-1.541e+04	2.232e+05	1.291e+04	-295.57
5259	reac per cdc 264 - nodo 517	612.43	-1514.95	-3.671e+04	2.704e+05	1.389e+05	2850.10
5260	reac per cdc 265 - nodo 517	-447.80	-1508.13	-3.669e+04	2.695e+05	-1.127e+05	2956.86
5261	reac per cdc 266 - nodo 517	62.47	-1227.71	-3.669e+04	2.053e+05	8389.54	3847.45
5262	reac per cdc 267 - nodo 517	99.91	-1796.93	-3.672e+04	3.350e+05	1.726e+04	1951.59
5263	reac per cdc 268 - nodo 517	943.11	-1082.34	-2.606e+04	1.932e+05	2.193e+05	2008.96
5264	reac per cdc 269 - nodo 517	-823.92	-1070.96	-2.603e+04	1.916e+05	-2.002e+05	2186.91
5265	reac per cdc 270 - nodo 517	26.52	-603.61	-2.602e+04	8.461e+04	1712.10	3671.22
5266	reac per cdc 271 - nodo 517	88.92	-1552.31	-2.607e+04	3.007e+05	1.650e+04	511.46
5267	reac per cdc 272 - nodo 517	2054.63	-483.15	-1.157e+04	8.507e+04	4.856e+05	1.384e+04
5268	reac per cdc 273 - nodo 517	2161.30	-1776.33	-1.165e+04	3.765e+05	5.109e+05	8089.67
5269	reac per cdc 274 - nodo 517	-2106.72	809.84	-1.145e+04	-2.035e+05	-5.021e+05	-6155.28
5270	reac per cdc 275 - nodo 517	-2000.06	-483.34	-1.154e+04	8.793e+04	-4.768e+05	-1.191e+04
5271	reac per cdc 276 - nodo 517	2199.38	-463.81	-1.157e+04	8.053e+04	5.200e+05	6672.69
5272	reac per cdc 277 - nodo 517	2016.54	-1795.68	-1.165e+04	3.810e+05	4.766e+05	1.526e+04
5273	reac per cdc 278 - nodo 517	-1961.97	829.18	-1.146e+04	-2.080e+05	-4.677e+05	-1.333e+04



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5274	reac per cdc 279 - nodo 517	-2144.81	-502.69	-1.154e+04	9.247e+04	-5.112e+05	-4738.30
5275	reac per cdc 280 - nodo 517	2277.53	678.56	-1.156e+04	-1.760e+05	5.385e+05	-3044.31
5276	reac per cdc 281 - nodo 517	2384.19	-614.62	-1.164e+04	1.154e+05	5.639e+05	-8798.19
5277	reac per cdc 282 - nodo 517	-2329.62	-351.87	-1.146e+04	5.758e+04	-5.550e+05	1.073e+04
5278	reac per cdc 283 - nodo 517	-2222.95	-1645.05	-1.155e+04	3.490e+05	-5.297e+05	4978.70
5279	reac per cdc 284 - nodo 517	2422.28	697.90	-1.156e+04	-1.805e+05	5.729e+05	-1.022e+04
5280	reac per cdc 285 - nodo 517	2239.44	-633.97	-1.164e+04	1.200e+05	5.295e+05	-1627.33
5281	reac per cdc 286 - nodo 517	-2184.86	-332.53	-1.147e+04	5.304e+04	-5.207e+05	3561.72
5282	reac per cdc 287 - nodo 517	-2367.70	-1664.39	-1.154e+04	3.535e+05	-5.641e+05	1.215e+04
5283	reac per cdc 288 - nodo 517	473.71	1478.10	-1.143e+04	-3.559e+05	1.104e+05	1.356e+04
5284	reac per cdc 289 - nodo 517	829.27	-2832.49	-1.171e+04	6.155e+05	1.948e+05	-5622.78
5285	reac per cdc 290 - nodo 517	-774.69	1866.00	-1.139e+04	-4.425e+05	-1.860e+05	7557.16
5286	reac per cdc 291 - nodo 517	-419.14	-2444.60	-1.168e+04	5.289e+05	-1.015e+05	-1.162e+04
5287	reac per cdc 292 - nodo 517	540.58	1826.62	-1.143e+04	-4.342e+05	1.262e+05	8490.45
5288	reac per cdc 293 - nodo 517	896.13	-2483.98	-1.171e+04	5.372e+05	2.107e+05	-1.069e+04
5289	reac per cdc 294 - nodo 517	-841.56	1517.49	-1.140e+04	-3.642e+05	-2.018e+05	1.262e+04
5290	reac per cdc 295 - nodo 517	-486.01	-2793.11	-1.168e+04	6.072e+05	-1.174e+05	-6556.07
5291	reac per cdc 296 - nodo 517	956.22	1542.58	-1.144e+04	-3.710e+05	2.249e+05	-1.035e+04
5292	reac per cdc 297 - nodo 517	346.76	-2896.98	-1.170e+04	6.306e+05	8.021e+04	1.828e+04
5293	reac per cdc 298 - nodo 517	-292.19	1930.48	-1.141e+04	-4.576e+05	-7.139e+04	-1.635e+04
5294	reac per cdc 299 - nodo 517	-901.64	-2509.08	-1.167e+04	5.440e+05	-2.161e+05	1.228e+04
5295	reac per cdc 300 - nodo 517	1023.09	1891.10	-1.144e+04	-4.494e+05	2.408e+05	-1.541e+04
5296	reac per cdc 301 - nodo 517	413.63	-2548.46	-1.170e+04	5.523e+05	9.608e+04	1.321e+04
5297	reac per cdc 302 - nodo 517	-359.05	1581.97	-1.141e+04	-3.793e+05	-8.727e+04	-1.128e+04
5298	reac per cdc 303 - nodo 517	-968.51	-2857.59	-1.167e+04	6.224e+05	-2.320e+05	1.735e+04
5299	reac per cdc 304 - nodo 517	1357.01	-483.19	-1.156e+04	8.557e+04	3.200e+05	9412.71
5300	reac per cdc 305 - nodo 517	1426.97	-1331.38	-1.162e+04	2.767e+05	3.366e+05	5638.78
5301	reac per cdc 306 - nodo 517	-1372.40	364.88	-1.149e+04	-1.037e+05	-3.278e+05	-3704.40
5302	reac per cdc 307 - nodo 517	-1302.43	-483.30	-1.154e+04	8.743e+04	-3.112e+05	-7478.32
5303	reac per cdc 308 - nodo 517	1451.95	-470.51	-1.156e+04	8.259e+04	3.426e+05	4709.39
5304	reac per cdc 309 - nodo 517	1332.03	-1344.07	-1.162e+04	2.797e+05	3.141e+05	1.034e+04
5305	reac per cdc 310 - nodo 517	-1277.45	377.57	-1.149e+04	-1.067e+05	-3.053e+05	-8407.71
5306	reac per cdc 311 - nodo 517	-1397.38	-495.99	-1.154e+04	9.041e+04	-3.338e+05	-2775.00
5307	reac per cdc 312 - nodo 517	1503.20	278.78	-1.156e+04	-8.567e+04	3.547e+05	-1663.93
5308	reac per cdc 313 - nodo 517	1573.16	-569.41	-1.161e+04	1.055e+05	3.713e+05	-5437.86
5309	reac per cdc 314 - nodo 517	-1518.59	-397.09	-1.149e+04	6.753e+04	-3.625e+05	7372.25
5310	reac per cdc 315 - nodo 517	-1448.63	-1245.27	-1.155e+04	2.587e+05	-3.459e+05	3598.32
5311	reac per cdc 316 - nodo 517	1598.15	291.47	-1.156e+04	-8.865e+04	3.773e+05	-6367.25
5312	reac per cdc 317 - nodo 517	1478.22	-582.09	-1.161e+04	1.084e+05	3.488e+05	-734.54
5313	reac per cdc 318 - nodo 517	-1423.65	-384.40	-1.150e+04	6.455e+04	-3.400e+05	2668.93
5314	reac per cdc 319 - nodo 517	-1543.57	-1257.96	-1.155e+04	2.616e+05	-3.685e+05	8301.64
5315	reac per cdc 320 - nodo 517	320.10	803.18	-1.147e+04	-2.037e+05	7.390e+04	9224.64
5316	reac per cdc 321 - nodo 517	553.30	-2024.10	-1.166e+04	4.335e+05	1.293e+05	-3355.12
5317	reac per cdc 322 - nodo 517	-498.73	1057.61	-1.145e+04	-2.605e+05	-1.205e+05	5289.50
5318	reac per cdc 323 - nodo 517	-265.52	-1769.68	-1.163e+04	3.767e+05	-6.508e+04	-7290.25
5319	reac per cdc 324 - nodo 517	363.95	1031.77	-1.147e+04	-2.550e+05	8.431e+04	5901.64
5320	reac per cdc 325 - nodo 517	597.16	-1795.51	-1.165e+04	3.821e+05	1.397e+05	-6678.11
5321	reac per cdc 326 - nodo 517	-542.58	829.01	-1.145e+04	-2.091e+05	-1.309e+05	8612.50
5322	reac per cdc 327 - nodo 517	-309.38	-1998.27	-1.164e+04	4.280e+05	-7.550e+04	-3967.26
5323	reac per cdc 328 - nodo 517	636.57	845.47	-1.148e+04	-2.136e+05	1.490e+05	-6453.09
5324	reac per cdc 329 - nodo 517	236.83	-2066.39	-1.165e+04	4.434e+05	5.412e+04	1.232e+04
5325	reac per cdc 330 - nodo 517	-182.25	1099.90	-1.146e+04	-2.704e+05	-4.531e+04	-1.039e+04
5326	reac per cdc 331 - nodo 517	-581.99	-1811.97	-1.163e+04	3.866e+05	-1.402e+05	8387.48
5327	reac per cdc 332 - nodo 517	680.43	1074.07	-1.148e+04	-2.650e+05	1.595e+05	-9776.08
5328	reac per cdc 333 - nodo 517	280.69	-1837.80	-1.165e+04	3.920e+05	6.454e+04	8999.62
5329	reac per cdc 334 - nodo 517	-226.11	871.31	-1.146e+04	-2.190e+05	-5.572e+04	-7065.23
5330	reac per cdc 335 - nodo 517	-625.85	-2040.56	-1.163e+04	4.380e+05	-1.506e+05	1.171e+04
5331	reac per cdc 336 - nodo 517	1095.35	-483.21	-1.156e+04	8.575e+04	2.579e+05	7750.78
5332	reac per cdc 337 - nodo 517	1151.54	-1164.49	-1.161e+04	2.393e+05	2.713e+05	4719.51
5333	reac per cdc 338 - nodo 517	-1096.96	198.00	-1.150e+04	-6.628e+04	-2.624e+05	-2785.12
5334	reac per cdc 339 - nodo 517	-1040.77	-483.28	-1.155e+04	8.725e+04	-2.491e+05	-5816.40
5335	reac per cdc 340 - nodo 517	1171.60	-473.02	-1.156e+04	8.336e+04	2.760e+05	3972.99
5336	reac per cdc 341 - nodo 517	1075.28	-1174.68	-1.160e+04	2.417e+05	2.532e+05	8497.29
5337	reac per cdc 342 - nodo 517	-1020.71	208.19	-1.150e+04	-6.867e+04	-2.443e+05	-6562.91
5338	reac per cdc 343 - nodo 517	-1117.03	-493.47	-1.154e+04	8.964e+04	-2.672e+05	-2038.61
5339	reac per cdc 344 - nodo 517	1212.77	128.84	-1.156e+04	-5.179e+04	2.858e+05	-1146.19
5340	reac per cdc 345 - nodo 517	1268.97	-552.44	-1.160e+04	1.017e+05	2.991e+05	-4177.47
5341	reac per cdc 346 - nodo 517	-1214.39	-414.06	-1.151e+04	7.127e+04	-2.903e+05	6111.86
5342	reac per cdc 347 - nodo 517	-1158.20	-1095.34	-1.155e+04	2.248e+05	-2.770e+05	3080.58
5343	reac per cdc 348 - nodo 517	1289.03	139.03	-1.156e+04	-5.418e+04	3.039e+05	-4923.98
5344	reac per cdc 349 - nodo 517	1192.71	-562.63	-1.160e+04	1.041e+05	2.810e+05	-399.68
5345	reac per cdc 350 - nodo 517	-1138.13	-403.87	-1.151e+04	6.887e+04	-2.722e+05	2334.07
5346	reac per cdc 351 - nodo 517	-1234.46	-1105.53	-1.155e+04	2.272e+05	-2.951e+05	6858.37
5347	reac per cdc 352 - nodo 517	262.48	550.03	-1.149e+04	-1.466e+05	6.022e+04	7599.71



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5348	reac per cdc 353 - nodo 517	449.79	-1720.89	-1.164e+04	3.652e+05	1.047e+05	-2504.55
5349	reac per cdc 354 - nodo 517	-395.22	754.40	-1.147e+04	-1.922e+05	-9.588e+04	4438.94
5350	reac per cdc 355 - nodo 517	-207.90	-1516.53	-1.162e+04	3.196e+05	-5.141e+04	-5665.32
5351	reac per cdc 356 - nodo 517	297.70	733.65	-1.149e+04	-1.878e+05	6.859e+04	4930.62
5352	reac per cdc 357 - nodo 517	485.02	-1537.27	-1.164e+04	3.239e+05	1.131e+05	-5173.65
5353	reac per cdc 358 - nodo 517	-430.44	570.78	-1.147e+04	-1.509e+05	-1.042e+05	7108.03
5354	reac per cdc 359 - nodo 517	-243.13	-1700.14	-1.162e+04	3.608e+05	-5.977e+04	-2996.23
5355	reac per cdc 360 - nodo 517	516.67	584.00	-1.149e+04	-1.545e+05	1.206e+05	-4992.92
5356	reac per cdc 361 - nodo 517	195.59	-1754.86	-1.163e+04	3.731e+05	4.434e+04	1.009e+04
5357	reac per cdc 362 - nodo 517	-141.02	788.36	-1.148e+04	-2.001e+05	-3.552e+04	-8153.69
5358	reac per cdc 363 - nodo 517	-462.10	-1550.49	-1.161e+04	3.275e+05	-1.118e+05	6927.31
5359	reac per cdc 364 - nodo 517	551.90	767.61	-1.149e+04	-1.958e+05	1.289e+05	-7662.01
5360	reac per cdc 365 - nodo 517	230.82	-1571.24	-1.163e+04	3.319e+05	5.270e+04	7418.98
5361	reac per cdc 366 - nodo 517	-176.25	604.75	-1.148e+04	-1.589e+05	-4.389e+04	-5484.60
5362	reac per cdc 367 - nodo 517	-497.33	-1734.11	-1.161e+04	3.688e+05	-1.201e+05	9596.40
5363	reac per cdc 373 - nodo 517	57.83	-1062.53	-2.576e+04	1.898e+05	9192.82	2043.23
5364	reac per cdc 369 - nodo 517	616.61	-486.33	-1.157e+04	8.689e+04	1.443e+05	910.35
5365	reac per cdc 370 - nodo 517	-561.42	-478.75	-1.154e+04	8.580e+04	-1.353e+05	1028.98
5366	reac per cdc 371 - nodo 517	5.54	-167.18	-1.154e+04	1.450e+04	-740.10	2018.52
5367	reac per cdc 372 - nodo 517	47.15	-799.65	-1.157e+04	1.586e+05	9116.44	-87.99
5368	reac per cdc 373 - nodo 517	411.42	-1064.38	-2.577e+04	1.900e+05	9.312e+04	2009.12
5369	reac per cdc 374 - nodo 517	-295.40	-1059.84	-2.575e+04	1.894e+05	-7.465e+04	2080.30
5370	reac per cdc 375 - nodo 517	44.78	-872.90	-2.575e+04	1.466e+05	6103.85	2674.03
5371	reac per cdc 376 - nodo 517	69.74	-1252.37	-2.577e+04	2.331e+05	1.202e+04	1410.12
5372	reac per cdc 377 - nodo 517	631.88	-775.98	-1.867e+04	1.385e+05	1.467e+05	1448.37
5373	reac per cdc 378 - nodo 517	-546.15	-768.40	-1.864e+04	1.375e+05	-1.329e+05	1567.00
5374	reac per cdc 379 - nodo 517	20.81	-456.83	-1.864e+04	6.616e+04	1652.22	2556.54
5375	reac per cdc 380 - nodo 517	62.41	-1089.29	-1.867e+04	2.102e+05	1.151e+04	450.03
5376	reac per cdc 381 - nodo 517	33.39	-599.10	-1.439e+04	1.072e+05	5365.11	1182.40
5377	reac per cdc 382 - nodo 517	145.15	-483.86	-1.156e+04	8.658e+04	3.238e+04	955.82
5378	reac per cdc 383 - nodo 517	-90.45	-482.35	-1.155e+04	8.636e+04	-2.354e+04	979.55
5379	reac per cdc 384 - nodo 517	22.94	-420.03	-1.155e+04	7.210e+04	3378.53	1177.46
5380	reac per cdc 385 - nodo 517	31.26	-546.53	-1.156e+04	1.009e+05	5349.84	756.16
5381	reac per cdc 386 - nodo 517	27.29	-483.25	-1.155e+04	8.650e+04	4408.19	967.19
5382	reac per cdc 387 - nodo 518	-42.10	-1410.59	-3.669e+04	2.477e+05	-4269.01	2867.33
5383	reac per cdc 260 - nodo 518	867.41	-600.01	-1.535e+04	1.057e+05	2.083e+05	1146.95
5384	reac per cdc 261 - nodo 518	-901.25	-593.60	-1.542e+04	1.041e+05	-2.115e+05	1399.74
5385	reac per cdc 262 - nodo 518	-46.58	-72.17	-1.536e+04	-1.455e+04	-8715.97	2837.65
5386	reac per cdc 263 - nodo 518	13.70	-1124.49	-1.541e+04	2.250e+05	5769.70	-305.10
5387	reac per cdc 264 - nodo 518	488.36	-1411.81	-3.667e+04	2.480e+05	1.216e+05	2784.11
5388	reac per cdc 265 - nodo 518	-572.83	-1407.96	-3.671e+04	2.471e+05	-1.302e+05	2935.78
5389	reac per cdc 266 - nodo 518	-60.03	-1095.11	-3.668e+04	1.759e+05	-8583.15	3798.53
5390	reac per cdc 267 - nodo 518	-23.87	-1726.50	-3.671e+04	3.196e+05	108.25	1912.88
5391	reac per cdc 268 - nodo 518	854.71	-1006.31	-2.600e+04	1.769e+05	2.069e+05	1941.12
5392	reac per cdc 269 - nodo 518	-913.95	-999.90	-2.607e+04	1.754e+05	-2.128e+05	2193.91
5393	reac per cdc 270 - nodo 518	-59.28	-478.48	-2.601e+04	5.671e+04	-1.009e+04	3631.82
5394	reac per cdc 271 - nodo 518	0.99	-1530.80	-2.606e+04	2.963e+05	4398.06	489.07
5395	reac per cdc 272 - nodo 518	2014.97	610.30	-1.142e+04	-1.600e+05	4.801e+05	1.384e+04
5396	reac per cdc 273 - nodo 518	2121.86	-642.12	-1.151e+04	1.224e+05	5.055e+05	8071.76
5397	reac per cdc 274 - nodo 518	-2146.79	-256.35	-1.159e+04	3.558e+04	-5.077e+05	-6164.71
5398	reac per cdc 275 - nodo 518	-2039.90	-1508.77	-1.168e+04	3.180e+05	-4.823e+05	-1.193e+04
5399	reac per cdc 276 - nodo 518	2160.11	564.86	-1.142e+04	-1.499e+05	5.145e+05	6652.87
5400	reac per cdc 277 - nodo 518	1976.72	-596.69	-1.151e+04	1.124e+05	4.710e+05	1.526e+04
5401	reac per cdc 278 - nodo 518	-2001.65	-301.78	-1.159e+04	4.562e+04	-4.733e+05	-1.335e+04
5402	reac per cdc 279 - nodo 518	-2185.04	-1463.33	-1.167e+04	3.080e+05	-5.168e+05	-4745.82
5403	reac per cdc 280 - nodo 518	2238.52	-215.77	-1.140e+04	2.629e+04	5.331e+05	-3072.74
5404	reac per cdc 281 - nodo 518	2345.40	-1468.19	-1.149e+04	3.087e+05	5.585e+05	-8837.64
5405	reac per cdc 282 - nodo 518	-2370.33	569.72	-1.161e+04	-1.507e+05	-5.608e+05	1.074e+04
5406	reac per cdc 283 - nodo 518	-2263.45	-682.70	-1.170e+04	1.317e+05	-5.354e+05	4979.79
5407	reac per cdc 284 - nodo 518	2383.66	-261.21	-1.140e+04	3.633e+04	5.676e+05	-1.026e+04
5408	reac per cdc 285 - nodo 518	2200.26	-1422.76	-1.148e+04	2.987e+05	5.241e+05	-1653.84
5409	reac per cdc 286 - nodo 518	-2225.20	524.29	-1.162e+04	-1.406e+05	-5.263e+05	3560.89
5410	reac per cdc 287 - nodo 518	-2408.59	-637.26	-1.170e+04	1.217e+05	-5.698e+05	1.216e+04
5411	reac per cdc 288 - nodo 518	433.66	1768.13	-1.138e+04	-4.210e+05	1.048e+05	1.356e+04
5412	reac per cdc 289 - nodo 518	789.93	-2406.60	-1.167e+04	5.204e+05	1.893e+05	-5654.44
5413	reac per cdc 290 - nodo 518	-814.87	1508.13	-1.143e+04	-3.623e+05	-1.916e+05	7561.49
5414	reac per cdc 291 - nodo 518	-458.59	-2666.60	-1.172e+04	5.790e+05	-1.070e+05	-1.165e+04
5415	reac per cdc 292 - nodo 518	500.73	1520.31	-1.137e+04	-3.651e+05	1.207e+05	8489.08
5416	reac per cdc 293 - nodo 518	857.00	-2654.43	-1.167e+04	5.763e+05	2.052e+05	-1.073e+04
5417	reac per cdc 294 - nodo 518	-881.93	1755.96	-1.143e+04	-4.182e+05	-2.075e+05	1.263e+04
5418	reac per cdc 295 - nodo 518	-525.66	-2418.78	-1.173e+04	5.232e+05	-1.229e+05	-6582.03
5419	reac per cdc 296 - nodo 518	917.45	1616.68	-1.139e+04	-3.875e+05	2.196e+05	-1.038e+04
5420	reac per cdc 297 - nodo 518	306.15	-2255.15	-1.166e+04	4.869e+05	7.453e+04	1.829e+04
5421	reac per cdc 298 - nodo 518	-331.08	1356.68	-1.144e+04	-3.289e+05	-7.679e+04	-1.638e+04



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5422	reac per cdc 299 - nodo 518	-942.38	-2515.15	-1.171e+04	5.456e+05	-2.218e+05	1.229e+04
5423	reac per cdc 300 - nodo 518	984.51	1368.86	-1.138e+04	-3.317e+05	2.355e+05	-1.546e+04
5424	reac per cdc 301 - nodo 518	373.21	-2502.97	-1.166e+04	5.428e+05	9.044e+04	1.322e+04
5425	reac per cdc 302 - nodo 518	-398.14	1604.51	-1.144e+04	-3.848e+05	-9.270e+04	-1.131e+04
5426	reac per cdc 303 - nodo 518	-1009.45	-2267.33	-1.172e+04	4.897e+05	-2.377e+05	1.736e+04
5427	reac per cdc 304 - nodo 518	1317.32	245.70	-1.147e+04	-7.773e+04	3.145e+05	9403.49
5428	reac per cdc 305 - nodo 518	1387.42	-575.75	-1.152e+04	1.075e+05	3.311e+05	5622.33
5429	reac per cdc 306 - nodo 518	-1412.35	-322.72	-1.158e+04	5.053e+04	-3.334e+05	-3715.28
5430	reac per cdc 307 - nodo 518	-1342.25	-1144.17	-1.163e+04	2.358e+05	-3.168e+05	-7496.44
5431	reac per cdc 308 - nodo 518	1412.51	215.89	-1.147e+04	-7.115e+04	3.371e+05	4691.69
5432	reac per cdc 309 - nodo 518	1292.23	-545.95	-1.152e+04	1.009e+05	3.085e+05	1.033e+04
5433	reac per cdc 310 - nodo 518	-1317.16	-352.52	-1.158e+04	5.711e+04	-3.108e+05	-8427.09
5434	reac per cdc 311 - nodo 518	-1437.44	-1114.36	-1.163e+04	2.292e+05	-3.393e+05	-2784.64
5435	reac per cdc 312 - nodo 518	1463.94	-296.12	-1.145e+04	4.443e+04	3.493e+05	-1687.28
5436	reac per cdc 313 - nodo 518	1534.04	-1117.57	-1.151e+04	2.297e+05	3.659e+05	-5468.44
5437	reac per cdc 314 - nodo 518	-1558.98	219.10	-1.159e+04	-7.164e+04	-3.682e+05	7375.49
5438	reac per cdc 315 - nodo 518	-1488.87	-602.35	-1.165e+04	1.136e+05	-3.516e+05	3594.33
5439	reac per cdc 316 - nodo 518	1559.13	-325.92	-1.145e+04	5.102e+04	3.719e+05	-6399.09
5440	reac per cdc 317 - nodo 518	1438.85	-1087.76	-1.151e+04	2.231e+05	3.433e+05	-756.64
5441	reac per cdc 318 - nodo 518	-1463.78	189.29	-1.159e+04	-6.505e+04	-3.456e+05	2663.68
5442	reac per cdc 319 - nodo 518	-1584.07	-572.55	-1.165e+04	1.070e+05	-3.741e+05	8306.14
5443	reac per cdc 320 - nodo 518	280.15	1005.11	-1.144e+04	-2.489e+05	6.832e+04	9223.27
5444	reac per cdc 321 - nodo 518	513.82	-1733.05	-1.163e+04	3.685e+05	1.238e+05	-3380.59
5445	reac per cdc 322 - nodo 518	-538.76	834.59	-1.147e+04	-2.105e+05	-1.261e+05	5287.64
5446	reac per cdc 323 - nodo 518	-305.08	-1903.58	-1.166e+04	4.070e+05	-7.058e+04	-7316.22
5447	reac per cdc 324 - nodo 518	324.13	842.57	-1.143e+04	-2.123e+05	7.876e+04	5896.04
5448	reac per cdc 325 - nodo 518	557.81	-1895.60	-1.163e+04	4.051e+05	1.342e+05	-6707.82
5449	reac per cdc 326 - nodo 518	-582.74	997.13	-1.147e+04	-2.471e+05	-1.365e+05	8614.87
5450	reac per cdc 327 - nodo 518	-349.06	-1741.03	-1.167e+04	3.703e+05	-8.102e+04	-3988.99
5451	reac per cdc 328 - nodo 518	597.46	905.76	-1.144e+04	-2.270e+05	1.436e+05	-6482.75
5452	reac per cdc 329 - nodo 518	196.51	-1633.71	-1.162e+04	3.465e+05	4.849e+04	1.233e+04
5453	reac per cdc 330 - nodo 518	-221.44	735.24	-1.148e+04	-1.885e+05	-5.075e+04	-1.042e+04
5454	reac per cdc 331 - nodo 518	-622.39	-1804.23	-1.166e+04	3.850e+05	-1.459e+05	8389.79
5455	reac per cdc 332 - nodo 518	641.45	743.22	-1.144e+04	-1.903e+05	1.541e+05	-9809.98
5456	reac per cdc 333 - nodo 518	240.50	-1796.25	-1.162e+04	3.832e+05	5.893e+04	8998.19
5457	reac per cdc 334 - nodo 518	-265.43	897.78	-1.148e+04	-2.252e+05	-6.119e+04	-7091.15
5458	reac per cdc 335 - nodo 518	-666.38	-1641.69	-1.166e+04	3.484e+05	-1.563e+05	1.172e+04
5459	reac per cdc 336 - nodo 518	1055.64	108.95	-1.148e+04	-4.689e+04	2.524e+05	7740.69
5460	reac per cdc 337 - nodo 518	1111.95	-550.85	-1.153e+04	1.019e+05	2.658e+05	4703.60
5461	reac per cdc 338 - nodo 518	-1136.88	-347.62	-1.157e+04	5.614e+04	-2.680e+05	-2796.55
5462	reac per cdc 339 - nodo 518	-1080.58	-1007.41	-1.162e+04	2.049e+05	-2.546e+05	-5833.64
5463	reac per cdc 340 - nodo 518	1132.11	85.00	-1.148e+04	-4.160e+04	2.705e+05	3956.09
5464	reac per cdc 341 - nodo 518	1035.49	-526.91	-1.153e+04	9.660e+04	2.476e+05	8488.21
5465	reac per cdc 342 - nodo 518	-1060.42	-371.56	-1.157e+04	6.143e+04	-2.499e+05	-6581.16
5466	reac per cdc 343 - nodo 518	-1157.04	-983.47	-1.162e+04	1.996e+05	-2.728e+05	-2049.04
5467	reac per cdc 344 - nodo 518	1173.41	-326.27	-1.147e+04	5.124e+04	2.803e+05	-1167.64
5468	reac per cdc 345 - nodo 518	1229.72	-986.07	-1.152e+04	2.000e+05	2.937e+05	-4204.72
5469	reac per cdc 346 - nodo 518	-1254.65	87.60	-1.158e+04	-4.199e+04	-2.960e+05	6111.77
5470	reac per cdc 347 - nodo 518	-1198.34	-572.20	-1.163e+04	1.068e+05	-2.826e+05	3074.68
5471	reac per cdc 348 - nodo 518	1249.88	-350.21	-1.147e+04	5.653e+04	2.985e+05	-4952.24
5472	reac per cdc 349 - nodo 518	1153.26	-962.12	-1.152e+04	1.947e+05	2.756e+05	-420.12
5473	reac per cdc 350 - nodo 518	-1178.19	63.65	-1.158e+04	-3.670e+04	-2.778e+05	2327.17
5474	reac per cdc 351 - nodo 518	-1274.81	-548.26	-1.163e+04	1.015e+05	-3.007e+05	6859.29
5475	reac per cdc 352 - nodo 518	222.57	718.91	-1.146e+04	-1.844e+05	5.465e+04	7595.93
5476	reac per cdc 353 - nodo 518	410.26	-1480.41	-1.161e+04	3.115e+05	9.921e+04	-2527.70
5477	reac per cdc 354 - nodo 518	-435.19	581.95	-1.148e+04	-1.535e+05	-1.015e+05	4434.75
5478	reac per cdc 355 - nodo 518	-247.50	-1617.38	-1.164e+04	3.424e+05	-5.691e+04	-5688.88
5479	reac per cdc 356 - nodo 518	257.90	588.35	-1.145e+04	-1.550e+05	6.304e+04	4923.43
5480	reac per cdc 357 - nodo 518	445.59	-1610.98	-1.161e+04	3.410e+05	1.076e+05	-5200.20
5481	reac per cdc 358 - nodo 518	-470.52	712.51	-1.149e+04	-1.829e+05	-1.099e+05	7107.25
5482	reac per cdc 359 - nodo 518	-282.83	-1486.82	-1.165e+04	3.130e+05	-6.530e+04	-3016.38
5483	reac per cdc 360 - nodo 518	477.44	639.10	-1.146e+04	-1.668e+05	1.151e+05	-5019.43
5484	reac per cdc 361 - nodo 518	155.39	-1400.60	-1.161e+04	2.939e+05	3.873e+04	1.009e+04
5485	reac per cdc 362 - nodo 518	-180.32	502.13	-1.149e+04	-1.359e+05	-4.099e+04	-8180.60
5486	reac per cdc 363 - nodo 518	-502.37	-1537.57	-1.164e+04	3.248e+05	-1.174e+05	6926.47
5487	reac per cdc 364 - nodo 518	512.77	508.54	-1.146e+04	-1.373e+05	1.235e+05	-7691.92
5488	reac per cdc 365 - nodo 518	190.72	-1531.16	-1.161e+04	3.233e+05	4.711e+04	7415.15
5489	reac per cdc 366 - nodo 518	-215.65	632.70	-1.149e+04	-1.653e+05	-4.937e+04	-5508.10
5490	reac per cdc 367 - nodo 518	-537.70	-1407.01	-1.164e+04	2.954e+05	-1.258e+05	9598.97
5491	reac per cdc 368 - nodo 518	-29.41	-990.97	-2.575e+04	1.740e+05	-2958.78	2012.41
5492	reac per cdc 369 - nodo 518	576.93	-450.58	-1.153e+04	7.936e+04	1.388e+05	872.16
5493	reac per cdc 370 - nodo 518	-602.17	-446.31	-1.157e+04	7.833e+04	-1.411e+05	1040.69
5494	reac per cdc 371 - nodo 518	-32.39	-98.69	-1.153e+04	-797.20	-5923.42	1999.29
5495	reac per cdc 372 - nodo 518	7.79	-800.24	-1.157e+04	1.589e+05	3733.70	-95.87



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5496	reac per cdc 373 - nodo 518	324.23	-991.78	-2.574e+04	1.742e+05	8.097e+04	1963.60
5497	reac per cdc 374 - nodo 518	-383.23	-989.22	-2.577e+04	1.736e+05	-8.693e+04	2064.71
5498	reac per cdc 375 - nodo 518	-41.36	-780.65	-2.574e+04	1.261e+05	-5834.88	2639.88
5499	reac per cdc 376 - nodo 518	-17.25	-1201.58	-2.576e+04	2.220e+05	-40.61	1382.78
5500	reac per cdc 377 - nodo 518	568.46	-721.45	-1.863e+04	1.269e+05	1.378e+05	1401.61
5501	reac per cdc 378 - nodo 518	-610.64	-717.18	-1.867e+04	1.258e+05	-1.420e+05	1570.13
5502	reac per cdc 379 - nodo 518	-40.86	-369.56	-1.863e+04	4.671e+04	-6837.84	2528.74
5503	reac per cdc 380 - nodo 518	-0.68	-1071.11	-1.867e+04	2.064e+05	2819.27	433.57
5504	reac per cdc 381 - nodo 518	-15.85	-557.58	-1.439e+04	9.802e+04	-1495.69	1165.30
5505	reac per cdc 382 - nodo 518	105.41	-449.50	-1.155e+04	7.908e+04	2.685e+04	937.25
5506	reac per cdc 383 - nodo 518	-130.41	-448.65	-1.155e+04	7.888e+04	-2.912e+04	970.96
5507	reac per cdc 384 - nodo 518	-16.45	-379.13	-1.155e+04	6.305e+04	-2088.62	1162.68
5508	reac per cdc 385 - nodo 518	-8.41	-519.43	-1.155e+04	9.500e+04	-157.20	743.64
5509	reac per cdc 386 - nodo 518	-12.47	-449.23	-1.155e+04	7.901e+04	-1129.92	953.52
5510	reac per cdc 259 - nodo 519	389.25	699.97	-1.525e+04	-5.666e+04	5.611e+04	2829.76
5511	reac per cdc 260 - nodo 519	821.16	327.16	-7483.16	-2.772e+04	2.018e+05	1045.05
5512	reac per cdc 261 - nodo 519	-503.17	310.32	-6736.69	-2.671e+04	-1.559e+05	1486.68
5513	reac per cdc 262 - nodo 519	138.86	983.97	-6466.06	-1.712e+05	1.740e+04	2794.08
5514	reac per cdc 263 - nodo 519	182.68	-349.47	-7756.08	1.175e+05	2.956e+04	-316.18
5515	reac per cdc 264 - nodo 519	786.20	705.69	-1.547e+04	-5.712e+04	1.633e+05	2702.36
5516	reac per cdc 265 - nodo 519	-8.40	695.59	-1.502e+04	-5.651e+04	-5.130e+04	2967.33
5517	reac per cdc 266 - nodo 519	376.82	1099.78	-1.486e+04	-1.432e+05	5.266e+04	3751.77
5518	reac per cdc 267 - nodo 519	403.11	299.72	-1.563e+04	3.001e+04	5.996e+04	1885.61
5519	reac per cdc 268 - nodo 519	936.00	518.33	-1.155e+04	-4.257e+04	2.183e+05	1831.24
5520	reac per cdc 269 - nodo 519	-388.33	501.50	-1.080e+04	-4.156e+04	-1.394e+05	2272.86
5521	reac per cdc 270 - nodo 519	253.70	1175.14	-1.053e+04	-1.861e+05	3.388e+04	3580.26
5522	reac per cdc 271 - nodo 519	297.52	-158.29	-1.182e+04	1.026e+05	4.604e+04	470.00
5523	reac per cdc 272 - nodo 519	1637.10	1384.58	-5857.10	-2.716e+05	4.271e+05	1.380e+04
5524	reac per cdc 273 - nodo 519	1716.95	69.05	-6928.85	1.854e+04	4.487e+05	8052.65
5525	reac per cdc 274 - nodo 519	-1477.56	408.89	-3794.66	-5.913e+04	-4.139e+05	-6163.17
5526	reac per cdc 275 - nodo 519	-1397.70	-906.64	-4866.41	2.310e+05	-3.923e+05	-1.191e+04
5527	reac per cdc 276 - nodo 519	1745.67	1290.35	-5906.16	-2.498e+05	4.564e+05	6633.61
5528	reac per cdc 277 - nodo 519	1608.38	163.28	-6879.78	-3288.29	4.194e+05	1.522e+04
5529	reac per cdc 278 - nodo 519	-1368.98	314.66	-3843.73	-3.730e+04	-3.846e+05	-1.333e+04
5530	reac per cdc 279 - nodo 519	-1506.27	-812.41	-4817.35	2.092e+05	-4.217e+05	-4744.13
5531	reac per cdc 280 - nodo 519	1804.44	487.03	-5890.80	-7.684e+04	4.723e+05	-3098.71
5532	reac per cdc 281 - nodo 519	1884.30	-828.49	-6962.55	2.133e+05	4.939e+05	-8850.14
5533	reac per cdc 282 - nodo 519	-1644.90	1306.43	-3760.96	-2.539e+05	-4.591e+05	1.074e+04
5534	reac per cdc 283 - nodo 519	-1565.04	-9.09	-4832.71	3.625e+04	-4.375e+05	4988.19
5535	reac per cdc 284 - nodo 519	1913.01	392.81	-5939.86	-5.501e+04	5.016e+05	-1.027e+04
5536	reac per cdc 285 - nodo 519	1775.73	-734.27	-6913.48	1.915e+05	4.646e+05	-1679.67
5537	reac per cdc 286 - nodo 519	-1536.33	1212.21	-3810.03	-2.320e+05	-4.298e+05	3569.15
5538	reac per cdc 287 - nodo 519	-1673.62	85.13	-4783.65	1.442e+04	-4.669e+05	1.216e+04
5539	reac per cdc 288 - nodo 519	453.80	2577.87	-3884.87	-5.357e+05	1.075e+05	1.353e+04
5540	reac per cdc 289 - nodo 519	719.99	-1807.22	-7457.38	4.314e+05	1.795e+05	-5645.88
5541	reac per cdc 290 - nodo 519	-480.59	2285.16	-3266.14	-4.720e+05	-1.448e+05	7535.36
5542	reac per cdc 291 - nodo 519	-214.40	-2099.93	-6838.64	4.951e+05	-7.280e+04	-1.164e+04
5543	reac per cdc 292 - nodo 519	504.00	2308.61	-3894.98	-4.773e+05	1.211e+05	8454.69
5544	reac per cdc 293 - nodo 519	770.20	-2076.49	-7467.49	4.898e+05	1.931e+05	-1.072e+04
5545	reac per cdc 294 - nodo 519	-530.80	2554.43	-3256.03	-5.304e+05	-1.583e+05	1.261e+04
5546	reac per cdc 295 - nodo 519	-264.61	-1830.67	-6828.53	4.367e+05	-8.636e+04	-6565.22
5547	reac per cdc 296 - nodo 519	815.71	2263.78	-4048.42	-4.629e+05	2.053e+05	-1.038e+04
5548	reac per cdc 297 - nodo 519	358.09	-1493.13	-7293.82	3.586e+05	8.177e+04	1.826e+04
5549	reac per cdc 298 - nodo 519	-118.69	1971.08	-3429.69	-3.992e+05	-4.703e+04	-1.637e+04
5550	reac per cdc 299 - nodo 519	-576.31	-1785.84	-6675.09	4.224e+05	-1.705e+05	1.226e+04
5551	reac per cdc 300 - nodo 519	865.91	1994.52	-4058.53	-4.045e+05	2.188e+05	-1.545e+04
5552	reac per cdc 301 - nodo 519	408.29	-1762.40	-7303.93	4.170e+05	9.533e+04	1.318e+04
5553	reac per cdc 302 - nodo 519	-168.89	2240.34	-3419.58	-4.576e+05	-6.059e+04	-1.130e+04
5554	reac per cdc 303 - nodo 519	-626.51	-1516.58	-6664.98	3.639e+05	-1.841e+05	1.734e+04
5555	reac per cdc 304 - nodo 519	1114.95	990.37	-5686.65	-1.851e+05	2.861e+05	9379.09
5556	reac per cdc 305 - nodo 519	1167.33	127.52	-6389.60	5177.51	3.003e+05	5606.77
5557	reac per cdc 306 - nodo 519	-927.93	350.42	-4333.91	-4.576e+04	-2.655e+05	-3717.30
5558	reac per cdc 307 - nodo 519	-875.55	-512.43	-5036.86	1.445e+05	-2.514e+05	-7489.62
5559	reac per cdc 308 - nodo 519	1186.16	928.57	-5718.83	-1.708e+05	3.053e+05	4676.03
5560	reac per cdc 309 - nodo 519	1096.12	189.32	-6357.42	-9139.77	2.810e+05	1.031e+04
5561	reac per cdc 310 - nodo 519	-856.72	288.62	-4366.09	-3.145e+04	-2.463e+05	-8420.36
5562	reac per cdc 311 - nodo 519	-946.76	-450.63	-5004.68	1.302e+05	-2.706e+05	-2786.55
5563	reac per cdc 312 - nodo 519	1224.71	401.67	-5708.75	-5.738e+04	3.157e+05	-1707.34
5564	reac per cdc 313 - nodo 519	1277.09	-461.17	-6411.71	1.329e+05	3.299e+05	-5479.66
5565	reac per cdc 314 - nodo 519	-1037.69	939.11	-4311.80	-1.735e+05	-2.952e+05	7369.14
5566	reac per cdc 315 - nodo 519	-985.31	76.27	-5014.76	1.679e+04	-2.810e+05	3596.82
5567	reac per cdc 316 - nodo 519	1295.92	339.87	-5740.93	-4.306e+04	3.350e+05	-6410.40
5568	reac per cdc 317 - nodo 519	1205.88	-399.37	-6379.53	1.186e+05	3.107e+05	-776.60
5569	reac per cdc 318 - nodo 519	-966.48	877.31	-4343.98	-1.592e+05	-2.759e+05	2666.08



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5570	reac per cdc 319 - nodo 519	-1056.53	138.07	-4982.58	2477.55	-3.002e+05	8299.88
5571	reac per cdc 320 - nodo 519	338.83	1773.04	-4393.07	-3.584e+05	7.651e+04	9196.39
5572	reac per cdc 321 - nodo 519	513.43	-1103.12	-6736.26	2.760e+05	1.237e+05	-3378.00
5573	reac per cdc 322 - nodo 519	-274.03	1581.06	-3987.25	-3.165e+05	-8.897e+04	5267.47
5574	reac per cdc 323 - nodo 519	-99.44	-1295.10	-6330.44	3.178e+05	-4.177e+04	-7306.91
5575	reac per cdc 324 - nodo 519	371.76	1596.43	-4399.70	-3.200e+05	8.541e+04	5870.46
5576	reac per cdc 325 - nodo 519	546.36	-1279.72	-6742.89	3.143e+05	1.326e+05	-6703.93
5577	reac per cdc 326 - nodo 519	-306.96	1757.66	-3980.62	-3.549e+05	-9.787e+04	8593.41
5578	reac per cdc 327 - nodo 519	-132.37	-1118.49	-6323.81	2.794e+05	-5.067e+04	-3980.99
5579	reac per cdc 328 - nodo 519	576.21	1567.04	-4500.34	-3.106e+05	1.406e+05	-6480.48
5580	reac per cdc 329 - nodo 519	276.06	-897.11	-6628.99	2.282e+05	5.961e+04	1.230e+04
5581	reac per cdc 330 - nodo 519	-36.66	1375.05	-4094.52	-2.688e+05	-2.487e+04	-1.041e+04
5582	reac per cdc 331 - nodo 519	-336.81	-1089.10	-6223.17	2.700e+05	-1.059e+05	8369.95
5583	reac per cdc 332 - nodo 519	609.13	1390.43	-4506.98	-2.723e+05	1.495e+05	-9806.41
5584	reac per cdc 333 - nodo 519	308.98	-1073.72	-6635.62	2.666e+05	6.850e+04	8972.94
5585	reac per cdc 334 - nodo 519	-69.59	1551.66	-4087.89	-3.071e+05	-3.377e+04	-7083.46
5586	reac per cdc 335 - nodo 519	-369.74	-912.49	-6216.54	2.317e+05	-1.148e+05	1.170e+04
5587	reac per cdc 336 - nodo 519	919.10	842.51	-5622.72	-1.527e+05	2.332e+05	7719.36
5588	reac per cdc 337 - nodo 519	961.17	149.45	-6187.35	165.25	2.446e+05	4689.38
5589	reac per cdc 338 - nodo 519	-721.78	328.49	-4536.17	-4.075e+04	-2.099e+05	-2799.90
5590	reac per cdc 339 - nodo 519	-679.71	-364.57	-5100.80	1.121e+05	-1.985e+05	-5829.89
5591	reac per cdc 340 - nodo 519	976.30	792.87	-5648.56	-1.412e+05	2.487e+05	3941.78
5592	reac per cdc 341 - nodo 519	903.98	199.09	-6161.50	-1.133e+04	2.291e+05	8466.96
5593	reac per cdc 342 - nodo 519	-664.58	278.85	-4562.01	-2.925e+04	-1.944e+05	-6577.48
5594	reac per cdc 343 - nodo 519	-736.91	-314.93	-5074.95	1.006e+05	-2.139e+05	-2052.31
5595	reac per cdc 344 - nodo 519	1007.27	369.66	-5640.47	-5.008e+04	2.570e+05	-1185.48
5596	reac per cdc 345 - nodo 519	1049.34	-323.40	-6205.10	1.028e+05	2.684e+05	-4215.47
5597	reac per cdc 346 - nodo 519	-809.94	801.34	-4518.41	-1.434e+05	-2.337e+05	6104.94
5598	reac per cdc 347 - nodo 519	-767.87	108.28	-5083.04	9496.85	-2.223e+05	3074.95
5599	reac per cdc 348 - nodo 519	1064.46	320.02	-5666.32	-3.858e+04	2.725e+05	-4963.06
5600	reac per cdc 349 - nodo 519	992.14	-273.76	-6179.25	9.126e+04	2.530e+05	-437.88
5601	reac per cdc 350 - nodo 519	-752.74	751.70	-4544.26	-1.319e+05	-2.182e+05	2327.36
5602	reac per cdc 351 - nodo 519	-825.07	157.92	-5057.19	-2002.78	-2.377e+05	6852.53
5603	reac per cdc 352 - nodo 519	295.71	1471.17	-4583.69	-2.918e+05	6.487e+04	7572.60
5604	reac per cdc 353 - nodo 519	435.95	-839.02	-6465.79	2.177e+05	1.028e+05	-2527.35
5605	reac per cdc 354 - nodo 519	-196.55	1316.96	-4257.73	-2.582e+05	-6.805e+04	4416.83
5606	reac per cdc 355 - nodo 519	-56.32	-993.23	-6139.82	2.512e+05	-3.014e+04	-5683.13
5607	reac per cdc 356 - nodo 519	322.16	1329.31	-4589.02	-2.610e+05	7.202e+04	4901.15
5608	reac per cdc 357 - nodo 519	462.40	-980.88	-6471.11	2.484e+05	1.099e+05	-5198.80
5609	reac per cdc 358 - nodo 519	-223.00	1458.82	-4252.40	-2.890e+05	-7.519e+04	7088.28
5610	reac per cdc 359 - nodo 519	-82.76	-851.37	-6134.50	2.205e+05	-3.728e+04	-3011.68
5611	reac per cdc 360 - nodo 519	486.37	1305.70	-4669.85	-2.535e+05	1.164e+05	-5019.33
5612	reac per cdc 361 - nodo 519	245.29	-673.56	-6379.63	1.793e+05	5.130e+04	1.006e+04
5613	reac per cdc 362 - nodo 519	-5.89	1151.50	-4343.88	-2.199e+05	-1.656e+04	-8175.11
5614	reac per cdc 363 - nodo 519	-246.98	-827.76	-6053.66	2.129e+05	-8.162e+04	6908.81
5615	reac per cdc 364 - nodo 519	512.82	1163.85	-4675.17	-2.227e+05	1.235e+05	-7690.78
5616	reac per cdc 365 - nodo 519	271.74	-815.41	-6384.95	2.101e+05	5.844e+04	7393.13
5617	reac per cdc 366 - nodo 519	-32.34	1293.35	-4338.56	-2.507e+05	-2.370e+04	-5503.66
5618	reac per cdc 367 - nodo 519	-273.43	-685.91	-6048.34	1.821e+05	-8.877e+04	9580.26
5619	reac per cdc 368 - nodo 519	272.81	493.87	-1.078e+04	-4.009e+04	3.934e+04	1992.98
5620	reac per cdc 369 - nodo 519	560.76	245.33	-5610.24	-2.080e+04	1.365e+05	803.18
5621	reac per cdc 370 - nodo 519	-322.13	234.10	-5112.60	-2.013e+04	-1.020e+05	1097.59
5622	reac per cdc 371 - nodo 519	105.89	683.20	-4932.17	-1.165e+05	1.354e+04	1969.19
5623	reac per cdc 372 - nodo 519	135.10	-205.75	-5792.19	7.601e+04	2.165e+04	-104.31
5624	reac per cdc 373 - nodo 519	537.45	497.69	-1.093e+04	-4.040e+04	1.108e+05	1908.05
5625	reac per cdc 374 - nodo 519	7.72	490.95	-1.064e+04	-3.999e+04	-3.226e+04	2084.70
5626	reac per cdc 375 - nodo 519	264.53	760.41	-1.053e+04	-9.781e+04	3.705e+04	2607.66
5627	reac per cdc 376 - nodo 519	282.06	227.04	-1.104e+04	1.769e+04	4.191e+04	1363.55
5628	reac per cdc 377 - nodo 519	637.31	372.78	-8321.85	-3.070e+04	1.475e+05	1327.30
5629	reac per cdc 378 - nodo 519	-245.57	361.55	-7824.21	-3.003e+04	-9.098e+04	1621.72
5630	reac per cdc 379 - nodo 519	182.45	810.65	-7643.79	-1.264e+05	2.453e+04	2493.32
5631	reac per cdc 380 - nodo 519	211.66	-78.30	-8503.80	6.611e+04	3.263e+04	419.81
5632	reac per cdc 381 - nodo 519	150.32	289.95	-6446.40	-2.425e+04	2.176e+04	1154.39
5633	reac per cdc 382 - nodo 519	207.91	240.24	-5411.45	-2.040e+04	4.119e+04	916.43
5634	reac per cdc 383 - nodo 519	31.33	238.00	-5311.92	-2.026e+04	-6499.56	975.31
5635	reac per cdc 384 - nodo 519	116.94	327.82	-5275.84	-3.953e+04	1.660e+04	1149.63
5636	reac per cdc 385 - nodo 519	122.78	150.03	-5447.84	-1032.91	1.822e+04	734.93
5637	reac per cdc 386 - nodo 519	119.70	238.97	-5361.76	-2.029e+04	1.737e+04	944.74
5638	reac per cdc 259 - nodo 542	-32.72	-1152.42	-1.397e+04	2.027e+05	-9336.76	3761.05
5639	reac per cdc 260 - nodo 542	249.00	-507.76	-4135.70	8.891e+04	1.196e+05	5731.11
5640	reac per cdc 261 - nodo 542	-294.43	-512.84	-1.154e+04	8.859e+04	-1.302e+05	-2428.07
5641	reac per cdc 262 - nodo 542	-66.94	-15.25	-8757.07	-3.136e+04	-1.777e+04	4910.66
5642	reac per cdc 263 - nodo 542	26.78	-1012.95	-6915.67	2.104e+05	8470.58	-1610.79
5643	reac per cdc 264 - nodo 542	129.77	-1149.20	-1.175e+04	2.024e+05	6.545e+04	6208.39



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5644	reac per cdc 265 - nodo 542	-196.29	-1152.25	-1.619e+04	2.022e+05	-8.439e+04	1312.88
5645	reac per cdc 266 - nodo 542	-59.79	-853.70	-1.452e+04	1.303e+05	-1.695e+04	5716.12
5646	reac per cdc 267 - nodo 542	-3.56	-1452.32	-1.342e+04	2.754e+05	-1203.57	1803.25
5647	reac per cdc 268 - nodo 542	243.55	-827.41	-7202.86	1.456e+05	1.174e+05	6785.52
5648	reac per cdc 269 - nodo 542	-299.88	-832.49	-1.461e+04	1.453e+05	-1.323e+05	-1373.65
5649	reac per cdc 270 - nodo 542	-72.39	-334.90	-1.182e+04	2.532e+04	-1.990e+04	5965.08
5650	reac per cdc 271 - nodo 542	21.33	-1332.60	-9982.83	2.671e+05	6344.57	-556.38
5651	reac per cdc 272 - nodo 542	1173.17	696.96	-937.99	-1.736e+05	3.373e+05	1.531e+04
5652	reac per cdc 273 - nodo 542	1334.82	-546.29	1531.34	1.059e+05	3.687e+05	6912.90
5653	reac per cdc 274 - nodo 542	-1367.92	-226.33	-1.347e+04	2.856e+04	-3.764e+05	-4415.73
5654	reac per cdc 275 - nodo 542	-1206.27	-1469.58	-1.100e+04	3.081e+05	-3.450e+05	-1.282e+04
5655	reac per cdc 276 - nodo 542	1405.86	569.27	-1159.57	-1.469e+05	3.859e+05	6088.47
5656	reac per cdc 277 - nodo 542	1102.12	-418.59	1752.91	7.923e+04	3.201e+05	1.614e+04
5657	reac per cdc 278 - nodo 542	-1135.23	-354.02	-1.369e+04	5.525e+04	-3.278e+05	-1.364e+04
5658	reac per cdc 279 - nodo 542	-1438.97	-1341.89	-1.078e+04	2.814e+05	-3.936e+05	-3591.30
5659	reac per cdc 280 - nodo 542	1390.28	-126.91	2011.51	8758.40	4.059e+05	-1542.45
5660	reac per cdc 281 - nodo 542	1551.93	-1370.16	4480.84	2.883e+05	4.373e+05	-9943.93
5661	reac per cdc 282 - nodo 542	-1585.03	597.54	-1.642e+04	-1.538e+05	-4.450e+05	1.244e+04
5662	reac per cdc 283 - nodo 542	-1423.38	-645.71	-1.395e+04	1.257e+05	-4.136e+05	4039.62
5663	reac per cdc 284 - nodo 542	1622.97	-254.60	1789.93	3.544e+04	4.545e+05	-1.077e+04
5664	reac per cdc 285 - nodo 542	1319.23	-1242.47	4702.41	2.616e+05	3.887e+05	-718.02
5665	reac per cdc 286 - nodo 542	-1352.34	469.85	-1.664e+04	-1.271e+05	-3.964e+05	3215.19
5666	reac per cdc 287 - nodo 542	-1656.07	-518.01	-1.373e+04	9.903e+04	-4.622e+05	1.327e+04
5667	reac per cdc 288 - nodo 542	95.19	1824.27	-8203.98	-4.290e+05	5.094e+04	1.821e+04
5668	reac per cdc 289 - nodo 542	634.03	-2319.90	27.11	5.028e+05	1.555e+05	-9794.36
5669	reac per cdc 290 - nodo 542	-667.13	1547.28	-1.196e+04	-3.683e+05	-1.632e+05	1.229e+04
5670	reac per cdc 291 - nodo 542	-128.30	-2596.89	-3731.55	5.634e+05	-5.862e+04	-1.571e+04
5671	reac per cdc 292 - nodo 542	160.33	1577.11	-7319.13	-3.743e+05	7.152e+04	1.315e+04
5672	reac per cdc 293 - nodo 542	699.16	-2567.06	911.96	5.575e+05	1.761e+05	-1.485e+04
5673	reac per cdc 294 - nodo 542	-732.27	1794.44	-1.285e+04	-4.230e+05	-1.838e+05	1.735e+04
5674	reac per cdc 295 - nodo 542	-193.43	-2349.72	-4616.40	5.087e+05	-7.920e+04	-1.066e+04
5675	reac per cdc 296 - nodo 542	870.84	1398.62	-8942.57	-3.400e+05	2.130e+05	-1.254e+04
5676	reac per cdc 297 - nodo 542	-141.62	-1894.25	765.70	4.138e+05	-6519.92	2.096e+04
5677	reac per cdc 298 - nodo 542	108.51	1121.63	-1.270e+04	-2.794e+05	-1153.57	-1.846e+04
5678	reac per cdc 299 - nodo 542	-903.94	-2171.24	-2992.96	4.745e+05	-2.206e+05	1.504e+04
5679	reac per cdc 300 - nodo 542	935.97	1151.46	-8057.72	-2.853e+05	2.335e+05	-1.760e+04
5680	reac per cdc 301 - nodo 542	-76.48	-2141.41	1650.55	4.686e+05	1.406e+04	1.590e+04
5681	reac per cdc 302 - nodo 542	43.38	1368.80	-1.359e+04	-3.341e+05	-2.173e+04	-1.340e+04
5682	reac per cdc 303 - nodo 542	-969.08	-1924.08	-3877.81	4.198e+05	-2.412e+05	2.010e+04
5683	reac per cdc 304 - nodo 542	763.78	324.20	-2668.77	-9.073e+04	2.199e+05	1.047e+04
5684	reac per cdc 305 - nodo 542	869.80	-491.24	-1049.15	9.260e+04	2.405e+05	4963.77
5685	reac per cdc 306 - nodo 542	-902.91	-281.38	-1.089e+04	4.187e+04	-2.482e+05	-2466.60
5686	reac per cdc 307 - nodo 542	-796.88	-1096.82	-9266.76	2.252e+05	-2.276e+05	-7977.07
5687	reac per cdc 308 - nodo 542	916.40	240.45	-2814.10	-7.323e+04	2.518e+05	4423.03
5688	reac per cdc 309 - nodo 542	717.18	-407.49	-903.82	7.510e+04	2.086e+05	1.101e+04
5689	reac per cdc 310 - nodo 542	-750.29	-365.13	-1.103e+04	5.937e+04	-2.163e+05	-8517.82
5690	reac per cdc 311 - nodo 542	-949.50	-1013.07	-9121.43	2.077e+05	-2.595e+05	-1925.86
5691	reac per cdc 312 - nodo 542	906.18	-216.17	-734.21	2.888e+04	2.649e+05	-582.04
5692	reac per cdc 313 - nodo 542	1012.20	-1031.61	885.41	2.122e+05	2.855e+05	-6092.52
5693	reac per cdc 314 - nodo 542	-1045.31	258.99	-1.282e+04	-7.775e+04	-2.932e+05	8589.69
5694	reac per cdc 315 - nodo 542	-939.28	-556.45	-1.120e+04	1.056e+05	-2.726e+05	3079.22
5695	reac per cdc 316 - nodo 542	1058.80	-299.92	-879.54	4.638e+04	2.968e+05	-6633.26
5696	reac per cdc 317 - nodo 542	859.58	-947.86	1030.74	1.947e+05	2.536e+05	-41.30
5697	reac per cdc 318 - nodo 542	-892.69	175.24	-1.297e+04	-6.024e+04	-2.613e+05	2538.47
5698	reac per cdc 319 - nodo 542	-1091.90	-472.70	-1.106e+04	8.809e+04	-3.045e+05	9130.43
5699	reac per cdc 320 - nodo 542	56.74	1063.60	-7434.48	-2.582e+05	3.209e+04	1.237e+04
5700	reac per cdc 321 - nodo 542	410.16	-1654.54	-2035.76	3.529e+05	1.007e+05	-5994.41
5701	reac per cdc 322 - nodo 542	-443.26	881.92	-9899.77	-2.184e+05	-1.083e+05	8491.58
5702	reac per cdc 323 - nodo 542	-89.85	-1836.22	-4501.04	3.927e+05	-3.977e+04	-9876.66
5703	reac per cdc 324 - nodo 542	99.46	901.49	-6854.11	-2.223e+05	4.559e+04	9056.95
5704	reac per cdc 325 - nodo 542	452.88	-1816.65	-1455.39	3.888e+05	1.142e+05	-9311.29
5705	reac per cdc 326 - nodo 542	-485.98	1044.04	-1.048e+04	-2.543e+05	-1.218e+05	1.181e+04
5706	reac per cdc 327 - nodo 542	-132.57	-1674.11	-5081.41	3.568e+05	-5.327e+04	-6559.77
5707	reac per cdc 328 - nodo 542	565.48	784.43	-7918.92	-1.999e+05	1.384e+05	-7796.87
5708	reac per cdc 329 - nodo 542	-98.58	-1375.37	-1551.32	2.946e+05	-5596.87	1.418e+04
5709	reac per cdc 330 - nodo 542	65.48	602.75	-1.038e+04	-1.601e+05	-2076.62	-1.168e+04
5710	reac per cdc 331 - nodo 542	-598.59	-1557.04	-4016.61	3.344e+05	-1.460e+05	1.029e+04
5711	reac per cdc 332 - nodo 542	608.20	622.31	-7338.55	-1.640e+05	1.519e+05	-1.111e+04
5712	reac per cdc 333 - nodo 542	-55.86	-1537.48	-970.95	3.305e+05	7901.07	1.086e+04
5713	reac per cdc 334 - nodo 542	22.76	764.86	-1.096e+04	-1.960e+05	-1.557e+04	-8362.24
5714	reac per cdc 335 - nodo 542	-641.31	-1394.93	-4596.97	2.985e+05	-1.595e+05	1.361e+04
5715	reac per cdc 336 - nodo 542	610.22	184.39	-3317.94	-5.965e+04	1.759e+05	8658.81
5716	reac per cdc 337 - nodo 542	695.39	-470.59	-2017.04	8.761e+04	1.924e+05	4232.69
5717	reac per cdc 338 - nodo 542	-728.49	-302.03	-9918.49	4.686e+04	-2.001e+05	-1735.52



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5718	reac per cdc 339 - nodo 542	-643.33	-957.01	-8617.58	1.941e+05	-1.836e+05	-6161.64
5719	reac per cdc 340 - nodo 542	732.81	117.12	-3434.68	-4.559e+04	2.015e+05	3798.36
5720	reac per cdc 341 - nodo 542	572.80	-403.32	-1900.30	7.356e+04	1.668e+05	9093.14
5721	reac per cdc 342 - nodo 542	-605.90	-369.30	-1.004e+04	6.092e+04	-1.745e+05	-6595.97
5722	reac per cdc 343 - nodo 542	-765.92	-889.74	-8500.85	1.801e+05	-2.092e+05	-1301.19
5723	reac per cdc 344 - nodo 542	724.60	-249.65	-1764.07	3.643e+04	2.120e+05	-221.82
5724	reac per cdc 345 - nodo 542	809.76	-904.63	-463.16	1.837e+05	2.286e+05	-4647.93
5725	reac per cdc 346 - nodo 542	-842.87	132.01	-1.147e+04	-4.922e+04	-2.362e+05	7145.10
5726	reac per cdc 347 - nodo 542	-757.71	-522.97	-1.017e+04	9.805e+04	-2.197e+05	2718.99
5727	reac per cdc 348 - nodo 542	847.19	-316.92	-1880.80	5.049e+04	2.376e+05	-5082.27
5728	reac per cdc 349 - nodo 542	687.17	-837.36	-346.43	1.696e+05	2.030e+05	212.51
5729	reac per cdc 350 - nodo 542	-720.28	64.74	-1.159e+04	-3.516e+04	-2.106e+05	2284.66
5730	reac per cdc 351 - nodo 542	-880.30	-455.70	-1.005e+04	8.399e+04	-2.453e+05	7579.44
5731	reac per cdc 352 - nodo 542	42.32	778.29	-7145.86	-1.942e+05	2.502e+04	1.018e+04
5732	reac per cdc 353 - nodo 542	326.19	-1404.98	-2809.50	2.967e+05	8.010e+04	-4569.12
5733	reac per cdc 354 - nodo 542	-359.29	632.37	-9126.02	-1.622e+05	-8.778e+04	7066.29
5734	reac per cdc 355 - nodo 542	-75.42	-1550.91	-4789.66	3.286e+05	-3.270e+04	-7687.42
5735	reac per cdc 356 - nodo 542	76.63	648.08	-6679.70	-1.654e+05	3.586e+04	7520.40
5736	reac per cdc 357 - nodo 542	360.50	-1535.20	-2343.34	3.255e+05	9.095e+04	-7233.31
5737	reac per cdc 358 - nodo 542	-393.61	762.58	-9592.19	-1.910e+05	-9.862e+04	9730.48
5738	reac per cdc 359 - nodo 542	-109.74	-1420.70	-5255.83	2.998e+05	-4.354e+04	-5023.23
5739	reac per cdc 360 - nodo 542	450.95	554.06	-7534.98	-1.473e+05	1.104e+05	-6016.90
5740	reac per cdc 361 - nodo 542	-82.44	-1180.76	-2420.39	2.498e+05	-5250.94	1.163e+04
5741	reac per cdc 362 - nodo 542	49.34	408.14	-9515.14	-1.154e+05	-2422.55	-9135.20
5742	reac per cdc 363 - nodo 542	-484.06	-1326.68	-4400.55	2.818e+05	-1.181e+05	8514.07
5743	reac per cdc 364 - nodo 542	485.26	423.85	-7068.81	-1.185e+05	1.212e+05	-8681.08
5744	reac per cdc 365 - nodo 542	-48.13	-1310.97	-1954.23	2.787e+05	5590.88	8968.18
5745	reac per cdc 366 - nodo 542	15.02	538.35	-9981.30	-1.442e+05	-1.326e+04	-6471.01
5746	reac per cdc 367 - nodo 542	-518.37	-1196.47	-4866.71	2.530e+05	-1.289e+05	1.118e+04
5747	reac per cdc 368 - nodo 542	-23.82	-812.51	-1.006e+04	1.428e+05	-6671.42	2654.47
5748	reac per cdc 369 - nodo 542	163.99	-382.74	-3499.76	6.696e+04	7.926e+04	3967.84
5749	reac per cdc 370 - nodo 542	-198.29	-386.12	-8435.39	6.674e+04	-8.723e+04	-1471.61
5750	reac per cdc 371 - nodo 542	-46.63	-54.40	-6580.68	-1.323e+04	-1.229e+04	3420.88
5751	reac per cdc 372 - nodo 542	15.85	-719.53	-5353.08	1.480e+05	5200.14	-926.76
5752	reac per cdc 373 - nodo 542	84.51	-810.37	-8576.51	1.426e+05	4.319e+04	4286.03
5753	reac per cdc 374 - nodo 542	-132.86	-812.40	-1.154e+04	1.425e+05	-5.671e+04	1022.36
5754	reac per cdc 375 - nodo 542	-41.87	-613.36	-1.043e+04	9.453e+04	-1.175e+04	3957.85
5755	reac per cdc 376 - nodo 542	-4.38	-1012.44	-9688.50	1.913e+05	-1249.29	1349.27
5756	reac per cdc 377 - nodo 542	160.36	-595.84	-5544.54	1.047e+05	7.785e+04	4670.79
5757	reac per cdc 378 - nodo 542	-201.93	-599.22	-1.048e+04	1.045e+05	-8.865e+04	-768.66
5758	reac per cdc 379 - nodo 542	-50.26	-267.50	-8625.45	2.456e+04	-1.371e+04	4123.83
5759	reac per cdc 380 - nodo 542	12.21	-932.63	-7397.86	1.858e+05	3782.80	-223.81
5760	reac per cdc 381 - nodo 542	-18.01	-471.55	-6785.67	8.235e+04	-4403.68	1529.76
5761	reac per cdc 382 - nodo 542	19.56	-385.59	-5474.16	6.718e+04	1.278e+04	1792.44
5762	reac per cdc 383 - nodo 542	-52.90	-386.27	-6461.29	6.714e+04	-2.052e+04	704.55
5763	reac per cdc 384 - nodo 542	-22.57	-319.93	-6090.35	5.114e+04	-5528.27	1683.05
5764	reac per cdc 385 - nodo 542	-10.07	-452.95	-5844.83	8.338e+04	-2029.37	813.52
5765	reac per cdc 386 - nodo 542	-16.55	-386.31	-5967.76	6.724e+04	-3836.74	1248.59
5766	reac per cdc 259 - nodo 543	1.89	179.48	-4902.94	-7.654e+04	-4472.19	1.444e+04
5767	reac per cdc 260 - nodo 543	301.55	136.27	-7133.96	-5.404e+04	1.281e+05	2.671e+04
5768	reac per cdc 261 - nodo 543	-277.76	19.05	484.51	-1.209e+04	-1.290e+05	-1.458e+04
5769	reac per cdc 262 - nodo 543	-31.99	463.07	-3374.57	-2.091e+05	-1.284e+04	1.867e+04
5770	reac per cdc 263 - nodo 543	60.96	-307.96	-3279.81	1.429e+05	1.323e+04	-6544.30
5771	reac per cdc 264 - nodo 543	175.15	214.69	-7188.04	-8.911e+04	7.254e+04	2.683e+04
5772	reac per cdc 265 - nodo 543	-172.44	144.35	-2616.95	-6.394e+04	-8.175e+04	2053.19
5773	reac per cdc 266 - nodo 543	-24.97	410.77	-4932.40	-1.821e+05	-1.204e+04	2.200e+04
5774	reac per cdc 267 - nodo 543	30.80	-51.85	-4875.55	2.906e+04	3606.94	6872.69
5775	reac per cdc 268 - nodo 543	296.11	187.21	-7922.70	-7.577e+04	1.260e+05	3.090e+04
5776	reac per cdc 269 - nodo 543	-283.21	69.99	-304.22	-3.382e+04	-1.311e+05	-1.039e+04
5777	reac per cdc 270 - nodo 543	-37.43	514.01	-4163.30	-2.308e+05	-1.496e+04	2.286e+04
5778	reac per cdc 271 - nodo 543	55.52	-257.02	-4068.55	1.212e+05	1.111e+04	-2357.80
5779	reac per cdc 272 - nodo 543	1195.33	536.15	-9755.12	-2.921e+05	3.403e+05	6.459e+04
5780	reac per cdc 273 - nodo 543	1347.98	55.76	-7793.12	-2.597e+04	3.717e+05	4720.09
5781	reac per cdc 274 - nodo 543	-1327.87	64.20	2677.10	-2.527e+04	-3.719e+05	4624.71
5782	reac per cdc 275 - nodo 543	-1175.21	-416.20	4639.11	2.409e+05	-3.405e+05	-5.524e+04
5783	reac per cdc 276 - nodo 543	1417.95	495.76	-1.010e+04	-2.760e+05	3.886e+05	5.636e+04
5784	reac per cdc 277 - nodo 543	1125.36	96.15	-7449.78	-4.205e+04	3.234e+05	1.295e+04
5785	reac per cdc 278 - nodo 543	-1105.24	23.80	2333.77	-9184.55	-3.236e+05	-3606.88
5786	reac per cdc 279 - nodo 543	-1397.84	-375.80	4982.44	2.248e+05	-3.888e+05	-4.701e+04
5787	reac per cdc 280 - nodo 543	1411.50	108.70	-1.324e+04	-4.990e+04	4.103e+05	1.063e+04
5788	reac per cdc 281 - nodo 543	1564.16	-371.70	-1.128e+04	2.162e+05	4.418e+05	-4.924e+04
5789	reac per cdc 282 - nodo 543	-1544.04	491.65	6164.48	-2.675e+05	-4.420e+05	5.859e+04
5790	reac per cdc 283 - nodo 543	-1391.39	11.26	8126.48	-1337.24	-4.105e+05	-1282.43
5791	reac per cdc 284 - nodo 543	1634.13	68.30	-1.359e+04	-3.381e+04	4.586e+05	2395.64



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5792	reac per cdc 285 - nodo 543	1341.53	-331.30	-1.094e+04	2.001e+05	3.934e+05	-4.101e+04
5793	reac per cdc 286 - nodo 543	-1321.42	451.26	5821.14	-2.514e+05	-3.936e+05	5.035e+04
5794	reac per cdc 287 - nodo 543	-1614.01	51.65	8469.82	-1.742e+04	-4.588e+05	6949.16
5795	reac per cdc 288 - nodo 543	134.11	931.43	-7692.85	-5.092e+05	5.431e+04	1.134e+05
5796	reac per cdc 289 - nodo 543	642.96	-669.88	-1152.84	3.779e+05	1.591e+05	-8.611e+04
5797	reac per cdc 290 - nodo 543	-622.84	789.84	-3963.18	-4.291e+05	-1.594e+05	9.546e+04
5798	reac per cdc 291 - nodo 543	-114.00	-811.47	2576.83	4.580e+05	-5.453e+04	-1.041e+05
5799	reac per cdc 292 - nodo 543	198.97	803.19	-8739.06	-4.365e+05	7.532e+04	9.726e+04
5800	reac per cdc 293 - nodo 543	707.81	-798.12	-2199.05	4.506e+05	1.801e+05	-1.023e+05
5801	reac per cdc 294 - nodo 543	-687.70	918.08	-2916.97	-5.018e+05	-1.804e+05	1.116e+05
5802	reac per cdc 295 - nodo 543	-178.85	-683.23	3623.05	3.853e+05	-7.553e+04	-8.792e+04
5803	reac per cdc 296 - nodo 543	876.20	796.78	-8837.31	-4.556e+05	2.154e+05	8.601e+04
5804	reac per cdc 297 - nodo 543	-99.12	-535.24	-8.38	3.243e+05	-1938.13	-5.868e+04
5805	reac per cdc 298 - nodo 543	119.24	655.20	-5107.64	-3.755e+05	1724.98	6.802e+04
5806	reac per cdc 299 - nodo 543	-856.08	-676.83	3721.29	4.043e+05	-2.156e+05	-7.667e+04
5807	reac per cdc 300 - nodo 543	941.05	668.54	-9883.52	-3.829e+05	2.364e+05	6.982e+04
5808	reac per cdc 301 - nodo 543	-34.27	-663.48	-1054.59	3.969e+05	1.907e+04	-7.486e+04
5809	reac per cdc 302 - nodo 543	54.39	783.43	-4061.42	-4.482e+05	-1.928e+04	8.421e+04
5810	reac per cdc 303 - nodo 543	-920.93	-548.59	4767.50	3.317e+05	-2.366e+05	-6.048e+04
5811	reac per cdc 304 - nodo 543	787.47	372.30	-7278.55	-2.004e+05	2.232e+05	4.397e+04
5812	reac per cdc 305 - nodo 543	887.59	57.21	-5991.69	-2.585e+04	2.438e+05	4703.68
5813	reac per cdc 306 - nodo 543	-867.48	62.75	875.67	-2.539e+04	-2.440e+05	4641.12
5814	reac per cdc 307 - nodo 543	-767.36	-252.34	2162.53	1.492e+05	-2.234e+05	-3.463e+04
5815	reac per cdc 308 - nodo 543	933.49	345.80	-7503.74	-1.898e+05	2.548e+05	3.857e+04
5816	reac per cdc 309 - nodo 543	741.58	83.70	-5766.49	-3.640e+04	2.121e+05	1.010e+04
5817	reac per cdc 310 - nodo 543	-721.46	36.25	650.48	-1.484e+04	-2.123e+05	-757.93
5818	reac per cdc 311 - nodo 543	-913.37	-225.85	2387.73	1.386e+05	-2.551e+05	-2.923e+04
5819	reac per cdc 312 - nodo 543	929.26	91.93	-9565.90	-4.155e+04	2.691e+05	8578.14
5820	reac per cdc 313 - nodo 543	1029.38	-223.15	-8279.03	1.330e+05	2.897e+05	-3.069e+04
5821	reac per cdc 314 - nodo 543	-1009.27	343.11	3163.02	-1.842e+05	-2.899e+05	4.003e+04
5822	reac per cdc 315 - nodo 543	-909.14	28.02	4449.88	-9692.94	-2.693e+05	766.67
5823	reac per cdc 316 - nodo 543	1075.28	65.44	-9791.09	-3.099e+04	3.008e+05	3179.09
5824	reac per cdc 317 - nodo 543	883.36	-196.66	-8053.84	1.225e+05	2.580e+05	-2.529e+04
5825	reac per cdc 318 - nodo 543	-863.25	316.62	2937.82	-1.737e+05	-2.582e+05	3.464e+04
5826	reac per cdc 319 - nodo 543	-1055.16	54.52	4675.08	-2.024e+04	-3.010e+05	6165.71
5827	reac per cdc 320 - nodo 543	91.43	631.56	-5925.92	-3.428e+05	3.559e+04	7.602e+04
5828	reac per cdc 321 - nodo 543	425.17	-418.73	-1636.37	2.391e+05	1.043e+05	-5.487e+04
5829	reac per cdc 322 - nodo 543	-405.06	538.69	-3479.65	-2.903e+05	-1.046e+05	6.422e+04
5830	reac per cdc 323 - nodo 543	-71.31	-511.60	809.90	2.916e+05	-3.580e+04	-6.667e+04
5831	reac per cdc 324 - nodo 543	133.96	547.45	-6612.12	-2.951e+05	4.936e+04	6.540e+04
5832	reac per cdc 325 - nodo 543	467.71	-502.84	-2322.57	2.867e+05	1.181e+05	-6.549e+04
5833	reac per cdc 326 - nodo 543	-447.59	622.80	-2793.45	-3.379e+05	-1.183e+05	7.484e+04
5834	reac per cdc 327 - nodo 543	-113.85	-427.49	1496.11	2.439e+05	-4.958e+04	-5.606e+04
5835	reac per cdc 328 - nodo 543	578.15	543.24	-6676.56	-3.076e+05	1.412e+05	5.802e+04
5836	reac per cdc 329 - nodo 543	-61.55	-330.42	-885.72	2.039e+05	-1308.12	-3.688e+04
5837	reac per cdc 330 - nodo 543	81.67	450.38	-4230.30	-2.551e+05	1094.97	4.622e+04
5838	reac per cdc 331 - nodo 543	-558.04	-423.29	1560.54	2.564e+05	-1.415e+05	-4.868e+04
5839	reac per cdc 332 - nodo 543	620.69	459.13	-7362.77	-2.600e+05	1.550e+05	4.740e+04
5840	reac per cdc 333 - nodo 543	-19.02	-414.53	-1571.93	2.515e+05	1.247e+04	-4.750e+04
5841	reac per cdc 334 - nodo 543	39.13	534.49	-3544.09	-3.028e+05	-1.268e+04	5.684e+04
5842	reac per cdc 335 - nodo 543	-600.58	-339.18	2246.75	2.087e+05	-1.552e+05	-3.806e+04
5843	reac per cdc 336 - nodo 543	634.49	310.84	-6349.64	-1.660e+05	1.792e+05	3.624e+04
5844	reac per cdc 337 - nodo 543	714.91	57.76	-5316.01	-2.580e+04	1.958e+05	4697.53
5845	reac per cdc 338 - nodo 543	-694.80	62.20	199.99	-2.544e+04	-1.960e+05	4647.27
5846	reac per cdc 339 - nodo 543	-614.38	-190.88	1233.62	1.148e+05	-1.794e+05	-2.689e+04
5847	reac per cdc 340 - nodo 543	751.78	289.56	-6530.52	-1.575e+05	2.047e+05	3.190e+04
5848	reac per cdc 341 - nodo 543	597.63	79.04	-5135.13	-3.428e+04	1.703e+05	9034.15
5849	reac per cdc 342 - nodo 543	-577.51	40.92	19.11	-1.696e+04	-1.705e+05	310.66
5850	reac per cdc 343 - nodo 543	-731.66	-169.60	1414.50	1.063e+05	-2.049e+05	-2.256e+04
5851	reac per cdc 344 - nodo 543	748.38	85.64	-8186.88	-3.841e+04	2.161e+05	7809.56
5852	reac per cdc 345 - nodo 543	828.80	-167.44	-7153.25	1.018e+05	2.327e+05	-2.373e+04
5853	reac per cdc 346 - nodo 543	-808.68	287.40	2037.23	-1.530e+05	-2.329e+05	3.308e+04
5854	reac per cdc 347 - nodo 543	-728.26	34.31	3070.87	-1.283e+04	-2.163e+05	1535.24
5855	reac per cdc 348 - nodo 543	865.66	64.36	-8367.76	-2.994e+04	2.416e+05	3472.94
5856	reac per cdc 349 - nodo 543	711.51	-146.16	-6972.37	9.332e+04	2.072e+05	-1.939e+04
5857	reac per cdc 350 - nodo 543	-691.40	266.12	1856.35	-1.446e+05	-2.074e+05	2.874e+04
5858	reac per cdc 351 - nodo 543	-845.55	55.59	3251.74	-2.130e+04	-2.418e+05	5871.86
5859	reac per cdc 352 - nodo 543	75.42	519.08	-5263.18	-2.804e+05	2.856e+04	6.198e+04
5860	reac per cdc 353 - nodo 543	343.49	-324.53	-1817.73	1.870e+05	8.379e+04	-4.316e+04
5861	reac per cdc 354 - nodo 543	-323.37	444.49	-3298.29	-2.382e+05	-8.400e+04	5.250e+04
5862	reac per cdc 355 - nodo 543	-55.30	-399.12	147.16	2.291e+05	-2.878e+04	5.263e+04
5863	reac per cdc 356 - nodo 543	109.58	451.52	-5814.35	-2.421e+05	3.963e+04	5.345e+04
5864	reac per cdc 357 - nodo 543	377.65	-392.09	-2368.90	2.252e+05	9.486e+04	-5.169e+04
5865	reac per cdc 358 - nodo 543	-357.54	512.05	-2747.12	-2.765e+05	-9.507e+04	6.103e+04



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5866	reac per cdc 359 - nodo 543	-89.47	-331.57	698.33	1.909e+05	-3.984e+04	-4.411e+04
5867	reac per cdc 360 - nodo 543	466.37	448.15	-5866.11	-2.521e+05	1.134e+05	4.752e+04
5868	reac per cdc 361 - nodo 543	-47.46	-253.60	-1214.80	1.587e+05	-1072.09	-2.870e+04
5869	reac per cdc 362 - nodo 543	67.58	373.55	-3901.22	-2.100e+05	858.94	3.805e+04
5870	reac per cdc 363 - nodo 543	-446.25	-328.19	750.09	2.009e+05	-1.136e+05	-3.818e+04
5871	reac per cdc 364 - nodo 543	500.53	380.59	-6417.28	-2.138e+05	1.245e+05	3.899e+04
5872	reac per cdc 365 - nodo 543	-13.30	-321.16	-1765.97	1.970e+05	9994.18	-3.723e+04
5873	reac per cdc 366 - nodo 543	33.41	441.11	-3350.05	-2.482e+05	-1.021e+04	4.657e+04
5874	reac per cdc 367 - nodo 543	-480.42	-260.63	1301.27	1.626e+05	-1.247e+05	-2.965e+04
5875	reac per cdc 368 - nodo 543	2.80	127.90	-3609.66	-5.458e+04	-2931.67	1.025e+04
5876	reac per cdc 369 - nodo 543	202.57	99.10	-5097.01	-3.959e+04	8.546e+04	1.844e+04
5877	reac per cdc 370 - nodo 543	-183.63	20.95	-18.02	-1.162e+04	-8.597e+04	-9089.24
5878	reac per cdc 371 - nodo 543	-19.79	316.97	-2590.74	-1.429e+05	-8512.74	1.308e+04
5879	reac per cdc 372 - nodo 543	42.18	-197.05	-2527.57	9.171e+04	8870.24	-3734.25
5880	reac per cdc 373 - nodo 543	118.30	151.38	-5133.06	-6.296e+04	4.841e+04	1.851e+04
5881	reac per cdc 374 - nodo 543	-113.42	104.49	-2085.67	-4.618e+04	-5.445e+04	1997.41
5882	reac per cdc 375 - nodo 543	-15.11	282.10	-3629.30	-1.250e+05	-7975.37	1.530e+04
5883	reac per cdc 376 - nodo 543	22.07	-26.32	-3591.40	1.581e+04	2454.41	5210.40
5884	reac per cdc 377 - nodo 543	198.94	133.06	-5622.83	-5.407e+04	8.405e+04	2.123e+04
5885	reac per cdc 378 - nodo 543	-187.27	54.91	-543.85	-2.610e+04	-8.738e+04	-6298.25
5886	reac per cdc 379 - nodo 543	-23.42	350.93	-3116.57	-1.574e+05	-9925.29	1.587e+04
5887	reac per cdc 380 - nodo 543	38.55	-163.09	-3053.40	7.723e+04	7457.69	-943.26
5888	reac per cdc 381 - nodo 543	8.61	73.56	-2768.34	-3.141e+04	-671.59	5788.80
5889	reac per cdc 382 - nodo 543	48.56	67.80	-3065.81	-2.841e+04	1.701e+04	7425.33
5890	reac per cdc 383 - nodo 543	-28.68	52.17	-2050.01	-2.282e+04	-1.728e+04	1920.07
5891	reac per cdc 384 - nodo 543	4.09	111.38	-2564.56	-4.908e+04	-1787.81	6353.51
5892	reac per cdc 385 - nodo 543	16.48	8.57	-2551.92	-2154.33	1688.79	2991.07
5893	reac per cdc 386 - nodo 543	10.06	59.98	-2558.01	-2.562e+04	-106.57	4672.40
5894	reac per cdc 259 - nodo 878	-342.23	2011.50	-9299.14	-2.134e+05	-6.371e+04	2563.74
5895	reac per cdc 260 - nodo 878	500.40	898.08	-4090.17	-9.659e+04	1.492e+05	4344.93
5896	reac per cdc 261 - nodo 878	-823.72	897.42	-5013.37	-9.648e+04	-2.084e+05	3792.91
5897	reac per cdc 262 - nodo 878	-259.51	1217.57	-4744.83	-1.777e+05	-5.604e+04	3828.89
5898	reac per cdc 263 - nodo 878	-66.04	571.95	-4358.42	-1.378e+04	-3800.76	-3305.46
5899	reac per cdc 264 - nodo 878	54.81	2013.08	-9022.68	-2.138e+05	4.349e+04	4482.29
5900	reac per cdc 265 - nodo 878	-739.66	2012.69	-9576.60	-2.137e+05	-1.710e+05	4151.08
5901	reac per cdc 266 - nodo 878	-401.14	2204.78	-9415.48	-2.625e+05	-7.963e+04	4172.67
5902	reac per cdc 267 - nodo 878	-285.06	1817.40	-9183.63	-1.641e+05	-4.828e+04	-107.94
5903	reac per cdc 268 - nodo 878	409.95	1456.11	-6464.27	-1.553e+05	1.321e+05	5053.13
5904	reac per cdc 269 - nodo 878	-914.17	1455.45	-7387.48	-1.552e+05	-2.255e+05	4501.11
5905	reac per cdc 270 - nodo 878	-349.97	1775.60	-7118.93	-2.365e+05	-7.314e+04	4537.09
5906	reac per cdc 271 - nodo 878	-156.49	1129.98	-6732.52	-7.251e+04	-2.090e+04	-2597.26
5907	reac per cdc 272 - nodo 878	959.03	483.98	-2557.46	-2.397e+04	2.696e+05	1.323e+04
5908	reac per cdc 273 - nodo 878	1300.25	-518.40	-2234.47	2.326e+05	3.617e+05	7909.09
5909	reac per cdc 274 - nodo 878	-1543.43	1866.11	-4639.78	-3.770e+05	-4.062e+05	-6184.45
5910	reac per cdc 275 - nodo 878	-1202.21	863.73	-4316.80	-1.205e+05	-3.141e+05	-1.150e+04
5911	reac per cdc 276 - nodo 878	1393.39	556.87	-2533.40	-4.244e+04	3.868e+05	6587.98
5912	reac per cdc 277 - nodo 878	865.90	-591.29	-2258.53	2.511e+05	2.445e+05	1.455e+04
5913	reac per cdc 278 - nodo 878	-1109.07	1939.00	-4615.72	-3.955e+05	-2.889e+05	-1.282e+04
5914	reac per cdc 279 - nodo 878	-1636.56	790.85	-4340.86	-1.020e+05	-4.313e+05	-4863.34
5915	reac per cdc 280 - nodo 878	1640.15	1704.33	-2366.71	-3.358e+05	4.535e+05	-2521.01
5916	reac per cdc 281 - nodo 878	1981.38	701.95	-2043.72	-7.925e+04	5.456e+05	-7837.87
5917	reac per cdc 282 - nodo 878	-2224.55	645.76	-4830.54	-6.519e+04	-5.900e+05	9562.51
5918	reac per cdc 283 - nodo 878	-1883.33	-356.61	-4507.55	1.914e+05	-4.979e+05	4245.65
5919	reac per cdc 284 - nodo 878	2074.51	1777.21	-2342.64	-3.543e+05	5.707e+05	-9158.98
5920	reac per cdc 285 - nodo 878	1547.02	629.06	-2067.78	-6.077e+04	4.283e+05	-1199.90
5921	reac per cdc 286 - nodo 878	-1790.20	718.65	-4806.47	-8.366e+04	-4.728e+05	2924.54
5922	reac per cdc 287 - nodo 878	-2317.69	-429.50	-4531.61	2.098e+05	-6.152e+05	1.088e+04
5923	reac per cdc 288 - nodo 878	-314.92	2137.16	-3663.09	-4.468e+05	-7.436e+04	1.264e+04
5924	reac per cdc 289 - nodo 878	822.48	-1204.09	-2586.47	4.083e+05	2.326e+05	-5087.55
5925	reac per cdc 290 - nodo 878	-1065.66	2551.80	-4287.79	-5.528e+05	-2.771e+05	6812.19
5926	reac per cdc 291 - nodo 878	71.75	-789.45	-3211.17	3.024e+05	2.991e+04	-1.091e+04
5927	reac per cdc 292 - nodo 878	-110.58	2503.27	-3605.86	-5.404e+05	-1.920e+04	7911.22
5928	reac per cdc 293 - nodo 878	1026.82	-837.99	-2529.24	3.148e+05	2.878e+05	-9811.64
5929	reac per cdc 294 - nodo 878	-1270.00	2185.70	-4345.01	-4.592e+05	-3.323e+05	1.154e+04
5930	reac per cdc 295 - nodo 878	-132.59	-1155.55	-3268.39	3.960e+05	-2.525e+04	-6186.58
5931	reac per cdc 296 - nodo 878	1132.93	2380.13	-3582.88	-5.084e+05	3.164e+05	-9491.25
5932	reac per cdc 297 - nodo 878	-625.37	-1447.06	-2666.68	4.699e+05	-1.582e+05	1.704e+04
5933	reac per cdc 298 - nodo 878	382.19	2794.77	-4207.58	-6.143e+05	1.137e+05	-1.531e+04
5934	reac per cdc 299 - nodo 878	-1376.11	-1032.41	-3291.38	3.640e+05	-3.609e+05	1.122e+04
5935	reac per cdc 300 - nodo 878	1337.27	2746.23	-3525.66	-6.020e+05	3.716e+05	-1.422e+04
5936	reac per cdc 301 - nodo 878	-421.03	-1080.95	-2609.45	3.764e+05	-1.030e+05	1.231e+04
5937	reac per cdc 302 - nodo 878	177.85	2428.66	-4264.81	-5.208e+05	5.855e+04	-1.059e+04
5938	reac per cdc 303 - nodo 878	-1580.44	-1398.52	-3348.60	4.575e+05	-4.161e+05	1.594e+04
5939	reac per cdc 304 - nodo 878	587.18	549.32	-2860.16	-4.057e+04	1.692e+05	8971.54



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
5940	reac per cdc 305 - nodo 878	810.99	-108.14	-2648.31	1.277e+05	2.296e+05	5484.25
5941	reac per cdc 306 - nodo 878	-1054.16	1455.85	-4225.94	-2.721e+05	-2.740e+05	-3759.61
5942	reac per cdc 307 - nodo 878	-830.36	798.40	-4014.10	-1.039e+05	-2.136e+05	-7246.90
5943	reac per cdc 308 - nodo 878	872.07	597.12	-2844.38	-5.269e+04	2.461e+05	4617.74
5944	reac per cdc 309 - nodo 878	526.10	-155.94	-2664.09	1.398e+05	1.527e+05	9838.05
5945	reac per cdc 310 - nodo 878	-769.27	1503.66	-4210.16	-2.843e+05	-1.972e+05	-8113.41
5946	reac per cdc 311 - nodo 878	-1115.25	750.59	-4029.88	-9.175e+04	-2.905e+05	-2893.11
5947	reac per cdc 312 - nodo 878	1033.93	1349.73	-2735.05	-2.451e+05	2.898e+05	-1356.79
5948	reac per cdc 313 - nodo 878	1257.73	692.28	-2523.20	-7.683e+04	3.502e+05	-4844.08
5949	reac per cdc 314 - nodo 878	-1500.91	655.43	-4351.06	-6.761e+04	-3.946e+05	6568.72
5950	reac per cdc 315 - nodo 878	-1277.11	-2.02	-4139.21	1.007e+05	-3.342e+05	3081.43
5951	reac per cdc 316 - nodo 878	1318.82	1397.54	-2719.26	-2.572e+05	3.667e+05	-5710.59
5952	reac per cdc 317 - nodo 878	972.84	644.47	-2538.98	-6.471e+04	2.733e+05	-490.29
5953	reac per cdc 318 - nodo 878	-1216.02	703.24	-4335.27	-7.972e+04	-3.177e+05	2214.92
5954	reac per cdc 319 - nodo 878	-1562.00	-49.83	-4154.99	1.128e+05	-4.111e+05	7435.23
5955	reac per cdc 320 - nodo 878	-248.39	1633.63	-3585.34	-3.179e+05	-5.642e+04	8584.14
5956	reac per cdc 321 - nodo 878	497.62	-557.88	-2879.19	2.430e+05	1.449e+05	-3040.15
5957	reac per cdc 322 - nodo 878	-740.80	1905.59	-3995.07	-3.874e+05	-1.894e+05	4764.79
5958	reac per cdc 323 - nodo 878	5.22	-285.92	-3288.92	1.735e+05	1.197e+04	-6859.50
5959	reac per cdc 324 - nodo 878	-114.37	1873.76	-3547.80	-3.793e+05	-2.024e+04	5485.64
5960	reac per cdc 325 - nodo 878	631.65	-317.75	-2841.65	1.816e+05	1.811e+05	-6138.65
5961	reac per cdc 326 - nodo 878	-874.82	1665.47	-4032.61	-3.260e+05	-2.256e+05	7863.29
5962	reac per cdc 327 - nodo 878	-128.81	-526.04	-3326.45	2.349e+05	-2.421e+04	-3761.00
5963	reac per cdc 328 - nodo 878	701.24	1792.99	-3532.73	-3.583e+05	1.999e+05	-5928.51
5964	reac per cdc 329 - nodo 878	-452.01	-717.24	-2931.79	2.834e+05	-1.114e+05	1.147e+04
5965	reac per cdc 330 - nodo 878	208.84	2064.95	-3942.47	-4.278e+05	6.693e+04	-9747.86
5966	reac per cdc 331 - nodo 878	-944.42	-445.28	-3341.53	2.139e+05	-2.444e+05	7653.15
5967	reac per cdc 332 - nodo 878	835.27	2033.12	-3495.20	-4.197e+05	2.361e+05	-9027.01
5968	reac per cdc 333 - nodo 878	-317.99	-477.11	-2894.26	2.220e+05	-7.521e+04	8374.00
5969	reac per cdc 334 - nodo 878	74.81	1824.83	-3980.00	-3.664e+05	3.075e+04	-6649.36
5970	reac per cdc 335 - nodo 878	-1078.44	-685.40	-3379.06	2.752e+05	-2.805e+05	1.075e+04
5971	reac per cdc 336 - nodo 878	447.71	573.83	-2973.70	-4.680e+04	1.315e+05	7375.79
5972	reac per cdc 337 - nodo 878	627.47	45.74	-2803.54	8.836e+04	1.800e+05	4574.75
5973	reac per cdc 338 - nodo 878	-870.65	1301.97	-4070.72	-2.328e+05	-2.245e+05	-2850.11
5974	reac per cdc 339 - nodo 878	-690.89	773.89	-3900.56	-9.764e+04	-1.760e+05	-5651.15
5975	reac per cdc 340 - nodo 878	676.54	612.23	-2961.02	-5.653e+04	1.933e+05	3878.75
5976	reac per cdc 341 - nodo 878	398.64	7.34	-2816.21	9.809e+04	1.183e+05	8071.79
5977	reac per cdc 342 - nodo 878	-641.82	1340.37	-4058.05	-2.425e+05	-1.627e+05	-6347.15
5978	reac per cdc 343 - nodo 878	-919.72	735.49	-3913.24	-8.790e+04	-2.377e+05	-2154.11
5979	reac per cdc 344 - nodo 878	806.55	1216.74	-2873.20	-2.111e+05	2.284e+05	-920.13
5980	reac per cdc 345 - nodo 878	986.31	688.65	-2703.04	-7.592e+04	2.769e+05	-3721.18
5981	reac per cdc 346 - nodo 878	-1229.49	659.06	-4171.21	-6.851e+04	-3.214e+05	5445.81
5982	reac per cdc 347 - nodo 878	-1049.72	130.98	-4001.05	6.664e+04	-2.728e+05	2644.77
5983	reac per cdc 348 - nodo 878	1035.38	1255.14	-2860.53	-2.208e+05	2.902e+05	-4417.17
5984	reac per cdc 349 - nodo 878	757.48	650.26	-2715.72	-6.619e+04	2.151e+05	-224.13
5985	reac per cdc 350 - nodo 878	-1000.66	697.46	-4158.54	-7.825e+04	-2.596e+05	1948.77
5986	reac per cdc 351 - nodo 878	-1278.55	92.58	-4013.73	7.638e+04	-3.346e+05	6141.81
5987	reac per cdc 352 - nodo 878	-223.44	1444.77	-3556.17	-2.696e+05	-4.969e+04	7064.61
5988	reac per cdc 353 - nodo 878	375.77	-315.50	-2988.98	1.809e+05	1.120e+05	-2272.20
5989	reac per cdc 354 - nodo 878	-618.95	1663.21	-3885.28	-3.254e+05	-1.565e+05	3996.84
5990	reac per cdc 355 - nodo 878	-19.74	-97.06	-3318.09	1.251e+05	5239.64	-5339.98
5991	reac per cdc 356 - nodo 878	-115.79	1637.64	-3526.02	-3.189e+05	-2.063e+04	4575.84
5992	reac per cdc 357 - nodo 878	483.42	-122.63	-2958.83	1.317e+05	1.411e+05	-4760.98
5993	reac per cdc 358 - nodo 878	-726.60	1470.34	-3915.43	-2.761e+05	-1.856e+05	6485.62
5994	reac per cdc 359 - nodo 878	-127.39	-289.93	-3348.23	1.744e+05	-2.382e+04	-2851.20
5995	reac per cdc 360 - nodo 878	539.33	1572.77	-3513.92	-3.020e+05	1.562e+05	-4592.20
5996	reac per cdc 361 - nodo 878	-386.99	-443.50	-3031.23	2.134e+05	-9.384e+04	9384.61
5997	reac per cdc 362 - nodo 878	143.82	1791.21	-3843.03	-3.578e+05	4.939e+04	-7659.97
5998	reac per cdc 363 - nodo 878	-782.50	-225.06	-3360.34	1.576e+05	-2.006e+05	6316.84
5999	reac per cdc 364 - nodo 878	646.98	1765.64	-3483.77	-3.513e+05	1.853e+05	-7080.98
6000	reac per cdc 365 - nodo 878	-279.34	-250.63	-3001.08	1.641e+05	-6.478e+04	6895.83
6001	reac per cdc 366 - nodo 878	36.17	1598.34	-3873.18	-3.085e+05	2.033e+04	-5171.19
6002	reac per cdc 367 - nodo 878	-890.15	-417.93	-3390.48	2.069e+05	-2.297e+05	8805.61
6003	reac per cdc 368 - nodo 878	-242.19	1417.89	-6602.60	-1.505e+05	-4.502e+04	1806.59
6004	reac per cdc 369 - nodo 878	319.56	675.61	-3129.95	-7.266e+04	9.689e+04	2994.04
6005	reac per cdc 370 - nodo 878	-563.18	675.17	-3745.42	-7.258e+04	-1.415e+05	2626.03
6006	reac per cdc 371 - nodo 878	-187.05	888.61	-3566.39	-1.267e+05	-3.991e+04	2650.02
6007	reac per cdc 372 - nodo 878	-58.07	458.19	-3308.78	-1.745e+04	-5080.82	-2106.21
6008	reac per cdc 373 - nodo 878	22.50	1418.95	-6418.29	-1.508e+05	2.645e+04	3085.62
6009	reac per cdc 374 - nodo 878	-507.15	1418.68	-6787.57	-1.507e+05	-1.166e+05	2864.81
6010	reac per cdc 375 - nodo 878	-281.47	1546.75	-6680.16	-1.832e+05	-5.563e+04	2879.21
6011	reac per cdc 376 - nodo 878	-204.08	1288.50	-6525.59	-1.177e+05	-3.473e+04	25.47
6012	reac per cdc 377 - nodo 878	259.26	1047.63	-4712.69	-1.118e+05	8.549e+04	3466.18
6013	reac per cdc 378 - nodo 878	-623.48	1047.19	-5328.16	-1.117e+05	-1.529e+05	3098.16



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
6014	reac per cdc 379 - nodo 878	-247.35	1260.63	-5149.13	-1.659e+05	-5.131e+04	3122.15
6015	reac per cdc 380 - nodo 878	-118.37	830.21	-4891.52	-5.660e+04	-1.648e+04	-1634.08
6016	reac per cdc 381 - nodo 878	-145.71	822.66	-4070.22	-8.788e+04	-2.679e+04	1051.17
6017	reac per cdc 382 - nodo 878	-33.36	674.21	-3375.69	-7.231e+04	1595.95	1288.66
6018	reac per cdc 383 - nodo 878	-209.91	674.12	-3498.79	-7.229e+04	-4.608e+04	1215.06
6019	reac per cdc 384 - nodo 878	-134.68	716.81	-3462.98	-8.312e+04	-2.576e+04	1219.86
6020	reac per cdc 385 - nodo 878	-108.88	630.72	-3411.46	-6.126e+04	-1.880e+04	268.61
6021	reac per cdc 386 - nodo 878	-121.59	673.86	-3437.13	-7.222e+04	-2.223e+04	862.32
6022	reac per cdc 259 - nodo 881	-118.66	4219.98	-1.657e+04	-5.312e+05	-3.255e+04	2746.55
6023	reac per cdc 260 - nodo 881	836.64	1718.98	-7401.31	-2.154e+05	1.963e+05	746.29
6024	reac per cdc 261 - nodo 881	-932.70	1718.14	-7332.58	-2.154e+05	-2.237e+05	631.04
6025	reac per cdc 262 - nodo 881	-177.77	2078.64	-7499.59	-3.070e+05	-4.450e+04	2488.73
6026	reac per cdc 263 - nodo 881	79.50	1349.49	-7230.23	-1.214e+05	1.655e+04	233.35
6027	reac per cdc 264 - nodo 881	412.16	4222.20	-1.659e+04	-5.317e+05	9.345e+04	2458.21
6028	reac per cdc 265 - nodo 881	-649.44	4221.70	-1.655e+04	-5.317e+05	-1.585e+05	2389.06
6029	reac per cdc 266 - nodo 881	-196.49	4438.00	-1.665e+04	-5.866e+05	-5.102e+04	3503.67
6030	reac per cdc 267 - nodo 881	-42.13	4000.51	-1.649e+04	-4.753e+05	-1.439e+04	2150.44
6031	reac per cdc 268 - nodo 881	801.34	2971.33	-1.200e+04	-3.737e+05	1.869e+05	1506.13
6032	reac per cdc 269 - nodo 881	-968.00	2970.50	-1.194e+04	-3.737e+05	-2.331e+05	1390.88
6033	reac per cdc 270 - nodo 881	-213.07	3330.99	-1.210e+04	-4.653e+05	-5.392e+04	3248.58
6034	reac per cdc 271 - nodo 881	44.19	2601.84	-1.183e+04	-2.797e+05	7135.63	993.19
6035	reac per cdc 272 - nodo 881	1408.41	1298.49	-5787.10	-1.639e+05	3.326e+05	1.331e+04
6036	reac per cdc 273 - nodo 881	1864.78	374.45	-5516.44	7.581e+04	4.409e+05	7896.83
6037	reac per cdc 274 - nodo 881	-1936.60	2197.31	-5569.51	-3.974e+05	-4.614e+05	-6052.66
6038	reac per cdc 275 - nodo 881	-1480.23	1273.27	-5298.84	-1.577e+05	-3.531e+05	-1.146e+04
6039	reac per cdc 276 - nodo 881	1989.31	1317.06	-5805.43	-1.683e+05	4.704e+05	6551.80
6040	reac per cdc 277 - nodo 881	1283.88	355.88	-5498.11	8.024e+04	3.030e+05	1.465e+04
6041	reac per cdc 278 - nodo 881	-1355.70	2215.88	-5587.83	-4.018e+05	-3.236e+05	-1.281e+04
6042	reac per cdc 279 - nodo 881	-2061.13	1254.70	-5280.52	-1.532e+05	-4.910e+05	-4707.63
6043	reac per cdc 280 - nodo 881	2318.98	2126.49	-5879.01	-3.783e+05	5.487e+05	-2631.98
6044	reac per cdc 281 - nodo 881	2775.35	1202.45	-5608.34	-1.385e+05	6.570e+05	-8040.19
6045	reac per cdc 282 - nodo 881	-2847.16	1369.31	-5477.61	-1.830e+05	-6.775e+05	9884.36
6046	reac per cdc 283 - nodo 881	-2390.79	445.27	-5206.94	5.667e+04	-5.692e+05	4476.14
6047	reac per cdc 284 - nodo 881	2899.88	2145.05	-5897.33	-3.827e+05	6.865e+05	-9385.22
6048	reac per cdc 285 - nodo 881	2194.45	1183.88	-5590.02	-1.341e+05	5.191e+05	-1286.94
6049	reac per cdc 286 - nodo 881	-2266.27	1387.88	-5495.93	-1.875e+05	-5.397e+05	3131.11
6050	reac per cdc 287 - nodo 881	-2971.69	426.70	-5188.62	6.111e+04	-7.071e+05	1.123e+04
6051	reac per cdc 288 - nodo 881	-294.77	2691.12	-6026.73	-5.253e+05	-7.168e+04	1.284e+04
6052	reac per cdc 289 - nodo 881	1226.46	-389.01	-5124.50	2.738e+05	2.893e+05	-5187.95
6053	reac per cdc 290 - nodo 881	-1298.28	2960.77	-5961.45	-5.954e+05	-3.099e+05	7032.12
6054	reac per cdc 291 - nodo 881	222.96	-119.36	-5059.22	2.037e+05	5.113e+04	-1.100e+04
6055	reac per cdc 292 - nodo 881	-21.60	2939.52	-6054.30	-5.896e+05	-6854.58	8058.32
6056	reac per cdc 293 - nodo 881	1499.63	-140.61	-5152.07	2.095e+05	3.542e+05	-9969.06
6057	reac per cdc 294 - nodo 881	-1571.45	2712.37	-5933.88	-5.310e+05	-3.747e+05	1.181e+04
6058	reac per cdc 295 - nodo 881	-50.21	-367.76	-5031.65	2.680e+05	-1.370e+04	-6214.16
6059	reac per cdc 296 - nodo 881	1641.56	2753.02	-6087.80	-5.401e+05	3.878e+05	-9671.40
6060	reac per cdc 297 - nodo 881	-709.87	-450.90	-5063.43	2.885e+05	-1.702e+05	1.732e+04
6061	reac per cdc 298 - nodo 881	638.05	3022.66	-6022.52	-6.101e+05	1.496e+05	-1.548e+04
6062	reac per cdc 299 - nodo 881	-1713.37	-181.26	-4998.15	2.185e+05	-4.084e+05	1.152e+04
6063	reac per cdc 300 - nodo 881	1914.72	3001.42	-6115.37	-6.044e+05	4.527e+05	-1.445e+04
6064	reac per cdc 301 - nodo 881	-436.70	-202.51	-5091.00	2.242e+05	-1.054e+05	1.254e+04
6065	reac per cdc 302 - nodo 881	364.88	2774.26	-5994.95	-5.458e+05	8.481e+04	-1.070e+04
6066	reac per cdc 303 - nodo 881	-1986.54	-429.66	-4970.58	2.828e+05	-4.732e+05	1.630e+04
6067	reac per cdc 304 - nodo 881	911.41	1294.17	-5703.22	-1.628e+05	2.146e+05	9043.99
6068	reac per cdc 305 - nodo 881	1210.74	688.06	-5525.40	-5605.19	2.856e+05	5496.78
6069	reac per cdc 306 - nodo 881	-1282.56	1883.70	-5560.54	-3.160e+05	-3.062e+05	-3652.61
6070	reac per cdc 307 - nodo 881	-983.23	1277.59	-5382.73	-1.587e+05	-2.352e+05	-7199.82
6071	reac per cdc 308 - nodo 881	1292.42	1306.35	-5715.21	-1.657e+05	3.050e+05	4614.58
6072	reac per cdc 309 - nodo 881	829.74	675.88	-5513.41	-2698.23	1.952e+05	9926.18
6073	reac per cdc 310 - nodo 881	-901.55	1895.88	-5572.54	-3.189e+05	-2.158e+05	-8082.02
6074	reac per cdc 311 - nodo 881	-1364.24	1265.41	-5370.73	-1.558e+05	-3.256e+05	-2770.41
6075	reac per cdc 312 - nodo 881	1508.65	1837.25	-5763.54	-3.034e+05	3.563e+05	-1409.01
6076	reac per cdc 313 - nodo 881	1807.98	1231.14	-5585.73	-1.462e+05	4.274e+05	-4956.22
6077	reac per cdc 314 - nodo 881	-1879.79	1340.62	-5500.22	-1.754e+05	-4.479e+05	6800.38
6078	reac per cdc 315 - nodo 881	-1580.46	734.51	-5322.41	-1.815e+04	-3.769e+05	3253.18
6079	reac per cdc 316 - nodo 881	1889.66	1849.43	-5775.54	-3.063e+05	4.468e+05	-5838.42
6080	reac per cdc 317 - nodo 881	1426.97	1218.96	-5573.73	-1.433e+05	3.370e+05	-526.81
6081	reac per cdc 318 - nodo 881	-1498.79	1352.79	-5512.22	-1.783e+05	-3.575e+05	2370.97
6082	reac per cdc 319 - nodo 881	-1961.47	722.33	-5310.41	-1.525e+04	-4.673e+05	7682.58
6083	reac per cdc 320 - nodo 881	-205.70	2207.63	-5860.73	-3.999e+05	-5.055e+04	8738.59
6084	reac per cdc 321 - nodo 881	792.07	187.27	-5268.02	1.242e+05	1.862e+05	-3085.44
6085	reac per cdc 322 - nodo 881	-863.89	2384.49	-5817.93	-4.458e+05	-2.068e+05	4929.61
6086	reac per cdc 323 - nodo 881	133.88	364.13	-5225.22	7.830e+04	3.000e+04	-6894.42
6087	reac per cdc 324 - nodo 881	-26.53	2370.55	-5878.83	-4.421e+05	-8031.72	5602.69



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
6088	reac per cdc 325 - nodo 881	971.24	350.20	-5286.11	8.206e+04	2.288e+05	-6221.34
6089	reac per cdc 326 - nodo 881	-1043.06	2221.56	-5799.83	-4.036e+05	-2.493e+05	8065.51
6090	reac per cdc 327 - nodo 881	-45.29	201.21	-5207.12	1.205e+05	-1.252e+04	-3758.52
6091	reac per cdc 328 - nodo 881	1064.33	2248.22	-5900.72	-4.096e+05	2.509e+05	-6026.11
6092	reac per cdc 329 - nodo 881	-477.95	146.68	-5228.03	1.339e+05	-1.152e+05	1.168e+04
6093	reac per cdc 330 - nodo 881	406.14	2425.08	-5857.92	-4.555e+05	9.461e+04	-9835.09
6094	reac per cdc 331 - nodo 881	-1136.14	323.54	-5185.23	8.799e+04	-2.714e+05	7870.28
6095	reac per cdc 332 - nodo 881	1243.50	2411.15	-5918.82	-4.517e+05	2.934e+05	-9162.01
6096	reac per cdc 333 - nodo 881	-298.78	309.60	-5246.13	9.175e+04	-7.264e+04	8543.36
6097	reac per cdc 334 - nodo 881	226.97	2262.16	-5839.82	-4.133e+05	5.209e+04	-6699.19
6098	reac per cdc 335 - nodo 881	-1315.32	160.61	-5167.13	1.302e+05	-3.139e+05	1.101e+04
6099	reac per cdc 336 - nodo 881	725.00	1292.56	-5672.01	-1.624e+05	1.704e+05	7445.74
6100	reac per cdc 337 - nodo 881	965.43	805.67	-5528.78	-3.614e+04	2.274e+05	4596.57
6101	reac per cdc 338 - nodo 881	-1037.24	1766.09	-5557.17	-2.854e+05	-2.480e+05	-2752.40
6102	reac per cdc 339 - nodo 881	-796.81	1279.20	-5413.94	-1.591e+05	-1.909e+05	-5601.57
6103	reac per cdc 340 - nodo 881	1031.03	1302.34	-5681.61	-1.648e+05	2.430e+05	3887.96
6104	reac per cdc 341 - nodo 881	659.39	795.89	-5519.18	-3.381e+04	1.548e+05	8154.35
6105	reac per cdc 342 - nodo 881	-731.21	1775.87	-5566.77	-2.878e+05	-1.753e+05	-6310.18
6106	reac per cdc 343 - nodo 881	-1102.85	1269.42	-5404.34	-1.568e+05	-2.635e+05	-2043.80
6107	reac per cdc 344 - nodo 881	1204.71	1728.79	-5720.47	-2.754e+05	2.842e+05	-950.31
6108	reac per cdc 345 - nodo 881	1445.14	1241.91	-5577.24	-1.491e+05	3.413e+05	-3799.48
6109	reac per cdc 346 - nodo 881	-1516.95	1329.85	-5508.70	-1.725e+05	-3.618e+05	5643.65
6110	reac per cdc 347 - nodo 881	-1276.53	842.97	-5365.48	-4.622e+04	-3.048e+05	2794.47
6111	reac per cdc 348 - nodo 881	1510.74	1738.57	-5730.07	-2.777e+05	3.568e+05	-4508.09
6112	reac per cdc 349 - nodo 881	1139.10	1232.13	-5567.64	-1.467e+05	2.686e+05	-241.70
6113	reac per cdc 350 - nodo 881	-1210.92	1339.63	-5518.31	-1.749e+05	-2.892e+05	2085.87
6114	reac per cdc 351 - nodo 881	-1582.56	833.19	-5355.87	-4.388e+04	-3.774e+05	6352.25
6115	reac per cdc 352 - nodo 881	-172.28	2026.32	-5798.91	-3.528e+05	-4.263e+04	7200.43
6116	reac per cdc 353 - nodo 881	629.14	403.37	-5321.48	6.816e+04	1.476e+05	-2296.82
6117	reac per cdc 354 - nodo 881	-700.96	2168.38	-5764.46	-3.897e+05	-1.681e+05	4140.99
6118	reac per cdc 355 - nodo 881	100.47	545.43	-5287.03	3.126e+04	2.208e+04	-5356.26
6119	reac per cdc 356 - nodo 881	-28.37	2157.20	-5813.45	-3.867e+05	-8473.06	4681.61
6120	reac per cdc 357 - nodo 881	773.05	534.25	-5336.02	3.428e+04	1.817e+05	-4815.64
6121	reac per cdc 358 - nodo 881	-844.87	2037.51	-5749.92	-3.559e+05	-2.023e+05	6659.80
6122	reac per cdc 359 - nodo 881	-43.44	414.56	-5272.49	6.514e+04	-1.208e+04	-2837.45
6123	reac per cdc 360 - nodo 881	847.83	2058.93	-5830.92	-3.606e+05	1.995e+05	-4658.83
6124	reac per cdc 361 - nodo 881	-390.97	370.77	-5289.48	7.594e+04	-9.452e+04	9562.44
6125	reac per cdc 362 - nodo 881	319.15	2200.99	-5796.47	-3.975e+05	7.397e+04	-7718.27
6126	reac per cdc 363 - nodo 881	-919.64	512.83	-5255.02	3.904e+04	-2.200e+05	6503.00
6127	reac per cdc 364 - nodo 881	991.74	2189.80	-5845.46	-3.945e+05	2.336e+05	-7177.65
6128	reac per cdc 365 - nodo 881	-247.06	501.64	-5304.02	4.206e+04	-6.037e+04	7043.63
6129	reac per cdc 366 - nodo 881	175.24	2070.12	-5781.93	-3.636e+05	3.982e+04	-5199.46
6130	reac per cdc 367 - nodo 881	-1063.55	381.96	-5240.49	7.292e+04	-2.542e+05	9021.81
6131	reac per cdc 368 - nodo 881	-82.98	2955.68	-1.168e+04	-3.719e+05	-2.283e+04	1935.21
6132	reac per cdc 369 - nodo 881	553.89	1288.35	-5566.52	-1.614e+05	1.297e+05	601.70
6133	reac per cdc 370 - nodo 881	-625.67	1287.79	-5520.70	-1.614e+05	-1.503e+05	524.87
6134	reac per cdc 371 - nodo 881	-122.38	1528.12	-5632.05	-2.224e+05	-3.080e+04	1763.33
6135	reac per cdc 372 - nodo 881	49.13	1042.02	-5452.47	-9.871e+04	9904.41	259.74
6136	reac per cdc 373 - nodo 881	270.90	2957.17	-1.169e+04	-3.722e+05	6.117e+04	1742.98
6137	reac per cdc 374 - nodo 881	-436.83	2956.83	-1.167e+04	-3.722e+05	-1.068e+05	1696.88
6138	reac per cdc 375 - nodo 881	-134.86	3101.03	-1.173e+04	-4.089e+05	-3.514e+04	2439.96
6139	reac per cdc 376 - nodo 881	-31.96	2809.37	-1.163e+04	-3.346e+05	-1.072e+04	1537.80
6140	reac per cdc 377 - nodo 881	530.35	2123.25	-8634.98	-2.669e+05	1.234e+05	1108.26
6141	reac per cdc 378 - nodo 881	-649.20	2122.70	-8589.16	-2.669e+05	-1.565e+05	1031.43
6142	reac per cdc 379 - nodo 881	-145.92	2363.02	-8700.50	-3.280e+05	-3.707e+04	2269.89
6143	reac per cdc 380 - nodo 881	25.59	1876.92	-8520.93	-2.042e+05	3629.00	766.30
6144	reac per cdc 381 - nodo 881	-45.32	1619.84	-6770.35	-2.030e+05	-1.279e+04	1124.71
6145	reac per cdc 382 - nodo 881	82.05	1286.37	-5547.68	-1.609e+05	1.772e+04	858.01
6146	reac per cdc 383 - nodo 881	-153.86	1286.26	-5538.52	-1.609e+05	-3.827e+04	842.64
6147	reac per cdc 384 - nodo 881	-53.20	1334.33	-5560.79	-1.731e+05	-1.438e+04	1090.33
6148	reac per cdc 385 - nodo 881	-18.90	1237.11	-5524.87	-1.484e+05	-6239.84	789.61
6149	reac per cdc 386 - nodo 881	-35.91	1285.88	-5542.97	-1.608e+05	-1.028e+04	922.08
6150	reac per cdc 259 - nodo 882	-206.64	4289.45	-1.659e+04	-5.491e+05	-4.503e+04	2922.19
6151	reac per cdc 260 - nodo 882	789.82	1746.29	-7342.71	-2.226e+05	1.896e+05	1912.56
6152	reac per cdc 261 - nodo 882	-979.67	1752.64	-7411.56	-2.242e+05	-2.304e+05	1761.00
6153	reac per cdc 262 - nodo 882	-223.23	2148.14	-7535.10	-3.248e+05	-5.080e+04	3042.41
6154	reac per cdc 263 - nodo 882	34.46	1341.46	-7215.02	-1.195e+05	1.030e+04	-739.88
6155	reac per cdc 264 - nodo 882	324.03	4289.58	-1.657e+04	-5.491e+05	8.092e+04	3295.14
6156	reac per cdc 265 - nodo 882	-737.66	4293.39	-1.662e+04	-5.501e+05	-1.711e+05	3204.20
6157	reac per cdc 266 - nodo 882	-283.80	4530.69	-1.669e+04	-6.105e+05	-6.333e+04	3973.05
6158	reac per cdc 267 - nodo 882	-129.18	4046.68	-1.650e+04	-4.872e+05	-2.667e+04	1703.67
6159	reac per cdc 268 - nodo 882	733.82	3017.97	-1.195e+04	-3.859e+05	1.772e+05	2728.17
6160	reac per cdc 269 - nodo 882	-1035.67	3024.33	-1.202e+04	-3.875e+05	-2.427e+05	2576.60
6161	reac per cdc 270 - nodo 882	-279.23	3419.83	-1.214e+04	-4.881e+05	-6.316e+04	3858.01



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
6162	reac per cdc 271 - nodo 882	-21.54	2613.14	-1.182e+04	-2.828e+05	-2062.48	75.73
6163	reac per cdc 272 - nodo 882	1373.03	2070.12	-5546.52	-3.639e+05	3.276e+05	1.338e+04
6164	reac per cdc 273 - nodo 882	1829.87	1172.36	-5282.97	-1.312e+05	4.360e+05	7958.37
6165	reac per cdc 274 - nodo 882	-1972.25	1445.69	-5818.20	-2.024e+05	-4.665e+05	-6018.58
6166	reac per cdc 275 - nodo 882	-1515.40	547.93	-5554.66	3.039e+04	-3.581e+05	-1.144e+04
6167	reac per cdc 276 - nodo 882	1954.31	2042.22	-5541.30	-3.563e+05	4.655e+05	6605.75
6168	reac per cdc 277 - nodo 882	1248.59	1200.27	-5288.18	-1.388e+05	2.980e+05	1.473e+04
6169	reac per cdc 278 - nodo 882	-1390.97	1417.78	-5812.99	-1.948e+05	-3.285e+05	-1.279e+04
6170	reac per cdc 279 - nodo 882	-2096.68	575.83	-5559.87	2.280e+04	-4.960e+05	-4665.96
6171	reac per cdc 280 - nodo 882	2283.68	1476.08	-5574.57	-2.103e+05	5.437e+05	-2579.03
6172	reac per cdc 281 - nodo 882	2740.53	578.32	-5311.02	2.250e+04	6.521e+05	-7996.01
6173	reac per cdc 282 - nodo 882	-2882.91	2039.73	-5790.15	-3.560e+05	-6.826e+05	9935.79
6174	reac per cdc 283 - nodo 882	-2426.06	1141.97	-5526.60	-1.233e+05	-5.742e+05	4518.82
6175	reac per cdc 284 - nodo 882	2864.96	1448.17	-5569.36	-2.027e+05	6.816e+05	-9348.62
6176	reac per cdc 285 - nodo 882	2159.25	606.22	-5316.24	1.491e+04	5.141e+05	-1226.41
6177	reac per cdc 286 - nodo 882	-2301.63	2011.83	-5784.93	-3.484e+05	-5.447e+05	3166.20
6178	reac per cdc 287 - nodo 882	-3007.34	1169.87	-5531.81	-1.309e+05	-7.122e+05	1.129e+04
6179	reac per cdc 288 - nodo 882	-330.81	2898.96	-5949.08	-5.789e+05	-7.686e+04	1.291e+04
6180	reac per cdc 289 - nodo 882	1192.02	-93.58	-5070.59	1.969e+05	2.845e+05	-5149.31
6181	reac per cdc 290 - nodo 882	-1334.39	2711.63	-6030.58	-5.304e+05	-3.151e+05	7089.10
6182	reac per cdc 291 - nodo 882	188.43	-280.91	-5152.09	2.454e+05	4.632e+04	-1.097e+04
6183	reac per cdc 292 - nodo 882	-57.61	2720.74	-5957.49	-5.328e+05	-1.202e+04	8120.96
6184	reac per cdc 293 - nodo 882	1465.21	-271.79	-5079.01	2.430e+05	3.494e+05	-9935.62
6185	reac per cdc 294 - nodo 882	-1607.59	2889.84	-6022.17	-5.765e+05	-3.799e+05	1.188e+04
6186	reac per cdc 295 - nodo 882	-84.77	-102.70	-5143.68	1.993e+05	-1.851e+04	-6181.17
6187	reac per cdc 296 - nodo 882	1606.79	2805.94	-5931.69	-5.536e+05	3.830e+05	-9658.03
6188	reac per cdc 297 - nodo 882	-745.59	-0.56	-5087.97	1.716e+05	-1.753e+05	1.742e+04
6189	reac per cdc 298 - nodo 882	603.21	2618.61	-6013.20	-5.052e+05	1.448e+05	-1.548e+04
6190	reac per cdc 299 - nodo 882	-1749.17	-187.89	-5169.48	2.201e+05	-4.135e+05	1.160e+04
6191	reac per cdc 300 - nodo 882	1879.99	2627.73	-5940.11	-5.075e+05	4.479e+05	-1.444e+04
6192	reac per cdc 301 - nodo 882	-472.39	-178.78	-5096.39	2.177e+05	-1.105e+05	1.263e+04
6193	reac per cdc 302 - nodo 882	330.01	2796.82	-6004.78	-5.512e+05	7.996e+04	-1.069e+04
6194	reac per cdc 303 - nodo 882	-2022.37	-9.68	-5161.06	1.740e+05	-4.784e+05	1.638e+04
6195	reac per cdc 304 - nodo 882	876.06	1808.24	-5548.10	-2.961e+05	2.096e+05	9106.55
6196	reac per cdc 305 - nodo 882	1175.71	1219.37	-5374.95	-1.434e+05	2.807e+05	5553.59
6197	reac per cdc 306 - nodo 882	-1318.08	1398.68	-5726.22	-1.901e+05	-3.112e+05	-3613.80
6198	reac per cdc 307 - nodo 882	-1018.44	809.80	-5553.07	-3.745e+04	-2.401e+05	-7166.76
6199	reac per cdc 308 - nodo 882	1257.32	1789.94	-5544.69	-2.911e+05	3.001e+05	4666.42
6200	reac per cdc 309 - nodo 882	794.45	1237.67	-5378.36	-1.484e+05	1.902e+05	9993.72
6201	reac per cdc 310 - nodo 882	-936.83	1380.38	-5722.81	-1.851e+05	-2.207e+05	-8053.93
6202	reac per cdc 311 - nodo 882	-1399.70	828.10	-5556.48	-4.242e+04	-3.306e+05	-2726.63
6203	reac per cdc 312 - nodo 882	1473.36	1418.62	-5566.58	-1.953e+05	3.513e+05	-1357.83
6204	reac per cdc 313 - nodo 882	1773.00	829.75	-5393.43	-4.262e+04	4.225e+05	-4910.78
6205	reac per cdc 314 - nodo 882	-1915.38	1788.30	-5707.74	-2.909e+05	-4.530e+05	6850.57
6206	reac per cdc 315 - nodo 882	-1615.73	1199.42	-5534.59	-1.382e+05	-3.819e+05	3297.62
6207	reac per cdc 316 - nodo 882	1854.61	1400.32	-5563.17	-1.903e+05	4.418e+05	-5797.96
6208	reac per cdc 317 - nodo 882	1391.74	848.05	-5396.84	-4.760e+04	3.320e+05	-470.65
6209	reac per cdc 318 - nodo 882	-1534.12	1770.00	-5704.33	-2.859e+05	-3.625e+05	2410.44
6210	reac per cdc 319 - nodo 882	-1996.99	1217.72	-5538.00	-1.432e+05	-4.724e+05	7737.74
6211	reac per cdc 320 - nodo 882	-241.47	2351.91	-5812.45	-4.371e+05	-5.566e+04	8799.54
6212	reac per cdc 321 - nodo 882	757.34	389.00	-5235.28	7.179e+04	1.814e+05	-3043.64
6213	reac per cdc 322 - nodo 882	-899.72	2229.04	-5865.89	-4.053e+05	-2.119e+05	4983.43
6214	reac per cdc 323 - nodo 882	99.09	266.13	-5288.72	1.036e+05	2.513e+04	-6859.75
6215	reac per cdc 324 - nodo 882	-62.28	2235.03	-5817.99	-4.069e+05	-1.313e+04	5660.23
6216	reac per cdc 325 - nodo 882	936.53	272.12	-5240.83	1.020e+05	2.239e+05	-6182.96
6217	reac per cdc 326 - nodo 882	-1078.90	2345.93	-5860.34	-4.355e+05	-2.544e+05	8122.74
6218	reac per cdc 327 - nodo 882	-80.09	383.02	-5283.18	7.334e+04	-1.740e+04	-3720.44
6219	reac per cdc 328 - nodo 882	1029.39	2290.92	-5801.08	-4.205e+05	2.460e+05	-6000.89
6220	reac per cdc 329 - nodo 882	-513.52	450.00	-5246.65	5.520e+04	-1.203e+05	1.176e+04
6221	reac per cdc 330 - nodo 882	371.14	2168.05	-5854.52	-3.887e+05	8.972e+04	-9817.00
6222	reac per cdc 331 - nodo 882	-1171.77	327.13	-5300.09	8.698e+04	-2.765e+05	7940.68
6223	reac per cdc 332 - nodo 882	1208.58	2174.03	-5806.63	-3.903e+05	2.885e+05	-9140.20
6224	reac per cdc 333 - nodo 882	-334.33	333.11	-5252.20	8.543e+04	-7.772e+04	8617.47
6225	reac per cdc 334 - nodo 882	191.96	2284.93	-5848.98	-4.190e+05	4.719e+04	-6677.68
6226	reac per cdc 335 - nodo 882	-1350.95	444.02	-5294.54	5.675e+04	-3.190e+05	1.108e+04
6227	reac per cdc 336 - nodo 882	689.66	1710.05	-5548.70	-2.706e+05	1.653e+05	7505.40
6228	reac per cdc 337 - nodo 882	930.34	1237.00	-5409.19	-1.480e+05	2.225e+05	4651.61
6229	reac per cdc 338 - nodo 882	-1072.72	1381.05	-5691.98	-1.855e+05	-2.530e+05	-2711.82
6230	reac per cdc 339 - nodo 882	-832.04	908.00	-5552.47	-6.289e+04	-1.959e+05	-5565.61
6231	reac per cdc 340 - nodo 882	995.90	1695.35	-5545.98	-2.666e+05	2.380e+05	3939.01
6232	reac per cdc 341 - nodo 882	624.11	1251.69	-5411.90	-1.520e+05	1.498e+05	8218.00
6233	reac per cdc 342 - nodo 882	-766.49	1366.36	-5689.27	-1.815e+05	-1.803e+05	-6278.21
6234	reac per cdc 343 - nodo 882	-1138.27	922.69	-5555.19	-6.689e+04	-2.686e+05	-1999.22
6235	reac per cdc 344 - nodo 882	1169.42	1397.07	-5563.42	-1.897e+05	2.792e+05	-899.79



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
6236	reac per cdc 345 - nodo 882	1410.10	924.02	-5423.91	-6.705e+04	3.363e+05	-3753.58
6237	reac per cdc 346 - nodo 882	-1552.48	1694.03	-5677.26	-2.665e+05	-3.669e+05	5693.37
6238	reac per cdc 347 - nodo 882	-1311.80	1220.98	-5537.75	-1.438e+05	-3.097e+05	2839.58
6239	reac per cdc 348 - nodo 882	1475.65	1382.38	-5560.71	-1.857e+05	3.519e+05	-4466.18
6240	reac per cdc 349 - nodo 882	1103.87	938.71	-5426.63	-7.104e+04	2.636e+05	-187.19
6241	reac per cdc 350 - nodo 882	-1246.24	1679.33	-5674.54	-2.625e+05	-2.942e+05	2126.98
6242	reac per cdc 351 - nodo 882	-1618.03	1235.67	-5540.46	-1.478e+05	-3.824e+05	6405.97
6243	reac per cdc 352 - nodo 882	-207.96	2146.78	-5761.61	-3.839e+05	-4.771e+04	7258.80
6244	reac per cdc 353 - nodo 882	594.30	569.96	-5296.58	2.486e+04	1.427e+05	-2253.84
6245	reac per cdc 354 - nodo 882	-736.68	2048.08	-5804.59	-3.584e+05	-1.732e+05	4193.63
6246	reac per cdc 355 - nodo 882	65.58	471.26	-5339.56	5.039e+04	1.718e+04	-5319.01
6247	reac per cdc 356 - nodo 882	-64.03	2052.89	-5766.03	-3.596e+05	-1.355e+04	4737.24
6248	reac per cdc 357 - nodo 882	738.23	476.07	-5300.99	4.914e+04	1.768e+05	-4775.40
6249	reac per cdc 358 - nodo 882	-880.60	2141.98	-5800.18	-3.827e+05	-2.074e+05	6715.19
6250	reac per cdc 359 - nodo 882	-78.34	565.16	-5335.15	2.610e+04	-1.698e+04	-2797.45
6251	reac per cdc 360 - nodo 882	812.82	2097.81	-5752.56	-3.706e+05	1.946e+05	-4629.17
6252	reac per cdc 361 - nodo 882	-426.48	618.94	-5305.63	1.153e+04	-9.959e+04	9634.13
6253	reac per cdc 362 - nodo 882	284.10	1999.11	-5795.54	-3.451e+05	6.906e+04	-7694.34
6254	reac per cdc 363 - nodo 882	-955.19	520.24	-5348.61	3.707e+04	-2.251e+05	6568.96
6255	reac per cdc 364 - nodo 882	956.74	2003.92	-5756.98	-3.463e+05	2.287e+05	-7150.73
6256	reac per cdc 365 - nodo 882	-282.55	525.04	-5310.04	3.582e+04	-6.543e+04	7112.57
6257	reac per cdc 366 - nodo 882	140.17	2093.01	-5791.13	-3.693e+05	3.490e+04	-5172.78
6258	reac per cdc 367 - nodo 882	-1099.12	614.13	-5344.19	1.278e+04	-2.593e+05	9090.52
6259	reac per cdc 368 - nodo 882	-145.86	3004.60	-1.170e+04	-3.845e+05	-3.175e+04	2057.37
6260	reac per cdc 369 - nodo 882	518.45	1309.16	-5528.31	-1.668e+05	1.247e+05	1384.28
6261	reac per cdc 370 - nodo 882	-661.21	1313.40	-5574.21	-1.679e+05	-1.553e+05	1283.24
6262	reac per cdc 371 - nodo 882	-156.91	1577.07	-5656.57	-2.350e+05	-3.559e+04	2137.51
6263	reac per cdc 372 - nodo 882	14.88	1039.28	-5443.18	-9.808e+04	5141.65	-384.01
6264	reac per cdc 373 - nodo 882	207.93	3004.69	-1.168e+04	-3.845e+05	5.222e+04	2306.00
6265	reac per cdc 374 - nodo 882	-499.87	3007.23	-1.171e+04	-3.851e+05	-1.158e+05	2245.37
6266	reac per cdc 375 - nodo 882	-197.29	3165.43	-1.176e+04	-4.254e+05	-4.394e+04	2757.94
6267	reac per cdc 376 - nodo 882	-94.21	2842.76	-1.163e+04	-3.433e+05	-1.950e+04	1245.02
6268	reac per cdc 377 - nodo 882	481.12	2156.95	-8601.00	-2.757e+05	1.164e+05	1928.02
6269	reac per cdc 378 - nodo 882	-698.54	2161.19	-8646.90	-2.767e+05	-1.636e+05	1826.98
6270	reac per cdc 379 - nodo 882	-194.25	2424.86	-8729.26	-3.438e+05	-4.383e+04	2681.25
6271	reac per cdc 380 - nodo 882	-22.45	1887.07	-8515.88	-2.069e+05	-3099.90	159.73
6272	reac per cdc 381 - nodo 882	-86.12	1648.14	-6779.66	-2.103e+05	-1.856e+04	1187.39
6273	reac per cdc 382 - nodo 882	46.74	1309.05	-5546.13	-1.668e+05	1.272e+04	1052.77
6274	reac per cdc 383 - nodo 882	-189.19	1309.90	-5555.31	-1.670e+05	-4.327e+04	1032.56
6275	reac per cdc 384 - nodo 882	-88.33	1362.63	-5571.78	-1.804e+05	-1.933e+04	1203.42
6276	reac per cdc 385 - nodo 882	-53.97	1255.07	-5529.10	-1.530e+05	-1.118e+04	699.11
6277	reac per cdc 386 - nodo 882	-71.19	1309.02	-5550.59	-1.668e+05	-1.527e+04	969.89
6278	reac per cdc 259 - nodo 883	101.63	567.40	-6155.60	-3.793e+04	-2055.12	3117.48
6279	reac per cdc 260 - nodo 883	717.80	250.76	-3616.84	-1.751e+04	1.795e+05	-1225.93
6280	reac per cdc 261 - nodo 883	-605.98	288.77	-2749.25	-2.352e+04	-1.780e+05	-1849.62
6281	reac per cdc 262 - nodo 883	-39.47	806.85	-3539.03	-1.462e+05	-2.495e+04	1650.18
6282	reac per cdc 263 - nodo 883	152.68	-275.24	-2824.00	1.072e+05	2.676e+04	2862.51
6283	reac per cdc 264 - nodo 883	498.85	557.75	-6416.76	-3.656e+04	1.052e+05	1556.13
6284	reac per cdc 265 - nodo 883	-295.42	580.56	-5896.21	-4.017e+04	-1.093e+05	1181.91
6285	reac per cdc 266 - nodo 883	44.49	891.41	-6370.07	-1.138e+05	-1.743e+04	3281.80
6286	reac per cdc 267 - nodo 883	159.78	242.16	-5941.05	3.824e+04	1.360e+04	4009.20
6287	reac per cdc 268 - nodo 883	740.73	401.04	-5103.85	-2.658e+04	1.781e+05	-355.35
6288	reac per cdc 269 - nodo 883	-583.05	439.05	-4236.27	-3.259e+04	-1.794e+05	-979.05
6289	reac per cdc 270 - nodo 883	-16.54	957.13	-5026.04	-1.553e+05	-2.631e+04	2520.76
6290	reac per cdc 271 - nodo 883	175.61	-124.96	-4311.01	9.809e+04	2.540e+04	3733.09
6291	reac per cdc 272 - nodo 883	1122.63	1126.54	-3640.08	-2.353e+05	2.923e+05	1.344e+04
6292	reac per cdc 273 - nodo 883	1464.46	58.62	-2889.66	2.001e+04	3.846e+05	8107.55
6293	reac per cdc 274 - nodo 883	-1379.73	343.67	-1925.59	-4.991e+04	-3.834e+05	-6039.41
6294	reac per cdc 275 - nodo 883	-1037.89	-724.25	-1175.17	2.054e+05	-2.911e+05	-1.137e+04
6295	reac per cdc 276 - nodo 883	1557.52	1048.69	-3681.66	-2.158e+05	4.097e+05	6773.46
6296	reac per cdc 277 - nodo 883	1029.57	136.47	-2848.07	495.47	2.672e+05	1.477e+04
6297	reac per cdc 278 - nodo 883	-944.84	265.82	-1967.17	-3.040e+04	-2.660e+05	-1.270e+04
6298	reac per cdc 279 - nodo 883	-1472.79	-646.40	-1133.59	1.859e+05	-4.086e+05	-4705.32
6299	reac per cdc 280 - nodo 883	1803.77	412.67	-4113.57	-6.618e+04	4.762e+05	-2339.36
6300	reac per cdc 281 - nodo 883	2145.60	-655.24	-3363.15	1.891e+05	5.685e+05	-7669.95
6301	reac per cdc 282 - nodo 883	-2060.87	1057.54	-1452.10	-2.190e+05	-5.673e+05	9738.10
6302	reac per cdc 283 - nodo 883	-1719.04	-10.38	-701.68	3.628e+04	-4.751e+05	4407.50
6303	reac per cdc 284 - nodo 883	2238.66	334.83	-4155.15	-4.667e+04	5.936e+05	-9004.04
6304	reac per cdc 285 - nodo 883	1710.71	-577.40	-3321.56	1.696e+05	4.511e+05	-1005.27
6305	reac per cdc 286 - nodo 883	-1625.98	979.69	-1493.68	-1.995e+05	-4.499e+05	3073.41
6306	reac per cdc 287 - nodo 883	-2153.93	67.47	-660.10	1.677e+04	-5.925e+05	1.107e+04
6307	reac per cdc 288 - nodo 883	-152.00	2098.44	-3915.50	-4.683e+05	-5.187e+04	1.284e+04
6308	reac per cdc 289 - nodo 883	987.44	-1461.29	-1414.10	3.828e+05	2.557e+05	-4928.63
6309	reac per cdc 290 - nodo 883	-902.71	1863.58	-3401.15	-4.127e+05	-2.546e+05	6996.77



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
6310	reac per cdc 291 - nodo 883	236.73	-1696.15	-899.75	4.384e+05	5.302e+04	-1.077e+04
6311	reac per cdc 292 - nodo 883	52.34	1884.28	-4057.55	-4.176e+05	3300.26	8106.78
6312	reac per cdc 293 - nodo 883	1191.78	-1675.45	-1556.14	4.335e+05	3.109e+05	-9661.88
6313	reac per cdc 294 - nodo 883	-1107.05	2077.74	-3259.10	-4.634e+05	-3.098e+05	1.173e+04
6314	reac per cdc 295 - nodo 883	32.39	-1481.99	-757.70	3.877e+05	-2153.24	-6038.64
6315	reac per cdc 296 - nodo 883	1297.64	1838.95	-4054.11	-4.032e+05	3.395e+05	-9375.58
6316	reac per cdc 297 - nodo 883	-462.20	-1201.79	-1275.48	3.177e+05	-1.357e+05	1.729e+04
6317	reac per cdc 298 - nodo 883	546.93	1604.09	-3539.76	-3.476e+05	1.368e+05	-1.522e+04
6318	reac per cdc 299 - nodo 883	-1212.90	-1436.65	-761.14	3.733e+05	-3.384e+05	1.144e+04
6319	reac per cdc 300 - nodo 883	1501.98	1624.79	-4196.16	-3.525e+05	3.947e+05	-1.411e+04
6320	reac per cdc 301 - nodo 883	-257.85	-1415.95	-1417.53	3.685e+05	-8.050e+04	1.255e+04
6321	reac per cdc 302 - nodo 883	342.59	1818.25	-3397.72	-3.984e+05	8.165e+04	-1.049e+04
6322	reac per cdc 303 - nodo 883	-1417.24	-1222.49	-619.09	3.226e+05	-3.936e+05	1.618e+04
6323	reac per cdc 304 - nodo 883	750.90	808.11	-3215.98	-1.595e+05	1.919e+05	9169.83
6324	reac per cdc 305 - nodo 883	975.11	107.67	-2723.78	7982.30	2.524e+05	5673.52
6325	reac per cdc 306 - nodo 883	-890.37	294.63	-2091.46	-3.788e+04	-2.513e+05	-3605.38
6326	reac per cdc 307 - nodo 883	-666.17	-405.81	-1599.27	1.296e+05	-1.908e+05	-7101.68
6327	reac per cdc 308 - nodo 883	1036.15	757.05	-3243.26	-1.467e+05	2.689e+05	4798.50
6328	reac per cdc 309 - nodo 883	689.87	158.72	-2696.51	-4819.21	1.754e+05	1.004e+04
6329	reac per cdc 310 - nodo 883	-605.13	243.57	-2118.74	-2.508e+04	-1.743e+05	-7976.70
6330	reac per cdc 311 - nodo 883	-951.41	-354.75	-1571.99	1.168e+05	-2.678e+05	-2730.36
6331	reac per cdc 312 - nodo 883	1197.66	339.89	-3526.54	-4.855e+04	3.125e+05	-1178.54
6332	reac per cdc 313 - nodo 883	1421.87	-360.56	-3034.34	1.189e+05	3.731e+05	-4674.85
6333	reac per cdc 314 - nodo 883	-1337.13	762.85	-1780.90	-1.488e+05	-3.719e+05	6742.99
6334	reac per cdc 315 - nodo 883	-1112.93	62.41	-1288.70	1.865e+04	-3.114e+05	3246.69
6335	reac per cdc 316 - nodo 883	1482.90	288.83	-3553.82	-3.575e+04	3.896e+05	-5549.87
6336	reac per cdc 317 - nodo 883	1136.62	-309.50	-3007.07	1.061e+05	2.960e+05	-303.52
6337	reac per cdc 318 - nodo 883	-1051.89	711.79	-1808.18	-1.360e+05	-2.949e+05	2371.66
6338	reac per cdc 319 - nodo 883	-1398.17	113.47	-1261.43	5852.71	-3.884e+05	7618.01
6339	reac per cdc 320 - nodo 883	-85.12	1445.57	-3396.63	-3.123e+05	-3.383e+04	8777.52
6340	reac per cdc 321 - nodo 883	662.23	-889.23	-1755.97	2.459e+05	1.679e+05	-2876.82
6341	reac per cdc 322 - nodo 883	-577.50	1291.53	-3059.27	-2.758e+05	-1.668e+05	4944.96
6342	reac per cdc 323 - nodo 883	169.85	-1043.28	-1418.62	2.824e+05	3.497e+04	-6709.38
6343	reac per cdc 324 - nodo 883	48.91	1305.11	-3489.80	-2.790e+05	2362.11	5673.01
6344	reac per cdc 325 - nodo 883	796.26	-1029.70	-1849.14	2.792e+05	2.041e+05	-5981.33
6345	reac per cdc 326 - nodo 883	-711.53	1431.99	-2966.11	-3.091e+05	-2.030e+05	8049.47
6346	reac per cdc 327 - nodo 883	35.82	-902.81	-1325.45	2.491e+05	-1215.09	-3604.87
6347	reac per cdc 328 - nodo 883	865.69	1275.37	-3487.54	-2.696e+05	2.229e+05	-5793.56
6348	reac per cdc 329 - nodo 883	-288.57	-719.04	-1665.06	2.032e+05	-8.879e+04	1.169e+04
6349	reac per cdc 330 - nodo 883	373.31	1121.33	-3150.19	-2.331e+05	8.994e+04	-9626.12
6350	reac per cdc 331 - nodo 883	-780.96	-873.08	-1327.70	2.397e+05	-2.218e+05	7861.70
6351	reac per cdc 332 - nodo 883	999.72	1134.91	-3580.71	-2.364e+05	2.591e+05	-8898.07
6352	reac per cdc 333 - nodo 883	-154.55	-859.50	-1758.23	2.365e+05	-5.260e+04	8589.75
6353	reac per cdc 334 - nodo 883	239.28	1261.80	-3057.02	-2.664e+05	5.375e+04	-6521.61
6354	reac per cdc 335 - nodo 883	-914.98	-732.61	-1234.54	2.065e+05	-2.579e+05	1.097e+04
6355	reac per cdc 336 - nodo 883	611.48	688.67	-3056.91	-1.310e+05	1.543e+05	7568.86
6356	reac per cdc 337 - nodo 883	791.56	126.06	-2661.57	3469.67	2.029e+05	4760.57
6357	reac per cdc 338 - nodo 883	-706.83	276.23	-2153.68	-3.337e+04	-2.017e+05	-2692.43
6358	reac per cdc 339 - nodo 883	-526.74	-286.38	-1758.34	1.011e+05	-1.531e+05	-5500.71
6359	reac per cdc 340 - nodo 883	840.59	647.66	-3078.82	-1.208e+05	2.161e+05	4057.73
6360	reac per cdc 341 - nodo 883	562.45	167.07	-2639.66	-6812.49	1.410e+05	8271.69
6361	reac per cdc 342 - nodo 883	-477.72	235.22	-2175.58	-2.309e+04	-1.399e+05	-6203.55
6362	reac per cdc 343 - nodo 883	-755.86	-245.37	-1736.43	9.086e+04	-2.150e+05	-1989.59
6363	reac per cdc 344 - nodo 883	970.32	312.59	-3306.36	-4.194e+04	2.512e+05	-743.16
6364	reac per cdc 345 - nodo 883	1150.41	-250.02	-2911.02	9.257e+04	2.998e+05	-3551.44
6365	reac per cdc 346 - nodo 883	-1065.67	652.32	-1904.23	-1.225e+05	-2.986e+05	5619.59
6366	reac per cdc 347 - nodo 883	-885.59	89.71	-1508.89	1.204e+04	-2.500e+05	2811.30
6367	reac per cdc 348 - nodo 883	1199.43	271.58	-3328.27	-3.166e+04	3.130e+05	-4254.28
6368	reac per cdc 349 - nodo 883	921.29	-209.01	-2889.11	8.229e+04	2.379e+05	-40.32
6369	reac per cdc 350 - nodo 883	-836.56	611.31	-1926.14	-1.122e+05	-2.368e+05	2108.46
6370	reac per cdc 351 - nodo 883	-1114.70	130.72	-1486.98	1759.73	-3.119e+05	6322.42
6371	reac per cdc 352 - nodo 883	-60.03	1200.69	-3202.01	-2.538e+05	-2.706e+04	7253.74
6372	reac per cdc 353 - nodo 883	540.25	-674.67	-1884.20	1.946e+05	1.350e+05	-2107.22
6373	reac per cdc 354 - nodo 883	-455.52	1076.96	-2931.04	-2.245e+05	-1.339e+05	4175.36
6374	reac per cdc 355 - nodo 883	144.76	-798.40	-1613.23	2.239e+05	2.820e+04	-5185.60
6375	reac per cdc 356 - nodo 883	47.62	1087.87	-3276.85	-2.270e+05	2010.39	4760.14
6376	reac per cdc 357 - nodo 883	647.91	-787.50	-1959.04	2.213e+05	1.641e+05	-4600.82
6377	reac per cdc 358 - nodo 883	-563.17	1189.79	-2856.21	-2.512e+05	-1.629e+05	6668.96
6378	reac per cdc 359 - nodo 883	37.11	-685.58	-1538.40	1.972e+05	-863.38	-2692.00
6379	reac per cdc 360 - nodo 883	703.68	1063.99	-3275.04	-2.195e+05	1.792e+05	-4450.01
6380	reac per cdc 361 - nodo 883	-223.45	-537.97	-1811.18	1.603e+05	-7.121e+04	9596.54
6381	reac per cdc 362 - nodo 883	308.19	940.26	-3004.07	-1.902e+05	7.236e+04	-7528.39
6382	reac per cdc 363 - nodo 883	-618.94	-661.70	-1540.21	1.896e+05	-1.780e+05	6518.15
6383	reac per cdc 364 - nodo 883	811.33	951.17	-3349.87	-1.928e+05	2.082e+05	-6943.61



Id	Tipo	Fx	Fy	Fz	Mx	My	Mz
6384	reac per cdc 365 - nodo 883	-115.80	-650.79	-1886.02	1.870e+05	-4.214e+04	7102.93
6385	reac per cdc 366 - nodo 883	200.53	1053.09	-2929.23	-2.169e+05	4.329e+04	-5034.79
6386	reac per cdc 367 - nodo 883	-726.60	-548.87	-1465.38	1.629e+05	-2.071e+05	9011.76
6387	reac per cdc 368 - nodo 883	72.94	401.53	-4390.31	-2.704e+04	-1241.82	2194.84
6388	reac per cdc 369 - nodo 883	483.72	190.43	-2697.80	-1.343e+04	1.198e+05	-700.76
6389	reac per cdc 370 - nodo 883	-398.80	215.77	-2119.41	-1.744e+04	-1.186e+05	-1116.56
6390	reac per cdc 371 - nodo 883	-21.12	561.16	-2645.93	-9.924e+04	-1.651e+04	1216.65
6391	reac per cdc 372 - nodo 883	106.98	-160.23	-2169.24	6.968e+04	1.797e+04	2024.87
6392	reac per cdc 373 - nodo 883	337.76	395.10	-4564.41	-2.613e+04	7.028e+04	1153.94
6393	reac per cdc 374 - nodo 883	-191.75	410.30	-4217.38	-2.854e+04	-7.272e+04	904.47
6394	reac per cdc 375 - nodo 883	34.85	617.53	-4533.29	-7.762e+04	-1.149e+04	2304.39
6395	reac per cdc 376 - nodo 883	111.71	184.70	-4247.28	2.374e+04	9195.52	2789.32
6396	reac per cdc 377 - nodo 883	499.01	290.62	-3689.14	-1.948e+04	1.189e+05	-120.38
6397	reac per cdc 378 - nodo 883	-383.51	315.96	-3110.75	-2.349e+04	-1.195e+05	-536.17
6398	reac per cdc 379 - nodo 883	-5.83	661.35	-3637.27	-1.053e+05	-1.741e+04	1797.04
6399	reac per cdc 380 - nodo 883	122.27	-60.04	-3160.58	6.364e+04	1.706e+04	2605.26
6400	reac per cdc 381 - nodo 883	48.48	241.22	-2804.16	-1.737e+04	210.44	1266.23
6401	reac per cdc 382 - nodo 883	130.64	199.00	-2465.66	-1.465e+04	2.441e+04	687.10
6402	reac per cdc 383 - nodo 883	-45.87	204.07	-2349.98	-1.545e+04	-2.325e+04	603.95
6403	reac per cdc 384 - nodo 883	29.67	273.15	-2455.28	-3.181e+04	-2842.62	1070.59
6404	reac per cdc 385 - nodo 883	55.29	128.87	-2359.95	1976.87	4052.62	1232.23
6405	reac per cdc 386 - nodo 883	42.37	201.15	-2407.62	-1.495e+04	573.51	1034.07

**Tipo** carico distribuito globale su trave

Id	Tipo	Pos.	fx	fy	fz	mx	my	mz
		cm	daN/cm	daN/cm	daN/cm	daN	daN	daN
1	G2k (pannelli US1)-DG:Fzi=-25.60 Fzf=-25.60	0.0	0.0	0.0	-25.60	0.0	0.0	0.0
		0.0	0.0	0.0	-25.60	0.0	0.0	0.0
2	G2k (pannelli US2 testata alta)-DG:Fzi=-49.20 Fzf=-49.20	0.0	0.0	0.0	-49.20	0.0	0.0	0.0
		0.0	0.0	0.0	-49.20	0.0	0.0	0.0
3	G2k (pannelli US2 testata bassa)-DG:Fzi=-39.20 Fzf=-39.20	0.0	0.0	0.0	-39.20	0.0	0.0	0.0
		0.0	0.0	0.0	-39.20	0.0	0.0	0.0
5	G2k (tamponamenti US3)-DG:Fzi=-17.00 Fzf=-17.00	0.0	0.0	0.0	-17.00	0.0	0.0	0.0
		0.0	0.0	0.0	-17.00	0.0	0.0	0.0

**Tipo** carico variabile generale

Id	Tipo	ascissa	valore	ascissa	valore
		cm	daN/cm2	cm	daN/cm2
4	G2k (pannelli US2 laterali)-QV:var y - Qz - Lineare				
	Y - Y Qz L2=0.0	1669.00	-49.20 daN/cm	5129.00	-39.20 daN/cm



# DEFINIZIONE DELLE COMBINAZIONI

## LEGENDA TABELLA COMBINAZIONI DI CARICO

Il programma combina i diversi tipi di casi di carico (CDC) secondo le regole previste dalla normativa vigente. Le combinazioni previste sono destinate al controllo di sicurezza della struttura ed alla verifica degli spostamenti e delle sollecitazioni.

La prima tabella delle combinazioni riportata di seguito comprende le seguenti informazioni: Numero, Tipo, Sigla identificativa. Una seconda tabella riporta il peso nella combinazione assunto per ogni caso di carico.

Ai fini delle verifiche degli stati limite si definiscono le seguenti combinazioni delle azioni:

### Combinazione fondamentale SLU

$$\gamma G_1 \cdot G_1 + \gamma G_2 \cdot G_2 + \gamma P \cdot P + \gamma Q_1 \cdot Q_{k1} + \gamma Q_2 \cdot \psi_{02} \cdot Q_{k2} + \gamma Q_3 \cdot \psi_{03} \cdot Q_{k3} + \dots$$

### Combinazione caratteristica (rara) SLE

$$G_1 + G_2 + P + Q_{k1} + \psi_{02} \cdot Q_{k2} + \psi_{03} \cdot Q_{k3} + \dots$$

### Combinazione frequente SLE

$$G_1 + G_2 + P + \psi_{11} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \psi_{23} \cdot Q_{k3} + \dots$$

### Combinazione quasi permanente SLE

$$G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \psi_{23} \cdot Q_{k3} + \dots$$

### Combinazione sismica, impiegata per gli stati limite ultimi e di esercizio connessi all'azione sismica E

$$E + G_1 + G_2 + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots$$

### Combinazione eccezionale, impiegata per gli stati limite connessi alle azioni eccezionali

$$G_1 + G_2 + A_d + P + \psi_{21} \cdot Q_{k1} + \psi_{22} \cdot Q_{k2} + \dots$$

Dove:

NTC 2018 Tabella 2.5.I

Destinazione d'uso/azione	$\psi_0$	$\psi_1$	$\psi_2$
Categoria A residenziali	0,70	0,50	0,30
Categoria B uffici	0,70	0,50	0,30
Categoria C ambienti suscettibili di affollamento	0,70	0,70	0,60
Categoria D ambienti ad uso commerciale	0,70	0,70	0,60
Categoria E biblioteche, archivi, magazzini,...	1,00	0,90	0,80
Categoria F Rimesse e parcheggi (autoveicoli $\leq 30\text{kN}$ )	0,70	0,70	0,60
Categoria G Rimesse e parcheggi (autoveicoli $> 30\text{kN}$ )	0,70	0,50	0,30
Categoria H Coperture	0,00	0,00	0,00
Vento	0,60	0,20	0,00
Neve a quota $\leq 1000\text{ m}$	0,50	0,20	0,00
Neve a quota $> 1000\text{ m}$	0,70	0,50	0,20
Variazioni Termiche	0,60	0,50	0,00

Nelle verifiche possono essere adottati in alternativa due diversi approcci progettuali:

- per l'approccio 1 si considerano due diverse combinazioni di gruppi di coefficienti di sicurezza parziali per le azioni, per i materiali e per la resistenza globale (combinazione 1 con coefficienti A1 e combinazione 2 con coefficienti A2),
- per l'approccio 2 si definisce un'unica combinazione per le azioni, per la resistenza dei materiali e per la resistenza globale (con coefficienti A1).

NTC 2018 Tabella 2.6.I

	Coefficiente	<b>EQU</b>	<b>A1</b>	<b>A2</b>
	$\gamma_f$			



<i>Carichi permanenti</i>	<i>Favorevoli</i>	$\gamma_{G1}$	0,9	1,0	1,0
	<i>Sfavorevoli</i>		1,1	1,3	1,0
<i>Carichi permanenti non strutturali</i>	<i>Favorevoli</i>	$\gamma_{G2}$	0,8	0,8	0,8
<i>(Non compiutamente definiti)</i>	<i>Sfavorevoli</i>		1,5	1,5	1,3
<i>Carichi variabili</i>	<i>Favorevoli</i>	$\gamma_{Qi}$	0,0	0,0	0,0
	<i>Sfavorevoli</i>		1,5	1,5	1,3

Cmb	Tipo	Sigla Id	effetto P-delta
1	SLU	SLU1	
2	SLU	SLU2	
3	SLU	SLU3	
4	SLU	SLU4	
5	SLU	SLU5	
6	SLU	SLU6	
7	SLU	SLU7	
8	SLU	SLU8	
9	SLU	SLU9	
10	SLU	SLU10	
11	SLU	SLU11	
12	SLU	SLU12	
13	SLU	SLU13	
14	SLU	SLV1	
15	SLU	SLV2	
16	SLU	SLV3	
17	SLU	SLV4	
18	SLU	SLV5	
19	SLU	SLV6	
20	SLU	SLV7	
21	SLU	SLV8	
22	SLU	SLV9	
23	SLU	SLV10	
24	SLU	SLV11	
25	SLU	SLV12	
26	SLU	SLV13	
27	SLU	SLV14	
28	SLU	SLV15	
29	SLU	SLV16	
30	SLU	SLV17	
31	SLU	SLV18	
32	SLU	SLV19	
33	SLU	SLV20	
34	SLU	SLV21	
35	SLU	SLV22	
36	SLU	SLV23	
37	SLU	SLV24	
38	SLU	SLV25	
39	SLU	SLV26	
40	SLU	SLV27	
41	SLU	SLV28	
42	SLU	SLV29	
43	SLU	SLV30	
44	SLU	SLV31	
45	SLU	SLV32	
46	SLE(sis)	SLD1	
47	SLE(sis)	SLD2	
48	SLE(sis)	SLD3	
49	SLE(sis)	SLD4	
50	SLE(sis)	SLD5	
51	SLE(sis)	SLD6	
52	SLE(sis)	SLD7	
53	SLE(sis)	SLD8	
54	SLE(sis)	SLD9	
55	SLE(sis)	SLD10	
56	SLE(sis)	SLD11	
57	SLE(sis)	SLD12	
58	SLE(sis)	SLD13	



Cmb	Tipo	Sigla Id	effetto P-delta
59	SLE(sis)	SLD14	
60	SLE(sis)	SLD15	
61	SLE(sis)	SLD16	
62	SLE(sis)	SLD17	
63	SLE(sis)	SLD18	
64	SLE(sis)	SLD19	
65	SLE(sis)	SLD20	
66	SLE(sis)	SLD21	
67	SLE(sis)	SLD22	
68	SLE(sis)	SLD23	
69	SLE(sis)	SLD24	
70	SLE(sis)	SLD25	
71	SLE(sis)	SLD26	
72	SLE(sis)	SLD27	
73	SLE(sis)	SLD28	
74	SLE(sis)	SLD29	
75	SLE(sis)	SLD30	
76	SLE(sis)	SLD31	
77	SLE(sis)	SLD32	
78	SLE(sis)	SLO1	
79	SLE(sis)	SLO2	
80	SLE(sis)	SLO3	
81	SLE(sis)	SLO4	
82	SLE(sis)	SLO5	
83	SLE(sis)	SLO6	
84	SLE(sis)	SLO7	
85	SLE(sis)	SLO8	
86	SLE(sis)	SLO9	
87	SLE(sis)	SLO10	
88	SLE(sis)	SLO11	
89	SLE(sis)	SLO12	
90	SLE(sis)	SLO13	
91	SLE(sis)	SLO14	
92	SLE(sis)	SLO15	
93	SLE(sis)	SLO16	
94	SLE(sis)	SLO17	
95	SLE(sis)	SLO18	
96	SLE(sis)	SLO19	
97	SLE(sis)	SLO20	
98	SLE(sis)	SLO21	
99	SLE(sis)	SLO22	
100	SLE(sis)	SLO23	
101	SLE(sis)	SLO24	
102	SLE(sis)	SLO25	
103	SLE(sis)	SLO26	
104	SLE(sis)	SLO27	
105	SLE(sis)	SLO28	
106	SLE(sis)	SLO29	
107	SLE(sis)	SLO30	
108	SLE(sis)	SLO31	
109	SLE(sis)	SLO32	
110	SLE(r)	SLE(r)1	
111	SLE(r)	SLE(r)2	
112	SLE(r)	SLE(r)3	
113	SLE(r)	SLE(r)4	
114	SLE(r)	SLE(r)5	
115	SLE(r)	SLE(r)6	
116	SLE(r)	SLE(r)7	
117	SLE(r)	SLE(r)8	
118	SLE(r)	SLE(r)9	
119	SLE(r)	SLE(r)10	
120	SLE(r)	SLE(r)11	
121	SLE(r)	SLE(r)12	
122	SLE(r)	SLE(r)13	
123	SLE(f)	SLE(f)1	
124	SLE(f)	SLE(f)2	
125	SLE(f)	SLE(f)3	
126	SLE(f)	SLE(f)4	
127	SLE(f)	SLE(f)5	
128	SLE(p)	SLE(p)	



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Cmb	CDC 1/15...	CDC 2/16...	CDC 3/17 ...	CDC 4/18...	CDC 5/19...	CDC 6/20...	CDC 7/21...	CDC 8/22...	CDC 9/23...	CDC 10/24...	CDC 11/25...	CDC 12/26...	CDC 13/27 ...	CDC 14/28...
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.00						



# RISULTATI OPERE DI FONDAZIONE

## LEGENDA RISULTATI OPERE DI FONDAZIONE

Il controllo dei risultati delle analisi condotte, per quanto concerne le opere di fondazione, è possibile in relazione alle tabelle sotto riportate.

La prima tabella è riferita alle fondazioni tipo palo e plinto su pali.

Per questo tipo di fondazione vengono riportate le sei componenti di sollecitazione (esprese nel riferimento globale della struttura) per ogni palo componente l'opera.

In particolare viene riportato:

<b>Nodo</b>	numero del nodo a cui è applicato il plinto
<b>Tipo</b>	codice corrispondente al nome assegnato al tipo di plinto di fondazione: 3) palo singolo ( <i>PALO</i> ) 4) plinto su palo 5) plinto su due pali ( <i>PL.2P</i> ) 6) plinto su tre pali ( <i>PL.3P</i> ) 7) plinto su quattro pali ( <i>PL.4P</i> ) 8) plinto rettangolare su cinque pali ( <i>PL.5P.R</i> ) 9) plinto pentagonale su cinque pali ( <i>PL.5P</i> ) 10) plinto su sei pali ( <i>PL.6P</i> )
<b>Palo</b>	numero del palo
<b>Comb.</b>	combinazione di carico in cui si verificano le sei componenti di sollecitazione.
<b>Quota</b>	quota assoluta della sezione del palo per cui si riportano le sei componenti di sollecitazione.

L'azione  $F_z$  ( corrispondente allo sforzo normale nel palo) è costante poiché il peso del palo stesso non è considerato nella modellazione.

La seconda tabella è riferita alle fondazioni tipo plinto su suolo elastico.

Per questo tipo di fondazione vengono riportate le pressioni nei quattro vertici dell'impronta sul terreno.

In particolare viene riportato:

<b>Nodo</b>	numero del nodo a cui è applicato il plinto
<b>Tipo</b>	Codice identificativo del nome assegnato al plinto
<b>area</b>	area dell'impronta del plinto
<b>Wink O</b> <b>Wink V</b>	coefficienti di Winkler (orizzontale e verticale) adottati
<b>Comb</b>	Combinazione di carico in cui si verificano i valori riportati
<b>Pt (P1 P2 P3 P4)</b>	valori di pressione nei vertici

La terza tabella è riferita alle fondazioni tipo platea su suolo elastico.

Per questo tipo di fondazione vengono riportate le pressioni in ogni vertice (nodo) degli elementi costituenti la platea.

La quarta tabella è riferita alle fondazioni tipo trave su suolo elastico.

Per questo tipo di fondazione vengono riportate le pressioni alle estremità dell'elemento e la massima (in valore assoluto) pressione lungo lo sviluppo dell'elemento.

Vengono inoltre riportati, con funzione statistica, i valori massimo e minimo delle pressioni che compaiono nella tabella.

Nodo (G)    Pt 1/12    Pt 2/13    Pt 3...    Pt 4...



	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2	daN/cm2
7	-0.61	-0.51	-0.35	-0.32	-0.32						
8	-0.62	-0.52	-0.37	-0.35	-0.34						
9	-0.64	-0.54	-0.40	-0.37	-0.36						
10	-0.66	-0.56	-0.42	-0.39	-0.38						
11	-0.67	-0.58	-0.44	-0.40	-0.40						
12	-0.71	-0.61	-0.46	-0.42	-0.42						
13	-0.75	-0.64	-0.49	-0.44	-0.43						
14	-0.87	-0.73	-0.63	-0.56	-0.55						
15	-0.88	-0.73	-0.63	-0.56	-0.55						
16	-0.89	-0.74	-0.64	-0.57	-0.55						
17	-0.89	-0.74	-0.64	-0.57	-0.55						
18	-0.90	-0.75	-0.65	-0.57	-0.56						
19	-0.91	-0.75	-0.65	-0.58	-0.56						
20	-0.91	-0.76	-0.65	-0.58	-0.56						
21	-0.92	-0.72	-0.66	-0.58	-0.57						
22	-0.92	-0.71	-0.66	-0.58	-0.57						
23	-0.92	-0.71	-0.66	-0.58	-0.56						
24	-0.92	-0.71	-0.66	-0.58	-0.56						
25	-0.92	-0.71	-0.66	-0.58	-0.56						
26	-0.92	-0.71	-0.66	-0.58	-0.56						
27	-0.91	-0.71	-0.65	-0.58	-0.56						
28	-0.90	-0.73	-0.65	-0.57	-0.56						
29	-0.90	-0.73	-0.65	-0.57	-0.56						
30	-0.90	-0.73	-0.64	-0.57	-0.56						
31	-0.89	-0.73	-0.64	-0.57	-0.55						
32	-0.89	-0.73	-0.64	-0.57	-0.55						
33	-0.89	-0.72	-0.64	-0.57	-0.55						
34	-0.88	-0.72	-0.63	-0.57	-0.55						
35	-0.77	-0.63	-0.56	-0.49	-0.48						
36	-0.75	-0.60	-0.54	-0.48	-0.46						
37	-0.72	-0.58	-0.53	-0.46	-0.45						
38	-0.70	-0.55	-0.52	-0.45	-0.43						
39	-0.68	-0.54	-0.50	-0.43	-0.42						
40	-0.66	-0.52	-0.48	-0.41	-0.40						
41	-0.62	-0.50	-0.46	-0.39	-0.38						
42	-0.60	-0.51	-0.38	-0.35	-0.34						
43	-0.59	-0.51	-0.40	-0.37	-0.36						
44	-0.60	-0.53	-0.42	-0.39	-0.38						
45	-0.62	-0.54	-0.45	-0.41	-0.40						
46	-0.64	-0.56	-0.47	-0.43	-0.42						
47	-0.67	-0.59	-0.49	-0.45	-0.44						
48	-0.71	-0.62	-0.51	-0.47	-0.46						
49	-0.88	-0.69	-0.63	-0.56	-0.55						
50	-0.89	-0.69	-0.64	-0.57	-0.55						
51	-0.90	-0.70	-0.64	-0.57	-0.55						
52	-0.90	-0.70	-0.65	-0.57	-0.56						
53	-0.91	-0.71	-0.65	-0.58	-0.56						
54	-0.91	-0.71	-0.66	-0.58	-0.56						
55	-0.92	-0.71	-0.66	-0.58	-0.56						
56	-0.93	-0.68	-0.67	-0.59	-0.57						
57	-0.93	-0.68	-0.67	-0.59	-0.57						
58	-0.93	-0.68	-0.67	-0.58	-0.57						
59	-0.93	-0.68	-0.67	-0.58	-0.56						
60	-0.93	-0.68	-0.67	-0.58	-0.56						
61	-0.92	-0.68	-0.66	-0.58	-0.56						
62	-0.92	-0.68	-0.66	-0.58	-0.56						
63	-0.91	-0.69	-0.65	-0.57	-0.56						
64	-0.90	-0.69	-0.65	-0.57	-0.56						
65	-0.90	-0.69	-0.65	-0.57	-0.55						
66	-0.90	-0.69	-0.65	-0.57	-0.55						
67	-0.90	-0.69	-0.65	-0.57	-0.55						
68	-0.89	-0.68	-0.64	-0.57	-0.55						
69	-0.89	-0.68	-0.64	-0.57	-0.55						
70	-0.79	-0.61	-0.57	-0.51	-0.49						
71	-0.77	-0.59	-0.56	-0.49	-0.48						
72	-0.75	-0.56	-0.54	-0.48	-0.46						
73	-0.72	-0.54	-0.53	-0.46	-0.44						
74	-0.70	-0.53	-0.51	-0.45	-0.43						
75	-0.68	-0.51	-0.50	-0.43	-0.41						
76	-0.65	-0.49	-0.48	-0.41	-0.39						
77	-0.61	-0.52	-0.40	-0.37	-0.36						
78	-0.58	-0.51	-0.42	-0.39	-0.38						
79	-0.61	-0.51	-0.45	-0.41	-0.40						
80	-0.64	-0.53	-0.47	-0.43	-0.42						
81	-0.68	-0.55	-0.49	-0.45	-0.44						
82	-0.71	-0.57	-0.52	-0.47	-0.46						



83	-0.74	-0.60	-0.54	-0.49	-0.48
84	-0.89	-0.64	-0.64	-0.56	-0.55
85	-0.89	-0.65	-0.64	-0.57	-0.55
86	-0.90	-0.66	-0.65	-0.57	-0.55
87	-0.91	-0.66	-0.65	-0.57	-0.56
88	-0.92	-0.67	-0.66	-0.58	-0.56
89	-0.92	-0.67	-0.66	-0.58	-0.56
90	-0.93	-0.67	-0.67	-0.58	-0.56
91	-0.94	-0.65	-0.67	-0.59	-0.57
92	-0.94	-0.65	-0.67	-0.59	-0.57
93	-0.94	-0.64	-0.68	-0.59	-0.57
94	-0.94	-0.64	-0.67	-0.59	-0.56
95	-0.94	-0.64	-0.67	-0.59	-0.56
96	-0.93	-0.64	-0.67	-0.58	-0.56
97	-0.93	-0.64	-0.67	-0.58	-0.56
98	-0.91	-0.65	-0.66	-0.58	-0.56
99	-0.91	-0.65	-0.65	-0.57	-0.55
100	-0.91	-0.65	-0.65	-0.57	-0.55
101	-0.90	-0.65	-0.65	-0.57	-0.55
102	-0.90	-0.64	-0.65	-0.57	-0.55
103	-0.90	-0.64	-0.65	-0.57	-0.55
104	-0.89	-0.64	-0.64	-0.57	-0.55
105	-0.81	-0.60	-0.59	-0.52	-0.51
106	-0.79	-0.57	-0.58	-0.51	-0.49
107	-0.77	-0.55	-0.56	-0.49	-0.47
108	-0.75	-0.53	-0.55	-0.47	-0.46
109	-0.73	-0.51	-0.53	-0.46	-0.44
110	-0.70	-0.50	-0.51	-0.44	-0.43
111	-0.67	-0.49	-0.49	-0.42	-0.40
112	-0.61	-0.53	-0.42	-0.39	-0.38
113	-0.61	-0.52	-0.45	-0.41	-0.40
114	-0.64	-0.51	-0.47	-0.43	-0.42
115	-0.68	-0.51	-0.49	-0.45	-0.44
116	-0.71	-0.53	-0.52	-0.47	-0.46
117	-0.74	-0.55	-0.54	-0.49	-0.48
118	-0.77	-0.58	-0.56	-0.51	-0.50
119	-0.89	-0.61	-0.64	-0.57	-0.55
120	-0.90	-0.61	-0.65	-0.57	-0.55
121	-0.91	-0.61	-0.65	-0.57	-0.55
122	-0.91	-0.62	-0.66	-0.57	-0.55
123	-0.92	-0.62	-0.66	-0.58	-0.56
124	-0.93	-0.63	-0.67	-0.58	-0.56
125	-0.93	-0.63	-0.67	-0.59	-0.56
126	-0.95	-0.62	-0.68	-0.59	-0.57
127	-0.94	-0.61	-0.68	-0.59	-0.57
128	-0.94	-0.61	-0.68	-0.59	-0.56
129	-0.94	-0.60	-0.68	-0.59	-0.56
130	-0.94	-0.60	-0.68	-0.59	-0.56
131	-0.94	-0.61	-0.68	-0.58	-0.56
132	-0.94	-0.61	-0.67	-0.58	-0.56
133	-0.92	-0.61	-0.66	-0.58	-0.56
134	-0.91	-0.61	-0.66	-0.57	-0.55
135	-0.91	-0.61	-0.66	-0.57	-0.55
136	-0.91	-0.60	-0.65	-0.57	-0.55
137	-0.90	-0.60	-0.65	-0.57	-0.55
138	-0.90	-0.60	-0.65	-0.57	-0.55
139	-0.90	-0.60	-0.65	-0.57	-0.55
140	-0.83	-0.58	-0.60	-0.54	-0.52
141	-0.81	-0.56	-0.59	-0.52	-0.50
142	-0.79	-0.54	-0.57	-0.50	-0.49
143	-0.77	-0.52	-0.56	-0.49	-0.47
144	-0.75	-0.50	-0.54	-0.47	-0.45
145	-0.72	-0.50	-0.53	-0.46	-0.44
146	-0.69	-0.50	-0.51	-0.43	-0.41
147	-0.61	-0.54	-0.45	-0.41	-0.40
148	-0.64	-0.53	-0.47	-0.43	-0.42
149	-0.68	-0.52	-0.49	-0.45	-0.44
150	-0.71	-0.51	-0.52	-0.47	-0.46
151	-0.74	-0.51	-0.54	-0.49	-0.48
152	-0.77	-0.53	-0.56	-0.51	-0.49
153	-0.80	-0.56	-0.58	-0.53	-0.51
154	-0.89	-0.56	-0.65	-0.56	-0.54
155	-0.90	-0.57	-0.65	-0.57	-0.55
156	-0.91	-0.57	-0.66	-0.57	-0.55
157	-0.92	-0.58	-0.66	-0.57	-0.55
158	-0.92	-0.59	-0.67	-0.58	-0.55
159	-0.93	-0.60	-0.67	-0.58	-0.56



160	-0.93	-0.61	-0.67	-0.58	-0.56
161	-0.95	-0.60	-0.68	-0.59	-0.56
162	-0.95	-0.59	-0.68	-0.59	-0.56
163	-0.95	-0.58	-0.69	-0.59	-0.56
164	-0.95	-0.57	-0.68	-0.58	-0.56
165	-0.95	-0.57	-0.68	-0.58	-0.56
166	-0.94	-0.58	-0.68	-0.58	-0.56
167	-0.94	-0.59	-0.68	-0.58	-0.56
168	-0.92	-0.58	-0.66	-0.57	-0.55
169	-0.92	-0.58	-0.66	-0.57	-0.55
170	-0.91	-0.58	-0.66	-0.57	-0.55
171	-0.91	-0.57	-0.66	-0.57	-0.55
172	-0.91	-0.56	-0.66	-0.57	-0.55
173	-0.90	-0.56	-0.65	-0.57	-0.55
174	-0.90	-0.56	-0.65	-0.57	-0.55
175	-0.85	-0.58	-0.62	-0.55	-0.53
176	-0.83	-0.55	-0.60	-0.53	-0.51
177	-0.81	-0.52	-0.59	-0.52	-0.50
178	-0.79	-0.50	-0.57	-0.50	-0.48
179	-0.77	-0.50	-0.56	-0.48	-0.47
180	-0.74	-0.50	-0.54	-0.47	-0.45
181	-0.71	-0.50	-0.52	-0.44	-0.43
182	-0.64	-0.56	-0.47	-0.43	-0.42
183	-0.68	-0.55	-0.49	-0.45	-0.44
184	-0.71	-0.54	-0.52	-0.47	-0.46
185	-0.74	-0.53	-0.54	-0.49	-0.48
186	-0.77	-0.52	-0.56	-0.51	-0.49
187	-0.80	-0.52	-0.58	-0.53	-0.51
188	-0.84	-0.56	-0.60	-0.55	-0.53
189	-0.90	-0.56	-0.65	-0.56	-0.54
190	-0.91	-0.57	-0.65	-0.56	-0.54
191	-0.91	-0.57	-0.66	-0.57	-0.55
192	-0.92	-0.58	-0.66	-0.57	-0.55
193	-0.93	-0.58	-0.67	-0.57	-0.55
194	-0.93	-0.59	-0.67	-0.58	-0.55
195	-0.94	-0.60	-0.68	-0.58	-0.56
196	-0.96	-0.61	-0.69	-0.58	-0.56
197	-0.96	-0.60	-0.69	-0.58	-0.56
198	-0.96	-0.59	-0.69	-0.58	-0.56
199	-0.96	-0.58	-0.69	-0.58	-0.56
200	-0.95	-0.59	-0.69	-0.58	-0.56
201	-0.95	-0.59	-0.69	-0.58	-0.55
202	-0.95	-0.59	-0.68	-0.58	-0.55
203	-0.92	-0.59	-0.67	-0.57	-0.55
204	-0.92	-0.58	-0.66	-0.57	-0.54
205	-0.92	-0.58	-0.66	-0.57	-0.54
206	-0.92	-0.57	-0.66	-0.57	-0.54
207	-0.91	-0.57	-0.66	-0.57	-0.54
208	-0.91	-0.57	-0.66	-0.56	-0.54
209	-0.90	-0.57	-0.65	-0.56	-0.54
210	-0.88	-0.58	-0.63	-0.56	-0.54
211	-0.85	-0.55	-0.62	-0.54	-0.53
212	-0.83	-0.52	-0.60	-0.53	-0.51
213	-0.81	-0.51	-0.59	-0.51	-0.49
214	-0.79	-0.51	-0.57	-0.50	-0.48
215	-0.77	-0.51	-0.56	-0.48	-0.46
216	-0.73	-0.52	-0.53	-0.46	-0.44
217	-0.68	-0.60	-0.49	-0.45	-0.44
218	-0.71	-0.58	-0.52	-0.47	-0.46
219	-0.75	-0.57	-0.54	-0.49	-0.48
220	-0.78	-0.56	-0.56	-0.51	-0.49
221	-0.81	-0.55	-0.58	-0.53	-0.51
222	-0.84	-0.56	-0.61	-0.55	-0.53
223	-0.87	-0.59	-0.63	-0.56	-0.55
224	-0.90	-0.60	-0.65	-0.56	-0.54
225	-0.91	-0.60	-0.66	-0.56	-0.54
226	-0.92	-0.60	-0.66	-0.56	-0.54
227	-0.92	-0.60	-0.67	-0.57	-0.54
228	-0.93	-0.60	-0.67	-0.57	-0.55
229	-0.94	-0.61	-0.68	-0.57	-0.55
230	-0.94	-0.62	-0.68	-0.58	-0.55
231	-0.96	-0.63	-0.70	-0.58	-0.55
232	-0.96	-0.63	-0.70	-0.58	-0.55
233	-0.96	-0.62	-0.70	-0.58	-0.55
234	-0.96	-0.61	-0.70	-0.58	-0.55
235	-0.96	-0.61	-0.69	-0.58	-0.55
236	-0.96	-0.62	-0.69	-0.58	-0.55



237	-0.95	-0.62	-0.69	-0.58	-0.55
238	-0.93	-0.61	-0.67	-0.56	-0.54
239	-0.92	-0.61	-0.67	-0.56	-0.54
240	-0.92	-0.60	-0.67	-0.56	-0.54
241	-0.92	-0.60	-0.66	-0.56	-0.54
242	-0.92	-0.60	-0.66	-0.56	-0.54
243	-0.91	-0.60	-0.66	-0.56	-0.54
244	-0.91	-0.60	-0.66	-0.56	-0.54
245	-0.90	-0.60	-0.65	-0.57	-0.55
246	-0.88	-0.57	-0.63	-0.56	-0.54
247	-0.85	-0.54	-0.62	-0.54	-0.52
248	-0.83	-0.53	-0.60	-0.52	-0.51
249	-0.81	-0.53	-0.59	-0.51	-0.49
250	-0.79	-0.54	-0.57	-0.49	-0.47
251	-0.75	-0.54	-0.55	-0.47	-0.45
258	-0.89	-0.72	-0.64	-0.58	-0.56
259	-0.89	-0.68	-0.64	-0.57	-0.56
260	-0.89	-0.64	-0.64	-0.57	-0.55
261	-0.89	-0.61	-0.65	-0.57	-0.55
262	-0.89	-0.57	-0.64	-0.57	-0.55
263	-0.89	-0.57	-0.64	-0.56	-0.54
264	-0.88	-0.59	-0.64	-0.55	-0.53
265	-0.90	-0.72	-0.65	-0.58	-0.57
266	-0.90	-0.68	-0.65	-0.58	-0.56
267	-0.90	-0.65	-0.65	-0.58	-0.56
268	-0.91	-0.61	-0.65	-0.58	-0.56
269	-0.90	-0.58	-0.65	-0.57	-0.55
270	-0.90	-0.58	-0.65	-0.57	-0.54
271	-0.89	-0.60	-0.65	-0.56	-0.54
272	-0.99	-0.55	-0.72	-0.58	-0.55
273	-1.00	-0.56	-0.72	-0.58	-0.55
274	-1.00	-0.56	-0.73	-0.58	-0.55
275	-1.00	-0.57	-0.73	-0.58	-0.54
276	-1.01	-0.58	-0.73	-0.58	-0.54
277	-1.01	-0.59	-0.73	-0.58	-0.54
278	-1.01	-0.59	-0.73	-0.58	-0.54
279	-1.05	-0.62	-0.77	-0.60	-0.56
280	-1.06	-0.60	-0.77	-0.60	-0.56
281	-1.07	-0.59	-0.77	-0.61	-0.57
282	-1.06	-0.58	-0.77	-0.61	-0.57
283	-1.07	-0.58	-0.78	-0.61	-0.57
284	-1.07	-0.60	-0.78	-0.61	-0.57
285	-1.07	-0.62	-0.78	-0.61	-0.57
286	-1.02	-0.58	-0.74	-0.58	-0.54
287	-1.01	-0.58	-0.74	-0.58	-0.54
288	-1.00	-0.57	-0.73	-0.58	-0.54
289	-0.99	-0.56	-0.72	-0.58	-0.54
290	-0.98	-0.55	-0.72	-0.57	-0.54
291	-0.97	-0.54	-0.71	-0.57	-0.54
292	-0.96	-0.54	-0.70	-0.57	-0.53
293	-0.84	-0.59	-0.61	-0.53	-0.51
294	-0.84	-0.57	-0.61	-0.53	-0.52
295	-0.85	-0.54	-0.62	-0.54	-0.52
296	-0.86	-0.54	-0.62	-0.54	-0.52
297	-0.87	-0.56	-0.63	-0.54	-0.51
298	-0.87	-0.59	-0.63	-0.54	-0.51
299	-0.87	-0.62	-0.63	-0.53	-0.51
300	-0.91	-0.73	-0.66	-0.59	-0.57
301	-0.92	-0.69	-0.66	-0.59	-0.57
302	-0.92	-0.65	-0.66	-0.59	-0.57
303	-0.92	-0.62	-0.66	-0.58	-0.56
304	-0.92	-0.59	-0.66	-0.58	-0.56
305	-0.91	-0.59	-0.66	-0.57	-0.55
306	-0.91	-0.60	-0.66	-0.57	-0.54
307	-0.99	-0.55	-0.72	-0.58	-0.54
308	-1.00	-0.55	-0.73	-0.58	-0.54
309	-1.01	-0.56	-0.73	-0.58	-0.55
310	-1.01	-0.57	-0.73	-0.58	-0.55
311	-1.01	-0.58	-0.73	-0.58	-0.54
312	-1.01	-0.58	-0.73	-0.58	-0.54
313	-1.01	-0.59	-0.73	-0.58	-0.54
314	-1.05	-0.61	-0.76	-0.60	-0.56
315	-1.06	-0.60	-0.77	-0.60	-0.56
316	-1.07	-0.59	-0.78	-0.61	-0.57
317	-1.07	-0.58	-0.78	-0.61	-0.57
318	-1.07	-0.58	-0.78	-0.61	-0.57
319	-1.07	-0.60	-0.78	-0.61	-0.57



320	-1.07	-0.62	-0.77	-0.61	-0.56
321	-1.02	-0.58	-0.74	-0.58	-0.54
322	-1.01	-0.58	-0.73	-0.58	-0.54
323	-1.00	-0.57	-0.73	-0.58	-0.54
324	-1.00	-0.56	-0.72	-0.58	-0.54
325	-0.98	-0.55	-0.72	-0.57	-0.54
326	-0.97	-0.54	-0.71	-0.57	-0.54
327	-0.95	-0.54	-0.69	-0.56	-0.53
328	-0.83	-0.58	-0.60	-0.53	-0.51
329	-0.84	-0.56	-0.61	-0.53	-0.51
330	-0.85	-0.54	-0.62	-0.53	-0.51
331	-0.85	-0.53	-0.62	-0.53	-0.51
332	-0.86	-0.56	-0.62	-0.53	-0.51
333	-0.86	-0.58	-0.63	-0.53	-0.51
334	-0.87	-0.61	-0.63	-0.53	-0.50
335	-0.92	-0.74	-0.67	-0.60	-0.58
336	-0.93	-0.70	-0.67	-0.59	-0.58
337	-0.93	-0.66	-0.67	-0.59	-0.57
338	-0.93	-0.62	-0.67	-0.59	-0.57
339	-0.93	-0.60	-0.67	-0.59	-0.56
340	-0.92	-0.60	-0.67	-0.58	-0.56
341	-0.92	-0.61	-0.66	-0.57	-0.55
342	-0.99	-0.56	-0.72	-0.58	-0.54
343	-1.00	-0.56	-0.73	-0.58	-0.54
344	-1.01	-0.56	-0.73	-0.58	-0.55
345	-1.01	-0.57	-0.74	-0.58	-0.54
346	-1.02	-0.58	-0.74	-0.58	-0.54
347	-1.01	-0.58	-0.73	-0.58	-0.54
348	-1.01	-0.58	-0.73	-0.57	-0.53
349	-1.05	-0.61	-0.77	-0.60	-0.56
350	-1.07	-0.60	-0.77	-0.60	-0.56
351	-1.08	-0.59	-0.78	-0.61	-0.57
352	-1.08	-0.57	-0.78	-0.61	-0.57
353	-1.08	-0.59	-0.79	-0.61	-0.57
354	-1.08	-0.60	-0.78	-0.61	-0.57
355	-1.07	-0.61	-0.78	-0.61	-0.56
356	-1.02	-0.58	-0.74	-0.58	-0.54
357	-1.02	-0.57	-0.74	-0.58	-0.54
358	-1.01	-0.57	-0.74	-0.58	-0.54
359	-1.00	-0.56	-0.73	-0.58	-0.54
360	-0.99	-0.55	-0.72	-0.58	-0.54
361	-0.97	-0.54	-0.71	-0.57	-0.54
362	-0.95	-0.54	-0.69	-0.56	-0.53
363	-0.82	-0.57	-0.60	-0.52	-0.51
364	-0.83	-0.56	-0.61	-0.53	-0.51
365	-0.84	-0.54	-0.61	-0.53	-0.51
366	-0.85	-0.53	-0.62	-0.53	-0.51
367	-0.85	-0.55	-0.62	-0.53	-0.51
368	-0.86	-0.57	-0.62	-0.53	-0.50
369	-0.86	-0.60	-0.63	-0.52	-0.50
370	-0.93	-0.74	-0.67	-0.60	-0.58
371	-0.93	-0.70	-0.67	-0.60	-0.58
372	-0.94	-0.67	-0.68	-0.60	-0.58
373	-0.94	-0.63	-0.68	-0.60	-0.58
374	-0.94	-0.61	-0.68	-0.59	-0.57
375	-0.93	-0.60	-0.67	-0.58	-0.56
376	-0.93	-0.62	-0.67	-0.58	-0.55
377	-0.99	-0.57	-0.72	-0.57	-0.54
378	-1.00	-0.56	-0.73	-0.58	-0.54
379	-1.01	-0.57	-0.73	-0.58	-0.54
380	-1.01	-0.57	-0.73	-0.58	-0.54
381	-1.01	-0.57	-0.74	-0.58	-0.54
382	-1.01	-0.58	-0.73	-0.57	-0.54
383	-1.00	-0.58	-0.73	-0.57	-0.53
384	-1.06	-0.61	-0.77	-0.60	-0.55
385	-1.07	-0.60	-0.78	-0.60	-0.56
386	-1.08	-0.59	-0.78	-0.61	-0.56
387	-1.08	-0.57	-0.79	-0.61	-0.57
388	-1.08	-0.58	-0.79	-0.61	-0.57
389	-1.08	-0.60	-0.79	-0.61	-0.56
390	-1.07	-0.61	-0.78	-0.60	-0.56
391	-1.02	-0.57	-0.74	-0.58	-0.54
392	-1.02	-0.57	-0.74	-0.58	-0.54
393	-1.02	-0.57	-0.74	-0.58	-0.54
394	-1.01	-0.56	-0.73	-0.58	-0.54
395	-1.00	-0.55	-0.72	-0.57	-0.54
396	-0.98	-0.54	-0.71	-0.57	-0.53



397	-0.95	-0.54	-0.70	-0.56	-0.53
398	-0.82	-0.57	-0.60	-0.52	-0.50
399	-0.83	-0.55	-0.60	-0.52	-0.50
400	-0.83	-0.53	-0.61	-0.52	-0.50
401	-0.84	-0.52	-0.61	-0.52	-0.50
402	-0.85	-0.54	-0.62	-0.52	-0.50
403	-0.85	-0.56	-0.62	-0.52	-0.50
404	-0.86	-0.59	-0.62	-0.52	-0.50
405	-0.94	-0.75	-0.68	-0.61	-0.59
406	-0.94	-0.71	-0.68	-0.61	-0.59
407	-0.94	-0.67	-0.68	-0.60	-0.58
408	-0.95	-0.63	-0.68	-0.60	-0.58
409	-0.94	-0.61	-0.68	-0.60	-0.58
410	-0.94	-0.62	-0.68	-0.59	-0.57
411	-0.93	-0.64	-0.68	-0.58	-0.56
412	-0.99	-0.57	-0.72	-0.57	-0.54
413	-0.99	-0.57	-0.72	-0.57	-0.54
414	-1.00	-0.57	-0.73	-0.58	-0.54
415	-1.00	-0.57	-0.73	-0.58	-0.54
416	-1.01	-0.57	-0.73	-0.58	-0.54
417	-1.00	-0.58	-0.73	-0.57	-0.53
418	-1.00	-0.58	-0.73	-0.57	-0.53
419	-1.06	-0.61	-0.77	-0.59	-0.55
420	-1.07	-0.60	-0.78	-0.60	-0.56
421	-1.08	-0.59	-0.79	-0.61	-0.56
422	-1.08	-0.57	-0.79	-0.61	-0.56
423	-1.09	-0.58	-0.79	-0.61	-0.56
424	-1.08	-0.60	-0.79	-0.60	-0.56
425	-1.08	-0.61	-0.78	-0.60	-0.56
426	-1.03	-0.58	-0.75	-0.58	-0.54
427	-1.02	-0.57	-0.74	-0.58	-0.54
428	-1.02	-0.57	-0.74	-0.58	-0.54
429	-1.01	-0.56	-0.73	-0.57	-0.54
430	-1.00	-0.55	-0.73	-0.57	-0.54
431	-0.98	-0.54	-0.71	-0.57	-0.53
432	-0.96	-0.54	-0.70	-0.56	-0.53
433	-0.81	-0.57	-0.59	-0.51	-0.50
434	-0.82	-0.55	-0.60	-0.52	-0.50
435	-0.83	-0.53	-0.60	-0.52	-0.50
436	-0.83	-0.51	-0.61	-0.52	-0.50
437	-0.84	-0.53	-0.61	-0.52	-0.50
438	-0.84	-0.55	-0.62	-0.52	-0.49
439	-0.85	-0.58	-0.62	-0.52	-0.49
440	-0.95	-0.75	-0.68	-0.61	-0.60
441	-0.95	-0.71	-0.68	-0.61	-0.59
442	-0.95	-0.67	-0.69	-0.61	-0.59
443	-0.95	-0.64	-0.69	-0.61	-0.59
444	-0.95	-0.62	-0.69	-0.60	-0.58
445	-0.95	-0.63	-0.68	-0.60	-0.57
446	-0.94	-0.65	-0.68	-0.59	-0.57
447	-0.98	-0.58	-0.71	-0.57	-0.53
448	-0.98	-0.57	-0.72	-0.57	-0.53
449	-0.99	-0.57	-0.72	-0.57	-0.53
450	-0.99	-0.57	-0.72	-0.57	-0.53
451	-1.00	-0.57	-0.72	-0.57	-0.53
452	-0.99	-0.57	-0.72	-0.56	-0.53
453	-0.99	-0.57	-0.72	-0.56	-0.52
454	-1.06	-0.61	-0.77	-0.59	-0.55
455	-1.07	-0.59	-0.78	-0.59	-0.55
456	-1.08	-0.58	-0.78	-0.60	-0.56
457	-1.08	-0.57	-0.78	-0.60	-0.56
458	-1.08	-0.57	-0.79	-0.60	-0.56
459	-1.08	-0.59	-0.78	-0.60	-0.56
460	-1.08	-0.61	-0.78	-0.60	-0.55
461	-1.03	-0.57	-0.75	-0.57	-0.53
462	-1.02	-0.57	-0.74	-0.57	-0.53
463	-1.02	-0.56	-0.74	-0.57	-0.53
464	-1.01	-0.55	-0.73	-0.57	-0.53
465	-1.00	-0.54	-0.72	-0.57	-0.53
466	-0.98	-0.54	-0.71	-0.56	-0.53
467	-0.96	-0.55	-0.70	-0.56	-0.52
468	-0.80	-0.57	-0.58	-0.51	-0.49
469	-0.81	-0.55	-0.59	-0.51	-0.49
470	-0.82	-0.52	-0.60	-0.51	-0.49
471	-0.83	-0.50	-0.60	-0.51	-0.49
472	-0.83	-0.52	-0.61	-0.51	-0.49
473	-0.84	-0.54	-0.61	-0.51	-0.49



474	-0.84	-0.57	-0.62	-0.51	-0.48
475	-0.97	-0.58	-0.71	-0.56	-0.52
476	-0.97	-0.57	-0.71	-0.56	-0.52
477	-0.98	-0.57	-0.71	-0.56	-0.52
478	-0.98	-0.56	-0.71	-0.56	-0.52
479	-0.98	-0.57	-0.72	-0.56	-0.52
480	-0.98	-0.57	-0.72	-0.56	-0.52
481	-0.98	-0.57	-0.72	-0.56	-0.52
482	-1.06	-0.60	-0.77	-0.59	-0.54
483	-1.07	-0.59	-0.77	-0.59	-0.55
484	-1.07	-0.57	-0.78	-0.59	-0.55
485	-1.07	-0.56	-0.78	-0.59	-0.55
486	-1.08	-0.57	-0.78	-0.59	-0.55
487	-1.08	-0.59	-0.78	-0.59	-0.55
488	-1.08	-0.60	-0.78	-0.59	-0.55
489	-1.03	-0.57	-0.75	-0.57	-0.53
490	-1.02	-0.56	-0.74	-0.57	-0.53
491	-1.01	-0.56	-0.74	-0.57	-0.53
492	-1.00	-0.55	-0.73	-0.56	-0.53
493	-0.99	-0.54	-0.72	-0.56	-0.53
494	-0.98	-0.54	-0.71	-0.56	-0.52
495	-0.96	-0.55	-0.70	-0.55	-0.52
496	-0.79	-0.57	-0.58	-0.50	-0.49
497	-0.80	-0.55	-0.58	-0.51	-0.49
498	-0.81	-0.52	-0.59	-0.51	-0.49
499	-0.82	-0.50	-0.60	-0.51	-0.49
500	-0.82	-0.51	-0.60	-0.51	-0.49
501	-0.83	-0.53	-0.61	-0.51	-0.48
502	-0.84	-0.55	-0.61	-0.51	-0.48
503	-0.77	-0.58	-0.57	-0.50	-0.48
504	-0.79	-0.55	-0.58	-0.50	-0.48
505	-0.80	-0.52	-0.59	-0.50	-0.48
506	-0.81	-0.50	-0.59	-0.50	-0.48
507	-0.82	-0.50	-0.60	-0.50	-0.48
508	-0.82	-0.52	-0.60	-0.50	-0.48
509	-0.83	-0.54	-0.61	-0.50	-0.47
510	-0.76	-0.58	-0.56	-0.49	-0.48
511	-0.77	-0.55	-0.57	-0.49	-0.48
512	-0.78	-0.52	-0.58	-0.50	-0.48
513	-0.79	-0.49	-0.58	-0.50	-0.48
514	-0.80	-0.50	-0.59	-0.50	-0.48
515	-0.81	-0.51	-0.60	-0.50	-0.47
516	-0.82	-0.52	-0.60	-0.49	-0.47
520	-0.75	-0.57	-0.55	-0.49	-0.47
521	-0.76	-0.55	-0.56	-0.49	-0.47
522	-0.77	-0.52	-0.57	-0.49	-0.47
523	-0.78	-0.49	-0.58	-0.49	-0.47
524	-0.79	-0.49	-0.58	-0.49	-0.47
525	-0.80	-0.51	-0.59	-0.49	-0.47
526	-0.80	-0.52	-0.59	-0.49	-0.46
527	-0.73	-0.57	-0.54	-0.48	-0.47
528	-0.75	-0.54	-0.55	-0.48	-0.47
529	-0.76	-0.51	-0.56	-0.48	-0.47
530	-0.77	-0.49	-0.57	-0.49	-0.47
531	-0.77	-0.48	-0.57	-0.48	-0.46
532	-0.78	-0.50	-0.58	-0.48	-0.46
533	-0.79	-0.52	-0.58	-0.48	-0.46
534	-0.72	-0.57	-0.53	-0.47	-0.46
535	-0.73	-0.54	-0.54	-0.48	-0.46
536	-0.74	-0.51	-0.55	-0.48	-0.46
537	-0.75	-0.48	-0.56	-0.48	-0.46
538	-0.76	-0.48	-0.56	-0.48	-0.46
539	-0.77	-0.50	-0.57	-0.48	-0.46
540	-0.77	-0.52	-0.57	-0.48	-0.45
544	-0.81	-0.66	-0.58	-0.52	-0.51
545	-0.82	-0.64	-0.59	-0.53	-0.52
546	-0.83	-0.63	-0.60	-0.54	-0.53
547	-0.84	-0.64	-0.61	-0.55	-0.54
548	-0.85	-0.64	-0.61	-0.56	-0.55
549	-0.85	-0.66	-0.61	-0.56	-0.55
550	-0.86	-0.68	-0.62	-0.57	-0.56
551	-0.68	-0.53	-0.50	-0.44	-0.43
552	-0.70	-0.54	-0.51	-0.46	-0.44
553	-0.72	-0.55	-0.53	-0.47	-0.45
554	-0.75	-0.56	-0.55	-0.48	-0.46
555	-0.77	-0.57	-0.56	-0.49	-0.47
556	-0.79	-0.58	-0.57	-0.50	-0.48



557	-0.80	-0.59	-0.59	-0.51	-0.49
558	-0.82	-0.59	-0.59	-0.51	-0.49
559	-0.83	-0.59	-0.60	-0.52	-0.50
560	-0.83	-0.60	-0.61	-0.52	-0.50
561	-0.84	-0.60	-0.61	-0.53	-0.50
562	-0.93	-0.71	-0.67	-0.53	-0.51
563	-0.93	-0.70	-0.67	-0.53	-0.51
564	-0.94	-0.70	-0.68	-0.53	-0.51
565	-0.95	-0.70	-0.68	-0.54	-0.51
566	-0.95	-0.69	-0.69	-0.54	-0.52
567	-0.96	-0.69	-0.69	-0.54	-0.52
568	-0.96	-0.68	-0.69	-0.55	-0.52
569	-0.96	-0.68	-0.70	-0.55	-0.53
570	-0.97	-0.68	-0.70	-0.55	-0.53
571	-0.97	-0.69	-0.70	-0.55	-0.53
572	-0.97	-0.69	-0.70	-0.56	-0.53
573	-0.90	-0.69	-0.65	-0.51	-0.49
574	-0.92	-0.70	-0.66	-0.52	-0.50
575	-0.93	-0.70	-0.67	-0.53	-0.51
576	-0.95	-0.71	-0.68	-0.54	-0.52
577	-0.96	-0.71	-0.69	-0.54	-0.52
578	-0.97	-0.71	-0.70	-0.55	-0.53
579	-0.97	-0.71	-0.70	-0.56	-0.54
580	-0.99	-0.72	-0.71	-0.57	-0.55
581	-1.00	-0.73	-0.72	-0.58	-0.55
582	-1.01	-0.74	-0.73	-0.58	-0.56
583	-0.81	-0.64	-0.59	-0.54	-0.53
584	-0.79	-0.60	-0.58	-0.53	-0.52
585	-0.77	-0.55	-0.57	-0.51	-0.50
586	-0.75	-0.52	-0.55	-0.49	-0.48
587	-0.73	-0.51	-0.54	-0.48	-0.46
588	-0.71	-0.51	-0.53	-0.46	-0.44
589	-0.69	-0.51	-0.51	-0.44	-0.42
590	-0.66	-0.52	-0.50	-0.42	-0.40
591	-0.78	-0.64	-0.57	-0.51	-0.50
592	-0.79	-0.63	-0.57	-0.52	-0.51
593	-0.81	-0.62	-0.58	-0.53	-0.52
594	-0.81	-0.60	-0.59	-0.54	-0.52
595	-0.82	-0.61	-0.59	-0.54	-0.53
596	-0.83	-0.61	-0.60	-0.55	-0.54
597	-0.83	-0.63	-0.60	-0.55	-0.54
598	-0.70	-0.52	-0.51	-0.46	-0.45
599	-0.72	-0.53	-0.53	-0.47	-0.46
600	-0.74	-0.55	-0.54	-0.48	-0.47
601	-0.76	-0.56	-0.56	-0.49	-0.48
602	-0.78	-0.56	-0.57	-0.50	-0.49
603	-0.80	-0.57	-0.58	-0.51	-0.50
604	-0.81	-0.58	-0.59	-0.52	-0.50
605	-0.83	-0.59	-0.60	-0.53	-0.51
606	-0.83	-0.59	-0.61	-0.53	-0.51
607	-0.84	-0.59	-0.61	-0.53	-0.51
608	-0.85	-0.59	-0.62	-0.54	-0.52
609	-0.91	-0.67	-0.66	-0.53	-0.52
610	-0.91	-0.67	-0.66	-0.53	-0.52
611	-0.92	-0.67	-0.66	-0.54	-0.52
612	-0.92	-0.66	-0.67	-0.54	-0.52
613	-0.93	-0.66	-0.67	-0.55	-0.53
614	-0.93	-0.65	-0.68	-0.55	-0.53
615	-0.94	-0.65	-0.68	-0.55	-0.53
616	-0.94	-0.65	-0.68	-0.55	-0.53
617	-0.95	-0.65	-0.69	-0.56	-0.53
618	-0.95	-0.66	-0.69	-0.56	-0.54
619	-0.95	-0.66	-0.69	-0.56	-0.54
620	-0.89	-0.66	-0.64	-0.52	-0.50
621	-0.90	-0.66	-0.65	-0.53	-0.51
622	-0.91	-0.67	-0.66	-0.54	-0.52
623	-0.93	-0.67	-0.67	-0.55	-0.53
624	-0.94	-0.67	-0.68	-0.55	-0.53
625	-0.95	-0.68	-0.69	-0.56	-0.54
626	-0.96	-0.68	-0.70	-0.57	-0.55
627	-0.97	-0.69	-0.70	-0.58	-0.56
628	-0.98	-0.70	-0.71	-0.59	-0.57
629	-0.99	-0.71	-0.72	-0.59	-0.57
630	-0.83	-0.66	-0.61	-0.56	-0.55
631	-0.81	-0.61	-0.59	-0.54	-0.53
632	-0.79	-0.56	-0.58	-0.53	-0.51
633	-0.77	-0.53	-0.57	-0.51	-0.49



634	-0.75	-0.52	-0.55	-0.49	-0.48
635	-0.73	-0.52	-0.54	-0.48	-0.46
636	-0.71	-0.53	-0.53	-0.46	-0.44
637	-0.68	-0.53	-0.51	-0.44	-0.42
638	-0.76	-0.64	-0.55	-0.50	-0.48
639	-0.77	-0.62	-0.56	-0.51	-0.49
640	-0.78	-0.61	-0.57	-0.52	-0.50
641	-0.79	-0.59	-0.57	-0.52	-0.51
642	-0.80	-0.58	-0.58	-0.53	-0.52
643	-0.80	-0.57	-0.58	-0.53	-0.52
644	-0.81	-0.58	-0.59	-0.54	-0.53
645	-0.71	-0.53	-0.52	-0.48	-0.47
646	-0.73	-0.53	-0.54	-0.49	-0.48
647	-0.75	-0.54	-0.55	-0.50	-0.49
648	-0.78	-0.55	-0.57	-0.51	-0.50
649	-0.79	-0.56	-0.58	-0.52	-0.50
650	-0.81	-0.57	-0.59	-0.53	-0.51
651	-0.83	-0.58	-0.60	-0.53	-0.52
652	-0.84	-0.58	-0.61	-0.54	-0.52
653	-0.85	-0.58	-0.61	-0.54	-0.53
654	-0.85	-0.59	-0.62	-0.55	-0.53
655	-0.86	-0.59	-0.62	-0.55	-0.53
656	-0.89	-0.64	-0.64	-0.54	-0.52
657	-0.89	-0.63	-0.64	-0.54	-0.53
658	-0.89	-0.63	-0.65	-0.54	-0.53
659	-0.90	-0.63	-0.65	-0.55	-0.53
660	-0.90	-0.62	-0.66	-0.55	-0.53
661	-0.91	-0.62	-0.66	-0.55	-0.53
662	-0.92	-0.62	-0.67	-0.56	-0.54
663	-0.92	-0.62	-0.67	-0.56	-0.54
664	-0.92	-0.62	-0.67	-0.56	-0.54
665	-0.92	-0.62	-0.67	-0.56	-0.54
666	-0.92	-0.62	-0.67	-0.56	-0.54
667	-0.87	-0.62	-0.63	-0.53	-0.51
668	-0.88	-0.62	-0.64	-0.54	-0.52
669	-0.90	-0.63	-0.65	-0.55	-0.53
670	-0.91	-0.63	-0.66	-0.56	-0.54
671	-0.92	-0.64	-0.67	-0.56	-0.55
672	-0.94	-0.64	-0.68	-0.57	-0.55
673	-0.95	-0.65	-0.68	-0.58	-0.56
674	-0.96	-0.66	-0.69	-0.59	-0.57
675	-0.97	-0.67	-0.70	-0.59	-0.58
676	-0.98	-0.68	-0.71	-0.60	-0.58
677	-0.86	-0.67	-0.62	-0.58	-0.57
678	-0.83	-0.62	-0.61	-0.56	-0.55
679	-0.81	-0.57	-0.60	-0.54	-0.53
680	-0.79	-0.54	-0.58	-0.52	-0.51
681	-0.77	-0.53	-0.57	-0.51	-0.49
682	-0.75	-0.54	-0.56	-0.49	-0.48
683	-0.73	-0.54	-0.54	-0.47	-0.46
684	-0.71	-0.55	-0.52	-0.45	-0.44
685	-0.74	-0.64	-0.54	-0.48	-0.47
686	-0.75	-0.62	-0.54	-0.49	-0.48
687	-0.76	-0.60	-0.55	-0.50	-0.49
688	-0.77	-0.58	-0.56	-0.51	-0.50
689	-0.77	-0.57	-0.56	-0.52	-0.50
690	-0.78	-0.55	-0.57	-0.52	-0.51
691	-0.79	-0.55	-0.57	-0.53	-0.52
692	-0.73	-0.54	-0.54	-0.49	-0.48
693	-0.75	-0.54	-0.55	-0.50	-0.49
694	-0.77	-0.54	-0.56	-0.51	-0.50
695	-0.79	-0.55	-0.57	-0.52	-0.51
696	-0.80	-0.55	-0.59	-0.53	-0.52
697	-0.82	-0.56	-0.60	-0.54	-0.52
698	-0.83	-0.57	-0.61	-0.54	-0.53
699	-0.84	-0.57	-0.61	-0.55	-0.53
700	-0.85	-0.58	-0.62	-0.55	-0.54
701	-0.86	-0.59	-0.62	-0.56	-0.54
702	-0.86	-0.59	-0.63	-0.56	-0.54
703	-0.87	-0.60	-0.63	-0.55	-0.53
704	-0.87	-0.60	-0.63	-0.55	-0.53
705	-0.87	-0.60	-0.63	-0.55	-0.53
706	-0.88	-0.59	-0.64	-0.55	-0.54
707	-0.88	-0.59	-0.64	-0.55	-0.54
708	-0.89	-0.59	-0.64	-0.56	-0.54
709	-0.89	-0.58	-0.65	-0.56	-0.54
710	-0.89	-0.58	-0.65	-0.56	-0.54



711	-0.90	-0.59	-0.65	-0.56	-0.54
712	-0.90	-0.59	-0.65	-0.56	-0.54
713	-0.90	-0.59	-0.65	-0.56	-0.55
714	-0.85	-0.58	-0.62	-0.54	-0.52
715	-0.86	-0.59	-0.63	-0.55	-0.53
716	-0.88	-0.59	-0.64	-0.55	-0.54
717	-0.89	-0.60	-0.65	-0.56	-0.55
718	-0.90	-0.60	-0.66	-0.57	-0.55
719	-0.92	-0.61	-0.66	-0.58	-0.56
720	-0.93	-0.61	-0.67	-0.59	-0.57
721	-0.94	-0.62	-0.68	-0.59	-0.58
722	-0.95	-0.63	-0.68	-0.60	-0.58
723	-0.96	-0.64	-0.69	-0.61	-0.59
724	-0.88	-0.67	-0.64	-0.59	-0.58
725	-0.85	-0.63	-0.62	-0.58	-0.57
726	-0.83	-0.58	-0.61	-0.56	-0.55
727	-0.81	-0.54	-0.59	-0.54	-0.52
728	-0.79	-0.55	-0.58	-0.52	-0.51
729	-0.77	-0.55	-0.57	-0.51	-0.49
730	-0.75	-0.55	-0.55	-0.49	-0.47
731	-0.73	-0.56	-0.54	-0.47	-0.45
732	-0.75	-0.65	-0.52	-0.47	-0.46
733	-0.73	-0.63	-0.53	-0.48	-0.47
734	-0.74	-0.62	-0.54	-0.49	-0.48
735	-0.75	-0.60	-0.54	-0.50	-0.49
736	-0.75	-0.58	-0.55	-0.50	-0.49
737	-0.76	-0.57	-0.55	-0.51	-0.50
738	-0.77	-0.55	-0.56	-0.52	-0.51
739	-0.75	-0.55	-0.55	-0.50	-0.49
740	-0.76	-0.55	-0.56	-0.51	-0.50
741	-0.78	-0.55	-0.57	-0.53	-0.51
742	-0.80	-0.55	-0.58	-0.53	-0.52
743	-0.81	-0.55	-0.59	-0.54	-0.53
744	-0.83	-0.56	-0.60	-0.55	-0.53
745	-0.84	-0.56	-0.61	-0.55	-0.54
746	-0.85	-0.57	-0.62	-0.56	-0.54
747	-0.86	-0.58	-0.62	-0.56	-0.55
748	-0.86	-0.59	-0.63	-0.57	-0.55
749	-0.87	-0.59	-0.63	-0.57	-0.55
750	-0.84	-0.57	-0.61	-0.55	-0.54
751	-0.84	-0.57	-0.61	-0.55	-0.54
752	-0.85	-0.57	-0.62	-0.55	-0.54
753	-0.85	-0.56	-0.62	-0.55	-0.54
754	-0.86	-0.55	-0.62	-0.56	-0.54
755	-0.86	-0.55	-0.62	-0.56	-0.54
756	-0.86	-0.55	-0.63	-0.56	-0.54
757	-0.87	-0.56	-0.63	-0.56	-0.55
758	-0.87	-0.57	-0.63	-0.56	-0.55
759	-0.87	-0.58	-0.63	-0.56	-0.55
760	-0.87	-0.58	-0.63	-0.56	-0.55
761	-0.84	-0.57	-0.61	-0.55	-0.53
762	-0.84	-0.57	-0.61	-0.55	-0.54
763	-0.86	-0.58	-0.62	-0.56	-0.55
764	-0.87	-0.57	-0.63	-0.57	-0.55
765	-0.88	-0.57	-0.64	-0.58	-0.56
766	-0.89	-0.57	-0.65	-0.58	-0.57
767	-0.90	-0.59	-0.66	-0.59	-0.58
768	-0.92	-0.60	-0.66	-0.60	-0.58
769	-0.93	-0.61	-0.67	-0.61	-0.59
770	-0.94	-0.62	-0.68	-0.62	-0.60
771	-0.90	-0.68	-0.65	-0.61	-0.60
772	-0.87	-0.64	-0.64	-0.59	-0.58
773	-0.85	-0.59	-0.62	-0.57	-0.56
774	-0.82	-0.55	-0.60	-0.55	-0.54
775	-0.81	-0.56	-0.59	-0.54	-0.52
776	-0.79	-0.56	-0.58	-0.52	-0.51
777	-0.77	-0.56	-0.57	-0.50	-0.49
778	-0.74	-0.56	-0.55	-0.48	-0.46
779	-0.78	-0.66	-0.51	-0.46	-0.45
780	-0.75	-0.65	-0.52	-0.47	-0.46
781	-0.72	-0.63	-0.52	-0.48	-0.47
782	-0.73	-0.61	-0.53	-0.48	-0.47
783	-0.73	-0.60	-0.54	-0.49	-0.48
784	-0.74	-0.59	-0.54	-0.50	-0.49
785	-0.75	-0.58	-0.54	-0.50	-0.50
786	-0.76	-0.57	-0.55	-0.52	-0.51
787	-0.77	-0.56	-0.56	-0.52	-0.52



788	-0.79	-0.56	-0.58	-0.53	-0.52
789	-0.81	-0.55	-0.59	-0.54	-0.53
790	-0.82	-0.54	-0.60	-0.55	-0.54
791	-0.83	-0.56	-0.60	-0.56	-0.54
792	-0.84	-0.57	-0.61	-0.56	-0.55
793	-0.85	-0.58	-0.62	-0.57	-0.55
794	-0.86	-0.59	-0.62	-0.57	-0.56
795	-0.87	-0.59	-0.63	-0.57	-0.56
796	-0.87	-0.60	-0.63	-0.57	-0.56
797	-0.84	-0.57	-0.61	-0.56	-0.55
798	-0.83	-0.57	-0.60	-0.55	-0.54
799	-0.84	-0.57	-0.61	-0.55	-0.54
800	-0.84	-0.57	-0.61	-0.55	-0.54
801	-0.85	-0.58	-0.62	-0.56	-0.54
802	-0.85	-0.58	-0.62	-0.56	-0.54
803	-0.86	-0.59	-0.62	-0.56	-0.54
804	-0.87	-0.59	-0.63	-0.56	-0.55
805	-0.87	-0.60	-0.63	-0.56	-0.55
806	-0.87	-0.60	-0.63	-0.56	-0.55
807	-0.87	-0.60	-0.63	-0.56	-0.55
808	-0.85	-0.59	-0.61	-0.55	-0.54
809	-0.85	-0.59	-0.62	-0.56	-0.54
810	-0.86	-0.60	-0.62	-0.56	-0.55
811	-0.87	-0.61	-0.63	-0.57	-0.56
812	-0.88	-0.61	-0.64	-0.58	-0.56
813	-0.90	-0.62	-0.65	-0.59	-0.57
814	-0.91	-0.63	-0.66	-0.59	-0.58
815	-0.92	-0.64	-0.66	-0.60	-0.59
816	-0.93	-0.64	-0.67	-0.61	-0.60
817	-0.94	-0.65	-0.68	-0.62	-0.61
818	-0.92	-0.69	-0.66	-0.62	-0.61
819	-0.89	-0.66	-0.65	-0.60	-0.59
820	-0.87	-0.61	-0.63	-0.58	-0.57
821	-0.84	-0.57	-0.62	-0.56	-0.55
822	-0.82	-0.58	-0.60	-0.55	-0.54
823	-0.81	-0.58	-0.59	-0.53	-0.52
824	-0.78	-0.58	-0.58	-0.51	-0.50
825	-0.76	-0.58	-0.56	-0.49	-0.48
826	-0.93	-0.71	-0.67	-0.63	-0.62
827	-0.91	-0.67	-0.66	-0.62	-0.61
828	-0.89	-0.63	-0.65	-0.60	-0.59
829	-0.86	-0.60	-0.63	-0.58	-0.57
830	-0.85	-0.60	-0.62	-0.56	-0.55
831	-0.82	-0.60	-0.60	-0.55	-0.53
832	-0.80	-0.59	-0.59	-0.53	-0.51
833	-0.78	-0.59	-0.58	-0.51	-0.49
834	-0.81	-0.68	-0.49	-0.44	-0.43
835	-0.79	-0.66	-0.50	-0.45	-0.44
836	-0.76	-0.65	-0.50	-0.46	-0.45
837	-0.74	-0.64	-0.51	-0.47	-0.46
838	-0.71	-0.63	-0.52	-0.47	-0.47
839	-0.71	-0.61	-0.52	-0.48	-0.47
840	-0.72	-0.60	-0.53	-0.49	-0.48
841	-0.77	-0.59	-0.56	-0.53	-0.52
842	-0.78	-0.59	-0.57	-0.54	-0.53
843	-0.80	-0.58	-0.58	-0.55	-0.54
844	-0.82	-0.58	-0.59	-0.56	-0.55
845	-0.83	-0.58	-0.60	-0.56	-0.55
846	-0.84	-0.59	-0.61	-0.57	-0.56
847	-0.85	-0.59	-0.61	-0.57	-0.56
848	-0.85	-0.60	-0.62	-0.57	-0.56
849	-0.86	-0.60	-0.62	-0.57	-0.56
850	-0.86	-0.61	-0.62	-0.58	-0.56
851	-0.87	-0.61	-0.63	-0.58	-0.57
852	-0.84	-0.63	-0.61	-0.55	-0.54
853	-0.84	-0.63	-0.61	-0.55	-0.54
854	-0.85	-0.63	-0.61	-0.55	-0.54
855	-0.85	-0.63	-0.62	-0.55	-0.54
856	-0.86	-0.64	-0.62	-0.55	-0.54
857	-0.86	-0.64	-0.62	-0.55	-0.54
858	-0.86	-0.64	-0.63	-0.55	-0.54
859	-0.87	-0.64	-0.63	-0.55	-0.54
860	-0.87	-0.64	-0.63	-0.55	-0.54
861	-0.87	-0.64	-0.63	-0.55	-0.54
862	-0.87	-0.65	-0.63	-0.55	-0.54
863	-0.86	-0.66	-0.62	-0.55	-0.54
864	-0.87	-0.66	-0.63	-0.56	-0.55



865	-0.88	-0.67	-0.64	-0.56	-0.55
866	-0.89	-0.68	-0.65	-0.57	-0.56
867	-0.90	-0.68	-0.65	-0.58	-0.57
868	-0.91	-0.69	-0.66	-0.58	-0.57
869	-0.92	-0.69	-0.66	-0.59	-0.58
870	-0.93	-0.70	-0.67	-0.60	-0.59
871	-0.94	-0.70	-0.68	-0.61	-0.59
872	-0.95	-0.71	-0.68	-0.61	-0.60
873	-0.94	-0.73	-0.68	-0.64	-0.63
874	-0.92	-0.68	-0.67	-0.63	-0.62
875	-0.90	-0.65	-0.66	-0.61	-0.60
876	-0.88	-0.63	-0.64	-0.59	-0.58
877	-0.86	-0.61	-0.63	-0.58	-0.56
878	-0.84	-0.61	-0.62	-0.56	-0.55
879	-0.82	-0.61	-0.60	-0.54	-0.53
880	-0.80	-0.60	-0.59	-0.52	-0.51
885	-0.77	-0.61	-0.56	-0.53	-0.53
886	-0.79	-0.61	-0.57	-0.55	-0.54
887	-0.81	-0.61	-0.59	-0.56	-0.55
888	-0.82	-0.61	-0.60	-0.57	-0.56
889	-0.83	-0.61	-0.61	-0.57	-0.56
890	-0.84	-0.62	-0.61	-0.57	-0.56
891	-0.85	-0.62	-0.61	-0.57	-0.57
892	-0.85	-0.63	-0.62	-0.58	-0.57
893	-0.86	-0.63	-0.62	-0.58	-0.57
894	-0.86	-0.64	-0.62	-0.58	-0.57
895	-0.86	-0.64	-0.62	-0.58	-0.57
896	-0.87	-0.68	-0.63	-0.55	-0.54
897	-0.87	-0.68	-0.63	-0.55	-0.53
898	-0.88	-0.69	-0.63	-0.55	-0.53
899	-0.88	-0.69	-0.63	-0.55	-0.53
900	-0.88	-0.68	-0.64	-0.55	-0.53
901	-0.88	-0.68	-0.64	-0.55	-0.53
902	-0.88	-0.69	-0.63	-0.55	-0.53
903	-0.88	-0.69	-0.63	-0.55	-0.53
904	-0.88	-0.69	-0.63	-0.55	-0.53
905	-0.88	-0.69	-0.63	-0.55	-0.53
906	-0.88	-0.69	-0.63	-0.55	-0.53
907	-0.89	-0.72	-0.64	-0.56	-0.54
908	-0.90	-0.73	-0.65	-0.56	-0.54
909	-0.92	-0.73	-0.66	-0.57	-0.55
910	-0.93	-0.74	-0.67	-0.58	-0.56
911	-0.93	-0.74	-0.67	-0.58	-0.56
912	-0.94	-0.75	-0.68	-0.59	-0.57
913	-0.94	-0.75	-0.68	-0.59	-0.58
914	-0.95	-0.76	-0.68	-0.60	-0.58
915	-0.96	-0.76	-0.69	-0.61	-0.59
916	-0.97	-0.77	-0.69	-0.61	-0.60
917	-0.96	-0.74	-0.69	-0.65	-0.64
918	-0.93	-0.70	-0.68	-0.63	-0.63
919	-0.91	-0.67	-0.66	-0.62	-0.61
920	-0.89	-0.64	-0.65	-0.60	-0.59
921	-0.88	-0.63	-0.64	-0.59	-0.57
922	-0.86	-0.62	-0.63	-0.57	-0.56
923	-0.84	-0.62	-0.61	-0.55	-0.54
924	-0.82	-0.62	-0.60	-0.53	-0.52
925	-0.78	-0.64	-0.57	-0.54	-0.54
926	-0.80	-0.64	-0.58	-0.55	-0.55
927	-0.81	-0.64	-0.59	-0.56	-0.56
928	-0.83	-0.63	-0.60	-0.57	-0.57
929	-0.84	-0.64	-0.61	-0.58	-0.57
930	-0.84	-0.64	-0.61	-0.58	-0.57
931	-0.85	-0.65	-0.61	-0.58	-0.57
932	-0.85	-0.65	-0.61	-0.58	-0.57
933	-0.85	-0.66	-0.62	-0.58	-0.57
934	-0.86	-0.66	-0.62	-0.58	-0.57
935	-0.86	-0.67	-0.62	-0.58	-0.57
936	-0.90	-0.73	-0.65	-0.55	-0.53
937	-0.91	-0.74	-0.65	-0.55	-0.53
938	-0.91	-0.74	-0.65	-0.55	-0.53
939	-0.91	-0.74	-0.65	-0.55	-0.53
940	-0.91	-0.73	-0.65	-0.55	-0.53
941	-0.91	-0.73	-0.65	-0.55	-0.53
942	-0.91	-0.73	-0.65	-0.55	-0.53
943	-0.90	-0.73	-0.65	-0.55	-0.52
944	-0.90	-0.73	-0.65	-0.55	-0.52
945	-0.90	-0.73	-0.64	-0.55	-0.52



946	-0.90	-0.73	-0.64	-0.55	-0.52
947	-0.93	-0.78	-0.67	-0.56	-0.54
948	-0.94	-0.79	-0.68	-0.57	-0.54
949	-0.96	-0.79	-0.68	-0.57	-0.55
950	-0.96	-0.80	-0.69	-0.58	-0.56
951	-0.97	-0.80	-0.70	-0.59	-0.56
952	-0.98	-0.81	-0.70	-0.59	-0.57
953	-0.98	-0.81	-0.70	-0.60	-0.57
954	-0.98	-0.82	-0.70	-0.60	-0.58
955	-0.99	-0.82	-0.71	-0.61	-0.59
956	-1.00	-0.82	-0.71	-0.61	-0.59
957	-0.97	-0.75	-0.70	-0.66	-0.65
958	-0.95	-0.72	-0.68	-0.64	-0.63
959	-0.93	-0.68	-0.67	-0.63	-0.62
960	-0.90	-0.65	-0.66	-0.61	-0.60
961	-0.89	-0.64	-0.65	-0.59	-0.58
962	-0.87	-0.64	-0.64	-0.58	-0.57
963	-0.85	-0.63	-0.62	-0.56	-0.55
964	-0.83	-0.63	-0.61	-0.54	-0.53
965	-0.97	-0.83	-0.70	-0.61	-0.60
966	-0.92	-0.75	-0.66	-0.60	-0.59
967	-0.88	-0.67	-0.63	-0.58	-0.58
968	-0.83	-0.60	-0.60	-0.57	-0.57
969	-0.81	-0.60	-0.59	-0.55	-0.54
970	-0.80	-0.64	-0.58	-0.53	-0.52
971	-0.80	-0.68	-0.58	-0.51	-0.50
972	-0.84	-0.70	-0.61	-0.53	-0.52
973	-0.84	-0.66	-0.61	-0.55	-0.54
974	-0.86	-0.62	-0.63	-0.58	-0.57
975	-0.88	-0.61	-0.64	-0.60	-0.59
976	-0.92	-0.69	-0.67	-0.61	-0.60
977	-0.96	-0.77	-0.70	-0.62	-0.61
978	-1.01	-0.84	-0.73	-0.63	-0.62
979	-0.97	-0.83	-0.70	-0.61	-0.59
980	-0.92	-0.75	-0.66	-0.60	-0.58
981	-0.87	-0.67	-0.63	-0.58	-0.57
982	-0.83	-0.59	-0.60	-0.57	-0.56
983	-0.81	-0.60	-0.59	-0.55	-0.54
984	-0.79	-0.64	-0.58	-0.53	-0.52
985	-0.79	-0.68	-0.57	-0.51	-0.49
986	-0.82	-0.69	-0.60	-0.52	-0.51
987	-0.83	-0.65	-0.61	-0.54	-0.53
988	-0.85	-0.61	-0.62	-0.57	-0.56
989	-0.87	-0.60	-0.63	-0.59	-0.58
990	-0.92	-0.68	-0.66	-0.60	-0.59
991	-0.96	-0.76	-0.69	-0.61	-0.60
992	-1.00	-0.84	-0.72	-0.63	-0.61
993	-0.97	-0.82	-0.70	-0.61	-0.59
994	-0.92	-0.75	-0.66	-0.59	-0.58
995	-0.88	-0.67	-0.64	-0.58	-0.57
996	-0.82	-0.58	-0.60	-0.56	-0.55
997	-0.81	-0.59	-0.59	-0.54	-0.54
998	-0.79	-0.63	-0.57	-0.52	-0.51
999	-0.78	-0.67	-0.57	-0.50	-0.49
1000	-0.81	-0.68	-0.59	-0.52	-0.50
1001	-0.82	-0.65	-0.60	-0.54	-0.53
1002	-0.84	-0.61	-0.61	-0.56	-0.55
1003	-0.86	-0.59	-0.63	-0.58	-0.57
1004	-0.91	-0.68	-0.66	-0.60	-0.59
1005	-0.95	-0.76	-0.69	-0.61	-0.60
1006	-1.00	-0.84	-0.72	-0.62	-0.61
1007	-0.97	-0.82	-0.70	-0.60	-0.59
1008	-0.91	-0.74	-0.66	-0.59	-0.58
1009	-0.87	-0.66	-0.63	-0.57	-0.56
1010	-0.82	-0.58	-0.60	-0.56	-0.55
1011	-0.80	-0.59	-0.58	-0.54	-0.53
1012	-0.79	-0.63	-0.57	-0.52	-0.51
1013	-0.77	-0.65	-0.56	-0.49	-0.48
1014	-0.80	-0.67	-0.58	-0.51	-0.49
1015	-0.81	-0.64	-0.59	-0.53	-0.52
1016	-0.83	-0.60	-0.61	-0.55	-0.54
1017	-0.85	-0.59	-0.62	-0.57	-0.56
1018	-0.90	-0.67	-0.65	-0.59	-0.58
1019	-0.94	-0.75	-0.68	-0.60	-0.59
1020	-0.99	-0.83	-0.72	-0.62	-0.60
1021	-0.96	-0.82	-0.70	-0.60	-0.58
1022	-0.91	-0.74	-0.66	-0.58	-0.57



1023	-0.87	-0.66	-0.63	-0.57	-0.56
1024	-0.82	-0.57	-0.60	-0.56	-0.55
1025	-0.80	-0.58	-0.58	-0.54	-0.53
1026	-0.78	-0.62	-0.57	-0.51	-0.50
1027	-0.77	-0.66	-0.56	-0.49	-0.48
1028	-0.79	-0.67	-0.58	-0.50	-0.49
1029	-0.81	-0.63	-0.59	-0.53	-0.52
1030	-0.82	-0.60	-0.60	-0.55	-0.54
1031	-0.84	-0.58	-0.61	-0.57	-0.56
1032	-0.90	-0.67	-0.65	-0.59	-0.57
1033	-0.94	-0.75	-0.68	-0.60	-0.58
1034	-0.98	-0.83	-0.71	-0.61	-0.59
1035	-0.96	-0.81	-0.69	-0.60	-0.58
1036	-0.91	-0.73	-0.66	-0.58	-0.57
1037	-0.86	-0.65	-0.63	-0.57	-0.56
1038	-0.82	-0.57	-0.60	-0.55	-0.54
1039	-0.79	-0.57	-0.58	-0.53	-0.52
1040	-0.78	-0.62	-0.57	-0.51	-0.50
1041	-0.77	-0.66	-0.56	-0.49	-0.48
1042	-0.79	-0.67	-0.57	-0.50	-0.49
1043	-0.80	-0.63	-0.58	-0.52	-0.51
1044	-0.81	-0.59	-0.59	-0.54	-0.53
1045	-0.84	-0.58	-0.61	-0.56	-0.55
1046	-0.88	-0.66	-0.64	-0.58	-0.57
1047	-0.93	-0.74	-0.67	-0.59	-0.58
1048	-0.98	-0.82	-0.71	-0.61	-0.59
1049	-0.95	-0.80	-0.69	-0.59	-0.57
1050	-0.90	-0.72	-0.66	-0.58	-0.56
1051	-0.86	-0.65	-0.63	-0.56	-0.55
1052	-0.82	-0.56	-0.60	-0.55	-0.54
1053	-0.79	-0.57	-0.58	-0.53	-0.52
1054	-0.78	-0.61	-0.57	-0.51	-0.50
1055	-0.77	-0.65	-0.56	-0.49	-0.47
1056	-0.78	-0.67	-0.57	-0.50	-0.48
1057	-0.79	-0.62	-0.57	-0.51	-0.51
1058	-0.81	-0.58	-0.59	-0.54	-0.53
1059	-0.83	-0.57	-0.61	-0.56	-0.55
1060	-0.88	-0.66	-0.64	-0.57	-0.56
1061	-0.92	-0.74	-0.67	-0.59	-0.57
1062	-0.97	-0.81	-0.70	-0.60	-0.58
1063	-0.97	-0.82	-0.69	-0.59	-0.57
1064	-0.90	-0.73	-0.65	-0.57	-0.56
1065	-0.86	-0.65	-0.62	-0.56	-0.55
1066	-0.81	-0.57	-0.59	-0.55	-0.53
1067	-0.79	-0.57	-0.57	-0.52	-0.51
1068	-0.77	-0.62	-0.56	-0.50	-0.49
1069	-0.79	-0.66	-0.56	-0.48	-0.47
1070	-0.80	-0.67	-0.56	-0.49	-0.48
1071	-0.78	-0.63	-0.57	-0.51	-0.50
1072	-0.79	-0.58	-0.57	-0.53	-0.52
1073	-0.81	-0.56	-0.59	-0.54	-0.53
1074	-0.85	-0.65	-0.62	-0.56	-0.55
1075	-0.89	-0.73	-0.65	-0.57	-0.56
1076	-0.96	-0.81	-0.68	-0.58	-0.57
1077	-0.97	-0.81	-0.69	-0.59	-0.57
1078	-0.90	-0.73	-0.65	-0.57	-0.56
1079	-0.86	-0.65	-0.62	-0.56	-0.55
1080	-0.81	-0.56	-0.59	-0.54	-0.53
1081	-0.78	-0.57	-0.57	-0.52	-0.51
1082	-0.77	-0.62	-0.56	-0.50	-0.49
1083	-0.78	-0.66	-0.55	-0.48	-0.47
1084	-0.78	-0.66	-0.55	-0.48	-0.46
1085	-0.76	-0.61	-0.55	-0.49	-0.48
1086	-0.77	-0.56	-0.56	-0.51	-0.50
1087	-0.79	-0.55	-0.58	-0.53	-0.52
1088	-0.83	-0.63	-0.61	-0.54	-0.53
1089	-0.87	-0.72	-0.64	-0.55	-0.54
1090	-0.95	-0.80	-0.67	-0.57	-0.55
1091	-0.97	-0.81	-0.69	-0.59	-0.57
1092	-0.90	-0.73	-0.65	-0.57	-0.56
1093	-0.86	-0.65	-0.63	-0.56	-0.55
1094	-0.81	-0.56	-0.59	-0.54	-0.53
1095	-0.79	-0.57	-0.57	-0.52	-0.51
1096	-0.77	-0.61	-0.56	-0.50	-0.49
1097	-0.77	-0.65	-0.55	-0.48	-0.47
1098	-0.75	-0.63	-0.53	-0.46	-0.45
1099	-0.73	-0.59	-0.54	-0.48	-0.47



1100	-0.75	-0.55	-0.55	-0.50	-0.49
1101	-0.76	-0.53	-0.56	-0.51	-0.50
1102	-0.81	-0.62	-0.60	-0.53	-0.52
1103	-0.85	-0.70	-0.62	-0.54	-0.53
1104	-0.93	-0.78	-0.66	-0.55	-0.54
1105	-0.96	-0.81	-0.69	-0.59	-0.57
1106	-0.90	-0.73	-0.65	-0.57	-0.56
1107	-0.86	-0.64	-0.62	-0.56	-0.55
1108	-0.81	-0.56	-0.59	-0.54	-0.53
1109	-0.78	-0.56	-0.57	-0.52	-0.51
1110	-0.77	-0.61	-0.56	-0.50	-0.49
1111	-0.75	-0.64	-0.55	-0.48	-0.46
1112	-0.72	-0.61	-0.51	-0.44	-0.43
1113	-0.71	-0.57	-0.52	-0.46	-0.45
1114	-0.72	-0.53	-0.53	-0.48	-0.47
1115	-0.74	-0.51	-0.55	-0.50	-0.49
1116	-0.79	-0.60	-0.58	-0.51	-0.50
1117	-0.83	-0.68	-0.61	-0.52	-0.51
1118	-0.92	-0.76	-0.64	-0.54	-0.52
1119	-0.96	-0.81	-0.69	-0.59	-0.57
1120	-0.90	-0.73	-0.65	-0.57	-0.56
1121	-0.86	-0.64	-0.62	-0.56	-0.55
1122	-0.80	-0.55	-0.59	-0.54	-0.53
1123	-0.78	-0.57	-0.57	-0.52	-0.51
1124	-0.77	-0.61	-0.56	-0.50	-0.49
1125	-0.76	-0.65	-0.55	-0.48	-0.46
1126	-0.72	-0.60	-0.50	-0.43	-0.42
1127	-0.69	-0.56	-0.51	-0.45	-0.44
1128	-0.70	-0.51	-0.52	-0.47	-0.46
1129	-0.72	-0.50	-0.53	-0.48	-0.47
1130	-0.77	-0.59	-0.56	-0.50	-0.49
1131	-0.81	-0.66	-0.59	-0.51	-0.50
1132	-0.90	-0.75	-0.62	-0.52	-0.51
1133	-0.96	-0.81	-0.68	-0.58	-0.57
1134	-0.89	-0.73	-0.65	-0.57	-0.56
1135	-0.85	-0.64	-0.62	-0.56	-0.54
1136	-0.80	-0.55	-0.59	-0.54	-0.53
1137	-0.78	-0.56	-0.57	-0.52	-0.51
1138	-0.76	-0.61	-0.56	-0.50	-0.49
1139	-0.77	-0.65	-0.55	-0.48	-0.46
1140	-0.71	-0.59	-0.49	-0.41	-0.40
1141	-0.66	-0.54	-0.49	-0.43	-0.42
1142	-0.67	-0.49	-0.50	-0.45	-0.44
1143	-0.69	-0.48	-0.51	-0.47	-0.45
1144	-0.74	-0.57	-0.54	-0.48	-0.47
1145	-0.78	-0.65	-0.57	-0.49	-0.48
1146	-0.88	-0.73	-0.61	-0.51	-0.49
1147	-0.96	-0.81	-0.68	-0.58	-0.57
1148	-0.89	-0.72	-0.65	-0.57	-0.55
1149	-0.85	-0.64	-0.62	-0.55	-0.54
1150	-0.80	-0.55	-0.59	-0.54	-0.53
1151	-0.78	-0.56	-0.57	-0.52	-0.51
1152	-0.76	-0.61	-0.56	-0.50	-0.49
1153	-0.78	-0.66	-0.55	-0.48	-0.46
1154	-0.70	-0.58	-0.47	-0.40	-0.38
1155	-0.64	-0.53	-0.47	-0.41	-0.40
1156	-0.64	-0.48	-0.48	-0.43	-0.42
1157	-0.66	-0.46	-0.49	-0.45	-0.44
1158	-0.71	-0.55	-0.52	-0.46	-0.45
1159	-0.75	-0.63	-0.55	-0.47	-0.46
1160	-0.86	-0.71	-0.59	-0.49	-0.47
1161	-0.96	-0.81	-0.67	-0.58	-0.56
1162	-0.88	-0.73	-0.64	-0.56	-0.55
1163	-0.84	-0.64	-0.61	-0.55	-0.54
1164	-0.80	-0.55	-0.58	-0.54	-0.53
1165	-0.77	-0.57	-0.57	-0.52	-0.51
1166	-0.76	-0.61	-0.55	-0.49	-0.49
1167	-0.78	-0.66	-0.55	-0.48	-0.46
1168	-0.68	-0.56	-0.44	-0.37	-0.36
1169	-0.59	-0.50	-0.44	-0.38	-0.38
1170	-0.60	-0.45	-0.45	-0.40	-0.39
1171	-0.62	-0.43	-0.46	-0.42	-0.41
1172	-0.65	-0.51	-0.49	-0.42	-0.41
1173	-0.70	-0.59	-0.51	-0.43	-0.42
1174	-0.83	-0.67	-0.54	-0.44	-0.43
1175	-0.96	-0.81	-0.67	-0.58	-0.56
1176	-0.88	-0.72	-0.64	-0.56	-0.55



1177	-0.84	-0.64	-0.61	-0.55	-0.54
1178	-0.80	-0.55	-0.58	-0.54	-0.53
1179	-0.77	-0.56	-0.57	-0.52	-0.51
1180	-0.76	-0.61	-0.55	-0.49	-0.48
1181	-0.78	-0.66	-0.54	-0.47	-0.46
1182	-0.68	-0.56	-0.45	-0.38	-0.37
1183	-0.61	-0.51	-0.45	-0.39	-0.38
1184	-0.61	-0.46	-0.46	-0.41	-0.40
1185	-0.62	-0.44	-0.47	-0.42	-0.41
1186	-0.66	-0.52	-0.50	-0.43	-0.42
1187	-0.71	-0.60	-0.52	-0.44	-0.43
1188	-0.84	-0.68	-0.55	-0.45	-0.44
1189	-0.96	-0.81	-0.67	-0.58	-0.56
1190	-0.89	-0.72	-0.64	-0.56	-0.55
1191	-0.84	-0.64	-0.62	-0.55	-0.54
1192	-0.79	-0.55	-0.58	-0.53	-0.52
1193	-0.77	-0.56	-0.57	-0.52	-0.51
1194	-0.76	-0.61	-0.55	-0.49	-0.48
1195	-0.77	-0.65	-0.54	-0.47	-0.46
1196	-0.68	-0.56	-0.46	-0.39	-0.37
1197	-0.62	-0.52	-0.46	-0.40	-0.39
1198	-0.63	-0.46	-0.47	-0.42	-0.41
1199	-0.64	-0.44	-0.48	-0.43	-0.42
1200	-0.68	-0.53	-0.51	-0.44	-0.43
1201	-0.72	-0.61	-0.53	-0.45	-0.44
1202	-0.84	-0.69	-0.56	-0.46	-0.44
1203	-0.95	-0.80	-0.67	-0.58	-0.56
1204	-0.88	-0.72	-0.64	-0.56	-0.55
1205	-0.84	-0.63	-0.61	-0.55	-0.54
1206	-0.79	-0.54	-0.58	-0.53	-0.52
1207	-0.77	-0.56	-0.56	-0.51	-0.50
1208	-0.76	-0.60	-0.55	-0.49	-0.48
1209	-0.75	-0.64	-0.54	-0.47	-0.46
1210	-0.68	-0.56	-0.46	-0.39	-0.38
1211	-0.63	-0.52	-0.47	-0.41	-0.40
1212	-0.64	-0.47	-0.47	-0.42	-0.41
1213	-0.65	-0.45	-0.49	-0.44	-0.43
1214	-0.69	-0.53	-0.51	-0.45	-0.44
1215	-0.73	-0.61	-0.54	-0.46	-0.44
1216	-0.85	-0.69	-0.57	-0.47	-0.45
1217	-0.96	-0.80	-0.67	-0.58	-0.56
1218	-0.88	-0.72	-0.64	-0.56	-0.55
1219	-0.84	-0.64	-0.61	-0.55	-0.54
1220	-0.79	-0.55	-0.58	-0.53	-0.52
1221	-0.77	-0.56	-0.57	-0.51	-0.50
1222	-0.75	-0.61	-0.55	-0.49	-0.48
1223	-0.77	-0.65	-0.54	-0.47	-0.46
1224	-0.70	-0.58	-0.47	-0.40	-0.39
1225	-0.64	-0.53	-0.48	-0.42	-0.41
1226	-0.65	-0.48	-0.48	-0.43	-0.42
1227	-0.66	-0.46	-0.49	-0.45	-0.43
1228	-0.71	-0.55	-0.52	-0.46	-0.45
1229	-0.74	-0.62	-0.55	-0.46	-0.45
1230	-0.86	-0.70	-0.57	-0.48	-0.46
1231	-0.96	-0.80	-0.67	-0.57	-0.56
1232	-0.88	-0.72	-0.64	-0.56	-0.55
1233	-0.84	-0.63	-0.61	-0.55	-0.53
1234	-0.79	-0.55	-0.58	-0.53	-0.52
1235	-0.77	-0.56	-0.56	-0.51	-0.50
1236	-0.75	-0.61	-0.55	-0.49	-0.48
1237	-0.77	-0.65	-0.54	-0.47	-0.46
1238	-0.72	-0.59	-0.48	-0.41	-0.40
1239	-0.66	-0.54	-0.49	-0.43	-0.42
1240	-0.66	-0.49	-0.49	-0.44	-0.43
1241	-0.68	-0.47	-0.50	-0.45	-0.44
1242	-0.72	-0.55	-0.53	-0.46	-0.45
1243	-0.75	-0.63	-0.56	-0.47	-0.46
1244	-0.87	-0.71	-0.58	-0.48	-0.47
1245	-0.95	-0.80	-0.67	-0.57	-0.56
1246	-0.88	-0.72	-0.64	-0.56	-0.54
1247	-0.84	-0.63	-0.61	-0.55	-0.53
1248	-0.79	-0.55	-0.58	-0.53	-0.52
1249	-0.77	-0.56	-0.56	-0.51	-0.50
1250	-0.75	-0.61	-0.55	-0.49	-0.48
1251	-0.78	-0.65	-0.54	-0.47	-0.46
1252	-0.73	-0.61	-0.49	-0.42	-0.41
1253	-0.67	-0.55	-0.50	-0.43	-0.42



1254	-0.68	-0.50	-0.50	-0.45	-0.44
1255	-0.69	-0.48	-0.51	-0.47	-0.46
1256	-0.73	-0.56	-0.54	-0.47	-0.46
1257	-0.76	-0.64	-0.56	-0.48	-0.47
1258	-0.88	-0.72	-0.59	-0.49	-0.48
1259	-0.95	-0.79	-0.65	-0.56	-0.55
1260	-0.86	-0.71	-0.63	-0.55	-0.54
1261	-0.83	-0.63	-0.60	-0.54	-0.53
1262	-0.79	-0.55	-0.58	-0.53	-0.52
1263	-0.77	-0.56	-0.56	-0.51	-0.50
1264	-0.75	-0.61	-0.55	-0.49	-0.48
1265	-0.78	-0.66	-0.54	-0.47	-0.46
1266	-0.76	-0.63	-0.52	-0.45	-0.44
1267	-0.72	-0.59	-0.53	-0.47	-0.46
1268	-0.73	-0.54	-0.53	-0.49	-0.48
1269	-0.75	-0.52	-0.55	-0.50	-0.49
1270	-0.79	-0.60	-0.58	-0.51	-0.50
1271	-0.82	-0.69	-0.60	-0.52	-0.51
1272	-0.92	-0.77	-0.63	-0.53	-0.52
1273	-0.95	-0.80	-0.65	-0.56	-0.55
1274	-0.86	-0.72	-0.63	-0.55	-0.54
1275	-0.83	-0.64	-0.60	-0.54	-0.53
1276	-0.79	-0.56	-0.58	-0.53	-0.52
1277	-0.77	-0.56	-0.56	-0.51	-0.50
1278	-0.75	-0.61	-0.55	-0.49	-0.48
1279	-0.78	-0.66	-0.54	-0.47	-0.46
1280	-0.76	-0.64	-0.52	-0.46	-0.44
1281	-0.72	-0.59	-0.53	-0.47	-0.46
1282	-0.74	-0.54	-0.54	-0.49	-0.48
1283	-0.75	-0.53	-0.55	-0.51	-0.50
1284	-0.80	-0.61	-0.58	-0.52	-0.51
1285	-0.83	-0.69	-0.61	-0.53	-0.52
1286	-0.93	-0.78	-0.63	-0.54	-0.53
1287	-0.96	-0.80	-0.65	-0.57	-0.55
1288	-0.86	-0.72	-0.63	-0.55	-0.54
1289	-0.83	-0.64	-0.61	-0.54	-0.53
1290	-0.79	-0.56	-0.57	-0.53	-0.52
1291	-0.77	-0.57	-0.56	-0.51	-0.51
1292	-0.75	-0.61	-0.55	-0.49	-0.48
1293	-0.77	-0.65	-0.54	-0.47	-0.46
1294	-0.76	-0.64	-0.53	-0.46	-0.45
1295	-0.73	-0.60	-0.54	-0.48	-0.47
1296	-0.75	-0.55	-0.55	-0.50	-0.49
1297	-0.76	-0.54	-0.56	-0.52	-0.51
1298	-0.81	-0.62	-0.59	-0.53	-0.52
1299	-0.84	-0.70	-0.61	-0.54	-0.53
1300	-0.94	-0.78	-0.64	-0.55	-0.53
1301	-0.96	-0.80	-0.65	-0.57	-0.55
1302	-0.86	-0.72	-0.63	-0.55	-0.54
1303	-0.83	-0.64	-0.60	-0.54	-0.53
1304	-0.78	-0.55	-0.57	-0.53	-0.52
1305	-0.77	-0.56	-0.56	-0.51	-0.51
1306	-0.75	-0.61	-0.55	-0.49	-0.49
1307	-0.76	-0.65	-0.54	-0.47	-0.46
1308	-0.75	-0.64	-0.53	-0.47	-0.46
1309	-0.74	-0.60	-0.54	-0.49	-0.48
1310	-0.75	-0.55	-0.55	-0.51	-0.50
1311	-0.77	-0.54	-0.56	-0.52	-0.51
1312	-0.81	-0.63	-0.59	-0.53	-0.52
1313	-0.85	-0.71	-0.62	-0.54	-0.53
1314	-0.95	-0.79	-0.64	-0.56	-0.54
1315	-0.95	-0.80	-0.65	-0.57	-0.55
1316	-0.86	-0.72	-0.63	-0.55	-0.54
1317	-0.83	-0.64	-0.60	-0.55	-0.54
1318	-0.78	-0.55	-0.57	-0.53	-0.52
1319	-0.77	-0.56	-0.56	-0.52	-0.51
1320	-0.75	-0.61	-0.55	-0.49	-0.49
1321	-0.77	-0.65	-0.54	-0.48	-0.47
1322	-0.77	-0.65	-0.54	-0.47	-0.46
1323	-0.75	-0.61	-0.55	-0.49	-0.48
1324	-0.76	-0.56	-0.56	-0.51	-0.50
1325	-0.78	-0.55	-0.57	-0.53	-0.52
1326	-0.82	-0.64	-0.60	-0.54	-0.53
1327	-0.85	-0.71	-0.62	-0.55	-0.54
1328	-0.95	-0.79	-0.65	-0.56	-0.55
1329	-0.95	-0.80	-0.65	-0.57	-0.55
1330	-0.86	-0.72	-0.62	-0.55	-0.54



1331	-0.82	-0.64	-0.60	-0.54	-0.54
1332	-0.78	-0.55	-0.57	-0.53	-0.52
1333	-0.76	-0.56	-0.56	-0.52	-0.51
1334	-0.75	-0.61	-0.55	-0.50	-0.49
1335	-0.77	-0.65	-0.54	-0.48	-0.47
1336	-0.78	-0.66	-0.54	-0.48	-0.47
1337	-0.75	-0.61	-0.55	-0.50	-0.49
1338	-0.76	-0.56	-0.56	-0.52	-0.51
1339	-0.78	-0.55	-0.57	-0.53	-0.52
1340	-0.82	-0.64	-0.60	-0.54	-0.54
1341	-0.86	-0.72	-0.62	-0.55	-0.54
1342	-0.95	-0.80	-0.65	-0.57	-0.55
1343	-0.95	-0.80	-0.65	-0.57	-0.55
1344	-0.85	-0.72	-0.62	-0.55	-0.54
1345	-0.82	-0.64	-0.59	-0.54	-0.54
1346	-0.78	-0.56	-0.57	-0.53	-0.53
1347	-0.76	-0.56	-0.55	-0.52	-0.51
1348	-0.75	-0.61	-0.54	-0.50	-0.49
1349	-0.77	-0.66	-0.54	-0.48	-0.47
1350	-0.78	-0.66	-0.55	-0.49	-0.48
1351	-0.76	-0.62	-0.55	-0.50	-0.50
1352	-0.77	-0.57	-0.56	-0.52	-0.51
1353	-0.79	-0.56	-0.57	-0.54	-0.53
1354	-0.82	-0.64	-0.60	-0.55	-0.54
1355	-0.86	-0.72	-0.62	-0.56	-0.55
1356	-0.95	-0.80	-0.65	-0.57	-0.56
1357	-0.69	-0.58	-0.44	-0.42	-0.41
1358	-0.65	-0.57	-0.47	-0.45	-0.44
1359	-0.69	-0.56	-0.50	-0.48	-0.48
1360	-0.73	-0.56	-0.53	-0.51	-0.51
1361	-0.77	-0.60	-0.56	-0.54	-0.53
1362	-0.81	-0.65	-0.59	-0.57	-0.56
1363	-0.86	-0.70	-0.62	-0.59	-0.59
1364	-1.07	-0.86	-0.71	-0.55	-0.51
1365	-1.07	-0.85	-0.70	-0.54	-0.51
1366	-1.06	-0.84	-0.69	-0.54	-0.50
1367	-1.06	-0.84	-0.69	-0.53	-0.49
1368	-1.07	-0.84	-0.68	-0.53	-0.49
1369	-1.07	-0.84	-0.68	-0.52	-0.48
1370	-1.07	-0.84	-0.67	-0.52	-0.48
1371	-1.07	-0.84	-0.67	-0.52	-0.48
1372	-1.07	-0.84	-0.68	-0.52	-0.48
1373	-1.07	-0.84	-0.68	-0.53	-0.49
1374	-1.06	-0.84	-0.69	-0.53	-0.49
1375	-1.06	-0.84	-0.69	-0.54	-0.50
1376	-1.07	-0.85	-0.70	-0.54	-0.51
1377	-1.07	-0.86	-0.71	-0.55	-0.52
1378	-0.86	-0.70	-0.62	-0.60	-0.59
1379	-0.82	-0.66	-0.59	-0.57	-0.57
1380	-0.78	-0.61	-0.57	-0.54	-0.54
1381	-0.74	-0.57	-0.54	-0.52	-0.51
1382	-0.70	-0.57	-0.51	-0.49	-0.48
1383	-0.66	-0.58	-0.48	-0.46	-0.45
1384	-0.70	-0.59	-0.45	-0.42	-0.42
1385	-0.65	-0.55	-0.42	-0.39	-0.39
1386	-0.62	-0.54	-0.45	-0.43	-0.42
1387	-0.65	-0.53	-0.48	-0.46	-0.46
1388	-0.69	-0.52	-0.51	-0.49	-0.49
1389	-0.74	-0.55	-0.54	-0.52	-0.51
1390	-0.78	-0.60	-0.56	-0.55	-0.54
1391	-0.82	-0.66	-0.59	-0.57	-0.57
1392	-0.91	-0.75	-0.65	-0.54	-0.52
1393	-0.90	-0.74	-0.64	-0.54	-0.51
1394	-0.89	-0.73	-0.64	-0.53	-0.50
1395	-0.88	-0.73	-0.63	-0.52	-0.50
1396	-0.88	-0.73	-0.63	-0.52	-0.49
1397	-0.89	-0.73	-0.62	-0.51	-0.49
1398	-0.89	-0.73	-0.62	-0.51	-0.48
1399	-0.89	-0.73	-0.62	-0.51	-0.48
1400	-0.89	-0.73	-0.62	-0.51	-0.49
1401	-0.89	-0.73	-0.63	-0.52	-0.49
1402	-0.88	-0.73	-0.63	-0.52	-0.50
1403	-0.89	-0.73	-0.64	-0.53	-0.50
1404	-0.90	-0.74	-0.64	-0.54	-0.51
1405	-0.91	-0.75	-0.65	-0.54	-0.52
1406	-0.83	-0.67	-0.60	-0.58	-0.57
1407	-0.79	-0.60	-0.57	-0.55	-0.55



1408	-0.74	-0.55	-0.54	-0.52	-0.52
1409	-0.70	-0.53	-0.51	-0.50	-0.49
1410	-0.66	-0.54	-0.48	-0.46	-0.46
1411	-0.62	-0.55	-0.45	-0.43	-0.43
1412	-0.66	-0.56	-0.42	-0.40	-0.40
1413	-0.64	-0.53	-0.39	-0.37	-0.37
1414	-0.60	-0.53	-0.42	-0.41	-0.40
1415	-0.62	-0.52	-0.45	-0.44	-0.44
1416	-0.66	-0.50	-0.48	-0.47	-0.47
1417	-0.70	-0.51	-0.51	-0.50	-0.50
1418	-0.74	-0.57	-0.54	-0.53	-0.52
1419	-0.79	-0.63	-0.57	-0.55	-0.55
1420	-0.82	-0.64	-0.59	-0.54	-0.53
1421	-0.81	-0.63	-0.59	-0.53	-0.52
1422	-0.80	-0.63	-0.58	-0.52	-0.51
1423	-0.79	-0.62	-0.57	-0.51	-0.50
1424	-0.79	-0.62	-0.57	-0.51	-0.50
1425	-0.78	-0.62	-0.56	-0.50	-0.49
1426	-0.77	-0.62	-0.56	-0.50	-0.49
1427	-0.77	-0.62	-0.56	-0.50	-0.49
1428	-0.78	-0.62	-0.56	-0.50	-0.49
1429	-0.79	-0.62	-0.57	-0.51	-0.50
1430	-0.79	-0.62	-0.57	-0.51	-0.50
1431	-0.80	-0.63	-0.58	-0.52	-0.51
1432	-0.81	-0.63	-0.59	-0.53	-0.52
1433	-0.83	-0.64	-0.59	-0.54	-0.53
1434	-0.79	-0.63	-0.57	-0.56	-0.55
1435	-0.75	-0.57	-0.54	-0.53	-0.53
1436	-0.71	-0.51	-0.52	-0.50	-0.50
1437	-0.66	-0.51	-0.49	-0.47	-0.47
1438	-0.62	-0.52	-0.46	-0.44	-0.44
1439	-0.61	-0.53	-0.43	-0.41	-0.41
1440	-0.64	-0.54	-0.40	-0.38	-0.37
1441	-0.64	-0.53	-0.37	-0.35	-0.35
1442	-0.61	-0.52	-0.40	-0.38	-0.38
1443	-0.58	-0.51	-0.43	-0.41	-0.41
1444	-0.62	-0.52	-0.46	-0.45	-0.44
1445	-0.67	-0.53	-0.49	-0.48	-0.47
1446	-0.71	-0.57	-0.52	-0.50	-0.50
1447	-0.75	-0.61	-0.55	-0.53	-0.53
1448	-0.75	-0.54	-0.55	-0.53	-0.53
1449	-0.73	-0.53	-0.53	-0.52	-0.52
1450	-0.72	-0.51	-0.53	-0.51	-0.51
1451	-0.71	-0.51	-0.52	-0.51	-0.50
1452	-0.71	-0.52	-0.52	-0.50	-0.50
1453	-0.70	-0.53	-0.51	-0.50	-0.49
1454	-0.70	-0.53	-0.51	-0.50	-0.49
1455	-0.70	-0.53	-0.51	-0.50	-0.49
1456	-0.70	-0.53	-0.51	-0.50	-0.49
1457	-0.71	-0.52	-0.52	-0.50	-0.50
1458	-0.71	-0.51	-0.52	-0.51	-0.50
1459	-0.72	-0.51	-0.53	-0.51	-0.51
1460	-0.74	-0.53	-0.53	-0.52	-0.52
1461	-0.75	-0.54	-0.55	-0.53	-0.53
1462	-0.76	-0.61	-0.55	-0.53	-0.53
1463	-0.71	-0.57	-0.52	-0.51	-0.50
1464	-0.67	-0.54	-0.49	-0.48	-0.48
1465	-0.63	-0.52	-0.46	-0.45	-0.45
1466	-0.58	-0.51	-0.43	-0.42	-0.41
1467	-0.61	-0.52	-0.40	-0.38	-0.38
1468	-0.64	-0.53	-0.37	-0.35	-0.35
1469	-0.64	-0.52	-0.35	-0.33	-0.32
1470	-0.61	-0.51	-0.37	-0.36	-0.36
1471	-0.62	-0.53	-0.40	-0.39	-0.39
1472	-0.62	-0.54	-0.43	-0.42	-0.42
1473	-0.63	-0.56	-0.46	-0.45	-0.45
1474	-0.67	-0.59	-0.49	-0.48	-0.48
1475	-0.72	-0.62	-0.52	-0.51	-0.51
1476	-0.83	-0.65	-0.60	-0.54	-0.52
1477	-0.82	-0.64	-0.59	-0.53	-0.51
1478	-0.81	-0.63	-0.59	-0.52	-0.51
1479	-0.80	-0.62	-0.58	-0.51	-0.50
1480	-0.80	-0.62	-0.58	-0.51	-0.49
1481	-0.79	-0.61	-0.57	-0.50	-0.49
1482	-0.79	-0.61	-0.57	-0.50	-0.49
1483	-0.79	-0.61	-0.57	-0.50	-0.49
1484	-0.79	-0.61	-0.57	-0.50	-0.49



1485	-0.80	-0.62	-0.58	-0.51	-0.49
1486	-0.80	-0.62	-0.58	-0.51	-0.50
1487	-0.81	-0.63	-0.59	-0.52	-0.51
1488	-0.82	-0.64	-0.59	-0.53	-0.51
1489	-0.83	-0.65	-0.60	-0.54	-0.52
1490	-0.72	-0.62	-0.52	-0.51	-0.51
1491	-0.67	-0.59	-0.49	-0.48	-0.48
1492	-0.63	-0.56	-0.46	-0.45	-0.45
1493	-0.62	-0.54	-0.43	-0.42	-0.42
1494	-0.62	-0.53	-0.40	-0.39	-0.39
1495	-0.61	-0.51	-0.37	-0.36	-0.36
1496	-0.64	-0.52	-0.35	-0.33	-0.33
1497	-0.65	-0.51	-0.32	-0.30	-0.30
1498	-0.66	-0.53	-0.35	-0.33	-0.33
1499	-0.67	-0.55	-0.38	-0.37	-0.36
1500	-0.67	-0.57	-0.41	-0.40	-0.39
1501	-0.68	-0.58	-0.44	-0.43	-0.42
1502	-0.72	-0.62	-0.47	-0.45	-0.45
1503	-0.75	-0.65	-0.50	-0.48	-0.48
1504	-0.93	-0.76	-0.66	-0.54	-0.52
1505	-0.92	-0.75	-0.65	-0.53	-0.51
1506	-0.91	-0.74	-0.65	-0.53	-0.50
1507	-0.90	-0.73	-0.64	-0.52	-0.49
1508	-0.89	-0.73	-0.64	-0.52	-0.49
1509	-0.88	-0.72	-0.63	-0.51	-0.48
1510	-0.88	-0.72	-0.63	-0.51	-0.48
1511	-0.88	-0.72	-0.63	-0.51	-0.48
1512	-0.88	-0.72	-0.63	-0.51	-0.48
1513	-0.89	-0.73	-0.64	-0.52	-0.49
1514	-0.90	-0.73	-0.64	-0.52	-0.49
1515	-0.91	-0.74	-0.65	-0.53	-0.50
1516	-0.92	-0.75	-0.65	-0.54	-0.51
1517	-0.93	-0.76	-0.66	-0.54	-0.52
1518	-0.75	-0.65	-0.49	-0.48	-0.48
1519	-0.72	-0.61	-0.47	-0.45	-0.45
1520	-0.68	-0.58	-0.44	-0.43	-0.42
1521	-0.67	-0.57	-0.41	-0.40	-0.39
1522	-0.67	-0.55	-0.38	-0.37	-0.36
1523	-0.66	-0.53	-0.35	-0.33	-0.33
1524	-0.65	-0.51	-0.32	-0.30	-0.30
1525	-0.70	-0.54	-0.29	-0.28	-0.28
1526	-0.71	-0.56	-0.32	-0.31	-0.31
1527	-0.72	-0.57	-0.36	-0.34	-0.34
1528	-0.73	-0.59	-0.39	-0.37	-0.37
1529	-0.73	-0.60	-0.42	-0.40	-0.40
1530	-0.77	-0.64	-0.44	-0.43	-0.43
1531	-0.81	-0.67	-0.47	-0.46	-0.45
1532	-1.09	-0.87	-0.72	-0.55	-0.51
1533	-1.08	-0.85	-0.72	-0.54	-0.50
1534	-1.06	-0.84	-0.71	-0.53	-0.49
1535	-1.06	-0.84	-0.70	-0.53	-0.49
1536	-1.06	-0.83	-0.70	-0.52	-0.48
1537	-1.05	-0.83	-0.70	-0.52	-0.48
1538	-1.05	-0.82	-0.69	-0.51	-0.47
1539	-1.05	-0.82	-0.69	-0.51	-0.47
1540	-1.05	-0.83	-0.70	-0.52	-0.48
1541	-1.06	-0.83	-0.70	-0.52	-0.48
1542	-1.06	-0.84	-0.70	-0.53	-0.49
1543	-1.06	-0.84	-0.71	-0.53	-0.49
1544	-1.08	-0.85	-0.72	-0.54	-0.50
1545	-1.09	-0.87	-0.72	-0.55	-0.51
1546	-0.80	-0.67	-0.47	-0.46	-0.45
1547	-0.77	-0.64	-0.44	-0.43	-0.42
1548	-0.73	-0.60	-0.41	-0.40	-0.40
1549	-0.72	-0.59	-0.38	-0.37	-0.37
1550	-0.72	-0.57	-0.35	-0.34	-0.34
1551	-0.71	-0.55	-0.32	-0.31	-0.31
1552	-0.70	-0.54	-0.29	-0.28	-0.27

<b>Nodo (G)</b>	<b>Pt 1/12</b>	<b>Pt 2/13</b>	<b>Pt 3...</b>	<b>Pt 4...</b>
	-1.09			
	-0.27			

<b>Elem.</b>	<b>Cmb</b>	<b>Pt ini</b>	<b>Pt fin</b>	<b>Pt max</b>	<b>Cmb</b>	<b>Pt ini</b>	<b>Pt fin</b>	<b>Pt max</b>	<b>Cmb</b>	<b>Pt ini</b>	<b>Pt fin</b>	<b>Pt max</b>
		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2		daN/cm2	daN/cm2	daN/cm2
1	9	-0.70	-0.65	-0.70	65	-0.57	-0.51	-0.57	118	-0.51	-0.48	-0.51

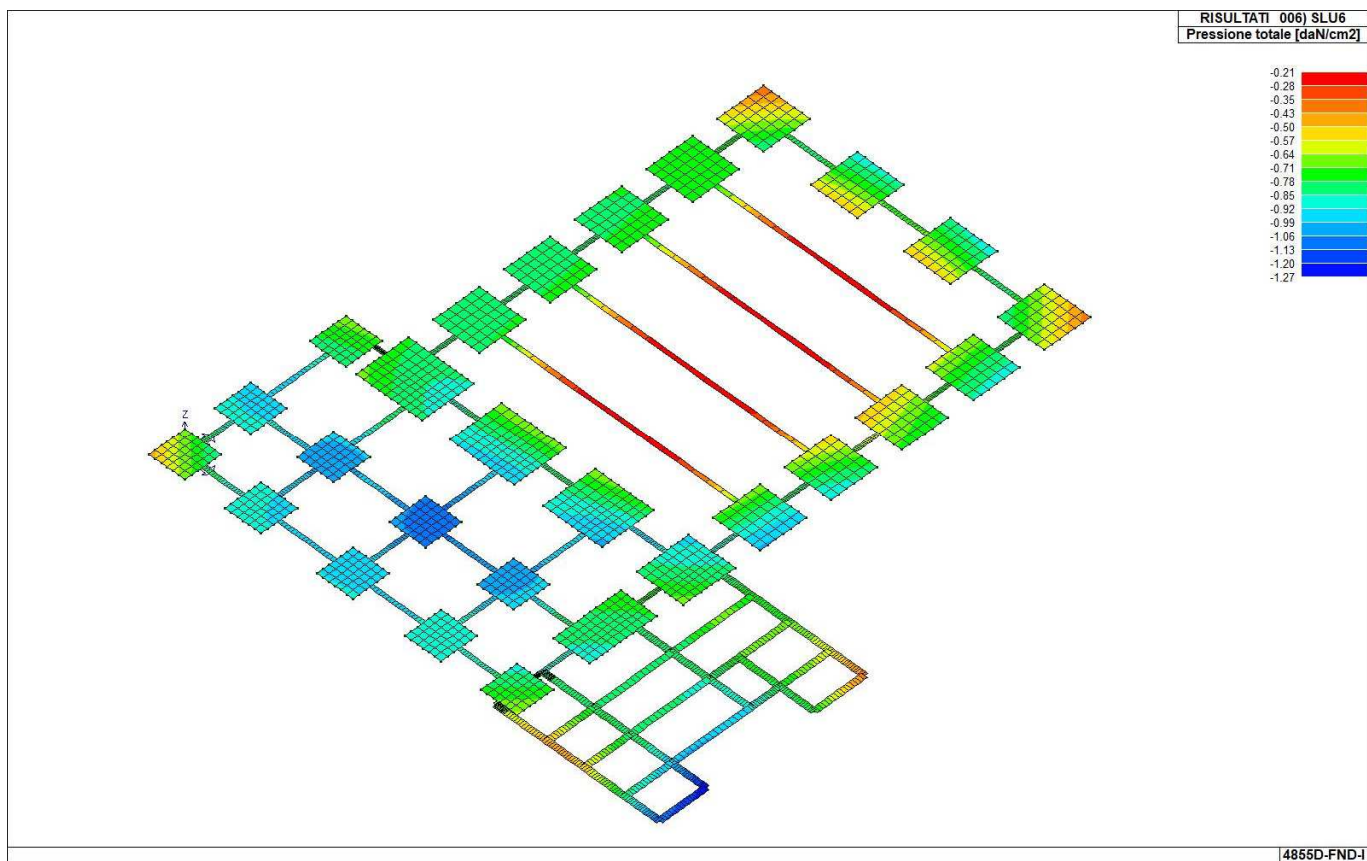


	123	-0.45	-0.41	-0.45	128	-0.43	-0.40	-0.43				
2	9	-0.65	-0.51	-0.65	67	-0.52	-0.35	-0.52	118	-0.48	-0.38	-0.48
	123	-0.41	-0.33	-0.41	128	-0.40	-0.31	-0.40				
3	7	-0.51	-0.57	-0.57	65	-0.35	-0.37	-0.37	116	-0.38	-0.42	-0.42
	123	-0.33	-0.35	-0.35	128	-0.31	-0.33	-0.33				
4	9	-0.57	-0.85	-0.85	65	-0.37	-0.54	-0.54	118	-0.42	-0.62	-0.62
	123	-0.35	-0.51	-0.51	128	-0.33	-0.48	-0.48				
5	6	-0.84	-1.11	-1.11	71	-0.53	-0.76	-0.76	115	-0.60	-0.79	-0.79
	123	-0.51	-0.67	-0.67	128	-0.48	-0.65	-0.65				
6	9	-0.70	-0.71	-0.71	65	-0.57	-0.56	-0.57	118	-0.51	-0.52	-0.52
	123	-0.45	-0.45	-0.45	128	-0.43	-0.44	-0.44				
23	9	-0.78	-0.89	-0.89	71	-0.59	-0.62	-0.62	118	-0.57	-0.64	-0.64
	123	-0.51	-0.57	-0.57	128	-0.50	-0.55	-0.55				
30	9	-0.93	-0.95	-0.96	71	-0.65	-0.60	-0.65	118	-0.67	-0.68	-0.69
	123	-0.59	-0.59	-0.60	128	-0.56	-0.57	-0.58				
37	8	-0.94	-0.92	-0.94	65	-0.60	-0.63	-0.63	117	-0.68	-0.66	-0.68
	123	-0.58	-0.58	-0.59	128	-0.56	-0.56	-0.57				
44	9	-0.90	-0.84	-0.90	65	-0.61	-0.59	-0.62	118	-0.65	-0.61	-0.65
	123	-0.57	-0.54	-0.57	128	-0.55	-0.52	-0.55				
48	7	-0.49	-0.79	-0.79	59	-0.33	-0.42	-0.42	116	-0.37	-0.58	-0.58
	123	-0.32	-0.44	-0.44	128	-0.31	-0.41	-0.41				
49	7	-0.57	-0.82	-0.82	52	-0.35	-0.44	-0.44	116	-0.42	-0.60	-0.60
	123	-0.35	-0.46	-0.46	128	-0.33	-0.42	-0.42				
50	6	-0.85	-0.99	-0.99	70	-0.44	-0.61	-0.61	115	-0.62	-0.71	-0.71
	123	-0.52	-0.59	-0.59	128	-0.49	-0.57	-0.57				
51	6	-1.12	-1.27	-1.27	46	-0.73	-0.97	-0.97	115	-0.80	-0.90	-0.90
	123	-0.68	-0.76	-0.76	128	-0.66	-0.73	-0.73				
77	7	-0.84	-0.86	-0.86	62	-0.53	-0.55	-0.55	116	-0.61	-0.62	-0.62
	123	-0.53	-0.54	-0.54	128	-0.51	-0.52	-0.52				
78	7	-0.86	-0.85	-0.86	62	-0.55	-0.52	-0.55	116	-0.62	-0.61	-0.62
	123	-0.54	-0.52	-0.54	128	-0.52	-0.49	-0.52				
79	8	-0.85	-0.80	-0.85	66	-0.53	-0.42	-0.53	117	-0.61	-0.58	-0.61
	123	-0.52	-0.45	-0.52	128	-0.49	-0.41	-0.49				
80	7	-0.80	-0.83	-0.83	52	-0.40	-0.44	-0.44	116	-0.58	-0.60	-0.60
	123	-0.45	-0.46	-0.46	128	-0.41	-0.42	-0.42				
81	8	-0.82	-0.98	-0.98	70	-0.42	-0.60	-0.60	117	-0.60	-0.70	-0.70
	123	-0.46	-0.58	-0.58	128	-0.42	-0.56	-0.56				
82	6	-0.98	-1.26	-1.26	46	-0.58	-0.95	-0.95	115	-0.70	-0.89	-0.89
	123	-0.58	-0.75	-0.75	128	-0.56	-0.72	-0.72				
83	8	-0.79	-0.89	-0.89	52	-0.56	-0.62	-0.62	117	-0.57	-0.65	-0.65
	123	-0.52	-0.57	-0.57	128	-0.50	-0.55	-0.55				
84	6	-0.92	-1.00	-1.00	74	-0.60	-0.55	-0.61	115	-0.67	-0.73	-0.73
	123	-0.57	-0.58	-0.58	128	-0.54	-0.55	-0.55				
85	8	-0.96	-1.07	-1.07	64	-0.61	-0.58	-0.62	117	-0.70	-0.77	-0.77
	123	-0.58	-0.61	-0.61	128	-0.55	-0.57	-0.57				
86	8	-0.92	-1.00	-1.00	68	-0.60	-0.56	-0.61	117	-0.67	-0.72	-0.72
	123	-0.56	-0.58	-0.58	128	-0.54	-0.54	-0.54				
87	7	-0.86	-0.86	-0.87	66	-0.55	-0.51	-0.56	116	-0.62	-0.63	-0.63
	123	-0.54	-0.54	-0.55	128	-0.52	-0.52	-0.53				
101	7	-0.79	-0.84	-0.85	55	-0.42	-0.49	-0.49	116	-0.58	-0.61	-0.62
	123	-0.44	-0.47	-0.47	128	-0.41	-0.44	-0.44				
102	7	-0.82	-0.85	-0.87	52	-0.44	-0.44	-0.45	116	-0.60	-0.62	-0.63
	123	-0.46	-0.48	-0.48	128	-0.42	-0.44	-0.45				
103	6	-0.99	-0.92	-1.01	70	-0.61	-0.57	-0.64	115	-0.71	-0.67	-0.72
	123	-0.59	-0.56	-0.61	128	-0.57	-0.54	-0.58				
107	8	-0.92	-0.99	-0.99	58	-0.61	-0.55	-0.62	117	-0.67	-0.72	-0.72
	123	-0.57	-0.58	-0.58	128	-0.55	-0.54	-0.55				
129	7	-1.00	-1.06	-1.06	52	-0.50	-0.61	-0.61	116	-0.73	-0.77	-0.77
	123	-0.57	-0.60	-0.60	128	-0.53	-0.56	-0.56				
136	6	-1.07	-1.02	-1.07	54	-0.61	-0.50	-0.61	115	-0.78	-0.74	-0.78
	123	-0.60	-0.58	-0.60	128	-0.56	-0.54	-0.56				
143	7	-0.96	-0.82	-0.96	53	-0.53	-0.57	-0.57	116	-0.70	-0.60	-0.70
	123	-0.56	-0.52	-0.56	128	-0.53	-0.50	-0.53				
176	7	-0.82	-0.85	-0.85	55	-0.53	-0.48	-0.53	116	-0.60	-0.62	-0.62
	123	-0.50	-0.47	-0.50	128	-0.47	-0.44	-0.47				
177	7	-0.85	-0.86	-0.86	55	-0.48	-0.44	-0.48	116	-0.62	-0.62	-0.62
	123	-0.47	-0.48	-0.48	128	-0.44	-0.44	-0.44				
178	6	-0.85	-0.92	-0.92	74	-0.44	-0.56	-0.56	115	-0.62	-0.67	-0.67
	123	-0.48	-0.56	-0.56	128	-0.44	-0.53	-0.53				
183	8	-0.95	-0.84	-0.96	77	-0.56	-0.64	-0.67	117	-0.69	-0.60	-0.69
	123	-0.61	-0.56	-0.62	128	-0.59	-0.54	-0.60				
184	6	-0.98	-0.82	-0.98	71	-0.49	-0.59	-0.59	115	-0.71	-0.60	-0.71
	123	-0.56	-0.51	-0.56	128	-0.52	-0.49	-0.52				
185	6	-1.07	-0.96	-1.07	63	-0.55	-0.68	-0.68	115	-0.78	-0.70	-0.78
	123	-0.59	-0.55	-0.59	128	-0.55	-0.53	-0.55				
186	7	-1.01	-0.98	-1.01	67	-0.52	-0.71	-0.71	116	-0.73	-0.71	-0.73
	123	-0.56	-0.56	-0.56	128	-0.53	-0.54	-0.54				



188	7	-0.85	-0.74	-0.85	76	-0.44	-0.41	-0.44	116	-0.62	-0.54	-0.62
	123	-0.48	-0.43	-0.48	128	-0.44	-0.40	-0.44				
189	6	-0.92	-0.78	-0.92	74	-0.57	-0.52	-0.57	115	-0.67	-0.57	-0.67
	123	-0.56	-0.49	-0.56	128	-0.54	-0.47	-0.54				
190	9	-0.75	-0.76	-0.76	69	-0.48	-0.52	-0.52	118	-0.56	-0.56	-0.56
	123	-0.48	-0.50	-0.50	128	-0.46	-0.48	-0.48				
191	6	-0.73	-0.80	-0.80	74	-0.41	-0.52	-0.52	115	-0.54	-0.58	-0.58
	123	-0.43	-0.50	-0.50	128	-0.40	-0.47	-0.47				
192	6	-0.80	-0.78	-0.80	58	-0.50	-0.67	-0.67	115	-0.58	-0.57	-0.58
	123	-0.50	-0.48	-0.50	128	-0.47	-0.47	-0.48				
193	7	-0.84	-0.75	-0.84	50	-0.48	-0.53	-0.53	116	-0.61	-0.55	-0.61
	123	-0.47	-0.46	-0.47	128	-0.44	-0.44	-0.44				
219	7	-0.74	-0.71	-0.74	70	-0.41	-0.43	-0.43	116	-0.54	-0.52	-0.54
	123	-0.43	-0.42	-0.43	128	-0.40	-0.39	-0.40				
220	6	-0.78	-0.59	-0.78	74	-0.52	-0.40	-0.52	115	-0.57	-0.43	-0.57
	123	-0.49	-0.37	-0.49	128	-0.47	-0.36	-0.47				
221	26	-0.77	-0.37	-0.77	58	-0.66	-0.34	-0.66	115	-0.56	-0.32	-0.56
	123	-0.48	-0.30	-0.48	128	-0.46	-0.30	-0.46				
253	7	-0.75	-0.76	-0.76	52	-0.58	-0.57	-0.58	116	-0.55	-0.56	-0.56
	123	-0.51	-0.52	-0.52	128	-0.50	-0.51	-0.51				
264	8	-0.87	-0.84	-0.87	58	-0.60	-0.53	-0.60	117	-0.63	-0.61	-0.63
	123	-0.58	-0.56	-0.58	128	-0.56	-0.55	-0.56				
275	8	-0.87	-0.85	-0.87	74	-0.61	-0.58	-0.61	117	-0.63	-0.62	-0.63
	123	-0.56	-0.55	-0.56	128	-0.55	-0.54	-0.55				
285	8	-0.95	-0.92	-0.96	56	-0.62	-0.70	-0.71	117	-0.68	-0.67	-0.69
	123	-0.62	-0.63	-0.64	128	-0.61	-0.62	-0.63				
305	6	-0.81	-0.77	-0.81	50	-0.61	-0.53	-0.61	115	-0.60	-0.56	-0.60
	123	-0.53	-0.46	-0.53	128	-0.51	-0.44	-0.51				
306	6	-0.77	-0.71	-0.77	50	-0.53	-0.43	-0.53	115	-0.56	-0.52	-0.56
	123	-0.46	-0.42	-0.46	128	-0.44	-0.39	-0.44				
307	8	-0.72	-0.59	-0.72	70	-0.44	-0.41	-0.44	117	-0.53	-0.44	-0.53
	123	-0.42	-0.37	-0.42	128	-0.39	-0.36	-0.39				
308	8	-0.59	-0.42	-0.59	70	-0.41	-0.36	-0.41	117	-0.44	-0.31	-0.44
	123	-0.37	-0.30	-0.37	128	-0.36	-0.30	-0.36				
312	7	-0.83	-0.84	-0.84	72	-0.63	-0.60	-0.64	116	-0.60	-0.61	-0.61
	123	-0.58	-0.58	-0.58	128	-0.57	-0.57	-0.57				
313	8	-0.91	-0.89	-0.91	62	-0.66	-0.61	-0.66	117	-0.66	-0.65	-0.66
	123	-0.61	-0.60	-0.61	128	-0.60	-0.59	-0.60				
327	11	-0.58	-0.80	-0.80	56	-0.31	-0.67	-0.67	120	-0.43	-0.58	-0.58
	125	-0.47	-0.51	-0.51	128	-0.48	-0.50	-0.50				
341	7	-0.83	-0.83	-0.83	61	-0.58	-0.59	-0.59	116	-0.61	-0.60	-0.61
	123	-0.56	-0.55	-0.56	128	-0.54	-0.54	-0.54				
342	6	-0.85	-0.82	-0.85	54	-0.60	-0.57	-0.60	115	-0.62	-0.60	-0.62
	123	-0.57	-0.55	-0.57	128	-0.56	-0.54	-0.56				
356	19	-0.76	-0.15	-0.77	51	-0.64	-0.26	-0.64	119	-0.55	-0.39	-0.55
	124	-0.48	-0.42	-0.48	128	-0.46	-0.44	-0.46				
370	7	-0.82	-0.81	-0.82	53	-0.57	-0.58	-0.58	116	-0.60	-0.59	-0.60
	123	-0.55	-0.54	-0.55	128	-0.53	-0.53	-0.54				
371	6	-0.67	-0.63	-0.67	54	-0.48	-0.44	-0.48	115	-0.50	-0.47	-0.50
	123	-0.45	-0.42	-0.45	128	-0.44	-0.41	-0.44				
385	27	-0.75	-0.09	-0.77	59	-0.64	-0.20	-0.64	119	-0.54	-0.34	-0.54
	124	-0.47	-0.37	-0.47	128	-0.46	-0.38	-0.46				
399	7	-0.81	-0.80	-0.81	53	-0.56	-0.57	-0.57	116	-0.59	-0.59	-0.59
	123	-0.54	-0.54	-0.54	128	-0.53	-0.52	-0.53				
400	6	-0.70	-0.76	-0.76	47	-0.49	-0.54	-0.54	115	-0.52	-0.56	-0.56
	123	-0.47	-0.51	-0.51	128	-0.46	-0.49	-0.49				
414	27	-0.76	-0.18	-0.78	59	-0.65	-0.28	-0.65	119	-0.54	-0.42	-0.54
	124	-0.47	-0.45	-0.47	128	-0.46	-0.46	-0.46				
428	7	-0.79	-0.74	-0.79	77	-0.57	-0.57	-0.58	116	-0.57	-0.54	-0.57
	123	-0.54	-0.52	-0.54	128	-0.53	-0.51	-0.53				
429	6	-0.79	-0.75	-0.79	67	-0.57	-0.58	-0.59	115	-0.58	-0.54	-0.58
	123	-0.54	-0.52	-0.54	128	-0.53	-0.52	-0.53				
447	9	-0.76	-0.77	-0.82	50	-0.61	-0.53	-0.64	118	-0.55	-0.56	-0.59
	123	-0.54	-0.53	-0.57	128	-0.54	-0.53	-0.57				
454	6	-0.72	-0.71	-0.73	75	-0.54	-0.52	-0.54	115	-0.52	-0.52	-0.53
	123	-0.50	-0.50	-0.51	128	-0.49	-0.49	-0.50				
461	9	-0.77	-0.76	-0.82	48	-0.53	-0.62	-0.64	118	-0.56	-0.55	-0.59
	123	-0.53	-0.54	-0.57	128	-0.53	-0.54	-0.57				
Elem.		Pt ini -1.27 -0.09	Pt fin	Pt max		Pt ini	Pt fin	Pt max		Pt ini	Pt fin	Pt max

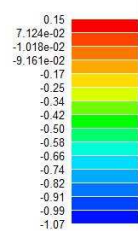
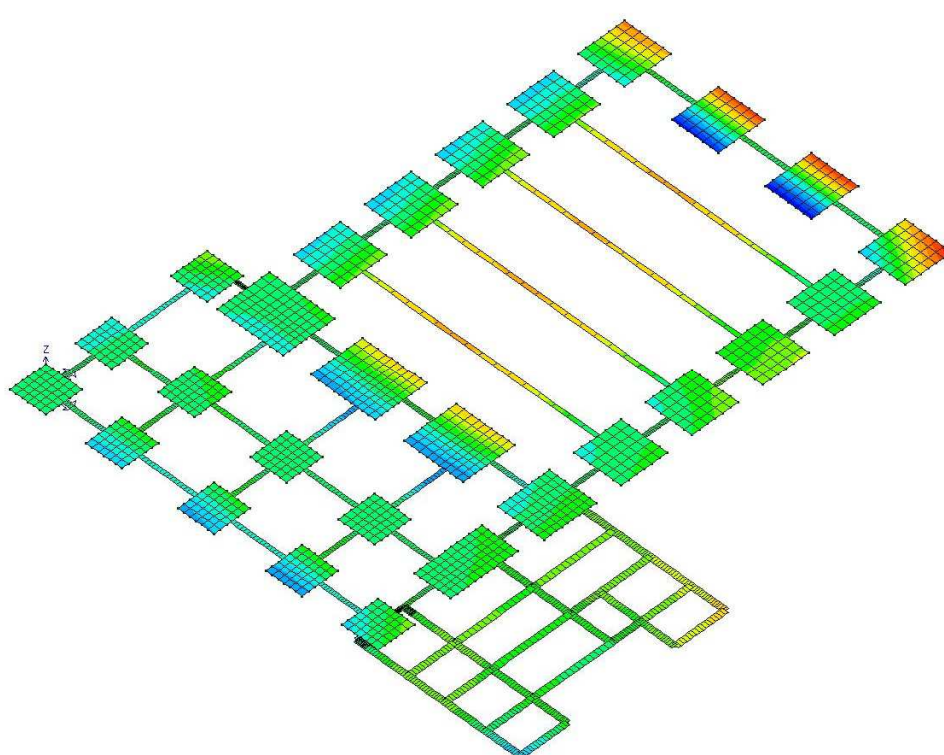




46\_RIS\_PRESSIONI\_006\_SLU6



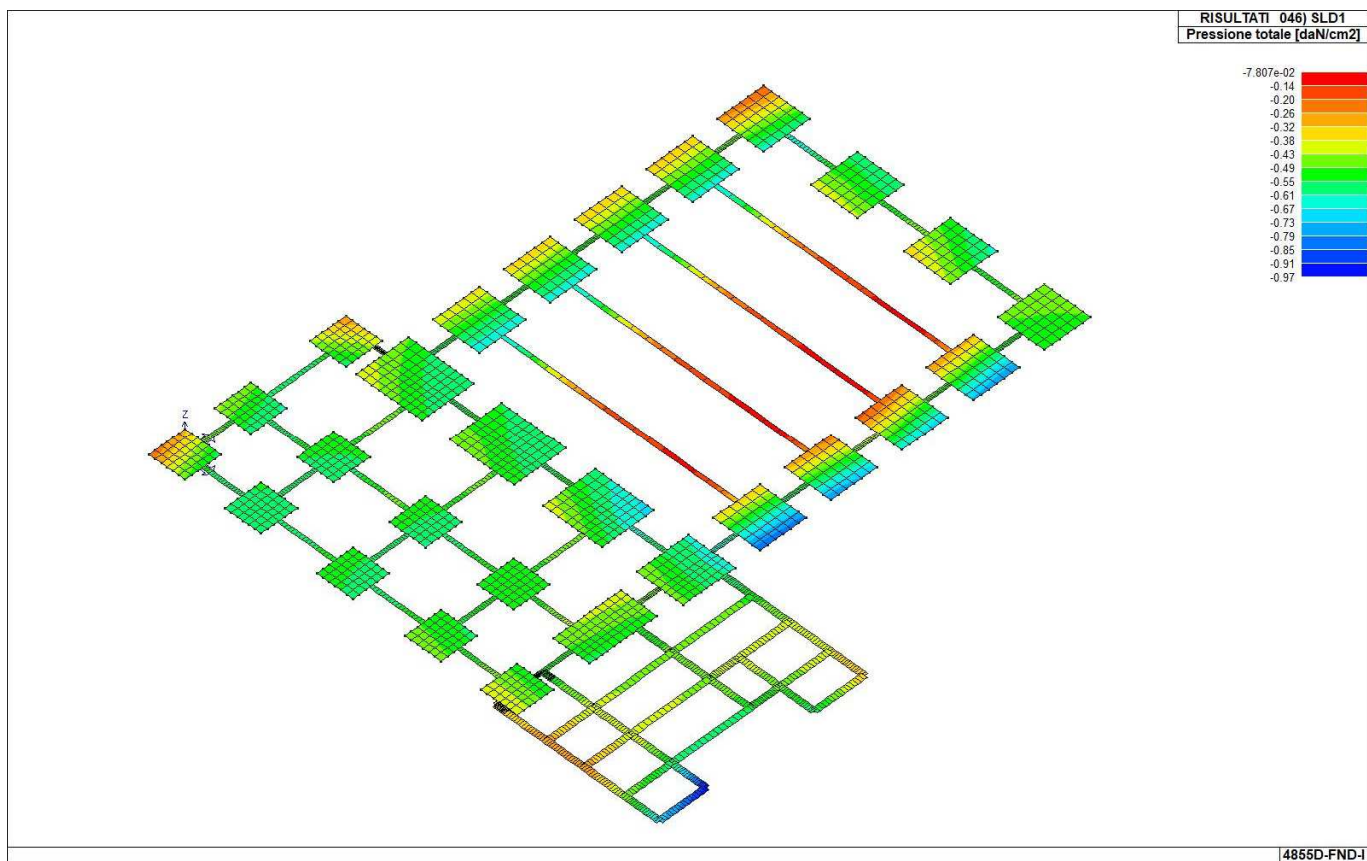
RISULTATI 033) SLV20  
Pressione totale [daN/cm<sup>2</sup>]



4855D-FND-1

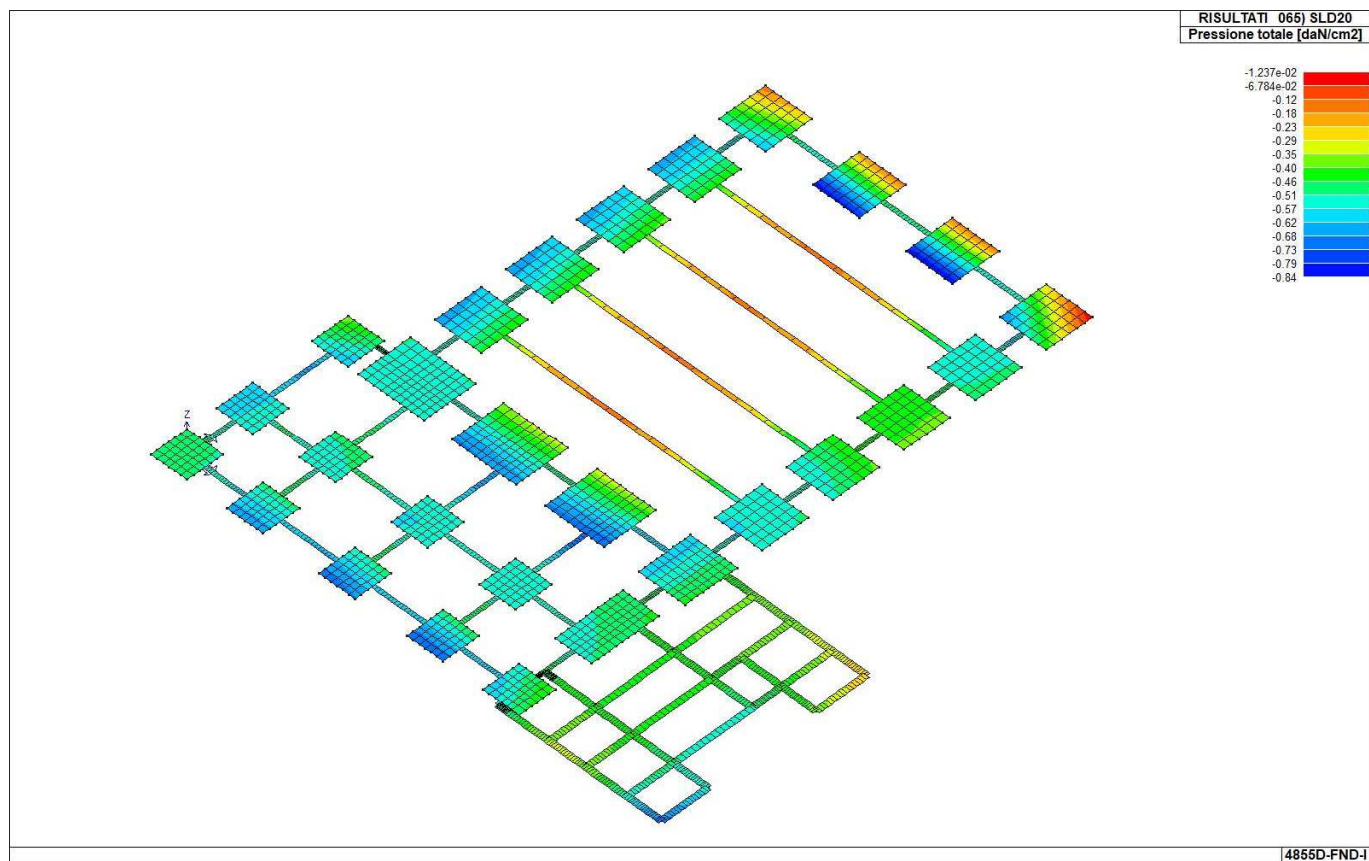
46\_RIS\_PRESSIONI\_033\_SLV20





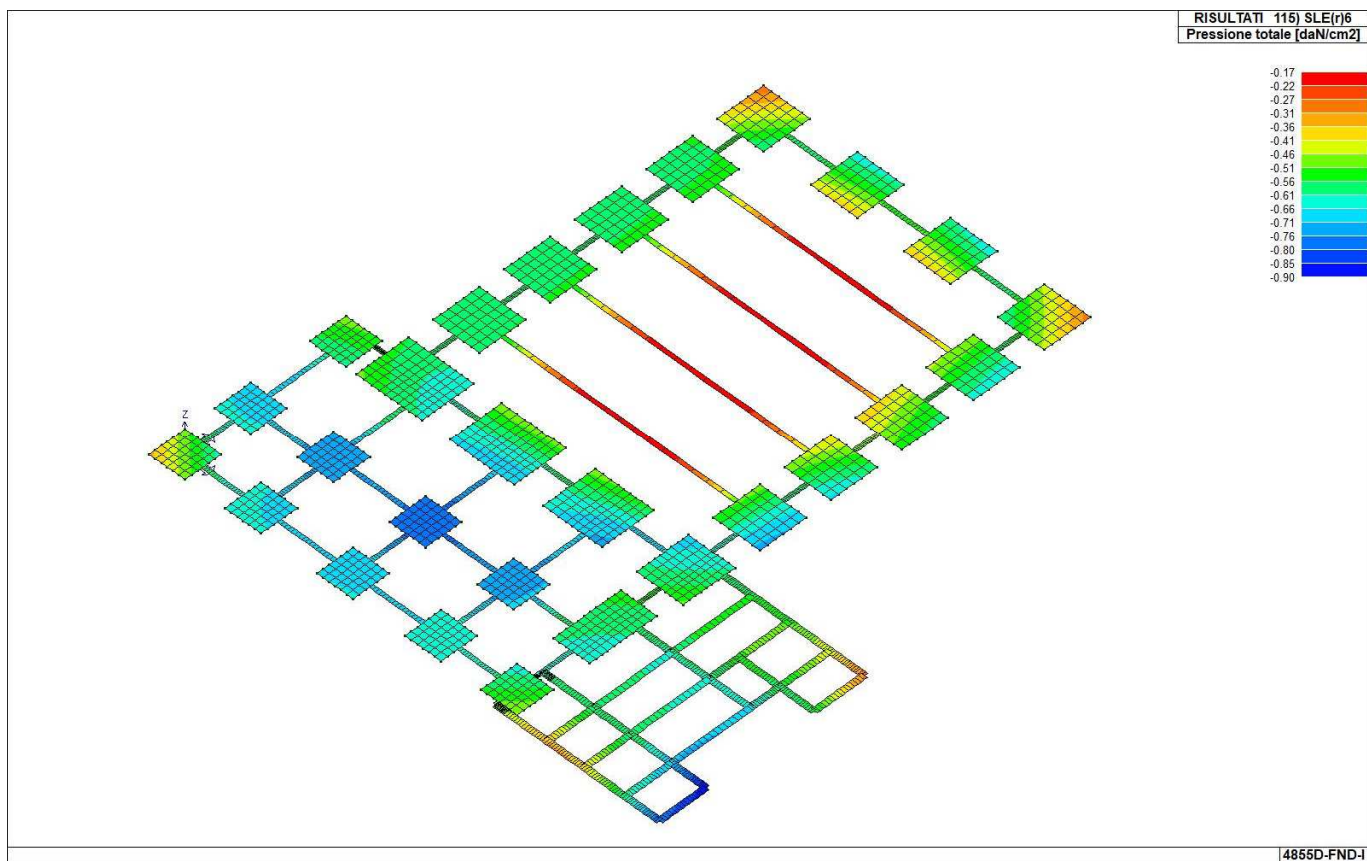
46\_RIS\_PRESSIONI\_046\_SLD1





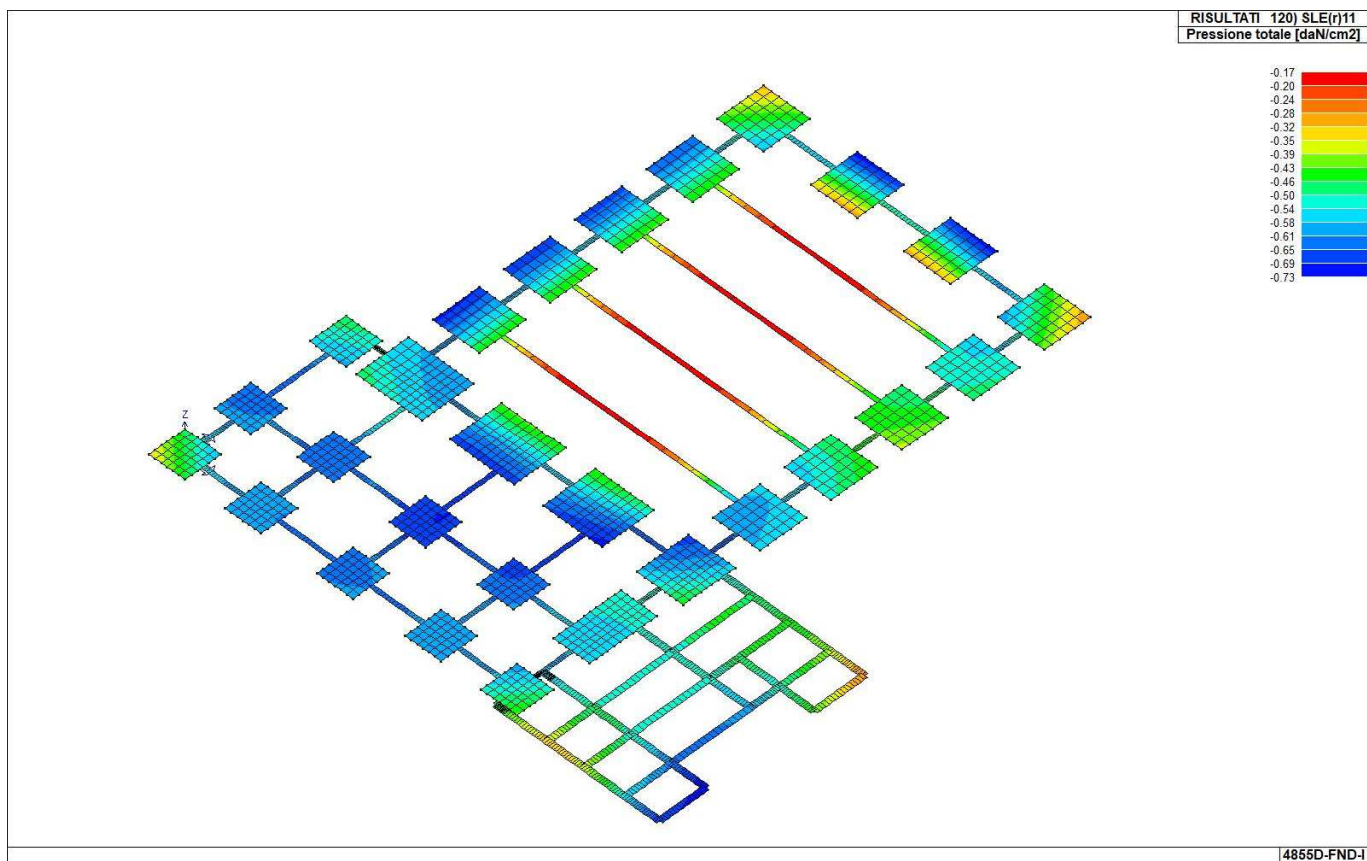
46\_RIS\_PRESSIONI\_065\_SLD20





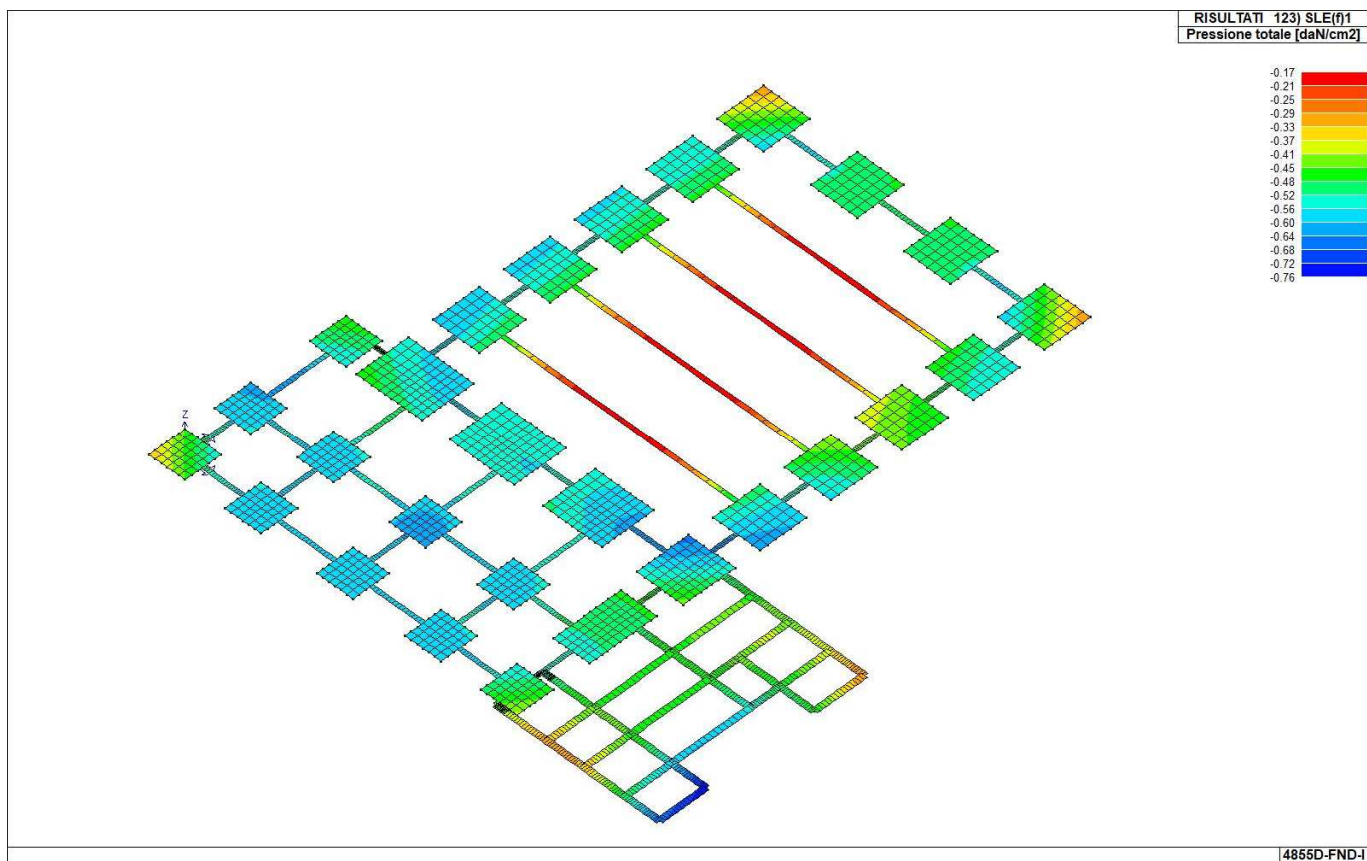
46\_RIS\_PRESSIONI\_115\_SLE(r)6





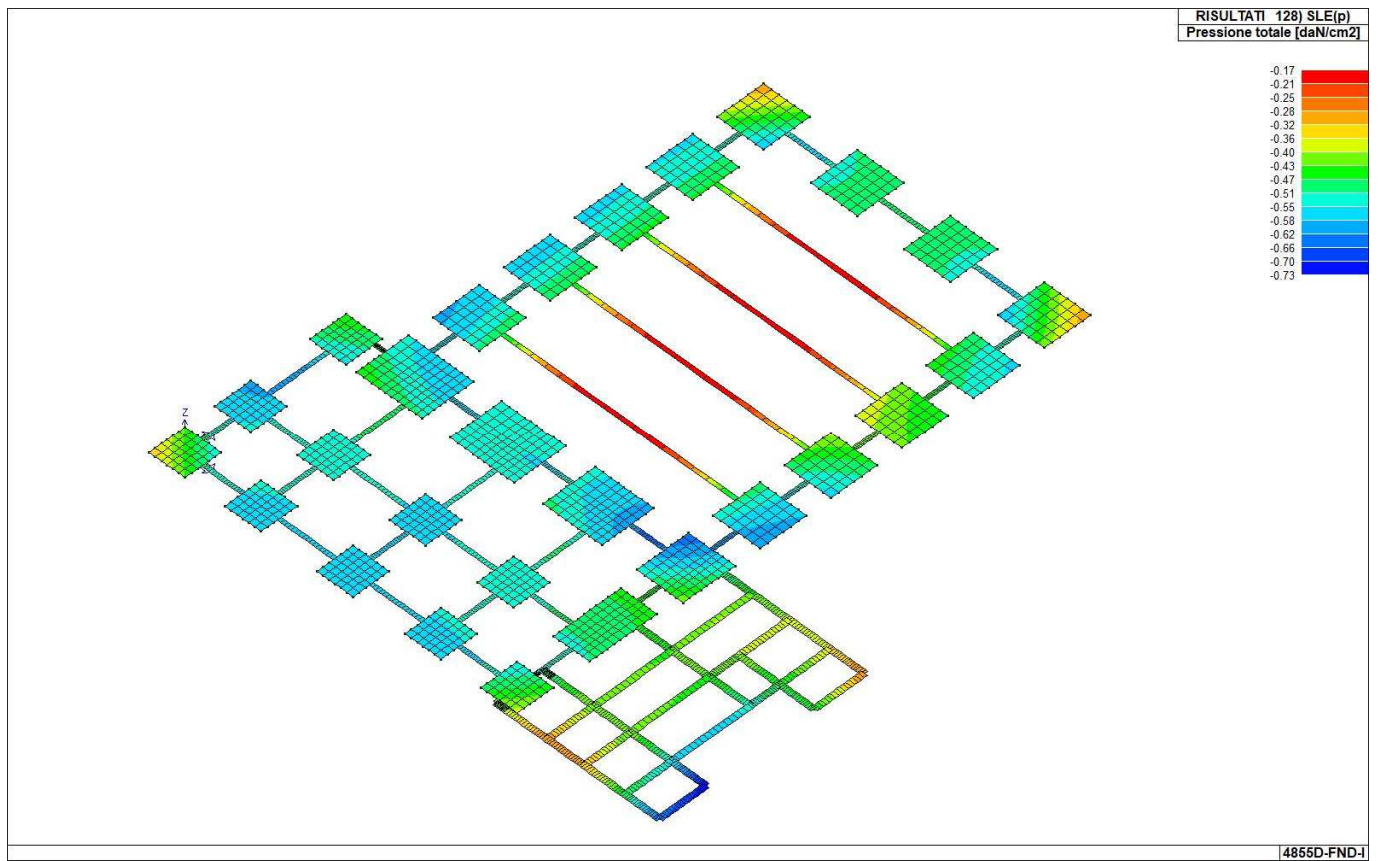
46\_RIS\_PRESSIONI\_120\_SLE(r)11





46\_RIS\_PRESSIONI\_123\_SLE(f)1





46\_RIS\_PRESSIONI\_128\_SLE(p)



# VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

## LEGENDA TABELLA VERIFICHE ELEMENTI TRAVE E/O PILASTRO IN C.A.

In tabella vengono riportati per ogni elemento il numero identificativo ed il codice di verifica con le sigle **Ok** o **NV**.

Nel caso in cui si sia proceduto alla progettazione con il metodo degli stati limite (**S.L.**) vengono riportati: il rapporto  $x/d$ , le verifiche per sollecitazioni proporzionali e la verifica per compressione media con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Nel caso in cui si sia proceduto alla progettazione con le tensioni ammissibili (**T.A.**) vengono riportate le massime tensioni nell'elemento (massima compressione nel calcestruzzo, massima compressione media nel calcestruzzo, massima tensione nell'acciaio, massima tensione tangenziale) con l'indicazione delle combinazioni in cui si sono attinti i rispettivi valori.

Nel caso in cui la struttura abbia comportamento dissipativo e sia prevista la progettazione con il criterio della gerarchia delle resistenze (**G.R.**) vengono riportate le verifiche di sovrarresistenza e del nodo.

Per gli elementi tipo pilastro sono riportati numero e diametro dei ferri di vertice, numero e diametro di ferri disposti lungo i lati L1 (paralleli alla base della sezione) e lungo i lati L2 (paralleli all'altezza della sezione).

Per gli elementi tipo trave sono riportati infine le quantità di armatura inferiore e superiore.

### Schema della distribuzione delle armature longitudinali

	<div data-bbox="1098 1081 1423 1339"> </div> <div data-bbox="1013 1384 1481 1413">Orientamento elementi 2D non verticali</div> <div data-bbox="1209 1447 1302 1854"> </div> <div data-bbox="1013 1883 1428 1910">Orientamento elementi 2D verticali</div>
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## PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

“Sia per CD“A” sia per CD“B” il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall’analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- [...];
- quella trasferita dagli elementi soprastanti nell’ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD“A” e 1,10 in CD“B”;

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO\_SAP mostra le sollecitazioni che derivano dall’analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO\_SAP (per travi e platee) o da PRO\_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

Per i bicchieri dei plinti di fondazione prefabbricati l’incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.

Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

### Simbologia adottata nelle tabelle di verifica

**Per le verifiche agli S.L. dei pilastri è presente una tabella con i simboli di seguito descritti:**

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
Pilas.	numero identificativo dell'elemento D2
Note	Codici identificativi delle sezione (s) e materiale (m) pilastro
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Quota	Quota sezione di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
r. snell.	Rapporto di snellezza $\lambda$ su $\lambda^*$ : valore superiore a 1 per elementi snelli nel caso in cui viene effettuata la verifica con il metodo diretto dello stato di equilibrio
Armat. long.	Numero e diametro (d) dei ferri di armatura longitudinale distinti in ferri di vertice + ferri di lato nelle posizioni nL1 e nL2, come da schemi in figura precedente
V N/M	Verifica a pressoflessione con rapporto $E_d/R_d$ : valore minore o uguale a 1 per verifica positiva
V N sis	Verifica a compressione solo calcestruzzo con rapporto $N_{sd}/N_{rd}$ ed $N_{rd}$ calcolato come al punto 7.4.4.2.1: valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto $V_{ed}/V_{rd}$ : valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro

**Per le verifiche alla G.R. dei pilastri è presente una tabella con i simboli di seguito descritti:**

Pilas.	numero identificativo dell'elemento D2 pilastro
sovr. Xi (Xf)	Verifica sovrarresistenza come da formula 7.4.4 in direzione X, alla base (i) ed alla sommità (f):



	rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del $\gamma_{Rd}$ adottato
sovr. $Y_i$ ( $Y_f$ )	Verifica sovraresistenza come da formula 7.4.4 in direzione Y, alla base (i) ed alla sommità (f): rapporto tra i momenti resistenti dei pilastri e delle travi. La verifica è positiva se maggiore del $\gamma_{Rd}$ adottato
M 2-2 i (f)	Valore del momento resistente 2-2 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
M 3-3 i (f)	Valore del momento resistente 3-3 alla base (i) ed alla sommità (f) con massimo momento in presenza dello sforzo normale di calcolo
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M2-2 (M3-3)	Valore del taglio generato dai momenti resistenti 2-2 (3-3)

**Per le verifiche dei dettagli costruttivi per la duttilità è presente una tabella con i simboli di seguito descritti:**  
**(Non presente nel caso di comportamento strutturale non dissipativo)**

Pilas	Numero identificativo D2 pilastro
$n_i$	Sforzo assiale adimensionalizzato di progetto relativo alla combinazione sismica SLV
alfaomega	Prodotto tra il coefficiente di efficacia del confinamento e il rapporto meccanico dell'armatura trasversale di confinamento all'interno del nodo
V.7.4.29 2-2 (3-3)	Rapporto tra la domanda di staffe minima nel nodo e il rapporto meccanico dell'armatura trasversale di confinamento inserito all'interno del nodo in direzione 2 (3)
V. 7.4.29 Stato	Codici relativi all'esito della verifica 7.4.29
$d_{mu\_fi}$ 2-2 (3- Domanda in duttilità di curvatura in direzione 2 (3)	
$c_{mu\_fi}$ 2-2 (3- Capacità in duttilità di curvatura in direzione 2 (3)	
V. dutt. 2-2 (3-3)	Rapporto tra la domanda in duttilità di curvatura e la capacità in duttilità di curvatura in direzione 2 (3)

**Per le verifiche nodi trave-pilastro di elementi nuovi è presente una tabella con i simboli di seguito descritti:**

Nodo	Numero identificativo del nodo trave-pilastro
Stato	Esito delle verifiche
Pilastro	Numero identificativo D2 pilastro
Diam st	Diametro staffe nodo
Passo	Passo staffe nodo
n. br. 2 (3)	Numero braccia staffe per il taglio in direzione 2 (3)
$B_{j2}$ (3)	Larghezza effettiva del nodo per il taglio in direzione 2 (3)
$H_{jc2}$ (3)	Distanza tra le giaciture più esterne delle armature del pilastro per il taglio in direzione 2 (3)
V. 7.4.8	Rapporto tra il taglio $V_{jbd}$ e il taglio resistente come da formula 7.4.8
V. Ash	Rapporto tra il passo staffe calcolato secondo il capitolo 7.4.4.3.1. e il passo staffe effettivamente inserita nel nodo. Nel caso di valore indica passo staffe utilizzato deriva dalle formule presenti nel paragrafo 7.4.4.3.1. Nel caso di valore minore di 1 il passo staffe utilizzato deriva del pilastro superiore o inferiore al nodo
7.4.10	Check passo staffe valutato in funzione della formula 7.4.10: <ul style="list-style-type: none"> <li>• SI il passo staffe è calcolato utilizzando la formula 7.4.10;</li> <li>• NO il passo staffe è calcolato utilizzando le formule 7.4.11 e/o 7.4.12;</li> <li>• NR calcolo passo staffe non richiesto;</li> </ul>
Rif. comb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il nodo

**Per le verifiche nodi trave-pilastro di elementi esistenti è presente una tabella con i simboli di seguito descritti:**

Pilastro I	Numero identificativo D2 del pilastro inferiore.
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Pilastro S	Numero identificativo D2 del pilastro superiore.
Nodo	Numero identificativo del nodo trave-pilastro.
SL cod	Stato limite di riferimento e relativo esito delle verifiche.
ver. (+)	Coefficiente di sicurezza, calcolato come rapporto D/C, nei riguardi della verifica di resistenza a trazione
V +	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a trazione
V + af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a trazione
N +	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a trazione
ver. (-)	Coefficiente di sicurezza, calcolato come rapporto D/C, nei riguardi della verifica di resistenza a compressione
V -	Azione di Taglio presente al di sopra del nodo nella verifica di resistenza a compressione
V - af s	Sollecitazione di trazione presente nell' armatura longitudinale superiore della trave nella verifica di resistenza a compressione
N -	Azione Assiale presente al di sopra del nodo nella verifica di resistenza a compressione
AreaV2	Area resistente del nodo in direzione 2 ( $A_{j2}=b_{j2}*h_{jc2}$ ).
AreaV3	Area resistente del nodo in direzione 3 ( $A_{j3}=b_{j3}*h_{jc3}$ ).
Rif. comb.	Combinazione (direzione) di riferimento nella verifica di trazione.

**Per le verifiche agli S.L. delle travi è presente una tabella con i simboli di seguito descritti:**

M_T Z P P	Numero della travata (T), quota media (Z), n° pilastrata iniziale (P) e finale (P) (nodo in assenza di pilastrata)
Trave	numero identificativo dell'elemento D2
Note	Codici identificativi sezione (s) e materiale (m) trave; sono inoltre presenti le sigle relative all'esito delle verifiche effettuate appresso descritte
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Af inf.	Area di armatura longitudinale posta all'intradosso
Af sup	Area di armatura longitudinale posta all'estradosso
Af long.	Area complessiva armatura longitudinale
x/d	rapporto tra posizione dell'asse neutro e altezza utile
V N/M	Verifica a pressoflessione rapporto $E_d/R_d$ : valore minore o uguale a 1 per verifica positiva
Staffe	Dati tratto di staffatura oggetto di verifica, nello specifico: numero delle braccia, diametro, passo, lunghezza L tratto
V V/T cls	Verifica a taglio/torsione con rapporto $V_{ed}/V_{rd}$ : valore minore o uguale a 1 per verifica positiva
Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per la trave

**Per le verifiche alla G.R. delle travi è presente una tabella con i simboli di seguito descritti:**

Trave	numero identificativo dell'elemento D2 trave
M negativo i (f)	Valore del momento resistente negativo all' estremità iniziale i (finale f) della trave
M positivo i (f)	Valore del momento resistente positivo all' estremità iniziale i (finale f) della trave
Luce per V	Luce di calcolo per la definizione del taglio (generato dai momenti resistenti)
V M-i M+f	Taglio generato dai momenti resistenti negativo i e positivo f
V M+i M-f	Taglio generato dai momenti resistenti positivo i e negativo f
V <sub>Ed, min</sub>	Valore di taglio minimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
V <sub>Ed, max</sub>	Valore di taglio massimo per verifica condizioni p.to 7.4.4.1.1 armatura diagonale (solo per CD "A")
V <sub>r1</sub>	Valore di taglio come da formula 7.4.1 per armatura diagonale (solo per CD "A")
A <sub>s</sub>	Area singolo ordine armature diagonali come da formula 7.4.2 (solo per CD "A")

**Per le verifiche a taglio ciclico di travi e pilastri esistenti è presente una tabella con i simboli di seguito descritti:**



Trave/Pilastro	Numero identificativo dell'elemento D2 trave/pilastro
V. SLV	Codice relativo all'esito delle verifiche
Nodo	Numero identificativo del nodo di verifica
Ver. VC	Fattore di sicurezza nei confronti della verifica a taglio ciclico (verificato se < 1.00)
Direz.	Direzione di verifica
N fr	Valore di sforzo normale calcolato con fattore di comportamento fragile
V fr	Valore di taglio calcolato con fattore di comportamento fragile
M fr	Valore di momento calcolato con fattore di comportamento fragile
N dutt	Valore di sforzo normale calcolato con fattore di comportamento duttile
LV	Lunghezza di taglio
Mud,pl	Parte plastica della domanda di duttilità
V cic	Resistenza a taglio in condizioni cicliche (C8.7.2.8)
Cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

Per le verifiche alle T.A. di pilastri e travi è presente una tabella con i simboli di seguito descritti:

M_P X Y	Numero della pilastrata (P) e posizione in pianta (X,Y)
M_T Z P P	Numero della travata, quota media pilastrata iniziale e finale (nodo in assenza di pilastrata)
Pilas. o Trave	numero identificativo dell'elemento D2
Note	Viene riportato il codice relativo alla sezione(s) e relativo al materiale(m); nella terza riga viene riportato il valore delle snellezze in direzione 2-2 e 3-3
Stato	Codici di verifica relativi alle tensioni normali e alle tensioni tangenziali
Quota	Ascissa del punto di verifica
%Af	Percentuale di area di armatura rispetto a quella di calcestruzzo
Armat. long.	Numero e diametro dei ferri di armatura longitudinale: ferri di vertice + ferri di lato (come da fig. precedente)
Af inf.	Area di armatura longitudinale posta all'intradosso della trave
Af sup	Area di armatura longitudinale posta all'estradosso della trave
Sc max	Massima tensione di compressione del calcestruzzo
Sc med	Massima tensione media di compressione del calcestruzzo
Sf max	Tensione massima nell'acciaio
staffe	Vengono riportati i dati del tratto di staffatura in cui cade la sezione di verifica; in particolare: numero dei bracci, diametro, passo, lunghezza tratto
Tau max	Tensione massima tangenziale nel cls
Rif. comb	Combinazioni in cui si generano i seguenti valori di tensione: Sc max, Sc med, Sf max, Tau max
AfV	area dell'armatura atta ad assorbire le azioni di taglio
AfT	area dell'armatura atta ad assorbire le azioni di torsione
Scorr. P	Scorrimento dei piegati
Af long.	Area del ferro longitudinale aggiuntivo per assorbire la torsione

Trave	Note	Pos. cm	%Af	Af inf.	Af. sup	Af long.	M_T= 1 x/d	Z=0.0 V N/M	N=1 V V/T cls	N=6 V V/T acc	Staffe Rif. cmb L=cm
1	ok,ok s=2,m=3	0.0 51.5 103.0	0.21 0.21 0.21	12.6 12.6 12.6	12.6 12.6 12.6	0.0 0.0 0.0	0.06 0.06 0.06	0.17 0.12 0.13	0.13 0.12 0.12	0.04 0.05 0.06	4d10/25 L=103 28,39,28 4d10/25 L=103 27,39,7 4d10/25 L=103 7,40,7
2	ok,ok s=2,m=3	0.0 198.8 397.5	0.21 0.21 0.21	12.6 12.6 12.6	12.6 12.6 12.6	0.0 0.0 0.0	0.06 0.06 0.06	0.25 0.25 0.26	0.15 0.13 0.11	0.06 0.03 0.02	4d10/25 L=26 20,35,43 4d10/25 L=242 17,33,43 4d10/25 L=129 33,37,19
3	ok,ok s=2,m=3	0.0 180.0 360.0	0.21 0.21 0.21	12.6 12.6 12.6	12.6 12.6 12.6	0.0 0.0 0.0	0.06 0.06 0.06	0.23 0.29 0.27	0.03 0.03 0.03	0.02 0.02 0.02	4d10/25 L=129 9,9,19 4d10/25 L=102 9,30,14 4d10/25 L=129 6,7,17



4	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.31	0.09	0.02	4d10/25 L=129	6,9,17
	s=2,m=3	198.8	0.21	12.6	12.6	0.0	0.06	0.30	0.11	0.04	4d10/25 L=139	19,9,7
		397.5	0.21	12.6	12.6	0.0	0.06	0.30	0.15	0.09	4d10/25 L=129	19,9,7
5	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.21	0.07	0.04	4d10/25 L=129	7,41,6
	s=2,m=3	167.5	0.21	12.6	12.6	0.0	0.06	0.15	0.08	0.03	4d10/25 L=77	17,30,6
		335.0	0.21	12.6	12.6	0.0	0.06	0.21	0.08	0.02	4d10/25 L=129	14,41,33
<div> <div>M_T= 2</div> <div>Z=0.0</div> <div>N=1</div> <div>N=1465</div> </div>												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
6	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.09	0.50	0.09	2d10/25 L=32	39,28,28
	s=3,m=3	16.2	0.31	12.6	12.6	0.0	0.07	0.08	0.50	0.09	2d10/25 L=32	39,28,28
		32.5	0.31	12.6	12.6	0.0	0.07	0.07	0.50	0.09	2d10/25 L=32	29,28,28
7	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.06	0.11	0.05	2d10/25 L=60	29,27,39
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.05	0.11	0.04	2d10/25 L=60	29,27,39
		60.0	0.31	12.6	12.6	0.0	0.07	0.05	0.11	0.04	2d10/25 L=60	24,28,40
8	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.04	0.04	0.04	2d10/25 L=60	24,43,31
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.04	0.04	0.04	2d10/25 L=60	23,43,31
		60.0	0.31	12.6	12.6	0.0	0.07	0.05	0.04	0.03	2d10/25 L=60	23,43,31
18	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.05	0.05	0.04	2d10/25 L=55	23,19,35
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.07	0.05	0.04	2d10/25 L=55	35,19,35
		55.0	0.31	12.6	12.6	0.0	0.07	0.09	0.04	0.03	2d10/25 L=55	35,19,35
65	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.06	0.07	2d10/25 L=55	30,14,36
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.21	0.05	0.05	2d10/25 L=55	30,14,36
		55.0	0.31	12.6	12.6	0.0	0.07	0.21	0.04	0.04	2d10/25 L=55	30,17,35
71	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.07	2d10/25 L=60	30,30,36
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.26	0.04	0.05	2d10/25 L=60	30,30,36
		60.0	0.31	12.6	12.6	0.0	0.07	0.28	0.04	0.05	2d10/25 L=60	30,33,35
76	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.31	0.10	0.09	2d10/25 L=60	30,20,7
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.40	0.09	0.07	2d10/25 L=60	30,20,7
		60.0	0.31	12.6	12.6	0.0	0.07	0.47	0.08	0.04	2d10/25 L=60	30,20,7
77	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.61	0.48	0.31	2d10/25 L=71	30,17,33
	s=3,m=3	35.5	0.31	12.6	12.6	0.0	0.07	0.52	0.48	0.30	2d10/25 L=71	30,17,33
		71.0	0.31	12.6	12.6	0.0	0.07	0.43	0.47	0.29	2d10/25 L=71	30,17,33
87	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.51	0.22	0.25	2d10/25 L=94	30,23,35
	s=3,m=3	142.5	0.31	12.6	12.6	0.0	0.07	0.17	0.21	0.24	2d10/25 L=97	42,30,36
		285.0	0.31	12.6	12.6	0.0	0.07	0.34	0.23	0.28	2d10/25 L=94	35,30,36
93	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.25	0.04	0.02	2d10/25 L=60	35,26,34
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.22	0.05	0.05	2d10/25 L=60	35,26,34
		60.0	0.31	12.6	12.6	0.0	0.07	0.19	0.06	0.07	2d10/25 L=60	36,26,4
100	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.04	2d10/25 L=60	36,24,7
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.16	0.02	9.49e-03	2d10/25 L=60	35,23,7
		60.0	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.03	2d10/25 L=60	35,23,4
124	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.04	2d10/25 L=55	35,14,7
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.14	0.04	0.01	2d10/25 L=55	35,14,17
		55.0	0.31	12.6	12.6	0.0	0.07	0.15	0.04	0.03	2d10/25 L=55	36,17,2
158	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.10	0.05	0.05	2d10/25 L=60	33,17,33
	s=3,m=3	30.2	0.31	12.6	12.6	0.0	0.07	0.08	0.04	0.03	2d10/25 L=60	30,14,33
		60.4	0.31	12.6	12.6	0.0	0.07	0.06	0.05	0.05	2d10/25 L=60	30,14,30
164	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.07	0.04	0.06	2d10/25 L=60	30,17,33
	s=3,m=3	30.2	0.31	12.6	12.6	0.0	0.07	0.05	0.03	0.05	2d10/25 L=60	30,14,30
		60.4	0.31	12.6	12.6	0.0	0.07	0.03	0.05	0.07	2d10/25 L=60	35,14,30
168	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.03	0.05	0.09	2d10/25 L=60	35,33,33
	s=3,m=3	30.2	0.31	12.6	12.6	0.0	0.07	0.03	0.04	0.07	2d10/25 L=60	9,33,33
		60.4	0.31	12.6	12.6	0.0	0.07	0.03	0.05	0.08	2d10/25 L=60	9,30,30
169	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.03	0.04	0.07	2d10/25 L=60	9,41,33
	s=3,m=3	30.2	0.31	12.6	12.6	0.0	0.07	0.05	0.03	0.05	2d10/25 L=60	33,41,33
		60.4	0.31	12.6	12.6	0.0	0.07	0.07	0.03	0.06	2d10/25 L=60	33,36,30
171	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.06	0.04	0.05	2d10/25 L=60	33,21,33
	s=3,m=3	30.2	0.31	12.6	12.6	0.0	0.07	0.08	0.04	0.03	2d10/25 L=60	33,24,30
		60.4	0.31	12.6	12.6	0.0	0.07	0.10	0.05	0.05	2d10/25 L=60	33,24,30
180	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.04	0.03	2d10/25 L=55	36,23,9
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.04	2d10/25 L=55	35,23,9
		55.0	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.05	2d10/25 L=55	35,23,9
182	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.03	0.05	2d10/25 L=60	35,22,8
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.20	0.04	0.06	2d10/25 L=60	35,8,8
		60.0	0.31	12.6	12.6	0.0	0.07	0.22	0.04	0.07	2d10/25 L=60	35,8,8
187	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.25	0.07	0.10	2d10/25 L=60	35,30,30
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.29	0.07	0.10	2d10/25 L=60	35,30,30
		60.0	0.31	12.6	12.6	0.0	0.07	0.33	0.08	0.11	2d10/25 L=60	35,30,30
190	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.50	0.27	0.35	2d10/25 L=207	35,36,36
	s=3,m=3	103.5	0.31	12.6	12.6	0.0	0.07	0.24	0.27	0.34	2d10/25 L=207	8,36,36
		207.0	0.31	12.6	12.6	0.0	0.07	0.57	0.26	0.35	2d10/25 L=207	36,36,35
198	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.45	0.06	0.07	2d10/25 L=60	36,8,8
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.38	0.06	0.07	2d10/25 L=60	36,8,23
		60.0	0.31	12.6	12.6	0.0	0.07	0.32	0.06	0.06	2d10/25 L=60	36,8,23
203	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.28	0.05	0.08	2d10/25 L=60	36,8,8
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.25	0.04	0.07	2d10/25 L=60	36,8,8
		60.0	0.31	12.6	12.6	0.0	0.07	0.22	0.04	0.06	2d10/25 L=60	36,36,8



217	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.06	0.07	2d10/25 L=55	36,26,8
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.21	0.06	0.06	2d10/25 L=55	35,26,8
		55.0	0.31	12.6	12.6	0.0	0.07	0.22	0.06	0.05	2d10/25 L=55	35,26,8
235	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.06	0.04	0.03	2d10/25 L=52	14,29,33
	s=3,m=3	26.0	0.31	12.6	12.6	0.0	0.07	0.05	0.04	0.03	2d10/25 L=52	19,26,33
		52.0	0.31	12.6	12.6	0.0	0.07	0.05	0.05	0.02	2d10/25 L=52	19,26,33
248	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.05	0.05	0.04	2d10/25 L=52	19,23,35
	s=3,m=3	26.0	0.31	12.6	12.6	0.0	0.07	0.07	0.05	0.03	2d10/25 L=52	39,23,35
		52.0	0.31	12.6	12.6	0.0	0.07	0.08	0.05	0.03	2d10/25 L=52	39,23,35
290	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.21	0.10	0.09	2d10/25 L=59	30,29,3
	s=3,m=3	29.8	0.31	12.6	12.6	0.0	0.07	0.21	0.08	0.04	2d10/25 L=59	30,29,3
		59.5	0.31	12.6	12.6	0.0	0.07	0.21	0.08	0.03	2d10/25 L=59	30,26,6
299	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.09	0.06	2d10/25 L=59	30,26,23
	s=3,m=3	29.8	0.31	12.6	12.6	0.0	0.07	0.23	0.08	0.02	2d10/25 L=59	30,26,23
		59.5	0.31	12.6	12.6	0.0	0.07	0.22	0.08	0.05	2d10/25 L=59	30,29,24
309	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.25	0.06	0.07	2d10/25 L=53	30,16,16
	s=3,m=3	26.5	0.31	12.6	12.6	0.0	0.07	0.27	0.05	0.04	2d10/25 L=53	30,24,16
		53.0	0.31	12.6	12.6	0.0	0.07	0.29	0.05	0.05	2d10/25 L=53	36,10,15
311	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.33	0.11	0.10	2d10/25 L=53	36,2,3
	s=3,m=3	26.5	0.31	12.6	12.6	0.0	0.07	0.39	0.08	0.05	2d10/25 L=53	36,2,3
		53.0	0.31	12.6	12.6	0.0	0.07	0.46	0.07	0.02	2d10/25 L=53	36,14,33
313	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.54	0.33	0.30	2d10/25 L=94	32,23,33
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.20	0.37	0.34	2d10/25 L=54	4,14,36
		242.0	0.31	12.6	12.6	0.0	0.07	0.36	0.41	0.42	2d10/25 L=94	33,14,36
315	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.07	0.03	2d10/25 L=75	36,27,35
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.08	0.06	2d10/25 L=75	36,14,36
		75.0	0.31	12.6	12.6	0.0	0.07	0.20	0.10	0.12	2d10/25 L=75	36,2,4
317	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.07	2d10/25 L=75	36,14,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.01	2d10/25 L=75	36,14,30
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.06	2d10/25 L=75	36,19,3
322	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.07	0.06	2d10/25 L=75	36,14,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.05	0.02	2d10/25 L=75	36,17,17
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.07	0.08	2d10/25 L=75	36,17,3
335	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.07	0.08	2d10/25 L=75	37,20,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.02	2d10/25 L=75	37,20,20
		75.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.06	2d10/25 L=75	37,19,6
338	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.04	0.06	2d10/25 L=75	37,20,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.02	0.01	2d10/25 L=75	37,19,39
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.07	2d10/25 L=75	37,19,6
340	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.06	0.10	2d10/25 L=75	37,2,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.19	0.03	0.04	2d10/25 L=75	37,2,33
		75.0	0.31	12.6	12.6	0.0	0.07	0.22	0.02	0.03	2d10/25 L=75	31,14,30
342	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.33	0.20	0.33	2d10/25 L=94	35,37,37
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.13	0.15	0.25	2d10/25 L=54	33,37,37
		242.0	0.31	12.6	12.6	0.0	0.07	0.47	0.16	0.26	2d10/25 L=94	33,32,32
344	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.30	0.02	0.03	2d10/25 L=75	33,19,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.25	0.03	0.04	2d10/25 L=75	33,20,3
		75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.06	0.10	2d10/25 L=75	35,3,3
346	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.04	0.06	2d10/25 L=75	35,14,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.02	0.02	2d10/25 L=75	35,17,33
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.04	0.07	2d10/25 L=75	35,17,3
351	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.04	2d10/25 L=75	35,14,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.03	2d10/25 L=75	35,17,17
		75.0	0.31	12.6	12.6	0.0	0.07	0.14	0.07	0.09	2d10/25 L=75	35,17,3
364	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.07	0.08	2d10/25 L=75	34,24,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.02	2d10/25 L=75	34,24,24
		75.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.05	2d10/25 L=75	34,23,6
367	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.04	2d10/25 L=75	34,24,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.03	2d10/25 L=75	34,23,35
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.09	2d10/25 L=75	33,10,6
369	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.02	0.02	2d10/25 L=75	33,25,37
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.22	0.03	0.05	2d10/25 L=75	35,10,6
		75.0	0.31	12.6	12.6	0.0	0.07	0.28	0.06	0.11	2d10/25 L=75	35,10,6
371	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.40	0.18	0.31	2d10/25 L=94	35,32,30
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.18	0.18	0.30	2d10/25 L=54	6,36,36
		242.0	0.31	12.6	12.6	0.0	0.07	0.51	0.17	0.29	2d10/25 L=94	34,36,36
373	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.37	0.03	0.06	2d10/25 L=75	34,7,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.31	0.03	0.05	2d10/25 L=75	32,23,6
		75.0	0.31	12.6	12.6	0.0	0.07	0.24	0.03	0.04	2d10/25 L=75	32,23,6
375	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.22	0.04	0.06	2d10/25 L=75	32,22,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.19	0.04	0.05	2d10/25 L=75	32,22,6
		75.0	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.04	2d10/25 L=75	32,22,6
380	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.06	0.05	2d10/25 L=75	32,22,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.06	0.04	2d10/25 L=75	32,22,6
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.03	2d10/25 L=75	35,22,6
393	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.02	2d10/25 L=75	33,23,15
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.03	2d10/25 L=75	33,23,15



396	ok,ok	75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.06	0.04	2d10/25 L=75	33,23,6
	s=3,m=3	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.02	2d10/25 L=75	33,15,31
		37.5	0.31	12.6	12.6	0.0	0.07	0.19	0.03	0.03	2d10/25 L=75	33,15,31
		75.0	0.31	12.6	12.6	0.0	0.07	0.21	0.03	0.04	2d10/25 L=75	33,15,31
398	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.03	0.04	2d10/25 L=75	33,17,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.02	0.03	2d10/25 L=75	35,17,3
		75.0	0.31	12.6	12.6	0.0	0.07	0.33	0.02	0.02	2d10/25 L=75	35,17,3
400	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.46	0.22	0.37	2d10/25 L=94	35,33,37
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.08	0.18	0.29	2d10/25 L=54	32,33,37
		242.0	0.31	12.6	12.6	0.0	0.07	0.37	0.18	0.31	2d10/25 L=94	33,36,32
402	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.26	0.03	0.04	2d10/25 L=75	33,23,31
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.22	0.02	0.04	2d10/25 L=75	33,24,32
		75.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.08	2d10/25 L=75	32,4,3
404	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.06	2d10/25 L=75	35,14,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.02	9.26e-03	2d10/25 L=75	35,14,30
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.04	0.06	2d10/25 L=75	35,17,3
409	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.06	0.04	2d10/25 L=75	35,23,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.03	2d10/25 L=75	35,24,16
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.07	0.08	2d10/25 L=75	32,24,3
422	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.19	0.07	0.08	2d10/25 L=75	33,16,3
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.03	2d10/25 L=75	34,24,16
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.06	0.04	2d10/25 L=75	34,23,15
425	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.06	2d10/25 L=75	34,2,5
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.20	0.03	0.01	2d10/25 L=75	34,22,17
		75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.05	0.05	2d10/25 L=75	32,22,6
427	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.21	0.11	0.14	2d10/25 L=75	32,35,33
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.26	0.09	0.10	2d10/25 L=75	32,35,33
		75.0	0.31	12.6	12.6	0.0	0.07	0.28	0.07	0.07	2d10/25 L=75	32,35,33
429	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.42	0.45	0.51	2d10/25 L=94	32,35,31
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.40	0.42	0.44	2d10/25 L=54	33,35,31
		242.0	0.31	12.6	12.6	0.0	0.07	0.98	0.39	0.48	2d10/25 L=94	33,30,32
431	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.69	0.05	0.04	2d10/25 L=75	33,35,30
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.57	0.07	0.07	2d10/25 L=75	35,10,33
		75.0	0.31	12.6	12.6	0.0	0.07	0.43	0.10	0.11	2d10/25 L=75	35,10,5
433	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.39	0.05	0.08	2d10/25 L=75	35,36,30
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.36	0.04	0.06	2d10/25 L=75	35,33,33
		75.0	0.31	12.6	12.6	0.0	0.07	0.32	0.06	0.10	2d10/25 L=75	35,33,33
442	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.28	0.05	0.06	2d10/25 L=75	31,22,30
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.06	0.07	2d10/25 L=75	31,25,33
		75.0	0.31	12.6	12.6	0.0	0.07	0.26	0.08	0.11	2d10/25 L=75	31,25,33
<b>M_T= 13      Z=0.0      N=115      N=143</b>												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
20	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.19	0.07	0.07	2d10/25 L=55	19,42,22
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.20	0.06	0.05	2d10/25 L=55	19,42,22
		55.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.05	2d10/25 L=55	19,45,25
21	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.22	0.05	0.08	2d10/25 L=60	19,22,14
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.26	0.04	0.06	2d10/25 L=60	19,22,14
		60.0	0.31	12.6	12.6	0.0	0.07	0.28	0.05	0.06	2d10/25 L=60	19,20,17
22	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.31	0.06	0.08	2d10/25 L=60	19,22,22
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.40	0.05	0.06	2d10/25 L=60	19,22,22
		60.0	0.31	12.6	12.6	0.0	0.07	0.48	0.03	0.04	2d10/25 L=60	19,22,22
23	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.64	0.18	0.25	2d10/25 L=129	19,17,20
	s=3,m=3	195.0	0.31	12.6	12.6	0.0	0.07	0.21	0.16	0.21	2d10/25 L=132	14,19,19
		390.0	0.31	12.6	12.6	0.0	0.07	0.32	0.18	0.25	2d10/25 L=129	19,19,19
24	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.03	0.01	2d10/25 L=60	19,37,29
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.21	0.03	0.03	2d10/25 L=60	19,5,26
		60.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.06	2d10/25 L=60	19,5,4
25	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.04	2d10/25 L=60	19,39,19
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.14	0.03	0.02	2d10/25 L=60	19,39,19
		60.0	0.31	12.6	12.6	0.0	0.07	0.13	0.03	0.03	2d10/25 L=60	14,40,20
26	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.04	2d10/25 L=55	14,39,39
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.02	2d10/25 L=55	14,39,39
		55.0	0.31	12.6	12.6	0.0	0.07	0.13	0.06	0.04	2d10/25 L=55	14,40,40
27	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.03	2d10/25 L=55	20,42,34
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.02	2d10/25 L=55	20,45,37
		55.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.05	2d10/25 L=55	20,45,9
28	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.02	0.03	2d10/25 L=60	20,39,14
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.14	0.03	0.03	2d10/25 L=60	20,40,17
		60.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.05	2d10/25 L=60	20,40,7
29	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.03	0.05	2d10/25 L=60	20,26,22
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.21	0.02	0.03	2d10/25 L=60	20,26,22
		60.0	0.31	12.6	12.6	0.0	0.07	0.25	0.02	0.03	2d10/25 L=60	20,29,25
30	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.34	0.11	0.17	2d10/25 L=129	20,20,20
	s=3,m=3	272.5	0.31	12.6	12.6	0.0	0.07	0.10	0.07	0.10	2d10/25 L=287	20,19,19
		545.0	0.31	12.6	12.6	0.0	0.07	0.38	0.10	0.17	2d10/25 L=129	19,19,14
31	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.29	0.03	0.05	2d10/25 L=60	19,23,19
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.24	0.02	0.04	2d10/25 L=60	19,24,20



		60.0	0.31	12.6	12.6	0.0	0.07	0.19	0.03	0.06	2d10/25 L=60 19,24,20
32	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.04	0.06	2d10/25 L=60 19,39,19
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.04	2d10/25 L=60 19,39,19
		60.0	0.31	12.6	12.6	0.0	0.07	0.13	0.03	0.04	2d10/25 L=60 14,40,20
33	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.05	2d10/25 L=55 14,31,9
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.12	0.04	0.03	2d10/25 L=55 14,31,19
		55.0	0.31	12.6	12.6	0.0	0.07	0.12	0.04	0.03	2d10/25 L=55 14,32,20
34	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.04	0.03	2d10/25 L=55 20,34,14
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.13	0.04	0.03	2d10/25 L=55 20,37,17
		55.0	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.05	2d10/25 L=55 20,37,9
35	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.04	2d10/25 L=60 20,19,14
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.04	2d10/25 L=60 20,20,17
		60.0	0.31	12.6	12.6	0.0	0.07	0.19	0.04	0.06	2d10/25 L=60 20,20,17
36	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.22	0.04	0.06	2d10/25 L=60 20,19,14
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.26	0.03	0.04	2d10/25 L=60 20,19,14
		60.0	0.31	12.6	12.6	0.0	0.07	0.32	0.03	0.04	2d10/25 L=60 20,20,17
37	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.43	0.14	0.18	2d10/25 L=507 20,20,20
	s=3,m=3	253.5	0.31	12.6	12.6	0.0	0.07	0.07	0.10	0.11	2d10/25 L=507 2,20,20
		507.0	0.31	12.6	12.6	0.0	0.07	0.34	0.14	0.18	2d10/25 L=507 19,19,19
38	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.27	0.03	0.03	2d10/25 L=60 19,19,19
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.22	0.02	0.02	2d10/25 L=60 19,20,20
		60.0	0.31	12.6	12.6	0.0	0.07	0.19	0.03	0.05	2d10/25 L=60 19,20,20
39	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.06	2d10/25 L=60 19,14,9
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.14	0.02	0.03	2d10/25 L=60 19,14,19
		60.0	0.31	12.6	12.6	0.0	0.07	0.13	0.02	0.03	2d10/25 L=60 19,17,20
40	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.05	2d10/25 L=55 19,35,9
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.02	2d10/25 L=55 14,35,9
		55.0	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.03	2d10/25 L=55 14,36,44
41	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.03	2d10/25 L=55 20,30,30
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.02	2d10/25 L=55 20,33,33
		55.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.04	2d10/25 L=55 20,33,9
42	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.03	0.03	2d10/25 L=60 20,30,14
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.03	2d10/25 L=60 20,33,17
		60.0	0.31	12.6	12.6	0.0	0.07	0.17	0.04	0.05	2d10/25 L=60 20,33,7
43	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.19	0.04	0.06	2d10/25 L=60 20,2,4
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.22	0.03	0.03	2d10/25 L=60 20,35,4
		60.0	0.31	12.6	12.6	0.0	0.07	0.25	0.03	0.02	2d10/25 L=60 20,33,9
44	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.35	0.18	0.24	2d10/25 L=129 20,17,20
	s=3,m=3	195.0	0.31	12.6	12.6	0.0	0.07	0.17	0.15	0.19	2d10/25 L=132 20,17,20
		390.0	0.31	12.6	12.6	0.0	0.07	0.58	0.15	0.21	2d10/25 L=129 20,19,19
45	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.42	0.02	0.03	2d10/25 L=60 20,17,20
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.35	0.03	0.05	2d10/25 L=60 20,3,20
		60.0	0.31	12.6	12.6	0.0	0.07	0.27	0.05	0.07	2d10/25 L=60 20,3,20
46	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.03	0.05	2d10/25 L=60 20,14,19
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.23	0.03	0.04	2d10/25 L=60 20,17,20
		60.0	0.31	12.6	12.6	0.0	0.07	0.20	0.04	0.06	2d10/25 L=60 20,17,20
47	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.04	0.03	2d10/25 L=55 20,35,19
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.18	0.04	0.04	2d10/25 L=55 20,36,20
		55.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.06	2d10/25 L=55 17,36,20
<b>M_T= 14      Z=0.0      N=3      N=881</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
48	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.08	0.04	0.02	4d10/25 L=94 37,36,9
	s=2,m=3	226.8	0.21	12.6	12.6	0.0	0.06	0.10	0.05	0.05	4d10/25 L=265 8,35,9
		453.5	0.21	12.6	12.6	0.0	0.06	0.49	0.09	0.10	4d10/25 L=94 9,9,9
101	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.45	0.09	0.11	4d10/25 L=94 8,8,8
	s=2,m=3	381.0	0.21	12.6	12.6	0.0	0.06	0.05	0.02	0.01	4d10/25 L=574 9,24,31
		762.0	0.21	12.6	12.6	0.0	0.06	0.47	0.09	0.11	4d10/25 L=94 9,7,9
193	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.41	0.10	0.12	4d10/25 L=99 8,8,8
	s=2,m=3	390.0	0.21	12.6	12.6	0.0	0.06	0.26	0.03	0.02	4d10/25 L=582 8,6,8
		780.0	0.21	12.6	12.6	0.0	0.06	0.14	0.06	0.06	4d10/25 L=99 32,6,6
<b>M_T= 15      Z=0.0      N=4      N=882</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
49	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.07	0.05	6.45e-03	4d10/25 L=94 33,9,6
	s=2,m=3	226.8	0.21	12.6	12.6	0.0	0.06	0.08	0.08	0.05	4d10/25 L=265 8,9,9
		453.5	0.21	12.6	12.6	0.0	0.06	0.46	0.12	0.10	4d10/25 L=94 7,9,7
102	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.44	0.10	0.11	4d10/25 L=94 8,7,7
	s=2,m=3	381.0	0.21	12.6	12.6	0.0	0.06	0.06	0.02	0.01	4d10/25 L=574 7,7,35
		762.0	0.21	12.6	12.6	0.0	0.06	0.50	0.10	0.12	4d10/25 L=94 9,7,9
188	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.44	0.11	0.13	4d10/25 L=99 6,8,6
	s=2,m=3	145.0	0.21	12.6	12.6	0.0	0.06	0.07	0.08	0.09	4d10/25 L=92 7,8,6
		290.0	0.21	12.6	12.6	0.0	0.06	0.18	0.05	0.05	4d10/25 L=99 6,8,6
219	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.20	0.08	0.04	4d10/25 L=490 6,7,7
	s=2,m=3	245.0	0.21	12.6	12.6	0.0	0.06	0.27	0.06	0.02	4d10/25 L=490 8,26,23
		490.0	0.21	12.6	12.6	0.0	0.06	0.10	0.10	0.06	4d10/25 L=490 36,6,6
<b>M_T= 16      Z=0.0      N=5      N=883</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
50	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.11	0.10	0.04	4d10/25 L=94 33,33,6



	s=2,m=3	226.8	0.21	12.6	12.6	0.0	0.06	0.13	0.09	0.03	4d10/25 L=265	33,33,9
		453.5	0.21	12.6	12.6	0.0	0.06	0.31	0.13	0.11	4d10/25 L=94	8,9,9
103	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.38	0.08	0.06	4d10/25 L=94	30,8,8
	s=2,m=3	381.0	0.21	12.6	12.6	0.0	0.06	0.09	0.06	0.02	4d10/25 L=574	4,30,30
		762.0	0.21	12.6	12.6	0.0	0.06	0.24	0.07	0.04	4d10/25 L=94	9,6,9
189	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.24	0.11	0.05	4d10/25 L=99	6,29,6
	s=2,m=3	145.0	0.21	12.6	12.6	0.0	0.06	0.10	0.11	0.04	4d10/25 L=92	9,29,6
		290.0	0.21	12.6	12.6	0.0	0.06	0.06	0.12	0.04	4d10/25 L=99	39,29,39
220	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.16	0.10	0.04	4d10/25 L=490	43,23,43
	s=2,m=3	245.0	0.21	12.6	12.6	0.0	0.06	0.04	0.09	0.02	4d10/25 L=490	17,26,35
		490.0	0.21	12.6	12.6	0.0	0.06	0.14	0.10	0.04	4d10/25 L=490	36,26,3
M_T= 17 Z=0.0 N=6 N=257												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
51	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.08	0.11	0.04	4d10/25 L=94	35,38,6
	s=2,m=3	226.8	0.21	12.6	12.6	0.0	0.06	0.14	0.10	0.01	4d10/25 L=265	6,38,35
		453.5	0.21	12.6	12.6	0.0	0.06	0.06	0.13	0.06	4d10/25 L=94	23,18,6
M_T= 18 Z=0.0 N=115 N=782												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
53	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.06	0.08	2d10/25 L=55	40,22,42
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.25	0.05	0.06	2d10/25 L=55	40,22,42
		55.0	0.31	12.6	12.6	0.0	0.07	0.26	0.05	0.05	2d10/25 L=55	40,39,45
67	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.28	0.05	0.08	2d10/25 L=60	40,40,40
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.32	0.04	0.06	2d10/25 L=60	40,39,40
		60.0	0.31	12.6	12.6	0.0	0.07	0.35	0.05	0.07	2d10/25 L=60	40,39,39
72	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.39	0.06	0.07	2d10/25 L=60	40,4,42
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.49	0.04	0.05	2d10/25 L=60	40,32,42
		60.0	0.31	12.6	12.6	0.0	0.07	0.59	0.04	0.04	2d10/25 L=60	40,45,45
83	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.77	0.25	0.33	2d10/25 L=99	40,45,39
	s=3,m=3	145.0	0.31	12.6	12.6	0.0	0.07	0.29	0.23	0.30	2d10/25 L=92	40,40,40
		290.0	0.31	12.6	12.6	0.0	0.07	0.29	0.25	0.33	2d10/25 L=99	39,40,40
88	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.21	0.05	0.06	2d10/25 L=60	39,45,39
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.19	0.05	0.07	2d10/25 L=60	39,40,40
		60.0	0.31	12.6	12.6	0.0	0.07	0.17	0.07	0.09	2d10/25 L=60	42,40,40
89	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.04	2d10/25 L=60	45,25,9
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.15	0.02	8.39e-03	2d10/25 L=60	45,25,9
		60.0	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.03	2d10/25 L=60	45,28,4
95	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.05	0.03	2d10/25 L=55	45,25,9
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.15	0.04	0.01	2d10/25 L=55	45,25,25
		55.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.03	2d10/25 L=55	45,22,22
112	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.03	2d10/25 L=55	39,22,42
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.02	2d10/25 L=55	40,25,45
		55.0	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.04	2d10/25 L=55	39,25,45
147	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.04	2d10/25 L=60	39,40,42
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.18	0.03	0.04	2d10/25 L=60	39,29,45
		60.0	0.31	12.6	12.6	0.0	0.07	0.21	0.04	0.06	2d10/25 L=60	39,29,45
160	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.04	0.06	2d10/25 L=60	39,40,42
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.28	0.03	0.04	2d10/25 L=60	39,40,42
		60.0	0.31	12.6	12.6	0.0	0.07	0.33	0.03	0.03	2d10/25 L=60	39,25,45
183	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.44	0.14	0.23	2d10/25 L=94	39,31,39
	s=3,m=3	287.5	0.31	12.6	12.6	0.0	0.07	0.24	0.13	0.17	2d10/25 L=387	19,40,40
		575.0	0.31	12.6	12.6	0.0	0.07	0.74	0.18	0.27	2d10/25 L=94	39,40,40
194	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.57	0.05	0.08	2d10/25 L=60	40,40,40
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.47	0.05	0.09	2d10/25 L=60	40,39,39
		60.0	0.31	12.6	12.6	0.0	0.07	0.38	0.07	0.11	2d10/25 L=60	40,39,39
199	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.33	0.05	0.09	2d10/25 L=60	40,40,40
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.29	0.04	0.07	2d10/25 L=60	40,40,40
		60.0	0.31	12.6	12.6	0.0	0.07	0.25	0.05	0.08	2d10/25 L=60	40,39,39
205	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.07	2d10/25 L=55	40,16,40
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.05	2d10/25 L=55	40,15,40
		55.0	0.31	12.6	12.6	0.0	0.07	0.23	0.06	0.07	2d10/25 L=55	40,15,39
223	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.10	0.08	0.06	2d10/25 L=52	39,23,19
	s=3,m=3	26.0	0.31	12.6	12.6	0.0	0.07	0.07	0.07	0.04	2d10/25 L=52	40,24,19
		52.0	0.31	12.6	12.6	0.0	0.07	0.04	0.08	0.06	2d10/25 L=52	40,24,20
237	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.05	0.09	0.06	2d10/25 L=52	40,26,15
	s=3,m=3	26.0	0.31	12.6	12.6	0.0	0.07	0.04	0.08	0.04	2d10/25 L=52	40,29,16
		52.0	0.31	12.6	12.6	0.0	0.07	0.02	0.09	0.06	2d10/25 L=52	42,29,16
M_T= 19 Z=0.0 N=122 N=793												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
56	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.05	0.05	2d10/25 L=55	40,19,39
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.15	0.05	0.06	2d10/25 L=55	40,19,39
		55.0	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.06	2d10/25 L=55	40,19,39
68	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.04	0.07	2d10/25 L=60	40,39,39
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.18	0.05	0.07	2d10/25 L=60	40,39,39
		60.0	0.39	12.6	12.6	0.0	0.09	0.20	0.05	0.08	2d10/25 L=60	40,39,39
73	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.23	0.05	0.08	2d10/25 L=60	40,39,39
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.33	0.05	0.09	2d10/25 L=60	39,39,39
		60.0	0.39	12.6	12.6	0.0	0.09	0.44	0.05	0.09	2d10/25 L=60	39,39,39



84	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.73	0.19	0.32	2d10/25 L=129 39,40,40
	s=1,m=3	178.0	0.39	12.6	12.6	0.0	0.09	0.17	0.15	0.28	2d10/25 L=98 39,39,39
		356.0	0.39	12.6	12.6	0.0	0.09	0.50	0.18	0.34	2d10/25 L=129 39,39,39
90	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.30	0.02	0.04	2d10/25 L=54 39,20,6
	s=1,m=3	27.2	0.39	12.6	12.6	0.0	0.09	0.25	0.02	0.03	2d10/25 L=54 39,20,6
		54.5	0.39	12.6	12.6	0.0	0.09	0.19	0.02	0.03	2d10/25 L=54 39,20,6
97	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.05	2d10/25 L=54 39,20,40
	s=1,m=3	27.2	0.39	12.6	12.6	0.0	0.09	0.15	0.03	0.05	2d10/25 L=54 39,20,40
		54.5	0.39	12.6	12.6	0.0	0.09	0.14	0.03	0.04	2d10/25 L=54 39,20,40
115	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.05	2d10/25 L=66 39,22,42
	s=1,m=3	33.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.04	2d10/25 L=66 39,22,42
		66.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.04	2d10/25 L=66 39,25,45
149	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55 40,19,9
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.03	2d10/25 L=55 40,19,9
		55.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.04	2d10/25 L=55 40,19,9
161	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.02	0.04	2d10/25 L=60 40,39,39
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.04	2d10/25 L=60 40,39,39
		60.0	0.39	12.6	12.6	0.0	0.09	0.14	0.03	0.05	2d10/25 L=60 40,39,39
165	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.05	2d10/25 L=60 40,39,39
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.22	0.03	0.06	2d10/25 L=60 40,39,39
		60.0	0.39	12.6	12.6	0.0	0.09	0.28	0.04	0.06	2d10/25 L=60 40,39,39
184	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.44	0.15	0.24	2d10/25 L=74 40,40,40
	s=1,m=3	254.5	0.39	12.6	12.6	0.0	0.09	0.14	0.11	0.16	2d10/25 L=361 8,40,40
		509.0	0.39	12.6	12.6	0.0	0.09	0.51	0.12	0.22	2d10/25 L=74 40,39,39
195	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.33	0.06	0.09	2d10/25 L=60 40,40,40
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.24	0.05	0.09	2d10/25 L=60 40,40,40
		60.0	0.39	12.6	12.6	0.0	0.09	0.16	0.05	0.08	2d10/25 L=60 40,40,40
200	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.07	2d10/25 L=60 40,8,40
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.13	0.04	0.06	2d10/25 L=60 39,8,40
		60.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.06	2d10/25 L=60 39,8,40
208	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.05	0.05	2d10/25 L=55 39,24,40
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.05	2d10/25 L=55 39,24,40
		55.0	0.39	12.6	12.6	0.0	0.09	0.13	0.04	0.04	2d10/25 L=55 39,24,40
226	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.08	0.06	2d10/25 L=52 40,23,19
	s=1,m=3	26.0	0.39	12.6	12.6	0.0	0.09	0.11	0.08	0.05	2d10/25 L=52 40,23,19
		52.0	0.39	12.6	12.6	0.0	0.09	0.08	0.08	0.05	2d10/25 L=52 40,23,19
240	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.06	0.04	2d10/25 L=52 40,15,19
	s=1,m=3	26.0	0.39	12.6	12.6	0.0	0.09	0.09	0.06	0.04	2d10/25 L=52 42,15,19
		52.0	0.39	12.6	12.6	0.0	0.09	0.07	0.06	0.04	2d10/25 L=52 42,15,20
<b>M_T= 20      Z=0.0      N=129      N=804</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T	cls V V/T	acc Staffe Rif. cmb
59	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.05	0.05	2d10/25 L=55 32,19,31
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.13	0.05	0.05	2d10/25 L=55 32,19,31
		55.0	0.39	12.6	12.6	0.0	0.09	0.12	0.05	0.06	2d10/25 L=55 32,19,31
69	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.06	2d10/25 L=60 32,39,31
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.07	2d10/25 L=60 32,39,31
		60.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.07	2d10/25 L=60 32,39,31
74	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.19	0.04	0.08	2d10/25 L=60 32,31,31
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.28	0.05	0.09	2d10/25 L=60 31,31,31
		60.0	0.39	12.6	12.6	0.0	0.09	0.38	0.05	0.09	2d10/25 L=60 31,31,31
85	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.63	0.14	0.26	2d10/25 L=129 31,32,32
	s=1,m=3	178.0	0.39	12.6	12.6	0.0	0.09	0.19	0.14	0.23	2d10/25 L=98 31,31,31
		356.0	0.39	12.6	12.6	0.0	0.09	0.36	0.17	0.28	2d10/25 L=129 31,31,31
91	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.21	0.03	0.05	2d10/25 L=60 31,10,10
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.04	2d10/25 L=60 31,10,10
		60.0	0.39	12.6	12.6	0.0	0.09	0.13	0.02	0.03	2d10/25 L=60 31,10,10
98	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.11	0.03	0.05	2d10/25 L=60 31,6,6
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.11	0.03	0.05	2d10/25 L=60 31,20,6
		60.0	0.39	12.6	12.6	0.0	0.09	0.11	0.02	0.04	2d10/25 L=60 31,20,6
118	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.05	2d10/25 L=55 31,28,6
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.04	2d10/25 L=55 31,28,6
		55.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55 31,28,6
152	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55 32,27,6
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.04	2d10/25 L=55 32,27,6
		55.0	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.05	2d10/25 L=55 32,27,6
162	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.04	2d10/25 L=60 32,39,31
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.05	2d10/25 L=60 32,39,31
		60.0	0.39	12.6	12.6	0.0	0.09	0.14	0.03	0.06	2d10/25 L=60 32,39,31
166	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.05	2d10/25 L=60 32,39,31
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.22	0.04	0.06	2d10/25 L=60 32,39,31
		60.0	0.39	12.6	12.6	0.0	0.09	0.28	0.04	0.06	2d10/25 L=60 32,39,31
185	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.46	0.16	0.25	2d10/25 L=74 32,40,32
	s=1,m=3	254.5	0.39	12.6	12.6	0.0	0.09	0.18	0.13	0.19	2d10/25 L=361 42,40,32
		509.0	0.39	12.6	12.6	0.0	0.09	0.76	0.19	0.31	2d10/25 L=74 31,39,31
196	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.45	0.07	0.12	2d10/25 L=60 31,34,40
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.35	0.06	0.11	2d10/25 L=60 31,34,40
		60.0	0.39	12.6	12.6	0.0	0.09	0.25	0.06	0.11	2d10/25 L=60 31,34,40



201	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.21	0.06	0.09	2d10/25 L=60 31,36,40
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.20	0.06	0.08	2d10/25 L=60 31,36,40
		60.0	0.39	12.6	12.6	0.0	0.09	0.18	0.05	0.08	2d10/25 L=60 31,36,40
211	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.06	0.07	2d10/25 L=55 31,36,40
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.16	0.05	0.06	2d10/25 L=55 31,36,40
		55.0	0.39	12.6	12.6	0.0	0.09	0.16	0.05	0.06	2d10/25 L=55 31,36,40
229	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.11	0.08	0.04	2d10/25 L=52 11,26,15
	s=1,m=3	26.0	0.39	12.6	12.6	0.0	0.09	0.10	0.08	0.04	2d10/25 L=52 11,26,15
		52.0	0.39	12.6	12.6	0.0	0.09	0.10	0.07	0.04	2d10/25 L=52 10,26,16
243	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.07	0.03	2d10/25 L=52 10,26,16
	s=1,m=3	26.0	0.39	12.6	12.6	0.0	0.09	0.10	0.06	0.03	2d10/25 L=52 10,26,16
		52.0	0.39	12.6	12.6	0.0	0.09	0.08	0.06	0.04	2d10/25 L=52 10,29,7
<b>M_T= 21      Z=0.0      N=136      N=814</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
62	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.05	2d10/25 L=55 30,17,33
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.05	2d10/25 L=55 30,17,33
		55.0	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.06	2d10/25 L=55 30,17,33
70	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.06	2d10/25 L=60 30,33,33
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.17	0.04	0.07	2d10/25 L=60 30,33,33
		60.0	0.39	12.6	12.6	0.0	0.09	0.19	0.05	0.08	2d10/25 L=60 30,33,33
75	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.22	0.05	0.08	2d10/25 L=60 30,33,33
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.31	0.05	0.09	2d10/25 L=60 33,33,33
		60.0	0.39	12.6	12.6	0.0	0.09	0.41	0.05	0.10	2d10/25 L=60 33,33,33
86	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.68	0.16	0.29	2d10/25 L=129 33,30,30
	s=1,m=3	178.0	0.39	12.6	12.6	0.0	0.09	0.20	0.14	0.24	2d10/25 L=98 33,33,33
		356.0	0.39	12.6	12.6	0.0	0.09	0.37	0.16	0.29	2d10/25 L=129 33,33,33
92	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.22	0.03	0.05	2d10/25 L=60 33,7,11
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.04	2d10/25 L=60 33,7,11
		60.0	0.39	12.6	12.6	0.0	0.09	0.14	0.02	0.03	2d10/25 L=60 33,7,11
99	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.05	2d10/25 L=60 33,14,7
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.05	2d10/25 L=60 33,14,7
		60.0	0.39	12.6	12.6	0.0	0.09	0.12	0.02	0.04	2d10/25 L=60 33,14,7
121	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.04	2d10/25 L=55 33,28,7
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.04	2d10/25 L=55 33,28,7
		55.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55 33,28,7
155	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55 36,27,7
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.04	2d10/25 L=55 36,27,7
		55.0	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.05	2d10/25 L=55 36,27,7
163	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.05	2d10/25 L=60 36,33,33
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.14	0.03	0.05	2d10/25 L=60 36,33,33
		60.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.06	2d10/25 L=60 36,33,33
167	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.04	0.06	2d10/25 L=60 36,33,33
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.23	0.04	0.06	2d10/25 L=60 30,33,33
		60.0	0.39	12.6	12.6	0.0	0.09	0.30	0.04	0.07	2d10/25 L=60 30,33,33
186	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.48	0.16	0.26	2d10/25 L=74 30,36,36
	s=1,m=3	254.5	0.39	12.6	12.6	0.0	0.09	0.20	0.13	0.21	2d10/25 L=361 36,36,30
		509.0	0.39	12.6	12.6	0.0	0.09	0.86	0.20	0.34	2d10/25 L=74 33,33,33
197	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.51	0.07	0.13	2d10/25 L=60 33,36,36
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.40	0.07	0.12	2d10/25 L=60 33,36,36
		60.0	0.39	12.6	12.6	0.0	0.09	0.28	0.06	0.12	2d10/25 L=60 33,36,36
202	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.24	0.06	0.09	2d10/25 L=60 33,30,30
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.22	0.06	0.09	2d10/25 L=60 33,30,30
		60.0	0.39	12.6	12.6	0.0	0.09	0.20	0.05	0.08	2d10/25 L=60 33,30,30
214	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.06	0.08	2d10/25 L=55 33,36,36
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.18	0.06	0.07	2d10/25 L=55 33,36,36
		55.0	0.39	12.6	12.6	0.0	0.09	0.18	0.05	0.06	2d10/25 L=55 33,36,36
232	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.08	0.05	2d10/25 L=52 11,26,23
	s=1,m=3	26.0	0.39	12.6	12.6	0.0	0.09	0.12	0.08	0.05	2d10/25 L=52 11,26,23
		52.0	0.39	12.6	12.6	0.0	0.09	0.11	0.08	0.05	2d10/25 L=52 10,29,24
246	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.07	0.03	2d10/25 L=52 11,29,29
	s=1,m=3	26.0	0.39	12.6	12.6	0.0	0.09	0.11	0.07	0.04	2d10/25 L=52 10,29,29
		52.0	0.39	12.6	12.6	0.0	0.09	0.09	0.08	0.04	2d10/25 L=52 10,29,11
<b>M_T= 22      Z=0.0      N=252      N=257</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
78	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.15	0.20	0.06	4d10/25 L=103 14,39,7
	s=2,m=3	51.5	0.21	12.6	12.6	0.0	0.06	0.10	0.19	0.07	4d10/25 L=103 14,39,7
		103.0	0.21	12.6	12.6	0.0	0.06	0.12	0.19	0.09	4d10/25 L=103 7,45,7
79	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.18	0.09	0.07	4d10/25 L=26 14,9,6
	s=2,m=3	198.8	0.21	12.6	12.6	0.0	0.06	0.14	0.06	0.04	4d10/25 L=242 20,19,14
		397.5	0.21	12.6	12.6	0.0	0.06	0.17	0.07	0.04	4d10/25 L=129 30,9,7
80	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.19	0.05	0.06	4d10/25 L=129 20,6,6
	s=2,m=3	180.0	0.21	12.6	12.6	0.0	0.06	0.20	0.03	0.03	4d10/25 L=102 4,22,14
		360.0	0.21	12.6	12.6	0.0	0.06	0.25	0.04	0.04	4d10/25 L=129 14,7,7
81	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.20	0.06	0.07	4d10/25 L=129 44,6,6
	s=2,m=3	198.8	0.21	12.6	12.6	0.0	0.06	0.35	0.05	0.06	4d10/25 L=139 14,17,20
		397.5	0.21	12.6	12.6	0.0	0.06	0.48	0.07	0.09	4d10/25 L=129 14,7,20
82	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.43	0.15	0.04	4d10/25 L=129 14,30,21



s=2,m=3		167.5	0.21	12.6	12.6	0.0	0.06	0.29	0.16	0.05	4d10/25 L=77 14,30,18	
		335.0	0.21	12.6	12.6	0.0	0.06	0.10	0.19	0.08	4d10/25 L=129 44,30,18	
<div>M_T= 25      Z=0.0      N=338      N=345</div>												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
104	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.05	0.04	2d10/25 L=55	27,40,28
		27.5	0.39	12.6	12.6	0.0	0.09	0.13	0.06	0.05	2d10/25 L=55	27,40,28
		55.0	0.39	12.6	12.6	0.0	0.09	0.13	0.06	0.05	2d10/25 L=55	27,40,28
105	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.06	2d10/25 L=60	27,20,28
		30.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.06	2d10/25 L=60	27,20,28
		60.0	0.39	12.6	12.6	0.0	0.09	0.17	0.05	0.07	2d10/25 L=60	27,20,28
106	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.20	0.04	0.08	2d10/25 L=60	27,20,28
		30.0	0.39	12.6	12.6	0.0	0.09	0.27	0.05	0.08	2d10/25 L=60	27,20,28
		60.0	0.39	12.6	12.6	0.0	0.09	0.36	0.05	0.09	2d10/25 L=60	28,20,28
107	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.58	0.19	0.27	2d10/25 L=129	28,19,27
		195.0	0.39	12.6	12.6	0.0	0.09	0.15	0.14	0.21	2d10/25 L=132	20,19,28
		390.0	0.39	12.6	12.6	0.0	0.09	0.42	0.15	0.27	2d10/25 L=129	28,20,28
108	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.25	0.04	0.06	2d10/25 L=60	28,9,9
		30.0	0.39	12.6	12.6	0.0	0.09	0.20	0.03	0.05	2d10/25 L=60	28,9,9
		60.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.05	2d10/25 L=60	28,9,9
109	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.14	0.13	0.18	2d10/25 L=60	28,45,9
		30.0	0.39	12.6	12.6	0.0	0.09	0.19	0.13	0.18	2d10/25 L=60	25,45,9
		60.0	0.39	12.6	12.6	0.0	0.09	0.24	0.12	0.17	2d10/25 L=60	25,45,9
110	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.04	0.10	0.08	2d10/25 L=55	9,45,45
		27.5	0.39	12.6	12.6	0.0	0.09	0.03	0.11	0.08	2d10/25 L=55	9,45,45
		55.0	0.39	12.6	12.6	0.0	0.09	0.02	0.11	0.09	2d10/25 L=55	8,45,45
<div>M_T= 34      Z=0.0      N=380      N=401</div>												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
126	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.11	0.05	0.03	2d10/25 L=55	22,40,7
		27.5	0.39	12.6	12.6	0.0	0.09	0.09	0.05	0.04	2d10/25 L=55	22,40,7
		55.0	0.39	12.6	12.6	0.0	0.09	0.08	0.05	0.05	2d10/25 L=55	22,40,7
127	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.03	0.04	2d10/25 L=60	22,20,7
		30.0	0.39	12.6	12.6	0.0	0.09	0.10	0.03	0.05	2d10/25 L=60	22,20,7
		60.0	0.39	12.6	12.6	0.0	0.09	0.10	0.03	0.06	2d10/25 L=60	22,8,7
128	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.05	2d10/25 L=60	22,20,28
		30.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.05	2d10/25 L=60	22,20,28
		60.0	0.39	12.6	12.6	0.0	0.09	0.20	0.04	0.06	2d10/25 L=60	22,20,28
129	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.33	0.11	0.19	2d10/25 L=129	27,19,6
		272.5	0.39	12.6	12.6	0.0	0.09	0.16	0.07	0.10	2d10/25 L=287	6,20,28
		545.0	0.39	12.6	12.6	0.0	0.09	0.44	0.12	0.21	2d10/25 L=129	28,20,7
130	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.26	0.04	0.06	2d10/25 L=60	28,22,22
		30.0	0.39	12.6	12.6	0.0	0.09	0.21	0.03	0.06	2d10/25 L=60	28,22,22
		60.0	0.39	12.6	12.6	0.0	0.09	0.15	0.03	0.05	2d10/25 L=60	28,22,22
131	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.06	2d10/25 L=60	28,6,6
		30.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.05	2d10/25 L=60	28,19,6
		60.0	0.39	12.6	12.6	0.0	0.09	0.12	0.02	0.04	2d10/25 L=60	28,19,6
132	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.05	2d10/25 L=55	28,31,6
		27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.04	2d10/25 L=55	28,31,6
		55.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55	28,31,6
133	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55	27,37,7
		27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.04	0.04	2d10/25 L=55	27,37,7
		55.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.05	2d10/25 L=55	27,37,7
134	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.04	2d10/25 L=60	27,20,7
		30.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.05	2d10/25 L=60	27,20,7
		60.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.06	2d10/25 L=60	27,20,7
135	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.03	0.05	2d10/25 L=60	27,20,28
		30.0	0.39	12.6	12.6	0.0	0.09	0.21	0.03	0.06	2d10/25 L=60	27,20,28
		60.0	0.39	12.6	12.6	0.0	0.09	0.27	0.04	0.06	2d10/25 L=60	27,20,28
136	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.45	0.12	0.21	2d10/25 L=507	27,19,27
		253.5	0.39	12.6	12.6	0.0	0.09	0.12	0.07	0.11	2d10/25 L=507	7,19,27
		507.0	0.39	12.6	12.6	0.0	0.09	0.34	0.11	0.19	2d10/25 L=507	28,20,28
137	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.20	0.03	0.06	2d10/25 L=60	28,14,27
		30.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.05	2d10/25 L=60	28,14,27
		60.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.04	2d10/25 L=60	28,14,27
138	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.10	0.03	0.06	2d10/25 L=60	28,14,6
		30.0	0.39	12.6	12.6	0.0	0.09	0.10	0.03	0.05	2d10/25 L=60	28,14,6
		60.0	0.39	12.6	12.6	0.0	0.09	0.10	0.02	0.04	2d10/25 L=60	28,14,6
139	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.08	0.05	0.05	2d10/25 L=55	28,35,6
		27.5	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.04	2d10/25 L=55	28,35,6
		55.0	0.39	12.6	12.6	0.0	0.09	0.10	0.04	0.03	2d10/25 L=55	28,35,6
140	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55	27,33,7
		27.5	0.39	12.6	12.6	0.0	0.09	0.11	0.05	0.03	2d10/25 L=55	27,33,7
		55.0	0.39	12.6	12.6	0.0	0.09	0.10	0.05	0.04	2d10/25 L=55	27,33,7
141	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.12	0.03	0.04	2d10/25 L=60	27,17,17
		30.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.04	2d10/25 L=60	22,17,17
		60.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.05	2d10/25 L=60	22,17,17
142	ok,ok s=1,m=3	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.02	0.04	2d10/25 L=60	22,17,17
		30.0	0.39	12.6	12.6	0.0	0.09	0.21	0.03	0.04	2d10/25 L=60	22,17,17



		60.0	0.39	12.6	12.6	0.0	0.09	0.26	0.03	0.05	2d10/25 L=60	22,7,17
143	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.43	0.16	0.26	2d10/25 L=129	22,27,22
	s=1,m=3	195.0	0.39	12.6	12.6	0.0	0.09	0.13	0.13	0.21	2d10/25 L=132	6,27,22
		390.0	0.39	12.6	12.6	0.0	0.09	0.53	0.15	0.25	2d10/25 L=129	22,28,25
144	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.33	0.05	0.08	2d10/25 L=60	22,23,26
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.24	0.04	0.07	2d10/25 L=60	25,23,26
		60.0	0.39	12.6	12.6	0.0	0.09	0.18	0.04	0.07	2d10/25 L=60	25,23,26
145	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.06	2d10/25 L=60	25,14,26
	s=1,m=3	30.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.06	2d10/25 L=60	25,14,26
		60.0	0.39	12.6	12.6	0.0	0.09	0.13	0.03	0.05	2d10/25 L=60	28,14,26
146	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.11	0.05	0.05	2d10/25 L=55	28,30,6
	s=1,m=3	27.5	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.04	2d10/25 L=55	28,30,6
		55.0	0.39	12.6	12.6	0.0	0.09	0.12	0.04	0.03	2d10/25 L=55	28,30,6
M_T= 40 Z=0.0 N=513 N=519												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
173	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.27	0.05	0.03	4d10/25 L=51	23,30,7
	s=2,m=3	25.8	0.21	12.6	12.6	0.0	0.06	0.27	0.05	0.03	4d10/25 L=51	23,30,7
		51.5	0.21	12.6	12.6	0.0	0.06	0.27	0.05	0.02	4d10/25 L=51	23,30,7
174	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.29	0.07	0.06	4d10/25 L=51	23,39,7
	s=2,m=3	25.8	0.21	12.6	12.6	0.0	0.06	0.31	0.07	0.05	4d10/25 L=51	23,39,7
		51.5	0.21	12.6	12.6	0.0	0.06	0.32	0.06	0.05	4d10/25 L=51	23,39,7
175	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.43	0.05	0.04	4d10/25 L=72	23,37,6
	s=2,m=3	36.0	0.21	12.6	12.6	0.0	0.06	0.49	0.05	0.04	4d10/25 L=72	23,37,6
		72.0	0.21	12.6	12.6	0.0	0.06	0.55	0.06	0.05	4d10/25 L=72	23,37,6
176	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.66	0.14	0.13	4d10/25 L=99	23,23,23
	s=2,m=3	162.8	0.21	12.6	12.6	0.0	0.06	0.32	0.12	0.10	4d10/25 L=127	24,23,23
		325.5	0.21	12.6	12.6	0.0	0.06	0.12	0.10	0.08	4d10/25 L=99	7,23,24
177	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.16	0.07	0.07	4d10/25 L=129	29,26,6
	s=2,m=3	180.0	0.21	12.6	12.6	0.0	0.06	0.17	0.06	0.04	4d10/25 L=102	2,26,26
		360.0	0.21	12.6	12.6	0.0	0.06	0.30	0.06	0.05	4d10/25 L=129	26,29,29
178	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.17	0.06	0.07	4d10/25 L=129	26,6,6
	s=2,m=3	198.8	0.21	12.6	12.6	0.0	0.06	0.21	0.04	0.02	4d10/25 L=139	26,3,3
		397.5	0.21	12.6	12.6	0.0	0.06	0.18	0.07	0.06	4d10/25 L=129	29,3,7
M_T= 42 Z=0.0 N=541 N=543												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
191	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.06	0.06	0.04	4d10/25 L=129	3,23,29
	s=2,m=3	198.8	0.21	12.6	12.6	0.0	0.06	0.22	0.06	0.06	4d10/25 L=139	29,3,29
		397.5	0.21	12.6	12.6	0.0	0.06	0.56	0.09	0.10	4d10/25 L=129	29,7,7
192	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.56	0.13	0.09	4d10/25 L=129	29,26,7
	s=2,m=3	167.5	0.21	12.6	12.6	0.0	0.06	0.28	0.14	0.07	4d10/25 L=77	29,26,25
		335.0	0.21	12.6	12.6	0.0	0.06	0.05	0.17	0.07	4d10/25 L=129	16,26,29
M_T= 53 Z=0.0 N=543 N=884												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
221	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.16	0.18	0.07	4d10/25 L=490	38,26,26
	s=2,m=3	245.0	0.21	12.6	12.6	0.0	0.06	0.10	0.14	0.02	4d10/25 L=490	23,26,38
		490.0	0.21	12.6	12.6	0.0	0.06	0.07	0.14	0.02	4d10/25 L=490	26,26,26
M_T= 65 Z=0.0 N=782 N=821												
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe	Rif. cmb
250	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.09	0.08	0.10	2d10/25 L=55	26,26,23
	s=3,m=3	27.5	0.31	12.6	12.6	0.0	0.07	0.13	0.08	0.08	2d10/25 L=55	26,29,23
		55.0	0.31	12.6	12.6	0.0	0.07	0.16	0.09	0.09	2d10/25 L=55	26,29,24
251	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.06	2d10/25 L=60	26,45,31
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.20	0.06	0.05	2d10/25 L=60	26,24,32
		60.0	0.31	12.6	12.6	0.0	0.07	0.21	0.07	0.07	2d10/25 L=60	26,24,32
252	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.12	0.08	2d10/25 L=60	26,39,45
	s=3,m=3	30.0	0.31	12.6	12.6	0.0	0.07	0.26	0.11	0.08	2d10/25 L=60	23,14,42
		60.0	0.31	12.6	12.6	0.0	0.07	0.29	0.12	0.10	2d10/25 L=60	23,14,42
253	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.38	0.59	0.38	2d10/25 L=102	23,19,26
	s=3,m=3	51.0	0.31	12.6	12.6	0.0	0.07	0.21	0.60	0.40	2d10/25 L=102	35,19,26
		102.0	0.31	12.6	12.6	0.0	0.07	0.22	0.61	0.42	2d10/25 L=102	34,19,26
254	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.11	0.13	2d10/25 L=75	34,15,29
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.12	0.11	2d10/25 L=75	34,15,26
		75.0	0.31	12.6	12.6	0.0	0.07	0.13	0.14	0.14	2d10/25 L=75	26,15,26
255	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.08	2d10/25 L=75	26,29,24
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.12	0.04	0.05	2d10/25 L=75	29,29,24
		75.0	0.31	12.6	12.6	0.0	0.07	0.14	0.04	0.05	2d10/25 L=75	29,26,23
256	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.05	2d10/25 L=75	29,41,8
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.04	0.02	2d10/25 L=75	29,39,15
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.04	2d10/25 L=75	29,39,15
257	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.08	0.09	2d10/25 L=59	19,36,8
	s=3,m=3	29.8	0.31	12.6	12.6	0.0	0.07	0.19	0.06	0.06	2d10/25 L=59	19,36,24
		59.5	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.04	2d10/25 L=59	19,35,23
258	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.19	0.07	0.09	2d10/25 L=59	19,28,16
	s=3,m=3	29.8	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.05	2d10/25 L=59	19,28,16
		59.5	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.08	2d10/25 L=59	19,18,15
259	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.07	0.09	2d10/25 L=59	19,40,20
	s=3,m=3	29.8	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.06	2d10/25 L=59	19,40,19



260	ok,ok s=3,m=3	59.5	0.31	12.6	12.6	0.0	0.07	0.09	0.06	0.09	2d10/25 L=59 19,19,19
		0.0	0.31	12.6	12.6	0.0	0.07	0.09	0.05	0.07	2d10/25 L=59 19,26,42
		29.8	0.31	12.6	12.6	0.0	0.07	0.09	0.03	0.04	2d10/25 L=59 19,26,45
261	ok,ok s=3,m=3	59.5	0.31	12.6	12.6	0.0	0.07	0.08	0.05	0.08	2d10/25 L=59 19,29,45
		0.0	0.31	12.6	12.6	0.0	0.07	0.10	0.09	0.09	2d10/25 L=55 27,26,26
		27.5	0.31	12.6	12.6	0.0	0.07	0.12	0.07	0.06	2d10/25 L=55 26,26,29
262	ok,ok s=3,m=3	55.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.09	2d10/25 L=55 26,29,29
		0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.06	0.07	2d10/25 L=60 26,23,15
		30.0	0.31	12.6	12.6	0.0	0.07	0.19	0.05	0.04	2d10/25 L=60 26,23,16
263	ok,ok s=3,m=3	60.0	0.31	12.6	12.6	0.0	0.07	0.21	0.05	0.08	2d10/25 L=60 23,24,16
		0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.08	0.09	2d10/25 L=60 23,3,3
		30.0	0.31	12.6	12.6	0.0	0.07	0.30	0.06	0.04	2d10/25 L=60 23,3,3
264	ok,ok s=3,m=3	60.0	0.31	12.6	12.6	0.0	0.07	0.35	0.04	0.02	2d10/25 L=60 23,10,8
		0.0	0.31	12.6	12.6	0.0	0.07	0.47	0.25	0.32	2d10/25 L=272 23,45,29
		136.0	0.31	12.6	12.6	0.0	0.07	0.11	0.23	0.31	2d10/25 L=272 3,35,26
265	ok,ok s=3,m=3	272.0	0.31	12.6	12.6	0.0	0.07	0.50	0.30	0.41	2d10/25 L=272 26,10,26
		0.0	0.31	12.6	12.6	0.0	0.07	0.37	0.05	0.04	2d10/25 L=75 26,11,8
		37.5	0.31	12.6	12.6	0.0	0.07	0.31	0.05	0.04	2d10/25 L=75 26,3,2
266	ok,ok s=3,m=3	75.0	0.31	12.6	12.6	0.0	0.07	0.27	0.09	0.10	2d10/25 L=75 23,3,2
		0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.07	0.09	2d10/25 L=75 23,6,6
		37.5	0.31	12.6	12.6	0.0	0.07	0.20	0.04	0.03	2d10/25 L=75 23,6,6
267	ok,ok s=3,m=3	75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.05	0.05	2d10/25 L=75 23,3,3
		0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.08	0.07	2d10/25 L=75 23,10,6
		37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.03	2d10/25 L=75 23,45,24
268	ok,ok s=3,m=3	75.0	0.31	12.6	12.6	0.0	0.07	0.17	0.08	0.07	2d10/25 L=75 23,45,24
		0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.10	0.10	2d10/25 L=56 20,36,24
		27.9	0.31	12.6	12.6	0.0	0.07	0.13	0.09	0.07	2d10/25 L=56 20,36,24
269	ok,ok s=3,m=3	55.8	0.31	12.6	12.6	0.0	0.07	0.10	0.08	0.06	2d10/25 L=56 20,35,23
		0.0	0.31	12.6	12.6	0.0	0.07	0.11	0.08	0.09	2d10/25 L=56 20,44,24
		27.9	0.31	12.6	12.6	0.0	0.07	0.09	0.07	0.06	2d10/25 L=56 14,44,24
270	ok,ok s=3,m=3	55.8	0.31	12.6	12.6	0.0	0.07	0.07	0.07	0.07	2d10/25 L=56 14,42,23
		0.0	0.31	12.6	12.6	0.0	0.07	0.07	0.09	0.08	2d10/25 L=56 17,40,20
		27.9	0.31	12.6	12.6	0.0	0.07	0.06	0.07	0.05	2d10/25 L=56 14,40,20
271	ok,ok s=3,m=3	55.8	0.31	12.6	12.6	0.0	0.07	0.05	0.06	0.06	2d10/25 L=56 14,39,19
		0.0	0.31	12.6	12.6	0.0	0.07	0.05	0.08	0.07	2d10/25 L=56 14,42,42
		27.9	0.31	12.6	12.6	0.0	0.07	0.06	0.06	0.04	2d10/25 L=56 14,45,42
272	ok,ok s=3,m=3	55.8	0.31	12.6	12.6	0.0	0.07	0.06	0.08	0.06	2d10/25 L=56 14,45,45
		0.0	0.31	12.6	12.6	0.0	0.07	0.08	0.10	0.09	2d10/25 L=55 22,26,26
		27.5	0.31	12.6	12.6	0.0	0.07	0.11	0.08	0.07	2d10/25 L=55 26,26,29
273	ok,ok s=3,m=3	55.0	0.31	12.6	12.6	0.0	0.07	0.13	0.07	0.10	2d10/25 L=55 29,29,29
		0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.07	2d10/25 L=60 29,26,23
		30.0	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.05	2d10/25 L=60 26,26,24
274	ok,ok s=3,m=3	60.0	0.31	12.6	12.6	0.0	0.07	0.20	0.06	0.09	2d10/25 L=60 29,29,24
		0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.09	2d10/25 L=60 29,3,3
		30.0	0.31	12.6	12.6	0.0	0.07	0.27	0.02	0.04	2d10/25 L=60 26,3,3
275	ok,ok s=3,m=3	60.0	0.31	12.6	12.6	0.0	0.07	0.32	0.02	0.03	2d10/25 L=60 26,30,30
		0.0	0.31	12.6	12.6	0.0	0.07	0.44	0.18	0.31	2d10/25 L=94 26,24,29
		143.5	0.31	12.6	12.6	0.0	0.07	0.06	0.20	0.29	2d10/25 L=99 3,18,26
276	ok,ok s=3,m=3	287.0	0.31	12.6	12.6	0.0	0.07	0.55	0.26	0.40	2d10/25 L=94 26,18,26
		0.0	0.31	12.6	12.6	0.0	0.07	0.40	0.04	0.05	2d10/25 L=75 26,30,8
		37.5	0.31	12.6	12.6	0.0	0.07	0.33	0.03	0.03	2d10/25 L=75 26,33,3
277	ok,ok s=3,m=3	75.0	0.31	12.6	12.6	0.0	0.07	0.28	0.06	0.09	2d10/25 L=75 26,3,3
		0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.07	0.10	2d10/25 L=75 26,6,8
		37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.04	0.03	2d10/25 L=75 26,6,8
278	ok,ok s=3,m=3	75.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.05	2d10/25 L=75 26,33,3
		0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.08	0.07	2d10/25 L=75 26,10,6
		37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.05	0.03	2d10/25 L=75 26,35,26
279	ok,ok s=3,m=3	75.0	0.31	12.6	12.6	0.0	0.07	0.17	0.07	0.07	2d10/25 L=75 23,33,29
		0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.11	0.10	2d10/25 L=55 20,11,24
		27.5	0.31	12.6	12.6	0.0	0.07	0.14	0.09	0.07	2d10/25 L=55 20,36,24
280	ok,ok s=3,m=3	55.0	0.31	12.6	12.6	0.0	0.07	0.11	0.09	0.06	2d10/25 L=55 20,35,23
		0.0	0.31	12.6	12.6	0.0	0.07	0.12	0.08	0.08	2d10/25 L=60 20,40,7
		30.0	0.31	12.6	12.6	0.0	0.07	0.10	0.06	0.04	2d10/25 L=60 17,40,24
281	ok,ok s=3,m=3	60.0	0.31	12.6	12.6	0.0	0.07	0.10	0.07	0.06	2d10/25 L=60 17,39,23
		0.0	0.31	12.6	12.6	0.0	0.07	0.10	0.08	0.06	2d10/25 L=55 17,42,42
		27.5	0.31	12.6	12.6	0.0	0.07	0.10	0.07	0.03	2d10/25 L=55 17,45,45
282	ok,ok s=3,m=3	55.0	0.31	12.6	12.6	0.0	0.07	0.11	0.09	0.06	2d10/25 L=55 17,45,45
		0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.09	0.09	2d10/25 L=55 17,26,26
		27.5	0.31	12.6	12.6	0.0	0.07	0.15	0.08	0.07	2d10/25 L=55 29,26,29
283	ok,ok s=3,m=3	55.0	0.31	12.6	12.6	0.0	0.07	0.18	0.08	0.10	2d10/25 L=55 29,29,29
		0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.07	0.08	2d10/25 L=60 29,26,23
		30.0	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.06	2d10/25 L=60 29,29,24
284	ok,ok s=3,m=3	60.0	0.31	12.6	12.6	0.0	0.07	0.28	0.07	0.09	2d10/25 L=60 29,29,24
		0.0	0.31	12.6	12.6	0.0	0.07	0.31	0.10	0.12	2d10/25 L=60 29,11,3
		30.0	0.31	12.6	12.6	0.0	0.07	0.35	0.07	0.07	2d10/25 L=60 29,11,3
285	ok,ok	60.0	0.31	12.6	12.6	0.0	0.07	0.40	0.05	0.02	2d10/25 L=60 29,33,33
		0.0	0.31	12.6	12.6	0.0	0.07	0.53	0.30	0.46	2d10/25 L=119 29,21,29



	s=3,m=3	170.0	0.31	12.6	12.6	0.0	0.07	0.27	0.24	0.35	2d10/25 L=102 29,21,29
		340.0	0.31	12.6	12.6	0.0	0.07	0.86	0.30	0.41	2d10/25 L=119 29,23,26
286	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.62	0.04	0.05	2d10/25 L=75 29,21,26
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.50	0.06	0.09	2d10/25 L=75 29,3,29
		75.0	0.31	12.6	12.6	0.0	0.07	0.36	0.10	0.13	2d10/25 L=75 29,3,3
287	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.33	0.05	0.09	2d10/25 L=75 29,23,26
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.30	0.05	0.06	2d10/25 L=75 29,24,29
		75.0	0.31	12.6	12.6	0.0	0.07	0.26	0.07	0.10	2d10/25 L=75 29,24,29
288	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.06	0.08	2d10/25 L=75 29,23,26
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.07	0.09	2d10/25 L=75 29,24,29
		75.0	0.31	12.6	12.6	0.0	0.07	0.17	0.09	0.13	2d10/25 L=75 29,24,29
M_T= 69 Z=0.0 N=789 N=1444											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
293	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.08	0.10	2d10/25 L=75 40,26,4
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.05	0.06	2d10/25 L=75 42,26,42
		75.0	0.31	12.6	12.6	0.0	0.07	0.22	0.05	0.05	2d10/25 L=75 42,19,45
300	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.05	0.07	2d10/25 L=75 42,3,42
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.26	0.03	0.03	2d10/25 L=75 42,39,42
		75.0	0.31	12.6	12.6	0.0	0.07	0.27	0.06	0.07	2d10/25 L=75 42,7,9
310	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.30	0.09	0.10	2d10/25 L=75 42,3,4
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.39	0.06	0.04	2d10/25 L=75 42,16,4
		75.0	0.31	12.6	12.6	0.0	0.07	0.47	0.07	0.04	2d10/25 L=75 42,29,7
312	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.60	0.39	0.37	2d10/25 L=94 42,29,39
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.22	0.36	0.34	2d10/25 L=54 42,20,42
		242.0	0.31	12.6	12.6	0.0	0.07	0.33	0.40	0.42	2d10/25 L=94 39,20,42
314	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.21	0.08	0.05	2d10/25 L=75 38,29,45
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.19	0.08	0.07	2d10/25 L=75 42,20,42
		75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.10	0.11	2d10/25 L=75 42,20,4
316	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.07	2d10/25 L=75 42,28,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.01	2d10/25 L=75 42,28,7
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.06	2d10/25 L=75 42,21,2
319	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.06	0.05	2d10/25 L=75 42,20,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.05	0.02	2d10/25 L=75 42,19,19
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.07	0.08	2d10/25 L=75 42,19,2
332	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.07	0.08	2d10/25 L=75 43,19,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.12	0.05	0.02	2d10/25 L=75 43,19,19
		75.0	0.31	12.6	12.6	0.0	0.07	0.11	0.06	0.06	2d10/25 L=75 43,20,7
337	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.13	0.04	0.05	2d10/25 L=75 43,14,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.13	0.02	0.01	2d10/25 L=75 43,17,7
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.07	2d10/25 L=75 43,17,7
339	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.08	2d10/25 L=75 43,2,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.18	0.02	0.03	2d10/25 L=75 43,39,39
		75.0	0.31	12.6	12.6	0.0	0.07	0.21	0.03	0.05	2d10/25 L=75 41,40,40
341	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.30	0.17	0.30	2d10/25 L=94 41,41,43
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.09	0.13	0.22	2d10/25 L=54 39,41,43
		242.0	0.31	12.6	12.6	0.0	0.07	0.36	0.17	0.29	2d10/25 L=94 44,38,38
343	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.26	0.03	0.04	2d10/25 L=75 40,17,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.22	0.02	0.02	2d10/25 L=75 38,14,2
		75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.05	0.08	2d10/25 L=75 38,2,2
345	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.07	2d10/25 L=75 38,20,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.03	0.02	2d10/25 L=75 38,20,40
		75.0	0.31	12.6	12.6	0.0	0.07	0.14	0.04	0.05	2d10/25 L=75 38,19,2
348	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.12	0.06	0.05	2d10/25 L=75 38,20,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.13	0.05	0.02	2d10/25 L=75 38,19,19
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.07	0.08	2d10/25 L=75 38,19,2
361	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.07	0.08	2d10/25 L=75 39,26,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.05	0.02	2d10/25 L=75 39,26,26
		75.0	0.31	12.6	12.6	0.0	0.07	0.13	0.06	0.05	2d10/25 L=75 39,29,7
366	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.04	0.05	2d10/25 L=75 39,26,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.02	2d10/25 L=75 39,29,45
		75.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.07	2d10/25 L=75 39,29,7
368	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.09	2d10/25 L=75 39,2,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.22	0.02	0.03	2d10/25 L=75 45,27,2
		75.0	0.31	12.6	12.6	0.0	0.07	0.27	0.03	0.04	2d10/25 L=75 45,28,7
370	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.37	0.19	0.33	2d10/25 L=94 45,39,39
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.07	0.15	0.25	2d10/25 L=54 2,39,42
		242.0	0.31	12.6	12.6	0.0	0.07	0.38	0.19	0.33	2d10/25 L=94 44,42,42
372	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.27	0.03	0.04	2d10/25 L=75 44,29,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.23	0.02	0.03	2d10/25 L=75 38,26,2
		75.0	0.31	12.6	12.6	0.0	0.07	0.21	0.05	0.08	2d10/25 L=75 38,2,2
374	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.07	2d10/25 L=75 38,28,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.02	2d10/25 L=75 38,28,44
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.05	2d10/25 L=75 38,27,2
377	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.05	2d10/25 L=75 38,28,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.05	0.02	2d10/25 L=75 38,27,27
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.07	0.07	2d10/25 L=75 38,27,2
390	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.07	0.07	2d10/25 L=75 39,18,2



	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.02	2d10/25 L=75 39,26,18
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.06	0.05	2d10/25 L=75 39,29,7
395	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.04	0.05	2d10/25 L=75 39,18,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.02	2d10/25 L=75 39,21,41
		75.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.07	2d10/25 L=75 39,21,9
397	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.22	0.05	0.08	2d10/25 L=75 39,3,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.25	0.02	0.02	2d10/25 L=75 45,19,2
		75.0	0.31	12.6	12.6	0.0	0.07	0.31	0.03	0.04	2d10/25 L=75 45,20,7
399	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.42	0.19	0.33	2d10/25 L=94 45,39,39
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.07	0.16	0.26	2d10/25 L=54 38,40,40
		242.0	0.31	12.6	12.6	0.0	0.07	0.37	0.20	0.34	2d10/25 L=94 44,40,42
401	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.26	0.03	0.04	2d10/25 L=75 44,29,41
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.23	0.02	0.03	2d10/25 L=75 44,26,38
		75.0	0.31	12.6	12.6	0.0	0.07	0.20	0.04	0.08	2d10/25 L=75 38,2,2
403	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.05	0.07	2d10/25 L=75 38,20,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.16	0.03	0.02	2d10/25 L=75 38,20,40
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.05	2d10/25 L=75 38,19,2
406	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.05	2d10/25 L=75 38,29,7
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.15	0.05	0.02	2d10/25 L=75 38,26,18
		75.0	0.31	12.6	12.6	0.0	0.07	0.17	0.07	0.07	2d10/25 L=75 38,26,2
419	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.07	0.07	2d10/25 L=75 39,18,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.03	2d10/25 L=75 39,26,18
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.06	0.04	2d10/25 L=75 39,29,7
424	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.19	0.04	0.06	2d10/25 L=75 39,29,5
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.18	0.03	7.57e-03	2d10/25 L=75 44,28,19
		75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.05	0.05	2d10/25 L=75 45,28,7
426	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.22	0.10	0.14	2d10/25 L=75 45,45,39
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.23	0.08	0.10	2d10/25 L=75 38,45,39
		75.0	0.31	12.6	12.6	0.0	0.07	0.26	0.07	0.07	2d10/25 L=75 38,20,40
428	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.38	0.46	0.52	2d10/25 L=94 38,45,41
	s=3,m=3	121.0	0.31	12.6	12.6	0.0	0.07	0.38	0.42	0.46	2d10/25 L=54 39,45,41
		242.0	0.31	12.6	12.6	0.0	0.07	0.96	0.39	0.47	2d10/25 L=94 39,45,38
430	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.68	0.05	0.04	2d10/25 L=75 39,28,40
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.56	0.07	0.07	2d10/25 L=75 45,11,39
		75.0	0.31	12.6	12.6	0.0	0.07	0.43	0.10	0.10	2d10/25 L=75 45,11,39
432	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.39	0.05	0.08	2d10/25 L=75 45,42,40
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.36	0.04	0.06	2d10/25 L=75 45,39,39
		75.0	0.31	12.6	12.6	0.0	0.07	0.32	0.06	0.10	2d10/25 L=75 45,39,39
435	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.28	0.05	0.06	2d10/25 L=75 45,28,40
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.06	0.07	2d10/25 L=75 45,27,39
		75.0	0.31	12.6	12.6	0.0	0.07	0.26	0.08	0.11	2d10/25 L=75 45,27,39
<b>M_T= 73      Z=0.0      N=876      N=884</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
301	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.09	0.09	0.05	4d10/25 L=51 15,16,15
	s=2,m=3	25.8	0.21	12.6	12.6	0.0	0.06	0.12	0.09	0.06	4d10/25 L=51 15,16,16
		51.5	0.21	12.6	12.6	0.0	0.06	0.16	0.10	0.06	4d10/25 L=51 18,16,16
302	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.18	0.09	0.03	4d10/25 L=51 18,32,20
	s=2,m=3	25.8	0.21	12.6	12.6	0.0	0.06	0.19	0.10	0.03	4d10/25 L=51 14,32,20
		51.5	0.21	12.6	12.6	0.0	0.06	0.20	0.10	0.04	4d10/25 L=51 19,32,20
303	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.29	0.06	0.05	4d10/25 L=61 26,24,8
	s=2,m=3	30.5	0.21	12.6	12.6	0.0	0.06	0.29	0.06	0.05	4d10/25 L=61 26,24,8
		61.0	0.21	12.6	12.6	0.0	0.06	0.32	0.07	0.06	4d10/25 L=61 24,24,8
304	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.34	0.03	0.03	4d10/25 L=61 24,24,28
	s=2,m=3	30.5	0.21	12.6	12.6	0.0	0.06	0.42	0.04	0.04	4d10/25 L=61 24,24,28
		61.0	0.21	12.6	12.6	0.0	0.06	0.50	0.04	0.04	4d10/25 L=61 24,24,28
305	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.61	0.13	0.11	4d10/25 L=99 24,23,26
	s=2,m=3	137.8	0.21	12.6	12.6	0.0	0.06	0.37	0.12	0.08	4d10/25 L=77 24,24,26
		275.5	0.21	12.6	12.6	0.0	0.06	0.11	0.12	0.09	4d10/25 L=99 2,24,24
306	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.24	0.07	0.07	4d10/25 L=129 29,26,26
	s=2,m=3	180.0	0.21	12.6	12.6	0.0	0.06	0.10	0.06	0.05	4d10/25 L=102 2,16,29
		360.0	0.21	12.6	12.6	0.0	0.06	0.19	0.07	0.06	4d10/25 L=129 26,7,7
307	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.18	0.15	0.05	4d10/25 L=129 6,6,6
	s=2,m=3	198.8	0.21	12.6	12.6	0.0	0.06	0.11	0.12	0.02	4d10/25 L=139 29,6,24
		397.5	0.21	12.6	12.6	0.0	0.06	0.25	0.14	0.04	4d10/25 L=129 24,6,36
308	ok,ok	0.0	0.21	12.6	12.6	0.0	0.06	0.18	0.12	0.05	4d10/25 L=129 8,26,6
	s=2,m=3	167.5	0.21	12.6	12.6	0.0	0.06	0.08	0.11	0.03	4d10/25 L=77 25,26,6
		335.0	0.21	12.6	12.6	0.0	0.06	0.10	0.10	0.02	4d10/25 L=129 26,26,26
<b>M_T= 78      Z=0.0      N=1010      N=1017</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
324	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.02	2d10/25 L=75 26,39,19
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.15	0.03	0.02	2d10/25 L=75 26,40,20
		75.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.03	2d10/25 L=75 26,40,20
325	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 26,28,20
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.18	0.02	0.04	2d10/25 L=75 26,28,20
		75.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.04	2d10/25 L=75 26,28,20
326	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.20	0.04	0.07	2d10/25 L=75 26,19,19
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.31	0.04	0.08	2d10/25 L=75 26,20,20

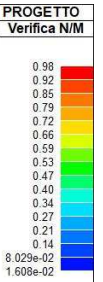


		75.0	0.39	12.6	12.6	0.0	0.09	0.41	0.05	0.08	2d10/25 L=75 26,20,20
327	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.73	0.14	0.26	2d10/25 L=239 22,26,26
	s=1,m=3	1140.0	0.39	12.6	12.6	0.0	0.09	0.03	0.01	0.02	2d10/25 L=1802 8,29,29
		2280.0	0.39	12.6	12.6	0.0	0.09	0.75	0.15	0.27	2d10/25 L=239 24,24,24
328	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.41	0.05	0.08	2d10/25 L=75 24,22,18
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.31	0.04	0.08	2d10/25 L=75 24,22,18
		75.0	0.39	12.6	12.6	0.0	0.09	0.21	0.04	0.07	2d10/25 L=75 24,25,21
329	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.04	2d10/25 L=75 24,14,18
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.18	0.02	0.04	2d10/25 L=75 24,14,18
		75.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 24,14,18
330	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.03	2d10/25 L=75 24,30,14
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.02	2d10/25 L=75 24,30,14
		75.0	0.39	12.6	12.6	0.0	0.09	0.16	0.03	0.02	2d10/25 L=75 24,33,17
<b>M_T= 83      Z=0.0      N=1108      N=1115</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
353	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.02	2d10/25 L=75 27,38,18
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.02	2d10/25 L=75 27,41,21
		75.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.03	2d10/25 L=75 19,41,21
354	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 19,20,29
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.18	0.02	0.04	2d10/25 L=75 19,20,29
		75.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.05	2d10/25 L=75 19,20,29
355	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.21	0.04	0.08	2d10/25 L=75 19,26,26
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.31	0.05	0.08	2d10/25 L=75 19,20,29
		75.0	0.39	12.6	12.6	0.0	0.09	0.42	0.05	0.09	2d10/25 L=75 19,20,29
356	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.75	0.15	0.27	2d10/25 L=239 15,23,19
	s=1,m=3	1140.0	0.39	12.6	12.6	0.0	0.09	0.03	0.02	0.02	2d10/25 L=1802 9,26,19
		2280.0	0.39	12.6	12.6	0.0	0.09	0.74	0.15	0.26	2d10/25 L=239 17,17,17
357	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.41	0.05	0.09	2d10/25 L=75 17,23,23
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.31	0.05	0.08	2d10/25 L=75 17,23,23
		75.0	0.39	12.6	12.6	0.0	0.09	0.20	0.05	0.08	2d10/25 L=75 17,17,24
358	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.04	2d10/25 L=75 17,23,23
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.04	2d10/25 L=75 17,23,23
		75.0	0.39	12.6	12.6	0.0	0.09	0.16	0.02	0.03	2d10/25 L=75 17,23,23
359	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.03	2d10/25 L=75 25,31,23
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.14	0.03	0.02	2d10/25 L=75 25,31,23
		75.0	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.03	2d10/25 L=75 25,37,24
<b>M_T= 88      Z=0.0      N=1206      N=1213</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
382	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.02	2d10/25 L=75 23,38,26
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.02	2d10/25 L=75 23,41,29
		75.0	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.03	2d10/25 L=75 23,41,29
383	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 27,29,17
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.18	0.02	0.04	2d10/25 L=75 27,29,17
		75.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.05	2d10/25 L=75 27,29,17
384	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.21	0.04	0.08	2d10/25 L=75 27,19,26
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.32	0.05	0.08	2d10/25 L=75 23,29,29
		75.0	0.39	12.6	12.6	0.0	0.09	0.42	0.05	0.09	2d10/25 L=75 23,29,29
385	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.76	0.15	0.27	2d10/25 L=239 22,27,23
	s=1,m=3	1140.0	0.39	12.6	12.6	0.0	0.09	0.03	0.01	0.02	2d10/25 L=1802 8,22,26
		2280.0	0.39	12.6	12.6	0.0	0.09	0.73	0.14	0.25	2d10/25 L=239 24,16,29
386	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.40	0.05	0.09	2d10/25 L=75 21,14,23
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.30	0.05	0.08	2d10/25 L=75 21,14,23
		75.0	0.39	12.6	12.6	0.0	0.09	0.20	0.05	0.08	2d10/25 L=75 17,24,24
387	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.03	0.04	2d10/25 L=75 29,14,15
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 29,14,15
		75.0	0.39	12.6	12.6	0.0	0.09	0.16	0.02	0.03	2d10/25 L=75 29,14,15
388	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.13	0.05	0.04	2d10/25 L=75 29,31,23
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.14	0.04	0.03	2d10/25 L=75 29,31,23
		75.0	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.02	2d10/25 L=75 29,31,23
<b>M_T= 93      Z=0.0      N=1304      N=1311</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
411	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.03	2d10/25 L=75 27,38,18
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.02	2d10/25 L=75 27,41,21
		75.0	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.03	2d10/25 L=75 27,41,21
412	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 27,29,21
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.18	0.02	0.04	2d10/25 L=75 27,29,21
		75.0	0.39	12.6	12.6	0.0	0.09	0.19	0.03	0.04	2d10/25 L=75 27,29,21
413	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.21	0.04	0.08	2d10/25 L=75 27,19,18
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.32	0.04	0.08	2d10/25 L=75 27,29,21
		75.0	0.39	12.6	12.6	0.0	0.09	0.43	0.05	0.09	2d10/25 L=75 19,29,21
414	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.77	0.15	0.27	2d10/25 L=239 19,19,19
	s=1,m=3	1140.0	0.39	12.6	12.6	0.0	0.09	0.03	0.01	0.02	2d10/25 L=1802 9,14,14
		2280.0	0.39	12.6	12.6	0.0	0.09	0.77	0.15	0.27	2d10/25 L=239 17,21,17
415	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.42	0.05	0.09	2d10/25 L=75 17,23,15
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.32	0.04	0.08	2d10/25 L=75 17,23,15
		75.0	0.39	12.6	12.6	0.0	0.09	0.21	0.05	0.08	2d10/25 L=75 17,24,16
416	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.18	0.03	0.04	2d10/25 L=75 25,23,15



	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.18	0.02	0.04	2d10/25 L=75 25,23,15
		75.0	0.39	12.6	12.6	0.0	0.09	0.17	0.02	0.03	2d10/25 L=75 25,23,15
417	ok,ok	0.0	0.39	12.6	12.6	0.0	0.09	0.14	0.05	0.03	2d10/25 L=75 25,31,15
	s=1,m=3	37.5	0.39	12.6	12.6	0.0	0.09	0.15	0.04	0.02	2d10/25 L=75 25,31,15
		75.0	0.39	12.6	12.6	0.0	0.09	0.16	0.04	0.03	2d10/25 L=75 25,32,16
<b>M_T= 102      Z=0.0      N=1444      N=1465</b>											
Trave	Note	Pos.	%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	Staffe Rif. cmb
444	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.19	0.09	0.10	2d10/25 L=75 18,43,19
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.07	0.07	2d10/25 L=75 18,39,19
		75.0	0.31	12.6	12.6	0.0	0.07	0.21	0.07	0.06	2d10/25 L=75 18,40,20
445	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.24	0.06	0.10	2d10/25 L=75 26,19,27
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.04	0.06	2d10/25 L=75 26,19,27
		75.0	0.31	12.6	12.6	0.0	0.07	0.30	0.05	0.08	2d10/25 L=75 26,29,28
446	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.33	0.10	0.15	2d10/25 L=75 18,10,27
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.47	0.07	0.11	2d10/25 L=75 18,10,27
		75.0	0.31	12.6	12.6	0.0	0.07	0.59	0.05	0.08	2d10/25 L=75 18,14,27
447	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.83	0.27	0.32	2d10/25 L=99 18,11,21
	s=3,m=3	230.0	0.31	12.6	12.6	0.0	0.07	0.28	0.25	0.26	2d10/25 L=262 27,42,18
		460.0	0.31	12.6	12.6	0.0	0.07	0.58	0.33	0.37	2d10/25 L=99 18,10,18
448	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.41	0.06	0.04	2d10/25 L=75 18,42,18
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.34	0.06	0.06	2d10/25 L=75 18,11,21
		75.0	0.31	12.6	12.6	0.0	0.07	0.28	0.09	0.09	2d10/25 L=75 18,11,3
449	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.25	0.06	0.08	2d10/25 L=75 18,42,18
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.04	0.04	2d10/25 L=75 18,42,18
		75.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.06	2d10/25 L=75 18,45,21
450	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.17	0.07	0.06	2d10/25 L=75 18,42,18
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.02	2d10/25 L=75 18,42,18
		75.0	0.31	12.6	12.6	0.0	0.07	0.18	0.06	0.05	2d10/25 L=75 18,45,21
451	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.15	0.06	0.05	2d10/25 L=75 28,43,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.04	9.60e-03	2d10/25 L=75 28,44,28
		75.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.06	2d10/25 L=75 28,44,7
452	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.05	2d10/25 L=75 28,39,27
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.03	2d10/25 L=75 28,40,28
		75.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.07	2d10/25 L=75 28,40,28
453	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.08	2d10/25 L=75 28,2,27
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.03	0.04	2d10/25 L=75 28,19,27
		75.0	0.31	12.6	12.6	0.0	0.07	0.35	0.03	0.05	2d10/25 L=75 28,20,28
454	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.48	0.15	0.27	2d10/25 L=99 20,20,28
	s=3,m=3	230.0	0.31	12.6	12.6	0.0	0.07	0.11	0.08	0.14	2d10/25 L=262 5,17,22
		460.0	0.31	12.6	12.6	0.0	0.07	0.49	0.15	0.27	2d10/25 L=99 22,14,22
455	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.35	0.03	0.05	2d10/25 L=75 22,14,22
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.03	0.04	2d10/25 L=75 22,17,25
		75.0	0.31	12.6	12.6	0.0	0.07	0.23	0.05	0.08	2d10/25 L=75 22,3,25
456	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.07	2d10/25 L=75 22,34,22
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.03	0.03	2d10/25 L=75 22,34,22
		75.0	0.31	12.6	12.6	0.0	0.07	0.16	0.04	0.05	2d10/25 L=75 22,37,25
457	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.14	0.06	0.06	2d10/25 L=75 22,34,6
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.14	0.04	9.66e-03	2d10/25 L=75 22,34,22
		75.0	0.31	12.6	12.6	0.0	0.07	0.15	0.06	0.05	2d10/25 L=75 22,37,3
458	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.18	0.06	0.05	2d10/25 L=75 16,35,15
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.17	0.05	0.02	2d10/25 L=75 16,36,16
		75.0	0.31	12.6	12.6	0.0	0.07	0.17	0.07	0.06	2d10/25 L=75 16,36,16
459	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.20	0.05	0.06	2d10/25 L=75 16,35,15
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.04	0.04	2d10/25 L=75 16,36,16
		75.0	0.31	12.6	12.6	0.0	0.07	0.25	0.06	0.08	2d10/25 L=75 16,36,16
460	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.28	0.09	0.09	2d10/25 L=75 16,10,2
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.34	0.06	0.06	2d10/25 L=75 16,10,15
		75.0	0.31	12.6	12.6	0.0	0.07	0.42	0.06	0.04	2d10/25 L=75 16,36,16
461	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.58	0.34	0.37	2d10/25 L=99 16,11,16
	s=3,m=3	230.0	0.31	12.6	12.6	0.0	0.07	0.28	0.26	0.26	2d10/25 L=262 25,36,16
		460.0	0.31	12.6	12.6	0.0	0.07	0.83	0.28	0.32	2d10/25 L=99 16,10,15
462	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.59	0.05	0.08	2d10/25 L=75 16,20,25
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.47	0.07	0.11	2d10/25 L=75 16,11,25
		75.0	0.31	12.6	12.6	0.0	0.07	0.33	0.10	0.15	2d10/25 L=75 16,11,25
463	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.30	0.05	0.08	2d10/25 L=75 16,23,22
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.28	0.04	0.06	2d10/25 L=75 16,17,25
		75.0	0.31	12.6	12.6	0.0	0.07	0.24	0.06	0.10	2d10/25 L=75 16,17,25
464	ok,ok	0.0	0.31	12.6	12.6	0.0	0.07	0.21	0.07	0.06	2d10/25 L=75 24,30,22
	s=3,m=3	37.5	0.31	12.6	12.6	0.0	0.07	0.21	0.07	0.07	2d10/25 L=75 24,33,25
		75.0	0.31	12.6	12.6	0.0	0.07	0.19	0.09	0.10	2d10/25 L=75 24,37,25
Trave			%Af	Af inf.	Af. sup	Af long.	x/d	V N/M	V V/T cls	V V/T acc	
			0.39	12.56	12.56	0.0	0.09	0.98	0.61	0.52	

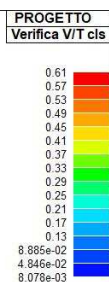




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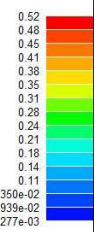
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71\_PRO\_CA\_TRV\_VER\_VRSD



# VERIFICHE ELEMENTI PARETE E/O GUSCIO IN C.A.

## LEGENDA TABELLA VERIFICHE ELEMENTI PARETE E GUSCIO IN C.A.

Per le pareti in c.a., in ottemperanza al cap. 7 del DM 17-01-18, viene effettuata una doppia progettazione: sia come *Singolo Elemento* sia come *Parete Sismica* o *Parete Debolmente Armata*.

Per la progettazione come *Singolo Elemento* di ogni elemento vengono riportati il codice dello stato di verifica con le sigle **Ok e NV**, il rapporto  $x/d$ , la verifica per sollecitazioni ultime (verifica a compressione media gli sforzi membranali, verifica a presso-flessionale e verifica a sollecitazioni taglianti), gli sforzi membranali e flessionali, il quantitativo di armatura nella direzione principale e secondaria sia inferiore che superiore e il quantitativo di armatura a taglio.

Per la progettazione come *Parete Sismica* o *Parete Debolmente Armata* vengono riportate invece le caratteristiche geometriche della parete e delle zone dissipative (quest'ultime solo nel caso di parete sismica), i coefficienti di verifica a compressione assiale, pressoflessione e sollecitazioni taglianti.

Inoltre vengono riportate per ogni quota significativa l'armatura principale e secondaria, l'armatura in zona confinata (solo per parete sismica) e non confinata, l'armatura concentrata all'estremità (per pareti debolmente armate), lo sforzo assiale aggiuntivo per  $q$  superiore a 2 e i valori di involuppo di taglio e momento. Per le pareti debolmente armate viene riportato anche lo stato di verifica relativo alla snellezza.

Le azioni derivate dall'analisi, in ogni combinazione di calcolo, sono elaborate come previsto al punto 7.4.4.5.1: traslazione del momento, incremento e variazione diagramma taglio, incremento e decremento sforzo assiale

La progettazione nel caso dei gusci viene effettuata una progettazione come *Singolo Elemento*, riportando in tabella il rapporto  $x/d$ , la verifica per sollecitazioni ultime, (verifica a compressione media gli sforzi membranali, verifica a presso-flessionale e verifica a sollecitazioni taglianti) di ogni elemento.

Per ogni elemento, viene riportata inoltre la maglia di armatura necessaria in relazione alle risultanze della progettazione dei nodi dell'elemento stesso. Le quantità di armature necessarie sono armature (disposte rispettivamente in direzione principale e secondaria, inferiore e superiore) distribuite nell'elemento ed espresse in centimetri quadri per sviluppo lineare pari ad un metro.

Nel caso dei gusci viene effettuata, inoltre, la verifica a punzonamento, riportando in tabella il codice dello stato di verifica, il coefficiente di verifica per piastre prive di armature a taglio lungo il perimetro resistente e lungo il perimetro del pilastro, coefficiente di incremento dovuto ai momenti flettenti, fattore di amplificazione per le fondazioni, il fattore di amplificazione dell'altezza utile per individuare il perimetro di verifica lungo il quale l'armatura a taglio non è richiesta, il quantitativo di armatura a punzonamento, il numero di serie di armature, il numero di braccia di armatura ed il riferimento alla combinazione più gravosa.

### Simbologia adottata nelle tabelle di verifica

Per gli elementi con progettazione "*Singolo Elemento* ..." è presente una tabella con i simboli di seguito descritti:

Macro Guscio	Numero del macroelemento di tipo guscio (elementi non verticali contigui ed analoghi per proprietà)
Macro Setto	Numero del macroelemento di tipo setto (elementi verticali contigui ed analoghi per proprietà)
Spessore	Spessore della parete
Id Materiale	Codice del materiale assegnato all'elemento
Id Criterio	Codice del criterio di progetto assegnato all'elemento
Progettazione	Sigla tipo di Elemento: - Singolo Elemento; - Singolo Elemento FONDAZIONE; - Singolo



Elemento NON DISSIPATIVO

Per gli elementi con progettazione “*Parete Sismica o Parete Debolmente Armata*” è presente una tabella con i simboli di seguito descritti:

Parete	Numero della PARETE SISMICA
Parete PDA	Numero della PARETE DEBOLMENTE ARMATA
H totale	Altezza complessiva della parete
Spessore	Spessore della parete
H critica	Altezza come da punto 7.4.4.5.1 per traslazione momento (solo in Parete Sismica)
H critica V	Altezza della zona dissipativa (solo in Parete Sismica)
L totale	Larghezza di base della parete
L confinata	Lunghezza della zona dissipativa (solo in Parete Sismica)
Verif. N	Verifica di cui al punto 7.4.4.5.1 compressione semplice
Verif. N-M	Verifica di cui al punto 7.4.4.5.1 pressoflessione
Fattore V	Fattore di amplificazione del taglio di cui al punto 7.4.4.5.1
Diagramma V	Diagramma elaborato per effetto modi superiori come da fig. 7.4.4
Verif. V	Verifica di cui al punto 7.4.4.5.1 taglio (compressione cls, trazione acciaio, scorrimento in zona critica) (solo in Parete Sismica)
Verifica Snellezza	Verifica di cui al punto 7.4.4.5.1 limitazione compressione per prevenire l'instabilità (solo in Parete Debolmente Armata)
Prog. composta	Sigla per la progettazione composta

Per le verifiche degli elementi con progettazione “*Singolo Elemento ...*” e *Progettazione Composta* è presente una tabella con i simboli di seguito descritti:

Nodo	numero del nodo
Stato	codice di verifica dell'elemento <b>ok</b> o <b>NV</b>
x/d	rapporto tra posizione dell'asse neutro e altezza utile alla rottura della sezione (per sola flessione)
V N/M	Verifica delle sollecitazioni Normali (momento e sforzo normale)
Ver. rid	Rapporto Nd/Nu (Nu ottenuto con riduzione del 25% di fcd)
Af pr+	quantità di armatura richiesta in direzione principale relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo)
Af pr-	quantità di armatura richiesta in direzione principale relativa alla faccia negativa (intradosso piastre) (valore derivante da calcolo o minimo normativo)
Af sec+	quantità di armatura richiesta in direzione secondaria relativa alla faccia positiva (estradosso piastre) (valore derivante da calcolo o minimo normativo)
Af sec-	quantità di armatura richiesta in direzione secondaria relativa alla faccia negativa (intradosso piastre) (valore derivante da calcolo o minimo normativo)
Nz No Nzo	Sforzi membranali per pareti e/o setti verticali
Mz Mo Mzo	Sforzi flessionali per pareti e/o setti verticali
Nx Ny Nxy	Sforzi membranali per gusci orizzontali
Mx My Mxy	Sforzi flessionali per gusci orizzontali

Nodo	numero del nodo
Stato	codice di verifica dell'elemento <b>ok</b> o <b>NV</b>
Max tau	Tensione tangenziale Massima
Ver V pr	Verifica a taglio nella direzione principale lato calcestruzzo
Ver V sec	Verifica a taglio nella direzione secondaria lato calcestruzzo
Af V pr	Armatura nella direzione principale
V pr-	Verifica dell'armatura nella direzione principale
Af V sec	Armatura nella direzione secondaria
V sec-	Verifica dell'armatura nella direzione secondaria



Per le verifiche degli elementi con progettazione “*Parete Sismica o Parete Debolmente Armata*”, oltre alla tabella con le verifiche per gli elementi con progettazione “*Singolo Elemento ...*”, è presente una tabella con i simboli di seguito descritti:

Quota	Ascissa verticale di riferimento
Af conf.	Numero e diametro armatura presente in una zona confinata
Af std	Diametro e passo armatura in zona non confinata (doppia maglia)
Af estremi	Diametro dei ferri di estremità del pannello; se posto uguale 0, viene utilizzato il diametro standard
Af V (ori)	Diametro e passo armatura orizzontale (doppia maglia)
Ver. N	Rapporto tra azione di calcolo e resistenza a compressione (normalizzato a 1 in quanto da confrontare con 40% in CDB e 35 % in CDA)
Ver. N/M	Rapporto tra azione di calcolo e resistenza a pressoflessione
Ver. V acc(7)	Rapporto tra azione di calcolo e resistenza a taglio-trazione per alfaS minore di 2 secondo paragrafo 7.4.4.5.1
Ver. V cls	Rapporto tra azione di calcolo e resistenza a taglio-compressione
Ver. V acc	Rapporto tra azione di calcolo e resistenza a taglio-trazione
Ver. V scorr.	Rapporto tra azione di calcolo e resistenza a taglio scorrimento
N add	Sforzo assiale di cui al punto 7.4.4.5.1 da sommare e sottrarre nelle verifiche quando q supera 2
N invil M invil	Inviluppo del Momento e Sforzo Normale come al punto 7.4.4.5.1 (informativo) (solo in Parete Sismica)

Quota	Ascissa verticale di riferimento
N v.N	Valore dello sforzo assiale per cui Ver. N attinge il massimo valore
N v.M/N, M v.M/N	Valore dello sforzo assiale e momento per cui Ver. N/M attinge il massimo valore
N v.M/N, M v.M/N Mo v.M/N	Valore dello sforzo assiale e dei momenti per cui Ver. N/M attinge il massimo valore (per le pareti estese debolmente armate)
N v.Vcls, V v.Vcls,	Valore dello sforzo assiale e taglio per cui Ver. V. cls attinge il massimo valore
N v.Vacc, M v.Vacc, V v.Vacc,	Valore dello sforzo assiale, momento e taglio per cui Ver. V. acc attinge il massimo valore
N v.Vscorr, M v.Vscorr, V v.Vscorr,	Valore dello sforzo assiale, momento e taglio per cui Ver. V. scorr.e attinge il massimo valore
N v.N	Valore dello sforzo assiale per cui Ver. N attinge il massimo valore
N v.M/N, M v.M/N	Valore dello sforzo assiale e momento per cui Ver. N/M attinge il massimo valore
N v.M/N, M v.M/N Mo v.M/N	Valore dello sforzo assiale e dei momenti per cui Ver. N/M attinge il massimo valore (per le pareti estese debolmente armate)
N v.Vcls, V v.Vcls,	Valore dello sforzo assiale e taglio per cui Ver. V. cls attinge il massimo valore

Quota	Ascissa verticale di riferimento
CtgT Vcls	Valore di ctg(teta) adottato nella verifica V compressione cls
Vrsd Vcls	Valore della resistenza a taglio trazione (armatura di calcolo)
Vrcd Vcls	Valore della resistenza a taglio compressione
CtgT Vacc	Valore di ctg(teta) adottato nella verifica V trazione armatura
Vrsd Vacc	Valore della resistenza a taglio trazione (armatura presente)
Vrcd Vacc	Valore della resistenza a taglio compressione
Vdd	Valore del contributo alla resistenza allo scorrimento come da [7.4.20]
Vid	Valore del contributo alla resistenza allo scorrimento come da [7.4.21]
A s.i.	Somma delle aree di armature
Incli.	Angolo di inclinazione delle armature
Dist.	Distanza alla base tra le armature inclinate



Quota	Ascissa verticale di riferimento
V[7.4.16]	Verifica a taglio-trazione dell'armatura dell'anima (7.4.16)
N M V	Sollecitazioni di calcolo della condizione più gravosa
Alfas	Rapporto di Taglio
Vrd,c	Resistenza a taglio degli elementi non armati
VRd,s	Resistenza a taglio nei confronti dello scorrimento
V[7.4.17]	Verifica a taglio-trazione dell'armatura dell'anima (7.4.17)
roH	Rapporto tra l'armatura orizzontale e l'area della sezione relativa di calcestruzzo
roV	Rapporto tra l'armatura verticale e l'area della sezione relativa di calcestruzzo
roN	Sforzo normale adimensionalizzato $N_{ed}/(b w f_{yd})$

Per la verifica a **Punzonamento** è presente una tabella con i simboli di seguito descritti:

Nodo	numero del nodo
Stato	codice di verifica dell'elemento <b>ok</b> o <b>NV</b>
V. 6.47	Fattore di sicurezza per la verifica per piastre prive di armature a taglio lungo il perimetro resistente U1
V. 6.53	Fattore di sicurezza per la verifica per piastre prive di armature a taglio lungo il perimetro del pilastro U0
Beta	Fattore di incremento dovuto ai momenti flettenti
f. a fon	fattore di amplificazione per le fondazioni (solo per gusci di fondazione)
f. Uout	fattore di amplificazione dell'altezza utile per individuare il perimetro di verifica lungo il quale l'armatura a taglio non è richiesta
Aw tot	Quantitativo di armatura per la verifica di piastre munite di armatura (formula 6.52 dell'EC2)
Asw,min	Quantitativo minimo di armatura previsto dai dettagli costruttivi (formula 9.11 dell'EC2)
n. x serie	Numero di serie di armature
n.ser 0(R)	Numero di braccia delle armature in direzione 0 (o numero di braccia radiale)
n.ser 90	Numero di braccia delle armature in direzione 90 (solo se armatura cruciforme)
Rif. cmb	Riferimento combinazioni da cui si generano le verifiche più gravose

## PROGETTAZIONE DELLE FONDAZIONI

Il D.M.17/01/2018 - par: 7.2.5 prevede:

“Sia per CD“A” sia per CD“B” il dimensionamento delle strutture di fondazione e la verifica di sicurezza del complesso fondazione-terreno devono essere eseguiti assumendo come azione in fondazione, trasmessa dagli elementi soprastanti, una tra le seguenti:

- quella derivante dall'analisi strutturale eseguita ipotizzando comportamento strutturale non dissipativo;
- [...];
- quella trasferita dagli elementi soprastanti nell'ipotesi di comportamento strutturale dissipativo, amplificata di un coefficiente pari a 1,30 in CD“A” e 1,10 in CD“B”;

Nel contesto visualizzazione risultati e nella stampa della relazione sulle fondazioni PRO\_SAP mostra le sollecitazioni che derivano dall'analisi non incrementate sia in termini di pressioni sul terreno che in termini di sollecitazioni.

La progettazione degli elementi strutturali con proprietà fondazione è effettuata da PRO\_SAP (per travi e platee) o da PRO\_CAD Plinti (per plinti e pali di fondazione) incrementando le sollecitazioni delle combinazioni con sisma di un coefficiente pari 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

Per i bicchieri dei plinti di fondazione prefabbricati l'incremento delle sollecitazioni ha un fattore pari a 1.2 in CDB e 1.35 in CDA.

N.B.: nel caso di comportamento strutturale non dissipativo la progettazione viene effettuata senza nessun incremento.



Le verifiche geotecniche vengono effettuate dal modulo geotecnico incrementando automaticamente le sollecitazioni del fattore 1.1 in CDB e 1.3 in CDA per pali, plinti, travi e platee.

N.B.: nel caso di comportamento strutturale non dissipativo le verifiche geotecniche vengono effettuate senza nessun incremento.

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
1	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
7	ok	0.07	4.22e-03	5.98e-04	20.9	20.9	20.9	20.9	-2.5	-1.8	-2.3	-78.0	-70.6	-164.5
8	ok	0.07	1.87e-02	1.04e-03	20.9	20.9	20.9	20.9	7.9	-4.7	-4.4	-1094.8	-79.8	-101.4
9	ok	0.07	4.43e-02	2.19e-03	20.9	20.9	20.9	20.9	20.1	-2.8	5.2	-2470.8	74.5	161.4
10	ok	0.07	7.36e-02	2.61e-03	20.9	20.9	20.9	20.9	11.0	-2.5	5.2	-4339.4	-31.9	67.3
11	ok	0.07	9.66e-02	2.29e-03	20.9	20.9	20.9	20.9	8.1	-1.9	5.8	-5702.4	162.0	-131.2
12	ok	0.07	5.74e-02	8.48e-04	20.9	20.9	20.9	20.9	-2.3	-3.1	7.0	-3402.0	-20.2	25.0
13	ok	0.07	6.54e-03	6.25e-04	20.9	20.9	20.9	20.9	-4.1	-2.0	3.4	205.9	-148.3	310.4
42	ok	0.07	1.59e-02	1.07e-03	20.9	20.9	20.9	20.9	-3.2	2.2	-4.6	-56.3	-931.0	-101.0
43	ok	0.07	4.85e-02	2.89e-03	20.9	20.9	20.9	20.9	-11.1	-9.7	-22.7	-2254.3	-2258.5	-589.6
44	ok	0.07	5.43e-02	2.85e-03	20.9	20.9	20.9	20.9	9.6	-9.9	-6.0	-2963.6	-1219.4	-50.3
45	ok	0.07	9.15e-02	2.85e-03	20.9	20.9	20.9	20.9	1.6	-19.5	21.4	-4760.3	-1981.8	1193.1
46	ok	0.07	0.2	3.46e-03	20.9	20.9	20.9	20.9	-21.0	-8.2	14.0	-1.200e+04	842.7	-1754.5
47	ok	0.07	0.1	4.53e-03	20.9	20.9	20.9	20.9	-15.2	-14.1	33.7	-6223.3	-3092.9	-14.5
48	ok	0.07	1.61e-02	9.19e-04	20.9	20.9	20.9	20.9	-4.1	2.3	5.1	871.2	-935.5	-189.1
77	ok	0.07	3.81e-02	1.65e-03	20.9	20.9	20.9	20.9	-2.2	18.9	-1.2	63.9	-2236.9	0.1
78	ok	0.07	5.23e-02	3.34e-03	20.9	20.9	20.9	20.9	-6.7	5.2	-6.3	-1116.7	-2341.7	-209.3
79	ok	0.07	0.2	6.96e-03	20.9	20.9	20.9	20.9	-35.5	-29.3	-43.0	-9107.5	-8829.6	-4290.9
80	ok	0.07	8.69e-02	4.29e-03	20.9	20.9	20.9	20.9	-10.2	-13.1	6.2	-5099.4	-2202.6	-424.0
81	ok	0.07	0.4	1.04e-02	20.9	20.9	20.9	20.9	-55.3	-44.8	62.6	-2.439e+04	-9512.8	7500.7
82	ok	0.07	0.3	3.85e-03	20.9	20.9	20.9	20.9	-2.6	0.1	8.3	-9129.8	-6253.2	-7729.0
83	ok	0.07	0.2	2.19e-03	20.9	20.9	20.9	20.9	0.8	19.7	8.8	-5528.8	8974.0	3550.0
112	ok	0.07	8.15e-02	1.93e-03	20.9	20.9	20.9	20.9	-2.2	4.2	5.6	-52.6	-4821.6	36.7
113	ok	0.07	0.1	3.31e-03	20.9	20.9	20.9	20.9	-15.8	-3.4	21.3	-1530.3	-4584.5	1296.1
114	ok	0.07	0.1	3.55e-03	20.9	20.9	20.9	20.9	1.0	-4.5	6.8	-1935.6	-4843.5	-241.6
115	ok	0.07	0.2	5.19e-03	20.9	20.9	20.9	20.9	-23.2	40.3	7.0	-5528.8	8974.0	1434.6
116	ok	0.07	0.3	5.29e-03	20.9	20.9	20.9	20.9	-56.6	26.8	19.7	-1.877e+04	2599.4	1480.9
117	ok	0.07	0.3	3.32e-03	20.9	20.9	20.9	20.9	27.0	-7.1	-0.6	1.331e+04	-1.189e+04	-2561.3
118	ok	0.07	0.5	2.00e-03	20.9	20.9	20.9	20.9	-9.1	20.6	-9.0	-2.022e+04	-2871.1	-1.836e+04
147	ok	0.07	0.1	1.76e-03	20.9	20.9	20.9	20.9	-1.5	2.4	5.9	179.9	-6750.3	-215.4
148	ok	0.07	0.3	3.65e-03	20.9	20.9	20.9	20.9	-5.9	-34.1	11.9	1104.7	-1.478e+04	-2620.7
149	ok	0.07	0.5	1.11e-02	20.9	20.9	20.9	20.9	-39.6	-73.5	68.9	-8936.6	-2.947e+04	8265.5
150	ok	0.07	0.4	6.51e-03	20.9	20.9	20.9	20.9	30.3	-70.7	21.1	2241.1	-2.350e+04	1565.8
151	ok	0.07	0.5	7.34e-03	20.9	20.9	20.9	20.9	4.6	-56.5	25.9	-7272.6	-2.854e+04	1.151e+04
152	ok	0.07	0.3	2.63e-03	20.9	20.9	20.9	20.9	-3.2	0.7	-2.1	-8354.1	-5243.3	7001.4
153	ok	0.07	0.2	2.36e-03	20.9	20.9	20.9	20.9	-6.3	14.3	-10.3	9096.6	5052.9	-3438.9
182	ok	0.07	6.90e-02	1.01e-03	20.9	20.9	20.9	20.9	-2.6	-5.2	7.7	4.0	-4092.4	-24.1
183	ok	0.07	0.1	4.51e-03	20.9	20.9	20.9	20.9	-13.4	-19.5	35.3	-3326.6	-7408.7	-309.2
184	ok	0.07	0.3	4.62e-03	20.9	20.9	20.9	20.9	0.4	-5.9	5.2	-7570.7	-1.144e+04	-1.006e+04
185	ok	0.07	0.4	3.11e-03	20.9	20.9	20.9	20.9	-10.0	30.4	-2.8	-1.386e+04	1.772e+04	-3045.7
186	ok	0.07	0.3	3.35e-03	20.9	20.9	20.9	20.9	-3.1	2.1	5.2	2515.8	9635.5	-9532.4
187	ok	0.07	0.1	2.97e-03	20.9	20.9	20.9	20.9	-10.8	-9.1	-24.2	-4879.5	-4323.6	118.9
188	ok	0.07	6.04e-02	9.22e-04	20.9	20.9	20.9	20.9	-4.8	-9.8	1.6	-760.0	-1856.9	-409.6
217	ok	0.07	8.02e-03	6.34e-04	20.9	20.9	20.9	20.9	-0.6	-5.0	3.9	-145.6	290.9	336.8
218	ok	0.07	1.95e-02	9.76e-04	20.9	20.9	20.9	20.9	6.4	0.5	6.3	-1021.0	1092.7	-321.8
219	ok	0.07	0.2	2.25e-03	20.9	20.9	20.9	20.9	19.0	-9.0	15.6	5694.1	1.171e+04	4201.3
220	ok	0.07	0.7	2.45e-03	20.9	20.9	20.9	20.9	13.8	-8.1	-19.3	-3602.2	-2.480e+04	-2.295e+04
221	ok	0.07	0.2	2.64e-03	20.9	20.9	20.9	20.9	-27.3	2.8	10.2	-8611.0	-9658.8	3118.7
222	ok	0.07	4.61e-02	8.66e-04	20.9	20.9	20.9	20.9	-9.7	1.1	1.7	-1225.5	-999.5	-537.4
223	ok	0.07	7.30e-03	4.64e-04	20.9	20.9	20.9	20.9	-2.9	-1.2	-2.3	78.7	19.0	-315.6

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.66	0.01	20.94	20.94	20.94	20.94	-56.56	-73.50	-43.01	-2.439e+04	-2.947e+04	-2.295e+04
								30.25	40.29	68.92	1.331e+04	1.772e+04	1.151e+04

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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		daN/cm2				daN/cm	daN/cm
7	ok	0.16					
8	ok	0.36					
9	ok	0.38					
10	ok	0.38					
11	ok	0.49					
12	ok	0.49					
13	ok	0.41					
42	ok	0.31					
43	ok	0.97					
44	ok	0.97					
45	ok	0.91					
46	ok	1.78					
47	ok	1.78					
48	ok	1.06					
77	ok	0.49					
78	ok	0.97					
79	ok	0.97					
80	ok	0.93					
81	ok	1.78					
82	ok	1.78					
83	ok	1.46					
112	ok	0.49					
113	ok	0.99					
114	ok	1.11					
115	ok	1.32					
116	ok	1.32					
117	ok	1.46					
118	ok	1.46					
147	ok	0.52					
148	ok	2.01					
149	ok	2.01					
150	ok	1.32					
151	ok	1.78					
152	ok	1.78					
153	ok	1.03					
182	ok	0.52					
183	ok	2.01					
184	ok	2.01					
185	ok	1.78					
186	ok	1.78					
187	ok	1.78					
188	ok	0.88					
217	ok	0.48					
218	ok	1.31					
219	ok	1.78					
220	ok	1.78					
221	ok	1.30					
222	ok	1.11					
223	ok	0.54					

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	2.01						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
2	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
14	ok	0.07	5.72e-03	4.67e-04	20.9	20.9	20.9	20.9	3.4	-4.6	-0.6	-216.3	-115.2	-156.8
15	ok	0.07	2.80e-02	9.11e-04	20.9	20.9	20.9	20.9	-4.4	-1.7	-4.0	-1649.5	-15.3	-65.5
16	ok	0.07	3.95e-02	1.72e-03	20.9	20.9	20.9	20.9	2.0	-1.0	-3.5	-2341.5	106.1	5.4
17	ok	0.07	3.01e-02	2.03e-03	20.9	20.9	20.9	20.9	20.9	-2.2	-2.2	-1745.6	49.3	-168.6
18	ok	0.07	3.94e-02	1.80e-03	20.9	20.9	20.9	20.9	14.3	-1.9	4.9	-2315.5	127.4	95.3
19	ok	0.07	2.89e-02	7.18e-04	20.9	20.9	20.9	20.9	1.9	-3.4	5.9	-1480.7	-72.4	158.5
20	ok	0.07	6.56e-03	4.65e-04	20.9	20.9	20.9	20.9	-3.4	-0.6	3.0	-35.2	-87.7	263.1
49	ok	0.07	1.89e-02	1.02e-03	20.9	20.9	20.9	20.9	-11.8	1.9	-0.3	341.7	-986.8	55.1
50	ok	0.07	6.07e-02	2.53e-03	20.9	20.9	20.9	20.9	-9.9	-6.8	-20.7	-3488.9	-2607.9	-316.0
51	ok	0.07	0.1	2.22e-03	20.9	20.9	20.9	20.9	17.7	0.9	6.4	5888.6	-854.8	-1975.2
52	ok	0.07	7.93e-02	2.35e-03	20.9	20.9	20.9	20.9	2.8	-11.2	-12.1	-2451.8	-2378.8	-1302.6
53	ok	0.07	0.1	2.74e-03	20.9	20.9	20.9	20.9	25.9	4.4	-9.1	6163.4	-835.5	1328.9



54	ok	0.07	6.99e-02	3.61e-03	20.9	20.9	20.9	20.9	-14.8	-10.1	26.9	-3780.6	-3180.0	547.6
55	ok	0.07	2.17e-02	9.87e-04	20.9	20.9	20.9	20.9	4.1	6.1	5.6	262.9	-1283.0	68.6
84	ok	0.07	9.49e-02	2.18e-03	20.9	20.9	20.9	20.9	-6.5	-22.0	-6.4	-4826.9	-3726.3	1242.7
85	ok	0.07	0.2	2.28e-03	20.9	20.9	20.9	20.9	3.0	6.3	-9.1	-4279.3	-4474.7	3860.4
86	ok	0.07	0.3	5.78e-03	20.9	20.9	20.9	20.9	-30.3	-21.6	-38.4	-1.372e+04	-9546.3	-5239.9
87	ok	0.07	0.1	3.50e-03	20.9	20.9	20.9	20.9	20.3	-38.9	9.0	1585.9	-6440.8	837.3
88	ok	0.07	0.3	8.69e-03	20.9	20.9	20.9	20.9	-59.2	-31.1	52.8	-1.479e+04	-1.202e+04	6220.2
89	ok	0.07	0.1	4.00e-03	20.9	20.9	20.9	20.9	-5.6	-1.3	2.0	-3822.7	-4264.1	-2498.9
90	ok	0.07	9.85e-02	1.95e-03	20.9	20.9	20.9	20.9	-10.1	13.2	16.6	3774.8	7.9	1524.3
119	ok	0.07	0.3	2.29e-03	20.9	20.9	20.9	20.9	-1.9	25.1	4.7	-9999.6	-6582.1	-9389.4
120	ok	0.07	0.2	2.17e-03	20.9	20.9	20.9	20.9	2.6	-7.9	-5.1	9298.3	-7251.2	-2024.1
121	ok	0.07	0.2	3.28e-03	20.9	20.9	20.9	20.9	-33.7	15.0	14.7	-1.113e+04	-2072.2	1656.3
122	ok	0.07	0.2	3.51e-03	20.9	20.9	20.9	20.9	24.2	-37.4	-4.7	3123.7	-9615.5	57.5
123	ok	0.07	0.2	5.26e-03	20.9	20.9	20.9	20.9	57.3	-24.2	-15.9	9938.2	-4392.9	-628.4
124	ok	0.07	0.2	3.03e-03	20.9	20.9	20.9	20.9	30.9	-7.1	9.26e-03	8680.4	-8659.2	-1683.4
125	ok	0.07	0.3	2.06e-03	20.9	20.9	20.9	20.9	7.9	-8.6	18.8	9808.1	-4446.7	8978.9
154	ok	0.07	0.1	2.63e-03	20.9	20.9	20.9	20.9	8.8	21.3	-5.3	4746.5	-2045.0	1644.2
155	ok	0.07	0.2	3.01e-03	20.9	20.9	20.9	20.9	1.3	5.6	13.2	-4734.5	-7232.5	-4203.5
156	ok	0.07	0.5	9.12e-03	20.9	20.9	20.9	20.9	-29.7	-62.2	56.8	-1.134e+04	-2.740e+04	8228.4
157	ok	0.07	0.3	5.59e-03	20.9	20.9	20.9	20.9	25.4	-61.2	16.8	1484.5	-2.045e+04	2017.0
158	ok	0.07	0.5	6.86e-03	20.9	20.9	20.9	20.9	3.7	-53.5	28.3	-7101.1	-2.573e+04	1.020e+04
159	ok	0.07	0.2	3.01e-03	20.9	20.9	20.9	20.9	17.1	-25.6	9.9	2796.9	-1.385e+04	2092.9
160	ok	0.07	0.1	1.93e-03	20.9	20.9	20.9	20.9	8.8	-14.9	14.3	-4731.1	-6130.1	1497.8
189	ok	0.07	6.45e-02	1.13e-03	20.9	20.9	20.9	20.9	-9.3	-2.8	3.4	234.0	-3825.2	-46.8
190	ok	0.07	0.1	3.62e-03	20.9	20.9	20.9	20.9	-10.2	-13.9	29.6	-3835.2	-6982.0	-388.1
191	ok	0.07	0.3	4.19e-03	20.9	20.9	20.9	20.9	-2.0	-6.9	2.4	-7931.8	-1.082e+04	-9597.9
192	ok	0.07	0.4	3.27e-03	20.9	20.9	20.9	20.9	7.8	-35.1	-1.3	8688.3	-1.859e+04	681.1
193	ok	0.07	0.3	3.40e-03	20.9	20.9	20.9	20.9	-0.9	-6.4	3.5	-5577.9	-1.068e+04	9350.0
194	ok	0.07	9.94e-02	2.76e-03	20.9	20.9	20.9	20.9	-7.3	-9.9	-22.2	-2522.4	-5370.6	5.8
195	ok	0.07	5.68e-02	7.73e-04	20.9	20.9	20.9	20.9	-6.4	-7.1	-0.3	-309.6	-3230.9	-199.8
224	ok	0.07	8.28e-03	4.90e-04	20.9	20.9	20.9	20.9	-2.0	-2.9	2.8	-91.3	271.7	357.0
225	ok	0.07	3.27e-02	9.86e-04	20.9	20.9	20.9	20.9	5.0	4.8	5.7	-1455.7	1148.0	-255.0
226	ok	0.07	0.3	2.17e-03	20.9	20.9	20.9	20.9	-14.8	8.0	-18.3	-4817.4	-1.307e+04	-4448.2
227	ok	0.07	0.7	2.36e-03	20.9	20.9	20.9	20.9	-4.6	9.5	-23.6	2504.1	2.758e+04	-2.168e+04
228	ok	0.07	0.3	2.23e-03	20.9	20.9	20.9	20.9	13.8	-13.1	-18.6	6845.5	1.255e+04	-4547.1
229	ok	0.07	2.21e-02	1.10e-03	20.9	20.9	20.9	20.9	7.9	6.2	-3.9	-365.2	1052.8	169.5
230	ok	0.07	6.57e-03	3.71e-04	20.9	20.9	20.9	20.9	-1.1	-2.4	-2.0	-137.3	186.0	-288.9

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.69	9.12e-03	20.94	20.94	20.94	20.94	-59.20	-62.19	-38.36	-1.479e+04	-2.740e+04	-2.168e+04
								57.33	25.12	56.78	9938.17	2.758e+04	1.020e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
14	ok	0.20						
15	ok	0.35						
16	ok	0.43						
17	ok	0.46						
18	ok	0.46						
19	ok	0.42						
20	ok	0.23						
49	ok	0.69						
50	ok	1.26						
51	ok	1.26						
52	ok	1.09						
53	ok	1.45						
54	ok	1.45						
55	ok	0.72						
84	ok	1.06						
85	ok	1.26						
86	ok	1.26						
87	ok	1.09						
88	ok	1.45						
89	ok	1.45						
90	ok	1.08						
119	ok	1.35						
120	ok	1.35						
121	ok	0.92						
122	ok	1.20						
123	ok	1.20						
124	ok	1.08						
125	ok	1.08						
154	ok	1.35						
155	ok	2.04						
156	ok	2.04						
157	ok	1.20						



158	ok	1.56
159	ok	1.56
160	ok	0.86
189	ok	0.81
190	ok	2.04
191	ok	2.04
192	ok	1.17
193	ok	1.56
194	ok	1.56
195	ok	0.61
224	ok	0.45
225	ok	1.14
226	ok	1.17
227	ok	1.17
228	ok	0.99
229	ok	0.99
230	ok	0.47

<b>Nodo</b>	<b>Max tau</b> 2.04	<b>Ver V pr</b>	<b>Ver V sec</b>	<b>Af V pr</b>	<b>Af V sec</b>	<b>V pr</b>	<b>V sec</b>
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
3	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
21	ok	0.07	5.80e-03	4.47e-04	20.9	20.9	20.9	20.9	0.5	-3.8	-1.0	-157.0	-98.8	-181.8
22	ok	0.07	2.49e-02	8.84e-04	20.9	20.9	20.9	20.9	6.8	1.1	3.6	1448.7	-54.3	-133.7
23	ok	0.07	3.22e-02	1.53e-03	20.9	20.9	20.9	20.9	2.8	0.7	3.3	1888.9	-56.5	-191.5
24	ok	0.07	2.61e-02	1.86e-03	20.9	20.9	20.9	20.9	21.2	-1.9	-2.0	-1495.3	43.7	-157.6
25	ok	0.07	4.31e-02	1.61e-03	20.9	20.9	20.9	20.9	-3.5	0.8	-4.0	2536.5	-82.5	192.2
26	ok	0.07	3.07e-02	6.52e-04	20.9	20.9	20.9	20.9	-2.4	-1.6	5.5	-1810.6	-17.6	88.6
27	ok	0.07	5.89e-03	4.32e-04	20.9	20.9	20.9	20.9	-3.4	-0.4	2.7	-1.7	-87.9	251.9
56	ok	0.07	2.06e-02	1.02e-03	20.9	20.9	20.9	20.9	7.76e-03	-0.2	-0.2	-178.0	-1147.5	-274.8
57	ok	0.07	5.76e-02	2.69e-03	20.9	20.9	20.9	20.9	-10.3	-4.7	-18.4	-3216.8	-2520.7	-361.7
58	ok	0.07	0.1	2.18e-03	20.9	20.9	20.9	20.9	16.5	1.8	7.5	5789.5	-819.9	-1640.6
59	ok	0.07	7.32e-02	2.17e-03	20.9	20.9	20.9	20.9	3.9	-12.5	-13.2	-2297.5	-2515.8	-1415.3
60	ok	0.07	0.1	2.58e-03	20.9	20.9	20.9	20.9	26.0	3.7	-7.6	6895.5	-912.9	1636.3
61	ok	0.07	6.86e-02	3.20e-03	20.9	20.9	20.9	20.9	-13.7	-8.9	25.3	-3889.9	-2940.4	442.6
62	ok	0.07	2.06e-02	1.15e-03	20.9	20.9	20.9	20.9	4.2	7.1	5.4	349.8	-1172.0	27.6
91	ok	0.07	0.1	2.37e-03	20.9	20.9	20.9	20.9	-2.3	-16.8	-5.4	-5703.1	-4335.6	1748.0
92	ok	0.07	0.2	2.32e-03	20.9	20.9	20.9	20.9	-1.8	-7.3	7.9	5018.0	2110.9	-5265.4
93	ok	0.07	0.3	6.02e-03	20.9	20.9	20.9	20.9	-29.7	-13.6	-33.5	-1.295e+04	-9004.0	-4990.4
94	ok	0.07	9.64e-02	3.01e-03	20.9	20.9	20.9	20.9	16.4	-33.3	8.5	1357.7	-5638.2	869.6
95	ok	0.07	0.3	8.09e-03	20.9	20.9	20.9	20.9	-58.6	-26.6	48.0	-1.538e+04	-1.078e+04	6049.1
96	ok	0.07	0.1	3.78e-03	20.9	20.9	20.9	20.9	5.1	2.9	-1.9	5403.5	1750.2	4974.9
97	ok	0.07	0.1	2.32e-03	20.9	20.9	20.9	20.9	7.1	-17.1	-16.9	-5918.7	-4974.0	-1785.9
126	ok	0.07	0.3	3.44e-03	20.9	20.9	20.9	20.9	-0.6	-21.0	5.0	1.128e+04	-3134.4	-1.024e+04
127	ok	0.07	0.2	1.95e-03	20.9	20.9	20.9	20.9	-2.1	-9.5	4.6	9563.0	-7766.6	1518.4
128	ok	0.07	0.2	2.74e-03	20.9	20.9	20.9	20.9	-28.3	14.7	12.2	-9941.3	-2183.7	1497.9
129	ok	0.07	0.1	3.09e-03	20.9	20.9	20.9	20.9	23.6	-26.3	-2.7	3177.6	-7896.9	362.6
130	ok	0.07	0.2	5.31e-03	20.9	20.9	20.9	20.9	58.4	-20.4	-13.6	1.119e+04	-3708.7	-577.0
131	ok	0.07	0.2	3.37e-03	20.9	20.9	20.9	20.9	38.1	-8.1	2.6	1.055e+04	-9467.7	-1808.4
132	ok	0.07	0.3	2.81e-03	20.9	20.9	20.9	20.9	11.5	-12.8	19.0	1.217e+04	-4933.7	1.079e+04
161	ok	0.07	0.1	3.71e-03	20.9	20.9	20.9	20.9	-11.6	-23.0	9.3	-5446.9	-4671.1	-1684.9
162	ok	0.07	0.2	2.60e-03	20.9	20.9	20.9	20.9	-3.9	-7.7	-12.8	5026.2	1540.7	5069.4
163	ok	0.07	0.4	6.88e-03	20.9	20.9	20.9	20.9	-21.5	-41.9	46.5	-9835.2	-2.227e+04	6990.5
164	ok	0.07	0.3	3.89e-03	20.9	20.9	20.9	20.9	17.0	-43.3	9.8	1196.2	-1.739e+04	1576.1
165	ok	0.07	0.4	7.11e-03	20.9	20.9	20.9	20.9	10.2	-41.8	13.2	-5852.6	-2.300e+04	7744.1
166	ok	0.07	0.2	3.88e-03	20.9	20.9	20.9	20.9	7.4	2.9	-5.1	5677.6	894.6	-5701.0
167	ok	0.07	0.1	2.67e-03	20.9	20.9	20.9	20.9	17.9	-8.3	21.6	-5978.3	-5997.6	1944.8
196	ok	0.07	5.23e-02	1.56e-03	20.9	20.9	20.9	20.9	-0.2	3.5	1.7	26.3	-2258.9	-441.0
197	ok	0.07	9.47e-02	3.13e-03	20.9	20.9	20.9	20.9	-7.2	-9.7	27.6	-3161.9	-5623.8	-40.4
198	ok	0.07	0.3	3.01e-03	20.9	20.9	20.9	20.9	1.7	-3.5	4.5	-5678.3	-9069.2	-7718.9
199	ok	0.07	0.3	2.36e-03	20.9	20.9	20.9	20.9	9.5	-20.8	0.3	7271.4	-1.547e+04	425.8
200	ok	0.07	0.3	2.57e-03	20.9	20.9	20.9	20.9	2.0	-3.1	-3.0	-5060.0	-9028.9	7729.9
201	ok	0.07	9.26e-02	2.84e-03	20.9	20.9	20.9	20.9	-7.3	-11.1	-23.3	-2631.3	-5499.6	29.5
202	ok	0.07	5.12e-02	1.28e-03	20.9	20.9	20.9	20.9	-9.0	-8.8	1.1	-392.0	-2461.5	-243.1
231	ok	0.07	6.46e-03	4.92e-04	20.9	20.9	20.9	20.9	-2.8	-3.4	1.9	-112.0	177.6	315.4
232	ok	0.07	2.83e-02	7.09e-04	20.9	20.9	20.9	20.9	0.4	-5.7	2.4	-1159.7	825.7	-132.0
233	ok	0.07	0.2	1.88e-03	20.9	20.9	20.9	20.9	-16.8	2.7	-8.9	-4947.3	-1.141e+04	-3978.1



234	ok	0.07	0.6	2.08e-03	20.9	20.9	20.9	20.9	-14.2	7.1	11.1	2560.8	2.417e+04	1.898e+04
235	ok	0.07	0.2	1.78e-03	20.9	20.9	20.9	20.9	17.5	-3.5	-8.4	5253.1	1.036e+04	-3751.6
236	ok	0.07	2.60e-02	6.75e-04	20.9	20.9	20.9	20.9	4.3	-1.4	-3.5	-880.9	856.3	133.8
237	ok	0.07	6.21e-03	3.73e-04	20.9	20.9	20.9	20.9	-0.7	-3.0	-2.2	-126.8	185.9	-297.4

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.60	8.09e-03	20.94	20.94	20.94	58.42	-43.31	-33.48	-1.538e+04	-2.300e+04	-1.024e+04
								14.67	47.99	1.217e+04	2.417e+04	1.898e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
21	ok	0.21						
22	ok	0.35						
23	ok	0.41						
24	ok	0.44						
25	ok	0.44						
26	ok	0.38						
27	ok	0.24						
56	ok	0.68						
57	ok	1.23						
58	ok	1.23						
59	ok	1.04						
60	ok	1.42						
61	ok	1.42						
62	ok	0.81						
91	ok	0.92						
92	ok	1.23						
93	ok	1.23						
94	ok	1.04						
95	ok	1.42						
96	ok	1.42						
97	ok	1.09						
126	ok	0.94						
127	ok	0.94						
128	ok	0.94						
129	ok	1.03						
130	ok	1.03						
131	ok	1.09						
132	ok	1.09						
161	ok	0.94						
162	ok	1.72						
163	ok	1.72						
164	ok	1.03						
165	ok	1.60						
166	ok	1.60						
167	ok	0.86						
196	ok	0.69						
197	ok	1.72						
198	ok	1.72						
199	ok	1.01						
200	ok	1.60						
201	ok	1.60						
202	ok	0.69						
231	ok	0.40						
232	ok	0.90						
233	ok	0.94						
234	ok	0.94						
235	ok	0.89						
236	ok	0.88						
237	ok	0.41						

Nodo	Max tau 1.72	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
4	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
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28	ok	0.07	6.16e-03	5.24e-04	20.9	20.9	20.9	20.9	-2.2	-3.9	-2.0	-105.5	-115.5	-242.8
29	ok	0.07	2.81e-02	7.56e-04	20.9	20.9	20.9	20.9	-4.6	-2.5	-4.7	-1653.2	-27.4	-100.6
30	ok	0.07	3.91e-02	1.82e-03	20.9	20.9	20.9	20.9	-6.7	1.5	4.7	2301.6	-85.1	-169.5
31	ok	0.07	2.81e-02	2.20e-03	20.9	20.9	20.9	20.9	22.8	-2.1	-2.5	-1616.6	49.5	-149.9
32	ok	0.07	3.82e-02	1.79e-03	20.9	20.9	20.9	20.9	-2.5	0.7	-3.1	2235.2	-66.9	208.5
33	ok	0.07	2.78e-02	6.23e-04	20.9	20.9	20.9	20.9	-0.7	-1.3	5.0	-1644.1	-13.0	70.0
34	ok	0.07	5.84e-03	4.22e-04	20.9	20.9	20.9	20.9	-1.9	-0.4	2.6	3.6	-73.8	223.0
63	ok	0.07	2.07e-02	1.82e-03	20.9	20.9	20.9	20.9	0.4	-4.65e-02	-0.3	-175.2	-1103.3	-267.5
64	ok	0.07	6.70e-02	3.17e-03	20.9	20.9	20.9	20.9	-9.5	-8.8	-27.1	-3655.0	-3043.6	-532.7
65	ok	0.07	0.1	2.93e-03	20.9	20.9	20.9	20.9	6.6	6.2	14.5	6209.6	-835.7	-1362.2
66	ok	0.07	7.53e-02	2.27e-03	20.9	20.9	20.9	20.9	6.8	-15.7	-15.1	-2670.0	-2837.9	-1399.5
67	ok	0.07	0.1	3.53e-03	20.9	20.9	20.9	20.9	36.2	-0.7	0.6	6007.0	-861.8	2001.3
68	ok	0.07	6.14e-02	2.79e-03	20.9	20.9	20.9	20.9	-12.9	-8.4	21.1	-3511.3	-2637.6	342.6
69	ok	0.07	1.93e-02	1.92e-03	20.9	20.9	20.9	20.9	17.1	11.6	7.0	337.8	-1015.4	-37.9
98	ok	0.07	0.1	4.22e-03	20.9	20.9	20.9	20.9	-16.9	-26.9	-15.4	-5117.3	-4247.9	1474.8
99	ok	0.07	0.1	2.73e-03	20.9	20.9	20.9	20.9	-6.1	-10.2	16.7	4700.3	1560.3	-4564.8
100	ok	0.07	0.3	7.05e-03	20.9	20.9	20.9	20.9	-23.7	-31.7	-46.7	-1.425e+04	-1.162e+04	-6016.8
101	ok	0.07	0.1	3.54e-03	20.9	20.9	20.9	20.9	31.0	-29.6	-8.8	2127.6	-5259.8	-691.9
102	ok	0.07	0.3	7.67e-03	20.9	20.9	20.9	20.9	-60.5	-23.2	42.5	-1.387e+04	-9624.4	5337.1
103	ok	0.07	0.1	4.89e-03	20.9	20.9	20.9	20.9	-11.1	-7.0	-9.4	-4189.5	-4336.4	-3362.5
104	ok	0.07	9.80e-02	4.30e-03	20.9	20.9	20.9	20.9	-25.9	3.0	30.3	4311.3	482.5	1595.9
133	ok	0.07	0.3	3.86e-03	20.9	20.9	20.9	20.9	-0.5	-33.4	14.8	1.051e+04	-4149.9	-9404.8
134	ok	0.07	0.2	2.41e-03	20.9	20.9	20.9	20.9	-5.4	-11.8	4.0	8788.6	-8974.9	1681.2
135	ok	0.07	0.2	2.51e-03	20.9	20.9	20.9	20.9	23.8	-17.3	14.3	9871.2	-4293.0	611.9
136	ok	0.07	0.2	3.80e-03	20.9	20.9	20.9	20.9	12.2	-16.6	-4.6	4214.1	-5856.7	-1272.4
137	ok	0.07	0.2	5.63e-03	20.9	20.9	20.9	20.9	-62.5	20.2	-14.3	-1.003e+04	-2116.2	-1649.0
138	ok	0.07	0.2	4.23e-03	20.9	20.9	20.9	20.9	47.4	-9.1	-5.9	9361.8	-7928.6	1562.9
139	ok	0.07	0.3	4.22e-03	20.9	20.9	20.9	20.9	14.6	-11.6	-23.9	9879.2	-4764.3	-9223.0
168	ok	0.07	0.1	3.73e-03	20.9	20.9	20.9	20.9	-5.9	-16.5	10.0	-4830.3	-5988.3	-1543.4
169	ok	0.07	0.2	2.44e-03	20.9	20.9	20.9	20.9	1.1	-21.7	-8.4	3404.4	-8260.5	-556.7
170	ok	0.07	0.5	6.52e-03	20.9	20.9	20.9	20.9	3.9	-45.6	-17.7	-6602.3	-2.464e+04	-9175.4
171	ok	0.07	0.3	4.56e-03	20.9	20.9	20.9	20.9	15.8	-49.8	-13.5	1348.1	-1.926e+04	-1887.0
172	ok	0.07	0.5	9.02e-03	20.9	20.9	20.9	20.9	-32.9	-53.4	-50.5	-8622.3	-2.566e+04	-7437.6
173	ok	0.07	0.2	4.04e-03	20.9	20.9	20.9	20.9	6.5	5.0	-1.4	4830.7	1513.2	-4808.6
174	ok	0.07	0.1	3.26e-03	20.9	20.9	20.9	20.9	9.2	-18.0	21.4	-4833.9	-3954.9	1207.6
203	ok	0.07	5.54e-02	1.65e-03	20.9	20.9	20.9	20.9	1.6	-4.5	2.9	-250.1	-3121.3	180.5
204	ok	0.07	9.80e-02	2.65e-03	20.9	20.9	20.9	20.9	-4.7	-11.3	21.7	-2149.0	-5824.7	-36.3
205	ok	0.07	0.3	2.96e-03	20.9	20.9	20.9	20.9	1.0	-4.1	1.6	-5520.4	-1.009e+04	-8792.0
206	ok	0.07	0.3	2.49e-03	20.9	20.9	20.9	20.9	8.9	-22.8	-0.8	8220.9	-1.741e+04	-558.1
207	ok	0.07	0.3	2.92e-03	20.9	20.9	20.9	20.9	0.7	-3.6	-6.7	-7014.8	-1.013e+04	8805.6
208	ok	0.07	0.1	3.52e-03	20.9	20.9	20.9	20.9	-8.0	-13.2	-27.9	-3085.5	-6358.9	168.0
209	ok	0.07	5.91e-02	1.55e-03	20.9	20.9	20.9	20.9	-2.0	3.9	-2.9	52.8	-2592.4	441.2
238	ok	0.07	6.56e-03	4.40e-04	20.9	20.9	20.9	20.9	-0.5	-3.4	1.8	-170.3	230.0	294.6
239	ok	0.07	2.35e-02	9.49e-04	20.9	20.9	20.9	20.9	5.1	-0.1	3.1	-583.1	999.5	-160.1
240	ok	0.07	0.2	2.08e-03	20.9	20.9	20.9	20.9	-18.3	5.9	-9.5	-6250.0	-1.232e+04	-4363.6
241	ok	0.07	0.6	2.06e-03	20.9	20.9	20.9	20.9	-21.1	8.9	-9.1	2732.9	2.617e+04	-2.047e+04
242	ok	0.07	0.2	2.17e-03	20.9	20.9	20.9	20.9	22.3	0.7	-7.7	4692.0	1.186e+04	-4189.5
243	ok	0.07	2.94e-02	6.02e-04	20.9	20.9	20.9	20.9	5.6	-3.0	-3.9	-1065.6	1057.4	198.2
244	ok	0.07	7.28e-03	4.58e-04	20.9	20.9	20.9	20.9	-0.8	-4.0	-2.4	-127.2	239.1	-325.1

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.64	9.02e-03	20.94	20.94	20.94	20.94	-62.48	-53.43	-50.50	-1.425e+04	-2.566e+04	-2.047e+04
								47.39	20.19	42.52	1.051e+04	2.617e+04	8805.57

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
28	ok	0.22						
29	ok	0.39						
30	ok	0.44						
31	ok	0.44						
32	ok	0.41						
33	ok	0.35						
34	ok	0.21						
63	ok	0.75						
64	ok	1.40						
65	ok	1.40						
66	ok	1.05						
67	ok	1.28						
68	ok	1.28						
69	ok	0.73						
98	ok	1.09						
99	ok	1.40						
100	ok	1.40						
101	ok	1.05						
102	ok	1.28						
103	ok	1.28						



104	ok	1.08
133	ok	1.09
134	ok	1.09
135	ok	1.05
136	ok	1.05
137	ok	0.92
138	ok	1.27
139	ok	1.27
168	ok	0.89
169	ok	1.57
170	ok	1.57
171	ok	1.05
172	ok	1.83
173	ok	1.83
174	ok	1.27
203	ok	0.62
204	ok	1.57
205	ok	1.57
206	ok	1.05
207	ok	1.83
208	ok	1.83
209	ok	0.77
238	ok	0.44
239	ok	0.96
240	ok	0.96
241	ok	1.05
242	ok	1.05
243	ok	1.04
244	ok	0.43

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.83						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
5	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
35	ok	0.07	5.50e-03	6.33e-04	20.9	20.9	20.9	20.9	-6.8	-5.0	-0.3	125.8	-133.0	-280.2
36	ok	0.07	4.83e-02	2.98e-03	20.9	20.9	20.9	20.9	-9.5	-33.5	4.4	-2856.5	-1.9	-66.7
37	ok	0.07	7.54e-02	8.65e-03	20.9	20.9	20.9	20.9	48.5	48.4	28.3	-3536.9	-1089.3	594.9
38	ok	0.07	0.3	9.32e-03	20.9	20.9	20.9	20.9	-87.1	16.6	-48.9	-1.748e+04	-3743.1	-6015.0
39	ok	0.07	8.05e-02	9.23e-03	20.9	20.9	20.9	20.9	-59.6	-40.5	-25.8	-4776.0	-264.3	-234.9
40	ok	0.07	1.78e-02	3.43e-03	20.9	20.9	20.9	20.9	-5.6	-4.7	-6.1	-1026.9	-117.3	-86.6
41	ok	0.07	5.36e-03	7.19e-04	20.9	20.9	20.9	20.9	8.1	1.2	0.9	117.6	-86.3	79.3
70	ok	0.07	1.52e-02	2.47e-03	20.9	20.9	20.9	20.9	-25.5	-2.4	3.6	703.1	-886.1	117.8
71	ok	0.07	9.04e-02	4.99e-03	20.9	20.9	20.9	20.9	-8.2	0.3	-40.1	-5357.0	-2799.5	-213.6
72	ok	0.07	0.2	4.62e-03	20.9	20.9	20.9	20.9	-5.7	29.3	-12.8	-1.063e+04	1015.5	1393.5
73	ok	0.07	0.2	4.44e-03	20.9	20.9	20.9	20.9	-16.8	-12.1	-29.7	-5469.7	-1740.1	-1682.4
74	ok	0.07	9.45e-02	4.34e-03	20.9	20.9	20.9	20.9	-4.5	-17.6	-38.3	-4028.3	-1666.2	-2525.8
75	ok	0.07	6.01e-02	4.49e-03	20.9	20.9	20.9	20.9	-8.3	-3.7	34.8	-2166.0	-2934.4	920.7
76	ok	0.07	1.97e-02	9.21e-04	20.9	20.9	20.9	20.9	-3.7	5.2	4.9	-87.1	-1121.4	53.3
105	ok	0.07	0.2	6.42e-03	20.9	20.9	20.9	20.9	22.4	46.0	21.6	8205.6	3370.6	-3092.9
106	ok	0.07	0.2	4.48e-03	20.9	20.9	20.9	20.9	5.7	23.7	-25.8	-7922.0	-5898.2	6565.6
107	ok	0.07	0.4	7.12e-03	20.9	20.9	20.9	20.9	-38.8	-8.9	-56.2	-2.211e+04	-8486.5	-7000.0
108	ok	0.07	0.1	3.48e-03	20.9	20.9	20.9	20.9	7.9	-19.9	20.3	3027.9	-5283.9	1572.5
109	ok	0.07	0.3	8.44e-03	20.9	20.9	20.9	20.9	-56.6	-12.6	54.3	-1.065e+04	-1.083e+04	5723.5
110	ok	0.07	7.49e-02	4.47e-03	20.9	20.9	20.9	20.9	-15.3	20.7	18.2	-1582.1	-3204.2	345.8
111	ok	0.07	3.92e-02	3.12e-03	20.9	20.9	20.9	20.9	-0.1	30.8	-0.9	157.7	-2112.8	-166.2
140	ok	0.07	0.5	7.27e-03	20.9	20.9	20.9	20.9	2.8	52.3	-18.2	-1.730e+04	-3874.8	1.565e+04
141	ok	0.07	0.3	3.22e-03	20.9	20.9	20.9	20.9	1.7	26.8	-2.1	-1.621e+04	-2378.5	-4231.2
142	ok	0.07	0.3	2.97e-03	20.9	20.9	20.9	20.9	-29.9	30.1	-16.5	-1.673e+04	1890.2	-1437.9
143	ok	0.07	0.1	4.44e-03	20.9	20.9	20.9	20.9	-41.6	-8.4	-14.2	-4205.3	-5201.4	-2168.4
144	ok	0.07	0.1	4.90e-03	20.9	20.9	20.9	20.9	-55.0	29.9	-11.3	-5303.9	-1296.7	-1788.4
145	ok	0.07	9.01e-02	2.81e-03	20.9	20.9	20.9	20.9	-21.3	17.7	-13.9	-2134.2	-3478.6	-747.0
146	ok	0.07	6.85e-02	4.06e-03	20.9	20.9	20.9	20.9	-0.4	24.2	-1.5	3.9	-3781.9	-94.1
175	ok	0.07	0.2	7.54e-03	20.9	20.9	20.9	20.9	38.8	58.8	-29.8	8088.1	4378.8	3087.8
176	ok	0.07	0.2	5.13e-03	20.9	20.9	20.9	20.9	11.0	25.6	33.9	-7703.7	-4791.7	-6138.9
177	ok	0.07	0.4	7.76e-03	20.9	20.9	20.9	20.9	2.2	-61.2	-30.8	-6352.8	-2.276e+04	-8983.9
178	ok	0.07	0.3	5.51e-03	20.9	20.9	20.9	20.9	17.0	-60.3	-16.1	1113.8	-1.981e+04	-1726.9
179	ok	0.07	0.5	1.02e-02	20.9	20.9	20.9	20.9	-37.9	-57.8	-59.3	-9261.5	-2.611e+04	-8601.0



180	ok	0.07	0.2	4.08e-03	20.9	20.9	20.9	20.9	-8.8	-20.6	-12.4	539.3	-1.308e+04	1651.7
181	ok	0.07	8.88e-02	3.27e-03	20.9	20.9	20.9	20.9	-0.7	12.7	-5.2	212.0	-5227.9	131.5
210	ok	0.07	4.94e-02	3.03e-03	20.9	20.9	20.9	20.9	-0.4	2.0	3.1	54.6	-2171.4	-403.1
211	ok	0.07	9.04e-02	5.69e-03	20.9	20.9	20.9	20.9	-5.3	2.9	35.7	-4788.8	-3332.3	122.8
212	ok	0.07	0.3	5.70e-03	20.9	20.9	20.9	20.9	-8.1	-15.0	-18.2	-5898.5	-9607.6	-8710.5
213	ok	0.07	0.3	5.23e-03	20.9	20.9	20.9	20.9	-6.1	45.8	-6.9	-1.322e+04	1.377e+04	2590.7
214	ok	0.07	0.3	4.35e-03	20.9	20.9	20.9	20.9	-2.5	0.2	-12.2	-5270.7	-9158.1	7114.5
215	ok	0.07	0.1	4.55e-03	20.9	20.9	20.9	20.9	-7.2	-15.4	-33.5	-3120.0	-7083.3	-25.2
216	ok	0.07	5.30e-02	9.74e-04	20.9	20.9	20.9	20.9	-2.6	0.6	-6.2	14.2	-3141.0	59.8
245	ok	0.07	6.35e-03	7.20e-04	20.9	20.9	20.9	20.9	-0.4	-3.3	1.9	-75.2	185.1	292.2
246	ok	0.07	4.12e-02	3.83e-03	20.9	20.9	20.9	20.9	6.2	1.3	3.7	-1099.9	807.0	-198.6
247	ok	0.07	0.2	9.97e-03	20.9	20.9	20.9	20.9	-9.2	-34.3	31.0	4972.9	9532.3	3625.7
248	ok	0.07	0.6	1.08e-02	20.9	20.9	20.9	20.9	-31.6	-3.3	-41.8	-7233.5	-2.063e+04	-1.988e+04
249	ok	0.07	0.2	9.03e-03	20.9	20.9	20.9	20.9	35.7	8.6	-8.0	5364.2	8986.4	-2918.6
250	ok	0.07	2.18e-02	3.17e-03	20.9	20.9	20.9	20.9	9.1	-3.9	-3.5	-634.5	844.7	347.7
251	ok	0.07	6.85e-03	6.66e-04	20.9	20.9	20.9	20.9	-1.5	-4.4	-2.3	-232.8	177.3	-283.6

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.57	0.01	20.94	20.94	20.94	20.94	-87.06	-61.22	-59.32	-2.211e+04	-2.611e+04	-1.988e+04
								48.46	58.82	54.32	8205.58	1.377e+04	1.565e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
35	ok	0.33						
36	ok	0.46						
37	ok	0.75						
38	ok	1.28						
39	ok	1.28						
40	ok	0.71						
41	ok	0.20						
70	ok	0.80						
71	ok	1.65						
72	ok	1.65						
73	ok	1.28						
74	ok	1.28						
75	ok	1.28						
76	ok	0.37						
105	ok	1.20						
106	ok	1.65						
107	ok	1.65						
108	ok	1.01						
109	ok	1.28						
110	ok	1.28						
111	ok	0.40						
140	ok	1.20						
141	ok	1.20						
142	ok	1.08						
143	ok	1.08						
144	ok	0.97						
145	ok	0.96						
146	ok	0.40						
175	ok	0.89						
176	ok	1.65						
177	ok	1.65						
178	ok	1.08						
179	ok	1.96						
180	ok	1.96						
181	ok	0.55						
210	ok	0.72						
211	ok	1.65						
212	ok	1.65						
213	ok	1.82						
214	ok	1.96						
215	ok	1.96						
216	ok	0.55						
245	ok	0.39						
246	ok	0.88						
247	ok	1.16						
248	ok	1.82						
249	ok	1.82						
250	ok	1.31						
251	ok	0.44						

Nodo	Max tau 1.96	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
6	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
258	ok	0.07	5.67e-03	5.98e-04	20.9	20.9	20.9	20.9	-4.5	3.9	-0.2	-113.1	-188.9	-150.9
259	ok	0.07	2.08e-02	1.51e-03	20.9	20.9	20.9	20.9	1.1	-17.4	-0.3	-1224.9	371.9	135.8
260	ok	0.07	7.90e-02	3.29e-03	20.9	20.9	20.9	20.9	-28.8	-12.5	-9.9	-3312.5	-3591.4	612.0
261	ok	0.07	0.3	3.89e-03	20.9	20.9	20.9	20.9	42.1	-3.1	11.7	-5203.6	-9532.9	-9704.1
262	ok	0.07	0.1	4.18e-03	20.9	20.9	20.9	20.9	34.3	17.6	-11.6	-1481.9	4546.9	1362.1
263	ok	0.07	5.77e-02	1.79e-03	20.9	20.9	20.9	20.9	-4.8	-15.9	1.6	-3418.2	234.2	-92.4
264	ok	0.07	7.65e-03	6.42e-04	20.9	20.9	20.9	20.9	-3.9	-3.6	2.4	227.0	-53.4	334.8
265	ok	0.07	3.64e-02	1.06e-03	20.9	20.9	20.9	20.9	-1.6	-8.0	-4.8	9.0	-2147.8	-12.2
266	ok	0.07	7.56e-02	3.13e-03	20.9	20.9	20.9	20.9	-6.4	-13.0	-26.2	-2953.7	-4481.5	-67.9
267	ok	0.07	0.1	2.53e-03	20.9	20.9	20.9	20.9	-9.8	-3.9	16.8	839.0	4711.7	-4699.7
268	ok	0.07	0.2	1.97e-03	20.9	20.9	20.9	20.9	-16.5	-0.6	-3.7	-8672.3	8186.2	-1384.9
269	ok	0.07	0.2	3.02e-03	20.9	20.9	20.9	20.9	11.2	4.7	20.6	-6525.0	-5453.9	-4854.8
270	ok	0.07	0.1	3.71e-03	20.9	20.9	20.9	20.9	-11.0	-9.6	32.4	-6293.9	-4023.6	-434.1
271	ok	0.07	3.77e-02	1.11e-03	20.9	20.9	20.9	20.9	-9.4	-1.5	2.7	948.0	-1622.5	-222.7
300	ok	0.07	4.96e-02	1.67e-03	20.9	20.9	20.9	20.9	-0.9	-0.6	-4.4	126.6	-2939.1	81.9
301	ok	0.07	0.1	3.01e-03	20.9	20.9	20.9	20.9	2.6	20.1	11.1	-1016.8	6451.9	-2049.7
302	ok	0.07	0.3	6.76e-03	20.9	20.9	20.9	20.9	-19.9	-39.3	-47.0	-9738.7	-1.807e+04	-6007.2
303	ok	0.07	0.2	3.53e-03	20.9	20.9	20.9	20.9	11.9	-33.1	-6.8	-2433.4	-1.323e+04	-1079.3
304	ok	0.07	0.5	7.86e-03	20.9	20.9	20.9	20.9	-43.3	-29.6	53.5	-2.398e+04	-1.288e+04	7623.7
305	ok	0.07	0.3	3.36e-03	20.9	20.9	20.9	20.9	0.4	3.9	13.1	-9080.2	-7208.3	-8067.8
306	ok	0.07	0.2	3.00e-03	20.9	20.9	20.9	20.9	10.0	24.1	1.4	1.039e+04	3063.4	3597.8
335	ok	0.07	3.79e-02	2.01e-03	20.9	20.9	20.9	20.9	-2.0	21.8	-1.9	41.6	-2191.4	-152.6
336	ok	0.07	8.71e-02	2.91e-03	20.9	20.9	20.9	20.9	-13.5	-3.1	19.0	-2845.2	-3347.5	1812.0
337	ok	0.07	0.1	3.51e-03	20.9	20.9	20.9	20.9	-38.2	19.1	11.4	-6415.9	1047.3	922.5
338	ok	0.07	0.1	3.90e-03	20.9	20.9	20.9	20.9	-20.6	-7.9	14.4	-8280.5	-2948.3	1762.6
339	ok	0.07	0.3	4.15e-03	20.9	20.9	20.9	20.9	-41.0	14.8	-11.7	-1.790e+04	1078.6	-1910.4
340	ok	0.07	0.3	2.93e-03	20.9	20.9	20.9	20.9	-15.5	12.0	-0.2	-1.591e+04	7479.1	-364.0
341	ok	0.07	0.6	2.73e-03	20.9	20.9	20.9	20.9	-5.8	18.2	-6.5	-2.259e+04	-2970.4	-1.855e+04
370	ok	0.07	5.83e-02	1.67e-03	20.9	20.9	20.9	20.9	-0.4	11.7	1.6	167.7	-2885.4	-356.5
371	ok	0.07	0.1	3.85e-03	20.9	20.9	20.9	20.9	-2.6	-7.6	8.6	-1408.0	-5471.6	98.5
372	ok	0.07	0.4	1.06e-02	20.9	20.9	20.9	20.9	-29.1	-81.5	61.7	-1.247e+04	-2.019e+04	7238.7
373	ok	0.07	0.2	6.83e-03	20.9	20.9	20.9	20.9	-26.2	75.1	-19.5	-3742.6	1.285e+04	-635.5
374	ok	0.07	0.4	8.14e-03	20.9	20.9	20.9	20.9	-42.5	-35.0	-48.4	-2.387e+04	-1.055e+04	-7469.2
375	ok	0.07	0.3	2.80e-03	20.9	20.9	20.9	20.9	1.9	-3.3	4.8	7386.3	4393.8	-7564.3
376	ok	0.07	0.2	3.34e-03	20.9	20.9	20.9	20.9	1.1	-18.8	4.8	-1.062e+04	-5769.9	3766.4
405	ok	0.07	4.16e-02	8.90e-04	20.9	20.9	20.9	20.9	-1.9	-4.5	7.0	-1.4	-2458.8	64.4
406	ok	0.07	8.65e-02	3.89e-03	20.9	20.9	20.9	20.9	-11.0	-19.8	29.1	-3597.1	-5089.7	289.3
407	ok	0.07	0.2	6.03e-03	20.9	20.9	20.9	20.9	-3.4	-11.3	-4.0	-6035.4	-6242.2	-4874.4
408	ok	0.07	0.2	4.30e-03	20.9	20.9	20.9	20.9	-5.3	37.5	-4.0	-9145.9	1.140e+04	-1963.6
409	ok	0.07	0.2	3.43e-03	20.9	20.9	20.9	20.9	-0.4	2.5	5.3	965.5	5985.6	-5895.1
410	ok	0.07	0.1	3.50e-03	20.9	20.9	20.9	20.9	-10.6	-7.9	-29.1	-6011.8	-3391.0	74.4
411	ok	0.07	3.60e-02	1.11e-03	20.9	20.9	20.9	20.9	-8.5	2.1	-2.6	892.9	-1268.2	155.3
440	ok	0.07	6.46e-03	5.08e-04	20.9	20.9	20.9	20.9	0.2	-3.4	3.8	-87.6	44.8	307.0
441	ok	0.07	2.48e-02	1.93e-03	20.9	20.9	20.9	20.9	10.1	13.5	8.3	-1463.3	522.8	-44.1
442	ok	0.07	0.1	4.25e-03	20.9	20.9	20.9	20.9	2.6	-30.9	30.5	796.6	6150.3	2366.0
443	ok	0.07	0.4	4.22e-03	20.9	20.9	20.9	20.9	30.2	-16.3	16.3	-5150.6	-1.387e+04	1.260e+04
444	ok	0.07	0.1	3.38e-03	20.9	20.9	20.9	20.9	-33.6	-0.9	13.4	-6111.3	-6159.8	1856.0
445	ok	0.07	5.52e-02	9.74e-04	20.9	20.9	20.9	20.9	4.9	-1.8	-2.0	-2395.1	31.8	474.9
446	ok	0.07	6.90e-03	5.32e-04	20.9	20.9	20.9	20.9	-3.8	-2.0	-2.1	191.3	-110.8	-332.9

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.57	0.01	20.94	20.94	20.94	20.94	-43.34	-81.49	-48.44	-2.398e+04	-2.019e+04	-1.855e+04
								42.08	75.06	61.74	1.039e+04	1.285e+04	1.260e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
258	ok	0.24						
259	ok	0.74						
260	ok	1.28						
261	ok	1.55						
262	ok	1.55						
263	ok	0.83						
264	ok	0.41						



265	ok	0.40
266	ok	1.49
267	ok	1.49
268	ok	1.55
269	ok	1.94
270	ok	1.94
271	ok	0.99
300	ok	0.52
301	ok	1.49
302	ok	1.49
303	ok	1.00
304	ok	1.94
305	ok	1.94
306	ok	1.02
335	ok	0.56
336	ok	1.23
337	ok	1.23
338	ok	1.16
339	ok	1.16
340	ok	1.12
341	ok	1.04
370	ok	0.56
371	ok	1.77
372	ok	1.77
373	ok	1.16
374	ok	1.85
375	ok	1.85
376	ok	1.04
405	ok	0.47
406	ok	1.77
407	ok	1.77
408	ok	1.16
409	ok	1.85
410	ok	1.85
411	ok	0.97
440	ok	0.29
441	ok	0.83
442	ok	1.16
443	ok	1.16
444	ok	1.06
445	ok	0.78
446	ok	0.43

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.94						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
7	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
272	ok	0.07	1.54e-02	7.89e-04	20.9	20.9	20.9	20.9	-6.7	0.3	0.4	679.4	-169.0	-419.9
273	ok	0.07	7.02e-02	1.52e-03	20.9	20.9	20.9	20.9	-4.1	-9.7	-1.4	-4166.3	427.1	-12.4
274	ok	0.07	0.2	3.24e-03	20.9	20.9	20.9	20.9	21.7	10.8	14.2	3801.4	9643.7	-3677.2
275	ok	0.07	0.5	3.66e-03	20.9	20.9	20.9	20.9	35.0	-9.69e-02	17.6	-3089.6	-1.930e+04	-1.605e+04
276	ok	0.07	0.2	4.11e-03	20.9	20.9	20.9	20.9	27.3	19.2	-16.8	2121.5	9712.4	3644.5
277	ok	0.07	4.19e-02	1.77e-03	20.9	20.9	20.9	20.9	-6.66e-03	-0.5	-4.99e-02	-2485.3	390.4	-26.4
278	ok	0.07	6.94e-03	4.11e-04	20.9	20.9	20.9	20.9	-1.00e-02	-0.2	3.30e-02	36.6	43.6	371.6
307	ok	0.07	0.1	1.19e-03	20.9	20.9	20.9	20.9	1.3	7.6	0.6	7482.7	2918.5	-2882.5
308	ok	0.07	0.2	2.44e-03	20.9	20.9	20.9	20.9	5.4	0.8	-11.9	-6923.9	-4788.0	5701.7
309	ok	0.07	0.2	1.91e-03	20.9	20.9	20.9	20.9	10.6	4.3	-12.2	-6038.4	-7508.4	7857.6
310	ok	0.07	0.3	1.95e-03	20.9	20.9	20.9	20.9	11.9	9.4	5.8	5806.3	-1.538e+04	2181.7
311	ok	0.07	0.3	2.21e-03	20.9	20.9	20.9	20.9	11.8	5.4	16.7	-7809.0	-7420.8	-7587.3
312	ok	0.07	9.50e-02	2.83e-03	20.9	20.9	20.9	20.9	-6.1	-7.8	24.3	-4278.6	-5167.0	-457.5
313	ok	0.07	4.33e-02	6.19e-04	20.9	20.9	20.9	20.9	-2.8	0.3	2.0	615.9	-2156.8	-81.3
342	ok	0.07	0.4	1.72e-03	20.9	20.9	20.9	20.9	-2.4	9.1	1.7	-1.584e+04	-3293.0	1.323e+04
343	ok	0.07	0.2	2.49e-03	20.9	20.9	20.9	20.9	-5.4	3.0	-12.1	-1.183e+04	-4690.0	-3229.1
344	ok	0.07	0.4	4.37e-03	20.9	20.9	20.9	20.9	-20.8	-18.5	-30.6	-1.751e+04	-1.436e+04	-6856.0
345	ok	0.07	0.3	1.78e-03	20.9	20.9	20.9	20.9	18.5	-16.7	8.1	-44.0	-1.544e+04	1109.7
346	ok	0.07	0.4	6.29e-03	20.9	20.9	20.9	20.9	-39.5	-14.7	43.6	-1.774e+04	-1.790e+04	7035.6
347	ok	0.07	0.2	3.05e-03	20.9	20.9	20.9	20.9	-0.3	5.2	9.6	-4366.2	-6827.8	-4390.8



348	ok	0.07	0.1	1.47e-03	20.9	20.9	20.9	20.9	-0.7	14.1	6.4	6221.5	-1100.8	2321.3
377	ok	0.07	0.1	1.94e-03	20.9	20.9	20.9	20.9	1.8	22.4	-0.4	7765.9	207.7	2953.4
378	ok	0.07	0.2	1.90e-03	20.9	20.9	20.9	20.9	3.6	9.9	1.6	-5005.8	-6482.7	-6427.5
379	ok	0.07	0.2	3.27e-03	20.9	20.9	20.9	20.9	-0.8	-4.24e-02	1.43e-02	-8858.0	-3992.8	1328.8
380	ok	0.07	0.2	4.05e-03	20.9	20.9	20.9	20.9	0.5	-0.9	-0.3	-7447.8	-8685.7	1392.7
381	ok	0.07	0.2	3.89e-03	20.9	20.9	20.9	20.9	-9.50e-03	-0.2	0.5	-1.079e+04	-5248.3	1690.3
382	ok	0.07	0.2	2.36e-03	20.9	20.9	20.9	20.9	-16.7	3.0	15.9	-1.045e+04	-3448.5	2749.6
383	ok	0.07	0.3	1.73e-03	20.9	20.9	20.9	20.9	-5.8	16.8	7.4	-1.326e+04	-3854.4	1.099e+04
412	ok	0.07	9.28e-02	1.67e-03	20.9	20.9	20.9	20.9	6.98e-02	0.3	0.1	157.7	-5006.4	-658.3
413	ok	0.07	0.2	3.12e-03	20.9	20.9	20.9	20.9	-7.5	1.9	6.5	-2960.0	-6166.5	-2228.0
414	ok	0.07	0.4	9.07e-03	20.9	20.9	20.9	20.9	-27.8	-72.3	49.7	-1.361e+04	-2.150e+04	6346.8
415	ok	0.07	0.3	6.58e-03	20.9	20.9	20.9	20.9	0.6	-1.4	-0.3	-3607.5	-1.437e+04	-1708.2
416	ok	0.07	0.4	8.17e-03	20.9	20.9	20.9	20.9	-0.2	-1.6	-1.2	-1.788e+04	-2.104e+04	-6530.9
417	ok	0.07	0.2	3.23e-03	20.9	20.9	20.9	20.9	-1.8	3.9	-5.2	-5828.9	-5497.5	5208.7
418	ok	0.07	0.1	1.80e-03	20.9	20.9	20.9	20.9	7.78e-02	19.1	-4.8	6310.0	845.4	-2193.4
447	ok	0.07	5.22e-02	6.45e-04	20.9	20.9	20.9	20.9	-2.9	4.5	5.4	145.4	-2728.8	-214.9
448	ok	0.07	9.99e-02	3.25e-03	20.9	20.9	20.9	20.9	-9.7	-14.3	24.7	-4079.5	-5733.7	-594.5
449	ok	0.07	0.2	5.12e-03	20.9	20.9	20.9	20.9	-9.7	-11.1	-6.8	-7354.7	-7726.2	-7075.6
450	ok	0.07	0.3	5.14e-03	20.9	20.9	20.9	20.9	-6.3	-36.7	21.6	-3717.2	-1.462e+04	3214.4
451	ok	0.07	0.2	5.49e-03	20.9	20.9	20.9	20.9	-10.0	-14.9	15.3	-6730.9	-7840.3	7091.5
452	ok	0.07	0.1	2.89e-03	20.9	20.9	20.9	20.9	-0.2	-0.4	-0.5	-5026.4	-5635.0	529.4
453	ok	0.07	5.04e-02	5.46e-04	20.9	20.9	20.9	20.9	-0.1	-0.2	-9.18e-02	243.8	-2990.6	52.1
475	ok	0.07	7.24e-03	4.02e-04	20.9	20.9	20.9	20.9	-0.3	-2.1	2.8	-14.4	171.4	316.7
476	ok	0.07	3.61e-02	1.92e-03	20.9	20.9	20.9	20.9	11.5	16.2	7.9	-1844.9	789.0	-208.7
477	ok	0.07	0.2	3.64e-03	20.9	20.9	20.9	20.9	12.2	-17.5	32.4	1387.5	8957.0	3006.5
478	ok	0.07	0.5	5.36e-03	20.9	20.9	20.9	20.9	-17.3	-14.4	45.9	-4760.0	-1.894e+04	1.549e+04
479	ok	0.07	0.2	5.22e-03	20.9	20.9	20.9	20.9	0.4	-31.5	-39.1	2120.9	8975.5	-3160.9
480	ok	0.07	4.29e-02	2.53e-03	20.9	20.9	20.9	20.9	0.2	7.56e-02	-0.1	-2544.8	479.7	87.7
481	ok	0.07	7.65e-03	4.02e-04	20.9	20.9	20.9	20.9	2.66e-02	-0.1	-7.40e-02	6.7	68.9	-415.1

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.50	9.07e-03	20.94	20.94	20.94	20.94	-39.49	-72.30	-39.09	-1.788e+04	-2.150e+04	-1.605e+04
								35.02	22.35	49.71	7765.93	9712.39	1.549e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
272	ok	0.56						
273	ok	0.93						
274	ok	1.24						
275	ok	1.28						
276	ok	1.28						
277	ok	0.93						
278	ok	0.35						
307	ok	0.83						
308	ok	2.01						
309	ok	2.01						
310	ok	1.28						
311	ok	2.01						
312	ok	2.01						
313	ok	0.65						
342	ok	1.10						
343	ok	2.01						
344	ok	2.01						
345	ok	1.17						
346	ok	2.01						
347	ok	2.01						
348	ok	0.78						
377	ok	1.10						
378	ok	1.23						
379	ok	1.23						
380	ok	1.00						
381	ok	1.24						
382	ok	1.24						
383	ok	0.78						
412	ok	0.99						
413	ok	1.99						
414	ok	1.99						
415	ok	1.17						
416	ok	2.20						
417	ok	2.20						
418	ok	0.74						
447	ok	0.60						
448	ok	1.99						
449	ok	1.99						
450	ok	1.17						
451	ok	2.20						



452	ok	2.20
453	ok	0.69
475	ok	0.37
476	ok	0.81
477	ok	0.88
478	ok	0.88
479	ok	0.81
480	ok	0.77
481	ok	0.39

<b>Nodo</b>	<b>Max tau</b> 2.20	<b>Ver V pr</b>	<b>Ver V sec</b>	<b>Af V pr</b>	<b>Af V sec</b>	<b>V pr</b>	<b>V sec</b>
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
8	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
279	ok	0.07	8.17e-03	3.86e-04	20.9	20.9	20.9	20.9	7.01e-03	0.2	0.1	16.5	66.9	-442.3
280	ok	0.07	4.73e-02	9.74e-04	20.9	20.9	20.9	20.9	0.3	0.3	-0.2	-2779.6	395.4	74.4
281	ok	0.07	0.1	2.47e-03	20.9	20.9	20.9	20.9	20.0	5.6	5.0	792.4	6766.4	-2173.0
282	ok	0.07	0.4	2.40e-03	20.9	20.9	20.9	20.9	20.6	-0.2	-2.7	-3360.4	-1.416e+04	1.203e+04
283	ok	0.07	0.1	2.55e-03	20.9	20.9	20.9	20.9	22.5	10.3	-6.6	42.2	6773.8	2103.9
284	ok	0.07	4.82e-02	1.07e-03	20.9	20.9	20.9	20.9	0.3	0.2	0.2	-2758.4	391.1	-65.8
285	ok	0.07	8.13e-03	4.07e-04	20.9	20.9	20.9	20.9	-1.95e-02	-0.2	7.89e-02	19.8	50.0	440.8
314	ok	0.07	5.13e-02	7.68e-04	20.9	20.9	20.9	20.9	0.4	0.2	0.2	296.6	-3041.4	56.1
315	ok	0.07	0.1	2.44e-03	20.9	20.9	20.9	20.9	-8.25e-02	-0.5	-0.9	-5232.2	-5464.1	682.5
316	ok	0.07	0.2	2.13e-03	20.9	20.9	20.9	20.9	7.7	1.6	-9.4	-5918.6	-6592.1	6023.3
317	ok	0.07	0.2	1.86e-03	20.9	20.9	20.9	20.9	5.9	-5.0	7.5	-3534.8	-1.236e+04	2793.9
318	ok	0.07	0.2	2.40e-03	20.9	20.9	20.9	20.9	7.4	2.4	13.0	-6624.7	-6537.0	-5811.5
319	ok	0.07	0.1	2.74e-03	20.9	20.9	20.9	20.9	-8.55e-02	-0.5	0.9	-5214.7	-5475.0	-627.5
320	ok	0.07	5.13e-02	7.14e-04	20.9	20.9	20.9	20.9	5.91e-02	0.1	-0.3	294.6	-3043.9	-44.6
349	ok	0.07	0.2	2.11e-03	20.9	20.9	20.9	20.9	-2.6	15.4	-3.0	8305.5	1621.7	-2942.6
350	ok	0.07	0.2	2.32e-03	20.9	20.9	20.9	20.9	-0.4	4.8	-8.8	-7293.5	-7422.5	6469.2
351	ok	0.07	0.4	5.48e-03	20.9	20.9	20.9	20.9	0.2	-2.5	-1.4	-1.884e+04	-1.998e+04	-5989.7
352	ok	0.07	0.2	2.69e-03	20.9	20.9	20.9	20.9	-0.9	4.2	-0.4	-4850.3	-1.391e+04	1677.9
353	ok	0.07	0.4	6.18e-03	20.9	20.9	20.9	20.9	0.2	-2.5	1.4	-1.886e+04	-2.008e+04	6084.3
354	ok	0.07	0.2	2.42e-03	20.9	20.9	20.9	20.9	-1.4	3.9	8.0	-7446.9	-7638.1	-6588.5
355	ok	0.07	0.2	1.99e-03	20.9	20.9	20.9	20.9	1.2	18.4	4.1	8496.3	690.9	2910.8
384	ok	0.07	0.5	2.37e-03	20.9	20.9	20.9	20.9	-5.6	26.4	1.3	-1.750e+04	-4881.6	-1.417e+04
385	ok	0.07	0.2	2.11e-03	20.9	20.9	20.9	20.9	-9.9	2.4	10.3	-1.363e+04	-4193.1	2989.4
386	ok	0.07	0.3	3.22e-03	20.9	20.9	20.9	20.9	0.6	1.1	0.8	-1.243e+04	-5692.4	-1666.4
387	ok	0.07	0.2	2.57e-03	20.9	20.9	20.9	20.9	-0.2	1.5	0.5	-7957.3	-9038.9	-2380.2
388	ok	0.07	0.3	3.60e-03	20.9	20.9	20.9	20.9	0.7	1.2	-0.9	-1.243e+04	-5713.4	1696.1
389	ok	0.07	0.2	2.22e-03	20.9	20.9	20.9	20.9	-13.3	3.3	11.8	-1.387e+04	-3947.1	3122.9
390	ok	0.07	0.5	2.13e-03	20.9	20.9	20.9	20.9	-4.4	15.4	7.3	-1.776e+04	-4384.4	1.432e+04
419	ok	0.07	0.2	2.46e-03	20.9	20.9	20.9	20.9	8.3	23.7	-1.6	8373.3	310.2	2861.1
420	ok	0.07	0.2	2.22e-03	20.9	20.9	20.9	20.9	0.6	4.5	11.1	-7353.7	-7891.2	-6550.8
421	ok	0.07	0.4	6.53e-03	20.9	20.9	20.9	20.9	0.8	1.8	0.9	-1.861e+04	-2.133e+04	6188.3
422	ok	0.07	0.3	4.28e-03	20.9	20.9	20.9	20.9	0.4	2.5	0.2	-4800.7	-1.480e+04	1700.4
423	ok	0.07	0.4	6.70e-03	20.9	20.9	20.9	20.9	0.8	2.2	-1.0	-1.856e+04	-2.131e+04	-6174.5
424	ok	0.07	0.2	2.51e-03	20.9	20.9	20.9	20.9	-1.3	4.4	-4.8	-7421.4	-6400.5	6597.9
425	ok	0.07	0.2	1.73e-03	20.9	20.9	20.9	20.9	-1.0	18.0	-4.3	8445.4	1925.2	-2996.3
454	ok	0.07	5.41e-02	8.77e-04	20.9	20.9	20.9	20.9	-0.9	-1.2	-0.2	308.6	-3206.5	-79.8
455	ok	0.07	0.1	2.81e-03	20.9	20.9	20.9	20.9	0.3	-0.2	1.0	-5225.4	-5818.6	-779.5
456	ok	0.07	0.3	3.05e-03	20.9	20.9	20.9	20.9	-0.8	-4.5	3.0	-7747.0	-7803.8	-7114.4
457	ok	0.07	0.3	2.56e-03	20.9	20.9	20.9	20.9	0.3	-19.9	13.4	-3872.5	-1.461e+04	3175.4
458	ok	0.07	0.2	3.11e-03	20.9	20.9	20.9	20.9	-1.3	-6.4	2.5	-7050.1	-7869.6	7286.7
459	ok	0.07	0.1	2.63e-03	20.9	20.9	20.9	20.9	0.3	-9.23e-02	-1.2	-5227.8	-5804.3	768.3
460	ok	0.07	5.40e-02	5.85e-04	20.9	20.9	20.9	20.9	-1.0	-1.3	0.2	309.5	-3199.2	72.7
482	ok	0.07	8.48e-03	4.16e-04	20.9	20.9	20.9	20.9	-3.71e-02	-0.5	-1.15e-02	24.5	95.2	441.3
483	ok	0.07	4.74e-02	8.22e-04	20.9	20.9	20.9	20.9	-1.0	-3.6	-0.7	-2734.8	517.7	-116.1
484	ok	0.07	0.2	2.03e-03	20.9	20.9	20.9	20.9	17.4	-3.5	12.7	1036.3	9013.6	3012.9
485	ok	0.07	0.5	2.08e-03	20.9	20.9	20.9	20.9	3.0	-7.4	20.7	-4669.2	-1.897e+04	1.552e+04
486	ok	0.07	0.2	2.31e-03	20.9	20.9	20.9	20.9	11.4	-11.9	-16.1	1780.1	9009.9	-3096.7
487	ok	0.07	4.69e-02	1.02e-03	20.9	20.9	20.9	20.9	-1.1	-4.1	0.8	-2739.9	515.6	109.8
488	ok	0.07	8.51e-03	3.78e-04	20.9	20.9	20.9	20.9	-4.20e-02	-0.6	3.32e-02	24.7	90.6	-444.9

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.48	6.70e-03	20.94	20.94	20.94	20.94	-13.31	-19.92	-16.09	-1.886e+04	-2.133e+04	-1.417e+04
								22.50	26.40	20.73	8496.33	9013.62	1.552e+04



Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
279	ok	0.41						
280	ok	0.77						
281	ok	0.90						
282	ok	0.93						
283	ok	0.93						
284	ok	0.77						
285	ok	0.41						
314	ok	0.75						
315	ok	2.23						
316	ok	2.23						
317	ok	1.22						
318	ok	2.24						
319	ok	2.24						
320	ok	0.78						
349	ok	0.76						
350	ok	2.23						
351	ok	2.23						
352	ok	1.22						
353	ok	2.24						
354	ok	2.24						
355	ok	0.82						
384	ok	0.79						
385	ok	1.22						
386	ok	1.22						
387	ok	0.82						
388	ok	1.22						
389	ok	1.22						
390	ok	0.82						
419	ok	0.79						
420	ok	2.29						
421	ok	2.29						
422	ok	1.20						
423	ok	2.29						
424	ok	2.29						
425	ok	0.78						
454	ok	0.78						
455	ok	2.29						
456	ok	2.29						
457	ok	1.20						
458	ok	2.29						
459	ok	2.29						
460	ok	0.76						
482	ok	0.41						
483	ok	0.82						
484	ok	0.91						
485	ok	0.91						
486	ok	0.86						
487	ok	0.81						
488	ok	0.42						

Nodo	Max tau 2.29	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
9	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
286	ok	0.07	7.16e-03	4.51e-04	20.9	20.9	20.9	20.9	-3.9	-2.2	-1.8	62.7	70.9	-312.4
287	ok	0.07	4.27e-02	1.00e-03	20.9	20.9	20.9	20.9	-4.7	-10.4	-1.4	-2366.5	448.5	147.0
288	ok	0.07	0.1	2.55e-03	20.9	20.9	20.9	20.9	19.4	2.6	2.7	1124.9	6582.1	-2113.3
289	ok	0.07	0.4	2.77e-03	20.9	20.9	20.9	20.9	26.0	-1.6	3.1	-2373.6	-1.458e+04	-1.232e+04
290	ok	0.07	0.1	2.86e-03	20.9	20.9	20.9	20.9	24.7	7.4	-5.5	1703.7	6974.0	2267.6
291	ok	0.07	4.77e-02	1.17e-03	20.9	20.9	20.9	20.9	0.3	1.5	0.4	-2668.1	251.4	-55.5
292	ok	0.07	7.44e-03	4.52e-04	20.9	20.9	20.9	20.9	-3.7	-1.9	1.7	143.4	34.9	305.1
321	ok	0.07	4.62e-02	1.01e-03	20.9	20.9	20.9	20.9	-10.9	-6.9	-1.1	255.6	-2730.8	105.7



322	ok	0.07	9.34e-02	2.98e-03	20.9	20.9	20.9	20.9	-9.1	-6.8	-26.3	-4923.6	-4893.6	388.8
323	ok	0.07	0.2	2.70e-03	20.9	20.9	20.9	20.9	8.2	1.4	-13.3	-6379.9	-6797.7	6016.0
324	ok	0.07	0.2	1.90e-03	20.9	20.9	20.9	20.9	6.7	-7.5	-9.6	-2994.0	-1.296e+04	-3155.5
325	ok	0.07	0.2	2.37e-03	20.9	20.9	20.9	20.9	8.9	2.4	11.2	-5243.4	-6790.0	-6091.3
326	ok	0.07	9.61e-02	2.79e-03	20.9	20.9	20.9	20.9	-9.6	-5.5	24.5	-5445.5	-4340.7	-556.2
327	ok	0.07	4.48e-02	9.96e-04	20.9	20.9	20.9	20.9	-7.9	0.5	1.5	709.0	-2040.2	-214.1
356	ok	0.07	0.1	2.69e-03	20.9	20.9	20.9	20.9	1.3	-16.9	2.7	-4671.8	-3976.4	1761.6
357	ok	0.07	0.2	2.64e-03	20.9	20.9	20.9	20.9	-0.3	4.5	-8.8	-5862.6	-6214.8	5107.9
358	ok	0.07	0.4	6.36e-03	20.9	20.9	20.9	20.9	-34.1	-23.1	-44.3	-1.806e+04	-1.753e+04	-7098.3
359	ok	0.07	0.3	3.16e-03	20.9	20.9	20.9	20.9	-0.7	3.8	0.5	-4527.7	-1.211e+04	-1514.0
360	ok	0.07	0.4	6.16e-03	20.9	20.9	20.9	20.9	-37.5	-17.0	41.2	-2.055e+04	-1.452e+04	6826.9
361	ok	0.07	0.2	2.53e-03	20.9	20.9	20.9	20.9	-1.7	4.0	7.6	-7392.7	-7030.9	-6692.4
362	ok	0.07	0.2	2.68e-03	20.9	20.9	20.9	20.9	0.5	17.2	4.1	8164.0	995.8	2703.6
391	ok	0.07	0.4	2.64e-03	20.9	20.9	20.9	20.9	-5.2	23.4	-0.7	-1.366e+04	-4021.2	-1.114e+04
392	ok	0.07	0.2	2.40e-03	20.9	20.9	20.9	20.9	-10.6	2.4	10.6	-1.125e+04	-3919.1	2541.1
393	ok	0.07	0.2	3.47e-03	20.9	20.9	20.9	20.9	0.2	1.5	0.8	-1.132e+04	-4886.5	1538.5
394	ok	0.07	0.2	2.73e-03	20.9	20.9	20.9	20.9	1.88e-02	1.2	-0.4	-7392.9	-7980.0	2132.7
395	ok	0.07	0.3	3.74e-03	20.9	20.9	20.9	20.9	0.7	1.1	-0.6	-1.177e+04	-4939.8	1514.5
396	ok	0.07	0.3	2.61e-03	20.9	20.9	20.9	20.9	-13.6	-3.0	-14.7	-1.387e+04	-3180.4	-3673.9
397	ok	0.07	0.4	2.31e-03	20.9	20.9	20.9	20.9	-3.6	13.0	-7.9	-1.719e+04	-3750.1	-1.423e+04
426	ok	0.07	0.1	2.01e-03	20.9	20.9	20.9	20.9	5.9	21.7	4.95e-02	6568.7	-378.3	2185.1
427	ok	0.07	0.2	2.42e-03	20.9	20.9	20.9	20.9	-0.1	4.2	10.0	-6006.8	-6831.0	-5271.2
428	ok	0.07	0.4	7.05e-03	20.9	20.9	20.9	20.9	-19.7	-51.4	42.8	-1.298e+04	-2.187e+04	6804.4
429	ok	0.07	0.3	4.69e-03	20.9	20.9	20.9	20.9	17.6	-52.0	-12.1	-1411.2	-1.619e+04	-1751.0
430	ok	0.07	0.4	7.61e-03	20.9	20.9	20.9	20.9	-41.1	-36.0	-47.6	-2.136e+04	-1.614e+04	-7369.6
431	ok	0.07	0.2	2.48e-03	20.9	20.9	20.9	20.9	-0.7	3.8	-8.3	-7285.8	-6752.5	6610.8
432	ok	0.07	0.2	2.07e-03	20.9	20.9	20.9	20.9	3.5	20.1	-2.4	8166.3	1246.8	-2679.7
461	ok	0.07	5.00e-02	7.00e-04	20.9	20.9	20.9	20.9	-0.7	-1.1	-0.1	250.3	-2804.3	-49.7
462	ok	0.07	9.82e-02	2.91e-03	20.9	20.9	20.9	20.9	-5.9	-11.5	24.1	-4013.3	-5670.0	-523.0
463	ok	0.07	0.3	3.06e-03	20.9	20.9	20.9	20.9	5.30e-02	-3.9	4.8	-7442.2	-8015.1	-7273.1
464	ok	0.07	0.3	2.71e-03	20.9	20.9	20.9	20.9	0.9	-20.7	-14.5	-3718.2	-1.517e+04	-3395.8
465	ok	0.07	0.3	3.45e-03	20.9	20.9	20.9	20.9	-0.2	-5.3	-3.3	-8153.4	-8149.9	7527.3
466	ok	0.07	0.1	3.15e-03	20.9	20.9	20.9	20.9	-10.5	-8.7	-26.7	-5741.4	-4718.6	587.8
467	ok	0.07	5.04e-02	6.59e-04	20.9	20.9	20.9	20.9	-6.7	2.1	-2.9	743.7	-2221.8	227.4
489	ok	0.07	7.38e-03	4.13e-04	20.9	20.9	20.9	20.9	-0.8	-3.4	2.0	8.7	168.0	304.8
490	ok	0.07	4.27e-02	8.81e-04	20.9	20.9	20.9	20.9	5.6	8.33e-02	3.7	-1839.6	823.4	-222.0
491	ok	0.07	0.2	2.11e-03	20.9	20.9	20.9	20.9	18.2	-6.7	12.7	2370.5	9314.7	3190.1
492	ok	0.07	0.5	1.98e-03	20.9	20.9	20.9	20.9	13.4	-9.2	15.9	-4684.2	-1.972e+04	1.614e+04
493	ok	0.07	0.2	2.22e-03	20.9	20.9	20.9	20.9	17.7	-5.6	-13.3	1019.9	9403.9	-3150.6
494	ok	0.07	4.99e-02	9.62e-04	20.9	20.9	20.9	20.9	6.5	2.1	-4.4	-2167.4	835.3	240.9
495	ok	0.07	7.77e-03	4.18e-04	20.9	20.9	20.9	20.9	-0.7	-3.4	-2.3	53.1	165.0	-319.6

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.50	7.61e-03	20.94	20.94	20.94	20.94	-41.13	-52.02	-47.59	-2.136e+04	-2.187e+04	-1.423e+04
								25.99	23.43	42.83	8166.27	9403.92	1.614e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
286	ok	0.37						
287	ok	0.76						
288	ok	0.98						
289	ok	0.98						
290	ok	0.91						
291	ok	0.72						
292	ok	0.37						
321	ok	0.67						
322	ok	2.01						
323	ok	2.01						
324	ok	1.09						
325	ok	2.01						
326	ok	2.01						
327	ok	0.78						
356	ok	0.74						
357	ok	2.01						
358	ok	2.01						
359	ok	1.09						
360	ok	2.01						
361	ok	2.01						
362	ok	0.88						
391	ok	0.74						
392	ok	1.13						
393	ok	1.13						
394	ok	0.89						
395	ok	1.10						
396	ok	1.10						
397	ok	0.98						



426	ok	0.73
427	ok	2.06
428	ok	2.06
429	ok	1.10
430	ok	2.05
431	ok	2.05
432	ok	0.98
461	ok	0.67
462	ok	2.06
463	ok	2.06
464	ok	1.10
465	ok	2.05
466	ok	2.05
467	ok	0.84
489	ok	0.37
490	ok	0.83
491	ok	0.92
492	ok	0.92
493	ok	0.89
494	ok	0.84
495	ok	0.37

<b>Nodo</b>	<b>Max tau</b>	<b>Ver V pr</b>	<b>Ver V sec</b>	<b>Af V pr</b>	<b>Af V sec</b>	<b>V pr</b>	<b>V sec</b>
	2.06						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
10	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
293	ok	0.07	6.38e-03	4.73e-04	20.9	20.9	20.9	20.9	-4.5	0.4	-0.3	177.2	-238.3	-183.5
294	ok	0.07	4.98e-02	2.02e-03	20.9	20.9	20.9	20.9	-7.7	-20.3	0.7	-2949.3	222.1	24.7
295	ok	0.07	0.1	4.12e-03	20.9	20.9	20.9	20.9	-12.3	-0.2	-5.7	-4530.4	-4310.6	975.8
296	ok	0.07	0.3	5.10e-03	20.9	20.9	20.9	20.9	19.0	5.9	-9.1	-4744.8	-1.078e+04	1.051e+04
297	ok	0.07	9.10e-02	5.57e-03	20.9	20.9	20.9	20.9	29.8	20.0	-19.2	769.0	4725.9	1530.3
298	ok	0.07	2.03e-02	2.42e-03	20.9	20.9	20.9	20.9	7.5	0.7	-1.2	-739.5	170.5	-590.7
299	ok	0.07	6.20e-03	5.55e-04	20.9	20.9	20.9	20.9	-1.2	-5.6	1.3	-118.2	35.7	247.2
328	ok	0.07	3.51e-02	8.60e-04	20.9	20.9	20.9	20.9	-8.4	-7.9	-0.5	294.3	-2072.0	63.4
329	ok	0.07	9.41e-02	3.04e-03	20.9	20.9	20.9	20.9	-9.6	-4.9	-27.6	-5588.0	-3720.2	71.3
330	ok	0.07	0.2	2.57e-03	20.9	20.9	20.9	20.9	-17.4	22.2	5.7	-1.084e+04	2686.2	1214.0
331	ok	0.07	0.2	1.89e-03	20.9	20.9	20.9	20.9	7.9	1.1	-5.9	-3922.3	-1.091e+04	-2736.3
332	ok	0.07	0.2	2.72e-03	20.9	20.9	20.9	20.9	12.0	5.8	18.5	-4739.7	-5477.8	-4442.7
333	ok	0.07	8.23e-02	3.33e-03	20.9	20.9	20.9	20.9	4.0	7.3	13.4	-1308.1	-2584.2	-1708.3
334	ok	0.07	3.40e-02	8.40e-04	20.9	20.9	20.9	20.9	-2.1	-5.7	4.1	16.9	-2010.1	-30.0
363	ok	0.07	0.2	2.04e-03	20.9	20.9	20.9	20.9	-0.6	-22.7	2.7	-9469.4	-5953.9	3474.4
364	ok	0.07	0.2	3.04e-03	20.9	20.9	20.9	20.9	0.5	10.1	-13.2	-7898.4	-6308.1	6649.0
365	ok	0.07	0.4	6.47e-03	20.9	20.9	20.9	20.9	-37.9	-13.6	-47.3	-2.179e+04	-1.238e+04	-7549.2
366	ok	0.07	0.2	2.22e-03	20.9	20.9	20.9	20.9	9.2	-18.4	5.4	-2288.3	-1.270e+04	995.0
367	ok	0.07	0.4	6.73e-03	20.9	20.9	20.9	20.9	-17.6	-24.8	44.6	-9954.7	-1.812e+04	6487.7
368	ok	0.07	0.1	3.37e-03	20.9	20.9	20.9	20.9	-10.6	16.8	14.6	-2214.8	-4440.8	-183.2
369	ok	0.07	5.21e-02	2.19e-03	20.9	20.9	20.9	20.9	-2.1	21.5	5.4	243.7	-2984.0	-75.7
398	ok	0.07	0.5	3.09e-03	20.9	20.9	20.9	20.9	4.1	-23.7	-2.3	2.076e+04	2121.8	-1.636e+04
399	ok	0.07	0.3	2.34e-03	20.9	20.9	20.9	20.9	-11.5	17.3	1.0	-1.401e+04	7225.0	145.8
400	ok	0.07	0.3	3.81e-03	20.9	20.9	20.9	20.9	-35.8	27.1	-14.8	-1.555e+04	922.7	-2076.6
401	ok	0.07	0.1	3.62e-03	20.9	20.9	20.9	20.9	-1.1	-9.2	-13.4	-3527.0	-5520.7	-1484.3
402	ok	0.07	0.1	4.44e-03	20.9	20.9	20.9	20.9	-45.0	8.5	-19.1	-6628.1	1239.9	-1939.0
403	ok	0.07	9.30e-02	3.43e-03	20.9	20.9	20.9	20.9	-14.5	-9.1	-20.5	-3230.5	-2730.8	-2549.0
404	ok	0.07	4.77e-02	3.01e-03	20.9	20.9	20.9	20.9	-2.4	34.4	-1.3	73.9	-2683.5	-292.8
433	ok	0.07	0.2	3.31e-03	20.9	20.9	20.9	20.9	-5.8	-28.7	1.4	-9894.2	-4384.9	-3598.4
434	ok	0.07	0.2	3.05e-03	20.9	20.9	20.9	20.9	-1.2	-8.5	-8.5	5760.9	4672.9	7071.1
435	ok	0.07	0.4	7.84e-03	20.9	20.9	20.9	20.9	-40.8	-31.0	47.0	-1.922e+04	-7432.5	5101.9
436	ok	0.07	0.1	6.63e-03	20.9	20.9	20.9	20.9	-20.3	58.8	22.7	-5045.1	4481.2	777.8
437	ok	0.07	0.3	1.25e-02	20.9	20.9	20.9	20.9	-50.8	-68.5	-73.3	-1.444e+04	-1.256e+04	-7610.4
438	ok	0.07	9.49e-02	4.87e-03	20.9	20.9	20.9	20.9	-10.8	-9.7	-15.0	-2733.1	-3892.5	-1493.8
439	ok	0.07	4.48e-02	3.10e-03	20.9	20.9	20.9	20.9	-1.3	14.1	-3.2	292.0	-2342.1	-457.2
468	ok	0.07	3.25e-02	1.15e-03	20.9	20.9	20.9	20.9	-6.6	12.5	1.9	819.7	-1866.3	-368.4
469	ok	0.07	9.24e-02	3.41e-03	20.9	20.9	20.9	20.9	-11.7	-6.0	26.0	-4413.2	-3272.0	-1002.7
470	ok	0.07	0.2	2.58e-03	20.9	20.9	20.9	20.9	0.4	-8.1	10.8	-5350.0	-1453.2	-537.7
471	ok	0.07	8.46e-02	3.46e-03	20.9	20.9	20.9	20.9	-7.4	-31.7	-14.9	-3291.0	-3474.0	-1114.2
472	ok	0.07	0.1	4.50e-03	20.9	20.9	20.9	20.9	-4.8	-28.9	-22.4	-4287.4	-1552.9	-1662.6
473	ok	0.07	0.1	6.84e-03	20.9	20.9	20.9	20.9	-16.7	-38.5	-41.1	-4366.2	-3689.5	-2598.2



474	ok	0.07	3.28e-02	2.71e-03	20.9	20.9	20.9	20.9	-4.1	-8.2	-5.5	69.9	-1748.7	-603.4
496	ok	0.07	4.15e-02	9.22e-04	20.9	20.9	20.9	20.9	-2.8	8.8	-2.9	57.4	-2335.3	-540.3
497	ok	0.07	9.66e-02	1.92e-03	20.9	20.9	20.9	20.9	-9.1	5.6	-13.3	-3561.7	-3742.1	-2061.4
498	ok	0.07	9.28e-02	1.94e-03	20.9	20.9	20.9	20.9	-12.7	0.6	1.3	-5465.9	-640.2	-491.8
499	ok	0.07	8.09e-02	1.75e-03	20.9	20.9	20.9	20.9	0.5	5.6	-0.3	-3846.6	-3450.2	1119.8
500	ok	0.07	0.2	3.75e-03	20.9	20.9	20.9	20.9	-20.6	3.6	-5.7	-9149.1	1571.9	-3157.3
501	ok	0.07	9.60e-02	6.46e-03	20.9	20.9	20.9	20.9	1.5	2.6	-0.6	-2472.4	-3573.4	1776.4
502	ok	0.07	3.99e-02	4.28e-03	20.9	20.9	20.9	20.9	-1.2	31.4	4.1	508.0	18.0	-852.6
503	ok	0.07	5.19e-02	1.42e-03	20.9	20.9	20.9	20.9	-2.1	10.2	-2.9	169.3	-3031.2	-312.3
504	ok	0.07	9.01e-02	2.76e-03	20.9	20.9	20.9	20.9	-4.6	13.8	-2.2	-1702.7	-3996.6	-1168.7
505	ok	0.07	0.3	3.94e-03	20.9	20.9	20.9	20.9	-25.3	-2.8	-26.4	-1.166e+04	-1.187e+04	-6045.4
506	ok	0.07	0.1	2.16e-03	20.9	20.9	20.9	20.9	-2.3	7.4	-4.0	-2229.3	-6044.9	1962.4
507	ok	0.07	0.4	5.12e-03	20.9	20.9	20.9	20.9	-32.6	16.8	-10.3	-1.962e+04	-4601.3	-5649.7
508	ok	0.07	0.2	6.09e-03	20.9	20.9	20.9	20.9	4.0	1.3	-1.5	-7885.9	-2911.9	-7250.5
509	ok	0.07	0.1	1.35e-02	20.9	20.9	20.9	20.9	7.0	48.1	17.0	6685.0	4248.0	1673.5
510	ok	0.07	5.93e-02	1.22e-03	20.9	20.9	20.9	20.9	-2.6	7.4	-1.6	23.5	-3443.0	-201.6
511	ok	0.07	7.30e-02	2.21e-03	20.9	20.9	20.9	20.9	-13.2	7.0	-11.6	-2281.9	-2662.9	-1847.4
512	ok	0.07	0.1	3.22e-03	20.9	20.9	20.9	20.9	-25.0	34.4	-0.2	-4890.4	778.4	-1293.7
513	ok	0.07	0.1	5.23e-03	20.9	20.9	20.9	20.9	-31.4	35.1	-6.5	-7732.9	3737.4	-623.9
514	ok	0.07	0.3	4.94e-03	20.9	20.9	20.9	20.9	-48.3	5.8	-14.2	-1.519e+04	1388.0	-2188.4
515	ok	0.07	0.3	6.47e-03	20.9	20.9	20.9	20.9	-66.5	30.3	-24.3	-1.596e+04	7011.2	-84.5
516	ok	0.07	0.4	1.37e-02	20.9	20.9	20.9	20.9	-24.1	51.0	-14.1	-1.513e+04	4901.1	-1.441e+04
520	ok	0.07	6.66e-02	8.80e-04	20.9	20.9	20.9	20.9	-1.6	5.2	2.8	136.2	-3612.0	-101.3
521	ok	0.07	0.2	4.76e-03	20.9	20.9	20.9	20.9	-1.7	-18.2	2.7	-770.7	-5589.8	-372.5
522	ok	0.07	0.3	1.14e-02	20.9	20.9	20.9	20.9	-27.8	-102.4	54.8	-8114.9	-1.876e+04	5198.9
523	ok	0.07	0.2	8.91e-03	20.9	20.9	20.9	20.9	-26.9	106.5	-20.5	-3180.0	1.362e+04	-1001.1
524	ok	0.07	0.4	9.93e-03	20.9	20.9	20.9	20.9	-42.5	-77.6	-48.9	-2.051e+04	-1.138e+04	-7583.3
525	ok	0.07	0.2	6.76e-03	20.9	20.9	20.9	20.9	-15.9	-2.4	26.1	-9433.6	-1393.4	6045.4
526	ok	0.07	0.1	1.01e-02	20.9	20.9	20.9	20.9	-55.3	-24.6	-43.9	6605.0	5341.1	-1850.9
527	ok	0.07	4.09e-02	7.02e-04	20.9	20.9	20.9	20.9	-1.0	2.9	6.2	4.0	-2420.8	-34.9
528	ok	0.07	7.95e-02	3.47e-03	20.9	20.9	20.9	20.9	-11.9	-19.3	20.6	-2809.0	-4668.3	-317.1
529	ok	0.07	0.2	9.08e-03	20.9	20.9	20.9	20.9	22.5	29.1	33.8	1802.3	6281.7	5751.8
530	ok	0.07	0.3	8.75e-03	20.9	20.9	20.9	20.9	2.6	90.4	4.5	-1.058e+04	1.232e+04	-2095.3
531	ok	0.07	0.2	8.01e-03	20.9	20.9	20.9	20.9	12.3	13.7	-19.6	941.7	7130.7	-6969.2
532	ok	0.07	9.92e-02	3.81e-03	20.9	20.9	20.9	20.9	-6.6	-20.8	-28.2	-5889.0	-3326.7	-135.6
533	ok	0.07	3.71e-02	3.17e-03	20.9	20.9	20.9	20.9	-8.0	9.8	-7.0	525.0	-961.4	358.2
534	ok	0.07	4.79e-03	4.73e-04	20.9	20.9	20.9	20.9	0.1	1.4	3.9	-45.8	119.0	224.0
535	ok	0.07	2.04e-02	5.23e-03	20.9	20.9	20.9	20.9	18.9	46.2	14.7	-1154.4	326.3	-238.7
536	ok	0.07	0.1	9.48e-03	20.9	20.9	20.9	20.9	23.3	68.5	-75.4	-5186.7	-6207.0	-1678.3
537	ok	0.07	0.4	9.69e-03	20.9	20.9	20.9	20.9	57.4	18.1	87.3	-6279.2	1.271e+04	1.170e+04
538	ok	0.07	0.1	6.84e-03	20.9	20.9	20.9	20.9	-26.1	32.5	52.6	-6256.9	-6100.7	1562.5
539	ok	0.07	5.88e-02	4.07e-03	20.9	20.9	20.9	20.9	-11.7	-7.8	-1.8	-3282.3	-564.6	-355.9
540	ok	0.07	5.66e-03	4.51e-04	20.9	20.9	20.9	20.9	-3.2	-0.6	-3.0	139.8	-125.8	-261.6

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.51	0.01	20.94	20.94	20.94	20.94	-66.49	-102.39	-75.37	-2.179e+04	-1.876e+04	-1.636e+04
								57.43	106.45	87.28	2.076e+04	1.362e+04	1.170e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
293	ok	0.38						
294	ok	0.82						
295	ok	1.41						
296	ok	1.41						
297	ok	1.23						
298	ok	0.86						
299	ok	0.27						
328	ok	0.87						
329	ok	1.82						
330	ok	1.82						
331	ok	1.41						
332	ok	1.57						
333	ok	1.57						
334	ok	0.47						
363	ok	0.90						
364	ok	1.82						
365	ok	1.82						
366	ok	1.01						
367	ok	1.57						
368	ok	1.57						
369	ok	0.47						
398	ok	1.05						
399	ok	1.05						
400	ok	1.01						
401	ok	1.01						
402	ok	0.96						



403	ok	0.96
404	ok	0.45
433	ok	1.05
434	ok	1.37
435	ok	1.37
436	ok	1.03
437	ok	1.41
438	ok	1.41
439	ok	0.60
468	ok	0.93
469	ok	1.37
470	ok	1.37
471	ok	1.03
472	ok	1.41
473	ok	1.41
474	ok	0.62
496	ok	0.58
497	ok	1.19
498	ok	1.19
499	ok	0.93
500	ok	1.39
501	ok	1.39
502	ok	0.90
503	ok	0.49
504	ok	1.19
505	ok	1.19
506	ok	0.93
507	ok	1.39
508	ok	1.39
509	ok	1.07
510	ok	0.38
511	ok	0.87
512	ok	0.87
513	ok	1.00
514	ok	1.00
515	ok	1.07
516	ok	1.07
520	ok	0.38
521	ok	1.41
522	ok	1.41
523	ok	1.26
524	ok	1.73
525	ok	1.73
526	ok	0.81
527	ok	0.38
528	ok	1.41
529	ok	1.41
530	ok	1.41
531	ok	1.73
532	ok	1.73
533	ok	0.81
534	ok	0.29
535	ok	0.96
536	ok	1.41
537	ok	1.41
538	ok	1.34
539	ok	0.95
540	ok	0.46

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.82						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
11	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
544	ok	0.07	7.05e-03	6.61e-04	20.9	20.9	20.9	20.9	4.8	-7.2	-2.3	-98.8	219.8	-299.4
545	ok	0.07	2.24e-02	8.66e-04	20.9	20.9	20.9	20.9	6.1	-7.9	-1.7	-1274.9	788.2	159.9
546	ok	0.07	0.2	1.98e-03	20.9	20.9	20.9	20.9	-13.2	14.3	1.3	-7623.2	-1.104e+04	3618.0
547	ok	0.07	0.6	7.82e-03	20.9	20.9	20.9	20.9	2.7	10.2	10.4	-5429.1	-2.238e+04	1.977e+04



548	ok	0.07	0.2	8.05e-03	20.9	20.9	20.9	20.9	58.3	47.2	-27.1	4340.8	1.056e+04	4130.2
549	ok	0.07	3.27e-02	3.14e-03	20.9	20.9	20.9	20.9	5.3	32.3	4.8	-764.0	-900.6	364.2
550	ok	0.07	6.59e-03	5.77e-04	20.9	20.9	20.9	20.9	-5.1	-3.0	1.5	-10.3	104.0	314.4
591	ok	0.07	5.53e-02	1.40e-03	20.9	20.9	20.9	20.9	-0.9	15.1	4.2	-72.3	3239.9	-190.9
592	ok	0.07	0.1	3.27e-03	20.9	20.9	20.9	20.9	-5.4	-18.6	-24.9	-3295.3	-5806.6	223.6
593	ok	0.07	0.3	3.33e-03	20.9	20.9	20.9	20.9	12.1	-2.8	-4.5	-7754.7	-9544.7	8557.9
594	ok	0.07	0.4	2.39e-03	20.9	20.9	20.9	20.9	-19.3	9.0	-1.9	-1430.5	2.085e+04	6253.8
595	ok	0.07	0.3	4.41e-03	20.9	20.9	20.9	20.9	15.1	12.4	36.9	-7582.4	-9458.4	-7746.3
596	ok	0.07	9.98e-02	4.99e-03	20.9	20.9	20.9	20.9	-6.5	-8.0	-16.0	1386.5	3105.9	2999.9
597	ok	0.07	5.13e-02	7.27e-04	20.9	20.9	20.9	20.9	-4.8	2.6	4.6	64.1	-2745.1	-120.4
638	ok	0.07	8.77e-02	2.06e-03	20.9	20.9	20.9	20.9	0.4	8.3	5.0	-147.9	5131.8	-337.2
639	ok	0.07	0.2	3.46e-03	20.9	20.9	20.9	20.9	-4.9	39.4	4.3	-1262.4	1.227e+04	-3148.0
640	ok	0.07	0.5	7.97e-03	20.9	20.9	20.9	20.9	-18.7	-54.1	-52.5	-1.024e+04	-2.257e+04	-6456.7
641	ok	0.07	0.3	4.15e-03	20.9	20.9	20.9	20.9	22.6	-42.6	19.1	-1226.3	-2.010e+04	2029.2
642	ok	0.07	0.5	8.89e-03	20.9	20.9	20.9	20.9	-2.8	-36.3	65.1	-8105.1	-2.475e+04	8066.2
643	ok	0.07	0.2	5.98e-03	20.9	20.9	20.9	20.9	-7.6	18.9	17.4	-2742.6	-5659.7	-1884.9
644	ok	0.07	8.16e-02	2.86e-03	20.9	20.9	20.9	20.9	-0.1	33.0	0.1	332.2	-3790.7	-619.7
685	ok	0.07	6.41e-02	2.30e-03	20.9	20.9	20.9	20.9	-0.9	-5.4	-5.4	-13.6	-3801.0	7.4
686	ok	0.07	8.81e-02	2.97e-03	20.9	20.9	20.9	20.9	-7.0	-11.9	-24.6	-1943.4	-4582.4	-1473.5
687	ok	0.07	0.1	3.64e-03	20.9	20.9	20.9	20.9	-39.9	24.4	11.7	-6107.5	3234.1	1310.9
688	ok	0.07	0.2	5.36e-03	20.9	20.9	20.9	20.9	-11.3	22.3	18.8	-2715.3	7336.7	3111.7
689	ok	0.07	0.3	8.38e-03	20.9	20.9	20.9	20.9	-76.8	16.5	-29.8	-1.607e+04	2154.4	-5211.6
690	ok	0.07	0.2	1.12e-02	20.9	20.9	20.9	20.9	-32.2	-22.6	-41.2	-6389.9	-3642.4	-6835.1
691	ok	0.07	6.10e-02	7.17e-03	20.9	20.9	20.9	20.9	-55.3	-3.5	-14.1	-761.1	2420.7	1223.6
732	ok	0.07	2.93e-02	1.90e-03	20.9	20.9	20.9	20.9	-1.6	16.4	0.8	113.6	-1697.8	223.0
733	ok	0.07	5.80e-02	3.21e-03	20.9	20.9	20.9	20.9	-7.2	6.7	7.2	-1540.1	-2376.8	1075.2
734	ok	0.07	0.3	8.75e-03	20.9	20.9	20.9	20.9	-48.5	-30.8	59.7	-1.364e+04	-1.058e+04	7514.5
735	ok	0.07	0.2	7.33e-03	20.9	20.9	20.9	20.9	6.4	-46.6	-33.2	-2637.3	-6520.7	-6096.2
736	ok	0.07	0.7	1.90e-02	20.9	20.9	20.9	20.9	-111.0	-38.8	-104.3	-3.197e+04	-1.416e+04	-1.577e+04
737	ok	0.07	0.3	1.15e-02	20.9	20.9	20.9	20.9	35.3	24.4	63.3	7205.8	5517.4	1.007e+04
738	ok	0.07	9.73e-02	2.18e-02	20.9	20.9	20.9	20.9	94.3	80.1	-64.4	-5010.0	-1405.9	-294.7
779	ok	0.07	1.74e-02	1.03e-03	20.9	20.9	20.9	20.9	-3.2	5.5	3.6	-172.2	-947.3	265.4
780	ok	0.07	7.67e-02	3.88e-03	20.9	20.9	20.9	20.9	-14.2	-8.9	31.8	-3145.1	-2779.9	1579.4
781	ok	0.07	8.78e-02	3.35e-03	20.9	20.9	20.9	20.9	10.0	-7.6	14.1	-4258.8	-1526.2	-936.9
782	ok	0.07	0.3	3.15e-03	20.9	20.9	20.9	20.9	-20.2	-7.4	-15.8	-1.285e+04	-2958.5	-5153.7
783	ok	0.07	0.3	4.67e-03	20.9	20.9	20.9	20.9	-50.4	-5.3	-12.8	-1.806e+04	976.9	-1990.2
784	ok	0.07	0.3	1.12e-02	20.9	20.9	20.9	20.9	-39.2	-49.5	-56.3	-1.640e+04	-499.5	-6797.3
785	ok	0.07	0.4	2.25e-02	20.9	20.9	20.9	20.9	1.3	-15.5	31.2	-1.082e+04	-1.255e+04	1.363e+04
834	ok	0.07	7.38e-03	9.01e-04	20.9	20.9	20.9	20.9	-2.2	-4.5	2.5	-195.9	-193.1	229.3
835	ok	0.07	2.26e-02	1.12e-03	20.9	20.9	20.9	20.9	12.2	-6.9	3.5	-1330.2	-216.3	-10.2
836	ok	0.07	7.70e-02	3.35e-03	20.9	20.9	20.9	20.9	15.3	-1.6	0.7	-4327.0	-458.7	31.2
837	ok	0.07	0.1	5.91e-03	20.9	20.9	20.9	20.9	29.0	-1.1	1.1	-8346.9	350.1	-1254.0
838	ok	0.07	0.2	6.81e-03	20.9	20.9	20.9	20.9	28.2	-1.3	-3.5	-9622.9	521.0	-178.4
839	ok	0.07	0.1	7.28e-03	20.9	20.9	20.9	20.9	-20.6	-19.0	0.8	-5113.1	-3631.6	3050.4
840	ok	0.07	0.1	2.95e-03	20.9	20.9	20.9	20.9	-18.1	17.5	-13.6	4592.3	3546.4	-4051.5

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.69	0.02	20.94	20.94	20.94	20.94	-110.97	-54.09	-104.34	-3.197e+04	-2.475e+04	-1.577e+04
								94.33	80.07	65.12	7205.82	2.085e+04	1.977e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
544	ok	0.40						
545	ok	1.23						
546	ok	1.44						
547	ok	1.44						
548	ok	1.26						
549	ok	1.14						
550	ok	0.38						
591	ok	0.48						
592	ok	1.76						
593	ok	1.76						
594	ok	1.44						
595	ok	1.82						
596	ok	1.82						
597	ok	0.52						
638	ok	0.48						
639	ok	1.76						
640	ok	1.76						
641	ok	1.25						
642	ok	1.82						
643	ok	1.82						
644	ok	0.96						
685	ok	0.53						
686	ok	1.05						
687	ok	1.05						



688	ok	1.25
689	ok	1.85
690	ok	1.85
691	ok	1.81
732	ok	0.53
733	ok	1.34
734	ok	1.45
735	ok	1.45
736	ok	2.08
737	ok	2.58
738	ok	2.58
779	ok	0.43
780	ok	1.34
781	ok	1.45
782	ok	1.45
783	ok	2.08
784	ok	2.58
785	ok	2.58
834	ok	0.24
835	ok	0.55
836	ok	0.75
837	ok	0.75
838	ok	0.61
839	ok	0.93
840	ok	0.93

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	2.58						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
12	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
551	ok	0.07	4.68e-03	3.26e-04	20.9	20.9	20.9	20.9	-0.2	9.04e-02	-8.35e-02	-211.1	-63.4	-118.6
552	ok	0.07	2.32e-02	1.09e-03	20.9	20.9	20.9	20.9	8.8	1.9	3.1	1347.1	-21.4	-170.5
553	ok	0.07	4.54e-02	2.10e-03	20.9	20.9	20.9	20.9	23.7	2.6	3.1	2644.9	-29.9	-201.2
554	ok	0.07	6.65e-02	2.83e-03	20.9	20.9	20.9	20.9	-25.8	-2.2	2.4	-3935.8	13.0	125.4
555	ok	0.07	9.00e-02	2.57e-03	20.9	20.9	20.9	20.9	-24.0	-1.9	1.6	-5195.7	82.4	206.2
556	ok	0.07	0.1	2.95e-03	20.9	20.9	20.9	20.9	-16.2	-33.0	4.2	-6670.7	782.5	-32.6
557	ok	0.07	0.2	6.51e-03	20.9	20.9	20.9	20.9	-33.8	-34.5	-33.2	-2752.5	-1.015e+04	3691.1
558	ok	0.07	0.5	5.94e-03	20.9	20.9	20.9	20.9	-34.7	-9.2	-25.7	3802.9	2.142e+04	1.669e+04
559	ok	0.07	0.2	4.71e-03	20.9	20.9	20.9	20.9	-26.9	-21.7	26.8	-4388.2	-1.004e+04	-3706.1
560	ok	0.07	3.62e-02	2.33e-03	20.9	20.9	20.9	20.9	2.2	1.9	1.5	-1480.1	111.5	-582.9
561	ok	0.07	6.72e-03	4.83e-04	20.9	20.9	20.9	20.9	-2.8	-2.9	0.9	56.6	130.1	298.8
598	ok	0.07	1.17e-02	7.29e-04	20.9	20.9	20.9	20.9	-1.5	-6.2	-3.0	-60.5	-643.2	24.7
599	ok	0.07	3.56e-02	1.33e-03	20.9	20.9	20.9	20.9	4.5	3.1	-9.8	1341.6	250.9	-1181.0
600	ok	0.07	5.22e-02	1.53e-03	20.9	20.9	20.9	20.9	11.8	-0.2	-8.8	2777.7	15.5	-946.3
601	ok	0.07	6.96e-02	1.88e-03	20.9	20.9	20.9	20.9	-14.1	1.7	1.6	-3905.3	-821.9	-378.4
602	ok	0.07	9.19e-02	2.31e-03	20.9	20.9	20.9	20.9	-11.3	-3.7	-10.1	-5312.8	-1820.5	50.1
603	ok	0.07	0.2	4.90e-03	20.9	20.9	20.9	20.9	-11.4	-7.7	-30.7	-9209.5	-5535.0	-1513.9
604	ok	0.07	0.2	3.61e-03	20.9	20.9	20.9	20.9	-15.1	-8.5	29.5	6438.1	5908.3	-6987.7
605	ok	0.07	0.3	3.03e-03	20.9	20.9	20.9	20.9	10.7	11.0	-1.7	-4777.3	-1.402e+04	-3584.0
606	ok	0.07	0.2	2.92e-03	20.9	20.9	20.9	20.9	-16.2	-8.4	-20.9	5212.9	6872.4	6820.7
607	ok	0.07	8.75e-02	2.80e-03	20.9	20.9	20.9	20.9	-0.7	-5.7	15.4	-2921.4	-4924.2	-410.0
608	ok	0.07	4.64e-02	9.98e-04	20.9	20.9	20.9	20.9	-2.8	0.4	3.0	84.9	-2486.9	-229.3
645	ok	0.07	3.61e-02	1.76e-03	20.9	20.9	20.9	20.9	-1.0	-16.4	0.5	74.1	-1970.5	370.0
646	ok	0.07	5.15e-02	2.48e-03	20.9	20.9	20.9	20.9	-9.7	-11.8	6.1	-2271.6	-2024.1	888.6
647	ok	0.07	7.07e-02	1.70e-03	20.9	20.9	20.9	20.9	-10.7	2.1	8.1	-4157.4	-2025.0	-36.0
648	ok	0.07	8.04e-02	1.84e-03	20.9	20.9	20.9	20.9	-10.1	3.1	-3.4	-4347.0	-2739.2	-932.7
649	ok	0.07	0.1	2.36e-03	20.9	20.9	20.9	20.9	-6.1	9.4	-9.4	-5881.2	-3655.3	-549.3
650	ok	0.07	0.2	4.08e-03	20.9	20.9	20.9	20.9	-5.3	-5.2	-21.7	-4934.1	-1.066e+04	-360.9
651	ok	0.07	0.5	9.48e-03	20.9	20.9	20.9	20.9	-18.5	-18.0	-50.1	-1.725e+04	-2.355e+04	-1.055e+04
652	ok	0.07	0.3	2.80e-03	20.9	20.9	20.9	20.9	13.3	-14.9	-13.6	-2067.6	-1.690e+04	-3437.0
653	ok	0.07	0.4	6.22e-03	20.9	20.9	20.9	20.9	-17.1	-14.6	38.0	-1.064e+04	-1.803e+04	4580.4
654	ok	0.07	0.2	2.76e-03	20.9	20.9	20.9	20.9	-6.0	13.2	10.5	-2881.5	-5951.0	-2791.5
655	ok	0.07	8.37e-02	1.87e-03	20.9	20.9	20.9	20.9	-0.4	18.2	-8.62e-02	335.8	-4473.2	-827.9
692	ok	0.07	6.68e-02	3.93e-03	20.9	20.9	20.9	20.9	0.9	-1.0	-0.2	-286.1	-3791.6	-794.9
693	ok	0.07	0.1	5.86e-03	20.9	20.9	20.9	20.9	-20.7	-1.1	-5.2	-6389.1	-5915.7	-844.9
694	ok	0.07	0.2	2.25e-03	20.9	20.9	20.9	20.9	-25.0	5.2	-5.4	-1.047e+04	-2319.2	-654.8
695	ok	0.07	0.1	2.06e-03	20.9	20.9	20.9	20.9	-9.3	1.3	-12.3	-4633.2	-5956.4	-1835.2



696	ok	0.07	0.2	2.68e-03	20.9	20.9	20.9	20.9	-6.3	8.7	-4.6-1.291e+04	-1999.0	-1284.8
697	ok	0.07	0.2	3.66e-03	20.9	20.9	20.9	20.9	0.6	20.7	-21.8	-9883.7	-7142.1
698	ok	0.07	0.2	4.23e-03	20.9	20.9	20.9	20.9	-17.2	28.8	-17.3	-9236.0	-1351.6
699	ok	0.07	0.2	4.15e-03	20.9	20.9	20.9	20.9	-17.1	-30.3	-15.4	-3953.4	-5679.1
700	ok	0.07	0.3	4.58e-03	20.9	20.9	20.9	20.9	-38.6	17.8	-3.9-1.486e+04	-2482.3	-5742.0
701	ok	0.07	0.2	4.15e-03	20.9	20.9	20.9	20.9	-20.2	-2.2	-20.4	-5616.1	-6731.6
702	ok	0.07	9.61e-02	2.55e-03	20.9	20.9	20.9	20.9	-3.4	23.4	-2.9	271.5	-5389.4
739	ok	0.07	0.1	1.24e-02	20.9	20.9	20.9	20.9	2.8	3.8	1.1	-1107.4	-7579.5
740	ok	0.07	0.1	4.50e-03	20.9	20.9	20.9	20.9	-22.9	13.4	31.3	-5241.2	-4368.8
741	ok	0.07	0.5	3.59e-03	20.9	20.9	20.9	20.9	-30.5	6.6	-22.8-2.440e+04	-1.743e+04	-1.028e+04
742	ok	0.07	0.2	2.26e-03	20.9	20.9	20.9	20.9	2.0	-4.0	-12.9	-2797.6	-9452.3
743	ok	0.07	0.5	4.77e-03	20.9	20.9	20.9	20.9	-13.9	-2.6	11.2-2.497e+04	-1.826e+04	9932.3
744	ok	0.07	0.2	5.02e-03	20.9	20.9	20.9	20.9	5.9	-17.9	-1.7	-9558.7	-5897.1
745	ok	0.07	0.3	1.14e-02	20.9	20.9	20.9	20.9	-44.4	-71.4	69.2	-9573.6-1.735e+04	5544.2
746	ok	0.07	0.3	6.88e-03	20.9	20.9	20.9	20.9	10.5	-3.6	-15.8	-1963.5	-9699.9
747	ok	0.07	0.7	1.24e-02	20.9	20.9	20.9	20.9	-72.0	-26.8	-66.9-3.089e+04	-2.493e+04	-1.797e+04
748	ok	0.07	0.3	4.62e-03	20.9	20.9	20.9	20.9	-14.0	-4.6	-25.2	-8613.5-1.150e+04	-9543.8
749	ok	0.07	0.1	6.97e-03	20.9	20.9	20.9	20.9	-36.5	-4.0	24.5	7180.2	-889.2
786	ok	0.07	0.4	1.91e-02	20.9	20.9	20.9	20.9	7.8	-93.8	37.3	-2831.3-2.093e+04	4730.1
787	ok	0.07	0.2	6.00e-03	20.9	20.9	20.9	20.9	-51.2	32.1	34.0	5670.9-1.150e+04	1732.7
788	ok	0.07	0.2	3.39e-03	20.9	20.9	20.9	20.9	-2.5	24.7	-7.9-1.078e+04	3682.0	-842.0
789	ok	0.07	0.2	2.66e-03	20.9	20.9	20.9	20.9	-11.9	8.3	10.9	-7139.4	-4591.8
790	ok	0.07	0.3	3.20e-03	20.9	20.9	20.9	20.9	-18.3	10.5	-15.8-1.540e+04	-3285.8	-4231.2
791	ok	0.07	0.2	5.87e-03	20.9	20.9	20.9	20.9	-3.7	13.8	-29.4-1.139e+04	-6046.5	-1079.3
792	ok	0.07	0.2	4.75e-03	20.9	20.9	20.9	20.9	-1.5	-3.3	-0.8	-5297.8	-8446.1
793	ok	0.07	0.2	4.51e-03	20.9	20.9	20.9	20.9	-9.7	-12.4	-4.9	-7228.0-1.057e+04	-4216.6
794	ok	0.07	0.3	3.50e-03	20.9	20.9	20.9	20.9	-10.3	-12.4	-5.5-1.028e+04	-8414.7	-2465.9
795	ok	0.07	0.4	5.93e-03	20.9	20.9	20.9	20.9	-22.1	-18.4	-34.2-1.759e+04	-8492.6	-7594.0
796	ok	0.07	0.5	6.84e-03	20.9	20.9	20.9	20.9	3.5	-5.1	-16.8-1.564e+04	-6560.2-1.558e+04	
841	ok	0.07	0.1	1.48e-02	20.9	20.9	20.9	20.9	-94.6	-94.6	70.4	-2330.5	-7390.6
842	ok	0.07	0.2	9.06e-03	20.9	20.9	20.9	20.9	-23.1	24.5	-42.8	2457.6	-8347.8
843	ok	0.07	0.5	7.56e-03	20.9	20.9	20.9	20.9	-3.8	-39.4	-14.7	-6131.3-2.537e+04	-8304.0
844	ok	0.07	0.3	5.08e-03	20.9	20.9	20.9	20.9	-2.5	-44.3	3.5	916.6-2.089e+04	-2105.3
845	ok	0.07	0.6	4.76e-03	20.9	20.9	20.9	20.9	-24.6	-39.1	-10.3-1.103e+04	-3.087e+04	-1.063e+04
846	ok	0.07	0.3	3.97e-03	20.9	20.9	20.9	20.9	-8.7	-33.7	21.0	2906.0-1.540e+04	770.5
847	ok	0.07	0.1	3.72e-03	20.9	20.9	20.9	20.9	-4.3	-3.2	-3.1	-5189.6	-5878.2
848	ok	0.07	0.1	2.88e-03	20.9	20.9	20.9	20.9	-2.4	-5.4	-0.8	-5294.6	-4299.3
849	ok	0.07	0.1	2.33e-03	20.9	20.9	20.9	20.9	-3.6	-9.6	-10.0	-5525.8	-3140.2
850	ok	0.07	0.1	1.72e-03	20.9	20.9	20.9	20.9	8.2	-1.8	-10.7	-3267.0	-5491.1
851	ok	0.07	0.2	2.56e-03	20.9	20.9	20.9	20.9	15.3	17.3	2.3	7314.6	1269.2
885	ok	0.07	6.55e-02	6.19e-03	20.9	20.9	20.9	20.9	64.9	12.5	19.4	-347.9	-3272.0
886	ok	0.07	0.1	7.99e-03	20.9	20.9	20.9	20.9	-19.7	-18.3	-5.2	-1547.6	-6682.1
887	ok	0.07	0.2	6.17e-03	20.9	20.9	20.9	20.9	-35.4	-18.6	-32.1	-5116.3	-9248.9
888	ok	0.07	0.3	6.42e-03	20.9	20.9	20.9	20.9	22.6	61.7	7.8-1.411e+04	1.190e+04	-1453.3
889	ok	0.07	0.3	5.23e-03	20.9	20.9	20.9	20.9	-8.8	10.8	-21.0	-6780.7	5353.1
890	ok	0.07	0.2	4.78e-03	20.9	20.9	20.9	20.9	-11.0	-16.6	-3.9	-4477.3	-8597.5
891	ok	0.07	0.1	2.05e-03	20.9	20.9	20.9	20.9	-1.5	0.6	-11.9	-5755.7	-1929.2
892	ok	0.07	8.05e-02	1.23e-03	20.9	20.9	20.9	20.9	-1.2	-1.2	-1.0	-4040.5	-1153.2
893	ok	0.07	6.39e-02	1.30e-03	20.9	20.9	20.9	20.9	1.2	-1.7	1.1	3056.3	-800.2
894	ok	0.07	4.77e-02	1.30e-03	20.9	20.9	20.9	20.9	3.4	-1.4	-1.3	1567.6	-649.4
895	ok	0.07	2.41e-02	1.02e-03	20.9	20.9	20.9	20.9	3.5	-0.4	-0.4	-596.1	-839.3
925	ok	0.07	7.53e-03	1.06e-03	20.9	20.9	20.9	20.9	5.8	1.8	4.7	-230.2	165.1
926	ok	0.07	3.62e-02	3.91e-03	20.9	20.9	20.9	20.9	-18.4	-37.8	-13.9	-932.7	-753.8
927	ok	0.07	0.2	9.24e-03	20.9	20.9	20.9	20.9	-34.0	-39.4	51.2	3387.9	9336.9
928	ok	0.07	0.5	1.03e-02	20.9	20.9	20.9	20.9	-56.7	-19.5	56.6	5733.1-1.919e+04	1.587e+04
929	ok	0.07	0.2	8.89e-03	20.9	20.9	20.9	20.9	23.5	36.1	44.5	-7039.8	-6072.4
930	ok	0.07	0.1	3.46e-03	20.9	20.9	20.9	20.9	-4.4	-36.5	10.8	-4545.1	-661.3
931	ok	0.07	9.82e-02	1.06e-03	20.9	20.9	20.9	20.9	-5.2	1.5	-3.0	-5719.3	-46.8
932	ok	0.07	6.74e-02	1.18e-03	20.9	20.9	20.9	20.9	-13.1	-0.2	-0.7	-3926.2	-109.8
933	ok	0.07	5.17e-02	1.07e-03	20.9	20.9	20.9	20.9	5.8	-0.8	2.6	2931.2	-35.3
934	ok	0.07	2.36e-02	7.11e-04	20.9	20.9	20.9	20.9	7.1	0.1	1.6	1277.1	-14.9
935	ok	0.07	5.72e-03	4.10e-04	20.9	20.9	20.9	20.9	2.8	-1.00e-02	2.0	-254.4	-35.5

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.73	0.02	20.94	20.94	20.94	20.94	-94.64	-94.64	-66.90-3.089e+04	-3.087e+04	-1.797e+04	
								64.88	61.66	70.37	7314.64	2.142e+04	1.669e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
551	ok	0.15						
552	ok	0.26						
553	ok	0.37						
554	ok	0.55						
555	ok	0.69						
556	ok	0.81						
557	ok	0.95						



558	ok	0.95
559	ok	0.70
560	ok	0.68
561	ok	0.31
598	ok	0.39
599	ok	0.54
600	ok	0.54
601	ok	0.61
602	ok	0.83
603	ok	1.88
604	ok	1.88
605	ok	0.95
606	ok	1.56
607	ok	1.56
608	ok	0.49
645	ok	0.66
646	ok	1.06
647	ok	1.06
648	ok	0.91
649	ok	0.96
650	ok	1.88
651	ok	1.88
652	ok	1.11
653	ok	1.56
654	ok	1.56
655	ok	0.98
692	ok	1.13
693	ok	2.08
694	ok	2.08
695	ok	1.43
696	ok	2.27
697	ok	2.27
698	ok	1.32
699	ok	1.11
700	ok	1.79
701	ok	1.79
702	ok	1.64
739	ok	1.72
740	ok	2.08
741	ok	2.08
742	ok	1.43
743	ok	2.27
744	ok	2.27
745	ok	1.77
746	ok	1.28
747	ok	1.90
748	ok	2.01
749	ok	2.01
786	ok	1.72
787	ok	1.72
788	ok	1.53
789	ok	1.17
790	ok	1.61
791	ok	1.77
792	ok	1.77
793	ok	1.28
794	ok	1.90
795	ok	2.01
796	ok	2.01
841	ok	0.89
842	ok	1.43
843	ok	1.43
844	ok	1.17
845	ok	2.01
846	ok	2.01
847	ok	1.01
848	ok	1.27
849	ok	1.45
850	ok	1.45
851	ok	1.33
885	ok	0.58
886	ok	1.43
887	ok	1.43
888	ok	1.39
889	ok	2.01
890	ok	2.01
891	ok	0.91



892	ok	0.75
893	ok	0.76
894	ok	0.92
895	ok	0.92
925	ok	0.42
926	ok	0.89
927	ok	1.39
928	ok	1.39
929	ok	1.20
930	ok	1.13
931	ok	0.75
932	ok	0.57
933	ok	0.48
934	ok	0.38
935	ok	0.31

Nodo	Max tau 2.27	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
13	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
562	ok	0.07	7.39e-03	3.26e-04	20.9	20.9	20.9	20.9	0.3	-0.5	-3.41e-02	-324.7	-48.4	-209.4
563	ok	0.07	3.50e-02	8.42e-04	20.9	20.9	20.9	20.9	8.9	0.9	2.7	2028.0	-54.3	-293.1
564	ok	0.07	6.23e-02	1.17e-03	20.9	20.9	20.9	20.9	5.6	2.3	3.5	3631.0	-103.1	-451.5
565	ok	0.07	6.93e-02	1.27e-03	20.9	20.9	20.9	20.9	0.2	1.4	-0.9	4028.5	-134.3	-587.0
566	ok	0.07	5.88e-02	1.19e-03	20.9	20.9	20.9	20.9	-0.5	3.8	3.6	3330.8	-222.6	-765.7
567	ok	0.07	5.10e-02	1.38e-03	20.9	20.9	20.9	20.9	7.6	-13.0	-0.6	-2949.7	1155.1	517.4
568	ok	0.07	0.3	3.51e-03	20.9	20.9	20.9	20.9	-34.2	-12.8	-10.9	-8359.6	-1.289e+04	4566.6
569	ok	0.07	0.7	3.32e-03	20.9	20.9	20.9	20.9	13.6	1.3	-0.4	-4184.9	-2.848e+04	-2.282e+04
570	ok	0.07	0.3	2.90e-03	20.9	20.9	20.9	20.9	14.1	1.3	-2.8	5667.5	1.343e+04	4973.6
571	ok	0.07	3.18e-02	1.22e-03	20.9	20.9	20.9	20.9	-4.5	2.8	0.4	-1005.4	-994.4	64.5
572	ok	0.07	8.44e-03	4.33e-04	20.9	20.9	20.9	20.9	-3.3	-1.8	1.5	-5.8	179.1	320.0
609	ok	0.07	2.42e-02	6.40e-04	20.9	20.9	20.9	20.9	-0.4	-1.0	-0.8	-292.4	-1144.2	-337.6
610	ok	0.07	5.92e-02	7.95e-04	20.9	20.9	20.9	20.9	-0.6	-1.36e-02	-2.5	1859.4	996.0	-2032.6
611	ok	0.07	8.45e-02	1.16e-03	20.9	20.9	20.9	20.9	-0.2	0.9	-0.5	3787.6	718.2	-2297.0
612	ok	0.07	9.62e-02	1.46e-03	20.9	20.9	20.9	20.9	-0.8	0.6	1.4	4157.1	937.1	-2727.9
613	ok	0.07	9.92e-02	1.78e-03	20.9	20.9	20.9	20.9	-1.9	3.95e-02	4.9	3481.0	1301.4	-3328.9
614	ok	0.07	0.1	3.61e-03	20.9	20.9	20.9	20.9	-7.8	-11.2	-25.6	-4938.2	-6422.4	1218.7
615	ok	0.07	0.3	3.31e-03	20.9	20.9	20.9	20.9	14.5	4.7	-10.3	-7103.5	-1.118e+04	1.037e+04
616	ok	0.07	0.4	2.57e-03	20.9	20.9	20.9	20.9	14.8	4.7	7.1	8928.2	-1.988e+04	872.8
617	ok	0.07	0.3	3.04e-03	20.9	20.9	20.9	20.9	6.8	0.4	8.4	-7564.5	-1.127e+04	-9613.1
618	ok	0.07	0.1	2.90e-03	20.9	20.9	20.9	20.9	-6.4	-8.8	24.9	-3459.0	-7259.6	-179.3
619	ok	0.07	6.94e-02	6.86e-04	20.9	20.9	20.9	20.9	-1.9	-3.7	3.8	-29.9	-4116.2	40.1
656	ok	0.07	7.27e-02	7.61e-04	20.9	20.9	20.9	20.9	-1.1	2.1	-1.1	-335.1	-4029.4	-551.1
657	ok	0.07	8.16e-02	1.11e-03	20.9	20.9	20.9	20.9	-4.5	-6.4	-7.3	-1542.4	-4716.0	649.7
658	ok	0.07	9.41e-02	1.33e-03	20.9	20.9	20.9	20.9	0.1	-3.4	-2.6	-3200.4	-5415.9	638.8
659	ok	0.07	0.1	1.67e-03	20.9	20.9	20.9	20.9	-0.1	-5.5	-4.9	-3487.7	-6512.6	699.7
660	ok	0.07	0.1	2.02e-03	20.9	20.9	20.9	20.9	-3.3	1.29e-02	-5.7	-3216.4	-7545.2	1005.6
661	ok	0.07	0.3	2.86e-03	20.9	20.9	20.9	20.9	2.6	-14.7	-6.3	-1877.9	-1.474e+04	2577.4
662	ok	0.07	0.5	8.36e-03	20.9	20.9	20.9	20.9	-2.9	-20.7	15.5	-7743.9	-2.736e+04	9816.2
663	ok	0.07	0.4	2.85e-03	20.9	20.9	20.9	20.9	22.0	-28.7	14.1	1210.3	-2.154e+04	1986.2
664	ok	0.07	0.5	7.02e-03	20.9	20.9	20.9	20.9	-23.6	-30.8	48.9	-1.026e+04	-2.874e+04	8110.0
665	ok	0.07	0.3	3.00e-03	20.9	20.9	20.9	20.9	-7.4	10.5	10.5	-2620.1	-7204.4	-2489.1
666	ok	0.07	0.1	1.85e-03	20.9	20.9	20.9	20.9	0.3	14.8	1.7	93.7	-6651.4	-419.1
703	ok	0.07	0.1	9.91e-04	20.9	20.9	20.9	20.9	-5.8	6.2	-0.4	-384.1	-7633.7	-1120.4
704	ok	0.07	0.2	2.25e-03	20.9	20.9	20.9	20.9	-14.5	-6.7	-14.8	-4148.2	-1.049e+04	-1734.1
705	ok	0.07	0.2	2.19e-03	20.9	20.9	20.9	20.9	23.1	-7.2	0.6	1.005e+04	-5675.9	-2665.4
706	ok	0.07	0.2	2.06e-03	20.9	20.9	20.9	20.9	-6.2	-11.5	-14.7	-5631.6	-1.394e+04	-2881.9
707	ok	0.07	0.2	2.22e-03	20.9	20.9	20.9	20.9	3.9	-4.7	-4.1	-6218.0	-1.291e+04	-1143.9
708	ok	0.07	0.3	3.07e-03	20.9	20.9	20.9	20.9	-2.8	-0.8	0.8	-7205.8	-1.424e+04	2680.5
709	ok	0.07	0.2	4.53e-03	20.9	20.9	20.9	20.9	-18.3	3.6	-3.4	-5997.5	-7922.6	3461.0
710	ok	0.07	0.2	4.25e-03	20.9	20.9	20.9	20.9	-6.6	-8.6	18.2	-1855.1	-9716.3	1602.8
711	ok	0.07	0.3	3.62e-03	20.9	20.9	20.9	20.9	-40.1	21.0	-5.8	-1.486e+04	-1340.1	-5861.7
712	ok	0.07	0.2	2.86e-03	20.9	20.9	20.9	20.9	-14.3	5.8	-11.9	-5245.2	-6422.8	-5741.0
713	ok	0.07	0.1	2.38e-03	20.9	20.9	20.9	20.9	-1.1	27.3	-1.6	204.1	-6315.5	-930.9
750	ok	0.07	0.2	1.89e-03	20.9	20.9	20.9	20.9	8.4	-3.9	2.1	-5768.7	-8892.7	-222.3
751	ok	0.07	0.3	1.89e-03	20.9	20.9	20.9	20.9	10.8	-4.9	3.0	3536.1	-1.953e+04	1236.7
752	ok	0.07	0.6	4.81e-03	20.9	20.9	20.9	20.9	-36.5	-6.7	-26.3	-2.350e+04	-2.412e+04	-1.156e+04



753	ok	0.07	0.4	2.62e-03	20.9	20.9	20.9	20.9	12.7	-23.2	-3.2	1331.4-2.165e+04	4228.2
754	ok	0.07	0.8	4.28e-03	20.9	20.9	20.9	20.9	-2.5	-19.3	11.1	-1.730e+04-3.826e+04	1.475e+04
755	ok	0.07	0.4	2.50e-03	20.9	20.9	20.9	20.9	-0.7	-10.5	7.4	-1544.6-2.009e+04	234.3
756	ok	0.07	0.5	9.32e-03	20.9	20.9	20.9	20.9	-3.4	-13.7	12.5	-7811.6-2.581e+04	8719.6
757	ok	0.07	0.3	5.06e-03	20.9	20.9	20.9	20.9	-0.4	-8.0	5.1	-1393.1-1.595e+04	3442.7
758	ok	0.07	0.7	9.76e-03	20.9	20.9	20.9	20.9	-55.8	-10.8	-50.2	-2.959e+04-2.224e+04-1.727e+04	
759	ok	0.07	0.3	3.60e-03	20.9	20.9	20.9	20.9	-6.1	5.1	-11.6	-8013.9-1.047e+04	-9087.4
760	ok	0.07	0.2	4.50e-03	20.9	20.9	20.9	20.9	-13.9	14.5	6.9	6563.3	-823.6
797	ok	0.07	0.4	4.35e-03	20.9	20.9	20.9	20.9	-4.7	10.6	-8.5	1.532e+04-1.073e+04-1.468e+04	
798	ok	0.07	0.3	1.51e-03	20.9	20.9	20.9	20.9	8.1	-11.7	0.5	1.284e+04-1.387e+04	-947.3
799	ok	0.07	0.2	2.51e-03	20.9	20.9	20.9	20.9	22.4	-11.7	-8.6	1.394e+04	-6328.9
800	ok	0.07	0.3	2.64e-03	20.9	20.9	20.9	20.9	-1.4	-22.1	-4.6	236.3-1.843e+04	-1790.3
801	ok	0.07	0.2	2.13e-03	20.9	20.9	20.9	20.9	-16.1	4.2	-14.0	-1.113e+04	-3514.7
802	ok	0.07	0.3	3.96e-03	20.9	20.9	20.9	20.9	-1.4	-6.4	9.5	-4517.0-1.368e+04	3672.9
803	ok	0.07	0.2	2.96e-03	20.9	20.9	20.9	20.9	1.3	-6.1	5.4	-3370.2-1.228e+04	1649.9
804	ok	0.07	0.3	2.88e-03	20.9	20.9	20.9	20.9	1.8	-5.4	3.6	-3704.1-1.481e+04	2508.9
805	ok	0.07	0.3	2.78e-03	20.9	20.9	20.9	20.9	-2.9	-3.8	-8.0	-9121.0	-7154.5
806	ok	0.07	0.3	4.53e-03	20.9	20.9	20.9	20.9	-11.4	-8.2	-26.5	-1.620e+04	-7574.5
807	ok	0.07	0.4	4.39e-03	20.9	20.9	20.9	20.9	-5.2	-4.13e-02	10.2	1.172e+04	-8700.7
852	ok	0.07	0.1	3.57e-03	20.9	20.9	20.9	20.9	-10.3	-20.1	5.8	-6831.9	-4695.7
853	ok	0.07	0.2	2.52e-03	20.9	20.9	20.9	20.9	-4.9	-6.1	-13.5	6603.0	848.2
854	ok	0.07	0.4	5.37e-03	20.9	20.9	20.9	20.9	-22.8	-18.8	32.0	-1.731e+04-1.389e+04	5285.4
855	ok	0.07	0.2	2.32e-03	20.9	20.9	20.9	20.9	13.2	-13.1	-5.5	3111.5	-8383.2
856	ok	0.07	0.6	4.51e-03	20.9	20.9	20.9	20.9	-9.0	-31.6	-23.7	-1.662e+04-2.829e+04-1.346e+04	
857	ok	0.07	0.2	1.85e-03	20.9	20.9	20.9	20.9	-0.3	-19.4	-0.5	-2376.3-1.206e+04	-2532.7
858	ok	0.07	0.1	2.06e-03	20.9	20.9	20.9	20.9	-1.8	1.2	-5.0	-3688.9	-4760.7
859	ok	0.07	0.1	1.95e-03	20.9	20.9	20.9	20.9	1.4	-0.2	-4.8	-3889.5	-3466.9
860	ok	0.07	9.63e-02	1.86e-03	20.9	20.9	20.9	20.9	4.1	-9.74e-02	-5.1	-4554.9	-2194.0
861	ok	0.07	0.1	1.62e-03	20.9	20.9	20.9	20.9	-7.8	-3.9	11.2	2420.8	-1632.6
862	ok	0.07	0.1	2.58e-03	20.9	20.9	20.9	20.9	-9.9	-11.8	-6.3	-5632.9	-6443.5
896	ok	0.07	3.75e-02	1.59e-03	20.9	20.9	20.9	20.9	-1.1	3.6	-1.5	6.6	-1609.8
897	ok	0.07	9.10e-02	2.38e-03	20.9	20.9	20.9	20.9	-9.1	-5.7	19.6	-4717.7	-3798.5
898	ok	0.07	0.2	1.93e-03	20.9	20.9	20.9	20.9	3.9	-4.3	5.8	-4282.0	-3038.7
899	ok	0.07	0.2	1.60e-03	20.9	20.9	20.9	20.9	0.8	-6.6	-5.7	-4800.3	-5552.5
900	ok	0.07	0.1	1.68e-03	20.9	20.9	20.9	20.9	6.9	-4.8	1.5	-6519.5	-3627.7
901	ok	0.07	0.2	2.31e-03	20.9	20.9	20.9	20.9	0.2	-14.6	-13.8	-6067.5	-6897.3
902	ok	0.07	7.61e-02	1.28e-03	20.9	20.9	20.9	20.9	-0.8	0.3	-3.4	-3456.2	-1496.8
903	ok	0.07	6.29e-02	1.06e-03	20.9	20.9	20.9	20.9	7.8	-4.0	-0.7	1472.8	-836.5
904	ok	0.07	5.45e-02	1.15e-03	20.9	20.9	20.9	20.9	3.7	-2.7	-0.2	2756.1	-703.1
905	ok	0.07	4.24e-02	1.11e-03	20.9	20.9	20.9	20.9	4.6	-1.1	-3.6	1425.4	-564.6
906	ok	0.07	2.51e-02	1.09e-03	20.9	20.9	20.9	20.9	7.0	-0.2	-0.5	-643.0	-665.0
936	ok	0.07	8.89e-03	4.69e-04	20.9	20.9	20.9	20.9	-4.4	-0.3	2.0	-27.2	-46.3
937	ok	0.07	5.08e-02	7.18e-04	20.9	20.9	20.9	20.9	0.7	-1.6	2.5	-1814.5	64.2
938	ok	0.07	6.83e-02	9.86e-04	20.9	20.9	20.9	20.9	11.3	-1.9	-1.0	-2944.4	228.5
939	ok	0.07	6.69e-02	1.37e-03	20.9	20.9	20.9	20.9	12.7	-2.1	-2.1	-3796.1	253.5
940	ok	0.07	7.61e-02	1.47e-03	20.9	20.9	20.9	20.9	14.1	-1.8	-1.9	-4387.2	369.4
941	ok	0.07	7.90e-02	1.53e-03	20.9	20.9	20.9	20.9	13.5	-2.6	-2.4	-4040.2	-26.3
942	ok	0.07	6.63e-02	1.52e-03	20.9	20.9	20.9	20.9	-1.4	-0.2	-2.2	-3292.2	53.2
943	ok	0.07	5.91e-02	1.34e-03	20.9	20.9	20.9	20.9	-6.9	-1.2	-3.1	-2440.1	-66.1
944	ok	0.07	4.69e-02	1.10e-03	20.9	20.9	20.9	20.9	7.0	-1.1	2.5	2714.4	-58.4
945	ok	0.07	2.15e-02	7.89e-04	20.9	20.9	20.9	20.9	6.3	-0.7	0.8	1195.7	-38.2
946	ok	0.07	6.83e-03	4.39e-04	20.9	20.9	20.9	20.9	2.8	-3.0	0.9	-273.6	-6.0

Nodo	x/d	V N/M	ver. rid	Af pr	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.76	9.76e-03	20.94	20.94	20.94	20.94	-55.75	-31.55	-50.16-2.959e+04-3.826e+04-2.282e+04			
								23.10	27.33	48.88	1.532e+04	1.343e+04	1.475e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
562	ok	0.24						
563	ok	0.30						
564	ok	0.43						
565	ok	0.71						
566	ok	0.94						
567	ok	1.37						
568	ok	1.37						
569	ok	1.26						
570	ok	1.16						
571	ok	1.16						
572	ok	0.51						
609	ok	0.65						
610	ok	0.81						
611	ok	0.89						
612	ok	0.93						
613	ok	0.99						
614	ok	1.78						



615	ok	1.78
616	ok	1.26
617	ok	2.10
618	ok	2.10
619	ok	0.64
656	ok	0.94
657	ok	1.38
658	ok	1.38
659	ok	1.45
660	ok	1.45
661	ok	1.78
662	ok	1.78
663	ok	1.06
664	ok	2.10
665	ok	2.10
666	ok	0.93
703	ok	1.35
704	ok	2.25
705	ok	2.25
706	ok	2.05
707	ok	2.43
708	ok	2.43
709	ok	1.56
710	ok	1.06
711	ok	1.64
712	ok	1.68
713	ok	1.68
750	ok	1.41
751	ok	2.25
752	ok	2.25
753	ok	2.05
754	ok	2.43
755	ok	2.43
756	ok	2.01
757	ok	1.37
758	ok	1.81
759	ok	2.14
760	ok	2.14
797	ok	1.57
798	ok	1.57
799	ok	1.19
800	ok	1.08
801	ok	1.74
802	ok	2.01
803	ok	2.01
804	ok	1.43
805	ok	1.81
806	ok	2.14
807	ok	2.14
852	ok	1.57
853	ok	1.57
854	ok	1.50
855	ok	1.69
856	ok	2.17
857	ok	2.17
858	ok	1.43
859	ok	1.43
860	ok	1.41
861	ok	1.37
862	ok	1.31
896	ok	0.92
897	ok	1.50
898	ok	1.50
899	ok	1.69
900	ok	2.17
901	ok	2.17
902	ok	1.02
903	ok	0.76
904	ok	0.76
905	ok	0.88
906	ok	0.88
936	ok	0.28
937	ok	0.48
938	ok	0.51
939	ok	0.62
940	ok	0.79
941	ok	0.79



942	ok	0.76
943	ok	0.61
944	ok	0.43
945	ok	0.30
946	ok	0.28

Nodo	Max tau 2.43	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
14	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
573	ok	0.07	7.01e-03	3.57e-04	20.9	20.9	20.9	20.9	7.36e-02	-0.5	-0.2	-294.6	-15.3	-219.7
574	ok	0.07	3.57e-02	8.30e-04	20.9	20.9	20.9	20.9	8.4	0.7	2.6	2066.6	-53.5	-293.8
575	ok	0.07	6.43e-02	9.66e-04	20.9	20.9	20.9	20.9	3.4	2.2	3.4	3747.3	-112.7	-493.2
576	ok	0.07	6.79e-02	9.02e-04	20.9	20.9	20.9	20.9	-1.9	3.1	3.9	3917.9	-210.6	-667.6
577	ok	0.07	5.11e-02	1.51e-03	20.9	20.9	20.9	20.9	8.5	-8.1	-1.4	-2956.3	1060.1	502.0
578	ok	0.07	0.3	3.98e-03	20.9	20.9	20.9	20.9	38.3	14.8	9.5	7300.4	1.551e+04	-5493.8
579	ok	0.07	0.8	3.73e-03	20.9	20.9	20.9	20.9	34.5	-1.1	-6.4	-3648.6	-3.288e+04	2.648e+04
580	ok	0.07	0.3	2.74e-03	20.9	20.9	20.9	20.9	25.0	9.2	-6.8	6443.5	1.555e+04	5629.7
581	ok	0.07	3.27e-02	1.09e-03	20.9	20.9	20.9	20.9	3.1	-0.2	1.8	-1196.8	151.6	-701.4
582	ok	0.07	8.97e-03	4.74e-04	20.9	20.9	20.9	20.9	-3.3	-2.0	1.7	-20.8	188.7	340.4
620	ok	0.07	2.70e-02	6.83e-04	20.9	20.9	20.9	20.9	-0.3	-0.9	-0.9	-281.4	-1351.4	-295.1
621	ok	0.07	6.29e-02	8.35e-04	20.9	20.9	20.9	20.9	-0.8	-0.3	-1.4	1968.1	1040.6	-2176.3
622	ok	0.07	8.84e-02	1.20e-03	20.9	20.9	20.9	20.9	-0.6	0.5	0.9	3913.2	760.4	-2441.5
623	ok	0.07	9.97e-02	1.65e-03	20.9	20.9	20.9	20.9	-1.4	-5.58e-02	4.1	4129.4	1127.6	-2933.0
624	ok	0.07	0.1	3.51e-03	20.9	20.9	20.9	20.9	-6.9	-10.0	-24.3	-4597.9	-5924.3	1304.7
625	ok	0.07	0.4	3.24e-03	20.9	20.9	20.9	20.9	13.4	4.0	-9.0	-8284.3	-1.283e+04	1.208e+04
626	ok	0.07	0.4	2.49e-03	20.9	20.9	20.9	20.9	14.6	-0.4	6.8	1.048e+04	-2.241e+04	989.9
627	ok	0.07	0.4	3.08e-03	20.9	20.9	20.9	20.9	9.6	2.3	15.2	-8796.0	-1.294e+04	-1.111e+04
628	ok	0.07	0.1	3.08e-03	20.9	20.9	20.9	20.9	-7.1	-10.5	26.6	-3591.1	-7985.3	-15.7
629	ok	0.07	7.53e-02	7.31e-04	20.9	20.9	20.9	20.9	-1.9	-4.3	4.3	-44.2	-4470.3	87.1
667	ok	0.07	7.89e-02	7.82e-04	20.9	20.9	20.9	20.9	-0.8	2.3	-1.2	-328.4	-4520.0	-498.9
668	ok	0.07	8.96e-02	1.22e-03	20.9	20.9	20.9	20.9	-4.8	-5.3	-7.3	-1469.4	-5088.9	947.2
669	ok	0.07	0.1	1.49e-03	20.9	20.9	20.9	20.9	-2.0	-2.1	-3.2	-3040.7	-5884.6	1112.8
670	ok	0.07	0.1	2.04e-03	20.9	20.9	20.9	20.9	-8.6	-4.9	-10.7	-3295.1	-7771.6	1272.1
671	ok	0.07	0.3	2.69e-03	20.9	20.9	20.9	20.9	3.0	-21.0	-10.7	52.7	-1.665e+04	3503.4
672	ok	0.07	0.6	7.79e-03	20.9	20.9	20.9	20.9	-3.0	-26.2	19.0	-8761.1	-3.012e+04	1.101e+04
673	ok	0.07	0.4	3.34e-03	20.9	20.9	20.9	20.9	14.5	-29.9	8.7	1277.5	-2.461e+04	2713



815	ok	0.07	0.3	2.95e-03	20.9	20.9	20.9	20.9	0.7	-9.6	-7.3	-9543.1	-8794.0	-2446.3
816	ok	0.07	0.4	4.07e-03	20.9	20.9	20.9	20.9	2.3	-7.9	8.6	1.474e+04	-1.879e+04	5015.9
817	ok	0.07	0.4	3.33e-03	20.9	20.9	20.9	20.9	-5.2	-9.6	3.6	1.615e+04	-1.021e+04	1.712e+04
863	ok	0.07	0.1	2.12e-03	20.9	20.9	20.9	20.9	-7.3	-19.8	1.1	-7512.7	-5227.8	-1590.2
864	ok	0.07	0.2	2.41e-03	20.9	20.9	20.9	20.9	-4.1	-4.3	-9.9	7031.4	1111.9	7317.5
865	ok	0.07	0.4	6.24e-03	20.9	20.9	20.9	20.9	-32.2	-22.5	36.5	-1.636e+04	-1.510e+04	5547.3
866	ok	0.07	0.2	2.77e-03	20.9	20.9	20.9	20.9	15.5	-15.0	-0.7	3085.4	-9143.2	-1278.9
867	ok	0.07	0.6	4.33e-03	20.9	20.9	20.9	20.9	-0.1	-33.9	-12.9	-1.781e+04	-2.818e+04	-1.303e+04
868	ok	0.07	0.2	2.47e-03	20.9	20.9	20.9	20.9	0.8	-6.4	-3.9	-6879.8	-7543.3	-2294.2
869	ok	0.07	0.1	2.10e-03	20.9	20.9	20.9	20.9	5.6	-7.6	-4.6	-5536.0	-5179.5	-1768.1
870	ok	0.07	0.1	2.18e-03	20.9	20.9	20.9	20.9	-0.6	-7.3	3.6	5654.9	-3850.9	-1317.7
871	ok	0.07	0.2	1.71e-03	20.9	20.9	20.9	20.9	-4.0	-5.4	6.3	3709.1	-5332.8	-2763.4
872	ok	0.07	0.2	3.00e-03	20.9	20.9	20.9	20.9	-9.5	-12.3	-8.3	-7650.1	-8101.8	2779.9
907	ok	0.07	3.89e-02	8.35e-04	20.9	20.9	20.9	20.9	-2.5	3.6	-1.2	-19.9	-1682.1	-620.6
908	ok	0.07	9.02e-02	2.72e-03	20.9	20.9	20.9	20.9	-10.8	-7.6	20.7	-4411.4	-4007.4	-64.7
909	ok	0.07	0.2	1.95e-03	20.9	20.9	20.9	20.9	6.1	-4.9	9.0	-3436.5	-3206.5	-1013.3
910	ok	0.07	0.2	1.88e-03	20.9	20.9	20.9	20.9	7.2	-9.6	-0.6	-5304.3	-5638.2	-3637.3
911	ok	0.07	0.1	1.67e-03	20.9	20.9	20.9	20.9	10.0	-6.7	2.6	-6293.3	-3839.4	-2692.9
912	ok	0.07	0.2	2.19e-03	20.9	20.9	20.9	20.9	7.2	-16.9	-10.4	-6626.2	-6707.9	-3709.2
913	ok	0.07	9.54e-02	1.23e-03	20.9	20.9	20.9	20.9	-1.7	0.3	2.7	5133.7	-794.9	-1401.5
914	ok	0.07	8.47e-02	1.25e-03	20.9	20.9	20.9	20.9	-2.4	-8.46e-02	2.8	4401.8	-753.7	-1903.7
915	ok	0.07	6.24e-02	1.33e-03	20.9	20.9	20.9	20.9	0.2	-1.8	2.0	2298.2	-413.5	-2146.9
916	ok	0.07	2.86e-02	1.39e-03	20.9	20.9	20.9	20.9	9.3	-0.2	-1.4	-899.1	-652.6	-532.9
947	ok	0.07	9.94e-03	4.32e-04	20.9	20.9	20.9	20.9	3.5	0.7	-2.5	-279.9	45.1	-36.5
948	ok	0.07	5.03e-02	7.02e-04	20.9	20.9	20.9	20.9	-1.1	1.9	-2.2	2218.9	-125.6	262.0
949	ok	0.07	6.71e-02	1.15e-03	20.9	20.9	20.9	20.9	13.1	-2.4	-1.6	-2461.0	238.8	-533.1
950	ok	0.07	6.63e-02	1.57e-03	20.9	20.9	20.9	20.9	16.9	-2.7	-2.5	-3532.3	265.0	-742.2
951	ok	0.07	7.80e-02	1.70e-03	20.9	20.9	20.9	20.9	18.7	-2.5	-2.4	-4060.4	341.5	-646.8
952	ok	0.07	9.57e-02	1.60e-03	20.9	20.9	20.9	20.9	10.3	-0.6	-0.5	-4444.5	275.5	-10.1
953	ok	0.07	8.97e-02	1.32e-03	20.9	20.9	20.9	20.9	-0.7	-0.4	1.9	4918.2	-99.8	-248.0
954	ok	0.07	7.04e-02	9.88e-04	20.9	20.9	20.9	20.9	3.5	0.6	2.0	4120.0	-106.6	-454.8
955	ok	0.07	3.26e-02	7.83e-04	20.9	20.9	20.9	20.9	4.7	0.9	1.3	1859.3	-57.7	-375.8
956	ok	0.07	7.81e-03	4.83e-04	20.9	20.9	20.9	20.9	3.5	-3.5	0.8	-379.3	-17.9	-88.1

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.82	9.31e-03	20.94	20.94	20.94	20.94	-50.64	-36.87	-43.52	-2.942e+04	-4.322e+04	-1.678e+04
								38.34	26.76	51.98	1.634e+04	1.555e+04	2.648e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
573	ok	0.26						
574	ok	0.31						
575	ok	0.43						
576	ok	0.76						
577	ok	1.39						
578	ok	1.39						
579	ok	1.26						
580	ok	1.28						
581	ok	1.28						
582	ok	0.56						
620	ok	0.68						
621	ok	0.81						
622	ok	0.91						
623	ok	1.02						
624	ok	1.79						
625	ok	1.79						
626	ok	1.26						
627	ok	2.30						
628	ok	2.30						
629	ok	0.70						
667	ok	0.95						
668	ok	1.33						
669	ok	1.39						
670	ok	1.46						
671	ok	1.79						
672	ok	1.79						
673	ok	1.12						
674	ok	2.30						
675	ok	2.30						
676	ok	1.25						
714	ok	1.36						
715	ok	2.15						
716	ok	2.15						
717	ok	2.16						
718	ok	2.67						
719	ok	2.67						



720	ok	1.13
721	ok	1.65
722	ok	2.22
723	ok	2.22
761	ok	1.37
762	ok	2.15
763	ok	2.15
764	ok	2.16
765	ok	2.67
766	ok	2.67
767	ok	1.62
768	ok	1.65
769	ok	2.77
770	ok	2.77
808	ok	1.41
809	ok	1.41
810	ok	1.20
811	ok	1.10
812	ok	1.97
813	ok	1.97
814	ok	1.62
815	ok	1.58
816	ok	2.77
817	ok	2.77
863	ok	1.41
864	ok	1.52
865	ok	1.52
866	ok	1.80
867	ok	2.19
868	ok	2.19
869	ok	1.62
870	ok	1.40
871	ok	1.72
872	ok	1.72
907	ok	0.87
908	ok	1.52
909	ok	1.52
910	ok	1.80
911	ok	2.19
912	ok	2.19
913	ok	1.06
914	ok	0.83
915	ok	1.17
916	ok	1.17
947	ok	0.28
948	ok	0.50
949	ok	0.54
950	ok	0.62
951	ok	0.77
952	ok	0.77
953	ok	0.72
954	ok	0.55
955	ok	0.38
956	ok	0.38

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	2.77						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
15	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
583	ok	0.07	6.14e-03	5.67e-04	20.9	20.9	20.9	20.9	0.4	-5.64e-02	5.72e-02	-148.1	-205.3	-162.5
584	ok	0.07	6.44e-02	3.30e-03	20.9	20.9	20.9	20.9	-14.2	-28.5	4.2	-3812.6	56.0	131.8
585	ok	0.07	0.2	5.91e-03	20.9	20.9	20.9	20.9	-9.0	-0.9	-32.8	-5965.1	-9811.0	4041.2
586	ok	0.07	0.5	1.43e-02	20.9	20.9	20.9	20.9	-118.8	-2.2	-86.3	-5565.2	1.901e+04	1.729e+04
587	ok	0.07	0.2	1.56e-02	20.9	20.9	20.9	20.9	-82.2	-93.1	76.9	-6432.9	-8781.5	-2378.8
588	ok	0.07	7.29e-02	7.21e-03	20.9	20.9	20.9	20.9	15.4	7.3	4.4	-3820.9	315.7	-689.6
589	ok	0.07	3.20e-02	1.01e-03	20.9	20.9	20.9	20.9	-8.8	-7.2	2.3	-1863.4	-1.9	-208.2
590	ok	0.07	5.62e-03	3.88e-04	20.9	20.9	20.9	20.9	-3.7	-0.3	1.4	116.7	79.6	232.9



630	ok	0.07	3.70e-02	1.19e-03	20.9	20.9	20.9	20.9	2.0	11.5	2.1	-159.1	1953.8	-349.3
631	ok	0.07	0.1	3.01e-03	20.9	20.9	20.9	20.9	-11.5	-5.5	-22.6	-6369.9	-3317.8	699.8
632	ok	0.07	0.2	3.67e-03	20.9	20.9	20.9	20.9	-27.8	-5.5	13.7	3684.8	5421.6	-8275.9
633	ok	0.07	0.3	8.48e-03	20.9	20.9	20.9	20.9	-29.3	-46.0	3.5	-1.031e+04	1.620e+04	-4351.9
634	ok	0.07	0.2	7.82e-03	20.9	20.9	20.9	20.9	-31.4	-26.8	-60.9	4020.2	8956.2	8519.8
635	ok	0.07	0.1	8.16e-03	20.9	20.9	20.9	20.9	2.6	4.0	35.2	-6507.2	-6863.6	-904.3
636	ok	0.07	6.64e-02	1.49e-03	20.9	20.9	20.9	20.9	2.7	-3.1	11.8	-1333.0	-2761.6	-1695.8
637	ok	0.07	3.40e-02	1.04e-03	20.9	20.9	20.9	20.9	-2.5	-9.1	2.2	58.4	-1993.3	-144.1
677	ok	0.07	6.72e-02	1.86e-03	20.9	20.9	20.9	20.9	-1.2	-9.4	-3.7	194.8	-3955.2	349.9
678	ok	0.07	0.2	2.32e-03	20.9	20.9	20.9	20.9	-8.4	12.1	-9.1	-4983.0	-3417.6	3808.0
679	ok	0.07	0.4	6.66e-03	20.9	20.9	20.9	20.9	-33.2	12.0	-38.7	-2.068e+04	-1.185e+04	-5271.0
680	ok	0.07	0.3	3.98e-03	20.9	20.9	20.9	20.9	-11.1	-24.9	-9.5	-2215.8	1.744e+04	-881.8
681	ok	0.07	0.5	6.34e-03	20.9	20.9	20.9	20.9	-16.4	33.5	36.8	-1.712e+04	-2.593e+04	8367.0
682	ok	0.07	0.2	4.51e-03	20.9	20.9	20.9	20.9	-17.2	23.4	19.5	-6228.1	-6038.4	-1673.5
683	ok	0.07	9.47e-02	2.42e-03	20.9	20.9	20.9	20.9	-3.3	17.1	10.9	-1647.3	-4218.3	-2275.1
684	ok	0.07	6.42e-02	1.42e-03	20.9	20.9	20.9	20.9	-2.6	13.5	3.6	116.3	-3724.6	-368.6
724	ok	0.07	6.47e-02	2.15e-03	20.9	20.9	20.9	20.9	-3.4	20.5	3.4	412.9	-2757.9	2110.5
725	ok	0.07	0.2	2.51e-03	20.9	20.9	20.9	20.9	-22.9	11.5	7.1	-9981.3	-5121.4	5578.8
726	ok	0.07	0.3	3.22e-03	20.9	20.9	20.9	20.9	-34.1	22.6	-4.3	-1.698e+04	-229.0	2749.4
727	ok	0.07	0.2	4.43e-03	20.9	20.9	20.9	20.9	-6.3	27.6	-4.6	-2369.5	-9165.5	-1415.2
728	ok	0.07	0.3	4.27e-03	20.9	20.9	20.9	20.9	-38.7	29.5	8.2	-1.440e+04	-2879.4	-3810.6
729	ok	0.07	0.2	3.96e-03	20.9	20.9	20.9	20.9	-25.0	15.8	24.3	-8808.5	-6624.9	278.1
730	ok	0.07	0.1	2.59e-03	20.9	20.9	20.9	20.9	-11.4	21.0	12.0	-2182.7	-5038.1	-2227.4
731	ok	0.07	8.02e-02	2.13e-03	20.9	20.9	20.9	20.9	-1.4	26.8	-1.0	170.2	-4600.6	-654.2
771	ok	0.07	0.2	2.29e-03	20.9	20.9	20.9	20.9	-19.0	15.8	-13.1	1.070e+04	3430.4	-1796.0
772	ok	0.07	0.4	3.97e-03	20.9	20.9	20.9	20.9	-7.9	7.2	11.1	-1.580e+04	-8693.6	1.174e+04
773	ok	0.07	0.6	7.99e-03	20.9	20.9	20.9	20.9	-54.2	4.7	34.1	-3.371e+04	-1.162e+04	1.153e+04
774	ok	0.07	0.1	5.45e-03	20.9	20.9	20.9	20.9	6.1	-15.6	14.5	-3211.8	-4235.0	4343.4
775	ok	0.07	0.5	1.02e-02	20.9	20.9	20.9	20.9	-55.8	-52.4	-57.7	-2.515e+04	-1.189e+04	-1.172e+04
776	ok	0.07	0.2	5.27e-03	20.9	20.9	20.9	20.9	-21.7	-12.1	-16.9	-8519.3	-5505.2	-3528.9
777	ok	0.07	0.1	3.03e-03	20.9	20.9	20.9	20.9	-8.5	-5.6	-8.2	-2378.0	-5062.2	-3733.6
778	ok	0.07	8.14e-02	2.48e-03	20.9	20.9	20.9	20.9	3.1	12.0	1.4	244.4	-4697.9	-694.3
818	ok	0.07	0.7	3.27e-03	20.9	20.9	20.9	20.9	-1.6	2.5	18.5	-2.805e+04	-3869.6	2.529e+04
819	ok	0.07	0.4	3.50e-03	20.9	20.9	20.9	20.9	-18.2	5.7	16.8	-2.350e+04	-6550.1	6401.6
820	ok	0.07	0.4	4.56e-03	20.9	20.9	20.9	20.9	-33.5	0.5	9.4	-2.326e+04	-2797.6	3368.7
821	ok	0.07	0.2	6.50e-03	20.9	20.9	20.9	20.9	-29.0	-16.5	-6.9	-1.336e+04	-3667.6	-1188.7
822	ok	0.07	0.4	5.08e-03	20.9	20.9	20.9	20.9	-42.1	-12.9	-23.4	-1.903e+04	-2746.9	-7106.7
823	ok	0.07	0.3	6.09e-03	20.9	20.9	20.9	20.9	-32.7	-25.7	-38.0	-1.107e+04	-8294.5	-6445.5
824	ok	0.07	0.2	4.91e-03	20.9	20.9	20.9	20.9	-29.7	-23.4	-24.6	-2859.7	-5991.4	-4511.1
825	ok	0.07	9.16e-02	3.68e-03	20.9	20.9	20.9	20.9	34.5	8.4	8.8	599.3	-5232.3	-793.9
826	ok	0.07	0.2	3.16e-03	20.9	20.9	20.9	20.9	8.9	28.4	1.6	1.113e+04	972.4	3125.0
827	ok	0.07	0.3	3.27e-03	20.9	20.9	20.9	20.9	-1.3	-2.4	10.3	-1.322e+04	-1.009e+04	-8124.2
828	ok	0.07	0.7	9.85e-03	20.9	20.9	20.9	20.9	-39.4	-49.2	47.0	-3.477e+04	-2.244e+04	1.451e+04
829	ok	0.07	0.4	1.08e-02	20.9	20.9	20.9	20.9	17.5	-72.7	-13.8	1036.8	-1.537e+04	-5119.3
830	ok	0.07	0.8	1.38e-02	20.9	20.9	20.9	20.9	-48.6	-96.0	-64.9	-3.588e+04	-2.908e+04	-1.838e+04
831	ok	0.07	0.3	6.23e-03	20.9	20.9	20.9	20.9	-27.6	-3.1	-18.0	-1.114e+04	-9438.1	-3471.2
832	ok	0.07	0.2	5.35e-03	20.9	20.9	20.9	20.9	-15.7	-15.9	-29.6	-4908.3	-7183.2	-6609.1
833	ok	0.07	0.1	9.83e-03	20.9	20.9	20.9	20.9	-62.4	-52.1	39.8	4888.9	-1015.1	1336.2
873	ok	0.07	9.72e-02	1.28e-03	20.9	20.9	20.9	20.9	-0.7	13.3	3.0	202.9	-5072.9	-759.2
874	ok	0.07	0.2	3.65e-03	20.9	20.9	20.9	20.9	-16.4	-9.0	26.7	-1.009e+04	-7157.1	284.9
875	ok	0.07	0.3	5.34e-03	20.9	20.9	20.9	20.9	-1.7	-51.7	1.8	-6655.1	-1.069e+04	-614.9
876	ok	0.07	0.3	8.77e-03	20.9	20.9	20.9	20.9	6.9	-76.4	-4.8	-9275.9	-1.696e+04	-3352.8
877	ok	0.07	0.3	7.54e-03	20.9	20.9	20.9	20.9	26.3	-77.5	32.6	-6090.1	-1.263e+04	2618.7
878	ok	0.07	0.3	6.65e-03	20.9	20.9	20.9	20.9	-22.7	-34.8	-17.7	-1.427e+04	-9567.9	-4179.2
879	ok	0.07	0.2	4.11e-03	20.9	20.9	20.9	20.9	21.7	-8.3	1.3	1.131e+04	-9999.6	4341.6
880	ok	0.07	0.4	9.59e-03	20.9	20.9	20.9	20.9	-3.8	3.4	14.5	1.214e+04	-7840.5	1.175e+04
917	ok	0.07	3.65e-02	6.28e-04	20.9	20.9	20.9	20.9	-1.8	0.3	4.7	-162.1	-1911.4	-449.5
918	ok	0.07	9.38e-02	2.49e-03	20.9	20.9	20.9	20.9	-13.5	-23.3	8.1	-2912.2	-2630.3	-2800.1
919	ok	0.07	0.2	6.69e-03	20.9	20.9	20.9	20.9	-26.3	-3.7	0.2	-7756.3	-3192.8	-5895.8
920	ok	0.07	0.3	1.21e-02	20.9	20.9	20.9	20.9	-4.8	-131.9	-20.4	7902.2	-1.848e+04	4899.7
921	ok	0.07	0.3	1.19e-02	20.9	20.9	20.9	20.9	-32.9	-24.2	55.2	-6368.5	-7944.6	1.052e+04
922	ok	0.07	0.1	7.56e-03	20.9	20.9	20.9	20.9	-18.1	-76.0	27.7	-4687.6	-3874.0	3738.7
923	ok	0.07	0.2	2.91e-03	20.9	20.9	20.9	20.9	-9.6	1.5	15.0	5938.0	2586.1	-3834.1
924	ok	0.07	0.1	4.98e-03	20.9	20.9	20.9	20.9	-17.7	-14.0	-3.8	-6120.5	-4135.6	2367.7
957	ok	0.07	6.87e-03	3.64e-04	20.9	20.9	20.9	20.9	-3.0	-0.2	1.8	65.0	41.0	307.2
958	ok	0.07	6.12e-02	4.31e-03	20.9	20.9	20.9	20.9	26.4	30.4	13.3	-2245.6	1062.9	81.7
959	ok	0.07	0.2	7.36e-03	20.9	20.9	20.9	20.9	13.5	-15.6	63.1	3117.1	9653.7	4234.9
960	ok	0.07	0.6	1.40e-02	20.9	20.9	20.9	20.9	-69.8	-15.7	112.2	-1.208e+04	-2.079e+04	2.108e+04
961	ok	0.07	0.2	1.56e-02	20.9	20.9	20.9	20.9	-31.0	-98.9	-99.0	5173.0	9525.0	-3707.5
962	ok	0.07	0.1	7.63e-03	20.9	20.9	20.9	20.9	63.0	79.4	-18.1	-3338.2	1050.1	428.3
963	ok	0.07	7.22e-02	3.28e-03	20.9	20.9	20.9	20.9	11.8	2.2	-5.1	-3725.4	-66.5	241.9
964	ok	0.07	1.35e-02	1.78e-03	20.9	20.9	20.9	20.9	-10.7	-3.5	1.6	588.0	-137.9	-416.9

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.81	0.02	20.94	20.94	20.94	20.94	-118.78 63.04	-131.91 79.36	-98.95 112.17	-3.588e+04 1.214e+04	-2.908e+04 1.901e+04	-1.838e+04 2.529e+04



Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
583	ok	0.34						
584	ok	0.83						
585	ok	1.48						
586	ok	1.65						
587	ok	1.65						
588	ok	1.41						
589	ok	0.55						
590	ok	0.23						
630	ok	0.56						
631	ok	1.62						
632	ok	1.62						
633	ok	1.65						
634	ok	2.34						
635	ok	2.34						
636	ok	1.04						
637	ok	0.34						
677	ok	0.92						
678	ok	1.62						
679	ok	1.62						
680	ok	1.46						
681	ok	2.34						
682	ok	2.34						
683	ok	1.04						
684	ok	0.40						
724	ok	1.61						
725	ok	1.83						
726	ok	1.83						
727	ok	1.27						
728	ok	1.60						
729	ok	1.60						
730	ok	1.02						
731	ok	0.66						
771	ok	1.61						
772	ok	1.83						
773	ok	1.83						
774	ok	1.52						
775	ok	1.60						
776	ok	1.60						
777	ok	1.16						
778	ok	1.03						
818	ok	1.52						
819	ok	1.52						
820	ok	1.63						
821	ok	1.63						
822	ok	1.70						
823	ok	1.70						
824	ok	1.53						
825	ok	1.53						
826	ok	1.12						
827	ok	2.78						
828	ok	2.78						
829	ok	1.78						
830	ok	2.95						
831	ok	2.95						
832	ok	1.64						
833	ok	1.64						
873	ok	1.07						
874	ok	2.78						
875	ok	2.78						
876	ok	1.78						
877	ok	2.95						
878	ok	2.95						
879	ok	1.64						
880	ok	1.64						
917	ok	0.68						
918	ok	1.48						
919	ok	1.66						
920	ok	1.81						
921	ok	1.81						
922	ok	1.48						
923	ok	1.29						
924	ok	0.62						
957	ok	0.35						
958	ok	0.87						
959	ok	1.57						



960	ok	1.81
961	ok	1.81
962	ok	1.31
963	ok	0.72
964	ok	0.62

Nodo	Max tau 2.95	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
16	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
965	ok	0.07	1.08e-02	5.03e-04	20.9	20.9	20.9	20.9	-2.6	4.1	-1.2	-201.2	-345.0	-357.7
966	ok	0.07	3.52e-02	2.90e-03	20.9	20.9	20.9	20.9	1.7	11.8	-5.3	-1908.5	-74.7	-465.3
967	ok	0.07	7.62e-02	5.48e-03	20.9	20.9	20.9	20.9	-17.4	-17.6	-38.3	-3952.6	-4203.5	354.8
968	ok	0.07	0.3	9.70e-03	20.9	20.9	20.9	20.9	-69.5	-19.2	-58.5	-1.444e+04	7236.7	6490.5
969	ok	0.07	0.1	8.34e-03	20.9	20.9	20.9	20.9	-34.9	-36.7	47.9	-3008.0	-3903.3	30.7
970	ok	0.07	7.16e-02	3.90e-03	20.9	20.9	20.9	20.9	2.8	23.6	7.6	-3665.2	-256.4	479.9
971	ok	0.07	9.12e-03	6.13e-04	20.9	20.9	20.9	20.9	-2.2	-2.4	0.9	131.1	-209.6	431.2
979	ok	0.07	4.30e-02	9.97e-04	20.9	20.9	20.9	20.9	1.5	9.0	2.1	-63.8	2335.1	-309.4
980	ok	0.07	8.86e-02	2.78e-03	20.9	20.9	20.9	20.9	-7.4	-4.7	-11.6	-4581.4	-3774.2	-958.0
981	ok	0.07	0.2	3.71e-03	20.9	20.9	20.9	20.9	-23.0	-28.2	-7.4	-8553.4	2468.7	-808.9
982	ok	0.07	0.2	4.95e-03	20.9	20.9	20.9	20.9	-18.3	-40.8	-2.6	-1.036e+04	8972.6	-1024.5
983	ok	0.07	0.3	5.13e-03	20.9	20.9	20.9	20.9	8.4	-6.6	-11.2	-9129.9	1354.7	2578.3
984	ok	0.07	0.1	4.41e-03	20.9	20.9	20.9	20.9	-5.3	-2.5	14.6	-7683.8	-3684.4	-176.6
985	ok	0.07	4.48e-02	1.20e-03	20.9	20.9	20.9	20.9	-1.7	-2.3	1.0	1097.2	-1929.1	-162.3
993	ok	0.07	5.90e-02	8.61e-04	20.9	20.9	20.9	20.9	-1.0	-4.0	-3.0	172.6	-3499.4	-52.3
994	ok	0.07	0.1	1.78e-03	20.9	20.9	20.9	20.9	1.6	0.8	10.8	-1262.8	7595.4	-2302.5
995	ok	0.07	0.4	4.46e-03	20.9	20.9	20.9	20.9	-20.9	-4.5	-25.1	-2.026e+04	-1.374e+04	-7179.6
996	ok	0.07	0.2	2.88e-03	20.9	20.9	20.9	20.9	-8.7	-13.7	7.6	-5807.1	1.063e+04	-174.7
997	ok	0.07	0.6	4.36e-03	20.9	20.9	20.9	20.9	-22.7	8.4	24.1	-3.018e+04	-1.190e+04	8387.8
998	ok	0.07	0.3	2.95e-03	20.9	20.9	20.9	20.9	0.6	6.3	7.9	-1.011e+04	-7334.3	-7777.2
999	ok	0.07	0.2	2.61e-03	20.9	20.9	20.9	20.9	0.6	9.2	5.1	1.219e+04	2232.7	4093.6
1007	ok	0.07	4.40e-02	7.87e-04	20.9	20.9	20.9	20.9	-1.6	6.5	-2.2	61.9	-2550.2	-367.8
1008	ok	0.07	0.1	1.55e-03	20.9	20.9	20.9	20.9	-6.8	4.3	-7.3	-4625.4	-3635.4	-1675.2
1009	ok	0.07	0.2	2.43e-03	20.9	20.9	20.9	20.9	-17.2	-1.9	7.0	-9332.4	1365.4	944.6
1010	ok	0.07	0.2	3.04e-03	20.9	20.9	20.9	20.9	-20.0	-2.1	7.1	-8894.1	-2102.1	1347.4
1011	ok	0.07	0.3	2.48e-03	20.9	20.9	20.9	20.9	-27.4	11.7	6.9	-2.022e+04	1043.3	2236.4
1012	ok	0.07	0.3	2.53e-03	20.9	20.9	20.9	20.9	-10.3	-0.3	7.1	-1.888e+04	-2891.7	3883.8
1013	ok	0.07	0.6	3.66e-03	20.9	20.9	20.9	20.9	-7.3	13.8	3.0	-2.492e+04	103.7	1.887e+04
1021	ok	0.07	4.46e-02	7.88e-04	20.9	20.9	20.9	20.9	-1.0	4.6	2.3	154.7	-2452.3	243.1
1022	ok	0.07	0.1	2.22e-03	20.9	20.9	20.9	20.9	-3.3	1.4	3.0	-2877.8	-3945.3	287.8
1023	ok	0.07	0.4	6.08e-03	20.9	20.9	20.9	20.9	-21.7	-17.5	25.1	-1.965e+04	-1.183e+04	6173.3
1024	ok	0.07	0.2	4.37e-03	20.9	20.9	20.9	20.9	10.9	-34.6	4.1	-4622.6	-8937.4	817.0
1025	ok	0.07	0.5	5.66e-03	20.9	20.9	20.9	20.9	-24.7	-7.6	-24.2	-2.990e+04	-1.052e+04	-7740.7
1026	ok	0.07	0.3	1.71e-03	20.9	20.9	20.9	20.9	-1.2	-1.8	-4.6	-1.025e+04	-6873.4	8061.2
1027	ok	0.07	0.2	2.59e-03	20.9	20.9	20.9	20.9	2.5	11.5	-4.9	1.224e+04	2752.5	-4077.0
1035	ok	0.07	3.50e-02	4.83e-04	20.9	20.9	20.9	20.9	-1.0	0.8	2.7	49.5	-1439.7	-465.0
1036	ok	0.07	8.41e-02	2.07e-03	20.9	20.9	20.9	20.9	-7.1	-5.6	12.2	-4606.0	-3275.2	804.2
1037	ok	0.07	0.1	3.83e-03	20.9	20.9	20.9	20.9	-2.2	-9.7	-5.7	-5366.8	-3568.6	-2152.8
1038	ok	0.07	0.2	3.52e-03	20.9	20.9	20.9	20.9	-5.3	25.5	-2.6	-9117.1	7713.5	-1369.3
1039	ok	0.07	0.3	2.60e-03	20.9	20.9	20.9	20.9	-2.0	-1.3	0.5	-9263.0	1209.7	-1921.8
1040	ok	0.07	0.1	2.34e-03	20.9	20.9	20.9	20.9	-6.0	-3.5	-13.2	-7711.9	-3327.1	283.0
1041	ok	0.07	3.74e-02	7.67e-04	20.9	20.9	20.9	20.9	-0.4	1.2	-1.9	1117.4	-1759.7	189.2
1049	ok	0.07	1.03e-02	2.67e-04	20.9	20.9	20.9	20.9	0.6	-1.8	2.2	-67.0	-102.0	330.3
1050	ok	0.07	3.69e-02	1.72e-03	20.9	20.9	20.9	20.9	7.4	11.3	6.0	-2156.9	199.3	60.4
1051	ok	0.07	7.95e-02	3.51e-03	20.9	20.9	20.9	20.9	-1.3	17.0	-21.7	-3219.3	-3903.4	-456.5
1052	ok	0.07	0.2	4.28e-03	20.9	20.9	20.9	20.9	-18.7	13.4	-11.8	-9121.3	7627.3	-7576.7
1053	ok	0.07	0.1	2.44e-03	20.9	20.9	20.9	20.9	-19.9	-1.4	10.8	-4909.3	-3833.2	485.3
1054	ok	0.07	7.36e-02	8.98e-04	20.9	20.9	20.9	20.9	-1.9	2.6	-2.2	-3770.7	-254.4	-379.9
1055	ok	0.07	8.47e-03	3.19e-04	20.9	20.9	20.9	20.9	-1.8	-1.0	-1.0	168.4	-221.5	-427.7

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.59	9.70e-03	20.94	20.94	20.94	20.94	-69.50	-40.79	-58.55	-3.018e+04	-1.374e+04	-7777.17
								10.91	25.53	47.89	1.224e+04	1.063e+04	1.887e+04

Nodo	Stato	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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		daN/cm2				daN/cm	daN/cm
965	ok	0.28					
966	ok	0.81					
967	ok	1.50					
968	ok	1.57					
969	ok	1.57					
970	ok	0.80					
971	ok	0.43					
979	ok	0.52					
980	ok	1.63					
981	ok	1.63					
982	ok	1.57					
983	ok	1.99					
984	ok	1.99					
985	ok	0.87					
993	ok	0.52					
994	ok	1.63					
995	ok	1.63					
996	ok	1.13					
997	ok	1.99					
998	ok	1.99					
999	ok	1.03					
1007	ok	0.50					
1008	ok	1.18					
1009	ok	1.18					
1010	ok	1.04					
1011	ok	1.07					
1012	ok	1.07					
1013	ok	1.04					
1021	ok	0.50					
1022	ok	1.51					
1023	ok	1.51					
1024	ok	1.00					
1025	ok	1.90					
1026	ok	1.90					
1027	ok	1.04					
1035	ok	0.49					
1036	ok	1.51					
1037	ok	1.51					
1038	ok	1.16					
1039	ok	1.90					
1040	ok	1.90					
1041	ok	0.88					
1049	ok	0.28					
1050	ok	0.65					
1051	ok	1.16					
1052	ok	1.16					
1053	ok	1.08					
1054	ok	0.61					
1055	ok	0.45					

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.99						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
17	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
972	ok	0.07	9.42e-03	7.17e-04	20.9	20.9	20.9	20.9	-1.6	4.5	-1.7	145.7	-339.4	-392.6
973	ok	0.07	7.33e-02	5.35e-03	20.9	20.9	20.9	20.9	-1.1	5.5	-4.1	-4304.9	-32.4	-277.2
974	ok	0.07	0.1	1.14e-02	20.9	20.9	20.9	20.9	-42.7	-49.1	-68.6	-5733.1	-4349.8	245.8
975	ok	0.07	0.3	1.30e-02	20.9	20.9	20.9	20.9	-87.5	-33.0	84.7	-1.596e+04	7979.2	-6676.6
976	ok	0.07	8.80e-02	9.17e-03	20.9	20.9	20.9	20.9	-21.8	-27.9	56.1	-3855.8	-4595.1	-486.4
977	ok	0.07	3.55e-02	4.75e-03	20.9	20.9	20.9	20.9	0.6	-0.2	-0.4	-1315.7	-250.1	591.6
978	ok	0.07	1.11e-02	7.07e-04	20.9	20.9	20.9	20.9	0.4	-7.2	0.6	-102.0	-77.6	341.7
986	ok	0.07	4.25e-02	1.48e-03	20.9	20.9	20.9	20.9	-8.8	-13.7	2.3	497.3	-2451.8	126.0
987	ok	0.07	0.1	5.60e-03	20.9	20.9	20.9	20.9	-4.4	-1.5	-15.3	-7797.8	-3423.7	108.7
988	ok	0.07	0.3	6.84e-03	20.9	20.9	20.9	20.9	-27.2	-33.2	-6.2	-1.552e+04	2801.2	1201.6
989	ok	0.07	0.2	7.58e-03	20.9	20.9	20.9	20.9	-17.8	-72.1	8.0	-1.147e+04	9608.5	1054.7
990	ok	0.07	0.2	5.84e-03	20.9	20.9	20.9	20.9	-29.8	-48.1	5.7	-6671.2	3852.8	1122.9



991	ok	0.07	8.96e-02	4.33e-03	20.9	20.9	20.9	20.9	-6.4	-3.6	12.9	-4633.8	-3540.2	1068.2
992	ok	0.07	4.15e-02	1.34e-03	20.9	20.9	20.9	20.9	-1.7	-12.9	1.6	-29.5	-2354.2	112.3
1000	ok	0.07	0.2	2.66e-03	20.9	20.9	20.9	20.9	-8.9	2.4	-9.7	1.242e+04	4498.3	-4329.1
1001	ok	0.07	0.3	3.54e-03	20.9	20.9	20.9	20.9	1.8	8.9	-10.3	-1.034e+04	-7092.0	7910.8
1002	ok	0.07	0.6	4.81e-03	20.9	20.9	20.9	20.9	-20.9	19.0	-23.2	-3.065e+04	-1.095e+04	-8297.8
1003	ok	0.07	0.2	4.13e-03	20.9	20.9	20.9	20.9	-5.4	-35.8	-6.8	-5814.2	1.099e+04	282.8
1004	ok	0.07	0.4	4.56e-03	20.9	20.9	20.9	20.9	-20.8	5.8	24.6	-2.063e+04	-1.291e+04	7147.7
1005	ok	0.07	0.1	2.41e-03	20.9	20.9	20.9	20.9	-3.9	9.0	5.0	-2887.4	-4158.6	651.3
1006	ok	0.07	5.61e-02	9.45e-04	20.9	20.9	20.9	20.9	0.9	0.8	3.5	180.1	-2712.7	-350.7
1014	ok	0.07	0.6	3.92e-03	20.9	20.9	20.9	20.9	-7.3	16.1	-1.6	-2.544e+04	388.7	-1.926e+04
1015	ok	0.07	0.3	2.91e-03	20.9	20.9	20.9	20.9	-9.9	0.3	-7.3	-1.932e+04	-2635.9	-3978.2
1016	ok	0.07	0.3	3.33e-03	20.9	20.9	20.9	20.9	-26.9	13.0	-7.0	-2.058e+04	1380.9	-2157.1
1017	ok	0.07	0.2	4.21e-03	20.9	20.9	20.9	20.9	-19.6	-3.5	-6.9	-9049.1	-1853.1	-1354.1
1018	ok	0.07	0.2	3.44e-03	20.9	20.9	20.9	20.9	-18.9	9.0	-3.9	-9447.0	1393.6	-1009.9
1019	ok	0.07	0.1	2.00e-03	20.9	20.9	20.9	20.9	-5.3	0.7	4.9	-4823.1	-3291.8	1841.7
1020	ok	0.07	3.94e-02	8.71e-04	20.9	20.9	20.9	20.9	-1.0	10.0	-0.7	61.6	-2268.4	-289.7
1028	ok	0.07	0.2	2.97e-03	20.9	20.9	20.9	20.9	3.9	13.5	3.5	1.249e+04	3032.6	4178.3
1029	ok	0.07	0.3	2.11e-03	20.9	20.9	20.9	20.9	-1.0	-2.5	5.2	-1.046e+04	-6803.8	-8172.2
1030	ok	0.07	0.5	7.08e-03	20.9	20.9	20.9	20.9	-24.6	-7.2	24.3	-3.045e+04	-1.011e+04	7860.7
1031	ok	0.07	0.2	5.99e-03	20.9	20.9	20.9	20.9	-21.0	58.9	9.2	-5376.0	9605.8	-152.3
1032	ok	0.07	0.4	7.65e-03	20.9	20.9	20.9	20.9	-22.3	-18.9	-25.8	-1.998e+04	-1.141e+04	-6231.0
1033	ok	0.07	0.1	3.02e-03	20.9	20.9	20.9	20.9	-3.4	1.3	-3.2	-2942.7	-3754.7	-328.6
1034	ok	0.07	4.60e-02	8.29e-04	20.9	20.9	20.9	20.9	-1.0	5.3	-2.3	154.3	-2274.9	-259.8
1042	ok	0.07	3.68e-02	8.72e-04	20.9	20.9	20.9	20.9	-0.8	1.2	1.7	1138.9	-1676.8	-182.8
1043	ok	0.07	0.1	2.69e-03	20.9	20.9	20.9	20.9	-6.0	-3.3	13.4	-7818.6	-3223.5	-225.3
1044	ok	0.07	0.3	3.99e-03	20.9	20.9	20.9	20.9	-2.4	-6.7	0.1	-7024.7	-3549.5	-2616.3
1045	ok	0.07	0.2	5.59e-03	20.9	20.9	20.9	20.9	-5.0	44.2	1.2	-9677.6	8260.6	1469.5
1046	ok	0.07	0.2	5.57e-03	20.9	20.9	20.9	20.9	5.9	13.2	-12.1	-469.1	4281.2	-5234.7
1047	ok	0.07	8.49e-02	2.36e-03	20.9	20.9	20.9	20.9	-7.2	-5.7	-12.7	-4642.9	-3165.6	-871.3
1048	ok	0.07	3.54e-02	5.19e-04	20.9	20.9	20.9	20.9	-1.1	1.0	-3.3	48.9	-1415.4	463.6
1056	ok	0.07	8.72e-03	3.29e-04	20.9	20.9	20.9	20.9	-1.9	-1.0	1.0	174.0	-236.1	433.2
1057	ok	0.07	7.47e-02	1.73e-03	20.9	20.9	20.9	20.9	-2.6	1.2	1.8	-3833.8	-263.9	416.8
1058	ok	0.07	0.1	3.39e-03	20.9	20.9	20.9	20.9	-19.5	4.7	-23.6	-5181.8	-3971.0	-440.0
1059	ok	0.07	0.2	7.19e-03	20.9	20.9	20.9	20.9	-11.8	21.9	26.6	-1.016e+04	7865.7	7865.9
1060	ok	0.07	8.45e-02	6.00e-03	20.9	20.9	20.9	20.9	0.9	24.7	32.3	-3881.4	-4103.1	354.8
1061	ok	0.07	3.73e-02	2.89e-03	20.9	20.9	20.9	20.9	4.9	-6.4	2.5	-1558.9	-5.7	556.0
1062	ok	0.07	1.05e-02	2.92e-04	20.9	20.9	20.9	20.9	1.0	-1.3	-2.7	-67.5	-106.5	-333.7

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.60	0.01	20.94	20.94	20.94	20.94	-87.49	-72.06	-68.58	-3.065e+04	-1.291e+04	-1.926e+04
								5.91	58.88	84.65	1.249e+04	1.099e+04	7910.81

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
972	ok	0.45						
973	ok	0.85						
974	ok	1.63						
975	ok	1.63						
976	ok	1.42						
977	ok	0.80						
978	ok	0.28						
986	ok	0.89						
987	ok	1.96						
988	ok	1.96						
989	ok	1.63						
990	ok	1.61						
991	ok	1.61						
992	ok	0.52						
1000	ok	1.06						
1001	ok	1.96						
1002	ok	1.96						
1003	ok	1.12						
1004	ok	1.61						
1005	ok	1.61						
1006	ok	0.52						
1014	ok	1.06						
1015	ok	1.09						
1016	ok	1.09						
1017	ok	1.03						
1018	ok	1.20						
1019	ok	1.20						
1020	ok	0.51						
1028	ok	1.06						
1029	ok	1.91						
1030	ok	1.91						
1031	ok	1.05						



1032	ok	1.51
1033	ok	1.51
1034	ok	0.51
1042	ok	0.90
1043	ok	1.91
1044	ok	1.91
1045	ok	1.25
1046	ok	1.51
1047	ok	1.51
1048	ok	0.49
1056	ok	0.46
1057	ok	0.66
1058	ok	1.19
1059	ok	1.25
1060	ok	1.25
1061	ok	0.70
1062	ok	0.28

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.96						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
18	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1063	ok	0.07	1.07e-02	3.74e-04	20.9	20.9	20.9	20.9	-1.9	-1.5	-1.1	-166.2	-254.8	-415.6
1064	ok	0.07	3.71e-02	1.29e-03	20.9	20.9	20.9	20.9	-1.8	-14.0	0.8	-2201.7	338.7	-24.1
1065	ok	0.07	9.24e-02	2.28e-03	20.9	20.9	20.9	20.9	-11.0	-3.8	-15.1	-3922.5	-5032.9	808.0
1066	ok	0.07	0.3	5.90e-03	20.9	20.9	20.9	20.9	-18.5	-10.5	12.9	-8777.5	9783.7	-9058.8
1067	ok	0.07	0.1	5.26e-03	20.9	20.9	20.9	20.9	-27.2	-20.0	22.2	-5173.9	-4903.3	-925.8
1068	ok	0.07	7.45e-02	2.31e-03	20.9	20.9	20.9	20.9	-6.8	-19.8	-2.2	-4417.4	47.1	162.8
1069	ok	0.07	8.75e-03	4.43e-04	20.9	20.9	20.9	20.9	-2.2	-2.5	0.8	157.1	-217.3	443.6
1077	ok	0.07	4.17e-02	7.34e-04	20.9	20.9	20.9	20.9	-1.1	-6.2	-2.7	-22.5	-2465.5	-104.0
1078	ok	0.07	8.69e-02	1.78e-03	20.9	20.9	20.9	20.9	-3.6	-7.9	-14.5	-4162.4	-4992.5	-38.8
1079	ok	0.07	0.2	1.86e-03	20.9	20.9	20.9	20.9	-10.4	5.3	-0.5	-8153.6	2160.0	-442.1
1080	ok	0.07	0.2	2.34e-03	20.9	20.9	20.9	20.9	-6.6	-19.4	7.4	-9364.2	9112.2	1409.6
1081	ok	0.07	0.3	3.26e-03	20.9	20.9	20.9	20.9	-9.3	10.2	-1.9	-1.471e+04	2318.5	-1451.5
1082	ok	0.07	0.1	3.13e-03	20.9	20.9	20.9	20.9	-6.5	-4.1	16.1	-7860.3	-3649.0	-268.5
1083	ok	0.07	4.44e-02	8.65e-04	20.9	20.9	20.9	20.9	-2.6	-0.9	1.1	1142.8	-1930.5	-181.6
1091	ok	0.07	5.47e-02	9.85e-04	20.9	20.9	20.9	20.9	-0.6	-1.4	-2.6	169.9	-3242.8	-82.4
1092	ok	0.07	0.1	1.65e-03	20.9	20.9	20.9	20.9	1.3	9.4	7.5	-1159.6	6955.9	-1799.8
1093	ok	0.07	0.4	4.49e-03	20.9	20.9	20.9	20.9	-12.9	-14.4	-27.6	-1.589e+04	-1.866e+04	-6461.0
1094	ok	0.07	0.2	2.39e-03	20.9	20.9	20.9	20.9	10.5	-4.4	5.6	-3454.7	-1.133e+04	1677.6
1095	ok	0.07	0.6	4.40e-03	20.9	20.9	20.9	20.9	-25.2	-0.2	27.2	-3.046e+04	-1.174e+04	8243.7
1096	ok	0.07	0.3	2.55e-03	20.9	20.9	20.9	20.9	0.3	6.2	8.6	-1.039e+04	-7415.0	-8112.2
1097	ok	0.07	0.2	2.32e-03	20.9	20.9	20.9	20.9	2.8	13.4	3.8	1.258e+04	2455.6	4213.5
1105	ok	0.07	4.11e-02	1.09e-03	20.9	20.9	20.9	20.9	-1.4	12.1	-0.6	51.7	-2380.1	-321.1
1106	ok	0.07	9.73e-02	1.33e-03	20.9	20.9	20.9	20.9	-6.8	5.2	-7.3	-4697.0	-3433.1	-1593.5
1107	ok	0.07	0.2	1.92e-03	20.9	20.9	20.9	20.9	-21.3	13.9	3.8	-9153.1	984.1	1229.5
1108	ok	0.07	0.2	2.39e-03	20.9	20.9	20.9	20.9	-23.0	9.79e-02	8.3	-8606.2	-2403.2	1519.5
1109	ok	0.07	0.3	2.60e-03	20.9	20.9	20.9	20.9	-28.3	20.6	7.8	-2.033e+04	983.0	2108.7
1110	ok	0.07	0.3	2.13e-03	20.9	20.9	20.9	20.9	-10.4	2.4	9.7	-1.928e+04	-2946.4	3844.8
1111	ok	0.07	0.6	3.17e-03	20.9	20.9	20.9	20.9	-5.7	17.9	-2.1	-2.562e+04	-289.2	-1.932e+04
1119	ok	0.07	5.92e-02	9.50e-04	20.9	20.9	20.9	20.9	-0.1	5.7	1.4	177.9	-3029.7	-379.0
1120	ok	0.07	0.1	1.66e-03	20.9	20.9	20.9	20.9	-1.2	-3.1	4.7	-1766.2	-5647.0	201.9
1121	ok	0.07	0.4	5.11e-03	20.9	20.9	20.9	20.9	-14.7	-36.8	31.1	-1.540e+04	-1.935e+04	6401.7
1122	ok	0.07	0.2	3.03e-03	20.9	20.9	20.9	20.9	9.6	-26.1	4.0	-4221.5	-1.159e+04	873.2
1123	ok	0.07	0.6	4.76e-03	20.9	20.9	20.9	20.9	-28.3	-20.6	-30.0	-3.024e+04	-1.196e+04	-8188.2
1124	ok	0.07	0.3	2.01e-03	20.9	20.9	20.9	20.9	-4.2	3.1	2.1	-1.036e+04	-5666.6	8132.4
1125	ok	0.07	0.2	2.28e-03	20.9	20.9	20.9	20.9	-7.5	4.0	-8.8	1.250e+04	4052.8	-4284.8
1133	ok	0.07	4.41e-02	5.23e-04	20.9	20.9	20.9	20.9	-0.9	-3.3	3.5	-18.1	-2612.4	79.4
1134	ok	0.07	8.74e-02	1.99e-03	20.9	20.9	20.9	20.9	-4.9	-10.4	15.1	-4104.2	-5183.6	-79.3
1135	ok	0.07	0.2	2.32e-03	20.9	20.9	20.9	20.9	3.0	-4.1	-8.21e-02	-5280.4	-4836.2	-4120.0
1136	ok	0.07	0.2	1.58e-03	20.9	20.9	20.9	20.9	-6.1	12.3	-3.9	-9814.3	9464.3	-1505.7
1137	ok	0.07	0.3	1.89e-03	20.9	20.9	20.9	20.9	-8.2	1.7	-3.6	-9303.7	1186.5	-1968.1
1138	ok	0.07	0.1	2.20e-03	20.9	20.9	20.9	20.9	-7.2	-5.0	-16.4	-7844.7	-3706.3	312.6
1139	ok	0.07	4.68e-02	6.72e-04	20.9	20.9	20.9	20.9	-1.3	3.0	-2.4	1142.3	-1980.6	192.1
1147	ok	0.07	1.05e-02	2.97e-04	20.9	20.9	20.9	20.9	0.3	-2.5	1.9	-88.1	-50.7	348.4
1148	ok	0.07	3.71e-02	7.19e-04	20.9	20.9	20.9	20.9	4.5	3.2	3.9	-2193.2	369.9	-34.8
1149	ok	0.07	9.08e-02	1.39e-03	20.9	20.9	20.9	20.9	-5.6	9.5	-10.8	-3625.1	-4933.8	-772.0



1150	ok	0.07	0.3	2.84e-03	20.9	20.9	20.9	20.9	-25.7	7.4	-0.8	-9614.7	9705.5	-9347.5
1151	ok	0.07	0.1	2.59e-03	20.9	20.9	20.9	20.9	-22.0	-6.3	1.2	-5348.4	-4854.3	788.0
1152	ok	0.07	7.46e-02	1.02e-03	20.9	20.9	20.9	20.9	-5.5	-4.5	-3.00e-02	-3810.5	-247.8	-381.7
1153	ok	0.07	8.55e-03	3.32e-04	20.9	20.9	20.9	20.9	-2.2	-0.6	-1.4	160.8	-208.5	-440.8

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
							-28.34	-36.81	-29.96	-3.046e+04	-1.935e+04	-1.932e+04
	0.07	0.61	5.90e-03	20.94	20.94	20.94	10.53	20.64	31.15	1.258e+04	9783.75	8243.68

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1063	ok	0.29						
1064	ok	0.68						
1065	ok	1.15						
1066	ok	1.15						
1067	ok	1.09						
1068	ok	0.63						
1069	ok	0.45						
1077	ok	0.51						
1078	ok	1.64						
1079	ok	1.64						
1080	ok	1.15						
1081	ok	1.98						
1082	ok	1.98						
1083	ok	0.90						
1091	ok	0.51						
1092	ok	1.64						
1093	ok	1.64						
1094	ok	1.06						
1095	ok	1.98						
1096	ok	1.98						
1097	ok	1.05						
1105	ok	0.51						
1106	ok	1.23						
1107	ok	1.23						
1108	ok	1.07						
1109	ok	1.10						
1110	ok	1.10						
1111	ok	1.05						
1119	ok	0.51						
1120	ok	1.64						
1121	ok	1.64						
1122	ok	1.07						
1123	ok	1.98						
1124	ok	1.98						
1125	ok	1.05						
1133	ok	0.51						
1134	ok	1.64						
1135	ok	1.64						
1136	ok	1.25						
1137	ok	1.98						
1138	ok	1.98						
1139	ok	0.89						
1147	ok	0.29						
1148	ok	0.72						
1149	ok	1.25						
1150	ok	1.25						
1151	ok	1.19						
1152	ok	0.68						
1153	ok	0.45						

Nodo	Max tau 1.98	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
19	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
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1070	ok	0.07	8.69e-03	5.62e-04	20.9	20.9	20.9	20.9	-1.8	0.4	-0.7	136.5	-251.6	-392.6
1071	ok	0.07	7.36e-02	3.53e-03	20.9	20.9	20.9	20.9	-9.2	-26.6	3.9	-4368.2	178.0	-103.0
1072	ok	0.07	0.1	7.73e-03	20.9	20.9	20.9	20.9	36.8	35.0	42.1	-2338.4	5987.6	-1897.4
1073	ok	0.07	0.3	8.76e-03	20.9	20.9	20.9	20.9	28.5	22.1	31.2	-3570.9	-1.216e+04	-1.056e+04
1074	ok	0.07	0.1	4.25e-03	20.9	20.9	20.9	20.9	14.3	11.3	-29.8	-647.4	5938.2	1951.7
1075	ok	0.07	3.67e-02	2.31e-03	20.9	20.9	20.9	20.9	-5.7	-24.5	-3.3	-2170.6	470.7	-50.9
1076	ok	0.07	1.06e-02	4.65e-04	20.9	20.9	20.9	20.9	0.3	-5.0	1.2	-108.8	-29.0	365.8
1084	ok	0.07	5.11e-02	1.14e-03	20.9	20.9	20.9	20.9	-1.3	2.1	-2.0	1120.5	-2330.9	179.1
1085	ok	0.07	0.1	4.21e-03	20.9	20.9	20.9	20.9	-6.5	-4.0	-16.1	-7768.9	-4252.6	339.7
1086	ok	0.07	0.2	4.73e-03	20.9	20.9	20.9	20.9	23.8	17.8	-33.6	-7426.7	-5633.3	4448.7
1087	ok	0.07	0.2	4.19e-03	20.9	20.9	20.9	20.9	11.9	24.7	4.6	-5479.6	-1.193e+04	-2242.9
1088	ok	0.07	0.2	3.06e-03	20.9	20.9	20.9	20.9	19.7	9.9	19.5	-5675.8	-5613.4	-4802.1
1089	ok	0.07	9.39e-02	2.37e-03	20.9	20.9	20.9	20.9	-3.3	-7.6	14.5	-4062.5	-5568.0	-89.2
1090	ok	0.07	4.85e-02	9.46e-04	20.9	20.9	20.9	20.9	-1.2	-7.4	2.5	-25.6	-2865.7	89.8
1098	ok	0.07	0.2	2.63e-03	20.9	20.9	20.9	20.9	-4.6	6.3	-7.7	1.235e+04	3142.4	-4231.6
1099	ok	0.07	0.3	3.06e-03	20.9	20.9	20.9	20.9	1.1	7.9	-10.2	-1.012e+04	-8035.8	7888.5
1100	ok	0.07	0.6	4.42e-03	20.9	20.9	20.9	20.9	-24.0	6.9	-26.7	-2.981e+04	-1.399e+04	-8609.2
1101	ok	0.07	0.2	2.55e-03	20.9	20.9	20.9	20.9	8.2	10.7	-5.3	-3080.4	-1.321e+04	-1789.9
1102	ok	0.07	0.4	4.58e-03	20.9	20.9	20.9	20.9	-11.7	-2.7	26.7	-1.513e+04	-2.076e+04	6714.0
1103	ok	0.07	0.1	1.91e-03	20.9	20.9	20.9	20.9	-4.2	7.7	5.3	-2642.1	-5087.9	493.9
1104	ok	0.07	6.72e-02	1.04e-03	20.9	20.9	20.9	20.9	0.3	3.2	2.2	172.0	-3471.4	-361.3
1112	ok	0.07	0.6	3.67e-03	20.9	20.9	20.9	20.9	-5.1	10.4	-6.5	-2.532e+04	-1241.0	-1.912e+04
1113	ok	0.07	0.3	2.51e-03	20.9	20.9	20.9	20.9	-10.7	3.2	-10.5	-1.870e+04	-3583.1	-3741.3
1114	ok	0.07	0.3	2.65e-03	20.9	20.9	20.9	20.9	-24.3	13.5	-2.1	-1.941e+04	-938.4	-1927.7
1115	ok	0.07	0.2	2.82e-03	20.9	20.9	20.9	20.9	-22.4	-0.9	-8.2	-8115.2	-3329.4	-1562.6
1116	ok	0.07	0.2	2.34e-03	20.9	20.9	20.9	20.9	-21.1	13.0	-4.0	-8516.0	123.4	-1107.6
1117	ok	0.07	9.48e-02	1.54e-03	20.9	20.9	20.9	20.9	-7.2	6.3	8.0	-4315.8	-4005.0	1464.8
1118	ok	0.07	5.38e-02	1.08e-03	20.9	20.9	20.9	20.9	-1.5	12.0	0.4	37.8	-3138.3	323.8
1126	ok	0.07	0.2	2.50e-03	20.9	20.9	20.9	20.9	-1.3	10.3	6.0	1.243e+04	1681.6	4072.3
1127	ok	0.07	0.3	1.94e-03	20.9	20.9	20.9	20.9	-1.8	4.3	4.2	-1.008e+04	-7995.4	-8258.6
1128	ok	0.07	0.5	5.68e-03	20.9	20.9	20.9	20.9	-28.8	-26.0	31.3	-2.909e+04	-1.381e+04	7969.0
1129	ok	0.07	0.2	4.08e-03	20.9	20.9	20.9	20.9	12.0	-37.9	-4.7	-3438.5	-1.316e+04	-810.3
1130	ok	0.07	0.4	6.06e-03	20.9	20.9	20.9	20.9	-15.4	-48.7	-33.9	-1.427e+04	-2.118e+04	-6189.1
1131	ok	0.07	0.2	2.10e-03	20.9	20.9	20.9	20.9	-0.4	-23.2	-4.7	515.6	-9021.2	775.7
1132	ok	0.07	7.14e-02	9.74e-04	20.9	20.9	20.9	20.9	-0.3	6.4	-1.4	166.3	-3695.2	427.9
1140	ok	0.07	5.33e-02	7.25e-04	20.9	20.9	20.9	20.9	-1.4	3.3	2.7	1141.6	-2364.7	-263.1
1141	ok	0.07	0.1	2.43e-03	20.9	20.9	20.9	20.9	-7.5	-5.9	17.0	-7734.0	-4216.9	-657.6
1142	ok	0.07	0.2	2.19e-03	20.9	20.9	20.9	20.9	2.5	-2.5	6.0	-6531.4	-5382.0	-4604.4
1143	ok	0.07	0.2	2.89e-03	20.9	20.9	20.9	20.9	-6.4	26.5	2.8	-7925.7	8505.4	1155.9
1144	ok	0.07	0.2	3.39e-03	20.9	20.9	20.9	20.9	16.7	-8.4	5.3	-4591.7	-4584.2	2099.5
1145	ok	0.07	9.78e-02	2.19e-03	20.9	20.9	20.9	20.9	-5.5	-12.3	-16.0	-4001.4	-5691.4	449.4
1146	ok	0.07	5.06e-02	5.14e-04	20.9	20.9	20.9	20.9	-0.8	-2.6	-4.1	-2.8	-2998.9	3.9
1154	ok	0.07	7.79e-03	3.39e-04	20.9	20.9	20.9	20.9	-2.2	-0.5	1.5	174.2	-145.9	416.3
1155	ok	0.07	7.44e-02	8.92e-04	20.9	20.9	20.9	20.9	2.8	-1.6	1.4	-3384.1	95.4	-685.3
1156	ok	0.07	0.1	2.27e-03	20.9	20.9	20.9	20.9	-21.3	-0.9	-11.1	-5008.4	-5065.0	-1227.9
1157	ok	0.07	0.3	3.27e-03	20.9	20.9	20.9	20.9	-19.5	13.4	12.5	-6843.4	1.024e+04	9082.4
1158	ok	0.07	9.92e-02	2.62e-03	20.9	20.9	20.9	20.9	-4.1	15.6	18.8	-3735.8	-5242.3	1180.1
1159	ok	0.07	3.75e-02	1.32e-03	20.9	20.9	20.9	20.9	7.6	10.5	-6.1	-2195.0	402.7	220.2
1160	ok	0.07	9.25e-03	2.99e-04	20.9	20.9	20.9	20.9	0.5	-2.1	-2.3	-70.0	17.0	-318.4

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.60	8.76e-03	20.94	20.94	20.94	20.94	-28.83	-48.66	-33.90	-2.981e+04	-2.118e+04	-1.912e+04
								36.77	35.04	42.14	1.243e+04	1.024e+04	9082.38

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1070	ok	0.44						
1071	ok	0.61						
1072	ok	0.99						
1073	ok	1.06						
1074	ok	1.06						
1075	ok	0.58						
1076	ok	0.31						
1084	ok	0.88						
1085	ok	2.05						
1086	ok	2.05						
1087	ok	1.06						
1088	ok	1.70						
1089	ok	1.70						
1090	ok	0.52						
1098	ok	1.03						
1099	ok	2.05						
1100	ok	2.05						
1101	ok	1.11						
1102	ok	1.70						
1103	ok	1.70						



1104	ok	0.52
1112	ok	1.03
1113	ok	1.07
1114	ok	1.11
1115	ok	1.11
1116	ok	1.18
1117	ok	1.18
1118	ok	0.49
1126	ok	1.01
1127	ok	2.00
1128	ok	2.00
1129	ok	1.06
1130	ok	1.65
1131	ok	1.65
1132	ok	0.50
1140	ok	0.87
1141	ok	2.00
1142	ok	2.00
1143	ok	0.94
1144	ok	1.65
1145	ok	1.65
1146	ok	0.50
1154	ok	0.43
1155	ok	0.61
1156	ok	0.90
1157	ok	0.90
1158	ok	0.90
1159	ok	0.59
1160	ok	0.30

Nodo	Max tau 2.05	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
20	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
1161	ok	0.07	1.06e-02	3.23e-04	20.9	20.9	20.9	20.9	-2.7	1.8	-0.7	-158.0	-327.6	-345.4
1162	ok	0.07	3.84e-02	6.25e-04	20.9	20.9	20.9	20.9	3.0	-1.2	-2.7	-2273.7	377.1	34.9
1163	ok	0.07	9.24e-02	1.13e-03	20.9	20.9	20.9	20.9	-7.9	5.7	3.0	-3868.9	-5133.9	745.8
1164	ok	0.07	0.3	3.51e-03	20.9	20.9	20.9	20.9	-29.3	4.2	-5.2	-9132.8	9993.9	9635.1
1165	ok	0.07	0.1	3.17e-03	20.9	20.9	20.9	20.9	-22.8	-9.1	4.1	-5156.3	-4993.3	-844.9
1166	ok	0.07	7.54e-02	1.21e-03	20.9	20.9	20.9	20.9	-1.2	-2.6	2.3	-4465.9	61.9	143.5
1167	ok	0.07	8.70e-03	3.72e-04	20.9	20.9	20.9	20.9	-2.3	-0.7	1.3	159.9	-212.6	445.7
1175	ok	0.07	4.52e-02	5.72e-04	20.9	20.9	20.9	20.9	-0.9	-3.4	-3.3	-16.8	-2674.8	-81.4
1176	ok	0.07	9.02e-02	2.00e-03	20.9	20.9	20.9	20.9	-5.0	-9.6	-15.5	-4256.0	-5353.5	74.2
1177	ok	0.07	0.2	1.99e-03	20.9	20.9	20.9	20.9	-4.5	3.3	3.4	939.9	5166.2	-5189.2
1178	ok	0.07	0.2	1.49e-03	20.9	20.9	20.9	20.9	-6.5	4.8	4.5	-9621.1	9703.1	1519.2
1179	ok	0.07	0.3	1.96e-03	20.9	20.9	20.9	20.9	3.5	-1.5	8.5	-6915.5	-3961.8	-1819.3
1180	ok	0.07	0.1	2.26e-03	20.9	20.9	20.9	20.9	-7.5	-4.9	16.7	-7942.7	-3769.8	-300.3
1181	ok	0.07	4.78e-02	7.03e-04	20.9	20.9	20.9	20.9	-0.8	3.1	2.5	1155.0	-2002.4	-191.2
1189	ok	0.07	5.91e-02	1.01e-03	20.9	20.9	20.9	20.9	-0.5	-0.3	-2.5	178.9	-3502.8	-57.4
1190	ok	0.07	0.1	1.61e-03	20.9	20.9	20.9	20.9	1.3	14.6	6.0	-1237.4	7595.0	-1931.6
1191	ok	0.07	0.4	4.92e-03	20.9	20.9	20.9	20.9	-15.9	-31.7	-31.9	-1.593e+04	-2.004e+04	-6646.5
1192	ok	0.07	0.2	2.80e-03	20.9	20.9	20.9	20.9	14.8	-25.3	6.7	-3197.7	-1.236e+04	1705.2
1193	ok	0.07	0.6	4.87e-03	20.9	20.9	20.9	20.9	-30.2	-19.2	30.8	-3.063e+04	-1.220e+04	8347.0
1194	ok	0.07	0.3	2.29e-03	20.9	20.9	20.9	20.9	-1.9	1.8	4.8	-1.044e+04	-7519.5	-8164.4
1195	ok	0.07	0.2	2.26e-03	20.9	20.9	20.9	20.9	0.8	13.2	5.6	1.269e+04	2407.7	4230.1
1203	ok	0.07	4.17e-02	1.10e-03	20.9	20.9	20.9	20.9	-1.5	12.5	-0.9	51.5	-2414.8	-319.1
1204	ok	0.07	9.75e-02	1.27e-03	20.9	20.9	20.9	20.9	-6.4	2.0	7.3	-4654.3	-3549.3	1577.1
1205	ok	0.07	0.2	2.02e-03	20.9	20.9	20.9	20.9	-22.2	10.9	5.3	-9129.9	1007.8	1238.1
1206	ok	0.07	0.2	2.45e-03	20.9	20.9	20.9	20.9	-21.9	-5.2	8.3	-8595.5	-2567.8	1629.0
1207	ok	0.07	0.3	2.78e-03	20.9	20.9	20.9	20.9	-30.6	12.5	7.8	-2.038e+04	1014.3	2128.1
1208	ok	0.07	0.3	2.06e-03	20.9	20.9	20.9	20.9	-10.9	8.88e-02	8.3	-1.940e+04	-2987.4	3923.3
1209	ok	0.07	0.6	3.09e-03	20.9	20.9	20.9	20.9	-6.4	13.6	5.5	-2.586e+04	-338.1	1.949e+04
1217	ok	0.07	6.39e-02	9.56e-04	20.9	20.9	20.9	20.9	7.24e-03	5.4	1.5	186.7	-3267.7	-400.6
1218	ok	0.07	0.1	1.60e-03	20.9	20.9	20.9	20.9	-1.7	-0.4	5.1	-1774.2	-6071.0	194.7
1219	ok	0.07	0.4	4.85e-03	20.9	20.9	20.9	20.9	-15.5	-29.3	31.8	-1.585e+04	-2.083e+04	6753.9
1220	ok	0.07	0.2	2.35e-03	20.9	20.9	20.9	20.9	8.7	-18.2	3.9	-4198.9	-1.264e+04	917.3
1221	ok	0.07	0.6	4.86e-03	20.9	20.9	20.9	20.9	-30.0	-18.3	-31.3	-3.056e+04	-1.238e+04	-8320.4



1222	ok	0.07	0.3	2.30e-03	20.9	20.9	20.9	20.9	-1.8	2.2	-4.9-1.044e+04	-7506.2	8217.6
1223	ok	0.07	0.2	2.39e-03	20.9	20.9	20.9	20.9	0.5	12.8	-5.6 1.269e+04	2434.5	-4237.8
1231	ok	0.07	4.79e-02	5.73e-04	20.9	20.9	20.9	20.9	-1.0	-4.2	3.2 -14.0	-2833.3	66.1
1232	ok	0.07	9.43e-02	1.99e-03	20.9	20.9	20.9	20.9	-4.9	-9.6	15.5 -4264.4	-5583.1	-148.8
1233	ok	0.07	0.2	1.90e-03	20.9	20.9	20.9	20.9	7.5	-0.3	5.2 -5591.4	-5337.6	-4590.8
1234	ok	0.07	0.2	1.32e-03	20.9	20.9	20.9	20.9	-6.2	-3.7	-5.9 -9963.1	1.063e+04	-1568.7
1235	ok	0.07	0.3	2.10e-03	20.9	20.9	20.9	20.9	2.1	-0.7	-10.0 -6897.4	-4236.9	2060.9
1236	ok	0.07	0.1	2.33e-03	20.9	20.9	20.9	20.9	-7.5	-4.9	-17.1 -7944.7	-3826.4	341.4
1237	ok	0.07	5.05e-02	7.54e-04	20.9	20.9	20.9	20.9	-1.2	2.7	-2.4 1157.7	-2049.1	199.9
1245	ok	0.07	1.05e-02	3.22e-04	20.9	20.9	20.9	20.9	0.2	-3.0	1.7 -89.8	-35.5	358.4
1246	ok	0.07	3.87e-02	5.87e-04	20.9	20.9	20.9	20.9	2.0	-3.4	2.2 -2290.1	431.5	-72.0
1247	ok	0.07	0.1	1.04e-03	20.9	20.9	20.9	20.9	-8.1	3.1	0.5 -3738.9	-5717.7	-1049.1
1248	ok	0.07	0.3	3.75e-03	20.9	20.9	20.9	20.9	-37.0	1.3	13.7 -9299.1	1.133e+04	-1.069e+04
1249	ok	0.07	0.1	3.38e-03	20.9	20.9	20.9	20.9	-25.8	-14.0	-10.9 -5466.1	-5643.7	1068.7
1250	ok	0.07	7.55e-02	1.37e-03	20.9	20.9	20.9	20.9	2.1	-0.6	-1.7 -3487.4	27.3	615.8
1251	ok	0.07	8.58e-03	3.68e-04	20.9	20.9	20.9	20.9	-2.3	-0.8	-1.4 163.0	-205.4	-445.2

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.61	4.92e-03	20.94	20.94	20.94	20.94	-37.03	-31.70	-31.87	-3.063e+04	-2.083e+04	-1.069e+04
								14.81	14.62	31.78	1.269e+04	1.133e+04	1.949e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1161	ok	0.30						
1162	ok	0.72						
1163	ok	1.25						
1164	ok	1.25						
1165	ok	1.19						
1166	ok	0.68						
1167	ok	0.45						
1175	ok	0.51						
1176	ok	1.70						
1177	ok	1.70						
1178	ok	1.25						
1179	ok	2.01						
1180	ok	2.01						
1181	ok	0.90						
1189	ok	0.54						
1190	ok	1.70						
1191	ok	1.70						
1192	ok	1.09						
1193	ok	2.01						
1194	ok	2.01						
1195	ok	1.06						
1203	ok	0.54						
1204	ok	1.26						
1205	ok	1.26						
1206	ok	1.09						
1207	ok	1.15						
1208	ok	1.15						
1209	ok	1.06						
1217	ok	0.54						
1218	ok	1.73						
1219	ok	1.73						
1220	ok	1.09						
1221	ok	2.01						
1222	ok	2.01						
1223	ok	1.06						
1231	ok	0.51						
1232	ok	1.73						
1233	ok	1.73						
1234	ok	1.27						
1235	ok	2.01						
1236	ok	2.01						
1237	ok	0.90						
1245	ok	0.31						
1246	ok	0.75						
1247	ok	1.27						
1248	ok	1.27						
1249	ok	1.21						
1250	ok	0.71						
1251	ok	0.45						

Nodo	Max tau 2.01	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
21	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
1168	ok	0.07	7.46e-03	4.38e-04	20.9	20.9	20.9	20.9	-1.8	2.0	-1.0	172.0	-280.9	-306.9
1169	ok	0.07	6.96e-02	1.95e-03	20.9	20.9	20.9	20.9	-5.9	-16.5	1.1	-4123.8	-92.2	-69.7
1170	ok	0.07	0.1	4.60e-03	20.9	20.9	20.9	20.9	-26.1	-14.7	-12.8	-5069.9	-7082.7	1842.0
1171	ok	0.07	0.4	5.11e-03	20.9	20.9	20.9	20.9	-38.2	-0.3	15.7	-5937.8	1.446e+04	-1.300e+04
1172	ok	0.07	0.1	1.70e-03	20.9	20.9	20.9	20.9	-10.2	0.9	3.4	-3419.5	-7122.6	-1806.0
1173	ok	0.07	3.39e-02	9.77e-04	20.9	20.9	20.9	20.9	2.9	-1.3	-1.8	-1340.0	94.8	-622.8
1174	ok	0.07	8.86e-03	3.79e-04	20.9	20.9	20.9	20.9	0.2	-3.4	1.6	-63.9	-29.2	279.3
1182	ok	0.07	4.56e-02	8.34e-04	20.9	20.9	20.9	20.9	-7.6	-5.1	-0.2	448.7	-2545.9	170.0
1183	ok	0.07	0.1	2.92e-03	20.9	20.9	20.9	20.9	-7.4	-4.8	-16.8	-7366.3	-3252.8	420.2
1184	ok	0.07	0.2	2.88e-03	20.9	20.9	20.9	20.9	-17.8	-6.3	-0.8	-1.330e+04	3085.1	1123.5
1185	ok	0.07	0.2	1.76e-03	20.9	20.9	20.9	20.9	-6.9	-6.4	-6.1	-8219.0	1.235e+04	-1559.6
1186	ok	0.07	0.2	1.83e-03	20.9	20.9	20.9	20.9	-8.2	0.2	-7.9	2582.5	6292.4	5958.4
1187	ok	0.07	8.24e-02	2.00e-03	20.9	20.9	20.9	20.9	-4.6	-9.2	15.9	-3740.2	-4812.9	-294.7
1188	ok	0.07	4.47e-02	7.08e-04	20.9	20.9	20.9	20.9	-1.0	-4.9	3.2	-6.1	-2403.5	18.5
1196	ok	0.07	0.2	2.44e-03	20.9	20.9	20.9	20.9	-6.6	5.8	-9.2	1.213e+04	4263.9	-4150.9
1197	ok	0.07	0.3	2.58e-03	20.9	20.9	20.9	20.9	-1.7	2.0	-5.1	-9828.5	-6923.2	7932.2
1198	ok	0.07	0.5	4.83e-03	20.9	20.9	20.9	20.9	-30.0	-18.4	-30.8	-2.797e+04	-1.067e+04	-7224.9
1199	ok	0.07	0.2	2.46e-03	20.9	20.9	20.9	20.9	-15.0	20.8	-8.8	-3269.7	1.264e+04	-494.8
1200	ok	0.07	0.4	4.79e-03	20.9	20.9	20.9	20.9	-15.3	-25.2	31.5	-1.334e+04	-1.836e+04	5444.2
1201	ok	0.07	0.1	1.76e-03	20.9	20.9	20.9	20.9	-1.8	1.1	5.6	-1440.6	-5103.5	55.3
1202	ok	0.07	5.73e-02	1.02e-03	20.9	20.9	20.9	20.9	0.1	5.5	1.7	174.4	-2605.6	-357.0
1210	ok	0.07	0.6	3.26e-03	20.9	20.9	20.9	20.9	-5.1	-3.5	14.7	-2.488e+04	-157.3	1.875e+04
1211	ok	0.07	0.3	2.21e-03	20.9	20.9	20.9	20.9	-10.9	-1.2	9.1	-1.825e+04	-2690.1	3801.6
1212	ok	0.07	0.3	2.80e-03	20.9	20.9	20.9	20.9	-30.5	11.2	8.6	-1.861e+04	1019.1	1891.6
1213	ok	0.07	0.2	2.51e-03	20.9	20.9	20.9	20.9	-18.6	-2.6	-9.1	-9173.7	-1603.8	-1675.0
1214	ok	0.07	0.1	2.05e-03	20.9	20.9	20.9	20.9	-21.9	8.6	-6.1	-7611.2	1173.1	-1008.7
1215	ok	0.07	8.77e-02	1.40e-03	20.9	20.9	20.9	20.9	-6.1	0.8	-7.6	-4092.6	-3058.6	-1550.1
1216	ok	0.07	3.49e-02	1.12e-03	20.9	20.9	20.9	20.9	-1.5	12.5	0.7	53.2	-2015.4	250.4
1224	ok	0.07	0.2	2.56e-03	20.9	20.9	20.9	20.9	-6.2	5.9	9.1	1.212e+04	4267.6	4183.2
1225	ok	0.07	0.3	2.28e-03	20.9	20.9	20.9	20.9	-4.5	1.01e-02	-2.3	-9819.5	-5112.9	-7753.5
1226	ok	0.07	0.5	5.06e-03	20.9	20.9	20.9	20.9	-30.2	-21.4	32.2	-2.827e+04	-1.131e+04	7656.5
1227	ok	0.07	0.2	2.98e-03	20.9	20.9	20.9	20.9	-16.6	29.0	9.2	-3674.8	1.289e+04	427.0
1228	ok	0.07	0.4	5.33e-03	20.9	20.9	20.9	20.9	-15.8	-36.7	-33.6	-1.359e+04	-1.956e+04	-5962.6
1229	ok	0.07	0.2	1.70e-03	20.9	20.9	20.9	20.9	1.1	15.9	6.3	-1134.6	8527.1	-1917.8
1230	ok	0.07	6.09e-02	9.71e-04	20.9	20.9	20.9	20.9	-8.16e-02	5.7	-1.5	173.4	-2947.4	338.5
1238	ok	0.07	4.72e-02	7.74e-04	20.9	20.9	20.9	20.9	-1.5	2.9	2.5	1105.1	-1830.5	-183.2
1239	ok	0.07	0.1	2.37e-03	20.9	20.9	20.9	20.9	-7.7	-5.4	17.6	-7385.7	-3447.1	-300.6
1240	ok	0.07	0.2	2.03e-03	20.9	20.9	20.9	20.9	8.8	3.6	14.2	-6582.2	-4948.1	-3923.7
1241	ok	0.07	0.2	1.39e-03	20.9	20.9	20.9	20.9	-6.3	3.5	5.4	-8803.2	1.188e+04	1724.5
1242	ok	0.07	0.2	2.21e-03	20.9	20.9	20.9	20.9	-5.7	2.3	2.7	1482.1	5945.0	-6634.8
1243	ok	0.07	8.77e-02	2.13e-03	20.9	20.9	20.9	20.9	-5.2	-10.9	-16.2	-3758.5	-5170.7	219.0
1244	ok	0.07	4.63e-02	5.73e-04	20.9	20.9	20.9	20.9	-1.0	-3.9	-3.6	-12.4	-2626.6	-45.0
1252	ok	0.07	7.97e-03	3.72e-04	20.9	20.9	20.9	20.9	-2.4	-0.8	1.5	145.4	-198.9	404.9
1253	ok	0.07	6.96e-02	1.22e-03	20.9	20.9	20.9	20.9	-2.1	4.0	2.7	-3433.3	-305.7	383.5
1254	ok	0.07	0.1	3.09e-03	20.9	20.9	20.9	20.9	-25.8	-11.6	6.0	-4803.4	-6168.3	-1272.7
1255	ok	0.07	0.3	3.41e-03	20.9	20.9	20.9	20.9	-2.7	-1.1	-8.9	-8188.8	1.238e+04	-1.140e+04
1256	ok	0.07	0.1	1.14e-03	20.9	20.9	20.9	20.9	-7.5	6.6	3.2	-3608.2	-6299.2	1171.4
1257	ok	0.07	3.39e-02	5.62e-04	20.9	20.9	20.9	20.9	3.0	-1.1	-2.9	-2004.6	407.6	104.3
1258	ok	0.07	9.45e-03	3.26e-04	20.9	20.9	20.9	20.9	0.3	-2.8	-2.0	-86.2	-15.7	-308.7

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.59	5.33e-03	20.94	20.94	20.94	20.94	-38.24	-36.66	-33.55	-2.827e+04	-1.956e+04	-1.300e+04
								8.85	29.00	32.16	1.213e+04	1.446e+04	1.875e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1168	ok	0.40						
1169	ok	0.65						
1170	ok	0.97						
1171	ok	1.03						
1172	ok	1.03						
1173	ok	0.68						
1174	ok	0.25						



1182	ok	0.82
1183	ok	1.80
1184	ok	1.80
1185	ok	1.06
1186	ok	1.46
1187	ok	1.46
1188	ok	0.43
1196	ok	0.97
1197	ok	1.80
1198	ok	1.80
1199	ok	1.18
1200	ok	1.46
1201	ok	1.46
1202	ok	0.50
1210	ok	0.98
1211	ok	1.04
1212	ok	1.18
1213	ok	1.18
1214	ok	1.14
1215	ok	1.14
1216	ok	0.50
1224	ok	0.98
1225	ok	1.85
1226	ok	1.85
1227	ok	1.12
1228	ok	1.54
1229	ok	1.54
1230	ok	0.50
1238	ok	0.84
1239	ok	1.85
1240	ok	1.85
1241	ok	1.23
1242	ok	1.54
1243	ok	1.54
1244	ok	0.45
1252	ok	0.41
1253	ok	0.70
1254	ok	1.16
1255	ok	1.23
1256	ok	1.23
1257	ok	0.74
1258	ok	0.27

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.85						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
22	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
1259	ok	0.07	1.04e-02	3.09e-04	20.9	20.9	20.9	20.9	-2.3	-0.2	-1.6	-150.7	-246.0	-409.6
1260	ok	0.07	4.11e-02	8.92e-04	20.9	20.9	20.9	20.9	4.8	3.1	-3.9	-2429.6	331.6	46.3
1261	ok	0.07	8.87e-02	1.84e-03	20.9	20.9	20.9	20.9	-6.2	10.6	9.8	-3486.4	-4999.8	674.6
1262	ok	0.07	0.3	2.78e-03	20.9	20.9	20.9	20.9	-28.2	7.8	2.63e-02	-8594.5	9608.6	9426.2
1263	ok	0.07	0.1	2.41e-03	20.9	20.9	20.9	20.9	-23.8	-7.5	-0.5	-4732.9	-4808.5	-765.6
1264	ok	0.07	7.68e-02	7.21e-04	20.9	20.9	20.9	20.9	-2.9	-8.0	1.2	-4552.4	53.4	131.6
1265	ok	0.07	8.71e-03	3.48e-04	20.9	20.9	20.9	20.9	-2.5	-1.3	1.3	167.4	-213.2	448.6
1273	ok	0.07	4.49e-02	5.17e-04	20.9	20.9	20.9	20.9	-0.9	-3.0	-3.7	-6.1	-2661.9	-58.8
1274	ok	0.07	9.10e-02	2.20e-03	20.9	20.9	20.9	20.9	-5.8	-11.0	-16.7	-4505.1	-5380.2	144.0
1275	ok	0.07	0.2	2.54e-03	20.9	20.9	20.9	20.9	-2.6	5.8	0.5	1182.5	5086.3	-5044.4
1276	ok	0.07	0.2	1.95e-03	20.9	20.9	20.9	20.9	-6.6	11.9	4.1	-9208.9	9549.7	1545.7
1277	ok	0.07	0.3	2.16e-03	20.9	20.9	20.9	20.9	6.0	-2.5	7.8	-7397.9	-3881.7	-1795.8
1278	ok	0.07	0.1	2.46e-03	20.9	20.9	20.9	20.9	-7.6	-4.8	18.9	-8085.9	-3842.2	-340.5
1279	ok	0.07	4.80e-02	7.27e-04	20.9	20.9	20.9	20.9	-1.7	2.3	2.3	1174.2	-2039.9	-203.9
1287	ok	0.07	5.70e-02	1.08e-03	20.9	20.9	20.9	20.9	-0.5	-0.4	-2.6	190.1	-3383.1	-28.7
1288	ok	0.07	0.1	1.81e-03	20.9	20.9	20.9	20.9	1.3	18.3	5.4	-1213.8	7613.6	-1860.6
1289	ok	0.07	0.4	5.81e-03	20.9	20.9	20.9	20.9	-17.8	-39.7	-35.5	-1.682e+04	-2.013e+04	-6635.2
1290	ok	0.07	0.2	3.48e-03	20.9	20.9	20.9	20.9	17.5	-33.9	7.6	-3348.1	-1.242e+04	1760.5
1291	ok	0.07	0.6	5.54e-03	20.9	20.9	20.9	20.9	-31.7	-16.2	33.4	-3.110e+04	-1.247e+04	8428.5
1292	ok	0.07	0.3	2.32e-03	20.9	20.9	20.9	20.9	-1.3	3.4	6.7	-1.059e+04	-7626.4	-8322.9



1293	ok	0.07	0.2	2.43e-03	20.9	20.9	20.9	20.9	1.8	15.1	5.3	1.287e+04	2439.9	4277.4
1301	ok	0.07	4.45e-02	1.22e-03	20.9	20.9	20.9	20.9	-1.4	13.9	-1.2	56.6	-2576.7	-276.7
1302	ok	0.07	0.1	1.36e-03	20.9	20.9	20.9	20.9	-7.2	3.7	-7.5	-4851.2	-3495.3	-1516.7
1303	ok	0.07	0.2	2.19e-03	20.9	20.9	20.9	20.9	-24.6	15.1	4.9	-9232.8	969.5	1454.5
1304	ok	0.07	0.2	2.64e-03	20.9	20.9	20.9	20.9	-9.0	14.9	5.6	-5186.1	6553.7	2353.0
1305	ok	0.07	0.3	3.00e-03	20.9	20.9	20.9	20.9	-32.8	13.6	8.4	-2.067e+04	1156.7	2088.5
1306	ok	0.07	0.3	2.06e-03	20.9	20.9	20.9	20.9	-11.7	0.9	9.5	-1.971e+04	-3017.5	3976.3
1307	ok	0.07	0.6	3.04e-03	20.9	20.9	20.9	20.9	-5.1	-2.3	14.9	-2.620e+04	-186.1	1.976e+04
1315	ok	0.07	7.50e-02	1.05e-03	20.9	20.9	20.9	20.9	0.2	6.7	1.7	193.2	-3843.5	-428.4
1316	ok	0.07	0.2	1.89e-03	20.9	20.9	20.9	20.9	-2.3	2.1	6.0	-1599.9	-6927.4	87.8
1317	ok	0.07	0.5	4.97e-03	20.9	20.9	20.9	20.9	-17.6	-25.4	33.8	-1.564e+04	-2.347e+04	7062.3
1318	ok	0.07	0.3	2.22e-03	20.9	20.9	20.9	20.9	-15.6	22.2	-9.3	-5915.9	1.320e+04	214.8
1319	ok	0.07	0.6	5.13e-03	20.9	20.9	20.9	20.9	-32.1	-13.6	-31.8	-3.068e+04	-1.360e+04	-8563.2
1320	ok	0.07	0.3	2.41e-03	20.9	20.9	20.9	20.9	-4.8	1.1	2.3	-1.059e+04	-5710.6	8262.6
1321	ok	0.07	0.2	2.21e-03	20.9	20.9	20.9	20.9	-6.9	6.3	-9.6	1.279e+04	4248.4	-4416.4
1329	ok	0.07	5.48e-02	6.00e-04	20.9	20.9	20.9	20.9	-1.1	-4.4	3.2	-8.0	-3249.7	8.7
1330	ok	0.07	0.1	2.13e-03	20.9	20.9	20.9	20.9	-4.9	-9.0	17.1	-4315.6	-6276.2	-399.4
1331	ok	0.07	0.2	1.93e-03	20.9	20.9	20.9	20.9	8.9	1.4	7.8	-4942.4	-5758.0	-5108.8
1332	ok	0.07	0.2	1.24e-03	20.9	20.9	20.9	20.9	-12.4	-1.6	1.7	-1.210e+04	1.055e+04	2213.6
1333	ok	0.07	0.3	2.09e-03	20.9	20.9	20.9	20.9	1.1	-0.6	-10.4	-6734.3	-4872.9	2771.7
1334	ok	0.07	0.1	2.31e-03	20.9	20.9	20.9	20.9	-7.9	-4.3	-17.2	-8009.6	-4168.7	430.0
1335	ok	0.07	5.73e-02	7.06e-04	20.9	20.9	20.9	20.9	-0.5	2.9	-2.3	1165.7	-2263.4	219.0
1343	ok	0.07	1.05e-02	3.61e-04	20.9	20.9	20.9	20.9	9.44e-02	-3.6	1.5	-93.9	18.3	338.8
1344	ok	0.07	3.93e-02	7.47e-04	20.9	20.9	20.9	20.9	1.0	-8.5	0.8	-2312.7	449.5	-223.9
1345	ok	0.07	9.25e-02	1.54e-03	20.9	20.9	20.9	20.9	-12.9	-1.5	4.6	-3198.1	-4290.4	-221.8
1346	ok	0.07	0.3	3.61e-03	20.9	20.9	20.9	20.9	-36.3	-0.2	14.7	-1.707e+04	7492.8	-6717.2
1347	ok	0.07	0.1	3.34e-03	20.9	20.9	20.9	20.9	-24.2	-12.7	-11.5	-5201.5	-3960.2	-161.5
1348	ok	0.07	7.62e-02	1.34e-03	20.9	20.9	20.9	20.9	-1.3	-15.4	0.8	-3268.9	513.2	363.4
1349	ok	0.07	8.74e-03	3.70e-04	20.9	20.9	20.9	20.9	-1.4	-3.9	-0.9	64.9	51.3	-340.8

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.62	5.81e-03	20.94	20.94	20.94	20.94	-36.31	-39.66	-35.49	-3.110e+04	-2.347e+04	-8563.15
								17.46	22.23	33.83	1.287e+04	1.320e+04	1.976e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1259	ok	0.30						
1260	ok	0.70						
1261	ok	1.26						
1262	ok	1.26						
1263	ok	1.19						
1264	ok	0.66						
1265	ok	0.46						
1273	ok	0.51						
1274	ok	1.74						
1275	ok	1.74						
1276	ok	1.26						
1277	ok	2.04						
1278	ok	2.04						
1279	ok	0.92						
1287	ok	0.59						
1288	ok	1.74						
1289	ok	1.74						
1290	ok	1.10						
1291	ok	2.04						
1292	ok	2.04						
1293	ok	1.08						
1301	ok	0.59						
1302	ok	1.34						
1303	ok	1.34						
1304	ok	1.14						
1305	ok	1.24						
1306	ok	1.24						
1307	ok	1.08						
1315	ok	0.56						
1316	ok	1.82						
1317	ok	1.82						
1318	ok	1.16						
1319	ok	2.07						
1320	ok	2.07						
1321	ok	1.06						
1329	ok	0.52						
1330	ok	1.82						
1331	ok	1.82						
1332	ok	1.89						
1333	ok	2.07						



1334	ok	2.07
1335	ok	0.91
1343	ok	0.32
1344	ok	0.84
1345	ok	1.61
1346	ok	1.89
1347	ok	1.89
1348	ok	0.92
1349	ok	0.45

Nodo	Max tau 2.07	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
23	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
1266	ok	0.07	8.30e-03	3.86e-04	20.9	20.9	20.9	20.9	-2.5	-0.7	-1.4	173.5	-180.6	-447.9
1267	ok	0.07	7.74e-02	1.12e-03	20.9	20.9	20.9	20.9	-3.8	-10.7	-0.6	-4589.7	141.2	-65.4
1268	ok	0.07	0.1	3.16e-03	20.9	20.9	20.9	20.9	27.9	14.0	6.7	-3173.3	5444.6	-1570.5
1269	ok	0.07	0.3	3.55e-03	20.9	20.9	20.9	20.9	-34.9	4.9	7.3	-8352.1	7957.6	-7882.3
1270	ok	0.07	9.58e-02	1.48e-03	20.9	20.9	20.9	20.9	-8.1	6.7	-5.4	-2535.3	-4096.8	-552.7
1271	ok	0.07	4.15e-02	7.44e-04	20.9	20.9	20.9	20.9	3.5	-1.0	3.0	-2453.4	420.0	-113.8
1272	ok	0.07	1.00e-02	3.42e-04	20.9	20.9	20.9	20.9	0.3	-3.1	1.9	-67.7	-29.9	355.6
1280	ok	0.07	5.20e-02	7.94e-04	20.9	20.9	20.9	20.9	-8.3	-3.8	-0.5	542.8	-3074.4	196.0
1281	ok	0.07	0.1	2.48e-03	20.9	20.9	20.9	20.9	-7.4	-4.6	-19.3	-8089.7	-4171.7	485.7
1282	ok	0.07	0.3	2.13e-03	20.9	20.9	20.9	20.9	-16.5	-0.9	0.4	-1.433e+04	1847.7	1644.3
1283	ok	0.07	0.2	1.68e-03	20.9	20.9	20.9	20.9	6.9	-4.9	-5.9	-5549.2	-1.162e+04	-2127.0
1284	ok	0.07	0.2	2.31e-03	20.9	20.9	20.9	20.9	10.0	-5.4	0.2	-5578.9	-4426.3	-1766.4
1285	ok	0.07	9.74e-02	2.21e-03	20.9	20.9	20.9	20.9	-5.5	-10.9	17.1	-4499.7	-5723.7	-283.5
1286	ok	0.07	4.90e-02	6.02e-04	20.9	20.9	20.9	20.9	-1.0	-4.1	3.6	1.2	-2905.3	27.7
1294	ok	0.07	0.2	2.57e-03	20.9	20.9	20.9	20.9	-6.9	6.1	-9.9	1.268e+04	3574.3	-4323.5
1295	ok	0.07	0.3	2.50e-03	20.9	20.9	20.9	20.9	-0.9	4.1	-7.5	-1.055e+04	-8030.0	8413.3
1296	ok	0.07	0.6	5.30e-03	20.9	20.9	20.9	20.9	-31.3	-13.7	-33.4	-3.087e+04	-1.357e+04	-8503.8
1297	ok	0.07	0.2	3.17e-03	20.9	20.9	20.9	20.9	16.8	-28.7	-7.5	-3226.6	-1.342e+04	-1762.4
1298	ok	0.07	0.4	5.60e-03	20.9	20.9	20.9	20.9	-17.4	-35.7	35.4	-1.659e+04	-2.128e+04	6752.5
1299	ok	0.07	0.1	1.73e-03	20.9	20.9	20.9	20.9	-1.8	-1.4	5.3	-1897.2	-6147.7	9.6
1300	ok	0.07	6.41e-02	1.08e-03	20.9	20.9	20.9	20.9	-5.12e-02	6.1	1.5	203.1	-3267.3	-462.1
1308	ok	0.07	0.6	3.27e-03	20.9	20.9	20.9	20.9	-6.8	17.2	4.5	-2.620e+04	-618.4	1.974e+04
1309	ok	0.07	0.3	2.18e-03	20.9	20.9	20.9	20.9	-11.7	1.0	-10.0	-1.960e+04	-3338.4	-3828.7
1310	ok	0.07	0.3	3.01e-03	20.9	20.9	20.9	20.9	-32.8	13.8	-8.4	-2.055e+04	746.8	-2113.1
1311	ok	0.07	0.2	2.64e-03	20.9	20.9	20.9	20.9	-4.5	-11.5	-13.8	-4718.4	-6227.1	-2619.5
1312	ok	0.07	0.2	2.19e-03	20.9	20.9	20.9	20.9	-17.4	17.0	-9.2	-5818.9	1501.1	-1156.5
1313	ok	0.07	0.1	1.40e-03	20.9	20.9	20.9	20.9	-7.3	4.1	7.8	-4754.2	-3819.6	1390.0
1314	ok	0.07	5.11e-02	1.23e-03	20.9	20.9	20.9	20.9	-1.4	13.9	1.2	53.1	-2971.7	251.1
1322	ok	0.07	0.2	2.34e-03	20.9	20.9	20.9	20.9	-7.3	5.9	9.7	1.279e+04	3903.5	4409.0
1323	ok	0.07	0.3	2.42e-03	20.9	20.9	20.9	20.9	-4.9	1.4	-2.5	-1.054e+04	-6018.1	-8217.3
1324	ok	0.07	0.6	5.23e-03	20.9	20.9	20.9	20.9	-32.1	-13.7	31.9	-3.060e+04	-1.461e+04	8762.1
1325	ok	0.07	0.3	2.53e-03	20.9	20.9	20.9	20.9	9.0	-18.6	-4.2	-3416.7	-1.536e+04	-969.5
1326	ok	0.07	0.5	5.21e-03	20.9	20.9	20.9	20.9	-17.7	-28.7	-34.8	-1.548e+04	-2.443e+04	-7211.5
1327	ok	0.07	0.2	1.88e-03	20.9	20.9	20.9	20.9	1.6	13.0	7.6	-1349.9	8528.1	-2467.4
1328	ok	0.07	8.08e-02	1.06e-03	20.9	20.9	20.9	20.9	0.1	6.9	-1.7	189.0	-4165.0	430.6
1336	ok	0.07	6.03e-02	7.26e-04	20.9	20.9	20.9	20.9	-0.5	2.9	2.3	1161.6	-2441.1	-217.6
1337	ok	0.07	0.1	2.40e-03	20.9	20.9	20.9	20.9	-7.9	-4.3	17.2	-8018.2	-4441.2	-459.4
1338	ok	0.07	0.3	2.06e-03	20.9	20.9	20.9	20.9	10.3	4.1	15.3	-7628.2	-6534.3	-5635.4
1339	ok	0.07	0.2	1.29e-03	20.9	20.9	20.9	20.9	-12.9	1.9	-1.3	-1.161e+04	9673.6	-2140.6
1340	ok	0.07	0.2	2.04e-03	20.9	20.9	20.9	20.9	-8.2	-0.5	6.8	585.2	5486.5	-6860.0
1341	ok	0.07	0.1	2.22e-03	20.9	20.9	20.9	20.9	-5.1	-9.7	-17.5	-4310.8	-6538.4	444.5
1342	ok	0.07	5.78e-02	6.15e-04	20.9	20.9	20.9	20.9	-1.0	-4.5	-3.4	-10.0	-3428.5	-5.5
1350	ok	0.07	8.73e-03	3.81e-04	20.9	20.9	20.9	20.9	-1.5	-4.0	1.0	54.9	66.6	350.5
1351	ok	0.07	7.63e-02	1.23e-03	20.9	20.9	20.9	20.9	-0.7	-14.2	-0.4	-3275.1	569.1	-385.4
1352	ok	0.07	0.1	3.17e-03	20.9	20.9	20.9	20.9	-24.8	-13.3	9.5	-2440.4	-3604.6	425.8
1353	ok	0.07	0.4	3.43e-03	20.9	20.9	20.9	20.9	-35.8	1.2	-12.4	-1.675e+04	6381.6	5799.7
1354	ok	0.07	0.1	1.39e-03	20.9	20.9	20.9	20.9	-12.4	1.1	-3.0	-3328.0	-4031.7	175.1
1355	ok	0.07	3.95e-02	6.73e-04	20.9	20.9	20.9	20.9	1.7	-6.9	-1.4	-2318.1	507.0	249.9
1356	ok	0.07	1.05e-02	3.70e-04	20.9	20.9	20.9	20.9	0.2	-3.6	-1.6	-101.8	36.1	-346.9

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.62	5.60e-03	20.94	20.94	20.94	20.94	-35.76	-35.68	-34.80	-3.087e+04	-2.443e+04	-8503.84
								27.85	17.18	35.44	1.279e+04	9673.56	1.974e+04



Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1266	ok	0.46						
1267	ok	0.62						
1268	ok	1.12						
1269	ok	1.16						
1270	ok	1.16						
1271	ok	0.63						
1272	ok	0.31						
1280	ok	0.92						
1281	ok	2.07						
1282	ok	2.07						
1283	ok	1.16						
1284	ok	1.78						
1285	ok	1.78						
1286	ok	0.51						
1294	ok	1.07						
1295	ok	2.07						
1296	ok	2.07						
1297	ok	1.13						
1298	ok	1.78						
1299	ok	1.78						
1300	ok	0.59						
1308	ok	1.07						
1309	ok	1.22						
1310	ok	1.22						
1311	ok	1.16						
1312	ok	1.33						
1313	ok	1.33						
1314	ok	0.59						
1322	ok	1.06						
1323	ok	2.11						
1324	ok	2.11						
1325	ok	1.16						
1326	ok	1.85						
1327	ok	1.85						
1328	ok	0.55						
1336	ok	0.91						
1337	ok	2.11						
1338	ok	2.11						
1339	ok	1.84						
1340	ok	1.85						
1341	ok	1.85						
1342	ok	0.53						
1350	ok	0.45						
1351	ok	0.88						
1352	ok	1.84						
1353	ok	1.84						
1354	ok	1.58						
1355	ok	0.80						
1356	ok	0.33						

Nodo	Max tau 2.11	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
24	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
1357	ok	0.07	8.78e-03	3.06e-04	20.9	20.9	20.9	20.9	-0.2	-2.3	-2.0	-154.3	299.1	-386.6
1358	ok	0.07	3.72e-02	7.82e-04	20.9	20.9	20.9	20.9	4.8	4.0	-4.4	-2096.1	1323.1	607.6
1359	ok	0.07	0.3	1.40e-03	20.9	20.9	20.9	20.9	7.7	-7.8	-11.9	3818.2	1.363e+04	-4496.0
1360	ok	0.07	0.7	1.80e-03	20.9	20.9	20.9	20.9	17.5	-7.9	-7.1	9031.5	-2.632e+04	-2.124e+04
1361	ok	0.07	0.3	1.74e-03	20.9	20.9	20.9	20.9	18.2	1.3	5.6	5688.3	1.308e+04	3916.1
1362	ok	0.07	7.10e-02	5.56e-04	20.9	20.9	20.9	20.9	-2.6	-4.1	2.1	-4214.4	461.5	-47.0
1363	ok	0.07	9.62e-03	3.41e-04	20.9	20.9	20.9	20.9	-2.6	-0.6	1.5	91.7	-80.7	469.4
1385	ok	0.07	9.03e-02	4.75e-04	20.9	20.9	20.9	20.9	-1.0	-2.0	-3.8	-6.0	-5361.0	80.3



1386	ok	0.07	0.2	2.33e-03	20.9	20.9	20.9	20.9	-7.0	-10.9	-17.7	-3557.0	-9261.3	1120.3
1387	ok	0.07	0.4	2.46e-03	20.9	20.9	20.9	20.9	1.1	-5.7	-0.4	-8596.2	-1.271e+04	1.132e+04
1388	ok	0.07	0.5	1.86e-03	20.9	20.9	20.9	20.9	4.5	-12.8	8.3	-3727.8	-2.537e+04	6067.9
1389	ok	0.07	0.3	2.13e-03	20.9	20.9	20.9	20.9	3.7	-0.8	5.0	-4870.3	-1.187e+04	-9527.6
1390	ok	0.07	0.2	2.42e-03	20.9	20.9	20.9	20.9	-5.3	-9.3	20.5	-4765.3	-9618.1	-812.1
1391	ok	0.07	9.36e-02	5.63e-04	20.9	20.9	20.9	20.9	-4.9	-2.7	2.3	347.3	-5555.0	5.3
1413	ok	0.07	0.1	1.00e-03	20.9	20.9	20.9	20.9	-0.5	0.3	-2.4	205.5	-8177.7	168.9
1414	ok	0.07	0.3	1.86e-03	20.9	20.9	20.9	20.9	-1.9	-19.0	-4.4	1677.6	-1.705e+04	2600.9
1415	ok	0.07	0.6	6.06e-03	20.9	20.9	20.9	20.9	-20.8	-41.4	-37.1	-1.019e+04	-3.454e+04	-8085.2
1416	ok	0.07	0.4	3.72e-03	20.9	20.9	20.9	20.9	18.4	-38.0	8.4	-690.0	-2.583e+04	2777.1
1417	ok	0.07	0.7	5.78e-03	20.9	20.9	20.9	20.9	-19.2	-37.0	37.1	-1.510e+04	-3.574e+04	1.013e+04
1418	ok	0.07	0.3	2.05e-03	20.9	20.9	20.9	20.9	-0.7	3.7	6.1	-9346.0	-9318.3	-7437.6
1419	ok	0.07	0.2	1.53e-03	20.9	20.9	20.9	20.9	2.0	12.4	1.3	1.133e+04	550.9	4034.7
1441	ok	0.07	8.67e-02	1.12e-03	20.9	20.9	20.9	20.9	-0.2	5.2	-1.2	-43.6	-5115.9	-283.3
1442	ok	0.07	0.1	1.34e-03	20.9	20.9	20.9	20.9	-3.0	-7.2	-10.1	-477.1	-5334.0	-2142.8
1443	ok	0.07	0.1	2.19e-03	20.9	20.9	20.9	20.9	-20.2	22.7	6.4	-4480.4	6604.7	413.5
1444	ok	0.07	0.2	3.37e-03	20.9	20.9	20.9	20.9	-2.1	-28.4	16.3	-4472.3	-6112.1	3403.9
1445	ok	0.07	0.3	2.53e-03	20.9	20.9	20.9	20.9	-19.6	5.9	-2.0	-1.821e+04	-3490.7	-1129.9
1446	ok	0.07	0.4	1.25e-03	20.9	20.9	20.9	20.9	-6.0	3.4	6.1	-1.917e+04	-5246.1	4271.2
1447	ok	0.07	0.6	1.36e-03	20.9	20.9	20.9	20.9	-2.3	10.9	3.4	-2.375e+04	-3315.0	2.037e+04
1469	ok	0.07	4.29e-02	1.02e-03	20.9	20.9	20.9	20.9	-1.5	8.2	-2.2	48.4	-2378.8	-230.4
1470	ok	0.07	8.74e-02	2.03e-03	20.9	20.9	20.9	20.9	-2.2	-14.6	6.3	627.0	-5162.4	442.2
1471	ok	0.07	0.3	5.63e-03	20.9	20.9	20.9	20.9	-20.2	-34.5	36.8	-1.448e+04	-1.589e+04	5569.0
1472	ok	0.07	0.1	2.56e-03	20.9	20.9	20.9	20.9	17.6	-28.9	3.6	843.4	-6113.1	364.7
1473	ok	0.07	0.5	5.52e-03	20.9	20.9	20.9	20.9	-27.6	-19.8	-31.3	-2.716e+04	-1.121e+04	-7399.4
1474	ok	0.07	0.3	1.98e-03	20.9	20.9	20.9	20.9	-1.1	3.6	-4.9	-9815.1	-7579.4	8153.0
1475	ok	0.07	0.2	1.04e-03	20.9	20.9	20.9	20.9	-0.2	10.6	-2.5	1.149e+04	2749.0	-4173.7
1497	ok	0.07	2.66e-02	4.81e-04	20.9	20.9	20.9	20.9	-2.3	1.9	3.3	-72.8	-1551.6	141.7
1498	ok	0.07	7.13e-02	2.36e-03	20.9	20.9	20.9	20.9	-6.2	-10.5	18.7	-3818.2	-3879.9	373.1
1499	ok	0.07	9.37e-02	1.97e-03	20.9	20.9	20.9	20.9	5.2	-5.8	5.2	-4725.2	-1958.6	199.8
1500	ok	0.07	9.11e-02	1.10e-03	20.9	20.9	20.9	20.9	5.7	-8.6	7.7	-3623.8	-3510.0	1170.4
1501	ok	0.07	0.2	1.96e-03	20.9	20.9	20.9	20.9	0.9	-2.9	-4.6	-8948.0	-706.2	-470.0
1502	ok	0.07	0.1	2.34e-03	20.9	20.9	20.9	20.9	-8.3	-6.0	-16.4	-7311.9	-3328.3	419.0
1503	ok	0.07	3.07e-02	4.97e-04	20.9	20.9	20.9	20.9	-3.2	2.0	-2.1	1052.1	-1797.8	253.1
1525	ok	0.07	7.25e-03	3.39e-04	20.9	20.9	20.9	20.9	-0.4	-3.0	1.7	-108.4	-151.8	291.0
1526	ok	0.07	3.12e-02	4.97e-04	20.9	20.9	20.9	20.9	3.0	-2.6	3.5	-1834.1	-94.0	163.6
1527	ok	0.07	5.41e-02	1.26e-03	20.9	20.9	20.9	20.9	12.7	-1.3	1.8	-3187.8	120.7	38.2
1528	ok	0.07	7.48e-02	1.41e-03	20.9	20.9	20.9	20.9	14.2	-2.1	-2.6	-4381.7	5.7	-260.1
1529	ok	0.07	0.1	1.26e-03	20.9	20.9	20.9	20.9	1.7	-0.6	-2.5	-6400.3	168.7	3.8
1530	ok	0.07	6.97e-02	4.93e-04	20.9	20.9	20.9	20.9	-2.4	-1.2	-3.2	-4136.5	-39.7	-55.8
1531	ok	0.07	8.47e-03	3.36e-04	20.9	20.9	20.9	20.9	-2.6	-0.3	-1.5	160.8	-173.1	-382.0

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.74	6.06e-03	20.94	20.94	20.94	20.94	-27.64	-41.45	-37.10	-2.716e+04	-3.574e+04	-2.124e+04
								18.44	22.74	37.07	1.149e+04	1.363e+04	2.037e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1357	ok	0.49						
1358	ok	1.11						
1359	ok	1.75						
1360	ok	1.75						
1361	ok	1.60						
1362	ok	1.17						
1363	ok	0.55						
1385	ok	0.49						
1386	ok	2.06						
1387	ok	2.06						
1388	ok	1.75						
1389	ok	2.35						
1390	ok	2.35						
1391	ok	0.85						
1413	ok	0.49						
1414	ok	2.06						
1415	ok	2.06						
1416	ok	1.51						
1417	ok	2.35						
1418	ok	2.35						
1419	ok	1.17						
1441	ok	0.54						
1442	ok	1.28						
1443	ok	1.51						
1444	ok	1.51						
1445	ok	1.40						
1446	ok	1.27						
1447	ok	1.26						



1469	ok	0.54
1470	ok	1.41
1471	ok	1.41
1472	ok	1.23
1473	ok	1.80
1474	ok	1.80
1475	ok	1.26
1497	ok	0.36
1498	ok	1.41
1499	ok	1.41
1500	ok	1.04
1501	ok	1.80
1502	ok	1.80
1503	ok	0.85
1525	ok	0.22
1526	ok	0.41
1527	ok	0.42
1528	ok	0.42
1529	ok	0.49
1530	ok	0.49
1531	ok	0.40

<b>Nodo</b>	<b>Max tau</b>	<b>Ver V pr</b>	<b>Ver V sec</b>	<b>Af V pr</b>	<b>Af V sec</b>	<b>V pr</b>	<b>V sec</b>
	2.35						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
25	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1364	ok	0.07	1.23e-02	3.06e-04	20.9	20.9	20.9	20.9	1.0	-3.1	-0.8	-445.3	-176.3	-378.1
1365	ok	0.07	5.35e-02	4.44e-04	20.9	20.9	20.9	20.9	2.6	1.1	3.0	3155.3	-47.6	-243.2
1366	ok	0.07	7.67e-02	1.13e-03	20.9	20.9	20.9	20.9	-1.5	0.6	2.4	4537.7	-135.3	-292.8
1367	ok	0.07	5.30e-02	1.31e-03	20.9	20.9	20.9	20.9	-13.5	1.9	2.4	3129.1	-33.1	90.4
1368	ok	0.07	5.92e-02	1.13e-03	20.9	20.9	20.9	20.9	-1.3	0.6	-2.4	3499.4	-114.9	202.0
1369	ok	0.07	4.35e-02	4.41e-04	20.9	20.9	20.9	20.9	2.6	1.1	-3.0	2565.8	-34.1	168.1
1370	ok	0.07	1.22e-02	3.01e-04	20.9	20.9	20.9	20.9	2.6	0.3	-1.5	-199.6	37.6	-81.0
1392	ok	0.07	3.89e-02	4.97e-04	20.9	20.9	20.9	20.9	-1.5	-4.7	-1.4	-495.9	-1540.7	-822.3
1393	ok	0.07	9.47e-02	2.09e-03	20.9	20.9	20.9	20.9	-4.7	-9.3	-16.9	-3053.8	-4873.9	-1321.0
1394	ok	0.07	0.2	1.75e-03	20.9	20.9	20.9	20.9	10.2	2.3	6.1	9959.3	-1233.0	-2216.5
1395	ok	0.07	0.1	1.02e-03	20.9	20.9	20.9	20.9	5.5	-8.0	-6.9	-2841.4	-5246.7	-2025.2
1396	ok	0.07	0.1	1.75e-03	20.9	20.9	20.9	20.9	10.5	2.3	-6.0	8113.4	-1024.0	1653.9
1397	ok	0.07	9.19e-02	2.08e-03	20.9	20.9	20.9	20.9	-4.7	-9.1	16.9	-2680.2	-4880.9	1279.4
1398	ok	0.07	3.98e-02	5.01e-04	20.9	20.9	20.9	20.9	4.2	-1.3	-1.9	-709.2	783.1	526.7
1420	ok	0.07	0.1	1.11e-03	20.9	20.9	20.9	20.9	0.2	-10.5	1.2	-7524.4	-5104.6	1526.5
1421	ok	0.07	0.2	1.77e-03	20.9	20.9	20.9	20.9	8.11e-02	-3.8	3.7	6883.5	1278.3	-7752.2
1422	ok	0.07	0.4	4.87e-03	20.9	20.9	20.9	20.9	-15.1	-30.7	-32.2	-1.093e+04	-2.167e+04	-7259.0
1423	ok	0.07	0.2	2.30e-03	20.9	20.9	20.9	20.9	17.0	-26.1	3.3	2411.8	-1.042e+04	1225.8
1424	ok	0.07	0.4	4.84e-03	20.9	20.9	20.9	20.9	-15.0	-30.6	32.0	-9573.1	-2.147e+04	6722.4
1425	ok	0.07	0.2	1.75e-03	20.9	20.9	20.9	20.9	0.5	-3.6	-5.6	5909.2	2309.0	5605.0
1426	ok	0.07	0.1	1.16e-03	20.9	20.9	20.9	20.9	-1.0	-10.5	-1.4	-6566.0	-3354.1	-1605.3
1448	ok	0.07	0.4	1.18e-03	20.9	20.9	20.9	20.9	2.0	-13.4	-0.7	1.537e+04	-1.154e+04	-1.315e+04
1449	ok	0.07	0.3	1.20e-03	20.9	20.9	20.9	20.9	7.2	-6.0	1.7	1.389e+04	-1.146e+04	2151.3
1450	ok	0.07	0.2	2.26e-03	20.9	20.9	20.9	20.9	24.0	-13.3	7.0	1.426e+04	-4231.3	565.4
1451	ok	0.07	0.2	2.74e-03	20.9	20.9	20.9	20.9	0.2	-28.6	-9.9	-709.8	-9285.0	-1503.4
1452	ok	0.07	0.2	2.28e-03	20.9	20.9	20.9	20.9	24.4	-13.4	-7.0	1.178e+04	-3702.6	-383.0
1453	ok	0.07	0.2	1.17e-03	20.9	20.9	20.9	20.9	7.5	-5.8	-1.7	1.126e+04	-8582.8	-1740.3
1454	ok	0.07	0.3	1.09e-03	20.9	20.9	20.9	20.9	1.3	-9.3	-2.9	1.319e+04	-7019.0	-1.194e+04
1476	ok	0.07	0.1	9.85e-04	20.9	20.9	20.9	20.9	1.0	-9.5	-1.2	-7939.7	-5218.9	-1775.5
1477	ok	0.07	0.2	1.81e-03	20.9	20.9	20.9	20.9	0.1	-3.9	-3.6	7269.4	1771.8	8285.2
1478	ok	0.07	0.4	4.97e-03	20.9	20.9	20.9	20.9	-17.2	-30.9	32.5	-9873.8	-2.183e+04	7195.8
1479	ok	0.07	0.2	2.28e-03	20.9	20.9	20.9	20.9	8.7	-2.8	1.4	1930.4	-2886.8	2983.8
1480	ok	0.07	0.4	4.94e-03	20.9	20.9	20.9	20.9	-16.9	-30.8	-32.3	-8612.6	-2.137e+04	-6454.7
1481	ok	0.07	0.2	1.78e-03	20.9	20.9	20.9	20.9	3.61e-02	-3.8	3.7	5786.2	1183.1	-6396.7
1482	ok	0.07	0.1	1.02e-03	20.9	20.9	20.9	20.9	0.6	-10.0	1.3	-6528.4	-4376.7	1418.8
1504	ok	0.07	3.83e-02	4.36e-04	20.9	20.9	20.9	20.9	2.7	-3.4	-0.8	-948.8	102.2	909.5
1505	ok	0.07	9.41e-02	2.10e-03	20.9	20.9	20.9	20.9	-4.9	-9.4	16.9	-2723.2	-4832.3	1480.7
1506	ok	0.07	0.2	1.73e-03	20.9	20.9	20.9	20.9	5.1	-5.4	4.8	-2907.1	-3271.6	882.9
1507	ok	0.07	0.1	1.02e-03	20.9	20.9	20.9	20.9	5.0	-7.9	-6.9	-2338.2	-5448.7	-1913.7
1508	ok	0.07	0.1	1.74e-03	20.9	20.9	20.9	20.9	5.2	-5.4	-4.9	-2539.6	-3317.0	-564.9
1509	ok	0.07	9.05e-02	2.11e-03	20.9	20.9	20.9	20.9	-4.9	-9.2	-17.0	-2431.1	-4839.0	-1264.7



1510	ok	0.07	3.97e-02	4.49e-04	20.9	20.9	20.9	20.9	-0.9	-4.1	-1.6	-528.8	-1594.1	-758.8
1532	ok	0.07	1.26e-02	3.06e-04	20.9	20.9	20.9	20.9	2.4	0.4	-1.5	-268.0	28.3	-70.4
1533	ok	0.07	5.19e-02	4.64e-04	20.9	20.9	20.9	20.9	-1.2	1.0	-1.6	2323.0	-120.3	319.1
1534	ok	0.07	7.39e-02	1.14e-03	20.9	20.9	20.9	20.9	10.8	-1.4	2.7	-1428.3	146.6	430.2
1535	ok	0.07	4.60e-02	1.31e-03	20.9	20.9	20.9	20.9	14.8	-1.7	-1.5	-1112.1	80.2	-334.6
1536	ok	0.07	5.74e-02	1.14e-03	20.9	20.9	20.9	20.9	10.7	-1.3	-2.8	-1169.5	145.9	-361.3
1537	ok	0.07	4.26e-02	4.45e-04	20.9	20.9	20.9	20.9	-1.2	1.0	1.7	1887.1	-109.3	-270.0
1538	ok	0.07	1.19e-02	3.03e-04	20.9	20.9	20.9	20.9	2.5	0.4	1.5	-192.5	36.1	79.9

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.42	4.97e-03	20.94	20.94	20.94	20.94	-17.22 24.37	-30.90 2.34	-32.30 32.47	-1.093e+04 1.537e+04	-2.183e+04 2309.02	-1.315e+04 8285.15

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1364	ok	0.30						
1365	ok	0.53						
1366	ok	0.53						
1367	ok	0.52						
1368	ok	0.52						
1369	ok	0.51						
1370	ok	0.30						
1392	ok	0.89						
1393	ok	1.56						
1394	ok	1.56						
1395	ok	1.24						
1396	ok	1.48						
1397	ok	1.48						
1398	ok	0.68						
1420	ok	1.44						
1421	ok	1.56						
1422	ok	1.56						
1423	ok	1.24						
1424	ok	1.48						
1425	ok	1.48						
1426	ok	1.05						
1448	ok	1.44						
1449	ok	1.44						
1450	ok	1.00						
1451	ok	1.00						
1452	ok	0.94						
1453	ok	1.05						
1454	ok	1.05						
1476	ok	1.34						
1477	ok	1.52						
1478	ok	1.52						
1479	ok	1.24						
1480	ok	1.43						
1481	ok	1.43						
1482	ok	1.04						
1504	ok	0.84						
1505	ok	1.52						
1506	ok	1.52						
1507	ok	1.24						
1508	ok	1.43						
1509	ok	1.43						
1510	ok	0.68						
1532	ok	0.29						
1533	ok	0.52						
1534	ok	0.52						
1535	ok	0.52						
1536	ok	0.52						
1537	ok	0.50						
1538	ok	0.30						

Nodo	Max tau 1.56	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
26	80.00	3	2	Singolo elemento



Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
1371	ok	0.07	1.22e-02	3.01e-04	20.9	20.9	20.9	20.9	-0.7	-2.7	-1.5	-365.3	-162.4	-441.5
1372	ok	0.07	4.35e-02	4.41e-04	20.9	20.9	20.9	20.9	2.6	1.1	3.0	2568.9	-34.1	-168.4
1373	ok	0.07	5.93e-02	1.12e-03	20.9	20.9	20.9	20.9	-1.3	0.6	2.4	3505.6	-114.9	-202.5
1374	ok	0.07	5.31e-02	1.30e-03	20.9	20.9	20.9	20.9	-14.8	1.6	1.5	3136.4	-25.8	67.0
1375	ok	0.07	7.69e-02	1.13e-03	20.9	20.9	20.9	20.9	-1.4	0.6	-2.4	4545.9	-135.5	293.2
1376	ok	0.07	5.36e-02	4.45e-04	20.9	20.9	20.9	20.9	2.6	1.1	-3.0	3160.0	-47.6	243.6
1377	ok	0.07	1.23e-02	3.07e-04	20.9	20.9	20.9	20.9	2.6	0.4	-1.5	-284.0	34.2	-66.3
1399	ok	0.07	3.99e-02	4.99e-04	20.9	20.9	20.9	20.9	-4.1	-3.1	-2.1	-185.8	-2199.7	-589.2
1400	ok	0.07	9.19e-02	2.08e-03	20.9	20.9	20.9	20.9	-4.7	-9.1	-16.9	-2676.2	-4881.4	-1281.0
1401	ok	0.07	0.1	1.75e-03	20.9	20.9	20.9	20.9	10.5	2.3	6.0	8123.1	-1024.6	-1657.0
1402	ok	0.07	0.1	1.02e-03	20.9	20.9	20.9	20.9	5.4	-8.0	-7.0	-2606.2	-5375.9	-1908.5
1403	ok	0.07	0.2	1.75e-03	20.9	20.9	20.9	20.9	10.2	2.3	-6.1	9973.8	-1235.1	2219.3
1404	ok	0.07	9.48e-02	2.09e-03	20.9	20.9	20.9	20.9	-4.7	-9.3	16.9	-3046.5	-4874.3	1322.4
1405	ok	0.07	3.89e-02	4.92e-04	20.9	20.9	20.9	20.9	4.6	-1.2	-1.8	-877.3	802.8	707.7
1427	ok	0.07	0.1	1.14e-03	20.9	20.9	20.9	20.9	1.2	-9.6	2.0	-6415.8	-4348.1	1380.6
1428	ok	0.07	0.2	1.75e-03	20.9	20.9	20.9	20.9	0.5	-3.5	5.6	5916.9	2312.2	-5613.4
1429	ok	0.07	0.4	4.83e-03	20.9	20.9	20.9	20.9	-15.0	-30.6	-31.9	-9559.6	-2.148e+04	-6722.3
1430	ok	0.07	0.2	2.30e-03	20.9	20.9	20.9	20.9	17.0	-26.0	-3.3	2419.3	-1.042e+04	-1226.2
1431	ok	0.07	0.4	4.88e-03	20.9	20.9	20.9	20.9	-15.3	-30.7	32.2	-1.091e+04	-2.168e+04	7252.9
1432	ok	0.07	0.2	1.78e-03	20.9	20.9	20.9	20.9	8.02e-02	-3.8	-3.7	6890.5	1272.0	7757.0
1433	ok	0.07	0.1	1.12e-03	20.9	20.9	20.9	20.9	0.7	-10.0	-1.4	-7538.7	-5115.3	-1527.6
1455	ok	0.07	0.3	1.09e-03	20.9	20.9	20.9	20.9	1.4	-9.3	2.9	1.320e+04	-7029.3	1.196e+04
1456	ok	0.07	0.2	1.17e-03	20.9	20.9	20.9	20.9	7.4	-5.7	1.8	1.126e+04	-8468.2	1701.1
1457	ok	0.07	0.2	2.28e-03	20.9	20.9	20.9	20.9	24.4	-13.4	7.0	1.179e+04	-3703.9	382.4
1458	ok	0.07	0.2	2.74e-03	20.9	20.9	20.9	20.9	14.0	-12.7	7.3	5175.3	-5074.7	2113.8
1459	ok	0.07	0.2	2.27e-03	20.9	20.9	20.9	20.9	24.0	-13.3	-7.0	1.428e+04	-4232.7	-569.0
1460	ok	0.07	0.3	1.21e-03	20.9	20.9	20.9	20.9	7.2	-6.0	-1.7	1.391e+04	-1.149e+04	-2153.1
1461	ok	0.07	0.4	1.18e-03	20.9	20.9	20.9	20.9	2.0	-13.4	0.7	1.540e+04	-1.161e+04	1.316e+04
1483	ok	0.07	0.1	1.02e-03	20.9	20.9	20.9	20.9	0.6	-10.0	-1.3	-6536.6	-4381.2	-1421.2
1484	ok	0.07	0.2	1.78e-03	20.9	20.9	20.9	20.9	3.55e-02	-3.8	-3.7	5793.0	1184.8	6401.9
1485	ok	0.07	0.4	4.94e-03	20.9	20.9	20.9	20.9	-16.9	-30.7	32.3	-8593.9	-2.137e+04	6449.5
1486	ok	0.07	0.2	2.28e-03	20.9	20.9	20.9	20.9	8.6	-2.7	-1.4	1936.9	-2884.8	-2987.0
1487	ok	0.07	0.4	4.98e-03	20.9	20.9	20.9	20.9	-17.4	-30.9	-32.5	-9858.9	-2.183e+04	-7196.5
1488	ok	0.07	0.2	1.82e-03	20.9	20.9	20.9	20.9	0.1	-3.9	3.6	7286.0	1788.8	-8305.3
1489	ok	0.07	0.1	9.86e-04	20.9	20.9	20.9	20.9	1.0	-9.5	1.2	-7959.0	-5225.3	1784.9
1511	ok	0.07	3.97e-02	4.47e-04	20.9	20.9	20.9	20.9	-0.8	-4.1	1.6	-529.7	-1593.8	759.1
1512	ok	0.07	9.05e-02	2.11e-03	20.9	20.9	20.9	20.9	-4.9	-9.2	17.0	-2426.2	-4838.2	1264.8
1513	ok	0.07	0.1	1.74e-03	20.9	20.9	20.9	20.9	5.2	-5.4	4.9	-2532.8	-3317.5	564.0
1514	ok	0.07	0.1	1.02e-03	20.9	20.9	20.9	20.9	4.9	-7.8	7.0	-2333.8	-5450.1	1913.6
1515	ok	0.07	0.2	1.73e-03	20.9	20.9	20.9	20.9	2.6	-0.5	2.0	4677.1	-1784.3	-607.9
1516	ok	0.07	9.41e-02	2.10e-03	20.9	20.9	20.9	20.9	-5.0	-9.5	-16.8	-2718.6	-4831.5	-1483.4
1517	ok	0.07	3.83e-02	4.30e-04	20.9	20.9	20.9	20.9	2.7	-3.4	0.8	-950.6	103.9	-910.4
1539	ok	0.07	1.19e-02	3.02e-04	20.9	20.9	20.9	20.9	2.5	0.3	-1.5	-192.7	36.3	-80.1
1540	ok	0.07	4.27e-02	4.42e-04	20.9	20.9	20.9	20.9	-1.2	1.0	-1.7	1889.4	-109.3	270.2
1541	ok	0.07	5.75e-02	1.14e-03	20.9	20.9	20.9	20.9	10.6	-1.3	2.8	-1164.1	145.8	361.2
1542	ok	0.07	4.61e-02	1.30e-03	20.9	20.9	20.9	20.9	14.7	-1.7	1.5	-1106.4	80.4	334.3
1543	ok	0.07	7.40e-02	1.14e-03	20.9	20.9	20.9	20.9	0.6	-0.8	2.1	3135.4	17.2	-126.6
1544	ok	0.07	5.19e-02	4.67e-04	20.9	20.9	20.9	20.9	4.7	-0.2	1.5	2666.9	-111.7	-400.5
1545	ok	0.07	1.26e-02	3.07e-04	20.9	20.9	20.9	20.9	2.4	0.4	1.5	-268.4	28.0	70.6

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+Af	sec-Af	sec+	N x daN/cm	N y daN/cm	N xy daN/cm	M x daN	M y daN	M xy daN
	0.07	0.42	4.98e-03	20.94	20.94	20.94	20.94	-17.44	-30.91	-32.52	-1.091e+04	-2.183e+04	-8305.29
								24.38	2.34	32.28	1.540e+04	2312.22	1.316e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1371	ok	0.30						
1372	ok	0.51						
1373	ok	0.52						
1374	ok	0.52						
1375	ok	0.53						
1376	ok	0.53						
1377	ok	0.30						
1399	ok	0.68						
1400	ok	1.48						
1401	ok	1.48						
1402	ok	1.24						
1403	ok	1.56						
1404	ok	1.56						
1405	ok	0.89						
1427	ok	1.05						



1428	ok	1.48
1429	ok	1.48
1430	ok	1.24
1431	ok	1.56
1432	ok	1.56
1433	ok	1.44
1455	ok	1.05
1456	ok	1.05
1457	ok	0.94
1458	ok	0.99
1459	ok	0.99
1460	ok	1.44
1461	ok	1.44
1483	ok	1.05
1484	ok	1.43
1485	ok	1.43
1486	ok	1.24
1487	ok	1.52
1488	ok	1.52
1489	ok	1.34
1511	ok	0.68
1512	ok	1.43
1513	ok	1.43
1514	ok	1.24
1515	ok	1.52
1516	ok	1.52
1517	ok	0.84
1539	ok	0.30
1540	ok	0.50
1541	ok	0.52
1542	ok	0.52
1543	ok	0.52
1544	ok	0.52
1545	ok	0.29

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
	1.56						

Macro Guscio	Spessore	Id Materiale	Id Criterio	Progettazione
	cm			
27	80.00	3	2	Singolo elemento

Nodo	Stato	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
									daN/cm	daN/cm	daN/cm	daN	daN	daN
1378	ok	0.07	9.66e-03	3.65e-04	20.9	20.9	20.9	20.9	0.8	-3.6	-0.9	-317.8	283.1	-382.6
1379	ok	0.07	7.11e-02	5.53e-04	20.9	20.9	20.9	20.9	-1.9	-1.6	-2.6	-4221.0	471.2	38.1
1380	ok	0.07	0.3	1.77e-03	20.9	20.9	20.9	20.9	19.7	3.2	-2.9	5718.0	1.322e+04	-3998.3
1381	ok	0.07	0.7	2.02e-03	20.9	20.9	20.9	20.9	19.2	-7.3	5.4	8749.4	-2.663e+04	2.146e+04
1382	ok	0.07	0.3	1.26e-03	20.9	20.9	20.9	20.9	8.4	-6.8	9.7	3854.9	1.377e+04	4569.5
1383	ok	0.07	3.72e-02	6.94e-04	20.9	20.9	20.9	20.9	4.1	-3.0	-1.5	-1216.6	190.0	-1433.0
1384	ok	0.07	8.80e-03	3.26e-04	20.9	20.9	20.9	20.9	-0.1	-2.5	2.0	-156.6	297.1	389.9
1406	ok	0.07	9.36e-02	6.04e-04	20.9	20.9	20.9	20.9	-5.3	-3.3	-2.2	347.8	-5553.5	-9.0
1407	ok	0.07	0.2	2.46e-03	20.9	20.9	20.9	20.9	-5.2	-9.3	-20.7	-4779.1	-9619.8	795.8
1408	ok	0.07	0.3	2.12e-03	20.9	20.9	20.9	20.9	4.3	-0.3	-5.9	-4979.8	-1.192e+04	9564.1
1409	ok	0.07	0.5	1.66e-03	20.9	20.9	20.9	20.9	5.2	-10.9	-7.7	-3828.9	-2.545e+04	-6063.3
1410	ok	0.07	0.4	2.34e-03	20.9	20.9	20.9	20.9	2.2	-4.9	1.7	-8676.9	-1.275e+04	-1.134e+04
1411	ok	0.07	0.2	2.37e-03	20.9	20.9	20.9	20.9	-2.3	-9.5	10.9	-2518.6	-8409.4	-1243.5
1412	ok	0.07	9.03e-02	5.14e-04	20.9	20.9	20.9	20.9	-1.1	-2.6	3.8	-7.0	-5361.1	-75.2
1434	ok	0.07	0.2	1.64e-03	20.9	20.9	20.9	20.9	-0.5	10.2	-1.9	1.120e+04	4824.2	-3985.5
1435	ok	0.07	0.3	2.11e-03	20.9	20.9	20.9	20.9	-0.7	3.7	-6.2	-9359.9	-9307.9	7425.2
1436	ok	0.07	0.7	5.70e-03	20.9	20.9	20.9	20.9	-18.7	-35.4	-37.3	-1.519e+04	-3.574e+04	-1.017e+04
1437	ok	0.07	0.4	3.60e-03	20.9	20.9	20.9	20.9	18.3	-36.1	-8.4	-752.4	-2.583e+04	-2786.8
1438	ok	0.07	0.6	6.02e-03	20.9	20.9	20.9	20.9	-20.6	-40.3	37.4	-1.028e+04	-3.455e+04	8133.8
1439	ok	0.07	0.3	1.89e-03	20.9	20.9	20.9	20.9	-1.9	-18.8	4.8	1673.5	-1.705e+04	-2574.9
1440	ok	0.07	0.1	1.00e-03	20.9	20.9	20.9	20.9	-0.6	-0.4	2.6	205.5	-8175.4	-163.1
1462	ok	0.07	0.6	1.42e-03	20.9	20.9	20.9	20.9	-2.2	10.8	-3.4	-2.378e+04	-3356.1	-2.042e+04
1463	ok	0.07	0.4	1.32e-03	20.9	20.9	20.9	20.9	-6.0	3.4	-6.3	-1.921e+04	-5242.0	-4296.4
1464	ok	0.07	0.3	2.53e-03	20.9	20.9	20.9	20.9	-19.6	6.0	2.0	-1.825e+04	-3473.5	1118.5
1465	ok	0.07	0.2	3.42e-03	20.9	20.9	20.9	20.9	-1.7	-29.2	-16.1	-4501.0	-6099.7	-3405.9
1466	ok	0.07	0.1	2.19e-03	20.9	20.9	20.9	20.9	-20.3	22.3	-6.9	-4509.9	6621.2	-403.3
1467	ok	0.07	0.1	1.39e-03	20.9	20.9	20.9	20.9	-3.1	-7.1	10.7	-491.3	-5333.2	2163.0
1468	ok	0.07	8.67e-02	1.13e-03	20.9	20.9	20.9	20.9	-0.2	5.3	1.4	-43.1	-5112.3	286.0



1490	ok	0.07	0.2	1.12e-03	20.9	20.9	20.9	20.9	-0.3	10.6	2.6	1.150e+04	2760.3	4178.7
1491	ok	0.07	0.3	1.98e-03	20.9	20.9	20.9	20.9	-1.1	3.7	4.9	-9835.2	-7588.3	-8181.7
1492	ok	0.07	0.5	5.62e-03	20.9	20.9	20.9	20.9	-27.6	-20.2	31.6	-2.720e+04	-1.118e+04	7390.0
1493	ok	0.07	0.1	2.65e-03	20.9	20.9	20.9	20.9	17.9	-29.8	-3.7	828.4	-6093.8	-365.2
1494	ok	0.07	0.3	5.74e-03	20.9	20.9	20.9	20.9	-20.2	-35.5	-37.5	-1.451e+04	-1.587e+04	-5564.3
1495	ok	0.07	8.72e-02	2.06e-03	20.9	20.9	20.9	20.9	-4.9	4.0	-4.5	-1657.7	-3893.3	-226.5
1496	ok	0.07	4.28e-02	1.02e-03	20.9	20.9	20.9	20.9	-1.1	11.6	1.1	147.0	-2145.6	255.4
1518	ok	0.07	3.07e-02	5.32e-04	20.9	20.9	20.9	20.9	-3.2	2.0	2.1	1054.3	-1796.8	-256.0
1519	ok	0.07	0.1	2.40e-03	20.9	20.9	20.9	20.9	-8.3	-6.2	16.6	-7321.4	-3323.9	-427.0
1520	ok	0.07	0.2	2.00e-03	20.9	20.9	20.9	20.9	1.0	-3.0	4.6	-8962.6	-698.6	464.5
1521	ok	0.07	9.11e-02	1.12e-03	20.9	20.9	20.9	20.9	5.9	-9.0	-8.0	-3632.1	-3499.0	-1166.2
1522	ok	0.07	9.40e-02	2.01e-03	20.9	20.9	20.9	20.9	5.6	-6.1	-5.3	-4738.8	-1951.4	-198.1
1523	ok	0.07	7.12e-02	2.42e-03	20.9	20.9	20.9	20.9	-6.2	-10.9	-19.1	-3827.2	-3875.8	-368.6
1524	ok	0.07	2.65e-02	5.10e-04	20.9	20.9	20.9	20.9	-2.3	1.7	-3.4	-72.0	-1549.5	-140.0
1546	ok	0.07	8.44e-03	3.51e-04	20.9	20.9	20.9	20.9	-2.6	-0.3	1.5	162.7	-172.5	381.3
1547	ok	0.07	6.99e-02	5.07e-04	20.9	20.9	20.9	20.9	-2.3	-1.2	3.3	-4144.2	-39.3	54.0
1548	ok	0.07	0.1	1.29e-03	20.9	20.9	20.9	20.9	1.9	-0.7	2.6	-6413.7	168.8	-5.9
1549	ok	0.07	7.51e-02	1.46e-03	20.9	20.9	20.9	20.9	14.9	-2.2	2.8	-4394.5	5.3	258.5
1550	ok	0.07	5.43e-02	1.29e-03	20.9	20.9	20.9	20.9	13.2	-1.5	-2.0	-3199.8	120.7	-37.2
1551	ok	0.07	3.13e-02	5.13e-04	20.9	20.9	20.9	20.9	3.2	-2.7	-3.7	-1840.4	-93.9	-162.8
1552	ok	0.07	7.24e-03	3.55e-04	20.9	20.9	20.9	20.9	-0.3	-3.1	-1.8	-107.0	-151.8	-290.7

Nodo	x/d	V N/M	ver. rid	Af pr-	Af pr+	Af sec-	Af sec+	N x	N y	N xy	M x	M y	M xy
	0.07	0.74	6.02e-03	20.94	20.94	20.94	20.94	-27.59	-40.26	-37.46	-2.720e+04	-3.574e+04	-2.042e+04
								19.67	22.29	37.39	1.150e+04	1.377e+04	2.146e+04

Nodo	Stato	Max tau daN/cm2	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr daN/cm	V sec daN/cm
1378	ok	0.55						
1379	ok	1.17						
1380	ok	1.58						
1381	ok	1.77						
1382	ok	1.77						
1383	ok	1.11						
1384	ok	0.49						
1406	ok	0.85						
1407	ok	2.35						
1408	ok	2.35						
1409	ok	1.77						
1410	ok	2.07						
1411	ok	2.07						
1412	ok	0.50						
1434	ok	1.17						
1435	ok	2.35						
1436	ok	2.35						
1437	ok	1.52						
1438	ok	2.07						
1439	ok	2.07						
1440	ok	0.50						
1462	ok	1.26						
1463	ok	1.27						
1464	ok	1.41						
1465	ok	1.52						
1466	ok	1.52						
1467	ok	1.28						
1468	ok	0.54						
1490	ok	1.26						
1491	ok	1.80						
1492	ok	1.80						
1493	ok	1.23						
1494	ok	1.41						
1495	ok	1.41						
1496	ok	0.54						
1518	ok	0.84						
1519	ok	1.80						
1520	ok	1.80						
1521	ok	1.04						
1522	ok	1.41						
1523	ok	1.41						
1524	ok	0.36						
1546	ok	0.40						
1547	ok	0.49						
1548	ok	0.49						
1549	ok	0.42						
1550	ok	0.42						
1551	ok	0.41						



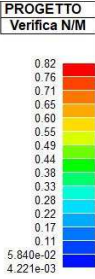
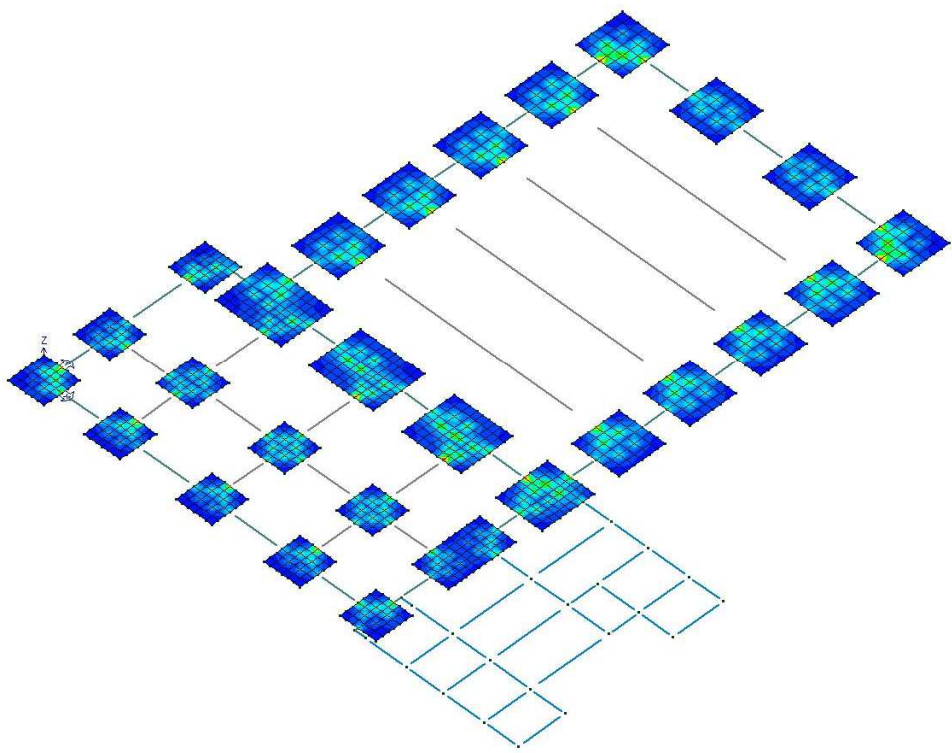
1552

ok

0.22

Nodo	Max tau	Ver V pr	Ver V sec	Af V pr	Af V sec	V pr	V sec
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2.35



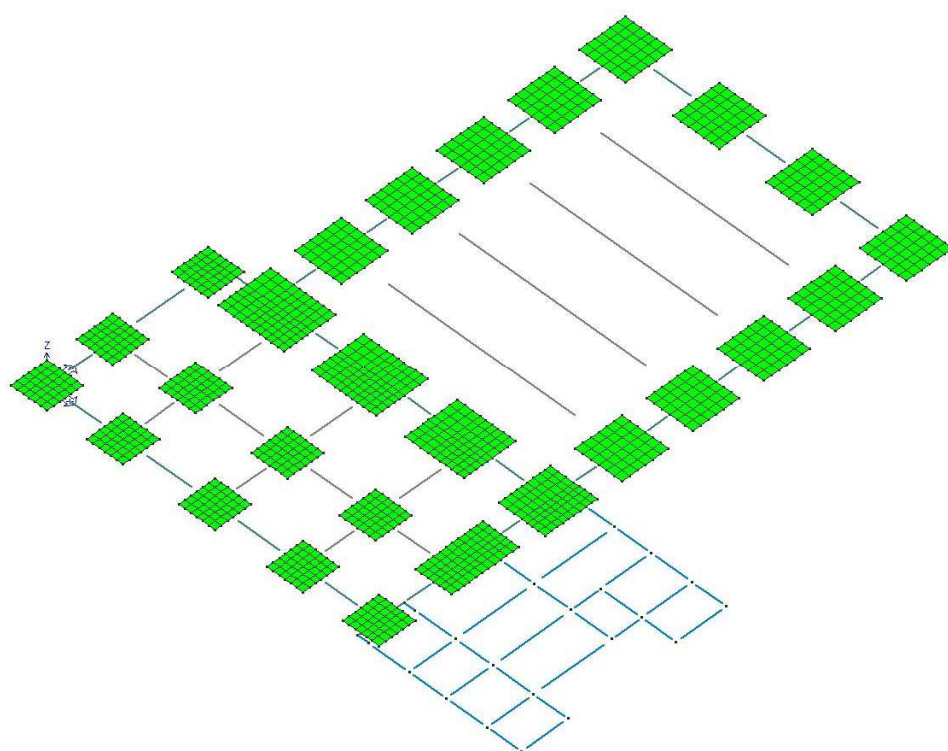
72\_PRO\_CA\_D3\_VER\_NM

4855D-FND-I

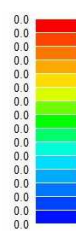








PROGETTO
Verifica V cls sec.





# STATI LIMITE D' ESERCIZIO

## LEGENDA TABELLA STATI LIMITE D' ESERCIZIO

In tabella vengono riportati i valori di interesse per il controllo degli stati limite d'esercizio.

In particolare vengono riportati, in relazione al tipo di elemento strutturale, i risultati relativi alle tre categorie di combinazione considerate:

- Combinazioni rare
- Combinazioni frequenti
- Combinazioni quasi permanenti.

I valori di interesse sono i seguenti:

<b>rRfck</b>	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni rare [normalizzato a 1]
<b>rRfyk</b>	rapporto tra la massima tensione nell'acciaio e la tensione fyk in combinazioni rare [normalizzato a 1]
<b>rPfck</b>	rapporto tra la massima compressione nel calcestruzzo e la tensione fck in combinazioni quasi permanenti [normalizzato a 1]
<b>wR</b>	apertura caratteristica delle fessure in combinazioni rare [mm]
<b>wF</b>	apertura caratteristica delle fessure in combinazioni frequenti [mm]
<b>wP</b>	apertura caratteristica delle fessure in combinazioni quasi permanenti [mm]
<b>dR</b>	massima deformazione in combinazioni rare
<b>dF</b>	massima deformazione in combinazioni frequenti
<b>dP</b>	massima deformazione in combinazioni quasi permanenti

Per ognuno dei nove valori soprariportati viene indicata (Rif.cmb) la combinazione in cui si è verificato.

In relazione al tipo di elemento strutturale i valori sono selezionati nel modo seguente:

pilastr	<b>rRfck</b>	<b>rRfyk</b>	<b>rPfck</b>	per sezioni significative
travi	<b>rRfck</b> <b>wR</b> <b>dR</b>	<b>rRfyk</b> <b>wF</b> <b>dF</b>	<b>rPfck</b> <b>wP</b> <b>dP</b>	per sezioni significative per sezioni significative massimi in campata
setti e gusci	<b>rRfck</b> <b>wR</b>	<b>rRfyk</b> <b>wF</b>	<b>rPfck</b> <b>wP</b>	massimi nei nodi dell'elemento massimi nei nodi dell'elemento

Si precisa che i valori di massima deformazione per travi sono riferiti al piano verticale (piano locale 1-2 con momenti flettenti 3-3).



Trave	Pos. cm	rRfck	rRfyk	rPfck	Rif. cmb	wR mm	wF mm	wP mm	Rif. cmb	dR cm	dF cm	dP cm	Rif. cmb
1	0.0	6.00e-03	0.02	1.09e-									
04118,115,128	0.0	0.0	0.0	0,0,0	0.09	0.08	0.07	116,123,128					
	51.5	0.02	0.06	5.46e-03	116,118,128	0.0	0.0	0.0	0,0,0				
	103.0	0.03	0.11	0.01	116,118,128	0.0	0.0	0.0	0,0,0				
2	0.0	8.54e-											
030.06	0.0	112,115,0	0.0	0.0	0.0	0,0,0	0.09	0.08	0.07	118,123,128			
	198.8	0.04	0.16	0.04	116,116,128	0.0	0.0	0.0	0,0,0				
	397.5	0.05	0.21	0.05	118,118,128	0.0	0.0	0.0	0,0,0				
3	0.0	0.05	0.20	0.06	116,118,128	0.0	0.0	0.0	0,0,0	-0.05	0.03	-	
0.03116,123,128	180.0	0.06	0.24	0.07	118,118,128	0.0	0.0	0.0	0,0,0				
	360.0	0.06	0.23	0.07	115,115,128	0.0	0.0	0.0	0,0,0				
4	0.0	0.07	0.26	0.07	115,115,128	0.0	0.0	0.0	0,0,0	-0.25	-0.20	-	
0.19118,123,128	198.8	0.05	0.20	0.05	111,119,128	0.0	0.0	0.0	0,0,0				
	397.5	0.04	0.15	2.56e-03	116,116,128	0.0	0.0	0.0	0,0,0				
5	0.0	0.05	0.17	0.01	116,116,128	0.0	0.0	0.0	0,0,0	-0.25	-0.21	-	
0.20119,124,128	167.5	0.02	0.06	1.80e-03	116,116,128	0.0	0.0	0.0	0,0,0				
	335.0	0.01	0.05	2.19e-03	111,111,128	0.0	0.0	0.0	0,0,0				
6	0.0	5.93e-03	0.02	3.84e-03	114,114,128	0.0	0.0	0.0	0,0,0	0.01	8.37e-03	-8.05e-	
03117,123,128	16.2	6.99e-03	0.02	5.29e-03	114,122,128	0.0	0.0	0.0	0,0,0				
	32.5	8.49e-03	0.03	6.48e-03	122,122,128	0.0	0.0	0.0	0,0,0				
7	0.0	7.34e-03	0.02	5.76e-03	122,122,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-	
0.02117,123,128	30.0	5.91e-03	0.02	3.57e-03	118,118,128	0.0	0.0	0.0	0,0,0				
	60.0	5.67e-03	0.02	2.49e-03	118,118,128	0.0	0.0	0.0	0,0,0				
8	0.0	4.44e-03	0.01	1.62e-03	118,118,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-	
0.02117,123,128	30.0	2.09e-03	6.39e-03	1.82e-03	111,111,128	0.0	0.0	0.0	0,0,0				
	60.0	4.00e-03	0.01	4.37e-03	111,111,128	0.0	0.0	0.0	0,0,0				
18	0.0	3.71e-03	0.01	4.05e-03	111,111,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-	
0.01117,123,128	27.5	5.22e-03	0.01	6.08e-03	111,111,128	0.0	0.0	0.0	0,0,0				
	55.0	6.02e-03	0.02	7.17e-03	111,111,128	0.0	0.0	0.0	0,0,0				
20	0.0	6.68e-03	0.02	5.45e-03	115,115,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-	
0.02115,123,128	27.5	8.79e-03	0.02	9.30e-03	115,115,128	0.0	0.0	0.0	0,0,0				
	55.0	8.75e-03	0.02	9.81e-03	119,119,128	0.0	0.0	0.0	0,0,0				
21	0.0	9.28e-03	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-	
0.02115,123,128	30.0	0.01	0.03	0.01	111,111,128	0.0	0.0	0.0	0,0,0				
	60.0	0.01	0.03	0.01	111,111,128	0.0	0.0	0.0	0,0,0				
22	0.0	0.01	0.03	0.01	111,111,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-	
0.02115,123,128	30.0	0.02	0.05	0.02	111,111,128	0.0	0.0	0.0	0,0,0				
	60.0	0.02	0.07	0.03	111,111,128	0.0	0.0	0.0	0,0,0				
23	0.0	0.03	0.09	0.04	111,111,128	0.0	0.0	0.0	0,0,0	0.10	0.07	0.06	116,123,1
28	195.0	0.04	0.11	0.05	111,111,128	0.0	0.0	0.0	0,0,0				
	390.0	0.01	0.03	6.29e-03	116,116,128	0.0	0.0	0.0	0,0,0				
24	0.0	6.48e-03	0.02	5.94e-03	116,116,128	0.0	0.0	0.0	0,0,0	-6.30e-03	-2.90e-03	-2.05e-	
03117,123,128	30.0	5.58e-03	0.02	6.03e-03	111,111,128	0.0	0.0	0.0	0,0,0				
	60.0	8.47e-03	0.02	0.01	111,111,128	0.0	0.0	0.0	0,0,0				
25	0.0	6.69e-03	0.02	7.85e-03	111,111,128	0.0	0.0	0.0	0,0,0	-6.40e-03	-3.63e-03	-2.94e-	
03115,123,128	30.0	5.81e-03	0.02	3.82e-03	116,116,128	0.0	0.0	0.0	0,0,0				
	60.0	6.32e-03	0.02	3.76e-03	116,116,128	0.0	0.0	0.0	0,0,0				
26	0.0	5.85e-03	0.02	3.22e-03	116,116,128	0.0	0.0	0.0	0,0,0	-5.43e-03	-3.38e-03	-2.88e-	
03115,123,128	27.5	8.15e-03	0.02	1.06e-03	116,116,128	0.0	0.0	0.0	0,0,0				
	55.0	7.94e-03	0.02	2.23e-03	116,116,128	0.0	0.0	0.0	0,0,0				
27	0.0	7.45e-03	0.02	2.59e-03	115,115,128	0.0	0.0	0.0	0,0,0	-4.59e-03	-3.21e-03	-2.88e-	
03115,123,128	27.5	6.93e-03	0.02	2.14e-03	115,115,128	0.0	0.0	0.0	0,0,0				
	55.0	4.33e-03	0.01	5.03e-03	112,112,128	0.0	0.0	0.0	0,0,0				
28	0.0	4.94e-03	0.01	5.74e-03	112,113,128	0.0	0.0	0.0	0,0,0	-4.64e-03	-3.68e-03	-3.46e-	
03117,123,128	30.0	6.13e-03	0.02	7.27e-03	112,112,128	0.0	0.0	0.0	0,0,0				
	60.0	0.01	0.03	0.01	112,112,128	0.0	0.0	0.0	0,0,0				
29	0.0	0.01	0.03	0.02	112,112,128	0.0	0.0	0.0	0,0,0	-5.23e-03	-4.79e-03	-4.70e-	



03117,123,128											
	30.0	0.01	0.03	0.01112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0			
30	0.0	0.02	0.05	0.02112,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128											
	272.5	0.03	0.07	0.03112,111,128	0.0	0.0	0.0	0,0,0			
	545.0	0.02	0.07	0.03111,111,128	0.0	0.0	0.0	0,0,0			
31	0.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0	3.37e-03	3.04e-03	2.96e-
03112,125,128											
	30.0	0.01	0.04	0.02111,111,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	0.02111,111,128	0.0	0.0	0.0	0,0,0			
32	0.0	0.01	0.03	0.01111,111,128	0.0	0.0	0.0	0,0,0	2.04e-03	1.65e-03	1.56e-
03112,125,128											
	30.0	7.61e-03	0.02	8.88e-03111,111,128	0.0	0.0	0.0	0,0,0			
	60.0	6.09e-03	0.02	6.99e-03111,111,128	0.0	0.0	0.0	0,0,0			
33	0.0	5.39e-03	0.02	6.18e-03111,111,128	0.0	0.0	0.0	0,0,0	1.55e-03	1.16e-03	1.06e-
03112,125,128											
	27.5	5.74e-03	0.01	2.98e-03116,116,128	0.0	0.0	0.0	0,0,0			
	55.0	6.70e-03	0.02	3.13e-03116,116,128	0.0	0.0	0.0	0,0,0			
34	0.0	6.64e-03	0.02	3.01e-03115,115,128	0.0	0.0	0.0	0,0,0	1.84e-03	1.19e-03	1.10e-
03116,125,128											
	27.5	5.71e-03	0.02	2.87e-03115,115,128	0.0	0.0	0.0	0,0,0			
	55.0	5.49e-03	0.01	6.07e-03112,112,128	0.0	0.0	0.0	0,0,0			
35	0.0	6.20e-03	0.02	6.85e-03112,112,128	0.0	0.0	0.0	0,0,0	2.18e-03	1.03e-03	8.08e-
04116,123,128											
	30.0	7.71e-03	0.02	8.77e-03112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	0.01112,112,128	0.0	0.0	0.0	0,0,0			
36	0.0	0.01	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0	1.26e-03	-6.15e-04	-5.74e-
04116,124,128											
	30.0	0.02	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
37	0.0	0.02	0.06	0.03112,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-
0.01115,124,128											
	253.5	0.02	0.06	0.02112,111,128	0.0	0.0	0.0	0,0,0			
	507.0	0.02	0.07	0.03114,111,128	0.0	0.0	0.0	0,0,0			
38	0.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0	2.87e-03	2.58e-03	2.54e-
03117,123,128											
	30.0	0.01	0.04	0.02111,111,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	0.02111,111,128	0.0	0.0	0.0	0,0,0			
39	0.0	0.01	0.03	0.01111,111,128	0.0	0.0	0.0	0,0,0	2.02e-03	1.33e-03	1.18e-
03117,123,128											
	30.0	6.98e-03	0.02	8.64e-03111,111,128	0.0	0.0	0.0	0,0,0			
	60.0	5.65e-03	0.02	6.90e-03111,111,128	0.0	0.0	0.0	0,0,0			
40	0.0	4.98e-03	0.02	6.10e-03111,111,128	0.0	0.0	0.0	0,0,0	2.03e-03	9.68e-04	7.32e-
04117,123,128											
	27.5	5.00e-03	0.01	3.11e-03116,117,128	0.0	0.0	0.0	0,0,0			
	55.0	5.72e-03	0.01	3.45e-03116,117,128	0.0	0.0	0.0	0,0,0			
41	0.0	5.74e-03	0.02	3.36e-03115,115,128	0.0	0.0	0.0	0,0,0	2.76e-03	1.08e-03	6.91e-
04117,123,128											
	27.5	5.51e-03	0.02	2.41e-03115,115,128	0.0	0.0	0.0	0,0,0			
	55.0	4.97e-03	0.01	4.80e-03112,112,128	0.0	0.0	0.0	0,0,0			
42	0.0	5.64e-03	0.01	5.50e-03112,112,128	0.0	0.0	0.0	0,0,0	3.27e-03	9.82e-04	4.41e-
04117,123,128											
	30.0	6.13e-03	0.01	5.97e-03112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	9.61e-03	0.02	0.01112,112,128	0.0	0.0	0.0	0,0,0			
43	0.0	0.01	0.03	0.01112,112,128	0.0	0.0	0.0	0,0,0	2.69e-03	-7.41e-04	-6.55e-
04117,125,128											
	30.0	9.77e-03	0.02	9.83e-03112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	0.01112,112,128	0.0	0.0	0.0	0,0,0			
44	0.0	0.01	0.03	0.01112,111,128	0.0	0.0	0.0	0,0,0	0.05	0.04	0.04 117,123,1
28											
	195.0	0.04	0.11	0.05112,111,128	0.0	0.0	0.0	0,0,0			
	390.0	0.04	0.10	0.05112,112,128	0.0	0.0	0.0	0,0,0			
45	0.0	0.03	0.08	0.03112,112,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 113,126,1
28											
	30.0	0.02	0.06	0.03112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0			
46	0.0	0.01	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 112,125,1
28											
	30.0	0.01	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	0.01120,116,128	0.0	0.0	0.0	0,0,0			
47	0.0	0.01	0.03	0.01120,120,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 112,125,1
28											
	27.5	0.01	0.03	0.01116,116,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	8.41e-03116,116,128	0.0	0.0	0.0	0,0,0			
48	0.0	0.02	0.06	6.15e-							
03118,118,1280.0											
		0.0	0.0	0,0,0	0.27	0.16	0.13117,123,128				



	226.8	0.02	0.08	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	453.5	0.12	0.40	0.07118,116,128	0.0	0.0	0.0	0,0,0			
49	0.0	0.01	0.04	4.84e-03118,118,128	0.0	0.0	0.0	0,0,0	-0.24	-0.14	-
0.12117,123,128	226.8	0.02	0.07	0.01117,117,128	0.0	0.0	0.0	0,0,0			
	453.5	0.11	0.37	0.07116,116,128	0.0	0.0	0.0	0,0,0			
50	0.0	8.10e-03	0.04	0.0 122,122,0	0.0	0.0	0.0	0,0,0	-0.14	-0.10	-
0.09117,123,128	226.8	0.02	0.07	0.02114,122,128	0.0	0.0	0.0	0,0,0			
	453.5	0.07	0.26	0.05117,117,128	0.0	0.0	0.0	0,0,0			
51	0.0	9.16e-03	0.04	5.31e-03122,122,128	0.0	0.0	0.0	0,0,0	-0.16	-0.11	-
0.09121,126,128	226.8	0.03	0.12	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	453.5	8.37e-03	0.03	4.42e-03119,119,128	0.0	0.0	0.0	0,0,0			
53	0.0	8.00e-03	0.02	5.86e-03121,121,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-
0.02117,123,128	27.5	0.01	0.03	9.55e-03121,121,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	9.90e-03121,121,128	0.0	0.0	0.0	0,0,0			
56	0.0	0.02	0.04	0.02117,117,128	0.0	0.0	0.0	0,0,0	-5.47e-03	3.44e-03	2.96e-
03117,127,128	27.5	0.01	0.04	0.02121,121,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0			
59	0.0	0.02	0.04	0.02117,117,128	0.0	0.0	0.0	0,0,0	-7.32e-03	3.63e-03	3.00e-
03117,127,128	27.5	0.01	0.04	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0			
62	0.0	0.02	0.04	0.02117,117,128	0.0	0.0	0.0	0,0,0	6.84e-03	4.39e-03	3.78e-
03114,127,128	27.5	0.01	0.03	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0			
65	0.0	6.24e-03	0.02	4.75e-03113,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-
0.01117,123,128	27.5	9.07e-03	0.02	8.43e-03113,113,128	0.0	0.0	0.0	0,0,0			
	55.0	9.40e-03	0.03	8.77e-03113,113,128	0.0	0.0	0.0	0,0,0			
67	0.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-
0.02117,123,128	30.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0			
68	0.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0	6.82e-03	4.96e-03	4.50e-
03114,127,128	30.0	0.01	0.02	0.01113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	6.45e-03	0.02	4.15e-03113,113,128	0.0	0.0	0.0	0,0,0			
69	0.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0	7.60e-03	5.08e-03	4.45e-
03114,127,128	30.0	8.88e-03	0.02	8.36e-03113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	4.71e-03	0.01	1.83e-03118,118,128	0.0	0.0	0.0	0,0,0			
70	0.0	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0	8.48e-03	5.99e-03	5.37e-
03114,127,128	30.0	9.69e-03	0.02	9.77e-03113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	5.69e-03	0.01	3.85e-03113,113,128	0.0	0.0	0.0	0,0,0			
71	0.0	9.97e-03	0.03	9.24e-03113,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-
0.01117,123,128	30.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0			
72	0.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-
0.02117,123,128	30.0	0.02	0.06	0.02113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.07	0.03113,113,128	0.0	0.0	0.0	0,0,0			
73	0.0	7.52e-03	0.02	4.90e-03113,113,128	0.0	0.0	0.0	0,0,0	6.90e-03	5.41e-03	5.04e-
03114,127,128	30.0	0.01	0.03	8.25e-05118,118,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.05	6.03e-03118,118,128	0.0	0.0	0.0	0,0,0			
74	0.0	5.49e-03	0.01	2.22e-03118,118,128	0.0	0.0	0.0	0,0,0	7.46e-03	5.29e-03	4.74e-
03114,127,128	30.0	0.02	0.04	4.31e-03118,118,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.06	0.01118,118,128	0.0	0.0	0.0	0,0,0			
75	0.0	6.59e-03	0.02	4.58e-03113,113,128	0.0	0.0	0.0	0,0,0	8.60e-03	6.43e-03	5.89e-
03114,127,128	30.0	0.01	0.03	6.21e-04118,118,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.05	7.11e-03118,118,128	0.0	0.0	0.0	0,0,0			
76	0.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-
0.01117,123,128	30.0	0.02	0.06	0.02113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.03121,121,128	0.0	0.0	0.0	0,0,0			
77	0.0	0.04	0.11	0.04121,121,128	0.0	0.0	0.0	0,0,0	0.02	0.01	0.01 117,123,1
28	35.5	0.05	0.14	0.05117,117,128	0.0	0.0	0.0	0,0,0			



	71.0	0.06	0.18	0.06117,117,128	0.0	0.0	0.0	0,0,0			
78	0.0	0.01	0.05	2.62e-03116,115,128	0.0	0.0	0.0	0,0,0	-0.14	0.14	-
0.07113,126,128	51.5	7.12e-03	0.02	6.09e-03120,119,128	0.0	0.0	0.0	0,0,0			
	103.0	0.03	0.10	0.01116,116,128	0.0	0.0	0.0	0,0,0			
79	0.0	0.03	0.11	0.01115,115,128	0.0	0.0	0.0	0,0,0	-0.14	0.14	-
0.07113,126,128	198.8	0.03	0.09	0.04112,113,128	0.0	0.0	0.0	0,0,0			
	397.5	0.03	0.11	0.04111,111,128	0.0	0.0	0.0	0,0,0			
80	0.0	0.04	0.12	0.04112,112,128	0.0	0.0	0.0	0,0,0	-		
0.020.02	0.02120,125,128										
	180.0	0.05	0.16	0.06113,111,128	0.0	0.0	0.0	0,0,0			
	360.0	0.05	0.17	0.05111,111,128	0.0	0.0	0.0	0,0,0			
81	0.0	0.04	0.14	0.05113,113,128	0.0	0.0	0.0	0,0,0	-0.18	-0.17	-
0.17111,124,128	198.8	0.06	0.21	0.06119,119,128	0.0	0.0	0.0	0,0,0			
	397.5	0.05	0.15	0.01111,119,128	0.0	0.0	0.0	0,0,0			
82	0.0	0.04	0.14	0.02111,111,128	0.0	0.0	0.0	0,0,0	-0.28	-0.22	-
0.21111,124,128	167.5	0.03	0.11	0.02119,119,128	0.0	0.0	0.0	0,0,0			
	335.0	3.53e-03	0.02	0.0115,115,0	0.0	0.0	0.0	0,0,0			
83	0.0	0.04	0.10	0.04113,113,128	0.0	0.0	0.0	0,0,0	0.09	0.07	-
0.06115,123,128	145.0	0.04	0.10	0.04117,117,128	0.0	0.0	0.0	0,0,0			
	290.0	0.03	0.08	0.01118,118,128	0.0	0.0	0.0	0,0,0			
84	0.0	0.03	0.07	8.29e-03118,118,128	0.0	0.0	0.0	0,0,0	-0.07	0.02	7.06e-
03118,123,128	178.0	0.02	0.05	0.02122,122,128	0.0	0.0	0.0	0,0,0			
	356.0	0.07	0.18	0.04118,118,128	0.0	0.0	0.0	0,0,0			
85	0.0	0.04	0.10	0.02118,118,128	0.0	0.0	0.0	0,0,0	0.09	0.03	0.01118,123,1
28	178.0	0.03	0.07	0.03119,119,128	0.0	0.0	0.0	0,0,0			
	356.0	0.09	0.22	0.04117,117,128	0.0	0.0	0.0	0,0,0			
86	0.0	0.03	0.07	0.01118,118,128	0.0	0.0	0.0	0,0,0	0.07	0.01	8.51e-
03118,123,128	178.0	0.03	0.07	0.03120,119,128	0.0	0.0	0.0	0,0,0			
	356.0	0.07	0.18	0.03117,117,128	0.0	0.0	0.0	0,0,0			
87	0.0	0.05	0.16	0.05117,117,128	0.0	0.0	0.0	0,0,0	-9.42e-03	-8.81e-03	-8.63e-
03115,126,128	142.5	0.04	0.12	0.05121,117,128	0.0	0.0	0.0	0,0,0			
	285.0	8.50e-03	0.04	7.65e-03114,122,128	0.0	0.0	0.0	0,0,0			
88	0.0	0.02	0.06	7.48e-03118,118,128	0.0	0.0	0.0	0,0,0	-0.01	-8.02e-03	-7.38e-
03115,123,128	30.0	0.02	0.05	5.44e-03118,118,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	5.89e-04118,118,128	0.0	0.0	0.0	0,0,0			
89	0.0	0.01	0.03	5.76e-04118,118,128	0.0	0.0	0.0	0,0,0	-9.79e-03	-8.00e-03	-7.57e-
03115,123,128	30.0	0.01	0.04	3.84e-03118,118,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	3.13e-03118,118,128	0.0	0.0	0.0	0,0,0			
90	0.0	0.04	0.11	0.02118,118,128	0.0	0.0	0.0	0,0,0	-5.37e-03	-1.30e-03	-3.25e-
04115,123,128	27.2	0.04	0.09	0.02118,118,128	0.0	0.0	0.0	0,0,0			
	54.5	0.03	0.08	0.02118,118,128	0.0	0.0	0.0	0,0,0			
91	0.0	0.05	0.12	0.03117,117,128	0.0	0.0	0.0	0,0,0	-0.01	-3.58e-03	-2.39e-
03115,124,128	30.0	0.04	0.11	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.02117,117,128	0.0	0.0	0.0	0,0,0			
92	0.0	0.04	0.10	0.02117,117,128	0.0	0.0	0.0	0,0,0	-0.01	-3.04e-03	-1.78e-
03119,124,128	30.0	0.03	0.09	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0			
93	0.0	6.25e-03	0.02	5.25e-03114,122,128	0.0	0.0	0.0	0,0,0	6.53e-03	6.00e-03	5.87e-
03113,126,128	30.0	4.47e-03	0.02	3.03e-03114,122,128	0.0	0.0	0.0	0,0,0			
	60.0	3.97e-03	0.01	2.29e-03113,113,128	0.0	0.0	0.0	0,0,0			
95	0.0	0.01	0.03	3.02e-03118,118,128	0.0	0.0	0.0	0,0,0	-8.02e-03	-6.95e-03	-6.71e-
03117,123,128	27.5	0.01	0.04	4.75e-03118,118,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.04	3.14e-03118,118,128	0.0	0.0	0.0	0,0,0			
97	0.0	0.03	0.06	0.02118,118,128	0.0	0.0	0.0	0,0,0	-2.29e-03	1.19e-03	1.16e-
03115,127,128	27.2	0.03	0.07	0.02118,118,128	0.0	0.0	0.0	0,0,0			
	54.5	0.03	0.07	0.02118,118,128	0.0	0.0	0.0	0,0,0			
98	0.0	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0	-8.94e-03	-1.79e-03	-4.39e-
04119,124,128	30.0	0.03	0.08	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.04	0.09	0.03117,117,128	0.0	0.0	0.0	0,0,0			



99	0.0	0.02	0.06	0.01117,117,128	0.0	0.0	0.0	0,0,0	-8.99e-03	-1.65e-03	-2.34e-
04119,124,128	30.0	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.02117,117,128	0.0	0.0	0.0	0,0,0			
100	0.0	2.82e-03	8.88e-03	1.15e-03113,113,128	0.0	0.0	0.0	0,0,0	5.95e-03	5.60e-03	5.52e-
03113,126,128	30.0	4.17e-03	0.02	1.14e-03118,118,128	0.0	0.0	0.0	0,0,0			
	60.0	4.61e-03	0.02	0.0 118,118,0	0.0	0.0	0.0	0,0,0			
101	0.0	0.10	0.36	0.07117,117,128	0.0	0.0	0.0	0,0,0	-		
0.050.03	0.03115,123,128										
	381.0	0.01	0.05	7.95e-03118,116,128	0.0	0.0	0.0	0,0,0			
	762.0	0.11	0.38	0.07118,118,128	0.0	0.0	0.0	0,0,0			
102	0.0	0.10	0.35	0.07117,117,128	0.0	0.0	0.0	0,0,0	0.04	0.03	0.02 115,123,1
28											
	381.0	0.01	0.06	8.79e-03116,116,128	0.0	0.0	0.0	0,0,0			
	762.0	0.12	0.40	0.08118,118,128	0.0	0.0	0.0	0,0,0			
103	0.0	0.08	0.28	0.05117,117,128	0.0	0.0	0.0	0,0,0	0.06	-0.03	-
0.03117,123,128											
	381.0	0.02	0.07	0.02113,113,128	0.0	0.0	0.0	0,0,0			
	762.0	0.05	0.20	0.03118,118,128	0.0	0.0	0.0	0,0,0			
104	0.0	0.02	0.04	0.02115,115,128	0.0	0.0	0.0	0,0,0	6.97e-03	6.18e-03	5.98e-
03112,125,128											
	27.5	0.01	0.04	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	0.01119,119,128	0.0	0.0	0.0	0,0,0			
105	0.0	0.01	0.03	0.02119,119,128	0.0	0.0	0.0	0,0,0	8.94e-03	8.16e-03	7.96e-
03112,125,128											
	30.0	0.01	0.03	0.01111,111,128	0.0	0.0	0.0	0,0,0			
	60.0	6.13e-03	0.01	6.23e-03111,111,128	0.0	0.0	0.0	0,0,0			
106	0.0	7.19e-03	0.02	7.35e-03111,111,128	0.0	0.0	0.0	0,0,0	9.55e-03	8.92e-03	8.76e-
03112,125,128											
	30.0	7.37e-03	0.02	3.11e-03116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.04	2.43e-03116,116,128	0.0	0.0	0.0	0,0,0			
107	0.0	0.02	0.06	1.91e-03116,116,128	0.0	0.0	0.0	0,0,0	-		
0.060.01	0.01116,123,128										
	195.0	0.03	0.08	0.03116,116,128	0.0	0.0	0.0	0,0,0			
	390.0	0.05	0.13	0.02116,116,128	0.0	0.0	0.0	0,0,0			
108	0.0	0.03	0.07	0.01116,116,128	0.0	0.0	0.0	0,0,0	-9.99e-03	-4.19e-03	-2.78e-
03115,123,128											
	30.0	0.03	0.07	0.01116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.06	0.02116,116,128	0.0	0.0	0.0	0,0,0			
109	0.0	0.02	0.05	0.01116,116,128	0.0	0.0	0.0	0,0,0	-7.86e-03	-2.99e-03	-1.84e-
03115,123,128											
	30.0	0.04	0.10	0.03116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.06	0.14	0.04116,116,128	0.0	0.0	0.0	0,0,0			
110	0.0	0.01	0.04	0.01118,118,128	0.0	0.0	0.0	0,0,0	-2.18e-03	1.28e-03	1.24e-
03115,126,128											
	27.5	0.01	0.03	8.26e-03118,118,128	0.0	0.0	0.0	0,0,0			
	55.0	5.39e-03	0.01	4.10e-03117,117,128	0.0	0.0	0.0	0,0,0			
112	0.0	0.01	0.04	2.46e-03117,117,128	0.0	0.0	0.0	0,0,0	-6.89e-03	-6.52e-03	-6.46e-
03117,123,128											
	27.5	0.01	0.04	3.55e-03117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	1.31e-03117,117,128	0.0	0.0	0.0	0,0,0			
115	0.0	0.02	0.06	0.02118,118,128	0.0	0.0	0.0	0,0,0	3.79e-03	3.49e-03	3.41e-
03114,127,128											
	33.0	0.02	0.05	0.02118,118,128	0.0	0.0	0.0	0,0,0			
	66.0	0.02	0.05	0.01118,118,128	0.0	0.0	0.0	0,0,0			
118	0.0	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0	6.73e-03	2.55e-03	1.51e-
03113,126,128											
	27.5	0.03	0.08	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.09	0.03118,117,128	0.0	0.0	0.0	0,0,0			
121	0.0	0.03	0.06	0.02117,117,128	0.0	0.0	0.0	0,0,0	7.10e-03	2.57e-03	1.44e-
03113,126,128											
	27.5	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.07	0.02118,117,128	0.0	0.0	0.0	0,0,0			
124	0.0	4.44e-03	0.02	1.74e-04118,118,128	0.0	0.0	0.0	0,0,0	5.37e-03	5.17e-03	5.13e-
03113,126,128											
	27.5	6.70e-03	0.02	1.58e-03118,118,128	0.0	0.0	0.0	0,0,0			
	55.0	6.43e-03	0.02	0.0 118,118,0	0.0	0.0	0.0	0,0,0			
126	0.0	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0	2.40e-03	2.19e-03	2.14e-
03113,126,128											
	27.5	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	55.0	0.02	0.06	0.02115,115,128	0.0	0.0	0.0	0,0,0			
127	0.0	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0	4.36e-03	4.12e-03	4.06e-
03113,126,128											
	30.0	0.02	0.06	0.02117,115,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.05	0.01117,117,128	0.0	0.0	0.0	0,0,0			
128	0.0	0.02	0.05	0.01117,117,128	0.0	0.0	0.0	0,0,0	5.87e-03	5.58e-03	5.51e-



03113,126,128	30.0	0.02	0.06	0.01117,117,128	0.0	0.0	0.0	0,0,0	-		
	60.0	0.02	0.06	0.01117,117,128	0.0	0.0	0.0	0,0,0			
	129	0.0	0.05	0.11	0.03117,117,128	0.0	0.0	0.0			
0.040.03	0.03116,123,128										
	272.5	0.05	0.13	0.05116,115,128	0.0	0.0	0.0	0,0,0			
	545.0	0.06	0.15	0.05116,116,128	0.0	0.0	0.0	0,0,0			
130	0.0	0.04	0.09	0.03116,116,128	0.0	0.0	0.0	0,0,0	-0.01	-7.63e-03	-6.85e-
03115,123,128											
	30.0	0.03	0.08	0.03116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.06	0.02116,116,128	0.0	0.0	0.0	0,0,0			
131	0.0	0.02	0.06	0.02116,116,128	0.0	0.0	0.0	0,0,0	-8.11e-03	-5.15e-03	-4.57e-
03115,123,128											
	30.0	0.03	0.07	0.02116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.03116,116,128	0.0	0.0	0.0	0,0,0			
132	0.0	0.03	0.07	0.02116,116,128	0.0	0.0	0.0	0,0,0	-4.30e-03	-2.46e-03	-2.14e-
03115,123,128											
	27.5	0.03	0.07	0.03116,116,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.08	0.03116,116,128	0.0	0.0	0.0	0,0,0			
133	0.0	0.03	0.08	0.03115,115,128	0.0	0.0	0.0	0,0,0	-7.32e-04	-2.67e-04	-2.63e-
04119,124,128											
	27.5	0.03	0.07	0.03115,115,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
134	0.0	0.03	0.08	0.03115,115,128	0.0	0.0	0.0	0,0,0	3.55e-03	2.62e-03	2.43e-
03116,123,128											
	30.0	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.06	0.02115,115,128	0.0	0.0	0.0	0,0,0			
135	0.0	0.03	0.06	0.02115,115,128	0.0	0.0	0.0	0,0,0	6.78e-03	5.05e-03	4.66e-
03116,123,128											
	30.0	0.03	0.08	0.03115,115,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.03115,115,128	0.0	0.0	0.0	0,0,0			
136	0.0	0.06	0.15	0.05115,115,128	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03 115,123,1
28											
	253.5	0.04	0.10	0.04116,115,128	0.0	0.0	0.0	0,0,0			
	507.0	0.05	0.12	0.03116,116,128	0.0	0.0	0.0	0,0,0			
137	0.0	0.03	0.07	0.01116,116,128	0.0	0.0	0.0	0,0,0	-2.97e-03	-2.87e-03	-2.84e-
03113,126,128											
	30.0	0.03	0.06	0.01116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.06	0.01116,116,128	0.0	0.0	0.0	0,0,0			
138	0.0	0.02	0.05	0.01116,116,128	0.0	0.0	0.0	0,0,0	3.98e-03	-1.48e-03	-1.42e-
03116,126,128											
	30.0	0.03	0.06	0.02116,116,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.07	0.02116,116,128	0.0	0.0	0.0	0,0,0			
139	0.0	0.02	0.06	0.02116,116,128	0.0	0.0	0.0	0,0,0	6.57e-03	1.47e-03	2.83e-
04116,123,128											
	27.5	0.03	0.07	0.02116,116,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.07	0.02116,116,128	0.0	0.0	0.0	0,0,0			
140	0.0	0.03	0.08	0.02115,115,128	0.0	0.0	0.0	0,0,0	0.01	3.79e-03	2.32e-
03116,123,128											
	27.5	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.06	0.02115,115,128	0.0	0.0	0.0	0,0,0			
141	0.0	0.03	0.08	0.02115,115,128	0.0	0.0	0.0	0,0,0	0.01	6.22e-03	4.32e-
03116,123,128											
	30.0	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.06	0.01115,115,128	0.0	0.0	0.0	0,0,0			
142	0.0	0.03	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0	0.02	8.22e-03	5.96e-
03115,123,128											
	30.0	0.03	0.08	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	60.0	0.04	0.10	0.02115,115,128	0.0	0.0	0.0	0,0,0			
143	0.0	0.07	0.17	0.04115,115,128	0.0	0.0	0.0	0,0,0	-0.11	0.05	-
0.03115,123,128											
	195.0	0.04	0.11	0.03116,115,128	0.0	0.0	0.0	0,0,0			
	390.0	0.07	0.17	5.44e-03115,115,128	0.0	0.0	0.0	0,0,0			
144	0.0	0.04	0.11	4.32e-03115,115,128	0.0	0.0	0.0	0,0,0	-6.26e-03	-2.28e-03	-1.37e-
03117,123,128											
	30.0	0.03	0.07	7.95e-04115,115,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	4.67e-03115,115,128	0.0	0.0	0.0	0,0,0			
145	0.0	0.01	0.03	3.91e-03115,115,128	0.0	0.0	0.0	0,0,0	-7.65e-03	-2.14e-03	-8.27e-
04117,123,128											
	30.0	7.41e-03	0.02	8.77e-03112,113,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.02	0.01112,113,128	0.0	0.0	0.0	0,0,0			
146	0.0	8.42e-03	0.02	0.01112,113,128	0.0	0.0	0.0	0,0,0	-6.54e-03	-1.07e-03	2.40e-
04117,123,128											
	27.5	0.01	0.02	0.01112,112,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	0.01112,112,128	0.0	0.0	0.0	0,0,0			
147	0.0	0.01	0.03	1.22e-03117,117,128	0.0	0.0	0.0	0,0,0	-7.07e-03	-6.95e-03	-6.91e-
03111,124,128											



	30.0	0.01	0.03	9.89e-04	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	8.72e-03	0.02	3.21e-03	117,117,128	0.0	0.0	0.0	0,0,0			
149	0.0	0.04	0.09	0.03	117,117,128	0.0	0.0	0.0	0,0,0	5.10e-03	4.85e-03	4.79e-
03114,127,128												
	27.5	0.03	0.08	0.03	117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
152	0.0	0.04	0.09	0.03	117,117,128	0.0	0.0	0.0	0,0,0	9.14e-03	4.84e-03	3.77e-
03121,126,128												
	27.5	0.03	0.09	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
155	0.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0	9.32e-03	4.67e-03	3.51e-
03113,126,128												
	27.5	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
158	0.0	5.71e-03	0.02	0.0	117,117,0	0.0	0.0	0.0	0,0,0	5.86e-03	5.67e-03	5.62e-
03113,126,128												
	30.2	7.64e-03	0.02	2.37e-03	117,115,128	0.0	0.0	0.0	0,0,0			
	60.4	6.55e-03	0.02	1.09e-03	117,115,128	0.0	0.0	0.0	0,0,0			
160	0.0	8.58e-03	0.02	4.99e-03	117,117,128	0.0	0.0	0.0	0,0,0	-7.61e-03	-7.47e-03	-7.44e-
03111,124,128												
	30.0	0.01	0.04	2.28e-04	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.05	5.58e-04	117,117,128	0.0	0.0	0.0	0,0,0			
161	0.0	0.04	0.09	0.03	117,117,128	0.0	0.0	0.0	0,0,0	8.60e-03	7.62e-03	7.41e-
03118,123,128												
	30.0	0.03	0.09	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
162	0.0	0.04	0.09	0.03	117,117,128	0.0	0.0	0.0	0,0,0	0.01	7.51e-03	6.22e-
03121,126,128												
	30.0	0.04	0.09	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
163	0.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0	0.01	7.03e-03	5.64e-
03121,126,128												
	30.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.07	0.01	117,117,128	0.0	0.0	0.0	0,0,0			
164	0.0	7.16e-03	0.02	1.13e-03	117,115,128	0.0	0.0	0.0	0,0,0	6.15e-03	5.85e-03	5.79e-
03121,126,128												
	30.2	8.44e-03	0.03	2.39e-03	115,115,128	0.0	0.0	0.0	0,0,0			
	60.4	6.71e-03	0.02	0.0	115,118,0	0.0	0.0	0.0	0,0,0			
165	0.0	0.04	0.09	0.02	117,117,128	0.0	0.0	0.0	0,0,0	0.01	0.01	9.72e-
03117,123,128												
	30.0	0.05	0.12	0.03	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.06	0.14	0.03	117,117,128	0.0	0.0	0.0	0,0,0			
166	0.0	0.04	0.09	0.02	117,117,128	0.0	0.0	0.0	0,0,0	0.02	9.80e-03	8.28e-
03121,126,128												
	30.0	0.05	0.12	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.06	0.14	0.03	117,117,128	0.0	0.0	0.0	0,0,0			
167	0.0	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0	0.02	8.86e-03	7.22e-
03121,126,128												
	30.0	0.04	0.10	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.05	0.11	0.02	117,117,128	0.0	0.0	0.0	0,0,0			
168	0.0	6.39e-03	0.02	7.09e-04	115,115,128	0.0	0.0	0.0	0,0,0	6.71e-03	5.91e-03	5.75e-
03117,123,128												
	30.2	9.48e-03	0.03	1.76e-03	118,118,128	0.0	0.0	0.0	0,0,0			
	60.4	9.68e-03	0.03	4.94e-04	118,118,128	0.0	0.0	0.0	0,0,0			
169	0.0	0.01	0.03	1.20e-03	118,118,128	0.0	0.0	0.0	0,0,0	7.64e-03	6.18e-03	5.84e-
03117,123,128												
	30.2	0.01	0.04	5.20e-03	118,118,128	0.0	0.0	0.0	0,0,0			
	60.4	0.02	0.04	5.16e-03	118,118,128	0.0	0.0	0.0	0,0,0			
171	0.0	0.01	0.04	4.85e-03	118,118,128	0.0	0.0	0.0	0,0,0	9.20e-03	6.93e-03	6.37e-
03117,123,128												
	30.2	0.02	0.04	6.06e-03	118,118,128	0.0	0.0	0.0	0,0,0			
	60.4	0.01	0.04	3.25e-03	118,118,128	0.0	0.0	0.0	0,0,0			
173	0.0	0.02	0.05	0.02	111,111,128	0.0	0.0	0.0	0,0,0	-8.00e-03	1.93e-03	1.72e-
03117,125,128												
	25.8	0.02	0.06	0.02	113,111,128	0.0	0.0	0.0	0,0,0			
	51.5	0.02	0.06	0.02	113,111,128	0.0	0.0	0.0	0,0,0			
174	0.0	0.02	0.06	0.02	113,111,128	0.0	0.0	0.0	0,0,0	-7.33e-03	2.89e-03	2.70e-
03117,125,128												
	25.8	0.02	0.08	0.03	116,117,128	0.0	0.0	0.0	0,0,0			
	51.5	0.03	0.10	0.03	116,117,128	0.0	0.0	0.0	0,0,0			
175	0.0	0.03	0.11	0.03	119,119,128	0.0	0.0	0.0	0,0,0	8.13e-03	7.29e-03	7.08e-
03112,125,128												
	36.0	0.03	0.10	0.03	111,111,128	0.0	0.0	0.0	0,0,0			
	72.0	0.03	0.09	0.03	111,111,128	0.0	0.0	0.0	0,0,0			
176	0.0	0.03	0.12	0.04	111,111,128	0.0	0.0	0.0	0,0,0	0.05	0.04	0.04 111,124,1
28												
	162.8	7.72e-03	0.02	6.69e-03	112,111,128	0.0	0.0	0.0	0,0,0			



	325.5	0.03	0.09	0.02116,116,128	0.0	0.0	0.0	0,0,0			
177	0.0	0.03	0.09	0.02115,115,128	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01 112,127,1
28	180.0	0.04	0.13	0.05111,111,128	0.0	0.0	0.0	0,0,0			
	360.0	0.04	0.14	0.04111,111,128	0.0	0.0	0.0	0,0,0			
178	0.0	0.03	0.10	0.03111,111,128	0.0	0.0	0.0	0,0,0	0.13	0.12	-
0.11111,124,128	198.8	0.04	0.13	0.04111,111,128	0.0	0.0	0.0	0,0,0			
	397.5	0.02	0.07	0.01112,112,128	0.0	0.0	0.0	0,0,0			
180	0.0	0.02	0.05	5.74e-03117,117,128	0.0	0.0	0.0	0,0,0	9.85e-03	7.04e-03	6.36e-
03117,123,128	27.5	0.01	0.04	1.78e-03117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	9.02e-03	0.03	2.54e-03117,117,128	0.0	0.0	0.0	0,0,0			
182	0.0	9.84e-03	0.03	2.78e-03117,117,128	0.0	0.0	0.0	0,0,0	0.01	7.80e-03	6.84e-
03117,123,128	30.0	0.01	0.03	0.01114,114,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.05	0.02114,114,128	0.0	0.0	0.0	0,0,0			
183	0.0	0.02	0.06	2.52e-03117,117,128	0.0	0.0	0.0	0,0,0	-0.10	-0.06	-
0.06117,123,128	287.5	0.04	0.12	0.06114,114,128	0.0	0.0	0.0	0,0,0			
	575.0	0.02	0.05	0.01121,121,128	0.0	0.0	0.0	0,0,0			
184	0.0	0.10	0.24	0.05117,117,128	0.0	0.0	0.0	0,0,0	-0.14	-	
0.050.04117,123,128	254.5	0.05	0.11	0.05117,117,128	0.0	0.0	0.0	0,0,0			
	509.0	0.04	0.11	0.03117,117,128	0.0	0.0	0.0	0,0,0			
185	0.0	0.10	0.25	0.05117,117,128	0.0	0.0	0.0	0,0,0	-0.16	-	
0.050.03117,123,128	254.5	0.05	0.15	0.05121,121,128	0.0	0.0	0.0	0,0,0			
	509.0	0.10	0.23	7.49e-03111,111,128	0.0	0.0	0.0	0,0,0			
186	0.0	0.08	0.20	0.03117,117,128	0.0	0.0	0.0	0,0,0	-		
0.100.04	0.03117,126,128	0.06	0.16	0.05121,121,128	0.0	0.0	0.0	0,0,0			
	254.5	0.12	0.26	0.01119,119,128	0.0	0.0	0.0	0,0,0			
187	0.0	0.02	0.06	0.02114,114,128	0.0	0.0	0.0	0,0,0	0.01	6.48e-03	5.31e-
03117,123,128	30.0	0.03	0.09	0.04114,114,128	0.0	0.0	0.0	0,0,0			
	60.0	0.04	0.12	0.05114,114,128	0.0	0.0	0.0	0,0,0			
188	0.0	0.10	0.37	0.06115,115,128	0.0	0.0	0.0	0,0,0	0.11	0.06	0.05 115,123,1
28	145.0	0.01	0.08	9.93e-03116,116,128	0.0	0.0	0.0	0,0,0			
	290.0	0.04	0.17	0.02115,115,128	0.0	0.0	0.0	0,0,0			
189	0.0	0.06	0.20	0.04115,115,128	0.0	0.0	0.0	0,0,0	-0.11	-0.08	-
0.08118,123,128	145.0	0.03	0.09	0.02118,118,128	0.0	0.0	0.0	0,0,0			
	290.0	5.78e-03	0.02	3.23e-03113,113,128	0.0	0.0	0.0	0,0,0			
190	0.0	0.05	0.16	0.07114,114,128	0.0	0.0	0.0	0,0,0	-		
0.020.02	0.02114,127,128	0.06	0.19	0.07117,117,128	0.0	0.0	0.0	0,0,0			
	103.5	0.08	0.24	0.07117,117,128	0.0	0.0	0.0	0,0,0			
191	0.0	0.01	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0	0.10	0.09	0.08 111,124,1
28	198.8	0.02	0.07	7.64e-03112,112,128	0.0	0.0	0.0	0,0,0			
	397.5	0.10	0.33	0.08120,120,128	0.0	0.0	0.0	0,0,0			
192	0.0	0.10	0.33	0.08120,120,128	0.0	0.0	0.0	0,0,0	-0.11	-0.02	-8.55e-
03120,125,128	167.5	0.04	0.13	0.03120,120,128	0.0	0.0	0.0	0,0,0			
	335.0	8.24e-03	0.03	7.59e-03116,118,128	0.0	0.0	0.0	0,0,0			
193	0.0	0.09	0.35	0.06117,117,128	0.0	0.0	0.0	0,0,0	0.08	0.05	0.05 116,123,1
28	390.0	0.06	0.23	0.05117,117,128	0.0	0.0	0.0	0,0,0			
	780.0	0.02	0.10	7.57e-03117,117,128	0.0	0.0	0.0	0,0,0			
194	0.0	0.01	0.04	0.01121,121,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 118,123,1
28	30.0	0.01	0.03	9.35e-03113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0			
195	0.0	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	30.0	0.02	0.04	0.01117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	6.15e-03	0.02	2.21e-03121,121,128	0.0	0.0	0.0	0,0,0			
196	0.0	0.06	0.15	2.93e-03111,111,128	0.0	0.0	0.0	0,0,0	-0.03	-0.01	-7.95e-
03113,126,128	30.0	0.05	0.12	7.73e-03119,119,128	0.0	0.0	0.0	0,0,0			
	60.0	0.04	0.09	0.01120,120,128	0.0	0.0	0.0	0,0,0			
197	0.0	0.07	0.16	5.84e-03119,119,128	0.0	0.0	0.0	0,0,0	-0.03	-0.02	-
0.01113,126,128	30.0	0.06	0.13	0.01119,119,128	0.0	0.0	0.0	0,0,0			
	60.0	0.04	0.10	0.01120,120,128	0.0	0.0	0.0	0,0,0			



198	0.0	0.06	0.18	0.06117,117,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	30.0	0.05	0.14	0.04117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.10	0.03117,117,128	0.0	0.0	0.0	0,0,0			
199	0.0	0.01	0.03	9.98e-							
03113,113,1280.0	0.0	0.0	0.0	0,0,0	0.02	0.02118,123,128					
	30.0	7.53e-03	0.02	5.74e-03113,113,128	0.0	0.0	0.0	0,0,0			
	60.0	6.93e-03	0.02	5.48e-03113,113,128	0.0	0.0	0.0	0,0,0			
200	0.0	4.97e-03	0.01	1.58e-03121,121,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	30.0	6.88e-03	0.02	5.95e-03122,122,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	0.01118,118,128	0.0	0.0	0.0	0,0,0			
201	0.0	0.03	0.08	9.81e-03120,119,128	0.0	0.0	0.0	0,0,0	-0.03	-0.01	-6.79e-
03113,126,128	30.0	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0,0,0			
	60.0	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0,0,0			
202	0.0	0.04	0.09	0.01120,120,128	0.0	0.0	0.0	0,0,0	-0.04	-0.02	-
0.01113,126,128	30.0	0.04	0.09	0.02120,120,128	0.0	0.0	0.0	0,0,0			
	60.0	0.04	0.09	0.02120,120,128	0.0	0.0	0.0	0,0,0			
203	0.0	0.03	0.08	0.02117,117,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	30.0	0.02	0.05	0.01117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	9.11e-03	0.03	3.16e-03117,117,128	0.0	0.0	0.0	0,0,0			
205	0.0	6.07e-03	0.02	4.70e-							
03113,113,1280.0	0.0	0.0	0.0	0,0,0	0.02	0.01118,123,128					
	27.5	4.52e-03	0.01	2.69e-03113,113,128	0.0	0.0	0.0	0,0,0			
	55.0	5.48e-03	0.02	4.02e-03113,113,128	0.0	0.0	0.0	0,0,0			
208	0.0	0.01	0.02	9.92e-03118,118,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-
0.01113,126,128	27.5	0.01	0.04	0.01118,118,128	0.0	0.0	0.0	0,0,0			
	55.0	0.02	0.04	0.02118,118,128	0.0	0.0	0.0	0,0,0			
211	0.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0	-0.03	-8.97e-03	-4.57e-
03113,126,128	27.5	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0			
214	0.0	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0,0,0	-0.03	-0.01	-9.23e-
03113,126,128	27.5	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0,0,0			
	55.0	0.03	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0			
217	0.0	8.40e-03	0.03	3.06e-03117,117,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	27.5	4.91e-03	0.02	2.48e-03114,114,128	0.0	0.0	0.0	0,0,0			
	55.0	8.77e-03	0.03	7.68e-03114,114,128	0.0	0.0	0.0	0,0,0			
219	0.0	0.04	0.18	0.02115,115,128	0.0	0.0	0.0	0,0,0	0.04	0.02	0.02 116,123,1
28	245.0	0.06	0.24	0.04117,117,128	0.0	0.0	0.0	0,0,0			
	490.0	0.01	0.08	9.59e-04117,117,128	0.0	0.0	0.0	0,0,0			
220	0.0	0.02	0.07	0.01119,115,128	0.0	0.0	0.0	0,0,0	-0.19	0.15	-
0.14118,123,128	245.0	9.23e-03	0.04	6.01e-03115,115,128	0.0	0.0	0.0	0,0,0			
	490.0	0.02	0.07	0.02121,121,128	0.0	0.0	0.0	0,0,0			
221	0.0	0.02	0.06	0.01121,121,128	0.0	0.0	0.0	0,0,0	0.31	0.23	0.21 115,123,1
28	245.0	0.02	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	490.0	0.01	0.04	6.09e-03115,115,128	0.0	0.0	0.0	0,0,0			
223	0.0	4.80e-03	0.01	8.24e-							
05117,117,1280.0	26.0	5.29e-03	0.01	2.01e-03117,117,128	0.0	0.0	0.0	0,0,0			
	52.0	3.54e-03	9.28e-03	1.13e-03117,117,128	0.0	0.0	0.0	0,0,0			
226	0.0	0.02	0.05	0.02117,117,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01113,126,128	26.0	0.02	0.05	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	52.0	0.02	0.05	0.02117,116,128	0.0	0.0	0.0	0,0,0			
229	0.0	0.04	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0	0.03	-6.61e-03	-2.33e-
03120,126,128	26.0	0.03	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0			
	52.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0			
232	0.0	0.04	0.09	0.03120,120,128	0.0	0.0	0.0	0,0,0	-0.03	-0.01	-6.62e-
03113,126,128	26.0	0.04	0.09	0.03120,120,128	0.0	0.0	0.0	0,0,0			
	52.0	0.04	0.09	0.03119,120,128	0.0	0.0	0.0	0,0,0			
235	0.0	7.45e-03	0.02	9.17e-03115,118,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	26.0	8.18e-03	0.02	0.01122,122,128	0.0	0.0	0.0	0,0,0			
	52.0	8.87e-03	0.03	0.01114,114,128	0.0	0.0	0.0	0,0,0			
237	0.0	3.89e-03	0.01	1.23e-							



03117,117,128	0.0	0.0	0.0,0	0.02	0.01	0.01118,123,128						
26.0	3.59e-03	9.68e-03	2.30e-03	03117,117,128	0.0	0.0	0.0	0.0,0				
52.0	1.06e-03	2.78e-03	3.84e-04	03117,115,128	0.0	0.0	0.0	0.0,0				
240	0.0	0.02	0.06	0.03117,117,128	0.0	0.0	0.0	0.0,0	-0.01	-9.92e-03	-9.55e-	
03113,126,128												
26.0	0.02	0.05	0.03117,117,128	0.0	0.0	0.0	0.0,0					
52.0	0.02	0.04	0.02121,115,128	0.0	0.0	0.0	0.0,0					
243	0.0	0.04	0.09	0.03119,120,128	0.0	0.0	0.0	0.0,0	0.03	4.69e-03	-2.79e-	
04120,125,128												
26.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0.0,0					
52.0	0.03	0.06	0.03119,119,128	0.0	0.0	0.0	0.0,0					
246	0.0	0.04	0.10	0.04120,120,128	0.0	0.0	0.0	0.0,0	-0.03	-9.02e-03	-4.25e-	
03113,126,128												
26.0	0.04	0.09	0.03119,119,128	0.0	0.0	0.0	0.0,0					
52.0	0.03	0.07	0.03119,119,128	0.0	0.0	0.0	0.0,0					
248	0.0	9.01e-03	0.03	0.01114,114,128	0.0	0.0	0.0	0.0,0	-0.02	-0.02	-	
0.02113,126,128												
26.0	0.01	0.03	0.01122,122,128	0.0	0.0	0.0	0.0,0					
52.0	0.01	0.03	0.01122,122,128	0.0	0.0	0.0	0.0,0					
250	0.0	6.55e-03	0.02	7.04e-03	03115,115,128	0.0	0.0	0.0,0	-9.48e-03	-8.87e-03	-8.72e-	
03114,127,128												
27.5	8.72e-03	0.02	0.01115,115,128	0.0	0.0	0.0	0.0,0					
55.0	8.58e-03	0.02	0.01119,119,128	0.0	0.0	0.0	0.0,0					
251	0.0	9.28e-03	0.03	0.01119,119,128	0.0	0.0	0.0	0.0,0	-9.48e-03	-8.79e-03	-8.62e-	
03114,127,128												
30.0	0.01	0.03	0.01111,111,128	0.0	0.0	0.0	0.0,0					
60.0	7.89e-03	0.02	9.78e-03	03111,111,128	0.0	0.0	0.0	0.0,0				
252	0.0	8.28e-03	0.02	0.01111,111,128	0.0	0.0	0.0	0.0,0	-8.64e-03	-7.94e-03	-7.77e-	
03114,127,128												
30.0	9.71e-03	0.03	0.01112,112,128	0.0	0.0	0.0	0.0,0					
60.0	8.80e-03	0.02	9.18e-03	03112,112,128	0.0	0.0	0.0	0.0,0				
253	0.0	0.01	0.03	0.01112,112,128	0.0	0.0	0.0	0.0,0	0.01	0.01	-	
0.01114,127,128												
51.0	0.02	0.06	2.37e-03	03117,115,128	0.0	0.0	0.0	0.0,0				
102.0	0.04	0.11	0.01115,115,128	0.0	0.0	0.0	0.0,0					
254	0.0	0.03	0.08	0.01115,115,128	0.0	0.0	0.0	0.0,0	-0.01	-0.01	-9.73e-	
03115,123,128												
37.5	0.02	0.06	7.18e-03	03115,115,128	0.0	0.0	0.0	0.0,0				
75.0	0.02	0.05	9.02e-03	03115,115,128	0.0	0.0	0.0	0.0,0				
255	0.0	0.01	0.04	6.33e-03	03115,115,128	0.0	0.0	0.0,0	-0.02	-0.01	-	
0.01115,123,128												
37.5	6.03e-03	0.02	2.21e-03	03115,115,128	0.0	0.0	0.0	0.0,0				
75.0	7.25e-03	0.02	4.54e-03	03112,112,128	0.0	0.0	0.0	0.0,0				
256	0.0	6.88e-03	0.02	4.57e-03	03112,112,128	0.0	0.0	0.0,0	-0.02	-0.01	-9.91e-	
03115,123,128												
37.5	9.07e-03	0.02	7.27e-03	03112,112,128	0.0	0.0	0.0	0.0,0				
75.0	6.62e-03	0.02	3.77e-03	03120,120,128	0.0	0.0	0.0	0.0,0				
257	0.0	0.01	0.03	7.82e-03	03111,111,128	0.0	0.0	0.0,0	-0.01	-8.32e-03	-7.55e-	
03115,123,128												
29.8	0.02	0.04	0.01119,119,128	0.0	0.0	0.0	0.0,0					
59.5	0.02	0.05	0.02119,119,128	0.0	0.0	0.0	0.0,0					
258	0.0	0.02	0.05	0.02119,119,128	0.0	0.0	0.0	0.0,0	-0.01	-6.86e-03	-6.11e-	
03115,123,128												
29.8	0.02	0.06	0.02119,119,128	0.0	0.0	0.0	0.0,0					
59.5	0.02	0.05	0.02115,115,128	0.0	0.0	0.0	0.0,0					
259	0.0	0.02	0.05	0.01115,115,128	0.0	0.0	0.0	0.0,0	-8.63e-03	-5.63e-03	-4.96e-	
03117,123,128												
29.8	0.02	0.05	0.02115,115,128	0.0	0.0	0.0	0.0,0					
59.5	0.02	0.05	0.01115,115,128	0.0	0.0	0.0	0.0,0					
260	0.0	0.02	0.05	0.01115,115,128	0.0	0.0	0.0	0.0,0	-7.11e-03	-4.65e-03	-4.13e-	
03117,123,128												
29.8	0.02	0.05	0.01115,115,128	0.0	0.0	0.0	0.0,0					
59.5	0.02	0.05	7.54e-03	03115,115,128	0.0	0.0	0.0	0.0,0				
261	0.0	0.02	0.05	8.34e-03	03115,115,128	0.0	0.0	0.0,0	-5.25e-03	-3.61e-03	-3.28e-	
03117,123,128												
27.5	0.02	0.06	0.01115,115,128	0.0	0.0	0.0	0.0,0					
55.0	0.02	0.05	7.32e-03	03115,115,128	0.0	0.0	0.0	0.0,0				
262	0.0	0.02	0.06	7.70e-03	03115,115,128	0.0	0.0	0.0,0	-4.07e-03	-3.14e-03	-3.00e-	
03117,126,128												
30.0	0.02	0.06	0.01115,115,128	0.0	0.0	0.0	0.0,0					
60.0	0.02	0.06	6.67e-03	03115,115,128	0.0	0.0	0.0	0.0,0				
263	0.0	0.02	0.07	7.75e-03	03115,115,128	0.0	0.0	0.0,0	-3.52e-03	-2.84e-03	-2.67e-	
03113,126,128												
30.0	0.03	0.10	0.02115,115,128	0.0	0.0	0.0	0.0,0					
60.0	0.04	0.11	0.02115,115,128	0.0	0.0	0.0	0.0,0					
264	0.0	0.06	0.16	0.03115,115,128	0.0	0.0	0.0	0.0,0	0.04	0.02	0.02	115,123,1



	136.0	0.03	0.08	0.04112,111,128	0.0	0.0	0.0	0,0,0			
	272.0	0.07	0.19	0.05115,115,128	0.0	0.0	0.0	0,0,0			
265	0.0	0.05	0.15	0.04115,115,128	0.0	0.0	0.0	0,0,0	7.18e-03	5.19e-03	4.69e-
03112,125,128											
	37.5	0.04	0.12	0.03115,115,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.11	0.03115,115,128	0.0	0.0	0.0	0,0,0			
266	0.0	0.03	0.10	0.03115,115,128	0.0	0.0	0.0	0,0,0	3.79e-03	1.46e-03	8.73e-
04112,125,128											
	37.5	0.02	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.06	0.02115,115,128	0.0	0.0	0.0	0,0,0			
267	0.0	0.02	0.05	0.01115,115,128	0.0	0.0	0.0	0,0,0	-5.58e-03	-1.32e-03	-5.32e-
04117,123,128											
	37.5	0.01	0.04	9.15e-03119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.01119,119,128	0.0	0.0	0.0	0,0,0			
268	0.0	0.02	0.04	0.01120,120,128	0.0	0.0	0.0	0,0,0	-5.16e-03	-2.02e-03	-1.41e-
03117,123,128											
	27.9	8.10e-03	0.02	3.35e-03112,112,128	0.0	0.0	0.0	0,0,0			
	55.8	5.74e-03	0.02	2.24e-03112,112,128	0.0	0.0	0.0	0,0,0			
269	0.0	6.96e-03	0.02	2.57e-03112,112,128	0.0	0.0	0.0	0,0,0	-5.01e-03	-1.96e-03	-1.36e-
03117,123,128											
	27.9	5.27e-03	0.01	1.85e-03115,115,128	0.0	0.0	0.0	0,0,0			
	55.8	5.53e-03	0.02	5.37e-04115,115,128	0.0	0.0	0.0	0,0,0			
270	0.0	5.88e-03	0.02	1.85e-03112,112,128	0.0	0.0	0.0	0,0,0	-4.61e-03	-1.87e-03	-1.34e-
03117,123,128											
	27.9	7.96e-03	0.02	2.33e-03117,115,128	0.0	0.0	0.0	0,0,0			
	55.8	8.18e-03	0.02	7.95e-04115,115,128	0.0	0.0	0.0	0,0,0			
271	0.0	7.61e-03	0.02	3.51e-04117,115,128	0.0	0.0	0.0	0,0,0	-3.82e-03	-1.59e-03	-1.18e-
03117,123,128											
	27.9	0.01	0.03	3.36e-03117,115,128	0.0	0.0	0.0	0,0,0			
	55.8	9.81e-03	0.03	6.60e-04117,117,128	0.0	0.0	0.0	0,0,0			
272	0.0	0.01	0.03	9.75e-04117,117,128	0.0	0.0	0.0	0,0,0	-2.78e-03	-1.25e-03	-9.91e-
04117,123,128											
	27.5	0.01	0.04	3.11e-03117,117,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	3.18e-04117,117,128	0.0	0.0	0.0	0,0,0			
273	0.0	0.01	0.03	4.83e-04117,117,128	0.0	0.0	0.0	0,0,0	-1.74e-03	-1.11e-03	-1.01e-
03121,126,128											
	30.0	0.01	0.04	1.16e-03117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.01	0.03	3.86e-03117,117,128	0.0	0.0	0.0	0,0,0			
274	0.0	0.01	0.03	3.91e-03117,117,128	0.0	0.0	0.0	0,0,0	-1.76e-03	-1.55e-03	-1.50e-
03112,125,128											
	30.0	0.02	0.05	3.71e-03117,117,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.06	4.69e-03117,117,128	0.0	0.0	0.0	0,0,0			
275	0.0	0.03	0.09	0.01117,115,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-7.76e-
03115,123,128											
	143.5	0.02	0.04	0.02112,111,128	0.0	0.0	0.0	0,0,0			
	287.0	0.08	0.22	0.07115,115,128	0.0	0.0	0.0	0,0,0			
276	0.0	0.06	0.16	0.05115,115,128	0.0	0.0	0.0	0,0,0	-3.04e-03	-2.67e-03	-2.60e-
03117,123,128											
	37.5	0.05	0.13	0.04115,115,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.12	0.04115,115,128	0.0	0.0	0.0	0,0,0			
277	0.0	0.04	0.10	0.03115,115,128	0.0	0.0	0.0	0,0,0	-9.31e-03	-7.55e-03	-7.20e-
03115,123,128											
	37.5	0.02	0.07	0.02115,115,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.06	0.02115,119,128	0.0	0.0	0.0	0,0,0			
278	0.0	0.02	0.05	0.02119,119,128	0.0	0.0	0.0	0,0,0	-0.01	-9.51e-03	-9.07e-
03115,123,128											
	37.5	0.01	0.04	0.01119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02119,119,128	0.0	0.0	0.0	0,0,0			
279	0.0	0.02	0.05	0.01112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-8.17e-03	-7.85e-
03115,123,128											
	27.5	0.01	0.03	6.49e-03112,112,128	0.0	0.0	0.0	0,0,0			
	55.0	7.24e-03	0.02	4.82e-03112,112,128	0.0	0.0	0.0	0,0,0			
280	0.0	9.48e-03	0.03	6.02e-03112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-8.94e-03	-8.67e-
03115,123,128											
	30.0	6.08e-03	0.02	1.55e-03115,115,128	0.0	0.0	0.0	0,0,0			
	60.0	6.79e-03	0.02	3.68e-03112,112,128	0.0	0.0	0.0	0,0,0			
281	0.0	9.01e-03	0.02	5.94e-03112,112,128	0.0	0.0	0.0	0,0,0	-9.04e-03	-8.20e-03	-8.08e-
03115,123,128											
	27.5	7.43e-03	0.02	4.01e-03112,112,128	0.0	0.0	0.0	0,0,0			
	55.0	0.01	0.03	7.63e-03112,112,128	0.0	0.0	0.0	0,0,0			
282	0.0	0.01	0.03	8.43e-03112,112,128	0.0	0.0	0.0	0,0,0	-8.95e-03	-8.52e-03	-8.42e-
03111,124,128											
	27.5	0.01	0.03	7.69e-03112,112,128	0.0	0.0	0.0	0,0,0			
	55.0	0.02	0.04	0.01112,112,128	0.0	0.0	0.0	0,0,0			
283	0.0	0.02	0.05	0.01112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01112,125,128											
	30.0	0.02	0.05	0.01112,112,128	0.0	0.0	0.0	0,0,0			



	60.0	0.02	0.06	0.02112,112,128	0.0	0.0	0.0	0,0,0			
284	0.0	0.03	0.07	0.02112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01112,125,128	30.0	0.02	0.06	0.01112,112,128	0.0	0.0	0.0	0,0,0			
	60.0	0.02	0.06	0.01112,112,128	0.0	0.0	0.0	0,0,0			
285	0.0	0.03	0.06	0.01112,112,128	0.0	0.0	0.0	0,0,0	0.03	-0.02	-
0.02112,125,128	170.0	0.07	0.18	0.09112,111,128	0.0	0.0	0.0	0,0,0			
	340.0	0.07	0.18	0.06112,112,128	0.0	0.0	0.0	0,0,0			
286	0.0	0.05	0.13	0.04112,112,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 113,126,1
28	37.5	0.04	0.10	0.03112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
287	0.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 112,125,1
28	37.5	0.02	0.06	0.02112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
288	0.0	0.02	0.04	0.01112,112,128	0.0	0.0	0.0	0,0,0	0.03	0.03	0.02 112,125,1
28	37.5	0.02	0.04	0.01112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	6.27e-03	0.01	2.11e-03112,112,128	0.0	0.0	0.0	0,0,0			
290	0.0	0.02	0.05	0.02121,121,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	29.8	0.02	0.06	0.03113,121,128	0.0	0.0	0.0	0,0,0			
	59.5	0.02	0.06	0.03113,113,128	0.0	0.0	0.0	0,0,0			
293	0.0	8.99e-03	0.02	7.57e-03113,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.02	-
0.02113,126,128	37.5	0.02	0.05	0.02113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02113,113,128	0.0	0.0	0.0	0,0,0			
299	0.0	0.03	0.07	0.03113,113,128	0.0	0.0	0.0	0,0,0	-0.02	-0.01	-
0.01113,126,128	29.8	0.03	0.07	0.03113,113,128	0.0	0.0	0.0	0,0,0			
	59.5	0.02	0.06	0.03113,113,128	0.0	0.0	0.0	0,0,0			
300	0.0	0.02	0.05	0.02113,113,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01113,126,128	37.5	0.02	0.06	0.02113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02113,113,128	0.0	0.0	0.0	0,0,0			
301	0.0	0.01	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 112,125,1
28	25.8	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0			
	51.5	0.02	0.06	0.02111,111,128	0.0	0.0	0.0	0,0,0			
302	0.0	0.02	0.06	0.02111,111,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02 112,125,1
28	25.8	0.02	0.06	0.02111,111,128	0.0	0.0	0.0	0,0,0			
	51.5	0.01	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0			
303	0.0	0.02	0.07	0.01111,111,128	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03 112,125,1
28	30.5	0.01	0.05	5.90e-03111,111,128	0.0	0.0	0.0	0,0,0			
	61.0	0.02	0.06	3.54e-03116,116,128	0.0	0.0	0.0	0,0,0			
304	0.0	0.02	0.06	3.99e-							
03116,116,128	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03112,125,128				
	30.5	0.03	0.09	0.01116,116,128	0.0	0.0	0.0	0,0,0			
	61.0	0.04	0.12	0.02116,116,128	0.0	0.0	0.0	0,0,0			
305	0.0	0.04	0.14	0.02116,116,128	0.0	0.0	0.0	0,0,0	0.09	0.09	0.09 114,127,1
28	137.8	0.03	0.10	0.04112,113,128	0.0	0.0	0.0	0,0,0			
	275.5	0.02	0.09	0.03111,111,128	0.0	0.0	0.0	0,0,0			
306	0.0	0.03	0.08	0.02112,112,128	0.0	0.0	0.0	0,0,0	0.06	0.06	0.05 111,124,1
28	180.0	0.02	0.08	0.03111,111,128	0.0	0.0	0.0	0,0,0			
	360.0	0.04	0.14	2.52e-03116,116,128	0.0	0.0	0.0	0,0,0			
307	0.0	0.04	0.15	8.91e-							
03115,115,128	0.0	0.0	0.0	0,0,0	0.12	0.06	0.05116,123,128				
	198.8	0.02	0.07	6.64e-03116,116,128	0.0	0.0	0.0	0,0,0			
	397.5	0.04	0.13	0.03120,120,128	0.0	0.0	0.0	0,0,0			
308	0.0	0.04	0.14	0.05117,117,128	0.0	0.0	0.0	0,0,0	0.17	0.10	0.08 116,123,1
28	167.5	0.01	0.05	0.01120,120,128	0.0	0.0	0.0	0,0,0			
	335.0	0.01	0.04	7.74e-03119,119,128	0.0	0.0	0.0	0,0,0			
309	0.0	0.03	0.07	0.03121,121,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01113,126,128	26.5	0.03	0.08	0.03113,113,128	0.0	0.0	0.0	0,0,0			
	53.0	0.03	0.09	0.03113,113,128	0.0	0.0	0.0	0,0,0			
310	0.0	0.02	0.05	0.02113,113,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01113,126,128	37.5	0.03	0.08	0.03113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.09	0.03113,113,128	0.0	0.0	0.0	0,0,0			



311	0.0	0.04	0.10	0.04113,113,128	0.0	0.0	0.0	0,0,0	-9.59e-03	-9.30e-03	-9.23e-
03113,126,128	26.5	0.05	0.13	0.05113,113,128	0.0	0.0	0.0	0,0,0			
	53.0	0.06	0.16	0.06113,113,128	0.0	0.0	0.0	0,0,0			
312	0.0	0.05	0.13	0.05113,113,128	0.0	0.0	0.0	0,0,0	-8.04e-03	-7.49e-03	-7.36e-
03113,126,128	121.0	0.05	0.12	0.06113,113,128	0.0	0.0	0.0	0,0,0			
	242.0	7.93e-03	0.02	1.03e-03121,117,128	0.0	0.0	0.0	0,0,0			
313	0.0	0.08	0.21	0.09113,113,128	0.0	0.0	0.0	0,0,0	0.02	-	
0.010.01117,126,128	121.0	0.06	0.15	0.07113,114,128	0.0	0.0	0.0	0,0,0			
	242.0	0.02	0.04	0.01121,117,128	0.0	0.0	0.0	0,0,0			
314	0.0	7.81e-03	0.02	3.78e-03121,121,128	0.0	0.0	0.0	0,0,0	8.14e-03	7.51e-03	7.36e-
03113,126,128	37.5	6.76e-03	0.02	4.11e-03121,121,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0			
315	0.0	0.01	0.04	0.01121,117,128	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01 113,126,1
28	37.5	0.01	0.03	0.01121,121,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02121,121,128	0.0	0.0	0.0	0,0,0			
316	0.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0	6.15e-03	5.78e-03	5.69e-
03111,124,128	37.5	5.53e-03	0.01	3.74e-03113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	7.86e-03	0.02	6.93e-03113,113,128	0.0	0.0	0.0	0,0,0			
317	0.0	0.02	0.04	0.02121,121,128	0.0	0.0	0.0	0,0,0	9.04e-03	8.45e-03	8.30e-
03112,125,128	37.5	9.87e-03	0.03	9.10e-03113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0			
319	0.0	6.59e-03	0.02	5.71e-03113,113,128	0.0	0.0	0.0	0,0,0	5.65e-03	5.37e-03	5.30e-
03111,124,128	37.5	4.46e-03	0.01	2.64e-03113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	9.83e-03	0.03	9.58e-03113,113,128	0.0	0.0	0.0	0,0,0			
322	0.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0	7.99e-03	7.50e-03	7.38e-
03112,125,128	37.5	7.50e-03	0.02	6.44e-03113,113,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0			
324	0.0	0.04	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.02 120,125,1
28	37.5	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.07	0.03119,119,128	0.0	0.0	0.0	0,0,0			
325	0.0	0.04	0.09	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.03 120,125,1
28	37.5	0.04	0.09	0.03119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.08	0.02119,119,128	0.0	0.0	0.0	0,0,0			
326	0.0	0.04	0.09	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.03 120,125,1
28	37.5	0.05	0.13	0.03119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.07	0.17	0.04119,119,128	0.0	0.0	0.0	0,0,0			
327	0.0	0.12	0.30	0.07119,119,128	0.0	0.0	0.0	0,0,0	0.39	0.36	0.35 116,123,1
28	1140.0	0.01	0.03	0.01117,115,128	0.0	0.0	0.0	0,0,0			
	2280.0	0.13	0.31	0.08120,120,128	0.0	0.0	0.0	0,0,0			
328	0.0	0.07	0.17	0.04120,120,128	0.0	0.0	0.0	0,0,0	-0.06	-0.03	-
0.03119,124,128	37.5	0.06	0.13	0.04120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.10	0.03120,120,128	0.0	0.0	0.0	0,0,0			
329	0.0	0.04	0.08	0.02120,120,128	0.0	0.0	0.0	0,0,0	-0.05	-0.03	-
0.03119,124,128	37.5	0.04	0.09	0.03120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.09	0.03120,120,128	0.0	0.0	0.0	0,0,0			
330	0.0	0.03	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0	-0.05	-0.03	-
0.02119,124,128	37.5	0.04	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.09	0.03120,120,128	0.0	0.0	0.0	0,0,0			
332	0.0	8.81e-03	0.03	8.89e-03114,114,128	0.0	0.0	0.0	0,0,0	4.61e-03	4.42e-03	4.37e-
03114,127,128	37.5	3.88e-03	0.01	2.59e-03114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	6.42e-03	0.02	6.25e-03114,114,128	0.0	0.0	0.0	0,0,0			
335	0.0	0.01	0.03	0.01114,114,128	0.0	0.0	0.0	0,0,0	6.89e-03	6.23e-03	6.11e-
03116,123,128	37.5	6.11e-03	0.02	5.75e-03114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	8.62e-03	0.03	9.38e-03114,114,128	0.0	0.0	0.0	0,0,0			
337	0.0	7.61e-03	0.02	7.45e-03114,114,128	0.0	0.0	0.0	0,0,0	4.11e-03	3.99e-03	3.96e-
03113,126,128	37.5	6.35e-03	0.02	5.69e-03114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.04	0.01114,114,128	0.0	0.0	0.0	0,0,0			
338	0.0	0.01	0.03	0.01114,114,128	0.0	0.0	0.0	0,0,0	6.37e-03	5.47e-03	5.29e-



03117,123,128												
	37.5	8.39e-03	0.02	8.62e-03	0.0	0.0	0.0	0.0,0				
	75.0	0.01	0.04	0.02114,114,128	0.0	0.0	0.0	0.0,0				
339	0.0	0.02	0.04	0.02114,114,128	0.0	0.0	0.0	0.0,0	2.53e-03	2.12e-03	2.02e-	
03113,126,128												
	37.5	0.01	0.03	0.01114,114,128	0.0	0.0	0.0	0.0,0				
	75.0	0.02	0.04	0.02114,114,128	0.0	0.0	0.0	0.0,0				
340	0.0	0.02	0.05	0.02122,122,128	0.0	0.0	0.0	0.0,0	4.24e-03	3.14e-03	2.95e-	
03117,123,128												
	37.5	0.01	0.04	0.01122,122,128	0.0	0.0	0.0	0.0,0				
	75.0	0.02	0.04	0.02122,122,128	0.0	0.0	0.0	0.0,0				
341	0.0	0.02	0.06	0.02114,114,128	0.0	0.0	0.0	0.0,0	9.13e-03	6.81e-03	6.22e-	
03113,126,128												
	121.0	0.01	0.04	0.02118,118,128	0.0	0.0	0.0	0.0,0				
	242.0	0.02	0.04	0.01113,113,128	0.0	0.0	0.0	0.0,0				
342	0.0	0.02	0.05	0.02122,122,128	0.0	0.0	0.0	0.0,0	-			
0.020.02 0.02121,126,128												
	121.0	0.03	0.10	0.04114,114,128	0.0	0.0	0.0	0.0,0				
	242.0	0.04	0.11	0.04114,114,128	0.0	0.0	0.0	0.0,0				
343	0.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0.0,0	2.87e-03	2.70e-03	2.66e-	
03111,124,128												
	37.5	9.45e-03	0.03	7.46e-03	0.0	0.0	0.0	0.0,0				
	75.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0.0,0				
344	0.0	0.02	0.07	0.03114,114,128	0.0	0.0	0.0	0.0,0	0.02	0.02	0.02 112,125,1	
28												
	37.5	0.02	0.06	0.02114,114,128	0.0	0.0	0.0	0.0,0				
	75.0	9.79e-03	0.03	8.95e-03	0.0	0.0	0.0	0.0,0				
345	0.0	0.01	0.03	9.91e-03	0.0	0.0	0.0	0.0,0	1.80e-03	1.35e-03	1.24e-	
03114,127,128												
	37.5	4.31e-03	0.01	2.25e-03	0.0	0.0	0.0	0.0,0				
	75.0	5.66e-03	0.02	4.27e-03	0.0	0.0	0.0	0.0,0				
346	0.0	0.01	0.03	9.91e-	0.0	0.0	0.0	0.0,0				
03122,122,1280.0 0.0 0.0,0 0.02 0.02 0.02114,127,128												
	37.5	0.01	0.04	0.01122,122,128	0.0	0.0	0.0	0.0,0				
	75.0	0.01	0.03	0.01118,118,128	0.0	0.0	0.0	0.0,0				
348	0.0	4.70e-03	0.01	3.42e-03	0.0	0.0	0.0	0.0,0	2.08e-03	1.33e-03	1.15e-	
03122,127,128												
	37.5	4.12e-03	0.01	1.45e-04	0.0	0.0	0.0	0.0,0				
	75.0	7.38e-03	0.02	6.52e-03	0.0	0.0	0.0	0.0,0				
351	0.0	0.01	0.03	9.47e-	0.0	0.0	0.0	0.0,0				
03118,118,1280.0 0.0 0.0,0 0.02 0.02 0.02114,127,128												
	37.5	0.01	0.03	0.01118,118,128	0.0	0.0	0.0	0.0,0				
	75.0	6.70e-03	0.02	2.10e-03	0.0	0.0	0.0	0.0,0				
353	0.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0.0,0	0.05	0.03	0.02 120,125,1	
28												
	37.5	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0.0,0				
	75.0	0.03	0.07	0.02119,119,128	0.0	0.0	0.0	0.0,0				
354	0.0	0.04	0.09	0.03119,119,128	0.0	0.0	0.0	0.0,0	0.05	0.03	0.02 120,125,1	
28												
	37.5	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0.0,0				
	75.0	0.03	0.08	0.02119,119,128	0.0	0.0	0.0	0.0,0				
355	0.0	0.04	0.09	0.02119,119,128	0.0	0.0	0.0	0.0,0	0.05	0.03	0.03 120,125,1	
28												
	37.5	0.05	0.12	0.03119,119,128	0.0	0.0	0.0	0.0,0				
	75.0	0.07	0.16	0.04119,119,128	0.0	0.0	0.0	0.0,0				
356	0.0	0.12	0.29	0.07119,119,128	0.0	0.0	0.0	0.0,0	0.35	0.31	0.30 115,123,1	
28												
	1140.0	9.68e-03	0.02	0.01118,116,128	0.0	0.0	0.0	0.0,0				
	2280.0	0.11	0.28	0.06120,120,128	0.0	0.0	0.0	0.0,0				
357	0.0	0.06	0.15	0.03120,120,128	0.0	0.0	0.0	0.0,0	-0.05	-0.03	-	
0.02119,124,128												
	37.5	0.05	0.12	0.03120,120,128	0.0	0.0	0.0	0.0,0				
	75.0	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0.0,0				
358	0.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0.0,0	-0.05	-0.03	-	
0.02119,124,128												
	37.5	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0.0,0				
	75.0	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0.0,0				
359	0.0	0.03	0.06	0.02120,120,128	0.0	0.0	0.0	0.0,0	-0.05	-0.02	-	
0.02119,124,128												
	37.5	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0.0,0				
	75.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0.0,0				
361	0.0	7.44e-03	0.02	6.47e-03	0.0	0.0	0.0	0.0,0	1.73e-03	6.95e-04	5.24e-	
04118,127,128												
	37.5	4.30e-03	0.01	0.0117,117,128	0.0	0.0	0.0	0.0,0				
	75.0	4.60e-03	0.01	3.14e-03	0.0	0.0	0.0	0.0,0				
364	0.0	8.75e-03	0.02	4.58e-	0.0	0.0	0.0	0.0,0				
03117,117,1280.0 0.0 0.0 0.0,0 0.02 0.02 0.02122,127,128												



	37.5	0.01	0.04	0.01117,117,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.03	8.54e-03117,117,128	0.0	0.0	0.0	0,0,0				
366	0.0	5.56e-03	0.02	3.95e-03114,114,128	0.0	0.0	0.0	0,0,0	1.78e-03	6.67e-04	4.63e-	
04118,123,128												
	37.5	4.01e-03	0.01	1.70e-03114,114,128	0.0	0.0	0.0	0,0,0				
	75.0	9.64e-03	0.03	9.03e-03114,114,128	0.0	0.0	0.0	0,0,0				
367	0.0	0.01	0.03	9.37e-								
03117,117,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02118,123,128					
	37.5	0.01	0.03	9.91e-03121,121,128	0.0	0.0	0.0	0,0,0				
	75.0	3.88e-03	9.94e-03	8.80e-04121,121,128	0.0	0.0	0.0	0,0,0				
368	0.0	0.01	0.03	0.01114,114,128	0.0	0.0	0.0	0,0,0	-1.20e-03	-9.33e-04	-8.65e-	
04111,124,128												
	37.5	8.64e-03	0.02	5.70e-03122,122,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.03	8.49e-03122,122,128	0.0	0.0	0.0	0,0,0				
369	0.0	3.58e-03	0.01	4.77e-								
04114,114,128	0.0	0.0	0.0	0,0,0	0.02	0.02	0.02115,123,128					
	37.5	6.81e-03	0.02	3.59e-03122,122,128	0.0	0.0	0.0	0,0,0				
	75.0	0.02	0.05	0.02122,122,128	0.0	0.0	0.0	0,0,0				
370	0.0	0.01	0.04	7.88e-03122,122,128	0.0	0.0	0.0	0,0,0	-5.82e-03	-3.80e-03	-3.29e-	
03113,126,128												
	121.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0				
	242.0	0.01	0.04	7.93e-03121,121,128	0.0	0.0	0.0	0,0,0				
371	0.0	0.02	0.06	0.02122,122,128	0.0	0.0	0.0	0,0,0	0.04	-		
0.040.04113,126,128												
	121.0	0.05	0.14	0.06115,115,128	0.0	0.0	0.0	0,0,0				
	242.0	0.08	0.21	0.09121,121,128	0.0	0.0	0.0	0,0,0				
372	0.0	0.01	0.03	8.47e-03121,121,128	0.0	0.0	0.0	0,0,0	3.08e-03	2.93e-03	2.90e-	
03111,124,128												
	37.5	8.87e-03	0.02	5.72e-03121,121,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.04	0.01121,121,128	0.0	0.0	0.0	0,0,0				
373	0.0	0.06	0.15	0.07121,121,128	0.0	0.0	0.0	0,0,0	-6.58e-03	-5.51e-03	-5.29e-	
03115,123,128												
	37.5	0.04	0.11	0.05121,121,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.08	0.03121,121,128	0.0	0.0	0.0	0,0,0				
374	0.0	9.66e-03	0.03	8.94e-03113,113,128	0.0	0.0	0.0	0,0,0	2.22e-03	1.71e-03	1.58e-	
03114,127,128												
	37.5	4.12e-03	0.01	1.74e-03113,113,128	0.0	0.0	0.0	0,0,0				
	75.0	5.58e-03	0.02	3.87e-03113,113,128	0.0	0.0	0.0	0,0,0				
375	0.0	0.02	0.07	0.03113,113,128	0.0	0.0	0.0	0,0,0	-0.01	-9.09e-03	-8.87e-	
03117,123,128												
	37.5	0.02	0.05	0.02113,113,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0				
377	0.0	4.62e-03	0.01	3.07e-03113,113,128	0.0	0.0	0.0	0,0,0	2.51e-03	1.71e-03	1.51e-	
03114,127,128												
	37.5	4.28e-03	0.01	2.30e-05118,118,128	0.0	0.0	0.0	0,0,0				
	75.0	7.36e-03	0.02	6.18e-03113,113,128	0.0	0.0	0.0	0,0,0				
380	0.0	9.68e-03	0.03	9.77e-03113,113,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-9.94e-	
03117,126,128												
	37.5	5.01e-03	0.01	3.27e-03113,113,128	0.0	0.0	0.0	0,0,0				
	75.0	6.27e-03	0.02	1.49e-03118,118,128	0.0	0.0	0.0	0,0,0				
382	0.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.02 120,125,1	
28												
	37.5	0.03	0.07	0.03119,119,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.07	0.02119,119,128	0.0	0.0	0.0	0,0,0				
383	0.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.02 120,125,1	
28												
	37.5	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.07	0.02119,119,128	0.0	0.0	0.0	0,0,0				
384	0.0	0.04	0.08	0.02119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.03 120,125,1	
28												
	37.5	0.05	0.12	0.03119,119,128	0.0	0.0	0.0	0,0,0				
	75.0	0.06	0.15	0.03119,119,128	0.0	0.0	0.0	0,0,0				
385	0.0	0.11	0.28	0.06119,119,128	0.0	0.0	0.0	0,0,0	0.29	0.28	0.27 119,123,1	
28												
	1140.0	8.85e-03	0.02	9.26e-03118,115,128	0.0	0.0	0.0	0,0,0				
	2280.0	0.10	0.25	0.05120,120,128	0.0	0.0	0.0	0,0,0				
386	0.0	0.06	0.13	0.03120,120,128	0.0	0.0	0.0	0,0,0	-0.04	-0.02	-	
0.02119,124,128												
	37.5	0.04	0.11	0.02120,120,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0				
387	0.0	0.03	0.06	0.01120,120,128	0.0	0.0	0.0	0,0,0	-0.04	-0.02	-	
0.02119,124,128												
	37.5	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0				
388	0.0	0.02	0.06	0.02120,120,128	0.0	0.0	0.0	0,0,0	-0.04	-0.02	-	
0.01119,124,128												
	37.5	0.03	0.06	0.02120,120,128	0.0	0.0	0.0	0,0,0				



	75.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0				
390	0.0	7.30e-03	0.02	5.97e-03114,114,128	0.0	0.0	0.0	0,0,0	1.91e-03	1.13e-03	9.32e-	
04114,127,128	37.5	4.41e-03	0.01	6.84e-05117,117,128	0.0	0.0	0.0	0,0,0				
	75.0	4.86e-03	0.01	3.15e-03114,114,128	0.0	0.0	0.0	0,0,0				
393	0.0	5.10e-03	0.01	9.79e-05117,117,128	0.0	0.0	0.0	0,0,0	-0.01	-9.64e-03	-9.45e-	
03121,126,128	37.5	4.75e-03	0.01	2.83e-03114,114,128	0.0	0.0	0.0	0,0,0				
	75.0	7.95e-03	0.02	7.30e-03114,114,128	0.0	0.0	0.0	0,0,0				
395	0.0	5.84e-03	0.02	3.93e-03114,114,128	0.0	0.0	0.0	0,0,0	1.50e-03	9.80e-04	8.64e-	
04122,127,128	37.5	4.68e-03	0.01	2.12e-03114,114,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.03	9.52e-03114,114,128	0.0	0.0	0.0	0,0,0				
396	0.0	8.99e-03	0.03	8.17e-03114,114,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-	
0.01113,126,128	37.5	0.01	0.03	0.01114,114,128	0.0	0.0	0.0	0,0,0				
	75.0	0.02	0.04	0.02114,114,128	0.0	0.0	0.0	0,0,0				
397	0.0	0.01	0.04	0.01114,114,128	0.0	0.0	0.0	0,0,0	-8.46e-04	-5.72e-04	-5.04e-	
04111,124,128	37.5	0.01	0.03	7.32e-03122,122,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.04	0.01122,122,128	0.0	0.0	0.0	0,0,0				
398	0.0	0.02	0.05	0.02114,114,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-	
0.01112,125,128	37.5	0.02	0.06	0.02122,122,128	0.0	0.0	0.0	0,0,0				
	75.0	0.02	0.06	0.02122,122,128	0.0	0.0	0.0	0,0,0				
399	0.0	0.02	0.04	0.01122,122,128	0.0	0.0	0.0	0,0,0	-4.90e-03	-1.62e-03	-1.58e-	
03121,126,128	121.0	0.01	0.04	0.02119,119,128	0.0	0.0	0.0	0,0,0				
	242.0	0.02	0.05	0.01113,113,128	0.0	0.0	0.0	0,0,0				
400	0.0	0.03	0.08	0.03122,122,128	0.0	0.0	0.0	0,0,0	-			
0.050.04	0.04114,127,128	121.0	0.02	0.06	0.02120,120,128	0.0	0.0	0.0	0,0,0			
		242.0	0.02	0.06	0.02118,118,128	0.0	0.0	0.0	0,0,0			
401	0.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0	2.21e-03	1.02e-03	7.98e-	
04117,123,128	37.5	0.01	0.03	8.94e-03113,113,128	0.0	0.0	0.0	0,0,0				
	75.0	0.01	0.04	0.01113,113,128	0.0	0.0	0.0	0,0,0				
402	0.0	0.01	0.04	9.82e-03118,118,128	0.0	0.0	0.0	0,0,0	-8.87e-03	-8.30e-03	-8.15e-	
03114,127,128	37.5	0.01	0.03	9.20e-03118,118,128	0.0	0.0	0.0	0,0,0				
	75.0	4.57e-03	0.01	4.53e-04118,118,128	0.0	0.0	0.0	0,0,0				
403	0.0	0.01	0.03	0.01113,113,128	0.0	0.0	0.0	0,0,0	1.16e-03	-7.73e-04	-7.15e-	
04116,127,128	37.5	4.99e-03	0.01	3.19e-03113,113,128	0.0	0.0	0.0	0,0,0				
	75.0	6.09e-03	0.02	4.75e-03113,113,128	0.0	0.0	0.0	0,0,0				
404	0.0	5.62e-03	0.02	1.39e-03118,118,128	0.0	0.0	0.0	0,0,0	-8.41e-03	-8.18e-03	-8.12e-	
03114,127,128	37.5	0.01	0.03	6.83e-03118,118,128	0.0	0.0	0.0	0,0,0				
	75.0	8.33e-03	0.02	3.28e-03118,118,128	0.0	0.0	0.0	0,0,0				
406	0.0	5.09e-03	0.01	3.87e-03113,113,128	0.0	0.0	0.0	0,0,0	1.69e-03	-9.36e-04	-8.76e-	
04116,126,128	37.5	5.36e-03	0.01	6.21e-04118,118,128	0.0	0.0	0.0	0,0,0				
	75.0	7.49e-03	0.02	6.32e-03113,113,128	0.0	0.0	0.0	0,0,0				
409	0.0	7.63e-03	0.02	3.29e-03118,118,128	0.0	0.0	0.0	0,0,0	-7.73e-03	-7.49e-03	-7.44e-	
03113,126,128	37.5	9.64e-03	0.03	5.10e-03118,118,128	0.0	0.0	0.0	0,0,0				
	75.0	4.93e-03	0.01	2.05e-03118,118,128	0.0	0.0	0.0	0,0,0				
411	0.0	0.03	0.07	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.02	0.02 120,125,1	
28	37.5	0.03	0.07	0.03119,119,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.07	0.02119,119,128	0.0	0.0	0.0	0,0,0				
412	0.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.02 120,125,1	
28	37.5	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.07	0.02119,119,128	0.0	0.0	0.0	0,0,0				
413	0.0	0.03	0.08	0.03119,119,128	0.0	0.0	0.0	0,0,0	0.05	0.03	0.03 120,125,1	
28	37.5	0.05	0.12	0.03119,119,128	0.0	0.0	0.0	0,0,0				
	75.0	0.06	0.15	0.04119,119,128	0.0	0.0	0.0	0,0,0				
414	0.0	0.11	0.28	0.07119,119,128	0.0	0.0	0.0	0,0,0	0.36	0.32	0.31 118,123,1	
28	1140.0	0.01	0.02	0.01118,116,128	0.0	0.0	0.0	0,0,0				
	2280.0	0.11	0.28	0.07120,120,128	0.0	0.0	0.0	0,0,0				
415	0.0	0.06	0.15	0.04120,120,128	0.0	0.0	0.0	0,0,0	-0.05	-0.03	-	
0.02119,124,128	37.5	0.05	0.12	0.03120,120,128	0.0	0.0	0.0	0,0,0				
	75.0	0.03	0.08	0.02120,120,128	0.0	0.0	0.0	0,0,0				



416	0.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0	-0.05	-0.03	-
0.02119,124,128	37.5	0.03	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.08	0.03120,120,128	0.0	0.0	0.0	0,0,0			
417	0.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0	-0.04	-0.02	-
0.02119,124,128	37.5	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.07	0.02120,120,128	0.0	0.0	0.0	0,0,0			
419	0.0	8.59e-03	0.02	6.66e-03114,114,128	0.0	0.0	0.0	0,0,0	1.99e-03	-1.59e-03	-1.54e-
03116,126,128	37.5	6.68e-03	0.02	4.41e-05117,117,128	0.0	0.0	0.0	0,0,0			
	75.0	4.73e-03	0.01	2.16e-03114,114,128	0.0	0.0	0.0	0,0,0			
422	0.0	5.80e-03	0.02	2.97e-03114,114,128	0.0	0.0	0.0	0,0,0	-8.02e-03	-7.80e-03	-7.75e-
03113,126,128	37.5	0.01	0.03	4.61e-03117,117,128	0.0	0.0	0.0	0,0,0			
	75.0	8.70e-03	0.02	3.28e-03117,117,128	0.0	0.0	0.0	0,0,0			
424	0.0	5.77e-03	0.02	2.89e-03114,114,128	0.0	0.0	0.0	0,0,0	2.76e-03	-1.66e-03	-1.55e-
03116,127,128	37.5	7.34e-03	0.02	8.38e-04117,117,128	0.0	0.0	0.0	0,0,0			
	75.0	6.84e-03	0.02	4.30e-03114,114,128	0.0	0.0	0.0	0,0,0			
425	0.0	9.44e-03	0.03	3.17e-03117,117,128	0.0	0.0	0.0	0,0,0	-7.67e-03	-7.22e-03	-7.11e-
03114,127,128	37.5	0.01	0.03	7.98e-03117,117,128	0.0	0.0	0.0	0,0,0			
	75.0	9.33e-03	0.03	3.93e-03117,117,128	0.0	0.0	0.0	0,0,0			
426	0.0	9.50e-03	0.03	7.16e-03114,114,128	0.0	0.0	0.0	0,0,0	-3.64e-03	-2.67e-03	-2.43e-
03114,127,128	37.5	0.01	0.03	5.00e-03117,117,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.04	8.33e-03117,117,128	0.0	0.0	0.0	0,0,0			
427	0.0	8.59e-03	0.02	2.11e-03117,117,128	0.0	0.0	0.0	0,0,0	-8.18e-03	-7.21e-03	-6.97e-
03114,127,128	37.5	0.02	0.06	0.02117,117,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0			
428	0.0	0.02	0.07	0.02117,117,128	0.0	0.0	0.0	0,0,0	-0.04	-	
0.030.02117,123,128	121.0	0.06	0.16	0.07122,122,128	0.0	0.0	0.0	0,0,0			
	242.0	0.07	0.19	0.07114,114,128	0.0	0.0	0.0	0,0,0			
429	0.0	0.04	0.11	0.04117,117,128	0.0	0.0	0.0	0,0,0	0.04	0.02	0.02 117,123,1
28	121.0	0.07	0.19	0.08122,122,128	0.0	0.0	0.0	0,0,0			
	242.0	0.07	0.20	0.07114,114,128	0.0	0.0	0.0	0,0,0			
430	0.0	0.05	0.13	0.04114,114,128	0.0	0.0	0.0	0,0,0	0.03	0.02	0.02 118,123,1
28	37.5	0.04	0.11	0.04114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.07	0.02114,114,128	0.0	0.0	0.0	0,0,0			
431	0.0	0.05	0.14	0.05114,114,128	0.0	0.0	0.0	0,0,0	0.03	0.02	0.02 118,123,1
28	37.5	0.04	0.11	0.04114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.07	0.02114,114,128	0.0	0.0	0.0	0,0,0			
432	0.0	0.02	0.06	0.02114,114,128	0.0	0.0	0.0	0,0,0	0.03	0.02	0.02 118,127,1
28	37.5	0.02	0.07	0.02114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02114,114,128	0.0	0.0	0.0	0,0,0			
433	0.0	0.02	0.06	0.02114,114,128	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03 118,127,1
28	37.5	0.02	0.07	0.02114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02114,114,128	0.0	0.0	0.0	0,0,0			
435	0.0	0.02	0.05	0.02114,114,128	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03 122,127,1
28	37.5	0.02	0.05	0.01114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	9.65e-03	0.03	5.83e-03114,114,128	0.0	0.0	0.0	0,0,0			
442	0.0	0.02	0.05	0.02114,114,128	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03 122,127,1
28	37.5	0.02	0.04	0.01114,114,128	0.0	0.0	0.0	0,0,0			
	75.0	9.37e-03	0.03	5.47e-03114,114,128	0.0	0.0	0.0	0,0,0			
444	0.0	6.00e-03	0.02	1.84e-03119,119,128	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-
0.03111,124,128	37.5	0.01	0.03	0.01119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.04	0.01119,119,128	0.0	0.0	0.0	0,0,0			
445	0.0	0.01	0.04	0.01119,119,128	0.0	0.0	0.0	0,0,0	-0.04	-0.03	-
0.03111,124,128	37.5	0.02	0.05	0.02119,119,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0			
446	0.0	0.02	0.05	0.01111,111,128	0.0	0.0	0.0	0,0,0	-0.03	-0.03	-
0.03111,124,128	37.5	0.04	0.10	0.03111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.05	0.13	0.04111,111,128	0.0	0.0	0.0	0,0,0			
447	0.0	0.07	0.18	0.07111,111,128	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-



0.04111,124,128											
	230.0	0.07	0.21	0.10111,111,128	0.0	0.0	0.0	0,0,0			
	460.0	0.05	0.13	0.05111,111,128	0.0	0.0	0.0	0,0,0			
448	0.0	0.04	0.10	0.04111,111,128	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01 113,126,1
28											
	37.5	0.03	0.09	0.03111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.09	0.04111,111,128	0.0	0.0	0.0	0,0,0			
449	0.0	0.03	0.07	0.03111,111,128	0.0	0.0	0.0	0,0,0	0.01	0.01	0.01 112,125,1
28											
	37.5	0.02	0.06	0.02111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.06	0.02111,111,128	0.0	0.0	0.0	0,0,0			
450	0.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0	9.03e-03	8.15e-03	7.93e-
03112,125,128											
	37.5	0.01	0.04	0.01111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0			
451	0.0	0.02	0.04	0.02112,112,128	0.0	0.0	0.0	0,0,0	7.29e-03	6.38e-03	6.15e-
03112,125,128											
	37.5	0.01	0.04	0.01112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
452	0.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0	4.96e-03	4.31e-03	4.15e-
03112,125,128											
	37.5	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.07	0.03112,112,128	0.0	0.0	0.0	0,0,0			
453	0.0	0.03	0.08	0.04112,112,128	0.0	0.0	0.0	0,0,0	5.03e-04	3.10e-04	2.94e-
04120,125,128											
	37.5	0.03	0.08	0.04112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.10	0.04112,112,128	0.0	0.0	0.0	0,0,0			
454	0.0	0.05	0.14	0.06112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01111,127,128											
	230.0	0.03	0.08	0.04114,114,128	0.0	0.0	0.0	0,0,0			
	460.0	0.05	0.14	0.06111,111,128	0.0	0.0	0.0	0,0,0			
455	0.0	0.04	0.11	0.04111,111,128	0.0	0.0	0.0	0,0,0	-5.45e-04	3.13e-04	2.97e-
04119,124,128											
	37.5	0.03	0.09	0.04111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.08	0.04111,111,128	0.0	0.0	0.0	0,0,0			
456	0.0	0.03	0.07	0.03111,111,128	0.0	0.0	0.0	0,0,0	-5.02e-03	-4.37e-03	-4.21e-
03111,124,128											
	37.5	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0			
457	0.0	0.02	0.05	0.02111,111,128	0.0	0.0	0.0	0,0,0	-7.36e-03	-6.45e-03	-6.22e-
03111,124,128											
	37.5	0.01	0.04	0.01111,111,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.04	0.02111,111,128	0.0	0.0	0.0	0,0,0			
458	0.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0	-9.10e-03	-8.22e-03	-8.00e-
03111,124,128											
	37.5	0.01	0.04	0.01112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
459	0.0	0.02	0.06	0.02112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01111,124,128											
	37.5	0.02	0.06	0.02112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.03	0.07	0.03112,112,128	0.0	0.0	0.0	0,0,0			
460	0.0	0.03	0.09	0.04112,112,128	0.0	0.0	0.0	0,0,0	-0.01	-0.01	-
0.01113,126,128											
	37.5	0.03	0.09	0.03112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.04	0.10	0.04112,112,128	0.0	0.0	0.0	0,0,0			
461	0.0	0.05	0.14	0.05112,112,128	0.0	0.0	0.0	0,0,0	-0.04	-0.04	-
0.04112,125,128											
	230.0	0.07	0.21	0.10112,112,128	0.0	0.0	0.0	0,0,0			
	460.0	0.07	0.19	0.07112,112,128	0.0	0.0	0.0	0,0,0			
462	0.0	0.05	0.13	0.05112,112,128	0.0	0.0	0.0	0,0,0	0.03	0.03	0.03 112,125,1
28											
	37.5	0.04	0.10	0.03112,112,128	0.0	0.0	0.0	0,0,0			
	75.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0			
463	0.0	0.02	0.05	0.02112,112,128	0.0	0.0	0.0	0,0,0	0.04	0.03	0.03 112,125,1
28											
	37.5	0.02	0.05	0.02120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	0.01	0.04	0.01120,120,128	0.0	0.0	0.0	0,0,0			
464	0.0	0.01	0.04	0.01120,120,128	0.0	0.0	0.0	0,0,0	0.04	0.04	0.03 112,125,1
28											
	37.5	0.01	0.04	0.01120,120,128	0.0	0.0	0.0	0,0,0			
	75.0	6.16e-03	0.02	2.11e-03120,120,128	0.0	0.0	0.0	0,0,0			
Trave											
	rRfck	rRfyk	rPfck	wR	wF	wP	dR	dF	dP		
	0.13	0.40	0.10	0.0	0.0	0.0	-0.28	-0.22	-0.21		
							0.39	0.36	0.35		



Guscio	rRfck	rRfyk	rPfck	Rif. cmb	wR	wF	wP	Rif. cmb
1	4.89e-03	0.01	5.06e-03	118,118,128	mm 0.0	mm 0.0	mm 0.0	0,0,0
2	8.87e-03	0.02	9.15e-03	118,118,128	0.0	0.0	0.0	0,0,0
3	7.74e-03	0.02	8.16e-03	118,118,128	0.0	0.0	0.0	0,0,0
4	7.75e-03	0.02	8.18e-03	115,118,128	0.0	0.0	0.0	0,0,0
5	8.62e-03	0.02	9.28e-03	115,115,128	0.0	0.0	0.0	0,0,0
6	4.17e-03	0.01	4.76e-03	119,119,128	0.0	0.0	0.0	0,0,0
7	5.45e-03	0.01	6.28e-03	118,118,128	0.0	0.0	0.0	0,0,0
8	0.01	0.03	9.14e-03	118,118,128	0.0	0.0	0.0	0,0,0
9	9.15e-03	0.02	8.22e-03	118,118,128	0.0	0.0	0.0	0,0,0
10	8.86e-03	0.02	8.31e-03	118,118,128	0.0	0.0	0.0	0,0,0
11	9.56e-03	0.02	8.89e-03	118,118,128	0.0	0.0	0.0	0,0,0
12	5.65e-03	0.01	6.47e-03	118,115,128	0.0	0.0	0.0	0,0,0
13	5.82e-03	0.01	6.64e-03	118,118,128	0.0	0.0	0.0	0,0,0
14	8.85e-03	0.02	9.09e-03	118,118,128	0.0	0.0	0.0	0,0,0
15	8.38e-03	0.02	8.35e-03	118,118,128	0.0	0.0	0.0	0,0,0
16	8.49e-03	0.02	8.34e-03	118,118,128	0.0	0.0	0.0	0,0,0
17	8.79e-03	0.02	9.02e-03	118,118,128	0.0	0.0	0.0	0,0,0
18	5.80e-03	0.01	6.56e-03	118,115,128	0.0	0.0	0.0	0,0,0
19	5.65e-03	0.01	6.45e-03	118,118,128	0.0	0.0	0.0	0,0,0
20	8.46e-03	0.02	8.87e-03	118,118,128	0.0	0.0	0.0	0,0,0
21	8.10e-03	0.02	8.25e-03	118,118,128	0.0	0.0	0.0	0,0,0
22	8.13e-03	0.02	8.21e-03	118,115,128	0.0	0.0	0.0	0,0,0
23	8.83e-03	0.02	9.09e-03	118,115,128	0.0	0.0	0.0	0,0,0
24	5.55e-03	0.01	6.42e-03	118,115,128	0.0	0.0	0.0	0,0,0
25	4.40e-03	0.01	4.65e-03	116,116,128	0.0	0.0	0.0	0,0,0
26	0.01	0.03	0.01	116,116,128	0.0	0.0	0.0	0,0,0
27	0.03	0.07	0.02	118,118,128	0.0	0.0	0.0	0,0,0
28	0.02	0.06	0.02	118,118,128	0.0	0.0	0.0	0,0,0
29	0.01	0.03	0.01	118,115,128	0.0	0.0	0.0	0,0,0
30	4.72e-03	0.01	5.06e-03	118,116,128	0.0	0.0	0.0	0,0,0
31	8.63e-03	0.02	9.15e-03	116,116,128	0.0	0.0	0.0	0,0,0
32	0.03	0.08	0.03	118,118,128	0.0	0.0	0.0	0,0,0
33	0.02	0.06	0.02	118,118,128	0.0	0.0	0.0	0,0,0
34	0.03	0.06	0.03	118,118,128	0.0	0.0	0.0	0,0,0
35	0.03	0.08	0.04	118,115,128	0.0	0.0	0.0	0,0,0
36	0.01	0.03	0.02	115,115,128	0.0	0.0	0.0	0,0,0
37	0.02	0.05	0.02	118,116,128	0.0	0.0	0.0	0,0,0
38	0.06	0.15	0.06	118,118,128	0.0	0.0	0.0	0,0,0
39	0.05	0.12	0.06	118,118,128	0.0	0.0	0.0	0,0,0
40	0.05	0.12	0.06	118,118,128	0.0	0.0	0.0	0,0,0
41	0.06	0.14	0.06	118,118,128	0.0	0.0	0.0	0,0,0
42	0.02	0.05	0.02	115,116,128	0.0	0.0	0.0	0,0,0
43	0.02	0.05	0.02	118,116,128	0.0	0.0	0.0	0,0,0
44	0.06	0.14	0.06	118,118,128	0.0	0.0	0.0	0,0,0
45	0.05	0.13	0.06	118,118,128	0.0	0.0	0.0	0,0,0
46	0.05	0.13	0.06	118,118,128	0.0	0.0	0.0	0,0,0
47	0.06	0.14	0.06	118,118,128	0.0	0.0	0.0	0,0,0
48	0.02	0.05	0.02	115,116,128	0.0	0.0	0.0	0,0,0
49	0.02	0.05	0.02	115,116,128	0.0	0.0	0.0	0,0,0
50	0.06	0.14	0.06	118,118,128	0.0	0.0	0.0	0,0,0
51	0.05	0.12	0.06	118,118,128	0.0	0.0	0.0	0,0,0
52	0.05	0.13	0.06	118,118,128	0.0	0.0	0.0	0,0,0
53	0.06	0.14	0.06	118,118,128	0.0	0.0	0.0	0,0,0
54	0.02	0.05	0.02	115,116,128	0.0	0.0	0.0	0,0,0
55	0.01	0.02	0.01	112,111,128	0.0	0.0	0.0	0,0,0
56	0.03	0.08	0.04	116,116,128	0.0	0.0	0.0	0,0,0
57	0.02	0.04	0.02	116,111,128	0.0	0.0	0.0	0,0,0
58	0.02	0.05	0.02	118,118,128	0.0	0.0	0.0	0,0,0
59	0.04	0.10	0.04	118,118,128	0.0	0.0	0.0	0,0,0
60	7.36e-03	0.02	7.69e-03	118,115,128	0.0	0.0	0.0	0,0,0
61	7.83e-03	0.02	8.12e-03	117,117,128	0.0	0.0	0.0	0,0,0
62	0.02	0.06	0.02	118,118,128	0.0	0.0	0.0	0,0,0
63	0.02	0.05	0.02	118,118,128	0.0	0.0	0.0	0,0,0
64	0.02	0.04	0.02	115,115,128	0.0	0.0	0.0	0,0,0
65	0.02	0.06	0.02	115,115,128	0.0	0.0	0.0	0,0,0
66	0.05	0.13	0.07	111,111,128	0.0	0.0	0.0	0,0,0
67	0.03	0.08	0.04	111,111,128	0.0	0.0	0.0	0,0,0
68	0.03	0.08	0.03	118,118,128	0.0	0.0	0.0	0,0,0
69	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
70	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
71	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
72	0.03	0.07	0.04	113,113,128	0.0	0.0	0.0	0,0,0
73	0.03	0.08	0.04	119,119,128	0.0	0.0	0.0	0,0,0
74	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
75	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0



76	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
77	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
78	0.03	0.07	0.04	120,121,128	0.0	0.0	0.0	0,0,0
79	0.03	0.08	0.04	115,115,128	0.0	0.0	0.0	0,0,0
80	0.03	0.07	0.03	118,115,128	0.0	0.0	0.0	0,0,0
81	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
82	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
83	0.03	0.07	0.03	118,115,128	0.0	0.0	0.0	0,0,0
84	0.03	0.08	0.04	112,112,128	0.0	0.0	0.0	0,0,0
85	0.05	0.12	0.06	112,112,128	0.0	0.0	0.0	0,0,0
86	0.03	0.07	0.03	116,116,128	0.0	0.0	0.0	0,0,0
87	0.02	0.05	0.02	120,116,128	0.0	0.0	0.0	0,0,0
88	0.02	0.05	0.02	118,115,128	0.0	0.0	0.0	0,0,0
89	0.04	0.09	0.03	118,118,128	0.0	0.0	0.0	0,0,0
90	6.96e-03	0.02	7.88e-03	118,118,128	0.0	0.0	0.0	0,0,0
91	7.97e-03	0.02	8.11e-03	117,117,128	0.0	0.0	0.0	0,0,0
92	0.02	0.06	0.03	116,116,128	0.0	0.0	0.0	0,0,0
93	0.02	0.05	0.02	121,121,128	0.0	0.0	0.0	0,0,0
94	0.03	0.06	0.03	121,121,128	0.0	0.0	0.0	0,0,0
95	0.03	0.07	0.03	115,115,128	0.0	0.0	0.0	0,0,0
96	0.02	0.06	0.03	111,111,128	0.0	0.0	0.0	0,0,0
97	0.04	0.11	0.06	116,117,128	0.0	0.0	0.0	0,0,0
98	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
99	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
100	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
101	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
102	0.03	0.08	0.04	113,113,128	0.0	0.0	0.0	0,0,0
103	0.03	0.08	0.04	117,121,128	0.0	0.0	0.0	0,0,0
104	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
105	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
106	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
107	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
108	0.03	0.08	0.04	117,121,128	0.0	0.0	0.0	0,0,0
109	0.03	0.07	0.04	117,121,128	0.0	0.0	0.0	0,0,0
110	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
111	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
112	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
113	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
114	0.04	0.10	0.05	112,111,128	0.0	0.0	0.0	0,0,0
115	0.03	0.07	0.04	112,112,128	0.0	0.0	0.0	0,0,0
116	0.04	0.09	0.04	116,116,128	0.0	0.0	0.0	0,0,0
117	0.03	0.07	0.03	116,116,128	0.0	0.0	0.0	0,0,0
118	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
119	0.04	0.09	0.03	118,118,128	0.0	0.0	0.0	0,0,0
120	7.76e-03	0.02	7.92e-03	115,116,128	0.0	0.0	0.0	0,0,0
121	9.15e-03	0.02	9.18e-03	121,121,128	0.0	0.0	0.0	0,0,0
122	0.04	0.09	0.04	117,117,128	0.0	0.0	0.0	0,0,0
123	0.03	0.06	0.03	121,121,128	0.0	0.0	0.0	0,0,0
124	0.03	0.08	0.03	121,121,128	0.0	0.0	0.0	0,0,0
125	0.05	0.12	0.05	117,117,128	0.0	0.0	0.0	0,0,0
126	0.01	0.03	0.02	117,117,128	0.0	0.0	0.0	0,0,0
127	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
128	0.05	0.13	0.05	117,117,128	0.0	0.0	0.0	0,0,0
129	0.05	0.12	0.05	121,121,128	0.0	0.0	0.0	0,0,0
130	0.05	0.12	0.05	121,121,128	0.0	0.0	0.0	0,0,0
131	0.06	0.14	0.05	117,117,128	0.0	0.0	0.0	0,0,0
132	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
133	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
134	0.05	0.13	0.05	117,117,128	0.0	0.0	0.0	0,0,0
135	0.05	0.12	0.05	117,117,128	0.0	0.0	0.0	0,0,0
136	0.05	0.12	0.05	117,117,128	0.0	0.0	0.0	0,0,0
137	0.05	0.13	0.05	117,117,128	0.0	0.0	0.0	0,0,0
138	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
139	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
140	0.05	0.13	0.05	117,117,128	0.0	0.0	0.0	0,0,0
141	0.05	0.12	0.05	117,117,128	0.0	0.0	0.0	0,0,0
142	0.05	0.12	0.05	117,117,128	0.0	0.0	0.0	0,0,0
143	0.05	0.13	0.05	117,117,128	0.0	0.0	0.0	0,0,0
144	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
145	0.01	0.03	0.01	117,117,128	0.0	0.0	0.0	0,0,0
146	0.05	0.13	0.05	117,117,128	0.0	0.0	0.0	0,0,0
147	0.03	0.07	0.03	121,117,128	0.0	0.0	0.0	0,0,0
148	0.03	0.07	0.03	116,116,128	0.0	0.0	0.0	0,0,0
149	0.04	0.10	0.04	117,117,128	0.0	0.0	0.0	0,0,0
150	8.71e-03	0.02	9.38e-03	113,113,128	0.0	0.0	0.0	0,0,0
151	4.94e-03	0.01	5.03e-03	121,121,128	0.0	0.0	0.0	0,0,0
152	0.01	0.03	0.02	117,117,128	0.0	0.0	0.0	0,0,0



153	0.06	0.15	0.07	113,113,128	0.0	0.0	0.0	0,0,0
154	0.02	0.06	0.02	118,118,128	0.0	0.0	0.0	0,0,0
155	0.01	0.03	0.01	115,115,128	0.0	0.0	0.0	0,0,0
156	5.54e-03	0.01	6.25e-03	117,118,128	0.0	0.0	0.0	0,0,0
157	5.74e-03	0.01	6.20e-03	117,117,128	0.0	0.0	0.0	0,0,0
158	9.51e-03	0.02	8.56e-03	116,116,128	0.0	0.0	0.0	0,0,0
159	0.02	0.06	7.92e-03	118,118,128	0.0	0.0	0.0	0,0,0
160	0.03	0.06	7.70e-03	118,118,128	0.0	0.0	0.0	0,0,0
161	9.73e-03	0.02	8.83e-03	115,115,128	0.0	0.0	0.0	0,0,0
162	5.76e-03	0.01	6.40e-03	117,117,128	0.0	0.0	0.0	0,0,0
163	5.81e-03	0.01	6.30e-03	117,117,128	0.0	0.0	0.0	0,0,0
164	9.45e-03	0.02	8.19e-03	117,116,128	0.0	0.0	0.0	0,0,0
165	0.03	0.09	0.02	118,118,128	0.0	0.0	0.0	0,0,0
166	0.03	0.08	0.01	118,118,128	0.0	0.0	0.0	0,0,0
167	9.29e-03	0.02	8.06e-03	117,115,128	0.0	0.0	0.0	0,0,0
168	5.70e-03	0.01	6.17e-03	117,117,128	0.0	0.0	0.0	0,0,0
169	5.62e-03	0.01	6.23e-03	117,117,128	0.0	0.0	0.0	0,0,0
170	8.53e-03	0.02	8.55e-03	117,117,128	0.0	0.0	0.0	0,0,0
171	0.02	0.06	7.24e-03	118,118,128	0.0	0.0	0.0	0,0,0
172	0.03	0.07	7.72e-03	118,118,128	0.0	0.0	0.0	0,0,0
173	8.47e-03	0.02	8.44e-03	117,115,128	0.0	0.0	0.0	0,0,0
174	5.60e-03	0.01	6.21e-03	117,117,128	0.0	0.0	0.0	0,0,0
175	6.04e-03	0.02	6.06e-03	116,116,128	0.0	0.0	0.0	0,0,0
176	0.02	0.04	0.02	116,116,128	0.0	0.0	0.0	0,0,0
177	0.03	0.09	0.04	113,113,128	0.0	0.0	0.0	0,0,0
178	0.08	0.21	0.06	117,116,128	0.0	0.0	0.0	0,0,0
179	0.02	0.05	0.02	116,116,128	0.0	0.0	0.0	0,0,0
180	7.01e-03	0.02	6.37e-03	117,116,128	0.0	0.0	0.0	0,0,0
181	7.36e-03	0.02	6.21e-03	118,118,128	0.0	0.0	0.0	0,0,0
182	0.02	0.05	0.02	118,118,128	0.0	0.0	0.0	0,0,0
183	0.03	0.08	0.04	113,113,128	0.0	0.0	0.0	0,0,0
184	0.06	0.15	0.07	118,118,128	0.0	0.0	0.0	0,0,0
185	0.02	0.05	0.02	115,115,128	0.0	0.0	0.0	0,0,0
186	8.20e-03	0.02	7.57e-03	115,118,128	0.0	0.0	0.0	0,0,0
187	0.02	0.04	0.01	118,118,128	0.0	0.0	0.0	0,0,0
188	0.07	0.17	0.07	118,118,128	0.0	0.0	0.0	0,0,0
189	0.04	0.10	0.03	118,118,128	0.0	0.0	0.0	0,0,0
190	0.04	0.09	0.03	118,118,128	0.0	0.0	0.0	0,0,0
191	0.06	0.15	0.06	115,115,128	0.0	0.0	0.0	0,0,0
192	0.01	0.03	0.01	118,118,128	0.0	0.0	0.0	0,0,0
193	0.03	0.07	0.02	118,118,128	0.0	0.0	0.0	0,0,0
194	0.04	0.10	0.03	118,118,128	0.0	0.0	0.0	0,0,0
195	0.08	0.21	0.05	118,118,128	0.0	0.0	0.0	0,0,0
196	0.09	0.22	0.05	118,118,128	0.0	0.0	0.0	0,0,0
197	0.04	0.10	0.03	118,118,128	0.0	0.0	0.0	0,0,0
198	0.03	0.06	0.02	118,118,128	0.0	0.0	0.0	0,0,0
199	0.03	0.08	0.02	117,118,128	0.0	0.0	0.0	0,0,0
200	0.05	0.12	0.04	117,118,128	0.0	0.0	0.0	0,0,0
201	0.10	0.25	0.06	117,117,128	0.0	0.0	0.0	0,0,0
202	0.10	0.24	0.06	117,117,128	0.0	0.0	0.0	0,0,0
203	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0
204	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0
205	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0
206	0.04	0.10	0.03	117,117,128	0.0	0.0	0.0	0,0,0
207	0.08	0.20	0.04	117,117,128	0.0	0.0	0.0	0,0,0
208	0.08	0.21	0.04	117,117,128	0.0	0.0	0.0	0,0,0
209	0.04	0.11	0.03	117,118,128	0.0	0.0	0.0	0,0,0
210	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0
211	4.49e-03	0.01	5.70e-03	112,112,128	0.0	0.0	0.0	0,0,0
212	0.02	0.04	0.02	112,112,128	0.0	0.0	0.0	0,0,0
213	0.04	0.11	0.05	113,111,128	0.0	0.0	0.0	0,0,0
214	0.03	0.07	0.04	113,121,128	0.0	0.0	0.0	0,0,0
215	0.02	0.04	0.02	116,115,128	0.0	0.0	0.0	0,0,0
216	7.04e-03	0.02	7.12e-03	117,117,128	0.0	0.0	0.0	0,0,0
217	0.01	0.03	9.01e-03	116,116,128	0.0	0.0	0.0	0,0,0
218	0.05	0.13	0.06	116,116,128	0.0	0.0	0.0	0,0,0
219	0.03	0.09	0.04	118,118,128	0.0	0.0	0.0	0,0,0
220	0.03	0.08	0.04	118,118,128	0.0	0.0	0.0	0,0,0
221	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
222	0.01	0.04	0.01	116,116,128	0.0	0.0	0.0	0,0,0
223	0.06	0.15	0.03	116,116,128	0.0	0.0	0.0	0,0,0
224	0.11	0.27	0.08	118,118,128	0.0	0.0	0.0	0,0,0
225	0.09	0.22	0.06	118,118,128	0.0	0.0	0.0	0,0,0
226	0.09	0.21	0.06	118,118,128	0.0	0.0	0.0	0,0,0
227	0.11	0.28	0.09	118,118,128	0.0	0.0	0.0	0,0,0
228	0.04	0.09	0.03	118,118,128	0.0	0.0	0.0	0,0,0
229	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0



230	0.14	0.35	0.11	118,117,128	0.0	0.0	0.0	0,0,0
231	0.11	0.27	0.08	117,117,128	0.0	0.0	0.0	0,0,0
232	0.11	0.27	0.08	117,117,128	0.0	0.0	0.0	0,0,0
233	0.14	0.35	0.11	118,117,128	0.0	0.0	0.0	0,0,0
234	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0
235	0.04	0.10	0.03	117,117,128	0.0	0.0	0.0	0,0,0
236	0.13	0.31	0.10	118,117,128	0.0	0.0	0.0	0,0,0
237	0.09	0.24	0.07	117,117,128	0.0	0.0	0.0	0,0,0
238	0.09	0.23	0.07	117,117,128	0.0	0.0	0.0	0,0,0
239	0.13	0.31	0.10	118,117,128	0.0	0.0	0.0	0,0,0
240	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
241	8.63e-03	0.02	7.77e-03	118,118,128	0.0	0.0	0.0	0,0,0
242	0.04	0.09	0.05	112,112,128	0.0	0.0	0.0	0,0,0
243	0.02	0.06	0.03	116,116,128	0.0	0.0	0.0	0,0,0
244	0.03	0.08	0.03	118,118,128	0.0	0.0	0.0	0,0,0
245	0.06	0.15	0.05	118,118,128	0.0	0.0	0.0	0,0,0
246	0.01	0.03	0.01	118,118,128	0.0	0.0	0.0	0,0,0
247	0.01	0.03	9.12e-03	117,116,128	0.0	0.0	0.0	0,0,0
248	0.05	0.13	0.06	116,117,128	0.0	0.0	0.0	0,0,0
249	0.03	0.08	0.03	117,117,128	0.0	0.0	0.0	0,0,0
250	0.03	0.08	0.04	115,115,128	0.0	0.0	0.0	0,0,0
251	0.05	0.13	0.06	115,115,128	0.0	0.0	0.0	0,0,0
252	0.02	0.05	0.01	116,116,128	0.0	0.0	0.0	0,0,0
253	0.06	0.16	0.04	116,116,128	0.0	0.0	0.0	0,0,0
254	0.07	0.17	0.05	116,116,128	0.0	0.0	0.0	0,0,0
255	0.06	0.15	0.05	118,118,128	0.0	0.0	0.0	0,0,0
256	0.06	0.16	0.05	118,118,128	0.0	0.0	0.0	0,0,0
257	0.08	0.20	0.06	115,115,128	0.0	0.0	0.0	0,0,0
258	0.06	0.14	0.04	117,117,128	0.0	0.0	0.0	0,0,0
259	0.08	0.19	0.07	116,116,128	0.0	0.0	0.0	0,0,0
260	0.10	0.25	0.08	116,116,128	0.0	0.0	0.0	0,0,0
261	0.08	0.20	0.06	118,118,128	0.0	0.0	0.0	0,0,0
262	0.08	0.20	0.06	118,117,128	0.0	0.0	0.0	0,0,0
263	0.10	0.25	0.08	115,115,128	0.0	0.0	0.0	0,0,0
264	0.07	0.19	0.06	115,115,128	0.0	0.0	0.0	0,0,0
265	0.06	0.16	0.04	116,116,128	0.0	0.0	0.0	0,0,0
266	0.09	0.23	0.07	116,116,128	0.0	0.0	0.0	0,0,0
267	0.07	0.18	0.05	117,117,128	0.0	0.0	0.0	0,0,0
268	0.07	0.18	0.05	117,117,128	0.0	0.0	0.0	0,0,0
269	0.09	0.24	0.07	115,115,128	0.0	0.0	0.0	0,0,0
270	0.08	0.20	0.05	115,115,128	0.0	0.0	0.0	0,0,0
271	0.06	0.15	7.50e-03	115,115,128	0.0	0.0	0.0	0,0,0
272	0.04	0.09	0.05	112,112,128	0.0	0.0	0.0	0,0,0
273	0.02	0.05	0.03	112,112,128	0.0	0.0	0.0	0,0,0
274	0.03	0.07	0.03	118,118,128	0.0	0.0	0.0	0,0,0
275	0.04	0.11	0.05	117,117,128	0.0	0.0	0.0	0,0,0
276	0.01	0.03	9.81e-03	118,118,128	0.0	0.0	0.0	0,0,0
277	0.01	0.04	9.82e-03	117,117,128	0.0	0.0	0.0	0,0,0
278	0.07	0.16	0.06	117,117,128	0.0	0.0	0.0	0,0,0
279	0.04	0.10	0.03	117,117,128	0.0	0.0	0.0	0,0,0
280	0.04	0.10	0.03	117,117,128	0.0	0.0	0.0	0,0,0
281	0.06	0.16	0.06	117,115,128	0.0	0.0	0.0	0,0,0
282	0.01	0.03	0.01	117,117,128	0.0	0.0	0.0	0,0,0
283	0.04	0.09	0.03	117,117,128	0.0	0.0	0.0	0,0,0
284	0.07	0.18	0.06	117,117,128	0.0	0.0	0.0	0,0,0
285	0.08	0.19	0.06	117,117,128	0.0	0.0	0.0	0,0,0
286	0.08	0.20	0.06	117,117,128	0.0	0.0	0.0	0,0,0
287	0.09	0.23	0.07	117,117,128	0.0	0.0	0.0	0,0,0
288	0.06	0.15	0.04	115,115,128	0.0	0.0	0.0	0,0,0
289	0.07	0.19	0.06	117,117,128	0.0	0.0	0.0	0,0,0
290	0.10	0.25	0.08	116,116,128	0.0	0.0	0.0	0,0,0
291	0.08	0.21	0.06	117,117,128	0.0	0.0	0.0	0,0,0
292	0.08	0.21	0.06	117,117,128	0.0	0.0	0.0	0,0,0
293	0.10	0.25	0.08	115,115,128	0.0	0.0	0.0	0,0,0
294	0.07	0.19	0.06	115,115,128	0.0	0.0	0.0	0,0,0
295	0.06	0.16	0.04	116,116,128	0.0	0.0	0.0	0,0,0
296	0.09	0.23	0.07	116,116,128	0.0	0.0	0.0	0,0,0
297	0.07	0.18	0.05	117,117,128	0.0	0.0	0.0	0,0,0
298	0.07	0.19	0.06	117,117,128	0.0	0.0	0.0	0,0,0
299	0.10	0.24	0.07	115,115,128	0.0	0.0	0.0	0,0,0
300	0.08	0.19	0.05	117,117,128	0.0	0.0	0.0	0,0,0
301	0.05	0.14	8.05e-03	115,115,128	0.0	0.0	0.0	0,0,0
302	0.03	0.08	0.04	112,112,128	0.0	0.0	0.0	0,0,0
303	0.02	0.06	0.03	117,116,128	0.0	0.0	0.0	0,0,0
304	0.02	0.06	0.03	117,117,128	0.0	0.0	0.0	0,0,0
305	0.04	0.09	0.05	113,113,128	0.0	0.0	0.0	0,0,0
306	0.01	0.03	9.99e-03	115,115,128	0.0	0.0	0.0	0,0,0



307	7.17e-03	0.02	6.68e-03	117,117,128	0.0	0.0	0.0	0,0,0
308	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
309	0.04	0.09	0.04	117,117,128	0.0	0.0	0.0	0,0,0
310	0.04	0.10	0.05	117,117,128	0.0	0.0	0.0	0,0,0
311	0.02	0.05	0.02	115,115,128	0.0	0.0	0.0	0,0,0
312	6.40e-03	0.02	6.92e-03	115,115,128	0.0	0.0	0.0	0,0,0
313	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
314	0.13	0.31	0.10	117,117,128	0.0	0.0	0.0	0,0,0
315	0.11	0.27	0.08	117,117,128	0.0	0.0	0.0	0,0,0
316	0.11	0.28	0.08	117,117,128	0.0	0.0	0.0	0,0,0
317	0.14	0.36	0.11	117,117,128	0.0	0.0	0.0	0,0,0
318	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
319	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0
320	0.14	0.36	0.11	117,117,128	0.0	0.0	0.0	0,0,0
321	0.11	0.28	0.08	117,117,128	0.0	0.0	0.0	0,0,0
322	0.11	0.28	0.08	117,117,128	0.0	0.0	0.0	0,0,0
323	0.14	0.36	0.11	117,117,128	0.0	0.0	0.0	0,0,0
324	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0
325	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
326	0.13	0.32	0.10	117,117,128	0.0	0.0	0.0	0,0,0
327	0.10	0.25	0.07	117,117,128	0.0	0.0	0.0	0,0,0
328	0.10	0.25	0.07	117,117,128	0.0	0.0	0.0	0,0,0
329	0.13	0.32	0.10	117,117,128	0.0	0.0	0.0	0,0,0
330	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
331	0.02	0.04	7.71e-03	115,116,128	0.0	0.0	0.0	0,0,0
332	0.05	0.13	0.04	117,116,128	0.0	0.0	0.0	0,0,0
333	0.03	0.08	0.02	117,116,128	0.0	0.0	0.0	0,0,0
334	0.02	0.05	0.03	117,117,128	0.0	0.0	0.0	0,0,0
335	0.04	0.10	0.05	113,113,128	0.0	0.0	0.0	0,0,0
336	0.01	0.03	0.01	115,116,128	0.0	0.0	0.0	0,0,0
337	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0
338	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
339	0.10	0.25	0.06	117,117,128	0.0	0.0	0.0	0,0,0
340	0.11	0.26	0.06	117,117,128	0.0	0.0	0.0	0,0,0
341	0.05	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
342	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0
343	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0
344	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0
345	0.11	0.27	0.06	117,117,128	0.0	0.0	0.0	0,0,0
346	0.11	0.28	0.06	117,117,128	0.0	0.0	0.0	0,0,0
347	0.05	0.12	0.04	117,117,128	0.0	0.0	0.0	0,0,0
348	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0
349	0.03	0.07	0.02	117,117,128	0.0	0.0	0.0	0,0,0
350	0.04	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
351	0.08	0.21	0.04	117,117,128	0.0	0.0	0.0	0,0,0
352	0.10	0.24	0.05	117,117,128	0.0	0.0	0.0	0,0,0
353	0.05	0.11	0.03	117,117,128	0.0	0.0	0.0	0,0,0
354	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0
355	0.01	0.04	6.16e-03	115,116,128	0.0	0.0	0.0	0,0,0
356	0.02	0.05	0.02	116,116,128	0.0	0.0	0.0	0,0,0
357	0.02	0.06	0.02	115,116,128	0.0	0.0	0.0	0,0,0
358	0.02	0.06	0.02	115,116,128	0.0	0.0	0.0	0,0,0
359	0.02	0.06	0.02	115,116,128	0.0	0.0	0.0	0,0,0
360	0.02	0.04	9.87e-03	116,116,128	0.0	0.0	0.0	0,0,0
361	0.01	0.04	9.62e-03	118,116,128	0.0	0.0	0.0	0,0,0
362	0.04	0.11	0.05	114,118,128	0.0	0.0	0.0	0,0,0
363	0.04	0.10	0.03	118,118,128	0.0	0.0	0.0	0,0,0
364	0.05	0.14	0.02	118,118,128	0.0	0.0	0.0	0,0,0
365	0.08	0.20	0.05	118,118,128	0.0	0.0	0.0	0,0,0
366	0.03	0.07	0.02	118,116,128	0.0	0.0	0.0	0,0,0
367	0.01	0.03	7.62e-03	116,116,128	0.0	0.0	0.0	0,0,0
368	0.03	0.08	0.04	112,114,128	0.0	0.0	0.0	0,0,0
369	0.03	0.07	0.03	118,116,128	0.0	0.0	0.0	0,0,0
370	0.04	0.10	0.03	118,116,128	0.0	0.0	0.0	0,0,0
371	0.05	0.12	0.04	115,115,128	0.0	0.0	0.0	0,0,0
372	0.04	0.11	0.03	118,115,128	0.0	0.0	0.0	0,0,0
373	0.01	0.03	7.37e-03	116,116,128	0.0	0.0	0.0	0,0,0
374	0.03	0.07	0.04	116,117,128	0.0	0.0	0.0	0,0,0
375	0.03	0.07	0.02	117,116,128	0.0	0.0	0.0	0,0,0
376	0.03	0.07	0.03	117,115,128	0.0	0.0	0.0	0,0,0
377	0.04	0.09	0.05	111,111,128	0.0	0.0	0.0	0,0,0
378	0.04	0.09	0.04	115,115,128	0.0	0.0	0.0	0,0,0
379	0.01	0.03	6.76e-03	117,116,128	0.0	0.0	0.0	0,0,0
380	0.04	0.11	0.04	117,117,128	0.0	0.0	0.0	0,0,0
381	0.03	0.09	0.02	117,117,128	0.0	0.0	0.0	0,0,0
382	0.04	0.10	0.02	117,117,128	0.0	0.0	0.0	0,0,0
383	0.06	0.14	0.05	117,117,128	0.0	0.0	0.0	0,0,0



384	0.02	0.05	0.02	117,117,128	0.0	0.0	0.0	0,0,0
385	5.07e-03	0.01	5.26e-03	117,116,128	0.0	0.0	0.0	0,0,0
386	0.01	0.04	0.02	114,116,128	0.0	0.0	0.0	0,0,0
387	0.03	0.09	0.04	114,114,128	0.0	0.0	0.0	0,0,0
388	0.06	0.14	0.07	114,114,128	0.0	0.0	0.0	0,0,0
389	0.01	0.03	0.02	114,113,128	0.0	0.0	0.0	0,0,0
390	6.79e-03	0.02	7.77e-03	117,115,128	0.0	0.0	0.0	0,0,0
391	4.72e-03	0.01	5.31e-03	117,117,128	0.0	0.0	0.0	0,0,0
392	0.02	0.04	0.02	116,118,128	0.0	0.0	0.0	0,0,0
393	0.03	0.08	0.04	113,112,128	0.0	0.0	0.0	0,0,0
394	0.03	0.08	0.04	121,121,128	0.0	0.0	0.0	0,0,0
395	0.02	0.04	0.02	115,117,128	0.0	0.0	0.0	0,0,0
396	5.45e-03	0.01	6.66e-03	116,116,128	0.0	0.0	0.0	0,0,0
397	7.34e-03	0.02	4.43e-03	117,117,128	0.0	0.0	0.0	0,0,0
398	8.54e-03	0.02	6.55e-03	116,117,128	0.0	0.0	0.0	0,0,0
399	0.01	0.03	0.01	116,116,128	0.0	0.0	0.0	0,0,0
400	0.02	0.04	0.01	115,115,128	0.0	0.0	0.0	0,0,0
401	0.03	0.06	0.02	115,115,128	0.0	0.0	0.0	0,0,0
402	0.04	0.09	0.03	115,115,128	0.0	0.0	0.0	0,0,0
403	0.03	0.08	0.03	115,115,128	0.0	0.0	0.0	0,0,0
404	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0
405	0.02	0.05	0.02	115,115,128	0.0	0.0	0.0	0,0,0
406	0.01	0.03	8.66e-03	115,115,128	0.0	0.0	0.0	0,0,0
407	0.02	0.04	9.84e-03	121,121,128	0.0	0.0	0.0	0,0,0
408	0.02	0.05	0.01	121,121,128	0.0	0.0	0.0	0,0,0
409	0.02	0.05	0.01	121,121,128	0.0	0.0	0.0	0,0,0
410	0.02	0.05	0.01	121,121,128	0.0	0.0	0.0	0,0,0
411	0.02	0.05	0.01	119,119,128	0.0	0.0	0.0	0,0,0
412	0.03	0.08	0.02	117,117,128	0.0	0.0	0.0	0,0,0
413	0.10	0.24	0.02	119,119,128	0.0	0.0	0.0	0,0,0
414	0.10	0.24	0.02	119,119,128	0.0	0.0	0.0	0,0,0
415	0.03	0.07	0.02	119,119,128	0.0	0.0	0.0	0,0,0
416	0.02	0.04	0.01	115,115,128	0.0	0.0	0.0	0,0,0
417	0.02	0.04	8.75e-03	121,121,128	0.0	0.0	0.0	0,0,0
418	0.02	0.05	9.27e-03	121,121,128	0.0	0.0	0.0	0,0,0
419	0.02	0.05	8.84e-03	121,121,128	0.0	0.0	0.0	0,0,0
420	0.02	0.06	9.50e-03	119,119,128	0.0	0.0	0.0	0,0,0
421	0.04	0.08	0.01	119,119,128	0.0	0.0	0.0	0,0,0
422	0.12	0.28	0.02	119,119,128	0.0	0.0	0.0	0,0,0
423	0.11	0.26	0.02	119,119,128	0.0	0.0	0.0	0,0,0
424	0.03	0.07	0.01	119,119,128	0.0	0.0	0.0	0,0,0
425	0.02	0.04	8.16e-03	119,119,128	0.0	0.0	0.0	0,0,0
426	7.02e-03	0.02	7.64e-03	117,117,128	0.0	0.0	0.0	0,0,0
427	0.02	0.05	0.02	116,120,128	0.0	0.0	0.0	0,0,0
428	0.07	0.18	0.06	117,117,128	0.0	0.0	0.0	0,0,0
429	0.05	0.14	0.05	117,117,128	0.0	0.0	0.0	0,0,0
430	0.03	0.08	0.03	117,116,128	0.0	0.0	0.0	0,0,0
431	0.01	0.03	0.01	115,115,128	0.0	0.0	0.0	0,0,0
432	3.79e-03	9.52e-03	4.08e-03	117,115,128	0.0	0.0	0.0	0,0,0
433	6.54e-03	0.02	6.81e-03	118,118,128	0.0	0.0	0.0	0,0,0
434	0.04	0.10	0.04	118,118,128	0.0	0.0	0.0	0,0,0
435	0.02	0.06	0.03	117,116,128	0.0	0.0	0.0	0,0,0
436	0.02	0.06	0.03	116,118,128	0.0	0.0	0.0	0,0,0
437	0.05	0.12	0.05	118,118,128	0.0	0.0	0.0	0,0,0
438	8.10e-03	0.02	9.11e-03	118,118,128	0.0	0.0	0.0	0,0,0
439	0.01	0.03	0.01	118,118,128	0.0	0.0	0.0	0,0,0
440	0.01	0.03	0.01	116,116,128	0.0	0.0	0.0	0,0,0
441	0.02	0.04	0.02	116,116,128	0.0	0.0	0.0	0,0,0
442	0.02	0.05	0.02	118,118,128	0.0	0.0	0.0	0,0,0
443	0.03	0.08	0.03	115,115,128	0.0	0.0	0.0	0,0,0
444	0.12	0.29	0.10	115,115,128	0.0	0.0	0.0	0,0,0
445	0.07	0.17	0.06	118,118,128	0.0	0.0	0.0	0,0,0
446	0.04	0.10	0.04	118,118,128	0.0	0.0	0.0	0,0,0
447	0.05	0.12	0.05	118,118,128	0.0	0.0	0.0	0,0,0
448	0.03	0.06	0.02	115,115,128	0.0	0.0	0.0	0,0,0
449	0.02	0.06	0.02	120,120,128	0.0	0.0	0.0	0,0,0
450	0.03	0.07	0.02	119,119,128	0.0	0.0	0.0	0,0,0
451	0.03	0.08	0.02	119,120,128	0.0	0.0	0.0	0,0,0
452	0.03	0.08	0.02	119,120,128	0.0	0.0	0.0	0,0,0
453	0.04	0.10	0.03	119,119,128	0.0	0.0	0.0	0,0,0
454	0.11	0.28	0.10	118,115,128	0.0	0.0	0.0	0,0,0
455	0.10	0.25	0.08	120,120,128	0.0	0.0	0.0	0,0,0
456	0.10	0.25	0.07	120,120,128	0.0	0.0	0.0	0,0,0
457	0.11	0.26	0.07	119,120,128	0.0	0.0	0.0	0,0,0
458	0.04	0.09	0.03	119,119,128	0.0	0.0	0.0	0,0,0
459	0.03	0.06	0.02	120,120,128	0.0	0.0	0.0	0,0,0
460	0.03	0.08	0.02	119,119,128	0.0	0.0	0.0	0,0,0



461	0.04	0.09	0.02	119,119,128	0.0	0.0	0.0	0,0,0
462	0.05	0.11	0.03	119,120,128	0.0	0.0	0.0	0,0,0
463	0.11	0.26	0.08	115,115,128	0.0	0.0	0.0	0,0,0
464	0.11	0.27	0.08	120,120,128	0.0	0.0	0.0	0,0,0
465	0.12	0.28	0.08	120,120,128	0.0	0.0	0.0	0,0,0
466	0.12	0.28	0.08	119,120,128	0.0	0.0	0.0	0,0,0
467	0.04	0.10	0.03	119,119,128	0.0	0.0	0.0	0,0,0
468	0.01	0.03	0.01	118,118,128	0.0	0.0	0.0	0,0,0
469	0.05	0.13	0.06	112,112,128	0.0	0.0	0.0	0,0,0
470	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
471	0.03	0.09	0.04	115,115,128	0.0	0.0	0.0	0,0,0
472	0.06	0.16	0.06	115,115,128	0.0	0.0	0.0	0,0,0
473	0.02	0.04	0.02	115,115,128	0.0	0.0	0.0	0,0,0
474	5.28e-03	0.01	4.69e-03	111,111,128	0.0	0.0	0.0	0,0,0
475	5.95e-03	0.01	6.39e-03	116,116,128	0.0	0.0	0.0	0,0,0
476	0.04	0.10	0.04	116,116,128	0.0	0.0	0.0	0,0,0
477	0.02	0.05	0.02	116,118,128	0.0	0.0	0.0	0,0,0
478	0.03	0.06	0.03	115,115,128	0.0	0.0	0.0	0,0,0
479	0.04	0.11	0.05	115,115,128	0.0	0.0	0.0	0,0,0
480	7.15e-03	0.02	8.02e-03	118,118,128	0.0	0.0	0.0	0,0,0
481	0.02	0.06	0.03	118,116,128	0.0	0.0	0.0	0,0,0
482	0.03	0.07	0.03	116,116,128	0.0	0.0	0.0	0,0,0
483	0.03	0.07	0.03	116,116,128	0.0	0.0	0.0	0,0,0
484	0.03	0.08	0.03	118,118,128	0.0	0.0	0.0	0,0,0
485	0.04	0.09	0.03	115,115,128	0.0	0.0	0.0	0,0,0
486	0.08	0.19	0.06	115,115,128	0.0	0.0	0.0	0,0,0
487	0.06	0.14	0.05	115,115,128	0.0	0.0	0.0	0,0,0
488	0.04	0.10	0.03	115,115,128	0.0	0.0	0.0	0,0,0
489	0.04	0.11	0.03	115,115,128	0.0	0.0	0.0	0,0,0
490	0.03	0.08	0.03	115,115,128	0.0	0.0	0.0	0,0,0
491	0.05	0.11	0.04	120,120,128	0.0	0.0	0.0	0,0,0
492	0.07	0.16	0.05	120,120,128	0.0	0.0	0.0	0,0,0
493	0.06	0.16	0.05	120,120,128	0.0	0.0	0.0	0,0,0
494	0.07	0.17	0.04	119,119,128	0.0	0.0	0.0	0,0,0
495	0.07	0.17	0.04	119,119,128	0.0	0.0	0.0	0,0,0
496	0.07	0.17	0.05	117,117,128	0.0	0.0	0.0	0,0,0
497	0.07	0.17	0.05	119,119,128	0.0	0.0	0.0	0,0,0
498	0.07	0.17	0.04	120,120,128	0.0	0.0	0.0	0,0,0
499	0.05	0.13	0.04	119,119,128	0.0	0.0	0.0	0,0,0
500	0.04	0.10	0.04	115,115,128	0.0	0.0	0.0	0,0,0
501	0.05	0.12	0.04	120,120,128	0.0	0.0	0.0	0,0,0
502	0.07	0.17	0.05	120,120,128	0.0	0.0	0.0	0,0,0
503	0.07	0.17	0.05	120,120,128	0.0	0.0	0.0	0,0,0
504	0.08	0.18	0.05	119,119,128	0.0	0.0	0.0	0,0,0
505	0.07	0.17	0.05	119,119,128	0.0	0.0	0.0	0,0,0
506	0.07	0.18	0.05	119,119,128	0.0	0.0	0.0	0,0,0
507	0.08	0.19	0.05	120,120,128	0.0	0.0	0.0	0,0,0
508	0.06	0.14	0.04	120,119,128	0.0	0.0	0.0	0,0,0
509	0.04	0.11	0.04	120,119,128	0.0	0.0	0.0	0,0,0
510	0.01	0.03	0.02	118,118,128	0.0	0.0	0.0	0,0,0
511	0.04	0.10	0.05	112,112,128	0.0	0.0	0.0	0,0,0
512	0.03	0.07	0.03	112,112,128	0.0	0.0	0.0	0,0,0
513	0.03	0.08	0.04	115,115,128	0.0	0.0	0.0	0,0,0
514	0.06	0.15	0.06	115,115,128	0.0	0.0	0.0	0,0,0
515	0.02	0.04	0.02	119,119,128	0.0	0.0	0.0	0,0,0
516	7.79e-03	0.02	7.85e-03	111,111,128	0.0	0.0	0.0	0,0,0
517	6.63e-03	0.02	6.15e-03	118,118,128	0.0	0.0	0.0	0,0,0
518	0.04	0.10	0.04	116,116,128	0.0	0.0	0.0	0,0,0
519	0.02	0.06	0.03	116,116,128	0.0	0.0	0.0	0,0,0
520	0.02	0.05	0.02	115,115,128	0.0	0.0	0.0	0,0,0
521	0.04	0.10	0.04	115,115,128	0.0	0.0	0.0	0,0,0
522	0.01	0.03	0.02	113,114,128	0.0	0.0	0.0	0,0,0
523	0.04	0.10	0.05	116,116,128	0.0	0.0	0.0	0,0,0
524	0.10	0.25	0.11	116,116,128	0.0	0.0	0.0	0,0,0
525	0.08	0.19	0.09	116,116,128	0.0	0.0	0.0	0,0,0
526	0.06	0.16	0.08	114,114,128	0.0	0.0	0.0	0,0,0
527	0.07	0.18	0.08	111,111,128	0.0	0.0	0.0	0,0,0
528	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
529	0.05	0.13	0.05	115,115,128	0.0	0.0	0.0	0,0,0
530	0.07	0.18	0.07	115,115,128	0.0	0.0	0.0	0,0,0
531	0.08	0.19	0.07	115,115,128	0.0	0.0	0.0	0,0,0
532	0.05	0.11	0.04	115,115,128	0.0	0.0	0.0	0,0,0
533	0.07	0.18	0.06	120,120,128	0.0	0.0	0.0	0,0,0
534	0.19	0.47	0.13	120,120,128	0.0	0.0	0.0	0,0,0
535	0.18	0.44	0.13	120,120,128	0.0	0.0	0.0	0,0,0
536	0.21	0.50	0.13	119,120,128	0.0	0.0	0.0	0,0,0
537	0.23	0.53	0.11	119,119,128	0.20	0.0	0.0	119,0,0



538	0.11	0.26	0.07	119,119,128	0.0	0.0	0.0	0,0,0
539	0.09	0.22	0.07	119,119,128	0.0	0.0	0.0	0,0,0
540	0.08	0.20	0.08	115,115,128	0.0	0.0	0.0	0,0,0
541	0.08	0.19	0.07	120,120,128	0.0	0.0	0.0	0,0,0
542	0.05	0.12	0.05	120,120,128	0.0	0.0	0.0	0,0,0
543	0.08	0.19	0.07	120,120,128	0.0	0.0	0.0	0,0,0
544	0.19	0.46	0.13	120,120,128	0.0	0.0	0.0	0,0,0
545	0.19	0.46	0.13	120,120,128	0.0	0.0	0.0	0,0,0
546	0.22	0.52	0.13	120,120,128	0.19	0.0	0.0	120,0,0
547	0.27	0.64	0.15	119,119,128	0.23	0.0	0.0	119,0,0
548	0.10	0.24	0.07	119,119,128	0.0	0.0	0.0	0,0,0
549	0.08	0.20	0.07	115,115,128	0.0	0.0	0.0	0,0,0
550	0.09	0.21	0.08	120,120,128	0.0	0.0	0.0	0,0,0
551	0.05	0.13	0.06	120,120,128	0.0	0.0	0.0	0,0,0
552	0.03	0.07	0.03	115,115,128	0.0	0.0	0.0	0,0,0
553	0.06	0.13	0.06	112,112,128	0.0	0.0	0.0	0,0,0
554	0.03	0.07	0.03	112,112,128	0.0	0.0	0.0	0,0,0
555	0.04	0.10	0.05	111,111,128	0.0	0.0	0.0	0,0,0
556	0.08	0.19	0.08	119,119,128	0.0	0.0	0.0	0,0,0
557	0.02	0.05	0.02	111,111,128	0.0	0.0	0.0	0,0,0
558	0.01	0.03	0.01	111,111,128	0.0	0.0	0.0	0,0,0
559	7.33e-03	0.02	7.21e-03	116,116,128	0.0	0.0	0.0	0,0,0
560	0.05	0.12	0.05	117,116,128	0.0	0.0	0.0	0,0,0
561	0.02	0.06	0.03	117,117,128	0.0	0.0	0.0	0,0,0
562	0.02	0.05	0.03	119,119,128	0.0	0.0	0.0	0,0,0
563	0.04	0.09	0.04	115,115,128	0.0	0.0	0.0	0,0,0
564	0.06	0.14	0.07	117,115,128	0.0	0.0	0.0	0,0,0
565	0.08	0.21	0.11	111,113,128	0.0	0.0	0.0	0,0,0
566	0.05	0.12	0.06	118,118,128	0.0	0.0	0.0	0,0,0
567	0.05	0.13	0.06	118,118,128	0.0	0.0	0.0	0,0,0
568	0.04	0.11	0.05	119,119,128	0.0	0.0	0.0	0,0,0
569	0.05	0.12	0.06	118,118,128	0.0	0.0	0.0	0,0,0
570	0.06	0.16	0.07	117,117,128	0.0	0.0	0.0	0,0,0
571	0.06	0.15	0.07	117,117,128	0.0	0.0	0.0	0,0,0
572	0.10	0.25	0.10	115,115,128	0.0	0.0	0.0	0,0,0
573	0.15	0.37	0.13	115,115,128	0.0	0.0	0.0	0,0,0
574	0.11	0.26	0.08	119,119,128	0.0	0.0	0.0	0,0,0
575	0.09	0.22	0.09	119,119,128	0.0	0.0	0.0	0,0,0
576	0.10	0.26	0.08	120,120,128	0.0	0.0	0.0	0,0,0
577	0.11	0.27	0.08	120,120,128	0.0	0.0	0.0	0,0,0
578	0.12	0.28	0.07	119,119,128	0.0	0.0	0.0	0,0,0
579	0.12	0.30	0.08	119,119,128	0.0	0.0	0.0	0,0,0
580	0.16	0.38	0.10	119,119,128	0.0	0.0	0.0	0,0,0
581	0.14	0.33	0.10	120,120,128	0.0	0.0	0.0	0,0,0
582	0.12	0.30	0.11	115,115,128	0.0	0.0	0.0	0,0,0
583	0.14	0.35	0.13	117,117,128	0.0	0.0	0.0	0,0,0
584	0.07	0.16	0.07	119,115,128	0.0	0.0	0.0	0,0,0
585	0.09	0.23	0.10	115,115,128	0.0	0.0	0.0	0,0,0
586	0.11	0.27	0.09	120,120,128	0.0	0.0	0.0	0,0,0
587	0.12	0.28	0.08	120,120,128	0.0	0.0	0.0	0,0,0
588	0.13	0.30	0.07	119,119,128	0.0	0.0	0.0	0,0,0
589	0.22	0.53	0.14	119,119,128	0.19	0.0	0.0	119,0,0
590	0.15	0.37	0.11	120,120,128	0.0	0.0	0.0	0,0,0
591	0.13	0.32	0.12	120,120,128	0.0	0.0	0.0	0,0,0
592	0.12	0.30	0.11	115,115,128	0.0	0.0	0.0	0,0,0
593	0.09	0.22	0.09	112,112,128	0.0	0.0	0.0	0,0,0
594	0.10	0.25	0.09	112,112,128	0.0	0.0	0.0	0,0,0
595	0.06	0.13	0.05	112,112,128	0.0	0.0	0.0	0,0,0
596	0.04	0.09	0.04	112,112,128	0.0	0.0	0.0	0,0,0
597	0.04	0.10	0.05	119,119,128	0.0	0.0	0.0	0,0,0
598	0.08	0.19	0.09	111,111,128	0.0	0.0	0.0	0,0,0
599	0.02	0.05	0.02	111,111,128	0.0	0.0	0.0	0,0,0
600	0.01	0.03	0.02	116,116,128	0.0	0.0	0.0	0,0,0
601	0.06	0.15	0.07	113,113,128	0.0	0.0	0.0	0,0,0
602	0.06	0.14	0.06	112,112,128	0.0	0.0	0.0	0,0,0
603	0.05	0.13	0.07	121,121,128	0.0	0.0	0.0	0,0,0
604	0.04	0.11	0.05	113,113,128	0.0	0.0	0.0	0,0,0
605	0.06	0.15	0.07	111,111,128	0.0	0.0	0.0	0,0,0
606	0.02	0.05	0.02	115,117,128	0.0	0.0	0.0	0,0,0
607	0.02	0.05	0.02	117,116,128	0.0	0.0	0.0	0,0,0
608	4.43e-03	0.01	4.44e-03	117,117,128	0.0	0.0	0.0	0,0,0
609	0.01	0.04	0.02	117,117,128	0.0	0.0	0.0	0,0,0
610	0.03	0.06	0.03	117,117,128	0.0	0.0	0.0	0,0,0
611	0.02	0.04	0.02	117,117,128	0.0	0.0	0.0	0,0,0
612	0.02	0.04	0.02	112,111,128	0.0	0.0	0.0	0,0,0
613	0.06	0.14	0.08	114,114,128	0.0	0.0	0.0	0,0,0
614	0.05	0.13	0.06	117,117,128	0.0	0.0	0.0	0,0,0



615	0.03	0.08	0.04	117,117,128	0.0	0.0	0.0	0,0,0
616	0.03	0.08	0.04	113,113,128	0.0	0.0	0.0	0,0,0
617	0.06	0.16	0.07	115,115,128	0.0	0.0	0.0	0,0,0
618	0.08	0.19	0.08	115,115,128	0.0	0.0	0.0	0,0,0
619	0.05	0.13	0.06	115,115,128	0.0	0.0	0.0	0,0,0
620	0.06	0.14	0.07	115,115,128	0.0	0.0	0.0	0,0,0
621	0.06	0.16	0.07	115,115,128	0.0	0.0	0.0	0,0,0
622	0.05	0.13	0.06	115,115,128	0.0	0.0	0.0	0,0,0
623	0.07	0.17	0.06	121,121,128	0.0	0.0	0.0	0,0,0
624	0.10	0.25	0.09	119,119,128	0.0	0.0	0.0	0,0,0
625	0.06	0.15	0.06	120,120,128	0.0	0.0	0.0	0,0,0
626	0.06	0.14	0.05	119,120,128	0.0	0.0	0.0	0,0,0
627	0.07	0.17	0.06	121,121,128	0.0	0.0	0.0	0,0,0
628	0.09	0.21	0.05	121,121,128	0.0	0.0	0.0	0,0,0
629	0.07	0.16	0.06	119,119,128	0.0	0.0	0.0	0,0,0
630	0.08	0.20	0.08	119,119,128	0.0	0.0	0.0	0,0,0
631	0.08	0.19	0.08	119,119,128	0.0	0.0	0.0	0,0,0
632	0.07	0.16	0.07	119,119,128	0.0	0.0	0.0	0,0,0
633	0.07	0.18	0.08	115,115,128	0.0	0.0	0.0	0,0,0
634	0.08	0.20	0.09	115,115,128	0.0	0.0	0.0	0,0,0
635	0.06	0.15	0.06	120,120,128	0.0	0.0	0.0	0,0,0
636	0.06	0.14	0.05	119,120,128	0.0	0.0	0.0	0,0,0
637	0.07	0.17	0.06	121,121,128	0.0	0.0	0.0	0,0,0
638	0.08	0.19	0.06	121,121,128	0.0	0.0	0.0	0,0,0
639	0.09	0.22	0.08	119,119,128	0.0	0.0	0.0	0,0,0
640	0.09	0.21	0.09	119,119,128	0.0	0.0	0.0	0,0,0
641	0.07	0.18	0.08	120,120,128	0.0	0.0	0.0	0,0,0
642	0.11	0.26	0.10	120,119,128	0.0	0.0	0.0	0,0,0
643	0.03	0.08	0.04	117,117,128	0.0	0.0	0.0	0,0,0
644	0.10	0.24	0.11	120,120,128	0.0	0.0	0.0	0,0,0
645	0.07	0.17	0.08	121,121,128	0.0	0.0	0.0	0,0,0
646	0.06	0.15	0.07	113,113,128	0.0	0.0	0.0	0,0,0
647	0.09	0.23	0.10	111,111,128	0.0	0.0	0.0	0,0,0
648	0.03	0.06	0.03	117,117,128	0.0	0.0	0.0	0,0,0
649	0.03	0.08	0.02	116,116,128	0.0	0.0	0.0	0,0,0
650	0.02	0.05	0.02	113,113,128	0.0	0.0	0.0	0,0,0
651	0.05	0.12	0.06	113,113,128	0.0	0.0	0.0	0,0,0
652	0.04	0.11	0.05	113,113,128	0.0	0.0	0.0	0,0,0
653	0.07	0.17	0.08	121,121,128	0.0	0.0	0.0	0,0,0
654	0.12	0.30	0.13	115,115,128	0.0	0.0	0.0	0,0,0
655	0.05	0.11	0.05	115,115,128	0.0	0.0	0.0	0,0,0
656	0.04	0.09	0.04	115,115,128	0.0	0.0	0.0	0,0,0
657	0.03	0.08	0.03	115,115,128	0.0	0.0	0.0	0,0,0
658	0.02	0.06	0.03	115,115,128	0.0	0.0	0.0	0,0,0
659	0.02	0.05	0.03	113,113,128	0.0	0.0	0.0	0,0,0
660	0.03	0.08	0.04	121,121,128	0.0	0.0	0.0	0,0,0
661	0.09	0.21	0.07	121,121,128	0.0	0.0	0.0	0,0,0
662	0.10	0.24	0.08	121,121,128	0.0	0.0	0.0	0,0,0
663	0.13	0.31	0.10	121,121,128	0.0	0.0	0.0	0,0,0
664	0.18	0.42	0.12	121,121,128	0.0	0.0	0.0	0,0,0
665	0.05	0.13	0.04	121,121,128	0.0	0.0	0.0	0,0,0
666	0.04	0.09	0.03	121,121,128	0.0	0.0	0.0	0,0,0
667	0.03	0.07	0.03	117,117,128	0.0	0.0	0.0	0,0,0
668	0.03	0.07	0.03	119,119,128	0.0	0.0	0.0	0,0,0
669	0.03	0.08	0.03	119,119,128	0.0	0.0	0.0	0,0,0
670	0.04	0.09	0.04	121,121,128	0.0	0.0	0.0	0,0,0
671	0.09	0.22	0.07	121,121,128	0.0	0.0	0.0	0,0,0
672	0.10	0.25	0.08	121,121,128	0.0	0.0	0.0	0,0,0
673	0.13	0.32	0.10	121,121,128	0.0	0.0	0.0	0,0,0
674	0.17	0.40	0.11	121,121,128	0.0	0.0	0.0	0,0,0
675	0.05	0.12	0.04	121,121,128	0.0	0.0	0.0	0,0,0
676	0.03	0.08	0.04	121,121,128	0.0	0.0	0.0	0,0,0
677	0.03	0.09	0.04	119,119,128	0.0	0.0	0.0	0,0,0
678	0.04	0.09	0.04	120,119,128	0.0	0.0	0.0	0,0,0
679	0.02	0.04	0.02	117,117,128	0.0	0.0	0.0	0,0,0
680	0.03	0.07	0.03	112,112,128	0.0	0.0	0.0	0,0,0
681	0.05	0.13	0.06	111,111,128	0.0	0.0	0.0	0,0,0
682	0.05	0.11	0.06	113,113,128	0.0	0.0	0.0	0,0,0
683	0.04	0.09	0.04	117,117,128	0.0	0.0	0.0	0,0,0
684	0.04	0.08	0.03	117,117,128	0.0	0.0	0.0	0,0,0
685	0.02	0.06	0.02	116,117,128	0.0	0.0	0.0	0,0,0
686	6.31e-03	0.02	7.76e-03	113,113,128	0.0	0.0	0.0	0,0,0
687	0.02	0.04	0.02	120,112,128	0.0	0.0	0.0	0,0,0
688	0.08	0.20	0.09	112,112,128	0.0	0.0	0.0	0,0,0
689	0.05	0.13	0.05	116,116,128	0.0	0.0	0.0	0,0,0
690	0.05	0.12	0.04	115,115,128	0.0	0.0	0.0	0,0,0
691	0.03	0.09	0.03	115,115,128	0.0	0.0	0.0	0,0,0



692	0.03	0.06	0.02	115,115,128	0.0	0.0	0.0	0,0,0
693	0.02	0.05	0.02	115,115,128	0.0	0.0	0.0	0,0,0
694	0.01	0.03	0.01	115,115,128	0.0	0.0	0.0	0,0,0
695	7.15e-03	0.02	8.94e-03	120,120,128	0.0	0.0	0.0	0,0,0
696	0.01	0.03	0.01	119,121,128	0.0	0.0	0.0	0,0,0
697	0.02	0.04	0.01	121,121,128	0.0	0.0	0.0	0,0,0
698	0.02	0.06	0.01	121,121,128	0.0	0.0	0.0	0,0,0
699	0.03	0.07	0.02	121,121,128	0.0	0.0	0.0	0,0,0
700	0.04	0.09	0.02	121,121,128	0.0	0.0	0.0	0,0,0
701	0.03	0.06	0.02	121,121,128	0.0	0.0	0.0	0,0,0
702	0.02	0.05	0.01	121,121,128	0.0	0.0	0.0	0,0,0
703	0.02	0.04	0.01	121,121,128	0.0	0.0	0.0	0,0,0
704	0.01	0.03	9.06e-03	113,113,128	0.0	0.0	0.0	0,0,0
705	0.01	0.03	8.27e-03	113,113,128	0.0	0.0	0.0	0,0,0
706	0.01	0.03	0.01	119,121,128	0.0	0.0	0.0	0,0,0
707	0.02	0.04	0.01	121,121,128	0.0	0.0	0.0	0,0,0
708	0.02	0.05	0.01	121,121,128	0.0	0.0	0.0	0,0,0
709	0.03	0.06	0.02	121,121,128	0.0	0.0	0.0	0,0,0
710	0.03	0.08	0.02	121,121,128	0.0	0.0	0.0	0,0,0
711	0.02	0.05	0.01	121,121,128	0.0	0.0	0.0	0,0,0
712	0.02	0.04	0.01	121,121,128	0.0	0.0	0.0	0,0,0
713	0.01	0.03	0.01	113,113,128	0.0	0.0	0.0	0,0,0
714	0.01	0.03	0.01	113,113,128	0.0	0.0	0.0	0,0,0
715	6.05e-03	0.02	6.77e-03	118,118,128	0.0	0.0	0.0	0,0,0
716	0.02	0.04	0.02	112,112,128	0.0	0.0	0.0	0,0,0
717	0.06	0.14	0.05	112,112,128	0.0	0.0	0.0	0,0,0
718	0.12	0.30	0.14	111,111,128	0.0	0.0	0.0	0,0,0
719	0.03	0.08	0.04	111,111,128	0.0	0.0	0.0	0,0,0
720	0.02	0.05	0.02	111,111,128	0.0	0.0	0.0	0,0,0
721	8.52e-03	0.02	8.26e-03	119,119,128	0.0	0.0	0.0	0,0,0
722	0.01	0.02	0.01	120,120,128	0.0	0.0	0.0	0,0,0
723	0.03	0.08	0.04	120,120,128	0.0	0.0	0.0	0,0,0
724	0.06	0.14	0.07	111,111,128	0.0	0.0	0.0	0,0,0
725	0.08	0.20	0.09	120,120,128	0.0	0.0	0.0	0,0,0
726	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
727	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
728	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
729	0.04	0.11	0.04	120,120,128	0.0	0.0	0.0	0,0,0
730	0.09	0.23	0.11	119,119,128	0.0	0.0	0.0	0,0,0
731	0.06	0.16	0.08	115,115,128	0.0	0.0	0.0	0,0,0
732	0.04	0.09	0.04	115,115,128	0.0	0.0	0.0	0,0,0
733	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
734	0.02	0.04	0.02	120,120,128	0.0	0.0	0.0	0,0,0
735	0.10	0.25	0.10	120,120,128	0.0	0.0	0.0	0,0,0
736	0.05	0.12	0.05	120,120,128	0.0	0.0	0.0	0,0,0
737	0.06	0.15	0.06	119,119,128	0.0	0.0	0.0	0,0,0
738	0.12	0.29	0.10	119,119,128	0.0	0.0	0.0	0,0,0
739	0.03	0.07	0.02	119,119,128	0.0	0.0	0.0	0,0,0
740	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
741	0.12	0.29	0.10	120,120,128	0.0	0.0	0.0	0,0,0
742	0.06	0.16	0.06	120,120,128	0.0	0.0	0.0	0,0,0
743	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
744	0.11	0.26	0.10	119,119,128	0.0	0.0	0.0	0,0,0
745	0.02	0.04	0.02	119,119,128	0.0	0.0	0.0	0,0,0
746	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
747	0.09	0.22	0.09	120,120,128	0.0	0.0	0.0	0,0,0
748	0.05	0.12	0.05	120,120,128	0.0	0.0	0.0	0,0,0
749	0.07	0.18	0.06	119,119,128	0.0	0.0	0.0	0,0,0
750	0.12	0.29	0.10	119,119,128	0.0	0.0	0.0	0,0,0
751	0.10	0.24	0.06	119,119,128	0.0	0.0	0.0	0,0,0
752	0.10	0.25	0.06	120,120,128	0.0	0.0	0.0	0,0,0
753	0.13	0.31	0.11	120,120,128	0.0	0.0	0.0	0,0,0
754	0.08	0.19	0.06	120,120,128	0.0	0.0	0.0	0,0,0
755	0.05	0.13	0.05	119,119,128	0.0	0.0	0.0	0,0,0
756	0.10	0.24	0.10	119,119,128	0.0	0.0	0.0	0,0,0
757	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
758	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
759	0.09	0.22	0.09	120,120,128	0.0	0.0	0.0	0,0,0
760	0.05	0.12	0.05	120,120,128	0.0	0.0	0.0	0,0,0
761	0.07	0.18	0.06	119,119,128	0.0	0.0	0.0	0,0,0
762	0.12	0.29	0.10	119,119,128	0.0	0.0	0.0	0,0,0
763	0.10	0.24	0.06	119,119,128	0.0	0.0	0.0	0,0,0
764	0.10	0.25	0.06	120,120,128	0.0	0.0	0.0	0,0,0
765	0.12	0.30	0.11	120,120,128	0.0	0.0	0.0	0,0,0
766	0.08	0.19	0.07	120,120,128	0.0	0.0	0.0	0,0,0
767	0.05	0.12	0.05	119,119,128	0.0	0.0	0.0	0,0,0
768	0.09	0.23	0.10	119,119,128	0.0	0.0	0.0	0,0,0



769	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
770	0.01	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
771	0.10	0.23	0.09	120,120,128	0.0	0.0	0.0	0,0,0
772	0.05	0.11	0.05	120,120,128	0.0	0.0	0.0	0,0,0
773	0.06	0.15	0.05	119,119,128	0.0	0.0	0.0	0,0,0
774	0.12	0.28	0.10	119,119,128	0.0	0.0	0.0	0,0,0
775	0.03	0.07	0.02	119,119,128	0.0	0.0	0.0	0,0,0
776	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
777	0.12	0.29	0.10	120,120,128	0.0	0.0	0.0	0,0,0
778	0.06	0.15	0.06	120,120,128	0.0	0.0	0.0	0,0,0
779	0.05	0.12	0.05	119,115,128	0.0	0.0	0.0	0,0,0
780	0.10	0.24	0.10	119,119,128	0.0	0.0	0.0	0,0,0
781	0.02	0.04	0.02	119,119,128	0.0	0.0	0.0	0,0,0
782	0.01	0.02	0.01	120,120,128	0.0	0.0	0.0	0,0,0
783	0.03	0.08	0.04	120,116,128	0.0	0.0	0.0	0,0,0
784	0.05	0.13	0.07	119,115,128	0.0	0.0	0.0	0,0,0
785	0.05	0.13	0.07	119,119,128	0.0	0.0	0.0	0,0,0
786	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
787	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
788	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
789	0.04	0.11	0.04	120,120,128	0.0	0.0	0.0	0,0,0
790	0.06	0.15	0.07	116,116,128	0.0	0.0	0.0	0,0,0
791	0.06	0.14	0.07	116,116,128	0.0	0.0	0.0	0,0,0
792	0.04	0.09	0.04	115,115,128	0.0	0.0	0.0	0,0,0
793	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
794	9.92e-03	0.02	0.01	120,120,128	0.0	0.0	0.0	0,0,0
795	0.03	0.08	0.04	116,116,128	0.0	0.0	0.0	0,0,0
796	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
797	0.05	0.13	0.06	115,115,128	0.0	0.0	0.0	0,0,0
798	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
799	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
800	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
801	0.04	0.09	0.03	120,120,128	0.0	0.0	0.0	0,0,0
802	0.05	0.12	0.06	120,122,128	0.0	0.0	0.0	0,0,0
803	0.05	0.13	0.06	120,122,128	0.0	0.0	0.0	0,0,0
804	0.03	0.07	0.03	115,115,128	0.0	0.0	0.0	0,0,0
805	8.90e-03	0.02	8.94e-03	119,119,128	0.0	0.0	0.0	0,0,0
806	0.01	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
807	0.10	0.23	0.09	120,120,128	0.0	0.0	0.0	0,0,0
808	0.04	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
809	0.06	0.14	0.05	119,119,128	0.0	0.0	0.0	0,0,0
810	0.11	0.27	0.09	119,119,128	0.0	0.0	0.0	0,0,0
811	0.03	0.07	0.02	119,119,128	0.0	0.0	0.0	0,0,0
812	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
813	0.11	0.27	0.09	120,120,128	0.0	0.0	0.0	0,0,0
814	0.05	0.13	0.05	120,120,128	0.0	0.0	0.0	0,0,0
815	0.05	0.13	0.05	119,119,128	0.0	0.0	0.0	0,0,0
816	0.10	0.23	0.09	119,119,128	0.0	0.0	0.0	0,0,0
817	0.02	0.05	0.02	119,119,128	0.0	0.0	0.0	0,0,0
818	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
819	0.09	0.21	0.09	120,120,128	0.0	0.0	0.0	0,0,0
820	0.05	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
821	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
822	0.11	0.28	0.09	119,119,128	0.0	0.0	0.0	0,0,0
823	0.10	0.24	0.05	119,119,128	0.0	0.0	0.0	0,0,0
824	0.09	0.23	0.05	120,120,128	0.0	0.0	0.0	0,0,0
825	0.10	0.25	0.08	120,120,128	0.0	0.0	0.0	0,0,0
826	0.07	0.16	0.05	120,120,128	0.0	0.0	0.0	0,0,0
827	0.04	0.11	0.05	119,115,128	0.0	0.0	0.0	0,0,0
828	0.08	0.19	0.07	119,119,128	0.0	0.0	0.0	0,0,0
829	0.02	0.04	0.01	115,119,128	0.0	0.0	0.0	0,0,0
830	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
831	0.09	0.21	0.09	120,120,128	0.0	0.0	0.0	0,0,0
832	0.05	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
833	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
834	0.11	0.28	0.09	119,119,128	0.0	0.0	0.0	0,0,0
835	0.09	0.23	0.05	119,119,128	0.0	0.0	0.0	0,0,0
836	0.09	0.23	0.05	120,120,128	0.0	0.0	0.0	0,0,0
837	0.10	0.24	0.08	120,120,128	0.0	0.0	0.0	0,0,0
838	0.07	0.16	0.05	120,120,128	0.0	0.0	0.0	0,0,0
839	0.04	0.10	0.04	119,115,128	0.0	0.0	0.0	0,0,0
840	0.07	0.18	0.07	119,119,128	0.0	0.0	0.0	0,0,0
841	0.02	0.04	0.01	115,119,128	0.0	0.0	0.0	0,0,0
842	0.01	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
843	0.10	0.23	0.09	120,120,128	0.0	0.0	0.0	0,0,0
844	0.04	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
845	0.06	0.14	0.05	119,119,128	0.0	0.0	0.0	0,0,0



846	0.11	0.27	0.09	119,119,128	0.0	0.0	0.0	0,0,0
847	0.03	0.07	0.02	119,119,128	0.0	0.0	0.0	0,0,0
848	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
849	0.11	0.25	0.08	120,120,128	0.0	0.0	0.0	0,0,0
850	0.05	0.12	0.04	120,120,128	0.0	0.0	0.0	0,0,0
851	0.05	0.12	0.04	119,119,128	0.0	0.0	0.0	0,0,0
852	0.09	0.22	0.08	119,119,128	0.0	0.0	0.0	0,0,0
853	0.02	0.04	0.02	115,119,128	0.0	0.0	0.0	0,0,0
854	9.83e-03	0.02	0.01	120,120,128	0.0	0.0	0.0	0,0,0
855	0.03	0.08	0.04	116,116,128	0.0	0.0	0.0	0,0,0
856	0.05	0.13	0.06	115,115,128	0.0	0.0	0.0	0,0,0
857	0.05	0.13	0.06	115,115,128	0.0	0.0	0.0	0,0,0
858	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
859	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
860	0.02	0.05	0.01	120,120,128	0.0	0.0	0.0	0,0,0
861	0.03	0.09	0.03	120,120,128	0.0	0.0	0.0	0,0,0
862	0.03	0.08	0.04	120,120,128	0.0	0.0	0.0	0,0,0
863	0.03	0.08	0.04	116,116,128	0.0	0.0	0.0	0,0,0
864	0.03	0.06	0.03	115,115,128	0.0	0.0	0.0	0,0,0
865	9.33e-03	0.02	9.31e-03	115,115,128	0.0	0.0	0.0	0,0,0
866	9.65e-03	0.02	0.01	120,120,128	0.0	0.0	0.0	0,0,0
867	0.03	0.08	0.03	116,116,128	0.0	0.0	0.0	0,0,0
868	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
869	0.05	0.12	0.06	115,119,128	0.0	0.0	0.0	0,0,0
870	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
871	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
872	0.01	0.03	7.41e-03	120,120,128	0.0	0.0	0.0	0,0,0
873	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
874	0.05	0.13	0.06	121,121,128	0.0	0.0	0.0	0,0,0
875	0.05	0.12	0.06	121,121,128	0.0	0.0	0.0	0,0,0
876	0.02	0.06	0.02	115,115,128	0.0	0.0	0.0	0,0,0
877	7.33e-03	0.02	6.97e-03	119,119,128	0.0	0.0	0.0	0,0,0
878	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
879	0.09	0.22	0.09	120,120,128	0.0	0.0	0.0	0,0,0
880	0.04	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
881	0.06	0.14	0.05	119,119,128	0.0	0.0	0.0	0,0,0
882	0.11	0.27	0.09	119,119,128	0.0	0.0	0.0	0,0,0
883	0.03	0.06	0.02	119,119,128	0.0	0.0	0.0	0,0,0
884	0.02	0.05	0.01	120,120,128	0.0	0.0	0.0	0,0,0
885	0.09	0.21	0.06	120,120,128	0.0	0.0	0.0	0,0,0
886	0.04	0.11	0.03	120,120,128	0.0	0.0	0.0	0,0,0
887	0.03	0.08	0.03	119,115,128	0.0	0.0	0.0	0,0,0
888	0.07	0.16	0.06	119,119,128	0.0	0.0	0.0	0,0,0
889	0.01	0.02	9.26e-03	119,119,128	0.0	0.0	0.0	0,0,0
890	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
891	0.08	0.21	0.08	120,120,128	0.0	0.0	0.0	0,0,0
892	0.05	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
893	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
894	0.11	0.27	0.09	119,119,128	0.0	0.0	0.0	0,0,0
895	0.09	0.23	0.05	119,119,128	0.0	0.0	0.0	0,0,0
896	0.08	0.20	0.04	120,120,128	0.0	0.0	0.0	0,0,0
897	0.09	0.22	0.06	120,120,128	0.0	0.0	0.0	0,0,0
898	0.05	0.13	0.04	120,120,128	0.0	0.0	0.0	0,0,0
899	0.03	0.08	0.03	119,115,128	0.0	0.0	0.0	0,0,0
900	0.07	0.16	0.06	119,119,128	0.0	0.0	0.0	0,0,0
901	0.01	0.02	8.91e-03	119,119,128	0.0	0.0	0.0	0,0,0
902	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
903	0.08	0.21	0.08	120,120,128	0.0	0.0	0.0	0,0,0
904	0.05	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
905	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
906	0.11	0.27	0.09	119,119,128	0.0	0.0	0.0	0,0,0
907	0.09	0.23	0.05	119,119,128	0.0	0.0	0.0	0,0,0
908	0.08	0.20	0.04	120,120,128	0.0	0.0	0.0	0,0,0
909	0.09	0.22	0.07	120,120,128	0.0	0.0	0.0	0,0,0
910	0.06	0.13	0.04	120,120,128	0.0	0.0	0.0	0,0,0
911	0.03	0.08	0.03	119,115,128	0.0	0.0	0.0	0,0,0
912	0.07	0.16	0.06	119,119,128	0.0	0.0	0.0	0,0,0
913	0.01	0.02	9.08e-03	119,119,128	0.0	0.0	0.0	0,0,0
914	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
915	0.09	0.23	0.09	120,120,128	0.0	0.0	0.0	0,0,0
916	0.04	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
917	0.06	0.14	0.05	119,119,128	0.0	0.0	0.0	0,0,0
918	0.11	0.27	0.09	119,119,128	0.0	0.0	0.0	0,0,0
919	0.03	0.06	0.02	119,119,128	0.0	0.0	0.0	0,0,0
920	0.02	0.05	0.01	120,120,128	0.0	0.0	0.0	0,0,0
921	0.09	0.22	0.06	120,120,128	0.0	0.0	0.0	0,0,0
922	0.05	0.11	0.04	120,120,128	0.0	0.0	0.0	0,0,0



923	0.03	0.08	0.03	119,115,128	0.0	0.0	0.0	0,0,0
924	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
925	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
926	9.57e-03	0.02	9.95e-03	120,120,128	0.0	0.0	0.0	0,0,0
927	0.03	0.08	0.03	116,116,128	0.0	0.0	0.0	0,0,0
928	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
929	0.05	0.12	0.06	115,115,128	0.0	0.0	0.0	0,0,0
930	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
931	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
932	0.01	0.03	7.76e-03	120,120,128	0.0	0.0	0.0	0,0,0
933	0.03	0.08	0.03	120,120,128	0.0	0.0	0.0	0,0,0
934	0.04	0.10	0.05	118,116,128	0.0	0.0	0.0	0,0,0
935	0.04	0.11	0.05	116,116,128	0.0	0.0	0.0	0,0,0
936	0.03	0.06	0.03	115,115,128	0.0	0.0	0.0	0,0,0
937	7.97e-03	0.02	7.84e-03	119,119,128	0.0	0.0	0.0	0,0,0
938	9.22e-03	0.02	9.80e-03	120,120,128	0.0	0.0	0.0	0,0,0
939	0.03	0.08	0.03	116,116,128	0.0	0.0	0.0	0,0,0
940	0.05	0.12	0.06	117,117,128	0.0	0.0	0.0	0,0,0
941	0.05	0.12	0.06	119,119,128	0.0	0.0	0.0	0,0,0
942	0.04	0.09	0.04	119,119,128	0.0	0.0	0.0	0,0,0
943	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
944	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
945	0.04	0.09	0.03	120,120,128	0.0	0.0	0.0	0,0,0
946	0.05	0.12	0.06	120,120,128	0.0	0.0	0.0	0,0,0
947	0.04	0.11	0.05	116,116,128	0.0	0.0	0.0	0,0,0
948	0.03	0.07	0.03	115,115,128	0.0	0.0	0.0	0,0,0
949	8.91e-03	0.02	9.00e-03	115,115,128	0.0	0.0	0.0	0,0,0
950	0.01	0.03	0.01	120,116,128	0.0	0.0	0.0	0,0,0
951	0.09	0.21	0.09	120,120,128	0.0	0.0	0.0	0,0,0
952	0.04	0.10	0.05	120,120,128	0.0	0.0	0.0	0,0,0
953	0.05	0.13	0.05	119,119,128	0.0	0.0	0.0	0,0,0
954	0.11	0.26	0.09	119,119,128	0.0	0.0	0.0	0,0,0
955	0.03	0.06	0.02	119,119,128	0.0	0.0	0.0	0,0,0
956	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
957	0.11	0.26	0.09	120,120,128	0.0	0.0	0.0	0,0,0
958	0.05	0.13	0.05	120,120,128	0.0	0.0	0.0	0,0,0
959	0.05	0.11	0.04	115,115,128	0.0	0.0	0.0	0,0,0
960	0.09	0.22	0.09	119,119,128	0.0	0.0	0.0	0,0,0
961	0.02	0.04	0.01	115,115,128	0.0	0.0	0.0	0,0,0
962	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
963	0.08	0.20	0.08	120,120,128	0.0	0.0	0.0	0,0,0
964	0.04	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
965	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
966	0.11	0.26	0.09	119,119,128	0.0	0.0	0.0	0,0,0
967	0.09	0.23	0.06	119,119,128	0.0	0.0	0.0	0,0,0
968	0.09	0.23	0.06	120,120,128	0.0	0.0	0.0	0,0,0
969	0.10	0.26	0.09	120,120,128	0.0	0.0	0.0	0,0,0
970	0.07	0.16	0.06	120,120,128	0.0	0.0	0.0	0,0,0
971	0.04	0.11	0.05	119,115,128	0.0	0.0	0.0	0,0,0
972	0.08	0.19	0.08	119,119,128	0.0	0.0	0.0	0,0,0
973	0.01	0.04	0.01	115,115,128	0.0	0.0	0.0	0,0,0
974	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
975	0.08	0.20	0.08	120,120,128	0.0	0.0	0.0	0,0,0
976	0.05	0.11	0.05	120,116,128	0.0	0.0	0.0	0,0,0
977	0.07	0.17	0.06	119,119,128	0.0	0.0	0.0	0,0,0
978	0.11	0.26	0.09	119,119,128	0.0	0.0	0.0	0,0,0
979	0.09	0.23	0.06	119,119,128	0.0	0.0	0.0	0,0,0
980	0.09	0.23	0.06	120,120,128	0.0	0.0	0.0	0,0,0
981	0.10	0.26	0.09	120,120,128	0.0	0.0	0.0	0,0,0
982	0.07	0.16	0.06	120,120,128	0.0	0.0	0.0	0,0,0
983	0.05	0.11	0.05	119,115,128	0.0	0.0	0.0	0,0,0
984	0.08	0.20	0.08	119,119,128	0.0	0.0	0.0	0,0,0
985	0.01	0.04	0.01	115,115,128	0.0	0.0	0.0	0,0,0
986	0.02	0.04	0.01	120,116,128	0.0	0.0	0.0	0,0,0
987	0.10	0.23	0.09	120,120,128	0.0	0.0	0.0	0,0,0
988	0.05	0.11	0.05	116,116,128	0.0	0.0	0.0	0,0,0
989	0.06	0.14	0.05	119,119,128	0.0	0.0	0.0	0,0,0
990	0.11	0.26	0.09	119,119,128	0.0	0.0	0.0	0,0,0
991	0.03	0.06	0.02	119,119,128	0.0	0.0	0.0	0,0,0
992	0.03	0.07	0.02	120,120,128	0.0	0.0	0.0	0,0,0
993	0.11	0.26	0.09	120,120,128	0.0	0.0	0.0	0,0,0
994	0.05	0.13	0.05	120,120,128	0.0	0.0	0.0	0,0,0
995	0.05	0.12	0.05	115,115,128	0.0	0.0	0.0	0,0,0
996	0.10	0.24	0.09	119,119,128	0.0	0.0	0.0	0,0,0
997	0.02	0.04	0.02	115,115,128	0.0	0.0	0.0	0,0,0
998	8.94e-03	0.02	9.75e-03	120,120,128	0.0	0.0	0.0	0,0,0
999	0.03	0.07	0.03	116,116,128	0.0	0.0	0.0	0,0,0



1000	0.05	0.13	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1001	0.09	0.22	0.10	120,120,128	0.0	0.0	0.0	0,0,0
1002	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
1003	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1004	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1005	0.04	0.09	0.04	120,120,128	0.0	0.0	0.0	0,0,0
1006	0.09	0.23	0.11	119,119,128	0.0	0.0	0.0	0,0,0
1007	0.05	0.12	0.06	119,119,128	0.0	0.0	0.0	0,0,0
1008	0.03	0.07	0.03	115,115,128	0.0	0.0	0.0	0,0,0
1009	8.61e-03	0.02	9.31e-03	119,119,128	0.0	0.0	0.0	0,0,0
1010	8.29e-03	0.02	7.44e-03	114,114,128	0.0	0.0	0.0	0,0,0
1011	0.02	0.04	0.02	114,114,128	0.0	0.0	0.0	0,0,0
1012	0.09	0.22	0.10	114,114,128	0.0	0.0	0.0	0,0,0
1013	0.04	0.10	0.04	114,114,128	0.0	0.0	0.0	0,0,0
1014	0.02	0.05	0.02	119,119,128	0.0	0.0	0.0	0,0,0
1015	8.37e-03	0.02	0.01	116,116,128	0.0	0.0	0.0	0,0,0
1016	0.01	0.03	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1017	0.02	0.04	0.01	111,122,128	0.0	0.0	0.0	0,0,0
1018	0.01	0.03	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1019	0.01	0.03	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1020	0.01	0.04	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1021	0.01	0.03	9.25e-03	122,122,128	0.0	0.0	0.0	0,0,0
1022	0.01	0.03	9.26e-03	122,122,128	0.0	0.0	0.0	0,0,0
1023	0.01	0.04	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1024	0.01	0.03	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1025	0.01	0.03	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1026	0.02	0.04	0.01	112,122,128	0.0	0.0	0.0	0,0,0
1027	0.01	0.03	0.01	122,122,128	0.0	0.0	0.0	0,0,0
1028	8.49e-03	0.02	0.01	115,115,128	0.0	0.0	0.0	0,0,0
1029	0.02	0.05	0.02	120,120,128	0.0	0.0	0.0	0,0,0
1030	0.04	0.11	0.04	114,114,128	0.0	0.0	0.0	0,0,0
1031	0.09	0.23	0.11	114,114,128	0.0	0.0	0.0	0,0,0
1032	0.02	0.04	0.02	114,114,128	0.0	0.0	0.0	0,0,0
1033	8.20e-03	0.02	7.33e-03	114,114,128	0.0	0.0	0.0	0,0,0
1034	0.02	0.04	0.01	114,114,128	0.0	0.0	0.0	0,0,0
1035	0.05	0.13	0.05	122,122,128	0.0	0.0	0.0	0,0,0
1036	0.04	0.10	0.04	114,114,128	0.0	0.0	0.0	0,0,0
1037	0.05	0.13	0.06	114,114,128	0.0	0.0	0.0	0,0,0
1038	0.07	0.18	0.08	119,119,128	0.0	0.0	0.0	0,0,0
1039	0.02	0.06	0.03	114,114,128	0.0	0.0	0.0	0,0,0
1040	0.03	0.08	0.03	122,122,128	0.0	0.0	0.0	0,0,0
1041	0.09	0.22	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1042	0.09	0.23	0.08	122,122,128	0.0	0.0	0.0	0,0,0
1043	0.09	0.22	0.08	122,122,128	0.0	0.0	0.0	0,0,0
1044	0.09	0.22	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1045	0.03	0.08	0.03	122,122,128	0.0	0.0	0.0	0,0,0
1046	0.03	0.08	0.03	122,122,128	0.0	0.0	0.0	0,0,0
1047	0.09	0.22	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1048	0.09	0.22	0.08	122,122,128	0.0	0.0	0.0	0,0,0
1049	0.09	0.23	0.08	122,122,128	0.0	0.0	0.0	0,0,0
1050	0.09	0.22	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1051	0.03	0.08	0.03	122,122,128	0.0	0.0	0.0	0,0,0
1052	0.02	0.06	0.03	114,114,128	0.0	0.0	0.0	0,0,0
1053	0.07	0.18	0.08	120,120,128	0.0	0.0	0.0	0,0,0
1054	0.05	0.13	0.06	114,114,128	0.0	0.0	0.0	0,0,0
1055	0.04	0.10	0.04	114,114,128	0.0	0.0	0.0	0,0,0
1056	0.05	0.13	0.05	122,122,128	0.0	0.0	0.0	0,0,0
1057	0.02	0.04	0.01	114,114,128	0.0	0.0	0.0	0,0,0
1058	0.01	0.03	0.01	114,114,128	0.0	0.0	0.0	0,0,0
1059	0.03	0.07	0.04	116,116,128	0.0	0.0	0.0	0,0,0
1060	0.03	0.08	0.03	114,114,128	0.0	0.0	0.0	0,0,0
1061	0.04	0.10	0.05	114,114,128	0.0	0.0	0.0	0,0,0
1062	0.05	0.11	0.05	119,119,128	0.0	0.0	0.0	0,0,0
1063	0.07	0.16	0.06	114,114,128	0.0	0.0	0.0	0,0,0
1064	0.08	0.21	0.08	119,119,128	0.0	0.0	0.0	0,0,0
1065	0.05	0.12	0.05	122,122,128	0.0	0.0	0.0	0,0,0
1066	0.05	0.11	0.04	122,122,128	0.0	0.0	0.0	0,0,0
1067	0.05	0.11	0.04	122,122,128	0.0	0.0	0.0	0,0,0
1068	0.05	0.11	0.04	122,122,128	0.0	0.0	0.0	0,0,0
1069	0.05	0.13	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1070	0.05	0.13	0.07	122,122,128	0.0	0.0	0.0	0,0,0
1071	0.05	0.11	0.04	122,122,128	0.0	0.0	0.0	0,0,0
1072	0.05	0.11	0.04	122,122,128	0.0	0.0	0.0	0,0,0
1073	0.05	0.11	0.04	122,122,128	0.0	0.0	0.0	0,0,0
1074	0.05	0.12	0.05	122,122,128	0.0	0.0	0.0	0,0,0
1075	0.09	0.21	0.08	120,120,128	0.0	0.0	0.0	0,0,0
1076	0.07	0.16	0.06	114,114,128	0.0	0.0	0.0	0,0,0



1077	0.05	0.12	0.05	120,120,128	0.0	0.0	0.0	0,0,0
1078	0.04	0.10	0.05	114,114,128	0.0	0.0	0.0	0,0,0
1079	0.03	0.08	0.03	114,114,128	0.0	0.0	0.0	0,0,0
1080	0.03	0.08	0.04	115,115,128	0.0	0.0	0.0	0,0,0
1081	0.01	0.03	0.01	114,114,128	0.0	0.0	0.0	0,0,0
1082	0.01	0.03	0.01	114,114,128	0.0	0.0	0.0	0,0,0
1083	0.03	0.07	0.03	120,120,128	0.0	0.0	0.0	0,0,0
1084	0.02	0.06	0.03	121,121,128	0.0	0.0	0.0	0,0,0
1085	0.03	0.06	0.03	119,119,128	0.0	0.0	0.0	0,0,0
1086	0.03	0.08	0.04	119,119,128	0.0	0.0	0.0	0,0,0
1087	0.10	0.23	0.08	119,119,128	0.0	0.0	0.0	0,0,0
1088	0.07	0.16	0.07	114,114,128	0.0	0.0	0.0	0,0,0
1089	0.05	0.12	0.05	119,111,128	0.0	0.0	0.0	0,0,0
1090	0.05	0.12	0.04	120,120,128	0.0	0.0	0.0	0,0,0
1091	0.05	0.11	0.04	119,119,128	0.0	0.0	0.0	0,0,0
1092	0.05	0.12	0.04	119,119,128	0.0	0.0	0.0	0,0,0
1093	0.06	0.14	0.07	120,120,128	0.0	0.0	0.0	0,0,0
1094	0.06	0.14	0.07	119,119,128	0.0	0.0	0.0	0,0,0
1095	0.05	0.12	0.04	120,120,128	0.0	0.0	0.0	0,0,0
1096	0.05	0.11	0.04	120,120,128	0.0	0.0	0.0	0,0,0
1097	0.05	0.12	0.04	119,119,128	0.0	0.0	0.0	0,0,0
1098	0.05	0.12	0.05	120,112,128	0.0	0.0	0.0	0,0,0
1099	0.06	0.16	0.07	114,114,128	0.0	0.0	0.0	0,0,0
1100	0.10	0.23	0.08	120,120,128	0.0	0.0	0.0	0,0,0
1101	0.03	0.08	0.04	120,120,128	0.0	0.0	0.0	0,0,0
1102	0.03	0.06	0.03	120,120,128	0.0	0.0	0.0	0,0,0
1103	0.02	0.06	0.03	121,121,128	0.0	0.0	0.0	0,0,0
1104	0.03	0.07	0.03	119,119,128	0.0	0.0	0.0	0,0,0
1105	0.01	0.03	0.01	114,114,128	0.0	0.0	0.0	0,0,0
1106	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1107	0.04	0.10	0.04	120,120,128	0.0	0.0	0.0	0,0,0
1108	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
1109	0.03	0.09	0.04	121,121,128	0.0	0.0	0.0	0,0,0
1110	0.05	0.12	0.06	119,119,128	0.0	0.0	0.0	0,0,0
1111	0.02	0.04	0.02	119,119,128	0.0	0.0	0.0	0,0,0
1112	0.04	0.09	0.03	119,119,128	0.0	0.0	0.0	0,0,0
1113	0.10	0.24	0.07	120,120,128	0.0	0.0	0.0	0,0,0
1114	0.10	0.24	0.08	119,119,128	0.0	0.0	0.0	0,0,0
1115	0.10	0.23	0.07	119,119,128	0.0	0.0	0.0	0,0,0
1116	0.10	0.23	0.07	119,119,128	0.0	0.0	0.0	0,0,0
1117	0.03	0.08	0.03	119,119,128	0.0	0.0	0.0	0,0,0
1118	0.03	0.08	0.03	120,120,128	0.0	0.0	0.0	0,0,0
1119	0.10	0.23	0.07	120,120,128	0.0	0.0	0.0	0,0,0
1120	0.10	0.23	0.07	120,120,128	0.0	0.0	0.0	0,0,0
1121	0.10	0.24	0.08	120,120,128	0.0	0.0	0.0	0,0,0
1122	0.10	0.24	0.07	119,119,128	0.0	0.0	0.0	0,0,0
1123	0.04	0.09	0.03	120,120,128	0.0	0.0	0.0	0,0,0
1124	0.02	0.04	0.02	120,120,128	0.0	0.0	0.0	0,0,0
1125	0.05	0.12	0.06	120,120,128	0.0	0.0	0.0	0,0,0
1126	0.03	0.08	0.04	121,121,128	0.0	0.0	0.0	0,0,0
1127	0.03	0.07	0.03	121,121,128	0.0	0.0	0.0	0,0,0
1128	0.04	0.10	0.04	119,119,128	0.0	0.0	0.0	0,0,0
1129	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1130	6.85e-03	0.02	8.50e-03	117,117,128	0.0	0.0	0.0	0,0,0
1131	0.01	0.03	0.01	121,121,128	0.0	0.0	0.0	0,0,0
1132	9.98e-03	0.03	0.01	121,121,128	0.0	0.0	0.0	0,0,0
1133	0.01	0.02	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1134	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1135	5.90e-03	0.01	5.65e-03	119,119,128	0.0	0.0	0.0	0,0,0
1136	0.01	0.03	9.92e-03	119,119,128	0.0	0.0	0.0	0,0,0
1137	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1138	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1139	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1140	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1141	0.01	0.03	9.05e-03	120,120,128	0.0	0.0	0.0	0,0,0
1142	0.01	0.03	9.06e-03	119,119,128	0.0	0.0	0.0	0,0,0
1143	0.02	0.04	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1144	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1145	0.01	0.03	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1146	0.02	0.04	0.01	119,119,128	0.0	0.0	0.0	0,0,0
1147	0.01	0.03	9.93e-03	120,120,128	0.0	0.0	0.0	0,0,0
1148	6.01e-03	0.01	5.58e-03	120,120,128	0.0	0.0	0.0	0,0,0
1149	0.01	0.03	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1150	0.01	0.02	0.01	120,120,128	0.0	0.0	0.0	0,0,0
1151	0.01	0.03	0.01	121,121,128	0.0	0.0	0.0	0,0,0
1152	0.01	0.03	0.01	121,121,128	0.0	0.0	0.0	0,0,0
1153	6.91e-03	0.02	8.57e-03	117,117,128	0.0	0.0	0.0	0,0,0



<b>Guscio</b>	<b>rRfck</b>	<b>rRfyk</b>	<b>rPfck</b>	<b>wR</b>	<b>wF</b>	<b>wP</b>
	0.27	0.64	0.15	0.23	0.0	0.0



# STATO LIMITE D' ESERCIZIO: SLD DANNO SISMICO

## LEGENDA TABELLA STATI LIMITE DI DANNO (VERIFICHE RES)

Le verifiche RES per SLD sono effettuate in accordo alle Norme Tecniche 17 Gennaio 2018 e alla circolare n.7 del 21 gennaio 2019 nonché alle linee guida del Consiglio Superiore LL.PP. "Linee guida per la Progettazione, l'Esecuzione ed il Collaudo di Interventi di Rinforzo di strutture di c.a., c.a.p. e murarie mediante FRP".

Le verifiche RES per SLD, sono riportate nelle successive tabelle nella forma di rapporto "domanda" su "capacità" e hanno esito positivo quando il rapporto è non superiore al valore unitario.

La "domanda" è ottenuta direttamente dall'analisi per le previste combinazioni SLD (NTC18 2.5.3. COMBINAZIONI DELLE AZIONI formula [2.5.5]).

Per "capacità" si intende qui il valore della sollecitazione corrispondente al raggiungimento dello stato limite di danno per la sezione: per la resistenza flessionale questo stato limite si identifica con la tensione di snervamento dell'acciaio o la resistenza massima a compressione per il calcestruzzo e la muratura. Lo stato limite di danno si ritiene attinto anche in caso di superamento della resistenza a taglio.

Le resistenze flessionali sono valutate utilizzando i legami costitutivi del materiale limitati al solo tratto elastico, ottenendo così resistenze sostanzialmente elastiche come previsto dalla norma.

La seguente tabella identifica per quali configurazioni (materiale nuovo, esistente, con rinforzi e metodo di analisi) sono state condotte le verifiche di seguito riportate.

Configurazione	Verifica SLD	NOTE
<b>1) c.a. nuovo e esist.</b> <b>Verifica SLU con <math>q &gt; 1</math></b>	Verifica N/M SE Verifica V/T	Sono verifiche per struttura non dissipativa condotte secondo il cap.4 NTC18 in regime sostanzialmente elastico; si verificano travi, pilastri, setti e gusci.
<b>2) Muratura nuova</b> <b>Verifica SLU con <math>q &gt; 1</math></b>	Verifica N/M SE Verifica V	Per N/M identificato SL elastico, per V formulazione secondo cap.7
<b>3) Muratura esis. AO</b> <b>Verifica SLU con <math>q &gt; 1</math></b>	Verifica N/M SE Verifica V	Per N/M identificato SL elastico, per V formulazione secondo cap. 7 e 8
<b>4) Muratura esis. PO</b> <b>Verifica SLU con <math>q &gt; 1</math></b>	Verifica N/M SE Verifica V	Per N/M identificato SL elastico, per V formulazione secondo cap. 7 e 8; Anche per rinforzi FRP è prevista verifica N/M SE e V

## Simbologia adottata nelle tabelle di verifica

Per le verifiche agli SLD di pilastri, travi setti e gusci in c.a. è presente una tabella con i simboli di seguito descritti:

Pilas./Trave/ Setto/Guscio	numero identificativo dell'elemento D2 o D3
Stato	Codici relativi all'esito delle verifiche effettuate appresso descritte
Pos.	Posizione nell'elemento della sezione per la quale si riporta la verifica
V N/M	Verifica a pressoflessione con rapporto $E_d/R_d$ : valore minore o uguale a 1 per verifica positiva
V V/T cls	Verifica a taglio/torsione con rapporto $V_{ed}/V_{rd}$ lato cls: valore minore o uguale a 1 per verifica positiva
V V/T acc	Verifica a taglio/torsione con rapporto $V_{ed}/V_{rd}$ lato acciaio: valore minore o uguale a 1 per verifica positiva



Rif. cmb.	Riferimento combinazioni da cui si generano le verifiche più gravose per il pilastro
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Per le verifiche agli SLD di maschi e fasce in ***muratura***, è presente una tabella con i simboli di seguito descritti:

<b>Setto/Fascia/Elem.</b>	numero del macroelemento (D3) o elemento (D2) considerato	
<b>Mat.</b>	Materiale	
<b>s=,m=</b>	Indice della sezione e del materiale assegnati all' elemento (per D2)	
<b>Spessore</b>	spessore dell'elemento	
<b>Stato</b>	<b>ok</b>	elemento verificato (SLD)
	<b>NV</b>	elemento non verificato (SLD)

e a seguire:

<b>Nodo/Pos.</b>	numero del nodo appartenente al setto / posizione relativa al nodo I per D2
<b>h0/t</b>	valore della snellezza convenzionale
<b>P/Ap</b>	tensione verticale media utilizzata per la verifica a pressoflessione nel piano del muro
<b>P/Acv</b>	tensione verticale media nella parte compressa, utilizzata nella verifica a taglio nel piano del muro
<b>Ver. Mp</b>	rapporto tra il momento di progetto e il momento Mrd in relazione alla verifica Par. 7.8.2.2.1 (pressoflessione complanare) effettuato per tutte le combinazioni
<b>Ver. V</b>	rapporto il taglio di progetto e il taglio ultimo in relazione alla verifica Par. 7.8.2.2.2 (taglio complanare) o C8.7.1.16 della circolare 21-01-19 per edifici esistenti effettuato per tutte le combinazioni
	Per travi in muratura:
<b>Ver. V</b>	rapporto tra il taglio di progetto e il minore dei tagli resistenti Vp e Vt in relazione alla verifica del par. 7.8.2.2.3
<b>Rif. cmb</b>	Combinazioni in cui si hanno i massimi valori dei rapporti Ver. Mp, Ver. V

Per elementi consolidati secondo il paragrafo C8.5.3.1 il programma opera come per gli elementi non rinforzati, considerando ai fini delle analisi e delle verifiche gli opportuni coefficienti correttivi delle rigidità e delle resistenze.

Per elementi consolidati con fibrorinforzi il programma implementa le verifiche previste dalle "Linee guida per la Progettazione, l'Esecuzione ed il Collaudo di Interventi di Rinforzo di strutture di c.a., c.a.p. e murarie mediante FRP" approvate dal CSLLPP il 24/07/2009. Per questi elementi vengono effettuate le verifiche di resistenza previste al cap. 4.4.1.2 "Verifiche per azioni nel piano del pannello". Per semplicità la simbologia adottata nelle tabelle è uniformata a quella degli elementi non rinforzati. Le tabelle riportano inoltre i seguenti parametri:

<b>Fibra</b>	Tipo di fibra del fibrorinforzo
<b>E frp</b>	Modulo elastico del fibrorinforzo
<b>epsr</b>	Dilatazione di rottura del fibrorinforzo
<b>epsd</b>	Dilatazione di calcolo
<b>epsd(s)</b>	Dilatazione di calcolo per combinazioni sismiche
<b>Spess.</b>	Spessore del fibrorinforzo, il programma prevede l' applicazione di uno strato di spessore s su entrambe le facce della parete (o sui quattro lati della sezione in caso di confinamento)
<b>AO frp</b>	Area orizzontale complessiva di fibrorinforzo per metro lineare
<b>AV frp</b>	Area verticale complessiva di fibrorinforzo per metro lineare

Affinché l'elemento sia verificato deve essere:

<b>V.Mp, Ver.V</b> non superiore a 1
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<b>TABELLA VERIFICHE ELEMENTI D2 TRAVI C.A.</b>
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Trave	Stato	Pos. cm	V N/M	V V/T cls	V V/T acc	Rif. cmb	Pos. cm	V N/M	V V/T cls	V V/T acc	Rif. cmb
1	ok	0.0	0.14	0.08	0.03	60,71,60	51.5	0.09	0.07	0.04	60,71,60
		103.0	0.07	0.08	0.04	63,71,60					
2	ok	0.0	0.21	0.10	0.05	52,67,75	198.8	0.24	0.09	0.03	49,65,75
		397.5	0.24	0.08	0.01	65,69,51					
3	ok	0.0	0.21	0.02	0.02	65,62,51	180.0	0.23	0.02	0.01	65,62,46
		360.0	0.22	0.02	0.02	63,52,49					
4	ok	0.0	0.24	0.06	0.02	63,65,49	198.8	0.26	0.08	0.03	51,65,49
		397.5	0.23	0.10	0.06	51,65,49					
5	ok	0.0	0.09	0.05	0.01	52,73,51	167.5	0.10	0.05	0.01	46,70,46
		335.0	0.15	0.05	0.02	46,73,65					
6	ok	0.0	0.07	0.30	0.06	71,60,60	16.2	0.07	0.30	0.06	71,60,60
		32.5	0.06	0.30	0.06	61,60,60					
7	ok	0.0	0.05	0.07	0.04	61,59,71	30.0	0.04	0.07	0.03	61,59,71
		60.0	0.04	0.07	0.03	56,60,72					
8	ok	0.0	0.03	0.03	0.04	56,75,63	30.0	0.03	0.03	0.03	55,75,63
		60.0	0.04	0.02	0.02	55,75,63					
18	ok	0.0	0.03	0.03	0.03	55,59,67	27.5	0.05	0.03	0.03	67,59,67
		55.0	0.06	0.03	0.02	67,59,67					
20	ok	0.0	0.13	0.05	0.06	52,74,54	27.5	0.14	0.04	0.04	51,74,54
		55.0	0.14	0.03	0.03	51,77,57					
21	ok	0.0	0.16	0.04	0.06	51,54,46	30.0	0.18	0.03	0.04	51,54,46
		60.0	0.20	0.03	0.04	51,52,49					
22	ok	0.0	0.22	0.05	0.07	51,54,54	30.0	0.29	0.04	0.05	51,54,54
		60.0	0.35	0.03	0.03	51,54,54					
23	ok	0.0	0.46	0.14	0.17	51,49,52	195.0	0.17	0.12	0.15	46,51,51
		390.0	0.22	0.15	0.19	51,51,51					
24	ok	0.0	0.17	0.02	9.34e-03	51,69,61	30.0	0.15	0.02	0.03	51,67,58
		60.0	0.13	0.04	0.05	51,67,58					
25	ok	0.0	0.12	0.03	0.04	51,71,51	30.0	0.10	0.02	0.02	51,71,51
		60.0	0.09	0.02	0.03	46,72,52					
26	ok	0.0	0.09	0.04	0.04	46,71,71	27.5	0.09	0.03	0.02	46,71,71
		55.0	0.09	0.04	0.03	46,72,72					
27	ok	0.0	0.10	0.03	0.02	52,74,66	27.5	0.10	0.03	0.02	52,77,69
		55.0	0.10	0.04	0.03	52,77,69					
28	ok	0.0	0.10	0.02	0.02	52,71,46	30.0	0.11	0.02	0.02	52,72,49
		60.0	0.13	0.03	0.04	52,72,49					
29	ok	0.0	0.14	0.03	0.04	52,58,54	30.0	0.16	0.01	0.02	52,58,54
		60.0	0.19	0.02	0.02	52,61,57					
30	ok	0.0	0.26	0.08	0.14	52,52,52	272.5	0.10	0.04	0.06	52,51,51
		545.0	0.27	0.08	0.13	51,51,46					
31	ok	0.0	0.22	0.02	0.03	51,55,51	30.0	0.18	0.02	0.03	51,56,52
		60.0	0.15	0.03	0.05	51,56,52					
32	ok	0.0	0.13	0.03	0.05	51,71,51	30.0	0.11	0.02	0.03	51,71,51
		60.0	0.09	0.02	0.03	46,72,52					
33	ok	0.0	0.09	0.04	0.04	46,63,51	27.5	0.08	0.03	0.02	46,63,51
		55.0	0.09	0.03	0.02	46,64,52					
34	ok	0.0	0.11	0.03	0.02	52,66,46	27.5	0.11	0.03	0.02	52,69,49
		55.0	0.11	0.04	0.04	52,69,49					
35	ok	0.0	0.11	0.02	0.03	52,51,46	30.0	0.13	0.02	0.03	52,52,49
		60.0	0.15	0.03	0.05	52,52,49					
36	ok	0.0	0.17	0.03	0.05	52,51,46	30.0	0.20	0.02	0.03	52,51,46
		60.0	0.24	0.02	0.03	52,52,49					
37	ok	0.0	0.32	0.10	0.14	52,52,52	253.5	0.06	0.07	0.07	76,52,52
		507.0	0.24	0.10	0.14	51,51,51					
38	ok	0.0	0.20	0.02	0.02	51,51,51	30.0	0.16	0.02	0.02	51,52,52
		60.0	0.14	0.03	0.04	51,52,52					
39	ok	0.0	0.12	0.03	0.05	51,46,51	30.0	0.10	0.02	0.03	51,46,51
		60.0	0.09	0.02	0.02	51,49,52					
40	ok	0.0	0.09	0.04	0.04	51,67,75	27.5	0.08	0.03	0.02	46,67,75
		55.0	0.09	0.03	0.02	46,68,76					
41	ok	0.0	0.11	0.03	0.03	52,62,62	27.5	0.10	0.03	0.02	52,65,65
		55.0	0.10	0.04	0.03	52,65,65					
42	ok	0.0	0.11	0.02	0.03	52,62,46	30.0	0.12	0.02	0.02	52,65,49
		60.0	0.13	0.03	0.04	52,65,49					
43	ok	0.0	0.15	0.03	0.04	52,67,62	30.0	0.16	0.02	0.02	52,67,62
		60.0	0.19	0.02	7.70e-03	52,65,65					
44	ok	0.0	0.27	0.14	0.18	52,49,52	195.0	0.17	0.11	0.13	52,49,52
		390.0	0.44	0.11	0.15	52,59,51					
45	ok	0.0	0.31	0.02	0.02	52,49,52	30.0	0.26	0.03	0.04	52,49,52
		60.0	0.20	0.04	0.06	52,49,52					
46	ok	0.0	0.18	0.02	0.03	52,46,51	30.0	0.17	0.02	0.03	52,60,52
		60.0	0.15	0.03	0.05	52,60,52					
47	ok	0.0	0.13	0.02	0.02	52,62,51	27.5	0.13	0.03	0.03	52,68,52
		55.0	0.13	0.04	0.05	49,68,52					
48	ok	0.0	0.05	0.03	9.13e-03	69,68,57	226.8	0.08	0.04	0.02	68,67,77



		453.5	0.20	0.05	0.04	56,67,77					
49	ok	0.0	0.05	0.02	3.89e-03	65,65,67	226.8	0.05	0.03	0.02	62,65,65
		453.5	0.17	0.05	0.04	49,65,65					
50	ok	0.0	0.08	0.07	0.03	65,65,47	226.8	0.11	0.06	0.01	65,65,49
		453.5	0.18	0.08	0.05	64,65,72					
51	ok	0.0	0.06	0.08	0.03	67,50,46	226.8	0.10	0.07	9.68e-03	51,70,67
		453.5	0.05	0.09	0.04	55,50,50					
53	ok	0.0	0.17	0.04	0.06	71,54,74	27.5	0.17	0.03	0.04	72,54,74
		55.0	0.17	0.03	0.04	72,71,77					
56	ok	0.0	0.10	0.03	0.04	72,51,71	27.5	0.10	0.04	0.04	72,51,71
		55.0	0.10	0.04	0.05	72,51,71					
59	ok	0.0	0.09	0.03	0.04	64,51,63	27.5	0.09	0.03	0.04	64,51,63
		55.0	0.08	0.04	0.05	64,51,63					
62	ok	0.0	0.10	0.03	0.04	62,49,65	27.5	0.10	0.03	0.04	62,49,65
		55.0	0.09	0.04	0.05	62,49,65					
65	ok	0.0	0.14	0.04	0.05	65,46,68	27.5	0.14	0.03	0.04	62,46,68
		55.0	0.14	0.03	0.03	62,49,67					
67	ok	0.0	0.19	0.04	0.06	72,74,72	30.0	0.22	0.03	0.04	72,74,72
		60.0	0.24	0.04	0.05	72,71,71					
68	ok	0.0	0.12	0.03	0.05	72,71,71	30.0	0.12	0.03	0.05	72,71,71
		60.0	0.13	0.04	0.06	71,71,71					
69	ok	0.0	0.10	0.03	0.05	64,71,63	30.0	0.11	0.03	0.05	64,71,63
		60.0	0.11	0.03	0.06	63,71,63					
70	ok	0.0	0.11	0.03	0.05	62,65,65	30.0	0.12	0.03	0.05	62,65,65
		60.0	0.13	0.04	0.06	62,65,65					
71	ok	0.0	0.16	0.04	0.05	62,62,68	30.0	0.18	0.02	0.03	62,62,68
		60.0	0.19	0.03	0.04	62,65,67					
72	ok	0.0	0.27	0.05	0.06	72,64,74	30.0	0.35	0.04	0.04	72,64,74
		60.0	0.42	0.03	0.02	72,77,77					
73	ok	0.0	0.16	0.04	0.06	72,71,71	30.0	0.23	0.04	0.07	71,71,71
		60.0	0.31	0.04	0.07	71,71,71					
74	ok	0.0	0.13	0.03	0.06	64,63,63	30.0	0.20	0.04	0.07	63,63,63
		60.0	0.27	0.04	0.07	63,63,63					
75	ok	0.0	0.15	0.03	0.06	62,65,65	30.0	0.21	0.04	0.07	65,65,65
		60.0	0.29	0.04	0.07	65,65,65					
76	ok	0.0	0.22	0.08	0.07	62,52,56	30.0	0.28	0.06	0.05	62,52,56
		60.0	0.34	0.05	0.02	62,52,56					
77	ok	0.0	0.44	0.30	0.22	62,49,65	35.5	0.38	0.29	0.21	62,49,65
		71.0	0.32	0.29	0.20	68,49,65					
78	ok	0.0	0.12	0.12	0.03	49,71,52	51.5	0.08	0.12	0.04	49,69,52
		103.0	0.05	0.13	0.05	74,69,52					
79	ok	0.0	0.12	0.06	0.05	46,51,46	198.8	0.16	0.05	0.03	52,51,46
		397.5	0.14	0.04	0.02	68,77,49					
80	ok	0.0	0.18	0.03	0.04	52,54,46	180.0	0.18	0.02	0.02	72,54,46
		360.0	0.20	0.03	0.03	46,52,49					
81	ok	0.0	0.18	0.05	0.04	76,46,51	198.8	0.28	0.03	0.04	46,52,52
		397.5	0.33	0.06	0.07	46,52,52					
82	ok	0.0	0.31	0.10	0.03	46,62,53	167.5	0.21	0.11	0.03	46,62,50
		335.0	0.07	0.13	0.06	75,62,50					
83	ok	0.0	0.55	0.19	0.23	72,77,71	145.0	0.22	0.18	0.20	72,72,72
		290.0	0.22	0.20	0.24	71,72,72					
84	ok	0.0	0.51	0.13	0.22	71,72,72	178.0	0.15	0.11	0.19	71,71,71
		356.0	0.38	0.14	0.25	71,71,71					
85	ok	0.0	0.44	0.10	0.18	63,66,64	178.0	0.15	0.10	0.16	63,63,63
		356.0	0.28	0.13	0.22	63,63,63					
86	ok	0.0	0.47	0.11	0.20	65,62,62	178.0	0.16	0.09	0.17	65,65,65
		356.0	0.28	0.12	0.22	65,65,65					
87	ok	0.0	0.37	0.16	0.17	62,55,67	142.5	0.14	0.15	0.17	74,62,68
		285.0	0.26	0.17	0.21	67,62,68					
88	ok	0.0	0.15	0.04	0.04	71,77,71	30.0	0.14	0.04	0.05	77,72,72
		60.0	0.12	0.06	0.07	74,72,72					
89	ok	0.0	0.10	0.03	0.03	74,57,69	30.0	0.11	0.01	6.18e-03	77,57,69
		60.0	0.10	0.02	0.02	77,60,66					
90	ok	0.0	0.22	0.02	0.03	71,52,72	27.2	0.18	0.02	0.02	71,52,72
		54.5	0.14	0.02	0.02	71,52,72					
91	ok	0.0	0.16	0.02	0.03	63,59,73	30.0	0.13	0.02	0.02	63,59,73
		60.0	0.10	0.01	0.02	63,59,73					
92	ok	0.0	0.16	0.02	0.03	65,61,71	30.0	0.14	0.02	0.02	65,61,71
		60.0	0.11	0.01	0.02	65,61,71					
93	ok	0.0	0.18	0.03	0.02	67,58,66	30.0	0.16	0.04	0.04	67,58,66
		60.0	0.13	0.05	0.06	68,58,66					
95	ok	0.0	0.09	0.03	0.03	77,57,57	27.5	0.10	0.02	7.96e-03	77,57,57
		55.0	0.11	0.03	0.02	77,54,54					
97	ok	0.0	0.12	0.03	0.04	71,52,72	27.2	0.11	0.02	0.04	71,52,72
		54.5	0.11	0.02	0.03	71,52,72					
98	ok	0.0	0.09	0.02	0.04	63,52,64	30.0	0.09	0.02	0.03	63,52,64
		60.0	0.09	0.02	0.02	63,52,64					



99	ok	0.0	0.09	0.02	0.04	65,46,62	30.0	0.09	0.02	0.03	65,46,62
100	ok	60.0	0.09	0.02	0.02	65,46,62	30.0	0.11	0.01	6.40e-03	67,55,56
		0.0	0.11	0.02	0.03	68,46,56					
101	ok	60.0	0.10	0.03	0.03	67,55,55	381.0	0.04	0.02	8.33e-03	51,56,63
		0.0	0.25	0.04	0.04	64,64,64					
102	ok	762.0	0.25	0.05	0.05	51,55,47	381.0	0.04	9.69e-03	7.13e-03	57,68,67
		0.0	0.23	0.04	0.05	64,64,64					
103	ok	762.0	0.23	0.04	0.05	67,55,67	381.0	0.07	0.04	0.02	46,62,62
		0.0	0.30	0.06	0.03	62,62,62					
104	ok	762.0	0.18	0.04	0.01	67,46,67	27.5	0.09	0.04	0.04	59,72,60
		0.0	0.10	0.03	0.03	59,72,60					
105	ok	55.0	0.09	0.04	0.04	59,72,60	30.0	0.11	0.03	0.05	59,52,60
		0.0	0.11	0.03	0.04	59,52,60					
106	ok	60.0	0.12	0.04	0.06	59,52,60	30.0	0.19	0.04	0.06	59,52,60
		0.0	0.14	0.03	0.06	59,52,60					
107	ok	60.0	0.25	0.04	0.07	60,52,60	195.0	0.13	0.10	0.14	52,51,60
		0.0	0.40	0.14	0.20	60,59,59					
108	ok	390.0	0.30	0.12	0.20	60,57,60	30.0	0.15	0.02	0.03	60,71,51
		0.0	0.17	0.03	0.04	60,71,51					
109	ok	60.0	0.12	0.02	0.03	60,71,51	30.0	0.14	0.10	0.13	60,77,61
		0.0	0.10	0.10	0.14	60,77,61					
110	ok	60.0	0.19	0.09	0.12	57,77,61	27.5	0.02	0.08	0.06	77,77,77
		0.0	0.04	0.08	0.06	71,77,77					
112	ok	55.0	0.01	0.08	0.07	72,77,77	27.5	0.12	0.03	0.01	71,57,77
		0.0	0.13	0.03	0.03	71,54,74					
115	ok	55.0	0.12	0.04	0.03	71,57,77	33.0	0.08	0.02	0.03	71,72,74
		0.0	0.09	0.03	0.03	71,72,74					
118	ok	66.0	0.07	0.02	0.03	71,57,77	27.5	0.09	0.03	0.02	63,60,64
		0.0	0.08	0.03	0.03	63,60,64					
121	ok	55.0	0.09	0.02	0.02	63,60,64	27.5	0.09	0.03	0.02	65,60,68
		0.0	0.08	0.03	0.03	65,60,68					
124	ok	55.0	0.09	0.02	0.02	65,60,68	27.5	0.10	0.02	8.14e-03	67,55,65
		0.0	0.09	0.03	0.02	68,46,62					
126	ok	55.0	0.10	0.03	0.03	68,55,65	27.5	0.07	0.03	0.02	54,72,52
		0.0	0.08	0.03	0.02	54,72,52					
127	ok	55.0	0.06	0.04	0.03	54,72,52	30.0	0.07	0.02	0.03	54,52,60
		0.0	0.08	0.02	0.03	54,52,60					
128	ok	60.0	0.07	0.03	0.04	54,52,60	30.0	0.12	0.03	0.04	54,52,60
		0.0	0.09	0.02	0.04	54,52,60					
129	ok	60.0	0.14	0.03	0.05	54,52,60	272.5	0.09	0.04	0.07	58,52,60
		0.0	0.24	0.09	0.15	59,51,54					
130	ok	545.0	0.34	0.10	0.17	60,52,60	30.0	0.16	0.03	0.05	60,54,54
		0.0	0.20	0.03	0.05	60,54,54					
131	ok	60.0	0.11	0.02	0.04	60,54,54	30.0	0.10	0.02	0.04	60,51,54
		0.0	0.10	0.02	0.04	60,51,54					
132	ok	60.0	0.09	0.02	0.03	60,51,54	27.5	0.09	0.03	0.02	60,63,59
		0.0	0.08	0.03	0.03	60,63,59					
133	ok	55.0	0.09	0.02	0.02	60,63,59	27.5	0.08	0.03	0.02	59,69,57
		0.0	0.09	0.02	0.02	59,69,57					
134	ok	55.0	0.08	0.03	0.03	59,69,57	30.0	0.10	0.02	0.04	59,52,60
		0.0	0.09	0.02	0.03	59,52,60					
135	ok	60.0	0.10	0.03	0.04	59,52,60	30.0	0.16	0.03	0.04	59,52,60
		0.0	0.11	0.02	0.04	59,52,60					
136	ok	60.0	0.20	0.03	0.05	59,52,60	253.5	0.08	0.05	0.08	49,51,59
		0.0	0.34	0.10	0.17	59,51,59					
137	ok	507.0	0.25	0.08	0.15	60,52,60	30.0	0.12	0.02	0.04	60,46,59
		0.0	0.15	0.03	0.05	60,46,59					
138	ok	60.0	0.09	0.02	0.04	60,46,59	30.0	0.08	0.02	0.03	60,46,59
		0.0	0.08	0.03	0.04	60,46,59					
139	ok	60.0	0.08	0.02	0.03	60,46,59	27.5	0.07	0.03	0.02	60,67,59
		0.0	0.06	0.03	0.03	60,67,59					
140	ok	55.0	0.08	0.03	0.02	60,67,59	27.5	0.08	0.03	0.03	59,65,57
		0.0	0.09	0.03	0.02	59,65,57					
141	ok	55.0	0.07	0.03	0.03	46,65,57	30.0	0.09	0.02	0.04	54,49,49
		0.0	0.09	0.02	0.03	54,49,49					
142	ok	60.0	0.09	0.03	0.04	54,49,49	30.0	0.15	0.02	0.03	54,49,49
		0.0	0.11	0.02	0.03	54,49,49					
143	ok	60.0	0.19	0.02	0.04	54,49,49	195.0	0.09	0.09	0.14	58,59,54
		0.0	0.31	0.12	0.20	54,59,54					
144	ok	390.0	0.37	0.10	0.18	54,60,57	30.0	0.17	0.03	0.06	54,55,58
		0.0	0.23	0.04	0.06	54,55,58					
145	ok	60.0	0.12	0.03	0.05	57,55,58	30.0	0.10	0.03	0.04	57,50,58
		0.0	0.10	0.03	0.05	57,50,58					
146	ok	60.0	0.09	0.02	0.04	60,50,58	27.5	0.08	0.03	0.03	60,62,46
		0.0	0.08	0.03	0.03	60,62,46					
147	ok	55.0	0.09	0.03	0.02	60,62,46	30.0	0.13	0.02	0.03	71,61,77
		0.0	0.12	0.02	0.03	71,72,74					



		60.0	0.15	0.03	0.05	71,61,77					
149	ok	0.0	0.09	0.02	0.02	72,51,71	27.5	0.08	0.03	0.02	72,51,71
		55.0	0.07	0.03	0.03	72,51,71					
152	ok	0.0	0.09	0.03	0.02	64,59,63	27.5	0.08	0.03	0.03	64,59,63
		55.0	0.08	0.03	0.03	64,59,63					
155	ok	0.0	0.09	0.03	0.02	68,59,65	27.5	0.08	0.03	0.03	68,59,65
		55.0	0.08	0.03	0.03	68,59,65					
158	ok	0.0	0.09	0.04	0.04	65,49,65	30.2	0.07	0.03	0.02	65,46,65
		60.4	0.06	0.04	0.04	65,46,62					
160	ok	0.0	0.17	0.03	0.05	71,72,74	30.0	0.20	0.02	0.03	71,72,74
		60.0	0.23	0.02	0.02	71,57,77					
161	ok	0.0	0.09	0.02	0.03	72,71,71	30.0	0.09	0.02	0.04	72,71,71
		60.0	0.10	0.02	0.04	72,71,71					
162	ok	0.0	0.09	0.02	0.03	64,71,63	30.0	0.10	0.02	0.04	64,71,63
		60.0	0.10	0.03	0.05	64,71,63					
163	ok	0.0	0.09	0.02	0.04	68,65,65	30.0	0.10	0.03	0.04	68,65,65
		60.0	0.10	0.03	0.05	68,65,65					
164	ok	0.0	0.06	0.03	0.05	65,49,65	30.2	0.04	0.02	0.03	65,46,62
		60.4	0.03	0.03	0.05	65,46,62					
165	ok	0.0	0.11	0.02	0.04	72,71,71	30.0	0.16	0.02	0.04	72,71,71
		60.0	0.20	0.03	0.05	72,71,71					
166	ok	0.0	0.12	0.02	0.04	64,71,63	30.0	0.16	0.03	0.04	64,71,63
		60.0	0.21	0.03	0.05	64,71,63					
167	ok	0.0	0.12	0.03	0.04	68,65,65	30.0	0.16	0.03	0.05	62,65,65
		60.0	0.21	0.03	0.06	62,65,65					
168	ok	0.0	0.03	0.04	0.06	67,65,65	30.2	0.02	0.02	0.04	61,65,65
		60.4	0.02	0.03	0.06	65,62,62					
169	ok	0.0	0.02	0.03	0.06	49,65,65	30.2	0.04	0.02	0.04	65,65,65
		60.4	0.06	0.02	0.04	65,68,62					
171	ok	0.0	0.05	0.03	0.04	65,53,65	30.2	0.06	0.02	0.02	65,56,62
		60.4	0.07	0.03	0.04	65,56,62					
173	ok	0.0	0.18	0.04	0.02	55,62,46	25.8	0.19	0.03	0.01	55,62,46
		51.5	0.19	0.03	0.01	55,62,46					
174	ok	0.0	0.21	0.05	0.03	55,71,59	25.8	0.23	0.05	0.03	55,71,59
		51.5	0.24	0.04	0.02	55,71,59					
175	ok	0.0	0.31	0.03	0.03	55,69,57	36.0	0.36	0.04	0.03	55,69,57
		72.0	0.39	0.04	0.04	55,69,57					
176	ok	0.0	0.47	0.10	0.10	55,55,55	162.8	0.26	0.08	0.07	56,55,55
		325.5	0.07	0.06	0.06	57,55,56					
177	ok	0.0	0.15	0.05	0.05	56,58,58	180.0	0.13	0.04	0.03	50,58,58
		360.0	0.22	0.04	0.04	58,61,61					
178	ok	0.0	0.13	0.03	0.02	58,51,50	198.8	0.16	0.03	0.01	58,61,53
		397.5	0.15	0.05	0.04	61,61,52					
180	ok	0.0	0.12	0.03	0.02	67,55,67	27.5	0.13	0.03	0.03	67,55,67
		55.0	0.13	0.04	0.03	67,55,67					
182	ok	0.0	0.14	0.03	0.04	67,54,54	30.0	0.16	0.03	0.04	67,54,54
		60.0	0.18	0.04	0.05	67,54,54					
183	ok	0.0	0.31	0.11	0.17	71,63,71	287.5	0.22	0.09	0.11	71,72,72
		575.0	0.51	0.13	0.20	72,72,72					
184	ok	0.0	0.31	0.12	0.19	72,72,72	254.5	0.12	0.08	0.11	51,72,72
		509.0	0.35	0.09	0.16	72,71,71					
185	ok	0.0	0.33	0.12	0.20	64,72,64	254.5	0.14	0.08	0.12	70,72,64
		509.0	0.51	0.13	0.22	63,71,63					
186	ok	0.0	0.34	0.12	0.20	62,68,68	254.5	0.15	0.09	0.13	72,68,62
		509.0	0.58	0.14	0.24	65,65,65					
187	ok	0.0	0.20	0.06	0.08	67,62,62	30.0	0.24	0.06	0.08	67,62,62
		60.0	0.28	0.06	0.09	67,62,62					
188	ok	0.0	0.21	0.06	0.06	50,74,58	145.0	0.06	0.04	0.04	56,74,58
		290.0	0.13	0.04	0.03	58,74,58					
189	ok	0.0	0.12	0.09	0.02	63,61,51	145.0	0.06	0.09	0.02	67,61,71
		290.0	0.05	0.10	0.03	71,61,71					
190	ok	0.0	0.43	0.19	0.24	67,68,68	103.5	0.19	0.18	0.22	58,68,68
		207.0	0.40	0.18	0.23	68,67,67					
191	ok	0.0	0.05	0.04	0.03	70,55,61	198.8	0.15	0.05	0.05	61,61,61
		397.5	0.45	0.07	0.07	61,61,56					
192	ok	0.0	0.45	0.10	0.07	61,58,60	167.5	0.21	0.10	0.05	61,58,57
		335.0	0.04	0.12	0.04	48,58,61					
193	ok	0.0	0.20	0.05	0.06	58,46,58	390.0	0.16	0.02	0.01	58,68,66
		780.0	0.11	0.04	0.04	64,51,47					
194	ok	0.0	0.40	0.03	0.05	72,72,72	30.0	0.33	0.04	0.07	72,71,71
		60.0	0.27	0.05	0.09	72,71,71					
195	ok	0.0	0.23	0.04	0.08	72,72,72	30.0	0.16	0.04	0.07	72,72,72
		60.0	0.11	0.04	0.06	71,72,72					
196	ok	0.0	0.30	0.05	0.09	63,66,72	30.0	0.24	0.05	0.08	63,66,72
		60.0	0.17	0.04	0.08	63,66,72					
197	ok	0.0	0.35	0.05	0.09	65,68,68	30.0	0.27	0.05	0.09	65,68,68
		60.0	0.20	0.05	0.08	65,68,68					



198	ok	0.0	0.33	0.04	0.06	68,55,55	30.0	0.27	0.04	0.06	68,55,55
		60.0	0.21	0.04	0.05	68,55,55					
199	ok	0.0	0.24	0.04	0.07	72,72,72	30.0	0.20	0.03	0.05	72,72,72
		60.0	0.18	0.04	0.06	72,71,71					
200	ok	0.0	0.09	0.03	0.06	71,72,72	30.0	0.09	0.03	0.05	71,72,72
		60.0	0.09	0.03	0.05	71,72,72					
201	ok	0.0	0.15	0.04	0.07	63,62,72	30.0	0.14	0.04	0.06	63,62,72
		60.0	0.13	0.04	0.06	63,62,72					
202	ok	0.0	0.17	0.04	0.07	65,62,62	30.0	0.16	0.04	0.06	65,62,62
		60.0	0.15	0.04	0.06	65,62,62					
203	ok	0.0	0.20	0.04	0.06	68,68,62	30.0	0.17	0.03	0.05	68,68,62
		60.0	0.15	0.03	0.05	67,68,62					
205	ok	0.0	0.17	0.04	0.05	72,48,72	27.5	0.16	0.03	0.03	72,47,72
		55.0	0.16	0.04	0.05	72,47,71					
208	ok	0.0	0.08	0.03	0.04	71,56,72	27.5	0.09	0.03	0.04	71,56,72
		55.0	0.10	0.03	0.03	71,56,72					
211	ok	0.0	0.11	0.04	0.05	63,68,72	27.5	0.12	0.04	0.05	63,68,72
		55.0	0.12	0.03	0.04	63,68,72					
214	ok	0.0	0.12	0.04	0.05	65,68,68	27.5	0.13	0.04	0.05	65,68,68
		55.0	0.13	0.03	0.04	65,68,68					
217	ok	0.0	0.13	0.04	0.04	67,58,74	27.5	0.15	0.04	0.04	67,58,74
		55.0	0.16	0.04	0.03	67,58,74					
219	ok	0.0	0.16	0.06	0.03	58,62,56	245.0	0.15	0.05	0.01	70,58,55
		490.0	0.09	0.07	0.03	68,58,55					
220	ok	0.0	0.12	0.08	0.03	67,55,75	245.0	0.04	0.07	0.01	49,58,67
		490.0	0.11	0.08	0.03	68,58,56					
221	ok	0.0	0.12	0.13	0.05	70,58,58	245.0	0.09	0.10	0.01	55,58,70
		490.0	0.05	0.10	0.01	58,58,58					
223	ok	0.0	0.08	0.05	0.05	71,55,51	26.0	0.06	0.05	0.03	71,56,51
		52.0	0.04	0.06	0.04	71,56,52					
226	ok	0.0	0.09	0.05	0.04	72,55,51	26.0	0.08	0.05	0.03	72,55,51
		52.0	0.06	0.05	0.03	74,55,51					
229	ok	0.0	0.07	0.05	0.03	64,58,47	26.0	0.06	0.05	0.02	48,58,47
		52.0	0.06	0.04	0.03	73,58,48					
232	ok	0.0	0.07	0.05	0.04	56,58,55	26.0	0.06	0.05	0.03	77,58,55
		52.0	0.07	0.05	0.03	71,61,56					
235	ok	0.0	0.04	0.03	0.03	51,55,65	26.0	0.04	0.03	0.02	51,55,65
		52.0	0.04	0.03	0.02	63,58,65					
237	ok	0.0	0.04	0.06	0.04	71,58,47	26.0	0.02	0.05	0.03	71,61,48
		52.0	0.02	0.06	0.05	77,61,48					
240	ok	0.0	0.08	0.04	0.03	72,47,51	26.0	0.07	0.04	0.02	74,47,51
		52.0	0.05	0.04	0.03	74,47,52					
243	ok	0.0	0.06	0.04	0.02	53,58,48	26.0	0.06	0.04	0.02	75,58,48
		52.0	0.05	0.04	0.03	75,74,48					
246	ok	0.0	0.08	0.04	0.02	71,61,56	26.0	0.07	0.05	0.03	71,61,56
		52.0	0.06	0.05	0.03	71,61,56					
248	ok	0.0	0.04	0.03	0.03	71,55,67	26.0	0.05	0.03	0.02	63,55,67
		52.0	0.07	0.03	0.02	63,55,67					
250	ok	0.0	0.06	0.06	0.08	58,58,55	27.5	0.09	0.05	0.06	58,61,55
		55.0	0.12	0.06	0.06	58,61,56					
251	ok	0.0	0.13	0.04	0.05	58,71,63	30.0	0.14	0.04	0.03	58,56,64
		60.0	0.15	0.05	0.05	58,56,64					
252	ok	0.0	0.17	0.09	0.06	58,71,77	30.0	0.19	0.08	0.05	55,46,74
		60.0	0.21	0.09	0.07	55,46,74					
253	ok	0.0	0.26	0.42	0.26	56,47,58	51.0	0.16	0.43	0.27	56,47,58
		102.0	0.15	0.44	0.29	68,47,58					
254	ok	0.0	0.12	0.08	0.09	66,47,61	37.5	0.09	0.09	0.07	66,47,58
		75.0	0.09	0.10	0.10	74,47,58					
255	ok	0.0	0.08	0.04	0.07	74,53,56	37.5	0.08	0.03	0.04	61,53,56
		75.0	0.10	0.03	0.04	61,50,55					
256	ok	0.0	0.09	0.04	0.03	61,73,48	37.5	0.10	0.03	0.01	61,71,47
		75.0	0.10	0.04	0.04	61,71,47					
257	ok	0.0	0.13	0.06	0.08	51,68,56	29.8	0.13	0.04	0.05	51,68,56
		59.5	0.11	0.03	0.03	51,67,55					
258	ok	0.0	0.13	0.05	0.07	51,56,48	29.8	0.12	0.03	0.04	51,56,48
		59.5	0.09	0.04	0.06	51,47,47					
259	ok	0.0	0.09	0.05	0.07	51,72,52	29.8	0.08	0.03	0.04	51,51,51
		59.5	0.06	0.05	0.07	51,51,51					
260	ok	0.0	0.06	0.04	0.06	51,58,74	29.8	0.07	0.02	0.03	51,58,77
		59.5	0.06	0.04	0.06	51,71,77					
261	ok	0.0	0.07	0.07	0.07	46,58,58	27.5	0.09	0.05	0.04	58,58,61
		55.0	0.10	0.04	0.07	58,56,61					
262	ok	0.0	0.11	0.05	0.06	58,55,47	30.0	0.13	0.03	0.03	58,55,48
		60.0	0.14	0.04	0.06	55,56,48					
263	ok	0.0	0.16	0.06	0.06	55,65,69	30.0	0.21	0.04	0.03	55,65,69
		60.0	0.24	0.03	0.02	55,67,66					
264	ok	0.0	0.33	0.16	0.22	55,53,61	136.0	0.09	0.16	0.21	77,67,58



		272.0	0.36	0.21	0.31	58,67,58					
265	ok	0.0	0.27	0.04	0.03	58,65,64	37.5	0.22	0.04	0.02	58,65,63
		75.0	0.20	0.06	0.07	55,65,63					
266	ok	0.0	0.18	0.05	0.06	55,67,58	37.5	0.15	0.03	0.02	55,67,58
		75.0	0.14	0.04	0.04	55,77,61					
267	ok	0.0	0.12	0.06	0.06	55,67,55	37.5	0.12	0.04	0.02	55,77,56
		75.0	0.13	0.06	0.06	55,77,56					
268	ok	0.0	0.12	0.07	0.09	52,68,56	27.9	0.09	0.06	0.05	52,68,56
		55.8	0.07	0.05	0.04	52,67,55					
269	ok	0.0	0.07	0.06	0.07	52,76,56	27.9	0.06	0.05	0.04	46,76,56
		55.8	0.04	0.05	0.05	46,74,55					
270	ok	0.0	0.05	0.06	0.07	49,72,52	27.9	0.04	0.05	0.03	46,72,52
		55.8	0.03	0.04	0.05	62,70,51					
271	ok	0.0	0.03	0.06	0.06	46,74,74	27.9	0.04	0.04	0.03	46,77,74
		55.8	0.04	0.06	0.05	46,77,77					
272	ok	0.0	0.05	0.07	0.07	54,58,58	27.5	0.07	0.05	0.04	58,58,61
		55.0	0.08	0.05	0.08	61,61,61					
273	ok	0.0	0.10	0.05	0.06	61,58,55	30.0	0.11	0.03	0.04	58,58,56
		60.0	0.14	0.05	0.07	61,61,56					
274	ok	0.0	0.16	0.04	0.06	61,77,65	30.0	0.18	0.02	0.03	58,77,65
		60.0	0.21	0.02	0.02	58,62,62					
275	ok	0.0	0.30	0.13	0.22	58,56,61	143.5	0.05	0.14	0.20	65,50,58
		287.0	0.41	0.20	0.30	58,50,58					
276	ok	0.0	0.30	0.03	0.03	58,62,62	37.5	0.25	0.02	0.02	58,65,65
		75.0	0.21	0.04	0.06	58,65,65					
277	ok	0.0	0.19	0.05	0.07	58,67,58	37.5	0.16	0.03	0.02	58,67,58
		75.0	0.15	0.04	0.04	58,65,61					
278	ok	0.0	0.13	0.06	0.06	58,67,58	37.5	0.12	0.03	0.02	58,67,58
		75.0	0.13	0.06	0.06	55,73,61					
279	ok	0.0	0.12	0.08	0.09	52,68,56	27.5	0.09	0.06	0.06	52,68,56
		55.0	0.08	0.06	0.04	52,67,55					
280	ok	0.0	0.08	0.06	0.06	52,72,56	30.0	0.07	0.04	0.03	49,72,56
		60.0	0.06	0.05	0.05	49,71,55					
281	ok	0.0	0.07	0.05	0.05	49,74,74	27.5	0.07	0.05	0.02	49,77,77
		55.0	0.08	0.06	0.05	49,77,77					
282	ok	0.0	0.09	0.07	0.07	49,58,58	27.5	0.10	0.05	0.05	61,58,61
		55.0	0.13	0.05	0.08	61,61,61					
283	ok	0.0	0.14	0.05	0.06	61,58,55	30.0	0.16	0.03	0.04	61,61,56
		60.0	0.20	0.05	0.07	61,61,56					
284	ok	0.0	0.22	0.07	0.08	61,65,65	30.0	0.24	0.05	0.05	61,65,65
		60.0	0.28	0.03	0.01	61,65,65					
285	ok	0.0	0.36	0.22	0.35	61,53,61	170.0	0.23	0.16	0.24	56,53,61
		340.0	0.61	0.22	0.29	61,55,58					
286	ok	0.0	0.44	0.03	0.03	61,55,58	37.5	0.35	0.05	0.07	61,53,61
		75.0	0.25	0.07	0.11	61,53,61					
287	ok	0.0	0.22	0.04	0.07	61,58,58	37.5	0.21	0.03	0.04	61,61,61
		75.0	0.18	0.06	0.08	61,61,61					
288	ok	0.0	0.16	0.04	0.06	61,55,58	37.5	0.15	0.05	0.07	61,56,61
		75.0	0.11	0.07	0.11	58,56,61					
290	ok	0.0	0.13	0.07	0.06	62,58,56	29.8	0.14	0.05	0.03	62,58,56
		59.5	0.13	0.05	0.02	62,58,55					
293	ok	0.0	0.12	0.06	0.09	74,58,74	37.5	0.14	0.04	0.05	74,58,74
		75.0	0.15	0.04	0.04	74,51,77					
299	ok	0.0	0.15	0.07	0.05	62,58,55	29.8	0.16	0.05	0.02	62,58,55
		59.5	0.15	0.05	0.05	62,50,56					
300	ok	0.0	0.16	0.04	0.06	74,74,74	37.5	0.18	0.02	0.02	74,71,74
		75.0	0.18	0.04	0.06	74,71,77					
301	ok	0.0	0.07	0.06	0.03	50,48,47	25.8	0.10	0.06	0.04	50,48,48
		51.5	0.12	0.07	0.04	50,48,48					
302	ok	0.0	0.14	0.06	0.02	50,64,52	25.8	0.14	0.06	0.02	50,64,52
		51.5	0.14	0.07	0.03	46,64,52					
303	ok	0.0	0.20	0.04	0.04	58,56,60	30.5	0.20	0.05	0.04	58,56,60
		61.0	0.22	0.05	0.05	56,56,60					
304	ok	0.0	0.23	0.03	0.03	56,56,60	30.5	0.29	0.03	0.03	56,56,60
		61.0	0.35	0.03	0.03	56,56,60					
305	ok	0.0	0.43	0.08	0.08	56,55,58	137.8	0.28	0.08	0.05	56,56,58
		275.5	0.11	0.08	0.06	52,56,56					
306	ok	0.0	0.19	0.06	0.05	61,58,58	180.0	0.08	0.05	0.03	70,48,61
		360.0	0.13	0.06	0.05	61,56,56					
307	ok	0.0	0.06	0.09	0.02	49,58,58	198.8	0.10	0.08	0.02	61,58,56
		397.5	0.21	0.09	0.03	56,66,68					
308	ok	0.0	0.14	0.09	0.04	72,58,74	167.5	0.07	0.08	0.02	61,58,58
		335.0	0.07	0.08	0.01	58,58,58					
309	ok	0.0	0.16	0.05	0.06	62,48,48	26.5	0.19	0.04	0.03	62,48,48
		53.0	0.20	0.04	0.04	68,71,47					
310	ok	0.0	0.20	0.07	0.08	74,48,74	37.5	0.27	0.05	0.03	74,48,74
		75.0	0.32	0.05	0.03	74,61,77					



311	ok	0.0	0.22	0.08	0.07	68,51,65	26.5	0.28	0.06	0.04	68,51,65
		53.0	0.33	0.05	0.01	68,46,65					
312	ok	0.0	0.41	0.27	0.25	74,61,71	121.0	0.15	0.25	0.22	62,52,74
		242.0	0.27	0.29	0.30	71,52,74					
313	ok	0.0	0.38	0.24	0.19	64,55,65	121.0	0.21	0.28	0.24	65,46,68
		242.0	0.30	0.32	0.31	65,46,68					
314	ok	0.0	0.15	0.05	0.04	71,61,77	37.5	0.13	0.06	0.05	77,52,74
		75.0	0.12	0.08	0.09	70,52,74					
315	ok	0.0	0.15	0.05	0.02	65,51,67	37.5	0.14	0.06	0.05	65,46,68
		75.0	0.12	0.08	0.09	64,46,68					
316	ok	0.0	0.11	0.04	0.05	70,60,76	37.5	0.10	0.02	5.14e-03	77,60,76
		75.0	0.10	0.04	0.04	70,53,75					
317	ok	0.0	0.11	0.04	0.05	64,46,62	37.5	0.10	0.02	8.16e-03	64,46,62
		75.0	0.10	0.04	0.04	64,51,65					
319	ok	0.0	0.09	0.05	0.04	70,52,52	37.5	0.09	0.03	0.02	77,51,51
		75.0	0.10	0.05	0.06	70,51,51					
322	ok	0.0	0.09	0.05	0.04	64,46,46	37.5	0.09	0.03	0.02	64,49,49
		75.0	0.10	0.05	0.06	64,49,49					
324	ok	0.0	0.12	0.02	0.02	58,71,51	37.5	0.11	0.02	0.02	58,72,52
		75.0	0.10	0.02	0.02	58,72,52					
325	ok	0.0	0.13	0.01	0.02	58,60,52	37.5	0.13	0.02	0.03	58,60,52
		75.0	0.13	0.02	0.03	58,60,52					
326	ok	0.0	0.15	0.03	0.05	58,59,51	37.5	0.22	0.03	0.05	58,60,52
		75.0	0.29	0.03	0.06	58,60,52					
327	ok	0.0	0.52	0.11	0.19	58,58,58	1140.0	0.02	7.49e-03	0.01	68,61,61
		2280.0	0.53	0.11	0.20	56,56,56					
328	ok	0.0	0.29	0.03	0.06	56,54,50	37.5	0.22	0.03	0.05	56,54,50
		75.0	0.15	0.03	0.05	56,57,53					
329	ok	0.0	0.13	0.02	0.03	56,54,50	37.5	0.13	0.02	0.03	56,54,50
		75.0	0.13	0.01	0.02	56,54,50					
330	ok	0.0	0.11	0.03	0.02	56,62,46	37.5	0.12	0.02	0.02	56,62,46
		75.0	0.12	0.02	0.01	56,65,49					
332	ok	0.0	0.11	0.05	0.06	71,51,51	37.5	0.09	0.03	0.02	71,51,51
		75.0	0.09	0.04	0.04	71,52,52					
335	ok	0.0	0.12	0.05	0.06	65,52,52	37.5	0.10	0.03	0.02	65,52,52
		75.0	0.10	0.04	0.04	65,51,51					
337	ok	0.0	0.10	0.03	0.04	71,46,62	37.5	0.09	0.02	0.01	71,49,65
		75.0	0.11	0.04	0.05	75,49,65					
338	ok	0.0	0.11	0.03	0.04	65,52,72	37.5	0.11	0.02	9.39e-03	65,51,71
		75.0	0.13	0.04	0.05	65,51,71					
339	ok	0.0	0.13	0.04	0.07	75,71,71	37.5	0.13	0.02	0.03	75,71,71
		75.0	0.15	0.02	0.04	75,72,72					
340	ok	0.0	0.14	0.04	0.08	65,67,65	37.5	0.14	0.02	0.04	65,67,65
		75.0	0.16	0.02	0.03	69,46,62					
341	ok	0.0	0.23	0.12	0.22	71,73,75	121.0	0.10	0.08	0.13	71,73,75
		242.0	0.24	0.12	0.21	71,70,70					
342	ok	0.0	0.26	0.14	0.25	65,69,69	121.0	0.18	0.10	0.17	65,69,69
		242.0	0.37	0.10	0.18	65,64,64					
343	ok	0.0	0.17	0.02	0.03	76,49,52	37.5	0.14	0.02	0.02	70,46,51
		75.0	0.13	0.04	0.06	70,46,51					
344	ok	0.0	0.22	0.02	0.02	65,51,51	37.5	0.19	0.02	0.03	65,52,52
		75.0	0.14	0.04	0.07	67,52,52					
345	ok	0.0	0.11	0.04	0.06	70,52,72	37.5	0.09	0.02	0.02	70,52,72
		75.0	0.09	0.03	0.04	70,51,71					
346	ok	0.0	0.12	0.03	0.05	67,46,62	37.5	0.13	0.01	0.01	67,49,65
		75.0	0.11	0.04	0.05	67,49,65					
348	ok	0.0	0.08	0.04	0.04	70,52,52	37.5	0.08	0.03	0.02	70,51,51
		75.0	0.10	0.05	0.06	70,51,51					
351	ok	0.0	0.10	0.04	0.03	67,46,46	37.5	0.11	0.04	0.03	67,49,49
		75.0	0.10	0.06	0.07	67,49,49					
353	ok	0.0	0.11	0.02	0.02	55,74,50	37.5	0.11	0.02	0.02	55,73,53
		75.0	0.10	0.03	0.02	55,73,53					
354	ok	0.0	0.13	0.01	0.02	55,52,61	37.5	0.13	0.02	0.03	55,52,61
		75.0	0.13	0.02	0.04	55,52,61					
355	ok	0.0	0.15	0.03	0.05	51,58,58	37.5	0.22	0.03	0.05	51,52,61
		75.0	0.29	0.03	0.06	51,52,61					
356	ok	0.0	0.52	0.11	0.19	51,55,51	1140.0	0.02	0.01	0.01	67,58,51
		2280.0	0.51	0.10	0.18	49,49,49					
357	ok	0.0	0.28	0.03	0.06	49,55,55	37.5	0.21	0.03	0.05	49,55,55
		75.0	0.14	0.03	0.05	49,49,56					
358	ok	0.0	0.12	0.02	0.03	61,55,55	37.5	0.12	0.02	0.03	61,55,55
		75.0	0.12	0.01	0.02	61,55,55					
359	ok	0.0	0.10	0.02	0.02	56,67,55	37.5	0.10	0.02	0.01	61,67,55
		75.0	0.11	0.02	0.02	61,65,56					
361	ok	0.0	0.11	0.05	0.06	71,58,58	37.5	0.10	0.03	0.02	71,58,58
		75.0	0.10	0.04	0.04	71,61,61					
364	ok	0.0	0.10	0.05	0.06	65,56,56	37.5	0.10	0.03	0.02	66,56,56



		75.0	0.09	0.04	0.04	66,55,55					
366	ok	0.0	0.11	0.03	0.04	71,58,74	37.5	0.11	0.02	0.01	71,61,77
		75.0	0.13	0.04	0.05	71,61,77					
367	ok	0.0	0.10	0.03	0.03	66,56,68	37.5	0.11	0.02	0.02	66,55,67
		75.0	0.11	0.04	0.06	65,55,67					
368	ok	0.0	0.14	0.04	0.06	71,59,75	37.5	0.15	0.02	0.02	71,59,75
		75.0	0.18	0.02	0.03	77,60,76					
369	ok	0.0	0.12	0.01	0.02	65,63,69	37.5	0.15	0.03	0.04	65,54,66
		75.0	0.20	0.05	0.08	67,54,66					
370	ok	0.0	0.25	0.13	0.23	77,71,71	121.0	0.07	0.09	0.15	51,71,74
		242.0	0.24	0.13	0.23	76,70,74					
371	ok	0.0	0.29	0.13	0.22	67,64,62	121.0	0.14	0.12	0.20	67,64,68
		242.0	0.39	0.11	0.19	64,64,68					
372	ok	0.0	0.18	0.02	0.03	76,61,77	37.5	0.15	0.02	0.02	70,58,74
		75.0	0.14	0.04	0.06	70,58,74					
373	ok	0.0	0.29	0.03	0.04	66,55,67	37.5	0.23	0.02	0.04	64,55,67
		75.0	0.18	0.02	0.03	64,55,67					
374	ok	0.0	0.12	0.04	0.05	70,60,76	37.5	0.11	0.02	0.01	70,60,76
		75.0	0.10	0.03	0.04	70,59,75					
375	ok	0.0	0.16	0.03	0.05	64,54,66	37.5	0.14	0.03	0.04	64,54,66
		75.0	0.12	0.03	0.03	64,54,66					
377	ok	0.0	0.09	0.04	0.04	70,60,60	37.5	0.09	0.03	0.02	70,59,59
		75.0	0.11	0.05	0.06	70,59,59					
380	ok	0.0	0.10	0.04	0.04	64,54,54	37.5	0.10	0.04	0.03	64,54,54
		75.0	0.10	0.04	0.03	67,54,54					
382	ok	0.0	0.11	0.02	0.02	55,74,58	37.5	0.11	0.02	0.02	55,77,61
		75.0	0.10	0.03	0.02	55,77,61					
383	ok	0.0	0.12	0.01	0.02	55,53,49	37.5	0.13	0.02	0.03	55,53,49
		75.0	0.13	0.02	0.04	55,53,49					
384	ok	0.0	0.15	0.03	0.05	55,59,58	37.5	0.22	0.03	0.05	55,53,61
		75.0	0.29	0.03	0.06	55,53,61					
385	ok	0.0	0.53	0.11	0.19	58,59,55	1140.0	0.02	9.67e-03	0.01	68,54,58
		2280.0	0.50	0.10	0.17	56,56,61					
386	ok	0.0	0.27	0.03	0.06	52,54,55	37.5	0.21	0.03	0.05	49,54,55
		75.0	0.13	0.03	0.05	49,48,56					
387	ok	0.0	0.12	0.02	0.03	61,54,47	37.5	0.12	0.02	0.02	61,54,47
		75.0	0.11	0.01	0.02	61,54,47					
388	ok	0.0	0.09	0.03	0.03	56,67,55	37.5	0.10	0.03	0.02	61,67,55
		75.0	0.10	0.02	0.01	61,67,55					
390	ok	0.0	0.12	0.05	0.06	71,50,50	37.5	0.10	0.03	0.02	71,50,50
		75.0	0.10	0.04	0.04	71,53,53					
393	ok	0.0	0.11	0.03	0.02	65,47,47	37.5	0.11	0.04	0.03	65,47,47
		75.0	0.11	0.04	0.03	65,47,47					
395	ok	0.0	0.11	0.03	0.04	71,50,70	37.5	0.11	0.02	0.02	71,53,73
		75.0	0.14	0.04	0.06	71,53,73					
396	ok	0.0	0.12	0.02	0.02	65,47,63	37.5	0.13	0.02	0.02	65,47,63
		75.0	0.15	0.02	0.03	65,47,63					
397	ok	0.0	0.15	0.03	0.06	71,51,51	37.5	0.17	0.01	0.02	71,51,51
		75.0	0.21	0.02	0.03	77,52,52					
398	ok	0.0	0.17	0.02	0.03	65,49,49	37.5	0.20	0.02	0.02	65,49,49
		75.0	0.23	0.01	0.01	67,49,49					
399	ok	0.0	0.28	0.13	0.23	77,71,71	121.0	0.07	0.10	0.16	62,72,72
		242.0	0.25	0.14	0.24	76,72,74					
400	ok	0.0	0.32	0.15	0.27	67,65,69	121.0	0.08	0.11	0.19	72,65,69
		242.0	0.26	0.12	0.21	65,64,64					
401	ok	0.0	0.18	0.02	0.04	76,61,73	37.5	0.15	0.02	0.02	76,50,70
		75.0	0.15	0.04	0.06	70,50,70					
402	ok	0.0	0.17	0.02	0.03	65,55,63	37.5	0.15	0.02	0.03	65,48,64
		75.0	0.12	0.04	0.07	64,48,64					
403	ok	0.0	0.13	0.04	0.05	70,52,72	37.5	0.11	0.02	0.01	70,52,72
		75.0	0.11	0.03	0.04	70,51,71					
404	ok	0.0	0.10	0.03	0.04	64,54,62	37.5	0.11	0.01	6.04e-03	67,46,62
		75.0	0.10	0.03	0.04	67,49,65					
406	ok	0.0	0.10	0.04	0.04	70,61,53	37.5	0.10	0.03	0.02	70,50,50
		75.0	0.12	0.05	0.05	70,50,50					
409	ok	0.0	0.08	0.04	0.03	67,55,47	37.5	0.10	0.03	0.02	67,48,48
		75.0	0.11	0.05	0.06	64,48,48					
411	ok	0.0	0.11	0.03	0.02	59,71,50	37.5	0.11	0.03	0.02	59,73,53
		75.0	0.10	0.03	0.02	59,73,53					
412	ok	0.0	0.13	0.01	0.02	59,53,53	37.5	0.13	0.02	0.03	59,53,53
		75.0	0.13	0.02	0.03	59,53,53					
413	ok	0.0	0.15	0.03	0.05	59,59,50	37.5	0.23	0.03	0.05	59,53,53
		75.0	0.30	0.03	0.06	59,53,53					
414	ok	0.0	0.54	0.11	0.20	59,59,51	1140.0	0.02	8.33e-03	0.01	67,54,46
		2280.0	0.54	0.11	0.19	49,53,49					
415	ok	0.0	0.30	0.03	0.06	49,54,47	37.5	0.22	0.03	0.05	49,54,47
		75.0	0.15	0.03	0.05	49,48,48					



416	ok	0.0	0.13	0.02	0.03	57,47,47	37.5	0.13	0.02	0.03	57,47,47
		75.0	0.13	0.01	0.02	57,47,47					
417	ok	0.0	0.10	0.03	0.02	57,63,47	37.5	0.11	0.02	0.01	57,63,47
		75.0	0.11	0.03	0.02	57,64,48					
419	ok	0.0	0.14	0.05	0.06	71,50,50	37.5	0.12	0.03	0.02	71,50,50
		75.0	0.11	0.04	0.04	71,53,53					
422	ok	0.0	0.13	0.05	0.06	65,48,48	37.5	0.11	0.03	0.02	66,48,48
		75.0	0.10	0.04	0.03	65,47,47					
424	ok	0.0	0.12	0.04	0.04	71,61,51	37.5	0.12	0.02	5.15e-03	71,52,51
		75.0	0.13	0.04	0.04	77,60,52					
425	ok	0.0	0.12	0.04	0.05	66,55,49	37.5	0.13	0.02	8.65e-03	66,55,49
		75.0	0.12	0.04	0.04	64,54,46					
426	ok	0.0	0.15	0.09	0.11	77,77,71	37.5	0.15	0.07	0.07	70,77,71
		75.0	0.17	0.05	0.05	70,60,72					
427	ok	0.0	0.14	0.09	0.11	64,67,65	37.5	0.18	0.07	0.08	64,67,65
		75.0	0.20	0.05	0.04	64,67,65					
428	ok	0.0	0.26	0.34	0.36	70,77,73	121.0	0.29	0.31	0.29	71,77,73
		242.0	0.67	0.29	0.30	71,76,70					
429	ok	0.0	0.30	0.33	0.34	64,67,63	121.0	0.32	0.30	0.28	65,67,63
		242.0	0.68	0.29	0.31	65,66,64					
430	ok	0.0	0.47	0.04	0.03	71,52,72	37.5	0.39	0.05	0.05	77,77,71
		75.0	0.29	0.07	0.09	77,77,71					
431	ok	0.0	0.48	0.04	0.02	65,46,62	37.5	0.39	0.06	0.06	67,67,65
		75.0	0.29	0.08	0.09	67,67,65					
432	ok	0.0	0.26	0.04	0.06	77,74,72	37.5	0.25	0.03	0.04	77,71,71
		75.0	0.22	0.05	0.08	77,71,71					
433	ok	0.0	0.26	0.04	0.06	67,68,62	37.5	0.25	0.03	0.04	67,65,65
		75.0	0.22	0.05	0.08	67,65,65					
435	ok	0.0	0.19	0.03	0.04	77,52,72	37.5	0.19	0.04	0.05	77,51,71
		75.0	0.17	0.06	0.09	77,51,71					
442	ok	0.0	0.19	0.03	0.04	67,46,62	37.5	0.19	0.04	0.05	67,49,65
		75.0	0.17	0.06	0.09	67,49,65					
444	ok	0.0	0.12	0.07	0.09	53,75,51	37.5	0.14	0.05	0.05	58,75,51
		75.0	0.14	0.04	0.04	58,72,52					
445	ok	0.0	0.16	0.05	0.08	58,59,59	37.5	0.19	0.03	0.04	58,59,59
		75.0	0.20	0.04	0.06	58,61,60					
446	ok	0.0	0.22	0.07	0.12	58,46,59	37.5	0.32	0.06	0.09	58,46,59
		75.0	0.41	0.04	0.05	58,46,59					
447	ok	0.0	0.58	0.19	0.23	50,76,53	230.0	0.25	0.18	0.17	51,70,50
		460.0	0.41	0.24	0.29	50,70,50					
448	ok	0.0	0.30	0.04	0.03	50,70,50	37.5	0.24	0.04	0.04	50,76,53
		75.0	0.21	0.06	0.08	50,76,53					
449	ok	0.0	0.18	0.04	0.06	50,70,50	37.5	0.16	0.03	0.03	50,70,50
		75.0	0.14	0.03	0.05	50,73,53					
450	ok	0.0	0.13	0.05	0.05	50,70,50	37.5	0.12	0.03	0.01	50,70,50
		75.0	0.13	0.04	0.05	50,73,53					
451	ok	0.0	0.12	0.04	0.04	60,75,59	37.5	0.11	0.02	6.49e-03	60,76,60
		75.0	0.11	0.04	0.04	60,76,60					
452	ok	0.0	0.12	0.03	0.04	52,75,59	37.5	0.13	0.02	0.02	52,76,60
		75.0	0.15	0.04	0.06	52,76,60					
453	ok	0.0	0.17	0.04	0.07	52,59,59	37.5	0.21	0.02	0.03	52,59,59
		75.0	0.26	0.02	0.04	52,52,60					
454	ok	0.0	0.35	0.12	0.22	52,52,60	230.0	0.08	0.05	0.08	65,49,54
		460.0	0.35	0.12	0.22	54,54,54					
455	ok	0.0	0.26	0.02	0.04	54,46,54	37.5	0.21	0.02	0.03	54,49,57
		75.0	0.18	0.04	0.07	54,49,57					
456	ok	0.0	0.15	0.04	0.06	54,66,54	37.5	0.13	0.02	0.02	54,66,54
		75.0	0.12	0.03	0.04	54,65,57					
457	ok	0.0	0.11	0.04	0.04	54,66,54	37.5	0.10	0.02	6.55e-03	54,66,54
		75.0	0.12	0.04	0.04	54,65,57					
458	ok	0.0	0.13	0.04	0.05	48,67,47	37.5	0.12	0.03	0.01	48,64,48
		75.0	0.13	0.05	0.05	48,64,48					
459	ok	0.0	0.14	0.03	0.05	48,67,47	37.5	0.16	0.03	0.03	48,64,48
		75.0	0.18	0.04	0.06	48,64,48					
460	ok	0.0	0.21	0.06	0.08	48,66,47	37.5	0.24	0.04	0.04	48,66,47
		75.0	0.30	0.04	0.03	48,64,48					
461	ok	0.0	0.41	0.24	0.29	48,64,48	230.0	0.25	0.18	0.17	49,64,48
		460.0	0.59	0.19	0.23	48,66,47					
462	ok	0.0	0.41	0.04	0.05	48,52,57	37.5	0.32	0.06	0.09	48,52,57
		75.0	0.22	0.07	0.12	48,52,57					
463	ok	0.0	0.20	0.04	0.06	56,55,54	37.5	0.19	0.03	0.04	56,57,57
		75.0	0.16	0.05	0.08	56,57,57					
464	ok	0.0	0.14	0.04	0.04	56,62,54	37.5	0.14	0.05	0.05	56,69,57
		75.0	0.12	0.07	0.09	47,69,57					
Trave			V N/M	V V/T cls	V V/T acc			V N/M	V V/T cls	V V/T acc	
			0.68	0.44	0.36						



TABELLA VERIFICHE ELEMENTI D3 GUSCI C.A.

Guscio	Stato	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb	Nodo	V N/M	V V/T cls	V V/T acc	Rif. cmb
1	ok	7	3.83e-03	0.0	0.0	74,0,0	8	0.01	0.0	0.0	71,0,0
		43	0.02	0.0	0.0	77,0,0	42	0.01	0.0	0.0	57,0,0
2	ok	8	0.02	0.0	0.0	71,0,0	9	0.04	0.0	0.0	71,0,0
		44	0.04	0.0	0.0	71,0,0	43	0.02	0.0	0.0	77,0,0
3	ok	9	0.04	0.0	0.0	71,0,0	10	0.06	0.0	0.0	71,0,0
		45	0.06	0.0	0.0	71,0,0	44	0.04	0.0	0.0	71,0,0
4	ok	10	0.06	0.0	0.0	71,0,0	11	0.07	0.0	0.0	51,0,0
		46	0.07	0.0	0.0	51,0,0	45	0.07	0.0	0.0	51,0,0
5	ok	11	0.07	0.0	0.0	51,0,0	12	0.04	0.0	0.0	51,0,0
		47	0.07	0.0	0.0	51,0,0	46	0.10	0.0	0.0	51,0,0
6	ok	12	0.03	0.0	0.0	51,0,0	13	4.65e-03	0.0	0.0	51,0,0
		48	0.01	0.0	0.0	51,0,0	47	0.06	0.0	0.0	51,0,0
7	ok	14	6.13e-03	0.0	0.0	51,0,0	15	0.02	0.0	0.0	57,0,0
		50	0.03	0.0	0.0	49,0,0	49	0.01	0.0	0.0	57,0,0
8	ok	15	0.02	0.0	0.0	46,0,0	16	0.03	0.0	0.0	57,0,0
		51	0.05	0.0	0.0	57,0,0	50	0.03	0.0	0.0	49,0,0
9	ok	16	0.03	0.0	0.0	57,0,0	17	0.03	0.0	0.0	77,0,0
		52	0.03	0.0	0.0	69,0,0	51	0.03	0.0	0.0	57,0,0
10	ok	17	0.03	0.0	0.0	77,0,0	18	0.03	0.0	0.0	71,0,0
		53	0.04	0.0	0.0	71,0,0	52	0.03	0.0	0.0	71,0,0
11	ok	18	0.03	0.0	0.0	71,0,0	19	0.02	0.0	0.0	52,0,0
		54	0.03	0.0	0.0	51,0,0	53	0.05	0.0	0.0	71,0,0
12	ok	19	0.02	0.0	0.0	51,0,0	20	4.65e-03	0.0	0.0	49,0,0
		55	0.02	0.0	0.0	51,0,0	54	0.03	0.0	0.0	51,0,0
13	ok	21	5.65e-03	0.0	0.0	51,0,0	22	0.01	0.0	0.0	49,0,0
		57	0.03	0.0	0.0	51,0,0	56	0.01	0.0	0.0	57,0,0
14	ok	22	0.02	0.0	0.0	46,0,0	23	0.02	0.0	0.0	69,0,0
		58	0.04	0.0	0.0	49,0,0	57	0.03	0.0	0.0	49,0,0
15	ok	23	0.02	0.0	0.0	69,0,0	24	0.03	0.0	0.0	63,0,0
		59	0.03	0.0	0.0	69,0,0	58	0.03	0.0	0.0	69,0,0
16	ok	24	0.03	0.0	0.0	63,0,0	25	0.03	0.0	0.0	51,0,0
		60	0.03	0.0	0.0	71,0,0	59	0.03	0.0	0.0	71,0,0
17	ok	25	0.03	0.0	0.0	51,0,0	26	0.02	0.0	0.0	52,0,0
		61	0.03	0.0	0.0	51,0,0	60	0.05	0.0	0.0	51,0,0
18	ok	26	0.02	0.0	0.0	51,0,0	27	5.08e-03	0.0	0.0	49,0,0
		62	0.01	0.0	0.0	51,0,0	61	0.03	0.0	0.0	51,0,0
19	ok	28	5.50e-03	0.0	0.0	51,0,0	29	0.02	0.0	0.0	49,0,0
		64	0.03	0.0	0.0	49,0,0	63	0.01	0.0	0.0	49,0,0
20	ok	29	0.02	0.0	0.0	46,0,0	30	0.03	0.0	0.0	49,0,0
		65	0.05	0.0	0.0	49,0,0	64	0.04	0.0	0.0	49,0,0
21	ok	30	0.03	0.0	0.0	65,0,0	31	0.03	0.0	0.0	65,0,0
		66	0.03	0.0	0.0	65,0,0	65	0.04	0.0	0.0	49,0,0
22	ok	31	0.03	0.0	0.0	67,0,0	32	0.03	0.0	0.0	59,0,0
		67	0.03	0.0	0.0	59,0,0	66	0.03	0.0	0.0	67,0,0
23	ok	32	0.03	0.0	0.0	59,0,0	33	0.02	0.0	0.0	59,0,0
		68	0.03	0.0	0.0	52,0,0	67	0.04	0.0	0.0	59,0,0
24	ok	33	0.02	0.0	0.0	59,0,0	34	5.01e-03	0.0	0.0	49,0,0
		69	0.01	0.0	0.0	59,0,0	68	0.03	0.0	0.0	52,0,0
25	ok	35	4.85e-03	0.0	0.0	46,0,0	36	0.03	0.0	0.0	49,0,0
		71	0.06	0.0	0.0	49,0,0	70	0.01	0.0	0.0	49,0,0
26	ok	36	0.03	0.0	0.0	49,0,0	37	0.08	0.0	0.0	65,0,0
		72	0.08	0.0	0.0	49,0,0	71	0.07	0.0	0.0	49,0,0
27	ok	37	0.08	0.0	0.0	49,0,0	38	0.21	0.0	0.0	60,0,0
		73	0.12	0.0	0.0	60,0,0	72	0.07	0.0	0.0	65,0,0
28	ok	38	0.24	0.0	0.0	51,0,0	39	0.05	0.0	0.0	51,0,0
		74	0.07	0.0	0.0	51,0,0	73	0.09	0.0	0.0	67,0,0
29	ok	39	0.07	0.0	0.0	51,0,0	40	0.02	0.0	0.0	65,0,0
		75	0.03	0.0	0.0	59,0,0	74	0.05	0.0	0.0	49,0,0
30	ok	40	0.01	0.0	0.0	49,0,0	41	5.25e-03	0.0	0.0	52,0,0
		76	0.01	0.0	0.0	59,0,0	75	0.03	0.0	0.0	59,0,0
31	ok	42	0.01	0.0	0.0	52,0,0	43	0.02	0.0	0.0	57,0,0
		78	0.04	0.0	0.0	52,0,0	77	0.03	0.0	0.0	52,0,0
32	ok	43	0.03	0.0	0.0	77,0,0	44	0.04	0.0	0.0	57,0,0
		79	0.15	0.0	0.0	61,0,0	78	0.04	0.0	0.0	77,0,0
33	ok	44	0.05	0.0	0.0	77,0,0	45	0.06	0.0	0.0	71,0,0
		80	0.04	0.0	0.0	51,0,0	79	0.10	0.0	0.0	77,0,0



34	ok	45	0.06	0.0	0.0	51,0,0	46	0.14	0.0	0.0	51,0,0
		81	0.12	0.0	0.0	51,0,0	80	0.05	0.0	0.0	51,0,0
35	ok	46	0.05	0.0	0.0	51,0,0	47	0.07	0.0	0.0	51,0,0
		82	0.11	0.0	0.0	51,0,0	81	0.30	0.0	0.0	51,0,0
36	ok	47	0.07	0.0	0.0	51,0,0	48	0.01	0.0	0.0	51,0,0
		83	0.05	0.0	0.0	52,0,0	82	0.11	0.0	0.0	51,0,0
37	ok	49	0.02	0.0	0.0	57,0,0	50	0.04	0.0	0.0	49,0,0
		85	0.06	0.0	0.0	51,0,0	84	0.03	0.0	0.0	54,0,0
38	ok	50	0.04	0.0	0.0	57,0,0	51	0.03	0.0	0.0	57,0,0
		86	0.20	0.0	0.0	57,0,0	85	0.06	0.0	0.0	51,0,0
39	ok	51	0.08	0.0	0.0	46,0,0	52	0.05	0.0	0.0	71,0,0
		87	0.04	0.0	0.0	77,0,0	86	0.17	0.0	0.0	71,0,0
40	ok	52	0.05	0.0	0.0	69,0,0	53	0.08	0.0	0.0	52,0,0
		88	0.16	0.0	0.0	71,0,0	87	0.04	0.0	0.0	71,0,0
41	ok	53	0.04	0.0	0.0	51,0,0	54	0.04	0.0	0.0	51,0,0
		89	0.06	0.0	0.0	52,0,0	88	0.22	0.0	0.0	51,0,0
42	ok	54	0.03	0.0	0.0	51,0,0	55	0.02	0.0	0.0	51,0,0
		90	0.04	0.0	0.0	72,0,0	89	0.06	0.0	0.0	51,0,0
43	ok	56	0.02	0.0	0.0	49,0,0	57	0.04	0.0	0.0	49,0,0
		92	0.06	0.0	0.0	51,0,0	91	0.04	0.0	0.0	60,0,0
44	ok	57	0.04	0.0	0.0	65,0,0	58	0.03	0.0	0.0	49,0,0
		93	0.19	0.0	0.0	49,0,0	92	0.06	0.0	0.0	51,0,0
45	ok	58	0.08	0.0	0.0	46,0,0	59	0.05	0.0	0.0	51,0,0
		94	0.03	0.0	0.0	69,0,0	93	0.15	0.0	0.0	63,0,0
46	ok	59	0.05	0.0	0.0	65,0,0	60	0.10	0.0	0.0	52,0,0
		95	0.15	0.0	0.0	63,0,0	94	0.03	0.0	0.0	71,0,0
47	ok	60	0.04	0.0	0.0	51,0,0	61	0.04	0.0	0.0	51,0,0
		96	0.07	0.0	0.0	52,0,0	95	0.22	0.0	0.0	51,0,0
48	ok	61	0.04	0.0	0.0	51,0,0	62	0.02	0.0	0.0	51,0,0
		97	0.05	0.0	0.0	52,0,0	96	0.06	0.0	0.0	52,0,0
49	ok	63	0.02	0.0	0.0	49,0,0	64	0.04	0.0	0.0	49,0,0
		99	0.06	0.0	0.0	52,0,0	98	0.04	0.0	0.0	52,0,0
50	ok	64	0.04	0.0	0.0	49,0,0	65	0.04	0.0	0.0	49,0,0
		100	0.22	0.0	0.0	49,0,0	99	0.05	0.0	0.0	51,0,0
51	ok	65	0.08	0.0	0.0	46,0,0	66	0.05	0.0	0.0	59,0,0
		101	0.04	0.0	0.0	65,0,0	100	0.15	0.0	0.0	65,0,0
52	ok	66	0.05	0.0	0.0	49,0,0	67	0.09	0.0	0.0	52,0,0
		102	0.16	0.0	0.0	65,0,0	101	0.04	0.0	0.0	67,0,0
53	ok	67	0.04	0.0	0.0	59,0,0	68	0.04	0.0	0.0	59,0,0
		103	0.08	0.0	0.0	52,0,0	102	0.20	0.0	0.0	59,0,0
54	ok	68	0.03	0.0	0.0	52,0,0	69	0.02	0.0	0.0	51,0,0
		104	0.04	0.0	0.0	52,0,0	103	0.07	0.0	0.0	52,0,0
55	ok	70	0.02	0.0	0.0	46,0,0	71	0.07	0.0	0.0	49,0,0
		106	0.10	0.0	0.0	52,0,0	105	0.05	0.0	0.0	49,0,0
56	ok	71	0.07	0.0	0.0	49,0,0	72	0.05	0.0	0.0	65,0,0
		107	0.29	0.0	0.0	49,0,0	106	0.11	0.0	0.0	52,0,0
57	ok	72	0.13	0.0	0.0	49,0,0	73	0.08	0.0	0.0	56,0,0
		108	0.05	0.0	0.0	49,0,0	107	0.12	0.0	0.0	49,0,0
58	ok	73	0.07	0.0	0.0	49,0,0	74	0.05	0.0	0.0	67,0,0
		109	0.12	0.0	0.0	55,0,0	108	0.04	0.0	0.0	52,0,0
59	ok	74	0.05	0.0	0.0	59,0,0	75	0.04	0.0	0.0	59,0,0
		110	0.04	0.0	0.0	46,0,0	109	0.18	0.0	0.0	55,0,0
60	ok	75	0.03	0.0	0.0	59,0,0	76	0.02	0.0	0.0	59,0,0
		111	0.04	0.0	0.0	46,0,0	110	0.05	0.0	0.0	59,0,0
61	ok	77	0.04	0.0	0.0	52,0,0	78	0.04	0.0	0.0	52,0,0
		113	0.06	0.0	0.0	72,0,0	112	0.06	0.0	0.0	72,0,0
62	ok	78	0.04	0.0	0.0	57,0,0	79	0.10	0.0	0.0	61,0,0
		114	0.04	0.0	0.0	72,0,0	113	0.06	0.0	0.0	72,0,0
63	ok	79	0.08	0.0	0.0	77,0,0	80	0.06	0.0	0.0	51,0,0
		115	0.06	0.0	0.0	61,0,0	114	0.07	0.0	0.0	72,0,0
64	ok	80	0.05	0.0	0.0	71,0,0	81	0.13	0.0	0.0	51,0,0
		116	0.21	0.0	0.0	51,0,0	115	0.10	0.0	0.0	52,0,0
65	ok	81	0.30	0.0	0.0	51,0,0	82	0.07	0.0	0.0	51,0,0
		117	0.23	0.0	0.0	51,0,0	116	0.08	0.0	0.0	51,0,0
66	ok	82	0.20	0.0	0.0	51,0,0	83	0.15	0.0	0.0	51,0,0
		118	0.40	0.0	0.0	51,0,0	117	0.20	0.0	0.0	51,0,0
67	ok	84	0.07	0.0	0.0	51,0,0	85	0.10	0.0	0.0	51,0,0
		120	0.12	0.0	0.0	54,0,0	119	0.19	0.0	0.0	51,0,0
68	ok	85	0.07	0.0	0.0	71,0,0	86	0.19	0.0	0.0	51,0,0
		121	0.06	0.0	0.0	74,0,0	120	0.15	0.0	0.0	51,0,0
69	ok	86	0.10	0.0	0.0	57,0,0	87	0.08	0.0	0.0	71,0,0
		122	0.08	0.0	0.0	71,0,0	121	0.12	0.0	0.0	46,0,0
70	ok	87	0.08	0.0	0.0	71,0,0	88	0.11	0.0	0.0	51,0,0
		123	0.14	0.0	0.0	52,0,0	122	0.08	0.0	0.0	71,0,0
71	ok	88	0.19	0.0	0.0	52,0,0	89	0.07	0.0	0.0	71,0,0
		124	0.13	0.0	0.0	52,0,0	123	0.06	0.0	0.0	72,0,0
72	ok	89	0.09	0.0	0.0	52,0,0	90	0.07	0.0	0.0	52,0,0



		125	0.18	0.0	0.0	52,0,0	124	0.12	0.0	0.0	52,0,0
73	ok	91	0.09	0.0	0.0	51,0,0	92	0.11	0.0	0.0	51,0,0
		127	0.13	0.0	0.0	51,0,0	126	0.21	0.0	0.0	51,0,0
74	ok	92	0.06	0.0	0.0	69,0,0	93	0.18	0.0	0.0	51,0,0
		128	0.06	0.0	0.0	64,0,0	127	0.15	0.0	0.0	51,0,0
75	ok	93	0.09	0.0	0.0	49,0,0	94	0.07	0.0	0.0	69,0,0
		129	0.07	0.0	0.0	69,0,0	128	0.12	0.0	0.0	46,0,0
76	ok	94	0.07	0.0	0.0	71,0,0	95	0.10	0.0	0.0	51,0,0
		130	0.15	0.0	0.0	52,0,0	129	0.07	0.0	0.0	71,0,0
77	ok	95	0.21	0.0	0.0	52,0,0	96	0.07	0.0	0.0	69,0,0
		131	0.16	0.0	0.0	52,0,0	130	0.06	0.0	0.0	64,0,0
78	ok	96	0.11	0.0	0.0	52,0,0	97	0.09	0.0	0.0	52,0,0
		132	0.22	0.0	0.0	52,0,0	131	0.14	0.0	0.0	52,0,0
79	ok	98	0.08	0.0	0.0	51,0,0	99	0.09	0.0	0.0	51,0,0
		134	0.11	0.0	0.0	51,0,0	133	0.18	0.0	0.0	51,0,0
80	ok	99	0.07	0.0	0.0	65,0,0	100	0.17	0.0	0.0	51,0,0
		135	0.06	0.0	0.0	62,0,0	134	0.13	0.0	0.0	51,0,0
81	ok	100	0.11	0.0	0.0	49,0,0	101	0.07	0.0	0.0	65,0,0
		136	0.08	0.0	0.0	65,0,0	135	0.12	0.0	0.0	46,0,0
82	ok	101	0.07	0.0	0.0	67,0,0	102	0.09	0.0	0.0	59,0,0
		137	0.14	0.0	0.0	52,0,0	136	0.07	0.0	0.0	67,0,0
83	ok	102	0.21	0.0	0.0	52,0,0	103	0.07	0.0	0.0	49,0,0
		138	0.15	0.0	0.0	49,0,0	137	0.06	0.0	0.0	68,0,0
84	ok	103	0.11	0.0	0.0	49,0,0	104	0.07	0.0	0.0	52,0,0
		139	0.21	0.0	0.0	49,0,0	138	0.13	0.0	0.0	52,0,0
85	ok	105	0.13	0.0	0.0	52,0,0	106	0.19	0.0	0.0	52,0,0
		141	0.19	0.0	0.0	52,0,0	140	0.37	0.0	0.0	52,0,0
86	ok	106	0.06	0.0	0.0	49,0,0	107	0.28	0.0	0.0	49,0,0
		142	0.08	0.0	0.0	52,0,0	141	0.21	0.0	0.0	52,0,0
87	ok	107	0.13	0.0	0.0	49,0,0	108	0.06	0.0	0.0	49,0,0
		143	0.09	0.0	0.0	49,0,0	142	0.20	0.0	0.0	52,0,0
88	ok	108	0.07	0.0	0.0	67,0,0	109	0.08	0.0	0.0	59,0,0
		144	0.06	0.0	0.0	59,0,0	143	0.06	0.0	0.0	59,0,0
89	ok	109	0.11	0.0	0.0	55,0,0	110	0.06	0.0	0.0	59,0,0
		145	0.06	0.0	0.0	46,0,0	144	0.04	0.0	0.0	62,0,0
90	ok	110	0.04	0.0	0.0	54,0,0	111	0.04	0.0	0.0	46,0,0
		146	0.07	0.0	0.0	46,0,0	145	0.06	0.0	0.0	46,0,0
91	ok	112	0.06	0.0	0.0	72,0,0	113	0.07	0.0	0.0	72,0,0
		148	0.08	0.0	0.0	72,0,0	147	0.08	0.0	0.0	72,0,0
92	ok	113	0.07	0.0	0.0	72,0,0	114	0.06	0.0	0.0	72,0,0
		149	0.13	0.0	0.0	72,0,0	148	0.17	0.0	0.0	72,0,0
93	ok	114	0.05	0.0	0.0	52,0,0	115	0.12	0.0	0.0	71,0,0
		150	0.26	0.0	0.0	72,0,0	149	0.15	0.0	0.0	72,0,0
94	ok	115	0.12	0.0	0.0	71,0,0	116	0.21	0.0	0.0	51,0,0
		151	0.13	0.0	0.0	58,0,0	150	0.26	0.0	0.0	72,0,0
95	ok	116	0.07	0.0	0.0	46,0,0	117	0.24	0.0	0.0	51,0,0
		152	0.18	0.0	0.0	72,0,0	151	0.31	0.0	0.0	51,0,0
96	ok	117	0.20	0.0	0.0	51,0,0	118	0.35	0.0	0.0	51,0,0
		153	0.15	0.0	0.0	51,0,0	152	0.17	0.0	0.0	46,0,0
97	ok	119	0.23	0.0	0.0	52,0,0	120	0.11	0.0	0.0	51,0,0
		155	0.13	0.0	0.0	52,0,0	154	0.08	0.0	0.0	74,0,0
98	ok	120	0.13	0.0	0.0	46,0,0	121	0.07	0.0	0.0	74,0,0
		156	0.18	0.0	0.0	54,0,0	155	0.17	0.0	0.0	72,0,0
99	ok	121	0.14	0.0	0.0	51,0,0	122	0.11	0.0	0.0	72,0,0
		157	0.23	0.0	0.0	72,0,0	156	0.16	0.0	0.0	72,0,0
100	ok	122	0.11	0.0	0.0	72,0,0	123	0.12	0.0	0.0	52,0,0
		158	0.12	0.0	0.0	66,0,0	157	0.23	0.0	0.0	72,0,0
101	ok	123	0.07	0.0	0.0	72,0,0	124	0.15	0.0	0.0	52,0,0
		159	0.17	0.0	0.0	72,0,0	158	0.21	0.0	0.0	52,0,0
102	ok	124	0.13	0.0	0.0	72,0,0	125	0.19	0.0	0.0	52,0,0
		160	0.10	0.0	0.0	72,0,0	159	0.09	0.0	0.0	49,0,0
103	ok	126	0.22	0.0	0.0	51,0,0	127	0.12	0.0	0.0	51,0,0
		162	0.11	0.0	0.0	52,0,0	161	0.09	0.0	0.0	66,0,0
104	ok	127	0.14	0.0	0.0	46,0,0	128	0.07	0.0	0.0	64,0,0
		163	0.18	0.0	0.0	46,0,0	162	0.15	0.0	0.0	64,0,0
105	ok	128	0.13	0.0	0.0	51,0,0	129	0.10	0.0	0.0	64,0,0
		164	0.20	0.0	0.0	64,0,0	163	0.13	0.0	0.0	72,0,0
106	ok	129	0.10	0.0	0.0	64,0,0	130	0.14	0.0	0.0	52,0,0
		165	0.12	0.0	0.0	66,0,0	164	0.20	0.0	0.0	64,0,0
107	ok	130	0.07	0.0	0.0	64,0,0	131	0.17	0.0	0.0	52,0,0
		166	0.15	0.0	0.0	64,0,0	165	0.23	0.0	0.0	52,0,0
108	ok	131	0.15	0.0	0.0	52,0,0	132	0.25	0.0	0.0	52,0,0
		167	0.09	0.0	0.0	52,0,0	166	0.12	0.0	0.0	52,0,0
109	ok	133	0.20	0.0	0.0	51,0,0	134	0.12	0.0	0.0	46,0,0
		169	0.10	0.0	0.0	51,0,0	168	0.09	0.0	0.0	62,0,0
110	ok	134	0.14	0.0	0.0	46,0,0	135	0.07	0.0	0.0	62,0,0
		170	0.20	0.0	0.0	46,0,0	169	0.16	0.0	0.0	62,0,0



111	ok	135	0.12	0.0	0.0	51,0,0	136	0.11	0.0	0.0	62,0,0
		171	0.22	0.0	0.0	62,0,0	170	0.12	0.0	0.0	68,0,0
112	ok	136	0.11	0.0	0.0	62,0,0	137	0.14	0.0	0.0	52,0,0
		172	0.14	0.0	0.0	62,0,0	171	0.22	0.0	0.0	62,0,0
113	ok	137	0.07	0.0	0.0	68,0,0	138	0.14	0.0	0.0	52,0,0
		173	0.17	0.0	0.0	62,0,0	172	0.21	0.0	0.0	60,0,0
114	ok	138	0.13	0.0	0.0	52,0,0	139	0.19	0.0	0.0	51,0,0
		174	0.09	0.0	0.0	68,0,0	173	0.11	0.0	0.0	46,0,0
115	ok	140	0.34	0.0	0.0	52,0,0	141	0.19	0.0	0.0	52,0,0
		176	0.17	0.0	0.0	52,0,0	175	0.13	0.0	0.0	49,0,0
116	ok	141	0.22	0.0	0.0	49,0,0	142	0.08	0.0	0.0	52,0,0
		177	0.29	0.0	0.0	49,0,0	176	0.14	0.0	0.0	62,0,0
117	ok	142	0.21	0.0	0.0	52,0,0	143	0.10	0.0	0.0	65,0,0
		178	0.21	0.0	0.0	62,0,0	177	0.12	0.0	0.0	60,0,0
118	ok	143	0.09	0.0	0.0	65,0,0	144	0.06	0.0	0.0	46,0,0
		179	0.13	0.0	0.0	62,0,0	178	0.22	0.0	0.0	62,0,0
119	ok	144	0.05	0.0	0.0	62,0,0	145	0.06	0.0	0.0	46,0,0
		180	0.15	0.0	0.0	62,0,0	179	0.13	0.0	0.0	62,0,0
120	ok	145	0.06	0.0	0.0	46,0,0	146	0.07	0.0	0.0	46,0,0
		181	0.07	0.0	0.0	46,0,0	180	0.08	0.0	0.0	62,0,0
121	ok	147	0.08	0.0	0.0	72,0,0	148	0.11	0.0	0.0	72,0,0
		183	0.08	0.0	0.0	72,0,0	182	0.05	0.0	0.0	72,0,0
122	ok	148	0.06	0.0	0.0	72,0,0	149	0.35	0.0	0.0	72,0,0
		184	0.14	0.0	0.0	72,0,0	183	0.09	0.0	0.0	72,0,0
123	ok	149	0.36	0.0	0.0	72,0,0	150	0.09	0.0	0.0	72,0,0
		185	0.28	0.0	0.0	72,0,0	184	0.08	0.0	0.0	72,0,0
124	ok	150	0.09	0.0	0.0	74,0,0	151	0.38	0.0	0.0	72,0,0
		186	0.14	0.0	0.0	51,0,0	185	0.29	0.0	0.0	72,0,0
125	ok	151	0.34	0.0	0.0	74,0,0	152	0.10	0.0	0.0	54,0,0
		187	0.08	0.0	0.0	74,0,0	186	0.12	0.0	0.0	74,0,0
126	ok	152	0.10	0.0	0.0	74,0,0	153	0.08	0.0	0.0	72,0,0
		188	0.04	0.0	0.0	74,0,0	187	0.07	0.0	0.0	74,0,0
127	ok	154	0.09	0.0	0.0	72,0,0	155	0.12	0.0	0.0	72,0,0
		190	0.08	0.0	0.0	72,0,0	189	0.05	0.0	0.0	72,0,0
128	ok	155	0.09	0.0	0.0	52,0,0	156	0.35	0.0	0.0	72,0,0
		191	0.13	0.0	0.0	72,0,0	190	0.09	0.0	0.0	72,0,0
129	ok	156	0.35	0.0	0.0	72,0,0	157	0.08	0.0	0.0	72,0,0
		192	0.24	0.0	0.0	72,0,0	191	0.08	0.0	0.0	51,0,0
130	ok	157	0.08	0.0	0.0	72,0,0	158	0.36	0.0	0.0	72,0,0
		193	0.08	0.0	0.0	52,0,0	192	0.25	0.0	0.0	72,0,0
131	ok	158	0.32	0.0	0.0	74,0,0	159	0.06	0.0	0.0	49,0,0
		194	0.07	0.0	0.0	74,0,0	193	0.11	0.0	0.0	71,0,0
132	ok	159	0.10	0.0	0.0	74,0,0	160	0.08	0.0	0.0	72,0,0
		195	0.04	0.0	0.0	74,0,0	194	0.06	0.0	0.0	74,0,0
133	ok	161	0.08	0.0	0.0	72,0,0	162	0.10	0.0	0.0	72,0,0
		197	0.07	0.0	0.0	72,0,0	196	0.04	0.0	0.0	64,0,0
134	ok	162	0.07	0.0	0.0	52,0,0	163	0.30	0.0	0.0	72,0,0
		198	0.10	0.0	0.0	64,0,0	197	0.07	0.0	0.0	72,0,0
135	ok	163	0.32	0.0	0.0	64,0,0	164	0.07	0.0	0.0	64,0,0
		199	0.21	0.0	0.0	64,0,0	198	0.08	0.0	0.0	46,0,0
136	ok	164	0.07	0.0	0.0	64,0,0	165	0.32	0.0	0.0	64,0,0
		200	0.10	0.0	0.0	52,0,0	199	0.21	0.0	0.0	64,0,0
137	ok	165	0.29	0.0	0.0	66,0,0	166	0.08	0.0	0.0	49,0,0
		201	0.07	0.0	0.0	66,0,0	200	0.09	0.0	0.0	66,0,0
138	ok	166	0.10	0.0	0.0	66,0,0	167	0.08	0.0	0.0	64,0,0
		202	0.04	0.0	0.0	66,0,0	201	0.06	0.0	0.0	66,0,0
139	ok	168	0.08	0.0	0.0	68,0,0	169	0.10	0.0	0.0	68,0,0
		204	0.06	0.0	0.0	68,0,0	203	0.04	0.0	0.0	68,0,0
140	ok	169	0.06	0.0	0.0	60,0,0	170	0.31	0.0	0.0	68,0,0
		205	0.11	0.0	0.0	68,0,0	204	0.07	0.0	0.0	68,0,0
141	ok	170	0.34	0.0	0.0	62,0,0	171	0.08	0.0	0.0	62,0,0
		206	0.24	0.0	0.0	62,0,0	205	0.08	0.0	0.0	46,0,0
142	ok	171	0.08	0.0	0.0	62,0,0	172	0.34	0.0	0.0	62,0,0
		207	0.09	0.0	0.0	52,0,0	206	0.23	0.0	0.0	62,0,0
143	ok	172	0.33	0.0	0.0	62,0,0	173	0.07	0.0	0.0	49,0,0
		208	0.08	0.0	0.0	62,0,0	207	0.12	0.0	0.0	62,0,0
144	ok	173	0.11	0.0	0.0	62,0,0	174	0.08	0.0	0.0	68,0,0
		209	0.04	0.0	0.0	62,0,0	208	0.07	0.0	0.0	62,0,0
145	ok	175	0.06	0.0	0.0	68,0,0	176	0.09	0.0	0.0	60,0,0
		211	0.07	0.0	0.0	60,0,0	210	0.03	0.0	0.0	62,0,0
146	ok	176	0.11	0.0	0.0	60,0,0	177	0.28	0.0	0.0	60,0,0
		212	0.11	0.0	0.0	68,0,0	211	0.06	0.0	0.0	68,0,0
147	ok	177	0.30	0.0	0.0	62,0,0	178	0.08	0.0	0.0	62,0,0
		213	0.24	0.0	0.0	62,0,0	212	0.14	0.0	0.0	49,0,0
148	ok	178	0.08	0.0	0.0	62,0,0	179	0.31	0.0	0.0	62,0,0
		214	0.06	0.0	0.0	62,0,0	213	0.23	0.0	0.0	62,0,0
149	ok	179	0.33	0.0	0.0	62,0,0	180	0.06	0.0	0.0	46,0,0



		215	0.08	0.0	0.0	62,0,0	214	0.11	0.0	0.0	62,0,0
150	ok	180	0.10	0.0	0.0	62,0,0	181	0.07	0.0	0.0	46,0,0
		216	0.04	0.0	0.0	62,0,0	215	0.07	0.0	0.0	62,0,0
151	ok	182	0.04	0.0	0.0	72,0,0	183	0.08	0.0	0.0	72,0,0
		218	0.01	0.0	0.0	72,0,0	217	5.96e-03	0.0	0.0	71,0,0
152	ok	183	0.08	0.0	0.0	72,0,0	184	0.13	0.0	0.0	72,0,0
		219	0.06	0.0	0.0	71,0,0	218	0.02	0.0	0.0	72,0,0
153	ok	184	0.24	0.0	0.0	72,0,0	185	0.25	0.0	0.0	72,0,0
		220	0.49	0.0	0.0	72,0,0	219	0.17	0.0	0.0	72,0,0
154	ok	185	0.24	0.0	0.0	72,0,0	186	0.21	0.0	0.0	74,0,0
		221	0.18	0.0	0.0	72,0,0	220	0.42	0.0	0.0	72,0,0
155	ok	186	0.12	0.0	0.0	74,0,0	187	0.07	0.0	0.0	74,0,0
		222	0.03	0.0	0.0	54,0,0	221	0.06	0.0	0.0	51,0,0
156	ok	187	0.06	0.0	0.0	74,0,0	188	0.03	0.0	0.0	74,0,0
		223	7.51e-03	0.0	0.0	71,0,0	222	0.03	0.0	0.0	54,0,0
157	ok	189	0.04	0.0	0.0	72,0,0	190	0.08	0.0	0.0	72,0,0
		225	0.02	0.0	0.0	52,0,0	224	6.09e-03	0.0	0.0	72,0,0
158	ok	190	0.08	0.0	0.0	72,0,0	191	0.12	0.0	0.0	72,0,0
		226	0.03	0.0	0.0	74,0,0	225	0.02	0.0	0.0	52,0,0
159	ok	191	0.22	0.0	0.0	72,0,0	192	0.21	0.0	0.0	72,0,0
		227	0.47	0.0	0.0	71,0,0	226	0.17	0.0	0.0	71,0,0
160	ok	192	0.21	0.0	0.0	71,0,0	193	0.21	0.0	0.0	72,0,0
		228	0.18	0.0	0.0	71,0,0	227	0.48	0.0	0.0	71,0,0
161	ok	193	0.10	0.0	0.0	74,0,0	194	0.06	0.0	0.0	74,0,0
		229	0.02	0.0	0.0	49,0,0	228	0.04	0.0	0.0	72,0,0
162	ok	194	0.05	0.0	0.0	74,0,0	195	0.03	0.0	0.0	74,0,0
		230	5.47e-03	0.0	0.0	52,0,0	229	0.01	0.0	0.0	72,0,0
163	ok	196	0.03	0.0	0.0	64,0,0	197	0.06	0.0	0.0	72,0,0
		232	0.02	0.0	0.0	52,0,0	231	5.40e-03	0.0	0.0	46,0,0
164	ok	197	0.06	0.0	0.0	72,0,0	198	0.09	0.0	0.0	64,0,0
		233	0.04	0.0	0.0	66,0,0	232	0.02	0.0	0.0	51,0,0
165	ok	198	0.18	0.0	0.0	64,0,0	199	0.18	0.0	0.0	63,0,0
		234	0.42	0.0	0.0	63,0,0	233	0.15	0.0	0.0	63,0,0
166	ok	199	0.18	0.0	0.0	63,0,0	200	0.18	0.0	0.0	64,0,0
		235	0.16	0.0	0.0	63,0,0	234	0.41	0.0	0.0	63,0,0
167	ok	200	0.09	0.0	0.0	64,0,0	201	0.06	0.0	0.0	66,0,0
		236	0.02	0.0	0.0	49,0,0	235	0.04	0.0	0.0	64,0,0
168	ok	201	0.05	0.0	0.0	66,0,0	202	0.03	0.0	0.0	66,0,0
		237	5.28e-03	0.0	0.0	52,0,0	236	0.01	0.0	0.0	52,0,0
169	ok	203	0.03	0.0	0.0	68,0,0	204	0.05	0.0	0.0	68,0,0
		239	0.01	0.0	0.0	46,0,0	238	5.65e-03	0.0	0.0	46,0,0
170	ok	204	0.06	0.0	0.0	68,0,0	205	0.10	0.0	0.0	68,0,0
		240	0.04	0.0	0.0	62,0,0	239	0.02	0.0	0.0	51,0,0
171	ok	205	0.20	0.0	0.0	62,0,0	206	0.20	0.0	0.0	62,0,0
		241	0.45	0.0	0.0	65,0,0	240	0.17	0.0	0.0	65,0,0
172	ok	206	0.20	0.0	0.0	62,0,0	207	0.21	0.0	0.0	62,0,0
		242	0.16	0.0	0.0	65,0,0	241	0.45	0.0	0.0	65,0,0
173	ok	207	0.11	0.0	0.0	62,0,0	208	0.07	0.0	0.0	62,0,0
		243	0.02	0.0	0.0	46,0,0	242	0.04	0.0	0.0	68,0,0
174	ok	208	0.07	0.0	0.0	62,0,0	209	0.04	0.0	0.0	62,0,0
		244	4.99e-03	0.0	0.0	62,0,0	243	0.02	0.0	0.0	46,0,0
175	ok	210	0.03	0.0	0.0	68,0,0	211	0.06	0.0	0.0	68,0,0
		246	0.02	0.0	0.0	60,0,0	245	5.98e-03	0.0	0.0	46,0,0
176	ok	211	0.07	0.0	0.0	60,0,0	212	0.10	0.0	0.0	68,0,0
		247	0.07	0.0	0.0	52,0,0	246	0.03	0.0	0.0	60,0,0
177	ok	212	0.19	0.0	0.0	62,0,0	213	0.20	0.0	0.0	62,0,0
		248	0.41	0.0	0.0	62,0,0	247	0.14	0.0	0.0	62,0,0
178	ok	213	0.20	0.0	0.0	62,0,0	214	0.19	0.0	0.0	62,0,0
		249	0.14	0.0	0.0	62,0,0	248	0.36	0.0	0.0	68,0,0
179	ok	214	0.11	0.0	0.0	62,0,0	215	0.07	0.0	0.0	62,0,0
		250	0.02	0.0	0.0	60,0,0	249	0.06	0.0	0.0	65,0,0
180	ok	215	0.07	0.0	0.0	62,0,0	216	0.03	0.0	0.0	62,0,0
		251	5.01e-03	0.0	0.0	65,0,0	250	0.01	0.0	0.0	62,0,0
181	ok	258	6.51e-03	0.0	0.0	72,0,0	259	0.01	0.0	0.0	77,0,0
		266	0.04	0.0	0.0	77,0,0	265	0.02	0.0	0.0	77,0,0
182	ok	259	0.02	0.0	0.0	71,0,0	260	0.03	0.0	0.0	77,0,0
		267	0.07	0.0	0.0	71,0,0	266	0.05	0.0	0.0	77,0,0
183	ok	260	0.06	0.0	0.0	77,0,0	261	0.16	0.0	0.0	71,0,0
		268	0.12	0.0	0.0	74,0,0	267	0.11	0.0	0.0	71,0,0
184	ok	261	0.24	0.0	0.0	71,0,0	262	0.08	0.0	0.0	54,0,0
		269	0.15	0.0	0.0	71,0,0	268	0.12	0.0	0.0	71,0,0
185	ok	262	0.09	0.0	0.0	51,0,0	263	0.04	0.0	0.0	51,0,0
		270	0.08	0.0	0.0	51,0,0	269	0.11	0.0	0.0	51,0,0
186	ok	263	0.04	0.0	0.0	51,0,0	264	6.07e-03	0.0	0.0	74,0,0
		271	0.02	0.0	0.0	71,0,0	270	0.08	0.0	0.0	51,0,0
187	ok	265	0.02	0.0	0.0	77,0,0	266	0.05	0.0	0.0	77,0,0
		301	0.06	0.0	0.0	77,0,0	300	0.04	0.0	0.0	61,0,0



188	ok	266	0.05	0.0	0.0	77,0,0	267	0.07	0.0	0.0	71,0,0
		302	0.25	0.0	0.0	77,0,0	301	0.05	0.0	0.0	77,0,0
189	ok	267	0.07	0.0	0.0	52,0,0	268	0.13	0.0	0.0	71,0,0
		303	0.06	0.0	0.0	58,0,0	302	0.22	0.0	0.0	77,0,0
190	ok	268	0.14	0.0	0.0	77,0,0	269	0.16	0.0	0.0	59,0,0
		304	0.21	0.0	0.0	77,0,0	303	0.07	0.0	0.0	54,0,0
191	ok	269	0.10	0.0	0.0	71,0,0	270	0.08	0.0	0.0	51,0,0
		305	0.12	0.0	0.0	51,0,0	304	0.33	0.0	0.0	51,0,0
192	ok	270	0.08	0.0	0.0	51,0,0	271	0.02	0.0	0.0	71,0,0
		306	0.04	0.0	0.0	71,0,0	305	0.11	0.0	0.0	51,0,0
193	ok	272	9.76e-03	0.0	0.0	61,0,0	273	0.05	0.0	0.0	57,0,0
		308	0.09	0.0	0.0	61,0,0	307	0.02	0.0	0.0	57,0,0
194	ok	273	0.05	0.0	0.0	57,0,0	274	0.08	0.0	0.0	57,0,0
		309	0.11	0.0	0.0	77,0,0	308	0.10	0.0	0.0	61,0,0
195	ok	274	0.14	0.0	0.0	71,0,0	275	0.37	0.0	0.0	71,0,0
		310	0.20	0.0	0.0	71,0,0	309	0.20	0.0	0.0	71,0,0
196	ok	275	0.38	0.0	0.0	71,0,0	276	0.14	0.0	0.0	71,0,0
		311	0.21	0.0	0.0	71,0,0	310	0.20	0.0	0.0	71,0,0
197	ok	276	0.06	0.0	0.0	71,0,0	277	0.03	0.0	0.0	51,0,0
		312	0.09	0.0	0.0	71,0,0	311	0.12	0.0	0.0	71,0,0
198	ok	277	0.03	0.0	0.0	51,0,0	278	5.18e-03	0.0	0.0	51,0,0
		313	0.03	0.0	0.0	71,0,0	312	0.07	0.0	0.0	71,0,0
199	ok	279	5.44e-03	0.0	0.0	57,0,0	280	0.03	0.0	0.0	57,0,0
		315	0.08	0.0	0.0	69,0,0	314	0.03	0.0	0.0	69,0,0
200	ok	280	0.04	0.0	0.0	57,0,0	281	0.06	0.0	0.0	57,0,0
		316	0.11	0.0	0.0	69,0,0	315	0.09	0.0	0.0	69,0,0
201	ok	281	0.10	0.0	0.0	63,0,0	282	0.30	0.0	0.0	63,0,0
		317	0.15	0.0	0.0	63,0,0	316	0.18	0.0	0.0	63,0,0
202	ok	282	0.29	0.0	0.0	63,0,0	283	0.10	0.0	0.0	63,0,0
		318	0.18	0.0	0.0	63,0,0	317	0.15	0.0	0.0	63,0,0
203	ok	283	0.06	0.0	0.0	59,0,0	284	0.04	0.0	0.0	59,0,0
		319	0.09	0.0	0.0	47,0,0	318	0.11	0.0	0.0	63,0,0
204	ok	284	0.03	0.0	0.0	59,0,0	285	5.65e-03	0.0	0.0	59,0,0
		320	0.03	0.0	0.0	63,0,0	319	0.08	0.0	0.0	47,0,0
205	ok	286	4.95e-03	0.0	0.0	49,0,0	287	0.03	0.0	0.0	49,0,0
		322	0.08	0.0	0.0	49,0,0	321	0.03	0.0	0.0	65,0,0
206	ok	287	0.03	0.0	0.0	49,0,0	288	0.05	0.0	0.0	49,0,0
		323	0.11	0.0	0.0	65,0,0	322	0.08	0.0	0.0	65,0,0
207	ok	288	0.10	0.0	0.0	65,0,0	289	0.29	0.0	0.0	65,0,0
		324	0.15	0.0	0.0	65,0,0	323	0.17	0.0	0.0	65,0,0
208	ok	289	0.29	0.0	0.0	65,0,0	290	0.10	0.0	0.0	65,0,0
		325	0.17	0.0	0.0	67,0,0	324	0.15	0.0	0.0	65,0,0
209	ok	290	0.06	0.0	0.0	55,0,0	291	0.04	0.0	0.0	59,0,0
		326	0.08	0.0	0.0	55,0,0	325	0.11	0.0	0.0	67,0,0
210	ok	291	0.03	0.0	0.0	55,0,0	292	5.29e-03	0.0	0.0	59,0,0
		327	0.03	0.0	0.0	67,0,0	326	0.08	0.0	0.0	55,0,0
211	ok	293	5.23e-03	0.0	0.0	68,0,0	294	0.03	0.0	0.0	49,0,0
		329	0.06	0.0	0.0	49,0,0	328	0.02	0.0	0.0	65,0,0
212	ok	294	0.03	0.0	0.0	49,0,0	295	0.08	0.0	0.0	57,0,0
		330	0.09	0.0	0.0	49,0,0	329	0.07	0.0	0.0	49,0,0
213	ok	295	0.08	0.0	0.0	56,0,0	296	0.25	0.0	0.0	67,0,0
		331	0.12	0.0	0.0	67,0,0	330	0.14	0.0	0.0	65,0,0
214	ok	296	0.21	0.0	0.0	65,0,0	297	0.07	0.0	0.0	67,0,0
		332	0.12	0.0	0.0	65,0,0	331	0.12	0.0	0.0	67,0,0
215	ok	297	0.04	0.0	0.0	67,0,0	298	0.02	0.0	0.0	68,0,0
		333	0.06	0.0	0.0	67,0,0	332	0.07	0.0	0.0	65,0,0
216	ok	298	0.02	0.0	0.0	67,0,0	299	5.27e-03	0.0	0.0	68,0,0
		334	0.02	0.0	0.0	67,0,0	333	0.05	0.0	0.0	67,0,0
217	ok	300	0.04	0.0	0.0	61,0,0	301	0.04	0.0	0.0	61,0,0
		336	0.04	0.0	0.0	61,0,0	335	0.04	0.0	0.0	60,0,0
218	ok	301	0.09	0.0	0.0	77,0,0	302	0.16	0.0	0.0	52,0,0
		337	0.04	0.0	0.0	57,0,0	336	0.06	0.0	0.0	72,0,0
219	ok	302	0.12	0.0	0.0	77,0,0	303	0.15	0.0	0.0	77,0,0
		338	0.07	0.0	0.0	77,0,0	337	0.08	0.0	0.0	52,0,0
220	ok	303	0.15	0.0	0.0	71,0,0	304	0.16	0.0	0.0	51,0,0
		339	0.21	0.0	0.0	59,0,0	338	0.11	0.0	0.0	59,0,0
221	ok	304	0.32	0.0	0.0	54,0,0	305	0.09	0.0	0.0	71,0,0
		340	0.22	0.0	0.0	54,0,0	339	0.08	0.0	0.0	59,0,0
222	ok	305	0.20	0.0	0.0	51,0,0	306	0.15	0.0	0.0	59,0,0
		341	0.39	0.0	0.0	59,0,0	340	0.19	0.0	0.0	59,0,0
223	ok	307	0.11	0.0	0.0	60,0,0	308	0.16	0.0	0.0	57,0,0
		343	0.17	0.0	0.0	60,0,0	342	0.30	0.0	0.0	57,0,0
224	ok	308	0.10	0.0	0.0	57,0,0	309	0.12	0.0	0.0	77,0,0
		344	0.29	0.0	0.0	61,0,0	343	0.17	0.0	0.0	57,0,0
225	ok	309	0.12	0.0	0.0	57,0,0	310	0.21	0.0	0.0	71,0,0
		345	0.11	0.0	0.0	71,0,0	344	0.29	0.0	0.0	71,0,0
226	ok	310	0.21	0.0	0.0	71,0,0	311	0.11	0.0	0.0	51,0,0



		346	0.30	0.0	0.0	71,0,0	345	0.09	0.0	0.0	71,0,0
227	ok	311	0.13	0.0	0.0	71,0,0	312	0.08	0.0	0.0	71,0,0
		347	0.09	0.0	0.0	51,0,0	346	0.33	0.0	0.0	71,0,0
228	ok	312	0.08	0.0	0.0	51,0,0	313	0.03	0.0	0.0	71,0,0
		348	0.05	0.0	0.0	71,0,0	347	0.10	0.0	0.0	71,0,0
229	ok	314	0.04	0.0	0.0	69,0,0	315	0.08	0.0	0.0	69,0,0
		350	0.11	0.0	0.0	57,0,0	349	0.06	0.0	0.0	69,0,0
230	ok	315	0.08	0.0	0.0	69,0,0	316	0.11	0.0	0.0	69,0,0
		351	0.33	0.0	0.0	57,0,0	350	0.12	0.0	0.0	57,0,0
231	ok	316	0.13	0.0	0.0	57,0,0	317	0.17	0.0	0.0	63,0,0
		352	0.08	0.0	0.0	63,0,0	351	0.27	0.0	0.0	63,0,0
232	ok	317	0.17	0.0	0.0	63,0,0	318	0.13	0.0	0.0	59,0,0
		353	0.28	0.0	0.0	63,0,0	352	0.08	0.0	0.0	63,0,0
233	ok	318	0.11	0.0	0.0	63,0,0	319	0.09	0.0	0.0	51,0,0
		354	0.12	0.0	0.0	59,0,0	353	0.34	0.0	0.0	51,0,0
234	ok	319	0.09	0.0	0.0	47,0,0	320	0.04	0.0	0.0	63,0,0
		355	0.06	0.0	0.0	63,0,0	354	0.12	0.0	0.0	59,0,0
235	ok	321	0.04	0.0	0.0	65,0,0	322	0.08	0.0	0.0	49,0,0
		357	0.11	0.0	0.0	49,0,0	356	0.06	0.0	0.0	65,0,0
236	ok	322	0.08	0.0	0.0	49,0,0	323	0.11	0.0	0.0	65,0,0
		358	0.32	0.0	0.0	49,0,0	357	0.10	0.0	0.0	49,0,0
237	ok	323	0.11	0.0	0.0	57,0,0	324	0.17	0.0	0.0	65,0,0
		359	0.08	0.0	0.0	65,0,0	358	0.28	0.0	0.0	65,0,0
238	ok	324	0.18	0.0	0.0	65,0,0	325	0.13	0.0	0.0	59,0,0
		360	0.28	0.0	0.0	65,0,0	359	0.07	0.0	0.0	65,0,0
239	ok	325	0.11	0.0	0.0	67,0,0	326	0.08	0.0	0.0	55,0,0
		361	0.11	0.0	0.0	55,0,0	360	0.32	0.0	0.0	55,0,0
240	ok	326	0.09	0.0	0.0	55,0,0	327	0.03	0.0	0.0	67,0,0
		362	0.06	0.0	0.0	65,0,0	361	0.11	0.0	0.0	55,0,0
241	ok	328	0.02	0.0	0.0	62,0,0	329	0.07	0.0	0.0	49,0,0
		364	0.09	0.0	0.0	49,0,0	363	0.04	0.0	0.0	56,0,0
242	ok	329	0.07	0.0	0.0	49,0,0	330	0.09	0.0	0.0	65,0,0
		365	0.30	0.0	0.0	49,0,0	364	0.10	0.0	0.0	49,0,0
243	ok	330	0.14	0.0	0.0	57,0,0	331	0.15	0.0	0.0	67,0,0
		366	0.06	0.0	0.0	65,0,0	365	0.21	0.0	0.0	68,0,0
244	ok	331	0.14	0.0	0.0	65,0,0	332	0.06	0.0	0.0	54,0,0
		367	0.21	0.0	0.0	67,0,0	366	0.06	0.0	0.0	67,0,0
245	ok	332	0.08	0.0	0.0	67,0,0	333	0.06	0.0	0.0	67,0,0
		368	0.05	0.0	0.0	55,0,0	367	0.25	0.0	0.0	67,0,0
246	ok	333	0.05	0.0	0.0	67,0,0	334	0.02	0.0	0.0	67,0,0
		369	0.04	0.0	0.0	55,0,0	368	0.07	0.0	0.0	67,0,0
247	ok	335	0.04	0.0	0.0	60,0,0	336	0.04	0.0	0.0	52,0,0
		371	0.05	0.0	0.0	52,0,0	370	0.04	0.0	0.0	52,0,0
248	ok	336	0.05	0.0	0.0	61,0,0	337	0.04	0.0	0.0	52,0,0
		372	0.16	0.0	0.0	52,0,0	371	0.10	0.0	0.0	71,0,0
249	ok	337	0.08	0.0	0.0	52,0,0	338	0.09	0.0	0.0	71,0,0
		373	0.17	0.0	0.0	71,0,0	372	0.13	0.0	0.0	72,0,0
250	ok	338	0.11	0.0	0.0	54,0,0	339	0.22	0.0	0.0	54,0,0
		374	0.14	0.0	0.0	58,0,0	373	0.15	0.0	0.0	71,0,0
251	ok	339	0.08	0.0	0.0	54,0,0	340	0.22	0.0	0.0	59,0,0
		375	0.10	0.0	0.0	71,0,0	374	0.33	0.0	0.0	59,0,0
252	ok	340	0.19	0.0	0.0	59,0,0	341	0.38	0.0	0.0	60,0,0
		376	0.15	0.0	0.0	59,0,0	375	0.19	0.0	0.0	54,0,0
253	ok	342	0.29	0.0	0.0	57,0,0	343	0.17	0.0	0.0	60,0,0
		378	0.16	0.0	0.0	57,0,0	377	0.11	0.0	0.0	60,0,0
254	ok	343	0.17	0.0	0.0	60,0,0	344	0.21	0.0	0.0	57,0,0
		379	0.09	0.0	0.0	60,0,0	378	0.09	0.0	0.0	57,0,0
255	ok	344	0.15	0.0	0.0	61,0,0	345	0.18	0.0	0.0	71,0,0
		380	0.11	0.0	0.0	52,0,0	379	0.14	0.0	0.0	60,0,0
256	ok	345	0.20	0.0	0.0	71,0,0	346	0.17	0.0	0.0	71,0,0
		381	0.16	0.0	0.0	59,0,0	380	0.09	0.0	0.0	54,0,0
257	ok	346	0.22	0.0	0.0	59,0,0	347	0.13	0.0	0.0	71,0,0
		382	0.14	0.0	0.0	54,0,0	381	0.06	0.0	0.0	54,0,0
258	ok	347	0.14	0.0	0.0	51,0,0	348	0.09	0.0	0.0	54,0,0
		383	0.24	0.0	0.0	54,0,0	382	0.12	0.0	0.0	54,0,0
259	ok	349	0.12	0.0	0.0	60,0,0	350	0.19	0.0	0.0	57,0,0
		385	0.16	0.0	0.0	60,0,0	384	0.35	0.0	0.0	57,0,0
260	ok	350	0.12	0.0	0.0	69,0,0	351	0.28	0.0	0.0	60,0,0
		386	0.08	0.0	0.0	57,0,0	385	0.19	0.0	0.0	60,0,0
261	ok	351	0.18	0.0	0.0	69,0,0	352	0.19	0.0	0.0	63,0,0
		387	0.10	0.0	0.0	63,0,0	386	0.20	0.0	0.0	57,0,0
262	ok	352	0.20	0.0	0.0	63,0,0	353	0.18	0.0	0.0	51,0,0
		388	0.20	0.0	0.0	59,0,0	387	0.10	0.0	0.0	63,0,0
263	ok	353	0.28	0.0	0.0	59,0,0	354	0.13	0.0	0.0	63,0,0
		389	0.19	0.0	0.0	54,0,0	388	0.08	0.0	0.0	59,0,0
264	ok	354	0.19	0.0	0.0	59,0,0	355	0.12	0.0	0.0	59,0,0
		390	0.35	0.0	0.0	59,0,0	389	0.16	0.0	0.0	59,0,0



265	ok	356	0.09	0.0	0.0	60,0,0	357	0.15	0.0	0.0	57,0,0
		392	0.13	0.0	0.0	60,0,0	391	0.26	0.0	0.0	60,0,0
266	ok	357	0.13	0.0	0.0	65,0,0	358	0.24	0.0	0.0	60,0,0
		393	0.07	0.0	0.0	60,0,0	392	0.15	0.0	0.0	60,0,0
267	ok	358	0.17	0.0	0.0	49,0,0	359	0.19	0.0	0.0	65,0,0
		394	0.10	0.0	0.0	65,0,0	393	0.17	0.0	0.0	60,0,0
268	ok	359	0.19	0.0	0.0	65,0,0	360	0.17	0.0	0.0	55,0,0
		395	0.19	0.0	0.0	59,0,0	394	0.10	0.0	0.0	65,0,0
269	ok	360	0.27	0.0	0.0	59,0,0	361	0.12	0.0	0.0	65,0,0
		396	0.19	0.0	0.0	46,0,0	395	0.08	0.0	0.0	59,0,0
270	ok	361	0.19	0.0	0.0	59,0,0	362	0.11	0.0	0.0	54,0,0
		397	0.33	0.0	0.0	54,0,0	396	0.16	0.0	0.0	54,0,0
271	ok	363	0.13	0.0	0.0	56,0,0	364	0.17	0.0	0.0	49,0,0
		399	0.17	0.0	0.0	57,0,0	398	0.35	0.0	0.0	54,0,0
272	ok	364	0.09	0.0	0.0	68,0,0	365	0.28	0.0	0.0	60,0,0
		400	0.07	0.0	0.0	49,0,0	399	0.19	0.0	0.0	60,0,0
273	ok	365	0.14	0.0	0.0	49,0,0	366	0.15	0.0	0.0	65,0,0
		401	0.09	0.0	0.0	60,0,0	400	0.19	0.0	0.0	49,0,0
274	ok	366	0.15	0.0	0.0	67,0,0	367	0.12	0.0	0.0	67,0,0
		402	0.08	0.0	0.0	55,0,0	401	0.08	0.0	0.0	59,0,0
275	ok	367	0.15	0.0	0.0	46,0,0	368	0.10	0.0	0.0	67,0,0
		403	0.06	0.0	0.0	46,0,0	402	0.04	0.0	0.0	55,0,0
276	ok	368	0.06	0.0	0.0	55,0,0	369	0.04	0.0	0.0	55,0,0
		404	0.05	0.0	0.0	59,0,0	403	0.05	0.0	0.0	55,0,0
277	ok	370	0.04	0.0	0.0	52,0,0	371	0.07	0.0	0.0	72,0,0
		406	0.05	0.0	0.0	72,0,0	405	0.03	0.0	0.0	72,0,0
278	ok	371	0.05	0.0	0.0	72,0,0	372	0.27	0.0	0.0	72,0,0
		407	0.08	0.0	0.0	71,0,0	406	0.06	0.0	0.0	72,0,0
279	ok	372	0.23	0.0	0.0	71,0,0	373	0.06	0.0	0.0	54,0,0
		408	0.16	0.0	0.0	71,0,0	407	0.07	0.0	0.0	72,0,0
280	ok	373	0.07	0.0	0.0	59,0,0	374	0.25	0.0	0.0	71,0,0
		409	0.16	0.0	0.0	54,0,0	408	0.18	0.0	0.0	71,0,0
281	ok	374	0.33	0.0	0.0	58,0,0	375	0.11	0.0	0.0	54,0,0
		410	0.08	0.0	0.0	58,0,0	409	0.09	0.0	0.0	74,0,0
282	ok	375	0.10	0.0	0.0	54,0,0	376	0.04	0.0	0.0	72,0,0
		411	0.02	0.0	0.0	74,0,0	410	0.07	0.0	0.0	58,0,0
283	ok	377	0.06	0.0	0.0	60,0,0	378	0.09	0.0	0.0	60,0,0
		413	0.10	0.0	0.0	52,0,0	412	0.07	0.0	0.0	72,0,0
284	ok	378	0.11	0.0	0.0	57,0,0	379	0.08	0.0	0.0	52,0,0
		414	0.20	0.0	0.0	52,0,0	413	0.13	0.0	0.0	72,0,0
285	ok	379	0.13	0.0	0.0	52,0,0	380	0.10	0.0	0.0	52,0,0
		415	0.19	0.0	0.0	72,0,0	414	0.17	0.0	0.0	52,0,0
286	ok	380	0.10	0.0	0.0	74,0,0	381	0.16	0.0	0.0	54,0,0
		416	0.17	0.0	0.0	58,0,0	415	0.19	0.0	0.0	72,0,0
287	ok	381	0.07	0.0	0.0	54,0,0	382	0.14	0.0	0.0	59,0,0
		417	0.12	0.0	0.0	74,0,0	416	0.24	0.0	0.0	54,0,0
288	ok	382	0.12	0.0	0.0	54,0,0	383	0.26	0.0	0.0	59,0,0
		418	0.09	0.0	0.0	59,0,0	417	0.15	0.0	0.0	54,0,0
289	ok	384	0.35	0.0	0.0	60,0,0	385	0.16	0.0	0.0	60,0,0
		420	0.20	0.0	0.0	60,0,0	419	0.12	0.0	0.0	60,0,0
290	ok	385	0.19	0.0	0.0	57,0,0	386	0.08	0.0	0.0	60,0,0
		421	0.28	0.0	0.0	60,0,0	420	0.13	0.0	0.0	64,0,0
291	ok	386	0.20	0.0	0.0	60,0,0	387	0.10	0.0	0.0	60,0,0
		422	0.20	0.0	0.0	64,0,0	421	0.19	0.0	0.0	52,0,0
292	ok	387	0.10	0.0	0.0	59,0,0	388	0.20	0.0	0.0	54,0,0
		423	0.18	0.0	0.0	66,0,0	422	0.20	0.0	0.0	64,0,0
293	ok	388	0.08	0.0	0.0	54,0,0	389	0.19	0.0	0.0	59,0,0
		424	0.13	0.0	0.0	66,0,0	423	0.28	0.0	0.0	59,0,0
294	ok	389	0.16	0.0	0.0	59,0,0	390	0.35	0.0	0.0	59,0,0
		425	0.12	0.0	0.0	59,0,0	424	0.19	0.0	0.0	54,0,0
295	ok	391	0.27	0.0	0.0	60,0,0	392	0.13	0.0	0.0	60,0,0
		427	0.16	0.0	0.0	60,0,0	426	0.09	0.0	0.0	60,0,0
296	ok	392	0.15	0.0	0.0	57,0,0	393	0.07	0.0	0.0	60,0,0
		428	0.24	0.0	0.0	60,0,0	427	0.13	0.0	0.0	68,0,0
297	ok	393	0.17	0.0	0.0	60,0,0	394	0.10	0.0	0.0	68,0,0
		429	0.20	0.0	0.0	68,0,0	428	0.17	0.0	0.0	68,0,0
298	ok	394	0.10	0.0	0.0	46,0,0	395	0.19	0.0	0.0	46,0,0
		430	0.18	0.0	0.0	46,0,0	429	0.20	0.0	0.0	62,0,0
299	ok	395	0.08	0.0	0.0	46,0,0	396	0.18	0.0	0.0	59,0,0
		431	0.13	0.0	0.0	62,0,0	430	0.28	0.0	0.0	46,0,0
300	ok	396	0.16	0.0	0.0	54,0,0	397	0.32	0.0	0.0	54,0,0
		432	0.12	0.0	0.0	59,0,0	431	0.18	0.0	0.0	46,0,0
301	ok	398	0.33	0.0	0.0	54,0,0	399	0.16	0.0	0.0	57,0,0
		434	0.17	0.0	0.0	57,0,0	433	0.13	0.0	0.0	57,0,0
302	ok	399	0.19	0.0	0.0	57,0,0	400	0.07	0.0	0.0	57,0,0
		435	0.26	0.0	0.0	60,0,0	434	0.06	0.0	0.0	65,0,0
303	ok	400	0.18	0.0	0.0	60,0,0	401	0.10	0.0	0.0	60,0,0



		436	0.08	0.0	0.0	65,0,0	435	0.12	0.0	0.0	56,0,0
304	ok	401	0.08	0.0	0.0	46,0,0	402	0.09	0.0	0.0	59,0,0
		437	0.09	0.0	0.0	46,0,0	436	0.09	0.0	0.0	65,0,0
305	ok	402	0.04	0.0	0.0	59,0,0	403	0.05	0.0	0.0	55,0,0
		438	0.07	0.0	0.0	65,0,0	437	0.16	0.0	0.0	46,0,0
306	ok	403	0.04	0.0	0.0	59,0,0	404	0.05	0.0	0.0	59,0,0
		439	0.04	0.0	0.0	59,0,0	438	0.05	0.0	0.0	59,0,0
307	ok	405	0.02	0.0	0.0	72,0,0	406	0.05	0.0	0.0	72,0,0
		441	0.02	0.0	0.0	72,0,0	440	5.10e-03	0.0	0.0	71,0,0
308	ok	406	0.05	0.0	0.0	72,0,0	407	0.08	0.0	0.0	72,0,0
		442	0.04	0.0	0.0	71,0,0	441	0.02	0.0	0.0	72,0,0
309	ok	407	0.13	0.0	0.0	72,0,0	408	0.15	0.0	0.0	71,0,0
		443	0.23	0.0	0.0	71,0,0	442	0.09	0.0	0.0	72,0,0
310	ok	408	0.15	0.0	0.0	71,0,0	409	0.14	0.0	0.0	74,0,0
		444	0.10	0.0	0.0	72,0,0	443	0.27	0.0	0.0	72,0,0
311	ok	409	0.11	0.0	0.0	58,0,0	410	0.07	0.0	0.0	58,0,0
		445	0.04	0.0	0.0	58,0,0	444	0.08	0.0	0.0	54,0,0
312	ok	410	0.06	0.0	0.0	58,0,0	411	0.02	0.0	0.0	74,0,0
		446	6.41e-03	0.0	0.0	71,0,0	445	0.03	0.0	0.0	58,0,0
313	ok	412	0.07	0.0	0.0	72,0,0	413	0.10	0.0	0.0	52,0,0
		448	0.08	0.0	0.0	52,0,0	447	0.04	0.0	0.0	72,0,0
314	ok	413	0.09	0.0	0.0	52,0,0	414	0.31	0.0	0.0	72,0,0
		449	0.11	0.0	0.0	72,0,0	448	0.08	0.0	0.0	72,0,0
315	ok	414	0.28	0.0	0.0	72,0,0	415	0.07	0.0	0.0	72,0,0
		450	0.18	0.0	0.0	72,0,0	449	0.10	0.0	0.0	52,0,0
316	ok	415	0.07	0.0	0.0	72,0,0	416	0.27	0.0	0.0	72,0,0
		451	0.11	0.0	0.0	54,0,0	450	0.19	0.0	0.0	72,0,0
317	ok	416	0.31	0.0	0.0	74,0,0	417	0.10	0.0	0.0	54,0,0
		452	0.08	0.0	0.0	74,0,0	451	0.11	0.0	0.0	74,0,0
318	ok	417	0.10	0.0	0.0	54,0,0	418	0.05	0.0	0.0	74,0,0
		453	0.04	0.0	0.0	74,0,0	452	0.08	0.0	0.0	58,0,0
319	ok	419	0.06	0.0	0.0	72,0,0	420	0.12	0.0	0.0	60,0,0
		455	0.09	0.0	0.0	52,0,0	454	0.04	0.0	0.0	64,0,0
320	ok	420	0.12	0.0	0.0	60,0,0	421	0.34	0.0	0.0	52,0,0
		456	0.12	0.0	0.0	64,0,0	455	0.09	0.0	0.0	52,0,0
321	ok	421	0.28	0.0	0.0	64,0,0	422	0.08	0.0	0.0	64,0,0
		457	0.19	0.0	0.0	64,0,0	456	0.13	0.0	0.0	60,0,0
322	ok	422	0.08	0.0	0.0	66,0,0	423	0.28	0.0	0.0	64,0,0
		458	0.13	0.0	0.0	54,0,0	457	0.19	0.0	0.0	64,0,0
323	ok	423	0.33	0.0	0.0	66,0,0	424	0.12	0.0	0.0	54,0,0
		459	0.09	0.0	0.0	66,0,0	458	0.12	0.0	0.0	66,0,0
324	ok	424	0.12	0.0	0.0	54,0,0	425	0.06	0.0	0.0	66,0,0
		460	0.04	0.0	0.0	66,0,0	459	0.09	0.0	0.0	66,0,0
325	ok	426	0.06	0.0	0.0	68,0,0	427	0.10	0.0	0.0	56,0,0
		462	0.08	0.0	0.0	68,0,0	461	0.04	0.0	0.0	68,0,0
326	ok	427	0.10	0.0	0.0	60,0,0	428	0.32	0.0	0.0	68,0,0
		463	0.11	0.0	0.0	68,0,0	462	0.08	0.0	0.0	68,0,0
327	ok	428	0.28	0.0	0.0	68,0,0	429	0.08	0.0	0.0	68,0,0
		464	0.19	0.0	0.0	62,0,0	463	0.11	0.0	0.0	60,0,0
328	ok	429	0.08	0.0	0.0	62,0,0	430	0.28	0.0	0.0	62,0,0
		465	0.13	0.0	0.0	46,0,0	464	0.19	0.0	0.0	68,0,0
329	ok	430	0.33	0.0	0.0	46,0,0	431	0.12	0.0	0.0	46,0,0
		466	0.09	0.0	0.0	46,0,0	465	0.12	0.0	0.0	62,0,0
330	ok	431	0.12	0.0	0.0	46,0,0	432	0.06	0.0	0.0	62,0,0
		467	0.04	0.0	0.0	62,0,0	466	0.09	0.0	0.0	46,0,0
331	ok	433	0.04	0.0	0.0	60,0,0	434	0.09	0.0	0.0	60,0,0
		469	0.07	0.0	0.0	56,0,0	468	0.03	0.0	0.0	56,0,0
332	ok	434	0.10	0.0	0.0	60,0,0	435	0.25	0.0	0.0	60,0,0
		470	0.05	0.0	0.0	56,0,0	469	0.07	0.0	0.0	56,0,0
333	ok	435	0.16	0.0	0.0	65,0,0	436	0.06	0.0	0.0	49,0,0
		471	0.05	0.0	0.0	60,0,0	470	0.12	0.0	0.0	60,0,0
334	ok	436	0.05	0.0	0.0	49,0,0	437	0.16	0.0	0.0	65,0,0
		472	0.08	0.0	0.0	59,0,0	471	0.05	0.0	0.0	46,0,0
335	ok	437	0.23	0.0	0.0	46,0,0	438	0.03	0.0	0.0	46,0,0
		473	0.07	0.0	0.0	49,0,0	472	0.03	0.0	0.0	62,0,0
336	ok	438	0.05	0.0	0.0	46,0,0	439	0.03	0.0	0.0	59,0,0
		474	0.02	0.0	0.0	59,0,0	473	0.05	0.0	0.0	55,0,0
337	ok	447	0.03	0.0	0.0	72,0,0	448	0.08	0.0	0.0	72,0,0
		476	0.02	0.0	0.0	52,0,0	475	6.23e-03	0.0	0.0	72,0,0
338	ok	448	0.08	0.0	0.0	72,0,0	449	0.11	0.0	0.0	72,0,0
		477	0.04	0.0	0.0	57,0,0	476	0.03	0.0	0.0	72,0,0
339	ok	449	0.19	0.0	0.0	72,0,0	450	0.16	0.0	0.0	72,0,0
		478	0.34	0.0	0.0	72,0,0	477	0.13	0.0	0.0	72,0,0
340	ok	450	0.15	0.0	0.0	72,0,0	451	0.18	0.0	0.0	72,0,0
		479	0.13	0.0	0.0	72,0,0	478	0.35	0.0	0.0	72,0,0
341	ok	451	0.11	0.0	0.0	74,0,0	452	0.07	0.0	0.0	58,0,0
		480	0.03	0.0	0.0	58,0,0	479	0.06	0.0	0.0	51,0,0



342	ok	452	0.07	0.0	0.0	74,0,0	453	0.03	0.0	0.0	74,0,0
		481	6.10e-03	0.0	0.0	74,0,0	480	0.03	0.0	0.0	54,0,0
343	ok	454	0.03	0.0	0.0	64,0,0	455	0.08	0.0	0.0	72,0,0
		483	0.03	0.0	0.0	52,0,0	482	5.99e-03	0.0	0.0	64,0,0
344	ok	455	0.09	0.0	0.0	72,0,0	456	0.12	0.0	0.0	64,0,0
		484	0.06	0.0	0.0	60,0,0	483	0.04	0.0	0.0	52,0,0
345	ok	456	0.20	0.0	0.0	64,0,0	457	0.17	0.0	0.0	64,0,0
		485	0.35	0.0	0.0	64,0,0	484	0.13	0.0	0.0	64,0,0
346	ok	457	0.16	0.0	0.0	64,0,0	458	0.19	0.0	0.0	64,0,0
		486	0.13	0.0	0.0	64,0,0	485	0.36	0.0	0.0	64,0,0
347	ok	458	0.12	0.0	0.0	66,0,0	459	0.09	0.0	0.0	66,0,0
		487	0.04	0.0	0.0	54,0,0	486	0.06	0.0	0.0	59,0,0
348	ok	459	0.08	0.0	0.0	66,0,0	460	0.03	0.0	0.0	66,0,0
		488	6.23e-03	0.0	0.0	66,0,0	487	0.03	0.0	0.0	54,0,0
349	ok	461	0.03	0.0	0.0	68,0,0	462	0.08	0.0	0.0	68,0,0
		490	0.03	0.0	0.0	56,0,0	489	5.50e-03	0.0	0.0	68,0,0
350	ok	462	0.08	0.0	0.0	68,0,0	463	0.11	0.0	0.0	68,0,0
		491	0.05	0.0	0.0	60,0,0	490	0.03	0.0	0.0	56,0,0
351	ok	463	0.19	0.0	0.0	68,0,0	464	0.17	0.0	0.0	68,0,0
		492	0.35	0.0	0.0	62,0,0	491	0.13	0.0	0.0	62,0,0
352	ok	464	0.17	0.0	0.0	62,0,0	465	0.20	0.0	0.0	62,0,0
		493	0.13	0.0	0.0	68,0,0	492	0.36	0.0	0.0	62,0,0
353	ok	465	0.12	0.0	0.0	62,0,0	466	0.09	0.0	0.0	62,0,0
		494	0.04	0.0	0.0	46,0,0	493	0.06	0.0	0.0	59,0,0
354	ok	466	0.08	0.0	0.0	46,0,0	467	0.03	0.0	0.0	62,0,0
		495	6.06e-03	0.0	0.0	62,0,0	494	0.03	0.0	0.0	46,0,0
355	ok	468	0.03	0.0	0.0	56,0,0	469	0.06	0.0	0.0	56,0,0
		497	0.05	0.0	0.0	61,0,0	496	0.03	0.0	0.0	61,0,0
356	ok	469	0.07	0.0	0.0	56,0,0	470	0.07	0.0	0.0	60,0,0
		498	0.06	0.0	0.0	61,0,0	497	0.04	0.0	0.0	56,0,0
357	ok	470	0.06	0.0	0.0	56,0,0	471	0.05	0.0	0.0	60,0,0
		499	0.05	0.0	0.0	73,0,0	498	0.05	0.0	0.0	53,0,0
358	ok	471	0.05	0.0	0.0	60,0,0	472	0.05	0.0	0.0	46,0,0
		500	0.06	0.0	0.0	55,0,0	499	0.06	0.0	0.0	55,0,0
359	ok	472	0.06	0.0	0.0	46,0,0	473	0.04	0.0	0.0	55,0,0
		501	0.07	0.0	0.0	55,0,0	500	0.08	0.0	0.0	55,0,0
360	ok	473	0.05	0.0	0.0	55,0,0	474	0.02	0.0	0.0	59,0,0
		502	0.03	0.0	0.0	65,0,0	501	0.07	0.0	0.0	55,0,0
361	ok	496	0.03	0.0	0.0	61,0,0	497	0.04	0.0	0.0	56,0,0
		504	0.06	0.0	0.0	53,0,0	503	0.04	0.0	0.0	61,0,0
362	ok	497	0.07	0.0	0.0	61,0,0	498	0.03	0.0	0.0	65,0,0
		505	0.22	0.0	0.0	53,0,0	504	0.04	0.0	0.0	65,0,0
363	ok	498	0.07	0.0	0.0	61,0,0	499	0.06	0.0	0.0	73,0,0
		506	0.04	0.0	0.0	50,0,0	505	0.15	0.0	0.0	65,0,0
364	ok	499	0.06	0.0	0.0	49,0,0	500	0.12	0.0	0.0	55,0,0
		507	0.16	0.0	0.0	65,0,0	506	0.05	0.0	0.0	46,0,0
365	ok	500	0.06	0.0	0.0	55,0,0	501	0.07	0.0	0.0	55,0,0
		508	0.11	0.0	0.0	55,0,0	507	0.25	0.0	0.0	55,0,0
366	ok	501	0.08	0.0	0.0	55,0,0	502	0.03	0.0	0.0	65,0,0
		509	0.09	0.0	0.0	65,0,0	508	0.11	0.0	0.0	55,0,0
367	ok	503	0.04	0.0	0.0	61,0,0	504	0.05	0.0	0.0	53,0,0
		511	0.05	0.0	0.0	61,0,0	510	0.05	0.0	0.0	56,0,0
368	ok	504	0.07	0.0	0.0	53,0,0	505	0.14	0.0	0.0	53,0,0
		512	0.04	0.0	0.0	61,0,0	511	0.05	0.0	0.0	56,0,0
369	ok	505	0.09	0.0	0.0	49,0,0	506	0.10	0.0	0.0	65,0,0
		513	0.06	0.0	0.0	49,0,0	512	0.08	0.0	0.0	61,0,0
370	ok	506	0.10	0.0	0.0	65,0,0	507	0.11	0.0	0.0	55,0,0
		514	0.19	0.0	0.0	55,0,0	513	0.09	0.0	0.0	55,0,0
371	ok	507	0.26	0.0	0.0	55,0,0	508	0.09	0.0	0.0	49,0,0
		515	0.19	0.0	0.0	51,0,0	514	0.06	0.0	0.0	55,0,0
372	ok	508	0.17	0.0	0.0	55,0,0	509	0.10	0.0	0.0	55,0,0
		516	0.27	0.0	0.0	55,0,0	515	0.19	0.0	0.0	55,0,0
373	ok	510	0.05	0.0	0.0	56,0,0	511	0.05	0.0	0.0	56,0,0
		521	0.05	0.0	0.0	56,0,0	520	0.05	0.0	0.0	68,0,0
374	ok	511	0.05	0.0	0.0	53,0,0	512	0.03	0.0	0.0	67,0,0
		522	0.11	0.0	0.0	53,0,0	521	0.12	0.0	0.0	67,0,0
375	ok	512	0.06	0.0	0.0	56,0,0	513	0.08	0.0	0.0	67,0,0
		523	0.20	0.0	0.0	67,0,0	522	0.11	0.0	0.0	68,0,0
376	ok	513	0.09	0.0	0.0	67,0,0	514	0.19	0.0	0.0	58,0,0
		524	0.11	0.0	0.0	62,0,0	523	0.17	0.0	0.0	67,0,0
377	ok	514	0.06	0.0	0.0	46,0,0	515	0.20	0.0	0.0	55,0,0
		525	0.12	0.0	0.0	67,0,0	524	0.29	0.0	0.0	55,0,0
378	ok	515	0.18	0.0	0.0	58,0,0	516	0.30	0.0	0.0	58,0,0
		526	0.09	0.0	0.0	55,0,0	525	0.16	0.0	0.0	58,0,0
379	ok	520	0.04	0.0	0.0	68,0,0	521	0.06	0.0	0.0	67,0,0
		528	0.05	0.0	0.0	67,0,0	527	0.03	0.0	0.0	68,0,0
380	ok	521	0.05	0.0	0.0	68,0,0	522	0.24	0.0	0.0	67,0,0



		529	0.11	0.0	0.0	67,0,0	528	0.05	0.0	0.0	68,0,0
381	ok	522	0.26	0.0	0.0	67,0,0	523	0.07	0.0	0.0	67,0,0
		530	0.20	0.0	0.0	67,0,0	529	0.09	0.0	0.0	67,0,0
382	ok	523	0.07	0.0	0.0	65,0,0	524	0.28	0.0	0.0	67,0,0
		531	0.14	0.0	0.0	55,0,0	530	0.22	0.0	0.0	67,0,0
383	ok	524	0.29	0.0	0.0	46,0,0	525	0.10	0.0	0.0	46,0,0
		532	0.07	0.0	0.0	46,0,0	531	0.11	0.0	0.0	65,0,0
384	ok	525	0.11	0.0	0.0	58,0,0	526	0.08	0.0	0.0	68,0,0
		533	0.03	0.0	0.0	62,0,0	532	0.06	0.0	0.0	62,0,0
385	ok	527	0.02	0.0	0.0	68,0,0	528	0.04	0.0	0.0	68,0,0
		535	0.01	0.0	0.0	68,0,0	534	5.18e-03	0.0	0.0	68,0,0
386	ok	528	0.06	0.0	0.0	67,0,0	529	0.08	0.0	0.0	67,0,0
		536	0.07	0.0	0.0	67,0,0	535	0.03	0.0	0.0	62,0,0
387	ok	529	0.15	0.0	0.0	67,0,0	530	0.19	0.0	0.0	67,0,0
		537	0.27	0.0	0.0	67,0,0	536	0.11	0.0	0.0	67,0,0
388	ok	530	0.19	0.0	0.0	67,0,0	531	0.16	0.0	0.0	67,0,0
		538	0.10	0.0	0.0	55,0,0	537	0.31	0.0	0.0	67,0,0
389	ok	531	0.09	0.0	0.0	46,0,0	532	0.06	0.0	0.0	65,0,0
		539	0.05	0.0	0.0	46,0,0	538	0.07	0.0	0.0	55,0,0
390	ok	532	0.06	0.0	0.0	46,0,0	533	0.03	0.0	0.0	62,0,0
		540	5.49e-03	0.0	0.0	67,0,0	539	0.04	0.0	0.0	46,0,0
391	ok	544	7.85e-03	0.0	0.0	72,0,0	545	0.02	0.0	0.0	77,0,0
		592	0.06	0.0	0.0	72,0,0	591	0.03	0.0	0.0	72,0,0
392	ok	545	0.02	0.0	0.0	77,0,0	546	0.06	0.0	0.0	72,0,0
		593	0.11	0.0	0.0	72,0,0	592	0.06	0.0	0.0	77,0,0
393	ok	546	0.16	0.0	0.0	72,0,0	547	0.41	0.0	0.0	71,0,0
		594	0.23	0.0	0.0	72,0,0	593	0.20	0.0	0.0	71,0,0
394	ok	547	0.42	0.0	0.0	71,0,0	548	0.15	0.0	0.0	71,0,0
		595	0.20	0.0	0.0	71,0,0	594	0.23	0.0	0.0	72,0,0
395	ok	548	0.07	0.0	0.0	71,0,0	549	0.03	0.0	0.0	72,0,0
		596	0.07	0.0	0.0	51,0,0	595	0.11	0.0	0.0	71,0,0
396	ok	549	0.02	0.0	0.0	47,0,0	550	7.20e-03	0.0	0.0	72,0,0
		597	0.03	0.0	0.0	51,0,0	596	0.06	0.0	0.0	51,0,0
397	ok	551	3.76e-03	0.0	0.0	55,0,0	552	0.01	0.0	0.0	74,0,0
		599	0.03	0.0	0.0	74,0,0	598	7.82e-03	0.0	0.0	73,0,0
398	ok	552	0.02	0.0	0.0	74,0,0	553	0.04	0.0	0.0	74,0,0
		600	0.04	0.0	0.0	74,0,0	599	0.03	0.0	0.0	74,0,0
399	ok	553	0.04	0.0	0.0	74,0,0	554	0.04	0.0	0.0	72,0,0
		601	0.05	0.0	0.0	72,0,0	600	0.04	0.0	0.0	74,0,0
400	ok	554	0.05	0.0	0.0	72,0,0	555	0.05	0.0	0.0	71,0,0
		602	0.06	0.0	0.0	71,0,0	601	0.05	0.0	0.0	72,0,0
401	ok	555	0.06	0.0	0.0	71,0,0	556	0.08	0.0	0.0	71,0,0
		603	0.09	0.0	0.0	71,0,0	602	0.06	0.0	0.0	71,0,0
402	ok	556	0.08	0.0	0.0	71,0,0	557	0.09	0.0	0.0	71,0,0
		604	0.11	0.0	0.0	71,0,0	603	0.10	0.0	0.0	71,0,0
403	ok	557	0.14	0.0	0.0	72,0,0	558	0.33	0.0	0.0	72,0,0
		605	0.16	0.0	0.0	71,0,0	604	0.18	0.0	0.0	71,0,0
404	ok	558	0.36	0.0	0.0	72,0,0	559	0.14	0.0	0.0	72,0,0
		606	0.18	0.0	0.0	71,0,0	605	0.16	0.0	0.0	71,0,0
405	ok	559	0.06	0.0	0.0	51,0,0	560	0.03	0.0	0.0	47,0,0
		607	0.07	0.0	0.0	47,0,0	606	0.10	0.0	0.0	71,0,0
406	ok	560	0.02	0.0	0.0	47,0,0	561	4.40e-03	0.0	0.0	47,0,0
		608	0.03	0.0	0.0	63,0,0	607	0.07	0.0	0.0	47,0,0
407	ok	562	5.94e-03	0.0	0.0	55,0,0	563	0.02	0.0	0.0	58,0,0
		610	0.05	0.0	0.0	74,0,0	609	0.02	0.0	0.0	77,0,0
408	ok	563	0.03	0.0	0.0	58,0,0	564	0.05	0.0	0.0	74,0,0
		611	0.06	0.0	0.0	74,0,0	610	0.04	0.0	0.0	58,0,0
409	ok	564	0.05	0.0	0.0	58,0,0	565	0.05	0.0	0.0	74,0,0
		612	0.07	0.0	0.0	74,0,0	611	0.06	0.0	0.0	74,0,0
410	ok	565	0.05	0.0	0.0	74,0,0	566	0.04	0.0	0.0	74,0,0
		613	0.07	0.0	0.0	74,0,0	612	0.07	0.0	0.0	74,0,0
411	ok	566	0.04	0.0	0.0	74,0,0	567	0.04	0.0	0.0	77,0,0
		614	0.09	0.0	0.0	77,0,0	613	0.07	0.0	0.0	74,0,0
412	ok	567	0.04	0.0	0.0	77,0,0	568	0.05	0.0	0.0	71,0,0
		615	0.12	0.0	0.0	77,0,0	614	0.10	0.0	0.0	77,0,0
413	ok	568	0.19	0.0	0.0	63,0,0	569	0.49	0.0	0.0	63,0,0
		616	0.24	0.0	0.0	63,0,0	615	0.24	0.0	0.0	71,0,0
414	ok	569	0.49	0.0	0.0	63,0,0	570	0.18	0.0	0.0	63,0,0
		617	0.25	0.0	0.0	63,0,0	616	0.24	0.0	0.0	63,0,0
415	ok	570	0.05	0.0	0.0	74,0,0	571	0.02	0.0	0.0	55,0,0
		618	0.09	0.0	0.0	67,0,0	617	0.13	0.0	0.0	63,0,0
416	ok	571	0.02	0.0	0.0	55,0,0	572	5.58e-03	0.0	0.0	77,0,0
		619	0.04	0.0	0.0	67,0,0	618	0.08	0.0	0.0	67,0,0
417	ok	573	5.91e-03	0.0	0.0	55,0,0	574	0.02	0.0	0.0	58,0,0
		621	0.05	0.0	0.0	74,0,0	620	0.02	0.0	0.0	77,0,0
418	ok	574	0.03	0.0	0.0	58,0,0	575	0.05	0.0	0.0	74,0,0
		622	0.06	0.0	0.0	74,0,0	621	0.04	0.0	0.0	74,0,0



419	ok	575	0.05	0.0	0.0	74,0,0	576	0.05	0.0	0.0	74,0,0
		623	0.07	0.0	0.0	74,0,0	622	0.06	0.0	0.0	74,0,0
420	ok	576	0.05	0.0	0.0	74,0,0	577	0.04	0.0	0.0	77,0,0
		624	0.09	0.0	0.0	73,0,0	623	0.07	0.0	0.0	74,0,0
421	ok	577	0.04	0.0	0.0	77,0,0	578	0.05	0.0	0.0	65,0,0
		625	0.14	0.0	0.0	65,0,0	624	0.09	0.0	0.0	73,0,0
422	ok	578	0.21	0.0	0.0	65,0,0	579	0.56	0.0	0.0	65,0,0
		626	0.27	0.0	0.0	65,0,0	625	0.28	0.0	0.0	65,0,0
423	ok	579	0.55	0.0	0.0	67,0,0	580	0.21	0.0	0.0	65,0,0
		627	0.27	0.0	0.0	67,0,0	626	0.26	0.0	0.0	65,0,0
424	ok	580	0.05	0.0	0.0	65,0,0	581	0.02	0.0	0.0	55,0,0
		628	0.09	0.0	0.0	67,0,0	627	0.14	0.0	0.0	67,0,0
425	ok	581	0.02	0.0	0.0	55,0,0	582	6.15e-03	0.0	0.0	73,0,0
		629	0.04	0.0	0.0	67,0,0	628	0.08	0.0	0.0	67,0,0
426	ok	583	6.15e-03	0.0	0.0	62,0,0	584	0.04	0.0	0.0	61,0,0
		631	0.06	0.0	0.0	53,0,0	630	0.02	0.0	0.0	65,0,0
427	ok	584	0.04	0.0	0.0	61,0,0	585	0.08	0.0	0.0	53,0,0
		632	0.09	0.0	0.0	61,0,0	631	0.07	0.0	0.0	49,0,0
428	ok	585	0.17	0.0	0.0	68,0,0	586	0.33	0.0	0.0	68,0,0
		633	0.19	0.0	0.0	68,0,0	632	0.15	0.0	0.0	62,0,0
429	ok	586	0.31	0.0	0.0	68,0,0	587	0.14	0.0	0.0	62,0,0
		634	0.19	0.0	0.0	67,0,0	633	0.18	0.0	0.0	68,0,0
430	ok	587	0.12	0.0	0.0	67,0,0	588	0.06	0.0	0.0	55,0,0
		635	0.13	0.0	0.0	67,0,0	634	0.12	0.0	0.0	67,0,0
431	ok	588	0.06	0.0	0.0	55,0,0	589	0.02	0.0	0.0	55,0,0
		636	0.05	0.0	0.0	67,0,0	635	0.10	0.0	0.0	67,0,0
432	ok	589	0.02	0.0	0.0	55,0,0	590	3.84e-03	0.0	0.0	55,0,0
		637	0.02	0.0	0.0	67,0,0	636	0.05	0.0	0.0	67,0,0
433	ok	591	0.04	0.0	0.0	72,0,0	592	0.06	0.0	0.0	72,0,0
		639	0.08	0.0	0.0	77,0,0	638	0.06	0.0	0.0	77,0,0
434	ok	592	0.07	0.0	0.0	72,0,0	593	0.13	0.0	0.0	72,0,0
		640	0.30	0.0	0.0	72,0,0	639	0.05	0.0	0.0	77,0,0
435	ok	593	0.09	0.0	0.0	72,0,0	594	0.26	0.0	0.0	72,0,0
		641	0.08	0.0	0.0	71,0,0	640	0.35	0.0	0.0	72,0,0
436	ok	594	0.27	0.0	0.0	72,0,0	595	0.11	0.0	0.0	58,0,0
		642	0.34	0.0	0.0	72,0,0	641	0.09	0.0	0.0	71,0,0
437	ok	595	0.12	0.0	0.0	71,0,0	596	0.07	0.0	0.0	71,0,0
		643	0.08	0.0	0.0	47,0,0	642	0.31	0.0	0.0	71,0,0
438	ok	596	0.07	0.0	0.0	51,0,0	597	0.04	0.0	0.0	72,0,0
		644	0.06	0.0	0.0	51,0,0	643	0.09	0.0	0.0	51,0,0
439	ok	598	7.97e-03	0.0	0.0	74,0,0	599	0.03	0.0	0.0	74,0,0
		646	0.04	0.0	0.0	74,0,0	645	0.03	0.0	0.0	49,0,0
440	ok	599	0.03	0.0	0.0	74,0,0	600	0.04	0.0	0.0	74,0,0
		647	0.05	0.0	0.0	77,0,0	646	0.03	0.0	0.0	74,0,0
441	ok	600	0.04	0.0	0.0	74,0,0	601	0.05	0.0	0.0	72,0,0
		648	0.06	0.0	0.0	77,0,0	647	0.05	0.0	0.0	77,0,0
442	ok	601	0.05	0.0	0.0	72,0,0	602	0.06	0.0	0.0	71,0,0
		649	0.07	0.0	0.0	71,0,0	648	0.05	0.0	0.0	77,0,0
443	ok	602	0.06	0.0	0.0	71,0,0	603	0.09	0.0	0.0	71,0,0
		650	0.11	0.0	0.0	71,0,0	649	0.07	0.0	0.0	71,0,0
444	ok	603	0.12	0.0	0.0	71,0,0	604	0.11	0.0	0.0	71,0,0
		651	0.40	0.0	0.0	71,0,0	650	0.08	0.0	0.0	71,0,0
445	ok	604	0.11	0.0	0.0	71,0,0	605	0.17	0.0	0.0	71,0,0
		652	0.08	0.0	0.0	71,0,0	651	0.29	0.0	0.0	71,0,0
446	ok	605	0.18	0.0	0.0	71,0,0	606	0.10	0.0	0.0	47,0,0
		653	0.27	0.0	0.0	71,0,0	652	0.08	0.0	0.0	71,0,0
447	ok	606	0.11	0.0	0.0	71,0,0	607	0.07	0.0	0.0	47,0,0
		654	0.09	0.0	0.0	47,0,0	653	0.26	0.0	0.0	71,0,0
448	ok	607	0.07	0.0	0.0	47,0,0	608	0.03	0.0	0.0	63,0,0
		655	0.07	0.0	0.0	47,0,0	654	0.10	0.0	0.0	47,0,0
449	ok	609	0.02	0.0	0.0	73,0,0	610	0.04	0.0	0.0	74,0,0
		657	0.06	0.0	0.0	58,0,0	656	0.05	0.0	0.0	73,0,0
450	ok	610	0.04	0.0	0.0	58,0,0	611	0.06	0.0	0.0	74,0,0
		658	0.07	0.0	0.0	77,0,0	657	0.06	0.0	0.0	77,0,0
451	ok	611	0.06	0.0	0.0	74,0,0	612	0.06	0.0	0.0	74,0,0
		659	0.08	0.0	0.0	77,0,0	658	0.07	0.0	0.0	77,0,0
452	ok	612	0.06	0.0	0.0	74,0,0	613	0.06	0.0	0.0	74,0,0
		660	0.10	0.0	0.0	77,0,0	659	0.08	0.0	0.0	77,0,0
453	ok	613	0.06	0.0	0.0	74,0,0	614	0.09	0.0	0.0	77,0,0
		661	0.13	0.0	0.0	77,0,0	660	0.09	0.0	0.0	77,0,0
454	ok	614	0.09	0.0	0.0	77,0,0	615	0.14	0.0	0.0	71,0,0
		662	0.37	0.0	0.0	71,0,0	661	0.09	0.0	0.0	77,0,0
455	ok	615	0.08	0.0	0.0	77,0,0	616	0.27	0.0	0.0	63,0,0
		663	0.10	0.0	0.0	63,0,0	662	0.39	0.0	0.0	63,0,0
456	ok	616	0.27	0.0	0.0	63,0,0	617	0.08	0.0	0.0	63,0,0
		664	0.39	0.0	0.0	63,0,0	663	0.10	0.0	0.0	63,0,0
457	ok	617	0.14	0.0	0.0	63,0,0	618	0.09	0.0	0.0	67,0,0



		665	0.09	0.0	0.0	55,0,0	664	0.38	0.0	0.0	63,0,0
458	ok	618	0.08	0.0	0.0	67,0,0	619	0.05	0.0	0.0	67,0,0
		666	0.09	0.0	0.0	67,0,0	665	0.13	0.0	0.0	67,0,0
459	ok	620	0.02	0.0	0.0	77,0,0	621	0.04	0.0	0.0	74,0,0
		668	0.06	0.0	0.0	77,0,0	667	0.06	0.0	0.0	77,0,0
460	ok	621	0.04	0.0	0.0	74,0,0	622	0.06	0.0	0.0	74,0,0
		669	0.08	0.0	0.0	77,0,0	668	0.06	0.0	0.0	77,0,0
461	ok	622	0.06	0.0	0.0	74,0,0	623	0.06	0.0	0.0	74,0,0
		670	0.10	0.0	0.0	77,0,0	669	0.08	0.0	0.0	77,0,0
462	ok	623	0.06	0.0	0.0	74,0,0	624	0.09	0.0	0.0	73,0,0
		671	0.14	0.0	0.0	65,0,0	670	0.09	0.0	0.0	77,0,0
463	ok	624	0.09	0.0	0.0	65,0,0	625	0.15	0.0	0.0	65,0,0
		672	0.39	0.0	0.0	65,0,0	671	0.09	0.0	0.0	77,0,0
464	ok	625	0.09	0.0	0.0	65,0,0	626	0.31	0.0	0.0	65,0,0
		673	0.11	0.0	0.0	67,0,0	672	0.43	0.0	0.0	65,0,0
465	ok	626	0.30	0.0	0.0	65,0,0	627	0.09	0.0	0.0	67,0,0
		674	0.44	0.0	0.0	65,0,0	673	0.11	0.0	0.0	67,0,0
466	ok	627	0.15	0.0	0.0	67,0,0	628	0.10	0.0	0.0	67,0,0
		675	0.09	0.0	0.0	55,0,0	674	0.42	0.0	0.0	67,0,0
467	ok	628	0.08	0.0	0.0	67,0,0	629	0.05	0.0	0.0	67,0,0
		676	0.10	0.0	0.0	67,0,0	675	0.14	0.0	0.0	67,0,0
468	ok	630	0.03	0.0	0.0	62,0,0	631	0.06	0.0	0.0	53,0,0
		678	0.09	0.0	0.0	53,0,0	677	0.04	0.0	0.0	73,0,0
469	ok	631	0.08	0.0	0.0	53,0,0	632	0.10	0.0	0.0	65,0,0
		679	0.28	0.0	0.0	53,0,0	678	0.08	0.0	0.0	61,0,0
470	ok	632	0.14	0.0	0.0	61,0,0	633	0.21	0.0	0.0	68,0,0
		680	0.08	0.0	0.0	65,0,0	679	0.26	0.0	0.0	67,0,0
471	ok	633	0.21	0.0	0.0	62,0,0	634	0.12	0.0	0.0	55,0,0
		681	0.32	0.0	0.0	67,0,0	680	0.09	0.0	0.0	67,0,0
472	ok	634	0.13	0.0	0.0	67,0,0	635	0.11	0.0	0.0	67,0,0
		682	0.10	0.0	0.0	55,0,0	681	0.37	0.0	0.0	67,0,0
473	ok	635	0.10	0.0	0.0	67,0,0	636	0.05	0.0	0.0	67,0,0
		683	0.07	0.0	0.0	55,0,0	682	0.12	0.0	0.0	67,0,0
474	ok	636	0.05	0.0	0.0	55,0,0	637	0.02	0.0	0.0	68,0,0
		684	0.05	0.0	0.0	55,0,0	683	0.07	0.0	0.0	55,0,0
475	ok	638	0.07	0.0	0.0	72,0,0	639	0.06	0.0	0.0	77,0,0
		686	0.05	0.0	0.0	77,0,0	685	0.05	0.0	0.0	77,0,0
476	ok	639	0.17	0.0	0.0	72,0,0	640	0.15	0.0	0.0	48,0,0
		687	0.05	0.0	0.0	72,0,0	686	0.05	0.0	0.0	48,0,0
477	ok	640	0.14	0.0	0.0	77,0,0	641	0.24	0.0	0.0	72,0,0
		688	0.11	0.0	0.0	74,0,0	687	0.06	0.0	0.0	61,0,0
478	ok	641	0.24	0.0	0.0	72,0,0	642	0.14	0.0	0.0	51,0,0
		689	0.13	0.0	0.0	55,0,0	688	0.12	0.0	0.0	58,0,0
479	ok	642	0.26	0.0	0.0	58,0,0	643	0.15	0.0	0.0	72,0,0
		690	0.15	0.0	0.0	61,0,0	689	0.07	0.0	0.0	61,0,0
480	ok	643	0.08	0.0	0.0	47,0,0	644	0.06	0.0	0.0	51,0,0
		691	0.04	0.0	0.0	61,0,0	690	0.12	0.0	0.0	61,0,0
481	ok	645	0.03	0.0	0.0	49,0,0	646	0.04	0.0	0.0	74,0,0
		693	0.06	0.0	0.0	49,0,0	692	0.06	0.0	0.0	52,0,0
482	ok	646	0.03	0.0	0.0	74,0,0	647	0.04	0.0	0.0	77,0,0
		694	0.10	0.0	0.0	61,0,0	693	0.06	0.0	0.0	49,0,0
483	ok	647	0.05	0.0	0.0	77,0,0	648	0.06	0.0	0.0	77,0,0
		695	0.09	0.0	0.0	77,0,0	694	0.08	0.0	0.0	73,0,0
484	ok	648	0.05	0.0	0.0	77,0,0	649	0.08	0.0	0.0	71,0,0
		696	0.10	0.0	0.0	71,0,0	695	0.08	0.0	0.0	77,0,0
485	ok	649	0.07	0.0	0.0	71,0,0	650	0.10	0.0	0.0	71,0,0
		697	0.12	0.0	0.0	71,0,0	696	0.11	0.0	0.0	71,0,0
486	ok	650	0.14	0.0	0.0	71,0,0	651	0.22	0.0	0.0	71,0,0
		698	0.08	0.0	0.0	71,0,0	697	0.12	0.0	0.0	71,0,0
487	ok	651	0.16	0.0	0.0	77,0,0	652	0.22	0.0	0.0	71,0,0
		699	0.10	0.0	0.0	77,0,0	698	0.13	0.0	0.0	71,0,0
488	ok	652	0.19	0.0	0.0	71,0,0	653	0.16	0.0	0.0	47,0,0
		700	0.11	0.0	0.0	55,0,0	699	0.11	0.0	0.0	58,0,0
489	ok	653	0.20	0.0	0.0	58,0,0	654	0.13	0.0	0.0	71,0,0
		701	0.14	0.0	0.0	58,0,0	700	0.09	0.0	0.0	47,0,0
490	ok	654	0.10	0.0	0.0	47,0,0	655	0.07	0.0	0.0	47,0,0
		702	0.09	0.0	0.0	55,0,0	701	0.12	0.0	0.0	55,0,0
491	ok	656	0.05	0.0	0.0	73,0,0	657	0.06	0.0	0.0	58,0,0
		704	0.11	0.0	0.0	73,0,0	703	0.09	0.0	0.0	73,0,0
492	ok	657	0.06	0.0	0.0	77,0,0	658	0.06	0.0	0.0	77,0,0
		705	0.16	0.0	0.0	77,0,0	704	0.10	0.0	0.0	77,0,0
493	ok	658	0.07	0.0	0.0	77,0,0	659	0.08	0.0	0.0	77,0,0
		706	0.15	0.0	0.0	77,0,0	705	0.15	0.0	0.0	77,0,0
494	ok	659	0.08	0.0	0.0	77,0,0	660	0.09	0.0	0.0	77,0,0
		707	0.17	0.0	0.0	77,0,0	706	0.15	0.0	0.0	77,0,0
495	ok	660	0.10	0.0	0.0	77,0,0	661	0.11	0.0	0.0	77,0,0
		708	0.14	0.0	0.0	77,0,0	707	0.17	0.0	0.0	77,0,0



496	ok	661	0.19	0.0	0.0	63,0,0	662	0.15	0.0	0.0	67,0,0
		709	0.10	0.0	0.0	77,0,0	708	0.13	0.0	0.0	77,0,0
497	ok	662	0.16	0.0	0.0	77,0,0	663	0.27	0.0	0.0	63,0,0
		710	0.12	0.0	0.0	69,0,0	709	0.09	0.0	0.0	51,0,0
498	ok	663	0.26	0.0	0.0	63,0,0	664	0.17	0.0	0.0	67,0,0
		711	0.11	0.0	0.0	58,0,0	710	0.13	0.0	0.0	63,0,0
499	ok	664	0.19	0.0	0.0	58,0,0	665	0.19	0.0	0.0	63,0,0
		712	0.14	0.0	0.0	58,0,0	711	0.09	0.0	0.0	55,0,0
500	ok	665	0.11	0.0	0.0	55,0,0	666	0.10	0.0	0.0	67,0,0
		713	0.11	0.0	0.0	67,0,0	712	0.12	0.0	0.0	55,0,0
501	ok	667	0.06	0.0	0.0	77,0,0	668	0.06	0.0	0.0	77,0,0
		715	0.11	0.0	0.0	69,0,0	714	0.10	0.0	0.0	69,0,0
502	ok	668	0.07	0.0	0.0	77,0,0	669	0.07	0.0	0.0	77,0,0
		716	0.16	0.0	0.0	69,0,0	715	0.11	0.0	0.0	69,0,0
503	ok	669	0.07	0.0	0.0	77,0,0	670	0.10	0.0	0.0	77,0,0
		717	0.16	0.0	0.0	77,0,0	716	0.16	0.0	0.0	69,0,0
504	ok	670	0.10	0.0	0.0	73,0,0	671	0.10	0.0	0.0	73,0,0
		718	0.18	0.0	0.0	77,0,0	717	0.15	0.0	0.0	77,0,0
505	ok	671	0.21	0.0	0.0	65,0,0	672	0.15	0.0	0.0	67,0,0
		719	0.12	0.0	0.0	65,0,0	718	0.17	0.0	0.0	77,0,0
506	ok	672	0.15	0.0	0.0	73,0,0	673	0.29	0.0	0.0	67,0,0
		720	0.14	0.0	0.0	65,0,0	719	0.10	0.0	0.0	71,0,0
507	ok	673	0.30	0.0	0.0	65,0,0	674	0.18	0.0	0.0	67,0,0
		721	0.11	0.0	0.0	61,0,0	720	0.14	0.0	0.0	67,0,0
508	ok	674	0.22	0.0	0.0	61,0,0	675	0.21	0.0	0.0	67,0,0
		722	0.13	0.0	0.0	61,0,0	721	0.09	0.0	0.0	67,0,0
509	ok	675	0.10	0.0	0.0	55,0,0	676	0.11	0.0	0.0	67,0,0
		723	0.11	0.0	0.0	67,0,0	722	0.12	0.0	0.0	55,0,0
510	ok	677	0.04	0.0	0.0	73,0,0	678	0.10	0.0	0.0	61,0,0
		725	0.12	0.0	0.0	61,0,0	724	0.05	0.0	0.0	61,0,0
511	ok	678	0.11	0.0	0.0	65,0,0	679	0.28	0.0	0.0	61,0,0
		726	0.10	0.0	0.0	61,0,0	725	0.15	0.0	0.0	61,0,0
512	ok	679	0.15	0.0	0.0	65,0,0	680	0.20	0.0	0.0	67,0,0
		727	0.13	0.0	0.0	67,0,0	726	0.16	0.0	0.0	61,0,0
513	ok	680	0.22	0.0	0.0	67,0,0	681	0.20	0.0	0.0	67,0,0
		728	0.14	0.0	0.0	55,0,0	727	0.12	0.0	0.0	67,0,0
514	ok	681	0.23	0.0	0.0	55,0,0	682	0.16	0.0	0.0	67,0,0
		729	0.12	0.0	0.0	50,0,0	728	0.08	0.0	0.0	55,0,0
515	ok	682	0.10	0.0	0.0	55,0,0	683	0.07	0.0	0.0	55,0,0
		730	0.08	0.0	0.0	55,0,0	729	0.10	0.0	0.0	55,0,0
516	ok	683	0.07	0.0	0.0	55,0,0	684	0.05	0.0	0.0	55,0,0
		731	0.07	0.0	0.0	55,0,0	730	0.08	0.0	0.0	55,0,0
517	ok	685	0.04	0.0	0.0	77,0,0	686	0.04	0.0	0.0	77,0,0
		733	0.03	0.0	0.0	61,0,0	732	0.03	0.0	0.0	61,0,0
518	ok	686	0.05	0.0	0.0	77,0,0	687	0.04	0.0	0.0	61,0,0
		734	0.15	0.0	0.0	56,0,0	733	0.04	0.0	0.0	56,0,0
519	ok	687	0.09	0.0	0.0	61,0,0	688	0.07	0.0	0.0	48,0,0
		735	0.09	0.0	0.0	58,0,0	734	0.09	0.0	0.0	48,0,0
520	ok	688	0.10	0.0	0.0	58,0,0	689	0.18	0.0	0.0	61,0,0
		736	0.15	0.0	0.0	58,0,0	735	0.15	0.0	0.0	77,0,0
521	ok	689	0.09	0.0	0.0	61,0,0	690	0.12	0.0	0.0	61,0,0
		737	0.17	0.0	0.0	61,0,0	736	0.33	0.0	0.0	58,0,0
522	ok	690	0.14	0.0	0.0	61,0,0	691	0.04	0.0	0.0	47,0,0
		738	0.14	0.0	0.0	77,0,0	737	0.15	0.0	0.0	61,0,0
523	ok	692	0.06	0.0	0.0	52,0,0	693	0.06	0.0	0.0	49,0,0
		740	0.10	0.0	0.0	65,0,0	739	0.14	0.0	0.0	74,0,0
524	ok	693	0.09	0.0	0.0	49,0,0	694	0.07	0.0	0.0	73,0,0
		741	0.40	0.0	0.0	61,0,0	740	0.06	0.0	0.0	77,0,0
525	ok	694	0.12	0.0	0.0	61,0,0	695	0.09	0.0	0.0	77,0,0
		742	0.07	0.0	0.0	75,0,0	741	0.25	0.0	0.0	65,0,0
526	ok	695	0.10	0.0	0.0	49,0,0	696	0.15	0.0	0.0	51,0,0
		743	0.23	0.0	0.0	75,0,0	742	0.07	0.0	0.0	75,0,0
527	ok	696	0.10	0.0	0.0	71,0,0	697	0.13	0.0	0.0	51,0,0
		744	0.11	0.0	0.0	51,0,0	743	0.40	0.0	0.0	51,0,0
528	ok	697	0.13	0.0	0.0	71,0,0	698	0.09	0.0	0.0	55,0,0
		745	0.15	0.0	0.0	77,0,0	744	0.13	0.0	0.0	58,0,0
529	ok	698	0.10	0.0	0.0	77,0,0	699	0.09	0.0	0.0	72,0,0
		746	0.15	0.0	0.0	72,0,0	745	0.12	0.0	0.0	64,0,0
530	ok	699	0.09	0.0	0.0	72,0,0	700	0.21	0.0	0.0	55,0,0
		747	0.17	0.0	0.0	58,0,0	746	0.22	0.0	0.0	58,0,0
531	ok	700	0.11	0.0	0.0	55,0,0	701	0.12	0.0	0.0	58,0,0
		748	0.19	0.0	0.0	58,0,0	747	0.32	0.0	0.0	58,0,0
532	ok	701	0.13	0.0	0.0	55,0,0	702	0.09	0.0	0.0	55,0,0
		749	0.09	0.0	0.0	49,0,0	748	0.16	0.0	0.0	58,0,0
533	ok	703	0.10	0.0	0.0	73,0,0	704	0.09	0.0	0.0	73,0,0
		751	0.17	0.0	0.0	65,0,0	750	0.12	0.0	0.0	55,0,0
534	ok	704	0.14	0.0	0.0	77,0,0	705	0.13	0.0	0.0	77,0,0



		752	0.48	0.0	0.0	77,0,0	751	0.10	0.0	0.0	55,0,0
535	ok	705	0.14	0.0	0.0	58,0,0	706	0.17	0.0	0.0	71,0,0
		753	0.12	0.0	0.0	77,0,0	752	0.43	0.0	0.0	73,0,0
536	ok	706	0.19	0.0	0.0	73,0,0	707	0.15	0.0	0.0	77,0,0
		754	0.48	0.0	0.0	75,0,0	753	0.12	0.0	0.0	71,0,0
537	ok	707	0.14	0.0	0.0	77,0,0	708	0.19	0.0	0.0	71,0,0
		755	0.07	0.0	0.0	46,0,0	754	0.55	0.0	0.0	71,0,0
538	ok	708	0.12	0.0	0.0	77,0,0	709	0.10	0.0	0.0	71,0,0
		756	0.14	0.0	0.0	61,0,0	755	0.22	0.0	0.0	77,0,0
539	ok	709	0.13	0.0	0.0	77,0,0	710	0.08	0.0	0.0	68,0,0
		757	0.16	0.0	0.0	77,0,0	756	0.13	0.0	0.0	68,0,0
540	ok	710	0.09	0.0	0.0	73,0,0	711	0.20	0.0	0.0	58,0,0
		758	0.16	0.0	0.0	58,0,0	757	0.20	0.0	0.0	58,0,0
541	ok	711	0.10	0.0	0.0	58,0,0	712	0.12	0.0	0.0	58,0,0
		759	0.18	0.0	0.0	58,0,0	758	0.30	0.0	0.0	58,0,0
542	ok	712	0.13	0.0	0.0	55,0,0	713	0.10	0.0	0.0	55,0,0
		760	0.11	0.0	0.0	65,0,0	759	0.15	0.0	0.0	58,0,0
543	ok	714	0.11	0.0	0.0	69,0,0	715	0.10	0.0	0.0	77,0,0
		762	0.18	0.0	0.0	65,0,0	761	0.13	0.0	0.0	67,0,0
544	ok	715	0.15	0.0	0.0	69,0,0	716	0.14	0.0	0.0	77,0,0
		763	0.47	0.0	0.0	69,0,0	762	0.11	0.0	0.0	58,0,0
545	ok	716	0.15	0.0	0.0	58,0,0	717	0.18	0.0	0.0	71,0,0
		764	0.12	0.0	0.0	77,0,0	763	0.44	0.0	0.0	69,0,0
546	ok	717	0.20	0.0	0.0	69,0,0	718	0.16	0.0	0.0	77,0,0
		765	0.48	0.0	0.0	77,0,0	764	0.12	0.0	0.0	71,0,0
547	ok	718	0.13	0.0	0.0	77,0,0	719	0.17	0.0	0.0	71,0,0
		766	0.13	0.0	0.0	63,0,0	765	0.62	0.0	0.0	71,0,0
548	ok	719	0.13	0.0	0.0	77,0,0	720	0.09	0.0	0.0	56,0,0
		767	0.19	0.0	0.0	77,0,0	766	0.11	0.0	0.0	68,0,0
549	ok	720	0.10	0.0	0.0	77,0,0	721	0.19	0.0	0.0	58,0,0
		768	0.15	0.0	0.0	50,0,0	767	0.21	0.0	0.0	50,0,0
550	ok	721	0.12	0.0	0.0	77,0,0	722	0.12	0.0	0.0	58,0,0
		769	0.18	0.0	0.0	50,0,0	768	0.33	0.0	0.0	61,0,0
551	ok	722	0.12	0.0	0.0	58,0,0	723	0.10	0.0	0.0	67,0,0
		770	0.12	0.0	0.0	61,0,0	769	0.15	0.0	0.0	58,0,0
552	ok	724	0.05	0.0	0.0	61,0,0	725	0.13	0.0	0.0	61,0,0
		772	0.18	0.0	0.0	61,0,0	771	0.09	0.0	0.0	55,0,0
553	ok	725	0.13	0.0	0.0	61,0,0	726	0.11	0.0	0.0	61,0,0
		773	0.40	0.0	0.0	61,0,0	772	0.17	0.0	0.0	61,0,0
554	ok	726	0.20	0.0	0.0	61,0,0	727	0.08	0.0	0.0	67,0,0
		774	0.10	0.0	0.0	61,0,0	773	0.15	0.0	0.0	61,0,0
555	ok	727	0.10	0.0	0.0	67,0,0	728	0.19	0.0	0.0	55,0,0
		775	0.14	0.0	0.0	47,0,0	774	0.08	0.0	0.0	47,0,0
556	ok	728	0.09	0.0	0.0	55,0,0	729	0.10	0.0	0.0	55,0,0
		776	0.12	0.0	0.0	55,0,0	775	0.34	0.0	0.0	47,0,0
557	ok	729	0.10	0.0	0.0	55,0,0	730	0.08	0.0	0.0	55,0,0
		777	0.09	0.0	0.0	55,0,0	776	0.12	0.0	0.0	58,0,0
558	ok	730	0.09	0.0	0.0	55,0,0	731	0.07	0.0	0.0	55,0,0
		778	0.07	0.0	0.0	55,0,0	777	0.09	0.0	0.0	55,0,0
559	ok	732	0.02	0.0	0.0	61,0,0	733	0.04	0.0	0.0	56,0,0
		780	0.02	0.0	0.0	72,0,0	779	0.01	0.0	0.0	61,0,0
560	ok	733	0.05	0.0	0.0	72,0,0	734	0.22	0.0	0.0	48,0,0
		781	0.06	0.0	0.0	61,0,0	780	0.05	0.0	0.0	56,0,0
561	ok	734	0.12	0.0	0.0	48,0,0	735	0.05	0.0	0.0	58,0,0
		782	0.18	0.0	0.0	58,0,0	781	0.06	0.0	0.0	72,0,0
562	ok	735	0.08	0.0	0.0	58,0,0	736	0.21	0.0	0.0	61,0,0
		783	0.21	0.0	0.0	58,0,0	782	0.12	0.0	0.0	58,0,0
563	ok	736	0.48	0.0	0.0	61,0,0	737	0.07	0.0	0.0	61,0,0
		784	0.24	0.0	0.0	61,0,0	783	0.04	0.0	0.0	61,0,0
564	ok	737	0.24	0.0	0.0	61,0,0	738	0.11	0.0	0.0	71,0,0
		785	0.32	0.0	0.0	77,0,0	784	0.15	0.0	0.0	61,0,0
565	ok	739	0.14	0.0	0.0	74,0,0	740	0.09	0.0	0.0	69,0,0
		787	0.10	0.0	0.0	72,0,0	786	0.31	0.0	0.0	58,0,0
566	ok	740	0.12	0.0	0.0	65,0,0	741	0.27	0.0	0.0	61,0,0
		788	0.07	0.0	0.0	61,0,0	787	0.11	0.0	0.0	72,0,0
567	ok	741	0.15	0.0	0.0	61,0,0	742	0.16	0.0	0.0	73,0,0
		789	0.12	0.0	0.0	65,0,0	788	0.17	0.0	0.0	61,0,0
568	ok	742	0.15	0.0	0.0	75,0,0	743	0.17	0.0	0.0	51,0,0
		790	0.21	0.0	0.0	51,0,0	789	0.12	0.0	0.0	65,0,0
569	ok	743	0.31	0.0	0.0	51,0,0	744	0.12	0.0	0.0	53,0,0
		791	0.14	0.0	0.0	51,0,0	790	0.11	0.0	0.0	72,0,0
570	ok	744	0.12	0.0	0.0	51,0,0	745	0.24	0.0	0.0	64,0,0
		792	0.14	0.0	0.0	58,0,0	791	0.13	0.0	0.0	74,0,0
571	ok	745	0.25	0.0	0.0	72,0,0	746	0.09	0.0	0.0	51,0,0
		793	0.15	0.0	0.0	58,0,0	792	0.14	0.0	0.0	58,0,0
572	ok	746	0.09	0.0	0.0	58,0,0	747	0.33	0.0	0.0	74,0,0
		794	0.21	0.0	0.0	58,0,0	793	0.17	0.0	0.0	58,0,0



573	ok	747	0.56	0.0	0.0	58,0,0	748	0.07	0.0	0.0	61,0,0
		795	0.26	0.0	0.0	58,0,0	794	0.12	0.0	0.0	72,0,0
574	ok	748	0.24	0.0	0.0	58,0,0	749	0.09	0.0	0.0	49,0,0
		796	0.34	0.0	0.0	55,0,0	795	0.18	0.0	0.0	48,0,0
575	ok	750	0.13	0.0	0.0	55,0,0	751	0.17	0.0	0.0	55,0,0
		798	0.21	0.0	0.0	67,0,0	797	0.27	0.0	0.0	55,0,0
576	ok	751	0.24	0.0	0.0	75,0,0	752	0.33	0.0	0.0	55,0,0
		799	0.09	0.0	0.0	61,0,0	798	0.21	0.0	0.0	55,0,0
577	ok	752	0.17	0.0	0.0	77,0,0	753	0.27	0.0	0.0	77,0,0
		800	0.23	0.0	0.0	73,0,0	799	0.17	0.0	0.0	58,0,0
578	ok	753	0.28	0.0	0.0	71,0,0	754	0.20	0.0	0.0	71,0,0
		801	0.13	0.0	0.0	51,0,0	800	0.21	0.0	0.0	73,0,0
579	ok	754	0.23	0.0	0.0	49,0,0	755	0.27	0.0	0.0	77,0,0
		802	0.14	0.0	0.0	71,0,0	801	0.11	0.0	0.0	48,0,0
580	ok	755	0.08	0.0	0.0	71,0,0	756	0.33	0.0	0.0	77,0,0
		803	0.13	0.0	0.0	58,0,0	802	0.17	0.0	0.0	71,0,0
581	ok	756	0.25	0.0	0.0	77,0,0	757	0.08	0.0	0.0	58,0,0
		804	0.14	0.0	0.0	58,0,0	803	0.14	0.0	0.0	75,0,0
582	ok	757	0.08	0.0	0.0	58,0,0	758	0.30	0.0	0.0	58,0,0
		805	0.19	0.0	0.0	58,0,0	804	0.16	0.0	0.0	58,0,0
583	ok	758	0.53	0.0	0.0	58,0,0	759	0.09	0.0	0.0	77,0,0
		806	0.24	0.0	0.0	58,0,0	805	0.12	0.0	0.0	77,0,0
584	ok	759	0.23	0.0	0.0	58,0,0	760	0.11	0.0	0.0	77,0,0
		807	0.28	0.0	0.0	58,0,0	806	0.20	0.0	0.0	61,0,0
585	ok	761	0.15	0.0	0.0	67,0,0	762	0.18	0.0	0.0	58,0,0
		809	0.19	0.0	0.0	55,0,0	808	0.29	0.0	0.0	58,0,0
586	ok	762	0.25	0.0	0.0	69,0,0	763	0.34	0.0	0.0	55,0,0
		810	0.09	0.0	0.0	61,0,0	809	0.21	0.0	0.0	55,0,0
587	ok	763	0.16	0.0	0.0	77,0,0	764	0.27	0.0	0.0	77,0,0
		811	0.23	0.0	0.0	69,0,0	810	0.18	0.0	0.0	58,0,0
588	ok	764	0.29	0.0	0.0	71,0,0	765	0.20	0.0	0.0	71,0,0
		812	0.14	0.0	0.0	51,0,0	811	0.22	0.0	0.0	69,0,0
589	ok	765	0.24	0.0	0.0	49,0,0	766	0.47	0.0	0.0	77,0,0
		813	0.14	0.0	0.0	63,0,0	812	0.13	0.0	0.0	71,0,0
590	ok	766	0.30	0.0	0.0	77,0,0	767	0.07	0.0	0.0	58,0,0
		814	0.14	0.0	0.0	50,0,0	813	0.17	0.0	0.0	71,0,0
591	ok	767	0.08	0.0	0.0	50,0,0	768	0.30	0.0	0.0	50,0,0
		815	0.22	0.0	0.0	61,0,0	814	0.16	0.0	0.0	50,0,0
592	ok	768	0.50	0.0	0.0	58,0,0	769	0.11	0.0	0.0	61,0,0
		816	0.24	0.0	0.0	58,0,0	815	0.14	0.0	0.0	77,0,0
593	ok	769	0.23	0.0	0.0	58,0,0	770	0.13	0.0	0.0	61,0,0
		817	0.31	0.0	0.0	58,0,0	816	0.27	0.0	0.0	61,0,0
594	ok	771	0.13	0.0	0.0	61,0,0	772	0.29	0.0	0.0	61,0,0
		819	0.24	0.0	0.0	61,0,0	818	0.54	0.0	0.0	61,0,0
595	ok	772	0.08	0.0	0.0	61,0,0	773	0.44	0.0	0.0	61,0,0
		820	0.09	0.0	0.0	56,0,0	819	0.30	0.0	0.0	61,0,0
596	ok	773	0.18	0.0	0.0	61,0,0	774	0.07	0.0	0.0	77,0,0
		821	0.07	0.0	0.0	56,0,0	820	0.26	0.0	0.0	61,0,0
597	ok	774	0.06	0.0	0.0	77,0,0	775	0.18	0.0	0.0	55,0,0
		822	0.19	0.0	0.0	50,0,0	821	0.16	0.0	0.0	50,0,0
598	ok	775	0.38	0.0	0.0	47,0,0	776	0.08	0.0	0.0	47,0,0
		823	0.18	0.0	0.0	50,0,0	822	0.08	0.0	0.0	50,0,0
599	ok	776	0.12	0.0	0.0	58,0,0	777	0.08	0.0	0.0	55,0,0
		824	0.09	0.0	0.0	58,0,0	823	0.12	0.0	0.0	50,0,0
600	ok	777	0.09	0.0	0.0	55,0,0	778	0.07	0.0	0.0	55,0,0
		825	0.07	0.0	0.0	50,0,0	824	0.10	0.0	0.0	58,0,0
601	ok	818	0.49	0.0	0.0	56,0,0	819	0.24	0.0	0.0	61,0,0
		827	0.24	0.0	0.0	56,0,0	826	0.16	0.0	0.0	61,0,0
602	ok	819	0.27	0.0	0.0	61,0,0	820	0.12	0.0	0.0	56,0,0
		828	0.40	0.0	0.0	61,0,0	827	0.17	0.0	0.0	62,0,0
603	ok	820	0.28	0.0	0.0	61,0,0	821	0.10	0.0	0.0	62,0,0
		829	0.24	0.0	0.0	68,0,0	828	0.18	0.0	0.0	56,0,0
604	ok	821	0.15	0.0	0.0	50,0,0	822	0.25	0.0	0.0	50,0,0
		830	0.20	0.0	0.0	46,0,0	829	0.24	0.0	0.0	62,0,0
605	ok	822	0.11	0.0	0.0	50,0,0	823	0.13	0.0	0.0	58,0,0
		831	0.17	0.0	0.0	62,0,0	830	0.39	0.0	0.0	50,0,0
606	ok	823	0.13	0.0	0.0	58,0,0	824	0.09	0.0	0.0	50,0,0
		832	0.10	0.0	0.0	53,0,0	831	0.14	0.0	0.0	50,0,0
607	ok	824	0.10	0.0	0.0	58,0,0	825	0.07	0.0	0.0	50,0,0
		833	0.06	0.0	0.0	56,0,0	832	0.10	0.0	0.0	50,0,0
608	ok	779	0.01	0.0	0.0	48,0,0	780	0.02	0.0	0.0	72,0,0
		835	0.02	0.0	0.0	74,0,0	834	4.55e-03	0.0	0.0	77,0,0
609	ok	780	0.03	0.0	0.0	72,0,0	781	0.07	0.0	0.0	74,0,0
		836	0.06	0.0	0.0	74,0,0	835	0.02	0.0	0.0	74,0,0
610	ok	781	0.07	0.0	0.0	74,0,0	782	0.14	0.0	0.0	58,0,0
		837	0.09	0.0	0.0	74,0,0	836	0.07	0.0	0.0	74,0,0
611	ok	782	0.08	0.0	0.0	58,0,0	783	0.12	0.0	0.0	58,0,0



		838	0.13	0.0	0.0	58,0,0	837	0.12	0.0	0.0	58,0,0
612	ok	783	0.12	0.0	0.0	58,0,0	784	0.14	0.0	0.0	55,0,0
		839	0.10	0.0	0.0	58,0,0	838	0.14	0.0	0.0	58,0,0
613	ok	784	0.16	0.0	0.0	58,0,0	785	0.33	0.0	0.0	55,0,0
		840	0.12	0.0	0.0	55,0,0	839	0.11	0.0	0.0	58,0,0
614	ok	786	0.22	0.0	0.0	71,0,0	787	0.18	0.0	0.0	74,0,0
		842	0.09	0.0	0.0	74,0,0	841	0.09	0.0	0.0	77,0,0
615	ok	787	0.11	0.0	0.0	61,0,0	788	0.09	0.0	0.0	74,0,0
		843	0.23	0.0	0.0	61,0,0	842	0.16	0.0	0.0	72,0,0
616	ok	788	0.14	0.0	0.0	61,0,0	789	0.09	0.0	0.0	72,0,0
		844	0.22	0.0	0.0	74,0,0	843	0.12	0.0	0.0	56,0,0
617	ok	789	0.09	0.0	0.0	51,0,0	790	0.22	0.0	0.0	51,0,0
		845	0.13	0.0	0.0	46,0,0	844	0.25	0.0	0.0	74,0,0
618	ok	790	0.09	0.0	0.0	72,0,0	791	0.14	0.0	0.0	51,0,0
		846	0.20	0.0	0.0	74,0,0	845	0.31	0.0	0.0	51,0,0
619	ok	791	0.14	0.0	0.0	74,0,0	792	0.15	0.0	0.0	74,0,0
		847	0.10	0.0	0.0	74,0,0	846	0.12	0.0	0.0	51,0,0
620	ok	792	0.15	0.0	0.0	74,0,0	793	0.18	0.0	0.0	74,0,0
		848	0.09	0.0	0.0	58,0,0	847	0.10	0.0	0.0	74,0,0
621	ok	793	0.19	0.0	0.0	74,0,0	794	0.15	0.0	0.0	58,0,0
		849	0.07	0.0	0.0	58,0,0	848	0.08	0.0	0.0	58,0,0
622	ok	794	0.16	0.0	0.0	58,0,0	795	0.15	0.0	0.0	58,0,0
		850	0.07	0.0	0.0	52,0,0	849	0.07	0.0	0.0	58,0,0
623	ok	795	0.17	0.0	0.0	52,0,0	796	0.28	0.0	0.0	58,0,0
		851	0.12	0.0	0.0	58,0,0	850	0.11	0.0	0.0	58,0,0
624	ok	797	0.24	0.0	0.0	55,0,0	798	0.17	0.0	0.0	58,0,0
		853	0.13	0.0	0.0	58,0,0	852	0.09	0.0	0.0	58,0,0
625	ok	798	0.18	0.0	0.0	58,0,0	799	0.10	0.0	0.0	67,0,0
		854	0.26	0.0	0.0	55,0,0	853	0.12	0.0	0.0	74,0,0
626	ok	799	0.17	0.0	0.0	55,0,0	800	0.11	0.0	0.0	72,0,0
		855	0.14	0.0	0.0	74,0,0	854	0.13	0.0	0.0	56,0,0
627	ok	800	0.10	0.0	0.0	74,0,0	801	0.16	0.0	0.0	46,0,0
		856	0.13	0.0	0.0	62,0,0	855	0.18	0.0	0.0	74,0,0
628	ok	801	0.09	0.0	0.0	73,0,0	802	0.14	0.0	0.0	62,0,0
		857	0.17	0.0	0.0	74,0,0	856	0.24	0.0	0.0	62,0,0
629	ok	802	0.13	0.0	0.0	62,0,0	803	0.14	0.0	0.0	54,0,0
		858	0.10	0.0	0.0	74,0,0	857	0.12	0.0	0.0	74,0,0
630	ok	803	0.13	0.0	0.0	58,0,0	804	0.16	0.0	0.0	58,0,0
		859	0.08	0.0	0.0	74,0,0	858	0.10	0.0	0.0	74,0,0
631	ok	804	0.18	0.0	0.0	58,0,0	805	0.14	0.0	0.0	58,0,0
		860	0.07	0.0	0.0	58,0,0	859	0.08	0.0	0.0	74,0,0
632	ok	805	0.15	0.0	0.0	58,0,0	806	0.14	0.0	0.0	48,0,0
		861	0.07	0.0	0.0	56,0,0	860	0.07	0.0	0.0	58,0,0
633	ok	806	0.17	0.0	0.0	61,0,0	807	0.26	0.0	0.0	58,0,0
		862	0.10	0.0	0.0	58,0,0	861	0.10	0.0	0.0	55,0,0
634	ok	808	0.26	0.0	0.0	58,0,0	809	0.18	0.0	0.0	50,0,0
		864	0.14	0.0	0.0	50,0,0	863	0.10	0.0	0.0	58,0,0
635	ok	809	0.20	0.0	0.0	58,0,0	810	0.10	0.0	0.0	63,0,0
		865	0.27	0.0	0.0	55,0,0	864	0.13	0.0	0.0	68,0,0
636	ok	810	0.17	0.0	0.0	55,0,0	811	0.11	0.0	0.0	68,0,0
		866	0.14	0.0	0.0	62,0,0	865	0.12	0.0	0.0	56,0,0
637	ok	811	0.10	0.0	0.0	68,0,0	812	0.17	0.0	0.0	46,0,0
		867	0.14	0.0	0.0	62,0,0	866	0.18	0.0	0.0	62,0,0
638	ok	812	0.10	0.0	0.0	77,0,0	813	0.15	0.0	0.0	71,0,0
		868	0.17	0.0	0.0	62,0,0	867	0.23	0.0	0.0	62,0,0
639	ok	813	0.14	0.0	0.0	46,0,0	814	0.19	0.0	0.0	71,0,0
		869	0.09	0.0	0.0	70,0,0	868	0.12	0.0	0.0	62,0,0
640	ok	814	0.19	0.0	0.0	46,0,0	815	0.15	0.0	0.0	50,0,0
		870	0.08	0.0	0.0	71,0,0	869	0.08	0.0	0.0	70,0,0
641	ok	815	0.16	0.0	0.0	50,0,0	816	0.17	0.0	0.0	61,0,0
		871	0.09	0.0	0.0	61,0,0	870	0.07	0.0	0.0	71,0,0
642	ok	816	0.23	0.0	0.0	56,0,0	817	0.30	0.0	0.0	55,0,0
		872	0.13	0.0	0.0	61,0,0	871	0.12	0.0	0.0	47,0,0
643	ok	826	0.10	0.0	0.0	62,0,0	827	0.14	0.0	0.0	56,0,0
		874	0.10	0.0	0.0	56,0,0	873	0.08	0.0	0.0	68,0,0
644	ok	827	0.14	0.0	0.0	56,0,0	828	0.53	0.0	0.0	56,0,0
		875	0.11	0.0	0.0	68,0,0	874	0.12	0.0	0.0	56,0,0
645	ok	828	0.34	0.0	0.0	68,0,0	829	0.08	0.0	0.0	68,0,0
		876	0.23	0.0	0.0	50,0,0	875	0.18	0.0	0.0	61,0,0
646	ok	829	0.09	0.0	0.0	62,0,0	830	0.35	0.0	0.0	62,0,0
		877	0.20	0.0	0.0	50,0,0	876	0.17	0.0	0.0	62,0,0
647	ok	830	0.60	0.0	0.0	50,0,0	831	0.09	0.0	0.0	58,0,0
		878	0.19	0.0	0.0	50,0,0	877	0.12	0.0	0.0	64,0,0
648	ok	831	0.16	0.0	0.0	50,0,0	832	0.09	0.0	0.0	53,0,0
		879	0.14	0.0	0.0	61,0,0	878	0.12	0.0	0.0	58,0,0
649	ok	832	0.14	0.0	0.0	53,0,0	833	0.09	0.0	0.0	53,0,0
		880	0.23	0.0	0.0	53,0,0	879	0.15	0.0	0.0	61,0,0



650	ok	841	0.09	0.0	0.0	71,0,0	842	0.13	0.0	0.0	72,0,0
		886	0.07	0.0	0.0	71,0,0	885	0.05	0.0	0.0	72,0,0
651	ok	842	0.07	0.0	0.0	61,0,0	843	0.31	0.0	0.0	72,0,0
		887	0.09	0.0	0.0	68,0,0	886	0.07	0.0	0.0	72,0,0
652	ok	843	0.33	0.0	0.0	74,0,0	844	0.09	0.0	0.0	77,0,0
		888	0.23	0.0	0.0	74,0,0	887	0.12	0.0	0.0	77,0,0
653	ok	844	0.09	0.0	0.0	70,0,0	845	0.39	0.0	0.0	74,0,0
		889	0.19	0.0	0.0	51,0,0	888	0.23	0.0	0.0	72,0,0
654	ok	845	0.45	0.0	0.0	74,0,0	846	0.10	0.0	0.0	51,0,0
		890	0.14	0.0	0.0	51,0,0	889	0.10	0.0	0.0	77,0,0
655	ok	846	0.15	0.0	0.0	74,0,0	847	0.10	0.0	0.0	74,0,0
		891	0.08	0.0	0.0	51,0,0	890	0.10	0.0	0.0	51,0,0
656	ok	847	0.11	0.0	0.0	74,0,0	848	0.09	0.0	0.0	58,0,0
		892	0.05	0.0	0.0	51,0,0	891	0.08	0.0	0.0	51,0,0
657	ok	848	0.09	0.0	0.0	58,0,0	849	0.07	0.0	0.0	58,0,0
		893	0.04	0.0	0.0	57,0,0	892	0.05	0.0	0.0	51,0,0
658	ok	849	0.07	0.0	0.0	58,0,0	850	0.07	0.0	0.0	72,0,0
		894	0.03	0.0	0.0	57,0,0	893	0.04	0.0	0.0	57,0,0
659	ok	850	0.07	0.0	0.0	52,0,0	851	0.08	0.0	0.0	72,0,0
		895	0.02	0.0	0.0	72,0,0	894	0.03	0.0	0.0	57,0,0
660	ok	852	0.08	0.0	0.0	61,0,0	853	0.09	0.0	0.0	72,0,0
		897	0.05	0.0	0.0	56,0,0	896	0.03	0.0	0.0	52,0,0
661	ok	853	0.08	0.0	0.0	61,0,0	854	0.26	0.0	0.0	72,0,0
		898	0.05	0.0	0.0	68,0,0	897	0.06	0.0	0.0	55,0,0
662	ok	854	0.26	0.0	0.0	74,0,0	855	0.07	0.0	0.0	72,0,0
		899	0.11	0.0	0.0	70,0,0	898	0.12	0.0	0.0	55,0,0
663	ok	855	0.09	0.0	0.0	70,0,0	856	0.34	0.0	0.0	74,0,0
		900	0.10	0.0	0.0	62,0,0	899	0.08	0.0	0.0	74,0,0
664	ok	856	0.46	0.0	0.0	70,0,0	857	0.05	0.0	0.0	51,0,0
		901	0.13	0.0	0.0	62,0,0	900	0.04	0.0	0.0	46,0,0
665	ok	857	0.14	0.0	0.0	74,0,0	858	0.09	0.0	0.0	74,0,0
		902	0.05	0.0	0.0	74,0,0	901	0.06	0.0	0.0	62,0,0
666	ok	858	0.10	0.0	0.0	74,0,0	859	0.08	0.0	0.0	74,0,0
		903	0.04	0.0	0.0	52,0,0	902	0.05	0.0	0.0	74,0,0
667	ok	859	0.09	0.0	0.0	74,0,0	860	0.07	0.0	0.0	74,0,0
		904	0.04	0.0	0.0	52,0,0	903	0.04	0.0	0.0	52,0,0
668	ok	860	0.07	0.0	0.0	74,0,0	861	0.06	0.0	0.0	61,0,0
		905	0.03	0.0	0.0	72,0,0	904	0.04	0.0	0.0	52,0,0
669	ok	861	0.07	0.0	0.0	61,0,0	862	0.07	0.0	0.0	48,0,0
		906	0.02	0.0	0.0	77,0,0	905	0.03	0.0	0.0	72,0,0
670	ok	863	0.07	0.0	0.0	61,0,0	864	0.10	0.0	0.0	68,0,0
		908	0.05	0.0	0.0	47,0,0	907	0.03	0.0	0.0	56,0,0
671	ok	864	0.09	0.0	0.0	58,0,0	865	0.27	0.0	0.0	68,0,0
		909	0.05	0.0	0.0	68,0,0	908	0.06	0.0	0.0	55,0,0
672	ok	865	0.27	0.0	0.0	62,0,0	866	0.07	0.0	0.0	68,0,0
		910	0.12	0.0	0.0	62,0,0	909	0.12	0.0	0.0	55,0,0
673	ok	866	0.09	0.0	0.0	62,0,0	867	0.35	0.0	0.0	62,0,0
		911	0.10	0.0	0.0	49,0,0	910	0.08	0.0	0.0	62,0,0
674	ok	867	0.46	0.0	0.0	62,0,0	868	0.06	0.0	0.0	49,0,0
		912	0.12	0.0	0.0	62,0,0	911	0.04	0.0	0.0	62,0,0
675	ok	868	0.14	0.0	0.0	62,0,0	869	0.08	0.0	0.0	50,0,0
		913	0.07	0.0	0.0	49,0,0	912	0.06	0.0	0.0	49,0,0
676	ok	869	0.09	0.0	0.0	70,0,0	870	0.07	0.0	0.0	70,0,0
		914	0.06	0.0	0.0	52,0,0	913	0.06	0.0	0.0	49,0,0
677	ok	870	0.07	0.0	0.0	62,0,0	871	0.08	0.0	0.0	61,0,0
		915	0.04	0.0	0.0	52,0,0	914	0.06	0.0	0.0	52,0,0
678	ok	871	0.09	0.0	0.0	61,0,0	872	0.09	0.0	0.0	61,0,0
		916	0.02	0.0	0.0	77,0,0	915	0.04	0.0	0.0	52,0,0
679	ok	873	0.07	0.0	0.0	68,0,0	874	0.10	0.0	0.0	56,0,0
		918	0.06	0.0	0.0	56,0,0	917	0.03	0.0	0.0	68,0,0
680	ok	874	0.10	0.0	0.0	56,0,0	875	0.14	0.0	0.0	56,0,0
		919	0.08	0.0	0.0	68,0,0	918	0.06	0.0	0.0	56,0,0
681	ok	875	0.12	0.0	0.0	62,0,0	876	0.16	0.0	0.0	68,0,0
		920	0.20	0.0	0.0	62,0,0	919	0.09	0.0	0.0	65,0,0
682	ok	876	0.16	0.0	0.0	68,0,0	877	0.14	0.0	0.0	66,0,0
		921	0.11	0.0	0.0	66,0,0	920	0.22	0.0	0.0	68,0,0
683	ok	877	0.13	0.0	0.0	62,0,0	878	0.16	0.0	0.0	66,0,0
		922	0.11	0.0	0.0	58,0,0	921	0.13	0.0	0.0	66,0,0
684	ok	878	0.14	0.0	0.0	58,0,0	879	0.13	0.0	0.0	58,0,0
		923	0.08	0.0	0.0	58,0,0	922	0.11	0.0	0.0	58,0,0
685	ok	879	0.14	0.0	0.0	61,0,0	880	0.25	0.0	0.0	61,0,0
		924	0.09	0.0	0.0	56,0,0	923	0.12	0.0	0.0	58,0,0
686	ok	885	0.04	0.0	0.0	72,0,0	886	0.05	0.0	0.0	71,0,0
		926	0.02	0.0	0.0	56,0,0	925	8.38e-03	0.0	0.0	72,0,0
687	ok	886	0.06	0.0	0.0	71,0,0	887	0.09	0.0	0.0	72,0,0
		927	0.09	0.0	0.0	77,0,0	926	0.03	0.0	0.0	74,0,0
688	ok	887	0.16	0.0	0.0	76,0,0	888	0.18	0.0	0.0	74,0,0



		928	0.35	0.0	0.0	72,0,0	927	0.13	0.0	0.0	72,0,0
689	ok	888	0.20	0.0	0.0	77,0,0	889	0.17	0.0	0.0	74,0,0
		929	0.15	0.0	0.0	71,0,0	928	0.34	0.0	0.0	74,0,0
690	ok	889	0.14	0.0	0.0	51,0,0	890	0.10	0.0	0.0	51,0,0
		930	0.10	0.0	0.0	51,0,0	929	0.14	0.0	0.0	51,0,0
691	ok	890	0.11	0.0	0.0	51,0,0	891	0.08	0.0	0.0	51,0,0
		931	0.06	0.0	0.0	51,0,0	930	0.10	0.0	0.0	51,0,0
692	ok	891	0.08	0.0	0.0	51,0,0	892	0.06	0.0	0.0	51,0,0
		932	0.05	0.0	0.0	52,0,0	931	0.06	0.0	0.0	51,0,0
693	ok	892	0.06	0.0	0.0	51,0,0	893	0.04	0.0	0.0	57,0,0
		933	0.04	0.0	0.0	52,0,0	932	0.05	0.0	0.0	52,0,0
694	ok	893	0.04	0.0	0.0	57,0,0	894	0.03	0.0	0.0	61,0,0
		934	0.02	0.0	0.0	61,0,0	933	0.04	0.0	0.0	52,0,0
695	ok	894	0.03	0.0	0.0	61,0,0	895	0.02	0.0	0.0	72,0,0
		935	5.46e-03	0.0	0.0	56,0,0	934	0.01	0.0	0.0	57,0,0
696	ok	896	0.03	0.0	0.0	56,0,0	897	0.05	0.0	0.0	55,0,0
		937	0.03	0.0	0.0	55,0,0	936	7.63e-03	0.0	0.0	74,0,0
697	ok	897	0.05	0.0	0.0	55,0,0	898	0.06	0.0	0.0	55,0,0
		938	0.04	0.0	0.0	55,0,0	937	0.04	0.0	0.0	55,0,0
698	ok	898	0.06	0.0	0.0	68,0,0	899	0.06	0.0	0.0	62,0,0
		939	0.05	0.0	0.0	68,0,0	938	0.05	0.0	0.0	55,0,0
699	ok	899	0.07	0.0	0.0	62,0,0	900	0.08	0.0	0.0	62,0,0
		940	0.06	0.0	0.0	62,0,0	939	0.05	0.0	0.0	68,0,0
700	ok	900	0.10	0.0	0.0	62,0,0	901	0.05	0.0	0.0	62,0,0
		941	0.05	0.0	0.0	62,0,0	940	0.05	0.0	0.0	62,0,0
701	ok	901	0.07	0.0	0.0	62,0,0	902	0.05	0.0	0.0	74,0,0
		942	0.04	0.0	0.0	49,0,0	941	0.05	0.0	0.0	46,0,0
702	ok	902	0.06	0.0	0.0	74,0,0	903	0.04	0.0	0.0	52,0,0
		943	0.04	0.0	0.0	52,0,0	942	0.04	0.0	0.0	49,0,0
703	ok	903	0.05	0.0	0.0	74,0,0	904	0.04	0.0	0.0	52,0,0
		944	0.04	0.0	0.0	60,0,0	943	0.04	0.0	0.0	52,0,0
704	ok	904	0.04	0.0	0.0	72,0,0	905	0.03	0.0	0.0	72,0,0
		945	0.02	0.0	0.0	60,0,0	944	0.03	0.0	0.0	60,0,0
705	ok	905	0.03	0.0	0.0	72,0,0	906	0.02	0.0	0.0	77,0,0
		946	5.45e-03	0.0	0.0	56,0,0	945	0.01	0.0	0.0	60,0,0
706	ok	907	0.03	0.0	0.0	56,0,0	908	0.05	0.0	0.0	55,0,0
		948	0.03	0.0	0.0	55,0,0	947	7.82e-03	0.0	0.0	74,0,0
707	ok	908	0.05	0.0	0.0	55,0,0	909	0.07	0.0	0.0	55,0,0
		949	0.04	0.0	0.0	55,0,0	948	0.04	0.0	0.0	55,0,0
708	ok	909	0.06	0.0	0.0	68,0,0	910	0.06	0.0	0.0	62,0,0
		950	0.04	0.0	0.0	62,0,0	949	0.05	0.0	0.0	55,0,0
709	ok	910	0.07	0.0	0.0	62,0,0	911	0.08	0.0	0.0	62,0,0
		951	0.05	0.0	0.0	62,0,0	950	0.04	0.0	0.0	62,0,0
710	ok	911	0.10	0.0	0.0	62,0,0	912	0.06	0.0	0.0	49,0,0
		952	0.06	0.0	0.0	49,0,0	951	0.04	0.0	0.0	62,0,0
711	ok	912	0.07	0.0	0.0	62,0,0	913	0.06	0.0	0.0	52,0,0
		953	0.06	0.0	0.0	49,0,0	952	0.06	0.0	0.0	49,0,0
712	ok	913	0.06	0.0	0.0	52,0,0	914	0.06	0.0	0.0	52,0,0
		954	0.05	0.0	0.0	48,0,0	953	0.06	0.0	0.0	49,0,0
713	ok	914	0.06	0.0	0.0	52,0,0	915	0.04	0.0	0.0	48,0,0
		955	0.03	0.0	0.0	56,0,0	954	0.05	0.0	0.0	52,0,0
714	ok	915	0.04	0.0	0.0	52,0,0	916	0.02	0.0	0.0	77,0,0
		956	7.01e-03	0.0	0.0	56,0,0	955	0.02	0.0	0.0	56,0,0
715	ok	917	0.03	0.0	0.0	68,0,0	918	0.06	0.0	0.0	56,0,0
		958	0.04	0.0	0.0	56,0,0	957	6.14e-03	0.0	0.0	58,0,0
716	ok	918	0.06	0.0	0.0	56,0,0	919	0.08	0.0	0.0	56,0,0
		959	0.07	0.0	0.0	53,0,0	958	0.05	0.0	0.0	56,0,0
717	ok	919	0.14	0.0	0.0	68,0,0	920	0.20	0.0	0.0	62,0,0
		960	0.29	0.0	0.0	68,0,0	959	0.17	0.0	0.0	68,0,0
718	ok	920	0.20	0.0	0.0	64,0,0	921	0.22	0.0	0.0	66,0,0
		961	0.15	0.0	0.0	68,0,0	960	0.45	0.0	0.0	62,0,0
719	ok	921	0.13	0.0	0.0	62,0,0	922	0.11	0.0	0.0	58,0,0
		962	0.10	0.0	0.0	50,0,0	961	0.14	0.0	0.0	55,0,0
720	ok	922	0.11	0.0	0.0	58,0,0	923	0.08	0.0	0.0	50,0,0
		963	0.06	0.0	0.0	50,0,0	962	0.11	0.0	0.0	50,0,0
721	ok	923	0.07	0.0	0.0	58,0,0	924	0.04	0.0	0.0	62,0,0
		964	0.02	0.0	0.0	53,0,0	963	0.05	0.0	0.0	50,0,0
722	ok	965	9.40e-03	0.0	0.0	52,0,0	966	0.02	0.0	0.0	73,0,0
		980	0.04	0.0	0.0	77,0,0	979	0.02	0.0	0.0	77,0,0
723	ok	966	0.03	0.0	0.0	49,0,0	967	0.07	0.0	0.0	71,0,0
		981	0.10	0.0	0.0	52,0,0	980	0.06	0.0	0.0	77,0,0
724	ok	967	0.06	0.0	0.0	72,0,0	968	0.21	0.0	0.0	58,0,0
		982	0.16	0.0	0.0	72,0,0	981	0.11	0.0	0.0	71,0,0
725	ok	968	0.26	0.0	0.0	77,0,0	969	0.10	0.0	0.0	51,0,0
		983	0.14	0.0	0.0	71,0,0	982	0.17	0.0	0.0	58,0,0
726	ok	969	0.10	0.0	0.0	51,0,0	970	0.05	0.0	0.0	55,0,0
		984	0.08	0.0	0.0	71,0,0	983	0.14	0.0	0.0	58,0,0



727	ok	970	0.04	0.0	0.0	59,0,0	971	7.97e-03	0.0	0.0	58,0,0
		985	0.02	0.0	0.0	71,0,0	984	0.07	0.0	0.0	51,0,0
728	ok	972	8.65e-03	0.0	0.0	68,0,0	973	0.05	0.0	0.0	57,0,0
		987	0.07	0.0	0.0	49,0,0	986	0.02	0.0	0.0	65,0,0
729	ok	973	0.06	0.0	0.0	61,0,0	974	0.11	0.0	0.0	65,0,0
		988	0.15	0.0	0.0	56,0,0	987	0.09	0.0	0.0	65,0,0
730	ok	974	0.11	0.0	0.0	49,0,0	975	0.29	0.0	0.0	67,0,0
		989	0.16	0.0	0.0	56,0,0	988	0.14	0.0	0.0	65,0,0
731	ok	975	0.19	0.0	0.0	65,0,0	976	0.08	0.0	0.0	62,0,0
		990	0.11	0.0	0.0	65,0,0	989	0.18	0.0	0.0	62,0,0
732	ok	976	0.08	0.0	0.0	65,0,0	977	0.03	0.0	0.0	62,0,0
		991	0.06	0.0	0.0	67,0,0	990	0.10	0.0	0.0	46,0,0
733	ok	977	0.02	0.0	0.0	63,0,0	978	9.91e-03	0.0	0.0	46,0,0
		992	0.02	0.0	0.0	68,0,0	991	0.04	0.0	0.0	68,0,0
734	ok	979	0.03	0.0	0.0	74,0,0	980	0.05	0.0	0.0	77,0,0
		994	0.07	0.0	0.0	77,0,0	993	0.04	0.0	0.0	77,0,0
735	ok	980	0.07	0.0	0.0	53,0,0	981	0.07	0.0	0.0	71,0,0
		995	0.32	0.0	0.0	61,0,0	994	0.04	0.0	0.0	77,0,0
736	ok	981	0.12	0.0	0.0	60,0,0	982	0.12	0.0	0.0	71,0,0
		996	0.09	0.0	0.0	58,0,0	995	0.21	0.0	0.0	77,0,0
737	ok	982	0.13	0.0	0.0	77,0,0	983	0.20	0.0	0.0	51,0,0
		997	0.20	0.0	0.0	70,0,0	996	0.10	0.0	0.0	58,0,0
738	ok	983	0.09	0.0	0.0	71,0,0	984	0.10	0.0	0.0	51,0,0
		998	0.12	0.0	0.0	51,0,0	997	0.42	0.0	0.0	51,0,0
739	ok	984	0.08	0.0	0.0	51,0,0	985	0.03	0.0	0.0	72,0,0
		999	0.05	0.0	0.0	51,0,0	998	0.11	0.0	0.0	51,0,0
740	ok	986	0.03	0.0	0.0	62,0,0	987	0.08	0.0	0.0	49,0,0
		1001	0.11	0.0	0.0	49,0,0	1000	0.04	0.0	0.0	49,0,0
741	ok	987	0.10	0.0	0.0	49,0,0	988	0.09	0.0	0.0	65,0,0
		1002	0.42	0.0	0.0	49,0,0	1001	0.12	0.0	0.0	49,0,0
742	ok	988	0.21	0.0	0.0	49,0,0	989	0.13	0.0	0.0	67,0,0
		1003	0.10	0.0	0.0	56,0,0	1002	0.21	0.0	0.0	64,0,0
743	ok	989	0.12	0.0	0.0	66,0,0	990	0.13	0.0	0.0	55,0,0
		1004	0.20	0.0	0.0	67,0,0	1003	0.10	0.0	0.0	56,0,0
744	ok	990	0.07	0.0	0.0	65,0,0	991	0.07	0.0	0.0	47,0,0
		1005	0.04	0.0	0.0	67,0,0	1004	0.32	0.0	0.0	55,0,0
745	ok	991	0.05	0.0	0.0	67,0,0	992	0.03	0.0	0.0	68,0,0
		1006	0.03	0.0	0.0	68,0,0	1005	0.06	0.0	0.0	67,0,0
746	ok	993	0.04	0.0	0.0	77,0,0	994	0.05	0.0	0.0	77,0,0
		1008	0.04	0.0	0.0	61,0,0	1007	0.03	0.0	0.0	61,0,0
747	ok	994	0.09	0.0	0.0	74,0,0	995	0.27	0.0	0.0	52,0,0
		1009	0.06	0.0	0.0	49,0,0	1008	0.07	0.0	0.0	52,0,0
748	ok	995	0.14	0.0	0.0	77,0,0	996	0.14	0.0	0.0	77,0,0
		1010	0.12	0.0	0.0	52,0,0	1009	0.14	0.0	0.0	52,0,0
749	ok	996	0.14	0.0	0.0	71,0,0	997	0.17	0.0	0.0	51,0,0
		1011	0.25	0.0	0.0	58,0,0	1010	0.13	0.0	0.0	55,0,0
750	ok	997	0.41	0.0	0.0	58,0,0	998	0.09	0.0	0.0	76,0,0
		1012	0.24	0.0	0.0	58,0,0	1011	0.09	0.0	0.0	55,0,0
751	ok	998	0.21	0.0	0.0	51,0,0	999	0.17	0.0	0.0	58,0,0
		1013	0.42	0.0	0.0	51,0,0	1012	0.20	0.0	0.0	54,0,0
752	ok	1000	0.17	0.0	0.0	56,0,0	1001	0.21	0.0	0.0	49,0,0
		1015	0.21	0.0	0.0	56,0,0	1014	0.43	0.0	0.0	49,0,0
753	ok	1001	0.09	0.0	0.0	66,0,0	1002	0.42	0.0	0.0	56,0,0
		1016	0.09	0.0	0.0	56,0,0	1015	0.25	0.0	0.0	56,0,0
754	ok	1002	0.17	0.0	0.0	49,0,0	1003	0.14	0.0	0.0	65,0,0
		1017	0.13	0.0	0.0	56,0,0	1016	0.26	0.0	0.0	61,0,0
755	ok	1003	0.14	0.0	0.0	67,0,0	1004	0.14	0.0	0.0	67,0,0
		1018	0.14	0.0	0.0	46,0,0	1017	0.12	0.0	0.0	46,0,0
756	ok	1004	0.27	0.0	0.0	51,0,0	1005	0.09	0.0	0.0	64,0,0
		1019	0.08	0.0	0.0	46,0,0	1018	0.06	0.0	0.0	51,0,0
757	ok	1005	0.05	0.0	0.0	67,0,0	1006	0.04	0.0	0.0	68,0,0
		1020	0.03	0.0	0.0	55,0,0	1019	0.04	0.0	0.0	47,0,0
758	ok	1007	0.03	0.0	0.0	61,0,0	1008	0.04	0.0	0.0	52,0,0
		1022	0.04	0.0	0.0	60,0,0	1021	0.03	0.0	0.0	60,0,0
759	ok	1008	0.08	0.0	0.0	53,0,0	1009	0.06	0.0	0.0	52,0,0
		1023	0.26	0.0	0.0	52,0,0	1022	0.08	0.0	0.0	75,0,0
760	ok	1009	0.13	0.0	0.0	52,0,0	1010	0.12	0.0	0.0	52,0,0
		1024	0.11	0.0	0.0	71,0,0	1023	0.13	0.0	0.0	60,0,0
761	ok	1010	0.13	0.0	0.0	58,0,0	1011	0.25	0.0	0.0	58,0,0
		1025	0.16	0.0	0.0	50,0,0	1024	0.10	0.0	0.0	77,0,0
762	ok	1011	0.09	0.0	0.0	58,0,0	1012	0.24	0.0	0.0	55,0,0
		1026	0.08	0.0	0.0	73,0,0	1025	0.41	0.0	0.0	58,0,0
763	ok	1012	0.20	0.0	0.0	58,0,0	1013	0.42	0.0	0.0	58,0,0
		1027	0.17	0.0	0.0	58,0,0	1026	0.21	0.0	0.0	50,0,0
764	ok	1014	0.43	0.0	0.0	56,0,0	1015	0.21	0.0	0.0	56,0,0
		1029	0.21	0.0	0.0	48,0,0	1028	0.17	0.0	0.0	56,0,0
765	ok	1015	0.25	0.0	0.0	61,0,0	1016	0.09	0.0	0.0	56,0,0



		1030	0.42	0.0	0.0	56,0,0	1029	0.09	0.0	0.0	65,0,0
766	ok	1016	0.26	0.0	0.0	56,0,0	1017	0.13	0.0	0.0	56,0,0
		1031	0.12	0.0	0.0	67,0,0	1030	0.16	0.0	0.0	48,0,0
767	ok	1017	0.13	0.0	0.0	46,0,0	1018	0.13	0.0	0.0	46,0,0
		1032	0.13	0.0	0.0	54,0,0	1031	0.13	0.0	0.0	65,0,0
768	ok	1018	0.06	0.0	0.0	46,0,0	1019	0.08	0.0	0.0	47,0,0
		1033	0.10	0.0	0.0	65,0,0	1032	0.27	0.0	0.0	46,0,0
769	ok	1019	0.04	0.0	0.0	46,0,0	1020	0.03	0.0	0.0	55,0,0
		1034	0.03	0.0	0.0	69,0,0	1033	0.04	0.0	0.0	54,0,0
770	ok	1021	0.03	0.0	0.0	76,0,0	1022	0.05	0.0	0.0	76,0,0
		1036	0.04	0.0	0.0	76,0,0	1035	0.02	0.0	0.0	76,0,0
771	ok	1022	0.04	0.0	0.0	60,0,0	1023	0.30	0.0	0.0	60,0,0
		1037	0.06	0.0	0.0	77,0,0	1036	0.06	0.0	0.0	60,0,0
772	ok	1023	0.18	0.0	0.0	71,0,0	1024	0.09	0.0	0.0	55,0,0
		1038	0.12	0.0	0.0	77,0,0	1037	0.12	0.0	0.0	60,0,0
773	ok	1024	0.09	0.0	0.0	55,0,0	1025	0.19	0.0	0.0	71,0,0
		1039	0.20	0.0	0.0	50,0,0	1038	0.12	0.0	0.0	71,0,0
774	ok	1025	0.41	0.0	0.0	50,0,0	1026	0.12	0.0	0.0	50,0,0
		1040	0.10	0.0	0.0	50,0,0	1039	0.07	0.0	0.0	70,0,0
775	ok	1026	0.11	0.0	0.0	50,0,0	1027	0.04	0.0	0.0	58,0,0
		1041	0.02	0.0	0.0	70,0,0	1040	0.08	0.0	0.0	50,0,0
776	ok	1028	0.04	0.0	0.0	56,0,0	1029	0.11	0.0	0.0	56,0,0
		1043	0.08	0.0	0.0	48,0,0	1042	0.02	0.0	0.0	64,0,0
777	ok	1029	0.12	0.0	0.0	48,0,0	1030	0.41	0.0	0.0	48,0,0
		1044	0.07	0.0	0.0	64,0,0	1043	0.10	0.0	0.0	48,0,0
778	ok	1030	0.21	0.0	0.0	65,0,0	1031	0.10	0.0	0.0	61,0,0
		1045	0.14	0.0	0.0	65,0,0	1044	0.20	0.0	0.0	48,0,0
779	ok	1031	0.09	0.0	0.0	61,0,0	1032	0.21	0.0	0.0	65,0,0
		1046	0.13	0.0	0.0	55,0,0	1045	0.13	0.0	0.0	67,0,0
780	ok	1032	0.30	0.0	0.0	54,0,0	1033	0.04	0.0	0.0	54,0,0
		1047	0.06	0.0	0.0	54,0,0	1046	0.07	0.0	0.0	67,0,0
781	ok	1033	0.05	0.0	0.0	54,0,0	1034	0.03	0.0	0.0	66,0,0
		1048	0.02	0.0	0.0	69,0,0	1047	0.04	0.0	0.0	65,0,0
782	ok	1035	0.02	0.0	0.0	76,0,0	1036	0.04	0.0	0.0	76,0,0
		1050	0.03	0.0	0.0	72,0,0	1049	8.14e-03	0.0	0.0	61,0,0
783	ok	1036	0.04	0.0	0.0	76,0,0	1037	0.10	0.0	0.0	52,0,0
		1051	0.05	0.0	0.0	61,0,0	1050	0.03	0.0	0.0	72,0,0
784	ok	1037	0.08	0.0	0.0	77,0,0	1038	0.13	0.0	0.0	75,0,0
		1052	0.17	0.0	0.0	75,0,0	1051	0.06	0.0	0.0	77,0,0
785	ok	1038	0.14	0.0	0.0	59,0,0	1039	0.11	0.0	0.0	50,0,0
		1053	0.10	0.0	0.0	58,0,0	1052	0.16	0.0	0.0	75,0,0
786	ok	1039	0.14	0.0	0.0	58,0,0	1040	0.08	0.0	0.0	50,0,0
		1054	0.06	0.0	0.0	58,0,0	1053	0.10	0.0	0.0	46,0,0
787	ok	1040	0.07	0.0	0.0	50,0,0	1041	0.02	0.0	0.0	70,0,0
		1055	6.85e-03	0.0	0.0	51,0,0	1054	0.05	0.0	0.0	58,0,0
788	ok	1042	0.02	0.0	0.0	68,0,0	1043	0.07	0.0	0.0	48,0,0
		1057	0.05	0.0	0.0	56,0,0	1056	7.11e-03	0.0	0.0	49,0,0
789	ok	1043	0.08	0.0	0.0	48,0,0	1044	0.14	0.0	0.0	56,0,0
		1058	0.10	0.0	0.0	52,0,0	1057	0.06	0.0	0.0	56,0,0
790	ok	1044	0.11	0.0	0.0	48,0,0	1045	0.15	0.0	0.0	57,0,0
		1059	0.18	0.0	0.0	69,0,0	1058	0.10	0.0	0.0	52,0,0
791	ok	1045	0.14	0.0	0.0	69,0,0	1046	0.10	0.0	0.0	67,0,0
		1060	0.08	0.0	0.0	67,0,0	1059	0.18	0.0	0.0	69,0,0
792	ok	1046	0.10	0.0	0.0	46,0,0	1047	0.04	0.0	0.0	65,0,0
		1061	0.04	0.0	0.0	62,0,0	1060	0.06	0.0	0.0	67,0,0
793	ok	1047	0.04	0.0	0.0	69,0,0	1048	0.02	0.0	0.0	66,0,0
		1062	8.39e-03	0.0	0.0	55,0,0	1061	0.03	0.0	0.0	62,0,0
794	ok	1063	8.47e-03	0.0	0.0	52,0,0	1064	0.02	0.0	0.0	73,0,0
		1078	0.04	0.0	0.0	77,0,0	1077	0.02	0.0	0.0	73,0,0
795	ok	1064	0.03	0.0	0.0	53,0,0	1065	0.06	0.0	0.0	77,0,0
		1079	0.09	0.0	0.0	49,0,0	1078	0.05	0.0	0.0	77,0,0
796	ok	1065	0.07	0.0	0.0	72,0,0	1066	0.19	0.0	0.0	71,0,0
		1080	0.13	0.0	0.0	70,0,0	1079	0.11	0.0	0.0	71,0,0
797	ok	1066	0.21	0.0	0.0	71,0,0	1067	0.10	0.0	0.0	51,0,0
		1081	0.13	0.0	0.0	71,0,0	1080	0.14	0.0	0.0	50,0,0
798	ok	1067	0.10	0.0	0.0	51,0,0	1068	0.05	0.0	0.0	59,0,0
		1082	0.08	0.0	0.0	51,0,0	1081	0.13	0.0	0.0	59,0,0
799	ok	1068	0.05	0.0	0.0	59,0,0	1069	6.94e-03	0.0	0.0	58,0,0
		1083	0.03	0.0	0.0	75,0,0	1082	0.07	0.0	0.0	51,0,0
800	ok	1070	6.93e-03	0.0	0.0	56,0,0	1071	0.04	0.0	0.0	57,0,0
		1085	0.08	0.0	0.0	49,0,0	1084	0.03	0.0	0.0	69,0,0
801	ok	1071	0.05	0.0	0.0	61,0,0	1072	0.10	0.0	0.0	49,0,0
		1086	0.13	0.0	0.0	61,0,0	1085	0.09	0.0	0.0	65,0,0
802	ok	1072	0.09	0.0	0.0	49,0,0	1073	0.27	0.0	0.0	65,0,0
		1087	0.15	0.0	0.0	65,0,0	1086	0.16	0.0	0.0	65,0,0
803	ok	1073	0.27	0.0	0.0	65,0,0	1074	0.08	0.0	0.0	65,0,0
		1088	0.14	0.0	0.0	65,0,0	1087	0.15	0.0	0.0	65,0,0



804	ok	1074	0.07	0.0	0.0	67,0,0	1075	0.03	0.0	0.0	47,0,0
		1089	0.07	0.0	0.0	67,0,0	1088	0.08	0.0	0.0	67,0,0
805	ok	1075	0.02	0.0	0.0	63,0,0	1076	8.27e-03	0.0	0.0	46,0,0
		1090	0.03	0.0	0.0	63,0,0	1089	0.05	0.0	0.0	67,0,0
806	ok	1077	0.03	0.0	0.0	73,0,0	1078	0.05	0.0	0.0	77,0,0
		1092	0.06	0.0	0.0	77,0,0	1091	0.03	0.0	0.0	73,0,0
807	ok	1078	0.06	0.0	0.0	61,0,0	1079	0.07	0.0	0.0	71,0,0
		1093	0.30	0.0	0.0	61,0,0	1092	0.04	0.0	0.0	77,0,0
808	ok	1079	0.12	0.0	0.0	61,0,0	1080	0.12	0.0	0.0	76,0,0
		1094	0.08	0.0	0.0	50,0,0	1093	0.20	0.0	0.0	77,0,0
809	ok	1080	0.12	0.0	0.0	70,0,0	1081	0.20	0.0	0.0	51,0,0
		1095	0.19	0.0	0.0	71,0,0	1094	0.09	0.0	0.0	50,0,0
810	ok	1081	0.09	0.0	0.0	71,0,0	1082	0.10	0.0	0.0	51,0,0
		1096	0.12	0.0	0.0	51,0,0	1095	0.41	0.0	0.0	51,0,0
811	ok	1082	0.09	0.0	0.0	51,0,0	1083	0.03	0.0	0.0	75,0,0
		1097	0.05	0.0	0.0	51,0,0	1096	0.11	0.0	0.0	51,0,0
812	ok	1084	0.03	0.0	0.0	69,0,0	1085	0.09	0.0	0.0	49,0,0
		1099	0.11	0.0	0.0	49,0,0	1098	0.05	0.0	0.0	49,0,0
813	ok	1085	0.10	0.0	0.0	49,0,0	1086	0.11	0.0	0.0	65,0,0
		1100	0.41	0.0	0.0	49,0,0	1099	0.12	0.0	0.0	49,0,0
814	ok	1086	0.19	0.0	0.0	49,0,0	1087	0.16	0.0	0.0	67,0,0
		1101	0.08	0.0	0.0	56,0,0	1100	0.24	0.0	0.0	65,0,0
815	ok	1087	0.16	0.0	0.0	65,0,0	1088	0.11	0.0	0.0	55,0,0
		1102	0.24	0.0	0.0	67,0,0	1101	0.08	0.0	0.0	56,0,0
816	ok	1088	0.09	0.0	0.0	65,0,0	1089	0.07	0.0	0.0	67,0,0
		1103	0.05	0.0	0.0	67,0,0	1102	0.32	0.0	0.0	67,0,0
817	ok	1089	0.06	0.0	0.0	67,0,0	1090	0.03	0.0	0.0	63,0,0
		1104	0.05	0.0	0.0	63,0,0	1103	0.08	0.0	0.0	67,0,0
818	ok	1091	0.04	0.0	0.0	73,0,0	1092	0.05	0.0	0.0	77,0,0
		1106	0.04	0.0	0.0	61,0,0	1105	0.03	0.0	0.0	56,0,0
819	ok	1092	0.08	0.0	0.0	70,0,0	1093	0.25	0.0	0.0	61,0,0
		1107	0.06	0.0	0.0	53,0,0	1106	0.07	0.0	0.0	60,0,0
820	ok	1093	0.14	0.0	0.0	77,0,0	1094	0.13	0.0	0.0	77,0,0
		1108	0.11	0.0	0.0	53,0,0	1107	0.13	0.0	0.0	53,0,0
821	ok	1094	0.13	0.0	0.0	71,0,0	1095	0.17	0.0	0.0	51,0,0
		1109	0.25	0.0	0.0	51,0,0	1108	0.12	0.0	0.0	59,0,0
822	ok	1095	0.40	0.0	0.0	51,0,0	1096	0.08	0.0	0.0	70,0,0
		1110	0.24	0.0	0.0	50,0,0	1109	0.09	0.0	0.0	55,0,0
823	ok	1096	0.21	0.0	0.0	51,0,0	1097	0.17	0.0	0.0	50,0,0
		1111	0.43	0.0	0.0	51,0,0	1110	0.20	0.0	0.0	51,0,0
824	ok	1098	0.16	0.0	0.0	49,0,0	1099	0.21	0.0	0.0	49,0,0
		1113	0.20	0.0	0.0	49,0,0	1112	0.42	0.0	0.0	49,0,0
825	ok	1099	0.10	0.0	0.0	65,0,0	1100	0.38	0.0	0.0	49,0,0
		1114	0.09	0.0	0.0	61,0,0	1113	0.23	0.0	0.0	48,0,0
826	ok	1100	0.18	0.0	0.0	49,0,0	1101	0.17	0.0	0.0	65,0,0
		1115	0.11	0.0	0.0	61,0,0	1114	0.24	0.0	0.0	49,0,0
827	ok	1101	0.17	0.0	0.0	67,0,0	1102	0.15	0.0	0.0	67,0,0
		1116	0.12	0.0	0.0	47,0,0	1115	0.10	0.0	0.0	51,0,0
828	ok	1102	0.23	0.0	0.0	55,0,0	1103	0.10	0.0	0.0	67,0,0
		1117	0.07	0.0	0.0	54,0,0	1116	0.06	0.0	0.0	47,0,0
829	ok	1103	0.06	0.0	0.0	67,0,0	1104	0.05	0.0	0.0	63,0,0
		1118	0.05	0.0	0.0	58,0,0	1117	0.05	0.0	0.0	55,0,0
830	ok	1105	0.03	0.0	0.0	52,0,0	1106	0.04	0.0	0.0	60,0,0
		1120	0.05	0.0	0.0	76,0,0	1119	0.04	0.0	0.0	76,0,0
831	ok	1106	0.07	0.0	0.0	53,0,0	1107	0.06	0.0	0.0	60,0,0
		1121	0.25	0.0	0.0	52,0,0	1120	0.09	0.0	0.0	71,0,0
832	ok	1107	0.13	0.0	0.0	60,0,0	1108	0.11	0.0	0.0	52,0,0
		1122	0.13	0.0	0.0	76,0,0	1121	0.14	0.0	0.0	76,0,0
833	ok	1108	0.12	0.0	0.0	58,0,0	1109	0.25	0.0	0.0	50,0,0
		1123	0.16	0.0	0.0	50,0,0	1122	0.13	0.0	0.0	70,0,0
834	ok	1109	0.09	0.0	0.0	58,0,0	1110	0.24	0.0	0.0	59,0,0
		1124	0.09	0.0	0.0	71,0,0	1123	0.40	0.0	0.0	50,0,0
835	ok	1110	0.20	0.0	0.0	58,0,0	1111	0.42	0.0	0.0	50,0,0
		1125	0.17	0.0	0.0	59,0,0	1124	0.21	0.0	0.0	50,0,0
836	ok	1112	0.42	0.0	0.0	56,0,0	1113	0.20	0.0	0.0	56,0,0
		1127	0.21	0.0	0.0	48,0,0	1126	0.16	0.0	0.0	61,0,0
837	ok	1113	0.23	0.0	0.0	57,0,0	1114	0.09	0.0	0.0	56,0,0
		1128	0.37	0.0	0.0	56,0,0	1127	0.10	0.0	0.0	64,0,0
838	ok	1114	0.24	0.0	0.0	48,0,0	1115	0.12	0.0	0.0	56,0,0
		1129	0.15	0.0	0.0	64,0,0	1128	0.17	0.0	0.0	48,0,0
839	ok	1115	0.11	0.0	0.0	46,0,0	1116	0.11	0.0	0.0	46,0,0
		1130	0.15	0.0	0.0	66,0,0	1129	0.15	0.0	0.0	66,0,0
840	ok	1116	0.06	0.0	0.0	54,0,0	1117	0.07	0.0	0.0	47,0,0
		1131	0.10	0.0	0.0	66,0,0	1130	0.23	0.0	0.0	46,0,0
841	ok	1117	0.05	0.0	0.0	54,0,0	1118	0.05	0.0	0.0	46,0,0
		1132	0.05	0.0	0.0	66,0,0	1131	0.06	0.0	0.0	66,0,0
842	ok	1119	0.04	0.0	0.0	72,0,0	1120	0.07	0.0	0.0	76,0,0



		1134	0.05	0.0	0.0	76,0,0	1133	0.03	0.0	0.0	72,0,0
843	ok	1120	0.04	0.0	0.0	60,0,0	1121	0.30	0.0	0.0	60,0,0
		1135	0.07	0.0	0.0	70,0,0	1134	0.06	0.0	0.0	60,0,0
844	ok	1121	0.20	0.0	0.0	71,0,0	1122	0.09	0.0	0.0	59,0,0
		1136	0.13	0.0	0.0	77,0,0	1135	0.12	0.0	0.0	61,0,0
845	ok	1122	0.09	0.0	0.0	59,0,0	1123	0.21	0.0	0.0	71,0,0
		1137	0.19	0.0	0.0	46,0,0	1136	0.13	0.0	0.0	71,0,0
846	ok	1123	0.41	0.0	0.0	50,0,0	1124	0.12	0.0	0.0	50,0,0
		1138	0.10	0.0	0.0	50,0,0	1137	0.08	0.0	0.0	70,0,0
847	ok	1124	0.11	0.0	0.0	50,0,0	1125	0.05	0.0	0.0	58,0,0
		1139	0.03	0.0	0.0	74,0,0	1138	0.08	0.0	0.0	50,0,0
848	ok	1126	0.06	0.0	0.0	68,0,0	1127	0.11	0.0	0.0	48,0,0
		1141	0.09	0.0	0.0	48,0,0	1140	0.04	0.0	0.0	68,0,0
849	ok	1127	0.12	0.0	0.0	48,0,0	1128	0.39	0.0	0.0	48,0,0
		1142	0.09	0.0	0.0	64,0,0	1141	0.10	0.0	0.0	56,0,0
850	ok	1128	0.22	0.0	0.0	64,0,0	1129	0.08	0.0	0.0	57,0,0
		1143	0.13	0.0	0.0	66,0,0	1142	0.18	0.0	0.0	52,0,0
851	ok	1129	0.07	0.0	0.0	57,0,0	1130	0.23	0.0	0.0	66,0,0
		1144	0.10	0.0	0.0	55,0,0	1143	0.13	0.0	0.0	64,0,0
852	ok	1130	0.29	0.0	0.0	66,0,0	1131	0.05	0.0	0.0	54,0,0
		1145	0.07	0.0	0.0	66,0,0	1144	0.08	0.0	0.0	64,0,0
853	ok	1131	0.08	0.0	0.0	66,0,0	1132	0.05	0.0	0.0	62,0,0
		1146	0.04	0.0	0.0	62,0,0	1145	0.06	0.0	0.0	66,0,0
854	ok	1133	0.02	0.0	0.0	72,0,0	1134	0.04	0.0	0.0	76,0,0
		1148	0.03	0.0	0.0	72,0,0	1147	8.26e-03	0.0	0.0	61,0,0
855	ok	1134	0.05	0.0	0.0	76,0,0	1135	0.09	0.0	0.0	52,0,0
		1149	0.05	0.0	0.0	61,0,0	1148	0.03	0.0	0.0	72,0,0
856	ok	1135	0.10	0.0	0.0	70,0,0	1136	0.14	0.0	0.0	71,0,0
		1150	0.18	0.0	0.0	70,0,0	1149	0.06	0.0	0.0	73,0,0
857	ok	1136	0.14	0.0	0.0	71,0,0	1137	0.12	0.0	0.0	70,0,0
		1151	0.10	0.0	0.0	51,0,0	1150	0.19	0.0	0.0	70,0,0
858	ok	1137	0.13	0.0	0.0	58,0,0	1138	0.08	0.0	0.0	50,0,0
		1152	0.06	0.0	0.0	58,0,0	1151	0.10	0.0	0.0	50,0,0
859	ok	1138	0.07	0.0	0.0	58,0,0	1139	0.03	0.0	0.0	74,0,0
		1153	6.91e-03	0.0	0.0	51,0,0	1152	0.05	0.0	0.0	58,0,0
860	ok	1140	0.03	0.0	0.0	68,0,0	1141	0.08	0.0	0.0	56,0,0
		1155	0.05	0.0	0.0	56,0,0	1154	5.80e-03	0.0	0.0	56,0,0
861	ok	1141	0.09	0.0	0.0	48,0,0	1142	0.13	0.0	0.0	56,0,0
		1156	0.09	0.0	0.0	52,0,0	1155	0.06	0.0	0.0	56,0,0
862	ok	1142	0.13	0.0	0.0	64,0,0	1143	0.11	0.0	0.0	64,0,0
		1157	0.17	0.0	0.0	67,0,0	1156	0.09	0.0	0.0	49,0,0
863	ok	1143	0.11	0.0	0.0	64,0,0	1144	0.11	0.0	0.0	64,0,0
		1158	0.07	0.0	0.0	63,0,0	1157	0.18	0.0	0.0	67,0,0
864	ok	1144	0.09	0.0	0.0	62,0,0	1145	0.06	0.0	0.0	66,0,0
		1159	0.03	0.0	0.0	62,0,0	1158	0.04	0.0	0.0	55,0,0
865	ok	1145	0.06	0.0	0.0	66,0,0	1146	0.03	0.0	0.0	62,0,0
		1160	6.86e-03	0.0	0.0	55,0,0	1159	0.02	0.0	0.0	62,0,0
866	ok	1161	8.29e-03	0.0	0.0	52,0,0	1162	0.03	0.0	0.0	73,0,0
		1176	0.05	0.0	0.0	77,0,0	1175	0.02	0.0	0.0	73,0,0
867	ok	1162	0.03	0.0	0.0	73,0,0	1163	0.06	0.0	0.0	77,0,0
		1177	0.09	0.0	0.0	49,0,0	1176	0.05	0.0	0.0	77,0,0
868	ok	1163	0.06	0.0	0.0	72,0,0	1164	0.19	0.0	0.0	71,0,0
		1178	0.13	0.0	0.0	70,0,0	1177	0.11	0.0	0.0	71,0,0
869	ok	1164	0.20	0.0	0.0	71,0,0	1165	0.10	0.0	0.0	46,0,0
		1179	0.13	0.0	0.0	71,0,0	1178	0.14	0.0	0.0	70,0,0
870	ok	1165	0.10	0.0	0.0	51,0,0	1166	0.06	0.0	0.0	59,0,0
		1180	0.08	0.0	0.0	51,0,0	1179	0.13	0.0	0.0	59,0,0
871	ok	1166	0.05	0.0	0.0	59,0,0	1167	6.89e-03	0.0	0.0	58,0,0
		1181	0.03	0.0	0.0	75,0,0	1180	0.07	0.0	0.0	51,0,0
872	ok	1168	5.82e-03	0.0	0.0	56,0,0	1169	0.04	0.0	0.0	57,0,0
		1183	0.07	0.0	0.0	49,0,0	1182	0.02	0.0	0.0	69,0,0
873	ok	1169	0.05	0.0	0.0	57,0,0	1170	0.08	0.0	0.0	49,0,0
		1184	0.11	0.0	0.0	61,0,0	1183	0.07	0.0	0.0	49,0,0
874	ok	1170	0.11	0.0	0.0	68,0,0	1171	0.26	0.0	0.0	66,0,0
		1185	0.15	0.0	0.0	64,0,0	1184	0.12	0.0	0.0	66,0,0
875	ok	1171	0.26	0.0	0.0	66,0,0	1172	0.11	0.0	0.0	62,0,0
		1186	0.13	0.0	0.0	66,0,0	1185	0.15	0.0	0.0	66,0,0
876	ok	1172	0.04	0.0	0.0	67,0,0	1173	0.03	0.0	0.0	63,0,0
		1187	0.05	0.0	0.0	67,0,0	1186	0.08	0.0	0.0	66,0,0
877	ok	1173	0.02	0.0	0.0	63,0,0	1174	6.73e-03	0.0	0.0	46,0,0
		1188	0.02	0.0	0.0	68,0,0	1187	0.04	0.0	0.0	64,0,0
878	ok	1175	0.03	0.0	0.0	73,0,0	1176	0.05	0.0	0.0	77,0,0
		1190	0.07	0.0	0.0	77,0,0	1189	0.04	0.0	0.0	73,0,0
879	ok	1176	0.06	0.0	0.0	61,0,0	1177	0.07	0.0	0.0	71,0,0
		1191	0.30	0.0	0.0	61,0,0	1190	0.04	0.0	0.0	77,0,0
880	ok	1177	0.12	0.0	0.0	61,0,0	1178	0.13	0.0	0.0	76,0,0
		1192	0.08	0.0	0.0	58,0,0	1191	0.21	0.0	0.0	77,0,0



881	ok	1178	0.14	0.0	0.0	70,0,0	1179	0.19	0.0	0.0	51,0,0
		1193	0.21	0.0	0.0	70,0,0	1192	0.09	0.0	0.0	58,0,0
882	ok	1179	0.09	0.0	0.0	71,0,0	1180	0.10	0.0	0.0	51,0,0
		1194	0.12	0.0	0.0	51,0,0	1193	0.41	0.0	0.0	51,0,0
883	ok	1180	0.09	0.0	0.0	51,0,0	1181	0.03	0.0	0.0	75,0,0
		1195	0.05	0.0	0.0	51,0,0	1194	0.11	0.0	0.0	51,0,0
884	ok	1182	0.03	0.0	0.0	62,0,0	1183	0.08	0.0	0.0	49,0,0
		1197	0.10	0.0	0.0	49,0,0	1196	0.04	0.0	0.0	49,0,0
885	ok	1183	0.09	0.0	0.0	49,0,0	1184	0.07	0.0	0.0	66,0,0
		1198	0.36	0.0	0.0	49,0,0	1197	0.11	0.0	0.0	49,0,0
886	ok	1184	0.17	0.0	0.0	49,0,0	1185	0.18	0.0	0.0	64,0,0
		1199	0.06	0.0	0.0	56,0,0	1198	0.22	0.0	0.0	64,0,0
887	ok	1185	0.17	0.0	0.0	66,0,0	1186	0.09	0.0	0.0	55,0,0
		1200	0.22	0.0	0.0	64,0,0	1199	0.05	0.0	0.0	56,0,0
888	ok	1186	0.08	0.0	0.0	66,0,0	1187	0.06	0.0	0.0	67,0,0
		1201	0.04	0.0	0.0	63,0,0	1200	0.24	0.0	0.0	55,0,0
889	ok	1187	0.04	0.0	0.0	64,0,0	1188	0.03	0.0	0.0	68,0,0
		1202	0.03	0.0	0.0	68,0,0	1201	0.06	0.0	0.0	67,0,0
890	ok	1189	0.04	0.0	0.0	73,0,0	1190	0.05	0.0	0.0	77,0,0
		1204	0.04	0.0	0.0	61,0,0	1203	0.03	0.0	0.0	60,0,0
891	ok	1190	0.09	0.0	0.0	70,0,0	1191	0.25	0.0	0.0	53,0,0
		1205	0.06	0.0	0.0	53,0,0	1204	0.07	0.0	0.0	60,0,0
892	ok	1191	0.15	0.0	0.0	77,0,0	1192	0.14	0.0	0.0	77,0,0
		1206	0.11	0.0	0.0	53,0,0	1205	0.12	0.0	0.0	53,0,0
893	ok	1192	0.14	0.0	0.0	71,0,0	1193	0.17	0.0	0.0	51,0,0
		1207	0.25	0.0	0.0	59,0,0	1206	0.12	0.0	0.0	59,0,0
894	ok	1193	0.40	0.0	0.0	51,0,0	1194	0.09	0.0	0.0	70,0,0
		1208	0.24	0.0	0.0	50,0,0	1207	0.09	0.0	0.0	59,0,0
895	ok	1194	0.21	0.0	0.0	51,0,0	1195	0.17	0.0	0.0	50,0,0
		1209	0.43	0.0	0.0	51,0,0	1208	0.20	0.0	0.0	51,0,0
896	ok	1196	0.16	0.0	0.0	48,0,0	1197	0.20	0.0	0.0	49,0,0
		1211	0.19	0.0	0.0	49,0,0	1210	0.40	0.0	0.0	49,0,0
897	ok	1197	0.09	0.0	0.0	64,0,0	1198	0.35	0.0	0.0	49,0,0
		1212	0.08	0.0	0.0	61,0,0	1211	0.22	0.0	0.0	48,0,0
898	ok	1198	0.15	0.0	0.0	49,0,0	1199	0.14	0.0	0.0	66,0,0
		1213	0.11	0.0	0.0	57,0,0	1212	0.22	0.0	0.0	57,0,0
899	ok	1199	0.15	0.0	0.0	64,0,0	1200	0.13	0.0	0.0	67,0,0
		1214	0.09	0.0	0.0	51,0,0	1213	0.10	0.0	0.0	47,0,0
900	ok	1200	0.21	0.0	0.0	47,0,0	1201	0.10	0.0	0.0	64,0,0
		1215	0.06	0.0	0.0	54,0,0	1214	0.05	0.0	0.0	47,0,0
901	ok	1201	0.04	0.0	0.0	67,0,0	1202	0.04	0.0	0.0	68,0,0
		1216	0.03	0.0	0.0	58,0,0	1215	0.03	0.0	0.0	47,0,0
902	ok	1203	0.03	0.0	0.0	52,0,0	1204	0.04	0.0	0.0	60,0,0
		1218	0.05	0.0	0.0	76,0,0	1217	0.04	0.0	0.0	76,0,0
903	ok	1204	0.07	0.0	0.0	53,0,0	1205	0.06	0.0	0.0	52,0,0
		1219	0.25	0.0	0.0	52,0,0	1218	0.10	0.0	0.0	71,0,0
904	ok	1205	0.12	0.0	0.0	52,0,0	1206	0.11	0.0	0.0	52,0,0
		1220	0.14	0.0	0.0	76,0,0	1219	0.15	0.0	0.0	76,0,0
905	ok	1206	0.12	0.0	0.0	58,0,0	1207	0.25	0.0	0.0	50,0,0
		1221	0.17	0.0	0.0	50,0,0	1220	0.14	0.0	0.0	70,0,0
906	ok	1207	0.09	0.0	0.0	58,0,0	1208	0.24	0.0	0.0	59,0,0
		1222	0.09	0.0	0.0	71,0,0	1221	0.40	0.0	0.0	58,0,0
907	ok	1208	0.20	0.0	0.0	58,0,0	1209	0.43	0.0	0.0	58,0,0
		1223	0.17	0.0	0.0	59,0,0	1222	0.21	0.0	0.0	50,0,0
908	ok	1210	0.40	0.0	0.0	56,0,0	1211	0.19	0.0	0.0	56,0,0
		1225	0.19	0.0	0.0	48,0,0	1224	0.16	0.0	0.0	57,0,0
909	ok	1211	0.22	0.0	0.0	57,0,0	1212	0.08	0.0	0.0	56,0,0
		1226	0.36	0.0	0.0	56,0,0	1225	0.10	0.0	0.0	65,0,0
910	ok	1212	0.22	0.0	0.0	48,0,0	1213	0.11	0.0	0.0	56,0,0
		1227	0.15	0.0	0.0	67,0,0	1226	0.15	0.0	0.0	48,0,0
911	ok	1213	0.10	0.0	0.0	46,0,0	1214	0.10	0.0	0.0	46,0,0
		1228	0.13	0.0	0.0	66,0,0	1227	0.15	0.0	0.0	65,0,0
912	ok	1214	0.05	0.0	0.0	54,0,0	1215	0.06	0.0	0.0	47,0,0
		1229	0.11	0.0	0.0	65,0,0	1228	0.21	0.0	0.0	46,0,0
913	ok	1215	0.04	0.0	0.0	54,0,0	1216	0.03	0.0	0.0	46,0,0
		1230	0.04	0.0	0.0	65,0,0	1229	0.05	0.0	0.0	66,0,0
914	ok	1217	0.04	0.0	0.0	72,0,0	1218	0.07	0.0	0.0	76,0,0
		1232	0.05	0.0	0.0	76,0,0	1231	0.03	0.0	0.0	72,0,0
915	ok	1218	0.04	0.0	0.0	76,0,0	1219	0.30	0.0	0.0	76,0,0
		1233	0.07	0.0	0.0	70,0,0	1232	0.06	0.0	0.0	76,0,0
916	ok	1219	0.22	0.0	0.0	76,0,0	1220	0.08	0.0	0.0	59,0,0
		1234	0.14	0.0	0.0	77,0,0	1233	0.11	0.0	0.0	61,0,0
917	ok	1220	0.09	0.0	0.0	59,0,0	1221	0.22	0.0	0.0	71,0,0
		1235	0.19	0.0	0.0	50,0,0	1234	0.15	0.0	0.0	71,0,0
918	ok	1221	0.41	0.0	0.0	50,0,0	1222	0.12	0.0	0.0	58,0,0
		1236	0.10	0.0	0.0	50,0,0	1235	0.09	0.0	0.0	70,0,0
919	ok	1222	0.11	0.0	0.0	58,0,0	1223	0.05	0.0	0.0	74,0,0



		1237	0.03	0.0	0.0	74,0,0	1236	0.09	0.0	0.0	50,0,0
920	ok	1224	0.04	0.0	0.0	68,0,0	1225	0.10	0.0	0.0	56,0,0
		1239	0.08	0.0	0.0	48,0,0	1238	0.03	0.0	0.0	63,0,0
921	ok	1225	0.11	0.0	0.0	56,0,0	1226	0.36	0.0	0.0	48,0,0
		1240	0.08	0.0	0.0	64,0,0	1239	0.09	0.0	0.0	48,0,0
922	ok	1226	0.23	0.0	0.0	65,0,0	1227	0.07	0.0	0.0	57,0,0
		1241	0.17	0.0	0.0	65,0,0	1240	0.17	0.0	0.0	48,0,0
923	ok	1227	0.06	0.0	0.0	57,0,0	1228	0.23	0.0	0.0	65,0,0
		1242	0.10	0.0	0.0	55,0,0	1241	0.17	0.0	0.0	67,0,0
924	ok	1228	0.26	0.0	0.0	66,0,0	1229	0.04	0.0	0.0	62,0,0
		1243	0.06	0.0	0.0	66,0,0	1242	0.08	0.0	0.0	67,0,0
925	ok	1229	0.06	0.0	0.0	66,0,0	1230	0.03	0.0	0.0	62,0,0
		1244	0.03	0.0	0.0	69,0,0	1243	0.05	0.0	0.0	65,0,0
926	ok	1231	0.02	0.0	0.0	72,0,0	1232	0.05	0.0	0.0	76,0,0
		1246	0.03	0.0	0.0	72,0,0	1245	8.12e-03	0.0	0.0	61,0,0
927	ok	1232	0.06	0.0	0.0	76,0,0	1233	0.09	0.0	0.0	52,0,0
		1247	0.05	0.0	0.0	76,0,0	1246	0.03	0.0	0.0	72,0,0
928	ok	1233	0.12	0.0	0.0	70,0,0	1234	0.14	0.0	0.0	75,0,0
		1248	0.20	0.0	0.0	70,0,0	1247	0.07	0.0	0.0	73,0,0
929	ok	1234	0.14	0.0	0.0	75,0,0	1235	0.14	0.0	0.0	70,0,0
		1249	0.10	0.0	0.0	51,0,0	1248	0.21	0.0	0.0	70,0,0
930	ok	1235	0.13	0.0	0.0	58,0,0	1236	0.08	0.0	0.0	50,0,0
		1250	0.06	0.0	0.0	58,0,0	1249	0.10	0.0	0.0	50,0,0
931	ok	1236	0.07	0.0	0.0	58,0,0	1237	0.03	0.0	0.0	74,0,0
		1251	6.85e-03	0.0	0.0	51,0,0	1250	0.05	0.0	0.0	58,0,0
932	ok	1238	0.03	0.0	0.0	68,0,0	1239	0.06	0.0	0.0	56,0,0
		1253	0.04	0.0	0.0	56,0,0	1252	6.28e-03	0.0	0.0	49,0,0
933	ok	1239	0.07	0.0	0.0	48,0,0	1240	0.12	0.0	0.0	56,0,0
		1254	0.08	0.0	0.0	48,0,0	1253	0.05	0.0	0.0	56,0,0
934	ok	1240	0.12	0.0	0.0	67,0,0	1241	0.14	0.0	0.0	65,0,0
		1255	0.21	0.0	0.0	67,0,0	1254	0.09	0.0	0.0	57,0,0
935	ok	1241	0.15	0.0	0.0	67,0,0	1242	0.12	0.0	0.0	67,0,0
		1256	0.08	0.0	0.0	67,0,0	1255	0.21	0.0	0.0	67,0,0
936	ok	1242	0.08	0.0	0.0	67,0,0	1243	0.05	0.0	0.0	66,0,0
		1257	0.03	0.0	0.0	62,0,0	1256	0.04	0.0	0.0	67,0,0
937	ok	1243	0.05	0.0	0.0	65,0,0	1244	0.02	0.0	0.0	69,0,0
		1258	7.09e-03	0.0	0.0	55,0,0	1257	0.02	0.0	0.0	62,0,0
938	ok	1259	7.93e-03	0.0	0.0	52,0,0	1260	0.03	0.0	0.0	73,0,0
		1274	0.05	0.0	0.0	77,0,0	1273	0.02	0.0	0.0	73,0,0
939	ok	1260	0.03	0.0	0.0	73,0,0	1261	0.05	0.0	0.0	77,0,0
		1275	0.09	0.0	0.0	73,0,0	1274	0.05	0.0	0.0	77,0,0
940	ok	1261	0.06	0.0	0.0	72,0,0	1262	0.17	0.0	0.0	70,0,0
		1276	0.12	0.0	0.0	70,0,0	1275	0.11	0.0	0.0	71,0,0
941	ok	1262	0.18	0.0	0.0	71,0,0	1263	0.10	0.0	0.0	51,0,0
		1277	0.13	0.0	0.0	71,0,0	1276	0.14	0.0	0.0	70,0,0
942	ok	1263	0.10	0.0	0.0	51,0,0	1264	0.06	0.0	0.0	59,0,0
		1278	0.08	0.0	0.0	51,0,0	1277	0.14	0.0	0.0	59,0,0
943	ok	1264	0.05	0.0	0.0	59,0,0	1265	6.79e-03	0.0	0.0	58,0,0
		1279	0.03	0.0	0.0	75,0,0	1278	0.08	0.0	0.0	51,0,0
944	ok	1266	6.39e-03	0.0	0.0	56,0,0	1267	0.05	0.0	0.0	57,0,0
		1281	0.08	0.0	0.0	49,0,0	1280	0.03	0.0	0.0	69,0,0
945	ok	1267	0.06	0.0	0.0	57,0,0	1268	0.10	0.0	0.0	49,0,0
		1282	0.13	0.0	0.0	57,0,0	1281	0.09	0.0	0.0	49,0,0
946	ok	1268	0.09	0.0	0.0	49,0,0	1269	0.22	0.0	0.0	65,0,0
		1283	0.12	0.0	0.0	65,0,0	1282	0.15	0.0	0.0	65,0,0
947	ok	1269	0.20	0.0	0.0	65,0,0	1270	0.06	0.0	0.0	65,0,0
		1284	0.12	0.0	0.0	65,0,0	1283	0.12	0.0	0.0	65,0,0
948	ok	1270	0.05	0.0	0.0	67,0,0	1271	0.03	0.0	0.0	63,0,0
		1285	0.06	0.0	0.0	67,0,0	1284	0.09	0.0	0.0	63,0,0
949	ok	1271	0.03	0.0	0.0	63,0,0	1272	7.48e-03	0.0	0.0	46,0,0
		1286	0.03	0.0	0.0	63,0,0	1285	0.05	0.0	0.0	67,0,0
950	ok	1273	0.03	0.0	0.0	73,0,0	1274	0.05	0.0	0.0	77,0,0
		1288	0.07	0.0	0.0	77,0,0	1287	0.04	0.0	0.0	73,0,0
951	ok	1274	0.06	0.0	0.0	77,0,0	1275	0.07	0.0	0.0	71,0,0
		1289	0.30	0.0	0.0	77,0,0	1288	0.04	0.0	0.0	73,0,0
952	ok	1275	0.12	0.0	0.0	61,0,0	1276	0.14	0.0	0.0	76,0,0
		1290	0.08	0.0	0.0	58,0,0	1289	0.22	0.0	0.0	70,0,0
953	ok	1276	0.14	0.0	0.0	70,0,0	1277	0.20	0.0	0.0	51,0,0
		1291	0.22	0.0	0.0	70,0,0	1290	0.09	0.0	0.0	58,0,0
954	ok	1277	0.09	0.0	0.0	71,0,0	1278	0.10	0.0	0.0	51,0,0
		1292	0.12	0.0	0.0	51,0,0	1291	0.42	0.0	0.0	51,0,0
955	ok	1278	0.09	0.0	0.0	51,0,0	1279	0.03	0.0	0.0	75,0,0
		1293	0.05	0.0	0.0	51,0,0	1292	0.11	0.0	0.0	51,0,0
956	ok	1280	0.04	0.0	0.0	69,0,0	1281	0.09	0.0	0.0	49,0,0
		1295	0.12	0.0	0.0	49,0,0	1294	0.05	0.0	0.0	49,0,0
957	ok	1281	0.10	0.0	0.0	49,0,0	1282	0.10	0.0	0.0	65,0,0
		1296	0.42	0.0	0.0	49,0,0	1295	0.13	0.0	0.0	49,0,0



958	ok	1282	0.19	0.0	0.0	49,0,0	1283	0.14	0.0	0.0	67,0,0
		1297	0.09	0.0	0.0	56,0,0	1296	0.22	0.0	0.0	65,0,0
959	ok	1283	0.14	0.0	0.0	65,0,0	1284	0.11	0.0	0.0	55,0,0
		1298	0.23	0.0	0.0	67,0,0	1297	0.08	0.0	0.0	56,0,0
960	ok	1284	0.08	0.0	0.0	65,0,0	1285	0.07	0.0	0.0	67,0,0
		1299	0.05	0.0	0.0	55,0,0	1298	0.31	0.0	0.0	67,0,0
961	ok	1285	0.06	0.0	0.0	67,0,0	1286	0.03	0.0	0.0	63,0,0
		1300	0.04	0.0	0.0	63,0,0	1299	0.07	0.0	0.0	67,0,0
962	ok	1287	0.04	0.0	0.0	73,0,0	1288	0.05	0.0	0.0	77,0,0
		1302	0.04	0.0	0.0	53,0,0	1301	0.04	0.0	0.0	60,0,0
963	ok	1288	0.09	0.0	0.0	70,0,0	1289	0.25	0.0	0.0	53,0,0
		1303	0.06	0.0	0.0	53,0,0	1302	0.08	0.0	0.0	60,0,0
964	ok	1289	0.15	0.0	0.0	77,0,0	1290	0.13	0.0	0.0	70,0,0
		1304	0.11	0.0	0.0	53,0,0	1303	0.12	0.0	0.0	53,0,0
965	ok	1290	0.13	0.0	0.0	71,0,0	1291	0.17	0.0	0.0	51,0,0
		1305	0.25	0.0	0.0	59,0,0	1304	0.12	0.0	0.0	59,0,0
966	ok	1291	0.41	0.0	0.0	51,0,0	1292	0.09	0.0	0.0	76,0,0
		1306	0.24	0.0	0.0	50,0,0	1305	0.09	0.0	0.0	59,0,0
967	ok	1292	0.21	0.0	0.0	51,0,0	1293	0.17	0.0	0.0	51,0,0
		1307	0.44	0.0	0.0	51,0,0	1306	0.21	0.0	0.0	51,0,0
968	ok	1294	0.17	0.0	0.0	49,0,0	1295	0.22	0.0	0.0	49,0,0
		1309	0.21	0.0	0.0	49,0,0	1308	0.44	0.0	0.0	49,0,0
969	ok	1295	0.09	0.0	0.0	65,0,0	1296	0.40	0.0	0.0	49,0,0
		1310	0.09	0.0	0.0	57,0,0	1309	0.24	0.0	0.0	48,0,0
970	ok	1296	0.18	0.0	0.0	49,0,0	1297	0.15	0.0	0.0	65,0,0
		1311	0.12	0.0	0.0	57,0,0	1310	0.25	0.0	0.0	57,0,0
971	ok	1297	0.15	0.0	0.0	67,0,0	1298	0.16	0.0	0.0	67,0,0
		1312	0.12	0.0	0.0	47,0,0	1311	0.11	0.0	0.0	47,0,0
972	ok	1298	0.25	0.0	0.0	47,0,0	1299	0.09	0.0	0.0	67,0,0
		1313	0.08	0.0	0.0	54,0,0	1312	0.06	0.0	0.0	47,0,0
973	ok	1299	0.06	0.0	0.0	67,0,0	1300	0.05	0.0	0.0	63,0,0
		1314	0.04	0.0	0.0	54,0,0	1313	0.04	0.0	0.0	55,0,0
974	ok	1301	0.04	0.0	0.0	52,0,0	1302	0.05	0.0	0.0	60,0,0
		1316	0.06	0.0	0.0	76,0,0	1315	0.05	0.0	0.0	76,0,0
975	ok	1302	0.07	0.0	0.0	53,0,0	1303	0.06	0.0	0.0	60,0,0
		1317	0.25	0.0	0.0	53,0,0	1316	0.11	0.0	0.0	71,0,0
976	ok	1303	0.13	0.0	0.0	61,0,0	1304	0.11	0.0	0.0	52,0,0
		1318	0.17	0.0	0.0	76,0,0	1317	0.16	0.0	0.0	76,0,0
977	ok	1304	0.12	0.0	0.0	58,0,0	1305	0.25	0.0	0.0	51,0,0
		1319	0.17	0.0	0.0	50,0,0	1318	0.16	0.0	0.0	70,0,0
978	ok	1305	0.09	0.0	0.0	58,0,0	1306	0.25	0.0	0.0	59,0,0
		1320	0.11	0.0	0.0	77,0,0	1319	0.40	0.0	0.0	59,0,0
979	ok	1306	0.21	0.0	0.0	59,0,0	1307	0.43	0.0	0.0	58,0,0
		1321	0.18	0.0	0.0	59,0,0	1320	0.21	0.0	0.0	58,0,0
980	ok	1308	0.43	0.0	0.0	56,0,0	1309	0.21	0.0	0.0	57,0,0
		1323	0.22	0.0	0.0	56,0,0	1322	0.17	0.0	0.0	57,0,0
981	ok	1309	0.25	0.0	0.0	57,0,0	1310	0.09	0.0	0.0	56,0,0
		1324	0.40	0.0	0.0	57,0,0	1323	0.11	0.0	0.0	64,0,0
982	ok	1310	0.25	0.0	0.0	49,0,0	1311	0.12	0.0	0.0	56,0,0
		1325	0.18	0.0	0.0	64,0,0	1324	0.18	0.0	0.0	48,0,0
983	ok	1311	0.11	0.0	0.0	46,0,0	1312	0.13	0.0	0.0	55,0,0
		1326	0.16	0.0	0.0	66,0,0	1325	0.18	0.0	0.0	66,0,0
984	ok	1312	0.06	0.0	0.0	54,0,0	1313	0.07	0.0	0.0	47,0,0
		1327	0.12	0.0	0.0	66,0,0	1326	0.25	0.0	0.0	47,0,0
985	ok	1313	0.05	0.0	0.0	54,0,0	1314	0.04	0.0	0.0	46,0,0
		1328	0.06	0.0	0.0	66,0,0	1327	0.07	0.0	0.0	66,0,0
986	ok	1315	0.05	0.0	0.0	72,0,0	1316	0.08	0.0	0.0	76,0,0
		1330	0.06	0.0	0.0	76,0,0	1329	0.04	0.0	0.0	76,0,0
987	ok	1316	0.05	0.0	0.0	76,0,0	1317	0.33	0.0	0.0	76,0,0
		1331	0.08	0.0	0.0	70,0,0	1330	0.07	0.0	0.0	76,0,0
988	ok	1317	0.25	0.0	0.0	76,0,0	1318	0.09	0.0	0.0	59,0,0
		1332	0.15	0.0	0.0	77,0,0	1331	0.12	0.0	0.0	61,0,0
989	ok	1318	0.09	0.0	0.0	59,0,0	1319	0.26	0.0	0.0	71,0,0
		1333	0.19	0.0	0.0	51,0,0	1332	0.15	0.0	0.0	76,0,0
990	ok	1319	0.41	0.0	0.0	50,0,0	1320	0.12	0.0	0.0	58,0,0
		1334	0.10	0.0	0.0	58,0,0	1333	0.10	0.0	0.0	70,0,0
991	ok	1320	0.11	0.0	0.0	58,0,0	1321	0.05	0.0	0.0	74,0,0
		1335	0.04	0.0	0.0	70,0,0	1334	0.09	0.0	0.0	58,0,0
992	ok	1322	0.06	0.0	0.0	68,0,0	1323	0.11	0.0	0.0	56,0,0
		1337	0.09	0.0	0.0	56,0,0	1336	0.04	0.0	0.0	64,0,0
993	ok	1323	0.12	0.0	0.0	56,0,0	1324	0.42	0.0	0.0	48,0,0
		1338	0.11	0.0	0.0	64,0,0	1337	0.10	0.0	0.0	56,0,0
994	ok	1324	0.25	0.0	0.0	64,0,0	1325	0.09	0.0	0.0	57,0,0
		1339	0.17	0.0	0.0	66,0,0	1338	0.19	0.0	0.0	49,0,0
995	ok	1325	0.08	0.0	0.0	57,0,0	1326	0.27	0.0	0.0	66,0,0
		1340	0.11	0.0	0.0	55,0,0	1339	0.16	0.0	0.0	64,0,0
996	ok	1326	0.34	0.0	0.0	66,0,0	1327	0.05	0.0	0.0	66,0,0



		1341	0.08	0.0	0.0	66,0,0	1340	0.09	0.0	0.0	64,0,0
997	ok	1327	0.09	0.0	0.0	66,0,0	1328	0.05	0.0	0.0	62,0,0
		1342	0.04	0.0	0.0	66,0,0	1341	0.06	0.0	0.0	66,0,0
998	ok	1329	0.03	0.0	0.0	72,0,0	1330	0.05	0.0	0.0	76,0,0
		1344	0.02	0.0	0.0	72,0,0	1343	8.31e-03	0.0	0.0	61,0,0
999	ok	1330	0.06	0.0	0.0	76,0,0	1331	0.08	0.0	0.0	53,0,0
		1345	0.05	0.0	0.0	70,0,0	1344	0.03	0.0	0.0	72,0,0
1000	ok	1331	0.12	0.0	0.0	77,0,0	1332	0.17	0.0	0.0	73,0,0
		1346	0.17	0.0	0.0	70,0,0	1345	0.06	0.0	0.0	70,0,0
1001	ok	1332	0.14	0.0	0.0	75,0,0	1333	0.16	0.0	0.0	70,0,0
		1347	0.10	0.0	0.0	51,0,0	1346	0.27	0.0	0.0	76,0,0
1002	ok	1333	0.13	0.0	0.0	58,0,0	1334	0.09	0.0	0.0	70,0,0
		1348	0.06	0.0	0.0	58,0,0	1347	0.10	0.0	0.0	50,0,0
1003	ok	1334	0.08	0.0	0.0	74,0,0	1335	0.03	0.0	0.0	74,0,0
		1349	7.02e-03	0.0	0.0	51,0,0	1348	0.05	0.0	0.0	58,0,0
1004	ok	1336	0.03	0.0	0.0	68,0,0	1337	0.08	0.0	0.0	68,0,0
		1351	0.05	0.0	0.0	56,0,0	1350	7.04e-03	0.0	0.0	49,0,0
1005	ok	1337	0.09	0.0	0.0	64,0,0	1338	0.13	0.0	0.0	56,0,0
		1352	0.10	0.0	0.0	48,0,0	1351	0.06	0.0	0.0	56,0,0
1006	ok	1338	0.17	0.0	0.0	64,0,0	1339	0.14	0.0	0.0	64,0,0
		1353	0.29	0.0	0.0	66,0,0	1352	0.09	0.0	0.0	49,0,0
1007	ok	1339	0.16	0.0	0.0	63,0,0	1340	0.13	0.0	0.0	64,0,0
		1354	0.07	0.0	0.0	64,0,0	1353	0.20	0.0	0.0	64,0,0
1008	ok	1340	0.09	0.0	0.0	64,0,0	1341	0.07	0.0	0.0	66,0,0
		1355	0.03	0.0	0.0	62,0,0	1354	0.05	0.0	0.0	64,0,0
1009	ok	1341	0.06	0.0	0.0	66,0,0	1342	0.03	0.0	0.0	62,0,0
		1356	8.30e-03	0.0	0.0	55,0,0	1355	0.03	0.0	0.0	62,0,0
1010	ok	1357	6.26e-03	0.0	0.0	73,0,0	1358	0.03	0.0	0.0	73,0,0
		1386	0.09	0.0	0.0	77,0,0	1385	0.05	0.0	0.0	73,0,0
1011	ok	1358	0.03	0.0	0.0	73,0,0	1359	0.06	0.0	0.0	77,0,0
		1387	0.14	0.0	0.0	77,0,0	1386	0.10	0.0	0.0	77,0,0
1012	ok	1359	0.18	0.0	0.0	73,0,0	1360	0.53	0.0	0.0	77,0,0
		1388	0.27	0.0	0.0	71,0,0	1387	0.26	0.0	0.0	77,0,0
1013	ok	1360	0.44	0.0	0.0	71,0,0	1361	0.18	0.0	0.0	73,0,0
		1389	0.23	0.0	0.0	71,0,0	1388	0.27	0.0	0.0	71,0,0
1014	ok	1361	0.07	0.0	0.0	50,0,0	1362	0.05	0.0	0.0	59,0,0
		1390	0.10	0.0	0.0	71,0,0	1389	0.14	0.0	0.0	71,0,0
1015	ok	1362	0.04	0.0	0.0	59,0,0	1363	7.49e-03	0.0	0.0	74,0,0
		1391	0.05	0.0	0.0	75,0,0	1390	0.09	0.0	0.0	71,0,0
1016	ok	1364	9.20e-03	0.0	0.0	71,0,0	1365	0.03	0.0	0.0	58,0,0
		1393	0.06	0.0	0.0	58,0,0	1392	0.02	0.0	0.0	73,0,0
1017	ok	1365	0.04	0.0	0.0	50,0,0	1366	0.05	0.0	0.0	58,0,0
		1394	0.07	0.0	0.0	58,0,0	1393	0.06	0.0	0.0	58,0,0
1018	ok	1366	0.06	0.0	0.0	58,0,0	1367	0.03	0.0	0.0	74,0,0
		1395	0.04	0.0	0.0	77,0,0	1394	0.05	0.0	0.0	58,0,0
1019	ok	1367	0.04	0.0	0.0	74,0,0	1368	0.04	0.0	0.0	52,0,0
		1396	0.04	0.0	0.0	52,0,0	1395	0.04	0.0	0.0	71,0,0
1020	ok	1368	0.04	0.0	0.0	52,0,0	1369	0.03	0.0	0.0	52,0,0
		1397	0.05	0.0	0.0	52,0,0	1396	0.06	0.0	0.0	52,0,0
1021	ok	1369	0.02	0.0	0.0	52,0,0	1370	8.72e-03	0.0	0.0	77,0,0
		1398	0.02	0.0	0.0	75,0,0	1397	0.05	0.0	0.0	52,0,0
1022	ok	1371	8.72e-03	0.0	0.0	63,0,0	1372	0.02	0.0	0.0	46,0,0
		1400	0.05	0.0	0.0	46,0,0	1399	0.02	0.0	0.0	69,0,0
1023	ok	1372	0.03	0.0	0.0	46,0,0	1373	0.04	0.0	0.0	46,0,0
		1401	0.06	0.0	0.0	46,0,0	1400	0.05	0.0	0.0	46,0,0
1024	ok	1373	0.04	0.0	0.0	46,0,0	1374	0.04	0.0	0.0	68,0,0
		1402	0.04	0.0	0.0	65,0,0	1401	0.04	0.0	0.0	46,0,0
1025	ok	1374	0.03	0.0	0.0	68,0,0	1375	0.06	0.0	0.0	56,0,0
		1403	0.05	0.0	0.0	56,0,0	1402	0.04	0.0	0.0	67,0,0
1026	ok	1375	0.05	0.0	0.0	56,0,0	1376	0.04	0.0	0.0	48,0,0
		1404	0.06	0.0	0.0	56,0,0	1403	0.07	0.0	0.0	56,0,0
1027	ok	1376	0.03	0.0	0.0	56,0,0	1377	9.21e-03	0.0	0.0	65,0,0
		1405	0.02	0.0	0.0	63,0,0	1404	0.06	0.0	0.0	56,0,0
1028	ok	1378	7.67e-03	0.0	0.0	68,0,0	1379	0.04	0.0	0.0	57,0,0
		1407	0.09	0.0	0.0	65,0,0	1406	0.05	0.0	0.0	69,0,0
1029	ok	1379	0.05	0.0	0.0	57,0,0	1380	0.07	0.0	0.0	48,0,0
		1408	0.14	0.0	0.0	65,0,0	1407	0.10	0.0	0.0	65,0,0
1030	ok	1380	0.18	0.0	0.0	63,0,0	1381	0.45	0.0	0.0	65,0,0
		1409	0.27	0.0	0.0	65,0,0	1408	0.23	0.0	0.0	65,0,0
1031	ok	1381	0.54	0.0	0.0	67,0,0	1382	0.19	0.0	0.0	63,0,0
		1410	0.27	0.0	0.0	67,0,0	1409	0.27	0.0	0.0	65,0,0
1032	ok	1382	0.06	0.0	0.0	67,0,0	1383	0.03	0.0	0.0	63,0,0
		1411	0.10	0.0	0.0	67,0,0	1410	0.14	0.0	0.0	67,0,0
1033	ok	1383	0.03	0.0	0.0	63,0,0	1384	6.22e-03	0.0	0.0	63,0,0
		1412	0.05	0.0	0.0	63,0,0	1411	0.09	0.0	0.0	67,0,0
1034	ok	1385	0.06	0.0	0.0	73,0,0	1386	0.09	0.0	0.0	77,0,0
		1414	0.13	0.0	0.0	77,0,0	1413	0.09	0.0	0.0	73,0,0



1035	ok	1386	0.11	0.0	0.0	73,0,0	1387	0.15	0.0	0.0	77,0,0
		1415	0.41	0.0	0.0	77,0,0	1414	0.06	0.0	0.0	77,0,0
1036	ok	1387	0.09	0.0	0.0	71,0,0	1388	0.31	0.0	0.0	71,0,0
		1416	0.11	0.0	0.0	71,0,0	1415	0.42	0.0	0.0	77,0,0
1037	ok	1388	0.30	0.0	0.0	77,0,0	1389	0.16	0.0	0.0	50,0,0
		1417	0.44	0.0	0.0	77,0,0	1416	0.11	0.0	0.0	71,0,0
1038	ok	1389	0.15	0.0	0.0	71,0,0	1390	0.11	0.0	0.0	71,0,0
		1418	0.12	0.0	0.0	51,0,0	1417	0.46	0.0	0.0	71,0,0
1039	ok	1390	0.10	0.0	0.0	71,0,0	1391	0.06	0.0	0.0	75,0,0
		1419	0.11	0.0	0.0	71,0,0	1418	0.15	0.0	0.0	71,0,0
1040	ok	1392	0.03	0.0	0.0	73,0,0	1393	0.06	0.0	0.0	58,0,0
		1421	0.10	0.0	0.0	71,0,0	1420	0.06	0.0	0.0	59,0,0
1041	ok	1393	0.07	0.0	0.0	58,0,0	1394	0.03	0.0	0.0	61,0,0
		1422	0.30	0.0	0.0	73,0,0	1421	0.09	0.0	0.0	55,0,0
1042	ok	1394	0.13	0.0	0.0	58,0,0	1395	0.08	0.0	0.0	75,0,0
		1423	0.06	0.0	0.0	77,0,0	1422	0.27	0.0	0.0	71,0,0
1043	ok	1395	0.08	0.0	0.0	73,0,0	1396	0.11	0.0	0.0	52,0,0
		1424	0.27	0.0	0.0	71,0,0	1423	0.06	0.0	0.0	71,0,0
1044	ok	1396	0.03	0.0	0.0	59,0,0	1397	0.06	0.0	0.0	71,0,0
		1425	0.08	0.0	0.0	53,0,0	1424	0.29	0.0	0.0	71,0,0
1045	ok	1397	0.05	0.0	0.0	52,0,0	1398	0.03	0.0	0.0	71,0,0
		1426	0.06	0.0	0.0	67,0,0	1425	0.10	0.0	0.0	71,0,0
1046	ok	1399	0.03	0.0	0.0	65,0,0	1400	0.05	0.0	0.0	46,0,0
		1428	0.10	0.0	0.0	65,0,0	1427	0.06	0.0	0.0	77,0,0
1047	ok	1400	0.06	0.0	0.0	65,0,0	1401	0.03	0.0	0.0	57,0,0
		1429	0.29	0.0	0.0	65,0,0	1428	0.08	0.0	0.0	47,0,0
1048	ok	1401	0.11	0.0	0.0	46,0,0	1402	0.08	0.0	0.0	63,0,0
		1430	0.06	0.0	0.0	65,0,0	1429	0.27	0.0	0.0	65,0,0
1049	ok	1402	0.08	0.0	0.0	69,0,0	1403	0.13	0.0	0.0	56,0,0
		1431	0.27	0.0	0.0	65,0,0	1430	0.06	0.0	0.0	67,0,0
1050	ok	1403	0.03	0.0	0.0	55,0,0	1404	0.07	0.0	0.0	56,0,0
		1432	0.09	0.0	0.0	61,0,0	1431	0.30	0.0	0.0	63,0,0
1051	ok	1404	0.06	0.0	0.0	56,0,0	1405	0.03	0.0	0.0	63,0,0
		1433	0.06	0.0	0.0	57,0,0	1432	0.10	0.0	0.0	65,0,0
1052	ok	1406	0.06	0.0	0.0	69,0,0	1407	0.10	0.0	0.0	65,0,0
		1435	0.15	0.0	0.0	65,0,0	1434	0.11	0.0	0.0	65,0,0
1053	ok	1407	0.11	0.0	0.0	65,0,0	1408	0.15	0.0	0.0	65,0,0
		1436	0.47	0.0	0.0	65,0,0	1435	0.12	0.0	0.0	49,0,0
1054	ok	1408	0.16	0.0	0.0	48,0,0	1409	0.31	0.0	0.0	67,0,0
		1437	0.11	0.0	0.0	65,0,0	1436	0.44	0.0	0.0	67,0,0
1055	ok	1409	0.31	0.0	0.0	65,0,0	1410	0.09	0.0	0.0	65,0,0
		1438	0.42	0.0	0.0	67,0,0	1437	0.11	0.0	0.0	65,0,0
1056	ok	1410	0.15	0.0	0.0	67,0,0	1411	0.11	0.0	0.0	63,0,0
		1439	0.06	0.0	0.0	67,0,0	1438	0.41	0.0	0.0	67,0,0
1057	ok	1411	0.09	0.0	0.0	67,0,0	1412	0.06	0.0	0.0	63,0,0
		1440	0.09	0.0	0.0	63,0,0	1439	0.13	0.0	0.0	67,0,0
1058	ok	1413	0.10	0.0	0.0	73,0,0	1414	0.10	0.0	0.0	77,0,0
		1442	0.08	0.0	0.0	77,0,0	1441	0.06	0.0	0.0	77,0,0
1059	ok	1414	0.19	0.0	0.0	77,0,0	1415	0.16	0.0	0.0	77,0,0
		1443	0.07	0.0	0.0	77,0,0	1442	0.07	0.0	0.0	73,0,0
1060	ok	1415	0.17	0.0	0.0	77,0,0	1416	0.29	0.0	0.0	77,0,0
		1444	0.11	0.0	0.0	77,0,0	1443	0.06	0.0	0.0	52,0,0
1061	ok	1416	0.30	0.0	0.0	71,0,0	1417	0.18	0.0	0.0	71,0,0
		1445	0.23	0.0	0.0	58,0,0	1444	0.11	0.0	0.0	76,0,0
1062	ok	1417	0.32	0.0	0.0	50,0,0	1418	0.21	0.0	0.0	77,0,0
		1446	0.24	0.0	0.0	50,0,0	1445	0.09	0.0	0.0	59,0,0
1063	ok	1418	0.20	0.0	0.0	51,0,0	1419	0.16	0.0	0.0	50,0,0
		1447	0.42	0.0	0.0	51,0,0	1446	0.21	0.0	0.0	50,0,0
1064	ok	1420	0.10	0.0	0.0	58,0,0	1421	0.14	0.0	0.0	55,0,0
		1449	0.17	0.0	0.0	58,0,0	1448	0.25	0.0	0.0	55,0,0
1065	ok	1421	0.13	0.0	0.0	75,0,0	1422	0.27	0.0	0.0	58,0,0
		1450	0.07	0.0	0.0	50,0,0	1449	0.19	0.0	0.0	47,0,0
1066	ok	1422	0.11	0.0	0.0	73,0,0	1423	0.13	0.0	0.0	73,0,0
		1451	0.11	0.0	0.0	77,0,0	1450	0.18	0.0	0.0	58,0,0
1067	ok	1423	0.13	0.0	0.0	71,0,0	1424	0.11	0.0	0.0	75,0,0
		1452	0.15	0.0	0.0	60,0,0	1451	0.12	0.0	0.0	71,0,0
1068	ok	1424	0.23	0.0	0.0	52,0,0	1425	0.13	0.0	0.0	75,0,0
		1453	0.17	0.0	0.0	53,0,0	1452	0.06	0.0	0.0	60,0,0
1069	ok	1425	0.12	0.0	0.0	53,0,0	1426	0.09	0.0	0.0	48,0,0
		1454	0.22	0.0	0.0	48,0,0	1453	0.14	0.0	0.0	52,0,0
1070	ok	1427	0.09	0.0	0.0	50,0,0	1428	0.12	0.0	0.0	47,0,0
		1456	0.14	0.0	0.0	46,0,0	1455	0.23	0.0	0.0	50,0,0
1071	ok	1428	0.13	0.0	0.0	69,0,0	1429	0.23	0.0	0.0	46,0,0
		1457	0.06	0.0	0.0	54,0,0	1456	0.17	0.0	0.0	55,0,0
1072	ok	1429	0.11	0.0	0.0	69,0,0	1430	0.13	0.0	0.0	65,0,0
		1458	0.12	0.0	0.0	65,0,0	1457	0.15	0.0	0.0	54,0,0
1073	ok	1430	0.13	0.0	0.0	63,0,0	1431	0.11	0.0	0.0	63,0,0



		1459	0.18	0.0	0.0	56,0,0	1458	0.11	0.0	0.0	67,0,0
1074	ok	1431	0.27	0.0	0.0	56,0,0	1432	0.13	0.0	0.0	69,0,0
		1460	0.19	0.0	0.0	53,0,0	1459	0.07	0.0	0.0	48,0,0
1075	ok	1432	0.14	0.0	0.0	61,0,0	1433	0.10	0.0	0.0	56,0,0
		1461	0.25	0.0	0.0	61,0,0	1460	0.17	0.0	0.0	56,0,0
1076	ok	1434	0.16	0.0	0.0	48,0,0	1435	0.20	0.0	0.0	49,0,0
		1463	0.21	0.0	0.0	48,0,0	1462	0.42	0.0	0.0	49,0,0
1077	ok	1435	0.21	0.0	0.0	67,0,0	1436	0.33	0.0	0.0	48,0,0
		1464	0.09	0.0	0.0	57,0,0	1463	0.24	0.0	0.0	48,0,0
1078	ok	1436	0.18	0.0	0.0	65,0,0	1437	0.30	0.0	0.0	65,0,0
		1465	0.11	0.0	0.0	66,0,0	1464	0.23	0.0	0.0	56,0,0
1079	ok	1437	0.29	0.0	0.0	67,0,0	1438	0.17	0.0	0.0	67,0,0
		1466	0.06	0.0	0.0	46,0,0	1465	0.11	0.0	0.0	67,0,0
1080	ok	1438	0.16	0.0	0.0	67,0,0	1439	0.19	0.0	0.0	67,0,0
		1467	0.07	0.0	0.0	63,0,0	1466	0.07	0.0	0.0	67,0,0
1081	ok	1439	0.10	0.0	0.0	67,0,0	1440	0.10	0.0	0.0	63,0,0
		1468	0.06	0.0	0.0	67,0,0	1467	0.08	0.0	0.0	67,0,0
1082	ok	1441	0.06	0.0	0.0	73,0,0	1442	0.06	0.0	0.0	77,0,0
		1470	0.04	0.0	0.0	60,0,0	1469	0.04	0.0	0.0	61,0,0
1083	ok	1442	0.07	0.0	0.0	73,0,0	1443	0.05	0.0	0.0	77,0,0
		1471	0.15	0.0	0.0	76,0,0	1470	0.06	0.0	0.0	76,0,0
1084	ok	1443	0.08	0.0	0.0	77,0,0	1444	0.09	0.0	0.0	76,0,0
		1472	0.07	0.0	0.0	76,0,0	1471	0.13	0.0	0.0	72,0,0
1085	ok	1444	0.08	0.0	0.0	58,0,0	1445	0.22	0.0	0.0	50,0,0
		1473	0.14	0.0	0.0	58,0,0	1472	0.08	0.0	0.0	70,0,0
1086	ok	1445	0.09	0.0	0.0	58,0,0	1446	0.24	0.0	0.0	58,0,0
		1474	0.07	0.0	0.0	76,0,0	1473	0.32	0.0	0.0	58,0,0
1087	ok	1446	0.21	0.0	0.0	58,0,0	1447	0.44	0.0	0.0	54,0,0
		1475	0.16	0.0	0.0	58,0,0	1474	0.20	0.0	0.0	58,0,0
1088	ok	1448	0.28	0.0	0.0	50,0,0	1449	0.17	0.0	0.0	50,0,0
		1477	0.16	0.0	0.0	50,0,0	1476	0.10	0.0	0.0	50,0,0
1089	ok	1449	0.20	0.0	0.0	58,0,0	1450	0.07	0.0	0.0	55,0,0
		1478	0.27	0.0	0.0	50,0,0	1477	0.13	0.0	0.0	70,0,0
1090	ok	1450	0.17	0.0	0.0	47,0,0	1451	0.11	0.0	0.0	72,0,0
		1479	0.13	0.0	0.0	72,0,0	1478	0.11	0.0	0.0	60,0,0
1091	ok	1451	0.12	0.0	0.0	74,0,0	1452	0.15	0.0	0.0	61,0,0
		1480	0.11	0.0	0.0	70,0,0	1479	0.13	0.0	0.0	74,0,0
1092	ok	1452	0.06	0.0	0.0	53,0,0	1453	0.17	0.0	0.0	52,0,0
		1481	0.13	0.0	0.0	70,0,0	1480	0.23	0.0	0.0	60,0,0
1093	ok	1453	0.14	0.0	0.0	60,0,0	1454	0.23	0.0	0.0	60,0,0
		1482	0.09	0.0	0.0	60,0,0	1481	0.13	0.0	0.0	60,0,0
1094	ok	1455	0.23	0.0	0.0	54,0,0	1456	0.14	0.0	0.0	54,0,0
		1484	0.13	0.0	0.0	54,0,0	1483	0.09	0.0	0.0	54,0,0
1095	ok	1456	0.17	0.0	0.0	54,0,0	1457	0.06	0.0	0.0	47,0,0
		1485	0.23	0.0	0.0	54,0,0	1484	0.13	0.0	0.0	64,0,0
1096	ok	1457	0.15	0.0	0.0	55,0,0	1458	0.12	0.0	0.0	68,0,0
		1486	0.13	0.0	0.0	68,0,0	1485	0.11	0.0	0.0	64,0,0
1097	ok	1458	0.11	0.0	0.0	62,0,0	1459	0.17	0.0	0.0	53,0,0
		1487	0.11	0.0	0.0	54,0,0	1486	0.13	0.0	0.0	62,0,0
1098	ok	1459	0.07	0.0	0.0	61,0,0	1460	0.20	0.0	0.0	56,0,0
		1488	0.13	0.0	0.0	64,0,0	1487	0.27	0.0	0.0	48,0,0
1099	ok	1460	0.17	0.0	0.0	48,0,0	1461	0.29	0.0	0.0	48,0,0
		1489	0.11	0.0	0.0	48,0,0	1488	0.16	0.0	0.0	48,0,0
1100	ok	1462	0.44	0.0	0.0	56,0,0	1463	0.21	0.0	0.0	56,0,0
		1491	0.20	0.0	0.0	56,0,0	1490	0.16	0.0	0.0	56,0,0
1101	ok	1463	0.24	0.0	0.0	56,0,0	1464	0.09	0.0	0.0	56,0,0
		1492	0.32	0.0	0.0	56,0,0	1491	0.07	0.0	0.0	66,0,0
1102	ok	1464	0.22	0.0	0.0	48,0,0	1465	0.08	0.0	0.0	56,0,0
		1493	0.08	0.0	0.0	64,0,0	1492	0.14	0.0	0.0	56,0,0
1103	ok	1465	0.09	0.0	0.0	66,0,0	1466	0.08	0.0	0.0	67,0,0
		1494	0.13	0.0	0.0	62,0,0	1493	0.07	0.0	0.0	66,0,0
1104	ok	1466	0.05	0.0	0.0	67,0,0	1467	0.07	0.0	0.0	63,0,0
		1495	0.06	0.0	0.0	54,0,0	1494	0.15	0.0	0.0	66,0,0
1105	ok	1467	0.06	0.0	0.0	67,0,0	1468	0.06	0.0	0.0	63,0,0
		1496	0.04	0.0	0.0	55,0,0	1495	0.04	0.0	0.0	54,0,0
1106	ok	1469	0.03	0.0	0.0	53,0,0	1470	0.05	0.0	0.0	60,0,0
		1498	0.03	0.0	0.0	76,0,0	1497	0.02	0.0	0.0	60,0,0
1107	ok	1470	0.04	0.0	0.0	76,0,0	1471	0.23	0.0	0.0	76,0,0
		1499	0.04	0.0	0.0	74,0,0	1498	0.05	0.0	0.0	72,0,0
1108	ok	1471	0.17	0.0	0.0	76,0,0	1472	0.04	0.0	0.0	58,0,0
		1500	0.06	0.0	0.0	74,0,0	1499	0.07	0.0	0.0	72,0,0
1109	ok	1472	0.05	0.0	0.0	58,0,0	1473	0.17	0.0	0.0	76,0,0
		1501	0.15	0.0	0.0	58,0,0	1500	0.06	0.0	0.0	58,0,0
1110	ok	1473	0.34	0.0	0.0	50,0,0	1474	0.12	0.0	0.0	58,0,0
		1502	0.08	0.0	0.0	58,0,0	1501	0.05	0.0	0.0	58,0,0
1111	ok	1474	0.11	0.0	0.0	58,0,0	1475	0.05	0.0	0.0	58,0,0
		1503	0.02	0.0	0.0	50,0,0	1502	0.08	0.0	0.0	58,0,0



1112	ok	1476	0.06	0.0	0.0	70,0,0	1477	0.10	0.0	0.0	74,0,0
		1505	0.06	0.0	0.0	51,0,0	1504	0.03	0.0	0.0	72,0,0
1113	ok	1477	0.10	0.0	0.0	50,0,0	1478	0.30	0.0	0.0	76,0,0
		1506	0.03	0.0	0.0	52,0,0	1505	0.06	0.0	0.0	72,0,0
1114	ok	1478	0.27	0.0	0.0	74,0,0	1479	0.06	0.0	0.0	72,0,0
		1507	0.08	0.0	0.0	70,0,0	1506	0.13	0.0	0.0	51,0,0
1115	ok	1479	0.06	0.0	0.0	74,0,0	1480	0.27	0.0	0.0	74,0,0
		1508	0.11	0.0	0.0	61,0,0	1507	0.08	0.0	0.0	72,0,0
1116	ok	1480	0.29	0.0	0.0	74,0,0	1481	0.08	0.0	0.0	60,0,0
		1509	0.06	0.0	0.0	74,0,0	1508	0.03	0.0	0.0	50,0,0
1117	ok	1481	0.10	0.0	0.0	74,0,0	1482	0.06	0.0	0.0	62,0,0
		1510	0.03	0.0	0.0	74,0,0	1509	0.05	0.0	0.0	57,0,0
1118	ok	1483	0.06	0.0	0.0	72,0,0	1484	0.10	0.0	0.0	68,0,0
		1512	0.05	0.0	0.0	59,0,0	1511	0.03	0.0	0.0	68,0,0
1119	ok	1484	0.08	0.0	0.0	54,0,0	1485	0.29	0.0	0.0	68,0,0
		1513	0.03	0.0	0.0	48,0,0	1512	0.06	0.0	0.0	68,0,0
1120	ok	1485	0.27	0.0	0.0	68,0,0	1486	0.06	0.0	0.0	68,0,0
		1514	0.08	0.0	0.0	62,0,0	1513	0.11	0.0	0.0	55,0,0
1121	ok	1486	0.06	0.0	0.0	62,0,0	1487	0.28	0.0	0.0	68,0,0
		1515	0.13	0.0	0.0	49,0,0	1514	0.08	0.0	0.0	64,0,0
1122	ok	1487	0.30	0.0	0.0	66,0,0	1488	0.10	0.0	0.0	48,0,0
		1516	0.06	0.0	0.0	62,0,0	1515	0.03	0.0	0.0	46,0,0
1123	ok	1488	0.10	0.0	0.0	68,0,0	1489	0.06	0.0	0.0	64,0,0
		1517	0.03	0.0	0.0	62,0,0	1516	0.06	0.0	0.0	49,0,0
1124	ok	1490	0.05	0.0	0.0	56,0,0	1491	0.11	0.0	0.0	56,0,0
		1519	0.08	0.0	0.0	56,0,0	1518	0.02	0.0	0.0	48,0,0
1125	ok	1491	0.12	0.0	0.0	56,0,0	1492	0.34	0.0	0.0	48,0,0
		1520	0.05	0.0	0.0	56,0,0	1519	0.08	0.0	0.0	56,0,0
1126	ok	1492	0.16	0.0	0.0	64,0,0	1493	0.05	0.0	0.0	56,0,0
		1521	0.07	0.0	0.0	56,0,0	1520	0.15	0.0	0.0	56,0,0
1127	ok	1493	0.04	0.0	0.0	56,0,0	1494	0.17	0.0	0.0	66,0,0
		1522	0.07	0.0	0.0	62,0,0	1521	0.06	0.0	0.0	68,0,0
1128	ok	1494	0.23	0.0	0.0	66,0,0	1495	0.04	0.0	0.0	66,0,0
		1523	0.05	0.0	0.0	62,0,0	1522	0.04	0.0	0.0	68,0,0
1129	ok	1495	0.05	0.0	0.0	54,0,0	1496	0.03	0.0	0.0	47,0,0
		1524	0.02	0.0	0.0	54,0,0	1523	0.03	0.0	0.0	66,0,0
1130	ok	1497	0.02	0.0	0.0	52,0,0	1498	0.03	0.0	0.0	72,0,0
		1526	0.02	0.0	0.0	72,0,0	1525	4.47e-03	0.0	0.0	71,0,0
1131	ok	1498	0.04	0.0	0.0	72,0,0	1499	0.06	0.0	0.0	72,0,0
		1527	0.04	0.0	0.0	74,0,0	1526	0.02	0.0	0.0	72,0,0
1132	ok	1499	0.05	0.0	0.0	72,0,0	1500	0.06	0.0	0.0	74,0,0
		1528	0.06	0.0	0.0	74,0,0	1527	0.04	0.0	0.0	74,0,0
1133	ok	1500	0.07	0.0	0.0	58,0,0	1501	0.08	0.0	0.0	58,0,0
		1529	0.08	0.0	0.0	58,0,0	1528	0.06	0.0	0.0	74,0,0
1134	ok	1501	0.11	0.0	0.0	58,0,0	1502	0.07	0.0	0.0	58,0,0
		1530	0.05	0.0	0.0	58,0,0	1529	0.07	0.0	0.0	58,0,0
1135	ok	1502	0.07	0.0	0.0	58,0,0	1503	0.02	0.0	0.0	58,0,0
		1531	5.45e-03	0.0	0.0	70,0,0	1530	0.04	0.0	0.0	58,0,0
1136	ok	1504	0.02	0.0	0.0	76,0,0	1505	0.06	0.0	0.0	51,0,0
		1533	0.03	0.0	0.0	51,0,0	1532	9.44e-03	0.0	0.0	74,0,0
1137	ok	1505	0.06	0.0	0.0	51,0,0	1506	0.07	0.0	0.0	51,0,0
		1534	0.05	0.0	0.0	51,0,0	1533	0.04	0.0	0.0	59,0,0
1138	ok	1506	0.05	0.0	0.0	51,0,0	1507	0.04	0.0	0.0	72,0,0
		1535	0.03	0.0	0.0	71,0,0	1534	0.05	0.0	0.0	51,0,0
1139	ok	1507	0.04	0.0	0.0	74,0,0	1508	0.04	0.0	0.0	61,0,0
		1536	0.04	0.0	0.0	61,0,0	1535	0.03	0.0	0.0	71,0,0
1140	ok	1508	0.06	0.0	0.0	61,0,0	1509	0.05	0.0	0.0	57,0,0
		1537	0.03	0.0	0.0	61,0,0	1536	0.04	0.0	0.0	61,0,0
1141	ok	1509	0.05	0.0	0.0	57,0,0	1510	0.02	0.0	0.0	70,0,0
		1538	8.57e-03	0.0	0.0	76,0,0	1537	0.02	0.0	0.0	61,0,0
1142	ok	1511	0.02	0.0	0.0	64,0,0	1512	0.05	0.0	0.0	59,0,0
		1540	0.02	0.0	0.0	55,0,0	1539	8.57e-03	0.0	0.0	66,0,0
1143	ok	1512	0.05	0.0	0.0	59,0,0	1513	0.06	0.0	0.0	55,0,0
		1541	0.04	0.0	0.0	55,0,0	1540	0.03	0.0	0.0	55,0,0
1144	ok	1513	0.04	0.0	0.0	55,0,0	1514	0.04	0.0	0.0	68,0,0
		1542	0.03	0.0	0.0	65,0,0	1541	0.04	0.0	0.0	55,0,0
1145	ok	1514	0.04	0.0	0.0	62,0,0	1515	0.05	0.0	0.0	49,0,0
		1543	0.05	0.0	0.0	49,0,0	1542	0.03	0.0	0.0	65,0,0
1146	ok	1515	0.07	0.0	0.0	49,0,0	1516	0.06	0.0	0.0	49,0,0
		1544	0.04	0.0	0.0	57,0,0	1543	0.05	0.0	0.0	49,0,0
1147	ok	1516	0.06	0.0	0.0	49,0,0	1517	0.02	0.0	0.0	66,0,0
		1545	9.45e-03	0.0	0.0	68,0,0	1544	0.03	0.0	0.0	49,0,0
1148	ok	1518	0.02	0.0	0.0	56,0,0	1519	0.07	0.0	0.0	56,0,0
		1547	0.04	0.0	0.0	56,0,0	1546	5.38e-03	0.0	0.0	64,0,0
1149	ok	1519	0.07	0.0	0.0	56,0,0	1520	0.11	0.0	0.0	56,0,0
		1548	0.07	0.0	0.0	56,0,0	1547	0.05	0.0	0.0	56,0,0
1150	ok	1520	0.08	0.0	0.0	56,0,0	1521	0.07	0.0	0.0	56,0,0



1151	ok	1549	0.06	0.0	0.0	68,0,0	1548	0.08	0.0	0.0	56,0,0
		1521	0.06	0.0	0.0	68,0,0	1522	0.05	0.0	0.0	62,0,0
		1550	0.05	0.0	0.0	68,0,0	1549	0.06	0.0	0.0	68,0,0
1152	ok	1522	0.06	0.0	0.0	62,0,0	1523	0.04	0.0	0.0	62,0,0
		1551	0.02	0.0	0.0	62,0,0	1550	0.04	0.0	0.0	68,0,0
1153	ok	1523	0.03	0.0	0.0	62,0,0	1524	0.02	0.0	0.0	46,0,0
		1552	4.55e-03	0.0	0.0	65,0,0	1551	0.02	0.0	0.0	62,0,0
Guscio			V N/M	V V/T cls	V V/T acc			V N/M	V V/T cls	V V/T acc	
			0.62	0.0	0.0						







# RELAZIONE GEOTECNICA E DELLE FONDAZIONI

## NORMATIVE DI RIFERIMENTO

In quanto di seguito riportato viene fatto esplicito riferimento alle seguenti Normative:

- **LEGGE n° 64 del 02/02/1974.** "Provvedimenti per le costruzioni, con particolari prescrizioni per le zone sismiche.";
- **D.M. LL.PP. del 11/03/1988.** "Norme tecniche riguardanti le indagini sui terreni e sulle rocce, la stabilità dei pendii naturali e delle scarpate, i criteri generali e le prescrizioni per la progettazione, l'esecuzione e il collaudo delle opere di sostegno delle terre e delle opere di fondazione.";
- **D.M. LL.PP. del 16/01/1996.** "Norme tecniche per le costruzioni in zone sismiche.";
- **Circolare Ministeriale LL.PP. n° 65/AA.GG. del 10/04/1997.** "Istruzioni per l'applicazione delle "Norme Tecniche per le costruzioni in zone sismiche" di cui al D.M. 16/01/1996.";
- **Eurocodice 1 - Parte 1** - "Basi di calcolo ed azioni sulle strutture - Basi di calcolo -.";
- **Eurocodice 7 - Parte 1** - "Progettazione geotecnica - Regole generali -.";
- **Eurocodice 8 - Parte 5** - "Indicazioni progettuali per la resistenza sismica delle strutture - Fondazioni, strutture di contenimento ed aspetti geotecnici -.";
- **D.M. 17/01/2018 - NUOVE NORME TECNICHE PER LE COSTRUZIONI**
- **Circolare n. 7 del 21/01/2019**

## INDAGINI IN SITO E CARATTERIZZAZIONE GEOTECNICA DEI TERRENI DI FONDAZIONE

La finalità della presente relazione è quella di definire il comportamento meccanico del volume di terreno (volume significativo) influenzato direttamente o indirettamente dalla costruzione di un manufatto e che a sua volta influenza il comportamento strutturale del manufatto stesso. Di seguito si illustrano i risultati delle indagini geologiche eseguite, nonché l'interpretazione dei risultati ottenuti. Dal quadro generale in tal modo scaturito si definiscono le caratteristiche della fondazione da adottare ed il modello da utilizzare per le elaborazioni relative alla interazione sovrastruttura-fondazione e fondazione-terreno.

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Le risultanze dell'indagine in sito hanno evidenziato che:

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Di seguito si riportano alcuni cenni teorici relativi alle modalità di calcolo implementate e la descrizione della simbologia adottata nei tabulati.

## CARICO LIMITE DI FONDAZIONI SUPERFICIALI SU TERRENI

Per la determinazione del carico limite del complesso terreno-fondazione (inteso come valore asintotico del diagramma carico-cedimento) si fa riferimento a due principali meccanismi di rottura: il "meccanismo generale" e quello di "punzonamento". Il primo è caratterizzato dalla formazione di una superficie di scorrimento: il terreno sottostante la fondazione rifluisce lateralmente e verso l'alto, conseguentemente il terreno circostante la fondazione è interessato da un meccanismo di sollevamento ed emersione della superficie di scorrimento. Il secondo meccanismo è caratterizzato dall'assenza di una superficie di scorrimento ben definita: il terreno sotto la fondazione si comprime ed in corrispondenza della superficie del terreno circostante la fondazione si osserva un abbassamento generalizzato. Quest'ultimo meccanismo non consente una precisa individuazione del carico limite in quanto la curva cedimenti-carico applicato non raggiunge mai un valore asintotico ma cresce indefinitamente. Vesic ha studiato il fenomeno della rottura per punzonamento assimilando il terreno ad un mezzo elasto-plastico e la rottura per carico limite all'espansione di una cavità cilindrica. In questo caso il fenomeno risulta retto da un indice di rigidezza " $I_r$ " così definito:

$$I_r = \frac{G}{c' + \sigma' \cdot \tan(\varphi)}$$

Per la determinazione del modulo di rigidezza a taglio si utilizzeranno le seguenti relazioni:



$$G = \frac{E}{2 \cdot (1 + \nu)}; \quad E = E_{ed} \frac{1 - \nu - 2 \cdot \nu^2}{1 - \nu}; \quad \nu = \frac{k_0}{1 + k_0}; \quad k_0 = 1 - \sin(\varphi).$$

L'indice di rigidezza viene confrontato con l'indice di rigidezza critico " $I_{r,crit}$ ":

$$I_{r,crit} = \frac{e^{\left[ \left( 3.3 - 0.45 \frac{B}{L} \right) \cdot \operatorname{ctg} \left( 45^\circ - \frac{\varphi}{2} \right) \right]}}{2}.$$

La rottura per punzonamento del terreno di fondazione avviene quando l'indice di rigidezza è minore di quello critico. Tale teoria comporta l'introduzione di coefficienti correttivi all'interno della formula trinomia del carico limite detti "coefficienti di punzonamento" i quali sono funzione dell'indice di rigidezza, dell'angolo d'attrito e della geometria dell'elemento di fondazione. La loro espressione è la seguente:

- se  $I_r < I_{r,crit}$  si ha :

$$\Psi_\gamma = \Psi_q = e^{\left[ \left( 0.6 \frac{B}{L} - 4.4 \right) \cdot \operatorname{tg}(\varphi) + \frac{3.07 \cdot \sin(\varphi) \log_{10}(2 \cdot I_r)}{1 + \sin(\varphi)} \right]} \quad \text{se } \varphi = 0 \Rightarrow \Psi_\gamma = \Psi_q = 1$$

$$\Psi_c = \Psi_q - \frac{1 - \Psi_q}{N_c \cdot \operatorname{tg}(\varphi)} \quad \text{se } \varphi = 0 \Rightarrow \Psi_c = 0.32 + 0.12 \cdot \frac{B}{L} + 0.6 \cdot \log_{10}(I_r)$$

- se  $I_r > I_{r,crit}$  si ha che  $\Psi_\gamma = \Psi_q = \Psi_c = 1$ .

Il significato dei simboli adottati nelle equazioni sopra riportate è il seguente:

- $E_{ed}$  modulo edometrico del terreno sottostante la fondazione
- $\nu$  coefficiente di Poisson del terreno sottostante la fondazione
- $k_0$  coefficiente di spinta a riposo del terreno sottostante la fondazione
- $\varphi$  angolo d'attrito efficace del terreno sottostante il piano di posa
- $c'$  coesione (espressa in termini di tensioni efficaci)
- $\sigma'$  tensione litostatica effettiva a profondità  $D+B/2$
- $L$  luce delle singole travi di fondazione
- $D$  profondità del piano di posa della fondazione a partire dal piano campagna
- $B$  larghezza della trave di fondazione

Definito il meccanismo di rottura, il calcolo del carico limite viene eseguito modellando il terreno come un mezzo rigido perfettamente plastico con la seguente espressione:

$$q_{ult} = \gamma_1 \cdot D \cdot N_q \cdot s_q \cdot d_q \cdot i_q \cdot \Psi_q + c \cdot N_c \cdot s_c \cdot d_c \cdot i_c \cdot \Psi_c + \gamma_2 \cdot \frac{B}{2} \cdot N_\gamma \cdot s_\gamma \cdot d_\gamma \cdot i_\gamma \cdot \Psi_\gamma \cdot r_\gamma.$$

Il significato dei termini presenti nella relazione trinomia sopra riportata è il seguente:

- $N_q, N_c, N_\gamma$ , fattori adimensionali di portanza funzione dell'angolo d'attrito interno  $\varphi$  del terreno
- $s_q, s_c, s_\gamma$ , coefficienti che rappresentano il fattore di forma
- $d_q, d_c, d_\gamma$ , coefficienti che rappresentano il fattore dell'approfondimento
- $i_q, i_c, i_\gamma$ , coefficienti che rappresentano il fattore di inclinazione del carico
- $\gamma_1$  peso per unità di volume del terreno sovrastante il piano di posa
- $\gamma_2$  peso per unità di volume del terreno sottostante il piano di posa

Per fondazioni aventi larghezza modesta si dimostra che il terzo termine non aumenta indefinitamente e per valori elevati di "B", sia secondo Vesic che secondo de Beer, il valore limite è prossimo a quello di una fondazione profonda. Bowles per fondazioni di larghezza maggiore di 2.00 metri propone il seguente fattore riduttivo:

$$r_\gamma = 1 - 0.25 \cdot \log_{10} \left( \frac{B}{2} \right) \quad \text{dove "B" va espresso in metri.}$$

Questa relazione risulta particolarmente utile per fondazioni larghe con rapporto  $D/B$  basso (platee e simili), caso nel quale il terzo termine dell'equazione trinomia è predominante.

Nel caso di carico eccentrico Meyerhof consiglia di ridurre le dimensioni della superficie di contatto ( $A_i$ ) tra fondazione e terreno ( $B, L$ ) in tutte le formule del calcolo del carico limite. Tale riduzione è espressa dalle seguenti relazioni:



$B_{rid} = B - 2 \cdot e_B$        $L_{rid} = L - 2 \cdot e_L$       dove  $e_B, e_L$  sono le eccentricità relative alle dimensioni in esame.

L'equazione trinomia del carico limite può essere risolta secondo varie formulazioni, di seguito si riportano quelle che sono state implementate:

#### Formulazione di Hansen (1970)

$$N_q = tg^2 \left( \frac{90^\circ + \varphi}{2} \right) \cdot e^{\pi \cdot tg(\varphi)} \quad N_\gamma = 1.5 \cdot (N_q - 1) \cdot tg(\varphi) \quad N_c = (N_q - 1) \cdot ctg(\varphi)$$

- se  $\varphi \neq 0$  si ha:

$$s_q = 1 + \frac{B}{L} \cdot tg(\varphi) \quad s_\gamma = 1 - 0.4 \cdot \frac{B}{L} \quad s_c = 1 + \frac{N_q \cdot B}{N_c \cdot L}$$

$$d_q = 1 + 2 \cdot tg(\varphi) \cdot (1 - sen(\varphi))^2 \cdot \Theta \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$\text{dove : se } \frac{D}{B} \leq 1 \Rightarrow \Theta = \frac{D}{B}, \text{ se } \frac{D}{B} > 1 \Rightarrow \Theta = arctg\left(\frac{D}{B}\right)$$

$$i_q = \left[ 1 - \frac{0.5 \cdot H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^{\alpha_1} \quad i_\gamma = \left[ 1 - \frac{0.7 \cdot H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^{\alpha_2} \quad i_c = i_q - \frac{1 - i_q}{N_q - 1}$$

- se  $\varphi = 0$  si ha:

$$s_q = 1.0 \quad s_\gamma = 1.0 \quad s_c = 1 + 0.2 \cdot \frac{B}{L}$$

$$d_q = 1.0 \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$i_q = 1.0 \quad i_\gamma = 1.0 \quad i_c = 0.5 \cdot \left( 1 + \sqrt{1 - \frac{H}{A_f \cdot c_a}} \right)$$

#### Formulazione di Vesic (1975)

$$N_q = tg^2 \left( \frac{90^\circ + \varphi}{2} \right) \cdot e^{\pi \cdot tg(\varphi)} \quad N_\gamma = 2 \cdot (N_q + 1) \cdot tg(\varphi) \quad N_c = (N_q - 1) \cdot ctg(\varphi)$$

- se  $\varphi \neq 0$  si ha:

$$s_q = 1 + \frac{B}{L} \cdot tg(\varphi) \quad s_\gamma = 1 - 0.4 \cdot \frac{B}{L} \quad s_c = 1 + \frac{N_q \cdot B}{N_c \cdot L}$$

$$d_q = 1 + 2 \cdot tg(\varphi) \cdot (1 - sen(\varphi))^2 \cdot \Theta \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$\text{dove : se } \frac{D}{B} \leq 1 \Rightarrow \Theta = \frac{D}{B}, \text{ se } \frac{D}{B} > 1 \Rightarrow \Theta = arctg\left(\frac{D}{B}\right)$$

$$i_q = \left[ 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^m \quad i_\gamma = \left[ 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^{m+1} \quad i_c = i_q - \frac{1 - i_q}{N_q - 1}$$

$$\text{dove : } m = m_B = \frac{2 + \frac{B}{L}}{1 + \frac{B}{L}} \quad m = m_L = \frac{2 + \frac{L}{B}}{1 + \frac{L}{B}}$$

- se  $\varphi = 0$  si ha:

$$s_q = 1.0 \quad s_\gamma = 1.0 \quad s_c = 1 + 0.2 \cdot \frac{B}{L}$$

$$d_q = 1.0 \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$i_q = 1.0 \quad i_\gamma = 1.0 \quad i_c = 1 - \frac{m \cdot H}{A_f \cdot c_a \cdot N_c}$$

#### Formulazione di Brinch-Hansen



$$N_q = tg^2 \left( \frac{90^\circ + \varphi}{2} \right) \cdot e^{\pi \cdot tg(\varphi)}$$

$$N_\gamma = 2 \cdot (N_q + 1) \cdot tg(\varphi) \quad N_c = (N_q - 1) \cdot ctg(\varphi)$$

- se  $\varphi \neq 0$  si ha:

$$s_q = 1 + 0.1 \cdot \frac{B \cdot (1 + \sin(\varphi))}{L \cdot (1 - \sin(\varphi))}$$

$$s_\gamma = 1 + 0.1 \cdot \frac{B \cdot (1 + \sin(\varphi))}{L \cdot (1 - \sin(\varphi))}$$

$$s_c = 1 + 0.2 \cdot \frac{B \cdot (1 + \sin(\varphi))}{L \cdot (1 - \sin(\varphi))}$$

$$d_q = 1 + 2 \cdot tg(\varphi) \cdot (1 - \sin(\varphi))^2 \cdot \Theta \quad d_\gamma = 1.0 \quad d_c = d_q - \frac{1 - d_q}{N_c \cdot tg(\varphi)}$$

$$\text{dove: se } \frac{D}{B} \leq 1 \Rightarrow \Theta = \frac{D}{B}, \text{ se } \frac{D}{B} > 1 \Rightarrow \Theta = \arctg\left(\frac{D}{B}\right)$$

$$i_q = \left[ 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^m$$

$$i_\gamma = \left[ 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^{m+1}$$

$$i_c = i_q - \frac{1 - i_q}{N_q - 1}$$

$$\text{dove: } m = m_B = \frac{2 + \frac{B}{L}}{1 + \frac{B}{L}}$$

$$m = m_L = \frac{2 + \frac{L}{B}}{1 + \frac{L}{B}}$$

- se  $\varphi = 0$  si ha:

$$s_q = 1.0 \quad s_\gamma = 1.0 \quad s_c = 1 + 0.2 \cdot \frac{B}{L}$$

$$d_q = 1.0 \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$i_q = 1.0 \quad i_\gamma = 1.0 \quad i_c = 1 - \frac{m \cdot H}{A_f \cdot c_a \cdot N_c}$$

### Formulazione Eurocodice 7

$$N_q = tg^2 \left( \frac{90^\circ + \varphi}{2} \right) \cdot e^{\pi \cdot tg(\varphi)}$$

$$N_\gamma = 2 \cdot (N_q - 1) \cdot tg(\varphi) \quad N_c = (N_q - 1) \cdot ctg(\varphi)$$

- se  $\varphi \neq 0$  si ha:

$$s_q = 1 + \frac{B}{L} \cdot \sin(\varphi) \quad s_\gamma = 1 - 0.3 \cdot \frac{B}{L} \quad s_c = \frac{s_q \cdot (N_q - 1)}{N_q - 1}$$

$$d_q = 1 + 2 \cdot tg(\varphi) \cdot (1 - \sin(\varphi))^2 \cdot \Theta \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$\text{dove: se } \frac{D}{B} \leq 1 \Rightarrow \Theta = \frac{D}{B}, \text{ se } \frac{D}{B} > 1 \Rightarrow \Theta = \arctg\left(\frac{D}{B}\right)$$

- se H è parallela al lato B si ha:

$$i_q = \left[ 1 - \frac{0.7 \cdot H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^3$$

$$i_\gamma = \left[ 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)} \right]^3$$

$$i_c = \frac{i_q \cdot N_q - 1}{N_q - 1}$$

- se H è parallela al lato L si ha:

$$i_q = 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)}$$

$$i_\gamma = 1 - \frac{H}{V + A_f \cdot c_a \cdot ctg(\varphi)}$$

$$i_c = \frac{i_q \cdot N_q - 1}{N_q - 1}$$

- se  $\varphi = 0$  si ha:

$$s_q = 1.0 \quad s_\gamma = 1.0 \quad s_c = 1 + 0.2 \cdot \frac{B}{L}$$

$$d_q = 1.0 \quad d_\gamma = 1.0 \quad d_c = 1 + 0.4 \cdot \Theta$$

$$i_q = 1.0 \quad i_\gamma = 1.0 \quad i_c = 0.5 \cdot \left( 1 + \sqrt{1 - \frac{H}{A_f \cdot c_a}} \right)$$

Si ricorda che per le relazioni sopra riportate nel caso in cui  $\varphi = 0 \Rightarrow N_q = 1.0$ ,  $N_\gamma = 1.0$  e  $N_c = 2 + \pi$ .



Il significato dei termini presenti nelle relazioni su descritte è il seguente:

- $V$  componente verticale del carico agente sulla fondazione
- $H$  componente orizzontale del carico agente sulla fondazione (sia lungo  $B$  che lungo  $L$ )
- $c_a$  adesione fondazione-terreno (valore variabile tra il 60% e 100% della coesione)
- $\alpha_1, \alpha_2$  esponenti di potenza che variano tra 2 e 5

Nel caso in cui il cuneo di fondazione sia interessato da falda idrica il valore di  $\gamma_2$  nella formula trinomia assume la seguente espressione:

$$\gamma_2 = \frac{\gamma \cdot z + \gamma_{sat} \cdot (h_c - z)}{h_c} \quad h_c = \frac{B}{2} \cdot \tan\left(\frac{90 + \varphi}{2}\right)$$

dove i termini dell'espressione hanno il seguente significato:

- $\gamma$  peso per unità di volume del terreno sottostante il piano di posa
- $\gamma_{sat}$  peso per unità di volume saturo del terreno sottostante il piano di posa
- $z$  profondità della falda dal piano di posa
- $h_c$  altezza del cuneo di rottura della fondazione

Tutto ciò che è stato detto sopra è valido nell'ipotesi di terreno con caratteristiche geotecniche omogenee. Nella realtà i terreni costituenti il piano di posa delle fondazioni sono quasi sempre composti, o comunque riconducibili, a formazioni di terreno omogenee di spessore variabile che si sovrappongono (caso di terreni stratificati). In queste condizioni i parametri vengono determinati con la seguente procedura:

- viene determinata l'altezza del cuneo di rottura in funzione delle caratteristiche geotecniche degli strati attraversati; quindi si determinano il numero degli strati interessati da esso
- in corrispondenza di ogni superficie di separazione, partendo da quella immediatamente sottostante il piano di posa della fondazione, fino a raggiungere l'altezza del cuneo di rottura, viene determinata la capacità portante di ogni singolo strato come somma di due valori: il primo dato dall'applicazione della formula trinomia alla quota  $i$ -esima dello strato; il secondo dato dalla resistenza al punzonamento del terreno sovrastante lo strato in esame
- il minimo di questi due valori sarà assunto come valore massimo della capacità portante della fondazione stratificata

Si può formulare il procedimento anche in forma analitica:

$$q'_{ult} = [q''_{ult} + q_{resT}]_{\min} = \left[ q''_{ult} + \frac{p}{A_f} (P_V \cdot K_s \cdot \tan(\varphi) + d \cdot c) \right]_{\min}$$

dove i termini dell'espressione hanno il seguente significato:

- $q''_{ult}$  carico limite per un'ipotetica fondazione posta alla quota dello strato interessato
- $p$  perimetro della fondazione
- $P_V$  spinta verticale del terreno dal piano di posa allo strato interessato
- $K_s$  coefficiente di spinta laterale del terreno
- $d$  distanza dal piano di posa allo strato interessato

## CARICO LIMITE DI FONDAZIONI SUPERFICIALI SU ROCCIA

Per la determinazione del carico limite nel caso di presenza di ammasso roccioso bisogna valutare molto attentamente il grado di solidità della roccia stessa. Tale valutazione viene in genere eseguita stimando l'indice  $RQD$  (Rock Quality Designation) che rappresenta una misura della qualità di un ammasso roccioso. Tale indice può variare da un minimo di 0 (caso in cui la lunghezza dei pezzi di roccia estratti dal carotiere è inferiore a 100 mm) ad un massimo di 1 (caso in cui la carota risulta integra) ed è calcolato nel seguente modo:

$$RQD = \frac{\sum \text{lunghezze dei pezzi di roccia intatta} > 100\text{mm}}{\text{lunghezza del carotiere}}$$

Se il valore di  $RQD$  è molto basso la roccia è molto fratturata ed il calcolo della capacità portante dell'ammasso roccioso va condotto alla stregua di un terreno sciolto utilizzando tutte le formulazioni sopra descritte.

Per ricavare la capacità portante di rocce non assimilabili ad ammassi di terreno sciolto sono state implementate due formulazioni: quella di Terzaghi (1943) e quella di Stagg-Zienkiewicz (1968), entrambe correlate all'indice  $RQD$ . In definitiva il valore della capacità portante sarà espresso dalla seguente relazione:

$$q'_{ult} = q''_{ult} \cdot RQD^2$$



dove i termini dell'espressione hanno il seguente significato:

- $q'_{ult}$  carico limite dell'ammasso roccioso
- $q''_{ult}$  carico limite calcolato alla Terzaghi o alla Stagg-Zienkiewicz

In questo caso l'equazione trinomia del carico limite assume la seguente forma:

$$q''_{ult} = \gamma_1 \cdot D \cdot N_q + c \cdot N_c \cdot s_c + \gamma_2 \cdot \frac{B}{2} \cdot N_\gamma \cdot s_\gamma$$

I termini presenti nell'equazione hanno lo stesso significato già visto in precedenza; i coefficienti di forma assumeranno i seguenti valori:

$s_c = 1.0$  per fondazioni di tipo nastriforme

$s_c = 1.3$  per fondazioni di tipo quadrato;

$s_\gamma = 1.0$  per fondazioni di tipo nastriforme

$s_\gamma = 0.8$  per fondazioni di tipo quadrato.

I fattori adimensionali di portanza a seconda della formulazione adottata saranno:

#### Formulazione di Terzaghi (1943)

$$N_q = \frac{e^{2 \left( 0.75 \cdot \pi - \frac{\varphi}{2} \right) \cdot \tan(\varphi)}}{2 \cdot \cos^2 \left( \frac{90^\circ + \varphi}{2} \right)} \quad N_\gamma = \frac{\tan(\varphi)}{2} \left( \frac{K_{p\gamma}}{\cos^2(\varphi)} - 1 \right) \quad N_c = (N_q - 1) \cdot \tan(\varphi)$$

se  $\varphi = 0 \Rightarrow N_c = 1.5 \cdot \pi + 1$

$\varphi$	0	5	10	15	20	25	30	35	40	45	50
$K_{p\gamma}$	10.8	12.2	14.7	18.6	25.0	35.0	52.0	82.0	141.0	298.0	800.0

#### Formulazione di Stagg-Zienkiewicz (1968)

$$N_q = \tan^6 \left( \frac{90^\circ + \varphi}{2} \right) \quad N_\gamma = N_q + 1 \quad N_c = 5 \cdot \tan^4 \left( \frac{90^\circ + \varphi}{2} \right)$$

### VERIFICA A ROTTURA PER SCORRIMENTO DI FONDAZIONI SUPERFICIALI

Se il carico applicato alla base della fondazione non è normale alla stessa bisogna effettuare anche una verifica per rottura a scorrimento. Rispetto al collasso per scorrimento la resistenza offerta dal sistema fondale viene valutata come somma di due componenti: la prima derivante dall'attrito fondazione-terreno, la seconda derivante dall'adesione. In generale, oltre a queste due componenti, può essere tenuto in conto anche l'effetto della spinta passiva del terreno di ricoprimento esercita sulla fondazione fino ad un massimo del 30%. La formulazione analitica della verifica può essere esposta nel seguente modo:

$$T_{sd} \leq T_{Rd} = N_{sd} \cdot \tan(\delta) + A_f \cdot c_a + S_p \cdot f_{sp}$$

dove i termini dell'espressione hanno il seguente significato:

- $T_{sd}$  componente orizzontale del carico agente sulla fondazione (sia lungo B che lungo L)
- $N_{sd}$  componente verticale del carico agente sulla fondazione
- $c_a$  adesione fondazione-terreno (valore variabile tra il 60% e 100% della coesione)
- $\delta$  angolo d'attrito fondazione-terreno (valore variabile tra il 60% e 100% dell'angolo di attrito)
- $S_p$  spinta passiva del terreno di ricoprimento della fondazione
- $f_{sp}$  percentuale di partecipazione della spinta passiva
- $A_f$  superficie di contatto del piano di posa della fondazione

La verifica deve essere effettuata sia per componenti taglianti parallele alla base della fondazione che per quelle ortogonali.

### DETERMINAZIONE DELLE TENSIONI INDOTTE NEL TERRENO



Ai fini del calcolo dei cedimenti è essenziale conoscere lo stato tensionale indotto nel terreno a varie profondità da un carico applicato in superficie. Tale determinazione viene eseguita ipotizzando che il terreno si comporti come un mezzo continuo, elastico-lineare, omogeneo e isotopo. Tale assunzione, utilizzata per la determinazione della variazione delle tensioni verticali dovuta all'applicazione di un carico in superficie, è confortata dalla letteratura (Morgenstern e Phukan) perché la non linearità del materiale poco influenza la distribuzione delle tensioni verticali. Per ottenere un profilo verticale di pressioni si possono utilizzare tre metodi di calcolo: quello di Boussinesq, quello di Westergaard oppure quello di Mindlin; tutti basati sulla teoria del continuo elastico. Il metodo di Westergaard differisce da quello di Boussinesq per la presenza del coefficiente di Poisson "u", quindi si adatta meglio ai terreni stratificati. Il metodo di Mindlin differisce dai primi due per la possibilità di posizionare il carico all'interno del continuo elastico mentre i primi due lo pongono esclusivamente sulla frontiera quindi si presta meglio al caso di fondazioni molto profonde. Nel caso di fondazioni poste sulla frontiera del continuo elastico il metodo di Mindlin risulta equivalente a quello di Boussinesq. Le espressioni analitiche dei tre metodi di calcolo sono:

$$\text{Boussinesq} \Rightarrow \Delta\sigma_v = \frac{3 \cdot Q \cdot z^3}{2 \cdot \pi \cdot (r^2 + z^2)^{\frac{5}{2}}} \quad \text{Westergaard} \Rightarrow \Delta\sigma_v = \frac{Q}{2 \cdot \pi \cdot z^2} \cdot \frac{\sqrt{\frac{1-2 \cdot \nu}{2-2 \cdot \nu}}}{\left(\frac{1-2 \cdot \nu}{2-2 \cdot \nu} + \frac{r^2}{z^2}\right)^{\frac{3}{2}}}$$

dove i termini dell'espressioni hanno il seguente significato:

- Q carico puntiforme applicato sulla frontiera del mezzo
- r proiezione orizzontale della distanza del punto di applicazione del carico dal punto in esame
- z proiezione verticale della distanza del punto di applicazione del carico dal punto in esame

$$\text{Mindlin} \Rightarrow \Delta\sigma_v = \frac{Q}{8 \cdot \pi \cdot (1-\nu) \cdot D^2} \left( \frac{-\frac{(1-2 \cdot \nu) \cdot (m-1)}{A^3} + \frac{(1-2 \cdot \nu) \cdot (m-1)}{B^3} - \frac{3 \cdot (m-1)^3}{A^5} - \frac{30 \cdot m \cdot (m+1)^3}{B^7}}{-\frac{3 \cdot (3-4 \cdot \nu) \cdot m \cdot (m+1)^2 - 3 \cdot (m+1) \cdot (5 \cdot m-1)}{B^5}} \right)$$

$$n = \frac{r}{D}; \quad m = \frac{z}{D}; \quad A^2 = n^2 + (m-1)^2; \quad B^2 = n^2 + (m+1)^2$$

dove i termini dell'espressioni hanno il seguente significato:

- Q carico puntiforme applicato sulla frontiera o all'interno del mezzo
- D proiezione verticale della distanza del punto di applicazione del carico dalla frontiera del mezzo
- r proiezione orizzontale della distanza del punto di applicazione del carico dal punto in esame
- z proiezione verticale della distanza del punto di applicazione del carico dal punto in esame

Basandosi sulle ben note equazioni ricavate per un carico puntiforme, l'algoritmo implementato esegue un'integrazione delle equazioni di cui sopra lungo la verticale di ogni punto notevole degli elementi fondali estesa a tutte le aree di carico presenti sulla superficie del terreno; questo consente di determinare la variazione dello stato tensionale verticale " $\Delta\sigma_v$ ". Bisogna sottolineare che, nel caso di pressione, "Q" va definito come "pressione netta", ossia la pressione in eccesso rispetto a quella geostatica esistente che può essere sopportata con sicurezza alla profondità "D" del piano di posa delle fondazioni. Questo perché i cedimenti sono causati solo da incrementi netti di pressione che si aggiungono all'esistente pressione geostatica.

## CALCOLO DEI CEDIMENTI DELLA FONDAZIONE

La determinazione dei cedimenti delle fondazioni assume una rilevanza notevole per il manufatto da realizzarsi, in special modo nella fase di esercizio. Nell'evolversi della fase di cedimento il terreno passa da uno stato di sforzo corrente dovuto al peso proprio ad uno nuovo dovuto all'effetto del carico addizionale applicato. Questa variazione dello stato tensionale produce una serie di movimenti di rotolamento e scorrimento relativo tra i granuli del terreno, nonché deformazioni elastiche e rotture delle particelle costituenti il mezzo localizzate in una limitata zona d'influenza a ridosso dell'area di carico. L'insieme di questi fenomeni costituisce il cedimento che nel caso in esame è verticale. Nonostante la frazione elastica sia modesta, l'esperienza ha dimostrato che ai fini del calcolo dei cedimenti modellare il terreno come materiale pseudoelastico permette di ottenere risultati soddisfacenti. In letteratura sono descritti diversi metodi per il calcolo dei cedimenti ma si ricorda che, qualunque



sia il metodo di calcolo, la determinazione del valore del cedimento deve intendersi come la miglior stima delle deformazioni subite dal terreno da attendersi all'applicazione dei carichi. Nel seguito vengono descritte le teorie implementate:

**Metodo edometrico**, che si basa sulla nota relazione:

$$w_{ed} = \sum_{i=1}^n \frac{\Delta\sigma_{v,i}}{E_{ed,i}} \cdot \Delta z_i$$

dove i termini dell'espressioni hanno il seguente significato:

- $\Delta\sigma_{v,i}$  variazione dello stato tensionale verticale alla profondità "z<sub>i</sub>" dello strato i-esimo per l'applicazione del carico
- $E_{ed,i}$  modulo edometrico del terreno relativo allo strato i-esimo
- $\Delta z_i$  spessore dello strato i-esimo

Si ricorda che questo metodo si basa sull'ipotesi edometrica quindi l'accuratezza del risultato è maggiore quando il rapporto tra lo spessore dello strato deformabile e la dimensione in pianta delle fondazioni è ridotto, tuttavia il metodo edometrico consente una buona approssimazione anche nel caso di strati deformabili di spessore notevole.

**Metodo dell'elasticità**, che si basa sulle note relazioni:

$$w_{imp.} = \sum_{i=1}^n \frac{\Delta\sigma_{v,i}}{E_i} \cdot \Delta z_i \quad w_{Lib.} = \sum_{i=1}^n \frac{\Delta\sigma_{v,i}}{E_i} \cdot \frac{1-2 \cdot \nu^2}{1-\nu} \cdot \Delta z_i$$

dove i termini dell'espressioni hanno il seguente significato:

- $w_{imp.}$  cedimento in condizioni di deformazione laterale impedita
- $w_{Lib.}$  cedimento in condizioni di deformazione laterale libera
- $\Delta\sigma_{v,i}$  variazione stato tensionale verticale alla profondità "z<sub>i</sub>" dello strato i-esimo per l'applicazione del carico
- $E_i$  modulo elastico del terreno relativo allo strato i-esimo
- $\Delta z_i$  spessore dello strato i-esimo

La doppia formulazione adottata consente di ottenere un intervallo di valori del cedimento elastico per la fondazione in esame (valore minimo per  $w_{imp.}$  e valore massimo per  $w_{Lib.}$ ).

## SIMBOLOGIA ADOTTATA NEI TABULATI DI CALCOLO

Per maggior chiarezza nella lettura dei tabulati di calcolo viene riportata la descrizione dei simboli principali utilizzati nella stesura degli stessi. Per comodità di lettura la legenda è suddivisa in paragrafi con la stessa modalità in cui sono stampati i tabulati di calcolo.

### ***Dati geometrici degli elementi costituenti le fondazioni superficiali***

*per tipologie travi e plinti superficiali:*

- Indice Strat. indice della stratigrafia associata all'elemento
- Prof. Fon. profondità del piano di posa dell'elemento a partire dal piano campagna
- Base larghezza della sezione trasversale dell'elemento
- Altezza altezza della sezione trasversale dell'elemento
- Lung. Elem. dimensione dello sviluppo longitudinale dell'elemento
- Lung. Travata nel caso l'elemento appartenga ad un macroelemento, rappresenta la dimensione dello sviluppo longitudinale del macroelemento

*per tipologia platea:*

- Indice Strat. indice della stratigrafia associata all'elemento
- Prof. Fon. profondità del piano di posa dell'elemento dal piano campagna
- Dia. Eq. diametro del cerchio equivalente alla superficie dell'elemento
- Spessore spessore dell'elemento
- Superficie superficie dell'elemento
- Vert. Elem. Numero dei vertici che costituiscono l'elemento



- Macro            nel caso l'elemento appartenga ad un macroelemento, rappresenta il numero del macroelemento

Nel caso si avesse scelto di determinare la portanza anche per gli elementi platea è presente un ulteriore riga nella quale sono riportate le caratteristiche geometriche del plinto equivalente alla macro/platea in esame.

### ***Dati di carico degli elementi costituenti le fondazioni superficiali***

*per tipologie travi e plinti superficiali:*

- Cmb            numero della combinazione di carico
- Tipologia      tipologia della combinazione di carico
- Sismica        flag per l'applicazione della riduzione sismica alle caratteristiche meccaniche del terreno di fondazione per la combinazione di carico in esame
- Ecc. B        eccentricità del carico normale agente sul piano di fondazione in direzione parallela alla sezione trasversale dell'elemento
- Ecc. L        eccentricità del carico normale agente sul piano di fondazione in direzione parallela allo sviluppo longitudinale dell'elemento
- S.Taglio B    sforzo di taglio agente sul piano di fondazione in direzione parallela alla sezione trasversale dell'elemento
- S.Taglio L    sforzo di taglio agente sul piano di fondazione in direzione parallela allo sviluppo longitudinale dell'elemento
- S.Normale    carico normale agente sul piano di fondazione
- T.T.min        minimo valore della distribuzione tensionale di contatto tra terreno ed elemento fondale
- T.T.max        massimo valore della distribuzione tensionale di contatto tra terreno ed elemento fondale

*per tipologia platea:*

- Cmb            numero della combinazione di carico
- Tipologia      tipologia della combinazione di carico
- Sismica        flag per l'applicazione della riduzione sismica alle caratteristiche meccaniche del terreno di fondazione per la combinazione di carico in esame
- Press. N1    tensione di contatto tra terreno e fondazione nel vertice n° 1 dell'elemento
- Press. N2    tensione di contatto tra terreno e fondazione nel vertice n° 2 dell'elemento
- Press. N3    tensione di contatto tra terreno e fondazione nel vertice n° 3 dell'elemento
- Press. N4    tensione di contatto tra terreno e fondazione nel vertice n° 4 dell'elemento
- S.Taglio X    sforzo di taglio agente sul piano di fondazione in direzione parallela all'asse X del riferimento globale
- S.Taglio Y    sforzo di taglio agente sul piano di fondazione in direzione parallela all'asse Y del riferimento globale

Nel caso si avesse scelto di determinare la portanza anche per gli elementi platea è presente un ulteriore riga nella quale sono riportate le macroazioni (integrale delle azioni applicate sui singoli elementi che compongono la platea) agenti sul plinto equivalente alla macro/platea in esame.

### ***Valori di calcolo della portanza per fondazioni superficiali***

- Cmb            numero della combinazione di carico
- Qlim            capacità portante totale data dalla somma di Qlim q, Qlim g, Qlim c e di Qres P (nel caso in cui si operi alle tensioni ammissibili corrisponde alla portanza ammissibile)
- Qlim q        termine relativo al sovraccarico della formula trinomia per il calcolo della capacità portante (nel caso in cui si operi alle tensioni ammissibili corrisponde alla relativa parte della portanza ammissibile)
- Qlim g        termine relativo alla larghezza della base di fondazione della formula trinomia per il calcolo della capacità portante (nel caso in cui si operi alle tensioni ammissibili corrisponde alla relativa parte della portanza ammissibile)
- Qlim c        termine relativo alla coesione della formula trinomia per il calcolo della capacità portante (nel caso in cui si operi alle tensioni ammissibili corrisponde alla relativa parte della portanza ammissibile)



- Qres P termine relativo alla resistenza al punzonamento del terreno sovrastante lo strato di rottura. Diverso da zero solo nel caso di terreni stratificati dove lo strato di rottura è diverso dal primo (nel caso in cui si operi alle tensioni ammissibili corrisponde alla relativa parte della portanza ammissibile)
- Qmax / Qlim rapporto tra il massimo valore della distribuzione tensionale di contatto tra terreno ed elemento fondale ed il valore della capacità portante (verifica positiva se il rapporto è < 1.0).
- TBlim valore limite della resistenza a scorrimento in direzione parallela alla sezione trasversale dell'elemento
- TB / TBlim rapporto tra lo sforzo di taglio agente ed il valore limite della resistenza a scorrimento in direzione parallela alla sezione trasversale dell'elemento (verifica positiva se il rapporto è < 1.0)
- TLlim valore limite della resistenza a scorrimento in direzione parallela allo sviluppo longitudinale dell'elemento
- TL / TLlim rapporto tra lo sforzo di taglio agente ed il valore limite della resistenza a scorrimento in direzione parallela allo sviluppo longitudinale dell'elemento (verifica positiva se il rapporto è < 1.0)
- Sgm. Lt. tensione litostatica agente alla quota del piano di posa dell'elemento fondale

Nel caso si avesse scelto di determinare la portanza anche per gli elementi platea è presente un ulteriore riga nella quale sono riportate le verifiche di portanza del plinto equivalente alla macro/platea in esame.

#### **Valori di calcolo dei cedimenti per fondazioni superficiali**

- Cmb numero della combinazione di carico e tipologia
- Nodo vertice dell'elemento in cui viene calcolato il cedimento
- Car. Netto valore del carico netto applicato sulla superficie del terreno
- Cedimento/i valore del cedimento (nel caso di calcolo di cedimenti elastici i valori riportati sono due, il primo corrisponde al cedimento  $w_{imp.}$ , mentre il secondo al cedimento  $w_{Lib.}$ )

### **PARAMETRI DI CALCOLO**

#### **Metodi di calcolo della portanza per fondazioni superficiali:**

- Per terreni sciolti: Eurocodice EC 7
- Per terreni lapidei: Terzaghi

#### **Fattori utilizzati per il calcolo della portanza per fondazioni superficiali :**

- Riduzione dimensioni per eccentricità: si
- Fattori di forma della fondazione: si
- Fattori di profondità del piano di posa: si
- Fattori di inclinazione del carico: si
- Fattori di punzonamento (Vesic): si
- Fattore riduzione effetto piastra (Bowles): si
- Fattore di riduzione dimensione Base equivalente platea: 20.0 %
- Fattore di riduzione dimensione Lunghezza equivalente platea: 20.0 %

#### **Coefficienti parziali di sicurezza per Tensioni Ammissibili, SLE nel calcolo della portanza per fondazioni superficiali:**

- Coeff. parziale di sicurezza  $F_c$  (statico): 2.50
- Coeff. parziale di sicurezza  $F_q$  (statico): 2.50
- Coeff. parziale di sicurezza  $F_g$  (statico): 2.50

#### **Combinazioni di carico:**

#### **APPROCCIO PROGETTUALE TIPO 2 - Comb. (A1+M1+R3)**

Coefficienti parziali di sicurezza per SLU nel calcolo della portanza per fondazioni superficiali :

I coeff. A1 risultano combinati secondo lo schema presente nella relazione di calcolo della struttura.

- Coeff. M1 per  $\tan \phi$  (statico): 1
- Coeff. M1 per  $c'$  (statico): 1
- Coeff. M1 per  $C_u$  (statico): 1



- Coeff. R3 capacità portante (statico e sismico): 2.30
- Coeff. R3 scorrimento (statico e sismico): 1.10

#### Parametri per la verifica a scorrimento delle fondazioni superficiali:

- Fattore per l'adesione ( $6 < Ca < 10$ ): 8
- Fattore per attrito terreno-fondazione ( $5 < Delta < 10$ ): 7
- Frazione di spinta passiva fSp: 50.00 %
- Coeff. resistenza sulle sup. laterali: 1.30

#### Metodi e parametri per il calcolo dei cedimenti delle fondazioni superficiali:

- Metodo di calcolo tensioni superficiali: Boussinesq
- Modalità d'interferenza dei bulbi tensionali: sovrapposizione dei bulbi
- Metodo di calcolo dei cedimenti del terreno: cedimenti edometrici

### ARCHIVIO STRATIGRAFIE

Indice / Descrizione: 001 / 4855-Stratigrafia

Numero strati: 5

Profondità falda: 900.00 cm

Strato n.	Quota di riferimento	Spessore	Indice / Descrizione terreno	Attrito Neg.
1	da 0.0 a -200.0 cm	200.0 cm	003 / Limi e argille	Assente
2	da -200.0 a -460.0 cm	260.0 cm	001 / Ghiaie	Assente
3	da -460.0 a -1160.0 cm	700.0 cm	004 / Argille limose/sabbiose	Assente
4	da -1160.0 a -1400.0 cm	240.0 cm	002 / Ghiaie con sabbie	Assente
5	da -1400.0 a -1500.0 cm	100.0 cm	005 / Argille consistenti	Assente

### ARCHIVIO TERRENI

Indice / Descrizione terreno: **003 / Limi e argille**

Comportamento del terreno: condizione non drenata

Peso Spec.	P. Spec. Sat.	Coes.non dren.	Mod.Elast.	Mod.Edom.	Dens.Rel.	Poisson	C. Ades.
daN/cmc	daN/cmc	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	%	%	
1.850 E-3	2.850 E-3	1.090	93.000	93.000	60.0	0.500	0.47

Indice / Descrizione terreno: **001 / Ghiaie**

Comportamento del terreno: condizione drenata

Peso Spec.	P. Spec. Sat.	Angolo Res.	Coesione	Mod.Elast.	Mod.Edom.	Dens.Rel.	Poisson	C. Ades.
daN/cmc	daN/cmc	Gradi°	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	%	%	
1.850 E-3	2.850 E-3	35.000	0.000	417.907	561.000	60.0	0.299	1.00

Indice / Descrizione terreno: **004 / Argille limose/sabbiose**

Comportamento del terreno: condizione non drenata

Peso Spec.	P. Spec. Sat.	Coes.non dren.	Mod.Elast.	Mod.Edom.	Dens.Rel.	Poisson	C. Ades.
daN/cmc	daN/cmc	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	%	%	
1.280 E-3	2.280 E-3	0.820	65.000	65.000	60.0	0.500	0.48

Indice / Descrizione terreno: **002 / Ghiaie con sabbie**

Comportamento del terreno: condizione drenata

Peso Spec.	P. Spec. Sat.	Angolo Res.	Coesione	Mod.Elast.	Mod.Edom.	Dens.Rel.	Poisson	C. Ades.
daN/cmc	daN/cmc	Gradi°	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	%	%	
1.100 E-3	2.100 E-3	38.000	0.000	634.235	807.000	60.0	0.278	1.00

Indice / Descrizione terreno: **005 / Argille consistenti**

Comportamento del terreno: condizione non drenata

Peso Spec.	P. Spec. Sat.	Coes.non dren.	Mod.Elast.	Mod.Edom.	Dens.Rel.	Poisson	C. Ades.
daN/cmc	daN/cmc	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>	%	%	
9.400 E-4	1.940 E-3	0.970	86.000	86.000	60.0	0.500	0.48

### DATI GEOMETRICI DEGLI ELEMENTI COSTITUENTI LE FONDAZIONI SUPERFICIALI

Elemento n.	Tipologia	Id.Strat.	Prof. Fon.	Base	Altezza	Lung.Elem.	Lung.Trav.
			cm	cm	cm	cm	cm
Trave n. 1	Trave	001	120.000	60.000	100.000	103.000	1593.000
Trave n. 2	Trave	001	120.000	60.000	100.000	397.500	1593.000
Trave n. 3	Trave	001	120.000	60.000	100.000	360.000	1593.000
Trave n. 4	Trave	001	120.000	60.000	100.000	397.500	1593.000
Trave n. 5	Trave	001	120.000	60.000	100.000	335.000	1593.000



Trave n. 6	Trave	001	120.000	40.000	100.000	32.500	5336.500
Trave n. 23	Trave	001	120.000	40.000	100.000	390.000	3232.000
Trave n. 30	Trave	001	120.000	40.000	100.000	545.000	3232.000
Trave n. 37	Trave	001	120.000	40.000	100.000	507.000	3232.000
Trave n. 44	Trave	001	120.000	40.000	100.000	390.000	3232.000
Trave n. 48	Trave	001	120.000	60.000	100.000	453.500	1995.500
Trave n. 49	Trave	001	120.000	60.000	100.000	453.500	1995.500
Trave n. 50	Trave	001	120.000	60.000	100.000	453.500	1995.500
Trave n. 51	Trave	001	120.000	60.000	100.000	453.500	453.500
Trave n. 77	Trave	001	120.000	40.000	100.000	71.000	5336.500
Trave n. 78	Trave	001	120.000	60.000	100.000	103.000	1593.000
Trave n. 79	Trave	001	120.000	60.000	100.000	397.500	1593.000
Trave n. 80	Trave	001	120.000	60.000	100.000	360.000	1593.000
Trave n. 81	Trave	001	120.000	60.000	100.000	397.500	1593.000
Trave n. 82	Trave	001	120.000	60.000	100.000	335.000	1593.000
Trave n. 83	Trave	001	120.000	40.000	100.000	290.000	1669.000
Trave n. 84	Trave	001	120.000	40.000	80.000	356.000	1669.000
Trave n. 85	Trave	001	120.000	40.000	80.000	356.000	1669.000
Trave n. 86	Trave	001	120.000	40.000	80.000	356.000	1669.000
Trave n. 87	Trave	001	120.000	40.000	100.000	285.000	5336.500
Trave n. 101	Trave	001	120.000	60.000	100.000	762.000	1995.500
Trave n. 102	Trave	001	120.000	60.000	100.000	762.000	1995.500
Trave n. 103	Trave	001	120.000	60.000	100.000	762.000	1995.500
Trave n. 107	Trave	001	120.000	40.000	80.000	390.000	740.000
Trave n. 129	Trave	001	120.000	40.000	80.000	545.000	2492.000
Trave n. 136	Trave	001	120.000	40.000	80.000	507.000	2492.000
Trave n. 143	Trave	001	120.000	40.000	80.000	390.000	2492.000
Trave n. 176	Trave	001	120.000	60.000	100.000	325.500	1258.000
Trave n. 177	Trave	001	120.000	60.000	100.000	360.000	1258.000
Trave n. 178	Trave	001	120.000	60.000	100.000	397.500	1258.000
Trave n. 183	Trave	001	120.000	40.000	100.000	575.000	1669.000
Trave n. 184	Trave	001	120.000	40.000	80.000	509.000	1669.000
Trave n. 185	Trave	001	120.000	40.000	80.000	509.000	1669.000
Trave n. 186	Trave	001	120.000	40.000	80.000	509.000	1669.000
Trave n. 188	Trave	001	120.000	60.000	100.000	290.000	1995.500
Trave n. 189	Trave	001	120.000	60.000	100.000	290.000	1995.500
Trave n. 190	Trave	001	120.000	40.000	100.000	207.000	5336.500
Trave n. 191	Trave	001	120.000	60.000	100.000	397.500	732.500
Trave n. 192	Trave	001	120.000	60.000	100.000	335.000	732.500
Trave n. 193	Trave	001	120.000	60.000	100.000	780.000	1995.500
Trave n. 219	Trave	001	120.000	60.000	100.000	490.000	1995.500
Trave n. 220	Trave	001	120.000	60.000	100.000	490.000	1995.500
Trave n. 221	Trave	001	120.000	60.000	100.000	490.000	490.000
Trave n. 253	Trave	001	120.000	40.000	100.000	102.000	3232.000
Trave n. 264	Trave	001	120.000	40.000	100.000	272.000	3232.000
Trave n. 275	Trave	001	120.000	40.000	100.000	287.000	3232.000
Trave n. 285	Trave	001	120.000	40.000	100.000	340.000	3232.000
Trave n. 305	Trave	001	120.000	60.000	100.000	275.500	1593.000
Trave n. 306	Trave	001	120.000	60.000	100.000	360.000	1593.000
Trave n. 307	Trave	001	120.000	60.000	100.000	397.500	1593.000
Trave n. 308	Trave	001	120.000	60.000	100.000	335.000	1593.000
Trave n. 312	Trave	001	120.000	40.000	100.000	242.000	3460.000
Trave n. 313	Trave	001	120.000	40.000	100.000	242.000	5336.500
Trave n. 327	Trave	001	120.000	40.000	80.000	2280.000	2730.000
Trave n. 341	Trave	001	120.000	40.000	100.000	242.000	3460.000
Trave n. 342	Trave	001	120.000	40.000	100.000	242.000	5336.500
Trave n. 356	Trave	001	120.000	40.000	80.000	2280.000	2730.000
Trave n. 370	Trave	001	120.000	40.000	100.000	242.000	3460.000
Trave n. 371	Trave	001	120.000	40.000	100.000	242.000	5336.500
Trave n. 385	Trave	001	120.000	40.000	80.000	2280.000	2730.000
Trave n. 399	Trave	001	120.000	40.000	100.000	242.000	3460.000
Trave n. 400	Trave	001	120.000	40.000	100.000	242.000	5336.500
Trave n. 414	Trave	001	120.000	40.000	80.000	2280.000	2730.000
Trave n. 428	Trave	001	120.000	40.000	100.000	242.000	3460.000
Trave n. 429	Trave	001	120.000	40.000	100.000	242.000	5336.500
Trave n. 447	Trave	001	120.000	40.000	100.000	460.000	2730.000
Trave n. 454	Trave	001	120.000	40.000	100.000	460.000	2730.000
Trave n. 461	Trave	001	120.000	40.000	100.000	460.000	2730.000

Elemento n.	Tipologia	Id.Strat.	Prof. Fon. cm	Dia. Eq. cm	Spessore cm	Superficie cm <sup>2</sup>	Vertici n. per elem.	Macro n.
Platea n. 1	Platea	001	120.000	67.703	80.000	3600.000	4	1



[illegible]







Platea n. 146	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 147	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 148	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 149	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 150	Platea	001	120.000	74.165	80.000	4320.000	4	5
Platea n. 25	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 26	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 27	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 28	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 29	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 30	Platea	001	120.000	74.165	80.000	4320.000	4	5
Platea n. 55	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 56	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 57	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 58	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 59	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 60	Platea	001	120.000	74.165	80.000	4320.000	4	5
Platea n. 85	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 86	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 87	Platea	001	120.000	62.061	80.000	3025.000	4	5
Platea n. 88	Platea	001	120.000	60.054	80.000	2832.500	4	5
Platea n. 89	Platea	001	120.000	60.054	80.000	2832.500	4	5
Platea n. 90	Platea	001	120.000	71.007	80.000	3960.000	4	5
Platea n. 115	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 116	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 117	Platea	001	120.000	62.061	80.000	3025.000	4	5
Platea n. 118	Platea	001	120.000	60.054	80.000	2832.500	4	5
Platea n. 119	Platea	001	120.000	60.054	80.000	2832.500	4	5
Platea n. 120	Platea	001	120.000	71.007	80.000	3960.000	4	5
Platea n. 175	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 176	Platea	001	120.000	67.703	80.000	3600.000	4	5
Platea n. 177	Platea	001	120.000	64.820	80.000	3300.000	4	5
Platea n. 178	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 179	Platea	001	120.000	62.724	80.000	3090.000	4	5
Platea n. 180	Platea	001	120.000	74.165	80.000	4320.000	4	5
Platea n. 181	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 182	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 183	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 184	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 185	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 186	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 187	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 188	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 189	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 190	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 191	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 192	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 217	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 218	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 219	Platea	001	120.000	62.061	80.000	3025.000	4	6
Platea n. 220	Platea	001	120.000	62.061	80.000	3025.000	4	6
Platea n. 221	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 222	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 247	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 248	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 249	Platea	001	120.000	62.061	80.000	3025.000	4	6
Platea n. 250	Platea	001	120.000	62.061	80.000	3025.000	4	6
Platea n. 251	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 252	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 277	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 278	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 279	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 280	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 281	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 282	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 307	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 308	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 309	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 310	Platea	001	120.000	64.820	80.000	3300.000	4	6
Platea n. 311	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 312	Platea	001	120.000	67.703	80.000	3600.000	4	6
Platea n. 193	Platea	001	120.000	64.525	80.000	3270.000	4	7







Platea n.	266	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	267	Platea	001	120.000	62.061	80.000	3025.000	4	9
Platea n.	268	Platea	001	120.000	62.061	80.000	3025.000	4	9
Platea n.	269	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	270	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	295	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	296	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	297	Platea	001	120.000	62.061	80.000	3025.000	4	9
Platea n.	298	Platea	001	120.000	62.061	80.000	3025.000	4	9
Platea n.	299	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	300	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	325	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	326	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	327	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	328	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	329	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	330	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	205	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	206	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	207	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	208	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	209	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	210	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	235	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	236	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	237	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	238	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	239	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	240	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	349	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	350	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	351	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	352	Platea	001	120.000	64.820	80.000	3300.000	4	9
Platea n.	353	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	354	Platea	001	120.000	67.703	80.000	3600.000	4	9
Platea n.	301	Platea	001	120.000	67.928	80.000	3624.001	4	10
Platea n.	302	Platea	001	120.000	67.928	80.000	3624.001	4	10
Platea n.	303	Platea	001	120.000	65.036	80.000	3322.001	4	10
Platea n.	304	Platea	001	120.000	62.933	80.000	3110.601	4	10
Platea n.	305	Platea	001	120.000	62.933	80.000	3110.601	4	10
Platea n.	306	Platea	001	120.000	74.411	80.000	4348.802	4	10
Platea n.	331	Platea	001	120.000	67.928	80.000	3623.998	4	10
Platea n.	332	Platea	001	120.000	67.928	80.000	3623.998	4	10
Platea n.	333	Platea	001	120.000	65.036	80.000	3321.998	4	10
Platea n.	334	Platea	001	120.000	62.933	80.000	3110.598	4	10
Platea n.	335	Platea	001	120.000	62.933	80.000	3110.598	4	10
Platea n.	336	Platea	001	120.000	74.411	80.000	4348.797	4	10
Platea n.	211	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	212	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	213	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	214	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	215	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	216	Platea	001	120.000	74.165	80.000	4320.000	4	10
Platea n.	241	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	242	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	243	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	244	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	245	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	246	Platea	001	120.000	74.165	80.000	4320.000	4	10
Platea n.	271	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	272	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	273	Platea	001	120.000	62.061	80.000	3025.000	4	10
Platea n.	274	Platea	001	120.000	60.054	80.000	2832.500	4	10
Platea n.	275	Platea	001	120.000	60.054	80.000	2832.500	4	10
Platea n.	276	Platea	001	120.000	71.007	80.000	3960.000	4	10
Platea n.	355	Platea	001	120.000	67.928	80.000	3624.001	4	10
Platea n.	356	Platea	001	120.000	67.928	80.000	3624.001	4	10
Platea n.	357	Platea	001	120.000	65.036	80.000	3322.001	4	10
Platea n.	358	Platea	001	120.000	62.933	80.000	3110.601	4	10
Platea n.	359	Platea	001	120.000	62.933	80.000	3110.601	4	10
Platea n.	360	Platea	001	120.000	74.411	80.000	4348.802	4	10
Platea n.	361	Platea	001	120.000	67.928	80.000	3623.998	4	10



Platea n.	362	Platea	001	120.000	67.928	80.000	3623.998	4	10
Platea n.	363	Platea	001	120.000	65.036	80.000	3321.998	4	10
Platea n.	364	Platea	001	120.000	62.933	80.000	3110.598	4	10
Platea n.	365	Platea	001	120.000	62.933	80.000	3110.598	4	10
Platea n.	366	Platea	001	120.000	74.411	80.000	4348.797	4	10
Platea n.	367	Platea	001	120.000	67.928	80.000	3624.001	4	10
Platea n.	368	Platea	001	120.000	67.928	80.000	3624.001	4	10
Platea n.	369	Platea	001	120.000	65.036	80.000	3322.001	4	10
Platea n.	370	Platea	001	120.000	62.933	80.000	3110.601	4	10
Platea n.	371	Platea	001	120.000	62.933	80.000	3110.601	4	10
Platea n.	372	Platea	001	120.000	74.411	80.000	4348.802	4	10
Platea n.	373	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	374	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	375	Platea	001	120.000	62.061	80.000	3025.000	4	10
Platea n.	376	Platea	001	120.000	60.054	80.000	2832.500	4	10
Platea n.	377	Platea	001	120.000	60.054	80.000	2832.500	4	10
Platea n.	378	Platea	001	120.000	71.007	80.000	3960.000	4	10
Platea n.	379	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	380	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	381	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	382	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	383	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	384	Platea	001	120.000	74.165	80.000	4320.000	4	10
Platea n.	385	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	386	Platea	001	120.000	67.703	80.000	3600.000	4	10
Platea n.	387	Platea	001	120.000	64.820	80.000	3300.000	4	10
Platea n.	388	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	389	Platea	001	120.000	62.724	80.000	3090.000	4	10
Platea n.	390	Platea	001	120.000	74.165	80.000	4320.000	4	10
Platea n.	391	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	392	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	393	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	394	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	395	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	396	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	433	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	434	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	435	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	436	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	437	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	438	Platea	001	120.000	67.703	80.000	3600.000	4	11
Platea n.	475	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	476	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	477	Platea	001	120.000	62.061	80.000	3025.000	4	11
Platea n.	478	Platea	001	120.000	62.061	80.000	3025.000	4	11
Platea n.	479	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	480	Platea	001	120.000	64.820	80.000	3300.000	4	11
Platea n.	517	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	518	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	519	Platea	001	120.000	60.345	80.000	2860.000	4	11
Platea n.	520	Platea	001	120.000	60.345	80.000	2860.000	4	11
Platea n.	521	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	522	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	559	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	560	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	561	Platea	001	120.000	60.345	80.000	2860.000	4	11
Platea n.	562	Platea	001	120.000	60.345	80.000	2860.000	4	11
Platea n.	563	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	564	Platea	001	120.000	63.028	80.000	3120.000	4	11
Platea n.	608	Platea	001	120.000	73.648	80.000	4260.000	4	11
Platea n.	609	Platea	001	120.000	73.648	80.000	4260.000	4	11
Platea n.	610	Platea	001	120.000	70.512	80.000	3905.000	4	11
Platea n.	611	Platea	001	120.000	70.512	80.000	3905.000	4	11
Platea n.	612	Platea	001	120.000	73.648	80.000	4260.000	4	11
Platea n.	613	Platea	001	120.000	73.648	80.000	4260.000	4	11
Platea n.	397	Platea	001	120.000	75.694	80.000	4500.000	4	12
Platea n.	398	Platea	001	120.000	75.694	80.000	4500.000	4	12
Platea n.	399	Platea	001	120.000	75.694	80.000	4500.000	4	12
Platea n.	400	Platea	001	120.000	67.420	80.000	3570.000	4	12
Platea n.	401	Platea	001	120.000	67.420	80.000	3570.000	4	12
Platea n.	402	Platea	001	120.000	67.420	80.000	3570.000	4	12
Platea n.	439	Platea	001	120.000	75.694	80.000	4500.000	4	12







Platea n. 695	Platea	001	120.000	75.694	80.000	4500.000	4	12
Platea n. 409	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 410	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 411	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 412	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 413	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 414	Platea	001	120.000	64.820	80.000	3300.000	4	13
Platea n. 457	Platea	001	120.000	67.703	80.000	3600.000	4	13
Platea n. 458	Platea	001	120.000	67.703	80.000	3600.000	4	13
Platea n. 533	Platea	001	120.000	70.467	80.000	3900.000	4	13
Platea n. 534	Platea	001	120.000	70.467	80.000	3900.000	4	13
Platea n. 535	Platea	001	120.000	70.467	80.000	3900.000	4	13
Platea n. 536	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 537	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 538	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 539	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 540	Platea	001	120.000	60.345	80.000	2860.000	4	13
Platea n. 541	Platea	001	120.000	63.028	80.000	3120.000	4	13
Platea n. 542	Platea	001	120.000	63.028	80.000	3120.000	4	13
Platea n. 415	Platea	001	120.000	67.703	80.000	3600.000	4	13
Platea n. 416	Platea	001	120.000	67.703	80.000	3600.000	4	13
Platea n. 575	Platea	001	120.000	70.467	80.000	3900.000	4	13
Platea n. 576	Platea	001	120.000	70.467	80.000	3900.000	4	13
Platea n. 577	Platea	001	120.000	70.467	80.000	3900.000	4	13
Platea n. 578	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 579	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 580	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 581	Platea	001	120.000	60.755	80.000	2899.000	4	13
Platea n. 582	Platea	001	120.000	60.345	80.000	2860.000	4	13
Platea n. 583	Platea	001	120.000	63.028	80.000	3120.000	4	13
Platea n. 584	Platea	001	120.000	63.028	80.000	3120.000	4	13
Platea n. 407	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 408	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 449	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 450	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 451	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 452	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 624	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 625	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 626	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 627	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 628	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 629	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 630	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 631	Platea	001	120.000	72.471	80.000	4125.000	4	13
Platea n. 632	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 633	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 453	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 454	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 455	Platea	001	120.000	65.261	80.000	3345.000	4	13
Platea n. 456	Platea	001	120.000	64.820	80.000	3300.000	4	13
Platea n. 491	Platea	001	120.000	72.471	80.000	4125.000	4	13
Platea n. 492	Platea	001	120.000	72.471	80.000	4125.000	4	13
Platea n. 493	Platea	001	120.000	72.471	80.000	4125.000	4	13
Platea n. 494	Platea	001	120.000	62.483	80.000	3066.250	4	13
Platea n. 495	Platea	001	120.000	62.483	80.000	3066.250	4	13
Platea n. 496	Platea	001	120.000	62.483	80.000	3066.250	4	13
Platea n. 660	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 661	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 662	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 663	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 664	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 665	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 666	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 667	Platea	001	120.000	72.471	80.000	4125.000	4	13
Platea n. 668	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 669	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 497	Platea	001	120.000	62.483	80.000	3066.250	4	13
Platea n. 498	Platea	001	120.000	62.061	80.000	3025.000	4	13
Platea n. 499	Platea	001	120.000	64.820	80.000	3300.000	4	13
Platea n. 500	Platea	001	120.000	64.820	80.000	3300.000	4	13
Platea n. 696	Platea	001	120.000	84.628	80.000	5625.000	4	13



Platea n. 697	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 698	Platea	001	120.000	84.628	80.000	5625.000	4	13
Platea n. 699	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 700	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 701	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 702	Platea	001	120.000	72.964	80.000	4181.250	4	13
Platea n. 703	Platea	001	120.000	72.471	80.000	4125.000	4	13
Platea n. 704	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 705	Platea	001	120.000	75.694	80.000	4500.000	4	13
Platea n. 587	Platea	001	120.000	70.467	80.000	3900.000	4	14
Platea n. 588	Platea	001	120.000	60.345	80.000	2860.000	4	14
Platea n. 589	Platea	001	120.000	63.028	80.000	3120.000	4	14
Platea n. 590	Platea	001	120.000	60.345	80.000	2860.000	4	14
Platea n. 591	Platea	001	120.000	60.345	80.000	2860.000	4	14
Platea n. 592	Platea	001	120.000	63.028	80.000	3120.000	4	14
Platea n. 593	Platea	001	120.000	63.028	80.000	3120.000	4	14
Platea n. 421	Platea	001	120.000	67.703	80.000	3600.000	4	14
Platea n. 422	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 423	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 424	Platea	001	120.000	67.703	80.000	3600.000	4	14
Platea n. 425	Platea	001	120.000	67.703	80.000	3600.000	4	14
Platea n. 509	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 543	Platea	001	120.000	70.467	80.000	3900.000	4	14
Platea n. 544	Platea	001	120.000	70.467	80.000	3900.000	4	14
Platea n. 545	Platea	001	120.000	70.467	80.000	3900.000	4	14
Platea n. 546	Platea	001	120.000	60.345	80.000	2860.000	4	14
Platea n. 547	Platea	001	120.000	63.028	80.000	3120.000	4	14
Platea n. 548	Platea	001	120.000	60.345	80.000	2860.000	4	14
Platea n. 549	Platea	001	120.000	60.345	80.000	2860.000	4	14
Platea n. 550	Platea	001	120.000	63.028	80.000	3120.000	4	14
Platea n. 551	Platea	001	120.000	63.028	80.000	3120.000	4	14
Platea n. 634	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 635	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 636	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 637	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 638	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 639	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 640	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 641	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 642	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 459	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 460	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 417	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 418	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 419	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 420	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 467	Platea	001	120.000	67.703	80.000	3600.000	4	14
Platea n. 670	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 671	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 672	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 673	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 674	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 675	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 676	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 677	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 678	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 461	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 462	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 501	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 502	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 503	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 504	Platea	001	120.000	62.061	80.000	3025.000	4	14
Platea n. 505	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 506	Platea	001	120.000	62.061	80.000	3025.000	4	14
Platea n. 463	Platea	001	120.000	67.703	80.000	3600.000	4	14
Platea n. 464	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 465	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 466	Platea	001	120.000	67.703	80.000	3600.000	4	14
Platea n. 507	Platea	001	120.000	62.061	80.000	3025.000	4	14
Platea n. 508	Platea	001	120.000	64.820	80.000	3300.000	4	14
Platea n. 585	Platea	001	120.000	70.467	80.000	3900.000	4	14
Platea n. 586	Platea	001	120.000	70.467	80.000	3900.000	4	14



Platea n. 706	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 707	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 708	Platea	001	120.000	84.628	80.000	5625.000	4	14
Platea n. 709	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 710	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 711	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 712	Platea	001	120.000	72.471	80.000	4125.000	4	14
Platea n. 713	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 714	Platea	001	120.000	75.694	80.000	4500.000	4	14
Platea n. 512	Platea	001	120.000	72.471	80.000	4125.000	4	15
Platea n. 513	Platea	001	120.000	60.054	80.000	2832.500	4	15
Platea n. 514	Platea	001	120.000	60.054	80.000	2832.500	4	15
Platea n. 600	Platea	001	120.000	63.551	80.000	3172.000	4	15
Platea n. 468	Platea	001	120.000	75.694	80.000	4500.000	4	15
Platea n. 469	Platea	001	120.000	75.694	80.000	4500.000	4	15
Platea n. 470	Platea	001	120.000	75.694	80.000	4500.000	4	15
Platea n. 471	Platea	001	120.000	62.724	80.000	3090.000	4	15
Platea n. 472	Platea	001	120.000	62.724	80.000	3090.000	4	15
Platea n. 473	Platea	001	120.000	68.265	80.000	3660.000	4	15
Platea n. 474	Platea	001	120.000	68.265	80.000	3660.000	4	15
Platea n. 601	Platea	001	120.000	75.378	80.000	4462.500	4	15
Platea n. 602	Platea	001	120.000	75.378	80.000	4462.500	4	15
Platea n. 603	Platea	001	120.000	75.378	80.000	4462.500	4	15
Platea n. 604	Platea	001	120.000	62.462	80.000	3064.250	4	15
Platea n. 605	Platea	001	120.000	62.462	80.000	3064.250	4	15
Platea n. 606	Platea	001	120.000	67.980	80.000	3629.500	4	15
Platea n. 607	Platea	001	120.000	67.980	80.000	3629.500	4	15
Platea n. 594	Platea	001	120.000	70.467	80.000	3900.000	4	15
Platea n. 552	Platea	001	120.000	70.467	80.000	3900.000	4	15
Platea n. 679	Platea	001	120.000	71.142	80.000	3975.000	4	15
Platea n. 680	Platea	001	120.000	71.142	80.000	3975.000	4	15
Platea n. 681	Platea	001	120.000	71.142	80.000	3975.000	4	15
Platea n. 682	Platea	001	120.000	58.952	80.000	2729.500	4	15
Platea n. 683	Platea	001	120.000	58.952	80.000	2729.500	4	15
Platea n. 684	Platea	001	120.000	64.159	80.000	3233.000	4	15
Platea n. 685	Platea	001	120.000	64.159	80.000	3233.000	4	15
Platea n. 431	Platea	001	120.000	68.265	80.000	3660.000	4	15
Platea n. 432	Platea	001	120.000	68.265	80.000	3660.000	4	15
Platea n. 595	Platea	001	120.000	70.467	80.000	3900.000	4	15
Platea n. 596	Platea	001	120.000	70.467	80.000	3900.000	4	15
Platea n. 597	Platea	001	120.000	58.393	80.000	2678.000	4	15
Platea n. 598	Platea	001	120.000	58.393	80.000	2678.000	4	15
Platea n. 426	Platea	001	120.000	75.694	80.000	4500.000	4	15
Platea n. 427	Platea	001	120.000	75.694	80.000	4500.000	4	15
Platea n. 428	Platea	001	120.000	75.694	80.000	4500.000	4	15
Platea n. 599	Platea	001	120.000	63.551	80.000	3172.000	4	15
Platea n. 510	Platea	001	120.000	72.471	80.000	4125.000	4	15
Platea n. 643	Platea	001	120.000	75.378	80.000	4462.500	4	15
Platea n. 644	Platea	001	120.000	75.378	80.000	4462.500	4	15
Platea n. 645	Platea	001	120.000	75.378	80.000	4462.500	4	15
Platea n. 515	Platea	001	120.000	65.358	80.000	3355.000	4	15
Platea n. 516	Platea	001	120.000	65.358	80.000	3355.000	4	15
Platea n. 646	Platea	001	120.000	62.462	80.000	3064.250	4	15
Platea n. 647	Platea	001	120.000	62.462	80.000	3064.250	4	15
Platea n. 648	Platea	001	120.000	67.980	80.000	3629.500	4	15
Platea n. 649	Platea	001	120.000	67.980	80.000	3629.500	4	15
Platea n. 553	Platea	001	120.000	70.467	80.000	3900.000	4	15
Platea n. 554	Platea	001	120.000	70.467	80.000	3900.000	4	15
Platea n. 555	Platea	001	120.000	58.393	80.000	2678.000	4	15
Platea n. 556	Platea	001	120.000	58.393	80.000	2678.000	4	15
Platea n. 557	Platea	001	120.000	63.551	80.000	3172.000	4	15
Platea n. 558	Platea	001	120.000	63.551	80.000	3172.000	4	15
Platea n. 429	Platea	001	120.000	62.724	80.000	3090.000	4	15
Platea n. 430	Platea	001	120.000	62.724	80.000	3090.000	4	15
Platea n. 511	Platea	001	120.000	72.471	80.000	4125.000	4	15
Platea n. 715	Platea	001	120.000	71.142	80.000	3975.000	4	15
Platea n. 716	Platea	001	120.000	71.142	80.000	3975.000	4	15
Platea n. 717	Platea	001	120.000	71.142	80.000	3975.000	4	15
Platea n. 718	Platea	001	120.000	58.952	80.000	2729.500	4	15
Platea n. 719	Platea	001	120.000	58.952	80.000	2729.500	4	15
Platea n. 720	Platea	001	120.000	64.159	80.000	3233.000	4	15
Platea n. 721	Platea	001	120.000	64.159	80.000	3233.000	4	15







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[illegible]



[illegible]











Elemento n.	Tipologia	Id.Strat.	Prof. Fon. cm	Base Eq. cm	Spessore cm	Lung. Eq. cm	Lung. Travata Eq. cm
Macro n. 1	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 2	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 3	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 4	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 5	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 6	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 7	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 8	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 9	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 10	Macro-Platea	001	120.000	280.000	80.000	521.600	521.600
Macro n. 11	Macro-Platea	001	120.000	280.000	80.000	280.000	280.000
Macro n. 12	Macro-Platea	001	120.000	403.200	80.000	510.400	510.400
Macro n. 13	Macro-Platea	001	120.000	403.200	80.000	498.400	498.400
Macro n. 14	Macro-Platea	001	120.000	403.200	80.000	456.000	456.000
Macro n. 15	Macro-Platea	001	120.000	360.000	80.000	403.200	403.200
Macro n. 16	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 17	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 18	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 19	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 20	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 21	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 22	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 23	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 24	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 25	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 26	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000
Macro n. 27	Macro-Platea	001	120.000	360.000	80.000	360.000	360.000

## VALORI DI CALCOLO DELLA PORTANZA PER FONDAZIONI SUPERFICIALI

I coeff. A1 risultano combinati secondo lo schema presente nella relazione di calcolo della struttura. Le azioni trasmesse in fondazione, relative alle combinazioni di tipo sismico, non saranno amplificate in quanto determinate ipotizzando un comportamento non dissipativo.

La verifica nei confronti dello Stato Limite di Danno viene eseguita determinando il carico limite della fondazione per le corrispondenti azioni di SLD, impiegando i coefficienti parziali gammaR di cui alla tabella 7.11.II.

N.B. La relazione è redatta in forma sintetica. Verranno riportati solo i casi maggiormente gravosi per ogni tipo di combinazione e le relative verifiche.

### Elemento: Trave n. 1

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6169 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7020 / 3.7134 = 0.189 Ok (Cmb. n. 009)

TB / TBlim = 529.4 / 15574.8 = 0.034 Ok (Cmb. n. 033)

TL / TLlim = 538.2 / 11060.5 = 0.049 Ok (Cmb. n. 020)

Sollecitazioni:

Cmb	Tip	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	-0.154	-0.630	40.3	-26.6	-4123.8	-0.6321	-0.7020
020	SLU STR	No	-0.173	-1.152	-7.7	-538.2	-2445.5	-0.3610	-0.4281
033	SLU STR	No	0.262	-0.999	529.4	-206.5	-3710.3	-0.5488	-0.6503

### Elemento: Trave n. 2

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6192 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.6523 / 3.7157 = 0.176 Ok (Cmb. n. 009)

TB / TBlim = 1511.9 / 59136.9 = 0.026 Ok (Cmb. n. 033)

TL / TLlim = 2037.0 / 24177.8 = 0.084 Ok (Cmb. n. 020)

Sollecitazioni:

Cmb	Tip	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	-0.284	-9.115	96.2	-85.2	-13231.0	-0.4716	-0.6523



020	SLU STR	No	-0.276	-9.055	-139.8	-2037.0	-7369.4	-0.2744	-0.3780
033	SLU STR	No	0.168	-14.721	1511.9	-774.1	-10729.6	-0.3660	-0.5813

#### Elemento: Trave n. 3

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6170 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.5706 / 3.7135 = 0.154 Ok (Cmb. n. 007)

TB / TBlim = 869.4 / 54317.9 = 0.016 Ok (Cmb. n. 030)

TL / TLlim = 1799.3 / 22636.7 = 0.079 Ok (Cmb. n. 020)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.408	3.560	-73.6	-131.4	-10872.0	-0.4648	-0.5706
020	SLU STR	No	-0.251	6.804	-163.7	-1799.3	-6678.2	-0.2748	-0.3594
030	SLU STR	No	-0.516	3.233	-869.4	655.2	-5388.8	-0.2255	-0.2793

#### Elemento: Trave n. 4

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6158 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8508 / 3.7124 = 0.229 Ok (Cmb. n. 009)

TB / TBlim = 943.1 / 59284.3 = 0.016 Ok (Cmb. n. 033)

TL / TLlim = 1974.1 / 23520.7 = 0.084 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
009	SLU STR	No	-0.177	14.551	166.7	-22.4	-16316.6	-0.5314	-0.8508
019	SLU STR	No	-0.139	16.864	73.6	1974.1	-8741.7	-0.2893	-0.4881
033	SLU STR	No	0.091	13.640	943.1	-730.4	-11105.4	-0.3785	-0.5792

#### Elemento: Trave n. 5

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6142 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.1055 / 3.7107 = 0.298 Ok (Cmb. n. 006)

TB / TBlim = 1175.9 / 50352.2 = 0.023 Ok (Cmb. n. 033)

TL / TLlim = 1675.6 / 20853.4 = 0.080 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	-0.067	7.792	177.6	126.2	-19413.3	-0.8194	-1.1055
019	SLU STR	No	-0.073	14.124	-25.2	1675.6	-12854.1	-0.4813	-0.8168
033	SLU STR	No	0.229	6.648	1175.9	-616.6	-13078.0	-0.5579	-0.7424

#### Elemento: Trave n. 6

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6960 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7115 / 3.7925 = 0.188 Ok (Cmb. n. 009)

TB / TBlim = 113.9 / 4429.7 = 0.026 Ok (Cmb. n. 020)

TL / TLlim = 115.3 / 5218.3 = 0.022 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
009	SLU STR	No	-0.085	0.044	-5.2	-7.2	-906.4	-0.6823	-0.7115
020	SLU STR	No	-0.204	0.034	-113.9	-1.2	-553.3	-0.4119	-0.4433
033	SLU STR	No	-0.134	-0.070	-43.9	-115.3	-815.1	-0.6070	-0.6485

#### Elemento: Trave n. 23

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7022 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8939 / 3.7988 = 0.235 Ok (Cmb. n. 009)

TB / TBlim = 1588.0 / 52598.1 = 0.030 Ok (Cmb. n. 040)

TL / TLlim = 1505.4 / 15920.2 = 0.095 Ok (Cmb. n. 020)

Sollecitazioni:



Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
009	SLU STR	No	-0.050	4.501	47.4	-6.7	-13200.0	-0.7620	-0.8939
020	SLU STR	No	-0.212	8.197	-843.5	-1505.4	-6799.9	-0.3766	-0.4966
040	SLU STR	No	-0.379	7.637	-1588.0	-859.0	-6467.5	-0.3411	-0.4763

#### Elemento: Trave n. 30

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7018 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9582 / 3.7983 = 0.252 Ok (Cmb. n. 009)

TB / TBlim = 1646.6 / 73741.7 = 0.022 Ok (Cmb. n. 040)

TL / TLlim = 2056.4 / 20588.5 = 0.100 Ok (Cmb. n. 020)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
009	SLU STR	No	-0.010	0.571	77.7	-10.9	-20706.0	-0.9310	-0.9582
020	SLU STR	No	-0.102	12.738	-751.6	-2056.4	-11957.0	-0.4590	-0.6083
040	SLU STR	No	-0.237	8.738	-1646.6	-1170.2	-11290.1	-0.4398	-0.5669

#### Elemento: Trave n. 37

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6994 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9391 / 3.7959 = 0.247 Ok (Cmb. n. 008)

TB / TBlim = 1646.8 / 69055.8 = 0.024 Ok (Cmb. n. 035)

TL / TLlim = 1848.0 / 19594.8 = 0.094 Ok (Cmb. n. 020)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.022	-0.884	-117.1	-3.3	-18866.2	-0.9121	-0.9391
020	SLU STR	No	-0.032	10.344	-274.9	-1848.0	-11150.9	-0.4883	-0.6053
035	SLU STR	No	0.216	-1.127	1646.8	235.9	-12636.9	-0.5919	-0.6480

#### Elemento: Trave n. 44

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7018 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8983 / 3.7984 = 0.237 Ok (Cmb. n. 009)

TB / TBlim = 1391.2 / 52871.3 = 0.026 Ok (Cmb. n. 030)

TL / TLlim = 1354.2 / 16125.3 = 0.084 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
009	SLU STR	No	-0.029	-2.254	53.7	-14.4	-13674.7	-0.8272	-0.8983
019	SLU STR	No	-0.034	-6.624	-22.6	1354.2	-7794.3	-0.4506	-0.5424
030	SLU STR	No	-0.281	-4.196	-1391.2	510.9	-7100.3	-0.4041	-0.4965

#### Elemento: Trave n. 48

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6133 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7926 / 3.7098 = 0.214 Ok (Cmb. n. 007)

TB / TBlim = 2156.1 / 68122.9 = 0.032 Ok (Cmb. n. 019)

TL / TLlim = 1268.5 / 25977.9 = 0.049 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.039	17.926	-123.9	96.8	-17801.3	-0.4874	-0.7926
019	SLU STR	No	-0.162	9.914	2156.1	-168.7	-10206.4	-0.3167	-0.4240
030	SLU STR	No	-0.067	19.411	807.4	1268.5	-9081.2	-0.2391	-0.4149

#### Elemento: Trave n. 49

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6139 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8241 / 3.7104 = 0.222 Ok (Cmb. n. 007)



TB / TBlim = 2131.8 / 68101.6 = 0.031 Ok (Cmb. n. 019)  
 TL / TLlim = 938.9 / 26278.1 = 0.036 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.145	14.983	-108.0	94.1	-18930.1	-0.5374	-0.8241
019	SLU STR	No	0.105	10.550	2131.8	-129.5	-9433.7	-0.2921	-0.3935
030	SLU STR	No	0.168	15.535	798.4	938.9	-9370.9	-0.2629	-0.4153

#### Elemento: Trave n. 50

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6104 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9922 / 3.7069 = 0.268 Ok (Cmb. n. 006)

TB / TBlim = 2134.1 / 68333.6 = 0.031 Ok (Cmb. n. 019)

TL / TLlim = 1268.8 / 27211.9 = 0.047 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.264	6.324	198.9	-152.5	-24425.5	-0.8003	-0.9922
019	SLU STR	No	0.500	5.177	2134.1	-36.9	-14052.6	-0.4593	-0.5807
033	SLU STR	No	0.179	-5.586	-762.1	-1268.8	-14048.6	-0.4868	-0.5847

#### Elemento: Trave n. 51

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6787 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.2699 / 3.7752 = 0.336 Ok (Cmb. n. 006)

TB / TBlim = 2136.7 / 68285.0 = 0.031 Ok (Cmb. n. 019)

TL / TLlim = 1905.1 / 26309.0 = 0.072 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.222	4.658	200.7	-314.3	-31555.5	-1.0760	-1.2699
019	SLU STR	No	0.437	6.168	2136.7	110.7	-23735.0	-0.7767	-0.9949
033	SLU STR	No	0.062	-15.961	-764.9	-1905.1	-16113.9	-0.4663	-0.7341

#### Elemento: Trave n. 77

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6991 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8573 / 3.7956 = 0.226 Ok (Cmb. n. 007)

TB / TBlim = 227.2 / 9699.8 = 0.023 Ok (Cmb. n. 019)

TL / TLlim = 250.2 / 6438.9 = 0.039 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.040	0.145	-7.7	-6.2	-2399.4	-0.8265	-0.8573
019	SLU STR	No	0.009	0.063	227.2	-1.5	-1499.9	-0.5209	-0.5327
033	SLU STR	No	-0.101	0.002	-82.4	-250.2	-1319.5	-0.4559	-0.4758

#### Elemento: Trave n. 78

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6208 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8615 / 3.7173 = 0.232 Ok (Cmb. n. 007)

TB / TBlim = 530.2 / 15673.4 = 0.034 Ok (Cmb. n. 033)

TL / TLlim = 484.7 / 11169.3 = 0.043 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.069	-0.139	17.9	-14.9	-5238.9	-0.8357	-0.8615
019	SLU STR	No	0.021	-0.262	11.6	484.7	-3231.5	-0.5113	-0.5312
033	SLU STR	No	-0.009	-0.387	530.2	-175.6	-2814.7	-0.4429	-0.4693

#### Elemento: Trave n. 79

Risultati più gravosi per cmb. di tipo **SLU STR**:



Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6198 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.8459 / 3.7164 = 0.228 Ok (Cmb. n. 008)  
 TB / TBlm = 1531.0 / 59673.2 = 0.026 Ok (Cmb. n. 030)  
 TL / TLlim = 1836.6 / 24527.6 = 0.075 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
008	SLU STR	No	-0.100	-2.269	-89.8	63.5	-19293.2	-0.7763	-0.8459
019	SLU STR	No	-0.001	-7.115	110.1	1836.6	-11106.8	-0.4155	-0.5175
030	SLU STR	No	-0.155	-9.129	-1531.0	704.2	-11113.5	-0.4030	-0.5417

#### Elemento: Trave n. 80

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6200 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.8266 / 3.7165 = 0.222 Ok (Cmb. n. 007)  
 TB / TBlm = 882.9 / 54799.0 = 0.016 Ok (Cmb. n. 030)  
 TL / TLlim = 1622.9 / 23144.0 = 0.070 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
007	SLU STR	No	-0.119	0.982	-77.9	-52.7	-17186.4	-0.7784	-0.8266
019	SLU STR	No	-0.086	-2.410	118.5	1622.9	-8545.9	-0.3823	-0.4220
030	SLU STR	No	-0.163	-0.237	-882.9	619.5	-8579.4	-0.3845	-0.4166

#### Elemento: Trave n. 81

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6150 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.9786 / 3.7115 = 0.264 Ok (Cmb. n. 006)  
 TB / TBlm = 927.3 / 59231.0 = 0.016 Ok (Cmb. n. 030)  
 TL / TLlim = 1765.0 / 24038.9 = 0.073 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	-0.093	6.422	24.1	195.6	-20725.3	-0.7919	-0.9786
019	SLU STR	No	-0.094	11.673	72.2	1765.0	-10648.3	-0.3866	-0.5593
030	SLU STR	No	-0.167	13.727	-927.3	667.4	-11688.0	-0.4024	-0.6239

#### Elemento: Trave n. 82

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6147 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 1.2557 / 3.7112 = 0.338 Ok (Cmb. n. 006)  
 TB / TBlm = 1168.6 / 50886.1 = 0.023 Ok (Cmb. n. 033)  
 TL / TLlim = 1479.3 / 20738.3 = 0.071 Ok (Cmb. n. 019)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	-0.090	6.872	167.3	169.1	-22121.9	-0.9647	-1.2557
019	SLU STR	No	-0.115	15.121	-29.3	1479.3	-14846.3	-0.5495	-0.9650
033	SLU STR	No	0.182	-1.254	1168.6	-511.3	-9746.6	-0.4539	-0.4974

#### Elemento: Trave n. 83

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7107 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.8923 / 3.8072 = 0.234 Ok (Cmb. n. 008)  
 TB / TBlm = 1001.3 / 39245.3 = 0.026 Ok (Cmb. n. 019)  
 TL / TLlim = 1450.3 / 13061.3 = 0.111 Ok (Cmb. n. 039)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
008	SLU STR	No	0.043	3.272	0.2	36.4	-9777.0	-0.7665	-0.8923
019	SLU STR	No	0.298	4.106	1001.3	-833.4	-4967.5	-0.3770	-0.4818
039	SLU STR	No	0.159	4.140	469.8	-1450.3	-5111.6	-0.4018	-0.4894



**Elemento: Trave n. 84**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7106 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0033 / 3.8071 = 0.264 Ok (Cmb. n. 008)

TB / TBlim = 1235.5 / 41222.0 = 0.030 Ok (Cmb. n. 020)

TL / TLlim = 1168.3 / 14249.0 = 0.082 Ok (Cmb. n. 039)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
008	SLU STR	No	0.011	2.630	-2.8	46.7	-13655.3	-0.9220	-1.0033
020	SLU STR	No	-0.045	-2.815	-1235.5	543.7	-7607.9	-0.5072	-0.5555
039	SLU STR	No	0.028	6.475	611.6	-1168.3	-7002.5	-0.4519	-0.5527

**Elemento: Trave n. 85**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7075 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0655 / 3.8040 = 0.280 Ok (Cmb. n. 008)

TB / TBlim = 1198.0 / 41170.8 = 0.029 Ok (Cmb. n. 019)

TL / TLlim = 1087.6 / 14238.4 = 0.076 Ok (Cmb. n. 031)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
008	SLU STR	No	0.001	3.281	0.8	86.9	-14393.2	-0.9619	-1.0655
019	SLU STR	No	0.100	3.142	1198.0	-426.7	-7450.2	-0.4976	-0.5665
031	SLU STR	No	0.023	6.684	250.0	-1087.6	-6847.4	-0.4427	-0.5495

**Elemento: Trave n. 86**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7079 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9951 / 3.8045 = 0.262 Ok (Cmb. n. 008)

TB / TBlim = 1163.6 / 41362.0 = 0.028 Ok (Cmb. n. 020)

TL / TLlim = 1272.2 / 14239.3 = 0.089 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
008	SLU STR	No	-0.016	2.489	0.4	81.3	-13557.9	-0.9179	-0.9951
020	SLU STR	No	-0.050	0.556	-1163.6	-24.8	-7982.7	-0.5524	-0.5716
033	SLU STR	No	-0.020	6.694	-404.4	-1272.2	-6615.8	-0.4265	-0.5321

**Elemento: Trave n. 87**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6997 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8712 / 3.7962 = 0.230 Ok (Cmb. n. 007)

TB / TBlim = 906.1 / 38891.0 = 0.023 Ok (Cmb. n. 019)

TL / TLlim = 989.2 / 12976.6 = 0.076 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
007	SLU STR	No	-0.003	0.145	-24.1	-19.6	-9878.3	-0.8519	-0.8712
019	SLU STR	No	0.056	-0.621	906.1	-7.0	-6006.7	-0.5062	-0.5330
033	SLU STR	No	-0.052	3.734	-314.9	-989.2	-5725.2	-0.4617	-0.5404

**Elemento: Trave n. 101**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6139 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8510 / 3.7104 = 0.229 Ok (Cmb. n. 007)

TB / TBlim = 3195.6 / 114808.7 = 0.028 Ok (Cmb. n. 019)

TL / TLlim = 2199.2 / 42084.2 = 0.052 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
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007	SLU STR	No	-0.004	3.818	-149.9	198.1	-37976.6	-0.7896	-0.8510
019	SLU STR	No	-0.149	13.175	3195.6	-259.1	-21127.5	-0.4135	-0.5126
030	SLU STR	No	-0.101	3.539	1049.3	2199.2	-19875.5	-0.4047	-0.4472

#### Elemento: Trave n. 102

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6141 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8665 / 3.7106 = 0.234 Ok (Cmb. n. 007)

TB / TBlim = 3120.1 / 115354.5 = 0.027 Ok (Cmb. n. 019)

TL / TLlim = 1614.0 / 42282.9 = 0.038 Ok (Cmb. n. 036)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.047	2.798	-150.9	188.1	-38782.2	-0.8114	-0.8665
019	SLU STR	No	0.053	8.606	3120.1	-212.9	-19265.0	-0.3869	-0.4446
036	SLU STR	No	0.150	0.828	-770.8	1614.0	-19933.2	-0.4150	-0.4450

#### Elemento: Trave n. 103

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6111 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0074 / 3.7076 = 0.272 Ok (Cmb. n. 006)

TB / TBlim = 3078.9 / 115666.7 = 0.027 Ok (Cmb. n. 019)

TL / TLlim = 2092.1 / 42058.1 = 0.050 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.153	-4.011	314.4	-206.0	-44312.5	-0.9053	-1.0074
019	SLU STR	No	0.346	-1.614	3078.9	-41.9	-26000.0	-0.5261	-0.6002
033	SLU STR	No	0.071	4.194	-938.8	-2092.1	-23098.5	-0.4850	-0.5239

#### Elemento: Trave n. 107

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7328 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9878 / 3.8293 = 0.258 Ok (Cmb. n. 008)

TB / TBlim = 1622.1 / 45238.0 = 0.036 Ok (Cmb. n. 039)

TL / TLlim = 1285.8 / 15303.9 = 0.084 Ok (Cmb. n. 028)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.012	2.742	-51.4	-0.7	-14648.0	-0.9114	-0.9878
028	SLU STR	No	-0.016	6.929	-272.8	-1285.8	-7562.2	-0.4468	-0.5439
039	SLU STR	No	0.033	-1.953	1622.1	514.1	-8271.9	-0.5135	-0.5437

#### Elemento: Trave n. 129

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7059 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0563 / 3.8024 = 0.278 Ok (Cmb. n. 007)

TB / TBlim = 1579.9 / 63016.0 = 0.025 Ok (Cmb. n. 040)

TL / TLlim = 1772.9 / 19563.5 = 0.091 Ok (Cmb. n. 028)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.001	2.761	48.9	-40.9	-21669.9	-0.9683	-1.0563
028	SLU STR	No	0.004	17.360	-420.5	-1772.9	-11859.2	-0.4675	-0.6350
040	SLU STR	No	-0.012	6.183	-1579.9	-643.8	-11944.6	-0.5216	-0.5920

#### Elemento: Trave n. 136

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7037 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0738 / 3.8002 = 0.283 Ok (Cmb. n. 006)

TB / TBlim = 1620.1 / 58654.4 = 0.028 Ok (Cmb. n. 035)

TL / TLlim = 1640.4 / 18534.1 = 0.089 Ok (Cmb. n. 027)



Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	-0.007	-2.166	87.2	53.2	-20853.0	-1.0096	-1.0738
027	SLU STR	No	0.008	-14.545	494.7	1640.4	-11171.2	-0.4775	-0.6308
035	SLU STR	No	0.010	-5.263	1620.1	432.1	-10789.8	-0.5101	-0.5689

#### Elemento: Trave n. 143

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7048 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9561 / 3.8014 = 0.252 Ok (Cmb. n. 007)

TB / TBlm = 1328.0 / 44975.6 = 0.030 Ok (Cmb. n. 030)

TL / TLlim = 1256.8 / 15034.0 = 0.084 Ok (Cmb. n. 027)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.005	-5.575	49.2	-37.3	-13541.5	-0.8157	-0.9561
027	SLU STR	No	0.034	-11.021	422.1	1256.8	-7150.7	-0.4011	-0.5372
030	SLU STR	No	0.007	-6.338	-1328.0	374.7	-7630.5	-0.4543	-0.5384

#### Elemento: Trave n. 176

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6269 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8469 / 3.7234 = 0.227 Ok (Cmb. n. 007)

TB / TBlm = 1325.5 / 49435.5 = 0.027 Ok (Cmb. n. 030)

TL / TLlim = 1456.8 / 21512.2 = 0.068 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.078	0.774	-44.6	-77.5	-16206.4	-0.8110	-0.8469
026	SLU STR	No	0.051	-2.552	-249.6	1456.8	-10539.7	-0.5028	-0.5603
030	SLU STR	No	0.023	-2.156	-1325.5	336.5	-9044.1	-0.4423	-0.4786

#### Elemento: Trave n. 177

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6260 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8601 / 3.7225 = 0.231 Ok (Cmb. n. 007)

TB / TBlm = 914.4 / 54864.5 = 0.017 Ok (Cmb. n. 030)

TL / TLlim = 1547.2 / 22837.2 = 0.068 Ok (Cmb. n. 029)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.081	0.430	-104.6	-89.4	-18249.2	-0.8338	-0.8601
029	SLU STR	No	0.057	5.810	172.1	-1547.2	-8599.0	-0.3599	-0.4380
030	SLU STR	No	0.020	-0.408	-914.4	357.7	-9340.9	-0.4269	-0.4436

#### Elemento: Trave n. 178

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6254 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9241 / 3.7219 = 0.248 Ok (Cmb. n. 006)

TB / TBlm = 934.5 / 59830.8 = 0.016 Ok (Cmb. n. 030)

TL / TLlim = 1678.5 / 24306.9 = 0.069 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.100	2.687	-8.4	126.6	-20738.4	-0.8351	-0.9241
026	SLU STR	No	0.085	8.902	-108.8	1678.5	-11661.0	-0.4367	-0.5763
030	SLU STR	No	0.050	8.135	-934.5	384.8	-11654.9	-0.4377	-0.5617

#### Elemento: Trave n. 183

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7108 + 0.0965 + 0.0000 + 0.0000



$Q_{max} / Q_{lim} = 0.9613 / 3.8073 = 0.252$  Ok (Cmb. n. 008)  
 $TB / TB_{lim} = 1940.3 / 77525.8 = 0.025$  Ok (Cmb. n. 020)  
 $TL / TL_{lim} = 2808.0 / 20641.7 = 0.136$  Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	0.007	-6.462	-22.2	70.2	-21263.3	-0.8318	-0.9613
020	SLU STR	No	-0.165	-14.597	-1940.3	1615.0	-13307.7	-0.5033	-0.6801
040	SLU STR	No	-0.079	-27.197	-997.1	2808.0	-12152.6	-0.4116	-0.6724

#### Elemento: Trave n. 184

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.7122 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.9784 / 3.8087 = 0.257$  Ok (Cmb. n. 006)

$TB / TB_{lim} = 1627.6 / 58629.3 = 0.028$  Ok (Cmb. n. 026)

$TL / TL_{lim} = 1550.4 / 17699.4 = 0.088$  Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.019	-9.096	35.0	-20.7	-17629.6	-0.8042	-0.9784
026	SLU STR	No	0.070	-8.597	1627.6	595.6	-10126.0	-0.4582	-0.5679
040	SLU STR	No	-0.007	-28.730	-128.0	1550.4	-8716.2	-0.3268	-0.5776

#### Elemento: Trave n. 185

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.7086 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 1.0727 / 3.8051 = 0.282$  Ok (Cmb. n. 006)

$TB / TB_{lim} = 1546.5 / 58728.0 = 0.026$  Ok (Cmb. n. 026)

$TL / TL_{lim} = 1509.9 / 17054.7 = 0.089$  Ok (Cmb. n. 032)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.008	-4.597	78.8	-103.2	-20531.3	-0.9600	-1.0727
026	SLU STR	No	0.102	-6.637	1546.5	318.1	-9931.9	-0.4543	-0.5530
032	SLU STR	No	-0.008	-38.880	-372.6	1509.9	-7464.5	-0.2534	-0.5531

#### Elemento: Trave n. 186

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.7089 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 1.0061 / 3.8054 = 0.264$  Ok (Cmb. n. 007)

$TB / TB_{lim} = 1570.1 / 59018.9 = 0.027$  Ok (Cmb. n. 029)

$TL / TL_{lim} = 1778.1 / 16900.0 = 0.105$  Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.001	-0.982	-25.3	-100.2	-19905.0	-0.9680	-1.0061
029	SLU STR	No	-0.038	2.832	-1570.1	-189.0	-11486.9	-0.5484	-0.5902
030	SLU STR	No	0.053	-40.845	460.3	1778.1	-6850.5	-0.2231	-0.5202

#### Elemento: Trave n. 188

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.6128 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.8546 / 3.7094 = 0.230$  Ok (Cmb. n. 007)

$TB / TB_{lim} = 1118.2 / 43907.2 = 0.025$  Ok (Cmb. n. 026)

$TL / TL_{lim} = 623.5 / 19858.0 = 0.031$  Ok (Cmb. n. 036)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.034	-3.673	-67.8	90.7	-13886.6	-0.7322	-0.8546
026	SLU STR	No	0.069	-3.137	1118.2	117.3	-7219.1	-0.3858	-0.4424
036	SLU STR	No	0.162	-1.689	-390.5	623.5	-7409.0	-0.4013	-0.4434

#### Elemento: Trave n. 189



Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6128 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9235 / 3.7093 = 0.249 Ok (Cmb. n. 006)

TB / TBlim = 1110.9 / 43809.9 = 0.025 Ok (Cmb. n. 026)

TL / TLlim = 782.7 / 19695.3 = 0.040 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	0.065	-3.812	91.6	-62.8	-14834.3	-0.7796	-0.9235
026	SLU STR	No	0.306	-3.040	1110.9	44.0	-9396.7	-0.4876	-0.5882
033	SLU STR	No	0.027	-4.045	-208.9	-782.7	-8086.0	-0.4214	-0.5058

#### Elemento: Trave n. 190

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6982 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7552 / 3.7948 = 0.199 Ok (Cmb. n. 009)

TB / TBlim = 670.1 / 28157.8 = 0.024 Ok (Cmb. n. 026)

TL / TLlim = 671.8 / 10604.5 = 0.063 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	-0.014	-0.043	13.8	-29.0	-6147.6	-0.7364	-0.7552
026	SLU STR	No	0.172	1.272	670.1	84.1	-3589.2	-0.4109	-0.4651
033	SLU STR	No	-0.074	2.119	-77.5	-671.8	-4218.4	-0.4776	-0.5469

#### Elemento: Trave n. 191

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6499 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7971 / 3.7464 = 0.213 Ok (Cmb. n. 006)

TB / TBlim = 934.2 / 59826.8 = 0.016 Ok (Cmb. n. 030)

TL / TLlim = 1376.9 / 24310.9 = 0.057 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	0.184	2.926	-23.7	121.4	-17918.5	-0.7075	-0.7971
026	SLU STR	No	0.139	8.519	-112.3	1376.9	-10302.1	-0.3854	-0.5120
030	SLU STR	No	0.094	7.896	-934.2	216.3	-10892.4	-0.4014	-0.5169

#### Elemento: Trave n. 192

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6498 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8001 / 3.7463 = 0.214 Ok (Cmb. n. 006)

TB / TBlim = 827.5 / 50391.3 = 0.016 Ok (Cmb. n. 033)

TL / TLlim = 1152.6 / 20053.9 = 0.057 Ok (Cmb. n. 029)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	0.252	-0.819	40.5	103.4	-15592.1	-0.7376	-0.8001
029	SLU STR	No	0.055	-22.635	54.2	-1152.6	-6449.6	-0.1742	-0.4376
033	SLU STR	No	0.248	-6.129	827.5	-170.0	-7819.8	-0.3306	-0.4327

#### Elemento: Trave n. 193

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6113 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8412 / 3.7078 = 0.227 Ok (Cmb. n. 007)

TB / TBlim = 3334.1 / 117585.5 = 0.028 Ok (Cmb. n. 029)

TL / TLlim = 2346.3 / 42579.7 = 0.055 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
007	SLU STR	No	-0.015	-10.611	-253.2	312.8	-34599.6	-0.6908	-0.8412
029	SLU STR	No	0.050	-14.047	-3334.1	-567.8	-14995.6	-0.2969	-0.3669



030	SLU STR	No	-0.132	6.925	629.8	2346.3	-20541.2	-0.4118	-0.5161
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**Elemento: Trave n. 219**

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6113 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7397 / 3.7078 = 0.199 Ok (Cmb. n. 007)

TB / TBlim = 1850.8 / 73853.4 = 0.025 Ok (Cmb. n. 029)

TL / TLlim = 1067.1 / 29185.1 = 0.037 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.016	-1.769	-152.2	200.3	-20339.5	-0.6741	-0.7397
029	SLU STR	No	0.119	-8.436	-1850.8	-90.3	-10910.5	-0.3339	-0.4173
030	SLU STR	No	0.048	4.030	272.4	1067.1	-11992.4	-0.3914	-0.4483

**Elemento: Trave n. 220**

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6137 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7836 / 3.7102 = 0.211 Ok (Cmb. n. 006)

TB / TBlim = 1838.8 / 73410.7 = 0.025 Ok (Cmb. n. 029)

TL / TLlim = 1309.7 / 28196.6 = 0.046 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	-0.078	-12.487	124.8	-93.2	-19754.4	-0.5616	-0.7836
029	SLU STR	No	-0.238	-12.183	-1838.8	-134.4	-11120.6	-0.3128	-0.4427
033	SLU STR	No	-0.101	-14.024	-272.9	-1309.7	-10628.0	-0.2897	-0.4262

**Elemento: Trave n. 221**

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6079 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7703 / 3.7044 = 0.208 Ok (Cmb. n. 026)

TB / TBlim = 1824.4 / 71872.4 = 0.025 Ok (Cmb. n. 026)

TL / TLlim = 1099.6 / 27689.8 = 0.040 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
026	SLU STR	No	0.223	-28.588	1824.4	5.0	-16039.7	-0.3648	-0.7703
033	SLU STR	No	-0.320	-17.706	-270.9	-1099.6	-8063.1	-0.2108	-0.3508

**Elemento: Trave n. 253**

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7022 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7614 / 3.7988 = 0.200 Ok (Cmb. n. 007)

TB / TBlim = 286.3 / 13848.9 = 0.021 Ok (Cmb. n. 039)

TL / TLlim = 305.4 / 7408.5 = 0.041 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	0.019	0.147	-2.4	-12.7	-3068.5	-0.7394	-0.7614
026	SLU STR	No	-0.012	0.364	-93.0	305.4	-1830.4	-0.4332	-0.4635
039	SLU STR	No	0.245	0.854	286.3	-11.5	-1756.6	-0.3857	-0.4607

**Elemento: Trave n. 264**

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6980 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8701 / 3.7945 = 0.229 Ok (Cmb. n. 008)

TB / TBlim = 739.3 / 36955.6 = 0.020 Ok (Cmb. n. 039)

TL / TLlim = 799.0 / 12516.5 = 0.064 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>



008	SLU STR	No	-0.020	-1.008	-76.6	-0.2	-9309.9	-0.8309	-0.8701
026	SLU STR	No	-0.079	-4.327	-245.0	799.0	-6186.8	-0.5091	-0.6203
039	SLU STR	No	0.211	-2.109	739.3	-17.0	-5779.1	-0.4809	-0.5607

#### Elemento: Trave n. 275

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6962 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8741 / 3.7927 = 0.230 Ok (Cmb. n. 008)

TB / TBlim = 837.4 / 38956.5 = 0.021 Ok (Cmb. n. 035)

TL / TLlim = 841.0 / 12965.6 = 0.065 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.027	-0.912	-100.2	-1.3	-9880.4	-0.8390	-0.8741
026	SLU STR	No	-0.078	-4.728	-126.2	841.0	-6396.2	-0.4991	-0.6102
035	SLU STR	No	0.344	-1.863	837.4	321.3	-5523.3	-0.4367	-0.5195

#### Elemento: Trave n. 285

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7027 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9604 / 3.7992 = 0.253 Ok (Cmb. n. 008)

TB / TBlim = 1188.6 / 46173.4 = 0.026 Ok (Cmb. n. 033)

TL / TLlim = 1007.8 / 14475.5 = 0.070 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.035	-0.767	-36.6	-4.9	-12857.5	-0.9104	-0.9604
026	SLU STR	No	-0.076	-7.341	-85.7	1007.8	-7730.5	-0.4951	-0.6356
033	SLU STR	No	0.164	3.361	1188.6	-127.4	-7867.8	-0.5097	-0.6086

#### Elemento: Trave n. 305

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6186 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8137 / 3.7151 = 0.219 Ok (Cmb. n. 006)

TB / TBlim = 1031.0 / 41589.0 = 0.025 Ok (Cmb. n. 030)

TL / TLlim = 1158.4 / 18934.5 = 0.061 Ok (Cmb. n. 029)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	-0.133	-1.382	-81.1	46.3	-12837.4	-0.7448	-0.8137
029	SLU STR	No	-0.086	-4.536	248.9	-1158.4	-5237.1	-0.2972	-0.3699
030	SLU STR	No	-0.252	-3.457	-1031.0	171.4	-9059.3	-0.4954	-0.6051

#### Elemento: Trave n. 306

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6157 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7678 / 3.7122 = 0.207 Ok (Cmb. n. 006)

TB / TBlim = 949.7 / 54412.5 = 0.017 Ok (Cmb. n. 030)

TL / TLlim = 1473.4 / 22578.5 = 0.065 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	-0.133	-2.152	-164.4	66.7	-15792.5	-0.6949	-0.7678
026	SLU STR	No	-0.193	-7.755	-266.5	1473.4	-10879.8	-0.4378	-0.5837
030	SLU STR	No	-0.226	-3.956	-949.7	210.7	-10179.7	-0.4370	-0.5209

#### Elemento: Trave n. 307

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6150 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7178 / 3.7116 = 0.193 Ok (Cmb. n. 008)

TB / TBlim = 947.4 / 60387.4 = 0.016 Ok (Cmb. n. 030)

TL / TLlim = 1629.2 / 24988.6 = 0.065 Ok (Cmb. n. 029)



Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	0.013	-6.533	-195.8	-47.8	-15570.8	-0.5713	-0.7178
029	SLU STR	No	0.152	-1.276	86.0	-1629.2	-8052.3	-0.3128	-0.3477
030	SLU STR	No	-0.052	-2.261	-947.4	221.2	-10251.9	-0.4103	-0.4540

#### Elemento: Trave n. 308

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6185 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.5908 / 3.7151 = 0.159 Ok (Cmb. n. 008)

TB / TBlim = 819.6 / 50160.0 = 0.016 Ok (Cmb. n. 033)

TL / TLlim = 1355.8 / 21152.2 = 0.064 Ok (Cmb. n. 029)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	0.259	-10.350	-92.2	-39.3	-9919.4	-0.3840	-0.5908
029	SLU STR	No	0.110	-10.779	50.7	-1355.8	-5458.1	-0.2137	-0.3267
033	SLU STR	No	0.311	-8.245	819.6	-201.8	-5211.9	-0.2122	-0.3043

#### Elemento: Trave n. 312

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7005 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8444 / 3.7970 = 0.222 Ok (Cmb. n. 007)

TB / TBlim = 567.1 / 32981.0 = 0.017 Ok (Cmb. n. 024)

TL / TLlim = 594.5 / 11686.5 = 0.051 Ok (Cmb. n. 039)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.041	0.022	-40.7	-0.8	-8078.6	-0.8192	-0.8444
024	SLU STR	No	-0.210	-0.263	-567.1	104.4	-5773.5	-0.5568	-0.6214
039	SLU STR	No	0.061	2.578	84.8	-594.5	-4765.0	-0.4620	-0.5271

#### Elemento: Trave n. 313

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6988 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9102 / 3.7953 = 0.240 Ok (Cmb. n. 008)

TB / TBlim = 548.3 / 32969.8 = 0.017 Ok (Cmb. n. 029)

TL / TLlim = 695.7 / 11700.5 = 0.059 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	0.003	-0.539	-26.3	28.6	-8709.3	-0.8752	-0.9102
029	SLU STR	No	-0.252	-0.183	-548.3	-102.2	-5541.2	-0.5397	-0.5969
030	SLU STR	No	0.047	-2.438	140.8	695.7	-6353.1	-0.5996	-0.6863

#### Elemento: Trave n. 327

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6929 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7984 / 3.7895 = 0.211 Ok (Cmb. n. 011)

TB / TBlim = 4437.1 / 256118.9 = 0.017 Ok (Cmb. n. 030)

TL / TLlim = 3749.7 / 42264.6 = 0.089 Ok (Cmb. n. 029)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
011	SLU STR	No	0.031	142.071	-81.4	-1068.2	-33537.5	-0.2127	-0.7984
029	SLU STR	No	0.040	525.711	1287.0	-3749.7	-24923.9	-0.0167	-0.7811
030	SLU STR	No	-0.002	-144.834	-4437.1	960.9	-25147.7	-0.1668	-0.5739

#### Elemento: Trave n. 341

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6963 + 0.0965 + 0.0000 + 0.0000



$Q_{max} / Q_{lim} = 0.8308 / 3.7928 = 0.219$  Ok (Cmb. n. 007)  
 $TB / TB_{lim} = 360.6 / 32899.9 = 0.011$  Ok (Cmb. n. 017)  
 $TL / TL_{lim} = 545.4 / 11650.7 = 0.047$  Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.112	-0.131	-78.0	-0.3	-7895.4	-0.7976	-0.8308
017	SLU STR	No	-0.406	0.362	-360.6	-69.5	-5549.1	-0.5342	-0.6127
040	SLU STR	No	-0.171	-2.485	-104.8	545.4	-5165.0	-0.4911	-0.5793

#### Elemento: Trave n. 342

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.6933 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.8468 / 3.7898 = 0.223$  Ok (Cmb. n. 006)

$TB / TB_{lim} = 366.1 / 32923.9 = 0.011$  Ok (Cmb. n. 027)

$TL / TL_{lim} = 616.3 / 11632.8 = 0.053$  Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.108	-0.621	77.5	1.4	-7975.8	-0.7931	-0.8468
027	SLU STR	No	0.397	-0.029	366.1	-172.6	-5636.9	-0.5424	-0.6189
030	SLU STR	No	0.164	-2.815	98.2	616.3	-5241.0	-0.4914	-0.5894

#### Elemento: Trave n. 356

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.6212 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.7702 / 3.7178 = 0.207$  Ok (Cmb. n. 019)

$TB / TB_{lim} = 4433.7 / 253311.3 = 0.018$  Ok (Cmb. n. 035)

$TL / TL_{lim} = 3544.6 / 38951.5 = 0.091$  Ok (Cmb. n. 019)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
019	SLU STR	No	0.083	-576.862	1227.0	3544.6	-23939.1	0.0000	-0.7702
035	SLU STR	No	0.149	-182.027	4433.7	1055.5	-24042.7	-0.1611	-0.5599

#### Elemento: Trave n. 370

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.6969 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.8165 / 3.7934 = 0.215$  Ok (Cmb. n. 007)

$TB / TB_{lim} = 395.5 / 32874.3 = 0.012$  Ok (Cmb. n. 024)

$TL / TL_{lim} = 525.5 / 11664.9 = 0.045$  Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-0.113	-0.104	-72.3	0.2	-7758.8	-0.7846	-0.8165
024	SLU STR	No	-0.425	-0.655	-395.5	112.3	-5433.6	-0.5163	-0.6046
040	SLU STR	No	-0.172	-2.252	-117.8	525.5	-5157.3	-0.4913	-0.5721

#### Elemento: Trave n. 371

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.6938 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.6746 / 3.7903 = 0.178$  Ok (Cmb. n. 006)

$TB / TB_{lim} = 393.7 / 32746.2 = 0.012$  Ok (Cmb. n. 026)

$TL / TL_{lim} = 576.6 / 11524.9 = 0.050$  Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.128	-1.535	72.6	1.4	-6104.4	-0.6036	-0.6746
026	SLU STR	No	0.519	-2.152	393.7	111.7	-4330.7	-0.3958	-0.5105
030	SLU STR	No	0.203	-4.298	117.6	576.6	-4055.4	-0.3708	-0.4784

#### Elemento: Trave n. 385

Risultati più gravosi per cmb. di tipo **SLU STR**:



Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6055 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7694 / 3.7020 = 0.208 Ok (Cmb. n. 027)

TB / TBlim = 4330.2 / 251388.0 = 0.017 Ok (Cmb. n. 030)

TL / TLlim = 3844.1 / 36000.2 = 0.107 Ok (Cmb. n. 026)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
026	SLU STR	No	-0.056	-624.282	-1244.0	3844.1	-23254.0	0.0000	-0.7688
027	SLU STR	No	0.008	-623.976	1299.2	3842.2	-23264.0	0.0000	-0.7694
030	SLU STR	No	-0.131	-213.453	-4330.2	1144.2	-23242.4	-0.1594	-0.5477

#### Elemento: Trave n. 399

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6964 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8063 / 3.7929 = 0.213 Ok (Cmb. n. 007)

TB / TBlim = 422.6 / 32861.7 = 0.013 Ok (Cmb. n. 028)

TL / TLlim = 524.6 / 11627.9 = 0.045 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
007	SLU STR	No	-0.106	-0.061	-76.9	0.8	-7671.4	-0.7777	-0.8063
028	SLU STR	No	-0.429	-0.832	-422.6	142.3	-5341.5	-0.5057	-0.5975
040	SLU STR	No	-0.169	-2.862	-130.8	524.6	-5089.5	-0.4766	-0.5714

#### Elemento: Trave n. 400

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6933 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7573 / 3.7899 = 0.200 Ok (Cmb. n. 006)

TB / TBlim = 422.7 / 32751.5 = 0.013 Ok (Cmb. n. 025)

TL / TLlim = 563.1 / 11541.9 = 0.049 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	0.106	1.498	76.9	1.7	-6988.6	-0.6818	-0.7573
025	SLU STR	No	-0.422	2.654	-422.7	-146.1	-4303.5	-0.3863	-0.4985
033	SLU STR	No	-0.084	4.728	-130.1	-563.1	-4555.8	-0.4124	-0.5276

#### Elemento: Trave n. 414

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6123 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7775 / 3.7088 = 0.210 Ok (Cmb. n. 027)

TB / TBlim = 4281.3 / 253961.8 = 0.017 Ok (Cmb. n. 030)

TL / TLlim = 4081.0 / 39945.0 = 0.102 Ok (Cmb. n. 022)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
022	SLU STR	No	-0.039	-562.392	-1254.8	4081.0	-24144.6	0.0000	-0.7648
027	SLU STR	No	-0.011	-553.502	1287.9	4082.2	-24532.4	0.0000	-0.7775
030	SLU STR	No	-0.073	-175.388	-4281.3	1216.2	-23692.2	-0.1662	-0.5247

#### Elemento: Trave n. 428

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7004 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7878 / 3.7969 = 0.207 Ok (Cmb. n. 007)

TB / TBlim = 446.7 / 32814.0 = 0.014 Ok (Cmb. n. 026)

TL / TLlim = 533.5 / 11651.3 = 0.046 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
007	SLU STR	No	-0.004	-1.327	-41.3	1.3	-7350.1	-0.7169	-0.7878
026	SLU STR	No	0.385	-1.870	446.7	168.1	-4427.7	-0.4098	-0.5027
040	SLU STR	No	-0.086	-2.981	-107.1	533.5	-4463.7	-0.4359	-0.5093



**Elemento: Trave n. 429**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6974 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7947 / 3.7939 = 0.209 Ok (Cmb. n. 006)

TB / TBlim = 447.0 / 32821.9 = 0.014 Ok (Cmb. n. 024)

TL / TLlim = 565.9 / 11659.3 = 0.049 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
006	SLU STR	No	0.003	-1.245	41.3	2.1	-7449.7	-0.7269	-0.7947
024	SLU STR	No	-0.380	-1.773	-447.0	182.7	-4494.1	-0.4165	-0.5076
030	SLU STR	No	0.084	-2.868	106.2	565.9	-4530.2	-0.4429	-0.5139

**Elemento: Trave n. 447**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6986 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8159 / 3.7951 = 0.215 Ok (Cmb. n. 009)

TB / TBlim = 974.3 / 62493.6 = 0.016 Ok (Cmb. n. 039)

TL / TLlim = 863.2 / 17746.3 = 0.049 Ok (Cmb. n. 029)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	0.113	-0.145	148.2	0.6	-14407.4	-0.7333	-0.8159
029	SLU STR	No	0.189	14.351	287.2	-863.2	-8791.9	-0.3852	-0.5602
039	SLU STR	No	0.486	0.444	974.3	252.1	-9755.2	-0.4598	-0.5862

**Elemento: Trave n. 454**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6755 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.7290 / 3.7720 = 0.193 Ok (Cmb. n. 010)

TB / TBlim = 877.2 / 62178.9 = 0.014 Ok (Cmb. n. 040)

TL / TLlim = 861.1 / 17932.0 = 0.048 Ok (Cmb. n. 024)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
010	SLU STR	No	-0.263	-0.628	-534.2	73.8	-12781.5	-0.6538	-0.7290
024	SLU STR	No	-0.194	11.335	-262.7	-861.1	-9114.5	-0.4150	-0.5667
040	SLU STR	No	-0.664	3.464	-877.2	-256.7	-8990.9	-0.4168	-0.5513

**Elemento: Trave n. 461**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.6985 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8177 / 3.7950 = 0.215 Ok (Cmb. n. 009)

TB / TBlim = 1004.8 / 62514.0 = 0.016 Ok (Cmb. n. 030)

TL / TLlim = 863.6 / 17754.4 = 0.049 Ok (Cmb. n. 023)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	0.115	0.257	149.6	-0.5	-14436.0	-0.7356	-0.8177
023	SLU STR	No	0.191	-14.196	300.6	863.6	-8810.9	-0.3867	-0.5607
030	SLU STR	No	-0.372	1.456	-1004.8	251.0	-10625.3	-0.5010	-0.6191

**Macro platea: 1**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7123 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8707 / 3.8088 = 0.229 Ok (Cmb. n. 008)

TB / TBlim = 11884.2 / 71419.6 = 0.166 Ok (Cmb. n. 019)

TL / TLlim = 14486.2 / 63646.6 = 0.228 Ok (Cmb. n. 042)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
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008	SLU STR	No	9.181	10.142	-21.1	387.0	-81825.8	-0.4544	-0.8707
019	SLU STR	No	28.075	-5.551	11884.2	-8849.8	-51670.6	-0.1892	-0.6489
042	SLU STR	No	11.657	41.850	-711.9	14486.2	-40025.3	-0.0395	-0.6050

#### Macro platea: 2

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7477 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9411 / 3.8442 = 0.245 Ok (Cmb. n. 008)

TB / TBlim = 11725.8 / 80068.2 = 0.146 Ok (Cmb. n. 020)

TL / TLlim = 10237.7 / 75007.6 = 0.136 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	1.366	1.620	-20.0	403.2	-110816.6	-0.8537	-0.9411
020	SLU STR	No	-2.036	11.157	-11725.8	4810.8	-57994.1	-0.3680	-0.5713
040	SLU STR	No	-0.228	24.243	-6685.3	10237.7	-55239.1	-0.2655	-0.6255

#### Macro platea: 3

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7480 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9635 / 3.8445 = 0.251 Ok (Cmb. n. 008)

TB / TBlim = 11380.3 / 80098.7 = 0.142 Ok (Cmb. n. 020)

TL / TLlim = 9434.9 / 76714.1 = 0.123 Ok (Cmb. n. 032)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.290	2.068	-19.4	724.1	-114518.6	-0.8923	-0.9635
020	SLU STR	No	-6.479	6.798	-11380.3	3714.9	-66062.9	-0.4196	-0.6520
032	SLU STR	No	-1.443	19.343	-1871.6	9434.9	-61132.4	-0.3264	-0.6625

#### Macro platea: 4

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7469 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9263 / 3.8434 = 0.241 Ok (Cmb. n. 008)

TB / TBlim = 10936.7 / 83867.6 = 0.130 Ok (Cmb. n. 020)

TL / TLlim = 11005.9 / 75480.5 = 0.146 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.671	1.537	-21.0	679.1	-110359.2	-0.8619	-0.9263
020	SLU STR	No	-3.043	-1.461	-10936.7	-232.4	-70764.2	-0.5318	-0.6166
030	SLU STR	No	0.662	22.812	4132.8	11005.9	-57192.0	-0.2845	-0.6399

#### Macro platea: 5

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7237 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8975 / 3.8203 = 0.235 Ok (Cmb. n. 007)

TB / TBlim = 10410.8 / 75609.3 = 0.138 Ok (Cmb. n. 020)

TL / TLlim = 10684.8 / 74804.8 = 0.143 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-5.922	5.485	-617.9	-275.8	-93557.7	-0.6171	-0.8975
020	SLU STR	No	-19.845	3.764	-10410.8	-124.9	-55285.5	-0.2762	-0.6185
030	SLU STR	No	-1.267	23.836	3884.1	10684.8	-49697.9	-0.2386	-0.5681

#### Macro platea: 6

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7533 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9536 / 3.8498 = 0.248 Ok (Cmb. n. 008)

TB / TBlim = 10132.7 / 77064.0 = 0.131 Ok (Cmb. n. 027)

TL / TLlim = 15206.6 / 81054.9 = 0.188 Ok (Cmb. n. 040)



Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-0.187	2.046	-7.6	381.4	-112988.1	-0.8819	-0.9536
027	SLU STR	No	16.904	3.292	10132.7	-2610.5	-61769.3	-0.3339	-0.6637
040	SLU STR	No	-8.058	2.918	-4062.2	15206.6	-78440.1	-0.5221	-0.7505

#### Macro platea: 7

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7535 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0150 / 3.8500 = 0.264 Ok (Cmb. n. 006)

TB / TBlim = 10011.5 / 82775.1 = 0.121 Ok (Cmb. n. 027)

TL / TLlim = 9845.1 / 82378.4 = 0.120 Ok (Cmb. n. 039)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.509	-0.690	262.4	-105.7	-122412.4	-0.9685	-1.0150
027	SLU STR	No	4.099	-2.921	10011.5	-1829.7	-68622.0	-0.4886	-0.6178
039	SLU STR	No	1.930	-5.980	3664.0	-9845.1	-63005.0	-0.4423	-0.5752

#### Macro platea: 8

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7496 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0884 / 3.8462 = 0.283 Ok (Cmb. n. 006)

TB / TBlim = 9928.4 / 81547.7 = 0.122 Ok (Cmb. n. 027)

TL / TLlim = 9266.2 / 84464.5 = 0.110 Ok (Cmb. n. 031)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	0.565	0.508	294.7	-523.3	-131231.5	-1.0386	-1.0884
027	SLU STR	No	9.142	-0.595	9928.4	-2936.3	-68154.8	-0.4621	-0.6382
031	SLU STR	No	2.463	-0.677	2425.2	-9266.2	-67456.6	-0.5162	-0.5735

#### Macro platea: 9

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7430 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0296 / 3.8396 = 0.268 Ok (Cmb. n. 007)

TB / TBlim = 9865.0 / 83300.4 = 0.118 Ok (Cmb. n. 028)

TL / TLlim = 10861.1 / 84792.1 = 0.128 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
007	SLU STR	No	-2.080	0.678	-271.8	-505.9	-122212.0	-0.9405	-1.0296
028	SLU STR	No	-4.724	-1.062	-9865.0	3156.5	-68475.3	-0.5011	-0.6060
033	SLU STR	No	-1.566	-0.833	-2983.7	-10861.1	-65389.7	-0.5075	-0.5501

#### Macro platea: 10

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.4605 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8739 / 3.5570 = 0.246 Ok (Cmb. n. 008)

TB / TBlim = 17587.9 / 141659.0 = 0.124 Ok (Cmb. n. 023)

TL / TLlim = 19412.8 / 133092.0 = 0.146 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	2.077	-7.449	100.5	524.4	-184934.9	-0.7107	-0.8739
023	SLU STR	No	14.700	-15.394	17587.9	-7160.0	-111819.1	-0.3078	-0.6750
033	SLU STR	No	-3.487	-8.095	-4634.8	-19412.8	-115498.5	-0.4366	-0.5675

#### Macro platea: 11

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.7443 + 0.0965 + 0.0000 + 0.0000



$Q_{max} / Q_{lim} = 0.8569 / 3.8409 = 0.223$  Ok (Cmb. n. 009)  
 $TB / TBl_{lim} = 8656.3 / 64017.5 = 0.135$  Ok (Cmb. n. 015)  
 $TL / TL_{lim} = 14692.5 / 69375.9 = 0.212$  Ok (Cmb. n. 039)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
009	SLU STR	No	2.154	-6.310	40.9	-372.5	-93042.7	-0.6494	-0.8569
015	SLU STR	No	23.594	-30.781	8656.3	-6844.0	-44289.1	-0.0424	-0.6792
039	SLU STR	No	10.199	-29.033	2365.8	-14692.5	-55979.7	-0.1597	-0.7393

#### Macro platea: 12

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.3680 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.8689 / 3.4645 = 0.251$  Ok (Cmb. n. 008)

$TB / TBl_{lim} = 21249.0 / 176705.9 = 0.120$  Ok (Cmb. n. 042)

$TL / TL_{lim} = 23964.3 / 173881.2 = 0.138$  Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	4.027	-8.754	856.3	-35.7	-259715.1	-0.6623	-0.8689
026	SLU STR	No	14.667	-19.436	7866.4	-23964.3	-170694.8	-0.3228	-0.6733
042	SLU STR	No	29.596	-10.433	21249.0	-12883.3	-167623.2	-0.2775	-0.7219

#### Macro platea: 13

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.3435 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.9737 / 3.4400 = 0.283$  Ok (Cmb. n. 006)

$TB / TBl_{lim} = 21504.8 / 161999.9 = 0.133$  Ok (Cmb. n. 031)

$TL / TL_{lim} = 22968.6 / 174227.0 = 0.132$  Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
006	SLU STR	No	-15.910	-2.567	-2240.8	-890.4	-259126.9	-0.6411	-0.9737
026	SLU STR	No	14.750	-12.748	4707.8	-22968.6	-170612.2	-0.3596	-0.6590
031	SLU STR	No	-49.645	-0.551	-21504.8	-7341.6	-160412.6	-0.1947	-0.7853

#### Macro platea: 14

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.1235 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.9611 / 3.2200 = 0.298$  Ok (Cmb. n. 030)

$TB / TBl_{lim} = 23217.2 / 142183.6 = 0.163$  Ok (Cmb. n. 030)

$TL / TL_{lim} = 21209.7 / 160488.3 = 0.132$  Ok (Cmb. n. 026)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
026	SLU STR	No	14.885	-14.582	2408.8	-21209.7	-158071.8	-0.3509	-0.6906
030	SLU STR	No	52.828	-8.429	23217.2	-2963.2	-169506.6	-0.1593	-0.9611

#### Macro platea: 15

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

$Q_{lim} = Q_{lim\ c} + Q_{lim\ q} + Q_{lim\ g} + Q_{res\ P} = 3.4832 + 0.0965 + 0.0000 + 0.0000$

$Q_{max} / Q_{lim} = 0.9663 / 3.5797 = 0.270$  Ok (Cmb. n. 008)

$TB / TBl_{lim} = 17173.5 / 126555.9 = 0.136$  Ok (Cmb. n. 029)

$TL / TL_{lim} = 16963.8 / 122051.1 = 0.139$  Ok (Cmb. n. 036)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
008	SLU STR	No	-7.230	8.990	-43.7	720.6	-187213.7	-0.6477	-0.9663
029	SLU STR	No	-30.954	6.042	-17173.5	-2345.5	-120650.5	-0.2633	-0.7542
036	SLU STR	No	-18.261	23.041	-6659.3	16963.8	-124054.3	-0.2612	-0.8009

#### Macro platea: 16

Risultati più gravosi per cmb. di tipo **SLU STR**:



Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.3175 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.9717 / 3.4140 = 0.285 Ok (Cmb. n. 020)  
 TB / TBlim = 8350.0 / 102875.6 = 0.081 Ok (Cmb. n. 029)  
 TL / TLlim = 11742.5 / 120533.9 = 0.097 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
020	SLU STR	No	-51.190	-1.923	-7959.2	4848.4	-119388.8	-0.1899	-0.9717
029	SLU STR	No	-52.536	-0.870	-8350.0	-3905.4	-115216.2	-0.1802	-0.9445
040	SLU STR	No	-21.026	-1.346	-2144.3	11742.5	-116769.6	-0.4073	-0.7280

#### Macro platea: 17

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.3205 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.9882 / 3.4171 = 0.289 Ok (Cmb. n. 019)  
 TB / TBlim = 8265.9 / 103698.6 = 0.080 Ok (Cmb. n. 026)  
 TL / TLlim = 13483.3 / 121073.6 = 0.111 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
019	SLU STR	No	50.806	-3.233	7765.0	-1054.3	-120513.8	-0.1844	-0.9882
026	SLU STR	No	51.053	-0.918	8265.9	2187.5	-120136.0	-0.1995	-0.9714
030	SLU STR	No	20.502	-0.865	2332.4	13483.3	-118017.3	-0.4189	-0.7282

#### Macro platea: 18

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.3014 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.9699 / 3.3979 = 0.285 Ok (Cmb. n. 029)  
 TB / TBlim = 7869.6 / 100533.4 = 0.078 Ok (Cmb. n. 020)  
 TL / TLlim = 11075.1 / 117079.1 = 0.095 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
020	SLU STR	No	-56.203	1.531	-7869.6	4253.8	-113350.3	-0.1487	-0.9581
029	SLU STR	No	-55.601	-2.117	-7838.9	-3604.7	-114860.2	-0.1506	-0.9699
040	SLU STR	No	-23.147	5.876	-2385.5	11075.1	-106662.3	-0.3269	-0.7105

#### Macro platea: 19

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.2831 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.9649 / 3.3797 = 0.285 Ok (Cmb. n. 023)  
 TB / TBlim = 7914.5 / 96076.5 = 0.082 Ok (Cmb. n. 027)  
 TL / TLlim = 12062.9 / 112919.6 = 0.107 Ok (Cmb. n. 035)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
023	SLU STR	No	59.078	-9.086	7892.1	-4146.1	-106202.9	-0.0705	-0.9649
027	SLU STR	No	59.121	-8.851	7914.5	-3428.2	-106104.6	-0.0717	-0.9627
035	SLU STR	No	23.526	-13.837	2400.6	-12062.9	-101980.1	-0.2598	-0.7314

#### Macro platea: 20

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>  
 Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.2868 + 0.0965 + 0.0000 + 0.0000  
 Qmax / Qlim = 0.9634 / 3.3834 = 0.285 Ok (Cmb. n. 021)  
 TB / TBlim = 8545.3 / 99637.6 = 0.086 Ok (Cmb. n. 029)  
 TL / TLlim = 10902.1 / 116958.8 = 0.093 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb	Tipo	Sism.	Ecc. B	Ecc. L	S. Taglio B	S. Taglio L	S. Normale	T.T. min	T.T. max
n.			cm	cm	daN	daN	daN	daN/cm <sup>2</sup>	daN/cm <sup>2</sup>
021	SLU STR	No	-57.201	-2.374	-8527.4	-2455.0	-112520.8	-0.1349	-0.9634
029	SLU STR	No	-57.212	-2.365	-8545.3	-3485.4	-112495.4	-0.1349	-0.9632
040	SLU STR	No	-23.269	5.982	-2578.2	10902.1	-106642.6	-0.3252	-0.7119



**Macro platea: 21**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.2470 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8752 / 3.3435 = 0.262 Ok (Cmb. n. 022)

TB / TBlim = 8549.5 / 93097.2 = 0.092 Ok (Cmb. n. 022)

TL / TLlim = 11811.3 / 112642.9 = 0.105 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
022	SLU STR	No	66.252	6.382	8549.5	3019.9	-93223.1	-0.0384	-0.8752
030	SLU STR	No	25.413	12.374	2576.3	11811.3	-87613.8	-0.2225	-0.6327

**Macro platea: 22**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.2905 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9569 / 3.3871 = 0.283 Ok (Cmb. n. 029)

TB / TBlim = 9055.3 / 100228.4 = 0.090 Ok (Cmb. n. 028)

TL / TLlim = 11030.1 / 118541.3 = 0.093 Ok (Cmb. n. 040)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
028	SLU STR	No	-56.752	1.517	-9055.3	3027.6	-110338.7	-0.1401	-0.9359
029	SLU STR	No	-54.929	0.201	-9106.2	-3484.6	-114812.4	-0.1687	-0.9569
040	SLU STR	No	-23.062	3.033	-2636.0	11030.1	-99480.9	-0.3218	-0.6438

**Macro platea: 23**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.2864 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.9536 / 3.3829 = 0.282 Ok (Cmb. n. 023)

TB / TBlim = 9054.6 / 98845.2 = 0.092 Ok (Cmb. n. 022)

TL / TLlim = 11750.2 / 117075.6 = 0.100 Ok (Cmb. n. 030)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
022	SLU STR	No	57.484	4.010	9054.6	3105.9	-108351.2	-0.1157	-0.9384
023	SLU STR	No	55.600	2.571	9110.4	-3801.0	-112825.9	-0.1443	-0.9536
030	SLU STR	No	23.189	5.837	2628.0	11750.2	-97492.1	-0.2974	-0.6482

**Macro platea: 24**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.5110 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8554 / 3.6076 = 0.237 Ok (Cmb. n. 009)

TB / TBlim = 9457.6 / 84110.1 = 0.112 Ok (Cmb. n. 027)

TL / TLlim = 11266.1 / 76872.6 = 0.147 Ok (Cmb. n. 039)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	17.672	-16.480	9.1	-448.0	-123027.5	-0.3386	-0.8554
027	SLU STR	No	65.840	-31.835	9457.6	-3127.7	-70680.5	0.0864	-0.7662
039	SLU STR	No	42.261	-73.769	2746.0	-11266.1	-63812.1	0.1514	-0.7634

**Macro platea: 25**Risultati più gravosi per cmb. di tipo **SLU STR**:Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.3775 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0903 / 3.4740 = 0.314 Ok (Cmb. n. 040)

TB / TBlim = 9478.1 / 111583.4 = 0.085 Ok (Cmb. n. 029)

TL / TLlim = 10051.4 / 79751.2 = 0.126 Ok (Cmb. n. 045)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
029	SLU STR	No	-11.135	-28.526	-9478.1	-3006.8	-97277.4	-0.2354	-0.7127



040	SLU STR	No	-7.088	89.897	-2799.2	10065.6	-100434.7	0.1118	-1.0903
045	SLU STR	No	-3.792	-91.809	-2875.7	-10051.4	-99502.7	0.1025	-1.0716

#### Macro platea: 26

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.3771 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 1.0904 / 3.4736 = 0.314 Ok (Cmb. n. 030)

TB / TBlim = 9481.5 / 111557.0 = 0.085 Ok (Cmb. n. 023)

TL / TLim = 10073.1 / 79739.2 = 0.126 Ok (Cmb. n. 035)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
023	SLU STR	No	11.163	-28.550	9481.5	-3016.1	-97302.4	-0.2352	-0.7132
030	SLU STR	No	7.116	89.844	2788.5	10088.1	-100459.9	0.1116	-1.0904
035	SLU STR	No	3.822	-91.816	2886.2	-10073.1	-99528.3	0.1027	-1.0721

#### Macro platea: 27

Risultati più gravosi per cmb. di tipo **SLU STR**:

Sgm. Lt (tens. litostatica) = -0.2220 daN/cm<sup>2</sup>

Qlim = Qlim c + Qlim q + Qlim g + Qres P = 3.5114 + 0.0965 + 0.0000 + 0.0000

Qmax / Qlim = 0.8644 / 3.6079 = 0.240 Ok (Cmb. n. 009)

TB / TBlim = 9454.8 / 84110.4 = 0.112 Ok (Cmb. n. 025)

TL / TLim = 11897.0 / 76812.3 = 0.155 Ok (Cmb. n. 033)

Sollecitazioni:

Cmb n.	Tipo	Sism.	Ecc. B cm	Ecc. L cm	S. Taglio B daN	S. Taglio L daN	S. Normale daN	T.T. min daN/cm <sup>2</sup>	T.T. max daN/cm <sup>2</sup>
009	SLU STR	No	-17.479	-17.185	-8.4	-476.9	-123757.3	-0.3367	-0.8644
025	SLU STR	No	-65.287	-32.548	-9454.8	-3190.3	-71166.8	0.0877	-0.7722
033	SLU STR	No	-41.828	-74.240	-2732.6	-11897.0	-64298.4	0.1527	-0.7694