



azienda casa emilia - romagna
provincia di bologna

Piazza della Resistenza 4 - 40122
Bologna - BO
tel. 051.292111 fax 051.554335
Codice Fiscale - Partita IVA e Registro
Imprese di Bologna n. 00322270372
sito web: www.acerbologna.it
posta elettronica: info@acerbologna.it

INTERVENTO

**FONDO COMPLEMENTARE AL PIANO NAZIONALE DI RIPRESA E RESILIENZA
PROGRAMMA "SICURO, VERDE E SOCIALE: RIQUALIFICAZIONE DELL'EDILIZIA RESIDENZIALE PUBBLICA"**

**PROGETTO DI MANUTENZIONE STRAORDINARIA PER IL RESTAURO E RISANAMENTO
CONSERVATIVO DI DUE CASAMENTI A CORTE SITI IN
COMUNE DI BOLOGNA LOCALITA' CIRENAICA.
VIA LIBIA CIV. 29÷51 PER COMPLESSIVI 70 ALLOGGI
DI ERP CON RELATIVE PERTINENZE E PARTI COMUNI**

LOTTO **3053/PN_2**

PROGETTO ESECUTIVO

TAV. TAB_19		OGGETTO TABULATI DI CALCOLO CIVICO 49 STATO DI FATTO			DATA Settembre 2022	
SCALA					N. DISEGNO	
VERSIONE	DESCRIZIONE	DATA	REDATTO	VERIFICATO		APPROVATO
00	PRIMA EMISSIONE	Settembre 2022	F. DALMONTE	N. LEONE		N. LEONE
01						
02						
03						

Il Progettista Architettonico Arch. Francesca Tovoli Ing. Nicola Leone SIDEL Ingegneria Srl Via Isonzo, 13 40055 Villanova di Castenaso (BO)	Il Progettista Strutturale Ing. Nicola Leone SIDEL Ingegneria Srl Via Isonzo, 13 40055 Villanova di Castenaso (BO)	Il Progettista Impianti Elettrici Ing. Nicola Leone SIDEL Ingegneria Srl Via Isonzo, 13 40055 Villanova di Castenaso (BO)	Il Progettista Impianti Meccanici Ing. Nicola Leone SIDEL Ingegneria Srl Via Isonzo, 13 40055 Villanova di Castenaso (BO)
Il Coordinatore della Sicurezza in Fase Progettuale Ing. Nicola Leone SIDEL Ingegneria Srl Via Isonzo, 13 40055 Villanova di Castenaso (BO)	Il Coordinatore per la progettazione Ing. Nicola Leone SIDEL Ingegneria Srl Via Isonzo, 13 40055 Villanova di Castenaso (BO)	Collaboratori Progettisti: Ing. Marco Venturini Ing. Federica DalmonTE Geom. Alessio Breviglieri Arch. Domenico Conaci Geom. Arianna Danieli P. I. Andrea Gamberini Ing. Cesare Orsini	
Responsabile del Procedimento Ing. Antonio Frighi ACER Bologna Piazza della Resistenza, 4 40122 Bologna	Il Dirigente Responsabile del Servizio Tecnico Ing. Antonio Frighi ACER Bologna Piazza della Resistenza, 4 40122 Bologna	Il Direttore Generale Avv. Francesco Nitti ACER Bologna Piazza della Resistenza, 4 40122 Bologna	Il Presidente Marco Bertuzzi ACER Bologna Piazza della Resistenza, 4 40122 Bologna

TABULATI DI CALCOLO
CIVICO 49
STATO DI FATTO



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1 Risultati numerici

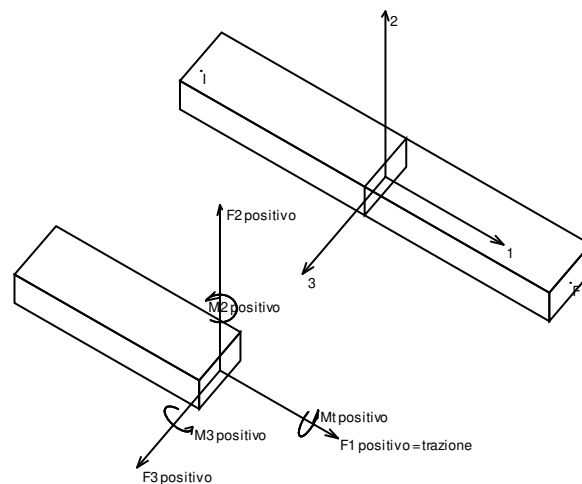
1.1 Sollecitazioni

1.1.1 Sollecitazioni aste

1.1.1.1 Convenzioni di segno aste

Le abbreviazioni relative alle sollecitazioni sugli elementi aste sono da intendersi:

- $F1$ (N): sforzo normale nell'asta;
- $F2$: sforzo di taglio agente nella direzione dell'asse locale 2;
- $F3$: sforzo di taglio agente nella direzione dell'asse locale 3;
- $M1$ (Mt): momento attorno all'asse locale 1; equivale al momento torcente;
- $M2$: momento attorno all'asse locale 2;
- $M3$: momento attorno all'asse locale 3.



La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:

presa un'asta con nodo iniziale i e nodo finale f , asse 1 che va da i a f , assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando la sezione sinistra del punto in cui si è effettuato il taglio (sezione da cui esce il versore asse 1) i parametri di sollecitazione sono positivi se hanno verso e direzione concordi con il sistema di riferimento locale dell'asta 1, 2, 3 (per i momenti si adotta la regola della mano destra).

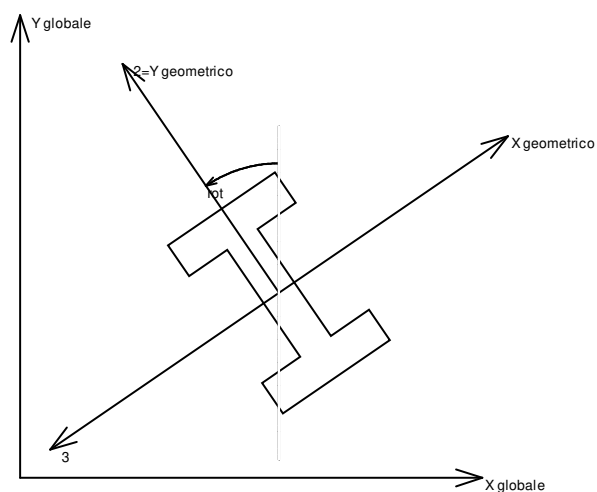
Il sistema è definito diversamente per tre categorie di aste, a seconda che siano originate da:

- aste verticali ad esempio pilastri e colonne;
- aste non verticali non di c.a., ad esempio travi di acciaio o legno;
- aste non verticali in c.a.: travi in c.a. di piano, falda o a quota generica.

Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

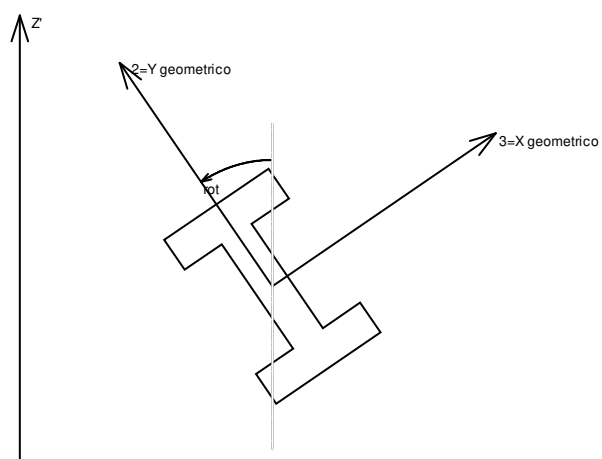


Sistema locale aste verticali



Nella figura si considera l'asse 1 uscente dal foglio (l'osservatore guarda in direzione opposta a quella dell'asse 1).

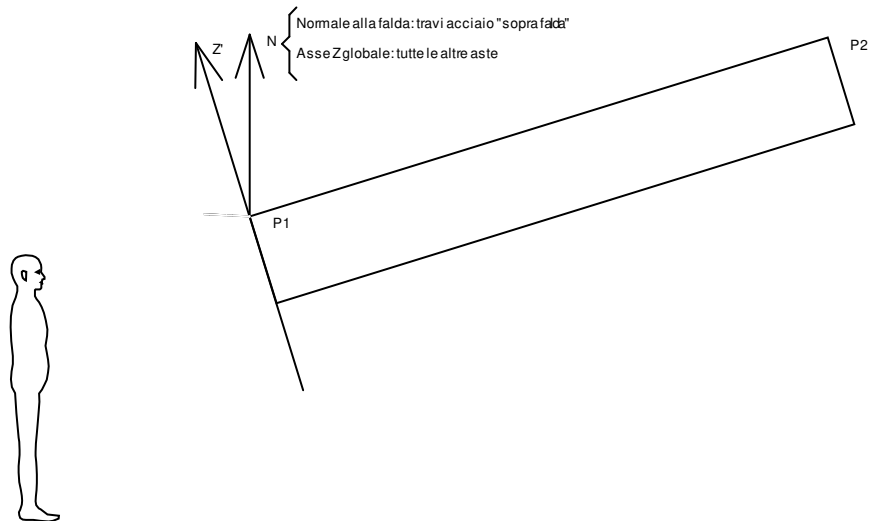
Sistema locale aste non verticali



Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1).

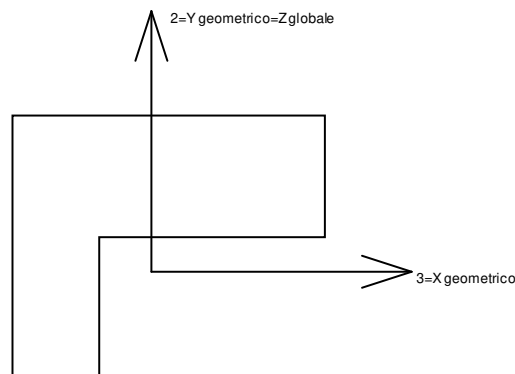
L'asse Z' è illustrato nella figura seguente dove:

- P1 è il punto di inserimento iniziale dell'asta;
- P2 è il punto di inserimento finale dell'asta;
- N è la normale al piano o falda di inserimento;



Z' è quindi l'intersezione tra il piano passante per $P1$, $P2$ contenente N e il piano della sezione iniziale dell'asta.

Sistema locale aste derivanti da travi in c.a.



Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1). L'asse 2 è sempre verticale e quindi coincidente con l'asse Z globale nonché con l'asse y geometrico. L'asse 3 coincide con l'asse x geometrico. Si sottolinea il fatto che gli assi 2 e 3 non corrispondono agli assi principali della sezione.

1.1.2 Sollecitazioni gusci

1.1.2.1 Convenzioni di segno gusci

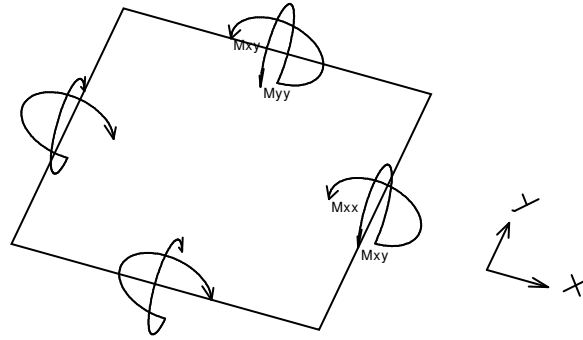
Sono individuate distinte convenzioni di segno in relazione al tipo di elemento strutturale a cui il guscio si riferisce:

- convenzione per gusci non verticali, originati ad esempio da piastre e platee;
- convenzione per gusci verticali, originati ad esempio da pareti e muri.

Convenzione di segno per gusci non verticali

Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse x e y contenuti nel piano dell'elemento e terzo asse (z) ortogonale al piano dell'elemento a formare una terna destrorsa. In particolare l'asse x ha proiezione in pianta parallela ed equivale all'asse globale X . Nel caso di piastre orizzontali (caso più comune) gli assi x , y e z locali all'elemento sono paralleli ed equivale agli assi X , Y e Z globali. Si sottolinea che non ha alcun interesse collocare esattamente nel piano dell'elemento la posizione dell'origine in quanto i parametri di sollecitazione sono invarianti rispetto a tale posizione.

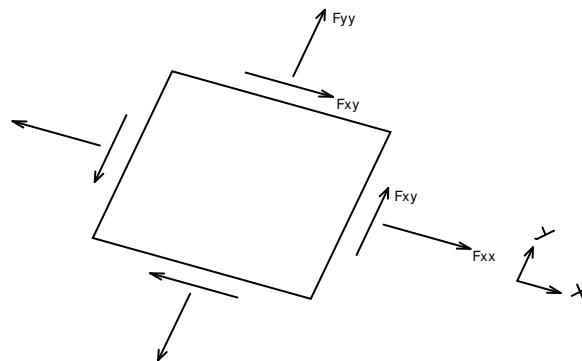
In figura è mostrato un elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione M_{xx} , M_{yy} , M_{xy} .



Si definiscono:

- M_{xx} : momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- M_{yy} : momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale y (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- M_{xy} : momento torcente [Forza*Lunghezza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

Per quanto riguarda le sollecitazioni estensionali si faccia riferimento alla figura seguente dove per lo stesso elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione F_{xx} , F_{yy} , F_{xy} .



Si definiscono:

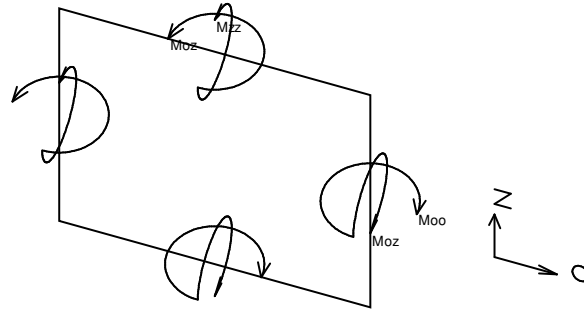
- F_{xx} : sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- F_{yy} : sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale all'asse y (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- F_{xy} : sforzo di taglio [Forza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

Vengono riportati inoltre i tagli fuori dal piano dell'elemento guscio:

- V_x : taglio fuori piano [Forza/Lunghezza] applicato al bordo di normale parallela all'asse x;
- V_y : taglio fuori piano [Forza/Lunghezza] applicato al bordo di normale parallela all'asse y.

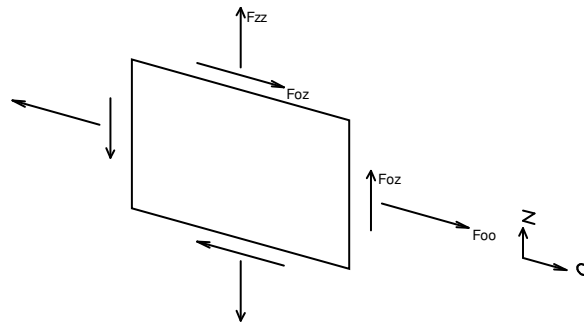
Convenzione di segno per gusci verticali

Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse O (ascisse) e z (ordinate) contenuti nel piano dell'elemento e terzo asse ortogonale al piano dell'elemento a formare una terna destrorsa. In particolare l'asse O è orizzontale e l'asse z parallelo ed equiverso con l'asse Z globale. Si sottolinea che non ha alcun interesse collocare esattamente nel piano dell'elemento la posizione dell'origine in quanto i parametri di sollecitazione sono invarianti rispetto a tale posizione. In figura è mostrato un elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione M_{xx} , M_{yy} , M_{xy} , F_{xx} , F_{yy} , F_{xy} .



- Moo: momento flettente distribuito $[Forza * Lunghezza / Lunghezza]$ applicato al bordo di normale parallela all'asse O (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Mzz: momento flettente distribuito $[Forza * Lunghezza / Lunghezza]$ applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Moz: momento 'torcente' distribuito $[Forza * Lunghezza / Lunghezza]$ applicato sui bordi (verso positivo indicato dalla freccia in figura).

Per quanto riguarda le sollecitazioni estensionali si faccia riferimento alla figura seguente dove per lo stesso elemento infinitesimo di shell con indicato il sistema di riferimento i parametri di sollecitazione Foo, Fzz, Foz sono rispettivamente:



- Fzz: sforzo tensionale distribuito $[Forza / Lunghezza]$ applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foo: sforzo tensionale distribuito $[Forza / Lunghezza]$ applicato al bordo di normale parallela all'asse O (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foz: sforzo tagliante distribuito $[Forza / Lunghezza]$ applicato sui bordi (verso positivo indicato dalla freccia in figura).

Vengono riportati inoltre i tagli fuori dal piano dell'elemento guscio:

- Vo: taglio fuori piano applicato al bordo di normale parallela all'asse O;
- Vz: taglio fuori piano applicato al bordo di normale parallela all'asse z.

1.1.2.2 Sollecitazioni estreme gusci

Shell: elemento guscio a cui si riferiscono le sollecitazioni.

Ind: indice del guscio.

Cont.: contesto a cui si riferiscono le sollecitazioni.

N.br.: nome breve della condizione o combinazione di carico.

Nodo: nodo su cui si basa il guscio a cui si riferisce la sollecitazione.

Ind: indice del nodo.

Sollecitazione: valori della sollecitazione.

M11: componente M11 della sollecitazione del guscio nel nodo indicato. $[daN * m / m]$

M12: componente M12 della sollecitazione del guscio nel nodo indicato. $[daN * m / m]$

M22: componente M22 della sollecitazione del guscio nel nodo indicato. $[daN * m / m]$

F11: componente F11 della sollecitazione del guscio nel nodo indicato. $[daN / m]$

F12: componente F12 della sollecitazione del guscio nel nodo indicato. $[daN / m]$

F22: componente F22 della sollecitazione del guscio nel nodo indicato. $[daN / m]$

V13: componente V13 della sollecitazione del guscio nel nodo indicato. $[daN / m]$

V23: componente V23 della sollecitazione del guscio nel nodo indicato. $[daN / m]$

Sollecitazioni con momento M11 minimo

Vengono mostrati i soli 5 gusci più sollecitati.



Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
599	SLV 9	1015	-975	-62	-291	-12966	12449	-788	4224	1456
600	SLV 9	1017	-963	56	-274	-12266	13695	-3779	4740	1297
598	SLV 5	1013	-961	-59	-276	-14606	11183	-2547	4798	1903
585	SLV 5	988	-949	-44	-184	-9466	-14320	-5538	-4729	1174
584	SLV 5	986	-942	-54	356	-8438	-16243	-6520	-4910	1283

Sollecitazioni con momento M11 massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
767	SLV 1	1022	945	94	208	-3166	68	-10296	-2222	-740
599	SLV 7	1015	932	103	452	10130	-8040	-5234	-3868	-1436
598	SLV 11	1013	927	96	444	11459	-7868	-4506	-4504	-1874
584	SLV 5	984	923	-101	434	14486	-17859	-1218	-4614	-601
597	SLV 11	1010	920	80	454	13099	-7278	-5568	-4230	-1397

Sollecitazioni con momento M22 minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
926	SLV 5	972	-96	-26	-596	34196	27271	-44866	-9943	3499
566	SLV Y	14	-149	-3	-595	-715	867	-2605	46	-579
567	SLV Y	14	-149	-3	-595	-804	1103	-2809	-82	-486
551	SLV 11	17	-138	-14	-554	-351	-989	-1960	46	-592
550	SLV 11	17	-138	-14	-554	-119	-1340	-1899	104	-522

Sollecitazioni con momento M22 massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
926	SLV 5	819	865	-623	753	-66417	43098	-69072	-9943	3499
924	SLV 5	819	671	-526	728	-30688	21402	-56242	4193	1555
925	SLV 5	819	884	-474	725	-50299	31993	-66206	-8083	3438
566	SLV 5	14	156	4	622	-888	-1424	-3823	-67	578
567	SLV 5	14	156	4	622	-877	-1603	-3895	71	475

Sollecitazioni con sforzo F11 minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
926	SLV 5	819	865	-623	753	-66417	43098	-69072	-9943	3499
925	SLV 5	819	884	-474	725	-50299	31993	-66206	-8083	3438
1796	SLV Y	997	-74	-11	-216	-31862	602	-2564	-219	-205
1787	SLV Y	999	-123	-22	-213	-31235	-1222	-3274	-664	-278
1805	SLV Y	993	-68	8	-220	-31131	1245	-3573	369	-249

Sollecitazioni con sforzo F11 massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
1006	SLV 11	1121	-102	-17	-136	42292	-1651	7065	-655	-217
960	SLV 7	1128	-91	17	-152	41592	1287	4842	574	-192
1034	SLV 7	1127	-79	11	-164	41116	-1083	4187	447	-184
926	SLV Y	819	-628	410	-525	41062	-21416	34962	7615	-2434
924	SLV 5	980	578	-134	-46	40709	-2081	-24748	4193	1555

Sollecitazioni con sforzo F22 minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
2116	SLV 1	1146	34	-71	-92	-2263	-13344	-139710	463	-78
2112	SLV 15	1483	33	74	-70	-853	10562	-113728	422	138
2107	SLV 5	1591	-141	-94	-85	-6113	-1628	-90807	-310	-209
2111	SLV 15	977	-31	18	-54	-6232	1464	-82646	-3428	-5
2115	SLV 1	1146	36	-41	-88	6775	-6075	-71145	371	-188

Sollecitazioni con sforzo F22 massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	M11	M12	M22	F11	F12	F22	V13	V23
2112	SLV 1	1483	-41	-84	76	1106	-12711	124035	-505	-209
2116	SLV 15	1146	-32	68	79	2302	11543	111103	-425	79
2107	SLV 11	1591	182	116	112	8263	-848	75598	207	89
2113	SLV 1	1483	-40	-45	82	-7374	-5433	60469	-464	-170
2111	SLV 1	977	9	-35	-19	14676	-3123	59835	6066	-277

1.1.2.3 Sollecitazioni estreme gusci non verticali

Shell: elemento guscio a cui si riferiscono le sollecitazioni.

Ind: indice del guscio.

Cont.: contesto a cui si riferiscono le sollecitazioni.

N.br.: nome breve della condizione o combinazione di carico.



Nodo: nodo su cui si basa il guscio a cui si riferisce la sollecitazione.

Ind: indice del nodo.

Sollecitazione: valori della sollecitazione.

Mxx: componente Mxx della sollecitazione del guscio nel nodo indicato. [daN*m/m]

Mxy: componente Mxy della sollecitazione del guscio nel nodo indicato. [daN*m/m]

Myy: componente Myy della sollecitazione del guscio nel nodo indicato. [daN*m/m]

Fxx: componente Fxx della sollecitazione del guscio nel nodo indicato. [daN/m]

Fxy: componente Fxy della sollecitazione del guscio nel nodo indicato. [daN/m]

Fyy: componente Fyy della sollecitazione del guscio nel nodo indicato. [daN/m]

Vx: componente Vo della sollecitazione del guscio nel nodo indicato. [daN/m]

Vy: componente Vz della sollecitazione del guscio nel nodo indicato. [daN/m]

Sollecitazioni con momento Mxx minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con momento Mxx massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con momento Myy minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con momento Myy massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con sforzo Fxx minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con sforzo Fxx massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con sforzo Fyy minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

Sollecitazioni con sforzo Fyy massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Mxx	Mxy	Myy	Fxx	Fxy	Fyy	Vx	Vy

1.1.2.4 Sollecitazioni estreme gusci verticali

Shell: elemento guscio a cui si riferiscono le sollecitazioni.

Ind: indice del guscio.

Cont.: contesto a cui si riferiscono le sollecitazioni.

N.br.: nome breve della condizione o combinazione di carico.

Nodo: nodo su cui si basa il guscio a cui si riferisce la sollecitazione.

Ind: indice del nodo.

Sollecitazione: valori della sollecitazione.

Moo: componente Moo della sollecitazione del guscio nel nodo indicato. [daN*m/m]

Moz: componente Moz della sollecitazione del guscio nel nodo indicato. [daN*m/m]

Mzz: componente Mzz della sollecitazione del guscio nel nodo indicato. [daN*m/m]

Foo: componente Foo della sollecitazione del guscio nel nodo indicato. [daN/m]

Foz: componente Foz della sollecitazione del guscio nel nodo indicato. [daN/m]

Fzz: componente Fzz della sollecitazione del guscio nel nodo indicato. [daN/m]

Vo: componente Vo della sollecitazione del guscio nel nodo indicato. [daN/m]

Vz: componente Vz della sollecitazione del guscio nel nodo indicato. [daN/m]

Sollecitazioni con momento Moo minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
599	SLV 9	1015	-975	-62	-291	-12966	12449	-788	4224	1456



Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
600	SLV 9	1017	-963	56	-274	-12266	13695	-3779	4740	1297
598	SLV 5	1013	-961	-59	-276	-14606	11183	-2547	4798	1903
585	SLV 5	988	-949	-44	-184	-9466	-14320	-5538	-4729	1174
767	SLV 1	1022	-945	94	-208	-3166	-68	-10296	-2222	740

Sollecitazioni con momento Moo massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
599	SLV 7	1015	932	103	452	10130	-8040	-5234	-3868	-1436
598	SLV 11	1013	927	96	444	11459	-7868	-4506	-4504	-1874
584	SLV 5	984	923	-101	434	14486	-17859	-1218	-4614	-601
597	SLV 11	1010	920	80	454	13099	-7278	-5568	-4230	-1397
600	SLV 7	1017	916	-4	426	9391	-8631	-3258	-4378	-1281

Sollecitazioni con momento Mzz minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
926	SLV 5	972	-96	-26	-596	34196	27271	-44866	-9943	3499
566	SLV Y	14	-149	-3	-595	-715	867	-2605	46	-579
567	SLV Y	14	-149	-3	-595	-804	1103	-2809	-82	-486
550	SLV 11	17	-138	-14	-554	-119	-1340	-1899	104	-522
551	SLV 11	17	-138	-14	-554	-351	-989	-1960	46	-592

Sollecitazioni con momento Mzz massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
926	SLV 5	819	865	-623	753	-66417	43098	-69072	-9943	3499
924	SLV 5	819	865	-623	753	-50299	31993	-66206	-8083	3438
925	SLV 5	819	884	-474	725	-50299	31993	-66206	-8083	3438
566	SLV 5	14	156	4	622	-888	-1424	-3823	-67	578
567	SLV 5	14	156	4	622	-877	-1603	-3895	71	475

Sollecitazioni con sforzo Foo minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
926	SLV 5	819	865	-623	753	-66417	43098	-69072	-9943	3499
925	SLV 5	819	884	-474	725	-50299	31993	-66206	-8083	3438
1796	SLV Y	997	-74	-11	-216	-31862	602	-2564	-219	-205
1787	SLV Y	999	-123	-22	-213	-31235	-1222	-3274	-664	-278
1805	SLV Y	993	-68	8	-220	-31131	1245	-3573	369	-249

Sollecitazioni con sforzo Foo massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
1006	SLV 11	1121	-102	-17	-136	42292	-1651	7065	-655	-217
960	SLV 7	1128	-91	17	-152	41592	1287	4842	574	-192
1034	SLV 7	1127	-79	11	-164	41116	-1083	4187	447	-184
926	SLV Y	819	-628	410	-525	41062	-21416	34962	7615	-2434
924	SLV 5	980	578	-134	-46	40709	-2081	-24748	4193	1555

Sollecitazioni con sforzo Fzz minimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
2116	SLV 1	1146	34	-71	-92	-2263	-13344	-139710	463	-78
2112	SLV 15	1483	33	74	-70	-853	10562	-113728	422	138
2107	SLV 5	1591	-141	-94	-85	-6113	-1628	-90807	-310	-209
2111	SLV 15	977	-31	18	-54	-6232	1464	-82646	-3428	-5
2115	SLV 1	1146	36	-41	-88	6775	-6075	-71145	371	-188

Sollecitazioni con sforzo Fzz massimo

Vengono mostrati i soli 5 gusci più sollecitati.

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
2112	SLV 1	1483	-41	-84	76	1106	-12711	124035	-505	-209
2116	SLV 15	1146	-32	68	79	2302	11543	111103	-425	79
2107	SLV 11	1591	182	116	112	8263	-848	75598	207	89
2113	SLV 1	1483	-40	-45	82	-7374	-5433	60469	-464	-170
2111	SLV 1	977	9	-35	-19	14676	-3123	59835	6066	-277

1.1.3 Sollecitazioni gusci armati

1.1.3.1 Convenzioni di segno gusci

Sono individuate distinte convenzioni di segno in relazione al tipo di elemento strutturale a cui il guscio si riferisce:

- convenzione per gusci non verticali, originati ad esempio da piastre e platee;

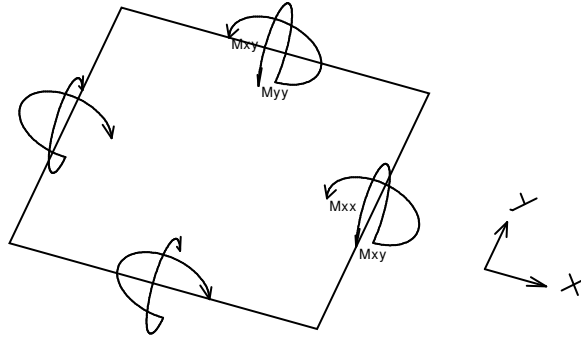


- convenzione per gusci verticali, originati ad esempio da pareti e muri.

Convenzione di segno per gusci non verticali

Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse x e y contenuti nel piano dell'elemento e terzo asse (z) ortogonale al piano dell'elemento a formare una terna destrorsa. In particolare l'asse x ha proiezione in pianta parallela ed equiversa all'asse globale X . Nel caso di piastre orizzontali (caso più comune) gli assi x , y e z locali all'elemento sono paralleli ed equiversi agli assi X , Y e Z globali. Si sottolinea che non ha alcun interesse collocare esattamente nel piano dell'elemento la posizione dell'origine in quanto i parametri di sollecitazione sono invarianti rispetto a tale posizione.

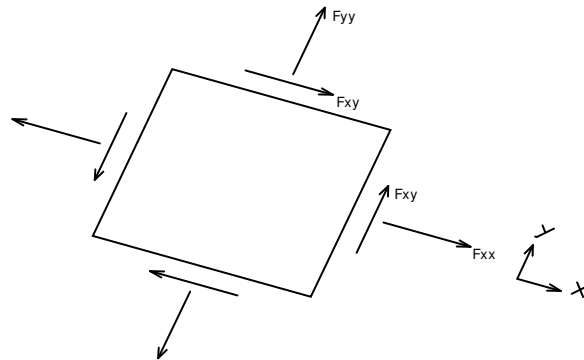
In figura è mostrato un elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione M_{xx} , M_{yy} , M_{xy} .



Si definiscono:

- M_{xx} : momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- M_{yy} : momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale y (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- M_{xy} : momento torcente [Forza*Lunghezza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

Per quanto riguarda le sollecitazioni estensionali si faccia riferimento alla figura seguente dove per lo stesso elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione F_{xx} , F_{yy} , F_{xy} .



Si definiscono:

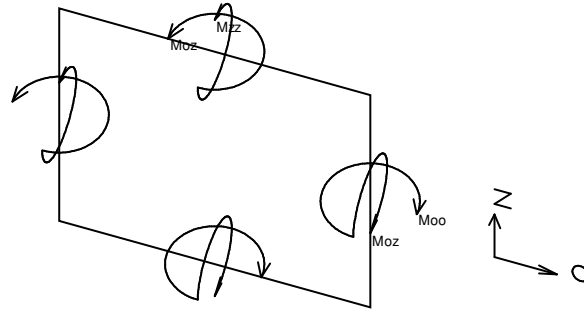
- F_{xx} : sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- F_{yy} : sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale all'asse y (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- F_{xy} : sforzo di taglio [Forza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

Vengono riportati inoltre i tagli fuori dal piano dell'elemento guscio:

- V_x : taglio fuori piano [Forza/Lunghezza] applicato al bordo di normale parallela all'asse x ;
- V_y : taglio fuori piano [Forza/Lunghezza] applicato al bordo di normale parallela all'asse y .

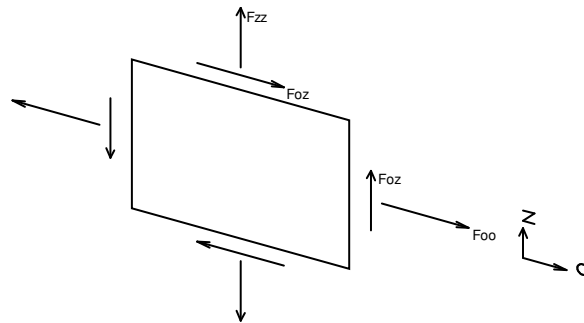
Convenzione di segno per gusci verticali

Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse O (ascisse) e z (ordinate) contenuti nel piano dell'elemento e terzo asse ortogonale al piano dell'elemento a formare una terna destrorsa. In particolare l'asse O è orizzontale e l'asse z parallelo ed equiverso con l'asse Z globale. Si sottolinea che non ha alcun interesse collocare esattamente nel piano dell'elemento la posizione dell'origine in quanto i parametri di sollecitazione sono invarianti rispetto a tale posizione. In figura è mostrato un elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione M_{oo} , M_{zz} , M_{oz} .



- Moo: momento flettente distribuito $[Forza * Lunghezza / Lunghezza]$ applicato al bordo di normale parallela all'asse O (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Mzz: momento flettente distribuito $[Forza * Lunghezza / Lunghezza]$ applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Moz: momento 'torcente' distribuito $[Forza * Lunghezza / Lunghezza]$ applicato sui bordi (verso positivo indicato dalla freccia in figura).

Per quanto riguarda le sollecitazioni estensionali si faccia riferimento alla figura seguente dove per lo stesso elemento infinitesimo di shell con indicato il sistema di riferimento i parametri di sollecitazione Foo, Fzz, Foz sono rispettivamente:



- Fzz: sforzo tensionale distribuito $[Forza / Lunghezza]$ applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foo: sforzo tensionale distribuito $[Forza / Lunghezza]$ applicato al bordo di normale parallela all'asse O (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foz: sforzo tagliante distribuito $[Forza / Lunghezza]$ applicato sui bordi (verso positivo indicato dalla freccia in figura).

Vengono riportati inoltre i tagli fuori dal piano dell'elemento guscio:

- Vo: taglio fuori piano applicato al bordo di normale parallela all'asse O;
- Vz: taglio fuori piano applicato al bordo di normale parallela all'asse z.

1.1.4 Sollecitazioni gusci muratura

1.1.4.1 Convenzioni di segno gusci muratura

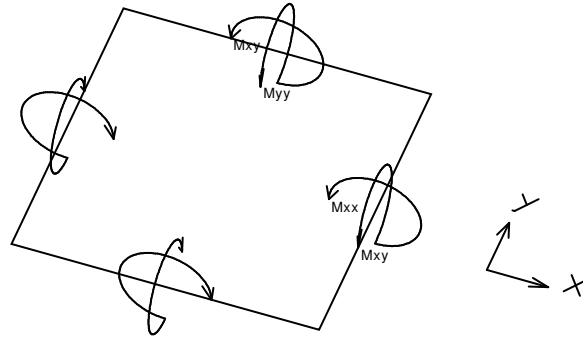
Sono individuate distinte convenzioni di segno in relazione al tipo di elemento strutturale a cui il guscio muratura si riferisce:

- convenzione per gusci non verticali, originati ad esempio da piastre e platee;
- convenzione per gusci verticali, originati ad esempio da pareti e muri.

Convenzione di segno per gusci non verticali

Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse x e y contenuti nel piano dell'elemento e terzo asse (z) ortogonale al piano dell'elemento a formare una terna destrorsa. In particolare l'asse x ha proiezione in pianta parallela ed equivale all'asse globale X. Nel caso di piastre orizzontali (caso più comune) gli assi x, y e z locali all'elemento sono paralleli ed equivale agli assi X, Y e Z globali. Si sottolinea che non ha alcun interesse collocare esattamente nel piano dell'elemento la posizione dell'origine in quanto i parametri di sollecitazione sono invarianti rispetto a tale posizione.

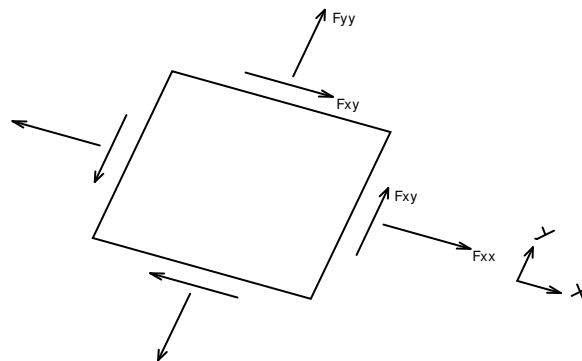
In figura è mostrato un elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione Mxx, Myy, Mxy.



Si definiscono:

- M_{xx} : momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- M_{yy} : momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale y (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- M_{xy} : momento torcente [Forza*Lunghezza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

Per quanto riguarda le sollecitazioni estensionali si faccia riferimento alla figura seguente dove per lo stesso elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione F_{xx} , F_{yy} , F_{xy} .

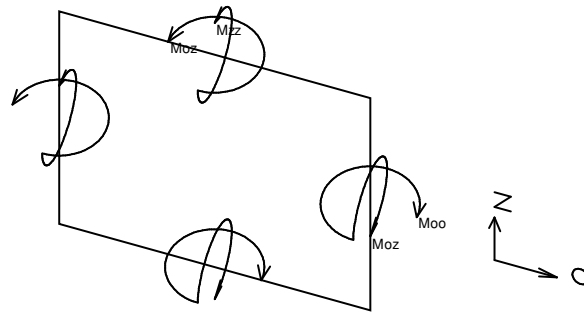


Si definiscono:

- F_{xx} : sforzo tensionale [Forza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- F_{yy} : sforzo tensionale [Forza/Lunghezza] agente sul bordo di normale all'asse y (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- F_{xy} : sforzo tagliante [Forza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

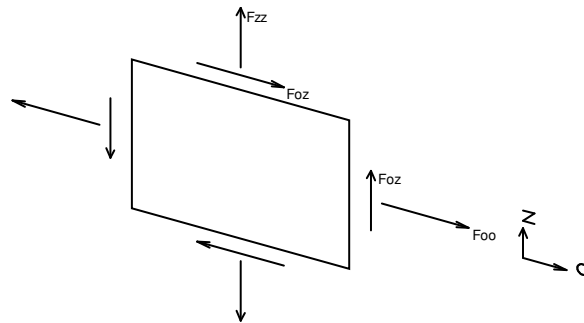
Convenzione di segno per gusci verticali

Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse O (ascisse) e z (ordinate) contenuti nel piano dell'elemento e terzo asse ortogonale al piano dell'elemento a formare una terna destrorsa. In particolare l'asse O è orizzontale e l'asse z parallelo ed equiverso con l'asse Z globale. Si sottolinea che non ha alcun interesse collocare esattamente nel piano dell'elemento la posizione dell'origine in quanto i parametri di sollecitazione sono invarianti rispetto a tale posizione. In figura è mostrato un elemento infinitesimo di shell orizzontale con indicato il sistema di riferimento e i parametri di sollecitazione M_{xx} , M_{zz} , M_{xz} .



- Moo: momento flettente distribuito $[Forza * Lunghezza / Lunghezza]$ applicato al bordo di normale parallela all'asse O (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Mzz: momento flettente distribuito $[Forza * Lunghezza / Lunghezza]$ applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Moz: momento 'torcente' distribuito $[Forza * Lunghezza / Lunghezza]$ applicato sui bordi (verso positivo indicato dalla freccia in figura).

Per quanto riguarda le sollecitazioni estensionali si faccia riferimento alla figura seguente dove per lo stesso elemento infinitesimo di shell con indicato il sistema di riferimento i parametri di sollecitazione Foo, Fzz, Foz sono rispettivamente:



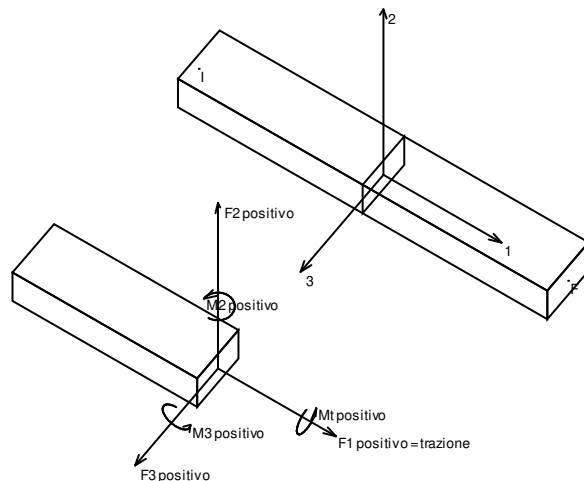
- Fzz: sforzo tensionale distribuito $[Forza / Lunghezza]$ applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foo: sforzo tensionale distribuito $[Forza / Lunghezza]$ applicato al bordo di normale parallela all'asse O (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foz: sforzo tagliante distribuito $[Forza / Lunghezza]$ applicato sui bordi (verso positivo indicato dalla freccia in figura).

1.1.5 Sollecitazioni aste in muratura

1.1.5.1 Convenzioni di segno aste

Le abbreviazioni relative alle sollecitazioni sugli elementi aste sono da intendersi:

- F1 (N): sforzo normale nell'asta;
- F2: sforzo di taglio agente nella direzione dell'asse locale 2;
- F3: sforzo di taglio agente nella direzione dell'asse locale 3;
- M1 (Mt): momento attorno all'asse locale 1; equivale al momento torcente;
- M2: momento attorno all'asse locale 2;
- M3: momento attorno all'asse locale 3.



La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:

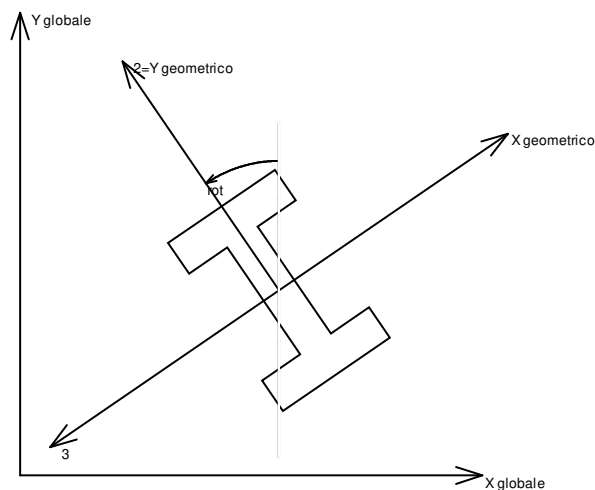
presa un'asta con nodo iniziale i e nodo finale f , asse 1 che va da i a f , assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando la sezione sinistra del punto in cui si è effettuato il taglio (sezione da cui esce il versore asse 1) i parametri di sollecitazione sono positivi se hanno verso e direzione concordi con il sistema di riferimento locale dell'asta 1, 2, 3 (per i momenti si adotta la regola della mano destra).

Il sistema è definito diversamente per tre categorie di aste, a seconda che siano originate da:

- aste verticali ad esempio pilastri e colonne;
- aste non verticali non di c.a., ad esempio travi di acciaio o legno;
- aste non verticali in c.a.: travi in c.a. di piano, falda o a quota generica.

Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

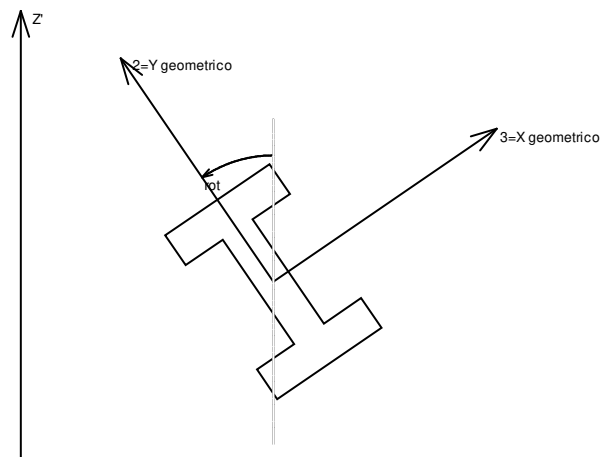
Sistema locale aste verticali



Nella figura si considera l'asse 1 uscente dal foglio (l'osservatore guarda in direzione opposta a quella dell'asse 1).



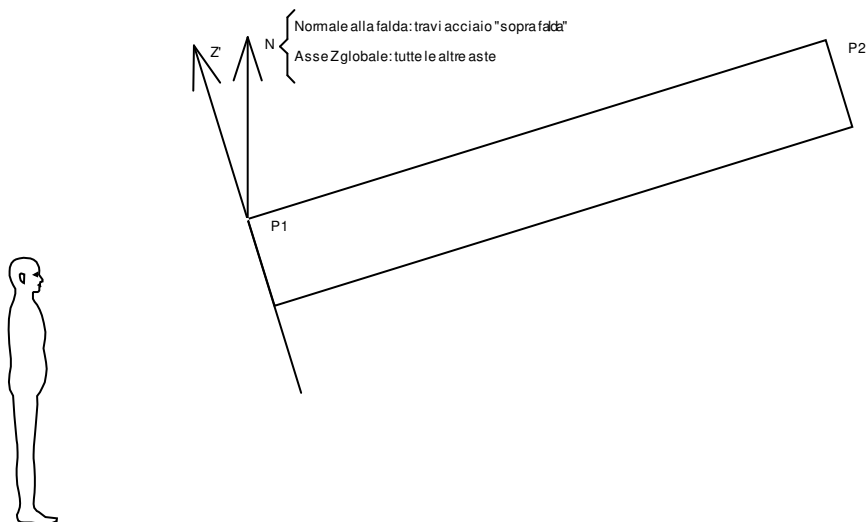
Sistema locale aste non verticali



Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1).

L'asse Z' è illustrato nella figura seguente dove:

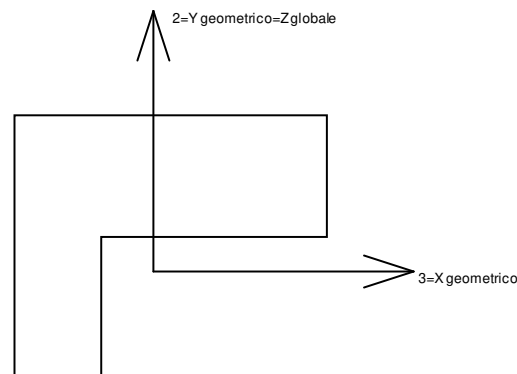
- $P1$ è il punto di inserimento iniziale dell'asta;
- $P2$ è il punto di inserimento finale dell'asta;
- N è la normale al piano o falda di inserimento;



Z' è quindi l'intersezione tra il piano passante per $P1$, $P2$ contenente N e il piano della sezione iniziale dell'asta.



Sistema locale aste derivanti da travi in c.a.



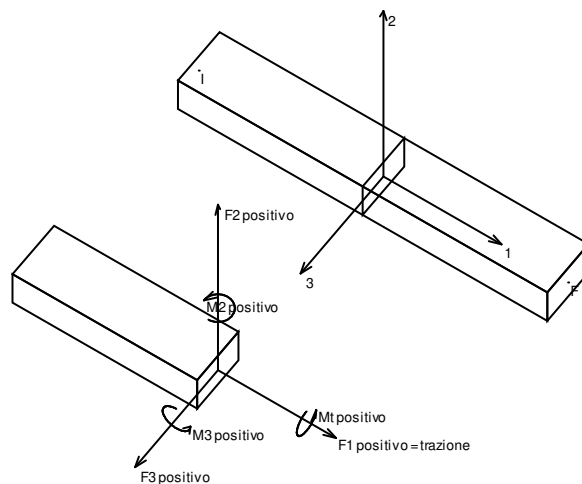
Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1). L'asse 2 è sempre verticale e quindi coincidente con l'asse Z globale nonché con l'asse y geometrico. L'asse 3 coincide con l'asse x geometrico. Si sottolinea il fatto che gli assi 2 e 3 non corrispondono agli assi principali della sezione.

1.1.6 Sollecitazioni aste in muratura FRCM

1.1.6.1 Convenzioni di segno aste

Le abbreviazioni relative alle sollecitazioni sugli elementi aste sono da intendersi:

- F1 (N): sforzo normale nell'asta;
- F2: sforzo di taglio agente nella direzione dell'asse locale 2;
- F3: sforzo di taglio agente nella direzione dell'asse locale 3;
- M1 (Mt): momento attorno all'asse locale 1; equivale al momento torcente;
- M2: momento attorno all'asse locale 2;
- M3: momento attorno all'asse locale 3.



La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:

presa un'asta con nodo iniziale i e nodo finale f, asse 1 che va da i a f, assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando la sezione sinistra del punto in cui si è effettuato il taglio (sezione da cui esce il versore asse 1) i parametri di sollecitazione sono positivi se hanno verso e direzione concordi con il sistema di riferimento locale dell'asta 1, 2, 3 (per i momenti si adotta la regola della mano destra).

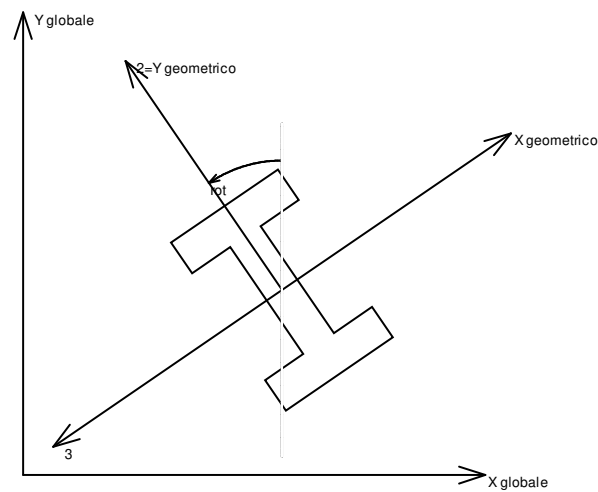
Il sistema è definito diversamente per tre categorie di aste, a seconda che siano originate da:

- aste verticali ad esempio pilastri e colonne;
- aste non verticali non di c.a., ad esempio travi di acciaio o legno;
- aste non verticali in c.a.: travi in c.a. di piano, falda o a quota generica.



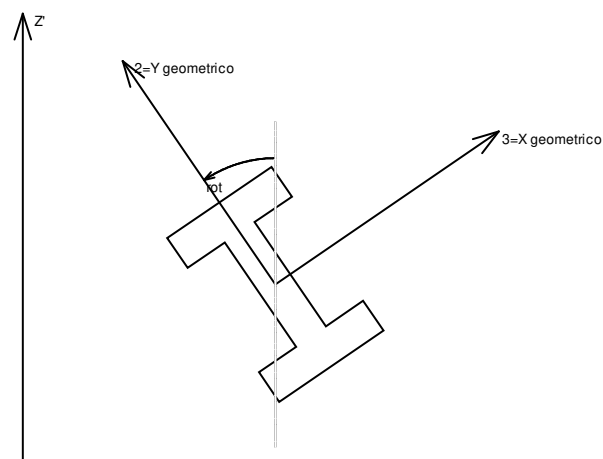
Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

Sistema locale aste verticali



Nella figura si considera l'asse 1 uscente dal foglio (l'osservatore guarda in direzione opposta a quella dell'asse 1).

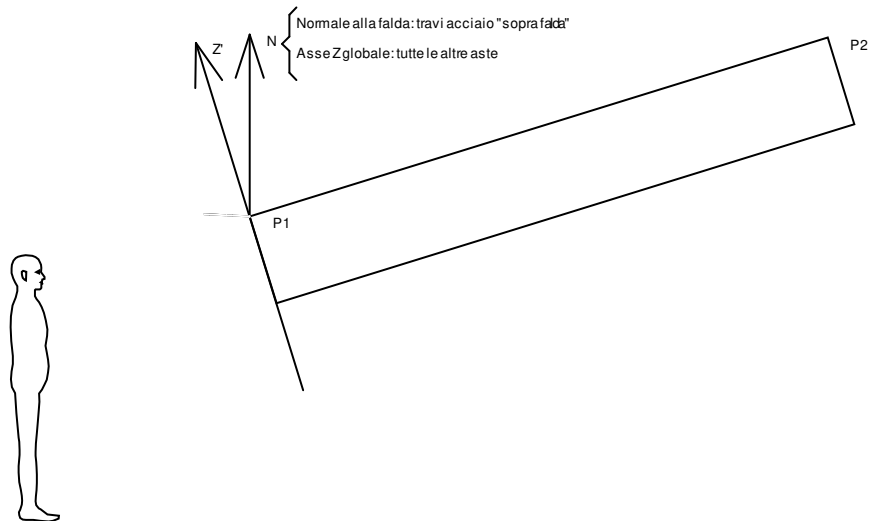
Sistema locale aste non verticali



Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1).

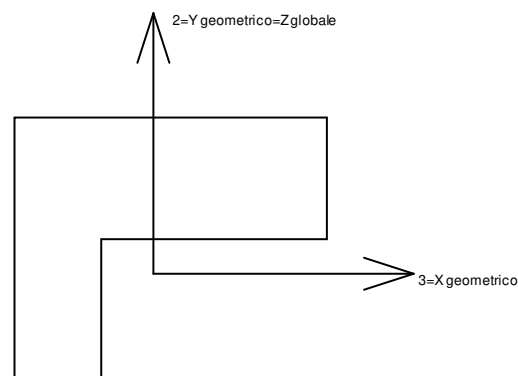
L'asse Z' è illustrato nella figura seguente dove:

- P1 è il punto di inserimento iniziale dell'asta;
- P2 è il punto di inserimento finale dell'asta;
- N è la normale al piano o falda di inserimento;



Z' è quindi l'intersezione tra il piano passante per P1, P2 contenente N e il piano della sezione iniziale dell'asta.

Sistema locale aste derivanti da travi in c.a.



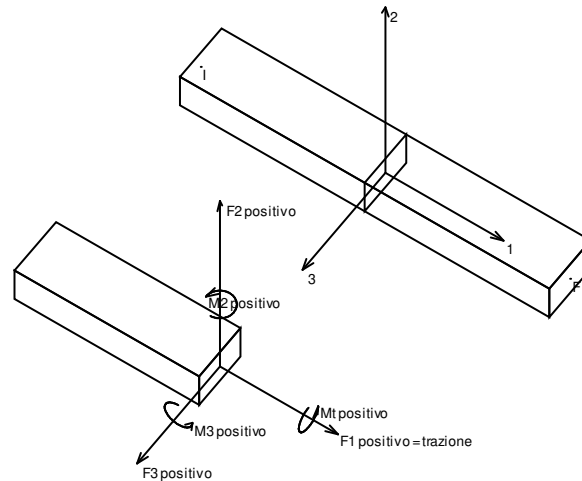
Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1). L'asse 2 è sempre verticale e quindi coincidente con l'asse Z globale nonché con l'asse y geometrico. L'asse 3 coincide con l'asse x geometrico. Si sottolinea il fatto che gli assi 2 e 3 non corrispondono agli assi principali della sezione.

1.1.7 Sollecitazioni aste in muratura armata

1.1.7.1 Convenzioni di segno aste

Le abbreviazioni relative alle sollecitazioni sugli elementi aste sono da intendersi:

- F1 (N): sforzo normale nell'asta;
- F2: sforzo di taglio agente nella direzione dell'asse locale 2;
- F3: sforzo di taglio agente nella direzione dell'asse locale 3;
- M1 (Mt): momento attorno all'asse locale 1; equivale al momento torcente;
- M2: momento attorno all'asse locale 2;
- M3: momento attorno all'asse locale 3.



La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:

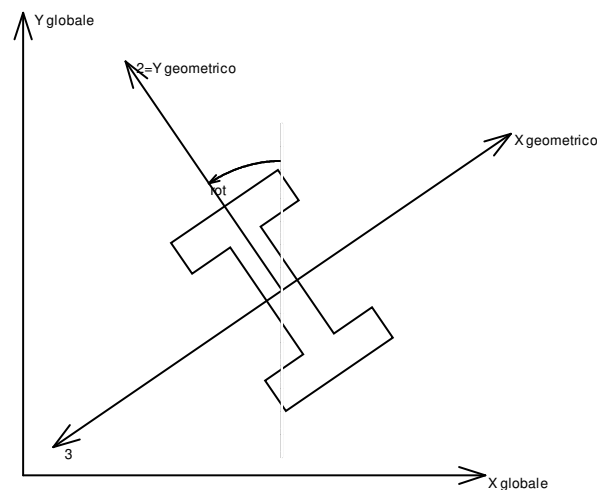
presa un'asta con nodo iniziale i e nodo finale f , asse 1 che va da i a f , assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando la sezione sinistra del punto in cui si è effettuato il taglio (sezione da cui esce il versore asse 1) i parametri di sollecitazione sono positivi se hanno verso e direzione concordi con il sistema di riferimento locale dell'asta 1, 2, 3 (per i momenti si adotta la regola della mano destra).

Il sistema è definito diversamente per tre categorie di aste, a seconda che siano originate da:

- aste verticali ad esempio pilastri e colonne;
- aste non verticali non di c.a., ad esempio travi di acciaio o legno;
- aste non verticali in c.a.: travi in c.a. di piano, falda o a quota generica.

Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

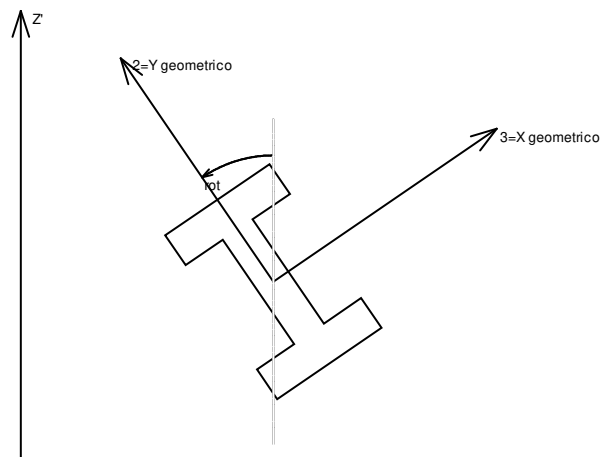
Sistema locale aste verticali



Nella figura si considera l'asse 1 uscente dal foglio (l'osservatore guarda in direzione opposta a quella dell'asse 1).



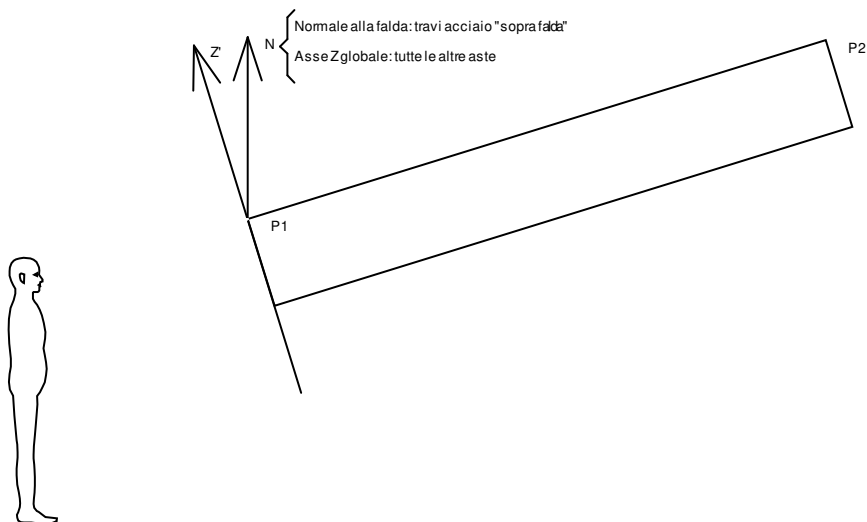
Sistema locale aste non verticali



Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1).

L'asse Z' è illustrato nella figura seguente dove:

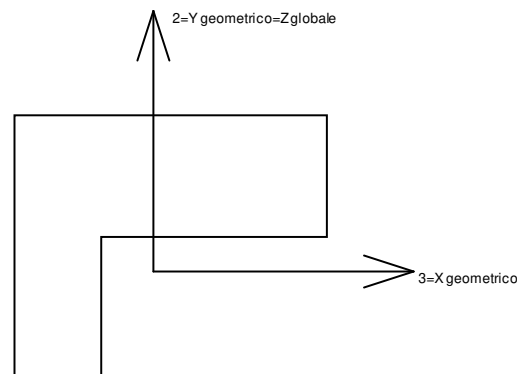
- P1 è il punto di inserimento iniziale dell'asta;
- P2 è il punto di inserimento finale dell'asta;
- N è la normale al piano o falda di inserimento;



Z' è quindi l'intersezione tra il piano passante per P1, P2 contenente N e il piano della sezione iniziale dell'asta.



Sistema locale aste derivanti da travi in c.a.



Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1). L'asse 2 è sempre verticale e quindi coincidente con l'asse Z globale nonché con l'asse y geometrico. L'asse 3 coincide con l'asse x geometrico. Si sottolinea il fatto che gli assi 2 e 3 non corrispondono agli assi principali della sezione.

1.2 Reazioni nodali

1.2.1 Reazioni nodali estreme

Nodo: Nodo sollecitato dalla reazione vincolare.

Ind.: indice del nodo.

Cont.: Contesto a cui si riferisce la reazione vincolare.

N.br.: nome breve della condizione o combinazione di carico.

Reazione a traslazione: reazione vincolare traslazionale del nodo.

x: componente X della reazione vincolare del nodo. [daN]

y: componente Y della reazione vincolare del nodo. [daN]

z: componente Z della reazione vincolare del nodo. [daN]

Reazione a rotazione: reazione vincolare rotazionale del nodo.

x: componente X della reazione a rotazione del nodo. [daN*m]

y: componente Y della reazione a rotazione del nodo. [daN*m]

z: componente Z della reazione a rotazione del nodo. [daN*m]

Reazioni Fx minime

Vengono mostrati i soli 5 nodi più sollecitati.

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
67	SLV 13	-1533	6	2834	-4.21	-75.37	0.03
21	SLV 9	-1527	125	1795	-102.86	-36.96	0.25
4	SLV 11	-1516	84	1567	14.17	-67.88	-1.11
19	SLV 9	-1516	185	1499	-153.17	-39.3	-1.82
20	SLV 9	-1498	140	1726	-131.82	-32.92	-0.27

Reazioni Fx massime

Vengono mostrati i soli 5 nodi più sollecitati.

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
23	SLV 7	1711	-100	1817	45.19	57.91	0.06
22	SLV 7	1626	-125	1966	73.23	43.56	-0.52
24	SLV 7	1605	-77	1539	22.55	80.89	0.95
21	SLV 7	1600	-145	2478	100.27	38.83	-0.31
47	SLV 3	1560	0	2534	2.91	70.61	0.34

Reazioni Fy minime

Vengono mostrati i soli 5 nodi più sollecitati.

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
90	SLV 7	33	-1221	3662	65.11	21.9	0.04
89	SLV 11	-83	-1046	3448	49.98	-24.1	-0.05
86	SLV 7	58	-938	2990	50.14	50.57	-0.04
88	SLV 7	52	-895	3149	-13.43	38.87	-0.03
113	SLV 11	-55	-880	2268	22.38	6.73	0.27

Reazioni Fy massime

Vengono mostrati i soli 5 nodi più sollecitati.



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
28	SLV 5	51	1109	4202	-59.76	-15.97	0.05
29	SLV 9	2	1015	112	-37.68	-8.67	-0.06
31	SLV 9	-16	943	656	-35.49	-16.75	-0.01
3	SLV 5	828	872	7674	-575.51	584.01	-7.45
33	SLV 9	-25	864	1055	-33.36	-26.27	-0.01

Reazioni Fz minime

Vengono mostrati i soli 5 nodi più sollecitati.

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
3	SLV X	-673	-382	-2598	211.27	-216.9	-2.93
17	SLV Y	914	-284	-2080	207.27	46.3	-0.43
16	SLV Y	729	-107	-1928	104.25	20.84	17.96
113	SLV Y	516	-324	-1867	12.4	23.19	0.26
12	SLV Y	-580	-512	-1819	23.76	-31.71	0.07

Reazioni Fz massime

Vengono mostrati i soli 5 nodi più sollecitati.

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
3	SLV 1	745	866	7725	-560.29	562.32	-0.69
68	SLU 81	-1102	-265	7247	18.12	-45.38	0.02
69	SLU 81	1036	27	6631	-4.6	41.86	-0.01
113	SLV 9	-1087	-233	6003	-2.42	-39.64	-0.25
25	SLV 7	1322	173	5825	3.79	52.09	-0.52

1.2.2 Reazioni nodali in combinazioni di carico

Nodo: Nodo sollecitato dalla reazione vincolare.

Ind.: indice del nodo.

Cont.: Contesto a cui si riferisce la reazione vincolare.

N.br.: nome breve della condizione o combinazione di carico.

Reazione a traslazione: reazione vincolare traslazionale del nodo.

x: componente X della reazione vincolare del nodo. [daN]

y: componente Y della reazione vincolare del nodo. [daN]

z: componente Z della reazione vincolare del nodo. [daN]

Reazione a rotazione: reazione vincolare rotazionale del nodo.

x: componente X della reazione a rotazione del nodo. [daN*m]

y: componente Y della reazione a rotazione del nodo. [daN*m]

z: componente Z della reazione a rotazione del nodo. [daN*m]

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
3	SLU 1	-144	323	3835	-244.69	237.62	-1.4
3	SLU 2	-144	323	3835	-244.69	237.62	-1.4
3	SLU 3	-144	323	3835	-244.69	237.62	-1.4
3	SLU 4	-144	323	3835	-244.69	237.62	-1.4
3	SLU 5	-144	323	3835	-244.69	237.62	-1.4
3	SLU 6	-144	323	3835	-244.69	237.62	-1.4
3	SLU 7	-144	323	3835	-244.69	237.62	-1.4
3	SLU 8	-144	323	3835	-244.69	237.62	-1.4
3	SLU 9	-144	323	3835	-244.69	237.62	-1.4
3	SLU 10	-189	422	5068	-324.43	315.22	-1.87
3	SLU 11	-189	422	5068	-324.43	315.22	-1.87
3	SLU 12	-189	422	5068	-324.43	315.22	-1.87
3	SLU 13	-189	422	5068	-324.43	315.22	-1.87
3	SLU 14	-189	422	5068	-324.43	315.22	-1.87
3	SLU 15	-189	422	5068	-324.43	315.22	-1.87
3	SLU 16	-189	422	5068	-324.43	315.22	-1.87
3	SLU 17	-189	422	5068	-324.43	315.22	-1.87
3	SLU 18	-209	465	5597	-358.6	348.49	-2.07
3	SLU 19	-209	465	5597	-358.6	348.49	-2.07
3	SLU 20	-209	465	5597	-358.6	348.49	-2.07
3	SLU 21	-209	465	5597	-358.6	348.49	-2.07
3	SLU 22	-174	375	4474	-285.45	277.03	-1.67
3	SLU 23	-174	375	4474	-285.45	277.03	-1.67
3	SLU 24	-174	375	4474	-285.45	277.03	-1.67
3	SLU 25	-174	375	4474	-285.45	277.03	-1.67
3	SLU 26	-174	375	4474	-285.45	277.03	-1.67
3	SLU 27	-174	375	4474	-285.45	277.03	-1.67
3	SLU 28	-174	375	4474	-285.45	277.03	-1.67
3	SLU 29	-174	375	4474	-285.45	277.03	-1.67
3	SLU 30	-174	375	4474	-285.45	277.03	-1.67
3	SLU 31	-219	474	5708	-365.19	354.63	-2.14
3	SLU 32	-219	474	5708	-365.19	354.63	-2.14
3	SLU 33	-219	474	5708	-365.19	354.63	-2.14
3	SLU 34	-219	474	5708	-365.19	354.63	-2.14
3	SLU 35	-219	474	5708	-365.19	354.63	-2.14
3	SLU 36	-219	474	5708	-365.19	354.63	-2.14
3	SLU 37	-219	474	5708	-365.19	354.63	-2.14
3	SLU 38	-219	474	5708	-365.19	354.63	-2.14
3	SLU 39	-238	517	6236	-399.36	387.9	-2.34



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
3	SLU 40	-238	517	6236	-399.36	387.9	-2.34
3	SLU 41	-238	517	6236	-399.36	387.9	-2.34
3	SLU 42	-238	517	6236	-399.36	387.9	-2.34
3	SLU 43	-177	402	4766	-304.12	295.39	-1.73
3	SLU 44	-177	402	4766	-304.12	295.39	-1.73
3	SLU 45	-177	402	4766	-304.12	295.39	-1.73
3	SLU 46	-177	402	4766	-304.12	295.39	-1.73
3	SLU 47	-177	402	4766	-304.12	295.39	-1.73
3	SLU 48	-177	402	4766	-304.12	295.39	-1.73
3	SLU 49	-177	402	4766	-304.12	295.39	-1.73
3	SLU 50	-177	402	4766	-304.12	295.39	-1.73
3	SLU 51	-177	402	4766	-304.12	295.39	-1.73
3	SLU 52	-223	502	6000	-383.86	373	-2.2
3	SLU 53	-223	502	6000	-383.86	373	-2.2
3	SLU 54	-223	502	6000	-383.86	373	-2.2
3	SLU 55	-223	502	6000	-383.86	373	-2.2
3	SLU 56	-223	502	6000	-383.86	373	-2.2
3	SLU 57	-223	502	6000	-383.86	373	-2.2
3	SLU 58	-223	502	6000	-383.86	373	-2.2
3	SLU 59	-223	502	6000	-383.86	373	-2.2
3	SLU 60	-242	544	6528	-418.03	406.26	-2.41
3	SLU 61	-242	544	6528	-418.03	406.26	-2.41
3	SLU 62	-242	544	6528	-418.03	406.26	-2.41
3	SLU 63	-242	544	6528	-418.03	406.26	-2.41
3	SLU 64	-207	454	5406	-344.88	334.8	-2
3	SLU 65	-207	454	5406	-344.88	334.8	-2
3	SLU 66	-207	454	5406	-344.88	334.8	-2
3	SLU 67	-207	454	5406	-344.88	334.8	-2
3	SLU 68	-207	454	5406	-344.88	334.8	-2
3	SLU 69	-207	454	5406	-344.88	334.8	-2
3	SLU 70	-207	454	5406	-344.88	334.8	-2
3	SLU 71	-207	454	5406	-344.88	334.8	-2
3	SLU 72	-207	454	5406	-344.88	334.8	-2
3	SLU 73	-252	553	6639	-424.62	412.41	-2.47
3	SLU 74	-252	553	6639	-424.62	412.41	-2.47
3	SLU 75	-252	553	6639	-424.62	412.41	-2.47
3	SLU 76	-252	553	6639	-424.62	412.41	-2.47
3	SLU 77	-252	553	6639	-424.62	412.41	-2.47
3	SLU 78	-252	553	6639	-424.62	412.41	-2.47
3	SLU 79	-252	553	6639	-424.62	412.41	-2.47
3	SLU 80	-252	553	6639	-424.62	412.41	-2.47
3	SLU 81	-271	596	7168	-458.79	445.67	-2.67
3	SLU 82	-271	596	7168	-458.79	445.67	-2.67
3	SLU 83	-271	596	7168	-458.79	445.67	-2.67
3	SLU 84	-271	596	7168	-458.79	445.67	-2.67
3	SLE RA 1	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 2	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 3	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 4	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 5	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 6	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 7	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 8	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 9	-153	338	4018	-256.33	248.88	-1.48
3	SLE RA 10	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 11	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 12	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 13	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 14	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 15	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 16	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 17	-183	404	4840	-309.49	300.62	-1.79
3	SLE RA 18	-196	433	5192	-332.27	322.79	-1.93
3	SLE RA 19	-196	433	5192	-332.27	322.79	-1.93
3	SLE RA 20	-196	433	5192	-332.27	322.79	-1.93
3	SLE RA 21	-196	433	5192	-332.27	322.79	-1.93
3	SLE FR 1	-153	338	4018	-256.33	248.88	-1.48
3	SLE FR 2	-153	338	4018	-256.33	248.88	-1.48
3	SLE FR 3	-153	338	4018	-256.33	248.88	-1.48
3	SLE FR 4	-166	366	4370	-279.12	271.05	-1.61
3	SLE FR 5	-166	366	4370	-279.12	271.05	-1.61
3	SLE FR 6	-174	385	4605	-294.3	285.83	-1.7
3	SLE QP 1	-153	338	4018	-256.33	248.88	-1.48
3	SLE QP 2	-166	366	4370	-279.12	271.05	-1.61
3	SLD 1	209	564	5680	-388.87	384.88	-1.15
3	SLD 2	209	564	5680	-388.87	384.88	-1.15
3	SLD 3	29	477	5155	-339.3	332.03	0.42
3	SLD 4	29	477	5155	-339.3	332.03	0.42
3	SLD 5	221	556	5559	-387.22	385.36	-3.85
3	SLD 6	221	556	5559	-387.22	385.36	-3.85
3	SLD 7	-381	269	3810	-221.99	209.18	1.37
3	SLD 8	-381	269	3810	-221.99	209.18	1.37
3	SLD 9	50	463	4930	-336.24	332.92	-4.59
3	SLD 10	50	463	4930	-336.24	332.92	-4.59
3	SLD 11	-552	176	3181	-171.01	156.74	0.62
3	SLD 12	-552	176	3181	-171.01	156.74	0.62
3	SLD 13	-360	255	3585	-218.93	210.07	-3.64



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
3	SLD 14	-360	255	3585	-218.93	210.07	-3.64
3	SLD 15	-540	169	3061	-169.36	157.22	-2.08
3	SLD 16	-540	169	3061	-169.36	157.22	-2.08
3	SLV 1	745	866	7725	-560.29	562.32	-0.69
3	SLV 2	745	866	7725	-560.29	562.32	-0.69
3	SLV 3	270	631	6211	-420.48	413.59	3.34
3	SLV 4	270	631	6211	-420.48	413.59	3.34
3	SLV 5	828	872	7674	-575.51	584.01	-7.45
3	SLV 6	828	872	7674	-575.51	584.01	-7.45
3	SLV 7	-755	90	2625	-109.48	88.24	5.99
3	SLV 8	-755	90	2625	-109.48	88.24	5.99
3	SLV 9	424	643	6115	-448.75	453.86	-9.21
3	SLV 10	424	643	6115	-448.75	453.86	-9.21
3	SLV 11	-1159	-140	1067	17.28	-41.91	4.22
3	SLV 12	-1159	-140	1067	17.28	-41.91	4.22
3	SLV 13	-601	101	2530	-137.75	128.51	-6.56
3	SLV 14	-601	101	2530	-137.75	128.51	-6.56
3	SLV 15	-1076	-133	1015	2.06	-20.22	-2.53
3	SLV 16	-1076	-133	1015	2.06	-20.22	-2.53
4	SLU 1	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 2	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 3	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 4	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 5	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 6	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 7	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 8	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 9	-259	14	3057	-1.72	-12.65	-0.02
4	SLU 10	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 11	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 12	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 13	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 14	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 15	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 16	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 17	-328	18	4004	-2.31	-16.4	-0.03
4	SLU 18	-358	20	4410	-2.57	-18.01	-0.03
4	SLU 19	-358	20	4410	-2.57	-18.01	-0.03
4	SLU 20	-358	20	4410	-2.57	-18.01	-0.03
4	SLU 21	-358	20	4410	-2.57	-18.01	-0.03
4	SLU 22	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 23	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 24	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 25	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 26	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 27	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 28	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 29	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 30	-306	17	3556	-2.07	-15.02	-0.02
4	SLU 31	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 32	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 33	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 34	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 35	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 36	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 37	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 38	-375	21	4503	-2.66	-18.77	-0.03
4	SLU 39	-404	22	4909	-2.92	-20.37	-0.03
4	SLU 40	-404	22	4909	-2.92	-20.37	-0.03
4	SLU 41	-404	22	4909	-2.92	-20.37	-0.03
4	SLU 42	-404	22	4909	-2.92	-20.37	-0.03
4	SLU 43	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 44	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 45	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 46	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 47	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 48	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 49	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 50	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 51	-321	18	3803	-2.11	-15.64	-0.02
4	SLU 52	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 53	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 54	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 55	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 56	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 57	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 58	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 59	-390	21	4750	-2.71	-19.39	-0.03
4	SLU 60	-419	23	5156	-2.96	-20.99	-0.03
4	SLU 61	-419	23	5156	-2.96	-20.99	-0.03
4	SLU 62	-419	23	5156	-2.96	-20.99	-0.03
4	SLU 63	-419	23	5156	-2.96	-20.99	-0.03
4	SLU 64	-368	20	4302	-2.46	-18	-0.03
4	SLU 65	-368	20	4302	-2.46	-18	-0.03
4	SLU 66	-368	20	4302	-2.46	-18	-0.03
4	SLU 67	-368	20	4302	-2.46	-18	-0.03
4	SLU 68	-368	20	4302	-2.46	-18	-0.03



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
4	SLU 69	-368	20	4302	-2.46	-18	-0.03
4	SLU 70	-368	20	4302	-2.46	-18	-0.03
4	SLU 71	-368	20	4302	-2.46	-18	-0.03
4	SLU 72	-368	20	4302	-2.46	-18	-0.03
4	SLU 73	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 74	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 75	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 76	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 77	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 78	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 79	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 80	-437	24	5249	-3.06	-21.75	-0.03
4	SLU 81	-466	26	5655	-3.31	-23.36	-0.04
4	SLU 82	-466	26	5655	-3.31	-23.36	-0.04
4	SLU 83	-466	26	5655	-3.31	-23.36	-0.04
4	SLU 84	-466	26	5655	-3.31	-23.36	-0.04
4	SLE RA 1	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 2	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 3	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 4	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 5	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 6	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 7	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 8	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 9	-273	15	3200	-1.82	-13.33	-0.02
4	SLE RA 10	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 11	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 12	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 13	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 14	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 15	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 16	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 17	-319	18	3831	-2.21	-15.83	-0.02
4	SLE RA 18	-338	19	4102	-2.39	-16.9	-0.03
4	SLE RA 19	-338	19	4102	-2.39	-16.9	-0.03
4	SLE RA 20	-338	19	4102	-2.39	-16.9	-0.03
4	SLE RA 21	-338	19	4102	-2.39	-16.9	-0.03
4	SLE FR 1	-273	15	3200	-1.82	-13.33	-0.02
4	SLE FR 2	-273	15	3200	-1.82	-13.33	-0.02
4	SLE FR 3	-273	15	3200	-1.82	-13.33	-0.02
4	SLE FR 4	-292	16	3470	-1.99	-14.4	-0.02
4	SLE FR 5	-292	16	3470	-1.99	-14.4	-0.02
4	SLE FR 6	-306	17	3651	-2.1	-15.11	-0.02
4	SLE QP 1	-273	15	3200	-1.82	-13.33	-0.02
4	SLE QP 2	-292	16	3470	-1.99	-14.4	-0.02
4	SLD 1	144	-8	4221	-5.43	5.11	0.14
4	SLD 2	144	-8	4221	-5.43	5.11	0.14
4	SLD 3	-83	4	3924	-1.94	-4.83	-0.1
4	SLD 4	-83	4	3924	-1.94	-4.83	-0.1
4	SLD 5	183	-10	4146	-8.31	6.52	0.4
4	SLD 6	183	-10	4146	-8.31	6.52	0.4
4	SLD 7	-574	31	3156	3.31	-26.59	-0.42
4	SLD 8	-574	31	3156	3.31	-26.59	-0.42
4	SLD 9	-11	1	3785	-7.29	-2.21	0.38
4	SLD 10	-11	1	3785	-7.29	-2.21	0.38
4	SLD 11	-768	42	2794	4.33	-35.32	-0.44
4	SLD 12	-768	42	2794	4.33	-35.32	-0.44
4	SLD 13	-501	28	3017	-2.03	-23.97	0.06
4	SLD 14	-501	28	3017	-2.03	-23.97	0.06
4	SLD 15	-729	40	2720	1.45	-33.91	-0.19
4	SLD 16	-729	40	2720	1.45	-33.91	-0.19
4	SLV 1	764	-43	5388	-10.54	32.66	0.39
4	SLV 2	764	-43	5388	-10.54	32.66	0.39
4	SLV 3	165	-10	4512	-1.57	6.71	-0.24
4	SLV 4	165	-10	4512	-1.57	6.71	-0.24
4	SLV 5	932	-51	5374	-18.15	39.08	1.07
4	SLV 6	932	-51	5374	-18.15	39.08	1.07
4	SLV 7	-1062	58	2455	11.73	-47.43	-1.05
4	SLV 8	-1062	58	2455	11.73	-47.43	-1.05
4	SLV 9	477	-26	4486	-15.71	18.63	1.01
4	SLV 10	477	-26	4486	-15.71	18.63	1.01
4	SLV 11	-1516	84	1567	14.17	-67.88	-1.11
4	SLV 12	-1516	84	1567	14.17	-67.88	-1.11
4	SLV 13	-750	42	2428	-2.4	-35.51	0.2
4	SLV 14	-750	42	2428	-2.4	-35.51	0.2
4	SLV 15	-1348	75	1553	6.56	-61.46	-0.44
4	SLV 16	-1348	75	1553	6.56	-61.46	-0.44
5	SLU 1	-94	-4	2784	1.01	-3.35	0.11
5	SLU 2	-94	-4	2784	1.01	-3.35	0.11
5	SLU 3	-94	-4	2784	1.01	-3.35	0.11
5	SLU 4	-94	-4	2784	1.01	-3.35	0.11
5	SLU 5	-94	-4	2784	1.01	-3.35	0.11
5	SLU 6	-94	-4	2784	1.01	-3.35	0.11
5	SLU 7	-94	-4	2784	1.01	-3.35	0.11
5	SLU 8	-94	-4	2784	1.01	-3.35	0.11
5	SLU 9	-94	-4	2784	1.01	-3.35	0.11
5	SLU 10	-113	-6	3611	1.34	-4.15	0.14



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
5	SLU 11	-113	-6	3611	1.34	-4.15	0.14
5	SLU 12	-113	-6	3611	1.34	-4.15	0.14
5	SLU 13	-113	-6	3611	1.34	-4.15	0.14
5	SLU 14	-113	-6	3611	1.34	-4.15	0.14
5	SLU 15	-113	-6	3611	1.34	-4.15	0.14
5	SLU 16	-113	-6	3611	1.34	-4.15	0.14
5	SLU 17	-113	-6	3611	1.34	-4.15	0.14
5	SLU 18	-121	-7	3966	1.48	-4.49	0.16
5	SLU 19	-121	-7	3966	1.48	-4.49	0.16
5	SLU 20	-121	-7	3966	1.48	-4.49	0.16
5	SLU 21	-121	-7	3966	1.48	-4.49	0.16
5	SLU 22	-116	-4	3228	1.12	-4.11	0.12
5	SLU 23	-116	-4	3228	1.12	-4.11	0.12
5	SLU 24	-116	-4	3228	1.12	-4.11	0.12
5	SLU 25	-116	-4	3228	1.12	-4.11	0.12
5	SLU 26	-116	-4	3228	1.12	-4.11	0.12
5	SLU 27	-116	-4	3228	1.12	-4.11	0.12
5	SLU 28	-116	-4	3228	1.12	-4.11	0.12
5	SLU 29	-116	-4	3228	1.12	-4.11	0.12
5	SLU 30	-116	-4	3228	1.12	-4.11	0.12
5	SLU 31	-134	-6	4056	1.46	-4.91	0.16
5	SLU 32	-134	-6	4056	1.46	-4.91	0.16
5	SLU 33	-134	-6	4056	1.46	-4.91	0.16
5	SLU 34	-134	-6	4056	1.46	-4.91	0.16
5	SLU 35	-134	-6	4056	1.46	-4.91	0.16
5	SLU 36	-134	-6	4056	1.46	-4.91	0.16
5	SLU 37	-134	-6	4056	1.46	-4.91	0.16
5	SLU 38	-134	-6	4056	1.46	-4.91	0.16
5	SLU 39	-142	-7	4410	1.6	-5.25	0.18
5	SLU 40	-142	-7	4410	1.6	-5.25	0.18
5	SLU 41	-142	-7	4410	1.6	-5.25	0.18
5	SLU 42	-142	-7	4410	1.6	-5.25	0.18
5	SLU 43	-116	-5	3467	1.27	-4.09	0.13
5	SLU 44	-116	-5	3467	1.27	-4.09	0.13
5	SLU 45	-116	-5	3467	1.27	-4.09	0.13
5	SLU 46	-116	-5	3467	1.27	-4.09	0.13
5	SLU 47	-116	-5	3467	1.27	-4.09	0.13
5	SLU 48	-116	-5	3467	1.27	-4.09	0.13
5	SLU 49	-116	-5	3467	1.27	-4.09	0.13
5	SLU 50	-116	-5	3467	1.27	-4.09	0.13
5	SLU 51	-116	-5	3467	1.27	-4.09	0.13
5	SLU 52	-134	-7	4294	1.6	-4.9	0.17
5	SLU 53	-134	-7	4294	1.6	-4.9	0.17
5	SLU 54	-134	-7	4294	1.6	-4.9	0.17
5	SLU 55	-134	-7	4294	1.6	-4.9	0.17
5	SLU 56	-134	-7	4294	1.6	-4.9	0.17
5	SLU 57	-134	-7	4294	1.6	-4.9	0.17
5	SLU 58	-134	-7	4294	1.6	-4.9	0.17
5	SLU 59	-134	-7	4294	1.6	-4.9	0.17
5	SLU 60	-142	-8	4649	1.74	-5.24	0.19
5	SLU 61	-142	-8	4649	1.74	-5.24	0.19
5	SLU 62	-142	-8	4649	1.74	-5.24	0.19
5	SLU 63	-142	-8	4649	1.74	-5.24	0.19
5	SLU 64	-137	-5	3911	1.39	-4.85	0.15
5	SLU 65	-137	-5	3911	1.39	-4.85	0.15
5	SLU 66	-137	-5	3911	1.39	-4.85	0.15
5	SLU 67	-137	-5	3911	1.39	-4.85	0.15
5	SLU 68	-137	-5	3911	1.39	-4.85	0.15
5	SLU 69	-137	-5	3911	1.39	-4.85	0.15
5	SLU 70	-137	-5	3911	1.39	-4.85	0.15
5	SLU 71	-137	-5	3911	1.39	-4.85	0.15
5	SLU 72	-137	-5	3911	1.39	-4.85	0.15
5	SLU 73	-155	-7	4739	1.72	-5.65	0.19
5	SLU 74	-155	-7	4739	1.72	-5.65	0.19
5	SLU 75	-155	-7	4739	1.72	-5.65	0.19
5	SLU 76	-155	-7	4739	1.72	-5.65	0.19
5	SLU 77	-155	-7	4739	1.72	-5.65	0.19
5	SLU 78	-155	-7	4739	1.72	-5.65	0.19
5	SLU 79	-155	-7	4739	1.72	-5.65	0.19
5	SLU 80	-155	-7	4739	1.72	-5.65	0.19
5	SLU 81	-163	-8	5093	1.86	-6	0.2
5	SLU 82	-163	-8	5093	1.86	-6	0.2
5	SLU 83	-163	-8	5093	1.86	-6	0.2
5	SLU 84	-163	-8	5093	1.86	-6	0.2
5	SLE RA 1	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 2	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 3	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 4	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 5	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 6	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 7	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 8	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 9	-100	-4	2911	1.04	-3.57	0.11
5	SLE RA 10	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 11	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 12	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 13	-113	-5	3463	1.26	-4.1	0.14



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
5	SLE RA 14	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 15	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 16	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 17	-113	-5	3463	1.26	-4.1	0.14
5	SLE RA 18	-118	-6	3699	1.36	-4.33	0.15
5	SLE RA 19	-118	-6	3699	1.36	-4.33	0.15
5	SLE RA 20	-118	-6	3699	1.36	-4.33	0.15
5	SLE RA 21	-118	-6	3699	1.36	-4.33	0.15
5	SLE FR 1	-100	-4	2911	1.04	-3.57	0.11
5	SLE FR 2	-100	-4	2911	1.04	-3.57	0.11
5	SLE FR 3	-100	-4	2911	1.04	-3.57	0.11
5	SLE FR 4	-106	-4	3147	1.14	-3.79	0.12
5	SLE FR 5	-106	-4	3147	1.14	-3.79	0.12
5	SLE FR 6	-109	-5	3305	1.2	-3.95	0.13
5	SLE QP 1	-100	-4	2911	1.04	-3.57	0.11
5	SLE QP 2	-106	-4	3147	1.14	-3.79	0.12
5	SLD 1	385	-32	3686	-5.54	12.11	0.19
5	SLD 2	385	-32	3686	-5.54	12.11	0.19
5	SLD 3	131	-18	3450	2.64	3.68	0.15
5	SLD 4	131	-18	3450	2.64	3.68	0.15
5	SLD 5	426	-35	3666	-13.29	13.76	0.21
5	SLD 6	426	-35	3666	-13.29	13.76	0.21
5	SLD 7	-419	14	2881	14.01	-14.34	0.06
5	SLD 8	-419	14	2881	14.01	-14.34	0.06
5	SLD 9	208	-22	3414	-11.73	6.75	0.18
5	SLD 10	208	-22	3414	-11.73	6.75	0.18
5	SLD 11	-638	26	2629	15.56	-21.35	0.03
5	SLD 12	-638	26	2629	15.56	-21.35	0.03
5	SLD 13	-343	9	2845	-0.37	-11.27	0.09
5	SLD 14	-343	9	2845	-0.37	-11.27	0.09
5	SLD 15	-597	23	2609	7.81	-19.7	0.05
5	SLD 16	-597	23	2609	7.81	-19.7	0.05
5	SLV 1	1085	-72	4534	-15.51	34.8	0.29
5	SLV 2	1085	-72	4534	-15.51	34.8	0.29
5	SLV 3	411	-33	3836	5.51	12.47	0.18
5	SLV 4	411	-33	3836	5.51	12.47	0.18
5	SLV 5	1274	-84	4622	-35.75	41.64	0.34
5	SLV 6	1274	-84	4622	-35.75	41.64	0.34
5	SLV 7	-973	46	2295	34.34	-32.77	-0.03
5	SLV 8	-973	46	2295	34.34	-32.77	-0.03
5	SLV 9	762	-55	3999	-32.07	25.18	0.27
5	SLV 10	762	-55	3999	-32.07	25.18	0.27
5	SLV 11	-1485	75	1673	38.02	-49.23	-0.1
5	SLV 12	-1485	75	1673	38.02	-49.23	-0.1
5	SLV 13	-623	24	2459	-3.24	-20.06	0.06
5	SLV 14	-623	24	2459	-3.24	-20.06	0.06
5	SLV 15	-1297	64	1761	17.78	-42.39	-0.05
5	SLV 16	-1297	64	1761	17.78	-42.39	-0.05
6	SLU 1	-14	-11	2565	1.9	-0.84	0.08
6	SLU 2	-14	-11	2565	1.9	-0.84	0.08
6	SLU 3	-14	-11	2565	1.9	-0.84	0.08
6	SLU 4	-14	-11	2565	1.9	-0.84	0.08
6	SLU 5	-14	-11	2565	1.9	-0.84	0.08
6	SLU 6	-14	-11	2565	1.9	-0.84	0.08
6	SLU 7	-14	-11	2565	1.9	-0.84	0.08
6	SLU 8	-14	-11	2565	1.9	-0.84	0.08
6	SLU 9	-14	-11	2565	1.9	-0.84	0.08
6	SLU 10	-10	-16	3292	2.56	-0.94	0.11
6	SLU 11	-10	-16	3292	2.56	-0.94	0.11
6	SLU 12	-10	-16	3292	2.56	-0.94	0.11
6	SLU 13	-10	-16	3292	2.56	-0.94	0.11
6	SLU 14	-10	-16	3292	2.56	-0.94	0.11
6	SLU 15	-10	-16	3292	2.56	-0.94	0.11
6	SLU 16	-10	-16	3292	2.56	-0.94	0.11
6	SLU 17	-10	-16	3292	2.56	-0.94	0.11
6	SLU 18	-8	-18	3604	2.84	-0.99	0.13
6	SLU 19	-8	-18	3604	2.84	-0.99	0.13
6	SLU 20	-8	-18	3604	2.84	-0.99	0.13
6	SLU 21	-8	-18	3604	2.84	-0.99	0.13
6	SLU 22	-22	-13	2966	2.18	-1.16	0.1
6	SLU 23	-22	-13	2966	2.18	-1.16	0.1
6	SLU 24	-22	-13	2966	2.18	-1.16	0.1
6	SLU 25	-22	-13	2966	2.18	-1.16	0.1
6	SLU 26	-22	-13	2966	2.18	-1.16	0.1
6	SLU 27	-22	-13	2966	2.18	-1.16	0.1
6	SLU 28	-22	-13	2966	2.18	-1.16	0.1
6	SLU 29	-22	-13	2966	2.18	-1.16	0.1
6	SLU 30	-22	-13	2966	2.18	-1.16	0.1
6	SLU 31	-19	-18	3693	2.84	-1.26	0.13
6	SLU 32	-19	-18	3693	2.84	-1.26	0.13
6	SLU 33	-19	-18	3693	2.84	-1.26	0.13
6	SLU 34	-19	-18	3693	2.84	-1.26	0.13
6	SLU 35	-19	-18	3693	2.84	-1.26	0.13
6	SLU 36	-19	-18	3693	2.84	-1.26	0.13
6	SLU 37	-19	-18	3693	2.84	-1.26	0.13
6	SLU 38	-19	-18	3693	2.84	-1.26	0.13
6	SLU 39	-17	-20	4005	3.12	-1.31	0.14



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
6	SLU 40	-17	-20	4005	3.12	-1.31	0.14
6	SLU 41	-17	-20	4005	3.12	-1.31	0.14
6	SLU 42	-17	-20	4005	3.12	-1.31	0.14
6	SLU 43	-15	-14	3197	2.37	-0.98	0.1
6	SLU 44	-15	-14	3197	2.37	-0.98	0.1
6	SLU 45	-15	-14	3197	2.37	-0.98	0.1
6	SLU 46	-15	-14	3197	2.37	-0.98	0.1
6	SLU 47	-15	-14	3197	2.37	-0.98	0.1
6	SLU 48	-15	-14	3197	2.37	-0.98	0.1
6	SLU 49	-15	-14	3197	2.37	-0.98	0.1
6	SLU 50	-15	-14	3197	2.37	-0.98	0.1
6	SLU 51	-15	-14	3197	2.37	-0.98	0.1
6	SLU 52	-11	-19	3924	3.03	-1.08	0.13
6	SLU 53	-11	-19	3924	3.03	-1.08	0.13
6	SLU 54	-11	-19	3924	3.03	-1.08	0.13
6	SLU 55	-11	-19	3924	3.03	-1.08	0.13
6	SLU 56	-11	-19	3924	3.03	-1.08	0.13
6	SLU 57	-11	-19	3924	3.03	-1.08	0.13
6	SLU 58	-11	-19	3924	3.03	-1.08	0.13
6	SLU 59	-11	-19	3924	3.03	-1.08	0.13
6	SLU 60	-10	-21	4236	3.31	-1.13	0.15
6	SLU 61	-10	-21	4236	3.31	-1.13	0.15
6	SLU 62	-10	-21	4236	3.31	-1.13	0.15
6	SLU 63	-10	-21	4236	3.31	-1.13	0.15
6	SLU 64	-24	-16	3598	2.65	-1.3	0.12
6	SLU 65	-24	-16	3598	2.65	-1.3	0.12
6	SLU 66	-24	-16	3598	2.65	-1.3	0.12
6	SLU 67	-24	-16	3598	2.65	-1.3	0.12
6	SLU 68	-24	-16	3598	2.65	-1.3	0.12
6	SLU 69	-24	-16	3598	2.65	-1.3	0.12
6	SLU 70	-24	-16	3598	2.65	-1.3	0.12
6	SLU 71	-24	-16	3598	2.65	-1.3	0.12
6	SLU 72	-24	-16	3598	2.65	-1.3	0.12
6	SLU 73	-20	-20	4325	3.31	-1.41	0.15
6	SLU 74	-20	-20	4325	3.31	-1.41	0.15
6	SLU 75	-20	-20	4325	3.31	-1.41	0.15
6	SLU 76	-20	-20	4325	3.31	-1.41	0.15
6	SLU 77	-20	-20	4325	3.31	-1.41	0.15
6	SLU 78	-20	-20	4325	3.31	-1.41	0.15
6	SLU 79	-20	-20	4325	3.31	-1.41	0.15
6	SLU 80	-20	-20	4325	3.31	-1.41	0.15
6	SLU 81	-18	-22	4637	3.59	-1.45	0.16
6	SLU 82	-18	-22	4637	3.59	-1.45	0.16
6	SLU 83	-18	-22	4637	3.59	-1.45	0.16
6	SLU 84	-18	-22	4637	3.59	-1.45	0.16
6	SLE RA 1	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 2	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 3	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 4	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 5	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 6	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 7	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 8	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 9	-16	-12	2680	1.98	-0.93	0.09
6	SLE RA 10	-14	-15	3164	2.42	-1	0.11
6	SLE RA 11	-14	-15	3164	2.42	-1	0.11
6	SLE RA 12	-14	-15	3164	2.42	-1	0.11
6	SLE RA 13	-14	-15	3164	2.42	-1	0.11
6	SLE RA 14	-14	-15	3164	2.42	-1	0.11
6	SLE RA 15	-14	-15	3164	2.42	-1	0.11
6	SLE RA 16	-14	-15	3164	2.42	-1	0.11
6	SLE RA 17	-14	-15	3164	2.42	-1	0.11
6	SLE RA 18	-13	-16	3372	2.61	-1.03	0.12
6	SLE RA 19	-13	-16	3372	2.61	-1.03	0.12
6	SLE RA 20	-13	-16	3372	2.61	-1.03	0.12
6	SLE RA 21	-13	-16	3372	2.61	-1.03	0.12
6	SLE FR 1	-16	-12	2680	1.98	-0.93	0.09
6	SLE FR 2	-16	-12	2680	1.98	-0.93	0.09
6	SLE FR 3	-16	-12	2680	1.98	-0.93	0.09
6	SLE FR 4	-15	-13	2887	2.17	-0.96	0.1
6	SLE FR 5	-15	-13	2887	2.17	-0.96	0.1
6	SLE FR 6	-15	-14	3026	2.29	-0.98	0.1
6	SLE QP 1	-16	-12	2680	1.98	-0.93	0.09
6	SLE QP 2	-15	-13	2887	2.17	-0.96	0.1
6	SLD 1	465	-39	3280	-8.69	12.58	0.1
6	SLD 2	465	-39	3280	-8.69	12.58	0.1
6	SLD 3	217	-29	3107	5.88	4.96	0.16
6	SLD 4	217	-29	3107	5.88	4.96	0.16
6	SLD 5	506	-36	3268	-23.17	14.65	0.01
6	SLD 6	506	-36	3268	-23.17	14.65	0.01
6	SLD 7	-323	-3	2690	25.36	-10.73	0.2
6	SLD 8	-323	-3	2690	25.36	-10.73	0.2
6	SLD 9	292	-23	3084	-21.03	8.81	-0.01
6	SLD 10	292	-23	3084	-21.03	8.81	-0.01
6	SLD 11	-537	10	2507	27.5	-16.58	0.18
6	SLD 12	-537	10	2507	27.5	-16.58	0.18
6	SLD 13	-247	3	2668	-1.54	-6.89	0.03



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
6	SLD 14	-247	3	2668	-1.54	-6.89	0.03
6	SLD 15	-496	13	2495	13.02	-14.5	0.09
6	SLD 16	-496	13	2495	13.02	-14.5	0.09
6	SLV 1	1152	-76	3897	-25.08	31.94	0.1
6	SLV 2	1152	-76	3897	-25.08	31.94	0.1
6	SLV 3	489	-49	3391	12.39	11.78	0.25
6	SLV 4	489	-49	3391	12.39	11.78	0.25
6	SLV 5	1340	-73	3958	-62.84	39.48	-0.12
6	SLV 6	1340	-73	3958	-62.84	39.48	-0.12
6	SLV 7	-869	17	2271	62.07	-27.71	0.36
6	SLV 8	-869	17	2271	62.07	-27.71	0.36
6	SLV 9	839	-43	3504	-57.73	25.79	-0.17
6	SLV 10	839	-43	3504	-57.73	25.79	-0.17
6	SLV 11	-1371	47	1817	67.17	-41.4	0.31
6	SLV 12	-1371	47	1817	67.17	-41.4	0.31
6	SLV 13	-519	23	2383	-8.06	-13.7	-0.06
6	SLV 14	-519	23	2383	-8.06	-13.7	-0.06
6	SLV 15	-1182	50	1877	29.41	-33.86	0.09
6	SLV 16	-1182	50	1877	29.41	-33.86	0.09
7	SLU 1	2	-13	2383	1.56	-0.55	0.04
7	SLU 2	2	-13	2383	1.56	-0.55	0.04
7	SLU 3	2	-13	2383	1.56	-0.55	0.04
7	SLU 4	2	-13	2383	1.56	-0.55	0.04
7	SLU 5	2	-13	2383	1.56	-0.55	0.04
7	SLU 6	2	-13	2383	1.56	-0.55	0.04
7	SLU 7	2	-13	2383	1.56	-0.55	0.04
7	SLU 8	2	-13	2383	1.56	-0.55	0.04
7	SLU 9	2	-13	2383	1.56	-0.55	0.04
7	SLU 10	6	-18	3028	2.09	-0.71	0.05
7	SLU 11	6	-18	3028	2.09	-0.71	0.05
7	SLU 12	6	-18	3028	2.09	-0.71	0.05
7	SLU 13	6	-18	3028	2.09	-0.71	0.05
7	SLU 14	6	-18	3028	2.09	-0.71	0.05
7	SLU 15	6	-18	3028	2.09	-0.71	0.05
7	SLU 16	6	-18	3028	2.09	-0.71	0.05
7	SLU 17	6	-18	3028	2.09	-0.71	0.05
7	SLU 18	7	-21	3305	2.31	-0.78	0.06
7	SLU 19	7	-21	3305	2.31	-0.78	0.06
7	SLU 20	7	-21	3305	2.31	-0.78	0.06
7	SLU 21	7	-21	3305	2.31	-0.78	0.06
7	SLU 22	-5	-15	2749	1.79	-0.84	0.05
7	SLU 23	-5	-15	2749	1.79	-0.84	0.05
7	SLU 24	-5	-15	2749	1.79	-0.84	0.05
7	SLU 25	-5	-15	2749	1.79	-0.84	0.05
7	SLU 26	-5	-15	2749	1.79	-0.84	0.05
7	SLU 27	-5	-15	2749	1.79	-0.84	0.05
7	SLU 28	-5	-15	2749	1.79	-0.84	0.05
7	SLU 29	-5	-15	2749	1.79	-0.84	0.05
7	SLU 30	-5	-15	2749	1.79	-0.84	0.05
7	SLU 31	-1	-20	3394	2.32	-1	0.06
7	SLU 32	-1	-20	3394	2.32	-1	0.06
7	SLU 33	-1	-20	3394	2.32	-1	0.06
7	SLU 34	-1	-20	3394	2.32	-1	0.06
7	SLU 35	-1	-20	3394	2.32	-1	0.06
7	SLU 36	-1	-20	3394	2.32	-1	0.06
7	SLU 37	-1	-20	3394	2.32	-1	0.06
7	SLU 38	-1	-20	3394	2.32	-1	0.06
7	SLU 39	1	-23	3671	2.54	-1.08	0.07
7	SLU 40	1	-23	3671	2.54	-1.08	0.07
7	SLU 41	1	-23	3671	2.54	-1.08	0.07
7	SLU 42	1	-23	3671	2.54	-1.08	0.07
7	SLU 43	5	-17	2972	1.95	-0.61	0.05
7	SLU 44	5	-17	2972	1.95	-0.61	0.05
7	SLU 45	5	-17	2972	1.95	-0.61	0.05
7	SLU 46	5	-17	2972	1.95	-0.61	0.05
7	SLU 47	5	-17	2972	1.95	-0.61	0.05
7	SLU 48	5	-17	2972	1.95	-0.61	0.05
7	SLU 49	5	-17	2972	1.95	-0.61	0.05
7	SLU 50	5	-17	2972	1.95	-0.61	0.05
7	SLU 51	5	-17	2972	1.95	-0.61	0.05
7	SLU 52	9	-22	3618	2.48	-0.78	0.06
7	SLU 53	9	-22	3618	2.48	-0.78	0.06
7	SLU 54	9	-22	3618	2.48	-0.78	0.06
7	SLU 55	9	-22	3618	2.48	-0.78	0.06
7	SLU 56	9	-22	3618	2.48	-0.78	0.06
7	SLU 57	9	-22	3618	2.48	-0.78	0.06
7	SLU 58	9	-22	3618	2.48	-0.78	0.06
7	SLU 59	9	-22	3618	2.48	-0.78	0.06
7	SLU 60	10	-24	3894	2.7	-0.85	0.07
7	SLU 61	10	-24	3894	2.7	-0.85	0.07
7	SLU 62	10	-24	3894	2.7	-0.85	0.07
7	SLU 63	10	-24	3894	2.7	-0.85	0.07
7	SLU 64	-2	-19	3338	2.18	-0.9	0.05
7	SLU 65	-2	-19	3338	2.18	-0.9	0.05
7	SLU 66	-2	-19	3338	2.18	-0.9	0.05
7	SLU 67	-2	-19	3338	2.18	-0.9	0.05
7	SLU 68	-2	-19	3338	2.18	-0.9	0.05



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
7	SLU 69	-2	-19	3338	2.18	-0.9	0.05
7	SLU 70	-2	-19	3338	2.18	-0.9	0.05
7	SLU 71	-2	-19	3338	2.18	-0.9	0.05
7	SLU 72	-2	-19	3338	2.18	-0.9	0.05
7	SLU 73	2	-24	3983	2.71	-1.07	0.07
7	SLU 74	2	-24	3983	2.71	-1.07	0.07
7	SLU 75	2	-24	3983	2.71	-1.07	0.07
7	SLU 76	2	-24	3983	2.71	-1.07	0.07
7	SLU 77	2	-24	3983	2.71	-1.07	0.07
7	SLU 78	2	-24	3983	2.71	-1.07	0.07
7	SLU 79	2	-24	3983	2.71	-1.07	0.07
7	SLU 80	2	-24	3983	2.71	-1.07	0.07
7	SLU 81	3	-26	4260	2.93	-1.14	0.08
7	SLU 82	3	-26	4260	2.93	-1.14	0.08
7	SLU 83	3	-26	4260	2.93	-1.14	0.08
7	SLU 84	3	-26	4260	2.93	-1.14	0.08
7	SLE RA 1	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 2	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 3	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 4	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 5	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 6	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 7	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 8	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 9	0	-14	2487	1.63	-0.63	0.04
7	SLE RA 10	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 11	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 12	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 13	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 14	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 15	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 16	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 17	3	-17	2918	1.98	-0.74	0.05
7	SLE RA 18	4	-19	3102	2.13	-0.79	0.05
7	SLE RA 19	4	-19	3102	2.13	-0.79	0.05
7	SLE RA 20	4	-19	3102	2.13	-0.79	0.05
7	SLE RA 21	4	-19	3102	2.13	-0.79	0.05
7	SLE FR 1	0	-14	2487	1.63	-0.63	0.04
7	SLE FR 2	0	-14	2487	1.63	-0.63	0.04
7	SLE FR 3	0	-14	2487	1.63	-0.63	0.04
7	SLE FR 4	1	-15	2672	1.78	-0.68	0.04
7	SLE FR 5	1	-15	2672	1.78	-0.68	0.04
7	SLE FR 6	2	-16	2795	1.88	-0.71	0.05
7	SLE QP 1	0	-14	2487	1.63	-0.63	0.04
7	SLE QP 2	1	-15	2672	1.78	-0.68	0.04
7	SLD 1	472	-40	2962	-13.01	12.02	0.04
7	SLD 2	472	-40	2962	-13.01	12.02	0.04
7	SLD 3	239	-33	2831	8.18	5.08	0.08
7	SLD 4	239	-33	2831	8.18	5.08	0.08
7	SLD 5	496	-34	2957	-34.8	13.67	-0.02
7	SLD 6	496	-34	2957	-34.8	13.67	-0.02
7	SLD 7	-281	-9	2521	35.84	-9.48	0.12
7	SLD 8	-281	-9	2521	35.84	-9.48	0.12
7	SLD 9	283	-21	2823	-32.28	8.13	-0.03
7	SLD 10	283	-21	2823	-32.28	8.13	-0.03
7	SLD 11	-494	4	2386	38.35	-15.02	0.11
7	SLD 12	-494	4	2386	38.35	-15.02	0.11
7	SLD 13	-237	2	2513	-4.62	-6.43	0.01
7	SLD 14	-237	2	2513	-4.62	-6.43	0.01
7	SLD 15	-470	10	2382	16.57	-13.38	0.05
7	SLD 16	-470	10	2382	16.57	-13.38	0.05
7	SLV 1	1143	-75	3412	-35.61	30.14	0.03
7	SLV 2	1143	-75	3412	-35.61	30.14	0.03
7	SLV 3	522	-55	3045	19.04	11.77	0.14
7	SLV 4	522	-55	3045	19.04	11.77	0.14
7	SLV 5	1285	-64	3449	-92.32	36.43	-0.11
7	SLV 6	1285	-64	3449	-92.32	36.43	-0.11
7	SLV 7	-785	3	2229	89.84	-24.8	0.23
7	SLV 8	-785	3	2229	89.84	-24.8	0.23
7	SLV 9	787	-34	3115	-86.28	23.45	-0.14
7	SLV 10	787	-34	3115	-86.28	23.45	-0.14
7	SLV 11	-1283	33	1895	95.87	-37.78	0.2
7	SLV 12	-1283	33	1895	95.87	-37.78	0.2
7	SLV 13	-520	25	2298	-15.48	-13.12	-0.05
7	SLV 14	-520	25	2298	-15.48	-13.12	-0.05
7	SLV 15	-1141	45	1932	39.16	-31.49	0.06
7	SLV 16	-1141	45	1932	39.16	-31.49	0.06
8	SLU 1	3	-13	2246	0.38	-0.08	-0.01
8	SLU 2	3	-13	2246	0.38	-0.08	-0.01
8	SLU 3	3	-13	2246	0.38	-0.08	-0.01
8	SLU 4	3	-13	2246	0.38	-0.08	-0.01
8	SLU 5	3	-13	2246	0.38	-0.08	-0.01
8	SLU 6	3	-13	2246	0.38	-0.08	-0.01
8	SLU 7	3	-13	2246	0.38	-0.08	-0.01
8	SLU 8	3	-13	2246	0.38	-0.08	-0.01
8	SLU 9	3	-13	2246	0.38	-0.08	-0.01
8	SLU 10	2	-18	2829	0.44	-0.17	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
8	SLU 11	2	-18	2829	0.44	-0.17	-0.01
8	SLU 12	2	-18	2829	0.44	-0.17	-0.01
8	SLU 13	2	-18	2829	0.44	-0.17	-0.01
8	SLU 14	2	-18	2829	0.44	-0.17	-0.01
8	SLU 15	2	-18	2829	0.44	-0.17	-0.01
8	SLU 16	2	-18	2829	0.44	-0.17	-0.01
8	SLU 17	2	-18	2829	0.44	-0.17	-0.01
8	SLU 18	2	-20	3079	0.46	-0.21	-0.01
8	SLU 19	2	-20	3079	0.46	-0.21	-0.01
8	SLU 20	2	-20	3079	0.46	-0.21	-0.01
8	SLU 21	2	-20	3079	0.46	-0.21	-0.01
8	SLU 22	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 23	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 24	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 25	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 26	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 27	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 28	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 29	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 30	-4	-15	2586	0.4	-0.29	-0.01
8	SLU 31	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 32	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 33	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 34	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 35	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 36	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 37	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 38	-5	-20	3170	0.46	-0.39	-0.01
8	SLU 39	-5	-22	3420	0.48	-0.43	-0.01
8	SLU 40	-5	-22	3420	0.48	-0.43	-0.01
8	SLU 41	-5	-22	3420	0.48	-0.43	-0.01
8	SLU 42	-5	-22	3420	0.48	-0.43	-0.01
8	SLU 43	7	-16	2803	0.48	-0.02	-0.01
8	SLU 44	7	-16	2803	0.48	-0.02	-0.01
8	SLU 45	7	-16	2803	0.48	-0.02	-0.01
8	SLU 46	7	-16	2803	0.48	-0.02	-0.01
8	SLU 47	7	-16	2803	0.48	-0.02	-0.01
8	SLU 48	7	-16	2803	0.48	-0.02	-0.01
8	SLU 49	7	-16	2803	0.48	-0.02	-0.01
8	SLU 50	7	-16	2803	0.48	-0.02	-0.01
8	SLU 51	7	-16	2803	0.48	-0.02	-0.01
8	SLU 52	6	-21	3387	0.55	-0.12	-0.01
8	SLU 53	6	-21	3387	0.55	-0.12	-0.01
8	SLU 54	6	-21	3387	0.55	-0.12	-0.01
8	SLU 55	6	-21	3387	0.55	-0.12	-0.01
8	SLU 56	6	-21	3387	0.55	-0.12	-0.01
8	SLU 57	6	-21	3387	0.55	-0.12	-0.01
8	SLU 58	6	-21	3387	0.55	-0.12	-0.01
8	SLU 59	6	-21	3387	0.55	-0.12	-0.01
8	SLU 60	6	-23	3637	0.57	-0.16	-0.01
8	SLU 61	6	-23	3637	0.57	-0.16	-0.01
8	SLU 62	6	-23	3637	0.57	-0.16	-0.01
8	SLU 63	6	-23	3637	0.57	-0.16	-0.01
8	SLU 64	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 65	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 66	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 67	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 68	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 69	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 70	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 71	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 72	-1	-18	3144	0.5	-0.24	-0.01
8	SLU 73	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 74	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 75	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 76	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 77	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 78	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 79	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 80	-2	-23	3727	0.57	-0.34	-0.01
8	SLU 81	-2	-25	3977	0.59	-0.38	-0.01
8	SLU 82	-2	-25	3977	0.59	-0.38	-0.01
8	SLU 83	-2	-25	3977	0.59	-0.38	-0.01
8	SLU 84	-2	-25	3977	0.59	-0.38	-0.01
8	SLE RA 1	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 2	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 3	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 4	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 5	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 6	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 7	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 8	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 9	1	-14	2343	0.38	-0.14	-0.01
8	SLE RA 10	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 11	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 12	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 13	1	-17	2732	0.42	-0.2	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
8	SLE RA 14	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 15	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 16	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 17	1	-17	2732	0.42	-0.2	-0.01
8	SLE RA 18	0	-18	2899	0.44	-0.23	-0.01
8	SLE RA 19	0	-18	2899	0.44	-0.23	-0.01
8	SLE RA 20	0	-18	2899	0.44	-0.23	-0.01
8	SLE RA 21	0	-18	2899	0.44	-0.23	-0.01
8	SLE FR 1	1	-14	2343	0.38	-0.14	-0.01
8	SLE FR 2	1	-14	2343	0.38	-0.14	-0.01
8	SLE FR 3	1	-14	2343	0.38	-0.14	-0.01
8	SLE FR 4	1	-15	2510	0.4	-0.17	-0.01
8	SLE FR 5	1	-15	2510	0.4	-0.17	-0.01
8	SLE FR 6	1	-16	2621	0.41	-0.18	-0.01
8	SLE QP 1	1	-14	2343	0.38	-0.14	-0.01
8	SLE QP 2	1	-15	2510	0.4	-0.17	-0.01
8	SLD 1	461	-41	2729	-17.89	12.25	-0.01
8	SLD 2	461	-41	2729	-17.89	12.25	-0.01
8	SLD 3	238	-31	2618	9.78	5.11	0
8	SLD 4	238	-31	2618	9.78	5.11	0
8	SLD 5	477	-37	2744	-47.06	14.39	-0.02
8	SLD 6	477	-37	2744	-47.06	14.39	-0.02
8	SLD 7	-266	-5	2374	45.19	-9.41	0.01
8	SLD 8	-266	-5	2374	45.19	-9.41	0.01
8	SLD 9	268	-25	2646	-44.39	9.08	-0.02
8	SLD 10	268	-25	2646	-44.39	9.08	-0.02
8	SLD 11	-475	7	2276	47.86	-14.72	0.01
8	SLD 12	-475	7	2276	47.86	-14.72	0.01
8	SLD 13	-237	1	2402	-8.98	-5.44	-0.01
8	SLD 14	-237	1	2402	-8.98	-5.44	-0.01
8	SLD 15	-459	11	2291	18.69	-12.58	0
8	SLD 16	-459	11	2291	18.69	-12.58	0
8	SLV 1	1115	-76	3062	-46.14	29.98	-0.02
8	SLV 2	1115	-76	3062	-46.14	29.98	-0.02
8	SLV 3	522	-52	2773	25.36	11.16	0
8	SLV 4	522	-52	2773	25.36	11.16	0
8	SLV 5	1234	-71	3114	-122	37.43	-0.05
8	SLV 6	1234	-71	3114	-122	37.43	-0.05
8	SLV 7	-741	11	2151	116.33	-25.32	0.04
8	SLV 8	-741	11	2151	116.33	-25.32	0.04
8	SLV 9	743	-41	2869	-115.52	24.98	-0.05
8	SLV 10	743	-41	2869	-115.52	24.98	-0.05
8	SLV 11	-1232	41	1906	122.8	-37.76	0.04
8	SLV 12	-1232	41	1906	122.8	-37.76	0.04
8	SLV 13	-521	22	2247	-24.56	-11.49	-0.02
8	SLV 14	-521	22	2247	-24.56	-11.49	-0.02
8	SLV 15	-1113	46	1958	46.94	-30.32	0.01
8	SLV 16	-1113	46	1958	46.94	-30.32	0.01
9	SLU 1	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 2	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 3	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 4	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 5	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 6	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 7	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 8	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 9	-4	-11	2155	-1.32	-0.37	-0.03
9	SLU 10	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 11	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 12	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 13	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 14	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 15	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 16	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 17	-13	-15	2695	-1.93	-0.71	-0.04
9	SLU 18	-17	-16	2927	-2.19	-0.86	-0.05
9	SLU 19	-17	-16	2927	-2.19	-0.86	-0.05
9	SLU 20	-17	-16	2927	-2.19	-0.86	-0.05
9	SLU 21	-17	-16	2927	-2.19	-0.86	-0.05
9	SLU 22	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 23	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 24	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 25	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 26	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 27	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 28	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 29	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 30	-14	-12	2478	-1.6	-0.68	-0.03
9	SLU 31	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 32	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 33	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 34	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 35	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 36	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 37	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 38	-23	-16	3018	-2.22	-1.02	-0.05
9	SLU 39	-27	-18	3250	-2.48	-1.17	-0.05



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
9	SLU 40	-27	-18	3250	-2.48	-1.17	-0.05
9	SLU 41	-27	-18	3250	-2.48	-1.17	-0.05
9	SLU 42	-27	-18	3250	-2.48	-1.17	-0.05
9	SLU 43	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 44	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 45	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 46	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 47	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 48	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 49	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 50	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 51	-2	-14	2691	-1.61	-0.38	-0.04
9	SLU 52	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 53	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 54	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 55	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 56	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 57	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 58	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 59	-11	-17	3231	-2.22	-0.72	-0.05
9	SLU 60	-15	-19	3462	-2.49	-0.87	-0.05
9	SLU 61	-15	-19	3462	-2.49	-0.87	-0.05
9	SLU 62	-15	-19	3462	-2.49	-0.87	-0.05
9	SLU 63	-15	-19	3462	-2.49	-0.87	-0.05
9	SLU 64	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 65	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 66	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 67	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 68	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 69	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 70	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 71	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 72	-12	-15	3014	-1.9	-0.68	-0.04
9	SLU 73	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 74	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 75	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 76	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 77	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 78	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 79	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 80	-21	-19	3554	-2.51	-1.03	-0.05
9	SLU 81	-25	-20	3786	-2.77	-1.17	-0.06
9	SLU 82	-25	-20	3786	-2.77	-1.17	-0.06
9	SLU 83	-25	-20	3786	-2.77	-1.17	-0.06
9	SLU 84	-25	-20	3786	-2.77	-1.17	-0.06
9	SLE RA 1	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 2	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 3	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 4	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 5	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 6	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 7	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 8	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 9	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE RA 10	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 11	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 12	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 13	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 14	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 15	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 16	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 17	-13	-14	2607	-1.81	-0.69	-0.04
9	SLE RA 18	-15	-15	2762	-1.98	-0.78	-0.04
9	SLE RA 19	-15	-15	2762	-1.98	-0.78	-0.04
9	SLE RA 20	-15	-15	2762	-1.98	-0.78	-0.04
9	SLE RA 21	-15	-15	2762	-1.98	-0.78	-0.04
9	SLE FR 1	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE FR 2	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE FR 3	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE FR 4	-10	-12	2402	-1.57	-0.56	-0.03
9	SLE FR 5	-10	-12	2402	-1.57	-0.56	-0.03
9	SLE FR 6	-11	-13	2505	-1.69	-0.62	-0.04
9	SLE QP 1	-7	-11	2247	-1.4	-0.46	-0.03
9	SLE QP 2	-10	-12	2402	-1.57	-0.56	-0.03
9	SLD 1	432	-39	2578	-22.86	12.02	0.02
9	SLD 2	432	-39	2578	-22.86	12.02	0.02
9	SLD 3	227	-25	2464	10.8	5.04	-0.06
9	SLD 4	227	-25	2464	10.8	5.04	-0.06
9	SLD 5	434	-40	2627	-59.01	13.8	0.09
9	SLD 6	434	-40	2627	-59.01	13.8	0.09
9	SLD 7	-250	4	2248	53.2	-9.46	-0.15
9	SLD 8	-250	4	2248	53.2	-9.46	-0.15
9	SLD 9	231	-28	2556	-56.34	8.35	0.08
9	SLD 10	231	-28	2556	-56.34	8.35	0.08
9	SLD 11	-454	15	2176	55.87	-14.92	-0.16
9	SLD 12	-454	15	2176	55.87	-14.92	-0.16
9	SLD 13	-246	1	2339	-13.95	-6.15	-0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
9	SLD 14	-246	1	2339	-13.95	-6.15	-0.01
9	SLD 15	-452	14	2226	19.71	-13.13	-0.08
9	SLD 16	-452	14	2226	19.71	-13.13	-0.08
9	SLV 1	1058	-75	2841	-56.05	29.91	0.09
9	SLV 2	1058	-75	2841	-56.05	29.91	0.09
9	SLV 3	513	-42	2556	31.04	11.55	-0.09
9	SLV 4	513	-42	2556	31.04	11.55	-0.09
9	SLV 5	1137	-82	2966	-150	36.44	0.28
9	SLV 6	1137	-82	2966	-150	36.44	0.28
9	SLV 7	-679	29	2015	140.3	-24.78	-0.33
9	SLV 8	-679	29	2015	140.3	-24.78	-0.33
9	SLV 9	660	-54	2788	-143.45	23.67	0.26
9	SLV 10	660	-54	2788	-143.45	23.67	0.26
9	SLV 11	-1156	57	1837	146.86	-37.55	-0.35
9	SLV 12	-1156	57	1837	146.86	-37.55	-0.35
9	SLV 13	-532	17	2247	-34.19	-12.66	0.02
9	SLV 14	-532	17	2247	-34.19	-12.66	0.02
9	SLV 15	-1077	50	1962	52.9	-31.03	-0.16
9	SLV 16	-1077	50	1962	52.9	-31.03	-0.16
10	SLU 1	2	-10	2100	-3.05	0.21	-0.07
10	SLU 2	2	-10	2100	-3.05	0.21	-0.07
10	SLU 3	2	-10	2100	-3.05	0.21	-0.07
10	SLU 4	2	-10	2100	-3.05	0.21	-0.07
10	SLU 5	2	-10	2100	-3.05	0.21	-0.07
10	SLU 6	2	-10	2100	-3.05	0.21	-0.07
10	SLU 7	2	-10	2100	-3.05	0.21	-0.07
10	SLU 8	2	-10	2100	-3.05	0.21	-0.07
10	SLU 9	2	-10	2100	-3.05	0.21	-0.07
10	SLU 10	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 11	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 12	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 13	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 14	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 15	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 16	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 17	-9	-12	2612	-4.36	-0.04	-0.09
10	SLU 18	-13	-14	2831	-4.92	-0.15	-0.1
10	SLU 19	-13	-14	2831	-4.92	-0.15	-0.1
10	SLU 20	-13	-14	2831	-4.92	-0.15	-0.1
10	SLU 21	-13	-14	2831	-4.92	-0.15	-0.1
10	SLU 22	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 23	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 24	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 25	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 26	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 27	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 28	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 29	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 30	-7	-11	2413	-3.66	-0.01	-0.08
10	SLU 31	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 32	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 33	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 34	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 35	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 36	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 37	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 38	-18	-14	2925	-4.97	-0.27	-0.1
10	SLU 39	-23	-15	3144	-5.53	-0.37	-0.11
10	SLU 40	-23	-15	3144	-5.53	-0.37	-0.11
10	SLU 41	-23	-15	3144	-5.53	-0.37	-0.11
10	SLU 42	-23	-15	3144	-5.53	-0.37	-0.11
10	SLU 43	6	-12	2622	-3.76	0.35	-0.08
10	SLU 44	6	-12	2622	-3.76	0.35	-0.08
10	SLU 45	6	-12	2622	-3.76	0.35	-0.08
10	SLU 46	6	-12	2622	-3.76	0.35	-0.08
10	SLU 47	6	-12	2622	-3.76	0.35	-0.08
10	SLU 48	6	-12	2622	-3.76	0.35	-0.08
10	SLU 49	6	-12	2622	-3.76	0.35	-0.08
10	SLU 50	6	-12	2622	-3.76	0.35	-0.08
10	SLU 51	6	-12	2622	-3.76	0.35	-0.08
10	SLU 52	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 53	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 54	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 55	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 56	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 57	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 58	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 59	-5	-15	3134	-5.06	0.1	-0.11
10	SLU 60	-9	-16	3354	-5.63	-0.01	-0.12
10	SLU 61	-9	-16	3354	-5.63	-0.01	-0.12
10	SLU 62	-9	-16	3354	-5.63	-0.01	-0.12
10	SLU 63	-9	-16	3354	-5.63	-0.01	-0.12
10	SLU 64	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 65	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 66	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 67	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 68	-3	-13	2935	-4.37	0.13	-0.09



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
10	SLU 69	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 70	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 71	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 72	-3	-13	2935	-4.37	0.13	-0.09
10	SLU 73	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 74	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 75	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 76	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 77	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 78	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 79	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 80	-14	-16	3447	-5.67	-0.13	-0.12
10	SLU 81	-19	-17	3667	-6.24	-0.23	-0.13
10	SLU 82	-19	-17	3667	-6.24	-0.23	-0.13
10	SLU 83	-19	-17	3667	-6.24	-0.23	-0.13
10	SLU 84	-19	-17	3667	-6.24	-0.23	-0.13
10	SLE RA 1	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 2	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 3	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 4	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 5	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 6	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 7	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 8	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 9	0	-10	2189	-3.22	0.15	-0.07
10	SLE RA 10	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 11	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 12	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 13	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 14	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 15	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 16	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 17	-8	-12	2530	-4.1	-0.02	-0.09
10	SLE RA 18	-11	-13	2677	-4.47	-0.09	-0.09
10	SLE RA 19	-11	-13	2677	-4.47	-0.09	-0.09
10	SLE RA 20	-11	-13	2677	-4.47	-0.09	-0.09
10	SLE RA 21	-11	-13	2677	-4.47	-0.09	-0.09
10	SLE FR 1	0	-10	2189	-3.22	0.15	-0.07
10	SLE FR 2	0	-10	2189	-3.22	0.15	-0.07
10	SLE FR 3	0	-10	2189	-3.22	0.15	-0.07
10	SLE FR 4	-3	-11	2335	-3.6	0.07	-0.08
10	SLE FR 5	-3	-11	2335	-3.6	0.07	-0.08
10	SLE FR 6	-6	-11	2433	-3.85	0.03	-0.08
10	SLE QP 1	0	-10	2189	-3.22	0.15	-0.07
10	SLE QP 2	-3	-11	2335	-3.6	0.07	-0.08
10	SLD 1	422	-20	2375	-27.55	12.98	0.03
10	SLD 2	422	-20	2375	-27.55	12.98	0.03
10	SLD 3	223	-38	2505	11.53	5.39	-0.13
10	SLD 4	223	-38	2505	11.53	5.39	-0.13
10	SLD 5	426	13	2150	-70.05	15.46	0.21
10	SLD 6	426	13	2150	-70.05	15.46	0.21
10	SLD 7	-238	-45	2584	60.21	-9.85	-0.34
10	SLD 8	-238	-45	2584	60.21	-9.85	-0.34
10	SLD 9	231	24	2087	-67.4	10	0.19
10	SLD 10	231	24	2087	-67.4	10	0.19
10	SLD 11	-433	-34	2521	62.86	-15.31	-0.36
10	SLD 12	-433	-34	2521	62.86	-15.31	-0.36
10	SLD 13	-230	16	2166	-18.72	-5.24	-0.02
10	SLD 14	-230	16	2166	-18.72	-5.24	-0.02
10	SLD 15	-429	-1	2296	20.36	-12.83	-0.19
10	SLD 16	-429	-1	2296	20.36	-12.83	-0.19
10	SLV 1	1023	-32	2424	-65.17	31.38	0.2
10	SLV 2	1023	-32	2424	-65.17	31.38	0.2
10	SLV 3	497	-76	2755	36.02	11.47	-0.22
10	SLV 4	497	-76	2755	36.02	11.47	-0.22
10	SLV 5	1103	50	1860	-175.55	39.66	0.65
10	SLV 6	1103	50	1860	-175.55	39.66	0.65
10	SLV 7	-651	-98	2963	161.77	-26.7	-0.76
10	SLV 8	-651	-98	2963	161.77	-26.7	-0.76
10	SLV 9	645	76	1708	-168.96	26.85	0.61
10	SLV 10	645	76	1708	-168.96	26.85	0.61
10	SLV 11	-1110	-72	2810	168.36	-39.51	-0.8
10	SLV 12	-1110	-72	2810	168.36	-39.51	-0.8
10	SLV 13	-504	55	1916	-43.22	-11.32	0.07
10	SLV 14	-504	55	1916	-43.22	-11.32	0.07
10	SLV 15	-1030	10	2246	57.98	-31.23	-0.36
10	SLV 16	-1030	10	2246	57.98	-31.23	-0.36
11	SLU 1	26	-8	2068	-4.56	0.78	-0.12
11	SLU 2	26	-8	2068	-4.56	0.78	-0.12
11	SLU 3	26	-8	2068	-4.56	0.78	-0.12
11	SLU 4	26	-8	2068	-4.56	0.78	-0.12
11	SLU 5	26	-8	2068	-4.56	0.78	-0.12
11	SLU 6	26	-8	2068	-4.56	0.78	-0.12
11	SLU 7	26	-8	2068	-4.56	0.78	-0.12
11	SLU 8	26	-8	2068	-4.56	0.78	-0.12
11	SLU 9	26	-8	2068	-4.56	0.78	-0.12
11	SLU 10	18	-10	2561	-6.49	0.55	-0.17



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
11	SLU 11	18	-10	2561	-6.49	0.55	-0.17
11	SLU 12	18	-10	2561	-6.49	0.55	-0.17
11	SLU 13	18	-10	2561	-6.49	0.55	-0.17
11	SLU 14	18	-10	2561	-6.49	0.55	-0.17
11	SLU 15	18	-10	2561	-6.49	0.55	-0.17
11	SLU 16	18	-10	2561	-6.49	0.55	-0.17
11	SLU 17	18	-10	2561	-6.49	0.55	-0.17
11	SLU 18	15	-11	2773	-7.31	0.45	-0.19
11	SLU 19	15	-11	2773	-7.31	0.45	-0.19
11	SLU 20	15	-11	2773	-7.31	0.45	-0.19
11	SLU 21	15	-11	2773	-7.31	0.45	-0.19
11	SLU 22	20	-9	2376	-5.46	0.61	-0.14
11	SLU 23	20	-9	2376	-5.46	0.61	-0.14
11	SLU 24	20	-9	2376	-5.46	0.61	-0.14
11	SLU 25	20	-9	2376	-5.46	0.61	-0.14
11	SLU 26	20	-9	2376	-5.46	0.61	-0.14
11	SLU 27	20	-9	2376	-5.46	0.61	-0.14
11	SLU 28	20	-9	2376	-5.46	0.61	-0.14
11	SLU 29	20	-9	2376	-5.46	0.61	-0.14
11	SLU 30	20	-9	2376	-5.46	0.61	-0.14
11	SLU 31	12	-11	2869	-7.39	0.38	-0.19
11	SLU 32	12	-11	2869	-7.39	0.38	-0.19
11	SLU 33	12	-11	2869	-7.39	0.38	-0.19
11	SLU 34	12	-11	2869	-7.39	0.38	-0.19
11	SLU 35	12	-11	2869	-7.39	0.38	-0.19
11	SLU 36	12	-11	2869	-7.39	0.38	-0.19
11	SLU 37	12	-11	2869	-7.39	0.38	-0.19
11	SLU 38	12	-11	2869	-7.39	0.38	-0.19
11	SLU 39	9	-12	3081	-8.22	0.28	-0.21
11	SLU 40	9	-12	3081	-8.22	0.28	-0.21
11	SLU 41	9	-12	3081	-8.22	0.28	-0.21
11	SLU 42	9	-12	3081	-8.22	0.28	-0.21
11	SLU 43	36	-10	2583	-5.61	1.07	-0.15
11	SLU 44	36	-10	2583	-5.61	1.07	-0.15
11	SLU 45	36	-10	2583	-5.61	1.07	-0.15
11	SLU 46	36	-10	2583	-5.61	1.07	-0.15
11	SLU 47	36	-10	2583	-5.61	1.07	-0.15
11	SLU 48	36	-10	2583	-5.61	1.07	-0.15
11	SLU 49	36	-10	2583	-5.61	1.07	-0.15
11	SLU 50	36	-10	2583	-5.61	1.07	-0.15
11	SLU 51	36	-10	2583	-5.61	1.07	-0.15
11	SLU 52	28	-12	3076	-7.54	0.84	-0.2
11	SLU 53	28	-12	3076	-7.54	0.84	-0.2
11	SLU 54	28	-12	3076	-7.54	0.84	-0.2
11	SLU 55	28	-12	3076	-7.54	0.84	-0.2
11	SLU 56	28	-12	3076	-7.54	0.84	-0.2
11	SLU 57	28	-12	3076	-7.54	0.84	-0.2
11	SLU 58	28	-12	3076	-7.54	0.84	-0.2
11	SLU 59	28	-12	3076	-7.54	0.84	-0.2
11	SLU 60	25	-13	3288	-8.37	0.74	-0.22
11	SLU 61	25	-13	3288	-8.37	0.74	-0.22
11	SLU 62	25	-13	3288	-8.37	0.74	-0.22
11	SLU 63	25	-13	3288	-8.37	0.74	-0.22
11	SLU 64	30	-11	2891	-6.52	0.9	-0.17
11	SLU 65	30	-11	2891	-6.52	0.9	-0.17
11	SLU 66	30	-11	2891	-6.52	0.9	-0.17
11	SLU 67	30	-11	2891	-6.52	0.9	-0.17
11	SLU 68	30	-11	2891	-6.52	0.9	-0.17
11	SLU 69	30	-11	2891	-6.52	0.9	-0.17
11	SLU 70	30	-11	2891	-6.52	0.9	-0.17
11	SLU 71	30	-11	2891	-6.52	0.9	-0.17
11	SLU 72	30	-11	2891	-6.52	0.9	-0.17
11	SLU 73	22	-13	3384	-8.45	0.67	-0.22
11	SLU 74	22	-13	3384	-8.45	0.67	-0.22
11	SLU 75	22	-13	3384	-8.45	0.67	-0.22
11	SLU 76	22	-13	3384	-8.45	0.67	-0.22
11	SLU 77	22	-13	3384	-8.45	0.67	-0.22
11	SLU 78	22	-13	3384	-8.45	0.67	-0.22
11	SLU 79	22	-13	3384	-8.45	0.67	-0.22
11	SLU 80	22	-13	3384	-8.45	0.67	-0.22
11	SLU 81	19	-14	3596	-9.28	0.57	-0.24
11	SLU 82	19	-14	3596	-9.28	0.57	-0.24
11	SLU 83	19	-14	3596	-9.28	0.57	-0.24
11	SLU 84	19	-14	3596	-9.28	0.57	-0.24
11	SLE RA 1	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 2	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 3	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 4	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 5	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 6	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 7	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 8	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 9	24	-8	2156	-4.82	0.73	-0.13
11	SLE RA 10	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 11	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 12	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 13	19	-10	2485	-6.1	0.58	-0.16



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
11	SLE RA 14	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 15	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 16	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 17	19	-10	2485	-6.1	0.58	-0.16
11	SLE RA 18	17	-10	2626	-6.65	0.51	-0.17
11	SLE RA 19	17	-10	2626	-6.65	0.51	-0.17
11	SLE RA 20	17	-10	2626	-6.65	0.51	-0.17
11	SLE RA 21	17	-10	2626	-6.65	0.51	-0.17
11	SLE FR 1	24	-8	2156	-4.82	0.73	-0.13
11	SLE FR 2	24	-8	2156	-4.82	0.73	-0.13
11	SLE FR 3	24	-8	2156	-4.82	0.73	-0.13
11	SLE FR 4	22	-9	2297	-5.37	0.66	-0.14
11	SLE FR 5	22	-9	2297	-5.37	0.66	-0.14
11	SLE FR 6	21	-9	2391	-5.73	0.62	-0.15
11	SLE QP 1	24	-8	2156	-4.82	0.73	-0.13
11	SLE QP 2	22	-9	2297	-5.37	0.66	-0.14
11	SLD 1	419	-16	2378	-32.05	14.17	0.17
11	SLD 2	419	-16	2378	-32.05	14.17	0.17
11	SLD 3	234	-36	2533	12.08	6.42	-0.32
11	SLD 4	234	-36	2533	12.08	6.42	-0.32
11	SLD 5	422	20	2086	-80.3	16.47	0.7
11	SLD 6	422	20	2086	-80.3	16.47	0.7
11	SLD 7	-195	-48	2603	66.8	-9.37	-0.94
11	SLD 8	-195	-48	2603	66.8	-9.37	-0.94
11	SLD 9	239	31	1991	-77.53	10.7	0.66
11	SLD 10	239	31	1991	-77.53	10.7	0.66
11	SLD 11	-377	-38	2508	69.57	-15.15	-0.98
11	SLD 12	-377	-38	2508	69.57	-15.15	-0.98
11	SLD 13	-190	18	2061	-22.81	-5.09	0.04
11	SLD 14	-190	18	2061	-22.81	-5.09	0.04
11	SLD 15	-375	-2	2216	21.32	-12.84	-0.45
11	SLD 16	-375	-2	2216	21.32	-12.84	-0.45
11	SLV 1	979	-22	2467	-74.11	33.37	0.65
11	SLV 2	979	-22	2467	-74.11	33.37	0.65
11	SLV 3	493	-75	2871	40.22	13.1	-0.62
11	SLV 4	493	-75	2871	40.22	13.1	-0.62
11	SLV 5	1047	67	1736	-199.38	41.22	2.02
11	SLV 6	1047	67	1736	-199.38	41.22	2.02
11	SLV 7	-575	-109	3081	181.7	-26.35	-2.21
11	SLV 8	-575	-109	3081	181.7	-26.35	-2.21
11	SLV 9	619	91	1512	-192.44	27.68	1.93
11	SLV 10	619	91	1512	-192.44	27.68	1.93
11	SLV 11	-1003	-85	2858	188.65	-39.89	-2.31
11	SLV 12	-1003	-85	2858	188.65	-39.89	-2.31
11	SLV 13	-448	57	1723	-50.95	-11.77	0.33
11	SLV 14	-448	57	1723	-50.95	-11.77	0.33
11	SLV 15	-935	4	2126	63.37	-32.04	-0.94
11	SLV 16	-935	4	2126	63.37	-32.04	-0.94
12	SLU 1	23	34	3015	-5.03	2.02	-0.07
12	SLU 2	23	34	3015	-5.03	2.02	-0.07
12	SLU 3	23	34	3015	-5.03	2.02	-0.07
12	SLU 4	23	34	3015	-5.03	2.02	-0.07
12	SLU 5	23	34	3015	-5.03	2.02	-0.07
12	SLU 6	23	34	3015	-5.03	2.02	-0.07
12	SLU 7	23	34	3015	-5.03	2.02	-0.07
12	SLU 8	23	34	3015	-5.03	2.02	-0.07
12	SLU 9	23	34	3015	-5.03	2.02	-0.07
12	SLU 10	13	28	3880	-6.55	2.63	-0.09
12	SLU 11	13	28	3880	-6.55	2.63	-0.09
12	SLU 12	13	28	3880	-6.55	2.63	-0.09
12	SLU 13	13	28	3880	-6.55	2.63	-0.09
12	SLU 14	13	28	3880	-6.55	2.63	-0.09
12	SLU 15	13	28	3880	-6.55	2.63	-0.09
12	SLU 16	13	28	3880	-6.55	2.63	-0.09
12	SLU 17	13	28	3880	-6.55	2.63	-0.09
12	SLU 18	9	26	4251	-7.21	2.89	-0.1
12	SLU 19	9	26	4251	-7.21	2.89	-0.1
12	SLU 20	9	26	4251	-7.21	2.89	-0.1
12	SLU 21	9	26	4251	-7.21	2.89	-0.1
12	SLU 22	18	31	3469	-5.77	2.25	-0.08
12	SLU 23	18	31	3469	-5.77	2.25	-0.08
12	SLU 24	18	31	3469	-5.77	2.25	-0.08
12	SLU 25	18	31	3469	-5.77	2.25	-0.08
12	SLU 26	18	31	3469	-5.77	2.25	-0.08
12	SLU 27	18	31	3469	-5.77	2.25	-0.08
12	SLU 28	18	31	3469	-5.77	2.25	-0.08
12	SLU 29	18	31	3469	-5.77	2.25	-0.08
12	SLU 30	18	31	3469	-5.77	2.25	-0.08
12	SLU 31	9	25	4334	-7.3	2.86	-0.1
12	SLU 32	9	25	4334	-7.3	2.86	-0.1
12	SLU 33	9	25	4334	-7.3	2.86	-0.1
12	SLU 34	9	25	4334	-7.3	2.86	-0.1
12	SLU 35	9	25	4334	-7.3	2.86	-0.1
12	SLU 36	9	25	4334	-7.3	2.86	-0.1
12	SLU 37	9	25	4334	-7.3	2.86	-0.1
12	SLU 38	9	25	4334	-7.3	2.86	-0.1
12	SLU 39	4	23	4704	-7.95	3.12	-0.11



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
12	SLU 40	4	23	4704	-7.95	3.12	-0.11
12	SLU 41	4	23	4704	-7.95	3.12	-0.11
12	SLU 42	4	23	4704	-7.95	3.12	-0.11
12	SLU 43	32	45	3764	-6.28	2.55	-0.09
12	SLU 44	32	45	3764	-6.28	2.55	-0.09
12	SLU 45	32	45	3764	-6.28	2.55	-0.09
12	SLU 46	32	45	3764	-6.28	2.55	-0.09
12	SLU 47	32	45	3764	-6.28	2.55	-0.09
12	SLU 48	32	45	3764	-6.28	2.55	-0.09
12	SLU 49	32	45	3764	-6.28	2.55	-0.09
12	SLU 50	32	45	3764	-6.28	2.55	-0.09
12	SLU 51	32	45	3764	-6.28	2.55	-0.09
12	SLU 52	22	39	4629	-7.8	3.16	-0.11
12	SLU 53	22	39	4629	-7.8	3.16	-0.11
12	SLU 54	22	39	4629	-7.8	3.16	-0.11
12	SLU 55	22	39	4629	-7.8	3.16	-0.11
12	SLU 56	22	39	4629	-7.8	3.16	-0.11
12	SLU 57	22	39	4629	-7.8	3.16	-0.11
12	SLU 58	22	39	4629	-7.8	3.16	-0.11
12	SLU 59	22	39	4629	-7.8	3.16	-0.11
12	SLU 60	18	37	5000	-8.46	3.41	-0.12
12	SLU 61	18	37	5000	-8.46	3.41	-0.12
12	SLU 62	18	37	5000	-8.46	3.41	-0.12
12	SLU 63	18	37	5000	-8.46	3.41	-0.12
12	SLU 64	27	42	4218	-7.02	2.78	-0.1
12	SLU 65	27	42	4218	-7.02	2.78	-0.1
12	SLU 66	27	42	4218	-7.02	2.78	-0.1
12	SLU 67	27	42	4218	-7.02	2.78	-0.1
12	SLU 68	27	42	4218	-7.02	2.78	-0.1
12	SLU 69	27	42	4218	-7.02	2.78	-0.1
12	SLU 70	27	42	4218	-7.02	2.78	-0.1
12	SLU 71	27	42	4218	-7.02	2.78	-0.1
12	SLU 72	27	42	4218	-7.02	2.78	-0.1
12	SLU 73	17	36	5083	-8.55	3.39	-0.12
12	SLU 74	17	36	5083	-8.55	3.39	-0.12
12	SLU 75	17	36	5083	-8.55	3.39	-0.12
12	SLU 76	17	36	5083	-8.55	3.39	-0.12
12	SLU 77	17	36	5083	-8.55	3.39	-0.12
12	SLU 78	17	36	5083	-8.55	3.39	-0.12
12	SLU 79	17	36	5083	-8.55	3.39	-0.12
12	SLU 80	17	36	5083	-8.55	3.39	-0.12
12	SLU 81	13	34	5453	-9.21	3.64	-0.13
12	SLU 82	13	34	5453	-9.21	3.64	-0.13
12	SLU 83	13	34	5453	-9.21	3.64	-0.13
12	SLU 84	13	34	5453	-9.21	3.64	-0.13
12	SLE RA 1	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 2	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 3	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 4	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 5	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 6	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 7	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 8	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 9	22	33	3145	-5.24	2.09	-0.07
12	SLE RA 10	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 11	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 12	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 13	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 14	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 15	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 16	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 17	15	29	3721	-6.26	2.49	-0.09
12	SLE RA 18	12	28	3969	-6.69	2.66	-0.09
12	SLE RA 19	12	28	3969	-6.69	2.66	-0.09
12	SLE RA 20	12	28	3969	-6.69	2.66	-0.09
12	SLE RA 21	12	28	3969	-6.69	2.66	-0.09
12	SLE FR 1	22	33	3145	-5.24	2.09	-0.07
12	SLE FR 2	22	33	3145	-5.24	2.09	-0.07
12	SLE FR 3	22	33	3145	-5.24	2.09	-0.07
12	SLE FR 4	19	31	3392	-5.68	2.26	-0.08
12	SLE FR 5	19	31	3392	-5.68	2.26	-0.08
12	SLE FR 6	17	30	3557	-5.97	2.38	-0.08
12	SLE QP 1	22	33	3145	-5.24	2.09	-0.07
12	SLE QP 2	19	31	3392	-5.68	2.26	-0.08
12	SLD 1	307	309	4199	-19.62	16.5	-0.07
12	SLD 2	307	309	4199	-19.62	16.5	-0.07
12	SLD 3	172	190	3819	-14.19	9.24	-0.06
12	SLD 4	172	190	3819	-14.19	9.24	-0.06
12	SLD 5	309	295	4211	-18.1	17.54	-0.1
12	SLD 6	309	295	4211	-18.1	17.54	-0.1
12	SLD 7	-139	-102	2943	0.01	-6.65	-0.05
12	SLD 8	-139	-102	2943	0.01	-6.65	-0.05
12	SLD 9	177	164	3841	-11.36	11.17	-0.11
12	SLD 10	177	164	3841	-11.36	11.17	-0.11
12	SLD 11	-271	-232	2573	6.75	-13.01	-0.06
12	SLD 12	-271	-232	2573	6.75	-13.01	-0.06
12	SLD 13	-134	-127	2965	2.84	-4.72	-0.1



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
12	SLD 14	-134	-127	2965	2.84	-4.72	-0.1
12	SLD 15	-269	-246	2585	8.27	-11.97	-0.08
12	SLD 16	-269	-246	2585	8.27	-11.97	-0.08
12	SLV 1	723	710	5461	-40.1	37.4	-0.07
12	SLV 2	723	710	5461	-40.1	37.4	-0.07
12	SLV 3	375	402	4370	-25.84	18.37	-0.03
12	SLV 4	375	402	4370	-25.84	18.37	-0.03
12	SLV 5	758	701	5668	-37.63	41.66	-0.14
12	SLV 6	758	701	5668	-37.63	41.66	-0.14
12	SLV 7	-402	-323	2030	9.9	-21.76	0
12	SLV 8	-402	-323	2030	9.9	-21.76	0
12	SLV 9	439	386	4754	-21.25	26.29	-0.15
12	SLV 10	439	386	4754	-21.25	26.29	-0.15
12	SLV 11	-720	-638	1116	26.28	-37.14	-0.02
12	SLV 12	-720	-638	1116	26.28	-37.14	-0.02
12	SLV 13	-338	-340	2414	14.49	-13.85	-0.13
12	SLV 14	-338	-340	2414	14.49	-13.85	-0.13
12	SLV 15	-685	-647	1323	28.75	-32.88	-0.09
12	SLV 16	-685	-647	1323	28.75	-32.88	-0.09
13	SLU 1	94	-11	2038	-5.04	3.51	-0.23
13	SLU 2	94	-11	2038	-5.04	3.51	-0.23
13	SLU 3	94	-11	2038	-5.04	3.51	-0.23
13	SLU 4	94	-11	2038	-5.04	3.51	-0.23
13	SLU 5	94	-11	2038	-5.04	3.51	-0.23
13	SLU 6	94	-11	2038	-5.04	3.51	-0.23
13	SLU 7	94	-11	2038	-5.04	3.51	-0.23
13	SLU 8	94	-11	2038	-5.04	3.51	-0.23
13	SLU 9	94	-11	2038	-5.04	3.51	-0.23
13	SLU 10	103	-13	2515	-7.23	3.88	-0.31
13	SLU 11	103	-13	2515	-7.23	3.88	-0.31
13	SLU 12	103	-13	2515	-7.23	3.88	-0.31
13	SLU 13	103	-13	2515	-7.23	3.88	-0.31
13	SLU 14	103	-13	2515	-7.23	3.88	-0.31
13	SLU 15	103	-13	2515	-7.23	3.88	-0.31
13	SLU 16	103	-13	2515	-7.23	3.88	-0.31
13	SLU 17	103	-13	2515	-7.23	3.88	-0.31
13	SLU 18	106	-14	2719	-8.17	4.03	-0.34
13	SLU 19	106	-14	2719	-8.17	4.03	-0.34
13	SLU 20	106	-14	2719	-8.17	4.03	-0.34
13	SLU 21	106	-14	2719	-8.17	4.03	-0.34
13	SLU 22	100	-12	2341	-6.09	3.73	-0.26
13	SLU 23	100	-12	2341	-6.09	3.73	-0.26
13	SLU 24	100	-12	2341	-6.09	3.73	-0.26
13	SLU 25	100	-12	2341	-6.09	3.73	-0.26
13	SLU 26	100	-12	2341	-6.09	3.73	-0.26
13	SLU 27	100	-12	2341	-6.09	3.73	-0.26
13	SLU 28	100	-12	2341	-6.09	3.73	-0.26
13	SLU 29	100	-12	2341	-6.09	3.73	-0.26
13	SLU 30	100	-12	2341	-6.09	3.73	-0.26
13	SLU 31	108	-14	2817	-8.28	4.1	-0.34
13	SLU 32	108	-14	2817	-8.28	4.1	-0.34
13	SLU 33	108	-14	2817	-8.28	4.1	-0.34
13	SLU 34	108	-14	2817	-8.28	4.1	-0.34
13	SLU 35	108	-14	2817	-8.28	4.1	-0.34
13	SLU 36	108	-14	2817	-8.28	4.1	-0.34
13	SLU 37	108	-14	2817	-8.28	4.1	-0.34
13	SLU 38	108	-14	2817	-8.28	4.1	-0.34
13	SLU 39	111	-15	3022	-9.22	4.25	-0.38
13	SLU 40	111	-15	3022	-9.22	4.25	-0.38
13	SLU 41	111	-15	3022	-9.22	4.25	-0.38
13	SLU 42	111	-15	3022	-9.22	4.25	-0.38
13	SLU 43	121	-13	2546	-6.19	4.49	-0.29
13	SLU 44	121	-13	2546	-6.19	4.49	-0.29
13	SLU 45	121	-13	2546	-6.19	4.49	-0.29
13	SLU 46	121	-13	2546	-6.19	4.49	-0.29
13	SLU 47	121	-13	2546	-6.19	4.49	-0.29
13	SLU 48	121	-13	2546	-6.19	4.49	-0.29
13	SLU 49	121	-13	2546	-6.19	4.49	-0.29
13	SLU 50	121	-13	2546	-6.19	4.49	-0.29
13	SLU 51	121	-13	2546	-6.19	4.49	-0.29
13	SLU 52	129	-16	3023	-8.38	4.85	-0.36
13	SLU 53	129	-16	3023	-8.38	4.85	-0.36
13	SLU 54	129	-16	3023	-8.38	4.85	-0.36
13	SLU 55	129	-16	3023	-8.38	4.85	-0.36
13	SLU 56	129	-16	3023	-8.38	4.85	-0.36
13	SLU 57	129	-16	3023	-8.38	4.85	-0.36
13	SLU 58	129	-16	3023	-8.38	4.85	-0.36
13	SLU 59	129	-16	3023	-8.38	4.85	-0.36
13	SLU 60	133	-17	3227	-9.32	5.01	-0.4
13	SLU 61	133	-17	3227	-9.32	5.01	-0.4
13	SLU 62	133	-17	3227	-9.32	5.01	-0.4
13	SLU 63	133	-17	3227	-9.32	5.01	-0.4
13	SLU 64	126	-14	2849	-7.24	4.71	-0.32
13	SLU 65	126	-14	2849	-7.24	4.71	-0.32
13	SLU 66	126	-14	2849	-7.24	4.71	-0.32
13	SLU 67	126	-14	2849	-7.24	4.71	-0.32
13	SLU 68	126	-14	2849	-7.24	4.71	-0.32



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
13	SLU 69	126	-14	2849	-7.24	4.71	-0.32
13	SLU 70	126	-14	2849	-7.24	4.71	-0.32
13	SLU 71	126	-14	2849	-7.24	4.71	-0.32
13	SLU 72	126	-14	2849	-7.24	4.71	-0.32
13	SLU 73	134	-17	3325	-9.43	5.07	-0.4
13	SLU 74	134	-17	3325	-9.43	5.07	-0.4
13	SLU 75	134	-17	3325	-9.43	5.07	-0.4
13	SLU 76	134	-17	3325	-9.43	5.07	-0.4
13	SLU 77	134	-17	3325	-9.43	5.07	-0.4
13	SLU 78	134	-17	3325	-9.43	5.07	-0.4
13	SLU 79	134	-17	3325	-9.43	5.07	-0.4
13	SLU 80	134	-17	3325	-9.43	5.07	-0.4
13	SLU 81	138	-18	3529	-10.37	5.23	-0.43
13	SLU 82	138	-18	3529	-10.37	5.23	-0.43
13	SLU 83	138	-18	3529	-10.37	5.23	-0.43
13	SLU 84	138	-18	3529	-10.37	5.23	-0.43
13	SLE RA 1	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 2	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 3	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 4	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 5	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 6	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 7	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 8	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 9	96	-11	2125	-5.34	3.57	-0.24
13	SLE RA 10	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 11	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 12	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 13	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 14	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 15	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 16	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 17	101	-12	2442	-6.8	3.82	-0.29
13	SLE RA 18	104	-13	2579	-7.43	3.92	-0.31
13	SLE RA 19	104	-13	2579	-7.43	3.92	-0.31
13	SLE RA 20	104	-13	2579	-7.43	3.92	-0.31
13	SLE RA 21	104	-13	2579	-7.43	3.92	-0.31
13	SLE FR 1	96	-11	2125	-5.34	3.57	-0.24
13	SLE FR 2	96	-11	2125	-5.34	3.57	-0.24
13	SLE FR 3	96	-11	2125	-5.34	3.57	-0.24
13	SLE FR 4	98	-12	2261	-5.97	3.68	-0.26
13	SLE FR 5	98	-12	2261	-5.97	3.68	-0.26
13	SLE FR 6	100	-12	2352	-6.38	3.75	-0.28
13	SLE QP 1	96	-11	2125	-5.34	3.57	-0.24
13	SLE QP 2	98	-12	2261	-5.97	3.68	-0.26
13	SLD 1	472	-12	2458	-35.95	19.52	0.42
13	SLD 2	472	-12	2458	-35.95	19.52	0.42
13	SLD 3	292	-43	2643	13.15	10.04	-0.64
13	SLD 4	292	-43	2643	13.15	10.04	-0.64
13	SLD 5	484	36	2039	-89.42	22.81	1.55
13	SLD 6	484	36	2039	-89.42	22.81	1.55
13	SLD 7	-117	-69	2657	74.23	-8.8	-1.98
13	SLD 8	-117	-69	2657	74.23	-8.8	-1.98
13	SLD 9	313	46	1865	-86.16	16.15	1.46
13	SLD 10	313	46	1865	-86.16	16.15	1.46
13	SLD 11	-287	-59	2483	77.49	-15.46	-2.07
13	SLD 12	-287	-59	2483	77.49	-15.46	-2.07
13	SLD 13	-95	20	1879	-25.08	-2.68	0.12
13	SLD 14	-95	20	1879	-25.08	-2.68	0.12
13	SLD 15	-276	-11	2064	24.02	-12.17	-0.94
13	SLD 16	-276	-11	2064	24.02	-12.17	-0.94
13	SLV 1	998	-9	2694	-83.12	42.06	1.47
13	SLV 2	998	-9	2694	-83.12	42.06	1.47
13	SLV 3	527	-89	3185	44.04	17.35	-1.25
13	SLV 4	527	-89	3185	44.04	17.35	-1.25
13	SLV 5	1083	112	1646	-221.96	52.66	4.4
13	SLV 6	1083	112	1646	-221.96	52.66	4.4
13	SLV 7	-488	-158	3283	201.89	-29.69	-4.69
13	SLV 8	-488	-158	3283	201.89	-29.69	-4.69
13	SLV 9	684	134	1239	-213.82	37.04	4.17
13	SLV 10	684	134	1239	-213.82	37.04	4.17
13	SLV 11	-886	-135	2876	210.03	-45.3	-4.92
13	SLV 12	-886	-135	2876	210.03	-45.3	-4.92
13	SLV 13	-331	66	1337	-55.97	-10	0.73
13	SLV 14	-331	66	1337	-55.97	-10	0.73
13	SLV 15	-802	-14	1828	71.18	-34.7	-1.99
13	SLV 16	-802	-14	1828	71.18	-34.7	-1.99
14	SLU 1	205	-16	2054	-3.41	10.16	-0.09
14	SLU 2	205	-16	2054	-3.41	10.16	-0.09
14	SLU 3	205	-16	2054	-3.41	10.16	-0.09
14	SLU 4	205	-16	2054	-3.41	10.16	-0.09
14	SLU 5	205	-16	2054	-3.41	10.16	-0.09
14	SLU 6	205	-16	2054	-3.41	10.16	-0.09
14	SLU 7	205	-16	2054	-3.41	10.16	-0.09
14	SLU 8	205	-16	2054	-3.41	10.16	-0.09
14	SLU 9	205	-16	2054	-3.41	10.16	-0.09
14	SLU 10	245	-20	2515	-5.11	11.95	-0.11



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
14	SLU 11	245	-20	2515	-5.11	11.95	-0.11
14	SLU 12	245	-20	2515	-5.11	11.95	-0.11
14	SLU 13	245	-20	2515	-5.11	11.95	-0.11
14	SLU 14	245	-20	2515	-5.11	11.95	-0.11
14	SLU 15	245	-20	2515	-5.11	11.95	-0.11
14	SLU 16	245	-20	2515	-5.11	11.95	-0.11
14	SLU 17	245	-20	2515	-5.11	11.95	-0.11
14	SLU 18	263	-21	2713	-5.83	12.72	-0.12
14	SLU 19	263	-21	2713	-5.83	12.72	-0.12
14	SLU 20	263	-21	2713	-5.83	12.72	-0.12
14	SLU 21	263	-21	2713	-5.83	12.72	-0.12
14	SLU 22	231	-18	2353	-4.25	11.36	-0.1
14	SLU 23	231	-18	2353	-4.25	11.36	-0.1
14	SLU 24	231	-18	2353	-4.25	11.36	-0.1
14	SLU 25	231	-18	2353	-4.25	11.36	-0.1
14	SLU 26	231	-18	2353	-4.25	11.36	-0.1
14	SLU 27	231	-18	2353	-4.25	11.36	-0.1
14	SLU 28	231	-18	2353	-4.25	11.36	-0.1
14	SLU 29	231	-18	2353	-4.25	11.36	-0.1
14	SLU 30	231	-18	2353	-4.25	11.36	-0.1
14	SLU 31	271	-22	2814	-5.94	13.15	-0.12
14	SLU 32	271	-22	2814	-5.94	13.15	-0.12
14	SLU 33	271	-22	2814	-5.94	13.15	-0.12
14	SLU 34	271	-22	2814	-5.94	13.15	-0.12
14	SLU 35	271	-22	2814	-5.94	13.15	-0.12
14	SLU 36	271	-22	2814	-5.94	13.15	-0.12
14	SLU 37	271	-22	2814	-5.94	13.15	-0.12
14	SLU 38	271	-22	2814	-5.94	13.15	-0.12
14	SLU 39	288	-23	3012	-6.67	13.92	-0.13
14	SLU 40	288	-23	3012	-6.67	13.92	-0.13
14	SLU 41	288	-23	3012	-6.67	13.92	-0.13
14	SLU 42	288	-23	3012	-6.67	13.92	-0.13
14	SLU 43	258	-20	2567	-4.15	12.79	-0.11
14	SLU 44	258	-20	2567	-4.15	12.79	-0.11
14	SLU 45	258	-20	2567	-4.15	12.79	-0.11
14	SLU 46	258	-20	2567	-4.15	12.79	-0.11
14	SLU 47	258	-20	2567	-4.15	12.79	-0.11
14	SLU 48	258	-20	2567	-4.15	12.79	-0.11
14	SLU 49	258	-20	2567	-4.15	12.79	-0.11
14	SLU 50	258	-20	2567	-4.15	12.79	-0.11
14	SLU 51	258	-20	2567	-4.15	12.79	-0.11
14	SLU 52	298	-24	3029	-5.84	14.59	-0.13
14	SLU 53	298	-24	3029	-5.84	14.59	-0.13
14	SLU 54	298	-24	3029	-5.84	14.59	-0.13
14	SLU 55	298	-24	3029	-5.84	14.59	-0.13
14	SLU 56	298	-24	3029	-5.84	14.59	-0.13
14	SLU 57	298	-24	3029	-5.84	14.59	-0.13
14	SLU 58	298	-24	3029	-5.84	14.59	-0.13
14	SLU 59	298	-24	3029	-5.84	14.59	-0.13
14	SLU 60	316	-26	3227	-6.57	15.36	-0.15
14	SLU 61	316	-26	3227	-6.57	15.36	-0.15
14	SLU 62	316	-26	3227	-6.57	15.36	-0.15
14	SLU 63	316	-26	3227	-6.57	15.36	-0.15
14	SLU 64	283	-22	2867	-4.99	13.99	-0.12
14	SLU 65	283	-22	2867	-4.99	13.99	-0.12
14	SLU 66	283	-22	2867	-4.99	13.99	-0.12
14	SLU 67	283	-22	2867	-4.99	13.99	-0.12
14	SLU 68	283	-22	2867	-4.99	13.99	-0.12
14	SLU 69	283	-22	2867	-4.99	13.99	-0.12
14	SLU 70	283	-22	2867	-4.99	13.99	-0.12
14	SLU 71	283	-22	2867	-4.99	13.99	-0.12
14	SLU 72	283	-22	2867	-4.99	13.99	-0.12
14	SLU 73	324	-26	3328	-6.68	15.79	-0.14
14	SLU 74	324	-26	3328	-6.68	15.79	-0.14
14	SLU 75	324	-26	3328	-6.68	15.79	-0.14
14	SLU 76	324	-26	3328	-6.68	15.79	-0.14
14	SLU 77	324	-26	3328	-6.68	15.79	-0.14
14	SLU 78	324	-26	3328	-6.68	15.79	-0.14
14	SLU 79	324	-26	3328	-6.68	15.79	-0.14
14	SLU 80	324	-26	3328	-6.68	15.79	-0.14
14	SLU 81	341	-28	3526	-7.41	16.56	-0.16
14	SLU 82	341	-28	3526	-7.41	16.56	-0.16
14	SLU 83	341	-28	3526	-7.41	16.56	-0.16
14	SLU 84	341	-28	3526	-7.41	16.56	-0.16
14	SLE RA 1	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 2	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 3	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 4	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 5	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 6	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 7	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 8	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 9	212	-17	2139	-3.65	10.5	-0.09
14	SLE RA 10	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 11	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 12	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 13	239	-19	2447	-4.78	11.7	-0.11



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
14	SLE RA 14	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 15	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 16	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 17	239	-19	2447	-4.78	11.7	-0.11
14	SLE RA 18	251	-20	2579	-5.26	12.21	-0.11
14	SLE RA 19	251	-20	2579	-5.26	12.21	-0.11
14	SLE RA 20	251	-20	2579	-5.26	12.21	-0.11
14	SLE RA 21	251	-20	2579	-5.26	12.21	-0.11
14	SLE FR 1	212	-17	2139	-3.65	10.5	-0.09
14	SLE FR 2	212	-17	2139	-3.65	10.5	-0.09
14	SLE FR 3	212	-17	2139	-3.65	10.5	-0.09
14	SLE FR 4	224	-18	2271	-4.14	11.01	-0.1
14	SLE FR 5	224	-18	2271	-4.14	11.01	-0.1
14	SLE FR 6	232	-18	2359	-4.46	11.36	-0.1
14	SLE QP 1	212	-17	2139	-3.65	10.5	-0.09
14	SLE QP 2	224	-18	2271	-4.14	11.01	-0.1
14	SLD 1	489	-6	2740	-36.67	30.75	0.44
14	SLD 2	489	-6	2740	-36.67	30.75	0.44
14	SLD 3	359	-57	3016	14.86	20.32	-0.34
14	SLD 4	359	-57	3016	14.86	20.32	-0.34
14	SLD 5	502	63	1995	-92.05	32.75	1.24
14	SLD 6	502	63	1995	-92.05	32.75	1.24
14	SLD 7	66	-107	2912	79.72	-2.01	-1.35
14	SLD 8	66	-107	2912	79.72	-2.01	-1.35
14	SLD 9	381	72	1631	-87.99	24.03	1.16
14	SLD 10	381	72	1631	-87.99	24.03	1.16
14	SLD 11	-54	-99	2548	83.78	-10.72	-1.44
14	SLD 12	-54	-99	2548	83.78	-10.72	-1.44
14	SLD 13	89	22	1527	-23.13	1.7	0.15
14	SLD 14	89	22	1527	-23.13	1.7	0.15
14	SLD 15	-42	-29	1802	28.4	-8.72	-0.63
14	SLD 16	-42	-29	1802	28.4	-8.72	-0.63
14	SLV 1	862	15	3338	-87.55	58.53	1.26
14	SLV 2	862	15	3338	-87.55	58.53	1.26
14	SLV 3	524	-117	4051	45.77	31.6	-0.75
14	SLV 4	524	-117	4051	45.77	31.6	-0.75
14	SLV 5	928	192	1511	-231.36	66.11	3.35
14	SLV 6	928	192	1511	-231.36	66.11	3.35
14	SLV 7	-199	-248	3886	213.04	-23.65	-3.33
14	SLV 8	-199	-248	3886	213.04	-23.65	-3.33
14	SLV 9	647	212	657	-221.31	45.68	3.14
14	SLV 10	647	212	657	-221.31	45.68	3.14
14	SLV 11	-481	-228	3032	223.09	-44.08	-3.54
14	SLV 12	-481	-228	3032	223.09	-44.08	-3.54
14	SLV 13	-76	81	492	-54.04	-9.57	0.56
14	SLV 14	-76	81	492	-54.04	-9.57	0.56
14	SLV 15	-414	-51	1204	79.28	-36.5	-1.45
14	SLV 16	-414	-51	1204	79.28	-36.5	-1.45
15	SLU 1	306	-33	1169	-0.17	8.6	0.07
15	SLU 2	306	-33	1169	-0.17	8.6	0.07
15	SLU 3	306	-33	1169	-0.17	8.6	0.07
15	SLU 4	306	-33	1169	-0.17	8.6	0.07
15	SLU 5	306	-33	1169	-0.17	8.6	0.07
15	SLU 6	306	-33	1169	-0.17	8.6	0.07
15	SLU 7	306	-33	1169	-0.17	8.6	0.07
15	SLU 8	306	-33	1169	-0.17	8.6	0.07
15	SLU 9	306	-33	1169	-0.17	8.6	0.07
15	SLU 10	370	-42	1423	-0.47	10.35	0.12
15	SLU 11	370	-42	1423	-0.47	10.35	0.12
15	SLU 12	370	-42	1423	-0.47	10.35	0.12
15	SLU 13	370	-42	1423	-0.47	10.35	0.12
15	SLU 14	370	-42	1423	-0.47	10.35	0.12
15	SLU 15	370	-42	1423	-0.47	10.35	0.12
15	SLU 16	370	-42	1423	-0.47	10.35	0.12
15	SLU 17	370	-42	1423	-0.47	10.35	0.12
15	SLU 18	398	-46	1532	-0.6	11.1	0.14
15	SLU 19	398	-46	1532	-0.6	11.1	0.14
15	SLU 20	398	-46	1532	-0.6	11.1	0.14
15	SLU 21	398	-46	1532	-0.6	11.1	0.14
15	SLU 22	348	-38	1336	-0.34	9.75	0.1
15	SLU 23	348	-38	1336	-0.34	9.75	0.1
15	SLU 24	348	-38	1336	-0.34	9.75	0.1
15	SLU 25	348	-38	1336	-0.34	9.75	0.1
15	SLU 26	348	-38	1336	-0.34	9.75	0.1
15	SLU 27	348	-38	1336	-0.34	9.75	0.1
15	SLU 28	348	-38	1336	-0.34	9.75	0.1
15	SLU 29	348	-38	1336	-0.34	9.75	0.1
15	SLU 30	348	-38	1336	-0.34	9.75	0.1
15	SLU 31	413	-47	1590	-0.65	11.5	0.15
15	SLU 32	413	-47	1590	-0.65	11.5	0.15
15	SLU 33	413	-47	1590	-0.65	11.5	0.15
15	SLU 34	413	-47	1590	-0.65	11.5	0.15
15	SLU 35	413	-47	1590	-0.65	11.5	0.15
15	SLU 36	413	-47	1590	-0.65	11.5	0.15
15	SLU 37	413	-47	1590	-0.65	11.5	0.15
15	SLU 38	413	-47	1590	-0.65	11.5	0.15
15	SLU 39	441	-51	1700	-0.78	12.25	0.17



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
15	SLU 40	441	-51	1700	-0.78	12.25	0.17
15	SLU 41	441	-51	1700	-0.78	12.25	0.17
15	SLU 42	441	-51	1700	-0.78	12.25	0.17
15	SLU 43	383	-41	1462	-0.15	10.79	0.07
15	SLU 44	383	-41	1462	-0.15	10.79	0.07
15	SLU 45	383	-41	1462	-0.15	10.79	0.07
15	SLU 46	383	-41	1462	-0.15	10.79	0.07
15	SLU 47	383	-41	1462	-0.15	10.79	0.07
15	SLU 48	383	-41	1462	-0.15	10.79	0.07
15	SLU 49	383	-41	1462	-0.15	10.79	0.07
15	SLU 50	383	-41	1462	-0.15	10.79	0.07
15	SLU 51	383	-41	1462	-0.15	10.79	0.07
15	SLU 52	448	-50	1717	-0.46	12.54	0.13
15	SLU 53	448	-50	1717	-0.46	12.54	0.13
15	SLU 54	448	-50	1717	-0.46	12.54	0.13
15	SLU 55	448	-50	1717	-0.46	12.54	0.13
15	SLU 56	448	-50	1717	-0.46	12.54	0.13
15	SLU 57	448	-50	1717	-0.46	12.54	0.13
15	SLU 58	448	-50	1717	-0.46	12.54	0.13
15	SLU 59	448	-50	1717	-0.46	12.54	0.13
15	SLU 60	475	-55	1826	-0.59	13.29	0.15
15	SLU 61	475	-55	1826	-0.59	13.29	0.15
15	SLU 62	475	-55	1826	-0.59	13.29	0.15
15	SLU 63	475	-55	1826	-0.59	13.29	0.15
15	SLU 64	425	-46	1629	-0.33	11.94	0.11
15	SLU 65	425	-46	1629	-0.33	11.94	0.11
15	SLU 66	425	-46	1629	-0.33	11.94	0.11
15	SLU 67	425	-46	1629	-0.33	11.94	0.11
15	SLU 68	425	-46	1629	-0.33	11.94	0.11
15	SLU 69	425	-46	1629	-0.33	11.94	0.11
15	SLU 70	425	-46	1629	-0.33	11.94	0.11
15	SLU 71	425	-46	1629	-0.33	11.94	0.11
15	SLU 72	425	-46	1629	-0.33	11.94	0.11
15	SLU 73	490	-55	1884	-0.63	13.69	0.16
15	SLU 74	490	-55	1884	-0.63	13.69	0.16
15	SLU 75	490	-55	1884	-0.63	13.69	0.16
15	SLU 76	490	-55	1884	-0.63	13.69	0.16
15	SLU 77	490	-55	1884	-0.63	13.69	0.16
15	SLU 78	490	-55	1884	-0.63	13.69	0.16
15	SLU 79	490	-55	1884	-0.63	13.69	0.16
15	SLU 80	490	-55	1884	-0.63	13.69	0.16
15	SLU 81	518	-59	1993	-0.76	14.44	0.18
15	SLU 82	518	-59	1993	-0.76	14.44	0.18
15	SLU 83	518	-59	1993	-0.76	14.44	0.18
15	SLU 84	518	-59	1993	-0.76	14.44	0.18
15	SLE RA 1	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 2	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 3	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 4	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 5	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 6	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 7	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 8	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 9	318	-34	1217	-0.22	8.93	0.08
15	SLE RA 10	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 11	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 12	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 13	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 14	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 15	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 16	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 17	361	-41	1386	-0.42	10.1	0.11
15	SLE RA 18	380	-43	1459	-0.5	10.6	0.12
15	SLE RA 19	380	-43	1459	-0.5	10.6	0.12
15	SLE RA 20	380	-43	1459	-0.5	10.6	0.12
15	SLE RA 21	380	-43	1459	-0.5	10.6	0.12
15	SLE FR 1	318	-34	1217	-0.22	8.93	0.08
15	SLE FR 2	318	-34	1217	-0.22	8.93	0.08
15	SLE FR 3	318	-34	1217	-0.22	8.93	0.08
15	SLE FR 4	336	-37	1289	-0.3	9.43	0.09
15	SLE FR 5	336	-37	1289	-0.3	9.43	0.09
15	SLE FR 6	349	-39	1338	-0.36	9.76	0.1
15	SLE QP 1	318	-34	1217	-0.22	8.93	0.08
15	SLE QP 2	336	-37	1289	-0.3	9.43	0.09
15	SLD 1	587	-53	1708	-16.38	19.88	2.7
15	SLD 2	587	-53	1708	-16.38	19.88	2.7
15	SLD 3	486	-47	1939	8.02	14.41	-1.21
15	SLD 4	486	-47	1939	8.02	14.41	-1.21
15	SLD 5	565	-51	1064	-42.14	20.85	6.81
15	SLD 6	565	-51	1064	-42.14	20.85	6.81
15	SLD 7	228	-30	1835	39.21	2.64	-6.23
15	SLD 8	228	-30	1835	39.21	2.64	-6.23
15	SLD 9	445	-43	744	-39.82	16.22	6.41
15	SLD 10	445	-43	744	-39.82	16.22	6.41
15	SLD 11	108	-22	1514	41.54	-1.99	-6.63
15	SLD 12	108	-22	1514	41.54	-1.99	-6.63
15	SLD 13	187	-27	639	-8.63	4.45	1.39



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
15	SLD 14	187	-27	639	-8.63	4.45	1.39
15	SLD 15	85	-21	870	15.78	-1.01	-2.52
15	SLD 16	85	-21	870	15.78	-1.01	-2.52
15	SLV 1	935	-76	2248	-41.36	34.54	6.75
15	SLV 2	935	-76	2248	-41.36	34.54	6.75
15	SLV 3	677	-60	2837	21.69	20.5	-3.36
15	SLV 4	677	-60	2837	21.69	20.5	-3.36
15	SLV 5	907	-73	683	-108.24	38.26	17.41
15	SLV 6	907	-73	683	-108.24	38.26	17.41
15	SLV 7	47	-19	2647	101.92	-8.54	-16.26
15	SLV 8	47	-19	2647	101.92	-8.54	-16.26
15	SLV 9	625	-55	-69	-102.52	27.4	16.44
15	SLV 10	625	-55	-69	-102.52	27.4	16.44
15	SLV 11	-235	-1	1895	107.64	-19.39	-17.23
15	SLV 12	-235	-1	1895	107.64	-19.39	-17.23
15	SLV 13	-4	-14	-259	-22.29	-1.64	3.53
15	SLV 14	-4	-14	-259	-22.29	-1.64	3.53
15	SLV 15	-262	2	330	40.76	-15.68	-6.57
15	SLV 16	-262	2	330	40.76	-15.68	-6.57
16	SLU 1	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 2	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 3	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 4	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 5	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 6	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 7	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 8	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 9	-305	7	1164	-2.19	-6.83	-0.31
16	SLU 10	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 11	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 12	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 13	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 14	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 15	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 16	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 17	-376	8	1442	-3.28	-8.31	-0.48
16	SLU 18	-406	8	1561	-3.76	-8.94	-0.55
16	SLU 19	-406	8	1561	-3.76	-8.94	-0.55
16	SLU 20	-406	8	1561	-3.76	-8.94	-0.55
16	SLU 21	-406	8	1561	-3.76	-8.94	-0.55
16	SLU 22	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 23	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 24	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 25	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 26	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 27	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 28	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 29	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 30	-349	8	1339	-2.75	-7.74	-0.39
16	SLU 31	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 32	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 33	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 34	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 35	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 36	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 37	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 38	-420	9	1616	-3.85	-9.22	-0.57
16	SLU 39	-450	9	1735	-4.32	-9.85	-0.64
16	SLU 40	-450	9	1735	-4.32	-9.85	-0.64
16	SLU 41	-450	9	1735	-4.32	-9.85	-0.64
16	SLU 42	-450	9	1735	-4.32	-9.85	-0.64
16	SLU 43	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 44	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 45	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 46	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 47	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 48	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 49	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 50	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 51	-382	9	1454	-2.65	-8.57	-0.37
16	SLU 52	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 53	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 54	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 55	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 56	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 57	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 58	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 59	-452	10	1731	-3.74	-10.05	-0.54
16	SLU 60	-483	10	1850	-4.22	-10.68	-0.61
16	SLU 61	-483	10	1850	-4.22	-10.68	-0.61
16	SLU 62	-483	10	1850	-4.22	-10.68	-0.61
16	SLU 63	-483	10	1850	-4.22	-10.68	-0.61
16	SLU 64	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 65	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 66	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 67	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 68	-426	10	1628	-3.22	-9.48	-0.45



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
16	SLU 69	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 70	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 71	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 72	-426	10	1628	-3.22	-9.48	-0.45
16	SLU 73	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 74	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 75	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 76	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 77	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 78	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 79	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 80	-496	11	1906	-4.31	-10.96	-0.63
16	SLU 81	-527	11	2024	-4.78	-11.59	-0.7
16	SLU 82	-527	11	2024	-4.78	-11.59	-0.7
16	SLU 83	-527	11	2024	-4.78	-11.59	-0.7
16	SLU 84	-527	11	2024	-4.78	-11.59	-0.7
16	SLE RA 1	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 2	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 3	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 4	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 5	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 6	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 7	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 8	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 9	-318	8	1214	-2.35	-7.09	-0.33
16	SLE RA 10	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 11	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 12	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 13	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 14	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 15	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 16	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 17	-365	8	1399	-3.08	-8.08	-0.44
16	SLE RA 18	-385	8	1478	-3.39	-8.5	-0.49
16	SLE RA 19	-385	8	1478	-3.39	-8.5	-0.49
16	SLE RA 20	-385	8	1478	-3.39	-8.5	-0.49
16	SLE RA 21	-385	8	1478	-3.39	-8.5	-0.49
16	SLE FR 1	-318	8	1214	-2.35	-7.09	-0.33
16	SLE FR 2	-318	8	1214	-2.35	-7.09	-0.33
16	SLE FR 3	-318	8	1214	-2.35	-7.09	-0.33
16	SLE FR 4	-338	8	1293	-2.66	-7.52	-0.38
16	SLE FR 5	-338	8	1293	-2.66	-7.52	-0.38
16	SLE FR 6	-351	8	1346	-2.87	-7.8	-0.41
16	SLE QP 1	-318	8	1214	-2.35	-7.09	-0.33
16	SLE QP 2	-338	8	1293	-2.66	-7.52	-0.38
16	SLD 1	-240	9	1005	-18.86	-3.5	-3.19
16	SLD 2	-240	9	1005	-18.86	-3.5	-3.19
16	SLD 3	-71	-16	556	5.31	1.29	0.98
16	SLD 4	-71	-16	556	5.31	1.29	0.98
16	SLD 5	-564	46	1889	-44.18	-13.57	-7.54
16	SLD 6	-564	46	1889	-44.18	-13.57	-7.54
16	SLD 7	-2	-37	390	36.39	2.39	6.35
16	SLD 8	-2	-37	390	36.39	2.39	6.35
16	SLD 9	-674	53	2196	-41.71	-17.42	-7.1
16	SLD 10	-674	53	2196	-41.71	-17.42	-7.1
16	SLD 11	-112	-30	698	38.85	-1.46	6.78
16	SLD 12	-112	-30	698	38.85	-1.46	6.78
16	SLD 13	-605	32	2031	-10.64	-16.32	-1.74
16	SLD 14	-605	32	2031	-10.64	-16.32	-1.74
16	SLD 15	-436	7	1581	13.53	-11.53	2.43
16	SLD 16	-436	7	1581	13.53	-11.53	2.43
16	SLV 1	-129	13	670	-44.04	1.26	-7.54
16	SLV 2	-129	13	670	-44.04	1.26	-7.54
16	SLV 3	309	-51	-487	18.52	13.76	3.24
16	SLV 4	309	-51	-487	18.52	13.76	3.24
16	SLV 5	-938	106	2861	-109.95	-23.85	-18.87
16	SLV 6	-938	106	2861	-109.95	-23.85	-18.87
16	SLV 7	519	-107	-996	98.56	17.83	17.05
16	SLV 8	519	-107	-996	98.56	17.83	17.05
16	SLV 9	-1195	122	3582	-103.89	-32.87	-17.81
16	SLV 10	-1195	122	3582	-103.89	-32.87	-17.81
16	SLV 11	263	-91	-275	104.62	8.82	18.11
16	SLV 12	263	-91	-275	104.62	8.82	18.11
16	SLV 13	-985	67	3074	-23.84	-28.79	-3.99
16	SLV 14	-985	67	3074	-23.84	-28.79	-3.99
16	SLV 15	-547	3	1916	38.71	-16.29	6.78
16	SLV 16	-547	3	1916	38.71	-16.29	6.78
17	SLU 1	-189	8	2008	-5.34	-10.81	0.05
17	SLU 2	-189	8	2008	-5.34	-10.81	0.05
17	SLU 3	-189	8	2008	-5.34	-10.81	0.05
17	SLU 4	-189	8	2008	-5.34	-10.81	0.05
17	SLU 5	-189	8	2008	-5.34	-10.81	0.05
17	SLU 6	-189	8	2008	-5.34	-10.81	0.05
17	SLU 7	-189	8	2008	-5.34	-10.81	0.05
17	SLU 8	-189	8	2008	-5.34	-10.81	0.05
17	SLU 9	-189	8	2008	-5.34	-10.81	0.05
17	SLU 10	-225	10	2477	-7.94	-13.06	0.07



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
17	SLU 11	-225	10	2477	-7.94	-13.06	0.07
17	SLU 12	-225	10	2477	-7.94	-13.06	0.07
17	SLU 13	-225	10	2477	-7.94	-13.06	0.07
17	SLU 14	-225	10	2477	-7.94	-13.06	0.07
17	SLU 15	-225	10	2477	-7.94	-13.06	0.07
17	SLU 16	-225	10	2477	-7.94	-13.06	0.07
17	SLU 17	-225	10	2477	-7.94	-13.06	0.07
17	SLU 18	-240	11	2678	-9.06	-14.03	0.08
17	SLU 19	-240	11	2678	-9.06	-14.03	0.08
17	SLU 20	-240	11	2678	-9.06	-14.03	0.08
17	SLU 21	-240	11	2678	-9.06	-14.03	0.08
17	SLU 22	-210	9	2306	-6.63	-12.12	0.06
17	SLU 23	-210	9	2306	-6.63	-12.12	0.06
17	SLU 24	-210	9	2306	-6.63	-12.12	0.06
17	SLU 25	-210	9	2306	-6.63	-12.12	0.06
17	SLU 26	-210	9	2306	-6.63	-12.12	0.06
17	SLU 27	-210	9	2306	-6.63	-12.12	0.06
17	SLU 28	-210	9	2306	-6.63	-12.12	0.06
17	SLU 29	-210	9	2306	-6.63	-12.12	0.06
17	SLU 30	-210	9	2306	-6.63	-12.12	0.06
17	SLU 31	-246	11	2775	-9.23	-14.38	0.08
17	SLU 32	-246	11	2775	-9.23	-14.38	0.08
17	SLU 33	-246	11	2775	-9.23	-14.38	0.08
17	SLU 34	-246	11	2775	-9.23	-14.38	0.08
17	SLU 35	-246	11	2775	-9.23	-14.38	0.08
17	SLU 36	-246	11	2775	-9.23	-14.38	0.08
17	SLU 37	-246	11	2775	-9.23	-14.38	0.08
17	SLU 38	-246	11	2775	-9.23	-14.38	0.08
17	SLU 39	-261	12	2976	-10.35	-15.34	0.09
17	SLU 40	-261	12	2976	-10.35	-15.34	0.09
17	SLU 41	-261	12	2976	-10.35	-15.34	0.09
17	SLU 42	-261	12	2976	-10.35	-15.34	0.09
17	SLU 43	-238	10	2508	-6.5	-13.6	0.07
17	SLU 44	-238	10	2508	-6.5	-13.6	0.07
17	SLU 45	-238	10	2508	-6.5	-13.6	0.07
17	SLU 46	-238	10	2508	-6.5	-13.6	0.07
17	SLU 47	-238	10	2508	-6.5	-13.6	0.07
17	SLU 48	-238	10	2508	-6.5	-13.6	0.07
17	SLU 49	-238	10	2508	-6.5	-13.6	0.07
17	SLU 50	-238	10	2508	-6.5	-13.6	0.07
17	SLU 51	-238	10	2508	-6.5	-13.6	0.07
17	SLU 52	-274	12	2978	-9.1	-15.85	0.09
17	SLU 53	-274	12	2978	-9.1	-15.85	0.09
17	SLU 54	-274	12	2978	-9.1	-15.85	0.09
17	SLU 55	-274	12	2978	-9.1	-15.85	0.09
17	SLU 56	-274	12	2978	-9.1	-15.85	0.09
17	SLU 57	-274	12	2978	-9.1	-15.85	0.09
17	SLU 58	-274	12	2978	-9.1	-15.85	0.09
17	SLU 59	-274	12	2978	-9.1	-15.85	0.09
17	SLU 60	-289	13	3179	-10.22	-16.82	0.09
17	SLU 61	-289	13	3179	-10.22	-16.82	0.09
17	SLU 62	-289	13	3179	-10.22	-16.82	0.09
17	SLU 63	-289	13	3179	-10.22	-16.82	0.09
17	SLU 64	-259	11	2806	-7.79	-14.91	0.07
17	SLU 65	-259	11	2806	-7.79	-14.91	0.07
17	SLU 66	-259	11	2806	-7.79	-14.91	0.07
17	SLU 67	-259	11	2806	-7.79	-14.91	0.07
17	SLU 68	-259	11	2806	-7.79	-14.91	0.07
17	SLU 69	-259	11	2806	-7.79	-14.91	0.07
17	SLU 70	-259	11	2806	-7.79	-14.91	0.07
17	SLU 71	-259	11	2806	-7.79	-14.91	0.07
17	SLU 72	-259	11	2806	-7.79	-14.91	0.07
17	SLU 73	-295	13	3275	-10.39	-17.17	0.09
17	SLU 74	-295	13	3275	-10.39	-17.17	0.09
17	SLU 75	-295	13	3275	-10.39	-17.17	0.09
17	SLU 76	-295	13	3275	-10.39	-17.17	0.09
17	SLU 77	-295	13	3275	-10.39	-17.17	0.09
17	SLU 78	-295	13	3275	-10.39	-17.17	0.09
17	SLU 79	-295	13	3275	-10.39	-17.17	0.09
17	SLU 80	-295	13	3275	-10.39	-17.17	0.09
17	SLU 81	-311	14	3476	-11.51	-18.13	0.1
17	SLU 82	-311	14	3476	-11.51	-18.13	0.1
17	SLU 83	-311	14	3476	-11.51	-18.13	0.1
17	SLU 84	-311	14	3476	-11.51	-18.13	0.1
17	SLE RA 1	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 2	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 3	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 4	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 5	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 6	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 7	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 8	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 9	-195	8	2093	-5.71	-11.18	0.06
17	SLE RA 10	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 11	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 12	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 13	-219	9	2406	-7.44	-12.69	0.07



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
17	SLE RA 14	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 15	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 16	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 17	-219	9	2406	-7.44	-12.69	0.07
17	SLE RA 18	-229	10	2540	-8.19	-13.33	0.07
17	SLE RA 19	-229	10	2540	-8.19	-13.33	0.07
17	SLE RA 20	-229	10	2540	-8.19	-13.33	0.07
17	SLE RA 21	-229	10	2540	-8.19	-13.33	0.07
17	SLE FR 1	-195	8	2093	-5.71	-11.18	0.06
17	SLE FR 2	-195	8	2093	-5.71	-11.18	0.06
17	SLE FR 3	-195	8	2093	-5.71	-11.18	0.06
17	SLE FR 4	-205	9	2227	-6.45	-11.83	0.06
17	SLE FR 5	-205	9	2227	-6.45	-11.83	0.06
17	SLE FR 6	-212	9	2316	-6.95	-12.26	0.06
17	SLE QP 1	-195	8	2093	-5.71	-11.18	0.06
17	SLE QP 2	-205	9	2227	-6.45	-11.83	0.06
17	SLD 1	-99	28	1918	-38.68	-3.74	0.12
17	SLD 2	-99	28	1918	-38.68	-3.74	0.12
17	SLD 3	110	-38	1429	9.32	6.83	0.03
17	SLD 4	110	-38	1429	9.32	6.83	0.03
17	SLD 5	-490	114	2875	-88.93	-25.43	0.23
17	SLD 6	-490	114	2875	-88.93	-25.43	0.23
17	SLD 7	206	-105	1247	71.09	9.8	-0.1
17	SLD 8	206	-105	1247	71.09	9.8	-0.1
17	SLD 9	-616	123	3207	-83.99	-33.45	0.22
17	SLD 10	-616	123	3207	-83.99	-33.45	0.22
17	SLD 11	80	-97	1579	76.03	1.77	-0.11
17	SLD 12	80	-97	1579	76.03	1.77	-0.11
17	SLD 13	-520	56	3025	-22.22	-30.48	0.1
17	SLD 14	-520	56	3025	-22.22	-30.48	0.1
17	SLD 15	-311	-10	2537	25.78	-19.92	0
17	SLD 16	-311	-10	2537	25.78	-19.92	0
17	SLV 1	14	60	1554	-89.03	5.61	0.22
17	SLV 2	14	60	1554	-89.03	5.61	0.22
17	SLV 3	563	-111	306	35.33	33.4	-0.03
17	SLV 4	563	-111	306	35.33	33.4	-0.03
17	SLV 5	-971	283	3918	-219.84	-48.73	0.5
17	SLV 6	-971	283	3918	-219.84	-48.73	0.5
17	SLV 7	857	-286	-242	194.7	43.87	-0.36
17	SLV 8	857	-286	-242	194.7	43.87	-0.36
17	SLV 9	-1267	303	4696	-207.6	-67.53	0.48
17	SLV 10	-1267	303	4696	-207.6	-67.53	0.48
17	SLV 11	561	-265	537	206.94	25.08	-0.38
17	SLV 12	561	-265	537	206.94	25.08	-0.38
17	SLV 13	-972	128	4148	-48.23	-57.05	0.16
17	SLV 14	-972	128	4148	-48.23	-57.05	0.16
17	SLV 15	-424	-43	2901	76.13	-29.27	-0.1
17	SLV 16	-424	-43	2901	76.13	-29.27	-0.1
18	SLU 1	-98	1	1949	-4.8	-3.39	0.07
18	SLU 2	-98	1	1949	-4.8	-3.39	0.07
18	SLU 3	-98	1	1949	-4.8	-3.39	0.07
18	SLU 4	-98	1	1949	-4.8	-3.39	0.07
18	SLU 5	-98	1	1949	-4.8	-3.39	0.07
18	SLU 6	-98	1	1949	-4.8	-3.39	0.07
18	SLU 7	-98	1	1949	-4.8	-3.39	0.07
18	SLU 8	-98	1	1949	-4.8	-3.39	0.07
18	SLU 9	-98	1	1949	-4.8	-3.39	0.07
18	SLU 10	-109	1	2387	-7.22	-3.66	0.08
18	SLU 11	-109	1	2387	-7.22	-3.66	0.08
18	SLU 12	-109	1	2387	-7.22	-3.66	0.08
18	SLU 13	-109	1	2387	-7.22	-3.66	0.08
18	SLU 14	-109	1	2387	-7.22	-3.66	0.08
18	SLU 15	-109	1	2387	-7.22	-3.66	0.08
18	SLU 16	-109	1	2387	-7.22	-3.66	0.08
18	SLU 17	-109	1	2387	-7.22	-3.66	0.08
18	SLU 18	-113	1	2575	-8.26	-3.78	0.09
18	SLU 19	-113	1	2575	-8.26	-3.78	0.09
18	SLU 20	-113	1	2575	-8.26	-3.78	0.09
18	SLU 21	-113	1	2575	-8.26	-3.78	0.09
18	SLU 22	-103	1	2229	-5.96	-3.5	0.07
18	SLU 23	-103	1	2229	-5.96	-3.5	0.07
18	SLU 24	-103	1	2229	-5.96	-3.5	0.07
18	SLU 25	-103	1	2229	-5.96	-3.5	0.07
18	SLU 26	-103	1	2229	-5.96	-3.5	0.07
18	SLU 27	-103	1	2229	-5.96	-3.5	0.07
18	SLU 28	-103	1	2229	-5.96	-3.5	0.07
18	SLU 29	-103	1	2229	-5.96	-3.5	0.07
18	SLU 30	-103	1	2229	-5.96	-3.5	0.07
18	SLU 31	-113	1	2668	-8.39	-3.78	0.09
18	SLU 32	-113	1	2668	-8.39	-3.78	0.09
18	SLU 33	-113	1	2668	-8.39	-3.78	0.09
18	SLU 34	-113	1	2668	-8.39	-3.78	0.09
18	SLU 35	-113	1	2668	-8.39	-3.78	0.09
18	SLU 36	-113	1	2668	-8.39	-3.78	0.09
18	SLU 37	-113	1	2668	-8.39	-3.78	0.09
18	SLU 38	-113	1	2668	-8.39	-3.78	0.09
18	SLU 39	-117	1	2855	-9.43	-3.9	0.09



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
18	SLU 40	-117	1	2855	-9.43	-3.9	0.09
18	SLU 41	-117	1	2855	-9.43	-3.9	0.09
18	SLU 42	-117	1	2855	-9.43	-3.9	0.09
18	SLU 43	-126	1	2437	-5.84	-4.37	0.09
18	SLU 44	-126	1	2437	-5.84	-4.37	0.09
18	SLU 45	-126	1	2437	-5.84	-4.37	0.09
18	SLU 46	-126	1	2437	-5.84	-4.37	0.09
18	SLU 47	-126	1	2437	-5.84	-4.37	0.09
18	SLU 48	-126	1	2437	-5.84	-4.37	0.09
18	SLU 49	-126	1	2437	-5.84	-4.37	0.09
18	SLU 50	-126	1	2437	-5.84	-4.37	0.09
18	SLU 51	-126	1	2437	-5.84	-4.37	0.09
18	SLU 52	-137	1	2876	-8.26	-4.64	0.1
18	SLU 53	-137	1	2876	-8.26	-4.64	0.1
18	SLU 54	-137	1	2876	-8.26	-4.64	0.1
18	SLU 55	-137	1	2876	-8.26	-4.64	0.1
18	SLU 56	-137	1	2876	-8.26	-4.64	0.1
18	SLU 57	-137	1	2876	-8.26	-4.64	0.1
18	SLU 58	-137	1	2876	-8.26	-4.64	0.1
18	SLU 59	-137	1	2876	-8.26	-4.64	0.1
18	SLU 60	-141	1	3063	-9.3	-4.76	0.11
18	SLU 61	-141	1	3063	-9.3	-4.76	0.11
18	SLU 62	-141	1	3063	-9.3	-4.76	0.11
18	SLU 63	-141	1	3063	-9.3	-4.76	0.11
18	SLU 64	-130	1	2718	-7	-4.48	0.09
18	SLU 65	-130	1	2718	-7	-4.48	0.09
18	SLU 66	-130	1	2718	-7	-4.48	0.09
18	SLU 67	-130	1	2718	-7	-4.48	0.09
18	SLU 68	-130	1	2718	-7	-4.48	0.09
18	SLU 69	-130	1	2718	-7	-4.48	0.09
18	SLU 70	-130	1	2718	-7	-4.48	0.09
18	SLU 71	-130	1	2718	-7	-4.48	0.09
18	SLU 72	-130	1	2718	-7	-4.48	0.09
18	SLU 73	-141	1	3156	-9.43	-4.76	0.11
18	SLU 74	-141	1	3156	-9.43	-4.76	0.11
18	SLU 75	-141	1	3156	-9.43	-4.76	0.11
18	SLU 76	-141	1	3156	-9.43	-4.76	0.11
18	SLU 77	-141	1	3156	-9.43	-4.76	0.11
18	SLU 78	-141	1	3156	-9.43	-4.76	0.11
18	SLU 79	-141	1	3156	-9.43	-4.76	0.11
18	SLU 80	-141	1	3156	-9.43	-4.76	0.11
18	SLU 81	-145	1	3344	-10.47	-4.87	0.11
18	SLU 82	-145	1	3344	-10.47	-4.87	0.11
18	SLU 83	-145	1	3344	-10.47	-4.87	0.11
18	SLU 84	-145	1	3344	-10.47	-4.87	0.11
18	SLE RA 1	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 2	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 3	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 4	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 5	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 6	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 7	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 8	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 9	-99	1	2029	-5.13	-3.42	0.07
18	SLE RA 10	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 11	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 12	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 13	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 14	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 15	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 16	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 17	-106	1	2321	-6.75	-3.61	0.08
18	SLE RA 18	-109	1	2446	-7.44	-3.68	0.08
18	SLE RA 19	-109	1	2446	-7.44	-3.68	0.08
18	SLE RA 20	-109	1	2446	-7.44	-3.68	0.08
18	SLE RA 21	-109	1	2446	-7.44	-3.68	0.08
18	SLE FR 1	-99	1	2029	-5.13	-3.42	0.07
18	SLE FR 2	-99	1	2029	-5.13	-3.42	0.07
18	SLE FR 3	-99	1	2029	-5.13	-3.42	0.07
18	SLE FR 4	-102	1	2154	-5.82	-3.5	0.07
18	SLE FR 5	-102	1	2154	-5.82	-3.5	0.07
18	SLE FR 6	-104	1	2238	-6.29	-3.55	0.08
18	SLE QP 1	-99	1	2029	-5.13	-3.42	0.07
18	SLE QP 2	-102	1	2154	-5.82	-3.5	0.07
18	SLD 1	25	10	1751	-34.96	3.93	-0.3
18	SLD 2	25	10	1751	-34.96	3.93	-0.3
18	SLD 3	280	-37	2021	7.69	13.65	0.23
18	SLD 4	280	-37	2021	7.69	13.65	0.23
18	SLD 5	-450	74	1623	-79.24	-16	-0.84
18	SLD 6	-450	74	1623	-79.24	-16	-0.84
18	SLD 7	398	-81	2524	62.91	16.38	0.92
18	SLD 8	398	-81	2524	62.91	16.38	0.92
18	SLD 9	-602	83	1784	-74.56	-23.38	-0.77
18	SLD 10	-602	83	1784	-74.56	-23.38	-0.77
18	SLD 11	245	-72	2685	67.6	9	0.99
18	SLD 12	245	-72	2685	67.6	9	0.99
18	SLD 13	-484	39	2287	-19.33	-20.65	-0.08



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
18	SLD 14	-484	39	2287	-19.33	-20.65	-0.08
18	SLD 15	-230	-8	2558	23.31	-10.93	0.45
18	SLD 16	-230	-8	2558	23.31	-10.93	0.45
18	SLV 1	160	27	1182	-80.59	12.48	-0.89
18	SLV 2	160	27	1182	-80.59	12.48	-0.89
18	SLV 3	830	-94	1869	29.94	38.12	0.48
18	SLV 4	830	-94	1869	29.94	38.12	0.48
18	SLV 5	-1040	192	821	-195.9	-37.59	-2.28
18	SLV 6	-1040	192	821	-195.9	-37.59	-2.28
18	SLV 7	1194	-211	3110	172.55	47.87	2.27
18	SLV 8	1194	-211	3110	172.55	47.87	2.27
18	SLV 9	-1399	213	1198	-184.2	-54.87	-2.12
18	SLV 10	-1399	213	1198	-184.2	-54.87	-2.12
18	SLV 11	836	-190	3487	184.25	30.59	2.43
18	SLV 12	836	-190	3487	184.25	30.59	2.43
18	SLV 13	-1035	96	2439	-41.59	-45.12	-0.33
18	SLV 14	-1035	96	2439	-41.59	-45.12	-0.33
18	SLV 15	-365	-25	3126	68.95	-19.48	1.04
18	SLV 16	-365	-25	3126	68.95	-19.48	1.04
19	SLU 1	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 2	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 3	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 4	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 5	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 6	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 7	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 8	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 9	-32	-4	1935	-3.58	-0.69	0.1
19	SLU 10	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 11	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 12	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 13	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 14	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 15	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 16	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 17	-27	-6	2352	-5.55	-0.46	0.13
19	SLU 18	-24	-7	2531	-6.39	-0.36	0.14
19	SLU 19	-24	-7	2531	-6.39	-0.36	0.14
19	SLU 20	-24	-7	2531	-6.39	-0.36	0.14
19	SLU 21	-24	-7	2531	-6.39	-0.36	0.14
19	SLU 22	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 23	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 24	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 25	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 26	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 27	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 28	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 29	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 30	-25	-5	2203	-4.51	-0.44	0.11
19	SLU 31	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 32	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 33	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 34	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 35	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 36	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 37	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 38	-20	-7	2620	-6.47	-0.21	0.14
19	SLU 39	-17	-8	2799	-7.32	-0.11	0.15
19	SLU 40	-17	-8	2799	-7.32	-0.11	0.15
19	SLU 41	-17	-8	2799	-7.32	-0.11	0.15
19	SLU 42	-17	-8	2799	-7.32	-0.11	0.15
19	SLU 43	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 44	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 45	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 46	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 47	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 48	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 49	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 50	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 51	-45	-5	2423	-4.34	-0.98	0.13
19	SLU 52	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 53	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 54	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 55	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 56	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 57	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 58	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 59	-39	-7	2841	-6.31	-0.75	0.15
19	SLU 60	-37	-7	3020	-7.15	-0.65	0.17
19	SLU 61	-37	-7	3020	-7.15	-0.65	0.17
19	SLU 62	-37	-7	3020	-7.15	-0.65	0.17
19	SLU 63	-37	-7	3020	-7.15	-0.65	0.17
19	SLU 64	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 65	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 66	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 67	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 68	-37	-6	2691	-5.26	-0.73	0.14



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
19	SLU 69	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 70	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 71	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 72	-37	-6	2691	-5.26	-0.73	0.14
19	SLU 73	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 74	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 75	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 76	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 77	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 78	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 79	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 80	-32	-8	3109	-7.23	-0.5	0.17
19	SLU 81	-29	-8	3288	-8.07	-0.4	0.18
19	SLU 82	-29	-8	3288	-8.07	-0.4	0.18
19	SLU 83	-29	-8	3288	-8.07	-0.4	0.18
19	SLU 84	-29	-8	3288	-8.07	-0.4	0.18
19	SLE RA 1	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 2	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 3	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 4	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 5	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 6	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 7	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 8	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 9	-30	-4	2011	-3.85	-0.62	0.11
19	SLE RA 10	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 11	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 12	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 13	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 14	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 15	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 16	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 17	-27	-6	2290	-5.16	-0.46	0.12
19	SLE RA 18	-25	-6	2409	-5.72	-0.4	0.13
19	SLE RA 19	-25	-6	2409	-5.72	-0.4	0.13
19	SLE RA 20	-25	-6	2409	-5.72	-0.4	0.13
19	SLE RA 21	-25	-6	2409	-5.72	-0.4	0.13
19	SLE FR 1	-30	-4	2011	-3.85	-0.62	0.11
19	SLE FR 2	-30	-4	2011	-3.85	-0.62	0.11
19	SLE FR 3	-30	-4	2011	-3.85	-0.62	0.11
19	SLE FR 4	-29	-5	2131	-4.41	-0.55	0.11
19	SLE FR 5	-29	-5	2131	-4.41	-0.55	0.11
19	SLE FR 6	-28	-5	2210	-4.78	-0.51	0.12
19	SLE QP 1	-30	-4	2011	-3.85	-0.62	0.11
19	SLE QP 2	-29	-5	2131	-4.41	-0.55	0.11
19	SLD 1	124	-1	1924	-29.61	5.16	0.01
19	SLD 2	124	-1	1924	-29.61	5.16	0.01
19	SLD 3	414	-42	2094	6.11	12.42	0.44
19	SLD 4	414	-42	2094	6.11	12.42	0.44
19	SLD 5	-422	59	1811	-66.13	-9.84	-0.57
19	SLD 6	-422	59	1811	-66.13	-9.84	-0.57
19	SLD 7	543	-78	2377	52.91	14.34	0.87
19	SLD 8	543	-78	2377	52.91	14.34	0.87
19	SLD 9	-601	68	1884	-61.73	-15.45	-0.64
19	SLD 10	-601	68	1884	-61.73	-15.45	-0.64
19	SLD 11	365	-69	2450	57.31	8.74	0.8
19	SLD 12	365	-69	2450	57.31	8.74	0.8
19	SLD 13	-471	32	2167	-14.92	-13.52	-0.22
19	SLD 14	-471	32	2167	-14.92	-13.52	-0.22
19	SLD 15	-182	-9	2337	20.79	-6.27	0.22
19	SLD 16	-182	-9	2337	20.79	-6.27	0.22
19	SLV 1	286	10	1630	-69.07	11.69	-0.16
19	SLV 2	286	10	1630	-69.07	11.69	-0.16
19	SLV 3	1053	-97	2060	23.49	30.99	0.95
19	SLV 4	1053	-97	2060	23.49	30.99	0.95
19	SLV 5	-1097	161	1327	-164.2	-26.16	-1.65
19	SLV 6	-1097	161	1327	-164.2	-26.16	-1.65
19	SLV 7	1458	-194	2763	144.35	38.19	2.05
19	SLV 8	1458	-194	2763	144.35	38.19	2.05
19	SLV 9	-1516	185	1499	-153.17	-39.3	-1.82
19	SLV 10	-1516	185	1499	-153.17	-39.3	-1.82
19	SLV 11	1039	-171	2934	155.38	25.06	1.88
19	SLV 12	1039	-171	2934	155.38	25.06	1.88
19	SLV 13	-1110	87	2201	-32.31	-32.1	-0.72
19	SLV 14	-1110	87	2201	-32.31	-32.1	-0.72
19	SLV 15	-344	-20	2632	60.26	-12.79	0.39
19	SLV 16	-344	-20	2632	60.26	-12.79	0.39
20	SLU 1	10	-8	1934	-2.09	0.63	0.02
20	SLU 2	10	-8	1934	-2.09	0.63	0.02
20	SLU 3	10	-8	1934	-2.09	0.63	0.02
20	SLU 4	10	-8	1934	-2.09	0.63	0.02
20	SLU 5	10	-8	1934	-2.09	0.63	0.02
20	SLU 6	10	-8	1934	-2.09	0.63	0.02
20	SLU 7	10	-8	1934	-2.09	0.63	0.02
20	SLU 8	10	-8	1934	-2.09	0.63	0.02
20	SLU 9	10	-8	1934	-2.09	0.63	0.02
20	SLU 10	26	-10	2333	-3.47	1.16	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
20	SLU 11	26	-10	2333	-3.47	1.16	0.03
20	SLU 12	26	-10	2333	-3.47	1.16	0.03
20	SLU 13	26	-10	2333	-3.47	1.16	0.03
20	SLU 14	26	-10	2333	-3.47	1.16	0.03
20	SLU 15	26	-10	2333	-3.47	1.16	0.03
20	SLU 16	26	-10	2333	-3.47	1.16	0.03
20	SLU 17	26	-10	2333	-3.47	1.16	0.03
20	SLU 18	33	-11	2504	-4.06	1.39	0.03
20	SLU 19	33	-11	2504	-4.06	1.39	0.03
20	SLU 20	33	-11	2504	-4.06	1.39	0.03
20	SLU 21	33	-11	2504	-4.06	1.39	0.03
20	SLU 22	25	-9	2189	-2.73	1.06	0.03
20	SLU 23	25	-9	2189	-2.73	1.06	0.03
20	SLU 24	25	-9	2189	-2.73	1.06	0.03
20	SLU 25	25	-9	2189	-2.73	1.06	0.03
20	SLU 26	25	-9	2189	-2.73	1.06	0.03
20	SLU 27	25	-9	2189	-2.73	1.06	0.03
20	SLU 28	25	-9	2189	-2.73	1.06	0.03
20	SLU 29	25	-9	2189	-2.73	1.06	0.03
20	SLU 30	25	-9	2189	-2.73	1.06	0.03
20	SLU 31	41	-12	2588	-4.11	1.6	0.03
20	SLU 32	41	-12	2588	-4.11	1.6	0.03
20	SLU 33	41	-12	2588	-4.11	1.6	0.03
20	SLU 34	41	-12	2588	-4.11	1.6	0.03
20	SLU 35	41	-12	2588	-4.11	1.6	0.03
20	SLU 36	41	-12	2588	-4.11	1.6	0.03
20	SLU 37	41	-12	2588	-4.11	1.6	0.03
20	SLU 38	41	-12	2588	-4.11	1.6	0.03
20	SLU 39	48	-13	2759	-4.7	1.82	0.04
20	SLU 40	48	-13	2759	-4.7	1.82	0.04
20	SLU 41	48	-13	2759	-4.7	1.82	0.04
20	SLU 42	48	-13	2759	-4.7	1.82	0.04
20	SLU 43	8	-9	2426	-2.5	0.67	0.03
20	SLU 44	8	-9	2426	-2.5	0.67	0.03
20	SLU 45	8	-9	2426	-2.5	0.67	0.03
20	SLU 46	8	-9	2426	-2.5	0.67	0.03
20	SLU 47	8	-9	2426	-2.5	0.67	0.03
20	SLU 48	8	-9	2426	-2.5	0.67	0.03
20	SLU 49	8	-9	2426	-2.5	0.67	0.03
20	SLU 50	8	-9	2426	-2.5	0.67	0.03
20	SLU 51	8	-9	2426	-2.5	0.67	0.03
20	SLU 52	24	-12	2825	-3.88	1.21	0.04
20	SLU 53	24	-12	2825	-3.88	1.21	0.04
20	SLU 54	24	-12	2825	-3.88	1.21	0.04
20	SLU 55	24	-12	2825	-3.88	1.21	0.04
20	SLU 56	24	-12	2825	-3.88	1.21	0.04
20	SLU 57	24	-12	2825	-3.88	1.21	0.04
20	SLU 58	24	-12	2825	-3.88	1.21	0.04
20	SLU 59	24	-12	2825	-3.88	1.21	0.04
20	SLU 60	31	-13	2996	-4.47	1.44	0.04
20	SLU 61	31	-13	2996	-4.47	1.44	0.04
20	SLU 62	31	-13	2996	-4.47	1.44	0.04
20	SLU 63	31	-13	2996	-4.47	1.44	0.04
20	SLU 64	23	-11	2682	-3.14	1.1	0.03
20	SLU 65	23	-11	2682	-3.14	1.1	0.03
20	SLU 66	23	-11	2682	-3.14	1.1	0.03
20	SLU 67	23	-11	2682	-3.14	1.1	0.03
20	SLU 68	23	-11	2682	-3.14	1.1	0.03
20	SLU 69	23	-11	2682	-3.14	1.1	0.03
20	SLU 70	23	-11	2682	-3.14	1.1	0.03
20	SLU 71	23	-11	2682	-3.14	1.1	0.03
20	SLU 72	23	-11	2682	-3.14	1.1	0.03
20	SLU 73	39	-14	3081	-4.52	1.64	0.04
20	SLU 74	39	-14	3081	-4.52	1.64	0.04
20	SLU 75	39	-14	3081	-4.52	1.64	0.04
20	SLU 76	39	-14	3081	-4.52	1.64	0.04
20	SLU 77	39	-14	3081	-4.52	1.64	0.04
20	SLU 78	39	-14	3081	-4.52	1.64	0.04
20	SLU 79	39	-14	3081	-4.52	1.64	0.04
20	SLU 80	39	-14	3081	-4.52	1.64	0.04
20	SLU 81	46	-15	3252	-5.11	1.87	0.04
20	SLU 82	46	-15	3252	-5.11	1.87	0.04
20	SLU 83	46	-15	3252	-5.11	1.87	0.04
20	SLU 84	46	-15	3252	-5.11	1.87	0.04
20	SLE RA 1	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 2	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 3	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 4	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 5	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 6	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 7	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 8	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 9	14	-8	2007	-2.27	0.75	0.02
20	SLE RA 10	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 11	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 12	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 13	25	-10	2273	-3.19	1.11	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
20	SLE RA 14	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 15	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 16	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 17	25	-10	2273	-3.19	1.11	0.03
20	SLE RA 18	30	-11	2387	-3.59	1.26	0.03
20	SLE RA 19	30	-11	2387	-3.59	1.26	0.03
20	SLE RA 20	30	-11	2387	-3.59	1.26	0.03
20	SLE RA 21	30	-11	2387	-3.59	1.26	0.03
20	SLE FR 1	14	-8	2007	-2.27	0.75	0.02
20	SLE FR 2	14	-8	2007	-2.27	0.75	0.02
20	SLE FR 3	14	-8	2007	-2.27	0.75	0.02
20	SLE FR 4	19	-9	2121	-2.67	0.91	0.03
20	SLE FR 5	19	-9	2121	-2.67	0.91	0.03
20	SLE FR 6	22	-9	2197	-2.93	1.01	0.03
20	SLE QP 1	14	-8	2007	-2.27	0.75	0.02
20	SLE QP 2	19	-9	2121	-2.67	0.91	0.03
20	SLD 1	179	-10	2002	-10.01	5.95	0.01
20	SLD 2	179	-10	2002	-10.01	5.95	0.01
20	SLD 3	473	-41	2107	18.69	12.28	0.08
20	SLD 4	473	-41	2107	18.69	12.28	0.08
20	SLD 5	-380	39	1925	-48.39	-7.18	-0.08
20	SLD 6	-380	39	1925	-48.39	-7.18	-0.08
20	SLD 7	602	-66	2276	47.26	13.92	0.14
20	SLD 8	602	-66	2276	47.26	13.92	0.14
20	SLD 9	-564	49	1965	-52.59	-12.11	-0.09
20	SLD 10	-564	49	1965	-52.59	-12.11	-0.09
20	SLD 11	418	-56	2316	43.05	8.99	0.13
20	SLD 12	418	-56	2316	43.05	8.99	0.13
20	SLD 13	-436	24	2135	-24.02	-10.47	-0.03
20	SLD 14	-436	24	2135	-24.02	-10.47	-0.03
20	SLD 15	-141	-8	2240	4.67	-4.14	0.04
20	SLD 16	-141	-8	2240	4.67	-4.14	0.04
20	SLV 1	348	-7	1829	-22.31	11.73	-0.01
20	SLV 2	348	-7	1829	-22.31	11.73	-0.01
20	SLV 3	1129	-89	2095	52.02	28.56	0.16
20	SLV 4	1129	-89	2095	52.02	28.56	0.16
20	SLV 5	-1066	116	1630	-121.31	-21.38	-0.24
20	SLV 6	-1066	116	1630	-121.31	-21.38	-0.24
20	SLV 7	1536	-157	2516	126.49	34.73	0.33
20	SLV 8	1536	-157	2516	126.49	34.73	0.33
20	SLV 9	-1498	140	1726	-131.82	-32.92	-0.27
20	SLV 10	-1498	140	1726	-131.82	-32.92	-0.27
20	SLV 11	1104	-134	2611	115.97	23.19	0.29
20	SLV 12	1104	-134	2611	115.97	23.19	0.29
20	SLV 13	-1091	72	2147	-57.36	-26.75	-0.11
20	SLV 14	-1091	72	2147	-57.36	-26.75	-0.11
20	SLV 15	-311	-10	2413	16.98	-9.92	0.06
20	SLV 16	-311	-10	2413	16.98	-9.92	0.06
21	SLU 1	25	-9	1956	-0.93	0.66	-0.03
21	SLU 2	25	-9	1956	-0.93	0.66	-0.03
21	SLU 3	25	-9	1956	-0.93	0.66	-0.03
21	SLU 4	25	-9	1956	-0.93	0.66	-0.03
21	SLU 5	25	-9	1956	-0.93	0.66	-0.03
21	SLU 6	25	-9	1956	-0.93	0.66	-0.03
21	SLU 7	25	-9	1956	-0.93	0.66	-0.03
21	SLU 8	25	-9	1956	-0.93	0.66	-0.03
21	SLU 9	25	-9	1956	-0.93	0.66	-0.03
21	SLU 10	45	-12	2343	-1.81	1.15	-0.03
21	SLU 11	45	-12	2343	-1.81	1.15	-0.03
21	SLU 12	45	-12	2343	-1.81	1.15	-0.03
21	SLU 13	45	-12	2343	-1.81	1.15	-0.03
21	SLU 14	45	-12	2343	-1.81	1.15	-0.03
21	SLU 15	45	-12	2343	-1.81	1.15	-0.03
21	SLU 16	45	-12	2343	-1.81	1.15	-0.03
21	SLU 17	45	-12	2343	-1.81	1.15	-0.03
21	SLU 18	53	-13	2509	-2.19	1.36	-0.04
21	SLU 19	53	-13	2509	-2.19	1.36	-0.04
21	SLU 20	53	-13	2509	-2.19	1.36	-0.04
21	SLU 21	53	-13	2509	-2.19	1.36	-0.04
21	SLU 22	44	-11	2202	-1.33	1.13	-0.03
21	SLU 23	44	-11	2202	-1.33	1.13	-0.03
21	SLU 24	44	-11	2202	-1.33	1.13	-0.03
21	SLU 25	44	-11	2202	-1.33	1.13	-0.03
21	SLU 26	44	-11	2202	-1.33	1.13	-0.03
21	SLU 27	44	-11	2202	-1.33	1.13	-0.03
21	SLU 28	44	-11	2202	-1.33	1.13	-0.03
21	SLU 29	44	-11	2202	-1.33	1.13	-0.03
21	SLU 30	44	-11	2202	-1.33	1.13	-0.03
21	SLU 31	64	-14	2589	-2.21	1.62	-0.04
21	SLU 32	64	-14	2589	-2.21	1.62	-0.04
21	SLU 33	64	-14	2589	-2.21	1.62	-0.04
21	SLU 34	64	-14	2589	-2.21	1.62	-0.04
21	SLU 35	64	-14	2589	-2.21	1.62	-0.04
21	SLU 36	64	-14	2589	-2.21	1.62	-0.04
21	SLU 37	64	-14	2589	-2.21	1.62	-0.04
21	SLU 38	64	-14	2589	-2.21	1.62	-0.04
21	SLU 39	72	-15	2754	-2.59	1.83	-0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
21	SLU 40	72	-15	2754	-2.59	1.83	-0.04
21	SLU 41	72	-15	2754	-2.59	1.83	-0.04
21	SLU 42	72	-15	2754	-2.59	1.83	-0.04
21	SLU 43	26	-11	2458	-1.07	0.7	-0.03
21	SLU 44	26	-11	2458	-1.07	0.7	-0.03
21	SLU 45	26	-11	2458	-1.07	0.7	-0.03
21	SLU 46	26	-11	2458	-1.07	0.7	-0.03
21	SLU 47	26	-11	2458	-1.07	0.7	-0.03
21	SLU 48	26	-11	2458	-1.07	0.7	-0.03
21	SLU 49	26	-11	2458	-1.07	0.7	-0.03
21	SLU 50	26	-11	2458	-1.07	0.7	-0.03
21	SLU 51	26	-11	2458	-1.07	0.7	-0.03
21	SLU 52	46	-14	2845	-1.95	1.19	-0.04
21	SLU 53	46	-14	2845	-1.95	1.19	-0.04
21	SLU 54	46	-14	2845	-1.95	1.19	-0.04
21	SLU 55	46	-14	2845	-1.95	1.19	-0.04
21	SLU 56	46	-14	2845	-1.95	1.19	-0.04
21	SLU 57	46	-14	2845	-1.95	1.19	-0.04
21	SLU 58	46	-14	2845	-1.95	1.19	-0.04
21	SLU 59	46	-14	2845	-1.95	1.19	-0.04
21	SLU 60	55	-15	3011	-2.33	1.4	-0.04
21	SLU 61	55	-15	3011	-2.33	1.4	-0.04
21	SLU 62	55	-15	3011	-2.33	1.4	-0.04
21	SLU 63	55	-15	3011	-2.33	1.4	-0.04
21	SLU 64	45	-13	2704	-1.47	1.16	-0.04
21	SLU 65	45	-13	2704	-1.47	1.16	-0.04
21	SLU 66	45	-13	2704	-1.47	1.16	-0.04
21	SLU 67	45	-13	2704	-1.47	1.16	-0.04
21	SLU 68	45	-13	2704	-1.47	1.16	-0.04
21	SLU 69	45	-13	2704	-1.47	1.16	-0.04
21	SLU 70	45	-13	2704	-1.47	1.16	-0.04
21	SLU 71	45	-13	2704	-1.47	1.16	-0.04
21	SLU 72	45	-13	2704	-1.47	1.16	-0.04
21	SLU 73	65	-16	3091	-2.35	1.65	-0.04
21	SLU 74	65	-16	3091	-2.35	1.65	-0.04
21	SLU 75	65	-16	3091	-2.35	1.65	-0.04
21	SLU 76	65	-16	3091	-2.35	1.65	-0.04
21	SLU 77	65	-16	3091	-2.35	1.65	-0.04
21	SLU 78	65	-16	3091	-2.35	1.65	-0.04
21	SLU 79	65	-16	3091	-2.35	1.65	-0.04
21	SLU 80	65	-16	3091	-2.35	1.65	-0.04
21	SLU 81	73	-17	3257	-2.73	1.87	-0.05
21	SLU 82	73	-17	3257	-2.73	1.87	-0.05
21	SLU 83	73	-17	3257	-2.73	1.87	-0.05
21	SLU 84	73	-17	3257	-2.73	1.87	-0.05
21	SLE RA 1	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 2	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 3	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 4	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 5	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 6	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 7	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 8	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 9	31	-9	2026	-1.04	0.79	-0.03
21	SLE RA 10	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 11	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 12	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 13	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 14	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 15	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 16	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 17	44	-11	2284	-1.63	1.12	-0.03
21	SLE RA 18	49	-12	2395	-1.88	1.26	-0.03
21	SLE RA 19	49	-12	2395	-1.88	1.26	-0.03
21	SLE RA 20	49	-12	2395	-1.88	1.26	-0.03
21	SLE RA 21	49	-12	2395	-1.88	1.26	-0.03
21	SLE FR 1	31	-9	2026	-1.04	0.79	-0.03
21	SLE FR 2	31	-9	2026	-1.04	0.79	-0.03
21	SLE FR 3	31	-9	2026	-1.04	0.79	-0.03
21	SLE FR 4	36	-10	2137	-1.3	0.93	-0.03
21	SLE FR 5	36	-10	2137	-1.3	0.93	-0.03
21	SLE FR 6	40	-11	2210	-1.46	1.03	-0.03
21	SLE QP 1	31	-9	2026	-1.04	0.79	-0.03
21	SLE QP 2	36	-10	2137	-1.3	0.93	-0.03
21	SLD 1	199	-13	2206	-5.72	5.99	-0.03
21	SLD 2	199	-13	2206	-5.72	5.99	-0.03
21	SLD 3	503	-42	2271	16.65	13.17	-0.09
21	SLD 4	503	-42	2271	16.65	13.17	-0.09
21	SLD 5	-375	32	2058	-36.55	-8.43	0.06
21	SLD 6	-375	32	2058	-36.55	-8.43	0.06
21	SLD 7	637	-63	2277	38.01	15.49	-0.14
21	SLD 8	637	-63	2277	38.01	15.49	-0.14
21	SLD 9	-564	42	1997	-40.6	-13.62	0.08
21	SLD 10	-564	42	1997	-40.6	-13.62	0.08
21	SLD 11	448	-52	2216	33.95	10.3	-0.12
21	SLD 12	448	-52	2216	33.95	10.3	-0.12
21	SLD 13	-431	21	2002	-19.24	-11.3	0.03



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
21	SLD 14	-431	21	2002	-19.24	-11.3	0.03
21	SLD 15	-127	-7	2068	3.13	-4.13	-0.03
21	SLD 16	-127	-7	2068	3.13	-4.13	-0.03
21	SLV 1	372	-14	2297	-13.45	11.66	-0.03
21	SLV 2	372	-14	2297	-13.45	11.66	-0.03
21	SLV 3	1177	-88	2458	44.46	30.75	-0.19
21	SLV 4	1177	-88	2458	44.46	30.75	-0.19
21	SLV 5	-1084	101	1939	-92.78	-24.8	0.2
21	SLV 6	-1084	101	1939	-92.78	-24.8	0.2
21	SLV 7	1600	-145	2478	100.27	38.83	-0.31
21	SLV 8	1600	-145	2478	100.27	38.83	-0.31
21	SLV 9	-1527	125	1795	-102.86	-36.96	0.25
21	SLV 10	-1527	125	1795	-102.86	-36.96	0.25
21	SLV 11	1157	-121	2334	90.19	26.67	-0.26
21	SLV 12	1157	-121	2334	90.19	26.67	-0.26
21	SLV 13	-1104	67	1815	-47.06	-28.88	0.13
21	SLV 14	-1104	67	1815	-47.06	-28.88	0.13
21	SLV 15	-299	-6	1977	10.86	-9.79	-0.03
21	SLV 16	-299	-6	1977	10.86	-9.79	-0.03
22	SLU 1	57	-10	2006	-0.19	1.96	-0.07
22	SLU 2	57	-10	2006	-0.19	1.96	-0.07
22	SLU 3	57	-10	2006	-0.19	1.96	-0.07
22	SLU 4	57	-10	2006	-0.19	1.96	-0.07
22	SLU 5	57	-10	2006	-0.19	1.96	-0.07
22	SLU 6	57	-10	2006	-0.19	1.96	-0.07
22	SLU 7	57	-10	2006	-0.19	1.96	-0.07
22	SLU 8	57	-10	2006	-0.19	1.96	-0.07
22	SLU 9	57	-10	2006	-0.19	1.96	-0.07
22	SLU 10	84	-13	2388	-0.67	2.83	-0.09
22	SLU 11	84	-13	2388	-0.67	2.83	-0.09
22	SLU 12	84	-13	2388	-0.67	2.83	-0.09
22	SLU 13	84	-13	2388	-0.67	2.83	-0.09
22	SLU 14	84	-13	2388	-0.67	2.83	-0.09
22	SLU 15	84	-13	2388	-0.67	2.83	-0.09
22	SLU 16	84	-13	2388	-0.67	2.83	-0.09
22	SLU 17	84	-13	2388	-0.67	2.83	-0.09
22	SLU 18	96	-14	2551	-0.88	3.2	-0.09
22	SLU 19	96	-14	2551	-0.88	3.2	-0.09
22	SLU 20	96	-14	2551	-0.88	3.2	-0.09
22	SLU 21	96	-14	2551	-0.88	3.2	-0.09
22	SLU 22	81	-12	2246	-0.4	2.67	-0.08
22	SLU 23	81	-12	2246	-0.4	2.67	-0.08
22	SLU 24	81	-12	2246	-0.4	2.67	-0.08
22	SLU 25	81	-12	2246	-0.4	2.67	-0.08
22	SLU 26	81	-12	2246	-0.4	2.67	-0.08
22	SLU 27	81	-12	2246	-0.4	2.67	-0.08
22	SLU 28	81	-12	2246	-0.4	2.67	-0.08
22	SLU 29	81	-12	2246	-0.4	2.67	-0.08
22	SLU 30	81	-12	2246	-0.4	2.67	-0.08
22	SLU 31	108	-15	2627	-0.89	3.53	-0.09
22	SLU 32	108	-15	2627	-0.89	3.53	-0.09
22	SLU 33	108	-15	2627	-0.89	3.53	-0.09
22	SLU 34	108	-15	2627	-0.89	3.53	-0.09
22	SLU 35	108	-15	2627	-0.89	3.53	-0.09
22	SLU 36	108	-15	2627	-0.89	3.53	-0.09
22	SLU 37	108	-15	2627	-0.89	3.53	-0.09
22	SLU 38	108	-15	2627	-0.89	3.53	-0.09
22	SLU 39	120	-17	2791	-1.09	3.9	-0.1
22	SLU 40	120	-17	2791	-1.09	3.9	-0.1
22	SLU 41	120	-17	2791	-1.09	3.9	-0.1
22	SLU 42	120	-17	2791	-1.09	3.9	-0.1
22	SLU 43	66	-12	2526	-0.17	2.31	-0.08
22	SLU 44	66	-12	2526	-0.17	2.31	-0.08
22	SLU 45	66	-12	2526	-0.17	2.31	-0.08
22	SLU 46	66	-12	2526	-0.17	2.31	-0.08
22	SLU 47	66	-12	2526	-0.17	2.31	-0.08
22	SLU 48	66	-12	2526	-0.17	2.31	-0.08
22	SLU 49	66	-12	2526	-0.17	2.31	-0.08
22	SLU 50	66	-12	2526	-0.17	2.31	-0.08
22	SLU 51	66	-12	2526	-0.17	2.31	-0.08
22	SLU 52	93	-15	2908	-0.65	3.18	-0.1
22	SLU 53	93	-15	2908	-0.65	3.18	-0.1
22	SLU 54	93	-15	2908	-0.65	3.18	-0.1
22	SLU 55	93	-15	2908	-0.65	3.18	-0.1
22	SLU 56	93	-15	2908	-0.65	3.18	-0.1
22	SLU 57	93	-15	2908	-0.65	3.18	-0.1
22	SLU 58	93	-15	2908	-0.65	3.18	-0.1
22	SLU 59	93	-15	2908	-0.65	3.18	-0.1
22	SLU 60	105	-17	3071	-0.86	3.55	-0.11
22	SLU 61	105	-17	3071	-0.86	3.55	-0.11
22	SLU 62	105	-17	3071	-0.86	3.55	-0.11
22	SLU 63	105	-17	3071	-0.86	3.55	-0.11
22	SLU 64	90	-14	2765	-0.38	3.02	-0.09
22	SLU 65	90	-14	2765	-0.38	3.02	-0.09
22	SLU 66	90	-14	2765	-0.38	3.02	-0.09
22	SLU 67	90	-14	2765	-0.38	3.02	-0.09
22	SLU 68	90	-14	2765	-0.38	3.02	-0.09



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
22	SLU 69	90	-14	2765	-0.38	3.02	-0.09
22	SLU 70	90	-14	2765	-0.38	3.02	-0.09
22	SLU 71	90	-14	2765	-0.38	3.02	-0.09
22	SLU 72	90	-14	2765	-0.38	3.02	-0.09
22	SLU 73	117	-17	3147	-0.87	3.88	-0.11
22	SLU 74	117	-17	3147	-0.87	3.88	-0.11
22	SLU 75	117	-17	3147	-0.87	3.88	-0.11
22	SLU 76	117	-17	3147	-0.87	3.88	-0.11
22	SLU 77	117	-17	3147	-0.87	3.88	-0.11
22	SLU 78	117	-17	3147	-0.87	3.88	-0.11
22	SLU 79	117	-17	3147	-0.87	3.88	-0.11
22	SLU 80	117	-17	3147	-0.87	3.88	-0.11
22	SLU 81	128	-19	3311	-1.08	4.25	-0.12
22	SLU 82	128	-19	3311	-1.08	4.25	-0.12
22	SLU 83	128	-19	3311	-1.08	4.25	-0.12
22	SLU 84	128	-19	3311	-1.08	4.25	-0.12
22	SLE RA 1	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 2	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 3	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 4	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 5	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 6	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 7	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 8	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 9	64	-10	2074	-0.25	2.16	-0.07
22	SLE RA 10	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 11	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 12	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 13	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 14	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 15	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 16	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 17	82	-13	2329	-0.57	2.74	-0.08
22	SLE RA 18	90	-14	2438	-0.71	2.99	-0.09
22	SLE RA 19	90	-14	2438	-0.71	2.99	-0.09
22	SLE RA 20	90	-14	2438	-0.71	2.99	-0.09
22	SLE RA 21	90	-14	2438	-0.71	2.99	-0.09
22	SLE FR 1	64	-10	2074	-0.25	2.16	-0.07
22	SLE FR 2	64	-10	2074	-0.25	2.16	-0.07
22	SLE FR 3	64	-10	2074	-0.25	2.16	-0.07
22	SLE FR 4	71	-11	2184	-0.39	2.41	-0.07
22	SLE FR 5	71	-11	2184	-0.39	2.41	-0.07
22	SLE FR 6	77	-12	2256	-0.48	2.58	-0.08
22	SLE QP 1	64	-10	2074	-0.25	2.16	-0.07
22	SLE QP 2	71	-11	2184	-0.39	2.41	-0.07
22	SLD 1	234	-17	2394	-2.04	7.58	-0.12
22	SLD 2	234	-17	2394	-2.04	7.58	-0.12
22	SLD 3	536	-41	2312	13.94	15.45	-0.21
22	SLD 4	536	-41	2312	13.94	15.45	-0.21
22	SLD 5	-338	22	2371	-25.12	-7.97	0.05
22	SLD 6	-338	22	2371	-25.12	-7.97	0.05
22	SLD 7	669	-55	2098	28.15	18.26	-0.25
22	SLD 8	669	-55	2098	28.15	18.26	-0.25
22	SLD 9	-526	33	2269	-28.92	-13.43	0.1
22	SLD 10	-526	33	2269	-28.92	-13.43	0.1
22	SLD 11	481	-45	1996	24.35	12.8	-0.19
22	SLD 12	481	-45	1996	24.35	12.8	-0.19
22	SLD 13	-393	18	2055	-14.72	-10.62	0.06
22	SLD 14	-393	18	2055	-14.72	-10.62	0.06
22	SLD 15	-91	-5	1973	1.27	-2.76	-0.03
22	SLD 16	-91	-5	1973	1.27	-2.76	-0.03
22	SLV 1	405	-22	2683	-5.47	13.32	-0.19
22	SLV 2	405	-22	2683	-5.47	13.32	-0.19
22	SLV 3	1206	-83	2481	35.89	34.17	-0.41
22	SLV 4	1206	-83	2481	35.89	34.17	-0.41
22	SLV 5	-1043	77	2640	-64.65	-25.93	0.23
22	SLV 6	-1043	77	2640	-64.65	-25.93	0.23
22	SLV 7	1626	-125	1966	73.23	43.56	-0.52
22	SLV 8	1626	-125	1966	73.23	43.56	-0.52
22	SLV 9	-1483	102	2401	-74.01	-38.73	0.37
22	SLV 10	-1483	102	2401	-74.01	-38.73	0.37
22	SLV 11	1186	-100	1727	63.87	30.75	-0.38
22	SLV 12	1186	-100	1727	63.87	30.75	-0.38
22	SLV 13	-1063	61	1886	-36.67	-29.34	0.26
22	SLV 14	-1063	61	1886	-36.67	-29.34	0.26
22	SLV 15	-262	0	1684	4.7	-8.5	0.04
22	SLV 16	-262	0	1684	4.7	-8.5	0.04
23	SLU 1	106	-10	2090	-0.1	3.4	-0.07
23	SLU 2	106	-10	2090	-0.1	3.4	-0.07
23	SLU 3	106	-10	2090	-0.1	3.4	-0.07
23	SLU 4	106	-10	2090	-0.1	3.4	-0.07
23	SLU 5	106	-10	2090	-0.1	3.4	-0.07
23	SLU 6	106	-10	2090	-0.1	3.4	-0.07
23	SLU 7	106	-10	2090	-0.1	3.4	-0.07
23	SLU 8	106	-10	2090	-0.1	3.4	-0.07
23	SLU 9	106	-10	2090	-0.1	3.4	-0.07
23	SLU 10	141	-13	2475	-0.35	4.56	-0.09



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
23	SLU 11	141	-13	2475	-0.35	4.56	-0.09
23	SLU 12	141	-13	2475	-0.35	4.56	-0.09
23	SLU 13	141	-13	2475	-0.35	4.56	-0.09
23	SLU 14	141	-13	2475	-0.35	4.56	-0.09
23	SLU 15	141	-13	2475	-0.35	4.56	-0.09
23	SLU 16	141	-13	2475	-0.35	4.56	-0.09
23	SLU 17	141	-13	2475	-0.35	4.56	-0.09
23	SLU 18	157	-15	2640	-0.45	5.06	-0.1
23	SLU 19	157	-15	2640	-0.45	5.06	-0.1
23	SLU 20	157	-15	2640	-0.45	5.06	-0.1
23	SLU 21	157	-15	2640	-0.45	5.06	-0.1
23	SLU 22	136	-12	2327	-0.2	4.38	-0.08
23	SLU 23	136	-12	2327	-0.2	4.38	-0.08
23	SLU 24	136	-12	2327	-0.2	4.38	-0.08
23	SLU 25	136	-12	2327	-0.2	4.38	-0.08
23	SLU 26	136	-12	2327	-0.2	4.38	-0.08
23	SLU 27	136	-12	2327	-0.2	4.38	-0.08
23	SLU 28	136	-12	2327	-0.2	4.38	-0.08
23	SLU 29	136	-12	2327	-0.2	4.38	-0.08
23	SLU 30	136	-12	2327	-0.2	4.38	-0.08
23	SLU 31	172	-15	2712	-0.45	5.55	-0.1
23	SLU 32	172	-15	2712	-0.45	5.55	-0.1
23	SLU 33	172	-15	2712	-0.45	5.55	-0.1
23	SLU 34	172	-15	2712	-0.45	5.55	-0.1
23	SLU 35	172	-15	2712	-0.45	5.55	-0.1
23	SLU 36	172	-15	2712	-0.45	5.55	-0.1
23	SLU 37	172	-15	2712	-0.45	5.55	-0.1
23	SLU 38	172	-15	2712	-0.45	5.55	-0.1
23	SLU 39	187	-17	2877	-0.56	6.05	-0.12
23	SLU 40	187	-17	2877	-0.56	6.05	-0.12
23	SLU 41	187	-17	2877	-0.56	6.05	-0.12
23	SLU 42	187	-17	2877	-0.56	6.05	-0.12
23	SLU 43	127	-12	2636	-0.09	4.08	-0.09
23	SLU 44	127	-12	2636	-0.09	4.08	-0.09
23	SLU 45	127	-12	2636	-0.09	4.08	-0.09
23	SLU 46	127	-12	2636	-0.09	4.08	-0.09
23	SLU 47	127	-12	2636	-0.09	4.08	-0.09
23	SLU 48	127	-12	2636	-0.09	4.08	-0.09
23	SLU 49	127	-12	2636	-0.09	4.08	-0.09
23	SLU 50	127	-12	2636	-0.09	4.08	-0.09
23	SLU 51	127	-12	2636	-0.09	4.08	-0.09
23	SLU 52	163	-15	3021	-0.34	5.24	-0.11
23	SLU 53	163	-15	3021	-0.34	5.24	-0.11
23	SLU 54	163	-15	3021	-0.34	5.24	-0.11
23	SLU 55	163	-15	3021	-0.34	5.24	-0.11
23	SLU 56	163	-15	3021	-0.34	5.24	-0.11
23	SLU 57	163	-15	3021	-0.34	5.24	-0.11
23	SLU 58	163	-15	3021	-0.34	5.24	-0.11
23	SLU 59	163	-15	3021	-0.34	5.24	-0.11
23	SLU 60	178	-17	3186	-0.45	5.74	-0.12
23	SLU 61	178	-17	3186	-0.45	5.74	-0.12
23	SLU 62	178	-17	3186	-0.45	5.74	-0.12
23	SLU 63	178	-17	3186	-0.45	5.74	-0.12
23	SLU 64	157	-14	2873	-0.19	5.07	-0.1
23	SLU 65	157	-14	2873	-0.19	5.07	-0.1
23	SLU 66	157	-14	2873	-0.19	5.07	-0.1
23	SLU 67	157	-14	2873	-0.19	5.07	-0.1
23	SLU 68	157	-14	2873	-0.19	5.07	-0.1
23	SLU 69	157	-14	2873	-0.19	5.07	-0.1
23	SLU 70	157	-14	2873	-0.19	5.07	-0.1
23	SLU 71	157	-14	2873	-0.19	5.07	-0.1
23	SLU 72	157	-14	2873	-0.19	5.07	-0.1
23	SLU 73	193	-18	3258	-0.44	6.23	-0.12
23	SLU 74	193	-18	3258	-0.44	6.23	-0.12
23	SLU 75	193	-18	3258	-0.44	6.23	-0.12
23	SLU 76	193	-18	3258	-0.44	6.23	-0.12
23	SLU 77	193	-18	3258	-0.44	6.23	-0.12
23	SLU 78	193	-18	3258	-0.44	6.23	-0.12
23	SLU 79	193	-18	3258	-0.44	6.23	-0.12
23	SLU 80	193	-18	3258	-0.44	6.23	-0.12
23	SLU 81	208	-19	3423	-0.55	6.73	-0.13
23	SLU 82	208	-19	3423	-0.55	6.73	-0.13
23	SLU 83	208	-19	3423	-0.55	6.73	-0.13
23	SLU 84	208	-19	3423	-0.55	6.73	-0.13
23	SLE RA 1	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 2	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 3	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 4	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 5	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 6	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 7	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 8	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 9	114	-11	2158	-0.12	3.68	-0.07
23	SLE RA 10	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 11	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 12	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 13	138	-13	2414	-0.29	4.46	-0.09



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
23	SLE RA 14	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 15	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 16	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 17	138	-13	2414	-0.29	4.46	-0.09
23	SLE RA 18	148	-14	2524	-0.36	4.79	-0.1
23	SLE RA 19	148	-14	2524	-0.36	4.79	-0.1
23	SLE RA 20	148	-14	2524	-0.36	4.79	-0.1
23	SLE RA 21	148	-14	2524	-0.36	4.79	-0.1
23	SLE FR 1	114	-11	2158	-0.12	3.68	-0.07
23	SLE FR 2	114	-11	2158	-0.12	3.68	-0.07
23	SLE FR 3	114	-11	2158	-0.12	3.68	-0.07
23	SLE FR 4	124	-12	2268	-0.2	4.01	-0.08
23	SLE FR 5	124	-12	2268	-0.2	4.01	-0.08
23	SLE FR 6	131	-12	2341	-0.24	4.23	-0.08
23	SLE QP 1	114	-11	2158	-0.12	3.68	-0.07
23	SLE QP 2	124	-12	2268	-0.2	4.01	-0.08
23	SLD 1	287	-21	2607	0.2	9.98	-0.27
23	SLD 2	287	-21	2607	0.2	9.98	-0.27
23	SLD 3	596	-38	2455	9.84	20.42	-0.21
23	SLD 4	596	-38	2455	9.84	20.42	-0.21
23	SLD 5	-296	12	2601	-14.69	-10.02	-0.23
23	SLD 6	-296	12	2601	-14.69	-10.02	-0.23
23	SLD 7	735	-46	2093	17.43	24.76	-0.03
23	SLD 8	735	-46	2093	17.43	24.76	-0.03
23	SLD 9	-486	23	2443	-17.82	-16.73	-0.13
23	SLD 10	-486	23	2443	-17.82	-16.73	-0.13
23	SLD 11	545	-35	1935	14.3	18.05	0.07
23	SLD 12	545	-35	1935	14.3	18.05	0.07
23	SLD 13	-347	15	2081	-10.23	-12.39	0.05
23	SLD 14	-347	15	2081	-10.23	-12.39	0.05
23	SLD 15	-38	-2	1929	-0.6	-1.96	0.11
23	SLD 16	-38	-2	1929	-0.6	-1.96	0.11
23	SLV 1	458	-32	3075	0.03	16.43	-0.54
23	SLV 2	458	-32	3075	0.03	16.43	-0.54
23	SLV 3	1276	-77	2693	24.98	44.05	-0.39
23	SLV 4	1276	-77	2693	24.98	44.05	-0.39
23	SLV 5	-1016	51	3089	-37.96	-34.16	-0.45
23	SLV 6	-1016	51	3089	-37.96	-34.16	-0.45
23	SLV 7	1711	-100	1817	45.19	57.91	0.06
23	SLV 8	1711	-100	1817	45.19	57.91	0.06
23	SLV 9	-1462	77	2719	-45.59	-49.89	-0.22
23	SLV 10	-1462	77	2719	-45.59	-49.89	-0.22
23	SLV 11	1265	-74	1447	37.57	42.18	0.29
23	SLV 12	1265	-74	1447	37.57	42.18	0.29
23	SLV 13	-1027	54	1843	-25.37	-36.02	0.23
23	SLV 14	-1027	54	1843	-25.37	-36.02	0.23
23	SLV 15	-209	9	1461	-0.43	-8.4	0.38
23	SLV 16	-209	9	1461	-0.43	-8.4	0.38
24	SLU 1	187	-8	2306	-0.34	11.51	-0.05
24	SLU 2	187	-8	2306	-0.34	11.51	-0.05
24	SLU 3	187	-8	2306	-0.34	11.51	-0.05
24	SLU 4	187	-8	2306	-0.34	11.51	-0.05
24	SLU 5	187	-8	2306	-0.34	11.51	-0.05
24	SLU 6	187	-8	2306	-0.34	11.51	-0.05
24	SLU 7	187	-8	2306	-0.34	11.51	-0.05
24	SLU 8	187	-8	2306	-0.34	11.51	-0.05
24	SLU 9	187	-8	2306	-0.34	11.51	-0.05
24	SLU 10	240	-11	2717	-0.46	14.42	-0.07
24	SLU 11	240	-11	2717	-0.46	14.42	-0.07
24	SLU 12	240	-11	2717	-0.46	14.42	-0.07
24	SLU 13	240	-11	2717	-0.46	14.42	-0.07
24	SLU 14	240	-11	2717	-0.46	14.42	-0.07
24	SLU 15	240	-11	2717	-0.46	14.42	-0.07
24	SLU 16	240	-11	2717	-0.46	14.42	-0.07
24	SLU 17	240	-11	2717	-0.46	14.42	-0.07
24	SLU 18	263	-12	2893	-0.51	15.66	-0.08
24	SLU 19	263	-12	2893	-0.51	15.66	-0.08
24	SLU 20	263	-12	2893	-0.51	15.66	-0.08
24	SLU 21	263	-12	2893	-0.51	15.66	-0.08
24	SLU 22	226	-10	2555	-0.38	13.53	-0.06
24	SLU 23	226	-10	2555	-0.38	13.53	-0.06
24	SLU 24	226	-10	2555	-0.38	13.53	-0.06
24	SLU 25	226	-10	2555	-0.38	13.53	-0.06
24	SLU 26	226	-10	2555	-0.38	13.53	-0.06
24	SLU 27	226	-10	2555	-0.38	13.53	-0.06
24	SLU 28	226	-10	2555	-0.38	13.53	-0.06
24	SLU 29	226	-10	2555	-0.38	13.53	-0.06
24	SLU 30	226	-10	2555	-0.38	13.53	-0.06
24	SLU 31	280	-13	2965	-0.5	16.44	-0.09
24	SLU 32	280	-13	2965	-0.5	16.44	-0.09
24	SLU 33	280	-13	2965	-0.5	16.44	-0.09
24	SLU 34	280	-13	2965	-0.5	16.44	-0.09
24	SLU 35	280	-13	2965	-0.5	16.44	-0.09
24	SLU 36	280	-13	2965	-0.5	16.44	-0.09
24	SLU 37	280	-13	2965	-0.5	16.44	-0.09
24	SLU 38	280	-13	2965	-0.5	16.44	-0.09
24	SLU 39	302	-14	3141	-0.55	17.69	-0.1



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
24	SLU 40	302	-14	3141	-0.55	17.69	-0.1
24	SLU 41	302	-14	3141	-0.55	17.69	-0.1
24	SLU 42	302	-14	3141	-0.55	17.69	-0.1
24	SLU 43	229	-10	2913	-0.42	14.26	-0.06
24	SLU 44	229	-10	2913	-0.42	14.26	-0.06
24	SLU 45	229	-10	2913	-0.42	14.26	-0.06
24	SLU 46	229	-10	2913	-0.42	14.26	-0.06
24	SLU 47	229	-10	2913	-0.42	14.26	-0.06
24	SLU 48	229	-10	2913	-0.42	14.26	-0.06
24	SLU 49	229	-10	2913	-0.42	14.26	-0.06
24	SLU 50	229	-10	2913	-0.42	14.26	-0.06
24	SLU 51	229	-10	2913	-0.42	14.26	-0.06
24	SLU 52	282	-12	3324	-0.55	17.17	-0.09
24	SLU 53	282	-12	3324	-0.55	17.17	-0.09
24	SLU 54	282	-12	3324	-0.55	17.17	-0.09
24	SLU 55	282	-12	3324	-0.55	17.17	-0.09
24	SLU 56	282	-12	3324	-0.55	17.17	-0.09
24	SLU 57	282	-12	3324	-0.55	17.17	-0.09
24	SLU 58	282	-12	3324	-0.55	17.17	-0.09
24	SLU 59	282	-12	3324	-0.55	17.17	-0.09
24	SLU 60	305	-14	3500	-0.6	18.42	-0.1
24	SLU 61	305	-14	3500	-0.6	18.42	-0.1
24	SLU 62	305	-14	3500	-0.6	18.42	-0.1
24	SLU 63	305	-14	3500	-0.6	18.42	-0.1
24	SLU 64	269	-12	3161	-0.46	16.29	-0.07
24	SLU 65	269	-12	3161	-0.46	16.29	-0.07
24	SLU 66	269	-12	3161	-0.46	16.29	-0.07
24	SLU 67	269	-12	3161	-0.46	16.29	-0.07
24	SLU 68	269	-12	3161	-0.46	16.29	-0.07
24	SLU 69	269	-12	3161	-0.46	16.29	-0.07
24	SLU 70	269	-12	3161	-0.46	16.29	-0.07
24	SLU 71	269	-12	3161	-0.46	16.29	-0.07
24	SLU 72	269	-12	3161	-0.46	16.29	-0.07
24	SLU 73	322	-14	3572	-0.59	19.2	-0.1
24	SLU 74	322	-14	3572	-0.59	19.2	-0.1
24	SLU 75	322	-14	3572	-0.59	19.2	-0.1
24	SLU 76	322	-14	3572	-0.59	19.2	-0.1
24	SLU 77	322	-14	3572	-0.59	19.2	-0.1
24	SLU 78	322	-14	3572	-0.59	19.2	-0.1
24	SLU 79	322	-14	3572	-0.59	19.2	-0.1
24	SLU 80	322	-14	3572	-0.59	19.2	-0.1
24	SLU 81	345	-16	3748	-0.64	20.45	-0.11
24	SLU 82	345	-16	3748	-0.64	20.45	-0.11
24	SLU 83	345	-16	3748	-0.64	20.45	-0.11
24	SLU 84	345	-16	3748	-0.64	20.45	-0.11
24	SLE RA 1	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 2	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 3	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 4	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 5	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 6	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 7	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 8	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 9	198	-9	2377	-0.35	12.09	-0.05
24	SLE RA 10	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 11	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 12	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 13	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 14	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 15	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 16	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 17	234	-10	2651	-0.43	14.03	-0.07
24	SLE RA 18	249	-11	2768	-0.47	14.86	-0.08
24	SLE RA 19	249	-11	2768	-0.47	14.86	-0.08
24	SLE RA 20	249	-11	2768	-0.47	14.86	-0.08
24	SLE RA 21	249	-11	2768	-0.47	14.86	-0.08
24	SLE FR 1	198	-9	2377	-0.35	12.09	-0.05
24	SLE FR 2	198	-9	2377	-0.35	12.09	-0.05
24	SLE FR 3	198	-9	2377	-0.35	12.09	-0.05
24	SLE FR 4	213	-9	2495	-0.38	12.92	-0.06
24	SLE FR 5	213	-9	2495	-0.38	12.92	-0.06
24	SLE FR 6	223	-10	2573	-0.41	13.47	-0.06
24	SLE QP 1	198	-9	2377	-0.35	12.09	-0.05
24	SLE QP 2	213	-9	2495	-0.38	12.92	-0.06
24	SLD 1	358	-18	3093	0.36	20.88	-0.31
24	SLD 2	358	-18	3093	0.36	20.88	-0.31
24	SLD 3	629	-31	2792	5.14	34.06	-0.06
24	SLD 4	629	-31	2792	5.14	34.06	-0.06
24	SLD 5	-155	8	3131	-7.41	-4.68	-0.52
24	SLD 6	-155	8	3131	-7.41	-4.68	-0.52
24	SLD 7	750	-35	2127	8.53	39.25	0.33
24	SLD 8	750	-35	2127	8.53	39.25	0.33
24	SLD 9	-323	17	2862	-9.29	-13.41	-0.45
24	SLD 10	-323	17	2862	-9.29	-13.41	-0.45
24	SLD 11	582	-26	1858	6.65	30.52	0.4
24	SLD 12	582	-26	1858	6.65	30.52	0.4
24	SLD 13	-203	12	2197	-5.9	-8.23	-0.06



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
24	SLD 14	-203	12	2197	-5.9	-8.23	-0.06
24	SLD 15	69	-1	1896	-1.12	4.95	0.19
24	SLD 16	69	-1	1896	-1.12	4.95	0.19
24	SLV 1	512	-28	3925	0.98	29.71	-0.68
24	SLV 2	512	-28	3925	0.98	29.71	-0.68
24	SLV 3	1229	-62	3163	13.38	64.35	-0.02
24	SLV 4	1229	-62	3163	13.38	64.35	-0.02
24	SLV 5	-784	37	4080	-18.78	-34.59	-1.25
24	SLV 6	-784	37	4080	-18.78	-34.59	-1.25
24	SLV 7	1605	-77	1539	22.55	80.89	0.95
24	SLV 8	1605	-77	1539	22.55	80.89	0.95
24	SLV 9	-1178	58	3450	-23.32	-55.06	-1.07
24	SLV 10	-1178	58	3450	-23.32	-55.06	-1.07
24	SLV 11	1210	-55	909	18.02	60.42	1.13
24	SLV 12	1210	-55	909	18.02	60.42	1.13
24	SLV 13	-802	43	1827	-14.15	-38.52	-0.1
24	SLV 14	-802	43	1827	-14.15	-38.52	-0.1
24	SLV 15	-86	9	1064	-1.75	-3.88	0.56
24	SLV 16	-86	9	1064	-1.75	-3.88	0.56
25	SLU 1	355	366	2895	-6.34	9.13	0.01
25	SLU 2	355	366	2895	-6.34	9.13	0.01
25	SLU 3	355	366	2895	-6.34	9.13	0.01
25	SLU 4	355	366	2895	-6.34	9.13	0.01
25	SLU 5	355	366	2895	-6.34	9.13	0.01
25	SLU 6	355	366	2895	-6.34	9.13	0.01
25	SLU 7	355	366	2895	-6.34	9.13	0.01
25	SLU 8	355	366	2895	-6.34	9.13	0.01
25	SLU 9	355	366	2895	-6.34	9.13	0.01
25	SLU 10	427	418	3403	-6.62	11.08	0.01
25	SLU 11	427	418	3403	-6.62	11.08	0.01
25	SLU 12	427	418	3403	-6.62	11.08	0.01
25	SLU 13	427	418	3403	-6.62	11.08	0.01
25	SLU 14	427	418	3403	-6.62	11.08	0.01
25	SLU 15	427	418	3403	-6.62	11.08	0.01
25	SLU 16	427	418	3403	-6.62	11.08	0.01
25	SLU 17	427	418	3403	-6.62	11.08	0.01
25	SLU 18	458	440	3621	-6.75	11.92	0.01
25	SLU 19	458	440	3621	-6.75	11.92	0.01
25	SLU 20	458	440	3621	-6.75	11.92	0.01
25	SLU 21	458	440	3621	-6.75	11.92	0.01
25	SLU 22	402	396	3198	-6.6	10.49	0.01
25	SLU 23	402	396	3198	-6.6	10.49	0.01
25	SLU 24	402	396	3198	-6.6	10.49	0.01
25	SLU 25	402	396	3198	-6.6	10.49	0.01
25	SLU 26	402	396	3198	-6.6	10.49	0.01
25	SLU 27	402	396	3198	-6.6	10.49	0.01
25	SLU 28	402	396	3198	-6.6	10.49	0.01
25	SLU 29	402	396	3198	-6.6	10.49	0.01
25	SLU 30	402	396	3198	-6.6	10.49	0.01
25	SLU 31	475	447	3707	-6.88	12.45	0
25	SLU 32	475	447	3707	-6.88	12.45	0
25	SLU 33	475	447	3707	-6.88	12.45	0
25	SLU 34	475	447	3707	-6.88	12.45	0
25	SLU 35	475	447	3707	-6.88	12.45	0
25	SLU 36	475	447	3707	-6.88	12.45	0
25	SLU 37	475	447	3707	-6.88	12.45	0
25	SLU 38	475	447	3707	-6.88	12.45	0
25	SLU 39	506	470	3924	-7.01	13.29	0
25	SLU 40	506	470	3924	-7.01	13.29	0
25	SLU 41	506	470	3924	-7.01	13.29	0
25	SLU 42	506	470	3924	-7.01	13.29	0
25	SLU 43	445	465	3659	-8.15	11.39	0.02
25	SLU 44	445	465	3659	-8.15	11.39	0.02
25	SLU 45	445	465	3659	-8.15	11.39	0.02
25	SLU 46	445	465	3659	-8.15	11.39	0.02
25	SLU 47	445	465	3659	-8.15	11.39	0.02
25	SLU 48	445	465	3659	-8.15	11.39	0.02
25	SLU 49	445	465	3659	-8.15	11.39	0.02
25	SLU 50	445	465	3659	-8.15	11.39	0.02
25	SLU 51	445	465	3659	-8.15	11.39	0.02
25	SLU 52	518	517	4168	-8.43	13.35	0.01
25	SLU 53	518	517	4168	-8.43	13.35	0.01
25	SLU 54	518	517	4168	-8.43	13.35	0.01
25	SLU 55	518	517	4168	-8.43	13.35	0.01
25	SLU 56	518	517	4168	-8.43	13.35	0.01
25	SLU 57	518	517	4168	-8.43	13.35	0.01
25	SLU 58	518	517	4168	-8.43	13.35	0.01
25	SLU 59	518	517	4168	-8.43	13.35	0.01
25	SLU 60	549	539	4385	-8.56	14.19	0.01
25	SLU 61	549	539	4385	-8.56	14.19	0.01
25	SLU 62	549	539	4385	-8.56	14.19	0.01
25	SLU 63	549	539	4385	-8.56	14.19	0.01
25	SLU 64	492	495	3963	-8.41	12.76	0.01
25	SLU 65	492	495	3963	-8.41	12.76	0.01
25	SLU 66	492	495	3963	-8.41	12.76	0.01
25	SLU 67	492	495	3963	-8.41	12.76	0.01
25	SLU 68	492	495	3963	-8.41	12.76	0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
25	SLU 69	492	495	3963	-8.41	12.76	0.01
25	SLU 70	492	495	3963	-8.41	12.76	0.01
25	SLU 71	492	495	3963	-8.41	12.76	0.01
25	SLU 72	492	495	3963	-8.41	12.76	0.01
25	SLU 73	565	547	4471	-8.7	14.72	0.01
25	SLU 74	565	547	4471	-8.7	14.72	0.01
25	SLU 75	565	547	4471	-8.7	14.72	0.01
25	SLU 76	565	547	4471	-8.7	14.72	0.01
25	SLU 77	565	547	4471	-8.7	14.72	0.01
25	SLU 78	565	547	4471	-8.7	14.72	0.01
25	SLU 79	565	547	4471	-8.7	14.72	0.01
25	SLU 80	565	547	4471	-8.7	14.72	0.01
25	SLU 81	596	569	4689	-8.82	15.56	0.01
25	SLU 82	596	569	4689	-8.82	15.56	0.01
25	SLU 83	596	569	4689	-8.82	15.56	0.01
25	SLU 84	596	569	4689	-8.82	15.56	0.01
25	SLE RA 1	368	374	2982	-6.41	9.52	0.01
25	SLE RA 2	368	374	2982	-6.41	9.52	0.01
25	SLE RA 3	368	374	2982	-6.41	9.52	0.01
25	SLE RA 4	368	374	2982	-6.41	9.52	0.01
25	SLE RA 5	368	374	2982	-6.41	9.52	0.01
25	SLE RA 6	368	374	2982	-6.41	9.52	0.01
25	SLE RA 7	368	374	2982	-6.41	9.52	0.01
25	SLE RA 8	368	374	2982	-6.41	9.52	0.01
25	SLE RA 9	368	374	2982	-6.41	9.52	0.01
25	SLE RA 10	417	409	3320	-6.6	10.82	0.01
25	SLE RA 11	417	409	3320	-6.6	10.82	0.01
25	SLE RA 12	417	409	3320	-6.6	10.82	0.01
25	SLE RA 13	417	409	3320	-6.6	10.82	0.01
25	SLE RA 14	417	409	3320	-6.6	10.82	0.01
25	SLE RA 15	417	409	3320	-6.6	10.82	0.01
25	SLE RA 16	417	409	3320	-6.6	10.82	0.01
25	SLE RA 17	417	409	3320	-6.6	10.82	0.01
25	SLE RA 18	437	424	3466	-6.68	11.38	0.01
25	SLE RA 19	437	424	3466	-6.68	11.38	0.01
25	SLE RA 20	437	424	3466	-6.68	11.38	0.01
25	SLE RA 21	437	424	3466	-6.68	11.38	0.01
25	SLE FR 1	368	374	2982	-6.41	9.52	0.01
25	SLE FR 2	368	374	2982	-6.41	9.52	0.01
25	SLE FR 3	368	374	2982	-6.41	9.52	0.01
25	SLE FR 4	389	389	3127	-6.49	10.08	0.01
25	SLE FR 5	389	389	3127	-6.49	10.08	0.01
25	SLE FR 6	403	399	3224	-6.55	10.45	0.01
25	SLE QP 1	368	374	2982	-6.41	9.52	0.01
25	SLE QP 2	389	389	3127	-6.49	10.08	0.01
25	SLD 1	510	459	3603	-8.67	14.26	-0.01
25	SLD 2	510	459	3603	-8.67	14.26	-0.01
25	SLD 3	690	399	4118	-5.98	22.52	-0.12
25	SLD 4	690	399	4118	-5.98	22.52	-0.12
25	SLD 5	153	502	2489	-11.21	-1.2	0.17
25	SLD 6	153	502	2489	-11.21	-1.2	0.17
25	SLD 7	752	300	4205	-2.27	26.33	-0.2
25	SLD 8	752	300	4205	-2.27	26.33	-0.2
25	SLD 9	26	479	2049	-10.71	-6.18	0.22
25	SLD 10	26	479	2049	-10.71	-6.18	0.22
25	SLD 11	625	276	3765	-1.78	21.35	-0.15
25	SLD 12	625	276	3765	-1.78	21.35	-0.15
25	SLD 13	88	380	2136	-7	-2.37	0.14
25	SLD 14	88	380	2136	-7	-2.37	0.14
25	SLD 15	268	319	2650	-4.32	5.89	0.03
25	SLD 16	268	319	2650	-4.32	5.89	0.03
25	SLV 1	648	555	4191	-11.7	18.71	-0.02
25	SLV 2	648	555	4191	-11.7	18.71	-0.02
25	SLV 3	1119	409	5500	-5.18	40.41	-0.31
25	SLV 4	1119	409	5500	-5.18	40.41	-0.31
25	SLV 5	-248	661	1460	-17.94	-20.25	0.44
25	SLV 6	-248	661	1460	-17.94	-20.25	0.44
25	SLV 7	1322	173	5825	3.79	52.09	-0.52
25	SLV 8	1322	173	5825	3.79	52.09	-0.52
25	SLV 9	-544	606	429	-16.77	-31.94	0.54
25	SLV 10	-544	606	429	-16.77	-31.94	0.54
25	SLV 11	1026	117	4794	4.96	40.4	-0.42
25	SLV 12	1026	117	4794	4.96	40.4	-0.42
25	SLV 13	-341	370	753	-7.81	-20.26	0.33
25	SLV 14	-341	370	753	-7.81	-20.26	0.33
25	SLV 15	130	223	2063	-1.29	1.45	0.04
25	SLV 16	130	223	2063	-1.29	1.45	0.04
26	SLU 1	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 2	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 3	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 4	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 5	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 6	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 7	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 8	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 9	-82	-74	2061	-0.63	-1.68	0.04
26	SLU 10	-120	-109	2416	-0.86	-1.73	0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
26	SLU 11	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 12	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 13	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 14	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 15	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 16	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 17	-120	-109	2416	-0.86	-1.73	0.04
26	SLU 18	-136	-124	2568	-0.96	-1.75	0.05
26	SLU 19	-136	-124	2568	-0.96	-1.75	0.05
26	SLU 20	-136	-124	2568	-0.96	-1.75	0.05
26	SLU 21	-136	-124	2568	-0.96	-1.75	0.05
26	SLU 22	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 23	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 24	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 25	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 26	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 27	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 28	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 29	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 30	-101	-91	2275	-0.72	-1.8	0.04
26	SLU 31	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 32	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 33	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 34	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 35	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 36	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 37	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 38	-138	-127	2630	-0.96	-1.85	0.05
26	SLU 39	-154	-142	2782	-1.06	-1.87	0.05
26	SLU 40	-154	-142	2782	-1.06	-1.87	0.05
26	SLU 41	-154	-142	2782	-1.06	-1.87	0.05
26	SLU 42	-154	-142	2782	-1.06	-1.87	0.05
26	SLU 43	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 44	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 45	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 46	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 47	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 48	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 49	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 50	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 51	-101	-90	2606	-0.78	-2.15	0.05
26	SLU 52	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 53	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 54	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 55	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 56	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 57	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 58	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 59	-138	-125	2961	-1.02	-2.19	0.05
26	SLU 60	-154	-140	3113	-1.12	-2.21	0.05
26	SLU 61	-154	-140	3113	-1.12	-2.21	0.05
26	SLU 62	-154	-140	3113	-1.12	-2.21	0.05
26	SLU 63	-154	-140	3113	-1.12	-2.21	0.05
26	SLU 64	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 65	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 66	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 67	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 68	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 69	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 70	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 71	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 72	-119	-107	2820	-0.88	-2.27	0.05
26	SLU 73	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 74	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 75	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 76	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 77	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 78	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 79	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 80	-157	-143	3175	-1.11	-2.31	0.06
26	SLU 81	-173	-158	3327	-1.21	-2.33	0.06
26	SLU 82	-173	-158	3327	-1.21	-2.33	0.06
26	SLU 83	-173	-158	3327	-1.21	-2.33	0.06
26	SLU 84	-173	-158	3327	-1.21	-2.33	0.06
26	SLE RA 1	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 2	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 3	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 4	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 5	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 6	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 7	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 8	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 9	-88	-79	2122	-0.65	-1.72	0.04
26	SLE RA 10	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 11	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 12	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 13	-113	-102	2359	-0.81	-1.75	0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
26	SLE RA 14	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 15	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 16	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 17	-113	-102	2359	-0.81	-1.75	0.04
26	SLE RA 18	-123	-113	2460	-0.88	-1.76	0.04
26	SLE RA 19	-123	-113	2460	-0.88	-1.76	0.04
26	SLE RA 20	-123	-113	2460	-0.88	-1.76	0.04
26	SLE RA 21	-123	-113	2460	-0.88	-1.76	0.04
26	SLE FR 1	-88	-79	2122	-0.65	-1.72	0.04
26	SLE FR 2	-88	-79	2122	-0.65	-1.72	0.04
26	SLE FR 3	-88	-79	2122	-0.65	-1.72	0.04
26	SLE FR 4	-98	-89	2224	-0.72	-1.73	0.04
26	SLE FR 5	-98	-89	2224	-0.72	-1.73	0.04
26	SLE FR 6	-106	-96	2291	-0.77	-1.74	0.04
26	SLE QP 1	-88	-79	2122	-0.65	-1.72	0.04
26	SLE QP 2	-98	-89	2224	-0.72	-1.73	0.04
26	SLD 1	212	210	1988	-14.29	13.01	0.01
26	SLD 2	212	210	1988	-14.29	13.01	0.01
26	SLD 3	67	79	1776	-9.32	5.37	0.01
26	SLD 4	67	79	1776	-9.32	5.37	0.01
26	SLD 5	214	200	2475	-12.33	14.28	0.04
26	SLD 6	214	200	2475	-12.33	14.28	0.04
26	SLD 7	-268	-238	1768	4.24	-11.19	0.02
26	SLD 8	-268	-238	1768	4.24	-11.19	0.02
26	SLD 9	71	60	2679	-5.68	7.73	0.06
26	SLD 10	71	60	2679	-5.68	7.73	0.06
26	SLD 11	-411	-378	1972	10.89	-17.74	0.04
26	SLD 12	-411	-378	1972	10.89	-17.74	0.04
26	SLD 13	-264	-257	2671	7.88	-8.83	0.07
26	SLD 14	-264	-257	2671	7.88	-8.83	0.07
26	SLD 15	-409	-388	2459	12.85	-16.47	0.07
26	SLD 16	-409	-388	2459	12.85	-16.47	0.07
26	SLV 1	660	640	1662	-34.03	34.77	-0.02
26	SLV 2	660	640	1662	-34.03	34.77	-0.02
26	SLV 3	289	305	1144	-21.18	14.8	-0.04
26	SLV 4	289	305	1144	-21.18	14.8	-0.04
26	SLV 5	690	637	2841	-30.22	39.51	0.05
26	SLV 6	690	637	2841	-30.22	39.51	0.05
26	SLV 7	-543	-478	1114	12.64	-27.06	-0.01
26	SLV 8	-543	-478	1114	12.64	-27.06	-0.01
26	SLV 9	347	300	3333	-14.09	23.6	0.09
26	SLV 10	347	300	3333	-14.09	23.6	0.09
26	SLV 11	-887	-815	1606	28.78	-42.97	0.03
26	SLV 12	-887	-815	1606	28.78	-42.97	0.03
26	SLV 13	-486	-483	3303	19.73	-18.26	0.12
26	SLV 14	-486	-483	3303	19.73	-18.26	0.12
26	SLV 15	-856	-818	2785	32.59	-38.23	0.1
26	SLV 16	-856	-818	2785	32.59	-38.23	0.1
27	SLU 1	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 2	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 3	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 4	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 5	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 6	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 7	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 8	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 9	-137	171	1634	-6.96	-3.31	-0.03
27	SLU 10	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 11	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 12	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 13	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 14	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 15	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 16	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 17	-154	171	1633	-7.57	-3.32	-0.03
27	SLU 18	-161	171	1633	-7.83	-3.33	-0.04
27	SLU 19	-161	171	1633	-7.83	-3.33	-0.04
27	SLU 20	-161	171	1633	-7.83	-3.33	-0.04
27	SLU 21	-161	171	1633	-7.83	-3.33	-0.04
27	SLU 22	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 23	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 24	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 25	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 26	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 27	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 28	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 29	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 30	-149	177	1693	-7.46	-3.45	-0.03
27	SLU 31	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 32	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 33	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 34	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 35	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 36	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 37	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 38	-166	177	1692	-8.07	-3.47	-0.04
27	SLU 39	-173	177	1691	-8.33	-3.47	-0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
27	SLU 40	-173	177	1691	-8.33	-3.47	-0.04
27	SLU 41	-173	177	1691	-8.33	-3.47	-0.04
27	SLU 42	-173	177	1691	-8.33	-3.47	-0.04
27	SLU 43	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 44	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 45	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 46	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 47	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 48	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 49	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 50	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 51	-174	220	2104	-8.87	-4.25	-0.04
27	SLU 52	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 53	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 54	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 55	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 56	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 57	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 58	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 59	-191	220	2103	-9.48	-4.27	-0.04
27	SLU 60	-198	220	2103	-9.74	-4.27	-0.04
27	SLU 61	-198	220	2103	-9.74	-4.27	-0.04
27	SLU 62	-198	220	2103	-9.74	-4.27	-0.04
27	SLU 63	-198	220	2103	-9.74	-4.27	-0.04
27	SLU 64	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 65	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 66	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 67	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 68	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 69	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 70	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 71	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 72	-186	226	2163	-9.37	-4.4	-0.04
27	SLU 73	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 74	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 75	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 76	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 77	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 78	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 79	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 80	-203	226	2162	-9.98	-4.41	-0.05
27	SLU 81	-210	226	2162	-10.24	-4.42	-0.05
27	SLU 82	-210	226	2162	-10.24	-4.42	-0.05
27	SLU 83	-210	226	2162	-10.24	-4.42	-0.05
27	SLU 84	-210	226	2162	-10.24	-4.42	-0.05
27	SLE RA 1	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 2	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 3	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 4	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 5	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 6	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 7	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 8	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 9	-140	173	1651	-7.1	-3.35	-0.03
27	SLE RA 10	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 11	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 12	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 13	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 14	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 15	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 16	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 17	-152	173	1650	-7.51	-3.36	-0.03
27	SLE RA 18	-156	173	1650	-7.68	-3.36	-0.03
27	SLE RA 19	-156	173	1650	-7.68	-3.36	-0.03
27	SLE RA 20	-156	173	1650	-7.68	-3.36	-0.03
27	SLE RA 21	-156	173	1650	-7.68	-3.36	-0.03
27	SLE FR 1	-140	173	1651	-7.1	-3.35	-0.03
27	SLE FR 2	-140	173	1651	-7.1	-3.35	-0.03
27	SLE FR 3	-140	173	1651	-7.1	-3.35	-0.03
27	SLE FR 4	-145	173	1651	-7.27	-3.35	-0.03
27	SLE FR 5	-145	173	1651	-7.27	-3.35	-0.03
27	SLE FR 6	-148	173	1650	-7.39	-3.36	-0.03
27	SLE QP 1	-140	173	1651	-7.1	-3.35	-0.03
27	SLE QP 2	-145	173	1651	-7.27	-3.35	-0.03
27	SLD 1	74	367	398	-14.9	6.04	-0.09
27	SLD 2	74	367	398	-14.9	6.04	-0.09
27	SLD 3	-19	245	952	-10.37	2.05	-0.06
27	SLD 4	-19	245	952	-10.37	2.05	-0.06
27	SLD 5	63	417	435	-16.42	5.51	-0.08
27	SLD 6	63	417	435	-16.42	5.51	-0.08
27	SLD 7	-250	9	2281	-1.34	-7.78	-0.01
27	SLD 8	-250	9	2281	-1.34	-7.78	-0.01
27	SLD 9	-41	337	1021	-13.21	1.08	-0.06
27	SLD 10	-41	337	1021	-13.21	1.08	-0.06
27	SLD 11	-353	-72	2866	1.88	-12.22	0.02
27	SLD 12	-353	-72	2866	1.88	-12.22	0.02
27	SLD 13	-271	100	2349	-4.18	-8.76	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
27	SLD 14	-271	100	2349	-4.18	-8.76	0
27	SLD 15	-365	-22	2903	0.35	-12.75	0.02
27	SLD 16	-365	-22	2903	0.35	-12.75	0.02
27	SLV 1	396	637	-1501	-25.5	19.91	-0.17
27	SLV 2	396	637	-1501	-25.5	19.91	-0.17
27	SLV 3	152	340	-30	-14.51	9.41	-0.11
27	SLV 4	152	340	-30	-14.51	9.41	-0.11
27	SLV 5	388	762	-1526	-29.41	19.55	-0.16
27	SLV 6	388	762	-1526	-29.41	19.55	-0.16
27	SLV 7	-427	-227	3378	7.22	-15.45	0.03
27	SLV 8	-427	-227	3378	7.22	-15.45	0.03
27	SLV 9	137	572	-77	-21.77	8.74	-0.09
27	SLV 10	137	572	-77	-21.77	8.74	-0.09
27	SLV 11	-679	-417	4828	14.86	-26.26	0.09
27	SLV 12	-679	-417	4828	14.86	-26.26	0.09
27	SLV 13	-442	5	3331	-0.03	-16.12	0.04
27	SLV 14	-442	5	3331	-0.03	-16.12	0.04
27	SLV 15	-687	-291	4802	10.95	-26.62	0.1
27	SLV 16	-687	-291	4802	10.95	-26.62	0.1
28	SLU 1	24	392	2486	-24.92	1.25	0.02
28	SLU 2	24	392	2486	-24.92	1.25	0.02
28	SLU 3	24	392	2486	-24.92	1.25	0.02
28	SLU 4	24	392	2486	-24.92	1.25	0.02
28	SLU 5	24	392	2486	-24.92	1.25	0.02
28	SLU 6	24	392	2486	-24.92	1.25	0.02
28	SLU 7	24	392	2486	-24.92	1.25	0.02
28	SLU 8	24	392	2486	-24.92	1.25	0.02
28	SLU 9	24	392	2486	-24.92	1.25	0.02
28	SLU 10	27	452	2917	-29.63	1.25	0.02
28	SLU 11	27	452	2917	-29.63	1.25	0.02
28	SLU 12	27	452	2917	-29.63	1.25	0.02
28	SLU 13	27	452	2917	-29.63	1.25	0.02
28	SLU 14	27	452	2917	-29.63	1.25	0.02
28	SLU 15	27	452	2917	-29.63	1.25	0.02
28	SLU 16	27	452	2917	-29.63	1.25	0.02
28	SLU 17	27	452	2917	-29.63	1.25	0.02
28	SLU 18	29	477	3102	-31.65	1.25	0.02
28	SLU 19	29	477	3102	-31.65	1.25	0.02
28	SLU 20	29	477	3102	-31.65	1.25	0.02
28	SLU 21	29	477	3102	-31.65	1.25	0.02
28	SLU 22	26	422	2734	-27.28	1.29	0.02
28	SLU 23	26	422	2734	-27.28	1.29	0.02
28	SLU 24	26	422	2734	-27.28	1.29	0.02
28	SLU 25	26	422	2734	-27.28	1.29	0.02
28	SLU 26	26	422	2734	-27.28	1.29	0.02
28	SLU 27	26	422	2734	-27.28	1.29	0.02
28	SLU 28	26	422	2734	-27.28	1.29	0.02
28	SLU 29	26	422	2734	-27.28	1.29	0.02
28	SLU 30	26	422	2734	-27.28	1.29	0.02
28	SLU 31	29	481	3165	-31.99	1.29	0.02
28	SLU 32	29	481	3165	-31.99	1.29	0.02
28	SLU 33	29	481	3165	-31.99	1.29	0.02
28	SLU 34	29	481	3165	-31.99	1.29	0.02
28	SLU 35	29	481	3165	-31.99	1.29	0.02
28	SLU 36	29	481	3165	-31.99	1.29	0.02
28	SLU 37	29	481	3165	-31.99	1.29	0.02
28	SLU 38	29	481	3165	-31.99	1.29	0.02
28	SLU 39	31	507	3349	-34.01	1.29	0.03
28	SLU 40	31	507	3349	-34.01	1.29	0.03
28	SLU 41	31	507	3349	-34.01	1.29	0.03
28	SLU 42	31	507	3349	-34.01	1.29	0.03
28	SLU 43	30	499	3147	-31.58	1.61	0.02
28	SLU 44	30	499	3147	-31.58	1.61	0.02
28	SLU 45	30	499	3147	-31.58	1.61	0.02
28	SLU 46	30	499	3147	-31.58	1.61	0.02
28	SLU 47	30	499	3147	-31.58	1.61	0.02
28	SLU 48	30	499	3147	-31.58	1.61	0.02
28	SLU 49	30	499	3147	-31.58	1.61	0.02
28	SLU 50	30	499	3147	-31.58	1.61	0.02
28	SLU 51	30	499	3147	-31.58	1.61	0.02
28	SLU 52	34	559	3578	-36.29	1.61	0.03
28	SLU 53	34	559	3578	-36.29	1.61	0.03
28	SLU 54	34	559	3578	-36.29	1.61	0.03
28	SLU 55	34	559	3578	-36.29	1.61	0.03
28	SLU 56	34	559	3578	-36.29	1.61	0.03
28	SLU 57	34	559	3578	-36.29	1.61	0.03
28	SLU 58	34	559	3578	-36.29	1.61	0.03
28	SLU 59	34	559	3578	-36.29	1.61	0.03
28	SLU 60	35	585	3763	-38.31	1.61	0.03
28	SLU 61	35	585	3763	-38.31	1.61	0.03
28	SLU 62	35	585	3763	-38.31	1.61	0.03
28	SLU 63	35	585	3763	-38.31	1.61	0.03
28	SLU 64	32	529	3395	-33.94	1.65	0.02
28	SLU 65	32	529	3395	-33.94	1.65	0.02
28	SLU 66	32	529	3395	-33.94	1.65	0.02
28	SLU 67	32	529	3395	-33.94	1.65	0.02
28	SLU 68	32	529	3395	-33.94	1.65	0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
28	SLU 69	32	529	3395	-33.94	1.65	0.02
28	SLU 70	32	529	3395	-33.94	1.65	0.02
28	SLU 71	32	529	3395	-33.94	1.65	0.02
28	SLU 72	32	529	3395	-33.94	1.65	0.02
28	SLU 73	36	589	3826	-38.65	1.65	0.03
28	SLU 74	36	589	3826	-38.65	1.65	0.03
28	SLU 75	36	589	3826	-38.65	1.65	0.03
28	SLU 76	36	589	3826	-38.65	1.65	0.03
28	SLU 77	36	589	3826	-38.65	1.65	0.03
28	SLU 78	36	589	3826	-38.65	1.65	0.03
28	SLU 79	36	589	3826	-38.65	1.65	0.03
28	SLU 80	36	589	3826	-38.65	1.65	0.03
28	SLU 81	37	614	4010	-40.68	1.65	0.03
28	SLU 82	37	614	4010	-40.68	1.65	0.03
28	SLU 83	37	614	4010	-40.68	1.65	0.03
28	SLU 84	37	614	4010	-40.68	1.65	0.03
28	SLE RA 1	24	400	2557	-25.59	1.26	0.02
28	SLE RA 2	24	400	2557	-25.59	1.26	0.02
28	SLE RA 3	24	400	2557	-25.59	1.26	0.02
28	SLE RA 4	24	400	2557	-25.59	1.26	0.02
28	SLE RA 5	24	400	2557	-25.59	1.26	0.02
28	SLE RA 6	24	400	2557	-25.59	1.26	0.02
28	SLE RA 7	24	400	2557	-25.59	1.26	0.02
28	SLE RA 8	24	400	2557	-25.59	1.26	0.02
28	SLE RA 9	24	400	2557	-25.59	1.26	0.02
28	SLE RA 10	27	440	2844	-28.73	1.26	0.02
28	SLE RA 11	27	440	2844	-28.73	1.26	0.02
28	SLE RA 12	27	440	2844	-28.73	1.26	0.02
28	SLE RA 13	27	440	2844	-28.73	1.26	0.02
28	SLE RA 14	27	440	2844	-28.73	1.26	0.02
28	SLE RA 15	27	440	2844	-28.73	1.26	0.02
28	SLE RA 16	27	440	2844	-28.73	1.26	0.02
28	SLE RA 17	27	440	2844	-28.73	1.26	0.02
28	SLE RA 18	28	457	2967	-30.08	1.26	0.02
28	SLE RA 19	28	457	2967	-30.08	1.26	0.02
28	SLE RA 20	28	457	2967	-30.08	1.26	0.02
28	SLE RA 21	28	457	2967	-30.08	1.26	0.02
28	SLE FR 1	24	400	2557	-25.59	1.26	0.02
28	SLE FR 2	24	400	2557	-25.59	1.26	0.02
28	SLE FR 3	24	400	2557	-25.59	1.26	0.02
28	SLE FR 4	25	417	2680	-26.94	1.26	0.02
28	SLE FR 5	25	417	2680	-26.94	1.26	0.02
28	SLE FR 6	26	429	2762	-27.83	1.26	0.02
28	SLE QP 1	24	400	2557	-25.59	1.26	0.02
28	SLE QP 2	25	417	2680	-26.94	1.26	0.02
28	SLD 1	32	568	3294	-33.74	2.95	0.03
28	SLD 2	32	568	3294	-33.74	2.95	0.03
28	SLD 3	27	419	3010	-26.68	7.6	0.02
28	SLD 4	27	419	3010	-26.68	7.6	0.02
28	SLD 5	36	689	3295	-39.69	-5.28	0.03
28	SLD 6	36	689	3295	-39.69	-5.28	0.03
28	SLD 7	17	192	2348	-16.15	10.21	0.01
28	SLD 8	17	192	2348	-16.15	10.21	0.01
28	SLD 9	33	643	3012	-37.72	-7.69	0.03
28	SLD 10	33	643	3012	-37.72	-7.69	0.03
28	SLD 11	15	146	2066	-14.19	7.81	0.01
28	SLD 12	15	146	2066	-14.19	7.81	0.01
28	SLD 13	24	415	2351	-27.2	-5.08	0.02
28	SLD 14	24	415	2351	-27.2	-5.08	0.02
28	SLD 15	18	266	2067	-20.14	-0.43	0.01
28	SLD 16	18	266	2067	-20.14	-0.43	0.01
28	SLV 1	42	788	4141	-43.8	4.81	0.04
28	SLV 2	42	788	4141	-43.8	4.81	0.04
28	SLV 3	29	406	3426	-25.5	16.87	0.03
28	SLV 4	29	406	3426	-25.5	16.87	0.03
28	SLV 5	51	1109	4202	-59.76	-15.97	0.05
28	SLV 6	51	1109	4202	-59.76	-15.97	0.05
28	SLV 7	6	-166	1820	1.26	24.24	0
28	SLV 8	6	-166	1820	1.26	24.24	0
28	SLV 9	45	1001	3540	-55.13	-21.72	0.04
28	SLV 10	45	1001	3540	-55.13	-21.72	0.04
28	SLV 11	0	-274	1158	5.88	18.49	-0.01
28	SLV 12	0	-274	1158	5.88	18.49	-0.01
28	SLV 13	22	429	1934	-28.38	-14.35	0.01
28	SLV 14	22	429	1934	-28.38	-14.35	0.01
28	SLV 15	9	47	1219	-10.07	-2.29	0
28	SLV 16	9	47	1219	-10.07	-2.29	0
29	SLU 1	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 2	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 3	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 4	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 5	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 6	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 7	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 8	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 9	-4	362	1350	-13.61	-0.71	-0.02
29	SLU 10	-4	411	1309	-15.21	-0.51	-0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
29	SLU 11	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 12	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 13	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 14	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 15	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 16	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 17	-4	411	1309	-15.21	-0.51	-0.02
29	SLU 18	-4	433	1292	-15.89	-0.42	-0.02
29	SLU 19	-4	433	1292	-15.89	-0.42	-0.02
29	SLU 20	-4	433	1292	-15.89	-0.42	-0.02
29	SLU 21	-4	433	1292	-15.89	-0.42	-0.02
29	SLU 22	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 23	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 24	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 25	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 26	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 27	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 28	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 29	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 30	-4	395	1382	-14.78	-0.65	-0.02
29	SLU 31	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 32	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 33	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 34	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 35	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 36	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 37	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 38	-4	445	1341	-16.37	-0.45	-0.02
29	SLU 39	-4	467	1324	-17.06	-0.36	-0.03
29	SLU 40	-4	467	1324	-17.06	-0.36	-0.03
29	SLU 41	-4	467	1324	-17.06	-0.36	-0.03
29	SLU 42	-4	467	1324	-17.06	-0.36	-0.03
29	SLU 43	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 44	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 45	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 46	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 47	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 48	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 49	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 50	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 51	-5	459	1744	-17.3	-0.94	-0.03
29	SLU 52	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 53	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 54	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 55	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 56	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 57	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 58	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 59	-5	508	1703	-18.89	-0.74	-0.03
29	SLU 60	-5	530	1686	-19.57	-0.65	-0.03
29	SLU 61	-5	530	1686	-19.57	-0.65	-0.03
29	SLU 62	-5	530	1686	-19.57	-0.65	-0.03
29	SLU 63	-5	530	1686	-19.57	-0.65	-0.03
29	SLU 64	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 65	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 66	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 67	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 68	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 69	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 70	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 71	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 72	-5	492	1776	-18.47	-0.88	-0.03
29	SLU 73	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 74	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 75	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 76	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 77	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 78	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 79	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 80	-5	542	1735	-20.06	-0.68	-0.03
29	SLU 81	-5	563	1718	-20.74	-0.59	-0.03
29	SLU 82	-5	563	1718	-20.74	-0.59	-0.03
29	SLU 83	-5	563	1718	-20.74	-0.59	-0.03
29	SLU 84	-5	563	1718	-20.74	-0.59	-0.03
29	SLE RA 1	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 2	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 3	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 4	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 5	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 6	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 7	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 8	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 9	-4	371	1359	-13.95	-0.69	-0.02
29	SLE RA 10	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 11	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 12	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 13	-4	404	1332	-15.01	-0.56	-0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
29	SLE RA 14	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 15	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 16	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 17	-4	404	1332	-15.01	-0.56	-0.02
29	SLE RA 18	-4	419	1320	-15.46	-0.5	-0.02
29	SLE RA 19	-4	419	1320	-15.46	-0.5	-0.02
29	SLE RA 20	-4	419	1320	-15.46	-0.5	-0.02
29	SLE RA 21	-4	419	1320	-15.46	-0.5	-0.02
29	SLE FR 1	-4	371	1359	-13.95	-0.69	-0.02
29	SLE FR 2	-4	371	1359	-13.95	-0.69	-0.02
29	SLE FR 3	-4	371	1359	-13.95	-0.69	-0.02
29	SLE FR 4	-4	386	1347	-14.4	-0.63	-0.02
29	SLE FR 5	-4	386	1347	-14.4	-0.63	-0.02
29	SLE FR 6	-4	395	1340	-14.71	-0.59	-0.02
29	SLE QP 1	-4	371	1359	-13.95	-0.69	-0.02
29	SLE QP 2	-4	386	1347	-14.4	-0.63	-0.02
29	SLD 1	0	362	480	-14.56	3.89	-0.01
29	SLD 2	0	362	480	-14.56	3.89	-0.01
29	SLD 3	-2	220	866	-9.12	4.95	0
29	SLD 4	-2	220	866	-9.12	4.95	0
29	SLD 5	0	594	503	-22.71	-0.88	-0.03
29	SLD 6	0	594	503	-22.71	-0.88	-0.03
29	SLD 7	-6	121	1787	-4.56	2.65	-0.01
29	SLD 8	-6	121	1787	-4.56	2.65	-0.01
29	SLD 9	-2	650	908	-24.24	-3.92	-0.04
29	SLD 10	-2	650	908	-24.24	-3.92	-0.04
29	SLD 11	-8	177	2192	-6.1	-0.38	-0.02
29	SLD 12	-8	177	2192	-6.1	-0.38	-0.02
29	SLD 13	-6	551	1829	-19.69	-6.22	-0.04
29	SLD 14	-6	551	1829	-19.69	-6.22	-0.04
29	SLD 15	-7	409	2215	-14.24	-5.16	-0.04
29	SLD 16	-7	409	2215	-14.24	-5.16	-0.04
29	SLV 1	5	333	-859	-14.82	10.15	0.01
29	SLV 2	5	333	-859	-14.82	10.15	0.01
29	SLV 3	0	-5	186	-1.94	12.8	0.02
29	SLV 4	0	-5	186	-1.94	12.8	0.02
29	SLV 5	6	882	-899	-34.06	-1.41	-0.04
29	SLV 6	6	882	-899	-34.06	-1.41	-0.04
29	SLV 7	-10	-244	2583	8.87	7.41	0.01
29	SLV 8	-10	-244	2583	8.87	7.41	0.01
29	SLV 9	2	1015	112	-37.68	-8.67	-0.06
29	SLV 10	2	1015	112	-37.68	-8.67	-0.06
29	SLV 11	-14	-111	3593	5.26	0.15	-0.01
29	SLV 12	-14	-111	3593	5.26	0.15	-0.01
29	SLV 13	-8	776	2509	-26.87	-14.06	-0.07
29	SLV 14	-8	776	2509	-26.87	-14.06	-0.07
29	SLV 15	-13	438	3553	-13.99	-11.42	-0.05
29	SLV 16	-13	438	3553	-13.99	-11.42	-0.05
30	SLU 1	4	94	2321	1.4	-1.69	0
30	SLU 2	4	94	2321	1.4	-1.69	0
30	SLU 3	4	94	2321	1.4	-1.69	0
30	SLU 4	4	94	2321	1.4	-1.69	0
30	SLU 5	4	94	2321	1.4	-1.69	0
30	SLU 6	4	94	2321	1.4	-1.69	0
30	SLU 7	4	94	2321	1.4	-1.69	0
30	SLU 8	4	94	2321	1.4	-1.69	0
30	SLU 9	4	94	2321	1.4	-1.69	0
30	SLU 10	2	87	2720	3.19	-2.57	0
30	SLU 11	2	87	2720	3.19	-2.57	0
30	SLU 12	2	87	2720	3.19	-2.57	0
30	SLU 13	2	87	2720	3.19	-2.57	0
30	SLU 14	2	87	2720	3.19	-2.57	0
30	SLU 15	2	87	2720	3.19	-2.57	0
30	SLU 16	2	87	2720	3.19	-2.57	0
30	SLU 17	2	87	2720	3.19	-2.57	0
30	SLU 18	2	84	2891	3.96	-2.94	0
30	SLU 19	2	84	2891	3.96	-2.94	0
30	SLU 20	2	84	2891	3.96	-2.94	0
30	SLU 21	2	84	2891	3.96	-2.94	0
30	SLU 22	3	92	2543	2.14	-2.07	0
30	SLU 23	3	92	2543	2.14	-2.07	0
30	SLU 24	3	92	2543	2.14	-2.07	0
30	SLU 25	3	92	2543	2.14	-2.07	0
30	SLU 26	3	92	2543	2.14	-2.07	0
30	SLU 27	3	92	2543	2.14	-2.07	0
30	SLU 28	3	92	2543	2.14	-2.07	0
30	SLU 29	3	92	2543	2.14	-2.07	0
30	SLU 30	3	92	2543	2.14	-2.07	0
30	SLU 31	2	85	2943	3.93	-2.95	0
30	SLU 32	2	85	2943	3.93	-2.95	0
30	SLU 33	2	85	2943	3.93	-2.95	0
30	SLU 34	2	85	2943	3.93	-2.95	0
30	SLU 35	2	85	2943	3.93	-2.95	0
30	SLU 36	2	85	2943	3.93	-2.95	0
30	SLU 37	2	85	2943	3.93	-2.95	0
30	SLU 38	2	85	2943	3.93	-2.95	0
30	SLU 39	1	82	3114	4.7	-3.33	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
30	SLU 40	1	82	3114	4.7	-3.33	0
30	SLU 41	1	82	3114	4.7	-3.33	0
30	SLU 42	1	82	3114	4.7	-3.33	0
30	SLU 43	5	122	2941	1.56	-2.06	0
30	SLU 44	5	122	2941	1.56	-2.06	0
30	SLU 45	5	122	2941	1.56	-2.06	0
30	SLU 46	5	122	2941	1.56	-2.06	0
30	SLU 47	5	122	2941	1.56	-2.06	0
30	SLU 48	5	122	2941	1.56	-2.06	0
30	SLU 49	5	122	2941	1.56	-2.06	0
30	SLU 50	5	122	2941	1.56	-2.06	0
30	SLU 51	5	122	2941	1.56	-2.06	0
30	SLU 52	4	115	3340	3.35	-2.94	0
30	SLU 53	4	115	3340	3.35	-2.94	0
30	SLU 54	4	115	3340	3.35	-2.94	0
30	SLU 55	4	115	3340	3.35	-2.94	0
30	SLU 56	4	115	3340	3.35	-2.94	0
30	SLU 57	4	115	3340	3.35	-2.94	0
30	SLU 58	4	115	3340	3.35	-2.94	0
30	SLU 59	4	115	3340	3.35	-2.94	0
30	SLU 60	3	112	3511	4.12	-3.31	0
30	SLU 61	3	112	3511	4.12	-3.31	0
30	SLU 62	3	112	3511	4.12	-3.31	0
30	SLU 63	3	112	3511	4.12	-3.31	0
30	SLU 64	4	120	3163	2.31	-2.45	0
30	SLU 65	4	120	3163	2.31	-2.45	0
30	SLU 66	4	120	3163	2.31	-2.45	0
30	SLU 67	4	120	3163	2.31	-2.45	0
30	SLU 68	4	120	3163	2.31	-2.45	0
30	SLU 69	4	120	3163	2.31	-2.45	0
30	SLU 70	4	120	3163	2.31	-2.45	0
30	SLU 71	4	120	3163	2.31	-2.45	0
30	SLU 72	4	120	3163	2.31	-2.45	0
30	SLU 73	3	113	3563	4.1	-3.33	0
30	SLU 74	3	113	3563	4.1	-3.33	0
30	SLU 75	3	113	3563	4.1	-3.33	0
30	SLU 76	3	113	3563	4.1	-3.33	0
30	SLU 77	3	113	3563	4.1	-3.33	0
30	SLU 78	3	113	3563	4.1	-3.33	0
30	SLU 79	3	113	3563	4.1	-3.33	0
30	SLU 80	3	113	3563	4.1	-3.33	0
30	SLU 81	3	110	3734	4.87	-3.7	0
30	SLU 82	3	110	3734	4.87	-3.7	0
30	SLU 83	3	110	3734	4.87	-3.7	0
30	SLU 84	3	110	3734	4.87	-3.7	0
30	SLE RA 1	3	93	2384	1.61	-1.8	0
30	SLE RA 2	3	93	2384	1.61	-1.8	0
30	SLE RA 3	3	93	2384	1.61	-1.8	0
30	SLE RA 4	3	93	2384	1.61	-1.8	0
30	SLE RA 5	3	93	2384	1.61	-1.8	0
30	SLE RA 6	3	93	2384	1.61	-1.8	0
30	SLE RA 7	3	93	2384	1.61	-1.8	0
30	SLE RA 8	3	93	2384	1.61	-1.8	0
30	SLE RA 9	3	93	2384	1.61	-1.8	0
30	SLE RA 10	3	88	2651	2.81	-2.38	0
30	SLE RA 11	3	88	2651	2.81	-2.38	0
30	SLE RA 12	3	88	2651	2.81	-2.38	0
30	SLE RA 13	3	88	2651	2.81	-2.38	0
30	SLE RA 14	3	88	2651	2.81	-2.38	0
30	SLE RA 15	3	88	2651	2.81	-2.38	0
30	SLE RA 16	3	88	2651	2.81	-2.38	0
30	SLE RA 17	3	88	2651	2.81	-2.38	0
30	SLE RA 18	2	86	2765	3.32	-2.63	0
30	SLE RA 19	2	86	2765	3.32	-2.63	0
30	SLE RA 20	2	86	2765	3.32	-2.63	0
30	SLE RA 21	2	86	2765	3.32	-2.63	0
30	SLE FR 1	3	93	2384	1.61	-1.8	0
30	SLE FR 2	3	93	2384	1.61	-1.8	0
30	SLE FR 3	3	93	2384	1.61	-1.8	0
30	SLE FR 4	3	91	2498	2.12	-2.05	0
30	SLE FR 5	3	91	2498	2.12	-2.05	0
30	SLE FR 6	3	90	2574	2.46	-2.22	0
30	SLE QP 1	3	93	2384	1.61	-1.8	0
30	SLE QP 2	3	91	2498	2.12	-2.05	0
30	SLD 1	-7	101	2886	1.43	3	-0.01
30	SLD 2	-7	101	2886	1.43	3	-0.01
30	SLD 3	2	-10	2741	5.67	10.62	-0.01
30	SLD 4	2	-10	2741	5.67	10.62	-0.01
30	SLD 5	-14	263	2835	-4.51	-12.09	-0.01
30	SLD 6	-14	263	2835	-4.51	-12.09	-0.01
30	SLD 7	17	-108	2351	9.61	13.31	0
30	SLD 8	17	-108	2351	9.61	13.31	0
30	SLD 9	-11	290	2646	-5.36	-17.4	0
30	SLD 10	-11	290	2646	-5.36	-17.4	0
30	SLD 11	20	-81	2162	8.75	8	0.01
30	SLD 12	20	-81	2162	8.75	8	0.01
30	SLD 13	4	192	2256	-1.42	-14.71	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
30	SLD 14	4	192	2256	-1.42	-14.71	0.01
30	SLD 15	13	81	2111	2.82	-7.09	0.01
30	SLD 16	13	81	2111	2.82	-7.09	0.01
30	SLV 1	-22	119	3418	0.43	9.16	-0.03
30	SLV 2	-22	119	3418	0.43	9.16	-0.03
30	SLV 3	2	-152	3050	10.5	28.99	-0.02
30	SLV 4	2	-152	3050	10.5	28.99	-0.02
30	SLV 5	-40	511	3332	-13.66	-28.76	-0.02
30	SLV 6	-40	511	3332	-13.66	-28.76	-0.02
30	SLV 7	38	-394	2107	19.91	37.34	0
30	SLV 8	38	-394	2107	19.91	37.34	0
30	SLV 9	-32	576	2890	-15.67	-41.43	0
30	SLV 10	-32	576	2890	-15.67	-41.43	0
30	SLV 11	46	-329	1665	17.91	24.67	0.02
30	SLV 12	46	-329	1665	17.91	24.67	0.02
30	SLV 13	5	334	1947	-6.26	-33.08	0.02
30	SLV 14	5	334	1947	-6.26	-33.08	0.02
30	SLV 15	28	63	1579	3.82	-13.25	0.03
30	SLV 16	28	63	1579	3.82	-13.25	0.03
31	SLU 1	0	306	1493	-11.1	-0.02	0.01
31	SLU 2	0	306	1493	-11.1	-0.02	0.01
31	SLU 3	0	306	1493	-11.1	-0.02	0.01
31	SLU 4	0	306	1493	-11.1	-0.02	0.01
31	SLU 5	0	306	1493	-11.1	-0.02	0.01
31	SLU 6	0	306	1493	-11.1	-0.02	0.01
31	SLU 7	0	306	1493	-11.1	-0.02	0.01
31	SLU 8	0	306	1493	-11.1	-0.02	0.01
31	SLU 9	0	306	1493	-11.1	-0.02	0.01
31	SLU 10	0	363	1522	-13.04	0.23	0.01
31	SLU 11	0	363	1522	-13.04	0.23	0.01
31	SLU 12	0	363	1522	-13.04	0.23	0.01
31	SLU 13	0	363	1522	-13.04	0.23	0.01
31	SLU 14	0	363	1522	-13.04	0.23	0.01
31	SLU 15	0	363	1522	-13.04	0.23	0.01
31	SLU 16	0	363	1522	-13.04	0.23	0.01
31	SLU 17	0	363	1522	-13.04	0.23	0.01
31	SLU 18	0	387	1535	-13.87	0.34	0.01
31	SLU 19	0	387	1535	-13.87	0.34	0.01
31	SLU 20	0	387	1535	-13.87	0.34	0.01
31	SLU 21	0	387	1535	-13.87	0.34	0.01
31	SLU 22	0	340	1557	-12.31	0.09	0.01
31	SLU 23	0	340	1557	-12.31	0.09	0.01
31	SLU 24	0	340	1557	-12.31	0.09	0.01
31	SLU 25	0	340	1557	-12.31	0.09	0.01
31	SLU 26	0	340	1557	-12.31	0.09	0.01
31	SLU 27	0	340	1557	-12.31	0.09	0.01
31	SLU 28	0	340	1557	-12.31	0.09	0.01
31	SLU 29	0	340	1557	-12.31	0.09	0.01
31	SLU 30	0	340	1557	-12.31	0.09	0.01
31	SLU 31	0	398	1586	-14.25	0.34	0.01
31	SLU 32	0	398	1586	-14.25	0.34	0.01
31	SLU 33	0	398	1586	-14.25	0.34	0.01
31	SLU 34	0	398	1586	-14.25	0.34	0.01
31	SLU 35	0	398	1586	-14.25	0.34	0.01
31	SLU 36	0	398	1586	-14.25	0.34	0.01
31	SLU 37	0	398	1586	-14.25	0.34	0.01
31	SLU 38	0	398	1586	-14.25	0.34	0.01
31	SLU 39	0	422	1599	-15.09	0.45	0.01
31	SLU 40	0	422	1599	-15.09	0.45	0.01
31	SLU 41	0	422	1599	-15.09	0.45	0.01
31	SLU 42	0	422	1599	-15.09	0.45	0.01
31	SLU 43	0	385	1919	-14.02	-0.07	0.01
31	SLU 44	0	385	1919	-14.02	-0.07	0.01
31	SLU 45	0	385	1919	-14.02	-0.07	0.01
31	SLU 46	0	385	1919	-14.02	-0.07	0.01
31	SLU 47	0	385	1919	-14.02	-0.07	0.01
31	SLU 48	0	385	1919	-14.02	-0.07	0.01
31	SLU 49	0	385	1919	-14.02	-0.07	0.01
31	SLU 50	0	385	1919	-14.02	-0.07	0.01
31	SLU 51	0	385	1919	-14.02	-0.07	0.01
31	SLU 52	0	442	1948	-15.96	0.19	0.01
31	SLU 53	0	442	1948	-15.96	0.19	0.01
31	SLU 54	0	442	1948	-15.96	0.19	0.01
31	SLU 55	0	442	1948	-15.96	0.19	0.01
31	SLU 56	0	442	1948	-15.96	0.19	0.01
31	SLU 57	0	442	1948	-15.96	0.19	0.01
31	SLU 58	0	442	1948	-15.96	0.19	0.01
31	SLU 59	0	442	1948	-15.96	0.19	0.01
31	SLU 60	0	467	1961	-16.79	0.3	0.01
31	SLU 61	0	467	1961	-16.79	0.3	0.01
31	SLU 62	0	467	1961	-16.79	0.3	0.01
31	SLU 63	0	467	1961	-16.79	0.3	0.01
31	SLU 64	0	420	1983	-15.23	0.04	0.01
31	SLU 65	0	420	1983	-15.23	0.04	0.01
31	SLU 66	0	420	1983	-15.23	0.04	0.01
31	SLU 67	0	420	1983	-15.23	0.04	0.01
31	SLU 68	0	420	1983	-15.23	0.04	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
31	SLU 69	0	420	1983	-15.23	0.04	0.01
31	SLU 70	0	420	1983	-15.23	0.04	0.01
31	SLU 71	0	420	1983	-15.23	0.04	0.01
31	SLU 72	0	420	1983	-15.23	0.04	0.01
31	SLU 73	0	477	2012	-17.17	0.3	0.01
31	SLU 74	0	477	2012	-17.17	0.3	0.01
31	SLU 75	0	477	2012	-17.17	0.3	0.01
31	SLU 76	0	477	2012	-17.17	0.3	0.01
31	SLU 77	0	477	2012	-17.17	0.3	0.01
31	SLU 78	0	477	2012	-17.17	0.3	0.01
31	SLU 79	0	477	2012	-17.17	0.3	0.01
31	SLU 80	0	477	2012	-17.17	0.3	0.01
31	SLU 81	0	502	2025	-18	0.41	0.01
31	SLU 82	0	502	2025	-18	0.41	0.01
31	SLU 83	0	502	2025	-18	0.41	0.01
31	SLU 84	0	502	2025	-18	0.41	0.01
31	SLE RA 1	0	316	1511	-11.45	0.01	0.01
31	SLE RA 2	0	316	1511	-11.45	0.01	0.01
31	SLE RA 3	0	316	1511	-11.45	0.01	0.01
31	SLE RA 4	0	316	1511	-11.45	0.01	0.01
31	SLE RA 5	0	316	1511	-11.45	0.01	0.01
31	SLE RA 6	0	316	1511	-11.45	0.01	0.01
31	SLE RA 7	0	316	1511	-11.45	0.01	0.01
31	SLE RA 8	0	316	1511	-11.45	0.01	0.01
31	SLE RA 9	0	316	1511	-11.45	0.01	0.01
31	SLE RA 10	0	354	1531	-12.74	0.18	0.01
31	SLE RA 11	0	354	1531	-12.74	0.18	0.01
31	SLE RA 12	0	354	1531	-12.74	0.18	0.01
31	SLE RA 13	0	354	1531	-12.74	0.18	0.01
31	SLE RA 14	0	354	1531	-12.74	0.18	0.01
31	SLE RA 15	0	354	1531	-12.74	0.18	0.01
31	SLE RA 16	0	354	1531	-12.74	0.18	0.01
31	SLE RA 17	0	354	1531	-12.74	0.18	0.01
31	SLE RA 18	0	370	1539	-13.3	0.25	0.01
31	SLE RA 19	0	370	1539	-13.3	0.25	0.01
31	SLE RA 20	0	370	1539	-13.3	0.25	0.01
31	SLE RA 21	0	370	1539	-13.3	0.25	0.01
31	SLE FR 1	0	316	1511	-11.45	0.01	0.01
31	SLE FR 2	0	316	1511	-11.45	0.01	0.01
31	SLE FR 3	0	316	1511	-11.45	0.01	0.01
31	SLE FR 4	0	332	1520	-12	0.08	0.01
31	SLE FR 5	0	332	1520	-12	0.08	0.01
31	SLE FR 6	0	343	1525	-12.37	0.13	0.01
31	SLE QP 1	0	316	1511	-11.45	0.01	0.01
31	SLE QP 2	0	332	1520	-12	0.08	0.01
31	SLD 1	4	319	920	-11.81	9.02	-0.01
31	SLD 2	4	319	920	-11.81	9.02	-0.01
31	SLD 3	7	179	1186	-6.37	11.34	0
31	SLD 4	7	179	1186	-6.37	11.34	0
31	SLD 5	-3	540	937	-20.19	-0.77	-0.01
31	SLD 6	-3	540	937	-20.19	-0.77	-0.01
31	SLD 7	7	75	1823	-2.07	6.99	0.01
31	SLD 8	7	75	1823	-2.07	6.99	0.01
31	SLD 9	-6	589	1217	-21.94	-6.82	0
31	SLD 10	-6	589	1217	-21.94	-6.82	0
31	SLD 11	3	124	2103	-3.81	0.93	0.02
31	SLD 12	3	124	2103	-3.81	0.93	0.02
31	SLD 13	-7	485	1854	-17.63	-11.18	0.02
31	SLD 14	-7	485	1854	-17.63	-11.18	0.02
31	SLD 15	-4	345	2120	-12.2	-8.85	0.02
31	SLD 16	-4	345	2120	-12.2	-8.85	0.02
31	SLV 1	9	304	-21	-11.63	21.17	-0.03
31	SLV 2	9	304	-21	-11.63	21.17	-0.03
31	SLV 3	17	-28	709	1.23	26.96	-0.01
31	SLV 4	17	-28	709	1.23	26.96	-0.01
31	SLV 5	-9	826	-50	-31.41	-2.36	-0.03
31	SLV 6	-9	826	-50	-31.41	-2.36	-0.03
31	SLV 7	16	-279	2384	11.48	16.92	0.03
31	SLV 8	16	-279	2384	11.48	16.92	0.03
31	SLV 9	-16	943	656	-35.49	-16.75	-0.01
31	SLV 10	-16	943	656	-35.49	-16.75	-0.01
31	SLV 11	9	-162	3089	7.4	2.53	0.05
31	SLV 12	9	-162	3089	7.4	2.53	0.05
31	SLV 13	-17	692	2331	-25.24	-26.79	0.03
31	SLV 14	-17	692	2331	-25.24	-26.79	0.03
31	SLV 15	-9	360	3061	-12.37	-21.01	0.05
31	SLV 16	-9	360	3061	-12.37	-21.01	0.05
32	SLU 1	1	85	2143	-9.38	-2.15	0
32	SLU 2	1	85	2143	-9.38	-2.15	0
32	SLU 3	1	85	2143	-9.38	-2.15	0
32	SLU 4	1	85	2143	-9.38	-2.15	0
32	SLU 5	1	85	2143	-9.38	-2.15	0
32	SLU 6	1	85	2143	-9.38	-2.15	0
32	SLU 7	1	85	2143	-9.38	-2.15	0
32	SLU 8	1	85	2143	-9.38	-2.15	0
32	SLU 9	1	85	2143	-9.38	-2.15	0
32	SLU 10	0	89	2505	-11.17	-3.18	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
32	SLU 11	0	89	2505	-11.17	-3.18	0
32	SLU 12	0	89	2505	-11.17	-3.18	0
32	SLU 13	0	89	2505	-11.17	-3.18	0
32	SLU 14	0	89	2505	-11.17	-3.18	0
32	SLU 15	0	89	2505	-11.17	-3.18	0
32	SLU 16	0	89	2505	-11.17	-3.18	0
32	SLU 17	0	89	2505	-11.17	-3.18	0
32	SLU 18	0	91	2661	-11.94	-3.62	0
32	SLU 19	0	91	2661	-11.94	-3.62	0
32	SLU 20	0	91	2661	-11.94	-3.62	0
32	SLU 21	0	91	2661	-11.94	-3.62	0
32	SLU 22	1	88	2342	-10.26	-2.61	0
32	SLU 23	1	88	2342	-10.26	-2.61	0
32	SLU 24	1	88	2342	-10.26	-2.61	0
32	SLU 25	1	88	2342	-10.26	-2.61	0
32	SLU 26	1	88	2342	-10.26	-2.61	0
32	SLU 27	1	88	2342	-10.26	-2.61	0
32	SLU 28	1	88	2342	-10.26	-2.61	0
32	SLU 29	1	88	2342	-10.26	-2.61	0
32	SLU 30	1	88	2342	-10.26	-2.61	0
32	SLU 31	0	92	2705	-12.05	-3.64	0
32	SLU 32	0	92	2705	-12.05	-3.64	0
32	SLU 33	0	92	2705	-12.05	-3.64	0
32	SLU 34	0	92	2705	-12.05	-3.64	0
32	SLU 35	0	92	2705	-12.05	-3.64	0
32	SLU 36	0	92	2705	-12.05	-3.64	0
32	SLU 37	0	92	2705	-12.05	-3.64	0
32	SLU 38	0	92	2705	-12.05	-3.64	0
32	SLU 39	-1	94	2860	-12.82	-4.08	0
32	SLU 40	-1	94	2860	-12.82	-4.08	0
32	SLU 41	-1	94	2860	-12.82	-4.08	0
32	SLU 42	-1	94	2860	-12.82	-4.08	0
32	SLU 43	2	109	2717	-11.89	-2.64	0
32	SLU 44	2	109	2717	-11.89	-2.64	0
32	SLU 45	2	109	2717	-11.89	-2.64	0
32	SLU 46	2	109	2717	-11.89	-2.64	0
32	SLU 47	2	109	2717	-11.89	-2.64	0
32	SLU 48	2	109	2717	-11.89	-2.64	0
32	SLU 49	2	109	2717	-11.89	-2.64	0
32	SLU 50	2	109	2717	-11.89	-2.64	0
32	SLU 51	2	109	2717	-11.89	-2.64	0
32	SLU 52	1	114	3079	-13.68	-3.66	0
32	SLU 53	1	114	3079	-13.68	-3.66	0
32	SLU 54	1	114	3079	-13.68	-3.66	0
32	SLU 55	1	114	3079	-13.68	-3.66	0
32	SLU 56	1	114	3079	-13.68	-3.66	0
32	SLU 57	1	114	3079	-13.68	-3.66	0
32	SLU 58	1	114	3079	-13.68	-3.66	0
32	SLU 59	1	114	3079	-13.68	-3.66	0
32	SLU 60	0	116	3235	-14.45	-4.1	0
32	SLU 61	0	116	3235	-14.45	-4.1	0
32	SLU 62	0	116	3235	-14.45	-4.1	0
32	SLU 63	0	116	3235	-14.45	-4.1	0
32	SLU 64	2	112	2916	-12.77	-3.1	0
32	SLU 65	2	112	2916	-12.77	-3.1	0
32	SLU 66	2	112	2916	-12.77	-3.1	0
32	SLU 67	2	112	2916	-12.77	-3.1	0
32	SLU 68	2	112	2916	-12.77	-3.1	0
32	SLU 69	2	112	2916	-12.77	-3.1	0
32	SLU 70	2	112	2916	-12.77	-3.1	0
32	SLU 71	2	112	2916	-12.77	-3.1	0
32	SLU 72	2	112	2916	-12.77	-3.1	0
32	SLU 73	0	117	3279	-14.56	-4.13	0
32	SLU 74	0	117	3279	-14.56	-4.13	0
32	SLU 75	0	117	3279	-14.56	-4.13	0
32	SLU 76	0	117	3279	-14.56	-4.13	0
32	SLU 77	0	117	3279	-14.56	-4.13	0
32	SLU 78	0	117	3279	-14.56	-4.13	0
32	SLU 79	0	117	3279	-14.56	-4.13	0
32	SLU 80	0	117	3279	-14.56	-4.13	0
32	SLU 81	0	118	3435	-15.33	-4.57	0
32	SLU 82	0	118	3435	-15.33	-4.57	0
32	SLU 83	0	118	3435	-15.33	-4.57	0
32	SLU 84	0	118	3435	-15.33	-4.57	0
32	SLE RA 1	1	86	2200	-9.63	-2.28	0
32	SLE RA 2	1	86	2200	-9.63	-2.28	0
32	SLE RA 3	1	86	2200	-9.63	-2.28	0
32	SLE RA 4	1	86	2200	-9.63	-2.28	0
32	SLE RA 5	1	86	2200	-9.63	-2.28	0
32	SLE RA 6	1	86	2200	-9.63	-2.28	0
32	SLE RA 7	1	86	2200	-9.63	-2.28	0
32	SLE RA 8	1	86	2200	-9.63	-2.28	0
32	SLE RA 9	1	86	2200	-9.63	-2.28	0
32	SLE RA 10	1	89	2441	-10.82	-2.97	0
32	SLE RA 11	1	89	2441	-10.82	-2.97	0
32	SLE RA 12	1	89	2441	-10.82	-2.97	0
32	SLE RA 13	1	89	2441	-10.82	-2.97	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
32	SLE RA 14	1	89	2441	-10.82	-2.97	0
32	SLE RA 15	1	89	2441	-10.82	-2.97	0
32	SLE RA 16	1	89	2441	-10.82	-2.97	0
32	SLE RA 17	1	89	2441	-10.82	-2.97	0
32	SLE RA 18	0	90	2545	-11.33	-3.26	0
32	SLE RA 19	0	90	2545	-11.33	-3.26	0
32	SLE RA 20	0	90	2545	-11.33	-3.26	0
32	SLE RA 21	0	90	2545	-11.33	-3.26	0
32	SLE FR 1	1	86	2200	-9.63	-2.28	0
32	SLE FR 2	1	86	2200	-9.63	-2.28	0
32	SLE FR 3	1	86	2200	-9.63	-2.28	0
32	SLE FR 4	1	87	2303	-10.14	-2.58	0
32	SLE FR 5	1	87	2303	-10.14	-2.58	0
32	SLE FR 6	1	88	2372	-10.48	-2.77	0
32	SLE QP 1	1	86	2200	-9.63	-2.28	0
32	SLE QP 2	1	87	2303	-10.14	-2.58	0
32	SLD 1	9	104	2583	-15.4	7.05	-0.02
32	SLD 2	9	104	2583	-15.4	7.05	-0.02
32	SLD 3	18	-15	2495	-9.68	15.99	-0.02
32	SLD 4	18	-15	2495	-9.68	15.99	-0.02
32	SLD 5	-11	272	2521	-20.39	-13.23	-0.01
32	SLD 6	-11	272	2521	-20.39	-13.23	-0.01
32	SLD 7	20	-123	2227	-1.33	16.54	0
32	SLD 8	20	-123	2227	-1.33	16.54	0
32	SLD 9	-18	297	2379	-18.95	-21.69	0
32	SLD 10	-18	297	2379	-18.95	-21.69	0
32	SLD 11	13	-98	2086	0.11	8.08	0.01
32	SLD 12	13	-98	2086	0.11	8.08	0.01
32	SLD 13	-16	189	2111	-10.6	-21.14	0.02
32	SLD 14	-16	189	2111	-10.6	-21.14	0.02
32	SLD 15	-7	70	2023	-4.88	-12.21	0.02
32	SLD 16	-7	70	2023	-4.88	-12.21	0.02
32	SLV 1	18	131	2970	-23.05	19.38	-0.05
32	SLV 2	18	131	2970	-23.05	19.38	-0.05
32	SLV 3	42	-158	2737	-8.68	42.61	-0.04
32	SLV 4	42	-158	2737	-8.68	42.61	-0.04
32	SLV 5	-30	539	2857	-35.8	-31.23	-0.03
32	SLV 6	-30	539	2857	-35.8	-31.23	-0.03
32	SLV 7	49	-426	2079	12.09	46.22	0
32	SLV 8	49	-426	2079	12.09	46.22	0
32	SLV 9	-47	599	2527	-32.37	-51.37	0
32	SLV 10	-47	599	2527	-32.37	-51.37	0
32	SLV 11	32	-365	1749	15.53	26.08	0.03
32	SLV 12	32	-365	1749	15.53	26.08	0.03
32	SLV 13	-40	332	1870	-11.59	-47.76	0.04
32	SLV 14	-40	332	1870	-11.59	-47.76	0.04
32	SLV 15	-17	43	1636	2.77	-24.53	0.05
32	SLV 16	-17	43	1636	2.77	-24.53	0.05
33	SLU 1	0	238	1661	-8.67	0.06	0
33	SLU 2	0	238	1661	-8.67	0.06	0
33	SLU 3	0	238	1661	-8.67	0.06	0
33	SLU 4	0	238	1661	-8.67	0.06	0
33	SLU 5	0	238	1661	-8.67	0.06	0
33	SLU 6	0	238	1661	-8.67	0.06	0
33	SLU 7	0	238	1661	-8.67	0.06	0
33	SLU 8	0	238	1661	-8.67	0.06	0
33	SLU 9	0	238	1661	-8.67	0.06	0
33	SLU 10	0	291	1760	-10.41	0.27	0
33	SLU 11	0	291	1760	-10.41	0.27	0
33	SLU 12	0	291	1760	-10.41	0.27	0
33	SLU 13	0	291	1760	-10.41	0.27	0
33	SLU 14	0	291	1760	-10.41	0.27	0
33	SLU 15	0	291	1760	-10.41	0.27	0
33	SLU 16	0	291	1760	-10.41	0.27	0
33	SLU 17	0	291	1760	-10.41	0.27	0
33	SLU 18	0	314	1802	-11.15	0.36	0
33	SLU 19	0	314	1802	-11.15	0.36	0
33	SLU 20	0	314	1802	-11.15	0.36	0
33	SLU 21	0	314	1802	-11.15	0.36	0
33	SLU 22	0	270	1758	-9.75	0.16	0
33	SLU 23	0	270	1758	-9.75	0.16	0
33	SLU 24	0	270	1758	-9.75	0.16	0
33	SLU 25	0	270	1758	-9.75	0.16	0
33	SLU 26	0	270	1758	-9.75	0.16	0
33	SLU 27	0	270	1758	-9.75	0.16	0
33	SLU 28	0	270	1758	-9.75	0.16	0
33	SLU 29	0	270	1758	-9.75	0.16	0
33	SLU 30	0	270	1758	-9.75	0.16	0
33	SLU 31	0	322	1857	-11.49	0.37	0
33	SLU 32	0	322	1857	-11.49	0.37	0
33	SLU 33	0	322	1857	-11.49	0.37	0
33	SLU 34	0	322	1857	-11.49	0.37	0
33	SLU 35	0	322	1857	-11.49	0.37	0
33	SLU 36	0	322	1857	-11.49	0.37	0
33	SLU 37	0	322	1857	-11.49	0.37	0
33	SLU 38	0	322	1857	-11.49	0.37	0
33	SLU 39	0	345	1900	-12.23	0.46	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
33	SLU 40	0	345	1900	-12.23	0.46	0
33	SLU 41	0	345	1900	-12.23	0.46	0
33	SLU 42	0	345	1900	-12.23	0.46	0
33	SLU 43	0	299	2126	-10.91	0.04	0
33	SLU 44	0	299	2126	-10.91	0.04	0
33	SLU 45	0	299	2126	-10.91	0.04	0
33	SLU 46	0	299	2126	-10.91	0.04	0
33	SLU 47	0	299	2126	-10.91	0.04	0
33	SLU 48	0	299	2126	-10.91	0.04	0
33	SLU 49	0	299	2126	-10.91	0.04	0
33	SLU 50	0	299	2126	-10.91	0.04	0
33	SLU 51	0	299	2126	-10.91	0.04	0
33	SLU 52	0	352	2225	-12.64	0.26	0
33	SLU 53	0	352	2225	-12.64	0.26	0
33	SLU 54	0	352	2225	-12.64	0.26	0
33	SLU 55	0	352	2225	-12.64	0.26	0
33	SLU 56	0	352	2225	-12.64	0.26	0
33	SLU 57	0	352	2225	-12.64	0.26	0
33	SLU 58	0	352	2225	-12.64	0.26	0
33	SLU 59	0	352	2225	-12.64	0.26	0
33	SLU 60	0	374	2267	-13.38	0.35	0
33	SLU 61	0	374	2267	-13.38	0.35	0
33	SLU 62	0	374	2267	-13.38	0.35	0
33	SLU 63	0	374	2267	-13.38	0.35	0
33	SLU 64	0	330	2223	-11.99	0.14	0
33	SLU 65	0	330	2223	-11.99	0.14	0
33	SLU 66	0	330	2223	-11.99	0.14	0
33	SLU 67	0	330	2223	-11.99	0.14	0
33	SLU 68	0	330	2223	-11.99	0.14	0
33	SLU 69	0	330	2223	-11.99	0.14	0
33	SLU 70	0	330	2223	-11.99	0.14	0
33	SLU 71	0	330	2223	-11.99	0.14	0
33	SLU 72	0	330	2223	-11.99	0.14	0
33	SLU 73	0	383	2322	-13.72	0.36	0
33	SLU 74	0	383	2322	-13.72	0.36	0
33	SLU 75	0	383	2322	-13.72	0.36	0
33	SLU 76	0	383	2322	-13.72	0.36	0
33	SLU 77	0	383	2322	-13.72	0.36	0
33	SLU 78	0	383	2322	-13.72	0.36	0
33	SLU 79	0	383	2322	-13.72	0.36	0
33	SLU 80	0	383	2322	-13.72	0.36	0
33	SLU 81	0	406	2365	-14.46	0.45	0
33	SLU 82	0	406	2365	-14.46	0.45	0
33	SLU 83	0	406	2365	-14.46	0.45	0
33	SLU 84	0	406	2365	-14.46	0.45	0
33	SLE RA 1	0	247	1689	-8.98	0.09	0
33	SLE RA 2	0	247	1689	-8.98	0.09	0
33	SLE RA 3	0	247	1689	-8.98	0.09	0
33	SLE RA 4	0	247	1689	-8.98	0.09	0
33	SLE RA 5	0	247	1689	-8.98	0.09	0
33	SLE RA 6	0	247	1689	-8.98	0.09	0
33	SLE RA 7	0	247	1689	-8.98	0.09	0
33	SLE RA 8	0	247	1689	-8.98	0.09	0
33	SLE RA 9	0	247	1689	-8.98	0.09	0
33	SLE RA 10	0	282	1755	-10.14	0.23	0
33	SLE RA 11	0	282	1755	-10.14	0.23	0
33	SLE RA 12	0	282	1755	-10.14	0.23	0
33	SLE RA 13	0	282	1755	-10.14	0.23	0
33	SLE RA 14	0	282	1755	-10.14	0.23	0
33	SLE RA 15	0	282	1755	-10.14	0.23	0
33	SLE RA 16	0	282	1755	-10.14	0.23	0
33	SLE RA 17	0	282	1755	-10.14	0.23	0
33	SLE RA 18	0	298	1783	-10.63	0.29	0
33	SLE RA 19	0	298	1783	-10.63	0.29	0
33	SLE RA 20	0	298	1783	-10.63	0.29	0
33	SLE RA 21	0	298	1783	-10.63	0.29	0
33	SLE FR 1	0	247	1689	-8.98	0.09	0
33	SLE FR 2	0	247	1689	-8.98	0.09	0
33	SLE FR 3	0	247	1689	-8.98	0.09	0
33	SLE FR 4	0	262	1717	-9.48	0.15	0
33	SLE FR 5	0	262	1717	-9.48	0.15	0
33	SLE FR 6	0	272	1736	-9.81	0.19	0
33	SLE QP 1	0	247	1689	-8.98	0.09	0
33	SLE QP 2	0	262	1717	-9.48	0.15	0
33	SLD 1	13	260	1248	-9.79	13.91	0
33	SLD 2	13	260	1248	-9.79	13.91	0
33	SLD 3	16	121	1452	-4.19	17.61	0
33	SLD 4	16	121	1452	-4.19	17.61	0
33	SLD 5	-1	473	1268	-18.06	-1.32	-0.01
33	SLD 6	-1	473	1268	-18.06	-1.32	-0.01
33	SLD 7	10	9	1946	0.6	10.99	0.01
33	SLD 8	10	9	1946	0.6	10.99	0.01
33	SLD 9	-10	516	1488	-19.55	-10.69	0
33	SLD 10	-10	516	1488	-19.55	-10.69	0
33	SLD 11	1	52	2166	-0.89	1.62	0.01
33	SLD 12	1	52	2166	-0.89	1.62	0.01
33	SLD 13	-16	404	1982	-14.76	-17.31	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
33	SLD 14	-16	404	1982	-14.76	-17.31	0
33	SLD 15	-13	265	2186	-9.17	-13.62	0.01
33	SLD 16	-13	265	2186	-9.17	-13.62	0.01
33	SLV 1	30	260	505	-10.3	32.56	-0.01
33	SLV 2	30	260	505	-10.3	32.56	-0.01
33	SLV 3	38	-71	1069	2.98	41.75	0
33	SLV 4	38	-71	1069	2.98	41.75	0
33	SLV 5	-4	763	497	-29.87	-4.06	-0.02
33	SLV 6	-4	763	497	-29.87	-4.06	-0.02
33	SLV 7	24	-339	2379	14.41	26.56	0.01
33	SLV 8	24	-339	2379	14.41	26.56	0.01
33	SLV 9	-25	864	1055	-33.36	-26.27	-0.01
33	SLV 10	-25	864	1055	-33.36	-26.27	-0.01
33	SLV 11	4	-238	2937	10.92	4.36	0.02
33	SLV 12	4	-238	2937	10.92	4.36	0.02
33	SLV 13	-39	596	2365	-21.94	-41.45	0
33	SLV 14	-39	596	2365	-21.94	-41.45	0
33	SLV 15	-30	265	2929	-8.65	-32.27	0.01
33	SLV 16	-30	265	2929	-8.65	-32.27	0.01
34	SLU 1	-6	-51	1952	5.28	-3.34	0
34	SLU 2	-6	-51	1952	5.28	-3.34	0
34	SLU 3	-6	-51	1952	5.28	-3.34	0
34	SLU 4	-6	-51	1952	5.28	-3.34	0
34	SLU 5	-6	-51	1952	5.28	-3.34	0
34	SLU 6	-6	-51	1952	5.28	-3.34	0
34	SLU 7	-6	-51	1952	5.28	-3.34	0
34	SLU 8	-6	-51	1952	5.28	-3.34	0
34	SLU 9	-6	-51	1952	5.28	-3.34	0
34	SLU 10	-9	-78	2278	7.28	-4.67	0.01
34	SLU 11	-9	-78	2278	7.28	-4.67	0.01
34	SLU 12	-9	-78	2278	7.28	-4.67	0.01
34	SLU 13	-9	-78	2278	7.28	-4.67	0.01
34	SLU 14	-9	-78	2278	7.28	-4.67	0.01
34	SLU 15	-9	-78	2278	7.28	-4.67	0.01
34	SLU 16	-9	-78	2278	7.28	-4.67	0.01
34	SLU 17	-9	-78	2278	7.28	-4.67	0.01
34	SLU 18	-10	-89	2418	8.13	-5.24	0.01
34	SLU 19	-10	-89	2418	8.13	-5.24	0.01
34	SLU 20	-10	-89	2418	8.13	-5.24	0.01
34	SLU 21	-10	-89	2418	8.13	-5.24	0.01
34	SLU 22	-7	-62	2130	6.12	-3.95	0.01
34	SLU 23	-7	-62	2130	6.12	-3.95	0.01
34	SLU 24	-7	-62	2130	6.12	-3.95	0.01
34	SLU 25	-7	-62	2130	6.12	-3.95	0.01
34	SLU 26	-7	-62	2130	6.12	-3.95	0.01
34	SLU 27	-7	-62	2130	6.12	-3.95	0.01
34	SLU 28	-7	-62	2130	6.12	-3.95	0.01
34	SLU 29	-7	-62	2130	6.12	-3.95	0.01
34	SLU 30	-7	-62	2130	6.12	-3.95	0.01
34	SLU 31	-10	-88	2456	8.12	-5.27	0.01
34	SLU 32	-10	-88	2456	8.12	-5.27	0.01
34	SLU 33	-10	-88	2456	8.12	-5.27	0.01
34	SLU 34	-10	-88	2456	8.12	-5.27	0.01
34	SLU 35	-10	-88	2456	8.12	-5.27	0.01
34	SLU 36	-10	-88	2456	8.12	-5.27	0.01
34	SLU 37	-10	-88	2456	8.12	-5.27	0.01
34	SLU 38	-10	-88	2456	8.12	-5.27	0.01
34	SLU 39	-11	-100	2596	8.98	-5.84	0.01
34	SLU 40	-11	-100	2596	8.98	-5.84	0.01
34	SLU 41	-11	-100	2596	8.98	-5.84	0.01
34	SLU 42	-11	-100	2596	8.98	-5.84	0.01
34	SLU 43	-8	-63	2477	6.58	-4.13	0.01
34	SLU 44	-8	-63	2477	6.58	-4.13	0.01
34	SLU 45	-8	-63	2477	6.58	-4.13	0.01
34	SLU 46	-8	-63	2477	6.58	-4.13	0.01
34	SLU 47	-8	-63	2477	6.58	-4.13	0.01
34	SLU 48	-8	-63	2477	6.58	-4.13	0.01
34	SLU 49	-8	-63	2477	6.58	-4.13	0.01
34	SLU 50	-8	-63	2477	6.58	-4.13	0.01
34	SLU 51	-8	-63	2477	6.58	-4.13	0.01
34	SLU 52	-10	-89	2802	8.57	-5.46	0.01
34	SLU 53	-10	-89	2802	8.57	-5.46	0.01
34	SLU 54	-10	-89	2802	8.57	-5.46	0.01
34	SLU 55	-10	-89	2802	8.57	-5.46	0.01
34	SLU 56	-10	-89	2802	8.57	-5.46	0.01
34	SLU 57	-10	-89	2802	8.57	-5.46	0.01
34	SLU 58	-10	-89	2802	8.57	-5.46	0.01
34	SLU 59	-10	-89	2802	8.57	-5.46	0.01
34	SLU 60	-12	-101	2942	9.43	-6.03	0.01
34	SLU 61	-12	-101	2942	9.43	-6.03	0.01
34	SLU 62	-12	-101	2942	9.43	-6.03	0.01
34	SLU 63	-12	-101	2942	9.43	-6.03	0.01
34	SLU 64	-9	-73	2655	7.42	-4.74	0.01
34	SLU 65	-9	-73	2655	7.42	-4.74	0.01
34	SLU 66	-9	-73	2655	7.42	-4.74	0.01
34	SLU 67	-9	-73	2655	7.42	-4.74	0.01
34	SLU 68	-9	-73	2655	7.42	-4.74	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
34	SLU 69	-9	-73	2655	7.42	-4.74	0.01
34	SLU 70	-9	-73	2655	7.42	-4.74	0.01
34	SLU 71	-9	-73	2655	7.42	-4.74	0.01
34	SLU 72	-9	-73	2655	7.42	-4.74	0.01
34	SLU 73	-12	-100	2981	9.42	-6.07	0.01
34	SLU 74	-12	-100	2981	9.42	-6.07	0.01
34	SLU 75	-12	-100	2981	9.42	-6.07	0.01
34	SLU 76	-12	-100	2981	9.42	-6.07	0.01
34	SLU 77	-12	-100	2981	9.42	-6.07	0.01
34	SLU 78	-12	-100	2981	9.42	-6.07	0.01
34	SLU 79	-12	-100	2981	9.42	-6.07	0.01
34	SLU 80	-12	-100	2981	9.42	-6.07	0.01
34	SLU 81	-13	-111	3120	10.27	-6.64	0.01
34	SLU 82	-13	-111	3120	10.27	-6.64	0.01
34	SLU 83	-13	-111	3120	10.27	-6.64	0.01
34	SLU 84	-13	-111	3120	10.27	-6.64	0.01
34	SLE RA 1	-7	-54	2003	5.52	-3.51	0
34	SLE RA 2	-7	-54	2003	5.52	-3.51	0
34	SLE RA 3	-7	-54	2003	5.52	-3.51	0
34	SLE RA 4	-7	-54	2003	5.52	-3.51	0
34	SLE RA 5	-7	-54	2003	5.52	-3.51	0
34	SLE RA 6	-7	-54	2003	5.52	-3.51	0
34	SLE RA 7	-7	-54	2003	5.52	-3.51	0
34	SLE RA 8	-7	-54	2003	5.52	-3.51	0
34	SLE RA 9	-7	-54	2003	5.52	-3.51	0
34	SLE RA 10	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 11	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 12	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 13	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 14	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 15	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 16	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 17	-8	-72	2220	6.85	-4.4	0.01
34	SLE RA 18	-9	-80	2313	7.42	-4.78	0.01
34	SLE RA 19	-9	-80	2313	7.42	-4.78	0.01
34	SLE RA 20	-9	-80	2313	7.42	-4.78	0.01
34	SLE RA 21	-9	-80	2313	7.42	-4.78	0.01
34	SLE FR 1	-7	-54	2003	5.52	-3.51	0
34	SLE FR 2	-7	-54	2003	5.52	-3.51	0
34	SLE FR 3	-7	-54	2003	5.52	-3.51	0
34	SLE FR 4	-7	-62	2096	6.09	-3.89	0.01
34	SLE FR 5	-7	-62	2096	6.09	-3.89	0.01
34	SLE FR 6	-8	-67	2158	6.47	-4.15	0.01
34	SLE QP 1	-7	-54	2003	5.52	-3.51	0
34	SLE QP 2	-7	-62	2096	6.09	-3.89	0.01
34	SLD 1	7	-35	2317	5.38	9.73	-0.04
34	SLD 2	7	-35	2317	5.38	9.73	-0.04
34	SLD 3	18	-150	2252	10.09	19.34	-0.03
34	SLD 4	18	-150	2252	10.09	19.34	-0.03
34	SLD 5	-20	120	2260	-1.25	-14.38	-0.03
34	SLD 6	-20	120	2260	-1.25	-14.38	-0.03
34	SLD 7	17	-262	2045	14.42	17.65	0.01
34	SLD 8	17	-262	2045	14.42	17.65	0.01
34	SLD 9	-31	139	2147	-2.24	-25.43	0
34	SLD 10	-31	139	2147	-2.24	-25.43	0
34	SLD 11	5	-244	1932	13.44	6.59	0.04
34	SLD 12	5	-244	1932	13.44	6.59	0.04
34	SLD 13	-32	27	1940	2.1	-27.12	0.04
34	SLD 14	-32	27	1940	2.1	-27.12	0.04
34	SLD 15	-21	-88	1876	6.8	-17.52	0.05
34	SLD 16	-21	-88	1876	6.8	-17.52	0.05
34	SLV 1	25	2	2625	4.38	27.48	-0.11
34	SLV 2	25	2	2625	4.38	27.48	-0.11
34	SLV 3	53	-270	2444	15.52	52.48	-0.07
34	SLV 4	53	-270	2444	15.52	52.48	-0.07
34	SLV 5	-40	370	2531	-11.31	-32.4	-0.08
34	SLV 6	-40	370	2531	-11.31	-32.4	-0.08
34	SLV 7	53	-537	1925	25.81	50.94	0.03
34	SLV 8	53	-537	1925	25.81	50.94	0.03
34	SLV 9	-68	413	2268	-13.62	-58.72	-0.02
34	SLV 10	-68	413	2268	-13.62	-58.72	-0.02
34	SLV 11	25	-493	1661	23.49	24.61	0.09
34	SLV 12	25	-493	1661	23.49	24.61	0.09
34	SLV 13	-67	147	1748	-3.33	-60.26	0.08
34	SLV 14	-67	147	1748	-3.33	-60.26	0.08
34	SLV 15	-39	-125	1567	7.8	-35.26	0.12
34	SLV 16	-39	-125	1567	7.8	-35.26	0.12
35	SLU 1	0	190	1807	-7.27	-0.02	0
35	SLU 2	0	190	1807	-7.27	-0.02	0
35	SLU 3	0	190	1807	-7.27	-0.02	0
35	SLU 4	0	190	1807	-7.27	-0.02	0
35	SLU 5	0	190	1807	-7.27	-0.02	0
35	SLU 6	0	190	1807	-7.27	-0.02	0
35	SLU 7	0	190	1807	-7.27	-0.02	0
35	SLU 8	0	190	1807	-7.27	-0.02	0
35	SLU 9	0	190	1807	-7.27	-0.02	0
35	SLU 10	0	241	1971	-9.1	0.11	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
35	SLU 11	0	241	1971	-9.1	0.11	0
35	SLU 12	0	241	1971	-9.1	0.11	0
35	SLU 13	0	241	1971	-9.1	0.11	0
35	SLU 14	0	241	1971	-9.1	0.11	0
35	SLU 15	0	241	1971	-9.1	0.11	0
35	SLU 16	0	241	1971	-9.1	0.11	0
35	SLU 17	0	241	1971	-9.1	0.11	0
35	SLU 18	0	263	2041	-9.89	0.17	0
35	SLU 19	0	263	2041	-9.89	0.17	0
35	SLU 20	0	263	2041	-9.89	0.17	0
35	SLU 21	0	263	2041	-9.89	0.17	0
35	SLU 22	0	220	1936	-8.34	0.05	0
35	SLU 23	0	220	1936	-8.34	0.05	0
35	SLU 24	0	220	1936	-8.34	0.05	0
35	SLU 25	0	220	1936	-8.34	0.05	0
35	SLU 26	0	220	1936	-8.34	0.05	0
35	SLU 27	0	220	1936	-8.34	0.05	0
35	SLU 28	0	220	1936	-8.34	0.05	0
35	SLU 29	0	220	1936	-8.34	0.05	0
35	SLU 30	0	220	1936	-8.34	0.05	0
35	SLU 31	0	271	2100	-10.18	0.18	0
35	SLU 32	0	271	2100	-10.18	0.18	0
35	SLU 33	0	271	2100	-10.18	0.18	0
35	SLU 34	0	271	2100	-10.18	0.18	0
35	SLU 35	0	271	2100	-10.18	0.18	0
35	SLU 36	0	271	2100	-10.18	0.18	0
35	SLU 37	0	271	2100	-10.18	0.18	0
35	SLU 38	0	271	2100	-10.18	0.18	0
35	SLU 39	0	293	2170	-10.96	0.23	0
35	SLU 40	0	293	2170	-10.96	0.23	0
35	SLU 41	0	293	2170	-10.96	0.23	0
35	SLU 42	0	293	2170	-10.96	0.23	0
35	SLU 43	0	237	2304	-9.08	-0.05	0
35	SLU 44	0	237	2304	-9.08	-0.05	0
35	SLU 45	0	237	2304	-9.08	-0.05	0
35	SLU 46	0	237	2304	-9.08	-0.05	0
35	SLU 47	0	237	2304	-9.08	-0.05	0
35	SLU 48	0	237	2304	-9.08	-0.05	0
35	SLU 49	0	237	2304	-9.08	-0.05	0
35	SLU 50	0	237	2304	-9.08	-0.05	0
35	SLU 51	0	237	2304	-9.08	-0.05	0
35	SLU 52	0	288	2468	-10.91	0.08	0
35	SLU 53	0	288	2468	-10.91	0.08	0
35	SLU 54	0	288	2468	-10.91	0.08	0
35	SLU 55	0	288	2468	-10.91	0.08	0
35	SLU 56	0	288	2468	-10.91	0.08	0
35	SLU 57	0	288	2468	-10.91	0.08	0
35	SLU 58	0	288	2468	-10.91	0.08	0
35	SLU 59	0	288	2468	-10.91	0.08	0
35	SLU 60	0	310	2539	-11.7	0.14	0
35	SLU 61	0	310	2539	-11.7	0.14	0
35	SLU 62	0	310	2539	-11.7	0.14	0
35	SLU 63	0	310	2539	-11.7	0.14	0
35	SLU 64	0	267	2433	-10.15	0.02	0
35	SLU 65	0	267	2433	-10.15	0.02	0
35	SLU 66	0	267	2433	-10.15	0.02	0
35	SLU 67	0	267	2433	-10.15	0.02	0
35	SLU 68	0	267	2433	-10.15	0.02	0
35	SLU 69	0	267	2433	-10.15	0.02	0
35	SLU 70	0	267	2433	-10.15	0.02	0
35	SLU 71	0	267	2433	-10.15	0.02	0
35	SLU 72	0	267	2433	-10.15	0.02	0
35	SLU 73	0	318	2598	-11.99	0.15	0
35	SLU 74	0	318	2598	-11.99	0.15	0
35	SLU 75	0	318	2598	-11.99	0.15	0
35	SLU 76	0	318	2598	-11.99	0.15	0
35	SLU 77	0	318	2598	-11.99	0.15	0
35	SLU 78	0	318	2598	-11.99	0.15	0
35	SLU 79	0	318	2598	-11.99	0.15	0
35	SLU 80	0	318	2598	-11.99	0.15	0
35	SLU 81	0	340	2668	-12.77	0.2	0
35	SLU 82	0	340	2668	-12.77	0.2	0
35	SLU 83	0	340	2668	-12.77	0.2	0
35	SLU 84	0	340	2668	-12.77	0.2	0
35	SLE RA 1	0	199	1844	-7.57	0	0
35	SLE RA 2	0	199	1844	-7.57	0	0
35	SLE RA 3	0	199	1844	-7.57	0	0
35	SLE RA 4	0	199	1844	-7.57	0	0
35	SLE RA 5	0	199	1844	-7.57	0	0
35	SLE RA 6	0	199	1844	-7.57	0	0
35	SLE RA 7	0	199	1844	-7.57	0	0
35	SLE RA 8	0	199	1844	-7.57	0	0
35	SLE RA 9	0	199	1844	-7.57	0	0
35	SLE RA 10	0	233	1953	-8.8	0.09	0
35	SLE RA 11	0	233	1953	-8.8	0.09	0
35	SLE RA 12	0	233	1953	-8.8	0.09	0
35	SLE RA 13	0	233	1953	-8.8	0.09	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
35	SLE RA 14	0	233	1953	-8.8	0.09	0
35	SLE RA 15	0	233	1953	-8.8	0.09	0
35	SLE RA 16	0	233	1953	-8.8	0.09	0
35	SLE RA 17	0	233	1953	-8.8	0.09	0
35	SLE RA 18	0	247	2000	-9.32	0.12	0
35	SLE RA 19	0	247	2000	-9.32	0.12	0
35	SLE RA 20	0	247	2000	-9.32	0.12	0
35	SLE RA 21	0	247	2000	-9.32	0.12	0
35	SLE FR 1	0	199	1844	-7.57	0	0
35	SLE FR 2	0	199	1844	-7.57	0	0
35	SLE FR 3	0	199	1844	-7.57	0	0
35	SLE FR 4	0	213	1890	-8.1	0.04	0
35	SLE FR 5	0	213	1890	-8.1	0.04	0
35	SLE FR 6	0	223	1922	-8.45	0.06	0
35	SLE QP 1	0	199	1844	-7.57	0	0
35	SLE QP 2	0	213	1890	-8.1	0.04	0
35	SLD 1	18	216	1508	-8.3	17.07	0.01
35	SLD 2	18	216	1508	-8.3	17.07	0.01
35	SLD 3	23	76	1667	-2.56	22.1	0.01
35	SLD 4	23	76	1667	-2.56	22.1	0.01
35	SLD 5	-2	426	1535	-16.86	-2.48	0
35	SLD 6	-2	426	1535	-16.86	-2.48	0
35	SLD 7	14	-39	2064	2.27	14.29	0.01
35	SLD 8	14	-39	2064	2.27	14.29	0.01
35	SLD 9	-15	466	1717	-18.46	-14.21	-0.01
35	SLD 10	-15	466	1717	-18.46	-14.21	-0.01
35	SLD 11	1	1	2246	0.66	2.55	0
35	SLD 12	1	1	2246	0.66	2.55	0
35	SLD 13	-24	350	2114	-13.64	-22.03	-0.01
35	SLD 14	-24	350	2114	-13.64	-22.03	-0.01
35	SLD 15	-19	211	2273	-7.9	-17	-0.01
35	SLD 16	-19	211	2273	-7.9	-17	-0.01
35	SLV 1	43	221	899	-8.64	40.08	0.02
35	SLV 2	43	221	899	-8.64	40.08	0.02
35	SLV 3	55	-110	1345	4.95	52.63	0.03
35	SLV 4	55	-110	1345	4.95	52.63	0.03
35	SLV 5	-5	718	917	-28.86	-6.99	-0.01
35	SLV 6	-5	718	917	-28.86	-6.99	-0.01
35	SLV 7	35	-386	2402	16.42	34.85	0.02
35	SLV 8	35	-386	2402	16.42	34.85	0.02
35	SLV 9	-35	813	1378	-32.61	-34.78	-0.02
35	SLV 10	-35	813	1378	-32.61	-34.78	-0.02
35	SLV 11	5	-291	2864	12.67	7.06	0.01
35	SLV 12	5	-291	2864	12.67	7.06	0.01
35	SLV 13	-56	537	2436	-21.14	-52.56	-0.03
35	SLV 14	-56	537	2436	-21.14	-52.56	-0.03
35	SLV 15	-44	206	2882	-7.56	-40.01	-0.03
35	SLV 16	-44	206	2882	-7.56	-40.01	-0.03
36	SLU 1	1	80	1805	-6.65	-2.6	0
36	SLU 2	1	80	1805	-6.65	-2.6	0
36	SLU 3	1	80	1805	-6.65	-2.6	0
36	SLU 4	1	80	1805	-6.65	-2.6	0
36	SLU 5	1	80	1805	-6.65	-2.6	0
36	SLU 6	1	80	1805	-6.65	-2.6	0
36	SLU 7	1	80	1805	-6.65	-2.6	0
36	SLU 8	1	80	1805	-6.65	-2.6	0
36	SLU 9	1	80	1805	-6.65	-2.6	0
36	SLU 10	0	92	2102	-8.06	-3.66	0
36	SLU 11	0	92	2102	-8.06	-3.66	0
36	SLU 12	0	92	2102	-8.06	-3.66	0
36	SLU 13	0	92	2102	-8.06	-3.66	0
36	SLU 14	0	92	2102	-8.06	-3.66	0
36	SLU 15	0	92	2102	-8.06	-3.66	0
36	SLU 16	0	92	2102	-8.06	-3.66	0
36	SLU 17	0	92	2102	-8.06	-3.66	0
36	SLU 18	0	97	2229	-8.66	-4.11	0
36	SLU 19	0	97	2229	-8.66	-4.11	0
36	SLU 20	0	97	2229	-8.66	-4.11	0
36	SLU 21	0	97	2229	-8.66	-4.11	0
36	SLU 22	1	89	1968	-7.44	-3.08	0
36	SLU 23	1	89	1968	-7.44	-3.08	0
36	SLU 24	1	89	1968	-7.44	-3.08	0
36	SLU 25	1	89	1968	-7.44	-3.08	0
36	SLU 26	1	89	1968	-7.44	-3.08	0
36	SLU 27	1	89	1968	-7.44	-3.08	0
36	SLU 28	1	89	1968	-7.44	-3.08	0
36	SLU 29	1	89	1968	-7.44	-3.08	0
36	SLU 30	1	89	1968	-7.44	-3.08	0
36	SLU 31	0	101	2265	-8.84	-4.14	0
36	SLU 32	0	101	2265	-8.84	-4.14	0
36	SLU 33	0	101	2265	-8.84	-4.14	0
36	SLU 34	0	101	2265	-8.84	-4.14	0
36	SLU 35	0	101	2265	-8.84	-4.14	0
36	SLU 36	0	101	2265	-8.84	-4.14	0
36	SLU 37	0	101	2265	-8.84	-4.14	0
36	SLU 38	0	101	2265	-8.84	-4.14	0
36	SLU 39	0	106	2392	-9.44	-4.59	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
36	SLU 40	0	106	2392	-9.44	-4.59	0.01
36	SLU 41	0	106	2392	-9.44	-4.59	0.01
36	SLU 42	0	106	2392	-9.44	-4.59	0.01
36	SLU 43	1	102	2291	-8.38	-3.22	0
36	SLU 44	1	102	2291	-8.38	-3.22	0
36	SLU 45	1	102	2291	-8.38	-3.22	0
36	SLU 46	1	102	2291	-8.38	-3.22	0
36	SLU 47	1	102	2291	-8.38	-3.22	0
36	SLU 48	1	102	2291	-8.38	-3.22	0
36	SLU 49	1	102	2291	-8.38	-3.22	0
36	SLU 50	1	102	2291	-8.38	-3.22	0
36	SLU 51	1	102	2291	-8.38	-3.22	0
36	SLU 52	1	113	2588	-9.78	-4.27	0
36	SLU 53	1	113	2588	-9.78	-4.27	0
36	SLU 54	1	113	2588	-9.78	-4.27	0
36	SLU 55	1	113	2588	-9.78	-4.27	0
36	SLU 56	1	113	2588	-9.78	-4.27	0
36	SLU 57	1	113	2588	-9.78	-4.27	0
36	SLU 58	1	113	2588	-9.78	-4.27	0
36	SLU 59	1	113	2588	-9.78	-4.27	0
36	SLU 60	0	118	2715	-10.39	-4.72	0.01
36	SLU 61	0	118	2715	-10.39	-4.72	0.01
36	SLU 62	0	118	2715	-10.39	-4.72	0.01
36	SLU 63	0	118	2715	-10.39	-4.72	0.01
36	SLU 64	1	110	2454	-9.17	-3.7	0
36	SLU 65	1	110	2454	-9.17	-3.7	0
36	SLU 66	1	110	2454	-9.17	-3.7	0
36	SLU 67	1	110	2454	-9.17	-3.7	0
36	SLU 68	1	110	2454	-9.17	-3.7	0
36	SLU 69	1	110	2454	-9.17	-3.7	0
36	SLU 70	1	110	2454	-9.17	-3.7	0
36	SLU 71	1	110	2454	-9.17	-3.7	0
36	SLU 72	1	110	2454	-9.17	-3.7	0
36	SLU 73	1	122	2751	-10.57	-4.75	0.01
36	SLU 74	1	122	2751	-10.57	-4.75	0.01
36	SLU 75	1	122	2751	-10.57	-4.75	0.01
36	SLU 76	1	122	2751	-10.57	-4.75	0.01
36	SLU 77	1	122	2751	-10.57	-4.75	0.01
36	SLU 78	1	122	2751	-10.57	-4.75	0.01
36	SLU 79	1	122	2751	-10.57	-4.75	0.01
36	SLU 80	1	122	2751	-10.57	-4.75	0.01
36	SLU 81	0	127	2878	-11.17	-5.2	0.01
36	SLU 82	0	127	2878	-11.17	-5.2	0.01
36	SLU 83	0	127	2878	-11.17	-5.2	0.01
36	SLU 84	0	127	2878	-11.17	-5.2	0.01
36	SLE RA 1	1	83	1852	-6.88	-2.74	0
36	SLE RA 2	1	83	1852	-6.88	-2.74	0
36	SLE RA 3	1	83	1852	-6.88	-2.74	0
36	SLE RA 4	1	83	1852	-6.88	-2.74	0
36	SLE RA 5	1	83	1852	-6.88	-2.74	0
36	SLE RA 6	1	83	1852	-6.88	-2.74	0
36	SLE RA 7	1	83	1852	-6.88	-2.74	0
36	SLE RA 8	1	83	1852	-6.88	-2.74	0
36	SLE RA 9	1	83	1852	-6.88	-2.74	0
36	SLE RA 10	1	91	2050	-7.81	-3.44	0
36	SLE RA 11	1	91	2050	-7.81	-3.44	0
36	SLE RA 12	1	91	2050	-7.81	-3.44	0
36	SLE RA 13	1	91	2050	-7.81	-3.44	0
36	SLE RA 14	1	91	2050	-7.81	-3.44	0
36	SLE RA 15	1	91	2050	-7.81	-3.44	0
36	SLE RA 16	1	91	2050	-7.81	-3.44	0
36	SLE RA 17	1	91	2050	-7.81	-3.44	0
36	SLE RA 18	0	94	2134	-8.21	-3.74	0
36	SLE RA 19	0	94	2134	-8.21	-3.74	0
36	SLE RA 20	0	94	2134	-8.21	-3.74	0
36	SLE RA 21	0	94	2134	-8.21	-3.74	0
36	SLE FR 1	1	83	1852	-6.88	-2.74	0
36	SLE FR 2	1	83	1852	-6.88	-2.74	0
36	SLE FR 3	1	83	1852	-6.88	-2.74	0
36	SLE FR 4	1	86	1937	-7.28	-3.04	0
36	SLE FR 5	1	86	1937	-7.28	-3.04	0
36	SLE FR 6	1	88	1993	-7.55	-3.24	0
36	SLE QP 1	1	83	1852	-6.88	-2.74	0
36	SLE QP 2	1	86	1937	-7.28	-3.04	0
36	SLD 1	29	188	2132	-12.15	22.2	-0.03
36	SLD 2	29	188	2132	-12.15	22.2	-0.03
36	SLD 3	18	68	2076	-7.08	12.78	-0.02
36	SLD 4	18	68	2076	-7.08	12.78	-0.02
36	SLD 5	25	300	2080	-16.44	18.83	-0.02
36	SLD 6	25	300	2080	-16.44	18.83	-0.02
36	SLD 7	-10	-102	1894	0.48	-12.59	0.01
36	SLD 8	-10	-102	1894	0.48	-12.59	0.01
36	SLD 9	11	274	1979	-15.04	6.51	-0.01
36	SLD 10	11	274	1979	-15.04	6.51	-0.01
36	SLD 11	-23	-127	1794	1.88	-24.9	0.03
36	SLD 12	-23	-127	1794	1.88	-24.9	0.03
36	SLD 13	-17	104	1797	-7.48	-18.86	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
36	SLD 14	-17	104	1797	-7.48	-18.86	0.03
36	SLD 15	-27	-16	1741	-2.41	-28.28	0.04
36	SLD 16	-27	-16	1741	-2.41	-28.28	0.04
36	SLV 1	68	327	2405	-18.89	58.04	-0.08
36	SLV 2	68	327	2405	-18.89	58.04	-0.08
36	SLV 3	42	42	2248	-6.68	33.59	-0.05
36	SLV 4	42	42	2248	-6.68	33.59	-0.05
36	SLV 5	61	591	2314	-29.28	52.37	-0.06
36	SLV 6	61	591	2314	-29.28	52.37	-0.06
36	SLV 7	-26	-360	1793	11.42	-29.13	0.03
36	SLV 8	-26	-360	1793	11.42	-29.13	0.03
36	SLV 9	28	532	2080	-25.98	23.06	-0.02
36	SLV 10	28	532	2080	-25.98	23.06	-0.02
36	SLV 11	-59	-419	1559	14.72	-58.45	0.07
36	SLV 12	-59	-419	1559	14.72	-58.45	0.07
36	SLV 13	-40	131	1625	-7.88	-39.67	0.06
36	SLV 14	-40	131	1625	-7.88	-39.67	0.06
36	SLV 15	-66	-154	1468	4.33	-64.12	0.08
36	SLV 16	-66	-154	1468	4.33	-64.12	0.08
37	SLU 1	0	146	1943	-5.23	-0.16	0
37	SLU 2	0	146	1943	-5.23	-0.16	0
37	SLU 3	0	146	1943	-5.23	-0.16	0
37	SLU 4	0	146	1943	-5.23	-0.16	0
37	SLU 5	0	146	1943	-5.23	-0.16	0
37	SLU 6	0	146	1943	-5.23	-0.16	0
37	SLU 7	0	146	1943	-5.23	-0.16	0
37	SLU 8	0	146	1943	-5.23	-0.16	0
37	SLU 9	0	146	1943	-5.23	-0.16	0
37	SLU 10	0	194	2173	-6.83	-0.13	0
37	SLU 11	0	194	2173	-6.83	-0.13	0
37	SLU 12	0	194	2173	-6.83	-0.13	0
37	SLU 13	0	194	2173	-6.83	-0.13	0
37	SLU 14	0	194	2173	-6.83	-0.13	0
37	SLU 15	0	194	2173	-6.83	-0.13	0
37	SLU 16	0	194	2173	-6.83	-0.13	0
37	SLU 17	0	194	2173	-6.83	-0.13	0
37	SLU 18	0	215	2271	-7.52	-0.12	0
37	SLU 19	0	215	2271	-7.52	-0.12	0
37	SLU 20	0	215	2271	-7.52	-0.12	0
37	SLU 21	0	215	2271	-7.52	-0.12	0
37	SLU 22	0	174	2104	-6.2	-0.14	0
37	SLU 23	0	174	2104	-6.2	-0.14	0
37	SLU 24	0	174	2104	-6.2	-0.14	0
37	SLU 25	0	174	2104	-6.2	-0.14	0
37	SLU 26	0	174	2104	-6.2	-0.14	0
37	SLU 27	0	174	2104	-6.2	-0.14	0
37	SLU 28	0	174	2104	-6.2	-0.14	0
37	SLU 29	0	174	2104	-6.2	-0.14	0
37	SLU 30	0	174	2104	-6.2	-0.14	0
37	SLU 31	0	222	2334	-7.8	-0.11	0
37	SLU 32	0	222	2334	-7.8	-0.11	0
37	SLU 33	0	222	2334	-7.8	-0.11	0
37	SLU 34	0	222	2334	-7.8	-0.11	0
37	SLU 35	0	222	2334	-7.8	-0.11	0
37	SLU 36	0	222	2334	-7.8	-0.11	0
37	SLU 37	0	222	2334	-7.8	-0.11	0
37	SLU 38	0	222	2334	-7.8	-0.11	0
37	SLU 39	0	243	2432	-8.49	-0.1	0
37	SLU 40	0	243	2432	-8.49	-0.1	0
37	SLU 41	0	243	2432	-8.49	-0.1	0
37	SLU 42	0	243	2432	-8.49	-0.1	0
37	SLU 43	0	180	2471	-6.47	-0.21	0
37	SLU 44	0	180	2471	-6.47	-0.21	0
37	SLU 45	0	180	2471	-6.47	-0.21	0
37	SLU 46	0	180	2471	-6.47	-0.21	0
37	SLU 47	0	180	2471	-6.47	-0.21	0
37	SLU 48	0	180	2471	-6.47	-0.21	0
37	SLU 49	0	180	2471	-6.47	-0.21	0
37	SLU 50	0	180	2471	-6.47	-0.21	0
37	SLU 51	0	180	2471	-6.47	-0.21	0
37	SLU 52	-1	228	2700	-8.07	-0.19	0
37	SLU 53	-1	228	2700	-8.07	-0.19	0
37	SLU 54	-1	228	2700	-8.07	-0.19	0
37	SLU 55	-1	228	2700	-8.07	-0.19	0
37	SLU 56	-1	228	2700	-8.07	-0.19	0
37	SLU 57	-1	228	2700	-8.07	-0.19	0
37	SLU 58	-1	228	2700	-8.07	-0.19	0
37	SLU 59	-1	228	2700	-8.07	-0.19	0
37	SLU 60	-1	249	2799	-8.75	-0.17	0
37	SLU 61	-1	249	2799	-8.75	-0.17	0
37	SLU 62	-1	249	2799	-8.75	-0.17	0
37	SLU 63	-1	249	2799	-8.75	-0.17	0
37	SLU 64	0	208	2632	-7.44	-0.19	0
37	SLU 65	0	208	2632	-7.44	-0.19	0
37	SLU 66	0	208	2632	-7.44	-0.19	0
37	SLU 67	0	208	2632	-7.44	-0.19	0
37	SLU 68	0	208	2632	-7.44	-0.19	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
37	SLU 69	0	208	2632	-7.44	-0.19	0
37	SLU 70	0	208	2632	-7.44	-0.19	0
37	SLU 71	0	208	2632	-7.44	-0.19	0
37	SLU 72	0	208	2632	-7.44	-0.19	0
37	SLU 73	-1	256	2862	-9.04	-0.17	0
37	SLU 74	-1	256	2862	-9.04	-0.17	0
37	SLU 75	-1	256	2862	-9.04	-0.17	0
37	SLU 76	-1	256	2862	-9.04	-0.17	0
37	SLU 77	-1	256	2862	-9.04	-0.17	0
37	SLU 78	-1	256	2862	-9.04	-0.17	0
37	SLU 79	-1	256	2862	-9.04	-0.17	0
37	SLU 80	-1	256	2862	-9.04	-0.17	0
37	SLU 81	-1	277	2960	-9.72	-0.16	0
37	SLU 82	-1	277	2960	-9.72	-0.16	0
37	SLU 83	-1	277	2960	-9.72	-0.16	0
37	SLU 84	-1	277	2960	-9.72	-0.16	0
37	SLE RA 1	0	154	1989	-5.51	-0.15	0
37	SLE RA 2	0	154	1989	-5.51	-0.15	0
37	SLE RA 3	0	154	1989	-5.51	-0.15	0
37	SLE RA 4	0	154	1989	-5.51	-0.15	0
37	SLE RA 5	0	154	1989	-5.51	-0.15	0
37	SLE RA 6	0	154	1989	-5.51	-0.15	0
37	SLE RA 7	0	154	1989	-5.51	-0.15	0
37	SLE RA 8	0	154	1989	-5.51	-0.15	0
37	SLE RA 9	0	154	1989	-5.51	-0.15	0
37	SLE RA 10	0	186	2142	-6.58	-0.14	0
37	SLE RA 11	0	186	2142	-6.58	-0.14	0
37	SLE RA 12	0	186	2142	-6.58	-0.14	0
37	SLE RA 13	0	186	2142	-6.58	-0.14	0
37	SLE RA 14	0	186	2142	-6.58	-0.14	0
37	SLE RA 15	0	186	2142	-6.58	-0.14	0
37	SLE RA 16	0	186	2142	-6.58	-0.14	0
37	SLE RA 17	0	186	2142	-6.58	-0.14	0
37	SLE RA 18	0	200	2208	-7.03	-0.13	0
37	SLE RA 19	0	200	2208	-7.03	-0.13	0
37	SLE RA 20	0	200	2208	-7.03	-0.13	0
37	SLE RA 21	0	200	2208	-7.03	-0.13	0
37	SLE FR 1	0	154	1989	-5.51	-0.15	0
37	SLE FR 2	0	154	1989	-5.51	-0.15	0
37	SLE FR 3	0	154	1989	-5.51	-0.15	0
37	SLE FR 4	0	168	2055	-5.97	-0.15	0
37	SLE FR 5	0	168	2055	-5.97	-0.15	0
37	SLE FR 6	0	177	2099	-6.27	-0.14	0
37	SLE QP 1	0	154	1989	-5.51	-0.15	0
37	SLE QP 2	0	168	2055	-5.97	-0.15	0
37	SLD 1	19	176	1728	-6.61	17.56	0.02
37	SLD 2	19	176	1728	-6.61	17.56	0.02
37	SLD 3	26	35	1852	-0.68	23.7	0.02
37	SLD 4	26	35	1852	-0.68	23.7	0.02
37	SLD 5	-4	383	1768	-15.14	-4.16	0
37	SLD 6	-4	383	1768	-15.14	-4.16	0
37	SLD 7	17	-85	2183	4.6	16.33	0.01
37	SLD 8	17	-85	2183	4.6	16.33	0.01
37	SLD 9	-18	420	1927	-16.53	-16.62	-0.01
37	SLD 10	-18	420	1927	-16.53	-16.62	-0.01
37	SLD 11	3	-47	2342	3.2	3.86	0
37	SLD 12	3	-47	2342	3.2	3.86	0
37	SLD 13	-27	300	2257	-11.25	-23.99	-0.02
37	SLD 14	-27	300	2257	-11.25	-23.99	-0.02
37	SLD 15	-20	160	2382	-5.33	-17.85	-0.02
37	SLD 16	-20	160	2382	-5.33	-17.85	-0.02
37	SLV 1	46	188	1212	-7.54	41.34	0.04
37	SLV 2	46	188	1212	-7.54	41.34	0.04
37	SLV 3	62	-145	1564	6.5	56.74	0.05
37	SLV 4	62	-145	1564	6.5	56.74	0.05
37	SLV 5	-11	679	1267	-27.74	-11.06	-0.01
37	SLV 6	-11	679	1267	-27.74	-11.06	-0.01
37	SLV 7	43	-431	2442	19.07	40.28	0.03
37	SLV 8	43	-431	2442	19.07	40.28	0.03
37	SLV 9	-43	766	1668	-31.01	-40.57	-0.04
37	SLV 10	-43	766	1668	-31.01	-40.57	-0.04
37	SLV 11	10	-343	2842	15.81	10.77	0.01
37	SLV 12	10	-343	2842	15.81	10.77	0.01
37	SLV 13	-63	480	2546	-18.43	-57.04	-0.05
37	SLV 14	-63	480	2546	-18.43	-57.04	-0.05
37	SLV 15	-47	147	2898	-4.39	-41.64	-0.04
37	SLV 16	-47	147	2898	-4.39	-41.64	-0.04
38	SLU 1	3	103	1823	-1.42	-2.33	0
38	SLU 2	3	103	1823	-1.42	-2.33	0
38	SLU 3	3	103	1823	-1.42	-2.33	0
38	SLU 4	3	103	1823	-1.42	-2.33	0
38	SLU 5	3	103	1823	-1.42	-2.33	0
38	SLU 6	3	103	1823	-1.42	-2.33	0
38	SLU 7	3	103	1823	-1.42	-2.33	0
38	SLU 8	3	103	1823	-1.42	-2.33	0
38	SLU 9	3	103	1823	-1.42	-2.33	0
38	SLU 10	3	121	2128	-1.34	-3.22	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
38	SLU 11	3	121	2128	-1.34	-3.22	0
38	SLU 12	3	121	2128	-1.34	-3.22	0
38	SLU 13	3	121	2128	-1.34	-3.22	0
38	SLU 14	3	121	2128	-1.34	-3.22	0
38	SLU 15	3	121	2128	-1.34	-3.22	0
38	SLU 16	3	121	2128	-1.34	-3.22	0
38	SLU 17	3	121	2128	-1.34	-3.22	0
38	SLU 18	3	128	2259	-1.31	-3.6	0
38	SLU 19	3	128	2259	-1.31	-3.6	0
38	SLU 20	3	128	2259	-1.31	-3.6	0
38	SLU 21	3	128	2259	-1.31	-3.6	0
38	SLU 22	3	116	1991	-1.6	-2.73	0
38	SLU 23	3	116	1991	-1.6	-2.73	0
38	SLU 24	3	116	1991	-1.6	-2.73	0
38	SLU 25	3	116	1991	-1.6	-2.73	0
38	SLU 26	3	116	1991	-1.6	-2.73	0
38	SLU 27	3	116	1991	-1.6	-2.73	0
38	SLU 28	3	116	1991	-1.6	-2.73	0
38	SLU 29	3	116	1991	-1.6	-2.73	0
38	SLU 30	3	116	1991	-1.6	-2.73	0
38	SLU 31	3	134	2296	-1.53	-3.62	0
38	SLU 32	3	134	2296	-1.53	-3.62	0
38	SLU 33	3	134	2296	-1.53	-3.62	0
38	SLU 34	3	134	2296	-1.53	-3.62	0
38	SLU 35	3	134	2296	-1.53	-3.62	0
38	SLU 36	3	134	2296	-1.53	-3.62	0
38	SLU 37	3	134	2296	-1.53	-3.62	0
38	SLU 38	3	134	2296	-1.53	-3.62	0
38	SLU 39	4	142	2427	-1.49	-4	0
38	SLU 40	4	142	2427	-1.49	-4	0
38	SLU 41	4	142	2427	-1.49	-4	0
38	SLU 42	4	142	2427	-1.49	-4	0
38	SLU 43	4	129	2312	-1.78	-2.9	0
38	SLU 44	4	129	2312	-1.78	-2.9	0
38	SLU 45	4	129	2312	-1.78	-2.9	0
38	SLU 46	4	129	2312	-1.78	-2.9	0
38	SLU 47	4	129	2312	-1.78	-2.9	0
38	SLU 48	4	129	2312	-1.78	-2.9	0
38	SLU 49	4	129	2312	-1.78	-2.9	0
38	SLU 50	4	129	2312	-1.78	-2.9	0
38	SLU 51	4	129	2312	-1.78	-2.9	0
38	SLU 52	4	147	2617	-1.7	-3.79	0
38	SLU 53	4	147	2617	-1.7	-3.79	0
38	SLU 54	4	147	2617	-1.7	-3.79	0
38	SLU 55	4	147	2617	-1.7	-3.79	0
38	SLU 56	4	147	2617	-1.7	-3.79	0
38	SLU 57	4	147	2617	-1.7	-3.79	0
38	SLU 58	4	147	2617	-1.7	-3.79	0
38	SLU 59	4	147	2617	-1.7	-3.79	0
38	SLU 60	4	155	2748	-1.67	-4.17	0
38	SLU 61	4	155	2748	-1.67	-4.17	0
38	SLU 62	4	155	2748	-1.67	-4.17	0
38	SLU 63	4	155	2748	-1.67	-4.17	0
38	SLU 64	4	143	2480	-1.96	-3.3	0
38	SLU 65	4	143	2480	-1.96	-3.3	0
38	SLU 66	4	143	2480	-1.96	-3.3	0
38	SLU 67	4	143	2480	-1.96	-3.3	0
38	SLU 68	4	143	2480	-1.96	-3.3	0
38	SLU 69	4	143	2480	-1.96	-3.3	0
38	SLU 70	4	143	2480	-1.96	-3.3	0
38	SLU 71	4	143	2480	-1.96	-3.3	0
38	SLU 72	4	143	2480	-1.96	-3.3	0
38	SLU 73	4	160	2785	-1.89	-4.19	0
38	SLU 74	4	160	2785	-1.89	-4.19	0
38	SLU 75	4	160	2785	-1.89	-4.19	0
38	SLU 76	4	160	2785	-1.89	-4.19	0
38	SLU 77	4	160	2785	-1.89	-4.19	0
38	SLU 78	4	160	2785	-1.89	-4.19	0
38	SLU 79	4	160	2785	-1.89	-4.19	0
38	SLU 80	4	160	2785	-1.89	-4.19	0
38	SLU 81	4	168	2916	-1.86	-4.57	0
38	SLU 82	4	168	2916	-1.86	-4.57	0
38	SLU 83	4	168	2916	-1.86	-4.57	0
38	SLU 84	4	168	2916	-1.86	-4.57	0
38	SLE RA 1	3	107	1871	-1.47	-2.45	0
38	SLE RA 2	3	107	1871	-1.47	-2.45	0
38	SLE RA 3	3	107	1871	-1.47	-2.45	0
38	SLE RA 4	3	107	1871	-1.47	-2.45	0
38	SLE RA 5	3	107	1871	-1.47	-2.45	0
38	SLE RA 6	3	107	1871	-1.47	-2.45	0
38	SLE RA 7	3	107	1871	-1.47	-2.45	0
38	SLE RA 8	3	107	1871	-1.47	-2.45	0
38	SLE RA 9	3	107	1871	-1.47	-2.45	0
38	SLE RA 10	3	119	2074	-1.42	-3.04	0
38	SLE RA 11	3	119	2074	-1.42	-3.04	0
38	SLE RA 12	3	119	2074	-1.42	-3.04	0
38	SLE RA 13	3	119	2074	-1.42	-3.04	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
38	SLE RA 14	3	119	2074	-1.42	-3.04	0
38	SLE RA 15	3	119	2074	-1.42	-3.04	0
38	SLE RA 16	3	119	2074	-1.42	-3.04	0
38	SLE RA 17	3	119	2074	-1.42	-3.04	0
38	SLE RA 18	3	124	2162	-1.4	-3.29	0
38	SLE RA 19	3	124	2162	-1.4	-3.29	0
38	SLE RA 20	3	124	2162	-1.4	-3.29	0
38	SLE RA 21	3	124	2162	-1.4	-3.29	0
38	SLE FR 1	3	107	1871	-1.47	-2.45	0
38	SLE FR 2	3	107	1871	-1.47	-2.45	0
38	SLE FR 3	3	107	1871	-1.47	-2.45	0
38	SLE FR 4	3	112	1958	-1.45	-2.7	0
38	SLE FR 5	3	112	1958	-1.45	-2.7	0
38	SLE FR 6	3	115	2016	-1.43	-2.87	0
38	SLE QP 1	3	107	1871	-1.47	-2.45	0
38	SLE QP 2	3	112	1958	-1.45	-2.7	0
38	SLD 1	31	224	2166	-6.16	21.64	0
38	SLD 2	31	224	2166	-6.16	21.64	0
38	SLD 3	20	104	2104	-1.2	12.64	0.01
38	SLD 4	20	104	2104	-1.2	12.64	0.01
38	SLD 5	28	328	2115	-10.39	18.26	-0.01
38	SLD 6	28	328	2115	-10.39	18.26	-0.01
38	SLD 7	-8	-73	1908	6.15	-11.76	0.01
38	SLD 8	-8	-73	1908	6.15	-11.76	0.01
38	SLD 9	15	297	2008	-9.05	6.35	-0.01
38	SLD 10	15	297	2008	-9.05	6.35	-0.01
38	SLD 11	-21	-105	1802	7.5	-23.66	0.01
38	SLD 12	-21	-105	1802	7.5	-23.66	0.01
38	SLD 13	-13	120	1812	-1.7	-18.04	-0.01
38	SLD 14	-13	120	1812	-1.7	-18.04	-0.01
38	SLD 15	-24	-1	1750	3.27	-27.04	0
38	SLD 16	-24	-1	1750	3.27	-27.04	0
38	SLV 1	69	376	2453	-12.54	56.15	0
38	SLV 2	69	376	2453	-12.54	56.15	0
38	SLV 3	42	92	2287	-0.82	32.86	0.02
38	SLV 4	42	92	2287	-0.82	32.86	0.02
38	SLV 5	64	622	2359	-22.54	50.28	-0.02
38	SLV 6	64	622	2359	-22.54	50.28	-0.02
38	SLV 7	-26	-325	1804	16.51	-27.36	0.03
38	SLV 8	-26	-325	1804	16.51	-27.36	0.03
38	SLV 9	33	548	2112	-19.4	21.95	-0.03
38	SLV 10	33	548	2112	-19.4	21.95	-0.03
38	SLV 11	-57	-398	1557	19.65	-55.68	0.02
38	SLV 12	-57	-398	1557	19.65	-55.68	0.02
38	SLV 13	-35	132	1629	-2.07	-38.26	-0.02
38	SLV 14	-35	132	1629	-2.07	-38.26	-0.02
38	SLV 15	-62	-152	1463	9.64	-61.55	-0.01
38	SLV 16	-62	-152	1463	9.64	-61.55	-0.01
39	SLU 1	-1	115	2084	-4.46	-0.34	0
39	SLU 2	-1	115	2084	-4.46	-0.34	0
39	SLU 3	-1	115	2084	-4.46	-0.34	0
39	SLU 4	-1	115	2084	-4.46	-0.34	0
39	SLU 5	-1	115	2084	-4.46	-0.34	0
39	SLU 6	-1	115	2084	-4.46	-0.34	0
39	SLU 7	-1	115	2084	-4.46	-0.34	0
39	SLU 8	-1	115	2084	-4.46	-0.34	0
39	SLU 9	-1	115	2084	-4.46	-0.34	0
39	SLU 10	-1	166	2385	-6.31	-0.44	0
39	SLU 11	-1	166	2385	-6.31	-0.44	0
39	SLU 12	-1	166	2385	-6.31	-0.44	0
39	SLU 13	-1	166	2385	-6.31	-0.44	0
39	SLU 14	-1	166	2385	-6.31	-0.44	0
39	SLU 15	-1	166	2385	-6.31	-0.44	0
39	SLU 16	-1	166	2385	-6.31	-0.44	0
39	SLU 17	-1	166	2385	-6.31	-0.44	0
39	SLU 18	-1	188	2514	-7.1	-0.48	0
39	SLU 19	-1	188	2514	-7.1	-0.48	0
39	SLU 20	-1	188	2514	-7.1	-0.48	0
39	SLU 21	-1	188	2514	-7.1	-0.48	0
39	SLU 22	-1	144	2281	-5.51	-0.38	0
39	SLU 23	-1	144	2281	-5.51	-0.38	0
39	SLU 24	-1	144	2281	-5.51	-0.38	0
39	SLU 25	-1	144	2281	-5.51	-0.38	0
39	SLU 26	-1	144	2281	-5.51	-0.38	0
39	SLU 27	-1	144	2281	-5.51	-0.38	0
39	SLU 28	-1	144	2281	-5.51	-0.38	0
39	SLU 29	-1	144	2281	-5.51	-0.38	0
39	SLU 30	-1	144	2281	-5.51	-0.38	0
39	SLU 31	-1	194	2582	-7.36	-0.48	0
39	SLU 32	-1	194	2582	-7.36	-0.48	0
39	SLU 33	-1	194	2582	-7.36	-0.48	0
39	SLU 34	-1	194	2582	-7.36	-0.48	0
39	SLU 35	-1	194	2582	-7.36	-0.48	0
39	SLU 36	-1	194	2582	-7.36	-0.48	0
39	SLU 37	-1	194	2582	-7.36	-0.48	0
39	SLU 38	-1	194	2582	-7.36	-0.48	0
39	SLU 39	-1	216	2711	-8.16	-0.52	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
39	SLU 40	-1	216	2711	-8.16	-0.52	0
39	SLU 41	-1	216	2711	-8.16	-0.52	0
39	SLU 42	-1	216	2711	-8.16	-0.52	0
39	SLU 43	-1	140	2642	-5.44	-0.43	0
39	SLU 44	-1	140	2642	-5.44	-0.43	0
39	SLU 45	-1	140	2642	-5.44	-0.43	0
39	SLU 46	-1	140	2642	-5.44	-0.43	0
39	SLU 47	-1	140	2642	-5.44	-0.43	0
39	SLU 48	-1	140	2642	-5.44	-0.43	0
39	SLU 49	-1	140	2642	-5.44	-0.43	0
39	SLU 50	-1	140	2642	-5.44	-0.43	0
39	SLU 51	-1	140	2642	-5.44	-0.43	0
39	SLU 52	-1	191	2943	-7.29	-0.53	0
39	SLU 53	-1	191	2943	-7.29	-0.53	0
39	SLU 54	-1	191	2943	-7.29	-0.53	0
39	SLU 55	-1	191	2943	-7.29	-0.53	0
39	SLU 56	-1	191	2943	-7.29	-0.53	0
39	SLU 57	-1	191	2943	-7.29	-0.53	0
39	SLU 58	-1	191	2943	-7.29	-0.53	0
39	SLU 59	-1	191	2943	-7.29	-0.53	0
39	SLU 60	-1	212	3072	-8.08	-0.57	0
39	SLU 61	-1	212	3072	-8.08	-0.57	0
39	SLU 62	-1	212	3072	-8.08	-0.57	0
39	SLU 63	-1	212	3072	-8.08	-0.57	0
39	SLU 64	-1	169	2839	-6.49	-0.47	0
39	SLU 65	-1	169	2839	-6.49	-0.47	0
39	SLU 66	-1	169	2839	-6.49	-0.47	0
39	SLU 67	-1	169	2839	-6.49	-0.47	0
39	SLU 68	-1	169	2839	-6.49	-0.47	0
39	SLU 69	-1	169	2839	-6.49	-0.47	0
39	SLU 70	-1	169	2839	-6.49	-0.47	0
39	SLU 71	-1	169	2839	-6.49	-0.47	0
39	SLU 72	-1	169	2839	-6.49	-0.47	0
39	SLU 73	-1	219	3140	-8.34	-0.57	0
39	SLU 74	-1	219	3140	-8.34	-0.57	0
39	SLU 75	-1	219	3140	-8.34	-0.57	0
39	SLU 76	-1	219	3140	-8.34	-0.57	0
39	SLU 77	-1	219	3140	-8.34	-0.57	0
39	SLU 78	-1	219	3140	-8.34	-0.57	0
39	SLU 79	-1	219	3140	-8.34	-0.57	0
39	SLU 80	-1	219	3140	-8.34	-0.57	0
39	SLU 81	-1	241	3269	-9.13	-0.61	0
39	SLU 82	-1	241	3269	-9.13	-0.61	0
39	SLU 83	-1	241	3269	-9.13	-0.61	0
39	SLU 84	-1	241	3269	-9.13	-0.61	0
39	SLE RA 1	-1	124	2140	-4.76	-0.35	0
39	SLE RA 2	-1	124	2140	-4.76	-0.35	0
39	SLE RA 3	-1	124	2140	-4.76	-0.35	0
39	SLE RA 4	-1	124	2140	-4.76	-0.35	0
39	SLE RA 5	-1	124	2140	-4.76	-0.35	0
39	SLE RA 6	-1	124	2140	-4.76	-0.35	0
39	SLE RA 7	-1	124	2140	-4.76	-0.35	0
39	SLE RA 8	-1	124	2140	-4.76	-0.35	0
39	SLE RA 9	-1	124	2140	-4.76	-0.35	0
39	SLE RA 10	-1	157	2341	-5.99	-0.42	0
39	SLE RA 11	-1	157	2341	-5.99	-0.42	0
39	SLE RA 12	-1	157	2341	-5.99	-0.42	0
39	SLE RA 13	-1	157	2341	-5.99	-0.42	0
39	SLE RA 14	-1	157	2341	-5.99	-0.42	0
39	SLE RA 15	-1	157	2341	-5.99	-0.42	0
39	SLE RA 16	-1	157	2341	-5.99	-0.42	0
39	SLE RA 17	-1	157	2341	-5.99	-0.42	0
39	SLE RA 18	-1	172	2427	-6.52	-0.44	0
39	SLE RA 19	-1	172	2427	-6.52	-0.44	0
39	SLE RA 20	-1	172	2427	-6.52	-0.44	0
39	SLE RA 21	-1	172	2427	-6.52	-0.44	0
39	SLE FR 1	-1	124	2140	-4.76	-0.35	0
39	SLE FR 2	-1	124	2140	-4.76	-0.35	0
39	SLE FR 3	-1	124	2140	-4.76	-0.35	0
39	SLE FR 4	-1	138	2226	-5.29	-0.38	0
39	SLE FR 5	-1	138	2226	-5.29	-0.38	0
39	SLE FR 6	-1	148	2284	-5.64	-0.4	0
39	SLE QP 1	-1	124	2140	-4.76	-0.35	0
39	SLE QP 2	-1	138	2226	-5.29	-0.38	0
39	SLD 1	16	143	1928	-5.64	15.25	0.02
39	SLD 2	16	143	1928	-5.64	15.25	0.02
39	SLD 3	24	3	2024	0.41	22.12	0.03
39	SLD 4	24	3	2024	0.41	22.12	0.03
39	SLD 5	-8	351	1992	-14.56	-6.1	0
39	SLD 6	-8	351	1992	-14.56	-6.1	0
39	SLD 7	19	-114	2311	5.58	16.78	0.02
39	SLD 8	19	-114	2311	5.58	16.78	0.02
39	SLD 9	-20	390	2142	-16.16	-17.54	-0.02
39	SLD 10	-20	390	2142	-16.16	-17.54	-0.02
39	SLD 11	7	-75	2461	3.98	5.34	0
39	SLD 12	7	-75	2461	3.98	5.34	0
39	SLD 13	-25	273	2429	-10.99	-22.88	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
39	SLD 14	-25	273	2429	-10.99	-22.88	-0.03
39	SLD 15	-17	133	2524	-4.94	-16.01	-0.02
39	SLD 16	-17	133	2524	-4.94	-16.01	-0.02
39	SLV 1	37	151	1469	-6.17	36.09	0.05
39	SLV 2	37	151	1469	-6.17	36.09	0.05
39	SLV 3	57	-180	1743	8.13	53.38	0.06
39	SLV 4	57	-180	1743	8.13	53.38	0.06
39	SLV 5	-20	644	1584	-27.25	-15.65	-0.01
39	SLV 6	-20	644	1584	-27.25	-15.65	-0.01
39	SLV 7	47	-460	2496	20.43	41.96	0.04
39	SLV 8	47	-460	2496	20.43	41.96	0.04
39	SLV 9	-49	736	1957	-31.01	-42.72	-0.04
39	SLV 10	-49	736	1957	-31.01	-42.72	-0.04
39	SLV 11	19	-368	2868	16.67	14.89	0.01
39	SLV 12	19	-368	2868	16.67	14.89	0.01
39	SLV 13	-59	456	2710	-18.71	-54.14	-0.07
39	SLV 14	-59	456	2710	-18.71	-54.14	-0.07
39	SLV 15	-38	125	2983	-4.41	-36.86	-0.05
39	SLV 16	-38	125	2983	-4.41	-36.86	-0.05
40	SLU 1	10	221	1965	-11.63	-0.99	0
40	SLU 2	10	221	1965	-11.63	-0.99	0
40	SLU 3	10	221	1965	-11.63	-0.99	0
40	SLU 4	10	221	1965	-11.63	-0.99	0
40	SLU 5	10	221	1965	-11.63	-0.99	0
40	SLU 6	10	221	1965	-11.63	-0.99	0
40	SLU 7	10	221	1965	-11.63	-0.99	0
40	SLU 8	10	221	1965	-11.63	-0.99	0
40	SLU 9	10	221	1965	-11.63	-0.99	0
40	SLU 10	13	276	2309	-14.6	-1.37	0
40	SLU 11	13	276	2309	-14.6	-1.37	0
40	SLU 12	13	276	2309	-14.6	-1.37	0
40	SLU 13	13	276	2309	-14.6	-1.37	0
40	SLU 14	13	276	2309	-14.6	-1.37	0
40	SLU 15	13	276	2309	-14.6	-1.37	0
40	SLU 16	13	276	2309	-14.6	-1.37	0
40	SLU 17	13	276	2309	-14.6	-1.37	0
40	SLU 18	14	300	2457	-15.88	-1.54	0
40	SLU 19	14	300	2457	-15.88	-1.54	0
40	SLU 20	14	300	2457	-15.88	-1.54	0
40	SLU 21	14	300	2457	-15.88	-1.54	0
40	SLU 22	12	253	2155	-13.24	-1.15	0
40	SLU 23	12	253	2155	-13.24	-1.15	0
40	SLU 24	12	253	2155	-13.24	-1.15	0
40	SLU 25	12	253	2155	-13.24	-1.15	0
40	SLU 26	12	253	2155	-13.24	-1.15	0
40	SLU 27	12	253	2155	-13.24	-1.15	0
40	SLU 28	12	253	2155	-13.24	-1.15	0
40	SLU 29	12	253	2155	-13.24	-1.15	0
40	SLU 30	12	253	2155	-13.24	-1.15	0
40	SLU 31	15	308	2499	-16.21	-1.54	0
40	SLU 32	15	308	2499	-16.21	-1.54	0
40	SLU 33	15	308	2499	-16.21	-1.54	0
40	SLU 34	15	308	2499	-16.21	-1.54	0
40	SLU 35	15	308	2499	-16.21	-1.54	0
40	SLU 36	15	308	2499	-16.21	-1.54	0
40	SLU 37	15	308	2499	-16.21	-1.54	0
40	SLU 38	15	308	2499	-16.21	-1.54	0
40	SLU 39	16	332	2647	-17.48	-1.7	0
40	SLU 40	16	332	2647	-17.48	-1.7	0
40	SLU 41	16	332	2647	-17.48	-1.7	0
40	SLU 42	16	332	2647	-17.48	-1.7	0
40	SLU 43	13	276	2489	-14.57	-1.22	0
40	SLU 44	13	276	2489	-14.57	-1.22	0
40	SLU 45	13	276	2489	-14.57	-1.22	0
40	SLU 46	13	276	2489	-14.57	-1.22	0
40	SLU 47	13	276	2489	-14.57	-1.22	0
40	SLU 48	13	276	2489	-14.57	-1.22	0
40	SLU 49	13	276	2489	-14.57	-1.22	0
40	SLU 50	13	276	2489	-14.57	-1.22	0
40	SLU 51	13	276	2489	-14.57	-1.22	0
40	SLU 52	16	332	2833	-17.54	-1.61	0
40	SLU 53	16	332	2833	-17.54	-1.61	0
40	SLU 54	16	332	2833	-17.54	-1.61	0
40	SLU 55	16	332	2833	-17.54	-1.61	0
40	SLU 56	16	332	2833	-17.54	-1.61	0
40	SLU 57	16	332	2833	-17.54	-1.61	0
40	SLU 58	16	332	2833	-17.54	-1.61	0
40	SLU 59	16	332	2833	-17.54	-1.61	0
40	SLU 60	17	355	2981	-18.82	-1.78	0
40	SLU 61	17	355	2981	-18.82	-1.78	0
40	SLU 62	17	355	2981	-18.82	-1.78	0
40	SLU 63	17	355	2981	-18.82	-1.78	0
40	SLU 64	15	308	2679	-16.18	-1.39	0
40	SLU 65	15	308	2679	-16.18	-1.39	0
40	SLU 66	15	308	2679	-16.18	-1.39	0
40	SLU 67	15	308	2679	-16.18	-1.39	0
40	SLU 68	15	308	2679	-16.18	-1.39	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
40	SLU 69	15	308	2679	-16.18	-1.39	0
40	SLU 70	15	308	2679	-16.18	-1.39	0
40	SLU 71	15	308	2679	-16.18	-1.39	0
40	SLU 72	15	308	2679	-16.18	-1.39	0
40	SLU 73	17	363	3023	-19.15	-1.78	0
40	SLU 74	17	363	3023	-19.15	-1.78	0
40	SLU 75	17	363	3023	-19.15	-1.78	0
40	SLU 76	17	363	3023	-19.15	-1.78	0
40	SLU 77	17	363	3023	-19.15	-1.78	0
40	SLU 78	17	363	3023	-19.15	-1.78	0
40	SLU 79	17	363	3023	-19.15	-1.78	0
40	SLU 80	17	363	3023	-19.15	-1.78	0
40	SLU 81	18	387	3171	-20.42	-1.94	0
40	SLU 82	18	387	3171	-20.42	-1.94	0
40	SLU 83	18	387	3171	-20.42	-1.94	0
40	SLU 84	18	387	3171	-20.42	-1.94	0
40	SLE RA 1	11	230	2019	-12.09	-1.03	0
40	SLE RA 2	11	230	2019	-12.09	-1.03	0
40	SLE RA 3	11	230	2019	-12.09	-1.03	0
40	SLE RA 4	11	230	2019	-12.09	-1.03	0
40	SLE RA 5	11	230	2019	-12.09	-1.03	0
40	SLE RA 6	11	230	2019	-12.09	-1.03	0
40	SLE RA 7	11	230	2019	-12.09	-1.03	0
40	SLE RA 8	11	230	2019	-12.09	-1.03	0
40	SLE RA 9	11	230	2019	-12.09	-1.03	0
40	SLE RA 10	13	267	2249	-14.07	-1.29	0
40	SLE RA 11	13	267	2249	-14.07	-1.29	0
40	SLE RA 12	13	267	2249	-14.07	-1.29	0
40	SLE RA 13	13	267	2249	-14.07	-1.29	0
40	SLE RA 14	13	267	2249	-14.07	-1.29	0
40	SLE RA 15	13	267	2249	-14.07	-1.29	0
40	SLE RA 16	13	267	2249	-14.07	-1.29	0
40	SLE RA 17	13	267	2249	-14.07	-1.29	0
40	SLE RA 18	13	283	2347	-14.92	-1.4	0
40	SLE RA 19	13	283	2347	-14.92	-1.4	0
40	SLE RA 20	13	283	2347	-14.92	-1.4	0
40	SLE RA 21	13	283	2347	-14.92	-1.4	0
40	SLE FR 1	11	230	2019	-12.09	-1.03	0
40	SLE FR 2	11	230	2019	-12.09	-1.03	0
40	SLE FR 3	11	230	2019	-12.09	-1.03	0
40	SLE FR 4	12	246	2117	-12.94	-1.14	0
40	SLE FR 5	12	246	2117	-12.94	-1.14	0
40	SLE FR 6	12	256	2183	-13.51	-1.22	0
40	SLE QP 1	11	230	2019	-12.09	-1.03	0
40	SLE QP 2	12	246	2117	-12.94	-1.14	0
40	SLD 1	33	367	2359	-18.06	19.41	0
40	SLD 2	33	367	2359	-18.06	19.41	0
40	SLD 3	23	257	2292	-13.56	11.27	0.01
40	SLD 4	23	257	2292	-13.56	11.27	0.01
40	SLD 5	33	449	2292	-21.31	17.37	-0.01
40	SLD 6	33	449	2292	-21.31	17.37	-0.01
40	SLD 7	0	82	2068	-6.29	-9.76	0.01
40	SLD 8	0	82	2068	-6.29	-9.76	0.01
40	SLD 9	23	410	2167	-19.59	7.48	-0.01
40	SLD 10	23	410	2167	-19.59	7.48	-0.01
40	SLD 11	-10	42	1943	-4.57	-19.66	0.01
40	SLD 12	-10	42	1943	-4.57	-19.66	0.01
40	SLD 13	0	235	1943	-12.32	-13.56	-0.01
40	SLD 14	0	235	1943	-12.32	-13.56	-0.01
40	SLD 15	-10	125	1876	-7.82	-21.7	0
40	SLD 16	-10	125	1876	-7.82	-21.7	0
40	SLV 1	63	529	2689	-25	48.55	0
40	SLV 2	63	529	2689	-25	48.55	0
40	SLV 3	38	270	2514	-14.28	27.6	0.02
40	SLV 4	38	270	2514	-14.28	27.6	0.02
40	SLV 5	65	725	2554	-32.82	45.54	-0.03
40	SLV 6	65	725	2554	-32.82	45.54	-0.03
40	SLV 7	-18	-141	1971	2.92	-24.29	0.03
40	SLV 8	-18	-141	1971	2.92	-24.29	0.03
40	SLV 9	42	632	2264	-28.8	22.01	-0.04
40	SLV 10	42	632	2264	-28.8	22.01	-0.04
40	SLV 11	-42	-233	1681	6.94	-47.82	0.03
40	SLV 12	-42	-233	1681	6.94	-47.82	0.03
40	SLV 13	-15	222	1721	-11.61	-29.88	-0.02
40	SLV 14	-15	222	1721	-11.61	-29.88	-0.02
40	SLV 15	-40	-38	1546	-0.88	-50.83	-0.01
40	SLV 16	-40	-38	1546	-0.88	-50.83	-0.01
41	SLU 1	-1	73	2238	-2.05	-0.57	0
41	SLU 2	-1	73	2238	-2.05	-0.57	0
41	SLU 3	-1	73	2238	-2.05	-0.57	0
41	SLU 4	-1	73	2238	-2.05	-0.57	0
41	SLU 5	-1	73	2238	-2.05	-0.57	0
41	SLU 6	-1	73	2238	-2.05	-0.57	0
41	SLU 7	-1	73	2238	-2.05	-0.57	0
41	SLU 8	-1	73	2238	-2.05	-0.57	0
41	SLU 9	-1	73	2238	-2.05	-0.57	0
41	SLU 10	-1	123	2623	-3.68	-0.81	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
41	SLU 11	-1	123	2623	-3.68	-0.81	0
41	SLU 12	-1	123	2623	-3.68	-0.81	0
41	SLU 13	-1	123	2623	-3.68	-0.81	0
41	SLU 14	-1	123	2623	-3.68	-0.81	0
41	SLU 15	-1	123	2623	-3.68	-0.81	0
41	SLU 16	-1	123	2623	-3.68	-0.81	0
41	SLU 17	-1	123	2623	-3.68	-0.81	0
41	SLU 18	-1	145	2788	-4.38	-0.91	0
41	SLU 19	-1	145	2788	-4.38	-0.91	0
41	SLU 20	-1	145	2788	-4.38	-0.91	0
41	SLU 21	-1	145	2788	-4.38	-0.91	0
41	SLU 22	-1	101	2478	-3	-0.68	0
41	SLU 23	-1	101	2478	-3	-0.68	0
41	SLU 24	-1	101	2478	-3	-0.68	0
41	SLU 25	-1	101	2478	-3	-0.68	0
41	SLU 26	-1	101	2478	-3	-0.68	0
41	SLU 27	-1	101	2478	-3	-0.68	0
41	SLU 28	-1	101	2478	-3	-0.68	0
41	SLU 29	-1	101	2478	-3	-0.68	0
41	SLU 30	-1	101	2478	-3	-0.68	0
41	SLU 31	-1	151	2863	-4.63	-0.92	0
41	SLU 32	-1	151	2863	-4.63	-0.92	0
41	SLU 33	-1	151	2863	-4.63	-0.92	0
41	SLU 34	-1	151	2863	-4.63	-0.92	0
41	SLU 35	-1	151	2863	-4.63	-0.92	0
41	SLU 36	-1	151	2863	-4.63	-0.92	0
41	SLU 37	-1	151	2863	-4.63	-0.92	0
41	SLU 38	-1	151	2863	-4.63	-0.92	0
41	SLU 39	-1	173	3028	-5.33	-1.02	0
41	SLU 40	-1	173	3028	-5.33	-1.02	0
41	SLU 41	-1	173	3028	-5.33	-1.02	0
41	SLU 42	-1	173	3028	-5.33	-1.02	0
41	SLU 43	-1	85	2827	-2.34	-0.71	0
41	SLU 44	-1	85	2827	-2.34	-0.71	0
41	SLU 45	-1	85	2827	-2.34	-0.71	0
41	SLU 46	-1	85	2827	-2.34	-0.71	0
41	SLU 47	-1	85	2827	-2.34	-0.71	0
41	SLU 48	-1	85	2827	-2.34	-0.71	0
41	SLU 49	-1	85	2827	-2.34	-0.71	0
41	SLU 50	-1	85	2827	-2.34	-0.71	0
41	SLU 51	-1	85	2827	-2.34	-0.71	0
41	SLU 52	-1	136	3212	-3.97	-0.95	0
41	SLU 53	-1	136	3212	-3.97	-0.95	0
41	SLU 54	-1	136	3212	-3.97	-0.95	0
41	SLU 55	-1	136	3212	-3.97	-0.95	0
41	SLU 56	-1	136	3212	-3.97	-0.95	0
41	SLU 57	-1	136	3212	-3.97	-0.95	0
41	SLU 58	-1	136	3212	-3.97	-0.95	0
41	SLU 59	-1	136	3212	-3.97	-0.95	0
41	SLU 60	-1	157	3377	-4.67	-1.05	0
41	SLU 61	-1	157	3377	-4.67	-1.05	0
41	SLU 62	-1	157	3377	-4.67	-1.05	0
41	SLU 63	-1	157	3377	-4.67	-1.05	0
41	SLU 64	-1	113	3067	-3.29	-0.82	0
41	SLU 65	-1	113	3067	-3.29	-0.82	0
41	SLU 66	-1	113	3067	-3.29	-0.82	0
41	SLU 67	-1	113	3067	-3.29	-0.82	0
41	SLU 68	-1	113	3067	-3.29	-0.82	0
41	SLU 69	-1	113	3067	-3.29	-0.82	0
41	SLU 70	-1	113	3067	-3.29	-0.82	0
41	SLU 71	-1	113	3067	-3.29	-0.82	0
41	SLU 72	-1	113	3067	-3.29	-0.82	0
41	SLU 73	-1	164	3452	-4.92	-1.06	0
41	SLU 74	-1	164	3452	-4.92	-1.06	0
41	SLU 75	-1	164	3452	-4.92	-1.06	0
41	SLU 76	-1	164	3452	-4.92	-1.06	0
41	SLU 77	-1	164	3452	-4.92	-1.06	0
41	SLU 78	-1	164	3452	-4.92	-1.06	0
41	SLU 79	-1	164	3452	-4.92	-1.06	0
41	SLU 80	-1	164	3452	-4.92	-1.06	0
41	SLU 81	-1	185	3617	-5.62	-1.16	0
41	SLU 82	-1	185	3617	-5.62	-1.16	0
41	SLU 83	-1	185	3617	-5.62	-1.16	0
41	SLU 84	-1	185	3617	-5.62	-1.16	0
41	SLE RA 1	-1	81	2307	-2.32	-0.61	0
41	SLE RA 2	-1	81	2307	-2.32	-0.61	0
41	SLE RA 3	-1	81	2307	-2.32	-0.61	0
41	SLE RA 4	-1	81	2307	-2.32	-0.61	0
41	SLE RA 5	-1	81	2307	-2.32	-0.61	0
41	SLE RA 6	-1	81	2307	-2.32	-0.61	0
41	SLE RA 7	-1	81	2307	-2.32	-0.61	0
41	SLE RA 8	-1	81	2307	-2.32	-0.61	0
41	SLE RA 9	-1	81	2307	-2.32	-0.61	0
41	SLE RA 10	-1	115	2563	-3.41	-0.76	0
41	SLE RA 11	-1	115	2563	-3.41	-0.76	0
41	SLE RA 12	-1	115	2563	-3.41	-0.76	0
41	SLE RA 13	-1	115	2563	-3.41	-0.76	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
41	SLE RA 14	-1	115	2563	-3.41	-0.76	0
41	SLE RA 15	-1	115	2563	-3.41	-0.76	0
41	SLE RA 16	-1	115	2563	-3.41	-0.76	0
41	SLE RA 17	-1	115	2563	-3.41	-0.76	0
41	SLE RA 18	-1	129	2673	-3.87	-0.83	0
41	SLE RA 19	-1	129	2673	-3.87	-0.83	0
41	SLE RA 20	-1	129	2673	-3.87	-0.83	0
41	SLE RA 21	-1	129	2673	-3.87	-0.83	0
41	SLE FR 1	-1	81	2307	-2.32	-0.61	0
41	SLE FR 2	-1	81	2307	-2.32	-0.61	0
41	SLE FR 3	-1	81	2307	-2.32	-0.61	0
41	SLE FR 4	-1	95	2417	-2.79	-0.67	0
41	SLE FR 5	-1	95	2417	-2.79	-0.67	0
41	SLE FR 6	-1	105	2490	-3.1	-0.72	0
41	SLE QP 1	-1	81	2307	-2.32	-0.61	0
41	SLE QP 2	-1	95	2417	-2.79	-0.67	0
41	SLD 1	9	97	2114	-3.25	10.88	0.02
41	SLD 2	9	97	2114	-3.25	10.88	0.02
41	SLD 3	18	-39	2185	2.82	17.89	0.03
41	SLD 4	18	-39	2185	2.82	17.89	0.03
41	SLD 5	-12	303	2219	-12.14	-7.84	-0.01
41	SLD 6	-12	303	2219	-12.14	-7.84	-0.01
41	SLD 7	19	-152	2454	8.1	15.53	0.02
41	SLD 8	19	-152	2454	8.1	15.53	0.02
41	SLD 9	-21	343	2380	-13.68	-16.87	-0.02
41	SLD 10	-21	343	2380	-13.68	-16.87	-0.02
41	SLD 11	11	-112	2614	6.56	6.49	0
41	SLD 12	11	-112	2614	6.56	6.49	0
41	SLD 13	-20	230	2649	-8.4	-19.24	-0.03
41	SLD 14	-20	230	2649	-8.4	-19.24	-0.03
41	SLD 15	-10	94	2719	-2.33	-12.23	-0.02
41	SLD 16	-10	94	2719	-2.33	-12.23	-0.02
41	SLV 1	21	101	1669	-3.96	26.09	0.05
41	SLV 2	21	101	1669	-3.96	26.09	0.05
41	SLV 3	45	-222	1873	10.44	43.8	0.06
41	SLV 4	45	-222	1873	10.44	43.8	0.06
41	SLV 5	-31	587	1883	-24.97	-19.51	-0.01
41	SLV 6	-31	587	1883	-24.97	-19.51	-0.01
41	SLV 7	50	-490	2563	23.01	39.54	0.04
41	SLV 8	50	-490	2563	23.01	39.54	0.04
41	SLV 9	-51	681	2270	-28.58	-40.89	-0.05
41	SLV 10	-51	681	2270	-28.58	-40.89	-0.05
41	SLV 11	29	-397	2951	19.39	18.17	0.01
41	SLV 12	29	-397	2951	19.39	18.17	0.01
41	SLV 13	-47	413	2961	-16.01	-45.15	-0.07
41	SLV 14	-47	413	2961	-16.01	-45.15	-0.07
41	SLV 15	-23	89	3165	-1.62	-27.43	-0.05
41	SLV 16	-23	89	3165	-1.62	-27.43	-0.05
42	SLU 1	8	144	2151	-2.06	-0.54	0
42	SLU 2	8	144	2151	-2.06	-0.54	0
42	SLU 3	8	144	2151	-2.06	-0.54	0
42	SLU 4	8	144	2151	-2.06	-0.54	0
42	SLU 5	8	144	2151	-2.06	-0.54	0
42	SLU 6	8	144	2151	-2.06	-0.54	0
42	SLU 7	8	144	2151	-2.06	-0.54	0
42	SLU 8	8	144	2151	-2.06	-0.54	0
42	SLU 9	8	144	2151	-2.06	-0.54	0
42	SLU 10	10	188	2553	-2.81	-0.66	0
42	SLU 11	10	188	2553	-2.81	-0.66	0
42	SLU 12	10	188	2553	-2.81	-0.66	0
42	SLU 13	10	188	2553	-2.81	-0.66	0
42	SLU 14	10	188	2553	-2.81	-0.66	0
42	SLU 15	10	188	2553	-2.81	-0.66	0
42	SLU 16	10	188	2553	-2.81	-0.66	0
42	SLU 17	10	188	2553	-2.81	-0.66	0
42	SLU 18	11	208	2725	-3.13	-0.7	0
42	SLU 19	11	208	2725	-3.13	-0.7	0
42	SLU 20	11	208	2725	-3.13	-0.7	0
42	SLU 21	11	208	2725	-3.13	-0.7	0
42	SLU 22	9	170	2371	-2.63	-0.58	0
42	SLU 23	9	170	2371	-2.63	-0.58	0
42	SLU 24	9	170	2371	-2.63	-0.58	0
42	SLU 25	9	170	2371	-2.63	-0.58	0
42	SLU 26	9	170	2371	-2.63	-0.58	0
42	SLU 27	9	170	2371	-2.63	-0.58	0
42	SLU 28	9	170	2371	-2.63	-0.58	0
42	SLU 29	9	170	2371	-2.63	-0.58	0
42	SLU 30	9	170	2371	-2.63	-0.58	0
42	SLU 31	12	215	2774	-3.38	-0.69	0
42	SLU 32	12	215	2774	-3.38	-0.69	0
42	SLU 33	12	215	2774	-3.38	-0.69	0
42	SLU 34	12	215	2774	-3.38	-0.69	0
42	SLU 35	12	215	2774	-3.38	-0.69	0
42	SLU 36	12	215	2774	-3.38	-0.69	0
42	SLU 37	12	215	2774	-3.38	-0.69	0
42	SLU 38	12	215	2774	-3.38	-0.69	0
42	SLU 39	13	234	2946	-3.69	-0.74	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
42	SLU 40	13	234	2946	-3.69	-0.74	0
42	SLU 41	13	234	2946	-3.69	-0.74	0
42	SLU 42	13	234	2946	-3.69	-0.74	0
42	SLU 43	10	178	2720	-2.49	-0.7	0
42	SLU 44	10	178	2720	-2.49	-0.7	0
42	SLU 45	10	178	2720	-2.49	-0.7	0
42	SLU 46	10	178	2720	-2.49	-0.7	0
42	SLU 47	10	178	2720	-2.49	-0.7	0
42	SLU 48	10	178	2720	-2.49	-0.7	0
42	SLU 49	10	178	2720	-2.49	-0.7	0
42	SLU 50	10	178	2720	-2.49	-0.7	0
42	SLU 51	10	178	2720	-2.49	-0.7	0
42	SLU 52	12	222	3122	-3.23	-0.81	0
42	SLU 53	12	222	3122	-3.23	-0.81	0
42	SLU 54	12	222	3122	-3.23	-0.81	0
42	SLU 55	12	222	3122	-3.23	-0.81	0
42	SLU 56	12	222	3122	-3.23	-0.81	0
42	SLU 57	12	222	3122	-3.23	-0.81	0
42	SLU 58	12	222	3122	-3.23	-0.81	0
42	SLU 59	12	222	3122	-3.23	-0.81	0
42	SLU 60	13	242	3295	-3.55	-0.86	0
42	SLU 61	13	242	3295	-3.55	-0.86	0
42	SLU 62	13	242	3295	-3.55	-0.86	0
42	SLU 63	13	242	3295	-3.55	-0.86	0
42	SLU 64	11	204	2941	-3.06	-0.73	0
42	SLU 65	11	204	2941	-3.06	-0.73	0
42	SLU 66	11	204	2941	-3.06	-0.73	0
42	SLU 67	11	204	2941	-3.06	-0.73	0
42	SLU 68	11	204	2941	-3.06	-0.73	0
42	SLU 69	11	204	2941	-3.06	-0.73	0
42	SLU 70	11	204	2941	-3.06	-0.73	0
42	SLU 71	11	204	2941	-3.06	-0.73	0
42	SLU 72	11	204	2941	-3.06	-0.73	0
42	SLU 73	14	249	3343	-3.8	-0.84	0
42	SLU 74	14	249	3343	-3.8	-0.84	0
42	SLU 75	14	249	3343	-3.8	-0.84	0
42	SLU 76	14	249	3343	-3.8	-0.84	0
42	SLU 77	14	249	3343	-3.8	-0.84	0
42	SLU 78	14	249	3343	-3.8	-0.84	0
42	SLU 79	14	249	3343	-3.8	-0.84	0
42	SLU 80	14	249	3343	-3.8	-0.84	0
42	SLU 81	15	268	3516	-4.12	-0.89	0
42	SLU 82	15	268	3516	-4.12	-0.89	0
42	SLU 83	15	268	3516	-4.12	-0.89	0
42	SLU 84	15	268	3516	-4.12	-0.89	0
42	SLE RA 1	8	151	2214	-2.22	-0.55	0
42	SLE RA 2	8	151	2214	-2.22	-0.55	0
42	SLE RA 3	8	151	2214	-2.22	-0.55	0
42	SLE RA 4	8	151	2214	-2.22	-0.55	0
42	SLE RA 5	8	151	2214	-2.22	-0.55	0
42	SLE RA 6	8	151	2214	-2.22	-0.55	0
42	SLE RA 7	8	151	2214	-2.22	-0.55	0
42	SLE RA 8	8	151	2214	-2.22	-0.55	0
42	SLE RA 9	8	151	2214	-2.22	-0.55	0
42	SLE RA 10	10	181	2482	-2.72	-0.63	0
42	SLE RA 11	10	181	2482	-2.72	-0.63	0
42	SLE RA 12	10	181	2482	-2.72	-0.63	0
42	SLE RA 13	10	181	2482	-2.72	-0.63	0
42	SLE RA 14	10	181	2482	-2.72	-0.63	0
42	SLE RA 15	10	181	2482	-2.72	-0.63	0
42	SLE RA 16	10	181	2482	-2.72	-0.63	0
42	SLE RA 17	10	181	2482	-2.72	-0.63	0
42	SLE RA 18	11	194	2597	-2.93	-0.66	0
42	SLE RA 19	11	194	2597	-2.93	-0.66	0
42	SLE RA 20	11	194	2597	-2.93	-0.66	0
42	SLE RA 21	11	194	2597	-2.93	-0.66	0
42	SLE FR 1	8	151	2214	-2.22	-0.55	0
42	SLE FR 2	8	151	2214	-2.22	-0.55	0
42	SLE FR 3	8	151	2214	-2.22	-0.55	0
42	SLE FR 4	9	164	2329	-2.44	-0.59	0
42	SLE FR 5	9	164	2329	-2.44	-0.59	0
42	SLE FR 6	9	173	2405	-2.58	-0.61	0
42	SLE QP 1	8	151	2214	-2.22	-0.55	0
42	SLE QP 2	9	164	2329	-2.44	-0.59	0
42	SLD 1	23	285	2611	-7.22	14.42	0.01
42	SLD 2	23	285	2611	-7.22	14.42	0.01
42	SLD 3	13	180	2549	-2.73	7.34	0.01
42	SLD 4	13	180	2549	-2.73	7.34	0.01
42	SLD 5	28	360	2509	-10.69	14.65	-0.01
42	SLD 6	28	360	2509	-10.69	14.65	-0.01
42	SLD 7	-5	9	2299	4.29	-8.94	0.01
42	SLD 8	-5	9	2299	4.29	-8.94	0.01
42	SLD 9	23	319	2358	-9.17	7.77	-0.01
42	SLD 10	23	319	2358	-9.17	7.77	-0.01
42	SLD 11	-11	-32	2149	5.82	-15.82	0.01
42	SLD 12	-11	-32	2149	5.82	-15.82	0.01
42	SLD 13	5	148	2109	-2.15	-8.51	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
42	SLD 14	5	148	2109	-2.15	-8.51	-0.01
42	SLD 15	-5	43	2046	2.35	-15.59	-0.01
42	SLD 16	-5	43	2046	2.35	-15.59	-0.01
42	SLV 1	43	447	2994	-13.7	35.77	0.02
42	SLV 2	43	447	2994	-13.7	35.77	0.02
42	SLV 3	18	200	2831	-3.07	17.62	0.03
42	SLV 4	18	200	2831	-3.07	17.62	0.03
42	SLV 5	57	625	2776	-21.93	37.84	-0.02
42	SLV 6	57	625	2776	-21.93	37.84	-0.02
42	SLV 7	-27	-201	2232	13.49	-22.64	0.03
42	SLV 8	-27	-201	2232	13.49	-22.64	0.03
42	SLV 9	44	529	2425	-18.37	21.47	-0.03
42	SLV 10	44	529	2425	-18.37	21.47	-0.03
42	SLV 11	-40	-297	1882	17.06	-39.01	0.02
42	SLV 12	-40	-297	1882	17.06	-39.01	0.02
42	SLV 13	0	128	1826	-1.8	-18.8	-0.03
42	SLV 14	0	128	1826	-1.8	-18.8	-0.03
42	SLV 15	-25	-119	1663	8.82	-36.94	-0.02
42	SLV 16	-25	-119	1663	8.82	-36.94	-0.02
43	SLU 1	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 2	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 3	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 4	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 5	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 6	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 7	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 8	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 9	-1	31	2422	-0.56	-0.96	-0.01
43	SLU 10	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 11	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 12	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 13	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 14	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 15	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 16	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 17	-2	85	2914	-2.34	-1.41	-0.01
43	SLU 18	-2	108	3125	-3.11	-1.6	-0.02
43	SLU 19	-2	108	3125	-3.11	-1.6	-0.02
43	SLU 20	-2	108	3125	-3.11	-1.6	-0.02
43	SLU 21	-2	108	3125	-3.11	-1.6	-0.02
43	SLU 22	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 23	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 24	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 25	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 26	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 27	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 28	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 29	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 30	-1	60	2717	-1.51	-1.19	-0.01
43	SLU 31	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 32	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 33	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 34	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 35	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 36	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 37	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 38	-2	113	3208	-3.29	-1.63	-0.02
43	SLU 39	-2	136	3419	-4.06	-1.82	-0.02
43	SLU 40	-2	136	3419	-4.06	-1.82	-0.02
43	SLU 41	-2	136	3419	-4.06	-1.82	-0.02
43	SLU 42	-2	136	3419	-4.06	-1.82	-0.02
43	SLU 43	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 44	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 45	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 46	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 47	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 48	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 49	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 50	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 51	-1	31	3048	-0.4	-1.18	-0.01
43	SLU 52	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 53	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 54	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 55	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 56	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 57	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 58	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 59	-2	84	3540	-2.19	-1.62	-0.02
43	SLU 60	-2	107	3750	-2.95	-1.82	-0.02
43	SLU 61	-2	107	3750	-2.95	-1.82	-0.02
43	SLU 62	-2	107	3750	-2.95	-1.82	-0.02
43	SLU 63	-2	107	3750	-2.95	-1.82	-0.02
43	SLU 64	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 65	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 66	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 67	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 68	-2	59	3342	-1.35	-1.4	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
43	SLU 69	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 70	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 71	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 72	-2	59	3342	-1.35	-1.4	-0.01
43	SLU 73	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 74	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 75	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 76	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 77	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 78	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 79	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 80	-2	113	3834	-3.13	-1.85	-0.02
43	SLU 81	-2	136	4045	-3.9	-2.04	-0.02
43	SLU 82	-2	136	4045	-3.9	-2.04	-0.02
43	SLU 83	-2	136	4045	-3.9	-2.04	-0.02
43	SLU 84	-2	136	4045	-3.9	-2.04	-0.02
43	SLE RA 1	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 2	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 3	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 4	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 5	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 6	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 7	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 8	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 9	-1	39	2506	-0.83	-1.03	-0.01
43	SLE RA 10	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 11	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 12	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 13	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 14	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 15	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 16	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 17	-1	75	2834	-2.02	-1.33	-0.01
43	SLE RA 18	-2	90	2975	-2.53	-1.45	-0.01
43	SLE RA 19	-2	90	2975	-2.53	-1.45	-0.01
43	SLE RA 20	-2	90	2975	-2.53	-1.45	-0.01
43	SLE RA 21	-2	90	2975	-2.53	-1.45	-0.01
43	SLE FR 1	-1	39	2506	-0.83	-1.03	-0.01
43	SLE FR 2	-1	39	2506	-0.83	-1.03	-0.01
43	SLE FR 3	-1	39	2506	-0.83	-1.03	-0.01
43	SLE FR 4	-1	55	2647	-1.34	-1.15	-0.01
43	SLE FR 5	-1	55	2647	-1.34	-1.15	-0.01
43	SLE FR 6	-1	65	2740	-1.68	-1.24	-0.01
43	SLE QP 1	-1	39	2506	-0.83	-1.03	-0.01
43	SLE QP 2	-1	55	2647	-1.34	-1.15	-0.01
43	SLD 1	-15	45	2295	-1.42	5.71	0.01
43	SLD 2	-15	45	2295	-1.42	5.71	0.01
43	SLD 3	-4	-83	2350	4.49	11.99	0.01
43	SLD 4	-4	-83	2350	4.49	11.99	0.01
43	SLD 5	-22	247	2458	-10.33	-8.62	-0.01
43	SLD 6	-22	247	2458	-10.33	-8.62	-0.01
43	SLD 7	14	-182	2641	9.38	12.31	0
43	SLD 8	14	-182	2641	9.38	12.31	0
43	SLD 9	-17	291	2653	-12.06	-14.62	-0.03
43	SLD 10	-17	291	2653	-12.06	-14.62	-0.03
43	SLD 11	19	-138	2836	7.65	6.31	-0.01
43	SLD 12	19	-138	2836	7.65	6.31	-0.01
43	SLD 13	1	192	2944	-7.17	-14.3	-0.03
43	SLD 14	1	192	2944	-7.17	-14.3	-0.03
43	SLD 15	12	64	2999	-1.26	-8.02	-0.03
43	SLD 16	12	64	2999	-1.26	-8.02	-0.03
43	SLV 1	-34	35	1801	-1.61	14.56	0.03
43	SLV 2	-34	35	1801	-1.61	14.56	0.03
43	SLV 3	-7	-269	1956	12.38	30.47	0.04
43	SLV 4	-7	-269	1956	12.38	30.47	0.04
43	SLV 5	-52	511	2157	-22.63	-20.57	-0.02
43	SLV 6	-52	511	2157	-22.63	-20.57	-0.02
43	SLV 7	38	-504	2675	23.99	32.47	0.02
43	SLV 8	38	-504	2675	23.99	32.47	0.02
43	SLV 9	-41	614	2619	-26.67	-34.78	-0.04
43	SLV 10	-41	614	2619	-26.67	-34.78	-0.04
43	SLV 11	50	-402	3136	19.95	18.26	-0.01
43	SLV 12	50	-402	3136	19.95	18.26	-0.01
43	SLV 13	4	378	3338	-15.06	-32.78	-0.06
43	SLV 14	4	378	3338	-15.06	-32.78	-0.06
43	SLV 15	32	74	3493	-1.07	-16.87	-0.05
43	SLV 16	32	74	3493	-1.07	-16.87	-0.05
44	SLU 1	10	165	2304	-8.69	0.83	0.01
44	SLU 2	10	165	2304	-8.69	0.83	0.01
44	SLU 3	10	165	2304	-8.69	0.83	0.01
44	SLU 4	10	165	2304	-8.69	0.83	0.01
44	SLU 5	10	165	2304	-8.69	0.83	0.01
44	SLU 6	10	165	2304	-8.69	0.83	0.01
44	SLU 7	10	165	2304	-8.69	0.83	0.01
44	SLU 8	10	165	2304	-8.69	0.83	0.01
44	SLU 9	10	165	2304	-8.69	0.83	0.01
44	SLU 10	14	226	2771	-11.55	1.26	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
44	SLU 11	14	226	2771	-11.55	1.26	0.01
44	SLU 12	14	226	2771	-11.55	1.26	0.01
44	SLU 13	14	226	2771	-11.55	1.26	0.01
44	SLU 14	14	226	2771	-11.55	1.26	0.01
44	SLU 15	14	226	2771	-11.55	1.26	0.01
44	SLU 16	14	226	2771	-11.55	1.26	0.01
44	SLU 17	14	226	2771	-11.55	1.26	0.01
44	SLU 18	16	252	2970	-12.77	1.45	0.01
44	SLU 19	16	252	2970	-12.77	1.45	0.01
44	SLU 20	16	252	2970	-12.77	1.45	0.01
44	SLU 21	16	252	2970	-12.77	1.45	0.01
44	SLU 22	12	198	2559	-10.19	1.06	0.01
44	SLU 23	12	198	2559	-10.19	1.06	0.01
44	SLU 24	12	198	2559	-10.19	1.06	0.01
44	SLU 25	12	198	2559	-10.19	1.06	0.01
44	SLU 26	12	198	2559	-10.19	1.06	0.01
44	SLU 27	12	198	2559	-10.19	1.06	0.01
44	SLU 28	12	198	2559	-10.19	1.06	0.01
44	SLU 29	12	198	2559	-10.19	1.06	0.01
44	SLU 30	12	198	2559	-10.19	1.06	0.01
44	SLU 31	16	259	3025	-13.05	1.49	0.01
44	SLU 32	16	259	3025	-13.05	1.49	0.01
44	SLU 33	16	259	3025	-13.05	1.49	0.01
44	SLU 34	16	259	3025	-13.05	1.49	0.01
44	SLU 35	16	259	3025	-13.05	1.49	0.01
44	SLU 36	16	259	3025	-13.05	1.49	0.01
44	SLU 37	16	259	3025	-13.05	1.49	0.01
44	SLU 38	16	259	3025	-13.05	1.49	0.01
44	SLU 39	18	285	3225	-14.27	1.68	0.01
44	SLU 40	18	285	3225	-14.27	1.68	0.01
44	SLU 41	18	285	3225	-14.27	1.68	0.01
44	SLU 42	18	285	3225	-14.27	1.68	0.01
44	SLU 43	12	203	2909	-10.78	1	0.01
44	SLU 44	12	203	2909	-10.78	1	0.01
44	SLU 45	12	203	2909	-10.78	1	0.01
44	SLU 46	12	203	2909	-10.78	1	0.01
44	SLU 47	12	203	2909	-10.78	1	0.01
44	SLU 48	12	203	2909	-10.78	1	0.01
44	SLU 49	12	203	2909	-10.78	1	0.01
44	SLU 50	12	203	2909	-10.78	1	0.01
44	SLU 51	12	203	2909	-10.78	1	0.01
44	SLU 52	16	264	3375	-13.64	1.43	0.01
44	SLU 53	16	264	3375	-13.64	1.43	0.01
44	SLU 54	16	264	3375	-13.64	1.43	0.01
44	SLU 55	16	264	3375	-13.64	1.43	0.01
44	SLU 56	16	264	3375	-13.64	1.43	0.01
44	SLU 57	16	264	3375	-13.64	1.43	0.01
44	SLU 58	16	264	3375	-13.64	1.43	0.01
44	SLU 59	16	264	3375	-13.64	1.43	0.01
44	SLU 60	18	290	3575	-14.86	1.62	0.01
44	SLU 61	18	290	3575	-14.86	1.62	0.01
44	SLU 62	18	290	3575	-14.86	1.62	0.01
44	SLU 63	18	290	3575	-14.86	1.62	0.01
44	SLU 64	15	236	3163	-12.28	1.23	0.01
44	SLU 65	15	236	3163	-12.28	1.23	0.01
44	SLU 66	15	236	3163	-12.28	1.23	0.01
44	SLU 67	15	236	3163	-12.28	1.23	0.01
44	SLU 68	15	236	3163	-12.28	1.23	0.01
44	SLU 69	15	236	3163	-12.28	1.23	0.01
44	SLU 70	15	236	3163	-12.28	1.23	0.01
44	SLU 71	15	236	3163	-12.28	1.23	0.01
44	SLU 72	15	236	3163	-12.28	1.23	0.01
44	SLU 73	19	297	3629	-15.14	1.66	0.01
44	SLU 74	19	297	3629	-15.14	1.66	0.01
44	SLU 75	19	297	3629	-15.14	1.66	0.01
44	SLU 76	19	297	3629	-15.14	1.66	0.01
44	SLU 77	19	297	3629	-15.14	1.66	0.01
44	SLU 78	19	297	3629	-15.14	1.66	0.01
44	SLU 79	19	297	3629	-15.14	1.66	0.01
44	SLU 80	19	297	3629	-15.14	1.66	0.01
44	SLU 81	20	323	3829	-16.36	1.85	0.01
44	SLU 82	20	323	3829	-16.36	1.85	0.01
44	SLU 83	20	323	3829	-16.36	1.85	0.01
44	SLU 84	20	323	3829	-16.36	1.85	0.01
44	SLE RA 1	11	174	2377	-9.12	0.9	0.01
44	SLE RA 2	11	174	2377	-9.12	0.9	0.01
44	SLE RA 3	11	174	2377	-9.12	0.9	0.01
44	SLE RA 4	11	174	2377	-9.12	0.9	0.01
44	SLE RA 5	11	174	2377	-9.12	0.9	0.01
44	SLE RA 6	11	174	2377	-9.12	0.9	0.01
44	SLE RA 7	11	174	2377	-9.12	0.9	0.01
44	SLE RA 8	11	174	2377	-9.12	0.9	0.01
44	SLE RA 9	11	174	2377	-9.12	0.9	0.01
44	SLE RA 10	13	215	2688	-11.02	1.18	0.01
44	SLE RA 11	13	215	2688	-11.02	1.18	0.01
44	SLE RA 12	13	215	2688	-11.02	1.18	0.01
44	SLE RA 13	13	215	2688	-11.02	1.18	0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
44	SLE RA 14	13	215	2688	-11.02	1.18	0.01
44	SLE RA 15	13	215	2688	-11.02	1.18	0.01
44	SLE RA 16	13	215	2688	-11.02	1.18	0.01
44	SLE RA 17	13	215	2688	-11.02	1.18	0.01
44	SLE RA 18	15	232	2821	-11.84	1.31	0.01
44	SLE RA 19	15	232	2821	-11.84	1.31	0.01
44	SLE RA 20	15	232	2821	-11.84	1.31	0.01
44	SLE RA 21	15	232	2821	-11.84	1.31	0.01
44	SLE FR 1	11	174	2377	-9.12	0.9	0.01
44	SLE FR 2	11	174	2377	-9.12	0.9	0.01
44	SLE FR 3	11	174	2377	-9.12	0.9	0.01
44	SLE FR 4	12	192	2510	-9.93	1.02	0.01
44	SLE FR 5	12	192	2510	-9.93	1.02	0.01
44	SLE FR 6	13	203	2599	-10.48	1.1	0.01
44	SLE QP 1	11	174	2377	-9.12	0.9	0.01
44	SLE QP 2	12	192	2510	-9.93	1.02	0.01
44	SLD 1	10	318	2840	-15.02	10.05	0.02
44	SLD 2	10	318	2840	-15.02	10.05	0.02
44	SLD 3	0	217	2792	-10.74	4.59	0.03
44	SLD 4	0	217	2792	-10.74	4.59	0.03
44	SLD 5	26	383	2682	-17.95	12.02	0.01
44	SLD 6	26	383	2682	-17.95	12.02	0.01
44	SLD 7	-6	46	2523	-3.68	-6.2	0.02
44	SLD 8	-6	46	2523	-3.68	-6.2	0.02
44	SLD 9	30	337	2498	-16.18	8.24	0
44	SLD 10	30	337	2498	-16.18	8.24	0
44	SLD 11	-2	0	2339	-1.91	-9.98	0.01
44	SLD 12	-2	0	2339	-1.91	-9.98	0.01
44	SLD 13	23	166	2229	-9.12	-2.55	-0.01
44	SLD 14	23	166	2229	-9.12	-2.55	-0.01
44	SLD 15	14	65	2181	-4.84	-8.01	-0.01
44	SLD 16	14	65	2181	-4.84	-8.01	-0.01
44	SLV 1	8	489	3283	-21.85	23.03	0.04
44	SLV 2	8	489	3283	-21.85	23.03	0.04
44	SLV 3	-16	251	3159	-11.77	9.07	0.05
44	SLV 4	-16	251	3159	-11.77	9.07	0.05
44	SLV 5	47	642	2931	-28.79	28.79	0
44	SLV 6	47	642	2931	-28.79	28.79	0
44	SLV 7	-33	-152	2517	4.8	-17.73	0.03
44	SLV 8	-33	-152	2517	4.8	-17.73	0.03
44	SLV 9	57	535	2504	-24.66	19.77	-0.02
44	SLV 10	57	535	2504	-24.66	19.77	-0.02
44	SLV 11	-23	-259	2090	8.93	-26.75	0.01
44	SLV 12	-23	-259	2090	8.93	-26.75	0.01
44	SLV 13	40	133	1862	-8.09	-7.04	-0.03
44	SLV 14	40	133	1862	-8.09	-7.04	-0.03
44	SLV 15	16	-106	1738	1.98	-20.99	-0.02
44	SLV 16	16	-106	1738	1.98	-20.99	-0.02
45	SLU 1	-5	-37	2714	4.32	-1.93	0.01
45	SLU 2	-5	-37	2714	4.32	-1.93	0.01
45	SLU 3	-5	-37	2714	4.32	-1.93	0.01
45	SLU 4	-5	-37	2714	4.32	-1.93	0.01
45	SLU 5	-5	-37	2714	4.32	-1.93	0.01
45	SLU 6	-5	-37	2714	4.32	-1.93	0.01
45	SLU 7	-5	-37	2714	4.32	-1.93	0.01
45	SLU 8	-5	-37	2714	4.32	-1.93	0.01
45	SLU 9	-5	-37	2714	4.32	-1.93	0.01
45	SLU 10	-8	16	3379	3.31	-2.84	0.02
45	SLU 11	-8	16	3379	3.31	-2.84	0.02
45	SLU 12	-8	16	3379	3.31	-2.84	0.02
45	SLU 13	-8	16	3379	3.31	-2.84	0.02
45	SLU 14	-8	16	3379	3.31	-2.84	0.02
45	SLU 15	-8	16	3379	3.31	-2.84	0.02
45	SLU 16	-8	16	3379	3.31	-2.84	0.02
45	SLU 17	-8	16	3379	3.31	-2.84	0.02
45	SLU 18	-9	38	3664	2.88	-3.23	0.02
45	SLU 19	-9	38	3664	2.88	-3.23	0.02
45	SLU 20	-9	38	3664	2.88	-3.23	0.02
45	SLU 21	-9	38	3664	2.88	-3.23	0.02
45	SLU 22	-7	-10	3098	3.79	-2.4	0.02
45	SLU 23	-7	-10	3098	3.79	-2.4	0.02
45	SLU 24	-7	-10	3098	3.79	-2.4	0.02
45	SLU 25	-7	-10	3098	3.79	-2.4	0.02
45	SLU 26	-7	-10	3098	3.79	-2.4	0.02
45	SLU 27	-7	-10	3098	3.79	-2.4	0.02
45	SLU 28	-7	-10	3098	3.79	-2.4	0.02
45	SLU 29	-7	-10	3098	3.79	-2.4	0.02
45	SLU 30	-7	-10	3098	3.79	-2.4	0.02
45	SLU 31	-9	43	3763	2.79	-3.32	0.02
45	SLU 32	-9	43	3763	2.79	-3.32	0.02
45	SLU 33	-9	43	3763	2.79	-3.32	0.02
45	SLU 34	-9	43	3763	2.79	-3.32	0.02
45	SLU 35	-9	43	3763	2.79	-3.32	0.02
45	SLU 36	-9	43	3763	2.79	-3.32	0.02
45	SLU 37	-9	43	3763	2.79	-3.32	0.02
45	SLU 38	-9	43	3763	2.79	-3.32	0.02
45	SLU 39	-10	65	4048	2.36	-3.71	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
45	SLU 40	-10	65	4048	2.36	-3.71	0.03
45	SLU 41	-10	65	4048	2.36	-3.71	0.03
45	SLU 42	-10	65	4048	2.36	-3.71	0.03
45	SLU 43	-7	-57	3397	5.79	-2.34	0.02
45	SLU 44	-7	-57	3397	5.79	-2.34	0.02
45	SLU 45	-7	-57	3397	5.79	-2.34	0.02
45	SLU 46	-7	-57	3397	5.79	-2.34	0.02
45	SLU 47	-7	-57	3397	5.79	-2.34	0.02
45	SLU 48	-7	-57	3397	5.79	-2.34	0.02
45	SLU 49	-7	-57	3397	5.79	-2.34	0.02
45	SLU 50	-7	-57	3397	5.79	-2.34	0.02
45	SLU 51	-7	-57	3397	5.79	-2.34	0.02
45	SLU 52	-9	-5	4062	4.79	-3.26	0.02
45	SLU 53	-9	-5	4062	4.79	-3.26	0.02
45	SLU 54	-9	-5	4062	4.79	-3.26	0.02
45	SLU 55	-9	-5	4062	4.79	-3.26	0.02
45	SLU 56	-9	-5	4062	4.79	-3.26	0.02
45	SLU 57	-9	-5	4062	4.79	-3.26	0.02
45	SLU 58	-9	-5	4062	4.79	-3.26	0.02
45	SLU 59	-9	-5	4062	4.79	-3.26	0.02
45	SLU 60	-10	18	4347	4.36	-3.65	0.03
45	SLU 61	-10	18	4347	4.36	-3.65	0.03
45	SLU 62	-10	18	4347	4.36	-3.65	0.03
45	SLU 63	-10	18	4347	4.36	-3.65	0.03
45	SLU 64	-8	-30	3781	5.27	-2.82	0.02
45	SLU 65	-8	-30	3781	5.27	-2.82	0.02
45	SLU 66	-8	-30	3781	5.27	-2.82	0.02
45	SLU 67	-8	-30	3781	5.27	-2.82	0.02
45	SLU 68	-8	-30	3781	5.27	-2.82	0.02
45	SLU 69	-8	-30	3781	5.27	-2.82	0.02
45	SLU 70	-8	-30	3781	5.27	-2.82	0.02
45	SLU 71	-8	-30	3781	5.27	-2.82	0.02
45	SLU 72	-8	-30	3781	5.27	-2.82	0.02
45	SLU 73	-10	22	4446	4.26	-3.73	0.03
45	SLU 74	-10	22	4446	4.26	-3.73	0.03
45	SLU 75	-10	22	4446	4.26	-3.73	0.03
45	SLU 76	-10	22	4446	4.26	-3.73	0.03
45	SLU 77	-10	22	4446	4.26	-3.73	0.03
45	SLU 78	-10	22	4446	4.26	-3.73	0.03
45	SLU 79	-10	22	4446	4.26	-3.73	0.03
45	SLU 80	-10	22	4446	4.26	-3.73	0.03
45	SLU 81	-11	45	4730	3.83	-4.13	0.03
45	SLU 82	-11	45	4730	3.83	-4.13	0.03
45	SLU 83	-11	45	4730	3.83	-4.13	0.03
45	SLU 84	-11	45	4730	3.83	-4.13	0.03
45	SLE RA 1	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 2	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 3	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 4	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 5	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 6	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 7	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 8	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 9	-6	-29	2824	4.17	-2.06	0.02
45	SLE RA 10	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 11	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 12	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 13	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 14	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 15	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 16	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 17	-7	6	3267	3.5	-2.67	0.02
45	SLE RA 18	-8	21	3457	3.21	-2.93	0.02
45	SLE RA 19	-8	21	3457	3.21	-2.93	0.02
45	SLE RA 20	-8	21	3457	3.21	-2.93	0.02
45	SLE RA 21	-8	21	3457	3.21	-2.93	0.02
45	SLE FR 1	-6	-29	2824	4.17	-2.06	0.02
45	SLE FR 2	-6	-29	2824	4.17	-2.06	0.02
45	SLE FR 3	-6	-29	2824	4.17	-2.06	0.02
45	SLE FR 4	-6	-14	3014	3.88	-2.32	0.02
45	SLE FR 5	-6	-14	3014	3.88	-2.32	0.02
45	SLE FR 6	-7	-4	3141	3.69	-2.5	0.02
45	SLE QP 1	-6	-29	2824	4.17	-2.06	0.02
45	SLE QP 2	-6	-14	3014	3.88	-2.32	0.02
45	SLD 1	-6	-37	2512	3.75	0.78	0
45	SLD 2	-6	-37	2512	3.75	0.78	0
45	SLD 3	4	-152	2590	9.42	4.86	0
45	SLD 4	4	-152	2590	9.42	4.86	0
45	SLD 5	-22	154	2745	-4.76	-7.58	0.02
45	SLD 6	-22	154	2745	-4.76	-7.58	0.02
45	SLD 7	12	-231	3005	14.14	6.02	0
45	SLD 8	12	-231	3005	14.14	6.02	0
45	SLD 9	-25	202	3023	-6.38	-10.67	0.03
45	SLD 10	-25	202	3023	-6.38	-10.67	0.03
45	SLD 11	9	-182	3283	12.52	2.94	0.02
45	SLD 12	9	-182	3283	12.52	2.94	0.02
45	SLD 13	-17	124	3438	-1.66	-9.51	0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
45	SLD 14	-17	124	3438	-1.66	-9.51	0.04
45	SLD 15	-7	9	3516	4.01	-5.42	0.03
45	SLD 16	-7	9	3516	4.01	-5.42	0.03
45	SLV 1	-6	-65	1835	3.5	4.67	-0.02
45	SLV 2	-6	-65	1835	3.5	4.67	-0.02
45	SLV 3	20	-339	2027	16.93	15.03	-0.03
45	SLV 4	20	-339	2027	16.93	15.03	-0.03
45	SLV 5	-46	386	2368	-16.61	-15.94	0.02
45	SLV 6	-46	386	2368	-16.61	-15.94	0.02
45	SLV 7	41	-527	3010	28.17	18.6	-0.01
45	SLV 8	41	-527	3010	28.17	18.6	-0.01
45	SLV 9	-54	498	3018	-20.41	-23.25	0.05
45	SLV 10	-54	498	3018	-20.41	-23.25	0.05
45	SLV 11	33	-414	3660	24.37	11.29	0.01
45	SLV 12	33	-414	3660	24.37	11.29	0.01
45	SLV 13	-33	311	4001	-9.17	-19.68	0.07
45	SLV 14	-33	311	4001	-9.17	-19.68	0.07
45	SLV 15	-7	37	4193	4.26	-9.32	0.06
45	SLV 16	-7	37	4193	4.26	-9.32	0.06
46	SLU 1	11	92	2499	-0.34	1.8	-0.02
46	SLU 2	11	92	2499	-0.34	1.8	-0.02
46	SLU 3	11	92	2499	-0.34	1.8	-0.02
46	SLU 4	11	92	2499	-0.34	1.8	-0.02
46	SLU 5	11	92	2499	-0.34	1.8	-0.02
46	SLU 6	11	92	2499	-0.34	1.8	-0.02
46	SLU 7	11	92	2499	-0.34	1.8	-0.02
46	SLU 8	11	92	2499	-0.34	1.8	-0.02
46	SLU 9	11	92	2499	-0.34	1.8	-0.02
46	SLU 10	17	143	3071	-1.15	2.74	-0.03
46	SLU 11	17	143	3071	-1.15	2.74	-0.03
46	SLU 12	17	143	3071	-1.15	2.74	-0.03
46	SLU 13	17	143	3071	-1.15	2.74	-0.03
46	SLU 14	17	143	3071	-1.15	2.74	-0.03
46	SLU 15	17	143	3071	-1.15	2.74	-0.03
46	SLU 16	17	143	3071	-1.15	2.74	-0.03
46	SLU 17	17	143	3071	-1.15	2.74	-0.03
46	SLU 18	20	165	3315	-1.5	3.14	-0.03
46	SLU 19	20	165	3315	-1.5	3.14	-0.03
46	SLU 20	20	165	3315	-1.5	3.14	-0.03
46	SLU 21	20	165	3315	-1.5	3.14	-0.03
46	SLU 22	14	120	2809	-0.88	2.3	-0.03
46	SLU 23	14	120	2809	-0.88	2.3	-0.03
46	SLU 24	14	120	2809	-0.88	2.3	-0.03
46	SLU 25	14	120	2809	-0.88	2.3	-0.03
46	SLU 26	14	120	2809	-0.88	2.3	-0.03
46	SLU 27	14	120	2809	-0.88	2.3	-0.03
46	SLU 28	14	120	2809	-0.88	2.3	-0.03
46	SLU 29	14	120	2809	-0.88	2.3	-0.03
46	SLU 30	14	120	2809	-0.88	2.3	-0.03
46	SLU 31	20	171	3381	-1.69	3.24	-0.04
46	SLU 32	20	171	3381	-1.69	3.24	-0.04
46	SLU 33	20	171	3381	-1.69	3.24	-0.04
46	SLU 34	20	171	3381	-1.69	3.24	-0.04
46	SLU 35	20	171	3381	-1.69	3.24	-0.04
46	SLU 36	20	171	3381	-1.69	3.24	-0.04
46	SLU 37	20	171	3381	-1.69	3.24	-0.04
46	SLU 38	20	171	3381	-1.69	3.24	-0.04
46	SLU 39	23	193	3625	-2.03	3.64	-0.04
46	SLU 40	23	193	3625	-2.03	3.64	-0.04
46	SLU 41	23	193	3625	-2.03	3.64	-0.04
46	SLU 42	23	193	3625	-2.03	3.64	-0.04
46	SLU 43	14	109	3143	-0.26	2.17	-0.03
46	SLU 44	14	109	3143	-0.26	2.17	-0.03
46	SLU 45	14	109	3143	-0.26	2.17	-0.03
46	SLU 46	14	109	3143	-0.26	2.17	-0.03
46	SLU 47	14	109	3143	-0.26	2.17	-0.03
46	SLU 48	14	109	3143	-0.26	2.17	-0.03
46	SLU 49	14	109	3143	-0.26	2.17	-0.03
46	SLU 50	14	109	3143	-0.26	2.17	-0.03
46	SLU 51	14	109	3143	-0.26	2.17	-0.03
46	SLU 52	19	161	3714	-1.07	3.11	-0.04
46	SLU 53	19	161	3714	-1.07	3.11	-0.04
46	SLU 54	19	161	3714	-1.07	3.11	-0.04
46	SLU 55	19	161	3714	-1.07	3.11	-0.04
46	SLU 56	19	161	3714	-1.07	3.11	-0.04
46	SLU 57	19	161	3714	-1.07	3.11	-0.04
46	SLU 58	19	161	3714	-1.07	3.11	-0.04
46	SLU 59	19	161	3714	-1.07	3.11	-0.04
46	SLU 60	22	183	3959	-1.42	3.51	-0.04
46	SLU 61	22	183	3959	-1.42	3.51	-0.04
46	SLU 62	22	183	3959	-1.42	3.51	-0.04
46	SLU 63	22	183	3959	-1.42	3.51	-0.04
46	SLU 64	17	138	3453	-0.79	2.67	-0.03
46	SLU 65	17	138	3453	-0.79	2.67	-0.03
46	SLU 66	17	138	3453	-0.79	2.67	-0.03
46	SLU 67	17	138	3453	-0.79	2.67	-0.03
46	SLU 68	17	138	3453	-0.79	2.67	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
46	SLU 69	17	138	3453	-0.79	2.67	-0.03
46	SLU 70	17	138	3453	-0.79	2.67	-0.03
46	SLU 71	17	138	3453	-0.79	2.67	-0.03
46	SLU 72	17	138	3453	-0.79	2.67	-0.03
46	SLU 73	23	189	4024	-1.6	3.61	-0.04
46	SLU 74	23	189	4024	-1.6	3.61	-0.04
46	SLU 75	23	189	4024	-1.6	3.61	-0.04
46	SLU 76	23	189	4024	-1.6	3.61	-0.04
46	SLU 77	23	189	4024	-1.6	3.61	-0.04
46	SLU 78	23	189	4024	-1.6	3.61	-0.04
46	SLU 79	23	189	4024	-1.6	3.61	-0.04
46	SLU 80	23	189	4024	-1.6	3.61	-0.04
46	SLU 81	25	211	4269	-1.95	4.01	-0.04
46	SLU 82	25	211	4269	-1.95	4.01	-0.04
46	SLU 83	25	211	4269	-1.95	4.01	-0.04
46	SLU 84	25	211	4269	-1.95	4.01	-0.04
46	SLE RA 1	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 2	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 3	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 4	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 5	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 6	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 7	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 8	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 9	12	100	2588	-0.49	1.95	-0.02
46	SLE RA 10	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 11	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 12	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 13	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 14	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 15	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 16	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 17	16	134	2969	-1.03	2.57	-0.03
46	SLE RA 18	18	149	3132	-1.26	2.84	-0.03
46	SLE RA 19	18	149	3132	-1.26	2.84	-0.03
46	SLE RA 20	18	149	3132	-1.26	2.84	-0.03
46	SLE RA 21	18	149	3132	-1.26	2.84	-0.03
46	SLE FR 1	12	100	2588	-0.49	1.95	-0.02
46	SLE FR 2	12	100	2588	-0.49	1.95	-0.02
46	SLE FR 3	12	100	2588	-0.49	1.95	-0.02
46	SLE FR 4	14	114	2751	-0.72	2.21	-0.03
46	SLE FR 5	14	114	2751	-0.72	2.21	-0.03
46	SLE FR 6	15	124	2860	-0.88	2.39	-0.03
46	SLE QP 1	12	100	2588	-0.49	1.95	-0.02
46	SLE QP 2	14	114	2751	-0.72	2.21	-0.03
46	SLD 1	27	249	3176	-5.72	6.52	-0.04
46	SLD 2	27	249	3176	-5.72	6.52	-0.04
46	SLD 3	19	147	3144	-1.32	3.38	-0.04
46	SLD 4	19	147	3144	-1.32	3.38	-0.04
46	SLD 5	30	310	2928	-8.89	8.26	-0.02
46	SLD 6	30	310	2928	-8.89	8.26	-0.02
46	SLD 7	4	-31	2819	5.77	-2.19	-0.04
46	SLD 8	4	-31	2819	5.77	-2.19	-0.04
46	SLD 9	24	260	2683	-7.22	6.62	-0.01
46	SLD 10	24	260	2683	-7.22	6.62	-0.01
46	SLD 11	-2	-82	2574	7.44	-3.83	-0.03
46	SLD 12	-2	-82	2574	7.44	-3.83	-0.03
46	SLD 13	9	82	2359	-0.13	1.04	-0.01
46	SLD 14	9	82	2359	-0.13	1.04	-0.01
46	SLD 15	1	-20	2326	4.27	-2.09	-0.01
46	SLD 16	1	-20	2326	4.27	-2.09	-0.01
46	SLV 1	44	431	3744	-12.48	12.77	-0.06
46	SLV 2	44	431	3744	-12.48	12.77	-0.06
46	SLV 3	25	189	3660	-2.08	4.77	-0.07
46	SLV 4	25	189	3660	-2.08	4.77	-0.07
46	SLV 5	52	577	3177	-20.03	17.51	-0.01
46	SLV 6	52	577	3177	-20.03	17.51	-0.01
46	SLV 7	-12	-231	2896	14.65	-9.15	-0.06
46	SLV 8	-12	-231	2896	14.65	-9.15	-0.06
46	SLV 9	40	460	2607	-16.1	13.57	0.01
46	SLV 10	40	460	2607	-16.1	13.57	0.01
46	SLV 11	-24	-348	2325	18.58	-13.08	-0.04
46	SLV 12	-24	-348	2325	18.58	-13.08	-0.04
46	SLV 13	3	40	1842	0.63	-0.34	0.02
46	SLV 14	3	40	1842	0.63	-0.34	0.02
46	SLV 15	-16	-202	1758	11.03	-8.34	0.01
46	SLV 16	-16	-202	1758	11.03	-8.34	0.01
47	SLU 1	633	0	1768	0.06	27.07	0
47	SLU 2	633	0	1768	0.06	27.07	0
47	SLU 3	633	0	1768	0.06	27.07	0
47	SLU 4	633	0	1768	0.06	27.07	0
47	SLU 5	633	0	1768	0.06	27.07	0
47	SLU 6	633	0	1768	0.06	27.07	0
47	SLU 7	633	0	1768	0.06	27.07	0
47	SLU 8	633	0	1768	0.06	27.07	0
47	SLU 9	633	0	1768	0.06	27.07	0
47	SLU 10	964	0	2261	0.08	41.27	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
47	SLU 11	964	0	2261	0.08	41.27	0
47	SLU 12	964	0	2261	0.08	41.27	0
47	SLU 13	964	0	2261	0.08	41.27	0
47	SLU 14	964	0	2261	0.08	41.27	0
47	SLU 15	964	0	2261	0.08	41.27	0
47	SLU 16	964	0	2261	0.08	41.27	0
47	SLU 17	964	0	2261	0.08	41.27	0
47	SLU 18	1106	0	2472	0.09	47.36	0
47	SLU 19	1106	0	2472	0.09	47.36	0
47	SLU 20	1106	0	2472	0.09	47.36	0
47	SLU 21	1106	0	2472	0.09	47.36	0
47	SLU 22	809	0	2042	0.07	34.58	0
47	SLU 23	809	0	2042	0.07	34.58	0
47	SLU 24	809	0	2042	0.07	34.58	0
47	SLU 25	809	0	2042	0.07	34.58	0
47	SLU 26	809	0	2042	0.07	34.58	0
47	SLU 27	809	0	2042	0.07	34.58	0
47	SLU 28	809	0	2042	0.07	34.58	0
47	SLU 29	809	0	2042	0.07	34.58	0
47	SLU 30	809	0	2042	0.07	34.58	0
47	SLU 31	1140	0	2535	0.09	48.78	0
47	SLU 32	1140	0	2535	0.09	48.78	0
47	SLU 33	1140	0	2535	0.09	48.78	0
47	SLU 34	1140	0	2535	0.09	48.78	0
47	SLU 35	1140	0	2535	0.09	48.78	0
47	SLU 36	1140	0	2535	0.09	48.78	0
47	SLU 37	1140	0	2535	0.09	48.78	0
47	SLU 38	1140	0	2535	0.09	48.78	0
47	SLU 39	1282	0	2746	0.1	54.86	0
47	SLU 40	1282	0	2746	0.1	54.86	0
47	SLU 41	1282	0	2746	0.1	54.86	0
47	SLU 42	1282	0	2746	0.1	54.86	0
47	SLU 43	762	0	2204	0.07	32.62	0
47	SLU 44	762	0	2204	0.07	32.62	0
47	SLU 45	762	0	2204	0.07	32.62	0
47	SLU 46	762	0	2204	0.07	32.62	0
47	SLU 47	762	0	2204	0.07	32.62	0
47	SLU 48	762	0	2204	0.07	32.62	0
47	SLU 49	762	0	2204	0.07	32.62	0
47	SLU 50	762	0	2204	0.07	32.62	0
47	SLU 51	762	0	2204	0.07	32.62	0
47	SLU 52	1093	0	2697	0.09	46.82	0
47	SLU 53	1093	0	2697	0.09	46.82	0
47	SLU 54	1093	0	2697	0.09	46.82	0
47	SLU 55	1093	0	2697	0.09	46.82	0
47	SLU 56	1093	0	2697	0.09	46.82	0
47	SLU 57	1093	0	2697	0.09	46.82	0
47	SLU 58	1093	0	2697	0.09	46.82	0
47	SLU 59	1093	0	2697	0.09	46.82	0
47	SLU 60	1235	0	2908	0.1	52.9	0
47	SLU 61	1235	0	2908	0.1	52.9	0
47	SLU 62	1235	0	2908	0.1	52.9	0
47	SLU 63	1235	0	2908	0.1	52.9	0
47	SLU 64	938	0	2478	0.08	40.13	0
47	SLU 65	938	0	2478	0.08	40.13	0
47	SLU 66	938	0	2478	0.08	40.13	0
47	SLU 67	938	0	2478	0.08	40.13	0
47	SLU 68	938	0	2478	0.08	40.13	0
47	SLU 69	938	0	2478	0.08	40.13	0
47	SLU 70	938	0	2478	0.08	40.13	0
47	SLU 71	938	0	2478	0.08	40.13	0
47	SLU 72	938	0	2478	0.08	40.13	0
47	SLU 73	1270	0	2971	0.11	54.33	0
47	SLU 74	1270	0	2971	0.11	54.33	0
47	SLU 75	1270	0	2971	0.11	54.33	0
47	SLU 76	1270	0	2971	0.11	54.33	0
47	SLU 77	1270	0	2971	0.11	54.33	0
47	SLU 78	1270	0	2971	0.11	54.33	0
47	SLU 79	1270	0	2971	0.11	54.33	0
47	SLU 80	1270	0	2971	0.11	54.33	0
47	SLU 81	1412	0	3183	0.12	60.41	0
47	SLU 82	1412	0	3183	0.12	60.41	0
47	SLU 83	1412	0	3183	0.12	60.41	0
47	SLU 84	1412	0	3183	0.12	60.41	0
47	SLE RA 1	683	0	1846	0.06	29.22	0
47	SLE RA 2	683	0	1846	0.06	29.22	0
47	SLE RA 3	683	0	1846	0.06	29.22	0
47	SLE RA 4	683	0	1846	0.06	29.22	0
47	SLE RA 5	683	0	1846	0.06	29.22	0
47	SLE RA 6	683	0	1846	0.06	29.22	0
47	SLE RA 7	683	0	1846	0.06	29.22	0
47	SLE RA 8	683	0	1846	0.06	29.22	0
47	SLE RA 9	683	0	1846	0.06	29.22	0
47	SLE RA 10	904	0	2175	0.08	38.68	0
47	SLE RA 11	904	0	2175	0.08	38.68	0
47	SLE RA 12	904	0	2175	0.08	38.68	0
47	SLE RA 13	904	0	2175	0.08	38.68	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
47	SLE RA 14	904	0	2175	0.08	38.68	0
47	SLE RA 15	904	0	2175	0.08	38.68	0
47	SLE RA 16	904	0	2175	0.08	38.68	0
47	SLE RA 17	904	0	2175	0.08	38.68	0
47	SLE RA 18	998	0	2316	0.08	42.74	0
47	SLE RA 19	998	0	2316	0.08	42.74	0
47	SLE RA 20	998	0	2316	0.08	42.74	0
47	SLE RA 21	998	0	2316	0.08	42.74	0
47	SLE FR 1	683	0	1846	0.06	29.22	0
47	SLE FR 2	683	0	1846	0.06	29.22	0
47	SLE FR 3	683	0	1846	0.06	29.22	0
47	SLE FR 4	778	0	1987	0.07	33.27	0
47	SLE FR 5	778	0	1987	0.07	33.27	0
47	SLE FR 6	841	0	2081	0.07	35.98	0
47	SLE QP 1	683	0	1846	0.06	29.22	0
47	SLE QP 2	778	0	1987	0.07	33.27	0
47	SLD 1	1099	-4	2234	-0.01	48.59	-0.03
47	SLD 2	1099	-4	2234	-0.01	48.59	-0.03
47	SLD 3	1113	0	2222	1.2	49.29	0.14
47	SLD 4	1113	0	2222	1.2	49.29	0.14
47	SLD 5	852	-7	2080	-1.78	36.82	-0.26
47	SLD 6	852	-7	2080	-1.78	36.82	-0.26
47	SLD 7	900	5	2039	2.23	39.13	0.3
47	SLD 8	900	5	2039	2.23	39.13	0.3
47	SLD 9	655	-5	1935	-2.09	27.42	-0.29
47	SLD 10	655	-5	1935	-2.09	27.42	-0.29
47	SLD 11	703	6	1895	1.92	29.73	0.27
47	SLD 12	703	6	1895	1.92	29.73	0.27
47	SLD 13	442	0	1752	-1.06	17.26	-0.13
47	SLD 14	442	0	1752	-1.06	17.26	-0.13
47	SLD 15	457	3	1740	0.14	17.95	0.03
47	SLD 16	457	3	1740	0.14	17.95	0.03
47	SLV 1	1526	-9	2562	-0.17	69.01	-0.09
47	SLV 2	1526	-9	2562	-0.17	69.01	-0.09
47	SLV 3	1560	0	2534	2.91	70.61	0.34
47	SLV 4	1560	0	2534	2.91	70.61	0.34
47	SLV 5	951	-16	2203	-4.67	41.55	-0.67
47	SLV 6	951	-16	2203	-4.67	41.55	-0.67
47	SLV 7	1063	14	2107	5.58	46.91	0.75
47	SLV 8	1063	14	2107	5.58	46.91	0.75
47	SLV 9	492	-14	1867	-5.45	19.63	-0.75
47	SLV 10	492	-14	1867	-5.45	19.63	-0.75
47	SLV 11	604	16	1771	4.8	24.99	0.68
47	SLV 12	604	16	1771	4.8	24.99	0.68
47	SLV 13	-5	0	1441	-2.77	-4.07	-0.33
47	SLV 14	-5	0	1441	-2.77	-4.07	-0.33
47	SLV 15	29	9	1412	0.3	-2.46	0.09
47	SLV 16	29	9	1412	0.3	-2.46	0.09
48	SLU 1	543	0	1871	0.07	18.28	0
48	SLU 2	543	0	1871	0.07	18.28	0
48	SLU 3	543	0	1871	0.07	18.28	0
48	SLU 4	543	0	1871	0.07	18.28	0
48	SLU 5	543	0	1871	0.07	18.28	0
48	SLU 6	543	0	1871	0.07	18.28	0
48	SLU 7	543	0	1871	0.07	18.28	0
48	SLU 8	543	0	1871	0.07	18.28	0
48	SLU 9	543	0	1871	0.07	18.28	0
48	SLU 10	857	0	2428	0.09	28.97	0
48	SLU 11	857	0	2428	0.09	28.97	0
48	SLU 12	857	0	2428	0.09	28.97	0
48	SLU 13	857	0	2428	0.09	28.97	0
48	SLU 14	857	0	2428	0.09	28.97	0
48	SLU 15	857	0	2428	0.09	28.97	0
48	SLU 16	857	0	2428	0.09	28.97	0
48	SLU 17	857	0	2428	0.09	28.97	0
48	SLU 18	992	0	2667	0.1	33.55	0
48	SLU 19	992	0	2667	0.1	33.55	0
48	SLU 20	992	0	2667	0.1	33.55	0
48	SLU 21	992	0	2667	0.1	33.55	0
48	SLU 22	708	0	2186	0.08	23.89	0
48	SLU 23	708	0	2186	0.08	23.89	0
48	SLU 24	708	0	2186	0.08	23.89	0
48	SLU 25	708	0	2186	0.08	23.89	0
48	SLU 26	708	0	2186	0.08	23.89	0
48	SLU 27	708	0	2186	0.08	23.89	0
48	SLU 28	708	0	2186	0.08	23.89	0
48	SLU 29	708	0	2186	0.08	23.89	0
48	SLU 30	708	0	2186	0.08	23.89	0
48	SLU 31	1023	0	2742	0.1	34.57	0
48	SLU 32	1023	0	2742	0.1	34.57	0
48	SLU 33	1023	0	2742	0.1	34.57	0
48	SLU 34	1023	0	2742	0.1	34.57	0
48	SLU 35	1023	0	2742	0.1	34.57	0
48	SLU 36	1023	0	2742	0.1	34.57	0
48	SLU 37	1023	0	2742	0.1	34.57	0
48	SLU 38	1023	0	2742	0.1	34.57	0
48	SLU 39	1158	0	2981	0.11	39.15	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
48	SLU 40	1158	0	2981	0.11	39.15	0
48	SLU 41	1158	0	2981	0.11	39.15	0
48	SLU 42	1158	0	2981	0.11	39.15	0
48	SLU 43	648	0	2325	0.08	21.84	0
48	SLU 44	648	0	2325	0.08	21.84	0
48	SLU 45	648	0	2325	0.08	21.84	0
48	SLU 46	648	0	2325	0.08	21.84	0
48	SLU 47	648	0	2325	0.08	21.84	0
48	SLU 48	648	0	2325	0.08	21.84	0
48	SLU 49	648	0	2325	0.08	21.84	0
48	SLU 50	648	0	2325	0.08	21.84	0
48	SLU 51	648	0	2325	0.08	21.84	0
48	SLU 52	963	0	2882	0.1	32.53	0
48	SLU 53	963	0	2882	0.1	32.53	0
48	SLU 54	963	0	2882	0.1	32.53	0
48	SLU 55	963	0	2882	0.1	32.53	0
48	SLU 56	963	0	2882	0.1	32.53	0
48	SLU 57	963	0	2882	0.1	32.53	0
48	SLU 58	963	0	2882	0.1	32.53	0
48	SLU 59	963	0	2882	0.1	32.53	0
48	SLU 60	1098	0	3120	0.11	37.11	0
48	SLU 61	1098	0	3120	0.11	37.11	0
48	SLU 62	1098	0	3120	0.11	37.11	0
48	SLU 63	1098	0	3120	0.11	37.11	0
48	SLU 64	814	0	2639	0.1	27.45	0
48	SLU 65	814	0	2639	0.1	27.45	0
48	SLU 66	814	0	2639	0.1	27.45	0
48	SLU 67	814	0	2639	0.1	27.45	0
48	SLU 68	814	0	2639	0.1	27.45	0
48	SLU 69	814	0	2639	0.1	27.45	0
48	SLU 70	814	0	2639	0.1	27.45	0
48	SLU 71	814	0	2639	0.1	27.45	0
48	SLU 72	814	0	2639	0.1	27.45	0
48	SLU 73	1129	0	3196	0.12	38.14	0
48	SLU 74	1129	0	3196	0.12	38.14	0
48	SLU 75	1129	0	3196	0.12	38.14	0
48	SLU 76	1129	0	3196	0.12	38.14	0
48	SLU 77	1129	0	3196	0.12	38.14	0
48	SLU 78	1129	0	3196	0.12	38.14	0
48	SLU 79	1129	0	3196	0.12	38.14	0
48	SLU 80	1129	0	3196	0.12	38.14	0
48	SLU 81	1264	0	3434	0.12	42.72	0
48	SLU 82	1264	0	3434	0.12	42.72	0
48	SLU 83	1264	0	3434	0.12	42.72	0
48	SLU 84	1264	0	3434	0.12	42.72	0
48	SLE RA 1	590	0	1961	0.07	19.88	0
48	SLE RA 2	590	0	1961	0.07	19.88	0
48	SLE RA 3	590	0	1961	0.07	19.88	0
48	SLE RA 4	590	0	1961	0.07	19.88	0
48	SLE RA 5	590	0	1961	0.07	19.88	0
48	SLE RA 6	590	0	1961	0.07	19.88	0
48	SLE RA 7	590	0	1961	0.07	19.88	0
48	SLE RA 8	590	0	1961	0.07	19.88	0
48	SLE RA 9	590	0	1961	0.07	19.88	0
48	SLE RA 10	800	0	2332	0.08	27.01	0
48	SLE RA 11	800	0	2332	0.08	27.01	0
48	SLE RA 12	800	0	2332	0.08	27.01	0
48	SLE RA 13	800	0	2332	0.08	27.01	0
48	SLE RA 14	800	0	2332	0.08	27.01	0
48	SLE RA 15	800	0	2332	0.08	27.01	0
48	SLE RA 16	800	0	2332	0.08	27.01	0
48	SLE RA 17	800	0	2332	0.08	27.01	0
48	SLE RA 18	890	0	2491	0.09	30.06	0
48	SLE RA 19	890	0	2491	0.09	30.06	0
48	SLE RA 20	890	0	2491	0.09	30.06	0
48	SLE RA 21	890	0	2491	0.09	30.06	0
48	SLE FR 1	590	0	1961	0.07	19.88	0
48	SLE FR 2	590	0	1961	0.07	19.88	0
48	SLE FR 3	590	0	1961	0.07	19.88	0
48	SLE FR 4	680	0	2120	0.08	22.94	0
48	SLE FR 5	680	0	2120	0.08	22.94	0
48	SLE FR 6	740	0	2226	0.08	24.97	0
48	SLE QP 1	590	0	1961	0.07	19.88	0
48	SLE QP 2	680	0	2120	0.08	22.94	0
48	SLD 1	1021	-4	2269	-0.73	34.95	-0.05
48	SLD 2	1021	-4	2269	-0.73	34.95	-0.05
48	SLD 3	1037	0	2262	2.64	35.5	0
48	SLD 4	1037	0	2262	2.64	35.5	0
48	SLD 5	758	-8	2177	-5.28	25.7	-0.1
48	SLD 6	758	-8	2177	-5.28	25.7	-0.1
48	SLD 7	811	6	2151	5.95	27.55	0.08
48	SLD 8	811	6	2151	5.95	27.55	0.08
48	SLD 9	549	-7	2089	-5.8	18.32	-0.09
48	SLD 10	549	-7	2089	-5.8	18.32	-0.09
48	SLD 11	601	8	2064	5.43	20.18	0.1
48	SLD 12	601	8	2064	5.43	20.18	0.1
48	SLD 13	322	0	1979	-2.48	10.37	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
48	SLD 14	322	0	1979	-2.48	10.37	-0.01
48	SLD 15	338	4	1971	0.89	10.93	0.05
48	SLD 16	338	4	1971	0.89	10.93	0.05
48	SLV 1	1477	-10	2467	-2.03	50.96	-0.13
48	SLV 2	1477	-10	2467	-2.03	50.96	-0.13
48	SLV 3	1514	0	2449	6.57	52.26	0.01
48	SLV 4	1514	0	2449	6.57	52.26	0.01
48	SLV 5	863	-19	2252	-13.6	29.39	-0.26
48	SLV 6	863	-19	2252	-13.6	29.39	-0.26
48	SLV 7	985	16	2191	15.07	33.69	0.22
48	SLV 8	985	16	2191	15.07	33.69	0.22
48	SLV 9	374	-17	2049	-14.92	12.18	-0.22
48	SLV 10	374	-17	2049	-14.92	12.18	-0.22
48	SLV 11	496	19	1988	13.76	16.49	0.25
48	SLV 12	496	19	1988	13.76	16.49	0.25
48	SLV 13	-154	-1	1791	-6.42	-6.38	-0.01
48	SLV 14	-154	-1	1791	-6.42	-6.38	-0.01
48	SLV 15	-117	10	1773	2.18	-5.09	0.13
48	SLV 16	-117	10	1773	2.18	-5.09	0.13
49	SLU 1	459	0	2016	0.08	12.91	0
49	SLU 2	459	0	2016	0.08	12.91	0
49	SLU 3	459	0	2016	0.08	12.91	0
49	SLU 4	459	0	2016	0.08	12.91	0
49	SLU 5	459	0	2016	0.08	12.91	0
49	SLU 6	459	0	2016	0.08	12.91	0
49	SLU 7	459	0	2016	0.08	12.91	0
49	SLU 8	459	0	2016	0.08	12.91	0
49	SLU 9	459	0	2016	0.08	12.91	0
49	SLU 10	745	0	2660	0.1	20.98	0
49	SLU 11	745	0	2660	0.1	20.98	0
49	SLU 12	745	0	2660	0.1	20.98	0
49	SLU 13	745	0	2660	0.1	20.98	0
49	SLU 14	745	0	2660	0.1	20.98	0
49	SLU 15	745	0	2660	0.1	20.98	0
49	SLU 16	745	0	2660	0.1	20.98	0
49	SLU 17	745	0	2660	0.1	20.98	0
49	SLU 18	867	0	2937	0.11	24.44	0
49	SLU 19	867	0	2937	0.11	24.44	0
49	SLU 20	867	0	2937	0.11	24.44	0
49	SLU 21	867	0	2937	0.11	24.44	0
49	SLU 22	608	0	2381	0.09	17.11	0
49	SLU 23	608	0	2381	0.09	17.11	0
49	SLU 24	608	0	2381	0.09	17.11	0
49	SLU 25	608	0	2381	0.09	17.11	0
49	SLU 26	608	0	2381	0.09	17.11	0
49	SLU 27	608	0	2381	0.09	17.11	0
49	SLU 28	608	0	2381	0.09	17.11	0
49	SLU 29	608	0	2381	0.09	17.11	0
49	SLU 30	608	0	2381	0.09	17.11	0
49	SLU 31	894	0	3025	0.11	25.17	0
49	SLU 32	894	0	3025	0.11	25.17	0
49	SLU 33	894	0	3025	0.11	25.17	0
49	SLU 34	894	0	3025	0.11	25.17	0
49	SLU 35	894	0	3025	0.11	25.17	0
49	SLU 36	894	0	3025	0.11	25.17	0
49	SLU 37	894	0	3025	0.11	25.17	0
49	SLU 38	894	0	3025	0.11	25.17	0
49	SLU 39	1016	0	3301	0.12	28.63	0
49	SLU 40	1016	0	3301	0.12	28.63	0
49	SLU 41	1016	0	3301	0.12	28.63	0
49	SLU 42	1016	0	3301	0.12	28.63	0
49	SLU 43	545	0	2496	0.1	15.35	0
49	SLU 44	545	0	2496	0.1	15.35	0
49	SLU 45	545	0	2496	0.1	15.35	0
49	SLU 46	545	0	2496	0.1	15.35	0
49	SLU 47	545	0	2496	0.1	15.35	0
49	SLU 48	545	0	2496	0.1	15.35	0
49	SLU 49	545	0	2496	0.1	15.35	0
49	SLU 50	545	0	2496	0.1	15.35	0
49	SLU 51	545	0	2496	0.1	15.35	0
49	SLU 52	831	0	3140	0.12	23.42	0
49	SLU 53	831	0	3140	0.12	23.42	0
49	SLU 54	831	0	3140	0.12	23.42	0
49	SLU 55	831	0	3140	0.12	23.42	0
49	SLU 56	831	0	3140	0.12	23.42	0
49	SLU 57	831	0	3140	0.12	23.42	0
49	SLU 58	831	0	3140	0.12	23.42	0
49	SLU 59	831	0	3140	0.12	23.42	0
49	SLU 60	954	0	3416	0.12	26.87	0
49	SLU 61	954	0	3416	0.12	26.87	0
49	SLU 62	954	0	3416	0.12	26.87	0
49	SLU 63	954	0	3416	0.12	26.87	0
49	SLU 64	694	0	2861	0.11	19.55	0
49	SLU 65	694	0	2861	0.11	19.55	0
49	SLU 66	694	0	2861	0.11	19.55	0
49	SLU 67	694	0	2861	0.11	19.55	0
49	SLU 68	694	0	2861	0.11	19.55	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
49	SLU 69	694	0	2861	0.11	19.55	0
49	SLU 70	694	0	2861	0.11	19.55	0
49	SLU 71	694	0	2861	0.11	19.55	0
49	SLU 72	694	0	2861	0.11	19.55	0
49	SLU 73	980	0	3505	0.13	27.61	0
49	SLU 74	980	0	3505	0.13	27.61	0
49	SLU 75	980	0	3505	0.13	27.61	0
49	SLU 76	980	0	3505	0.13	27.61	0
49	SLU 77	980	0	3505	0.13	27.61	0
49	SLU 78	980	0	3505	0.13	27.61	0
49	SLU 79	980	0	3505	0.13	27.61	0
49	SLU 80	980	0	3505	0.13	27.61	0
49	SLU 81	1103	0	3781	0.14	31.07	0
49	SLU 82	1103	0	3781	0.14	31.07	0
49	SLU 83	1103	0	3781	0.14	31.07	0
49	SLU 84	1103	0	3781	0.14	31.07	0
49	SLE RA 1	501	0	2120	0.08	14.11	0
49	SLE RA 2	501	0	2120	0.08	14.11	0
49	SLE RA 3	501	0	2120	0.08	14.11	0
49	SLE RA 4	501	0	2120	0.08	14.11	0
49	SLE RA 5	501	0	2120	0.08	14.11	0
49	SLE RA 6	501	0	2120	0.08	14.11	0
49	SLE RA 7	501	0	2120	0.08	14.11	0
49	SLE RA 8	501	0	2120	0.08	14.11	0
49	SLE RA 9	501	0	2120	0.08	14.11	0
49	SLE RA 10	692	0	2550	0.09	19.49	0
49	SLE RA 11	692	0	2550	0.09	19.49	0
49	SLE RA 12	692	0	2550	0.09	19.49	0
49	SLE RA 13	692	0	2550	0.09	19.49	0
49	SLE RA 14	692	0	2550	0.09	19.49	0
49	SLE RA 15	692	0	2550	0.09	19.49	0
49	SLE RA 16	692	0	2550	0.09	19.49	0
49	SLE RA 17	692	0	2550	0.09	19.49	0
49	SLE RA 18	773	0	2734	0.1	21.79	0
49	SLE RA 19	773	0	2734	0.1	21.79	0
49	SLE RA 20	773	0	2734	0.1	21.79	0
49	SLE RA 21	773	0	2734	0.1	21.79	0
49	SLE FR 1	501	0	2120	0.08	14.11	0
49	SLE FR 2	501	0	2120	0.08	14.11	0
49	SLE FR 3	501	0	2120	0.08	14.11	0
49	SLE FR 4	583	0	2305	0.09	16.42	0
49	SLE FR 5	583	0	2305	0.09	16.42	0
49	SLE FR 6	637	0	2427	0.09	17.95	0
49	SLE QP 1	501	0	2120	0.08	14.11	0
49	SLE QP 2	583	0	2305	0.09	16.42	0
49	SLD 1	918	-5	2392	-1.93	26.31	-0.05
49	SLD 2	918	-5	2392	-1.93	26.31	-0.05
49	SLD 3	934	1	2387	4.77	26.76	0.01
49	SLD 4	934	1	2387	4.77	26.76	0.01
49	SLD 5	660	-10	2338	-10.69	18.69	-0.1
49	SLD 6	660	-10	2338	-10.69	18.69	-0.1
49	SLD 7	712	9	2322	11.66	20.22	0.08
49	SLD 8	712	9	2322	11.66	20.22	0.08
49	SLD 9	454	-9	2287	-11.49	12.62	-0.09
49	SLD 10	454	-9	2287	-11.49	12.62	-0.09
49	SLD 11	506	10	2271	10.86	14.14	0.09
49	SLD 12	506	10	2271	10.86	14.14	0.09
49	SLD 13	232	-1	2222	-4.6	6.07	-0.01
49	SLD 14	232	-1	2222	-4.6	6.07	-0.01
49	SLD 15	248	5	2217	2.11	6.53	0.04
49	SLD 16	248	5	2217	2.11	6.53	0.04
49	SLV 1	1366	-12	2508	-5.13	39.5	-0.11
49	SLV 2	1366	-12	2508	-5.13	39.5	-0.11
49	SLV 3	1402	2	2496	11.99	40.56	0.03
49	SLV 4	1402	2	2496	11.99	40.56	0.03
49	SLV 5	763	-26	2383	-27.45	21.73	-0.24
49	SLV 6	763	-26	2383	-27.45	21.73	-0.24
49	SLV 7	883	23	2344	29.62	25.27	0.22
49	SLV 8	883	23	2344	29.62	25.27	0.22
49	SLV 9	282	-23	2265	-29.45	7.56	-0.22
49	SLV 10	282	-23	2265	-29.45	7.56	-0.22
49	SLV 11	403	26	2226	27.62	11.1	0.24
49	SLV 12	403	26	2226	27.62	11.1	0.24
49	SLV 13	-236	-3	2113	-11.82	-7.73	-0.03
49	SLV 14	-236	-3	2113	-11.82	-7.73	-0.03
49	SLV 15	-200	12	2101	5.31	-6.67	0.11
49	SLV 16	-200	12	2101	5.31	-6.67	0.11
50	SLU 1	392	0	2149	0.08	10.27	0
50	SLU 2	392	0	2149	0.08	10.27	0
50	SLU 3	392	0	2149	0.08	10.27	0
50	SLU 4	392	0	2149	0.08	10.27	0
50	SLU 5	392	0	2149	0.08	10.27	0
50	SLU 6	392	0	2149	0.08	10.27	0
50	SLU 7	392	0	2149	0.08	10.27	0
50	SLU 8	392	0	2149	0.08	10.27	0
50	SLU 9	392	0	2149	0.08	10.27	0
50	SLU 10	652	0	2877	0.1	17.1	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
50	SLU 11	652	0	2877	0.1	17.1	0
50	SLU 12	652	0	2877	0.1	17.1	0
50	SLU 13	652	0	2877	0.1	17.1	0
50	SLU 14	652	0	2877	0.1	17.1	0
50	SLU 15	652	0	2877	0.1	17.1	0
50	SLU 16	652	0	2877	0.1	17.1	0
50	SLU 17	652	0	2877	0.1	17.1	0
50	SLU 18	763	0	3189	0.11	20.03	0
50	SLU 19	763	0	3189	0.11	20.03	0
50	SLU 20	763	0	3189	0.11	20.03	0
50	SLU 21	763	0	3189	0.11	20.03	0
50	SLU 22	526	0	2561	0.1	13.79	0
50	SLU 23	526	0	2561	0.1	13.79	0
50	SLU 24	526	0	2561	0.1	13.79	0
50	SLU 25	526	0	2561	0.1	13.79	0
50	SLU 26	526	0	2561	0.1	13.79	0
50	SLU 27	526	0	2561	0.1	13.79	0
50	SLU 28	526	0	2561	0.1	13.79	0
50	SLU 29	526	0	2561	0.1	13.79	0
50	SLU 30	526	0	2561	0.1	13.79	0
50	SLU 31	786	0	3289	0.12	20.61	0
50	SLU 32	786	0	3289	0.12	20.61	0
50	SLU 33	786	0	3289	0.12	20.61	0
50	SLU 34	786	0	3289	0.12	20.61	0
50	SLU 35	786	0	3289	0.12	20.61	0
50	SLU 36	786	0	3289	0.12	20.61	0
50	SLU 37	786	0	3289	0.12	20.61	0
50	SLU 38	786	0	3289	0.12	20.61	0
50	SLU 39	898	0	3601	0.13	23.54	0
50	SLU 40	898	0	3601	0.13	23.54	0
50	SLU 41	898	0	3601	0.13	23.54	0
50	SLU 42	898	0	3601	0.13	23.54	0
50	SLU 43	464	0	2652	0.1	12.15	0
50	SLU 44	464	0	2652	0.1	12.15	0
50	SLU 45	464	0	2652	0.1	12.15	0
50	SLU 46	464	0	2652	0.1	12.15	0
50	SLU 47	464	0	2652	0.1	12.15	0
50	SLU 48	464	0	2652	0.1	12.15	0
50	SLU 49	464	0	2652	0.1	12.15	0
50	SLU 50	464	0	2652	0.1	12.15	0
50	SLU 51	464	0	2652	0.1	12.15	0
50	SLU 52	724	0	3380	0.12	18.98	0
50	SLU 53	724	0	3380	0.12	18.98	0
50	SLU 54	724	0	3380	0.12	18.98	0
50	SLU 55	724	0	3380	0.12	18.98	0
50	SLU 56	724	0	3380	0.12	18.98	0
50	SLU 57	724	0	3380	0.12	18.98	0
50	SLU 58	724	0	3380	0.12	18.98	0
50	SLU 59	724	0	3380	0.12	18.98	0
50	SLU 60	835	0	3692	0.13	21.91	0
50	SLU 61	835	0	3692	0.13	21.91	0
50	SLU 62	835	0	3692	0.13	21.91	0
50	SLU 63	835	0	3692	0.13	21.91	0
50	SLU 64	598	0	3065	0.12	15.66	0
50	SLU 65	598	0	3065	0.12	15.66	0
50	SLU 66	598	0	3065	0.12	15.66	0
50	SLU 67	598	0	3065	0.12	15.66	0
50	SLU 68	598	0	3065	0.12	15.66	0
50	SLU 69	598	0	3065	0.12	15.66	0
50	SLU 70	598	0	3065	0.12	15.66	0
50	SLU 71	598	0	3065	0.12	15.66	0
50	SLU 72	598	0	3065	0.12	15.66	0
50	SLU 73	858	0	3792	0.14	22.49	0
50	SLU 74	858	0	3792	0.14	22.49	0
50	SLU 75	858	0	3792	0.14	22.49	0
50	SLU 76	858	0	3792	0.14	22.49	0
50	SLU 77	858	0	3792	0.14	22.49	0
50	SLU 78	858	0	3792	0.14	22.49	0
50	SLU 79	858	0	3792	0.14	22.49	0
50	SLU 80	858	0	3792	0.14	22.49	0
50	SLU 81	969	0	4104	0.15	25.42	0
50	SLU 82	969	0	4104	0.15	25.42	0
50	SLU 83	969	0	4104	0.15	25.42	0
50	SLU 84	969	0	4104	0.15	25.42	0
50	SLE RA 1	430	0	2267	0.09	11.28	0
50	SLE RA 2	430	0	2267	0.09	11.28	0
50	SLE RA 3	430	0	2267	0.09	11.28	0
50	SLE RA 4	430	0	2267	0.09	11.28	0
50	SLE RA 5	430	0	2267	0.09	11.28	0
50	SLE RA 6	430	0	2267	0.09	11.28	0
50	SLE RA 7	430	0	2267	0.09	11.28	0
50	SLE RA 8	430	0	2267	0.09	11.28	0
50	SLE RA 9	430	0	2267	0.09	11.28	0
50	SLE RA 10	604	0	2752	0.1	15.83	0
50	SLE RA 11	604	0	2752	0.1	15.83	0
50	SLE RA 12	604	0	2752	0.1	15.83	0
50	SLE RA 13	604	0	2752	0.1	15.83	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
50	SLE RA 14	604	0	2752	0.1	15.83	0
50	SLE RA 15	604	0	2752	0.1	15.83	0
50	SLE RA 16	604	0	2752	0.1	15.83	0
50	SLE RA 17	604	0	2752	0.1	15.83	0
50	SLE RA 18	678	0	2960	0.11	17.78	0
50	SLE RA 19	678	0	2960	0.11	17.78	0
50	SLE RA 20	678	0	2960	0.11	17.78	0
50	SLE RA 21	678	0	2960	0.11	17.78	0
50	SLE FR 1	430	0	2267	0.09	11.28	0
50	SLE FR 2	430	0	2267	0.09	11.28	0
50	SLE FR 3	430	0	2267	0.09	11.28	0
50	SLE FR 4	505	0	2475	0.09	13.23	0
50	SLE FR 5	505	0	2475	0.09	13.23	0
50	SLE FR 6	554	0	2613	0.1	14.53	0
50	SLE QP 1	430	0	2267	0.09	11.28	0
50	SLE QP 2	505	0	2475	0.09	13.23	0
50	SLD 1	840	-7	2508	-3.22	22.48	-0.04
50	SLD 2	840	-7	2508	-3.22	22.48	-0.04
50	SLD 3	856	2	2505	7	22.91	0.01
50	SLD 4	856	2	2505	7	22.91	0.01
50	SLD 5	581	-15	2489	-16.4	15.34	-0.08
50	SLD 6	581	-15	2489	-16.4	15.34	-0.08
50	SLD 7	634	13	2480	17.66	16.79	0.07
50	SLD 8	634	13	2480	17.66	16.79	0.07
50	SLD 9	376	-14	2470	-17.48	9.66	-0.07
50	SLD 10	376	-14	2470	-17.48	9.66	-0.07
50	SLD 11	428	15	2461	16.58	11.11	0.08
50	SLD 12	428	15	2461	16.58	11.11	0.08
50	SLD 13	154	-2	2444	-6.82	3.54	-0.01
50	SLD 14	154	-2	2444	-6.82	3.54	-0.01
50	SLD 15	169	7	2442	3.4	3.98	0.03
50	SLD 16	169	7	2442	3.4	3.98	0.03
50	SLV 1	1287	-17	2552	-8.47	34.82	-0.09
50	SLV 2	1287	-17	2552	-8.47	34.82	-0.09
50	SLV 3	1324	5	2545	17.62	35.83	0.03
50	SLV 4	1324	5	2545	17.62	35.83	0.03
50	SLV 5	684	-38	2508	-42.04	18.18	-0.2
50	SLV 6	684	-38	2508	-42.04	18.18	-0.2
50	SLV 7	806	34	2485	44.91	21.54	0.18
50	SLV 8	806	34	2485	44.91	21.54	0.18
50	SLV 9	204	-35	2464	-44.73	4.92	-0.18
50	SLV 10	204	-35	2464	-44.73	4.92	-0.18
50	SLV 11	325	38	2441	42.22	8.28	0.2
50	SLV 12	325	38	2441	42.22	8.28	0.2
50	SLV 13	-314	-5	2404	-17.43	-9.37	-0.03
50	SLV 14	-314	-5	2404	-17.43	-9.37	-0.03
50	SLV 15	-278	17	2398	8.65	-8.37	0.09
50	SLV 16	-278	17	2398	8.65	-8.37	0.09
51	SLU 1	323	0	2272	0.08	8.06	0
51	SLU 2	323	0	2272	0.08	8.06	0
51	SLU 3	323	0	2272	0.08	8.06	0
51	SLU 4	323	0	2272	0.08	8.06	0
51	SLU 5	323	0	2272	0.08	8.06	0
51	SLU 6	323	0	2272	0.08	8.06	0
51	SLU 7	323	0	2272	0.08	8.06	0
51	SLU 8	323	0	2272	0.08	8.06	0
51	SLU 9	323	0	2272	0.08	8.06	0
51	SLU 10	552	0	3079	0.1	13.81	0
51	SLU 11	552	0	3079	0.1	13.81	0
51	SLU 12	552	0	3079	0.1	13.81	0
51	SLU 13	552	0	3079	0.1	13.81	0
51	SLU 14	552	0	3079	0.1	13.81	0
51	SLU 15	552	0	3079	0.1	13.81	0
51	SLU 16	552	0	3079	0.1	13.81	0
51	SLU 17	552	0	3079	0.1	13.81	0
51	SLU 18	651	0	3426	0.11	16.27	0
51	SLU 19	651	0	3426	0.11	16.27	0
51	SLU 20	651	0	3426	0.11	16.27	0
51	SLU 21	651	0	3426	0.11	16.27	0
51	SLU 22	440	0	2728	0.1	10.99	0
51	SLU 23	440	0	2728	0.1	10.99	0
51	SLU 24	440	0	2728	0.1	10.99	0
51	SLU 25	440	0	2728	0.1	10.99	0
51	SLU 26	440	0	2728	0.1	10.99	0
51	SLU 27	440	0	2728	0.1	10.99	0
51	SLU 28	440	0	2728	0.1	10.99	0
51	SLU 29	440	0	2728	0.1	10.99	0
51	SLU 30	440	0	2728	0.1	10.99	0
51	SLU 31	670	0	3536	0.12	16.73	0
51	SLU 32	670	0	3536	0.12	16.73	0
51	SLU 33	670	0	3536	0.12	16.73	0
51	SLU 34	670	0	3536	0.12	16.73	0
51	SLU 35	670	0	3536	0.12	16.73	0
51	SLU 36	670	0	3536	0.12	16.73	0
51	SLU 37	670	0	3536	0.12	16.73	0
51	SLU 38	670	0	3536	0.12	16.73	0
51	SLU 39	768	0	3882	0.13	19.19	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
51	SLU 40	768	0	3882	0.13	19.19	0
51	SLU 41	768	0	3882	0.13	19.19	0
51	SLU 42	768	0	3882	0.13	19.19	0
51	SLU 43	380	0	2797	0.1	9.48	0
51	SLU 44	380	0	2797	0.1	9.48	0
51	SLU 45	380	0	2797	0.1	9.48	0
51	SLU 46	380	0	2797	0.1	9.48	0
51	SLU 47	380	0	2797	0.1	9.48	0
51	SLU 48	380	0	2797	0.1	9.48	0
51	SLU 49	380	0	2797	0.1	9.48	0
51	SLU 50	380	0	2797	0.1	9.48	0
51	SLU 51	380	0	2797	0.1	9.48	0
51	SLU 52	609	0	3605	0.12	15.22	0
51	SLU 53	609	0	3605	0.12	15.22	0
51	SLU 54	609	0	3605	0.12	15.22	0
51	SLU 55	609	0	3605	0.12	15.22	0
51	SLU 56	609	0	3605	0.12	15.22	0
51	SLU 57	609	0	3605	0.12	15.22	0
51	SLU 58	609	0	3605	0.12	15.22	0
51	SLU 59	609	0	3605	0.12	15.22	0
51	SLU 60	708	0	3951	0.13	17.68	0
51	SLU 61	708	0	3951	0.13	17.68	0
51	SLU 62	708	0	3951	0.13	17.68	0
51	SLU 63	708	0	3951	0.13	17.68	0
51	SLU 64	497	0	3253	0.12	12.41	0
51	SLU 65	497	0	3253	0.12	12.41	0
51	SLU 66	497	0	3253	0.12	12.41	0
51	SLU 67	497	0	3253	0.12	12.41	0
51	SLU 68	497	0	3253	0.12	12.41	0
51	SLU 69	497	0	3253	0.12	12.41	0
51	SLU 70	497	0	3253	0.12	12.41	0
51	SLU 71	497	0	3253	0.12	12.41	0
51	SLU 72	497	0	3253	0.12	12.41	0
51	SLU 73	726	0	4061	0.14	18.15	0
51	SLU 74	726	0	4061	0.14	18.15	0
51	SLU 75	726	0	4061	0.14	18.15	0
51	SLU 76	726	0	4061	0.14	18.15	0
51	SLU 77	726	0	4061	0.14	18.15	0
51	SLU 78	726	0	4061	0.14	18.15	0
51	SLU 79	726	0	4061	0.14	18.15	0
51	SLU 80	726	0	4061	0.14	18.15	0
51	SLU 81	825	0	4407	0.15	20.61	0
51	SLU 82	825	0	4407	0.15	20.61	0
51	SLU 83	825	0	4407	0.15	20.61	0
51	SLU 84	825	0	4407	0.15	20.61	0
51	SLE RA 1	357	0	2402	0.09	8.9	0
51	SLE RA 2	357	0	2402	0.09	8.9	0
51	SLE RA 3	357	0	2402	0.09	8.9	0
51	SLE RA 4	357	0	2402	0.09	8.9	0
51	SLE RA 5	357	0	2402	0.09	8.9	0
51	SLE RA 6	357	0	2402	0.09	8.9	0
51	SLE RA 7	357	0	2402	0.09	8.9	0
51	SLE RA 8	357	0	2402	0.09	8.9	0
51	SLE RA 9	357	0	2402	0.09	8.9	0
51	SLE RA 10	510	0	2941	0.1	12.73	0
51	SLE RA 11	510	0	2941	0.1	12.73	0
51	SLE RA 12	510	0	2941	0.1	12.73	0
51	SLE RA 13	510	0	2941	0.1	12.73	0
51	SLE RA 14	510	0	2941	0.1	12.73	0
51	SLE RA 15	510	0	2941	0.1	12.73	0
51	SLE RA 16	510	0	2941	0.1	12.73	0
51	SLE RA 17	510	0	2941	0.1	12.73	0
51	SLE RA 18	575	0	3171	0.11	14.37	0
51	SLE RA 19	575	0	3171	0.11	14.37	0
51	SLE RA 20	575	0	3171	0.11	14.37	0
51	SLE RA 21	575	0	3171	0.11	14.37	0
51	SLE FR 1	357	0	2402	0.09	8.9	0
51	SLE FR 2	357	0	2402	0.09	8.9	0
51	SLE FR 3	357	0	2402	0.09	8.9	0
51	SLE FR 4	422	0	2633	0.09	10.54	0
51	SLE FR 5	422	0	2633	0.09	10.54	0
51	SLE FR 6	466	0	2787	0.1	11.63	0
51	SLE QP 1	357	0	2402	0.09	8.9	0
51	SLE QP 2	422	0	2633	0.09	10.54	0
51	SLD 1	754	2	2608	-4.61	19.26	0.01
51	SLD 2	754	2	2608	-4.61	19.26	0.01
51	SLD 3	769	-8	2606	9.03	19.67	-0.02
51	SLD 4	769	-8	2606	9.03	19.67	-0.02
51	SLD 5	498	17	2629	-22.01	12.54	0.04
51	SLD 6	498	17	2629	-22.01	12.54	0.04
51	SLD 7	550	-19	2621	23.46	13.89	-0.05
51	SLD 8	550	-19	2621	23.46	13.89	-0.05
51	SLD 9	295	19	2644	-23.28	7.19	0.05
51	SLD 10	295	19	2644	-23.28	7.19	0.05
51	SLD 11	346	-17	2637	22.19	8.54	-0.04
51	SLD 12	346	-17	2637	22.19	8.54	-0.04
51	SLD 13	75	8	2660	-8.84	1.42	0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
51	SLD 14	75	8	2660	-8.84	1.42	0.02
51	SLD 15	91	-3	2657	4.8	1.82	-0.01
51	SLD 16	91	-3	2657	4.8	1.82	-0.01
51	SLV 1	1196	7	2575	-12.03	30.9	0.02
51	SLV 2	1196	7	2575	-12.03	30.9	0.02
51	SLV 3	1232	-21	2569	22.77	31.84	-0.05
51	SLV 4	1232	-21	2569	22.77	31.84	-0.05
51	SLV 5	600	44	2625	-56.34	15.22	0.11
51	SLV 6	600	44	2625	-56.34	15.22	0.11
51	SLV 7	720	-49	2605	59.69	18.36	-0.12
51	SLV 8	720	-49	2605	59.69	18.36	-0.12
51	SLV 9	125	48	2661	-59.5	2.72	0.12
51	SLV 10	125	48	2661	-59.5	2.72	0.12
51	SLV 11	245	-44	2641	56.52	5.86	-0.11
51	SLV 12	245	-44	2641	56.52	5.86	-0.11
51	SLV 13	-388	21	2696	-22.59	-10.76	0.05
51	SLV 14	-388	21	2696	-22.59	-10.76	0.05
51	SLV 15	-352	-7	2690	12.22	-9.82	-0.02
51	SLV 16	-352	-7	2690	12.22	-9.82	-0.02
52	SLU 1	254	0	2381	0.08	6.27	0
52	SLU 2	254	0	2381	0.08	6.27	0
52	SLU 3	254	0	2381	0.08	6.27	0
52	SLU 4	254	0	2381	0.08	6.27	0
52	SLU 5	254	0	2381	0.08	6.27	0
52	SLU 6	254	0	2381	0.08	6.27	0
52	SLU 7	254	0	2381	0.08	6.27	0
52	SLU 8	254	0	2381	0.08	6.27	0
52	SLU 9	254	0	2381	0.08	6.27	0
52	SLU 10	450	0	3261	0.1	11.13	0
52	SLU 11	450	0	3261	0.1	11.13	0
52	SLU 12	450	0	3261	0.1	11.13	0
52	SLU 13	450	0	3261	0.1	11.13	0
52	SLU 14	450	0	3261	0.1	11.13	0
52	SLU 15	450	0	3261	0.1	11.13	0
52	SLU 16	450	0	3261	0.1	11.13	0
52	SLU 17	450	0	3261	0.1	11.13	0
52	SLU 18	534	0	3639	0.11	13.21	0
52	SLU 19	534	0	3639	0.11	13.21	0
52	SLU 20	534	0	3639	0.11	13.21	0
52	SLU 21	534	0	3639	0.11	13.21	0
52	SLU 22	353	0	2877	0.09	8.71	0
52	SLU 23	353	0	2877	0.09	8.71	0
52	SLU 24	353	0	2877	0.09	8.71	0
52	SLU 25	353	0	2877	0.09	8.71	0
52	SLU 26	353	0	2877	0.09	8.71	0
52	SLU 27	353	0	2877	0.09	8.71	0
52	SLU 28	353	0	2877	0.09	8.71	0
52	SLU 29	353	0	2877	0.09	8.71	0
52	SLU 30	353	0	2877	0.09	8.71	0
52	SLU 31	549	0	3758	0.11	13.57	0
52	SLU 32	549	0	3758	0.11	13.57	0
52	SLU 33	549	0	3758	0.11	13.57	0
52	SLU 34	549	0	3758	0.11	13.57	0
52	SLU 35	549	0	3758	0.11	13.57	0
52	SLU 36	549	0	3758	0.11	13.57	0
52	SLU 37	549	0	3758	0.11	13.57	0
52	SLU 38	549	0	3758	0.11	13.57	0
52	SLU 39	633	0	4135	0.12	15.65	0
52	SLU 40	633	0	4135	0.12	15.65	0
52	SLU 41	633	0	4135	0.12	15.65	0
52	SLU 42	633	0	4135	0.12	15.65	0
52	SLU 43	296	0	2925	0.1	7.31	0
52	SLU 44	296	0	2925	0.1	7.31	0
52	SLU 45	296	0	2925	0.1	7.31	0
52	SLU 46	296	0	2925	0.1	7.31	0
52	SLU 47	296	0	2925	0.1	7.31	0
52	SLU 48	296	0	2925	0.1	7.31	0
52	SLU 49	296	0	2925	0.1	7.31	0
52	SLU 50	296	0	2925	0.1	7.31	0
52	SLU 51	296	0	2925	0.1	7.31	0
52	SLU 52	492	0	3805	0.12	12.17	0
52	SLU 53	492	0	3805	0.12	12.17	0
52	SLU 54	492	0	3805	0.12	12.17	0
52	SLU 55	492	0	3805	0.12	12.17	0
52	SLU 56	492	0	3805	0.12	12.17	0
52	SLU 57	492	0	3805	0.12	12.17	0
52	SLU 58	492	0	3805	0.12	12.17	0
52	SLU 59	492	0	3805	0.12	12.17	0
52	SLU 60	576	0	4183	0.13	14.25	0
52	SLU 61	576	0	4183	0.13	14.25	0
52	SLU 62	576	0	4183	0.13	14.25	0
52	SLU 63	576	0	4183	0.13	14.25	0
52	SLU 64	395	0	3421	0.11	9.76	0
52	SLU 65	395	0	3421	0.11	9.76	0
52	SLU 66	395	0	3421	0.11	9.76	0
52	SLU 67	395	0	3421	0.11	9.76	0
52	SLU 68	395	0	3421	0.11	9.76	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
52	SLU 69	395	0	3421	0.11	9.76	0
52	SLU 70	395	0	3421	0.11	9.76	0
52	SLU 71	395	0	3421	0.11	9.76	0
52	SLU 72	395	0	3421	0.11	9.76	0
52	SLU 73	591	0	4302	0.13	14.61	0
52	SLU 74	591	0	4302	0.13	14.61	0
52	SLU 75	591	0	4302	0.13	14.61	0
52	SLU 76	591	0	4302	0.13	14.61	0
52	SLU 77	591	0	4302	0.13	14.61	0
52	SLU 78	591	0	4302	0.13	14.61	0
52	SLU 79	591	0	4302	0.13	14.61	0
52	SLU 80	591	0	4302	0.13	14.61	0
52	SLU 81	675	0	4679	0.14	16.7	0
52	SLU 82	675	0	4679	0.14	16.7	0
52	SLU 83	675	0	4679	0.14	16.7	0
52	SLU 84	675	0	4679	0.14	16.7	0
52	SLE RA 1	282	0	2522	0.08	6.97	0
52	SLE RA 2	282	0	2522	0.08	6.97	0
52	SLE RA 3	282	0	2522	0.08	6.97	0
52	SLE RA 4	282	0	2522	0.08	6.97	0
52	SLE RA 5	282	0	2522	0.08	6.97	0
52	SLE RA 6	282	0	2522	0.08	6.97	0
52	SLE RA 7	282	0	2522	0.08	6.97	0
52	SLE RA 8	282	0	2522	0.08	6.97	0
52	SLE RA 9	282	0	2522	0.08	6.97	0
52	SLE RA 10	413	0	3110	0.1	10.21	0
52	SLE RA 11	413	0	3110	0.1	10.21	0
52	SLE RA 12	413	0	3110	0.1	10.21	0
52	SLE RA 13	413	0	3110	0.1	10.21	0
52	SLE RA 14	413	0	3110	0.1	10.21	0
52	SLE RA 15	413	0	3110	0.1	10.21	0
52	SLE RA 16	413	0	3110	0.1	10.21	0
52	SLE RA 17	413	0	3110	0.1	10.21	0
52	SLE RA 18	469	0	3361	0.1	11.59	0
52	SLE RA 19	469	0	3361	0.1	11.59	0
52	SLE RA 20	469	0	3361	0.1	11.59	0
52	SLE RA 21	469	0	3361	0.1	11.59	0
52	SLE FR 1	282	0	2522	0.08	6.97	0
52	SLE FR 2	282	0	2522	0.08	6.97	0
52	SLE FR 3	282	0	2522	0.08	6.97	0
52	SLE FR 4	338	0	2774	0.09	8.36	0
52	SLE FR 5	338	0	2774	0.09	8.36	0
52	SLE FR 6	376	0	2942	0.09	9.28	0
52	SLE QP 1	282	0	2522	0.08	6.97	0
52	SLE QP 2	338	0	2774	0.09	8.36	0
52	SLD 1	664	3	2695	-6.13	16.83	0
52	SLD 2	664	3	2695	-6.13	16.83	0
52	SLD 3	679	-9	2690	10.88	17.22	0
52	SLD 4	679	-9	2690	10.88	17.22	0
52	SLD 5	413	20	2757	-27.57	10.29	0.01
52	SLD 6	413	20	2757	-27.57	10.29	0.01
52	SLD 7	464	-22	2742	29.12	11.62	0
52	SLD 8	464	-22	2742	29.12	11.62	0
52	SLD 9	213	22	2806	-28.94	5.09	0
52	SLD 10	213	22	2806	-28.94	5.09	0
52	SLD 11	264	-20	2791	27.75	6.42	-0.01
52	SLD 12	264	-20	2791	27.75	6.42	-0.01
52	SLD 13	-2	9	2858	-10.7	-0.51	0
52	SLD 14	-2	9	2858	-10.7	-0.51	0
52	SLD 15	13	-3	2853	6.31	-0.12	0
52	SLD 16	13	-3	2853	6.31	-0.12	0
52	SLV 1	1098	8	2589	-15.84	28.14	0.01
52	SLV 2	1098	8	2589	-15.84	28.14	0.01
52	SLV 3	1133	-24	2579	27.51	29.06	0
52	SLV 4	1133	-24	2579	27.51	29.06	0
52	SLV 5	513	51	2735	-70.44	12.89	0.01
52	SLV 6	513	51	2735	-70.44	12.89	0.01
52	SLV 7	630	-56	2699	74.07	15.96	-0.01
52	SLV 8	630	-56	2699	74.07	15.96	-0.01
52	SLV 9	46	56	2849	-73.89	0.75	0.01
52	SLV 10	46	56	2849	-73.89	0.75	0.01
52	SLV 11	164	-51	2813	70.62	3.82	-0.01
52	SLV 12	164	-51	2813	70.62	3.82	-0.01
52	SLV 13	-456	24	2969	-27.33	-12.35	0
52	SLV 14	-456	24	2969	-27.33	-12.35	0
52	SLV 15	-421	-8	2959	16.02	-11.43	-0.01
52	SLV 16	-421	-8	2959	16.02	-11.43	-0.01
53	SLU 1	176	0	2476	0.07	4.31	0
53	SLU 2	176	0	2476	0.07	4.31	0
53	SLU 3	176	0	2476	0.07	4.31	0
53	SLU 4	176	0	2476	0.07	4.31	0
53	SLU 5	176	0	2476	0.07	4.31	0
53	SLU 6	176	0	2476	0.07	4.31	0
53	SLU 7	176	0	2476	0.07	4.31	0
53	SLU 8	176	0	2476	0.07	4.31	0
53	SLU 9	176	0	2476	0.07	4.31	0
53	SLU 10	333	0	3421	0.09	8.22	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
53	SLU 11	333	0	3421	0.09	8.22	0
53	SLU 12	333	0	3421	0.09	8.22	0
53	SLU 13	333	0	3421	0.09	8.22	0
53	SLU 14	333	0	3421	0.09	8.22	0
53	SLU 15	333	0	3421	0.09	8.22	0
53	SLU 16	333	0	3421	0.09	8.22	0
53	SLU 17	333	0	3421	0.09	8.22	0
53	SLU 18	400	0	3826	0.1	9.89	0
53	SLU 19	400	0	3826	0.1	9.89	0
53	SLU 20	400	0	3826	0.1	9.89	0
53	SLU 21	400	0	3826	0.1	9.89	0
53	SLU 22	254	0	3008	0.09	6.25	0
53	SLU 23	254	0	3008	0.09	6.25	0
53	SLU 24	254	0	3008	0.09	6.25	0
53	SLU 25	254	0	3008	0.09	6.25	0
53	SLU 26	254	0	3008	0.09	6.25	0
53	SLU 27	254	0	3008	0.09	6.25	0
53	SLU 28	254	0	3008	0.09	6.25	0
53	SLU 29	254	0	3008	0.09	6.25	0
53	SLU 30	254	0	3008	0.09	6.25	0
53	SLU 31	411	0	3953	0.11	10.15	0
53	SLU 32	411	0	3953	0.11	10.15	0
53	SLU 33	411	0	3953	0.11	10.15	0
53	SLU 34	411	0	3953	0.11	10.15	0
53	SLU 35	411	0	3953	0.11	10.15	0
53	SLU 36	411	0	3953	0.11	10.15	0
53	SLU 37	411	0	3953	0.11	10.15	0
53	SLU 38	411	0	3953	0.11	10.15	0
53	SLU 39	478	0	4358	0.11	11.83	0
53	SLU 40	478	0	4358	0.11	11.83	0
53	SLU 41	478	0	4358	0.11	11.83	0
53	SLU 42	478	0	4358	0.11	11.83	0
53	SLU 43	202	0	3036	0.09	4.94	0
53	SLU 44	202	0	3036	0.09	4.94	0
53	SLU 45	202	0	3036	0.09	4.94	0
53	SLU 46	202	0	3036	0.09	4.94	0
53	SLU 47	202	0	3036	0.09	4.94	0
53	SLU 48	202	0	3036	0.09	4.94	0
53	SLU 49	202	0	3036	0.09	4.94	0
53	SLU 50	202	0	3036	0.09	4.94	0
53	SLU 51	202	0	3036	0.09	4.94	0
53	SLU 52	359	0	3981	0.11	8.84	0
53	SLU 53	359	0	3981	0.11	8.84	0
53	SLU 54	359	0	3981	0.11	8.84	0
53	SLU 55	359	0	3981	0.11	8.84	0
53	SLU 56	359	0	3981	0.11	8.84	0
53	SLU 57	359	0	3981	0.11	8.84	0
53	SLU 58	359	0	3981	0.11	8.84	0
53	SLU 59	359	0	3981	0.11	8.84	0
53	SLU 60	426	0	4387	0.12	10.52	0
53	SLU 61	426	0	4387	0.12	10.52	0
53	SLU 62	426	0	4387	0.12	10.52	0
53	SLU 63	426	0	4387	0.12	10.52	0
53	SLU 64	280	0	3568	0.11	6.87	0
53	SLU 65	280	0	3568	0.11	6.87	0
53	SLU 66	280	0	3568	0.11	6.87	0
53	SLU 67	280	0	3568	0.11	6.87	0
53	SLU 68	280	0	3568	0.11	6.87	0
53	SLU 69	280	0	3568	0.11	6.87	0
53	SLU 70	280	0	3568	0.11	6.87	0
53	SLU 71	280	0	3568	0.11	6.87	0
53	SLU 72	280	0	3568	0.11	6.87	0
53	SLU 73	437	0	4513	0.12	10.78	0
53	SLU 74	437	0	4513	0.12	10.78	0
53	SLU 75	437	0	4513	0.12	10.78	0
53	SLU 76	437	0	4513	0.12	10.78	0
53	SLU 77	437	0	4513	0.12	10.78	0
53	SLU 78	437	0	4513	0.12	10.78	0
53	SLU 79	437	0	4513	0.12	10.78	0
53	SLU 80	437	0	4513	0.12	10.78	0
53	SLU 81	504	0	4919	0.13	12.45	0
53	SLU 82	504	0	4919	0.13	12.45	0
53	SLU 83	504	0	4919	0.13	12.45	0
53	SLU 84	504	0	4919	0.13	12.45	0
53	SLE RA 1	198	0	2628	0.08	4.86	0
53	SLE RA 2	198	0	2628	0.08	4.86	0
53	SLE RA 3	198	0	2628	0.08	4.86	0
53	SLE RA 4	198	0	2628	0.08	4.86	0
53	SLE RA 5	198	0	2628	0.08	4.86	0
53	SLE RA 6	198	0	2628	0.08	4.86	0
53	SLE RA 7	198	0	2628	0.08	4.86	0
53	SLE RA 8	198	0	2628	0.08	4.86	0
53	SLE RA 9	198	0	2628	0.08	4.86	0
53	SLE RA 10	303	0	3258	0.09	7.47	0
53	SLE RA 11	303	0	3258	0.09	7.47	0
53	SLE RA 12	303	0	3258	0.09	7.47	0
53	SLE RA 13	303	0	3258	0.09	7.47	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
53	SLE RA 14	303	0	3258	0.09	7.47	0
53	SLE RA 15	303	0	3258	0.09	7.47	0
53	SLE RA 16	303	0	3258	0.09	7.47	0
53	SLE RA 17	303	0	3258	0.09	7.47	0
53	SLE RA 18	348	0	3528	0.1	8.58	0
53	SLE RA 19	348	0	3528	0.1	8.58	0
53	SLE RA 20	348	0	3528	0.1	8.58	0
53	SLE RA 21	348	0	3528	0.1	8.58	0
53	SLE FR 1	198	0	2628	0.08	4.86	0
53	SLE FR 2	198	0	2628	0.08	4.86	0
53	SLE FR 3	198	0	2628	0.08	4.86	0
53	SLE FR 4	243	0	2898	0.08	5.98	0
53	SLE FR 5	243	0	2898	0.08	5.98	0
53	SLE FR 6	273	0	3078	0.09	6.72	0
53	SLE QP 1	198	0	2628	0.08	4.86	0
53	SLE QP 2	243	0	2898	0.08	5.98	0
53	SLD 1	557	4	2751	-7.74	14.38	-0.02
53	SLD 2	557	4	2751	-7.74	14.38	-0.02
53	SLD 3	571	-10	2743	12.76	14.77	0.05
53	SLD 4	571	-10	2743	12.76	14.77	0.05
53	SLD 5	315	23	2865	-33.35	7.91	-0.11
53	SLD 6	315	23	2865	-33.35	7.91	-0.11
53	SLD 7	364	-25	2840	34.98	9.21	0.12
53	SLD 8	364	-25	2840	34.98	9.21	0.12
53	SLD 9	122	25	2956	-34.81	2.75	-0.12
53	SLD 10	122	25	2956	-34.81	2.75	-0.12
53	SLD 11	171	-23	2930	33.52	4.05	0.11
53	SLD 12	171	-23	2930	33.52	4.05	0.11
53	SLD 13	-85	10	3052	-12.59	-2.82	-0.05
53	SLD 14	-85	10	3052	-12.59	-2.82	-0.05
53	SLD 15	-71	-4	3045	7.91	-2.43	0.02
53	SLD 16	-71	-4	3045	7.91	-2.43	0.02
53	SLV 1	976	10	2556	-19.86	25.6	-0.05
53	SLV 2	976	10	2556	-19.86	25.6	-0.05
53	SLV 3	1010	-26	2538	32.35	26.51	0.12
53	SLV 4	1010	-26	2538	32.35	26.51	0.12
53	SLV 5	411	58	2822	-85.1	10.49	-0.27
53	SLV 6	411	58	2822	-85.1	10.49	-0.27
53	SLV 7	525	-63	2763	88.96	13.51	0.3
53	SLV 8	525	-63	2763	88.96	13.51	0.3
53	SLV 9	-39	63	3033	-88.79	-1.56	-0.29
53	SLV 10	-39	63	3033	-88.79	-1.56	-0.29
53	SLV 11	75	-58	2974	85.26	1.47	0.27
53	SLV 12	75	-58	2974	85.26	1.47	0.27
53	SLV 13	-524	26	3258	-32.18	-14.55	-0.12
53	SLV 14	-524	26	3258	-32.18	-14.55	-0.12
53	SLV 15	-490	-10	3240	20.03	-13.64	0.05
53	SLV 16	-490	-10	3240	20.03	-13.64	0.05
54	SLU 1	86	0	2556	0.07	2.28	0
54	SLU 2	86	0	2556	0.07	2.28	0
54	SLU 3	86	0	2556	0.07	2.28	0
54	SLU 4	86	0	2556	0.07	2.28	0
54	SLU 5	86	0	2556	0.07	2.28	0
54	SLU 6	86	0	2556	0.07	2.28	0
54	SLU 7	86	0	2556	0.07	2.28	0
54	SLU 8	86	0	2556	0.07	2.28	0
54	SLU 9	86	0	2556	0.07	2.28	0
54	SLU 10	197	0	3556	0.08	5.3	0
54	SLU 11	197	0	3556	0.08	5.3	0
54	SLU 12	197	0	3556	0.08	5.3	0
54	SLU 13	197	0	3556	0.08	5.3	0
54	SLU 14	197	0	3556	0.08	5.3	0
54	SLU 15	197	0	3556	0.08	5.3	0
54	SLU 16	197	0	3556	0.08	5.3	0
54	SLU 17	197	0	3556	0.08	5.3	0
54	SLU 18	245	0	3984	0.09	6.59	0
54	SLU 19	245	0	3984	0.09	6.59	0
54	SLU 20	245	0	3984	0.09	6.59	0
54	SLU 21	245	0	3984	0.09	6.59	0
54	SLU 22	139	0	3118	0.08	3.73	0
54	SLU 23	139	0	3118	0.08	3.73	0
54	SLU 24	139	0	3118	0.08	3.73	0
54	SLU 25	139	0	3118	0.08	3.73	0
54	SLU 26	139	0	3118	0.08	3.73	0
54	SLU 27	139	0	3118	0.08	3.73	0
54	SLU 28	139	0	3118	0.08	3.73	0
54	SLU 29	139	0	3118	0.08	3.73	0
54	SLU 30	139	0	3118	0.08	3.73	0
54	SLU 31	251	0	4118	0.1	6.75	0
54	SLU 32	251	0	4118	0.1	6.75	0
54	SLU 33	251	0	4118	0.1	6.75	0
54	SLU 34	251	0	4118	0.1	6.75	0
54	SLU 35	251	0	4118	0.1	6.75	0
54	SLU 36	251	0	4118	0.1	6.75	0
54	SLU 37	251	0	4118	0.1	6.75	0
54	SLU 38	251	0	4118	0.1	6.75	0
54	SLU 39	298	0	4546	0.1	8.04	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
54	SLU 40	298	0	4546	0.1	8.04	0
54	SLU 41	298	0	4546	0.1	8.04	0
54	SLU 42	298	0	4546	0.1	8.04	0
54	SLU 43	93	0	3130	0.08	2.46	0
54	SLU 44	93	0	3130	0.08	2.46	0
54	SLU 45	93	0	3130	0.08	2.46	0
54	SLU 46	93	0	3130	0.08	2.46	0
54	SLU 47	93	0	3130	0.08	2.46	0
54	SLU 48	93	0	3130	0.08	2.46	0
54	SLU 49	93	0	3130	0.08	2.46	0
54	SLU 50	93	0	3130	0.08	2.46	0
54	SLU 51	93	0	3130	0.08	2.46	0
54	SLU 52	204	0	4130	0.1	5.48	0
54	SLU 53	204	0	4130	0.1	5.48	0
54	SLU 54	204	0	4130	0.1	5.48	0
54	SLU 55	204	0	4130	0.1	5.48	0
54	SLU 56	204	0	4130	0.1	5.48	0
54	SLU 57	204	0	4130	0.1	5.48	0
54	SLU 58	204	0	4130	0.1	5.48	0
54	SLU 59	204	0	4130	0.1	5.48	0
54	SLU 60	252	0	4559	0.11	6.78	0
54	SLU 61	252	0	4559	0.11	6.78	0
54	SLU 62	252	0	4559	0.11	6.78	0
54	SLU 63	252	0	4559	0.11	6.78	0
54	SLU 64	147	0	3692	0.1	3.91	0
54	SLU 65	147	0	3692	0.1	3.91	0
54	SLU 66	147	0	3692	0.1	3.91	0
54	SLU 67	147	0	3692	0.1	3.91	0
54	SLU 68	147	0	3692	0.1	3.91	0
54	SLU 69	147	0	3692	0.1	3.91	0
54	SLU 70	147	0	3692	0.1	3.91	0
54	SLU 71	147	0	3692	0.1	3.91	0
54	SLU 72	147	0	3692	0.1	3.91	0
54	SLU 73	258	0	4692	0.11	6.93	0
54	SLU 74	258	0	4692	0.11	6.93	0
54	SLU 75	258	0	4692	0.11	6.93	0
54	SLU 76	258	0	4692	0.11	6.93	0
54	SLU 77	258	0	4692	0.11	6.93	0
54	SLU 78	258	0	4692	0.11	6.93	0
54	SLU 79	258	0	4692	0.11	6.93	0
54	SLU 80	258	0	4692	0.11	6.93	0
54	SLU 81	306	0	5121	0.12	8.23	0
54	SLU 82	306	0	5121	0.12	8.23	0
54	SLU 83	306	0	5121	0.12	8.23	0
54	SLU 84	306	0	5121	0.12	8.23	0
54	SLE RA 1	101	0	2717	0.07	2.69	0
54	SLE RA 2	101	0	2717	0.07	2.69	0
54	SLE RA 3	101	0	2717	0.07	2.69	0
54	SLE RA 4	101	0	2717	0.07	2.69	0
54	SLE RA 5	101	0	2717	0.07	2.69	0
54	SLE RA 6	101	0	2717	0.07	2.69	0
54	SLE RA 7	101	0	2717	0.07	2.69	0
54	SLE RA 8	101	0	2717	0.07	2.69	0
54	SLE RA 9	101	0	2717	0.07	2.69	0
54	SLE RA 10	175	0	3383	0.08	4.7	0
54	SLE RA 11	175	0	3383	0.08	4.7	0
54	SLE RA 12	175	0	3383	0.08	4.7	0
54	SLE RA 13	175	0	3383	0.08	4.7	0
54	SLE RA 14	175	0	3383	0.08	4.7	0
54	SLE RA 15	175	0	3383	0.08	4.7	0
54	SLE RA 16	175	0	3383	0.08	4.7	0
54	SLE RA 17	175	0	3383	0.08	4.7	0
54	SLE RA 18	207	0	3669	0.09	5.57	0
54	SLE RA 19	207	0	3669	0.09	5.57	0
54	SLE RA 20	207	0	3669	0.09	5.57	0
54	SLE RA 21	207	0	3669	0.09	5.57	0
54	SLE FR 1	101	0	2717	0.07	2.69	0
54	SLE FR 2	101	0	2717	0.07	2.69	0
54	SLE FR 3	101	0	2717	0.07	2.69	0
54	SLE FR 4	133	0	3002	0.08	3.55	0
54	SLE FR 5	133	0	3002	0.08	3.55	0
54	SLE FR 6	154	0	3193	0.08	4.13	0
54	SLE QP 1	101	0	2717	0.07	2.69	0
54	SLE QP 2	133	0	3002	0.08	3.55	0
54	SLD 1	429	5	2761	-9.51	12.29	-0.08
54	SLD 2	429	5	2761	-9.51	12.29	-0.08
54	SLD 3	443	-11	2750	14.88	12.7	0.16
54	SLD 4	443	-11	2750	14.88	12.7	0.16
54	SLD 5	201	25	2948	-39.79	5.56	-0.38
54	SLD 6	201	25	2948	-39.79	5.56	-0.38
54	SLD 7	247	-27	2908	41.51	6.91	0.41
54	SLD 8	247	-27	2908	41.51	6.91	0.41
54	SLD 9	19	27	3096	-41.36	0.19	-0.41
54	SLD 10	19	27	3096	-41.36	0.19	-0.41
54	SLD 11	65	-25	3057	39.94	1.55	0.38
54	SLD 12	65	-25	3057	39.94	1.55	0.38
54	SLD 13	-177	11	3255	-14.73	-5.59	-0.16



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
54	SLD 14	-177	11	3255	-14.73	-5.59	-0.16
54	SLD 15	-163	-5	3243	9.66	-5.18	0.08
54	SLD 16	-163	-5	3243	9.66	-5.18	0.08
54	SLV 1	824	12	2441	-24.33	23.95	-0.2
54	SLV 2	824	12	2441	-24.33	23.95	-0.2
54	SLV 3	857	-28	2413	37.78	24.9	0.4
54	SLV 4	857	-28	2413	37.78	24.9	0.4
54	SLV 5	292	64	2876	-101.45	8.24	-0.97
54	SLV 6	292	64	2876	-101.45	8.24	-0.97
54	SLV 7	399	-70	2784	105.59	11.39	1.04
54	SLV 8	399	-70	2784	105.59	11.39	1.04
54	SLV 9	-133	69	3221	-105.44	-4.28	-1.04
54	SLV 10	-133	69	3221	-105.44	-4.28	-1.04
54	SLV 11	-26	-65	3129	101.6	-1.14	0.97
54	SLV 12	-26	-65	3129	101.6	-1.14	0.97
54	SLV 13	-591	28	3591	-37.63	-17.79	-0.4
54	SLV 14	-591	28	3591	-37.63	-17.79	-0.4
54	SLV 15	-559	-12	3564	24.48	-16.85	0.2
54	SLV 16	-559	-12	3564	24.48	-16.85	0.2
55	SLU 1	-42	0	2615	0.05	-1.36	0
55	SLU 2	-42	0	2615	0.05	-1.36	0
55	SLU 3	-42	0	2615	0.05	-1.36	0
55	SLU 4	-42	0	2615	0.05	-1.36	0
55	SLU 5	-42	0	2615	0.05	-1.36	0
55	SLU 6	-42	0	2615	0.05	-1.36	0
55	SLU 7	-42	0	2615	0.05	-1.36	0
55	SLU 8	-42	0	2615	0.05	-1.36	0
55	SLU 9	-42	0	2615	0.05	-1.36	0
55	SLU 10	8	0	3655	0.07	0.4	0
55	SLU 11	8	0	3655	0.07	0.4	0
55	SLU 12	8	0	3655	0.07	0.4	0
55	SLU 13	8	0	3655	0.07	0.4	0
55	SLU 14	8	0	3655	0.07	0.4	0
55	SLU 15	8	0	3655	0.07	0.4	0
55	SLU 16	8	0	3655	0.07	0.4	0
55	SLU 17	8	0	3655	0.07	0.4	0
55	SLU 18	30	0	4101	0.07	1.15	0
55	SLU 19	30	0	4101	0.07	1.15	0
55	SLU 20	30	0	4101	0.07	1.15	0
55	SLU 21	30	0	4101	0.07	1.15	0
55	SLU 22	-21	0	3200	0.07	-0.64	0
55	SLU 23	-21	0	3200	0.07	-0.64	0
55	SLU 24	-21	0	3200	0.07	-0.64	0
55	SLU 25	-21	0	3200	0.07	-0.64	0
55	SLU 26	-21	0	3200	0.07	-0.64	0
55	SLU 27	-21	0	3200	0.07	-0.64	0
55	SLU 28	-21	0	3200	0.07	-0.64	0
55	SLU 29	-21	0	3200	0.07	-0.64	0
55	SLU 30	-21	0	3200	0.07	-0.64	0
55	SLU 31	29	0	4240	0.08	1.11	0
55	SLU 32	29	0	4240	0.08	1.11	0
55	SLU 33	29	0	4240	0.08	1.11	0
55	SLU 34	29	0	4240	0.08	1.11	0
55	SLU 35	29	0	4240	0.08	1.11	0
55	SLU 36	29	0	4240	0.08	1.11	0
55	SLU 37	29	0	4240	0.08	1.11	0
55	SLU 38	29	0	4240	0.08	1.11	0
55	SLU 39	50	0	4685	0.09	1.86	0
55	SLU 40	50	0	4685	0.09	1.86	0
55	SLU 41	50	0	4685	0.09	1.86	0
55	SLU 42	50	0	4685	0.09	1.86	0
55	SLU 43	-61	0	3200	0.07	-2.01	0
55	SLU 44	-61	0	3200	0.07	-2.01	0
55	SLU 45	-61	0	3200	0.07	-2.01	0
55	SLU 46	-61	0	3200	0.07	-2.01	0
55	SLU 47	-61	0	3200	0.07	-2.01	0
55	SLU 48	-61	0	3200	0.07	-2.01	0
55	SLU 49	-61	0	3200	0.07	-2.01	0
55	SLU 50	-61	0	3200	0.07	-2.01	0
55	SLU 51	-61	0	3200	0.07	-2.01	0
55	SLU 52	-11	0	4239	0.08	-0.25	0
55	SLU 53	-11	0	4239	0.08	-0.25	0
55	SLU 54	-11	0	4239	0.08	-0.25	0
55	SLU 55	-11	0	4239	0.08	-0.25	0
55	SLU 56	-11	0	4239	0.08	-0.25	0
55	SLU 57	-11	0	4239	0.08	-0.25	0
55	SLU 58	-11	0	4239	0.08	-0.25	0
55	SLU 59	-11	0	4239	0.08	-0.25	0
55	SLU 60	10	0	4685	0.09	0.5	0
55	SLU 61	10	0	4685	0.09	0.5	0
55	SLU 62	10	0	4685	0.09	0.5	0
55	SLU 63	10	0	4685	0.09	0.5	0
55	SLU 64	-41	0	3784	0.08	-1.29	0
55	SLU 65	-41	0	3784	0.08	-1.29	0
55	SLU 66	-41	0	3784	0.08	-1.29	0
55	SLU 67	-41	0	3784	0.08	-1.29	0
55	SLU 68	-41	0	3784	0.08	-1.29	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
55	SLU 69	-41	0	3784	0.08	-1.29	0
55	SLU 70	-41	0	3784	0.08	-1.29	0
55	SLU 71	-41	0	3784	0.08	-1.29	0
55	SLU 72	-41	0	3784	0.08	-1.29	0
55	SLU 73	9	0	4824	0.09	0.46	0
55	SLU 74	9	0	4824	0.09	0.46	0
55	SLU 75	9	0	4824	0.09	0.46	0
55	SLU 76	9	0	4824	0.09	0.46	0
55	SLU 77	9	0	4824	0.09	0.46	0
55	SLU 78	9	0	4824	0.09	0.46	0
55	SLU 79	9	0	4824	0.09	0.46	0
55	SLU 80	9	0	4824	0.09	0.46	0
55	SLU 81	30	0	5269	0.1	1.21	0
55	SLU 82	30	0	5269	0.1	1.21	0
55	SLU 83	30	0	5269	0.1	1.21	0
55	SLU 84	30	0	5269	0.1	1.21	0
55	SLE RA 1	-36	0	2782	0.06	-1.15	0
55	SLE RA 2	-36	0	2782	0.06	-1.15	0
55	SLE RA 3	-36	0	2782	0.06	-1.15	0
55	SLE RA 4	-36	0	2782	0.06	-1.15	0
55	SLE RA 5	-36	0	2782	0.06	-1.15	0
55	SLE RA 6	-36	0	2782	0.06	-1.15	0
55	SLE RA 7	-36	0	2782	0.06	-1.15	0
55	SLE RA 8	-36	0	2782	0.06	-1.15	0
55	SLE RA 9	-36	0	2782	0.06	-1.15	0
55	SLE RA 10	-3	0	3476	0.07	0.02	0
55	SLE RA 11	-3	0	3476	0.07	0.02	0
55	SLE RA 12	-3	0	3476	0.07	0.02	0
55	SLE RA 13	-3	0	3476	0.07	0.02	0
55	SLE RA 14	-3	0	3476	0.07	0.02	0
55	SLE RA 15	-3	0	3476	0.07	0.02	0
55	SLE RA 16	-3	0	3476	0.07	0.02	0
55	SLE RA 17	-3	0	3476	0.07	0.02	0
55	SLE RA 18	12	0	3773	0.07	0.52	0
55	SLE RA 19	12	0	3773	0.07	0.52	0
55	SLE RA 20	12	0	3773	0.07	0.52	0
55	SLE RA 21	12	0	3773	0.07	0.52	0
55	SLE FR 1	-36	0	2782	0.06	-1.15	0
55	SLE FR 2	-36	0	2782	0.06	-1.15	0
55	SLE FR 3	-36	0	2782	0.06	-1.15	0
55	SLE FR 4	-22	0	3079	0.06	-0.65	0
55	SLE FR 5	-22	0	3079	0.06	-0.65	0
55	SLE FR 6	-12	0	3277	0.06	-0.32	0
55	SLE QP 1	-36	0	2782	0.06	-1.15	0
55	SLE QP 2	-22	0	3079	0.06	-0.65	0
55	SLD 1	259	8	2699	-11.77	9.69	-0.23
55	SLD 2	259	8	2699	-11.77	9.69	-0.23
55	SLD 3	272	-15	2681	17.53	10.17	0.4
55	SLD 4	272	-15	2681	17.53	10.17	0.4
55	SLD 5	43	38	2993	-47.93	1.72	-1.04
55	SLD 6	43	38	2993	-47.93	1.72	-1.04
55	SLD 7	86	-40	2932	49.74	3.32	1.09
55	SLD 8	86	-40	2932	49.74	3.32	1.09
55	SLD 9	-129	40	3227	-49.62	-4.62	-1.09
55	SLD 10	-129	40	3227	-49.62	-4.62	-1.09
55	SLD 11	-86	-38	3166	48.05	-3.03	1.04
55	SLD 12	-86	-38	3166	48.05	-3.03	1.04
55	SLD 13	-315	15	3478	-17.41	-11.47	-0.4
55	SLD 14	-315	15	3478	-17.41	-11.47	-0.4
55	SLD 15	-302	-8	3460	11.89	-10.99	0.24
55	SLD 16	-302	-8	3460	11.89	-10.99	0.24
55	SLV 1	633	20	2194	-30.11	23.49	-0.6
55	SLV 2	633	20	2194	-30.11	23.49	-0.6
55	SLV 3	663	-39	2151	44.53	24.61	1.03
55	SLV 4	663	-39	2151	44.53	24.61	1.03
55	SLV 5	129	96	2878	-122.2	4.91	-2.65
55	SLV 6	129	96	2878	-122.2	4.91	-2.65
55	SLV 7	230	-102	2736	126.61	8.61	2.77
55	SLV 8	230	-102	2736	126.61	8.61	2.77
55	SLV 9	-273	102	3422	-126.49	-9.91	-2.77
55	SLV 10	-273	102	3422	-126.49	-9.91	-2.77
55	SLV 11	-172	-97	3281	122.33	-6.21	2.65
55	SLV 12	-172	-97	3281	122.33	-6.21	2.65
55	SLV 13	-706	39	4008	-44.41	-25.91	-1.02
55	SLV 14	-706	39	4008	-44.41	-25.91	-1.02
55	SLV 15	-676	-20	3965	30.24	-24.8	0.6
55	SLV 16	-676	-20	3965	30.24	-24.8	0.6
56	SLU 1	-217	0	2712	0.04	-11.09	0
56	SLU 2	-217	0	2712	0.04	-11.09	0
56	SLU 3	-217	0	2712	0.04	-11.09	0
56	SLU 4	-217	0	2712	0.04	-11.09	0
56	SLU 5	-217	0	2712	0.04	-11.09	0
56	SLU 6	-217	0	2712	0.04	-11.09	0
56	SLU 7	-217	0	2712	0.04	-11.09	0
56	SLU 8	-217	0	2712	0.04	-11.09	0
56	SLU 9	-217	0	2712	0.04	-11.09	0
56	SLU 10	-260	0	3777	0.04	-13.16	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
56	SLU 11	-260	0	3777	0.04	-13.16	0
56	SLU 12	-260	0	3777	0.04	-13.16	0
56	SLU 13	-260	0	3777	0.04	-13.16	0
56	SLU 14	-260	0	3777	0.04	-13.16	0
56	SLU 15	-260	0	3777	0.04	-13.16	0
56	SLU 16	-260	0	3777	0.04	-13.16	0
56	SLU 17	-260	0	3777	0.04	-13.16	0
56	SLU 18	-278	0	4233	0.05	-14.05	0
56	SLU 19	-278	0	4233	0.05	-14.05	0
56	SLU 20	-278	0	4233	0.05	-14.05	0
56	SLU 21	-278	0	4233	0.05	-14.05	0
56	SLU 22	-246	0	3314	0.04	-12.54	0
56	SLU 23	-246	0	3314	0.04	-12.54	0
56	SLU 24	-246	0	3314	0.04	-12.54	0
56	SLU 25	-246	0	3314	0.04	-12.54	0
56	SLU 26	-246	0	3314	0.04	-12.54	0
56	SLU 27	-246	0	3314	0.04	-12.54	0
56	SLU 28	-246	0	3314	0.04	-12.54	0
56	SLU 29	-246	0	3314	0.04	-12.54	0
56	SLU 30	-246	0	3314	0.04	-12.54	0
56	SLU 31	-289	0	4379	0.05	-14.62	0
56	SLU 32	-289	0	4379	0.05	-14.62	0
56	SLU 33	-289	0	4379	0.05	-14.62	0
56	SLU 34	-289	0	4379	0.05	-14.62	0
56	SLU 35	-289	0	4379	0.05	-14.62	0
56	SLU 36	-289	0	4379	0.05	-14.62	0
56	SLU 37	-289	0	4379	0.05	-14.62	0
56	SLU 38	-289	0	4379	0.05	-14.62	0
56	SLU 39	-308	0	4835	0.06	-15.51	0
56	SLU 40	-308	0	4835	0.06	-15.51	0
56	SLU 41	-308	0	4835	0.06	-15.51	0
56	SLU 42	-308	0	4835	0.06	-15.51	0
56	SLU 43	-272	0	3319	0.04	-13.91	0
56	SLU 44	-272	0	3319	0.04	-13.91	0
56	SLU 45	-272	0	3319	0.04	-13.91	0
56	SLU 46	-272	0	3319	0.04	-13.91	0
56	SLU 47	-272	0	3319	0.04	-13.91	0
56	SLU 48	-272	0	3319	0.04	-13.91	0
56	SLU 49	-272	0	3319	0.04	-13.91	0
56	SLU 50	-272	0	3319	0.04	-13.91	0
56	SLU 51	-272	0	3319	0.04	-13.91	0
56	SLU 52	-315	0	4384	0.05	-15.99	0
56	SLU 53	-315	0	4384	0.05	-15.99	0
56	SLU 54	-315	0	4384	0.05	-15.99	0
56	SLU 55	-315	0	4384	0.05	-15.99	0
56	SLU 56	-315	0	4384	0.05	-15.99	0
56	SLU 57	-315	0	4384	0.05	-15.99	0
56	SLU 58	-315	0	4384	0.05	-15.99	0
56	SLU 59	-315	0	4384	0.05	-15.99	0
56	SLU 60	-334	0	4841	0.06	-16.88	0
56	SLU 61	-334	0	4841	0.06	-16.88	0
56	SLU 62	-334	0	4841	0.06	-16.88	0
56	SLU 63	-334	0	4841	0.06	-16.88	0
56	SLU 64	-302	0	3921	0.05	-15.37	0
56	SLU 65	-302	0	3921	0.05	-15.37	0
56	SLU 66	-302	0	3921	0.05	-15.37	0
56	SLU 67	-302	0	3921	0.05	-15.37	0
56	SLU 68	-302	0	3921	0.05	-15.37	0
56	SLU 69	-302	0	3921	0.05	-15.37	0
56	SLU 70	-302	0	3921	0.05	-15.37	0
56	SLU 71	-302	0	3921	0.05	-15.37	0
56	SLU 72	-302	0	3921	0.05	-15.37	0
56	SLU 73	-344	0	4986	0.06	-17.45	0
56	SLU 74	-344	0	4986	0.06	-17.45	0
56	SLU 75	-344	0	4986	0.06	-17.45	0
56	SLU 76	-344	0	4986	0.06	-17.45	0
56	SLU 77	-344	0	4986	0.06	-17.45	0
56	SLU 78	-344	0	4986	0.06	-17.45	0
56	SLU 79	-344	0	4986	0.06	-17.45	0
56	SLU 80	-344	0	4986	0.06	-17.45	0
56	SLU 81	-363	0	5443	0.06	-18.34	0
56	SLU 82	-363	0	5443	0.06	-18.34	0
56	SLU 83	-363	0	5443	0.06	-18.34	0
56	SLU 84	-363	0	5443	0.06	-18.34	0
56	SLE RA 1	-226	0	2884	0.04	-11.5	0
56	SLE RA 2	-226	0	2884	0.04	-11.5	0
56	SLE RA 3	-226	0	2884	0.04	-11.5	0
56	SLE RA 4	-226	0	2884	0.04	-11.5	0
56	SLE RA 5	-226	0	2884	0.04	-11.5	0
56	SLE RA 6	-226	0	2884	0.04	-11.5	0
56	SLE RA 7	-226	0	2884	0.04	-11.5	0
56	SLE RA 8	-226	0	2884	0.04	-11.5	0
56	SLE RA 9	-226	0	2884	0.04	-11.5	0
56	SLE RA 10	-254	0	3594	0.04	-12.89	0
56	SLE RA 11	-254	0	3594	0.04	-12.89	0
56	SLE RA 12	-254	0	3594	0.04	-12.89	0
56	SLE RA 13	-254	0	3594	0.04	-12.89	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
56	SLE RA 14	-254	0	3594	0.04	-12.89	0
56	SLE RA 15	-254	0	3594	0.04	-12.89	0
56	SLE RA 16	-254	0	3594	0.04	-12.89	0
56	SLE RA 17	-254	0	3594	0.04	-12.89	0
56	SLE RA 18	-266	0	3898	0.05	-13.48	0
56	SLE RA 19	-266	0	3898	0.05	-13.48	0
56	SLE RA 20	-266	0	3898	0.05	-13.48	0
56	SLE RA 21	-266	0	3898	0.05	-13.48	0
56	SLE FR 1	-226	0	2884	0.04	-11.5	0
56	SLE FR 2	-226	0	2884	0.04	-11.5	0
56	SLE FR 3	-226	0	2884	0.04	-11.5	0
56	SLE FR 4	-238	0	3188	0.04	-12.1	0
56	SLE FR 5	-238	0	3188	0.04	-12.1	0
56	SLE FR 6	-246	0	3391	0.04	-12.49	0
56	SLE QP 1	-226	0	2884	0.04	-11.5	0
56	SLE QP 2	-238	0	3188	0.04	-12.1	0
56	SLD 1	-29	15	2497	-13.82	2.04	-0.37
56	SLD 2	-29	15	2497	-13.82	2.04	-0.37
56	SLD 3	-19	-24	2464	19.84	2.69	0.23
56	SLD 4	-19	-24	2464	19.84	2.69	0.23
56	SLD 5	-190	63	3030	-55.17	-8.84	-1.01
56	SLD 6	-190	63	3030	-55.17	-8.84	-1.01
56	SLD 7	-158	-66	2922	57.03	-6.67	0.97
56	SLD 8	-158	-66	2922	57.03	-6.67	0.97
56	SLD 9	-318	66	3454	-56.95	-17.52	-0.97
56	SLD 10	-318	66	3454	-56.95	-17.52	-0.97
56	SLD 11	-286	-64	3347	55.25	-15.35	1.01
56	SLD 12	-286	-64	3347	55.25	-15.35	1.01
56	SLD 13	-456	24	3912	-19.76	-26.88	-0.23
56	SLD 14	-456	24	3912	-19.76	-26.88	-0.23
56	SLD 15	-446	-15	3880	13.9	-26.23	0.37
56	SLD 16	-446	-15	3880	13.9	-26.23	0.37
56	SLV 1	249	39	1576	-35.38	20.88	-0.93
56	SLV 2	249	39	1576	-35.38	20.88	-0.93
56	SLV 3	272	-60	1501	50.43	22.39	0.58
56	SLV 4	272	-60	1501	50.43	22.39	0.58
56	SLV 5	-126	162	2818	-140.73	-4.49	-2.58
56	SLV 6	-126	162	2818	-140.73	-4.49	-2.58
56	SLV 7	-51	-169	2569	145.3	0.54	2.47
56	SLV 8	-51	-169	2569	145.3	0.54	2.47
56	SLV 9	-425	169	3808	-145.22	-24.73	-2.47
56	SLV 10	-425	169	3808	-145.22	-24.73	-2.47
56	SLV 11	-350	-162	3559	140.81	-19.7	2.58
56	SLV 12	-350	-162	3559	140.81	-19.7	2.58
56	SLV 13	-747	60	4876	-50.35	-46.58	-0.58
56	SLV 14	-747	60	4876	-50.35	-46.58	-0.58
56	SLV 15	-725	-39	4801	35.46	-45.07	0.93
56	SLV 16	-725	-39	4801	35.46	-45.07	0.93
57	SLU 1	-389	0	1561	0.01	-10.46	0
57	SLU 2	-389	0	1561	0.01	-10.46	0
57	SLU 3	-389	0	1561	0.01	-10.46	0
57	SLU 4	-389	0	1561	0.01	-10.46	0
57	SLU 5	-389	0	1561	0.01	-10.46	0
57	SLU 6	-389	0	1561	0.01	-10.46	0
57	SLU 7	-389	0	1561	0.01	-10.46	0
57	SLU 8	-389	0	1561	0.01	-10.46	0
57	SLU 9	-389	0	1561	0.01	-10.46	0
57	SLU 10	-522	0	2153	0.01	-13.56	0
57	SLU 11	-522	0	2153	0.01	-13.56	0
57	SLU 12	-522	0	2153	0.01	-13.56	0
57	SLU 13	-522	0	2153	0.01	-13.56	0
57	SLU 14	-522	0	2153	0.01	-13.56	0
57	SLU 15	-522	0	2153	0.01	-13.56	0
57	SLU 16	-522	0	2153	0.01	-13.56	0
57	SLU 17	-522	0	2153	0.01	-13.56	0
57	SLU 18	-578	0	2406	0.01	-14.89	0
57	SLU 19	-578	0	2406	0.01	-14.89	0
57	SLU 20	-578	0	2406	0.01	-14.89	0
57	SLU 21	-578	0	2406	0.01	-14.89	0
57	SLU 22	-467	0	1898	0.01	-12.34	0
57	SLU 23	-467	0	1898	0.01	-12.34	0
57	SLU 24	-467	0	1898	0.01	-12.34	0
57	SLU 25	-467	0	1898	0.01	-12.34	0
57	SLU 26	-467	0	1898	0.01	-12.34	0
57	SLU 27	-467	0	1898	0.01	-12.34	0
57	SLU 28	-467	0	1898	0.01	-12.34	0
57	SLU 29	-467	0	1898	0.01	-12.34	0
57	SLU 30	-467	0	1898	0.01	-12.34	0
57	SLU 31	-599	0	2490	0.01	-15.44	0
57	SLU 32	-599	0	2490	0.01	-15.44	0
57	SLU 33	-599	0	2490	0.01	-15.44	0
57	SLU 34	-599	0	2490	0.01	-15.44	0
57	SLU 35	-599	0	2490	0.01	-15.44	0
57	SLU 36	-599	0	2490	0.01	-15.44	0
57	SLU 37	-599	0	2490	0.01	-15.44	0
57	SLU 38	-599	0	2490	0.01	-15.44	0
57	SLU 39	-656	0	2744	0.01	-16.77	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
57	SLU 40	-656	0	2744	0.01	-16.77	0
57	SLU 41	-656	0	2744	0.01	-16.77	0
57	SLU 42	-656	0	2744	0.01	-16.77	0
57	SLU 43	-480	0	1913	0.01	-12.95	0
57	SLU 44	-480	0	1913	0.01	-12.95	0
57	SLU 45	-480	0	1913	0.01	-12.95	0
57	SLU 46	-480	0	1913	0.01	-12.95	0
57	SLU 47	-480	0	1913	0.01	-12.95	0
57	SLU 48	-480	0	1913	0.01	-12.95	0
57	SLU 49	-480	0	1913	0.01	-12.95	0
57	SLU 50	-480	0	1913	0.01	-12.95	0
57	SLU 51	-480	0	1913	0.01	-12.95	0
57	SLU 52	-612	0	2505	0.01	-16.05	0
57	SLU 53	-612	0	2505	0.01	-16.05	0
57	SLU 54	-612	0	2505	0.01	-16.05	0
57	SLU 55	-612	0	2505	0.01	-16.05	0
57	SLU 56	-612	0	2505	0.01	-16.05	0
57	SLU 57	-612	0	2505	0.01	-16.05	0
57	SLU 58	-612	0	2505	0.01	-16.05	0
57	SLU 59	-612	0	2505	0.01	-16.05	0
57	SLU 60	-669	0	2759	0.01	-17.38	0
57	SLU 61	-669	0	2759	0.01	-17.38	0
57	SLU 62	-669	0	2759	0.01	-17.38	0
57	SLU 63	-669	0	2759	0.01	-17.38	0
57	SLU 64	-557	0	2251	0.01	-14.83	0
57	SLU 65	-557	0	2251	0.01	-14.83	0
57	SLU 66	-557	0	2251	0.01	-14.83	0
57	SLU 67	-557	0	2251	0.01	-14.83	0
57	SLU 68	-557	0	2251	0.01	-14.83	0
57	SLU 69	-557	0	2251	0.01	-14.83	0
57	SLU 70	-557	0	2251	0.01	-14.83	0
57	SLU 71	-557	0	2251	0.01	-14.83	0
57	SLU 72	-557	0	2251	0.01	-14.83	0
57	SLU 73	-689	0	2843	0.01	-17.93	0
57	SLU 74	-689	0	2843	0.01	-17.93	0
57	SLU 75	-689	0	2843	0.01	-17.93	0
57	SLU 76	-689	0	2843	0.01	-17.93	0
57	SLU 77	-689	0	2843	0.01	-17.93	0
57	SLU 78	-689	0	2843	0.01	-17.93	0
57	SLU 79	-689	0	2843	0.01	-17.93	0
57	SLU 80	-689	0	2843	0.01	-17.93	0
57	SLU 81	-746	0	3096	0.01	-19.26	0
57	SLU 82	-746	0	3096	0.01	-19.26	0
57	SLU 83	-746	0	3096	0.01	-19.26	0
57	SLU 84	-746	0	3096	0.01	-19.26	0
57	SLE RA 1	-411	0	1657	0.01	-11	0
57	SLE RA 2	-411	0	1657	0.01	-11	0
57	SLE RA 3	-411	0	1657	0.01	-11	0
57	SLE RA 4	-411	0	1657	0.01	-11	0
57	SLE RA 5	-411	0	1657	0.01	-11	0
57	SLE RA 6	-411	0	1657	0.01	-11	0
57	SLE RA 7	-411	0	1657	0.01	-11	0
57	SLE RA 8	-411	0	1657	0.01	-11	0
57	SLE RA 9	-411	0	1657	0.01	-11	0
57	SLE RA 10	-500	0	2052	0.01	-13.06	0
57	SLE RA 11	-500	0	2052	0.01	-13.06	0
57	SLE RA 12	-500	0	2052	0.01	-13.06	0
57	SLE RA 13	-500	0	2052	0.01	-13.06	0
57	SLE RA 14	-500	0	2052	0.01	-13.06	0
57	SLE RA 15	-500	0	2052	0.01	-13.06	0
57	SLE RA 16	-500	0	2052	0.01	-13.06	0
57	SLE RA 17	-500	0	2052	0.01	-13.06	0
57	SLE RA 18	-538	0	2221	0.01	-13.95	0
57	SLE RA 19	-538	0	2221	0.01	-13.95	0
57	SLE RA 20	-538	0	2221	0.01	-13.95	0
57	SLE RA 21	-538	0	2221	0.01	-13.95	0
57	SLE FR 1	-411	0	1657	0.01	-11	0
57	SLE FR 2	-411	0	1657	0.01	-11	0
57	SLE FR 3	-411	0	1657	0.01	-11	0
57	SLE FR 4	-449	0	1826	0.01	-11.88	0
57	SLE FR 5	-449	0	1826	0.01	-11.88	0
57	SLE FR 6	-475	0	1939	0.01	-12.47	0
57	SLE QP 1	-411	0	1657	0.01	-11	0
57	SLE QP 2	-449	0	1826	0.01	-11.88	0
57	SLD 1	-240	13	1245	-7.15	-4.08	-1.14
57	SLD 2	-240	13	1245	-7.15	-4.08	-1.14
57	SLD 3	-231	-6	1219	10.18	-3.72	1.63
57	SLD 4	-231	-6	1219	10.18	-3.72	1.63
57	SLD 5	-401	33	1693	-28.42	-10.08	-4.55
57	SLD 6	-401	33	1693	-28.42	-10.08	-4.55
57	SLD 7	-369	-31	1603	29.34	-8.89	4.7
57	SLD 8	-369	-31	1603	29.34	-8.89	4.7
57	SLD 9	-529	31	2049	-29.32	-14.87	-4.7
57	SLD 10	-529	31	2049	-29.32	-14.87	-4.7
57	SLD 11	-497	-33	1960	28.43	-13.68	4.55
57	SLD 12	-497	-33	1960	28.43	-13.68	4.55
57	SLD 13	-668	6	2434	-10.16	-20.04	-1.63



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
57	SLD 14	-668	6	2434	-10.16	-20.04	-1.63
57	SLD 15	-658	-13	2407	7.17	-19.68	1.15
57	SLD 16	-658	-13	2407	7.17	-19.68	1.15
57	SLV 1	38	33	471	-18.33	6.32	-2.94
57	SLV 2	38	33	471	-18.33	6.32	-2.94
57	SLV 3	60	-16	409	25.87	7.15	4.14
57	SLV 4	60	-16	409	25.87	7.15	4.14
57	SLV 5	-337	84	1514	-72.53	-7.68	-11.62
57	SLV 6	-337	84	1514	-72.53	-7.68	-11.62
57	SLV 7	-263	-79	1307	74.8	-4.91	11.98
57	SLV 8	-263	-79	1307	74.8	-4.91	11.98
57	SLV 9	-636	79	2345	-74.79	-18.85	-11.98
57	SLV 10	-636	79	2345	-74.79	-18.85	-11.98
57	SLV 11	-562	-84	2139	72.54	-16.08	11.62
57	SLV 12	-562	-84	2139	72.54	-16.08	11.62
57	SLV 13	-959	16	3243	-25.86	-30.92	-4.14
57	SLV 14	-959	16	3243	-25.86	-30.92	-4.14
57	SLV 15	-936	-33	3181	18.34	-30.09	2.94
57	SLV 16	-936	-33	3181	18.34	-30.09	2.94
58	SLU 1	347	0	1438	0	8.6	0
58	SLU 2	347	0	1438	0	8.6	0
58	SLU 3	347	0	1438	0	8.6	0
58	SLU 4	347	0	1438	0	8.6	0
58	SLU 5	347	0	1438	0	8.6	0
58	SLU 6	347	0	1438	0	8.6	0
58	SLU 7	347	0	1438	0	8.6	0
58	SLU 8	347	0	1438	0	8.6	0
58	SLU 9	347	0	1438	0	8.6	0
58	SLU 10	452	0	1952	0	10.57	0
58	SLU 11	452	0	1952	0	10.57	0
58	SLU 12	452	0	1952	0	10.57	0
58	SLU 13	452	0	1952	0	10.57	0
58	SLU 14	452	0	1952	0	10.57	0
58	SLU 15	452	0	1952	0	10.57	0
58	SLU 16	452	0	1952	0	10.57	0
58	SLU 17	452	0	1952	0	10.57	0
58	SLU 18	497	0	2172	0	11.41	0
58	SLU 19	497	0	2172	0	11.41	0
58	SLU 20	497	0	2172	0	11.41	0
58	SLU 21	497	0	2172	0	11.41	0
58	SLU 22	411	0	1737	0.01	9.91	0
58	SLU 23	411	0	1737	0.01	9.91	0
58	SLU 24	411	0	1737	0.01	9.91	0
58	SLU 25	411	0	1737	0.01	9.91	0
58	SLU 26	411	0	1737	0.01	9.91	0
58	SLU 27	411	0	1737	0.01	9.91	0
58	SLU 28	411	0	1737	0.01	9.91	0
58	SLU 29	411	0	1737	0.01	9.91	0
58	SLU 30	411	0	1737	0.01	9.91	0
58	SLU 31	516	0	2251	0.01	11.87	0
58	SLU 32	516	0	2251	0.01	11.87	0
58	SLU 33	516	0	2251	0.01	11.87	0
58	SLU 34	516	0	2251	0.01	11.87	0
58	SLU 35	516	0	2251	0.01	11.87	0
58	SLU 36	516	0	2251	0.01	11.87	0
58	SLU 37	516	0	2251	0.01	11.87	0
58	SLU 38	516	0	2251	0.01	11.87	0
58	SLU 39	561	0	2471	0.01	12.72	0
58	SLU 40	561	0	2471	0.01	12.72	0
58	SLU 41	561	0	2471	0.01	12.72	0
58	SLU 42	561	0	2471	0.01	12.72	0
58	SLU 43	430	0	1767	0	10.73	0
58	SLU 44	430	0	1767	0	10.73	0
58	SLU 45	430	0	1767	0	10.73	0
58	SLU 46	430	0	1767	0	10.73	0
58	SLU 47	430	0	1767	0	10.73	0
58	SLU 48	430	0	1767	0	10.73	0
58	SLU 49	430	0	1767	0	10.73	0
58	SLU 50	430	0	1767	0	10.73	0
58	SLU 51	430	0	1767	0	10.73	0
58	SLU 52	535	0	2281	0	12.7	0
58	SLU 53	535	0	2281	0	12.7	0
58	SLU 54	535	0	2281	0	12.7	0
58	SLU 55	535	0	2281	0	12.7	0
58	SLU 56	535	0	2281	0	12.7	0
58	SLU 57	535	0	2281	0	12.7	0
58	SLU 58	535	0	2281	0	12.7	0
58	SLU 59	535	0	2281	0	12.7	0
58	SLU 60	580	0	2501	0	13.54	0
58	SLU 61	580	0	2501	0	13.54	0
58	SLU 62	580	0	2501	0	13.54	0
58	SLU 63	580	0	2501	0	13.54	0
58	SLU 64	493	0	2066	0.01	12.04	0
58	SLU 65	493	0	2066	0.01	12.04	0
58	SLU 66	493	0	2066	0.01	12.04	0
58	SLU 67	493	0	2066	0.01	12.04	0
58	SLU 68	493	0	2066	0.01	12.04	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
58	SLU 69	493	0	2066	0.01	12.04	0
58	SLU 70	493	0	2066	0.01	12.04	0
58	SLU 71	493	0	2066	0.01	12.04	0
58	SLU 72	493	0	2066	0.01	12.04	0
58	SLU 73	598	0	2580	0.01	14.01	0
58	SLU 74	598	0	2580	0.01	14.01	0
58	SLU 75	598	0	2580	0.01	14.01	0
58	SLU 76	598	0	2580	0.01	14.01	0
58	SLU 77	598	0	2580	0.01	14.01	0
58	SLU 78	598	0	2580	0.01	14.01	0
58	SLU 79	598	0	2580	0.01	14.01	0
58	SLU 80	598	0	2580	0.01	14.01	0
58	SLU 81	644	0	2800	0.01	14.85	0
58	SLU 82	644	0	2800	0.01	14.85	0
58	SLU 83	644	0	2800	0.01	14.85	0
58	SLU 84	644	0	2800	0.01	14.85	0
58	SLE RA 1	366	0	1524	0	8.98	0
58	SLE RA 2	366	0	1524	0	8.98	0
58	SLE RA 3	366	0	1524	0	8.98	0
58	SLE RA 4	366	0	1524	0	8.98	0
58	SLE RA 5	366	0	1524	0	8.98	0
58	SLE RA 6	366	0	1524	0	8.98	0
58	SLE RA 7	366	0	1524	0	8.98	0
58	SLE RA 8	366	0	1524	0	8.98	0
58	SLE RA 9	366	0	1524	0	8.98	0
58	SLE RA 10	436	0	1866	0.01	10.28	0
58	SLE RA 11	436	0	1866	0.01	10.28	0
58	SLE RA 12	436	0	1866	0.01	10.28	0
58	SLE RA 13	436	0	1866	0.01	10.28	0
58	SLE RA 14	436	0	1866	0.01	10.28	0
58	SLE RA 15	436	0	1866	0.01	10.28	0
58	SLE RA 16	436	0	1866	0.01	10.28	0
58	SLE RA 17	436	0	1866	0.01	10.28	0
58	SLE RA 18	466	0	2013	0.01	10.85	0
58	SLE RA 19	466	0	2013	0.01	10.85	0
58	SLE RA 20	466	0	2013	0.01	10.85	0
58	SLE RA 21	466	0	2013	0.01	10.85	0
58	SLE FR 1	366	0	1524	0	8.98	0
58	SLE FR 2	366	0	1524	0	8.98	0
58	SLE FR 3	366	0	1524	0	8.98	0
58	SLE FR 4	396	0	1670	0	9.54	0
58	SLE FR 5	396	0	1670	0	9.54	0
58	SLE FR 6	416	0	1768	0	9.91	0
58	SLE QP 1	366	0	1524	0	8.98	0
58	SLE QP 2	396	0	1670	0	9.54	0
58	SLD 1	600	7	2241	-7.04	17.01	1.14
58	SLD 2	600	7	2241	-7.04	17.01	1.14
58	SLD 3	610	-14	2268	9.58	17.38	-1.56
58	SLD 4	610	-14	2268	9.58	17.38	-1.56
58	SLD 5	442	34	1799	-27.31	11.22	4.42
58	SLD 6	442	34	1799	-27.31	11.22	4.42
58	SLD 7	475	-36	1892	28.08	12.45	-4.55
58	SLD 8	475	-36	1892	28.08	12.45	-4.55
58	SLD 9	316	36	1449	-28.07	6.63	4.55
58	SLD 10	316	36	1449	-28.07	6.63	4.55
58	SLD 11	349	-34	1542	27.32	7.85	-4.43
58	SLD 12	349	-34	1542	27.32	7.85	-4.43
58	SLD 13	181	14	1072	-9.57	1.7	1.55
58	SLD 14	181	14	1072	-9.57	1.7	1.55
58	SLD 15	191	-7	1100	7.05	2.06	-1.14
58	SLD 16	191	-7	1100	7.05	2.06	-1.14
58	SLV 1	873	18	3000	-18.06	26.97	2.92
58	SLV 2	873	18	3000	-18.06	26.97	2.92
58	SLV 3	896	-36	3065	24.32	27.83	-3.95
58	SLV 4	896	-36	3065	24.32	27.83	-3.95
58	SLV 5	503	88	1971	-69.69	13.46	11.29
58	SLV 6	503	88	1971	-69.69	13.46	11.29
58	SLV 7	581	-93	2187	71.57	16.33	-11.6
58	SLV 8	581	-93	2187	71.57	16.33	-11.6
58	SLV 9	210	93	1153	-71.56	2.74	11.6
58	SLV 10	210	93	1153	-71.56	2.74	11.6
58	SLV 11	288	-88	1370	69.7	5.62	-11.29
58	SLV 12	288	-88	1370	69.7	5.62	-11.29
58	SLV 13	-105	36	276	-24.31	-8.76	3.95
58	SLV 14	-105	36	276	-24.31	-8.76	3.95
58	SLV 15	-81	-18	341	18.07	-7.9	-2.92
58	SLV 16	-81	-18	341	18.07	-7.9	-2.92
59	SLU 1	166	0	2559	-0.01	8.15	0
59	SLU 2	166	0	2559	-0.01	8.15	0
59	SLU 3	166	0	2559	-0.01	8.15	0
59	SLU 4	166	0	2559	-0.01	8.15	0
59	SLU 5	166	0	2559	-0.01	8.15	0
59	SLU 6	166	0	2559	-0.01	8.15	0
59	SLU 7	166	0	2559	-0.01	8.15	0
59	SLU 8	166	0	2559	-0.01	8.15	0
59	SLU 9	166	0	2559	-0.01	8.15	0
59	SLU 10	177	0	3524	-0.01	8.44	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
59	SLU 11	177	0	3524	-0.01	8.44	0
59	SLU 12	177	0	3524	-0.01	8.44	0
59	SLU 13	177	0	3524	-0.01	8.44	0
59	SLU 14	177	0	3524	-0.01	8.44	0
59	SLU 15	177	0	3524	-0.01	8.44	0
59	SLU 16	177	0	3524	-0.01	8.44	0
59	SLU 17	177	0	3524	-0.01	8.44	0
59	SLU 18	182	0	3937	-0.01	8.56	0
59	SLU 19	182	0	3937	-0.01	8.56	0
59	SLU 20	182	0	3937	-0.01	8.56	0
59	SLU 21	182	0	3937	-0.01	8.56	0
59	SLU 22	179	0	3112	0	8.69	0
59	SLU 23	179	0	3112	0	8.69	0
59	SLU 24	179	0	3112	0	8.69	0
59	SLU 25	179	0	3112	0	8.69	0
59	SLU 26	179	0	3112	0	8.69	0
59	SLU 27	179	0	3112	0	8.69	0
59	SLU 28	179	0	3112	0	8.69	0
59	SLU 29	179	0	3112	0	8.69	0
59	SLU 30	179	0	3112	0	8.69	0
59	SLU 31	190	0	4076	-0.01	8.97	0
59	SLU 32	190	0	4076	-0.01	8.97	0
59	SLU 33	190	0	4076	-0.01	8.97	0
59	SLU 34	190	0	4076	-0.01	8.97	0
59	SLU 35	190	0	4076	-0.01	8.97	0
59	SLU 36	190	0	4076	-0.01	8.97	0
59	SLU 37	190	0	4076	-0.01	8.97	0
59	SLU 38	190	0	4076	-0.01	8.97	0
59	SLU 39	195	0	4490	-0.01	9.1	0
59	SLU 40	195	0	4490	-0.01	9.1	0
59	SLU 41	195	0	4490	-0.01	9.1	0
59	SLU 42	195	0	4490	-0.01	9.1	0
59	SLU 43	211	0	3138	-0.01	10.42	0
59	SLU 44	211	0	3138	-0.01	10.42	0
59	SLU 45	211	0	3138	-0.01	10.42	0
59	SLU 46	211	0	3138	-0.01	10.42	0
59	SLU 47	211	0	3138	-0.01	10.42	0
59	SLU 48	211	0	3138	-0.01	10.42	0
59	SLU 49	211	0	3138	-0.01	10.42	0
59	SLU 50	211	0	3138	-0.01	10.42	0
59	SLU 51	211	0	3138	-0.01	10.42	0
59	SLU 52	222	0	4102	-0.02	10.7	0
59	SLU 53	222	0	4102	-0.02	10.7	0
59	SLU 54	222	0	4102	-0.02	10.7	0
59	SLU 55	222	0	4102	-0.02	10.7	0
59	SLU 56	222	0	4102	-0.02	10.7	0
59	SLU 57	222	0	4102	-0.02	10.7	0
59	SLU 58	222	0	4102	-0.02	10.7	0
59	SLU 59	222	0	4102	-0.02	10.7	0
59	SLU 60	227	0	4516	-0.02	10.82	0
59	SLU 61	227	0	4516	-0.02	10.82	0
59	SLU 62	227	0	4516	-0.02	10.82	0
59	SLU 63	227	0	4516	-0.02	10.82	0
59	SLU 64	224	0	3690	-0.01	10.95	0
59	SLU 65	224	0	3690	-0.01	10.95	0
59	SLU 66	224	0	3690	-0.01	10.95	0
59	SLU 67	224	0	3690	-0.01	10.95	0
59	SLU 68	224	0	3690	-0.01	10.95	0
59	SLU 69	224	0	3690	-0.01	10.95	0
59	SLU 70	224	0	3690	-0.01	10.95	0
59	SLU 71	224	0	3690	-0.01	10.95	0
59	SLU 72	224	0	3690	-0.01	10.95	0
59	SLU 73	235	0	4655	-0.01	11.24	0
59	SLU 74	235	0	4655	-0.01	11.24	0
59	SLU 75	235	0	4655	-0.01	11.24	0
59	SLU 76	235	0	4655	-0.01	11.24	0
59	SLU 77	235	0	4655	-0.01	11.24	0
59	SLU 78	235	0	4655	-0.01	11.24	0
59	SLU 79	235	0	4655	-0.01	11.24	0
59	SLU 80	235	0	4655	-0.01	11.24	0
59	SLU 81	240	0	5068	-0.01	11.36	0
59	SLU 82	240	0	5068	-0.01	11.36	0
59	SLU 83	240	0	5068	-0.01	11.36	0
59	SLU 84	240	0	5068	-0.01	11.36	0
59	SLE RA 1	169	0	2717	-0.01	8.31	0
59	SLE RA 2	169	0	2717	-0.01	8.31	0
59	SLE RA 3	169	0	2717	-0.01	8.31	0
59	SLE RA 4	169	0	2717	-0.01	8.31	0
59	SLE RA 5	169	0	2717	-0.01	8.31	0
59	SLE RA 6	169	0	2717	-0.01	8.31	0
59	SLE RA 7	169	0	2717	-0.01	8.31	0
59	SLE RA 8	169	0	2717	-0.01	8.31	0
59	SLE RA 9	169	0	2717	-0.01	8.31	0
59	SLE RA 10	177	0	3360	-0.01	8.5	0
59	SLE RA 11	177	0	3360	-0.01	8.5	0
59	SLE RA 12	177	0	3360	-0.01	8.5	0
59	SLE RA 13	177	0	3360	-0.01	8.5	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
59	SLE RA 14	177	0	3360	-0.01	8.5	0
59	SLE RA 15	177	0	3360	-0.01	8.5	0
59	SLE RA 16	177	0	3360	-0.01	8.5	0
59	SLE RA 17	177	0	3360	-0.01	8.5	0
59	SLE RA 18	180	0	3636	-0.01	8.58	0
59	SLE RA 19	180	0	3636	-0.01	8.58	0
59	SLE RA 20	180	0	3636	-0.01	8.58	0
59	SLE RA 21	180	0	3636	-0.01	8.58	0
59	SLE FR 1	169	0	2717	-0.01	8.31	0
59	SLE FR 2	169	0	2717	-0.01	8.31	0
59	SLE FR 3	169	0	2717	-0.01	8.31	0
59	SLE FR 4	173	0	2993	-0.01	8.39	0
59	SLE FR 5	173	0	2993	-0.01	8.39	0
59	SLE FR 6	175	0	3177	-0.01	8.44	0
59	SLE QP 1	169	0	2717	-0.01	8.31	0
59	SLE QP 2	173	0	2993	-0.01	8.39	0
59	SLD 1	376	15	3667	-13.41	22.53	0.14
59	SLD 2	376	15	3667	-13.41	22.53	0.14
59	SLD 3	386	-22	3701	18.1	23.22	-0.22
59	SLD 4	386	-22	3701	18.1	23.22	-0.22
59	SLD 5	218	60	3145	-51.81	11.58	0.59
59	SLD 6	218	60	3145	-51.81	11.58	0.59
59	SLD 7	252	-62	3256	53.21	13.89	-0.61
59	SLD 8	252	-62	3256	53.21	13.89	-0.61
59	SLD 9	93	62	2730	-53.22	2.89	0.61
59	SLD 10	93	62	2730	-53.22	2.89	0.61
59	SLD 11	127	-60	2841	51.79	5.19	-0.59
59	SLD 12	127	-60	2841	51.79	5.19	-0.59
59	SLD 13	-41	22	2285	-18.12	-6.44	0.22
59	SLD 14	-41	22	2285	-18.12	-6.44	0.22
59	SLD 15	-31	-15	2318	13.39	-5.75	-0.14
59	SLD 16	-31	-15	2318	13.39	-5.75	-0.14
59	SLV 1	647	38	4565	-34.27	41.39	0.37
59	SLV 2	647	38	4565	-34.27	41.39	0.37
59	SLV 3	671	-55	4643	46.03	43	-0.55
59	SLV 4	671	-55	4643	46.03	43	-0.55
59	SLV 5	279	153	3346	-132.08	15.84	1.5
59	SLV 6	279	153	3346	-132.08	15.84	1.5
59	SLV 7	358	-158	3606	135.59	21.22	-1.56
59	SLV 8	358	-158	3606	135.59	21.22	-1.56
59	SLV 9	-13	158	2379	-135.61	-4.44	1.56
59	SLV 10	-13	158	2379	-135.61	-4.44	1.56
59	SLV 11	67	-153	2640	132.06	0.93	-1.51
59	SLV 12	67	-153	2640	132.06	0.93	-1.51
59	SLV 13	-326	55	1343	-46.04	-26.23	0.55
59	SLV 14	-326	55	1343	-46.04	-26.23	0.55
59	SLV 15	-302	-38	1421	34.26	-24.61	-0.37
59	SLV 16	-302	-38	1421	34.26	-24.61	-0.37
60	SLU 1	-12	0	2515	-0.03	-0.61	0
60	SLU 2	-12	0	2515	-0.03	-0.61	0
60	SLU 3	-12	0	2515	-0.03	-0.61	0
60	SLU 4	-12	0	2515	-0.03	-0.61	0
60	SLU 5	-12	0	2515	-0.03	-0.61	0
60	SLU 6	-12	0	2515	-0.03	-0.61	0
60	SLU 7	-12	0	2515	-0.03	-0.61	0
60	SLU 8	-12	0	2515	-0.03	-0.61	0
60	SLU 9	-12	0	2515	-0.03	-0.61	0
60	SLU 10	-97	0	3484	-0.03	-3.76	0
60	SLU 11	-97	0	3484	-0.03	-3.76	0
60	SLU 12	-97	0	3484	-0.03	-3.76	0
60	SLU 13	-97	0	3484	-0.03	-3.76	0
60	SLU 14	-97	0	3484	-0.03	-3.76	0
60	SLU 15	-97	0	3484	-0.03	-3.76	0
60	SLU 16	-97	0	3484	-0.03	-3.76	0
60	SLU 17	-97	0	3484	-0.03	-3.76	0
60	SLU 18	-134	0	3900	-0.04	-5.11	0
60	SLU 19	-134	0	3900	-0.04	-5.11	0
60	SLU 20	-134	0	3900	-0.04	-5.11	0
60	SLU 21	-134	0	3900	-0.04	-5.11	0
60	SLU 22	-50	0	3065	-0.02	-2.01	0
60	SLU 23	-50	0	3065	-0.02	-2.01	0
60	SLU 24	-50	0	3065	-0.02	-2.01	0
60	SLU 25	-50	0	3065	-0.02	-2.01	0
60	SLU 26	-50	0	3065	-0.02	-2.01	0
60	SLU 27	-50	0	3065	-0.02	-2.01	0
60	SLU 28	-50	0	3065	-0.02	-2.01	0
60	SLU 29	-50	0	3065	-0.02	-2.01	0
60	SLU 30	-50	0	3065	-0.02	-2.01	0
60	SLU 31	-135	0	4035	-0.03	-5.17	0
60	SLU 32	-135	0	4035	-0.03	-5.17	0
60	SLU 33	-135	0	4035	-0.03	-5.17	0
60	SLU 34	-135	0	4035	-0.03	-5.17	0
60	SLU 35	-135	0	4035	-0.03	-5.17	0
60	SLU 36	-135	0	4035	-0.03	-5.17	0
60	SLU 37	-135	0	4035	-0.03	-5.17	0
60	SLU 38	-135	0	4035	-0.03	-5.17	0
60	SLU 39	-171	0	4450	-0.03	-6.52	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
60	SLU 40	-171	0	4450	-0.03	-6.52	0
60	SLU 41	-171	0	4450	-0.03	-6.52	0
60	SLU 42	-171	0	4450	-0.03	-6.52	0
60	SLU 43	-3	0	3081	-0.03	-0.32	0
60	SLU 44	-3	0	3081	-0.03	-0.32	0
60	SLU 45	-3	0	3081	-0.03	-0.32	0
60	SLU 46	-3	0	3081	-0.03	-0.32	0
60	SLU 47	-3	0	3081	-0.03	-0.32	0
60	SLU 48	-3	0	3081	-0.03	-0.32	0
60	SLU 49	-3	0	3081	-0.03	-0.32	0
60	SLU 50	-3	0	3081	-0.03	-0.32	0
60	SLU 51	-3	0	3081	-0.03	-0.32	0
60	SLU 52	-88	0	4050	-0.04	-3.47	0
60	SLU 53	-88	0	4050	-0.04	-3.47	0
60	SLU 54	-88	0	4050	-0.04	-3.47	0
60	SLU 55	-88	0	4050	-0.04	-3.47	0
60	SLU 56	-88	0	4050	-0.04	-3.47	0
60	SLU 57	-88	0	4050	-0.04	-3.47	0
60	SLU 58	-88	0	4050	-0.04	-3.47	0
60	SLU 59	-88	0	4050	-0.04	-3.47	0
60	SLU 60	-124	0	4465	-0.05	-4.82	0
60	SLU 61	-124	0	4465	-0.05	-4.82	0
60	SLU 62	-124	0	4465	-0.05	-4.82	0
60	SLU 63	-124	0	4465	-0.05	-4.82	0
60	SLU 64	-41	0	3631	-0.03	-1.72	0
60	SLU 65	-41	0	3631	-0.03	-1.72	0
60	SLU 66	-41	0	3631	-0.03	-1.72	0
60	SLU 67	-41	0	3631	-0.03	-1.72	0
60	SLU 68	-41	0	3631	-0.03	-1.72	0
60	SLU 69	-41	0	3631	-0.03	-1.72	0
60	SLU 70	-41	0	3631	-0.03	-1.72	0
60	SLU 71	-41	0	3631	-0.03	-1.72	0
60	SLU 72	-41	0	3631	-0.03	-1.72	0
60	SLU 73	-126	0	4600	-0.04	-4.87	0
60	SLU 74	-126	0	4600	-0.04	-4.87	0
60	SLU 75	-126	0	4600	-0.04	-4.87	0
60	SLU 76	-126	0	4600	-0.04	-4.87	0
60	SLU 77	-126	0	4600	-0.04	-4.87	0
60	SLU 78	-126	0	4600	-0.04	-4.87	0
60	SLU 79	-126	0	4600	-0.04	-4.87	0
60	SLU 80	-126	0	4600	-0.04	-4.87	0
60	SLU 81	-162	0	5016	-0.04	-6.22	0
60	SLU 82	-162	0	5016	-0.04	-6.22	0
60	SLU 83	-162	0	5016	-0.04	-6.22	0
60	SLU 84	-162	0	5016	-0.04	-6.22	0
60	SLE RA 1	-23	0	2672	-0.03	-1.01	0
60	SLE RA 2	-23	0	2672	-0.03	-1.01	0
60	SLE RA 3	-23	0	2672	-0.03	-1.01	0
60	SLE RA 4	-23	0	2672	-0.03	-1.01	0
60	SLE RA 5	-23	0	2672	-0.03	-1.01	0
60	SLE RA 6	-23	0	2672	-0.03	-1.01	0
60	SLE RA 7	-23	0	2672	-0.03	-1.01	0
60	SLE RA 8	-23	0	2672	-0.03	-1.01	0
60	SLE RA 9	-23	0	2672	-0.03	-1.01	0
60	SLE RA 10	-80	0	3318	-0.03	-3.11	0
60	SLE RA 11	-80	0	3318	-0.03	-3.11	0
60	SLE RA 12	-80	0	3318	-0.03	-3.11	0
60	SLE RA 13	-80	0	3318	-0.03	-3.11	0
60	SLE RA 14	-80	0	3318	-0.03	-3.11	0
60	SLE RA 15	-80	0	3318	-0.03	-3.11	0
60	SLE RA 16	-80	0	3318	-0.03	-3.11	0
60	SLE RA 17	-80	0	3318	-0.03	-3.11	0
60	SLE RA 18	-104	0	3595	-0.03	-4.01	0
60	SLE RA 19	-104	0	3595	-0.03	-4.01	0
60	SLE RA 20	-104	0	3595	-0.03	-4.01	0
60	SLE RA 21	-104	0	3595	-0.03	-4.01	0
60	SLE FR 1	-23	0	2672	-0.03	-1.01	0
60	SLE FR 2	-23	0	2672	-0.03	-1.01	0
60	SLE FR 3	-23	0	2672	-0.03	-1.01	0
60	SLE FR 4	-47	0	2949	-0.03	-1.91	0
60	SLE FR 5	-47	0	2949	-0.03	-1.91	0
60	SLE FR 6	-63	0	3134	-0.03	-2.51	0
60	SLE QP 1	-23	0	2672	-0.03	-1.01	0
60	SLE QP 2	-47	0	2949	-0.03	-1.91	0
60	SLD 1	228	14	3316	-15.6	8.58	0.3
60	SLD 2	228	14	3316	-15.6	8.58	0.3
60	SLD 3	241	-8	3335	11.06	9.1	-0.19
60	SLD 4	241	-8	3335	11.06	9.1	-0.19
60	SLD 5	14	37	3030	-45.14	0.44	0.82
60	SLD 6	14	37	3030	-45.14	0.44	0.82
60	SLD 7	60	-35	3094	43.74	2.19	-0.79
60	SLD 8	60	-35	3094	43.74	2.19	-0.79
60	SLD 9	-155	35	2804	-43.8	-6.01	0.79
60	SLD 10	-155	35	2804	-43.8	-6.01	0.79
60	SLD 11	-109	-37	2868	45.09	-4.26	-0.82
60	SLD 12	-109	-37	2868	45.09	-4.26	-0.82
60	SLD 13	-336	8	2563	-11.12	-12.93	0.19



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
60	SLD 14	-336	8	2563	-11.12	-12.93	0.19
60	SLD 15	-322	-14	2582	15.55	-12.4	-0.29
60	SLD 16	-322	-14	2582	15.55	-12.4	-0.29
60	SLV 1	594	35	3804	-39.7	22.57	0.75
60	SLV 2	594	35	3804	-39.7	22.57	0.75
60	SLV 3	626	-20	3849	28.25	23.8	-0.49
60	SLV 4	626	-20	3849	28.25	23.8	-0.49
60	SLV 5	96	94	3137	-114.98	3.57	2.1
60	SLV 6	96	94	3137	-114.98	3.57	2.1
60	SLV 7	204	-89	3288	111.5	7.66	-2.02
60	SLV 8	204	-89	3288	111.5	7.66	-2.02
60	SLV 9	-298	89	2610	-111.56	-11.49	2.02
60	SLV 10	-298	89	2610	-111.56	-11.49	2.02
60	SLV 11	-191	-94	2761	114.92	-7.39	-2.1
60	SLV 12	-191	-94	2761	114.92	-7.39	-2.1
60	SLV 13	-721	20	2049	-28.3	-27.62	0.49
60	SLV 14	-721	20	2049	-28.3	-27.62	0.49
60	SLV 15	-689	-35	2094	39.64	-26.39	-0.75
60	SLV 16	-689	-35	2094	39.64	-26.39	-0.75
61	SLU 1	-146	0	2477	-0.04	-4.36	0
61	SLU 2	-146	0	2477	-0.04	-4.36	0
61	SLU 3	-146	0	2477	-0.04	-4.36	0
61	SLU 4	-146	0	2477	-0.04	-4.36	0
61	SLU 5	-146	0	2477	-0.04	-4.36	0
61	SLU 6	-146	0	2477	-0.04	-4.36	0
61	SLU 7	-146	0	2477	-0.04	-4.36	0
61	SLU 8	-146	0	2477	-0.04	-4.36	0
61	SLU 9	-146	0	2477	-0.04	-4.36	0
61	SLU 10	-295	0	3416	-0.05	-8.75	0
61	SLU 11	-295	0	3416	-0.05	-8.75	0
61	SLU 12	-295	0	3416	-0.05	-8.75	0
61	SLU 13	-295	0	3416	-0.05	-8.75	0
61	SLU 14	-295	0	3416	-0.05	-8.75	0
61	SLU 15	-295	0	3416	-0.05	-8.75	0
61	SLU 16	-295	0	3416	-0.05	-8.75	0
61	SLU 17	-295	0	3416	-0.05	-8.75	0
61	SLU 18	-358	0	3819	-0.06	-10.62	0
61	SLU 19	-358	0	3819	-0.06	-10.62	0
61	SLU 20	-358	0	3819	-0.06	-10.62	0
61	SLU 21	-358	0	3819	-0.06	-10.62	0
61	SLU 22	-219	0	3011	-0.04	-6.51	0
61	SLU 23	-219	0	3011	-0.04	-6.51	0
61	SLU 24	-219	0	3011	-0.04	-6.51	0
61	SLU 25	-219	0	3011	-0.04	-6.51	0
61	SLU 26	-219	0	3011	-0.04	-6.51	0
61	SLU 27	-219	0	3011	-0.04	-6.51	0
61	SLU 28	-219	0	3011	-0.04	-6.51	0
61	SLU 29	-219	0	3011	-0.04	-6.51	0
61	SLU 30	-219	0	3011	-0.04	-6.51	0
61	SLU 31	-367	0	3950	-0.05	-10.89	0
61	SLU 32	-367	0	3950	-0.05	-10.89	0
61	SLU 33	-367	0	3950	-0.05	-10.89	0
61	SLU 34	-367	0	3950	-0.05	-10.89	0
61	SLU 35	-367	0	3950	-0.05	-10.89	0
61	SLU 36	-367	0	3950	-0.05	-10.89	0
61	SLU 37	-367	0	3950	-0.05	-10.89	0
61	SLU 38	-367	0	3950	-0.05	-10.89	0
61	SLU 39	-431	0	4353	-0.05	-12.77	0
61	SLU 40	-431	0	4353	-0.05	-12.77	0
61	SLU 41	-431	0	4353	-0.05	-12.77	0
61	SLU 42	-431	0	4353	-0.05	-12.77	0
61	SLU 43	-165	0	3038	-0.05	-4.94	0
61	SLU 44	-165	0	3038	-0.05	-4.94	0
61	SLU 45	-165	0	3038	-0.05	-4.94	0
61	SLU 46	-165	0	3038	-0.05	-4.94	0
61	SLU 47	-165	0	3038	-0.05	-4.94	0
61	SLU 48	-165	0	3038	-0.05	-4.94	0
61	SLU 49	-165	0	3038	-0.05	-4.94	0
61	SLU 50	-165	0	3038	-0.05	-4.94	0
61	SLU 51	-165	0	3038	-0.05	-4.94	0
61	SLU 52	-314	0	3977	-0.06	-9.32	0
61	SLU 53	-314	0	3977	-0.06	-9.32	0
61	SLU 54	-314	0	3977	-0.06	-9.32	0
61	SLU 55	-314	0	3977	-0.06	-9.32	0
61	SLU 56	-314	0	3977	-0.06	-9.32	0
61	SLU 57	-314	0	3977	-0.06	-9.32	0
61	SLU 58	-314	0	3977	-0.06	-9.32	0
61	SLU 59	-314	0	3977	-0.06	-9.32	0
61	SLU 60	-377	0	4379	-0.07	-11.2	0
61	SLU 61	-377	0	4379	-0.07	-11.2	0
61	SLU 62	-377	0	4379	-0.07	-11.2	0
61	SLU 63	-377	0	4379	-0.07	-11.2	0
61	SLU 64	-238	0	3571	-0.05	-7.08	0
61	SLU 65	-238	0	3571	-0.05	-7.08	0
61	SLU 66	-238	0	3571	-0.05	-7.08	0
61	SLU 67	-238	0	3571	-0.05	-7.08	0
61	SLU 68	-238	0	3571	-0.05	-7.08	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
61	SLU 69	-238	0	3571	-0.05	-7.08	0
61	SLU 70	-238	0	3571	-0.05	-7.08	0
61	SLU 71	-238	0	3571	-0.05	-7.08	0
61	SLU 72	-238	0	3571	-0.05	-7.08	0
61	SLU 73	-386	0	4510	-0.06	-11.46	0
61	SLU 74	-386	0	4510	-0.06	-11.46	0
61	SLU 75	-386	0	4510	-0.06	-11.46	0
61	SLU 76	-386	0	4510	-0.06	-11.46	0
61	SLU 77	-386	0	4510	-0.06	-11.46	0
61	SLU 78	-386	0	4510	-0.06	-11.46	0
61	SLU 79	-386	0	4510	-0.06	-11.46	0
61	SLU 80	-386	0	4510	-0.06	-11.46	0
61	SLU 81	-450	0	4913	-0.07	-13.34	0
61	SLU 82	-450	0	4913	-0.07	-13.34	0
61	SLU 83	-450	0	4913	-0.07	-13.34	0
61	SLU 84	-450	0	4913	-0.07	-13.34	0
61	SLE RA 1	-167	0	2630	-0.04	-4.98	0
61	SLE RA 2	-167	0	2630	-0.04	-4.98	0
61	SLE RA 3	-167	0	2630	-0.04	-4.98	0
61	SLE RA 4	-167	0	2630	-0.04	-4.98	0
61	SLE RA 5	-167	0	2630	-0.04	-4.98	0
61	SLE RA 6	-167	0	2630	-0.04	-4.98	0
61	SLE RA 7	-167	0	2630	-0.04	-4.98	0
61	SLE RA 8	-167	0	2630	-0.04	-4.98	0
61	SLE RA 9	-167	0	2630	-0.04	-4.98	0
61	SLE RA 10	-266	0	3256	-0.05	-7.9	0
61	SLE RA 11	-266	0	3256	-0.05	-7.9	0
61	SLE RA 12	-266	0	3256	-0.05	-7.9	0
61	SLE RA 13	-266	0	3256	-0.05	-7.9	0
61	SLE RA 14	-266	0	3256	-0.05	-7.9	0
61	SLE RA 15	-266	0	3256	-0.05	-7.9	0
61	SLE RA 16	-266	0	3256	-0.05	-7.9	0
61	SLE RA 17	-266	0	3256	-0.05	-7.9	0
61	SLE RA 18	-308	0	3524	-0.05	-9.15	0
61	SLE RA 19	-308	0	3524	-0.05	-9.15	0
61	SLE RA 20	-308	0	3524	-0.05	-9.15	0
61	SLE RA 21	-308	0	3524	-0.05	-9.15	0
61	SLE FR 1	-167	0	2630	-0.04	-4.98	0
61	SLE FR 2	-167	0	2630	-0.04	-4.98	0
61	SLE FR 3	-167	0	2630	-0.04	-4.98	0
61	SLE FR 4	-209	0	2898	-0.04	-6.23	0
61	SLE FR 5	-209	0	2898	-0.04	-6.23	0
61	SLE FR 6	-238	0	3077	-0.04	-7.06	0
61	SLE QP 1	-167	0	2630	-0.04	-4.98	0
61	SLE QP 2	-209	0	2898	-0.04	-6.23	0
61	SLD 1	82	10	3121	-13.04	2.93	0.12
61	SLD 2	82	10	3121	-13.04	2.93	0.12
61	SLD 3	97	-4	3134	8.52	3.38	-0.06
61	SLD 4	97	-4	3134	8.52	3.38	-0.06
61	SLD 5	-144	25	2945	-36.65	-4.17	0.31
61	SLD 6	-144	25	2945	-36.65	-4.17	0.31
61	SLD 7	-95	-23	2989	35.23	-2.66	-0.29
61	SLD 8	-95	-23	2989	35.23	-2.66	-0.29
61	SLD 9	-323	23	2807	-35.32	-9.8	0.29
61	SLD 10	-323	23	2807	-35.32	-9.8	0.29
61	SLD 11	-275	-25	2851	36.56	-8.29	-0.31
61	SLD 12	-275	-25	2851	36.56	-8.29	-0.31
61	SLD 13	-515	4	2662	-8.6	-15.84	0.06
61	SLD 14	-515	4	2662	-8.6	-15.84	0.06
61	SLD 15	-501	-10	2676	12.96	-15.38	-0.12
61	SLD 16	-501	-10	2676	12.96	-15.38	-0.12
61	SLV 1	471	26	3416	-33.18	15.14	0.3
61	SLV 2	471	26	3416	-33.18	15.14	0.3
61	SLV 3	506	-11	3448	21.77	16.2	-0.16
61	SLV 4	506	-11	3448	21.77	16.2	-0.16
61	SLV 5	-57	63	3006	-93.33	-1.42	0.78
61	SLV 6	-57	63	3006	-93.33	-1.42	0.78
61	SLV 7	57	-59	3111	89.85	2.11	-0.74
61	SLV 8	57	-59	3111	89.85	2.11	-0.74
61	SLV 9	-476	59	2685	-89.94	-14.56	0.74
61	SLV 10	-476	59	2685	-89.94	-14.56	0.74
61	SLV 11	-362	-63	2791	93.25	-11.03	-0.78
61	SLV 12	-362	-63	2791	93.25	-11.03	-0.78
61	SLV 13	-924	11	2349	-21.86	-28.66	0.16
61	SLV 14	-924	11	2349	-21.86	-28.66	0.16
61	SLV 15	-890	-26	2380	33.1	-27.6	-0.3
61	SLV 16	-890	-26	2380	33.1	-27.6	-0.3
62	SLU 1	-236	0	2410	-0.05	-6.18	0
62	SLU 2	-236	0	2410	-0.05	-6.18	0
62	SLU 3	-236	0	2410	-0.05	-6.18	0
62	SLU 4	-236	0	2410	-0.05	-6.18	0
62	SLU 5	-236	0	2410	-0.05	-6.18	0
62	SLU 6	-236	0	2410	-0.05	-6.18	0
62	SLU 7	-236	0	2410	-0.05	-6.18	0
62	SLU 8	-236	0	2410	-0.05	-6.18	0
62	SLU 9	-236	0	2410	-0.05	-6.18	0
62	SLU 10	-430	0	3299	-0.06	-11.32	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
62	SLU 11	-430	0	3299	-0.06	-11.32	0
62	SLU 12	-430	0	3299	-0.06	-11.32	0
62	SLU 13	-430	0	3299	-0.06	-11.32	0
62	SLU 14	-430	0	3299	-0.06	-11.32	0
62	SLU 15	-430	0	3299	-0.06	-11.32	0
62	SLU 16	-430	0	3299	-0.06	-11.32	0
62	SLU 17	-430	0	3299	-0.06	-11.32	0
62	SLU 18	-514	0	3680	-0.07	-13.53	0
62	SLU 19	-514	0	3680	-0.07	-13.53	0
62	SLU 20	-514	0	3680	-0.07	-13.53	0
62	SLU 21	-514	0	3680	-0.07	-13.53	0
62	SLU 22	-333	0	2916	-0.05	-8.74	0
62	SLU 23	-333	0	2916	-0.05	-8.74	0
62	SLU 24	-333	0	2916	-0.05	-8.74	0
62	SLU 25	-333	0	2916	-0.05	-8.74	0
62	SLU 26	-333	0	2916	-0.05	-8.74	0
62	SLU 27	-333	0	2916	-0.05	-8.74	0
62	SLU 28	-333	0	2916	-0.05	-8.74	0
62	SLU 29	-333	0	2916	-0.05	-8.74	0
62	SLU 30	-333	0	2916	-0.05	-8.74	0
62	SLU 31	-528	0	3805	-0.06	-13.89	0
62	SLU 32	-528	0	3805	-0.06	-13.89	0
62	SLU 33	-528	0	3805	-0.06	-13.89	0
62	SLU 34	-528	0	3805	-0.06	-13.89	0
62	SLU 35	-528	0	3805	-0.06	-13.89	0
62	SLU 36	-528	0	3805	-0.06	-13.89	0
62	SLU 37	-528	0	3805	-0.06	-13.89	0
62	SLU 38	-528	0	3805	-0.06	-13.89	0
62	SLU 39	-611	0	4187	-0.07	-16.09	0
62	SLU 40	-611	0	4187	-0.07	-16.09	0
62	SLU 41	-611	0	4187	-0.07	-16.09	0
62	SLU 42	-611	0	4187	-0.07	-16.09	0
62	SLU 43	-274	0	2959	-0.06	-7.15	0
62	SLU 44	-274	0	2959	-0.06	-7.15	0
62	SLU 45	-274	0	2959	-0.06	-7.15	0
62	SLU 46	-274	0	2959	-0.06	-7.15	0
62	SLU 47	-274	0	2959	-0.06	-7.15	0
62	SLU 48	-274	0	2959	-0.06	-7.15	0
62	SLU 49	-274	0	2959	-0.06	-7.15	0
62	SLU 50	-274	0	2959	-0.06	-7.15	0
62	SLU 51	-274	0	2959	-0.06	-7.15	0
62	SLU 52	-468	0	3848	-0.08	-12.3	0
62	SLU 53	-468	0	3848	-0.08	-12.3	0
62	SLU 54	-468	0	3848	-0.08	-12.3	0
62	SLU 55	-468	0	3848	-0.08	-12.3	0
62	SLU 56	-468	0	3848	-0.08	-12.3	0
62	SLU 57	-468	0	3848	-0.08	-12.3	0
62	SLU 58	-468	0	3848	-0.08	-12.3	0
62	SLU 59	-468	0	3848	-0.08	-12.3	0
62	SLU 60	-551	0	4230	-0.08	-14.5	0
62	SLU 61	-551	0	4230	-0.08	-14.5	0
62	SLU 62	-551	0	4230	-0.08	-14.5	0
62	SLU 63	-551	0	4230	-0.08	-14.5	0
62	SLU 64	-371	0	3466	-0.06	-9.72	0
62	SLU 65	-371	0	3466	-0.06	-9.72	0
62	SLU 66	-371	0	3466	-0.06	-9.72	0
62	SLU 67	-371	0	3466	-0.06	-9.72	0
62	SLU 68	-371	0	3466	-0.06	-9.72	0
62	SLU 69	-371	0	3466	-0.06	-9.72	0
62	SLU 70	-371	0	3466	-0.06	-9.72	0
62	SLU 71	-371	0	3466	-0.06	-9.72	0
62	SLU 72	-371	0	3466	-0.06	-9.72	0
62	SLU 73	-565	0	4355	-0.08	-14.86	0
62	SLU 74	-565	0	4355	-0.08	-14.86	0
62	SLU 75	-565	0	4355	-0.08	-14.86	0
62	SLU 76	-565	0	4355	-0.08	-14.86	0
62	SLU 77	-565	0	4355	-0.08	-14.86	0
62	SLU 78	-565	0	4355	-0.08	-14.86	0
62	SLU 79	-565	0	4355	-0.08	-14.86	0
62	SLU 80	-565	0	4355	-0.08	-14.86	0
62	SLU 81	-648	0	4736	-0.08	-17.07	0
62	SLU 82	-648	0	4736	-0.08	-17.07	0
62	SLU 83	-648	0	4736	-0.08	-17.07	0
62	SLU 84	-648	0	4736	-0.08	-17.07	0
62	SLE RA 1	-264	0	2554	-0.05	-6.91	0
62	SLE RA 2	-264	0	2554	-0.05	-6.91	0
62	SLE RA 3	-264	0	2554	-0.05	-6.91	0
62	SLE RA 4	-264	0	2554	-0.05	-6.91	0
62	SLE RA 5	-264	0	2554	-0.05	-6.91	0
62	SLE RA 6	-264	0	2554	-0.05	-6.91	0
62	SLE RA 7	-264	0	2554	-0.05	-6.91	0
62	SLE RA 8	-264	0	2554	-0.05	-6.91	0
62	SLE RA 9	-264	0	2554	-0.05	-6.91	0
62	SLE RA 10	-393	0	3147	-0.06	-10.34	0
62	SLE RA 11	-393	0	3147	-0.06	-10.34	0
62	SLE RA 12	-393	0	3147	-0.06	-10.34	0
62	SLE RA 13	-393	0	3147	-0.06	-10.34	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
62	SLE RA 14	-393	0	3147	-0.06	-10.34	0
62	SLE RA 15	-393	0	3147	-0.06	-10.34	0
62	SLE RA 16	-393	0	3147	-0.06	-10.34	0
62	SLE RA 17	-393	0	3147	-0.06	-10.34	0
62	SLE RA 18	-449	0	3401	-0.06	-11.81	0
62	SLE RA 19	-449	0	3401	-0.06	-11.81	0
62	SLE RA 20	-449	0	3401	-0.06	-11.81	0
62	SLE RA 21	-449	0	3401	-0.06	-11.81	0
62	SLE FR 1	-264	0	2554	-0.05	-6.91	0
62	SLE FR 2	-264	0	2554	-0.05	-6.91	0
62	SLE FR 3	-264	0	2554	-0.05	-6.91	0
62	SLE FR 4	-319	0	2809	-0.05	-8.38	0
62	SLE FR 5	-319	0	2809	-0.05	-8.38	0
62	SLE FR 6	-356	0	2978	-0.05	-9.36	0
62	SLE QP 1	-264	0	2554	-0.05	-6.91	0
62	SLE QP 2	-319	0	2809	-0.05	-8.38	0
62	SLD 1	-12	9	2933	-11.05	0.37	0.04
62	SLD 2	-12	9	2933	-11.05	0.37	0.04
62	SLD 3	4	-3	2943	6.57	0.81	-0.02
62	SLD 4	4	-3	2943	6.57	0.81	-0.02
62	SLD 5	-251	22	2831	-30.07	-6.43	0.09
62	SLD 6	-251	22	2831	-30.07	-6.43	0.09
62	SLD 7	-199	-20	2864	28.65	-4.95	-0.09
62	SLD 8	-199	-20	2864	28.65	-4.95	-0.09
62	SLD 9	-440	21	2753	-28.76	-11.81	0.09
62	SLD 10	-440	21	2753	-28.76	-11.81	0.09
62	SLD 11	-388	-22	2786	29.97	-10.34	-0.09
62	SLD 12	-388	-22	2786	29.97	-10.34	-0.09
62	SLD 13	-643	4	2674	-6.67	-17.58	0.02
62	SLD 14	-643	4	2674	-6.67	-17.58	0.02
62	SLD 15	-627	-9	2684	10.94	-17.14	-0.04
62	SLD 16	-627	-9	2684	10.94	-17.14	-0.04
62	SLV 1	398	24	3098	-28.04	12.06	0.1
62	SLV 2	398	24	3098	-28.04	12.06	0.1
62	SLV 3	435	-9	3123	16.89	13.09	-0.04
62	SLV 4	435	-9	3123	16.89	13.09	-0.04
62	SLV 5	-159	57	2857	-76.59	-3.82	0.24
62	SLV 6	-159	57	2857	-76.59	-3.82	0.24
62	SLV 7	-38	-52	2941	73.17	-0.37	-0.22
62	SLV 8	-38	-52	2941	73.17	-0.37	-0.22
62	SLV 9	-601	53	2676	-73.28	-16.39	0.22
62	SLV 10	-601	53	2676	-73.28	-16.39	0.22
62	SLV 11	-480	-57	2760	76.49	-12.95	-0.24
62	SLV 12	-480	-57	2760	76.49	-12.95	-0.24
62	SLV 13	-1074	9	2494	-16.99	-29.85	0.04
62	SLV 14	-1074	9	2494	-16.99	-29.85	0.04
62	SLV 15	-1037	-24	2519	27.94	-28.82	-0.1
62	SLV 16	-1037	-24	2519	27.94	-28.82	-0.1
63	SLU 1	-317	0	2325	-0.05	-8.24	0
63	SLU 2	-317	0	2325	-0.05	-8.24	0
63	SLU 3	-317	0	2325	-0.05	-8.24	0
63	SLU 4	-317	0	2325	-0.05	-8.24	0
63	SLU 5	-317	0	2325	-0.05	-8.24	0
63	SLU 6	-317	0	2325	-0.05	-8.24	0
63	SLU 7	-317	0	2325	-0.05	-8.24	0
63	SLU 8	-317	0	2325	-0.05	-8.24	0
63	SLU 9	-317	0	2325	-0.05	-8.24	0
63	SLU 10	-550	0	3152	-0.06	-14.26	0
63	SLU 11	-550	0	3152	-0.06	-14.26	0
63	SLU 12	-550	0	3152	-0.06	-14.26	0
63	SLU 13	-550	0	3152	-0.06	-14.26	0
63	SLU 14	-550	0	3152	-0.06	-14.26	0
63	SLU 15	-550	0	3152	-0.06	-14.26	0
63	SLU 16	-550	0	3152	-0.06	-14.26	0
63	SLU 17	-550	0	3152	-0.06	-14.26	0
63	SLU 18	-650	0	3507	-0.07	-16.85	0
63	SLU 19	-650	0	3507	-0.07	-16.85	0
63	SLU 20	-650	0	3507	-0.07	-16.85	0
63	SLU 21	-650	0	3507	-0.07	-16.85	0
63	SLU 22	-435	0	2798	-0.05	-11.3	0
63	SLU 23	-435	0	2798	-0.05	-11.3	0
63	SLU 24	-435	0	2798	-0.05	-11.3	0
63	SLU 25	-435	0	2798	-0.05	-11.3	0
63	SLU 26	-435	0	2798	-0.05	-11.3	0
63	SLU 27	-435	0	2798	-0.05	-11.3	0
63	SLU 28	-435	0	2798	-0.05	-11.3	0
63	SLU 29	-435	0	2798	-0.05	-11.3	0
63	SLU 30	-435	0	2798	-0.05	-11.3	0
63	SLU 31	-668	0	3625	-0.06	-17.33	0
63	SLU 32	-668	0	3625	-0.06	-17.33	0
63	SLU 33	-668	0	3625	-0.06	-17.33	0
63	SLU 34	-668	0	3625	-0.06	-17.33	0
63	SLU 35	-668	0	3625	-0.06	-17.33	0
63	SLU 36	-668	0	3625	-0.06	-17.33	0
63	SLU 37	-668	0	3625	-0.06	-17.33	0
63	SLU 38	-668	0	3625	-0.06	-17.33	0
63	SLU 39	-768	0	3980	-0.07	-19.91	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
63	SLU 40	-768	0	3980	-0.07	-19.91	0
63	SLU 41	-768	0	3980	-0.07	-19.91	0
63	SLU 42	-768	0	3980	-0.07	-19.91	0
63	SLU 43	-371	0	2860	-0.07	-9.66	0
63	SLU 44	-371	0	2860	-0.07	-9.66	0
63	SLU 45	-371	0	2860	-0.07	-9.66	0
63	SLU 46	-371	0	2860	-0.07	-9.66	0
63	SLU 47	-371	0	2860	-0.07	-9.66	0
63	SLU 48	-371	0	2860	-0.07	-9.66	0
63	SLU 49	-371	0	2860	-0.07	-9.66	0
63	SLU 50	-371	0	2860	-0.07	-9.66	0
63	SLU 51	-371	0	2860	-0.07	-9.66	0
63	SLU 52	-604	0	3688	-0.08	-15.69	0
63	SLU 53	-604	0	3688	-0.08	-15.69	0
63	SLU 54	-604	0	3688	-0.08	-15.69	0
63	SLU 55	-604	0	3688	-0.08	-15.69	0
63	SLU 56	-604	0	3688	-0.08	-15.69	0
63	SLU 57	-604	0	3688	-0.08	-15.69	0
63	SLU 58	-604	0	3688	-0.08	-15.69	0
63	SLU 59	-604	0	3688	-0.08	-15.69	0
63	SLU 60	-704	0	4042	-0.08	-18.27	0
63	SLU 61	-704	0	4042	-0.08	-18.27	0
63	SLU 62	-704	0	4042	-0.08	-18.27	0
63	SLU 63	-704	0	4042	-0.08	-18.27	0
63	SLU 64	-490	0	3333	-0.07	-12.72	0
63	SLU 65	-490	0	3333	-0.07	-12.72	0
63	SLU 66	-490	0	3333	-0.07	-12.72	0
63	SLU 67	-490	0	3333	-0.07	-12.72	0
63	SLU 68	-490	0	3333	-0.07	-12.72	0
63	SLU 69	-490	0	3333	-0.07	-12.72	0
63	SLU 70	-490	0	3333	-0.07	-12.72	0
63	SLU 71	-490	0	3333	-0.07	-12.72	0
63	SLU 72	-490	0	3333	-0.07	-12.72	0
63	SLU 73	-723	0	4161	-0.08	-18.75	0
63	SLU 74	-723	0	4161	-0.08	-18.75	0
63	SLU 75	-723	0	4161	-0.08	-18.75	0
63	SLU 76	-723	0	4161	-0.08	-18.75	0
63	SLU 77	-723	0	4161	-0.08	-18.75	0
63	SLU 78	-723	0	4161	-0.08	-18.75	0
63	SLU 79	-723	0	4161	-0.08	-18.75	0
63	SLU 80	-723	0	4161	-0.08	-18.75	0
63	SLU 81	-823	0	4515	-0.08	-21.33	0
63	SLU 82	-823	0	4515	-0.08	-21.33	0
63	SLU 83	-823	0	4515	-0.08	-21.33	0
63	SLU 84	-823	0	4515	-0.08	-21.33	0
63	SLE RA 1	-351	0	2460	-0.05	-9.11	0
63	SLE RA 2	-351	0	2460	-0.05	-9.11	0
63	SLE RA 3	-351	0	2460	-0.05	-9.11	0
63	SLE RA 4	-351	0	2460	-0.05	-9.11	0
63	SLE RA 5	-351	0	2460	-0.05	-9.11	0
63	SLE RA 6	-351	0	2460	-0.05	-9.11	0
63	SLE RA 7	-351	0	2460	-0.05	-9.11	0
63	SLE RA 8	-351	0	2460	-0.05	-9.11	0
63	SLE RA 9	-351	0	2460	-0.05	-9.11	0
63	SLE RA 10	-506	0	3012	-0.06	-13.13	0
63	SLE RA 11	-506	0	3012	-0.06	-13.13	0
63	SLE RA 12	-506	0	3012	-0.06	-13.13	0
63	SLE RA 13	-506	0	3012	-0.06	-13.13	0
63	SLE RA 14	-506	0	3012	-0.06	-13.13	0
63	SLE RA 15	-506	0	3012	-0.06	-13.13	0
63	SLE RA 16	-506	0	3012	-0.06	-13.13	0
63	SLE RA 17	-506	0	3012	-0.06	-13.13	0
63	SLE RA 18	-573	0	3248	-0.06	-14.85	0
63	SLE RA 19	-573	0	3248	-0.06	-14.85	0
63	SLE RA 20	-573	0	3248	-0.06	-14.85	0
63	SLE RA 21	-573	0	3248	-0.06	-14.85	0
63	SLE FR 1	-351	0	2460	-0.05	-9.11	0
63	SLE FR 2	-351	0	2460	-0.05	-9.11	0
63	SLE FR 3	-351	0	2460	-0.05	-9.11	0
63	SLE FR 4	-417	0	2697	-0.05	-10.83	0
63	SLE FR 5	-417	0	2697	-0.05	-10.83	0
63	SLE FR 6	-462	0	2854	-0.06	-11.98	0
63	SLE QP 1	-351	0	2460	-0.05	-9.11	0
63	SLE QP 2	-417	0	2697	-0.05	-10.83	0
63	SLD 1	-100	9	2745	-9.14	-2.31	-0.01
63	SLD 2	-100	9	2745	-9.14	-2.31	-0.01
63	SLD 3	-84	-3	2755	4.9	-1.88	0
63	SLD 4	-84	-3	2755	4.9	-1.88	0
63	SLD 5	-347	20	2696	-24.07	-8.93	-0.02
63	SLD 6	-347	20	2696	-24.07	-8.93	-0.02
63	SLD 7	-293	-18	2729	22.72	-7.49	0.02
63	SLD 8	-293	-18	2729	22.72	-7.49	0.02
63	SLD 9	-542	18	2664	-22.83	-14.17	-0.02
63	SLD 10	-542	18	2664	-22.83	-14.17	-0.02
63	SLD 11	-488	-19	2697	23.97	-12.74	0.02
63	SLD 12	-488	-19	2697	23.97	-12.74	0.02
63	SLD 13	-751	3	2638	-5	-19.79	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
63	SLD 14	-751	3	2638	-5	-19.79	0
63	SLD 15	-734	-8	2648	9.04	-19.36	0.01
63	SLD 16	-734	-8	2648	9.04	-19.36	0.01
63	SLV 1	323	21	2808	-23.12	9.07	-0.02
63	SLV 2	323	21	2808	-23.12	9.07	-0.02
63	SLV 3	361	-7	2833	12.72	10.07	0.01
63	SLV 4	361	-7	2833	12.72	10.07	0.01
63	SLV 5	-253	50	2692	-61.33	-6.39	-0.05
63	SLV 6	-253	50	2692	-61.33	-6.39	-0.05
63	SLV 7	-126	-45	2775	58.13	-3.04	0.04
63	SLV 8	-126	-45	2775	58.13	-3.04	0.04
63	SLV 9	-708	46	2618	-58.24	-18.63	-0.04
63	SLV 10	-708	46	2618	-58.24	-18.63	-0.04
63	SLV 11	-582	-50	2701	61.22	-15.28	0.05
63	SLV 12	-582	-50	2701	61.22	-15.28	0.05
63	SLV 13	-1195	7	2560	-12.83	-31.74	-0.01
63	SLV 14	-1195	7	2560	-12.83	-31.74	-0.01
63	SLV 15	-1157	-21	2585	23.01	-30.74	0.02
63	SLV 16	-1157	-21	2585	23.01	-30.74	0.02
64	SLU 1	-384	0	2228	-0.04	-10.1	0
64	SLU 2	-384	0	2228	-0.04	-10.1	0
64	SLU 3	-384	0	2228	-0.04	-10.1	0
64	SLU 4	-384	0	2228	-0.04	-10.1	0
64	SLU 5	-384	0	2228	-0.04	-10.1	0
64	SLU 6	-384	0	2228	-0.04	-10.1	0
64	SLU 7	-384	0	2228	-0.04	-10.1	0
64	SLU 8	-384	0	2228	-0.04	-10.1	0
64	SLU 9	-384	0	2228	-0.04	-10.1	0
64	SLU 10	-647	0	2987	-0.05	-17.05	0
64	SLU 11	-647	0	2987	-0.05	-17.05	0
64	SLU 12	-647	0	2987	-0.05	-17.05	0
64	SLU 13	-647	0	2987	-0.05	-17.05	0
64	SLU 14	-647	0	2987	-0.05	-17.05	0
64	SLU 15	-647	0	2987	-0.05	-17.05	0
64	SLU 16	-647	0	2987	-0.05	-17.05	0
64	SLU 17	-647	0	2987	-0.05	-17.05	0
64	SLU 18	-760	0	3312	-0.05	-20.02	0
64	SLU 19	-760	0	3312	-0.05	-20.02	0
64	SLU 20	-760	0	3312	-0.05	-20.02	0
64	SLU 21	-760	0	3312	-0.05	-20.02	0
64	SLU 22	-519	0	2663	-0.04	-13.66	0
64	SLU 23	-519	0	2663	-0.04	-13.66	0
64	SLU 24	-519	0	2663	-0.04	-13.66	0
64	SLU 25	-519	0	2663	-0.04	-13.66	0
64	SLU 26	-519	0	2663	-0.04	-13.66	0
64	SLU 27	-519	0	2663	-0.04	-13.66	0
64	SLU 28	-519	0	2663	-0.04	-13.66	0
64	SLU 29	-519	0	2663	-0.04	-13.66	0
64	SLU 30	-519	0	2663	-0.04	-13.66	0
64	SLU 31	-782	0	3422	-0.05	-20.61	0
64	SLU 32	-782	0	3422	-0.05	-20.61	0
64	SLU 33	-782	0	3422	-0.05	-20.61	0
64	SLU 34	-782	0	3422	-0.05	-20.61	0
64	SLU 35	-782	0	3422	-0.05	-20.61	0
64	SLU 36	-782	0	3422	-0.05	-20.61	0
64	SLU 37	-782	0	3422	-0.05	-20.61	0
64	SLU 38	-782	0	3422	-0.05	-20.61	0
64	SLU 39	-895	0	3747	-0.05	-23.58	0
64	SLU 40	-895	0	3747	-0.05	-23.58	0
64	SLU 41	-895	0	3747	-0.05	-23.58	0
64	SLU 42	-895	0	3747	-0.05	-23.58	0
64	SLU 43	-452	0	2748	-0.05	-11.91	0
64	SLU 44	-452	0	2748	-0.05	-11.91	0
64	SLU 45	-452	0	2748	-0.05	-11.91	0
64	SLU 46	-452	0	2748	-0.05	-11.91	0
64	SLU 47	-452	0	2748	-0.05	-11.91	0
64	SLU 48	-452	0	2748	-0.05	-11.91	0
64	SLU 49	-452	0	2748	-0.05	-11.91	0
64	SLU 50	-452	0	2748	-0.05	-11.91	0
64	SLU 51	-452	0	2748	-0.05	-11.91	0
64	SLU 52	-716	0	3506	-0.06	-18.85	0
64	SLU 53	-716	0	3506	-0.06	-18.85	0
64	SLU 54	-716	0	3506	-0.06	-18.85	0
64	SLU 55	-716	0	3506	-0.06	-18.85	0
64	SLU 56	-716	0	3506	-0.06	-18.85	0
64	SLU 57	-716	0	3506	-0.06	-18.85	0
64	SLU 58	-716	0	3506	-0.06	-18.85	0
64	SLU 59	-716	0	3506	-0.06	-18.85	0
64	SLU 60	-829	0	3831	-0.07	-21.83	0
64	SLU 61	-829	0	3831	-0.07	-21.83	0
64	SLU 62	-829	0	3831	-0.07	-21.83	0
64	SLU 63	-829	0	3831	-0.07	-21.83	0
64	SLU 64	-588	0	3183	-0.05	-15.47	0
64	SLU 65	-588	0	3183	-0.05	-15.47	0
64	SLU 66	-588	0	3183	-0.05	-15.47	0
64	SLU 67	-588	0	3183	-0.05	-15.47	0
64	SLU 68	-588	0	3183	-0.05	-15.47	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
64	SLU 69	-588	0	3183	-0.05	-15.47	0
64	SLU 70	-588	0	3183	-0.05	-15.47	0
64	SLU 71	-588	0	3183	-0.05	-15.47	0
64	SLU 72	-588	0	3183	-0.05	-15.47	0
64	SLU 73	-851	0	3941	-0.06	-22.41	0
64	SLU 74	-851	0	3941	-0.06	-22.41	0
64	SLU 75	-851	0	3941	-0.06	-22.41	0
64	SLU 76	-851	0	3941	-0.06	-22.41	0
64	SLU 77	-851	0	3941	-0.06	-22.41	0
64	SLU 78	-851	0	3941	-0.06	-22.41	0
64	SLU 79	-851	0	3941	-0.06	-22.41	0
64	SLU 80	-851	0	3941	-0.06	-22.41	0
64	SLU 81	-964	0	4266	-0.06	-25.39	0
64	SLU 82	-964	0	4266	-0.06	-25.39	0
64	SLU 83	-964	0	4266	-0.06	-25.39	0
64	SLU 84	-964	0	4266	-0.06	-25.39	0
64	SLE RA 1	-422	0	2353	-0.04	-11.12	0
64	SLE RA 2	-422	0	2353	-0.04	-11.12	0
64	SLE RA 3	-422	0	2353	-0.04	-11.12	0
64	SLE RA 4	-422	0	2353	-0.04	-11.12	0
64	SLE RA 5	-422	0	2353	-0.04	-11.12	0
64	SLE RA 6	-422	0	2353	-0.04	-11.12	0
64	SLE RA 7	-422	0	2353	-0.04	-11.12	0
64	SLE RA 8	-422	0	2353	-0.04	-11.12	0
64	SLE RA 9	-422	0	2353	-0.04	-11.12	0
64	SLE RA 10	-598	0	2858	-0.05	-15.75	0
64	SLE RA 11	-598	0	2858	-0.05	-15.75	0
64	SLE RA 12	-598	0	2858	-0.05	-15.75	0
64	SLE RA 13	-598	0	2858	-0.05	-15.75	0
64	SLE RA 14	-598	0	2858	-0.05	-15.75	0
64	SLE RA 15	-598	0	2858	-0.05	-15.75	0
64	SLE RA 16	-598	0	2858	-0.05	-15.75	0
64	SLE RA 17	-598	0	2858	-0.05	-15.75	0
64	SLE RA 18	-673	0	3075	-0.05	-17.73	0
64	SLE RA 19	-673	0	3075	-0.05	-17.73	0
64	SLE RA 20	-673	0	3075	-0.05	-17.73	0
64	SLE RA 21	-673	0	3075	-0.05	-17.73	0
64	SLE FR 1	-422	0	2353	-0.04	-11.12	0
64	SLE FR 2	-422	0	2353	-0.04	-11.12	0
64	SLE FR 3	-422	0	2353	-0.04	-11.12	0
64	SLE FR 4	-498	0	2569	-0.04	-13.1	0
64	SLE FR 5	-498	0	2569	-0.04	-13.1	0
64	SLE FR 6	-548	0	2714	-0.04	-14.42	0
64	SLE QP 1	-422	0	2353	-0.04	-11.12	0
64	SLE QP 2	-498	0	2569	-0.04	-13.1	0
64	SLD 1	-176	-2	2542	-7.13	-4.15	0.01
64	SLD 2	-176	-2	2542	-7.13	-4.15	0.01
64	SLD 3	-159	7	2555	3.36	-3.69	-0.04
64	SLD 4	-159	7	2555	3.36	-3.69	-0.04
64	SLD 5	-427	-14	2542	-18.09	-11.13	0.08
64	SLD 6	-427	-14	2542	-18.09	-11.13	0.08
64	SLD 7	-370	15	2584	16.9	-9.57	-0.09
64	SLD 8	-370	15	2584	16.9	-9.57	-0.09
64	SLD 9	-625	-15	2554	-16.98	-16.64	0.09
64	SLD 10	-625	-15	2554	-16.98	-16.64	0.09
64	SLD 11	-568	14	2597	18	-15.07	-0.08
64	SLD 12	-568	14	2597	18	-15.07	-0.08
64	SLD 13	-837	-7	2584	-3.45	-22.52	0.04
64	SLD 14	-837	-7	2584	-3.45	-22.52	0.04
64	SLD 15	-820	2	2597	7.05	-22.05	-0.01
64	SLD 16	-820	2	2597	7.05	-22.05	-0.01
64	SLV 1	254	-5	2504	-17.96	7.78	0.03
64	SLV 2	254	-5	2504	-17.96	7.78	0.03
64	SLV 3	294	18	2536	8.86	8.88	-0.1
64	SLV 4	294	18	2536	8.86	8.88	-0.1
64	SLV 5	-332	-36	2502	-46.08	-8.5	0.21
64	SLV 6	-332	-36	2502	-46.08	-8.5	0.21
64	SLV 7	-200	39	2607	43.29	-4.84	-0.23
64	SLV 8	-200	39	2607	43.29	-4.84	-0.23
64	SLV 9	-795	-39	2531	-43.38	-21.36	0.23
64	SLV 10	-795	-39	2531	-43.38	-21.36	0.23
64	SLV 11	-663	36	2637	46	-17.7	-0.21
64	SLV 12	-663	36	2637	46	-17.7	-0.21
64	SLV 13	-1289	-17	2603	-8.94	-35.08	0.1
64	SLV 14	-1289	-17	2603	-8.94	-35.08	0.1
64	SLV 15	-1249	5	2635	17.87	-33.99	-0.03
64	SLV 16	-1249	5	2635	17.87	-33.99	-0.03
65	SLU 1	-452	0	2128	-0.01	-13.22	0
65	SLU 2	-452	0	2128	-0.01	-13.22	0
65	SLU 3	-452	0	2128	-0.01	-13.22	0
65	SLU 4	-452	0	2128	-0.01	-13.22	0
65	SLU 5	-452	0	2128	-0.01	-13.22	0
65	SLU 6	-452	0	2128	-0.01	-13.22	0
65	SLU 7	-452	0	2128	-0.01	-13.22	0
65	SLU 8	-452	0	2128	-0.01	-13.22	0
65	SLU 9	-452	0	2128	-0.01	-13.22	0
65	SLU 10	-742	0	2815	-0.01	-21.69	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
65	SLU 11	-742	0	2815	-0.01	-21.69	0
65	SLU 12	-742	0	2815	-0.01	-21.69	0
65	SLU 13	-742	0	2815	-0.01	-21.69	0
65	SLU 14	-742	0	2815	-0.01	-21.69	0
65	SLU 15	-742	0	2815	-0.01	-21.69	0
65	SLU 16	-742	0	2815	-0.01	-21.69	0
65	SLU 17	-742	0	2815	-0.01	-21.69	0
65	SLU 18	-866	0	3110	-0.01	-25.33	0
65	SLU 19	-866	0	3110	-0.01	-25.33	0
65	SLU 20	-866	0	3110	-0.01	-25.33	0
65	SLU 21	-866	0	3110	-0.01	-25.33	0
65	SLU 22	-603	0	2523	-0.01	-17.61	0
65	SLU 23	-603	0	2523	-0.01	-17.61	0
65	SLU 24	-603	0	2523	-0.01	-17.61	0
65	SLU 25	-603	0	2523	-0.01	-17.61	0
65	SLU 26	-603	0	2523	-0.01	-17.61	0
65	SLU 27	-603	0	2523	-0.01	-17.61	0
65	SLU 28	-603	0	2523	-0.01	-17.61	0
65	SLU 29	-603	0	2523	-0.01	-17.61	0
65	SLU 30	-603	0	2523	-0.01	-17.61	0
65	SLU 31	-893	0	3211	0	-26.09	0
65	SLU 32	-893	0	3211	0	-26.09	0
65	SLU 33	-893	0	3211	0	-26.09	0
65	SLU 34	-893	0	3211	0	-26.09	0
65	SLU 35	-893	0	3211	0	-26.09	0
65	SLU 36	-893	0	3211	0	-26.09	0
65	SLU 37	-893	0	3211	0	-26.09	0
65	SLU 38	-893	0	3211	0	-26.09	0
65	SLU 39	-1017	0	3505	0	-29.72	0
65	SLU 40	-1017	0	3505	0	-29.72	0
65	SLU 41	-1017	0	3505	0	-29.72	0
65	SLU 42	-1017	0	3505	0	-29.72	0
65	SLU 43	-536	0	2630	-0.02	-15.68	0
65	SLU 44	-536	0	2630	-0.02	-15.68	0
65	SLU 45	-536	0	2630	-0.02	-15.68	0
65	SLU 46	-536	0	2630	-0.02	-15.68	0
65	SLU 47	-536	0	2630	-0.02	-15.68	0
65	SLU 48	-536	0	2630	-0.02	-15.68	0
65	SLU 49	-536	0	2630	-0.02	-15.68	0
65	SLU 50	-536	0	2630	-0.02	-15.68	0
65	SLU 51	-536	0	2630	-0.02	-15.68	0
65	SLU 52	-826	0	3318	-0.02	-24.15	0
65	SLU 53	-826	0	3318	-0.02	-24.15	0
65	SLU 54	-826	0	3318	-0.02	-24.15	0
65	SLU 55	-826	0	3318	-0.02	-24.15	0
65	SLU 56	-826	0	3318	-0.02	-24.15	0
65	SLU 57	-826	0	3318	-0.02	-24.15	0
65	SLU 58	-826	0	3318	-0.02	-24.15	0
65	SLU 59	-826	0	3318	-0.02	-24.15	0
65	SLU 60	-950	0	3612	-0.01	-27.79	0
65	SLU 61	-950	0	3612	-0.01	-27.79	0
65	SLU 62	-950	0	3612	-0.01	-27.79	0
65	SLU 63	-950	0	3612	-0.01	-27.79	0
65	SLU 64	-686	0	3026	-0.01	-20.07	0
65	SLU 65	-686	0	3026	-0.01	-20.07	0
65	SLU 66	-686	0	3026	-0.01	-20.07	0
65	SLU 67	-686	0	3026	-0.01	-20.07	0
65	SLU 68	-686	0	3026	-0.01	-20.07	0
65	SLU 69	-686	0	3026	-0.01	-20.07	0
65	SLU 70	-686	0	3026	-0.01	-20.07	0
65	SLU 71	-686	0	3026	-0.01	-20.07	0
65	SLU 72	-686	0	3026	-0.01	-20.07	0
65	SLU 73	-977	0	3713	-0.01	-28.55	0
65	SLU 74	-977	0	3713	-0.01	-28.55	0
65	SLU 75	-977	0	3713	-0.01	-28.55	0
65	SLU 76	-977	0	3713	-0.01	-28.55	0
65	SLU 77	-977	0	3713	-0.01	-28.55	0
65	SLU 78	-977	0	3713	-0.01	-28.55	0
65	SLU 79	-977	0	3713	-0.01	-28.55	0
65	SLU 80	-977	0	3713	-0.01	-28.55	0
65	SLU 81	-1101	0	4008	-0.01	-32.18	0
65	SLU 82	-1101	0	4008	-0.01	-32.18	0
65	SLU 83	-1101	0	4008	-0.01	-32.18	0
65	SLU 84	-1101	0	4008	-0.01	-32.18	0
65	SLE RA 1	-495	0	2241	-0.01	-14.48	0
65	SLE RA 2	-495	0	2241	-0.01	-14.48	0
65	SLE RA 3	-495	0	2241	-0.01	-14.48	0
65	SLE RA 4	-495	0	2241	-0.01	-14.48	0
65	SLE RA 5	-495	0	2241	-0.01	-14.48	0
65	SLE RA 6	-495	0	2241	-0.01	-14.48	0
65	SLE RA 7	-495	0	2241	-0.01	-14.48	0
65	SLE RA 8	-495	0	2241	-0.01	-14.48	0
65	SLE RA 9	-495	0	2241	-0.01	-14.48	0
65	SLE RA 10	-688	0	2699	-0.01	-20.13	0
65	SLE RA 11	-688	0	2699	-0.01	-20.13	0
65	SLE RA 12	-688	0	2699	-0.01	-20.13	0
65	SLE RA 13	-688	0	2699	-0.01	-20.13	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
65	SLE RA 14	-688	0	2699	-0.01	-20.13	0
65	SLE RA 15	-688	0	2699	-0.01	-20.13	0
65	SLE RA 16	-688	0	2699	-0.01	-20.13	0
65	SLE RA 17	-688	0	2699	-0.01	-20.13	0
65	SLE RA 18	-771	0	2895	-0.01	-22.55	0
65	SLE RA 19	-771	0	2895	-0.01	-22.55	0
65	SLE RA 20	-771	0	2895	-0.01	-22.55	0
65	SLE RA 21	-771	0	2895	-0.01	-22.55	0
65	SLE FR 1	-495	0	2241	-0.01	-14.48	0
65	SLE FR 2	-495	0	2241	-0.01	-14.48	0
65	SLE FR 3	-495	0	2241	-0.01	-14.48	0
65	SLE FR 4	-578	0	2437	-0.01	-16.9	0
65	SLE FR 5	-578	0	2437	-0.01	-16.9	0
65	SLE FR 6	-633	0	2568	-0.01	-18.51	0
65	SLE QP 1	-495	0	2241	-0.01	-14.48	0
65	SLE QP 2	-578	0	2437	-0.01	-16.9	0
65	SLD 1	-256	-6	2341	-5.1	-7.14	0.06
65	SLD 2	-256	-6	2341	-5.1	-7.14	0.06
65	SLD 3	-238	0	2360	1.85	-6.62	0
65	SLD 4	-238	0	2360	1.85	-6.62	0
65	SLD 5	-508	-11	2380	-12.08	-14.77	0.12
65	SLD 6	-508	-11	2380	-12.08	-14.77	0.12
65	SLD 7	-449	9	2443	11.09	-13.02	-0.1
65	SLD 8	-449	9	2443	11.09	-13.02	-0.1
65	SLD 9	-707	-9	2431	-11.11	-20.78	0.11
65	SLD 10	-707	-9	2431	-11.11	-20.78	0.11
65	SLD 11	-647	11	2494	12.06	-19.03	-0.12
65	SLD 12	-647	11	2494	12.06	-19.03	-0.12
65	SLD 13	-917	0	2514	-1.87	-27.18	0.01
65	SLD 14	-917	0	2514	-1.87	-27.18	0.01
65	SLD 15	-900	6	2533	5.08	-26.65	-0.06
65	SLD 16	-900	6	2533	5.08	-26.65	-0.06
65	SLV 1	173	-14	2213	-12.78	5.87	0.16
65	SLV 2	173	-14	2213	-12.78	5.87	0.16
65	SLV 3	215	1	2259	4.97	7.1	-0.02
65	SLV 4	215	1	2259	4.97	7.1	-0.02
65	SLV 5	-415	-27	2300	-30.77	-11.93	0.31
65	SLV 6	-415	-27	2300	-30.77	-11.93	0.31
65	SLV 7	-277	23	2453	28.42	-7.84	-0.27
65	SLV 8	-277	23	2453	28.42	-7.84	-0.27
65	SLV 9	-879	-23	2421	-28.44	-25.96	0.27
65	SLV 10	-879	-23	2421	-28.44	-25.96	0.27
65	SLV 11	-740	27	2574	30.75	-21.87	-0.31
65	SLV 12	-740	27	2574	30.75	-21.87	-0.31
65	SLV 13	-1371	-1	2615	-4.99	-40.89	0.02
65	SLV 14	-1371	-1	2615	-4.99	-40.89	0.02
65	SLV 15	-1329	14	2661	12.76	-39.67	-0.16
65	SLV 16	-1329	14	2661	12.76	-39.67	-0.16
66	SLU 1	-532	0	2027	0.05	-18.68	0
66	SLU 2	-532	0	2027	0.05	-18.68	0
66	SLU 3	-532	0	2027	0.05	-18.68	0
66	SLU 4	-532	0	2027	0.05	-18.68	0
66	SLU 5	-532	0	2027	0.05	-18.68	0
66	SLU 6	-532	0	2027	0.05	-18.68	0
66	SLU 7	-532	0	2027	0.05	-18.68	0
66	SLU 8	-532	0	2027	0.05	-18.68	0
66	SLU 9	-532	0	2027	0.05	-18.68	0
66	SLU 10	-849	0	2645	0.07	-29.9	0.01
66	SLU 11	-849	0	2645	0.07	-29.9	0.01
66	SLU 12	-849	0	2645	0.07	-29.9	0.01
66	SLU 13	-849	0	2645	0.07	-29.9	0.01
66	SLU 14	-849	0	2645	0.07	-29.9	0.01
66	SLU 15	-849	0	2645	0.07	-29.9	0.01
66	SLU 16	-849	0	2645	0.07	-29.9	0.01
66	SLU 17	-849	0	2645	0.07	-29.9	0.01
66	SLU 18	-984	0	2910	0.08	-34.71	0.01
66	SLU 19	-984	0	2910	0.08	-34.71	0.01
66	SLU 20	-984	0	2910	0.08	-34.71	0.01
66	SLU 21	-984	0	2910	0.08	-34.71	0.01
66	SLU 22	-698	0	2383	0.07	-24.56	0
66	SLU 23	-698	0	2383	0.07	-24.56	0
66	SLU 24	-698	0	2383	0.07	-24.56	0
66	SLU 25	-698	0	2383	0.07	-24.56	0
66	SLU 26	-698	0	2383	0.07	-24.56	0
66	SLU 27	-698	0	2383	0.07	-24.56	0
66	SLU 28	-698	0	2383	0.07	-24.56	0
66	SLU 29	-698	0	2383	0.07	-24.56	0
66	SLU 30	-698	0	2383	0.07	-24.56	0
66	SLU 31	-1015	0	3001	0.09	-35.78	0.01
66	SLU 32	-1015	0	3001	0.09	-35.78	0.01
66	SLU 33	-1015	0	3001	0.09	-35.78	0.01
66	SLU 34	-1015	0	3001	0.09	-35.78	0.01
66	SLU 35	-1015	0	3001	0.09	-35.78	0.01
66	SLU 36	-1015	0	3001	0.09	-35.78	0.01
66	SLU 37	-1015	0	3001	0.09	-35.78	0.01
66	SLU 38	-1015	0	3001	0.09	-35.78	0.01
66	SLU 39	-1151	0	3266	0.1	-40.59	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
66	SLU 40	-1151	0	3266	0.1	-40.59	0.01
66	SLU 41	-1151	0	3266	0.1	-40.59	0.01
66	SLU 42	-1151	0	3266	0.1	-40.59	0.01
66	SLU 43	-634	0	2513	0.06	-22.26	0.01
66	SLU 44	-634	0	2513	0.06	-22.26	0.01
66	SLU 45	-634	0	2513	0.06	-22.26	0.01
66	SLU 46	-634	0	2513	0.06	-22.26	0.01
66	SLU 47	-634	0	2513	0.06	-22.26	0.01
66	SLU 48	-634	0	2513	0.06	-22.26	0.01
66	SLU 49	-634	0	2513	0.06	-22.26	0.01
66	SLU 50	-634	0	2513	0.06	-22.26	0.01
66	SLU 51	-634	0	2513	0.06	-22.26	0.01
66	SLU 52	-951	0	3131	0.08	-33.49	0.01
66	SLU 53	-951	0	3131	0.08	-33.49	0.01
66	SLU 54	-951	0	3131	0.08	-33.49	0.01
66	SLU 55	-951	0	3131	0.08	-33.49	0.01
66	SLU 56	-951	0	3131	0.08	-33.49	0.01
66	SLU 57	-951	0	3131	0.08	-33.49	0.01
66	SLU 58	-951	0	3131	0.08	-33.49	0.01
66	SLU 59	-951	0	3131	0.08	-33.49	0.01
66	SLU 60	-1087	0	3396	0.09	-38.29	0.01
66	SLU 61	-1087	0	3396	0.09	-38.29	0.01
66	SLU 62	-1087	0	3396	0.09	-38.29	0.01
66	SLU 63	-1087	0	3396	0.09	-38.29	0.01
66	SLU 64	-801	0	2869	0.08	-28.14	0.01
66	SLU 65	-801	0	2869	0.08	-28.14	0.01
66	SLU 66	-801	0	2869	0.08	-28.14	0.01
66	SLU 67	-801	0	2869	0.08	-28.14	0.01
66	SLU 68	-801	0	2869	0.08	-28.14	0.01
66	SLU 69	-801	0	2869	0.08	-28.14	0.01
66	SLU 70	-801	0	2869	0.08	-28.14	0.01
66	SLU 71	-801	0	2869	0.08	-28.14	0.01
66	SLU 72	-801	0	2869	0.08	-28.14	0.01
66	SLU 73	-1118	0	3487	0.1	-39.37	0.01
66	SLU 74	-1118	0	3487	0.1	-39.37	0.01
66	SLU 75	-1118	0	3487	0.1	-39.37	0.01
66	SLU 76	-1118	0	3487	0.1	-39.37	0.01
66	SLU 77	-1118	0	3487	0.1	-39.37	0.01
66	SLU 78	-1118	0	3487	0.1	-39.37	0.01
66	SLU 79	-1118	0	3487	0.1	-39.37	0.01
66	SLU 80	-1118	0	3487	0.1	-39.37	0.01
66	SLU 81	-1253	0	3752	0.11	-44.18	0.01
66	SLU 82	-1253	0	3752	0.11	-44.18	0.01
66	SLU 83	-1253	0	3752	0.11	-44.18	0.01
66	SLU 84	-1253	0	3752	0.11	-44.18	0.01
66	SLE RA 1	-579	0	2129	0.06	-20.36	0
66	SLE RA 2	-579	0	2129	0.06	-20.36	0
66	SLE RA 3	-579	0	2129	0.06	-20.36	0
66	SLE RA 4	-579	0	2129	0.06	-20.36	0
66	SLE RA 5	-579	0	2129	0.06	-20.36	0
66	SLE RA 6	-579	0	2129	0.06	-20.36	0
66	SLE RA 7	-579	0	2129	0.06	-20.36	0
66	SLE RA 8	-579	0	2129	0.06	-20.36	0
66	SLE RA 9	-579	0	2129	0.06	-20.36	0
66	SLE RA 10	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 11	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 12	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 13	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 14	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 15	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 16	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 17	-791	0	2541	0.07	-27.84	0.01
66	SLE RA 18	-881	0	2717	0.08	-31.04	0.01
66	SLE RA 19	-881	0	2717	0.08	-31.04	0.01
66	SLE RA 20	-881	0	2717	0.08	-31.04	0.01
66	SLE RA 21	-881	0	2717	0.08	-31.04	0.01
66	SLE FR 1	-579	0	2129	0.06	-20.36	0
66	SLE FR 2	-579	0	2129	0.06	-20.36	0
66	SLE FR 3	-579	0	2129	0.06	-20.36	0
66	SLE FR 4	-670	0	2305	0.06	-23.56	0
66	SLE FR 5	-670	0	2305	0.06	-23.56	0
66	SLE FR 6	-730	0	2423	0.07	-25.7	0
66	SLE QP 1	-579	0	2129	0.06	-20.36	0
66	SLE QP 2	-670	0	2305	0.06	-23.56	0
66	SLD 1	-344	-6	2127	-0.27	-11.54	0.1
66	SLD 2	-344	-6	2127	-0.27	-11.54	0.1
66	SLD 3	-324	-2	2157	3.34	-10.83	0.03
66	SLD 4	-324	-2	2157	3.34	-10.83	0.03
66	SLD 5	-602	-8	2206	-5.51	-21.03	0.14
66	SLD 6	-602	-8	2206	-5.51	-21.03	0.14
66	SLD 7	-536	6	2307	6.52	-18.68	-0.09
66	SLD 8	-536	6	2307	6.52	-18.68	-0.09
66	SLD 9	-803	-6	2304	-6.39	-28.45	0.1
66	SLD 10	-803	-6	2304	-6.39	-28.45	0.1
66	SLD 11	-738	8	2405	5.64	-26.1	-0.13
66	SLD 12	-738	8	2405	5.64	-26.1	-0.13
66	SLD 13	-1016	2	2454	-3.21	-36.29	-0.02



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
66	SLD 14	-1016	2	2454	-3.21	-36.29	-0.02
66	SLD 15	-996	6	2484	0.4	-35.59	-0.09
66	SLD 16	-996	6	2484	0.4	-35.59	-0.09
66	SLV 1	91	-14	1888	-1.03	4.5	0.24
66	SLV 2	91	-14	1888	-1.03	4.5	0.24
66	SLV 3	137	-4	1961	8.19	6.15	0.06
66	SLV 4	137	-4	1961	8.19	6.15	0.06
66	SLV 5	-511	-20	2070	-14.25	-17.65	0.33
66	SLV 6	-511	-20	2070	-14.25	-17.65	0.33
66	SLV 7	-358	14	2313	16.48	-12.15	-0.24
66	SLV 8	-358	14	2313	16.48	-12.15	-0.24
66	SLV 9	-982	-15	2298	-16.36	-34.98	0.25
66	SLV 10	-982	-15	2298	-16.36	-34.98	0.25
66	SLV 11	-829	20	2541	14.37	-29.48	-0.32
66	SLV 12	-829	20	2541	14.37	-29.48	-0.32
66	SLV 13	-1477	4	2650	-8.06	-53.27	-0.05
66	SLV 14	-1477	4	2650	-8.06	-53.27	-0.05
66	SLV 15	-1431	14	2722	1.16	-51.63	-0.23
66	SLV 16	-1431	14	2722	1.16	-51.63	-0.23
67	SLU 1	-632	-1	1976	0.15	-29.5	0
67	SLU 2	-632	-1	1976	0.15	-29.5	0
67	SLU 3	-632	-1	1976	0.15	-29.5	0
67	SLU 4	-632	-1	1976	0.15	-29.5	0
67	SLU 5	-632	-1	1976	0.15	-29.5	0
67	SLU 6	-632	-1	1976	0.15	-29.5	0
67	SLU 7	-632	-1	1976	0.15	-29.5	0
67	SLU 8	-632	-1	1976	0.15	-29.5	0
67	SLU 9	-632	-1	1976	0.15	-29.5	0
67	SLU 10	-967	-1	2557	0.19	-45.24	0.01
67	SLU 11	-967	-1	2557	0.19	-45.24	0.01
67	SLU 12	-967	-1	2557	0.19	-45.24	0.01
67	SLU 13	-967	-1	2557	0.19	-45.24	0.01
67	SLU 14	-967	-1	2557	0.19	-45.24	0.01
67	SLU 15	-967	-1	2557	0.19	-45.24	0.01
67	SLU 16	-967	-1	2557	0.19	-45.24	0.01
67	SLU 17	-967	-1	2557	0.19	-45.24	0.01
67	SLU 18	-1111	-1	2806	0.2	-51.99	0.01
67	SLU 19	-1111	-1	2806	0.2	-51.99	0.01
67	SLU 20	-1111	-1	2806	0.2	-51.99	0.01
67	SLU 21	-1111	-1	2806	0.2	-51.99	0.01
67	SLU 22	-811	-1	2308	0.17	-37.84	0.01
67	SLU 23	-811	-1	2308	0.17	-37.84	0.01
67	SLU 24	-811	-1	2308	0.17	-37.84	0.01
67	SLU 25	-811	-1	2308	0.17	-37.84	0.01
67	SLU 26	-811	-1	2308	0.17	-37.84	0.01
67	SLU 27	-811	-1	2308	0.17	-37.84	0.01
67	SLU 28	-811	-1	2308	0.17	-37.84	0.01
67	SLU 29	-811	-1	2308	0.17	-37.84	0.01
67	SLU 30	-811	-1	2308	0.17	-37.84	0.01
67	SLU 31	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 32	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 33	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 34	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 35	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 36	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 37	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 38	-1146	-1	2889	0.21	-53.58	0.01
67	SLU 39	-1290	-1	3138	0.23	-60.33	0.01
67	SLU 40	-1290	-1	3138	0.23	-60.33	0.01
67	SLU 41	-1290	-1	3138	0.23	-60.33	0.01
67	SLU 42	-1290	-1	3138	0.23	-60.33	0.01
67	SLU 43	-760	-1	2455	0.18	-35.5	0.01
67	SLU 44	-760	-1	2455	0.18	-35.5	0.01
67	SLU 45	-760	-1	2455	0.18	-35.5	0.01
67	SLU 46	-760	-1	2455	0.18	-35.5	0.01
67	SLU 47	-760	-1	2455	0.18	-35.5	0.01
67	SLU 48	-760	-1	2455	0.18	-35.5	0.01
67	SLU 49	-760	-1	2455	0.18	-35.5	0.01
67	SLU 50	-760	-1	2455	0.18	-35.5	0.01
67	SLU 51	-760	-1	2455	0.18	-35.5	0.01
67	SLU 52	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 53	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 54	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 55	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 56	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 57	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 58	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 59	-1095	-1	3036	0.22	-51.24	0.01
67	SLU 60	-1239	-1	3285	0.24	-57.98	0.01
67	SLU 61	-1239	-1	3285	0.24	-57.98	0.01
67	SLU 62	-1239	-1	3285	0.24	-57.98	0.01
67	SLU 63	-1239	-1	3285	0.24	-57.98	0.01
67	SLU 64	-939	-1	2787	0.21	-43.84	0.01
67	SLU 65	-939	-1	2787	0.21	-43.84	0.01
67	SLU 66	-939	-1	2787	0.21	-43.84	0.01
67	SLU 67	-939	-1	2787	0.21	-43.84	0.01
67	SLU 68	-939	-1	2787	0.21	-43.84	0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
67	SLU 69	-939	-1	2787	0.21	-43.84	0.01
67	SLU 70	-939	-1	2787	0.21	-43.84	0.01
67	SLU 71	-939	-1	2787	0.21	-43.84	0.01
67	SLU 72	-939	-1	2787	0.21	-43.84	0.01
67	SLU 73	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 74	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 75	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 76	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 77	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 78	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 79	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 80	-1274	-1	3368	0.25	-59.57	0.01
67	SLU 81	-1418	-1	3617	0.26	-66.32	0.01
67	SLU 82	-1418	-1	3617	0.26	-66.32	0.01
67	SLU 83	-1418	-1	3617	0.26	-66.32	0.01
67	SLU 84	-1418	-1	3617	0.26	-66.32	0.01
67	SLE RA 1	-683	-1	2071	0.15	-31.89	0
67	SLE RA 2	-683	-1	2071	0.15	-31.89	0
67	SLE RA 3	-683	-1	2071	0.15	-31.89	0
67	SLE RA 4	-683	-1	2071	0.15	-31.89	0
67	SLE RA 5	-683	-1	2071	0.15	-31.89	0
67	SLE RA 6	-683	-1	2071	0.15	-31.89	0
67	SLE RA 7	-683	-1	2071	0.15	-31.89	0
67	SLE RA 8	-683	-1	2071	0.15	-31.89	0
67	SLE RA 9	-683	-1	2071	0.15	-31.89	0
67	SLE RA 10	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 11	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 12	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 13	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 14	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 15	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 16	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 17	-907	-1	2458	0.18	-42.38	0.01
67	SLE RA 18	-1002	-1	2624	0.19	-46.88	0.01
67	SLE RA 19	-1002	-1	2624	0.19	-46.88	0.01
67	SLE RA 20	-1002	-1	2624	0.19	-46.88	0.01
67	SLE RA 21	-1002	-1	2624	0.19	-46.88	0.01
67	SLE FR 1	-683	-1	2071	0.15	-31.89	0
67	SLE FR 2	-683	-1	2071	0.15	-31.89	0
67	SLE FR 3	-683	-1	2071	0.15	-31.89	0
67	SLE FR 4	-779	-1	2237	0.17	-36.38	0.01
67	SLE FR 5	-779	-1	2237	0.17	-36.38	0.01
67	SLE FR 6	-843	-1	2348	0.17	-39.38	0.01
67	SLE QP 1	-683	-1	2071	0.15	-31.89	0
67	SLE QP 2	-779	-1	2237	0.17	-36.38	0.01
67	SLD 1	-477	-6	1926	0.54	-20.57	0.16
67	SLD 2	-477	-6	1926	0.54	-20.57	0.16
67	SLD 3	-456	-3	1980	1.95	-19.68	0
67	SLD 4	-456	-3	1980	1.95	-19.68	0
67	SLD 5	-720	-6	2062	-1.86	-32.99	0.3
67	SLD 6	-720	-6	2062	-1.86	-32.99	0.3
67	SLD 7	-650	2	2241	2.84	-30.02	-0.24
67	SLD 8	-650	2	2241	2.84	-30.02	-0.24
67	SLD 9	-908	-4	2232	-2.51	-42.75	0.25
67	SLD 10	-908	-4	2232	-2.51	-42.75	0.25
67	SLD 11	-837	5	2412	2.19	-39.77	-0.29
67	SLD 12	-837	5	2412	2.19	-39.77	-0.29
67	SLD 13	-1102	2	2494	-1.62	-53.09	0.01
67	SLD 14	-1102	2	2494	-1.62	-53.09	0.01
67	SLD 15	-1081	5	2547	-0.21	-52.2	-0.15
67	SLD 16	-1081	5	2547	-0.21	-52.2	-0.15
67	SLV 1	-74	-13	1512	0.95	0.51	0.39
67	SLV 2	-74	-13	1512	0.95	0.51	0.39
67	SLV 3	-24	-7	1639	4.54	2.6	-0.02
67	SLV 4	-24	-7	1639	4.54	2.6	-0.02
67	SLV 5	-643	-14	1826	-5.05	-28.48	0.75
67	SLV 6	-643	-14	1826	-5.05	-28.48	0.75
67	SLV 7	-477	7	2251	6.93	-21.52	-0.63
67	SLV 8	-477	7	2251	6.93	-21.52	-0.63
67	SLV 9	-1081	-8	2222	-6.6	-51.25	0.64
67	SLV 10	-1081	-8	2222	-6.6	-51.25	0.64
67	SLV 11	-915	13	2648	5.38	-44.29	-0.74
67	SLV 12	-915	13	2648	5.38	-44.29	-0.74
67	SLV 13	-1533	6	2834	-4.21	-75.37	0.03
67	SLV 14	-1533	6	2834	-4.21	-75.37	0.03
67	SLV 15	-1484	12	2962	-0.62	-73.28	-0.38
67	SLV 16	-1484	12	2962	-0.62	-73.28	-0.38
68	SLU 1	-528	-185	3966	11.62	-20.92	0.01
68	SLU 2	-528	-185	3966	11.62	-20.92	0.01
68	SLU 3	-528	-185	3966	11.62	-20.92	0.01
68	SLU 4	-528	-185	3966	11.62	-20.92	0.01
68	SLU 5	-528	-185	3966	11.62	-20.92	0.01
68	SLU 6	-528	-185	3966	11.62	-20.92	0.01
68	SLU 7	-528	-185	3966	11.62	-20.92	0.01
68	SLU 8	-528	-185	3966	11.62	-20.92	0.01
68	SLU 9	-528	-185	3966	11.62	-20.92	0.01
68	SLU 10	-761	-198	5129	13.27	-31.14	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
68	SLU 11	-761	-198	5129	13.27	-31.14	0.01
68	SLU 12	-761	-198	5129	13.27	-31.14	0.01
68	SLU 13	-761	-198	5129	13.27	-31.14	0.01
68	SLU 14	-761	-198	5129	13.27	-31.14	0.01
68	SLU 15	-761	-198	5129	13.27	-31.14	0.01
68	SLU 16	-761	-198	5129	13.27	-31.14	0.01
68	SLU 17	-761	-198	5129	13.27	-31.14	0.01
68	SLU 18	-861	-203	5627	13.97	-35.51	0.01
68	SLU 19	-861	-203	5627	13.97	-35.51	0.01
68	SLU 20	-861	-203	5627	13.97	-35.51	0.01
68	SLU 21	-861	-203	5627	13.97	-35.51	0.01
68	SLU 22	-654	-194	4620	12.63	-26.38	0.01
68	SLU 23	-654	-194	4620	12.63	-26.38	0.01
68	SLU 24	-654	-194	4620	12.63	-26.38	0.01
68	SLU 25	-654	-194	4620	12.63	-26.38	0.01
68	SLU 26	-654	-194	4620	12.63	-26.38	0.01
68	SLU 27	-654	-194	4620	12.63	-26.38	0.01
68	SLU 28	-654	-194	4620	12.63	-26.38	0.01
68	SLU 29	-654	-194	4620	12.63	-26.38	0.01
68	SLU 30	-654	-194	4620	12.63	-26.38	0.01
68	SLU 31	-887	-207	5782	14.28	-36.6	0.01
68	SLU 32	-887	-207	5782	14.28	-36.6	0.01
68	SLU 33	-887	-207	5782	14.28	-36.6	0.01
68	SLU 34	-887	-207	5782	14.28	-36.6	0.01
68	SLU 35	-887	-207	5782	14.28	-36.6	0.01
68	SLU 36	-887	-207	5782	14.28	-36.6	0.01
68	SLU 37	-887	-207	5782	14.28	-36.6	0.01
68	SLU 38	-887	-207	5782	14.28	-36.6	0.01
68	SLU 39	-987	-213	6281	14.99	-40.97	0.02
68	SLU 40	-987	-213	6281	14.99	-40.97	0.02
68	SLU 41	-987	-213	6281	14.99	-40.97	0.02
68	SLU 42	-987	-213	6281	14.99	-40.97	0.02
68	SLU 43	-643	-237	4932	14.75	-25.33	0.02
68	SLU 44	-643	-237	4932	14.75	-25.33	0.02
68	SLU 45	-643	-237	4932	14.75	-25.33	0.02
68	SLU 46	-643	-237	4932	14.75	-25.33	0.02
68	SLU 47	-643	-237	4932	14.75	-25.33	0.02
68	SLU 48	-643	-237	4932	14.75	-25.33	0.02
68	SLU 49	-643	-237	4932	14.75	-25.33	0.02
68	SLU 50	-643	-237	4932	14.75	-25.33	0.02
68	SLU 51	-643	-237	4932	14.75	-25.33	0.02
68	SLU 52	-876	-250	6095	16.4	-35.54	0.02
68	SLU 53	-876	-250	6095	16.4	-35.54	0.02
68	SLU 54	-876	-250	6095	16.4	-35.54	0.02
68	SLU 55	-876	-250	6095	16.4	-35.54	0.02
68	SLU 56	-876	-250	6095	16.4	-35.54	0.02
68	SLU 57	-876	-250	6095	16.4	-35.54	0.02
68	SLU 58	-876	-250	6095	16.4	-35.54	0.02
68	SLU 59	-876	-250	6095	16.4	-35.54	0.02
68	SLU 60	-976	-256	6593	17.11	-39.92	0.02
68	SLU 61	-976	-256	6593	17.11	-39.92	0.02
68	SLU 62	-976	-256	6593	17.11	-39.92	0.02
68	SLU 63	-976	-256	6593	17.11	-39.92	0.02
68	SLU 64	-769	-246	5586	15.77	-30.79	0.02
68	SLU 65	-769	-246	5586	15.77	-30.79	0.02
68	SLU 66	-769	-246	5586	15.77	-30.79	0.02
68	SLU 67	-769	-246	5586	15.77	-30.79	0.02
68	SLU 68	-769	-246	5586	15.77	-30.79	0.02
68	SLU 69	-769	-246	5586	15.77	-30.79	0.02
68	SLU 70	-769	-246	5586	15.77	-30.79	0.02
68	SLU 71	-769	-246	5586	15.77	-30.79	0.02
68	SLU 72	-769	-246	5586	15.77	-30.79	0.02
68	SLU 73	-1002	-259	6748	17.42	-41	0.02
68	SLU 74	-1002	-259	6748	17.42	-41	0.02
68	SLU 75	-1002	-259	6748	17.42	-41	0.02
68	SLU 76	-1002	-259	6748	17.42	-41	0.02
68	SLU 77	-1002	-259	6748	17.42	-41	0.02
68	SLU 78	-1002	-259	6748	17.42	-41	0.02
68	SLU 79	-1002	-259	6748	17.42	-41	0.02
68	SLU 80	-1002	-259	6748	17.42	-41	0.02
68	SLU 81	-1102	-265	7247	18.12	-45.38	0.02
68	SLU 82	-1102	-265	7247	18.12	-45.38	0.02
68	SLU 83	-1102	-265	7247	18.12	-45.38	0.02
68	SLU 84	-1102	-265	7247	18.12	-45.38	0.02
68	SLE RA 1	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 2	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 3	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 4	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 5	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 6	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 7	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 8	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 9	-564	-187	4153	11.91	-22.48	0.01
68	SLE RA 10	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 11	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 12	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 13	-719	-196	4928	13.01	-29.29	0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
68	SLE RA 14	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 15	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 16	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 17	-719	-196	4928	13.01	-29.29	0.01
68	SLE RA 18	-786	-200	5260	13.48	-32.21	0.01
68	SLE RA 19	-786	-200	5260	13.48	-32.21	0.01
68	SLE RA 20	-786	-200	5260	13.48	-32.21	0.01
68	SLE RA 21	-786	-200	5260	13.48	-32.21	0.01
68	SLE FR 1	-564	-187	4153	11.91	-22.48	0.01
68	SLE FR 2	-564	-187	4153	11.91	-22.48	0.01
68	SLE FR 3	-564	-187	4153	11.91	-22.48	0.01
68	SLE FR 4	-631	-191	4485	12.38	-25.4	0.01
68	SLE FR 5	-631	-191	4485	12.38	-25.4	0.01
68	SLE FR 6	-675	-194	4707	12.69	-27.35	0.01
68	SLE QP 1	-564	-187	4153	11.91	-22.48	0.01
68	SLE QP 2	-631	-191	4485	12.38	-25.4	0.01
68	SLD 1	-426	-127	3542	8.52	-15.62	0.02
68	SLD 2	-426	-127	3542	8.52	-15.62	0.02
68	SLD 3	-416	-202	3736	13.05	-15.1	0.05
68	SLD 4	-416	-202	3736	13.05	-15.1	0.05
68	SLD 5	-584	-58	3909	4.35	-23.26	-0.04
68	SLD 6	-584	-58	3909	4.35	-23.26	-0.04
68	SLD 7	-552	-308	4554	19.45	-21.52	0.07
68	SLD 8	-552	-308	4554	19.45	-21.52	0.07
68	SLD 9	-710	-74	4416	5.3	-29.28	-0.05
68	SLD 10	-710	-74	4416	5.3	-29.28	-0.05
68	SLD 11	-678	-324	5062	20.41	-27.55	0.06
68	SLD 12	-678	-324	5062	20.41	-27.55	0.06
68	SLD 13	-845	-180	5235	11.7	-35.7	-0.02
68	SLD 14	-845	-180	5235	11.7	-35.7	-0.02
68	SLD 15	-836	-255	5428	16.23	-35.18	0.01
68	SLD 16	-836	-255	5428	16.23	-35.18	0.01
68	SLV 1	-152	-40	2282	3.24	-2.57	0.02
68	SLV 2	-152	-40	2282	3.24	-2.57	0.02
68	SLV 3	-130	-218	2741	13.97	-1.36	0.1
68	SLV 4	-130	-218	2741	13.97	-1.36	0.1
68	SLV 5	-521	124	3129	-6.64	-20.39	-0.11
68	SLV 6	-521	124	3129	-6.64	-20.39	-0.11
68	SLV 7	-447	-468	4658	29.13	-16.35	0.17
68	SLV 8	-447	-468	4658	29.13	-16.35	0.17
68	SLV 9	-814	86	4313	-4.38	-34.45	-0.14
68	SLV 10	-814	86	4313	-4.38	-34.45	-0.14
68	SLV 11	-740	-506	5842	31.39	-30.41	0.14
68	SLV 12	-740	-506	5842	31.39	-30.41	0.14
68	SLV 13	-1131	-165	6229	10.78	-49.44	-0.07
68	SLV 14	-1131	-165	6229	10.78	-49.44	-0.07
68	SLV 15	-1109	-342	6688	21.51	-48.23	0.01
68	SLV 16	-1109	-342	6688	21.51	-48.23	0.01
69	SLU 1	497	16	3730	-2.63	19.45	0
69	SLU 2	497	16	3730	-2.63	19.45	0
69	SLU 3	497	16	3730	-2.63	19.45	0
69	SLU 4	497	16	3730	-2.63	19.45	0
69	SLU 5	497	16	3730	-2.63	19.45	0
69	SLU 6	497	16	3730	-2.63	19.45	0
69	SLU 7	497	16	3730	-2.63	19.45	0
69	SLU 8	497	16	3730	-2.63	19.45	0
69	SLU 9	497	16	3730	-2.63	19.45	0
69	SLU 10	716	20	4729	-3.32	28.77	0
69	SLU 11	716	20	4729	-3.32	28.77	0
69	SLU 12	716	20	4729	-3.32	28.77	0
69	SLU 13	716	20	4729	-3.32	28.77	0
69	SLU 14	716	20	4729	-3.32	28.77	0
69	SLU 15	716	20	4729	-3.32	28.77	0
69	SLU 16	716	20	4729	-3.32	28.77	0
69	SLU 17	716	20	4729	-3.32	28.77	0
69	SLU 18	810	22	5157	-3.62	32.77	0
69	SLU 19	810	22	5157	-3.62	32.77	0
69	SLU 20	810	22	5157	-3.62	32.77	0
69	SLU 21	810	22	5157	-3.62	32.77	0
69	SLU 22	614	18	4270	-2.92	24.4	0
69	SLU 23	614	18	4270	-2.92	24.4	0
69	SLU 24	614	18	4270	-2.92	24.4	0
69	SLU 25	614	18	4270	-2.92	24.4	0
69	SLU 26	614	18	4270	-2.92	24.4	0
69	SLU 27	614	18	4270	-2.92	24.4	0
69	SLU 28	614	18	4270	-2.92	24.4	0
69	SLU 29	614	18	4270	-2.92	24.4	0
69	SLU 30	614	18	4270	-2.92	24.4	0
69	SLU 31	833	21	5269	-3.61	33.72	0
69	SLU 32	833	21	5269	-3.61	33.72	0
69	SLU 33	833	21	5269	-3.61	33.72	0
69	SLU 34	833	21	5269	-3.61	33.72	0
69	SLU 35	833	21	5269	-3.61	33.72	0
69	SLU 36	833	21	5269	-3.61	33.72	0
69	SLU 37	833	21	5269	-3.61	33.72	0
69	SLU 38	833	21	5269	-3.61	33.72	0
69	SLU 39	927	23	5697	-3.91	37.72	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
69	SLU 40	927	23	5697	-3.91	37.72	-0.01
69	SLU 41	927	23	5697	-3.91	37.72	-0.01
69	SLU 42	927	23	5697	-3.91	37.72	-0.01
69	SLU 43	606	21	4664	-3.31	23.58	0
69	SLU 44	606	21	4664	-3.31	23.58	0
69	SLU 45	606	21	4664	-3.31	23.58	0
69	SLU 46	606	21	4664	-3.31	23.58	0
69	SLU 47	606	21	4664	-3.31	23.58	0
69	SLU 48	606	21	4664	-3.31	23.58	0
69	SLU 49	606	21	4664	-3.31	23.58	0
69	SLU 50	606	21	4664	-3.31	23.58	0
69	SLU 51	606	21	4664	-3.31	23.58	0
69	SLU 52	825	25	5663	-4.01	32.91	0
69	SLU 53	825	25	5663	-4.01	32.91	0
69	SLU 54	825	25	5663	-4.01	32.91	0
69	SLU 55	825	25	5663	-4.01	32.91	0
69	SLU 56	825	25	5663	-4.01	32.91	0
69	SLU 57	825	25	5663	-4.01	32.91	0
69	SLU 58	825	25	5663	-4.01	32.91	0
69	SLU 59	825	25	5663	-4.01	32.91	0
69	SLU 60	919	26	6091	-4.31	36.9	-0.01
69	SLU 61	919	26	6091	-4.31	36.9	-0.01
69	SLU 62	919	26	6091	-4.31	36.9	-0.01
69	SLU 63	919	26	6091	-4.31	36.9	-0.01
69	SLU 64	723	22	5204	-3.61	28.54	0
69	SLU 65	723	22	5204	-3.61	28.54	0
69	SLU 66	723	22	5204	-3.61	28.54	0
69	SLU 67	723	22	5204	-3.61	28.54	0
69	SLU 68	723	22	5204	-3.61	28.54	0
69	SLU 69	723	22	5204	-3.61	28.54	0
69	SLU 70	723	22	5204	-3.61	28.54	0
69	SLU 71	723	22	5204	-3.61	28.54	0
69	SLU 72	723	22	5204	-3.61	28.54	0
69	SLU 73	942	26	6203	-4.3	37.86	-0.01
69	SLU 74	942	26	6203	-4.3	37.86	-0.01
69	SLU 75	942	26	6203	-4.3	37.86	-0.01
69	SLU 76	942	26	6203	-4.3	37.86	-0.01
69	SLU 77	942	26	6203	-4.3	37.86	-0.01
69	SLU 78	942	26	6203	-4.3	37.86	-0.01
69	SLU 79	942	26	6203	-4.3	37.86	-0.01
69	SLU 80	942	26	6203	-4.3	37.86	-0.01
69	SLU 81	1036	27	6631	-4.6	41.86	-0.01
69	SLU 82	1036	27	6631	-4.6	41.86	-0.01
69	SLU 83	1036	27	6631	-4.6	41.86	-0.01
69	SLU 84	1036	27	6631	-4.6	41.86	-0.01
69	SLE RA 1	530	17	3885	-2.71	20.86	0
69	SLE RA 2	530	17	3885	-2.71	20.86	0
69	SLE RA 3	530	17	3885	-2.71	20.86	0
69	SLE RA 4	530	17	3885	-2.71	20.86	0
69	SLE RA 5	530	17	3885	-2.71	20.86	0
69	SLE RA 6	530	17	3885	-2.71	20.86	0
69	SLE RA 7	530	17	3885	-2.71	20.86	0
69	SLE RA 8	530	17	3885	-2.71	20.86	0
69	SLE RA 9	530	17	3885	-2.71	20.86	0
69	SLE RA 10	676	19	4550	-3.17	27.08	0
69	SLE RA 11	676	19	4550	-3.17	27.08	0
69	SLE RA 12	676	19	4550	-3.17	27.08	0
69	SLE RA 13	676	19	4550	-3.17	27.08	0
69	SLE RA 14	676	19	4550	-3.17	27.08	0
69	SLE RA 15	676	19	4550	-3.17	27.08	0
69	SLE RA 16	676	19	4550	-3.17	27.08	0
69	SLE RA 17	676	19	4550	-3.17	27.08	0
69	SLE RA 18	739	20	4836	-3.37	29.74	0
69	SLE RA 19	739	20	4836	-3.37	29.74	0
69	SLE RA 20	739	20	4836	-3.37	29.74	0
69	SLE RA 21	739	20	4836	-3.37	29.74	0
69	SLE FR 1	530	17	3885	-2.71	20.86	0
69	SLE FR 2	530	17	3885	-2.71	20.86	0
69	SLE FR 3	530	17	3885	-2.71	20.86	0
69	SLE FR 4	593	18	4170	-2.91	23.53	0
69	SLE FR 5	593	18	4170	-2.91	23.53	0
69	SLE FR 6	635	18	4360	-3.04	25.3	0
69	SLE QP 1	530	17	3885	-2.71	20.86	0
69	SLE QP 2	593	18	4170	-2.91	23.53	0
69	SLD 1	809	107	4949	-6.74	33.38	0
69	SLD 2	809	107	4949	-6.74	33.38	0
69	SLD 3	799	3	4911	-2.24	32.94	-0.02
69	SLD 4	799	3	4911	-2.24	32.94	-0.02
69	SLD 5	673	203	4461	-10.89	27.16	0.02
69	SLD 6	673	203	4461	-10.89	27.16	0.02
69	SLD 7	640	-145	4335	4.12	25.68	-0.03
69	SLD 8	640	-145	4335	4.12	25.68	-0.03
69	SLD 9	546	180	4005	-9.94	21.37	0.03
69	SLD 10	546	180	4005	-9.94	21.37	0.03
69	SLD 11	513	-167	3879	5.07	19.9	-0.03
69	SLD 12	513	-167	3879	5.07	19.9	-0.03
69	SLD 13	387	33	3428	-3.58	14.11	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
69	SLD 14	387	33	3428	-3.58	14.11	0.01
69	SLD 15	377	-72	3390	0.92	13.67	-0.01
69	SLD 16	377	-72	3390	0.92	13.67	-0.01
69	SLV 1	1097	228	5985	-11.93	46.51	0
69	SLV 2	1097	228	5985	-11.93	46.51	0
69	SLV 3	1074	-18	5895	-1.3	45.48	-0.04
69	SLV 4	1074	-18	5895	-1.3	45.48	-0.04
69	SLV 5	779	454	4852	-21.73	31.98	0.06
69	SLV 6	779	454	4852	-21.73	31.98	0.06
69	SLV 7	703	-366	4550	13.69	28.55	-0.08
69	SLV 8	703	-366	4550	13.69	28.55	-0.08
69	SLV 9	483	402	3789	-19.51	18.5	0.07
69	SLV 10	483	402	3789	-19.51	18.5	0.07
69	SLV 11	407	-419	3488	15.92	15.07	-0.07
69	SLV 12	407	-419	3488	15.92	15.07	-0.07
69	SLV 13	112	53	2445	-4.51	1.57	0.03
69	SLV 14	112	53	2445	-4.51	1.57	0.03
69	SLV 15	89	-193	2354	6.11	0.54	-0.01
69	SLV 16	89	-193	2354	6.11	0.54	-0.01
70	SLU 1	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 2	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 3	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 4	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 5	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 6	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 7	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 8	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 9	-3	-426	1423	9.14	-1.14	-0.21
70	SLU 10	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 11	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 12	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 13	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 14	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 15	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 16	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 17	-5	-543	1820	11.54	-1.69	-0.32
70	SLU 18	-6	-593	1991	12.57	-1.93	-0.36
70	SLU 19	-6	-593	1991	12.57	-1.93	-0.36
70	SLU 20	-6	-593	1991	12.57	-1.93	-0.36
70	SLU 21	-6	-593	1991	12.57	-1.93	-0.36
70	SLU 22	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 23	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 24	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 25	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 26	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 27	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 28	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 29	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 30	-4	-492	1646	10.47	-1.44	-0.27
70	SLU 31	-6	-609	2043	12.87	-2	-0.38
70	SLU 32	-6	-609	2043	12.87	-2	-0.38
70	SLU 33	-6	-609	2043	12.87	-2	-0.38
70	SLU 34	-6	-609	2043	12.87	-2	-0.38
70	SLU 35	-6	-609	2043	12.87	-2	-0.38
70	SLU 36	-6	-609	2043	12.87	-2	-0.38
70	SLU 37	-6	-609	2043	12.87	-2	-0.38
70	SLU 38	-6	-609	2043	12.87	-2	-0.38
70	SLU 39	-7	-659	2214	13.9	-2.23	-0.42
70	SLU 40	-7	-659	2214	13.9	-2.23	-0.42
70	SLU 41	-7	-659	2214	13.9	-2.23	-0.42
70	SLU 42	-7	-659	2214	13.9	-2.23	-0.42
70	SLU 43	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 44	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 45	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 46	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 47	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 48	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 49	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 50	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 51	-4	-532	1773	11.42	-1.37	-0.26
70	SLU 52	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 53	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 54	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 55	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 56	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 57	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 58	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 59	-6	-649	2171	13.82	-1.93	-0.36
70	SLU 60	-6	-699	2341	14.85	-2.17	-0.41
70	SLU 61	-6	-699	2341	14.85	-2.17	-0.41
70	SLU 62	-6	-699	2341	14.85	-2.17	-0.41
70	SLU 63	-6	-699	2341	14.85	-2.17	-0.41
70	SLU 64	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 65	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 66	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 67	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 68	-5	-597	1996	12.75	-1.67	-0.31



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
70	SLU 69	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 70	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 71	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 72	-5	-597	1996	12.75	-1.67	-0.31
70	SLU 73	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 74	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 75	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 76	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 77	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 78	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 79	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 80	-7	-714	2394	15.15	-2.23	-0.42
70	SLU 81	-7	-764	2564	16.18	-2.47	-0.47
70	SLU 82	-7	-764	2564	16.18	-2.47	-0.47
70	SLU 83	-7	-764	2564	16.18	-2.47	-0.47
70	SLU 84	-7	-764	2564	16.18	-2.47	-0.47
70	SLE RA 1	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 2	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 3	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 4	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 5	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 6	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 7	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 8	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 9	-4	-445	1486	9.52	-1.22	-0.23
70	SLE RA 10	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 11	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 12	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 13	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 14	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 15	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 16	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 17	-5	-523	1751	11.12	-1.59	-0.3
70	SLE RA 18	-5	-556	1865	11.8	-1.75	-0.33
70	SLE RA 19	-5	-556	1865	11.8	-1.75	-0.33
70	SLE RA 20	-5	-556	1865	11.8	-1.75	-0.33
70	SLE RA 21	-5	-556	1865	11.8	-1.75	-0.33
70	SLE FR 1	-4	-445	1486	9.52	-1.22	-0.23
70	SLE FR 2	-4	-445	1486	9.52	-1.22	-0.23
70	SLE FR 3	-4	-445	1486	9.52	-1.22	-0.23
70	SLE FR 4	-4	-478	1600	10.2	-1.38	-0.26
70	SLE FR 5	-4	-478	1600	10.2	-1.38	-0.26
70	SLE FR 6	-4	-501	1676	10.66	-1.49	-0.28
70	SLE QP 1	-4	-445	1486	9.52	-1.22	-0.23
70	SLE QP 2	-4	-478	1600	10.2	-1.38	-0.26
70	SLD 1	-11	-369	1248	7.67	1.13	0.38
70	SLD 2	-11	-369	1248	7.67	1.13	0.38
70	SLD 3	-26	-423	1386	9.46	-0.51	-0.05
70	SLD 4	-26	-423	1386	9.46	-0.51	-0.05
70	SLD 5	15	-364	1284	6.72	1.86	0.58
70	SLD 6	15	-364	1284	6.72	1.86	0.58
70	SLD 7	-32	-543	1746	12.7	-3.6	-0.84
70	SLD 8	-32	-543	1746	12.7	-3.6	-0.84
70	SLD 9	24	-414	1454	7.71	0.84	0.32
70	SLD 10	24	-414	1454	7.71	0.84	0.32
70	SLD 11	-23	-593	1915	13.68	-4.62	-1.1
70	SLD 12	-23	-593	1915	13.68	-4.62	-1.1
70	SLD 13	17	-534	1814	10.95	-2.25	-0.47
70	SLD 14	17	-534	1814	10.95	-2.25	-0.47
70	SLD 15	3	-588	1952	12.74	-3.89	-0.9
70	SLD 16	3	-588	1952	12.74	-3.89	-0.9
70	SLV 1	-20	-222	777	4.25	4.71	1.29
70	SLV 2	-20	-222	777	4.25	4.71	1.29
70	SLV 3	-56	-349	1104	8.5	0.55	0.21
70	SLV 4	-56	-349	1104	8.5	0.55	0.21
70	SLV 5	45	-209	857	1.97	6.76	1.84
70	SLV 6	45	-209	857	1.97	6.76	1.84
70	SLV 7	-74	-632	1947	16.13	-7.11	-1.75
70	SLV 8	-74	-632	1947	16.13	-7.11	-1.75
70	SLV 9	66	-324	1253	4.27	4.35	1.24
70	SLV 10	66	-324	1253	4.27	4.35	1.24
70	SLV 11	-53	-748	2343	18.43	-9.52	-2.36
70	SLV 12	-53	-748	2343	18.43	-9.52	-2.36
70	SLV 13	48	-608	2096	11.91	-3.31	-0.73
70	SLV 14	48	-608	2096	11.91	-3.31	-0.73
70	SLV 15	12	-735	2423	16.16	-7.47	-1.81
70	SLV 16	12	-735	2423	16.16	-7.47	-1.81
71	SLU 1	-1	-139	2484	6.72	1.64	0.02
71	SLU 2	-1	-139	2484	6.72	1.64	0.02
71	SLU 3	-1	-139	2484	6.72	1.64	0.02
71	SLU 4	-1	-139	2484	6.72	1.64	0.02
71	SLU 5	-1	-139	2484	6.72	1.64	0.02
71	SLU 6	-1	-139	2484	6.72	1.64	0.02
71	SLU 7	-1	-139	2484	6.72	1.64	0.02
71	SLU 8	-1	-139	2484	6.72	1.64	0.02
71	SLU 9	-1	-139	2484	6.72	1.64	0.02
71	SLU 10	-1	-207	3060	9.61	2.44	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
71	SLU 11	-1	-207	3060	9.61	2.44	0.03
71	SLU 12	-1	-207	3060	9.61	2.44	0.03
71	SLU 13	-1	-207	3060	9.61	2.44	0.03
71	SLU 14	-1	-207	3060	9.61	2.44	0.03
71	SLU 15	-1	-207	3060	9.61	2.44	0.03
71	SLU 16	-1	-207	3060	9.61	2.44	0.03
71	SLU 17	-1	-207	3060	9.61	2.44	0.03
71	SLU 18	-1	-236	3307	10.85	2.77	0.03
71	SLU 19	-1	-236	3307	10.85	2.77	0.03
71	SLU 20	-1	-236	3307	10.85	2.77	0.03
71	SLU 21	-1	-236	3307	10.85	2.77	0.03
71	SLU 22	-1	-175	2794	8.22	2.07	0.03
71	SLU 23	-1	-175	2794	8.22	2.07	0.03
71	SLU 24	-1	-175	2794	8.22	2.07	0.03
71	SLU 25	-1	-175	2794	8.22	2.07	0.03
71	SLU 26	-1	-175	2794	8.22	2.07	0.03
71	SLU 27	-1	-175	2794	8.22	2.07	0.03
71	SLU 28	-1	-175	2794	8.22	2.07	0.03
71	SLU 29	-1	-175	2794	8.22	2.07	0.03
71	SLU 30	-1	-175	2794	8.22	2.07	0.03
71	SLU 31	-1	-243	3370	11.11	2.86	0.03
71	SLU 32	-1	-243	3370	11.11	2.86	0.03
71	SLU 33	-1	-243	3370	11.11	2.86	0.03
71	SLU 34	-1	-243	3370	11.11	2.86	0.03
71	SLU 35	-1	-243	3370	11.11	2.86	0.03
71	SLU 36	-1	-243	3370	11.11	2.86	0.03
71	SLU 37	-1	-243	3370	11.11	2.86	0.03
71	SLU 38	-1	-243	3370	11.11	2.86	0.03
71	SLU 39	-2	-272	3617	12.35	3.2	0.04
71	SLU 40	-2	-272	3617	12.35	3.2	0.04
71	SLU 41	-2	-272	3617	12.35	3.2	0.04
71	SLU 42	-2	-272	3617	12.35	3.2	0.04
71	SLU 43	-1	-168	3124	8.22	1.99	0.03
71	SLU 44	-1	-168	3124	8.22	1.99	0.03
71	SLU 45	-1	-168	3124	8.22	1.99	0.03
71	SLU 46	-1	-168	3124	8.22	1.99	0.03
71	SLU 47	-1	-168	3124	8.22	1.99	0.03
71	SLU 48	-1	-168	3124	8.22	1.99	0.03
71	SLU 49	-1	-168	3124	8.22	1.99	0.03
71	SLU 50	-1	-168	3124	8.22	1.99	0.03
71	SLU 51	-1	-168	3124	8.22	1.99	0.03
71	SLU 52	-1	-236	3699	11.11	2.78	0.03
71	SLU 53	-1	-236	3699	11.11	2.78	0.03
71	SLU 54	-1	-236	3699	11.11	2.78	0.03
71	SLU 55	-1	-236	3699	11.11	2.78	0.03
71	SLU 56	-1	-236	3699	11.11	2.78	0.03
71	SLU 57	-1	-236	3699	11.11	2.78	0.03
71	SLU 58	-1	-236	3699	11.11	2.78	0.03
71	SLU 59	-1	-236	3699	11.11	2.78	0.03
71	SLU 60	-1	-265	3946	12.35	3.12	0.04
71	SLU 61	-1	-265	3946	12.35	3.12	0.04
71	SLU 62	-1	-265	3946	12.35	3.12	0.04
71	SLU 63	-1	-265	3946	12.35	3.12	0.04
71	SLU 64	-1	-205	3433	9.72	2.41	0.03
71	SLU 65	-1	-205	3433	9.72	2.41	0.03
71	SLU 66	-1	-205	3433	9.72	2.41	0.03
71	SLU 67	-1	-205	3433	9.72	2.41	0.03
71	SLU 68	-1	-205	3433	9.72	2.41	0.03
71	SLU 69	-1	-205	3433	9.72	2.41	0.03
71	SLU 70	-1	-205	3433	9.72	2.41	0.03
71	SLU 71	-1	-205	3433	9.72	2.41	0.03
71	SLU 72	-1	-205	3433	9.72	2.41	0.03
71	SLU 73	-1	-272	4009	12.61	3.21	0.04
71	SLU 74	-1	-272	4009	12.61	3.21	0.04
71	SLU 75	-1	-272	4009	12.61	3.21	0.04
71	SLU 76	-1	-272	4009	12.61	3.21	0.04
71	SLU 77	-1	-272	4009	12.61	3.21	0.04
71	SLU 78	-1	-272	4009	12.61	3.21	0.04
71	SLU 79	-1	-272	4009	12.61	3.21	0.04
71	SLU 80	-1	-272	4009	12.61	3.21	0.04
71	SLU 81	-2	-301	4256	13.85	3.55	0.04
71	SLU 82	-2	-301	4256	13.85	3.55	0.04
71	SLU 83	-2	-301	4256	13.85	3.55	0.04
71	SLU 84	-2	-301	4256	13.85	3.55	0.04
71	SLE RA 1	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 2	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 3	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 4	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 5	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 6	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 7	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 8	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 9	-1	-149	2573	7.15	1.76	0.02
71	SLE RA 10	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 11	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 12	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 13	-1	-194	2957	9.07	2.29	0.03



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
71	SLE RA 14	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 15	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 16	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 17	-1	-194	2957	9.07	2.29	0.03
71	SLE RA 18	-1	-214	3122	9.9	2.52	0.03
71	SLE RA 19	-1	-214	3122	9.9	2.52	0.03
71	SLE RA 20	-1	-214	3122	9.9	2.52	0.03
71	SLE RA 21	-1	-214	3122	9.9	2.52	0.03
71	SLE FR 1	-1	-149	2573	7.15	1.76	0.02
71	SLE FR 2	-1	-149	2573	7.15	1.76	0.02
71	SLE FR 3	-1	-149	2573	7.15	1.76	0.02
71	SLE FR 4	-1	-169	2738	7.97	1.99	0.02
71	SLE FR 5	-1	-169	2738	7.97	1.99	0.02
71	SLE FR 6	-1	-182	2847	8.52	2.14	0.03
71	SLE QP 1	-1	-149	2573	7.15	1.76	0.02
71	SLE QP 2	-1	-169	2738	7.97	1.99	0.02
71	SLD 1	-13	-183	3124	8.26	2.7	0.04
71	SLD 2	-13	-183	3124	8.26	2.7	0.04
71	SLD 3	-6	-287	3154	12.7	5.75	0.04
71	SLD 4	-6	-287	3154	12.7	5.75	0.04
71	SLD 5	-15	-16	2808	1.34	-2.44	0.04
71	SLD 6	-15	-16	2808	1.34	-2.44	0.04
71	SLD 7	8	-361	2908	16.11	7.76	0.02
71	SLD 8	8	-361	2908	16.11	7.76	0.02
71	SLD 9	-10	23	2567	-0.16	-3.78	0.03
71	SLD 10	-10	23	2567	-0.16	-3.78	0.03
71	SLD 11	13	-321	2667	14.61	6.42	0.01
71	SLD 12	13	-321	2667	14.61	6.42	0.01
71	SLD 13	4	-51	2322	3.25	-1.77	0.01
71	SLD 14	4	-51	2322	3.25	-1.77	0.01
71	SLD 15	11	-154	2352	7.68	1.28	0.01
71	SLD 16	11	-154	2352	7.68	1.28	0.01
71	SLV 1	-30	-201	3633	8.57	3.48	0.07
71	SLV 2	-30	-201	3633	8.57	3.48	0.07
71	SLV 3	-13	-445	3708	19.03	11.27	0.06
71	SLV 4	-13	-445	3708	19.03	11.27	0.06
71	SLV 5	-35	191	2893	-7.71	-9.37	0.06
71	SLV 6	-35	191	2893	-7.71	-9.37	0.06
71	SLV 7	21	-621	3142	27.16	16.58	0.02
71	SLV 8	21	-621	3142	27.16	16.58	0.02
71	SLV 9	-22	284	2333	-11.21	-12.6	0.03
71	SLV 10	-22	284	2333	-11.21	-12.6	0.03
71	SLV 11	33	-528	2582	23.66	13.35	-0.01
71	SLV 12	33	-528	2582	23.66	13.35	-0.01
71	SLV 13	12	107	1767	-3.09	-7.29	-0.01
71	SLV 14	12	107	1767	-3.09	-7.29	-0.01
71	SLV 15	28	-136	1842	7.37	0.5	-0.02
71	SLV 16	28	-136	1842	7.37	0.5	-0.02
72	SLU 1	-4	-118	2293	2.3	0.68	-0.01
72	SLU 2	-4	-118	2293	2.3	0.68	-0.01
72	SLU 3	-4	-118	2293	2.3	0.68	-0.01
72	SLU 4	-4	-118	2293	2.3	0.68	-0.01
72	SLU 5	-4	-118	2293	2.3	0.68	-0.01
72	SLU 6	-4	-118	2293	2.3	0.68	-0.01
72	SLU 7	-4	-118	2293	2.3	0.68	-0.01
72	SLU 8	-4	-118	2293	2.3	0.68	-0.01
72	SLU 9	-4	-118	2293	2.3	0.68	-0.01
72	SLU 10	-6	-169	2773	3.45	1.01	-0.01
72	SLU 11	-6	-169	2773	3.45	1.01	-0.01
72	SLU 12	-6	-169	2773	3.45	1.01	-0.01
72	SLU 13	-6	-169	2773	3.45	1.01	-0.01
72	SLU 14	-6	-169	2773	3.45	1.01	-0.01
72	SLU 15	-6	-169	2773	3.45	1.01	-0.01
72	SLU 16	-6	-169	2773	3.45	1.01	-0.01
72	SLU 17	-6	-169	2773	3.45	1.01	-0.01
72	SLU 18	-7	-191	2978	3.95	1.15	-0.01
72	SLU 19	-7	-191	2978	3.95	1.15	-0.01
72	SLU 20	-7	-191	2978	3.95	1.15	-0.01
72	SLU 21	-7	-191	2978	3.95	1.15	-0.01
72	SLU 22	-5	-147	2550	3.06	0.86	-0.01
72	SLU 23	-5	-147	2550	3.06	0.86	-0.01
72	SLU 24	-5	-147	2550	3.06	0.86	-0.01
72	SLU 25	-5	-147	2550	3.06	0.86	-0.01
72	SLU 26	-5	-147	2550	3.06	0.86	-0.01
72	SLU 27	-5	-147	2550	3.06	0.86	-0.01
72	SLU 28	-5	-147	2550	3.06	0.86	-0.01
72	SLU 29	-5	-147	2550	3.06	0.86	-0.01
72	SLU 30	-5	-147	2550	3.06	0.86	-0.01
72	SLU 31	-7	-198	3030	4.21	1.19	-0.01
72	SLU 32	-7	-198	3030	4.21	1.19	-0.01
72	SLU 33	-7	-198	3030	4.21	1.19	-0.01
72	SLU 34	-7	-198	3030	4.21	1.19	-0.01
72	SLU 35	-7	-198	3030	4.21	1.19	-0.01
72	SLU 36	-7	-198	3030	4.21	1.19	-0.01
72	SLU 37	-7	-198	3030	4.21	1.19	-0.01
72	SLU 38	-7	-198	3030	4.21	1.19	-0.01
72	SLU 39	-8	-220	3235	4.7	1.33	-0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
72	SLU 40	-8	-220	3235	4.7	1.33	-0.01
72	SLU 41	-8	-220	3235	4.7	1.33	-0.01
72	SLU 42	-8	-220	3235	4.7	1.33	-0.01
72	SLU 43	-5	-144	2893	2.74	0.83	-0.01
72	SLU 44	-5	-144	2893	2.74	0.83	-0.01
72	SLU 45	-5	-144	2893	2.74	0.83	-0.01
72	SLU 46	-5	-144	2893	2.74	0.83	-0.01
72	SLU 47	-5	-144	2893	2.74	0.83	-0.01
72	SLU 48	-5	-144	2893	2.74	0.83	-0.01
72	SLU 49	-5	-144	2893	2.74	0.83	-0.01
72	SLU 50	-5	-144	2893	2.74	0.83	-0.01
72	SLU 51	-5	-144	2893	2.74	0.83	-0.01
72	SLU 52	-7	-195	3373	3.89	1.15	-0.01
72	SLU 53	-7	-195	3373	3.89	1.15	-0.01
72	SLU 54	-7	-195	3373	3.89	1.15	-0.01
72	SLU 55	-7	-195	3373	3.89	1.15	-0.01
72	SLU 56	-7	-195	3373	3.89	1.15	-0.01
72	SLU 57	-7	-195	3373	3.89	1.15	-0.01
72	SLU 58	-7	-195	3373	3.89	1.15	-0.01
72	SLU 59	-7	-195	3373	3.89	1.15	-0.01
72	SLU 60	-8	-216	3578	4.38	1.29	-0.01
72	SLU 61	-8	-216	3578	4.38	1.29	-0.01
72	SLU 62	-8	-216	3578	4.38	1.29	-0.01
72	SLU 63	-8	-216	3578	4.38	1.29	-0.01
72	SLU 64	-6	-173	3150	3.49	1	-0.01
72	SLU 65	-6	-173	3150	3.49	1	-0.01
72	SLU 66	-6	-173	3150	3.49	1	-0.01
72	SLU 67	-6	-173	3150	3.49	1	-0.01
72	SLU 68	-6	-173	3150	3.49	1	-0.01
72	SLU 69	-6	-173	3150	3.49	1	-0.01
72	SLU 70	-6	-173	3150	3.49	1	-0.01
72	SLU 71	-6	-173	3150	3.49	1	-0.01
72	SLU 72	-6	-173	3150	3.49	1	-0.01
72	SLU 73	-8	-224	3629	4.64	1.33	-0.01
72	SLU 74	-8	-224	3629	4.64	1.33	-0.01
72	SLU 75	-8	-224	3629	4.64	1.33	-0.01
72	SLU 76	-8	-224	3629	4.64	1.33	-0.01
72	SLU 77	-8	-224	3629	4.64	1.33	-0.01
72	SLU 78	-8	-224	3629	4.64	1.33	-0.01
72	SLU 79	-8	-224	3629	4.64	1.33	-0.01
72	SLU 80	-8	-224	3629	4.64	1.33	-0.01
72	SLU 81	-9	-246	3835	5.13	1.47	-0.01
72	SLU 82	-9	-246	3835	5.13	1.47	-0.01
72	SLU 83	-9	-246	3835	5.13	1.47	-0.01
72	SLU 84	-9	-246	3835	5.13	1.47	-0.01
72	SLE RA 1	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 2	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 3	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 4	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 5	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 6	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 7	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 8	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 9	-5	-127	2367	2.52	0.73	-0.01
72	SLE RA 10	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 11	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 12	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 13	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 14	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 15	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 16	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 17	-6	-161	2686	3.29	0.95	-0.01
72	SLE RA 18	-6	-175	2823	3.61	1.05	-0.01
72	SLE RA 19	-6	-175	2823	3.61	1.05	-0.01
72	SLE RA 20	-6	-175	2823	3.61	1.05	-0.01
72	SLE RA 21	-6	-175	2823	3.61	1.05	-0.01
72	SLE FR 1	-5	-127	2367	2.52	0.73	-0.01
72	SLE FR 2	-5	-127	2367	2.52	0.73	-0.01
72	SLE FR 3	-5	-127	2367	2.52	0.73	-0.01
72	SLE FR 4	-5	-141	2504	2.85	0.83	-0.01
72	SLE FR 5	-5	-141	2504	2.85	0.83	-0.01
72	SLE FR 6	-5	-151	2595	3.07	0.89	-0.01
72	SLE QP 1	-5	-127	2367	2.52	0.73	-0.01
72	SLE QP 2	-5	-141	2504	2.85	0.83	-0.01
72	SLD 1	-18	-149	2773	2.76	2.64	-0.02
72	SLD 2	-18	-149	2773	2.76	2.64	-0.02
72	SLD 3	-10	-251	2819	7.13	8.14	-0.02
72	SLD 4	-10	-251	2819	7.13	8.14	-0.02
72	SLD 5	-22	11	2515	-3.8	-6.98	-0.02
72	SLD 6	-22	11	2515	-3.8	-6.98	-0.02
72	SLD 7	6	-329	2668	10.75	11.37	-0.01
72	SLD 8	6	-329	2668	10.75	11.37	-0.01
72	SLD 9	-16	46	2339	-5.06	-9.71	-0.01
72	SLD 10	-16	46	2339	-5.06	-9.71	-0.01
72	SLD 11	11	-293	2492	9.5	8.63	0
72	SLD 12	11	-293	2492	9.5	8.63	0
72	SLD 13	-1	-31	2188	-1.43	-6.49	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
72	SLD 14	-1	-31	2188	-1.43	-6.49	0
72	SLD 15	8	-133	2234	-0.98	-0.98	0.01
72	SLD 16	8	-133	2234	2.93	-0.98	0.01
72	SLV 1	-36	-159	3125	2.6	4.8	-0.04
72	SLV 2	-36	-159	3125	2.6	4.8	-0.04
72	SLV 3	-16	-399	3242	12.93	18.83	-0.04
72	SLV 4	-16	-399	3242	12.93	18.83	-0.04
72	SLV 5	-46	218	2513	-12.9	-19.26	-0.03
72	SLV 6	-46	218	2513	-12.9	-19.26	-0.03
72	SLV 7	23	-583	2903	21.55	27.5	-0.01
72	SLV 8	23	-583	2903	21.55	27.5	-0.01
72	SLV 9	-33	301	2105	-15.85	-25.85	-0.01
72	SLV 10	-33	301	2105	-15.85	-25.85	-0.01
72	SLV 11	35	-501	2495	18.6	20.91	0.01
72	SLV 12	35	-501	2495	18.6	20.91	0.01
72	SLV 13	6	117	1765	-7.24	-17.17	0.02
72	SLV 14	6	117	1765	-7.24	-17.17	0.02
72	SLV 15	26	-123	1882	3.1	-3.14	0.03
72	SLV 16	26	-123	1882	3.1	-3.14	0.03
73	SLU 1	-9	-189	2139	8.78	-0.48	0
73	SLU 2	-9	-189	2139	8.78	-0.48	0
73	SLU 3	-9	-189	2139	8.78	-0.48	0
73	SLU 4	-9	-189	2139	8.78	-0.48	0
73	SLU 5	-9	-189	2139	8.78	-0.48	0
73	SLU 6	-9	-189	2139	8.78	-0.48	0
73	SLU 7	-9	-189	2139	8.78	-0.48	0
73	SLU 8	-9	-189	2139	8.78	-0.48	0
73	SLU 9	-9	-189	2139	8.78	-0.48	0
73	SLU 10	-12	-251	2560	11.75	-0.63	0
73	SLU 11	-12	-251	2560	11.75	-0.63	0
73	SLU 12	-12	-251	2560	11.75	-0.63	0
73	SLU 13	-12	-251	2560	11.75	-0.63	0
73	SLU 14	-12	-251	2560	11.75	-0.63	0
73	SLU 15	-12	-251	2560	11.75	-0.63	0
73	SLU 16	-12	-251	2560	11.75	-0.63	0
73	SLU 17	-12	-251	2560	11.75	-0.63	0
73	SLU 18	-13	-278	2740	13.02	-0.7	0
73	SLU 19	-13	-278	2740	13.02	-0.7	0
73	SLU 20	-13	-278	2740	13.02	-0.7	0
73	SLU 21	-13	-278	2740	13.02	-0.7	0
73	SLU 22	-11	-223	2363	10.35	-0.53	0
73	SLU 23	-11	-223	2363	10.35	-0.53	0
73	SLU 24	-11	-223	2363	10.35	-0.53	0
73	SLU 25	-11	-223	2363	10.35	-0.53	0
73	SLU 26	-11	-223	2363	10.35	-0.53	0
73	SLU 27	-11	-223	2363	10.35	-0.53	0
73	SLU 28	-11	-223	2363	10.35	-0.53	0
73	SLU 29	-11	-223	2363	10.35	-0.53	0
73	SLU 30	-11	-223	2363	10.35	-0.53	0
73	SLU 31	-14	-286	2784	13.32	-0.68	0
73	SLU 32	-14	-286	2784	13.32	-0.68	0
73	SLU 33	-14	-286	2784	13.32	-0.68	0
73	SLU 34	-14	-286	2784	13.32	-0.68	0
73	SLU 35	-14	-286	2784	13.32	-0.68	0
73	SLU 36	-14	-286	2784	13.32	-0.68	0
73	SLU 37	-14	-286	2784	13.32	-0.68	0
73	SLU 38	-14	-286	2784	13.32	-0.68	0
73	SLU 39	-15	-313	2964	14.59	-0.74	0
73	SLU 40	-15	-313	2964	14.59	-0.74	0
73	SLU 41	-15	-313	2964	14.59	-0.74	0
73	SLU 42	-15	-313	2964	14.59	-0.74	0
73	SLU 43	-11	-233	2703	10.88	-0.61	0
73	SLU 44	-11	-233	2703	10.88	-0.61	0
73	SLU 45	-11	-233	2703	10.88	-0.61	0
73	SLU 46	-11	-233	2703	10.88	-0.61	0
73	SLU 47	-11	-233	2703	10.88	-0.61	0
73	SLU 48	-11	-233	2703	10.88	-0.61	0
73	SLU 49	-11	-233	2703	10.88	-0.61	0
73	SLU 50	-11	-233	2703	10.88	-0.61	0
73	SLU 51	-11	-233	2703	10.88	-0.61	0
73	SLU 52	-14	-296	3124	13.85	-0.76	0
73	SLU 53	-14	-296	3124	13.85	-0.76	0
73	SLU 54	-14	-296	3124	13.85	-0.76	0
73	SLU 55	-14	-296	3124	13.85	-0.76	0
73	SLU 56	-14	-296	3124	13.85	-0.76	0
73	SLU 57	-14	-296	3124	13.85	-0.76	0
73	SLU 58	-14	-296	3124	13.85	-0.76	0
73	SLU 59	-14	-296	3124	13.85	-0.76	0
73	SLU 60	-15	-323	3305	15.12	-0.82	0
73	SLU 61	-15	-323	3305	15.12	-0.82	0
73	SLU 62	-15	-323	3305	15.12	-0.82	0
73	SLU 63	-15	-323	3305	15.12	-0.82	0
73	SLU 64	-13	-268	2928	12.45	-0.65	0
73	SLU 65	-13	-268	2928	12.45	-0.65	0
73	SLU 66	-13	-268	2928	12.45	-0.65	0
73	SLU 67	-13	-268	2928	12.45	-0.65	0
73	SLU 68	-13	-268	2928	12.45	-0.65	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
73	SLU 69	-13	-268	2928	12.45	-0.65	0
73	SLU 70	-13	-268	2928	12.45	-0.65	0
73	SLU 71	-13	-268	2928	12.45	-0.65	0
73	SLU 72	-13	-268	2928	12.45	-0.65	0
73	SLU 73	-16	-331	3349	15.41	-0.81	0
73	SLU 74	-16	-331	3349	15.41	-0.81	0
73	SLU 75	-16	-331	3349	15.41	-0.81	0
73	SLU 76	-16	-331	3349	15.41	-0.81	0
73	SLU 77	-16	-331	3349	15.41	-0.81	0
73	SLU 78	-16	-331	3349	15.41	-0.81	0
73	SLU 79	-16	-331	3349	15.41	-0.81	0
73	SLU 80	-16	-331	3349	15.41	-0.81	0
73	SLU 81	-17	-358	3529	16.68	-0.87	0
73	SLU 82	-17	-358	3529	16.68	-0.87	0
73	SLU 83	-17	-358	3529	16.68	-0.87	0
73	SLU 84	-17	-358	3529	16.68	-0.87	0
73	SLE RA 1	-9	-198	2203	9.23	-0.49	0
73	SLE RA 2	-9	-198	2203	9.23	-0.49	0
73	SLE RA 3	-9	-198	2203	9.23	-0.49	0
73	SLE RA 4	-9	-198	2203	9.23	-0.49	0
73	SLE RA 5	-9	-198	2203	9.23	-0.49	0
73	SLE RA 6	-9	-198	2203	9.23	-0.49	0
73	SLE RA 7	-9	-198	2203	9.23	-0.49	0
73	SLE RA 8	-9	-198	2203	9.23	-0.49	0
73	SLE RA 9	-9	-198	2203	9.23	-0.49	0
73	SLE RA 10	-11	-240	2483	11.21	-0.59	0
73	SLE RA 11	-11	-240	2483	11.21	-0.59	0
73	SLE RA 12	-11	-240	2483	11.21	-0.59	0
73	SLE RA 13	-11	-240	2483	11.21	-0.59	0
73	SLE RA 14	-11	-240	2483	11.21	-0.59	0
73	SLE RA 15	-11	-240	2483	11.21	-0.59	0
73	SLE RA 16	-11	-240	2483	11.21	-0.59	0
73	SLE RA 17	-11	-240	2483	11.21	-0.59	0
73	SLE RA 18	-12	-258	2604	12.06	-0.64	0
73	SLE RA 19	-12	-258	2604	12.06	-0.64	0
73	SLE RA 20	-12	-258	2604	12.06	-0.64	0
73	SLE RA 21	-12	-258	2604	12.06	-0.64	0
73	SLE FR 1	-9	-198	2203	9.23	-0.49	0
73	SLE FR 2	-9	-198	2203	9.23	-0.49	0
73	SLE FR 3	-9	-198	2203	9.23	-0.49	0
73	SLE FR 4	-10	-216	2323	10.08	-0.54	0
73	SLE FR 5	-10	-216	2323	10.08	-0.54	0
73	SLE FR 6	-11	-228	2403	10.64	-0.56	0
73	SLE QP 1	-9	-198	2203	9.23	-0.49	0
73	SLE QP 2	-10	-216	2323	10.08	-0.54	0
73	SLD 1	-21	-228	2526	10.59	4.39	-0.01
73	SLD 2	-21	-228	2526	10.59	4.39	-0.01
73	SLD 3	-12	-333	2586	15.13	11.68	-0.01
73	SLD 4	-12	-333	2586	15.13	11.68	-0.01
73	SLD 5	-27	-61	2293	3.35	-10.11	-0.01
73	SLD 6	-27	-61	2293	3.35	-10.11	-0.01
73	SLD 7	3	-410	2493	18.48	14.18	0
73	SLD 8	3	-410	2493	18.48	14.18	0
73	SLD 9	-23	-23	2154	1.67	-15.25	0
73	SLD 10	-23	-23	2154	1.67	-15.25	0
73	SLD 11	7	-372	2353	16.81	9.04	0.01
73	SLD 12	7	-372	2353	16.81	9.04	0.01
73	SLD 13	-8	-100	2060	5.02	-12.75	0.01
73	SLD 14	-8	-100	2060	5.02	-12.75	0.01
73	SLD 15	1	-205	2120	9.56	-5.46	0.01
73	SLD 16	1	-205	2120	9.56	-5.46	0.01
73	SLV 1	-37	-242	2789	11.22	10.69	-0.03
73	SLV 2	-37	-242	2789	11.22	10.69	-0.03
73	SLV 3	-15	-488	2941	21.94	29.29	-0.02
73	SLV 4	-15	-488	2941	21.94	29.29	-0.02
73	SLV 5	-52	150	2231	-5.83	-25.38	-0.02
73	SLV 6	-52	150	2231	-5.83	-25.38	-0.02
73	SLV 7	22	-672	2740	29.88	36.62	0.01
73	SLV 8	22	-672	2740	29.88	36.62	0.01
73	SLV 9	-42	239	1906	-9.73	-37.7	-0.01
73	SLV 10	-42	239	1906	-9.73	-37.7	-0.01
73	SLV 11	31	-582	2415	25.98	24.31	0.02
73	SLV 12	31	-582	2415	25.98	24.31	0.02
73	SLV 13	-5	56	1705	-1.78	-30.36	0.02
73	SLV 14	-5	56	1705	-1.78	-30.36	0.02
73	SLV 15	17	-191	1857	8.93	-11.76	0.03
73	SLV 16	17	-191	1857	8.93	-11.76	0.03
74	SLU 1	-4	320	1283	-5.22	0.05	0.02
74	SLU 2	-4	320	1283	-5.22	0.05	0.02
74	SLU 3	-4	320	1283	-5.22	0.05	0.02
74	SLU 4	-4	320	1283	-5.22	0.05	0.02
74	SLU 5	-4	320	1283	-5.22	0.05	0.02
74	SLU 6	-4	320	1283	-5.22	0.05	0.02
74	SLU 7	-4	320	1283	-5.22	0.05	0.02
74	SLU 8	-4	320	1283	-5.22	0.05	0.02
74	SLU 9	-4	320	1283	-5.22	0.05	0.02
74	SLU 10	-6	363	1468	-5.38	0.04	0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
74	SLU 11	-6	363	1468	-5.38	0.04	0.04
74	SLU 12	-6	363	1468	-5.38	0.04	0.04
74	SLU 13	-6	363	1468	-5.38	0.04	0.04
74	SLU 14	-6	363	1468	-5.38	0.04	0.04
74	SLU 15	-6	363	1468	-5.38	0.04	0.04
74	SLU 16	-6	363	1468	-5.38	0.04	0.04
74	SLU 17	-6	363	1468	-5.38	0.04	0.04
74	SLU 18	-7	382	1547	-5.45	0.03	0.05
74	SLU 19	-7	382	1547	-5.45	0.03	0.05
74	SLU 20	-7	382	1547	-5.45	0.03	0.05
74	SLU 21	-7	382	1547	-5.45	0.03	0.05
74	SLU 22	-5	345	1392	-5.38	0.03	0.03
74	SLU 23	-5	345	1392	-5.38	0.03	0.03
74	SLU 24	-5	345	1392	-5.38	0.03	0.03
74	SLU 25	-5	345	1392	-5.38	0.03	0.03
74	SLU 26	-5	345	1392	-5.38	0.03	0.03
74	SLU 27	-5	345	1392	-5.38	0.03	0.03
74	SLU 28	-5	345	1392	-5.38	0.03	0.03
74	SLU 29	-5	345	1392	-5.38	0.03	0.03
74	SLU 30	-5	345	1392	-5.38	0.03	0.03
74	SLU 31	-7	388	1576	-5.54	0.02	0.05
74	SLU 32	-7	388	1576	-5.54	0.02	0.05
74	SLU 33	-7	388	1576	-5.54	0.02	0.05
74	SLU 34	-7	388	1576	-5.54	0.02	0.05
74	SLU 35	-7	388	1576	-5.54	0.02	0.05
74	SLU 36	-7	388	1576	-5.54	0.02	0.05
74	SLU 37	-7	388	1576	-5.54	0.02	0.05
74	SLU 38	-7	388	1576	-5.54	0.02	0.05
74	SLU 39	-8	406	1655	-5.61	0.02	0.05
74	SLU 40	-8	406	1655	-5.61	0.02	0.05
74	SLU 41	-8	406	1655	-5.61	0.02	0.05
74	SLU 42	-8	406	1655	-5.61	0.02	0.05
74	SLU 43	-5	408	1631	-6.73	0.07	0.03
74	SLU 44	-5	408	1631	-6.73	0.07	0.03
74	SLU 45	-5	408	1631	-6.73	0.07	0.03
74	SLU 46	-5	408	1631	-6.73	0.07	0.03
74	SLU 47	-5	408	1631	-6.73	0.07	0.03
74	SLU 48	-5	408	1631	-6.73	0.07	0.03
74	SLU 49	-5	408	1631	-6.73	0.07	0.03
74	SLU 50	-5	408	1631	-6.73	0.07	0.03
74	SLU 51	-5	408	1631	-6.73	0.07	0.03
74	SLU 52	-7	451	1816	-6.89	0.05	0.04
74	SLU 53	-7	451	1816	-6.89	0.05	0.04
74	SLU 54	-7	451	1816	-6.89	0.05	0.04
74	SLU 55	-7	451	1816	-6.89	0.05	0.04
74	SLU 56	-7	451	1816	-6.89	0.05	0.04
74	SLU 57	-7	451	1816	-6.89	0.05	0.04
74	SLU 58	-7	451	1816	-6.89	0.05	0.04
74	SLU 59	-7	451	1816	-6.89	0.05	0.04
74	SLU 60	-8	469	1895	-6.96	0.05	0.05
74	SLU 61	-8	469	1895	-6.96	0.05	0.05
74	SLU 62	-8	469	1895	-6.96	0.05	0.05
74	SLU 63	-8	469	1895	-6.96	0.05	0.05
74	SLU 64	-6	433	1740	-6.89	0.05	0.04
74	SLU 65	-6	433	1740	-6.89	0.05	0.04
74	SLU 66	-6	433	1740	-6.89	0.05	0.04
74	SLU 67	-6	433	1740	-6.89	0.05	0.04
74	SLU 68	-6	433	1740	-6.89	0.05	0.04
74	SLU 69	-6	433	1740	-6.89	0.05	0.04
74	SLU 70	-6	433	1740	-6.89	0.05	0.04
74	SLU 71	-6	433	1740	-6.89	0.05	0.04
74	SLU 72	-6	433	1740	-6.89	0.05	0.04
74	SLU 73	-8	476	1924	-7.05	0.04	0.05
74	SLU 74	-8	476	1924	-7.05	0.04	0.05
74	SLU 75	-8	476	1924	-7.05	0.04	0.05
74	SLU 76	-8	476	1924	-7.05	0.04	0.05
74	SLU 77	-8	476	1924	-7.05	0.04	0.05
74	SLU 78	-8	476	1924	-7.05	0.04	0.05
74	SLU 79	-8	476	1924	-7.05	0.04	0.05
74	SLU 80	-8	476	1924	-7.05	0.04	0.05
74	SLU 81	-9	494	2003	-7.12	0.04	0.06
74	SLU 82	-9	494	2003	-7.12	0.04	0.06
74	SLU 83	-9	494	2003	-7.12	0.04	0.06
74	SLU 84	-9	494	2003	-7.12	0.04	0.06
74	SLE RA 1	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 2	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 3	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 4	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 5	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 6	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 7	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 8	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 9	-5	327	1314	-5.27	0.04	0.03
74	SLE RA 10	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 11	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 12	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 13	-6	356	1437	-5.37	0.04	0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
74	SLE RA 14	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 15	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 16	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 17	-6	356	1437	-5.37	0.04	0.04
74	SLE RA 18	-7	368	1490	-5.42	0.03	0.04
74	SLE RA 19	-7	368	1490	-5.42	0.03	0.04
74	SLE RA 20	-7	368	1490	-5.42	0.03	0.04
74	SLE RA 21	-7	368	1490	-5.42	0.03	0.04
74	SLE FR 1	-5	327	1314	-5.27	0.04	0.03
74	SLE FR 2	-5	327	1314	-5.27	0.04	0.03
74	SLE FR 3	-5	327	1314	-5.27	0.04	0.03
74	SLE FR 4	-5	340	1367	-5.31	0.04	0.03
74	SLE FR 5	-5	340	1367	-5.31	0.04	0.03
74	SLE FR 6	-6	348	1402	-5.34	0.04	0.03
74	SLE QP 1	-5	327	1314	-5.27	0.04	0.03
74	SLE QP 2	-5	340	1367	-5.31	0.04	0.03
74	SLD 1	-22	275	1182	-5.4	8.19	-1.2
74	SLD 2	-22	275	1182	-5.4	8.19	-1.2
74	SLD 3	-31	347	1381	-2.87	4.66	-0.63
74	SLD 4	-31	347	1381	-2.87	4.66	-0.63
74	SLD 5	4	212	1011	-9.17	7.83	-1.21
74	SLD 6	4	212	1011	-9.17	7.83	-1.21
74	SLD 7	-27	450	1672	-0.74	-3.93	0.7
74	SLD 8	-27	450	1672	-0.74	-3.93	0.7
74	SLD 9	16	229	1062	-9.88	4.01	-0.64
74	SLD 10	16	229	1062	-9.88	4.01	-0.64
74	SLD 11	-14	467	1723	-1.45	-7.76	1.27
74	SLD 12	-14	467	1723	-1.45	-7.76	1.27
74	SLD 13	20	332	1353	-7.75	-4.58	0.69
74	SLD 14	20	332	1353	-7.75	-4.58	0.69
74	SLD 15	11	404	1552	-5.22	-8.11	1.26
74	SLD 16	11	404	1552	-5.22	-8.11	1.26
74	SLV 1	-45	183	915	-5.42	20	-2.98
74	SLV 2	-45	183	915	-5.42	20	-2.98
74	SLV 3	-69	355	1396	0.6	11.1	-1.54
74	SLV 4	-69	355	1396	0.6	11.1	-1.54
74	SLV 5	20	32	502	-14.47	19.51	-3.06
74	SLV 6	20	32	502	-14.47	19.51	-3.06
74	SLV 7	-61	605	2105	5.59	-10.13	1.74
74	SLV 8	-61	605	2105	5.59	-10.13	1.74
74	SLV 9	51	74	629	-16.21	10.21	-1.68
74	SLV 10	51	74	629	-16.21	10.21	-1.68
74	SLV 11	-30	647	2232	3.84	-19.43	3.12
74	SLV 12	-30	647	2232	3.84	-19.43	3.12
74	SLV 13	59	325	1338	-11.22	-11.03	1.6
74	SLV 14	59	325	1338	-11.22	-11.03	1.6
74	SLV 15	35	496	1819	-5.21	-19.92	3.04
74	SLV 16	35	496	1819	-5.21	-19.92	3.04
75	SLU 1	-9	-163	1961	4.04	-1.01	0
75	SLU 2	-9	-163	1961	4.04	-1.01	0
75	SLU 3	-9	-163	1961	4.04	-1.01	0
75	SLU 4	-9	-163	1961	4.04	-1.01	0
75	SLU 5	-9	-163	1961	4.04	-1.01	0
75	SLU 6	-9	-163	1961	4.04	-1.01	0
75	SLU 7	-9	-163	1961	4.04	-1.01	0
75	SLU 8	-9	-163	1961	4.04	-1.01	0
75	SLU 9	-9	-163	1961	4.04	-1.01	0
75	SLU 10	-11	-206	2330	4.94	-1.41	0
75	SLU 11	-11	-206	2330	4.94	-1.41	0
75	SLU 12	-11	-206	2330	4.94	-1.41	0
75	SLU 13	-11	-206	2330	4.94	-1.41	0
75	SLU 14	-11	-206	2330	4.94	-1.41	0
75	SLU 15	-11	-206	2330	4.94	-1.41	0
75	SLU 16	-11	-206	2330	4.94	-1.41	0
75	SLU 17	-11	-206	2330	4.94	-1.41	0
75	SLU 18	-12	-224	2489	5.33	-1.58	0
75	SLU 19	-12	-224	2489	5.33	-1.58	0
75	SLU 20	-12	-224	2489	5.33	-1.58	0
75	SLU 21	-12	-224	2489	5.33	-1.58	0
75	SLU 22	-10	-189	2156	4.72	-1.17	0
75	SLU 23	-10	-189	2156	4.72	-1.17	0
75	SLU 24	-10	-189	2156	4.72	-1.17	0
75	SLU 25	-10	-189	2156	4.72	-1.17	0
75	SLU 26	-10	-189	2156	4.72	-1.17	0
75	SLU 27	-10	-189	2156	4.72	-1.17	0
75	SLU 28	-10	-189	2156	4.72	-1.17	0
75	SLU 29	-10	-189	2156	4.72	-1.17	0
75	SLU 30	-10	-189	2156	4.72	-1.17	0
75	SLU 31	-12	-232	2525	5.63	-1.57	0
75	SLU 32	-12	-232	2525	5.63	-1.57	0
75	SLU 33	-12	-232	2525	5.63	-1.57	0
75	SLU 34	-12	-232	2525	5.63	-1.57	0
75	SLU 35	-12	-232	2525	5.63	-1.57	0
75	SLU 36	-12	-232	2525	5.63	-1.57	0
75	SLU 37	-12	-232	2525	5.63	-1.57	0
75	SLU 38	-12	-232	2525	5.63	-1.57	0
75	SLU 39	-13	-251	2684	6.01	-1.74	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
75	SLU 40	-13	-251	2684	6.01	-1.74	0
75	SLU 41	-13	-251	2684	6.01	-1.74	0
75	SLU 42	-13	-251	2684	6.01	-1.74	0
75	SLU 43	-11	-202	2482	5.02	-1.26	0
75	SLU 44	-11	-202	2482	5.02	-1.26	0
75	SLU 45	-11	-202	2482	5.02	-1.26	0
75	SLU 46	-11	-202	2482	5.02	-1.26	0
75	SLU 47	-11	-202	2482	5.02	-1.26	0
75	SLU 48	-11	-202	2482	5.02	-1.26	0
75	SLU 49	-11	-202	2482	5.02	-1.26	0
75	SLU 50	-11	-202	2482	5.02	-1.26	0
75	SLU 51	-11	-202	2482	5.02	-1.26	0
75	SLU 52	-13	-246	2851	5.92	-1.65	0
75	SLU 53	-13	-246	2851	5.92	-1.65	0
75	SLU 54	-13	-246	2851	5.92	-1.65	0
75	SLU 55	-13	-246	2851	5.92	-1.65	0
75	SLU 56	-13	-246	2851	5.92	-1.65	0
75	SLU 57	-13	-246	2851	5.92	-1.65	0
75	SLU 58	-13	-246	2851	5.92	-1.65	0
75	SLU 59	-13	-246	2851	5.92	-1.65	0
75	SLU 60	-14	-264	3010	6.31	-1.82	0
75	SLU 61	-14	-264	3010	6.31	-1.82	0
75	SLU 62	-14	-264	3010	6.31	-1.82	0
75	SLU 63	-14	-264	3010	6.31	-1.82	0
75	SLU 64	-12	-229	2677	5.7	-1.42	0
75	SLU 65	-12	-229	2677	5.7	-1.42	0
75	SLU 66	-12	-229	2677	5.7	-1.42	0
75	SLU 67	-12	-229	2677	5.7	-1.42	0
75	SLU 68	-12	-229	2677	5.7	-1.42	0
75	SLU 69	-12	-229	2677	5.7	-1.42	0
75	SLU 70	-12	-229	2677	5.7	-1.42	0
75	SLU 71	-12	-229	2677	5.7	-1.42	0
75	SLU 72	-12	-229	2677	5.7	-1.42	0
75	SLU 73	-15	-272	3047	6.6	-1.82	0
75	SLU 74	-15	-272	3047	6.6	-1.82	0
75	SLU 75	-15	-272	3047	6.6	-1.82	0
75	SLU 76	-15	-272	3047	6.6	-1.82	0
75	SLU 77	-15	-272	3047	6.6	-1.82	0
75	SLU 78	-15	-272	3047	6.6	-1.82	0
75	SLU 79	-15	-272	3047	6.6	-1.82	0
75	SLU 80	-15	-272	3047	6.6	-1.82	0
75	SLU 81	-16	-290	3205	6.99	-1.99	0
75	SLU 82	-16	-290	3205	6.99	-1.99	0
75	SLU 83	-16	-290	3205	6.99	-1.99	0
75	SLU 84	-16	-290	3205	6.99	-1.99	0
75	SLE RA 1	-9	-170	2016	4.23	-1.05	0
75	SLE RA 2	-9	-170	2016	4.23	-1.05	0
75	SLE RA 3	-9	-170	2016	4.23	-1.05	0
75	SLE RA 4	-9	-170	2016	4.23	-1.05	0
75	SLE RA 5	-9	-170	2016	4.23	-1.05	0
75	SLE RA 6	-9	-170	2016	4.23	-1.05	0
75	SLE RA 7	-9	-170	2016	4.23	-1.05	0
75	SLE RA 8	-9	-170	2016	4.23	-1.05	0
75	SLE RA 9	-9	-170	2016	4.23	-1.05	0
75	SLE RA 10	-11	-199	2263	4.84	-1.32	0
75	SLE RA 11	-11	-199	2263	4.84	-1.32	0
75	SLE RA 12	-11	-199	2263	4.84	-1.32	0
75	SLE RA 13	-11	-199	2263	4.84	-1.32	0
75	SLE RA 14	-11	-199	2263	4.84	-1.32	0
75	SLE RA 15	-11	-199	2263	4.84	-1.32	0
75	SLE RA 16	-11	-199	2263	4.84	-1.32	0
75	SLE RA 17	-11	-199	2263	4.84	-1.32	0
75	SLE RA 18	-11	-211	2368	5.1	-1.43	0
75	SLE RA 19	-11	-211	2368	5.1	-1.43	0
75	SLE RA 20	-11	-211	2368	5.1	-1.43	0
75	SLE RA 21	-11	-211	2368	5.1	-1.43	0
75	SLE FR 1	-9	-170	2016	4.23	-1.05	0
75	SLE FR 2	-9	-170	2016	4.23	-1.05	0
75	SLE FR 3	-9	-170	2016	4.23	-1.05	0
75	SLE FR 4	-10	-182	2122	4.49	-1.17	0
75	SLE FR 5	-10	-182	2122	4.49	-1.17	0
75	SLE FR 6	-10	-191	2192	4.67	-1.24	0
75	SLE QP 1	-9	-170	2016	4.23	-1.05	0
75	SLE QP 2	-10	-182	2122	4.49	-1.17	0
75	SLD 1	-3	-190	2273	4.67	7.76	-0.01
75	SLD 2	-3	-190	2273	4.67	7.76	-0.01
75	SLD 3	7	-298	2342	9.06	16.29	-0.01
75	SLD 4	7	-298	2342	9.06	16.29	-0.01
75	SLD 5	-22	-20	2064	-2.13	-11.44	-0.01
75	SLD 6	-22	-20	2064	-2.13	-11.44	-0.01
75	SLD 7	9	-382	2292	12.54	17.02	0
75	SLD 8	9	-382	2292	12.54	17.02	0
75	SLD 9	-29	17	1952	-3.55	-19.35	0
75	SLD 10	-29	17	1952	-3.55	-19.35	0
75	SLD 11	2	-345	2180	11.11	9.1	0.01
75	SLD 12	2	-345	2180	11.11	9.1	0.01
75	SLD 13	-26	-67	1902	-0.08	-18.63	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
75	SLD 14	-26	-67	1902	-0.08	-18.63	0.01
75	SLD 15	-17	-175	1971	4.32	-10.09	0.01
75	SLD 16	-17	-175	1971	4.32	-10.09	0.01
75	SLV 1	7	-199	2466	4.86	19.49	-0.02
75	SLV 2	7	-199	2466	4.86	19.49	-0.02
75	SLV 3	30	-454	2642	15.3	41.32	-0.02
75	SLV 4	30	-454	2642	15.3	41.32	-0.02
75	SLV 5	-40	200	1958	-11.23	-28.09	-0.02
75	SLV 6	-40	200	1958	-11.23	-28.09	-0.02
75	SLV 7	37	-651	2545	23.56	44.69	0.01
75	SLV 8	37	-651	2545	23.56	44.69	0.01
75	SLV 9	-57	286	1699	-14.58	-47.03	-0.01
75	SLV 10	-57	286	1699	-14.58	-47.03	-0.01
75	SLV 11	20	-565	2286	20.21	25.75	0.02
75	SLV 12	20	-565	2286	20.21	25.75	0.02
75	SLV 13	-49	89	1602	-6.31	-43.66	0.02
75	SLV 14	-49	89	1602	-6.31	-43.66	0.02
75	SLV 15	-26	-166	1778	4.13	-21.83	0.03
75	SLV 16	-26	-166	1778	4.13	-21.83	0.03
76	SLU 1	1	233	2292	-14.9	1.27	0
76	SLU 2	1	233	2292	-14.9	1.27	0
76	SLU 3	1	233	2292	-14.9	1.27	0
76	SLU 4	1	233	2292	-14.9	1.27	0
76	SLU 5	1	233	2292	-14.9	1.27	0
76	SLU 6	1	233	2292	-14.9	1.27	0
76	SLU 7	1	233	2292	-14.9	1.27	0
76	SLU 8	1	233	2292	-14.9	1.27	0
76	SLU 9	1	233	2292	-14.9	1.27	0
76	SLU 10	1	269	2651	-17.51	1.75	0
76	SLU 11	1	269	2651	-17.51	1.75	0
76	SLU 12	1	269	2651	-17.51	1.75	0
76	SLU 13	1	269	2651	-17.51	1.75	0
76	SLU 14	1	269	2651	-17.51	1.75	0
76	SLU 15	1	269	2651	-17.51	1.75	0
76	SLU 16	1	269	2651	-17.51	1.75	0
76	SLU 17	1	269	2651	-17.51	1.75	0
76	SLU 18	1	284	2805	-18.63	1.96	0.01
76	SLU 19	1	284	2805	-18.63	1.96	0.01
76	SLU 20	1	284	2805	-18.63	1.96	0.01
76	SLU 21	1	284	2805	-18.63	1.96	0.01
76	SLU 22	1	250	2502	-16.11	1.46	0
76	SLU 23	1	250	2502	-16.11	1.46	0
76	SLU 24	1	250	2502	-16.11	1.46	0
76	SLU 25	1	250	2502	-16.11	1.46	0
76	SLU 26	1	250	2502	-16.11	1.46	0
76	SLU 27	1	250	2502	-16.11	1.46	0
76	SLU 28	1	250	2502	-16.11	1.46	0
76	SLU 29	1	250	2502	-16.11	1.46	0
76	SLU 30	1	250	2502	-16.11	1.46	0
76	SLU 31	1	285	2861	-18.72	1.94	0.01
76	SLU 32	1	285	2861	-18.72	1.94	0.01
76	SLU 33	1	285	2861	-18.72	1.94	0.01
76	SLU 34	1	285	2861	-18.72	1.94	0.01
76	SLU 35	1	285	2861	-18.72	1.94	0.01
76	SLU 36	1	285	2861	-18.72	1.94	0.01
76	SLU 37	1	285	2861	-18.72	1.94	0.01
76	SLU 38	1	285	2861	-18.72	1.94	0.01
76	SLU 39	1	301	3016	-19.84	2.15	0.01
76	SLU 40	1	301	3016	-19.84	2.15	0.01
76	SLU 41	1	301	3016	-19.84	2.15	0.01
76	SLU 42	1	301	3016	-19.84	2.15	0.01
76	SLU 43	1	298	2907	-18.95	1.58	0
76	SLU 44	1	298	2907	-18.95	1.58	0
76	SLU 45	1	298	2907	-18.95	1.58	0
76	SLU 46	1	298	2907	-18.95	1.58	0
76	SLU 47	1	298	2907	-18.95	1.58	0
76	SLU 48	1	298	2907	-18.95	1.58	0
76	SLU 49	1	298	2907	-18.95	1.58	0
76	SLU 50	1	298	2907	-18.95	1.58	0
76	SLU 51	1	298	2907	-18.95	1.58	0
76	SLU 52	1	333	3267	-21.57	2.07	0.01
76	SLU 53	1	333	3267	-21.57	2.07	0.01
76	SLU 54	1	333	3267	-21.57	2.07	0.01
76	SLU 55	1	333	3267	-21.57	2.07	0.01
76	SLU 56	1	333	3267	-21.57	2.07	0.01
76	SLU 57	1	333	3267	-21.57	2.07	0.01
76	SLU 58	1	333	3267	-21.57	2.07	0.01
76	SLU 59	1	333	3267	-21.57	2.07	0.01
76	SLU 60	1	348	3421	-22.69	2.28	0.01
76	SLU 61	1	348	3421	-22.69	2.28	0.01
76	SLU 62	1	348	3421	-22.69	2.28	0.01
76	SLU 63	1	348	3421	-22.69	2.28	0.01
76	SLU 64	1	314	3117	-20.16	1.77	0
76	SLU 65	1	314	3117	-20.16	1.77	0
76	SLU 66	1	314	3117	-20.16	1.77	0
76	SLU 67	1	314	3117	-20.16	1.77	0
76	SLU 68	1	314	3117	-20.16	1.77	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
76	SLU 69	1	314	3117	-20.16	1.77	0
76	SLU 70	1	314	3117	-20.16	1.77	0
76	SLU 71	1	314	3117	-20.16	1.77	0
76	SLU 72	1	314	3117	-20.16	1.77	0
76	SLU 73	1	350	3477	-22.78	2.26	0.01
76	SLU 74	1	350	3477	-22.78	2.26	0.01
76	SLU 75	1	350	3477	-22.78	2.26	0.01
76	SLU 76	1	350	3477	-22.78	2.26	0.01
76	SLU 77	1	350	3477	-22.78	2.26	0.01
76	SLU 78	1	350	3477	-22.78	2.26	0.01
76	SLU 79	1	350	3477	-22.78	2.26	0.01
76	SLU 80	1	350	3477	-22.78	2.26	0.01
76	SLU 81	1	365	3631	-23.9	2.47	0.01
76	SLU 82	1	365	3631	-23.9	2.47	0.01
76	SLU 83	1	365	3631	-23.9	2.47	0.01
76	SLU 84	1	365	3631	-23.9	2.47	0.01
76	SLE RA 1	1	238	2352	-15.24	1.32	0
76	SLE RA 2	1	238	2352	-15.24	1.32	0
76	SLE RA 3	1	238	2352	-15.24	1.32	0
76	SLE RA 4	1	238	2352	-15.24	1.32	0
76	SLE RA 5	1	238	2352	-15.24	1.32	0
76	SLE RA 6	1	238	2352	-15.24	1.32	0
76	SLE RA 7	1	238	2352	-15.24	1.32	0
76	SLE RA 8	1	238	2352	-15.24	1.32	0
76	SLE RA 9	1	238	2352	-15.24	1.32	0
76	SLE RA 10	1	262	2591	-16.99	1.65	0
76	SLE RA 11	1	262	2591	-16.99	1.65	0
76	SLE RA 12	1	262	2591	-16.99	1.65	0
76	SLE RA 13	1	262	2591	-16.99	1.65	0
76	SLE RA 14	1	262	2591	-16.99	1.65	0
76	SLE RA 15	1	262	2591	-16.99	1.65	0
76	SLE RA 16	1	262	2591	-16.99	1.65	0
76	SLE RA 17	1	262	2591	-16.99	1.65	0
76	SLE RA 18	1	272	2694	-17.73	1.78	0
76	SLE RA 19	1	272	2694	-17.73	1.78	0
76	SLE RA 20	1	272	2694	-17.73	1.78	0
76	SLE RA 21	1	272	2694	-17.73	1.78	0
76	SLE FR 1	1	238	2352	-15.24	1.32	0
76	SLE FR 2	1	238	2352	-15.24	1.32	0
76	SLE FR 3	1	238	2352	-15.24	1.32	0
76	SLE FR 4	1	248	2454	-15.99	1.46	0
76	SLE FR 5	1	248	2454	-15.99	1.46	0
76	SLE FR 6	1	255	2523	-16.49	1.55	0
76	SLE QP 1	1	238	2352	-15.24	1.32	0
76	SLE QP 2	1	248	2454	-15.99	1.46	0
76	SLD 1	26	170	2214	-11.48	23.76	0.07
76	SLD 2	26	170	2214	-11.48	23.76	0.07
76	SLD 3	17	258	2424	-16.88	15.41	0.04
76	SLD 4	17	258	2424	-16.88	15.41	0.04
76	SLD 5	22	92	2064	-6.45	20.82	0.07
76	SLD 6	22	92	2064	-6.45	20.82	0.07
76	SLD 7	-8	384	2764	-24.44	-7.02	-0.03
76	SLD 8	-8	384	2764	-24.44	-7.02	-0.03
76	SLD 9	10	112	2145	-7.54	9.95	0.04
76	SLD 10	10	112	2145	-7.54	9.95	0.04
76	SLD 11	-21	405	2845	-25.53	-17.9	-0.06
76	SLD 12	-21	405	2845	-25.53	-17.9	-0.06
76	SLD 13	-16	239	2485	-15.11	-12.49	-0.03
76	SLD 14	-16	239	2485	-15.11	-12.49	-0.03
76	SLD 15	-25	326	2695	-20.5	-20.84	-0.06
76	SLD 16	-25	326	2695	-20.5	-20.84	-0.06
76	SLV 1	63	57	1872	-4.88	56.41	0.16
76	SLV 2	63	57	1872	-4.88	56.41	0.16
76	SLV 3	40	271	2388	-18.17	35.2	0.09
76	SLV 4	40	271	2388	-18.17	35.2	0.09
76	SLV 5	55	-133	1497	7.5	50.11	0.16
76	SLV 6	55	-133	1497	7.5	50.11	0.16
76	SLV 7	-22	579	3217	-36.8	-20.58	-0.08
76	SLV 8	-22	579	3217	-36.8	-20.58	-0.08
76	SLV 9	24	-83	1692	4.82	23.5	0.08
76	SLV 10	24	-83	1692	4.82	23.5	0.08
76	SLV 11	-53	630	3412	-39.48	-47.19	-0.15
76	SLV 12	-53	630	3412	-39.48	-47.19	-0.15
76	SLV 13	-39	226	2521	-13.82	-32.28	-0.09
76	SLV 14	-39	226	2521	-13.82	-32.28	-0.09
76	SLV 15	-62	439	3037	-27.11	-53.49	-0.16
76	SLV 16	-62	439	3037	-27.11	-53.49	-0.16
77	SLU 1	-9	-153	1807	8.07	-1.95	0
77	SLU 2	-9	-153	1807	8.07	-1.95	0
77	SLU 3	-9	-153	1807	8.07	-1.95	0
77	SLU 4	-9	-153	1807	8.07	-1.95	0
77	SLU 5	-9	-153	1807	8.07	-1.95	0
77	SLU 6	-9	-153	1807	8.07	-1.95	0
77	SLU 7	-9	-153	1807	8.07	-1.95	0
77	SLU 8	-9	-153	1807	8.07	-1.95	0
77	SLU 9	-9	-153	1807	8.07	-1.95	0
77	SLU 10	-12	-189	2138	10.18	-2.75	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
77	SLU 11	-12	-189	2138	10.18	-2.75	0
77	SLU 12	-12	-189	2138	10.18	-2.75	0
77	SLU 13	-12	-189	2138	10.18	-2.75	0
77	SLU 14	-12	-189	2138	10.18	-2.75	0
77	SLU 15	-12	-189	2138	10.18	-2.75	0
77	SLU 16	-12	-189	2138	10.18	-2.75	0
77	SLU 17	-12	-189	2138	10.18	-2.75	0
77	SLU 18	-13	-205	2281	11.09	-3.09	0
77	SLU 19	-13	-205	2281	11.09	-3.09	0
77	SLU 20	-13	-205	2281	11.09	-3.09	0
77	SLU 21	-13	-205	2281	11.09	-3.09	0
77	SLU 22	-11	-175	1980	9.24	-2.29	0
77	SLU 23	-11	-175	1980	9.24	-2.29	0
77	SLU 24	-11	-175	1980	9.24	-2.29	0
77	SLU 25	-11	-175	1980	9.24	-2.29	0
77	SLU 26	-11	-175	1980	9.24	-2.29	0
77	SLU 27	-11	-175	1980	9.24	-2.29	0
77	SLU 28	-11	-175	1980	9.24	-2.29	0
77	SLU 29	-11	-175	1980	9.24	-2.29	0
77	SLU 30	-11	-175	1980	9.24	-2.29	0
77	SLU 31	-13	-212	2311	11.35	-3.08	0
77	SLU 32	-13	-212	2311	11.35	-3.08	0
77	SLU 33	-13	-212	2311	11.35	-3.08	0
77	SLU 34	-13	-212	2311	11.35	-3.08	0
77	SLU 35	-13	-212	2311	11.35	-3.08	0
77	SLU 36	-13	-212	2311	11.35	-3.08	0
77	SLU 37	-13	-212	2311	11.35	-3.08	0
77	SLU 38	-13	-212	2311	11.35	-3.08	0
77	SLU 39	-14	-227	2453	12.25	-3.42	0
77	SLU 40	-14	-227	2453	12.25	-3.42	0
77	SLU 41	-14	-227	2453	12.25	-3.42	0
77	SLU 42	-14	-227	2453	12.25	-3.42	0
77	SLU 43	-11	-191	2290	10.09	-2.42	0
77	SLU 44	-11	-191	2290	10.09	-2.42	0
77	SLU 45	-11	-191	2290	10.09	-2.42	0
77	SLU 46	-11	-191	2290	10.09	-2.42	0
77	SLU 47	-11	-191	2290	10.09	-2.42	0
77	SLU 48	-11	-191	2290	10.09	-2.42	0
77	SLU 49	-11	-191	2290	10.09	-2.42	0
77	SLU 50	-11	-191	2290	10.09	-2.42	0
77	SLU 51	-11	-191	2290	10.09	-2.42	0
77	SLU 52	-14	-227	2621	12.2	-3.22	0
77	SLU 53	-14	-227	2621	12.2	-3.22	0
77	SLU 54	-14	-227	2621	12.2	-3.22	0
77	SLU 55	-14	-227	2621	12.2	-3.22	0
77	SLU 56	-14	-227	2621	12.2	-3.22	0
77	SLU 57	-14	-227	2621	12.2	-3.22	0
77	SLU 58	-14	-227	2621	12.2	-3.22	0
77	SLU 59	-14	-227	2621	12.2	-3.22	0
77	SLU 60	-15	-243	2763	13.11	-3.56	0
77	SLU 61	-15	-243	2763	13.11	-3.56	0
77	SLU 62	-15	-243	2763	13.11	-3.56	0
77	SLU 63	-15	-243	2763	13.11	-3.56	0
77	SLU 64	-13	-213	2463	11.26	-2.76	0
77	SLU 65	-13	-213	2463	11.26	-2.76	0
77	SLU 66	-13	-213	2463	11.26	-2.76	0
77	SLU 67	-13	-213	2463	11.26	-2.76	0
77	SLU 68	-13	-213	2463	11.26	-2.76	0
77	SLU 69	-13	-213	2463	11.26	-2.76	0
77	SLU 70	-13	-213	2463	11.26	-2.76	0
77	SLU 71	-13	-213	2463	11.26	-2.76	0
77	SLU 72	-13	-213	2463	11.26	-2.76	0
77	SLU 73	-15	-250	2794	13.37	-3.55	0
77	SLU 74	-15	-250	2794	13.37	-3.55	0
77	SLU 75	-15	-250	2794	13.37	-3.55	0
77	SLU 76	-15	-250	2794	13.37	-3.55	0
77	SLU 77	-15	-250	2794	13.37	-3.55	0
77	SLU 78	-15	-250	2794	13.37	-3.55	0
77	SLU 79	-15	-250	2794	13.37	-3.55	0
77	SLU 80	-15	-250	2794	13.37	-3.55	0
77	SLU 81	-16	-266	2936	14.28	-3.89	0
77	SLU 82	-16	-266	2936	14.28	-3.89	0
77	SLU 83	-16	-266	2936	14.28	-3.89	0
77	SLU 84	-16	-266	2936	14.28	-3.89	0
77	SLE RA 1	-10	-159	1856	8.4	-2.05	0
77	SLE RA 2	-10	-159	1856	8.4	-2.05	0
77	SLE RA 3	-10	-159	1856	8.4	-2.05	0
77	SLE RA 4	-10	-159	1856	8.4	-2.05	0
77	SLE RA 5	-10	-159	1856	8.4	-2.05	0
77	SLE RA 6	-10	-159	1856	8.4	-2.05	0
77	SLE RA 7	-10	-159	1856	8.4	-2.05	0
77	SLE RA 8	-10	-159	1856	8.4	-2.05	0
77	SLE RA 9	-10	-159	1856	8.4	-2.05	0
77	SLE RA 10	-11	-183	2077	9.81	-2.58	0
77	SLE RA 11	-11	-183	2077	9.81	-2.58	0
77	SLE RA 12	-11	-183	2077	9.81	-2.58	0
77	SLE RA 13	-11	-183	2077	9.81	-2.58	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
77	SLE RA 14	-11	-183	2077	9.81	-2.58	0
77	SLE RA 15	-11	-183	2077	9.81	-2.58	0
77	SLE RA 16	-11	-183	2077	9.81	-2.58	0
77	SLE RA 17	-11	-183	2077	9.81	-2.58	0
77	SLE RA 18	-12	-194	2172	10.42	-2.8	0
77	SLE RA 19	-12	-194	2172	10.42	-2.8	0
77	SLE RA 20	-12	-194	2172	10.42	-2.8	0
77	SLE RA 21	-12	-194	2172	10.42	-2.8	0
77	SLE FR 1	-10	-159	1856	8.4	-2.05	0
77	SLE FR 2	-10	-159	1856	8.4	-2.05	0
77	SLE FR 3	-10	-159	1856	8.4	-2.05	0
77	SLE FR 4	-10	-170	1951	9.01	-2.27	0
77	SLE FR 5	-10	-170	1951	9.01	-2.27	0
77	SLE FR 6	-11	-176	2014	9.41	-2.43	0
77	SLE QP 1	-10	-159	1856	8.4	-2.05	0
77	SLE QP 2	-10	-170	1951	9.01	-2.27	0
77	SLD 1	2	-178	2067	9.54	9.96	-0.01
77	SLD 2	2	-178	2067	9.54	9.96	-0.01
77	SLD 3	13	-297	2131	14.56	19.35	-0.01
77	SLD 4	13	-297	2131	14.56	19.35	-0.01
77	SLD 5	-22	9	1888	1.55	-12.86	-0.01
77	SLD 6	-22	9	1888	1.55	-12.86	-0.01
77	SLD 7	12	-389	2103	18.29	18.47	0
77	SLD 8	12	-389	2103	18.29	18.47	0
77	SLD 9	-33	50	1799	-0.27	-23.02	0
77	SLD 10	-33	50	1799	-0.27	-23.02	0
77	SLD 11	1	-348	2014	16.46	8.31	0.01
77	SLD 12	1	-348	2014	16.46	8.31	0.01
77	SLD 13	-33	-42	1771	3.45	-23.9	0.01
77	SLD 14	-33	-42	1771	3.45	-23.9	0.01
77	SLD 15	-23	-161	1835	8.47	-14.51	0.02
77	SLD 16	-23	-161	1835	8.47	-14.51	0.02
77	SLV 1	19	-187	2210	10.21	26.22	-0.03
77	SLV 2	19	-187	2210	10.21	26.22	-0.03
77	SLV 3	44	-468	2381	22.06	50.34	-0.03
77	SLV 4	44	-468	2381	22.06	50.34	-0.03
77	SLV 5	-40	251	1769	-8.6	-30.31	-0.02
77	SLV 6	-40	251	1769	-8.6	-30.31	-0.02
77	SLV 7	45	-685	2340	30.89	50.1	0
77	SLV 8	45	-685	2340	30.89	50.1	0
77	SLV 9	-65	346	1562	-12.88	-54.65	0
77	SLV 10	-65	346	1562	-12.88	-54.65	0
77	SLV 11	19	-590	2133	26.62	25.76	0.02
77	SLV 12	19	-590	2133	26.62	25.76	0.02
77	SLV 13	-65	129	1521	-4.05	-54.89	0.03
77	SLV 14	-65	129	1521	-4.05	-54.89	0.03
77	SLV 15	-40	-152	1692	7.8	-30.77	0.03
77	SLV 16	-40	-152	1692	7.8	-30.77	0.03
78	SLU 1	2	53	2330	1.64	2.33	0
78	SLU 2	2	53	2330	1.64	2.33	0
78	SLU 3	2	53	2330	1.64	2.33	0
78	SLU 4	2	53	2330	1.64	2.33	0
78	SLU 5	2	53	2330	1.64	2.33	0
78	SLU 6	2	53	2330	1.64	2.33	0
78	SLU 7	2	53	2330	1.64	2.33	0
78	SLU 8	2	53	2330	1.64	2.33	0
78	SLU 9	2	53	2330	1.64	2.33	0
78	SLU 10	3	45	2729	3.4	3.29	0
78	SLU 11	3	45	2729	3.4	3.29	0
78	SLU 12	3	45	2729	3.4	3.29	0
78	SLU 13	3	45	2729	3.4	3.29	0
78	SLU 14	3	45	2729	3.4	3.29	0
78	SLU 15	3	45	2729	3.4	3.29	0
78	SLU 16	3	45	2729	3.4	3.29	0
78	SLU 17	3	45	2729	3.4	3.29	0
78	SLU 18	4	41	2901	4.16	3.7	0
78	SLU 19	4	41	2901	4.16	3.7	0
78	SLU 20	4	41	2901	4.16	3.7	0
78	SLU 21	4	41	2901	4.16	3.7	0
78	SLU 22	3	46	2559	2.57	2.72	0
78	SLU 23	3	46	2559	2.57	2.72	0
78	SLU 24	3	46	2559	2.57	2.72	0
78	SLU 25	3	46	2559	2.57	2.72	0
78	SLU 26	3	46	2559	2.57	2.72	0
78	SLU 27	3	46	2559	2.57	2.72	0
78	SLU 28	3	46	2559	2.57	2.72	0
78	SLU 29	3	46	2559	2.57	2.72	0
78	SLU 30	3	46	2559	2.57	2.72	0
78	SLU 31	4	38	2959	4.34	3.68	0
78	SLU 32	4	38	2959	4.34	3.68	0
78	SLU 33	4	38	2959	4.34	3.68	0
78	SLU 34	4	38	2959	4.34	3.68	0
78	SLU 35	4	38	2959	4.34	3.68	0
78	SLU 36	4	38	2959	4.34	3.68	0
78	SLU 37	4	38	2959	4.34	3.68	0
78	SLU 38	4	38	2959	4.34	3.68	0
78	SLU 39	4	35	3130	5.09	4.09	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
78	SLU 40	4	35	3130	5.09	4.09	0
78	SLU 41	4	35	3130	5.09	4.09	0
78	SLU 42	4	35	3130	5.09	4.09	0
78	SLU 43	3	71	2950	1.81	2.9	0
78	SLU 44	3	71	2950	1.81	2.9	0
78	SLU 45	3	71	2950	1.81	2.9	0
78	SLU 46	3	71	2950	1.81	2.9	0
78	SLU 47	3	71	2950	1.81	2.9	0
78	SLU 48	3	71	2950	1.81	2.9	0
78	SLU 49	3	71	2950	1.81	2.9	0
78	SLU 50	3	71	2950	1.81	2.9	0
78	SLU 51	3	71	2950	1.81	2.9	0
78	SLU 52	4	63	3349	3.57	3.85	0
78	SLU 53	4	63	3349	3.57	3.85	0
78	SLU 54	4	63	3349	3.57	3.85	0
78	SLU 55	4	63	3349	3.57	3.85	0
78	SLU 56	4	63	3349	3.57	3.85	0
78	SLU 57	4	63	3349	3.57	3.85	0
78	SLU 58	4	63	3349	3.57	3.85	0
78	SLU 59	4	63	3349	3.57	3.85	0
78	SLU 60	4	60	3521	4.33	4.26	0
78	SLU 61	4	60	3521	4.33	4.26	0
78	SLU 62	4	60	3521	4.33	4.26	0
78	SLU 63	4	60	3521	4.33	4.26	0
78	SLU 64	3	64	3180	2.74	3.29	0
78	SLU 65	3	64	3180	2.74	3.29	0
78	SLU 66	3	64	3180	2.74	3.29	0
78	SLU 67	3	64	3180	2.74	3.29	0
78	SLU 68	3	64	3180	2.74	3.29	0
78	SLU 69	3	64	3180	2.74	3.29	0
78	SLU 70	3	64	3180	2.74	3.29	0
78	SLU 71	3	64	3180	2.74	3.29	0
78	SLU 72	3	64	3180	2.74	3.29	0
78	SLU 73	4	56	3579	4.51	4.24	0
78	SLU 74	4	56	3579	4.51	4.24	0
78	SLU 75	4	56	3579	4.51	4.24	0
78	SLU 76	4	56	3579	4.51	4.24	0
78	SLU 77	4	56	3579	4.51	4.24	0
78	SLU 78	4	56	3579	4.51	4.24	0
78	SLU 79	4	56	3579	4.51	4.24	0
78	SLU 80	4	56	3579	4.51	4.24	0
78	SLU 81	4	53	3750	5.26	4.65	0
78	SLU 82	4	53	3750	5.26	4.65	0
78	SLU 83	4	53	3750	5.26	4.65	0
78	SLU 84	4	53	3750	5.26	4.65	0
78	SLE RA 1	2	51	2395	1.9	2.44	0
78	SLE RA 2	2	51	2395	1.9	2.44	0
78	SLE RA 3	2	51	2395	1.9	2.44	0
78	SLE RA 4	2	51	2395	1.9	2.44	0
78	SLE RA 5	2	51	2395	1.9	2.44	0
78	SLE RA 6	2	51	2395	1.9	2.44	0
78	SLE RA 7	2	51	2395	1.9	2.44	0
78	SLE RA 8	2	51	2395	1.9	2.44	0
78	SLE RA 9	2	51	2395	1.9	2.44	0
78	SLE RA 10	3	46	2662	3.08	3.08	0
78	SLE RA 11	3	46	2662	3.08	3.08	0
78	SLE RA 12	3	46	2662	3.08	3.08	0
78	SLE RA 13	3	46	2662	3.08	3.08	0
78	SLE RA 14	3	46	2662	3.08	3.08	0
78	SLE RA 15	3	46	2662	3.08	3.08	0
78	SLE RA 16	3	46	2662	3.08	3.08	0
78	SLE RA 17	3	46	2662	3.08	3.08	0
78	SLE RA 18	3	43	2776	3.59	3.35	0
78	SLE RA 19	3	43	2776	3.59	3.35	0
78	SLE RA 20	3	43	2776	3.59	3.35	0
78	SLE RA 21	3	43	2776	3.59	3.35	0
78	SLE FR 1	2	51	2395	1.9	2.44	0
78	SLE FR 2	2	51	2395	1.9	2.44	0
78	SLE FR 3	2	51	2395	1.9	2.44	0
78	SLE FR 4	3	49	2509	2.41	2.72	0
78	SLE FR 5	3	49	2509	2.41	2.72	0
78	SLE FR 6	3	47	2586	2.74	2.9	0
78	SLE QP 1	2	51	2395	1.9	2.44	0
78	SLE QP 2	3	49	2509	2.41	2.72	0
78	SLD 1	31	-59	2312	2.74	29.25	0.01
78	SLD 2	31	-59	2312	2.74	29.25	0.01
78	SLD 3	22	48	2417	8.04	19.97	0.01
78	SLD 4	22	48	2417	8.04	19.97	0.01
78	SLD 5	24	-146	2290	-5.54	24.75	0
78	SLD 6	24	-146	2290	-5.54	24.75	0
78	SLD 7	-4	211	2642	12.14	-6.18	0.01
78	SLD 8	-4	211	2642	12.14	-6.18	0.01
78	SLD 9	10	-114	2377	-7.33	11.61	-0.01
78	SLD 10	10	-114	2377	-7.33	11.61	-0.01
78	SLD 11	-19	244	2729	10.36	-19.31	0
78	SLD 12	-19	244	2729	10.36	-19.31	0
78	SLD 13	-17	49	2601	-3.23	-14.54	-0.01



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
78	SLD 14	-17	49	2601	-3.23	-14.54	-0.01
78	SLD 15	-26	156	2707	2.08	-23.82	0
78	SLD 16	-26	156	2707	2.08	-23.82	0
78	SLV 1	72	-211	2034	3.33	68.34	0.02
78	SLV 2	72	-211	2034	3.33	68.34	0.02
78	SLV 3	50	46	2308	15.93	44.59	0.02
78	SLV 4	50	46	2308	15.93	44.59	0.02
78	SLV 5	57	-418	1951	-16.43	58.43	-0.01
78	SLV 6	57	-418	1951	-16.43	58.43	-0.01
78	SLV 7	-16	437	2865	25.58	-20.74	0.02
78	SLV 8	-16	437	2865	25.58	-20.74	0.02
78	SLV 9	22	-340	2154	-20.76	26.18	-0.02
78	SLV 10	22	-340	2154	-20.76	26.18	-0.02
78	SLV 11	-52	516	3068	21.24	-52.99	0.01
78	SLV 12	-52	516	3068	21.24	-52.99	0.01
78	SLV 13	-45	52	2711	-11.12	-39.16	-0.02
78	SLV 14	-45	52	2711	-11.12	-39.16	-0.02
78	SLV 15	-67	308	2985	1.48	-62.91	-0.01
78	SLV 16	-67	308	2985	1.48	-62.91	-0.01
79	SLU 1	-3	-10	1781	-1.78	-2.04	0
79	SLU 2	-3	-10	1781	-1.78	-2.04	0
79	SLU 3	-3	-10	1781	-1.78	-2.04	0
79	SLU 4	-3	-10	1781	-1.78	-2.04	0
79	SLU 5	-3	-10	1781	-1.78	-2.04	0
79	SLU 6	-3	-10	1781	-1.78	-2.04	0
79	SLU 7	-3	-10	1781	-1.78	-2.04	0
79	SLU 8	-3	-10	1781	-1.78	-2.04	0
79	SLU 9	-3	-10	1781	-1.78	-2.04	0
79	SLU 10	-3	-1	2110	-2.89	-2.94	0
79	SLU 11	-3	-1	2110	-2.89	-2.94	0
79	SLU 12	-3	-1	2110	-2.89	-2.94	0
79	SLU 13	-3	-1	2110	-2.89	-2.94	0
79	SLU 14	-3	-1	2110	-2.89	-2.94	0
79	SLU 15	-3	-1	2110	-2.89	-2.94	0
79	SLU 16	-3	-1	2110	-2.89	-2.94	0
79	SLU 17	-3	-1	2110	-2.89	-2.94	0
79	SLU 18	-3	2	2251	-3.36	-3.32	0
79	SLU 19	-3	2	2251	-3.36	-3.32	0
79	SLU 20	-3	2	2251	-3.36	-3.32	0
79	SLU 21	-3	2	2251	-3.36	-3.32	0
79	SLU 22	-3	-11	1949	-2.08	-2.42	0
79	SLU 23	-3	-11	1949	-2.08	-2.42	0
79	SLU 24	-3	-11	1949	-2.08	-2.42	0
79	SLU 25	-3	-11	1949	-2.08	-2.42	0
79	SLU 26	-3	-11	1949	-2.08	-2.42	0
79	SLU 27	-3	-11	1949	-2.08	-2.42	0
79	SLU 28	-3	-11	1949	-2.08	-2.42	0
79	SLU 29	-3	-11	1949	-2.08	-2.42	0
79	SLU 30	-3	-11	1949	-2.08	-2.42	0
79	SLU 31	-3	-2	2278	-3.18	-3.31	0
79	SLU 32	-3	-2	2278	-3.18	-3.31	0
79	SLU 33	-3	-2	2278	-3.18	-3.31	0
79	SLU 34	-3	-2	2278	-3.18	-3.31	0
79	SLU 35	-3	-2	2278	-3.18	-3.31	0
79	SLU 36	-3	-2	2278	-3.18	-3.31	0
79	SLU 37	-3	-2	2278	-3.18	-3.31	0
79	SLU 38	-3	-2	2278	-3.18	-3.31	0
79	SLU 39	-4	2	2419	-3.65	-3.7	0
79	SLU 40	-4	2	2419	-3.65	-3.7	0
79	SLU 41	-4	2	2419	-3.65	-3.7	0
79	SLU 42	-4	2	2419	-3.65	-3.7	0
79	SLU 43	-3	-13	2257	-2.22	-2.52	0
79	SLU 44	-3	-13	2257	-2.22	-2.52	0
79	SLU 45	-3	-13	2257	-2.22	-2.52	0
79	SLU 46	-3	-13	2257	-2.22	-2.52	0
79	SLU 47	-3	-13	2257	-2.22	-2.52	0
79	SLU 48	-3	-13	2257	-2.22	-2.52	0
79	SLU 49	-3	-13	2257	-2.22	-2.52	0
79	SLU 50	-3	-13	2257	-2.22	-2.52	0
79	SLU 51	-3	-13	2257	-2.22	-2.52	0
79	SLU 52	-4	-4	2586	-3.32	-3.42	0
79	SLU 53	-4	-4	2586	-3.32	-3.42	0
79	SLU 54	-4	-4	2586	-3.32	-3.42	0
79	SLU 55	-4	-4	2586	-3.32	-3.42	0
79	SLU 56	-4	-4	2586	-3.32	-3.42	0
79	SLU 57	-4	-4	2586	-3.32	-3.42	0
79	SLU 58	-4	-4	2586	-3.32	-3.42	0
79	SLU 59	-4	-4	2586	-3.32	-3.42	0
79	SLU 60	-4	0	2727	-3.79	-3.8	0
79	SLU 61	-4	0	2727	-3.79	-3.8	0
79	SLU 62	-4	0	2727	-3.79	-3.8	0
79	SLU 63	-4	0	2727	-3.79	-3.8	0
79	SLU 64	-4	-14	2425	-2.51	-2.9	0
79	SLU 65	-4	-14	2425	-2.51	-2.9	0
79	SLU 66	-4	-14	2425	-2.51	-2.9	0
79	SLU 67	-4	-14	2425	-2.51	-2.9	0
79	SLU 68	-4	-14	2425	-2.51	-2.9	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
79	SLU 69	-4	-14	2425	-2.51	-2.9	0
79	SLU 70	-4	-14	2425	-2.51	-2.9	0
79	SLU 71	-4	-14	2425	-2.51	-2.9	0
79	SLU 72	-4	-14	2425	-2.51	-2.9	0
79	SLU 73	-4	-5	2754	-3.61	-3.8	0
79	SLU 74	-4	-5	2754	-3.61	-3.8	0
79	SLU 75	-4	-5	2754	-3.61	-3.8	0
79	SLU 76	-4	-5	2754	-3.61	-3.8	0
79	SLU 77	-4	-5	2754	-3.61	-3.8	0
79	SLU 78	-4	-5	2754	-3.61	-3.8	0
79	SLU 79	-4	-5	2754	-3.61	-3.8	0
79	SLU 80	-4	-5	2754	-3.61	-3.8	0
79	SLU 81	-4	-1	2895	-4.09	-4.18	0
79	SLU 82	-4	-1	2895	-4.09	-4.18	0
79	SLU 83	-4	-1	2895	-4.09	-4.18	0
79	SLU 84	-4	-1	2895	-4.09	-4.18	0
79	SLE RA 1	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 2	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 3	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 4	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 5	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 6	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 7	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 8	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 9	-3	-10	1829	-1.87	-2.15	0
79	SLE RA 10	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 11	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 12	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 13	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 14	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 15	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 16	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 17	-3	-4	2048	-2.6	-2.74	0
79	SLE RA 18	-3	-2	2142	-2.92	-3	0
79	SLE RA 19	-3	-2	2142	-2.92	-3	0
79	SLE RA 20	-3	-2	2142	-2.92	-3	0
79	SLE RA 21	-3	-2	2142	-2.92	-3	0
79	SLE FR 1	-3	-10	1829	-1.87	-2.15	0
79	SLE FR 2	-3	-10	1829	-1.87	-2.15	0
79	SLE FR 3	-3	-10	1829	-1.87	-2.15	0
79	SLE FR 4	-3	-8	1923	-2.18	-2.4	0
79	SLE FR 5	-3	-8	1923	-2.18	-2.4	0
79	SLE FR 6	-3	-6	1985	-2.39	-2.57	0
79	SLE QP 1	-3	-10	1829	-1.87	-2.15	0
79	SLE QP 2	-3	-8	1923	-2.18	-2.4	0
79	SLD 1	13	-14	2020	-1.96	11.46	0.01
79	SLD 2	13	-14	2020	-1.96	11.46	0.01
79	SLD 3	23	-131	2083	2.73	21.25	0.01
79	SLD 4	23	-131	2083	2.73	21.25	0.01
79	SLD 5	-14	166	1856	-9.22	-13.09	0
79	SLD 6	-14	166	1856	-9.22	-13.09	0
79	SLD 7	21	-221	2066	6.4	19.54	0.01
79	SLD 8	21	-221	2066	6.4	19.54	0.01
79	SLD 9	-26	205	1779	-10.76	-24.35	-0.01
79	SLD 10	-26	205	1779	-10.76	-24.35	-0.01
79	SLD 11	8	-182	1989	4.85	8.29	0
79	SLD 12	8	-182	1989	4.85	8.29	0
79	SLD 13	-28	115	1762	-7.09	-26.05	-0.01
79	SLD 14	-28	115	1762	-7.09	-26.05	-0.01
79	SLD 15	-18	-1	1825	-2.41	-16.26	-0.01
79	SLD 16	-18	-1	1825	-2.41	-16.26	-0.01
79	SLV 1	33	-22	2135	-1.7	29.98	0.01
79	SLV 2	33	-22	2135	-1.7	29.98	0.01
79	SLV 3	59	-296	2311	9.44	55.2	0.02
79	SLV 4	59	-296	2311	9.44	55.2	0.02
79	SLV 5	-31	404	1721	-18.95	-30.94	-0.01
79	SLV 6	-31	404	1721	-18.95	-30.94	-0.01
79	SLV 7	55	-510	2305	18.21	53.13	0.02
79	SLV 8	55	-510	2305	18.21	53.13	0.02
79	SLV 9	-60	494	1540	-22.58	-57.94	-0.02
79	SLV 10	-60	494	1540	-22.58	-57.94	-0.02
79	SLV 11	25	-419	2125	14.58	26.13	0.01
79	SLV 12	25	-419	2125	14.58	26.13	0.01
79	SLV 13	-65	281	1535	-13.81	-60.01	-0.02
79	SLV 14	-65	281	1535	-13.81	-60.01	-0.02
79	SLV 15	-39	7	1710	-2.66	-34.79	-0.01
79	SLV 16	-39	7	1710	-2.66	-34.79	-0.01
80	SLU 1	3	10	2404	-4.03	2.95	0
80	SLU 2	3	10	2404	-4.03	2.95	0
80	SLU 3	3	10	2404	-4.03	2.95	0
80	SLU 4	3	10	2404	-4.03	2.95	0
80	SLU 5	3	10	2404	-4.03	2.95	0
80	SLU 6	3	10	2404	-4.03	2.95	0
80	SLU 7	3	10	2404	-4.03	2.95	0
80	SLU 8	3	10	2404	-4.03	2.95	0
80	SLU 9	3	10	2404	-4.03	2.95	0
80	SLU 10	4	2	2841	-4.73	4.2	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
80	SLU 11	4	2	2841	-4.73	4.2	0
80	SLU 12	4	2	2841	-4.73	4.2	0
80	SLU 13	4	2	2841	-4.73	4.2	0
80	SLU 14	4	2	2841	-4.73	4.2	0
80	SLU 15	4	2	2841	-4.73	4.2	0
80	SLU 16	4	2	2841	-4.73	4.2	0
80	SLU 17	4	2	2841	-4.73	4.2	0
80	SLU 18	5	-2	3028	-5.03	4.73	0
80	SLU 19	5	-2	3028	-5.03	4.73	0
80	SLU 20	5	-2	3028	-5.03	4.73	0
80	SLU 21	5	-2	3028	-5.03	4.73	0
80	SLU 22	3	0	2650	-4.07	3.46	0
80	SLU 23	3	0	2650	-4.07	3.46	0
80	SLU 24	3	0	2650	-4.07	3.46	0
80	SLU 25	3	0	2650	-4.07	3.46	0
80	SLU 26	3	0	2650	-4.07	3.46	0
80	SLU 27	3	0	2650	-4.07	3.46	0
80	SLU 28	3	0	2650	-4.07	3.46	0
80	SLU 29	3	0	2650	-4.07	3.46	0
80	SLU 30	3	0	2650	-4.07	3.46	0
80	SLU 31	5	-8	3087	-4.78	4.71	0
80	SLU 32	5	-8	3087	-4.78	4.71	0
80	SLU 33	5	-8	3087	-4.78	4.71	0
80	SLU 34	5	-8	3087	-4.78	4.71	0
80	SLU 35	5	-8	3087	-4.78	4.71	0
80	SLU 36	5	-8	3087	-4.78	4.71	0
80	SLU 37	5	-8	3087	-4.78	4.71	0
80	SLU 38	5	-8	3087	-4.78	4.71	0
80	SLU 39	5	-12	3274	-5.08	5.24	0
80	SLU 40	5	-12	3274	-5.08	5.24	0
80	SLU 41	5	-12	3274	-5.08	5.24	0
80	SLU 42	5	-12	3274	-5.08	5.24	0
80	SLU 43	4	16	3041	-5.22	3.66	0
80	SLU 44	4	16	3041	-5.22	3.66	0
80	SLU 45	4	16	3041	-5.22	3.66	0
80	SLU 46	4	16	3041	-5.22	3.66	0
80	SLU 47	4	16	3041	-5.22	3.66	0
80	SLU 48	4	16	3041	-5.22	3.66	0
80	SLU 49	4	16	3041	-5.22	3.66	0
80	SLU 50	4	16	3041	-5.22	3.66	0
80	SLU 51	4	16	3041	-5.22	3.66	0
80	SLU 52	5	8	3477	-5.93	4.91	0
80	SLU 53	5	8	3477	-5.93	4.91	0
80	SLU 54	5	8	3477	-5.93	4.91	0
80	SLU 55	5	8	3477	-5.93	4.91	0
80	SLU 56	5	8	3477	-5.93	4.91	0
80	SLU 57	5	8	3477	-5.93	4.91	0
80	SLU 58	5	8	3477	-5.93	4.91	0
80	SLU 59	5	8	3477	-5.93	4.91	0
80	SLU 60	5	4	3665	-6.23	5.44	0
80	SLU 61	5	4	3665	-6.23	5.44	0
80	SLU 62	5	4	3665	-6.23	5.44	0
80	SLU 63	5	4	3665	-6.23	5.44	0
80	SLU 64	4	7	3287	-5.27	4.17	0
80	SLU 65	4	7	3287	-5.27	4.17	0
80	SLU 66	4	7	3287	-5.27	4.17	0
80	SLU 67	4	7	3287	-5.27	4.17	0
80	SLU 68	4	7	3287	-5.27	4.17	0
80	SLU 69	4	7	3287	-5.27	4.17	0
80	SLU 70	4	7	3287	-5.27	4.17	0
80	SLU 71	4	7	3287	-5.27	4.17	0
80	SLU 72	4	7	3287	-5.27	4.17	0
80	SLU 73	5	-2	3724	-5.97	5.42	0
80	SLU 74	5	-2	3724	-5.97	5.42	0
80	SLU 75	5	-2	3724	-5.97	5.42	0
80	SLU 76	5	-2	3724	-5.97	5.42	0
80	SLU 77	5	-2	3724	-5.97	5.42	0
80	SLU 78	5	-2	3724	-5.97	5.42	0
80	SLU 79	5	-2	3724	-5.97	5.42	0
80	SLU 80	5	-2	3724	-5.97	5.42	0
80	SLU 81	6	-5	3911	-6.27	5.95	0
80	SLU 82	6	-5	3911	-6.27	5.95	0
80	SLU 83	6	-5	3911	-6.27	5.95	0
80	SLU 84	6	-5	3911	-6.27	5.95	0
80	SLE RA 1	3	7	2474	-4.04	3.1	0
80	SLE RA 2	3	7	2474	-4.04	3.1	0
80	SLE RA 3	3	7	2474	-4.04	3.1	0
80	SLE RA 4	3	7	2474	-4.04	3.1	0
80	SLE RA 5	3	7	2474	-4.04	3.1	0
80	SLE RA 6	3	7	2474	-4.04	3.1	0
80	SLE RA 7	3	7	2474	-4.04	3.1	0
80	SLE RA 8	3	7	2474	-4.04	3.1	0
80	SLE RA 9	3	7	2474	-4.04	3.1	0
80	SLE RA 10	4	2	2766	-4.51	3.93	0
80	SLE RA 11	4	2	2766	-4.51	3.93	0
80	SLE RA 12	4	2	2766	-4.51	3.93	0
80	SLE RA 13	4	2	2766	-4.51	3.93	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
80	SLE RA 14	4	2	2766	-4.51	3.93	0
80	SLE RA 15	4	2	2766	-4.51	3.93	0
80	SLE RA 16	4	2	2766	-4.51	3.93	0
80	SLE RA 17	4	2	2766	-4.51	3.93	0
80	SLE RA 18	4	-1	2890	-4.71	4.28	0
80	SLE RA 19	4	-1	2890	-4.71	4.28	0
80	SLE RA 20	4	-1	2890	-4.71	4.28	0
80	SLE RA 21	4	-1	2890	-4.71	4.28	0
80	SLE FR 1	3	7	2474	-4.04	3.1	0
80	SLE FR 2	3	7	2474	-4.04	3.1	0
80	SLE FR 3	3	7	2474	-4.04	3.1	0
80	SLE FR 4	3	5	2599	-4.24	3.45	0
80	SLE FR 5	3	5	2599	-4.24	3.45	0
80	SLE FR 6	4	3	2682	-4.38	3.69	0
80	SLE QP 1	3	7	2474	-4.04	3.1	0
80	SLE QP 2	3	5	2599	-4.24	3.45	0
80	SLD 1	32	-117	2402	1.25	30.83	-0.01
80	SLD 2	32	-117	2402	1.25	30.83	-0.01
80	SLD 3	23	5	2478	-4.75	21.2	-0.02
80	SLD 4	23	5	2478	-4.75	21.2	-0.02
80	SLD 5	25	-216	2424	6.51	26.27	0
80	SLD 6	25	-216	2424	6.51	26.27	0
80	SLD 7	-4	189	2679	-13.5	-5.83	-0.01
80	SLD 8	-4	189	2679	-13.5	-5.83	-0.01
80	SLD 9	11	-180	2519	5.01	12.73	0.01
80	SLD 10	11	-180	2519	5.01	12.73	0.01
80	SLD 11	-18	226	2774	-14.99	-19.36	-0.01
80	SLD 12	-18	226	2774	-14.99	-19.36	-0.01
80	SLD 13	-16	5	2720	-3.73	-14.29	0.01
80	SLD 14	-16	5	2720	-3.73	-14.29	0.01
80	SLD 15	-25	126	2796	-9.73	-23.92	0.01
80	SLD 16	-25	126	2796	-9.73	-23.92	0.01
80	SLV 1	73	-288	2122	9.11	71.34	-0.02
80	SLV 2	73	-288	2122	9.11	71.34	-0.02
80	SLV 3	50	5	2335	-5.54	46.53	-0.04
80	SLV 4	50	5	2335	-5.54	46.53	-0.04
80	SLV 5	58	-527	2133	21.99	61.45	0.01
80	SLV 6	58	-527	2133	21.99	61.45	0.01
80	SLV 7	-17	449	2843	-26.86	-21.25	-0.03
80	SLV 8	-17	449	2843	-26.86	-21.25	-0.03
80	SLV 9	23	-439	2355	18.37	28.16	0.03
80	SLV 10	23	-439	2355	18.37	28.16	0.03
80	SLV 11	-51	537	3065	-30.48	-54.54	-0.01
80	SLV 12	-51	537	3065	-30.48	-54.54	-0.01
80	SLV 13	-44	5	2863	-2.94	-39.62	0.03
80	SLV 14	-44	5	2863	-2.94	-39.62	0.03
80	SLV 15	-66	298	3076	-17.6	-64.43	0.02
80	SLV 16	-66	298	3076	-17.6	-64.43	0.02
81	SLU 1	-2	7	1890	2.89	-2.65	0
81	SLU 2	-2	7	1890	2.89	-2.65	0
81	SLU 3	-2	7	1890	2.89	-2.65	0
81	SLU 4	-2	7	1890	2.89	-2.65	0
81	SLU 5	-2	7	1890	2.89	-2.65	0
81	SLU 6	-2	7	1890	2.89	-2.65	0
81	SLU 7	-2	7	1890	2.89	-2.65	0
81	SLU 8	-2	7	1890	2.89	-2.65	0
81	SLU 9	-2	7	1890	2.89	-2.65	0
81	SLU 10	-3	20	2250	3.38	-3.81	0
81	SLU 11	-3	20	2250	3.38	-3.81	0
81	SLU 12	-3	20	2250	3.38	-3.81	0
81	SLU 13	-3	20	2250	3.38	-3.81	0
81	SLU 14	-3	20	2250	3.38	-3.81	0
81	SLU 15	-3	20	2250	3.38	-3.81	0
81	SLU 16	-3	20	2250	3.38	-3.81	0
81	SLU 17	-3	20	2250	3.38	-3.81	0
81	SLU 18	-3	26	2403	3.6	-4.31	0
81	SLU 19	-3	26	2403	3.6	-4.31	0
81	SLU 20	-3	26	2403	3.6	-4.31	0
81	SLU 21	-3	26	2403	3.6	-4.31	0
81	SLU 22	-3	10	2071	3.19	-3.14	0
81	SLU 23	-3	10	2071	3.19	-3.14	0
81	SLU 24	-3	10	2071	3.19	-3.14	0
81	SLU 25	-3	10	2071	3.19	-3.14	0
81	SLU 26	-3	10	2071	3.19	-3.14	0
81	SLU 27	-3	10	2071	3.19	-3.14	0
81	SLU 28	-3	10	2071	3.19	-3.14	0
81	SLU 29	-3	10	2071	3.19	-3.14	0
81	SLU 30	-3	10	2071	3.19	-3.14	0
81	SLU 31	-3	24	2430	3.69	-4.3	0
81	SLU 32	-3	24	2430	3.69	-4.3	0
81	SLU 33	-3	24	2430	3.69	-4.3	0
81	SLU 34	-3	24	2430	3.69	-4.3	0
81	SLU 35	-3	24	2430	3.69	-4.3	0
81	SLU 36	-3	24	2430	3.69	-4.3	0
81	SLU 37	-3	24	2430	3.69	-4.3	0
81	SLU 38	-3	24	2430	3.69	-4.3	0
81	SLU 39	-3	29	2584	3.9	-4.8	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
81	SLU 40	-3	29	2584	3.9	-4.8	0
81	SLU 41	-3	29	2584	3.9	-4.8	0
81	SLU 42	-3	29	2584	3.9	-4.8	0
81	SLU 43	-3	8	2396	3.65	-3.28	0
81	SLU 44	-3	8	2396	3.65	-3.28	0
81	SLU 45	-3	8	2396	3.65	-3.28	0
81	SLU 46	-3	8	2396	3.65	-3.28	0
81	SLU 47	-3	8	2396	3.65	-3.28	0
81	SLU 48	-3	8	2396	3.65	-3.28	0
81	SLU 49	-3	8	2396	3.65	-3.28	0
81	SLU 50	-3	8	2396	3.65	-3.28	0
81	SLU 51	-3	8	2396	3.65	-3.28	0
81	SLU 52	-3	21	2755	4.15	-4.44	0
81	SLU 53	-3	21	2755	4.15	-4.44	0
81	SLU 54	-3	21	2755	4.15	-4.44	0
81	SLU 55	-3	21	2755	4.15	-4.44	0
81	SLU 56	-3	21	2755	4.15	-4.44	0
81	SLU 57	-3	21	2755	4.15	-4.44	0
81	SLU 58	-3	21	2755	4.15	-4.44	0
81	SLU 59	-3	21	2755	4.15	-4.44	0
81	SLU 60	-3	27	2909	4.36	-4.94	0
81	SLU 61	-3	27	2909	4.36	-4.94	0
81	SLU 62	-3	27	2909	4.36	-4.94	0
81	SLU 63	-3	27	2909	4.36	-4.94	0
81	SLU 64	-3	11	2576	3.96	-3.77	0
81	SLU 65	-3	11	2576	3.96	-3.77	0
81	SLU 66	-3	11	2576	3.96	-3.77	0
81	SLU 67	-3	11	2576	3.96	-3.77	0
81	SLU 68	-3	11	2576	3.96	-3.77	0
81	SLU 69	-3	11	2576	3.96	-3.77	0
81	SLU 70	-3	11	2576	3.96	-3.77	0
81	SLU 71	-3	11	2576	3.96	-3.77	0
81	SLU 72	-3	11	2576	3.96	-3.77	0
81	SLU 73	-4	25	2935	4.45	-4.93	0
81	SLU 74	-4	25	2935	4.45	-4.93	0
81	SLU 75	-4	25	2935	4.45	-4.93	0
81	SLU 76	-4	25	2935	4.45	-4.93	0
81	SLU 77	-4	25	2935	4.45	-4.93	0
81	SLU 78	-4	25	2935	4.45	-4.93	0
81	SLU 79	-4	25	2935	4.45	-4.93	0
81	SLU 80	-4	25	2935	4.45	-4.93	0
81	SLU 81	-4	30	3089	4.66	-5.43	0
81	SLU 82	-4	30	3089	4.66	-5.43	0
81	SLU 83	-4	30	3089	4.66	-5.43	0
81	SLU 84	-4	30	3089	4.66	-5.43	0
81	SLE RA 1	-2	8	1942	2.98	-2.79	0
81	SLE RA 2	-2	8	1942	2.98	-2.79	0
81	SLE RA 3	-2	8	1942	2.98	-2.79	0
81	SLE RA 4	-2	8	1942	2.98	-2.79	0
81	SLE RA 5	-2	8	1942	2.98	-2.79	0
81	SLE RA 6	-2	8	1942	2.98	-2.79	0
81	SLE RA 7	-2	8	1942	2.98	-2.79	0
81	SLE RA 8	-2	8	1942	2.98	-2.79	0
81	SLE RA 9	-2	8	1942	2.98	-2.79	0
81	SLE RA 10	-3	17	2181	3.31	-3.56	0
81	SLE RA 11	-3	17	2181	3.31	-3.56	0
81	SLE RA 12	-3	17	2181	3.31	-3.56	0
81	SLE RA 13	-3	17	2181	3.31	-3.56	0
81	SLE RA 14	-3	17	2181	3.31	-3.56	0
81	SLE RA 15	-3	17	2181	3.31	-3.56	0
81	SLE RA 16	-3	17	2181	3.31	-3.56	0
81	SLE RA 17	-3	17	2181	3.31	-3.56	0
81	SLE RA 18	-3	21	2284	3.45	-3.9	0
81	SLE RA 19	-3	21	2284	3.45	-3.9	0
81	SLE RA 20	-3	21	2284	3.45	-3.9	0
81	SLE RA 21	-3	21	2284	3.45	-3.9	0
81	SLE FR 1	-2	8	1942	2.98	-2.79	0
81	SLE FR 2	-2	8	1942	2.98	-2.79	0
81	SLE FR 3	-2	8	1942	2.98	-2.79	0
81	SLE FR 4	-2	12	2045	3.12	-3.12	0
81	SLE FR 5	-2	12	2045	3.12	-3.12	0
81	SLE FR 6	-3	14	2113	3.21	-3.34	0
81	SLE QP 1	-2	8	1942	2.98	-2.79	0
81	SLE QP 2	-2	12	2045	3.12	-3.12	0
81	SLD 1	23	141	2145	3.89	10.15	0.02
81	SLD 2	23	141	2145	3.89	10.15	0.02
81	SLD 3	12	27	2211	8.74	20.08	0.02
81	SLD 4	12	27	2211	8.74	20.08	0.02
81	SLD 5	22	223	1973	-4	-14.2	0
81	SLD 6	22	223	1973	-4	-14.2	0
81	SLD 7	-15	-156	2196	12.16	18.9	0.02
81	SLD 8	-15	-156	2196	12.16	18.9	0.02
81	SLD 9	10	180	1893	-5.92	-25.14	-0.02
81	SLD 10	10	180	1893	-5.92	-25.14	-0.02
81	SLD 11	-27	-200	2116	10.24	7.95	0
81	SLD 12	-27	-200	2116	10.24	7.95	0
81	SLD 13	-17	-4	1878	-2.5	-26.33	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
81	SLD 14	-17	-4	1878	-2.5	-26.33	-0.03
81	SLD 15	-28	-118	1945	2.35	-16.4	-0.02
81	SLD 16	-28	-118	1945	2.35	-16.4	-0.02
81	SLV 1	59	316	2261	4.86	27.88	0.04
81	SLV 2	59	316	2261	4.86	27.88	0.04
81	SLV 3	30	47	2453	16.33	53.56	0.06
81	SLV 4	30	47	2453	16.33	53.56	0.06
81	SLV 5	59	510	1819	-13.76	-32.77	-0.01
81	SLV 6	59	510	1819	-13.76	-32.77	-0.01
81	SLV 7	-36	-385	2458	24.48	52.83	0.04
81	SLV 8	-36	-385	2458	24.48	52.83	0.04
81	SLV 9	31	408	1631	-18.25	-59.08	-0.04
81	SLV 10	31	408	1631	-18.25	-59.08	-0.04
81	SLV 11	-64	-487	2270	19.99	26.53	0.01
81	SLV 12	-64	-487	2270	19.99	26.53	0.01
81	SLV 13	-35	-24	1636	-10.1	-59.81	-0.06
81	SLV 14	-35	-24	1636	-10.1	-59.81	-0.06
81	SLV 15	-64	-293	1828	1.37	-34.12	-0.04
81	SLV 16	-64	-293	1828	1.37	-34.12	-0.04
82	SLU 1	3	-141	2443	10.95	3.25	0
82	SLU 2	3	-141	2443	10.95	3.25	0
82	SLU 3	3	-141	2443	10.95	3.25	0
82	SLU 4	3	-141	2443	10.95	3.25	0
82	SLU 5	3	-141	2443	10.95	3.25	0
82	SLU 6	3	-141	2443	10.95	3.25	0
82	SLU 7	3	-141	2443	10.95	3.25	0
82	SLU 8	3	-141	2443	10.95	3.25	0
82	SLU 9	3	-141	2443	10.95	3.25	0
82	SLU 10	5	-188	2906	14.6	4.66	0
82	SLU 11	5	-188	2906	14.6	4.66	0
82	SLU 12	5	-188	2906	14.6	4.66	0
82	SLU 13	5	-188	2906	14.6	4.66	0
82	SLU 14	5	-188	2906	14.6	4.66	0
82	SLU 15	5	-188	2906	14.6	4.66	0
82	SLU 16	5	-188	2906	14.6	4.66	0
82	SLU 17	5	-188	2906	14.6	4.66	0
82	SLU 18	5	-208	3105	16.17	5.26	0
82	SLU 19	5	-208	3105	16.17	5.26	0
82	SLU 20	5	-208	3105	16.17	5.26	0
82	SLU 21	5	-208	3105	16.17	5.26	0
82	SLU 22	4	-169	2700	12.89	3.83	0
82	SLU 23	4	-169	2700	12.89	3.83	0
82	SLU 24	4	-169	2700	12.89	3.83	0
82	SLU 25	4	-169	2700	12.89	3.83	0
82	SLU 26	4	-169	2700	12.89	3.83	0
82	SLU 27	4	-169	2700	12.89	3.83	0
82	SLU 28	4	-169	2700	12.89	3.83	0
82	SLU 29	4	-169	2700	12.89	3.83	0
82	SLU 30	4	-169	2700	12.89	3.83	0
82	SLU 31	5	-216	3163	16.55	5.24	0
82	SLU 32	5	-216	3163	16.55	5.24	0
82	SLU 33	5	-216	3163	16.55	5.24	0
82	SLU 34	5	-216	3163	16.55	5.24	0
82	SLU 35	5	-216	3163	16.55	5.24	0
82	SLU 36	5	-216	3163	16.55	5.24	0
82	SLU 37	5	-216	3163	16.55	5.24	0
82	SLU 38	5	-216	3163	16.55	5.24	0
82	SLU 39	6	-236	3362	18.11	5.84	0
82	SLU 40	6	-236	3362	18.11	5.84	0
82	SLU 41	6	-236	3362	18.11	5.84	0
82	SLU 42	6	-236	3362	18.11	5.84	0
82	SLU 43	4	-174	3088	13.56	4.03	0
82	SLU 44	4	-174	3088	13.56	4.03	0
82	SLU 45	4	-174	3088	13.56	4.03	0
82	SLU 46	4	-174	3088	13.56	4.03	0
82	SLU 47	4	-174	3088	13.56	4.03	0
82	SLU 48	4	-174	3088	13.56	4.03	0
82	SLU 49	4	-174	3088	13.56	4.03	0
82	SLU 50	4	-174	3088	13.56	4.03	0
82	SLU 51	4	-174	3088	13.56	4.03	0
82	SLU 52	6	-221	3551	17.22	5.43	0
82	SLU 53	6	-221	3551	17.22	5.43	0
82	SLU 54	6	-221	3551	17.22	5.43	0
82	SLU 55	6	-221	3551	17.22	5.43	0
82	SLU 56	6	-221	3551	17.22	5.43	0
82	SLU 57	6	-221	3551	17.22	5.43	0
82	SLU 58	6	-221	3551	17.22	5.43	0
82	SLU 59	6	-221	3551	17.22	5.43	0
82	SLU 60	6	-241	3749	18.78	6.03	0
82	SLU 61	6	-241	3749	18.78	6.03	0
82	SLU 62	6	-241	3749	18.78	6.03	0
82	SLU 63	6	-241	3749	18.78	6.03	0
82	SLU 64	5	-202	3345	15.51	4.61	0
82	SLU 65	5	-202	3345	15.51	4.61	0
82	SLU 66	5	-202	3345	15.51	4.61	0
82	SLU 67	5	-202	3345	15.51	4.61	0
82	SLU 68	5	-202	3345	15.51	4.61	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
82	SLU 69	5	-202	3345	15.51	4.61	0
82	SLU 70	5	-202	3345	15.51	4.61	0
82	SLU 71	5	-202	3345	15.51	4.61	0
82	SLU 72	5	-202	3345	15.51	4.61	0
82	SLU 73	6	-249	3808	19.16	6.01	0
82	SLU 74	6	-249	3808	19.16	6.01	0
82	SLU 75	6	-249	3808	19.16	6.01	0
82	SLU 76	6	-249	3808	19.16	6.01	0
82	SLU 77	6	-249	3808	19.16	6.01	0
82	SLU 78	6	-249	3808	19.16	6.01	0
82	SLU 79	6	-249	3808	19.16	6.01	0
82	SLU 80	6	-249	3808	19.16	6.01	0
82	SLU 81	7	-269	4006	20.73	6.61	-0.01
82	SLU 82	7	-269	4006	20.73	6.61	-0.01
82	SLU 83	7	-269	4006	20.73	6.61	-0.01
82	SLU 84	7	-269	4006	20.73	6.61	-0.01
82	SLE RA 1	4	-149	2516	11.5	3.42	0
82	SLE RA 2	4	-149	2516	11.5	3.42	0
82	SLE RA 3	4	-149	2516	11.5	3.42	0
82	SLE RA 4	4	-149	2516	11.5	3.42	0
82	SLE RA 5	4	-149	2516	11.5	3.42	0
82	SLE RA 6	4	-149	2516	11.5	3.42	0
82	SLE RA 7	4	-149	2516	11.5	3.42	0
82	SLE RA 8	4	-149	2516	11.5	3.42	0
82	SLE RA 9	4	-149	2516	11.5	3.42	0
82	SLE RA 10	4	-180	2825	13.94	4.35	0
82	SLE RA 11	4	-180	2825	13.94	4.35	0
82	SLE RA 12	4	-180	2825	13.94	4.35	0
82	SLE RA 13	4	-180	2825	13.94	4.35	0
82	SLE RA 14	4	-180	2825	13.94	4.35	0
82	SLE RA 15	4	-180	2825	13.94	4.35	0
82	SLE RA 16	4	-180	2825	13.94	4.35	0
82	SLE RA 17	4	-180	2825	13.94	4.35	0
82	SLE RA 18	5	-194	2958	14.98	4.75	0
82	SLE RA 19	5	-194	2958	14.98	4.75	0
82	SLE RA 20	5	-194	2958	14.98	4.75	0
82	SLE RA 21	5	-194	2958	14.98	4.75	0
82	SLE FR 1	4	-149	2516	11.5	3.42	0
82	SLE FR 2	4	-149	2516	11.5	3.42	0
82	SLE FR 3	4	-149	2516	11.5	3.42	0
82	SLE FR 4	4	-163	2649	12.55	3.82	0
82	SLE FR 5	4	-163	2649	12.55	3.82	0
82	SLE FR 6	4	-172	2737	13.24	4.09	0
82	SLE QP 1	4	-149	2516	11.5	3.42	0
82	SLE QP 2	4	-163	2649	12.55	3.82	0
82	SLD 1	20	-177	2439	13.5	19.94	-0.01
82	SLD 2	20	-177	2439	13.5	19.94	-0.01
82	SLD 3	30	-304	2512	19.43	29.64	-0.01
82	SLD 4	30	-304	2512	19.43	29.64	-0.01
82	SLD 5	-5	25	2476	3.83	-6.06	0.01
82	SLD 6	-5	25	2476	3.83	-6.06	0.01
82	SLD 7	26	-397	2718	23.61	26.29	-0.02
82	SLD 8	26	-397	2718	23.61	26.29	-0.02
82	SLD 9	-18	72	2580	1.48	-18.65	0.01
82	SLD 10	-18	72	2580	1.48	-18.65	0.01
82	SLD 11	13	-351	2822	21.26	13.7	-0.01
82	SLD 12	13	-351	2822	21.26	13.7	-0.01
82	SLD 13	-22	-22	2786	5.66	-22.01	0.01
82	SLD 14	-22	-22	2786	5.66	-22.01	0.01
82	SLD 15	-13	-148	2858	11.6	-12.3	0
82	SLD 16	-13	-148	2858	11.6	-12.3	0
82	SLV 1	44	-200	2142	14.95	42.94	-0.01
82	SLV 2	44	-200	2142	14.95	42.94	-0.01
82	SLV 3	68	-501	2347	29.05	68.06	-0.03
82	SLV 4	68	-501	2347	29.05	68.06	-0.03
82	SLV 5	-20	283	2186	-8.11	-22.55	0.02
82	SLV 6	-20	283	2186	-8.11	-22.55	0.02
82	SLV 7	59	-721	2869	38.87	61.19	-0.04
82	SLV 8	59	-721	2869	38.87	61.19	-0.04
82	SLV 9	-52	396	2429	-13.78	-53.56	0.03
82	SLV 10	-52	396	2429	-13.78	-53.56	0.03
82	SLV 11	28	-609	3111	33.2	30.19	-0.02
82	SLV 12	28	-609	3111	33.2	30.19	-0.02
82	SLV 13	-60	176	2951	-3.96	-60.42	0.03
82	SLV 14	-60	176	2951	-3.96	-60.42	0.03
82	SLV 15	-36	-126	3155	10.14	-35.3	0.01
82	SLV 16	-36	-126	3155	10.14	-35.3	0.01
83	SLU 1	1	79	2109	-6.58	-2.19	0
83	SLU 2	1	79	2109	-6.58	-2.19	0
83	SLU 3	1	79	2109	-6.58	-2.19	0
83	SLU 4	1	79	2109	-6.58	-2.19	0
83	SLU 5	1	79	2109	-6.58	-2.19	0
83	SLU 6	1	79	2109	-6.58	-2.19	0
83	SLU 7	1	79	2109	-6.58	-2.19	0
83	SLU 8	1	79	2109	-6.58	-2.19	0
83	SLU 9	1	79	2109	-6.58	-2.19	0
83	SLU 10	2	123	2528	-9.53	-3.21	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
83	SLU 11	2	123	2528	-9.53	-3.21	0
83	SLU 12	2	123	2528	-9.53	-3.21	0
83	SLU 13	2	123	2528	-9.53	-3.21	0
83	SLU 14	2	123	2528	-9.53	-3.21	0
83	SLU 15	2	123	2528	-9.53	-3.21	0
83	SLU 16	2	123	2528	-9.53	-3.21	0
83	SLU 17	2	123	2528	-9.53	-3.21	0
83	SLU 18	3	142	2707	-10.8	-3.65	0
83	SLU 19	3	142	2707	-10.8	-3.65	0
83	SLU 20	3	142	2707	-10.8	-3.65	0
83	SLU 21	3	142	2707	-10.8	-3.65	0
83	SLU 22	2	97	2317	-7.8	-2.62	0
83	SLU 23	2	97	2317	-7.8	-2.62	0
83	SLU 24	2	97	2317	-7.8	-2.62	0
83	SLU 25	2	97	2317	-7.8	-2.62	0
83	SLU 26	2	97	2317	-7.8	-2.62	0
83	SLU 27	2	97	2317	-7.8	-2.62	0
83	SLU 28	2	97	2317	-7.8	-2.62	0
83	SLU 29	2	97	2317	-7.8	-2.62	0
83	SLU 30	2	97	2317	-7.8	-2.62	0
83	SLU 31	3	141	2736	-10.75	-3.64	0
83	SLU 32	3	141	2736	-10.75	-3.64	0
83	SLU 33	3	141	2736	-10.75	-3.64	0
83	SLU 34	3	141	2736	-10.75	-3.64	0
83	SLU 35	3	141	2736	-10.75	-3.64	0
83	SLU 36	3	141	2736	-10.75	-3.64	0
83	SLU 37	3	141	2736	-10.75	-3.64	0
83	SLU 38	3	141	2736	-10.75	-3.64	0
83	SLU 39	3	160	2915	-12.01	-4.08	0
83	SLU 40	3	160	2915	-12.01	-4.08	0
83	SLU 41	3	160	2915	-12.01	-4.08	0
83	SLU 42	3	160	2915	-12.01	-4.08	0
83	SLU 43	2	97	2670	-8.14	-2.7	0
83	SLU 44	2	97	2670	-8.14	-2.7	0
83	SLU 45	2	97	2670	-8.14	-2.7	0
83	SLU 46	2	97	2670	-8.14	-2.7	0
83	SLU 47	2	97	2670	-8.14	-2.7	0
83	SLU 48	2	97	2670	-8.14	-2.7	0
83	SLU 49	2	97	2670	-8.14	-2.7	0
83	SLU 50	2	97	2670	-8.14	-2.7	0
83	SLU 51	2	97	2670	-8.14	-2.7	0
83	SLU 52	3	141	3089	-11.09	-3.72	0
83	SLU 53	3	141	3089	-11.09	-3.72	0
83	SLU 54	3	141	3089	-11.09	-3.72	0
83	SLU 55	3	141	3089	-11.09	-3.72	0
83	SLU 56	3	141	3089	-11.09	-3.72	0
83	SLU 57	3	141	3089	-11.09	-3.72	0
83	SLU 58	3	141	3089	-11.09	-3.72	0
83	SLU 59	3	141	3089	-11.09	-3.72	0
83	SLU 60	3	160	3269	-12.35	-4.15	0
83	SLU 61	3	160	3269	-12.35	-4.15	0
83	SLU 62	3	160	3269	-12.35	-4.15	0
83	SLU 63	3	160	3269	-12.35	-4.15	0
83	SLU 64	2	115	2879	-9.35	-3.13	0
83	SLU 65	2	115	2879	-9.35	-3.13	0
83	SLU 66	2	115	2879	-9.35	-3.13	0
83	SLU 67	2	115	2879	-9.35	-3.13	0
83	SLU 68	2	115	2879	-9.35	-3.13	0
83	SLU 69	2	115	2879	-9.35	-3.13	0
83	SLU 70	2	115	2879	-9.35	-3.13	0
83	SLU 71	2	115	2879	-9.35	-3.13	0
83	SLU 72	2	115	2879	-9.35	-3.13	0
83	SLU 73	3	159	3297	-12.3	-4.15	0
83	SLU 74	3	159	3297	-12.3	-4.15	0
83	SLU 75	3	159	3297	-12.3	-4.15	0
83	SLU 76	3	159	3297	-12.3	-4.15	0
83	SLU 77	3	159	3297	-12.3	-4.15	0
83	SLU 78	3	159	3297	-12.3	-4.15	0
83	SLU 79	3	159	3297	-12.3	-4.15	0
83	SLU 80	3	159	3297	-12.3	-4.15	0
83	SLU 81	3	178	3477	-13.57	-4.59	0
83	SLU 82	3	178	3477	-13.57	-4.59	0
83	SLU 83	3	178	3477	-13.57	-4.59	0
83	SLU 84	3	178	3477	-13.57	-4.59	0
83	SLE RA 1	1	84	2169	-6.93	-2.31	0
83	SLE RA 2	1	84	2169	-6.93	-2.31	0
83	SLE RA 3	1	84	2169	-6.93	-2.31	0
83	SLE RA 4	1	84	2169	-6.93	-2.31	0
83	SLE RA 5	1	84	2169	-6.93	-2.31	0
83	SLE RA 6	1	84	2169	-6.93	-2.31	0
83	SLE RA 7	1	84	2169	-6.93	-2.31	0
83	SLE RA 8	1	84	2169	-6.93	-2.31	0
83	SLE RA 9	1	84	2169	-6.93	-2.31	0
83	SLE RA 10	2	114	2448	-8.9	-2.99	0
83	SLE RA 11	2	114	2448	-8.9	-2.99	0
83	SLE RA 12	2	114	2448	-8.9	-2.99	0
83	SLE RA 13	2	114	2448	-8.9	-2.99	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
83	SLE RA 14	2	114	2448	-8.9	-2.99	0
83	SLE RA 15	2	114	2448	-8.9	-2.99	0
83	SLE RA 16	2	114	2448	-8.9	-2.99	0
83	SLE RA 17	2	114	2448	-8.9	-2.99	0
83	SLE RA 18	2	126	2567	-9.74	-3.28	0
83	SLE RA 19	2	126	2567	-9.74	-3.28	0
83	SLE RA 20	2	126	2567	-9.74	-3.28	0
83	SLE RA 21	2	126	2567	-9.74	-3.28	0
83	SLE FR 1	1	84	2169	-6.93	-2.31	0
83	SLE FR 2	1	84	2169	-6.93	-2.31	0
83	SLE FR 3	1	84	2169	-6.93	-2.31	0
83	SLE FR 4	2	97	2288	-7.77	-2.6	0
83	SLE FR 5	2	97	2288	-7.77	-2.6	0
83	SLE FR 6	2	105	2368	-8.33	-2.8	0
83	SLE QP 1	1	84	2169	-6.93	-2.31	0
83	SLE QP 2	2	97	2288	-7.77	-2.6	0
83	SLD 1	23	219	2409	-8.47	17.78	0.01
83	SLD 2	23	219	2409	-8.47	17.78	0.01
83	SLD 3	11	120	2487	-12.47	8.19	0.01
83	SLD 4	11	120	2487	-12.47	8.19	0.01
83	SLD 5	26	282	2207	-1.92	18.06	0
83	SLD 6	26	282	2207	-1.92	18.06	0
83	SLD 7	-13	-45	2466	-15.25	-13.91	0.01
83	SLD 8	-13	-45	2466	-15.25	-13.91	0.01
83	SLD 9	16	239	2111	-0.29	8.71	-0.01
83	SLD 10	16	239	2111	-0.29	8.71	-0.01
83	SLD 11	-22	-88	2370	-13.63	-23.26	0.01
83	SLD 12	-22	-88	2370	-13.63	-23.26	0.01
83	SLD 13	-8	74	2090	-3.07	-13.4	-0.01
83	SLD 14	-8	74	2090	-3.07	-13.4	-0.01
83	SLD 15	-20	-25	2167	-7.07	-22.99	-0.01
83	SLD 16	-20	-25	2167	-7.07	-22.99	-0.01
83	SLV 1	54	383	2551	-9.32	47.4	0.02
83	SLV 2	54	383	2551	-9.32	47.4	0.02
83	SLV 3	24	151	2775	-18.9	22.53	0.03
83	SLV 4	24	151	2775	-18.9	22.53	0.03
83	SLV 5	62	534	2027	6.28	50.12	-0.01
83	SLV 6	62	534	2027	6.28	50.12	-0.01
83	SLV 7	-36	-238	2774	-25.63	-32.78	0.03
83	SLV 8	-36	-238	2774	-25.63	-32.78	0.03
83	SLV 9	40	432	1802	10.09	27.58	-0.02
83	SLV 10	40	432	1802	10.09	27.58	-0.02
83	SLV 11	-59	-341	2549	-21.82	-55.32	0.01
83	SLV 12	-59	-341	2549	-21.82	-55.32	0.01
83	SLV 13	-21	43	1801	3.36	-27.73	-0.02
83	SLV 14	-21	43	1801	3.36	-27.73	-0.02
83	SLV 15	-50	-189	2025	-6.22	-52.6	-0.01
83	SLV 16	-50	-189	2025	-6.22	-52.6	-0.01
84	SLU 1	3	-127	2484	0.89	3.18	0
84	SLU 2	3	-127	2484	0.89	3.18	0
84	SLU 3	3	-127	2484	0.89	3.18	0
84	SLU 4	3	-127	2484	0.89	3.18	0
84	SLU 5	3	-127	2484	0.89	3.18	0
84	SLU 6	3	-127	2484	0.89	3.18	0
84	SLU 7	3	-127	2484	0.89	3.18	0
84	SLU 8	3	-127	2484	0.89	3.18	0
84	SLU 9	3	-127	2484	0.89	3.18	0
84	SLU 10	5	-158	2976	0.79	4.59	0
84	SLU 11	5	-158	2976	0.79	4.59	0
84	SLU 12	5	-158	2976	0.79	4.59	0
84	SLU 13	5	-158	2976	0.79	4.59	0
84	SLU 14	5	-158	2976	0.79	4.59	0
84	SLU 15	5	-158	2976	0.79	4.59	0
84	SLU 16	5	-158	2976	0.79	4.59	0
84	SLU 17	5	-158	2976	0.79	4.59	0
84	SLU 18	6	-171	3186	0.75	5.2	0
84	SLU 19	6	-171	3186	0.75	5.2	0
84	SLU 20	6	-171	3186	0.75	5.2	0
84	SLU 21	6	-171	3186	0.75	5.2	0
84	SLU 22	4	-149	2753	1.22	3.76	0
84	SLU 23	4	-149	2753	1.22	3.76	0
84	SLU 24	4	-149	2753	1.22	3.76	0
84	SLU 25	4	-149	2753	1.22	3.76	0
84	SLU 26	4	-149	2753	1.22	3.76	0
84	SLU 27	4	-149	2753	1.22	3.76	0
84	SLU 28	4	-149	2753	1.22	3.76	0
84	SLU 29	4	-149	2753	1.22	3.76	0
84	SLU 30	4	-149	2753	1.22	3.76	0
84	SLU 31	6	-180	3245	1.12	5.17	0
84	SLU 32	6	-180	3245	1.12	5.17	0
84	SLU 33	6	-180	3245	1.12	5.17	0
84	SLU 34	6	-180	3245	1.12	5.17	0
84	SLU 35	6	-180	3245	1.12	5.17	0
84	SLU 36	6	-180	3245	1.12	5.17	0
84	SLU 37	6	-180	3245	1.12	5.17	0
84	SLU 38	6	-180	3245	1.12	5.17	0
84	SLU 39	6	-193	3455	1.08	5.78	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
84	SLU 40	6	-193	3455	1.08	5.78	0
84	SLU 41	6	-193	3455	1.08	5.78	0
84	SLU 42	6	-193	3455	1.08	5.78	0
84	SLU 43	4	-158	3137	1.05	3.93	0
84	SLU 44	4	-158	3137	1.05	3.93	0
84	SLU 45	4	-158	3137	1.05	3.93	0
84	SLU 46	4	-158	3137	1.05	3.93	0
84	SLU 47	4	-158	3137	1.05	3.93	0
84	SLU 48	4	-158	3137	1.05	3.93	0
84	SLU 49	4	-158	3137	1.05	3.93	0
84	SLU 50	4	-158	3137	1.05	3.93	0
84	SLU 51	4	-158	3137	1.05	3.93	0
84	SLU 52	6	-188	3629	0.95	5.34	0
84	SLU 53	6	-188	3629	0.95	5.34	0
84	SLU 54	6	-188	3629	0.95	5.34	0
84	SLU 55	6	-188	3629	0.95	5.34	0
84	SLU 56	6	-188	3629	0.95	5.34	0
84	SLU 57	6	-188	3629	0.95	5.34	0
84	SLU 58	6	-188	3629	0.95	5.34	0
84	SLU 59	6	-188	3629	0.95	5.34	0
84	SLU 60	6	-202	3839	0.91	5.95	0
84	SLU 61	6	-202	3839	0.91	5.95	0
84	SLU 62	6	-202	3839	0.91	5.95	0
84	SLU 63	6	-202	3839	0.91	5.95	0
84	SLU 64	5	-180	3406	1.38	4.51	0
84	SLU 65	5	-180	3406	1.38	4.51	0
84	SLU 66	5	-180	3406	1.38	4.51	0
84	SLU 67	5	-180	3406	1.38	4.51	0
84	SLU 68	5	-180	3406	1.38	4.51	0
84	SLU 69	5	-180	3406	1.38	4.51	0
84	SLU 70	5	-180	3406	1.38	4.51	0
84	SLU 71	5	-180	3406	1.38	4.51	0
84	SLU 72	5	-180	3406	1.38	4.51	0
84	SLU 73	6	-211	3898	1.28	5.93	0
84	SLU 74	6	-211	3898	1.28	5.93	0
84	SLU 75	6	-211	3898	1.28	5.93	0
84	SLU 76	6	-211	3898	1.28	5.93	0
84	SLU 77	6	-211	3898	1.28	5.93	0
84	SLU 78	6	-211	3898	1.28	5.93	0
84	SLU 79	6	-211	3898	1.28	5.93	0
84	SLU 80	6	-211	3898	1.28	5.93	0
84	SLU 81	7	-224	4108	1.24	6.53	-0.01
84	SLU 82	7	-224	4108	1.24	6.53	-0.01
84	SLU 83	7	-224	4108	1.24	6.53	-0.01
84	SLU 84	7	-224	4108	1.24	6.53	-0.01
84	SLE RA 1	4	-133	2561	0.99	3.34	0
84	SLE RA 2	4	-133	2561	0.99	3.34	0
84	SLE RA 3	4	-133	2561	0.99	3.34	0
84	SLE RA 4	4	-133	2561	0.99	3.34	0
84	SLE RA 5	4	-133	2561	0.99	3.34	0
84	SLE RA 6	4	-133	2561	0.99	3.34	0
84	SLE RA 7	4	-133	2561	0.99	3.34	0
84	SLE RA 8	4	-133	2561	0.99	3.34	0
84	SLE RA 9	4	-133	2561	0.99	3.34	0
84	SLE RA 10	5	-154	2889	0.92	4.29	0
84	SLE RA 11	5	-154	2889	0.92	4.29	0
84	SLE RA 12	5	-154	2889	0.92	4.29	0
84	SLE RA 13	5	-154	2889	0.92	4.29	0
84	SLE RA 14	5	-154	2889	0.92	4.29	0
84	SLE RA 15	5	-154	2889	0.92	4.29	0
84	SLE RA 16	5	-154	2889	0.92	4.29	0
84	SLE RA 17	5	-154	2889	0.92	4.29	0
84	SLE RA 18	5	-163	3029	0.89	4.69	0
84	SLE RA 19	5	-163	3029	0.89	4.69	0
84	SLE RA 20	5	-163	3029	0.89	4.69	0
84	SLE RA 21	5	-163	3029	0.89	4.69	0
84	SLE FR 1	4	-133	2561	0.99	3.34	0
84	SLE FR 2	4	-133	2561	0.99	3.34	0
84	SLE FR 3	4	-133	2561	0.99	3.34	0
84	SLE FR 4	4	-142	2702	0.96	3.75	0
84	SLE FR 5	4	-142	2702	0.96	3.75	0
84	SLE FR 6	4	-148	2795	0.94	4.02	0
84	SLE QP 1	4	-133	2561	0.99	3.34	0
84	SLE QP 2	4	-142	2702	0.96	3.75	0
84	SLD 1	15	-156	2467	7	16.54	0
84	SLD 2	15	-156	2467	7	16.54	0
84	SLD 3	25	-286	2548	0.89	26	-0.01
84	SLD 4	25	-286	2548	0.89	26	-0.01
84	SLD 5	-8	51	2509	12.04	-6.78	0.01
84	SLD 6	-8	51	2509	12.04	-6.78	0.01
84	SLD 7	26	-383	2778	-8.33	24.78	-0.02
84	SLD 8	26	-383	2778	-8.33	24.78	-0.02
84	SLD 9	-18	98	2625	10.25	-17.29	0.01
84	SLD 10	-18	98	2625	10.25	-17.29	0.01
84	SLD 11	16	-335	2895	-10.12	14.27	-0.01
84	SLD 12	16	-335	2895	-10.12	14.27	-0.01
84	SLD 13	-17	2	2856	1.03	-18.51	0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
84	SLD 14	-17	2	2856	1.03	-18.51	0.01
84	SLD 15	-7	-128	2936	-5.08	-9.04	0
84	SLD 16	-7	-128	2936	-5.08	-9.04	0
84	SLV 1	31	-177	2136	15.57	34.75	0
84	SLV 2	31	-177	2136	15.57	34.75	0
84	SLV 3	57	-488	2357	0.77	59.34	-0.02
84	SLV 4	57	-488	2357	0.77	59.34	-0.02
84	SLV 5	-28	318	2197	27.79	-24.24	0.03
84	SLV 6	-28	318	2197	27.79	-24.24	0.03
84	SLV 7	60	-717	2934	-21.55	57.71	-0.04
84	SLV 8	60	-717	2934	-21.55	57.71	-0.04
84	SLV 9	-52	432	2470	23.46	-50.22	0.03
84	SLV 10	-52	432	2470	23.46	-50.22	0.03
84	SLV 11	36	-602	3206	-25.87	31.73	-0.03
84	SLV 12	36	-602	3206	-25.87	31.73	-0.03
84	SLV 13	-49	203	3046	1.15	-51.84	0.02
84	SLV 14	-49	203	3046	1.15	-51.84	0.02
84	SLV 15	-23	-107	3267	-13.65	-27.26	0
84	SLV 16	-23	-107	3267	-13.65	-27.26	0
85	SLU 1	-8	-109	2285	10.36	-2.65	0
85	SLU 2	-8	-109	2285	10.36	-2.65	0
85	SLU 3	-8	-109	2285	10.36	-2.65	0
85	SLU 4	-8	-109	2285	10.36	-2.65	0
85	SLU 5	-8	-109	2285	10.36	-2.65	0
85	SLU 6	-8	-109	2285	10.36	-2.65	0
85	SLU 7	-8	-109	2285	10.36	-2.65	0
85	SLU 8	-8	-109	2285	10.36	-2.65	0
85	SLU 9	-8	-109	2285	10.36	-2.65	0
85	SLU 10	-9	-113	2754	12.42	-3.78	0
85	SLU 11	-9	-113	2754	12.42	-3.78	0
85	SLU 12	-9	-113	2754	12.42	-3.78	0
85	SLU 13	-9	-113	2754	12.42	-3.78	0
85	SLU 14	-9	-113	2754	12.42	-3.78	0
85	SLU 15	-9	-113	2754	12.42	-3.78	0
85	SLU 16	-9	-113	2754	12.42	-3.78	0
85	SLU 17	-9	-113	2754	12.42	-3.78	0
85	SLU 18	-10	-115	2955	13.3	-4.27	0
85	SLU 19	-10	-115	2955	13.3	-4.27	0
85	SLU 20	-10	-115	2955	13.3	-4.27	0
85	SLU 21	-10	-115	2955	13.3	-4.27	0
85	SLU 22	-9	-111	2519	11.28	-3.13	0
85	SLU 23	-9	-111	2519	11.28	-3.13	0
85	SLU 24	-9	-111	2519	11.28	-3.13	0
85	SLU 25	-9	-111	2519	11.28	-3.13	0
85	SLU 26	-9	-111	2519	11.28	-3.13	0
85	SLU 27	-9	-111	2519	11.28	-3.13	0
85	SLU 28	-9	-111	2519	11.28	-3.13	0
85	SLU 29	-9	-111	2519	11.28	-3.13	0
85	SLU 30	-9	-111	2519	11.28	-3.13	0
85	SLU 31	-10	-115	2988	13.34	-4.26	0
85	SLU 32	-10	-115	2988	13.34	-4.26	0
85	SLU 33	-10	-115	2988	13.34	-4.26	0
85	SLU 34	-10	-115	2988	13.34	-4.26	0
85	SLU 35	-10	-115	2988	13.34	-4.26	0
85	SLU 36	-10	-115	2988	13.34	-4.26	0
85	SLU 37	-10	-115	2988	13.34	-4.26	0
85	SLU 38	-10	-115	2988	13.34	-4.26	0
85	SLU 39	-11	-117	3189	14.22	-4.75	0
85	SLU 40	-11	-117	3189	14.22	-4.75	0
85	SLU 41	-11	-117	3189	14.22	-4.75	0
85	SLU 42	-11	-117	3189	14.22	-4.75	0
85	SLU 43	-10	-141	2891	13.15	-3.28	0
85	SLU 44	-10	-141	2891	13.15	-3.28	0
85	SLU 45	-10	-141	2891	13.15	-3.28	0
85	SLU 46	-10	-141	2891	13.15	-3.28	0
85	SLU 47	-10	-141	2891	13.15	-3.28	0
85	SLU 48	-10	-141	2891	13.15	-3.28	0
85	SLU 49	-10	-141	2891	13.15	-3.28	0
85	SLU 50	-10	-141	2891	13.15	-3.28	0
85	SLU 51	-10	-141	2891	13.15	-3.28	0
85	SLU 52	-12	-145	3360	15.21	-4.41	0
85	SLU 53	-12	-145	3360	15.21	-4.41	0
85	SLU 54	-12	-145	3360	15.21	-4.41	0
85	SLU 55	-12	-145	3360	15.21	-4.41	0
85	SLU 56	-12	-145	3360	15.21	-4.41	0
85	SLU 57	-12	-145	3360	15.21	-4.41	0
85	SLU 58	-12	-145	3360	15.21	-4.41	0
85	SLU 59	-12	-145	3360	15.21	-4.41	0
85	SLU 60	-12	-147	3561	16.09	-4.9	0
85	SLU 61	-12	-147	3561	16.09	-4.9	0
85	SLU 62	-12	-147	3561	16.09	-4.9	0
85	SLU 63	-12	-147	3561	16.09	-4.9	0
85	SLU 64	-11	-143	3125	14.07	-3.76	0
85	SLU 65	-11	-143	3125	14.07	-3.76	0
85	SLU 66	-11	-143	3125	14.07	-3.76	0
85	SLU 67	-11	-143	3125	14.07	-3.76	0
85	SLU 68	-11	-143	3125	14.07	-3.76	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
85	SLU 69	-11	-143	3125	14.07	-3.76	0
85	SLU 70	-11	-143	3125	14.07	-3.76	0
85	SLU 71	-11	-143	3125	14.07	-3.76	0
85	SLU 72	-11	-143	3125	14.07	-3.76	0
85	SLU 73	-12	-147	3594	16.13	-4.89	0
85	SLU 74	-12	-147	3594	16.13	-4.89	0
85	SLU 75	-12	-147	3594	16.13	-4.89	0
85	SLU 76	-12	-147	3594	16.13	-4.89	0
85	SLU 77	-12	-147	3594	16.13	-4.89	0
85	SLU 78	-12	-147	3594	16.13	-4.89	0
85	SLU 79	-12	-147	3594	16.13	-4.89	0
85	SLU 80	-12	-147	3594	16.13	-4.89	0
85	SLU 81	-13	-149	3795	17.01	-5.38	0
85	SLU 82	-13	-149	3795	17.01	-5.38	0
85	SLU 83	-13	-149	3795	17.01	-5.38	0
85	SLU 84	-13	-149	3795	17.01	-5.38	0
85	SLE RA 1	-8	-110	2352	10.62	-2.78	0
85	SLE RA 2	-8	-110	2352	10.62	-2.78	0
85	SLE RA 3	-8	-110	2352	10.62	-2.78	0
85	SLE RA 4	-8	-110	2352	10.62	-2.78	0
85	SLE RA 5	-8	-110	2352	10.62	-2.78	0
85	SLE RA 6	-8	-110	2352	10.62	-2.78	0
85	SLE RA 7	-8	-110	2352	10.62	-2.78	0
85	SLE RA 8	-8	-110	2352	10.62	-2.78	0
85	SLE RA 9	-8	-110	2352	10.62	-2.78	0
85	SLE RA 10	-9	-112	2665	11.99	-3.54	0
85	SLE RA 11	-9	-112	2665	11.99	-3.54	0
85	SLE RA 12	-9	-112	2665	11.99	-3.54	0
85	SLE RA 13	-9	-112	2665	11.99	-3.54	0
85	SLE RA 14	-9	-112	2665	11.99	-3.54	0
85	SLE RA 15	-9	-112	2665	11.99	-3.54	0
85	SLE RA 16	-9	-112	2665	11.99	-3.54	0
85	SLE RA 17	-9	-112	2665	11.99	-3.54	0
85	SLE RA 18	-9	-113	2799	12.58	-3.87	0
85	SLE RA 19	-9	-113	2799	12.58	-3.87	0
85	SLE RA 20	-9	-113	2799	12.58	-3.87	0
85	SLE RA 21	-9	-113	2799	12.58	-3.87	0
85	SLE FR 1	-8	-110	2352	10.62	-2.78	0
85	SLE FR 2	-8	-110	2352	10.62	-2.78	0
85	SLE FR 3	-8	-110	2352	10.62	-2.78	0
85	SLE FR 4	-9	-111	2486	11.21	-3.11	0
85	SLE FR 5	-9	-111	2486	11.21	-3.11	0
85	SLE FR 6	-9	-112	2576	11.6	-3.32	0
85	SLE QP 1	-8	-110	2352	10.62	-2.78	0
85	SLE QP 2	-9	-111	2486	11.21	-3.11	0
85	SLD 1	9	31	2642	4.87	12.92	0.01
85	SLD 2	9	31	2642	4.87	12.92	0.01
85	SLD 3	-6	-77	2729	9.91	3.87	0.01
85	SLD 4	-6	-77	2729	9.91	3.87	0.01
85	SLD 5	19	95	2400	1.66	15.42	0
85	SLD 6	19	95	2400	1.66	15.42	0
85	SLD 7	-30	-264	2692	18.46	-14.74	0.01
85	SLD 8	-30	-264	2692	18.46	-14.74	0.01
85	SLD 9	13	42	2281	3.96	8.52	-0.01
85	SLD 10	13	42	2281	3.96	8.52	-0.01
85	SLD 11	-36	-316	2572	20.76	-21.64	0.01
85	SLD 12	-36	-316	2572	20.76	-21.64	0.01
85	SLD 13	-11	-145	2243	12.51	-10.08	-0.01
85	SLD 14	-11	-145	2243	12.51	-10.08	-0.01
85	SLD 15	-26	-252	2331	17.55	-19.13	0
85	SLD 16	-26	-252	2331	17.55	-19.13	0
85	SLV 1	34	225	2834	-3.93	36.49	0.01
85	SLV 2	34	225	2834	-3.93	36.49	0.01
85	SLV 3	-3	-35	3078	8.45	12.99	0.02
85	SLV 4	-3	-35	3078	8.45	12.99	0.02
85	SLV 5	61	385	2221	-12.1	44.41	-0.01
85	SLV 6	61	385	2221	-12.1	44.41	-0.01
85	SLV 7	-64	-483	3033	29.16	-33.92	0.03
85	SLV 8	-64	-483	3033	29.16	-33.92	0.03
85	SLV 9	47	262	1939	-6.74	27.7	-0.02
85	SLV 10	47	262	1939	-6.74	27.7	-0.02
85	SLV 11	-78	-607	2751	34.52	-50.63	0.02
85	SLV 12	-78	-607	2751	34.52	-50.63	0.02
85	SLV 13	-14	-186	1894	13.97	-19.21	-0.02
85	SLV 14	-14	-186	1894	13.97	-19.21	-0.02
85	SLV 15	-51	-447	2138	26.35	-42.71	-0.01
85	SLV 16	-51	-447	2138	26.35	-42.71	-0.01
86	SLU 1	3	-303	2505	18.97	2.62	0
86	SLU 2	3	-303	2505	18.97	2.62	0
86	SLU 3	3	-303	2505	18.97	2.62	0
86	SLU 4	3	-303	2505	18.97	2.62	0
86	SLU 5	3	-303	2505	18.97	2.62	0
86	SLU 6	3	-303	2505	18.97	2.62	0
86	SLU 7	3	-303	2505	18.97	2.62	0
86	SLU 8	3	-303	2505	18.97	2.62	0
86	SLU 9	3	-303	2505	18.97	2.62	0
86	SLU 10	4	-380	3021	24.29	3.85	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
86	SLU 11	4	-380	3021	24.29	3.85	0
86	SLU 12	4	-380	3021	24.29	3.85	0
86	SLU 13	4	-380	3021	24.29	3.85	0
86	SLU 14	4	-380	3021	24.29	3.85	0
86	SLU 15	4	-380	3021	24.29	3.85	0
86	SLU 16	4	-380	3021	24.29	3.85	0
86	SLU 17	4	-380	3021	24.29	3.85	0
86	SLU 18	5	-413	3242	26.58	4.38	0
86	SLU 19	5	-413	3242	26.58	4.38	0
86	SLU 20	5	-413	3242	26.58	4.38	0
86	SLU 21	5	-413	3242	26.58	4.38	0
86	SLU 22	3	-346	2785	21.71	3.13	0
86	SLU 23	3	-346	2785	21.71	3.13	0
86	SLU 24	3	-346	2785	21.71	3.13	0
86	SLU 25	3	-346	2785	21.71	3.13	0
86	SLU 26	3	-346	2785	21.71	3.13	0
86	SLU 27	3	-346	2785	21.71	3.13	0
86	SLU 28	3	-346	2785	21.71	3.13	0
86	SLU 29	3	-346	2785	21.71	3.13	0
86	SLU 30	3	-346	2785	21.71	3.13	0
86	SLU 31	5	-423	3300	27.04	4.36	0
86	SLU 32	5	-423	3300	27.04	4.36	0
86	SLU 33	5	-423	3300	27.04	4.36	0
86	SLU 34	5	-423	3300	27.04	4.36	0
86	SLU 35	5	-423	3300	27.04	4.36	0
86	SLU 36	5	-423	3300	27.04	4.36	0
86	SLU 37	5	-423	3300	27.04	4.36	0
86	SLU 38	5	-423	3300	27.04	4.36	0
86	SLU 39	5	-455	3521	29.32	4.88	0
86	SLU 40	5	-455	3521	29.32	4.88	0
86	SLU 41	5	-455	3521	29.32	4.88	0
86	SLU 42	5	-455	3521	29.32	4.88	0
86	SLU 43	4	-379	3161	23.72	3.24	0
86	SLU 44	4	-379	3161	23.72	3.24	0
86	SLU 45	4	-379	3161	23.72	3.24	0
86	SLU 46	4	-379	3161	23.72	3.24	0
86	SLU 47	4	-379	3161	23.72	3.24	0
86	SLU 48	4	-379	3161	23.72	3.24	0
86	SLU 49	4	-379	3161	23.72	3.24	0
86	SLU 50	4	-379	3161	23.72	3.24	0
86	SLU 51	4	-379	3161	23.72	3.24	0
86	SLU 52	5	-456	3677	29.05	4.47	0
86	SLU 53	5	-456	3677	29.05	4.47	0
86	SLU 54	5	-456	3677	29.05	4.47	0
86	SLU 55	5	-456	3677	29.05	4.47	0
86	SLU 56	5	-456	3677	29.05	4.47	0
86	SLU 57	5	-456	3677	29.05	4.47	0
86	SLU 58	5	-456	3677	29.05	4.47	0
86	SLU 59	5	-456	3677	29.05	4.47	0
86	SLU 60	6	-489	3897	31.33	4.99	0
86	SLU 61	6	-489	3897	31.33	4.99	0
86	SLU 62	6	-489	3897	31.33	4.99	0
86	SLU 63	6	-489	3897	31.33	4.99	0
86	SLU 64	4	-422	3441	26.46	3.74	0
86	SLU 65	4	-422	3441	26.46	3.74	0
86	SLU 66	4	-422	3441	26.46	3.74	0
86	SLU 67	4	-422	3441	26.46	3.74	0
86	SLU 68	4	-422	3441	26.46	3.74	0
86	SLU 69	4	-422	3441	26.46	3.74	0
86	SLU 70	4	-422	3441	26.46	3.74	0
86	SLU 71	4	-422	3441	26.46	3.74	0
86	SLU 72	4	-422	3441	26.46	3.74	0
86	SLU 73	6	-499	3956	31.79	4.97	0
86	SLU 74	6	-499	3956	31.79	4.97	0
86	SLU 75	6	-499	3956	31.79	4.97	0
86	SLU 76	6	-499	3956	31.79	4.97	0
86	SLU 77	6	-499	3956	31.79	4.97	0
86	SLU 78	6	-499	3956	31.79	4.97	0
86	SLU 79	6	-499	3956	31.79	4.97	0
86	SLU 80	6	-499	3956	31.79	4.97	0
86	SLU 81	6	-532	4177	34.07	5.5	0
86	SLU 82	6	-532	4177	34.07	5.5	0
86	SLU 83	6	-532	4177	34.07	5.5	0
86	SLU 84	6	-532	4177	34.07	5.5	0
86	SLE RA 1	3	-315	2585	19.75	2.77	0
86	SLE RA 2	3	-315	2585	19.75	2.77	0
86	SLE RA 3	3	-315	2585	19.75	2.77	0
86	SLE RA 4	3	-315	2585	19.75	2.77	0
86	SLE RA 5	3	-315	2585	19.75	2.77	0
86	SLE RA 6	3	-315	2585	19.75	2.77	0
86	SLE RA 7	3	-315	2585	19.75	2.77	0
86	SLE RA 8	3	-315	2585	19.75	2.77	0
86	SLE RA 9	3	-315	2585	19.75	2.77	0
86	SLE RA 10	4	-366	2929	23.3	3.59	0
86	SLE RA 11	4	-366	2929	23.3	3.59	0
86	SLE RA 12	4	-366	2929	23.3	3.59	0
86	SLE RA 13	4	-366	2929	23.3	3.59	0



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
86	SLE RA 14	4	-366	2929	23.3	3.59	0
86	SLE RA 15	4	-366	2929	23.3	3.59	0
86	SLE RA 16	4	-366	2929	23.3	3.59	0
86	SLE RA 17	4	-366	2929	23.3	3.59	0
86	SLE RA 18	4	-388	3076	24.82	3.94	0
86	SLE RA 19	4	-388	3076	24.82	3.94	0
86	SLE RA 20	4	-388	3076	24.82	3.94	0
86	SLE RA 21	4	-388	3076	24.82	3.94	0
86	SLE FR 1	3	-315	2585	19.75	2.77	0
86	SLE FR 2	3	-315	2585	19.75	2.77	0
86	SLE FR 3	3	-315	2585	19.75	2.77	0
86	SLE FR 4	3	-337	2733	21.27	3.12	0
86	SLE FR 5	3	-337	2733	21.27	3.12	0
86	SLE FR 6	4	-352	2831	22.29	3.35	0
86	SLE QP 1	3	-315	2585	19.75	2.77	0
86	SLE QP 2	3	-337	2733	21.27	3.12	0
86	SLD 1	8	-369	2455	22.87	11.6	0.01
86	SLD 2	8	-369	2455	22.87	11.6	0.01
86	SLD 3	19	-503	2552	29.21	20.35	0
86	SLD 4	19	-503	2552	29.21	20.35	0
86	SLD 5	-12	-144	2502	12.13	-7.6	0.01
86	SLD 6	-12	-144	2502	12.13	-7.6	0.01
86	SLD 7	25	-589	2826	33.27	21.55	-0.02
86	SLD 8	25	-589	2826	33.27	21.55	-0.02
86	SLD 9	-18	-85	2639	9.28	-15.31	0.01
86	SLD 10	-18	-85	2639	9.28	-15.31	0.01
86	SLD 11	19	-530	2963	30.41	13.84	-0.02
86	SLD 12	19	-530	2963	30.41	13.84	-0.02
86	SLD 13	-12	-171	2913	13.34	-14.11	0
86	SLD 14	-12	-171	2913	13.34	-14.11	0
86	SLD 15	-1	-305	3010	19.68	-5.37	-0.01
86	SLD 16	-1	-305	3010	19.68	-5.37	-0.01
86	SLV 1	13	-416	2069	25.12	23.66	0.02
86	SLV 2	13	-416	2069	25.12	23.66	0.02
86	SLV 3	42	-734	2320	40.38	46.39	0
86	SLV 4	42	-734	2320	40.38	46.39	0
86	SLV 5	-37	121	2152	-0.71	-25.19	0.04
86	SLV 6	-37	121	2152	-0.71	-25.19	0.04
86	SLV 7	58	-938	2990	50.14	50.57	-0.04
86	SLV 8	58	-938	2990	50.14	50.57	-0.04
86	SLV 9	-51	264	2475	-7.6	-44.33	0.03
86	SLV 10	-51	264	2475	-7.6	-44.33	0.03
86	SLV 11	44	-795	3313	43.26	31.43	-0.04
86	SLV 12	44	-795	3313	43.26	31.43	-0.04
86	SLV 13	-35	60	3145	2.17	-40.15	0
86	SLV 14	-35	60	3145	2.17	-40.15	0
86	SLV 15	-6	-258	3396	17.42	-17.42	-0.02
86	SLV 16	-6	-258	3396	17.42	-17.42	-0.02
87	SLU 1	-7	-127	2412	-0.08	-1.12	0
87	SLU 2	-7	-127	2412	-0.08	-1.12	0
87	SLU 3	-7	-127	2412	-0.08	-1.12	0
87	SLU 4	-7	-127	2412	-0.08	-1.12	0
87	SLU 5	-7	-127	2412	-0.08	-1.12	0
87	SLU 6	-7	-127	2412	-0.08	-1.12	0
87	SLU 7	-7	-127	2412	-0.08	-1.12	0
87	SLU 8	-7	-127	2412	-0.08	-1.12	0
87	SLU 9	-7	-127	2412	-0.08	-1.12	0
87	SLU 10	-7	-120	2925	-2.17	-1.66	0
87	SLU 11	-7	-120	2925	-2.17	-1.66	0
87	SLU 12	-7	-120	2925	-2.17	-1.66	0
87	SLU 13	-7	-120	2925	-2.17	-1.66	0
87	SLU 14	-7	-120	2925	-2.17	-1.66	0
87	SLU 15	-7	-120	2925	-2.17	-1.66	0
87	SLU 16	-7	-120	2925	-2.17	-1.66	0
87	SLU 17	-7	-120	2925	-2.17	-1.66	0
87	SLU 18	-8	-117	3145	-3.07	-1.89	0
87	SLU 19	-8	-117	3145	-3.07	-1.89	0
87	SLU 20	-8	-117	3145	-3.07	-1.89	0
87	SLU 21	-8	-117	3145	-3.07	-1.89	0
87	SLU 22	-7	-125	2669	-0.9	-1.34	0
87	SLU 23	-7	-125	2669	-0.9	-1.34	0
87	SLU 24	-7	-125	2669	-0.9	-1.34	0
87	SLU 25	-7	-125	2669	-0.9	-1.34	0
87	SLU 26	-7	-125	2669	-0.9	-1.34	0
87	SLU 27	-7	-125	2669	-0.9	-1.34	0
87	SLU 28	-7	-125	2669	-0.9	-1.34	0
87	SLU 29	-7	-125	2669	-0.9	-1.34	0
87	SLU 30	-7	-125	2669	-0.9	-1.34	0
87	SLU 31	-8	-117	3182	-2.99	-1.89	0
87	SLU 32	-8	-117	3182	-2.99	-1.89	0
87	SLU 33	-8	-117	3182	-2.99	-1.89	0
87	SLU 34	-8	-117	3182	-2.99	-1.89	0
87	SLU 35	-8	-117	3182	-2.99	-1.89	0
87	SLU 36	-8	-117	3182	-2.99	-1.89	0
87	SLU 37	-8	-117	3182	-2.99	-1.89	0
87	SLU 38	-8	-117	3182	-2.99	-1.89	0
87	SLU 39	-8	-114	3402	-3.89	-2.12	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
87	SLU 40	-8	-114	3402	-3.89	-2.12	0
87	SLU 41	-8	-114	3402	-3.89	-2.12	0
87	SLU 42	-8	-114	3402	-3.89	-2.12	0
87	SLU 43	-9	-166	3047	0.18	-1.37	0
87	SLU 44	-9	-166	3047	0.18	-1.37	0
87	SLU 45	-9	-166	3047	0.18	-1.37	0
87	SLU 46	-9	-166	3047	0.18	-1.37	0
87	SLU 47	-9	-166	3047	0.18	-1.37	0
87	SLU 48	-9	-166	3047	0.18	-1.37	0
87	SLU 49	-9	-166	3047	0.18	-1.37	0
87	SLU 50	-9	-166	3047	0.18	-1.37	0
87	SLU 51	-9	-166	3047	0.18	-1.37	0
87	SLU 52	-10	-159	3560	-1.91	-1.92	0
87	SLU 53	-10	-159	3560	-1.91	-1.92	0
87	SLU 54	-10	-159	3560	-1.91	-1.92	0
87	SLU 55	-10	-159	3560	-1.91	-1.92	0
87	SLU 56	-10	-159	3560	-1.91	-1.92	0
87	SLU 57	-10	-159	3560	-1.91	-1.92	0
87	SLU 58	-10	-159	3560	-1.91	-1.92	0
87	SLU 59	-10	-159	3560	-1.91	-1.92	0
87	SLU 60	-10	-155	3780	-2.81	-2.15	0
87	SLU 61	-10	-155	3780	-2.81	-2.15	0
87	SLU 62	-10	-155	3780	-2.81	-2.15	0
87	SLU 63	-10	-155	3780	-2.81	-2.15	0
87	SLU 64	-10	-164	3304	-0.65	-1.6	0
87	SLU 65	-10	-164	3304	-0.65	-1.6	0
87	SLU 66	-10	-164	3304	-0.65	-1.6	0
87	SLU 67	-10	-164	3304	-0.65	-1.6	0
87	SLU 68	-10	-164	3304	-0.65	-1.6	0
87	SLU 69	-10	-164	3304	-0.65	-1.6	0
87	SLU 70	-10	-164	3304	-0.65	-1.6	0
87	SLU 71	-10	-164	3304	-0.65	-1.6	0
87	SLU 72	-10	-164	3304	-0.65	-1.6	0
87	SLU 73	-10	-156	3818	-2.74	-2.14	0
87	SLU 74	-10	-156	3818	-2.74	-2.14	0
87	SLU 75	-10	-156	3818	-2.74	-2.14	0
87	SLU 76	-10	-156	3818	-2.74	-2.14	0
87	SLU 77	-10	-156	3818	-2.74	-2.14	0
87	SLU 78	-10	-156	3818	-2.74	-2.14	0
87	SLU 79	-10	-156	3818	-2.74	-2.14	0
87	SLU 80	-10	-156	3818	-2.74	-2.14	0
87	SLU 81	-10	-153	4038	-3.63	-2.38	0
87	SLU 82	-10	-153	4038	-3.63	-2.38	0
87	SLU 83	-10	-153	4038	-3.63	-2.38	0
87	SLU 84	-10	-153	4038	-3.63	-2.38	0
87	SLE RA 1	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 2	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 3	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 4	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 5	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 6	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 7	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 8	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 9	-7	-126	2485	-0.32	-1.18	0
87	SLE RA 10	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 11	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 12	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 13	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 14	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 15	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 16	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 17	-7	-121	2827	-1.71	-1.54	0
87	SLE RA 18	-7	-119	2974	-2.31	-1.7	0
87	SLE RA 19	-7	-119	2974	-2.31	-1.7	0
87	SLE RA 20	-7	-119	2974	-2.31	-1.7	0
87	SLE RA 21	-7	-119	2974	-2.31	-1.7	0
87	SLE FR 1	-7	-126	2485	-0.32	-1.18	0
87	SLE FR 2	-7	-126	2485	-0.32	-1.18	0
87	SLE FR 3	-7	-126	2485	-0.32	-1.18	0
87	SLE FR 4	-7	-124	2632	-0.91	-1.34	0
87	SLE FR 5	-7	-124	2632	-0.91	-1.34	0
87	SLE FR 6	-7	-123	2730	-1.31	-1.44	0
87	SLE QP 1	-7	-126	2485	-0.32	-1.18	0
87	SLE QP 2	-7	-124	2632	-0.91	-1.34	0
87	SLD 1	6	17	2829	-5.95	9.38	0.01
87	SLD 2	6	17	2829	-5.95	9.38	0.01
87	SLD 3	-8	-82	2951	-2.2	2.01	0.01
87	SLD 4	-8	-82	2951	-2.2	2.01	0.01
87	SLD 5	19	69	2506	-8.11	13.06	0
87	SLD 6	19	69	2506	-8.11	13.06	0
87	SLD 7	-30	-263	2913	4.39	-11.51	0.01
87	SLD 8	-30	-263	2913	4.39	-11.51	0.01
87	SLD 9	15	14	2351	-6.21	8.84	-0.01
87	SLD 10	15	14	2351	-6.21	8.84	-0.01
87	SLD 11	-33	-318	2757	6.28	-15.73	0
87	SLD 12	-33	-318	2757	6.28	-15.73	0
87	SLD 13	-6	-166	2312	0.38	-4.68	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
87	SLD 14	-6	-166	2312	0.38	-4.68	-0.01
87	SLD 15	-21	-266	2434	4.12	-12.05	-0.01
87	SLD 16	-21	-266	2434	4.12	-12.05	-0.01
87	SLV 1	26	212	3086	-12.76	25.38	0.02
87	SLV 2	26	212	3086	-12.76	25.38	0.02
87	SLV 3	-11	-29	3401	-3.89	6.27	0.03
87	SLV 4	-11	-29	3401	-3.89	6.27	0.03
87	SLV 5	59	342	2290	-17.92	35.67	-0.01
87	SLV 6	59	342	2290	-17.92	35.67	-0.01
87	SLV 7	-65	-461	3341	11.64	-28.05	0.02
87	SLV 8	-65	-461	3341	11.64	-28.05	0.02
87	SLV 9	50	213	1923	-13.47	25.37	-0.02
87	SLV 10	50	213	1923	-13.47	25.37	-0.02
87	SLV 11	-74	-591	2974	16.09	-38.34	0.01
87	SLV 12	-74	-591	2974	16.09	-38.34	0.01
87	SLV 13	-4	-219	1862	2.06	-8.94	-0.02
87	SLV 14	-4	-219	1862	2.06	-8.94	-0.02
87	SLV 15	-41	-460	2178	10.93	-28.05	-0.02
87	SLV 16	-41	-460	2178	10.93	-28.05	-0.02
88	SLU 1	1	-285	2538	6.57	1.51	0
88	SLU 2	1	-285	2538	6.57	1.51	0
88	SLU 3	1	-285	2538	6.57	1.51	0
88	SLU 4	1	-285	2538	6.57	1.51	0
88	SLU 5	1	-285	2538	6.57	1.51	0
88	SLU 6	1	-285	2538	6.57	1.51	0
88	SLU 7	1	-285	2538	6.57	1.51	0
88	SLU 8	1	-285	2538	6.57	1.51	0
88	SLU 9	1	-285	2538	6.57	1.51	0
88	SLU 10	2	-344	3084	7.32	2.32	0
88	SLU 11	2	-344	3084	7.32	2.32	0
88	SLU 12	2	-344	3084	7.32	2.32	0
88	SLU 13	2	-344	3084	7.32	2.32	0
88	SLU 14	2	-344	3084	7.32	2.32	0
88	SLU 15	2	-344	3084	7.32	2.32	0
88	SLU 16	2	-344	3084	7.32	2.32	0
88	SLU 17	2	-344	3084	7.32	2.32	0
88	SLU 18	2	-369	3318	7.65	2.67	0
88	SLU 19	2	-369	3318	7.65	2.67	0
88	SLU 20	2	-369	3318	7.65	2.67	0
88	SLU 21	2	-369	3318	7.65	2.67	0
88	SLU 22	1	-321	2833	7.33	1.83	0
88	SLU 23	1	-321	2833	7.33	1.83	0
88	SLU 24	1	-321	2833	7.33	1.83	0
88	SLU 25	1	-321	2833	7.33	1.83	0
88	SLU 26	1	-321	2833	7.33	1.83	0
88	SLU 27	1	-321	2833	7.33	1.83	0
88	SLU 28	1	-321	2833	7.33	1.83	0
88	SLU 29	1	-321	2833	7.33	1.83	0
88	SLU 30	1	-321	2833	7.33	1.83	0
88	SLU 31	2	-379	3379	8.09	2.64	0
88	SLU 32	2	-379	3379	8.09	2.64	0
88	SLU 33	2	-379	3379	8.09	2.64	0
88	SLU 34	2	-379	3379	8.09	2.64	0
88	SLU 35	2	-379	3379	8.09	2.64	0
88	SLU 36	2	-379	3379	8.09	2.64	0
88	SLU 37	2	-379	3379	8.09	2.64	0
88	SLU 38	2	-379	3379	8.09	2.64	0
88	SLU 39	3	-404	3613	8.41	2.99	0
88	SLU 40	3	-404	3613	8.41	2.99	0
88	SLU 41	3	-404	3613	8.41	2.99	0
88	SLU 42	3	-404	3613	8.41	2.99	0
88	SLU 43	1	-359	3198	8.27	1.86	0
88	SLU 44	1	-359	3198	8.27	1.86	0
88	SLU 45	1	-359	3198	8.27	1.86	0
88	SLU 46	1	-359	3198	8.27	1.86	0
88	SLU 47	1	-359	3198	8.27	1.86	0
88	SLU 48	1	-359	3198	8.27	1.86	0
88	SLU 49	1	-359	3198	8.27	1.86	0
88	SLU 50	1	-359	3198	8.27	1.86	0
88	SLU 51	1	-359	3198	8.27	1.86	0
88	SLU 52	2	-418	3744	9.03	2.67	0
88	SLU 53	2	-418	3744	9.03	2.67	0
88	SLU 54	2	-418	3744	9.03	2.67	0
88	SLU 55	2	-418	3744	9.03	2.67	0
88	SLU 56	2	-418	3744	9.03	2.67	0
88	SLU 57	2	-418	3744	9.03	2.67	0
88	SLU 58	2	-418	3744	9.03	2.67	0
88	SLU 59	2	-418	3744	9.03	2.67	0
88	SLU 60	2	-443	3979	9.36	3.01	0
88	SLU 61	2	-443	3979	9.36	3.01	0
88	SLU 62	2	-443	3979	9.36	3.01	0
88	SLU 63	2	-443	3979	9.36	3.01	0
88	SLU 64	2	-394	3493	9.04	2.17	0
88	SLU 65	2	-394	3493	9.04	2.17	0
88	SLU 66	2	-394	3493	9.04	2.17	0
88	SLU 67	2	-394	3493	9.04	2.17	0
88	SLU 68	2	-394	3493	9.04	2.17	0



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
88	SLU 69	2	-394	3493	9.04	2.17	0
88	SLU 70	2	-394	3493	9.04	2.17	0
88	SLU 71	2	-394	3493	9.04	2.17	0
88	SLU 72	2	-394	3493	9.04	2.17	0
88	SLU 73	2	-453	4039	9.79	2.98	0
88	SLU 74	2	-453	4039	9.79	2.98	0
88	SLU 75	2	-453	4039	9.79	2.98	0
88	SLU 76	2	-453	4039	9.79	2.98	0
88	SLU 77	2	-453	4039	9.79	2.98	0
88	SLU 78	2	-453	4039	9.79	2.98	0
88	SLU 79	2	-453	4039	9.79	2.98	0
88	SLU 80	2	-453	4039	9.79	2.98	0
88	SLU 81	3	-478	4273	10.12	3.33	0
88	SLU 82	3	-478	4273	10.12	3.33	0
88	SLU 83	3	-478	4273	10.12	3.33	0
88	SLU 84	3	-478	4273	10.12	3.33	0
88	SLE RA 1	1	-295	2622	6.78	1.6	0
88	SLE RA 2	1	-295	2622	6.78	1.6	0
88	SLE RA 3	1	-295	2622	6.78	1.6	0
88	SLE RA 4	1	-295	2622	6.78	1.6	0
88	SLE RA 5	1	-295	2622	6.78	1.6	0
88	SLE RA 6	1	-295	2622	6.78	1.6	0
88	SLE RA 7	1	-295	2622	6.78	1.6	0
88	SLE RA 8	1	-295	2622	6.78	1.6	0
88	SLE RA 9	1	-295	2622	6.78	1.6	0
88	SLE RA 10	2	-335	2986	7.29	2.14	0
88	SLE RA 11	2	-335	2986	7.29	2.14	0
88	SLE RA 12	2	-335	2986	7.29	2.14	0
88	SLE RA 13	2	-335	2986	7.29	2.14	0
88	SLE RA 14	2	-335	2986	7.29	2.14	0
88	SLE RA 15	2	-335	2986	7.29	2.14	0
88	SLE RA 16	2	-335	2986	7.29	2.14	0
88	SLE RA 17	2	-335	2986	7.29	2.14	0
88	SLE RA 18	2	-351	3142	7.51	2.37	0
88	SLE RA 19	2	-351	3142	7.51	2.37	0
88	SLE RA 20	2	-351	3142	7.51	2.37	0
88	SLE RA 21	2	-351	3142	7.51	2.37	0
88	SLE FR 1	1	-295	2622	6.78	1.6	0
88	SLE FR 2	1	-295	2622	6.78	1.6	0
88	SLE FR 3	1	-295	2622	6.78	1.6	0
88	SLE FR 4	1	-312	2778	7	1.83	0
88	SLE FR 5	1	-312	2778	7	1.83	0
88	SLE FR 6	2	-323	2882	7.14	1.99	0
88	SLE QP 1	1	-295	2622	6.78	1.6	0
88	SLE QP 2	1	-312	2778	7	1.83	0
88	SLD 1	0	-345	2418	13.3	6.14	0.01
88	SLD 2	0	-345	2418	13.3	6.14	0.01
88	SLD 3	11	-474	2557	7.57	13.33	0
88	SLD 4	11	-474	2557	7.57	13.33	0
88	SLD 5	-15	-126	2459	17.58	-7.78	0.01
88	SLD 6	-15	-126	2459	17.58	-7.78	0.01
88	SLD 7	21	-557	2923	-1.52	16.19	-0.01
88	SLD 8	21	-557	2923	-1.52	16.19	-0.01
88	SLD 9	-18	-68	2633	15.52	-12.52	0.01
88	SLD 10	-18	-68	2633	15.52	-12.52	0.01
88	SLD 11	18	-498	3097	-3.58	11.44	-0.02
88	SLD 12	18	-498	3097	-3.58	11.44	-0.02
88	SLD 13	-9	-150	2999	6.43	-9.66	0
88	SLD 14	-9	-150	2999	6.43	-9.66	0
88	SLD 15	2	-279	3138	0.7	-2.48	-0.01
88	SLD 16	2	-279	3138	0.7	-2.48	-0.01
88	SLV 1	-2	-392	1923	22.11	12.23	0.03
88	SLV 2	-2	-392	1923	22.11	12.23	0.03
88	SLV 3	27	-700	2268	8.37	30.9	0.01
88	SLV 4	27	-700	2268	8.37	30.9	0.01
88	SLV 5	-42	130	1998	32.37	-23.36	0.04
88	SLV 6	-42	130	1998	32.37	-23.36	0.04
88	SLV 7	52	-895	3149	-13.43	38.87	-0.03
88	SLV 8	52	-895	3149	-13.43	38.87	-0.03
88	SLV 9	-49	271	2407	27.43	-35.2	0.03
88	SLV 10	-49	271	2407	27.43	-35.2	0.03
88	SLV 11	45	-755	3559	-18.37	27.03	-0.04
88	SLV 12	45	-755	3559	-18.37	27.03	-0.04
88	SLV 13	-24	75	3288	5.63	-27.24	-0.01
88	SLV 14	-24	75	3288	5.63	-27.24	-0.01
88	SLV 15	4	-233	3634	-8.11	-8.57	-0.03
88	SLV 16	4	-233	3634	-8.11	-8.57	-0.03
89	SLU 1	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 2	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 3	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 4	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 5	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 6	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 7	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 8	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 9	-16	-392	2573	24.51	-0.91	-0.02
89	SLU 10	-19	-458	3140	29.83	-1.27	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
89	SLU 11	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 12	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 13	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 14	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 15	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 16	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 17	-19	-458	3140	29.83	-1.27	-0.03
89	SLU 18	-20	-486	3382	32.11	-1.42	-0.03
89	SLU 19	-20	-486	3382	32.11	-1.42	-0.03
89	SLU 20	-20	-486	3382	32.11	-1.42	-0.03
89	SLU 21	-20	-486	3382	32.11	-1.42	-0.03
89	SLU 22	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 23	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 24	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 25	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 26	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 27	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 28	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 29	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 30	-17	-421	2863	26.9	-1.04	-0.02
89	SLU 31	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 32	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 33	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 34	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 35	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 36	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 37	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 38	-20	-486	3430	32.22	-1.4	-0.03
89	SLU 39	-21	-514	3673	34.5	-1.55	-0.03
89	SLU 40	-21	-514	3673	34.5	-1.55	-0.03
89	SLU 41	-21	-514	3673	34.5	-1.55	-0.03
89	SLU 42	-21	-514	3673	34.5	-1.55	-0.03
89	SLU 43	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 44	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 45	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 46	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 47	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 48	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 49	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 50	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 51	-21	-500	3245	31.05	-1.14	-0.02
89	SLU 52	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 53	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 54	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 55	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 56	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 57	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 58	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 59	-23	-566	3812	36.37	-1.5	-0.03
89	SLU 60	-24	-594	4055	38.65	-1.65	-0.03
89	SLU 61	-24	-594	4055	38.65	-1.65	-0.03
89	SLU 62	-24	-594	4055	38.65	-1.65	-0.03
89	SLU 63	-24	-594	4055	38.65	-1.65	-0.03
89	SLU 64	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 65	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 66	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 67	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 68	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 69	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 70	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 71	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 72	-22	-529	3536	33.44	-1.27	-0.03
89	SLU 73	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 74	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 75	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 76	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 77	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 78	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 79	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 80	-24	-594	4102	38.76	-1.63	-0.03
89	SLU 81	-25	-622	4345	41.04	-1.78	-0.04
89	SLU 82	-25	-622	4345	41.04	-1.78	-0.04
89	SLU 83	-25	-622	4345	41.04	-1.78	-0.04
89	SLU 84	-25	-622	4345	41.04	-1.78	-0.04
89	SLE RA 1	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 2	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 3	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 4	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 5	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 6	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 7	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 8	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 9	-17	-401	2656	25.2	-0.95	-0.02
89	SLE RA 10	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 11	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 12	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 13	-18	-444	3034	28.74	-1.19	-0.02



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
89	SLE RA 14	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 15	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 16	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 17	-18	-444	3034	28.74	-1.19	-0.02
89	SLE RA 18	-19	-463	3196	30.26	-1.29	-0.03
89	SLE RA 19	-19	-463	3196	30.26	-1.29	-0.03
89	SLE RA 20	-19	-463	3196	30.26	-1.29	-0.03
89	SLE RA 21	-19	-463	3196	30.26	-1.29	-0.03
89	SLE FR 1	-17	-401	2656	25.2	-0.95	-0.02
89	SLE FR 2	-17	-401	2656	25.2	-0.95	-0.02
89	SLE FR 3	-17	-401	2656	25.2	-0.95	-0.02
89	SLE FR 4	-17	-419	2818	26.72	-1.05	-0.02
89	SLE FR 5	-17	-419	2818	26.72	-1.05	-0.02
89	SLE FR 6	-18	-432	2926	27.73	-1.12	-0.02
89	SLE QP 1	-17	-401	2656	25.2	-0.95	-0.02
89	SLE QP 2	-17	-419	2818	26.72	-1.05	-0.02
89	SLD 1	-3	-240	3088	27.98	4.54	-0.02
89	SLD 2	-3	-240	3088	27.98	4.54	-0.02
89	SLD 3	-17	-370	3305	34.19	-0.25	-0.03
89	SLD 4	-17	-370	3305	34.19	-0.25	-0.03
89	SLD 5	8	-169	2569	17.68	7.88	-0.01
89	SLD 6	8	-169	2569	17.68	7.88	-0.01
89	SLD 7	-38	-601	3293	38.38	-8.06	-0.04
89	SLD 8	-38	-601	3293	38.38	-8.06	-0.04
89	SLD 9	4	-237	2342	15.06	5.96	-0.01
89	SLD 10	4	-237	2342	15.06	5.96	-0.01
89	SLD 11	-43	-670	3066	35.75	-9.98	-0.03
89	SLD 12	-43	-670	3066	35.75	-9.98	-0.03
89	SLD 13	-18	-469	2330	19.24	-1.85	-0.01
89	SLD 14	-18	-469	2330	19.24	-1.85	-0.01
89	SLD 15	-32	-598	2547	25.45	-6.64	-0.02
89	SLD 16	-32	-598	2547	25.45	-6.64	-0.02
89	SLV 1	19	12	3444	29.03	13.05	-0.03
89	SLV 2	19	12	3444	29.03	13.05	-0.03
89	SLV 3	-17	-316	3983	44.83	0.64	-0.05
89	SLV 4	-17	-316	3983	44.83	0.64	-0.05
89	SLV 5	48	207	2188	3.45	22	0.01
89	SLV 6	48	207	2188	3.45	22	0.01
89	SLV 7	-72	-885	3985	56.11	-19.36	-0.06
89	SLV 8	-72	-885	3985	56.11	-19.36	-0.06
89	SLV 9	37	47	1651	-2.68	17.26	0.02
89	SLV 10	37	47	1651	-2.68	17.26	0.02
89	SLV 11	-83	-1046	3448	49.98	-24.1	-0.05
89	SLV 12	-83	-1046	3448	49.98	-24.1	-0.05
89	SLV 13	-18	-523	1653	8.6	-2.74	0
89	SLV 14	-18	-523	1653	8.6	-2.74	0
89	SLV 15	-54	-851	2192	24.4	-15.15	-0.02
89	SLV 16	-54	-851	2192	24.4	-15.15	-0.02
90	SLU 1	-4	-513	2680	30.33	-0.11	0.02
90	SLU 2	-4	-513	2680	30.33	-0.11	0.02
90	SLU 3	-4	-513	2680	30.33	-0.11	0.02
90	SLU 4	-4	-513	2680	30.33	-0.11	0.02
90	SLU 5	-4	-513	2680	30.33	-0.11	0.02
90	SLU 6	-4	-513	2680	30.33	-0.11	0.02
90	SLU 7	-4	-513	2680	30.33	-0.11	0.02
90	SLU 8	-4	-513	2680	30.33	-0.11	0.02
90	SLU 9	-4	-513	2680	30.33	-0.11	0.02
90	SLU 10	-5	-633	3289	38.2	0.08	0.03
90	SLU 11	-5	-633	3289	38.2	0.08	0.03
90	SLU 12	-5	-633	3289	38.2	0.08	0.03
90	SLU 13	-5	-633	3289	38.2	0.08	0.03
90	SLU 14	-5	-633	3289	38.2	0.08	0.03
90	SLU 15	-5	-633	3289	38.2	0.08	0.03
90	SLU 16	-5	-633	3289	38.2	0.08	0.03
90	SLU 17	-5	-633	3289	38.2	0.08	0.03
90	SLU 18	-5	-684	3550	41.58	0.16	0.03
90	SLU 19	-5	-684	3550	41.58	0.16	0.03
90	SLU 20	-5	-684	3550	41.58	0.16	0.03
90	SLU 21	-5	-684	3550	41.58	0.16	0.03
90	SLU 22	-4	-575	3010	34.31	-0.07	0.02
90	SLU 23	-4	-575	3010	34.31	-0.07	0.02
90	SLU 24	-4	-575	3010	34.31	-0.07	0.02
90	SLU 25	-4	-575	3010	34.31	-0.07	0.02
90	SLU 26	-4	-575	3010	34.31	-0.07	0.02
90	SLU 27	-4	-575	3010	34.31	-0.07	0.02
90	SLU 28	-4	-575	3010	34.31	-0.07	0.02
90	SLU 29	-4	-575	3010	34.31	-0.07	0.02
90	SLU 30	-4	-575	3010	34.31	-0.07	0.02
90	SLU 31	-5	-695	3619	42.18	0.11	0.03
90	SLU 32	-5	-695	3619	42.18	0.11	0.03
90	SLU 33	-5	-695	3619	42.18	0.11	0.03
90	SLU 34	-5	-695	3619	42.18	0.11	0.03
90	SLU 35	-5	-695	3619	42.18	0.11	0.03
90	SLU 36	-5	-695	3619	42.18	0.11	0.03
90	SLU 37	-5	-695	3619	42.18	0.11	0.03
90	SLU 38	-5	-695	3619	42.18	0.11	0.03
90	SLU 39	-5	-747	3880	45.55	0.19	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
90	SLU 40	-5	-747	3880	45.55	0.19	0.03
90	SLU 41	-5	-747	3880	45.55	0.19	0.03
90	SLU 42	-5	-747	3880	45.55	0.19	0.03
90	SLU 43	-5	-645	3370	38.07	-0.15	0.03
90	SLU 44	-5	-645	3370	38.07	-0.15	0.03
90	SLU 45	-5	-645	3370	38.07	-0.15	0.03
90	SLU 46	-5	-645	3370	38.07	-0.15	0.03
90	SLU 47	-5	-645	3370	38.07	-0.15	0.03
90	SLU 48	-5	-645	3370	38.07	-0.15	0.03
90	SLU 49	-5	-645	3370	38.07	-0.15	0.03
90	SLU 50	-5	-645	3370	38.07	-0.15	0.03
90	SLU 51	-5	-645	3370	38.07	-0.15	0.03
90	SLU 52	-6	-765	3979	45.94	0.03	0.03
90	SLU 53	-6	-765	3979	45.94	0.03	0.03
90	SLU 54	-6	-765	3979	45.94	0.03	0.03
90	SLU 55	-6	-765	3979	45.94	0.03	0.03
90	SLU 56	-6	-765	3979	45.94	0.03	0.03
90	SLU 57	-6	-765	3979	45.94	0.03	0.03
90	SLU 58	-6	-765	3979	45.94	0.03	0.03
90	SLU 59	-6	-765	3979	45.94	0.03	0.03
90	SLU 60	-6	-817	4240	49.32	0.11	0.03
90	SLU 61	-6	-817	4240	49.32	0.11	0.03
90	SLU 62	-6	-817	4240	49.32	0.11	0.03
90	SLU 63	-6	-817	4240	49.32	0.11	0.03
90	SLU 64	-5	-708	3701	42.04	-0.12	0.03
90	SLU 65	-5	-708	3701	42.04	-0.12	0.03
90	SLU 66	-5	-708	3701	42.04	-0.12	0.03
90	SLU 67	-5	-708	3701	42.04	-0.12	0.03
90	SLU 68	-5	-708	3701	42.04	-0.12	0.03
90	SLU 69	-5	-708	3701	42.04	-0.12	0.03
90	SLU 70	-5	-708	3701	42.04	-0.12	0.03
90	SLU 71	-5	-708	3701	42.04	-0.12	0.03
90	SLU 72	-5	-708	3701	42.04	-0.12	0.03
90	SLU 73	-6	-828	4310	49.91	0.07	0.04
90	SLU 74	-6	-828	4310	49.91	0.07	0.04
90	SLU 75	-6	-828	4310	49.91	0.07	0.04
90	SLU 76	-6	-828	4310	49.91	0.07	0.04
90	SLU 77	-6	-828	4310	49.91	0.07	0.04
90	SLU 78	-6	-828	4310	49.91	0.07	0.04
90	SLU 79	-6	-828	4310	49.91	0.07	0.04
90	SLU 80	-6	-828	4310	49.91	0.07	0.04
90	SLU 81	-6	-879	4571	53.29	0.15	0.04
90	SLU 82	-6	-879	4571	53.29	0.15	0.04
90	SLU 83	-6	-879	4571	53.29	0.15	0.04
90	SLU 84	-6	-879	4571	53.29	0.15	0.04
90	SLE RA 1	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 2	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 3	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 4	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 5	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 6	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 7	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 8	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 9	-4	-531	2774	31.47	-0.1	0.02
90	SLE RA 10	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 11	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 12	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 13	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 14	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 15	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 16	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 17	-5	-611	3180	36.72	0.02	0.03
90	SLE RA 18	-5	-645	3354	38.96	0.08	0.03
90	SLE RA 19	-5	-645	3354	38.96	0.08	0.03
90	SLE RA 20	-5	-645	3354	38.96	0.08	0.03
90	SLE RA 21	-5	-645	3354	38.96	0.08	0.03
90	SLE FR 1	-4	-531	2774	31.47	-0.1	0.02
90	SLE FR 2	-4	-531	2774	31.47	-0.1	0.02
90	SLE FR 3	-4	-531	2774	31.47	-0.1	0.02
90	SLE FR 4	-4	-565	2948	33.72	-0.05	0.02
90	SLE FR 5	-4	-565	2948	33.72	-0.05	0.02
90	SLE FR 6	-4	-588	3064	35.22	-0.01	0.02
90	SLE QP 1	-4	-531	2774	31.47	-0.1	0.02
90	SLE QP 2	-4	-565	2948	33.72	-0.05	0.02
90	SLD 1	-5	-615	2402	35.63	1.34	0.01
90	SLD 2	-5	-615	2402	35.63	1.34	0.01
90	SLD 3	3	-755	2647	42.38	5.78	0.02
90	SLD 4	3	-755	2647	42.38	5.78	0.02
90	SLD 5	-17	-367	2412	24.04	-6.38	0.01
90	SLD 6	-17	-367	2412	24.04	-6.38	0.01
90	SLD 7	10	-835	3230	46.56	8.45	0.03
90	SLD 8	10	-835	3230	46.56	8.45	0.03
90	SLD 9	-19	-295	2666	20.87	-8.54	0.02
90	SLD 10	-19	-295	2666	20.87	-8.54	0.02
90	SLD 11	8	-763	3484	43.39	6.29	0.03
90	SLD 12	8	-763	3484	43.39	6.29	0.03
90	SLD 13	-12	-375	3249	25.05	-5.87	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
90	SLD 14	-12	-375	3249	25.05	-5.87	0.03
90	SLD 15	-4	-515	3495	31.81	-1.43	0.03
90	SLD 16	-4	-515	3495	31.81	-1.43	0.03
90	SLV 1	-7	-679	1648	38.07	3.25	0
90	SLV 2	-7	-679	1648	38.07	3.25	0
90	SLV 3	14	-1021	2255	54.63	14.78	0.01
90	SLV 4	14	-1021	2255	54.63	14.78	0.01
90	SLV 5	-37	-80	1637	9.9	-16.56	0
90	SLV 6	-37	-80	1637	9.9	-16.56	0
90	SLV 7	33	-1221	3662	65.11	21.9	0.04
90	SLV 8	33	-1221	3662	65.11	21.9	0.04
90	SLV 9	-42	91	2235	2.32	-21.99	0.01
90	SLV 10	-42	91	2235	2.32	-21.99	0.01
90	SLV 11	28	-1050	4260	57.53	16.47	0.05
90	SLV 12	28	-1050	4260	57.53	16.47	0.05
90	SLV 13	-23	-109	3641	12.8	-14.87	0.03
90	SLV 14	-23	-109	3641	12.8	-14.87	0.03
90	SLV 15	-2	-451	4248	29.36	-3.34	0.04
90	SLV 16	-2	-451	4248	29.36	-3.34	0.04
91	SLU 1	350	-398	3124	7.68	8.85	-0.03
91	SLU 2	350	-398	3124	7.68	8.85	-0.03
91	SLU 3	350	-398	3124	7.68	8.85	-0.03
91	SLU 4	350	-398	3124	7.68	8.85	-0.03
91	SLU 5	350	-398	3124	7.68	8.85	-0.03
91	SLU 6	350	-398	3124	7.68	8.85	-0.03
91	SLU 7	350	-398	3124	7.68	8.85	-0.03
91	SLU 8	350	-398	3124	7.68	8.85	-0.03
91	SLU 9	350	-398	3124	7.68	8.85	-0.03
91	SLU 10	444	-470	3831	8.35	11.38	-0.03
91	SLU 11	444	-470	3831	8.35	11.38	-0.03
91	SLU 12	444	-470	3831	8.35	11.38	-0.03
91	SLU 13	444	-470	3831	8.35	11.38	-0.03
91	SLU 14	444	-470	3831	8.35	11.38	-0.03
91	SLU 15	444	-470	3831	8.35	11.38	-0.03
91	SLU 16	444	-470	3831	8.35	11.38	-0.03
91	SLU 17	444	-470	3831	8.35	11.38	-0.03
91	SLU 18	484	-500	4133	8.64	12.46	-0.02
91	SLU 19	484	-500	4133	8.64	12.46	-0.02
91	SLU 20	484	-500	4133	8.64	12.46	-0.02
91	SLU 21	484	-500	4133	8.64	12.46	-0.02
91	SLU 22	405	-434	3498	8.1	10.42	-0.02
91	SLU 23	405	-434	3498	8.1	10.42	-0.02
91	SLU 24	405	-434	3498	8.1	10.42	-0.02
91	SLU 25	405	-434	3498	8.1	10.42	-0.02
91	SLU 26	405	-434	3498	8.1	10.42	-0.02
91	SLU 27	405	-434	3498	8.1	10.42	-0.02
91	SLU 28	405	-434	3498	8.1	10.42	-0.02
91	SLU 29	405	-434	3498	8.1	10.42	-0.02
91	SLU 30	405	-434	3498	8.1	10.42	-0.02
91	SLU 31	499	-506	4204	8.78	12.95	-0.02
91	SLU 32	499	-506	4204	8.78	12.95	-0.02
91	SLU 33	499	-506	4204	8.78	12.95	-0.02
91	SLU 34	499	-506	4204	8.78	12.95	-0.02
91	SLU 35	499	-506	4204	8.78	12.95	-0.02
91	SLU 36	499	-506	4204	8.78	12.95	-0.02
91	SLU 37	499	-506	4204	8.78	12.95	-0.02
91	SLU 38	499	-506	4204	8.78	12.95	-0.02
91	SLU 39	539	-537	4507	9.06	14.04	-0.02
91	SLU 40	539	-537	4507	9.06	14.04	-0.02
91	SLU 41	539	-537	4507	9.06	14.04	-0.02
91	SLU 42	539	-537	4507	9.06	14.04	-0.02
91	SLU 43	436	-505	3934	9.84	10.96	-0.04
91	SLU 44	436	-505	3934	9.84	10.96	-0.04
91	SLU 45	436	-505	3934	9.84	10.96	-0.04
91	SLU 46	436	-505	3934	9.84	10.96	-0.04
91	SLU 47	436	-505	3934	9.84	10.96	-0.04
91	SLU 48	436	-505	3934	9.84	10.96	-0.04
91	SLU 49	436	-505	3934	9.84	10.96	-0.04
91	SLU 50	436	-505	3934	9.84	10.96	-0.04
91	SLU 51	436	-505	3934	9.84	10.96	-0.04
91	SLU 52	530	-576	4640	10.51	13.49	-0.04
91	SLU 53	530	-576	4640	10.51	13.49	-0.04
91	SLU 54	530	-576	4640	10.51	13.49	-0.04
91	SLU 55	530	-576	4640	10.51	13.49	-0.04
91	SLU 56	530	-576	4640	10.51	13.49	-0.04
91	SLU 57	530	-576	4640	10.51	13.49	-0.04
91	SLU 58	530	-576	4640	10.51	13.49	-0.04
91	SLU 59	530	-576	4640	10.51	13.49	-0.04
91	SLU 60	570	-607	4943	10.8	14.58	-0.03
91	SLU 61	570	-607	4943	10.8	14.58	-0.03
91	SLU 62	570	-607	4943	10.8	14.58	-0.03
91	SLU 63	570	-607	4943	10.8	14.58	-0.03
91	SLU 64	491	-541	4307	10.26	12.54	-0.03
91	SLU 65	491	-541	4307	10.26	12.54	-0.03
91	SLU 66	491	-541	4307	10.26	12.54	-0.03
91	SLU 67	491	-541	4307	10.26	12.54	-0.03
91	SLU 68	491	-541	4307	10.26	12.54	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
91	SLU 69	491	-541	4307	10.26	12.54	-0.03
91	SLU 70	491	-541	4307	10.26	12.54	-0.03
91	SLU 71	491	-541	4307	10.26	12.54	-0.03
91	SLU 72	491	-541	4307	10.26	12.54	-0.03
91	SLU 73	585	-613	5013	10.93	15.07	-0.03
91	SLU 74	585	-613	5013	10.93	15.07	-0.03
91	SLU 75	585	-613	5013	10.93	15.07	-0.03
91	SLU 76	585	-613	5013	10.93	15.07	-0.03
91	SLU 77	585	-613	5013	10.93	15.07	-0.03
91	SLU 78	585	-613	5013	10.93	15.07	-0.03
91	SLU 79	585	-613	5013	10.93	15.07	-0.03
91	SLU 80	585	-613	5013	10.93	15.07	-0.03
91	SLU 81	625	-644	5316	11.22	16.15	-0.03
91	SLU 82	625	-644	5316	11.22	16.15	-0.03
91	SLU 83	625	-644	5316	11.22	16.15	-0.03
91	SLU 84	625	-644	5316	11.22	16.15	-0.03
91	SLE RA 1	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 2	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 3	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 4	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 5	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 6	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 7	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 8	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 9	366	-408	3231	7.8	9.3	-0.03
91	SLE RA 10	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 11	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 12	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 13	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 14	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 15	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 16	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 17	428	-456	3702	8.25	10.98	-0.02
91	SLE RA 18	455	-477	3904	8.44	11.71	-0.02
91	SLE RA 19	455	-477	3904	8.44	11.71	-0.02
91	SLE RA 20	455	-477	3904	8.44	11.71	-0.02
91	SLE RA 21	455	-477	3904	8.44	11.71	-0.02
91	SLE FR 1	366	-408	3231	7.8	9.3	-0.03
91	SLE FR 2	366	-408	3231	7.8	9.3	-0.03
91	SLE FR 3	366	-408	3231	7.8	9.3	-0.03
91	SLE FR 4	392	-429	3433	7.99	10.02	-0.03
91	SLE FR 5	392	-429	3433	7.99	10.02	-0.03
91	SLE FR 6	410	-442	3567	8.12	10.5	-0.03
91	SLE QP 1	366	-408	3231	7.8	9.3	-0.03
91	SLE QP 2	392	-429	3433	7.99	10.02	-0.03
91	SLD 1	625	-430	3823	8.07	19.72	0.07
91	SLD 2	625	-430	3823	8.07	19.72	0.07
91	SLD 3	521	-493	4205	10.48	14.72	0.02
91	SLD 4	521	-493	4205	10.48	14.72	0.02
91	SLD 5	620	-333	2971	4.37	20.52	0.08
91	SLD 6	620	-333	2971	4.37	20.52	0.08
91	SLD 7	273	-544	4243	12.39	3.84	-0.09
91	SLD 8	273	-544	4243	12.39	3.84	-0.09
91	SLD 9	511	-314	2623	3.59	16.2	0.04
91	SLD 10	511	-314	2623	3.59	16.2	0.04
91	SLD 11	165	-524	3894	11.62	-0.48	-0.13
91	SLD 12	165	-524	3894	11.62	-0.48	-0.13
91	SLD 13	264	-365	2661	5.5	5.32	-0.07
91	SLD 14	264	-365	2661	5.5	5.32	-0.07
91	SLD 15	160	-428	3043	7.91	0.32	-0.12
91	SLD 16	160	-428	3043	7.91	0.32	-0.12
91	SLV 1	950	-431	4329	8.13	33.43	0.21
91	SLV 2	950	-431	4329	8.13	33.43	0.21
91	SLV 3	680	-582	5275	13.88	20.39	0.08
91	SLV 4	680	-582	5275	13.88	20.39	0.08
91	SLV 5	969	-200	2266	-0.68	36.83	0.25
91	SLV 6	969	-200	2266	-0.68	36.83	0.25
91	SLV 7	70	-704	5421	18.47	-6.65	-0.2
91	SLV 8	70	-704	5421	18.47	-6.65	-0.2
91	SLV 9	715	-153	1445	-2.49	26.69	0.15
91	SLV 10	715	-153	1445	-2.49	26.69	0.15
91	SLV 11	-184	-658	4600	16.67	-16.79	-0.3
91	SLV 12	-184	-658	4600	16.67	-16.79	-0.3
91	SLV 13	104	-275	1590	2.11	-0.35	-0.13
91	SLV 14	104	-275	1590	2.11	-0.35	-0.13
91	SLV 15	-165	-427	2537	7.85	-13.39	-0.26
91	SLV 16	-165	-427	2537	7.85	-13.39	-0.26
92	SLU 1	219	-2	2498	0.9	12.35	0.02
92	SLU 2	219	-2	2498	0.9	12.35	0.02
92	SLU 3	219	-2	2498	0.9	12.35	0.02
92	SLU 4	219	-2	2498	0.9	12.35	0.02
92	SLU 5	219	-2	2498	0.9	12.35	0.02
92	SLU 6	219	-2	2498	0.9	12.35	0.02
92	SLU 7	219	-2	2498	0.9	12.35	0.02
92	SLU 8	219	-2	2498	0.9	12.35	0.02
92	SLU 9	219	-2	2498	0.9	12.35	0.02
92	SLU 10	294	-2	3059	1.19	16.38	0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
92	SLU 11	294	-2	3059	1.19	16.38	0.03
92	SLU 12	294	-2	3059	1.19	16.38	0.03
92	SLU 13	294	-2	3059	1.19	16.38	0.03
92	SLU 14	294	-2	3059	1.19	16.38	0.03
92	SLU 15	294	-2	3059	1.19	16.38	0.03
92	SLU 16	294	-2	3059	1.19	16.38	0.03
92	SLU 17	294	-2	3059	1.19	16.38	0.03
92	SLU 18	326	-2	3299	1.31	18.11	0.03
92	SLU 19	326	-2	3299	1.31	18.11	0.03
92	SLU 20	326	-2	3299	1.31	18.11	0.03
92	SLU 21	326	-2	3299	1.31	18.11	0.03
92	SLU 22	267	-2	2798	1.06	14.78	0.03
92	SLU 23	267	-2	2798	1.06	14.78	0.03
92	SLU 24	267	-2	2798	1.06	14.78	0.03
92	SLU 25	267	-2	2798	1.06	14.78	0.03
92	SLU 26	267	-2	2798	1.06	14.78	0.03
92	SLU 27	267	-2	2798	1.06	14.78	0.03
92	SLU 28	267	-2	2798	1.06	14.78	0.03
92	SLU 29	267	-2	2798	1.06	14.78	0.03
92	SLU 30	267	-2	2798	1.06	14.78	0.03
92	SLU 31	342	-2	3359	1.34	18.81	0.03
92	SLU 32	342	-2	3359	1.34	18.81	0.03
92	SLU 33	342	-2	3359	1.34	18.81	0.03
92	SLU 34	342	-2	3359	1.34	18.81	0.03
92	SLU 35	342	-2	3359	1.34	18.81	0.03
92	SLU 36	342	-2	3359	1.34	18.81	0.03
92	SLU 37	342	-2	3359	1.34	18.81	0.03
92	SLU 38	342	-2	3359	1.34	18.81	0.03
92	SLU 39	375	-3	3599	1.46	20.54	0.03
92	SLU 40	375	-3	3599	1.46	20.54	0.03
92	SLU 41	375	-3	3599	1.46	20.54	0.03
92	SLU 42	375	-3	3599	1.46	20.54	0.03
92	SLU 43	267	-3	3145	1.12	15.22	0.03
92	SLU 44	267	-3	3145	1.12	15.22	0.03
92	SLU 45	267	-3	3145	1.12	15.22	0.03
92	SLU 46	267	-3	3145	1.12	15.22	0.03
92	SLU 47	267	-3	3145	1.12	15.22	0.03
92	SLU 48	267	-3	3145	1.12	15.22	0.03
92	SLU 49	267	-3	3145	1.12	15.22	0.03
92	SLU 50	267	-3	3145	1.12	15.22	0.03
92	SLU 51	267	-3	3145	1.12	15.22	0.03
92	SLU 52	342	-3	3705	1.4	19.26	0.03
92	SLU 53	342	-3	3705	1.4	19.26	0.03
92	SLU 54	342	-3	3705	1.4	19.26	0.03
92	SLU 55	342	-3	3705	1.4	19.26	0.03
92	SLU 56	342	-3	3705	1.4	19.26	0.03
92	SLU 57	342	-3	3705	1.4	19.26	0.03
92	SLU 58	342	-3	3705	1.4	19.26	0.03
92	SLU 59	342	-3	3705	1.4	19.26	0.03
92	SLU 60	375	-3	3945	1.52	20.98	0.04
92	SLU 61	375	-3	3945	1.52	20.98	0.04
92	SLU 62	375	-3	3945	1.52	20.98	0.04
92	SLU 63	375	-3	3945	1.52	20.98	0.04
92	SLU 64	316	-3	3445	1.28	17.65	0.03
92	SLU 65	316	-3	3445	1.28	17.65	0.03
92	SLU 66	316	-3	3445	1.28	17.65	0.03
92	SLU 67	316	-3	3445	1.28	17.65	0.03
92	SLU 68	316	-3	3445	1.28	17.65	0.03
92	SLU 69	316	-3	3445	1.28	17.65	0.03
92	SLU 70	316	-3	3445	1.28	17.65	0.03
92	SLU 71	316	-3	3445	1.28	17.65	0.03
92	SLU 72	316	-3	3445	1.28	17.65	0.03
92	SLU 73	391	-3	4005	1.56	21.69	0.04
92	SLU 74	391	-3	4005	1.56	21.69	0.04
92	SLU 75	391	-3	4005	1.56	21.69	0.04
92	SLU 76	391	-3	4005	1.56	21.69	0.04
92	SLU 77	391	-3	4005	1.56	21.69	0.04
92	SLU 78	391	-3	4005	1.56	21.69	0.04
92	SLU 79	391	-3	4005	1.56	21.69	0.04
92	SLU 80	391	-3	4005	1.56	21.69	0.04
92	SLU 81	423	-3	4246	1.68	23.41	0.04
92	SLU 82	423	-3	4246	1.68	23.41	0.04
92	SLU 83	423	-3	4246	1.68	23.41	0.04
92	SLU 84	423	-3	4246	1.68	23.41	0.04
92	SLE RA 1	232	-2	2584	0.95	13.04	0.02
92	SLE RA 2	232	-2	2584	0.95	13.04	0.02
92	SLE RA 3	232	-2	2584	0.95	13.04	0.02
92	SLE RA 4	232	-2	2584	0.95	13.04	0.02
92	SLE RA 5	232	-2	2584	0.95	13.04	0.02
92	SLE RA 6	232	-2	2584	0.95	13.04	0.02
92	SLE RA 7	232	-2	2584	0.95	13.04	0.02
92	SLE RA 8	232	-2	2584	0.95	13.04	0.02
92	SLE RA 9	232	-2	2584	0.95	13.04	0.02
92	SLE RA 10	283	-2	2958	1.14	15.73	0.03
92	SLE RA 11	283	-2	2958	1.14	15.73	0.03
92	SLE RA 12	283	-2	2958	1.14	15.73	0.03
92	SLE RA 13	283	-2	2958	1.14	15.73	0.03



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
92	SLE RA 14	283	-2	2958	1.14	15.73	0.03
92	SLE RA 15	283	-2	2958	1.14	15.73	0.03
92	SLE RA 16	283	-2	2958	1.14	15.73	0.03
92	SLE RA 17	283	-2	2958	1.14	15.73	0.03
92	SLE RA 18	304	-2	3118	1.22	16.89	0.03
92	SLE RA 19	304	-2	3118	1.22	16.89	0.03
92	SLE RA 20	304	-2	3118	1.22	16.89	0.03
92	SLE RA 21	304	-2	3118	1.22	16.89	0.03
92	SLE FR 1	232	-2	2584	0.95	13.04	0.02
92	SLE FR 2	232	-2	2584	0.95	13.04	0.02
92	SLE FR 3	232	-2	2584	0.95	13.04	0.02
92	SLE FR 4	254	-2	2744	1.03	14.2	0.02
92	SLE FR 5	254	-2	2744	1.03	14.2	0.02
92	SLE FR 6	268	-2	2851	1.08	14.96	0.03
92	SLE QP 1	232	-2	2584	0.95	13.04	0.02
92	SLE QP 2	254	-2	2744	1.03	14.2	0.02
92	SLD 1	606	3	2954	-4.5	29.82	0.03
92	SLD 2	606	3	2954	-4.5	29.82	0.03
92	SLD 3	443	5	3168	0.52	22.73	0.03
92	SLD 4	443	5	3168	0.52	22.73	0.03
92	SLD 5	608	-3	2482	-8.25	29.63	0.02
92	SLD 6	608	-3	2482	-8.25	29.63	0.02
92	SLD 7	62	3	3197	8.5	6.01	0.03
92	SLD 8	62	3	3197	8.5	6.01	0.03
92	SLD 9	445	-7	2291	-6.44	22.38	0.02
92	SLD 10	445	-7	2291	-6.44	22.38	0.02
92	SLD 11	-100	-1	3006	10.31	-1.24	0.03
92	SLD 12	-100	-1	3006	10.31	-1.24	0.03
92	SLD 13	65	-10	2320	1.54	5.66	0.02
92	SLD 14	65	-10	2320	1.54	5.66	0.02
92	SLD 15	-98	-8	2534	6.56	-1.43	0.02
92	SLD 16	-98	-8	2534	6.56	-1.43	0.02
92	SLV 1	1101	11	3227	-13.04	51.71	0.03
92	SLV 2	1101	11	3227	-13.04	51.71	0.03
92	SLV 3	674	16	3755	-0.07	33.27	0.04
92	SLV 4	674	16	3755	-0.07	33.27	0.04
92	SLV 5	1156	-5	2088	-22.86	53.42	0.02
92	SLV 6	1156	-5	2088	-22.86	53.42	0.02
92	SLV 7	-268	10	3848	20.37	-8.05	0.04
92	SLV 8	-268	10	3848	20.37	-8.05	0.04
92	SLV 9	776	-15	1640	-18.31	36.44	0.01
92	SLV 10	776	-15	1640	-18.31	36.44	0.01
92	SLV 11	-648	1	3400	24.92	-25.02	0.03
92	SLV 12	-648	1	3400	24.92	-25.02	0.03
92	SLV 13	-166	-20	1733	2.13	-4.88	0.01
92	SLV 14	-166	-20	1733	2.13	-4.88	0.01
92	SLV 15	-593	-16	2261	15.1	-23.32	0.02
92	SLV 16	-593	-16	2261	15.1	-23.32	0.02
93	SLU 1	79	4	2167	0.04	3.98	-0.01
93	SLU 2	79	4	2167	0.04	3.98	-0.01
93	SLU 3	79	4	2167	0.04	3.98	-0.01
93	SLU 4	79	4	2167	0.04	3.98	-0.01
93	SLU 5	79	4	2167	0.04	3.98	-0.01
93	SLU 6	79	4	2167	0.04	3.98	-0.01
93	SLU 7	79	4	2167	0.04	3.98	-0.01
93	SLU 8	79	4	2167	0.04	3.98	-0.01
93	SLU 9	79	4	2167	0.04	3.98	-0.01
93	SLU 10	116	6	2644	0.27	5.6	-0.02
93	SLU 11	116	6	2644	0.27	5.6	-0.02
93	SLU 12	116	6	2644	0.27	5.6	-0.02
93	SLU 13	116	6	2644	0.27	5.6	-0.02
93	SLU 14	116	6	2644	0.27	5.6	-0.02
93	SLU 15	116	6	2644	0.27	5.6	-0.02
93	SLU 16	116	6	2644	0.27	5.6	-0.02
93	SLU 17	116	6	2644	0.27	5.6	-0.02
93	SLU 18	131	6	2848	0.37	6.3	-0.02
93	SLU 19	131	6	2848	0.37	6.3	-0.02
93	SLU 20	131	6	2848	0.37	6.3	-0.02
93	SLU 21	131	6	2848	0.37	6.3	-0.02
93	SLU 22	108	5	2428	0.18	5.23	-0.02
93	SLU 23	108	5	2428	0.18	5.23	-0.02
93	SLU 24	108	5	2428	0.18	5.23	-0.02
93	SLU 25	108	5	2428	0.18	5.23	-0.02
93	SLU 26	108	5	2428	0.18	5.23	-0.02
93	SLU 27	108	5	2428	0.18	5.23	-0.02
93	SLU 28	108	5	2428	0.18	5.23	-0.02
93	SLU 29	108	5	2428	0.18	5.23	-0.02
93	SLU 30	108	5	2428	0.18	5.23	-0.02
93	SLU 31	144	6	2905	0.41	6.85	-0.02
93	SLU 32	144	6	2905	0.41	6.85	-0.02
93	SLU 33	144	6	2905	0.41	6.85	-0.02
93	SLU 34	144	6	2905	0.41	6.85	-0.02
93	SLU 35	144	6	2905	0.41	6.85	-0.02
93	SLU 36	144	6	2905	0.41	6.85	-0.02
93	SLU 37	144	6	2905	0.41	6.85	-0.02
93	SLU 38	144	6	2905	0.41	6.85	-0.02
93	SLU 39	160	7	3109	0.51	7.54	-0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
93	SLU 40	160	7	3109	0.51	7.54	-0.02
93	SLU 41	160	7	3109	0.51	7.54	-0.02
93	SLU 42	160	7	3109	0.51	7.54	-0.02
93	SLU 43	93	5	2727	0.01	4.75	-0.02
93	SLU 44	93	5	2727	0.01	4.75	-0.02
93	SLU 45	93	5	2727	0.01	4.75	-0.02
93	SLU 46	93	5	2727	0.01	4.75	-0.02
93	SLU 47	93	5	2727	0.01	4.75	-0.02
93	SLU 48	93	5	2727	0.01	4.75	-0.02
93	SLU 49	93	5	2727	0.01	4.75	-0.02
93	SLU 50	93	5	2727	0.01	4.75	-0.02
93	SLU 51	93	5	2727	0.01	4.75	-0.02
93	SLU 52	130	7	3204	0.23	6.37	-0.02
93	SLU 53	130	7	3204	0.23	6.37	-0.02
93	SLU 54	130	7	3204	0.23	6.37	-0.02
93	SLU 55	130	7	3204	0.23	6.37	-0.02
93	SLU 56	130	7	3204	0.23	6.37	-0.02
93	SLU 57	130	7	3204	0.23	6.37	-0.02
93	SLU 58	130	7	3204	0.23	6.37	-0.02
93	SLU 59	130	7	3204	0.23	6.37	-0.02
93	SLU 60	145	8	3408	0.33	7.06	-0.02
93	SLU 61	145	8	3408	0.33	7.06	-0.02
93	SLU 62	145	8	3408	0.33	7.06	-0.02
93	SLU 63	145	8	3408	0.33	7.06	-0.02
93	SLU 64	122	6	2989	0.15	5.99	-0.02
93	SLU 65	122	6	2989	0.15	5.99	-0.02
93	SLU 66	122	6	2989	0.15	5.99	-0.02
93	SLU 67	122	6	2989	0.15	5.99	-0.02
93	SLU 68	122	6	2989	0.15	5.99	-0.02
93	SLU 69	122	6	2989	0.15	5.99	-0.02
93	SLU 70	122	6	2989	0.15	5.99	-0.02
93	SLU 71	122	6	2989	0.15	5.99	-0.02
93	SLU 72	122	6	2989	0.15	5.99	-0.02
93	SLU 73	158	8	3465	0.37	7.61	-0.02
93	SLU 74	158	8	3465	0.37	7.61	-0.02
93	SLU 75	158	8	3465	0.37	7.61	-0.02
93	SLU 76	158	8	3465	0.37	7.61	-0.02
93	SLU 77	158	8	3465	0.37	7.61	-0.02
93	SLU 78	158	8	3465	0.37	7.61	-0.02
93	SLU 79	158	8	3465	0.37	7.61	-0.02
93	SLU 80	158	8	3465	0.37	7.61	-0.02
93	SLU 81	174	8	3669	0.47	8.31	-0.03
93	SLU 82	174	8	3669	0.47	8.31	-0.03
93	SLU 83	174	8	3669	0.47	8.31	-0.03
93	SLU 84	174	8	3669	0.47	8.31	-0.03
93	SLE RA 1	88	4	2241	0.08	4.34	-0.02
93	SLE RA 2	88	4	2241	0.08	4.34	-0.02
93	SLE RA 3	88	4	2241	0.08	4.34	-0.02
93	SLE RA 4	88	4	2241	0.08	4.34	-0.02
93	SLE RA 5	88	4	2241	0.08	4.34	-0.02
93	SLE RA 6	88	4	2241	0.08	4.34	-0.02
93	SLE RA 7	88	4	2241	0.08	4.34	-0.02
93	SLE RA 8	88	4	2241	0.08	4.34	-0.02
93	SLE RA 9	88	4	2241	0.08	4.34	-0.02
93	SLE RA 10	112	5	2559	0.23	5.42	-0.02
93	SLE RA 11	112	5	2559	0.23	5.42	-0.02
93	SLE RA 12	112	5	2559	0.23	5.42	-0.02
93	SLE RA 13	112	5	2559	0.23	5.42	-0.02
93	SLE RA 14	112	5	2559	0.23	5.42	-0.02
93	SLE RA 15	112	5	2559	0.23	5.42	-0.02
93	SLE RA 16	112	5	2559	0.23	5.42	-0.02
93	SLE RA 17	112	5	2559	0.23	5.42	-0.02
93	SLE RA 18	122	6	2695	0.3	5.88	-0.02
93	SLE RA 19	122	6	2695	0.3	5.88	-0.02
93	SLE RA 20	122	6	2695	0.3	5.88	-0.02
93	SLE RA 21	122	6	2695	0.3	5.88	-0.02
93	SLE FR 1	88	4	2241	0.08	4.34	-0.02
93	SLE FR 2	88	4	2241	0.08	4.34	-0.02
93	SLE FR 3	88	4	2241	0.08	4.34	-0.02
93	SLE FR 4	98	5	2378	0.15	4.8	-0.02
93	SLE FR 5	98	5	2378	0.15	4.8	-0.02
93	SLE FR 6	105	5	2468	0.19	5.11	-0.02
93	SLE QP 1	88	4	2241	0.08	4.34	-0.02
93	SLE QP 2	98	5	2378	0.15	4.8	-0.02
93	SLD 1	486	11	2463	-10.6	21.61	-0.04
93	SLD 2	486	11	2463	-10.6	21.61	-0.04
93	SLD 3	311	16	2567	0.45	13.9	-0.05
93	SLD 4	311	16	2567	0.45	13.9	-0.05
93	SLD 5	480	-1	2245	-19.83	21.53	-0.01
93	SLD 6	480	-1	2245	-19.83	21.53	-0.01
93	SLD 7	-104	16	2593	17	-4.15	-0.04
93	SLD 8	-104	16	2593	17	-4.15	-0.04
93	SLD 9	299	-6	2162	-16.7	13.75	0.01
93	SLD 10	299	-6	2162	-16.7	13.75	0.01
93	SLD 11	-284	11	2511	20.13	-11.93	-0.02
93	SLD 12	-284	11	2511	20.13	-11.93	-0.02
93	SLD 13	-115	-6	2188	-0.16	-4.3	0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
93	SLD 14	-115	-6	2188	-0.16	-4.3	0.02
93	SLD 15	-290	-1	2293	10.89	-12.01	0.01
93	SLD 16	-290	-1	2293	10.89	-12.01	0.01
93	SLV 1	1031	19	2572	-27.34	45.25	-0.08
93	SLV 2	1031	19	2572	-27.34	45.25	-0.08
93	SLV 3	571	32	2827	1.14	25.04	-0.1
93	SLV 4	571	32	2827	1.14	25.04	-0.1
93	SLV 5	1074	-10	2050	-51.3	47.59	0
93	SLV 6	1074	-10	2050	-51.3	47.59	0
93	SLV 7	-457	32	2898	43.65	-19.78	-0.07
93	SLV 8	-457	32	2898	43.65	-19.78	-0.07
93	SLV 9	652	-22	1857	-43.35	29.38	0.04
93	SLV 10	652	-22	1857	-43.35	29.38	0.04
93	SLV 11	-878	20	2705	51.6	-37.99	-0.03
93	SLV 12	-878	20	2705	51.6	-37.99	-0.03
93	SLV 13	-376	-22	1929	-0.85	-15.44	0.07
93	SLV 14	-376	-22	1929	-0.85	-15.44	0.07
93	SLV 15	-835	-9	2183	27.64	-35.65	0.04
93	SLV 16	-835	-9	2183	27.64	-35.65	0.04
94	SLU 1	16	6	1913	0.15	1.81	-0.03
94	SLU 2	16	6	1913	0.15	1.81	-0.03
94	SLU 3	16	6	1913	0.15	1.81	-0.03
94	SLU 4	16	6	1913	0.15	1.81	-0.03
94	SLU 5	16	6	1913	0.15	1.81	-0.03
94	SLU 6	16	6	1913	0.15	1.81	-0.03
94	SLU 7	16	6	1913	0.15	1.81	-0.03
94	SLU 8	16	6	1913	0.15	1.81	-0.03
94	SLU 9	16	6	1913	0.15	1.81	-0.03
94	SLU 10	37	8	2322	0.61	2.97	-0.04
94	SLU 11	37	8	2322	0.61	2.97	-0.04
94	SLU 12	37	8	2322	0.61	2.97	-0.04
94	SLU 13	37	8	2322	0.61	2.97	-0.04
94	SLU 14	37	8	2322	0.61	2.97	-0.04
94	SLU 15	37	8	2322	0.61	2.97	-0.04
94	SLU 16	37	8	2322	0.61	2.97	-0.04
94	SLU 17	37	8	2322	0.61	2.97	-0.04
94	SLU 18	47	9	2497	0.8	3.47	-0.04
94	SLU 19	47	9	2497	0.8	3.47	-0.04
94	SLU 20	47	9	2497	0.8	3.47	-0.04
94	SLU 21	47	9	2497	0.8	3.47	-0.04
94	SLU 22	34	7	2143	0.4	2.63	-0.03
94	SLU 23	34	7	2143	0.4	2.63	-0.03
94	SLU 24	34	7	2143	0.4	2.63	-0.03
94	SLU 25	34	7	2143	0.4	2.63	-0.03
94	SLU 26	34	7	2143	0.4	2.63	-0.03
94	SLU 27	34	7	2143	0.4	2.63	-0.03
94	SLU 28	34	7	2143	0.4	2.63	-0.03
94	SLU 29	34	7	2143	0.4	2.63	-0.03
94	SLU 30	34	7	2143	0.4	2.63	-0.03
94	SLU 31	55	8	2552	0.86	3.8	-0.04
94	SLU 32	55	8	2552	0.86	3.8	-0.04
94	SLU 33	55	8	2552	0.86	3.8	-0.04
94	SLU 34	55	8	2552	0.86	3.8	-0.04
94	SLU 35	55	8	2552	0.86	3.8	-0.04
94	SLU 36	55	8	2552	0.86	3.8	-0.04
94	SLU 37	55	8	2552	0.86	3.8	-0.04
94	SLU 38	55	8	2552	0.86	3.8	-0.04
94	SLU 39	64	9	2727	1.05	4.3	-0.05
94	SLU 40	64	9	2727	1.05	4.3	-0.05
94	SLU 41	64	9	2727	1.05	4.3	-0.05
94	SLU 42	64	9	2727	1.05	4.3	-0.05
94	SLU 43	15	7	2409	0.1	2.06	-0.04
94	SLU 44	15	7	2409	0.1	2.06	-0.04
94	SLU 45	15	7	2409	0.1	2.06	-0.04
94	SLU 46	15	7	2409	0.1	2.06	-0.04
94	SLU 47	15	7	2409	0.1	2.06	-0.04
94	SLU 48	15	7	2409	0.1	2.06	-0.04
94	SLU 49	15	7	2409	0.1	2.06	-0.04
94	SLU 50	15	7	2409	0.1	2.06	-0.04
94	SLU 51	15	7	2409	0.1	2.06	-0.04
94	SLU 52	36	9	2817	0.56	3.23	-0.05
94	SLU 53	36	9	2817	0.56	3.23	-0.05
94	SLU 54	36	9	2817	0.56	3.23	-0.05
94	SLU 55	36	9	2817	0.56	3.23	-0.05
94	SLU 56	36	9	2817	0.56	3.23	-0.05
94	SLU 57	36	9	2817	0.56	3.23	-0.05
94	SLU 58	36	9	2817	0.56	3.23	-0.05
94	SLU 59	36	9	2817	0.56	3.23	-0.05
94	SLU 60	45	10	2993	0.76	3.73	-0.05
94	SLU 61	45	10	2993	0.76	3.73	-0.05
94	SLU 62	45	10	2993	0.76	3.73	-0.05
94	SLU 63	45	10	2993	0.76	3.73	-0.05
94	SLU 64	32	8	2638	0.35	2.89	-0.04
94	SLU 65	32	8	2638	0.35	2.89	-0.04
94	SLU 66	32	8	2638	0.35	2.89	-0.04
94	SLU 67	32	8	2638	0.35	2.89	-0.04
94	SLU 68	32	8	2638	0.35	2.89	-0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
94	SLU 69	32	8	2638	0.35	2.89	-0.04
94	SLU 70	32	8	2638	0.35	2.89	-0.04
94	SLU 71	32	8	2638	0.35	2.89	-0.04
94	SLU 72	32	8	2638	0.35	2.89	-0.04
94	SLU 73	54	10	3047	0.81	4.06	-0.05
94	SLU 74	54	10	3047	0.81	4.06	-0.05
94	SLU 75	54	10	3047	0.81	4.06	-0.05
94	SLU 76	54	10	3047	0.81	4.06	-0.05
94	SLU 77	54	10	3047	0.81	4.06	-0.05
94	SLU 78	54	10	3047	0.81	4.06	-0.05
94	SLU 79	54	10	3047	0.81	4.06	-0.05
94	SLU 80	54	10	3047	0.81	4.06	-0.05
94	SLU 81	63	11	3223	1.01	4.55	-0.06
94	SLU 82	63	11	3223	1.01	4.55	-0.06
94	SLU 83	63	11	3223	1.01	4.55	-0.06
94	SLU 84	63	11	3223	1.01	4.55	-0.06
94	SLE RA 1	21	6	1979	0.22	2.04	-0.03
94	SLE RA 2	21	6	1979	0.22	2.04	-0.03
94	SLE RA 3	21	6	1979	0.22	2.04	-0.03
94	SLE RA 4	21	6	1979	0.22	2.04	-0.03
94	SLE RA 5	21	6	1979	0.22	2.04	-0.03
94	SLE RA 6	21	6	1979	0.22	2.04	-0.03
94	SLE RA 7	21	6	1979	0.22	2.04	-0.03
94	SLE RA 8	21	6	1979	0.22	2.04	-0.03
94	SLE RA 9	21	6	1979	0.22	2.04	-0.03
94	SLE RA 10	35	7	2252	0.52	2.82	-0.04
94	SLE RA 11	35	7	2252	0.52	2.82	-0.04
94	SLE RA 12	35	7	2252	0.52	2.82	-0.04
94	SLE RA 13	35	7	2252	0.52	2.82	-0.04
94	SLE RA 14	35	7	2252	0.52	2.82	-0.04
94	SLE RA 15	35	7	2252	0.52	2.82	-0.04
94	SLE RA 16	35	7	2252	0.52	2.82	-0.04
94	SLE RA 17	35	7	2252	0.52	2.82	-0.04
94	SLE RA 18	41	8	2368	0.65	3.15	-0.04
94	SLE RA 19	41	8	2368	0.65	3.15	-0.04
94	SLE RA 20	41	8	2368	0.65	3.15	-0.04
94	SLE RA 21	41	8	2368	0.65	3.15	-0.04
94	SLE FR 1	21	6	1979	0.22	2.04	-0.03
94	SLE FR 2	21	6	1979	0.22	2.04	-0.03
94	SLE FR 3	21	6	1979	0.22	2.04	-0.03
94	SLE FR 4	27	7	2096	0.35	2.37	-0.03
94	SLE FR 5	27	7	2096	0.35	2.37	-0.03
94	SLE FR 6	31	7	2174	0.44	2.6	-0.04
94	SLE QP 1	21	6	1979	0.22	2.04	-0.03
94	SLE QP 2	27	7	2096	0.35	2.37	-0.03
94	SLD 1	439	20	2130	-15.23	17.89	-0.09
94	SLD 2	439	20	2130	-15.23	17.89	-0.09
94	SLD 3	268	9	2218	2.48	11.47	-0.05
94	SLD 4	268	9	2218	2.48	11.47	-0.05
94	SLD 5	410	28	1972	-31.19	16.75	-0.11
94	SLD 6	410	28	1972	-31.19	16.75	-0.11
94	SLD 7	-160	-10	2267	27.85	-4.62	0.02
94	SLD 8	-160	-10	2267	27.85	-4.62	0.02
94	SLD 9	214	23	1925	-27.15	9.37	-0.09
94	SLD 10	214	23	1925	-27.15	9.37	-0.09
94	SLD 11	-356	-15	2220	31.88	-12.01	0.04
94	SLD 12	-356	-15	2220	31.88	-12.01	0.04
94	SLD 13	-214	4	1974	-1.78	-6.72	-0.02
94	SLD 14	-214	4	1974	-1.78	-6.72	-0.02
94	SLD 15	-385	-7	2062	15.93	-13.14	0.02
94	SLD 16	-385	-7	2062	15.93	-13.14	0.02
94	SLV 1	1016	42	2176	-39.61	39.59	-0.17
94	SLV 2	1016	42	2176	-39.61	39.59	-0.17
94	SLV 3	567	13	2396	6.06	22.79	-0.08
94	SLV 4	567	13	2396	6.06	22.79	-0.08
94	SLV 5	1005	61	1785	-80.89	39.02	-0.23
94	SLV 6	1005	61	1785	-80.89	39.02	-0.23
94	SLV 7	-493	-35	2521	71.32	-16.98	0.1
94	SLV 8	-493	-35	2521	71.32	-16.98	0.1
94	SLV 9	547	49	1671	-70.62	21.73	-0.17
94	SLV 10	547	49	1671	-70.62	21.73	-0.17
94	SLV 11	-951	-48	2407	81.59	-34.27	0.16
94	SLV 12	-951	-48	2407	81.59	-34.27	0.16
94	SLV 13	-513	1	1796	-5.36	-18.04	0.01
94	SLV 14	-513	1	1796	-5.36	-18.04	0.01
94	SLV 15	-962	-28	2016	40.3	-34.84	0.11
94	SLV 16	-962	-28	2016	40.3	-34.84	0.11
95	SLU 1	34	6	1711	0.96	1.15	-0.03
95	SLU 2	34	6	1711	0.96	1.15	-0.03
95	SLU 3	34	6	1711	0.96	1.15	-0.03
95	SLU 4	34	6	1711	0.96	1.15	-0.03
95	SLU 5	34	6	1711	0.96	1.15	-0.03
95	SLU 6	34	6	1711	0.96	1.15	-0.03
95	SLU 7	34	6	1711	0.96	1.15	-0.03
95	SLU 8	34	6	1711	0.96	1.15	-0.03
95	SLU 9	34	6	1711	0.96	1.15	-0.03
95	SLU 10	62	8	2070	1.88	2.16	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
95	SLU 11	62	8	2070	1.88	2.16	-0.04
95	SLU 12	62	8	2070	1.88	2.16	-0.04
95	SLU 13	62	8	2070	1.88	2.16	-0.04
95	SLU 14	62	8	2070	1.88	2.16	-0.04
95	SLU 15	62	8	2070	1.88	2.16	-0.04
95	SLU 16	62	8	2070	1.88	2.16	-0.04
95	SLU 17	62	8	2070	1.88	2.16	-0.04
95	SLU 18	74	8	2223	2.27	2.6	-0.05
95	SLU 19	74	8	2223	2.27	2.6	-0.05
95	SLU 20	74	8	2223	2.27	2.6	-0.05
95	SLU 21	74	8	2223	2.27	2.6	-0.05
95	SLU 22	54	6	1917	1.41	1.87	-0.04
95	SLU 23	54	6	1917	1.41	1.87	-0.04
95	SLU 24	54	6	1917	1.41	1.87	-0.04
95	SLU 25	54	6	1917	1.41	1.87	-0.04
95	SLU 26	54	6	1917	1.41	1.87	-0.04
95	SLU 27	54	6	1917	1.41	1.87	-0.04
95	SLU 28	54	6	1917	1.41	1.87	-0.04
95	SLU 29	54	6	1917	1.41	1.87	-0.04
95	SLU 30	54	6	1917	1.41	1.87	-0.04
95	SLU 31	82	8	2276	2.32	2.88	-0.05
95	SLU 32	82	8	2276	2.32	2.88	-0.05
95	SLU 33	82	8	2276	2.32	2.88	-0.05
95	SLU 34	82	8	2276	2.32	2.88	-0.05
95	SLU 35	82	8	2276	2.32	2.88	-0.05
95	SLU 36	82	8	2276	2.32	2.88	-0.05
95	SLU 37	82	8	2276	2.32	2.88	-0.05
95	SLU 38	82	8	2276	2.32	2.88	-0.05
95	SLU 39	94	9	2430	2.72	3.32	-0.05
95	SLU 40	94	9	2430	2.72	3.32	-0.05
95	SLU 41	94	9	2430	2.72	3.32	-0.05
95	SLU 42	94	9	2430	2.72	3.32	-0.05
95	SLU 43	37	7	2153	1.09	1.25	-0.04
95	SLU 44	37	7	2153	1.09	1.25	-0.04
95	SLU 45	37	7	2153	1.09	1.25	-0.04
95	SLU 46	37	7	2153	1.09	1.25	-0.04
95	SLU 47	37	7	2153	1.09	1.25	-0.04
95	SLU 48	37	7	2153	1.09	1.25	-0.04
95	SLU 49	37	7	2153	1.09	1.25	-0.04
95	SLU 50	37	7	2153	1.09	1.25	-0.04
95	SLU 51	37	7	2153	1.09	1.25	-0.04
95	SLU 52	65	9	2512	2.01	2.26	-0.05
95	SLU 53	65	9	2512	2.01	2.26	-0.05
95	SLU 54	65	9	2512	2.01	2.26	-0.05
95	SLU 55	65	9	2512	2.01	2.26	-0.05
95	SLU 56	65	9	2512	2.01	2.26	-0.05
95	SLU 57	65	9	2512	2.01	2.26	-0.05
95	SLU 58	65	9	2512	2.01	2.26	-0.05
95	SLU 59	65	9	2512	2.01	2.26	-0.05
95	SLU 60	77	10	2666	2.4	2.7	-0.06
95	SLU 61	77	10	2666	2.4	2.7	-0.06
95	SLU 62	77	10	2666	2.4	2.7	-0.06
95	SLU 63	77	10	2666	2.4	2.7	-0.06
95	SLU 64	57	8	2360	1.54	1.97	-0.05
95	SLU 65	57	8	2360	1.54	1.97	-0.05
95	SLU 66	57	8	2360	1.54	1.97	-0.05
95	SLU 67	57	8	2360	1.54	1.97	-0.05
95	SLU 68	57	8	2360	1.54	1.97	-0.05
95	SLU 69	57	8	2360	1.54	1.97	-0.05
95	SLU 70	57	8	2360	1.54	1.97	-0.05
95	SLU 71	57	8	2360	1.54	1.97	-0.05
95	SLU 72	57	8	2360	1.54	1.97	-0.05
95	SLU 73	85	10	2718	2.46	2.98	-0.06
95	SLU 74	85	10	2718	2.46	2.98	-0.06
95	SLU 75	85	10	2718	2.46	2.98	-0.06
95	SLU 76	85	10	2718	2.46	2.98	-0.06
95	SLU 77	85	10	2718	2.46	2.98	-0.06
95	SLU 78	85	10	2718	2.46	2.98	-0.06
95	SLU 79	85	10	2718	2.46	2.98	-0.06
95	SLU 80	85	10	2718	2.46	2.98	-0.06
95	SLU 81	97	10	2872	2.85	3.42	-0.06
95	SLU 82	97	10	2872	2.85	3.42	-0.06
95	SLU 83	97	10	2872	2.85	3.42	-0.06
95	SLU 84	97	10	2872	2.85	3.42	-0.06
95	SLE RA 1	39	6	1770	1.09	1.36	-0.03
95	SLE RA 2	39	6	1770	1.09	1.36	-0.03
95	SLE RA 3	39	6	1770	1.09	1.36	-0.03
95	SLE RA 4	39	6	1770	1.09	1.36	-0.03
95	SLE RA 5	39	6	1770	1.09	1.36	-0.03
95	SLE RA 6	39	6	1770	1.09	1.36	-0.03
95	SLE RA 7	39	6	1770	1.09	1.36	-0.03
95	SLE RA 8	39	6	1770	1.09	1.36	-0.03
95	SLE RA 9	39	6	1770	1.09	1.36	-0.03
95	SLE RA 10	58	7	2009	1.7	2.03	-0.04
95	SLE RA 11	58	7	2009	1.7	2.03	-0.04
95	SLE RA 12	58	7	2009	1.7	2.03	-0.04
95	SLE RA 13	58	7	2009	1.7	2.03	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
95	SLE RA 14	58	7	2009	1.7	2.03	-0.04
95	SLE RA 15	58	7	2009	1.7	2.03	-0.04
95	SLE RA 16	58	7	2009	1.7	2.03	-0.04
95	SLE RA 17	58	7	2009	1.7	2.03	-0.04
95	SLE RA 18	66	8	2111	1.96	2.32	-0.05
95	SLE RA 19	66	8	2111	1.96	2.32	-0.05
95	SLE RA 20	66	8	2111	1.96	2.32	-0.05
95	SLE RA 21	66	8	2111	1.96	2.32	-0.05
95	SLE FR 1	39	6	1770	1.09	1.36	-0.03
95	SLE FR 2	39	6	1770	1.09	1.36	-0.03
95	SLE FR 3	39	6	1770	1.09	1.36	-0.03
95	SLE FR 4	48	6	1872	1.35	1.65	-0.04
95	SLE FR 5	48	6	1872	1.35	1.65	-0.04
95	SLE FR 6	53	7	1941	1.52	1.84	-0.04
95	SLE QP 1	39	6	1770	1.09	1.36	-0.03
95	SLE QP 2	48	6	1872	1.35	1.65	-0.04
95	SLD 1	522	23	1736	-18.54	20.47	-0.11
95	SLD 2	522	23	1736	-18.54	20.47	-0.11
95	SLD 3	337	7	1832	5.54	13.04	-0.04
95	SLD 4	337	7	1832	5.54	13.04	-0.04
95	SLD 5	471	37	1687	-41.15	18.56	-0.17
95	SLD 6	471	37	1687	-41.15	18.56	-0.17
95	SLD 7	-147	-19	2004	39.14	-6.21	0.07
95	SLD 8	-147	-19	2004	39.14	-6.21	0.07
95	SLD 9	242	32	1740	-36.44	9.5	-0.15
95	SLD 10	242	32	1740	-36.44	9.5	-0.15
95	SLD 11	-376	-24	2057	43.85	-15.27	0.09
95	SLD 12	-376	-24	2057	43.85	-15.27	0.09
95	SLD 13	-242	6	1913	-2.84	-9.74	-0.04
95	SLD 14	-242	6	1913	-2.84	-9.74	-0.04
95	SLD 15	-427	-10	2008	21.24	-17.18	0.04
95	SLD 16	-427	-10	2008	21.24	-17.18	0.04
95	SLV 1	1186	49	1532	-49.61	46.78	-0.22
95	SLV 2	1186	49	1532	-49.61	46.78	-0.22
95	SLV 3	700	7	1771	12.52	27.3	-0.04
95	SLV 4	700	7	1771	12.52	27.3	-0.04
95	SLV 5	1127	84	1408	-108.17	44.73	-0.37
95	SLV 6	1127	84	1408	-108.17	44.73	-0.37
95	SLV 7	-495	-58	2204	98.93	-20.2	0.24
95	SLV 8	-495	-58	2204	98.93	-20.2	0.24
95	SLV 9	590	71	1540	-96.23	23.49	-0.31
95	SLV 10	590	71	1540	-96.23	23.49	-0.31
95	SLV 11	-1032	-71	2337	110.87	-41.44	0.29
95	SLV 12	-1032	-71	2337	110.87	-41.44	0.29
95	SLV 13	-605	6	1974	-9.82	-24.01	-0.03
95	SLV 14	-605	6	1974	-9.82	-24.01	-0.03
95	SLV 15	-1091	-36	2213	52.31	-43.49	0.15
95	SLV 16	-1091	-36	2213	52.31	-43.49	0.15
96	SLU 1	117	6	1650	1.98	4.71	-0.03
96	SLU 2	117	6	1650	1.98	4.71	-0.03
96	SLU 3	117	6	1650	1.98	4.71	-0.03
96	SLU 4	117	6	1650	1.98	4.71	-0.03
96	SLU 5	117	6	1650	1.98	4.71	-0.03
96	SLU 6	117	6	1650	1.98	4.71	-0.03
96	SLU 7	117	6	1650	1.98	4.71	-0.03
96	SLU 8	117	6	1650	1.98	4.71	-0.03
96	SLU 9	117	6	1650	1.98	4.71	-0.03
96	SLU 10	169	8	2002	3.4	6.73	-0.04
96	SLU 11	169	8	2002	3.4	6.73	-0.04
96	SLU 12	169	8	2002	3.4	6.73	-0.04
96	SLU 13	169	8	2002	3.4	6.73	-0.04
96	SLU 14	169	8	2002	3.4	6.73	-0.04
96	SLU 15	169	8	2002	3.4	6.73	-0.04
96	SLU 16	169	8	2002	3.4	6.73	-0.04
96	SLU 17	169	8	2002	3.4	6.73	-0.04
96	SLU 18	191	9	2153	4	7.59	-0.05
96	SLU 19	191	9	2153	4	7.59	-0.05
96	SLU 20	191	9	2153	4	7.59	-0.05
96	SLU 21	191	9	2153	4	7.59	-0.05
96	SLU 22	149	7	1855	2.64	5.93	-0.04
96	SLU 23	149	7	1855	2.64	5.93	-0.04
96	SLU 24	149	7	1855	2.64	5.93	-0.04
96	SLU 25	149	7	1855	2.64	5.93	-0.04
96	SLU 26	149	7	1855	2.64	5.93	-0.04
96	SLU 27	149	7	1855	2.64	5.93	-0.04
96	SLU 28	149	7	1855	2.64	5.93	-0.04
96	SLU 29	149	7	1855	2.64	5.93	-0.04
96	SLU 30	149	7	1855	2.64	5.93	-0.04
96	SLU 31	201	9	2207	4.05	7.95	-0.05
96	SLU 32	201	9	2207	4.05	7.95	-0.05
96	SLU 33	201	9	2207	4.05	7.95	-0.05
96	SLU 34	201	9	2207	4.05	7.95	-0.05
96	SLU 35	201	9	2207	4.05	7.95	-0.05
96	SLU 36	201	9	2207	4.05	7.95	-0.05
96	SLU 37	201	9	2207	4.05	7.95	-0.05
96	SLU 38	201	9	2207	4.05	7.95	-0.05
96	SLU 39	223	10	2358	4.65	8.81	-0.05



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
96	SLU 40	223	10	2358	4.65	8.81	-0.05
96	SLU 41	223	10	2358	4.65	8.81	-0.05
96	SLU 42	223	10	2358	4.65	8.81	-0.05
96	SLU 43	141	8	2075	2.35	5.7	-0.04
96	SLU 44	141	8	2075	2.35	5.7	-0.04
96	SLU 45	141	8	2075	2.35	5.7	-0.04
96	SLU 46	141	8	2075	2.35	5.7	-0.04
96	SLU 47	141	8	2075	2.35	5.7	-0.04
96	SLU 48	141	8	2075	2.35	5.7	-0.04
96	SLU 49	141	8	2075	2.35	5.7	-0.04
96	SLU 50	141	8	2075	2.35	5.7	-0.04
96	SLU 51	141	8	2075	2.35	5.7	-0.04
96	SLU 52	193	10	2427	3.77	7.72	-0.05
96	SLU 53	193	10	2427	3.77	7.72	-0.05
96	SLU 54	193	10	2427	3.77	7.72	-0.05
96	SLU 55	193	10	2427	3.77	7.72	-0.05
96	SLU 56	193	10	2427	3.77	7.72	-0.05
96	SLU 57	193	10	2427	3.77	7.72	-0.05
96	SLU 58	193	10	2427	3.77	7.72	-0.05
96	SLU 59	193	10	2427	3.77	7.72	-0.05
96	SLU 60	215	11	2578	4.37	8.58	-0.06
96	SLU 61	215	11	2578	4.37	8.58	-0.06
96	SLU 62	215	11	2578	4.37	8.58	-0.06
96	SLU 63	215	11	2578	4.37	8.58	-0.06
96	SLU 64	173	9	2280	3.01	6.92	-0.05
96	SLU 65	173	9	2280	3.01	6.92	-0.05
96	SLU 66	173	9	2280	3.01	6.92	-0.05
96	SLU 67	173	9	2280	3.01	6.92	-0.05
96	SLU 68	173	9	2280	3.01	6.92	-0.05
96	SLU 69	173	9	2280	3.01	6.92	-0.05
96	SLU 70	173	9	2280	3.01	6.92	-0.05
96	SLU 71	173	9	2280	3.01	6.92	-0.05
96	SLU 72	173	9	2280	3.01	6.92	-0.05
96	SLU 73	225	11	2632	4.42	8.94	-0.06
96	SLU 74	225	11	2632	4.42	8.94	-0.06
96	SLU 75	225	11	2632	4.42	8.94	-0.06
96	SLU 76	225	11	2632	4.42	8.94	-0.06
96	SLU 77	225	11	2632	4.42	8.94	-0.06
96	SLU 78	225	11	2632	4.42	8.94	-0.06
96	SLU 79	225	11	2632	4.42	8.94	-0.06
96	SLU 80	225	11	2632	4.42	8.94	-0.06
96	SLU 81	247	11	2783	5.02	9.81	-0.06
96	SLU 82	247	11	2783	5.02	9.81	-0.06
96	SLU 83	247	11	2783	5.02	9.81	-0.06
96	SLU 84	247	11	2783	5.02	9.81	-0.06
96	SLE RA 1	126	6	1709	2.17	5.06	-0.04
96	SLE RA 2	126	6	1709	2.17	5.06	-0.04
96	SLE RA 3	126	6	1709	2.17	5.06	-0.04
96	SLE RA 4	126	6	1709	2.17	5.06	-0.04
96	SLE RA 5	126	6	1709	2.17	5.06	-0.04
96	SLE RA 6	126	6	1709	2.17	5.06	-0.04
96	SLE RA 7	126	6	1709	2.17	5.06	-0.04
96	SLE RA 8	126	6	1709	2.17	5.06	-0.04
96	SLE RA 9	126	6	1709	2.17	5.06	-0.04
96	SLE RA 10	160	8	1943	3.11	6.4	-0.04
96	SLE RA 11	160	8	1943	3.11	6.4	-0.04
96	SLE RA 12	160	8	1943	3.11	6.4	-0.04
96	SLE RA 13	160	8	1943	3.11	6.4	-0.04
96	SLE RA 14	160	8	1943	3.11	6.4	-0.04
96	SLE RA 15	160	8	1943	3.11	6.4	-0.04
96	SLE RA 16	160	8	1943	3.11	6.4	-0.04
96	SLE RA 17	160	8	1943	3.11	6.4	-0.04
96	SLE RA 18	175	8	2044	3.51	6.98	-0.05
96	SLE RA 19	175	8	2044	3.51	6.98	-0.05
96	SLE RA 20	175	8	2044	3.51	6.98	-0.05
96	SLE RA 21	175	8	2044	3.51	6.98	-0.05
96	SLE FR 1	126	6	1709	2.17	5.06	-0.04
96	SLE FR 2	126	6	1709	2.17	5.06	-0.04
96	SLE FR 3	126	6	1709	2.17	5.06	-0.04
96	SLE FR 4	141	7	1809	2.57	5.63	-0.04
96	SLE FR 5	141	7	1809	2.57	5.63	-0.04
96	SLE FR 6	151	7	1876	2.84	6.02	-0.04
96	SLE QP 1	126	6	1709	2.17	5.06	-0.04
96	SLE QP 2	141	7	1809	2.57	5.63	-0.04
96	SLD 1	612	26	1972	-20.84	23.04	-0.13
96	SLD 2	612	26	1972	-20.84	23.04	-0.13
96	SLD 3	445	6	1885	8.92	16.88	-0.03
96	SLD 4	445	6	1885	8.92	16.88	-0.03
96	SLD 5	535	43	1990	-49.59	20.2	-0.21
96	SLD 6	535	43	1990	-49.59	20.2	-0.21
96	SLD 7	-22	-24	1701	49.61	-0.33	0.11
96	SLD 8	-22	-24	1701	49.61	-0.33	0.11
96	SLD 9	303	38	1918	-44.47	11.6	-0.19
96	SLD 10	303	38	1918	-44.47	11.6	-0.19
96	SLD 11	-254	-29	1629	54.73	-8.93	0.14
96	SLD 12	-254	-29	1629	54.73	-8.93	0.14
96	SLD 13	-163	8	1734	-3.77	-5.61	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
96	SLD 14	-163	8	1734	-3.77	-5.61	-0.04
96	SLD 15	-331	-12	1647	25.99	-11.77	0.05
96	SLD 16	-331	-12	1647	25.99	-11.77	0.05
96	SLV 1	1268	55	2208	-57.3	47.28	-0.27
96	SLV 2	1268	55	2208	-57.3	47.28	-0.27
96	SLV 3	829	4	1992	19.51	31.1	-0.02
96	SLV 4	829	4	1992	19.51	31.1	-0.02
96	SLV 5	1145	99	2257	-131.88	42.66	-0.49
96	SLV 6	1145	99	2257	-131.88	42.66	-0.49
96	SLV 7	-319	-71	1536	124.15	-11.26	0.34
96	SLV 8	-319	-71	1536	124.15	-11.26	0.34
96	SLV 9	601	86	2083	-119	22.53	-0.42
96	SLV 10	601	86	2083	-119	22.53	-0.42
96	SLV 11	-864	-85	1362	137.03	-31.39	0.41
96	SLV 12	-864	-85	1362	137.03	-31.39	0.41
96	SLV 13	-548	10	1627	-14.36	-19.84	-0.05
96	SLV 14	-548	10	1627	-14.36	-19.84	-0.05
96	SLV 15	-987	-41	1410	62.45	-36.01	0.2
96	SLV 16	-987	-41	1410	62.45	-36.01	0.2
97	SLU 1	166	8	1738	3.06	5.89	-0.04
97	SLU 2	166	8	1738	3.06	5.89	-0.04
97	SLU 3	166	8	1738	3.06	5.89	-0.04
97	SLU 4	166	8	1738	3.06	5.89	-0.04
97	SLU 5	166	8	1738	3.06	5.89	-0.04
97	SLU 6	166	8	1738	3.06	5.89	-0.04
97	SLU 7	166	8	1738	3.06	5.89	-0.04
97	SLU 8	166	8	1738	3.06	5.89	-0.04
97	SLU 9	166	8	1738	3.06	5.89	-0.04
97	SLU 10	231	10	2126	4.96	8.2	-0.05
97	SLU 11	231	10	2126	4.96	8.2	-0.05
97	SLU 12	231	10	2126	4.96	8.2	-0.05
97	SLU 13	231	10	2126	4.96	8.2	-0.05
97	SLU 14	231	10	2126	4.96	8.2	-0.05
97	SLU 15	231	10	2126	4.96	8.2	-0.05
97	SLU 16	231	10	2126	4.96	8.2	-0.05
97	SLU 17	231	10	2126	4.96	8.2	-0.05
97	SLU 18	258	11	2292	5.78	9.19	-0.05
97	SLU 19	258	11	2292	5.78	9.19	-0.05
97	SLU 20	258	11	2292	5.78	9.19	-0.05
97	SLU 21	258	11	2292	5.78	9.19	-0.05
97	SLU 22	204	9	1965	3.9	7.24	-0.04
97	SLU 23	204	9	1965	3.9	7.24	-0.04
97	SLU 24	204	9	1965	3.9	7.24	-0.04
97	SLU 25	204	9	1965	3.9	7.24	-0.04
97	SLU 26	204	9	1965	3.9	7.24	-0.04
97	SLU 27	204	9	1965	3.9	7.24	-0.04
97	SLU 28	204	9	1965	3.9	7.24	-0.04
97	SLU 29	204	9	1965	3.9	7.24	-0.04
97	SLU 30	204	9	1965	3.9	7.24	-0.04
97	SLU 31	268	11	2353	5.81	9.54	-0.05
97	SLU 32	268	11	2353	5.81	9.54	-0.05
97	SLU 33	268	11	2353	5.81	9.54	-0.05
97	SLU 34	268	11	2353	5.81	9.54	-0.05
97	SLU 35	268	11	2353	5.81	9.54	-0.05
97	SLU 36	268	11	2353	5.81	9.54	-0.05
97	SLU 37	268	11	2353	5.81	9.54	-0.05
97	SLU 38	268	11	2353	5.81	9.54	-0.05
97	SLU 39	296	12	2519	6.63	10.53	-0.06
97	SLU 40	296	12	2519	6.63	10.53	-0.06
97	SLU 41	296	12	2519	6.63	10.53	-0.06
97	SLU 42	296	12	2519	6.63	10.53	-0.06
97	SLU 43	203	10	2181	3.68	7.2	-0.05
97	SLU 44	203	10	2181	3.68	7.2	-0.05
97	SLU 45	203	10	2181	3.68	7.2	-0.05
97	SLU 46	203	10	2181	3.68	7.2	-0.05
97	SLU 47	203	10	2181	3.68	7.2	-0.05
97	SLU 48	203	10	2181	3.68	7.2	-0.05
97	SLU 49	203	10	2181	3.68	7.2	-0.05
97	SLU 50	203	10	2181	3.68	7.2	-0.05
97	SLU 51	203	10	2181	3.68	7.2	-0.05
97	SLU 52	267	12	2569	5.59	9.5	-0.06
97	SLU 53	267	12	2569	5.59	9.5	-0.06
97	SLU 54	267	12	2569	5.59	9.5	-0.06
97	SLU 55	267	12	2569	5.59	9.5	-0.06
97	SLU 56	267	12	2569	5.59	9.5	-0.06
97	SLU 57	267	12	2569	5.59	9.5	-0.06
97	SLU 58	267	12	2569	5.59	9.5	-0.06
97	SLU 59	267	12	2569	5.59	9.5	-0.06
97	SLU 60	295	13	2735	6.41	10.49	-0.06
97	SLU 61	295	13	2735	6.41	10.49	-0.06
97	SLU 62	295	13	2735	6.41	10.49	-0.06
97	SLU 63	295	13	2735	6.41	10.49	-0.06
97	SLU 64	241	11	2409	4.53	8.54	-0.05
97	SLU 65	241	11	2409	4.53	8.54	-0.05
97	SLU 66	241	11	2409	4.53	8.54	-0.05
97	SLU 67	241	11	2409	4.53	8.54	-0.05
97	SLU 68	241	11	2409	4.53	8.54	-0.05



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
97	SLU 69	241	11	2409	4.53	8.54	-0.05
97	SLU 70	241	11	2409	4.53	8.54	-0.05
97	SLU 71	241	11	2409	4.53	8.54	-0.05
97	SLU 72	241	11	2409	4.53	8.54	-0.05
97	SLU 73	305	13	2797	6.44	10.85	-0.06
97	SLU 74	305	13	2797	6.44	10.85	-0.06
97	SLU 75	305	13	2797	6.44	10.85	-0.06
97	SLU 76	305	13	2797	6.44	10.85	-0.06
97	SLU 77	305	13	2797	6.44	10.85	-0.06
97	SLU 78	305	13	2797	6.44	10.85	-0.06
97	SLU 79	305	13	2797	6.44	10.85	-0.06
97	SLU 80	305	13	2797	6.44	10.85	-0.06
97	SLU 81	333	14	2963	7.26	11.84	-0.07
97	SLU 82	333	14	2963	7.26	11.84	-0.07
97	SLU 83	333	14	2963	7.26	11.84	-0.07
97	SLU 84	333	14	2963	7.26	11.84	-0.07
97	SLE RA 1	177	8	1803	3.3	6.28	-0.04
97	SLE RA 2	177	8	1803	3.3	6.28	-0.04
97	SLE RA 3	177	8	1803	3.3	6.28	-0.04
97	SLE RA 4	177	8	1803	3.3	6.28	-0.04
97	SLE RA 5	177	8	1803	3.3	6.28	-0.04
97	SLE RA 6	177	8	1803	3.3	6.28	-0.04
97	SLE RA 7	177	8	1803	3.3	6.28	-0.04
97	SLE RA 8	177	8	1803	3.3	6.28	-0.04
97	SLE RA 9	177	8	1803	3.3	6.28	-0.04
97	SLE RA 10	220	10	2061	4.57	7.81	-0.05
97	SLE RA 11	220	10	2061	4.57	7.81	-0.05
97	SLE RA 12	220	10	2061	4.57	7.81	-0.05
97	SLE RA 13	220	10	2061	4.57	7.81	-0.05
97	SLE RA 14	220	10	2061	4.57	7.81	-0.05
97	SLE RA 15	220	10	2061	4.57	7.81	-0.05
97	SLE RA 16	220	10	2061	4.57	7.81	-0.05
97	SLE RA 17	220	10	2061	4.57	7.81	-0.05
97	SLE RA 18	238	10	2172	5.12	8.47	-0.05
97	SLE RA 19	238	10	2172	5.12	8.47	-0.05
97	SLE RA 20	238	10	2172	5.12	8.47	-0.05
97	SLE RA 21	238	10	2172	5.12	8.47	-0.05
97	SLE FR 1	177	8	1803	3.3	6.28	-0.04
97	SLE FR 2	177	8	1803	3.3	6.28	-0.04
97	SLE FR 3	177	8	1803	3.3	6.28	-0.04
97	SLE FR 4	195	9	1914	3.84	6.94	-0.04
97	SLE FR 5	195	9	1914	3.84	6.94	-0.04
97	SLE FR 6	208	9	1987	4.21	7.37	-0.04
97	SLE QP 1	177	8	1803	3.3	6.28	-0.04
97	SLE QP 2	195	9	1914	3.84	6.94	-0.04
97	SLD 1	656	29	2114	-22.22	25.09	-0.13
97	SLD 2	656	29	2114	-22.22	25.09	-0.13
97	SLD 3	511	6	2031	12.65	19.25	-0.04
97	SLD 4	511	6	2031	12.65	19.25	-0.04
97	SLD 5	553	49	2100	-56.87	21.24	-0.2
97	SLD 6	553	49	2100	-56.87	21.24	-0.2
97	SLD 7	70	-27	1822	59.38	1.77	0.09
97	SLD 8	70	-27	1822	59.38	1.77	0.09
97	SLD 9	321	44	2005	-51.69	12.11	-0.18
97	SLD 10	321	44	2005	-51.69	12.11	-0.18
97	SLD 11	-163	-32	1727	64.56	-7.37	0.12
97	SLD 12	-163	-32	1727	64.56	-7.37	0.12
97	SLD 13	-120	11	1796	-4.96	-5.37	-0.05
97	SLD 14	-120	11	1796	-4.96	-5.37	-0.05
97	SLD 15	-265	-12	1713	29.91	-11.22	0.04
97	SLD 16	-265	-12	1713	29.91	-11.22	0.04
97	SLV 1	1295	60	2400	-62.75	50.28	-0.25
97	SLV 2	1295	60	2400	-62.75	50.28	-0.25
97	SLV 3	914	2	2187	27.3	34.95	-0.03
97	SLV 4	914	2	2187	27.3	34.95	-0.03
97	SLV 5	1104	113	2382	-152.71	43.2	-0.45
97	SLV 6	1104	113	2382	-152.71	43.2	-0.45
97	SLV 7	-168	-82	1673	147.46	-7.92	0.31
97	SLV 8	-168	-82	1673	147.46	-7.92	0.31
97	SLV 9	559	99	2155	-139.77	21.79	-0.39
97	SLV 10	559	99	2155	-139.77	21.79	-0.39
97	SLV 11	-713	-96	1445	160.4	-29.33	0.37
97	SLV 12	-713	-96	1445	160.4	-29.33	0.37
97	SLV 13	-523	15	1641	-19.61	-21.08	-0.06
97	SLV 14	-523	15	1641	-19.61	-21.08	-0.06
97	SLV 15	-904	-43	1428	70.44	-36.41	0.17
97	SLV 16	-904	-43	1428	70.44	-36.41	0.17
98	SLU 1	164	8	1888	4.32	6.21	-0.03
98	SLU 2	164	8	1888	4.32	6.21	-0.03
98	SLU 3	164	8	1888	4.32	6.21	-0.03
98	SLU 4	164	8	1888	4.32	6.21	-0.03
98	SLU 5	164	8	1888	4.32	6.21	-0.03
98	SLU 6	164	8	1888	4.32	6.21	-0.03
98	SLU 7	164	8	1888	4.32	6.21	-0.03
98	SLU 8	164	8	1888	4.32	6.21	-0.03
98	SLU 9	164	8	1888	4.32	6.21	-0.03
98	SLU 10	223	11	2327	6.79	8.43	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
98	SLU 11	223	11	2327	6.79	8.43	-0.04
98	SLU 12	223	11	2327	6.79	8.43	-0.04
98	SLU 13	223	11	2327	6.79	8.43	-0.04
98	SLU 14	223	11	2327	6.79	8.43	-0.04
98	SLU 15	223	11	2327	6.79	8.43	-0.04
98	SLU 16	223	11	2327	6.79	8.43	-0.04
98	SLU 17	223	11	2327	6.79	8.43	-0.04
98	SLU 18	248	12	2515	7.85	9.38	-0.04
98	SLU 19	248	12	2515	7.85	9.38	-0.04
98	SLU 20	248	12	2515	7.85	9.38	-0.04
98	SLU 21	248	12	2515	7.85	9.38	-0.04
98	SLU 22	198	9	2146	5.39	7.5	-0.03
98	SLU 23	198	9	2146	5.39	7.5	-0.03
98	SLU 24	198	9	2146	5.39	7.5	-0.03
98	SLU 25	198	9	2146	5.39	7.5	-0.03
98	SLU 26	198	9	2146	5.39	7.5	-0.03
98	SLU 27	198	9	2146	5.39	7.5	-0.03
98	SLU 28	198	9	2146	5.39	7.5	-0.03
98	SLU 29	198	9	2146	5.39	7.5	-0.03
98	SLU 30	198	9	2146	5.39	7.5	-0.03
98	SLU 31	257	12	2585	7.85	9.71	-0.04
98	SLU 32	257	12	2585	7.85	9.71	-0.04
98	SLU 33	257	12	2585	7.85	9.71	-0.04
98	SLU 34	257	12	2585	7.85	9.71	-0.04
98	SLU 35	257	12	2585	7.85	9.71	-0.04
98	SLU 36	257	12	2585	7.85	9.71	-0.04
98	SLU 37	257	12	2585	7.85	9.71	-0.04
98	SLU 38	257	12	2585	7.85	9.71	-0.04
98	SLU 39	282	13	2773	8.91	10.66	-0.05
98	SLU 40	282	13	2773	8.91	10.66	-0.05
98	SLU 41	282	13	2773	8.91	10.66	-0.05
98	SLU 42	282	13	2773	8.91	10.66	-0.05
98	SLU 43	201	10	2365	5.26	7.63	-0.04
98	SLU 44	201	10	2365	5.26	7.63	-0.04
98	SLU 45	201	10	2365	5.26	7.63	-0.04
98	SLU 46	201	10	2365	5.26	7.63	-0.04
98	SLU 47	201	10	2365	5.26	7.63	-0.04
98	SLU 48	201	10	2365	5.26	7.63	-0.04
98	SLU 49	201	10	2365	5.26	7.63	-0.04
98	SLU 50	201	10	2365	5.26	7.63	-0.04
98	SLU 51	201	10	2365	5.26	7.63	-0.04
98	SLU 52	260	13	2804	7.72	9.85	-0.05
98	SLU 53	260	13	2804	7.72	9.85	-0.05
98	SLU 54	260	13	2804	7.72	9.85	-0.05
98	SLU 55	260	13	2804	7.72	9.85	-0.05
98	SLU 56	260	13	2804	7.72	9.85	-0.05
98	SLU 57	260	13	2804	7.72	9.85	-0.05
98	SLU 58	260	13	2804	7.72	9.85	-0.05
98	SLU 59	260	13	2804	7.72	9.85	-0.05
98	SLU 60	285	14	2993	8.78	10.8	-0.05
98	SLU 61	285	14	2993	8.78	10.8	-0.05
98	SLU 62	285	14	2993	8.78	10.8	-0.05
98	SLU 63	285	14	2993	8.78	10.8	-0.05
98	SLU 64	235	12	2624	6.32	8.92	-0.04
98	SLU 65	235	12	2624	6.32	8.92	-0.04
98	SLU 66	235	12	2624	6.32	8.92	-0.04
98	SLU 67	235	12	2624	6.32	8.92	-0.04
98	SLU 68	235	12	2624	6.32	8.92	-0.04
98	SLU 69	235	12	2624	6.32	8.92	-0.04
98	SLU 70	235	12	2624	6.32	8.92	-0.04
98	SLU 71	235	12	2624	6.32	8.92	-0.04
98	SLU 72	235	12	2624	6.32	8.92	-0.04
98	SLU 73	294	14	3063	8.78	11.14	-0.05
98	SLU 74	294	14	3063	8.78	11.14	-0.05
98	SLU 75	294	14	3063	8.78	11.14	-0.05
98	SLU 76	294	14	3063	8.78	11.14	-0.05
98	SLU 77	294	14	3063	8.78	11.14	-0.05
98	SLU 78	294	14	3063	8.78	11.14	-0.05
98	SLU 79	294	14	3063	8.78	11.14	-0.05
98	SLU 80	294	14	3063	8.78	11.14	-0.05
98	SLU 81	320	16	3251	9.84	12.09	-0.05
98	SLU 82	320	16	3251	9.84	12.09	-0.05
98	SLU 83	320	16	3251	9.84	12.09	-0.05
98	SLU 84	320	16	3251	9.84	12.09	-0.05
98	SLE RA 1	174	9	1962	4.63	6.58	-0.03
98	SLE RA 2	174	9	1962	4.63	6.58	-0.03
98	SLE RA 3	174	9	1962	4.63	6.58	-0.03
98	SLE RA 4	174	9	1962	4.63	6.58	-0.03
98	SLE RA 5	174	9	1962	4.63	6.58	-0.03
98	SLE RA 6	174	9	1962	4.63	6.58	-0.03
98	SLE RA 7	174	9	1962	4.63	6.58	-0.03
98	SLE RA 8	174	9	1962	4.63	6.58	-0.03
98	SLE RA 9	174	9	1962	4.63	6.58	-0.03
98	SLE RA 10	213	11	2254	6.27	8.06	-0.04
98	SLE RA 11	213	11	2254	6.27	8.06	-0.04
98	SLE RA 12	213	11	2254	6.27	8.06	-0.04
98	SLE RA 13	213	11	2254	6.27	8.06	-0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
98	SLE RA 14	213	11	2254	6.27	8.06	-0.04
98	SLE RA 15	213	11	2254	6.27	8.06	-0.04
98	SLE RA 16	213	11	2254	6.27	8.06	-0.04
98	SLE RA 17	213	11	2254	6.27	8.06	-0.04
98	SLE RA 18	230	11	2380	6.98	8.69	-0.04
98	SLE RA 19	230	11	2380	6.98	8.69	-0.04
98	SLE RA 20	230	11	2380	6.98	8.69	-0.04
98	SLE RA 21	230	11	2380	6.98	8.69	-0.04
98	SLE FR 1	174	9	1962	4.63	6.58	-0.03
98	SLE FR 2	174	9	1962	4.63	6.58	-0.03
98	SLE FR 3	174	9	1962	4.63	6.58	-0.03
98	SLE FR 4	190	9	2087	5.33	7.21	-0.03
98	SLE FR 5	190	9	2087	5.33	7.21	-0.03
98	SLE FR 6	202	10	2171	5.8	7.63	-0.03
98	SLE QP 1	174	9	1962	4.63	6.58	-0.03
98	SLE QP 2	190	9	2087	5.33	7.21	-0.03
98	SLD 1	592	31	2302	-22.51	22.32	-0.09
98	SLD 2	592	31	2302	-22.51	22.32	-0.09
98	SLD 3	492	5	2204	17.05	18.62	-0.02
98	SLD 4	492	5	2204	17.05	18.62	-0.02
98	SLD 5	464	55	2300	-63.02	17.35	-0.16
98	SLD 6	464	55	2300	-63.02	17.35	-0.16
98	SLD 7	128	-31	1973	68.85	5.03	0.08
98	SLD 8	128	-31	1973	68.85	5.03	0.08
98	SLD 9	253	50	2201	-58.19	9.39	-0.14
98	SLD 10	253	50	2201	-58.19	9.39	-0.14
98	SLD 11	-83	-37	1874	73.69	-2.92	0.09
98	SLD 12	-83	-37	1874	73.69	-2.92	0.09
98	SLD 13	-111	14	1970	-6.39	-4.2	-0.04
98	SLD 14	-111	14	1970	-6.39	-4.2	-0.04
98	SLD 15	-212	-12	1872	33.17	-7.89	0.03
98	SLD 16	-212	-12	1872	33.17	-7.89	0.03
98	SLV 1	1147	64	2609	-65.83	43.13	-0.19
98	SLV 2	1147	64	2609	-65.83	43.13	-0.19
98	SLV 3	881	-3	2353	36.38	33.39	-0.01
98	SLV 4	881	-3	2353	36.38	33.39	-0.01
98	SLV 5	880	127	2633	-171.04	32.75	-0.35
98	SLV 6	880	127	2633	-171.04	32.75	-0.35
98	SLV 7	-5	-96	1778	169.67	0.3	0.25
98	SLV 8	-5	-96	1778	169.67	0.3	0.25
98	SLV 9	386	114	2396	-159	14.12	-0.31
98	SLV 10	386	114	2396	-159	14.12	-0.31
98	SLV 11	-499	-108	1541	181.7	-18.33	0.28
98	SLV 12	-499	-108	1541	181.7	-18.33	0.28
98	SLV 13	-501	22	1821	-25.72	-18.97	-0.06
98	SLV 14	-501	22	1821	-25.72	-18.97	-0.06
98	SLV 15	-766	-45	1565	76.49	-28.71	0.12
98	SLV 16	-766	-45	1565	76.49	-28.71	0.12
99	SLU 1	101	8	2003	5.77	3.27	-0.02
99	SLU 2	101	8	2003	5.77	3.27	-0.02
99	SLU 3	101	8	2003	5.77	3.27	-0.02
99	SLU 4	101	8	2003	5.77	3.27	-0.02
99	SLU 5	101	8	2003	5.77	3.27	-0.02
99	SLU 6	101	8	2003	5.77	3.27	-0.02
99	SLU 7	101	8	2003	5.77	3.27	-0.02
99	SLU 8	101	8	2003	5.77	3.27	-0.02
99	SLU 9	101	8	2003	5.77	3.27	-0.02
99	SLU 10	138	10	2478	8.85	4.49	-0.03
99	SLU 11	138	10	2478	8.85	4.49	-0.03
99	SLU 12	138	10	2478	8.85	4.49	-0.03
99	SLU 13	138	10	2478	8.85	4.49	-0.03
99	SLU 14	138	10	2478	8.85	4.49	-0.03
99	SLU 15	138	10	2478	8.85	4.49	-0.03
99	SLU 16	138	10	2478	8.85	4.49	-0.03
99	SLU 17	138	10	2478	8.85	4.49	-0.03
99	SLU 18	154	11	2682	10.18	5.02	-0.03
99	SLU 19	154	11	2682	10.18	5.02	-0.03
99	SLU 20	154	11	2682	10.18	5.02	-0.03
99	SLU 21	154	11	2682	10.18	5.02	-0.03
99	SLU 22	122	9	2283	7.07	3.96	-0.02
99	SLU 23	122	9	2283	7.07	3.96	-0.02
99	SLU 24	122	9	2283	7.07	3.96	-0.02
99	SLU 25	122	9	2283	7.07	3.96	-0.02
99	SLU 26	122	9	2283	7.07	3.96	-0.02
99	SLU 27	122	9	2283	7.07	3.96	-0.02
99	SLU 28	122	9	2283	7.07	3.96	-0.02
99	SLU 29	122	9	2283	7.07	3.96	-0.02
99	SLU 30	122	9	2283	7.07	3.96	-0.02
99	SLU 31	159	11	2759	10.15	5.18	-0.03
99	SLU 32	159	11	2759	10.15	5.18	-0.03
99	SLU 33	159	11	2759	10.15	5.18	-0.03
99	SLU 34	159	11	2759	10.15	5.18	-0.03
99	SLU 35	159	11	2759	10.15	5.18	-0.03
99	SLU 36	159	11	2759	10.15	5.18	-0.03
99	SLU 37	159	11	2759	10.15	5.18	-0.03
99	SLU 38	159	11	2759	10.15	5.18	-0.03
99	SLU 39	175	12	2963	11.47	5.71	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
99	SLU 40	175	12	2963	11.47	5.71	-0.04
99	SLU 41	175	12	2963	11.47	5.71	-0.04
99	SLU 42	175	12	2963	11.47	5.71	-0.04
99	SLU 43	125	10	2507	7.06	4.01	-0.03
99	SLU 44	125	10	2507	7.06	4.01	-0.03
99	SLU 45	125	10	2507	7.06	4.01	-0.03
99	SLU 46	125	10	2507	7.06	4.01	-0.03
99	SLU 47	125	10	2507	7.06	4.01	-0.03
99	SLU 48	125	10	2507	7.06	4.01	-0.03
99	SLU 49	125	10	2507	7.06	4.01	-0.03
99	SLU 50	125	10	2507	7.06	4.01	-0.03
99	SLU 51	125	10	2507	7.06	4.01	-0.03
99	SLU 52	161	12	2983	10.14	5.23	-0.03
99	SLU 53	161	12	2983	10.14	5.23	-0.03
99	SLU 54	161	12	2983	10.14	5.23	-0.03
99	SLU 55	161	12	2983	10.14	5.23	-0.03
99	SLU 56	161	12	2983	10.14	5.23	-0.03
99	SLU 57	161	12	2983	10.14	5.23	-0.03
99	SLU 58	161	12	2983	10.14	5.23	-0.03
99	SLU 59	161	12	2983	10.14	5.23	-0.03
99	SLU 60	177	13	3187	11.46	5.76	-0.04
99	SLU 61	177	13	3187	11.46	5.76	-0.04
99	SLU 62	177	13	3187	11.46	5.76	-0.04
99	SLU 63	177	13	3187	11.46	5.76	-0.04
99	SLU 64	146	11	2788	8.36	4.7	-0.03
99	SLU 65	146	11	2788	8.36	4.7	-0.03
99	SLU 66	146	11	2788	8.36	4.7	-0.03
99	SLU 67	146	11	2788	8.36	4.7	-0.03
99	SLU 68	146	11	2788	8.36	4.7	-0.03
99	SLU 69	146	11	2788	8.36	4.7	-0.03
99	SLU 70	146	11	2788	8.36	4.7	-0.03
99	SLU 71	146	11	2788	8.36	4.7	-0.03
99	SLU 72	146	11	2788	8.36	4.7	-0.03
99	SLU 73	182	13	3263	11.44	5.93	-0.04
99	SLU 74	182	13	3263	11.44	5.93	-0.04
99	SLU 75	182	13	3263	11.44	5.93	-0.04
99	SLU 76	182	13	3263	11.44	5.93	-0.04
99	SLU 77	182	13	3263	11.44	5.93	-0.04
99	SLU 78	182	13	3263	11.44	5.93	-0.04
99	SLU 79	182	13	3263	11.44	5.93	-0.04
99	SLU 80	182	13	3263	11.44	5.93	-0.04
99	SLU 81	198	14	3467	12.76	6.45	-0.04
99	SLU 82	198	14	3467	12.76	6.45	-0.04
99	SLU 83	198	14	3467	12.76	6.45	-0.04
99	SLU 84	198	14	3467	12.76	6.45	-0.04
99	SLE RA 1	107	8	2083	6.14	3.46	-0.02
99	SLE RA 2	107	8	2083	6.14	3.46	-0.02
99	SLE RA 3	107	8	2083	6.14	3.46	-0.02
99	SLE RA 4	107	8	2083	6.14	3.46	-0.02
99	SLE RA 5	107	8	2083	6.14	3.46	-0.02
99	SLE RA 6	107	8	2083	6.14	3.46	-0.02
99	SLE RA 7	107	8	2083	6.14	3.46	-0.02
99	SLE RA 8	107	8	2083	6.14	3.46	-0.02
99	SLE RA 9	107	8	2083	6.14	3.46	-0.02
99	SLE RA 10	132	10	2400	8.2	4.28	-0.03
99	SLE RA 11	132	10	2400	8.2	4.28	-0.03
99	SLE RA 12	132	10	2400	8.2	4.28	-0.03
99	SLE RA 13	132	10	2400	8.2	4.28	-0.03
99	SLE RA 14	132	10	2400	8.2	4.28	-0.03
99	SLE RA 15	132	10	2400	8.2	4.28	-0.03
99	SLE RA 16	132	10	2400	8.2	4.28	-0.03
99	SLE RA 17	132	10	2400	8.2	4.28	-0.03
99	SLE RA 18	142	11	2536	9.08	4.63	-0.03
99	SLE RA 19	142	11	2536	9.08	4.63	-0.03
99	SLE RA 20	142	11	2536	9.08	4.63	-0.03
99	SLE RA 21	142	11	2536	9.08	4.63	-0.03
99	SLE FR 1	107	8	2083	6.14	3.46	-0.02
99	SLE FR 2	107	8	2083	6.14	3.46	-0.02
99	SLE FR 3	107	8	2083	6.14	3.46	-0.02
99	SLE FR 4	118	9	2219	7.02	3.81	-0.02
99	SLE FR 5	118	9	2219	7.02	3.81	-0.02
99	SLE FR 6	125	9	2309	7.61	4.05	-0.03
99	SLE QP 1	107	8	2083	6.14	3.46	-0.02
99	SLE QP 2	118	9	2219	7.02	3.81	-0.02
99	SLD 1	499	31	2415	-21.67	19.44	-0.07
99	SLD 2	499	31	2415	-21.67	19.44	-0.07
99	SLD 3	426	1	2288	21.97	16.34	-0.01
99	SLD 4	426	1	2288	21.97	16.34	-0.01
99	SLD 5	343	60	2470	-67.77	13.2	-0.13
99	SLD 6	343	60	2470	-67.77	13.2	-0.13
99	SLD 7	99	-38	2047	77.7	2.87	0.07
99	SLD 8	99	-38	2047	77.7	2.87	0.07
99	SLD 9	136	56	2390	-63.65	4.76	-0.12
99	SLD 10	136	56	2390	-63.65	4.76	-0.12
99	SLD 11	-107	-43	1967	81.82	-5.57	0.08
99	SLD 12	-107	-43	1967	81.82	-5.57	0.08
99	SLD 13	-190	16	2149	-7.93	-8.72	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
99	SLD 14	-190	16	2149	-7.93	-8.72	-0.04
99	SLD 15	-263	-13	2022	35.72	-11.81	0.02
99	SLD 16	-263	-13	2022	35.72	-11.81	0.02
99	SLV 1	1021	64	2701	-66.45	40.84	-0.15
99	SLV 2	1021	64	2701	-66.45	40.84	-0.15
99	SLV 3	829	-11	2371	46.36	32.73	0.01
99	SLV 4	829	-11	2371	46.36	32.73	0.01
99	SLV 5	680	141	2864	-186.1	27.23	-0.3
99	SLV 6	680	141	2864	-186.1	27.23	-0.3
99	SLV 7	40	-112	1764	189.91	0.18	0.23
99	SLV 8	40	-112	1764	189.91	0.18	0.23
99	SLV 9	196	130	2674	-175.86	7.44	-0.28
99	SLV 10	196	130	2674	-175.86	7.44	-0.28
99	SLV 11	-445	-123	1574	200.15	-19.6	0.25
99	SLV 12	-445	-123	1574	200.15	-19.6	0.25
99	SLV 13	-593	29	2067	-32.31	-25.1	-0.06
99	SLV 14	-593	29	2067	-32.31	-25.1	-0.06
99	SLV 15	-786	-47	1737	80.49	-33.21	0.1
99	SLV 16	-786	-47	1737	80.49	-33.21	0.1
100	SLU 1	51	7	2054	7.08	2.2	-0.02
100	SLU 2	51	7	2054	7.08	2.2	-0.02
100	SLU 3	51	7	2054	7.08	2.2	-0.02
100	SLU 4	51	7	2054	7.08	2.2	-0.02
100	SLU 5	51	7	2054	7.08	2.2	-0.02
100	SLU 6	51	7	2054	7.08	2.2	-0.02
100	SLU 7	51	7	2054	7.08	2.2	-0.02
100	SLU 8	51	7	2054	7.08	2.2	-0.02
100	SLU 9	51	7	2054	7.08	2.2	-0.02
100	SLU 10	69	9	2545	10.72	2.98	-0.02
100	SLU 11	69	9	2545	10.72	2.98	-0.02
100	SLU 12	69	9	2545	10.72	2.98	-0.02
100	SLU 13	69	9	2545	10.72	2.98	-0.02
100	SLU 14	69	9	2545	10.72	2.98	-0.02
100	SLU 15	69	9	2545	10.72	2.98	-0.02
100	SLU 16	69	9	2545	10.72	2.98	-0.02
100	SLU 17	69	9	2545	10.72	2.98	-0.02
100	SLU 18	77	10	2755	12.28	3.32	-0.02
100	SLU 19	77	10	2755	12.28	3.32	-0.02
100	SLU 20	77	10	2755	12.28	3.32	-0.02
100	SLU 21	77	10	2755	12.28	3.32	-0.02
100	SLU 22	61	8	2344	8.6	2.65	-0.02
100	SLU 23	61	8	2344	8.6	2.65	-0.02
100	SLU 24	61	8	2344	8.6	2.65	-0.02
100	SLU 25	61	8	2344	8.6	2.65	-0.02
100	SLU 26	61	8	2344	8.6	2.65	-0.02
100	SLU 27	61	8	2344	8.6	2.65	-0.02
100	SLU 28	61	8	2344	8.6	2.65	-0.02
100	SLU 29	61	8	2344	8.6	2.65	-0.02
100	SLU 30	61	8	2344	8.6	2.65	-0.02
100	SLU 31	80	10	2835	12.23	3.43	-0.02
100	SLU 32	80	10	2835	12.23	3.43	-0.02
100	SLU 33	80	10	2835	12.23	3.43	-0.02
100	SLU 34	80	10	2835	12.23	3.43	-0.02
100	SLU 35	80	10	2835	12.23	3.43	-0.02
100	SLU 36	80	10	2835	12.23	3.43	-0.02
100	SLU 37	80	10	2835	12.23	3.43	-0.02
100	SLU 38	80	10	2835	12.23	3.43	-0.02
100	SLU 39	87	11	3045	13.79	3.76	-0.03
100	SLU 40	87	11	3045	13.79	3.76	-0.03
100	SLU 41	87	11	3045	13.79	3.76	-0.03
100	SLU 42	87	11	3045	13.79	3.76	-0.03
100	SLU 43	62	8	2570	8.69	2.71	-0.02
100	SLU 44	62	8	2570	8.69	2.71	-0.02
100	SLU 45	62	8	2570	8.69	2.71	-0.02
100	SLU 46	62	8	2570	8.69	2.71	-0.02
100	SLU 47	62	8	2570	8.69	2.71	-0.02
100	SLU 48	62	8	2570	8.69	2.71	-0.02
100	SLU 49	62	8	2570	8.69	2.71	-0.02
100	SLU 50	62	8	2570	8.69	2.71	-0.02
100	SLU 51	62	8	2570	8.69	2.71	-0.02
100	SLU 52	81	10	3061	12.32	3.49	-0.03
100	SLU 53	81	10	3061	12.32	3.49	-0.03
100	SLU 54	81	10	3061	12.32	3.49	-0.03
100	SLU 55	81	10	3061	12.32	3.49	-0.03
100	SLU 56	81	10	3061	12.32	3.49	-0.03
100	SLU 57	81	10	3061	12.32	3.49	-0.03
100	SLU 58	81	10	3061	12.32	3.49	-0.03
100	SLU 59	81	10	3061	12.32	3.49	-0.03
100	SLU 60	89	11	3272	13.88	3.83	-0.03
100	SLU 61	89	11	3272	13.88	3.83	-0.03
100	SLU 62	89	11	3272	13.88	3.83	-0.03
100	SLU 63	89	11	3272	13.88	3.83	-0.03
100	SLU 64	73	9	2860	10.2	3.16	-0.02
100	SLU 65	73	9	2860	10.2	3.16	-0.02
100	SLU 66	73	9	2860	10.2	3.16	-0.02
100	SLU 67	73	9	2860	10.2	3.16	-0.02
100	SLU 68	73	9	2860	10.2	3.16	-0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
100	SLU 69	73	9	2860	10.2	3.16	-0.02
100	SLU 70	73	9	2860	10.2	3.16	-0.02
100	SLU 71	73	9	2860	10.2	3.16	-0.02
100	SLU 72	73	9	2860	10.2	3.16	-0.02
100	SLU 73	91	11	3351	13.84	3.94	-0.03
100	SLU 74	91	11	3351	13.84	3.94	-0.03
100	SLU 75	91	11	3351	13.84	3.94	-0.03
100	SLU 76	91	11	3351	13.84	3.94	-0.03
100	SLU 77	91	11	3351	13.84	3.94	-0.03
100	SLU 78	91	11	3351	13.84	3.94	-0.03
100	SLU 79	91	11	3351	13.84	3.94	-0.03
100	SLU 80	91	11	3351	13.84	3.94	-0.03
100	SLU 81	99	12	3562	15.4	4.27	-0.03
100	SLU 82	99	12	3562	15.4	4.27	-0.03
100	SLU 83	99	12	3562	15.4	4.27	-0.03
100	SLU 84	99	12	3562	15.4	4.27	-0.03
100	SLE RA 1	54	7	2136	7.51	2.33	-0.02
100	SLE RA 2	54	7	2136	7.51	2.33	-0.02
100	SLE RA 3	54	7	2136	7.51	2.33	-0.02
100	SLE RA 4	54	7	2136	7.51	2.33	-0.02
100	SLE RA 5	54	7	2136	7.51	2.33	-0.02
100	SLE RA 6	54	7	2136	7.51	2.33	-0.02
100	SLE RA 7	54	7	2136	7.51	2.33	-0.02
100	SLE RA 8	54	7	2136	7.51	2.33	-0.02
100	SLE RA 9	54	7	2136	7.51	2.33	-0.02
100	SLE RA 10	66	8	2464	9.94	2.85	-0.02
100	SLE RA 11	66	8	2464	9.94	2.85	-0.02
100	SLE RA 12	66	8	2464	9.94	2.85	-0.02
100	SLE RA 13	66	8	2464	9.94	2.85	-0.02
100	SLE RA 14	66	8	2464	9.94	2.85	-0.02
100	SLE RA 15	66	8	2464	9.94	2.85	-0.02
100	SLE RA 16	66	8	2464	9.94	2.85	-0.02
100	SLE RA 17	66	8	2464	9.94	2.85	-0.02
100	SLE RA 18	71	9	2604	10.98	3.07	-0.02
100	SLE RA 19	71	9	2604	10.98	3.07	-0.02
100	SLE RA 20	71	9	2604	10.98	3.07	-0.02
100	SLE RA 21	71	9	2604	10.98	3.07	-0.02
100	SLE FR 1	54	7	2136	7.51	2.33	-0.02
100	SLE FR 2	54	7	2136	7.51	2.33	-0.02
100	SLE FR 3	54	7	2136	7.51	2.33	-0.02
100	SLE FR 4	59	8	2277	8.55	2.55	-0.02
100	SLE FR 5	59	8	2277	8.55	2.55	-0.02
100	SLE FR 6	63	8	2370	9.25	2.7	-0.02
100	SLE QP 1	54	7	2136	7.51	2.33	-0.02
100	SLE QP 2	59	8	2277	8.55	2.55	-0.02
100	SLD 1	422	29	2441	-20.1	17.18	-0.06
100	SLD 2	422	29	2441	-20.1	17.18	-0.06
100	SLD 3	372	-3	2286	26.65	15.15	0
100	SLD 4	372	-3	2286	26.65	15.15	0
100	SLD 5	244	63	2562	-70.94	10.02	-0.13
100	SLD 6	244	63	2562	-70.94	10.02	-0.13
100	SLD 7	76	-45	2043	84.88	3.26	0.08
100	SLD 8	76	-45	2043	84.88	3.26	0.08
100	SLD 9	42	60	2510	-67.77	1.85	-0.12
100	SLD 10	42	60	2510	-67.77	1.85	-0.12
100	SLD 11	-126	-48	1991	88.05	-4.91	0.09
100	SLD 12	-126	-48	1991	88.05	-4.91	0.09
100	SLD 13	-254	18	2268	-9.54	-10.04	-0.04
100	SLD 14	-254	18	2268	-9.54	-10.04	-0.04
100	SLD 15	-304	-14	2112	37.21	-12.07	0.03
100	SLD 16	-304	-14	2112	37.21	-12.07	0.03
100	SLV 1	916	63	2686	-64.98	37.07	-0.13
100	SLV 2	916	63	2686	-64.98	37.07	-0.13
100	SLV 3	785	-21	2284	55.89	31.79	0.03
100	SLV 4	785	-21	2284	55.89	31.79	0.03
100	SLV 5	515	150	3009	-196.82	20.92	-0.3
100	SLV 6	515	150	3009	-196.82	20.92	-0.3
100	SLV 7	78	-127	1670	206.07	3.31	0.24
100	SLV 8	78	-127	1670	206.07	3.31	0.24
100	SLV 9	40	142	2884	-188.96	1.8	-0.28
100	SLV 10	40	142	2884	-188.96	1.8	-0.28
100	SLV 11	-397	-135	1545	213.93	-15.81	0.26
100	SLV 12	-397	-135	1545	213.93	-15.81	0.26
100	SLV 13	-667	36	2270	-38.78	-26.68	-0.07
100	SLV 14	-667	36	2270	-38.78	-26.68	-0.07
100	SLV 15	-798	-47	1868	82.08	-31.97	0.09
100	SLV 16	-798	-47	1868	82.08	-31.97	0.09
101	SLU 1	5	6	2063	7.91	-0.03	-0.02
101	SLU 2	5	6	2063	7.91	-0.03	-0.02
101	SLU 3	5	6	2063	7.91	-0.03	-0.02
101	SLU 4	5	6	2063	7.91	-0.03	-0.02
101	SLU 5	5	6	2063	7.91	-0.03	-0.02
101	SLU 6	5	6	2063	7.91	-0.03	-0.02
101	SLU 7	5	6	2063	7.91	-0.03	-0.02
101	SLU 8	5	6	2063	7.91	-0.03	-0.02
101	SLU 9	5	6	2063	7.91	-0.03	-0.02
101	SLU 10	7	8	2557	11.9	-0.01	-0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
101	SLU 11	7	8	2557	11.9	-0.01	-0.02
101	SLU 12	7	8	2557	11.9	-0.01	-0.02
101	SLU 13	7	8	2557	11.9	-0.01	-0.02
101	SLU 14	7	8	2557	11.9	-0.01	-0.02
101	SLU 15	7	8	2557	11.9	-0.01	-0.02
101	SLU 16	7	8	2557	11.9	-0.01	-0.02
101	SLU 17	7	8	2557	11.9	-0.01	-0.02
101	SLU 18	8	9	2768	13.61	0	-0.02
101	SLU 19	8	9	2768	13.61	0	-0.02
101	SLU 20	8	9	2768	13.61	0	-0.02
101	SLU 21	8	9	2768	13.61	0	-0.02
101	SLU 22	6	7	2355	9.56	-0.02	-0.02
101	SLU 23	6	7	2355	9.56	-0.02	-0.02
101	SLU 24	6	7	2355	9.56	-0.02	-0.02
101	SLU 25	6	7	2355	9.56	-0.02	-0.02
101	SLU 26	6	7	2355	9.56	-0.02	-0.02
101	SLU 27	6	7	2355	9.56	-0.02	-0.02
101	SLU 28	6	7	2355	9.56	-0.02	-0.02
101	SLU 29	6	7	2355	9.56	-0.02	-0.02
101	SLU 30	6	7	2355	9.56	-0.02	-0.02
101	SLU 31	8	9	2849	13.55	0.01	-0.02
101	SLU 32	8	9	2849	13.55	0.01	-0.02
101	SLU 33	8	9	2849	13.55	0.01	-0.02
101	SLU 34	8	9	2849	13.55	0.01	-0.02
101	SLU 35	8	9	2849	13.55	0.01	-0.02
101	SLU 36	8	9	2849	13.55	0.01	-0.02
101	SLU 37	8	9	2849	13.55	0.01	-0.02
101	SLU 38	8	9	2849	13.55	0.01	-0.02
101	SLU 39	9	9	3060	15.26	0.02	-0.02
101	SLU 40	9	9	3060	15.26	0.02	-0.02
101	SLU 41	9	9	3060	15.26	0.02	-0.02
101	SLU 42	9	9	3060	15.26	0.02	-0.02
101	SLU 43	6	7	2582	9.72	-0.05	-0.02
101	SLU 44	6	7	2582	9.72	-0.05	-0.02
101	SLU 45	6	7	2582	9.72	-0.05	-0.02
101	SLU 46	6	7	2582	9.72	-0.05	-0.02
101	SLU 47	6	7	2582	9.72	-0.05	-0.02
101	SLU 48	6	7	2582	9.72	-0.05	-0.02
101	SLU 49	6	7	2582	9.72	-0.05	-0.02
101	SLU 50	6	7	2582	9.72	-0.05	-0.02
101	SLU 51	6	7	2582	9.72	-0.05	-0.02
101	SLU 52	8	9	3076	13.71	-0.02	-0.02
101	SLU 53	8	9	3076	13.71	-0.02	-0.02
101	SLU 54	8	9	3076	13.71	-0.02	-0.02
101	SLU 55	8	9	3076	13.71	-0.02	-0.02
101	SLU 56	8	9	3076	13.71	-0.02	-0.02
101	SLU 57	8	9	3076	13.71	-0.02	-0.02
101	SLU 58	8	9	3076	13.71	-0.02	-0.02
101	SLU 59	8	9	3076	13.71	-0.02	-0.02
101	SLU 60	9	10	3287	15.42	-0.01	-0.03
101	SLU 61	9	10	3287	15.42	-0.01	-0.03
101	SLU 62	9	10	3287	15.42	-0.01	-0.03
101	SLU 63	9	10	3287	15.42	-0.01	-0.03
101	SLU 64	7	8	2874	11.37	-0.03	-0.02
101	SLU 65	7	8	2874	11.37	-0.03	-0.02
101	SLU 66	7	8	2874	11.37	-0.03	-0.02
101	SLU 67	7	8	2874	11.37	-0.03	-0.02
101	SLU 68	7	8	2874	11.37	-0.03	-0.02
101	SLU 69	7	8	2874	11.37	-0.03	-0.02
101	SLU 70	7	8	2874	11.37	-0.03	-0.02
101	SLU 71	7	8	2874	11.37	-0.03	-0.02
101	SLU 72	7	8	2874	11.37	-0.03	-0.02
101	SLU 73	9	10	3367	15.36	-0.01	-0.03
101	SLU 74	9	10	3367	15.36	-0.01	-0.03
101	SLU 75	9	10	3367	15.36	-0.01	-0.03
101	SLU 76	9	10	3367	15.36	-0.01	-0.03
101	SLU 77	9	10	3367	15.36	-0.01	-0.03
101	SLU 78	9	10	3367	15.36	-0.01	-0.03
101	SLU 79	9	10	3367	15.36	-0.01	-0.03
101	SLU 80	9	10	3367	15.36	-0.01	-0.03
101	SLU 81	10	11	3579	17.07	0	-0.03
101	SLU 82	10	11	3579	17.07	0	-0.03
101	SLU 83	10	11	3579	17.07	0	-0.03
101	SLU 84	10	11	3579	17.07	0	-0.03
101	SLE RA 1	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 2	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 3	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 4	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 5	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 6	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 7	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 8	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 9	5	6	2147	8.38	-0.03	-0.02
101	SLE RA 10	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 11	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 12	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 13	7	7	2476	11.04	-0.01	-0.02



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
101	SLE RA 14	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 15	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 16	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 17	7	7	2476	11.04	-0.01	-0.02
101	SLE RA 18	7	8	2617	12.18	-0.01	-0.02
101	SLE RA 19	7	8	2617	12.18	-0.01	-0.02
101	SLE RA 20	7	8	2617	12.18	-0.01	-0.02
101	SLE RA 21	7	8	2617	12.18	-0.01	-0.02
101	SLE FR 1	5	6	2147	8.38	-0.03	-0.02
101	SLE FR 2	5	6	2147	8.38	-0.03	-0.02
101	SLE FR 3	5	6	2147	8.38	-0.03	-0.02
101	SLE FR 4	6	7	2288	9.52	-0.02	-0.02
101	SLE FR 5	6	7	2288	9.52	-0.02	-0.02
101	SLE FR 6	6	7	2382	10.28	-0.02	-0.02
101	SLE QP 1	5	6	2147	8.38	-0.03	-0.02
101	SLE QP 2	6	7	2288	9.52	-0.02	-0.02
101	SLD 1	367	27	2331	-18.56	14.84	-0.06
101	SLD 2	367	27	2331	-18.56	14.84	-0.06
101	SLD 3	331	-7	2156	30.04	13.33	0.01
101	SLD 4	331	-7	2156	30.04	13.33	0.01
101	SLD 5	169	64	2566	-72.61	6.72	-0.14
101	SLD 6	169	64	2566	-72.61	6.72	-0.14
101	SLD 7	48	-49	1983	89.38	1.7	0.1
101	SLD 8	48	-49	1983	89.38	1.7	0.1
101	SLD 9	-36	62	2592	-70.34	-1.74	-0.14
101	SLD 10	-36	62	2592	-70.34	-1.74	-0.14
101	SLD 11	-158	-51	2010	91.66	-6.77	0.11
101	SLD 12	-158	-51	2010	91.66	-6.77	0.11
101	SLD 13	-319	20	2419	-10.99	-13.37	-0.04
101	SLD 14	-319	20	2419	-10.99	-13.37	-0.04
101	SLD 15	-355	-14	2244	37.61	-14.88	0.03
101	SLD 16	-355	-14	2244	37.61	-14.88	0.03
101	SLV 1	856	59	2405	-62.65	34.94	-0.14
101	SLV 2	856	59	2405	-62.65	34.94	-0.14
101	SLV 3	762	-28	1956	63.02	31.08	0.05
101	SLV 4	762	-28	1956	63.02	31.08	0.05
101	SLV 5	403	155	3005	-202.73	16.32	-0.34
101	SLV 6	403	155	3005	-202.73	16.32	-0.34
101	SLV 7	91	-136	1507	216.17	3.46	0.29
101	SLV 8	91	-136	1507	216.17	3.46	0.29
101	SLV 9	-79	150	3069	-197.13	-3.5	-0.33
101	SLV 10	-79	150	3069	-197.13	-3.5	-0.33
101	SLV 11	-391	-142	1571	221.78	-16.36	0.31
101	SLV 12	-391	-142	1571	221.78	-16.36	0.31
101	SLV 13	-750	41	2619	-43.97	-31.13	-0.09
101	SLV 14	-750	41	2619	-43.97	-31.13	-0.09
101	SLV 15	-844	-46	2170	81.7	-34.98	0.1
101	SLV 16	-844	-46	2170	81.7	-34.98	0.1
102	SLU 1	-26	6	2053	8.1	-0.7	-0.02
102	SLU 2	-26	6	2053	8.1	-0.7	-0.02
102	SLU 3	-26	6	2053	8.1	-0.7	-0.02
102	SLU 4	-26	6	2053	8.1	-0.7	-0.02
102	SLU 5	-26	6	2053	8.1	-0.7	-0.02
102	SLU 6	-26	6	2053	8.1	-0.7	-0.02
102	SLU 7	-26	6	2053	8.1	-0.7	-0.02
102	SLU 8	-26	6	2053	8.1	-0.7	-0.02
102	SLU 9	-26	6	2053	8.1	-0.7	-0.02
102	SLU 10	-36	8	2542	12.18	-0.97	-0.02
102	SLU 11	-36	8	2542	12.18	-0.97	-0.02
102	SLU 12	-36	8	2542	12.18	-0.97	-0.02
102	SLU 13	-36	8	2542	12.18	-0.97	-0.02
102	SLU 14	-36	8	2542	12.18	-0.97	-0.02
102	SLU 15	-36	8	2542	12.18	-0.97	-0.02
102	SLU 16	-36	8	2542	12.18	-0.97	-0.02
102	SLU 17	-36	8	2542	12.18	-0.97	-0.02
102	SLU 18	-40	8	2752	13.92	-1.08	-0.03
102	SLU 19	-40	8	2752	13.92	-1.08	-0.03
102	SLU 20	-40	8	2752	13.92	-1.08	-0.03
102	SLU 21	-40	8	2752	13.92	-1.08	-0.03
102	SLU 22	-31	7	2343	9.79	-0.83	-0.02
102	SLU 23	-31	7	2343	9.79	-0.83	-0.02
102	SLU 24	-31	7	2343	9.79	-0.83	-0.02
102	SLU 25	-31	7	2343	9.79	-0.83	-0.02
102	SLU 26	-31	7	2343	9.79	-0.83	-0.02
102	SLU 27	-31	7	2343	9.79	-0.83	-0.02
102	SLU 28	-31	7	2343	9.79	-0.83	-0.02
102	SLU 29	-31	7	2343	9.79	-0.83	-0.02
102	SLU 30	-31	7	2343	9.79	-0.83	-0.02
102	SLU 31	-40	8	2832	13.86	-1.1	-0.03
102	SLU 32	-40	8	2832	13.86	-1.1	-0.03
102	SLU 33	-40	8	2832	13.86	-1.1	-0.03
102	SLU 34	-40	8	2832	13.86	-1.1	-0.03
102	SLU 35	-40	8	2832	13.86	-1.1	-0.03
102	SLU 36	-40	8	2832	13.86	-1.1	-0.03
102	SLU 37	-40	8	2832	13.86	-1.1	-0.03
102	SLU 38	-40	8	2832	13.86	-1.1	-0.03
102	SLU 39	-44	9	3042	15.61	-1.22	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
102	SLU 40	-44	9	3042	15.61	-1.22	-0.03
102	SLU 41	-44	9	3042	15.61	-1.22	-0.03
102	SLU 42	-44	9	3042	15.61	-1.22	-0.03
102	SLU 43	-32	7	2569	9.95	-0.87	-0.02
102	SLU 44	-32	7	2569	9.95	-0.87	-0.02
102	SLU 45	-32	7	2569	9.95	-0.87	-0.02
102	SLU 46	-32	7	2569	9.95	-0.87	-0.02
102	SLU 47	-32	7	2569	9.95	-0.87	-0.02
102	SLU 48	-32	7	2569	9.95	-0.87	-0.02
102	SLU 49	-32	7	2569	9.95	-0.87	-0.02
102	SLU 50	-32	7	2569	9.95	-0.87	-0.02
102	SLU 51	-32	7	2569	9.95	-0.87	-0.02
102	SLU 52	-42	9	3058	14.03	-1.14	-0.03
102	SLU 53	-42	9	3058	14.03	-1.14	-0.03
102	SLU 54	-42	9	3058	14.03	-1.14	-0.03
102	SLU 55	-42	9	3058	14.03	-1.14	-0.03
102	SLU 56	-42	9	3058	14.03	-1.14	-0.03
102	SLU 57	-42	9	3058	14.03	-1.14	-0.03
102	SLU 58	-42	9	3058	14.03	-1.14	-0.03
102	SLU 59	-42	9	3058	14.03	-1.14	-0.03
102	SLU 60	-46	10	3268	15.78	-1.25	-0.03
102	SLU 61	-46	10	3268	15.78	-1.25	-0.03
102	SLU 62	-46	10	3268	15.78	-1.25	-0.03
102	SLU 63	-46	10	3268	15.78	-1.25	-0.03
102	SLU 64	-37	8	2859	11.64	-1	-0.02
102	SLU 65	-37	8	2859	11.64	-1	-0.02
102	SLU 66	-37	8	2859	11.64	-1	-0.02
102	SLU 67	-37	8	2859	11.64	-1	-0.02
102	SLU 68	-37	8	2859	11.64	-1	-0.02
102	SLU 69	-37	8	2859	11.64	-1	-0.02
102	SLU 70	-37	8	2859	11.64	-1	-0.02
102	SLU 71	-37	8	2859	11.64	-1	-0.02
102	SLU 72	-37	8	2859	11.64	-1	-0.02
102	SLU 73	-47	10	3349	15.72	-1.27	-0.03
102	SLU 74	-47	10	3349	15.72	-1.27	-0.03
102	SLU 75	-47	10	3349	15.72	-1.27	-0.03
102	SLU 76	-47	10	3349	15.72	-1.27	-0.03
102	SLU 77	-47	10	3349	15.72	-1.27	-0.03
102	SLU 78	-47	10	3349	15.72	-1.27	-0.03
102	SLU 79	-47	10	3349	15.72	-1.27	-0.03
102	SLU 80	-47	10	3349	15.72	-1.27	-0.03
102	SLU 81	-51	11	3558	17.46	-1.38	-0.03
102	SLU 82	-51	11	3558	17.46	-1.38	-0.03
102	SLU 83	-51	11	3558	17.46	-1.38	-0.03
102	SLU 84	-51	11	3558	17.46	-1.38	-0.03
102	SLE RA 1	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 2	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 3	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 4	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 5	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 6	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 7	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 8	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 9	-28	6	2136	8.58	-0.74	-0.02
102	SLE RA 10	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 11	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 12	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 13	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 14	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 15	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 16	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 17	-34	7	2462	11.3	-0.92	-0.02
102	SLE RA 18	-36	8	2602	12.46	-0.99	-0.02
102	SLE RA 19	-36	8	2602	12.46	-0.99	-0.02
102	SLE RA 20	-36	8	2602	12.46	-0.99	-0.02
102	SLE RA 21	-36	8	2602	12.46	-0.99	-0.02
102	SLE FR 1	-28	6	2136	8.58	-0.74	-0.02
102	SLE FR 2	-28	6	2136	8.58	-0.74	-0.02
102	SLE FR 3	-28	6	2136	8.58	-0.74	-0.02
102	SLE FR 4	-30	7	2276	9.75	-0.82	-0.02
102	SLE FR 5	-30	7	2276	9.75	-0.82	-0.02
102	SLE FR 6	-32	7	2369	10.52	-0.87	-0.02
102	SLE QP 1	-28	6	2136	8.58	-0.74	-0.02
102	SLE QP 2	-30	7	2276	9.75	-0.82	-0.02
102	SLD 1	322	21	2315	-11.26	13.68	-0.06
102	SLD 2	322	21	2315	-11.26	13.68	-0.06
102	SLD 3	297	-14	2140	37.83	12.71	0.04
102	SLD 4	297	-14	2140	37.83	12.71	0.04
102	SLD 5	114	63	2553	-71.01	5.01	-0.19
102	SLD 6	114	63	2553	-71.01	5.01	-0.19
102	SLD 7	30	-51	1969	92.63	1.76	0.15
102	SLD 8	30	-51	1969	92.63	1.76	0.15
102	SLD 9	-90	65	2582	-73.13	-3.39	-0.19
102	SLD 10	-90	65	2582	-73.13	-3.39	-0.19
102	SLD 11	-174	-50	1998	90.5	-6.65	0.15
102	SLD 12	-174	-50	1998	90.5	-6.65	0.15
102	SLD 13	-358	27	2411	-18.34	-14.34	-0.08



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
102	SLD 14	-358	27	2411	-18.34	-14.34	-0.08
102	SLD 15	-383	-7	2236	30.75	-15.32	0.02
102	SLD 16	-383	-7	2236	30.75	-15.32	0.02
102	SLV 1	797	43	2388	-45.16	33.19	-0.13
102	SLV 2	797	43	2388	-45.16	33.19	-0.13
102	SLV 3	735	-45	1937	81.78	30.8	0.13
102	SLV 4	735	-45	1937	81.78	30.8	0.13
102	SLV 5	312	151	2994	-199.25	13.01	-0.45
102	SLV 6	312	151	2994	-199.25	13.01	-0.45
102	SLV 7	105	-142	1489	223.88	5.05	0.42
102	SLV 8	105	-142	1489	223.88	5.05	0.42
102	SLV 9	-166	156	3062	-204.39	-6.68	-0.46
102	SLV 10	-166	156	3062	-204.39	-6.68	-0.46
102	SLV 11	-373	-138	1557	218.75	-14.64	0.41
102	SLV 12	-373	-138	1557	218.75	-14.64	0.41
102	SLV 13	-796	58	2614	-62.28	-32.44	-0.17
102	SLV 14	-796	58	2614	-62.28	-32.44	-0.17
102	SLV 15	-858	-30	2163	64.66	-34.83	0.09
102	SLV 16	-858	-30	2163	64.66	-34.83	0.09
103	SLU 1	-88	6	2006	7.7	-3.45	-0.03
103	SLU 2	-88	6	2006	7.7	-3.45	-0.03
103	SLU 3	-88	6	2006	7.7	-3.45	-0.03
103	SLU 4	-88	6	2006	7.7	-3.45	-0.03
103	SLU 5	-88	6	2006	7.7	-3.45	-0.03
103	SLU 6	-88	6	2006	7.7	-3.45	-0.03
103	SLU 7	-88	6	2006	7.7	-3.45	-0.03
103	SLU 8	-88	6	2006	7.7	-3.45	-0.03
103	SLU 9	-88	6	2006	7.7	-3.45	-0.03
103	SLU 10	-118	8	2480	11.62	-4.63	-0.03
103	SLU 11	-118	8	2480	11.62	-4.63	-0.03
103	SLU 12	-118	8	2480	11.62	-4.63	-0.03
103	SLU 13	-118	8	2480	11.62	-4.63	-0.03
103	SLU 14	-118	8	2480	11.62	-4.63	-0.03
103	SLU 15	-118	8	2480	11.62	-4.63	-0.03
103	SLU 16	-118	8	2480	11.62	-4.63	-0.03
103	SLU 17	-118	8	2480	11.62	-4.63	-0.03
103	SLU 18	-131	9	2683	13.3	-5.14	-0.04
103	SLU 19	-131	9	2683	13.3	-5.14	-0.04
103	SLU 20	-131	9	2683	13.3	-5.14	-0.04
103	SLU 21	-131	9	2683	13.3	-5.14	-0.04
103	SLU 22	-104	7	2288	9.33	-4.11	-0.03
103	SLU 23	-104	7	2288	9.33	-4.11	-0.03
103	SLU 24	-104	7	2288	9.33	-4.11	-0.03
103	SLU 25	-104	7	2288	9.33	-4.11	-0.03
103	SLU 26	-104	7	2288	9.33	-4.11	-0.03
103	SLU 27	-104	7	2288	9.33	-4.11	-0.03
103	SLU 28	-104	7	2288	9.33	-4.11	-0.03
103	SLU 29	-104	7	2288	9.33	-4.11	-0.03
103	SLU 30	-104	7	2288	9.33	-4.11	-0.03
103	SLU 31	-135	9	2762	13.24	-5.3	-0.04
103	SLU 32	-135	9	2762	13.24	-5.3	-0.04
103	SLU 33	-135	9	2762	13.24	-5.3	-0.04
103	SLU 34	-135	9	2762	13.24	-5.3	-0.04
103	SLU 35	-135	9	2762	13.24	-5.3	-0.04
103	SLU 36	-135	9	2762	13.24	-5.3	-0.04
103	SLU 37	-135	9	2762	13.24	-5.3	-0.04
103	SLU 38	-135	9	2762	13.24	-5.3	-0.04
103	SLU 39	-148	10	2965	14.92	-5.8	-0.04
103	SLU 40	-148	10	2965	14.92	-5.8	-0.04
103	SLU 41	-148	10	2965	14.92	-5.8	-0.04
103	SLU 42	-148	10	2965	14.92	-5.8	-0.04
103	SLU 43	-108	8	2511	9.45	-4.26	-0.03
103	SLU 44	-108	8	2511	9.45	-4.26	-0.03
103	SLU 45	-108	8	2511	9.45	-4.26	-0.03
103	SLU 46	-108	8	2511	9.45	-4.26	-0.03
103	SLU 47	-108	8	2511	9.45	-4.26	-0.03
103	SLU 48	-108	8	2511	9.45	-4.26	-0.03
103	SLU 49	-108	8	2511	9.45	-4.26	-0.03
103	SLU 50	-108	8	2511	9.45	-4.26	-0.03
103	SLU 51	-108	8	2511	9.45	-4.26	-0.03
103	SLU 52	-138	10	2985	13.37	-5.44	-0.04
103	SLU 53	-138	10	2985	13.37	-5.44	-0.04
103	SLU 54	-138	10	2985	13.37	-5.44	-0.04
103	SLU 55	-138	10	2985	13.37	-5.44	-0.04
103	SLU 56	-138	10	2985	13.37	-5.44	-0.04
103	SLU 57	-138	10	2985	13.37	-5.44	-0.04
103	SLU 58	-138	10	2985	13.37	-5.44	-0.04
103	SLU 59	-138	10	2985	13.37	-5.44	-0.04
103	SLU 60	-151	11	3188	15.05	-5.95	-0.04
103	SLU 61	-151	11	3188	15.05	-5.95	-0.04
103	SLU 62	-151	11	3188	15.05	-5.95	-0.04
103	SLU 63	-151	11	3188	15.05	-5.95	-0.04
103	SLU 64	-125	9	2793	11.08	-4.92	-0.04
103	SLU 65	-125	9	2793	11.08	-4.92	-0.04
103	SLU 66	-125	9	2793	11.08	-4.92	-0.04
103	SLU 67	-125	9	2793	11.08	-4.92	-0.04
103	SLU 68	-125	9	2793	11.08	-4.92	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
103	SLU 69	-125	9	2793	11.08	-4.92	-0.04
103	SLU 70	-125	9	2793	11.08	-4.92	-0.04
103	SLU 71	-125	9	2793	11.08	-4.92	-0.04
103	SLU 72	-125	9	2793	11.08	-4.92	-0.04
103	SLU 73	-155	11	3267	15	-6.1	-0.04
103	SLU 74	-155	11	3267	15	-6.1	-0.04
103	SLU 75	-155	11	3267	15	-6.1	-0.04
103	SLU 76	-155	11	3267	15	-6.1	-0.04
103	SLU 77	-155	11	3267	15	-6.1	-0.04
103	SLU 78	-155	11	3267	15	-6.1	-0.04
103	SLU 79	-155	11	3267	15	-6.1	-0.04
103	SLU 80	-155	11	3267	15	-6.1	-0.04
103	SLU 81	-168	12	3470	16.68	-6.61	-0.05
103	SLU 82	-168	12	3470	16.68	-6.61	-0.05
103	SLU 83	-168	12	3470	16.68	-6.61	-0.05
103	SLU 84	-168	12	3470	16.68	-6.61	-0.05
103	SLE RA 1	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 2	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 3	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 4	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 5	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 6	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 7	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 8	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 9	-92	7	2086	8.17	-3.64	-0.03
103	SLE RA 10	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 11	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 12	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 13	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 14	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 15	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 16	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 17	-113	8	2402	10.78	-4.43	-0.03
103	SLE RA 18	-121	8	2538	11.9	-4.77	-0.03
103	SLE RA 19	-121	8	2538	11.9	-4.77	-0.03
103	SLE RA 20	-121	8	2538	11.9	-4.77	-0.03
103	SLE RA 21	-121	8	2538	11.9	-4.77	-0.03
103	SLE FR 1	-92	7	2086	8.17	-3.64	-0.03
103	SLE FR 2	-92	7	2086	8.17	-3.64	-0.03
103	SLE FR 3	-92	7	2086	8.17	-3.64	-0.03
103	SLE FR 4	-101	7	2222	9.28	-3.98	-0.03
103	SLE FR 5	-101	7	2222	9.28	-3.98	-0.03
103	SLE FR 6	-107	7	2312	10.03	-4.2	-0.03
103	SLE QP 1	-92	7	2086	8.17	-3.64	-0.03
103	SLE QP 2	-101	7	2222	9.28	-3.98	-0.03
103	SLD 1	225	19	2202	-9.87	9.13	-0.08
103	SLD 2	225	19	2202	-9.87	9.13	-0.08
103	SLD 3	246	-14	2042	38.38	9.99	0.06
103	SLD 4	246	-14	2042	38.38	9.99	0.06
103	SLD 5	-36	61	2457	-69.64	-1.35	-0.26
103	SLD 6	-36	61	2457	-69.64	-1.35	-0.26
103	SLD 7	35	-50	1926	91.19	1.51	0.21
103	SLD 8	35	-50	1926	91.19	1.51	0.21
103	SLD 9	-237	64	2517	-72.62	-9.47	-0.27
103	SLD 10	-237	64	2517	-72.62	-9.47	-0.27
103	SLD 11	-166	-47	1986	88.21	-6.61	0.2
103	SLD 12	-166	-47	1986	88.21	-6.61	0.2
103	SLD 13	-448	29	2401	-19.81	-17.95	-0.12
103	SLD 14	-448	29	2401	-19.81	-17.95	-0.12
103	SLD 15	-427	-5	2242	28.44	-17.09	0.03
103	SLD 16	-427	-5	2242	28.44	-17.09	0.03
103	SLV 1	661	38	2194	-41.11	26.69	-0.17
103	SLV 2	661	38	2194	-41.11	26.69	-0.17
103	SLV 3	712	-47	1781	83.64	28.76	0.2
103	SLV 4	712	-47	1781	83.64	28.76	0.2
103	SLV 5	50	146	2840	-195.03	2.09	-0.63
103	SLV 6	50	146	2840	-195.03	2.09	-0.63
103	SLV 7	220	-139	1463	220.78	8.97	0.59
103	SLV 8	220	-139	1463	220.78	8.97	0.59
103	SLV 9	-422	153	2981	-202.21	-16.93	-0.65
103	SLV 10	-422	153	2981	-202.21	-16.93	-0.65
103	SLV 11	-252	-132	1603	213.6	-10.05	0.57
103	SLV 12	-252	-132	1603	213.6	-10.05	0.57
103	SLV 13	-914	62	2663	-65.07	-36.72	-0.25
103	SLV 14	-914	62	2663	-65.07	-36.72	-0.25
103	SLV 15	-863	-24	2249	59.67	-34.65	0.11
103	SLV 16	-863	-24	2249	59.67	-34.65	0.11
104	SLU 1	-140	7	1896	6.96	-4.56	-0.04
104	SLU 2	-140	7	1896	6.96	-4.56	-0.04
104	SLU 3	-140	7	1896	6.96	-4.56	-0.04
104	SLU 4	-140	7	1896	6.96	-4.56	-0.04
104	SLU 5	-140	7	1896	6.96	-4.56	-0.04
104	SLU 6	-140	7	1896	6.96	-4.56	-0.04
104	SLU 7	-140	7	1896	6.96	-4.56	-0.04
104	SLU 8	-140	7	1896	6.96	-4.56	-0.04
104	SLU 9	-140	7	1896	6.96	-4.56	-0.04
104	SLU 10	-189	9	2334	10.58	-6.21	-0.05



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
104	SLU 11	-189	9	2334	10.58	-6.21	-0.05
104	SLU 12	-189	9	2334	10.58	-6.21	-0.05
104	SLU 13	-189	9	2334	10.58	-6.21	-0.05
104	SLU 14	-189	9	2334	10.58	-6.21	-0.05
104	SLU 15	-189	9	2334	10.58	-6.21	-0.05
104	SLU 16	-189	9	2334	10.58	-6.21	-0.05
104	SLU 17	-189	9	2334	10.58	-6.21	-0.05
104	SLU 18	-210	10	2522	12.13	-6.92	-0.05
104	SLU 19	-210	10	2522	12.13	-6.92	-0.05
104	SLU 20	-210	10	2522	12.13	-6.92	-0.05
104	SLU 21	-210	10	2522	12.13	-6.92	-0.05
104	SLU 22	-167	8	2158	8.47	-5.47	-0.04
104	SLU 23	-167	8	2158	8.47	-5.47	-0.04
104	SLU 24	-167	8	2158	8.47	-5.47	-0.04
104	SLU 25	-167	8	2158	8.47	-5.47	-0.04
104	SLU 26	-167	8	2158	8.47	-5.47	-0.04
104	SLU 27	-167	8	2158	8.47	-5.47	-0.04
104	SLU 28	-167	8	2158	8.47	-5.47	-0.04
104	SLU 29	-167	8	2158	8.47	-5.47	-0.04
104	SLU 30	-167	8	2158	8.47	-5.47	-0.04
104	SLU 31	-217	10	2596	12.09	-7.12	-0.05
104	SLU 32	-217	10	2596	12.09	-7.12	-0.05
104	SLU 33	-217	10	2596	12.09	-7.12	-0.05
104	SLU 34	-217	10	2596	12.09	-7.12	-0.05
104	SLU 35	-217	10	2596	12.09	-7.12	-0.05
104	SLU 36	-217	10	2596	12.09	-7.12	-0.05
104	SLU 37	-217	10	2596	12.09	-7.12	-0.05
104	SLU 38	-217	10	2596	12.09	-7.12	-0.05
104	SLU 39	-238	10	2784	13.64	-7.84	-0.06
104	SLU 40	-238	10	2784	13.64	-7.84	-0.06
104	SLU 41	-238	10	2784	13.64	-7.84	-0.06
104	SLU 42	-238	10	2784	13.64	-7.84	-0.06
104	SLU 43	-172	8	2375	8.53	-5.61	-0.05
104	SLU 44	-172	8	2375	8.53	-5.61	-0.05
104	SLU 45	-172	8	2375	8.53	-5.61	-0.05
104	SLU 46	-172	8	2375	8.53	-5.61	-0.05
104	SLU 47	-172	8	2375	8.53	-5.61	-0.05
104	SLU 48	-172	8	2375	8.53	-5.61	-0.05
104	SLU 49	-172	8	2375	8.53	-5.61	-0.05
104	SLU 50	-172	8	2375	8.53	-5.61	-0.05
104	SLU 51	-172	8	2375	8.53	-5.61	-0.05
104	SLU 52	-221	10	2813	12.15	-7.27	-0.06
104	SLU 53	-221	10	2813	12.15	-7.27	-0.06
104	SLU 54	-221	10	2813	12.15	-7.27	-0.06
104	SLU 55	-221	10	2813	12.15	-7.27	-0.06
104	SLU 56	-221	10	2813	12.15	-7.27	-0.06
104	SLU 57	-221	10	2813	12.15	-7.27	-0.06
104	SLU 58	-221	10	2813	12.15	-7.27	-0.06
104	SLU 59	-221	10	2813	12.15	-7.27	-0.06
104	SLU 60	-243	11	3001	13.7	-7.98	-0.06
104	SLU 61	-243	11	3001	13.7	-7.98	-0.06
104	SLU 62	-243	11	3001	13.7	-7.98	-0.06
104	SLU 63	-243	11	3001	13.7	-7.98	-0.06
104	SLU 64	-200	9	2637	10.04	-6.52	-0.05
104	SLU 65	-200	9	2637	10.04	-6.52	-0.05
104	SLU 66	-200	9	2637	10.04	-6.52	-0.05
104	SLU 67	-200	9	2637	10.04	-6.52	-0.05
104	SLU 68	-200	9	2637	10.04	-6.52	-0.05
104	SLU 69	-200	9	2637	10.04	-6.52	-0.05
104	SLU 70	-200	9	2637	10.04	-6.52	-0.05
104	SLU 71	-200	9	2637	10.04	-6.52	-0.05
104	SLU 72	-200	9	2637	10.04	-6.52	-0.05
104	SLU 73	-249	11	3075	13.66	-8.18	-0.06
104	SLU 74	-249	11	3075	13.66	-8.18	-0.06
104	SLU 75	-249	11	3075	13.66	-8.18	-0.06
104	SLU 76	-249	11	3075	13.66	-8.18	-0.06
104	SLU 77	-249	11	3075	13.66	-8.18	-0.06
104	SLU 78	-249	11	3075	13.66	-8.18	-0.06
104	SLU 79	-249	11	3075	13.66	-8.18	-0.06
104	SLU 80	-249	11	3075	13.66	-8.18	-0.06
104	SLU 81	-270	12	3263	15.21	-8.89	-0.07
104	SLU 82	-270	12	3263	15.21	-8.89	-0.07
104	SLU 83	-270	12	3263	15.21	-8.89	-0.07
104	SLU 84	-270	12	3263	15.21	-8.89	-0.07
104	SLE RA 1	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 2	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 3	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 4	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 5	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 6	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 7	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 8	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 9	-147	7	1971	7.39	-4.82	-0.04
104	SLE RA 10	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 11	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 12	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 13	-180	8	2263	9.81	-5.92	-0.05



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
104	SLE RA 14	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 15	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 16	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 17	-180	8	2263	9.81	-5.92	-0.05
104	SLE RA 18	-195	9	2388	10.84	-6.39	-0.05
104	SLE RA 19	-195	9	2388	10.84	-6.39	-0.05
104	SLE RA 20	-195	9	2388	10.84	-6.39	-0.05
104	SLE RA 21	-195	9	2388	10.84	-6.39	-0.05
104	SLE FR 1	-147	7	1971	7.39	-4.82	-0.04
104	SLE FR 2	-147	7	1971	7.39	-4.82	-0.04
104	SLE FR 3	-147	7	1971	7.39	-4.82	-0.04
104	SLE FR 4	-162	7	2096	8.43	-5.29	-0.04
104	SLE FR 5	-162	7	2096	8.43	-5.29	-0.04
104	SLE FR 6	-171	8	2179	9.12	-5.61	-0.04
104	SLE QP 1	-147	7	1971	7.39	-4.82	-0.04
104	SLE QP 2	-162	7	2096	8.43	-5.29	-0.04
104	SLD 1	170	16	2023	-7.75	8.27	-0.1
104	SLD 2	170	16	2023	-7.75	8.27	-0.1
104	SLD 3	217	-15	1884	38.48	10.3	0.1
104	SLD 4	217	-15	1884	38.48	10.3	0.1
104	SLD 5	-135	57	2284	-66.54	-4.31	-0.35
104	SLD 6	-135	57	2284	-66.54	-4.31	-0.35
104	SLD 7	24	-47	1822	87.55	2.48	0.29
104	SLD 8	24	-47	1822	87.55	2.48	0.29
104	SLD 9	-348	62	2370	-70.7	-13.06	-0.38
104	SLD 10	-348	62	2370	-70.7	-13.06	-0.38
104	SLD 11	-189	-43	1908	83.39	-6.27	0.27
104	SLD 12	-189	-43	1908	83.39	-6.27	0.27
104	SLD 13	-541	30	2308	-21.63	-20.88	-0.18
104	SLD 14	-541	30	2308	-21.63	-20.88	-0.18
104	SLD 15	-493	-1	2169	24.6	-18.85	0.02
104	SLD 16	-493	-1	2169	24.6	-18.85	0.02
104	SLV 1	608	30	1940	-34.51	26.21	-0.2
104	SLV 2	608	30	1940	-34.51	26.21	-0.2
104	SLV 3	732	-50	1578	84.99	31.48	0.3
104	SLV 4	732	-50	1578	84.99	31.48	0.3
104	SLV 5	-119	136	2599	-185.69	-3.84	-0.84
104	SLV 6	-119	136	2599	-185.69	-3.84	-0.84
104	SLV 7	295	-132	1391	212.63	13.74	0.82
104	SLV 8	295	-132	1391	212.63	13.74	0.82
104	SLV 9	-618	147	2800	-195.77	-24.32	-0.9
104	SLV 10	-618	147	2800	-195.77	-24.32	-0.9
104	SLV 11	-204	-121	1593	202.54	-6.74	0.76
104	SLV 12	-204	-121	1593	202.54	-6.74	0.76
104	SLV 13	-1055	65	2614	-68.13	-42.06	-0.39
104	SLV 14	-1055	65	2614	-68.13	-42.06	-0.39
104	SLV 15	-931	-15	2251	51.36	-36.79	0.11
104	SLV 16	-931	-15	2251	51.36	-36.79	0.11
105	SLU 1	-170	6	1735	6.2	-6.03	-0.04
105	SLU 2	-170	6	1735	6.2	-6.03	-0.04
105	SLU 3	-170	6	1735	6.2	-6.03	-0.04
105	SLU 4	-170	6	1735	6.2	-6.03	-0.04
105	SLU 5	-170	6	1735	6.2	-6.03	-0.04
105	SLU 6	-170	6	1735	6.2	-6.03	-0.04
105	SLU 7	-170	6	1735	6.2	-6.03	-0.04
105	SLU 8	-170	6	1735	6.2	-6.03	-0.04
105	SLU 9	-170	6	1735	6.2	-6.03	-0.04
105	SLU 10	-233	7	2121	9.51	-8.22	-0.06
105	SLU 11	-233	7	2121	9.51	-8.22	-0.06
105	SLU 12	-233	7	2121	9.51	-8.22	-0.06
105	SLU 13	-233	7	2121	9.51	-8.22	-0.06
105	SLU 14	-233	7	2121	9.51	-8.22	-0.06
105	SLU 15	-233	7	2121	9.51	-8.22	-0.06
105	SLU 16	-233	7	2121	9.51	-8.22	-0.06
105	SLU 17	-233	7	2121	9.51	-8.22	-0.06
105	SLU 18	-259	8	2286	10.92	-9.16	-0.06
105	SLU 19	-259	8	2286	10.92	-9.16	-0.06
105	SLU 20	-259	8	2286	10.92	-9.16	-0.06
105	SLU 21	-259	8	2286	10.92	-9.16	-0.06
105	SLU 22	-206	6	1967	7.6	-7.28	-0.05
105	SLU 23	-206	6	1967	7.6	-7.28	-0.05
105	SLU 24	-206	6	1967	7.6	-7.28	-0.05
105	SLU 25	-206	6	1967	7.6	-7.28	-0.05
105	SLU 26	-206	6	1967	7.6	-7.28	-0.05
105	SLU 27	-206	6	1967	7.6	-7.28	-0.05
105	SLU 28	-206	6	1967	7.6	-7.28	-0.05
105	SLU 29	-206	6	1967	7.6	-7.28	-0.05
105	SLU 30	-206	6	1967	7.6	-7.28	-0.05
105	SLU 31	-268	8	2353	10.9	-9.47	-0.06
105	SLU 32	-268	8	2353	10.9	-9.47	-0.06
105	SLU 33	-268	8	2353	10.9	-9.47	-0.06
105	SLU 34	-268	8	2353	10.9	-9.47	-0.06
105	SLU 35	-268	8	2353	10.9	-9.47	-0.06
105	SLU 36	-268	8	2353	10.9	-9.47	-0.06
105	SLU 37	-268	8	2353	10.9	-9.47	-0.06
105	SLU 38	-268	8	2353	10.9	-9.47	-0.06
105	SLU 39	-295	9	2518	12.32	-10.41	-0.07



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
105	SLU 40	-295	9	2518	12.32	-10.41	-0.07
105	SLU 41	-295	9	2518	12.32	-10.41	-0.07
105	SLU 42	-295	9	2518	12.32	-10.41	-0.07
105	SLU 43	-209	7	2177	7.59	-7.4	-0.06
105	SLU 44	-209	7	2177	7.59	-7.4	-0.06
105	SLU 45	-209	7	2177	7.59	-7.4	-0.06
105	SLU 46	-209	7	2177	7.59	-7.4	-0.06
105	SLU 47	-209	7	2177	7.59	-7.4	-0.06
105	SLU 48	-209	7	2177	7.59	-7.4	-0.06
105	SLU 49	-209	7	2177	7.59	-7.4	-0.06
105	SLU 50	-209	7	2177	7.59	-7.4	-0.06
105	SLU 51	-209	7	2177	7.59	-7.4	-0.06
105	SLU 52	-272	9	2562	10.89	-9.6	-0.07
105	SLU 53	-272	9	2562	10.89	-9.6	-0.07
105	SLU 54	-272	9	2562	10.89	-9.6	-0.07
105	SLU 55	-272	9	2562	10.89	-9.6	-0.07
105	SLU 56	-272	9	2562	10.89	-9.6	-0.07
105	SLU 57	-272	9	2562	10.89	-9.6	-0.07
105	SLU 58	-272	9	2562	10.89	-9.6	-0.07
105	SLU 59	-272	9	2562	10.89	-9.6	-0.07
105	SLU 60	-298	10	2727	12.31	-10.54	-0.07
105	SLU 61	-298	10	2727	12.31	-10.54	-0.07
105	SLU 62	-298	10	2727	12.31	-10.54	-0.07
105	SLU 63	-298	10	2727	12.31	-10.54	-0.07
105	SLU 64	-245	8	2409	8.98	-8.66	-0.06
105	SLU 65	-245	8	2409	8.98	-8.66	-0.06
105	SLU 66	-245	8	2409	8.98	-8.66	-0.06
105	SLU 67	-245	8	2409	8.98	-8.66	-0.06
105	SLU 68	-245	8	2409	8.98	-8.66	-0.06
105	SLU 69	-245	8	2409	8.98	-8.66	-0.06
105	SLU 70	-245	8	2409	8.98	-8.66	-0.06
105	SLU 71	-245	8	2409	8.98	-8.66	-0.06
105	SLU 72	-245	8	2409	8.98	-8.66	-0.06
105	SLU 73	-307	10	2794	12.29	-10.85	-0.07
105	SLU 74	-307	10	2794	12.29	-10.85	-0.07
105	SLU 75	-307	10	2794	12.29	-10.85	-0.07
105	SLU 76	-307	10	2794	12.29	-10.85	-0.07
105	SLU 77	-307	10	2794	12.29	-10.85	-0.07
105	SLU 78	-307	10	2794	12.29	-10.85	-0.07
105	SLU 79	-307	10	2794	12.29	-10.85	-0.07
105	SLU 80	-307	10	2794	12.29	-10.85	-0.07
105	SLU 81	-334	10	2959	13.7	-11.79	-0.08
105	SLU 82	-334	10	2959	13.7	-11.79	-0.08
105	SLU 83	-334	10	2959	13.7	-11.79	-0.08
105	SLU 84	-334	10	2959	13.7	-11.79	-0.08
105	SLE RA 1	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 2	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 3	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 4	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 5	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 6	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 7	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 8	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 9	-180	6	1802	6.6	-6.38	-0.05
105	SLE RA 10	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 11	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 12	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 13	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 14	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 15	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 16	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 17	-222	7	2058	8.8	-7.84	-0.05
105	SLE RA 18	-240	8	2168	9.75	-8.47	-0.06
105	SLE RA 19	-240	8	2168	9.75	-8.47	-0.06
105	SLE RA 20	-240	8	2168	9.75	-8.47	-0.06
105	SLE RA 21	-240	8	2168	9.75	-8.47	-0.06
105	SLE FR 1	-180	6	1802	6.6	-6.38	-0.05
105	SLE FR 2	-180	6	1802	6.6	-6.38	-0.05
105	SLE FR 3	-180	6	1802	6.6	-6.38	-0.05
105	SLE FR 4	-198	6	1912	7.55	-7.01	-0.05
105	SLE FR 5	-198	6	1912	7.55	-7.01	-0.05
105	SLE FR 6	-210	7	1985	8.18	-7.43	-0.05
105	SLE QP 1	-180	6	1802	6.6	-6.38	-0.05
105	SLE QP 2	-198	6	1912	7.55	-7.01	-0.05
105	SLD 1	131	12	1815	-5.45	5.22	-0.1
105	SLD 2	131	12	1815	-5.45	5.22	-0.1
105	SLD 3	214	-17	1694	37.88	8.15	0.14
105	SLD 4	214	-17	1694	37.88	8.15	0.14
105	SLD 5	-226	52	2065	-62.07	-7.8	-0.42
105	SLD 6	-226	52	2065	-62.07	-7.8	-0.42
105	SLD 7	52	-45	1664	82.36	2	0.36
105	SLD 8	52	-45	1664	82.36	2	0.36
105	SLD 9	-448	58	2160	-67.27	-16.01	-0.46
105	SLD 10	-448	58	2160	-67.27	-16.01	-0.46
105	SLD 11	-171	-39	1758	77.16	-6.22	0.32
105	SLD 12	-171	-39	1758	77.16	-6.22	0.32
105	SLD 13	-611	30	2130	-22.78	-22.17	-0.23



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
105	SLD 14	-611	30	2130	-22.78	-22.17	-0.23
105	SLD 15	-527	1	2009	20.54	-19.23	0
105	SLD 16	-527	1	2009	20.54	-19.23	0
105	SLV 1	561	22	1694	-27.34	21.21	-0.19
105	SLV 2	561	22	1694	-27.34	21.21	-0.19
105	SLV 3	780	-53	1380	84.64	28.93	0.42
105	SLV 4	780	-53	1380	84.64	28.93	0.42
105	SLV 5	-303	124	2323	-172.76	-10.26	-1.01
105	SLV 6	-303	124	2323	-172.76	-10.26	-1.01
105	SLV 7	428	-125	1276	200.52	15.48	1.01
105	SLV 8	428	-125	1276	200.52	15.48	1.01
105	SLV 9	-824	138	2547	-185.42	-29.5	-1.11
105	SLV 10	-824	138	2547	-185.42	-29.5	-1.11
105	SLV 11	-94	-111	1501	187.86	-3.76	0.91
105	SLV 12	-94	-111	1501	187.86	-3.76	0.91
105	SLV 13	-1176	66	2443	-69.55	-42.95	-0.51
105	SLV 14	-1176	66	2443	-69.55	-42.95	-0.51
105	SLV 15	-957	-9	2129	42.44	-35.22	0.09
105	SLV 16	-957	-9	2129	42.44	-35.22	0.09
106	SLU 1	-130	4	1594	5.44	-5.56	-0.04
106	SLU 2	-130	4	1594	5.44	-5.56	-0.04
106	SLU 3	-130	4	1594	5.44	-5.56	-0.04
106	SLU 4	-130	4	1594	5.44	-5.56	-0.04
106	SLU 5	-130	4	1594	5.44	-5.56	-0.04
106	SLU 6	-130	4	1594	5.44	-5.56	-0.04
106	SLU 7	-130	4	1594	5.44	-5.56	-0.04
106	SLU 8	-130	4	1594	5.44	-5.56	-0.04
106	SLU 9	-130	4	1594	5.44	-5.56	-0.04
106	SLU 10	-184	5	1929	8.42	-7.8	-0.04
106	SLU 11	-184	5	1929	8.42	-7.8	-0.04
106	SLU 12	-184	5	1929	8.42	-7.8	-0.04
106	SLU 13	-184	5	1929	8.42	-7.8	-0.04
106	SLU 14	-184	5	1929	8.42	-7.8	-0.04
106	SLU 15	-184	5	1929	8.42	-7.8	-0.04
106	SLU 16	-184	5	1929	8.42	-7.8	-0.04
106	SLU 17	-184	5	1929	8.42	-7.8	-0.04
106	SLU 18	-207	5	2072	9.7	-8.76	-0.05
106	SLU 19	-207	5	2072	9.7	-8.76	-0.05
106	SLU 20	-207	5	2072	9.7	-8.76	-0.05
106	SLU 21	-207	5	2072	9.7	-8.76	-0.05
106	SLU 22	-160	4	1798	6.71	-6.81	-0.04
106	SLU 23	-160	4	1798	6.71	-6.81	-0.04
106	SLU 24	-160	4	1798	6.71	-6.81	-0.04
106	SLU 25	-160	4	1798	6.71	-6.81	-0.04
106	SLU 26	-160	4	1798	6.71	-6.81	-0.04
106	SLU 27	-160	4	1798	6.71	-6.81	-0.04
106	SLU 28	-160	4	1798	6.71	-6.81	-0.04
106	SLU 29	-160	4	1798	6.71	-6.81	-0.04
106	SLU 30	-160	4	1798	6.71	-6.81	-0.04
106	SLU 31	-214	5	2132	9.69	-9.05	-0.05
106	SLU 32	-214	5	2132	9.69	-9.05	-0.05
106	SLU 33	-214	5	2132	9.69	-9.05	-0.05
106	SLU 34	-214	5	2132	9.69	-9.05	-0.05
106	SLU 35	-214	5	2132	9.69	-9.05	-0.05
106	SLU 36	-214	5	2132	9.69	-9.05	-0.05
106	SLU 37	-214	5	2132	9.69	-9.05	-0.05
106	SLU 38	-214	5	2132	9.69	-9.05	-0.05
106	SLU 39	-237	6	2275	10.97	-10.01	-0.05
106	SLU 40	-237	6	2275	10.97	-10.01	-0.05
106	SLU 41	-237	6	2275	10.97	-10.01	-0.05
106	SLU 42	-237	6	2275	10.97	-10.01	-0.05
106	SLU 43	-158	5	2003	6.63	-6.8	-0.05
106	SLU 44	-158	5	2003	6.63	-6.8	-0.05
106	SLU 45	-158	5	2003	6.63	-6.8	-0.05
106	SLU 46	-158	5	2003	6.63	-6.8	-0.05
106	SLU 47	-158	5	2003	6.63	-6.8	-0.05
106	SLU 48	-158	5	2003	6.63	-6.8	-0.05
106	SLU 49	-158	5	2003	6.63	-6.8	-0.05
106	SLU 50	-158	5	2003	6.63	-6.8	-0.05
106	SLU 51	-158	5	2003	6.63	-6.8	-0.05
106	SLU 52	-212	6	2337	9.62	-9.04	-0.05
106	SLU 53	-212	6	2337	9.62	-9.04	-0.05
106	SLU 54	-212	6	2337	9.62	-9.04	-0.05
106	SLU 55	-212	6	2337	9.62	-9.04	-0.05
106	SLU 56	-212	6	2337	9.62	-9.04	-0.05
106	SLU 57	-212	6	2337	9.62	-9.04	-0.05
106	SLU 58	-212	6	2337	9.62	-9.04	-0.05
106	SLU 59	-212	6	2337	9.62	-9.04	-0.05
106	SLU 60	-235	7	2481	10.9	-9.99	-0.06
106	SLU 61	-235	7	2481	10.9	-9.99	-0.06
106	SLU 62	-235	7	2481	10.9	-9.99	-0.06
106	SLU 63	-235	7	2481	10.9	-9.99	-0.06
106	SLU 64	-188	6	2206	7.91	-8.05	-0.05
106	SLU 65	-188	6	2206	7.91	-8.05	-0.05
106	SLU 66	-188	6	2206	7.91	-8.05	-0.05
106	SLU 67	-188	6	2206	7.91	-8.05	-0.05
106	SLU 68	-188	6	2206	7.91	-8.05	-0.05



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
106	SLU 69	-188	6	2206	7.91	-8.05	-0.05
106	SLU 70	-188	6	2206	7.91	-8.05	-0.05
106	SLU 71	-188	6	2206	7.91	-8.05	-0.05
106	SLU 72	-188	6	2206	7.91	-8.05	-0.05
106	SLU 73	-242	6	2541	10.89	-10.29	-0.06
106	SLU 74	-242	6	2541	10.89	-10.29	-0.06
106	SLU 75	-242	6	2541	10.89	-10.29	-0.06
106	SLU 76	-242	6	2541	10.89	-10.29	-0.06
106	SLU 77	-242	6	2541	10.89	-10.29	-0.06
106	SLU 78	-242	6	2541	10.89	-10.29	-0.06
106	SLU 79	-242	6	2541	10.89	-10.29	-0.06
106	SLU 80	-242	6	2541	10.89	-10.29	-0.06
106	SLU 81	-265	7	2684	12.17	-11.25	-0.06
106	SLU 82	-265	7	2684	12.17	-11.25	-0.06
106	SLU 83	-265	7	2684	12.17	-11.25	-0.06
106	SLU 84	-265	7	2684	12.17	-11.25	-0.06
106	SLE RA 1	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 2	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 3	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 4	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 5	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 6	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 7	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 8	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 9	-138	4	1652	5.8	-5.92	-0.04
106	SLE RA 10	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 11	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 12	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 13	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 14	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 15	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 16	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 17	-174	5	1875	7.79	-7.41	-0.04
106	SLE RA 18	-190	5	1971	8.64	-8.05	-0.05
106	SLE RA 19	-190	5	1971	8.64	-8.05	-0.05
106	SLE RA 20	-190	5	1971	8.64	-8.05	-0.05
106	SLE RA 21	-190	5	1971	8.64	-8.05	-0.05
106	SLE FR 1	-138	4	1652	5.8	-5.92	-0.04
106	SLE FR 2	-138	4	1652	5.8	-5.92	-0.04
106	SLE FR 3	-138	4	1652	5.8	-5.92	-0.04
106	SLE FR 4	-154	4	1748	6.65	-6.56	-0.04
106	SLE FR 5	-154	4	1748	6.65	-6.56	-0.04
106	SLE FR 6	-164	5	1812	7.22	-6.98	-0.04
106	SLE QP 1	-138	4	1652	5.8	-5.92	-0.04
106	SLE QP 2	-154	4	1748	6.65	-6.56	-0.04
106	SLD 1	191	8	1679	-3.46	6.92	-0.08
106	SLD 2	191	8	1679	-3.46	6.92	-0.08
106	SLD 3	317	-20	1560	36.38	12.02	0.17
106	SLD 4	317	-20	1560	36.38	12.02	0.17
106	SLD 5	-241	47	1907	-56.8	-10.26	-0.42
106	SLD 6	-241	47	1907	-56.8	-10.26	-0.42
106	SLD 7	178	-44	1512	76	6.76	0.39
106	SLD 8	178	-44	1512	76	6.76	0.39
106	SLD 9	-485	53	1984	-62.69	-19.88	-0.47
106	SLD 10	-485	53	1984	-62.69	-19.88	-0.47
106	SLD 11	-67	-38	1589	70.11	-2.85	0.34
106	SLD 12	-67	-38	1589	70.11	-2.85	0.34
106	SLD 13	-624	29	1936	-23.07	-25.14	-0.25
106	SLD 14	-624	29	1936	-23.07	-25.14	-0.25
106	SLD 15	-499	1	1817	16.77	-20.03	0
106	SLD 16	-499	1	1817	16.77	-20.03	0
106	SLV 1	637	14	1587	-20.81	24.3	-0.15
106	SLV 2	637	14	1587	-20.81	24.3	-0.15
106	SLV 3	966	-56	1284	82.14	37.67	0.48
106	SLV 4	966	-56	1284	82.14	37.67	0.48
106	SLV 5	-415	114	2160	-157.73	-17.58	-1.03
106	SLV 6	-415	114	2160	-157.73	-17.58	-1.03
106	SLV 7	681	-121	1149	185.44	26.98	1.07
106	SLV 8	681	-121	1149	185.44	26.98	1.07
106	SLV 9	-989	129	2347	-172.14	-40.1	-1.15
106	SLV 10	-989	129	2347	-172.14	-40.1	-1.15
106	SLV 11	108	-105	1336	171.04	4.46	0.95
106	SLV 12	108	-105	1336	171.04	4.46	0.95
106	SLV 13	-1274	65	2212	-68.83	-50.78	-0.56
106	SLV 14	-1274	65	2212	-68.83	-50.78	-0.56
106	SLV 15	-945	-6	1909	34.12	-37.41	0.07
106	SLV 16	-945	-6	1909	34.12	-37.41	0.07
107	SLU 1	-36	3	1587	4.35	-1.18	-0.03
107	SLU 2	-36	3	1587	4.35	-1.18	-0.03
107	SLU 3	-36	3	1587	4.35	-1.18	-0.03
107	SLU 4	-36	3	1587	4.35	-1.18	-0.03
107	SLU 5	-36	3	1587	4.35	-1.18	-0.03
107	SLU 6	-36	3	1587	4.35	-1.18	-0.03
107	SLU 7	-36	3	1587	4.35	-1.18	-0.03
107	SLU 8	-36	3	1587	4.35	-1.18	-0.03
107	SLU 9	-36	3	1587	4.35	-1.18	-0.03
107	SLU 10	-63	4	1910	6.89	-2.11	-0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
107	SLU 11	-63	4	1910	6.89	-2.11	-0.04
107	SLU 12	-63	4	1910	6.89	-2.11	-0.04
107	SLU 13	-63	4	1910	6.89	-2.11	-0.04
107	SLU 14	-63	4	1910	6.89	-2.11	-0.04
107	SLU 15	-63	4	1910	6.89	-2.11	-0.04
107	SLU 16	-63	4	1910	6.89	-2.11	-0.04
107	SLU 17	-63	4	1910	6.89	-2.11	-0.04
107	SLU 18	-74	4	2048	7.97	-2.51	-0.04
107	SLU 19	-74	4	2048	7.97	-2.51	-0.04
107	SLU 20	-74	4	2048	7.97	-2.51	-0.04
107	SLU 21	-74	4	2048	7.97	-2.51	-0.04
107	SLU 22	-51	4	1785	5.44	-1.72	-0.03
107	SLU 23	-51	4	1785	5.44	-1.72	-0.03
107	SLU 24	-51	4	1785	5.44	-1.72	-0.03
107	SLU 25	-51	4	1785	5.44	-1.72	-0.03
107	SLU 26	-51	4	1785	5.44	-1.72	-0.03
107	SLU 27	-51	4	1785	5.44	-1.72	-0.03
107	SLU 28	-51	4	1785	5.44	-1.72	-0.03
107	SLU 29	-51	4	1785	5.44	-1.72	-0.03
107	SLU 30	-51	4	1785	5.44	-1.72	-0.03
107	SLU 31	-78	4	2107	7.97	-2.65	-0.04
107	SLU 32	-78	4	2107	7.97	-2.65	-0.04
107	SLU 33	-78	4	2107	7.97	-2.65	-0.04
107	SLU 34	-78	4	2107	7.97	-2.65	-0.04
107	SLU 35	-78	4	2107	7.97	-2.65	-0.04
107	SLU 36	-78	4	2107	7.97	-2.65	-0.04
107	SLU 37	-78	4	2107	7.97	-2.65	-0.04
107	SLU 38	-78	4	2107	7.97	-2.65	-0.04
107	SLU 39	-90	5	2245	9.06	-3.05	-0.04
107	SLU 40	-90	5	2245	9.06	-3.05	-0.04
107	SLU 41	-90	5	2245	9.06	-3.05	-0.04
107	SLU 42	-90	5	2245	9.06	-3.05	-0.04
107	SLU 43	-41	4	1996	5.29	-1.35	-0.04
107	SLU 44	-41	4	1996	5.29	-1.35	-0.04
107	SLU 45	-41	4	1996	5.29	-1.35	-0.04
107	SLU 46	-41	4	1996	5.29	-1.35	-0.04
107	SLU 47	-41	4	1996	5.29	-1.35	-0.04
107	SLU 48	-41	4	1996	5.29	-1.35	-0.04
107	SLU 49	-41	4	1996	5.29	-1.35	-0.04
107	SLU 50	-41	4	1996	5.29	-1.35	-0.04
107	SLU 51	-41	4	1996	5.29	-1.35	-0.04
107	SLU 52	-68	5	2318	7.82	-2.28	-0.05
107	SLU 53	-68	5	2318	7.82	-2.28	-0.05
107	SLU 54	-68	5	2318	7.82	-2.28	-0.05
107	SLU 55	-68	5	2318	7.82	-2.28	-0.05
107	SLU 56	-68	5	2318	7.82	-2.28	-0.05
107	SLU 57	-68	5	2318	7.82	-2.28	-0.05
107	SLU 58	-68	5	2318	7.82	-2.28	-0.05
107	SLU 59	-68	5	2318	7.82	-2.28	-0.05
107	SLU 60	-80	5	2456	8.9	-2.68	-0.05
107	SLU 61	-80	5	2456	8.9	-2.68	-0.05
107	SLU 62	-80	5	2456	8.9	-2.68	-0.05
107	SLU 63	-80	5	2456	8.9	-2.68	-0.05
107	SLU 64	-56	5	2193	6.37	-1.89	-0.04
107	SLU 65	-56	5	2193	6.37	-1.89	-0.04
107	SLU 66	-56	5	2193	6.37	-1.89	-0.04
107	SLU 67	-56	5	2193	6.37	-1.89	-0.04
107	SLU 68	-56	5	2193	6.37	-1.89	-0.04
107	SLU 69	-56	5	2193	6.37	-1.89	-0.04
107	SLU 70	-56	5	2193	6.37	-1.89	-0.04
107	SLU 71	-56	5	2193	6.37	-1.89	-0.04
107	SLU 72	-56	5	2193	6.37	-1.89	-0.04
107	SLU 73	-84	5	2516	8.91	-2.82	-0.05
107	SLU 74	-84	5	2516	8.91	-2.82	-0.05
107	SLU 75	-84	5	2516	8.91	-2.82	-0.05
107	SLU 76	-84	5	2516	8.91	-2.82	-0.05
107	SLU 77	-84	5	2516	8.91	-2.82	-0.05
107	SLU 78	-84	5	2516	8.91	-2.82	-0.05
107	SLU 79	-84	5	2516	8.91	-2.82	-0.05
107	SLU 80	-84	5	2516	8.91	-2.82	-0.05
107	SLU 81	-95	6	2654	9.99	-3.22	-0.05
107	SLU 82	-95	6	2654	9.99	-3.22	-0.05
107	SLU 83	-95	6	2654	9.99	-3.22	-0.05
107	SLU 84	-95	6	2654	9.99	-3.22	-0.05
107	SLE RA 1	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 2	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 3	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 4	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 5	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 6	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 7	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 8	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 9	-40	4	1644	4.66	-1.34	-0.03
107	SLE RA 10	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 11	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 12	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 13	-58	4	1859	6.35	-1.96	-0.04



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
107	SLE RA 14	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 15	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 16	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 17	-58	4	1859	6.35	-1.96	-0.04
107	SLE RA 18	-66	4	1951	7.08	-2.22	-0.04
107	SLE RA 19	-66	4	1951	7.08	-2.22	-0.04
107	SLE RA 20	-66	4	1951	7.08	-2.22	-0.04
107	SLE RA 21	-66	4	1951	7.08	-2.22	-0.04
107	SLE FR 1	-40	4	1644	4.66	-1.34	-0.03
107	SLE FR 2	-40	4	1644	4.66	-1.34	-0.03
107	SLE FR 3	-40	4	1644	4.66	-1.34	-0.03
107	SLE FR 4	-48	4	1736	5.39	-1.6	-0.03
107	SLE FR 5	-48	4	1736	5.39	-1.6	-0.03
107	SLE FR 6	-53	4	1797	5.87	-1.78	-0.03
107	SLE QP 1	-40	4	1644	4.66	-1.34	-0.03
107	SLE QP 2	-48	4	1736	5.39	-1.6	-0.03
107	SLD 1	270	6	1908	-2.24	10.17	-0.06
107	SLD 2	270	6	1908	-2.24	10.17	-0.06
107	SLD 3	410	-20	1786	33.47	15.42	0.18
107	SLD 4	410	-20	1786	33.47	15.42	0.18
107	SLD 5	-165	44	1972	-51.06	-6.03	-0.39
107	SLD 6	-165	44	1972	-51.06	-6.03	-0.39
107	SLD 7	302	-42	1566	67.98	11.47	0.38
107	SLD 8	302	-42	1566	67.98	11.47	0.38
107	SLD 9	-397	50	1906	-57.2	-14.67	-0.45
107	SLD 10	-397	50	1906	-57.2	-14.67	-0.45
107	SLD 11	69	-36	1499	61.84	2.83	0.32
107	SLD 12	69	-36	1499	61.84	2.83	0.32
107	SLD 13	-506	27	1686	-22.7	-18.63	-0.24
107	SLD 14	-506	27	1686	-22.7	-18.63	-0.24
107	SLD 15	-366	2	1564	13.01	-13.38	-0.01
107	SLD 16	-366	2	1564	13.01	-13.38	-0.01
107	SLV 1	679	11	2170	-15.53	25.28	-0.1
107	SLV 2	679	11	2170	-15.53	25.28	-0.1
107	SLV 3	1045	-55	1861	76.72	39	0.49
107	SLV 4	1045	-55	1861	76.72	39	0.49
107	SLV 5	-385	106	2334	-140.81	-14.35	-0.96
107	SLV 6	-385	106	2334	-140.81	-14.35	-0.96
107	SLV 7	835	-114	1305	166.71	31.39	1.03
107	SLV 8	835	-114	1305	166.71	31.39	1.03
107	SLV 9	-931	122	2166	-155.93	-34.6	-1.1
107	SLV 10	-931	122	2166	-155.93	-34.6	-1.1
107	SLV 11	290	-99	1138	151.58	11.15	0.89
107	SLV 12	290	-99	1138	151.58	11.15	0.89
107	SLV 13	-1140	63	1611	-65.95	-42.21	-0.56
107	SLV 14	-1140	63	1611	-65.95	-42.21	-0.56
107	SLV 15	-774	-3	1302	26.31	-28.48	0.03
107	SLV 16	-774	-3	1302	26.31	-28.48	0.03
108	SLU 1	13	5	1718	2.86	-0.56	-0.03
108	SLU 2	13	5	1718	2.86	-0.56	-0.03
108	SLU 3	13	5	1718	2.86	-0.56	-0.03
108	SLU 4	13	5	1718	2.86	-0.56	-0.03
108	SLU 5	13	5	1718	2.86	-0.56	-0.03
108	SLU 6	13	5	1718	2.86	-0.56	-0.03
108	SLU 7	13	5	1718	2.86	-0.56	-0.03
108	SLU 8	13	5	1718	2.86	-0.56	-0.03
108	SLU 9	13	5	1718	2.86	-0.56	-0.03
108	SLU 10	0	6	2070	4.75	-1.37	-0.04
108	SLU 11	0	6	2070	4.75	-1.37	-0.04
108	SLU 12	0	6	2070	4.75	-1.37	-0.04
108	SLU 13	0	6	2070	4.75	-1.37	-0.04
108	SLU 14	0	6	2070	4.75	-1.37	-0.04
108	SLU 15	0	6	2070	4.75	-1.37	-0.04
108	SLU 16	0	6	2070	4.75	-1.37	-0.04
108	SLU 17	0	6	2070	4.75	-1.37	-0.04
108	SLU 18	-6	7	2221	5.56	-1.72	-0.05
108	SLU 19	-6	7	2221	5.56	-1.72	-0.05
108	SLU 20	-6	7	2221	5.56	-1.72	-0.05
108	SLU 21	-6	7	2221	5.56	-1.72	-0.05
108	SLU 22	4	5	1932	3.68	-1.07	-0.04
108	SLU 23	4	5	1932	3.68	-1.07	-0.04
108	SLU 24	4	5	1932	3.68	-1.07	-0.04
108	SLU 25	4	5	1932	3.68	-1.07	-0.04
108	SLU 26	4	5	1932	3.68	-1.07	-0.04
108	SLU 27	4	5	1932	3.68	-1.07	-0.04
108	SLU 28	4	5	1932	3.68	-1.07	-0.04
108	SLU 29	4	5	1932	3.68	-1.07	-0.04
108	SLU 30	4	5	1932	3.68	-1.07	-0.04
108	SLU 31	-10	7	2285	5.57	-1.89	-0.04
108	SLU 32	-10	7	2285	5.57	-1.89	-0.04
108	SLU 33	-10	7	2285	5.57	-1.89	-0.04
108	SLU 34	-10	7	2285	5.57	-1.89	-0.04
108	SLU 35	-10	7	2285	5.57	-1.89	-0.04
108	SLU 36	-10	7	2285	5.57	-1.89	-0.04
108	SLU 37	-10	7	2285	5.57	-1.89	-0.04
108	SLU 38	-10	7	2285	5.57	-1.89	-0.04
108	SLU 39	-15	7	2436	6.38	-2.24	-0.05



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
108	SLU 40	-15	7	2436	6.38	-2.24	-0.05
108	SLU 41	-15	7	2436	6.38	-2.24	-0.05
108	SLU 42	-15	7	2436	6.38	-2.24	-0.05
108	SLU 43	20	6	2159	3.43	-0.55	-0.04
108	SLU 44	20	6	2159	3.43	-0.55	-0.04
108	SLU 45	20	6	2159	3.43	-0.55	-0.04
108	SLU 46	20	6	2159	3.43	-0.55	-0.04
108	SLU 47	20	6	2159	3.43	-0.55	-0.04
108	SLU 48	20	6	2159	3.43	-0.55	-0.04
108	SLU 49	20	6	2159	3.43	-0.55	-0.04
108	SLU 50	20	6	2159	3.43	-0.55	-0.04
108	SLU 51	20	6	2159	3.43	-0.55	-0.04
108	SLU 52	7	7	2512	5.33	-1.36	-0.05
108	SLU 53	7	7	2512	5.33	-1.36	-0.05
108	SLU 54	7	7	2512	5.33	-1.36	-0.05
108	SLU 55	7	7	2512	5.33	-1.36	-0.05
108	SLU 56	7	7	2512	5.33	-1.36	-0.05
108	SLU 57	7	7	2512	5.33	-1.36	-0.05
108	SLU 58	7	7	2512	5.33	-1.36	-0.05
108	SLU 59	7	7	2512	5.33	-1.36	-0.05
108	SLU 60	1	8	2663	6.14	-1.71	-0.05
108	SLU 61	1	8	2663	6.14	-1.71	-0.05
108	SLU 62	1	8	2663	6.14	-1.71	-0.05
108	SLU 63	1	8	2663	6.14	-1.71	-0.05
108	SLU 64	11	7	2374	4.25	-1.06	-0.05
108	SLU 65	11	7	2374	4.25	-1.06	-0.05
108	SLU 66	11	7	2374	4.25	-1.06	-0.05
108	SLU 67	11	7	2374	4.25	-1.06	-0.05
108	SLU 68	11	7	2374	4.25	-1.06	-0.05
108	SLU 69	11	7	2374	4.25	-1.06	-0.05
108	SLU 70	11	7	2374	4.25	-1.06	-0.05
108	SLU 71	11	7	2374	4.25	-1.06	-0.05
108	SLU 72	11	7	2374	4.25	-1.06	-0.05
108	SLU 73	-3	8	2726	6.15	-1.88	-0.05
108	SLU 74	-3	8	2726	6.15	-1.88	-0.05
108	SLU 75	-3	8	2726	6.15	-1.88	-0.05
108	SLU 76	-3	8	2726	6.15	-1.88	-0.05
108	SLU 77	-3	8	2726	6.15	-1.88	-0.05
108	SLU 78	-3	8	2726	6.15	-1.88	-0.05
108	SLU 79	-3	8	2726	6.15	-1.88	-0.05
108	SLU 80	-3	8	2726	6.15	-1.88	-0.05
108	SLU 81	-8	8	2877	6.96	-2.23	-0.06
108	SLU 82	-8	8	2877	6.96	-2.23	-0.06
108	SLU 83	-8	8	2877	6.96	-2.23	-0.06
108	SLU 84	-8	8	2877	6.96	-2.23	-0.06
108	SLE RA 1	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 2	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 3	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 4	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 5	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 6	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 7	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 8	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 9	10	5	1779	3.09	-0.71	-0.03
108	SLE RA 10	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 11	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 12	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 13	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 14	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 15	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 16	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 17	1	6	2014	4.35	-1.25	-0.04
108	SLE RA 18	-2	6	2115	4.89	-1.48	-0.04
108	SLE RA 19	-2	6	2115	4.89	-1.48	-0.04
108	SLE RA 20	-2	6	2115	4.89	-1.48	-0.04
108	SLE RA 21	-2	6	2115	4.89	-1.48	-0.04
108	SLE FR 1	10	5	1779	3.09	-0.71	-0.03
108	SLE FR 2	10	5	1779	3.09	-0.71	-0.03
108	SLE FR 3	10	5	1779	3.09	-0.71	-0.03
108	SLE FR 4	6	5	1880	3.63	-0.94	-0.04
108	SLE FR 5	6	5	1880	3.63	-0.94	-0.04
108	SLE FR 6	4	6	1947	3.99	-1.09	-0.04
108	SLE QP 1	10	5	1779	3.09	-0.71	-0.03
108	SLE QP 2	6	5	1880	3.63	-0.94	-0.04
108	SLD 1	298	6	2052	-1.73	10.6	-0.05
108	SLD 2	298	6	2052	-1.73	10.6	-0.05
108	SLD 3	454	-16	1940	28.89	16.96	0.13
108	SLD 4	454	-16	1940	28.89	16.96	0.13
108	SLD 5	-143	40	2101	-44.41	-7.12	-0.31
108	SLD 6	-143	40	2101	-44.41	-7.12	-0.31
108	SLD 7	378	-35	1728	57.64	14.08	0.29
108	SLD 8	378	-35	1728	57.64	14.08	0.29
108	SLD 9	-365	46	2031	-50.37	-15.95	-0.36
108	SLD 10	-365	46	2031	-50.37	-15.95	-0.36
108	SLD 11	156	-29	1658	51.67	5.25	0.24
108	SLD 12	156	-29	1658	51.67	5.25	0.24
108	SLD 13	-442	27	1819	-21.62	-18.84	-0.21



Nodo Ind.	Cont. N.br.	Reazione a traslazione			Reazione a rotazione		
		x	y	z	x	y	z
108	SLD 14	-442	27	1819	-21.62	-18.84	-0.21
108	SLD 15	-285	4	1707	8.99	-12.48	-0.03
108	SLD 16	-285	4	1707	8.99	-12.48	-0.03
108	SLV 1	668	9	2312	-11.17	25.24	-0.07
108	SLV 2	668	9	2312	-11.17	25.24	-0.07
108	SLV 3	1078	-49	2032	67.87	41.86	0.39
108	SLV 4	1078	-49	2032	67.87	41.86	0.39
108	SLV 5	-416	94	2435	-120.68	-18.29	-0.74
108	SLV 6	-416	94	2435	-120.68	-18.29	-0.74
108	SLV 7	948	-99	1500	142.78	37.11	0.79
108	SLV 8	948	-99	1500	142.78	37.11	0.79
108	SLV 9	-936	110	2260	-135.52	-38.98	-0.86
108	SLV 10	-936	110	2260	-135.52	-38.98	-0.86
108	SLV 11	428	-84	1324	127.95	16.42	0.67
108	SLV 12	428	-84	1324	127.95	16.42	0.67
108	SLV 13	-1065	60	1728	-60.61	-43.73	-0.47
108	SLV 14	-1065	60	1728	-60.61	-43.73	-0.47
108	SLV 15	-656	2	1447	18.43	-27.11	-0.01
108	SLV 16	-656	2	1447	18.43	-27.11	-0.01
109	SLU 1	23	7	1925	1.36	0.52	-0.03
109	SLU 2	23	7	1925	1.36	0.52	-0.03
109	SLU 3	23	7	1925	1.36	0.52	-0.03
109	SLU 4	23	7	1925	1.36	0.52	-0.03
109	SLU 5	23	7	1925	1.36	0.52	-0.03
109	SLU 6	23	7	1925	1.36	0.52	-0.03
109	SLU 7	23	7	1925	1.36	0.52	-0.03
109	SLU 8	23	7	1925	1.36	0.52	-0.03
109	SLU 9	23	7	1925	1.36	0.52	-0.03
109	SLU 10	14	9	2333	2.57	0.13	-0.04
109	SLU 11	14	9	2333	2.57	0.13	-0.04
109	SLU 12	14	9	2333	2.57	0.13	-0.04
109	SLU 13	14	9	2333	2.57	0.13	-0.04
109	SLU 14	14	9	2333	2.57	0.13	-0.04
109	SLU 15	14	9	2333	2.57	0.13	-0.04
109	SLU 16	14	9	2333	2.57	0.13	-0.04
109	SLU 17	14	9	2333	2.57	0.13	-0.04
109	SLU 18	11	9	2508	3.09	-0.04	-0.05
109	SLU 19	11	9	2508	3.09	-0.04	-0.05
109	SLU 20	11	9	2508	3.09	-0.04	-0.05
109	SLU 21	11	9	2508	3.09	-0.04	-0.05
109	SLU 22	13	8	2169	1.89	0.14	-0.04
109	SLU 23	13	8	2169	1.89	0.14	-0.04
109	SLU 24	13	8	2169	1.89	0.14	-0.04
109	SLU 25	13	8	2169	1.89	0.14	-0.04
109	SLU 26	13	8	2169	1.89	0.14	-0.04
109	SLU 27	13	8	2169	1.89	0.14	-0.04
109	SLU 28	13	8	2169	1.89	0.14	-0.04
109	SLU 29	13	8	2169	1.89	0.14	-0.04
109	SLU 30	13	8	2169	1.89	0.14	-0.04
109	SLU 31	5	9	2577	3.1	-0.25	-0.05
109	SLU 32	5	9	2577	3.1	-0.25	-0.05
109	SLU 33	5	9	2577	3.1	-0.25	-0.05
109	SLU 34	5	9	2577	3.1	-0.25	-0.05
109	SLU 35	5	9	2577	3.1	-0.25	-0.05
109	SLU 36	5	9	2577	3.1	-0.25	-0.05
109	SLU 37	5	9	2577	3.1	-0.25	-0.05
109	SLU 38	5	9	2577	3.1	-0.25	-0.05
109	SLU 39	2	10	2752	3.62	-0.41	-0.05
109	SLU 40	2	10	2752	3.62	-0.41	-0.05
109	SLU 41	2	10	2752	3.62	-0.41	-0.05
109	SLU 42	2	10	2752	3.62	-0.41	-0.05
109	SLU 43	32	8	2419	1.59	0.8	-0.04
109	SLU 44	32	8	2419	1.59	0.8	-0.04
109	SLU 45	32	8	2419	1.59	0.8	-0.04
109	SLU 46	32	8	2419	1.59	0.8	-0.04
109	SLU 47	32	8	2419	1.59	0.8	-0.04
109	SLU 48	32	8	2419	1.59	0.8	-0.04
109	SLU 49	32	8	2419	1.59	0.8	-0.04
109	SLU 50	32	8	2419	1.59	0.8	-0.04
109	SLU 51	32	8	2419	1.59	0.8	-0.04
109	SLU 52	24	10	2827	2.8	0.41	-0.05
109	SLU 53	24	10	2827	2.8	0.41	-0.05
109	SLU 54	24	10	2827	2.8	0.41	-0.05
109	SLU 55	24	10	2827	2.8	0.41	-0.05
109	SLU 56	24	10	2827	2.8	0.41	-0.05
109	SLU 57	24	10	2827	2.8	0.41	-0.05
109	SLU 58	24	10	2827	2.8	0.41	-0.05
109	SLU 59	24	10	2827	2.8	0.41	-0.05
109	SLU 60	21	11	3002	3.32	0.24	-0.05
109	SLU 61	21	11	3002	3.32	0.24	-0.05
109	SLU 62	21	11	3002	3.32	0.24	-0.05
109	SLU 63	21	11	3002	3.32	0.24	-0.05
109	SLU 64	23	9	2663	2.12	0.43	-0.04
109	SLU 65	23	9	2663	2.12	0.43	-0.04
109	SLU 66	23	9	2663	2.12	0.43	-0.04
109	SLU 67	23	9	2663	2.12	0.43	-0.04
109	SLU 68	23	9	2663	2.12	0.43	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
109	SLU 69	23	9	2663	2.12	0.43	-0.04
109	SLU 70	23	9	2663	2.12	0.43	-0.04
109	SLU 71	23	9	2663	2.12	0.43	-0.04
109	SLU 72	23	9	2663	2.12	0.43	-0.04
109	SLU 73	15	11	3071	3.33	0.04	-0.05
109	SLU 74	15	11	3071	3.33	0.04	-0.05
109	SLU 75	15	11	3071	3.33	0.04	-0.05
109	SLU 76	15	11	3071	3.33	0.04	-0.05
109	SLU 77	15	11	3071	3.33	0.04	-0.05
109	SLU 78	15	11	3071	3.33	0.04	-0.05
109	SLU 79	15	11	3071	3.33	0.04	-0.05
109	SLU 80	15	11	3071	3.33	0.04	-0.05
109	SLU 81	12	12	3246	3.84	-0.13	-0.06
109	SLU 82	12	12	3246	3.84	-0.13	-0.06
109	SLU 83	12	12	3246	3.84	-0.13	-0.06
109	SLU 84	12	12	3246	3.84	-0.13	-0.06
109	SLE RA 1	20	7	1995	1.51	0.41	-0.03
109	SLE RA 2	20	7	1995	1.51	0.41	-0.03
109	SLE RA 3	20	7	1995	1.51	0.41	-0.03
109	SLE RA 4	20	7	1995	1.51	0.41	-0.03
109	SLE RA 5	20	7	1995	1.51	0.41	-0.03
109	SLE RA 6	20	7	1995	1.51	0.41	-0.03
109	SLE RA 7	20	7	1995	1.51	0.41	-0.03
109	SLE RA 8	20	7	1995	1.51	0.41	-0.03
109	SLE RA 9	20	7	1995	1.51	0.41	-0.03
109	SLE RA 10	14	8	2267	2.32	0.15	-0.04
109	SLE RA 11	14	8	2267	2.32	0.15	-0.04
109	SLE RA 12	14	8	2267	2.32	0.15	-0.04
109	SLE RA 13	14	8	2267	2.32	0.15	-0.04
109	SLE RA 14	14	8	2267	2.32	0.15	-0.04
109	SLE RA 15	14	8	2267	2.32	0.15	-0.04
109	SLE RA 16	14	8	2267	2.32	0.15	-0.04
109	SLE RA 17	14	8	2267	2.32	0.15	-0.04
109	SLE RA 18	12	9	2383	2.66	0.04	-0.04
109	SLE RA 19	12	9	2383	2.66	0.04	-0.04
109	SLE RA 20	12	9	2383	2.66	0.04	-0.04
109	SLE RA 21	12	9	2383	2.66	0.04	-0.04
109	SLE FR 1	20	7	1995	1.51	0.41	-0.03
109	SLE FR 2	20	7	1995	1.51	0.41	-0.03
109	SLE FR 3	20	7	1995	1.51	0.41	-0.03
109	SLE FR 4	18	8	2111	1.86	0.3	-0.04
109	SLE FR 5	18	8	2111	1.86	0.3	-0.04
109	SLE FR 6	16	8	2189	2.09	0.23	-0.04
109	SLE QP 1	20	7	1995	1.51	0.41	-0.03
109	SLE QP 2	18	8	2111	1.86	0.3	-0.04
109	SLD 1	261	7	2263	-1.3	9.61	-0.03
109	SLD 2	261	7	2263	-1.3	9.61	-0.03
109	SLD 3	422	-11	2176	23.14	15.81	0.07
109	SLD 4	422	-11	2176	23.14	15.81	0.07
109	SLD 5	-153	33	2288	-36.15	-6.32	-0.19
109	SLD 6	-153	33	2288	-36.15	-6.32	-0.19
109	SLD 7	383	-24	1999	45.3	14.36	0.15
109	SLD 8	383	-24	1999	45.3	14.36	0.15
109	SLD 9	-348	39	2223	-41.59	-13.76	-0.23
109	SLD 10	-348	39	2223	-41.59	-13.76	-0.23
109	SLD 11	188	-18	1934	39.86	6.92	0.12
109	SLD 12	188	-18	1934	39.86	6.92	0.12
109	SLD 13	-387	26	2046	-19.43	-15.21	-0.14
109	SLD 14	-387	26	2046	-19.43	-15.21	-0.14
109	SLD 15	-226	8	1960	5.01	-9.01	-0.04
109	SLD 16	-226	8	1960	5.01	-9.01	-0.04
109	SLV 1	566	5	2490	-6.9	21.26	-0.04
109	SLV 2	566	5	2490	-6.9	21.26	-0.04
109	SLV 3	987	-39	2278	56.15	37.51	0.23
109	SLV 4	987	-39	2278	56.15	37.51	0.23
109	SLV 5	-457	73	2547	-96.39	-18.05	-0.44
109	SLV 6	-457	73	2547	-96.39	-18.05	-0.44
109	SLV 7	948	-73	1840	113.77	36.1	0.45
109	SLV 8	948	-73	1840	113.77	36.1	0.45
109	SLV 9	-913	88	2383	-110.05	-35.5	-0.52
109	SLV 10	-913	88	2383	-110.05	-35.5	-0.52
109	SLV 11	493	-58	1676	100.11	18.65	0.37
109	SLV 12	493	-58	1676	100.11	18.65	0.37
109	SLV 13	-952	54	1945	-52.44	-36.91	-0.3
109	SLV 14	-952	54	1945	-52.44	-36.91	-0.3
109	SLV 15	-531	10	1733	10.61	-20.66	-0.04
109	SLV 16	-531	10	1733	10.61	-20.66	-0.04
110	SLU 1	-42	7	2136	0.43	-3.14	-0.02
110	SLU 2	-42	7	2136	0.43	-3.14	-0.02
110	SLU 3	-42	7	2136	0.43	-3.14	-0.02
110	SLU 4	-42	7	2136	0.43	-3.14	-0.02
110	SLU 5	-42	7	2136	0.43	-3.14	-0.02
110	SLU 6	-42	7	2136	0.43	-3.14	-0.02
110	SLU 7	-42	7	2136	0.43	-3.14	-0.02
110	SLU 8	-42	7	2136	0.43	-3.14	-0.02
110	SLU 9	-42	7	2136	0.43	-3.14	-0.02
110	SLU 10	-67	9	2603	1.11	-4.61	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
110	SLU 11	-67	9	2603	1.11	-4.61	-0.03
110	SLU 12	-67	9	2603	1.11	-4.61	-0.03
110	SLU 13	-67	9	2603	1.11	-4.61	-0.03
110	SLU 14	-67	9	2603	1.11	-4.61	-0.03
110	SLU 15	-67	9	2603	1.11	-4.61	-0.03
110	SLU 16	-67	9	2603	1.11	-4.61	-0.03
110	SLU 17	-67	9	2603	1.11	-4.61	-0.03
110	SLU 18	-78	10	2803	1.41	-5.24	-0.03
110	SLU 19	-78	10	2803	1.41	-5.24	-0.03
110	SLU 20	-78	10	2803	1.41	-5.24	-0.03
110	SLU 21	-78	10	2803	1.41	-5.24	-0.03
110	SLU 22	-63	8	2409	0.73	-4.22	-0.03
110	SLU 23	-63	8	2409	0.73	-4.22	-0.03
110	SLU 24	-63	8	2409	0.73	-4.22	-0.03
110	SLU 25	-63	8	2409	0.73	-4.22	-0.03
110	SLU 26	-63	8	2409	0.73	-4.22	-0.03
110	SLU 27	-63	8	2409	0.73	-4.22	-0.03
110	SLU 28	-63	8	2409	0.73	-4.22	-0.03
110	SLU 29	-63	8	2409	0.73	-4.22	-0.03
110	SLU 30	-63	8	2409	0.73	-4.22	-0.03
110	SLU 31	-88	10	2875	1.42	-5.69	-0.03
110	SLU 32	-88	10	2875	1.42	-5.69	-0.03
110	SLU 33	-88	10	2875	1.42	-5.69	-0.03
110	SLU 34	-88	10	2875	1.42	-5.69	-0.03
110	SLU 35	-88	10	2875	1.42	-5.69	-0.03
110	SLU 36	-88	10	2875	1.42	-5.69	-0.03
110	SLU 37	-88	10	2875	1.42	-5.69	-0.03
110	SLU 38	-88	10	2875	1.42	-5.69	-0.03
110	SLU 39	-99	11	3075	1.71	-6.32	-0.04
110	SLU 40	-99	11	3075	1.71	-6.32	-0.04
110	SLU 41	-99	11	3075	1.71	-6.32	-0.04
110	SLU 42	-99	11	3075	1.71	-6.32	-0.04
110	SLU 43	-47	9	2684	0.45	-3.72	-0.03
110	SLU 44	-47	9	2684	0.45	-3.72	-0.03
110	SLU 45	-47	9	2684	0.45	-3.72	-0.03
110	SLU 46	-47	9	2684	0.45	-3.72	-0.03
110	SLU 47	-47	9	2684	0.45	-3.72	-0.03
110	SLU 48	-47	9	2684	0.45	-3.72	-0.03
110	SLU 49	-47	9	2684	0.45	-3.72	-0.03
110	SLU 50	-47	9	2684	0.45	-3.72	-0.03
110	SLU 51	-47	9	2684	0.45	-3.72	-0.03
110	SLU 52	-72	11	3150	1.14	-5.19	-0.04
110	SLU 53	-72	11	3150	1.14	-5.19	-0.04
110	SLU 54	-72	11	3150	1.14	-5.19	-0.04
110	SLU 55	-72	11	3150	1.14	-5.19	-0.04
110	SLU 56	-72	11	3150	1.14	-5.19	-0.04
110	SLU 57	-72	11	3150	1.14	-5.19	-0.04
110	SLU 58	-72	11	3150	1.14	-5.19	-0.04
110	SLU 59	-72	11	3150	1.14	-5.19	-0.04
110	SLU 60	-83	12	3350	1.43	-5.82	-0.04
110	SLU 61	-83	12	3350	1.43	-5.82	-0.04
110	SLU 62	-83	12	3350	1.43	-5.82	-0.04
110	SLU 63	-83	12	3350	1.43	-5.82	-0.04
110	SLU 64	-68	10	2956	0.76	-4.79	-0.03
110	SLU 65	-68	10	2956	0.76	-4.79	-0.03
110	SLU 66	-68	10	2956	0.76	-4.79	-0.03
110	SLU 67	-68	10	2956	0.76	-4.79	-0.03
110	SLU 68	-68	10	2956	0.76	-4.79	-0.03
110	SLU 69	-68	10	2956	0.76	-4.79	-0.03
110	SLU 70	-68	10	2956	0.76	-4.79	-0.03
110	SLU 71	-68	10	2956	0.76	-4.79	-0.03
110	SLU 72	-68	10	2956	0.76	-4.79	-0.03
110	SLU 73	-94	12	3423	1.44	-6.26	-0.04
110	SLU 74	-94	12	3423	1.44	-6.26	-0.04
110	SLU 75	-94	12	3423	1.44	-6.26	-0.04
110	SLU 76	-94	12	3423	1.44	-6.26	-0.04
110	SLU 77	-94	12	3423	1.44	-6.26	-0.04
110	SLU 78	-94	12	3423	1.44	-6.26	-0.04
110	SLU 79	-94	12	3423	1.44	-6.26	-0.04
110	SLU 80	-94	12	3423	1.44	-6.26	-0.04
110	SLU 81	-104	13	3623	1.74	-6.89	-0.04
110	SLU 82	-104	13	3623	1.74	-6.89	-0.04
110	SLU 83	-104	13	3623	1.74	-6.89	-0.04
110	SLU 84	-104	13	3623	1.74	-6.89	-0.04
110	SLE RA 1	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 2	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 3	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 4	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 5	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 6	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 7	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 8	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 9	-48	7	2214	0.52	-3.45	-0.02
110	SLE RA 10	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 11	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 12	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 13	-65	9	2525	0.97	-4.43	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
110	SLE RA 14	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 15	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 16	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 17	-65	9	2525	0.97	-4.43	-0.03
110	SLE RA 18	-72	9	2658	1.17	-4.85	-0.03
110	SLE RA 19	-72	9	2658	1.17	-4.85	-0.03
110	SLE RA 20	-72	9	2658	1.17	-4.85	-0.03
110	SLE RA 21	-72	9	2658	1.17	-4.85	-0.03
110	SLE FR 1	-48	7	2214	0.52	-3.45	-0.02
110	SLE FR 2	-48	7	2214	0.52	-3.45	-0.02
110	SLE FR 3	-48	7	2214	0.52	-3.45	-0.02
110	SLE FR 4	-55	8	2347	0.71	-3.87	-0.03
110	SLE FR 5	-55	8	2347	0.71	-3.87	-0.03
110	SLE FR 6	-60	8	2436	0.84	-4.15	-0.03
110	SLE QP 1	-48	7	2214	0.52	-3.45	-0.02
110	SLE QP 2	-55	8	2347	0.71	-3.87	-0.03
110	SLD 1	166	4	2265	-0.32	5.44	-0.02
110	SLD 2	166	4	2265	-0.32	5.44	-0.02
110	SLD 3	347	-7	2178	17.26	13.06	0.03
110	SLD 4	347	-7	2178	17.26	13.06	0.03
110	SLD 5	-263	22	2454	-26.27	-12.64	-0.1
110	SLD 6	-263	22	2454	-26.27	-12.64	-0.1
110	SLD 7	340	-12	2165	32.34	12.77	0.07
110	SLD 8	340	-12	2165	32.34	12.77	0.07
110	SLD 9	-450	28	2529	-30.92	-20.51	-0.12
110	SLD 10	-450	28	2529	-30.92	-20.51	-0.12
110	SLD 11	153	-7	2241	27.69	4.9	0.05
110	SLD 12	153	-7	2241	27.69	4.9	0.05
110	SLD 13	-457	22	2516	-15.84	-20.8	-0.09
110	SLD 14	-457	22	2516	-15.84	-20.8	-0.09
110	SLD 15	-276	12	2430	1.75	-13.18	-0.03
110	SLD 16	-276	12	2430	1.75	-13.18	-0.03
110	SLV 1	437	-3	2147	-2.28	16.88	-0.01
110	SLV 2	437	-3	2147	-2.28	16.88	-0.01
110	SLV 3	913	-29	1939	43.06	36.84	0.12
110	SLV 4	913	-29	1939	43.06	36.84	0.12
110	SLV 5	-628	45	2604	-68.96	-27.93	-0.22
110	SLV 6	-628	45	2604	-68.96	-27.93	-0.22
110	SLV 7	956	-43	1908	82.19	38.62	0.21
110	SLV 8	956	-43	1908	82.19	38.62	0.21
110	SLV 9	-1066	59	2786	-80.76	-46.36	-0.27
110	SLV 10	-1066	59	2786	-80.76	-46.36	-0.27
110	SLV 11	518	-29	2091	70.38	20.19	0.16
110	SLV 12	518	-29	2091	70.38	20.19	0.16
110	SLV 13	-1022	44	2756	-41.64	-44.58	-0.18
110	SLV 14	-1022	44	2756	-41.64	-44.58	-0.18
110	SLV 15	-547	18	2547	3.7	-24.62	-0.05
110	SLV 16	-547	18	2547	3.7	-24.62	-0.05
111	SLU 1	-117	5	2331	0.4	-5.26	-0.01
111	SLU 2	-117	5	2331	0.4	-5.26	-0.01
111	SLU 3	-117	5	2331	0.4	-5.26	-0.01
111	SLU 4	-117	5	2331	0.4	-5.26	-0.01
111	SLU 5	-117	5	2331	0.4	-5.26	-0.01
111	SLU 6	-117	5	2331	0.4	-5.26	-0.01
111	SLU 7	-117	5	2331	0.4	-5.26	-0.01
111	SLU 8	-117	5	2331	0.4	-5.26	-0.01
111	SLU 9	-117	5	2331	0.4	-5.26	-0.01
111	SLU 10	-160	6	2854	0.85	-7.17	-0.01
111	SLU 11	-160	6	2854	0.85	-7.17	-0.01
111	SLU 12	-160	6	2854	0.85	-7.17	-0.01
111	SLU 13	-160	6	2854	0.85	-7.17	-0.01
111	SLU 14	-160	6	2854	0.85	-7.17	-0.01
111	SLU 15	-160	6	2854	0.85	-7.17	-0.01
111	SLU 16	-160	6	2854	0.85	-7.17	-0.01
111	SLU 17	-160	6	2854	0.85	-7.17	-0.01
111	SLU 18	-179	7	3078	1.04	-7.99	-0.01
111	SLU 19	-179	7	3078	1.04	-7.99	-0.01
111	SLU 20	-179	7	3078	1.04	-7.99	-0.01
111	SLU 21	-179	7	3078	1.04	-7.99	-0.01
111	SLU 22	-150	5	2628	0.61	-6.65	-0.01
111	SLU 23	-150	5	2628	0.61	-6.65	-0.01
111	SLU 24	-150	5	2628	0.61	-6.65	-0.01
111	SLU 25	-150	5	2628	0.61	-6.65	-0.01
111	SLU 26	-150	5	2628	0.61	-6.65	-0.01
111	SLU 27	-150	5	2628	0.61	-6.65	-0.01
111	SLU 28	-150	5	2628	0.61	-6.65	-0.01
111	SLU 29	-150	5	2628	0.61	-6.65	-0.01
111	SLU 30	-150	5	2628	0.61	-6.65	-0.01
111	SLU 31	-193	7	3150	1.06	-8.56	-0.01
111	SLU 32	-193	7	3150	1.06	-8.56	-0.01
111	SLU 33	-193	7	3150	1.06	-8.56	-0.01
111	SLU 34	-193	7	3150	1.06	-8.56	-0.01
111	SLU 35	-193	7	3150	1.06	-8.56	-0.01
111	SLU 36	-193	7	3150	1.06	-8.56	-0.01
111	SLU 37	-193	7	3150	1.06	-8.56	-0.01
111	SLU 38	-193	7	3150	1.06	-8.56	-0.01
111	SLU 39	-212	7	3374	1.25	-9.38	-0.01



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
111	SLU 40	-212	7	3374	1.25	-9.38	-0.01
111	SLU 41	-212	7	3374	1.25	-9.38	-0.01
111	SLU 42	-212	7	3374	1.25	-9.38	-0.01
111	SLU 43	-141	6	2928	0.45	-6.37	-0.01
111	SLU 44	-141	6	2928	0.45	-6.37	-0.01
111	SLU 45	-141	6	2928	0.45	-6.37	-0.01
111	SLU 46	-141	6	2928	0.45	-6.37	-0.01
111	SLU 47	-141	6	2928	0.45	-6.37	-0.01
111	SLU 48	-141	6	2928	0.45	-6.37	-0.01
111	SLU 49	-141	6	2928	0.45	-6.37	-0.01
111	SLU 50	-141	6	2928	0.45	-6.37	-0.01
111	SLU 51	-141	6	2928	0.45	-6.37	-0.01
111	SLU 52	-184	7	3451	0.9	-8.27	-0.01
111	SLU 53	-184	7	3451	0.9	-8.27	-0.01
111	SLU 54	-184	7	3451	0.9	-8.27	-0.01
111	SLU 55	-184	7	3451	0.9	-8.27	-0.01
111	SLU 56	-184	7	3451	0.9	-8.27	-0.01
111	SLU 57	-184	7	3451	0.9	-8.27	-0.01
111	SLU 58	-184	7	3451	0.9	-8.27	-0.01
111	SLU 59	-184	7	3451	0.9	-8.27	-0.01
111	SLU 60	-203	8	3675	1.09	-9.09	-0.01
111	SLU 61	-203	8	3675	1.09	-9.09	-0.01
111	SLU 62	-203	8	3675	1.09	-9.09	-0.01
111	SLU 63	-203	8	3675	1.09	-9.09	-0.01
111	SLU 64	-174	6	3225	0.66	-7.76	-0.01
111	SLU 65	-174	6	3225	0.66	-7.76	-0.01
111	SLU 66	-174	6	3225	0.66	-7.76	-0.01
111	SLU 67	-174	6	3225	0.66	-7.76	-0.01
111	SLU 68	-174	6	3225	0.66	-7.76	-0.01
111	SLU 69	-174	6	3225	0.66	-7.76	-0.01
111	SLU 70	-174	6	3225	0.66	-7.76	-0.01
111	SLU 71	-174	6	3225	0.66	-7.76	-0.01
111	SLU 72	-174	6	3225	0.66	-7.76	-0.01
111	SLU 73	-217	8	3748	1.11	-9.66	-0.01
111	SLU 74	-217	8	3748	1.11	-9.66	-0.01
111	SLU 75	-217	8	3748	1.11	-9.66	-0.01
111	SLU 76	-217	8	3748	1.11	-9.66	-0.01
111	SLU 77	-217	8	3748	1.11	-9.66	-0.01
111	SLU 78	-217	8	3748	1.11	-9.66	-0.01
111	SLU 79	-217	8	3748	1.11	-9.66	-0.01
111	SLU 80	-217	8	3748	1.11	-9.66	-0.01
111	SLU 81	-236	9	3972	1.3	-10.48	-0.01
111	SLU 82	-236	9	3972	1.3	-10.48	-0.01
111	SLU 83	-236	9	3972	1.3	-10.48	-0.01
111	SLU 84	-236	9	3972	1.3	-10.48	-0.01
111	SLE RA 1	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 2	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 3	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 4	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 5	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 6	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 7	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 8	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 9	-126	5	2416	0.46	-5.66	-0.01
111	SLE RA 10	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 11	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 12	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 13	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 14	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 15	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 16	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 17	-155	6	2764	0.76	-6.93	-0.01
111	SLE RA 18	-168	6	2913	0.89	-7.48	-0.01
111	SLE RA 19	-168	6	2913	0.89	-7.48	-0.01
111	SLE RA 20	-168	6	2913	0.89	-7.48	-0.01
111	SLE RA 21	-168	6	2913	0.89	-7.48	-0.01
111	SLE FR 1	-126	5	2416	0.46	-5.66	-0.01
111	SLE FR 2	-126	5	2416	0.46	-5.66	-0.01
111	SLE FR 3	-126	5	2416	0.46	-5.66	-0.01
111	SLE FR 4	-139	5	2565	0.59	-6.21	-0.01
111	SLE FR 5	-139	5	2565	0.59	-6.21	-0.01
111	SLE FR 6	-147	6	2665	0.67	-6.57	-0.01
111	SLE QP 1	-126	5	2416	0.46	-5.66	-0.01
111	SLE QP 2	-139	5	2565	0.59	-6.21	-0.01
111	SLD 1	63	-6	2278	1.24	2.27	0
111	SLD 2	63	-6	2278	1.24	2.27	0
111	SLD 3	255	-2	2420	12.04	10.19	0.02
111	SLD 4	255	-2	2420	12.04	10.19	0.02
111	SLD 5	-369	-4	2262	-15.6	-15.69	-0.04
111	SLD 6	-369	-4	2262	-15.6	-15.69	-0.04
111	SLD 7	270	9	2738	20.41	10.74	0.03
111	SLD 8	270	9	2738	20.41	10.74	0.03
111	SLD 9	-547	1	2392	-19.23	-23.15	-0.05
111	SLD 10	-547	1	2392	-19.23	-23.15	-0.05
111	SLD 11	91	15	2868	16.78	3.27	0.02
111	SLD 12	91	15	2868	16.78	3.27	0.02
111	SLD 13	-532	13	2710	-10.86	-22.6	-0.04



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
111	SLD 14	-532	13	2710	-10.86	-22.6	-0.04
111	SLD 15	-341	17	2852	-0.06	-14.68	-0.02
111	SLD 16	-341	17	2852	-0.06	-14.68	-0.02
111	SLV 1	307	-24	1881	2.07	12.56	0.01
111	SLV 2	307	-24	1881	2.07	12.56	0.01
111	SLV 3	809	-13	2233	29.93	33.32	0.07
111	SLV 4	809	-13	2233	29.93	33.32	0.07
111	SLV 5	-766	-19	1826	-41.22	-32.06	-0.08
111	SLV 6	-766	-19	1826	-41.22	-32.06	-0.08
111	SLV 7	907	15	2999	51.64	37.14	0.1
111	SLV 8	907	15	2999	51.64	37.14	0.1
111	SLV 9	-1184	-5	2131	-50.46	-49.55	-0.11
111	SLV 10	-1184	-5	2131	-50.46	-49.55	-0.11
111	SLV 11	489	30	3304	42.4	19.65	0.07
111	SLV 12	489	30	3304	42.4	19.65	0.07
111	SLV 13	-1087	24	2897	-28.75	-45.73	-0.08
111	SLV 14	-1087	24	2897	-28.75	-45.73	-0.08
111	SLV 15	-585	34	3249	-0.89	-24.97	-0.03
111	SLV 16	-585	34	3249	-0.89	-24.97	-0.03
112	SLU 1	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 2	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 3	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 4	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 5	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 6	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 7	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 8	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 9	-223	-2	2654	1.28	-12.49	-0.02
112	SLU 10	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 11	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 12	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 13	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 14	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 15	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 16	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 17	-291	-3	3269	1.76	-16.24	-0.02
112	SLU 18	-321	-3	3533	1.97	-17.85	-0.03
112	SLU 19	-321	-3	3533	1.97	-17.85	-0.03
112	SLU 20	-321	-3	3533	1.97	-17.85	-0.03
112	SLU 21	-321	-3	3533	1.97	-17.85	-0.03
112	SLU 22	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 23	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 24	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 25	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 26	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 27	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 28	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 29	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 30	-270	-3	2995	1.52	-14.9	-0.02
112	SLU 31	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 32	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 33	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 34	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 35	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 36	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 37	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 38	-338	-3	3610	2.01	-18.65	-0.03
112	SLU 39	-367	-3	3874	2.21	-20.25	-0.03
112	SLU 40	-367	-3	3874	2.21	-20.25	-0.03
112	SLU 41	-367	-3	3874	2.21	-20.25	-0.03
112	SLU 42	-367	-3	3874	2.21	-20.25	-0.03
112	SLU 43	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 44	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 45	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 46	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 47	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 48	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 49	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 50	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 51	-274	-3	3333	1.58	-15.42	-0.02
112	SLU 52	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 53	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 54	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 55	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 56	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 57	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 58	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 59	-342	-4	3948	2.06	-19.16	-0.03
112	SLU 60	-372	-4	4212	2.27	-20.77	-0.03
112	SLU 61	-372	-4	4212	2.27	-20.77	-0.03
112	SLU 62	-372	-4	4212	2.27	-20.77	-0.03
112	SLU 63	-372	-4	4212	2.27	-20.77	-0.03
112	SLU 64	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 65	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 66	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 67	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 68	-321	-3	3674	1.82	-17.82	-0.03



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
112	SLU 69	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 70	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 71	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 72	-321	-3	3674	1.82	-17.82	-0.03
112	SLU 73	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 74	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 75	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 76	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 77	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 78	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 79	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 80	-389	-4	4289	2.31	-21.57	-0.03
112	SLU 81	-418	-4	4553	2.51	-23.18	-0.03
112	SLU 82	-418	-4	4553	2.51	-23.18	-0.03
112	SLU 83	-418	-4	4553	2.51	-23.18	-0.03
112	SLU 84	-418	-4	4553	2.51	-23.18	-0.03
112	SLE RA 1	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 2	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 3	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 4	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 5	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 6	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 7	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 8	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 9	-236	-3	2751	1.35	-13.18	-0.02
112	SLE RA 10	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 11	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 12	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 13	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 14	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 15	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 16	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 17	-282	-3	3161	1.67	-15.68	-0.02
112	SLE RA 18	-301	-3	3337	1.81	-16.75	-0.03
112	SLE RA 19	-301	-3	3337	1.81	-16.75	-0.03
112	SLE RA 20	-301	-3	3337	1.81	-16.75	-0.03
112	SLE RA 21	-301	-3	3337	1.81	-16.75	-0.03
112	SLE FR 1	-236	-3	2751	1.35	-13.18	-0.02
112	SLE FR 2	-236	-3	2751	1.35	-13.18	-0.02
112	SLE FR 3	-236	-3	2751	1.35	-13.18	-0.02
112	SLE FR 4	-256	-3	2927	1.49	-14.25	-0.02
112	SLE FR 5	-256	-3	2927	1.49	-14.25	-0.02
112	SLE FR 6	-269	-3	3044	1.58	-14.97	-0.02
112	SLE QP 1	-236	-3	2751	1.35	-13.18	-0.02
112	SLE QP 2	-256	-3	2927	1.49	-14.25	-0.02
112	SLD 1	-61	-11	2390	2.59	-5.16	0
112	SLD 2	-61	-11	2390	2.59	-5.16	0
112	SLD 3	134	-9	2657	7.48	3.62	-0.01
112	SLD 4	134	-9	2657	7.48	3.62	-0.01
112	SLD 5	-493	-8	2359	-5.59	-24.83	-0.01
112	SLD 6	-493	-8	2359	-5.59	-24.83	-0.01
112	SLD 7	156	-2	3252	10.7	4.42	-0.03
112	SLD 8	156	-2	3252	10.7	4.42	-0.03
112	SLD 9	-668	-4	2602	-7.73	-32.92	-0.02
112	SLD 10	-668	-4	2602	-7.73	-32.92	-0.02
112	SLD 11	-19	3	3494	8.56	-3.67	-0.04
112	SLD 12	-19	3	3494	8.56	-3.67	-0.04
112	SLD 13	-646	4	3196	-4.51	-32.12	-0.04
112	SLD 14	-646	4	3196	-4.51	-32.12	-0.04
112	SLD 15	-451	6	3464	0.38	-23.35	-0.04
112	SLD 16	-451	6	3464	0.38	-23.35	-0.04
112	SLV 1	175	-23	1646	4.2	5.88	0.03
112	SLV 2	175	-23	1646	4.2	5.88	0.03
112	SLV 3	683	-19	2313	16.81	28.78	0.02
112	SLV 4	683	-19	2313	16.81	28.78	0.02
112	SLV 5	-898	-16	1530	-16.82	-42.95	0.02
112	SLV 6	-898	-16	1530	-16.82	-42.95	0.02
112	SLV 7	797	0	3756	25.21	33.39	-0.03
112	SLV 8	797	0	3756	25.21	33.39	-0.03
112	SLV 9	-1309	-5	2098	-22.24	-61.89	-0.01
112	SLV 10	-1309	-5	2098	-22.24	-61.89	-0.01
112	SLV 11	386	11	4324	19.8	14.44	-0.06
112	SLV 12	386	11	4324	19.8	14.44	-0.06
112	SLV 13	-1195	13	3541	-13.84	-57.28	-0.06
112	SLV 14	-1195	13	3541	-13.84	-57.28	-0.06
112	SLV 15	-687	18	4208	-1.23	-34.38	-0.07
112	SLV 16	-687	18	4208	-1.23	-34.38	-0.07
113	SLU 1	-387	-469	3311	10.46	-9.91	0.06
113	SLU 2	-387	-469	3311	10.46	-9.91	0.06
113	SLU 3	-387	-469	3311	10.46	-9.91	0.06
113	SLU 4	-387	-469	3311	10.46	-9.91	0.06
113	SLU 5	-387	-469	3311	10.46	-9.91	0.06
113	SLU 6	-387	-469	3311	10.46	-9.91	0.06
113	SLU 7	-387	-469	3311	10.46	-9.91	0.06
113	SLU 8	-387	-469	3311	10.46	-9.91	0.06
113	SLU 9	-387	-469	3311	10.46	-9.91	0.06
113	SLU 10	-488	-574	4099	12.52	-12.62	0.07



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
113	SLU 11	-488	-574	4099	12.52	-12.62	0.07
113	SLU 12	-488	-574	4099	12.52	-12.62	0.07
113	SLU 13	-488	-574	4099	12.52	-12.62	0.07
113	SLU 14	-488	-574	4099	12.52	-12.62	0.07
113	SLU 15	-488	-574	4099	12.52	-12.62	0.07
113	SLU 16	-488	-574	4099	12.52	-12.62	0.07
113	SLU 17	-488	-574	4099	12.52	-12.62	0.07
113	SLU 18	-531	-620	4437	13.4	-13.78	0.07
113	SLU 19	-531	-620	4437	13.4	-13.78	0.07
113	SLU 20	-531	-620	4437	13.4	-13.78	0.07
113	SLU 21	-531	-620	4437	13.4	-13.78	0.07
113	SLU 22	-447	-527	3745	11.69	-11.58	0.06
113	SLU 23	-447	-527	3745	11.69	-11.58	0.06
113	SLU 24	-447	-527	3745	11.69	-11.58	0.06
113	SLU 25	-447	-527	3745	11.69	-11.58	0.06
113	SLU 26	-447	-527	3745	11.69	-11.58	0.06
113	SLU 27	-447	-527	3745	11.69	-11.58	0.06
113	SLU 28	-447	-527	3745	11.69	-11.58	0.06
113	SLU 29	-447	-527	3745	11.69	-11.58	0.06
113	SLU 30	-447	-527	3745	11.69	-11.58	0.06
113	SLU 31	-548	-632	4533	13.75	-14.29	0.07
113	SLU 32	-548	-632	4533	13.75	-14.29	0.07
113	SLU 33	-548	-632	4533	13.75	-14.29	0.07
113	SLU 34	-548	-632	4533	13.75	-14.29	0.07
113	SLU 35	-548	-632	4533	13.75	-14.29	0.07
113	SLU 36	-548	-632	4533	13.75	-14.29	0.07
113	SLU 37	-548	-632	4533	13.75	-14.29	0.07
113	SLU 38	-548	-632	4533	13.75	-14.29	0.07
113	SLU 39	-591	-677	4871	14.64	-15.45	0.08
113	SLU 40	-591	-677	4871	14.64	-15.45	0.08
113	SLU 41	-591	-677	4871	14.64	-15.45	0.08
113	SLU 42	-591	-677	4871	14.64	-15.45	0.08
113	SLU 43	-483	-590	4155	13.17	-12.3	0.08
113	SLU 44	-483	-590	4155	13.17	-12.3	0.08
113	SLU 45	-483	-590	4155	13.17	-12.3	0.08
113	SLU 46	-483	-590	4155	13.17	-12.3	0.08
113	SLU 47	-483	-590	4155	13.17	-12.3	0.08
113	SLU 48	-483	-590	4155	13.17	-12.3	0.08
113	SLU 49	-483	-590	4155	13.17	-12.3	0.08
113	SLU 50	-483	-590	4155	13.17	-12.3	0.08
113	SLU 51	-483	-590	4155	13.17	-12.3	0.08
113	SLU 52	-584	-695	4943	15.23	-15.02	0.09
113	SLU 53	-584	-695	4943	15.23	-15.02	0.09
113	SLU 54	-584	-695	4943	15.23	-15.02	0.09
113	SLU 55	-584	-695	4943	15.23	-15.02	0.09
113	SLU 56	-584	-695	4943	15.23	-15.02	0.09
113	SLU 57	-584	-695	4943	15.23	-15.02	0.09
113	SLU 58	-584	-695	4943	15.23	-15.02	0.09
113	SLU 59	-584	-695	4943	15.23	-15.02	0.09
113	SLU 60	-627	-740	5281	16.11	-16.18	0.09
113	SLU 61	-627	-740	5281	16.11	-16.18	0.09
113	SLU 62	-627	-740	5281	16.11	-16.18	0.09
113	SLU 63	-627	-740	5281	16.11	-16.18	0.09
113	SLU 64	-542	-648	4590	14.41	-13.98	0.08
113	SLU 65	-542	-648	4590	14.41	-13.98	0.08
113	SLU 66	-542	-648	4590	14.41	-13.98	0.08
113	SLU 67	-542	-648	4590	14.41	-13.98	0.08
113	SLU 68	-542	-648	4590	14.41	-13.98	0.08
113	SLU 69	-542	-648	4590	14.41	-13.98	0.08
113	SLU 70	-542	-648	4590	14.41	-13.98	0.08
113	SLU 71	-542	-648	4590	14.41	-13.98	0.08
113	SLU 72	-542	-648	4590	14.41	-13.98	0.08
113	SLU 73	-643	-753	5378	16.47	-16.69	0.09
113	SLU 74	-643	-753	5378	16.47	-16.69	0.09
113	SLU 75	-643	-753	5378	16.47	-16.69	0.09
113	SLU 76	-643	-753	5378	16.47	-16.69	0.09
113	SLU 77	-643	-753	5378	16.47	-16.69	0.09
113	SLU 78	-643	-753	5378	16.47	-16.69	0.09
113	SLU 79	-643	-753	5378	16.47	-16.69	0.09
113	SLU 80	-643	-753	5378	16.47	-16.69	0.09
113	SLU 81	-687	-798	5715	17.35	-17.85	0.09
113	SLU 82	-687	-798	5715	17.35	-17.85	0.09
113	SLU 83	-687	-798	5715	17.35	-17.85	0.09
113	SLU 84	-687	-798	5715	17.35	-17.85	0.09
113	SLE RA 1	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 2	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 3	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 4	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 5	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 6	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 7	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 8	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 9	-404	-486	3435	10.81	-10.38	0.06
113	SLE RA 10	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 11	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 12	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 13	-471	-556	3960	12.18	-12.19	0.07



Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
113	SLE RA 14	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 15	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 16	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 17	-471	-556	3960	12.18	-12.19	0.07
113	SLE RA 18	-500	-586	4185	12.77	-12.97	0.07
113	SLE RA 19	-500	-586	4185	12.77	-12.97	0.07
113	SLE RA 20	-500	-586	4185	12.77	-12.97	0.07
113	SLE RA 21	-500	-586	4185	12.77	-12.97	0.07
113	SLE FR 1	-404	-486	3435	10.81	-10.38	0.06
113	SLE FR 2	-404	-486	3435	10.81	-10.38	0.06
113	SLE FR 3	-404	-486	3435	10.81	-10.38	0.06
113	SLE FR 4	-433	-516	3660	11.4	-11.16	0.06
113	SLE FR 5	-433	-516	3660	11.4	-11.16	0.06
113	SLE FR 6	-452	-536	3810	11.79	-11.68	0.06
113	SLE QP 1	-404	-486	3435	10.81	-10.38	0.06
113	SLE QP 2	-433	-516	3660	11.4	-11.16	0.06
113	SLD 1	-296	-418	3210	11.79	-6.3	0.11
113	SLD 2	-296	-418	3210	11.79	-6.3	0.11
113	SLD 3	-177	-499	2762	14.92	-0.97	0.17
113	SLD 4	-177	-499	2762	14.92	-0.97	0.17
113	SLD 5	-572	-362	4204	6.77	-17.8	-0.01
113	SLD 6	-572	-362	4204	6.77	-17.8	-0.01
113	SLD 7	-176	-635	2712	17.21	0	0.19
113	SLD 8	-176	-635	2712	17.21	0	0.19
113	SLD 9	-690	-397	4609	5.59	-22.31	-0.06
113	SLD 10	-690	-397	4609	5.59	-22.31	-0.06
113	SLD 11	-293	-669	3116	16.03	-4.52	0.14
113	SLD 12	-293	-669	3116	16.03	-4.52	0.14
113	SLD 13	-689	-532	4558	7.87	-21.35	-0.04
113	SLD 14	-689	-532	4558	7.87	-21.35	-0.04
113	SLD 15	-570	-614	4111	11.01	-16.01	0.02
113	SLD 16	-570	-614	4111	11.01	-16.01	0.02
113	SLV 1	-128	-282	2637	12.41	-0.46	0.17
113	SLV 2	-128	-282	2637	12.41	-0.46	0.17
113	SLV 3	181	-477	1517	19.84	13.45	0.32
113	SLV 4	181	-477	1517	19.84	13.45	0.32
113	SLV 5	-811	-151	5052	0.42	-29.05	-0.14
113	SLV 6	-811	-151	5052	0.42	-29.05	-0.14
113	SLV 7	221	-799	1318	25.22	17.33	0.37
113	SLV 8	221	-799	1318	25.22	17.33	0.37
113	SLV 9	-1087	-233	6003	-2.42	-39.64	-0.25
113	SLV 10	-1087	-233	6003	-2.42	-39.64	-0.25
113	SLV 11	-55	-880	2268	22.38	6.73	0.27
113	SLV 12	-55	-880	2268	22.38	6.73	0.27
113	SLV 13	-1047	-555	5804	2.95	-35.77	-0.19
113	SLV 14	-1047	-555	5804	2.95	-35.77	-0.19
113	SLV 15	-738	-749	4683	10.39	-21.86	-0.04
113	SLV 16	-738	-749	4683	10.39	-21.86	-0.04

1.3 Risposta modale

Modo: identificativo del modo di vibrare.

Periodo: periodo. [s]

Massa X: massa partecipante in direzione globale X. Il valore è adimensionale.

Massa Y: massa partecipante in direzione globale Y. Il valore è adimensionale.

Massa Z: massa partecipante in direzione globale Z. Il valore è adimensionale.

Massa rot. X: massa rotazionale partecipante attorno la direzione globale X. Il valore è adimensionale.

Massa rot. Y: massa rotazionale partecipante attorno la direzione globale Y. Il valore è adimensionale.

Massa rot. Z: massa rotazionale partecipante attorno la direzione globale Z. Il valore è adimensionale.

Massa sX: massa partecipante in direzione Sisma X. Il valore è adimensionale.

Massa sY: massa partecipante in direzione Sisma Y. Il valore è adimensionale.

Totale masse partecipanti:

Traslazione X: 0.92655

Traslazione Y: 0.954493

Traslazione Z: 0

Rotazione X: 0.936284

Rotazione Y: 0.895865

Rotazione Z: 0.93591

Modo	Periodo	Massa X	Massa Y	Massa Z	Massa rot. X	Massa rot. Y	Massa rot. Z	Massa sX	Massa sY
1	4.268305318	0.000000237	0.131136321	0	0.20223835	0.000000516	0.080039596	0.000000237	0.131136321
2	3.048916638	0.000004932	0.104228744	0	0.190388051	0.000007088	0.064627965	0.000004932	0.104228744
3	2.808091498	0.000232049	0.097535746	0	0.170735652	0.000448172	0.05435807	0.000232049	0.097535746
4	1.807580482	0.000002416	0.048734874	0	0.000382649	0.000002581	0.030573422	0.000002416	0.048734874
5	1.788521624	0.000052439	0.002826039	0	0.000017832	0.000057416	0.00095436	0.000052439	0.002826039
6	1.409657881	0.001726762	0.000030787	0	0.000051187	0.002212488	0.002679028	0.001726762	0.000030787
7	1.303760623	0.001544895	0.00013082	0	0.000178863	0.002154235	0.000028477	0.001544895	0.00013082
8	1.06303417	0.000055031	0.000098268	0	0.000739946	0.00004658	0.000002662	0.000055031	0.000098268

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Modo	Periodo	Massa X	Massa Y	Massa Z	Massa rot. X	Massa rot. Y	Massa rot. Z	Massa sX	Massa sY
9	1.049981585	0.000004683	0.0020848	0	0.014659241	0.000005176	0.001248823	0.000004683	0.0020848
10	0.949988761	0.000030289	0.083279666	0	0.014996981	0.000021913	0.052849737	0.000030289	0.083279666
11	0.922068183	0.00003998	0.080093266	0	0.011215539	0.000004169	0.045538256	0.00003998	0.080093266
12	0.853314418	0.001236119	0.004409913	0	0.026550551	0.001615216	0.006308114	0.001236119	0.004409913
13	0.804291486	0.006344137	0.000004646	0	0.000330337	0.007236642	0.004364866	0.006344137	0.000004646
14	0.783683301	0.002862058	0.000823025	0	0.010500848	0.004057231	0.000087447	0.002862058	0.000823025
15	0.711401815	0.000067602	0.035317061	0	0.019486924	0.000079339	0.020292208	0.000067602	0.035317061
16	0.670406401	0.001402402	0.000721937	0	0.002196723	0.001855929	0.002043321	0.001402402	0.000721937
17	0.651870856	0.072056993	0.000026312	0	0.000103992	0.088933654	0.026862466	0.072056993	0.000026312
18	0.616377064	0.008429494	0.000063866	0	0.000022059	0.011641792	0.000786722	0.008429494	0.000063866
19	0.576809631	0.006241075	0.000003851	0	0.000301782	0.007545817	0.001852152	0.006241075	0.000003851
20	0.542205765	0.000005234	0.003687348	0	0.000045167	0.000009357	0.002075306	0.000005234	0.003687348
21	0.511480807	0.006568742	0.000052386	0	0.000000248	0.002382708	0.00281839	0.006568742	0.000052386
22	0.477303993	0.000548575	0.000094033	0	0.000055377	0.001890925	0.000291158	0.000548575	0.000094033
23	0.471961191	0.004118395	0.001699872	0	0.00256425	0.000886889	0.007041372	0.004118395	0.001699872
24	0.461101126	0.005145857	0.001978935	0	0.004368083	0.004068972	0.000235676	0.005145857	0.001978935
25	0.456224512	0.001498286	0.000527512	0	0.004713803	0.005480583	0.001674662	0.001498286	0.000527512
26	0.427520388	0.003626372	0.005486912	0	0.000118988	0.000924884	0.000508208	0.003626372	0.005486912
27	0.415474823	0.002711482	0.0066803	0	0.000028163	0.000771707	0.009246359	0.002711482	0.0066803
28	0.390224638	0.005304326	0.000017749	0	0.000067813	0.00001944	0.002266266	0.005304326	0.000017749
29	0.37335091	0.030589774	0.000072779	0	0.000026708	0.001294563	0.010882778	0.030589774	0.000072779
30	0.36067175	0.000011634	0.005933756	0	0.010379374	0.000046354	0.003238779	0.000011634	0.005933756
31	0.336311909	0.00009277	0.006462628	0	0.001376757	0.000000002	0.005224169	0.00009277	0.006462628
32	0.297995697	0.000876553	0.007134618	0	0.000972222	0.000091864	0.002160979	0.000876553	0.007134618
33	0.274000338	0.001839564	0.000293829	0	0.000181664	0.000214854	0.001717884	0.001839564	0.000293829
34	0.258099167	0.000738148	0.009184251	0	0.008249157	0.000024755	0.003497174	0.000738148	0.009184251
35	0.234897054	0.005719831	0.001730177	0	0.000752624	0.000161672	0.005796146	0.005719831	0.001730177
36	0.206465175	0.000605915	0.01558274	0	0.003662002	0.000002525	0.006424196	0.000605915	0.01558274
37	0.183256275	0.002405657	0.000674548	0	0.000133131	0.001738338	0.002577322	0.002405657	0.000674548
38	0.145766223	0.001191612	0.016281139	0	0.014956505	0.000930112	0.006702322	0.001191612	0.016281139
39	0.129363004	0.026454224	0.003181017	0	0.00384301	0.021181403	0.020400943	0.026454224	0.003181017
40	0.093550114	0.002976567	0.028776241	0	0.015803013	0.002372142	0.008382433	0.002976567	0.028776241
41	0.07512944	0.250227911	0.000839506	0	0.000449975	0.314266757	0.103607073	0.250227911	0.000839506
42	0.050715069	0.468115921	0.000967163	0	0.000717466	0.408417941	0.155733997	0.468115921	0.000967163
43	0.039779159	0.002040248	0.245223031	0	0.197166801	0.000622165	0.176468389	0.002040248	0.245223031
44	0.02581447	0.000295071	0.000240496	0	0.00017396	0.000000384	0.000778947	0.000295071	0.000240496
45	0.025064674	0.000028054	0.000013538	0	0.000007675	0.000078953	0.000048043	0.000028054	0.000013538
46	0.020886212	0.000307456	0.000017763	0	0.000090605	0.000010198	0.000164738	0.000307456	0.000017763
47	0.01692666	0.000004794	0.000071772	0	0.000027215	0.000038819	0.000173618	0.000004794	0.000071772
48	0.016554281	0.000007416	0.000017614	0	0.000027788	0.000002887	0.000000454	0.000007416	0.000017614
49	0.013919437	0.000106211	0.000019544	0	0.000194275	0.000003547	0.000223969	0.000106211	0.000019544
50	0.012826298	0.000053376	0.000000039	0	0.000032767	0.000003618	0.000050863	0.000053376	0.000000039

1.4 Equilibrio globale forze

Contributo: Nome attribuito al sistema risultante.

Fx: Componente X di forza del sistema risultante. [daN]

Fy: Componente Y di forza del sistema risultante. [daN]

Fz: Componente Z di forza del sistema risultante. [daN]

Mx: Componente di momento attorno l'asse X del sistema risultante. [daN*m]

My: Componente di momento attorno l'asse Y del sistema risultante. [daN*m]

Mz: Componente di momento attorno l'asse Z del sistema risultante. [daN*m]

Bilancio in condizione di carico: Pesì strutturali

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	-204727.08	-4608883.1	5888786.03	0
Reazioni	0	0	204727.08	4608883.1	-5888786.03	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Permanenti portati

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	-47337.61	-1062610.02	1366238.15	0
Reazioni	0	0	47337.61	1062610.02	-1366238.15	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Variabile A

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	-55109.382	-1240956.44	1587152.12	0
Reazioni	0	0	55109.382	1240956.44	-1587152.12	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Sisma X SLV

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	62363.877	0	0	0	225356.94	-1402295.47
Reazioni	-62363.877	0	0	0	-225356.94	1402295.47
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0



Bilancio in condizione di carico: Sisma Y SLV

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	60218.734	0	-217605.29	0	1734451.83
Reazioni	0	-60218.734	0	217605.29	0	-1734451.83
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Sisma X SLD

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	26607.448	0	0	0	96148.18	-598287.12
Reazioni	-26607.448	0	0	0	-96148.18	598287.12
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Sisma Y SLD

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	25546.902	0	-92315.81	0	735815.39
Reazioni	0	-25546.902	0	92315.81	0	-735815.39
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Rig Ux

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	0	0	0	0
Reazioni	0	0	0	0	0	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Rig Uy

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	0	0	0	0
Reazioni	0	0	0	0	0	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Rig Rz

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	0	0	0	0
Reazioni	0	0	0	0	0	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

1.5 Risposta di spettro

Spettro: condizione elementare corrispondente allo spettro.

N.b.: nome breve della condizione elementare.

Fx: componente della forza lungo l'asse X. [daN]

Fy: componente della forza lungo l'asse Y. [daN]

Fz: componente della forza lungo l'asse Z. [daN]

Mx: componente della coppia attorno all'asse X. [daN*m]

My: componente della coppia attorno all'asse Y. [daN*m]

Mz: componente della coppia attorno all'asse Z. [daN*m]

Max X: massima reazione lungo l'asse X.

Valore: valore massimo della reazione. [daN]

Angolo: angolo d'ingresso del sisma che provoca il valore massimo della reazione. [deg]

Max Y: massima reazione lungo l'asse Y.

Valore: valore massimo della reazione. [daN]

Angolo: angolo d'ingresso del sisma che provoca il valore massimo della reazione. [deg]

Max Z: massima reazione lungo l'asse Z.

Valore: valore massimo della reazione. [daN]

Angolo: angolo d'ingresso del sisma che provoca il valore massimo della reazione. [deg]

Spettro	Fx	Fy	Fz	Mx	My	Mz	Max X		Max Y		Max Z	
N.b.							Valore	Angolo	Valore	Angolo	Valore	Angolo
SLV X	35369.12	2173.12	0	5720.669	1.048E05	7.813E05	35372.15	1	17351.72	93	0	0
SLV Y	2173.12	17327.23	0	4.340E04	5583.9741	5.261E05	35372.15	1	17351.72	93	0	0
X SLD	15103.39	930.42	0	2445.187	44787.646	3.338E05	15104.59	1	7230.2	93	0	0
Y SLD	930.42	7219.28	0	1.819E04	2396.247	2.196E05	15104.59	1	7230.2	93	0	0

1.6 Annotazioni solutore

Informazioni: informazioni fornite dal solutore al termine del calcolo del modello.

Informazioni



1.7 Statistiche soluzione

Tipo di equazioni	Lineari
Tecnica di soluzione	Intel MKL PARDISO
Numero equazioni	11904
Elemento min. diagonale	5116.16265338
Elemento max diagonale	738599537.83603
Rapporto max/min	144365.92185895
Elementi non nulli	414618

TABULATI DI CALCOLO – VERIFICHE
CIVICO 49
STATO DI FATTO



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1 Verifiche

1.1 Verifica regolarità strutturale

Le unità di misura elencate nel capitolo sono in [m, daN] ove non espressamente specificato.

Livello:

Descr: descrizione livello.

Quota: quota livello. [m]

Q: quota livello. [m]

Qinf: quota livello precedente. [m]

Comb: combinazione.

A1: a1 (Distribuzione masse).

A1n: a1 numeratore (distanza tra centro massa vs. centro rigidezza [se presente] o centro dell'ingombro del piano). [m]

A1d: a1 denominatore (ingombro del piano nella medesima direzione [x o y globale]). [m]

A1r: a1 rapporto (distanza centro massa/rigidezza su ingombro del piano).

A2: a2 (Distribuzione rigidezze).

A2n: a2 numeratore (rigidezza max [x o y globale]).

A2d: a2 denominatore (rigidezza min [x o y globale]).

A2r: a2 rapporto (rigidezza max/min).

A3: a3 (Forma compatta).

A3n: a3 numeratore (area convessa). [m²]

A3d: a3 denominatore (area piano). [m²]

A3r: a3 rapporto (area convessa/area piano).

B: b (Rapporto lati).

Bn: b numeratore (lato max [x o y globale]). [m]

Bd: b denominatore (lato min [x o y globale]). [m]

Br: b rapporto (lato max/min).

C: c (Rapporto rigidezze piano).

Cn: c numeratore (rigidezza elementi verticali).

Cd: c denominatore (rigidezza piano).

Cr: c rapporto (rigidezza elementi verticali/rigidezza piano).

E1: e1 (Variazione masse).

E1n: e1 numeratore (massa max). [daN]

E1d: e1 denominatore (massa min). [daN]

E1r: e1 rapporto (massa max/min).

E2: e2 (Riduzione rigidezze).

E2n: e2 numeratore (rigidezza relativa alla traslazione KUmax). [daN/m]

E2d: e2 denominatore (rigidezza relativa alla traslazione KUmin). [daN/m]

E2r: e2 rapporto (variazione massima in decremento Kmax/Kmin).

E3: e3 (Incremento rigidezze).

E3n: e3 numeratore (rigidezza relativa alla traslazione KUmax). [daN/m]

E3d: e3 denominatore (rigidezza relativa alla traslazione KUmin). [daN/m]

E3r: e3 rapporto (variazione massima in incremento Kmax/Kmin).

F: f (Rapporto Capacità/Domanda).

Fn: f numeratore (rapporto capacità/domanda massimo [c/d max]). [daN]

Fd: f denominatore (rapporto capacità/domanda minimo [c/d min]). [daN]

Fr: f rapporto (variazione massima [rapporto (c/d max)/(c/d min)]).

G1: g1 (Rastremazione di piano).

G1n: g1 numeratore (L1). [m]

G1d: g1 denominatore (L2). [m]

G1r: g1 rapporto (L1/L2).

G2: g2 (Rastremazione totale).

G2n: g2 numeratore (L0). [m]

G2d: g2 denominatore (Li). [m]

G2r: g2 rapporto (L0/Li).

Capacità/Domanda in X:

VrdX: taglio resistente complessivo in direzione X. [daN]

VedX: taglio agente complessivo in direzione X. [daN]

|Rd/Ed|: |Rd/Ed| (rapporto capacità/domanda in termini di resistenza a taglio).

Capacità/Domanda in Y:

VrdY: taglio resistente complessivo in direzione Y. [daN]

VedY: taglio agente complessivo in direzione Y. [daN]

Verifica regolarità strutturale

Controllo regolarità edificio secondo D.M. 17-01-18 (N.T.C.) §7.2.1 - §C7.2.1

Avvertenze

La seguente procedura valuta la regolarità della costruzione secondo quanto indicato nelle NTC 2018 §7.2.1.



Tali valutazioni sono a carattere puramente informativo e vengono condotte sulla base del modello e delle verifiche presenti alla sua generazione, con le limitazioni indicate nella manualistica.

In ogni caso l'impostazione di regolarità della costruzione, in pianta ed elevazione, va indicata nelle preferenze di analisi dall'utente utilizzatore del software.

Sintesi dei risultati

Orizzontamenti considerati nella valutazione

Nessun livello di fondazione trovato

Livelli di elevazione considerati: Rialzato(L2), Primo(L3),

Regolarità in pianta - NO

L'edificio risulta NON regolare in pianta, in base alle condizioni indicate in NTC 2018 §7.2.1

Ok - Criterio A1 (Distribuzione masse) rispettato, con rapporto massimo 0,01 (limite=0,2) al livello Primo

N.V. - Criterio A2 (Distribuzione rigidezze) non valutabile al livello Rialzato

Ok - Criterio A3 (Forma compatta) rispettato, con rapporto massimo 1 (limite=1,05) al livello Rialzato

Ok - Criterio B (Rapporto lati) rispettato, con rapporto massimo 1,03 (limite=4) al livello Primo

No - Criterio C (Rapporto rigidezze piano) NON rispettato, con rapporto massimo > 999 (limite=0) al livello Rialzato

Regolarità in altezza - NO

L'edificio risulta NON regolare in altezza, in base alle condizioni indicate in NTC 2018 §7.2.1

Ok - Criterio D (Altezza elementi sismoresistenti) rispettato, con rapporto massimo 1 (limite=1,01)

Ok - Criterio E1 (Variazione masse) rispettato, con rapporto massimo 1,04 (limite=1,25) tra il livello Primo ed il precedente

N.V. - Criterio E2 (Riduzione rigidezze) non valutabile tra il livello Primo ed il precedente

N.V. - Criterio E3 (Incremento rigidezze) non valutabile tra il livello Primo ed il precedente

No - Criterio F (Rapporto Capacità/Domanda) NON rispettato, con rapporto massimo 83.7/19.7=4.2 (limite=1,3) tra il livello Primo ed il precedente

Ok - Criterio G1 (Rastremazione di piano) rispettato, con rapporto massimo 0,01 (limite=0,1) tra il livello Primo ed il precedente

Ok - Criterio G2 (Rastremazione totale) rispettato, con rapporto massimo 0,01 (limite=0,3) tra il livello Primo ed il precedente

Valori per piano

Verifiche di regolarità in pianta

Livello		A1			A2			A3			B			C		
Descr	Quota	A1n	A1d	A1r	A2n	A2d	A2r	A3n	A3d	A3r	Bn	Bd	Br	Cn	Cd	Cr
Rialzato	1.09	0.14	9.92	0.01				94.4577	94.0495	1	10.05	9.92	1.01	9999	1	9999
Primo	4.89	0.15	9.78	0.01				92.9865	92.6123	1	10.08	9.75	1.03	9999	1	9999

Verifiche di regolarità in elevazione

Rapporto di regolarità per la condizione D (Altezza elementi sismoresistenti): 3.8/3.8=0.01.

Livello			E1			E2			E3			F			G1			G2		
Descr	Q	Qinf	E1n	E1d	E1r	E2n	E2d	E2r	E3n	E3d	E3r	F _n	F _d	F _r	G1 _n	G1 _d	G1 _r	G2 _n	G2 _d	G2 _r
Primo	4.89	1.09	64985	62724	1.04							83.7	19.7	4.25	0.07	9.92	0.01	0.07	9.92	0.01

Dettaglio delle resistenze di piano a taglio (per valutazione punto F)

Livello			Capacità/Domanda in X				Capacità/Domanda in Y			
Descr	Q	Comb	VrdX	VedX	Rd/Ed		VrdY	VedY	Rd/Ed	
Rialzato	1.09	SLV 1	67021	-33852	2		102461	-2809	36.5	
Rialzato	1.09	SLV 2	67021	-33852	2		102461	-2809	36.5	
Rialzato	1.09	SLV 3	65060	-36483	1.8		107318	5372	20	
Rialzato	1.09	SLV 4	65060	-36483	1.8		107318	5372	20	
Rialzato	1.09	SLV 5	69200	-6166	11.2		96174	-13250	7.3	
Rialzato	1.09	SLV 6	69200	-6166	11.2		96174	-13250	7.3	
Rialzato	1.09	SLV 7	63233	-14935	4.2		108929	14019	7.8	
Rialzato	1.09	SLV 8	63233	-14935	4.2		108929	14019	7.8	
Rialzato	1.09	SLV 9	69254	14935	4.6		99710	-14019	7.1	
Rialzato	1.09	SLV 10	69254	14935	4.6		99710	-14019	7.1	
Rialzato	1.09	SLV 11	62100	6166	10.1		108887	13250	8.2	
Rialzato	1.09	SLV 12	62100	6166	10.1		108887	13250	8.2	
Rialzato	1.09	SLV 13	67881	36483	1.9		105751	-5372	19.7	
Rialzato	1.09	SLV 14	67881	36483	1.9		105751	-5372	19.7	
Rialzato	1.09	SLV 15	64759	33852	1.9		107175	2809	38.2	
Rialzato	1.09	SLV 16	64759	33852	1.9		107175	2809	38.2	
Primo	4.89	SLV 1	45114	-17461	2.6		65532	-545	120.3	
Primo	4.89	SLV 2	45114	-17461	2.6		65532	-545	120.3	
Primo	4.89	SLV 3	38954	-17402	2.2		65540	775	84.5	
Primo	4.89	SLV 4	38954	-17402	2.2		65540	775	84.5	
Primo	4.89	SLV 5	42689	-5327	8		64517	-2166	29.8	
Primo	4.89	SLV 6	42689	-5327	8		64517	-2166	29.8	
Primo	4.89	SLV 7	30709	-5132	6		61256	2235	27.4	
Primo	4.89	SLV 8	30709	-5132	6		61256	2235	27.4	
Primo	4.89	SLV 9	42561	5132	8.3		63038	-2235	28.2	
Primo	4.89	SLV 10	42561	5132	8.3		63038	-2235	28.2	
Primo	4.89	SLV 11	30690	5327	5.8		61112	2166	28.2	
Primo	4.89	SLV 12	30690	5327	5.8		61112	2166	28.2	
Primo	4.89	SLV 13	45416	17402	2.6		64867	-775	83.7	
Primo	4.89	SLV 14	45416	17402	2.6		64867	-775	83.7	
Primo	4.89	SLV 15	42073	17461	2.4		64875	545	119.1	
Primo	4.89	SLV 16	42073	17461	2.4		64875	545	119.1	



1.2 Verifica sismica globale

Desc.: descrizione.

Stato limite: (muratura) V=Taglio; PF=Pressoflessione; PFFP=Pressoflessione fuori piano; R=Ribaltamento.

Molt.: moltiplicatore minimo della azione sismica che produce lo stato limite.

Comb.: combinazione.

PGA: accelerazione al suolo.

iPGA (ZE): indicatore di rischio sismico in termini di PGA ovvero rapporto tra l'azione sismica massima sopportabile dall'elemento e l'azione sismica massima che si utilizzerebbe nel progetto nuovo (§C8.3).

TR: tempo di ritorno.

(TR/TRrif)^.41: indicatore di rischio sismico in termini di periodo di ritorno.

fa: fattore di accelerazione.

Stato limite: (muratura) V=Taglio; PF=Presso flessione; PFFP=Pressoflessione fuori piano; R=Ribaltamento.

Coeff.s.: coefficiente minimo prodotto dallo stato limite.

Verifica: stato di verifica.

Maschio: maschio.

Stato limite: (maschio muratura) V=Taglio; PF=Presso flessione; PFFP=Presso flessione fuori piano; R=Ribaltamento.

Trave: trave di collegamento in muratura.

Stato limite: (trave muratura) V=Taglio; F=Flessione.

S. L.: stato limite di riferimento.

TR,C: periodo di ritorno di capacità.

PGA,C: accelerazione di aggancio di capacità.

TR,Rif: periodo di ritorno di riferimento.

PGA,Rif: accelerazione di aggancio di riferimento.

Tipo rottura: tipo di rottura che fornisce il valore minimo degli elementi considerati.

PAM: perdita media annua attesa.

Classe PAM: classe di rischio PAM.

IS-V: indice di sicurezza.

Classe IS-V: classe di rischio IS-V.

Verifica di elementi dotati di indicatori di rischio sismico mediante analisi con fattore q

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.) § C8.7.1

Accelerazioni e tempi di ritorno

Accelerazione di aggancio SLO (ag/g_SLO*S*ST) PGA,SLOrif = 0.081

Accelerazione di aggancio SLD (ag/g_SLD*S*ST) PGA,SLDrif = 0.101

Accelerazione di aggancio SLV (ag/g_SLV*S*ST) PGA,SLVrif = 0.244

Tr,SLOrif = 30 anni

Tr,SLDrif = 50 anni

Tr,SLVrif = 475 anni

Moltiplicatori minimi delle condizioni sismiche

(Il valore di ZE corrisponde al valore di I.R. PGA secondo quanto riportato nella Circolare 7 21-01-19 §C8.3)

Rottura a taglio

Moltiplicatore: 0

Maschio 21

Lunghezza: 1.681; altezza: 3.8; spessore: 0.3; sezione a quota: 2.09

Combinazione SLV 1 N = -2543 V par. = -2878 I' = 0.4804 fvd = 11862 Vt scorrimento = 1710 Vt fess. diag. = 0

Tempo di ritorno 0 anni

Indicatore iTr = (Tr/Tr,SLVrif)^.41 = 0

PGA 0

Indicatore iPGA = PGA/PGA,SLVrif = 0

Fattore di accelerazione fa = 0

Rottura a flessione

Moltiplicatore: 0

Maschio 24

Lunghezza: 0.071; altezza: 3.8; spessore: 0.3 sezione a quota 1.09

Combinazione SLV 1 N = -1504 M = -23.76 σ0 = 70293 fd = 143750 Mu = 22.78

Tempo di ritorno 0 anni

Indicatore iTr = (Tr/Tr,SLVrif)^.41 = 0

PGA 0

Indicatore iPGA = PGA/PGA,SLVrif = 0

Fattore di accelerazione fa = 0

Rottura a pressoflessione nel piano ortogonale

Moltiplicatore: 0

Maschio 25



Lunghezza: 0.13; altezza: 3.8; spessore: 0.3; sezione a quota: 2.99
Combinazione SLV 1 fd= 143750 Ta= 0.08 Wa= 540 N= 94 M= 0 Mc= 0
Tempo di ritorno 0 anni
Indicatore $iTr=(Tr/Tr,SLVrif)^{.41}=0$
PGA 0
Indicatore $iPGA=PGA/PGA,SLVrif=0$
Fattore di accelerazione $fa=0$

Rottura per meccanismi locali di collasso

Moltiplicatore: 0.039
Maschio 24
Lunghezza: 0.071; altezza: 3.8; spessore: 0.3 f.agg.= 0 a.lim.= 4.216314
Combinazione SLV 13 N top= -61 N base= -1576 T orto= -2 $\alpha 0=0.044 M^*=18.8 e^*=0.89 a0^*=0.3596$
Tempo di ritorno 0 anni
Indicatore $iTr=(Tr/Tr,SLVrif)^{.41}=0$
PGA 0
Indicatore $iPGA=PGA/PGA,SLVrif=0$
Fattore di accelerazione $fa=0$

Indicatori minimi riferiti al solo materiale muratura

Desc.	Stato limite	Molt.	Comb.	PGA	IPGA (ZE)	TR	$(TR/TRrif)^{.41}$	fa
Maschio 24	PF	0	SLV 1	0	0	0	0	0
Maschio 21	V	0	SLV 1	0	0	0	0	0
Maschio 25	PFFP	0	SLV 1	0	0	0	0	0
Maschio 24	R	0.039	SLV 13	0	0	0	0	0
Trave di accoppiamento 20	PF	0.144	SLV 7	0.0309	0.1266	3	0.1254	0.1232
Trave di accoppiamento 1	V	0	SLV 1	0	0	0	0	0

Coefficienti di sicurezza riferiti al solo materiale muratura

Desc.	Stato limite	Coeff.s.	Comb.	Verifica
Maschio 1	PF SLU	5.774	SLU 81	Si
Maschio 1	V SLU	7.083	SLU 81	Si
Maschio 1	PF	2.912	SLV 11	Si
Maschio 1	V	2.022	SLV 7	Si
Maschio 1	PFFP	11.41	SLV 11	Si
Maschio 1	R	0.13	SLV 5	No
Maschio 2	PF SLU	136.745	SLU 43	Si
Maschio 2	V SLU	47.992	SLU 81	Si
Maschio 2	PF	4.933	SLV 11	Si
Maschio 2	V	3.091	SLV 11	Si
Maschio 2	PFFP	12.943	SLV 15	Si
Maschio 2	R	0.142	SLV 7	No
Maschio 3	PF SLU	7.923	SLU 43	Si
Maschio 3	V SLU	6.407	SLU 81	Si
Maschio 3	PF	4.476	SLV 9	Si
Maschio 3	V	2.742	SLV 5	Si
Maschio 3	PFFP	12.066	SLV 9	Si
Maschio 3	R	0.097	SLV 5	No
Maschio 4	PF SLU	25.423	SLU 43	Si
Maschio 4	V SLU	33.572	SLU 39	Si
Maschio 4	PF	1.912	SLV 7	Si
Maschio 4	V	0.736	SLV 9	No
Maschio 4	PFFP	13.767	SLV 13	Si
Maschio 4	R	0.091	SLV 11	No
Maschio 5	PF SLU	6.832	SLU 81	Si
Maschio 5	V SLU	35.144	SLU 39	Si
Maschio 5	PF	1.879	SLV 5	Si
Maschio 5	V	1.153	SLV 5	Si
Maschio 5	PFFP	17.591	SLV 11	Si
Maschio 5	R	0.102	SLV 11	No
Maschio 6	PF SLU	4.622	SLU 81	Si
Maschio 6	V SLU	1.983	SLU 81	Si
Maschio 6	PF	3.32	SLV 13	Si
Maschio 6	V	1.328	SLV 3	Si
Maschio 6	PFFP	18.419	SLV 3	Si
Maschio 6	R	0.069	SLV 7	No
Maschio 7	PF SLU	5.21	SLU 81	Si
Maschio 7	V SLU	1.785	SLU 81	Si
Maschio 7	PF	3.483	SLV 1	Si
Maschio 7	V	1.316	SLV 13	Si
Maschio 7	PFFP	18.932	SLV 13	Si
Maschio 7	R	0.069	SLV 5	No
Maschio 8	PF SLU	7.2	SLU 81	Si
Maschio 8	V SLU	13.003	SLU 43	Si
Maschio 8	PF	3.169	SLV 9	Si
Maschio 8	V	0.946	SLV 11	No
Maschio 8	PFFP	14.821	SLV 15	Si
Maschio 8	R	0.075	SLV 5	No
Maschio 9	PF SLU	71.086	SLU 60	Si
Maschio 9	V SLU	423.055	SLU 39	Si
Maschio 9	PF	6.598	SLV 3	Si
Maschio 9	V	1.485	SLV 15	Si
Maschio 9	PFFP	10.558	SLV 11	Si
Maschio 9	R	0.113	SLV 9	No
Maschio 10	PF SLU	13.314	SLU 39	Si
Maschio 10	V SLU	18.194	SLU 43	Si
Maschio 10	PF	3.951	SLV 7	Si



Desc.	Stato limite	Coeff.s.	Comb.	Verifica
Maschio 10	V	0.998	SLV 7	No
Maschio 10	PFFP	12.657	SLV 7	Si
Maschio 10	R	0.093	SLV 9	No
Maschio 11	PF SLU	4.053	SLU 81	Si
Maschio 11	V SLU	34.841	SLU 81	Si
Maschio 11	PF	0	SLV 11	No
Maschio 11	V	0	SLV 11	No
Maschio 11	PFFP	5.391	SLV 11	Si
Maschio 11	R	0	SLV 3	No
Maschio 12	PF SLU	1.239	SLU 81	Si
Maschio 12	V SLU	1.302	SLU 81	Si
Maschio 12	PF	0	SLV 1	No
Maschio 12	V	0	SLV 1	No
Maschio 12	PFFP	4.165	SLV 3	Si
Maschio 12	R	0	SLV 16	No
Maschio 13	PF SLU	3.492	SLU 39	Si
Maschio 13	V SLU	6.55	SLU 81	Si
Maschio 13	PF	1.517	SLV 5	Si
Maschio 13	V	1.547	SLV 5	Si
Maschio 13	PFFP	6.709	SLV 1	Si
Maschio 13	R	0.139	SLV 11	No
Maschio 14	PF SLU	12.605	SLU 39	Si
Maschio 14	V SLU	5.279	SLU 81	Si
Maschio 14	PF	8.996	SLV 9	Si
Maschio 14	V	4.973	SLV 7	Si
Maschio 14	PFFP	13.681	SLV 5	Si
Maschio 14	R	0.137	SLV 11	No
Maschio 15	PF SLU	4.294	SLU 39	Si
Maschio 15	V SLU	1.144	SLU 81	Si
Maschio 15	PF	0	SLV 12	No
Maschio 15	V	0	SLV 7	No
Maschio 15	PFFP	0	SLV 7	No
Maschio 15	R	0	SLV 12	No
Maschio 16	PF SLU	19.039	SLU 39	Si
Maschio 16	V SLU	14.918	SLU 81	Si
Maschio 16	PF	3.459	SLV 11	Si
Maschio 16	V	3.276	SLV 7	Si
Maschio 16	PFFP	1.337	SLV 15	Si
Maschio 16	R	0.056	SLV 13	No
Maschio 17	PF SLU	4.248	SLU 39	Si
Maschio 17	V SLU	1.207	SLU 81	Si
Maschio 17	PF	1.615	SLV 9	Si
Maschio 17	V	2.146	SLV 3	Si
Maschio 17	PFFP	0	SLV 9	No
Maschio 17	R	0.02	SLV 5	No
Maschio 18	PF SLU	3.064	SLU 81	Si
Maschio 18	V SLU	129.534	SLU 81	Si
Maschio 18	PF	1.059	SLV 9	Si
Maschio 18	V	1.58	SLV 9	Si
Maschio 18	PFFP	1.17	SLV 5	Si
Maschio 18	R	0.043	SLV 3	No
Maschio 19	PF SLU	4.397	SLU 39	Si
Maschio 19	V SLU	1.671	SLU 81	Si
Maschio 19	PF	3.058	SLV 3	Si
Maschio 19	V	1.336	SLV 3	Si
Maschio 19	PFFP	2.017	SLV 15	Si
Maschio 19	R	0.039	SLV 1	No
Maschio 20	PF SLU	3.837	SLU 39	Si
Maschio 20	V SLU	1.507	SLU 81	Si
Maschio 20	PF	2.656	SLV 13	Si
Maschio 20	V	1.285	SLV 13	Si
Maschio 20	PFFP	1.978	SLV 1	Si
Maschio 20	R	0.034	SLV 13	No
Maschio 21	PF SLU	1.087	SLU 43	Si
Maschio 21	V SLU	0.312	SLU 43	No
Maschio 21	PF	0	SLV 3	No
Maschio 21	V	0	SLV 3	No
Maschio 21	PFFP	0	SLV 9	No
Maschio 21	R	0	SLV 1	No
Maschio 22	PF SLU	11.052	SLU 43	Si
Maschio 22	V SLU	4.997	SLU 81	Si
Maschio 22	PF	0	SLV 12	No
Maschio 22	V	0	SLV 7	No
Maschio 22	PFFP	0	SLV 12	No
Maschio 22	R	0	SLV 12	No
Maschio 23	PF SLU	1.557	SLU 43	Si
Maschio 23	V SLU	0.541	SLU 81	No
Maschio 23	PF	0	SLV 3	No
Maschio 23	V	0	SLV 3	No
Maschio 23	PFFP	1.216	SLV 3	Si
Maschio 23	R	0	SLV 1	No
Maschio 24	PF SLU	0	SLU 10	No
Maschio 24	V SLU	1.405	SLU 81	Si
Maschio 24	PF	0	SLV 16	No
Maschio 24	V	0	SLV 1	No
Maschio 24	PFFP	0	SLV 16	No
Maschio 24	R	0	SLV 4	No
Maschio 25	PF SLU	0	SLU 84	No
Maschio 25	V SLU	0	SLU 1	No
Maschio 25	PF	0	SLV 16	No



Desc.	Stato limite	Coeff.s.	Comb.	Verifica
Maschio 25	V	0	SLV 1	No
Maschio 25	PFFP	0	SLV 10	No
Maschio 25	R	0	SLV 16	No
Maschio 26	PF SLU	4.224	SLU 39	Si
Maschio 26	V SLU	120.899	SLU 81	Si
Maschio 26	PF	1.27	SLV 1	Si
Maschio 26	V	5.183	SLV 5	Si
Maschio 26	PFFP	1.368	SLV 13	Si
Maschio 26	R	0.054	SLV 3	No

Verifica maschi in muratura

Maschio	Stato limite	Molt.	Comb.	PGA	iPGA (ZE)	TR	(TR/TRrif)^.41	Verifica
1	PF	1.72	SLV 11	0.362	1.483	1618	1.653	Si
	V	1.457	SLV 11	0.354	1.449	1499	1.602	Si
	PFFP	1.971	SLV 11	0.362	1.483	1618	1.653	Si
2	R	0.142	SLV 5	0.031	0.127	3	0.125	No
	PF	2.901	SLV 15	0.362	1.483	1618	1.653	Si
	V	2.319	SLV 11	0.362	1.483	1618	1.653	Si
3	PFFP	2.938	SLV 15	0.362	1.483	1618	1.653	Si
	R	0.156	SLV 5	0.035	0.143	4	0.141	No
	PF	1.911	SLV 9	0.362	1.483	1618	1.653	Si
4	V	1.829	SLV 9	0.362	1.483	1618	1.653	Si
	PFFP	2.133	SLV 9	0.362	1.483	1618	1.653	Si
	R	0.141	SLV 5	0.031	0.127	3	0.125	No
5	PF	1.748	SLV 7	0.362	1.483	1618	1.653	Si
	V	0.828	SLV 9	0.201	0.822	282	0.808	No
	PFFP	1.000	SLV 1	0.362	1.483	1618	1.653	Si
6	R	0.131	SLV 11	0.026	0.107	2	0.106	No
	PF	2.042	SLV 5	0.362	1.483	1618	1.653	Si
	V	1.09	SLV 5	0.266	1.088	611	1.109	Si
7	PFFP	1.000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.124	SLV 7	0.026	0.107	2	0.106	No
	PF	3.379	SLV 3	0.362	1.483	1618	1.653	Si
8	V	1.428	SLV 3	0.347	1.419	1399	1.557	Si
	PFFP	1.000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.082	SLV 5	0	0	0	0	No
9	PF	3.205	SLV 13	0.362	1.483	1618	1.653	Si
	V	1.432	SLV 13	0.348	1.423	1412	1.563	Si
	PFFP	1.000	SLV 1	0.362	1.483	1618	1.653	Si
10	R	0.082	SLV 5	0	0	0	0	No
	PF	2.521	SLV 11	0.362	1.483	1618	1.653	Si
	V	0.947	SLV 11	0.231	0.944	408	0.94	No
11	PFFP	4	SLV 15	0.362	1.483	1618	1.653	Si
	R	0.115	SLV 5	0.026	0.107	2	0.106	No
	PF	2.119	SLV 7	0.362	1.483	1618	1.653	Si
12	V	1.462	SLV 15	0.355	1.453	1510	1.607	Si
	PFFP	2.354	SLV 11	0.362	1.483	1618	1.653	Si
	R	0.137	SLV 5	0.031	0.127	3	0.125	No
13	PF	1.906	SLV 7	0.362	1.483	1618	1.653	Si
	V	0.997	SLV 7	0.243	0.997	470	0.996	No
	PFFP	3.129	SLV 7	0.362	1.483	1618	1.653	Si
14	R	0.13	SLV 5	0.026	0.107	2	0.106	No
	PF	0.862	SLV 11	0.209	0.857	316	0.846	No
	V	0.726	SLV 11	0.175	0.716	197	0.697	No
15	PFFP	1.16	SLV 11	0.283	1.157	734	1.195	Si
	R	0.089	SLV 9	0.02	0.08	1	0.08	No
	PF	0.159	SLV 5	0.035	0.143	4	0.141	No
16	V	0.12	SLV 5	0.026	0.107	2	0.106	No
	PFFP	1.606	SLV 3	0.362	1.483	1618	1.653	Si
	R	0.154	SLV 5	0.035	0.143	4	0.141	No
17	PF	1.233	SLV 5	0.3	1.228	878	1.286	Si
	V	1.105	SLV 5	0.27	1.103	637	1.128	Si
	PFFP	1.604	SLV 1	0.362	1.483	1618	1.653	Si
18	R	0.159	SLV 9	0.035	0.143	4	0.141	No
	PF	2.192	SLV 5	0.362	1.483	1618	1.653	Si
	V	2.17	SLV 5	0.362	1.483	1618	1.653	Si
19	PFFP	2.515	SLV 5	0.362	1.483	1618	1.653	Si
	R	0.146	SLV 11	0.031	0.127	3	0.125	No
	PF	0.829	SLV 11	0.201	0.823	283	0.809	No
20	V	0.81	SLV 11	0.196	0.804	266	0.788	No
	PFFP	0.784	SLV 11	0.19	0.776	243	0.76	No
	R	0.059	SLV 1	0	0	0	0	No
21	PF	2.828	SLV 13	0.362	1.483	1618	1.653	Si
	V	2.089	SLV 11	0.362	1.483	1618	1.653	Si
	PFFP	1.239	SLV 15	0.301	1.233	889	1.293	Si
22	R	0.061	SLV 13	0	0	0	0	No
	PF	1.12	SLV 9	0.273	1.117	662	1.146	Si
	V	1.101	SLV 9	0.269	1.099	630	1.123	Si
23	PFFP	0.956	SLV 9	0.233	0.954	419	0.95	No
	R	0.06	SLV 15	0	0	0	0	No
	PF	1.049	SLV 9	0.256	1.048	546	1.059	Si
24	V	1.032	SLV 9	0.252	1.032	521	1.039	Si
	PFFP	1.118	SLV 5	0.273	1.116	659	1.144	Si
	R	0.053	SLV 1	0	0	0	0	No
25	PF	3.314	SLV 13	0.362	1.483	1618	1.653	Si
	V	1.47	SLV 3	0.357	1.46	1538	1.619	Si
	PFFP	1.741	SLV 15	0.362	1.483	1618	1.653	Si
26	R	0.047	SLV 1	0	0	0	0	No
	PF	2.958	SLV 3	0.362	1.483	1618	1.653	Si
	V	1.412	SLV 13	0.343	1.404	1349	1.534	Si



Maschio	Stato limite	Molt.	Comb.	PGA	iPGA (ZE)	TR	(TR/TRrif)^.41	Verifica
21	PFFP	1.695	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.047	SLV 1	0	0	0	0	No
	PF	0.062	SLV 7	0	0	0	0	No
	V	0	SLV 1	0	0	0	0	No
22	PFFP	0.911	SLV 9	0.222	0.907	367	0.9	No
	R	0.044	SLV 1	0	0	0	0	No
	PF	0.509	SLV 7	0.122	0.498	84	0.491	No
	V	0.495	SLV 7	0.118	0.482	78	0.477	No
23	PFFP	0.57	SLV 11	0.136	0.558	110	0.549	No
	R	0.051	SLV 3	0	0	0	0	No
	PF	0.18	SLV 7	0.041	0.169	6	0.167	No
	V	0.026	SLV 11	0	0	0	0	No
24	PFFP	1.137	SLV 3	0.277	1.134	691	1.166	Si
	R	0.046	SLV 13	0	0	0	0	No
	PF	0	SLV 1	0	0	0	0	No
	V	0.065	SLV 11	0	0	0	0	No
25	PFFP	0.182	SLV 11	0.041	0.169	6	0.167	No
	R	0.039	SLV 13	0	0	0	0	No
	PF	0	SLV 1	0	0	0	0	No
	V	0	SLV 1	0	0	0	0	No
26	PFFP	0	SLV 1	0	0	0	0	No
	R	0.053	SLV 13	0	0	0	0	No
	PF	1.148	SLV 1	0.28	1.145	711	1.18	Si
	V	1.163	SLV 1	0.283	1.159	738	1.198	Si
	PFFP	1.325	SLV 13	0.322	1.318	1096	1.409	Si
	R	0.061	SLV 1	0	0	0	0	No

Verifica travi di collegamento in muratura

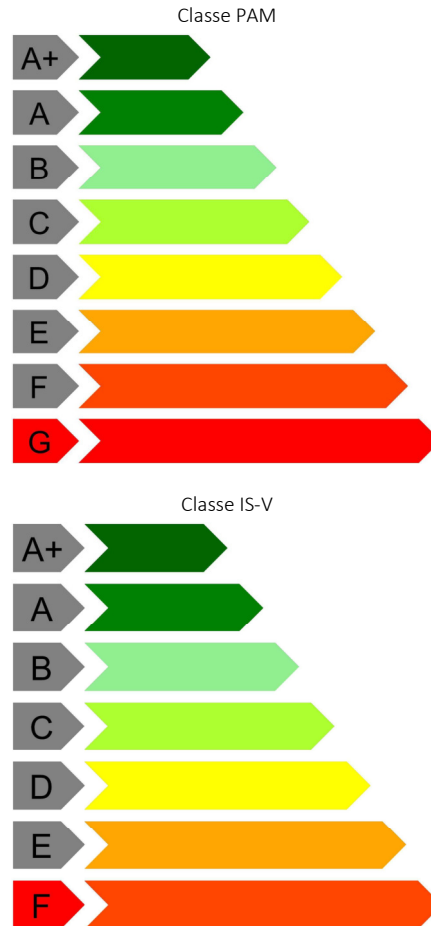
Trave	Stato limite	Molt.	Comb.	PGA	iPGA (ZE)	TR	(TR/TRrif)^.41	Verifica
1	F	1000	SLV 1	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
2	F	1000	SLV 1	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
3	F	1000	SLV 1	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
4	F	1000	SLV 1	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
5	F	3.15	SLV 15	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
6	F	2.683	SLV 15	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
7	F	1.409	SLV 5	0.343	1.402	1344	1.532	Si
	V	0	SLV 1	0	0	0	0	No
8	F	0.746	SLV 11	0.18	0.738	212	0.718	No
	V	0	SLV 1	0	0	0	0	No
9	F	1.27	SLV 9	0.309	1.265	959	1.334	Si
	V	0	SLV 1	0	0	0	0	No
10	F	0.853	SLV 9	0.207	0.848	306	0.835	No
	V	0	SLV 1	0	0	0	0	No
11	F	1.939	SLV 11	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
12	F	0.374	SLV 5	0.089	0.364	39	0.359	No
	V	0	SLV 1	0	0	0	0	No
13	F	3.256	SLV 15	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
14	F	3.442	SLV 5	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
15	F	2.996	SLV 11	0.362	1.483	1618	1.653	Si
	V	0.311	SLV 11	0.073	0.298	24	0.294	No
16	F	3.841	SLV 9	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
17	F	3.341	SLV 5	0.362	1.483	1618	1.653	Si
	V	0.544	SLV 11	0.13	0.532	99	0.526	No
18	F	1.681	SLV 15	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
19	F	0.235	SLV 11	0.053	0.218	11	0.214	No
	V	0	SLV 1	0	0	0	0	No
20	F	0.144	SLV 7	0.031	0.127	3	0.125	No
	V	0	SLV 1	0	0	0	0	No
21	F	0.327	SLV 11	0.077	0.313	27	0.309	No
	V	0	SLV 1	0	0	0	0	No
22	F	0.238	SLV 11	0.055	0.226	12	0.221	No
	V	0	SLV 1	0	0	0	0	No
23	F	1.591	SLV 1	0.362	1.483	1618	1.653	Si
	V	0.085	SLV 5	0.02	0.08	1	0.08	No

Periodi di ritorno e accelerazioni di aggancio per gli Stati Limite

S. L.	TR,C	PGA,C	TR,Rif	PGA,Rif	Tipo rottura
Stato limite di salvaguardia della vita	0	0	475	0.244	taglio maschio muratura

Coefficienti relativi alle Linee guida per la classificazione del rischio sismico delle costruzioni secondo il D.M. 24 09/01/2020

TR,C	TR,Rif	PAM	Classe PAM	IS-V	Classe IS-V	Tipo rottura
0	475	8.22	G	0	F	taglio maschio muratura



1.3 Verifiche maschi in muratura

Le unità di misura elencate nel capitolo sono in [m, daN, s] ove non espressamente specificato.

X_{ini.}: coordinate del punto iniziale del maschio. [m]

Y_{ini.}: coordinate del punto iniziale del maschio. [m]

X_{fin.}: coordinate del punto finale del maschio. [m]

Y_{fin.}: coordinate del punto finale del maschio. [m]

Quota i.: livello o falda inferiore.

Quota s.: livello o falda superiore.

l: lunghezza del maschio. [m]

Sp.: spessore. [m]

h_{netta}: altezza netta (a filo solai). [m]

h_{ini.}: altezza nel modello al punto iniziale. [m]

h_{fin.}: altezza nel modello al punto finale. [m]

a: distanza tra irrigidimenti laterali. [m]

a.s.,sx: lunghezza di appoggio del solaio di sinistra. [m]

a.s.,dx: lunghezza di appoggio del solaio di destra. [m]

fb: resistenza normalizzata a compressione verticale dei blocchi. [daN/m²]

fk: resistenza caratteristica a compressione della muratura utilizzata. [daN/m²]

fvk0: resistenza caratteristica a taglio in assenza di carichi verticali. [daN/m²]

fmedio: resistenza media a compressione della muratura utilizzata. [daN/m²]

τ0: resistenza media a taglio in assenza di azioni normali [C8.7.1.16]. [daN/m²]

fv0: resistenza media a taglio in assenza di azioni normali [C8.7.1.17]. [daN/m²]

μ: coefficiente di attrito [C8.7.1.17].

φ: coefficiente di ammorsamento o ingranamento secondo Circolare 7 21-01-19 §C8.7.1.3.1.1.

fv,lim: valore massimo della resistenza a taglio che può essere impiegata nel calcolo. [daN/m²]

E: modulo di elasticità longitudinale della muratura utilizzato. [daN/m²]

G: modulo di elasticità tangenziale della muratura utilizzato. [daN/m²]

FC: fattore di confidenza della muratura.

Comb.: combinazione.

Quota: quota della sezione di verifica. [m]

N: sforzo normale. [daN]

M: momento flettente nel piano. [daN*m]



σ_0 : tensione media di compressione. [daN/m²]

M_u : momento flettente ultimo. [daN*m]

$c.s.$: coefficiente di sicurezza.

Verifica: stato di verifica.

V_{par} : taglio nel piano. [daN]

σ_N : tensione media di compressione sulla parte reagente. [daN/m²]

l' : lunghezza della parte compressa della parete. [m]

f_{vd} : resistenza a taglio di calcolo. [daN/m²]

$V_{t\ scorr.}$: taglio ultimo per verifica a scorrimento. [daN]

$V_{t\ fess.diag.}$: taglio ultimo per verifica a fessurazione diagonale regolare [C8.7.1.17]. [daN]

$V_{t\ lim.}$: taglio limite [C8.7.1.18]. [daN]

$c.s.$: coefficiente di sicurezza a taglio.

f_d : resistenza a compressione di calcolo. [daN/m²]

S_a : accelerazione massima, adimensionalizzata rispetto a g , che l'elemento strutturale subisce durante il sisma.

M : momento flettente fuori piano. [daN*m]

M_c : momento di collasso per azioni perpendicolari al piano. [daN*m]

$Coeff.s.$: coefficiente di sicurezza.

N_{top} : sforzo normale in sommità. [daN]

N_{base} : sforzo normale al piede. [daN]

V_{orto} : taglio fuori piano. [daN]

α_0 : moltiplicatore secondo [C8.7.1.1].

M^* : massa partecipante al cinematisimo. [daN/(m/s²)]

e^* : frazione di massa partecipante della muratura [C8.7.1.5].

α_0^* : accelerazione spettrale di attivazione del meccanismo [C8.7.1.8]. [m/s²]

a_{Lim} : accelerazione limite [C7.2.11]. [m/s²]

Stato limite: pF_{SLU} =Presso flessione per azioni non sismiche; V_{SLU} =Taglio per azioni non sismiche; PF_{SLV} =Presso flessione per azioni sismiche; V_{SLV} =Taglio per azioni sismiche; PF_{FSLV} =Presso flessione fuori piano per azioni sismiche; R_{SLV} =Ribaltamento per azioni sismiche.

Maschio 1

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
23.989	19.646	23.91	18.118	L1	L2	1.53	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	t ₀	f _{v0}	μ	φ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	M_u	c.s.	Verifica
SLU 81	-0.21	-15806	-1503.23	22964	8680.17	5.774	Si
SLU 81	0.19	-15360	-1039.45	22316	8528.81	8.205	Si
SLU 75	-0.21	-14949	-1430.95	21718	8384.23	5.859	Si
SLU 75	0.19	-14501	-1004.44	21067	8221.52	8.185	Si
SLU 62	-0.21	-14740	-1420.19	21415	8309.07	5.851	Si
SLU 62	0.19	-14302	-993.69	20780	8147.86	8.2	Si
SLU 61	-0.21	-14740	-1420.19	21415	8309.07	5.851	Si
SLU 61	0.19	-14302	-993.69	20780	8147.86	8.2	Si
SLU 60	-0.21	-14740	-1420.19	21415	8309.07	5.851	Si
SLU 60	0.19	-14302	-993.69	20780	8147.86	8.2	Si
SLU 83	-0.21	-15806	-1503.23	22964	8680.17	5.774	Si
SLU 83	0.19	-15360	-1039.45	22316	8528.81	8.205	Si
SLU 76	-0.21	-14949	-1430.95	21718	8384.23	5.859	Si
SLU 76	0.19	-14501	-1004.44	21067	8221.52	8.185	Si
SLU 84	-0.21	-15806	-1503.23	22964	8680.17	5.774	Si
SLU 84	0.19	-15360	-1039.45	22316	8528.81	8.205	Si
SLU 82	-0.21	-15806	-1503.23	22964	8680.17	5.774	Si
SLU 82	0.19	-15360	-1039.45	22316	8528.81	8.205	Si
SLU 63	-0.21	-14740	-1420.19	21415	8309.07	5.851	Si
SLU 63	0.19	-14302	-993.69	20780	8147.86	8.2	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	M_u	c.s.	Verifica
SLV 15	-0.21	-6376	-1087.79	9263	4506.33	4.143	Si
SLV 15	0.19	-6029	-733.78	8759	4280.2	5.833	Si
SLV 12	-0.21	-5711	-1397.83	8297	4070.98	2.912	Si
SLV 12	0.19	-4937	-882.34	7173	3554.2	4.028	Si
SLV 11	-0.21	-5711	-1397.83	8297	4070.98	2.912	Si
SLV 11	0.19	-4937	-882.34	7173	3554.2	4.028	Si
SLV 8	-0.21	-7390	-1419.06	10736	5154.77	3.633	Si
SLV 8	0.19	-6532	-906.8	9490	4607.46	5.081	Si
SLV 14	-0.21	-8624	-843.28	12530	5919.19	7.019	Si
SLV 14	0.19	-8559	-630.88	12436	5879.7	9.32	Si
SLV 7	-0.21	-7390	-1419.06	10736	5154.77	3.633	Si
SLV 7	0.19	-6532	-906.8	9490	4607.46	5.081	Si
SLV 3	-0.21	-11971	-1158.58	17393	7852.02	6.777	Si
SLV 3	0.19	-11345	-815.28	16482	7505.67	9.206	Si
SLV 13	-0.21	-8624	-843.28	12530	5919.19	7.019	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 13	0.19	-8559	-630.88	12436	5879.7	9.32	Si
SLV 16	-0.21	-6376	-1087.79	9263	4506.33	4.143	Si
SLV 16	0.19	-6029	-733.78	8759	4280.2	5.833	Si
SLV 4	-0.21	-11971	-1158.58	17393	7852.02	6.777	Si
SLV 4	0.19	-11345	-815.28	16482	7505.67	9.206	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 41	-0.21	-13345	-766	-1253		19388	1.5295	8141	5603			7.31	Si
SLU 41	0.19	-13000	-725	-849.14		18887	1.5295	8074	5557			7.66	Si
SLU 77	-0.21	-14949	-746	-1430.95		21718	1.5295	8451	5817			7.8	Si
SLU 77	0.19	-14501	-702	-1004.44		21067	1.5295	8365	5757			8.21	Si
SLU 40	-0.21	-13345	-766	-1253		19388	1.5295	8141	5603			7.31	Si
SLU 40	0.19	-13000	-725	-849.14		18887	1.5295	8074	5557			7.66	Si
SLU 82	-0.21	-15806	-837	-1503.23		22964	1.5295	8617	5931			7.08	Si
SLU 82	0.19	-15360	-789	-1039.45		22316	1.5295	8531	5872			7.44	Si
SLU 83	-0.21	-15806	-837	-1503.23		22964	1.5295	8617	5931			7.08	Si
SLU 83	0.19	-15360	-789	-1039.45		22316	1.5295	8531	5872			7.44	Si
SLU 75	-0.21	-14949	-746	-1430.95		21718	1.5295	8451	5817			7.8	Si
SLU 75	0.19	-14501	-702	-1004.44		21067	1.5295	8365	5757			8.21	Si
SLU 84	-0.21	-15806	-837	-1503.23		22964	1.5295	8617	5931			7.08	Si
SLU 84	0.19	-15360	-789	-1039.45		22316	1.5295	8531	5872			7.44	Si
SLU 42	-0.21	-13345	-766	-1253		19388	1.5295	8141	5603			7.31	Si
SLU 42	0.19	-13000	-725	-849.14		18887	1.5295	8074	5557			7.66	Si
SLU 39	-0.21	-13345	-766	-1253		19388	1.5295	8141	5603			7.31	Si
SLU 39	0.19	-13000	-725	-849.14		18887	1.5295	8074	5557			7.66	Si
SLU 81	-0.21	-15806	-837	-1503.23		22964	1.5295	8617	5931			7.08	Si
SLU 81	0.19	-15360	-789	-1039.45		22316	1.5295	8531	5872			7.44	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 10	-0.21	-13206	2672	-582.79		19186	1.5295	12171	8377			3.13	Si
SLV 10	0.19	-13372	1868	-539.37		19428	1.5295	12219	8410			4.5	Si
SLV 12	-0.21	-5711	-3168	-1397.83		8297	1.5295	9993	6878			2.17	Si
SLV 12	0.19	-4937	-2381	-882.34		7173	1.5295	9768	6723			2.82	Si
SLV 8	-0.21	-7390	-3568	-1419.06		10736	1.5295	10481	7214			2.02	Si
SLV 8	0.19	-6532	-2704	-906.8		9490	1.5295	10231	7042			2.6	Si
SLV 6	-0.21	-14884	2272	-604.02		21625	1.5295	12658	8713			3.83	Si
SLV 6	0.19	-14967	1544	-563.82		21744	1.5295	12682	8729			5.65	Si
SLV 7	-0.21	-7390	-3568	-1419.06		10736	1.5295	10481	7214			2.02	Si
SLV 7	0.19	-6532	-2704	-906.8		9490	1.5295	10231	7042			2.6	Si
SLV 5	-0.21	-14884	2272	-604.02		21625	1.5295	12658	8713			3.83	Si
SLV 5	0.19	-14967	1544	-563.82		21744	1.5295	12682	8729			5.65	Si
SLV 11	-0.21	-5711	-3168	-1397.83		8297	1.5295	9993	6878			2.17	Si
SLV 11	0.19	-4937	-2381	-882.34		7173	1.5295	9768	6723			2.82	Si
SLV 9	-0.21	-13206	2672	-582.79		19186	1.5295	12171	8377			3.13	Si
SLV 9	0.19	-13372	1868	-539.37		19428	1.5295	12219	8410			4.5	Si
SLV 4	-0.21	-11971	-1991	-1158.58		17393	1.5295	11812	8130			4.08	Si
SLV 4	0.19	-11345	-1594	-815.28		16482	1.5295	11630	8005			5.02	Si
SLV 3	-0.21	-11971	-1991	-1158.58		17393	1.5295	11812	8130			4.08	Si
SLV 3	0.19	-11345	-1594	-815.28		16482	1.5295	11630	8005			5.02	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 12	143750	0.24	7254	-4993	92.61	1056.75	11.41	Si
SLV 11	143750	0.24	7254	-4993	92.61	1056.75	11.41	Si
SLV 15	143750	0.24	8182	-5632	92.61	1182.28	12.77	Si
SLV 16	143750	0.24	8182	-5632	92.61	1182.28	12.77	Si
SLV 7	143750	0.24	9523	-6555	92.61	1359.86	14.68	Si
SLV 8	143750	0.24	9523	-6555	92.61	1359.86	14.68	Si
SLV 13	143750	0.24	11246	-7741	92.61	1581.34	17.07	Si
SLV 14	143750	0.24	11246	-7741	92.61	1581.34	17.07	Si
SLV 4	143750	0.24	15745	-10837	92.61	2124.13	22.94	Si
SLV 3	143750	0.24	15745	-10837	92.61	2124.13	22.94	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	α_{lim}	Verifica
SLV 6	-13815	-12779	72	0.088	1667.9	0.954	1.34063	10.34889	No
SLV 5	-13815	-12779	72	0.088	1667.9	0.954	1.34063	10.34889	No
SLV 10	-12411	-10788	53	0.09	1525.3	0.95	1.37338	10.34889	No
SLV 9	-12411	-10788	53	0.09	1525.3	0.95	1.37338	10.34889	No
SLV 8	-3731	-9097	-39	0.102	650.6	0.904	1.64519	10.34889	No
SLV 7	-3731	-9097	-39	0.102	650.6	0.904	1.64519	10.34889	No
SLV 12	-2326	-7106	-58	0.104	514.3	0.892	1.69609	10.34889	No
SLV 11	-2326	-7106	-58	0.104	514.3	0.892	1.69609	10.34889	No
SLV 2	-11923	-13813	55	0.09	1475.8	0.949	1.37574	7.79402	No
SLV 1	-11923	-13813	55	0.09	1475.8	0.949	1.37574	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	5.774	SLU 81	Si
V_SLU	7.083	SLU 81	Si
PF_SLV	2.912	SLV 11	Si
V_SLV	2.022	SLV 7	Si
PFFP_SLV	11.41	SLV 11	Si
R_SLV	0.13	SLV 5	No



Maschio 2

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
24.232	24.289	24.042	20.644	L1	L2	3.65	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ ₀	f _{v0}	μ	φ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLU 71	-0.21	-25953	192.45	15802	38175.35	198.366	Si
SLU 71	0.19	-23882	244.1	14540	35803.38	146.673	Si
SLU 49	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 49	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 46	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 46	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 48	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 48	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 47	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 47	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 45	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 45	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 44	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 44	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 43	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 43	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 50	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 50	0.19	-21682	242.47	13201	33156.38	136.745	Si
SLU 51	-0.21	-23608	202.34	14374	35481.38	175.359	Si
SLU 51	0.19	-21682	242.47	13201	33156.38	136.745	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLV 5	-0.21	-22512	6450.12	13707	36475.08	5.655	Si
SLV 5	0.19	-21161	6081.64	12884	34545.31	5.68	Si
SLV 11	-0.21	-18894	-6210.78	11503	31233.79	5.029	Si
SLV 11	0.19	-16980	-5750.52	10338	28365.14	4.933	Si
SLV 7	-0.21	-22449	-6020.27	13668	36384.9	6.044	Si
SLV 7	0.19	-20191	-5611.46	12293	33140.69	5.906	Si
SLV 10	-0.21	-18957	6259.61	11542	31328.09	5.005	Si
SLV 10	0.19	-17949	5942.59	10928	29826.38	5.019	Si
SLV 8	-0.21	-22449	-6020.27	13668	36384.9	6.044	Si
SLV 8	0.19	-20191	-5611.46	12293	33140.69	5.906	Si
SLV 12	-0.21	-18894	-6210.78	11503	31233.79	5.029	Si
SLV 12	0.19	-16980	-5750.52	10338	28365.14	4.933	Si
SLV 16	-0.21	-14769	-2068.41	8992	24968.37	12.071	Si
SLV 16	0.19	-13572	-1820.17	8263	23093.06	12.687	Si
SLV 9	-0.21	-18957	6259.61	11542	31328.09	5.005	Si
SLV 9	0.19	-17949	5942.59	10928	29826.38	5.019	Si
SLV 15	-0.21	-14769	-2068.41	8992	24968.37	12.071	Si
SLV 15	0.19	-13572	-1820.17	8263	23093.06	12.687	Si
SLV 6	-0.21	-22512	6450.12	13707	36475.08	5.655	Si
SLV 6	0.19	-21161	6081.64	12884	34545.31	5.68	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 83	-0.21	-32225	-272	39.75		19620	3.6499	8172	13421			49.26	Si
SLU 83	0.19	-29797	-273	134.86		18142	3.6499	7974	13098			47.99	Si
SLU 82	-0.21	-32225	-272	39.75		19620	3.6499	8172	13421			49.26	Si
SLU 82	0.19	-29797	-273	134.86		18142	3.6499	7974	13098			47.99	Si
SLU 81	-0.21	-32225	-272	39.75		19620	3.6499	8172	13421			49.26	Si
SLU 81	0.19	-29797	-273	134.86		18142	3.6499	7974	13098			47.99	Si
SLU 62	-0.21	-29880	-238	49.63		18193	3.6499	7981	13109			55.01	Si
SLU 62	0.19	-27597	-239	133.22		16802	3.6499	7796	12804			53.64	Si
SLU 42	-0.21	-27396	-255	-9.55		16680	3.6499	7780	12777			50.16	Si
SLU 42	0.19	-25373	-255	79.33		15448	3.6499	7615	12508			49.02	Si
SLU 39	-0.21	-27396	-255	-9.55		16680	3.6499	7780	12777			50.16	Si
SLU 39	0.19	-25373	-255	79.33		15448	3.6499	7615	12508			49.02	Si
SLU 40	-0.21	-27396	-255	-9.55		16680	3.6499	7780	12777			50.16	Si
SLU 40	0.19	-25373	-255	79.33		15448	3.6499	7615	12508			49.02	Si
SLU 84	-0.21	-32225	-272	39.75		19620	3.6499	8172	13421			49.26	Si
SLU 84	0.19	-29797	-273	134.86		18142	3.6499	7974	13098			47.99	Si
SLU 41	-0.21	-27396	-255	-9.55		16680	3.6499	7780	12777			50.16	Si
SLU 41	0.19	-25373	-255	79.33		15448	3.6499	7615	12508			49.02	Si
SLU 63	-0.21	-29880	-238	49.63		18193	3.6499	7981	13109			55.01	Si
SLU 63	0.19	-27597	-239	133.22		16802	3.6499	7796	12804			53.64	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 16	-0.21	-14769	-1820	-2068.41		8992	3.6499	10132	16641			9.14	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 16	0.19	-13572	-1941	-1820.17		8263	3.6499	9986	16401			8.45	Si
SLV 6	-0.21	-22512	4835	6450.12		13707	3.6499	11075	18190			3.76	Si
SLV 6	0.19	-21161	5262	6081.64		12884	3.6499	10910	17919			3.41	Si
SLV 8	-0.21	-22449	-4969	-6020.27		13668	3.6499	11067	18177			3.66	Si
SLV 8	0.19	-20191	-5402	-5611.46		12293	3.6499	10792	17725			3.28	Si
SLV 5	-0.21	-22512	4835	6450.12		13707	3.6499	11075	18190			3.76	Si
SLV 5	0.19	-21161	5262	6081.64		12884	3.6499	10910	17919			3.41	Si
SLV 12	-0.21	-18894	-5100	-6210.78		11503	3.6499	10634	17466			3.42	Si
SLV 12	0.19	-16980	-5527	-5750.52		10338	3.6499	10401	17083			3.09	Si
SLV 15	-0.21	-14769	-1820	-2068.41		8992	3.6499	10132	16641			9.14	Si
SLV 15	0.19	-13572	-1941	-1820.17		8263	3.6499	9986	16401			8.45	Si
SLV 9	-0.21	-18957	4705	6259.61		11542	3.6499	10642	17479			3.72	Si
SLV 9	0.19	-17949	5137	5942.59		10928	3.6499	10519	17277			3.36	Si
SLV 11	-0.21	-18894	-5100	-6210.78		11503	3.6499	10634	17466			3.42	Si
SLV 11	0.19	-16980	-5527	-5750.52		10338	3.6499	10401	17083			3.09	Si
SLV 10	-0.21	-18957	4705	6259.61		11542	3.6499	10642	17479			3.72	Si
SLV 10	0.19	-17949	5137	5942.59		10928	3.6499	10519	17277			3.36	Si
SLV 7	-0.21	-22449	-4969	-6020.27		13668	3.6499	11067	18177			3.66	Si
SLV 7	0.19	-20191	-5402	-5611.46		12293	3.6499	10792	17725			3.28	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 16	143750	0.24	8305	-13641	221	2860.51	12.94	Si
SLV 15	143750	0.24	8305	-13641	221	2860.51	12.94	Si
SLV 14	143750	0.24	8323	-13669	221	2866.11	12.97	Si
SLV 13	143750	0.24	8323	-13669	221	2866.11	12.97	Si
SLV 11	143750	0.24	10633	-17465	221	3587.59	16.23	Si
SLV 12	143750	0.24	10633	-17465	221	3587.59	16.23	Si
SLV 10	143750	0.24	10692	-17561	221	3605.43	16.31	Si
SLV 9	143750	0.24	10692	-17561	221	3605.43	16.31	Si
SLV 8	143750	0.24	12647	-20771	221	4189.85	18.96	Si
SLV 7	143750	0.24	12647	-20771	221	4189.85	18.96	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 7	-13024	-24883	-177	0.093	1962.5	0.918	1.46902	10.34889	No
SLV 8	-13024	-24883	-177	0.093	1962.5	0.918	1.46902	10.34889	No
SLV 10	-11924	-20860	182	0.093	1852.4	0.914	1.48064	10.34889	No
SLV 9	-11924	-20860	182	0.093	1852.4	0.914	1.48064	10.34889	No
SLV 5	-14167	-24818	142	0.094	2077.1	0.921	1.48503	10.34889	No
SLV 6	-14167	-24818	142	0.094	2077.1	0.921	1.48503	10.34889	No
SLV 11	-10780	-20924	-138	0.097	1738.5	0.91	1.54542	10.34889	No
SLV 12	-10780	-20924	-138	0.097	1738.5	0.91	1.54542	10.34889	No
SLV 3	-16042	-29479	-111	0.095	2265.6	0.926	1.4859	7.79402	No
SLV 4	-16042	-29479	-111	0.095	2265.6	0.926	1.4859	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	136.745	SLU 43	Si
V_SLU	47.992	SLU 81	Si
PF_SLV	4.933	SLV 11	Si
V_SLV	3.091	SLV 11	Si
PFFP_SLV	12.943	SLV 15	Si
R_SLV	0.142	SLV 7	No

Maschio 3

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X inl.	Y inl.	X fin.	Y fin.	Quota l.	Quota.s	I	Sp.	h netta	h inl.	h fin.	a	a.s.,sx	a.s.,dx
24.382	27.161	24.284	25.288	L1	L2	1.876	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 47	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 47	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 43	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 43	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 44	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 44	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 48	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 48	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 64	-0.21	-15192	1376.86	17996	11102.15	8.063	Si
SLU 64	0.19	-14559	972.9	17246	10765.47	11.065	Si
SLU 50	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 50	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 51	-0.21	-13842	1308.82	16396	10370.37	7.923	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 51	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 45	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 45	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 46	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 46	0.19	-13225	949.69	15666	10019.61	10.55	Si
SLU 49	-0.21	-13842	1308.82	16396	10370.37	7.923	Si
SLU 49	0.19	-13225	949.69	15666	10019.61	10.55	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 5	-0.21	-8732	1332.04	10343	7496.99	5.628	Si
SLV 5	0.19	-7650	824.16	9062	6643.98	8.062	Si
SLV 10	-0.21	-7127	1390.18	8442	6223.04	4.476	Si
SLV 10	0.19	-6145	880.18	7279	5420.75	6.159	Si
SLV 13	-0.21	-8237	1263.53	9757	7109.16	5.626	Si
SLV 13	0.19	-7755	873.31	9186	6727.23	7.703	Si
SLV 6	-0.21	-8732	1332.04	10343	7496.99	5.628	Si
SLV 6	0.19	-7650	824.16	9062	6643.98	8.062	Si
SLV 1	-0.21	-13586	1069.71	16093	11065.48	10.344	Si
SLV 1	0.19	-12773	686.56	15130	10497.48	15.29	Si
SLV 2	-0.21	-13586	1069.71	16093	11065.48	10.344	Si
SLV 2	0.19	-12773	686.56	15130	10497.48	15.29	Si
SLV 15	-0.21	-10793	1096.82	12785	9064.63	8.264	Si
SLV 15	0.19	-10640	811.39	12604	8950.94	11.032	Si
SLV 16	-0.21	-10793	1096.82	12785	9064.63	8.264	Si
SLV 16	0.19	-10640	811.39	12604	8950.94	11.032	Si
SLV 14	-0.21	-8237	1263.53	9757	7109.16	5.626	Si
SLV 14	0.19	-7755	873.31	9186	6727.23	7.703	Si
SLV 9	-0.21	-7127	1390.18	8442	6223.04	4.476	Si
SLV 9	0.19	-6145	880.18	7279	5420.75	6.159	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 84	-0.21	-19193	1132	1572.35		22735	1.876	8587	7249			6.41	Si
SLU 84	0.19	-18560	1078	1001.35		21985	1.876	8487	7165			6.65	Si
SLU 40	-0.21	-16355	1040	1288.26		19373	1.876	8139	6871			6.61	Si
SLU 40	0.19	-15860	993	788.31		18787	1.876	8060	6805			6.85	Si
SLU 42	-0.21	-16355	1040	1288.26		19373	1.876	8139	6871			6.61	Si
SLU 42	0.19	-15860	993	788.31		18787	1.876	8060	6805			6.85	Si
SLU 75	-0.21	-17993	1002	1513.7		21313	1.876	8397	7089			7.07	Si
SLU 75	0.19	-17360	953	992.81		20563	1.876	8297	7005			7.35	Si
SLU 77	-0.21	-17993	1002	1513.7		21313	1.876	8397	7089			7.07	Si
SLU 77	0.19	-17360	953	992.81		20563	1.876	8297	7005			7.35	Si
SLU 81	-0.21	-19193	1132	1572.35		22735	1.876	8587	7249			6.41	Si
SLU 81	0.19	-18560	1078	1001.35		21985	1.876	8487	7165			6.65	Si
SLU 82	-0.21	-19193	1132	1572.35		22735	1.876	8587	7249			6.41	Si
SLU 82	0.19	-18560	1078	1001.35		21985	1.876	8487	7165			6.65	Si
SLU 83	-0.21	-19193	1132	1572.35		22735	1.876	8587	7249			6.41	Si
SLU 83	0.19	-18560	1078	1001.35		21985	1.876	8487	7165			6.65	Si
SLU 41	-0.21	-16355	1040	1288.26		19373	1.876	8139	6871			6.61	Si
SLU 41	0.19	-15860	993	788.31		18787	1.876	8060	6805			6.85	Si
SLU 39	-0.21	-16355	1040	1288.26		19373	1.876	8139	6871			6.61	Si
SLU 39	0.19	-15860	993	788.31		18787	1.876	8060	6805			6.85	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 7	-0.21	-17253	-1398	776.35		20436	1.876	12421	10486			7.5	Si
SLV 7	0.19	-17268	-1092	617.77		20454	1.876	12424	10489			9.6	Si
SLV 8	-0.21	-17253	-1398	776.35		20436	1.876	12421	10486			7.5	Si
SLV 8	0.19	-17268	-1092	617.77		20454	1.876	12424	10489			9.6	Si
SLV 11	-0.21	-15648	-2015	834.5		18535	1.876	12040	10165			5.04	Si
SLV 11	0.19	-15762	-1618	673.79		18671	1.876	12068	10188			6.3	Si
SLV 12	-0.21	-15648	-2015	834.5		18535	1.876	12040	10165			5.04	Si
SLV 12	0.19	-15762	-1618	673.79		18671	1.876	12068	10188			6.3	Si
SLV 9	-0.21	-7127	2587	1390.18		8442	1.876	10022	8460			3.27	Si
SLV 9	0.19	-6145	2216	880.18		7279	1.876	9789	8264			3.73	Si
SLV 1	-0.21	-13586	2312	1069.71		16093	1.876	11552	9752			4.22	Si
SLV 1	0.19	-12773	2014	686.56		15130	1.876	11359	9590			4.76	Si
SLV 5	-0.21	-8732	3203	1332.04		10343	1.876	10402	8781			2.74	Si
SLV 5	0.19	-7650	2742	824.16		9062	1.876	10146	8565			3.12	Si
SLV 10	-0.21	-7127	2587	1390.18		8442	1.876	10022	8460			3.27	Si
SLV 10	0.19	-6145	2216	880.18		7279	1.876	9789	8264			3.73	Si
SLV 2	-0.21	-13586	2312	1069.71		16093	1.876	11552	9752			4.22	Si
SLV 2	0.19	-12773	2014	686.56		15130	1.876	11359	9590			4.76	Si
SLV 6	-0.21	-8732	3203	1332.04		10343	1.876	10402	8781			2.74	Si
SLV 6	0.19	-7650	2742	824.16		9062	1.876	10146	8565			3.12	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 10	143750	0.24	7701	-6501	113.59	1370.57	12.07	Si
SLV 9	143750	0.24	7701	-6501	113.59	1370.57	12.07	Si
SLV 13	143750	0.24	8960	-7564	113.59	1577.12	13.88	Si
SLV 14	143750	0.24	8960	-7564	113.59	1577.12	13.88	Si
SLV 6	143750	0.24	9479	-8002	113.59	1660.86	14.62	Si
SLV 5	143750	0.24	9479	-8002	113.59	1660.86	14.62	Si
SLV 16	143750	0.24	11818	-9976	113.59	2027.61	17.85	Si
SLV 15	143750	0.24	11818	-9976	113.59	2027.61	17.85	Si



Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 2	143750	0.24	14888	-12568	113.59	2483.33	21.86	Si
SLV 1	143750	0.24	14888	-12568	113.59	2483.33	21.86	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.255 $W_a = 0.08$ $T_a = 0.0269$

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 5	-4569	-9987	311	0.062	797.3	0.904	1.00462	10.34889	No
SLV 6	-4569	-9987	311	0.062	797.3	0.904	1.00462	10.34889	No
SLV 9	-3291	-8142	258	0.067	672.7	0.894	1.09287	10.34889	No
SLV 10	-3291	-8142	258	0.067	672.7	0.894	1.09287	10.34889	No
SLV 11	-14765	-15042	-275	0.077	1824.4	0.949	1.18569	10.34889	No
SLV 12	-14765	-15042	-275	0.077	1824.4	0.949	1.18569	10.34889	No
SLV 8	-16043	-16887	-222	0.081	1954.2	0.952	1.2331	10.34889	No
SLV 7	-16043	-16887	-222	0.081	1954.2	0.952	1.2331	10.34889	No
SLV 2	-10076	-14555	186	0.082	1349.2	0.934	1.28181	7.79402	No
SLV 1	-10076	-14555	186	0.082	1349.2	0.934	1.28181	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	7.923	SLU 43	Si
V_SLU	6.407	SLU 81	Si
PF_SLV	4.476	SLV 9	Si
V_SLV	2.742	SLV 5	Si
PFFP_SLV	12.066	SLV 9	Si
R_SLV	0.097	SLV 5	No

Maschio 4

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
23.91	18.118	27.312	17.94	L1	L2	3.407	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ_0	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 45	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 45	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 1	-1.6	-18715	-942.49	12206	27107.13	28.761	Si
SLU 1	0.6	-11390	-325.93	7429	17635.83	54.109	Si
SLU 51	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 51	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 46	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 46	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 49	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 49	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 43	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 43	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 47	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 47	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 48	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 48	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 44	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 44	0.6	-14057	-490.99	9168	21252.44	43.285	Si
SLU 50	-1.6	-23511	-1278.98	15334	32515	25.423	Si
SLU 50	0.6	-14057	-490.99	9168	21252.44	43.285	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 8	-1.6	-17660	-14249.36	11517	27250.26	1.912	Si
SLV 8	0.6	-15462	7201.5	10084	24167.55	3.356	Si
SLV 9	-1.6	-23317	12564.64	15207	34779.77	2.768	Si
SLV 9	0.6	-10646	-7618.03	6943	17106.07	2.245	Si
SLV 7	-1.6	-17660	-14249.36	11517	27250.26	1.912	Si
SLV 7	0.6	-15462	7201.5	10084	24167.55	3.356	Si
SLV 14	-1.6	-21532	11259.21	14043	32466.74	2.884	Si
SLV 14	0.6	-11175	-2368.36	7288	17903.09	7.559	Si
SLV 10	-1.6	-23317	12564.64	15207	34779.77	2.768	Si
SLV 10	0.6	-10646	-7618.03	6943	17106.07	2.245	Si
SLV 4	-1.6	-19445	-12943.93	12682	29689	2.294	Si
SLV 4	0.6	-14932	1951.83	9739	23411.81	11.995	Si
SLV 5	-1.6	-23188	7237.51	15123	34615.17	4.783	Si
SLV 5	0.6	-11408	-7659.46	7440	18251.85	2.383	Si
SLV 13	-1.6	-21532	11259.21	14043	32466.74	2.884	Si
SLV 13	0.6	-11175	-2368.36	7288	17903.09	7.559	Si
SLV 6	-1.6	-23188	7237.51	15123	34615.17	4.783	Si
SLV 6	0.6	-11408	-7659.46	7440	18251.85	2.383	Si
SLV 3	-1.6	-19445	-12943.93	12682	29689	2.294	Si
SLV 3	0.6	-14932	1951.83	9739	23411.81	11.995	Si



Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 39	-1.6	-26555	-359	-509.01		17319	3.4073	7865	12059			33.57	Si
SLU 39	0.6	-18767	40	178.3		12240	3.4073	7188	11021			277.29	Si
SLU 40	-1.6	-26555	-359	-509.01		17319	3.4073	7865	12059			33.57	Si
SLU 40	0.6	-18767	40	178.3		12240	3.4073	7188	11021			277.29	Si
SLU 33	-1.6	-24920	-312	-592.03		16252	3.4073	7723	11841			37.91	Si
SLU 33	0.6	-17212	54	85.9		11225	3.4073	7052	10813			198.82	Si
SLU 35	-1.6	-24920	-312	-592.03		16252	3.4073	7723	11841			37.91	Si
SLU 35	0.6	-17212	54	85.9		11225	3.4073	7052	10813			198.82	Si
SLU 41	-1.6	-26555	-359	-509.01		17319	3.4073	7865	12059			33.57	Si
SLU 41	0.6	-18767	40	178.3		12240	3.4073	7188	11021			277.29	Si
SLU 42	-1.6	-26555	-359	-509.01		17319	3.4073	7865	12059			33.57	Si
SLU 42	0.6	-18767	40	178.3		12240	3.4073	7188	11021			277.29	Si
SLU 84	-1.6	-31350	-349	-845.5		20446	3.4073	8282	12698			36.36	Si
SLU 84	0.6	-21433	104	13.24		13979	3.4073	7419	11376			109.35	Si
SLU 83	-1.6	-31350	-349	-845.5		20446	3.4073	8282	12698			36.36	Si
SLU 83	0.6	-21433	104	13.24		13979	3.4073	7419	11376			109.35	Si
SLU 81	-1.6	-31350	-349	-845.5		20446	3.4073	8282	12698			36.36	Si
SLU 81	0.6	-21433	104	13.24		13979	3.4073	7419	11376			109.35	Si
SLU 82	-1.6	-31350	-349	-845.5		20446	3.4073	8282	12698			36.36	Si
SLU 82	0.6	-21433	104	13.24		13979	3.4073	7419	11376			109.35	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 9	-1.6	-23317	13205	12564.64		15207	3.4073	11375	17441			1.32	Si
SLV 9	0.6	-10646	17997	-7618.03		7981	2.9642	9930	13245			0.74	No, Vu<V
SLV 8	-1.6	-17660	-13516	-14249.36		14587	2.6903	11251	13621			1.01	Si
SLV 8	0.6	-15462	-17756	7201.5		10084	3.4073	10350	15870			0.89	No, Vu<V
SLV 11	-1.6	-17788	-9727	-8922.23		11601	3.4073	10654	16335			1.68	Si
SLV 11	0.6	-14699	-13945	7242.93		9587	3.4073	10251	15717			1.13	Si
SLV 6	-1.6	-23188	9416	7237.51		15123	3.4073	11358	17415			1.85	Si
SLV 6	0.6	-11408	14186	-7659.46		8186	3.0967	9971	13894			0.98	No, Vu<V
SLV 13	-1.6	-21532	9600	11259.21		14043	3.4073	11142	17084			1.78	Si
SLV 13	0.6	-11175	11264	-2368.36		7288	3.4073	9791	15013			1.33	Si
SLV 10	-1.6	-23317	13205	12564.64		15207	3.4073	11375	17441			1.32	Si
SLV 10	0.6	-10646	17997	-7618.03		7981	2.9642	9930	13245			0.74	No, Vu<V
SLV 5	-1.6	-23188	9416	7237.51		15123	3.4073	11358	17415			1.85	Si
SLV 5	0.6	-11408	14186	-7659.46		8186	3.0967	9971	13894			0.98	No, Vu<V
SLV 14	-1.6	-21532	9600	11259.21		14043	3.4073	11142	17084			1.78	Si
SLV 14	0.6	-11175	11264	-2368.36		7288	3.4073	9791	15013			1.33	Si
SLV 7	-1.6	-17660	-13516	-14249.36		14587	2.6903	11251	13621			1.01	Si
SLV 7	0.6	-15462	-17756	7201.5		10084	3.4073	10350	15870			0.89	No, Vu<V
SLV 12	-1.6	-17788	-9727	-8922.23		11601	3.4073	10654	16335			1.68	Si
SLV 12	0.6	-14699	-13945	7242.93		9587	3.4073	10251	15717			1.13	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 14	143750	0.24	9019	-13829	209.33	2881.9	13.77	Si
SLV 13	143750	0.24	9019	-13829	209.33	2881.9	13.77	Si
SLV 9	143750	0.24	9083	-13927	209.33	2900.63	13.86	Si
SLV 10	143750	0.24	9083	-13927	209.33	2900.63	13.86	Si
SLV 15	143750	0.24	9648	-14793	209.33	3065.59	14.65	Si
SLV 16	143750	0.24	9648	-14793	209.33	3065.59	14.65	Si
SLV 6	143750	0.24	9766	-14974	209.33	3099.95	14.81	Si
SLV 5	143750	0.24	9766	-14974	209.33	3099.95	14.81	Si
SLV 11	143750	0.24	11178	-17139	209.33	3503.52	16.74	Si
SLV 12	143750	0.24	11178	-17139	209.33	3503.52	16.74	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 11	-13318	-17788	719	0.06	1948.3	0.921	0.94088	10.34889	No
SLV 12	-13318	-17788	719	0.06	1948.3	0.921	0.94088	10.34889	No
SLV 7	-14453	-17660	634	0.066	2062.4	0.925	1.03482	10.34889	No
SLV 8	-14453	-17660	634	0.066	2062.4	0.925	1.03482	10.34889	No
SLV 6	-8360	-23188	-291	0.085	1454.2	0.904	1.37046	10.34889	No
SLV 5	-8360	-23188	-291	0.085	1454.2	0.904	1.37046	10.34889	No
SLV 16	-9861	-19873	495	0.07	1602.7	0.91	1.11952	7.79402	No
SLV 15	-9861	-19873	495	0.07	1602.7	0.91	1.11952	7.79402	No
SLV 9	-7225	-23317	-206	0.093	1342.8	0.899	1.50613	10.34889	No
SLV 10	-7225	-23317	-206	0.093	1342.8	0.899	1.50613	10.34889	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	25.423	SLU 43	Si
V_SLU	33.572	SLU 39	Si
PF_SLV	1.912	SLV 7	Si
V_SLV	0.736	SLV 9	No
PFFP_SLV	13.767	SLV 13	Si
R_SLV	0.091	SLV 11	No

Maschio 5

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Sismicad 12.19 - Licenza assegnata a Sidel ingegneria Srl - Via Isonzo, 13 - Villanova di Castenaso (BO)



Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
28.311	17.888	32.583	17.665	L1	L2	4.278	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ ₀	f _{v0}	μ	φ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLU 62	-1.6	-43022	9280.93	22347	66780.15	7.195	Si
SLU 62	0.6	-31138	7753.08	16174	53381.17	6.885	Si
SLU 40	-1.6	-40540	9127.6	21058	64300.7	7.045	Si
SLU 40	0.6	-30809	7500.12	16003	52955.29	7.061	Si
SLU 60	-1.6	-43022	9280.93	22347	66780.15	7.195	Si
SLU 60	0.6	-31138	7753.08	16174	53381.17	6.885	Si
SLU 61	-1.6	-43022	9280.93	22347	66780.15	7.195	Si
SLU 61	0.6	-31138	7753.08	16174	53381.17	6.885	Si
SLU 41	-1.6	-40540	9127.6	21058	64300.7	7.045	Si
SLU 41	0.6	-30809	7500.12	16003	52955.29	7.061	Si
SLU 82	-1.6	-47077	10246.11	24453	70470.96	6.878	Si
SLU 82	0.6	-34842	8484.92	18098	57970.47	6.832	Si
SLU 81	-1.6	-47077	10246.11	24453	70470.96	6.878	Si
SLU 81	0.6	-34842	8484.92	18098	57970.47	6.832	Si
SLU 84	-1.6	-47077	10246.11	24453	70470.96	6.878	Si
SLU 84	0.6	-34842	8484.92	18098	57970.47	6.832	Si
SLU 63	-1.6	-43022	9280.93	22347	66780.15	7.195	Si
SLU 63	0.6	-31138	7753.08	16174	53381.17	6.885	Si
SLU 83	-1.6	-47077	10246.11	24453	70470.96	6.878	Si
SLU 83	0.6	-34842	8484.92	18098	57970.47	6.832	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLV 11	-1.6	-25293	-4601.17	13138	48286.65	10.494	Si
SLV 11	0.6	-21541	-10831.12	11189	41859.05	3.865	Si
SLV 6	-1.6	-33895	16147.91	17606	62057.27	3.843	Si
SLV 6	0.6	-19698	20547.1	10232	38607.35	1.879	Si
SLV 5	-1.6	-33895	16147.91	17606	62057.27	3.843	Si
SLV 5	0.6	-19698	20547.1	10232	38607.35	1.879	Si
SLV 12	-1.6	-25293	-4601.17	13138	48286.65	10.494	Si
SLV 12	0.6	-21541	-10831.12	11189	41859.05	3.865	Si
SLV 2	-1.6	-33532	919.34	17418	61502.45	66.898	Si
SLV 2	0.6	-20200	11937.69	10492	39497.91	3.309	Si
SLV 14	-1.6	-27714	18427.89	14396	52297.74	2.838	Si
SLV 14	0.6	-20516	6722.36	10657	40056.9	5.959	Si
SLV 10	-1.6	-32150	21400.47	16700	59372.04	2.774	Si
SLV 10	0.6	-19793	18982.5	10281	38776.11	2.043	Si
SLV 13	-1.6	-27714	18427.89	14396	52297.74	2.838	Si
SLV 13	0.6	-20516	6722.36	10657	40056.9	5.959	Si
SLV 9	-1.6	-32150	21400.47	16700	59372.04	2.774	Si
SLV 9	0.6	-19793	18982.5	10281	38776.11	2.043	Si
SLV 1	-1.6	-33532	919.34	17418	61502.45	66.898	Si
SLV 1	0.6	-20200	11937.69	10492	39497.91	3.309	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt _{lim}	c.s.	Verifica
SLU 37	-1.6	-37522	404	8128.29		19490	4.2781	8154	15698			38.85	Si
SLU 37	0.6	-27980	71	6705.35		14534	4.2781	7493	14426			202.44	Si
SLU 83	-1.6	-47077	466	10246.11		24453	4.2781	8816	16972			36.39	Si
SLU 83	0.6	-34842	56	8484.92		18098	4.2781	7969	15341			271.72	Si
SLU 41	-1.6	-40540	458	9127.6		21058	4.2781	8363	16101			35.14	Si
SLU 41	0.6	-30809	93	7500.12		16003	4.2781	7689	14803			159.56	Si
SLU 82	-1.6	-47077	466	10246.11		24453	4.2781	8816	16972			36.39	Si
SLU 82	0.6	-34842	56	8484.92		18098	4.2781	7969	15341			271.72	Si
SLU 39	-1.6	-40540	458	9127.6		21058	4.2781	8363	16101			35.14	Si
SLU 39	0.6	-30809	93	7500.12		16003	4.2781	7689	14803			159.56	Si
SLU 42	-1.6	-40540	458	9127.6		21058	4.2781	8363	16101			35.14	Si
SLU 42	0.6	-30809	93	7500.12		16003	4.2781	7689	14803			159.56	Si
SLU 84	-1.6	-47077	466	10246.11		24453	4.2781	8816	16972			36.39	Si
SLU 84	0.6	-34842	56	8484.92		18098	4.2781	7969	15341			271.72	Si
SLU 38	-1.6	-37522	404	8128.29		19490	4.2781	8154	15698			38.85	Si
SLU 38	0.6	-27980	71	6705.35		14534	4.2781	7493	14426			202.44	Si
SLU 81	-1.6	-47077	466	10246.11		24453	4.2781	8816	16972			36.39	Si
SLU 81	0.6	-34842	56	8484.92		18098	4.2781	7969	15341			271.72	Si
SLU 40	-1.6	-40540	458	9127.6		21058	4.2781	8363	16101			35.14	Si
SLU 40	0.6	-30809	93	7500.12		16003	4.2781	7689	14803			159.56	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt _{lim}	c.s.	Verifica
SLV 6	-1.6	-33895	-12517	16147.91		17606	4.2781	11855	22822			1.82	Si
SLV 6	0.6	-19698	-14117	20547.1		13313	3.2879	10996	16269			1.15	Si
SLV 16	-1.6	-25657	11843	10627.4		13327	4.2781	10999	21174			1.79	Si
SLV 16	0.6	-21040	12047	-2221.72		10929	4.2781	10519	20251			1.68	Si
SLV 1	-1.6	-33532	-11382	919.34		17418	4.2781	11817	22749			2	Si
SLV 1	0.6	-20200	-12071	11937.69		10492	4.2781	10432	20083			1.66	Si
SLV 9	-1.6	-32150	-7382	21400.47		16700	4.2781	11673	22473			3.04	Si
SLV 9	0.6	-19793	-8955	18982.5		12425	3.5401	10818	17234			1.92	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 5	-1.6	-33895	-12517	16147.91		17606	4.2781	11855	22822			1.82	Si
SLV 5	0.6	-19698	-14117	20547.1		13313	3.2879	10996	16269			1.15	Si
SLV 11	-1.6	-25293	12978	-4601.17		13138	4.2781	10961	21102			1.63	Si
SLV 11	0.6	-21541	14093	-10831.12		11189	4.2781	10571	20351			1.44	Si
SLV 15	-1.6	-25657	11843	10627.4		13327	4.2781	10999	21174			1.79	Si
SLV 15	0.6	-21040	12047	-2221.72		10929	4.2781	10519	20251			1.68	Si
SLV 2	-1.6	-33532	-11382	919.34		17418	4.2781	11817	22749			2	Si
SLV 2	0.6	-20200	-12071	11937.69		10492	4.2781	10432	20083			1.66	Si
SLV 12	-1.6	-25293	12978	-4601.17		13138	4.2781	10961	21102			1.63	Si
SLV 12	0.6	-21541	14093	-10831.12		11189	4.2781	10571	20351			1.44	Si
SLV 10	-1.6	-32150	-7382	21400.47		16700	4.2781	11673	22473			3.04	Si
SLV 10	0.6	-19793	-8955	18982.5		12425	3.5401	10818	17234			1.92	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 12	143750	0.24	11816	-22749	262.82	4623.44	17.59	Si
SLV 11	143750	0.24	11816	-22749	262.82	4623.44	17.59	Si
SLV 15	143750	0.24	12069	-23234	262.82	4711.31	17.93	Si
SLV 16	143750	0.24	12069	-23234	262.82	4711.31	17.93	Si
SLV 8	143750	0.24	12151	-23392	262.82	4739.87	18.03	Si
SLV 7	143750	0.24	12151	-23392	262.82	4739.87	18.03	Si
SLV 14	143750	0.24	12619	-24294	262.82	4901.6	18.65	Si
SLV 13	143750	0.24	12619	-24294	262.82	4901.6	18.65	Si
SLV 3	143750	0.24	13183	-25380	262.82	5094.35	19.38	Si
SLV 4	143750	0.24	13183	-25380	262.82	5094.35	19.38	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 11	-20576	-25293	795	0.068	2834.2	0.93	1.05604	10.34889	No
SLV 12	-20576	-25293	795	0.068	2834.2	0.93	1.05604	10.34889	No
SLV 7	-20161	-27039	731	0.07	2792.5	0.929	1.09348	10.34889	No
SLV 8	-20161	-27039	731	0.07	2792.5	0.929	1.09348	10.34889	No
SLV 16	-18799	-25657	609	0.074	2655.2	0.926	1.16588	7.79402	No
SLV 15	-18799	-25657	609	0.074	2655.2	0.926	1.16588	7.79402	No
SLV 10	-14118	-32150	47	0.102	2185.5	0.915	1.61871	10.34889	No
SLV 9	-14118	-32150	47	0.102	2185.5	0.915	1.61871	10.34889	No
SLV 6	-13704	-33895	-17	0.104	2144.1	0.913	1.65365	10.34889	No
SLV 5	-13704	-33895	-17	0.104	2144.1	0.913	1.65365	10.34889	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	6.832	SLU 81	Si
V_SLU	35.144	SLU 39	Si
PF_SLV	1.879	SLV 5	Si
V_SLV	1.153	SLV 5	Si
PFFP_SLV	17.591	SLV 11	Si
R_SLV	0.102	SLV 11	No

Maschio 6

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
28.472	22.451	24.136	22.451	L1	L2	4.336	0.3	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 77	-1.6	-45650	-9122.87	35096	56324.37	6.174	Si
SLU 77	0.57	-41771	-10701.49	32114	54853.55	5.126	Si
SLU 75	-1.6	-45650	-9122.87	35096	56324.37	6.174	Si
SLU 75	0.57	-41771	-10701.49	32114	54853.55	5.126	Si
SLU 83	-1.6	-49559	-10234.34	38102	57183.82	5.587	Si
SLU 83	0.57	-46091	-12213.42	35435	56452.7	4.622	Si
SLU 81	-1.6	-49559	-10234.34	38102	57183.82	5.587	Si
SLU 81	0.57	-46091	-12213.42	35435	56452.7	4.622	Si
SLU 40	-1.6	-43664	-9465.64	33570	55648.4	5.879	Si
SLU 40	0.57	-41488	-11469.03	31896	54722.02	4.771	Si
SLU 39	-1.6	-43664	-9465.64	33570	55648.4	5.879	Si
SLU 39	0.57	-41488	-11469.03	31896	54722.02	4.771	Si
SLU 82	-1.6	-49559	-10234.34	38102	57183.82	5.587	Si
SLU 82	0.57	-46091	-12213.42	35435	56452.7	4.622	Si
SLU 41	-1.6	-43664	-9465.64	33570	55648.4	5.879	Si
SLU 41	0.57	-41488	-11469.03	31896	54722.02	4.771	Si
SLU 84	-1.6	-49559	-10234.34	38102	57183.82	5.587	Si
SLU 84	0.57	-46091	-12213.42	35435	56452.7	4.622	Si
SLU 42	-1.6	-43664	-9465.64	33570	55648.4	5.879	Si
SLU 42	0.57	-41488	-11469.03	31896	54722.02	4.771	Si



Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 11	-1.6	-29890	-8613.42	22980	52610.58	6.108	Si
SLV 11	0.57	-25823	-6734.1	19853	46884.48	6.962	Si
SLV 9	-1.6	-31258	-9211.85	24032	54435.42	5.909	Si
SLV 9	0.57	-26510	-6639.29	20381	47882.86	7.212	Si
SLV 13	-1.6	-33103	-17115.51	25450	56815.4	3.32	Si
SLV 13	0.57	-26533	-7991.89	20399	47916.96	5.996	Si
SLV 3	-1.6	-26053	6244.35	20030	47220.57	7.562	Si
SLV 3	0.57	-25573	-4250.57	19661	46518.02	10.944	Si
SLV 10	-1.6	-31258	-9211.85	24032	54435.42	5.909	Si
SLV 10	0.57	-26510	-6639.29	20381	47882.86	7.212	Si
SLV 15	-1.6	-32693	-16935.98	25135	56293.97	3.324	Si
SLV 15	0.57	-26327	-8020.33	20241	47618.93	5.937	Si
SLV 4	-1.6	-26053	6244.35	20030	47220.57	7.562	Si
SLV 4	0.57	-25573	-4250.57	19661	46518.02	10.944	Si
SLV 14	-1.6	-33103	-17115.51	25450	56815.4	3.32	Si
SLV 14	0.57	-26533	-7991.89	20399	47916.96	5.996	Si
SLV 16	-1.6	-32693	-16935.98	25135	56293.97	3.324	Si
SLV 16	0.57	-26327	-8020.33	20241	47618.93	5.937	Si
SLV 12	-1.6	-29890	-8613.42	22980	52610.58	6.108	Si
SLV 12	0.57	-25823	-6734.1	19853	46884.48	6.962	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 82	-1.6	-49559	6977	-10234.34		38102	4.3357	10636	13834			1.98	Si
SLU 82	0.57	-46091	6457	-12213.42		35435	4.3357	10280	13372			2.07	Si
SLU 81	-1.6	-49559	6977	-10234.34		38102	4.3357	10636	13834			1.98	Si
SLU 81	0.57	-46091	6457	-12213.42		35435	4.3357	10280	13372			2.07	Si
SLU 40	-1.6	-43664	6511	-9465.64		33570	4.3357	10032	13048			2	Si
SLU 40	0.57	-41488	6050	-11469.03		31896	4.3357	9808	12758			2.11	Si
SLU 83	-1.6	-49559	6977	-10234.34		38102	4.3357	10636	13834			1.98	Si
SLU 83	0.57	-46091	6457	-12213.42		35435	4.3357	10280	13372			2.07	Si
SLU 77	-1.6	-45650	6132	-9122.87		35096	4.3357	10235	13313			2.17	Si
SLU 77	0.57	-41771	5651	-10701.49		32114	4.3357	9837	12796			2.26	Si
SLU 84	-1.6	-49559	6977	-10234.34		38102	4.3357	10636	13834			1.98	Si
SLU 84	0.57	-46091	6457	-12213.42		35435	4.3357	10280	13372			2.07	Si
SLU 39	-1.6	-43664	6511	-9465.64		33570	4.3357	10032	13048			2	Si
SLU 39	0.57	-41488	6050	-11469.03		31896	4.3357	9808	12758			2.11	Si
SLU 41	-1.6	-43664	6511	-9465.64		33570	4.3357	10032	13048			2	Si
SLU 41	0.57	-41488	6050	-11469.03		31896	4.3357	9808	12758			2.11	Si
SLU 75	-1.6	-45650	6132	-9122.87		35096	4.3357	10235	13313			2.17	Si
SLU 75	0.57	-41771	5651	-10701.49		32114	4.3357	9837	12796			2.26	Si
SLU 42	-1.6	-43664	6511	-9465.64		33570	4.3357	10032	13048			2	Si
SLU 42	0.57	-41488	6050	-11469.03		31896	4.3357	9808	12758			2.11	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 13	-1.6	-33103	-4999	-17115.51		25450	4.3357	13423	17460			3.49	Si
SLV 13	0.57	-26533	-4496	-7991.89		20399	4.3357	12413	16146			3.59	Si
SLV 5	-1.6	-29266	5422	-2257.75		22500	4.3357	12833	16692			3.08	Si
SLV 5	0.57	-26283	4920	-5508.36		20207	4.3357	12375	16096			3.27	Si
SLV 8	-1.6	-27898	6680	-1659.32		21448	4.3357	12623	16419			2.46	Si
SLV 8	0.57	-25597	6077	-5603.17		19679	4.3357	12269	15959			2.63	Si
SLV 2	-1.6	-26464	11711	6064.82		20345	4.3357	12402	16132			1.38	Si
SLV 2	0.57	-25779	10613	-4222.13		19819	4.3357	12297	15995			1.51	Si
SLV 3	-1.6	-26053	12088	6244.35		20030	4.3357	12339	16050			1.33	Si
SLV 3	0.57	-25573	10960	-4250.57		19661	4.3357	12266	15954			1.46	Si
SLV 1	-1.6	-26464	11711	6064.82		20345	4.3357	12402	16132			1.38	Si
SLV 1	0.57	-25779	10613	-4222.13		19819	4.3357	12297	15995			1.51	Si
SLV 4	-1.6	-26053	12088	6244.35		20030	4.3357	12339	16050			1.33	Si
SLV 4	0.57	-25573	10960	-4250.57		19661	4.3357	12266	15954			1.46	Si
SLV 6	-1.6	-29266	5422	-2257.75		22500	4.3357	12833	16692			3.08	Si
SLV 6	0.57	-26283	4920	-5508.36		20207	4.3357	12375	16096			3.27	Si
SLV 14	-1.6	-33103	-4999	-17115.51		25450	4.3357	13423	17460			3.49	Si
SLV 14	0.57	-26533	-4496	-7991.89		20399	4.3357	12413	16146			3.59	Si
SLV 7	-1.6	-27898	6680	-1659.32		21448	4.3357	12623	16419			2.46	Si
SLV 7	0.57	-25597	6077	-5603.17		19679	4.3357	12269	15959			2.63	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.24	20417	-26556	180.13	3317.82	18.42	Si
SLV 4	143750	0.24	20417	-26556	180.13	3317.82	18.42	Si
SLV 2	143750	0.24	20647	-26855	180.13	3347.6	18.58	Si
SLV 1	143750	0.24	20647	-26855	180.13	3347.6	18.58	Si
SLV 8	143750	0.24	20851	-27121	180.13	3373.91	18.73	Si
SLV 7	143750	0.24	20851	-27121	180.13	3373.91	18.73	Si
SLV 11	143750	0.24	21453	-27904	180.13	3450.71	19.16	Si
SLV 12	143750	0.24	21453	-27904	180.13	3450.71	19.16	Si
SLV 5	143750	0.24	21617	-28118	180.13	3471.48	19.27	Si
SLV 6	143750	0.24	21617	-28118	180.13	3471.48	19.27	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.05 Ta = 0.0403

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 7	-24284	-27898	-288	0.052	2966.7	0.952	0.78876	11.35877	No
SLV 8	-24284	-27898	-288	0.052	2966.7	0.952	0.78876	11.35877	No



Comb.	N top	N base	V orto	$\alpha 0$	M*	e*	a0*	aLim	Verifica
SLV 9	-24864	-31258	288	0.052	3025.6	0.952	0.78952	11.35877	No
SLV 10	-24864	-31258	288	0.052	3025.6	0.952	0.78952	11.35877	No
SLV 12	-24296	-29890	-272	0.052	2967.9	0.952	0.798	11.35877	No
SLV 11	-24296	-29890	-272	0.052	2967.9	0.952	0.798	11.35877	No
SLV 6	-24853	-29266	272	0.052	3024.5	0.952	0.79854	11.35877	No
SLV 5	-24853	-29266	272	0.052	3024.5	0.952	0.79854	11.35877	No
SLV 14	-24678	-33103	111	0.058	3006.8	0.952	0.88624	11.3564	No
SLV 13	-24678	-33103	111	0.058	3006.8	0.952	0.88624	11.3564	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.622	SLU 81	Si
V_SLU	1.983	SLU 81	Si
PF_SLV	3.32	SLV 13	Si
V_SLV	1.328	SLV 3	Si
PFFP_SLV	18.419	SLV 3	Si
R_SLV	0.069	SLV 7	No

Maschio 7

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
33.371	22.451	29.472	22.451	L1	L2	3.9	0.3	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	$\tau 0$	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLU 81	-1.6	-45128	5052.82	38574	46323.75	9.168	Si
SLU 81	0.57	-42210	8800.42	36080	45848.5	5.21	Si
SLU 40	-1.6	-39719	4713.54	33950	45167.05	9.582	Si
SLU 40	0.57	-37961	8310.09	32448	44533.48	5.359	Si
SLU 41	-1.6	-39719	4713.54	33950	45167.05	9.582	Si
SLU 41	0.57	-37961	8310.09	32448	44533.48	5.359	Si
SLU 84	-1.6	-45128	5052.82	38574	46323.75	9.168	Si
SLU 84	0.57	-42210	8800.42	36080	45848.5	5.21	Si
SLU 75	-1.6	-41619	4479.91	35575	45709.98	10.203	Si
SLU 75	0.57	-38297	7666.89	32735	44664.33	5.826	Si
SLU 39	-1.6	-39719	4713.54	33950	45167.05	9.582	Si
SLU 39	0.57	-37961	8310.09	32448	44533.48	5.359	Si
SLU 83	-1.6	-45128	5052.82	38574	46323.75	9.168	Si
SLU 83	0.57	-42210	8800.42	36080	45848.5	5.21	Si
SLU 42	-1.6	-39719	4713.54	33950	45167.05	9.582	Si
SLU 42	0.57	-37961	8310.09	32448	44533.48	5.359	Si
SLU 77	-1.6	-41619	4479.91	35575	45709.98	10.203	Si
SLU 77	0.57	-38297	7666.89	32735	44664.33	5.826	Si
SLU 82	-1.6	-45128	5052.82	38574	46323.75	9.168	Si
SLU 82	0.57	-42210	8800.42	36080	45848.5	5.21	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLV 16	-1.6	-24780	-7778.77	21181	39941.11	5.135	Si
SLV 16	0.57	-24318	3094.04	20787	39350.25	12.718	Si
SLV 13	-1.6	-24113	-7613.05	20611	39084.81	5.134	Si
SLV 13	0.57	-24109	2991.26	20607	39079.7	13.065	Si
SLV 2	-1.6	-29284	13035.06	25031	45401.56	3.483	Si
SLV 2	0.57	-23565	5549.18	20142	38372.68	6.915	Si
SLV 6	-1.6	-26695	6001.56	22818	42330.72	7.053	Si
SLV 6	0.57	-23510	4534	20096	38301.54	8.448	Si
SLV 14	-1.6	-24113	-7613.05	20611	39084.81	5.134	Si
SLV 14	0.57	-24109	2991.26	20607	39079.7	13.065	Si
SLV 15	-1.6	-24780	-7778.77	21181	39941.11	5.135	Si
SLV 15	0.57	-24318	3094.04	20787	39350.25	12.718	Si
SLV 3	-1.6	-29951	12869.34	25602	46163.69	3.587	Si
SLV 3	0.57	-23774	5651.96	20322	38646.34	6.838	Si
SLV 4	-1.6	-29951	12869.34	25602	46163.69	3.587	Si
SLV 4	0.57	-23774	5651.96	20322	38646.34	6.838	Si
SLV 1	-1.6	-29284	13035.06	25031	45401.56	3.483	Si
SLV 1	0.57	-23565	5549.18	20142	38372.68	6.915	Si
SLV 5	-1.6	-26695	6001.56	22818	42330.72	7.053	Si
SLV 5	0.57	-23510	4534	20096	38301.54	8.448	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	$\sigma 0$	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 81	-1.6	-45128	-7010	5052.82		38574	3.8997	10699	12516			1.79	Si
SLU 81	0.57	-42210	-6401	8800.42		36080	3.8997	10366	12127			1.89	Si
SLU 41	-1.6	-39719	-6540	4713.54		33950	3.8997	10082	11795			1.8	Si
SLU 41	0.57	-37961	-5996	8310.09		32448	3.8997	9882	11561			1.93	Si
SLU 77	-1.6	-41619	-6163	4479.91		35575	3.8997	10299	12049			1.96	Si
SLU 77	0.57	-38297	-5604	7666.89		32735	3.8997	9920	11606			2.07	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 42	-1.6	-39719	-6540	4713.54		33950	3.8997	10082	11795			1.8	Si
SLU 42	0.57	-37961	-5996	8310.09		32448	3.8997	9882	11561			1.93	Si
SLU 40	-1.6	-39719	-6540	4713.54		33950	3.8997	10082	11795			1.8	Si
SLU 40	0.57	-37961	-5996	8310.09		32448	3.8997	9882	11561			1.93	Si
SLU 82	-1.6	-45128	-7010	5052.82		38574	3.8997	10699	12516			1.79	Si
SLU 82	0.57	-42210	-6401	8800.42		36080	3.8997	10366	12127			1.89	Si
SLU 83	-1.6	-45128	-7010	5052.82		38574	3.8997	10699	12516			1.79	Si
SLU 83	0.57	-42210	-6401	8800.42		36080	3.8997	10366	12127			1.89	Si
SLU 75	-1.6	-41619	-6163	4479.91		35575	3.8997	10299	12049			1.96	Si
SLU 75	0.57	-38297	-5604	7666.89		32735	3.8997	9920	11606			2.07	Si
SLU 39	-1.6	-39719	-6540	4713.54		33950	3.8997	10082	11795			1.8	Si
SLU 39	0.57	-37961	-5996	8310.09		32448	3.8997	9882	11561			1.93	Si
SLU 84	-1.6	-45128	-7010	5052.82		38574	3.8997	10699	12516			1.79	Si
SLU 84	0.57	-42210	-6401	8800.42		36080	3.8997	10366	12127			1.89	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 10	-1.6	-25144	-6247	-192.88		21492	3.8997	12632	14778			2.37	Si
SLV 10	0.57	-23673	-5794	3766.63		20235	3.8997	12380	14484			2.5	Si
SLV 14	-1.6	-24113	-11072	-7613.05		20611	3.8997	12455	14572			1.32	Si
SLV 14	0.57	-24109	-9993	2991.26		20607	3.8997	12455	14571			1.46	Si
SLV 9	-1.6	-25144	-6247	-192.88		21492	3.8997	12632	14778			2.37	Si
SLV 9	0.57	-23673	-5794	3766.63		20235	3.8997	12380	14484			2.5	Si
SLV 15	-1.6	-24780	-10788	-7778.77		21181	3.8997	12570	14705			1.36	Si
SLV 15	0.57	-24318	-9630	3094.04		20787	3.8997	12491	14613			1.52	Si
SLV 4	-1.6	-29951	3943	12869.34		25602	3.8997	13454	15739			3.99	Si
SLV 4	0.57	-23774	3578	5651.96		20322	3.8997	12398	14504			4.05	Si
SLV 13	-1.6	-24113	-11072	-7613.05		20611	3.8997	12455	14572			1.32	Si
SLV 13	0.57	-24109	-9993	2991.26		20607	3.8997	12455	14571			1.46	Si
SLV 3	-1.6	-29951	3943	12869.34		25602	3.8997	13454	15739			3.99	Si
SLV 3	0.57	-23774	3578	5651.96		20322	3.8997	12398	14504			4.05	Si
SLV 11	-1.6	-27369	-5300	-745.27		23394	3.8997	13012	15223			2.87	Si
SLV 11	0.57	-24373	-4583	4109.22		20833	3.8997	12500	14624			3.19	Si
SLV 12	-1.6	-27369	-5300	-745.27		23394	3.8997	13012	15223			2.87	Si
SLV 12	0.57	-24373	-4583	4109.22		20833	3.8997	12500	14624			3.19	Si
SLV 16	-1.6	-24780	-10788	-7778.77		21181	3.8997	12570	14705			1.36	Si
SLV 16	0.57	-24318	-9630	3094.04		20787	3.8997	12491	14613			1.52	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 14	143750	0.24	21135	-24726	162.01	3067.31	18.93	Si
SLV 13	143750	0.24	21135	-24726	162.01	3067.31	18.93	Si
SLV 9	143750	0.24	21244	-24853	162.01	3079.79	19.01	Si
SLV 10	143750	0.24	21244	-24853	162.01	3079.79	19.01	Si
SLV 15	143750	0.24	21499	-25152	162.01	3108.97	19.19	Si
SLV 16	143750	0.24	21499	-25152	162.01	3108.97	19.19	Si
SLV 6	143750	0.24	21701	-25389	162.01	3131.9	19.33	Si
SLV 5	143750	0.24	21701	-25389	162.01	3131.9	19.33	Si
SLV 12	143750	0.24	22459	-26275	162.01	3216.78	19.86	Si
SLV 11	143750	0.24	22459	-26275	162.01	3216.78	19.86	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.05 Ta = 0.0403

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 5	-21799	-26695	271	0.051	2664	0.952	0.78154	11.35877	No
SLV 6	-21799	-26695	271	0.051	2664	0.952	0.78154	11.35877	No
SLV 12	-22491	-27369	-269	0.051	2734.2	0.953	0.78404	11.35877	No
SLV 11	-22491	-27369	-269	0.051	2734.2	0.953	0.78404	11.35877	No
SLV 9	-21840	-25144	255	0.052	2668.1	0.952	0.79164	11.35877	No
SLV 10	-21840	-25144	255	0.052	2668.1	0.952	0.79164	11.35877	No
SLV 7	-22450	-28920	-252	0.052	2730.1	0.953	0.79377	11.35877	No
SLV 8	-22450	-28920	-252	0.052	2730.1	0.953	0.79377	11.35877	No
SLV 2	-21979	-29284	107	0.058	2682.3	0.952	0.88288	11.3564	No
SLV 1	-21979	-29284	107	0.058	2682.3	0.952	0.88288	11.3564	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	5.21	SLU 81	Si
V_SLU	1.785	SLU 81	Si
PF_SLV	3.483	SLV 1	Si
V_SLV	1.316	SLV 13	Si
PFFP_SLV	18.932	SLV 13	Si
R_SLV	0.069	SLV 5	No

Maschio 8

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X inl.	Y inl.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h inl.	h fin.	a	a.s.,sx	a.s.,dx
24.382	27.161	25.828	27.161	L1	L2	1.445	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti



fb	fk	fvk0	fmedio	$\tau 0$	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLU 84	-0.21	-13689	974.17	21045	7337.38	7.532	Si
SLU 84	0.19	-12942	981.74	19897	7068.98	7.2	Si
SLU 82	-0.21	-13689	974.17	21045	7337.38	7.532	Si
SLU 82	0.19	-12942	981.74	19897	7068.98	7.2	Si
SLU 81	-0.21	-13689	974.17	21045	7337.38	7.532	Si
SLU 81	0.19	-12942	981.74	19897	7068.98	7.2	Si
SLU 42	-0.21	-11840	857.45	18203	6645.13	7.75	Si
SLU 42	0.19	-11269	878.23	17325	6412.39	7.301	Si
SLU 77	-0.21	-12755	909.13	19610	6999.41	7.699	Si
SLU 77	0.19	-12009	908.36	18462	6711.96	7.389	Si
SLU 41	-0.21	-11840	857.45	18203	6645.13	7.75	Si
SLU 41	0.19	-11269	878.23	17325	6412.39	7.301	Si
SLU 39	-0.21	-11840	857.45	18203	6645.13	7.75	Si
SLU 39	0.19	-11269	878.23	17325	6412.39	7.301	Si
SLU 83	-0.21	-13689	974.17	21045	7337.38	7.532	Si
SLU 83	0.19	-12942	981.74	19897	7068.98	7.2	Si
SLU 40	-0.21	-11840	857.45	18203	6645.13	7.75	Si
SLU 40	0.19	-11269	878.23	17325	6412.39	7.301	Si
SLU 78	-0.21	-12755	909.13	19610	6999.41	7.699	Si
SLU 78	0.19	-12009	908.36	18462	6711.96	7.389	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLV 11	-0.21	-8257	1129.61	12694	5347.45	4.734	Si
SLV 11	0.19	-6248	-659.28	9606	4160.65	6.311	Si
SLV 12	-0.21	-8257	1129.61	12694	5347.45	4.734	Si
SLV 12	0.19	-6248	-659.28	9606	4160.65	6.311	Si
SLV 6	-0.21	-8734	70.69	13427	5618.51	79.476	Si
SLV 6	0.19	-9591	1831.97	14744	6095.01	3.327	Si
SLV 10	-0.21	-8335	546.83	12814	5392.33	9.861	Si
SLV 10	0.19	-8710	1768.63	13391	5605.33	3.169	Si
SLV 13	-0.21	-7843	1306.29	12057	5108.87	3.911	Si
SLV 13	0.19	-6822	844.97	10487	4507.03	5.334	Si
SLV 16	-0.21	-7819	1481.12	12021	5095.21	3.44	Si
SLV 16	0.19	-6083	116.6	9352	4059.83	34.818	Si
SLV 9	-0.21	-8335	546.83	12814	5392.33	9.861	Si
SLV 9	0.19	-8710	1768.63	13391	5605.33	3.169	Si
SLV 5	-0.21	-8734	70.69	13427	5618.51	79.476	Si
SLV 5	0.19	-9591	1831.97	14744	6095.01	3.327	Si
SLV 14	-0.21	-7843	1306.29	12057	5108.87	3.911	Si
SLV 14	0.19	-6822	844.97	10487	4507.03	5.334	Si
SLV 15	-0.21	-7819	1481.12	12021	5095.21	3.44	Si
SLV 15	0.19	-6083	116.6	9352	4059.83	34.818	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	$\sigma 0$	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 46	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 46	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 49	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 49	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 50	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 50	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 59	-0.21	-11557	326	791.72		17768	1.4455	7925	5155			15.79	Si
SLU 59	0.19	-10804	317	773.68		16610	1.4455	7770	5054			15.93	Si
SLU 47	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 47	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 45	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 45	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 51	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 51	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 48	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 48	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 44	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 44	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si
SLU 43	-0.21	-9379	374	639.97		14419	1.4455	7478	4864			13.02	Si
SLU 43	0.19	-8626	366	602.45		13261	1.4455	7324	4764			13	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	$\sigma 0$	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 7	-0.21	-8655	4767	653.48		13306	1.4455	10995	7152			1.5	Si
SLV 7	0.19	-7128	4779	-595.94		10959	1.4455	10525	6846			1.43	Si
SLV 16	-0.21	-7819	5576	1481.12		12021	1.4455	10738	6984			1.25	Si
SLV 16	0.19	-6083	5722	116.6		9352	1.4455	10204	6637			1.16	Si
SLV 8	-0.21	-8655	4767	653.48		13306	1.4455	10995	7152			1.5	Si
SLV 8	0.19	-7128	4779	-595.94		10959	1.4455	10525	6846			1.43	Si
SLV 11	-0.21	-8257	6957	1129.61		12694	1.4455	10872	7072			1.02	Si
SLV 11	0.19	-6248	7049	-659.28		9606	1.4455	10254	6670			0.95	No, Vu<V
SLV 12	-0.21	-8257	6957	1129.61		12694	1.4455	10872	7072			1.02	Si
SLV 12	0.19	-6248	7049	-659.28		9606	1.4455	10254	6670			0.95	No, Vu<V
SLV 5	-0.21	-8734	-6475	70.69		13427	1.4455	11019	7167			1.11	Si
SLV 5	0.19	-9591	-6581	1831.97		14744	1.4455	11282	7339			1.12	Si
SLV 15	-0.21	-7819	5576	1481.12		12021	1.4455	10738	6984			1.25	Si
SLV 15	0.19	-6083	5722	116.6		9352	1.4455	10204	6637			1.16	Si
SLV 6	-0.21	-8734	-6475	70.69		13427	1.4455	11019	7167			1.11	Si
SLV 6	0.19	-9591	-6581	1831.97		14744	1.4455	11282	7339			1.12	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 2	-0.21	-9171	-5094	-280.82		14100	1.4455	11153	7255			1.42	Si
SLV 2	0.19	-9756	-5254	1056.09		14998	1.4455	11333	7372			1.4	Si
SLV 1	-0.21	-9171	-5094	-280.82		14100	1.4455	11153	7255			1.42	Si
SLV 1	0.19	-9756	-5254	1056.09		14998	1.4455	11333	7372			1.4	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore $8 \gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 15	143750	0.24	9621	-6258	87.52	1297.17	14.82	Si
SLV 16	143750	0.24	9621	-6258	87.52	1297.17	14.82	Si
SLV 11	143750	0.24	10125	-6586	87.52	1359.1	15.53	Si
SLV 12	143750	0.24	10125	-6586	87.52	1359.1	15.53	Si
SLV 13	143750	0.24	10392	-6760	87.52	1391.59	15.9	Si
SLV 14	143750	0.24	10392	-6760	87.52	1391.59	15.9	Si
SLV 8	143750	0.24	11330	-7369	87.52	1504.37	17.19	Si
SLV 7	143750	0.24	11330	-7369	87.52	1504.37	17.19	Si
SLV 9	143750	0.24	12697	-8259	87.52	1665.16	19.03	Si
SLV 10	143750	0.24	12697	-8259	87.52	1665.16	19.03	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 5	-5464	-7015	-375	0.049	807.9	0.92	0.77554	10.34889	No
SLV 6	-5464	-7015	-375	0.049	807.9	0.92	0.77554	10.34889	No
SLV 10	-5194	-5905	-339	0.053	780.8	0.918	0.83923	10.34889	No
SLV 9	-5194	-5905	-339	0.053	780.8	0.918	0.83923	10.34889	No
SLV 2	-5530	-10040	-281	0.063	814.6	0.921	0.9886	7.79402	No
SLV 1	-5530	-10040	-281	0.063	814.6	0.921	0.9886	7.79402	No
SLV 11	-4481	-10850	48	0.097	709.5	0.912	1.55175	10.34889	No
SLV 12	-4481	-10850	48	0.097	709.5	0.912	1.55175	10.34889	No
SLV 8	-4751	-11960	13	0.102	736.5	0.915	1.62856	10.34889	No
SLV 7	-4751	-11960	13	0.102	736.5	0.915	1.62856	10.34889	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	7.2	SLU 81	Si
V_SLU	13.003	SLU 43	Si
PF_SLV	3.169	SLV 9	Si
V_SLV	0.946	SLV 11	No
PFFP_SLV	14.821	SLV 15	Si
R_SLV	0.075	SLV 5	No

Maschio 9

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
26.828	27.161	30.248	27.161	L1	L2	3.42	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 53	-0.21	-24311	-446.29	15797	33509.22	75.084	Si
SLU 53	0.19	-22891	-439.81	14874	31994.49	72.747	Si
SLU 83	-0.21	-29321	-531.57	19053	38410.54	72.259	Si
SLU 83	0.19	-27890	-521.18	18123	37080.56	71.148	Si
SLU 81	-0.21	-29321	-531.57	19053	38410.54	72.259	Si
SLU 81	0.19	-27890	-521.18	18123	37080.56	71.148	Si
SLU 62	-0.21	-26437	-491.17	17179	35672.46	72.628	Si
SLU 62	0.19	-25016	-481.67	16255	34240.11	71.086	Si
SLU 84	-0.21	-29321	-531.57	19053	38410.54	72.259	Si
SLU 84	0.19	-27890	-521.18	18123	37080.56	71.148	Si
SLU 63	-0.21	-26437	-491.17	17179	35672.46	72.628	Si
SLU 63	0.19	-25016	-481.67	16255	34240.11	71.086	Si
SLU 61	-0.21	-26437	-491.17	17179	35672.46	72.628	Si
SLU 61	0.19	-25016	-481.67	16255	34240.11	71.086	Si
SLU 60	-0.21	-26437	-491.17	17179	35672.46	72.628	Si
SLU 60	0.19	-25016	-481.67	16255	34240.11	71.086	Si
SLU 82	-0.21	-29321	-531.57	19053	38410.54	72.259	Si
SLU 82	0.19	-27890	-521.18	18123	37080.56	71.148	Si
SLU 52	-0.21	-24311	-446.29	15797	33509.22	75.084	Si
SLU 52	0.19	-22891	-439.81	14874	31994.49	72.747	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 13	-0.21	-19827	3152.63	12884	30328.44	9.62	Si
SLV 13	0.19	-18990	-717.34	12340	29193.21	40.697	Si
SLV 15	-0.21	-15651	3286.15	10170	24534.56	7.466	Si
SLV 15	0.19	-14280	-570.04	9279	22563.24	39.582	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 3	-0.21	-15948	-3782.36	10363	24957.79	6.598	Si
SLV 3	0.19	-14588	91.77	9479	23009.63	250.734	Si
SLV 2	-0.21	-20125	-3915.88	13077	30729.07	7.847	Si
SLV 2	0.19	-19299	-55.53	12540	29613.18	533.277	Si
SLV 1	-0.21	-20125	-3915.88	13077	30729.07	7.847	Si
SLV 1	0.19	-19299	-55.53	12540	29613.18	533.277	Si
SLV 7	-0.21	-10972	-1152.61	7129	17666.54	15.327	Si
SLV 7	0.19	-8984	31.99	5838	14628.55	457.342	Si
SLV 4	-0.21	-15948	-3782.36	10363	24957.79	6.598	Si
SLV 4	0.19	-14588	91.77	9479	23009.63	250.734	Si
SLV 16	-0.21	-15651	3286.15	10170	24534.56	7.466	Si
SLV 16	0.19	-14280	-570.04	9279	22563.24	39.582	Si
SLV 8	-0.21	-10972	-1152.61	7129	17666.54	15.327	Si
SLV 8	0.19	-8984	31.99	5838	14628.55	457.342	Si
SLV 14	-0.21	-19827	3152.63	12884	30328.44	9.62	Si
SLV 14	0.19	-18990	-717.34	12340	29193.21	40.697	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 81	-0.21	-29321	-27	-531.57		19053	3.4199	8096	12459			465.12	Si
SLU 81	0.19	-27890	-27	-521.18		18123	3.4199	7972	12268			458	Si
SLU 84	-0.21	-29321	-27	-531.57		19053	3.4199	8096	12459			465.12	Si
SLU 84	0.19	-27890	-27	-521.18		18123	3.4199	7972	12268			458	Si
SLU 19	-0.21	-22732	-25	-423		14771	3.4199	7525	11581			466.52	Si
SLU 19	0.19	-21636	-25	-413.14		14059	3.4199	7430	11435			460.64	Si
SLU 40	-0.21	-25616	-28	-463.4		16645	3.4199	7775	11965			428.33	Si
SLU 40	0.19	-24510	-28	-452.65		15927	3.4199	7679	11818			423.05	Si
SLU 39	-0.21	-25616	-28	-463.4		16645	3.4199	7775	11965			428.33	Si
SLU 39	0.19	-24510	-28	-452.65		15927	3.4199	7679	11818			423.05	Si
SLU 82	-0.21	-29321	-27	-531.57		19053	3.4199	8096	12459			465.12	Si
SLU 82	0.19	-27890	-27	-521.18		18123	3.4199	7972	12268			458	Si
SLU 83	-0.21	-29321	-27	-531.57		19053	3.4199	8096	12459			465.12	Si
SLU 83	0.19	-27890	-27	-521.18		18123	3.4199	7972	12268			458	Si
SLU 42	-0.21	-25616	-28	-463.4		16645	3.4199	7775	11965			428.33	Si
SLU 42	0.19	-24510	-28	-452.65		15927	3.4199	7679	11818			423.05	Si
SLU 18	-0.21	-22732	-25	-423		14771	3.4199	7525	11581			466.52	Si
SLU 18	0.19	-21636	-25	-413.14		14059	3.4199	7430	11435			460.64	Si
SLU 41	-0.21	-25616	-28	-463.4		16645	3.4199	7775	11965			428.33	Si
SLU 41	0.19	-24510	-28	-452.65		15927	3.4199	7679	11818			423.05	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 11	-0.21	-10883	4548	967.94		7071	3.4199	9748	15001			3.3	Si
SLV 11	0.19	-8892	4880	-166.56		5778	3.4199	9489	14603			2.99	Si
SLV 1	-0.21	-20125	-10077	-3915.88		13077	3.4199	10949	16849			1.67	Si
SLV 1	0.19	-19299	-10572	-55.53		12540	3.4199	10841	16684			1.58	Si
SLV 13	-0.21	-19827	9056	3152.63		12884	3.4199	10910	16790			1.85	Si
SLV 13	0.19	-18990	9430	-717.34		12340	3.4199	10801	16623			1.76	Si
SLV 16	-0.21	-15651	10066	3286.15		10170	3.4199	10367	15955			1.59	Si
SLV 16	0.19	-14280	10561	-570.04		9279	3.4199	10189	15681			1.48	Si
SLV 12	-0.21	-10883	4548	967.94		7071	3.4199	9748	15001			3.3	Si
SLV 12	0.19	-8892	4880	-166.56		5778	3.4199	9489	14603			2.99	Si
SLV 14	-0.21	-19827	9056	3152.63		12884	3.4199	10910	16790			1.85	Si
SLV 14	0.19	-18990	9430	-717.34		12340	3.4199	10801	16623			1.76	Si
SLV 4	-0.21	-15948	-9067	-3782.36		10363	3.4199	10406	16014			1.77	Si
SLV 4	0.19	-14588	-9441	91.77		9479	3.4199	10229	15742			1.67	Si
SLV 3	-0.21	-15948	-9067	-3782.36		10363	3.4199	10406	16014			1.77	Si
SLV 3	0.19	-14588	-9441	91.77		9479	3.4199	10229	15742			1.67	Si
SLV 2	-0.21	-20125	-10077	-3915.88		13077	3.4199	10949	16849			1.67	Si
SLV 2	0.19	-19299	-10572	-55.53		12540	3.4199	10841	16684			1.58	Si
SLV 15	-0.21	-15651	10066	3286.15		10170	3.4199	10367	15955			1.59	Si
SLV 15	0.19	-14280	10561	-570.04		9279	3.4199	10189	15681			1.48	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 11	143750	0.24	6679	-10279	207.08	2186.38	10.56	Si
SLV 12	143750	0.24	6679	-10279	207.08	2186.38	10.56	Si
SLV 8	143750	0.24	6719	-10340	207.08	2198.65	10.62	Si
SLV 7	143750	0.24	6719	-10340	207.08	2198.65	10.62	Si
SLV 16	143750	0.24	9335	-14366	207.08	2985.34	14.42	Si
SLV 15	143750	0.24	9335	-14366	207.08	2985.34	14.42	Si
SLV 3	143750	0.24	9467	-14570	207.08	3024.2	14.6	Si
SLV 4	143750	0.24	9467	-14570	207.08	3024.2	14.6	Si
SLV 13	143750	0.24	11651	-17930	207.08	3649.51	17.62	Si
SLV 14	143750	0.24	11651	-17930	207.08	3649.51	17.62	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 10	-17937	-23411	-497	0.075	2416	0.934	1.16922	10.34889	No
SLV 9	-17937	-23411	-497	0.075	2416	0.934	1.16922	10.34889	No
SLV 6	-18142	-23482	-495	0.075	2436.7	0.934	1.17117	10.34889	No
SLV 5	-18142	-23482	-495	0.075	2436.7	0.934	1.17117	10.34889	No
SLV 8	-5213	-12936	179	0.099	1151.1	0.892	1.60572	10.34889	No
SLV 7	-5213	-12936	179	0.099	1151.1	0.892	1.60572	10.34889	No
SLV 12	-5008	-12864	177	0.099	1131.7	0.891	1.61589	10.34889	No
SLV 11	-5008	-12864	177	0.099	1131.7	0.891	1.61589	10.34889	No



Comb.	N top	N base	V orto	$\alpha 0$	M*	e*	a0*	aLim	Verifica
SLV 14	-13172	-19636	-263	0.087	1935.9	0.921	1.36551	7.79402	No
SLV 13	-13172	-19636	-263	0.087	1935.9	0.921	1.36551	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	71.086	SLU 60	Si
V_SLU	423.055	SLU 39	Si
PF_SLV	6.598	SLV 3	Si
V_SLV	1.485	SLV 15	Si
PFFP_SLV	10.558	SLV 11	Si
R_SLV	0.113	SLV 9	No

Maschio 10

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.sx	a.s.dx
31.248	27.161	33.371	27.161	L1	L2	2.124	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	$\tau 0$	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma M = 3$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLU 39	-0.21	-15780	-735.12	16511	13360.16	18.174	Si
SLU 39	0.19	-14840	-957.95	15528	12754.44	13.314	Si
SLU 81	-0.21	-18224	-810.92	19068	14821.71	18.278	Si
SLU 81	0.19	-17028	-1048.67	17817	14126.96	13.471	Si
SLU 40	-0.21	-15780	-735.12	16511	13360.16	18.174	Si
SLU 40	0.19	-14840	-957.95	15528	12754.44	13.314	Si
SLU 82	-0.21	-18224	-810.92	19068	14821.71	18.278	Si
SLU 82	0.19	-17028	-1048.67	17817	14126.96	13.471	Si
SLU 41	-0.21	-15780	-735.12	16511	13360.16	18.174	Si
SLU 41	0.19	-14840	-957.95	15528	12754.44	13.314	Si
SLU 83	-0.21	-18224	-810.92	19068	14821.71	18.278	Si
SLU 83	0.19	-17028	-1048.67	17817	14126.96	13.471	Si
SLU 37	-0.21	-14553	-680.6	15227	12564.75	18.461	Si
SLU 37	0.19	-13628	-876.26	14259	11938.02	13.624	Si
SLU 36	-0.21	-14553	-680.6	15227	12564.75	18.461	Si
SLU 36	0.19	-13628	-876.26	14259	11938.02	13.624	Si
SLU 42	-0.21	-15780	-735.12	16511	13360.16	18.174	Si
SLU 42	0.19	-14840	-957.95	15528	12754.44	13.314	Si
SLU 84	-0.21	-18224	-810.92	19068	14821.71	18.278	Si
SLU 84	0.19	-17028	-1048.67	17817	14126.96	13.471	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma M = 2$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLV 2	-0.21	-11399	-2192.47	11927	10922.82	4.982	Si
SLV 2	0.19	-9941	-1367.94	10401	9657.28	7.06	Si
SLV 11	-0.21	-9046	1074.81	9465	8861.76	8.245	Si
SLV 11	0.19	-7809	1783.44	8171	7737.68	4.339	Si
SLV 7	-0.21	-8643	261.38	9043	8498.45	32.513	Si
SLV 7	0.19	-6960	1759.16	7282	6950.09	3.951	Si
SLV 6	-0.21	-13607	-2053.79	14237	12765.21	6.215	Si
SLV 6	0.19	-13070	-3008.18	13675	12325.25	4.097	Si
SLV 1	-0.21	-11399	-2192.47	11927	10922.82	4.982	Si
SLV 1	0.19	-9941	-1367.94	10401	9657.28	7.06	Si
SLV 12	-0.21	-9046	1074.81	9465	8861.76	8.245	Si
SLV 12	0.19	-7809	1783.44	8171	7737.68	4.339	Si
SLV 8	-0.21	-8643	261.38	9043	8498.45	32.513	Si
SLV 8	0.19	-6960	1759.16	7282	6950.09	3.951	Si
SLV 10	-0.21	-14010	-1240.36	14659	13092.12	10.555	Si
SLV 10	0.19	-13919	-2983.9	14564	13018.5	4.363	Si
SLV 9	-0.21	-14010	-1240.36	14659	13092.12	10.555	Si
SLV 9	0.19	-13919	-2983.9	14564	13018.5	4.363	Si
SLV 5	-0.21	-13607	-2053.79	14237	12765.21	6.215	Si
SLV 5	0.19	-13070	-3008.18	13675	12325.25	4.097	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma M = 3$

Comb.	Quota	N	V par	M	$\sigma 0$	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 45	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 45	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 43	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 43	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 48	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 48	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 49	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 49	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 44	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 44	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 71	-0.21	-14133	-314	-629.18		14788	2.1238	7527	7194			22.93	Si
SLU 71	0.19	-12988	-312	-776.39		13590	2.1238	7368	7041			22.6	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 47	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 47	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 46	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 46	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 51	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 51	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si
SLU 50	-0.21	-12479	-377	-488.84		13058	2.1238	7297	6973			18.5	Si
SLU 50	0.19	-11352	-375	-597.54		11878	2.1238	7139	6823			18.19	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 13	-0.21	-12743	7132	518.95		13333	2.1238	11000	10513			1.47	Si
SLV 13	0.19	-12771	7479	-1287		13363	2.1238	11006	10518			1.41	Si
SLV 7	-0.21	-8643	-9183	261.38		9043	2.1238	10142	9693			1.06	Si
SLV 7	0.19	-6960	-9376	1759.16		7282	2.1238	9790	9356			1	No, Vu<V
SLV 10	-0.21	-14010	8709	-1240.36		14659	2.1238	11265	10766			1.24	Si
SLV 10	0.19	-13919	8906	-2983.9		14564	2.1238	11246	10748			1.21	Si
SLV 14	-0.21	-12743	7132	518.95		13333	2.1238	11000	10513			1.47	Si
SLV 14	0.19	-12771	7479	-1287		13363	2.1238	11006	10518			1.41	Si
SLV 9	-0.21	-14010	8709	-1240.36		14659	2.1238	11265	10766			1.24	Si
SLV 9	0.19	-13919	8906	-2983.9		14564	2.1238	11246	10748			1.21	Si
SLV 12	-0.21	-9046	-6094	1074.81		9465	2.1238	10226	9773			1.6	Si
SLV 12	0.19	-7809	-6098	1783.44		8171	2.1238	9967	9526			1.56	Si
SLV 11	-0.21	-9046	-6094	1074.81		9465	2.1238	10226	9773			1.6	Si
SLV 11	0.19	-7809	-6098	1783.44		8171	2.1238	9967	9526			1.56	Si
SLV 3	-0.21	-9910	-7605	-1497.92		10369	2.1238	10407	9946			1.31	Si
SLV 3	0.19	-8108	-7949	62.26		8483	2.1238	10030	9586			1.21	Si
SLV 8	-0.21	-8643	-9183	261.38		9043	2.1238	10142	9693			1.06	Si
SLV 8	0.19	-6960	-9376	1759.16		7282	2.1238	9790	9356			1	No, Vu<V
SLV 4	-0.21	-9910	-7605	-1497.92		10369	2.1238	10407	9946			1.31	Si
SLV 4	0.19	-8108	-7949	62.26		8483	2.1238	10030	9586			1.21	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 7	143750	0.24	8107	-7748	128.6	1627.7	12.66	Si
SLV 8	143750	0.24	8107	-7748	128.6	1627.7	12.66	Si
SLV 3	143750	0.24	8861	-8468	128.6	1767.19	13.74	Si
SLV 4	143750	0.24	8861	-8468	128.6	1767.19	13.74	Si
SLV 12	143750	0.24	8956	-8559	128.6	1784.7	13.88	Si
SLV 11	143750	0.24	8956	-8559	128.6	1784.7	13.88	Si
SLV 2	143750	0.24	10355	-9896	128.6	2037.98	15.85	Si
SLV 1	143750	0.24	10355	-9896	128.6	2037.98	15.85	Si
SLV 16	143750	0.24	11689	-11172	128.6	2273.16	17.68	Si
SLV 15	143750	0.24	11689	-11172	128.6	2273.16	17.68	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzaria = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 10	-8558	-14642	-442	0.061	1240.2	0.923	0.9581	10.34889	No
SLV 9	-8558	-14642	-442	0.061	1240.2	0.923	0.9581	10.34889	No
SLV 6	-8204	-13309	-422	0.062	1204.7	0.921	0.97696	10.34889	No
SLV 5	-8204	-13309	-422	0.062	1204.7	0.921	0.97696	10.34889	No
SLV 7	-5582	-11607	148	0.089	943.1	0.906	1.43486	10.34889	No
SLV 8	-5582	-11607	148	0.089	943.1	0.906	1.43486	10.34889	No
SLV 11	-5936	-12940	128	0.092	978.1	0.908	1.46511	10.34889	No
SLV 12	-5936	-12940	128	0.092	978.1	0.908	1.46511	10.34889	No
SLV 13	-8053	-15602	-265	0.077	1189.5	0.92	1.21232	7.79402	No
SLV 14	-8053	-15602	-265	0.077	1189.5	0.92	1.21232	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	13.314	SLU 39	Si
V_SLU	18.194	SLU 43	Si
PF_SLV	3.951	SLV 7	Si
V_SLV	0.998	SLV 7	No
PFFP_SLV	12.657	SLV 7	Si
R_SLV	0.093	SLV 9	No

Maschio 11

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
32.465	17.55	32.757	17.833	L1	L2	0.407	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ_0	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2



Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 80	-0.21	-7927	171.6	43302	755.21	4.401	Si
SLU 80	0.19	-7755	150.42	42366	757.02	5.033	Si
SLU 81	-0.21	-8607	182.61	47020	740.15	4.053	Si
SLU 81	0.19	-8436	159.84	46084	745.13	4.662	Si
SLU 77	-0.21	-7927	171.6	43302	755.21	4.401	Si
SLU 77	0.19	-7755	150.42	42366	757.02	5.033	Si
SLU 76	-0.21	-7927	171.6	43302	755.21	4.401	Si
SLU 76	0.19	-7755	150.42	42366	757.02	5.033	Si
SLU 78	-0.21	-7927	171.6	43302	755.21	4.401	Si
SLU 78	0.19	-7755	150.42	42366	757.02	5.033	Si
SLU 83	-0.21	-8607	182.61	47020	740.15	4.053	Si
SLU 83	0.19	-8436	159.84	46084	745.13	4.662	Si
SLU 84	-0.21	-8607	182.61	47020	740.15	4.053	Si
SLU 84	0.19	-8436	159.84	46084	745.13	4.662	Si
SLU 82	-0.21	-8607	182.61	47020	740.15	4.053	Si
SLU 82	0.19	-8436	159.84	46084	745.13	4.662	Si
SLU 75	-0.21	-7927	171.6	43302	755.21	4.401	Si
SLU 75	0.19	-7755	150.42	42366	757.02	5.033	Si
SLU 79	-0.21	-7927	171.6	43302	755.21	4.401	Si
SLU 79	0.19	-7755	150.42	42366	757.02	5.033	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 1	-0.21	-6742	-381.15	36830	957.96	2.513	Si
SLV 1	0.19	-6828	593.38	37299	964.83	1.626	Si
SLV 4	-0.21	-4599	-292.52	25124	743.11	2.54	Si
SLV 4	0.19	-4684	489.12	25585	753.14	1.54	Si
SLV 16	-0.21	-3567	613.71	19485	609.8	0.994	No, $M > \mu$
SLV 16	0.19	-3217	-388.85	17576	560.29	1.441	Si
SLV 3	-0.21	-4599	-292.52	25124	743.11	2.54	Si
SLV 3	0.19	-4684	489.12	25585	753.14	1.54	Si
SLV 15	-0.21	-3567	613.71	19485	609.8	0.994	No, $M > \mu$
SLV 15	0.19	-3217	-388.85	17576	560.29	1.441	Si
SLV 13	-0.21	-5710	525.08	31191	864.88	1.647	Si
SLV 13	0.19	-5362	-284.59	29290	829.14	2.914	Si
SLV 11	-0.21	-1428	399.94	0	0	0	No, $e > l/2$
SLV 11	0.19	-1229	-203.2	6713	236.22	1.163	Si
SLV 2	-0.21	-6742	-381.15	36830	957.96	2.513	Si
SLV 2	0.19	-6828	593.38	37299	964.83	1.626	Si
SLV 14	-0.21	-5710	525.08	31191	864.88	1.647	Si
SLV 14	0.19	-5362	-284.59	29290	829.14	2.914	Si
SLV 12	-0.21	-1428	399.94	0	0	0	No, $e > l/2$
SLV 12	0.19	-1229	-203.2	6713	236.22	1.163	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 81	-0.21	-8607	57	182.61		47020	0.4068	10833	1983			34.84	Si
SLU 81	0.19	-8436	57	159.84		46084	0.4068	10833	1983			34.84	Si
SLU 75	-0.21	-7927	53	171.6		43302	0.4068	10833	1983			37.46	Si
SLU 75	0.19	-7755	53	150.42		42366	0.4068	10833	1983			37.46	Si
SLU 82	-0.21	-8607	57	182.61		47020	0.4068	10833	1983			34.84	Si
SLU 82	0.19	-8436	57	159.84		46084	0.4068	10833	1983			34.84	Si
SLU 78	-0.21	-7927	53	171.6		43302	0.4068	10833	1983			37.46	Si
SLU 78	0.19	-7755	53	150.42		42366	0.4068	10833	1983			37.46	Si
SLU 76	-0.21	-7927	53	171.6		43302	0.4068	10833	1983			37.46	Si
SLU 76	0.19	-7755	53	150.42		42366	0.4068	10833	1983			37.46	Si
SLU 74	-0.21	-7927	53	171.6		43302	0.4068	10833	1983			37.46	Si
SLU 74	0.19	-7755	53	150.42		42366	0.4068	10833	1983			37.46	Si
SLU 79	-0.21	-7927	53	171.6		43302	0.4068	10833	1983			37.46	Si
SLU 79	0.19	-7755	53	150.42		42366	0.4068	10833	1983			37.46	Si
SLU 84	-0.21	-8607	57	182.61		47020	0.4068	10833	1983			34.84	Si
SLU 84	0.19	-8436	57	159.84		46084	0.4068	10833	1983			34.84	Si
SLU 73	-0.21	-7927	53	171.6		43302	0.4068	10833	1983			37.46	Si
SLU 73	0.19	-7755	53	150.42		42366	0.4068	10833	1983			37.46	Si
SLU 83	-0.21	-8607	57	182.61		47020	0.4068	10833	1983			34.84	Si
SLU 83	0.19	-8436	57	159.84		46084	0.4068	10833	1983			34.84	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 5	-0.21	-8881	-1703	-167.37		48513	0.4068	16250	2975			1.75	Si
SLV 5	0.19	-8816	-1809	407.73		48162	0.4068	16250	2975			1.64	Si
SLV 11	-0.21	-1428	1773	399.94		0	0	8333	0			0	No, $V_u < V$
SLV 11	0.19	-1229	1880	-203.2		23925	0.1141	13118	674			0.36	No, $V_u < V$
SLV 8	-0.21	-1738	883	128.07		9925	0.3891	10318	1807			2.05	Si
SLV 8	0.19	-1669	981	60.2		9116	0.4068	10156	1859			1.9	Si
SLV 1	-0.21	-6742	-1837	-381.15		36830	0.4068	15699	2874			1.56	Si
SLV 1	0.19	-6828	-1882	593.38		43417	0.3495	16250	2556			1.36	Si
SLV 16	-0.21	-3567	1907	613.71		84308	0.094	16250	688			0.36	No, $V_u < V$
SLV 16	0.19	-3217	1952	-388.85		28874	0.2476	14108	1572			0.81	No, $V_u < V$
SLV 7	-0.21	-1738	883	128.07		9925	0.3891	10318	1807			2.05	Si
SLV 7	0.19	-1669	981	60.2		9116	0.4068	10156	1859			1.9	Si
SLV 15	-0.21	-3567	1907	613.71		84308	0.094	16250	688			0.36	No, $V_u < V$
SLV 15	0.19	-3217	1952	-388.85		28874	0.2476	14108	1572			0.81	No, $V_u < V$
SLV 12	-0.21	-1428	1773	399.94		0	0	8333	0			0	No, $V_u < V$
SLV 12	0.19	-1229	1880	-203.2		23925	0.1141	13118	674			0.36	No, $V_u < V$
SLV 2	-0.21	-6742	-1837	-381.15		36830	0.4068	15699	2874			1.56	Si
SLV 2	0.19	-6828	-1882	593.38		43417	0.3495	16250	2556			1.36	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 6	-0.21	-8881	-1703	-167.37		48513	0.4068	16250	2975			1.75	Si
SLV 6	0.19	-8816	-1809	407.73		48162	0.4068	16250	2975			1.64	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 11	143750	0.24	3314	-607	24.63	132.8	5.39	Si
SLV 12	143750	0.24	3314	-607	24.63	132.8	5.39	Si
SLV 15	143750	0.24	6868	-1257	24.63	266.99	10.84	Si
SLV 16	143750	0.24	6868	-1257	24.63	266.99	10.84	Si
SLV 8	143750	0.24	8470	-1551	24.63	324.68	13.18	Si
SLV 7	143750	0.24	8470	-1551	24.63	324.68	13.18	Si
SLV 13	143750	0.24	15071	-2759	24.63	544.17	22.09	Si
SLV 14	143750	0.24	15071	-2759	24.63	544.17	22.09	Si
SLV 4	143750	0.24	24055	-4403	24.63	795.71	32.3	Si
SLV 3	143750	0.24	24055	-4403	24.63	795.71	32.3	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 15	-2431	-613	-425	0	317.5	0.939	0	7.79402	No
SLV 8	-717	-1953	357	0	146.2	0.894	0	10.34889	No
SLV 7	-717	-1953	357	0	146.2	0.894	0	10.34889	No
SLV 14	-4175	-2361	-618	0	494.5	0.958	0	7.79402	No
SLV 16	-2431	-613	-425	0	317.5	0.939	0	7.79402	No
SLV 3	-2924	-5812	432	0	367.4	0.946	0	7.79402	No
SLV 4	-2924	-5812	432	0	367.4	0.946	0	7.79402	No
SLV 13	-4175	-2361	-618	0	494.5	0.958	0	7.79402	No
SLV 10	-6382	-6220	-543	0.009	719.1	0.971	0.14225	10.34889	No
SLV 9	-6382	-6220	-543	0.009	719.1	0.971	0.14225	10.34889	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.053	SLU 81	Si
V_SLU	34.841	SLU 81	Si
PF_SLV	0	SLV 11	No
V_SLV	0	SLV 11	No
PFFP_SLV	5.391	SLV 11	Si
R_SLV	0	SLV 3	No

Maschio 12

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
33.189	18.25	33.371	18.426	L1	L2	0.254	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ_0	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 81	-0.21	-2032	-162.74	17789	201.56	1.239	Si
SLU 81	0.19	-1925	28.33	16853	193.76	6.839	Si
SLU 82	-0.21	-2032	-162.74	17789	201.56	1.239	Si
SLU 82	0.19	-1925	28.33	16853	193.76	6.839	Si
SLU 39	-0.21	-1687	-140.8	14772	175.31	1.245	Si
SLU 39	0.19	-1605	24.44	14052	168.56	6.897	Si
SLU 84	-0.21	-2032	-162.74	17789	201.56	1.239	Si
SLU 84	0.19	-1925	28.33	16853	193.76	6.839	Si
SLU 41	-0.21	-1687	-140.8	14772	175.31	1.245	Si
SLU 41	0.19	-1605	24.44	14052	168.56	6.897	Si
SLU 42	-0.21	-1687	-140.8	14772	175.31	1.245	Si
SLU 42	0.19	-1605	24.44	14052	168.56	6.897	Si
SLU 40	-0.21	-1687	-140.8	14772	175.31	1.245	Si
SLU 40	0.19	-1605	24.44	14052	168.56	6.897	Si
SLU 63	-0.21	-1902	-149.24	16649	192.02	1.287	Si
SLU 63	0.19	-1795	26.68	15713	183.84	6.892	Si
SLU 62	-0.21	-1902	-149.24	16649	192.02	1.287	Si
SLU 62	0.19	-1795	26.68	15713	183.84	6.892	Si
SLU 83	-0.21	-2032	-162.74	17789	201.56	1.239	Si
SLU 83	0.19	-1925	28.33	16853	193.76	6.839	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 9	-0.21	-1509	-316.89	0	0	0	No, e>1/2
SLV 9	0.19	-1404	212.98	0	0	0	No, e>1/2
SLV 8	-0.21	-1264	116.55	11070	145.94	1.252	Si
SLV 8	0.19	-1204	-179.13	0	0	0	No, e>1/2
SLV 7	-0.21	-1264	116.55	11070	145.94	1.252	Si
SLV 7	0.19	-1204	-179.13	0	0	0	No, e>1/2



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 10	-0.21	-1509	-316.89	0	0	0	No, $e \geq l/2$
SLV 10	0.19	-1404	212.98	0	0	0	No, $e \geq l/2$
SLV 4	-0.21	-1181	-262.4	0	0	0	No, $e \geq l/2$
SLV 4	0.19	-1088	181.42	0	0	0	No, $e \geq l/2$
SLV 5	-0.21	-1397	-466.73	0	0	0	No, $e \geq l/2$
SLV 5	0.19	-1282	360.22	0	0	0	No, $e \geq l/2$
SLV 3	-0.21	-1181	-262.4	0	0	0	No, $e \geq l/2$
SLV 3	0.19	-1088	181.42	0	0	0	No, $e \geq l/2$
SLV 6	-0.21	-1397	-466.73	0	0	0	No, $e \geq l/2$
SLV 6	0.19	-1282	360.22	0	0	0	No, $e \geq l/2$
SLV 2	-0.21	-1221	-437.39	0	0	0	No, $e \geq l/2$
SLV 2	0.19	-1111	343.22	0	0	0	No, $e \geq l/2$
SLV 1	-0.21	-1221	-437.39	0	0	0	No, $e \geq l/2$
SLV 1	0.19	-1111	343.22	0	0	0	No, $e \geq l/2$

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 62	-0.21	-1902	-440	-149.24		29084	0.1453	9433	617			1.4	Si
SLU 62	0.19	-1795	-440	26.68		15713	0.2538	7651	874			1.99	Si
SLU 39	-0.21	-1687	-413	-140.8		28755	0.1304	9390	551			1.33	Si
SLU 39	0.19	-1605	-413	24.44		14052	0.2538	7429	849			2.05	Si
SLU 63	-0.21	-1902	-440	-149.24		29084	0.1453	9433	617			1.4	Si
SLU 63	0.19	-1795	-440	26.68		15713	0.2538	7651	874			1.99	Si
SLU 42	-0.21	-1687	-413	-140.8		28755	0.1304	9390	551			1.33	Si
SLU 42	0.19	-1605	-413	24.44		14052	0.2538	7429	849			2.05	Si
SLU 84	-0.21	-2032	-478	-162.74		32147	0.1405	9842	622			1.3	Si
SLU 84	0.19	-1925	-478	28.33		16853	0.2538	7803	891			1.87	Si
SLU 82	-0.21	-2032	-478	-162.74		32147	0.1405	9842	622			1.3	Si
SLU 82	0.19	-1925	-478	28.33		16853	0.2538	7803	891			1.87	Si
SLU 83	-0.21	-2032	-478	-162.74		32147	0.1405	9842	622			1.3	Si
SLU 83	0.19	-1925	-478	28.33		16853	0.2538	7803	891			1.87	Si
SLU 40	-0.21	-1687	-413	-140.8		28755	0.1304	9390	551			1.33	Si
SLU 40	0.19	-1605	-413	24.44		14052	0.2538	7429	849			2.05	Si
SLU 41	-0.21	-1687	-413	-140.8		28755	0.1304	9390	551			1.33	Si
SLU 41	0.19	-1605	-413	24.44		14052	0.2538	7429	849			2.05	Si
SLU 81	-0.21	-2032	-478	-162.74		32147	0.1405	9842	622			1.3	Si
SLU 81	0.19	-1925	-478	28.33		16853	0.2538	7803	891			1.87	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	-0.21	-1264	701	116.55		26963	0.1042	13726	644			0.92	No, $V_u < V$
SLV 8	0.19	-1204	703	-179.13		0	0	8333	0			0	No, $V_u < V$
SLV 1	-0.21	-1221	-1935	-437.39		0	0	8333	0			0	No, $V_u < V$
SLV 1	0.19	-1111	-1928	343.22		0	0	8333	0			0	No, $V_u < V$
SLV 6	-0.21	-1397	-2026	-466.73		0	0	8333	0			0	No, $V_u < V$
SLV 6	0.19	-1282	-2024	360.22		0	0	8333	0			0	No, $V_u < V$
SLV 10	-0.21	-1509	-1287	-316.89		0	0	8333	0			0	No, $V_u < V$
SLV 10	0.19	-1404	-1288	212.98		0	0	8333	0			0	No, $V_u < V$
SLV 5	-0.21	-1397	-2026	-466.73		0	0	8333	0			0	No, $V_u < V$
SLV 5	0.19	-1282	-2024	360.22		0	0	8333	0			0	No, $V_u < V$
SLV 2	-0.21	-1221	-1935	-437.39		0	0	8333	0			0	No, $V_u < V$
SLV 2	0.19	-1111	-1928	343.22		0	0	8333	0			0	No, $V_u < V$
SLV 9	-0.21	-1509	-1287	-316.89		0	0	8333	0			0	No, $V_u < V$
SLV 9	0.19	-1404	-1288	212.98		0	0	8333	0			0	No, $V_u < V$
SLV 4	-0.21	-1181	-1116	-262.4		0	0	8333	0			0	No, $V_u < V$
SLV 4	0.19	-1088	-1110	181.42		0	0	8333	0			0	No, $V_u < V$
SLV 3	-0.21	-1181	-1116	-262.4		0	0	8333	0			0	No, $V_u < V$
SLV 3	0.19	-1088	-1110	181.42		0	0	8333	0			0	No, $V_u < V$
SLV 7	-0.21	-1264	701	116.55		26963	0.1042	13726	644			0.92	No, $V_u < V$
SLV 7	0.19	-1204	703	-179.13		0	0	8333	0			0	No, $V_u < V$

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 4	143750	0.24	2544	-291	15.37	64.01	4.16	Si
SLV 3	143750	0.24	2544	-291	15.37	64.01	4.16	Si
SLV 2	143750	0.24	3263	-373	15.37	81.63	5.31	Si
SLV 1	143750	0.24	3263	-373	15.37	81.63	5.31	Si
SLV 8	143750	0.24	3271	-374	15.37	81.8	5.32	Si
SLV 7	143750	0.24	3271	-374	15.37	81.8	5.32	Si
SLV 12	143750	0.24	4613	-527	15.37	114.09	7.42	Si
SLV 11	143750	0.24	4613	-527	15.37	114.09	7.42	Si
SLV 5	143750	0.24	5670	-648	15.37	138.95	9.04	Si
SLV 6	143750	0.24	5670	-648	15.37	138.95	9.04	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 11	1172	-1835	-11	0	0	0	0	10.34889	No, Trazione
SLV 2	-2672	93	29	0	0	0	0	7.79402	No, Trazione
SLV 16	1249	-2232	-32	0	0	0	0	7.79402	No, Trazione
SLV 14	395	-1957	-32	0	0	0	0	7.79402	No, Trazione
SLV 12	1172	-1835	-11	0	0	0	0	10.34889	No, Trazione
SLV 15	1249	-2232	-32	0	0	0	0	7.79402	No, Trazione
SLV 7	252	-1220	8	0	0	0	0	10.34889	No, Trazione
SLV 8	252	-1220	8	0	0	0	0	10.34889	No, Trazione
SLV 13	395	-1957	-32	0	0	0	0	7.79402	No, Trazione
SLV 1	-2672	93	29	0	0	0	0	7.79402	No, Trazione



Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	1.239	SLU 81	Si
V_SLU	1.302	SLU 81	Si
PF_SLV	0	SLV 1	No
V_SLV	0	SLV 1	No
PFFP_SLV	4.165	SLV 3	Si
R_SLV	0	SLV 16	No

Maschio 13

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
33.371	22.756	33.371	18.426	L1	L2	4.33	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 39	-1.6	-29712	-14972.88	15248	52285.49	3.492	Si
SLU 39	0.5	-20548	-8841.51	10546	38728.49	4.38	Si
SLU 84	-1.6	-35724	-16551.09	18334	59935.47	3.621	Si
SLU 84	0.5	-24413	-9946.31	12529	44725.83	4.497	Si
SLU 42	-1.6	-29712	-14972.88	15248	52285.49	3.492	Si
SLU 42	0.5	-20548	-8841.51	10546	38728.49	4.38	Si
SLU 18	-1.6	-27476	-13030.71	14101	49188.9	3.775	Si
SLU 18	0.5	-18808	-7799.25	9652	35893.88	4.602	Si
SLU 40	-1.6	-29712	-14972.88	15248	52285.49	3.492	Si
SLU 40	0.5	-20548	-8841.51	10546	38728.49	4.38	Si
SLU 83	-1.6	-35724	-16551.09	18334	59935.47	3.621	Si
SLU 83	0.5	-24413	-9946.31	12529	44725.83	4.497	Si
SLU 81	-1.6	-35724	-16551.09	18334	59935.47	3.621	Si
SLU 81	0.5	-24413	-9946.31	12529	44725.83	4.497	Si
SLU 21	-1.6	-27476	-13030.71	14101	49188.9	3.775	Si
SLU 21	0.5	-18808	-7799.25	9652	35893.88	4.602	Si
SLU 82	-1.6	-35724	-16551.09	18334	59935.47	3.621	Si
SLU 82	0.5	-24413	-9946.31	12529	44725.83	4.497	Si
SLU 41	-1.6	-29712	-14972.88	15248	52285.49	3.492	Si
SLU 41	0.5	-20548	-8841.51	10546	38728.49	4.38	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 10	-1.6	-17585	-13532.21	9025	35259.71	2.606	Si
SLV 10	0.5	-16227	-11274.7	8328	32737.13	2.904	Si
SLV 14	-1.6	-32613	-8796.61	16737	60936.02	6.927	Si
SLV 14	0.5	-22536	-6260.55	11566	44173.33	7.056	Si
SLV 13	-1.6	-32613	-8796.61	16737	60936.02	6.927	Si
SLV 13	0.5	-22536	-6260.55	11566	44173.33	7.056	Si
SLV 1	-1.6	-9777	-12455.44	5018	20297.8	1.63	Si
SLV 1	0.5	-8562	-8791.41	4394	17870.33	2.033	Si
SLV 9	-1.6	-17585	-13532.21	9025	35259.71	2.606	Si
SLV 9	0.5	-16227	-11274.7	8328	32737.13	2.904	Si
SLV 4	-1.6	-15807	-9494.01	8112	31950.78	3.365	Si
SLV 4	0.5	-9778	-5252.82	5018	20299.9	3.865	Si
SLV 2	-1.6	-9777	-12455.44	5018	20297.8	1.63	Si
SLV 2	0.5	-8562	-8791.41	4394	17870.33	2.033	Si
SLV 5	-1.6	-10734	-14629.86	5509	22191.65	1.517	Si
SLV 5	0.5	-12035	-12033.96	6176	24738.08	2.056	Si
SLV 3	-1.6	-15807	-9494.01	8112	31950.78	3.365	Si
SLV 3	0.5	-9778	-5252.82	5018	20299.9	3.865	Si
SLV 6	-1.6	-10734	-14629.86	5509	22191.65	1.517	Si
SLV 6	0.5	-12035	-12033.96	6176	24738.08	2.056	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 79	-1.6	-34260	1923	-14885.98		17582	4.33	7900	15393			8	Si
SLU 79	0.5	-23233	1995	-9068.67		11923	4.33	7145	13923			6.98	Si
SLU 78	-1.6	-34260	1923	-14885.98		17582	4.33	7900	15393			8	Si
SLU 78	0.5	-23233	1995	-9068.67		11923	4.33	7145	13923			6.98	Si
SLU 82	-1.6	-35724	2073	-16551.09		18334	4.33	8000	15588			7.52	Si
SLU 82	0.5	-24413	2150	-9946.31		12529	4.33	7226	14080			6.55	Si
SLU 75	-1.6	-34260	1923	-14885.98		17582	4.33	7900	15393			8	Si
SLU 75	0.5	-23233	1995	-9068.67		11923	4.33	7145	13923			6.98	Si
SLU 81	-1.6	-35724	2073	-16551.09		18334	4.33	8000	15588			7.52	Si
SLU 81	0.5	-24413	2150	-9946.31		12529	4.33	7226	14080			6.55	Si
SLU 84	-1.6	-35724	2073	-16551.09		18334	4.33	8000	15588			7.52	Si
SLU 84	0.5	-24413	2150	-9946.31		12529	4.33	7226	14080			6.55	Si
SLU 76	-1.6	-34260	1923	-14885.98		17582	4.33	7900	15393			8	Si
SLU 76	0.5	-23233	1995	-9068.67		11923	4.33	7145	13923			6.98	Si
SLU 73	-1.6	-34260	1923	-14885.98		17582	4.33	7900	15393			8	Si
SLU 73	0.5	-23233	1995	-9068.67		11923	4.33	7145	13923			6.98	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 83	-1.6	-35724	2073	-16551.09		18334	4.33	8000	15588			7.52	Si
SLU 83	0.5	-24413	2150	-9946.31		12529	4.33	7226	14080			6.55	Si
SLU 74	-1.6	-34260	1923	-14885.98		17582	4.33	7900	15393			8	Si
SLU 74	0.5	-23233	1995	-9068.67		11923	4.33	7145	13923			6.98	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 11	-1.6	-37686	-4692	-3660.76		19341	4.33	12202	23775			5.07	Si
SLV 11	0.5	-20280	-3528	520.59		10408	4.33	10415	20294			5.75	Si
SLV 7	-1.6	-30835	-4680	-4758.41		15825	4.33	11498	22405			4.79	Si
SLV 7	0.5	-16087	-3427	-238.67		8256	4.33	9985	19455			5.68	Si
SLV 2	-1.6	-9777	3068	-12455.44		8128	2.6731	9959	11980			3.9	Si
SLV 2	0.5	-8562	2918	-8791.41		5572	3.4147	9448	14518			4.98	Si
SLV 12	-1.6	-37686	-4692	-3660.76		19341	4.33	12202	23775			5.07	Si
SLV 12	0.5	-20280	-3528	520.59		10408	4.33	10415	20294			5.75	Si
SLV 9	-1.6	-17585	7207	-13532.21		9334	4.1865	10200	19216			2.67	Si
SLV 9	0.5	-16227	6054	-11274.7		8328	4.33	9999	19483			3.22	Si
SLV 1	-1.6	-9777	3068	-12455.44		8128	2.6731	9959	11980			3.9	Si
SLV 1	0.5	-8562	2918	-8791.41		5572	3.4147	9448	14518			4.98	Si
SLV 8	-1.6	-30835	-4680	-4758.41		15825	4.33	11498	22405			4.79	Si
SLV 8	0.5	-16087	-3427	-238.67		8256	4.33	9985	19455			5.68	Si
SLV 5	-1.6	-10734	7219	-14629.86		9913	2.4062	10316	11170			1.55	Si
SLV 5	0.5	-12035	6154	-12033.96		7651	3.4952	9864	15514			2.52	Si
SLV 10	-1.6	-17585	7207	-13532.21		9334	4.1865	10200	19216			2.67	Si
SLV 10	0.5	-16227	6054	-11274.7		8328	4.33	9999	19483			3.22	Si
SLV 6	-1.6	-10734	7219	-14629.86		9913	2.4062	10316	11170			1.55	Si
SLV 6	0.5	-12035	6154	-12033.96		7651	3.4952	9864	15514			2.52	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 2	143750	0.24	4216	-8216	266.01	1784.79	6.71	Si
SLV 1	143750	0.24	4216	-8216	266.01	1784.79	6.71	Si
SLV 5	143750	0.24	5211	-10153	266.01	2187.04	8.22	Si
SLV 6	143750	0.24	5211	-10153	266.01	2187.04	8.22	Si
SLV 3	143750	0.24	6028	-11745	266.01	2512.27	9.44	Si
SLV 4	143750	0.24	6028	-11745	266.01	2512.27	9.44	Si
SLV 10	143750	0.24	7874	-15343	266.01	3229.65	12.14	Si
SLV 9	143750	0.24	7874	-15343	266.01	3229.65	12.14	Si
SLV 8	143750	0.24	11248	-21917	266.01	4477.35	16.83	Si
SLV 7	143750	0.24	11248	-21917	266.01	4477.35	16.83	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 12	-18042	-37686	-215	0.092	2588.3	0.924	1.43975	10.34889	No
SLV 11	-18042	-37686	-215	0.092	2588.3	0.924	1.43975	10.34889	No
SLV 9	-11856	-17585	266	0.091	1969.8	0.908	1.46388	10.34889	No
SLV 10	-11856	-17585	266	0.091	1969.8	0.908	1.46388	10.34889	No
SLV 7	-13594	-30835	-226	0.093	2142.6	0.913	1.47812	10.34889	No
SLV 8	-13594	-30835	-226	0.093	2142.6	0.913	1.47812	10.34889	No
SLV 5	-7408	-10734	254	0.095	1534.5	0.894	1.5485	10.34889	No
SLV 6	-7408	-10734	254	0.095	1534.5	0.894	1.5485	10.34889	No
SLV 14	-19211	-32613	111	0.095	2705.9	0.927	1.4976	7.79402	No
SLV 13	-19211	-32613	111	0.095	2705.9	0.927	1.4976	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	3.492	SLU 39	Si
V_SLV	6.55	SLU 81	Si
PF_SLV	1.517	SLV 5	Si
V_SLV	1.547	SLV 5	Si
PFFP_SLV	6.709	SLV 1	Si
R_SLV	0.139	SLV 11	No

Maschio 14

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota s.	I	Sp.	h netta	h ini.	h fin.	a	a.s.sx	a.s.dx
33.371	27.161	33.371	23.706	L1	L2	3.455	0.45	2.69	2.69	2.69			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ_0	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 81	-1.6	-37273	-3532.68	23974	45438.65	12.862	Si
SLU 81	0.5	-31149	-1053.79	20035	40574.89	38.504	Si
SLU 42	-1.6	-31321	-3230.79	20146	40725.75	12.605	Si
SLU 42	0.5	-26623	-939	17124	36323.55	38.683	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 82	-1.6	-37273	-3532.68	23974	45438.65	12.862	Si
SLU 82	0.5	-31149	-1053.79	20035	40574.89	38.504	Si
SLU 84	-1.6	-37273	-3532.68	23974	45438.65	12.862	Si
SLU 84	0.5	-31149	-1053.79	20035	40574.89	38.504	Si
SLU 33	-1.6	-29437	-2844.64	18934	39032.32	13.721	Si
SLU 33	0.5	-24679	-795.59	15873	34324.78	43.144	Si
SLU 37	-1.6	-29437	-2844.64	18934	39032.32	13.721	Si
SLU 37	0.5	-24679	-795.59	15873	34324.78	43.144	Si
SLU 41	-1.6	-31321	-3230.79	20146	40725.75	12.605	Si
SLU 41	0.5	-26623	-939	17124	36323.55	38.683	Si
SLU 40	-1.6	-31321	-3230.79	20146	40725.75	12.605	Si
SLU 40	0.5	-26623	-939	17124	36323.55	38.683	Si
SLU 83	-1.6	-37273	-3532.68	23974	45438.65	12.862	Si
SLU 83	0.5	-31149	-1053.79	20035	40574.89	38.504	Si
SLU 39	-1.6	-31321	-3230.79	20146	40725.75	12.605	Si
SLU 39	0.5	-26623	-939	17124	36323.55	38.683	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 11	-1.6	-31841	-1534.14	20480	45785.89	29.845	Si
SLV 11	0.5	-27871	-2292.56	17927	41083.6	17.92	Si
SLV 16	-1.6	-31442	-3679.42	20223	45325.86	12.319	Si
SLV 16	0.5	-26090	-1359.01	16781	38879.94	28.609	Si
SLV 5	-1.6	-17284	-2243.06	11117	27141.79	12.1	Si
SLV 5	0.5	-11632	1231.62	7482	18864.08	15.316	Si
SLV 13	-1.6	-28004	-4267.36	18012	41244.87	9.665	Si
SLV 13	0.5	-21990	-361.08	14144	33589.86	93.026	Si
SLV 12	-1.6	-31841	-1534.14	20480	45785.89	29.845	Si
SLV 12	0.5	-27871	-2292.56	17927	41083.6	17.92	Si
SLV 15	-1.6	-31442	-3679.42	20223	45325.86	12.319	Si
SLV 15	0.5	-26090	-1359.01	16781	38879.94	28.609	Si
SLV 14	-1.6	-28004	-4267.36	18012	41244.87	9.665	Si
SLV 14	0.5	-21990	-361.08	14144	33589.86	93.026	Si
SLV 6	-1.6	-17284	-2243.06	11117	27141.79	12.1	Si
SLV 6	0.5	-11632	1231.62	7482	18864.08	15.316	Si
SLV 9	-1.6	-20380	-3493.93	13108	31429.72	8.996	Si
SLV 9	0.5	-14205	1033.88	9136	22703.98	21.96	Si
SLV 10	-1.6	-20380	-3493.93	13108	31429.72	8.996	Si
SLV 10	0.5	-14205	1033.88	9136	22703.98	21.96	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 76	-1.6	-35389	-2108	-3146.52		22762	3.455	8590	13356			6.34	Si
SLU 76	0.5	-29204	-2249	-910.38		18784	3.455	8060	12531			5.57	Si
SLU 83	-1.6	-37273	-2269	-3532.68		23974	3.455	8752	13607			6	Si
SLU 83	0.5	-31149	-2423	-1053.79		20035	3.455	8227	12791			5.28	Si
SLU 82	-1.6	-37273	-2269	-3532.68		23974	3.455	8752	13607			6	Si
SLU 82	0.5	-31149	-2423	-1053.79		20035	3.455	8227	12791			5.28	Si
SLU 75	-1.6	-35389	-2108	-3146.52		22762	3.455	8590	13356			6.34	Si
SLU 75	0.5	-29204	-2249	-910.38		18784	3.455	8060	12531			5.57	Si
SLU 73	-1.6	-35389	-2108	-3146.52		22762	3.455	8590	13356			6.34	Si
SLU 73	0.5	-29204	-2249	-910.38		18784	3.455	8060	12531			5.57	Si
SLU 74	-1.6	-35389	-2108	-3146.52		22762	3.455	8590	13356			6.34	Si
SLU 74	0.5	-29204	-2249	-910.38		18784	3.455	8060	12531			5.57	Si
SLU 81	-1.6	-37273	-2269	-3532.68		23974	3.455	8752	13607			6	Si
SLU 81	0.5	-31149	-2423	-1053.79		20035	3.455	8227	12791			5.28	Si
SLU 84	-1.6	-37273	-2269	-3532.68		23974	3.455	8752	13607			6	Si
SLU 84	0.5	-31149	-2423	-1053.79		20035	3.455	8227	12791			5.28	Si
SLU 78	-1.6	-35389	-2108	-3146.52		22762	3.455	8590	13356			6.34	Si
SLU 78	0.5	-29204	-2249	-910.38		18784	3.455	8060	12531			5.57	Si
SLU 79	-1.6	-35389	-2108	-3146.52		22762	3.455	8590	13356			6.34	Si
SLU 79	0.5	-29204	-2249	-910.38		18784	3.455	8060	12531			5.57	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 12	-1.6	-31841	-2557	-1534.14		20480	3.455	12429	19324			7.56	Si
SLV 12	0.5	-27871	-3287	-2292.56		17927	3.455	11919	18530			5.64	Si
SLV 3	-1.6	-21122	-1824	490.16		13585	3.455	11050	17181			9.42	Si
SLV 3	0.5	-17514	-2634	-699.85		11265	3.455	10586	16459			6.25	Si
SLV 11	-1.6	-31841	-2557	-1534.14		20480	3.455	12429	19324			7.56	Si
SLV 11	0.5	-27871	-3287	-2292.56		17927	3.455	11919	18530			5.64	Si
SLV 16	-1.6	-31442	-1671	-3679.42		20223	3.455	12378	19245			11.52	Si
SLV 16	0.5	-26090	-1514	-1359.01		16781	3.455	11689	18174			12	Si
SLV 2	-1.6	-17684	-1110	-97.78		11374	3.455	10608	16493			14.85	Si
SLV 2	0.5	-13414	-1451	298.08		8628	3.455	10059	15639			10.78	Si
SLV 8	-1.6	-28745	-2604	-283.27		18489	3.455	12031	18705			7.18	Si
SLV 8	0.5	-25299	-3623	-2094.81		16272	3.455	11588	18016			4.97	Si
SLV 15	-1.6	-31442	-1671	-3679.42		20223	3.455	12378	19245			11.52	Si
SLV 15	0.5	-26090	-1514	-1359.01		16781	3.455	11689	18174			12	Si
SLV 4	-1.6	-21122	-1824	490.16		13585	3.455	11050	17181			9.42	Si
SLV 4	0.5	-17514	-2634	-699.85		11265	3.455	10586	16459			6.25	Si
SLV 1	-1.6	-17684	-1110	-97.78		11374	3.455	10608	16493			14.85	Si
SLV 1	0.5	-13414	-1451	298.08		8628	3.455	10059	15639			10.78	Si
SLV 7	-1.6	-28745	-2604	-283.27		18489	3.455	12031	18705			7.18	Si
SLV 7	0.5	-25299	-3623	-2094.81		16272	3.455	11588	18016			4.97	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota -0.255 Wa 0.08 denominatore 8 $\gamma_M = 2$



Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 5	143750	0.24	8958	-13927	212.25	2903.79	13.68	Si
SLV 6	143750	0.24	8958	-13927	212.25	2903.79	13.68	Si
SLV 1	143750	0.24	9767	-15185	212.25	3143.52	14.81	Si
SLV 2	143750	0.24	9767	-15185	212.25	3143.52	14.81	Si
SLV 10	143750	0.24	10681	-16606	212.25	3409.76	16.06	Si
SLV 9	143750	0.24	10681	-16606	212.25	3409.76	16.06	Si
SLV 3	143750	0.24	12184	-18943	212.25	3837.16	18.08	Si
SLV 4	143750	0.24	12184	-18943	212.25	3837.16	18.08	Si
SLV 13	143750	0.24	15511	-24116	212.25	4737.33	22.32	Si
SLV 14	143750	0.24	15511	-24116	212.25	4737.33	22.32	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeraia = -0.255 Wa = 0.08 Ta = 0.0269

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 11	-24108	-31841	-80	0.092	3046.9	0.945	1.41648	10.34889	No
SLV 12	-24108	-31841	-80	0.092	3046.9	0.945	1.41648	10.34889	No
SLV 8	-22660	-28745	-55	0.093	2900.1	0.942	1.44142	10.34889	No
SLV 7	-22660	-28745	-55	0.093	2900.1	0.942	1.44142	10.34889	No
SLV 10	-10094	-20380	31	0.104	1634.6	0.91	1.66265	10.34889	No
SLV 9	-10094	-20380	31	0.104	1634.6	0.91	1.66265	10.34889	No
SLV 6	-8646	-17284	56	0.105	1491.2	0.904	1.67963	10.34889	No
SLV 5	-8646	-17284	56	0.105	1491.2	0.904	1.67963	10.34889	No
SLV 16	-20892	-31442	-69	0.094	2721	0.939	1.4484	7.79402	No
SLV 15	-20892	-31442	-69	0.094	2721	0.939	1.4484	7.79402	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	12.605	SLU 39	Si
V_SLU	5.279	SLU 81	Si
PF_SLV	8.996	SLV 9	Si
V_SLV	4.973	SLV 7	Si
PFFP_SLV	13.681	SLV 5	Si
R_SLV	0.137	SLV 11	No

Maschio 15

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
23.989	19.646	23.905	18.041	L2	L3	1.607	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 39	2.09	-9227	-324.11	19140	5671.83	17.5	Si
SLU 39	3.99	-2775	482.52	5755	2071.78	4.294	Si
SLU 81	2.09	-10802	-389.68	22407	6291.97	16.147	Si
SLU 81	3.99	-3219	505.05	6677	2374.45	4.701	Si
SLU 42	2.09	-9227	-324.11	19140	5671.83	17.5	Si
SLU 42	3.99	-2775	482.52	5755	2071.78	4.294	Si
SLU 18	2.09	-8448	-300.9	17523	5327.55	17.705	Si
SLU 18	3.99	-2522	411.68	5232	1896.39	4.606	Si
SLU 82	2.09	-10802	-389.68	22407	6291.97	16.147	Si
SLU 82	3.99	-3219	505.05	6677	2374.45	4.701	Si
SLU 21	2.09	-8448	-300.9	17523	5327.55	17.705	Si
SLU 21	3.99	-2522	411.68	5232	1896.39	4.606	Si
SLU 40	2.09	-9227	-324.11	19140	5671.83	17.5	Si
SLU 40	3.99	-2775	482.52	5755	2071.78	4.294	Si
SLU 19	2.09	-8448	-300.9	17523	5327.55	17.705	Si
SLU 19	3.99	-2522	411.68	5232	1896.39	4.606	Si
SLU 20	2.09	-8448	-300.9	17523	5327.55	17.705	Si
SLU 20	3.99	-2522	411.68	5232	1896.39	4.606	Si
SLU 41	2.09	-9227	-324.11	19140	5671.83	17.5	Si
SLU 41	3.99	-2775	482.52	5755	2071.78	4.294	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 16	2.09	-4074	-520.58	8451	3047.28	5.854	Si
SLV 16	3.99	-952	201.28	1974	752.2	3.737	Si
SLV 15	2.09	-4074	-520.58	8451	3047.28	5.854	Si
SLV 15	3.99	-952	201.28	1974	752.2	3.737	Si
SLV 8	2.09	-2494	-1979.18	5173	1919.12	0.97	No, M>Mu
SLV 8	3.99	-216	248.17	0	0	0	No, e>l/2
SLV 11	2.09	-1695	-1837.61	0	0	0	No, e>l/2
SLV 11	3.99	63	230.35	0	0	0	No, Trazione
SLV 9	2.09	-11156	1453.42	23141	7266.21	4.999	Si
SLV 9	3.99	-3769	206.69	7818	2834.56	13.714	Si
SLV 4	2.09	-6738	-992.48	13976	4794.38	4.831	Si
SLV 4	3.99	-1884	260.67	3908	1465.47	5.622	Si
SLV 10	2.09	-11156	1453.42	23141	7266.21	4.999	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 10	3.99	-3769	206.69	7818	2834.56	13.714	Si
SLV 3	2.09	-6738	-992.48	13976	4794.38	4.831	Si
SLV 3	3.99	-1884	260.67	3908	1465.47	5.622	Si
SLV 12	2.09	-1695	-1837.61	0	0	0	No, $e \geq l/2$
SLV 12	3.99	63	230.35	0	0	0	No, Trazione
SLV 7	2.09	-2494	-1979.18	5173	1919.12	0.97	No, $M > M_u$
SLV 7	3.99	-216	248.17	0	0	0	No, $e \geq l/2$

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 78	2.09	-10110	-2412	-372.93		20972	1.607	8352	4026			1.67	Si
SLU 78	3.99	-2993	-2467	428.36		6209	1.607	6383	3077			1.25	Si
SLU 73	2.09	-10110	-2412	-372.93		20972	1.607	8352	4026			1.67	Si
SLU 73	3.99	-2993	-2467	428.36		6209	1.607	6383	3077			1.25	Si
SLU 83	2.09	-10802	-2656	-389.68		22407	1.607	8543	4119			1.55	Si
SLU 83	3.99	-3219	-2715	505.05		6677	1.607	6446	3107			1.14	Si
SLU 81	2.09	-10802	-2656	-389.68		22407	1.607	8543	4119			1.55	Si
SLU 81	3.99	-3219	-2715	505.05		6677	1.607	6446	3107			1.14	Si
SLU 75	2.09	-10110	-2412	-372.93		20972	1.607	8352	4026			1.67	Si
SLU 75	3.99	-2993	-2467	428.36		6209	1.607	6383	3077			1.25	Si
SLU 74	2.09	-10110	-2412	-372.93		20972	1.607	8352	4026			1.67	Si
SLU 74	3.99	-2993	-2467	428.36		6209	1.607	6383	3077			1.25	Si
SLU 82	2.09	-10802	-2656	-389.68		22407	1.607	8543	4119			1.55	Si
SLU 82	3.99	-3219	-2715	505.05		6677	1.607	6446	3107			1.14	Si
SLU 76	2.09	-10110	-2412	-372.93		20972	1.607	8352	4026			1.67	Si
SLU 76	3.99	-2993	-2467	428.36		6209	1.607	6383	3077			1.25	Si
SLU 84	2.09	-10802	-2656	-389.68		22407	1.607	8543	4119			1.55	Si
SLU 84	3.99	-3219	-2715	505.05		6677	1.607	6446	3107			1.14	Si
SLU 79	2.09	-10110	-2412	-372.93		20972	1.607	8352	4026			1.67	Si
SLU 79	3.99	-2993	-2467	428.36		6209	1.607	6383	3077			1.25	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	2.09	-2494	-1319	-1979.18		278786	0.0298	16250	145			0.11	No, $V_u < V$
SLV 8	3.99	-216	-983	248.17		0	0	8333	0			0	No, $V_u < V$
SLV 10	2.09	-11156	-1729	1453.42		23141	1.607	12962	6249			3.62	Si
SLV 10	3.99	-3769	-2137	206.69		7818	1.607	9897	4771			2.23	Si
SLV 12	2.09	-1695	-1096	-1837.61		0	0	8333	0			0	No, $V_u < V$
SLV 12	3.99	63	-628	230.35		0	0	8333	0			0	No, $V_u < V$
SLV 6	2.09	-11955	-1952	1311.85		24799	1.607	13293	6408			3.28	Si
SLV 6	3.99	-4049	-2492	224.5		8398	1.607	10013	4827			1.94	Si
SLV 9	2.09	-11156	-1729	1453.42		23141	1.607	12962	6249			3.62	Si
SLV 9	3.99	-3769	-2137	206.69		7818	1.607	9897	4771			2.23	Si
SLV 2	2.09	-9576	-1991	-5.18		19863	1.607	12306	5933			2.98	Si
SLV 2	3.99	-3034	-2378	253.57		6293	1.607	9592	4624			1.94	Si
SLV 11	2.09	-1695	-1096	-1837.61		0	0	8333	0			0	No, $V_u < V$
SLV 11	3.99	63	-628	230.35		0	0	8333	0			0	No, $V_u < V$
SLV 5	2.09	-11955	-1952	1311.85		24799	1.607	13293	6408			3.28	Si
SLV 5	3.99	-4049	-2492	224.5		8398	1.607	10013	4827			1.94	Si
SLV 1	2.09	-9576	-1991	-5.18		19863	1.607	12306	5933			2.98	Si
SLV 1	3.99	-3034	-2378	253.57		6293	1.607	9592	4624			1.94	Si
SLV 7	2.09	-2494	-1319	-1979.18		278786	0.0298	16250	145			0.11	No, $V_u < V$
SLV 7	3.99	-216	-983	248.17		0	0	8333	0			0	No, $V_u < V$

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 W_a 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 8	143750	0.47	0	-1071	249.99	0	0	No, $e > t/2$
SLV 12	143750	0.47	0	-456	249.99	0	0	No, $e > t/2$
SLV 7	143750	0.47	0	-1071	249.99	0	0	No, $e > t/2$
SLV 11	143750	0.47	0	-456	249.99	0	0	No, $e > t/2$
SLV 16	143750	0.47	4946	-2385	249.99	343.2	1.37	Si
SLV 15	143750	0.47	4946	-2385	249.99	343.2	1.37	Si
SLV 3	143750	0.47	9194	-4432	249.99	614.82	2.46	Si
SLV 4	143750	0.47	9194	-4432	249.99	614.82	2.46	Si
SLV 13	143750	0.47	9649	-4652	249.99	642.65	2.57	Si
SLV 14	143750	0.47	9649	-4652	249.99	642.65	2.57	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.99 $W_a = 0.05$ $T_a = 0.0804$

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	α_{lim}	Verifica
SLV 11	15	-2037	120	0	0	0	0	10.81192	No, Trazione
SLV 12	15	-2037	120	0	0	0	0	10.81192	No, Trazione
SLV 10	-379	-13549	-137	0.004	348.3	0.929	0.06248	10.81192	No
SLV 9	-379	-13549	-137	0.004	348.3	0.929	0.06248	10.81192	No
SLV 8	-30	-2756	124	0.004	336.2	0.991	0.06368	10.81192	No
SLV 7	-30	-2756	124	0.004	336.2	0.991	0.06368	10.81192	No
SLV 6	-424	-14268	-133	0.007	350.8	0.925	0.10892	10.81192	No
SLV 5	-424	-14268	-133	0.007	350.8	0.925	0.10892	10.81192	No
SLV 14	-188	-8681	-52	0.046	339.7	0.956	0.70456	18.05143	No
SLV 13	-188	-8681	-52	0.046	339.7	0.956	0.70456	18.05143	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF SLU	4.294	SLU 39	Si
V SLU	1.144	SLU 81	Si
PF SLV	0	SLV 12	No
V SLV	0	SLV 7	No



Stato limite	Coeff.s.	Comb.	Verifica
PFFP_SLV	0	SLV 7	No
R_SLV	0	SLV 12	No

Maschio 16

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
24.232	24.289	24.042	20.644	L2	L3	3.65	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ ₀	f _{v0}	μ	φ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLU 21	2.09	-11819	-272.59	10794	18710.6	68.639	Si
SLU 21	3.99	-4512	395.88	4121	7817.97	19.748	Si
SLU 82	2.09	-15136	-313.9	13823	22935.1	73.066	Si
SLU 82	3.99	-5752	494.82	5253	9820.55	19.847	Si
SLU 18	2.09	-11819	-272.59	10794	18710.6	68.639	Si
SLU 18	3.99	-4512	395.88	4121	7817.97	19.748	Si
SLU 41	2.09	-12961	-319.79	11837	20216.27	63.218	Si
SLU 41	3.99	-4964	449.36	4534	8555.42	19.039	Si
SLU 40	2.09	-12961	-319.79	11837	20216.27	63.218	Si
SLU 40	3.99	-4964	449.36	4534	8555.42	19.039	Si
SLU 39	2.09	-12961	-319.79	11837	20216.27	63.218	Si
SLU 39	3.99	-4964	449.36	4534	8555.42	19.039	Si
SLU 42	2.09	-12961	-319.79	11837	20216.27	63.218	Si
SLU 42	3.99	-4964	449.36	4534	8555.42	19.039	Si
SLU 81	2.09	-15136	-313.9	13823	22935.1	73.066	Si
SLU 81	3.99	-5752	494.82	5253	9820.55	19.847	Si
SLU 19	2.09	-11819	-272.59	10794	18710.6	68.639	Si
SLU 19	3.99	-4512	395.88	4121	7817.97	19.748	Si
SLU 20	2.09	-11819	-272.59	10794	18710.6	68.639	Si
SLU 20	3.99	-4512	395.88	4121	7817.97	19.748	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLV 15	2.09	-6865	-1283.77	6269	11884.87	9.258	Si
SLV 15	3.99	-2566	664.08	2344	4593.42	6.917	Si
SLV 8	2.09	-10286	-4333.91	9394	17328.54	3.998	Si
SLV 8	3.99	-3820	1358.25	3488	6771.59	4.986	Si
SLV 16	2.09	-6865	-1283.77	6269	11884.87	9.258	Si
SLV 16	3.99	-2566	664.08	2344	4593.42	6.917	Si
SLV 7	2.09	-10286	-4333.91	9394	17328.54	3.998	Si
SLV 7	3.99	-3820	1358.25	3488	6771.59	4.986	Si
SLV 11	2.09	-8692	-4288.11	7939	14832.56	3.459	Si
SLV 11	3.99	-3235	1397.55	2955	5761.09	4.122	Si
SLV 5	2.09	-10377	4097.23	9477	17468.18	4.263	Si
SLV 5	3.99	-3857	-868.37	3523	6836.05	7.872	Si
SLV 6	2.09	-10377	4097.23	9477	17468.18	4.263	Si
SLV 6	3.99	-3857	-868.37	3523	6836.05	7.872	Si
SLV 9	2.09	-8783	4143.04	8021	14976.13	3.615	Si
SLV 9	3.99	-3273	-829.07	2989	5826.15	7.027	Si
SLV 10	2.09	-8783	4143.04	8021	14976.13	3.615	Si
SLV 10	3.99	-3273	-829.07	2989	5826.15	7.027	Si
SLV 12	2.09	-8692	-4288.11	7939	14832.56	3.459	Si
SLV 12	3.99	-3235	1397.55	2955	5761.09	4.122	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 42	2.09	-12961	-435	-319.79		11837	3.6499	7134	7811			17.94	Si
SLU 42	3.99	-4964	-437	449.36		4534	3.6499	6160	6745			15.44	Si
SLU 39	2.09	-12961	-435	-319.79		11837	3.6499	7134	7811			17.94	Si
SLU 39	3.99	-4964	-437	449.36		4534	3.6499	6160	6745			15.44	Si
SLU 62	2.09	-13994	-399	-266.7		12780	3.6499	7260	7949			19.92	Si
SLU 62	3.99	-5300	-401	441.35		4840	3.6499	6201	6790			16.94	Si
SLU 83	2.09	-15136	-457	-313.9		13823	3.6499	7399	8101			17.72	Si
SLU 83	3.99	-5752	-459	494.82		5253	3.6499	6256	6850			14.92	Si
SLU 41	2.09	-12961	-435	-319.79		11837	3.6499	7134	7811			17.94	Si
SLU 41	3.99	-4964	-437	449.36		4534	3.6499	6160	6745			15.44	Si
SLU 40	2.09	-12961	-435	-319.79		11837	3.6499	7134	7811			17.94	Si
SLU 40	3.99	-4964	-437	449.36		4534	3.6499	6160	6745			15.44	Si
SLU 82	2.09	-15136	-457	-313.9		13823	3.6499	7399	8101			17.72	Si
SLU 82	3.99	-5752	-459	494.82		5253	3.6499	6256	6850			14.92	Si
SLU 84	2.09	-15136	-457	-313.9		13823	3.6499	7399	8101			17.72	Si
SLU 84	3.99	-5752	-459	494.82		5253	3.6499	6256	6850			14.92	Si
SLU 63	2.09	-13994	-399	-266.7		12780	3.6499	7260	7949			19.92	Si
SLU 63	3.99	-5300	-401	441.35		4840	3.6499	6201	6790			16.94	Si
SLU 81	2.09	-15136	-457	-313.9		13823	3.6499	7399	8101			17.72	Si
SLU 81	3.99	-5752	-459	494.82		5253	3.6499	6256	6850			14.92	Si



Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 9	2.09	-8783	3005	4143.04		8021	3.6499	9938	10881			3.62	Si
SLV 9	3.99	-3273	2539	-829.07		2989	3.6499	8931	9779			3.85	Si
SLV 5	2.09	-10377	2907	4097.23		9477	3.6499	10229	11200			3.85	Si
SLV 5	3.99	-3857	2546	-868.37		3523	3.6499	9038	9896			3.89	Si
SLV 10	2.09	-8783	3005	4143.04		8021	3.6499	9938	10881			3.62	Si
SLV 10	3.99	-3273	2539	-829.07		2989	3.6499	8931	9779			3.85	Si
SLV 7	2.09	-10286	-3413	-4333.91		9394	3.6499	10212	11182			3.28	Si
SLV 7	3.99	-3820	-2949	1358.25		3488	3.6499	9031	9889			3.35	Si
SLV 12	2.09	-8692	-3315	-4288.11		7939	3.6499	9921	10863			3.28	Si
SLV 12	3.99	-3235	-2956	1397.55		2955	3.6499	8924	9772			3.31	Si
SLV 3	2.09	-12177	-1315	-1436.45		11121	3.6499	10558	11560			8.79	Si
SLV 3	3.99	-4515	-1018	533.09		4123	3.6499	9158	10028			9.85	Si
SLV 8	2.09	-10286	-3413	-4333.91		9394	3.6499	10212	11182			3.28	Si
SLV 8	3.99	-3820	-2949	1358.25		3488	3.6499	9031	9889			3.35	Si
SLV 11	2.09	-8692	-3315	-4288.11		7939	3.6499	9921	10863			3.28	Si
SLV 11	3.99	-3235	-2956	1397.55		2955	3.6499	8924	9772			3.31	Si
SLV 6	2.09	-10377	2907	4097.23		9477	3.6499	10229	11200			3.85	Si
SLV 6	3.99	-3857	2546	-868.37		3523	3.6499	9038	9896			3.89	Si
SLV 4	2.09	-12177	-1315	-1436.45		11121	3.6499	10558	11560			8.79	Si
SLV 4	3.99	-4515	-1018	533.09		4123	3.6499	9158	10028			9.85	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 16	143750	0.47	4810	-5267	567.79	758.96	1.34	Si
SLV 15	143750	0.47	4810	-5267	567.79	758.96	1.34	Si
SLV 14	143750	0.47	4830	-5289	567.79	761.99	1.34	Si
SLV 13	143750	0.47	4830	-5289	567.79	761.99	1.34	Si
SLV 12	143750	0.47	5845	-6400	567.79	914.1	1.61	Si
SLV 11	143750	0.47	5845	-6400	567.79	914.1	1.61	Si
SLV 9	143750	0.47	5912	-6473	567.79	924	1.63	Si
SLV 10	143750	0.47	5912	-6473	567.79	924	1.63	Si
SLV 8	143750	0.47	6752	-7393	567.79	1047.71	1.85	Si
SLV 7	143750	0.47	6752	-7393	567.79	1047.71	1.85	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 14	-174	-8042	36	0.068	765	0.979	1.00896	18.05143	No
SLV 13	-174	-8042	36	0.068	765	0.979	1.00896	18.05143	No
SLV 15	-173	-8036	30	0.069	765	0.979	1.03105	18.05143	No
SLV 16	-173	-8036	30	0.069	765	0.979	1.03105	18.05143	No
SLV 3	-605	-14491	-27	0.067	778.5	0.944	1.03536	18.05143	No
SLV 4	-605	-14491	-27	0.067	778.5	0.944	1.03536	18.05143	No
SLV 2	-607	-14498	-21	0.069	778.6	0.943	1.05596	18.05143	No
SLV 1	-607	-14498	-21	0.069	778.6	0.943	1.05596	18.05143	No
SLV 9	-328	-10309	23	0.07	768.4	0.964	1.05753	10.81192	No
SLV 10	-328	-10309	23	0.07	768.4	0.964	1.05753	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	19.039	SLU 39	Si
V_SLU	14.918	SLU 81	Si
PF_SLV	3.459	SLV 11	Si
V_SLV	3.276	SLV 7	Si
PFFP_SLV	1.337	SLV 15	Si
R_SLV	0.056	SLV 13	No

Maschio 17

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
24.386	27.236	24.284	25.288	L2	L3	1.951	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 81	2.09	-12650	-146.61	21611	9066.63	61.843	Si
SLU 81	3.99	-4353	-832.92	7437	3858.95	4.633	Si
SLU 40	2.09	-10895	-181.94	18614	8200.27	45.07	Si
SLU 40	3.99	-3811	-805.28	6511	3420.96	4.248	Si
SLU 21	2.09	-9951	-138.54	17001	7681.92	55.45	Si
SLU 21	3.99	-3439	-681.66	5875	3112.73	4.566	Si
SLU 39	2.09	-10895	-181.94	18614	8200.27	45.07	Si
SLU 39	3.99	-3811	-805.28	6511	3420.96	4.248	Si
SLU 18	2.09	-9951	-138.54	17001	7681.92	55.45	Si
SLU 18	3.99	-3439	-681.66	5875	3112.73	4.566	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 41	2.09	-10895	-181.94	18614	8200.27	45.07	Si
SLU 41	3.99	-3811	-805.28	6511	3420.96	4.248	Si
SLU 19	2.09	-9951	-138.54	17001	7681.92	55.45	Si
SLU 19	3.99	-3439	-681.66	5875	3112.73	4.566	Si
SLU 42	2.09	-10895	-181.94	18614	8200.27	45.07	Si
SLU 42	3.99	-3811	-805.28	6511	3420.96	4.248	Si
SLU 20	2.09	-9951	-138.54	17001	7681.92	55.45	Si
SLU 20	3.99	-3439	-681.66	5875	3112.73	4.566	Si
SLU 82	2.09	-12650	-146.61	21611	9066.63	61.843	Si
SLU 82	3.99	-4353	-832.92	7437	3858.95	4.633	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 9	2.09	-2958	1645.88	5054	2766.63	1.681	Si
SLV 9	3.99	-620	-371.42	1059	599.76	1.615	Si
SLV 12	2.09	-12032	-1856.55	20556	9763.27	5.259	Si
SLV 12	3.99	-4221	-315.22	7212	3874.98	12.293	Si
SLV 1	2.09	-7462	939.04	12748	6520.21	6.943	Si
SLV 1	3.99	-2569	-417.1	4388	2415.8	5.792	Si
SLV 6	2.09	-3571	1885.42	6101	3309.98	1.756	Si
SLV 6	3.99	-938	-401.58	1602	902.81	2.248	Si
SLV 13	2.09	-5419	140.56	9258	4886.03	34.761	Si
SLV 13	3.99	-1510	-316.56	2580	1442.03	4.555	Si
SLV 11	2.09	-12032	-1856.55	20556	9763.27	5.259	Si
SLV 11	3.99	-4221	-315.22	7212	3874.98	12.293	Si
SLV 10	2.09	-2958	1645.88	5054	2766.63	1.681	Si
SLV 10	3.99	-620	-371.42	1059	599.76	1.615	Si
SLV 2	2.09	-7462	939.04	12748	6520.21	6.943	Si
SLV 2	3.99	-2569	-417.1	4388	2415.8	5.792	Si
SLV 14	2.09	-5419	140.56	9258	4886.03	34.761	Si
SLV 14	3.99	-1510	-316.56	2580	1442.03	4.555	Si
SLV 5	2.09	-3571	1885.42	6101	3309.98	1.756	Si
SLV 5	3.99	-938	-401.58	1602	902.81	2.248	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 81	2.09	-12650	3107	-146.61		21611	1.9511	8437	4939			1.59	Si
SLU 81	3.99	-4353	3176	-832.92		7437	1.9511	6547	3832			1.21	Si
SLU 82	2.09	-12650	3107	-146.61		21611	1.9511	8437	4939			1.59	Si
SLU 82	3.99	-4353	3176	-832.92		7437	1.9511	6547	3832			1.21	Si
SLU 39	2.09	-10895	2788	-181.94		18614	1.9511	8037	4705			1.69	Si
SLU 39	3.99	-3811	2849	-805.28		6511	1.9511	6424	3760			1.32	Si
SLU 84	2.09	-12650	3107	-146.61		21611	1.9511	8437	4939			1.59	Si
SLU 84	3.99	-4353	3176	-832.92		7437	1.9511	6547	3832			1.21	Si
SLU 42	2.09	-10895	2788	-181.94		18614	1.9511	8037	4705			1.69	Si
SLU 42	3.99	-3811	2849	-805.28		6511	1.9511	6424	3760			1.32	Si
SLU 77	2.09	-11743	2793	-84.59		20061	1.9511	8230	4818			1.72	Si
SLU 77	3.99	-3991	2857	-698.46		6818	1.9511	6465	3784			1.32	Si
SLU 83	2.09	-12650	3107	-146.61		21611	1.9511	8437	4939			1.59	Si
SLU 83	3.99	-4353	3176	-832.92		7437	1.9511	6547	3832			1.21	Si
SLU 75	2.09	-11743	2793	-84.59		20061	1.9511	8230	4818			1.72	Si
SLU 75	3.99	-3991	2857	-698.46		6818	1.9511	6465	3784			1.32	Si
SLU 41	2.09	-10895	2788	-181.94		18614	1.9511	8037	4705			1.69	Si
SLU 41	3.99	-3811	2849	-805.28		6511	1.9511	6424	3760			1.32	Si
SLU 40	2.09	-10895	2788	-181.94		18614	1.9511	8037	4705			1.69	Si
SLU 40	3.99	-3811	2849	-805.28		6511	1.9511	6424	3760			1.32	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 1	2.09	-7462	1901	939.04		12748	1.9511	10883	6370			3.35	Si
SLV 1	3.99	-2569	2176	-417.1		4388	1.9511	9211	5392			2.48	Si
SLV 2	2.09	-7462	1901	939.04		12748	1.9511	10883	6370			3.35	Si
SLV 2	3.99	-2569	2176	-417.1		4388	1.9511	9211	5392			2.48	Si
SLV 5	2.09	-3571	1601	1885.42		8865	1.3428	10106	4071			2.54	Si
SLV 5	3.99	-938	1226	-401.58		1904	1.6419	8714	4292			3.5	Si
SLV 11	2.09	-12032	1849	-1856.55		20556	1.9511	12444	7284			3.94	Si
SLV 11	3.99	-4221	2306	-315.22		7212	1.9511	9776	5722			2.48	Si
SLV 8	2.09	-12645	1990	-1617		21603	1.9511	12654	7407			3.72	Si
SLV 8	3.99	-4539	2683	-345.38		7754	1.9511	9884	5786			2.16	Si
SLV 6	2.09	-3571	1601	1885.42		8865	1.3428	10106	4071			2.54	Si
SLV 6	3.99	-938	1226	-401.58		1904	1.6419	8714	4292			3.5	Si
SLV 3	2.09	-10184	2018	-111.69		17399	1.9511	11813	6915			3.43	Si
SLV 3	3.99	-3649	2613	-400.24		6234	1.9511	9580	5608			2.15	Si
SLV 4	2.09	-10184	2018	-111.69		17399	1.9511	11813	6915			3.43	Si
SLV 4	3.99	-3649	2613	-400.24		6234	1.9511	9580	5608			2.15	Si
SLV 7	2.09	-12645	1990	-1617		21603	1.9511	12654	7407			3.72	Si
SLV 7	3.99	-4539	2683	-345.38		7754	1.9511	9884	5786			2.16	Si
SLV 12	2.09	-12032	1849	-1856.55		20556	1.9511	12444	7284			3.94	Si
SLV 12	3.99	-4221	2306	-315.22		7212	1.9511	9776	5722			2.48	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 10	143750	0.47	0	-1844	303.52	0	0	No, $e > t/2$
SLV 9	143750	0.47	0	-1844	303.52	0	0	No, $e > t/2$
SLV 5	143750	0.47	3809	-2230	303.52	324.05	1.07	Si
SLV 6	143750	0.47	3809	-2230	303.52	324.05	1.07	Si
SLV 14	143750	0.47	6282	-3677	303.52	523.18	1.72	Si



Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 13	143750	0.47	6282	-3677	303.52	523.18	1.72	Si
SLV 2	143750	0.47	8480	-4963	303.52	692.84	2.28	Si
SLV 1	143750	0.47	8480	-4963	303.52	692.84	2.28	Si
SLV 16	143750	0.47	9625	-5634	303.52	778.53	2.56	Si
SLV 15	143750	0.47	9625	-5634	303.52	778.53	2.56	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.99 $W_a = 0.05$ $T_a = 0.0804$

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 6	-89	-3620	131	0.015	408.9	0.98	0.21524	10.81192	No
SLV 5	-89	-3620	131	0.015	408.9	0.98	0.21524	10.81192	No
SLV 11	-535	-16154	-137	0.016	427.1	0.923	0.25887	10.81192	No
SLV 12	-535	-16154	-137	0.016	427.1	0.923	0.25887	10.81192	No
SLV 16	-301	-10670	-85	0.037	415.2	0.946	0.56886	18.05143	No
SLV 15	-301	-10670	-85	0.037	415.2	0.946	0.56886	18.05143	No
SLV 2	-323	-9104	78	0.04	416.2	0.944	0.61225	18.05143	No
SLV 1	-323	-9104	78	0.04	416.2	0.944	0.61225	18.05143	No
SLV 10	-37	-2897	104	0.027	408.3	0.991	0.39897	10.81192	No
SLV 9	-37	-2897	104	0.027	408.3	0.991	0.39897	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.248	SLU 39	Si
V_SLU	1.207	SLU 81	Si
PF_SLV	1.615	SLV 9	Si
V_SLV	2.146	SLV 3	Si
PFFP_SLV	0	SLV 9	No
R_SLV	0.02	SLV 5	No

Maschio 18

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
23.905	18.041	32.507	17.591	L2	L3	8.614	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	t0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 82	1.09	-35791	41751.12	13850	127935.03	3.064	Si
SLU 82	4.89	-21791	2859.68	8433	84133.48	29.421	Si
SLU 77	1.09	-32899	37743.38	12731	119544.68	3.167	Si
SLU 77	4.89	-18020	2418.82	6973	70964.55	29.338	Si
SLU 40	1.09	-31258	37285.42	12096	114631.76	3.074	Si
SLU 40	4.89	-21403	2745.31	8283	82805.7	30.163	Si
SLU 81	1.09	-35791	41751.12	13850	127935.03	3.064	Si
SLU 81	4.89	-21791	2859.68	8433	84133.48	29.421	Si
SLU 41	1.09	-31258	37285.42	12096	114631.76	3.074	Si
SLU 41	4.89	-21403	2745.31	8283	82805.7	30.163	Si
SLU 75	1.09	-32899	37743.38	12731	119544.68	3.167	Si
SLU 75	4.89	-18020	2418.82	6973	70964.55	29.338	Si
SLU 83	1.09	-35791	41751.12	13850	127935.03	3.064	Si
SLU 83	4.89	-21791	2859.68	8433	84133.48	29.421	Si
SLU 42	1.09	-31258	37285.42	12096	114631.76	3.074	Si
SLU 42	4.89	-21403	2745.31	8283	82805.7	30.163	Si
SLU 84	1.09	-35791	41751.12	13850	127935.03	3.064	Si
SLU 84	4.89	-21791	2859.68	8433	84133.48	29.421	Si
SLU 39	1.09	-31258	37285.42	12096	114631.76	3.074	Si
SLU 39	4.89	-21403	2745.31	8283	82805.7	30.163	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 14	1.09	-15622	26289.21	6045	63952.47	2.433	Si
SLV 14	4.89	-8798	1009.8	3405	36836.33	36.479	Si
SLV 10	1.09	-12989	50664.74	5026	53639.7	1.059	Si
SLV 10	4.89	-8764	1986.38	3391	36695.76	18.474	Si
SLV 4	1.09	-27131	20879.92	10499	106808.59	5.115	Si
SLV 4	4.89	-8869	1533.21	3432	37125.65	24.214	Si
SLV 2	1.09	-22739	38200	8800	90880.37	2.379	Si
SLV 2	4.89	-8830	2056.32	3417	36966.25	17.977	Si
SLV 6	1.09	-15124	54237.97	5853	62016.53	1.143	Si
SLV 6	4.89	-8773	2300.33	3395	36734.75	15.969	Si
SLV 1	1.09	-22739	38200	8800	90880.37	2.379	Si
SLV 1	4.89	-8830	2056.32	3417	36966.25	17.977	Si
SLV 9	1.09	-12989	50664.74	5026	53639.7	1.059	Si
SLV 9	4.89	-8764	1986.38	3391	36695.76	18.474	Si
SLV 13	1.09	-15622	26289.21	6045	63952.47	2.433	Si
SLV 13	4.89	-8798	1009.8	3405	36836.33	36.479	Si
SLV 5	1.09	-15124	54237.97	5853	62016.53	1.143	Si
SLV 5	4.89	-8773	2300.33	3395	36734.75	15.969	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 3	1.09	-27131	20879.92	10499	106808.59	5.115	Si
SLV 3	4.89	-8869	1533.21	3432	37125.65	24.214	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 84	1.09	-35791	148	41751.12		13850	8.6136	7402	19128			129.53	Si
SLU 84	4.89	-21791	-18	2859.68		8433	8.6136	6680	17261			980.01	Si
SLU 79	1.09	-32899	136	37743.38		12731	8.6136	7253	18743			138.25	Si
SLU 79	4.89	-18020	-16	2418.82		6973	8.6136	6485	16759			1000	Si
SLU 82	1.09	-35791	148	41751.12		13850	8.6136	7402	19128			129.53	Si
SLU 82	4.89	-21791	-18	2859.68		8433	8.6136	6680	17261			980.01	Si
SLU 83	1.09	-35791	148	41751.12		13850	8.6136	7402	19128			129.53	Si
SLU 83	4.89	-21791	-18	2859.68		8433	8.6136	6680	17261			980.01	Si
SLU 75	1.09	-32899	136	37743.38		12731	8.6136	7253	18743			138.25	Si
SLU 75	4.89	-18020	-16	2418.82		6973	8.6136	6485	16759			1000	Si
SLU 81	1.09	-35791	148	41751.12		13850	8.6136	7402	19128			129.53	Si
SLU 81	4.89	-21791	-18	2859.68		8433	8.6136	6680	17261			980.01	Si
SLU 78	1.09	-32899	136	37743.38		12731	8.6136	7253	18743			138.25	Si
SLU 78	4.89	-18020	-16	2418.82		6973	8.6136	6485	16759			1000	Si
SLU 76	1.09	-32899	136	37743.38		12731	8.6136	7253	18743			138.25	Si
SLU 76	4.89	-18020	-16	2418.82		6973	8.6136	6485	16759			1000	Si
SLU 74	1.09	-32899	136	37743.38		12731	8.6136	7253	18743			138.25	Si
SLU 74	4.89	-18020	-16	2418.82		6973	8.6136	6485	16759			1000	Si
SLU 73	1.09	-32899	136	37743.38		12731	8.6136	7253	18743			138.25	Si
SLU 73	4.89	-18020	-16	2418.82		6973	8.6136	6485	16759			1000	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 2	1.09	-22739	-4284	38200		9618	7.8807	10257	24250			5.66	Si
SLV 2	4.89	-8830	-4853	2056.32		3417	8.6136	9017	23300			4.8	Si
SLV 4	1.09	-27131	-5481	20879.92		10499	8.6136	10433	26960			4.92	Si
SLV 4	4.89	-8869	-5109	1533.21		3432	8.6136	9020	23308			4.56	Si
SLV 16	1.09	-20014	4460	8969.14		7745	8.6136	9882	25537			5.73	Si
SLV 16	4.89	-8837	4834	486.69		3420	8.6136	9017	23302			4.82	Si
SLV 13	1.09	-15622	5656	26289.21		6615	7.872	9656	22804			4.03	Si
SLV 13	4.89	-8798	5090	1009.8		3405	8.6136	9014	23294			4.58	Si
SLV 9	1.09	-12989	3573	50664.74		35529	1.2186	15439	5644			1.58	Si
SLV 9	4.89	-8764	1908	1986.38		3391	8.6136	9012	23287			12.2	Si
SLV 15	1.09	-20014	4460	8969.14		7745	8.6136	9882	25537			5.73	Si
SLV 15	4.89	-8837	4834	486.69		3420	8.6136	9017	23302			4.82	Si
SLV 14	1.09	-15622	5656	26289.21		6615	7.872	9656	22804			4.03	Si
SLV 14	4.89	-8798	5090	1009.8		3405	8.6136	9014	23294			4.58	Si
SLV 10	1.09	-12989	3573	50664.74		35529	1.2186	15439	5644			1.58	Si
SLV 10	4.89	-8764	1908	1986.38		3391	8.6136	9012	23287			12.2	Si
SLV 1	1.09	-22739	-4284	38200		9618	7.8807	10257	24250			5.66	Si
SLV 1	4.89	-8830	-4853	2056.32		3417	8.6136	9017	23300			4.8	Si
SLV 3	1.09	-27131	-5481	20879.92		10499	8.6136	10433	26960			4.92	Si
SLV 3	4.89	-8869	-5109	1533.21		3432	8.6136	9020	23308			4.56	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 6	143750	0.47	4282	-11065	1369.1	1601.56	1.17	Si
SLV 5	143750	0.47	4282	-11065	1369.1	1601.56	1.17	Si
SLV 9	143750	0.47	4628	-11960	1369.1	1725.99	1.26	Si
SLV 10	143750	0.47	4628	-11960	1369.1	1725.99	1.26	Si
SLV 2	143750	0.47	4911	-12690	1369.1	1826.97	1.33	Si
SLV 1	143750	0.47	4911	-12690	1369.1	1826.97	1.33	Si
SLV 4	143750	0.47	5796	-14977	1369.1	2140.04	1.56	Si
SLV 3	143750	0.47	5796	-14977	1369.1	2140.04	1.56	Si
SLV 14	143750	0.47	6065	-15672	1369.1	2234.17	1.63	Si
SLV 13	143750	0.47	6065	-15672	1369.1	2234.17	1.63	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 3	-8869	-27131	199	0.048	2405.2	0.889	0.78372	18.05143	No
SLV 4	-8869	-27131	199	0.048	2405.2	0.889	0.78372	18.05143	No
SLV 13	-8798	-15622	-194	0.048	2398.8	0.889	0.7887	18.05143	No
SLV 14	-8798	-15622	-194	0.048	2398.8	0.889	0.7887	18.05143	No
SLV 1	-8830	-22739	15	0.058	2401.7	0.889	0.95438	18.05143	No
SLV 2	-8830	-22739	15	0.058	2401.7	0.889	0.95438	18.05143	No
SLV 16	-8837	-20014	-10	0.059	2402.3	0.889	0.95867	18.05143	No
SLV 15	-8837	-20014	-10	0.059	2402.3	0.889	0.95867	18.05143	No
SLV 7	-8904	-29764	341	0.04	2408.3	0.889	0.65302	10.81192	No
SLV 8	-8904	-29764	341	0.04	2408.3	0.889	0.65302	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	3.064	SLU 81	Si
V_SLU	129.534	SLU 81	Si
PF_SLV	1.059	SLV 9	Si
V_SLV	1.58	SLV 9	Si
PFFP_SLV	1.17	SLV 5	Si
R_SLV	0.043	SLV 3	No



Maschio 19

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
28.572	22.451	24.136	22.451	L2	L3	4.436	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 39	1.09	-24553	-5328.91	18451	42120.3	7.904	Si
SLU 39	3.19	-23229	-9206.22	17456	40477.76	4.397	Si
SLU 41	1.09	-24553	-5328.91	18451	42120.3	7.904	Si
SLU 41	3.19	-23229	-9206.22	17456	40477.76	4.397	Si
SLU 42	1.09	-24553	-5328.91	18451	42120.3	7.904	Si
SLU 42	3.19	-23229	-9206.22	17456	40477.76	4.397	Si
SLU 83	1.09	-27453	-5444.55	20631	45466.51	8.351	Si
SLU 83	3.19	-24833	-9543.62	18662	42458.77	4.449	Si
SLU 40	1.09	-24553	-5328.91	18451	42120.3	7.904	Si
SLU 40	3.19	-23229	-9206.22	17456	40477.76	4.397	Si
SLU 21	1.09	-21936	-4473.47	16484	38805.34	8.675	Si
SLU 21	3.19	-20076	-7778.13	15087	36278.95	4.664	Si
SLU 20	1.09	-21936	-4473.47	16484	38805.34	8.675	Si
SLU 20	3.19	-20076	-7778.13	15087	36278.95	4.664	Si
SLU 84	1.09	-27453	-5444.55	20631	45466.51	8.351	Si
SLU 84	3.19	-24833	-9543.62	18662	42458.77	4.449	Si
SLU 81	1.09	-27453	-5444.55	20631	45466.51	8.351	Si
SLU 81	3.19	-24833	-9543.62	18662	42458.77	4.449	Si
SLU 82	1.09	-27453	-5444.55	20631	45466.51	8.351	Si
SLU 82	3.19	-24833	-9543.62	18662	42458.77	4.449	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 13	1.09	-15559	-6693.08	11692	31205.2	4.662	Si
SLV 13	3.19	-10218	-902.09	7679	21238.14	23.543	Si
SLV 7	1.09	-14835	-888.54	11148	29899.35	33.65	Si
SLV 7	3.19	-12468	-6272.27	9370	25532.18	4.071	Si
SLV 8	1.09	-14835	-888.54	11148	29899.35	33.65	Si
SLV 8	3.19	-12468	-6272.27	9370	25532.18	4.071	Si
SLV 14	1.09	-15559	-6693.08	11692	31205.2	4.662	Si
SLV 14	3.19	-10218	-902.09	7679	21238.14	23.543	Si
SLV 15	1.09	-15336	-6691.76	11525	30805.25	4.603	Si
SLV 15	3.19	-10108	-518.45	7596	21024.07	40.551	Si
SLV 2	1.09	-15187	-2232.58	11413	30536.23	13.678	Si
SLV 2	3.19	-14048	-8856.6	10556	28463.58	3.214	Si
SLV 1	1.09	-15187	-2232.58	11413	30536.23	13.678	Si
SLV 1	3.19	-14048	-8856.6	10556	28463.58	3.214	Si
SLV 16	1.09	-15336	-6691.76	11525	30805.25	4.603	Si
SLV 16	3.19	-10108	-518.45	7596	21024.07	40.551	Si
SLV 3	1.09	-14964	-2233.9	11245	30134.02	13.489	Si
SLV 3	3.19	-13937	-9240.23	10474	28261.04	3.058	Si
SLV 4	1.09	-14964	-2233.9	11245	30134.02	13.489	Si
SLV 4	3.19	-13937	-9240.23	10474	28261.04	3.058	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 77	1.09	-24670	5530	-4511.44		18539	4.4357	8027	10682			1.93	Si
SLU 77	3.19	-21496	5549	-8037.21		16154	4.4357	7709	10259			1.85	Si
SLU 75	1.09	-24670	5530	-4511.44		18539	4.4357	8027	10682			1.93	Si
SLU 75	3.19	-21496	5549	-8037.21		16154	4.4357	7709	10259			1.85	Si
SLU 81	1.09	-27453	6387	-5444.55		20631	4.4357	8306	11053			1.73	Si
SLU 81	3.19	-24833	6407	-9543.62		18662	4.4357	8044	10704			1.67	Si
SLU 40	1.09	-24553	6052	-5328.91		18451	4.4357	8016	10667			1.76	Si
SLU 40	3.19	-23229	6069	-9206.22		17456	4.4357	7883	10490			1.73	Si
SLU 39	1.09	-24553	6052	-5328.91		18451	4.4357	8016	10667			1.76	Si
SLU 39	3.19	-23229	6069	-9206.22		17456	4.4357	7883	10490			1.73	Si
SLU 42	1.09	-24553	6052	-5328.91		18451	4.4357	8016	10667			1.76	Si
SLU 42	3.19	-23229	6069	-9206.22		17456	4.4357	7883	10490			1.73	Si
SLU 41	1.09	-24553	6052	-5328.91		18451	4.4357	8016	10667			1.76	Si
SLU 41	3.19	-23229	6069	-9206.22		17456	4.4357	7883	10490			1.73	Si
SLU 83	1.09	-27453	6387	-5444.55		20631	4.4357	8306	11053			1.73	Si
SLU 83	3.19	-24833	6407	-9543.62		18662	4.4357	8044	10704			1.67	Si
SLU 82	1.09	-27453	6387	-5444.55		20631	4.4357	8306	11053			1.73	Si
SLU 82	3.19	-24833	6407	-9543.62		18662	4.4357	8044	10704			1.67	Si
SLU 84	1.09	-27453	6387	-5444.55		20631	4.4357	8306	11053			1.73	Si
SLU 84	3.19	-24833	6407	-9543.62		18662	4.4357	8044	10704			1.67	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	1.09	-14835	5705	-888.54		11148	4.4357	10563	14056			2.46	Si
SLV 8	3.19	-12468	4726	-6272.27		9370	4.4357	10207	13583			2.87	Si
SLV 1	1.09	-15187	10284	-2232.58		11413	4.4357	10616	14127			1.37	Si
SLV 1	3.19	-14048	9560	-8856.6		10556	4.4357	10445	13899			1.45	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 2	1.09	-15187	10284	2232.58		11413	4.4357	10616	14127			1.37	Si
SLV 2	3.19	-14048	9560	-8856.6		10556	4.4357	10445	13899			1.45	Si
SLV 5	1.09	-15577	4847	-892.94		11706	4.4357	10674	14205			2.93	Si
SLV 5	3.19	-12836	5281	-4993.48		9646	4.4357	10263	13656			2.59	Si
SLV 14	1.09	-15559	-4393	-6693.08		11692	4.4357	10672	14201			3.23	Si
SLV 14	3.19	-10218	-3222	902.09		7679	4.4357	9869	13133			4.08	Si
SLV 7	1.09	-14835	5705	-888.54		11148	4.4357	10563	14056			2.46	Si
SLV 7	3.19	-12468	4726	-6272.27		9370	4.4357	10207	13583			2.87	Si
SLV 6	1.09	-15577	4847	-892.94		11706	4.4357	10674	14205			2.93	Si
SLV 6	3.19	-12836	5281	-4993.48		9646	4.4357	10263	13656			2.59	Si
SLV 13	1.09	-15559	-4393	-6693.08		11692	4.4357	10672	14201			3.23	Si
SLV 13	3.19	-10218	-3222	902.09		7679	4.4357	9869	13133			4.08	Si
SLV 3	1.09	-14964	10542	2233.9		11245	4.4357	10582	14082			1.34	Si
SLV 3	3.19	-13937	9394	-9240.23		10474	4.4357	10428	13877			1.48	Si
SLV 4	1.09	-14964	10542	2233.9		11245	4.4357	10582	14082			1.34	Si
SLV 4	3.19	-13937	9394	-9240.23		10474	4.4357	10428	13877			1.48	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 16	143750	0.47	7596	-10108	705.03	1421.92	2.02	Si
SLV 15	143750	0.47	7596	-10108	705.03	1421.92	2.02	Si
SLV 13	143750	0.47	7679	-10218	705.03	1436.4	2.04	Si
SLV 14	143750	0.47	7679	-10218	705.03	1436.4	2.04	Si
SLV 12	143750	0.47	8506	-11319	705.03	1579.71	2.24	Si
SLV 11	143750	0.47	8506	-11319	705.03	1579.71	2.24	Si
SLV 9	143750	0.47	8783	-11687	705.03	1627.06	2.31	Si
SLV 10	143750	0.47	8783	-11687	705.03	1627.06	2.31	Si
SLV 7	143750	0.47	9370	-12468	705.03	1726.82	2.45	Si
SLV 8	143750	0.47	9370	-12468	705.03	1726.82	2.45	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 2	-8530	-15187	133	0.043	1614.2	0.898	0.69666	18.05143	No
SLV 1	-8530	-15187	133	0.043	1614.2	0.898	0.69666	18.05143	No
SLV 16	-8408	-15336	-132	0.043	1602.3	0.898	0.69844	18.05143	No
SLV 15	-8408	-15336	-132	0.043	1602.3	0.898	0.69844	18.05143	No
SLV 3	-8530	-14964	16	0.052	1614.3	0.898	0.84174	18.05143	No
SLV 4	-8530	-14964	16	0.052	1614.3	0.898	0.84174	18.05143	No
SLV 13	-8407	-15559	-15	0.052	1602.2	0.898	0.84499	18.05143	No
SLV 14	-8407	-15559	-15	0.052	1602.2	0.898	0.84499	18.05143	No
SLV 5	-8485	-15577	218	0.037	1609.9	0.898	0.59125	10.81192	No
SLV 6	-8485	-15577	218	0.037	1609.9	0.898	0.59125	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.397	SLU 39	Si
V_SLU	1.671	SLU 81	Si
PF_SLV	3.058	SLV 3	Si
V_SLV	1.336	SLV 3	Si
PFFP_SLV	2.017	SLV 15	Si
R_SLV	0.039	SLV 1	No

Maschio 20

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
33.371	22.451	29.372	22.451	L2	L3	4	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ_0	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 41	1.09	-21466	4362.86	17890	33500.71	7.679	Si
SLU 41	3.19	-20932	8573.22	17445	32896.16	3.837	Si
SLU 81	1.09	-24027	4496.06	20024	36238.11	8.06	Si
SLU 81	3.19	-22365	8938.19	18639	34492.62	3.859	Si
SLU 84	1.09	-24027	4496.06	20024	36238.11	8.06	Si
SLU 84	3.19	-22365	8938.19	18639	34492.62	3.859	Si
SLU 42	1.09	-21466	4362.86	17890	33500.71	7.679	Si
SLU 42	3.19	-20932	8573.22	17445	32896.16	3.837	Si
SLU 21	1.09	-19195	3706.58	15997	30848.46	8.323	Si
SLU 21	3.19	-18080	7268	15068	29468.43	4.055	Si
SLU 40	1.09	-21466	4362.86	17890	33500.71	7.679	Si
SLU 40	3.19	-20932	8573.22	17445	32896.16	3.837	Si
SLU 83	1.09	-24027	4496.06	20024	36238.11	8.06	Si
SLU 83	3.19	-22365	8938.19	18639	34492.62	3.859	Si
SLU 20	1.09	-19195	3706.58	15997	30848.46	8.323	Si
SLU 20	3.19	-18080	7268	15068	29468.43	4.055	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 82	1.09	-24027	4496.06	20024	36238.11	8.06	Si
SLU 82	3.19	-22365	8938.19	18639	34492.62	3.859	Si
SLU 39	1.09	-21466	4362.86	17890	33500.71	7.679	Si
SLU 39	3.19	-20932	8573.22	17445	32896.16	3.837	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 11	1.09	-13792	1351.51	11494	24986.81	18.488	Si
SLV 11	3.19	-11500	4761.28	9584	21194.88	4.452	Si
SLV 13	1.09	-13061	-1758.84	10885	23793.46	13.528	Si
SLV 13	3.19	-12756	8768.21	10631	23290.18	2.656	Si
SLV 10	1.09	-12877	323.38	10732	23489.95	72.638	Si
SLV 10	3.19	-11370	5980.31	9476	20974.61	3.507	Si
SLV 14	1.09	-13061	-1758.84	10885	23793.46	13.528	Si
SLV 14	3.19	-12756	8768.21	10631	23290.18	2.656	Si
SLV 3	1.09	-13724	5526.93	11438	24876.4	4.501	Si
SLV 3	3.19	-8966	-781.95	7472	16833.41	21.527	Si
SLV 16	1.09	-13336	-1450.4	11114	24243.54	16.715	Si
SLV 16	3.19	-12795	8402.5	10663	23354.83	2.78	Si
SLV 9	1.09	-12877	323.38	10732	23489.95	72.638	Si
SLV 9	3.19	-11370	5980.31	9476	20974.61	3.507	Si
SLV 4	1.09	-13724	5526.93	11438	24876.4	4.501	Si
SLV 4	3.19	-8966	-781.95	7472	16833.41	21.527	Si
SLV 12	1.09	-13792	1351.51	11494	24986.81	18.488	Si
SLV 12	3.19	-11500	4761.28	9584	21194.88	4.452	Si
SLV 15	1.09	-13336	-1450.4	11114	24243.54	16.715	Si
SLV 15	3.19	-12795	8402.5	10663	23354.83	2.78	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 75	1.09	-21608	-5533	3742.29		18008	3.9997	7957	9547			1.73	Si
SLU 75	3.19	-19353	-5545	7570.27		16129	3.9997	7706	9246			1.67	Si
SLU 40	1.09	-21466	-6054	4362.86		17890	3.9997	7941	9528			1.57	Si
SLU 40	3.19	-20932	-6065	8573.22		17445	3.9997	7882	9457			1.56	Si
SLU 42	1.09	-21466	-6054	4362.86		17890	3.9997	7941	9528			1.57	Si
SLU 42	3.19	-20932	-6065	8573.22		17445	3.9997	7882	9457			1.56	Si
SLU 83	1.09	-24027	-6390	4496.06		20024	3.9997	8225	9870			1.54	Si
SLU 83	3.19	-22365	-6403	8938.19		18639	3.9997	8041	9648			1.51	Si
SLU 84	1.09	-24027	-6390	4496.06		20024	3.9997	8225	9870			1.54	Si
SLU 84	3.19	-22365	-6403	8938.19		18639	3.9997	8041	9648			1.51	Si
SLU 41	1.09	-21466	-6054	4362.86		17890	3.9997	7941	9528			1.57	Si
SLU 41	3.19	-20932	-6065	8573.22		17445	3.9997	7882	9457			1.56	Si
SLU 77	1.09	-21608	-5533	3742.29		18008	3.9997	7957	9547			1.73	Si
SLU 77	3.19	-19353	-5545	7570.27		16129	3.9997	7706	9246			1.67	Si
SLU 39	1.09	-21466	-6054	4362.86		17890	3.9997	7941	9528			1.57	Si
SLU 39	3.19	-20932	-6065	8573.22		17445	3.9997	7882	9457			1.56	Si
SLU 82	1.09	-24027	-6390	4496.06		20024	3.9997	8225	9870			1.54	Si
SLU 82	3.19	-22365	-6403	8938.19		18639	3.9997	8041	9648			1.51	Si
SLU 81	1.09	-24027	-6390	4496.06		20024	3.9997	8225	9870			1.54	Si
SLU 81	3.19	-22365	-6403	8938.19		18639	3.9997	8041	9648			1.51	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 16	1.09	-13336	-9355	-1450.4		11114	3.9997	10556	12666			1.35	Si
SLV 16	3.19	-12795	-8582	8402.5		10663	3.9997	10466	12558			1.46	Si
SLV 11	1.09	-13792	-4268	1351.51		11494	3.9997	10632	12758			2.99	Si
SLV 11	3.19	-11500	-4161	4761.28		9584	3.9997	10250	12299			2.96	Si
SLV 13	1.09	-13061	-9811	-1758.84		10885	3.9997	10510	12611			1.29	Si
SLV 13	3.19	-12756	-8960	8768.21		10799	3.9373	10493	12395			1.38	Si
SLV 15	1.09	-13336	-9355	-1450.4		11114	3.9997	10556	12666			1.35	Si
SLV 15	3.19	-12795	-8582	8402.5		10663	3.9997	10466	12558			1.46	Si
SLV 9	1.09	-12877	-5789	323.38		10732	3.9997	10480	12575			2.17	Si
SLV 9	3.19	-11370	-5420	5980.31		9476	3.9997	10228	12273			2.26	Si
SLV 3	1.09	-13724	3658	5526.93		11438	3.9997	10621	12744			3.48	Si
SLV 3	3.19	-8966	2792	-781.95		7472	3.9997	9828	11792			4.22	Si
SLV 14	1.09	-13061	-9811	-1758.84		10885	3.9997	10510	12611			1.29	Si
SLV 14	3.19	-12756	-8960	8768.21		10799	3.9373	10493	12395			1.38	Si
SLV 4	1.09	-13724	3658	5526.93		11438	3.9997	10621	12744			3.48	Si
SLV 4	3.19	-8966	2792	-781.95		7472	3.9997	9828	11792			4.22	Si
SLV 10	1.09	-12877	-5789	323.38		10732	3.9997	10480	12575			2.17	Si
SLV 10	3.19	-11370	-5420	5980.31		9476	3.9997	10228	12273			2.26	Si
SLV 12	1.09	-13792	-4268	1351.51		11494	3.9997	10632	12758			2.99	Si
SLV 12	3.19	-11500	-4161	4761.28		9584	3.9997	10250	12299			2.96	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 1	143750	0.47	7439	-8927	635.73	1257.46	1.98	Si
SLV 2	143750	0.47	7439	-8927	635.73	1257.46	1.98	Si
SLV 3	143750	0.47	7472	-8966	635.73	1262.61	1.99	Si
SLV 4	143750	0.47	7472	-8966	635.73	1262.61	1.99	Si
SLV 5	143750	0.47	8518	-10221	635.73	1426.28	2.24	Si
SLV 6	143750	0.47	8518	-10221	635.73	1426.28	2.24	Si
SLV 7	143750	0.47	8627	-10352	635.73	1443.11	2.27	Si
SLV 8	143750	0.47	8627	-10352	635.73	1443.11	2.27	Si
SLV 10	143750	0.47	9476	-11370	635.73	1573.23	2.47	Si
SLV 9	143750	0.47	9476	-11370	635.73	1573.23	2.47	Si



Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeraia = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	$\alpha 0$	M*	e*	a0*	aLim	Verifica
SLV 14	-7747	-13061	180	0.038	1461	0.898	0.61455	18.05143	No
SLV 13	-7747	-13061	180	0.038	1461	0.898	0.61455	18.05143	No
SLV 4	-7670	-13724	-179	0.038	1453.5	0.898	0.61495	18.05143	No
SLV 3	-7670	-13724	-179	0.038	1453.5	0.898	0.61495	18.05143	No
SLV 16	-7762	-13336	74	0.047	1462.4	0.898	0.75888	18.05143	No
SLV 15	-7762	-13336	74	0.047	1462.4	0.898	0.75888	18.05143	No
SLV 2	-7655	-13449	-73	0.047	1452	0.898	0.76067	18.05143	No
SLV 1	-7655	-13449	-73	0.047	1452	0.898	0.76067	18.05143	No
SLV 10	-7697	-12877	215	0.035	1456.1	0.898	0.56667	10.81192	No
SLV 9	-7697	-12877	215	0.035	1456.1	0.898	0.56667	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	3.837	SLU 39	Si
V_SLU	1.507	SLU 81	Si
PF_SLV	2.656	SLV 13	Si
V_SLV	1.285	SLV 13	Si
PFFP_SLV	1.978	SLV 1	Si
R_SLV	0.034	SLV 13	No

Maschio 21

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
24.147	27.236	25.828	27.236	L2	L3	1.681	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	$\tau 0$	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma M = 3$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLU 45	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 45	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 71	2.09	-3014	-2108.34	5976	2347.65	1.114	Si
SLU 71	3.99	-4294	2243.64	8515	3232.32	1.441	Si
SLU 51	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 51	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 46	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 46	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 49	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 49	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 50	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 50	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 43	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 43	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 47	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 47	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 44	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 44	3.99	-3321	1867.87	6584	2565.65	1.374	Si
SLU 48	2.09	-2559	-1855.51	5074	2017.09	1.087	Si
SLU 48	3.99	-3321	1867.87	6584	2565.65	1.374	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma M = 2$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLV 6	2.09	-2653	3112.07	0	0	0	No, e>l/2
SLV 6	3.99	-1350	-961.88	2677	1110.04	1.154	Si
SLV 8	2.09	-2307	-6655.96	0	0	0	No, e>l/2
SLV 8	3.99	-6643	5232.28	13172	4981.95	0.952	No, M>Mu
SLV 9	2.09	-2779	3195.33	0	0	0	No, e>l/2
SLV 9	3.99	-911	-1432.32	0	0	0	No, e>l/2
SLV 10	2.09	-2779	3195.33	0	0	0	No, e>l/2
SLV 10	3.99	-911	-1432.32	0	0	0	No, e>l/2
SLV 3	2.09	-2281	-3334.28	0	0	0	No, e>l/2
SLV 3	3.99	-5303	3613.17	10514	4073.59	1.127	Si
SLV 5	2.09	-2653	3112.07	0	0	0	No, e>l/2
SLV 5	3.99	-1350	-961.88	2677	1110.04	1.154	Si
SLV 12	2.09	-2433	-6572.7	0	0	0	No, e>l/2
SLV 12	3.99	-6204	4761.84	12302	4689.98	0.985	No, M>Mu
SLV 11	2.09	-2433	-6572.7	0	0	0	No, e>l/2
SLV 11	3.99	-6204	4761.84	12302	4689.98	0.985	No, M>Mu
SLV 7	2.09	-2307	-6655.96	0	0	0	No, e>l/2
SLV 7	3.99	-6643	5232.28	13172	4981.95	0.952	No, M>Mu
SLV 4	2.09	-2281	-3334.28	0	0	0	No, e>l/2
SLV 4	3.99	-5303	3613.17	10514	4073.59	1.127	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma M = 3$

Comb.	Quota	N	V par	M	$\sigma 0$	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 67	2.09	-3014	-3447	-2108.34		23741	0.4232	8721	1107			0.32	No, Vu<V



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 67	3.99	-4294	-3428	2243.64		15000	0.9543	7556	2163			0.63	No, Vu<V
SLU 48	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 48	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 50	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 50	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 49	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 49	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 46	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 46	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 51	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 51	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 45	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 45	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 47	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 47	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 43	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 43	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V
SLU 44	2.09	-2559	-2942	-1855.51		24619	0.3465	8838	919			0.31	No, Vu<V
SLU 44	3.99	-3321	-2925	1867.87		13269	0.8342	7325	1833			0.63	No, Vu<V

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 3	2.09	-2281	-5674	-3334.28		0	0	8333	0			0	No, Vu<V
SLV 3	3.99	-5303	-4464	3613.17		37019	0.4775	15737	2254			0.5	No, Vu<V
SLV 12	2.09	-2433	-7855	-6572.7		0	0	8333	0			0	No, Vu<V
SLV 12	3.99	-6204	-8066	4761.84		94376	0.2191	16250	1068			0.13	No, Vu<V
SLV 9	2.09	-2779	2815	3195.33		0	0	8333	0			0	No, Vu<V
SLV 9	3.99	-911	2363	-1432.32		0	0	8333	0			0	No, Vu<V
SLV 5	2.09	-2653	2098	3112.07		0	0	8333	0			0	No, Vu<V
SLV 5	3.99	-1350	2340	-961.88		11707	0.3844	10675	1231			0.53	No, Vu<V
SLV 6	2.09	-2653	2098	3112.07		0	0	8333	0			0	No, Vu<V
SLV 6	3.99	-1350	2340	-961.88		11707	0.3844	10675	1231			0.53	No, Vu<V
SLV 11	2.09	-2433	-7855	-6572.7		0	0	8333	0			0	No, Vu<V
SLV 11	3.99	-6204	-8066	4761.84		94376	0.2191	16250	1068			0.13	No, Vu<V
SLV 8	2.09	-2307	-8572	-6655.96		0	0	8333	0			0	No, Vu<V
SLV 8	3.99	-6643	-8088	5232.28		139450	0.1588	16250	774			0.1	No, Vu<V
SLV 10	2.09	-2779	2815	3195.33		0	0	8333	0			0	No, Vu<V
SLV 10	3.99	-911	2363	-1432.32		0	0	8333	0			0	No, Vu<V
SLV 7	2.09	-2307	-8572	-6655.96		0	0	8333	0			0	No, Vu<V
SLV 7	3.99	-6643	-8088	5232.28		139450	0.1588	16250	774			0.1	No, Vu<V
SLV 4	2.09	-2281	-5674	-3334.28		0	0	8333	0			0	No, Vu<V
SLV 4	3.99	-5303	-4464	3613.17		37019	0.4775	15737	2254			0.5	No, Vu<V

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 9	143750	0.47	0	-1475	261.52	0	0	No, $e > t/2$
SLV 10	143750	0.47	0	-1475	261.52	0	0	No, $e > t/2$
SLV 14	143750	0.47	3643	-1837	261.52	267.39	1.02	Si
SLV 13	143750	0.47	3643	-1837	261.52	267.39	1.02	Si
SLV 5	143750	0.47	4045	-2040	261.52	295.89	1.13	Si
SLV 6	143750	0.47	4045	-2040	261.52	295.89	1.13	Si
SLV 15	143750	0.47	5381	-2714	261.52	389.12	1.49	Si
SLV 16	143750	0.47	5381	-2714	261.52	389.12	1.49	Si
SLV 2	143750	0.47	7380	-3722	261.52	524.59	2.01	Si
SLV 1	143750	0.47	7380	-3722	261.52	524.59	2.01	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 13	-2024	-1933	-559	0	496.3	0.89	0	18.05143	No
SLV 14	-2024	-1933	-559	0	496.3	0.89	0	18.05143	No
SLV 2	-2139	-2865	648	0	507	0.89	0	18.05143	No
SLV 4	-2263	-3309	565	0	518.6	0.891	0	18.05143	No
SLV 12	-2333	-3222	-317	0	525.2	0.891	0	10.81192	No
SLV 6	-1954	-2021	323	0	489.8	0.889	0	10.81192	No
SLV 11	-2333	-3222	-317	0	525.2	0.891	0	10.81192	No
SLV 3	-2263	-3309	565	0	518.6	0.891	0	18.05143	No
SLV 5	-1954	-2021	323	0	489.8	0.889	0	10.81192	No
SLV 1	-2139	-2865	648	0	507	0.89	0	18.05143	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.087	SLV 43	Si
V_SLV	0.312	SLV 43	No
PF_SLV	0	SLV 3	No
V_SLV	0	SLV 3	No
PFFP_SLV	0	SLV 9	No
R_SLV	0	SLV 1	No

Maschio 22

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)



Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
26.828	27.236	30.248	27.236	L2	L3	3.42	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	τ ₀	f _{v0}	μ	φ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLU 9	2.09	-6493	-755.62	6328	10239.39	13.551	Si
SLU 9	3.99	-2721	375.27	2653	4502	11.997	Si
SLU 51	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 51	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 45	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 45	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 50	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 50	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 47	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 47	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 46	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 46	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 43	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 43	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 44	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 44	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 49	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 49	3.99	-3029	451.64	2952	4991.65	11.052	Si
SLU 48	2.09	-7914	-930.32	7713	12250.5	13.168	Si
SLU 48	3.99	-3029	451.64	2952	4991.65	11.052	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	M	σ ₀	Mu	c.s.	Verifica
SLV 7	2.09	-909	-5205.37	0	0	0	No, e>1/2
SLV 7	3.99	2808	1672.59	0	0	0	No, Trazione
SLV 11	2.09	-566	-1636.45	0	0	0	No, e>1/2
SLV 11	3.99	2797	661.56	0	0	0	No, Trazione
SLV 14	2.09	-9604	5800.41	9361	15164.15	2.614	Si
SLV 14	3.99	-6335	-1415.98	6175	10285.2	7.264	Si
SLV 13	2.09	-9604	5800.41	9361	15164.15	2.614	Si
SLV 13	3.99	-6335	-1415.98	6175	10285.2	7.264	Si
SLV 3	2.09	-6392	-7606.67	6230	10372.64	1.364	Si
SLV 3	3.99	-2089	2368.59	2036	3512.86	1.483	Si
SLV 15	2.09	-5248	4289.74	5115	8597.52	2.004	Si
SLV 15	3.99	-2126	-1001.51	2072	3573.73	3.568	Si
SLV 8	2.09	-909	-5205.37	0	0	0	No, e>1/2
SLV 8	3.99	2808	1672.59	0	0	0	No, Trazione
SLV 4	2.09	-6392	-7606.67	6230	10372.64	1.364	Si
SLV 4	3.99	-2089	2368.59	2036	3512.86	1.483	Si
SLV 16	2.09	-5248	4289.74	5115	8597.52	2.004	Si
SLV 16	3.99	-2126	-1001.51	2072	3573.73	3.568	Si
SLV 12	2.09	-566	-1636.45	0	0	0	No, e>1/2
SLV 12	3.99	2797	661.56	0	0	0	No, Trazione

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, γ_M = 3

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt _{lim}	c.s.	Verifica
SLU 63	2.09	-13246	-1269	-1451.28		12911	3.4199	7277	7466			5.88	Si
SLU 63	3.99	-8362	-1269	805.91		8150	3.4199	6642	6815			5.37	Si
SLU 74	2.09	-13183	-1265	-1446.6		12849	3.4199	7269	7458			5.89	Si
SLU 74	3.99	-8246	-1265	805.26		8038	3.4199	6627	6799			5.37	Si
SLU 62	2.09	-13246	-1269	-1451.28		12911	3.4199	7277	7466			5.88	Si
SLU 62	3.99	-8362	-1269	805.91		8150	3.4199	6642	6815			5.37	Si
SLU 84	2.09	-14783	-1403	-1602.89		14408	3.4199	7477	7671			5.47	Si
SLU 84	3.99	-9846	-1403	911.54		9597	3.4199	6835	7013			5	Si
SLU 61	2.09	-13246	-1269	-1451.28		12911	3.4199	7277	7466			5.88	Si
SLU 61	3.99	-8362	-1269	805.91		8150	3.4199	6642	6815			5.37	Si
SLU 83	2.09	-14783	-1403	-1602.89		14408	3.4199	7477	7671			5.47	Si
SLU 83	3.99	-9846	-1403	911.54		9597	3.4199	6835	7013			5	Si
SLU 81	2.09	-14783	-1403	-1602.89		14408	3.4199	7477	7671			5.47	Si
SLU 81	3.99	-9846	-1403	911.54		9597	3.4199	6835	7013			5	Si
SLU 60	2.09	-13246	-1269	-1451.28		12911	3.4199	7277	7466			5.88	Si
SLU 60	3.99	-8362	-1269	805.91		8150	3.4199	6642	6815			5.37	Si
SLU 73	2.09	-13183	-1265	-1446.6		12849	3.4199	7269	7458			5.89	Si
SLU 73	3.99	-8246	-1265	805.26		8038	3.4199	6627	6799			5.37	Si
SLU 82	2.09	-14783	-1403	-1602.89		14408	3.4199	7477	7671			5.47	Si
SLU 82	3.99	-9846	-1403	911.54		9597	3.4199	6835	7013			5	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, γ_M = 2

Comb.	Quota	N	V par	M	σ ₀	σ _N	I'	f _{vd}	Vt scorr.	Vt fess.diag.	Vt _{lim}	c.s.	Verifica
SLV 12	2.09	-566	-2376	-1636.45		0	0	8333	0			0	No, Vu<V
SLV 12	3.99	2797	-1359	661.56		0	0	8333	0			0	No, Vu<V
SLV 11	2.09	-566	-2376	-1636.45		0	0	8333	0			0	No, Vu<V
SLV 11	3.99	2797	-1359	661.56		0	0	8333	0			0	No, Vu<V
SLV 2	2.09	-10748	-4120	-6096		10476	3.4199	10429	10699			2.6	Si
SLV 2	3.99	-6298	-3668	1954.12		6139	3.4199	9561	9809			2.67	Si
SLV 13	2.09	-9604	4250	5800.41		9649	3.318	10263	10216			2.4	Si
SLV 13	3.99	-6335	3038	-1415.98		6175	3.4199	9568	9817			3.23	Si



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 7	2.09	-909	-4887	-5205.37		0	0	8333	0			0	No, Vu<V
SLV 7	3.99	2808	-3371	1672.59		0	0	8333	0			0	No, Vu<V
SLV 8	2.09	-909	-4887	-5205.37		0	0	8333	0			0	No, Vu<V
SLV 8	3.99	2808	-3371	1672.59		0	0	8333	0			0	No, Vu<V
SLV 1	2.09	-10748	-4120	-6096		10476	3.4199	10429	10699			2.6	Si
SLV 1	3.99	-6298	-3668	1954.12		6139	3.4199	9561	9809			2.67	Si
SLV 4	2.09	-6392	-5826	-7606.67		13660	1.5597	11065	5178			0.89	No, Vu<V
SLV 4	3.99	-2089	-4614	2368.59		4029	1.7286	9139	4739			1.03	Si
SLV 14	2.09	-9604	4250	5800.41		9649	3.318	10263	10216			2.4	Si
SLV 14	3.99	-6335	3038	-1415.98		6175	3.4199	9568	9817			3.23	Si
SLV 3	2.09	-6392	-5826	-7606.67		13660	1.5597	11065	5178			0.89	No, Vu<V
SLV 3	3.99	-2089	-4614	2368.59		4029	1.7286	9139	4739			1.03	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 11	143750	0.47	0	1029	532.01	0	0	No, Trazione
SLV 7	143750	0.47	0	909	532.01	0	0	No, Trazione
SLV 12	143750	0.47	0	1029	532.01	0	0	No, Trazione
SLV 8	143750	0.47	0	909	532.01	0	0	No, Trazione
SLV 16	143750	0.47	3720	-3817	532.01	555.09	1.04	Si
SLV 15	143750	0.47	3720	-3817	532.01	555.09	1.04	Si
SLV 3	143750	0.47	4112	-4219	532.01	611.53	1.15	Si
SLV 4	143750	0.47	4112	-4219	532.01	611.53	1.15	Si
SLV 14	143750	0.47	7886	-8091	532.01	1135.34	2.13	Si
SLV 13	143750	0.47	7886	-8091	532.01	1135.34	2.13	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 7	-3369	2708	-231	0	0	0	0	10.81192	No, Trazione
SLV 8	-3369	2708	-231	0	0	0	0	10.81192	No, Trazione
SLV 11	-3349	2596	-97	0	0	0	0	10.81192	No, Trazione
SLV 12	-3349	2596	-97	0	0	0	0	10.81192	No, Trazione
SLV 3	-3721	-3700	-273	0.021	973.1	0.889	0.34173	18.05143	No
SLV 4	-3721	-3700	-273	0.021	973.1	0.889	0.34173	18.05143	No
SLV 14	-3935	-9679	274	0.021	992.8	0.889	0.34729	18.05143	No
SLV 13	-3935	-9679	274	0.021	992.8	0.889	0.34729	18.05143	No
SLV 15	-3654	-4074	175	0.034	967	0.889	0.56123	18.05143	No
SLV 16	-3654	-4074	175	0.034	967	0.889	0.56123	18.05143	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	11.052	SLU 43	Si
V_SLU	4.997	SLU 81	Si
PF_SLV	0	SLV 12	No
V_SLV	0	SLV 7	No
PFFP_SLV	0	SLV 12	No
R_SLV	0	SLV 12	No

Maschio 23

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota s.	I	Sp.	h netta	h ini.	h fin.	a	a.s.sx	a.s.dx
31.248	27.236	33.371	27.236	L2	L3	2.124	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ_0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 1	2.09	-3028	1881.11	4752	3027.47	1.609	Si
SLU 1	3.99	-3193	-1442.32	5012	3182.15	2.206	Si
SLU 49	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 49	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 44	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 44	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 47	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 47	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 43	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 43	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 51	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 51	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 48	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 48	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 50	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 50	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 45	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 45	3.99	-3778	-1730.69	5930	3719.94	2.149	Si
SLU 46	2.09	-3722	2355.44	5841	3668.54	1.557	Si
SLU 46	3.99	-3778	-1730.69	5930	3719.94	2.149	Si



Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 4	2.09	-2827	3866.57	0	0	0	No, $e \geq l/2$
SLV 4	3.99	-4085	-1527.52	6411	4109.95	2.691	Si
SLV 5	2.09	-5699	-4537.07	8944	5608.42	1.236	Si
SLV 5	3.99	-2061	995.9	3234	2130.36	2.139	Si
SLV 16	2.09	-3176	4326.9	0	0	0	No, $e \geq l/2$
SLV 16	3.99	-5637	-3701.54	8848	5552.65	1.5	Si
SLV 11	2.09	-1573	8777.57	0	0	0	No, $e \geq l/2$
SLV 11	3.99	-6476	-4709.12	10165	6305	1.339	Si
SLV 6	2.09	-5699	-4537.07	8944	5608.42	1.236	Si
SLV 6	3.99	-2061	995.9	3234	2130.36	2.139	Si
SLV 8	2.09	-1468	8639.47	0	0	0	No, $e \geq l/2$
SLV 8	3.99	-6011	-4056.91	9434	5889.76	1.452	Si
SLV 12	2.09	-1573	8777.57	0	0	0	No, $e \geq l/2$
SLV 12	3.99	-6476	-4709.12	10165	6305	1.339	Si
SLV 15	2.09	-3176	4326.9	0	0	0	No, $e \geq l/2$
SLV 15	3.99	-5637	-3701.54	8848	5552.65	1.5	Si
SLV 3	2.09	-2827	3866.57	0	0	0	No, $e \geq l/2$
SLV 3	3.99	-4085	-1527.52	6411	4109.95	2.691	Si
SLV 7	2.09	-1468	8639.47	0	0	0	No, $e \geq l/2$
SLV 7	3.99	-6011	-4056.91	9434	5889.76	1.452	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 75	2.09	-5850	5880	3192.44		12593	1.5486	7235	3361			0.57	No, $V_u < V$
SLU 75	3.99	-7542	5862	-3180.69		13090	1.9205	7301	4206			0.72	No, $V_u < V$
SLU 82	2.09	-6495	6523	3438.66		13553	1.5973	7363	3528			0.54	No, $V_u < V$
SLU 82	3.99	-8689	6503	-3621.72		14966	1.9352	7551	4384			0.67	No, $V_u < V$
SLU 83	2.09	-6495	6523	3438.66		13553	1.5973	7363	3528			0.54	No, $V_u < V$
SLU 83	3.99	-8689	6503	-3621.72		14966	1.9352	7551	4384			0.67	No, $V_u < V$
SLU 84	2.09	-6495	6523	3438.66		13553	1.5973	7363	3528			0.54	No, $V_u < V$
SLU 84	3.99	-8689	6503	-3621.72		14966	1.9352	7551	4384			0.67	No, $V_u < V$
SLU 78	2.09	-5850	5880	3192.44		12593	1.5486	7235	3361			0.57	No, $V_u < V$
SLU 78	3.99	-7542	5862	-3180.69		13090	1.9205	7301	4206			0.72	No, $V_u < V$
SLU 79	2.09	-5850	5880	3192.44		12593	1.5486	7235	3361			0.57	No, $V_u < V$
SLU 79	3.99	-7542	5862	-3180.69		13090	1.9205	7301	4206			0.72	No, $V_u < V$
SLU 81	2.09	-6495	6523	3438.66		13553	1.5973	7363	3528			0.54	No, $V_u < V$
SLU 81	3.99	-8689	6503	-3621.72		14966	1.9352	7551	4384			0.67	No, $V_u < V$
SLU 74	2.09	-5850	5880	3192.44		12593	1.5486	7235	3361			0.57	No, $V_u < V$
SLU 74	3.99	-7542	5862	-3180.69		13090	1.9205	7301	4206			0.72	No, $V_u < V$
SLU 73	2.09	-5850	5880	3192.44		12593	1.5486	7235	3361			0.57	No, $V_u < V$
SLU 73	3.99	-7542	5862	-3180.69		13090	1.9205	7301	4206			0.72	No, $V_u < V$
SLU 76	2.09	-5850	5880	3192.44		12593	1.5486	7235	3361			0.57	No, $V_u < V$
SLU 76	3.99	-7542	5862	-3180.69		13090	1.9205	7301	4206			0.72	No, $V_u < V$

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 12	2.09	-1573	11745	8777.57		0	0	8333	0			0	No, $V_u < V$
SLV 12	3.99	-6476	10693	-4709.12		21496	1.0043	12632	3806			0.36	No, $V_u < V$
SLV 15	2.09	-3176	8063	4326.9		0	0	8333	0			0	No, $V_u < V$
SLV 15	3.99	-5637	6313	-3701.54		15455	1.2158	11424	4167			0.66	No, $V_u < V$
SLV 5	2.09	-5699	-4431	-4537.07		23828	0.7972	13099	3133			0.71	No, $V_u < V$
SLV 5	3.99	-2061	-3402	995.9		3957	1.7359	9125	4752			1.4	Si
SLV 16	2.09	-3176	8063	4326.9		0	0	8333	0			0	No, $V_u < V$
SLV 16	3.99	-5637	6313	-3701.54		15455	1.2158	11424	4167			0.66	No, $V_u < V$
SLV 3	2.09	-2827	3713	3866.57		0	0	8333	0			0	No, $V_u < V$
SLV 3	3.99	-4085	5096	-1527.52		6597	2.0638	9653	5976			1.17	Si
SLV 8	2.09	-1468	10440	8639.47		0	0	8333	0			0	No, $V_u < V$
SLV 8	3.99	-6011	10328	-4056.91		17260	1.1608	11785	4104			0.4	No, $V_u < V$
SLV 7	2.09	-1468	10440	8639.47		0	0	8333	0			0	No, $V_u < V$
SLV 7	3.99	-6011	10328	-4056.91		17260	1.1608	11785	4104			0.4	No, $V_u < V$
SLV 6	2.09	-5699	-4431	-4537.07		23828	0.7972	13099	3133			0.71	No, $V_u < V$
SLV 6	3.99	-2061	-3402	995.9		3957	1.7359	9125	4752			1.4	Si
SLV 11	2.09	-1573	11745	8777.57		0	0	8333	0			0	No, $V_u < V$
SLV 11	3.99	-6476	10693	-4709.12		21496	1.0043	12632	3806			0.36	No, $V_u < V$
SLV 4	2.09	-2827	3713	3866.57		0	0	8333	0			0	No, $V_u < V$
SLV 4	3.99	-4085	5096	-1527.52		6597	2.0638	9653	5976			1.17	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 W_a 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.47	4359	-2777	330.39	401.75	1.22	Si
SLV 4	143750	0.47	4359	-2777	330.39	401.75	1.22	Si
SLV 2	143750	0.47	4461	-2842	330.39	410.79	1.24	Si
SLV 1	143750	0.47	4461	-2842	330.39	410.79	1.24	Si
SLV 8	143750	0.47	5696	-3629	330.39	519	1.57	Si
SLV 7	143750	0.47	5696	-3629	330.39	519	1.57	Si
SLV 5	143750	0.47	6036	-3846	330.39	548.33	1.66	Si
SLV 6	143750	0.47	6036	-3846	330.39	548.33	1.66	Si
SLV 12	143750	0.47	6944	-4424	330.39	625.9	1.89	Si
SLV 11	143750	0.47	6944	-4424	330.39	625.9	1.89	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = 2.99 $W_a = 0.05$ $T_a = 0.0804$

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	α_{lim}	Verifica
SLV 4	-2282	-2342	-574	0	601.7	0.889	0	18.05143	No
SLV 1	-2162	-2033	-543	0	590.8	0.889	0	18.05143	No



Comb.	N top	N base	V orto	$\alpha 0$	M*	e*	a0*	aLim	Verifica
SLV 15	-2535	-6070	555	0	625	0.889	0	18.05143	No
SLV 2	-2162	-2033	-543	0	590.8	0.889	0	18.05143	No
SLV 3	-2282	-2342	-574	0	601.7	0.889	0	18.05143	No
SLV 16	-2535	-6070	555	0	625	0.889	0	18.05143	No
SLV 14	-2415	-5761	586	0	613.9	0.889	0	18.05143	No
SLV 13	-2415	-5761	586	0	613.9	0.889	0	18.05143	No
SLV 10	-2186	-4096	228	0.007	593	0.889	0.11322	10.81192	No
SLV 9	-2186	-4096	228	0.007	593	0.889	0.11322	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	1.557	SLU 43	Si
V_SLU	0.541	SLU 81	No
PF_SLV	0	SLV 3	No
V_SLV	0	SLV 3	No
PFFP_SLV	1.216	SLV 3	Si
R_SLV	0	SLV 1	No

Maschio 24

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
32.507	17.591	32.559	17.641	L2	L3	0.071	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _k	f _{vk0}	f _{medio}	$\tau 0$	f _{v0}	μ	ϕ	f _{v,lim}	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLU 59	1.09	-2117	-33.27	98920	0	0	No, Rottura per schiacciamento
SLU 59	3.09	-800	-9.19	37387	15.44	1.679	Si
SLU 60	1.09	-2344	-36.61	109547	0	0	No, Rottura per schiacciamento
SLU 60	3.09	-893	-10.27	41716	15.53	1.513	Si
SLU 57	1.09	-2117	-33.27	98920	0	0	No, Rottura per schiacciamento
SLU 57	3.09	-800	-9.19	37387	15.44	1.679	Si
SLU 42	1.09	-2283	-35.17	106682	0	0	No, Rottura per schiacciamento
SLU 42	3.09	-878	-10.19	41009	15.54	1.525	Si
SLU 56	1.09	-2117	-33.27	98920	0	0	No, Rottura per schiacciamento
SLU 56	3.09	-800	-9.19	37387	15.44	1.679	Si
SLU 58	1.09	-2117	-33.27	98920	0	0	No, Rottura per schiacciamento
SLU 58	3.09	-800	-9.19	37387	15.44	1.679	Si
SLU 55	1.09	-2117	-33.27	98920	0	0	No, Rottura per schiacciamento
SLU 55	3.09	-800	-9.19	37387	15.44	1.679	Si
SLU 62	1.09	-2344	-36.61	109547	0	0	No, Rottura per schiacciamento
SLU 62	3.09	-893	-10.27	41716	15.53	1.513	Si
SLU 63	1.09	-2344	-36.61	109547	0	0	No, Rottura per schiacciamento
SLU 63	3.09	-893	-10.27	41716	15.53	1.513	Si
SLU 61	1.09	-2344	-36.61	109547	0	0	No, Rottura per schiacciamento
SLU 61	3.09	-893	-10.27	41716	15.53	1.513	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	$\sigma 0$	Mu	c.s.	Verifica
SLV 9	1.09	-2222	-92.24	0	0	0	No, e>l/2
SLV 9	3.09	-2387	44.32	111568	7.4	0.167	No, M>Mu
SLV 4	1.09	329	-58.72	0	0	0	No, Trazione
SLV 4	3.09	-1817	25.67	84897	19.77	0.77	No, M>Mu
SLV 1	1.09	218	-110.78	0	0	0	No, Trazione
SLV 1	3.09	-3268	65.54	152703	0	0	No, Rottura per schiacciamento
SLV 5	1.09	-1156	-128.83	0	0	0	No, e>l/2
SLV 5	3.09	-3575	75.58	167064	0	0	No, Rottura per schiacciamento
SLV 8	1.09	-786	44.72	0	0	0	No, e>l/2
SLV 8	3.09	1262	-57.31	0	0	0	No, Trazione
SLV 6	1.09	-1156	-128.83	0	0	0	No, e>l/2
SLV 6	3.09	-3575	75.58	167064	0	0	No, Rottura per schiacciamento
SLV 7	1.09	-786	44.72	0	0	0	No, e>l/2
SLV 7	3.09	1262	-57.31	0	0	0	No, Trazione
SLV 2	1.09	218	-110.78	0	0	0	No, Trazione
SLV 2	3.09	-3268	65.54	152703	0	0	No, Rottura per schiacciamento
SLV 10	1.09	-2222	-92.24	0	0	0	No, e>l/2



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 10	3.09	-2387	44.32	111568	7.4	0.167	No, M>Mu
SLV 3	1.09	329	-58.72	0	0	0	No, Trazione
SLV 3	3.09	-1817	25.67	84897	19.77	0.77	No, M>Mu

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 74	1.09	-2358	-128	-36.79		130584	0.0602	10833	196			1.53	Si
SLU 74	3.09	-895	49	-10.35		41810	0.0713	10833	232			4.75	Si
SLU 83	1.09	-2585	-140	-40.13		142598	0.0604	10833	196			1.4	Si
SLU 83	3.09	-987	54	-11.43		46139	0.0713	10833	232			4.32	Si
SLU 78	1.09	-2358	-128	-36.79		130584	0.0602	10833	196			1.53	Si
SLU 78	3.09	-895	49	-10.35		41810	0.0713	10833	232			4.75	Si
SLU 75	1.09	-2358	-128	-36.79		130584	0.0602	10833	196			1.53	Si
SLU 75	3.09	-895	49	-10.35		41810	0.0713	10833	232			4.75	Si
SLU 82	1.09	-2585	-140	-40.13		142598	0.0604	10833	196			1.4	Si
SLU 82	3.09	-987	54	-11.43		46139	0.0713	10833	232			4.32	Si
SLU 84	1.09	-2585	-140	-40.13		142598	0.0604	10833	196			1.4	Si
SLU 84	3.09	-987	54	-11.43		46139	0.0713	10833	232			4.32	Si
SLU 73	1.09	-2358	-128	-36.79		130584	0.0602	10833	196			1.53	Si
SLU 73	3.09	-895	49	-10.35		41810	0.0713	10833	232			4.75	Si
SLU 81	1.09	-2585	-140	-40.13		142598	0.0604	10833	196			1.4	Si
SLU 81	3.09	-987	54	-11.43		46139	0.0713	10833	232			4.32	Si
SLU 76	1.09	-2358	-128	-36.79		130584	0.0602	10833	196			1.53	Si
SLU 76	3.09	-895	49	-10.35		41810	0.0713	10833	232			4.75	Si
SLU 79	1.09	-2358	-128	-36.79		130584	0.0602	10833	196			1.53	Si
SLU 79	3.09	-895	49	-10.35		41810	0.0713	10833	232			4.75	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 9	1.09	-2222	-173	-92.24		0	0	8333	0			0	No, Vu<V
SLV 9	3.09	-2387	-124	44.32		155106	0.0513	16250	250			2.01	Si
SLV 4	1.09	329	-229	-58.72		0	0	8333	0			0	No, Vu<V
SLV 4	3.09	-1817	-33	25.67		93733	0.0646	16250	315			9.56	Si
SLV 1	1.09	218	-317	-110.78		0	0	8333	0			0	No, Vu<V
SLV 1	3.09	-3268	-148	65.54		232604	0.0468	16250	228			1.54	Si
SLV 10	1.09	-2222	-173	-92.24		0	0	8333	0			0	No, Vu<V
SLV 10	3.09	-2387	-124	44.32		155106	0.0513	16250	250			2.01	Si
SLV 6	1.09	-1156	-287	-128.83		0	0	8333	0			0	No, Vu<V
SLV 6	3.09	-3575	-197	75.58		273481	0.0436	16250	212			1.08	Si
SLV 7	1.09	-786	7	44.72		0	0	8333	0			0	No, Vu<V
SLV 7	3.09	1262	186	-57.31		0	0	8333	0			0	No, Vu<V
SLV 5	1.09	-1156	-287	-128.83		0	0	8333	0			0	No, Vu<V
SLV 5	3.09	-3575	-197	75.58		273481	0.0436	16250	212			1.08	Si
SLV 2	1.09	218	-317	-110.78		0	0	8333	0			0	No, Vu<V
SLV 2	3.09	-3268	-148	65.54		232604	0.0468	16250	228			1.54	Si
SLV 8	1.09	-786	7	44.72		0	0	8333	0			0	No, Vu<V
SLV 8	3.09	1262	186	-57.31		0	0	8333	0			0	No, Vu<V
SLV 3	1.09	329	-229	-58.72		0	0	8333	0			0	No, Vu<V
SLV 3	3.09	-1817	-33	25.67		93733	0.0646	16250	315			9.56	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 5	143750	0.47	167064	-3575	11.1	0	0	No, Rottura per schiacciamento
SLV 7	143750	0.47	0	1262	11.1	0	0	No, Trazione
SLV 8	143750	0.47	0	1262	11.1	0	0	No, Trazione
SLV 12	143750	0.47	0	2449	11.1	0	0	No, Trazione
SLV 11	143750	0.47	0	2449	11.1	0	0	No, Trazione
SLV 1	143750	0.47	152703	-3268	11.1	0	0	No, Rottura per schiacciamento
SLV 6	143750	0.47	167064	-3575	11.1	0	0	No, Rottura per schiacciamento
SLV 13	143750	0.47	0	691	11.1	0	0	No, Trazione
SLV 2	143750	0.47	152703	-3268	11.1	0	0	No, Rottura per schiacciamento
SLV 14	143750	0.47	0	691	11.1	0	0	No, Trazione

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 8	-63	-786	18	0	19	0.889	0	10.81192	No
SLV 6	-74	-1156	9	0	19.9	0.889	0	10.81192	No
SLV 2	-85	218	44	0	0	0	0	18.05143	No, Trazione
SLV 9	-61	-2222	-18	0	18.8	0.89	0	10.81192	No
SLV 10	-61	-2222	-18	0	18.8	0.89	0	10.81192	No
SLV 7	-63	-786	18	0	19	0.889	0	10.81192	No
SLV 4	-81	329	47	0	0	0	0	18.05143	No, Trazione
SLV 3	-81	329	47	0	0	0	0	18.05143	No, Trazione
SLV 5	-74	-1156	9	0	19.9	0.889	0	10.81192	No
SLV 1	-85	218	44	0	0	0	0	18.05143	No, Trazione

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 10	No
V_SLU	1.405	SLU 81	Si
PF_SLV	0	SLV 16	No
V_SLV	0	SLV 1	No



Stato limite	Coeff.s.	Comb.	Verifica
PFFP SLV	0	SLV 16	No
R SLV	0	SLV 4	No

Maschio 25

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
33.278	18.336	33.371	18.426	L2	L3	0.13	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	τ0	fv0	μ	φ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, γM = 3

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLU 54	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 54	3.09	132	33.81	0	0	0	No, Trazione
SLU 57	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 57	3.09	132	33.81	0	0	0	No, Trazione
SLU 59	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 59	3.09	132	33.81	0	0	0	No, Trazione
SLU 55	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 55	3.09	132	33.81	0	0	0	No, Trazione
SLU 60	1.09	-1487	-47.99	38049	51.65	1.076	Si
SLU 60	3.09	143	36.54	0	0	0	No, Trazione
SLU 56	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 56	3.09	132	33.81	0	0	0	No, Trazione
SLU 53	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 53	3.09	132	33.81	0	0	0	No, Trazione
SLU 58	1.09	-1387	-44.14	35482	51.01	1.156	Si
SLU 58	3.09	132	33.81	0	0	0	No, Trazione
SLU 61	1.09	-1487	-47.99	38049	51.65	1.076	Si
SLU 61	3.09	143	36.54	0	0	0	No, Trazione
SLU 1	1.09	-916	-28.13	23440	42.52	1.512	Si
SLU 1	3.09	83	21.89	0	0	0	No, Trazione

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, γM = 2

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 3	1.09	-4727	-251.73	120925	3.18	0.013	No, M>Mu
SLV 3	3.09	3661	216.98	0	0	0	No, Trazione
SLV 1	1.09	-7671	-416.6	196212	0	0	No, Rottura per schiacciamento
SLV 1	3.09	6439	377.62	0	0	0	No, Trazione
SLV 7	1.09	2335	152.23	0	0	0	No, Trazione
SLV 7	3.09	-3049	-161.37	77982	71.86	0.445	No, M>Mu
SLV 8	1.09	2335	152.23	0	0	0	No, Trazione
SLV 8	3.09	-3049	-161.37	77982	71.86	0.445	No, M>Mu
SLV 6	1.09	-7476	-397.34	191227	0	0	No, Rottura per schiacciamento
SLV 6	3.09	6210	374.11	0	0	0	No, Trazione
SLV 5	1.09	-7476	-397.34	191227	0	0	No, Rottura per schiacciamento
SLV 5	3.09	6210	374.11	0	0	0	No, Trazione
SLV 4	1.09	-4727	-251.73	120925	3.18	0.013	No, M>Mu
SLV 4	3.09	3661	216.98	0	0	0	No, Trazione
SLV 9	1.09	-4365	-215.96	111667	24.49	0.113	No, M>Mu
SLV 9	3.09	3237	210.46	0	0	0	No, Trazione
SLV 2	1.09	-7671	-416.6	196212	0	0	No, Rottura per schiacciamento
SLV 2	3.09	6439	377.62	0	0	0	No, Trazione
SLV 10	1.09	-4365	-215.96	111667	24.49	0.113	No, M>Mu
SLV 10	3.09	3237	210.46	0	0	0	No, Trazione

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 53	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 53	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V
SLU 54	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 54	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V
SLU 58	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 58	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V
SLU 1	1.09	-916	-59	-28.13		29547	0.1034	9495	294			4.97	Si
SLU 1	3.09	83	-55	21.89		0	0	5556	0			0	No, Vu<V
SLU 55	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 55	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V
SLU 60	1.09	-1487	-100	-47.99		50246	0.0987	10833	321			3.2	Si
SLU 60	3.09	143	-92	36.54		0	0	5556	0			0	No, Vu<V
SLU 57	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 57	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V
SLU 56	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 56	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V
SLU 59	1.09	-1387	-92	-44.14		46238	0.1	10833	325			3.52	Si
SLU 59	3.09	132	-85	33.81		0	0	5556	0			0	No, Vu<V



Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 61	1.09	-1487	-100	-47.99		50246	0.0987	10833	321			3.2	Si
SLU 61	3.09	143	-92	36.54		0	0	5556	0			0	No, Vu<V

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 6	1.09	-7476	-887	-397.34		691944	0.036	16250	176			0.2	No, Vu<V
SLV 6	3.09	6210	-873	374.11		0	0	8333	0			0	No, Vu<V
SLV 1	1.09	-7671	-942	-416.6		785952	0.0325	16250	159			0.17	No, Vu<V
SLV 1	3.09	6439	-863	377.62		0	0	8333	0			0	No, Vu<V
SLV 10	1.09	-4365	-472	-215.96		309249	0.0471	16250	229			0.49	No, Vu<V
SLV 10	3.09	3237	-505	210.46		0	0	8333	0			0	No, Vu<V
SLV 3	1.09	-4727	-574	-251.73		441159	0.0357	16250	174			0.3	No, Vu<V
SLV 3	3.09	3661	-486	216.98		0	0	8333	0			0	No, Vu<V
SLV 2	1.09	-7671	-942	-416.6		785952	0.0325	16250	159			0.17	No, Vu<V
SLV 2	3.09	6439	-863	377.62		0	0	8333	0			0	No, Vu<V
SLV 4	1.09	-4727	-574	-251.73		441159	0.0357	16250	174			0.3	No, Vu<V
SLV 4	3.09	3661	-486	216.98		0	0	8333	0			0	No, Vu<V
SLV 8	1.09	2335	338	152.23		0	0	8333	0			0	No, Vu<V
SLV 8	3.09	-3049	382	-161.37		277129	0.0367	16250	179			0.47	No, Vu<V
SLV 5	1.09	-7476	-887	-397.34		691944	0.036	16250	176			0.2	No, Vu<V
SLV 5	3.09	6210	-873	374.11		0	0	8333	0			0	No, Vu<V
SLV 9	1.09	-4365	-472	-215.96		309249	0.0471	16250	229			0.49	No, Vu<V
SLV 9	3.09	3237	-505	210.46		0	0	8333	0			0	No, Vu<V
SLV 7	1.09	2335	338	152.23		0	0	8333	0			0	No, Vu<V
SLV 7	3.09	-3049	382	-161.37		277129	0.0367	16250	179			0.47	No, Vu<V

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$

Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.47	0	3661	20.27	0	0	No, Trazione
SLV 1	143750	0.47	0	6439	20.27	0	0	No, Trazione
SLV 5	143750	0.47	0	6210	20.27	0	0	No, Trazione
SLV 11	143750	0.47	154049	-6022	20.27	0	0	No, Rottura per schiacciamento
SLV 9	143750	0.47	0	3237	20.27	0	0	No, Trazione
SLV 6	143750	0.47	0	6210	20.27	0	0	No, Trazione
SLV 2	143750	0.47	0	6439	20.27	0	0	No, Trazione
SLV 12	143750	0.47	154049	-6022	20.27	0	0	No, Rottura per schiacciamento
SLV 10	143750	0.47	0	3237	20.27	0	0	No, Trazione
SLV 4	143750	0.47	0	3661	20.27	0	0	No, Trazione

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = 2.99 Wa = 0.05 Ta = 0.0804

Comb.	N top	N base	V orto	α_0	M*	e*	α_0^*	aLim	Verifica
SLV 11	-71	5445	17	0	0	0	0	10.81192	No, Trazione
SLV 10	-28	-4365	-23	0	28.1	0.934	0	10.81192	No
SLV 4	-33	-4727	12	0	28.4	0.927	0	18.05143	No
SLV 8	-60	2335	21	0	0	0	0	10.81192	No, Trazione
SLV 9	-28	-4365	-23	0	28.1	0.934	0	10.81192	No
SLV 5	-17	-7476	-19	0	27.6	0.952	0	10.81192	No
SLV 3	-33	-4727	12	0	28.4	0.927	0	18.05143	No
SLV 12	-71	5445	17	0	0	0	0	10.81192	No, Trazione
SLV 6	-17	-7476	-19	0	27.6	0.952	0	10.81192	No
SLV 7	-60	2335	21	0	0	0	0	10.81192	No, Trazione

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 84	No
V_SLU	0	SLU 1	No
PF_SLV	0	SLV 16	No
V_SLV	0	SLV 1	No
PFFP_SLV	0	SLV 10	No
R_SLV	0	SLV 16	No

Maschio 26

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	X fin.	Y fin.	Quota i.	Quota.s	I	Sp.	h netta	h ini.	h fin.	a	a.s,sx	a.s,dx
33.371	27.236	33.371	18.426	L2	L3	8.81	0.3	3.8	3.8	3.8			

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fk	fvk0	fmedio	t0	fv0	μ	ϕ	fv,lim	E	G	FC
600000			345000	9000	20000	0.58	0.77	32500	320000000	128000000	1.2

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 40	1.09	-38424	-32915.78	14538	139049.66	4.224	Si
SLU 40	4.89	-2706	-754.58	1024	11770.09	15.598	Si
SLU 81	1.09	-45262	-37130.61	17125	157463.68	4.241	Si
SLU 81	4.89	-2771	-793.94	1048	12047.16	15.174	Si
SLU 42	1.09	-38424	-32915.78	14538	139049.66	4.224	Si



Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLU 42	4.89	-2706	-754.58	1024	11770.09	15.598	Si
SLU 18	1.09	-35194	-29497.86	13316	129688.54	4.397	Si
SLU 18	4.89	-2249	-646.39	851	9805.25	15.169	Si
SLU 83	1.09	-45262	-37130.61	17125	157463.68	4.241	Si
SLU 83	4.89	-2771	-793.94	1048	12047.16	15.174	Si
SLU 82	1.09	-45262	-37130.61	17125	157463.68	4.241	Si
SLU 82	4.89	-2771	-793.94	1048	12047.16	15.174	Si
SLU 39	1.09	-38424	-32915.78	14538	139049.66	4.224	Si
SLU 39	4.89	-2706	-754.58	1024	11770.09	15.598	Si
SLU 20	1.09	-35194	-29497.86	13316	129688.54	4.397	Si
SLU 20	4.89	-2249	-646.39	851	9805.25	15.169	Si
SLU 84	1.09	-45262	-37130.61	17125	157463.68	4.241	Si
SLU 84	4.89	-2771	-793.94	1048	12047.16	15.174	Si
SLU 41	1.09	-38424	-32915.78	14538	139049.66	4.224	Si
SLU 41	4.89	-2706	-754.58	1024	11770.09	15.598	Si

Verifica a pressoflessione nel piano secondo D.M. 17-01-18 NTC §7.8.2.2.1 in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	M	σ_0	Mu	c.s.	Verifica
SLV 6	1.09	-13759	-25377.52	5206	58024.86	2.286	Si
SLV 6	4.89	-937	-85.46	354	4114.65	48.148	Si
SLV 3	1.09	-21577	-50082.3	8164	88696.38	1.771	Si
SLV 3	4.89	-886	-439.69	335	3893.17	8.854	Si
SLV 2	1.09	-14355	-47596.64	5431	60424.84	1.27	Si
SLV 2	4.89	-805	-273.84	304	3536.25	12.913	Si
SLV 12	1.09	-44540	-17103.73	16852	169141.16	9.889	Si
SLV 12	4.89	-1403	-642.67	531	6153.02	9.574	Si
SLV 1	1.09	-14355	-47596.64	5431	60424.84	1.27	Si
SLV 1	4.89	-805	-273.84	304	3536.25	12.913	Si
SLV 5	1.09	-13759	-25377.52	5206	58024.86	2.286	Si
SLV 5	4.89	-937	-85.46	354	4114.65	48.148	Si
SLV 7	1.09	-37830	-33663.04	14313	147122.53	4.37	Si
SLV 7	4.89	-1208	-638.29	457	5302.69	8.308	Si
SLV 8	1.09	-37830	-33663.04	14313	147122.53	4.37	Si
SLV 8	4.89	-1208	-638.29	457	5302.69	8.308	Si
SLV 4	1.09	-21577	-50082.3	8164	88696.38	1.771	Si
SLV 4	4.89	-886	-439.69	335	3893.17	8.854	Si
SLV 11	1.09	-44540	-17103.73	16852	169141.16	9.889	Si
SLV 11	4.89	-1403	-642.67	531	6153.02	9.574	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni non sismiche, $\gamma_M = 3$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt _{lim}	c.s.	Verifica
SLU 73	1.09	-42649	-159	-33667.94		16137	8.81	7707	20370			128.46	Si
SLU 73	4.89	-2317	3	-676.48		877	8.81	5672	14992			1000	Si
SLU 74	1.09	-42649	-159	-33667.94		16137	8.81	7707	20370			128.46	Si
SLU 74	4.89	-2317	3	-676.48		877	8.81	5672	14992			1000	Si
SLU 81	1.09	-45262	-171	-37130.61		17125	8.81	7839	20718			120.9	Si
SLU 81	4.89	-2771	3	-793.94		1048	8.81	5695	15053			1000	Si
SLU 62	1.09	-42033	-159	-33712.68		15903	8.81	7676	20288			127.56	Si
SLU 62	4.89	-2314	3	-685.75		876	8.81	5672	14992			1000	Si
SLU 83	1.09	-45262	-171	-37130.61		17125	8.81	7839	20718			120.9	Si
SLU 83	4.89	-2771	3	-793.94		1048	8.81	5695	15053			1000	Si
SLU 84	1.09	-45262	-171	-37130.61		17125	8.81	7839	20718			120.9	Si
SLU 84	4.89	-2771	3	-793.94		1048	8.81	5695	15053			1000	Si
SLU 63	1.09	-42033	-159	-33712.68		15903	8.81	7676	20288			127.56	Si
SLU 63	4.89	-2314	3	-685.75		876	8.81	5672	14992			1000	Si
SLU 82	1.09	-45262	-171	-37130.61		17125	8.81	7839	20718			120.9	Si
SLU 82	4.89	-2771	3	-793.94		1048	8.81	5695	15053			1000	Si
SLU 61	1.09	-42033	-159	-33712.68		15903	8.81	7676	20288			127.56	Si
SLU 61	4.89	-2314	3	-685.75		876	8.81	5672	14992			1000	Si
SLU 60	1.09	-42033	-159	-33712.68		15903	8.81	7676	20288			127.56	Si
SLU 60	4.89	-2314	3	-685.75		876	8.81	5672	14992			1000	Si

Verifica a taglio nel piano secondo D.M. 17-01-18 (N.T.C.) §7.8.2.2.2 con rottura per scorrimento in combinazioni sismiche, $\gamma_M = 2$

Comb.	Quota	N	V par	M	σ_0	σ_N	I'	fvd	Vt scorr.	Vt fess.diag.	Vt _{lim}	c.s.	Verifica
SLV 12	1.09	-44540	-4446	-17103.73		16852	8.81	11704	30933			6.96	Si
SLV 12	4.89	-1403	-174	-642.67		531	8.81	8439	22306			128.13	Si
SLV 5	1.09	-13759	4236	-25377.52		5970	7.6816	9527	21956			5.18	Si
SLV 5	4.89	-937	176	-85.46		354	8.81	8404	22212			126.14	Si
SLV 6	1.09	-13759	4236	-25377.52		5970	7.6816	9527	21956			5.18	Si
SLV 6	4.89	-937	176	-85.46		354	8.81	8404	22212			126.14	Si
SLV 11	1.09	-44540	-4446	-17103.73		16852	8.81	11704	30933			6.96	Si
SLV 11	4.89	-1403	-174	-642.67		531	8.81	8439	22306			128.13	Si
SLV 8	1.09	-37830	-4797	-33663.04		14313	8.81	11196	29591			6.17	Si
SLV 8	4.89	-1208	-406	-638.29		457	8.81	8425	22267			54.87	Si
SLV 7	1.09	-37830	-4797	-33663.04		14313	8.81	11196	29591			6.17	Si
SLV 7	4.89	-1208	-406	-638.29		457	8.81	8425	22267			54.87	Si
SLV 10	1.09	-20469	4588	-8818.21		7744	8.81	9882	26119			5.69	Si
SLV 10	4.89	-1131	408	-89.84		428	8.81	8419	22251			54.56	Si
SLV 3	1.09	-21577	-2046	-50082.3		11504	6.2517	10634	19945			9.75	Si
SLV 3	4.89	-886	-473	-439.69		335	8.81	8400	22202			46.98	Si
SLV 9	1.09	-20469	4588	-8818.21		7744	8.81	9882	26119			5.69	Si
SLV 9	4.89	-1131	408	-89.84		428	8.81	8419	22251			54.56	Si
SLV 4	1.09	-21577	-2046	-50082.3		11504	6.2517	10634	19945			9.75	Si
SLV 4	4.89	-886	-473	-439.69		335	8.81	8400	22202			46.98	Si

Verifica a pressoflessione fuori piano D.M. 17-01-18 (N.T.C.)

quota 2.99 Wa 0.05 denominatore 8 $\gamma_M = 2$



Comb.	fd	Sa	σ_0	N	M	Mc	Coeff.s.	Verifica
SLV 13	143750	0.47	5042	-13325	1400.32	1916.28	1.37	Si
SLV 14	143750	0.47	5042	-13325	1400.32	1916.28	1.37	Si
SLV 15	143750	0.47	5068	-13395	1400.32	1925.9	1.38	Si
SLV 16	143750	0.47	5068	-13395	1400.32	1925.9	1.38	Si
SLV 9	143750	0.47	5357	-14159	1400.32	2030.79	1.45	Si
SLV 10	143750	0.47	5357	-14159	1400.32	2030.79	1.45	Si
SLV 12	143750	0.47	5445	-14392	1400.32	2062.66	1.47	Si
SLV 11	143750	0.47	5445	-14392	1400.32	2062.66	1.47	Si
SLV 5	143750	0.47	5654	-14945	1400.32	2137.94	1.53	Si
SLV 6	143750	0.47	5654	-14945	1400.32	2137.94	1.53	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzera = 2.99 $W_a = 0.05$ $T_a = 0.0804$

Comb.	N top	N base	V orto	α_0	M*	e*	a0*	aLim	Verifica
SLV 3	-886	-21577	112	0.064	1857.6	0.961	0.97062	18.05143	No
SLV 4	-886	-21577	112	0.064	1857.6	0.961	0.97062	18.05143	No
SLV 13	-1453	-36722	-90	0.065	1878.9	0.944	0.99897	18.05143	No
SLV 14	-1453	-36722	-90	0.065	1878.9	0.944	0.99897	18.05143	No
SLV 1	-805	-14355	44	0.071	1855.2	0.964	1.07429	18.05143	No
SLV 2	-805	-14355	44	0.071	1855.2	0.964	1.07429	18.05143	No
SLV 16	-1535	-43944	-23	0.071	1882.5	0.942	1.09681	18.05143	No
SLV 15	-1535	-43944	-23	0.071	1882.5	0.942	1.09681	18.05143	No
SLV 7	-1208	-37830	143	0.06	1868.8	0.951	0.92193	10.81192	No
SLV 8	-1208	-37830	143	0.06	1868.8	0.951	0.92193	10.81192	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.224	SLU 39	Si
V_SLU	120.899	SLU 81	Si
PF_SLV	1.27	SLV 1	Si
V_SLV	5.183	SLV 5	Si
PFFP_SLV	1.368	SLV 13	Si
R_SLV	0.054	SLV 3	No

1.4 Verifiche travi di accoppiamento in muratura

Le unità di misura elencate nel capitolo sono in [m, daN] ove non espressamente specificato.

X_{ini.}: coordinata punto iniziale. [m]

Y_{ini.}: coordinata punto iniziale. [m]

Z_{ini.inf.}: coordinata punto iniziale. [m]

Z_{ini.sup.}: coordinata punto iniziale. [m]

H_{ini.}: altezza della sezione iniziale. [m]

X_{fin.}: coordinata punto finale. [m]

Y_{fin.}: coordinata punto finale. [m]

Z_{fin.inf.}: coordinata punto finale. [m]

Z_{fin.sup.}: coordinata punto finale. [m]

H_{fin.}: altezza della sezione finale. [m]

Luce: lunghezza della trave. [m]

Spessore: spessore. [m]

R. Trazione: resistenza a trazione dell'elemento teso disposto orizzontalmente. [daN]

f_b: resistenza normalizzata a compressione in direzione orizzontale dei blocchi. [daN/m²]

f_{hk}: resistenza caratteristica a compressione della muratura utilizzata in direzione orizzontale. [daN/m²]

f_{vk0}: resistenza caratteristica a taglio in assenza di carichi verticali. [daN/m²]

f_{hmedio}: resistenza media a compressione della muratura utilizzata in direzione orizzontale. [daN/m²]

τ_0 : resistenza media a taglio in assenza di azioni normali [C8.7.1.16]. [daN/m²]

f_{vo}: resistenza media a taglio in assenza di azioni normali [C8.7.1.17]. [daN/m²]

μ : coefficiente di attrito [C8.7.1.17].

ϕ : coefficiente di ammassamento o ingranamento secondo Circolare 7 21-01-19 §C8.7.1.3.1.1.

f_{vk,lim}: valore caratteristico massimo della resistenza a taglio che può essere impiegata nel calcolo (§11.10.3.3). [daN/m²]

E: modulo di elasticità longitudinale della muratura utilizzato. [daN/m²]

G: modulo di elasticità tangenziale della muratura utilizzato. [daN/m²]

FC: fattore di confidenza della muratura.

Sezione: sezione di verifica.

γ_M : fattore parziale di sicurezza del materiale.

N: sforzo normale. [daN]

M: momento flettente nel piano. [daN*m]

Mu: momento ultimo. [daN*m]

Comb.: combinazione.

c.s.: coefficiente di sicurezza.

Verifica: stato di verifica.

M: momento flettente. [daN*m]

V: taglio nel piano. [daN]

V_t: resistenza a taglio secondo [7.8.4]. [daN]

V_p: resistenza a taglio secondo [7.8.6]. [daN]



Vt fess. diag.: resistenza a taglio per fessurazione diagonale secondo §C8.7.1.3.1.1 formule [C8.7.1.16] ovvero [C8.7.1.17]. [daN]

Vt,lim: taglio limite [C8.1.7.18]. [daN]

Stato limite: pF_SLV=Presso flessione per azioni sismiche; V_SLV=Taglio per azioni sismiche.

Coeff.s.: coefficiente di sicurezza.

Trave di accoppiamento 1

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.042	20.644	-1.6	-0.21	1.39	23.989	19.646	-1.6	-0.21	1.39	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb _m	fhk	fvk0	fhmedio	τ0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-2519	143.33	2098.31	SLU 84	14.64	Si
fin.	3	-2336	118.14	2098.31	SLU 84	17.76	Si
ini.	3	-2374	132.82	2098.31	SLU 73	15.8	Si
fin.	3	-2192	101.53	2098.31	SLU 73	20.67	Si
ini.	3	-2374	132.82	2098.31	SLU 79	15.8	Si
fin.	3	-2192	101.53	2098.31	SLU 79	20.67	Si
ini.	3	-2519	143.33	2098.31	SLU 82	14.64	Si
fin.	3	-2336	118.14	2098.31	SLU 82	17.76	Si
ini.	3	-2519	143.33	2098.31	SLU 81	14.64	Si
fin.	3	-2336	118.14	2098.31	SLU 81	17.76	Si
ini.	3	-2374	132.82	2098.31	SLU 74	15.8	Si
fin.	3	-2192	101.53	2098.31	SLU 74	20.67	Si
ini.	3	-2374	132.82	2098.31	SLU 76	15.8	Si
fin.	3	-2192	101.53	2098.31	SLU 76	20.67	Si
ini.	3	-2374	132.82	2098.31	SLU 75	15.8	Si
fin.	3	-2192	101.53	2098.31	SLU 75	20.67	Si
ini.	3	-2374	132.82	2098.31	SLU 78	15.8	Si
fin.	3	-2192	101.53	2098.31	SLU 78	20.67	Si
ini.	3	-2519	143.33	2098.31	SLU 83	14.64	Si
fin.	3	-2336	118.14	2098.31	SLU 83	17.76	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	132.82	-3270			2409	907	SLU 79	0.28	No
fin.	3	0	101.53	3994			2409	907	SLU 79	0.23	No
ini.	3	0	132.82	-3270			2409	907	SLU 76	0.28	No
fin.	3	0	101.53	3994			2409	907	SLU 76	0.23	No
ini.	3	0	132.82	-3270			2409	907	SLU 77	0.28	No
fin.	3	0	101.53	3994			2409	907	SLU 77	0.23	No
ini.	3	0	143.33	-3438			2409	907	SLU 83	0.26	No
fin.	3	0	118.14	4224			2409	907	SLU 83	0.21	No
ini.	3	0	143.33	-3438			2409	907	SLU 82	0.26	No
fin.	3	0	118.14	4224			2409	907	SLU 82	0.21	No
ini.	3	0	132.82	-3270			2409	907	SLU 78	0.28	No
fin.	3	0	101.53	3994			2409	907	SLU 78	0.23	No
ini.	3	0	132.82	-3270			2409	907	SLU 80	0.28	No
fin.	3	0	101.53	3994			2409	907	SLU 80	0.23	No
ini.	3	0	132.82	-3270			2409	907	SLU 75	0.28	No
fin.	3	0	101.53	3994			2409	907	SLU 75	0.23	No
ini.	3	0	143.33	-3438			2409	907	SLU 81	0.26	No
fin.	3	0	118.14	4224			2409	907	SLU 81	0.21	No
ini.	3	0	143.33	-3438			2409	907	SLU 84	0.26	No
fin.	3	0	118.14	4224			2409	907	SLU 84	0.21	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-2128	369.11	2209.71	SLV 10	5.99	Si
fin.	2	-324	-230.05	2209.71	SLV 10	9.61	Si
ini.	2	-2521	418.57	2209.71	SLV 5	5.28	Si
fin.	2	-625	-226.49	2209.71	SLV 5	9.76	Si
ini.	2	-722	-244.51	2209.71	SLV 12	9.04	Si
fin.	2	-2346	338.45	2209.71	SLV 12	6.53	Si
ini.	2	-722	-244.51	2209.71	SLV 11	9.04	Si
fin.	2	-2346	338.45	2209.71	SLV 11	6.53	Si
ini.	2	-1116	-195.05	2209.71	SLV 7	11.33	Si
fin.	2	-2647	342.01	2209.71	SLV 7	6.46	Si
ini.	2	-2128	369.11	2209.71	SLV 9	5.99	Si
fin.	2	-324	-230.05	2209.71	SLV 9	9.61	Si
ini.	2	-2488	261.52	2209.71	SLV 2	8.45	Si
fin.	2	-1684	-23.35	2209.71	SLV 2	94.62	Si
ini.	2	-2521	418.57	2209.71	SLV 6	5.28	Si
fin.	2	-625	-226.49	2209.71	SLV 6	9.76	Si
ini.	2	-1116	-195.05	2209.71	SLV 8	11.33	Si
fin.	2	-2647	342.01	2209.71	SLV 8	6.46	Si
ini.	2	-2488	261.52	2209.71	SLV 1	8.45	Si
fin.	2	-1684	-23.35	2209.71	SLV 1	94.62	Si



Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	96.63	-1896			3613	1360	SLV 13	0.72	No
fin.	2	0	-35.24	2487			3613	1360	SLV 13	0.55	No
ini.	2	0	96.63	-1896			3613	1360	SLV 14	0.72	No
fin.	2	0	-35.24	2487			3613	1360	SLV 14	0.55	No
ini.	2	0	261.52	-3426			3613	1360	SLV 1	0.4	No
fin.	2	0	-23.35	3480			3613	1360	SLV 1	0.39	No
ini.	2	0	77.43	-2659			3613	1360	SLV 4	0.51	No
fin.	2	0	147.2	3019			3613	1360	SLV 4	0.45	No
ini.	2	0	369.11	-3326			3613	1360	SLV 10	0.41	No
fin.	2	0	-230.05	3372			3613	1360	SLV 10	0.4	No
ini.	2	0	369.11	-3326			3613	1360	SLV 9	0.41	No
fin.	2	0	-230.05	3372			3613	1360	SLV 9	0.4	No
ini.	2	0	418.57	-3785			3613	1360	SLV 5	0.36	No
fin.	2	0	-226.49	3669			3613	1360	SLV 5	0.37	No
ini.	2	0	77.43	-2659			3613	1360	SLV 3	0.51	No
fin.	2	0	147.2	3019			3613	1360	SLV 3	0.45	No
ini.	2	0	418.57	-3785			3613	1360	SLV 6	0.36	No
fin.	2	0	-226.49	3669			3613	1360	SLV 6	0.37	No
ini.	2	0	261.52	-3426			3613	1360	SLV 2	0.4	No
fin.	2	0	-23.35	3480			3613	1360	SLV 2	0.39	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	5.279	SLV 5	Si
V_SLV	0.359	SLV 5	No
PF_SLU	14.64	SLU 81	Si
V_SLU	0.215	SLU 81	No

Trave di accoppiamento 2

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.042	20.644	0.19	1.09	0.9	23.989	19.646	0.19	1.09	0.9	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1254	-260.85	1240.81	SLU 78	4.76	Si
fin.	3	-660	-63.57	1240.81	SLU 78	19.52	Si
ini.	3	-1254	-260.85	1240.81	SLU 76	4.76	Si
fin.	3	-660	-63.57	1240.81	SLU 76	19.52	Si
ini.	3	-1362	-280.09	1240.81	SLU 84	4.43	Si
fin.	3	-718	-67.27	1240.81	SLU 84	18.45	Si
ini.	3	-1362	-280.09	1240.81	SLU 81	4.43	Si
fin.	3	-718	-67.27	1240.81	SLU 81	18.45	Si
ini.	3	-1254	-260.85	1240.81	SLU 73	4.76	Si
fin.	3	-660	-63.57	1240.81	SLU 73	19.52	Si
ini.	3	-1254	-260.85	1240.81	SLU 74	4.76	Si
fin.	3	-660	-63.57	1240.81	SLU 74	19.52	Si
ini.	3	-1362	-280.09	1240.81	SLU 83	4.43	Si
fin.	3	-718	-67.27	1240.81	SLU 83	18.45	Si
ini.	3	-1362	-280.09	1240.81	SLU 82	4.43	Si
fin.	3	-718	-67.27	1240.81	SLU 82	18.45	Si
ini.	3	-1254	-260.85	1240.81	SLU 79	4.76	Si
fin.	3	-660	-63.57	1240.81	SLU 79	19.52	Si
ini.	3	-1254	-260.85	1240.81	SLU 75	4.76	Si
fin.	3	-660	-63.57	1240.81	SLU 75	19.52	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-260.85	2389			1404	528	SLU 79	0.22	No
fin.	3	0	-63.57	-2307			1404	528	SLU 79	0.23	No
ini.	3	0	-280.09	2522			1404	528	SLU 82	0.21	No
fin.	3	0	-67.27	-2414			1404	528	SLU 82	0.22	No
ini.	3	0	-260.85	2389			1404	528	SLU 77	0.22	No
fin.	3	0	-63.57	-2307			1404	528	SLU 77	0.23	No
ini.	3	0	-280.09	2522			1404	528	SLU 83	0.21	No
fin.	3	0	-67.27	-2414			1404	528	SLU 83	0.22	No
ini.	3	0	-260.85	2389			1404	528	SLU 76	0.22	No
fin.	3	0	-63.57	-2307			1404	528	SLU 76	0.23	No
ini.	3	0	-280.09	2522			1404	528	SLU 81	0.21	No
fin.	3	0	-67.27	-2414			1404	528	SLU 81	0.22	No
ini.	3	0	-260.85	2389			1404	528	SLU 80	0.22	No
fin.	3	0	-63.57	-2307			1404	528	SLU 80	0.23	No
ini.	3	0	-260.85	2389			1404	528	SLU 75	0.22	No
fin.	3	0	-63.57	-2307			1404	528	SLU 75	0.23	No
ini.	3	0	-260.85	2389			1404	528	SLU 78	0.22	No
fin.	3	0	-63.57	-2307			1404	528	SLU 78	0.23	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-280.09	2522			1404	528	SLU 84	0.21	No
fin.	3	0	-67.27	-2414			1404	528	SLU 84	0.22	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-614	-267.37	1352.21	SLV 1	5.06	Si
fin.	2	-841	-189.21	1352.21	SLV 1	7.15	Si
ini.	2	-1125	-300.87	1352.21	SLV 3	4.49	Si
fin.	2	-50	-127.57	1352.21	SLV 3	10.6	Si
ini.	2	-1654	-197.17	1352.21	SLV 11	6.86	Si
fin.	2	895	94.19	1352.21	SLV 11	14.36	Si
ini.	2	-614	-267.37	1352.21	SLV 2	5.06	Si
fin.	2	-841	-189.21	1352.21	SLV 2	7.15	Si
ini.	2	16	-151.4	1352.21	SLV 6	8.93	Si
fin.	2	-1752	-180.44	1352.21	SLV 6	7.49	Si
ini.	2	-1654	-197.17	1352.21	SLV 12	6.86	Si
fin.	2	895	94.19	1352.21	SLV 12	14.36	Si
ini.	2	-1684	-263.07	1352.21	SLV 7	5.14	Si
fin.	2	885	25.03	1352.21	SLV 7	54.03	Si
ini.	2	-1125	-300.87	1352.21	SLV 4	4.49	Si
fin.	2	-50	-127.57	1352.21	SLV 4	10.6	Si
ini.	2	16	-151.4	1352.21	SLV 5	8.93	Si
fin.	2	-1752	-180.44	1352.21	SLV 5	7.49	Si
ini.	2	-1684	-263.07	1352.21	SLV 8	5.14	Si
fin.	2	885	25.03	1352.21	SLV 8	54.03	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-85.5	2317			2106	792	SLV 9	0.34	No
fin.	2	0	-111.28	-2547			2106	792	SLV 9	0.31	No
ini.	2	0	-267.37	2069			2106	792	SLV 2	0.38	No
fin.	2	0	-189.21	-2387			2106	792	SLV 2	0.33	No
ini.	2	0	-47.7	1671			2106	792	SLV 13	0.47	No
fin.	2	0	41.32	-1492			2106	792	SLV 13	0.53	No
ini.	2	0	-151.4	2436			2106	792	SLV 6	0.33	No
fin.	2	0	-180.44	-2815			2106	792	SLV 6	0.28	No
ini.	2	0	-300.87	1634			2106	792	SLV 3	0.48	No
fin.	2	0	-127.57	-1752			2106	792	SLV 3	0.45	No
ini.	2	0	-151.4	2436			2106	792	SLV 5	0.33	No
fin.	2	0	-180.44	-2815			2106	792	SLV 5	0.28	No
ini.	2	0	-85.5	2317			2106	792	SLV 10	0.34	No
fin.	2	0	-111.28	-2547			2106	792	SLV 10	0.31	No
ini.	2	0	-47.7	1671			2106	792	SLV 14	0.47	No
fin.	2	0	41.32	-1492			2106	792	SLV 14	0.53	No
ini.	2	0	-300.87	1634			2106	792	SLV 4	0.48	No
fin.	2	0	-127.57	-1752			2106	792	SLV 4	0.45	No
ini.	2	0	-267.37	2069			2106	792	SLV 1	0.38	No
fin.	2	0	-189.21	-2387			2106	792	SLV 1	0.33	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	4.494	SLV 3	Si
V_SLV	0.281	SLV 5	No
PF_SLU	4.43	SLU 81	Si
V_SLU	0.209	SLU 81	No

Trave di accoppiamento 3

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.284	25.288	-1.6	-0.21	1.39	24.232	24.289	-1.6	-0.21	1.39	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fhk	fvk0	fkhmedio	τ0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-2212	192.34	2098.31	SLU 41	10.91	Si
fin.	3	-2409	139.98	2098.31	SLU 41	14.99	Si
ini.	3	-2578	213.94	2098.31	SLU 81	9.81	Si
fin.	3	-2815	154.85	2098.31	SLU 81	13.55	Si
ini.	3	-2385	192.73	2098.31	SLU 63	10.89	Si
fin.	3	-2602	136.4	2098.31	SLU 63	15.38	Si
ini.	3	-2578	213.94	2098.31	SLU 84	9.81	Si
fin.	3	-2815	154.85	2098.31	SLU 84	13.55	Si
ini.	3	-2385	192.73	2098.31	SLU 62	10.89	Si
fin.	3	-2602	136.4	2098.31	SLU 62	15.38	Si
ini.	3	-2385	192.73	2098.31	SLU 60	10.89	Si
fin.	3	-2602	136.4	2098.31	SLU 60	15.38	Si
ini.	3	-2385	192.73	2098.31	SLU 61	10.89	Si
fin.	3	-2602	136.4	2098.31	SLU 61	15.38	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-2578	213.94	2098.31	SLU 83	9.81	Si
fin.	3	-2815	154.85	2098.31	SLU 83	13.55	Si
ini.	3	-2578	213.94	2098.31	SLU 82	9.81	Si
fin.	3	-2815	154.85	2098.31	SLU 82	13.55	Si
ini.	3	-2212	192.34	2098.31	SLU 40	10.91	Si
fin.	3	-2409	139.98	2098.31	SLU 40	14.99	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt _{lim}	Comb.	c.s.	Verifica
ini.	3	0	191.47	-3713			2409	907	SLU 78	0.24	No
fin.	3	0	139.6	3522			2409	907	SLU 78	0.26	No
ini.	3	0	191.47	-3713			2409	907	SLU 76	0.24	No
fin.	3	0	139.6	3522			2409	907	SLU 76	0.26	No
ini.	3	0	213.94	-3947			2409	907	SLU 83	0.23	No
fin.	3	0	154.85	3724			2409	907	SLU 83	0.24	No
ini.	3	0	213.94	-3947			2409	907	SLU 84	0.23	No
fin.	3	0	154.85	3724			2409	907	SLU 84	0.24	No
ini.	3	0	191.47	-3713			2409	907	SLU 79	0.24	No
fin.	3	0	139.6	3522			2409	907	SLU 79	0.26	No
ini.	3	0	191.47	-3713			2409	907	SLU 80	0.24	No
fin.	3	0	139.6	3522			2409	907	SLU 80	0.26	No
ini.	3	0	213.94	-3947			2409	907	SLU 82	0.23	No
fin.	3	0	154.85	3724			2409	907	SLU 82	0.24	No
ini.	3	0	191.47	-3713			2409	907	SLU 75	0.24	No
fin.	3	0	139.6	3522			2409	907	SLU 75	0.26	No
ini.	3	0	213.94	-3947			2409	907	SLU 81	0.23	No
fin.	3	0	154.85	3724			2409	907	SLU 81	0.24	No
ini.	3	0	191.47	-3713			2409	907	SLU 77	0.24	No
fin.	3	0	139.6	3522			2409	907	SLU 77	0.26	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-1953	376.1	2209.71	SLV 9	5.88	Si
fin.	2	-808	-216.03	2209.71	SLV 9	10.23	Si
ini.	2	-2375	403.64	2209.71	SLV 6	5.47	Si
fin.	2	-1192	-187.36	2209.71	SLV 6	11.79	Si
ini.	2	-2482	244.95	2209.71	SLV 2	9.02	Si
fin.	2	-2186	47.56	2209.71	SLV 2	46.46	Si
ini.	2	-2375	403.64	2209.71	SLV 5	5.47	Si
fin.	2	-1192	-187.36	2209.71	SLV 5	11.79	Si
ini.	2	-2482	244.95	2209.71	SLV 1	9.02	Si
fin.	2	-2186	47.56	2209.71	SLV 1	46.46	Si
ini.	2	-1273	-141.55	2209.71	SLV 7	15.61	Si
fin.	2	-2751	388.27	2209.71	SLV 7	5.69	Si
ini.	2	-1273	-141.55	2209.71	SLV 8	15.61	Si
fin.	2	-2751	388.27	2209.71	SLV 8	5.69	Si
ini.	2	-851	-169.08	2209.71	SLV 11	13.07	Si
fin.	2	-2367	359.59	2209.71	SLV 11	6.14	Si
ini.	2	-1953	376.1	2209.71	SLV 10	5.88	Si
fin.	2	-808	-216.03	2209.71	SLV 10	10.23	Si
ini.	2	-851	-169.08	2209.71	SLV 12	13.07	Si
fin.	2	-2367	359.59	2209.71	SLV 12	6.14	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt _{lim}	Comb.	c.s.	Verifica
ini.	2	0	244.95	-2873			3613	1360	SLV 1	0.47	No
fin.	2	0	47.56	2666			3613	1360	SLV 1	0.51	No
ini.	2	0	81.39	-3334			3613	1360	SLV 3	0.41	No
fin.	2	0	220.25	3452			3613	1360	SLV 3	0.39	No
ini.	2	0	-10.39	-2197			3613	1360	SLV 16	0.62	No
fin.	2	0	124.67	2184			3613	1360	SLV 16	0.62	No
ini.	2	0	-169.08	-3132			3613	1360	SLV 12	0.43	No
fin.	2	0	359.59	3545			3613	1360	SLV 12	0.38	No
ini.	2	0	-141.55	-3473			3613	1360	SLV 8	0.39	No
fin.	2	0	388.27	3925			3613	1360	SLV 8	0.35	No
ini.	2	0	-169.08	-3132			3613	1360	SLV 11	0.43	No
fin.	2	0	359.59	3545			3613	1360	SLV 11	0.38	No
ini.	2	0	244.95	-2873			3613	1360	SLV 2	0.47	No
fin.	2	0	47.56	2666			3613	1360	SLV 2	0.51	No
ini.	2	0	81.39	-3334			3613	1360	SLV 4	0.41	No
fin.	2	0	220.25	3452			3613	1360	SLV 4	0.39	No
ini.	2	0	-10.39	-2197			3613	1360	SLV 15	0.62	No
fin.	2	0	124.67	2184			3613	1360	SLV 15	0.62	No
ini.	2	0	-141.55	-3473			3613	1360	SLV 7	0.39	No
fin.	2	0	388.27	3925			3613	1360	SLV 7	0.35	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	5.474	SLV 5	Si
V_SLV	0.346	SLV 7	No
PF_SLU	9.808	SLU 81	Si
V_SLU	0.23	SLU 81	No

Trave di accoppiamento 4

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)



Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.284	25.288	0.19	1.09	0.9	24.232	24.289	0.19	1.09	0.9	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1022	-119.89	1240.81	SLU 81	10.35	Si
fin.	3	-1309	-252.55	1240.81	SLU 81	4.91	Si
ini.	3	-922	-112.02	1240.81	SLU 79	11.08	Si
fin.	3	-1201	-234.75	1240.81	SLU 79	5.29	Si
ini.	3	-922	-112.02	1240.81	SLU 73	11.08	Si
fin.	3	-1201	-234.75	1240.81	SLU 73	5.29	Si
ini.	3	-1022	-119.89	1240.81	SLU 83	10.35	Si
fin.	3	-1309	-252.55	1240.81	SLU 83	4.91	Si
ini.	3	-922	-112.02	1240.81	SLU 74	11.08	Si
fin.	3	-1201	-234.75	1240.81	SLU 74	5.29	Si
ini.	3	-922	-112.02	1240.81	SLU 78	11.08	Si
fin.	3	-1201	-234.75	1240.81	SLU 78	5.29	Si
ini.	3	-922	-112.02	1240.81	SLU 75	11.08	Si
fin.	3	-1201	-234.75	1240.81	SLU 75	5.29	Si
ini.	3	-1022	-119.89	1240.81	SLU 82	10.35	Si
fin.	3	-1309	-252.55	1240.81	SLU 82	4.91	Si
ini.	3	-1022	-119.89	1240.81	SLU 84	10.35	Si
fin.	3	-1309	-252.55	1240.81	SLU 84	4.91	Si
ini.	3	-922	-112.02	1240.81	SLU 76	11.08	Si
fin.	3	-1201	-234.75	1240.81	SLU 76	5.29	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-112.02	2142			1404	528	SLU 79	0.25	No
fin.	3	0	-234.75	-2333			1404	528	SLU 79	0.23	No
ini.	3	0	-112.02	2142			1404	528	SLU 77	0.25	No
fin.	3	0	-234.75	-2333			1404	528	SLU 77	0.23	No
ini.	3	0	-119.89	2260			1404	528	SLU 82	0.23	No
fin.	3	0	-252.55	-2460			1404	528	SLU 82	0.21	No
ini.	3	0	-119.89	2260			1404	528	SLU 83	0.23	No
fin.	3	0	-252.55	-2460			1404	528	SLU 83	0.21	No
ini.	3	0	-119.89	2260			1404	528	SLU 81	0.23	No
fin.	3	0	-252.55	-2460			1404	528	SLU 81	0.21	No
ini.	3	0	-119.89	2260			1404	528	SLU 84	0.23	No
fin.	3	0	-252.55	-2460			1404	528	SLU 84	0.21	No
ini.	3	0	-112.02	2142			1404	528	SLU 75	0.25	No
fin.	3	0	-234.75	-2333			1404	528	SLU 75	0.23	No
ini.	3	0	-112.02	2142			1404	528	SLU 78	0.25	No
fin.	3	0	-234.75	-2333			1404	528	SLU 78	0.23	No
ini.	3	0	-112.02	2142			1404	528	SLU 80	0.25	No
fin.	3	0	-234.75	-2333			1404	528	SLU 80	0.23	No
ini.	3	0	-112.02	2142			1404	528	SLU 76	0.25	No
fin.	3	0	-234.75	-2333			1404	528	SLU 76	0.23	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	778	121.09	1352.21	SLV 10	11.17	Si
fin.	2	-1630	-286.3	1352.21	SLV 10	4.72	Si
ini.	2	-301	-186.82	1352.21	SLV 1	7.24	Si
fin.	2	-952	-308.02	1352.21	SLV 1	4.39	Si
ini.	2	-301	-186.82	1352.21	SLV 2	7.24	Si
fin.	2	-952	-308.02	1352.21	SLV 2	4.39	Si
ini.	2	705	27.05	1352.21	SLV 6	49.99	Si
fin.	2	-1584	-348.33	1352.21	SLV 6	3.88	Si
ini.	2	778	121.09	1352.21	SLV 9	11.17	Si
fin.	2	-1630	-286.3	1352.21	SLV 9	4.72	Si
ini.	2	705	27.05	1352.21	SLV 5	49.99	Si
fin.	2	-1584	-348.33	1352.21	SLV 5	3.88	Si
ini.	2	-1091	-276.1	1352.21	SLV 4	4.9	Si
fin.	2	-457	-211.43	1352.21	SLV 4	6.4	Si
ini.	2	-1091	-276.1	1352.21	SLV 3	4.9	Si
fin.	2	-457	-211.43	1352.21	SLV 3	6.4	Si
ini.	2	-1928	-270.55	1352.21	SLV 8	5	Si
fin.	2	69	-26.38	1352.21	SLV 8	51.26	Si
ini.	2	-1928	-270.55	1352.21	SLV 7	5	Si
fin.	2	69	-26.38	1352.21	SLV 7	51.26	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	27.05	602				2106	792	SLV 5	1.32	Si
fin.	2	-348.33	-1470				2106	792	SLV 5	0.54	No
ini.	2	-176.51	2363				2106	792	SLV 11	0.34	No
fin.	2	35.65	-1772				2106	792	SLV 11	0.45	No
ini.	2	-276.1	2088				2106	792	SLV 3	0.38	No
fin.	2	-211.43	-1939				2106	792	SLV 3	0.41	No
ini.	2	-270.55	2551				2106	792	SLV 7	0.31	No
fin.	2	-26.38	-1922				2106	792	SLV 7	0.41	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-186.82	1504			2106	792	SLV 2	0.53	No
fin.	2	0	-308.02	-1803			2106	792	SLV 2	0.44	No
ini.	2	0	27.05	602			2106	792	SLV 6	1.32	Si
fin.	2	0	-348.33	-1470			2106	792	SLV 6	0.54	No
ini.	2	0	-186.82	1504			2106	792	SLV 1	0.53	No
fin.	2	0	-308.02	-1803			2106	792	SLV 1	0.44	No
ini.	2	0	-270.55	2551			2106	792	SLV 8	0.31	No
fin.	2	0	-26.38	-1922			2106	792	SLV 8	0.41	No
ini.	2	0	-176.51	2363			2106	792	SLV 12	0.34	No
fin.	2	0	35.65	-1772			2106	792	SLV 12	0.45	No
ini.	2	0	-276.1	2088			2106	792	SLV 4	0.38	No
fin.	2	0	-211.43	-1939			2106	792	SLV 4	0.41	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	3.882	SLV 5	Si
V_SLV	0.311	SLV 7	No
PF_SLU	4.913	SLU 81	Si
V_SLU	0.215	SLU 81	No

Trave di accoppiamento 5

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
27.312	17.94	0.6	1.09	0.49	28.311	17.888	0.6	1.09	0.49	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb _m	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-456	-78.76	523.31	SLU 82	6.64	Si
fin.	3	-711	-45.81	523.31	SLU 82	11.42	Si
ini.	3	-422	-72.55	523.31	SLU 75	7.21	Si
fin.	3	-656	-41.68	523.31	SLU 75	12.55	Si
ini.	3	-422	-72.55	523.31	SLU 74	7.21	Si
fin.	3	-656	-41.68	523.31	SLU 74	12.55	Si
ini.	3	-422	-72.55	523.31	SLU 73	7.21	Si
fin.	3	-656	-41.68	523.31	SLU 73	12.55	Si
ini.	3	-422	-72.55	523.31	SLU 78	7.21	Si
fin.	3	-656	-41.68	523.31	SLU 78	12.55	Si
ini.	3	-456	-78.76	523.31	SLU 83	6.64	Si
fin.	3	-711	-45.81	523.31	SLU 83	11.42	Si
ini.	3	-422	-72.55	523.31	SLU 76	7.21	Si
fin.	3	-656	-41.68	523.31	SLU 76	12.55	Si
ini.	3	-456	-78.76	523.31	SLU 84	6.64	Si
fin.	3	-711	-45.81	523.31	SLU 84	11.42	Si
ini.	3	-456	-78.76	523.31	SLU 81	6.64	Si
fin.	3	-711	-45.81	523.31	SLU 81	11.42	Si
ini.	3	-422	-72.55	523.31	SLU 79	7.21	Si
fin.	3	-656	-41.68	523.31	SLU 79	12.55	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-78.76	929			566	213	SLU 81	0.23	No
fin.	3	0	-45.81	-1788			566	213	SLU 81	0.12	No
ini.	3	0	-78.76	929			566	213	SLU 84	0.23	No
fin.	3	0	-45.81	-1788			566	213	SLU 84	0.12	No
ini.	3	0	-78.76	929			566	213	SLU 83	0.23	No
fin.	3	0	-45.81	-1788			566	213	SLU 83	0.12	No
ini.	3	0	-72.55	856			566	213	SLU 79	0.25	No
fin.	3	0	-41.68	-1637			566	213	SLU 79	0.13	No
ini.	3	0	-72.55	856			566	213	SLU 78	0.25	No
fin.	3	0	-41.68	-1637			566	213	SLU 78	0.13	No
ini.	3	0	-72.55	856			566	213	SLU 77	0.25	No
fin.	3	0	-41.68	-1637			566	213	SLU 77	0.13	No
ini.	3	0	-78.76	929			566	213	SLU 82	0.23	No
fin.	3	0	-45.81	-1788			566	213	SLU 82	0.12	No
ini.	3	0	-72.55	856			566	213	SLU 80	0.25	No
fin.	3	0	-41.68	-1637			566	213	SLU 80	0.13	No
ini.	3	0	-72.55	856			566	213	SLU 76	0.25	No
fin.	3	0	-41.68	-1637			566	213	SLU 76	0.13	No
ini.	3	0	-72.55	856			566	213	SLU 75	0.25	No
fin.	3	0	-41.68	-1637			566	213	SLU 75	0.13	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	620	-155.35	634.71	SLV 3	4.09	Si
fin.	2	1317	144.53	634.71	SLV 3	4.39	Si
ini.	2	-2782	-207.76	634.71	SLV 6	3.06	Si
fin.	2	-6656	65.83	634.71	SLV 6	9.64	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-1162	61.65	634.71	SLV 13	10.3	Si
fin.	2	-2165	-196.93	634.71	SLV 13	3.22	Si
ini.	2	-909	-226.01	634.71	SLV 2	2.81	Si
fin.	2	-2401	166.99	634.71	SLV 2	3.8	Si
ini.	2	367	132.31	634.71	SLV 16	4.8	Si
fin.	2	1553	-219.39	634.71	SLV 16	2.89	Si
ini.	2	-2782	-207.76	634.71	SLV 5	3.06	Si
fin.	2	-6656	65.83	634.71	SLV 5	9.64	Si
ini.	2	-1162	61.65	634.71	SLV 14	10.3	Si
fin.	2	-2165	-196.93	634.71	SLV 14	3.22	Si
ini.	2	620	-155.35	634.71	SLV 4	4.09	Si
fin.	2	1317	144.53	634.71	SLV 4	4.39	Si
ini.	2	367	132.31	634.71	SLV 15	4.8	Si
fin.	2	1553	-219.39	634.71	SLV 15	2.89	Si
ini.	2	-909	-226.01	634.71	SLV 1	2.81	Si
fin.	2	-2401	166.99	634.71	SLV 1	3.8	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	114.06	2054			849	320	SLV 12	0.16	No
fin.	2	0	-118.23	-2013			849	320	SLV 12	0.16	No
ini.	2	0	61.65	206			849	320	SLV 13	1.55	Si
fin.	2	0	-196.93	-1397			849	320	SLV 13	0.23	No
ini.	2	0	-207.76	-955			849	320	SLV 5	0.33	No
fin.	2	0	65.83	-68			849	320	SLV 5	4.69	Si
ini.	2	0	-207.76	-955			849	320	SLV 6	0.33	No
fin.	2	0	65.83	-68			849	320	SLV 6	4.69	Si
ini.	2	0	132.31	1091			849	320	SLV 15	0.29	No
fin.	2	0	-219.39	-1873			849	320	SLV 15	0.17	No
ini.	2	0	27.76	1995			849	320	SLV 7	0.16	No
fin.	2	0	-9.06	-1657			849	320	SLV 7	0.19	No
ini.	2	0	132.31	1091			849	320	SLV 16	0.29	No
fin.	2	0	-219.39	-1873			849	320	SLV 16	0.17	No
ini.	2	0	61.65	206			849	320	SLV 14	1.55	Si
fin.	2	0	-196.93	-1397			849	320	SLV 14	0.23	No
ini.	2	0	114.06	2054			849	320	SLV 11	0.16	No
fin.	2	0	-118.23	-2013			849	320	SLV 11	0.16	No
ini.	2	0	27.76	1995			849	320	SLV 8	0.16	No
fin.	2	0	-9.06	-1657			849	320	SLV 8	0.19	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.808	SLV 1	Si
V_SLV	0.156	SLV 11	No
PF_SLU	6.645	SLU 81	Si
V_SLU	0.119	SLU 81	No

Trave di accoppiamento 6

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
29.472	22.451	0.57	1.09	0.52	28.472	22.451	0.57	1.09	0.52	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

f _b	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-315	-138.99	411.56	SLU 82	2.96	Si
fin.	3	-327	-109.38	411.56	SLU 82	3.76	Si
ini.	3	-332	-125	411.56	SLU 75	3.29	Si
fin.	3	-342	-98.47	411.56	SLU 75	4.18	Si
ini.	3	-332	-125	411.56	SLU 77	3.29	Si
fin.	3	-342	-98.47	411.56	SLU 77	4.18	Si
ini.	3	-315	-138.99	411.56	SLU 83	2.96	Si
fin.	3	-327	-109.38	411.56	SLU 83	3.76	Si
ini.	3	-315	-138.99	411.56	SLU 81	2.96	Si
fin.	3	-327	-109.38	411.56	SLU 81	3.76	Si
ini.	3	-239	-126.26	411.56	SLU 40	3.26	Si
fin.	3	-251	-99.17	411.56	SLU 40	4.15	Si
ini.	3	-239	-126.26	411.56	SLU 39	3.26	Si
fin.	3	-251	-99.17	411.56	SLU 39	4.15	Si
ini.	3	-315	-138.99	411.56	SLU 84	2.96	Si
fin.	3	-327	-109.38	411.56	SLU 84	3.76	Si
ini.	3	-239	-126.26	411.56	SLU 42	3.26	Si
fin.	3	-251	-99.17	411.56	SLU 42	4.15	Si
ini.	3	-239	-126.26	411.56	SLU 41	3.26	Si
fin.	3	-251	-99.17	411.56	SLU 41	4.15	Si



Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-138.99	2080			401	151	SLU 82	0.07	No
fin.	3	0	-109.38	-2057			401	151	SLU 82	0.07	No
ini.	3	0	-138.99	2080			401	151	SLU 83	0.07	No
fin.	3	0	-109.38	-2057			401	151	SLU 83	0.07	No
ini.	3	0	-125	1871			401	151	SLU 77	0.08	No
fin.	3	0	-98.47	-1850			401	151	SLU 77	0.08	No
ini.	3	0	-138.99	2080			401	151	SLU 81	0.07	No
fin.	3	0	-109.38	-2057			401	151	SLU 81	0.07	No
ini.	3	0	-126.26	1903			401	151	SLU 39	0.08	No
fin.	3	0	-99.17	-1882			401	151	SLU 39	0.08	No
ini.	3	0	-126.26	1903			401	151	SLU 42	0.08	No
fin.	3	0	-99.17	-1882			401	151	SLU 42	0.08	No
ini.	3	0	-138.99	2080			401	151	SLU 84	0.07	No
fin.	3	0	-109.38	-2057			401	151	SLU 84	0.07	No
ini.	3	0	-126.26	1903			401	151	SLU 41	0.08	No
fin.	3	0	-99.17	-1882			401	151	SLU 41	0.08	No
ini.	3	0	-125	1871			401	151	SLU 75	0.08	No
fin.	3	0	-98.47	-1850			401	151	SLU 75	0.08	No
ini.	3	0	-126.26	1903			401	151	SLU 40	0.08	No
fin.	3	0	-99.17	-1882			401	151	SLU 40	0.08	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-141	-262.56	575.81	SLV 16	2.19	Si
fin.	2	-316	112.54	575.81	SLV 16	5.12	Si
ini.	2	-398	109.44	575.81	SLV 1	5.26	Si
fin.	2	-234	-233.51	575.81	SLV 1	2.47	Si
ini.	2	-110	-135.04	575.81	SLV 11	4.26	Si
fin.	2	-259	-22.24	575.81	SLV 11	25.89	Si
ini.	2	-110	-135.04	575.81	SLV 12	4.26	Si
fin.	2	-259	-22.24	575.81	SLV 12	25.89	Si
ini.	2	-319	107.67	575.81	SLV 4	5.35	Si
fin.	2	-215	-242.52	575.81	SLV 4	2.37	Si
ini.	2	-319	107.67	575.81	SLV 3	5.35	Si
fin.	2	-215	-242.52	575.81	SLV 3	2.37	Si
ini.	2	-141	-262.56	575.81	SLV 15	2.19	Si
fin.	2	-316	112.54	575.81	SLV 15	5.12	Si
ini.	2	-398	109.44	575.81	SLV 2	5.26	Si
fin.	2	-234	-233.51	575.81	SLV 2	2.47	Si
ini.	2	-221	-260.79	575.81	SLV 13	2.21	Si
fin.	2	-335	121.55	575.81	SLV 13	4.74	Si
ini.	2	-221	-260.79	575.81	SLV 14	2.21	Si
fin.	2	-335	121.55	575.81	SLV 14	4.74	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-262.56	1145			601	226	SLV 16	0.2	No
fin.	2	0	112.54	-1126			601	226	SLV 16	0.2	No
ini.	2	0	-129.14	1126			601	226	SLV 10	0.2	No
fin.	2	0	7.79	-1140			601	226	SLV 10	0.2	No
ini.	2	0	-23.97	1154			601	226	SLV 7	0.2	No
fin.	2	0	-128.76	-1114			601	226	SLV 7	0.2	No
ini.	2	0	-129.14	1126			601	226	SLV 9	0.2	No
fin.	2	0	7.79	-1140			601	226	SLV 9	0.2	No
ini.	2	0	-135.04	1155			601	226	SLV 11	0.2	No
fin.	2	0	-22.24	-1116			601	226	SLV 11	0.2	No
ini.	2	0	-23.97	1154			601	226	SLV 8	0.2	No
fin.	2	0	-128.76	-1114			601	226	SLV 8	0.2	No
ini.	2	0	-135.04	1155			601	226	SLV 12	0.2	No
fin.	2	0	-22.24	-1116			601	226	SLV 12	0.2	No
ini.	2	0	-262.56	1145			601	226	SLV 15	0.2	No
fin.	2	0	112.54	-1126			601	226	SLV 15	0.2	No
ini.	2	0	107.67	1143			601	226	SLV 3	0.2	No
fin.	2	0	-242.52	-1121			601	226	SLV 3	0.2	No
ini.	2	0	107.67	1143			601	226	SLV 4	0.2	No
fin.	2	0	-242.52	-1121			601	226	SLV 4	0.2	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.193	SLV 15	Si
V_SLV	0.196	SLV 11	No
PF_SLU	2.961	SLU 81	Si
V_SLU	0.072	SLU 81	No

Trave di accoppiamento 7

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
25.828	27.161	-1.6	-0.21	1.39	26.828	27.161	-1.6	-0.21	1.39	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

Sismicad 12.19 - Licenza assegnata a Sidel ingegneria Srl - Via Isonzo, 13 - Villanova di Castenaso (BO)



fb _u	fhk	fvk0	fhmedio	τ0	fv0	μ	φ	fvk _{lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1309	-87.12	2098.31	SLU 40	24.09	Si
fin.	3	-1626	127.58	2098.31	SLU 40	16.45	Si
ini.	3	-1309	-87.12	2098.31	SLU 39	24.09	Si
fin.	3	-1626	127.58	2098.31	SLU 39	16.45	Si
ini.	3	-1309	-87.12	2098.31	SLU 41	24.09	Si
fin.	3	-1626	127.58	2098.31	SLU 41	16.45	Si
ini.	3	-1565	-91.65	2098.31	SLU 82	22.9	Si
fin.	3	-1909	135.46	2098.31	SLU 82	15.49	Si
ini.	3	-1565	-91.65	2098.31	SLU 83	22.9	Si
fin.	3	-1909	135.46	2098.31	SLU 83	15.49	Si
ini.	3	-1565	-91.65	2098.31	SLU 84	22.9	Si
fin.	3	-1909	135.46	2098.31	SLU 84	15.49	Si
ini.	3	-1487	-80.03	2098.31	SLU 77	26.22	Si
fin.	3	-1797	118.01	2098.31	SLU 77	17.78	Si
ini.	3	-1487	-80.03	2098.31	SLU 75	26.22	Si
fin.	3	-1797	118.01	2098.31	SLU 75	17.78	Si
ini.	3	-1309	-87.12	2098.31	SLU 42	24.09	Si
fin.	3	-1626	127.58	2098.31	SLU 42	16.45	Si
ini.	3	-1565	-91.65	2098.31	SLU 81	22.9	Si
fin.	3	-1909	135.46	2098.31	SLU 81	15.49	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt _{lim}	Comb.	c.s.	Verifica
ini.	3	0	-91.65	-2424			2409	907	SLU 83	0.37	No
fin.	3	0	135.46	1942			2409	907	SLU 83	0.47	No
ini.	3	0	-80.03	-2290			2409	907	SLU 75	0.4	No
fin.	3	0	118.01	1771			2409	907	SLU 75	0.51	No
ini.	3	0	-91.65	-2424			2409	907	SLU 82	0.37	No
fin.	3	0	135.46	1942			2409	907	SLU 82	0.47	No
ini.	3	0	-80.03	-2290			2409	907	SLU 77	0.4	No
fin.	3	0	118.01	1771			2409	907	SLU 77	0.51	No
ini.	3	0	-80.03	-2290			2409	907	SLU 80	0.4	No
fin.	3	0	118.01	1771			2409	907	SLU 80	0.51	No
ini.	3	0	-80.03	-2290			2409	907	SLU 79	0.4	No
fin.	3	0	118.01	1771			2409	907	SLU 79	0.51	No
ini.	3	0	-80.03	-2290			2409	907	SLU 76	0.4	No
fin.	3	0	118.01	1771			2409	907	SLU 76	0.51	No
ini.	3	0	-91.65	-2424			2409	907	SLU 84	0.37	No
fin.	3	0	135.46	1942			2409	907	SLU 84	0.47	No
ini.	3	0	-80.03	-2290			2409	907	SLU 78	0.4	No
fin.	3	0	118.01	1771			2409	907	SLU 78	0.51	No
ini.	3	0	-91.65	-2424			2409	907	SLU 81	0.37	No
fin.	3	0	135.46	1942			2409	907	SLU 81	0.47	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	912	-1247.98	2209.71	SLV 1	1.77	Si
fin.	2	-1715	1254.39	2209.71	SLV 1	1.76	Si
ini.	2	1459	-1092.35	2209.71	SLV 9	2.02	Si
fin.	2	162	221.34	2209.71	SLV 9	9.98	Si
ini.	2	912	-1247.98	2209.71	SLV 2	1.77	Si
fin.	2	-1715	1254.39	2209.71	SLV 2	1.76	Si
ini.	2	-4189	1491.49	2209.71	SLV 11	1.48	Si
fin.	2	-2110	-716.27	2209.71	SLV 11	3.09	Si
ini.	2	2119	-1581.57	2209.71	SLV 5	1.4	Si
fin.	2	-337	849.59	2209.71	SLV 5	2.6	Si
ini.	2	-2982	1157.9	2209.71	SLV 15	1.91	Si
fin.	2	-732	-1121.07	2209.71	SLV 15	1.97	Si
ini.	2	1459	-1092.35	2209.71	SLV 10	2.02	Si
fin.	2	162	221.34	2209.71	SLV 10	9.98	Si
ini.	2	2119	-1581.57	2209.71	SLV 6	1.4	Si
fin.	2	-337	849.59	2209.71	SLV 6	2.6	Si
ini.	2	-2982	1157.9	2209.71	SLV 16	1.91	Si
fin.	2	-732	-1121.07	2209.71	SLV 16	1.97	Si
ini.	2	-4189	1491.49	2209.71	SLV 12	1.48	Si
fin.	2	-2110	-716.27	2209.71	SLV 12	3.09	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt _{lim}	Comb.	c.s.	Verifica
ini.	2	0	1157.9	-5599			3613	1360	SLV 15	0.24	No
fin.	2	0	-1121.07	-2659			3613	1360	SLV 15	0.51	No
ini.	2	0	1491.49	-5804			3613	1360	SLV 11	0.23	No
fin.	2	0	-716.27	-1952			3613	1360	SLV 11	0.7	No
ini.	2	0	-1247.98	2453			3613	1360	SLV 2	0.55	No
fin.	2	0	1254.39	4899			3613	1360	SLV 2	0.28	No
ini.	2	0	1157.9	-5599			3613	1360	SLV 16	0.24	No
fin.	2	0	-1121.07	-2659			3613	1360	SLV 16	0.51	No
ini.	2	0	-1247.98	2453			3613	1360	SLV 1	0.55	No
fin.	2	0	1254.39	4899			3613	1360	SLV 1	0.28	No
ini.	2	0	1002.27	-3986			3613	1360	SLV 8	0.34	No
fin.	2	0	-88.02	-68			3613	1360	SLV 8	20.09	Si
ini.	2	0	-1581.57	2658			3613	1360	SLV 5	0.51	No
fin.	2	0	849.59	4192			3613	1360	SLV 5	0.32	No
ini.	2	0	1002.27	-3986			3613	1360	SLV 7	0.34	No
fin.	2	0	-88.02	-68			3613	1360	SLV 7	20.09	Si



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	1491.49	-5804			3613	1360	SLV 12	0.23	No
fin.	2	0	-716.27	-1952			3613	1360	SLV 12	0.7	No
ini.	2	0	-1581.57	2658			3613	1360	SLV 6	0.51	No
fin.	2	0	849.59	4192			3613	1360	SLV 6	0.32	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.397	SLV 5	Si
V_SLV	0.234	SLV 11	No
PF_SLU	15.49	SLU 81	Si
V_SLU	0.374	SLU 81	No

Trave di accoppiamento 8

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
25.828	27.161	0.19	1.09	0.9	26.828	27.161	0.19	1.09	0.9	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fhk	fvk0	fhmmedio	t0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-55	-308.16	1240.81	SLU 73	4.03	Si
fin.	3	-280	-70.12	1240.81	SLU 73	17.7	Si
ini.	3	-68	-339.15	1240.81	SLU 84	3.66	Si
fin.	3	-300	-70.22	1240.81	SLU 84	17.67	Si
ini.	3	-55	-308.16	1240.81	SLU 79	4.03	Si
fin.	3	-280	-70.12	1240.81	SLU 79	17.7	Si
ini.	3	-68	-339.15	1240.81	SLU 82	3.66	Si
fin.	3	-300	-70.22	1240.81	SLU 82	17.67	Si
ini.	3	-55	-308.16	1240.81	SLU 74	4.03	Si
fin.	3	-280	-70.12	1240.81	SLU 74	17.7	Si
ini.	3	-68	-339.15	1240.81	SLU 81	3.66	Si
fin.	3	-300	-70.22	1240.81	SLU 81	17.67	Si
ini.	3	-55	-308.16	1240.81	SLU 75	4.03	Si
fin.	3	-280	-70.12	1240.81	SLU 75	17.7	Si
ini.	3	-55	-308.16	1240.81	SLU 78	4.03	Si
fin.	3	-280	-70.12	1240.81	SLU 78	17.7	Si
ini.	3	-55	-308.16	1240.81	SLU 76	4.03	Si
fin.	3	-280	-70.12	1240.81	SLU 76	17.7	Si
ini.	3	-68	-339.15	1240.81	SLU 83	3.66	Si
fin.	3	-300	-70.22	1240.81	SLU 83	17.67	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-339.15	2148			1404	528	SLU 82	0.25	No
fin.	3	0	-70.22	-2192			1404	528	SLU 82	0.24	No
ini.	3	0	-339.15	2148			1404	528	SLU 83	0.25	No
fin.	3	0	-70.22	-2192			1404	528	SLU 83	0.24	No
ini.	3	0	-308.16	1978			1404	528	SLU 74	0.27	No
fin.	3	0	-70.12	-2051			1404	528	SLU 74	0.26	No
ini.	3	0	-308.16	1978			1404	528	SLU 76	0.27	No
fin.	3	0	-70.12	-2051			1404	528	SLU 76	0.26	No
ini.	3	0	-339.15	2148			1404	528	SLU 81	0.25	No
fin.	3	0	-70.22	-2192			1404	528	SLU 81	0.24	No
ini.	3	0	-339.15	2148			1404	528	SLU 84	0.25	No
fin.	3	0	-70.22	-2192			1404	528	SLU 84	0.24	No
ini.	3	0	-308.16	1978			1404	528	SLU 75	0.27	No
fin.	3	0	-70.12	-2051			1404	528	SLU 75	0.26	No
ini.	3	0	-308.16	1978			1404	528	SLU 78	0.27	No
fin.	3	0	-70.12	-2051			1404	528	SLU 78	0.26	No
ini.	3	0	-308.16	1978			1404	528	SLU 79	0.27	No
fin.	3	0	-70.12	-2051			1404	528	SLU 79	0.26	No
ini.	3	0	-308.16	1978			1404	528	SLU 73	0.27	No
fin.	3	0	-70.12	-2051			1404	528	SLU 73	0.26	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2		1370	-1277.29	1352.21	SLV 2	1.06
fin.	2		4649	572.69	1352.21	SLV 2	2.36
ini.	2		-519	-220.11	1352.21	SLV 10	6.14
fin.	2		3084	1617.36	1352.21	SLV 10	0.84
ini.	2		-361	421.7	1352.21	SLV 11	3.21
fin.	2		-5567	-1793.62	1352.21	SLV 11	0.75
ini.	2		485	-169.9	1352.21	SLV 7	7.96
fin.	2		-3447	-1724.77	1352.21	SLV 7	0.78
ini.	2		327	-811.72	1352.21	SLV 6	1.67
fin.	2		5204	1686.21	1352.21	SLV 6	0.8
ini.	2		-361	421.7	1352.21	SLV 12	3.21
fin.	2		-5567	-1793.62	1352.21	SLV 12	0.75



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	1370	-1277.29	1352.21	SLV 1	1.06	Si
fin.	2	4649	572.69	1352.21	SLV 1	2.36	Si
ini.	2	485	-169.9	1352.21	SLV 8	7.96	Si
fin.	2	-3447	-1724.77	1352.21	SLV 8	0.78	No
ini.	2	-519	-220.11	1352.21	SLV 9	6.14	Si
fin.	2	3084	1617.36	1352.21	SLV 9	0.84	No
ini.	2	327	-811.72	1352.21	SLV 5	1.67	Si
fin.	2	5204	1686.21	1352.21	SLV 5	0.8	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-1277.29	5120			2106	792	SLV 1	0.15	No
fin.	2	0	572.69	1698			2106	792	SLV 1	0.47	No
ini.	2	0	-811.72	7322			2106	792	SLV 6	0.11	No
fin.	2	0	1686.21	3325			2106	792	SLV 6	0.24	No
ini.	2	0	-169.9	-3433			2106	792	SLV 8	0.23	No
fin.	2	0	-1724.77	-4981			2106	792	SLV 8	0.16	No
ini.	2	0	-1277.29	5120			2106	792	SLV 2	0.15	No
fin.	2	0	572.69	1698			2106	792	SLV 2	0.47	No
ini.	2	0	-169.9	-3433			2106	792	SLV 7	0.23	No
fin.	2	0	-1724.77	-4981			2106	792	SLV 7	0.16	No
ini.	2	0	-811.72	7322			2106	792	SLV 5	0.11	No
fin.	2	0	1686.21	3325			2106	792	SLV 5	0.24	No
ini.	2	0	421.7	-4772			2106	792	SLV 11	0.17	No
fin.	2	0	-1793.62	-6078			2106	792	SLV 11	0.13	No
ini.	2	0	421.7	-4772			2106	792	SLV 12	0.17	No
fin.	2	0	-1793.62	-6078			2106	792	SLV 12	0.13	No
ini.	2	0	-220.11	5983			2106	792	SLV 10	0.13	No
fin.	2	0	1617.36	2227			2106	792	SLV 10	0.36	No
ini.	2	0	-220.11	5983			2106	792	SLV 9	0.13	No
fin.	2	0	1617.36	2227			2106	792	SLV 9	0.36	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.754	SLV 11	No
V_SLV	0.108	SLV 5	No
PF_SLU	3.659	SLU 81	Si
V_SLU	0.241	SLU 81	No

Trave di accoppiamento 9

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
30.248	27.161	-1.6	-0.21	1.39	31.248	27.161	-1.6	-0.21	1.39	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	t ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1902	210.73	2098.31	SLU 78	9.96	Si
fin.	3	-1576	-164.26	2098.31	SLU 78	12.77	Si
ini.	3	-1902	210.73	2098.31	SLU 79	9.96	Si
fin.	3	-1576	-164.26	2098.31	SLU 79	12.77	Si
ini.	3	-1902	210.73	2098.31	SLU 73	9.96	Si
fin.	3	-1576	-164.26	2098.31	SLU 73	12.77	Si
ini.	3	-1902	210.73	2098.31	SLU 75	9.96	Si
fin.	3	-1576	-164.26	2098.31	SLU 75	12.77	Si
ini.	3	-2020	228.89	2098.31	SLU 83	9.17	Si
fin.	3	-1659	-181.67	2098.31	SLU 83	11.55	Si
ini.	3	-1902	210.73	2098.31	SLU 76	9.96	Si
fin.	3	-1576	-164.26	2098.31	SLU 76	12.77	Si
ini.	3	-2020	228.89	2098.31	SLU 82	9.17	Si
fin.	3	-1659	-181.67	2098.31	SLU 82	11.55	Si
ini.	3	-2020	228.89	2098.31	SLU 81	9.17	Si
fin.	3	-1659	-181.67	2098.31	SLU 81	11.55	Si
ini.	3	-2020	228.89	2098.31	SLU 84	9.17	Si
fin.	3	-1659	-181.67	2098.31	SLU 84	11.55	Si
ini.	3	-1902	210.73	2098.31	SLU 74	9.96	Si
fin.	3	-1576	-164.26	2098.31	SLU 74	12.77	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	210.73	-2469			2409	907	SLU 75	0.37	No
fin.	3	0	-164.26	996			2409	907	SLU 75	0.91	No
ini.	3	0	228.89	-2678			2409	907	SLU 84	0.34	No
fin.	3	0	-181.67	1068			2409	907	SLU 84	0.85	No
ini.	3	0	210.73	-2469			2409	907	SLU 78	0.37	No
fin.	3	0	-164.26	996			2409	907	SLU 78	0.91	No
ini.	3	0	228.89	-2678			2409	907	SLU 82	0.34	No
fin.	3	0	-181.67	1068			2409	907	SLU 82	0.85	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	210.73	-2469			2409	907	SLU 73	0.37	No
fin.	3	0	-164.26	996			2409	907	SLU 73	0.91	No
ini.	3	0	210.73	-2469			2409	907	SLU 79	0.37	No
fin.	3	0	-164.26	996			2409	907	SLU 79	0.91	No
ini.	3	0	210.73	-2469			2409	907	SLU 74	0.37	No
fin.	3	0	-164.26	996			2409	907	SLU 74	0.91	No
ini.	3	0	228.89	-2678			2409	907	SLU 81	0.34	No
fin.	3	0	-181.67	1068			2409	907	SLU 81	0.85	No
ini.	3	0	210.73	-2469			2409	907	SLU 76	0.37	No
fin.	3	0	-164.26	996			2409	907	SLU 76	0.91	No
ini.	3	0	228.89	-2678			2409	907	SLU 83	0.34	No
fin.	3	0	-181.67	1068			2409	907	SLU 83	0.85	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-283	282.19	2209.71	SLV 5	7.83	Si
fin.	2	1549	-1186.93	2209.71	SLV 5	1.86	Si
ini.	2	-986	794.82	2209.71	SLV 9	2.78	Si
fin.	2	2031	-1761.76	2209.71	SLV 9	1.25	Si
ini.	2	-321	-838.17	2209.71	SLV 3	2.64	Si
fin.	2	-2762	1267.47	2209.71	SLV 3	1.74	Si
ini.	2	-2269	1111.65	2209.71	SLV 14	1.99	Si
fin.	2	575	-1471.89	2209.71	SLV 14	1.5	Si
ini.	2	-1604	-521.34	2209.71	SLV 7	4.24	Si
fin.	2	-4218	1557.34	2209.71	SLV 7	1.42	Si
ini.	2	-986	794.82	2209.71	SLV 10	2.78	Si
fin.	2	2031	-1761.76	2209.71	SLV 10	1.25	Si
ini.	2	-321	-838.17	2209.71	SLV 4	2.64	Si
fin.	2	-2762	1267.47	2209.71	SLV 4	1.74	Si
ini.	2	-1604	-521.34	2209.71	SLV 8	4.24	Si
fin.	2	-4218	1557.34	2209.71	SLV 8	1.42	Si
ini.	2	-283	282.19	2209.71	SLV 6	7.83	Si
fin.	2	1549	-1186.93	2209.71	SLV 6	1.86	Si
ini.	2	-2269	1111.65	2209.71	SLV 13	1.99	Si
fin.	2	575	-1471.89	2209.71	SLV 13	1.5	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	1111.65	-5053			3613	1360	SLV 13	0.27	No
fin.	2	0	-1471.89	-3353			3613	1360	SLV 13	0.41	No
ini.	2	0	870.59	-4568			3613	1360	SLV 15	0.3	No
fin.	2	0	-648.61	-1608			3613	1360	SLV 15	0.85	No
ini.	2	0	-521.34	170			3613	1360	SLV 8	8.01	Si
fin.	2	0	1557.34	4511			3613	1360	SLV 8	0.3	No
ini.	2	0	794.82	-3372			3613	1360	SLV 9	0.4	No
fin.	2	0	-1761.76	-3190			3613	1360	SLV 9	0.43	No
ini.	2	0	1111.65	-5053			3613	1360	SLV 14	0.27	No
fin.	2	0	-1471.89	-3353			3613	1360	SLV 14	0.41	No
ini.	2	0	794.82	-3372			3613	1360	SLV 10	0.4	No
fin.	2	0	-1761.76	-3190			3613	1360	SLV 10	0.43	No
ini.	2	0	-838.17	1851			3613	1360	SLV 3	0.73	No
fin.	2	0	1267.47	4674			3613	1360	SLV 3	0.29	No
ini.	2	0	-838.17	1851			3613	1360	SLV 4	0.73	No
fin.	2	0	1267.47	4674			3613	1360	SLV 4	0.29	No
ini.	2	0	870.59	-4568			3613	1360	SLV 16	0.3	No
fin.	2	0	-648.61	-1608			3613	1360	SLV 16	0.85	No
ini.	2	0	-521.34	170			3613	1360	SLV 7	8.01	Si
fin.	2	0	1557.34	4511			3613	1360	SLV 7	0.3	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.254	SLV 9	Si
V_SLV	0.269	SLV 13	No
PF_SLU	9.167	SLU 81	Si
V_SLU	0.338	SLU 81	No

Trave di accoppiamento 10

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
30.248	27.161	0.19	1.09	0.9	31.248	27.161	0.19	1.09	0.9	1	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-331	-36.23	1240.81	SLU 75	34.25	Si
fin.	3	-128	-225.46	1240.81	SLU 75	5.5	Si
ini.	3	-331	-36.23	1240.81	SLU 74	34.25	Si
fin.	3	-128	-225.46	1240.81	SLU 74	5.5	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-350	-37.24	1240.81	SLU 83	33.32	Si
fin.	3	-137	-246.69	1240.81	SLU 83	5.03	Si
ini.	3	-350	-37.24	1240.81	SLU 82	33.32	Si
fin.	3	-137	-246.69	1240.81	SLU 82	5.03	Si
ini.	3	-350	-37.24	1240.81	SLU 84	33.32	Si
fin.	3	-137	-246.69	1240.81	SLU 84	5.03	Si
ini.	3	-331	-36.23	1240.81	SLU 78	34.25	Si
fin.	3	-128	-225.46	1240.81	SLU 78	5.5	Si
ini.	3	-350	-37.24	1240.81	SLU 81	33.32	Si
fin.	3	-137	-246.69	1240.81	SLU 81	5.03	Si
ini.	3	-331	-36.23	1240.81	SLU 73	34.25	Si
fin.	3	-128	-225.46	1240.81	SLU 73	5.5	Si
ini.	3	-331	-36.23	1240.81	SLU 79	34.25	Si
fin.	3	-128	-225.46	1240.81	SLU 79	5.5	Si
ini.	3	-331	-36.23	1240.81	SLU 76	34.25	Si
fin.	3	-128	-225.46	1240.81	SLU 76	5.5	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-36.23	2473			1404	528	SLU 79	0.21	No
fin.	3	0	-225.46	-1712			1404	528	SLU 79	0.31	No
ini.	3	0	-37.24	2658			1404	528	SLU 83	0.2	No
fin.	3	0	-246.69	-1835			1404	528	SLU 83	0.29	No
ini.	3	0	-37.24	2658			1404	528	SLU 82	0.2	No
fin.	3	0	-246.69	-1835			1404	528	SLU 82	0.29	No
ini.	3	0	-37.24	2658			1404	528	SLU 81	0.2	No
fin.	3	0	-246.69	-1835			1404	528	SLU 81	0.29	No
ini.	3	0	-36.23	2473			1404	528	SLU 76	0.21	No
fin.	3	0	-225.46	-1712			1404	528	SLU 76	0.31	No
ini.	3	0	-36.23	2473			1404	528	SLU 73	0.21	No
fin.	3	0	-225.46	-1712			1404	528	SLU 73	0.31	No
ini.	3	0	-37.24	2658			1404	528	SLU 84	0.2	No
fin.	3	0	-246.69	-1835			1404	528	SLU 84	0.29	No
ini.	3	0	-36.23	2473			1404	528	SLU 75	0.21	No
fin.	3	0	-225.46	-1712			1404	528	SLU 75	0.31	No
ini.	3	0	-36.23	2473			1404	528	SLU 78	0.21	No
fin.	3	0	-225.46	-1712			1404	528	SLU 78	0.31	No
ini.	3	0	-36.23	2473			1404	528	SLU 74	0.21	No
fin.	3	0	-225.46	-1712			1404	528	SLU 74	0.31	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	5104	-159.85	1352.21	SLV 13	8.46	Si
fin.	2	1885	-1434.15	1352.21	SLV 13	0.94	No
ini.	2	7835	151.5	1352.21	SLV 10	8.93	Si
fin.	2	2580	-1558.84	1352.21	SLV 10	0.87	No
ini.	2	-8281	-203.17	1352.21	SLV 7	6.66	Si
fin.	2	-2738	1270.8	1352.21	SLV 7	1.06	Si
ini.	2	5104	-159.85	1352.21	SLV 14	8.46	Si
fin.	2	1885	-1434.15	1352.21	SLV 14	0.94	No
ini.	2	-5550	108.18	1352.21	SLV 4	12.5	Si
fin.	2	-2043	1146.11	1352.21	SLV 4	1.18	Si
ini.	2	7835	151.5	1352.21	SLV 9	8.93	Si
fin.	2	2580	-1558.84	1352.21	SLV 9	0.87	No
ini.	2	5916	274.94	1352.21	SLV 5	4.92	Si
fin.	2	1811	-988.06	1352.21	SLV 5	1.37	Si
ini.	2	5916	274.94	1352.21	SLV 6	4.92	Si
fin.	2	1811	-988.06	1352.21	SLV 6	1.37	Si
ini.	2	-5550	108.18	1352.21	SLV 3	12.5	Si
fin.	2	-2043	1146.11	1352.21	SLV 3	1.18	Si
ini.	2	-8281	-203.17	1352.21	SLV 8	6.66	Si
fin.	2	-2738	1270.8	1352.21	SLV 8	1.06	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	151.5	-1317			2106	792	SLV 9	0.6	No
fin.	2	0	-1558.84	-6189			2106	792	SLV 9	0.13	No
ini.	2	0	-203.17	4592			2106	792	SLV 7	0.17	No
fin.	2	0	1270.8	3916			2106	792	SLV 7	0.2	No
ini.	2	0	-203.17	4592			2106	792	SLV 8	0.17	No
fin.	2	0	1270.8	3916			2106	792	SLV 8	0.2	No
ini.	2	0	108.18	4369			2106	792	SLV 4	0.18	No
fin.	2	0	1146.11	2168			2106	792	SLV 4	0.37	No
ini.	2	0	108.18	4369			2106	792	SLV 3	0.18	No
fin.	2	0	1146.11	2168			2106	792	SLV 3	0.37	No
ini.	2	0	274.94	-100			2106	792	SLV 6	7.93	Si
fin.	2	0	-988.06	-5010			2106	792	SLV 6	0.16	No
ini.	2	0	274.94	-100			2106	792	SLV 5	7.93	Si
fin.	2	0	-988.06	-5010			2106	792	SLV 5	0.16	No
ini.	2	0	151.5	-1317			2106	792	SLV 10	0.6	No
fin.	2	0	-1558.84	-6189			2106	792	SLV 10	0.13	No
ini.	2	0	-159.85	-1094			2106	792	SLV 14	0.72	No
fin.	2	0	-1434.15	-4441			2106	792	SLV 14	0.18	No
ini.	2	0	-159.85	-1094			2106	792	SLV 13	0.72	No
fin.	2	0	-1434.15	-4441			2106	792	SLV 13	0.18	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF SLV	0.867	SLV 9	No



Stato limite	Coeff.s.	Comb.	Verifica
V SLV	0.128	SLV 9	No
PF SLU	5.03	SLU 81	Si
V SLU	0.199	SLU 81	No

Trave di accoppiamento 11

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
32.757	17.833	-1.6	-0.21	1.39	33.189	18.25	-1.6	-0.21	1.39	0.6	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-924	-494.19	2098.31	SLU 79	4.25	Si
fin.	3	-750	-43.4	2098.31	SLU 79	48.35	Si
ini.	3	-997	-530.09	2098.31	SLU 84	3.96	Si
fin.	3	-796	-41.7	2098.31	SLU 84	50.32	Si
ini.	3	-924	-494.19	2098.31	SLU 75	4.25	Si
fin.	3	-750	-43.4	2098.31	SLU 75	48.35	Si
ini.	3	-924	-494.19	2098.31	SLU 76	4.25	Si
fin.	3	-750	-43.4	2098.31	SLU 76	48.35	Si
ini.	3	-997	-530.09	2098.31	SLU 82	3.96	Si
fin.	3	-796	-41.7	2098.31	SLU 82	50.32	Si
ini.	3	-997	-530.09	2098.31	SLU 83	3.96	Si
fin.	3	-796	-41.7	2098.31	SLU 83	50.32	Si
ini.	3	-924	-494.19	2098.31	SLU 73	4.25	Si
fin.	3	-750	-43.4	2098.31	SLU 73	48.35	Si
ini.	3	-924	-494.19	2098.31	SLU 74	4.25	Si
fin.	3	-750	-43.4	2098.31	SLU 74	48.35	Si
ini.	3	-997	-530.09	2098.31	SLU 81	3.96	Si
fin.	3	-796	-41.7	2098.31	SLU 81	50.32	Si
ini.	3	-924	-494.19	2098.31	SLU 78	4.25	Si
fin.	3	-750	-43.4	2098.31	SLU 78	48.35	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-494.19	-4910			2409	907	SLU 75	0.18	No
fin.	3	0	-43.4	2664			2409	907	SLU 75	0.34	No
ini.	3	0	-494.19	-4910			2409	907	SLU 76	0.18	No
fin.	3	0	-43.4	2664			2409	907	SLU 76	0.34	No
ini.	3	0	-494.19	-4910			2409	907	SLU 74	0.18	No
fin.	3	0	-43.4	2664			2409	907	SLU 74	0.34	No
ini.	3	0	-494.19	-4910			2409	907	SLU 79	0.18	No
fin.	3	0	-43.4	2664			2409	907	SLU 79	0.34	No
ini.	3	0	-494.19	-4910			2409	907	SLU 78	0.18	No
fin.	3	0	-43.4	2664			2409	907	SLU 78	0.34	No
ini.	3	0	-530.09	-5284			2409	907	SLU 83	0.17	No
fin.	3	0	-41.7	2812			2409	907	SLU 83	0.32	No
ini.	3	0	-530.09	-5284			2409	907	SLU 84	0.17	No
fin.	3	0	-41.7	2812			2409	907	SLU 84	0.32	No
ini.	3	0	-494.19	-4910			2409	907	SLU 73	0.18	No
fin.	3	0	-43.4	2664			2409	907	SLU 73	0.34	No
ini.	3	0	-530.09	-5284			2409	907	SLU 82	0.17	No
fin.	3	0	-41.7	2812			2409	907	SLU 82	0.32	No
ini.	3	0	-530.09	-5284			2409	907	SLU 81	0.17	No
fin.	3	0	-41.7	2812			2409	907	SLU 81	0.32	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-1614	440.38	2209.71	SLV 12	5.02	Si
fin.	2	597	-1156.05	2209.71	SLV 12	1.91	Si
ini.	2	395	-1099.19	2209.71	SLV 5	2.01	Si
fin.	2	-1622	1087.13	2209.71	SLV 5	2.03	Si
ini.	2	-1791	439.98	2209.71	SLV 15	5.02	Si
fin.	2	383	-952.47	2209.71	SLV 15	2.32	Si
ini.	2	-1033	85.36	2209.71	SLV 8	25.89	Si
fin.	2	226	-772.62	2209.71	SLV 8	2.86	Si
ini.	2	-1614	440.38	2209.71	SLV 11	5.02	Si
fin.	2	597	-1156.05	2209.71	SLV 11	1.91	Si
ini.	2	-1033	85.36	2209.71	SLV 7	25.89	Si
fin.	2	226	-772.62	2209.71	SLV 7	2.86	Si
ini.	2	572	-1098.79	2209.71	SLV 1	2.01	Si
fin.	2	-1408	883.55	2209.71	SLV 1	2.5	Si
ini.	2	-1791	439.98	2209.71	SLV 16	5.02	Si
fin.	2	383	-952.47	2209.71	SLV 16	2.32	Si
ini.	2	572	-1098.79	2209.71	SLV 2	2.01	Si
fin.	2	-1408	883.55	2209.71	SLV 2	2.5	Si
ini.	2	395	-1099.19	2209.71	SLV 6	2.01	Si
fin.	2	-1622	1087.13	2209.71	SLV 6	2.03	Si



Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	84.62	-5800			3613	1360	SLV 13	0.23	No
fin.	2	0	-394.54	304			3613	1360	SLV 13	4.47	Si
ini.	2	0	-1098.79	-541			3613	1360	SLV 1	2.52	Si
fin.	2	0	883.55	6583			3613	1360	SLV 1	0.21	No
ini.	2	0	84.62	-5800			3613	1360	SLV 14	0.23	No
fin.	2	0	-394.54	304			3613	1360	SLV 14	4.47	Si
ini.	2	0	439.98	-5966			3613	1360	SLV 16	0.23	No
fin.	2	0	-952.47	-2907			3613	1360	SLV 16	0.47	No
ini.	2	0	-744.16	-3765			3613	1360	SLV 10	0.36	No
fin.	2	0	703.7	6248			3613	1360	SLV 10	0.22	No
ini.	2	0	-744.16	-3765			3613	1360	SLV 9	0.36	No
fin.	2	0	703.7	6248			3613	1360	SLV 9	0.22	No
ini.	2	0	-1098.79	-541			3613	1360	SLV 2	2.52	Si
fin.	2	0	883.55	6583			3613	1360	SLV 2	0.21	No
ini.	2	0	439.98	-5966			3613	1360	SLV 15	0.23	No
fin.	2	0	-952.47	-2907			3613	1360	SLV 15	0.47	No
ini.	2	0	-1099.19	-2187			3613	1360	SLV 5	0.62	No
fin.	2	0	1087.13	8132			3613	1360	SLV 5	0.17	No
ini.	2	0	-1099.19	-2187			3613	1360	SLV 6	0.62	No
fin.	2	0	1087.13	8132			3613	1360	SLV 6	0.17	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.911	SLV 11	Si
V_SLV	0.167	SLV 5	No
PF_SLU	3.958	SLU 81	Si
V_SLU	0.172	SLU 81	No

Trave di accoppiamento 12

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
32.757	17.833	0.19	1.09	0.9	33.189	18.25	0.19	1.09	0.9	0.6	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	305	-1298.26	1240.81	SLU 84	0.96	No
fin.	3	305	-59.67	1240.81	SLU 84	20.8	Si
ini.	3	282	-1184.48	1240.81	SLU 74	1.05	Si
fin.	3	282	-50.78	1240.81	SLU 74	24.43	Si
ini.	3	305	-1298.26	1240.81	SLU 81	0.96	No
fin.	3	305	-59.67	1240.81	SLU 81	20.8	Si
ini.	3	305	-1298.26	1240.81	SLU 83	0.96	No
fin.	3	305	-59.67	1240.81	SLU 83	20.8	Si
ini.	3	282	-1184.48	1240.81	SLU 73	1.05	Si
fin.	3	282	-50.78	1240.81	SLU 73	24.43	Si
ini.	3	282	-1184.48	1240.81	SLU 78	1.05	Si
fin.	3	282	-50.78	1240.81	SLU 78	24.43	Si
ini.	3	282	-1184.48	1240.81	SLU 75	1.05	Si
fin.	3	282	-50.78	1240.81	SLU 75	24.43	Si
ini.	3	282	-1184.48	1240.81	SLU 79	1.05	Si
fin.	3	282	-50.78	1240.81	SLU 79	24.43	Si
ini.	3	305	-1298.26	1240.81	SLU 82	0.96	No
fin.	3	305	-59.67	1240.81	SLU 82	20.8	Si
ini.	3	282	-1184.48	1240.81	SLU 76	1.05	Si
fin.	3	282	-50.78	1240.81	SLU 76	24.43	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-1184.48	2530			1560	587	SLU 73	0.23	No
fin.	3	0	-50.78	1373			1560	587	SLU 73	0.43	No
ini.	3	0	-1184.48	2530			1560	587	SLU 79	0.23	No
fin.	3	0	-50.78	1373			1560	587	SLU 79	0.43	No
ini.	3	0	-1298.26	2756			1560	587	SLU 81	0.21	No
fin.	3	0	-59.67	1518			1560	587	SLU 81	0.39	No
ini.	3	0	-1184.48	2530			1560	587	SLU 74	0.23	No
fin.	3	0	-50.78	1373			1560	587	SLU 74	0.43	No
ini.	3	0	-1184.48	2530			1560	587	SLU 76	0.23	No
fin.	3	0	-50.78	1373			1560	587	SLU 76	0.43	No
ini.	3	0	-1184.48	2530			1560	587	SLU 78	0.23	No
fin.	3	0	-50.78	1373			1560	587	SLU 78	0.43	No
ini.	3	0	-1298.26	2756			1560	587	SLU 83	0.21	No
fin.	3	0	-59.67	1518			1560	587	SLU 83	0.39	No
ini.	3	0	-1184.48	2530			1560	587	SLU 75	0.23	No
fin.	3	0	-50.78	1373			1560	587	SLU 75	0.43	No
ini.	3	0	-1298.26	2756			1560	587	SLU 82	0.21	No
fin.	3	0	-59.67	1518			1560	587	SLU 82	0.39	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-1298.26	2756			1560	587	SLU 84	0.21	No
fin.	3	0	-59.67	1518			1560	587	SLU 84	0.39	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	230	-2349.16	1352.21	SLV 6	0.58	No
fin.	2	382	1197.85	1352.21	SLV 6	1.13	Si
ini.	2	1172	262.08	1352.21	SLV 15	5.16	Si
fin.	2	499	-1422.2	1352.21	SLV 15	0.95	No
ini.	2	-800	-1774.89	1352.21	SLV 2	0.76	No
fin.	2	-127	1367.29	1352.21	SLV 2	0.99	No
ini.	2	-800	-1774.89	1352.21	SLV 1	0.76	No
fin.	2	-127	1367.29	1352.21	SLV 1	0.99	No
ini.	2	230	-2349.16	1352.21	SLV 5	0.58	No
fin.	2	382	1197.85	1352.21	SLV 5	1.13	Si
ini.	2	889	-1992.68	1352.21	SLV 9	0.68	No
fin.	2	627	520.6	1352.21	SLV 9	2.6	Si
ini.	2	142	836.35	1352.21	SLV 11	1.62	Si
fin.	2	-10	-1252.76	1352.21	SLV 11	1.08	Si
ini.	2	889	-1992.68	1352.21	SLV 10	0.68	No
fin.	2	627	520.6	1352.21	SLV 10	2.6	Si
ini.	2	142	836.35	1352.21	SLV 12	1.62	Si
fin.	2	-10	-1252.76	1352.21	SLV 12	1.08	Si
ini.	2	1172	262.08	1352.21	SLV 16	5.16	Si
fin.	2	499	-1422.2	1352.21	SLV 16	0.95	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	262.08	-2574			2340	880	SLV 15	0.34	No
fin.	2	0	-1422.2	-4015			2340	880	SLV 15	0.22	No
ini.	2	0	-1992.68	3985			2340	880	SLV 10	0.22	No
fin.	2	0	520.6	3840			2340	880	SLV 10	0.23	No
ini.	2	0	-2349.16	5910			2340	880	SLV 6	0.15	No
fin.	2	0	1197.85	6034			2340	880	SLV 6	0.15	No
ini.	2	0	836.35	-2650			2340	880	SLV 11	0.33	No
fin.	2	0	-1252.76	-4306			2340	880	SLV 11	0.2	No
ini.	2	0	-1774.89	5833			2340	880	SLV 1	0.15	No
fin.	2	0	1367.29	5744			2340	880	SLV 1	0.15	No
ini.	2	0	-1774.89	5833			2340	880	SLV 2	0.15	No
fin.	2	0	1367.29	5744			2340	880	SLV 2	0.15	No
ini.	2	0	836.35	-2650			2340	880	SLV 12	0.33	No
fin.	2	0	-1252.76	-4306			2340	880	SLV 12	0.2	No
ini.	2	0	262.08	-2574			2340	880	SLV 16	0.34	No
fin.	2	0	-1422.2	-4015			2340	880	SLV 16	0.22	No
ini.	2	0	-1992.68	3985			2340	880	SLV 9	0.22	No
fin.	2	0	520.6	3840			2340	880	SLV 9	0.23	No
ini.	2	0	-2349.16	5910			2340	880	SLV 5	0.15	No
fin.	2	0	1197.85	6034			2340	880	SLV 5	0.15	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.576	SLV 5	No
V_SLV	0.146	SLV 5	No
PF_SLU	0.956	SLU 81	No
V_SLU	0.213	SLU 81	No

Trave di accoppiamento 13

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
33.371	23.706	0.5	1.09	0.59	33.371	22.756	0.5	1.09	0.59	0.95	0.45	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fhk	fvk0	fkhmedio	τ0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1274	-434.9	698.31	SLU 76	1.61	Si
fin.	3	-578	93.64	698.31	SLU 76	7.46	Si
ini.	3	-1382	-478.96	698.31	SLU 84	1.46	Si
fin.	3	-593	119.2	698.31	SLU 84	5.86	Si
ini.	3	-1382	-478.96	698.31	SLU 83	1.46	Si
fin.	3	-593	119.2	698.31	SLU 83	5.86	Si
ini.	3	-1382	-478.96	698.31	SLU 82	1.46	Si
fin.	3	-593	119.2	698.31	SLU 82	5.86	Si
ini.	3	-1274	-434.9	698.31	SLU 79	1.61	Si
fin.	3	-578	93.64	698.31	SLU 79	7.46	Si
ini.	3	-1274	-434.9	698.31	SLU 75	1.61	Si
fin.	3	-578	93.64	698.31	SLU 75	7.46	Si
ini.	3	-1274	-434.9	698.31	SLU 78	1.61	Si
fin.	3	-578	93.64	698.31	SLU 78	7.46	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1382	-478.96	698.31	SLU 81	1.46	Si
fin.	3	-593	119.2	698.31	SLU 81	5.86	Si
ini.	3	-1274	-434.9	698.31	SLU 80	1.61	Si
fin.	3	-578	93.64	698.31	SLU 80	7.46	Si
ini.	3	-1274	-434.9	698.31	SLU 77	1.61	Si
fin.	3	-578	93.64	698.31	SLU 77	7.46	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-478.96	1977			682	257	SLU 84	0.13	No
fin.	3	0	119.2	-217			682	257	SLU 84	1.18	Si
ini.	3	0	-434.9	1823			682	257	SLU 74	0.14	No
fin.	3	0	93.64	-269			682	257	SLU 74	0.95	No
ini.	3	0	-478.96	1977			682	257	SLU 81	0.13	No
fin.	3	0	119.2	-217			682	257	SLU 81	1.18	Si
ini.	3	0	-434.9	1823			682	257	SLU 76	0.14	No
fin.	3	0	93.64	-269			682	257	SLU 76	0.95	No
ini.	3	0	-434.9	1823			682	257	SLU 75	0.14	No
fin.	3	0	93.64	-269			682	257	SLU 75	0.95	No
ini.	3	0	-434.9	1823			682	257	SLU 73	0.14	No
fin.	3	0	93.64	-269			682	257	SLU 73	0.95	No
ini.	3	0	-434.9	1823			682	257	SLU 78	0.14	No
fin.	3	0	93.64	-269			682	257	SLU 78	0.95	No
ini.	3	0	-478.96	1977			682	257	SLU 82	0.13	No
fin.	3	0	119.2	-217			682	257	SLU 82	1.18	Si
ini.	3	0	-434.9	1823			682	257	SLU 79	0.14	No
fin.	3	0	93.64	-269			682	257	SLU 79	0.95	No
ini.	3	0	-478.96	1977			682	257	SLU 83	0.13	No
fin.	3	0	119.2	-217			682	257	SLU 83	1.18	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	389	-274.73			809.71	SLV 9		SLV 9	2.95	Si
fin.	2	889	128.63			809.71	SLV 9		SLV 9	6.29	Si
ini.	2	-1419	-437.91			809.71	SLV 15		SLV 15	1.85	Si
fin.	2	-646	150.14			809.71	SLV 15		SLV 15	5.39	Si
ini.	2	-2174	-362.43			809.71	SLV 11		SLV 11	2.23	Si
fin.	2	-1643	22.49			809.71	SLV 11		SLV 11	36	Si
ini.	2	-2174	-362.43			809.71	SLV 12		SLV 12	2.23	Si
fin.	2	-1643	22.49			809.71	SLV 12		SLV 12	36	Si
ini.	2	-2052	-271.42			809.71	SLV 8		SLV 8	2.98	Si
fin.	2	-1738	-55.08			809.71	SLV 8		SLV 8	14.7	Si
ini.	2	-2052	-271.42			809.71	SLV 7		SLV 7	2.98	Si
fin.	2	-1738	-55.08			809.71	SLV 7		SLV 7	14.7	Si
ini.	2	389	-274.73			809.71	SLV 10		SLV 10	2.95	Si
fin.	2	889	128.63			809.71	SLV 10		SLV 10	6.29	Si
ini.	2	-650	-411.6			809.71	SLV 14		SLV 14	1.97	Si
fin.	2	113	181.98			809.71	SLV 14		SLV 14	4.45	Si
ini.	2	-1419	-437.91			809.71	SLV 16		SLV 16	1.85	Si
fin.	2	-646	150.14			809.71	SLV 16		SLV 16	5.39	Si
ini.	2	-650	-411.6			809.71	SLV 13		SLV 13	1.97	Si
fin.	2	113	181.98			809.71	SLV 13		SLV 13	4.45	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-411.6	1456			1022	385	SLV 14	0.26	No
fin.	2	0	181.98	-659			1022	385	SLV 14	0.58	No
ini.	2	0	-411.6	1456			1022	385	SLV 13	0.26	No
fin.	2	0	181.98	-659			1022	385	SLV 13	0.58	No
ini.	2	0	-271.42	1722			1022	385	SLV 8	0.22	No
fin.	2	0	-55.08	717			1022	385	SLV 8	0.54	No
ini.	2	0	-362.43	2005			1022	385	SLV 12	0.19	No
fin.	2	0	22.49	661			1022	385	SLV 12	0.58	No
ini.	2	0	-274.73	652			1022	385	SLV 10	0.59	No
fin.	2	0	128.63	-1270			1022	385	SLV 10	0.3	No
ini.	2	0	-274.73	652			1022	385	SLV 9	0.59	No
fin.	2	0	128.63	-1270			1022	385	SLV 9	0.3	No
ini.	2	0	-271.42	1722			1022	385	SLV 7	0.22	No
fin.	2	0	-55.08	717			1022	385	SLV 7	0.54	No
ini.	2	0	-437.91	1862			1022	385	SLV 15	0.21	No
fin.	2	0	150.14	-79			1022	385	SLV 15	4.85	Si
ini.	2	0	-362.43	2005			1022	385	SLV 11	0.19	No
fin.	2	0	22.49	661			1022	385	SLV 11	0.58	No
ini.	2	0	-437.91	1862			1022	385	SLV 16	0.21	No
fin.	2	0	150.14	-79			1022	385	SLV 16	4.85	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.849	SLV 15	Si
V_SLV	0.192	SLV 11	No
PF_SLU	1.458	SLU 81	Si
V_SLU	0.13	SLU 81	No

Trave di accoppiamento 14

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)



Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.042	20.644	1.09	2.09	1	23.989	19.646	1.09	2.09	1	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-332	-33.78	1248.72	SLU 60	36.96	Si
fin.	3	-933	-2.37	1248.72	SLU 60	526.53	Si
ini.	3	-333	-32.57	1248.72	SLU 75	38.33	Si
fin.	3	-926	-4.57	1248.72	SLU 75	273.02	Si
ini.	3	-371	-34.24	1248.72	SLU 83	36.47	Si
fin.	3	-1015	-4.53	1248.72	SLU 83	275.83	Si
ini.	3	-332	-33.78	1248.72	SLU 63	36.96	Si
fin.	3	-933	-2.37	1248.72	SLU 63	526.53	Si
ini.	3	-332	-33.78	1248.72	SLU 61	36.96	Si
fin.	3	-933	-2.37	1248.72	SLU 61	526.53	Si
ini.	3	-332	-33.78	1248.72	SLU 62	36.96	Si
fin.	3	-933	-2.37	1248.72	SLU 62	526.53	Si
ini.	3	-333	-32.57	1248.72	SLU 76	38.33	Si
fin.	3	-926	-4.57	1248.72	SLU 76	273.02	Si
ini.	3	-371	-34.24	1248.72	SLU 81	36.47	Si
fin.	3	-1015	-4.53	1248.72	SLU 81	275.83	Si
ini.	3	-371	-34.24	1248.72	SLU 84	36.47	Si
fin.	3	-1015	-4.53	1248.72	SLU 84	275.83	Si
ini.	3	-371	-34.24	1248.72	SLU 82	36.47	Si
fin.	3	-1015	-4.53	1248.72	SLU 82	275.83	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-34.24	-964			1155	435	SLU 83	0.45	No
fin.	3	0	-4.53	2473			1155	435	SLU 83	0.18	No
ini.	3	0	-34.24	-964			1155	435	SLU 82	0.45	No
fin.	3	0	-4.53	2473			1155	435	SLU 82	0.18	No
ini.	3	0	-32.57	-896			1155	435	SLU 75	0.49	No
fin.	3	0	-4.57	2302			1155	435	SLU 75	0.19	No
ini.	3	0	-34.24	-964			1155	435	SLU 81	0.45	No
fin.	3	0	-4.53	2473			1155	435	SLU 81	0.18	No
ini.	3	0	-32.57	-896			1155	435	SLU 79	0.49	No
fin.	3	0	-4.57	2302			1155	435	SLU 79	0.19	No
ini.	3	0	-32.57	-896			1155	435	SLU 76	0.49	No
fin.	3	0	-4.57	2302			1155	435	SLU 76	0.19	No
ini.	3	0	-32.57	-896			1155	435	SLU 73	0.49	No
fin.	3	0	-4.57	2302			1155	435	SLU 73	0.19	No
ini.	3	0	-32.57	-896			1155	435	SLU 78	0.49	No
fin.	3	0	-4.57	2302			1155	435	SLU 78	0.19	No
ini.	3	0	-32.57	-896			1155	435	SLU 74	0.49	No
fin.	3	0	-4.57	2302			1155	435	SLU 74	0.19	No
ini.	3	0	-34.24	-964			1155	435	SLU 84	0.45	No
fin.	3	0	-4.53	2473			1155	435	SLU 84	0.18	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-1219	248.79	1415.81	SLV 9	5.69	Si
fin.	2	-1180	-338.2	1415.81	SLV 9	4.19	Si
ini.	2	-194	-25.95	1415.81	SLV 2	54.57	Si
fin.	2	-478	-240.39	1415.81	SLV 2	5.89	Si
ini.	2	637	-248.49	1415.81	SLV 12	5.7	Si
fin.	2	-170	407.29	1415.81	SLV 12	3.48	Si
ini.	2	-1219	248.79	1415.81	SLV 10	5.69	Si
fin.	2	-1180	-338.2	1415.81	SLV 10	4.19	Si
ini.	2	-1045	202.32	1415.81	SLV 5	7	Si
fin.	2	-1020	-413.48	1415.81	SLV 5	3.42	Si
ini.	2	637	-248.49	1415.81	SLV 11	5.7	Si
fin.	2	-170	407.29	1415.81	SLV 11	3.48	Si
ini.	2	-194	-25.95	1415.81	SLV 1	54.57	Si
fin.	2	-478	-240.39	1415.81	SLV 1	5.89	Si
ini.	2	-1045	202.32	1415.81	SLV 6	7	Si
fin.	2	-1020	-413.48	1415.81	SLV 6	3.42	Si
ini.	2	810	-294.96	1415.81	SLV 7	4.8	Si
fin.	2	-9	332	1415.81	SLV 7	4.26	Si
ini.	2	810	-294.96	1415.81	SLV 8	4.8	Si
fin.	2	-9	332	1415.81	SLV 8	4.26	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-175.13	-675			1733	652	SLV 4	0.97	No
fin.	2	0	-16.75	1985			1733	652	SLV 4	0.33	No
ini.	2	0	202.32	-1713			1733	652	SLV 6	0.38	No
fin.	2	0	-413.48	1062			1733	652	SLV 6	0.61	No
ini.	2	0	202.32	-1713			1733	652	SLV 5	0.38	No
fin.	2	0	-413.48	1062			1733	652	SLV 5	0.61	No
ini.	2	0	-294.96	298			1733	652	SLV 8	2.19	Si
fin.	2	0	332	2180			1733	652	SLV 8	0.3	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-25.95	-1278			1733	652	SLV 2	0.51	No
fin.	2	0	-240.39	1650			1733	652	SLV 2	0.4	No
ini.	2	0	-248.49	528			1733	652	SLV 11	1.24	Si
fin.	2	0	407.29	2011			1733	652	SLV 11	0.32	No
ini.	2	0	-175.13	-675			1733	652	SLV 3	0.97	No
fin.	2	0	-16.75	1985			1733	652	SLV 3	0.33	No
ini.	2	0	-294.96	298			1733	652	SLV 7	2.19	Si
fin.	2	0	332	2180			1733	652	SLV 7	0.3	No
ini.	2	0	-248.49	528			1733	652	SLV 12	1.24	Si
fin.	2	0	407.29	2011			1733	652	SLV 12	0.32	No
ini.	2	0	-25.95	-1278			1733	652	SLV 1	0.51	No
fin.	2	0	-240.39	1650			1733	652	SLV 1	0.4	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	3.424	SLV 5	Si
V_SLV	0.299	SLV 7	No
PF_SLU	36.474	SLU 81	Si
V_SLU	0.176	SLU 81	No

Trave di accoppiamento 15

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.042	20.644	3.99	4.89	0.9	23.989	19.646	3.99	4.89	0.9	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb _m	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	1642	-75.24	1073.72	SLU 45	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 45	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 50	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 50	8.68	Si
ini.	3	1909	-83.14	1073.72	SLU 64	12.91	Si
fin.	3	1909	122.38	1073.72	SLU 64	8.77	Si
ini.	3	1642	-75.24	1073.72	SLU 43	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 43	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 51	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 51	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 46	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 46	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 44	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 44	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 49	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 49	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 48	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 48	8.68	Si
ini.	3	1642	-75.24	1073.72	SLU 47	14.27	Si
fin.	3	1642	123.72	1073.72	SLU 47	8.68	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-105.53	486			936	352	SLU 75	0.72	No
fin.	3	0	118.88	-94			936	352	SLU 75	3.76	Si
ini.	3	0	-105.53	486			936	352	SLU 77	0.72	No
fin.	3	0	118.88	-94			936	352	SLU 77	3.76	Si
ini.	3	0	-115.13	495			936	352	SLU 81	0.71	No
fin.	3	0	117.38	-86			936	352	SLU 81	4.08	Si
ini.	3	0	-115.13	495			936	352	SLU 82	0.71	No
fin.	3	0	117.38	-86			936	352	SLU 82	4.08	Si
ini.	3	0	-115.13	495			936	352	SLU 83	0.71	No
fin.	3	0	117.38	-86			936	352	SLU 83	4.08	Si
ini.	3	0	-105.53	486			936	352	SLU 78	0.72	No
fin.	3	0	118.88	-94			936	352	SLU 78	3.76	Si
ini.	3	0	-105.53	486			936	352	SLU 79	0.72	No
fin.	3	0	118.88	-94			936	352	SLU 79	3.76	Si
ini.	3	0	-105.53	486			936	352	SLU 80	0.72	No
fin.	3	0	118.88	-94			936	352	SLU 80	3.76	Si
ini.	3	0	-115.13	495			936	352	SLU 84	0.71	No
fin.	3	0	117.38	-86			936	352	SLU 84	4.08	Si
ini.	3	0	-105.53	486			936	352	SLU 76	0.72	No
fin.	3	0	118.88	-94			936	352	SLU 76	3.76	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	3105	92.37	1240.81	SLV 5	13.43	Si
fin.	2	2778	-289.47	1240.81	SLV 5	4.29	Si
ini.	2	48	-229.6	1240.81	SLV 11	5.4	Si
fin.	2	375	476.34	1240.81	SLV 11	2.6	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	496	-214.34	1240.81	SLV 8	5.79	Si
fin.	2	822	467.86	1240.81	SLV 8	2.65	Si
ini.	2	440	-140.05	1240.81	SLV 16	8.86	Si
fin.	2	539	221.18	1240.81	SLV 16	5.61	Si
ini.	2	3105	92.37	1240.81	SLV 6	13.43	Si
fin.	2	2778	-289.47	1240.81	SLV 6	4.29	Si
ini.	2	2658	77.11	1240.81	SLV 9	16.09	Si
fin.	2	2331	-280.98	1240.81	SLV 9	4.42	Si
ini.	2	2658	77.11	1240.81	SLV 10	16.09	Si
fin.	2	2331	-280.98	1240.81	SLV 10	4.42	Si
ini.	2	496	-214.34	1240.81	SLV 7	5.79	Si
fin.	2	822	467.86	1240.81	SLV 7	2.65	Si
ini.	2	440	-140.05	1240.81	SLV 15	8.86	Si
fin.	2	539	221.18	1240.81	SLV 15	5.61	Si
ini.	2	48	-229.6	1240.81	SLV 12	5.4	Si
fin.	2	375	476.34	1240.81	SLV 12	2.6	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-214.34	854			1404	528	SLV 8	0.62	No
fin.	2	0	467.86	403			1404	528	SLV 8	1.31	Si
ini.	2	0	-229.6	896			1404	528	SLV 12	0.59	No
fin.	2	0	476.34	474			1404	528	SLV 12	1.11	Si
ini.	2	0	-140.05	586			1404	528	SLV 15	0.9	No
fin.	2	0	221.18	194			1404	528	SLV 15	2.73	Si
ini.	2	0	92.37	-174			1404	528	SLV 6	3.04	Si
fin.	2	0	-289.47	-637			1404	528	SLV 6	0.83	No
ini.	2	0	92.37	-174			1404	528	SLV 5	3.04	Si
fin.	2	0	-289.47	-637			1404	528	SLV 5	0.83	No
ini.	2	0	77.11	-132			1404	528	SLV 9	4.01	Si
fin.	2	0	-280.98	-565			1404	528	SLV 9	0.93	No
ini.	2	0	-214.34	854			1404	528	SLV 7	0.62	No
fin.	2	0	467.86	403			1404	528	SLV 7	1.31	Si
ini.	2	0	-140.05	586			1404	528	SLV 16	0.9	No
fin.	2	0	221.18	194			1404	528	SLV 16	2.73	Si
ini.	2	0	-229.6	896			1404	528	SLV 11	0.59	No
fin.	2	0	476.34	474			1404	528	SLV 11	1.11	Si
ini.	2	0	77.11	-132			1404	528	SLV 10	4.01	Si
fin.	2	0	-280.98	-565			1404	528	SLV 10	0.93	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.605	SLV 11	Si
V_SLV	0.589	SLV 11	No
PF_SLU	8.678	SLU 43	Si
V_SLU	0.711	SLU 81	No

Trave di accoppiamento 16

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.284	25.288	1.09	2.09	1	24.232	24.289	1.09	2.09	1	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-553	39.35	1248.72	SLU 50	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 50	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 48	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 48	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 51	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 51	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 44	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 44	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 43	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 43	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 46	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 46	150.32	Si
ini.	3	-623	37.13	1248.72	SLU 64	33.63	Si
fin.	3	-362	-2.34	1248.72	SLU 64	533.11	Si
ini.	3	-553	39.35	1248.72	SLU 45	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 45	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 47	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 47	150.32	Si
ini.	3	-553	39.35	1248.72	SLU 49	31.74	Si
fin.	3	-294	-8.31	1248.72	SLU 49	150.32	Si



Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt _{lim}	Comb.	c.s.	Verifica
ini.	3	0	33.12	-1795			1155	435	SLU 78	0.24	No
fin.	3	0	12.7	1197			1155	435	SLU 78	0.36	No
ini.	3	0	33.12	-1795			1155	435	SLU 77	0.24	No
fin.	3	0	12.7	1197			1155	435	SLU 77	0.36	No
ini.	3	0	31.41	-1922			1155	435	SLU 84	0.23	No
fin.	3	0	19.15	1314			1155	435	SLU 84	0.33	No
ini.	3	0	33.12	-1795			1155	435	SLU 75	0.24	No
fin.	3	0	12.7	1197			1155	435	SLU 75	0.36	No
ini.	3	0	31.41	-1922			1155	435	SLU 82	0.23	No
fin.	3	0	19.15	1314			1155	435	SLU 82	0.33	No
ini.	3	0	33.12	-1795			1155	435	SLU 80	0.24	No
fin.	3	0	12.7	1197			1155	435	SLU 80	0.36	No
ini.	3	0	33.12	-1795			1155	435	SLU 76	0.24	No
fin.	3	0	12.7	1197			1155	435	SLU 76	0.36	No
ini.	3	0	31.41	-1922			1155	435	SLU 83	0.23	No
fin.	3	0	19.15	1314			1155	435	SLU 83	0.33	No
ini.	3	0	33.12	-1795			1155	435	SLU 79	0.24	No
fin.	3	0	12.7	1197			1155	435	SLU 79	0.36	No
ini.	3	0	31.41	-1922			1155	435	SLU 81	0.23	No
fin.	3	0	19.15	1314			1155	435	SLU 81	0.33	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-521	-318.76	1415.81	SLV 12	4.44	Si
fin.	2	-1210	241.3	1415.81	SLV 12	5.87	Si
ini.	2	-903	-53.93	1415.81	SLV 15	26.25	Si
fin.	2	-855	173.56	1415.81	SLV 15	8.16	Si
ini.	2	-515	374.57	1415.81	SLV 6	3.78	Si
fin.	2	586	-238.93	1415.81	SLV 6	5.93	Si
ini.	2	-515	374.57	1415.81	SLV 5	3.78	Si
fin.	2	586	-238.93	1415.81	SLV 5	5.93	Si
ini.	2	-768	389.18	1415.81	SLV 10	3.64	Si
fin.	2	405	-172.77	1415.81	SLV 10	8.19	Si
ini.	2	-903	-53.93	1415.81	SLV 16	26.25	Si
fin.	2	-855	173.56	1415.81	SLV 16	8.16	Si
ini.	2	-268	-333.37	1415.81	SLV 7	4.25	Si
fin.	2	-1030	175.14	1415.81	SLV 7	8.08	Si
ini.	2	-521	-318.76	1415.81	SLV 11	4.44	Si
fin.	2	-1210	241.3	1415.81	SLV 11	5.87	Si
ini.	2	-768	389.18	1415.81	SLV 9	3.64	Si
fin.	2	405	-172.77	1415.81	SLV 9	8.19	Si
ini.	2	-268	-333.37	1415.81	SLV 8	4.25	Si
fin.	2	-1030	175.14	1415.81	SLV 8	8.08	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt _{lim}	Comb.	c.s.	Verifica
ini.	2	0	389.18	-1980			1733	652	SLV 9	0.33	No
fin.	2	0	-172.77	-423			1733	652	SLV 9	1.54	Si
ini.	2	0	109.74	-1829			1733	652	SLV 2	0.36	No
fin.	2	0	-171.19	939			1733	652	SLV 2	0.69	No
ini.	2	0	389.18	-1980			1733	652	SLV 10	0.33	No
fin.	2	0	-172.77	-423			1733	652	SLV 10	1.54	Si
ini.	2	0	374.57	-2194			1733	652	SLV 6	0.3	No
fin.	2	0	-238.93	-128			1733	652	SLV 6	5.08	Si
ini.	2	0	-318.76	-221			1733	652	SLV 11	2.96	Si
fin.	2	0	241.3	1647			1733	652	SLV 11	0.4	No
ini.	2	0	-333.37	-435			1733	652	SLV 8	1.5	Si
fin.	2	0	175.14	1941			1733	652	SLV 8	0.34	No
ini.	2	0	-333.37	-435			1733	652	SLV 7	1.5	Si
fin.	2	0	175.14	1941			1733	652	SLV 7	0.34	No
ini.	2	0	-318.76	-221			1733	652	SLV 12	2.96	Si
fin.	2	0	241.3	1647			1733	652	SLV 12	0.4	No
ini.	2	0	109.74	-1829			1733	652	SLV 1	0.36	No
fin.	2	0	-171.19	939			1733	652	SLV 1	0.69	No
ini.	2	0	374.57	-2194			1733	652	SLV 5	0.3	No
fin.	2	0	-238.93	-128			1733	652	SLV 5	5.08	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	3.638	SLV 9	Si
V_SLV	0.297	SLV 5	No
PF_SLU	31.737	SLU 43	Si
V_SLU	0.226	SLU 81	No

Trave di accoppiamento 17

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
24.284	25.288	3.99	4.89	0.9	24.232	24.289	3.99	4.89	0.9	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti



fb _u	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	γ _M	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	1805	43.33	1073.72	SLU 51	24.78	Si
fin.	3	1805	-17.07	1073.72	SLU 51	62.92	Si
ini.	3	2874	-57.38	1073.72	SLU 39	18.71	Si
fin.	3	2874	14.61	1073.72	SLU 39	73.51	Si
ini.	3	2874	-57.38	1073.72	SLU 42	18.71	Si
fin.	3	2874	14.61	1073.72	SLU 42	73.51	Si
ini.	3	1805	43.33	1073.72	SLU 47	24.78	Si
fin.	3	1805	-17.07	1073.72	SLU 47	62.92	Si
ini.	3	1805	43.33	1073.72	SLU 50	24.78	Si
fin.	3	1805	-17.07	1073.72	SLU 50	62.92	Si
ini.	3	1805	43.33	1073.72	SLU 46	24.78	Si
fin.	3	1805	-17.07	1073.72	SLU 46	62.92	Si
ini.	3	2874	-57.38	1073.72	SLU 41	18.71	Si
fin.	3	2874	14.61	1073.72	SLU 41	73.51	Si
ini.	3	2874	-57.38	1073.72	SLU 40	18.71	Si
fin.	3	2874	14.61	1073.72	SLU 40	73.51	Si
ini.	3	1805	43.33	1073.72	SLU 48	24.78	Si
fin.	3	1805	-17.07	1073.72	SLU 48	62.92	Si
ini.	3	1805	43.33	1073.72	SLU 49	24.78	Si
fin.	3	1805	-17.07	1073.72	SLU 49	62.92	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	γ _M	N	M	V	V _t	V _p	V _t fess. diag.	V _{t,lim}	Comb.	c.s.	Verifica
ini.	3	0	-22.29	331			936	352	SLU 79	1.06	Si
fin.	3	0	3.07	-247			936	352	SLU 79	1.43	Si
ini.	3	0	-22.29	331			936	352	SLU 80	1.06	Si
fin.	3	0	3.07	-247			936	352	SLU 80	1.43	Si
ini.	3	0	-22.29	331			936	352	SLU 75	1.06	Si
fin.	3	0	3.07	-247			936	352	SLU 75	1.43	Si
ini.	3	0	-22.29	331			936	352	SLU 76	1.06	Si
fin.	3	0	3.07	-247			936	352	SLU 76	1.43	Si
ini.	3	0	-42.53	358			936	352	SLU 81	0.98	No
fin.	3	0	9.03	-221			936	352	SLU 81	1.59	Si
ini.	3	0	-42.53	358			936	352	SLU 84	0.98	No
fin.	3	0	9.03	-221			936	352	SLU 84	1.59	Si
ini.	3	0	-22.29	331			936	352	SLU 77	1.06	Si
fin.	3	0	3.07	-247			936	352	SLU 77	1.43	Si
ini.	3	0	-22.29	331			936	352	SLU 78	1.06	Si
fin.	3	0	3.07	-247			936	352	SLU 78	1.43	Si
ini.	3	0	-42.53	358			936	352	SLU 83	0.98	No
fin.	3	0	9.03	-221			936	352	SLU 83	1.59	Si
ini.	3	0	-42.53	358			936	352	SLU 82	0.98	No
fin.	3	0	9.03	-221			936	352	SLU 82	1.59	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γ _M	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	1003	378.07	1240.81	SLV 6	3.28	Si
fin.	2	670	-188.44	1240.81	SLV 6	6.58	Si
ini.	2	2105	127.28	1240.81	SLV 2	9.75	Si
fin.	2	1979	-45.72	1240.81	SLV 2	27.14	Si
ini.	2	636	373.42	1240.81	SLV 10	3.32	Si
fin.	2	321	-198.22	1240.81	SLV 10	6.26	Si
ini.	2	2562	-358.61	1240.81	SLV 11	3.46	Si
fin.	2	2895	176.98	1240.81	SLV 11	7.01	Si
ini.	2	2929	-353.97	1240.81	SLV 7	3.51	Si
fin.	2	3244	186.75	1240.81	SLV 7	6.64	Si
ini.	2	2929	-353.97	1240.81	SLV 8	3.51	Si
fin.	2	3244	186.75	1240.81	SLV 8	6.64	Si
ini.	2	2105	127.28	1240.81	SLV 1	9.75	Si
fin.	2	1979	-45.72	1240.81	SLV 1	27.14	Si
ini.	2	2562	-358.61	1240.81	SLV 12	3.46	Si
fin.	2	2895	176.98	1240.81	SLV 12	7.01	Si
ini.	2	1003	378.07	1240.81	SLV 5	3.28	Si
fin.	2	670	-188.44	1240.81	SLV 5	6.58	Si
ini.	2	636	373.42	1240.81	SLV 9	3.32	Si
fin.	2	321	-198.22	1240.81	SLV 9	6.26	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	γ _M	N	M	V	V _t	V _p	V _t fess. diag.	V _{t,lim}	Comb.	c.s.	Verifica
ini.	2	0	373.42	-281			1404	528	SLV 10	1.88	Si
fin.	2	0	-198.22	-776			1404	528	SLV 10	0.68	No
ini.	2	0	-353.97	716			1404	528	SLV 8	0.74	No
fin.	2	0	186.75	329			1404	528	SLV 8	1.6	Si
ini.	2	0	-358.61	788			1404	528	SLV 11	0.67	No
fin.	2	0	176.98	327			1404	528	SLV 11	1.61	Si
ini.	2	0	378.07	-352			1404	528	SLV 6	1.5	Si
fin.	2	0	-188.44	-775			1404	528	SLV 6	0.68	No
ini.	2	0	373.42	-281			1404	528	SLV 9	1.88	Si
fin.	2	0	-198.22	-776			1404	528	SLV 9	0.68	No
ini.	2	0	-358.61	788			1404	528	SLV 12	0.67	No
fin.	2	0	176.98	327			1404	528	SLV 12	1.61	Si
ini.	2	0	-107.82	497			1404	528	SLV 15	1.06	Si
fin.	2	0	34.25	-61			1404	528	SLV 15	8.67	Si
ini.	2	0	-353.97	716			1404	528	SLV 7	0.74	No
fin.	2	0	186.75	329			1404	528	SLV 7	1.6	Si



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-107.82	497			1404	528	SLV 16	1.06	Si
fin.	2	0	34.25	-61			1404	528	SLV 16	8.67	Si
ini.	2	0	378.07	-352			1404	528	SLV 5	1.5	Si
fin.	2	0	-188.44	-775			1404	528	SLV 5	0.68	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	3.282	SLV 5	Si
V_SLV	0.67	SLV 11	No
PF_SLU	18.714	SLU 39	Si
V_SLU	0.984	SLU 81	No

Trave di accoppiamento 18

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
29.372	22.451	3.19	4.89	1.7	28.572	22.451	3.19	4.89	1.7	0.8	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fhk	fvk0	fhmmedio	t0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-6449	718.87	2473.72	SLU 83	3.44	Si
fin.	3	-6449	767.72	2473.72	SLU 83	3.22	Si
ini.	3	-6106	702.7	2473.72	SLU 39	3.52	Si
fin.	3	-6106	747	2473.72	SLU 39	3.31	Si
ini.	3	-5587	599.94	2473.72	SLU 77	4.12	Si
fin.	3	-5587	645.21	2473.72	SLU 77	3.83	Si
ini.	3	-6449	718.87	2473.72	SLU 84	3.44	Si
fin.	3	-6449	767.72	2473.72	SLU 84	3.22	Si
ini.	3	-5587	599.94	2473.72	SLU 75	4.12	Si
fin.	3	-5587	645.21	2473.72	SLU 75	3.83	Si
ini.	3	-6106	702.7	2473.72	SLU 42	3.52	Si
fin.	3	-6106	747	2473.72	SLU 42	3.31	Si
ini.	3	-6106	702.7	2473.72	SLU 41	3.52	Si
fin.	3	-6106	747	2473.72	SLU 41	3.31	Si
ini.	3	-6449	718.87	2473.72	SLU 82	3.44	Si
fin.	3	-6449	767.72	2473.72	SLU 82	3.22	Si
ini.	3	-6449	718.87	2473.72	SLU 81	3.44	Si
fin.	3	-6449	767.72	2473.72	SLU 81	3.22	Si
ini.	3	-6106	702.7	2473.72	SLU 40	3.52	Si
fin.	3	-6106	747	2473.72	SLU 40	3.31	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	718.87	3432			1964	739	SLU 81	0.22	No
fin.	3	0	767.72	-1510			1964	739	SLU 81	0.49	No
ini.	3	0	702.7	3265			1964	739	SLU 41	0.23	No
fin.	3	0	747	-1383			1964	739	SLU 41	0.53	No
ini.	3	0	601.1	2950			1964	739	SLU 63	0.25	No
fin.	3	0	641.91	-1343			1964	739	SLU 63	0.55	No
ini.	3	0	718.87	3432			1964	739	SLU 84	0.22	No
fin.	3	0	767.72	-1510			1964	739	SLU 84	0.49	No
ini.	3	0	718.87	3432			1964	739	SLU 83	0.22	No
fin.	3	0	767.72	-1510			1964	739	SLU 83	0.49	No
ini.	3	0	718.87	3432			1964	739	SLU 82	0.22	No
fin.	3	0	767.72	-1510			1964	739	SLU 82	0.49	No
ini.	3	0	702.7	3265			1964	739	SLU 39	0.23	No
fin.	3	0	747	-1383			1964	739	SLU 39	0.53	No
ini.	3	0	702.7	3265			1964	739	SLU 40	0.23	No
fin.	3	0	747	-1383			1964	739	SLU 40	0.53	No
ini.	3	0	601.1	2950			1964	739	SLU 62	0.25	No
fin.	3	0	641.91	-1343			1964	739	SLU 62	0.55	No
ini.	3	0	702.7	3265			1964	739	SLU 42	0.23	No
fin.	3	0	747	-1383			1964	739	SLU 42	0.53	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-2734	1435.81	2640.81	SLV 3	1.84	Si
fin.	2	-3453	-1004.92	2640.81	SLV 3	2.63	Si
ini.	2	-2973	1396.98	2640.81	SLV 2	1.89	Si
fin.	2	-3705	-1043.55	2640.81	SLV 2	2.53	Si
ini.	2	-2789	31.66	2640.81	SLV 11	83.42	Si
fin.	2	-2550	801.24	2640.81	SLV 11	3.3	Si
ini.	2	-3487	-832.93	2640.81	SLV 13	3.17	Si
fin.	2	-2768	1665.83	2640.81	SLV 13	1.59	Si
ini.	2	-3248	-794.11	2640.81	SLV 15	3.33	Si
fin.	2	-2516	1704.46	2640.81	SLV 15	1.55	Si
ini.	2	-2973	1396.98	2640.81	SLV 1	1.89	Si
fin.	2	-3705	-1043.55	2640.81	SLV 1	2.53	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-2789	31.66	2640.81	SLV 12	83.42	Si
fin.	2	-2550	801.24	2640.81	SLV 12	3.3	Si
ini.	2	-3487	-832.93	2640.81	SLV 14	3.17	Si
fin.	2	-2768	1665.83	2640.81	SLV 14	1.59	Si
ini.	2	-2734	1435.81	2640.81	SLV 4	1.84	Si
fin.	2	-3453	-1004.92	2640.81	SLV 4	2.63	Si
ini.	2	-3248	-794.11	2640.81	SLV 16	3.33	Si
fin.	2	-2516	1704.46	2640.81	SLV 16	1.55	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	1396.98	-2019			2946	1109	SLV 1	0.55	No
fin.	2	0	-1043.55	-4339			2946	1109	SLV 1	0.26	No
ini.	2	0	1435.81	-2154			2946	1109	SLV 3	0.51	No
fin.	2	0	-1004.92	-4556			2946	1109	SLV 3	0.24	No
ini.	2	0	-97.76	2903			2946	1109	SLV 10	0.38	No
fin.	2	0	672.49	679			2946	1109	SLV 10	1.63	Si
ini.	2	0	-794.11	5177			2946	1109	SLV 15	0.21	No
fin.	2	0	1704.46	2774			2946	1109	SLV 15	0.4	No
ini.	2	0	1435.81	-2154			2946	1109	SLV 4	0.51	No
fin.	2	0	-1004.92	-4556			2946	1109	SLV 4	0.24	No
ini.	2	0	-832.93	5312			2946	1109	SLV 14	0.21	No
fin.	2	0	1665.83	2991			2946	1109	SLV 14	0.37	No
ini.	2	0	-97.76	2903			2946	1109	SLV 9	0.38	No
fin.	2	0	672.49	679			2946	1109	SLV 9	1.63	Si
ini.	2	0	1396.98	-2019			2946	1109	SLV 2	0.55	No
fin.	2	0	-1043.55	-4339			2946	1109	SLV 2	0.26	No
ini.	2	0	-794.11	5177			2946	1109	SLV 16	0.21	No
fin.	2	0	1704.46	2774			2946	1109	SLV 16	0.4	No
ini.	2	0	-832.93	5312			2946	1109	SLV 13	0.21	No
fin.	2	0	1665.83	2991			2946	1109	SLV 13	0.37	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.549	SLV 15	Si
V_SLV	0.209	SLV 13	No
PF_SLU	3.222	SLU 81	Si
V_SLU	0.215	SLU 81	No

Trave di accoppiamento 19

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
25.828	27.236	1.09	2.09	1	26.828	27.236	1.09	2.09	1	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fhk	fvk0	fmedio	t0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	5466	-1012.23	1248.72	SLU 81	1.23	Si
fin.	3	5698	1802.59	1248.72	SLU 81	0.69	No
ini.	3	4974	-909.45	1248.72	SLU 63	1.37	Si
fin.	3	5200	1632.38	1248.72	SLU 63	0.76	No
ini.	3	5466	-1012.23	1248.72	SLU 82	1.23	Si
fin.	3	5698	1802.59	1248.72	SLU 82	0.69	No
ini.	3	4974	-909.45	1248.72	SLU 60	1.37	Si
fin.	3	5200	1632.38	1248.72	SLU 60	0.76	No
ini.	3	4965	-906.81	1248.72	SLU 73	1.38	Si
fin.	3	5190	1631.51	1248.72	SLU 73	0.77	No
ini.	3	4974	-909.45	1248.72	SLU 61	1.37	Si
fin.	3	5200	1632.38	1248.72	SLU 61	0.76	No
ini.	3	4974	-909.45	1248.72	SLU 62	1.37	Si
fin.	3	5200	1632.38	1248.72	SLU 62	0.76	No
ini.	3	5466	-1012.23	1248.72	SLU 83	1.23	Si
fin.	3	5698	1802.59	1248.72	SLU 83	0.69	No
ini.	3	5466	-1012.23	1248.72	SLU 84	1.23	Si
fin.	3	5698	1802.59	1248.72	SLU 84	0.69	No
ini.	3	4965	-906.81	1248.72	SLU 74	1.38	Si
fin.	3	5190	1631.51	1248.72	SLU 74	0.77	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-910.57	2425			1155	435	SLU 39	0.18	No
fin.	3	0	1602.37	3045			1155	435	SLU 39	0.14	No
ini.	3	0	-1012.23	2744			1155	435	SLU 84	0.16	No
fin.	3	0	1802.59	3362			1155	435	SLU 84	0.13	No
ini.	3	0	-909.45	2492			1155	435	SLU 62	0.17	No
fin.	3	0	1632.38	3006			1155	435	SLU 62	0.14	No
ini.	3	0	-909.45	2492			1155	435	SLU 63	0.17	No
fin.	3	0	1632.38	3006			1155	435	SLU 63	0.14	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-910.57	2425			1155	435	SLU 42	0.18	No
fin.	3	0	1602.37	3045			1155	435	SLU 42	0.14	No
ini.	3	0	-1012.23	2744			1155	435	SLU 81	0.16	No
fin.	3	0	1802.59	3362			1155	435	SLU 81	0.13	No
ini.	3	0	-910.57	2425			1155	435	SLU 40	0.18	No
fin.	3	0	1602.37	3045			1155	435	SLU 40	0.14	No
ini.	3	0	-1012.23	2744			1155	435	SLU 82	0.16	No
fin.	3	0	1802.59	3362			1155	435	SLU 82	0.13	No
ini.	3	0	-910.57	2425			1155	435	SLU 41	0.18	No
fin.	3	0	1602.37	3045			1155	435	SLU 41	0.14	No
ini.	3	0	-1012.23	2744			1155	435	SLU 83	0.16	No
fin.	3	0	1802.59	3362			1155	435	SLU 83	0.13	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	14603	-2094.65	1415.81	SLV 8	0.68	No
fin.	2	18409	2494.17	1415.81	SLV 8	0.57	No
ini.	2	8663	406.58	1415.81	SLV 15	3.48	Si
fin.	2	12889	1819.92	1415.81	SLV 15	0.78	No
ini.	2	4846	-2206.6	1415.81	SLV 3	0.64	No
fin.	2	3623	1169.54	1415.81	SLV 3	1.21	Si
ini.	2	4846	-2206.6	1415.81	SLV 4	0.64	No
fin.	2	3623	1169.54	1415.81	SLV 4	1.21	Si
ini.	2	14603	-2094.65	1415.81	SLV 7	0.68	No
fin.	2	18409	2494.17	1415.81	SLV 7	0.57	No
ini.	2	15748	-1310.7	1415.81	SLV 12	1.08	Si
fin.	2	21189	2689.28	1415.81	SLV 12	0.53	No
ini.	2	-2372	-1518.6	1415.81	SLV 1	0.93	No
fin.	2	-6270	229.26	1415.81	SLV 1	6.18	Si
ini.	2	8663	406.58	1415.81	SLV 16	3.48	Si
fin.	2	12889	1819.92	1415.81	SLV 16	0.78	No
ini.	2	-2372	-1518.6	1415.81	SLV 2	0.93	No
fin.	2	-6270	229.26	1415.81	SLV 2	6.18	Si
ini.	2	15748	-1310.7	1415.81	SLV 11	1.08	Si
fin.	2	21189	2689.28	1415.81	SLV 11	0.53	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	982.63	-2268			1733	652	SLV 9	0.29	No
fin.	2	0	-444.99	-797			1733	652	SLV 9	0.82	No
ini.	2	0	-1310.7	4578			1733	652	SLV 11	0.14	No
fin.	2	0	2689.28	3562			1733	652	SLV 11	0.18	No
ini.	2	0	982.63	-2268			1733	652	SLV 10	0.29	No
fin.	2	0	-444.99	-797			1733	652	SLV 10	0.82	No
ini.	2	0	-1518.6	2003			1733	652	SLV 1	0.33	No
fin.	2	0	229.26	2582			1733	652	SLV 1	0.25	No
ini.	2	0	-2206.6	4056			1733	652	SLV 3	0.16	No
fin.	2	0	1169.54	3890			1733	652	SLV 3	0.17	No
ini.	2	0	-1518.6	2003			1733	652	SLV 2	0.33	No
fin.	2	0	229.26	2582			1733	652	SLV 2	0.25	No
ini.	2	0	-2094.65	5443			1733	652	SLV 7	0.12	No
fin.	2	0	2494.17	4418			1733	652	SLV 7	0.15	No
ini.	2	0	-2206.6	4056			1733	652	SLV 4	0.16	No
fin.	2	0	1169.54	3890			1733	652	SLV 4	0.17	No
ini.	2	0	-1310.7	4578			1733	652	SLV 12	0.14	No
fin.	2	0	2689.28	3562			1733	652	SLV 12	0.18	No
ini.	2	0	-2094.65	5443			1733	652	SLV 8	0.12	No
fin.	2	0	2494.17	4418			1733	652	SLV 8	0.15	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.526	SLV 11	No
V_SLV	0.12	SLV 7	No
PF_SLU	0.693	SLU 81	No
V_SLU	0.129	SLU 81	No

Trave di accoppiamento 20

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
25.828	27.236	3.99	4.89	0.9	26.828	27.236	3.99	4.89	0.9	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-5095	-1119.06	1073.72	SLU 84	0.96	No
fin.	3	-5095	1530.44	1073.72	SLU 84	0.7	No
ini.	3	-4592	-1014.08	1073.72	SLU 74	1.06	Si
fin.	3	-4592	1387.92	1073.72	SLU 74	0.77	No



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-5095	-1119.06	1073.72	SLU 81	0.96	No
fin.	3	-5095	1530.44	1073.72	SLU 81	0.7	No
ini.	3	-5095	-1119.06	1073.72	SLU 82	0.96	No
fin.	3	-5095	1530.44	1073.72	SLU 82	0.7	No
ini.	3	-5095	-1119.06	1073.72	SLU 83	0.96	No
fin.	3	-5095	1530.44	1073.72	SLU 83	0.7	No
ini.	3	-4594	-1013.78	1073.72	SLU 62	1.06	Si
fin.	3	-4594	1389.38	1073.72	SLU 62	0.77	No
ini.	3	-4594	-1013.78	1073.72	SLU 61	1.06	Si
fin.	3	-4594	1389.38	1073.72	SLU 61	0.77	No
ini.	3	-4592	-1014.08	1073.72	SLU 73	1.06	Si
fin.	3	-4592	1387.92	1073.72	SLU 73	0.77	No
ini.	3	-4594	-1013.78	1073.72	SLU 60	1.06	Si
fin.	3	-4594	1389.38	1073.72	SLU 60	0.77	No
ini.	3	-4594	-1013.78	1073.72	SLU 63	1.06	Si
fin.	3	-4594	1389.38	1073.72	SLU 63	0.77	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-1119.06	4067			936	352	SLU 84	0.09	No
fin.	3	0	1530.44	1183			936	352	SLU 84	0.3	No
ini.	3	0	-993.63	3656			936	352	SLU 40	0.1	No
fin.	3	0	1356.64	984			936	352	SLU 40	0.36	No
ini.	3	0	-993.63	3656			936	352	SLU 39	0.1	No
fin.	3	0	1356.64	984			936	352	SLU 39	0.36	No
ini.	3	0	-1119.06	4067			936	352	SLU 82	0.09	No
fin.	3	0	1530.44	1183			936	352	SLU 82	0.3	No
ini.	3	0	-1119.06	4067			936	352	SLU 81	0.09	No
fin.	3	0	1530.44	1183			936	352	SLU 81	0.3	No
ini.	3	0	-993.63	3656			936	352	SLU 41	0.1	No
fin.	3	0	1356.64	984			936	352	SLU 41	0.36	No
ini.	3	0	-1119.06	4067			936	352	SLU 83	0.09	No
fin.	3	0	1530.44	1183			936	352	SLU 83	0.3	No
ini.	3	0	-1013.78	3656			936	352	SLU 62	0.1	No
fin.	3	0	1389.38	1119			936	352	SLU 62	0.31	No
ini.	3	0	-1013.78	3656			936	352	SLU 63	0.1	No
fin.	3	0	1389.38	1119			936	352	SLU 63	0.31	No
ini.	3	0	-993.63	3656			936	352	SLU 42	0.1	No
fin.	3	0	1356.64	984			936	352	SLU 42	0.36	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-3961	-1577.16	1240.81	SLV 3	0.79	No
fin.	2	-2671	1773.23	1240.81	SLV 3	0.7	No
ini.	2	-3961	-1577.16	1240.81	SLV 4	0.79	No
fin.	2	-2671	1773.23	1240.81	SLV 4	0.7	No
ini.	2	-8189	-1878.79	1240.81	SLV 12	0.66	No
fin.	2	-8491	3298.25	1240.81	SLV 12	0.38	No
ini.	2	-7917	-2190.68	1240.81	SLV 8	0.57	No
fin.	2	-7459	3392.2	1240.81	SLV 8	0.37	No
ini.	2	2480	601.84	1240.81	SLV 5	2.06	Si
fin.	2	2782	-1546.58	1240.81	SLV 5	0.8	No
ini.	2	2208	913.72	1240.81	SLV 9	1.36	Si
fin.	2	1750	-1640.52	1240.81	SLV 9	0.76	No
ini.	2	-8189	-1878.79	1240.81	SLV 11	0.66	No
fin.	2	-8491	3298.25	1240.81	SLV 11	0.38	No
ini.	2	2208	913.72	1240.81	SLV 10	1.36	Si
fin.	2	1750	-1640.52	1240.81	SLV 10	0.76	No
ini.	2	-7917	-2190.68	1240.81	SLV 7	0.57	No
fin.	2	-7459	3392.2	1240.81	SLV 7	0.37	No
ini.	2	2480	601.84	1240.81	SLV 6	2.06	Si
fin.	2	2782	-1546.58	1240.81	SLV 6	0.8	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-1878.79	5881			1404	528	SLV 12	0.09	No
fin.	2	0	3298.25	4361			1404	528	SLV 12	0.12	No
ini.	2	0	-2190.68	6322			1404	528	SLV 7	0.08	No
fin.	2	0	3392.2	4942			1404	528	SLV 7	0.11	No
ini.	2	0	-1577.16	4131			1404	528	SLV 3	0.13	No
fin.	2	0	1773.23	2919			1404	528	SLV 3	0.18	No
ini.	2	0	601.84	-1407			1404	528	SLV 6	0.38	No
fin.	2	0	-1546.58	-2777			1404	528	SLV 6	0.19	No
ini.	2	0	-2190.68	6322			1404	528	SLV 8	0.08	No
fin.	2	0	3392.2	4942			1404	528	SLV 8	0.11	No
ini.	2	0	-1577.16	4131			1404	528	SLV 4	0.13	No
fin.	2	0	1773.23	2919			1404	528	SLV 4	0.18	No
ini.	2	0	913.72	-1848			1404	528	SLV 9	0.29	No
fin.	2	0	-1640.52	-3358			1404	528	SLV 9	0.16	No
ini.	2	0	601.84	-1407			1404	528	SLV 5	0.38	No
fin.	2	0	-1546.58	-2777			1404	528	SLV 5	0.19	No
ini.	2	0	-1878.79	5881			1404	528	SLV 11	0.09	No
fin.	2	0	3298.25	4361			1404	528	SLV 11	0.12	No
ini.	2	0	913.72	-1848			1404	528	SLV 10	0.29	No
fin.	2	0	-1640.52	-3358			1404	528	SLV 10	0.16	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF SLV	0.366	SLV 7	No



Stato limite	Coeff.s.	Comb.	Verifica
V SLV	0.084	SLV 7	No
PF SLU	0.702	SLU 81	No
V SLU	0.087	SLU 81	No

Trave di accoppiamento 21

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
30.248	27.236	1.09	2.09	1	31.248	27.236	1.09	2.09	1	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	6496	1284.27	1248.72	SLU 62	0.97	No
fin.	3	6293	-465.95	1248.72	SLU 62	2.68	Si
ini.	3	6496	1284.27	1248.72	SLU 60	0.97	No
fin.	3	6293	-465.95	1248.72	SLU 60	2.68	Si
ini.	3	7124	1414.69	1248.72	SLU 83	0.88	No
fin.	3	6911	-524.41	1248.72	SLU 83	2.38	Si
ini.	3	7124	1414.69	1248.72	SLU 81	0.88	No
fin.	3	6911	-524.41	1248.72	SLU 81	2.38	Si
ini.	3	6487	1284.03	1248.72	SLU 74	0.97	No
fin.	3	6283	-463.85	1248.72	SLU 74	2.69	Si
ini.	3	7124	1414.69	1248.72	SLU 84	0.88	No
fin.	3	6911	-524.41	1248.72	SLU 84	2.38	Si
ini.	3	6487	1284.03	1248.72	SLU 73	0.97	No
fin.	3	6283	-463.85	1248.72	SLU 73	2.69	Si
ini.	3	6496	1284.27	1248.72	SLU 61	0.97	No
fin.	3	6293	-465.95	1248.72	SLU 61	2.68	Si
ini.	3	7124	1414.69	1248.72	SLU 82	0.88	No
fin.	3	6911	-524.41	1248.72	SLU 82	2.38	Si
ini.	3	6496	1284.27	1248.72	SLU 63	0.97	No
fin.	3	6293	-465.95	1248.72	SLU 63	2.68	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	1253.21	-2296			1155	435	SLU 40	0.19	No
fin.	3	0	-478.87	-1732			1155	435	SLU 40	0.25	No
ini.	3	0	1414.69	-2520			1155	435	SLU 83	0.17	No
fin.	3	0	-524.41	-1972			1155	435	SLU 83	0.22	No
ini.	3	0	1253.21	-2296			1155	435	SLU 39	0.19	No
fin.	3	0	-478.87	-1732			1155	435	SLU 39	0.25	No
ini.	3	0	1253.21	-2296			1155	435	SLU 41	0.19	No
fin.	3	0	-478.87	-1732			1155	435	SLU 41	0.25	No
ini.	3	0	1414.69	-2520			1155	435	SLU 82	0.17	No
fin.	3	0	-524.41	-1972			1155	435	SLU 82	0.22	No
ini.	3	0	1253.21	-2296			1155	435	SLU 42	0.19	No
fin.	3	0	-478.87	-1732			1155	435	SLU 42	0.25	No
ini.	3	0	1414.69	-2520			1155	435	SLU 84	0.17	No
fin.	3	0	-524.41	-1972			1155	435	SLU 84	0.22	No
ini.	3	0	1284.27	-2244			1155	435	SLU 62	0.19	No
fin.	3	0	-465.95	-1799			1155	435	SLU 62	0.24	No
ini.	3	0	1284.27	-2244			1155	435	SLU 63	0.19	No
fin.	3	0	-465.95	-1799			1155	435	SLU 63	0.24	No
ini.	3	0	1414.69	-2520			1155	435	SLU 81	0.17	No
fin.	3	0	-524.41	-1972			1155	435	SLU 81	0.22	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-5944	328.13	1415.81	SLV 13	4.31	Si
fin.	2	-4601	-1369.35	1415.81	SLV 13	1.03	Si
ini.	2	6548	1424.09	1415.81	SLV 16	0.99	No
fin.	2	6008	-1720.68	1415.81	SLV 16	0.82	No
ini.	2	26103	2618.9	1415.81	SLV 7	0.54	No
fin.	2	22656	-480.4	1415.81	SLV 7	2.95	Si
ini.	2	23804	2657.58	1415.81	SLV 11	0.53	No
fin.	2	20684	-1242.02	1415.81	SLV 11	1.14	Si
ini.	2	14211	1295.17	1415.81	SLV 3	1.09	Si
fin.	2	12579	818.06	1415.81	SLV 3	1.73	Si
ini.	2	-5944	328.13	1415.81	SLV 14	4.31	Si
fin.	2	-4601	-1369.35	1415.81	SLV 14	1.03	Si
ini.	2	6548	1424.09	1415.81	SLV 15	0.99	No
fin.	2	6008	-1720.68	1415.81	SLV 15	0.82	No
ini.	2	26103	2618.9	1415.81	SLV 8	0.54	No
fin.	2	22656	-480.4	1415.81	SLV 8	2.95	Si
ini.	2	23804	2657.58	1415.81	SLV 12	0.53	No
fin.	2	20684	-1242.02	1415.81	SLV 12	1.14	Si
ini.	2	14211	1295.17	1415.81	SLV 4	1.09	Si
fin.	2	12579	818.06	1415.81	SLV 4	1.73	Si



Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	2618.9	-1571			1733	652	SLV 7	0.42	No
fin.	2	0	-480.4	-3477			1733	652	SLV 7	0.19	No
ini.	2	0	328.13	-2675			1733	652	SLV 13	0.24	No
fin.	2	0	-1369.35	-1832			1733	652	SLV 13	0.36	No
ini.	2	0	328.13	-2675			1733	652	SLV 14	0.24	No
fin.	2	0	-1369.35	-1832			1733	652	SLV 14	0.36	No
ini.	2	0	-1034.28	-167			1733	652	SLV 5	3.9	Si
fin.	2	0	690.73	2060			1733	652	SLV 5	0.32	No
ini.	2	0	-1034.28	-167			1733	652	SLV 6	3.9	Si
fin.	2	0	690.73	2060			1733	652	SLV 6	0.32	No
ini.	2	0	1424.09	-3096			1733	652	SLV 15	0.21	No
fin.	2	0	-1720.68	-3493			1733	652	SLV 15	0.19	No
ini.	2	0	2657.58	-2501			1733	652	SLV 12	0.26	No
fin.	2	0	-1242.02	-4379			1733	652	SLV 12	0.15	No
ini.	2	0	1424.09	-3096			1733	652	SLV 16	0.21	No
fin.	2	0	-1720.68	-3493			1733	652	SLV 16	0.19	No
ini.	2	0	2618.9	-1571			1733	652	SLV 8	0.42	No
fin.	2	0	-480.4	-3477			1733	652	SLV 8	0.19	No
ini.	2	0	2657.58	-2501			1733	652	SLV 11	0.26	No
fin.	2	0	-1242.02	-4379			1733	652	SLV 11	0.15	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.533	SLV 11	No
V_SLV	0.149	SLV 11	No
PF_SLU	0.883	SLU 81	No
V_SLU	0.173	SLU 81	No

Trave di accoppiamento 22

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
30.248	27.236	3.99	4.89	0.9	31.248	27.236	3.99	4.89	0.9	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	f _{hk}	f _{vk0}	f _{hmedio}	τ ₀	f _{v0}	μ	φ	f _{vk,lim}	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-6499	1159.97	1073.72	SLU 82	0.93	No
fin.	3	-6499	-764.63	1073.72	SLU 82	1.4	Si
ini.	3	-5863	1054.52	1073.72	SLU 60	1.02	Si
fin.	3	-5863	-694.98	1073.72	SLU 60	1.54	Si
ini.	3	-6499	1159.97	1073.72	SLU 83	0.93	No
fin.	3	-6499	-764.63	1073.72	SLU 83	1.4	Si
ini.	3	-5863	1054.52	1073.72	SLU 63	1.02	Si
fin.	3	-5863	-694.98	1073.72	SLU 63	1.54	Si
ini.	3	-5863	1054.52	1073.72	SLU 61	1.02	Si
fin.	3	-5863	-694.98	1073.72	SLU 61	1.54	Si
ini.	3	-5857	1053.48	1073.72	SLU 74	1.02	Si
fin.	3	-5857	-696.23	1073.72	SLU 74	1.54	Si
ini.	3	-6499	1159.97	1073.72	SLU 84	0.93	No
fin.	3	-6499	-764.63	1073.72	SLU 84	1.4	Si
ini.	3	-6499	1159.97	1073.72	SLU 81	0.93	No
fin.	3	-6499	-764.63	1073.72	SLU 81	1.4	Si
ini.	3	-5863	1054.52	1073.72	SLU 62	1.02	Si
fin.	3	-5863	-694.98	1073.72	SLU 62	1.54	Si
ini.	3	-5857	1053.48	1073.72	SLU 73	1.02	Si
fin.	3	-5857	-696.23	1073.72	SLU 73	1.54	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	1159.97	-485			936	352	SLU 83	0.73	No
fin.	3	0	-764.63	-3379			936	352	SLU 83	0.1	No
ini.	3	0	1159.97	-485			936	352	SLU 84	0.73	No
fin.	3	0	-764.63	-3379			936	352	SLU 84	0.1	No
ini.	3	0	1026.33	-375			936	352	SLU 42	0.94	No
fin.	3	0	-675.23	-3055			936	352	SLU 42	0.12	No
ini.	3	0	1026.33	-375			936	352	SLU 40	0.94	No
fin.	3	0	-675.23	-3055			936	352	SLU 40	0.12	No
ini.	3	0	1159.97	-485			936	352	SLU 82	0.73	No
fin.	3	0	-764.63	-3379			936	352	SLU 82	0.1	No
ini.	3	0	1159.97	-485			936	352	SLU 81	0.73	No
fin.	3	0	-764.63	-3379			936	352	SLU 81	0.1	No
ini.	3	0	1026.33	-375			936	352	SLU 41	0.94	No
fin.	3	0	-675.23	-3055			936	352	SLU 41	0.12	No
ini.	3	0	1054.52	-477			936	352	SLU 63	0.74	No
fin.	3	0	-694.98	-3025			936	352	SLU 63	0.12	No
ini.	3	0	1054.52	-477			936	352	SLU 62	0.74	No
fin.	3	0	-694.98	-3025			936	352	SLU 62	0.12	No



Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	1026.33	-375			936	352	SLU 39	0.94	No
fin.	3	0	-675.23	-3055			936	352	SLU 39	0.12	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	2810	-1739.32	1240.81	SLV 6	0.71	No
fin.	2	3091	693.1	1240.81	SLV 6	1.79	Si
ini.	2	3241	-1452.68	1240.81	SLV 10	0.85	No
fin.	2	3455	371.67	1240.81	SLV 10	3.34	Si
ini.	2	2810	-1739.32	1240.81	SLV 5	0.71	No
fin.	2	3091	693.1	1240.81	SLV 5	1.79	Si
ini.	2	3241	-1452.68	1240.81	SLV 9	0.85	No
fin.	2	3455	371.67	1240.81	SLV 9	3.34	Si
ini.	2	-10526	2786.81	1240.81	SLV 7	0.45	No
fin.	2	-10740	-1257.85	1240.81	SLV 7	0.99	No
ini.	2	-4924	1823.72	1240.81	SLV 15	0.68	No
fin.	2	-5111	-1271.44	1240.81	SLV 15	0.98	No
ini.	2	-4924	1823.72	1240.81	SLV 16	0.68	No
fin.	2	-5111	-1271.44	1240.81	SLV 16	0.98	No
ini.	2	-10526	2786.81	1240.81	SLV 8	0.45	No
fin.	2	-10740	-1257.85	1240.81	SLV 8	0.99	No
ini.	2	-10095	3073.45	1240.81	SLV 12	0.4	No
fin.	2	-10376	-1579.27	1240.81	SLV 12	0.79	No
ini.	2	-10095	3073.45	1240.81	SLV 11	0.4	No
fin.	2	-10376	-1579.27	1240.81	SLV 11	0.79	No

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-1452.68	2517			1404	528	SLV 10	0.21	No
fin.	2	0	371.67	1113			1404	528	SLV 10	0.47	No
ini.	2	0	1823.72	-2246			1404	528	SLV 16	0.24	No
fin.	2	0	-1271.44	-3666			1404	528	SLV 16	0.14	No
ini.	2	0	2786.81	-3270			1404	528	SLV 7	0.16	No
fin.	2	0	-1257.85	-4772			1404	528	SLV 7	0.11	No
ini.	2	0	1823.72	-2246			1404	528	SLV 15	0.24	No
fin.	2	0	-1271.44	-3666			1404	528	SLV 15	0.14	No
ini.	2	0	-1739.32	3069			1404	528	SLV 5	0.17	No
fin.	2	0	693.1	1638			1404	528	SLV 5	0.32	No
ini.	2	0	2786.81	-3270			1404	528	SLV 8	0.16	No
fin.	2	0	-1257.85	-4772			1404	528	SLV 8	0.11	No
ini.	2	0	3073.45	-3821			1404	528	SLV 12	0.14	No
fin.	2	0	-1579.27	-5297			1404	528	SLV 12	0.1	No
ini.	2	0	-1452.68	2517			1404	528	SLV 9	0.21	No
fin.	2	0	371.67	1113			1404	528	SLV 9	0.47	No
ini.	2	0	3073.45	-3821			1404	528	SLV 11	0.14	No
fin.	2	0	-1579.27	-5297			1404	528	SLV 11	0.1	No
ini.	2	0	-1739.32	3069			1404	528	SLV 6	0.17	No
fin.	2	0	693.1	1638			1404	528	SLV 6	0.32	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.404	SLV 11	No
V_SLV	0.1	SLV 11	No
PF_SLU	0.926	SLU 81	No
V_SLU	0.104	SLU 81	No

Trave di accoppiamento 23

Verifiche condotte secondo D.M. 17-01-18 (N.T.C.)

Dati geometrici

X ini.	Y ini.	Z ini.inf.	Z ini.sup.	H ini.	X fin.	Y fin.	Z fin.inf.	Z fin.sup.	H fin.	Luce	Spessore	R. Trazione
32.559	17.641	3.09	4.89	1.8	33.278	18.336	3.09	4.89	1.8	1	0.3	3500

Caratteristiche del materiale

(Circolare 7 21-01-19 C8.5.I) Muratura in mattoni pieni e malta di calce LC2_Corti

fb	fhk	fvk0	fkhmedio	τ0	fv0	μ	φ	fvk,lim	E	G	FC
120000			172500	9000	20000	0.577	0.767	6500	320000000	128000000	1.2

Verifiche a pressoflessione delle travi in muratura in combinazioni non sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	157	216.83	2648.72	SLU 82	12.22	Si
fin.	3	157	338.12	2648.72	SLU 82	7.83	Si
ini.	3	144	197.28	2648.72	SLU 74	13.43	Si
fin.	3	144	311.21	2648.72	SLU 74	8.51	Si
ini.	3	144	197.28	2648.72	SLU 76	13.43	Si
fin.	3	144	311.21	2648.72	SLU 76	8.51	Si
ini.	3	157	216.83	2648.72	SLU 81	12.22	Si
fin.	3	157	338.12	2648.72	SLU 81	7.83	Si
ini.	3	144	197.28	2648.72	SLU 78	13.43	Si
fin.	3	144	311.21	2648.72	SLU 78	8.51	Si
ini.	3	144	197.28	2648.72	SLU 75	13.43	Si
fin.	3	144	311.21	2648.72	SLU 75	8.51	Si
ini.	3	157	216.83	2648.72	SLU 84	12.22	Si
fin.	3	157	338.12	2648.72	SLU 84	7.83	Si



Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	157	216.83	2648.72	SLU 83	12.22	Si
fin.	3	157	338.12	2648.72	SLU 83	7.83	Si
ini.	3	144	197.28	2648.72	SLU 79	13.43	Si
fin.	3	144	311.21	2648.72	SLU 79	8.51	Si
ini.	3	144	197.28	2648.72	SLU 73	13.43	Si
fin.	3	144	311.21	2648.72	SLU 73	8.51	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni non sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	216.83	1648			2080	783	SLU 84	0.47	No
fin.	3	0	338.12	-1533			2080	783	SLU 84	0.51	No
ini.	3	0	196.86	1507			2080	783	SLU 62	0.52	No
fin.	3	0	310.94	-1400			2080	783	SLU 62	0.56	No
ini.	3	0	196.86	1507			2080	783	SLU 60	0.52	No
fin.	3	0	310.94	-1400			2080	783	SLU 60	0.56	No
ini.	3	0	216.83	1648			2080	783	SLU 81	0.47	No
fin.	3	0	338.12	-1533			2080	783	SLU 81	0.51	No
ini.	3	0	196.86	1507			2080	783	SLU 63	0.52	No
fin.	3	0	310.94	-1400			2080	783	SLU 63	0.56	No
ini.	3	0	197.28	1502			2080	783	SLU 73	0.52	No
fin.	3	0	311.21	-1396			2080	783	SLU 73	0.56	No
ini.	3	0	216.83	1648			2080	783	SLU 82	0.47	No
fin.	3	0	338.12	-1533			2080	783	SLU 82	0.51	No
ini.	3	0	216.83	1648			2080	783	SLU 83	0.47	No
fin.	3	0	338.12	-1533			2080	783	SLU 83	0.51	No
ini.	3	0	196.86	1507			2080	783	SLU 61	0.52	No
fin.	3	0	310.94	-1400			2080	783	SLU 61	0.56	No
ini.	3	0	197.28	1502			2080	783	SLU 74	0.52	No
fin.	3	0	311.21	-1396			2080	783	SLU 74	0.56	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-298	1012.69	2815.81	SLV 16	2.78	Si
fin.	2	28	-1438.58	2815.81	SLV 16	1.96	Si
ini.	2	40	-279.9	2815.81	SLV 4	10.06	Si
fin.	2	-310	1213.3	2815.81	SLV 4	2.32	Si
ini.	2	-699	1122.83	2815.81	SLV 12	2.51	Si
fin.	2	-637	-1247.01	2815.81	SLV 12	2.26	Si
ini.	2	-699	1122.83	2815.81	SLV 11	2.51	Si
fin.	2	-637	-1247.01	2815.81	SLV 11	2.26	Si
ini.	2	485	-762.08	2815.81	SLV 1	3.69	Si
fin.	2	159	1844.67	2815.81	SLV 1	1.53	Si
ini.	2	485	-762.08	2815.81	SLV 2	3.69	Si
fin.	2	159	1844.67	2815.81	SLV 2	1.53	Si
ini.	2	886	-872.22	2815.81	SLV 6	3.23	Si
fin.	2	824	1653.11	2815.81	SLV 6	1.7	Si
ini.	2	40	-279.9	2815.81	SLV 3	10.06	Si
fin.	2	-310	1213.3	2815.81	SLV 3	2.32	Si
ini.	2	886	-872.22	2815.81	SLV 5	3.23	Si
fin.	2	824	1653.11	2815.81	SLV 5	1.7	Si
ini.	2	-298	1012.69	2815.81	SLV 15	2.78	Si
fin.	2	28	-1438.58	2815.81	SLV 15	1.96	Si

Verifiche a taglio delle travi in muratura secondo §C8.7.1.3.1 in combinazioni sismiche

Sezione	yM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-484.44	2461			3119	1174	SLV 10	0.48	No
fin.	2	0	857.54	277			3119	1174	SLV 10	4.24	Si
ini.	2	0	1122.83	-1551			3119	1174	SLV 12	0.76	No
fin.	2	0	-1247.01	-3056			3119	1174	SLV 12	0.38	No
ini.	2	0	-762.08	3247			3119	1174	SLV 2	0.36	No
fin.	2	0	1844.67	1277			3119	1174	SLV 2	0.92	No
ini.	2	0	-872.22	3471			3119	1174	SLV 6	0.34	No
fin.	2	0	1653.11	1277			3119	1174	SLV 6	0.92	No
ini.	2	0	1122.83	-1551			3119	1174	SLV 11	0.76	No
fin.	2	0	-1247.01	-3056			3119	1174	SLV 11	0.38	No
ini.	2	0	-762.08	3247			3119	1174	SLV 1	0.36	No
fin.	2	0	1844.67	1277			3119	1174	SLV 1	0.92	No
ini.	2	0	-872.22	3471			3119	1174	SLV 5	0.34	No
fin.	2	0	1653.11	1277			3119	1174	SLV 5	0.92	No
ini.	2	0	-484.44	2461			3119	1174	SLV 9	0.48	No
fin.	2	0	857.54	277			3119	1174	SLV 9	4.24	Si
ini.	2	0	1012.69	-1326			3119	1174	SLV 16	0.89	No
fin.	2	0	-1438.58	-3056			3119	1174	SLV 16	0.38	No
ini.	2	0	1012.69	-1326			3119	1174	SLV 15	0.89	No
fin.	2	0	-1438.58	-3056			3119	1174	SLV 15	0.38	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.526	SLV 1	Si
V_SLV	0.338	SLV 5	No
PF_SLU	7.834	SLU 81	Si
V_SLU	0.475	SLU 81	No