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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.	OGGETTO	DATA
TAB_11	TABULATI DI CALCOLO CIVICO SALA COMUNE STATO DI FATTO	Settembre 2022
SCALA		N. DISEGNO

VERSIONE	DESCRIZIONE	DATA	REDATTO	VERIFICATO		APPROVATO
00	PRIMA EMISSIONE	Settembre 2022	F. DALMONTE	N. LEONE		N. LEONE
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INGEGNERIA

TABULATI DI CALCOLO
SALA COMUNE
STATO DI FATTO

Sommario

1 Risultati numerici ... 3
1.1 Sollecitazioni ... 3
1.1.1 Sollecitazioni aste ... 3
1.1.1.1 Convenzioni di segno aste ... 3
1.1.2 Sollecitazioni gusci ... 5
1.1.2.1 Convenzioni di segno gusci ... 5
1.1.2.2 Sollecitazioni estreme gusci ... 7
1.1.2.3 Sollecitazioni estreme gusci non verticali ... 8
1.1.2.4 Sollecitazioni estreme gusci verticali ... 9
1.1.3 Sollecitazioni gusci armati ... 10
1.1.3.1 Convenzioni di segno gusci ... 10
1.1.4 Sollecitazioni gusci muratura ... 12
1.1.4.1 Convenzioni di segno gusci muratura ... 12
1.1.5 Sollecitazioni aste in muratura ... 14
1.1.5.1 Convenzioni di segno aste ... 14
1.1.6 Sollecitazioni aste in muratura FRCM ... 17
1.1.6.1 Convenzioni di segno aste ... 17
1.1.7 Sollecitazioni aste in muratura armata ... 19
1.1.7.1 Convenzioni di segno aste ... 19
1.2 Reazioni nodali ... 22
1.2.1 Reazioni nodali estreme ... 22
1.2.2 Reazioni nodali in combinazioni di carico ... 23
1.3 Risposta modale ... 209
1.4 Equilibrio globale forze ... 210
1.5 Risposta di spettro ... 211
1.6 Annotazioni solutore ... 212
1.7 Statistiche soluzione ... 212

1 Risultati numerici

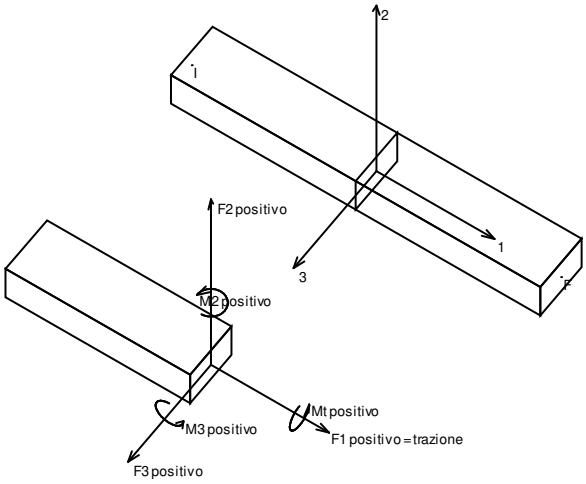
1.1 Sollecitazioni

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.



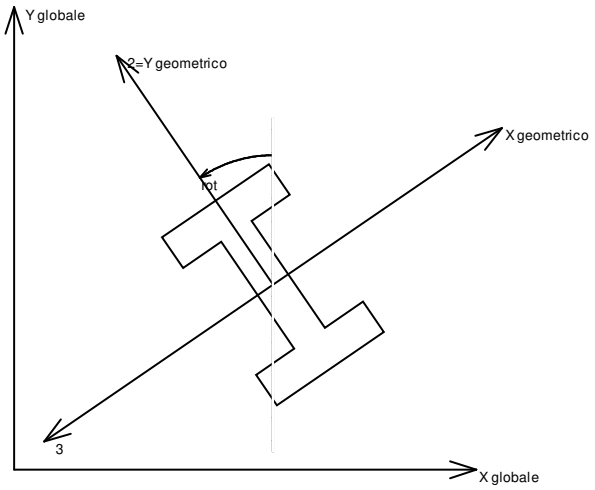
La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:
presa un'asta con nodo iniziale i e nodo finale f, asse 1 che va da i a f, assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando 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.

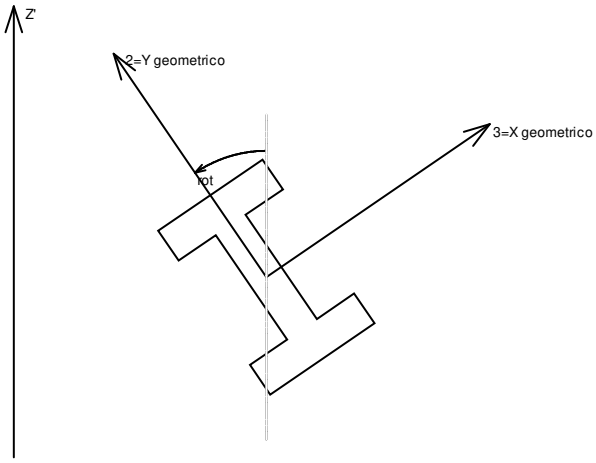
Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

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).

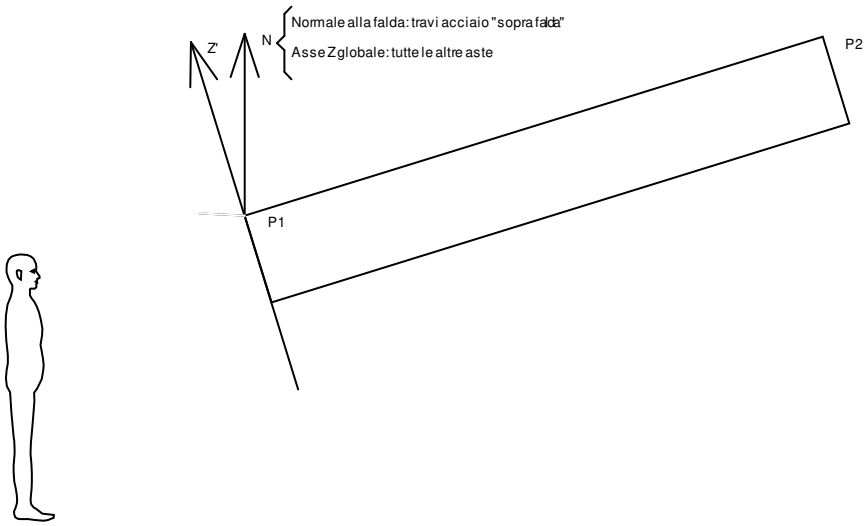
Sistema locale aste non verticali



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

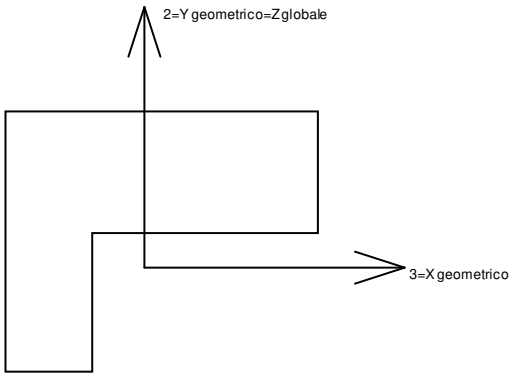
L'asse Z' è illustrato nella figura seguente dove:

- 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

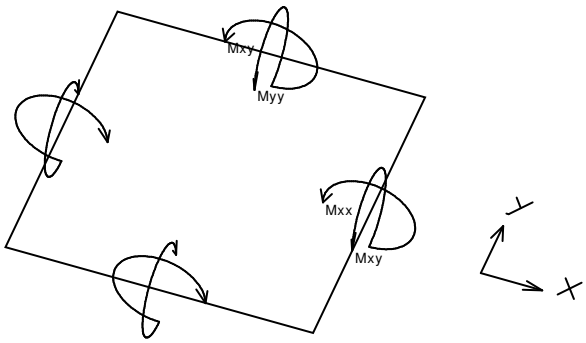
1.1.2.1 Convenzioni di segno gusci

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

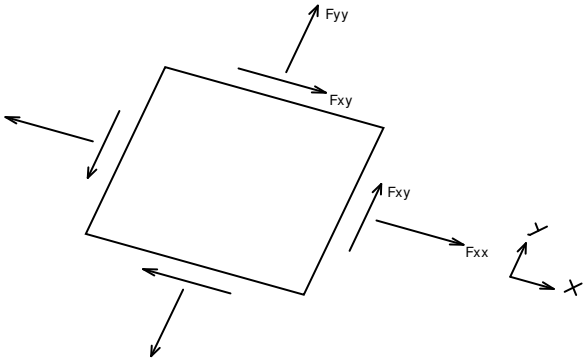
Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse x e y contenuti nel piano dell'elemento e terzo asse (z) ortogonale al piano dell'elemento a formare una terna destrogira. In particolare l'asse x ha proiezione 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 Mxx, Myy, Mxy.



Si definiscono:

- Mxx: momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Myy: momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale y (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Mxy: 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 Fxx, Fyy, Fxy.



Si definiscono:

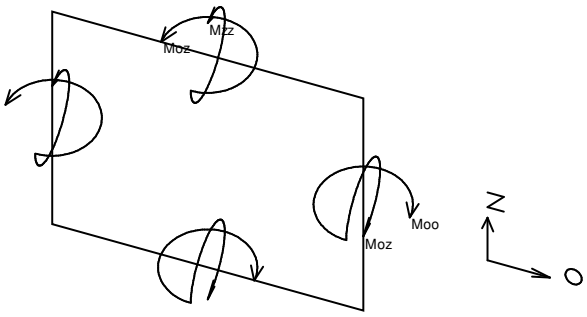
- Fxx: sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Fyy: sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale all'asse y (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Fxy: 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:

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

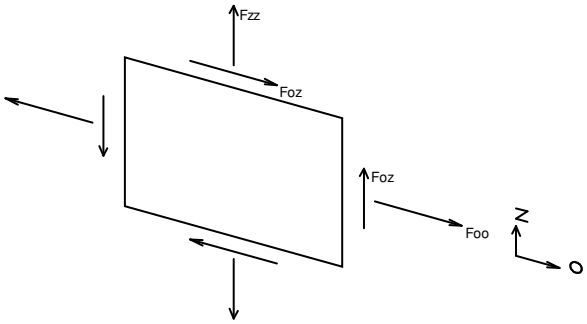
Convenzione di segno per gusci verticali

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 destrogira. 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 Moo, Mzz, Moz.



- 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
305	SLV 7	972	-1198	107	-384	46582	-9536	-22298	4647	867
328	SLV 11	948	-1179	-108	-405	47178	9103	-21436	-4523	837
329	SLV 5	830	-1145	35	-269	-2172	1557	-6411	-2853	959
306	SLV 7	971	-932	86	-480	26622	-11283	1998	4175	1158
327	SLV 11	949	-911	-86	-461	27393	11449	2277	-4060	1223

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
329	SLV 11	830	1114	-11	270	-920	-4442	-2600	2791	-906
307	SLV 7	969	746	90	141	6854	-11159	-1895	3894	-509
308	SLV 7	968	736	95	200	-6659	-14460	-5802	3644	-490
309	SLV 7	967	729	102	205	-8541	-12055	-1475	3413	-349
326	SLV 11	951	722	-87	116	6656	11692	-2037	-3771	-452

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
460	SLV 5	11	-159	14	-637	-1753	-387	-7158	59	-602
461	SLV 5	11	-159	14	-637	-1855	-205	-7280	-123	-531
458	SLV 5	14	-154	-14	-616	-2266	806	-8424	125	-520
459	SLV 5	14	-154	-14	-616	-2114	906	-8442	-94	-589
462	SLV 5	10	-141	14	-562	-1840	51	-7633	-121	-383

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
461	SLV 11	11	160	-14	641	-2013	-396	-7788	124	534
460	SLV 11	11	160	-14	641	-1921	-544	-7625	-59	605
459	SLV 11	14	155	14	621	-1596	265	-6580	95	593
458	SLV 11	14	155	14	621	-1528	30	-6351	-125	523
462	SLV 11	10	141	-14	566	-1838	-154	-7291	122	385

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
1015	SLV 11	996	134	58	160	-53464	18175	-18881	713	446
1038	SLV 7	974	126	-55	156	-52603	-19073	-19295	-681	421
1014	SLV 11	947	6	-31	163	-49918	-14410	-16549	-418	426
1663	SLV 7	944	113	29	143	-48737	13900	-15860	382	413
777	SLV 3	761	-69	-17	-46	-28745	-9378	-12452	149	149

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
158	SLV 11	946	-52	-59	-360	62956	-16692	11260	-2117	571
536	SLV 7	945	-8	59	-284	62050	15426	10643	1850	485
305	SLV 11	972	-1087	118	-414	53032	-7584	-24897	4059	784
328	SLV 7	948	-1043	-119	-363	52940	7273	-24194	-3872	725
1023	SLV 11	989	-80	31	-95	41538	3123	-177	550	-172

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
1698	SLV 3	1547	76	-62	41	-14417	2044	-112375	337	62
1702	SLV 13	839	68	46	66	-20440	-678	-96926	293	-85
1697	SLV 3	832	104	-51	40	-8643	-1012	-87436	-181	38
1699	SLV 3	1432	-24	-20	35	-4934	-7680	-84822	-385	62
1693	SLV 13	1431	-11	49	43	-4176	-6724	-77728	182	-57

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
1698	SLV 13	1547	-82	68	-41	14003	-1184	100085	-362	-48
1702	SLV 3	839	-92	-78	-50	27313	4055	84703	-469	146
1693	SLV 3	1431	13	-50	-44	4395	7973	77678	-194	87
1699	SLV 13	1432	25	24	-33	5298	7632	70747	390	-62
1697	SLV 13	1083	25	52	-47	1163	-7975	68950	-308	-53

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
305	SLV 7	972	-1198	107	-384	46582	-9536	-22298	4647	867
328	SLV 11	948	-1179	-108	-405	47178	9103	-21436	-4523	837
329	SLV 11	830	-1114	-11	-270	-920	4442	-2600	2791	906
306	SLV 7	971	-932	86	-480	26622	-11283	1998	4175	1158

Shell	Cont.	Nodo	Sollecitazione							
Ind	N.br.	Ind	Moo	Moz	Mzz	Foo	Foz	Fzz	Vo	Vz
327	SLV 11	949	-911	-86	-461	27393	11449	2277	-4060	1223

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
329	SLV 5	830	1145	35	269	-2172	-1557	-6411	-2853	-959
158	SLV 15	972	798	-48	297	33363	-3568	-20327	-3156	-692
307	SLV 7	969	746	90	141	6854	-11159	-1895	3894	-509
308	SLV 7	968	736	95	200	-6659	-14460	-5802	3644	-490
309	SLV 7	967	729	102	205	-8541	-12055	-1475	3413	-349

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
460	SLV 11	11	-160	-14	-641	-1921	544	-7625	-59	-605
461	SLV 11	11	-160	-14	-641	-2013	396	-7788	124	-534
459	SLV 11	14	-155	14	-621	-1596	-265	-6580	95	-593
458	SLV 11	14	-155	14	-621	-1528	-30	-6351	-125	-523
462	SLV 11	10	-141	-14	-566	-1838	154	-7291	122	-385

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
460	SLV 5	11	159	14	637	-1753	387	-7158	59	602
461	SLV 5	11	159	14	637	-1855	205	-7280	-123	531
459	SLV 5	14	154	-14	616	-2114	-906	-8442	-94	589
458	SLV 5	14	154	-14	616	-2266	-806	-8424	125	520
462	SLV 5	10	141	14	562	-1840	-51	-7633	-121	383

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
1015	SLV 11	996	134	58	160	-53464	18175	-18881	713	446
1038	SLV 7	974	126	-55	156	-52603	-19073	-19295	-681	421
1014	SLV 11	947	-6	-31	-163	-49918	14410	-16549	-418	-426
1663	SLV 7	944	113	29	143	-48737	13900	-15860	382	413
777	SLV 3	761	69	-17	46	-28745	9378	-12452	149	-149

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
158	SLV 11	946	52	-59	360	62956	16692	11260	-2117	-571
536	SLV 7	945	-8	59	-284	62050	15426	10643	1850	485
305	SLV 11	972	-1087	118	-414	53032	-7584	-24897	4059	784
328	SLV 7	948	-1043	-119	-363	52940	7273	-24194	-3872	725
1023	SLV 11	989	-80	31	-95	41538	3123	-177	550	-172

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
1698	SLV 3	1547	-76	-62	-41	-14417	-2044	-112375	337	-62
1702	SLV 13	839	-68	46	-66	-20440	678	-96926	293	85
1697	SLV 3	832	-104	-51	-40	-8643	1012	-87436	-181	-38
1699	SLV 3	1432	24	-20	-35	-4934	7680	-84822	-385	-62
1693	SLV 13	1431	11	49	-43	-4176	6724	-77728	182	57

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
1698	SLV 13	1547	82	68	41	14003	1184	100085	-362	48
1702	SLV 3	839	92	-78	50	27313	-4055	84703	-469	-146
1693	SLV 3	1431	-13	-50	44	4395	-7973	77678	-194	-87
1699	SLV 13	1432	-25	24	33	5298	-7632	70747	390	62
1697	SLV 13	1083	-25	52	47	1163	7975	68950	-308	53

1.1.3 Sollecitazioni gusci armati

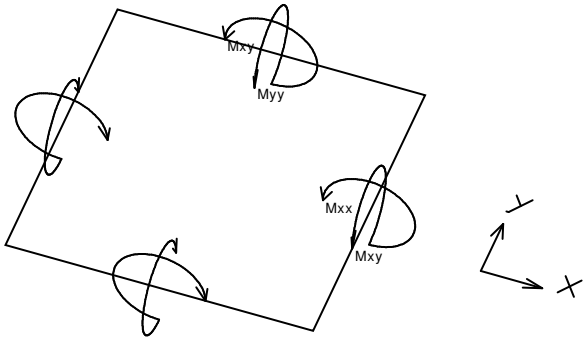
1.1.3.1 Convenzioni di segno gusci

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

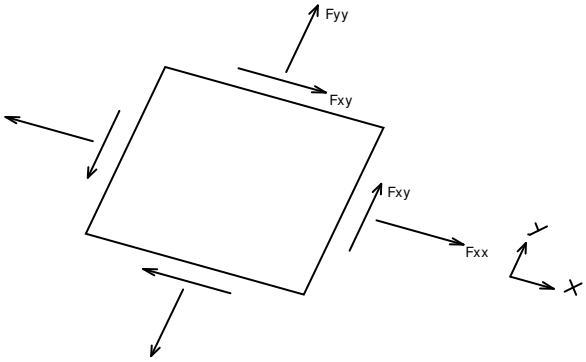
Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse x e y contenuti nel piano dell'elemento e terzo asse (z) ortogonale al piano dell'elemento a formare una terna destrogira. In particolare l'asse x ha proiezione 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 Mxx, Myy, Mxy.



Si definiscono:

- Mxx: momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Myy: momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale y (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Mxy: 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 Fxx, Fyy, Fxy.



Si definiscono:

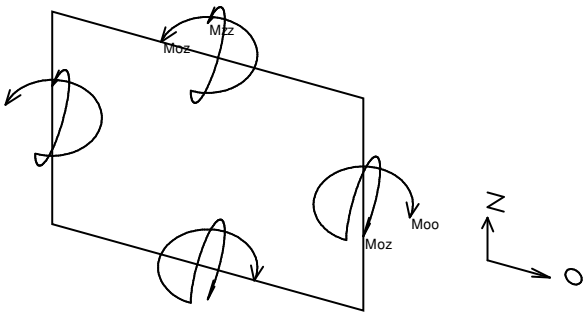
- Fxx: sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Fyy: sforzo estensionale [Forza/Lunghezza] agente sul bordo di normale all'asse y (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Fxy: 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:

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

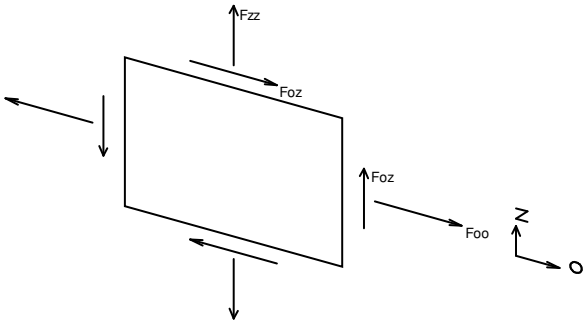
Convenzione di segno per gusci verticali

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 destrogira. 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 Moo, Mzz, Moz.



- 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

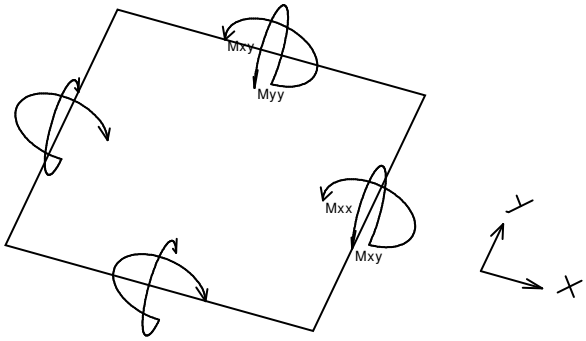
1.1.4.1 Convenzioni di segno gusci muratura

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

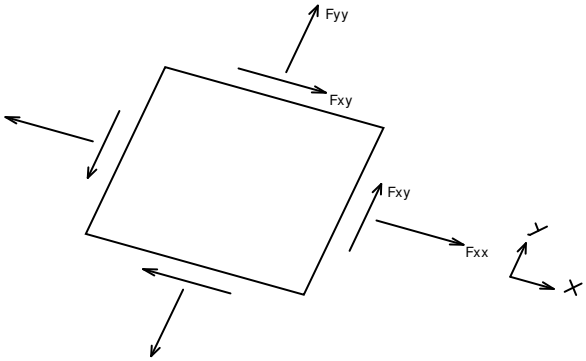
Il sistema di riferimento nel quale sono espressi i parametri di sollecitazione è così definito: origine appartenente al piano dell'elemento, asse x e y contenuti nel piano dell'elemento e terzo asse (z) ortogonale al piano dell'elemento a formare una terna destrogira. In particolare l'asse x ha proiezione 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 Mxx, Myy, Mxy.



Si definiscono:

- Mxx: momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Myy: momento flettente [Forza*Lunghezza/Lunghezza] agente sul bordo di normale y (verso positivo indicato dalla freccia in figura che tende le fibre inferiori);
- Mxy: 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 Fxx, Fyy, Fxy.

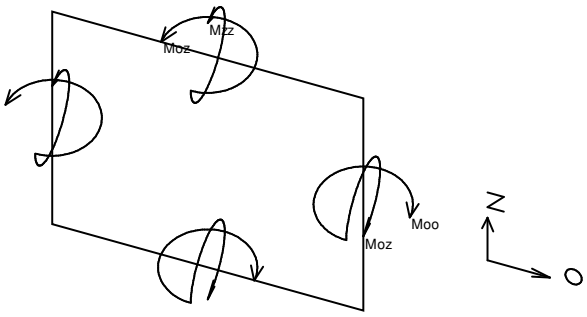


Si definiscono:

- Fxx: sforzo tensionale [Forza/Lunghezza] agente sul bordo di normale x (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Fyy: 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);
- Fxy: sforzo tagliante [Forza/Lunghezza] agente sui bordi (verso positivo indicato dalla freccia in figura).

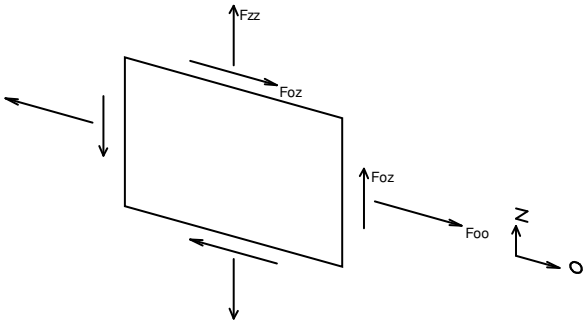
Convenzione di segno per gusci verticali

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 destrogira. 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 Moo, Mzz, Moz.



- 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:



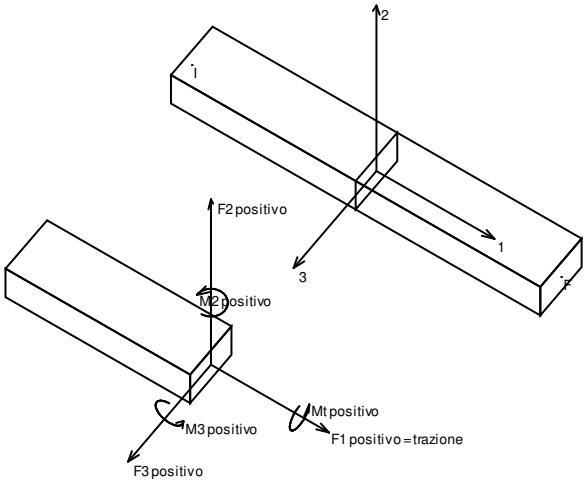
- Fzz: sforzo tensionale distribuito [Forza/Lunghezza] applicato al bordo di normale parallela all'asse z (verso positivo indicato dalla freccia in figura che mette in trazione l'elemento);
- Foo: sforzo tensionale distribuito [Forza/Lunghezza] applicato al bordo di normale parallela all'asse O (verso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



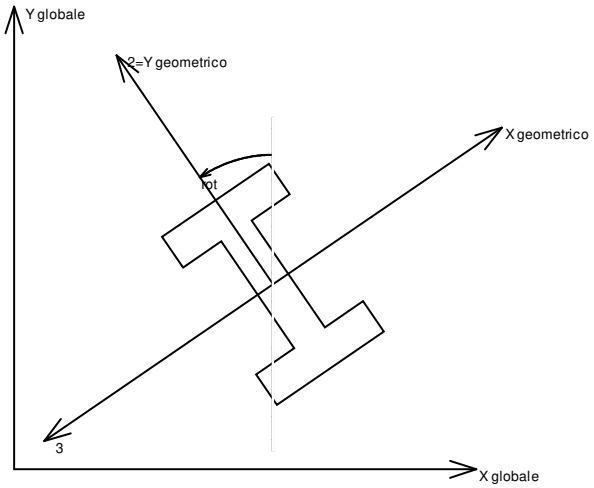
La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:
presa un'asta con nodo iniziale i e nodo finale f, asse 1 che va da i a f, assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando 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.

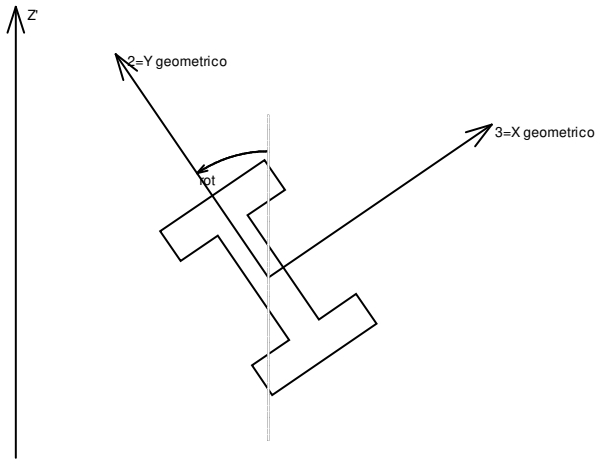
Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

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).

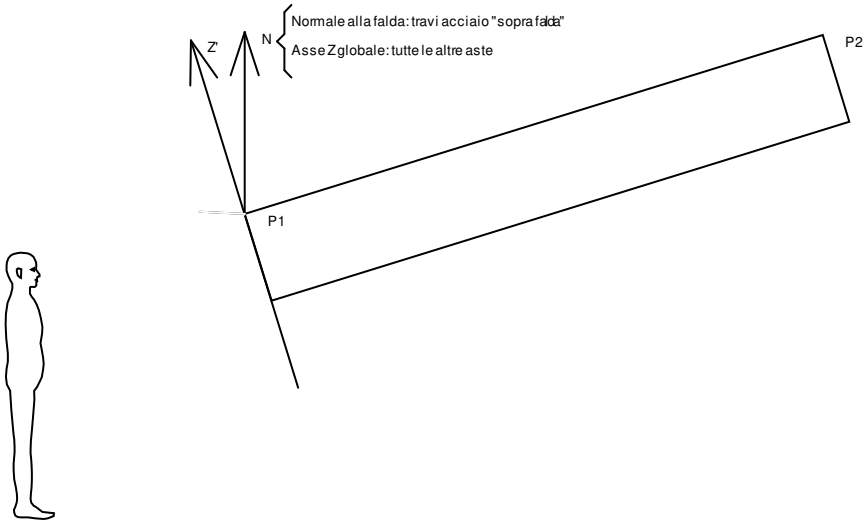
Sistema locale aste non verticali



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

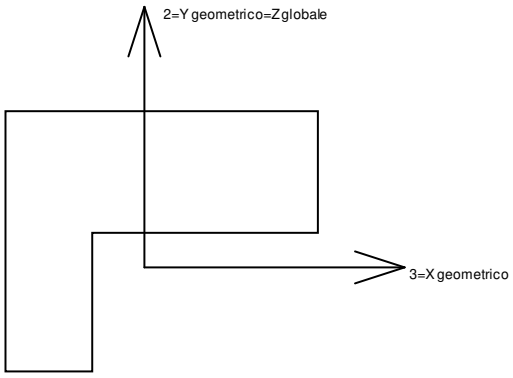
L'asse Z' è illustrato nella figura seguente dove:

- 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.



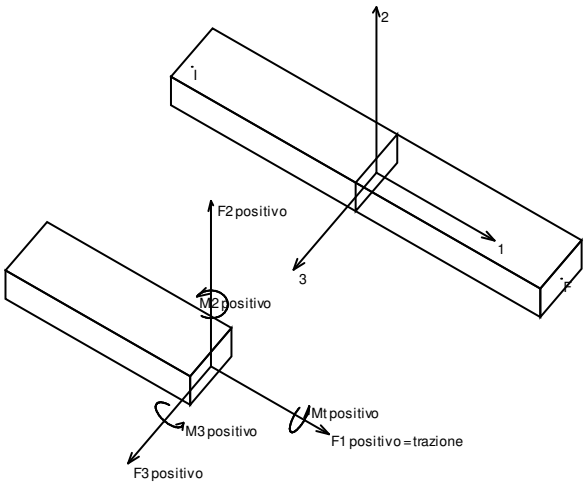
Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1). L'asse 2 è sempre verticale e quindi coincidente con l'asse Z globale nonché con l'asse y geometrico. L'asse 3 coincide con l'asse x geometrico. . Si sottolinea il fatto che gli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

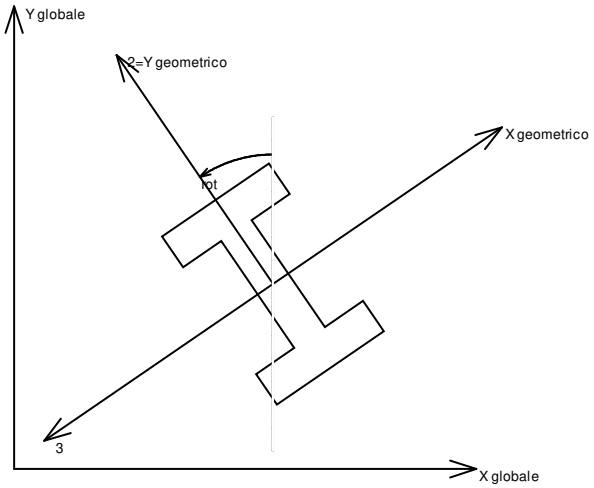
Il sistema è definito diversamente per tre categorie di aste, a seconda che siano originate da:

- 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

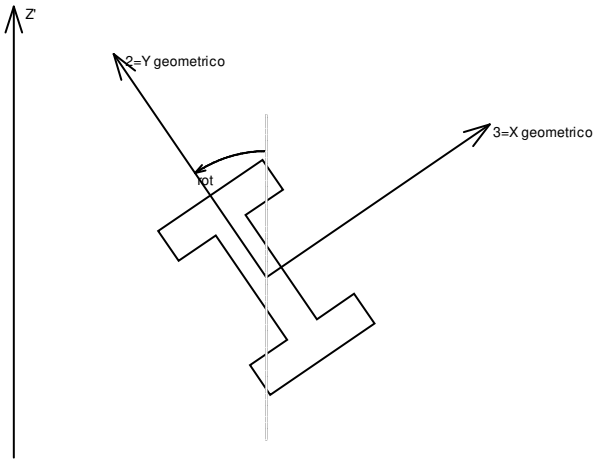
assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

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).

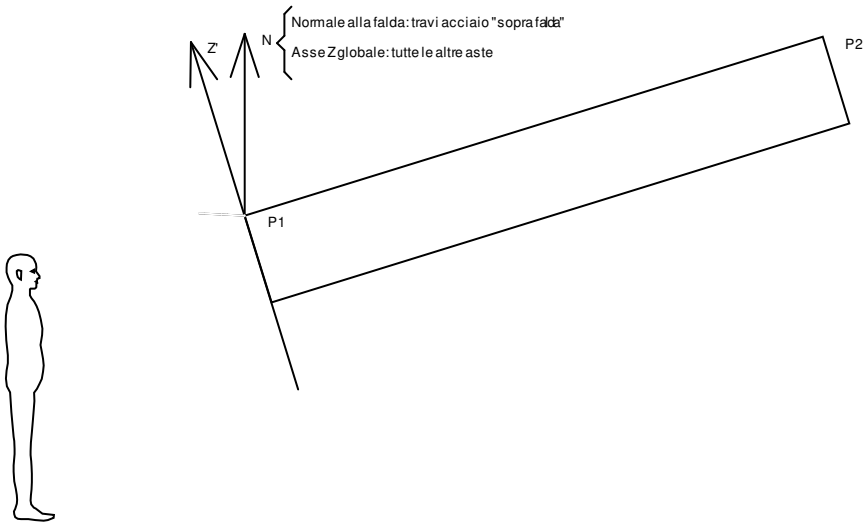
Sistema locale aste non verticali



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

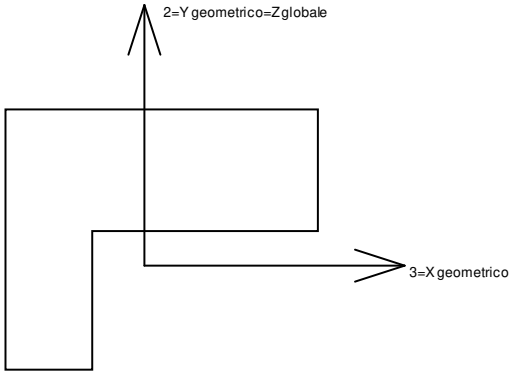
L'asse Z' è illustrato nella figura seguente dove:

- 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.



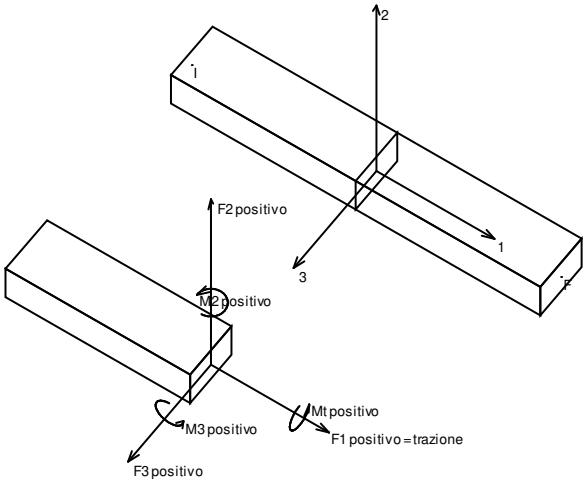
Nella figura si considera l'asse 1 entrante nel foglio (l'osservatore guarda in direzione coincidente a quella dell'asse 1). L'asse 2 è sempre verticale e quindi coincidente con l'asse Z globale nonché con l'asse y geometrico. L'asse 3 coincide con l'asse x geometrico. . Si sottolinea il fatto che gli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



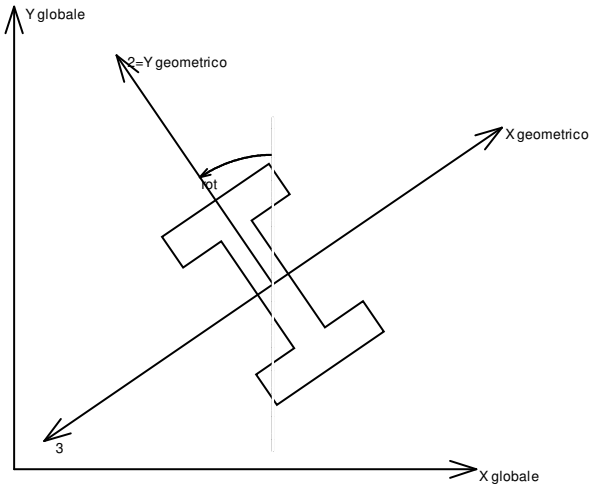
La convenzione sui segni per i parametri di sollecitazione delle aste è la seguente:
presa un'asta con nodo iniziale i e nodo finale f, asse 1 che va da i a f, assi 2 e 3 presi secondo quanto indicato nei paragrafi successivi relativi al sistema locale delle aste sezionando l'asta in un punto e considerando 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.

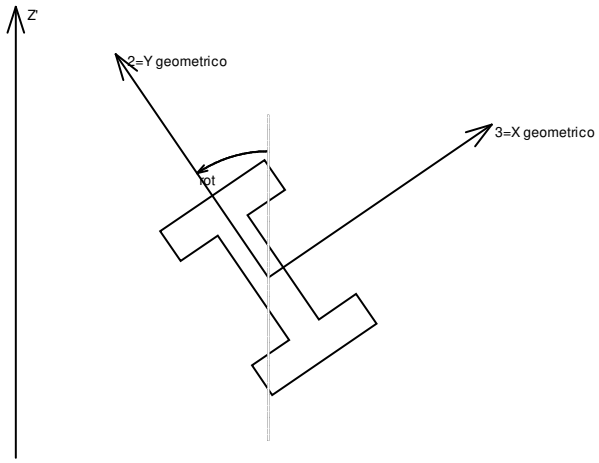
Nel seguito si indica con 1, 2 e 3 il sistema locale dell'asta che non sempre coincide con gli assi principali della sezione. Si ricorda che per assi principali si intendono gli assi rispetto a cui si ha il raggio di inerzia minimo e massimo. Gli assi 1, 2 e 3 rispettano la regola della mano destra.

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).

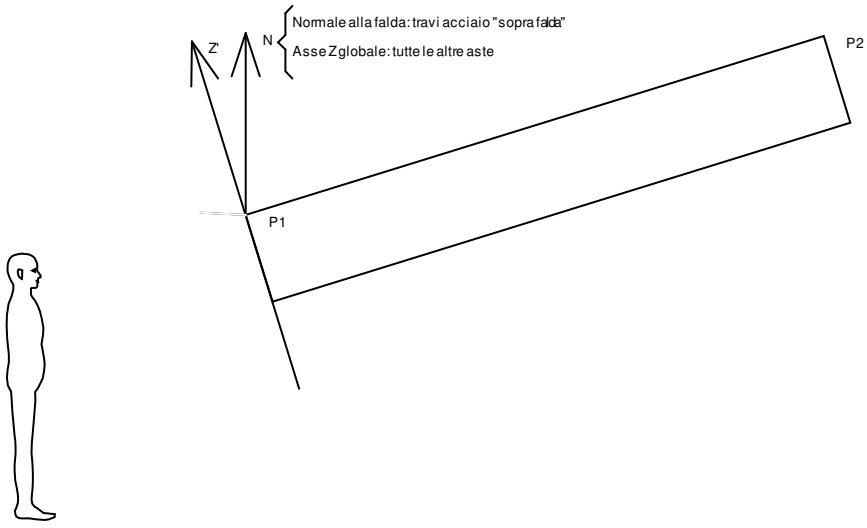
Sistema locale aste non verticali



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

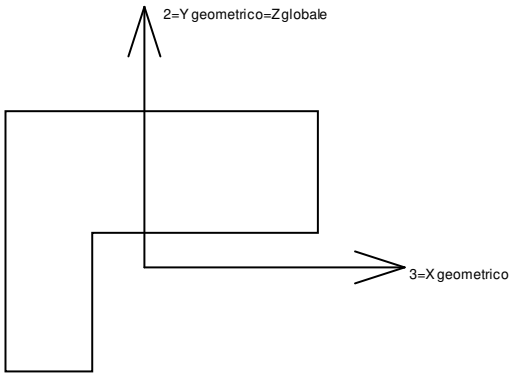
L'asse Z' è illustrato nella figura seguente dove:

- 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	-1618	-5	2406	-1.84	-74.2	0
65	SLV 13	-1383	-5	2946	-11	-61.87	-0.04
21	SLV 15	-1361	-2	3595	11.45	-66.81	0.03
66	SLV 13	-1354	-7	2646	-5.32	-48.18	-0.04
113	SLV 9	-1314	-11	2434	-16.76	-67.58	-0.02

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
47	SLV 1	1616	-12	2470	0.29	73.14	0
49	SLV 1	1369	-10	2979	-7.6	62.43	0.06
91	SLV 5	1365	-11	2397	-16.07	70.35	0.02
48	SLV 1	1352	-13	2702	-2.3	48.48	0.05
3	SLV 3	1242	3	410	8.77	48.87	0.02

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
88	SLV 11	-31	-831	3521	50.99	-23.08	-0.07
25	SLV 7	777	-806	3055	29.72	42.59	-0.17
89	SLV 7	26	-770	3251	44.19	20.03	0.09
76	SLV 7	5	-759	2383	36.26	11.35	0.01
72	SLV 7	14	-747	2727	33.27	9.11	0.02

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
29	SLV 9	8	796	-198	-28.43	-0.38	-0.01
23	SLV 13	-677	759	1624	-39.64	-32.82	0
27	SLV 9	-369	747	-879	-29.27	-18.63	0.12
38	SLV 9	-15	721	2022	-28.04	-20.43	0
36	SLV 9	23	719	1833	-27.86	22.9	0

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
2	SLV X	-508	386	-2496	-15.48	-18.97	0.11
27	SLV X	-383	330	-2218	-12.83	-16.38	0.08
3	SLV Y	145	22	-1733	16.79	3.48	0.06
29	SLV X	-8	219	-1557	-7.06	-7.38	-0.03
46	SLV X	-444	112	-1452	5.95	-18.91	-0.02

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
2	SLV 1	819	-68	6453	4.4	29.64	-0.13
56	SLU 82	-534	0	6231	-0.59	-31.47	0
59	SLU 82	411	0	6097	-0.64	20.45	0
46	SLU 82	954	-82	6020	6.55	31.62	0
55	SLU 82	-92	0	5997	-0.63	-0.91	0

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
2	SLU 1	323	176	2810	-5.33	11.63	-0.05
2	SLU 2	338	163	2780	-4.98	11.97	-0.05
2	SLU 3	323	176	2810	-5.33	11.63	-0.05
2	SLU 4	332	168	2792	-5.12	11.83	-0.05
2	SLU 5	338	163	2780	-4.98	11.97	-0.05
2	SLU 6	323	176	2810	-5.33	11.63	-0.05
2	SLU 7	332	168	2792	-5.12	11.83	-0.05
2	SLU 8	323	176	2810	-5.33	11.63	-0.05
2	SLU 9	332	168	2792	-5.12	11.83	-0.05
2	SLU 10	462	210	3677	-6.73	16.1	-0.06
2	SLU 11	446	223	3707	-7.08	15.76	-0.06
2	SLU 12	456	215	3689	-6.87	15.97	-0.06
2	SLU 13	462	210	3677	-6.73	16.1	-0.06
2	SLU 14	446	223	3707	-7.08	15.76	-0.06
2	SLU 15	456	215	3689	-6.87	15.97	-0.06
2	SLU 16	446	223	3707	-7.08	15.76	-0.06
2	SLU 17	456	215	3689	-6.87	15.97	-0.06
2	SLU 18	499	243	4091	-7.83	17.53	-0.07
2	SLU 19	509	235	4073	-7.62	17.74	-0.07
2	SLU 20	499	243	4091	-7.83	17.53	-0.07
2	SLU 21	509	235	4073	-7.62	17.74	-0.07
2	SLU 22	390	203	3307	-6.31	13.88	-0.05
2	SLU 23	405	190	3277	-5.95	14.23	-0.06
2	SLU 24	390	203	3307	-6.31	13.88	-0.05
2	SLU 25	399	195	3289	-6.1	14.09	-0.06
2	SLU 26	405	190	3277	-5.95	14.23	-0.06
2	SLU 27	390	203	3307	-6.31	13.88	-0.05
2	SLU 28	399	195	3289	-6.1	14.09	-0.06
2	SLU 29	390	203	3307	-6.31	13.88	-0.05
2	SLU 30	399	195	3289	-6.1	14.09	-0.06
2	SLU 31	529	237	4173	-7.7	18.36	-0.07
2	SLU 32	513	250	4204	-8.06	18.02	-0.07
2	SLU 33	523	242	4186	-7.85	18.23	-0.07
2	SLU 34	529	237	4173	-7.7	18.36	-0.07
2	SLU 35	513	250	4204	-8.06	18.02	-0.07
2	SLU 36	523	242	4186	-7.85	18.23	-0.07
2	SLU 37	513	250	4204	-8.06	18.02	-0.07
2	SLU 38	523	242	4186	-7.85	18.23	-0.07
2	SLU 39	566	270	4588	-8.81	19.79	-0.08
2	SLU 40	576	262	4570	-8.59	20	-0.08
2	SLU 41	566	270	4588	-8.81	19.79	-0.08

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
2	SLU 42	576	262	4570	-8.59	20	-0.08
2	SLU 43	396	220	3483	-6.6	14.34	-0.06
2	SLU 44	412	207	3453	-6.24	14.68	-0.06
2	SLU 45	396	220	3483	-6.6	14.34	-0.06
2	SLU 46	406	212	3465	-6.38	14.55	-0.06
2	SLU 47	412	207	3453	-6.24	14.68	-0.06
2	SLU 48	396	220	3483	-6.6	14.34	-0.06
2	SLU 49	406	212	3465	-6.38	14.55	-0.06
2	SLU 50	396	220	3483	-6.6	14.34	-0.06
2	SLU 51	406	212	3465	-6.38	14.55	-0.06
2	SLU 52	535	253	4349	-7.99	18.82	-0.07
2	SLU 53	520	267	4380	-8.35	18.47	-0.07
2	SLU 54	529	259	4361	-8.13	18.68	-0.07
2	SLU 55	535	253	4349	-7.99	18.82	-0.07
2	SLU 56	520	267	4380	-8.35	18.47	-0.07
2	SLU 57	529	259	4361	-8.13	18.68	-0.07
2	SLU 58	520	267	4380	-8.35	18.47	-0.07
2	SLU 59	529	259	4361	-8.13	18.68	-0.07
2	SLU 60	573	287	4764	-9.1	20.25	-0.08
2	SLU 61	582	279	4746	-8.88	20.45	-0.08
2	SLU 62	573	287	4764	-9.1	20.25	-0.08
2	SLU 63	582	279	4746	-8.88	20.45	-0.08
2	SLU 64	463	247	3980	-7.57	16.6	-0.06
2	SLU 65	479	234	3950	-7.22	16.94	-0.07
2	SLU 66	463	247	3980	-7.57	16.6	-0.06
2	SLU 67	473	239	3962	-7.36	16.8	-0.07
2	SLU 68	479	234	3950	-7.22	16.94	-0.07
2	SLU 69	463	247	3980	-7.57	16.6	-0.06
2	SLU 70	473	239	3962	-7.36	16.8	-0.07
2	SLU 71	463	247	3980	-7.57	16.6	-0.06
2	SLU 72	473	239	3962	-7.36	16.8	-0.07
2	SLU 73	602	280	4846	-8.97	21.08	-0.08
2	SLU 74	587	294	4877	-9.32	20.73	-0.08
2	SLU 75	596	286	4858	-9.11	20.94	-0.08
2	SLU 76	602	280	4846	-8.97	21.08	-0.08
2	SLU 77	587	294	4877	-9.32	20.73	-0.08
2	SLU 78	596	286	4858	-9.11	20.94	-0.08
2	SLU 79	587	294	4877	-9.32	20.73	-0.08
2	SLU 80	596	286	4858	-9.11	20.94	-0.08
2	SLU 81	640	314	5261	-10.07	22.5	-0.09
2	SLU 82	649	306	5243	-9.86	22.71	-0.09
2	SLU 83	640	314	5261	-10.07	22.5	-0.09
2	SLU 84	649	306	5243	-9.86	22.71	-0.09
2	SLE RA 1	342	184	2952	-5.61	12.27	-0.05
2	SLE RA 2	352	175	2932	-5.37	12.5	-0.05
2	SLE RA 3	342	184	2952	-5.61	12.27	-0.05
2	SLE RA 4	348	179	2940	-5.47	12.41	-0.05
2	SLE RA 5	352	175	2932	-5.37	12.5	-0.05
2	SLE RA 6	342	184	2952	-5.61	12.27	-0.05
2	SLE RA 7	348	179	2940	-5.47	12.41	-0.05
2	SLE RA 8	342	184	2952	-5.61	12.27	-0.05
2	SLE RA 9	348	179	2940	-5.47	12.41	-0.05
2	SLE RA 10	434	206	3530	-6.54	15.26	-0.06
2	SLE RA 11	424	215	3550	-6.78	15.03	-0.06
2	SLE RA 12	430	210	3538	-6.64	15.17	-0.06
2	SLE RA 13	434	206	3530	-6.54	15.26	-0.06
2	SLE RA 14	424	215	3550	-6.78	15.03	-0.06
2	SLE RA 15	430	210	3538	-6.64	15.17	-0.06
2	SLE RA 16	424	215	3550	-6.78	15.03	-0.06
2	SLE RA 17	430	210	3538	-6.64	15.17	-0.06
2	SLE RA 18	460	229	3806	-7.28	16.21	-0.06
2	SLE RA 19	466	223	3794	-7.14	16.35	-0.06
2	SLE RA 20	460	229	3806	-7.28	16.21	-0.06
2	SLE RA 21	466	223	3794	-7.14	16.35	-0.06
2	SLE FR 1	342	184	2952	-5.61	12.27	-0.05
2	SLE FR 2	344	182	2948	-5.56	12.32	-0.05
2	SLE FR 3	342	184	2952	-5.61	12.27	-0.05
2	SLE FR 4	379	196	3204	-6.06	13.5	-0.05
2	SLE FR 5	377	197	3208	-6.11	13.45	-0.05
2	SLE FR 6	401	206	3379	-6.44	14.24	-0.06
2	SLE QP 1	342	184	2952	-5.61	12.27	-0.05
2	SLE QP 2	377	197	3208	-6.11	13.45	-0.05
2	SLD 1	566	86	4505	-1.74	20.36	-0.09
2	SLD 2	566	86	4505	-1.74	20.36	-0.09
2	SLD 3	618	-5	3947	2.06	22.53	-0.11
2	SLD 4	618	-5	3947	2.06	22.53	-0.11
2	SLD 5	354	303	4444	-10.56	12.23	-0.03
2	SLD 6	354	303	4444	-10.56	12.23	-0.03
2	SLD 7	529	-3	2583	2.1	19.47	-0.11
2	SLD 8	529	-3	2583	2.1	19.47	-0.11
2	SLD 9	225	398	3834	-14.33	7.43	0
2	SLD 10	225	398	3834	-14.33	7.43	0
2	SLD 11	400	92	1973	-1.66	14.68	-0.08
2	SLD 12	400	92	1973	-1.66	14.68	-0.08
2	SLD 13	136	400	2470	-14.28	4.38	0.01
2	SLD 14	136	400	2470	-14.28	4.38	0.01
2	SLD 15	189	309	1912	-10.48	6.55	-0.02
2	SLD 16	189	309	1912	-10.48	6.55	-0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
2	SLV 1	819	-68	6453	4.4	29.64	-0.13
2	SLV 2	819	-68	6453	4.4	29.64	-0.13
2	SLV 3	951	-309	4957	14.34	35.21	-0.2
2	SLV 4	951	-309	4957	14.34	35.21	-0.2
2	SLV 5	309	483	6451	-18.03	9.87	0.02
2	SLV 6	309	483	6451	-18.03	9.87	0.02
2	SLV 7	750	-319	1464	15.1	28.42	-0.19
2	SLV 8	750	-319	1464	15.1	28.42	-0.19
2	SLV 9	5	714	4953	-27.32	-1.52	0.08
2	SLV 10	5	714	4953	-27.32	-1.52	0.08
2	SLV 11	445	-88	-34	5.81	17.04	-0.12
2	SLV 12	445	-88	-34	5.81	17.04	-0.12
2	SLV 13	-197	704	1460	-26.56	-8.3	0.09
2	SLV 14	-197	704	1460	-26.56	-8.3	0.09
2	SLV 15	-65	463	-36	-16.62	-2.74	0.03
2	SLV 16	-65	463	-36	-16.62	-2.74	0.03
3	SLU 1	478	5	2399	-1.62	19.07	-0.04
3	SLU 2	488	5	2392	-1.69	19.46	-0.04
3	SLU 3	478	5	2399	-1.62	19.07	-0.04
3	SLU 4	484	5	2395	-1.66	19.31	-0.04
3	SLU 5	488	5	2392	-1.69	19.46	-0.04
3	SLU 6	478	5	2399	-1.62	19.07	-0.04
3	SLU 7	484	5	2395	-1.66	19.31	-0.04
3	SLU 8	478	5	2399	-1.62	19.07	-0.04
3	SLU 9	484	5	2395	-1.66	19.31	-0.04
3	SLU 10	660	7	3154	-2.46	26.5	-0.05
3	SLU 11	650	7	3161	-2.39	26.12	-0.05
3	SLU 12	656	7	3157	-2.43	26.35	-0.05
3	SLU 13	660	7	3154	-2.46	26.5	-0.05
3	SLU 14	650	7	3161	-2.39	26.12	-0.05
3	SLU 15	656	7	3157	-2.43	26.35	-0.05
3	SLU 16	650	7	3161	-2.39	26.12	-0.05
3	SLU 17	656	7	3157	-2.43	26.35	-0.05
3	SLU 18	723	8	3488	-2.71	29.14	-0.05
3	SLU 19	729	8	3484	-2.76	29.37	-0.05
3	SLU 20	723	8	3488	-2.71	29.14	-0.05
3	SLU 21	729	8	3484	-2.76	29.37	-0.05
3	SLU 22	573	6	2822	-2.02	22.93	-0.04
3	SLU 23	583	7	2815	-2.09	23.31	-0.04
3	SLU 24	573	6	2822	-2.02	22.93	-0.04
3	SLU 25	579	6	2818	-2.07	23.16	-0.04
3	SLU 26	583	7	2815	-2.09	23.31	-0.04
3	SLU 27	573	6	2822	-2.02	22.93	-0.04
3	SLU 28	579	6	2818	-2.07	23.16	-0.04
3	SLU 29	573	6	2822	-2.02	22.93	-0.04
3	SLU 30	579	6	2818	-2.07	23.16	-0.04
3	SLU 31	754	9	3578	-2.86	30.36	-0.05
3	SLU 32	744	8	3585	-2.79	29.97	-0.06
3	SLU 33	750	8	3580	-2.83	30.2	-0.05
3	SLU 34	754	9	3578	-2.86	30.36	-0.05
3	SLU 35	744	8	3585	-2.79	29.97	-0.06
3	SLU 36	750	8	3580	-2.83	30.2	-0.05
3	SLU 37	744	8	3585	-2.79	29.97	-0.06
3	SLU 38	750	8	3580	-2.83	30.2	-0.05
3	SLU 39	818	9	3911	-3.12	32.99	-0.06
3	SLU 40	824	9	3907	-3.16	33.22	-0.06
3	SLU 41	818	9	3911	-3.12	32.99	-0.06
3	SLU 42	824	9	3907	-3.16	33.22	-0.06
3	SLU 43	590	6	2974	-1.96	23.48	-0.04
3	SLU 44	600	7	2967	-2.04	23.86	-0.04
3	SLU 45	590	6	2974	-1.96	23.48	-0.04
3	SLU 46	596	7	2969	-2.01	23.71	-0.04
3	SLU 47	600	7	2967	-2.04	23.86	-0.04
3	SLU 48	590	6	2974	-1.96	23.48	-0.04
3	SLU 49	596	7	2969	-2.01	23.71	-0.04
3	SLU 50	590	6	2974	-1.96	23.48	-0.04
3	SLU 51	596	7	2969	-2.01	23.71	-0.04
3	SLU 52	771	9	3729	-2.8	30.9	-0.06
3	SLU 53	761	9	3736	-2.73	30.52	-0.06
3	SLU 54	767	9	3732	-2.78	30.75	-0.06
3	SLU 55	771	9	3729	-2.8	30.9	-0.06
3	SLU 56	761	9	3736	-2.73	30.52	-0.06
3	SLU 57	767	9	3732	-2.78	30.75	-0.06
3	SLU 58	761	9	3736	-2.73	30.52	-0.06
3	SLU 59	767	9	3732	-2.78	30.75	-0.06
3	SLU 60	835	9	4063	-3.06	33.54	-0.06
3	SLU 61	841	9	4058	-3.1	33.77	-0.06
3	SLU 62	835	9	4063	-3.06	33.54	-0.06
3	SLU 63	841	9	4058	-3.1	33.77	-0.06
3	SLU 64	684	8	3397	-2.37	27.33	-0.05
3	SLU 65	694	8	3390	-2.44	27.72	-0.05
3	SLU 66	684	8	3397	-2.37	27.33	-0.05
3	SLU 67	690	8	3393	-2.41	27.56	-0.05
3	SLU 68	694	8	3390	-2.44	27.72	-0.05
3	SLU 69	684	8	3397	-2.37	27.33	-0.05
3	SLU 70	690	8	3393	-2.41	27.56	-0.05
3	SLU 71	684	8	3397	-2.37	27.33	-0.05
3	SLU 72	690	8	3393	-2.41	27.56	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
3	SLU 73	865	10	4152	-3.21	34.76	-0.06
3	SLU 74	855	10	4159	-3.14	34.37	-0.06
3	SLU 75	861	10	4155	-3.18	34.6	-0.06
3	SLU 76	865	10	4152	-3.21	34.76	-0.06
3	SLU 77	855	10	4159	-3.14	34.37	-0.06
3	SLU 78	861	10	4155	-3.18	34.6	-0.06
3	SLU 79	855	10	4159	-3.14	34.37	-0.06
3	SLU 80	861	10	4155	-3.18	34.6	-0.06
3	SLU 81	929	10	4486	-3.47	37.39	-0.07
3	SLU 82	935	11	4482	-3.51	37.62	-0.07
3	SLU 83	929	10	4486	-3.47	37.39	-0.07
3	SLU 84	935	11	4482	-3.51	37.62	-0.07
3	SLE RA 1	505	6	2520	-1.73	20.18	-0.04
3	SLE RA 2	512	6	2515	-1.78	20.43	-0.04
3	SLE RA 3	505	6	2520	-1.73	20.18	-0.04
3	SLE RA 4	509	6	2517	-1.76	20.33	-0.04
3	SLE RA 5	512	6	2515	-1.78	20.43	-0.04
3	SLE RA 6	505	6	2520	-1.73	20.18	-0.04
3	SLE RA 7	509	6	2517	-1.76	20.33	-0.04
3	SLE RA 8	505	6	2520	-1.73	20.18	-0.04
3	SLE RA 9	509	6	2517	-1.76	20.33	-0.04
3	SLE RA 10	626	7	3023	-2.29	25.13	-0.05
3	SLE RA 11	620	7	3028	-2.25	24.87	-0.05
3	SLE RA 12	624	7	3025	-2.27	25.03	-0.05
3	SLE RA 13	626	7	3023	-2.29	25.13	-0.05
3	SLE RA 14	620	7	3028	-2.25	24.87	-0.05
3	SLE RA 15	624	7	3025	-2.27	25.03	-0.05
3	SLE RA 16	620	7	3028	-2.25	24.87	-0.05
3	SLE RA 17	624	7	3025	-2.27	25.03	-0.05
3	SLE RA 18	669	8	3246	-2.46	26.88	-0.05
3	SLE RA 19	673	8	3243	-2.49	27.04	-0.05
3	SLE RA 20	669	8	3246	-2.46	26.88	-0.05
3	SLE RA 21	673	8	3243	-2.49	27.04	-0.05
3	SLE FR 1	505	6	2520	-1.73	20.18	-0.04
3	SLE FR 2	507	6	2519	-1.74	20.23	-0.04
3	SLE FR 3	505	6	2520	-1.73	20.18	-0.04
3	SLE FR 4	556	6	2737	-1.96	22.24	-0.04
3	SLE FR 5	554	6	2738	-1.95	22.19	-0.04
3	SLE FR 6	587	7	2883	-2.1	23.53	-0.04
3	SLE QP 1	505	6	2520	-1.73	20.18	-0.04
3	SLE QP 2	554	6	2738	-1.95	22.19	-0.04
3	SLD 1	811	0	2196	-1.65	32.66	-0.03
3	SLD 2	811	0	2196	-1.65	32.66	-0.03
3	SLD 3	846	5	1812	2.34	33.53	-0.02
3	SLD 4	846	5	1812	2.34	33.53	-0.02
3	SLD 5	578	-3	3156	-7.92	24.01	-0.06
3	SLD 6	578	-3	3156	-7.92	24.01	-0.06
3	SLD 7	695	13	1879	5.39	26.91	-0.02
3	SLD 8	695	13	1879	5.39	26.91	-0.02
3	SLD 9	414	-1	3597	-9.3	17.47	-0.07
3	SLD 10	414	-1	3597	-9.3	17.47	-0.07
3	SLD 11	531	16	2319	4.01	20.36	-0.03
3	SLD 12	531	16	2319	4.01	20.36	-0.03
3	SLD 13	263	8	3663	-6.25	10.85	-0.06
3	SLD 14	263	8	3663	-6.25	10.85	-0.06
3	SLD 15	298	13	3280	-2.26	11.72	-0.05
3	SLD 16	298	13	3280	-2.26	11.72	-0.05
3	SLV 1	1155	-10	1449	-1.31	46.78	-0.02
3	SLV 2	1155	-10	1449	-1.31	46.78	-0.02
3	SLV 3	1242	3	410	8.77	48.87	0.02
3	SLV 4	1242	3	410	8.77	48.87	0.02
3	SLV 5	602	-19	3928	-17.04	26.4	-0.08
3	SLV 6	602	-19	3928	-17.04	26.4	-0.08
3	SLV 7	893	25	462	16.54	33.36	0.03
3	SLV 8	893	25	462	16.54	33.36	0.03
3	SLV 9	216	-13	5013	-20.45	11.02	-0.11
3	SLV 10	216	-13	5013	-20.45	11.02	-0.11
3	SLV 11	506	31	1547	13.13	17.98	0
3	SLV 12	506	31	1547	13.13	17.98	0
3	SLV 13	-133	9	5066	-12.67	-4.49	-0.1
3	SLV 14	-133	9	5066	-12.67	-4.49	-0.1
3	SLV 15	-46	22	4026	-2.6	-2.4	-0.07
3	SLV 16	-46	22	4026	-2.6	-2.4	-0.07
4	SLU 1	388	0	2360	-0.44	15.16	0.01
4	SLU 2	394	0	2358	-0.59	15.37	0.01
4	SLU 3	388	0	2360	-0.44	15.16	0.01
4	SLU 4	392	0	2358	-0.53	15.29	0.01
4	SLU 5	394	0	2358	-0.59	15.37	0.01
4	SLU 6	388	0	2360	-0.44	15.16	0.01
4	SLU 7	392	0	2358	-0.53	15.29	0.01
4	SLU 8	388	0	2360	-0.44	15.16	0.01
4	SLU 9	392	0	2358	-0.53	15.29	0.01
4	SLU 10	536	1	3079	-1.07	20.94	0.01
4	SLU 11	529	0	3082	-0.92	20.73	0.01
4	SLU 12	533	1	3080	-1.01	20.86	0.01
4	SLU 13	536	1	3079	-1.07	20.94	0.01
4	SLU 14	529	0	3082	-0.92	20.73	0.01
4	SLU 15	533	1	3080	-1.01	20.86	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
4	SLU 16	529	0	3082	-0.92	20.73	0.01
4	SLU 17	533	1	3080	-1.01	20.86	0.01
4	SLU 18	589	1	3391	-1.12	23.11	0.01
4	SLU 19	593	1	3390	-1.21	23.24	0.01
4	SLU 20	589	1	3391	-1.12	23.11	0.01
4	SLU 21	593	1	3390	-1.21	23.24	0.01
4	SLU 22	465	0	2764	-0.68	18.21	0.01
4	SLU 23	472	1	2761	-0.83	18.43	0.01
4	SLU 24	465	0	2764	-0.68	18.21	0.01
4	SLU 25	469	0	2762	-0.77	18.34	0.01
4	SLU 26	472	1	2761	-0.83	18.43	0.01
4	SLU 27	465	0	2764	-0.68	18.21	0.01
4	SLU 28	469	0	2762	-0.77	18.34	0.01
4	SLU 29	465	0	2764	-0.68	18.21	0.01
4	SLU 30	469	0	2762	-0.77	18.34	0.01
4	SLU 31	613	1	3483	-1.3	24	0.01
4	SLU 32	607	1	3485	-1.15	23.78	0.01
4	SLU 33	611	1	3484	-1.24	23.91	0.01
4	SLU 34	613	1	3483	-1.3	24	0.01
4	SLU 35	607	1	3485	-1.15	23.78	0.01
4	SLU 36	611	1	3484	-1.24	23.91	0.01
4	SLU 37	607	1	3485	-1.15	23.78	0.01
4	SLU 38	611	1	3484	-1.24	23.91	0.01
4	SLU 39	667	1	3795	-1.36	26.17	0.01
4	SLU 40	671	1	3794	-1.45	26.3	0.01
4	SLU 41	667	1	3795	-1.36	26.17	0.01
4	SLU 42	671	1	3794	-1.45	26.3	0.01
4	SLU 43	477	0	2929	-0.49	18.66	0.01
4	SLU 44	484	0	2927	-0.64	18.88	0.01
4	SLU 45	477	0	2929	-0.49	18.66	0.01
4	SLU 46	481	0	2928	-0.58	18.79	0.01
4	SLU 47	484	0	2927	-0.64	18.88	0.01
4	SLU 48	477	0	2929	-0.49	18.66	0.01
4	SLU 49	481	0	2928	-0.58	18.79	0.01
4	SLU 50	477	0	2929	-0.49	18.66	0.01
4	SLU 51	481	0	2928	-0.58	18.79	0.01
4	SLU 52	625	1	3649	-1.12	24.44	0.01
4	SLU 53	618	0	3651	-0.97	24.23	0.01
4	SLU 54	623	1	3650	-1.06	24.36	0.01
4	SLU 55	625	1	3649	-1.12	24.44	0.01
4	SLU 56	618	0	3651	-0.97	24.23	0.01
4	SLU 57	623	1	3650	-1.06	24.36	0.01
4	SLU 58	618	0	3651	-0.97	24.23	0.01
4	SLU 59	623	1	3650	-1.06	24.36	0.01
4	SLU 60	679	1	3960	-1.18	26.62	0.01
4	SLU 61	683	1	3959	-1.27	26.75	0.01
4	SLU 62	679	1	3960	-1.18	26.62	0.01
4	SLU 63	683	1	3959	-1.27	26.75	0.01
4	SLU 64	555	0	3333	-0.73	21.71	0.01
4	SLU 65	562	1	3331	-0.88	21.93	0.01
4	SLU 66	555	0	3333	-0.73	21.71	0.01
4	SLU 67	559	0	3332	-0.82	21.84	0.01
4	SLU 68	562	1	3331	-0.88	21.93	0.01
4	SLU 69	555	0	3333	-0.73	21.71	0.01
4	SLU 70	559	0	3332	-0.82	21.84	0.01
4	SLU 71	555	0	3333	-0.73	21.71	0.01
4	SLU 72	559	0	3332	-0.82	21.84	0.01
4	SLU 73	703	1	4053	-1.36	27.5	0.01
4	SLU 74	696	1	4055	-1.21	27.28	0.01
4	SLU 75	700	1	4054	-1.3	27.41	0.01
4	SLU 76	703	1	4053	-1.36	27.5	0.01
4	SLU 77	696	1	4055	-1.21	27.28	0.01
4	SLU 78	700	1	4054	-1.3	27.41	0.01
4	SLU 79	696	1	4055	-1.21	27.28	0.01
4	SLU 80	700	1	4054	-1.3	27.41	0.01
4	SLU 81	757	1	4364	-1.41	29.67	0.01
4	SLU 82	761	1	4363	-1.5	29.8	0.01
4	SLU 83	757	1	4364	-1.41	29.67	0.01
4	SLU 84	761	1	4363	-1.5	29.8	0.01
4	SLE RA 1	410	0	2475	-0.51	16.03	0.01
4	SLE RA 2	414	0	2474	-0.61	16.17	0.01
4	SLE RA 3	410	0	2475	-0.51	16.03	0.01
4	SLE RA 4	412	0	2474	-0.57	16.12	0.01
4	SLE RA 5	414	0	2474	-0.61	16.17	0.01
4	SLE RA 6	410	0	2475	-0.51	16.03	0.01
4	SLE RA 7	412	0	2474	-0.57	16.12	0.01
4	SLE RA 8	410	0	2475	-0.51	16.03	0.01
4	SLE RA 9	412	0	2474	-0.57	16.12	0.01
4	SLE RA 10	508	1	2955	-0.93	19.89	0.01
4	SLE RA 11	504	0	2956	-0.83	19.74	0.01
4	SLE RA 12	507	1	2955	-0.89	19.83	0.01
4	SLE RA 13	508	1	2955	-0.93	19.89	0.01
4	SLE RA 14	504	0	2956	-0.83	19.74	0.01
4	SLE RA 15	507	1	2955	-0.89	19.83	0.01
4	SLE RA 16	504	0	2956	-0.83	19.74	0.01
4	SLE RA 17	507	1	2955	-0.89	19.83	0.01
4	SLE RA 18	544	0	3163	-0.96	21.33	0.01
4	SLE RA 19	547	1	3162	-1.02	21.42	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
4	SLE RA 20	544	0	3163	-0.96	21.33	0.01
4	SLE RA 21	547	1	3162	-1.02	21.42	0.01
4	SLE FR 1	410	0	2475	-0.51	16.03	0.01
4	SLE FR 2	411	0	2475	-0.53	16.06	0.01
4	SLE FR 3	410	0	2475	-0.51	16.03	0.01
4	SLE FR 4	451	0	2681	-0.67	17.65	0.01
4	SLE FR 5	450	0	2681	-0.65	17.62	0.01
4	SLE FR 6	477	0	2819	-0.74	18.68	0.01
4	SLE QP 1	410	0	2475	-0.51	16.03	0.01
4	SLE QP 2	450	0	2681	-0.65	17.62	0.01
4	SLD 1	712	-6	2271	-0.61	28.07	0.02
4	SLD 2	712	-6	2271	-0.61	28.07	0.02
4	SLD 3	737	0	2011	8.34	28.86	0.01
4	SLD 4	737	0	2011	8.34	28.86	0.01
4	SLD 5	490	-11	2952	-14.19	19.54	0.04
4	SLD 6	490	-11	2952	-14.19	19.54	0.04
4	SLD 7	575	10	2086	15.61	22.21	-0.01
4	SLD 8	575	10	2086	15.61	22.21	-0.01
4	SLD 9	325	-9	3277	-16.9	13.04	0.03
4	SLD 10	325	-9	3277	-16.9	13.04	0.03
4	SLD 11	410	12	2410	12.9	15.7	-0.02
4	SLD 12	410	12	2410	12.9	15.7	-0.02
4	SLD 13	163	0	3352	-9.63	6.38	0.01
4	SLD 14	163	0	3352	-9.63	6.38	0.01
4	SLD 15	188	6	3092	-0.69	7.18	0
4	SLD 16	188	6	3092	-0.69	7.18	0
4	SLV 1	1065	-15	1703	-0.75	42.21	0.05
4	SLV 2	1065	-15	1703	-0.75	42.21	0.05
4	SLV 3	1129	1	987	21.9	44.09	0.01
4	SLV 4	1129	1	987	21.9	44.09	0.01
4	SLV 5	538	-29	3474	-35.03	22.14	0.08
4	SLV 6	538	-29	3474	-35.03	22.14	0.08
4	SLV 7	750	25	1087	40.47	28.43	-0.05
4	SLV 8	750	25	1087	40.47	28.43	-0.05
4	SLV 9	150	-24	4276	-41.76	6.82	0.07
4	SLV 10	150	-24	4276	-41.76	6.82	0.07
4	SLV 11	362	29	1889	33.74	13.11	-0.06
4	SLV 12	362	29	1889	33.74	13.11	-0.06
4	SLV 13	-228	0	4375	-23.19	-8.85	0.01
4	SLV 14	-228	0	4375	-23.19	-8.85	0.01
4	SLV 15	-165	16	3659	-0.54	-6.96	-0.03
4	SLV 16	-165	16	3659	-0.54	-6.96	-0.03
5	SLU 1	303	0	2415	-0.05	11.85	0
5	SLU 2	309	0	2413	-0.2	12.14	0
5	SLU 3	303	0	2415	-0.05	11.85	0
5	SLU 4	307	0	2414	-0.14	12.02	0
5	SLU 5	309	0	2413	-0.2	12.14	0
5	SLU 6	303	0	2415	-0.05	11.85	0
5	SLU 7	307	0	2414	-0.14	12.02	0
5	SLU 8	303	0	2415	-0.05	11.85	0
5	SLU 9	307	0	2414	-0.14	12.02	0
5	SLU 10	425	1	3133	-0.59	16.82	0
5	SLU 11	419	0	3134	-0.43	16.53	0
5	SLU 12	423	1	3133	-0.52	16.71	0
5	SLU 13	425	1	3133	-0.59	16.82	0
5	SLU 14	419	0	3134	-0.43	16.53	0
5	SLU 15	423	1	3133	-0.52	16.71	0
5	SLU 16	419	0	3134	-0.43	16.53	0
5	SLU 17	423	1	3133	-0.52	16.71	0
5	SLU 18	469	0	3443	-0.6	18.54	0
5	SLU 19	472	1	3442	-0.69	18.71	0
5	SLU 20	469	0	3443	-0.6	18.54	0
5	SLU 21	472	1	3442	-0.69	18.71	0
5	SLU 22	366	0	2820	-0.23	14.4	0
5	SLU 23	373	0	2818	-0.38	14.7	0
5	SLU 24	366	0	2820	-0.23	14.4	0
5	SLU 25	370	0	2819	-0.32	14.58	0
5	SLU 26	373	0	2818	-0.38	14.7	0
5	SLU 27	366	0	2820	-0.23	14.4	0
5	SLU 28	370	0	2819	-0.32	14.58	0
5	SLU 29	366	0	2820	-0.23	14.4	0
5	SLU 30	370	0	2819	-0.32	14.58	0
5	SLU 31	489	1	3538	-0.77	19.38	0
5	SLU 32	482	0	3539	-0.61	19.09	0
5	SLU 33	486	1	3538	-0.7	19.26	0
5	SLU 34	489	1	3538	-0.77	19.38	0
5	SLU 35	482	0	3539	-0.61	19.09	0
5	SLU 36	486	1	3538	-0.7	19.26	0
5	SLU 37	482	0	3539	-0.61	19.09	0
5	SLU 38	486	1	3538	-0.7	19.26	0
5	SLU 39	532	1	3848	-0.78	21.09	0
5	SLU 40	536	1	3847	-0.87	21.27	0
5	SLU 41	532	1	3848	-0.78	21.09	0
5	SLU 42	536	1	3847	-0.87	21.27	0
5	SLU 43	372	0	3000	0	14.52	0
5	SLU 44	378	0	2999	-0.15	14.82	0
5	SLU 45	372	0	3000	0	14.52	0
5	SLU 46	376	0	2999	-0.09	14.7	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
5	SLU 47	378	0	2999	-0.15	14.82	0
5	SLU 48	372	0	3000	0	14.52	0
5	SLU 49	376	0	2999	-0.09	14.7	0
5	SLU 50	372	0	3000	0	14.52	0
5	SLU 51	376	0	2999	-0.09	14.7	0
5	SLU 52	494	1	3718	-0.54	19.5	0
5	SLU 53	488	0	3720	-0.38	19.21	0
5	SLU 54	492	0	3719	-0.48	19.38	0
5	SLU 55	494	1	3718	-0.54	19.5	0
5	SLU 56	488	0	3720	-0.38	19.21	0
5	SLU 57	492	0	3719	-0.48	19.38	0
5	SLU 58	488	0	3720	-0.38	19.21	0
5	SLU 59	492	0	3719	-0.48	19.38	0
5	SLU 60	537	0	4028	-0.55	21.21	0
5	SLU 61	541	1	4027	-0.64	21.39	0
5	SLU 62	537	0	4028	-0.55	21.21	0
5	SLU 63	541	1	4027	-0.64	21.39	0
5	SLU 64	435	0	3405	-0.18	17.08	0
5	SLU 65	442	0	3404	-0.33	17.37	0
5	SLU 66	435	0	3405	-0.18	17.08	0
5	SLU 67	439	0	3405	-0.27	17.26	0
5	SLU 68	442	0	3404	-0.33	17.37	0
5	SLU 69	435	0	3405	-0.18	17.08	0
5	SLU 70	439	0	3405	-0.27	17.26	0
5	SLU 71	435	0	3405	-0.18	17.08	0
5	SLU 72	439	0	3405	-0.27	17.26	0
5	SLU 73	558	1	4123	-0.72	22.06	0
5	SLU 74	551	0	4125	-0.56	21.76	0
5	SLU 75	555	1	4124	-0.66	21.94	0
5	SLU 76	558	1	4123	-0.72	22.06	0
5	SLU 77	551	0	4125	-0.56	21.76	0
5	SLU 78	555	1	4124	-0.66	21.94	0
5	SLU 79	551	0	4125	-0.56	21.76	0
5	SLU 80	555	1	4124	-0.66	21.94	0
5	SLU 81	601	1	4433	-0.73	23.77	0
5	SLU 82	605	1	4432	-0.82	23.95	0
5	SLU 83	601	1	4433	-0.73	23.77	0
5	SLU 84	605	1	4432	-0.82	23.95	0
5	SLE RA 1	321	0	2531	-0.1	12.58	0
5	SLE RA 2	325	0	2530	-0.2	12.77	0
5	SLE RA 3	321	0	2531	-0.1	12.58	0
5	SLE RA 4	323	0	2530	-0.16	12.69	0
5	SLE RA 5	325	0	2530	-0.2	12.77	0
5	SLE RA 6	321	0	2531	-0.1	12.58	0
5	SLE RA 7	323	0	2530	-0.16	12.69	0
5	SLE RA 8	321	0	2531	-0.1	12.58	0
5	SLE RA 9	323	0	2530	-0.16	12.69	0
5	SLE RA 10	403	0	3009	-0.46	15.9	0
5	SLE RA 11	398	0	3010	-0.35	15.7	0
5	SLE RA 12	401	0	3010	-0.42	15.82	0
5	SLE RA 13	403	0	3009	-0.46	15.9	0
5	SLE RA 14	398	0	3010	-0.35	15.7	0
5	SLE RA 15	401	0	3010	-0.42	15.82	0
5	SLE RA 16	398	0	3010	-0.35	15.7	0
5	SLE RA 17	401	0	3010	-0.42	15.82	0
5	SLE RA 18	431	0	3216	-0.47	17.04	0
5	SLE RA 19	434	0	3215	-0.53	17.15	0
5	SLE RA 20	431	0	3216	-0.47	17.04	0
5	SLE RA 21	434	0	3215	-0.53	17.15	0
5	SLE FR 1	321	0	2531	-0.1	12.58	0
5	SLE FR 2	322	0	2530	-0.12	12.62	0
5	SLE FR 3	321	0	2531	-0.1	12.58	0
5	SLE FR 4	355	0	2736	-0.23	13.95	0
5	SLE FR 5	354	0	2736	-0.21	13.92	0
5	SLE FR 6	376	0	2873	-0.28	14.81	0
5	SLE QP 1	321	0	2531	-0.1	12.58	0
5	SLE QP 2	354	0	2736	-0.21	13.92	0
5	SLD 1	619	-11	2406	-0.73	24.81	0.03
5	SLD 2	619	-11	2406	-0.73	24.81	0.03
5	SLD 3	642	-2	2213	14.88	25.68	0.01
5	SLD 4	642	-2	2213	14.88	25.68	0.01
5	SLD 5	398	-17	2930	-24.03	15.85	0.04
5	SLD 6	398	-17	2930	-24.03	15.85	0.04
5	SLD 7	476	13	2286	27.99	18.77	-0.03
5	SLD 8	476	13	2286	27.99	18.77	-0.03
5	SLD 9	232	-13	3186	-28.41	9.06	0.03
5	SLD 10	232	-13	3186	-28.41	9.06	0.03
5	SLD 11	310	17	2543	23.62	11.98	-0.04
5	SLD 12	310	17	2543	23.62	11.98	-0.04
5	SLD 13	66	2	3260	-15.3	2.15	-0.01
5	SLD 14	66	2	3260	-15.3	2.15	-0.01
5	SLD 15	89	11	3067	0.31	3.03	-0.03
5	SLD 16	89	11	3067	0.31	3.03	-0.03
5	SLV 1	976	-27	1946	-1.92	39.49	0.07
5	SLV 2	976	-27	1946	-1.92	39.49	0.07
5	SLV 3	1035	-5	1409	37.99	41.67	0.02
5	SLV 4	1035	-5	1409	37.99	41.67	0.02
5	SLV 5	451	-40	3315	-61.25	18.28	0.1

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
5	SLV 6	451	-40	3315	-61.25	18.28	0.1
5	SLV 7	649	31	1522	71.78	25.55	-0.07
5	SLV 8	649	31	1522	71.78	25.55	-0.07
5	SLV 9	59	-31	3950	-72.2	2.28	0.07
5	SLV 10	59	-31	3950	-72.2	2.28	0.07
5	SLV 11	257	41	2158	60.84	9.55	-0.09
5	SLV 12	257	41	2158	60.84	9.55	-0.09
5	SLV 13	-327	5	4064	-38.4	-13.84	-0.02
5	SLV 14	-327	5	4064	-38.4	-13.84	-0.02
5	SLV 15	-268	27	3526	1.51	-11.65	-0.07
5	SLV 16	-268	27	3526	1.51	-11.65	-0.07
6	SLU 1	238	0	2471	0.17	9.55	0
6	SLU 2	244	0	2469	0.04	9.77	0
6	SLU 3	238	0	2471	0.17	9.55	0
6	SLU 4	242	0	2470	0.09	9.68	0
6	SLU 5	244	0	2469	0.04	9.77	0
6	SLU 6	238	0	2471	0.17	9.55	0
6	SLU 7	242	0	2470	0.09	9.68	0
6	SLU 8	238	0	2471	0.17	9.55	0
6	SLU 9	242	0	2470	0.09	9.68	0
6	SLU 10	340	0	3191	-0.29	13.67	0
6	SLU 11	334	0	3193	-0.17	13.45	0
6	SLU 12	338	0	3192	-0.25	13.58	0
6	SLU 13	340	0	3191	-0.29	13.67	0
6	SLU 14	334	0	3193	-0.17	13.45	0
6	SLU 15	338	0	3192	-0.25	13.58	0
6	SLU 16	334	0	3193	-0.17	13.45	0
6	SLU 17	338	0	3192	-0.25	13.58	0
6	SLU 18	375	0	3502	-0.32	15.12	0
6	SLU 19	379	1	3501	-0.39	15.26	0
6	SLU 20	375	0	3502	-0.32	15.12	0
6	SLU 21	379	1	3501	-0.39	15.26	0
6	SLU 22	291	0	2880	0.01	11.67	0
6	SLU 23	297	0	2878	-0.11	11.9	0
6	SLU 24	291	0	2880	0.01	11.67	0
6	SLU 25	294	0	2879	-0.06	11.81	0
6	SLU 26	297	0	2878	-0.11	11.9	0
6	SLU 27	291	0	2880	0.01	11.67	0
6	SLU 28	294	0	2879	-0.06	11.81	0
6	SLU 29	291	0	2880	0.01	11.67	0
6	SLU 30	294	0	2879	-0.06	11.81	0
6	SLU 31	393	1	3600	-0.45	15.8	0
6	SLU 32	387	0	3602	-0.33	15.58	0
6	SLU 33	390	1	3601	-0.4	15.71	0
6	SLU 34	393	1	3600	-0.45	15.8	0
6	SLU 35	387	0	3602	-0.33	15.58	0
6	SLU 36	390	1	3601	-0.4	15.71	0
6	SLU 37	387	0	3602	-0.33	15.58	0
6	SLU 38	390	1	3601	-0.4	15.71	0
6	SLU 39	428	0	3911	-0.47	17.25	0
6	SLU 40	431	1	3910	-0.54	17.38	0
6	SLU 41	428	0	3911	-0.47	17.25	0
6	SLU 42	431	1	3910	-0.54	17.38	0
6	SLU 43	292	0	3072	0.27	11.68	0
6	SLU 44	298	0	3070	0.15	11.9	0
6	SLU 45	292	0	3072	0.27	11.68	0
6	SLU 46	295	0	3071	0.19	11.82	0
6	SLU 47	298	0	3070	0.15	11.9	0
6	SLU 48	292	0	3072	0.27	11.68	0
6	SLU 49	295	0	3071	0.19	11.82	0
6	SLU 50	292	0	3072	0.27	11.68	0
6	SLU 51	295	0	3071	0.19	11.82	0
6	SLU 52	394	0	3792	-0.19	15.81	0
6	SLU 53	388	0	3794	-0.07	15.59	0
6	SLU 54	391	0	3793	-0.14	15.72	0
6	SLU 55	394	0	3792	-0.19	15.81	0
6	SLU 56	388	0	3794	-0.07	15.59	0
6	SLU 57	391	0	3793	-0.14	15.72	0
6	SLU 58	388	0	3794	-0.07	15.59	0
6	SLU 59	391	0	3793	-0.14	15.72	0
6	SLU 60	429	0	4103	-0.22	17.26	0
6	SLU 61	432	0	4102	-0.29	17.39	0
6	SLU 62	429	0	4103	-0.22	17.26	0
6	SLU 63	432	0	4102	-0.29	17.39	0
6	SLU 64	345	0	3481	0.12	13.81	0
6	SLU 65	350	0	3479	-0.01	14.03	0
6	SLU 66	345	0	3481	0.12	13.81	0
6	SLU 67	348	0	3480	0.04	13.94	0
6	SLU 68	350	0	3479	-0.01	14.03	0
6	SLU 69	345	0	3481	0.12	13.81	0
6	SLU 70	348	0	3480	0.04	13.94	0
6	SLU 71	345	0	3481	0.12	13.81	0
6	SLU 72	348	0	3480	0.04	13.94	0
6	SLU 73	446	1	4201	-0.35	17.93	0
6	SLU 74	440	0	4203	-0.22	17.71	0
6	SLU 75	444	0	4202	-0.3	17.85	0
6	SLU 76	446	1	4201	-0.35	17.93	0
6	SLU 77	440	0	4203	-0.22	17.71	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
6	SLU 78	444	0	4202	-0.3	17.85	0
6	SLU 79	440	0	4203	-0.22	17.71	0
6	SLU 80	444	0	4202	-0.3	17.85	0
6	SLU 81	481	0	4512	-0.37	19.39	0
6	SLU 82	485	1	4511	-0.44	19.52	0
6	SLU 83	481	0	4512	-0.37	19.39	0
6	SLU 84	485	1	4511	-0.44	19.52	0
6	SLE RA 1	253	0	2588	0.12	10.16	0
6	SLE RA 2	257	0	2587	0.04	10.3	0
6	SLE RA 3	253	0	2588	0.12	10.16	0
6	SLE RA 4	256	0	2587	0.07	10.24	0
6	SLE RA 5	257	0	2587	0.04	10.3	0
6	SLE RA 6	253	0	2588	0.12	10.16	0
6	SLE RA 7	256	0	2587	0.07	10.24	0
6	SLE RA 8	253	0	2588	0.12	10.16	0
6	SLE RA 9	256	0	2587	0.07	10.24	0
6	SLE RA 10	321	0	3068	-0.18	12.91	0
6	SLE RA 11	317	0	3069	-0.1	12.76	0
6	SLE RA 12	320	0	3068	-0.15	12.85	0
6	SLE RA 13	321	0	3068	-0.18	12.91	0
6	SLE RA 14	317	0	3069	-0.1	12.76	0
6	SLE RA 15	320	0	3068	-0.15	12.85	0
6	SLE RA 16	317	0	3069	-0.1	12.76	0
6	SLE RA 17	320	0	3068	-0.15	12.85	0
6	SLE RA 18	345	0	3275	-0.2	13.87	0
6	SLE RA 19	347	0	3275	-0.25	13.96	0
6	SLE RA 20	345	0	3275	-0.2	13.87	0
6	SLE RA 21	347	0	3275	-0.25	13.96	0
6	SLE FR 1	253	0	2588	0.12	10.16	0
6	SLE FR 2	254	0	2587	0.11	10.18	0
6	SLE FR 3	253	0	2588	0.12	10.16	0
6	SLE FR 4	282	0	2794	0.01	11.3	0
6	SLE FR 5	281	0	2794	0.03	11.27	0
6	SLE FR 6	299	0	2931	-0.04	12.01	0
6	SLE QP 1	253	0	2588	0.12	10.16	0
6	SLE QP 2	281	0	2794	0.03	11.27	0
6	SLD 1	544	-3	2528	-1.69	22	0.01
6	SLD 2	544	-3	2528	-1.69	22	0.01
6	SLD 3	566	-17	2381	21.11	23.03	0.06
6	SLD 4	566	-17	2381	21.11	23.03	0.06
6	SLD 5	325	21	2937	-35.08	12.94	-0.07
6	SLD 6	325	21	2937	-35.08	12.94	-0.07
6	SLD 7	401	-27	2447	40.94	16.35	0.08
6	SLD 8	401	-27	2447	40.94	16.35	0.08
6	SLD 9	161	27	3140	-40.89	6.19	-0.09
6	SLD 10	161	27	3140	-40.89	6.19	-0.09
6	SLD 11	237	-21	2651	35.13	9.61	0.06
6	SLD 12	237	-21	2651	35.13	9.61	0.06
6	SLD 13	-5	17	3206	-21.06	-0.49	-0.06
6	SLD 14	-5	17	3206	-21.06	-0.49	-0.06
6	SLD 15	18	3	3060	1.75	0.54	-0.01
6	SLD 16	18	3	3060	1.75	0.54	-0.01
6	SLV 1	899	-7	2157	-5.02	36.52	0.03
6	SLV 2	899	-7	2157	-5.02	36.52	0.03
6	SLV 3	955	-42	1744	53.84	38.99	0.14
6	SLV 4	955	-42	1744	53.84	38.99	0.14
6	SLV 5	381	51	3229	-90.76	15.11	-0.16
6	SLV 6	381	51	3229	-90.76	15.11	-0.16
6	SLV 7	568	-65	1853	105.44	23.32	0.21
6	SLV 8	568	-65	1853	105.44	23.32	0.21
6	SLV 9	-6	66	3735	-105.39	-0.78	-0.21
6	SLV 10	-6	66	3735	-105.39	-0.78	-0.21
6	SLV 11	180	-51	2359	90.81	7.43	0.16
6	SLV 12	180	-51	2359	90.81	7.43	0.16
6	SLV 13	-393	42	3844	-53.79	-16.44	-0.14
6	SLV 14	-393	42	3844	-53.79	-16.44	-0.14
6	SLV 15	-337	7	3431	5.07	-13.98	-0.03
6	SLV 16	-337	7	3431	5.07	-13.98	-0.03
7	SLU 1	178	0	2531	0.35	7.22	0
7	SLU 2	184	0	2528	0.27	7.47	0
7	SLU 3	178	0	2531	0.35	7.22	0
7	SLU 4	181	0	2529	0.3	7.37	0
7	SLU 5	184	0	2528	0.27	7.47	0
7	SLU 6	178	0	2531	0.35	7.22	0
7	SLU 7	181	0	2529	0.3	7.37	0
7	SLU 8	178	0	2531	0.35	7.22	0
7	SLU 9	181	0	2529	0.3	7.37	0
7	SLU 10	261	0	3257	-0.02	10.72	0
7	SLU 11	256	0	3259	0.05	10.47	0
7	SLU 12	259	0	3258	0.01	10.62	0
7	SLU 13	261	0	3257	-0.02	10.72	0
7	SLU 14	256	0	3259	0.05	10.47	0
7	SLU 15	259	0	3258	0.01	10.62	0
7	SLU 16	256	0	3259	0.05	10.47	0
7	SLU 17	259	0	3258	0.01	10.62	0
7	SLU 18	289	0	3571	-0.08	11.86	0
7	SLU 19	293	0	3570	-0.12	12.01	0
7	SLU 20	289	0	3571	-0.08	11.86	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
7	SLU 21	293	0	3570	-0.12	12.01	0
7	SLU 22	220	0	2945	0.22	8.98	0
7	SLU 23	226	0	2943	0.14	9.23	0
7	SLU 24	220	0	2945	0.22	8.98	0
7	SLU 25	224	0	2944	0.17	9.13	0
7	SLU 26	226	0	2943	0.14	9.23	0
7	SLU 27	220	0	2945	0.22	8.98	0
7	SLU 28	224	0	2944	0.17	9.13	0
7	SLU 29	220	0	2945	0.22	8.98	0
7	SLU 30	224	0	2944	0.17	9.13	0
7	SLU 31	304	0	3671	-0.15	12.48	0
7	SLU 32	298	0	3674	-0.08	12.22	0
7	SLU 33	302	0	3672	-0.12	12.38	0
7	SLU 34	304	0	3671	-0.15	12.48	0
7	SLU 35	298	0	3674	-0.08	12.22	0
7	SLU 36	302	0	3672	-0.12	12.38	0
7	SLU 37	298	0	3674	-0.08	12.22	0
7	SLU 38	302	0	3672	-0.12	12.38	0
7	SLU 39	331	0	3986	-0.2	13.62	0
7	SLU 40	335	0	3984	-0.25	13.77	0
7	SLU 41	331	0	3986	-0.2	13.62	0
7	SLU 42	335	0	3984	-0.25	13.77	0
7	SLU 43	217	0	3148	0.49	8.78	0
7	SLU 44	223	0	3146	0.42	9.04	0
7	SLU 45	217	0	3148	0.49	8.78	0
7	SLU 46	220	0	3147	0.45	8.94	0
7	SLU 47	223	0	3146	0.42	9.04	0
7	SLU 48	217	0	3148	0.49	8.78	0
7	SLU 49	220	0	3147	0.45	8.94	0
7	SLU 50	217	0	3148	0.49	8.78	0
7	SLU 51	220	0	3147	0.45	8.94	0
7	SLU 52	300	0	3874	0.12	12.28	0
7	SLU 53	295	0	3877	0.2	12.03	0
7	SLU 54	298	0	3875	0.15	12.18	0
7	SLU 55	300	0	3874	0.12	12.28	0
7	SLU 56	295	0	3877	0.2	12.03	0
7	SLU 57	298	0	3875	0.15	12.18	0
7	SLU 58	295	0	3877	0.2	12.03	0
7	SLU 59	298	0	3875	0.15	12.18	0
7	SLU 60	328	0	4189	0.07	13.42	0
7	SLU 61	331	0	4187	0.03	13.57	0
7	SLU 62	328	0	4189	0.07	13.42	0
7	SLU 63	331	0	4187	0.03	13.57	0
7	SLU 64	259	0	3563	0.36	10.54	0
7	SLU 65	265	0	3560	0.29	10.79	0
7	SLU 66	259	0	3563	0.36	10.54	0
7	SLU 67	263	0	3561	0.32	10.69	0
7	SLU 68	265	0	3560	0.29	10.79	0
7	SLU 69	259	0	3563	0.36	10.54	0
7	SLU 70	263	0	3561	0.32	10.69	0
7	SLU 71	259	0	3563	0.36	10.54	0
7	SLU 72	263	0	3561	0.32	10.69	0
7	SLU 73	343	0	4288	0	14.04	0
7	SLU 74	337	0	4291	0.07	13.79	0
7	SLU 75	340	0	4289	0.02	13.94	0
7	SLU 76	343	0	4288	0	14.04	0
7	SLU 77	337	0	4291	0.07	13.79	0
7	SLU 78	340	0	4289	0.02	13.94	0
7	SLU 79	337	0	4291	0.07	13.79	0
7	SLU 80	340	0	4289	0.02	13.94	0
7	SLU 81	370	0	4603	-0.06	15.18	0
7	SLU 82	374	0	4601	-0.1	15.33	0
7	SLU 83	370	0	4603	-0.06	15.18	0
7	SLU 84	374	0	4601	-0.1	15.33	0
7	SLE RA 1	190	0	2649	0.31	7.72	0
7	SLE RA 2	194	0	2648	0.26	7.89	0
7	SLE RA 3	190	0	2649	0.31	7.72	0
7	SLE RA 4	192	0	2648	0.28	7.82	0
7	SLE RA 5	194	0	2648	0.26	7.89	0
7	SLE RA 6	190	0	2649	0.31	7.72	0
7	SLE RA 7	192	0	2648	0.28	7.82	0
7	SLE RA 8	190	0	2649	0.31	7.72	0
7	SLE RA 9	192	0	2648	0.28	7.82	0
7	SLE RA 10	246	0	3133	0.06	10.06	0
7	SLE RA 11	242	0	3135	0.11	9.89	0
7	SLE RA 12	244	0	3134	0.08	9.99	0
7	SLE RA 13	246	0	3133	0.06	10.06	0
7	SLE RA 14	242	0	3135	0.11	9.89	0
7	SLE RA 15	244	0	3134	0.08	9.99	0
7	SLE RA 16	242	0	3135	0.11	9.89	0
7	SLE RA 17	244	0	3134	0.08	9.99	0
7	SLE RA 18	264	0	3343	0.03	10.81	0
7	SLE RA 19	266	0	3342	0	10.92	0
7	SLE RA 20	264	0	3343	0.03	10.81	0
7	SLE RA 21	266	0	3342	0	10.92	0
7	SLE FR 1	190	0	2649	0.31	7.72	0
7	SLE FR 2	191	0	2649	0.3	7.76	0
7	SLE FR 3	190	0	2649	0.31	7.72	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
7	SLE FR 4	213	0	2857	0.21	8.68	0
7	SLE FR 5	212	0	2858	0.22	8.65	0
7	SLE FR 6	227	0	2996	0.17	9.27	0
7	SLE QP 1	190	0	2649	0.31	7.72	0
7	SLE QP 2	212	0	2858	0.22	8.65	0
7	SLD 1	472	-2	2647	-3.47	19.81	0.01
7	SLD 2	472	-2	2647	-3.47	19.81	0.01
7	SLD 3	495	-22	2534	26.39	20.78	0.08
7	SLD 4	495	-22	2534	26.39	20.78	0.08
7	SLD 5	254	29	2966	-46.16	10.53	-0.11
7	SLD 6	254	29	2966	-46.16	10.53	-0.11
7	SLD 7	333	-36	2588	53.35	13.76	0.13
7	SLD 8	333	-36	2588	53.35	13.76	0.13
7	SLD 9	91	36	3127	-52.9	3.54	-0.13
7	SLD 10	91	36	3127	-52.9	3.54	-0.13
7	SLD 11	171	-29	2749	46.61	6.77	0.11
7	SLD 12	171	-29	2749	46.61	6.77	0.11
7	SLD 13	-71	22	3181	-25.94	-3.48	-0.08
7	SLD 14	-71	22	3181	-25.94	-3.48	-0.08
7	SLD 15	-47	2	3068	3.92	-2.51	-0.01
7	SLD 16	-47	2	3068	3.92	-2.51	-0.01
7	SLV 1	822	-6	2350	-10.16	34.87	0.02
7	SLV 2	822	-6	2350	-10.16	34.87	0.02
7	SLV 3	880	-54	2030	67.49	37.23	0.2
7	SLV 4	880	-54	2030	67.49	37.23	0.2
7	SLV 5	307	71	3191	-120.67	12.93	-0.26
7	SLV 6	307	71	3191	-120.67	12.93	-0.26
7	SLV 7	501	-89	2123	138.18	20.81	0.33
7	SLV 8	501	-89	2123	138.18	20.81	0.33
7	SLV 9	-77	89	3592	-137.73	-3.51	-0.33
7	SLV 10	-77	89	3592	-137.73	-3.51	-0.33
7	SLV 11	118	-71	2524	121.12	4.37	0.26
7	SLV 12	118	-71	2524	121.12	4.37	0.26
7	SLV 13	-456	54	3685	-67.05	-19.93	-0.2
7	SLV 14	-456	54	3685	-67.05	-19.93	-0.2
7	SLV 15	-397	6	3365	10.61	-17.57	-0.02
7	SLV 16	-397	6	3365	10.61	-17.57	-0.02
8	SLU 1	110	0	2588	0.5	4.37	0
8	SLU 2	116	0	2584	0.49	4.6	0
8	SLU 3	110	0	2588	0.5	4.37	0
8	SLU 4	113	0	2586	0.49	4.51	0
8	SLU 5	116	0	2584	0.49	4.6	0
8	SLU 6	110	0	2588	0.5	4.37	0
8	SLU 7	113	0	2586	0.49	4.51	0
8	SLU 8	110	0	2588	0.5	4.37	0
8	SLU 9	113	0	2586	0.49	4.51	0
8	SLU 10	172	0	3320	0.23	6.97	0
8	SLU 11	167	0	3324	0.25	6.74	0
8	SLU 12	170	0	3321	0.24	6.88	0
8	SLU 13	172	0	3320	0.23	6.97	0
8	SLU 14	167	0	3324	0.25	6.74	0
8	SLU 15	170	0	3321	0.24	6.88	0
8	SLU 16	167	0	3324	0.25	6.74	0
8	SLU 17	170	0	3321	0.24	6.88	0
8	SLU 18	191	0	3639	0.14	7.76	0
8	SLU 19	195	0	3636	0.13	7.9	0
8	SLU 20	191	0	3639	0.14	7.76	0
8	SLU 21	195	0	3636	0.13	7.9	0
8	SLU 22	141	0	3008	0.4	5.63	0
8	SLU 23	146	0	3004	0.38	5.87	0
8	SLU 24	141	0	3008	0.4	5.63	0
8	SLU 25	144	0	3006	0.39	5.77	0
8	SLU 26	146	0	3004	0.38	5.87	0
8	SLU 27	141	0	3008	0.4	5.63	0
8	SLU 28	144	0	3006	0.39	5.77	0
8	SLU 29	141	0	3008	0.4	5.63	0
8	SLU 30	144	0	3006	0.39	5.77	0
8	SLU 31	203	0	3740	0.13	8.24	0
8	SLU 32	198	0	3744	0.15	8	0
8	SLU 33	201	0	3742	0.14	8.14	0
8	SLU 34	203	0	3740	0.13	8.24	0
8	SLU 35	198	0	3744	0.15	8	0
8	SLU 36	201	0	3742	0.14	8.14	0
8	SLU 37	198	0	3744	0.15	8	0
8	SLU 38	201	0	3742	0.14	8.14	0
8	SLU 39	222	0	4059	0.04	9.02	0
8	SLU 40	225	0	4057	0.03	9.16	0
8	SLU 41	222	0	4059	0.04	9.02	0
8	SLU 42	225	0	4057	0.03	9.16	0
8	SLU 43	133	0	3220	0.69	5.25	0
8	SLU 44	138	0	3216	0.67	5.48	0
8	SLU 45	133	0	3220	0.69	5.25	0
8	SLU 46	136	0	3218	0.68	5.39	0
8	SLU 47	138	0	3216	0.67	5.48	0
8	SLU 48	133	0	3220	0.69	5.25	0
8	SLU 49	136	0	3218	0.68	5.39	0
8	SLU 50	133	0	3220	0.69	5.25	0
8	SLU 51	136	0	3218	0.68	5.39	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
8	SLU 52	195	0	3952	0.42	7.85	0
8	SLU 53	190	0	3956	0.44	7.62	0
8	SLU 54	193	0	3954	0.43	7.76	0
8	SLU 55	195	0	3952	0.42	7.85	0
8	SLU 56	190	0	3956	0.44	7.62	0
8	SLU 57	193	0	3954	0.43	7.76	0
8	SLU 58	190	0	3956	0.44	7.62	0
8	SLU 59	193	0	3954	0.43	7.76	0
8	SLU 60	214	0	4271	0.33	8.63	0
8	SLU 61	217	0	4269	0.32	8.77	0
8	SLU 62	214	0	4271	0.33	8.63	0
8	SLU 63	217	0	4269	0.32	8.77	0
8	SLU 64	163	0	3641	0.59	6.51	0
8	SLU 65	169	0	3637	0.57	6.75	0
8	SLU 66	163	0	3641	0.59	6.51	0
8	SLU 67	167	0	3638	0.58	6.65	0
8	SLU 68	169	0	3637	0.57	6.75	0
8	SLU 69	163	0	3641	0.59	6.51	0
8	SLU 70	167	0	3638	0.58	6.65	0
8	SLU 71	163	0	3641	0.59	6.51	0
8	SLU 72	167	0	3638	0.58	6.65	0
8	SLU 73	225	0	4372	0.32	9.12	0
8	SLU 74	220	0	4376	0.33	8.88	0
8	SLU 75	223	0	4374	0.32	9.02	0
8	SLU 76	225	0	4372	0.32	9.12	0
8	SLU 77	220	0	4376	0.33	8.88	0
8	SLU 78	223	0	4374	0.32	9.02	0
8	SLU 79	220	0	4376	0.33	8.88	0
8	SLU 80	223	0	4374	0.32	9.02	0
8	SLU 81	244	0	4692	0.23	9.9	0
8	SLU 82	248	0	4689	0.22	10.04	0
8	SLU 83	244	0	4692	0.23	9.9	0
8	SLU 84	248	0	4689	0.22	10.04	0
8	SLE RA 1	119	0	2708	0.47	4.73	0
8	SLE RA 2	122	0	2706	0.46	4.89	0
8	SLE RA 3	119	0	2708	0.47	4.73	0
8	SLE RA 4	121	0	2707	0.47	4.82	0
8	SLE RA 5	122	0	2706	0.46	4.89	0
8	SLE RA 6	119	0	2708	0.47	4.73	0
8	SLE RA 7	121	0	2707	0.47	4.82	0
8	SLE RA 8	119	0	2708	0.47	4.73	0
8	SLE RA 9	121	0	2707	0.47	4.82	0
8	SLE RA 10	160	0	3196	0.29	6.47	0
8	SLE RA 11	157	0	3199	0.31	6.31	0
8	SLE RA 12	159	0	3197	0.3	6.4	0
8	SLE RA 13	160	0	3196	0.29	6.47	0
8	SLE RA 14	157	0	3199	0.31	6.31	0
8	SLE RA 15	159	0	3197	0.3	6.4	0
8	SLE RA 16	157	0	3199	0.31	6.31	0
8	SLE RA 17	159	0	3197	0.3	6.4	0
8	SLE RA 18	173	0	3409	0.23	6.99	0
8	SLE RA 19	175	0	3407	0.23	7.08	0
8	SLE RA 20	173	0	3409	0.23	6.99	0
8	SLE RA 21	175	0	3407	0.23	7.08	0
8	SLE FR 1	119	0	2708	0.47	4.73	0
8	SLE FR 2	120	0	2708	0.47	4.76	0
8	SLE FR 3	119	0	2708	0.47	4.73	0
8	SLE FR 4	136	0	2918	0.4	5.44	0
8	SLE FR 5	135	0	2918	0.4	5.41	0
8	SLE FR 6	146	0	3058	0.35	5.86	0
8	SLE QP 1	119	0	2708	0.47	4.73	0
8	SLE QP 2	135	0	2918	0.4	5.41	0
8	SLD 1	384	-1	2756	-29.65	16.11	0.02
8	SLD 2	384	-1	2756	-29.65	16.11	0.02
8	SLD 3	409	-25	2669	6.93	17.3	0.12
8	SLD 4	409	-25	2669	6.93	17.3	0.12
8	SLD 5	171	35	3001	-64.09	6.82	-0.14
8	SLD 6	171	35	3001	-64.09	6.82	-0.14
8	SLD 7	256	-43	2712	57.83	10.77	0.18
8	SLD 8	256	-43	2712	57.83	10.77	0.18
8	SLD 9	14	43	3124	-57.03	0.05	-0.18
8	SLD 10	14	43	3124	-57.03	0.05	-0.18
8	SLD 11	99	-36	2836	64.89	3.99	0.14
8	SLD 12	99	-36	2836	64.89	3.99	0.14
8	SLD 13	-139	24	3167	-6.12	-6.48	-0.12
8	SLD 14	-139	24	3167	-6.12	-6.48	-0.12
8	SLD 15	-114	1	3081	30.45	-5.3	-0.02
8	SLD 16	-114	1	3081	30.45	-5.3	-0.02
8	SLV 1	720	-2	2524	-77.38	30.58	0.05
8	SLV 2	720	-2	2524	-77.38	30.58	0.05
8	SLV 3	782	-62	2279	18.32	33.44	0.29
8	SLV 4	782	-62	2279	18.32	33.44	0.29
8	SLV 5	216	90	3172	-168.08	8.61	-0.36
8	SLV 6	216	90	3172	-168.08	8.61	-0.36
8	SLV 7	424	-110	2355	150.92	18.17	0.46
8	SLV 8	424	-110	2355	150.92	18.17	0.46
8	SLV 9	-153	109	3482	-150.12	-7.35	-0.46
8	SLV 10	-153	109	3482	-150.12	-7.35	-0.46

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
8	SLV 11	54	-90	2665	168.88	2.21	0.36
8	SLV 12	54	-90	2665	168.88	2.21	0.36
8	SLV 13	-512	62	3557	-17.51	-22.63	-0.29
8	SLV 14	-512	62	3557	-17.51	-22.63	-0.29
8	SLV 15	-450	2	3312	78.19	-19.76	-0.05
8	SLV 16	-450	2	3312	78.19	-19.76	-0.05
9	SLU 1	30	0	2640	0.65	1.14	0
9	SLU 2	35	0	2634	0.69	1.38	0
9	SLU 3	30	0	2640	0.65	1.14	0
9	SLU 4	33	0	2636	0.67	1.28	0
9	SLU 5	35	0	2634	0.69	1.38	0
9	SLU 6	30	0	2640	0.65	1.14	0
9	SLU 7	33	0	2636	0.67	1.28	0
9	SLU 8	30	0	2640	0.65	1.14	0
9	SLU 9	33	0	2636	0.67	1.28	0
9	SLU 10	67	0	3375	0.49	2.74	0
9	SLU 11	61	0	3381	0.44	2.5	0
9	SLU 12	65	0	3378	0.47	2.64	0
9	SLU 13	67	0	3375	0.49	2.74	0
9	SLU 14	61	0	3381	0.44	2.5	0
9	SLU 15	65	0	3378	0.47	2.64	0
9	SLU 16	61	0	3381	0.44	2.5	0
9	SLU 17	65	0	3378	0.47	2.64	0
9	SLU 18	75	0	3699	0.35	3.09	0
9	SLU 19	78	0	3696	0.38	3.23	0
9	SLU 20	75	0	3699	0.35	3.09	0
9	SLU 21	78	0	3696	0.38	3.23	0
9	SLU 22	46	0	3065	0.56	1.83	0
9	SLU 23	51	0	3059	0.61	2.07	0
9	SLU 24	46	0	3065	0.56	1.83	0
9	SLU 25	49	0	3062	0.59	1.97	0
9	SLU 26	51	0	3059	0.61	2.07	0
9	SLU 27	46	0	3065	0.56	1.83	0
9	SLU 28	49	0	3062	0.59	1.97	0
9	SLU 29	46	0	3065	0.56	1.83	0
9	SLU 30	49	0	3062	0.59	1.97	0
9	SLU 31	83	0	3801	0.4	3.43	0
9	SLU 32	78	0	3807	0.35	3.19	0
9	SLU 33	81	0	3803	0.38	3.34	0
9	SLU 34	83	0	3801	0.4	3.43	0
9	SLU 35	78	0	3807	0.35	3.19	0
9	SLU 36	81	0	3803	0.38	3.34	0
9	SLU 37	78	0	3807	0.35	3.19	0
9	SLU 38	81	0	3803	0.38	3.34	0
9	SLU 39	91	0	4125	0.26	3.78	0
9	SLU 40	94	0	4121	0.29	3.92	0
9	SLU 41	91	0	4125	0.26	3.78	0
9	SLU 42	94	0	4121	0.29	3.92	0
9	SLU 43	33	0	3286	0.87	1.24	0
9	SLU 44	38	0	3280	0.92	1.48	0
9	SLU 45	33	0	3286	0.87	1.24	0
9	SLU 46	36	0	3282	0.9	1.38	0
9	SLU 47	38	0	3280	0.92	1.48	0
9	SLU 48	33	0	3286	0.87	1.24	0
9	SLU 49	36	0	3282	0.9	1.38	0
9	SLU 50	33	0	3286	0.87	1.24	0
9	SLU 51	36	0	3282	0.9	1.38	0
9	SLU 52	70	0	4021	0.71	2.84	0
9	SLU 53	65	0	4027	0.66	2.61	0
9	SLU 54	68	0	4024	0.69	2.75	0
9	SLU 55	70	0	4021	0.71	2.84	0
9	SLU 56	65	0	4027	0.66	2.61	0
9	SLU 57	68	0	4024	0.69	2.75	0
9	SLU 58	65	0	4027	0.66	2.61	0
9	SLU 59	68	0	4024	0.69	2.75	0
9	SLU 60	78	0	4345	0.57	3.19	0
9	SLU 61	81	0	4342	0.6	3.33	0
9	SLU 62	78	0	4345	0.57	3.19	0
9	SLU 63	81	0	4342	0.6	3.33	0
9	SLU 64	50	0	3711	0.79	1.93	0
9	SLU 65	55	0	3705	0.83	2.17	0
9	SLU 66	50	0	3711	0.79	1.93	0
9	SLU 67	53	0	3708	0.81	2.08	0
9	SLU 68	55	0	3705	0.83	2.17	0
9	SLU 69	50	0	3711	0.79	1.93	0
9	SLU 70	53	0	3708	0.81	2.08	0
9	SLU 71	50	0	3711	0.79	1.93	0
9	SLU 72	53	0	3708	0.81	2.08	0
9	SLU 73	86	0	4447	0.63	3.54	0
9	SLU 74	81	0	4453	0.58	3.3	0
9	SLU 75	84	0	4449	0.61	3.44	0
9	SLU 76	86	0	4447	0.63	3.54	0
9	SLU 77	81	0	4453	0.58	3.3	0
9	SLU 78	84	0	4449	0.61	3.44	0
9	SLU 79	81	0	4453	0.58	3.3	0
9	SLU 80	84	0	4449	0.61	3.44	0
9	SLU 81	95	0	4771	0.49	3.88	0
9	SLU 82	98	0	4767	0.52	4.02	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
9	SLU 83	95	0	4771	0.49	3.88	0
9	SLU 84	98	0	4767	0.52	4.02	0
9	SLE RA 1	35	0	2761	0.62	1.33	0
9	SLE RA 2	38	0	2757	0.65	1.49	0
9	SLE RA 3	35	0	2761	0.62	1.33	0
9	SLE RA 4	37	0	2759	0.64	1.43	0
9	SLE RA 5	38	0	2757	0.65	1.49	0
9	SLE RA 6	35	0	2761	0.62	1.33	0
9	SLE RA 7	37	0	2759	0.64	1.43	0
9	SLE RA 8	35	0	2761	0.62	1.33	0
9	SLE RA 9	37	0	2759	0.64	1.43	0
9	SLE RA 10	59	0	3252	0.52	2.4	0
9	SLE RA 11	56	0	3256	0.48	2.24	0
9	SLE RA 12	58	0	3253	0.5	2.34	0
9	SLE RA 13	59	0	3252	0.52	2.4	0
9	SLE RA 14	56	0	3256	0.48	2.24	0
9	SLE RA 15	58	0	3253	0.5	2.34	0
9	SLE RA 16	56	0	3256	0.48	2.24	0
9	SLE RA 17	58	0	3253	0.5	2.34	0
9	SLE RA 18	65	0	3468	0.42	2.63	0
9	SLE RA 19	67	0	3465	0.44	2.73	0
9	SLE RA 20	65	0	3468	0.42	2.63	0
9	SLE RA 21	67	0	3465	0.44	2.73	0
9	SLE FR 1	35	0	2761	0.62	1.33	0
9	SLE FR 2	35	0	2760	0.63	1.37	0
9	SLE FR 3	35	0	2761	0.62	1.33	0
9	SLE FR 4	44	0	2972	0.57	1.76	0
9	SLE FR 5	44	0	2973	0.56	1.72	0
9	SLE FR 6	50	0	3114	0.52	1.98	0
9	SLE QP 1	35	0	2761	0.62	1.33	0
9	SLE QP 2	44	0	2973	0.56	1.72	0
9	SLD 1	276	2	2839	-32.31	12.44	-0.12
9	SLD 2	276	2	2839	-32.31	12.44	-0.12
9	SLD 3	300	-27	2776	10.83	13.5	0
9	SLD 4	300	-27	2776	10.83	13.5	0
9	SLD 5	76	43	3029	-74.71	3.33	-0.22
9	SLD 6	76	43	3029	-74.71	3.33	-0.22
9	SLD 7	158	-51	2818	69.06	6.87	0.18
9	SLD 8	158	-51	2818	69.06	6.87	0.18
9	SLD 9	-71	51	3128	-67.93	-3.42	-0.18
9	SLD 10	-71	51	3128	-67.93	-3.42	-0.18
9	SLD 11	11	-44	2918	75.84	0.12	0.22
9	SLD 12	11	-44	2918	75.84	0.12	0.22
9	SLD 13	-213	26	3170	-9.7	-10.05	0.01
9	SLD 14	-213	26	3170	-9.7	-10.05	0.01
9	SLD 15	-189	-2	3107	33.43	-8.99	0.12
9	SLD 16	-189	-2	3107	33.43	-8.99	0.12
9	SLV 1	590	5	2649	-84.93	26.89	-0.31
9	SLV 2	590	5	2649	-84.93	26.89	-0.31
9	SLV 3	650	-68	2470	28.32	29.48	0
9	SLV 4	650	-68	2470	28.32	29.48	0
9	SLV 5	116	111	3146	-196.84	5.35	-0.55
9	SLV 6	116	111	3146	-196.84	5.35	-0.55
9	SLV 7	317	-131	2552	180.65	13.98	0.46
9	SLV 8	317	-131	2552	180.65	13.98	0.46
9	SLV 9	-230	130	3395	-179.52	-10.53	-0.46
9	SLV 10	-230	130	3395	-179.52	-10.53	-0.46
9	SLV 11	-29	-112	2800	197.97	-1.9	0.56
9	SLV 12	-29	-112	2800	197.97	-1.9	0.56
9	SLV 13	-563	68	3476	-27.19	-26.03	0.01
9	SLV 14	-563	68	3476	-27.19	-26.03	0.01
9	SLV 15	-503	-5	3298	86.05	-23.44	0.31
9	SLV 16	-503	-5	3298	86.05	-23.44	0.31
10	SLU 1	-90	0	2671	0.78	-4.16	0
10	SLU 2	-85	0	2662	0.9	-3.92	0
10	SLU 3	-90	0	2671	0.78	-4.16	0
10	SLU 4	-87	0	2666	0.85	-4.02	0
10	SLU 5	-85	0	2662	0.9	-3.92	0
10	SLU 6	-90	0	2671	0.78	-4.16	0
10	SLU 7	-87	0	2666	0.85	-4.02	0
10	SLU 8	-90	0	2671	0.78	-4.16	0
10	SLU 9	-87	0	2666	0.85	-4.02	0
10	SLU 10	-91	0	3403	0.74	-4.16	0
10	SLU 11	-96	0	3411	0.62	-4.39	0
10	SLU 12	-93	0	3406	0.69	-4.25	0
10	SLU 13	-91	0	3403	0.74	-4.16	0
10	SLU 14	-96	0	3411	0.62	-4.39	0
10	SLU 15	-93	0	3406	0.69	-4.25	0
10	SLU 16	-96	0	3411	0.62	-4.39	0
10	SLU 17	-93	0	3406	0.69	-4.25	0
10	SLU 18	-99	0	3729	0.55	-4.49	0
10	SLU 19	-96	0	3724	0.62	-4.35	0
10	SLU 20	-99	0	3729	0.55	-4.49	0
10	SLU 21	-96	0	3724	0.62	-4.35	0
10	SLU 22	-95	0	3097	0.72	-4.38	0
10	SLU 23	-90	0	3089	0.84	-4.14	0
10	SLU 24	-95	0	3097	0.72	-4.38	0
10	SLU 25	-92	0	3092	0.79	-4.23	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
10	SLU 26	-90	0	3089	0.84	-4.14	0
10	SLU 27	-95	0	3097	0.72	-4.38	0
10	SLU 28	-92	0	3092	0.79	-4.23	0
10	SLU 29	-95	0	3097	0.72	-4.38	0
10	SLU 30	-92	0	3092	0.79	-4.23	0
10	SLU 31	-96	0	3829	0.68	-4.37	0
10	SLU 32	-101	0	3838	0.56	-4.61	0
10	SLU 33	-98	0	3833	0.63	-4.47	0
10	SLU 34	-96	0	3829	0.68	-4.37	0
10	SLU 35	-101	0	3838	0.56	-4.61	0
10	SLU 36	-98	0	3833	0.63	-4.47	0
10	SLU 37	-101	0	3838	0.56	-4.61	0
10	SLU 38	-98	0	3833	0.63	-4.47	0
10	SLU 39	-104	0	4155	0.49	-4.71	0
10	SLU 40	-101	0	4150	0.56	-4.57	0
10	SLU 41	-104	0	4155	0.49	-4.71	0
10	SLU 42	-101	0	4150	0.56	-4.57	0
10	SLU 43	-115	-1	3326	1.03	-5.33	0
10	SLU 44	-110	-1	3317	1.15	-5.1	0
10	SLU 45	-115	-1	3326	1.03	-5.33	0
10	SLU 46	-112	-1	3321	1.1	-5.19	0
10	SLU 47	-110	-1	3317	1.15	-5.1	0
10	SLU 48	-115	-1	3326	1.03	-5.33	0
10	SLU 49	-112	-1	3321	1.1	-5.19	0
10	SLU 50	-115	-1	3326	1.03	-5.33	0
10	SLU 51	-112	-1	3321	1.1	-5.19	0
10	SLU 52	-116	0	4058	0.99	-5.33	0
10	SLU 53	-121	0	4067	0.87	-5.57	0
10	SLU 54	-118	0	4061	0.94	-5.42	0
10	SLU 55	-116	0	4058	0.99	-5.33	0
10	SLU 56	-121	0	4067	0.87	-5.57	0
10	SLU 57	-118	0	4061	0.94	-5.42	0
10	SLU 58	-121	0	4067	0.87	-5.57	0
10	SLU 59	-118	0	4061	0.94	-5.42	0
10	SLU 60	-124	0	4384	0.8	-5.67	0
10	SLU 61	-121	0	4379	0.88	-5.52	0
10	SLU 62	-124	0	4384	0.8	-5.67	0
10	SLU 63	-121	0	4379	0.88	-5.52	0
10	SLU 64	-120	-1	3752	0.97	-5.55	0
10	SLU 65	-115	-1	3744	1.09	-5.31	0
10	SLU 66	-120	-1	3752	0.97	-5.55	0
10	SLU 67	-117	-1	3747	1.04	-5.41	0
10	SLU 68	-115	-1	3744	1.09	-5.31	0
10	SLU 69	-120	-1	3752	0.97	-5.55	0
10	SLU 70	-117	-1	3747	1.04	-5.41	0
10	SLU 71	-120	-1	3752	0.97	-5.55	0
10	SLU 72	-117	-1	3747	1.04	-5.41	0
10	SLU 73	-121	0	4484	0.94	-5.55	0
10	SLU 74	-126	0	4493	0.81	-5.78	0
10	SLU 75	-123	0	4488	0.89	-5.64	0
10	SLU 76	-121	0	4484	0.94	-5.55	0
10	SLU 77	-126	0	4493	0.81	-5.78	0
10	SLU 78	-123	0	4488	0.89	-5.64	0
10	SLU 79	-126	0	4493	0.81	-5.78	0
10	SLU 80	-123	0	4488	0.89	-5.64	0
10	SLU 81	-129	0	4810	0.74	-5.88	0
10	SLU 82	-126	0	4805	0.82	-5.74	0
10	SLU 83	-129	0	4810	0.74	-5.88	0
10	SLU 84	-126	0	4805	0.82	-5.74	0
10	SLE RA 1	-91	0	2793	0.76	-4.22	0
10	SLE RA 2	-88	0	2787	0.84	-4.06	0
10	SLE RA 3	-91	0	2793	0.76	-4.22	0
10	SLE RA 4	-89	0	2789	0.81	-4.13	0
10	SLE RA 5	-88	0	2787	0.84	-4.06	0
10	SLE RA 6	-91	0	2793	0.76	-4.22	0
10	SLE RA 7	-89	0	2789	0.81	-4.13	0
10	SLE RA 8	-91	0	2793	0.76	-4.22	0
10	SLE RA 9	-89	0	2789	0.81	-4.13	0
10	SLE RA 10	-92	0	3281	0.74	-4.22	0
10	SLE RA 11	-95	0	3286	0.65	-4.38	0
10	SLE RA 12	-93	0	3283	0.7	-4.28	0
10	SLE RA 13	-92	0	3281	0.74	-4.22	0
10	SLE RA 14	-95	0	3286	0.65	-4.38	0
10	SLE RA 15	-93	0	3283	0.7	-4.28	0
10	SLE RA 16	-95	0	3286	0.65	-4.38	0
10	SLE RA 17	-93	0	3283	0.7	-4.28	0
10	SLE RA 18	-97	0	3498	0.61	-4.44	0
10	SLE RA 19	-95	0	3495	0.66	-4.35	0
10	SLE RA 20	-97	0	3498	0.61	-4.44	0
10	SLE RA 21	-95	0	3495	0.66	-4.35	0
10	SLE FR 1	-91	0	2793	0.76	-4.22	0
10	SLE FR 2	-91	0	2791	0.78	-4.19	0
10	SLE FR 3	-91	0	2793	0.76	-4.22	0
10	SLE FR 4	-92	0	3003	0.73	-4.26	0
10	SLE FR 5	-93	0	3004	0.71	-4.29	0
10	SLE FR 6	-94	0	3145	0.68	-4.33	0
10	SLE QP 1	-91	0	2793	0.76	-4.22	0
10	SLE QP 2	-93	0	3004	0.71	-4.29	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
10	SLD 1	113	29	2829	-34.18	5.52	-0.13
10	SLD 2	113	29	2829	-34.18	5.52	-0.13
10	SLD 3	136	-8	2786	15.71	6.68	0
10	SLD 4	136	-8	2786	15.71	6.68	0
10	SLD 5	-67	64	3016	-85.42	-3.1	-0.23
10	SLD 6	-67	64	3016	-85.42	-3.1	-0.23
10	SLD 7	11	-58	2874	80.88	0.75	0.19
10	SLD 8	11	-58	2874	80.88	0.75	0.19
10	SLD 9	-197	58	3134	-79.45	-9.33	-0.19
10	SLD 10	-197	58	3134	-79.45	-9.33	-0.19
10	SLD 11	-120	-65	2993	86.84	-5.48	0.23
10	SLD 12	-120	-65	2993	86.84	-5.48	0.23
10	SLD 13	-322	7	3222	-14.28	-15.26	0
10	SLD 14	-322	7	3222	-14.28	-15.26	0
10	SLD 15	-299	-30	3180	35.6	-14.1	0.13
10	SLD 16	-299	-30	3180	35.6	-14.1	0.13
10	SLV 1	391	76	2589	-90.28	18.77	-0.31
10	SLV 2	391	76	2589	-90.28	18.77	-0.31
10	SLV 3	448	-20	2472	40.85	21.58	0.01
10	SLV 4	448	-20	2472	40.85	21.58	0.01
10	SLV 5	-34	167	3058	-225.46	-1.63	-0.58
10	SLV 6	-34	167	3058	-225.46	-1.63	-0.58
10	SLV 7	155	-151	2666	211.62	7.73	0.49
10	SLV 8	155	-151	2666	211.62	7.73	0.49
10	SLV 9	-342	150	3342	-210.2	-16.3	-0.49
10	SLV 10	-342	150	3342	-210.2	-16.3	-0.49
10	SLV 11	-152	-168	2950	226.88	-6.95	0.59
10	SLV 12	-152	-168	2950	226.88	-6.95	0.59
10	SLV 13	-634	19	3537	-39.42	-30.16	-0.01
10	SLV 14	-634	19	3537	-39.42	-30.16	-0.01
10	SLV 15	-577	-76	3419	91.7	-27.35	0.32
10	SLV 16	-577	-76	3419	91.7	-27.35	0.32
11	SLU 1	-237	-1	2753	0.86	-12.37	0
11	SLU 2	-232	-1	2738	1.07	-12.13	0
11	SLU 3	-237	-1	2753	0.86	-12.37	0
11	SLU 4	-234	-1	2744	0.99	-12.22	0
11	SLU 5	-232	-1	2738	1.07	-12.13	0
11	SLU 6	-237	-1	2753	0.86	-12.37	0
11	SLU 7	-234	-1	2744	0.99	-12.22	0
11	SLU 8	-237	-1	2753	0.86	-12.37	0
11	SLU 9	-234	-1	2744	0.99	-12.22	0
11	SLU 10	-286	-1	3485	0.98	-14.9	0
11	SLU 11	-290	-1	3499	0.77	-15.14	0
11	SLU 12	-288	-1	3490	0.9	-15	0
11	SLU 13	-286	-1	3485	0.98	-14.9	0
11	SLU 14	-290	-1	3499	0.77	-15.14	0
11	SLU 15	-288	-1	3490	0.9	-15	0
11	SLU 16	-290	-1	3499	0.77	-15.14	0
11	SLU 17	-288	-1	3490	0.9	-15	0
11	SLU 18	-313	-1	3818	0.73	-16.33	0
11	SLU 19	-311	-1	3810	0.86	-16.18	0
11	SLU 20	-313	-1	3818	0.73	-16.33	0
11	SLU 21	-311	-1	3810	0.86	-16.18	0
11	SLU 22	-269	-1	3184	0.83	-14.03	0
11	SLU 23	-265	-1	3170	1.04	-13.79	0
11	SLU 24	-269	-1	3184	0.83	-14.03	0
11	SLU 25	-266	-1	3176	0.96	-13.89	0
11	SLU 26	-265	-1	3170	1.04	-13.79	0
11	SLU 27	-269	-1	3184	0.83	-14.03	0
11	SLU 28	-266	-1	3176	0.96	-13.89	0
11	SLU 29	-269	-1	3184	0.83	-14.03	0
11	SLU 30	-266	-1	3176	0.96	-13.89	0
11	SLU 31	-318	-1	3916	0.96	-16.57	0
11	SLU 32	-322	-1	3930	0.74	-16.8	0
11	SLU 33	-320	-1	3922	0.87	-16.66	0
11	SLU 34	-318	-1	3916	0.96	-16.57	0
11	SLU 35	-322	-1	3930	0.74	-16.8	0
11	SLU 36	-320	-1	3922	0.87	-16.66	0
11	SLU 37	-322	-1	3930	0.74	-16.8	0
11	SLU 38	-320	-1	3922	0.87	-16.66	0
11	SLU 39	-345	-1	4250	0.71	-17.99	0
11	SLU 40	-343	-1	4242	0.83	-17.85	0
11	SLU 41	-345	-1	4250	0.71	-17.99	0
11	SLU 42	-343	-1	4242	0.83	-17.85	0
11	SLU 43	-297	-1	3430	1.12	-15.51	0
11	SLU 44	-292	-1	3416	1.34	-15.27	0
11	SLU 45	-297	-1	3430	1.12	-15.51	0
11	SLU 46	-294	-1	3422	1.25	-15.36	0
11	SLU 47	-292	-1	3416	1.34	-15.27	0
11	SLU 48	-297	-1	3430	1.12	-15.51	0
11	SLU 49	-294	-1	3422	1.25	-15.36	0
11	SLU 50	-297	-1	3430	1.12	-15.51	0
11	SLU 51	-294	-1	3422	1.25	-15.36	0
11	SLU 52	-346	-1	4162	1.25	-18.04	0
11	SLU 53	-350	-1	4176	1.04	-18.28	0
11	SLU 54	-348	-1	4168	1.16	-18.13	0
11	SLU 55	-346	-1	4162	1.25	-18.04	0
11	SLU 56	-350	-1	4176	1.04	-18.28	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
11	SLU 57	-348	-1	4168	1.16	-18.13	0
11	SLU 58	-350	-1	4176	1.04	-18.28	0
11	SLU 59	-348	-1	4168	1.16	-18.13	0
11	SLU 60	-373	-1	4496	1	-19.46	0
11	SLU 61	-371	-1	4488	1.13	-19.32	0
11	SLU 62	-373	-1	4496	1	-19.46	0
11	SLU 63	-371	-1	4488	1.13	-19.32	0
11	SLU 64	-329	-1	3862	1.1	-17.17	0
11	SLU 65	-325	-1	3848	1.31	-16.93	0
11	SLU 66	-329	-1	3862	1.1	-17.17	0
11	SLU 67	-326	-1	3854	1.23	-17.03	0
11	SLU 68	-325	-1	3848	1.31	-16.93	0
11	SLU 69	-329	-1	3862	1.1	-17.17	0
11	SLU 70	-326	-1	3854	1.23	-17.03	0
11	SLU 71	-329	-1	3862	1.1	-17.17	0
11	SLU 72	-326	-1	3854	1.23	-17.03	0
11	SLU 73	-378	-1	4594	1.22	-19.7	0
11	SLU 74	-382	-1	4608	1.01	-19.94	0
11	SLU 75	-380	-1	4600	1.14	-19.8	0
11	SLU 76	-378	-1	4594	1.22	-19.7	0
11	SLU 77	-382	-1	4608	1.01	-19.94	0
11	SLU 78	-380	-1	4600	1.14	-19.8	0
11	SLU 79	-382	-1	4608	1.01	-19.94	0
11	SLU 80	-380	-1	4600	1.14	-19.8	0
11	SLU 81	-405	-1	4928	0.97	-21.13	0
11	SLU 82	-403	-1	4919	1.1	-20.99	0
11	SLU 83	-405	-1	4928	0.97	-21.13	0
11	SLU 84	-403	-1	4919	1.1	-20.99	0
11	SLE RA 1	-246	-1	2876	0.85	-12.84	0
11	SLE RA 2	-243	-1	2867	0.99	-12.68	0
11	SLE RA 3	-246	-1	2876	0.85	-12.84	0
11	SLE RA 4	-244	-1	2870	0.94	-12.75	0
11	SLE RA 5	-243	-1	2867	0.99	-12.68	0
11	SLE RA 6	-246	-1	2876	0.85	-12.84	0
11	SLE RA 7	-244	-1	2870	0.94	-12.75	0
11	SLE RA 8	-246	-1	2876	0.85	-12.84	0
11	SLE RA 9	-244	-1	2870	0.94	-12.75	0
11	SLE RA 10	-279	-1	3364	0.93	-14.53	0
11	SLE RA 11	-281	-1	3373	0.79	-14.69	0
11	SLE RA 12	-280	-1	3368	0.88	-14.59	0
11	SLE RA 13	-279	-1	3364	0.93	-14.53	0
11	SLE RA 14	-281	-1	3373	0.79	-14.69	0
11	SLE RA 15	-280	-1	3368	0.88	-14.59	0
11	SLE RA 16	-281	-1	3373	0.79	-14.69	0
11	SLE RA 17	-280	-1	3368	0.88	-14.59	0
11	SLE RA 18	-297	-1	3586	0.77	-15.48	0
11	SLE RA 19	-295	-1	3581	0.85	-15.39	0
11	SLE RA 20	-297	-1	3586	0.77	-15.48	0
11	SLE RA 21	-295	-1	3581	0.85	-15.39	0
11	SLE FR 1	-246	-1	2876	0.85	-12.84	0
11	SLE FR 2	-245	-1	2874	0.88	-12.81	0
11	SLE FR 3	-246	-1	2876	0.85	-12.84	0
11	SLE FR 4	-261	-1	3087	0.85	-13.6	0
11	SLE FR 5	-261	-1	3089	0.83	-13.63	0
11	SLE FR 6	-271	-1	3231	0.81	-14.16	0
11	SLE QP 1	-246	-1	2876	0.85	-12.84	0
11	SLE QP 2	-261	-1	3089	0.83	-13.63	0
11	SLD 1	-98	38	2706	-34.75	-4.01	0.08
11	SLD 2	-98	38	2706	-34.75	-4.01	0.08
11	SLD 3	-79	-21	2668	20.47	-3.01	-0.03
11	SLD 4	-79	-21	2668	20.47	-3.01	-0.03
11	SLD 5	-240	101	3033	-93.6	-12.26	0.18
11	SLD 6	-240	101	3033	-93.6	-12.26	0.18
11	SLD 7	-178	-97	2904	90.47	-8.94	-0.17
11	SLD 8	-178	-97	2904	90.47	-8.94	-0.17
11	SLD 9	-344	96	3274	-88.82	-18.33	0.17
11	SLD 10	-344	96	3274	-88.82	-18.33	0.17
11	SLD 11	-282	-103	3146	95.25	-15.01	-0.19
11	SLD 12	-282	-103	3146	95.25	-15.01	-0.19
11	SLD 13	-443	20	3510	-18.82	-24.25	0.02
11	SLD 14	-443	20	3510	-18.82	-24.25	0.02
11	SLD 15	-424	-40	3472	36.4	-23.26	-0.08
11	SLD 16	-424	-40	3472	36.4	-23.26	-0.08
11	SLV 1	123	100	2189	-91.75	8.98	0.2
11	SLV 2	123	100	2189	-91.75	8.98	0.2
11	SLV 3	169	-55	2094	53.14	11.41	-0.08
11	SLV 4	169	-55	2094	53.14	11.41	-0.08
11	SLV 5	-216	265	2963	-246.69	-10.55	0.49
11	SLV 6	-216	265	2963	-246.69	-10.55	0.49
11	SLV 7	-62	-252	2647	236.26	-2.42	-0.46
11	SLV 8	-62	-252	2647	236.26	-2.42	-0.46
11	SLV 9	-460	251	3531	-234.61	-24.84	0.45
11	SLV 10	-460	251	3531	-234.61	-24.84	0.45
11	SLV 11	-306	-266	3215	248.34	-16.72	-0.49
11	SLV 12	-306	-266	3215	248.34	-16.72	-0.49
11	SLV 13	-691	54	4084	-51.49	-38.68	0.07
11	SLV 14	-691	54	4084	-51.49	-38.68	0.07
11	SLV 15	-645	-101	3989	93.4	-36.25	-0.21

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
11	SLV 16	-645	-101	3989	93.4	-36.25	-0.21
12	SLU 1	-406	0	1594	0.41	-9.91	0.07
12	SLU 2	-402	0	1583	0.54	-9.77	0.09
12	SLU 3	-406	0	1594	0.41	-9.91	0.07
12	SLU 4	-404	0	1587	0.49	-9.82	0.08
12	SLU 5	-402	0	1583	0.54	-9.77	0.09
12	SLU 6	-406	0	1594	0.41	-9.91	0.07
12	SLU 7	-404	0	1587	0.49	-9.82	0.08
12	SLU 8	-406	0	1594	0.41	-9.91	0.07
12	SLU 9	-404	0	1587	0.49	-9.82	0.08
12	SLU 10	-508	0	2004	0.54	-12.18	0.09
12	SLU 11	-512	0	2016	0.41	-12.32	0.07
12	SLU 12	-509	0	2009	0.49	-12.24	0.08
12	SLU 13	-508	0	2004	0.54	-12.18	0.09
12	SLU 14	-512	0	2016	0.41	-12.32	0.07
12	SLU 15	-509	0	2009	0.49	-12.24	0.08
12	SLU 16	-512	0	2016	0.41	-12.32	0.07
12	SLU 17	-509	0	2009	0.49	-12.24	0.08
12	SLU 18	-557	0	2197	0.4	-13.35	0.07
12	SLU 19	-554	-1	2190	0.48	-13.27	0.08
12	SLU 20	-557	0	2197	0.4	-13.35	0.07
12	SLU 21	-554	-1	2190	0.48	-13.27	0.08
12	SLU 22	-468	0	1840	0.41	-11.33	0.07
12	SLU 23	-464	0	1828	0.55	-11.19	0.09
12	SLU 24	-468	0	1840	0.41	-11.33	0.07
12	SLU 25	-465	0	1833	0.49	-11.25	0.08
12	SLU 26	-464	0	1828	0.55	-11.19	0.09
12	SLU 27	-468	0	1840	0.41	-11.33	0.07
12	SLU 28	-465	0	1833	0.49	-11.25	0.08
12	SLU 29	-468	0	1840	0.41	-11.33	0.07
12	SLU 30	-465	0	1833	0.49	-11.25	0.08
12	SLU 31	-569	-1	2250	0.54	-13.6	0.09
12	SLU 32	-573	0	2261	0.41	-13.74	0.07
12	SLU 33	-571	-1	2254	0.49	-13.66	0.08
12	SLU 34	-569	-1	2250	0.54	-13.6	0.09
12	SLU 35	-573	0	2261	0.41	-13.74	0.07
12	SLU 36	-571	-1	2254	0.49	-13.66	0.08
12	SLU 37	-573	0	2261	0.41	-13.74	0.07
12	SLU 38	-571	-1	2254	0.49	-13.66	0.08
12	SLU 39	-618	-1	2442	0.41	-14.77	0.07
12	SLU 40	-616	-1	2435	0.49	-14.69	0.09
12	SLU 41	-618	-1	2442	0.41	-14.77	0.07
12	SLU 42	-616	-1	2435	0.49	-14.69	0.09
12	SLU 43	-507	0	1989	0.53	-12.39	0.09
12	SLU 44	-503	0	1977	0.67	-12.25	0.11
12	SLU 45	-507	0	1989	0.53	-12.39	0.09
12	SLU 46	-505	0	1982	0.61	-12.31	0.1
12	SLU 47	-503	0	1977	0.67	-12.25	0.11
12	SLU 48	-507	0	1989	0.53	-12.39	0.09
12	SLU 49	-505	0	1982	0.61	-12.31	0.1
12	SLU 50	-507	0	1989	0.53	-12.39	0.09
12	SLU 51	-505	0	1982	0.61	-12.31	0.1
12	SLU 52	-608	0	2399	0.66	-14.67	0.11
12	SLU 53	-612	0	2410	0.53	-14.8	0.09
12	SLU 54	-610	0	2403	0.61	-14.72	0.1
12	SLU 55	-608	0	2399	0.66	-14.67	0.11
12	SLU 56	-612	0	2410	0.53	-14.8	0.09
12	SLU 57	-610	0	2403	0.61	-14.72	0.1
12	SLU 58	-612	0	2410	0.53	-14.8	0.09
12	SLU 59	-610	0	2403	0.61	-14.72	0.1
12	SLU 60	-657	0	2591	0.53	-15.84	0.09
12	SLU 61	-655	0	2584	0.61	-15.75	0.1
12	SLU 62	-657	0	2591	0.53	-15.84	0.09
12	SLU 63	-655	0	2584	0.61	-15.75	0.1
12	SLU 64	-568	0	2234	0.53	-13.81	0.09
12	SLU 65	-564	0	2222	0.67	-13.68	0.11
12	SLU 66	-568	0	2234	0.53	-13.81	0.09
12	SLU 67	-566	0	2227	0.62	-13.73	0.1
12	SLU 68	-564	0	2222	0.67	-13.68	0.11
12	SLU 69	-568	0	2234	0.53	-13.81	0.09
12	SLU 70	-566	0	2227	0.62	-13.73	0.1
12	SLU 71	-568	0	2234	0.53	-13.81	0.09
12	SLU 72	-566	0	2227	0.62	-13.73	0.1
12	SLU 73	-670	-1	2644	0.66	-16.09	0.11
12	SLU 74	-674	0	2656	0.53	-16.23	0.09
12	SLU 75	-671	0	2649	0.61	-16.14	0.1
12	SLU 76	-670	-1	2644	0.66	-16.09	0.11
12	SLU 77	-674	0	2656	0.53	-16.23	0.09
12	SLU 78	-671	0	2649	0.61	-16.14	0.1
12	SLU 79	-674	0	2656	0.53	-16.23	0.09
12	SLU 80	-671	0	2649	0.61	-16.14	0.1
12	SLU 81	-719	0	2836	0.53	-17.26	0.09
12	SLU 82	-717	-1	2829	0.61	-17.18	0.11
12	SLU 83	-719	0	2836	0.53	-17.26	0.09
12	SLU 84	-717	-1	2829	0.61	-17.18	0.11
12	SLE RA 1	-424	0	1664	0.41	-10.31	0.07
12	SLE RA 2	-421	0	1657	0.5	-10.22	0.08
12	SLE RA 3	-424	0	1664	0.41	-10.31	0.07

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
12	SLE RA 4	-422	0	1660	0.46	-10.26	0.08
12	SLE RA 5	-421	0	1657	0.5	-10.22	0.08
12	SLE RA 6	-424	0	1664	0.41	-10.31	0.07
12	SLE RA 7	-422	0	1660	0.46	-10.26	0.08
12	SLE RA 8	-424	0	1664	0.41	-10.31	0.07
12	SLE RA 9	-422	0	1660	0.46	-10.26	0.08
12	SLE RA 10	-491	0	1938	0.5	-11.83	0.08
12	SLE RA 11	-494	0	1946	0.41	-11.92	0.07
12	SLE RA 12	-492	0	1941	0.46	-11.87	0.08
12	SLE RA 13	-491	0	1938	0.5	-11.83	0.08
12	SLE RA 14	-494	0	1946	0.41	-11.92	0.07
12	SLE RA 15	-492	0	1941	0.46	-11.87	0.08
12	SLE RA 16	-494	0	1946	0.41	-11.92	0.07
12	SLE RA 17	-492	0	1941	0.46	-11.87	0.08
12	SLE RA 18	-524	0	2066	0.41	-12.61	0.07
12	SLE RA 19	-522	0	2061	0.46	-12.55	0.08
12	SLE RA 20	-524	0	2066	0.41	-12.61	0.07
12	SLE RA 21	-522	0	2061	0.46	-12.55	0.08
12	SLE FR 1	-424	0	1664	0.41	-10.31	0.07
12	SLE FR 2	-423	0	1663	0.43	-10.3	0.07
12	SLE FR 3	-424	0	1664	0.41	-10.31	0.07
12	SLE FR 4	-453	0	1783	0.43	-10.98	0.07
12	SLE FR 5	-454	0	1785	0.41	-11	0.07
12	SLE FR 6	-474	0	1865	0.41	-11.46	0.07
12	SLE QP 1	-424	0	1664	0.41	-10.31	0.07
12	SLE QP 2	-454	0	1785	0.41	-11	0.07
12	SLD 1	-321	6	1415	-16.78	-5.54	-2.81
12	SLD 2	-321	6	1415	-16.78	-5.54	-2.81
12	SLD 3	-307	25	1379	10.4	-6.1	1.7
12	SLD 4	-307	25	1379	10.4	-6.1	1.7
12	SLD 5	-435	-27	1728	-45.97	-8.52	-7.65
12	SLD 6	-435	-27	1728	-45.97	-8.52	-7.65
12	SLD 7	-389	36	1609	44.63	-10.38	7.41
12	SLD 8	-389	36	1609	44.63	-10.38	7.41
12	SLD 9	-519	-36	1961	-43.81	-11.62	-7.27
12	SLD 10	-519	-36	1961	-43.81	-11.62	-7.27
12	SLD 11	-473	27	1842	46.79	-13.49	7.78
12	SLD 12	-473	27	1842	46.79	-13.49	7.78
12	SLD 13	-601	-25	2191	-9.58	-15.9	-1.57
12	SLD 14	-601	-25	2191	-9.58	-15.9	-1.57
12	SLD 15	-587	-6	2155	17.6	-16.46	2.95
12	SLD 16	-587	-6	2155	17.6	-16.46	2.95
12	SLV 1	-140	16	915	-43.96	1.87	-7.35
12	SLV 2	-140	16	915	-43.96	1.87	-7.35
12	SLV 3	-107	62	829	27.11	0.51	4.44
12	SLV 4	-107	62	829	27.11	0.51	4.44
12	SLV 5	-411	-66	1654	-120.69	-5.09	-20.04
12	SLV 6	-411	-66	1654	-120.69	-5.09	-20.04
12	SLV 7	-299	89	1368	116.2	-9.6	19.27
12	SLV 8	-299	89	1368	116.2	-9.6	19.27
12	SLV 9	-609	-89	2202	-115.38	-12.4	-19.13
12	SLV 10	-609	-89	2202	-115.38	-12.4	-19.13
12	SLV 11	-497	66	1916	121.5	-16.92	20.18
12	SLV 12	-497	66	1916	121.5	-16.92	20.18
12	SLV 13	-801	-62	2741	-26.29	-22.52	-4.31
12	SLV 14	-801	-62	2741	-26.29	-22.52	-4.31
12	SLV 15	-767	-16	2655	44.78	-23.87	7.49
12	SLV 16	-767	-16	2655	44.78	-23.87	7.49
13	SLU 1	403	0	1664	0.44	8.38	-0.07
13	SLU 2	396	1	1648	0.58	8.21	-0.08
13	SLU 3	403	0	1664	0.44	8.38	-0.07
13	SLU 4	399	1	1654	0.52	8.28	-0.08
13	SLU 5	396	1	1648	0.58	8.21	-0.08
13	SLU 6	403	0	1664	0.44	8.38	-0.07
13	SLU 7	399	1	1654	0.52	8.28	-0.08
13	SLU 8	403	0	1664	0.44	8.38	-0.07
13	SLU 9	399	1	1654	0.52	8.28	-0.08
13	SLU 10	491	1	2068	0.56	9.93	-0.08
13	SLU 11	497	1	2084	0.42	10.11	-0.06
13	SLU 12	493	1	2075	0.5	10	-0.07
13	SLU 13	491	1	2068	0.56	9.93	-0.08
13	SLU 14	497	1	2084	0.42	10.11	-0.06
13	SLU 15	493	1	2075	0.5	10	-0.07
13	SLU 16	497	1	2084	0.42	10.11	-0.06
13	SLU 17	493	1	2075	0.5	10	-0.07
13	SLU 18	538	1	2265	0.41	10.84	-0.06
13	SLU 19	534	1	2255	0.5	10.74	-0.07
13	SLU 20	538	1	2265	0.41	10.84	-0.06
13	SLU 21	534	1	2255	0.5	10.74	-0.07
13	SLU 22	460	1	1913	0.44	9.48	-0.07
13	SLU 23	453	1	1897	0.57	9.31	-0.08
13	SLU 24	460	1	1913	0.44	9.48	-0.07
13	SLU 25	456	1	1904	0.52	9.38	-0.08
13	SLU 26	453	1	1897	0.57	9.31	-0.08
13	SLU 27	460	1	1913	0.44	9.48	-0.07
13	SLU 28	456	1	1904	0.52	9.38	-0.08
13	SLU 29	460	1	1913	0.44	9.48	-0.07
13	SLU 30	456	1	1904	0.52	9.38	-0.08

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
13	SLU 31	548	1	2318	0.56	11.03	-0.08
13	SLU 32	554	1	2334	0.42	11.2	-0.06
13	SLU 33	550	1	2324	0.5	11.1	-0.07
13	SLU 34	548	1	2318	0.56	11.03	-0.08
13	SLU 35	554	1	2334	0.42	11.2	-0.06
13	SLU 36	550	1	2324	0.5	11.1	-0.07
13	SLU 37	554	1	2334	0.42	11.2	-0.06
13	SLU 38	550	1	2324	0.5	11.1	-0.07
13	SLU 39	595	1	2514	0.41	11.94	-0.06
13	SLU 40	591	1	2504	0.49	11.84	-0.07
13	SLU 41	595	1	2514	0.41	11.94	-0.06
13	SLU 42	591	1	2504	0.49	11.84	-0.07
13	SLU 43	504	1	2078	0.57	10.52	-0.09
13	SLU 44	498	1	2062	0.71	10.35	-0.1
13	SLU 45	504	1	2078	0.57	10.52	-0.09
13	SLU 46	500	1	2068	0.65	10.42	-0.1
13	SLU 47	498	1	2062	0.71	10.35	-0.1
13	SLU 48	504	1	2078	0.57	10.52	-0.09
13	SLU 49	500	1	2068	0.65	10.42	-0.1
13	SLU 50	504	1	2078	0.57	10.52	-0.09
13	SLU 51	500	1	2068	0.65	10.42	-0.1
13	SLU 52	592	1	2482	0.69	12.07	-0.1
13	SLU 53	598	1	2498	0.55	12.24	-0.08
13	SLU 54	594	1	2489	0.64	12.14	-0.09
13	SLU 55	592	1	2482	0.69	12.07	-0.1
13	SLU 56	598	1	2498	0.55	12.24	-0.08
13	SLU 57	594	1	2489	0.64	12.14	-0.09
13	SLU 58	598	1	2498	0.55	12.24	-0.08
13	SLU 59	594	1	2489	0.64	12.14	-0.09
13	SLU 60	639	1	2678	0.55	12.98	-0.08
13	SLU 61	635	1	2669	0.63	12.88	-0.09
13	SLU 62	639	1	2678	0.55	12.98	-0.08
13	SLU 63	635	1	2669	0.63	12.88	-0.09
13	SLU 64	561	1	2327	0.57	11.62	-0.09
13	SLU 65	555	1	2311	0.71	11.45	-0.1
13	SLU 66	561	1	2327	0.57	11.62	-0.09
13	SLU 67	557	1	2318	0.65	11.51	-0.1
13	SLU 68	555	1	2311	0.71	11.45	-0.1
13	SLU 69	561	1	2327	0.57	11.62	-0.09
13	SLU 70	557	1	2318	0.65	11.51	-0.1
13	SLU 71	561	1	2327	0.57	11.62	-0.09
13	SLU 72	557	1	2318	0.65	11.51	-0.1
13	SLU 73	649	1	2732	0.69	13.17	-0.1
13	SLU 74	655	1	2747	0.55	13.34	-0.08
13	SLU 75	652	1	2738	0.63	13.24	-0.09
13	SLU 76	649	1	2732	0.69	13.17	-0.1
13	SLU 77	655	1	2747	0.55	13.34	-0.08
13	SLU 78	652	1	2738	0.63	13.24	-0.09
13	SLU 79	655	1	2747	0.55	13.34	-0.08
13	SLU 80	652	1	2738	0.63	13.24	-0.09
13	SLU 81	696	1	2928	0.54	14.08	-0.08
13	SLU 82	692	1	2918	0.63	13.98	-0.09
13	SLU 83	696	1	2928	0.54	14.08	-0.08
13	SLU 84	692	1	2918	0.63	13.98	-0.09
13	SLE RA 1	419	0	1735	0.44	8.69	-0.07
13	SLE RA 2	415	1	1725	0.53	8.58	-0.08
13	SLE RA 3	419	0	1735	0.44	8.69	-0.07
13	SLE RA 4	416	1	1729	0.49	8.63	-0.07
13	SLE RA 5	415	1	1725	0.53	8.58	-0.08
13	SLE RA 6	419	0	1735	0.44	8.69	-0.07
13	SLE RA 7	416	1	1729	0.49	8.63	-0.07
13	SLE RA 8	419	0	1735	0.44	8.69	-0.07
13	SLE RA 9	416	1	1729	0.49	8.63	-0.07
13	SLE RA 10	478	1	2005	0.52	9.73	-0.08
13	SLE RA 11	482	1	2016	0.43	9.84	-0.06
13	SLE RA 12	479	1	2009	0.48	9.78	-0.07
13	SLE RA 13	478	1	2005	0.52	9.73	-0.08
13	SLE RA 14	482	1	2016	0.43	9.84	-0.06
13	SLE RA 15	479	1	2009	0.48	9.78	-0.07
13	SLE RA 16	482	1	2016	0.43	9.84	-0.06
13	SLE RA 17	479	1	2009	0.48	9.78	-0.07
13	SLE RA 18	509	1	2136	0.42	10.34	-0.06
13	SLE RA 19	506	1	2129	0.48	10.27	-0.07
13	SLE RA 20	509	1	2136	0.42	10.34	-0.06
13	SLE RA 21	506	1	2129	0.48	10.27	-0.07
13	SLE FR 1	419	0	1735	0.44	8.69	-0.07
13	SLE FR 2	418	1	1733	0.46	8.67	-0.07
13	SLE FR 3	419	0	1735	0.44	8.69	-0.07
13	SLE FR 4	445	1	1853	0.45	9.16	-0.07
13	SLE FR 5	446	1	1855	0.43	9.19	-0.06
13	SLE FR 6	464	1	1935	0.43	9.52	-0.06
13	SLE QP 1	419	0	1735	0.44	8.69	-0.07
13	SLE QP 2	446	1	1855	0.43	9.19	-0.06
13	SLD 1	602	0	2285	-17.81	15.19	2.85
13	SLD 2	602	0	2285	-17.81	15.19	2.85
13	SLD 3	585	-24	2239	10.54	14.46	-1.7
13	SLD 4	585	-24	2239	10.54	14.46	-1.7
13	SLD 5	519	36	2054	-48.04	12.09	7.72

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
13	SLD 6	519	36	2054	-48.04	12.09	7.72
13	SLD 7	461	-43	1900	46.46	9.67	-7.46
13	SLD 8	461	-43	1900	46.46	9.67	-7.46
13	SLD 9	431	44	1810	-45.6	8.7	7.33
13	SLD 10	431	44	1810	-45.6	8.7	7.33
13	SLD 11	373	-35	1656	48.9	6.29	-7.85
13	SLD 12	373	-35	1656	48.9	6.29	-7.85
13	SLD 13	307	25	1472	-9.67	3.91	1.57
13	SLD 14	307	25	1472	-9.67	3.91	1.57
13	SLD 15	290	1	1426	18.68	3.19	-2.98
13	SLD 16	290	1	1426	18.68	3.19	-2.98
13	SLV 1	816	-2	2873	-46.8	23.43	7.47
13	SLV 2	816	-2	2873	-46.8	23.43	7.47
13	SLV 3	771	-60	2753	27.39	21.49	-4.44
13	SLV 4	771	-60	2753	27.39	21.49	-4.44
13	SLV 5	625	89	2342	-126.27	16.41	20.26
13	SLV 6	625	89	2342	-126.27	16.41	20.26
13	SLV 7	475	-107	1943	121.05	9.93	-19.44
13	SLV 8	475	-107	1943	121.05	9.93	-19.44
13	SLV 9	417	108	1768	-120.18	8.44	19.31
13	SLV 10	417	108	1768	-120.18	8.44	19.31
13	SLV 11	267	-88	1369	127.14	1.97	-20.39
13	SLV 12	267	-88	1369	127.14	1.97	-20.39
13	SLV 13	121	61	958	-26.52	-3.12	4.31
13	SLV 14	121	61	958	-26.52	-3.12	4.31
13	SLV 15	76	3	838	47.67	-5.06	-7.6
13	SLV 16	76	3	838	47.67	-5.06	-7.6
14	SLU 1	267	-1	2899	1.05	16.13	0
14	SLU 2	256	-1	2873	1.48	15.54	0
14	SLU 3	267	-1	2899	1.05	16.13	0
14	SLU 4	260	-1	2883	1.31	15.78	0
14	SLU 5	256	-1	2873	1.48	15.54	0
14	SLU 6	267	-1	2899	1.05	16.13	0
14	SLU 7	260	-1	2883	1.31	15.78	0
14	SLU 8	267	-1	2899	1.05	16.13	0
14	SLU 9	260	-1	2883	1.31	15.78	0
14	SLU 10	298	-1	3613	1.47	18.46	0
14	SLU 11	309	-1	3638	1.03	19.06	0
14	SLU 12	303	-1	3623	1.29	18.7	0
14	SLU 13	298	-1	3613	1.47	18.46	0
14	SLU 14	309	-1	3638	1.03	19.06	0
14	SLU 15	303	-1	3623	1.29	18.7	0
14	SLU 16	309	-1	3638	1.03	19.06	0
14	SLU 17	303	-1	3623	1.29	18.7	0
14	SLU 18	327	-1	3955	1.03	20.31	0
14	SLU 19	321	-1	3940	1.29	19.95	0
14	SLU 20	327	-1	3955	1.03	20.31	0
14	SLU 21	321	-1	3940	1.29	19.95	0
14	SLU 22	295	-1	3335	1.05	18	0
14	SLU 23	284	-1	3309	1.49	17.41	0
14	SLU 24	295	-1	3335	1.05	18	0
14	SLU 25	289	-1	3320	1.31	17.65	0
14	SLU 26	284	-1	3309	1.49	17.41	0
14	SLU 27	295	-1	3335	1.05	18	0
14	SLU 28	289	-1	3320	1.31	17.65	0
14	SLU 29	295	-1	3335	1.05	18	0
14	SLU 30	289	-1	3320	1.31	17.65	0
14	SLU 31	327	-1	4049	1.47	20.33	0
14	SLU 32	337	-1	4075	1.04	20.93	0
14	SLU 33	331	-1	4059	1.3	20.57	0
14	SLU 34	327	-1	4049	1.47	20.33	0
14	SLU 35	337	-1	4075	1.04	20.93	0
14	SLU 36	331	-1	4059	1.3	20.57	0
14	SLU 37	337	-1	4075	1.04	20.93	0
14	SLU 38	331	-1	4059	1.3	20.57	0
14	SLU 39	356	-1	4392	1.03	22.18	0
14	SLU 40	349	-1	4376	1.29	21.82	0
14	SLU 41	356	-1	4392	1.03	22.18	0
14	SLU 42	349	-1	4376	1.29	21.82	0
14	SLU 43	337	-1	3619	1.36	20.33	0
14	SLU 44	326	-2	3593	1.8	19.74	0
14	SLU 45	337	-1	3619	1.36	20.33	0
14	SLU 46	331	-1	3603	1.62	19.98	0
14	SLU 47	326	-2	3593	1.8	19.74	0
14	SLU 48	337	-1	3619	1.36	20.33	0
14	SLU 49	331	-1	3603	1.62	19.98	0
14	SLU 50	337	-1	3619	1.36	20.33	0
14	SLU 51	331	-1	3603	1.62	19.98	0
14	SLU 52	369	-1	4333	1.78	22.66	0
14	SLU 53	380	-1	4358	1.35	23.26	0
14	SLU 54	373	-1	4343	1.61	22.9	0
14	SLU 55	369	-1	4333	1.78	22.66	0
14	SLU 56	380	-1	4358	1.35	23.26	0
14	SLU 57	373	-1	4343	1.61	22.9	0
14	SLU 58	380	-1	4358	1.35	23.26	0
14	SLU 59	373	-1	4343	1.61	22.9	0
14	SLU 60	398	-1	4675	1.34	24.51	0
14	SLU 61	391	-1	4660	1.6	24.15	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
14	SLU 62	398	-1	4675	1.34	24.51	0
14	SLU 63	391	-1	4660	1.6	24.15	0
14	SLU 64	366	-1	4055	1.37	22.2	0
14	SLU 65	355	-2	4029	1.8	21.61	0
14	SLU 66	366	-1	4055	1.37	22.2	0
14	SLU 67	359	-1	4040	1.63	21.85	0
14	SLU 68	355	-2	4029	1.8	21.61	0
14	SLU 69	366	-1	4055	1.37	22.2	0
14	SLU 70	359	-1	4040	1.63	21.85	0
14	SLU 71	366	-1	4055	1.37	22.2	0
14	SLU 72	359	-1	4040	1.63	21.85	0
14	SLU 73	397	-1	4769	1.78	24.53	0
14	SLU 74	408	-1	4795	1.35	25.13	0
14	SLU 75	401	-1	4779	1.61	24.77	0
14	SLU 76	397	-1	4769	1.78	24.53	0
14	SLU 77	408	-1	4795	1.35	25.13	0
14	SLU 78	401	-1	4779	1.61	24.77	0
14	SLU 79	408	-1	4795	1.35	25.13	0
14	SLU 80	401	-1	4779	1.61	24.77	0
14	SLU 81	426	-1	5112	1.34	26.38	0
14	SLU 82	419	-1	5096	1.6	26.02	0
14	SLU 83	426	-1	5112	1.34	26.38	0
14	SLU 84	419	-1	5096	1.6	26.02	0
14	SLE RA 1	275	-1	3023	1.05	16.67	0
14	SLE RA 2	268	-1	3006	1.34	16.27	0
14	SLE RA 3	275	-1	3023	1.05	16.67	0
14	SLE RA 4	271	-1	3013	1.22	16.43	0
14	SLE RA 5	268	-1	3006	1.34	16.27	0
14	SLE RA 6	275	-1	3023	1.05	16.67	0
14	SLE RA 7	271	-1	3013	1.22	16.43	0
14	SLE RA 8	275	-1	3023	1.05	16.67	0
14	SLE RA 9	271	-1	3013	1.22	16.43	0
14	SLE RA 10	296	-1	3500	1.33	18.22	0
14	SLE RA 11	303	-1	3516	1.04	18.62	0
14	SLE RA 12	299	-1	3506	1.21	18.38	0
14	SLE RA 13	296	-1	3500	1.33	18.22	0
14	SLE RA 14	303	-1	3516	1.04	18.62	0
14	SLE RA 15	299	-1	3506	1.21	18.38	0
14	SLE RA 16	303	-1	3516	1.04	18.62	0
14	SLE RA 17	299	-1	3506	1.21	18.38	0
14	SLE RA 18	315	-1	3728	1.04	19.45	0
14	SLE RA 19	311	-1	3718	1.21	19.21	0
14	SLE RA 20	315	-1	3728	1.04	19.45	0
14	SLE RA 21	311	-1	3718	1.21	19.21	0
14	SLE FR 1	275	-1	3023	1.05	16.67	0
14	SLE FR 2	274	-1	3020	1.11	16.59	0
14	SLE FR 3	275	-1	3023	1.05	16.67	0
14	SLE FR 4	286	-1	3231	1.1	17.42	0
14	SLE FR 5	287	-1	3235	1.05	17.5	0
14	SLE FR 6	295	-1	3375	1.04	18.06	0
14	SLE QP 1	275	-1	3023	1.05	16.67	0
14	SLE QP 2	287	-1	3235	1.05	17.5	0
14	SLD 1	483	40	3665	-36.48	28.74	-0.05
14	SLD 2	483	40	3665	-36.48	28.74	-0.05
14	SLD 3	462	-20	3615	19.39	27.63	0.03
14	SLD 4	462	-20	3615	19.39	27.63	0.03
14	SLD 5	378	102	3440	-94.95	22.54	-0.15
14	SLD 6	378	102	3440	-94.95	22.54	-0.15
14	SLD 7	308	-97	3272	91.29	18.87	0.14
14	SLD 8	308	-97	3272	91.29	18.87	0.14
14	SLD 9	266	96	3197	-89.2	16.14	-0.14
14	SLD 10	266	96	3197	-89.2	16.14	-0.14
14	SLD 11	197	-104	3029	97.04	12.46	0.15
14	SLD 12	197	-104	3029	97.04	12.46	0.15
14	SLD 13	112	18	2854	-17.3	7.37	-0.03
14	SLD 14	112	18	2854	-17.3	7.37	-0.03
14	SLD 15	91	-42	2804	38.57	6.27	0.06
14	SLD 16	91	-42	2804	38.57	6.27	0.06
14	SLV 1	751	105	4255	-96.64	44.06	-0.15
14	SLV 2	751	105	4255	-96.64	44.06	-0.15
14	SLV 3	698	-51	4127	49.96	41.29	0.09
14	SLV 4	698	-51	4127	49.96	41.29	0.09
14	SLV 5	507	268	3735	-250.6	29.68	-0.4
14	SLV 6	507	268	3735	-250.6	29.68	-0.4
14	SLV 7	329	-253	3308	238.06	20.43	0.38
14	SLV 8	329	-253	3308	238.06	20.43	0.38
14	SLV 9	245	251	3161	-235.97	14.57	-0.38
14	SLV 10	245	251	3161	-235.97	14.57	-0.38
14	SLV 11	67	-269	2734	252.69	5.33	0.4
14	SLV 12	67	-269	2734	252.69	5.33	0.4
14	SLV 13	-124	49	2342	-47.87	-6.28	-0.08
14	SLV 14	-124	49	2342	-47.87	-6.28	-0.08
14	SLV 15	-177	-107	2214	98.73	-9.06	0.15
14	SLV 16	-177	-107	2214	98.73	-9.06	0.15
15	SLU 1	55	-1	2841	1.05	-0.17	0
15	SLU 2	44	-1	2811	1.6	-0.53	0
15	SLU 3	55	-1	2841	1.05	-0.17	0
15	SLU 4	49	-1	2823	1.38	-0.39	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
15	SLU 5	44	-1	2811	1.6	-0.53	0
15	SLU 6	55	-1	2841	1.05	-0.17	0
15	SLU 7	49	-1	2823	1.38	-0.39	0
15	SLU 8	55	-1	2841	1.05	-0.17	0
15	SLU 9	49	-1	2823	1.38	-0.39	0
15	SLU 10	22	-1	3521	1.6	-2.05	0
15	SLU 11	33	-1	3552	1.05	-1.69	0
15	SLU 12	26	-1	3533	1.38	-1.9	0
15	SLU 13	22	-1	3521	1.6	-2.05	0
15	SLU 14	33	-1	3552	1.05	-1.69	0
15	SLU 15	26	-1	3533	1.38	-1.9	0
15	SLU 16	33	-1	3552	1.05	-1.69	0
15	SLU 17	26	-1	3533	1.38	-1.9	0
15	SLU 18	23	-1	3856	1.05	-2.34	0
15	SLU 19	16	-1	3838	1.38	-2.55	0
15	SLU 20	23	-1	3856	1.05	-2.34	0
15	SLU 21	16	-1	3838	1.38	-2.55	0
15	SLU 22	47	-1	3260	1.06	-0.83	0
15	SLU 23	36	-1	3230	1.6	-1.19	0
15	SLU 24	47	-1	3260	1.06	-0.83	0
15	SLU 25	40	-1	3242	1.38	-1.05	0
15	SLU 26	36	-1	3230	1.6	-1.19	0
15	SLU 27	47	-1	3260	1.06	-0.83	0
15	SLU 28	40	-1	3242	1.38	-1.05	0
15	SLU 29	47	-1	3260	1.06	-0.83	0
15	SLU 30	40	-1	3242	1.38	-1.05	0
15	SLU 31	13	-1	3940	1.6	-2.71	0
15	SLU 32	24	-1	3971	1.05	-2.35	0
15	SLU 33	18	-1	3952	1.38	-2.56	0
15	SLU 34	13	-1	3940	1.6	-2.71	0
15	SLU 35	24	-1	3971	1.05	-2.35	0
15	SLU 36	18	-1	3952	1.38	-2.56	0
15	SLU 37	24	-1	3971	1.05	-2.35	0
15	SLU 38	18	-1	3952	1.38	-2.56	0
15	SLU 39	15	-1	4275	1.05	-3	0
15	SLU 40	8	-1	4257	1.38	-3.21	0
15	SLU 41	15	-1	4275	1.05	-3	0
15	SLU 42	8	-1	4257	1.38	-3.21	0
15	SLU 43	75	-1	3550	1.37	0	0
15	SLU 44	64	-1	3519	1.91	-0.35	0
15	SLU 45	75	-1	3550	1.37	0	0
15	SLU 46	68	-1	3531	1.69	-0.21	0
15	SLU 47	64	-1	3519	1.91	-0.35	0
15	SLU 48	75	-1	3550	1.37	0	0
15	SLU 49	68	-1	3531	1.69	-0.21	0
15	SLU 50	75	-1	3550	1.37	0	0
15	SLU 51	68	-1	3531	1.69	-0.21	0
15	SLU 52	41	-1	4230	1.91	-1.87	0
15	SLU 53	52	-1	4260	1.36	-1.51	0
15	SLU 54	46	-1	4242	1.69	-1.73	0
15	SLU 55	41	-1	4230	1.91	-1.87	0
15	SLU 56	52	-1	4260	1.36	-1.51	0
15	SLU 57	46	-1	4242	1.69	-1.73	0
15	SLU 58	52	-1	4260	1.36	-1.51	0
15	SLU 59	46	-1	4242	1.69	-1.73	0
15	SLU 60	43	-1	4565	1.36	-2.16	0
15	SLU 61	36	-1	4547	1.69	-2.38	0
15	SLU 62	43	-1	4565	1.36	-2.16	0
15	SLU 63	36	-1	4547	1.69	-2.38	0
15	SLU 64	67	-1	3969	1.37	-0.66	0
15	SLU 65	55	-1	3938	1.92	-1.02	0
15	SLU 66	67	-1	3969	1.37	-0.66	0
15	SLU 67	60	-1	3950	1.7	-0.87	0
15	SLU 68	55	-1	3938	1.92	-1.02	0
15	SLU 69	67	-1	3969	1.37	-0.66	0
15	SLU 70	60	-1	3950	1.7	-0.87	0
15	SLU 71	67	-1	3969	1.37	-0.66	0
15	SLU 72	60	-1	3950	1.7	-0.87	0
15	SLU 73	33	-1	4649	1.91	-2.53	0
15	SLU 74	44	-1	4679	1.37	-2.17	0
15	SLU 75	37	-1	4661	1.69	-2.39	0
15	SLU 76	33	-1	4649	1.91	-2.53	0
15	SLU 77	44	-1	4679	1.37	-2.17	0
15	SLU 78	37	-1	4661	1.69	-2.39	0
15	SLU 79	44	-1	4679	1.37	-2.17	0
15	SLU 80	37	-1	4661	1.69	-2.39	0
15	SLU 81	34	-1	4984	1.37	-2.82	0
15	SLU 82	28	-1	4966	1.69	-3.04	0
15	SLU 83	34	-1	4984	1.37	-2.82	0
15	SLU 84	28	-1	4966	1.69	-3.04	0
15	SLE RA 1	53	-1	2961	1.05	-0.36	0
15	SLE RA 2	46	-1	2940	1.42	-0.6	0
15	SLE RA 3	53	-1	2961	1.05	-0.36	0
15	SLE RA 4	49	-1	2949	1.27	-0.5	0
15	SLE RA 5	46	-1	2940	1.42	-0.6	0
15	SLE RA 6	53	-1	2961	1.05	-0.36	0
15	SLE RA 7	49	-1	2949	1.27	-0.5	0
15	SLE RA 8	53	-1	2961	1.05	-0.36	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
15	SLE RA 9	49	-1	2949	1.27	-0.5	0
15	SLE RA 10	31	-1	3414	1.42	-1.61	0
15	SLE RA 11	38	-1	3434	1.05	-1.37	0
15	SLE RA 12	34	-1	3422	1.27	-1.51	0
15	SLE RA 13	31	-1	3414	1.42	-1.61	0
15	SLE RA 14	38	-1	3434	1.05	-1.37	0
15	SLE RA 15	34	-1	3422	1.27	-1.51	0
15	SLE RA 16	38	-1	3434	1.05	-1.37	0
15	SLE RA 17	34	-1	3422	1.27	-1.51	0
15	SLE RA 18	31	-1	3638	1.05	-1.8	0
15	SLE RA 19	27	-1	3625	1.27	-1.95	0
15	SLE RA 20	31	-1	3638	1.05	-1.8	0
15	SLE RA 21	27	-1	3625	1.27	-1.95	0
15	SLE FR 1	53	-1	2961	1.05	-0.36	0
15	SLE FR 2	52	-1	2957	1.13	-0.41	0
15	SLE FR 3	53	-1	2961	1.05	-0.36	0
15	SLE FR 4	45	-1	3160	1.12	-0.84	0
15	SLE FR 5	47	-1	3164	1.05	-0.79	0
15	SLE FR 6	42	-1	3299	1.05	-1.08	0
15	SLE QP 1	53	-1	2961	1.05	-0.36	0
15	SLE QP 2	47	-1	3164	1.05	-0.79	0
15	SLD 1	294	29	3343	-34.42	11.16	0.13
15	SLD 2	294	29	3343	-34.42	11.16	0.13
15	SLD 3	265	-6	3310	14.22	9.69	-0.04
15	SLD 4	265	-6	3310	14.22	9.69	-0.04
15	SLD 5	164	62	3267	-83.36	5.03	0.3
15	SLD 6	164	62	3267	-83.36	5.03	0.3
15	SLD 7	69	-56	3158	78.77	0.12	-0.28
15	SLD 8	69	-56	3158	78.77	0.12	-0.28
15	SLD 9	24	54	3170	-76.67	-1.71	0.27
15	SLD 10	24	54	3170	-76.67	-1.71	0.27
15	SLD 11	-71	-63	3060	85.46	-6.61	-0.31
15	SLD 12	-71	-63	3060	85.46	-6.61	-0.31
15	SLD 13	-172	5	3018	-12.12	-11.28	0.03
15	SLD 14	-172	5	3018	-12.12	-11.28	0.03
15	SLD 15	-200	-30	2985	36.52	-12.75	-0.14
15	SLD 16	-200	-30	2985	36.52	-12.75	-0.14
15	SLV 1	632	75	3588	-91.25	27.58	0.35
15	SLV 2	632	75	3588	-91.25	27.58	0.35
15	SLV 3	557	-16	3509	36.35	23.64	-0.1
15	SLV 4	557	-16	3509	36.35	23.64	-0.1
15	SLV 5	336	160	3412	-220.17	13.7	0.78
15	SLV 6	336	160	3412	-220.17	13.7	0.78
15	SLV 7	86	-143	3147	205.17	0.56	-0.71
15	SLV 8	86	-143	3147	205.17	0.56	-0.71
15	SLV 9	7	142	3181	-203.07	-2.14	0.7
15	SLV 10	7	142	3181	-203.07	-2.14	0.7
15	SLV 11	-242	-161	2916	222.28	-15.29	-0.78
15	SLV 12	-242	-161	2916	222.28	-15.29	-0.78
15	SLV 13	-464	14	2819	-34.24	-25.23	0.09
15	SLV 14	-464	14	2819	-34.24	-25.23	0.09
15	SLV 15	-539	-77	2739	93.36	-29.17	-0.35
15	SLV 16	-539	-77	2739	93.36	-29.17	-0.35
16	SLU 1	-24	-1	2827	0.91	1.92	0
16	SLU 2	-38	-1	2787	1.51	1.26	0
16	SLU 3	-24	-1	2827	0.91	1.92	0
16	SLU 4	-32	-1	2803	1.27	1.52	0
16	SLU 5	-38	-1	2787	1.51	1.26	0
16	SLU 6	-24	-1	2827	0.91	1.92	0
16	SLU 7	-32	-1	2803	1.27	1.52	0
16	SLU 8	-24	-1	2827	0.91	1.92	0
16	SLU 9	-32	-1	2803	1.27	1.52	0
16	SLU 10	-88	-1	3468	1.49	-0.11	0
16	SLU 11	-74	-1	3508	0.89	0.55	0
16	SLU 12	-82	-1	3484	1.25	0.16	0
16	SLU 13	-88	-1	3468	1.49	-0.11	0
16	SLU 14	-74	-1	3508	0.89	0.55	0
16	SLU 15	-82	-1	3484	1.25	0.16	0
16	SLU 16	-74	-1	3508	0.89	0.55	0
16	SLU 17	-82	-1	3484	1.25	0.16	0
16	SLU 18	-96	-1	3800	0.89	-0.03	0
16	SLU 19	-104	-1	3776	1.25	-0.43	0
16	SLU 20	-96	-1	3800	0.89	-0.03	0
16	SLU 21	-104	-1	3776	1.25	-0.43	0
16	SLU 22	-48	-1	3231	0.9	1.32	0
16	SLU 23	-62	-1	3190	1.5	0.66	0
16	SLU 24	-48	-1	3231	0.9	1.32	0
16	SLU 25	-56	-1	3207	1.26	0.93	0
16	SLU 26	-62	-1	3190	1.5	0.66	0
16	SLU 27	-48	-1	3231	0.9	1.32	0
16	SLU 28	-56	-1	3207	1.26	0.93	0
16	SLU 29	-48	-1	3231	0.9	1.32	0
16	SLU 30	-56	-1	3207	1.26	0.93	0
16	SLU 31	-112	-1	3872	1.49	-0.71	0
16	SLU 32	-98	-1	3912	0.89	-0.05	0
16	SLU 33	-107	-1	3888	1.25	-0.44	0
16	SLU 34	-112	-1	3872	1.49	-0.71	0
16	SLU 35	-98	-1	3912	0.89	-0.05	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
16	SLU 36	-107	-1	3888	1.25	-0.44	0
16	SLU 37	-98	-1	3912	0.89	-0.05	0
16	SLU 38	-107	-1	3888	1.25	-0.44	0
16	SLU 39	-120	-1	4204	0.88	-0.63	0
16	SLU 40	-129	-1	4180	1.24	-1.03	0
16	SLU 41	-120	-1	4204	0.88	-0.63	0
16	SLU 42	-129	-1	4180	1.24	-1.03	0
16	SLU 43	-22	-1	3537	1.18	2.7	0
16	SLU 44	-36	-1	3497	1.78	2.04	-0.01
16	SLU 45	-22	-1	3537	1.18	2.7	0
16	SLU 46	-31	-1	3513	1.54	2.31	0
16	SLU 47	-36	-1	3497	1.78	2.04	-0.01
16	SLU 48	-22	-1	3537	1.18	2.7	0
16	SLU 49	-31	-1	3513	1.54	2.31	0
16	SLU 50	-22	-1	3537	1.18	2.7	0
16	SLU 51	-31	-1	3513	1.54	2.31	0
16	SLU 52	-87	-1	4178	1.77	0.68	-0.01
16	SLU 53	-73	-1	4218	1.17	1.33	0
16	SLU 54	-81	-1	4194	1.53	0.94	0
16	SLU 55	-87	-1	4178	1.77	0.68	-0.01
16	SLU 56	-73	-1	4218	1.17	1.33	0
16	SLU 57	-81	-1	4194	1.53	0.94	0
16	SLU 58	-73	-1	4218	1.17	1.33	0
16	SLU 59	-81	-1	4194	1.53	0.94	0
16	SLU 60	-94	-1	4510	1.16	0.75	0
16	SLU 61	-103	-1	4486	1.52	0.35	0
16	SLU 62	-94	-1	4510	1.16	0.75	0
16	SLU 63	-103	-1	4486	1.52	0.35	0
16	SLU 64	-47	-1	3941	1.17	2.1	0
16	SLU 65	-61	-1	3900	1.77	1.44	-0.01
16	SLU 66	-47	-1	3941	1.17	2.1	0
16	SLU 67	-55	-1	3917	1.53	1.71	0
16	SLU 68	-61	-1	3900	1.77	1.44	-0.01
16	SLU 69	-47	-1	3941	1.17	2.1	0
16	SLU 70	-55	-1	3917	1.53	1.71	0
16	SLU 71	-47	-1	3941	1.17	2.1	0
16	SLU 72	-55	-1	3917	1.53	1.71	0
16	SLU 73	-111	-1	4582	1.76	0.08	-0.01
16	SLU 74	-97	-1	4622	1.16	0.73	0
16	SLU 75	-106	-1	4598	1.52	0.34	0
16	SLU 76	-111	-1	4582	1.76	0.08	-0.01
16	SLU 77	-97	-1	4622	1.16	0.73	0
16	SLU 78	-106	-1	4598	1.52	0.34	0
16	SLU 79	-97	-1	4622	1.16	0.73	0
16	SLU 80	-106	-1	4598	1.52	0.34	0
16	SLU 81	-119	-1	4914	1.15	0.15	0
16	SLU 82	-127	-1	4889	1.51	-0.25	0
16	SLU 83	-119	-1	4914	1.15	0.15	0
16	SLU 84	-127	-1	4889	1.51	-0.25	0
16	SLE RA 1	-31	-1	2943	0.9	1.75	0
16	SLE RA 2	-40	-1	2916	1.3	1.31	0
16	SLE RA 3	-31	-1	2943	0.9	1.75	0
16	SLE RA 4	-36	-1	2927	1.14	1.48	0
16	SLE RA 5	-40	-1	2916	1.3	1.31	0
16	SLE RA 6	-31	-1	2943	0.9	1.75	0
16	SLE RA 7	-36	-1	2927	1.14	1.48	0
16	SLE RA 8	-31	-1	2943	0.9	1.75	0
16	SLE RA 9	-36	-1	2927	1.14	1.48	0
16	SLE RA 10	-74	-1	3370	1.29	0.4	0
16	SLE RA 11	-64	-1	3397	0.9	0.84	0
16	SLE RA 12	-70	-1	3381	1.13	0.57	0
16	SLE RA 13	-74	-1	3370	1.29	0.4	0
16	SLE RA 14	-64	-1	3397	0.9	0.84	0
16	SLE RA 15	-70	-1	3381	1.13	0.57	0
16	SLE RA 16	-64	-1	3397	0.9	0.84	0
16	SLE RA 17	-70	-1	3381	1.13	0.57	0
16	SLE RA 18	-79	-1	3591	0.89	0.45	0
16	SLE RA 19	-84	-1	3575	1.13	0.18	0
16	SLE RA 20	-79	-1	3591	0.89	0.45	0
16	SLE RA 21	-84	-1	3575	1.13	0.18	0
16	SLE FR 1	-31	-1	2943	0.9	1.75	0
16	SLE FR 2	-32	-1	2937	0.98	1.66	0
16	SLE FR 3	-31	-1	2943	0.9	1.75	0
16	SLE FR 4	-47	-1	3132	0.98	1.27	0
16	SLE FR 5	-45	-1	3137	0.9	1.36	0
16	SLE FR 6	-55	-1	3267	0.9	1.1	0
16	SLE QP 1	-31	-1	2943	0.9	1.75	0
16	SLE QP 2	-45	-1	3137	0.9	1.36	0
16	SLD 1	233	25	3077	-31.03	14.07	0.14
16	SLD 2	233	25	3077	-31.03	14.07	0.14
16	SLD 3	201	-2	3042	9.53	12.76	-0.02
16	SLD 4	201	-2	3042	9.53	12.76	-0.02
16	SLD 5	86	48	3172	-70.19	7.15	0.28
16	SLD 6	86	48	3172	-70.19	7.15	0.28
16	SLD 7	-19	-41	3056	65	2.8	-0.24
16	SLD 8	-19	-41	3056	65	2.8	-0.24
16	SLD 9	-71	40	3218	-63.2	-0.08	0.24
16	SLD 10	-71	40	3218	-63.2	-0.08	0.24

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
16	SLD 11	-176	-49	3103	71.99	-4.44	-0.28
16	SLD 12	-176	-49	3103	71.99	-4.44	-0.28
16	SLD 13	-291	1	3232	-7.73	-10.05	0.01
16	SLD 14	-291	1	3232	-7.73	-10.05	0.01
16	SLD 15	-323	-26	3198	32.83	-11.35	-0.14
16	SLD 16	-323	-26	3198	32.83	-11.35	-0.14
16	SLV 1	613	64	2993	-81.86	31.42	0.36
16	SLV 2	613	64	2993	-81.86	31.42	0.36
16	SLV 3	531	-3	2910	24.17	28.1	-0.04
16	SLV 4	531	-3	2910	24.17	28.1	-0.04
16	SLV 5	276	122	3221	-184.74	15.42	0.71
16	SLV 6	276	122	3221	-184.74	15.42	0.71
16	SLV 7	4	-104	2942	168.69	4.34	-0.62
16	SLV 8	4	-104	2942	168.69	4.34	-0.62
16	SLV 9	-94	103	3332	-166.89	-1.62	0.61
16	SLV 10	-94	103	3332	-166.89	-1.62	0.61
16	SLV 11	-366	-123	3054	186.54	-12.7	-0.71
16	SLV 12	-366	-123	3054	186.54	-12.7	-0.71
16	SLV 13	-621	2	3365	-22.37	-25.39	0.03
16	SLV 14	-621	2	3365	-22.37	-25.39	0.03
16	SLV 15	-703	-65	3281	83.66	-28.71	-0.36
16	SLV 16	-703	-65	3281	83.66	-28.71	-0.36
17	SLU 1	-179	0	2784	0.64	-10.62	0
17	SLU 2	-193	-1	2732	1.27	-11.01	0
17	SLU 3	-179	0	2784	0.64	-10.62	0
17	SLU 4	-187	-1	2753	1.02	-10.85	0
17	SLU 5	-193	-1	2732	1.27	-11.01	0
17	SLU 6	-179	0	2784	0.64	-10.62	0
17	SLU 7	-187	-1	2753	1.02	-10.85	0
17	SLU 8	-179	0	2784	0.64	-10.62	0
17	SLU 9	-187	-1	2753	1.02	-10.85	0
17	SLU 10	-285	-1	3374	1.22	-15.48	0
17	SLU 11	-272	0	3425	0.59	-15.1	0
17	SLU 12	-280	0	3394	0.97	-15.33	0
17	SLU 13	-285	-1	3374	1.22	-15.48	0
17	SLU 14	-272	0	3425	0.59	-15.1	0
17	SLU 15	-280	0	3394	0.97	-15.33	0
17	SLU 16	-272	0	3425	0.59	-15.1	0
17	SLU 17	-280	0	3394	0.97	-15.33	0
17	SLU 18	-311	0	3700	0.56	-17.02	0
17	SLU 19	-319	0	3669	0.94	-17.25	0
17	SLU 20	-311	0	3700	0.56	-17.02	0
17	SLU 21	-319	0	3669	0.94	-17.25	0
17	SLU 22	-228	0	3166	0.61	-13	0
17	SLU 23	-241	-1	3114	1.24	-13.39	0
17	SLU 24	-228	0	3166	0.61	-13	0
17	SLU 25	-236	-1	3135	0.99	-13.23	0
17	SLU 26	-241	-1	3114	1.24	-13.39	0
17	SLU 27	-228	0	3166	0.61	-13	0
17	SLU 28	-236	-1	3135	0.99	-13.23	0
17	SLU 29	-228	0	3166	0.61	-13	0
17	SLU 30	-236	-1	3135	0.99	-13.23	0
17	SLU 31	-333	-1	3756	1.19	-17.86	0
17	SLU 32	-320	0	3807	0.56	-17.48	0
17	SLU 33	-328	0	3776	0.93	-17.71	0
17	SLU 34	-333	-1	3756	1.19	-17.86	0
17	SLU 35	-320	0	3807	0.56	-17.48	0
17	SLU 36	-328	0	3776	0.93	-17.71	0
17	SLU 37	-320	0	3807	0.56	-17.48	0
17	SLU 38	-328	0	3776	0.93	-17.71	0
17	SLU 39	-360	0	4082	0.53	-19.4	0
17	SLU 40	-368	0	4051	0.91	-19.63	0
17	SLU 41	-360	0	4082	0.53	-19.4	0
17	SLU 42	-368	0	4051	0.91	-19.63	0
17	SLU 43	-217	0	3488	0.84	-12.99	0
17	SLU 44	-230	-1	3437	1.47	-13.38	0
17	SLU 45	-217	0	3488	0.84	-12.99	0
17	SLU 46	-225	-1	3457	1.22	-13.22	0
17	SLU 47	-230	-1	3437	1.47	-13.38	0
17	SLU 48	-217	0	3488	0.84	-12.99	0
17	SLU 49	-225	-1	3457	1.22	-13.22	0
17	SLU 50	-217	0	3488	0.84	-12.99	0
17	SLU 51	-225	-1	3457	1.22	-13.22	0
17	SLU 52	-322	-1	4078	1.42	-17.86	0
17	SLU 53	-309	0	4130	0.79	-17.47	0
17	SLU 54	-317	-1	4099	1.17	-17.7	0
17	SLU 55	-322	-1	4078	1.42	-17.86	0
17	SLU 56	-309	0	4130	0.79	-17.47	0
17	SLU 57	-317	-1	4099	1.17	-17.7	0
17	SLU 58	-309	0	4130	0.79	-17.47	0
17	SLU 59	-317	-1	4099	1.17	-17.7	0
17	SLU 60	-348	0	4405	0.77	-19.39	0
17	SLU 61	-356	-1	4374	1.15	-19.62	0
17	SLU 62	-348	0	4405	0.77	-19.39	0
17	SLU 63	-356	-1	4374	1.15	-19.62	0
17	SLU 64	-265	0	3870	0.81	-15.37	0
17	SLU 65	-278	-1	3818	1.44	-15.76	0
17	SLU 66	-265	0	3870	0.81	-15.37	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
17	SLU 67	-273	-1	3839	1.19	-15.6	0
17	SLU 68	-278	-1	3818	1.44	-15.76	0
17	SLU 69	-265	0	3870	0.81	-15.37	0
17	SLU 70	-273	-1	3839	1.19	-15.6	0
17	SLU 71	-265	0	3870	0.81	-15.37	0
17	SLU 72	-273	-1	3839	1.19	-15.6	0
17	SLU 73	-371	-1	4460	1.39	-20.23	0
17	SLU 74	-357	0	4512	0.76	-19.85	0
17	SLU 75	-365	-1	4481	1.14	-20.08	0
17	SLU 76	-371	-1	4460	1.39	-20.23	0
17	SLU 77	-357	0	4512	0.76	-19.85	0
17	SLU 78	-365	-1	4481	1.14	-20.08	0
17	SLU 79	-357	0	4512	0.76	-19.85	0
17	SLU 80	-365	-1	4481	1.14	-20.08	0
17	SLU 81	-397	0	4787	0.74	-21.77	0
17	SLU 82	-405	-1	4755	1.11	-22	0
17	SLU 83	-397	0	4787	0.74	-21.77	0
17	SLU 84	-405	-1	4755	1.11	-22	0
17	SLE RA 1	-193	0	2893	0.63	-11.3	0
17	SLE RA 2	-202	-1	2859	1.05	-11.56	0
17	SLE RA 3	-193	0	2893	0.63	-11.3	0
17	SLE RA 4	-199	0	2872	0.88	-11.45	0
17	SLE RA 5	-202	-1	2859	1.05	-11.56	0
17	SLE RA 6	-193	0	2893	0.63	-11.3	0
17	SLE RA 7	-199	0	2872	0.88	-11.45	0
17	SLE RA 8	-193	0	2893	0.63	-11.3	0
17	SLE RA 9	-199	0	2872	0.88	-11.45	0
17	SLE RA 10	-264	-1	3286	1.02	-14.54	0
17	SLE RA 11	-255	0	3321	0.6	-14.29	0
17	SLE RA 12	-260	0	3300	0.85	-14.44	0
17	SLE RA 13	-264	-1	3286	1.02	-14.54	0
17	SLE RA 14	-255	0	3321	0.6	-14.29	0
17	SLE RA 15	-260	0	3300	0.85	-14.44	0
17	SLE RA 16	-255	0	3321	0.6	-14.29	0
17	SLE RA 17	-260	0	3300	0.85	-14.44	0
17	SLE RA 18	-281	0	3504	0.58	-15.56	0
17	SLE RA 19	-286	0	3483	0.83	-15.72	0
17	SLE RA 20	-281	0	3504	0.58	-15.56	0
17	SLE RA 21	-286	0	3483	0.83	-15.72	0
17	SLE FR 1	-193	0	2893	0.63	-11.3	0
17	SLE FR 2	-195	0	2886	0.71	-11.35	0
17	SLE FR 3	-193	0	2893	0.63	-11.3	0
17	SLE FR 4	-221	0	3069	0.7	-12.63	0
17	SLE FR 5	-220	0	3076	0.62	-12.58	0
17	SLE FR 6	-237	0	3199	0.61	-13.43	0
17	SLE QP 1	-193	0	2893	0.63	-11.3	0
17	SLE QP 2	-220	0	3076	0.62	-12.58	0
17	SLD 1	77	22	3007	-26.99	0.57	0.12
17	SLD 2	77	22	3007	-26.99	0.57	0.12
17	SLD 3	37	0	2965	5.92	-1.28	0
17	SLD 4	37	0	2965	5.92	-1.28	0
17	SLD 5	-71	39	3120	-57.59	-5.82	0.22
17	SLD 6	-71	39	3120	-57.59	-5.82	0.22
17	SLD 7	-202	-33	2979	52.13	-12	-0.18
17	SLD 8	-202	-33	2979	52.13	-12	-0.18
17	SLD 9	-237	33	3174	-50.9	-13.15	0.18
17	SLD 10	-237	33	3174	-50.9	-13.15	0.18
17	SLD 11	-368	-40	3033	58.82	-19.34	-0.22
17	SLD 12	-368	-40	3033	58.82	-19.34	-0.22
17	SLD 13	-477	-1	3188	-4.69	-23.88	0
17	SLD 14	-477	-1	3188	-4.69	-23.88	0
17	SLD 15	-516	-23	3145	28.23	-25.73	-0.13
17	SLD 16	-516	-23	3145	28.23	-25.73	-0.13
17	SLV 1	483	56	2914	-70.52	18.68	0.31
17	SLV 2	483	56	2914	-70.52	18.68	0.31
17	SLV 3	379	2	2812	14.99	13.68	0.01
17	SLV 4	379	2	2812	14.99	13.68	0.01
17	SLV 5	149	98	3183	-150.42	4.39	0.55
17	SLV 6	149	98	3183	-150.42	4.39	0.55
17	SLV 7	-198	-81	2841	134.62	-12.3	-0.46
17	SLV 8	-198	-81	2841	134.62	-12.3	-0.46
17	SLV 9	-242	81	3311	-133.39	-12.86	0.46
17	SLV 10	-242	81	3311	-133.39	-12.86	0.46
17	SLV 11	-588	-99	2969	151.65	-29.55	-0.55
17	SLV 12	-588	-99	2969	151.65	-29.55	-0.55
17	SLV 13	-819	-2	3341	-13.76	-38.84	-0.01
17	SLV 14	-819	-2	3341	-13.76	-38.84	-0.01
17	SLV 15	-923	-56	3238	71.75	-43.84	-0.31
17	SLV 16	-923	-56	3238	71.75	-43.84	-0.31
18	SLU 1	-194	0	2733	0.22	-4.29	0
18	SLU 2	-212	0	2667	0.87	-5.09	0
18	SLU 3	-194	0	2733	0.22	-4.29	0
18	SLU 4	-205	0	2693	0.61	-4.77	0
18	SLU 5	-212	0	2667	0.87	-5.09	0
18	SLU 6	-194	0	2733	0.22	-4.29	0
18	SLU 7	-205	0	2693	0.61	-4.77	0
18	SLU 8	-194	0	2733	0.22	-4.29	0
18	SLU 9	-205	0	2693	0.61	-4.77	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
18	SLU 10	-311	0	3266	0.74	-8.24	0
18	SLU 11	-294	0	3332	0.1	-7.45	0
18	SLU 12	-304	0	3292	0.49	-7.93	0
18	SLU 13	-311	0	3266	0.74	-8.24	0
18	SLU 14	-294	0	3332	0.1	-7.45	0
18	SLU 15	-304	0	3292	0.49	-7.93	0
18	SLU 16	-294	0	3332	0.1	-7.45	0
18	SLU 17	-304	0	3292	0.49	-7.93	0
18	SLU 18	-336	1	3589	0.05	-8.8	0
18	SLU 19	-347	0	3549	0.44	-9.28	0
18	SLU 20	-336	1	3589	0.05	-8.8	0
18	SLU 21	-347	0	3549	0.44	-9.28	0
18	SLU 22	-248	0	3091	0.15	-5.96	0
18	SLU 23	-265	0	3025	0.79	-6.76	0
18	SLU 24	-248	0	3091	0.15	-5.96	0
18	SLU 25	-258	0	3052	0.54	-6.44	0
18	SLU 26	-265	0	3025	0.79	-6.76	0
18	SLU 27	-248	0	3091	0.15	-5.96	0
18	SLU 28	-258	0	3052	0.54	-6.44	0
18	SLU 29	-248	0	3091	0.15	-5.96	0
18	SLU 30	-258	0	3052	0.54	-6.44	0
18	SLU 31	-364	0	3625	0.67	-9.91	0
18	SLU 32	-347	1	3691	0.03	-9.11	0
18	SLU 33	-357	0	3651	0.42	-9.59	0
18	SLU 34	-364	0	3625	0.67	-9.91	0
18	SLU 35	-347	1	3691	0.03	-9.11	0
18	SLU 36	-357	0	3651	0.42	-9.59	0
18	SLU 37	-347	1	3691	0.03	-9.11	0
18	SLU 38	-357	0	3651	0.42	-9.59	0
18	SLU 39	-389	1	3947	-0.02	-10.47	0
18	SLU 40	-400	0	3908	0.36	-10.95	0
18	SLU 41	-389	1	3947	-0.02	-10.47	0
18	SLU 42	-400	0	3908	0.36	-10.95	0
18	SLU 43	-235	0	3430	0.31	-5.01	0
18	SLU 44	-252	0	3364	0.96	-5.8	0
18	SLU 45	-235	0	3430	0.31	-5.01	0
18	SLU 46	-245	0	3390	0.7	-5.48	0
18	SLU 47	-252	0	3364	0.96	-5.8	0
18	SLU 48	-235	0	3430	0.31	-5.01	0
18	SLU 49	-245	0	3390	0.7	-5.48	0
18	SLU 50	-235	0	3430	0.31	-5.01	0
18	SLU 51	-245	0	3390	0.7	-5.48	0
18	SLU 52	-351	0	3963	0.84	-8.96	0
18	SLU 53	-334	1	4029	0.19	-8.16	0
18	SLU 54	-344	0	3989	0.58	-8.64	0
18	SLU 55	-351	0	3963	0.84	-8.96	0
18	SLU 56	-334	1	4029	0.19	-8.16	0
18	SLU 57	-344	0	3989	0.58	-8.64	0
18	SLU 58	-334	1	4029	0.19	-8.16	0
18	SLU 59	-344	0	3989	0.58	-8.64	0
18	SLU 60	-376	1	4286	0.14	-9.51	0
18	SLU 61	-387	0	4246	0.53	-9.99	0
18	SLU 62	-376	1	4286	0.14	-9.51	0
18	SLU 63	-387	0	4246	0.53	-9.99	0
18	SLU 64	-288	0	3788	0.24	-6.67	0
18	SLU 65	-305	0	3722	0.89	-7.47	0
18	SLU 66	-288	0	3788	0.24	-6.67	0
18	SLU 67	-298	0	3749	0.63	-7.15	0
18	SLU 68	-305	0	3722	0.89	-7.47	0
18	SLU 69	-288	0	3788	0.24	-6.67	0
18	SLU 70	-298	0	3749	0.63	-7.15	0
18	SLU 71	-288	0	3788	0.24	-6.67	0
18	SLU 72	-298	0	3749	0.63	-7.15	0
18	SLU 73	-404	0	4322	0.76	-10.63	0
18	SLU 74	-387	1	4388	0.12	-9.83	0
18	SLU 75	-397	0	4348	0.51	-10.31	0
18	SLU 76	-404	0	4322	0.76	-10.63	0
18	SLU 77	-387	1	4388	0.12	-9.83	0
18	SLU 78	-397	0	4348	0.51	-10.31	0
18	SLU 79	-387	1	4388	0.12	-9.83	0
18	SLU 80	-397	0	4348	0.51	-10.31	0
18	SLU 81	-430	1	4644	0.07	-11.18	0.01
18	SLU 82	-440	0	4605	0.46	-11.66	0
18	SLU 83	-430	1	4644	0.07	-11.18	0.01
18	SLU 84	-440	0	4605	0.46	-11.66	0
18	SLE RA 1	-210	0	2835	0.2	-4.77	0
18	SLE RA 2	-221	0	2791	0.63	-5.3	0
18	SLE RA 3	-210	0	2835	0.2	-4.77	0
18	SLE RA 4	-217	0	2809	0.46	-5.09	0
18	SLE RA 5	-221	0	2791	0.63	-5.3	0
18	SLE RA 6	-210	0	2835	0.2	-4.77	0
18	SLE RA 7	-217	0	2809	0.46	-5.09	0
18	SLE RA 8	-210	0	2835	0.2	-4.77	0
18	SLE RA 9	-217	0	2809	0.46	-5.09	0
18	SLE RA 10	-287	0	3191	0.55	-7.4	0
18	SLE RA 11	-276	0	3235	0.12	-6.87	0
18	SLE RA 12	-283	0	3208	0.38	-7.19	0
18	SLE RA 13	-287	0	3191	0.55	-7.4	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
18	SLE RA 14	-276	0	3235	0.12	-6.87	0
18	SLE RA 15	-283	0	3208	0.38	-7.19	0
18	SLE RA 16	-276	0	3235	0.12	-6.87	0
18	SLE RA 17	-283	0	3208	0.38	-7.19	0
18	SLE RA 18	-304	0	3406	0.09	-7.77	0
18	SLE RA 19	-311	0	3380	0.34	-8.09	0
18	SLE RA 20	-304	0	3406	0.09	-7.77	0
18	SLE RA 21	-311	0	3380	0.34	-8.09	0
18	SLE FR 1	-210	0	2835	0.2	-4.77	0
18	SLE FR 2	-212	0	2827	0.29	-4.87	0
18	SLE FR 3	-210	0	2835	0.2	-4.77	0
18	SLE FR 4	-240	0	2998	0.25	-5.77	0
18	SLE FR 5	-238	0	3007	0.17	-5.67	0
18	SLE FR 6	-257	0	3121	0.14	-6.27	0
18	SLE QP 1	-210	0	2835	0.2	-4.77	0
18	SLE QP 2	-238	0	3007	0.17	-5.67	0
18	SLD 1	64	18	2898	-22.2	7.38	0.09
18	SLD 2	64	18	2898	-22.2	7.38	0.09
18	SLD 3	23	2	2844	3.05	5.84	0.01
18	SLD 4	23	2	2844	3.05	5.84	0.01
18	SLD 5	-86	31	3056	-44.85	0.59	0.15
18	SLD 6	-86	31	3056	-44.85	0.59	0.15
18	SLD 7	-221	-25	2876	39.34	-4.56	-0.12
18	SLD 8	-221	-25	2876	39.34	-4.56	-0.12
18	SLD 9	-255	25	3137	-39	-6.77	0.12
18	SLD 10	-255	25	3137	-39	-6.77	0.12
18	SLD 11	-390	-30	2957	45.19	-11.93	-0.15
18	SLD 12	-390	-30	2957	45.19	-11.93	-0.15
18	SLD 13	-499	-1	3169	-2.72	-17.17	0
18	SLD 14	-499	-1	3169	-2.72	-17.17	0
18	SLD 15	-540	-18	3115	22.54	-18.72	-0.08
18	SLD 16	-540	-18	3115	22.54	-18.72	-0.08
18	SLV 1	479	45	2753	-57.02	25.24	0.22
18	SLV 2	479	45	2753	-57.02	25.24	0.22
18	SLV 3	372	4	2623	8.02	21.26	0.02
18	SLV 4	372	4	2623	8.02	21.26	0.02
18	SLV 5	139	75	3128	-115.63	9.64	0.37
18	SLV 6	139	75	3128	-115.63	9.64	0.37
18	SLV 7	-217	-59	2694	101.16	-3.62	-0.29
18	SLV 8	-217	-59	2694	101.16	-3.62	-0.29
18	SLV 9	-259	60	3319	-100.83	-7.71	0.3
18	SLV 10	-259	60	3319	-100.83	-7.71	0.3
18	SLV 11	-615	-74	2885	115.96	-20.98	-0.36
18	SLV 12	-615	-74	2885	115.96	-20.98	-0.36
18	SLV 13	-848	-4	3391	-7.68	-32.6	-0.01
18	SLV 14	-848	-4	3391	-7.68	-32.6	-0.01
18	SLV 15	-955	-44	3260	57.35	-36.58	-0.21
18	SLV 16	-955	-44	3260	57.35	-36.58	-0.21
19	SLU 1	-369	1	2663	-0.34	-19.4	0.01
19	SLU 2	-384	1	2580	0.28	-19.78	0
19	SLU 3	-369	1	2663	-0.34	-19.4	0.01
19	SLU 4	-378	1	2613	0.03	-19.63	0.01
19	SLU 5	-384	1	2580	0.28	-19.78	0
19	SLU 6	-369	1	2663	-0.34	-19.4	0.01
19	SLU 7	-378	1	2613	0.03	-19.63	0.01
19	SLU 8	-369	1	2663	-0.34	-19.4	0.01
19	SLU 9	-378	1	2613	0.03	-19.63	0.01
19	SLU 10	-524	1	3133	0.07	-26.4	0.01
19	SLU 11	-509	2	3216	-0.55	-26.02	0.01
19	SLU 12	-518	1	3166	-0.18	-26.25	0.01
19	SLU 13	-524	1	3133	0.07	-26.4	0.01
19	SLU 14	-509	2	3216	-0.55	-26.02	0.01
19	SLU 15	-518	1	3166	-0.18	-26.25	0.01
19	SLU 16	-509	2	3216	-0.55	-26.02	0.01
19	SLU 17	-518	1	3166	-0.18	-26.25	0.01
19	SLU 18	-569	2	3453	-0.65	-28.86	0.01
19	SLU 19	-578	1	3403	-0.27	-29.09	0.01
19	SLU 20	-569	2	3453	-0.65	-28.86	0.01
19	SLU 21	-578	1	3403	-0.27	-29.09	0.01
19	SLU 22	-446	2	2996	-0.47	-23.06	0.01
19	SLU 23	-461	1	2912	0.16	-23.44	0.01
19	SLU 24	-446	2	2996	-0.47	-23.06	0.01
19	SLU 25	-455	1	2946	-0.09	-23.28	0.01
19	SLU 26	-461	1	2912	0.16	-23.44	0.01
19	SLU 27	-446	2	2996	-0.47	-23.06	0.01
19	SLU 28	-455	1	2946	-0.09	-23.28	0.01
19	SLU 29	-446	2	2996	-0.47	-23.06	0.01
19	SLU 30	-455	1	2946	-0.09	-23.28	0.01
19	SLU 31	-601	1	3465	-0.05	-30.06	0.01
19	SLU 32	-586	2	3548	-0.68	-29.68	0.01
19	SLU 33	-595	2	3498	-0.3	-29.91	0.01
19	SLU 34	-601	1	3465	-0.05	-30.06	0.01
19	SLU 35	-586	2	3548	-0.68	-29.68	0.01
19	SLU 36	-595	2	3498	-0.3	-29.91	0.01
19	SLU 37	-586	2	3548	-0.68	-29.68	0.01
19	SLU 38	-595	2	3498	-0.3	-29.91	0.01
19	SLU 39	-646	2	3785	-0.77	-32.52	0.01
19	SLU 40	-655	2	3735	-0.39	-32.74	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
19	SLU 41	-646	2	3785	-0.77	-32.52	0.01
19	SLU 42	-655	2	3735	-0.39	-32.74	0.01
19	SLU 43	-453	2	3348	-0.4	-23.97	0.01
19	SLU 44	-468	1	3265	0.22	-24.35	0.01
19	SLU 45	-453	2	3348	-0.4	-23.97	0.01
19	SLU 46	-462	1	3298	-0.03	-24.2	0.01
19	SLU 47	-468	1	3265	0.22	-24.35	0.01
19	SLU 48	-453	2	3348	-0.4	-23.97	0.01
19	SLU 49	-462	1	3298	-0.03	-24.2	0.01
19	SLU 50	-453	2	3348	-0.4	-23.97	0.01
19	SLU 51	-462	1	3298	-0.03	-24.2	0.01
19	SLU 52	-608	1	3818	0.01	-30.97	0.01
19	SLU 53	-593	2	3901	-0.62	-30.59	0.01
19	SLU 54	-602	2	3851	-0.24	-30.82	0.01
19	SLU 55	-608	1	3818	0.01	-30.97	0.01
19	SLU 56	-593	2	3901	-0.62	-30.59	0.01
19	SLU 57	-602	2	3851	-0.24	-30.82	0.01
19	SLU 58	-593	2	3901	-0.62	-30.59	0.01
19	SLU 59	-602	2	3851	-0.24	-30.82	0.01
19	SLU 60	-653	2	4138	-0.71	-33.43	0.01
19	SLU 61	-662	2	4088	-0.33	-33.66	0.01
19	SLU 62	-653	2	4138	-0.71	-33.43	0.01
19	SLU 63	-662	2	4088	-0.33	-33.66	0.01
19	SLU 64	-530	2	3681	-0.53	-27.63	0.01
19	SLU 65	-545	1	3597	0.1	-28	0.01
19	SLU 66	-530	2	3681	-0.53	-27.63	0.01
19	SLU 67	-539	1	3631	-0.15	-27.85	0.01
19	SLU 68	-545	1	3597	0.1	-28	0.01
19	SLU 69	-530	2	3681	-0.53	-27.63	0.01
19	SLU 70	-539	1	3631	-0.15	-27.85	0.01
19	SLU 71	-530	2	3681	-0.53	-27.63	0.01
19	SLU 72	-539	1	3631	-0.15	-27.85	0.01
19	SLU 73	-685	2	4150	-0.11	-34.62	0.01
19	SLU 74	-670	2	4233	-0.74	-34.25	0.01
19	SLU 75	-679	2	4183	-0.36	-34.47	0.01
19	SLU 76	-685	2	4150	-0.11	-34.62	0.01
19	SLU 77	-670	2	4233	-0.74	-34.25	0.01
19	SLU 78	-679	2	4183	-0.36	-34.47	0.01
19	SLU 79	-670	2	4233	-0.74	-34.25	0.01
19	SLU 80	-679	2	4183	-0.36	-34.47	0.01
19	SLU 81	-730	2	4470	-0.83	-37.09	0.01
19	SLU 82	-739	2	4420	-0.45	-37.31	0.01
19	SLU 83	-730	2	4470	-0.83	-37.09	0.01
19	SLU 84	-739	2	4420	-0.45	-37.31	0.01
19	SLE RA 1	-391	1	2758	-0.38	-20.45	0.01
19	SLE RA 2	-401	1	2703	0.04	-20.7	0.01
19	SLE RA 3	-391	1	2758	-0.38	-20.45	0.01
19	SLE RA 4	-397	1	2725	-0.13	-20.6	0.01
19	SLE RA 5	-401	1	2703	0.04	-20.7	0.01
19	SLE RA 6	-391	1	2758	-0.38	-20.45	0.01
19	SLE RA 7	-397	1	2725	-0.13	-20.6	0.01
19	SLE RA 8	-391	1	2758	-0.38	-20.45	0.01
19	SLE RA 9	-397	1	2725	-0.13	-20.6	0.01
19	SLE RA 10	-494	1	3071	-0.1	-25.11	0.01
19	SLE RA 11	-484	2	3127	-0.52	-24.86	0.01
19	SLE RA 12	-490	1	3093	-0.27	-25.01	0.01
19	SLE RA 13	-494	1	3071	-0.1	-25.11	0.01
19	SLE RA 14	-484	2	3127	-0.52	-24.86	0.01
19	SLE RA 15	-490	1	3093	-0.27	-25.01	0.01
19	SLE RA 16	-484	2	3127	-0.52	-24.86	0.01
19	SLE RA 17	-490	1	3093	-0.27	-25.01	0.01
19	SLE RA 18	-524	2	3285	-0.58	-26.75	0.01
19	SLE RA 19	-530	1	3251	-0.33	-26.9	0.01
19	SLE RA 20	-524	2	3285	-0.58	-26.75	0.01
19	SLE RA 21	-530	1	3251	-0.33	-26.9	0.01
19	SLE FR 1	-391	1	2758	-0.38	-20.45	0.01
19	SLE FR 2	-393	1	2747	-0.29	-20.5	0.01
19	SLE FR 3	-391	1	2758	-0.38	-20.45	0.01
19	SLE FR 4	-433	1	2905	-0.36	-22.39	0.01
19	SLE FR 5	-431	1	2916	-0.44	-22.34	0.01
19	SLE FR 6	-457	2	3021	-0.48	-23.6	0.01
19	SLE QP 1	-391	1	2758	-0.38	-20.45	0.01
19	SLE QP 2	-431	1	2916	-0.44	-22.34	0.01
19	SLD 1	-128	4	2762	-16.97	-9.09	0.02
19	SLD 2	-128	4	2762	-16.97	-9.09	0.02
19	SLD 3	-177	15	2692	0.63	-11.35	0.06
19	SLD 4	-177	15	2692	0.63	-11.35	0.06
19	SLD 5	-265	-15	2977	-32.09	-14.94	-0.05
19	SLD 6	-265	-15	2977	-32.09	-14.94	-0.05
19	SLD 7	-429	23	2741	26.57	-22.47	0.09
19	SLD 8	-429	23	2741	26.57	-22.47	0.09
19	SLD 9	-432	-20	3091	-27.45	-22.21	-0.07
19	SLD 10	-432	-20	3091	-27.45	-22.21	-0.07
19	SLD 11	-596	18	2855	31.21	-29.74	0.07
19	SLD 12	-596	18	2855	31.21	-29.74	0.07
19	SLD 13	-684	-12	3141	-1.5	-33.33	-0.05
19	SLD 14	-684	-12	3141	-1.5	-33.33	-0.05
19	SLD 15	-734	-1	3070	16.09	-35.59	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
19	SLD 16	-734	-1	3070	16.09	-35.59	0
19	SLV 1	290	7	2557	-42.26	9.23	0.04
19	SLV 2	290	7	2557	-42.26	9.23	0.04
19	SLV 3	158	34	2387	2.58	3.09	0.14
19	SLV 4	158	34	2387	2.58	3.09	0.14
19	SLV 5	-15	-37	3066	-80.99	-3.55	-0.13
19	SLV 6	-15	-37	3066	-80.99	-3.55	-0.13
19	SLV 7	-454	52	2500	68.47	-24.03	0.19
19	SLV 8	-454	52	2500	68.47	-24.03	0.19
19	SLV 9	-407	-49	3332	-69.35	-20.65	-0.18
19	SLV 10	-407	-49	3332	-69.35	-20.65	-0.18
19	SLV 11	-847	40	2766	80.11	-41.13	0.15
19	SLV 12	-847	40	2766	80.11	-41.13	0.15
19	SLV 13	-1020	-31	3445	-3.46	-47.77	-0.12
19	SLV 14	-1020	-31	3445	-3.46	-47.77	-0.12
19	SLV 15	-1151	-4	3275	41.38	-53.91	-0.02
19	SLV 16	-1151	-4	3275	41.38	-53.91	-0.02
20	SLU 1	-377	3	2588	-0.97	-10.47	0.01
20	SLU 2	-396	2	2483	-0.41	-11.31	0.01
20	SLU 3	-377	3	2588	-0.97	-10.47	0.01
20	SLU 4	-388	2	2525	-0.64	-10.97	0.01
20	SLU 5	-396	2	2483	-0.41	-11.31	0.01
20	SLU 6	-377	3	2588	-0.97	-10.47	0.01
20	SLU 7	-388	2	2525	-0.64	-10.97	0.01
20	SLU 8	-377	3	2588	-0.97	-10.47	0.01
20	SLU 9	-388	2	2525	-0.64	-10.97	0.01
20	SLU 10	-536	3	2989	-0.71	-15.83	0.01
20	SLU 11	-518	4	3095	-1.27	-15	0.01
20	SLU 12	-529	3	3032	-0.93	-15.5	0.01
20	SLU 13	-536	3	2989	-0.71	-15.83	0.01
20	SLU 14	-518	4	3095	-1.27	-15	0.01
20	SLU 15	-529	3	3032	-0.93	-15.5	0.01
20	SLU 16	-518	4	3095	-1.27	-15	0.01
20	SLU 17	-529	3	3032	-0.93	-15.5	0.01
20	SLU 18	-578	4	3312	-1.4	-16.94	0.01
20	SLU 19	-589	3	3249	-1.06	-17.44	0.01
20	SLU 20	-578	4	3312	-1.4	-16.94	0.01
20	SLU 21	-589	3	3249	-1.06	-17.44	0.01
20	SLU 22	-456	3	2894	-1.14	-12.99	0.01
20	SLU 23	-474	2	2788	-0.58	-13.83	0.01
20	SLU 24	-456	3	2894	-1.14	-12.99	0.01
20	SLU 25	-467	3	2831	-0.81	-13.49	0.01
20	SLU 26	-474	2	2788	-0.58	-13.83	0.01
20	SLU 27	-456	3	2894	-1.14	-12.99	0.01
20	SLU 28	-467	3	2831	-0.81	-13.49	0.01
20	SLU 29	-456	3	2894	-1.14	-12.99	0.01
20	SLU 30	-467	3	2831	-0.81	-13.49	0.01
20	SLU 31	-615	3	3295	-0.88	-18.36	0.01
20	SLU 32	-596	4	3400	-1.44	-17.52	0.01
20	SLU 33	-607	3	3337	-1.11	-18.02	0.01
20	SLU 34	-615	3	3295	-0.88	-18.36	0.01
20	SLU 35	-596	4	3400	-1.44	-17.52	0.01
20	SLU 36	-607	3	3337	-1.11	-18.02	0.01
20	SLU 37	-596	4	3400	-1.44	-17.52	0.01
20	SLU 38	-607	3	3337	-1.11	-18.02	0.01
20	SLU 39	-656	4	3618	-1.57	-19.46	0.01
20	SLU 40	-668	4	3554	-1.23	-19.96	0.01
20	SLU 41	-656	4	3618	-1.57	-19.46	0.01
20	SLU 42	-668	4	3554	-1.23	-19.96	0.01
20	SLU 43	-464	4	3260	-1.21	-12.74	0.01
20	SLU 44	-482	3	3155	-0.65	-13.58	0.01
20	SLU 45	-464	4	3260	-1.21	-12.74	0.01
20	SLU 46	-475	3	3197	-0.87	-13.25	0.01
20	SLU 47	-482	3	3155	-0.65	-13.58	0.01
20	SLU 48	-464	4	3260	-1.21	-12.74	0.01
20	SLU 49	-475	3	3197	-0.87	-13.25	0.01
20	SLU 50	-464	4	3260	-1.21	-12.74	0.01
20	SLU 51	-475	3	3197	-0.87	-13.25	0.01
20	SLU 52	-623	4	3661	-0.94	-18.11	0.01
20	SLU 53	-604	4	3767	-1.5	-17.27	0.01
20	SLU 54	-615	4	3703	-1.17	-17.77	0.01
20	SLU 55	-623	4	3661	-0.94	-18.11	0.01
20	SLU 56	-604	4	3767	-1.5	-17.27	0.01
20	SLU 57	-615	4	3703	-1.17	-17.77	0.01
20	SLU 58	-604	4	3767	-1.5	-17.27	0.01
20	SLU 59	-615	4	3703	-1.17	-17.77	0.01
20	SLU 60	-664	5	3984	-1.63	-19.21	0.01
20	SLU 61	-675	4	3920	-1.3	-19.72	0.01
20	SLU 62	-664	5	3984	-1.63	-19.21	0.01
20	SLU 63	-675	4	3920	-1.3	-19.72	0.01
20	SLU 64	-542	4	3566	-1.38	-15.27	0.01
20	SLU 65	-561	3	3460	-0.82	-16.1	0.01
20	SLU 66	-542	4	3566	-1.38	-15.27	0.01
20	SLU 67	-553	3	3502	-1.04	-15.77	0.01
20	SLU 68	-561	3	3460	-0.82	-16.1	0.01
20	SLU 69	-542	4	3566	-1.38	-15.27	0.01
20	SLU 70	-553	3	3502	-1.04	-15.77	0.01
20	SLU 71	-542	4	3566	-1.38	-15.27	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
20	SLU 72	-553	3	3502	-1.04	-15.77	0.01
20	SLU 73	-701	4	3967	-1.12	-20.63	0.01
20	SLU 74	-683	5	4072	-1.67	-19.8	0.01
20	SLU 75	-694	4	4009	-1.34	-20.3	0.01
20	SLU 76	-701	4	3967	-1.12	-20.63	0.01
20	SLU 77	-683	5	4072	-1.67	-19.8	0.01
20	SLU 78	-694	4	4009	-1.34	-20.3	0.01
20	SLU 79	-683	5	4072	-1.67	-19.8	0.01
20	SLU 80	-694	4	4009	-1.34	-20.3	0.01
20	SLU 81	-743	5	4289	-1.8	-21.74	0.02
20	SLU 82	-754	5	4226	-1.47	-22.24	0.01
20	SLU 83	-743	5	4289	-1.8	-21.74	0.02
20	SLU 84	-754	5	4226	-1.47	-22.24	0.01
20	SLE RA 1	-400	3	2676	-1.02	-11.19	0.01
20	SLE RA 2	-412	2	2605	-0.65	-11.75	0.01
20	SLE RA 3	-400	3	2676	-1.02	-11.19	0.01
20	SLE RA 4	-407	3	2633	-0.8	-11.52	0.01
20	SLE RA 5	-412	2	2605	-0.65	-11.75	0.01
20	SLE RA 6	-400	3	2676	-1.02	-11.19	0.01
20	SLE RA 7	-407	3	2633	-0.8	-11.52	0.01
20	SLE RA 8	-400	3	2676	-1.02	-11.19	0.01
20	SLE RA 9	-407	3	2633	-0.8	-11.52	0.01
20	SLE RA 10	-506	3	2943	-0.85	-14.77	0.01
20	SLE RA 11	-493	3	3013	-1.22	-14.21	0.01
20	SLE RA 12	-501	3	2971	-1	-14.54	0.01
20	SLE RA 13	-506	3	2943	-0.85	-14.77	0.01
20	SLE RA 14	-493	3	3013	-1.22	-14.21	0.01
20	SLE RA 15	-501	3	2971	-1	-14.54	0.01
20	SLE RA 16	-493	3	3013	-1.22	-14.21	0.01
20	SLE RA 17	-501	3	2971	-1	-14.54	0.01
20	SLE RA 18	-534	4	3158	-1.3	-15.5	0.01
20	SLE RA 19	-541	3	3116	-1.08	-15.84	0.01
20	SLE RA 20	-534	4	3158	-1.3	-15.5	0.01
20	SLE RA 21	-541	3	3116	-1.08	-15.84	0.01
20	SLE FR 1	-400	3	2676	-1.02	-11.19	0.01
20	SLE FR 2	-402	3	2662	-0.95	-11.3	0.01
20	SLE FR 3	-400	3	2676	-1.02	-11.19	0.01
20	SLE FR 4	-442	3	2806	-1.03	-12.59	0.01
20	SLE FR 5	-440	3	2820	-1.11	-12.48	0.01
20	SLE FR 6	-467	3	2917	-1.16	-13.35	0.01
20	SLE QP 1	-400	3	2676	-1.02	-11.19	0.01
20	SLE QP 2	-440	3	2820	-1.11	-12.48	0.01
20	SLD 1	-146	7	2607	-11.8	0.01	0.03
20	SLD 2	-146	7	2607	-11.8	0.01	0.03
20	SLD 3	-192	14	2511	-1.36	-1.6	0.04
20	SLD 4	-192	14	2511	-1.36	-1.6	0.04
20	SLD 5	-283	-6	2901	-20.15	-6.29	-0.01
20	SLD 6	-283	-6	2901	-20.15	-6.29	-0.01
20	SLD 7	-435	17	2583	14.66	-11.66	0.04
20	SLD 8	-435	17	2583	14.66	-11.66	0.04
20	SLD 9	-445	-11	3058	-16.87	-13.31	-0.02
20	SLD 10	-445	-11	3058	-16.87	-13.31	-0.02
20	SLD 11	-597	13	2739	17.94	-18.67	0.03
20	SLD 12	-597	13	2739	17.94	-18.67	0.03
20	SLD 13	-688	-8	3129	-0.85	-23.37	-0.02
20	SLD 14	-688	-8	3129	-0.85	-23.37	-0.02
20	SLD 15	-734	-1	3034	9.59	-24.98	-0.01
20	SLD 16	-734	-1	3034	9.59	-24.98	-0.01
20	SLV 1	258	12	2321	-27.79	17.13	0.05
20	SLV 2	258	12	2321	-27.79	17.13	0.05
20	SLV 3	137	29	2093	-1.48	12.96	0.09
20	SLV 4	137	29	2093	-1.48	12.96	0.09
20	SLV 5	-48	-20	3017	-49.03	2.72	-0.04
20	SLV 6	-48	-20	3017	-49.03	2.72	-0.04
20	SLV 7	-450	37	2256	38.7	-11.18	0.1
20	SLV 8	-450	37	2256	38.7	-11.18	0.1
20	SLV 9	-430	-31	3385	-40.91	-13.79	-0.08
20	SLV 10	-430	-31	3385	-40.91	-13.79	-0.08
20	SLV 11	-832	27	2624	46.81	-27.69	0.06
20	SLV 12	-832	27	2624	46.81	-27.69	0.06
20	SLV 13	-1017	-22	3548	-0.74	-37.92	-0.07
20	SLV 14	-1017	-22	3548	-0.74	-37.92	-0.07
20	SLV 15	-1138	-5	3320	25.58	-42.09	-0.03
20	SLV 16	-1138	-5	3320	25.58	-42.09	-0.03
21	SLU 1	-600	6	2607	-1.44	-31.36	0.02
21	SLU 2	-612	5	2467	-1.02	-31.36	0.02
21	SLU 3	-600	6	2607	-1.44	-31.36	0.02
21	SLU 4	-607	5	2523	-1.19	-31.36	0.02
21	SLU 5	-612	5	2467	-1.02	-31.36	0.02
21	SLU 6	-600	6	2607	-1.44	-31.36	0.02
21	SLU 7	-607	5	2523	-1.19	-31.36	0.02
21	SLU 8	-600	6	2607	-1.44	-31.36	0.02
21	SLU 9	-607	5	2523	-1.19	-31.36	0.02
21	SLU 10	-796	6	2950	-1.31	-40.33	0.03
21	SLU 11	-785	7	3090	-1.74	-40.32	0.03
21	SLU 12	-792	6	3006	-1.48	-40.33	0.03
21	SLU 13	-796	6	2950	-1.31	-40.33	0.03
21	SLU 14	-785	7	3090	-1.74	-40.32	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
21	SLU 15	-792	6	3006	-1.48	-40.33	0.03
21	SLU 16	-785	7	3090	-1.74	-40.32	0.03
21	SLU 17	-792	6	3006	-1.48	-40.33	0.03
21	SLU 18	-864	7	3297	-1.87	-44.17	0.03
21	SLU 19	-871	7	3213	-1.61	-44.17	0.03
21	SLU 20	-864	7	3297	-1.87	-44.17	0.03
21	SLU 21	-871	7	3213	-1.61	-44.17	0.03
21	SLU 22	-705	6	2898	-1.62	-36.43	0.03
21	SLU 23	-716	6	2758	-1.19	-36.44	0.02
21	SLU 24	-705	6	2898	-1.62	-36.43	0.03
21	SLU 25	-712	6	2814	-1.36	-36.44	0.03
21	SLU 26	-716	6	2758	-1.19	-36.44	0.02
21	SLU 27	-705	6	2898	-1.62	-36.43	0.03
21	SLU 28	-712	6	2814	-1.36	-36.44	0.03
21	SLU 29	-705	6	2898	-1.62	-36.43	0.03
21	SLU 30	-712	6	2814	-1.36	-36.44	0.03
21	SLU 31	-901	7	3241	-1.49	-45.41	0.03
21	SLU 32	-890	7	3381	-1.91	-45.4	0.03
21	SLU 33	-897	7	3297	-1.66	-45.41	0.03
21	SLU 34	-901	7	3241	-1.49	-45.41	0.03
21	SLU 35	-890	7	3381	-1.91	-45.4	0.03
21	SLU 36	-897	7	3297	-1.66	-45.41	0.03
21	SLU 37	-890	7	3381	-1.91	-45.4	0.03
21	SLU 38	-897	7	3297	-1.66	-45.41	0.03
21	SLU 39	-969	8	3588	-2.04	-49.25	0.03
21	SLU 40	-976	7	3504	-1.78	-49.25	0.03
21	SLU 41	-969	8	3588	-2.04	-49.25	0.03
21	SLU 42	-976	7	3504	-1.78	-49.25	0.03
21	SLU 43	-744	7	3289	-1.82	-39.02	0.03
21	SLU 44	-756	6	3149	-1.39	-39.03	0.03
21	SLU 45	-744	7	3289	-1.82	-39.02	0.03
21	SLU 46	-751	7	3205	-1.56	-39.02	0.03
21	SLU 47	-756	6	3149	-1.39	-39.03	0.03
21	SLU 48	-744	7	3289	-1.82	-39.02	0.03
21	SLU 49	-751	7	3205	-1.56	-39.02	0.03
21	SLU 50	-744	7	3289	-1.82	-39.02	0.03
21	SLU 51	-751	7	3205	-1.56	-39.02	0.03
21	SLU 52	-940	8	3632	-1.69	-47.99	0.03
21	SLU 53	-929	8	3772	-2.12	-47.99	0.03
21	SLU 54	-936	8	3688	-1.86	-47.99	0.03
21	SLU 55	-940	8	3632	-1.69	-47.99	0.03
21	SLU 56	-929	8	3772	-2.12	-47.99	0.03
21	SLU 57	-936	8	3688	-1.86	-47.99	0.03
21	SLU 58	-929	8	3772	-2.12	-47.99	0.03
21	SLU 59	-936	8	3688	-1.86	-47.99	0.03
21	SLU 60	-1008	9	3979	-2.24	-51.83	0.04
21	SLU 61	-1015	8	3895	-1.99	-51.84	0.04
21	SLU 62	-1008	9	3979	-2.24	-51.83	0.04
21	SLU 63	-1015	8	3895	-1.99	-51.84	0.04
21	SLU 64	-849	8	3580	-1.99	-44.1	0.03
21	SLU 65	-860	7	3440	-1.56	-44.11	0.03
21	SLU 66	-849	8	3580	-1.99	-44.1	0.03
21	SLU 67	-856	7	3496	-1.73	-44.1	0.03
21	SLU 68	-860	7	3440	-1.56	-44.11	0.03
21	SLU 69	-849	8	3580	-1.99	-44.1	0.03
21	SLU 70	-856	7	3496	-1.73	-44.1	0.03
21	SLU 71	-849	8	3580	-1.99	-44.1	0.03
21	SLU 72	-856	7	3496	-1.73	-44.1	0.03
21	SLU 73	-1045	8	3923	-1.86	-53.07	0.04
21	SLU 74	-1034	9	4063	-2.29	-53.07	0.04
21	SLU 75	-1041	8	3979	-2.03	-53.07	0.04
21	SLU 76	-1045	8	3923	-1.86	-53.07	0.04
21	SLU 77	-1034	9	4063	-2.29	-53.07	0.04
21	SLU 78	-1041	8	3979	-2.03	-53.07	0.04
21	SLU 79	-1034	9	4063	-2.29	-53.07	0.04
21	SLU 80	-1041	8	3979	-2.03	-53.07	0.04
21	SLU 81	-1113	9	4271	-2.42	-56.91	0.04
21	SLU 82	-1120	9	4186	-2.16	-56.92	0.04
21	SLU 83	-1113	9	4271	-2.42	-56.91	0.04
21	SLU 84	-1120	9	4186	-2.16	-56.92	0.04
21	SLE RA 1	-630	6	2690	-1.49	-32.81	0.02
21	SLE RA 2	-638	5	2597	-1.21	-32.81	0.02
21	SLE RA 3	-630	6	2690	-1.49	-32.81	0.02
21	SLE RA 4	-635	6	2634	-1.32	-32.81	0.02
21	SLE RA 5	-638	5	2597	-1.21	-32.81	0.02
21	SLE RA 6	-630	6	2690	-1.49	-32.81	0.02
21	SLE RA 7	-635	6	2634	-1.32	-32.81	0.02
21	SLE RA 8	-630	6	2690	-1.49	-32.81	0.02
21	SLE RA 9	-635	6	2634	-1.32	-32.81	0.02
21	SLE RA 10	-761	6	2919	-1.41	-38.79	0.03
21	SLE RA 11	-753	7	3012	-1.69	-38.79	0.03
21	SLE RA 12	-758	6	2956	-1.52	-38.79	0.03
21	SLE RA 13	-761	6	2919	-1.41	-38.79	0.03
21	SLE RA 14	-753	7	3012	-1.69	-38.79	0.03
21	SLE RA 15	-758	6	2956	-1.52	-38.79	0.03
21	SLE RA 16	-753	7	3012	-1.69	-38.79	0.03
21	SLE RA 17	-758	6	2956	-1.52	-38.79	0.03
21	SLE RA 18	-806	7	3150	-1.78	-41.35	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
21	SLE RA 19	-811	7	3094	-1.61	-41.35	0.03
21	SLE RA 20	-806	7	3150	-1.78	-41.35	0.03
21	SLE RA 21	-811	7	3094	-1.61	-41.35	0.03
21	SLE FR 1	-630	6	2690	-1.49	-32.81	0.02
21	SLE FR 2	-632	6	2671	-1.44	-32.81	0.02
21	SLE FR 3	-630	6	2690	-1.49	-32.81	0.02
21	SLE FR 4	-684	6	2809	-1.52	-35.37	0.03
21	SLE FR 5	-683	6	2828	-1.58	-35.37	0.03
21	SLE FR 6	-718	6	2920	-1.64	-37.08	0.03
21	SLE QP 1	-630	6	2690	-1.49	-32.81	0.02
21	SLE QP 2	-683	6	2828	-1.58	-35.37	0.03
21	SLD 1	-398	10	2501	-6.88	-22.19	0.02
21	SLD 2	-398	10	2501	-6.88	-22.19	0.02
21	SLD 3	-446	14	2361	-2.31	-24.38	0.02
21	SLD 4	-446	14	2361	-2.31	-24.38	0.02
21	SLD 5	-525	1	2942	-10.1	-28.1	0.04
21	SLD 6	-525	1	2942	-10.1	-28.1	0.04
21	SLD 7	-685	15	2476	5.13	-35.39	0.01
21	SLD 8	-685	15	2476	5.13	-35.39	0.01
21	SLD 9	-681	-3	3180	-8.29	-35.35	0.04
21	SLD 10	-681	-3	3180	-8.29	-35.35	0.04
21	SLD 11	-841	12	2715	6.94	-42.64	0.02
21	SLD 12	-841	12	2715	6.94	-42.64	0.02
21	SLD 13	-920	-2	3295	-0.85	-46.36	0.04
21	SLD 14	-920	-2	3295	-0.85	-46.36	0.04
21	SLD 15	-968	3	3155	3.72	-48.55	0.03
21	SLD 16	-968	3	3155	3.72	-48.55	0.03
21	SLV 1	-5	14	2061	-14.61	-3.93	0.02
21	SLV 2	-5	14	2061	-14.61	-3.93	0.02
21	SLV 3	-134	25	1729	-3.2	-9.99	0
21	SLV 4	-134	25	1729	-3.2	-9.99	0
21	SLV 5	-283	-8	3102	-22.8	-16.75	0.05
21	SLV 6	-283	-8	3102	-22.8	-16.75	0.05
21	SLV 7	-715	29	1994	15.24	-36.94	-0.01
21	SLV 8	-715	29	1994	15.24	-36.94	-0.01
21	SLV 9	-651	-16	3662	-18.4	-33.8	0.06
21	SLV 10	-651	-16	3662	-18.4	-33.8	0.06
21	SLV 11	-1083	21	2554	19.64	-53.99	0
21	SLV 12	-1083	21	2554	19.64	-53.99	0
21	SLV 13	-1232	-13	3928	0.04	-60.75	0.05
21	SLV 14	-1232	-13	3928	0.04	-60.75	0.05
21	SLV 15	-1361	-2	3595	11.45	-66.81	0.03
21	SLV 16	-1361	-2	3595	11.45	-66.81	0.03
22	SLU 1	-490	284	3003	-7.01	-12.18	0.08
22	SLU 2	-482	244	2811	-5.57	-12.31	0.1
22	SLU 3	-490	284	3003	-7.01	-12.18	0.08
22	SLU 4	-485	260	2888	-6.14	-12.26	0.09
22	SLU 5	-482	244	2811	-5.57	-12.31	0.1
22	SLU 6	-490	284	3003	-7.01	-12.18	0.08
22	SLU 7	-485	260	2888	-6.14	-12.26	0.09
22	SLU 8	-490	284	3003	-7.01	-12.18	0.08
22	SLU 9	-485	260	2888	-6.14	-12.26	0.09
22	SLU 10	-606	267	3348	-5.79	-15.86	0.13
22	SLU 11	-615	307	3541	-7.22	-15.74	0.12
22	SLU 12	-610	283	3425	-6.36	-15.82	0.13
22	SLU 13	-606	267	3348	-5.79	-15.86	0.13
22	SLU 14	-615	307	3541	-7.22	-15.74	0.12
22	SLU 15	-610	283	3425	-6.36	-15.82	0.13
22	SLU 16	-615	307	3541	-7.22	-15.74	0.12
22	SLU 17	-610	283	3425	-6.36	-15.82	0.13
22	SLU 18	-668	317	3771	-7.32	-17.27	0.14
22	SLU 19	-663	293	3655	-6.46	-17.34	0.14
22	SLU 20	-668	317	3771	-7.32	-17.27	0.14
22	SLU 21	-663	293	3655	-6.46	-17.34	0.14
22	SLU 22	-562	299	3325	-7.2	-14.23	0.1
22	SLU 23	-554	259	3132	-5.76	-14.35	0.12
22	SLU 24	-562	299	3325	-7.2	-14.23	0.1
22	SLU 25	-557	275	3209	-6.33	-14.31	0.11
22	SLU 26	-554	259	3132	-5.76	-14.35	0.12
22	SLU 27	-562	299	3325	-7.2	-14.23	0.1
22	SLU 28	-557	275	3209	-6.33	-14.31	0.11
22	SLU 29	-562	299	3325	-7.2	-14.23	0.1
22	SLU 30	-557	275	3209	-6.33	-14.31	0.11
22	SLU 31	-678	282	3670	-5.98	-17.91	0.15
22	SLU 32	-687	322	3862	-7.42	-17.79	0.14
22	SLU 33	-682	298	3747	-6.55	-17.86	0.15
22	SLU 34	-678	282	3670	-5.98	-17.91	0.15
22	SLU 35	-687	322	3862	-7.42	-17.79	0.14
22	SLU 36	-682	298	3747	-6.55	-17.86	0.15
22	SLU 37	-687	322	3862	-7.42	-17.79	0.14
22	SLU 38	-682	298	3747	-6.55	-17.86	0.15
22	SLU 39	-740	332	4093	-7.51	-19.31	0.16
22	SLU 40	-735	308	3977	-6.65	-19.39	0.17
22	SLU 41	-740	332	4093	-7.51	-19.31	0.16
22	SLU 42	-735	308	3977	-6.65	-19.39	0.17
22	SLU 43	-613	364	3794	-9.04	-15.14	0.1
22	SLU 44	-604	323	3601	-7.61	-15.26	0.11
22	SLU 45	-613	364	3794	-9.04	-15.14	0.1

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
22	SLU 46	-608	340	3678	-8.18	-15.21	0.11
22	SLU 47	-604	323	3601	-7.61	-15.26	0.11
22	SLU 48	-613	364	3794	-9.04	-15.14	0.1
22	SLU 49	-608	340	3678	-8.18	-15.21	0.11
22	SLU 50	-613	364	3794	-9.04	-15.14	0.1
22	SLU 51	-608	340	3678	-8.18	-15.21	0.11
22	SLU 52	-729	347	4139	-7.82	-18.82	0.15
22	SLU 53	-737	387	4331	-9.26	-18.69	0.14
22	SLU 54	-732	363	4216	-8.4	-18.77	0.15
22	SLU 55	-729	347	4139	-7.82	-18.82	0.15
22	SLU 56	-737	387	4331	-9.26	-18.69	0.14
22	SLU 57	-732	363	4216	-8.4	-18.77	0.15
22	SLU 58	-737	387	4331	-9.26	-18.69	0.14
22	SLU 59	-732	363	4216	-8.4	-18.77	0.15
22	SLU 60	-790	397	4562	-9.35	-20.22	0.15
22	SLU 61	-785	373	4446	-8.49	-20.29	0.16
22	SLU 62	-790	397	4562	-9.35	-20.22	0.15
22	SLU 63	-785	373	4446	-8.49	-20.29	0.16
22	SLU 64	-685	379	4116	-9.23	-17.19	0.12
22	SLU 65	-676	339	3923	-7.8	-17.31	0.13
22	SLU 66	-685	379	4116	-9.23	-17.19	0.12
22	SLU 67	-680	355	4000	-8.37	-17.26	0.13
22	SLU 68	-676	339	3923	-7.8	-17.31	0.13
22	SLU 69	-685	379	4116	-9.23	-17.19	0.12
22	SLU 70	-680	355	4000	-8.37	-17.26	0.13
22	SLU 71	-685	379	4116	-9.23	-17.19	0.12
22	SLU 72	-680	355	4000	-8.37	-17.26	0.13
22	SLU 73	-801	362	4460	-8.01	-20.87	0.17
22	SLU 74	-809	402	4653	-9.45	-20.74	0.16
22	SLU 75	-804	378	4537	-8.59	-20.82	0.17
22	SLU 76	-801	362	4460	-8.01	-20.87	0.17
22	SLU 77	-809	402	4653	-9.45	-20.74	0.16
22	SLU 78	-804	378	4537	-8.59	-20.82	0.17
22	SLU 79	-809	402	4653	-9.45	-20.74	0.16
22	SLU 80	-804	378	4537	-8.59	-20.82	0.17
22	SLU 81	-862	412	4883	-9.55	-22.27	0.18
22	SLU 82	-857	388	4768	-8.68	-22.34	0.18
22	SLU 83	-862	412	4883	-9.55	-22.27	0.18
22	SLU 84	-857	388	4768	-8.68	-22.34	0.18
22	SLE RA 1	-511	288	3095	-7.06	-12.77	0.09
22	SLE RA 2	-505	261	2967	-6.1	-12.85	0.1
22	SLE RA 3	-511	288	3095	-7.06	-12.77	0.09
22	SLE RA 4	-508	272	3018	-6.49	-12.82	0.09
22	SLE RA 5	-505	261	2967	-6.1	-12.85	0.1
22	SLE RA 6	-511	288	3095	-7.06	-12.77	0.09
22	SLE RA 7	-508	272	3018	-6.49	-12.82	0.09
22	SLE RA 8	-511	288	3095	-7.06	-12.77	0.09
22	SLE RA 9	-508	272	3018	-6.49	-12.82	0.09
22	SLE RA 10	-588	277	3325	-6.25	-15.22	0.12
22	SLE RA 11	-594	304	3453	-7.21	-15.14	0.11
22	SLE RA 12	-590	288	3376	-6.63	-15.19	0.12
22	SLE RA 13	-588	277	3325	-6.25	-15.22	0.12
22	SLE RA 14	-594	304	3453	-7.21	-15.14	0.11
22	SLE RA 15	-590	288	3376	-6.63	-15.19	0.12
22	SLE RA 16	-594	304	3453	-7.21	-15.14	0.11
22	SLE RA 17	-590	288	3376	-6.63	-15.19	0.12
22	SLE RA 18	-629	310	3607	-7.27	-16.16	0.13
22	SLE RA 19	-626	294	3530	-6.69	-16.21	0.13
22	SLE RA 20	-629	310	3607	-7.27	-16.16	0.13
22	SLE RA 21	-626	294	3530	-6.69	-16.21	0.13
22	SLE FR 1	-511	288	3095	-7.06	-12.77	0.09
22	SLE FR 2	-510	283	3069	-6.87	-12.79	0.09
22	SLE FR 3	-511	288	3095	-7.06	-12.77	0.09
22	SLE FR 4	-545	289	3223	-6.93	-13.8	0.1
22	SLE FR 5	-546	295	3249	-7.12	-13.79	0.1
22	SLE FR 6	-570	299	3351	-7.17	-14.46	0.11
22	SLE QP 1	-511	288	3095	-7.06	-12.77	0.09
22	SLE QP 2	-546	295	3249	-7.12	-13.79	0.1
22	SLD 1	-364	357	2724	-9.65	-6.67	0.03
22	SLD 2	-364	357	2724	-9.65	-6.67	0.03
22	SLD 3	-380	299	2514	-7.22	-7.67	0.05
22	SLD 4	-380	299	2514	-7.22	-7.67	0.05
22	SLD 5	-467	401	3409	-11.57	-10.12	0.04
22	SLD 6	-467	401	3409	-11.57	-10.12	0.04
22	SLD 7	-521	208	2711	-3.46	-13.48	0.12
22	SLD 8	-521	208	2711	-3.46	-13.48	0.12
22	SLD 9	-572	382	3787	-10.79	-14.09	0.08
22	SLD 10	-572	382	3787	-10.79	-14.09	0.08
22	SLD 11	-626	188	3088	-2.67	-17.45	0.16
22	SLD 12	-626	188	3088	-2.67	-17.45	0.16
22	SLD 13	-713	291	3983	-7.03	-19.9	0.15
22	SLD 14	-713	291	3983	-7.03	-19.9	0.15
22	SLD 15	-729	233	3773	-4.6	-20.91	0.17
22	SLD 16	-729	233	3773	-4.6	-20.91	0.17
22	SLV 1	-114	443	2015	-13.22	3.12	-0.07
22	SLV 2	-114	443	2015	-13.22	3.12	-0.07
22	SLV 3	-158	305	1519	-7.34	0.46	-0.01
22	SLV 4	-158	305	1519	-7.34	0.46	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
22	SLV 5	-350	549	3632	-17.89	-4.69	-0.04
22	SLV 6	-350	549	3632	-17.89	-4.69	-0.04
22	SLV 7	-497	88	1976	1.75	-13.54	0.16
22	SLV 8	-497	88	1976	1.75	-13.54	0.16
22	SLV 9	-596	501	4521	-15.99	-14.03	0.04
22	SLV 10	-596	501	4521	-15.99	-14.03	0.04
22	SLV 11	-743	41	2865	3.64	-22.89	0.24
22	SLV 12	-743	41	2865	3.64	-22.89	0.24
22	SLV 13	-935	285	4979	-6.91	-28.03	0.21
22	SLV 14	-935	285	4979	-6.91	-28.03	0.21
22	SLV 15	-979	147	4482	-1.02	-30.69	0.27
22	SLV 16	-979	147	4482	-1.02	-30.69	0.27
23	SLU 1	-17	31	2169	-5.85	-1.37	0.01
23	SLU 2	9	1	2102	-4.64	-0.53	0.01
23	SLU 3	-17	31	2169	-5.85	-1.37	0.01
23	SLU 4	-1	13	2129	-5.12	-0.86	0.01
23	SLU 5	9	1	2102	-4.64	-0.53	0.01
23	SLU 6	-17	31	2169	-5.85	-1.37	0.01
23	SLU 7	-1	13	2129	-5.12	-0.86	0.01
23	SLU 8	-17	31	2169	-5.85	-1.37	0.01
23	SLU 9	-1	13	2129	-5.12	-0.86	0.01
23	SLU 10	27	-15	2647	-5.8	-0.55	0.01
23	SLU 11	1	14	2713	-7.01	-1.39	0.01
23	SLU 12	16	-3	2673	-6.28	-0.88	0.01
23	SLU 13	27	-15	2647	-5.8	-0.55	0.01
23	SLU 14	1	14	2713	-7.01	-1.39	0.01
23	SLU 15	16	-3	2673	-6.28	-0.88	0.01
23	SLU 16	1	14	2713	-7.01	-1.39	0.01
23	SLU 17	16	-3	2673	-6.28	-0.88	0.01
23	SLU 18	9	7	2946	-7.51	-1.39	0.01
23	SLU 19	24	-10	2906	-6.78	-0.89	0.01
23	SLU 20	9	7	2946	-7.51	-1.39	0.01
23	SLU 21	24	-10	2906	-6.78	-0.89	0.01
23	SLU 22	-9	24	2481	-6.56	-1.41	0.01
23	SLU 23	17	-5	2415	-5.34	-0.58	0.01
23	SLU 24	-9	24	2481	-6.56	-1.41	0.01
23	SLU 25	6	6	2442	-5.83	-0.91	0.01
23	SLU 26	17	-5	2415	-5.34	-0.58	0.01
23	SLU 27	-9	24	2481	-6.56	-1.41	0.01
23	SLU 28	6	6	2442	-5.83	-0.91	0.01
23	SLU 29	-9	24	2481	-6.56	-1.41	0.01
23	SLU 30	6	6	2442	-5.83	-0.91	0.01
23	SLU 31	35	-22	2960	-6.5	-0.6	0.01
23	SLU 32	9	8	3026	-7.72	-1.43	0.01
23	SLU 33	24	-10	2986	-6.99	-0.93	0.01
23	SLU 34	35	-22	2960	-6.5	-0.6	0.01
23	SLU 35	9	8	3026	-7.72	-1.43	0.01
23	SLU 36	24	-10	2986	-6.99	-0.93	0.01
23	SLU 37	9	8	3026	-7.72	-1.43	0.01
23	SLU 38	24	-10	2986	-6.99	-0.93	0.01
23	SLU 39	16	1	3259	-8.21	-1.44	0.01
23	SLU 40	32	-17	3219	-7.48	-0.94	0.01
23	SLU 41	16	1	3259	-8.21	-1.44	0.01
23	SLU 42	32	-17	3219	-7.48	-0.94	0.01
23	SLU 43	-25	42	2712	-7.37	-1.76	0.01
23	SLU 44	1	13	2645	-6.15	-0.92	0.01
23	SLU 45	-25	42	2712	-7.37	-1.76	0.01
23	SLU 46	-9	25	2672	-6.64	-1.26	0.01
23	SLU 47	1	13	2645	-6.15	-0.92	0.01
23	SLU 48	-25	42	2712	-7.37	-1.76	0.01
23	SLU 49	-9	25	2672	-6.64	-1.26	0.01
23	SLU 50	-25	42	2712	-7.37	-1.76	0.01
23	SLU 51	-9	25	2672	-6.64	-1.26	0.01
23	SLU 52	19	-4	3190	-7.31	-0.94	0.01
23	SLU 53	-7	26	3256	-8.52	-1.78	0.01
23	SLU 54	9	8	3216	-7.8	-1.28	0.01
23	SLU 55	19	-4	3190	-7.31	-0.94	0.01
23	SLU 56	-7	26	3256	-8.52	-1.78	0.01
23	SLU 57	9	8	3216	-7.8	-1.28	0.01
23	SLU 58	-7	26	3256	-8.52	-1.78	0.01
23	SLU 59	9	8	3216	-7.8	-1.28	0.01
23	SLU 60	1	19	3489	-9.02	-1.79	0.01
23	SLU 61	16	1	3450	-8.29	-1.29	0.02
23	SLU 62	1	19	3489	-9.02	-1.79	0.01
23	SLU 63	16	1	3450	-8.29	-1.29	0.02
23	SLU 64	-17	36	3025	-8.07	-1.81	0.01
23	SLU 65	9	6	2958	-6.86	-0.97	0.01
23	SLU 66	-17	36	3025	-8.07	-1.81	0.01
23	SLU 67	-1	18	2985	-7.34	-1.31	0.01
23	SLU 68	9	6	2958	-6.86	-0.97	0.01
23	SLU 69	-17	36	3025	-8.07	-1.81	0.01
23	SLU 70	-1	18	2985	-7.34	-1.31	0.01
23	SLU 71	-17	36	3025	-8.07	-1.81	0.01
23	SLU 72	-1	18	2985	-7.34	-1.31	0.01
23	SLU 73	27	-10	3503	-8.01	-0.99	0.02
23	SLU 74	1	19	3569	-9.23	-1.83	0.01
23	SLU 75	16	1	3529	-8.5	-1.33	0.02
23	SLU 76	27	-10	3503	-8.01	-0.99	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
23	SLU 77	1	19	3569	-9.23	-1.83	0.01
23	SLU 78	16	1	3529	-8.5	-1.33	0.02
23	SLU 79	1	19	3569	-9.23	-1.83	0.01
23	SLU 80	16	1	3529	-8.5	-1.33	0.02
23	SLU 81	9	12	3802	-9.73	-1.83	0.02
23	SLU 82	24	-6	3763	-9	-1.33	0.02
23	SLU 83	9	12	3802	-9.73	-1.83	0.02
23	SLU 84	24	-6	3763	-9	-1.33	0.02
23	SLE RA 1	-15	29	2258	-6.05	-1.38	0.01
23	SLE RA 2	2	9	2214	-5.24	-0.82	0.01
23	SLE RA 3	-15	29	2258	-6.05	-1.38	0.01
23	SLE RA 4	-4	17	2231	-5.57	-1.05	0.01
23	SLE RA 5	2	9	2214	-5.24	-0.82	0.01
23	SLE RA 6	-15	29	2258	-6.05	-1.38	0.01
23	SLE RA 7	-4	17	2231	-5.57	-1.05	0.01
23	SLE RA 8	-15	29	2258	-6.05	-1.38	0.01
23	SLE RA 9	-4	17	2231	-5.57	-1.05	0.01
23	SLE RA 10	14	-2	2577	-6.02	-0.84	0.01
23	SLE RA 11	-3	18	2621	-6.83	-1.39	0.01
23	SLE RA 12	8	6	2594	-6.34	-1.06	0.01
23	SLE RA 13	14	-2	2577	-6.02	-0.84	0.01
23	SLE RA 14	-3	18	2621	-6.83	-1.39	0.01
23	SLE RA 15	8	6	2594	-6.34	-1.06	0.01
23	SLE RA 16	-3	18	2621	-6.83	-1.39	0.01
23	SLE RA 17	8	6	2594	-6.34	-1.06	0.01
23	SLE RA 18	2	13	2776	-7.16	-1.4	0.01
23	SLE RA 19	13	1	2750	-6.67	-1.06	0.01
23	SLE RA 20	2	13	2776	-7.16	-1.4	0.01
23	SLE RA 21	13	1	2750	-6.67	-1.06	0.01
23	SLE FR 1	-15	29	2258	-6.05	-1.38	0.01
23	SLE FR 2	-11	25	2249	-5.89	-1.27	0.01
23	SLE FR 3	-15	29	2258	-6.05	-1.38	0.01
23	SLE FR 4	-6	20	2405	-6.22	-1.27	0.01
23	SLE FR 5	-10	24	2413	-6.39	-1.38	0.01
23	SLE FR 6	-6	21	2517	-6.61	-1.39	0.01
23	SLE QP 1	-15	29	2258	-6.05	-1.38	0.01
23	SLE QP 2	-10	24	2413	-6.39	-1.38	0.01
23	SLD 1	139	-147	2973	1.72	4.5	0.06
23	SLD 2	139	-147	2973	1.72	4.5	0.06
23	SLD 3	263	-276	2752	7.17	11.37	0.01
23	SLD 4	263	-276	2752	7.17	11.37	0.01
23	SLD 5	-152	169	2916	-12.22	-10.04	0.09
23	SLD 6	-152	169	2916	-12.22	-10.04	0.09
23	SLD 7	260	-262	2180	5.95	12.86	-0.06
23	SLD 8	260	-262	2180	5.95	12.86	-0.06
23	SLD 9	-279	310	2647	-18.72	-15.63	0.08
23	SLD 10	-279	310	2647	-18.72	-15.63	0.08
23	SLD 11	133	-120	1911	-0.55	7.27	-0.07
23	SLD 12	133	-120	1911	-0.55	7.27	-0.07
23	SLD 13	-282	324	2075	-19.94	-14.14	0.01
23	SLD 14	-282	324	2075	-19.94	-14.14	0.01
23	SLD 15	-159	195	1854	-14.49	-7.27	-0.04
23	SLD 16	-159	195	1854	-14.49	-7.27	-0.04
23	SLV 1	341	-380	3791	12.82	12.34	0.13
23	SLV 2	341	-380	3791	12.82	12.34	0.13
23	SLV 3	657	-710	3203	26.87	30.05	0.02
23	SLV 4	657	-710	3203	26.87	30.05	0.02
23	SLV 5	-385	405	3718	-21.92	-24.12	0.22
23	SLV 6	-385	405	3718	-21.92	-24.12	0.22
23	SLV 7	671	-698	1759	24.89	34.9	-0.16
23	SLV 8	671	-698	1759	24.89	34.9	-0.16
23	SLV 9	-690	746	3068	-37.66	-37.67	0.18
23	SLV 10	-690	746	3068	-37.66	-37.67	0.18
23	SLV 11	365	-356	1109	9.15	21.35	-0.2
23	SLV 12	365	-356	1109	9.15	21.35	-0.2
23	SLV 13	-677	759	1624	-39.64	-32.82	0
23	SLV 14	-677	759	1624	-39.64	-32.82	0
23	SLV 15	-360	428	1036	-25.59	-15.11	-0.11
23	SLV 16	-360	428	1036	-25.59	-15.11	-0.11
24	SLU 1	-3	100	2258	-7.11	0.3	-0.01
24	SLU 2	-3	51	2134	-4.63	-0.03	-0.01
24	SLU 3	-3	100	2258	-7.11	0.3	-0.01
24	SLU 4	-3	70	2183	-5.62	0.1	-0.01
24	SLU 5	-3	51	2134	-4.63	-0.03	-0.01
24	SLU 6	-3	100	2258	-7.11	0.3	-0.01
24	SLU 7	-3	70	2183	-5.62	0.1	-0.01
24	SLU 8	-3	100	2258	-7.11	0.3	-0.01
24	SLU 9	-3	70	2183	-5.62	0.1	-0.01
24	SLU 10	-3	17	2491	-3.98	0.04	-0.02
24	SLU 11	-3	66	2615	-6.46	0.37	-0.02
24	SLU 12	-3	37	2541	-4.97	0.17	-0.02
24	SLU 13	-3	17	2491	-3.98	0.04	-0.02
24	SLU 14	-3	66	2615	-6.46	0.37	-0.02
24	SLU 15	-3	37	2541	-4.97	0.17	-0.02
24	SLU 16	-3	66	2615	-6.46	0.37	-0.02
24	SLU 17	-3	37	2541	-4.97	0.17	-0.02
24	SLU 18	-4	52	2769	-6.18	0.4	-0.02
24	SLU 19	-4	22	2694	-4.69	0.2	-0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
24	SLU 20	-4	52	2769	-6.18	0.4	-0.02
24	SLU 21	-4	22	2694	-4.69	0.2	-0.02
24	SLU 22	-3	83	2472	-6.85	0.33	-0.02
24	SLU 23	-3	34	2348	-4.37	0	-0.02
24	SLU 24	-3	83	2472	-6.85	0.33	-0.02
24	SLU 25	-3	53	2398	-5.36	0.13	-0.02
24	SLU 26	-3	34	2348	-4.37	0	-0.02
24	SLU 27	-3	83	2472	-6.85	0.33	-0.02
24	SLU 28	-3	53	2398	-5.36	0.13	-0.02
24	SLU 29	-3	83	2472	-6.85	0.33	-0.02
24	SLU 30	-3	53	2398	-5.36	0.13	-0.02
24	SLU 31	-4	0	2706	-3.72	0.07	-0.02
24	SLU 32	-4	49	2830	-6.2	0.4	-0.02
24	SLU 33	-4	20	2755	-4.71	0.2	-0.02
24	SLU 34	-4	0	2706	-3.72	0.07	-0.02
24	SLU 35	-4	49	2830	-6.2	0.4	-0.02
24	SLU 36	-4	20	2755	-4.71	0.2	-0.02
24	SLU 37	-4	49	2830	-6.2	0.4	-0.02
24	SLU 38	-4	20	2755	-4.71	0.2	-0.02
24	SLU 39	-4	35	2983	-5.92	0.44	-0.02
24	SLU 40	-4	5	2908	-4.43	0.23	-0.02
24	SLU 41	-4	35	2983	-5.92	0.44	-0.02
24	SLU 42	-4	5	2908	-4.43	0.23	-0.02
24	SLU 43	-3	136	2862	-9.34	0.38	-0.02
24	SLU 44	-3	86	2738	-6.85	0.05	-0.02
24	SLU 45	-3	136	2862	-9.34	0.38	-0.02
24	SLU 46	-3	106	2787	-7.85	0.18	-0.02
24	SLU 47	-3	86	2738	-6.85	0.05	-0.02
24	SLU 48	-3	136	2862	-9.34	0.38	-0.02
24	SLU 49	-3	106	2787	-7.85	0.18	-0.02
24	SLU 50	-3	136	2862	-9.34	0.38	-0.02
24	SLU 51	-3	106	2787	-7.85	0.18	-0.02
24	SLU 52	-4	53	3095	-6.2	0.12	-0.02
24	SLU 53	-4	102	3219	-8.68	0.45	-0.02
24	SLU 54	-4	73	3145	-7.19	0.25	-0.02
24	SLU 55	-4	53	3095	-6.2	0.12	-0.02
24	SLU 56	-4	102	3219	-8.68	0.45	-0.02
24	SLU 57	-4	73	3145	-7.19	0.25	-0.02
24	SLU 58	-4	102	3219	-8.68	0.45	-0.02
24	SLU 59	-4	73	3145	-7.19	0.25	-0.02
24	SLU 60	-4	88	3373	-8.4	0.48	-0.02
24	SLU 61	-4	58	3298	-6.91	0.28	-0.02
24	SLU 62	-4	88	3373	-8.4	0.48	-0.02
24	SLU 63	-4	58	3298	-6.91	0.28	-0.02
24	SLU 64	-4	119	3076	-9.07	0.41	-0.02
24	SLU 65	-4	69	2952	-6.59	0.08	-0.02
24	SLU 66	-4	119	3076	-9.07	0.41	-0.02
24	SLU 67	-4	89	3002	-7.59	0.21	-0.02
24	SLU 68	-4	69	2952	-6.59	0.08	-0.02
24	SLU 69	-4	119	3076	-9.07	0.41	-0.02
24	SLU 70	-4	89	3002	-7.59	0.21	-0.02
24	SLU 71	-4	119	3076	-9.07	0.41	-0.02
24	SLU 72	-4	89	3002	-7.59	0.21	-0.02
24	SLU 73	-4	36	3309	-5.94	0.15	-0.02
24	SLU 74	-4	85	3434	-8.42	0.48	-0.02
24	SLU 75	-4	56	3359	-6.93	0.28	-0.02
24	SLU 76	-4	36	3309	-5.94	0.15	-0.02
24	SLU 77	-4	85	3434	-8.42	0.48	-0.02
24	SLU 78	-4	56	3359	-6.93	0.28	-0.02
24	SLU 79	-4	85	3434	-8.42	0.48	-0.02
24	SLU 80	-4	56	3359	-6.93	0.28	-0.02
24	SLU 81	-5	71	3587	-8.14	0.52	-0.02
24	SLU 82	-5	41	3512	-6.65	0.31	-0.02
24	SLU 83	-5	71	3587	-8.14	0.52	-0.02
24	SLU 84	-5	41	3512	-6.65	0.31	-0.02
24	SLE RA 1	-3	95	2319	-7.04	0.31	-0.02
24	SLE RA 2	-3	62	2236	-5.38	0.09	-0.01
24	SLE RA 3	-3	95	2319	-7.04	0.31	-0.02
24	SLE RA 4	-3	75	2270	-6.05	0.18	-0.01
24	SLE RA 5	-3	62	2236	-5.38	0.09	-0.01
24	SLE RA 6	-3	95	2319	-7.04	0.31	-0.02
24	SLE RA 7	-3	75	2270	-6.05	0.18	-0.01
24	SLE RA 8	-3	95	2319	-7.04	0.31	-0.02
24	SLE RA 9	-3	75	2270	-6.05	0.18	-0.01
24	SLE RA 10	-3	40	2475	-4.95	0.13	-0.02
24	SLE RA 11	-3	73	2558	-6.6	0.36	-0.02
24	SLE RA 12	-3	53	2508	-5.61	0.22	-0.02
24	SLE RA 13	-3	40	2475	-4.95	0.13	-0.02
24	SLE RA 14	-3	73	2558	-6.6	0.36	-0.02
24	SLE RA 15	-3	53	2508	-5.61	0.22	-0.02
24	SLE RA 16	-3	73	2558	-6.6	0.36	-0.02
24	SLE RA 17	-3	53	2508	-5.61	0.22	-0.02
24	SLE RA 18	-3	63	2660	-6.41	0.38	-0.02
24	SLE RA 19	-3	43	2610	-5.42	0.24	-0.02
24	SLE RA 20	-3	63	2660	-6.41	0.38	-0.02
24	SLE RA 21	-3	43	2610	-5.42	0.24	-0.02
24	SLE FR 1	-3	95	2319	-7.04	0.31	-0.02
24	SLE FR 2	-3	88	2303	-6.71	0.27	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
24	SLE FR 3	-3	95	2319	-7.04	0.31	-0.02
24	SLE FR 4	-3	79	2405	-6.52	0.29	-0.02
24	SLE FR 5	-3	85	2421	-6.85	0.33	-0.02
24	SLE FR 6	-3	79	2489	-6.73	0.34	-0.02
24	SLE QP 1	-3	95	2319	-7.04	0.31	-0.02
24	SLE QP 2	-3	85	2421	-6.85	0.33	-0.02
24	SLD 1	5	192	2096	-10.88	5.61	-0.03
24	SLD 2	5	192	2096	-10.88	5.61	-0.03
24	SLD 3	-3	107	1976	-6.98	1.66	-0.02
24	SLD 4	-3	107	1976	-6.98	1.66	-0.02
24	SLD 5	11	246	2505	-13.98	7.91	-0.04
24	SLD 6	11	246	2505	-13.98	7.91	-0.04
24	SLD 7	-15	-37	2106	-0.97	-5.26	0
24	SLD 8	-15	-37	2106	-0.97	-5.26	0
24	SLD 9	9	208	2737	-12.73	5.93	-0.03
24	SLD 10	9	208	2737	-12.73	5.93	-0.03
24	SLD 11	-17	-75	2338	0.28	-7.25	0.01
24	SLD 12	-17	-75	2338	0.28	-7.25	0.01
24	SLD 13	-3	64	2867	-6.72	-1	-0.02
24	SLD 14	-3	64	2867	-6.72	-1	-0.02
24	SLD 15	-11	-21	2747	-2.82	-4.95	0
24	SLD 16	-11	-21	2747	-2.82	-4.95	0
24	SLV 1	16	339	1656	-16.51	13.25	-0.05
24	SLV 2	16	339	1656	-16.51	13.25	-0.05
24	SLV 3	-4	136	1372	-7.21	3.23	-0.01
24	SLV 4	-4	136	1372	-7.21	3.23	-0.01
24	SLV 5	32	470	2622	-23.85	19.4	-0.07
24	SLV 6	32	470	2622	-23.85	19.4	-0.07
24	SLV 7	-33	-207	1676	7.15	-14	0.03
24	SLV 8	-33	-207	1676	7.15	-14	0.03
24	SLV 9	27	378	3167	-20.85	14.66	-0.07
24	SLV 10	27	378	3167	-20.85	14.66	-0.07
24	SLV 11	-39	-299	2221	10.15	-18.74	0.04
24	SLV 12	-39	-299	2221	10.15	-18.74	0.04
24	SLV 13	-2	35	3471	-6.49	-2.57	-0.02
24	SLV 14	-2	35	3471	-6.49	-2.57	-0.02
24	SLV 15	-22	-168	3187	2.81	-12.59	0.02
24	SLV 16	-22	-168	3187	2.81	-12.59	0.02
25	SLU 1	73	-68	1874	2.19	5.53	-0.06
25	SLU 2	93	-92	1744	2.85	5.7	-0.05
25	SLU 3	73	-68	1874	2.19	5.53	-0.06
25	SLU 4	85	-83	1796	2.58	5.63	-0.06
25	SLU 5	93	-92	1744	2.85	5.7	-0.05
25	SLU 6	73	-68	1874	2.19	5.53	-0.06
25	SLU 7	85	-83	1796	2.58	5.63	-0.06
25	SLU 8	73	-68	1874	2.19	5.53	-0.06
25	SLU 9	85	-83	1796	2.58	5.63	-0.06
25	SLU 10	123	-125	2003	3.35	6.59	-0.06
25	SLU 11	103	-101	2134	2.69	6.41	-0.07
25	SLU 12	115	-115	2055	3.08	6.52	-0.07
25	SLU 13	123	-125	2003	3.35	6.59	-0.06
25	SLU 14	103	-101	2134	2.69	6.41	-0.07
25	SLU 15	115	-115	2055	3.08	6.52	-0.07
25	SLU 16	103	-101	2134	2.69	6.41	-0.07
25	SLU 17	115	-115	2055	3.08	6.52	-0.07
25	SLU 18	116	-115	2245	2.9	6.79	-0.07
25	SLU 19	128	-129	2167	3.3	6.9	-0.07
25	SLU 20	116	-115	2245	2.9	6.79	-0.07
25	SLU 21	128	-129	2167	3.3	6.9	-0.07
25	SLU 22	88	-85	2046	2.46	6.07	-0.06
25	SLU 23	108	-108	1915	3.11	6.24	-0.06
25	SLU 24	88	-85	2046	2.46	6.07	-0.06
25	SLU 25	100	-99	1967	2.85	6.17	-0.06
25	SLU 26	108	-108	1915	3.11	6.24	-0.06
25	SLU 27	88	-85	2046	2.46	6.07	-0.06
25	SLU 28	100	-99	1967	2.85	6.17	-0.06
25	SLU 29	88	-85	2046	2.46	6.07	-0.06
25	SLU 30	100	-99	1967	2.85	6.17	-0.06
25	SLU 31	139	-141	2175	3.61	7.13	-0.07
25	SLU 32	119	-117	2305	2.96	6.95	-0.07
25	SLU 33	131	-131	2227	3.35	7.06	-0.07
25	SLU 34	139	-141	2175	3.61	7.13	-0.07
25	SLU 35	119	-117	2305	2.96	6.95	-0.07
25	SLU 36	131	-131	2227	3.35	7.06	-0.07
25	SLU 37	119	-117	2305	2.96	6.95	-0.07
25	SLU 38	131	-131	2227	3.35	7.06	-0.07
25	SLU 39	132	-131	2417	3.17	7.33	-0.08
25	SLU 40	144	-145	2339	3.57	7.44	-0.07
25	SLU 41	132	-131	2417	3.17	7.33	-0.08
25	SLU 42	144	-145	2339	3.57	7.44	-0.07
25	SLU 43	89	-83	2377	2.76	7	-0.07
25	SLU 44	109	-107	2247	3.41	7.18	-0.07
25	SLU 45	89	-83	2377	2.76	7	-0.07
25	SLU 46	101	-97	2299	3.15	7.11	-0.07
25	SLU 47	109	-107	2247	3.41	7.18	-0.07
25	SLU 48	89	-83	2377	2.76	7	-0.07
25	SLU 49	101	-97	2299	3.15	7.11	-0.07
25	SLU 50	89	-83	2377	2.76	7	-0.07

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
25	SLU 51	101	-97	2299	3.15	7.11	-0.07
25	SLU 52	140	-139	2507	3.91	8.06	-0.08
25	SLU 53	119	-116	2637	3.26	7.89	-0.08
25	SLU 54	132	-130	2559	3.65	7.99	-0.08
25	SLU 55	140	-139	2507	3.91	8.06	-0.08
25	SLU 56	119	-116	2637	3.26	7.89	-0.08
25	SLU 57	132	-130	2559	3.65	7.99	-0.08
25	SLU 58	119	-116	2637	3.26	7.89	-0.08
25	SLU 59	132	-130	2559	3.65	7.99	-0.08
25	SLU 60	132	-130	2748	3.47	8.27	-0.09
25	SLU 61	145	-144	2670	3.86	8.37	-0.08
25	SLU 62	132	-130	2748	3.47	8.27	-0.09
25	SLU 63	145	-144	2670	3.86	8.37	-0.08
25	SLU 64	105	-100	2549	3.02	7.54	-0.08
25	SLU 65	125	-123	2419	3.68	7.72	-0.08
25	SLU 66	105	-100	2549	3.02	7.54	-0.08
25	SLU 67	117	-114	2471	3.42	7.65	-0.08
25	SLU 68	125	-123	2419	3.68	7.72	-0.08
25	SLU 69	105	-100	2549	3.02	7.54	-0.08
25	SLU 70	117	-114	2471	3.42	7.65	-0.08
25	SLU 71	105	-100	2549	3.02	7.54	-0.08
25	SLU 72	117	-114	2471	3.42	7.65	-0.08
25	SLU 73	155	-156	2678	4.18	8.6	-0.09
25	SLU 74	135	-132	2809	3.52	8.43	-0.09
25	SLU 75	147	-146	2730	3.92	8.53	-0.09
25	SLU 76	155	-156	2678	4.18	8.6	-0.09
25	SLU 77	135	-132	2809	3.52	8.43	-0.09
25	SLU 78	147	-146	2730	3.92	8.53	-0.09
25	SLU 79	135	-132	2809	3.52	8.43	-0.09
25	SLU 80	147	-146	2730	3.92	8.53	-0.09
25	SLU 81	148	-146	2920	3.74	8.81	-0.09
25	SLU 82	160	-160	2842	4.13	8.91	-0.09
25	SLU 83	148	-146	2920	3.74	8.81	-0.09
25	SLU 84	160	-160	2842	4.13	8.91	-0.09
25	SLE RA 1	77	-73	1923	2.27	5.68	-0.06
25	SLE RA 2	91	-89	1836	2.7	5.8	-0.06
25	SLE RA 3	77	-73	1923	2.27	5.68	-0.06
25	SLE RA 4	85	-82	1871	2.53	5.75	-0.06
25	SLE RA 5	91	-89	1836	2.7	5.8	-0.06
25	SLE RA 6	77	-73	1923	2.27	5.68	-0.06
25	SLE RA 7	85	-82	1871	2.53	5.75	-0.06
25	SLE RA 8	77	-73	1923	2.27	5.68	-0.06
25	SLE RA 9	85	-82	1871	2.53	5.75	-0.06
25	SLE RA 10	111	-110	2009	3.04	6.39	-0.06
25	SLE RA 11	97	-95	2096	2.6	6.27	-0.07
25	SLE RA 12	105	-104	2044	2.86	6.34	-0.06
25	SLE RA 13	111	-110	2009	3.04	6.39	-0.06
25	SLE RA 14	97	-95	2096	2.6	6.27	-0.07
25	SLE RA 15	105	-104	2044	2.86	6.34	-0.06
25	SLE RA 16	97	-95	2096	2.6	6.27	-0.07
25	SLE RA 17	105	-104	2044	2.86	6.34	-0.06
25	SLE RA 18	106	-104	2170	2.74	6.53	-0.07
25	SLE RA 19	114	-113	2118	3.01	6.59	-0.07
25	SLE RA 20	106	-104	2170	2.74	6.53	-0.07
25	SLE RA 21	114	-113	2118	3.01	6.59	-0.07
25	SLE FR 1	77	-73	1923	2.27	5.68	-0.06
25	SLE FR 2	80	-76	1906	2.35	5.71	-0.06
25	SLE FR 3	77	-73	1923	2.27	5.68	-0.06
25	SLE FR 4	88	-85	1980	2.5	5.96	-0.06
25	SLE FR 5	86	-82	1997	2.41	5.94	-0.06
25	SLE FR 6	92	-88	2047	2.51	6.1	-0.06
25	SLE QP 1	77	-73	1923	2.27	5.68	-0.06
25	SLE QP 2	86	-82	1997	2.41	5.94	-0.06
25	SLD 1	230	-244	2267	9.96	12.29	-0.07
25	SLD 2	230	-244	2267	9.96	12.29	-0.07
25	SLD 3	356	-375	2452	14.6	19.08	-0.09
25	SLD 4	356	-375	2452	14.6	19.08	-0.09
25	SLD 5	-62	68	1797	-2.36	-2.44	-0.03
25	SLD 6	-62	68	1797	-2.36	-2.44	-0.03
25	SLD 7	358	-368	2414	13.1	20.16	-0.1
25	SLD 8	358	-368	2414	13.1	20.16	-0.1
25	SLD 9	-187	204	1580	-8.28	-8.29	-0.02
25	SLD 10	-187	204	1580	-8.28	-8.29	-0.02
25	SLD 11	234	-232	2197	7.18	14.31	-0.09
25	SLD 12	234	-232	2197	7.18	14.31	-0.09
25	SLD 13	-184	210	1542	-9.78	-7.2	-0.03
25	SLD 14	-184	210	1542	-9.78	-7.2	-0.03
25	SLD 15	-58	79	1727	-5.14	-0.42	-0.05
25	SLD 16	-58	79	1727	-5.14	-0.42	-0.05
25	SLV 1	428	-466	2645	20.59	21.09	-0.08
25	SLV 2	428	-466	2645	20.59	21.09	-0.08
25	SLV 3	752	-801	3120	32.62	38.76	-0.14
25	SLV 4	752	-801	3120	32.62	38.76	-0.14
25	SLV 5	-303	311	1471	-10.39	-16.33	0.01
25	SLV 6	-303	311	1471	-10.39	-16.33	0.01
25	SLV 7	777	-806	3055	29.72	42.59	-0.17
25	SLV 8	777	-806	3055	29.72	42.59	-0.17
25	SLV 9	-606	642	939	-24.9	-30.72	0.04

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
25	SLV 10	-606	642	939	-24.9	-30.72	0.04
25	SLV 11	475	-476	2523	15.21	28.2	-0.14
25	SLV 12	475	-476	2523	15.21	28.2	-0.14
25	SLV 13	-580	637	874	-27.8	-26.89	0.01
25	SLV 14	-580	637	874	-27.8	-26.89	0.01
25	SLV 15	-256	301	1349	-15.77	-9.22	-0.04
25	SLV 16	-256	301	1349	-15.77	-9.22	-0.04
26	SLU 1	4	27	1924	-2	3.01	0
26	SLU 2	4	-14	1851	-0.26	2.23	0
26	SLU 3	4	27	1924	-2	3.01	0
26	SLU 4	4	2	1880	-0.96	2.54	0
26	SLU 5	4	-14	1851	-0.26	2.23	0
26	SLU 6	4	27	1924	-2	3.01	0
26	SLU 7	4	2	1880	-0.96	2.54	0
26	SLU 8	4	27	1924	-2	3.01	0
26	SLU 9	4	2	1880	-0.96	2.54	0
26	SLU 10	5	-50	2116	0.9	2.97	0
26	SLU 11	5	-9	2189	-0.84	3.75	0
26	SLU 12	5	-34	2145	0.2	3.28	0
26	SLU 13	5	-50	2116	0.9	2.97	0
26	SLU 14	5	-9	2189	-0.84	3.75	0
26	SLU 15	5	-34	2145	0.2	3.28	0
26	SLU 16	5	-9	2189	-0.84	3.75	0
26	SLU 17	5	-34	2145	0.2	3.28	0
26	SLU 18	5	-25	2302	-0.35	4.06	0
26	SLU 19	5	-49	2259	0.7	3.6	0
26	SLU 20	5	-25	2302	-0.35	4.06	0
26	SLU 21	5	-49	2259	0.7	3.6	0
26	SLU 22	5	8	2083	-1.41	3.41	0
26	SLU 23	4	-33	2010	0.33	2.63	0
26	SLU 24	5	8	2083	-1.41	3.41	0
26	SLU 25	4	-17	2039	-0.36	2.94	0
26	SLU 26	4	-33	2010	0.33	2.63	0
26	SLU 27	5	8	2083	-1.41	3.41	0
26	SLU 28	4	-17	2039	-0.36	2.94	0
26	SLU 29	5	8	2083	-1.41	3.41	0
26	SLU 30	4	-17	2039	-0.36	2.94	0
26	SLU 31	5	-69	2276	1.49	3.36	0
26	SLU 32	6	-28	2348	-0.25	4.15	0
26	SLU 33	5	-53	2305	0.8	3.68	0
26	SLU 34	5	-69	2276	1.49	3.36	0
26	SLU 35	6	-28	2348	-0.25	4.15	0
26	SLU 36	5	-53	2305	0.8	3.68	0
26	SLU 37	6	-28	2348	-0.25	4.15	0
26	SLU 38	5	-53	2305	0.8	3.68	0
26	SLU 39	6	-43	2462	0.25	4.46	0
26	SLU 40	6	-68	2418	1.29	3.99	0
26	SLU 41	6	-43	2462	0.25	4.46	0
26	SLU 42	6	-68	2418	1.29	3.99	0
26	SLU 43	5	41	2446	-2.81	3.78	0
26	SLU 44	5	0	2374	-1.06	2.99	0
26	SLU 45	5	41	2446	-2.81	3.78	0
26	SLU 46	5	16	2403	-1.76	3.31	0
26	SLU 47	5	0	2374	-1.06	2.99	0
26	SLU 48	5	41	2446	-2.81	3.78	0
26	SLU 49	5	16	2403	-1.76	3.31	0
26	SLU 50	5	41	2446	-2.81	3.78	0
26	SLU 51	5	16	2403	-1.76	3.31	0
26	SLU 52	6	-36	2639	0.09	3.73	0
26	SLU 53	6	5	2711	-1.65	4.51	0
26	SLU 54	6	-19	2668	-0.6	4.04	0
26	SLU 55	6	-36	2639	0.09	3.73	0
26	SLU 56	6	5	2711	-1.65	4.51	0
26	SLU 57	6	-19	2668	-0.6	4.04	0
26	SLU 58	6	5	2711	-1.65	4.51	0
26	SLU 59	6	-19	2668	-0.6	4.04	0
26	SLU 60	7	-10	2825	-1.15	4.83	0
26	SLU 61	6	-35	2781	-0.11	4.36	0
26	SLU 62	7	-10	2825	-1.15	4.83	0
26	SLU 63	6	-35	2781	-0.11	4.36	0
26	SLU 64	6	22	2605	-2.21	4.17	0
26	SLU 65	5	-19	2533	-0.47	3.39	0
26	SLU 66	6	22	2605	-2.21	4.17	0
26	SLU 67	5	-2	2562	-1.17	3.7	0
26	SLU 68	5	-19	2533	-0.47	3.39	0
26	SLU 69	6	22	2605	-2.21	4.17	0
26	SLU 70	5	-2	2562	-1.17	3.7	0
26	SLU 71	6	22	2605	-2.21	4.17	0
26	SLU 72	5	-2	2562	-1.17	3.7	0
26	SLU 73	6	-55	2798	0.69	4.13	0.01
26	SLU 74	7	-14	2871	-1.05	4.91	0
26	SLU 75	6	-38	2827	-0.01	4.44	0
26	SLU 76	6	-55	2798	0.69	4.13	0.01
26	SLU 77	7	-14	2871	-1.05	4.91	0
26	SLU 78	6	-38	2827	-0.01	4.44	0
26	SLU 79	7	-14	2871	-1.05	4.91	0
26	SLU 80	6	-38	2827	-0.01	4.44	0
26	SLU 81	7	-29	2984	-0.56	5.23	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
26	SLU 82	7	-53	2941	0.49	4.76	0.01
26	SLU 83	7	-29	2984	-0.56	5.23	0
26	SLU 84	7	-53	2941	0.49	4.76	0.01
26	SLE RA 1	4	21	1969	-1.83	3.12	0
26	SLE RA 2	4	-6	1921	-0.67	2.6	0
26	SLE RA 3	4	21	1969	-1.83	3.12	0
26	SLE RA 4	4	5	1940	-1.13	2.81	0
26	SLE RA 5	4	-6	1921	-0.67	2.6	0
26	SLE RA 6	4	21	1969	-1.83	3.12	0
26	SLE RA 7	4	5	1940	-1.13	2.81	0
26	SLE RA 8	4	21	1969	-1.83	3.12	0
26	SLE RA 9	4	5	1940	-1.13	2.81	0
26	SLE RA 10	5	-30	2098	0.1	3.09	0
26	SLE RA 11	5	-3	2146	-1.06	3.62	0
26	SLE RA 12	5	-19	2117	-0.36	3.3	0
26	SLE RA 13	5	-30	2098	0.1	3.09	0
26	SLE RA 14	5	-3	2146	-1.06	3.62	0
26	SLE RA 15	5	-19	2117	-0.36	3.3	0
26	SLE RA 16	5	-3	2146	-1.06	3.62	0
26	SLE RA 17	5	-19	2117	-0.36	3.3	0
26	SLE RA 18	5	-13	2222	-0.73	3.83	0
26	SLE RA 19	5	-29	2193	-0.03	3.51	0
26	SLE RA 20	5	-13	2222	-0.73	3.83	0
26	SLE RA 21	5	-29	2193	-0.03	3.51	0
26	SLE FR 1	4	21	1969	-1.83	3.12	0
26	SLE FR 2	4	16	1959	-1.6	3.02	0
26	SLE FR 3	4	21	1969	-1.83	3.12	0
26	SLE FR 4	4	6	2035	-1.27	3.23	0
26	SLE FR 5	5	11	2045	-1.5	3.33	0
26	SLE FR 6	5	4	2095	-1.28	3.48	0
26	SLE QP 1	4	21	1969	-1.83	3.12	0
26	SLE QP 2	5	11	2045	-1.5	3.33	0
26	SLD 1	16	108	1766	-5.31	13.31	-0.01
26	SLD 2	16	108	1766	-5.31	13.31	-0.01
26	SLD 3	5	21	1836	-1.53	6.94	-0.01
26	SLD 4	5	21	1836	-1.53	6.94	-0.01
26	SLD 5	24	171	1856	-8.37	15.99	0.01
26	SLD 6	24	171	1856	-8.37	15.99	0.01
26	SLD 7	-11	-117	2087	4.22	-5.24	-0.01
26	SLD 8	-11	-117	2087	4.22	-5.24	-0.01
26	SLD 9	20	139	2003	-7.22	11.91	0.02
26	SLD 10	20	139	2003	-7.22	11.91	0.02
26	SLD 11	-15	-149	2233	5.37	-9.32	0
26	SLD 12	-15	-149	2233	5.37	-9.32	0
26	SLD 13	4	1	2254	-1.47	-0.27	0.02
26	SLD 14	4	1	2254	-1.47	-0.27	0.02
26	SLD 15	-7	-85	2323	2.31	-6.64	0.01
26	SLD 16	-7	-85	2323	2.31	-6.64	0.01
26	SLV 1	32	241	1388	-10.62	27.56	-0.02
26	SLV 2	32	241	1388	-10.62	27.56	-0.02
26	SLV 3	6	34	1554	-1.54	11.4	-0.03
26	SLV 4	6	34	1554	-1.54	11.4	-0.03
26	SLV 5	53	394	1595	-18.02	35.12	0.02
26	SLV 6	53	394	1595	-18.02	35.12	0.02
26	SLV 7	-35	-296	2150	12.27	-18.76	-0.03
26	SLV 8	-35	-296	2150	12.27	-18.76	-0.03
26	SLV 9	44	318	1939	-15.27	25.43	0.04
26	SLV 10	44	318	1939	-15.27	25.43	0.04
26	SLV 11	-44	-372	2495	15.02	-28.45	-0.01
26	SLV 12	-44	-372	2495	15.02	-28.45	-0.01
26	SLV 13	3	-12	2535	-1.46	-4.73	0.04
26	SLV 14	3	-12	2535	-1.46	-4.73	0.04
26	SLV 15	-23	-219	2702	7.62	-20.9	0.02
26	SLV 16	-23	-219	2702	7.62	-20.9	0.02
27	SLU 1	135	155	1966	-6.55	3.52	0.02
27	SLU 2	135	115	1766	-4.99	3.57	0.02
27	SLU 3	135	155	1966	-6.55	3.52	0.02
27	SLU 4	135	131	1846	-5.61	3.55	0.02
27	SLU 5	135	115	1766	-4.99	3.57	0.02
27	SLU 6	135	155	1966	-6.55	3.52	0.02
27	SLU 7	135	131	1846	-5.61	3.55	0.02
27	SLU 8	135	155	1966	-6.55	3.52	0.02
27	SLU 9	135	131	1846	-5.61	3.55	0.02
27	SLU 10	151	111	1851	-5.29	3.77	0.02
27	SLU 11	152	151	2051	-6.86	3.71	0.03
27	SLU 12	152	127	1931	-5.92	3.74	0.02
27	SLU 13	151	111	1851	-5.29	3.77	0.02
27	SLU 14	152	151	2051	-6.86	3.71	0.03
27	SLU 15	152	127	1931	-5.92	3.74	0.02
27	SLU 16	152	151	2051	-6.86	3.71	0.03
27	SLU 17	152	127	1931	-5.92	3.74	0.02
27	SLU 18	159	150	2088	-6.99	3.79	0.03
27	SLU 19	159	126	1968	-6.05	3.83	0.02
27	SLU 20	159	150	2088	-6.99	3.79	0.03
27	SLU 21	159	126	1968	-6.05	3.83	0.02
27	SLU 22	146	158	2059	-6.88	3.7	0.03
27	SLU 23	146	118	1859	-5.31	3.75	0.02
27	SLU 24	146	158	2059	-6.88	3.7	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
27	SLU 25	146	134	1939	-5.94	3.73	0.02
27	SLU 26	146	118	1859	-5.31	3.75	0.02
27	SLU 27	146	158	2059	-6.88	3.7	0.03
27	SLU 28	146	134	1939	-5.94	3.73	0.02
27	SLU 29	146	158	2059	-6.88	3.7	0.03
27	SLU 30	146	134	1939	-5.94	3.73	0.02
27	SLU 31	163	114	1945	-5.62	3.95	0.02
27	SLU 32	163	154	2145	-7.19	3.89	0.03
27	SLU 33	163	130	2025	-6.24	3.92	0.02
27	SLU 34	163	114	1945	-5.62	3.95	0.02
27	SLU 35	163	154	2145	-7.19	3.89	0.03
27	SLU 36	163	130	2025	-6.24	3.92	0.02
27	SLU 37	163	154	2145	-7.19	3.89	0.03
27	SLU 38	163	130	2025	-6.24	3.92	0.02
27	SLU 39	170	153	2181	-7.32	3.97	0.03
27	SLU 40	170	129	2061	-6.38	4.01	0.02
27	SLU 41	170	153	2181	-7.32	3.97	0.03
27	SLU 42	170	129	2061	-6.38	4.01	0.02
27	SLU 43	172	200	2524	-8.41	4.51	0.03
27	SLU 44	171	160	2324	-6.84	4.57	0.02
27	SLU 45	172	200	2524	-8.41	4.51	0.03
27	SLU 46	172	176	2404	-7.47	4.55	0.03
27	SLU 47	171	160	2324	-6.84	4.57	0.02
27	SLU 48	172	200	2524	-8.41	4.51	0.03
27	SLU 49	172	176	2404	-7.47	4.55	0.03
27	SLU 50	172	200	2524	-8.41	4.51	0.03
27	SLU 51	172	176	2404	-7.47	4.55	0.03
27	SLU 52	188	157	2409	-7.15	4.76	0.03
27	SLU 53	188	197	2609	-8.72	4.71	0.03
27	SLU 54	188	173	2489	-7.77	4.74	0.03
27	SLU 55	188	157	2409	-7.15	4.76	0.03
27	SLU 56	188	197	2609	-8.72	4.71	0.03
27	SLU 57	188	173	2489	-7.77	4.74	0.03
27	SLU 58	188	197	2609	-8.72	4.71	0.03
27	SLU 59	188	173	2489	-7.77	4.74	0.03
27	SLU 60	196	195	2646	-8.85	4.79	0.03
27	SLU 61	195	171	2526	-7.91	4.82	0.03
27	SLU 62	196	195	2646	-8.85	4.79	0.03
27	SLU 63	195	171	2526	-7.91	4.82	0.03
27	SLU 64	183	203	2617	-8.73	4.69	0.03
27	SLU 65	183	163	2417	-7.17	4.75	0.03
27	SLU 66	183	203	2617	-8.73	4.69	0.03
27	SLU 67	183	179	2497	-7.79	4.73	0.03
27	SLU 68	183	163	2417	-7.17	4.75	0.03
27	SLU 69	183	203	2617	-8.73	4.69	0.03
27	SLU 70	183	179	2497	-7.79	4.73	0.03
27	SLU 71	183	203	2617	-8.73	4.69	0.03
27	SLU 72	183	179	2497	-7.79	4.73	0.03
27	SLU 73	199	160	2502	-7.47	4.94	0.03
27	SLU 74	200	200	2703	-9.04	4.89	0.03
27	SLU 75	200	176	2582	-8.1	4.92	0.03
27	SLU 76	199	160	2502	-7.47	4.94	0.03
27	SLU 77	200	200	2703	-9.04	4.89	0.03
27	SLU 78	200	176	2582	-8.1	4.92	0.03
27	SLU 79	200	200	2703	-9.04	4.89	0.03
27	SLU 80	200	176	2582	-8.1	4.92	0.03
27	SLU 81	207	198	2739	-9.17	4.97	0.03
27	SLU 82	207	174	2619	-8.23	5	0.03
27	SLU 83	207	198	2739	-9.17	4.97	0.03
27	SLU 84	207	174	2619	-8.23	5	0.03
27	SLE RA 1	138	156	1993	-6.65	3.57	0.02
27	SLE RA 2	138	129	1859	-5.6	3.61	0.02
27	SLE RA 3	138	156	1993	-6.65	3.57	0.02
27	SLE RA 4	138	140	1913	-6.02	3.59	0.02
27	SLE RA 5	138	129	1859	-5.6	3.61	0.02
27	SLE RA 6	138	156	1993	-6.65	3.57	0.02
27	SLE RA 7	138	140	1913	-6.02	3.59	0.02
27	SLE RA 8	138	156	1993	-6.65	3.57	0.02
27	SLE RA 9	138	140	1913	-6.02	3.59	0.02
27	SLE RA 10	149	127	1916	-5.81	3.73	0.02
27	SLE RA 11	149	153	2050	-6.85	3.7	0.03
27	SLE RA 12	149	137	1970	-6.22	3.72	0.02
27	SLE RA 13	149	127	1916	-5.81	3.73	0.02
27	SLE RA 14	149	153	2050	-6.85	3.7	0.03
27	SLE RA 15	149	137	1970	-6.22	3.72	0.02
27	SLE RA 16	149	153	2050	-6.85	3.7	0.03
27	SLE RA 17	149	137	1970	-6.22	3.72	0.02
27	SLE RA 18	154	152	2074	-6.94	3.75	0.03
27	SLE RA 19	154	136	1994	-6.31	3.78	0.02
27	SLE RA 20	154	152	2074	-6.94	3.75	0.03
27	SLE RA 21	154	136	1994	-6.31	3.78	0.02
27	SLE FR 1	138	156	1993	-6.65	3.57	0.02
27	SLE FR 2	138	150	1966	-6.44	3.58	0.02
27	SLE FR 3	138	156	1993	-6.65	3.57	0.02
27	SLE FR 4	143	149	1990	-6.53	3.63	0.02
27	SLE FR 5	143	155	2017	-6.73	3.63	0.02
27	SLE FR 6	146	154	2033	-6.79	3.66	0.03
27	SLE QP 1	138	156	1993	-6.65	3.57	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
27	SLE QP 2	143	155	2017	-6.73	3.63	0.02
27	SLD 1	254	77	2658	-3.64	8.35	0
27	SLD 2	254	77	2658	-3.64	8.35	0
27	SLD 3	346	-44	3163	0.95	12.34	-0.02
27	SLD 4	346	-44	3163	0.95	12.34	-0.02
27	SLD 5	38	314	1444	-12.76	-1.01	0.05
27	SLD 6	38	314	1444	-12.76	-1.01	0.05
27	SLD 7	343	-88	3126	2.52	12.3	-0.02
27	SLD 8	343	-88	3126	2.52	12.3	-0.02
27	SLD 9	-56	397	908	-15.99	-5.04	0.07
27	SLD 10	-56	397	908	-15.99	-5.04	0.07
27	SLD 11	249	-5	2590	-0.71	8.26	0
27	SLD 12	249	-5	2590	-0.71	8.26	0
27	SLD 13	-59	353	872	-14.41	-5.09	0.07
27	SLD 14	-59	353	872	-14.41	-5.09	0.07
27	SLD 15	32	232	1376	-9.83	-1.1	0.05
27	SLD 16	32	232	1376	-9.83	-1.1	0.05
27	SLV 1	407	-28	3565	0.49	14.8	-0.03
27	SLV 2	407	-28	3565	0.49	14.8	-0.03
27	SLV 3	645	-324	4904	11.7	25.21	-0.08
27	SLV 4	645	-324	4904	11.7	25.21	-0.08
27	SLV 5	-140	549	451	-21.58	-8.8	0.08
27	SLV 6	-140	549	451	-21.58	-8.8	0.08
27	SLV 7	656	-438	4914	15.81	25.88	-0.08
27	SLV 8	656	-438	4914	15.81	25.88	-0.08
27	SLV 9	-369	747	-879	-29.27	-18.63	0.12
27	SLV 10	-369	747	-879	-29.27	-18.63	0.12
27	SLV 11	426	-240	3583	8.11	16.05	-0.03
27	SLV 12	426	-240	3583	8.11	16.05	-0.03
27	SLV 13	-359	633	-870	-25.17	-17.95	0.13
27	SLV 14	-359	633	-870	-25.17	-17.95	0.13
27	SLV 15	-121	337	469	-13.95	-7.55	0.08
27	SLV 16	-121	337	469	-13.95	-7.55	0.08
28	SLU 1	8	-18	1713	-0.45	5.17	0
28	SLU 2	7	-58	1679	1.52	3.92	0
28	SLU 3	8	-18	1713	-0.45	5.17	0
28	SLU 4	7	-42	1693	0.73	4.42	0
28	SLU 5	7	-58	1679	1.52	3.92	0
28	SLU 6	8	-18	1713	-0.45	5.17	0
28	SLU 7	7	-42	1693	0.73	4.42	0
28	SLU 8	8	-18	1713	-0.45	5.17	0
28	SLU 9	7	-42	1693	0.73	4.42	0
28	SLU 10	9	-91	1889	2.64	5.18	0
28	SLU 11	10	-51	1923	0.67	6.44	0
28	SLU 12	9	-75	1902	1.85	5.68	0
28	SLU 13	9	-91	1889	2.64	5.18	0
28	SLU 14	10	-51	1923	0.67	6.44	0
28	SLU 15	9	-75	1902	1.85	5.68	0
28	SLU 16	10	-51	1923	0.67	6.44	0
28	SLU 17	9	-75	1902	1.85	5.68	0
28	SLU 18	10	-65	2013	1.15	6.98	0
28	SLU 19	10	-89	1992	2.33	6.23	0
28	SLU 20	10	-65	2013	1.15	6.98	0
28	SLU 21	10	-89	1992	2.33	6.23	0
28	SLU 22	9	-35	1839	0.11	5.86	0
28	SLU 23	8	-75	1805	2.08	4.61	0
28	SLU 24	9	-35	1839	0.11	5.86	0
28	SLU 25	8	-59	1819	1.29	5.11	0
28	SLU 26	8	-75	1805	2.08	4.61	0
28	SLU 27	9	-35	1839	0.11	5.86	0
28	SLU 28	8	-59	1819	1.29	5.11	0
28	SLU 29	9	-35	1839	0.11	5.86	0
28	SLU 30	8	-59	1819	1.29	5.11	0
28	SLU 31	10	-108	2015	3.2	5.87	0
28	SLU 32	11	-68	2049	1.23	7.12	0
28	SLU 33	10	-92	2028	2.41	6.37	0
28	SLU 34	10	-108	2015	3.2	5.87	0
28	SLU 35	11	-68	2049	1.23	7.12	0
28	SLU 36	10	-92	2028	2.41	6.37	0
28	SLU 37	11	-68	2049	1.23	7.12	0
28	SLU 38	10	-92	2028	2.41	6.37	0
28	SLU 39	11	-83	2138	1.71	7.66	0
28	SLU 40	11	-106	2118	2.9	6.91	0
28	SLU 41	11	-83	2138	1.71	7.66	0
28	SLU 42	11	-106	2118	2.9	6.91	0
28	SLU 43	10	-17	2184	-0.78	6.49	0
28	SLU 44	9	-57	2150	1.19	5.24	0
28	SLU 45	10	-17	2184	-0.78	6.49	0
28	SLU 46	9	-41	2163	0.4	5.74	0
28	SLU 47	9	-57	2150	1.19	5.24	0
28	SLU 48	10	-17	2184	-0.78	6.49	0
28	SLU 49	9	-41	2163	0.4	5.74	0
28	SLU 50	10	-17	2184	-0.78	6.49	0
28	SLU 51	9	-41	2163	0.4	5.74	0
28	SLU 52	11	-90	2360	2.31	6.5	0
28	SLU 53	12	-50	2393	0.34	7.75	0
28	SLU 54	11	-74	2373	1.52	7	0
28	SLU 55	11	-90	2360	2.31	6.5	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
28	SLU 56	12	-50	2393	0.34	7.75	0
28	SLU 57	11	-74	2373	1.52	7	0
28	SLU 58	12	-50	2393	0.34	7.75	0
28	SLU 59	11	-74	2373	1.52	7	0
28	SLU 60	12	-64	2483	0.82	8.29	0
28	SLU 61	12	-88	2463	2.01	7.54	0
28	SLU 62	12	-64	2483	0.82	8.29	0
28	SLU 63	12	-88	2463	2.01	7.54	0
28	SLU 64	11	-34	2310	-0.22	7.17	0
28	SLU 65	10	-74	2276	1.75	5.92	0
28	SLU 66	11	-34	2310	-0.22	7.17	0
28	SLU 67	10	-58	2289	0.96	6.42	0
28	SLU 68	10	-74	2276	1.75	5.92	0
28	SLU 69	11	-34	2310	-0.22	7.17	0
28	SLU 70	10	-58	2289	0.96	6.42	0
28	SLU 71	11	-34	2310	-0.22	7.17	0
28	SLU 72	10	-58	2289	0.96	6.42	0
28	SLU 73	12	-108	2486	2.87	7.18	0
28	SLU 74	13	-68	2519	0.9	8.44	0
28	SLU 75	12	-92	2499	2.09	7.69	0
28	SLU 76	12	-108	2486	2.87	7.18	0
28	SLU 77	13	-68	2519	0.9	8.44	0
28	SLU 78	12	-92	2499	2.09	7.69	0
28	SLU 79	13	-68	2519	0.9	8.44	0
28	SLU 80	12	-92	2499	2.09	7.69	0
28	SLU 81	13	-82	2609	1.38	8.98	0
28	SLU 82	13	-106	2589	2.57	8.23	0
28	SLU 83	13	-82	2609	1.38	8.98	0
28	SLU 84	13	-106	2589	2.57	8.23	0
28	SLE RA 1	8	-23	1749	-0.29	5.37	0
28	SLE RA 2	7	-49	1726	1.02	4.53	0
28	SLE RA 3	8	-23	1749	-0.29	5.37	0
28	SLE RA 4	8	-39	1735	0.5	4.87	0
28	SLE RA 5	7	-49	1726	1.02	4.53	0
28	SLE RA 6	8	-23	1749	-0.29	5.37	0
28	SLE RA 7	8	-39	1735	0.5	4.87	0
28	SLE RA 8	8	-23	1749	-0.29	5.37	0
28	SLE RA 9	8	-39	1735	0.5	4.87	0
28	SLE RA 10	9	-71	1866	1.77	5.38	0
28	SLE RA 11	9	-45	1889	0.46	6.21	0
28	SLE RA 12	9	-61	1875	1.24	5.71	0
28	SLE RA 13	9	-71	1866	1.77	5.38	0
28	SLE RA 14	9	-45	1889	0.46	6.21	0
28	SLE RA 15	9	-61	1875	1.24	5.71	0
28	SLE RA 16	9	-45	1889	0.46	6.21	0
28	SLE RA 17	9	-61	1875	1.24	5.71	0
28	SLE RA 18	10	-54	1949	0.78	6.57	0
28	SLE RA 19	9	-70	1935	1.57	6.07	0
28	SLE RA 20	10	-54	1949	0.78	6.57	0
28	SLE RA 21	9	-70	1935	1.57	6.07	0
28	SLE FR 1	8	-23	1749	-0.29	5.37	0
28	SLE FR 2	8	-28	1744	-0.03	5.2	0
28	SLE FR 3	8	-23	1749	-0.29	5.37	0
28	SLE FR 4	8	-37	1804	0.29	5.56	0
28	SLE FR 5	9	-32	1809	0.03	5.73	0
28	SLE FR 6	9	-38	1849	0.24	5.97	0
28	SLE QP 1	8	-23	1749	-0.29	5.37	0
28	SLE QP 2	9	-32	1809	0.03	5.73	0
28	SLD 1	23	58	1590	-3.69	19.71	-0.01
28	SLD 2	23	58	1590	-3.69	19.71	-0.01
28	SLD 3	14	-34	1661	0.25	12.42	-0.01
28	SLD 4	14	-34	1661	0.25	12.42	-0.01
28	SLD 5	27	134	1635	-7.07	20.97	0.01
28	SLD 6	27	134	1635	-7.07	20.97	0.01
28	SLD 7	-4	-172	1873	6.08	-3.31	-0.01
28	SLD 8	-4	-172	1873	6.08	-3.31	-0.01
28	SLD 9	21	108	1745	-6.02	14.76	0.01
28	SLD 10	21	108	1745	-6.02	14.76	0.01
28	SLD 11	-10	-199	1983	7.13	-9.51	-0.01
28	SLD 12	-10	-199	1983	7.13	-9.51	-0.01
28	SLD 13	3	-31	1956	-0.2	-0.97	0.01
28	SLD 14	3	-31	1956	-0.2	-0.97	0.01
28	SLD 15	-6	-122	2028	3.75	-8.25	0.01
28	SLD 16	-6	-122	2028	3.75	-8.25	0.01
28	SLV 1	44	183	1289	-8.85	39.41	-0.02
28	SLV 2	44	183	1289	-8.85	39.41	-0.02
28	SLV 3	20	-36	1466	0.56	20.95	-0.03
28	SLV 4	20	-36	1466	0.56	20.95	-0.03
28	SLV 5	56	366	1384	-16.91	43.83	0.02
28	SLV 6	56	366	1384	-16.91	43.83	0.02
28	SLV 7	-25	-367	1975	14.46	-17.7	-0.03
28	SLV 8	-25	-367	1975	14.46	-17.7	-0.03
28	SLV 9	42	302	1643	-14.41	29.16	0.03
28	SLV 10	42	302	1643	-14.41	29.16	0.03
28	SLV 11	-39	-430	2234	16.97	-32.37	-0.02
28	SLV 12	-39	-430	2234	16.97	-32.37	-0.02
28	SLV 13	-3	-28	2152	-0.5	-9.5	0.03
28	SLV 14	-3	-28	2152	-0.5	-9.5	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
28	SLV 15	-27	-248	2329	8.91	-27.96	0.02
28	SLV 16	-27	-248	2329	8.91	-27.96	0.02
29	SLU 1	3	253	1699	-9.46	-0.98	0.03
29	SLU 2	3	217	1539	-8.08	-0.82	0.02
29	SLU 3	3	253	1699	-9.46	-0.98	0.03
29	SLU 4	3	232	1603	-8.63	-0.89	0.02
29	SLU 5	3	217	1539	-8.08	-0.82	0.02
29	SLU 6	3	253	1699	-9.46	-0.98	0.03
29	SLU 7	3	232	1603	-8.63	-0.89	0.02
29	SLU 8	3	253	1699	-9.46	-0.98	0.03
29	SLU 9	3	232	1603	-8.63	-0.89	0.02
29	SLU 10	3	240	1588	-8.87	-1.19	0.03
29	SLU 11	3	276	1748	-10.25	-1.34	0.03
29	SLU 12	3	254	1652	-9.42	-1.25	0.03
29	SLU 13	3	240	1588	-8.87	-1.19	0.03
29	SLU 14	3	276	1748	-10.25	-1.34	0.03
29	SLU 15	3	254	1652	-9.42	-1.25	0.03
29	SLU 16	3	276	1748	-10.25	-1.34	0.03
29	SLU 17	3	254	1652	-9.42	-1.25	0.03
29	SLU 18	3	286	1769	-10.59	-1.5	0.03
29	SLU 19	3	264	1673	-9.76	-1.41	0.03
29	SLU 20	3	286	1769	-10.59	-1.5	0.03
29	SLU 21	3	264	1673	-9.76	-1.41	0.03
29	SLU 22	3	270	1768	-10.08	-1.17	0.03
29	SLU 23	3	235	1608	-8.7	-1.02	0.02
29	SLU 24	3	270	1768	-10.08	-1.17	0.03
29	SLU 25	3	249	1672	-9.26	-1.08	0.03
29	SLU 26	3	235	1608	-8.7	-1.02	0.02
29	SLU 27	3	270	1768	-10.08	-1.17	0.03
29	SLU 28	3	249	1672	-9.26	-1.08	0.03
29	SLU 29	3	270	1768	-10.08	-1.17	0.03
29	SLU 30	3	249	1672	-9.26	-1.08	0.03
29	SLU 31	3	257	1657	-9.49	-1.38	0.03
29	SLU 32	3	293	1817	-10.87	-1.54	0.03
29	SLU 33	3	271	1721	-10.04	-1.45	0.03
29	SLU 34	3	257	1657	-9.49	-1.38	0.03
29	SLU 35	3	293	1817	-10.87	-1.54	0.03
29	SLU 36	3	271	1721	-10.04	-1.45	0.03
29	SLU 37	3	293	1817	-10.87	-1.54	0.03
29	SLU 38	3	271	1721	-10.04	-1.45	0.03
29	SLU 39	3	303	1838	-11.21	-1.7	0.03
29	SLU 40	3	281	1742	-10.38	-1.6	0.03
29	SLU 41	3	303	1838	-11.21	-1.7	0.03
29	SLU 42	3	281	1742	-10.38	-1.6	0.03
29	SLU 43	4	323	2185	-12.09	-1.21	0.03
29	SLU 44	4	288	2025	-10.71	-1.05	0.03
29	SLU 45	4	323	2185	-12.09	-1.21	0.03
29	SLU 46	4	302	2089	-11.26	-1.11	0.03
29	SLU 47	4	288	2025	-10.71	-1.05	0.03
29	SLU 48	4	323	2185	-12.09	-1.21	0.03
29	SLU 49	4	302	2089	-11.26	-1.11	0.03
29	SLU 50	4	323	2185	-12.09	-1.21	0.03
29	SLU 51	4	302	2089	-11.26	-1.11	0.03
29	SLU 52	3	310	2074	-11.5	-1.42	0.03
29	SLU 53	4	346	2234	-12.88	-1.57	0.03
29	SLU 54	4	324	2138	-12.05	-1.48	0.03
29	SLU 55	3	310	2074	-11.5	-1.42	0.03
29	SLU 56	4	346	2234	-12.88	-1.57	0.03
29	SLU 57	4	324	2138	-12.05	-1.48	0.03
29	SLU 58	4	346	2234	-12.88	-1.57	0.03
29	SLU 59	4	324	2138	-12.05	-1.48	0.03
29	SLU 60	4	356	2255	-13.21	-1.73	0.04
29	SLU 61	4	334	2159	-12.39	-1.64	0.03
29	SLU 62	4	356	2255	-13.21	-1.73	0.04
29	SLU 63	4	334	2159	-12.39	-1.64	0.03
29	SLU 64	4	341	2254	-12.71	-1.4	0.03
29	SLU 65	4	305	2094	-11.33	-1.25	0.03
29	SLU 66	4	341	2254	-12.71	-1.4	0.03
29	SLU 67	4	319	2158	-11.88	-1.31	0.03
29	SLU 68	4	305	2094	-11.33	-1.25	0.03
29	SLU 69	4	341	2254	-12.71	-1.4	0.03
29	SLU 70	4	319	2158	-11.88	-1.31	0.03
29	SLU 71	4	341	2254	-12.71	-1.4	0.03
29	SLU 72	4	319	2158	-11.88	-1.31	0.03
29	SLU 73	4	327	2143	-12.12	-1.61	0.03
29	SLU 74	4	363	2303	-13.5	-1.77	0.04
29	SLU 75	4	342	2207	-12.67	-1.67	0.03
29	SLU 76	4	327	2143	-12.12	-1.61	0.03
29	SLU 77	4	363	2303	-13.5	-1.77	0.04
29	SLU 78	4	342	2207	-12.67	-1.67	0.03
29	SLU 79	4	363	2303	-13.5	-1.77	0.04
29	SLU 80	4	342	2207	-12.67	-1.67	0.03
29	SLU 81	4	373	2324	-13.83	-1.92	0.04
29	SLU 82	4	351	2228	-13.01	-1.83	0.04
29	SLU 83	4	373	2324	-13.83	-1.92	0.04
29	SLU 84	4	351	2228	-13.01	-1.83	0.04
29	SLE RA 1	3	258	1718	-9.64	-1.03	0.03
29	SLE RA 2	3	234	1612	-8.72	-0.93	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
29	SLE RA 3	3	258	1718	-9.64	-1.03	0.03
29	SLE RA 4	3	244	1655	-9.09	-0.97	0.02
29	SLE RA 5	3	234	1612	-8.72	-0.93	0.02
29	SLE RA 6	3	258	1718	-9.64	-1.03	0.03
29	SLE RA 7	3	244	1655	-9.09	-0.97	0.02
29	SLE RA 8	3	258	1718	-9.64	-1.03	0.03
29	SLE RA 9	3	244	1655	-9.09	-0.97	0.02
29	SLE RA 10	3	249	1645	-9.25	-1.18	0.03
29	SLE RA 11	3	273	1751	-10.16	-1.28	0.03
29	SLE RA 12	3	259	1687	-9.61	-1.22	0.03
29	SLE RA 13	3	249	1645	-9.25	-1.18	0.03
29	SLE RA 14	3	273	1751	-10.16	-1.28	0.03
29	SLE RA 15	3	259	1687	-9.61	-1.22	0.03
29	SLE RA 16	3	273	1751	-10.16	-1.28	0.03
29	SLE RA 17	3	259	1687	-9.61	-1.22	0.03
29	SLE RA 18	3	280	1765	-10.39	-1.38	0.03
29	SLE RA 19	3	265	1701	-9.84	-1.32	0.03
29	SLE RA 20	3	280	1765	-10.39	-1.38	0.03
29	SLE RA 21	3	265	1701	-9.84	-1.32	0.03
29	SLE FR 1	3	258	1718	-9.64	-1.03	0.03
29	SLE FR 2	3	253	1697	-9.45	-1.01	0.03
29	SLE FR 3	3	258	1718	-9.64	-1.03	0.03
29	SLE FR 4	3	260	1711	-9.68	-1.12	0.03
29	SLE FR 5	3	265	1732	-9.86	-1.14	0.03
29	SLE FR 6	3	269	1742	-10.01	-1.21	0.03
29	SLE QP 1	3	258	1718	-9.64	-1.03	0.03
29	SLE QP 2	3	265	1732	-9.86	-1.14	0.03
29	SLD 1	7	232	2191	-9.08	2.35	0.04
29	SLD 2	7	232	2191	-9.08	2.35	0.04
29	SLD 3	6	116	2518	-4.94	1.63	0.04
29	SLD 4	6	116	2518	-4.94	1.63	0.04
29	SLD 5	7	431	1373	-15.9	0.99	0.02
29	SLD 6	7	431	1373	-15.9	0.99	0.02
29	SLD 7	1	43	2465	-2.12	-1.39	0.04
29	SLD 8	1	43	2465	-2.12	-1.39	0.04
29	SLD 9	5	486	1000	-17.61	-0.89	0.01
29	SLD 10	5	486	1000	-17.61	-0.89	0.01
29	SLD 11	-1	98	2091	-3.83	-3.27	0.03
29	SLD 12	-1	98	2091	-3.83	-3.27	0.03
29	SLD 13	1	414	947	-14.78	-3.91	0.01
29	SLD 14	1	414	947	-14.78	-3.91	0.01
29	SLD 15	-1	297	1274	-10.65	-4.63	0.02
29	SLD 16	-1	297	1274	-10.65	-4.63	0.02
29	SLV 1	13	185	2850	-7.74	7.13	0.05
29	SLV 2	13	185	2850	-7.74	7.13	0.05
29	SLV 3	9	-94	3728	2.13	5.35	0.06
29	SLV 4	9	-94	3728	2.13	5.35	0.06
29	SLV 5	13	665	736	-24.19	4.05	0.01
29	SLV 6	13	665	736	-24.19	4.05	0.01
29	SLV 7	-2	-267	3662	8.7	-1.9	0.06
29	SLV 8	-2	-267	3662	8.7	-1.9	0.06
29	SLV 9	8	796	-198	-28.43	-0.38	-0.01
29	SLV 10	8	796	-198	-28.43	-0.38	-0.01
29	SLV 11	-7	-136	2729	4.46	-6.32	0.04
29	SLV 12	-7	-136	2729	4.46	-6.32	0.04
29	SLV 13	-3	624	-263	-21.86	-7.63	-0.01
29	SLV 14	-3	624	-263	-21.86	-7.63	-0.01
29	SLV 15	-7	344	615	-11.99	-9.41	0
29	SLV 16	-7	344	615	-11.99	-9.41	0
30	SLU 1	10	-25	1517	0.36	6.64	0
30	SLU 2	8	-59	1515	1.62	4.96	0
30	SLU 3	10	-25	1517	0.36	6.64	0
30	SLU 4	9	-45	1516	1.12	5.63	0
30	SLU 5	8	-59	1515	1.62	4.96	0
30	SLU 6	10	-25	1517	0.36	6.64	0
30	SLU 7	9	-45	1516	1.12	5.63	0
30	SLU 8	10	-25	1517	0.36	6.64	0
30	SLU 9	9	-45	1516	1.12	5.63	0
30	SLU 10	10	-81	1683	2.36	6.58	0
30	SLU 11	12	-47	1684	1.09	8.26	0
30	SLU 12	11	-68	1684	1.85	7.25	0
30	SLU 13	10	-81	1683	2.36	6.58	0
30	SLU 14	12	-47	1684	1.09	8.26	0
30	SLU 15	11	-68	1684	1.85	7.25	0
30	SLU 16	12	-47	1684	1.09	8.26	0
30	SLU 17	11	-68	1684	1.85	7.25	0
30	SLU 18	13	-57	1756	1.41	8.95	0
30	SLU 19	12	-77	1756	2.17	7.94	0
30	SLU 20	13	-57	1756	1.41	8.95	0
30	SLU 21	12	-77	1756	2.17	7.94	0
30	SLU 22	11	-36	1617	0.73	7.51	0
30	SLU 23	9	-70	1616	2	5.83	0
30	SLU 24	11	-36	1617	0.73	7.51	0
30	SLU 25	10	-57	1616	1.49	6.51	0
30	SLU 26	9	-70	1616	2	5.83	0
30	SLU 27	11	-36	1617	0.73	7.51	0
30	SLU 28	10	-57	1616	1.49	6.51	0
30	SLU 29	11	-36	1617	0.73	7.51	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
30	SLU 30	10	-57	1616	1.49	6.51	0
30	SLU 31	12	-93	1784	2.74	7.45	0
30	SLU 32	13	-59	1785	1.47	9.13	0
30	SLU 33	12	-79	1784	2.23	8.13	0
30	SLU 34	12	-93	1784	2.74	7.45	0
30	SLU 35	13	-59	1785	1.47	9.13	0
30	SLU 36	12	-79	1784	2.23	8.13	0
30	SLU 37	13	-59	1785	1.47	9.13	0
30	SLU 38	12	-79	1784	2.23	8.13	0
30	SLU 39	14	-69	1857	1.78	9.83	0
30	SLU 40	13	-89	1856	2.54	8.82	0
30	SLU 41	14	-69	1857	1.78	9.83	0
30	SLU 42	13	-89	1856	2.54	8.82	0
30	SLU 43	12	-28	1937	0.33	8.33	0
30	SLU 44	11	-62	1936	1.6	6.65	0
30	SLU 45	12	-28	1937	0.33	8.33	0
30	SLU 46	11	-48	1937	1.09	7.32	0
30	SLU 47	11	-62	1936	1.6	6.65	0
30	SLU 48	12	-28	1937	0.33	8.33	0
30	SLU 49	11	-48	1937	1.09	7.32	0
30	SLU 50	12	-28	1937	0.33	8.33	0
30	SLU 51	11	-48	1937	1.09	7.32	0
30	SLU 52	13	-85	2104	2.34	8.27	0
30	SLU 53	14	-51	2105	1.07	9.95	0
30	SLU 54	13	-71	2104	1.83	8.94	0
30	SLU 55	13	-85	2104	2.34	8.27	0
30	SLU 56	14	-51	2105	1.07	9.95	0
30	SLU 57	13	-71	2104	1.83	8.94	0
30	SLU 58	14	-51	2105	1.07	9.95	0
30	SLU 59	13	-71	2104	1.83	8.94	0
30	SLU 60	15	-60	2177	1.38	10.64	0
30	SLU 61	14	-81	2176	2.14	9.64	0
30	SLU 62	15	-60	2177	1.38	10.64	0
30	SLU 63	14	-81	2176	2.14	9.64	0
30	SLU 64	13	-40	2038	0.71	9.2	0
30	SLU 65	12	-74	2036	1.98	7.53	0
30	SLU 66	13	-40	2038	0.71	9.2	0
30	SLU 67	12	-60	2037	1.47	8.2	0
30	SLU 68	12	-74	2036	1.98	7.53	0
30	SLU 69	13	-40	2038	0.71	9.2	0
30	SLU 70	12	-60	2037	1.47	8.2	0
30	SLU 71	13	-40	2038	0.71	9.2	0
30	SLU 72	12	-60	2037	1.47	8.2	0
30	SLU 73	14	-96	2204	2.71	9.14	0
30	SLU 74	16	-62	2205	1.45	10.82	0
30	SLU 75	15	-83	2205	2.21	9.82	0
30	SLU 76	14	-96	2204	2.71	9.14	0
30	SLU 77	16	-62	2205	1.45	10.82	0
30	SLU 78	15	-83	2205	2.21	9.82	0
30	SLU 79	16	-62	2205	1.45	10.82	0
30	SLU 80	15	-83	2205	2.21	9.82	0
30	SLU 81	17	-72	2277	1.76	11.52	0
30	SLU 82	16	-92	2277	2.52	10.51	0
30	SLU 83	17	-72	2277	1.76	11.52	0
30	SLU 84	16	-92	2277	2.52	10.51	0
30	SLE RA 1	10	-28	1545	0.46	6.89	0
30	SLE RA 2	9	-51	1545	1.31	5.77	0
30	SLE RA 3	10	-28	1545	0.46	6.89	0
30	SLE RA 4	9	-42	1545	0.97	6.22	0
30	SLE RA 5	9	-51	1545	1.31	5.77	0
30	SLE RA 6	10	-28	1545	0.46	6.89	0
30	SLE RA 7	9	-42	1545	0.97	6.22	0
30	SLE RA 8	10	-28	1545	0.46	6.89	0
30	SLE RA 9	9	-42	1545	0.97	6.22	0
30	SLE RA 10	11	-66	1656	1.8	6.85	0
30	SLE RA 11	11	-43	1657	0.95	7.97	0
30	SLE RA 12	11	-57	1657	1.46	7.3	0
30	SLE RA 13	11	-66	1656	1.8	6.85	0
30	SLE RA 14	11	-43	1657	0.95	7.97	0
30	SLE RA 15	11	-57	1657	1.46	7.3	0
30	SLE RA 16	11	-43	1657	0.95	7.97	0
30	SLE RA 17	11	-57	1657	1.46	7.3	0
30	SLE RA 18	12	-50	1705	1.16	8.43	0
30	SLE RA 19	12	-63	1705	1.67	7.76	0
30	SLE RA 20	12	-50	1705	1.16	8.43	0
30	SLE RA 21	12	-63	1705	1.67	7.76	0
30	SLE FR 1	10	-28	1545	0.46	6.89	0
30	SLE FR 2	10	-33	1545	0.63	6.66	0
30	SLE FR 3	10	-28	1545	0.46	6.89	0
30	SLE FR 4	10	-39	1593	0.84	7.13	0
30	SLE FR 5	11	-35	1593	0.67	7.35	0
30	SLE FR 6	11	-39	1625	0.81	7.66	0
30	SLE QP 1	10	-28	1545	0.46	6.89	0
30	SLE QP 2	11	-35	1593	0.67	7.35	0
30	SLD 1	29	53	1396	-2.78	24.23	-0.01
30	SLD 2	29	53	1396	-2.78	24.23	-0.01
30	SLD 3	21	-48	1480	1.24	16.89	-0.01
30	SLD 4	21	-48	1480	1.24	16.89	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
30	SLD 5	28	145	1407	-6.46	23.56	0.01
30	SLD 6	28	145	1407	-6.46	23.56	0.01
30	SLD 7	1	-192	1686	6.94	-0.93	-0.01
30	SLD 8	1	-192	1686	6.94	-0.93	-0.01
30	SLD 9	20	123	1500	-5.59	15.63	0.01
30	SLD 10	20	123	1500	-5.59	15.63	0.01
30	SLD 11	-7	-214	1779	7.81	-8.86	0
30	SLD 12	-7	-214	1779	7.81	-8.86	0
30	SLD 13	1	-21	1707	0.1	-2.19	0.02
30	SLD 14	1	-21	1707	0.1	-2.19	0.02
30	SLD 15	-7	-122	1790	4.12	-9.53	0.01
30	SLD 16	-7	-122	1790	4.12	-9.53	0.01
30	SLV 1	53	173	1123	-7.56	47.82	-0.02
30	SLV 2	53	173	1123	-7.56	47.82	-0.02
30	SLV 3	33	-68	1332	2.08	29.25	-0.03
30	SLV 4	33	-68	1332	2.08	29.25	-0.03
30	SLV 5	54	394	1135	-16.41	47.65	0.01
30	SLV 6	54	394	1135	-16.41	47.65	0.01
30	SLV 7	-13	-411	1832	15.71	-14.23	-0.03
30	SLV 8	-13	-411	1832	15.71	-14.23	-0.03
30	SLV 9	35	342	1354	-14.36	28.94	0.03
30	SLV 10	35	342	1354	-14.36	28.94	0.03
30	SLV 11	-33	-463	2052	17.76	-32.95	-0.01
30	SLV 12	-33	-463	2052	17.76	-32.95	-0.01
30	SLV 13	-12	-1	1854	-0.73	-14.55	0.04
30	SLV 14	-12	-1	1854	-0.73	-14.55	0.04
30	SLV 15	-32	-242	2063	8.91	-33.12	0.03
30	SLV 16	-32	-242	2063	8.91	-33.12	0.03
31	SLU 1	-6	177	1693	-6.92	-4.38	-0.01
31	SLU 2	-6	151	1574	-5.59	-3.76	-0.01
31	SLU 3	-6	177	1693	-6.92	-4.38	-0.01
31	SLU 4	-6	162	1622	-6.12	-4.01	-0.01
31	SLU 5	-6	151	1574	-5.59	-3.76	-0.01
31	SLU 6	-6	177	1693	-6.92	-4.38	-0.01
31	SLU 7	-6	162	1622	-6.12	-4.01	-0.01
31	SLU 8	-6	177	1693	-6.92	-4.38	-0.01
31	SLU 9	-6	162	1622	-6.12	-4.01	-0.01
31	SLU 10	-7	172	1647	-6.24	-4.56	-0.01
31	SLU 11	-7	199	1765	-7.58	-5.18	-0.01
31	SLU 12	-7	183	1694	-6.77	-4.81	-0.01
31	SLU 13	-7	172	1647	-6.24	-4.56	-0.01
31	SLU 14	-7	199	1765	-7.58	-5.18	-0.01
31	SLU 15	-7	183	1694	-6.77	-4.81	-0.01
31	SLU 16	-7	199	1765	-7.58	-5.18	-0.01
31	SLU 17	-7	183	1694	-6.77	-4.81	-0.01
31	SLU 18	-8	208	1796	-7.86	-5.53	-0.01
31	SLU 19	-8	192	1725	-7.06	-5.15	-0.01
31	SLU 20	-8	208	1796	-7.86	-5.53	-0.01
31	SLU 21	-8	192	1725	-7.06	-5.15	-0.01
31	SLU 22	-7	192	1771	-7.41	-4.87	-0.01
31	SLU 23	-7	165	1652	-6.07	-4.24	-0.01
31	SLU 24	-7	192	1771	-7.41	-4.87	-0.01
31	SLU 25	-7	176	1700	-6.61	-4.49	-0.01
31	SLU 26	-7	165	1652	-6.07	-4.24	-0.01
31	SLU 27	-7	192	1771	-7.41	-4.87	-0.01
31	SLU 28	-7	176	1700	-6.61	-4.49	-0.01
31	SLU 29	-7	192	1771	-7.41	-4.87	-0.01
31	SLU 30	-7	176	1700	-6.61	-4.49	-0.01
31	SLU 31	-8	187	1724	-6.72	-5.04	-0.01
31	SLU 32	-8	213	1843	-8.06	-5.67	-0.01
31	SLU 33	-8	197	1772	-7.26	-5.29	-0.01
31	SLU 34	-8	187	1724	-6.72	-5.04	-0.01
31	SLU 35	-8	213	1843	-8.06	-5.67	-0.01
31	SLU 36	-8	197	1772	-7.26	-5.29	-0.01
31	SLU 37	-8	213	1843	-8.06	-5.67	-0.01
31	SLU 38	-8	197	1772	-7.26	-5.29	-0.01
31	SLU 39	-9	222	1874	-8.34	-6.01	-0.01
31	SLU 40	-8	206	1803	-7.54	-5.64	-0.01
31	SLU 41	-9	222	1874	-8.34	-6.01	-0.01
31	SLU 42	-8	206	1803	-7.54	-5.64	-0.01
31	SLU 43	-8	226	2174	-8.83	-5.53	-0.01
31	SLU 44	-8	199	2056	-7.5	-4.91	-0.01
31	SLU 45	-8	226	2174	-8.83	-5.53	-0.01
31	SLU 46	-8	210	2103	-8.03	-5.16	-0.01
31	SLU 47	-8	199	2056	-7.5	-4.91	-0.01
31	SLU 48	-8	226	2174	-8.83	-5.53	-0.01
31	SLU 49	-8	210	2103	-8.03	-5.16	-0.01
31	SLU 50	-8	226	2174	-8.83	-5.53	-0.01
31	SLU 51	-8	210	2103	-8.03	-5.16	-0.01
31	SLU 52	-9	221	2128	-8.15	-5.71	-0.01
31	SLU 53	-9	247	2246	-9.49	-6.33	-0.01
31	SLU 54	-9	231	2175	-8.69	-5.96	-0.01
31	SLU 55	-9	221	2128	-8.15	-5.71	-0.01
31	SLU 56	-9	247	2246	-9.49	-6.33	-0.01
31	SLU 57	-9	231	2175	-8.69	-5.96	-0.01
31	SLU 58	-9	247	2246	-9.49	-6.33	-0.01
31	SLU 59	-9	231	2175	-8.69	-5.96	-0.01
31	SLU 60	-10	256	2277	-9.77	-6.68	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
31	SLU 61	-9	240	2206	-8.97	-6.3	-0.01
31	SLU 62	-10	256	2277	-9.77	-6.68	-0.01
31	SLU 63	-9	240	2206	-8.97	-6.3	-0.01
31	SLU 64	-9	240	2252	-9.32	-6.02	-0.01
31	SLU 65	-8	214	2134	-7.98	-5.39	-0.01
31	SLU 66	-9	240	2252	-9.32	-6.02	-0.01
31	SLU 67	-8	224	2181	-8.52	-5.64	-0.01
31	SLU 68	-8	214	2134	-7.98	-5.39	-0.01
31	SLU 69	-9	240	2252	-9.32	-6.02	-0.01
31	SLU 70	-8	224	2181	-8.52	-5.64	-0.01
31	SLU 71	-9	240	2252	-9.32	-6.02	-0.01
31	SLU 72	-8	224	2181	-8.52	-5.64	-0.01
31	SLU 73	-9	235	2206	-8.64	-6.19	-0.01
31	SLU 74	-10	261	2324	-9.97	-6.82	-0.01
31	SLU 75	-9	245	2253	-9.17	-6.44	-0.01
31	SLU 76	-9	235	2206	-8.64	-6.19	-0.01
31	SLU 77	-10	261	2324	-9.97	-6.82	-0.01
31	SLU 78	-9	245	2253	-9.17	-6.44	-0.01
31	SLU 79	-10	261	2324	-9.97	-6.82	-0.01
31	SLU 80	-9	245	2253	-9.17	-6.44	-0.01
31	SLU 81	-10	270	2355	-10.25	-7.16	-0.01
31	SLU 82	-10	255	2284	-9.45	-6.79	-0.01
31	SLU 83	-10	270	2355	-10.25	-7.16	-0.01
31	SLU 84	-10	255	2284	-9.45	-6.79	-0.01
31	SLE RA 1	-7	181	1715	-7.06	-4.52	-0.01
31	SLE RA 2	-6	164	1636	-6.17	-4.11	-0.01
31	SLE RA 3	-7	181	1715	-7.06	-4.52	-0.01
31	SLE RA 4	-6	171	1668	-6.53	-4.27	-0.01
31	SLE RA 5	-6	164	1636	-6.17	-4.11	-0.01
31	SLE RA 6	-7	181	1715	-7.06	-4.52	-0.01
31	SLE RA 7	-6	171	1668	-6.53	-4.27	-0.01
31	SLE RA 8	-7	181	1715	-7.06	-4.52	-0.01
31	SLE RA 9	-6	171	1668	-6.53	-4.27	-0.01
31	SLE RA 10	-7	178	1684	-6.61	-4.64	-0.01
31	SLE RA 11	-7	196	1763	-7.5	-5.06	-0.01
31	SLE RA 12	-7	185	1716	-6.96	-4.81	-0.01
31	SLE RA 13	-7	178	1684	-6.61	-4.64	-0.01
31	SLE RA 14	-7	196	1763	-7.5	-5.06	-0.01
31	SLE RA 15	-7	185	1716	-6.96	-4.81	-0.01
31	SLE RA 16	-7	196	1763	-7.5	-5.06	-0.01
31	SLE RA 17	-7	185	1716	-6.96	-4.81	-0.01
31	SLE RA 18	-8	202	1784	-7.68	-5.28	-0.01
31	SLE RA 19	-7	191	1737	-7.15	-5.03	-0.01
31	SLE RA 20	-8	202	1784	-7.68	-5.28	-0.01
31	SLE RA 21	-7	191	1737	-7.15	-5.03	-0.01
31	SLE FR 1	-7	181	1715	-7.06	-4.52	-0.01
31	SLE FR 2	-6	178	1700	-6.88	-4.44	-0.01
31	SLE FR 3	-7	181	1715	-7.06	-4.52	-0.01
31	SLE FR 4	-7	184	1720	-7.07	-4.67	-0.01
31	SLE FR 5	-7	188	1736	-7.25	-4.75	-0.01
31	SLE FR 6	-7	192	1750	-7.37	-4.9	-0.01
31	SLE QP 1	-7	181	1715	-7.06	-4.52	-0.01
31	SLE QP 2	-7	188	1736	-7.25	-4.75	-0.01
31	SLD 1	-11	166	2086	-11.99	-9.83	-0.01
31	SLD 2	-11	166	2086	-11.99	-9.83	-0.01
31	SLD 3	-14	55	2295	-7.8	-11.63	-0.02
31	SLD 4	-14	55	2295	-7.8	-11.63	-0.02
31	SLD 5	-3	349	1524	-15.03	-3.54	0
31	SLD 6	-3	349	1524	-15.03	-3.54	0
31	SLD 7	-14	-20	2221	-1.05	-9.55	-0.02
31	SLD 8	-14	-20	2221	-1.05	-9.55	-0.02
31	SLD 9	1	395	1251	-13.44	0.05	0.01
31	SLD 10	1	395	1251	-13.44	0.05	0.01
31	SLD 11	-11	26	1948	0.54	-5.97	-0.01
31	SLD 12	-11	26	1948	0.54	-5.97	-0.01
31	SLD 13	0	320	1177	-6.69	2.13	0.01
31	SLD 14	0	320	1177	-6.69	2.13	0.01
31	SLD 15	-3	209	1386	-2.5	0.33	0
31	SLD 16	-3	209	1386	-2.5	0.33	0
31	SLV 1	-15	137	2596	-18.41	-16.43	-0.03
31	SLV 2	-15	137	2596	-18.41	-16.43	-0.03
31	SLV 3	-24	-126	3165	-8.51	-21.11	-0.04
31	SLV 4	-24	-126	3165	-8.51	-21.11	-0.04
31	SLV 5	4	571	1131	-25.62	-1.17	0.01
31	SLV 6	4	571	1131	-25.62	-1.17	0.01
31	SLV 7	-26	-305	3028	7.39	-16.74	-0.04
31	SLV 8	-26	-305	3028	7.39	-16.74	-0.04
31	SLV 9	12	680	444	-21.89	7.24	0.03
31	SLV 10	12	680	444	-21.89	7.24	0.03
31	SLV 11	-18	-196	2341	11.12	-8.33	-0.02
31	SLV 12	-18	-196	2341	11.12	-8.33	-0.02
31	SLV 13	11	501	306	-5.99	11.6	0.03
31	SLV 14	11	501	306	-5.99	11.6	0.03
31	SLV 15	2	238	875	3.91	6.93	0.01
31	SLV 16	2	238	875	3.91	6.93	0.01
32	SLU 1	10	26	1370	-1.18	7.43	0
32	SLU 2	8	-13	1388	0.61	5.4	0
32	SLU 3	10	26	1370	-1.18	7.43	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
32	SLU 4	9	3	1381	-0.11	6.21	0
32	SLU 5	8	-13	1388	0.61	5.4	0
32	SLU 6	10	26	1370	-1.18	7.43	0
32	SLU 7	9	3	1381	-0.11	6.21	0
32	SLU 8	10	26	1370	-1.18	7.43	0
32	SLU 9	9	3	1381	-0.11	6.21	0
32	SLU 10	11	-18	1531	0.83	7.21	0
32	SLU 11	12	20	1512	-0.96	9.24	0
32	SLU 12	11	-3	1523	0.11	8.02	0
32	SLU 13	11	-18	1531	0.83	7.21	0
32	SLU 14	12	20	1512	-0.96	9.24	0
32	SLU 15	11	-3	1523	0.11	8.02	0
32	SLU 16	12	20	1512	-0.96	9.24	0
32	SLU 17	11	-3	1523	0.11	8.02	0
32	SLU 18	14	18	1573	-0.87	10.02	0
32	SLU 19	12	-5	1584	0.21	8.8	0
32	SLU 20	14	18	1573	-0.87	10.02	0
32	SLU 21	12	-5	1584	0.21	8.8	0
32	SLU 22	11	24	1454	-1.13	8.41	0
32	SLU 23	10	-14	1473	0.66	6.37	0
32	SLU 24	11	24	1454	-1.13	8.41	0
32	SLU 25	10	1	1466	-0.05	7.19	0
32	SLU 26	10	-14	1473	0.66	6.37	0
32	SLU 27	11	24	1454	-1.13	8.41	0
32	SLU 28	10	1	1466	-0.05	7.19	0
32	SLU 29	11	24	1454	-1.13	8.41	0
32	SLU 30	10	1	1466	-0.05	7.19	0
32	SLU 31	12	-20	1615	0.88	8.18	0
32	SLU 32	14	18	1597	-0.91	10.22	0
32	SLU 33	13	-5	1608	0.17	9	0
32	SLU 34	12	-20	1615	0.88	8.18	0
32	SLU 35	14	18	1597	-0.91	10.22	0
32	SLU 36	13	-5	1608	0.17	9	0
32	SLU 37	14	18	1597	-0.91	10.22	0
32	SLU 38	13	-5	1608	0.17	9	0
32	SLU 39	15	16	1658	-0.81	11	0
32	SLU 40	14	-7	1669	0.26	9.78	0
32	SLU 41	15	16	1658	-0.81	11	0
32	SLU 42	14	-7	1669	0.26	9.78	0
32	SLU 43	13	34	1751	-1.55	9.33	0
32	SLU 44	11	-5	1770	0.23	7.29	0
32	SLU 45	13	34	1751	-1.55	9.33	0
32	SLU 46	12	11	1763	-0.48	8.11	0
32	SLU 47	11	-5	1770	0.23	7.29	0
32	SLU 48	13	34	1751	-1.55	9.33	0
32	SLU 49	12	11	1763	-0.48	8.11	0
32	SLU 50	13	34	1751	-1.55	9.33	0
32	SLU 51	12	11	1763	-0.48	8.11	0
32	SLU 52	13	-10	1912	0.45	9.11	0
32	SLU 53	15	28	1894	-1.33	11.14	0
32	SLU 54	14	5	1905	-0.26	9.92	0
32	SLU 55	13	-10	1912	0.45	9.11	0
32	SLU 56	15	28	1894	-1.33	11.14	0
32	SLU 57	14	5	1905	-0.26	9.92	0
32	SLU 58	15	28	1894	-1.33	11.14	0
32	SLU 59	14	5	1905	-0.26	9.92	0
32	SLU 60	16	26	1955	-1.24	11.92	0
32	SLU 61	15	3	1966	-0.17	10.7	0
32	SLU 62	16	26	1955	-1.24	11.92	0
32	SLU 63	15	3	1966	-0.17	10.7	0
32	SLU 64	14	32	1836	-1.5	10.3	0
32	SLU 65	12	-6	1855	0.29	8.27	0
32	SLU 66	14	32	1836	-1.5	10.3	0
32	SLU 67	13	9	1847	-0.43	9.08	0
32	SLU 68	12	-6	1855	0.29	8.27	0
32	SLU 69	14	32	1836	-1.5	10.3	0
32	SLU 70	13	9	1847	-0.43	9.08	0
32	SLU 71	14	32	1836	-1.5	10.3	0
32	SLU 72	13	9	1847	-0.43	9.08	0
32	SLU 73	15	-12	1997	0.51	10.08	0
32	SLU 74	16	27	1979	-1.28	12.11	0
32	SLU 75	15	4	1990	-0.21	10.89	0
32	SLU 76	15	-12	1997	0.51	10.08	0
32	SLU 77	16	27	1979	-1.28	12.11	0
32	SLU 78	15	4	1990	-0.21	10.89	0
32	SLU 79	16	27	1979	-1.28	12.11	0
32	SLU 80	15	4	1990	-0.21	10.89	0
32	SLU 81	17	24	2040	-1.19	12.89	0
32	SLU 82	16	1	2051	-0.11	11.67	0
32	SLU 83	17	24	2040	-1.19	12.89	0
32	SLU 84	16	1	2051	-0.11	11.67	0
32	SLE RA 1	10	25	1394	-1.17	7.71	0
32	SLE RA 2	9	0	1406	0.03	6.35	0
32	SLE RA 3	10	25	1394	-1.17	7.71	0
32	SLE RA 4	10	10	1401	-0.45	6.9	0
32	SLE RA 5	9	0	1406	0.03	6.35	0
32	SLE RA 6	10	25	1394	-1.17	7.71	0
32	SLE RA 7	10	10	1401	-0.45	6.9	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
32	SLE RA 8	10	25	1394	-1.17	7.71	0
32	SLE RA 9	10	10	1401	-0.45	6.9	0
32	SLE RA 10	11	-4	1501	0.17	7.56	0
32	SLE RA 11	12	21	1489	-1.02	8.92	0
32	SLE RA 12	11	6	1496	-0.3	8.1	0
32	SLE RA 13	11	-4	1501	0.17	7.56	0
32	SLE RA 14	12	21	1489	-1.02	8.92	0
32	SLE RA 15	11	6	1496	-0.3	8.1	0
32	SLE RA 16	12	21	1489	-1.02	8.92	0
32	SLE RA 17	11	6	1496	-0.3	8.1	0
32	SLE RA 18	13	20	1529	-0.96	9.44	0
32	SLE RA 19	12	5	1537	-0.24	8.62	0
32	SLE RA 20	13	20	1529	-0.96	9.44	0
32	SLE RA 21	12	5	1537	-0.24	8.62	0
32	SLE FR 1	10	25	1394	-1.17	7.71	0
32	SLE FR 2	10	20	1396	-0.93	7.44	0
32	SLE FR 3	10	25	1394	-1.17	7.71	0
32	SLE FR 4	11	18	1437	-0.86	7.96	0
32	SLE FR 5	11	24	1435	-1.1	8.23	0
32	SLE FR 6	12	22	1462	-1.06	8.57	0
32	SLE QP 1	10	25	1394	-1.17	7.71	0
32	SLE QP 2	11	24	1435	-1.1	8.23	0
32	SLD 1	31	121	1254	-4.97	26.57	-0.01
32	SLD 2	31	121	1254	-4.97	26.57	-0.01
32	SLD 3	24	4	1336	-0.27	19.55	-0.01
32	SLD 4	24	4	1336	-0.27	19.55	-0.01
32	SLD 5	27	229	1257	-9.39	24.38	0
32	SLD 6	27	229	1257	-9.39	24.38	0
32	SLD 7	5	-159	1528	6.27	0.98	-0.01
32	SLD 8	5	-159	1528	6.27	0.98	-0.01
32	SLD 9	18	206	1341	-8.48	15.48	0.01
32	SLD 10	18	206	1341	-8.48	15.48	0.01
32	SLD 11	-5	-182	1612	7.18	-7.92	0
32	SLD 12	-5	-182	1612	7.18	-7.92	0
32	SLD 13	-1	43	1533	-1.94	-3.09	0.01
32	SLD 14	-1	43	1533	-1.94	-3.09	0.01
32	SLD 15	-8	-74	1615	2.76	-10.11	0.01
32	SLD 16	-8	-74	1615	2.76	-10.11	0.01
32	SLV 1	57	254	1005	-10.28	52.04	-0.02
32	SLV 2	57	254	1005	-10.28	52.04	-0.02
32	SLV 3	40	-24	1208	0.91	34.37	-0.03
32	SLV 4	40	-24	1208	0.91	34.37	-0.03
32	SLV 5	51	515	997	-20.82	48.17	0
32	SLV 6	51	515	997	-20.82	48.17	0
32	SLV 7	-6	-413	1675	16.47	-10.72	-0.02
32	SLV 8	-6	-413	1675	16.47	-10.72	-0.02
32	SLV 9	28	460	1194	-18.68	27.18	0.02
32	SLV 10	28	460	1194	-18.68	27.18	0.02
32	SLV 11	-29	-468	1872	18.62	-31.71	-0.01
32	SLV 12	-29	-468	1872	18.62	-31.71	-0.01
32	SLV 13	-18	71	1661	-3.12	-17.92	0.03
32	SLV 14	-18	71	1661	-3.12	-17.92	0.03
32	SLV 15	-35	-207	1864	8.07	-35.58	0.02
32	SLV 16	-35	-207	1864	8.07	-35.58	0.02
33	SLU 1	-11	118	1704	-4.29	-6.84	0
33	SLU 2	-10	104	1625	-3.79	-5.74	0
33	SLU 3	-11	118	1704	-4.29	-6.84	0
33	SLU 4	-10	109	1657	-3.99	-6.18	0
33	SLU 5	-10	104	1625	-3.79	-5.74	0
33	SLU 6	-11	118	1704	-4.29	-6.84	0
33	SLU 7	-10	109	1657	-3.99	-6.18	0
33	SLU 8	-11	118	1704	-4.29	-6.84	0
33	SLU 9	-10	109	1657	-3.99	-6.18	0
33	SLU 10	-11	126	1721	-4.62	-6.84	-0.01
33	SLU 11	-12	140	1800	-5.12	-7.94	0
33	SLU 12	-12	132	1752	-4.82	-7.28	0
33	SLU 13	-11	126	1721	-4.62	-6.84	-0.01
33	SLU 14	-12	140	1800	-5.12	-7.94	0
33	SLU 15	-12	132	1752	-4.82	-7.28	0
33	SLU 16	-12	140	1800	-5.12	-7.94	0
33	SLU 17	-12	132	1752	-4.82	-7.28	0
33	SLU 18	-13	149	1841	-5.48	-8.42	0
33	SLU 19	-12	141	1793	-5.18	-7.76	-0.01
33	SLU 20	-13	149	1841	-5.48	-8.42	0
33	SLU 21	-12	141	1793	-5.18	-7.76	-0.01
33	SLU 22	-12	131	1791	-4.79	-7.53	0
33	SLU 23	-11	117	1712	-4.28	-6.43	-0.01
33	SLU 24	-12	131	1791	-4.79	-7.53	0
33	SLU 25	-11	123	1744	-4.48	-6.87	0
33	SLU 26	-11	117	1712	-4.28	-6.43	-0.01
33	SLU 27	-12	131	1791	-4.79	-7.53	0
33	SLU 28	-11	123	1744	-4.48	-6.87	0
33	SLU 29	-12	131	1791	-4.79	-7.53	0
33	SLU 30	-11	123	1744	-4.48	-6.87	0
33	SLU 31	-12	139	1808	-5.11	-7.53	-0.01
33	SLU 32	-13	153	1887	-5.61	-8.63	0
33	SLU 33	-13	145	1840	-5.31	-7.97	-0.01
33	SLU 34	-12	139	1808	-5.11	-7.53	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
33	SLU 35	-13	153	1887	-5.61	-8.63	0
33	SLU 36	-13	145	1840	-5.31	-7.97	-0.01
33	SLU 37	-13	153	1887	-5.61	-8.63	0
33	SLU 38	-13	145	1840	-5.31	-7.97	-0.01
33	SLU 39	-14	163	1928	-5.97	-9.11	-0.01
33	SLU 40	-13	154	1881	-5.67	-8.45	-0.01
33	SLU 41	-14	163	1928	-5.97	-9.11	-0.01
33	SLU 42	-13	154	1881	-5.67	-8.45	-0.01
33	SLU 43	-14	149	2185	-5.41	-8.65	0
33	SLU 44	-12	135	2106	-4.91	-7.55	-0.01
33	SLU 45	-14	149	2185	-5.41	-8.65	0
33	SLU 46	-13	140	2138	-5.11	-7.99	-0.01
33	SLU 47	-12	135	2106	-4.91	-7.55	-0.01
33	SLU 48	-14	149	2185	-5.41	-8.65	0
33	SLU 49	-13	140	2138	-5.11	-7.99	-0.01
33	SLU 50	-14	149	2185	-5.41	-8.65	0
33	SLU 51	-13	140	2138	-5.11	-7.99	-0.01
33	SLU 52	-14	157	2202	-5.74	-8.66	-0.01
33	SLU 53	-15	171	2281	-6.24	-9.76	-0.01
33	SLU 54	-14	162	2234	-5.94	-9.1	-0.01
33	SLU 55	-14	157	2202	-5.74	-8.66	-0.01
33	SLU 56	-15	171	2281	-6.24	-9.76	-0.01
33	SLU 57	-14	162	2234	-5.94	-9.1	-0.01
33	SLU 58	-15	171	2281	-6.24	-9.76	-0.01
33	SLU 59	-14	162	2234	-5.94	-9.1	-0.01
33	SLU 60	-16	180	2322	-6.6	-10.23	-0.01
33	SLU 61	-15	172	2275	-6.3	-9.57	-0.01
33	SLU 62	-16	180	2322	-6.6	-10.23	-0.01
33	SLU 63	-15	172	2275	-6.3	-9.57	-0.01
33	SLU 64	-15	162	2272	-5.91	-9.34	-0.01
33	SLU 65	-13	148	2194	-5.4	-8.24	-0.01
33	SLU 66	-15	162	2272	-5.91	-9.34	-0.01
33	SLU 67	-14	153	2225	-5.6	-8.68	-0.01
33	SLU 68	-13	148	2194	-5.4	-8.24	-0.01
33	SLU 69	-15	162	2272	-5.91	-9.34	-0.01
33	SLU 70	-14	153	2225	-5.6	-8.68	-0.01
33	SLU 71	-15	162	2272	-5.91	-9.34	-0.01
33	SLU 72	-14	153	2225	-5.6	-8.68	-0.01
33	SLU 73	-15	170	2289	-6.23	-9.35	-0.01
33	SLU 74	-16	184	2368	-6.73	-10.45	-0.01
33	SLU 75	-16	176	2321	-6.43	-9.79	-0.01
33	SLU 76	-15	170	2289	-6.23	-9.35	-0.01
33	SLU 77	-16	184	2368	-6.73	-10.45	-0.01
33	SLU 78	-16	176	2321	-6.43	-9.79	-0.01
33	SLU 79	-16	184	2368	-6.73	-10.45	-0.01
33	SLU 80	-16	176	2321	-6.43	-9.79	-0.01
33	SLU 81	-17	193	2409	-7.09	-10.92	-0.01
33	SLU 82	-16	185	2362	-6.79	-10.26	-0.01
33	SLU 83	-17	193	2409	-7.09	-10.92	-0.01
33	SLU 84	-16	185	2362	-6.79	-10.26	-0.01
33	SLE RA 1	-11	122	1729	-4.44	-7.04	0
33	SLE RA 2	-10	112	1676	-4.1	-6.3	0
33	SLE RA 3	-11	122	1729	-4.44	-7.04	0
33	SLE RA 4	-11	116	1697	-4.23	-6.59	0
33	SLE RA 5	-10	112	1676	-4.1	-6.3	0
33	SLE RA 6	-11	122	1729	-4.44	-7.04	0
33	SLE RA 7	-11	116	1697	-4.23	-6.59	0
33	SLE RA 8	-11	122	1729	-4.44	-7.04	0
33	SLE RA 9	-11	116	1697	-4.23	-6.59	0
33	SLE RA 10	-11	127	1740	-4.65	-7.04	0
33	SLE RA 11	-12	136	1793	-4.99	-7.77	0
33	SLE RA 12	-12	131	1761	-4.79	-7.33	0
33	SLE RA 13	-11	127	1740	-4.65	-7.04	0
33	SLE RA 14	-12	136	1793	-4.99	-7.77	0
33	SLE RA 15	-12	131	1761	-4.79	-7.33	0
33	SLE RA 16	-12	136	1793	-4.99	-7.77	0
33	SLE RA 17	-12	131	1761	-4.79	-7.33	0
33	SLE RA 18	-13	143	1820	-5.22	-8.09	0
33	SLE RA 19	-12	137	1789	-5.02	-7.65	0
33	SLE RA 20	-13	143	1820	-5.22	-8.09	0
33	SLE RA 21	-12	137	1789	-5.02	-7.65	0
33	SLE FR 1	-11	122	1729	-4.44	-7.04	0
33	SLE FR 2	-11	120	1718	-4.37	-6.89	0
33	SLE FR 3	-11	122	1729	-4.44	-7.04	0
33	SLE FR 4	-11	126	1746	-4.61	-7.2	0
33	SLE FR 5	-11	128	1756	-4.67	-7.35	0
33	SLE FR 6	-12	132	1774	-4.83	-7.56	0
33	SLE QP 1	-11	122	1729	-4.44	-7.04	0
33	SLE QP 2	-11	128	1756	-4.67	-7.35	0
33	SLD 1	-20	101	2057	-3.32	-15.1	-0.01
33	SLD 2	-20	101	2057	-3.32	-15.1	-0.01
33	SLD 3	-24	-6	2208	0.83	-17.51	-0.01
33	SLD 4	-24	-6	2208	0.83	-17.51	-0.01
33	SLD 5	-9	283	1617	-10.55	-6.01	0
33	SLD 6	-9	283	1617	-10.55	-6.01	0
33	SLD 7	-21	-76	2122	3.26	-14.06	-0.01
33	SLD 8	-21	-76	2122	3.26	-14.06	-0.01
33	SLD 9	-2	332	1391	-12.61	-0.64	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
33	SLD 10	-2	332	1391	-12.61	-0.64	0
33	SLD 11	-14	-28	1896	1.21	-8.69	-0.01
33	SLD 12	-14	-28	1896	1.21	-8.69	-0.01
33	SLD 13	1	262	1304	-10.17	2.81	0
33	SLD 14	1	262	1304	-10.17	2.81	0
33	SLD 15	-3	154	1456	-6.03	0.4	0
33	SLD 16	-3	154	1456	-6.03	0.4	0
33	SLV 1	-32	61	2497	-1.08	-25.2	-0.01
33	SLV 2	-32	61	2497	-1.08	-25.2	-0.01
33	SLV 3	-41	-196	2915	8.83	-31.47	-0.02
33	SLV 4	-41	-196	2915	8.83	-31.47	-0.02
33	SLV 5	-3	497	1345	-18.62	-3.21	0.01
33	SLV 6	-3	497	1345	-18.62	-3.21	0.01
33	SLV 7	-35	-358	2738	14.4	-24.09	-0.02
33	SLV 8	-35	-358	2738	14.4	-24.09	-0.02
33	SLV 9	12	614	775	-23.75	9.38	0.01
33	SLV 10	12	614	775	-23.75	9.38	0.01
33	SLV 11	-20	-241	2168	9.27	-11.5	-0.02
33	SLV 12	-20	-241	2168	9.27	-11.5	-0.02
33	SLV 13	18	451	597	-18.17	16.77	0.01
33	SLV 14	18	451	597	-18.17	16.77	0.01
33	SLV 15	9	195	1015	-8.27	10.5	0
33	SLV 16	9	195	1015	-8.27	10.5	0
34	SLU 1	10	115	1336	-4.62	7.74	0
34	SLU 2	8	86	1362	-3.59	5.43	0
34	SLU 3	10	115	1336	-4.62	7.74	0
34	SLU 4	9	98	1352	-4	6.36	0
34	SLU 5	8	86	1362	-3.59	5.43	0
34	SLU 6	10	115	1336	-4.62	7.74	0
34	SLU 7	9	98	1352	-4	6.36	0
34	SLU 8	10	115	1336	-4.62	7.74	0
34	SLU 9	9	98	1352	-4	6.36	0
34	SLU 10	11	104	1503	-4.33	7.3	0
34	SLU 11	13	134	1477	-5.36	9.61	0
34	SLU 12	11	116	1493	-4.74	8.23	0
34	SLU 13	11	104	1503	-4.33	7.3	0
34	SLU 14	13	134	1477	-5.36	9.61	0
34	SLU 15	11	116	1493	-4.74	8.23	0
34	SLU 16	13	134	1477	-5.36	9.61	0
34	SLU 17	11	116	1493	-4.74	8.23	0
34	SLU 18	14	141	1537	-5.67	10.41	0
34	SLU 19	12	124	1553	-5.05	9.03	0
34	SLU 20	14	141	1537	-5.67	10.41	0
34	SLU 21	12	124	1553	-5.05	9.03	0
34	SLU 22	12	127	1419	-5.07	8.74	0
34	SLU 23	9	97	1445	-4.04	6.43	0
34	SLU 24	12	127	1419	-5.07	8.74	0
34	SLU 25	10	109	1435	-4.45	7.36	0
34	SLU 26	9	97	1445	-4.04	6.43	0
34	SLU 27	12	127	1419	-5.07	8.74	0
34	SLU 28	10	109	1435	-4.45	7.36	0
34	SLU 29	12	127	1419	-5.07	8.74	0
34	SLU 30	10	109	1435	-4.45	7.36	0
34	SLU 31	12	115	1586	-4.78	8.3	0
34	SLU 32	14	145	1560	-5.8	10.61	0
34	SLU 33	13	127	1576	-5.19	9.23	0
34	SLU 34	12	115	1586	-4.78	8.3	0
34	SLU 35	14	145	1560	-5.8	10.61	0
34	SLU 36	13	127	1576	-5.19	9.23	0
34	SLU 37	14	145	1560	-5.8	10.61	0
34	SLU 38	13	127	1576	-5.19	9.23	0
34	SLU 39	15	153	1620	-6.12	11.42	0
34	SLU 40	14	135	1636	-5.5	10.03	0
34	SLU 41	15	153	1620	-6.12	11.42	0
34	SLU 42	14	135	1636	-5.5	10.03	0
34	SLU 43	13	146	1708	-5.85	9.72	0
34	SLU 44	11	117	1734	-4.82	7.41	0
34	SLU 45	13	146	1708	-5.85	9.72	0
34	SLU 46	12	128	1724	-5.23	8.34	0
34	SLU 47	11	117	1734	-4.82	7.41	0
34	SLU 48	13	146	1708	-5.85	9.72	0
34	SLU 49	12	128	1724	-5.23	8.34	0
34	SLU 50	13	146	1708	-5.85	9.72	0
34	SLU 51	12	128	1724	-5.23	8.34	0
34	SLU 52	13	135	1875	-5.56	9.28	0
34	SLU 53	15	164	1849	-6.59	11.59	0
34	SLU 54	14	147	1865	-5.97	10.21	0
34	SLU 55	13	135	1875	-5.56	9.28	0
34	SLU 56	15	164	1849	-6.59	11.59	0
34	SLU 57	14	147	1865	-5.97	10.21	0
34	SLU 58	15	164	1849	-6.59	11.59	0
34	SLU 59	14	147	1865	-5.97	10.21	0
34	SLU 60	16	172	1910	-6.9	12.39	0
34	SLU 61	15	154	1925	-6.29	11.01	0
34	SLU 62	16	172	1910	-6.9	12.39	0
34	SLU 63	15	154	1925	-6.29	11.01	0
34	SLU 64	14	157	1791	-6.3	10.72	0
34	SLU 65	12	128	1817	-5.27	8.41	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
34	SLU 66	14	157	1791	-6.3	10.72	0
34	SLU 67	13	140	1807	-5.68	9.34	0
34	SLU 68	12	128	1817	-5.27	8.41	0
34	SLU 69	14	157	1791	-6.3	10.72	0
34	SLU 70	13	140	1807	-5.68	9.34	0
34	SLU 71	14	157	1791	-6.3	10.72	0
34	SLU 72	13	140	1807	-5.68	9.34	0
34	SLU 73	14	146	1958	-6.01	10.28	0
34	SLU 74	17	176	1932	-7.03	12.59	0
34	SLU 75	15	158	1948	-6.42	11.21	0
34	SLU 76	14	146	1958	-6.01	10.28	0
34	SLU 77	17	176	1932	-7.03	12.59	0
34	SLU 78	15	158	1948	-6.42	11.21	0
34	SLU 79	17	176	1932	-7.03	12.59	0
34	SLU 80	15	158	1948	-6.42	11.21	0
34	SLU 81	18	183	1993	-7.35	13.39	0
34	SLU 82	16	166	2008	-6.73	12.01	0
34	SLU 83	18	183	1993	-7.35	13.39	0
34	SLU 84	16	166	2008	-6.73	12.01	0
34	SLE RA 1	11	119	1360	-4.75	8.03	0
34	SLE RA 2	9	99	1377	-4.06	6.49	0
34	SLE RA 3	11	119	1360	-4.75	8.03	0
34	SLE RA 4	10	107	1370	-4.34	7.11	0
34	SLE RA 5	9	99	1377	-4.06	6.49	0
34	SLE RA 6	11	119	1360	-4.75	8.03	0
34	SLE RA 7	10	107	1370	-4.34	7.11	0
34	SLE RA 8	11	119	1360	-4.75	8.03	0
34	SLE RA 9	10	107	1370	-4.34	7.11	0
34	SLE RA 10	11	111	1471	-4.55	7.74	0
34	SLE RA 11	12	131	1454	-5.24	9.28	0
34	SLE RA 12	11	119	1464	-4.83	8.35	0
34	SLE RA 13	11	111	1471	-4.55	7.74	0
34	SLE RA 14	12	131	1454	-5.24	9.28	0
34	SLE RA 15	11	119	1464	-4.83	8.35	0
34	SLE RA 16	12	131	1454	-5.24	9.28	0
34	SLE RA 17	11	119	1464	-4.83	8.35	0
34	SLE RA 18	13	136	1494	-5.45	9.81	0
34	SLE RA 19	12	124	1504	-5.04	8.89	0
34	SLE RA 20	13	136	1494	-5.45	9.81	0
34	SLE RA 21	12	124	1504	-5.04	8.89	0
34	SLE FR 1	11	119	1360	-4.75	8.03	0
34	SLE FR 2	10	115	1363	-4.61	7.72	0
34	SLE FR 3	11	119	1360	-4.75	8.03	0
34	SLE FR 4	11	120	1404	-4.82	8.26	0
34	SLE FR 5	11	124	1400	-4.96	8.56	0
34	SLE FR 6	12	127	1427	-5.1	8.92	0
34	SLE QP 1	11	119	1360	-4.75	8.03	0
34	SLE QP 2	11	124	1400	-4.96	8.56	0
34	SLD 1	30	229	1240	-8.99	26.7	-0.01
34	SLD 2	30	229	1240	-8.99	26.7	-0.01
34	SLD 3	24	108	1309	-4.35	20.23	-0.01
34	SLD 4	24	108	1309	-4.35	20.23	-0.01
34	SLD 5	26	339	1248	-13.2	23.82	-0.01
34	SLD 6	26	339	1248	-13.2	23.82	-0.01
34	SLD 7	6	-64	1477	2.26	2.25	0
34	SLD 8	6	-64	1477	2.26	2.25	0
34	SLD 9	16	312	1323	-12.17	14.88	0
34	SLD 10	16	312	1323	-12.17	14.88	0
34	SLD 11	-3	-91	1553	3.28	-6.69	0
34	SLD 12	-3	-91	1553	3.28	-6.69	0
34	SLD 13	-2	139	1491	-5.56	-3.1	0
34	SLD 14	-2	139	1491	-5.56	-3.1	0
34	SLD 15	-8	19	1560	-0.93	-9.58	0
34	SLD 16	-8	19	1560	-0.93	-9.58	0
34	SLV 1	56	373	1019	-14.52	51.81	-0.02
34	SLV 2	56	373	1019	-14.52	51.81	-0.02
34	SLV 3	42	86	1191	-3.47	35.58	-0.01
34	SLV 4	42	86	1191	-3.47	35.58	-0.01
34	SLV 5	47	635	1026	-24.58	46.16	-0.01
34	SLV 6	47	635	1026	-24.58	46.16	-0.01
34	SLV 7	-2	-324	1598	12.24	-7.96	0
34	SLV 8	-2	-324	1598	12.24	-7.96	0
34	SLV 9	25	572	1202	-22.16	25.08	-0.01
34	SLV 10	25	572	1202	-22.16	25.08	-0.01
34	SLV 11	-25	-387	1775	14.66	-29.04	0.01
34	SLV 12	-25	-387	1775	14.66	-29.04	0.01
34	SLV 13	-19	162	1609	-6.45	-18.45	0.01
34	SLV 14	-19	162	1609	-6.45	-18.45	0.01
34	SLV 15	-34	-126	1781	4.6	-34.68	0.01
34	SLV 16	-34	-126	1781	4.6	-34.68	0.01
35	SLU 1	-13	109	1704	-4.22	-8.25	0
35	SLU 2	-11	95	1663	-3.29	-6.73	-0.01
35	SLU 3	-13	109	1704	-4.22	-8.25	0
35	SLU 4	-12	100	1679	-3.66	-7.34	-0.01
35	SLU 5	-11	95	1663	-3.29	-6.73	-0.01
35	SLU 6	-13	109	1704	-4.22	-8.25	0
35	SLU 7	-12	100	1679	-3.66	-7.34	-0.01
35	SLU 8	-13	109	1704	-4.22	-8.25	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
35	SLU 9	-12	100	1679	-3.66	-7.34	-0.01
35	SLU 10	-13	118	1781	-3.98	-8	-0.01
35	SLU 11	-15	133	1823	-4.91	-9.52	-0.01
35	SLU 12	-14	124	1798	-4.35	-8.61	-0.01
35	SLU 13	-13	118	1781	-3.98	-8	-0.01
35	SLU 14	-15	133	1823	-4.91	-9.52	-0.01
35	SLU 15	-14	124	1798	-4.35	-8.61	-0.01
35	SLU 16	-15	133	1823	-4.91	-9.52	-0.01
35	SLU 17	-14	124	1798	-4.35	-8.61	-0.01
35	SLU 18	-16	143	1873	-5.21	-10.06	-0.01
35	SLU 19	-15	134	1849	-4.65	-9.15	-0.01
35	SLU 20	-16	143	1873	-5.21	-10.06	-0.01
35	SLU 21	-15	134	1849	-4.65	-9.15	-0.01
35	SLU 22	-14	123	1801	-4.68	-9.05	-0.01
35	SLU 23	-13	109	1759	-3.75	-7.53	-0.01
35	SLU 24	-14	123	1801	-4.68	-9.05	-0.01
35	SLU 25	-13	115	1776	-4.12	-8.14	-0.01
35	SLU 26	-13	109	1759	-3.75	-7.53	-0.01
35	SLU 27	-14	123	1801	-4.68	-9.05	-0.01
35	SLU 28	-13	115	1776	-4.12	-8.14	-0.01
35	SLU 29	-14	123	1801	-4.68	-9.05	-0.01
35	SLU 30	-13	115	1776	-4.12	-8.14	-0.01
35	SLU 31	-15	133	1878	-4.44	-8.8	-0.01
35	SLU 32	-16	147	1919	-5.38	-10.32	-0.01
35	SLU 33	-15	138	1894	-4.82	-9.41	-0.01
35	SLU 34	-15	133	1878	-4.44	-8.8	-0.01
35	SLU 35	-16	147	1919	-5.38	-10.32	-0.01
35	SLU 36	-15	138	1894	-4.82	-9.41	-0.01
35	SLU 37	-16	147	1919	-5.38	-10.32	-0.01
35	SLU 38	-15	138	1894	-4.82	-9.41	-0.01
35	SLU 39	-17	157	1970	-5.67	-10.86	-0.01
35	SLU 40	-16	149	1945	-5.11	-9.95	-0.01
35	SLU 41	-17	157	1970	-5.67	-10.86	-0.01
35	SLU 42	-16	149	1945	-5.11	-9.95	-0.01
35	SLU 43	-17	137	2182	-5.33	-10.46	-0.01
35	SLU 44	-15	122	2141	-4.39	-8.93	-0.01
35	SLU 45	-17	137	2182	-5.33	-10.46	-0.01
35	SLU 46	-16	128	2157	-4.77	-9.54	-0.01
35	SLU 47	-15	122	2141	-4.39	-8.93	-0.01
35	SLU 48	-17	137	2182	-5.33	-10.46	-0.01
35	SLU 49	-16	128	2157	-4.77	-9.54	-0.01
35	SLU 50	-17	137	2182	-5.33	-10.46	-0.01
35	SLU 51	-16	128	2157	-4.77	-9.54	-0.01
35	SLU 52	-17	146	2259	-5.08	-10.2	-0.01
35	SLU 53	-19	160	2301	-6.02	-11.72	-0.01
35	SLU 54	-18	152	2276	-5.46	-10.81	-0.01
35	SLU 55	-17	146	2259	-5.08	-10.2	-0.01
35	SLU 56	-19	160	2301	-6.02	-11.72	-0.01
35	SLU 57	-18	152	2276	-5.46	-10.81	-0.01
35	SLU 58	-19	160	2301	-6.02	-11.72	-0.01
35	SLU 59	-18	152	2276	-5.46	-10.81	-0.01
35	SLU 60	-19	170	2352	-6.32	-12.26	-0.01
35	SLU 61	-18	162	2327	-5.76	-11.35	-0.01
35	SLU 62	-19	170	2352	-6.32	-12.26	-0.01
35	SLU 63	-18	162	2327	-5.76	-11.35	-0.01
35	SLU 64	-18	151	2279	-5.79	-11.25	-0.01
35	SLU 65	-16	137	2237	-4.86	-9.73	-0.01
35	SLU 66	-18	151	2279	-5.79	-11.25	-0.01
35	SLU 67	-17	142	2254	-5.23	-10.34	-0.01
35	SLU 68	-16	137	2237	-4.86	-9.73	-0.01
35	SLU 69	-18	151	2279	-5.79	-11.25	-0.01
35	SLU 70	-17	142	2254	-5.23	-10.34	-0.01
35	SLU 71	-18	151	2279	-5.79	-11.25	-0.01
35	SLU 72	-17	142	2254	-5.23	-10.34	-0.01
35	SLU 73	-18	160	2356	-5.55	-11	-0.01
35	SLU 74	-20	175	2397	-6.48	-12.52	-0.01
35	SLU 75	-19	166	2372	-5.92	-11.61	-0.01
35	SLU 76	-18	160	2356	-5.55	-11	-0.01
35	SLU 77	-20	175	2397	-6.48	-12.52	-0.01
35	SLU 78	-19	166	2372	-5.92	-11.61	-0.01
35	SLU 79	-20	175	2397	-6.48	-12.52	-0.01
35	SLU 80	-19	166	2372	-5.92	-11.61	-0.01
35	SLU 81	-21	185	2448	-6.78	-13.06	-0.01
35	SLU 82	-20	176	2423	-6.22	-12.15	-0.01
35	SLU 83	-21	185	2448	-6.78	-13.06	-0.01
35	SLU 84	-20	176	2423	-6.22	-12.15	-0.01
35	SLE RA 1	-13	113	1732	-4.35	-8.48	0
35	SLE RA 2	-12	104	1704	-3.73	-7.47	-0.01
35	SLE RA 3	-13	113	1732	-4.35	-8.48	0
35	SLE RA 4	-13	107	1715	-3.98	-7.87	-0.01
35	SLE RA 5	-12	104	1704	-3.73	-7.47	-0.01
35	SLE RA 6	-13	113	1732	-4.35	-8.48	0
35	SLE RA 7	-13	107	1715	-3.98	-7.87	-0.01
35	SLE RA 8	-13	113	1732	-4.35	-8.48	0
35	SLE RA 9	-13	107	1715	-3.98	-7.87	-0.01
35	SLE RA 10	-14	119	1783	-4.19	-8.31	-0.01
35	SLE RA 11	-15	129	1811	-4.81	-9.33	-0.01
35	SLE RA 12	-14	123	1794	-4.44	-8.72	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
35	SLE RA 13	-14	119	1783	-4.19	-8.31	-0.01
35	SLE RA 14	-15	129	1811	-4.81	-9.33	-0.01
35	SLE RA 15	-14	123	1794	-4.44	-8.72	-0.01
35	SLE RA 16	-15	129	1811	-4.81	-9.33	-0.01
35	SLE RA 17	-14	123	1794	-4.44	-8.72	-0.01
35	SLE RA 18	-15	135	1845	-5.01	-9.69	-0.01
35	SLE RA 19	-15	130	1828	-4.64	-9.08	-0.01
35	SLE RA 20	-15	135	1845	-5.01	-9.69	-0.01
35	SLE RA 21	-15	130	1828	-4.64	-9.08	-0.01
35	SLE FR 1	-13	113	1732	-4.35	-8.48	0
35	SLE FR 2	-13	111	1726	-4.23	-8.28	0
35	SLE FR 3	-13	113	1732	-4.35	-8.48	0
35	SLE FR 4	-14	118	1760	-4.43	-8.64	-0.01
35	SLE FR 5	-14	120	1766	-4.55	-8.84	-0.01
35	SLE FR 6	-14	124	1788	-4.68	-9.08	-0.01
35	SLE QP 1	-13	113	1732	-4.35	-8.48	0
35	SLE QP 2	-14	120	1766	-4.55	-8.84	-0.01
35	SLD 1	-26	231	2029	-8.69	-18.38	-0.01
35	SLD 2	-26	231	2029	-8.69	-18.38	-0.01
35	SLD 3	-30	124	2145	-4.49	-21.11	-0.01
35	SLD 4	-30	124	2145	-4.49	-21.11	-0.01
35	SLD 5	-12	315	1669	-12.17	-7.56	0
35	SLD 6	-12	315	1669	-12.17	-7.56	0
35	SLD 7	-24	-41	2055	1.84	-16.67	-0.01
35	SLD 8	-24	-41	2055	1.84	-16.67	-0.01
35	SLD 9	-4	280	1476	-10.94	-1.02	0
35	SLD 10	-4	280	1476	-10.94	-1.02	0
35	SLD 11	-16	-76	1862	3.07	-10.12	-0.01
35	SLD 12	-16	-76	1862	3.07	-10.12	-0.01
35	SLD 13	2	115	1386	-4.61	3.43	0
35	SLD 14	2	115	1386	-4.61	3.43	0
35	SLD 15	-2	8	1502	-0.41	0.7	0
35	SLD 16	-2	8	1502	-0.41	0.7	0
35	SLV 1	-42	383	2414	-14.29	-30.86	-0.02
35	SLV 2	-42	383	2414	-14.29	-30.86	-0.02
35	SLV 3	-51	131	2736	-4.37	-37.93	-0.03
35	SLV 4	-51	131	2736	-4.37	-37.93	-0.03
35	SLV 5	-8	581	1470	-22.51	-4.72	0
35	SLV 6	-8	581	1470	-22.51	-4.72	0
35	SLV 7	-40	-259	2546	10.54	-28.3	-0.02
35	SLV 8	-40	-259	2546	10.54	-28.3	-0.02
35	SLV 9	12	499	985	-19.64	10.61	0.01
35	SLV 10	12	499	985	-19.64	10.61	0.01
35	SLV 11	-20	-342	2061	13.41	-12.97	-0.01
35	SLV 12	-20	-342	2061	13.41	-12.97	-0.01
35	SLV 13	23	108	795	-4.73	20.24	0.01
35	SLV 14	23	108	795	-4.73	20.24	0.01
35	SLV 15	14	-144	1117	5.19	13.17	0.01
35	SLV 16	14	-144	1117	5.19	13.17	0.01
36	SLU 1	11	191	1430	-6.9	7.62	0
36	SLU 2	8	167	1458	-5.64	5.11	0
36	SLU 3	11	191	1430	-6.9	7.62	0
36	SLU 4	9	177	1447	-6.14	6.12	0
36	SLU 5	8	167	1458	-5.64	5.11	0
36	SLU 6	11	191	1430	-6.9	7.62	0
36	SLU 7	9	177	1447	-6.14	6.12	0
36	SLU 8	11	191	1430	-6.9	7.62	0
36	SLU 9	9	177	1447	-6.14	6.12	0
36	SLU 10	11	205	1622	-6.92	6.9	0
36	SLU 11	13	229	1594	-8.17	9.41	0
36	SLU 12	12	214	1611	-7.42	7.91	0
36	SLU 13	11	205	1622	-6.92	6.9	0
36	SLU 14	13	229	1594	-8.17	9.41	0
36	SLU 15	12	214	1611	-7.42	7.91	0
36	SLU 16	13	229	1594	-8.17	9.41	0
36	SLU 17	12	214	1611	-7.42	7.91	0
36	SLU 18	14	245	1664	-8.72	10.18	0
36	SLU 19	13	230	1681	-7.97	8.67	0
36	SLU 20	14	245	1664	-8.72	10.18	0
36	SLU 21	13	230	1681	-7.97	8.67	0
36	SLU 22	12	214	1525	-7.68	8.58	0
36	SLU 23	10	189	1553	-6.43	6.07	0
36	SLU 24	12	214	1525	-7.68	8.58	0
36	SLU 25	11	199	1542	-6.93	7.07	0
36	SLU 26	10	189	1553	-6.43	6.07	0
36	SLU 27	12	214	1525	-7.68	8.58	0
36	SLU 28	11	199	1542	-6.93	7.07	0
36	SLU 29	12	214	1525	-7.68	8.58	0
36	SLU 30	11	199	1542	-6.93	7.07	0
36	SLU 31	12	227	1717	-7.7	7.86	0
36	SLU 32	14	251	1689	-8.96	10.37	0
36	SLU 33	13	237	1706	-8.2	8.86	0
36	SLU 34	12	227	1717	-7.7	7.86	0
36	SLU 35	14	251	1689	-8.96	10.37	0
36	SLU 36	13	237	1706	-8.2	8.86	0
36	SLU 37	14	251	1689	-8.96	10.37	0
36	SLU 38	13	237	1706	-8.2	8.86	0
36	SLU 39	16	267	1760	-9.5	11.14	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
36	SLU 40	14	253	1777	-8.75	9.63	0
36	SLU 41	16	267	1760	-9.5	11.14	0
36	SLU 42	14	253	1777	-8.75	9.63	0
36	SLU 43	13	241	1826	-8.7	9.58	0
36	SLU 44	11	217	1854	-7.44	7.07	0
36	SLU 45	13	241	1826	-8.7	9.58	0
36	SLU 46	12	226	1843	-7.95	8.07	0
36	SLU 47	11	217	1854	-7.44	7.07	0
36	SLU 48	13	241	1826	-8.7	9.58	0
36	SLU 49	12	226	1843	-7.95	8.07	0
36	SLU 50	13	241	1826	-8.7	9.58	0
36	SLU 51	12	226	1843	-7.95	8.07	0
36	SLU 52	13	254	2018	-8.72	8.86	0
36	SLU 53	16	278	1990	-9.97	11.37	0
36	SLU 54	14	264	2007	-9.22	9.86	0
36	SLU 55	13	254	2018	-8.72	8.86	0
36	SLU 56	16	278	1990	-9.97	11.37	0
36	SLU 57	14	264	2007	-9.22	9.86	0
36	SLU 58	16	278	1990	-9.97	11.37	0
36	SLU 59	14	264	2007	-9.22	9.86	0
36	SLU 60	17	295	2061	-10.52	12.14	0
36	SLU 61	16	280	2077	-9.77	10.63	0
36	SLU 62	17	295	2061	-10.52	12.14	0
36	SLU 63	16	280	2077	-9.77	10.63	0
36	SLU 64	15	263	1922	-9.48	10.54	0
36	SLU 65	12	239	1950	-8.23	8.03	0
36	SLU 66	15	263	1922	-9.48	10.54	0
36	SLU 67	13	249	1939	-8.73	9.03	0
36	SLU 68	12	239	1950	-8.23	8.03	0
36	SLU 69	15	263	1922	-9.48	10.54	0
36	SLU 70	13	249	1939	-8.73	9.03	0
36	SLU 71	15	263	1922	-9.48	10.54	0
36	SLU 72	13	249	1939	-8.73	9.03	0
36	SLU 73	15	277	2114	-9.5	9.82	0
36	SLU 74	17	301	2086	-10.76	12.33	0
36	SLU 75	16	286	2103	-10	10.82	0
36	SLU 76	15	277	2114	-9.5	9.82	0
36	SLU 77	17	301	2086	-10.76	12.33	0
36	SLU 78	16	286	2103	-10	10.82	0
36	SLU 79	17	301	2086	-10.76	12.33	0
36	SLU 80	16	286	2103	-10	10.82	0
36	SLU 81	18	317	2156	-11.3	13.1	0
36	SLU 82	17	302	2173	-10.55	11.59	0
36	SLU 83	18	317	2156	-11.3	13.1	0
36	SLU 84	17	302	2173	-10.55	11.59	0
36	SLE RA 1	11	198	1457	-7.12	7.9	0
36	SLE RA 2	9	181	1476	-6.28	6.22	0
36	SLE RA 3	11	198	1457	-7.12	7.9	0
36	SLE RA 4	10	188	1468	-6.62	6.89	0
36	SLE RA 5	9	181	1476	-6.28	6.22	0
36	SLE RA 6	11	198	1457	-7.12	7.9	0
36	SLE RA 7	10	188	1468	-6.62	6.89	0
36	SLE RA 8	11	198	1457	-7.12	7.9	0
36	SLE RA 9	10	188	1468	-6.62	6.89	0
36	SLE RA 10	11	207	1585	-7.13	7.41	0
36	SLE RA 11	13	223	1567	-7.97	9.09	0
36	SLE RA 12	12	213	1578	-7.47	8.08	0
36	SLE RA 13	11	207	1585	-7.13	7.41	0
36	SLE RA 14	13	223	1567	-7.97	9.09	0
36	SLE RA 15	12	213	1578	-7.47	8.08	0
36	SLE RA 16	13	223	1567	-7.97	9.09	0
36	SLE RA 17	12	213	1578	-7.47	8.08	0
36	SLE RA 18	13	233	1613	-8.34	9.6	0
36	SLE RA 19	12	224	1625	-7.83	8.6	0
36	SLE RA 20	13	233	1613	-8.34	9.6	0
36	SLE RA 21	12	224	1625	-7.83	8.6	0
36	SLE FR 1	11	198	1457	-7.12	7.9	0
36	SLE FR 2	11	194	1461	-6.95	7.56	0
36	SLE FR 3	11	198	1457	-7.12	7.9	0
36	SLE FR 4	11	205	1508	-7.32	8.07	0
36	SLE FR 5	12	208	1504	-7.49	8.41	0
36	SLE FR 6	12	215	1535	-7.73	8.75	0
36	SLE QP 1	11	198	1457	-7.12	7.9	0
36	SLE QP 2	12	208	1504	-7.49	8.41	0
36	SLD 1	28	215	1419	-7.88	24.69	0.01
36	SLD 2	28	215	1419	-7.88	24.69	0.01
36	SLD 3	23	95	1359	-3.08	18.96	0.01
36	SLD 4	23	95	1359	-3.08	18.96	0.01
36	SLD 5	25	392	1570	-14.88	22	0
36	SLD 6	25	392	1570	-14.88	22	0
36	SLD 7	7	-7	1369	1.12	2.87	0
36	SLD 8	7	-7	1369	1.12	2.87	0
36	SLD 9	16	424	1639	-16.09	13.95	0
36	SLD 10	16	424	1639	-16.09	13.95	0
36	SLD 11	-1	25	1438	-0.09	-5.18	-0.01
36	SLD 12	-1	25	1438	-0.09	-5.18	-0.01
36	SLD 13	0	321	1650	-11.9	-2.14	-0.01
36	SLD 14	0	321	1650	-11.9	-2.14	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
36	SLD 15	-5	202	1589	-7.09	-7.88	-0.01
36	SLD 16	-5	202	1589	-7.09	-7.88	-0.01
36	SLV 1	51	226	1309	-8.45	47.21	0.03
36	SLV 2	51	226	1309	-8.45	47.21	0.03
36	SLV 3	38	-59	1160	2.92	32.83	0.02
36	SLV 4	38	-59	1160	2.92	32.83	0.02
36	SLV 5	43	644	1671	-25.03	41.87	0.02
36	SLV 6	43	644	1671	-25.03	41.87	0.02
36	SLV 7	0	-303	1175	12.89	-6.08	-0.01
36	SLV 8	0	-303	1175	12.89	-6.08	-0.01
36	SLV 9	23	719	1833	-27.86	22.9	0
36	SLV 10	23	719	1833	-27.86	22.9	0
36	SLV 11	-20	-228	1337	10.06	-25.05	-0.02
36	SLV 12	-20	-228	1337	10.06	-25.05	-0.02
36	SLV 13	-15	475	1848	-17.9	-16.01	-0.02
36	SLV 14	-15	475	1848	-17.9	-16.01	-0.02
36	SLV 15	-28	191	1700	-6.52	-30.4	-0.03
36	SLV 16	-28	191	1700	-6.52	-30.4	-0.03
37	SLU 1	-14	119	1733	-4.63	-8.54	0
37	SLU 2	-11	114	1726	-4.55	-6.68	0
37	SLU 3	-14	119	1733	-4.63	-8.54	0
37	SLU 4	-12	116	1729	-4.58	-7.43	0
37	SLU 5	-11	114	1726	-4.55	-6.68	0
37	SLU 6	-14	119	1733	-4.63	-8.54	0
37	SLU 7	-12	116	1729	-4.58	-7.43	0
37	SLU 8	-14	119	1733	-4.63	-8.54	0
37	SLU 9	-12	116	1729	-4.58	-7.43	0
37	SLU 10	-13	147	1874	-5.86	-7.94	-0.01
37	SLU 11	-16	152	1880	-5.94	-9.79	-0.01
37	SLU 12	-14	149	1876	-5.89	-8.68	-0.01
37	SLU 13	-13	147	1874	-5.86	-7.94	-0.01
37	SLU 14	-16	152	1880	-5.94	-9.79	-0.01
37	SLU 15	-14	149	1876	-5.89	-8.68	-0.01
37	SLU 16	-16	152	1880	-5.94	-9.79	-0.01
37	SLU 17	-14	149	1876	-5.89	-8.68	-0.01
37	SLU 18	-17	167	1944	-6.49	-10.33	-0.01
37	SLU 19	-15	163	1940	-6.45	-9.21	-0.01
37	SLU 20	-17	167	1944	-6.49	-10.33	-0.01
37	SLU 21	-15	163	1940	-6.45	-9.21	-0.01
37	SLU 22	-15	139	1843	-5.38	-9.34	-0.01
37	SLU 23	-13	134	1836	-5.31	-7.48	-0.01
37	SLU 24	-15	139	1843	-5.38	-9.34	-0.01
37	SLU 25	-14	136	1839	-5.34	-8.22	-0.01
37	SLU 26	-13	134	1836	-5.31	-7.48	-0.01
37	SLU 27	-15	139	1843	-5.38	-9.34	-0.01
37	SLU 28	-14	136	1839	-5.34	-8.22	-0.01
37	SLU 29	-15	139	1843	-5.38	-9.34	-0.01
37	SLU 30	-14	136	1839	-5.34	-8.22	-0.01
37	SLU 31	-15	167	1984	-6.61	-8.74	-0.01
37	SLU 32	-17	172	1990	-6.69	-10.59	-0.01
37	SLU 33	-16	169	1986	-6.64	-9.48	-0.01
37	SLU 34	-15	167	1984	-6.61	-8.74	-0.01
37	SLU 35	-17	172	1990	-6.69	-10.59	-0.01
37	SLU 36	-16	169	1986	-6.64	-9.48	-0.01
37	SLU 37	-17	172	1990	-6.69	-10.59	-0.01
37	SLU 38	-16	169	1986	-6.64	-9.48	-0.01
37	SLU 39	-18	186	2054	-7.25	-11.13	-0.01
37	SLU 40	-16	183	2050	-7.2	-10.01	-0.01
37	SLU 41	-18	186	2054	-7.25	-11.13	-0.01
37	SLU 42	-16	183	2050	-7.2	-10.01	-0.01
37	SLU 43	-17	148	2215	-5.76	-10.82	-0.01
37	SLU 44	-15	143	2208	-5.68	-8.97	-0.01
37	SLU 45	-17	148	2215	-5.76	-10.82	-0.01
37	SLU 46	-16	145	2211	-5.72	-9.71	-0.01
37	SLU 47	-15	143	2208	-5.68	-8.97	-0.01
37	SLU 48	-17	148	2215	-5.76	-10.82	-0.01
37	SLU 49	-16	145	2211	-5.72	-9.71	-0.01
37	SLU 50	-17	148	2215	-5.76	-10.82	-0.01
37	SLU 51	-16	145	2211	-5.72	-9.71	-0.01
37	SLU 52	-17	176	2356	-6.99	-10.22	-0.01
37	SLU 53	-19	181	2363	-7.07	-12.08	-0.01
37	SLU 54	-18	178	2359	-7.02	-10.96	-0.01
37	SLU 55	-17	176	2356	-6.99	-10.22	-0.01
37	SLU 56	-19	181	2363	-7.07	-12.08	-0.01
37	SLU 57	-18	178	2359	-7.02	-10.96	-0.01
37	SLU 58	-19	181	2363	-7.07	-12.08	-0.01
37	SLU 59	-18	178	2359	-7.02	-10.96	-0.01
37	SLU 60	-20	196	2426	-7.63	-12.61	-0.01
37	SLU 61	-19	193	2422	-7.58	-11.5	-0.01
37	SLU 62	-20	196	2426	-7.63	-12.61	-0.01
37	SLU 63	-19	193	2422	-7.58	-11.5	-0.01
37	SLU 64	-19	168	2325	-6.52	-11.62	-0.01
37	SLU 65	-16	163	2318	-6.44	-9.77	-0.01
37	SLU 66	-19	168	2325	-6.52	-11.62	-0.01
37	SLU 67	-17	165	2321	-6.47	-10.51	-0.01
37	SLU 68	-16	163	2318	-6.44	-9.77	-0.01
37	SLU 69	-19	168	2325	-6.52	-11.62	-0.01
37	SLU 70	-17	165	2321	-6.47	-10.51	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
37	SLU 71	-19	168	2325	-6.52	-11.62	-0.01
37	SLU 72	-17	165	2321	-6.47	-10.51	-0.01
37	SLU 73	-18	196	2466	-7.74	-11.02	-0.01
37	SLU 74	-21	201	2473	-7.82	-12.88	-0.01
37	SLU 75	-19	198	2469	-7.77	-11.76	-0.01
37	SLU 76	-18	196	2466	-7.74	-11.02	-0.01
37	SLU 77	-21	201	2473	-7.82	-12.88	-0.01
37	SLU 78	-19	198	2469	-7.77	-11.76	-0.01
37	SLU 79	-21	201	2473	-7.82	-12.88	-0.01
37	SLU 80	-19	198	2469	-7.77	-11.76	-0.01
37	SLU 81	-21	215	2536	-8.38	-13.41	-0.01
37	SLU 82	-20	212	2532	-8.33	-12.3	-0.01
37	SLU 83	-21	215	2536	-8.38	-13.41	-0.01
37	SLU 84	-20	212	2532	-8.33	-12.3	-0.01
37	SLE RA 1	-14	125	1764	-4.85	-8.76	0
37	SLE RA 2	-13	121	1760	-4.79	-7.53	0
37	SLE RA 3	-14	125	1764	-4.85	-8.76	0
37	SLE RA 4	-13	123	1762	-4.82	-8.02	0
37	SLE RA 5	-13	121	1760	-4.79	-7.53	0
37	SLE RA 6	-14	125	1764	-4.85	-8.76	0
37	SLE RA 7	-13	123	1762	-4.82	-8.02	0
37	SLE RA 8	-14	125	1764	-4.85	-8.76	0
37	SLE RA 9	-13	123	1762	-4.82	-8.02	0
37	SLE RA 10	-14	143	1858	-5.66	-8.37	-0.01
37	SLE RA 11	-15	147	1863	-5.72	-9.6	-0.01
37	SLE RA 12	-15	145	1860	-5.68	-8.86	-0.01
37	SLE RA 13	-14	143	1858	-5.66	-8.37	-0.01
37	SLE RA 14	-15	147	1863	-5.72	-9.6	-0.01
37	SLE RA 15	-15	145	1860	-5.68	-8.86	-0.01
37	SLE RA 16	-15	147	1863	-5.72	-9.6	-0.01
37	SLE RA 17	-15	145	1860	-5.68	-8.86	-0.01
37	SLE RA 18	-16	156	1905	-6.09	-9.96	-0.01
37	SLE RA 19	-15	154	1902	-6.06	-9.22	-0.01
37	SLE RA 20	-16	156	1905	-6.09	-9.96	-0.01
37	SLE RA 21	-15	154	1902	-6.06	-9.22	-0.01
37	SLE FR 1	-14	125	1764	-4.85	-8.76	0
37	SLE FR 2	-14	124	1763	-4.84	-8.52	0
37	SLE FR 3	-14	125	1764	-4.85	-8.76	0
37	SLE FR 4	-14	134	1806	-5.21	-8.88	-0.01
37	SLE FR 5	-15	134	1806	-5.22	-9.12	-0.01
37	SLE FR 6	-15	141	1835	-5.47	-9.36	-0.01
37	SLE QP 1	-14	125	1764	-4.85	-8.76	0
37	SLE QP 2	-15	134	1806	-5.22	-9.12	-0.01
37	SLD 1	-27	131	2042	-4.8	-19.04	-0.01
37	SLD 2	-27	131	2042	-4.8	-19.04	-0.01
37	SLD 3	-31	24	2138	-0.61	-21.91	-0.02
37	SLD 4	-31	24	2138	-0.61	-21.91	-0.02
37	SLD 5	-13	295	1731	-11.44	-7.75	0
37	SLD 6	-13	295	1731	-11.44	-7.75	0
37	SLD 7	-25	-60	2052	2.52	-17.31	-0.01
37	SLD 8	-25	-60	2052	2.52	-17.31	-0.01
37	SLD 9	-4	329	1561	-12.96	-0.94	0
37	SLD 10	-4	329	1561	-12.96	-0.94	0
37	SLD 11	-16	-26	1882	1.01	-10.5	-0.01
37	SLD 12	-16	-26	1882	1.01	-10.5	-0.01
37	SLD 13	2	244	1475	-9.83	3.66	0.01
37	SLD 14	2	244	1475	-9.83	3.66	0.01
37	SLD 15	-2	138	1571	-5.64	0.79	0
37	SLD 16	-2	138	1571	-5.64	0.79	0
37	SLV 1	-44	124	2382	-3.97	-31.99	-0.03
37	SLV 2	-44	124	2382	-3.97	-31.99	-0.03
37	SLV 3	-53	-127	2651	5.94	-39.44	-0.03
37	SLV 4	-53	-127	2651	5.94	-39.44	-0.03
37	SLV 5	-9	513	1571	-19.88	-4.69	0
37	SLV 6	-9	513	1571	-19.88	-4.69	0
37	SLV 7	-40	-326	2468	13.16	-29.51	-0.02
37	SLV 8	-40	-326	2468	13.16	-29.51	-0.02
37	SLV 9	11	594	1145	-23.6	11.27	0.01
37	SLV 10	11	594	1145	-23.6	11.27	0.01
37	SLV 11	-20	-244	2041	9.44	-13.56	-0.01
37	SLV 12	-20	-244	2041	9.44	-13.56	-0.01
37	SLV 13	24	396	962	-16.38	21.19	0.02
37	SLV 14	24	396	962	-16.38	21.19	0.02
37	SLV 15	14	144	1231	-6.47	13.74	0.02
37	SLV 16	14	144	1231	-6.47	13.74	0.02
38	SLU 1	10	233	1613	-9.12	6.76	0
38	SLU 2	7	231	1650	-9.26	4.14	0
38	SLU 3	10	233	1613	-9.12	6.76	0
38	SLU 4	8	232	1635	-9.2	5.19	0
38	SLU 5	7	231	1650	-9.26	4.14	0
38	SLU 6	10	233	1613	-9.12	6.76	0
38	SLU 7	8	232	1635	-9.2	5.19	0
38	SLU 8	10	233	1613	-9.12	6.76	0
38	SLU 9	8	232	1635	-9.2	5.19	0
38	SLU 10	10	286	1858	-11.38	5.64	0
38	SLU 11	12	288	1821	-11.25	8.26	-0.01
38	SLU 12	11	287	1843	-11.33	6.69	0
38	SLU 13	10	286	1858	-11.38	5.64	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
38	SLU 14	12	288	1821	-11.25	8.26	-0.01
38	SLU 15	11	287	1843	-11.33	6.69	0
38	SLU 16	12	288	1821	-11.25	8.26	-0.01
38	SLU 17	11	287	1843	-11.33	6.69	0
38	SLU 18	13	312	1910	-12.16	8.9	-0.01
38	SLU 19	12	310	1932	-12.24	7.33	0
38	SLU 20	13	312	1910	-12.16	8.9	-0.01
38	SLU 21	12	310	1932	-12.24	7.33	0
38	SLU 22	11	265	1733	-10.32	7.56	0
38	SLU 23	9	263	1769	-10.45	4.94	0
38	SLU 24	11	265	1733	-10.32	7.56	0
38	SLU 25	10	263	1755	-10.4	5.99	0
38	SLU 26	9	263	1769	-10.45	4.94	0
38	SLU 27	11	265	1733	-10.32	7.56	0
38	SLU 28	10	263	1755	-10.4	5.99	0
38	SLU 29	11	265	1733	-10.32	7.56	0
38	SLU 30	10	263	1755	-10.4	5.99	0
38	SLU 31	11	317	1977	-12.58	6.44	0
38	SLU 32	14	319	1941	-12.44	9.06	-0.01
38	SLU 33	12	318	1963	-12.52	7.49	0
38	SLU 34	11	317	1977	-12.58	6.44	0
38	SLU 35	14	319	1941	-12.44	9.06	-0.01
38	SLU 36	12	318	1963	-12.52	7.49	0
38	SLU 37	14	319	1941	-12.44	9.06	-0.01
38	SLU 38	12	318	1963	-12.52	7.49	0
38	SLU 39	15	343	2030	-13.35	9.7	-0.01
38	SLU 40	13	342	2052	-13.43	8.13	0
38	SLU 41	15	343	2030	-13.35	9.7	-0.01
38	SLU 42	13	342	2052	-13.43	8.13	0
38	SLU 43	13	293	2056	-11.45	8.51	-0.01
38	SLU 44	10	291	2093	-11.58	5.89	0
38	SLU 45	13	293	2056	-11.45	8.51	-0.01
38	SLU 46	11	291	2078	-11.53	6.94	0
38	SLU 47	10	291	2093	-11.58	5.89	0
38	SLU 48	13	293	2056	-11.45	8.51	-0.01
38	SLU 49	11	291	2078	-11.53	6.94	0
38	SLU 50	13	293	2056	-11.45	8.51	-0.01
38	SLU 51	11	291	2078	-11.53	6.94	0
38	SLU 52	12	345	2301	-13.71	7.39	0
38	SLU 53	15	347	2264	-13.57	10.01	-0.01
38	SLU 54	13	346	2286	-13.65	8.44	-0.01
38	SLU 55	12	345	2301	-13.71	7.39	0
38	SLU 56	15	347	2264	-13.57	10.01	-0.01
38	SLU 57	13	346	2286	-13.65	8.44	-0.01
38	SLU 58	15	347	2264	-13.57	10.01	-0.01
38	SLU 59	13	346	2286	-13.65	8.44	-0.01
38	SLU 60	16	371	2353	-14.48	10.65	-0.01
38	SLU 61	14	370	2375	-14.56	9.08	-0.01
38	SLU 62	16	371	2353	-14.48	10.65	-0.01
38	SLU 63	14	370	2375	-14.56	9.08	-0.01
38	SLU 64	14	324	2176	-12.64	9.31	-0.01
38	SLU 65	11	322	2212	-12.78	6.7	0
38	SLU 66	14	324	2176	-12.64	9.31	-0.01
38	SLU 67	12	323	2198	-12.72	7.74	0
38	SLU 68	11	322	2212	-12.78	6.7	0
38	SLU 69	14	324	2176	-12.64	9.31	-0.01
38	SLU 70	12	323	2198	-12.72	7.74	0
38	SLU 71	14	324	2176	-12.64	9.31	-0.01
38	SLU 72	12	323	2198	-12.72	7.74	0
38	SLU 73	13	377	2420	-14.9	8.19	0
38	SLU 74	16	379	2384	-14.77	10.81	-0.01
38	SLU 75	15	377	2406	-14.85	9.24	-0.01
38	SLU 76	13	377	2420	-14.9	8.19	0
38	SLU 77	16	379	2384	-14.77	10.81	-0.01
38	SLU 78	15	377	2406	-14.85	9.24	-0.01
38	SLU 79	16	379	2384	-14.77	10.81	-0.01
38	SLU 80	15	377	2406	-14.85	9.24	-0.01
38	SLU 81	17	402	2473	-15.68	11.45	-0.01
38	SLU 82	16	401	2495	-15.76	9.88	-0.01
38	SLU 83	17	402	2473	-15.68	11.45	-0.01
38	SLU 84	16	401	2495	-15.76	9.88	-0.01
38	SLE RA 1	11	242	1647	-9.46	6.99	0
38	SLE RA 2	9	241	1672	-9.55	5.24	0
38	SLE RA 3	11	242	1647	-9.46	6.99	0
38	SLE RA 4	9	241	1662	-9.52	5.94	0
38	SLE RA 5	9	241	1672	-9.55	5.24	0
38	SLE RA 6	11	242	1647	-9.46	6.99	0
38	SLE RA 7	9	241	1662	-9.52	5.94	0
38	SLE RA 8	11	242	1647	-9.46	6.99	0
38	SLE RA 9	9	241	1662	-9.52	5.94	0
38	SLE RA 10	10	277	1811	-10.97	6.24	0
38	SLE RA 11	12	279	1786	-10.88	7.99	-0.01
38	SLE RA 12	11	278	1801	-10.93	6.94	0
38	SLE RA 13	10	277	1811	-10.97	6.24	0
38	SLE RA 14	12	279	1786	-10.88	7.99	-0.01
38	SLE RA 15	11	278	1801	-10.93	6.94	0
38	SLE RA 16	12	279	1786	-10.88	7.99	-0.01
38	SLE RA 17	11	278	1801	-10.93	6.94	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
38	SLE RA 18	13	294	1845	-11.49	8.41	-0.01
38	SLE RA 19	12	294	1860	-11.54	7.37	0
38	SLE RA 20	13	294	1845	-11.49	8.41	-0.01
38	SLE RA 21	12	294	1860	-11.54	7.37	0
38	SLE FR 1	11	242	1647	-9.46	6.99	0
38	SLE FR 2	10	242	1652	-9.48	6.64	0
38	SLE FR 3	11	242	1647	-9.46	6.99	0
38	SLE FR 4	11	258	1712	-10.09	7.07	0
38	SLE FR 5	11	258	1707	-10.07	7.41	0
38	SLE FR 6	12	268	1746	-10.47	7.7	0
38	SLE QP 1	11	242	1647	-9.46	6.99	0
38	SLE QP 2	11	258	1707	-10.07	7.41	0
38	SLD 1	19	254	1617	-10.02	15.6	0.01
38	SLD 2	19	254	1617	-10.02	15.6	0.01
38	SLD 3	23	147	1561	-5.85	20.44	0
38	SLD 4	23	147	1561	-5.85	20.44	0
38	SLD 5	7	419	1766	-16.39	2.52	0
38	SLD 6	7	419	1766	-16.39	2.52	0
38	SLD 7	22	62	1577	-2.47	18.67	-0.01
38	SLD 8	22	62	1577	-2.47	18.67	-0.01
38	SLD 9	1	454	1837	-17.67	-3.84	0
38	SLD 10	1	454	1837	-17.67	-3.84	0
38	SLD 11	16	97	1648	-3.75	12.31	-0.01
38	SLD 12	16	97	1648	-3.75	12.31	-0.01
38	SLD 13	-1	369	1853	-14.29	-5.61	-0.01
38	SLD 14	-1	369	1853	-14.29	-5.61	-0.01
38	SLD 15	3	262	1796	-10.12	-0.77	-0.01
38	SLD 16	3	262	1796	-10.12	-0.77	-0.01
38	SLV 1	29	249	1502	-9.99	26.29	0.02
38	SLV 2	29	249	1502	-9.99	26.29	0.02
38	SLV 3	40	-4	1362	-0.11	38.5	0.01
38	SLV 4	40	-4	1362	-0.11	38.5	0.01
38	SLV 5	-1	640	1857	-25.03	-5.44	0.01
38	SLV 6	-1	640	1857	-25.03	-5.44	0.01
38	SLV 7	37	-205	1392	7.9	35.26	-0.01
38	SLV 8	37	-205	1392	7.9	35.26	-0.01
38	SLV 9	-15	721	2022	-28.04	-20.43	0
38	SLV 10	-15	721	2022	-28.04	-20.43	0
38	SLV 11	23	-124	1556	4.89	20.27	-0.02
38	SLV 12	23	-124	1556	4.89	20.27	-0.02
38	SLV 13	-18	520	2051	-20.03	-23.67	-0.02
38	SLV 14	-18	520	2051	-20.03	-23.67	-0.02
38	SLV 15	-7	266	1912	-10.15	-11.46	-0.03
38	SLV 16	-7	266	1912	-10.15	-11.46	-0.03
39	SLU 1	-12	128	1789	-4.39	-7.58	0
39	SLU 2	-10	120	1811	-3.62	-5.52	-0.01
39	SLU 3	-12	128	1789	-4.39	-7.58	0
39	SLU 4	-11	123	1802	-3.93	-6.35	-0.01
39	SLU 5	-10	120	1811	-3.62	-5.52	-0.01
39	SLU 6	-12	128	1789	-4.39	-7.58	0
39	SLU 7	-11	123	1802	-3.93	-6.35	-0.01
39	SLU 8	-12	128	1789	-4.39	-7.58	0
39	SLU 9	-11	123	1802	-3.93	-6.35	-0.01
39	SLU 10	-11	156	1996	-4.67	-6.55	-0.01
39	SLU 11	-14	165	1973	-5.43	-8.61	-0.01
39	SLU 12	-12	160	1987	-4.97	-7.37	-0.01
39	SLU 13	-11	156	1996	-4.67	-6.55	-0.01
39	SLU 14	-14	165	1973	-5.43	-8.61	-0.01
39	SLU 15	-12	160	1987	-4.97	-7.37	-0.01
39	SLU 16	-14	165	1973	-5.43	-8.61	-0.01
39	SLU 17	-12	160	1987	-4.97	-7.37	-0.01
39	SLU 18	-15	180	2052	-5.88	-9.05	-0.01
39	SLU 19	-13	175	2066	-5.42	-7.81	-0.01
39	SLU 20	-15	180	2052	-5.88	-9.05	-0.01
39	SLU 21	-13	175	2066	-5.42	-7.81	-0.01
39	SLU 22	-13	151	1917	-5.09	-8.25	-0.01
39	SLU 23	-11	142	1940	-4.32	-6.19	-0.01
39	SLU 24	-13	151	1917	-5.09	-8.25	-0.01
39	SLU 25	-12	146	1931	-4.63	-7.02	-0.01
39	SLU 26	-11	142	1940	-4.32	-6.19	-0.01
39	SLU 27	-13	151	1917	-5.09	-8.25	-0.01
39	SLU 28	-12	146	1931	-4.63	-7.02	-0.01
39	SLU 29	-13	151	1917	-5.09	-8.25	-0.01
39	SLU 30	-12	146	1931	-4.63	-7.02	-0.01
39	SLU 31	-12	179	2124	-5.36	-7.22	-0.01
39	SLU 32	-15	187	2102	-6.13	-9.28	-0.01
39	SLU 33	-13	182	2115	-5.67	-8.04	-0.01
39	SLU 34	-12	179	2124	-5.36	-7.22	-0.01
39	SLU 35	-15	187	2102	-6.13	-9.28	-0.01
39	SLU 36	-13	182	2115	-5.67	-8.04	-0.01
39	SLU 37	-15	187	2102	-6.13	-9.28	-0.01
39	SLU 38	-13	182	2115	-5.67	-8.04	-0.01
39	SLU 39	-16	203	2181	-6.58	-9.72	-0.01
39	SLU 40	-14	198	2194	-6.11	-8.48	-0.01
39	SLU 41	-16	203	2181	-6.58	-9.72	-0.01
39	SLU 42	-14	198	2194	-6.11	-8.48	-0.01
39	SLU 43	-15	159	2282	-5.47	-9.63	-0.01
39	SLU 44	-13	151	2304	-4.7	-7.56	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
39	SLU 45	-15	159	2282	-5.47	-9.63	-0.01
39	SLU 46	-14	154	2295	-5.01	-8.39	-0.01
39	SLU 47	-13	151	2304	-4.7	-7.56	-0.01
39	SLU 48	-15	159	2282	-5.47	-9.63	-0.01
39	SLU 49	-14	154	2295	-5.01	-8.39	-0.01
39	SLU 50	-15	159	2282	-5.47	-9.63	-0.01
39	SLU 51	-14	154	2295	-5.01	-8.39	-0.01
39	SLU 52	-14	187	2488	-5.75	-8.59	-0.01
39	SLU 53	-17	196	2466	-6.51	-10.65	-0.01
39	SLU 54	-16	191	2479	-6.05	-9.42	-0.01
39	SLU 55	-14	187	2488	-5.75	-8.59	-0.01
39	SLU 56	-17	196	2466	-6.51	-10.65	-0.01
39	SLU 57	-16	191	2479	-6.05	-9.42	-0.01
39	SLU 58	-17	196	2466	-6.51	-10.65	-0.01
39	SLU 59	-16	191	2479	-6.05	-9.42	-0.01
39	SLU 60	-18	211	2545	-6.96	-11.09	-0.01
39	SLU 61	-16	206	2558	-6.5	-9.86	-0.01
39	SLU 62	-18	211	2545	-6.96	-11.09	-0.01
39	SLU 63	-16	206	2558	-6.5	-9.86	-0.01
39	SLU 64	-17	182	2410	-6.17	-10.3	-0.01
39	SLU 65	-14	173	2433	-5.4	-8.24	-0.01
39	SLU 66	-17	182	2410	-6.17	-10.3	-0.01
39	SLU 67	-15	177	2424	-5.71	-9.06	-0.01
39	SLU 68	-14	173	2433	-5.4	-8.24	-0.01
39	SLU 69	-17	182	2410	-6.17	-10.3	-0.01
39	SLU 70	-15	177	2424	-5.71	-9.06	-0.01
39	SLU 71	-17	182	2410	-6.17	-10.3	-0.01
39	SLU 72	-15	177	2424	-5.71	-9.06	-0.01
39	SLU 73	-16	210	2617	-6.44	-9.26	-0.01
39	SLU 74	-18	218	2594	-7.21	-11.33	-0.01
39	SLU 75	-17	213	2608	-6.75	-10.09	-0.01
39	SLU 76	-16	210	2617	-6.44	-9.26	-0.01
39	SLU 77	-18	218	2594	-7.21	-11.33	-0.01
39	SLU 78	-17	213	2608	-6.75	-10.09	-0.01
39	SLU 79	-18	218	2594	-7.21	-11.33	-0.01
39	SLU 80	-17	213	2608	-6.75	-10.09	-0.01
39	SLU 81	-19	233	2673	-7.66	-11.77	-0.01
39	SLU 82	-17	228	2687	-7.19	-10.53	-0.01
39	SLU 83	-19	233	2673	-7.66	-11.77	-0.01
39	SLU 84	-17	228	2687	-7.19	-10.53	-0.01
39	SLE RA 1	-12	135	1826	-4.59	-7.77	0
39	SLE RA 2	-11	129	1841	-4.08	-6.4	-0.01
39	SLE RA 3	-12	135	1826	-4.59	-7.77	0
39	SLE RA 4	-11	131	1835	-4.28	-6.95	-0.01
39	SLE RA 5	-11	129	1841	-4.08	-6.4	-0.01
39	SLE RA 6	-12	135	1826	-4.59	-7.77	0
39	SLE RA 7	-11	131	1835	-4.28	-6.95	-0.01
39	SLE RA 8	-12	135	1826	-4.59	-7.77	0
39	SLE RA 9	-11	131	1835	-4.28	-6.95	-0.01
39	SLE RA 10	-12	153	1963	-4.77	-7.08	-0.01
39	SLE RA 11	-14	159	1948	-5.29	-8.46	-0.01
39	SLE RA 12	-13	156	1957	-4.98	-7.63	-0.01
39	SLE RA 13	-12	153	1963	-4.77	-7.08	-0.01
39	SLE RA 14	-14	159	1948	-5.29	-8.46	-0.01
39	SLE RA 15	-13	156	1957	-4.98	-7.63	-0.01
39	SLE RA 16	-14	159	1948	-5.29	-8.46	-0.01
39	SLE RA 17	-13	156	1957	-4.98	-7.63	-0.01
39	SLE RA 18	-14	169	2001	-5.58	-8.75	-0.01
39	SLE RA 19	-13	166	2010	-5.28	-7.93	-0.01
39	SLE RA 20	-14	169	2001	-5.58	-8.75	-0.01
39	SLE RA 21	-13	166	2010	-5.28	-7.93	-0.01
39	SLE FR 1	-12	135	1826	-4.59	-7.77	0
39	SLE FR 2	-12	134	1829	-4.49	-7.5	-0.01
39	SLE FR 3	-12	135	1826	-4.59	-7.77	0
39	SLE FR 4	-13	144	1881	-4.79	-7.79	-0.01
39	SLE FR 5	-13	145	1878	-4.89	-8.07	-0.01
39	SLE FR 6	-13	152	1913	-5.09	-8.26	-0.01
39	SLE QP 1	-12	135	1826	-4.59	-7.77	0
39	SLE QP 2	-13	145	1878	-4.89	-8.07	-0.01
39	SLD 1	-24	248	2087	-9.1	-16.88	0.01
39	SLD 2	-24	248	2087	-9.1	-16.88	0.01
39	SLD 3	-27	140	2171	-4.75	-19.76	0.01
39	SLD 4	-27	140	2171	-4.75	-19.76	0.01
39	SLD 5	-11	339	1814	-12.75	-6.34	0
39	SLD 6	-11	339	1814	-12.75	-6.34	0
39	SLD 7	-23	-20	2093	1.75	-15.95	-0.01
39	SLD 8	-23	-20	2093	1.75	-15.95	-0.01
39	SLD 9	-3	310	1664	-11.53	-0.19	0
39	SLD 10	-3	310	1664	-11.53	-0.19	0
39	SLD 11	-15	-49	1942	2.97	-9.79	-0.01
39	SLD 12	-15	-49	1942	2.97	-9.79	-0.01
39	SLD 13	1	150	1586	-5.03	3.63	-0.02
39	SLD 14	1	150	1586	-5.03	3.63	-0.02
39	SLD 15	-2	43	1669	-0.68	0.75	-0.02
39	SLD 16	-2	43	1669	-0.68	0.75	-0.02
39	SLV 1	-37	386	2386	-14.92	-28.31	0.02
39	SLV 2	-37	386	2386	-14.92	-28.31	0.02
39	SLV 3	-47	132	2620	-4.63	-35.87	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
39	SLV 4	-47	132	2620	-4.63	-35.87	0.02
39	SLV 5	-6	603	1676	-23.5	-2.68	0.01
39	SLV 6	-6	603	1676	-23.5	-2.68	0.01
39	SLV 7	-38	-245	2456	10.79	-27.87	-0.01
39	SLV 8	-38	-245	2456	10.79	-27.87	-0.01
39	SLV 9	12	535	1301	-20.57	11.73	0
39	SLV 10	12	535	1301	-20.57	11.73	0
39	SLV 11	-20	-313	2081	13.72	-13.46	-0.02
39	SLV 12	-20	-313	2081	13.72	-13.46	-0.02
39	SLV 13	21	158	1137	-5.15	19.73	-0.03
39	SLV 14	21	158	1137	-5.15	19.73	-0.03
39	SLV 15	12	-96	1371	5.14	12.18	-0.03
39	SLV 16	12	-96	1371	5.14	12.18	-0.03
40	SLU 1	7	202	1802	-6.51	4.79	0
40	SLU 2	4	209	1857	-6.39	2.24	0
40	SLU 3	7	202	1802	-6.51	4.79	0
40	SLU 4	5	206	1835	-6.44	3.26	0
40	SLU 5	4	209	1857	-6.39	2.24	0
40	SLU 6	7	202	1802	-6.51	4.79	0
40	SLU 7	5	206	1835	-6.44	3.26	0
40	SLU 8	7	202	1802	-6.51	4.79	0
40	SLU 9	5	206	1835	-6.44	3.26	0
40	SLU 10	5	267	2120	-8.28	3.16	0
40	SLU 11	8	260	2065	-8.4	5.71	0
40	SLU 12	6	264	2098	-8.33	4.18	0
40	SLU 13	5	267	2120	-8.28	3.16	0
40	SLU 14	8	260	2065	-8.4	5.71	0
40	SLU 15	6	264	2098	-8.33	4.18	0
40	SLU 16	8	260	2065	-8.4	5.71	0
40	SLU 17	6	264	2098	-8.33	4.18	0
40	SLU 18	9	285	2178	-9.21	6.1	0
40	SLU 19	7	289	2211	-9.13	4.57	0
40	SLU 20	9	285	2178	-9.21	6.1	0
40	SLU 21	7	289	2211	-9.13	4.57	0
40	SLU 22	8	235	1951	-7.64	5.29	0
40	SLU 23	4	242	2007	-7.51	2.74	0
40	SLU 24	8	235	1951	-7.64	5.29	0
40	SLU 25	6	239	1985	-7.56	3.76	0
40	SLU 26	4	242	2007	-7.51	2.74	0
40	SLU 27	8	235	1951	-7.64	5.29	0
40	SLU 28	6	239	1985	-7.56	3.76	0
40	SLU 29	8	235	1951	-7.64	5.29	0
40	SLU 30	6	239	1985	-7.56	3.76	0
40	SLU 31	6	300	2270	-9.4	3.66	0
40	SLU 32	9	293	2214	-9.52	6.21	0
40	SLU 33	7	298	2248	-9.45	4.68	0
40	SLU 34	6	300	2270	-9.4	3.66	0
40	SLU 35	9	293	2214	-9.52	6.21	0
40	SLU 36	7	298	2248	-9.45	4.68	0
40	SLU 37	9	293	2214	-9.52	6.21	0
40	SLU 38	7	298	2248	-9.45	4.68	0
40	SLU 39	10	318	2327	-10.33	6.6	0
40	SLU 40	8	322	2360	-10.26	5.07	0
40	SLU 41	10	318	2327	-10.33	6.6	0
40	SLU 42	8	322	2360	-10.26	5.07	0
40	SLU 43	9	251	2291	-8.08	6.05	0
40	SLU 44	6	258	2346	-7.96	3.5	0
40	SLU 45	9	251	2291	-8.08	6.05	0
40	SLU 46	7	255	2324	-8.01	4.52	0
40	SLU 47	6	258	2346	-7.96	3.5	0
40	SLU 48	9	251	2291	-8.08	6.05	0
40	SLU 49	7	255	2324	-8.01	4.52	0
40	SLU 50	9	251	2291	-8.08	6.05	0
40	SLU 51	7	255	2324	-8.01	4.52	0
40	SLU 52	7	316	2609	-9.85	4.42	0
40	SLU 53	10	309	2554	-9.97	6.97	0
40	SLU 54	8	313	2587	-9.9	5.44	0
40	SLU 55	7	316	2609	-9.85	4.42	0
40	SLU 56	10	309	2554	-9.97	6.97	0
40	SLU 57	8	313	2587	-9.9	5.44	0
40	SLU 58	10	309	2554	-9.97	6.97	0
40	SLU 59	8	313	2587	-9.9	5.44	0
40	SLU 60	11	334	2667	-10.78	7.37	0
40	SLU 61	9	338	2700	-10.7	5.84	0
40	SLU 62	11	334	2667	-10.78	7.37	0
40	SLU 63	9	338	2700	-10.7	5.84	0
40	SLU 64	10	284	2441	-9.2	6.55	0
40	SLU 65	6	291	2496	-9.08	4	0
40	SLU 66	10	284	2441	-9.2	6.55	0
40	SLU 67	8	288	2474	-9.13	5.02	0
40	SLU 68	6	291	2496	-9.08	4	0
40	SLU 69	10	284	2441	-9.2	6.55	0
40	SLU 70	8	288	2474	-9.13	5.02	0
40	SLU 71	10	284	2441	-9.2	6.55	0
40	SLU 72	8	288	2474	-9.13	5.02	0
40	SLU 73	8	349	2759	-10.97	4.92	0.01
40	SLU 74	11	343	2704	-11.09	7.47	0
40	SLU 75	9	347	2737	-11.02	5.94	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
40	SLU 76	8	349	2759	-10.97	4.92	0.01
40	SLU 77	11	343	2704	-11.09	7.47	0
40	SLU 78	9	347	2737	-11.02	5.94	0
40	SLU 79	11	343	2704	-11.09	7.47	0
40	SLU 80	9	347	2737	-11.02	5.94	0
40	SLU 81	11	367	2816	-11.9	7.87	0
40	SLU 82	10	372	2850	-11.83	6.34	0
40	SLU 83	11	367	2816	-11.9	7.87	0
40	SLU 84	10	372	2850	-11.83	6.34	0
40	SLE RA 1	7	211	1845	-6.83	4.93	0
40	SLE RA 2	5	216	1881	-6.75	3.23	0
40	SLE RA 3	7	211	1845	-6.83	4.93	0
40	SLE RA 4	6	214	1867	-6.79	3.91	0
40	SLE RA 5	5	216	1881	-6.75	3.23	0
40	SLE RA 6	7	211	1845	-6.83	4.93	0
40	SLE RA 7	6	214	1867	-6.79	3.91	0
40	SLE RA 8	7	211	1845	-6.83	4.93	0
40	SLE RA 9	6	214	1867	-6.79	3.91	0
40	SLE RA 10	6	255	2057	-8.01	3.84	0
40	SLE RA 11	8	250	2020	-8.09	5.54	0
40	SLE RA 12	7	253	2042	-8.04	4.52	0
40	SLE RA 13	6	255	2057	-8.01	3.84	0
40	SLE RA 14	8	250	2020	-8.09	5.54	0
40	SLE RA 15	7	253	2042	-8.04	4.52	0
40	SLE RA 16	8	250	2020	-8.09	5.54	0
40	SLE RA 17	7	253	2042	-8.04	4.52	0
40	SLE RA 18	8	267	2095	-8.63	5.81	0
40	SLE RA 19	7	270	2117	-8.58	4.79	0
40	SLE RA 20	8	267	2095	-8.63	5.81	0
40	SLE RA 21	7	270	2117	-8.58	4.79	0
40	SLE FR 1	7	211	1845	-6.83	4.93	0
40	SLE FR 2	7	212	1852	-6.82	4.59	0
40	SLE FR 3	7	211	1845	-6.83	4.93	0
40	SLE FR 4	7	229	1927	-7.36	4.85	0
40	SLE FR 5	8	228	1920	-7.37	5.19	0
40	SLE FR 6	8	239	1970	-7.73	5.37	0
40	SLE QP 1	7	211	1845	-6.83	4.93	0
40	SLE QP 2	8	228	1920	-7.37	5.19	0
40	SLD 1	10	218	1803	-7.14	10.29	0.02
40	SLD 2	10	218	1803	-7.14	10.29	0.02
40	SLD 3	15	115	1757	-2.84	14.17	0.01
40	SLD 4	15	115	1757	-2.84	14.17	0.01
40	SLD 5	2	381	1956	-13.82	0.84	0.01
40	SLD 6	2	381	1956	-13.82	0.84	0.01
40	SLD 7	16	38	1800	0.5	13.77	0
40	SLD 8	16	38	1800	0.5	13.77	0
40	SLD 9	-1	418	2040	-15.25	-3.39	0
40	SLD 10	-1	418	2040	-15.25	-3.39	0
40	SLD 11	13	75	1884	-0.93	9.55	-0.01
40	SLD 12	13	75	1884	-0.93	9.55	-0.01
40	SLD 13	1	341	2083	-11.9	-3.79	-0.01
40	SLD 14	1	341	2083	-11.9	-3.79	-0.01
40	SLD 15	5	238	2036	-7.61	0.1	-0.01
40	SLD 16	5	238	2036	-7.61	0.1	-0.01
40	SLV 1	14	205	1653	-6.84	16.8	0.04
40	SLV 2	14	205	1653	-6.84	16.8	0.04
40	SLV 3	25	-39	1535	3.31	26.75	0.03
40	SLV 4	25	-39	1535	3.31	26.75	0.03
40	SLV 5	-7	590	2018	-22.6	-6.4	0.03
40	SLV 6	-7	590	2018	-22.6	-6.4	0.03
40	SLV 7	29	-221	1626	11.22	26.74	-0.01
40	SLV 8	29	-221	1626	11.22	26.74	-0.01
40	SLV 9	-14	677	2214	-25.97	-16.35	0.01
40	SLV 10	-14	677	2214	-25.97	-16.35	0.01
40	SLV 11	22	-134	1821	7.86	16.79	-0.02
40	SLV 12	22	-134	1821	7.86	16.79	-0.02
40	SLV 13	-9	495	2304	-18.06	-16.36	-0.02
40	SLV 14	-9	495	2304	-18.06	-16.36	-0.02
40	SLV 15	2	251	2187	-7.91	-6.42	-0.03
40	SLV 16	2	251	2187	-7.91	-6.42	-0.03
41	SLU 1	-8	144	1883	-5.89	-5.38	-0.01
41	SLU 2	-5	145	1932	-6.22	-3.28	-0.01
41	SLU 3	-8	144	1883	-5.89	-5.38	-0.01
41	SLU 4	-6	145	1912	-6.09	-4.12	-0.01
41	SLU 5	-5	145	1932	-6.22	-3.28	-0.01
41	SLU 6	-8	144	1883	-5.89	-5.38	-0.01
41	SLU 7	-6	145	1912	-6.09	-4.12	-0.01
41	SLU 8	-8	144	1883	-5.89	-5.38	-0.01
41	SLU 9	-6	145	1912	-6.09	-4.12	-0.01
41	SLU 10	-6	193	2165	-8.14	-3.85	-0.01
41	SLU 11	-9	191	2116	-7.81	-5.94	-0.01
41	SLU 12	-7	192	2145	-8.01	-4.69	-0.01
41	SLU 13	-6	193	2165	-8.14	-3.85	-0.01
41	SLU 14	-9	191	2116	-7.81	-5.94	-0.01
41	SLU 15	-7	192	2145	-8.01	-4.69	-0.01
41	SLU 16	-9	191	2116	-7.81	-5.94	-0.01
41	SLU 17	-7	192	2145	-8.01	-4.69	-0.01
41	SLU 18	-9	211	2216	-8.63	-6.19	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
41	SLU 19	-7	212	2245	-8.83	-4.93	-0.01
41	SLU 20	-9	211	2216	-8.63	-6.19	-0.01
41	SLU 21	-7	212	2245	-8.83	-4.93	-0.01
41	SLU 22	-9	172	2038	-7	-5.78	-0.01
41	SLU 23	-6	173	2086	-7.33	-3.69	-0.01
41	SLU 24	-9	172	2038	-7	-5.78	-0.01
41	SLU 25	-7	173	2067	-7.2	-4.53	-0.01
41	SLU 26	-6	173	2086	-7.33	-3.69	-0.01
41	SLU 27	-9	172	2038	-7	-5.78	-0.01
41	SLU 28	-7	173	2067	-7.2	-4.53	-0.01
41	SLU 29	-9	172	2038	-7	-5.78	-0.01
41	SLU 30	-7	173	2067	-7.2	-4.53	-0.01
41	SLU 31	-6	221	2319	-9.25	-4.25	-0.01
41	SLU 32	-9	219	2271	-8.92	-6.35	-0.01
41	SLU 33	-8	220	2300	-9.12	-5.09	-0.01
41	SLU 34	-6	221	2319	-9.25	-4.25	-0.01
41	SLU 35	-9	219	2271	-8.92	-6.35	-0.01
41	SLU 36	-8	220	2300	-9.12	-5.09	-0.01
41	SLU 37	-9	219	2271	-8.92	-6.35	-0.01
41	SLU 38	-8	220	2300	-9.12	-5.09	-0.01
41	SLU 39	-10	239	2370	-9.74	-6.59	-0.01
41	SLU 40	-8	240	2399	-9.94	-5.33	-0.01
41	SLU 41	-10	239	2370	-9.74	-6.59	-0.01
41	SLU 42	-8	240	2399	-9.94	-5.33	-0.01
41	SLU 43	-10	177	2395	-7.28	-6.86	-0.01
41	SLU 44	-7	179	2444	-7.61	-4.76	-0.01
41	SLU 45	-10	177	2395	-7.28	-6.86	-0.01
41	SLU 46	-8	178	2424	-7.48	-5.6	-0.01
41	SLU 47	-7	179	2444	-7.61	-4.76	-0.01
41	SLU 48	-10	177	2395	-7.28	-6.86	-0.01
41	SLU 49	-8	178	2424	-7.48	-5.6	-0.01
41	SLU 50	-10	177	2395	-7.28	-6.86	-0.01
41	SLU 51	-8	178	2424	-7.48	-5.6	-0.01
41	SLU 52	-8	226	2677	-9.53	-5.32	-0.01
41	SLU 53	-11	224	2628	-9.2	-7.42	-0.01
41	SLU 54	-9	225	2657	-9.4	-6.16	-0.01
41	SLU 55	-8	226	2677	-9.53	-5.32	-0.01
41	SLU 56	-11	224	2628	-9.2	-7.42	-0.01
41	SLU 57	-9	225	2657	-9.4	-6.16	-0.01
41	SLU 58	-11	224	2628	-9.2	-7.42	-0.01
41	SLU 59	-9	225	2657	-9.4	-6.16	-0.01
41	SLU 60	-11	245	2728	-10.02	-7.66	-0.01
41	SLU 61	-10	246	2757	-10.22	-6.4	-0.01
41	SLU 62	-11	245	2728	-10.02	-7.66	-0.01
41	SLU 63	-10	246	2757	-10.22	-6.4	-0.01
41	SLU 64	-11	205	2550	-8.39	-7.26	-0.01
41	SLU 65	-8	207	2598	-8.72	-5.16	-0.01
41	SLU 66	-11	205	2550	-8.39	-7.26	-0.01
41	SLU 67	-9	206	2579	-8.59	-6	-0.01
41	SLU 68	-8	207	2598	-8.72	-5.16	-0.01
41	SLU 69	-11	205	2550	-8.39	-7.26	-0.01
41	SLU 70	-9	206	2579	-8.59	-6	-0.01
41	SLU 71	-11	205	2550	-8.39	-7.26	-0.01
41	SLU 72	-9	206	2579	-8.59	-6	-0.01
41	SLU 73	-9	254	2831	-10.64	-5.73	-0.01
41	SLU 74	-12	252	2783	-10.31	-7.82	-0.01
41	SLU 75	-10	253	2812	-10.5	-6.57	-0.01
41	SLU 76	-9	254	2831	-10.64	-5.73	-0.01
41	SLU 77	-12	252	2783	-10.31	-7.82	-0.01
41	SLU 78	-10	253	2812	-10.5	-6.57	-0.01
41	SLU 79	-12	252	2783	-10.31	-7.82	-0.01
41	SLU 80	-10	253	2812	-10.5	-6.57	-0.01
41	SLU 81	-12	273	2882	-11.13	-8.07	-0.01
41	SLU 82	-10	274	2911	-11.33	-6.81	-0.01
41	SLU 83	-12	273	2882	-11.13	-8.07	-0.01
41	SLU 84	-10	274	2911	-11.33	-6.81	-0.01
41	SLE RA 1	-8	152	1927	-6.21	-5.5	-0.01
41	SLE RA 2	-6	153	1960	-6.43	-4.1	-0.01
41	SLE RA 3	-8	152	1927	-6.21	-5.5	-0.01
41	SLE RA 4	-7	152	1947	-6.34	-4.66	-0.01
41	SLE RA 5	-6	153	1960	-6.43	-4.1	-0.01
41	SLE RA 6	-8	152	1927	-6.21	-5.5	-0.01
41	SLE RA 7	-7	152	1947	-6.34	-4.66	-0.01
41	SLE RA 8	-8	152	1927	-6.21	-5.5	-0.01
41	SLE RA 9	-7	152	1947	-6.34	-4.66	-0.01
41	SLE RA 10	-7	184	2115	-7.71	-4.47	-0.01
41	SLE RA 11	-9	183	2083	-7.49	-5.87	-0.01
41	SLE RA 12	-7	184	2102	-7.62	-5.03	-0.01
41	SLE RA 13	-7	184	2115	-7.71	-4.47	-0.01
41	SLE RA 14	-9	183	2083	-7.49	-5.87	-0.01
41	SLE RA 15	-7	184	2102	-7.62	-5.03	-0.01
41	SLE RA 16	-9	183	2083	-7.49	-5.87	-0.01
41	SLE RA 17	-7	184	2102	-7.62	-5.03	-0.01
41	SLE RA 18	-9	197	2149	-8.04	-6.03	-0.01
41	SLE RA 19	-8	197	2169	-8.17	-5.19	-0.01
41	SLE RA 20	-9	197	2149	-8.04	-6.03	-0.01
41	SLE RA 21	-8	197	2169	-8.17	-5.19	-0.01
41	SLE FR 1	-8	152	1927	-6.21	-5.5	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
41	SLE FR 2	-8	152	1934	-6.25	-5.22	-0.01
41	SLE FR 3	-8	152	1927	-6.21	-5.5	-0.01
41	SLE FR 4	-8	165	2000	-6.8	-5.38	-0.01
41	SLE FR 5	-8	165	1994	-6.76	-5.66	-0.01
41	SLE FR 6	-9	174	2038	-7.12	-5.76	-0.01
41	SLE QP 1	-8	152	1927	-6.21	-5.5	-0.01
41	SLE QP 2	-8	165	1994	-6.76	-5.66	-0.01
41	SLD 1	-15	271	2189	-10.92	-12.21	0.01
41	SLD 2	-15	271	2189	-10.92	-12.21	0.01
41	SLD 3	-19	163	2265	-6.58	-14.98	0.01
41	SLD 4	-19	163	2265	-6.58	-14.98	0.01
41	SLD 5	-4	361	1937	-14.59	-3.42	0
41	SLD 6	-4	361	1937	-14.59	-3.42	0
41	SLD 7	-18	0	2191	-0.12	-12.66	-0.01
41	SLD 8	-18	0	2191	-0.12	-12.66	-0.01
41	SLD 9	1	330	1797	-13.39	1.34	-0.01
41	SLD 10	1	330	1797	-13.39	1.34	-0.01
41	SLD 11	-12	-31	2051	1.08	-7.89	-0.02
41	SLD 12	-12	-31	2051	1.08	-7.89	-0.02
41	SLD 13	2	168	1723	-6.93	3.67	-0.02
41	SLD 14	2	168	1723	-6.93	3.67	-0.02
41	SLD 15	-2	59	1799	-2.59	0.9	-0.02
41	SLD 16	-2	59	1799	-2.59	0.9	-0.02
41	SLV 1	-24	415	2463	-16.59	-20.57	0.03
41	SLV 2	-24	415	2463	-16.59	-20.57	0.03
41	SLV 3	-34	159	2677	-6.34	-27.95	0.02
41	SLV 4	-34	159	2677	-6.34	-27.95	0.02
41	SLV 5	3	628	1810	-25.25	1.06	0.02
41	SLV 6	3	628	1810	-25.25	1.06	0.02
41	SLV 7	-32	-225	2524	8.91	-23.54	-0.01
41	SLV 8	-32	-225	2524	8.91	-23.54	-0.01
41	SLV 9	16	555	1464	-22.43	12.23	0
41	SLV 10	16	555	1464	-22.43	12.23	0
41	SLV 11	-20	-298	2178	11.74	-12.38	-0.03
41	SLV 12	-20	-298	2178	11.74	-12.38	-0.03
41	SLV 13	18	172	1310	-7.17	16.64	-0.04
41	SLV 14	18	172	1310	-7.17	16.64	-0.04
41	SLV 15	7	-84	1525	3.08	9.26	-0.05
41	SLV 16	7	-84	1525	3.08	9.26	-0.05
42	SLU 1	1	185	1976	-7.7	1.84	0
42	SLU 2	-3	207	2054	-8.85	-0.35	0.01
42	SLU 3	1	185	1976	-7.7	1.84	0
42	SLU 4	-2	198	2023	-8.39	0.52	0
42	SLU 5	-3	207	2054	-8.85	-0.35	0.01
42	SLU 6	1	185	1976	-7.7	1.84	0
42	SLU 7	-2	198	2023	-8.39	0.52	0
42	SLU 8	1	185	1976	-7.7	1.84	0
42	SLU 9	-2	198	2023	-8.39	0.52	0
42	SLU 10	-3	274	2385	-11.4	-0.29	0
42	SLU 11	0	252	2306	-10.26	1.9	0
42	SLU 12	-2	265	2354	-10.94	0.59	0
42	SLU 13	-3	274	2385	-11.4	-0.29	0
42	SLU 14	0	252	2306	-10.26	1.9	0
42	SLU 15	-2	265	2354	-10.94	0.59	0
42	SLU 16	0	252	2306	-10.26	1.9	0
42	SLU 17	-2	265	2354	-10.94	0.59	0
42	SLU 18	0	280	2448	-11.35	1.93	0
42	SLU 19	-2	294	2495	-12.04	0.62	0
42	SLU 20	0	280	2448	-11.35	1.93	0
42	SLU 21	-2	294	2495	-12.04	0.62	0
42	SLU 22	0	222	2162	-9.11	1.89	0
42	SLU 23	-3	245	2241	-10.25	-0.3	0
42	SLU 24	0	222	2162	-9.11	1.89	0
42	SLU 25	-2	236	2209	-9.79	0.58	0
42	SLU 26	-3	245	2241	-10.25	-0.3	0
42	SLU 27	0	222	2162	-9.11	1.89	0
42	SLU 28	-2	236	2209	-9.79	0.58	0
42	SLU 29	0	222	2162	-9.11	1.89	0
42	SLU 30	-2	236	2209	-9.79	0.58	0
42	SLU 31	-4	311	2572	-12.81	-0.23	0
42	SLU 32	0	289	2493	-11.66	1.96	0
42	SLU 33	-2	302	2540	-12.35	0.64	0
42	SLU 34	-4	311	2572	-12.81	-0.23	0
42	SLU 35	0	289	2493	-11.66	1.96	0
42	SLU 36	-2	302	2540	-12.35	0.64	0
42	SLU 37	0	289	2493	-11.66	1.96	0
42	SLU 38	-2	302	2540	-12.35	0.64	0
42	SLU 39	0	318	2635	-12.76	1.98	0
42	SLU 40	-2	331	2682	-13.44	0.67	0
42	SLU 41	0	318	2635	-12.76	1.98	0
42	SLU 42	-2	331	2682	-13.44	0.67	0
42	SLU 43	1	228	2504	-9.53	2.37	0
42	SLU 44	-3	250	2583	-10.68	0.18	0.01
42	SLU 45	1	228	2504	-9.53	2.37	0
42	SLU 46	-1	241	2551	-10.22	1.06	0.01
42	SLU 47	-3	250	2583	-10.68	0.18	0.01
42	SLU 48	1	228	2504	-9.53	2.37	0
42	SLU 49	-1	241	2551	-10.22	1.06	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
42	SLU 50	1	228	2504	-9.53	2.37	0
42	SLU 51	-1	241	2551	-10.22	1.06	0.01
42	SLU 52	-3	317	2914	-13.23	0.24	0.01
42	SLU 53	0	294	2835	-12.09	2.43	0
42	SLU 54	-2	308	2882	-12.77	1.12	0
42	SLU 55	-3	317	2914	-13.23	0.24	0.01
42	SLU 56	0	294	2835	-12.09	2.43	0
42	SLU 57	-2	308	2882	-12.77	1.12	0
42	SLU 58	0	294	2835	-12.09	2.43	0
42	SLU 59	-2	308	2882	-12.77	1.12	0
42	SLU 60	0	323	2977	-13.18	2.46	0
42	SLU 61	-2	336	3024	-13.87	1.15	0
42	SLU 62	0	323	2977	-13.18	2.46	0
42	SLU 63	-2	336	3024	-13.87	1.15	0
42	SLU 64	1	265	2691	-10.94	2.42	0
42	SLU 65	-3	287	2770	-12.08	0.24	0.01
42	SLU 66	1	265	2691	-10.94	2.42	0
42	SLU 67	-1	278	2738	-11.62	1.11	0.01
42	SLU 68	-3	287	2770	-12.08	0.24	0.01
42	SLU 69	1	265	2691	-10.94	2.42	0
42	SLU 70	-1	278	2738	-11.62	1.11	0.01
42	SLU 71	1	265	2691	-10.94	2.42	0
42	SLU 72	-1	278	2738	-11.62	1.11	0.01
42	SLU 73	-3	354	3100	-14.63	0.3	0.01
42	SLU 74	0	332	3022	-13.49	2.49	0
42	SLU 75	-2	345	3069	-14.18	1.18	0
42	SLU 76	-3	354	3100	-14.63	0.3	0.01
42	SLU 77	0	332	3022	-13.49	2.49	0
42	SLU 78	-2	345	3069	-14.18	1.18	0
42	SLU 79	0	332	3022	-13.49	2.49	0
42	SLU 80	-2	345	3069	-14.18	1.18	0
42	SLU 81	0	360	3163	-14.59	2.52	0
42	SLU 82	-2	374	3211	-15.27	1.2	0
42	SLU 83	0	360	3163	-14.59	2.52	0
42	SLU 84	-2	374	3211	-15.27	1.2	0
42	SLE RA 1	0	196	2029	-8.1	1.85	0
42	SLE RA 2	-2	211	2081	-8.87	0.39	0
42	SLE RA 3	0	196	2029	-8.1	1.85	0
42	SLE RA 4	-1	205	2060	-8.56	0.98	0
42	SLE RA 5	-2	211	2081	-8.87	0.39	0
42	SLE RA 6	0	196	2029	-8.1	1.85	0
42	SLE RA 7	-1	205	2060	-8.56	0.98	0
42	SLE RA 8	0	196	2029	-8.1	1.85	0
42	SLE RA 9	-1	205	2060	-8.56	0.98	0
42	SLE RA 10	-2	255	2302	-10.57	0.44	0
42	SLE RA 11	0	240	2249	-9.81	1.9	0
42	SLE RA 12	-1	249	2281	-10.26	1.02	0
42	SLE RA 13	-2	255	2302	-10.57	0.44	0
42	SLE RA 14	0	240	2249	-9.81	1.9	0
42	SLE RA 15	-1	249	2281	-10.26	1.02	0
42	SLE RA 16	0	240	2249	-9.81	1.9	0
42	SLE RA 17	-1	249	2281	-10.26	1.02	0
42	SLE RA 18	0	259	2344	-10.54	1.91	0
42	SLE RA 19	-1	268	2375	-10.99	1.04	0
42	SLE RA 20	0	259	2344	-10.54	1.91	0
42	SLE RA 21	-1	268	2375	-10.99	1.04	0
42	SLE FR 1	0	196	2029	-8.1	1.85	0
42	SLE FR 2	0	199	2039	-8.26	1.56	0
42	SLE FR 3	0	196	2029	-8.1	1.85	0
42	SLE FR 4	0	218	2134	-8.99	1.58	0
42	SLE FR 5	0	215	2123	-8.83	1.87	0
42	SLE FR 6	0	228	2186	-9.32	1.88	0
42	SLE QP 1	0	196	2029	-8.1	1.85	0
42	SLE QP 2	0	215	2123	-8.83	1.87	0
42	SLD 1	-6	202	1957	-8.59	4.11	0.02
42	SLD 2	-6	202	1957	-8.59	4.11	0.02
42	SLD 3	-1	100	1921	-4.38	6.99	0.02
42	SLD 4	-1	100	1921	-4.38	6.99	0.02
42	SLD 5	-8	365	2128	-15.15	-1.83	0.02
42	SLD 6	-8	365	2128	-15.15	-1.83	0.02
42	SLD 7	6	26	2008	-1.11	7.77	0
42	SLD 8	6	26	2008	-1.11	7.77	0
42	SLD 9	-6	404	2239	-16.56	-4.03	0.01
42	SLD 10	-6	404	2239	-16.56	-4.03	0.01
42	SLD 11	9	64	2119	-2.52	5.57	-0.01
42	SLD 12	9	64	2119	-2.52	5.57	-0.01
42	SLD 13	2	329	2326	-13.29	-3.24	-0.01
42	SLD 14	2	329	2326	-13.29	-3.24	-0.01
42	SLD 15	6	228	2290	-9.08	-0.36	-0.02
42	SLD 16	6	228	2290	-9.08	-0.36	-0.02
42	SLV 1	-15	185	1741	-8.27	6.75	0.05
42	SLV 2	-15	185	1741	-8.27	6.75	0.05
42	SLV 3	-3	-56	1649	1.71	14.33	0.04
42	SLV 4	-3	-56	1649	1.71	14.33	0.04
42	SLV 5	-22	572	2148	-23.81	-8.16	0.03
42	SLV 6	-22	572	2148	-23.81	-8.16	0.03
42	SLV 7	17	-233	1841	9.48	17.1	-0.01
42	SLV 8	17	-233	1841	9.48	17.1	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
42	SLV 9	-17	662	2406	-27.15	-13.36	0.01
42	SLV 10	-17	662	2406	-27.15	-13.36	0.01
42	SLV 11	23	-143	2098	6.15	11.9	-0.03
42	SLV 12	23	-143	2098	6.15	11.9	-0.03
42	SLV 13	4	486	2598	-19.38	-10.59	-0.03
42	SLV 14	4	486	2598	-19.38	-10.59	-0.03
42	SLV 15	15	244	2506	-9.39	-3.01	-0.04
42	SLV 16	15	244	2506	-9.39	-3.01	-0.04
43	SLU 1	-1	119	1996	-3.25	-2.23	0
43	SLU 2	2	114	2063	-2.51	-0.39	-0.01
43	SLU 3	-1	119	1996	-3.25	-2.23	0
43	SLU 4	1	116	2036	-2.81	-1.12	0
43	SLU 5	2	114	2063	-2.51	-0.39	-0.01
43	SLU 6	-1	119	1996	-3.25	-2.23	0
43	SLU 7	1	116	2036	-2.81	-1.12	0
43	SLU 8	-1	119	1996	-3.25	-2.23	0
43	SLU 9	1	116	2036	-2.81	-1.12	0
43	SLU 10	3	159	2357	-3.59	-0.27	0
43	SLU 11	0	164	2290	-4.34	-2.11	0
43	SLU 12	2	161	2330	-3.89	-1.01	0
43	SLU 13	3	159	2357	-3.59	-0.27	0
43	SLU 14	0	164	2290	-4.34	-2.11	0
43	SLU 15	2	161	2330	-3.89	-1.01	0
43	SLU 16	0	164	2290	-4.34	-2.11	0
43	SLU 17	2	161	2330	-3.89	-1.01	0
43	SLU 18	0	184	2416	-4.8	-2.06	0
43	SLU 19	2	180	2457	-4.35	-0.96	0
43	SLU 20	0	184	2416	-4.8	-2.06	0
43	SLU 21	2	180	2457	-4.35	-0.96	0
43	SLU 22	-1	146	2184	-3.99	-2.24	0
43	SLU 23	3	141	2251	-3.24	-0.4	0
43	SLU 24	-1	146	2184	-3.99	-2.24	0
43	SLU 25	1	143	2224	-3.54	-1.13	0
43	SLU 26	3	141	2251	-3.24	-0.4	0
43	SLU 27	-1	146	2184	-3.99	-2.24	0
43	SLU 28	1	143	2224	-3.54	-1.13	0
43	SLU 29	-1	146	2184	-3.99	-2.24	0
43	SLU 30	1	143	2224	-3.54	-1.13	0
43	SLU 31	3	186	2545	-4.32	-0.28	0
43	SLU 32	0	192	2478	-5.07	-2.12	0
43	SLU 33	2	188	2518	-4.62	-1.01	0
43	SLU 34	3	186	2545	-4.32	-0.28	0
43	SLU 35	0	192	2478	-5.07	-2.12	0
43	SLU 36	2	188	2518	-4.62	-1.01	0
43	SLU 37	0	192	2478	-5.07	-2.12	0
43	SLU 38	2	188	2518	-4.62	-1.01	0
43	SLU 39	0	211	2604	-5.53	-2.07	0
43	SLU 40	2	208	2645	-5.09	-0.96	0
43	SLU 41	0	211	2604	-5.53	-2.07	0
43	SLU 42	2	208	2645	-5.09	-0.96	0
43	SLU 43	-1	145	2530	-3.98	-2.89	-0.01
43	SLU 44	2	140	2597	-3.23	-1.05	-0.01
43	SLU 45	-1	145	2530	-3.98	-2.89	-0.01
43	SLU 46	1	142	2570	-3.53	-1.79	-0.01
43	SLU 47	2	140	2597	-3.23	-1.05	-0.01
43	SLU 48	-1	145	2530	-3.98	-2.89	-0.01
43	SLU 49	1	142	2570	-3.53	-1.79	-0.01
43	SLU 50	-1	145	2530	-3.98	-2.89	-0.01
43	SLU 51	1	142	2570	-3.53	-1.79	-0.01
43	SLU 52	3	185	2891	-4.31	-0.94	-0.01
43	SLU 53	-1	191	2824	-5.06	-2.78	0
43	SLU 54	1	187	2865	-4.61	-1.67	0
43	SLU 55	3	185	2891	-4.31	-0.94	-0.01
43	SLU 56	-1	191	2824	-5.06	-2.78	0
43	SLU 57	1	187	2865	-4.61	-1.67	0
43	SLU 58	-1	191	2824	-5.06	-2.78	0
43	SLU 59	1	187	2865	-4.61	-1.67	0
43	SLU 60	0	210	2951	-5.52	-2.73	0
43	SLU 61	2	207	2991	-5.08	-1.62	0
43	SLU 62	0	210	2951	-5.52	-2.73	0
43	SLU 63	2	207	2991	-5.08	-1.62	0
43	SLU 64	-1	173	2718	-4.71	-2.9	0
43	SLU 65	2	167	2785	-3.97	-1.06	-0.01
43	SLU 66	-1	173	2718	-4.71	-2.9	0
43	SLU 67	1	169	2758	-4.26	-1.8	-0.01
43	SLU 68	2	167	2785	-3.97	-1.06	-0.01
43	SLU 69	-1	173	2718	-4.71	-2.9	0
43	SLU 70	1	169	2758	-4.26	-1.8	-0.01
43	SLU 71	-1	173	2718	-4.71	-2.9	0
43	SLU 72	1	169	2758	-4.26	-1.8	-0.01
43	SLU 73	3	212	3079	-5.05	-0.94	0
43	SLU 74	0	218	3012	-5.79	-2.78	0
43	SLU 75	1	215	3053	-5.35	-1.68	0
43	SLU 76	3	212	3079	-5.05	-0.94	0
43	SLU 77	0	218	3012	-5.79	-2.78	0
43	SLU 78	1	215	3053	-5.35	-1.68	0
43	SLU 79	0	218	3012	-5.79	-2.78	0
43	SLU 80	1	215	3053	-5.35	-1.68	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
43	SLU 81	0	237	3139	-6.26	-2.73	0
43	SLU 82	2	234	3179	-5.81	-1.63	0
43	SLU 83	0	237	3139	-6.26	-2.73	0
43	SLU 84	2	234	3179	-5.81	-1.63	0
43	SLE RA 1	-1	127	2049	-3.46	-2.23	0
43	SLE RA 2	1	123	2094	-2.97	-1	0
43	SLE RA 3	-1	127	2049	-3.46	-2.23	0
43	SLE RA 4	0	125	2076	-3.16	-1.49	0
43	SLE RA 5	1	123	2094	-2.97	-1	0
43	SLE RA 6	-1	127	2049	-3.46	-2.23	0
43	SLE RA 7	0	125	2076	-3.16	-1.49	0
43	SLE RA 8	-1	127	2049	-3.46	-2.23	0
43	SLE RA 9	0	125	2076	-3.16	-1.49	0
43	SLE RA 10	2	153	2290	-3.69	-0.92	0
43	SLE RA 11	0	157	2246	-4.18	-2.15	0
43	SLE RA 12	1	155	2273	-3.89	-1.42	0
43	SLE RA 13	2	153	2290	-3.69	-0.92	0
43	SLE RA 14	0	157	2246	-4.18	-2.15	0
43	SLE RA 15	1	155	2273	-3.89	-1.42	0
43	SLE RA 16	0	157	2246	-4.18	-2.15	0
43	SLE RA 17	1	155	2273	-3.89	-1.42	0
43	SLE RA 18	0	170	2330	-4.49	-2.12	0
43	SLE RA 19	1	168	2357	-4.2	-1.38	0
43	SLE RA 20	0	170	2330	-4.49	-2.12	0
43	SLE RA 21	1	168	2357	-4.2	-1.38	0
43	SLE FR 1	-1	127	2049	-3.46	-2.23	0
43	SLE FR 2	0	126	2058	-3.36	-1.99	0
43	SLE FR 3	-1	127	2049	-3.46	-2.23	0
43	SLE FR 4	0	139	2142	-3.67	-1.95	0
43	SLE FR 5	-1	140	2134	-3.77	-2.2	0
43	SLE FR 6	-1	148	2190	-3.98	-2.17	0
43	SLE QP 1	-1	127	2049	-3.46	-2.23	0
43	SLE QP 2	-1	140	2134	-3.77	-2.2	0
43	SLD 1	-4	255	2334	-8.53	-6.08	0.02
43	SLD 2	-4	255	2334	-8.53	-6.08	0.02
43	SLD 3	-8	145	2404	-4.01	-8.46	0.01
43	SLD 4	-8	145	2404	-4.01	-8.46	0.01
43	SLD 5	5	341	2088	-12.06	0.25	0.01
43	SLD 6	5	341	2088	-12.06	0.25	0.01
43	SLD 7	-9	-26	2321	3.02	-7.69	0
43	SLD 8	-9	-26	2321	3.02	-7.69	0
43	SLD 9	8	305	1946	-10.56	3.3	0
43	SLD 10	8	305	1946	-10.56	3.3	0
43	SLD 11	-6	-62	2179	4.52	-4.65	-0.01
43	SLD 12	-6	-62	2179	4.52	-4.65	-0.01
43	SLD 13	7	135	1863	-3.54	4.07	-0.02
43	SLD 14	7	135	1863	-3.54	4.07	-0.02
43	SLD 15	2	25	1933	0.99	1.68	-0.02
43	SLD 16	2	25	1933	0.99	1.68	-0.02
43	SLV 1	-7	413	2610	-15.25	-10.86	0.04
43	SLV 2	-7	413	2610	-15.25	-10.86	0.04
43	SLV 3	-19	153	2808	-4.53	-17.31	0.03
43	SLV 4	-19	153	2808	-4.53	-17.31	0.03
43	SLV 5	15	617	1978	-23.47	4.98	0.02
43	SLV 6	15	617	1978	-23.47	4.98	0.02
43	SLV 7	-24	-251	2635	12.26	-16.51	-0.01
43	SLV 8	-24	-251	2635	12.26	-16.51	-0.01
43	SLV 9	22	531	1632	-19.8	12.11	0
43	SLV 10	22	531	1632	-19.8	12.11	0
43	SLV 11	-16	-337	2289	15.93	-9.37	-0.03
43	SLV 12	-16	-337	2289	15.93	-9.37	-0.03
43	SLV 13	18	127	1459	-3.02	12.91	-0.04
43	SLV 14	18	127	1459	-3.02	12.91	-0.04
43	SLV 15	6	-133	1657	7.7	6.47	-0.05
43	SLV 16	6	-133	1657	7.7	6.47	-0.05
44	SLU 1	-9	135	2188	-3.05	-1.25	0.03
44	SLU 2	-12	152	2284	-3.28	-2.59	0.02
44	SLU 3	-9	135	2188	-3.05	-1.25	0.03
44	SLU 4	-11	145	2246	-3.19	-2.05	0.03
44	SLU 5	-12	152	2284	-3.28	-2.59	0.02
44	SLU 6	-9	135	2188	-3.05	-1.25	0.03
44	SLU 7	-11	145	2246	-3.19	-2.05	0.03
44	SLU 8	-9	135	2188	-3.05	-1.25	0.03
44	SLU 9	-11	145	2246	-3.19	-2.05	0.03
44	SLU 10	-16	221	2734	-5.04	-3.53	0.04
44	SLU 11	-14	204	2637	-4.8	-2.2	0.04
44	SLU 12	-15	214	2695	-4.94	-3	0.04
44	SLU 13	-16	221	2734	-5.04	-3.53	0.04
44	SLU 14	-14	204	2637	-4.8	-2.2	0.04
44	SLU 15	-15	214	2695	-4.94	-3	0.04
44	SLU 16	-14	204	2637	-4.8	-2.2	0.04
44	SLU 17	-15	214	2695	-4.94	-3	0.04
44	SLU 18	-15	233	2830	-5.56	-2.6	0.04
44	SLU 19	-17	244	2888	-5.7	-3.4	0.04
44	SLU 20	-15	233	2830	-5.56	-2.6	0.04
44	SLU 21	-17	244	2888	-5.7	-3.4	0.04
44	SLU 22	-12	173	2439	-4.08	-1.74	0.03
44	SLU 23	-14	191	2536	-4.32	-3.07	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
44	SLU 24	-12	173	2439	-4.08	-1.74	0.03
44	SLU 25	-13	184	2497	-4.22	-2.54	0.03
44	SLU 26	-14	191	2536	-4.32	-3.07	0.03
44	SLU 27	-12	173	2439	-4.08	-1.74	0.03
44	SLU 28	-13	184	2497	-4.22	-2.54	0.03
44	SLU 29	-12	173	2439	-4.08	-1.74	0.03
44	SLU 30	-13	184	2497	-4.22	-2.54	0.03
44	SLU 31	-18	260	2985	-6.07	-4.02	0.04
44	SLU 32	-16	242	2888	-5.84	-2.68	0.05
44	SLU 33	-17	253	2946	-5.98	-3.48	0.04
44	SLU 34	-18	260	2985	-6.07	-4.02	0.04
44	SLU 35	-16	242	2888	-5.84	-2.68	0.05
44	SLU 36	-17	253	2946	-5.98	-3.48	0.04
44	SLU 37	-16	242	2888	-5.84	-2.68	0.05
44	SLU 38	-17	253	2946	-5.98	-3.48	0.04
44	SLU 39	-17	272	3081	-6.59	-3.09	0.05
44	SLU 40	-19	282	3139	-6.73	-3.89	0.05
44	SLU 41	-17	272	3081	-6.59	-3.09	0.05
44	SLU 42	-19	282	3139	-6.73	-3.89	0.05
44	SLU 43	-12	162	2758	-3.61	-1.46	0.03
44	SLU 44	-14	179	2854	-3.84	-2.79	0.03
44	SLU 45	-12	162	2758	-3.61	-1.46	0.03
44	SLU 46	-13	172	2816	-3.75	-2.26	0.03
44	SLU 47	-14	179	2854	-3.84	-2.79	0.03
44	SLU 48	-12	162	2758	-3.61	-1.46	0.03
44	SLU 49	-13	172	2816	-3.75	-2.26	0.03
44	SLU 50	-12	162	2758	-3.61	-1.46	0.03
44	SLU 51	-13	172	2816	-3.75	-2.26	0.03
44	SLU 52	-18	248	3304	-5.6	-3.74	0.04
44	SLU 53	-16	231	3207	-5.36	-2.4	0.04
44	SLU 54	-17	241	3265	-5.5	-3.21	0.04
44	SLU 55	-18	248	3304	-5.6	-3.74	0.04
44	SLU 56	-16	231	3207	-5.36	-2.4	0.04
44	SLU 57	-17	241	3265	-5.5	-3.21	0.04
44	SLU 58	-16	231	3207	-5.36	-2.4	0.04
44	SLU 59	-17	241	3265	-5.5	-3.21	0.04
44	SLU 60	-17	261	3400	-6.12	-2.81	0.05
44	SLU 61	-19	271	3458	-6.26	-3.61	0.05
44	SLU 62	-17	261	3400	-6.12	-2.81	0.05
44	SLU 63	-19	271	3458	-6.26	-3.61	0.05
44	SLU 64	-14	201	3009	-4.64	-1.94	0.04
44	SLU 65	-16	218	3106	-4.88	-3.28	0.04
44	SLU 66	-14	201	3009	-4.64	-1.94	0.04
44	SLU 67	-15	211	3067	-4.78	-2.75	0.04
44	SLU 68	-16	218	3106	-4.88	-3.28	0.04
44	SLU 69	-14	201	3009	-4.64	-1.94	0.04
44	SLU 70	-15	211	3067	-4.78	-2.75	0.04
44	SLU 71	-14	201	3009	-4.64	-1.94	0.04
44	SLU 72	-15	211	3067	-4.78	-2.75	0.04
44	SLU 73	-20	287	3555	-6.63	-4.23	0.05
44	SLU 74	-18	270	3459	-6.4	-2.89	0.05
44	SLU 75	-19	280	3517	-6.54	-3.69	0.05
44	SLU 76	-20	287	3555	-6.63	-4.23	0.05
44	SLU 77	-18	270	3459	-6.4	-2.89	0.05
44	SLU 78	-19	280	3517	-6.54	-3.69	0.05
44	SLU 79	-18	270	3459	-6.4	-2.89	0.05
44	SLU 80	-19	280	3517	-6.54	-3.69	0.05
44	SLU 81	-20	299	3651	-7.15	-3.3	0.06
44	SLU 82	-21	310	3709	-7.29	-4.1	0.05
44	SLU 83	-20	299	3651	-7.15	-3.3	0.06
44	SLU 84	-21	310	3709	-7.29	-4.1	0.05
44	SLE RA 1	-10	146	2259	-3.34	-1.39	0.03
44	SLE RA 2	-12	157	2324	-3.5	-2.28	0.03
44	SLE RA 3	-10	146	2259	-3.34	-1.39	0.03
44	SLE RA 4	-11	153	2298	-3.44	-1.92	0.03
44	SLE RA 5	-12	157	2324	-3.5	-2.28	0.03
44	SLE RA 6	-10	146	2259	-3.34	-1.39	0.03
44	SLE RA 7	-11	153	2298	-3.44	-1.92	0.03
44	SLE RA 8	-10	146	2259	-3.34	-1.39	0.03
44	SLE RA 9	-11	153	2298	-3.44	-1.92	0.03
44	SLE RA 10	-15	203	2624	-4.67	-2.91	0.04
44	SLE RA 11	-13	192	2559	-4.51	-2.02	0.04
44	SLE RA 12	-14	199	2598	-4.61	-2.55	0.04
44	SLE RA 13	-15	203	2624	-4.67	-2.91	0.04
44	SLE RA 14	-13	192	2559	-4.51	-2.02	0.04
44	SLE RA 15	-14	199	2598	-4.61	-2.55	0.04
44	SLE RA 16	-13	192	2559	-4.51	-2.02	0.04
44	SLE RA 17	-14	199	2598	-4.61	-2.55	0.04
44	SLE RA 18	-14	212	2688	-5.02	-2.29	0.04
44	SLE RA 19	-15	219	2726	-5.11	-2.82	0.04
44	SLE RA 20	-14	212	2688	-5.02	-2.29	0.04
44	SLE RA 21	-15	219	2726	-5.11	-2.82	0.04
44	SLE FR 1	-10	146	2259	-3.34	-1.39	0.03
44	SLE FR 2	-10	148	2272	-3.37	-1.57	0.03
44	SLE FR 3	-10	146	2259	-3.34	-1.39	0.03
44	SLE FR 4	-12	168	2401	-3.88	-1.84	0.03
44	SLE FR 5	-11	166	2388	-3.85	-1.66	0.03
44	SLE FR 6	-12	179	2473	-4.18	-1.84	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
44	SLE QP 1	-10	146	2259	-3.34	-1.39	0.03
44	SLE QP 2	-11	166	2388	-3.85	-1.66	0.03
44	SLD 1	-8	147	2092	-3.65	-0.79	0.02
44	SLD 2	-8	147	2092	-3.65	-0.79	0.02
44	SLD 3	-4	43	2125	0.68	0.84	0.03
44	SLD 4	-4	43	2125	0.68	0.84	0.03
44	SLD 5	-15	319	2249	-10.36	-3.87	0.02
44	SLD 6	-15	319	2249	-10.36	-3.87	0.02
44	SLD 7	-4	-30	2359	4.09	1.57	0.04
44	SLD 8	-4	-30	2359	4.09	1.57	0.04
44	SLD 9	-18	361	2417	-11.78	-4.88	0.02
44	SLD 10	-18	361	2417	-11.78	-4.88	0.02
44	SLD 11	-7	13	2526	2.67	0.56	0.05
44	SLD 12	-7	13	2526	2.67	0.56	0.05
44	SLD 13	-18	289	2650	-8.37	-4.16	0.04
44	SLD 14	-18	289	2650	-8.37	-4.16	0.04
44	SLD 15	-15	184	2683	-4.04	-2.53	0.05
44	SLD 16	-15	184	2683	-4.04	-2.53	0.05
44	SLV 1	-4	123	1697	-3.41	0.11	0
44	SLV 2	-4	123	1697	-3.41	0.11	0
44	SLV 3	5	-125	1782	6.89	4.5	0.02
44	SLV 4	5	-125	1782	6.89	4.5	0.02
44	SLV 5	-22	530	2053	-19.34	-7.79	-0.01
44	SLV 6	-22	530	2053	-19.34	-7.79	-0.01
44	SLV 7	7	-299	2334	15	6.85	0.06
44	SLV 8	7	-299	2334	15	6.85	0.06
44	SLV 9	-29	630	2442	-22.69	-10.17	0.01
44	SLV 10	-29	630	2442	-22.69	-10.17	0.01
44	SLV 11	0	-199	2723	11.65	4.47	0.07
44	SLV 12	0	-199	2723	11.65	4.47	0.07
44	SLV 13	-28	456	2994	-14.58	-7.82	0.05
44	SLV 14	-28	456	2994	-14.58	-7.82	0.05
44	SLV 15	-19	208	3078	-4.28	-3.43	0.07
44	SLV 16	-19	208	3078	-4.28	-3.43	0.07
45	SLU 1	9	128	2189	-5.28	1.02	-0.02
45	SLU 2	12	133	2269	-5.99	2.15	-0.02
45	SLU 3	9	128	2189	-5.28	1.02	-0.02
45	SLU 4	11	131	2237	-5.7	1.7	-0.02
45	SLU 5	12	133	2269	-5.99	2.15	-0.02
45	SLU 6	9	128	2189	-5.28	1.02	-0.02
45	SLU 7	11	131	2237	-5.7	1.7	-0.02
45	SLU 8	9	128	2189	-5.28	1.02	-0.02
45	SLU 9	11	131	2237	-5.7	1.7	-0.02
45	SLU 10	15	194	2679	-8.19	3.11	-0.03
45	SLU 11	13	189	2599	-7.48	1.98	-0.03
45	SLU 12	15	192	2647	-7.9	2.66	-0.03
45	SLU 13	15	194	2679	-8.19	3.11	-0.03
45	SLU 14	13	189	2599	-7.48	1.98	-0.03
45	SLU 15	15	192	2647	-7.9	2.66	-0.03
45	SLU 16	13	189	2599	-7.48	1.98	-0.03
45	SLU 17	15	192	2647	-7.9	2.66	-0.03
45	SLU 18	15	215	2775	-8.42	2.39	-0.04
45	SLU 19	16	218	2823	-8.85	3.07	-0.03
45	SLU 20	15	215	2775	-8.42	2.39	-0.04
45	SLU 21	16	218	2823	-8.85	3.07	-0.03
45	SLU 22	11	162	2440	-6.49	1.5	-0.03
45	SLU 23	14	167	2520	-7.2	2.63	-0.02
45	SLU 24	11	162	2440	-6.49	1.5	-0.03
45	SLU 25	13	165	2488	-6.92	2.18	-0.02
45	SLU 26	14	167	2520	-7.2	2.63	-0.02
45	SLU 27	11	162	2440	-6.49	1.5	-0.03
45	SLU 28	13	165	2488	-6.92	2.18	-0.02
45	SLU 29	11	162	2440	-6.49	1.5	-0.03
45	SLU 30	13	165	2488	-6.92	2.18	-0.02
45	SLU 31	18	228	2930	-9.4	3.59	-0.03
45	SLU 32	15	223	2850	-8.69	2.46	-0.04
45	SLU 33	17	226	2898	-9.12	3.14	-0.03
45	SLU 34	18	228	2930	-9.4	3.59	-0.03
45	SLU 35	15	223	2850	-8.69	2.46	-0.04
45	SLU 36	17	226	2898	-9.12	3.14	-0.03
45	SLU 37	15	223	2850	-8.69	2.46	-0.04
45	SLU 38	17	226	2898	-9.12	3.14	-0.03
45	SLU 39	17	249	3026	-9.63	2.87	-0.04
45	SLU 40	18	252	3074	-10.06	3.55	-0.04
45	SLU 41	17	249	3026	-9.63	2.87	-0.04
45	SLU 42	18	252	3074	-10.06	3.55	-0.04
45	SLU 43	11	155	2759	-6.44	1.16	-0.03
45	SLU 44	14	160	2840	-7.16	2.29	-0.02
45	SLU 45	11	155	2759	-6.44	1.16	-0.03
45	SLU 46	13	158	2808	-6.87	1.84	-0.02
45	SLU 47	14	160	2840	-7.16	2.29	-0.02
45	SLU 48	11	155	2759	-6.44	1.16	-0.03
45	SLU 49	13	158	2808	-6.87	1.84	-0.02
45	SLU 50	11	155	2759	-6.44	1.16	-0.03
45	SLU 51	13	158	2808	-6.87	1.84	-0.02
45	SLU 52	18	220	3250	-9.36	3.25	-0.03
45	SLU 53	15	215	3170	-8.64	2.12	-0.04
45	SLU 54	17	218	3218	-9.07	2.8	-0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
45	SLU 55	18	220	3250	-9.36	3.25	-0.03
45	SLU 56	15	215	3170	-8.64	2.12	-0.04
45	SLU 57	17	218	3218	-9.07	2.8	-0.03
45	SLU 58	15	215	3170	-8.64	2.12	-0.04
45	SLU 59	17	218	3218	-9.07	2.8	-0.03
45	SLU 60	17	241	3346	-9.59	2.53	-0.04
45	SLU 61	18	244	3394	-10.01	3.21	-0.04
45	SLU 62	17	241	3346	-9.59	2.53	-0.04
45	SLU 63	18	244	3394	-10.01	3.21	-0.04
45	SLU 64	13	189	3010	-7.66	1.64	-0.03
45	SLU 65	16	194	3090	-8.37	2.77	-0.03
45	SLU 66	13	189	3010	-7.66	1.64	-0.03
45	SLU 67	15	192	3058	-8.08	2.32	-0.03
45	SLU 68	16	194	3090	-8.37	2.77	-0.03
45	SLU 69	13	189	3010	-7.66	1.64	-0.03
45	SLU 70	15	192	3058	-8.08	2.32	-0.03
45	SLU 71	13	189	3010	-7.66	1.64	-0.03
45	SLU 72	15	192	3058	-8.08	2.32	-0.03
45	SLU 73	20	255	3501	-10.57	3.73	-0.04
45	SLU 74	17	250	3420	-9.86	2.6	-0.04
45	SLU 75	19	253	3469	-10.28	3.28	-0.04
45	SLU 76	20	255	3501	-10.57	3.73	-0.04
45	SLU 77	17	250	3420	-9.86	2.6	-0.04
45	SLU 78	19	253	3469	-10.28	3.28	-0.04
45	SLU 79	17	250	3420	-9.86	2.6	-0.04
45	SLU 80	19	253	3469	-10.28	3.28	-0.04
45	SLU 81	19	276	3596	-10.8	3.01	-0.05
45	SLU 82	20	279	3644	-11.23	3.69	-0.04
45	SLU 83	19	276	3596	-10.8	3.01	-0.05
45	SLU 84	20	279	3644	-11.23	3.69	-0.04
45	SLE RA 1	10	138	2260	-5.62	1.16	-0.02
45	SLE RA 2	11	141	2314	-6.1	1.91	-0.02
45	SLE RA 3	10	138	2260	-5.62	1.16	-0.02
45	SLE RA 4	11	140	2293	-5.91	1.61	-0.02
45	SLE RA 5	11	141	2314	-6.1	1.91	-0.02
45	SLE RA 6	10	138	2260	-5.62	1.16	-0.02
45	SLE RA 7	11	140	2293	-5.91	1.61	-0.02
45	SLE RA 8	10	138	2260	-5.62	1.16	-0.02
45	SLE RA 9	11	140	2293	-5.91	1.61	-0.02
45	SLE RA 10	14	182	2587	-7.57	2.55	-0.03
45	SLE RA 11	12	178	2534	-7.09	1.8	-0.03
45	SLE RA 12	13	180	2566	-7.37	2.25	-0.03
45	SLE RA 13	14	182	2587	-7.57	2.55	-0.03
45	SLE RA 14	12	178	2534	-7.09	1.8	-0.03
45	SLE RA 15	13	180	2566	-7.37	2.25	-0.03
45	SLE RA 16	12	178	2534	-7.09	1.8	-0.03
45	SLE RA 17	13	180	2566	-7.37	2.25	-0.03
45	SLE RA 18	14	196	2651	-7.72	2.07	-0.03
45	SLE RA 19	14	198	2683	-8	2.52	-0.03
45	SLE RA 20	14	196	2651	-7.72	2.07	-0.03
45	SLE RA 21	14	198	2683	-8	2.52	-0.03
45	SLE FR 1	10	138	2260	-5.62	1.16	-0.02
45	SLE FR 2	10	138	2271	-5.72	1.31	-0.02
45	SLE FR 3	10	138	2260	-5.62	1.16	-0.02
45	SLE FR 4	11	156	2388	-6.35	1.58	-0.03
45	SLE FR 5	11	155	2378	-6.25	1.43	-0.03
45	SLE FR 6	12	167	2456	-6.67	1.61	-0.03
45	SLE QP 1	10	138	2260	-5.62	1.16	-0.02
45	SLE QP 2	11	155	2378	-6.25	1.43	-0.03
45	SLD 1	17	278	2647	-10.74	4.65	-0.03
45	SLD 2	17	278	2647	-10.74	4.65	-0.03
45	SLD 3	14	167	2713	-6.2	3.2	-0.04
45	SLD 4	14	167	2713	-6.2	3.2	-0.04
45	SLD 5	17	359	2358	-14.47	4.6	-0.02
45	SLD 6	17	359	2358	-14.47	4.6	-0.02
45	SLD 7	7	-9	2578	0.64	-0.24	-0.04
45	SLD 8	7	-9	2578	0.64	-0.24	-0.04
45	SLD 9	15	319	2177	-13.14	3.1	-0.01
45	SLD 10	15	319	2177	-13.14	3.1	-0.01
45	SLD 11	5	-49	2397	1.97	-1.74	-0.04
45	SLD 12	5	-49	2397	1.97	-1.74	-0.04
45	SLD 13	8	143	2042	-6.3	-0.34	-0.01
45	SLD 14	8	143	2042	-6.3	-0.34	-0.01
45	SLD 15	5	32	2108	-1.77	-1.79	-0.02
45	SLD 16	5	32	2108	-1.77	-1.79	-0.02
45	SLV 1	25	446	3009	-16.86	9.26	-0.04
45	SLV 2	25	446	3009	-16.86	9.26	-0.04
45	SLV 3	17	184	3195	-6.11	5.29	-0.06
45	SLV 4	17	184	3195	-6.11	5.29	-0.06
45	SLV 5	28	639	2285	-25.73	9.79	0
45	SLV 6	28	639	2285	-25.73	9.79	0
45	SLV 7	0	-233	2905	10.08	-3.43	-0.07
45	SLV 8	0	-233	2905	10.08	-3.43	-0.07
45	SLV 9	22	543	1850	-22.59	6.29	0.02
45	SLV 10	22	543	1850	-22.59	6.29	0.02
45	SLV 11	-6	-329	2470	13.22	-6.93	-0.05
45	SLV 12	-6	-329	2470	13.22	-6.93	-0.05
45	SLV 13	5	126	1560	-6.39	-2.43	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
45	SLV 14	5	126	1560	-6.39	-2.43	0.01
45	SLV 15	-3	-136	1746	4.35	-6.4	-0.01
45	SLV 16	-3	-136	1746	4.35	-6.4	-0.01
46	SLU 1	425	-36	3402	3	12.72	0
46	SLU 2	425	-43	3512	3.94	12.59	0
46	SLU 3	425	-36	3402	3	12.72	0
46	SLU 4	425	-40	3468	3.56	12.64	0
46	SLU 5	425	-43	3512	3.94	12.59	0
46	SLU 6	425	-36	3402	3	12.72	0
46	SLU 7	425	-40	3468	3.56	12.64	0
46	SLU 8	425	-36	3402	3	12.72	0
46	SLU 9	425	-40	3468	3.56	12.64	0
46	SLU 10	649	-60	4356	5.14	21.09	0
46	SLU 11	650	-54	4246	4.2	21.22	0
46	SLU 12	649	-58	4312	4.77	21.14	0
46	SLU 13	649	-60	4356	5.14	21.09	0
46	SLU 14	650	-54	4246	4.2	21.22	0
46	SLU 15	649	-58	4312	4.77	21.14	0
46	SLU 16	650	-54	4246	4.2	21.22	0
46	SLU 17	649	-58	4312	4.77	21.14	0
46	SLU 18	746	-61	4608	4.72	24.87	0
46	SLU 19	746	-65	4674	5.28	24.79	0
46	SLU 20	746	-61	4608	4.72	24.87	0
46	SLU 21	746	-65	4674	5.28	24.79	0
46	SLU 22	548	-45	3898	3.56	17.31	0
46	SLU 23	548	-51	4008	4.49	17.17	0
46	SLU 24	548	-45	3898	3.56	17.31	0
46	SLU 25	548	-48	3964	4.12	17.23	0
46	SLU 26	548	-51	4008	4.49	17.17	0
46	SLU 27	548	-45	3898	3.56	17.31	0
46	SLU 28	548	-48	3964	4.12	17.23	0
46	SLU 29	548	-45	3898	3.56	17.31	0
46	SLU 30	548	-48	3964	4.12	17.23	0
46	SLU 31	772	-69	4852	5.7	25.68	0
46	SLU 32	772	-62	4742	4.76	25.81	0
46	SLU 33	772	-66	4808	5.32	25.73	0
46	SLU 34	772	-69	4852	5.7	25.68	0
46	SLU 35	772	-62	4742	4.76	25.81	0
46	SLU 36	772	-66	4808	5.32	25.73	0
46	SLU 37	772	-62	4742	4.76	25.81	0
46	SLU 38	772	-66	4808	5.32	25.73	0
46	SLU 39	868	-70	5103	5.28	29.46	0
46	SLU 40	868	-74	5169	5.84	29.38	0
46	SLU 41	868	-70	5103	5.28	29.46	0
46	SLU 42	868	-74	5169	5.84	29.38	0
46	SLU 43	511	-44	4253	3.71	14.96	0
46	SLU 44	511	-51	4363	4.65	14.83	0
46	SLU 45	511	-44	4253	3.71	14.96	0
46	SLU 46	511	-48	4319	4.27	14.88	0
46	SLU 47	511	-51	4363	4.65	14.83	0
46	SLU 48	511	-44	4253	3.71	14.96	0
46	SLU 49	511	-48	4319	4.27	14.88	0
46	SLU 50	511	-44	4253	3.71	14.96	0
46	SLU 51	511	-48	4319	4.27	14.88	0
46	SLU 52	735	-68	5207	5.85	23.33	0
46	SLU 53	735	-62	5097	4.91	23.47	0
46	SLU 54	735	-66	5163	5.47	23.38	0
46	SLU 55	735	-68	5207	5.85	23.33	0
46	SLU 56	735	-62	5097	4.91	23.47	0
46	SLU 57	735	-66	5163	5.47	23.38	0
46	SLU 58	735	-62	5097	4.91	23.47	0
46	SLU 59	735	-66	5163	5.47	23.38	0
46	SLU 60	831	-69	5458	5.43	27.11	0
46	SLU 61	831	-73	5524	5.99	27.03	0
46	SLU 62	831	-69	5458	5.43	27.11	0
46	SLU 63	831	-73	5524	5.99	27.03	0
46	SLU 64	633	-53	4749	4.27	19.55	0
46	SLU 65	633	-59	4859	5.2	19.42	0
46	SLU 66	633	-53	4749	4.27	19.55	0
46	SLU 67	633	-57	4815	4.83	19.47	0
46	SLU 68	633	-59	4859	5.2	19.42	0
46	SLU 69	633	-53	4749	4.27	19.55	0
46	SLU 70	633	-57	4815	4.83	19.47	0
46	SLU 71	633	-53	4749	4.27	19.55	0
46	SLU 72	633	-57	4815	4.83	19.47	0
46	SLU 73	857	-77	5703	6.41	27.92	0
46	SLU 74	858	-70	5592	5.47	28.05	0
46	SLU 75	858	-74	5659	6.03	27.97	0
46	SLU 76	857	-77	5703	6.41	27.92	0
46	SLU 77	858	-70	5592	5.47	28.05	0
46	SLU 78	858	-74	5659	6.03	27.97	0
46	SLU 79	858	-70	5592	5.47	28.05	0
46	SLU 80	858	-74	5659	6.03	27.97	0
46	SLU 81	954	-78	5954	5.99	31.7	0
46	SLU 82	954	-82	6020	6.55	31.62	0
46	SLU 83	954	-78	5954	5.99	31.7	0
46	SLU 84	954	-82	6020	6.55	31.62	0
46	SLE RA 1	460	-39	3544	3.16	14.03	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
46	SLE RA 2	460	-43	3617	3.78	13.94	0
46	SLE RA 3	460	-39	3544	3.16	14.03	0
46	SLE RA 4	460	-41	3588	3.53	13.98	0
46	SLE RA 5	460	-43	3617	3.78	13.94	0
46	SLE RA 6	460	-39	3544	3.16	14.03	0
46	SLE RA 7	460	-41	3588	3.53	13.98	0
46	SLE RA 8	460	-39	3544	3.16	14.03	0
46	SLE RA 9	460	-41	3588	3.53	13.98	0
46	SLE RA 10	610	-55	4180	4.59	19.61	0
46	SLE RA 11	610	-50	4106	3.96	19.7	0
46	SLE RA 12	610	-53	4150	4.34	19.65	0
46	SLE RA 13	610	-55	4180	4.59	19.61	0
46	SLE RA 14	610	-50	4106	3.96	19.7	0
46	SLE RA 15	610	-53	4150	4.34	19.65	0
46	SLE RA 16	610	-50	4106	3.96	19.7	0
46	SLE RA 17	610	-53	4150	4.34	19.65	0
46	SLE RA 18	674	-55	4347	4.31	22.13	0
46	SLE RA 19	674	-58	4392	4.68	22.08	0
46	SLE RA 20	674	-55	4347	4.31	22.13	0
46	SLE RA 21	674	-58	4392	4.68	22.08	0
46	SLE FR 1	460	-39	3544	3.16	14.03	0
46	SLE FR 2	460	-40	3559	3.28	14.01	0
46	SLE FR 3	460	-39	3544	3.16	14.03	0
46	SLE FR 4	524	-45	3800	3.63	16.44	0
46	SLE FR 5	524	-44	3785	3.5	16.46	0
46	SLE FR 6	567	-47	3946	3.73	18.08	0
46	SLE QP 1	460	-39	3544	3.16	14.03	0
46	SLE QP 2	524	-44	3785	3.5	16.46	0
46	SLD 1	712	-32	4359	-1.28	24.73	0.01
46	SLD 2	712	-32	4359	-1.28	24.73	0.01
46	SLD 3	718	-146	4442	3.48	24.45	0
46	SLD 4	718	-146	4442	3.48	24.45	0
46	SLD 5	572	133	3831	-5.15	19.37	0.01
46	SLD 6	572	133	3831	-5.15	19.37	0.01
46	SLD 7	591	-248	4108	10.71	18.43	-0.01
46	SLD 8	591	-248	4108	10.71	18.43	-0.01
46	SLD 9	458	161	3461	-3.7	14.49	0.01
46	SLD 10	458	161	3461	-3.7	14.49	0.01
46	SLD 11	476	-221	3739	12.15	13.55	-0.01
46	SLD 12	476	-221	3739	12.15	13.55	-0.01
46	SLD 13	331	59	3127	3.53	8.47	0
46	SLD 14	331	59	3127	3.53	8.47	0
46	SLD 15	337	-56	3211	8.29	8.19	-0.01
46	SLD 16	337	-56	3211	8.29	8.19	-0.01
46	SLV 1	962	-20	5121	-8.09	35.73	0.03
46	SLV 2	962	-20	5121	-8.09	35.73	0.03
46	SLV 3	975	-292	5354	3.19	35.01	0.01
46	SLV 4	975	-292	5354	3.19	35.01	0.01
46	SLV 5	636	375	3833	-17.08	23.32	0.04
46	SLV 6	636	375	3833	-17.08	23.32	0.04
46	SLV 7	679	-530	4608	20.51	20.94	-0.02
46	SLV 8	679	-530	4608	20.51	20.94	-0.02
46	SLV 9	370	443	2962	-13.51	11.98	0.02
46	SLV 10	370	443	2962	-13.51	11.98	0.02
46	SLV 11	413	-463	3737	24.09	9.6	-0.04
46	SLV 12	413	-463	3737	24.09	9.6	-0.04
46	SLV 13	74	204	2216	3.82	-2.09	-0.01
46	SLV 14	74	204	2216	3.82	-2.09	-0.01
46	SLV 15	87	-68	2449	15.1	-2.81	-0.03
46	SLV 16	87	-68	2449	15.1	-2.81	-0.03
47	SLU 1	648	0	1722	-0.09	32	0
47	SLU 2	635	1	1761	-0.42	31.47	0
47	SLU 3	648	0	1722	-0.09	32	0
47	SLU 4	640	1	1745	-0.29	31.68	0
47	SLU 5	635	1	1761	-0.42	31.47	0
47	SLU 6	648	0	1722	-0.09	32	0
47	SLU 7	640	1	1745	-0.29	31.68	0
47	SLU 8	648	0	1722	-0.09	32	0
47	SLU 9	640	1	1745	-0.29	31.68	0
47	SLU 10	1022	1	2266	-0.47	48.11	0
47	SLU 11	1035	0	2226	-0.14	48.64	0
47	SLU 12	1027	1	2250	-0.34	48.32	0
47	SLU 13	1022	1	2266	-0.47	48.11	0
47	SLU 14	1035	0	2226	-0.14	48.64	0
47	SLU 15	1027	1	2250	-0.34	48.32	0
47	SLU 16	1035	0	2226	-0.14	48.64	0
47	SLU 17	1027	1	2250	-0.34	48.32	0
47	SLU 18	1200	0	2443	-0.16	55.77	0
47	SLU 19	1193	1	2466	-0.36	55.45	0
47	SLU 20	1200	0	2443	-0.16	55.77	0
47	SLU 21	1193	1	2466	-0.36	55.45	0
47	SLU 22	855	0	2017	-0.11	40.93	0
47	SLU 23	843	1	2056	-0.44	40.4	0
47	SLU 24	855	0	2017	-0.11	40.93	0
47	SLU 25	848	1	2041	-0.31	40.61	0
47	SLU 26	843	1	2056	-0.44	40.4	0
47	SLU 27	855	0	2017	-0.11	40.93	0
47	SLU 28	848	1	2041	-0.31	40.61	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
47	SLU 29	855	0	2017	-0.11	40.93	0
47	SLU 30	848	1	2041	-0.31	40.61	0
47	SLU 31	1230	1	2561	-0.49	57.03	0
47	SLU 32	1242	0	2522	-0.16	57.57	0
47	SLU 33	1235	1	2545	-0.36	57.25	0
47	SLU 34	1230	1	2561	-0.49	57.03	0
47	SLU 35	1242	0	2522	-0.16	57.57	0
47	SLU 36	1235	1	2545	-0.36	57.25	0
47	SLU 37	1242	0	2522	-0.16	57.57	0
47	SLU 38	1235	1	2545	-0.36	57.25	0
47	SLU 39	1408	0	2738	-0.18	64.7	0
47	SLU 40	1401	1	2762	-0.38	64.38	0
47	SLU 41	1408	0	2738	-0.18	64.7	0
47	SLU 42	1401	1	2762	-0.38	64.38	0
47	SLU 43	771	0	2137	-0.11	38.54	0
47	SLU 44	758	1	2176	-0.44	38.01	0
47	SLU 45	771	0	2137	-0.11	38.54	0
47	SLU 46	763	1	2160	-0.31	38.22	0
47	SLU 47	758	1	2176	-0.44	38.01	0
47	SLU 48	771	0	2137	-0.11	38.54	0
47	SLU 49	763	1	2160	-0.31	38.22	0
47	SLU 50	771	0	2137	-0.11	38.54	0
47	SLU 51	763	1	2160	-0.31	38.22	0
47	SLU 52	1145	1	2681	-0.49	54.65	0
47	SLU 53	1158	0	2641	-0.16	55.18	0
47	SLU 54	1150	1	2665	-0.36	54.86	0
47	SLU 55	1145	1	2681	-0.49	54.65	0
47	SLU 56	1158	0	2641	-0.16	55.18	0
47	SLU 57	1150	1	2665	-0.36	54.86	0
47	SLU 58	1158	0	2641	-0.16	55.18	0
47	SLU 59	1150	1	2665	-0.36	54.86	0
47	SLU 60	1324	0	2858	-0.19	62.31	0
47	SLU 61	1316	1	2881	-0.38	61.99	0
47	SLU 62	1324	0	2858	-0.19	62.31	0
47	SLU 63	1316	1	2881	-0.38	61.99	0
47	SLU 64	978	0	2432	-0.13	47.47	0
47	SLU 65	966	1	2471	-0.46	46.94	0
47	SLU 66	978	0	2432	-0.13	47.47	0
47	SLU 67	971	1	2456	-0.33	47.15	0
47	SLU 68	966	1	2471	-0.46	46.94	0
47	SLU 69	978	0	2432	-0.13	47.47	0
47	SLU 70	971	1	2456	-0.33	47.15	0
47	SLU 71	978	0	2432	-0.13	47.47	0
47	SLU 72	971	1	2456	-0.33	47.15	0
47	SLU 73	1353	1	2976	-0.51	63.57	0
47	SLU 74	1365	0	2937	-0.18	64.11	0
47	SLU 75	1358	1	2960	-0.38	63.79	0
47	SLU 76	1353	1	2976	-0.51	63.57	0
47	SLU 77	1365	0	2937	-0.18	64.11	0
47	SLU 78	1358	1	2960	-0.38	63.79	0
47	SLU 79	1365	0	2937	-0.18	64.11	0
47	SLU 80	1358	1	2960	-0.38	63.79	0
47	SLU 81	1531	1	3153	-0.2	71.24	0
47	SLU 82	1524	1	3177	-0.4	70.92	0
47	SLU 83	1531	1	3153	-0.2	71.24	0
47	SLU 84	1524	1	3177	-0.4	70.92	0
47	SLE RA 1	707	0	1806	-0.1	34.55	0
47	SLE RA 2	699	1	1832	-0.32	34.2	0
47	SLE RA 3	707	0	1806	-0.1	34.55	0
47	SLE RA 4	702	1	1822	-0.23	34.34	0
47	SLE RA 5	699	1	1832	-0.32	34.2	0
47	SLE RA 6	707	0	1806	-0.1	34.55	0
47	SLE RA 7	702	1	1822	-0.23	34.34	0
47	SLE RA 8	707	0	1806	-0.1	34.55	0
47	SLE RA 9	702	1	1822	-0.23	34.34	0
47	SLE RA 10	957	1	2169	-0.35	45.29	0
47	SLE RA 11	965	0	2142	-0.13	45.64	0
47	SLE RA 12	960	1	2158	-0.26	45.43	0
47	SLE RA 13	957	1	2169	-0.35	45.29	0
47	SLE RA 14	965	0	2142	-0.13	45.64	0
47	SLE RA 15	960	1	2158	-0.26	45.43	0
47	SLE RA 16	965	0	2142	-0.13	45.64	0
47	SLE RA 17	960	1	2158	-0.26	45.43	0
47	SLE RA 18	1076	0	2287	-0.15	50.4	0
47	SLE RA 19	1071	1	2302	-0.28	50.19	0
47	SLE RA 20	1076	0	2287	-0.15	50.4	0
47	SLE RA 21	1071	1	2302	-0.28	50.19	0
47	SLE FR 1	707	0	1806	-0.1	34.55	0
47	SLE FR 2	705	0	1811	-0.14	34.48	0
47	SLE FR 3	707	0	1806	-0.1	34.55	0
47	SLE FR 4	816	0	1955	-0.16	39.24	0
47	SLE FR 5	818	0	1950	-0.11	39.31	0
47	SLE FR 6	891	0	2046	-0.12	42.48	0
47	SLE QP 1	707	0	1806	-0.1	34.55	0
47	SLE QP 2	818	0	1950	-0.11	39.31	0
47	SLD 1	1159	-4	2173	0.11	53.76	0
47	SLD 2	1159	-4	2173	0.11	53.76	0
47	SLD 3	1147	2	2206	0.78	54.37	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
47	SLD 4	1147	2	2206	0.78	54.37	0
47	SLD 5	939	-10	1968	-1.07	42.73	-0.01
47	SLD 6	939	-10	1968	-1.07	42.73	-0.01
47	SLD 7	897	9	2076	1.18	44.74	0.01
47	SLD 8	897	9	2076	1.18	44.74	0.01
47	SLD 9	738	-9	1824	-1.41	33.88	-0.01
47	SLD 10	738	-9	1824	-1.41	33.88	-0.01
47	SLD 11	696	10	1932	0.84	35.88	0.01
47	SLD 12	696	10	1932	0.84	35.88	0.01
47	SLD 13	488	-1	1695	-1.01	24.25	0
47	SLD 14	488	-1	1695	-1.01	24.25	0
47	SLD 15	476	5	1727	-0.34	24.85	0
47	SLD 16	476	5	1727	-0.34	24.85	0
47	SLV 1	1616	-12	2470	0.29	73.14	0
47	SLV 2	1616	-12	2470	0.29	73.14	0
47	SLV 3	1585	5	2560	2.11	74.61	0.01
47	SLV 4	1585	5	2560	2.11	74.61	0.01
47	SLV 5	1104	-28	1969	-2.75	47.23	-0.02
47	SLV 6	1104	-28	1969	-2.75	47.23	-0.02
47	SLV 7	1001	26	2270	3.31	52.13	0.03
47	SLV 8	1001	26	2270	3.31	52.13	0.03
47	SLV 9	634	-25	1630	-3.53	26.49	-0.03
47	SLV 10	634	-25	1630	-3.53	26.49	-0.03
47	SLV 11	531	28	1931	2.52	31.39	0.02
47	SLV 12	531	28	1931	2.52	31.39	0.02
47	SLV 13	50	-4	1340	-2.34	4.01	-0.01
47	SLV 14	50	-4	1340	-2.34	4.01	-0.01
47	SLV 15	19	12	1430	-0.52	5.48	0
47	SLV 16	19	12	1430	-0.52	5.48	0
48	SLU 1	426	0	1903	-0.14	11.31	0
48	SLU 2	413	1	1933	-0.65	10.88	0
48	SLU 3	426	0	1903	-0.14	11.31	0
48	SLU 4	418	1	1921	-0.45	11.05	0
48	SLU 5	413	1	1933	-0.65	10.88	0
48	SLU 6	426	0	1903	-0.14	11.31	0
48	SLU 7	418	1	1921	-0.45	11.05	0
48	SLU 8	426	0	1903	-0.14	11.31	0
48	SLU 9	418	1	1921	-0.45	11.05	0
48	SLU 10	752	1	2590	-0.73	23.13	0
48	SLU 11	765	0	2560	-0.21	23.56	0
48	SLU 12	757	1	2578	-0.52	23.3	0
48	SLU 13	752	1	2590	-0.73	23.13	0
48	SLU 14	765	0	2560	-0.21	23.56	0
48	SLU 15	757	1	2578	-0.52	23.3	0
48	SLU 16	765	0	2560	-0.21	23.56	0
48	SLU 17	757	1	2578	-0.52	23.3	0
48	SLU 18	911	0	2842	-0.25	28.81	0
48	SLU 19	903	1	2860	-0.55	28.55	0
48	SLU 20	911	0	2842	-0.25	28.81	0
48	SLU 21	903	1	2860	-0.55	28.55	0
48	SLU 22	605	0	2283	-0.17	17.73	0
48	SLU 23	591	1	2312	-0.68	17.3	0
48	SLU 24	605	0	2283	-0.17	17.73	0
48	SLU 25	597	1	2300	-0.48	17.47	0
48	SLU 26	591	1	2312	-0.68	17.3	0
48	SLU 27	605	0	2283	-0.17	17.73	0
48	SLU 28	597	1	2300	-0.48	17.47	0
48	SLU 29	605	0	2283	-0.17	17.73	0
48	SLU 30	597	1	2300	-0.48	17.47	0
48	SLU 31	931	1	2969	-0.76	29.54	0
48	SLU 32	944	0	2940	-0.24	29.97	0
48	SLU 33	936	1	2957	-0.55	29.71	0
48	SLU 34	931	1	2969	-0.76	29.54	0
48	SLU 35	944	0	2940	-0.24	29.97	0
48	SLU 36	936	1	2957	-0.55	29.71	0
48	SLU 37	944	0	2940	-0.24	29.97	0
48	SLU 38	936	1	2957	-0.55	29.71	0
48	SLU 39	1089	1	3221	-0.28	35.22	0
48	SLU 40	1082	1	3239	-0.58	34.96	0
48	SLU 41	1089	1	3221	-0.28	35.22	0
48	SLU 42	1082	1	3239	-0.58	34.96	0
48	SLU 43	492	0	2344	-0.17	12.51	0
48	SLU 44	479	1	2374	-0.68	12.08	0
48	SLU 45	492	0	2344	-0.17	12.51	0
48	SLU 46	484	1	2362	-0.48	12.25	0
48	SLU 47	479	1	2374	-0.68	12.08	0
48	SLU 48	492	0	2344	-0.17	12.51	0
48	SLU 49	484	1	2362	-0.48	12.25	0
48	SLU 50	492	0	2344	-0.17	12.51	0
48	SLU 51	484	1	2362	-0.48	12.25	0
48	SLU 52	818	1	3031	-0.76	24.32	0
48	SLU 53	831	0	3001	-0.25	24.75	0
48	SLU 54	824	1	3019	-0.55	24.49	0
48	SLU 55	818	1	3031	-0.76	24.32	0
48	SLU 56	831	0	3001	-0.25	24.75	0
48	SLU 57	824	1	3019	-0.55	24.49	0
48	SLU 58	831	0	3001	-0.25	24.75	0
48	SLU 59	824	1	3019	-0.55	24.49	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
48	SLU 60	977	1	3283	-0.28	30	0
48	SLU 61	969	1	3301	-0.59	29.74	0
48	SLU 62	977	1	3283	-0.28	30	0
48	SLU 63	969	1	3301	-0.59	29.74	0
48	SLU 64	671	0	2724	-0.2	18.92	0
48	SLU 65	658	1	2753	-0.71	18.49	0
48	SLU 66	671	0	2724	-0.2	18.92	0
48	SLU 67	663	1	2741	-0.51	18.66	0
48	SLU 68	658	1	2753	-0.71	18.49	0
48	SLU 69	671	0	2724	-0.2	18.92	0
48	SLU 70	663	1	2741	-0.51	18.66	0
48	SLU 71	671	0	2724	-0.2	18.92	0
48	SLU 72	663	1	2741	-0.51	18.66	0
48	SLU 73	997	1	3410	-0.79	30.74	0
48	SLU 74	1010	1	3381	-0.28	31.17	0
48	SLU 75	1002	1	3398	-0.58	30.91	0
48	SLU 76	997	1	3410	-0.79	30.74	0
48	SLU 77	1010	1	3381	-0.28	31.17	0
48	SLU 78	1002	1	3398	-0.58	30.91	0
48	SLU 79	1010	1	3381	-0.28	31.17	0
48	SLU 80	1002	1	3398	-0.58	30.91	0
48	SLU 81	1156	1	3662	-0.31	36.42	0
48	SLU 82	1148	1	3680	-0.62	36.16	0
48	SLU 83	1156	1	3662	-0.31	36.42	0
48	SLU 84	1148	1	3680	-0.62	36.16	0
48	SLE RA 1	477	0	2012	-0.15	13.14	0
48	SLE RA 2	468	1	2031	-0.49	12.86	0
48	SLE RA 3	477	0	2012	-0.15	13.14	0
48	SLE RA 4	472	1	2024	-0.35	12.97	0
48	SLE RA 5	468	1	2031	-0.49	12.86	0
48	SLE RA 6	477	0	2012	-0.15	13.14	0
48	SLE RA 7	472	1	2024	-0.35	12.97	0
48	SLE RA 8	477	0	2012	-0.15	13.14	0
48	SLE RA 9	472	1	2024	-0.35	12.97	0
48	SLE RA 10	694	1	2469	-0.54	21.02	0
48	SLE RA 11	703	0	2450	-0.2	21.31	0
48	SLE RA 12	698	1	2462	-0.4	21.14	0
48	SLE RA 13	694	1	2469	-0.54	21.02	0
48	SLE RA 14	703	0	2450	-0.2	21.31	0
48	SLE RA 15	698	1	2462	-0.4	21.14	0
48	SLE RA 16	703	0	2450	-0.2	21.31	0
48	SLE RA 17	698	1	2462	-0.4	21.14	0
48	SLE RA 18	800	0	2637	-0.22	24.81	0
48	SLE RA 19	795	1	2649	-0.42	24.64	0
48	SLE RA 20	800	0	2637	-0.22	24.81	0
48	SLE RA 21	795	1	2649	-0.42	24.64	0
48	SLE FR 1	477	0	2012	-0.15	13.14	0
48	SLE FR 2	475	0	2016	-0.22	13.09	0
48	SLE FR 3	477	0	2012	-0.15	13.14	0
48	SLE FR 4	572	0	2203	-0.24	16.59	0
48	SLE FR 5	574	0	2199	-0.17	16.64	0
48	SLE FR 6	638	0	2325	-0.18	18.98	0
48	SLE QP 1	477	0	2012	-0.15	13.14	0
48	SLE QP 2	574	0	2199	-0.17	16.64	0
48	SLD 1	907	-5	2415	-0.83	30.29	0.02
48	SLD 2	907	-5	2415	-0.83	30.29	0.02
48	SLD 3	892	2	2442	2.05	29.6	-0.01
48	SLD 4	892	2	2442	2.05	29.6	-0.01
48	SLD 5	696	-12	2224	-4.72	21.77	0.04
48	SLD 6	696	-12	2224	-4.72	21.77	0.04
48	SLD 7	647	12	2312	4.85	19.49	-0.04
48	SLD 8	647	12	2312	4.85	19.49	-0.04
48	SLD 9	501	-11	2087	-5.19	13.8	0.03
48	SLD 10	501	-11	2087	-5.19	13.8	0.03
48	SLD 11	451	13	2175	4.38	11.51	-0.04
48	SLD 12	451	13	2175	4.38	11.51	-0.04
48	SLD 13	255	-2	1957	-2.39	3.69	0
48	SLD 14	255	-2	1957	-2.39	3.69	0
48	SLD 15	240	6	1984	0.49	3	-0.02
48	SLD 16	240	6	1984	0.49	3	-0.02
48	SLV 1	1352	-13	2702	-2.3	48.48	0.05
48	SLV 2	1352	-13	2702	-2.3	48.48	0.05
48	SLV 3	1314	6	2776	5.64	46.66	-0.02
48	SLV 4	1314	6	2776	5.64	46.66	-0.02
48	SLV 5	865	-33	2239	-12.85	28.96	0.11
48	SLV 6	865	-33	2239	-12.85	28.96	0.11
48	SLV 7	738	31	2484	13.61	22.88	-0.1
48	SLV 8	738	31	2484	13.61	22.88	-0.1
48	SLV 9	409	-31	1915	-13.95	10.4	0.1
48	SLV 10	409	-31	1915	-13.95	10.4	0.1
48	SLV 11	282	34	2160	12.51	4.33	-0.11
48	SLV 12	282	34	2160	12.51	4.33	-0.11
48	SLV 13	-166	-5	1623	-5.98	-13.37	0.01
48	SLV 14	-166	-5	1623	-5.98	-13.37	0.01
48	SLV 15	-204	14	1696	1.96	-15.19	-0.05
48	SLV 16	-204	14	1696	1.96	-15.19	-0.05
49	SLU 1	454	0	2085	-0.14	22.96	0
49	SLU 2	441	1	2106	-0.73	22.36	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
49	SLU 3	454	0	2085	-0.14	22.96	0
49	SLU 4	446	1	2098	-0.5	22.6	0
49	SLU 5	441	1	2106	-0.73	22.36	0
49	SLU 6	454	0	2085	-0.14	22.96	0
49	SLU 7	446	1	2098	-0.5	22.6	0
49	SLU 8	454	0	2085	-0.14	22.96	0
49	SLU 9	446	1	2098	-0.5	22.6	0
49	SLU 10	764	1	2924	-0.8	36.06	0
49	SLU 11	777	0	2903	-0.22	36.67	0
49	SLU 12	769	1	2916	-0.57	36.3	0
49	SLU 13	764	1	2924	-0.8	36.06	0
49	SLU 14	777	0	2903	-0.22	36.67	0
49	SLU 15	769	1	2916	-0.57	36.3	0
49	SLU 16	777	0	2903	-0.22	36.67	0
49	SLU 17	769	1	2916	-0.57	36.3	0
49	SLU 18	916	0	3253	-0.25	42.54	0
49	SLU 19	908	1	3266	-0.6	42.18	0
49	SLU 20	916	0	3253	-0.25	42.54	0
49	SLU 21	908	1	3266	-0.6	42.18	0
49	SLU 22	623	0	2551	-0.17	30.12	0
49	SLU 23	609	1	2572	-0.76	29.51	0
49	SLU 24	623	0	2551	-0.17	30.12	0
49	SLU 25	614	1	2563	-0.52	29.76	0
49	SLU 26	609	1	2572	-0.76	29.51	0
49	SLU 27	623	0	2551	-0.17	30.12	0
49	SLU 28	614	1	2563	-0.52	29.76	0
49	SLU 29	623	0	2551	-0.17	30.12	0
49	SLU 30	614	1	2563	-0.52	29.76	0
49	SLU 31	932	1	3389	-0.83	43.22	0
49	SLU 32	946	0	3368	-0.25	43.83	0
49	SLU 33	937	1	3381	-0.6	43.46	0
49	SLU 34	932	1	3389	-0.83	43.22	0
49	SLU 35	946	0	3368	-0.25	43.83	0
49	SLU 36	937	1	3381	-0.6	43.46	0
49	SLU 37	946	0	3368	-0.25	43.83	0
49	SLU 38	937	1	3381	-0.6	43.46	0
49	SLU 39	1084	0	3719	-0.28	49.7	0
49	SLU 40	1076	1	3731	-0.63	49.34	0
49	SLU 41	1084	0	3719	-0.28	49.7	0
49	SLU 42	1076	1	3731	-0.63	49.34	0
49	SLU 43	533	0	2551	-0.18	27.4	0
49	SLU 44	519	1	2572	-0.76	26.79	0
49	SLU 45	533	0	2551	-0.18	27.4	0
49	SLU 46	525	1	2564	-0.53	27.03	0
49	SLU 47	519	1	2572	-0.76	26.79	0
49	SLU 48	533	0	2551	-0.18	27.4	0
49	SLU 49	525	1	2564	-0.53	27.03	0
49	SLU 50	533	0	2551	-0.18	27.4	0
49	SLU 51	525	1	2564	-0.53	27.03	0
49	SLU 52	842	1	3390	-0.84	40.5	0
49	SLU 53	856	0	3369	-0.25	41.1	0
49	SLU 54	848	1	3382	-0.6	40.74	0
49	SLU 55	842	1	3390	-0.84	40.5	0
49	SLU 56	856	0	3369	-0.25	41.1	0
49	SLU 57	848	1	3382	-0.6	40.74	0
49	SLU 58	856	0	3369	-0.25	41.1	0
49	SLU 59	848	1	3382	-0.6	40.74	0
49	SLU 60	994	0	3719	-0.28	46.98	0
49	SLU 61	986	1	3732	-0.63	46.61	0
49	SLU 62	994	0	3719	-0.28	46.98	0
49	SLU 63	986	1	3732	-0.63	46.61	0
49	SLU 64	701	0	3017	-0.21	34.55	0
49	SLU 65	687	1	3038	-0.79	33.95	0
49	SLU 66	701	0	3017	-0.21	34.55	0
49	SLU 67	693	1	3029	-0.56	34.19	0
49	SLU 68	687	1	3038	-0.79	33.95	0
49	SLU 69	701	0	3017	-0.21	34.55	0
49	SLU 70	693	1	3029	-0.56	34.19	0
49	SLU 71	701	0	3017	-0.21	34.55	0
49	SLU 72	693	1	3029	-0.56	34.19	0
49	SLU 73	1010	1	3855	-0.87	47.65	0
49	SLU 74	1024	0	3834	-0.28	48.26	0
49	SLU 75	1016	1	3847	-0.63	47.9	0
49	SLU 76	1010	1	3855	-0.87	47.65	0
49	SLU 77	1024	0	3834	-0.28	48.26	0
49	SLU 78	1016	1	3847	-0.63	47.9	0
49	SLU 79	1024	0	3834	-0.28	48.26	0
49	SLU 80	1016	1	3847	-0.63	47.9	0
49	SLU 81	1163	0	4185	-0.31	54.13	0
49	SLU 82	1154	1	4197	-0.66	53.77	0
49	SLU 83	1163	0	4185	-0.31	54.13	0
49	SLU 84	1154	1	4197	-0.66	53.77	0
49	SLE RA 1	502	0	2218	-0.15	25.01	0
49	SLE RA 2	493	1	2232	-0.54	24.6	0
49	SLE RA 3	502	0	2218	-0.15	25.01	0
49	SLE RA 4	497	0	2227	-0.39	24.77	0
49	SLE RA 5	493	1	2232	-0.54	24.6	0
49	SLE RA 6	502	0	2218	-0.15	25.01	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
49	SLE RA 7	497	0	2227	-0.39	24.77	0
49	SLE RA 8	502	0	2218	-0.15	25.01	0
49	SLE RA 9	497	0	2227	-0.39	24.77	0
49	SLE RA 10	709	1	2777	-0.59	33.74	0
49	SLE RA 11	718	0	2763	-0.2	34.14	0
49	SLE RA 12	712	0	2772	-0.44	33.9	0
49	SLE RA 13	709	1	2777	-0.59	33.74	0
49	SLE RA 14	718	0	2763	-0.2	34.14	0
49	SLE RA 15	712	0	2772	-0.44	33.9	0
49	SLE RA 16	718	0	2763	-0.2	34.14	0
49	SLE RA 17	712	0	2772	-0.44	33.9	0
49	SLE RA 18	810	0	2997	-0.22	38.06	0
49	SLE RA 19	805	1	3005	-0.46	37.82	0
49	SLE RA 20	810	0	2997	-0.22	38.06	0
49	SLE RA 21	805	1	3005	-0.46	37.82	0
49	SLE FR 1	502	0	2218	-0.15	25.01	0
49	SLE FR 2	501	0	2221	-0.23	24.93	0
49	SLE FR 3	502	0	2218	-0.15	25.01	0
49	SLE FR 4	593	0	2455	-0.25	28.84	0
49	SLE FR 5	595	0	2452	-0.17	28.92	0
49	SLE FR 6	656	0	2608	-0.19	31.53	0
49	SLE QP 1	502	0	2218	-0.15	25.01	0
49	SLE QP 2	595	0	2452	-0.17	28.92	0
49	SLD 1	926	-4	2678	-2.73	43.24	0.02
49	SLD 2	926	-4	2678	-2.73	43.24	0.02
49	SLD 3	912	2	2699	3.98	42.62	0
49	SLD 4	912	2	2699	3.98	42.62	0
49	SLD 5	716	-10	2488	-11.11	34.15	0.04
49	SLD 6	716	-10	2488	-11.11	34.15	0.04
49	SLD 7	668	10	2557	11.25	32.1	-0.03
49	SLD 8	668	10	2557	11.25	32.1	-0.03
49	SLD 9	522	-9	2346	-11.59	25.75	0.03
49	SLD 10	522	-9	2346	-11.59	25.75	0.03
49	SLD 11	473	10	2415	10.77	23.7	-0.04
49	SLD 12	473	10	2415	10.77	23.7	-0.04
49	SLD 13	278	-1	2205	-4.33	15.23	0
49	SLD 14	278	-1	2205	-4.33	15.23	0
49	SLD 15	263	4	2226	2.38	14.61	-0.02
49	SLD 16	263	4	2226	2.38	14.61	-0.02
49	SLV 1	1369	-10	2979	-7.6	62.43	0.06
49	SLV 2	1369	-10	2979	-7.6	62.43	0.06
49	SLV 3	1333	5	3036	11.11	60.94	0
49	SLV 4	1333	5	3036	11.11	60.94	0
49	SLV 5	881	-26	2522	-30.78	41.24	0.11
49	SLV 6	881	-26	2522	-30.78	41.24	0.11
49	SLV 7	762	25	2714	31.59	36.26	-0.09
49	SLV 8	762	25	2714	31.59	36.26	-0.09
49	SLV 9	427	-24	2189	-31.94	21.58	0.09
49	SLV 10	427	-24	2189	-31.94	21.58	0.09
49	SLV 11	308	26	2381	30.44	16.61	-0.11
49	SLV 12	308	26	2381	30.44	16.61	-0.11
49	SLV 13	-144	-4	1867	-11.46	-3.09	0
49	SLV 14	-144	-4	1867	-11.46	-3.09	0
49	SLV 15	-179	11	1925	7.26	-4.59	-0.06
49	SLV 16	-179	11	1925	7.26	-4.59	-0.06
50	SLU 1	285	0	2248	-0.14	7.19	0
50	SLU 2	274	1	2263	-0.75	6.82	0
50	SLU 3	285	0	2248	-0.14	7.19	0
50	SLU 4	279	0	2257	-0.5	6.97	0
50	SLU 5	274	1	2263	-0.75	6.82	0
50	SLU 6	285	0	2248	-0.14	7.19	0
50	SLU 7	279	0	2257	-0.5	6.97	0
50	SLU 8	285	0	2248	-0.14	7.19	0
50	SLU 9	279	0	2257	-0.5	6.97	0
50	SLU 10	534	1	3223	-0.81	16.29	0
50	SLU 11	545	0	3209	-0.2	16.66	0
50	SLU 12	538	0	3217	-0.57	16.44	0
50	SLU 13	534	1	3223	-0.81	16.29	0
50	SLU 14	545	0	3209	-0.2	16.66	0
50	SLU 15	538	0	3217	-0.57	16.44	0
50	SLU 16	545	0	3209	-0.2	16.66	0
50	SLU 17	538	0	3217	-0.57	16.44	0
50	SLU 18	656	0	3620	-0.23	20.72	0
50	SLU 19	650	0	3629	-0.6	20.5	0
50	SLU 20	656	0	3620	-0.23	20.72	0
50	SLU 21	650	0	3629	-0.6	20.5	0
50	SLU 22	418	0	2789	-0.16	11.99	0
50	SLU 23	407	1	2804	-0.77	11.62	0
50	SLU 24	418	0	2789	-0.16	11.99	0
50	SLU 25	411	0	2798	-0.53	11.77	0
50	SLU 26	407	1	2804	-0.77	11.62	0
50	SLU 27	418	0	2789	-0.16	11.99	0
50	SLU 28	411	0	2798	-0.53	11.77	0
50	SLU 29	418	0	2789	-0.16	11.99	0
50	SLU 30	411	0	2798	-0.53	11.77	0
50	SLU 31	667	1	3764	-0.84	21.09	0
50	SLU 32	678	0	3749	-0.23	21.46	0
50	SLU 33	671	0	3758	-0.59	21.24	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
50	SLU 34	667	1	3764	-0.84	21.09	0
50	SLU 35	678	0	3749	-0.23	21.46	0
50	SLU 36	671	0	3758	-0.59	21.24	0
50	SLU 37	678	0	3749	-0.23	21.46	0
50	SLU 38	671	0	3758	-0.59	21.24	0
50	SLU 39	789	0	4160	-0.26	25.52	0
50	SLU 40	782	1	4169	-0.62	25.3	0
50	SLU 41	789	0	4160	-0.26	25.52	0
50	SLU 42	782	1	4169	-0.62	25.3	0
50	SLU 43	325	0	2738	-0.17	7.7	0
50	SLU 44	314	1	2753	-0.78	7.33	0
50	SLU 45	325	0	2738	-0.17	7.7	0
50	SLU 46	319	0	2747	-0.53	7.48	0
50	SLU 47	314	1	2753	-0.78	7.33	0
50	SLU 48	325	0	2738	-0.17	7.7	0
50	SLU 49	319	0	2747	-0.53	7.48	0
50	SLU 50	325	0	2738	-0.17	7.7	0
50	SLU 51	319	0	2747	-0.53	7.48	0
50	SLU 52	574	1	3713	-0.85	16.8	0
50	SLU 53	585	0	3698	-0.23	17.17	0
50	SLU 54	578	0	3707	-0.6	16.95	0
50	SLU 55	574	1	3713	-0.85	16.8	0
50	SLU 56	585	0	3698	-0.23	17.17	0
50	SLU 57	578	0	3707	-0.6	16.95	0
50	SLU 58	585	0	3698	-0.23	17.17	0
50	SLU 59	578	0	3707	-0.6	16.95	0
50	SLU 60	696	0	4109	-0.26	21.23	0
50	SLU 61	690	1	4118	-0.63	21.01	0
50	SLU 62	696	0	4109	-0.26	21.23	0
50	SLU 63	690	1	4118	-0.63	21.01	0
50	SLU 64	458	0	3278	-0.19	12.5	0
50	SLU 65	447	1	3293	-0.81	12.13	0
50	SLU 66	458	0	3278	-0.19	12.5	0
50	SLU 67	451	0	3287	-0.56	12.28	0
50	SLU 68	447	1	3293	-0.81	12.13	0
50	SLU 69	458	0	3278	-0.19	12.5	0
50	SLU 70	451	0	3287	-0.56	12.28	0
50	SLU 71	458	0	3278	-0.19	12.5	0
50	SLU 72	451	0	3287	-0.56	12.28	0
50	SLU 73	707	1	4253	-0.87	21.6	0
50	SLU 74	718	0	4238	-0.26	21.98	0
50	SLU 75	711	1	4247	-0.63	21.75	0
50	SLU 76	707	1	4253	-0.87	21.6	0
50	SLU 77	718	0	4238	-0.26	21.98	0
50	SLU 78	711	1	4247	-0.63	21.75	0
50	SLU 79	718	0	4238	-0.26	21.98	0
50	SLU 80	711	1	4247	-0.63	21.75	0
50	SLU 81	829	0	4650	-0.29	26.04	0
50	SLU 82	822	1	4659	-0.65	25.81	0
50	SLU 83	829	0	4650	-0.29	26.04	0
50	SLU 84	822	1	4659	-0.65	25.81	0
50	SLE RA 1	323	0	2403	-0.14	8.56	0
50	SLE RA 2	316	0	2413	-0.55	8.31	0
50	SLE RA 3	323	0	2403	-0.14	8.56	0
50	SLE RA 4	319	0	2409	-0.39	8.41	0
50	SLE RA 5	316	0	2413	-0.55	8.31	0
50	SLE RA 6	323	0	2403	-0.14	8.56	0
50	SLE RA 7	319	0	2409	-0.39	8.41	0
50	SLE RA 8	323	0	2403	-0.14	8.56	0
50	SLE RA 9	319	0	2409	-0.39	8.41	0
50	SLE RA 10	489	0	3053	-0.6	14.63	0
50	SLE RA 11	496	0	3043	-0.19	14.88	0
50	SLE RA 12	492	0	3049	-0.43	14.73	0
50	SLE RA 13	489	0	3053	-0.6	14.63	0
50	SLE RA 14	496	0	3043	-0.19	14.88	0
50	SLE RA 15	492	0	3049	-0.43	14.73	0
50	SLE RA 16	496	0	3043	-0.19	14.88	0
50	SLE RA 17	492	0	3049	-0.43	14.73	0
50	SLE RA 18	570	0	3317	-0.21	17.58	0
50	SLE RA 19	566	0	3323	-0.45	17.44	0
50	SLE RA 20	570	0	3317	-0.21	17.58	0
50	SLE RA 21	566	0	3323	-0.45	17.44	0
50	SLE FR 1	323	0	2403	-0.14	8.56	0
50	SLE FR 2	322	0	2405	-0.22	8.51	0
50	SLE FR 3	323	0	2403	-0.14	8.56	0
50	SLE FR 4	396	0	2679	-0.24	11.22	0
50	SLE FR 5	397	0	2677	-0.16	11.27	0
50	SLE FR 6	447	0	2860	-0.17	13.07	0
50	SLE QP 1	323	0	2403	-0.14	8.56	0
50	SLE QP 2	397	0	2677	-0.16	11.27	0
50	SLD 1	710	-4	2906	-5	24.34	0.02
50	SLD 2	710	-4	2906	-5	24.34	0.02
50	SLD 3	696	3	2922	6.34	23.69	-0.01
50	SLD 4	696	3	2922	6.34	23.69	-0.01
50	SLD 5	513	-12	2721	-18.82	16.18	0.05
50	SLD 6	513	-12	2721	-18.82	16.18	0.05
50	SLD 7	465	11	2775	18.99	14	-0.05
50	SLD 8	465	11	2775	18.99	14	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
50	SLD 9	330	-11	2579	-19.32	8.53	0.04
50	SLD 10	330	-11	2579	-19.32	8.53	0.04
50	SLD 11	281	12	2633	18.49	6.35	-0.05
50	SLD 12	281	12	2633	18.49	6.35	-0.05
50	SLD 13	99	-2	2432	-6.67	-1.15	0.01
50	SLD 14	99	-2	2432	-6.67	-1.15	0.01
50	SLD 15	84	5	2449	4.68	-1.81	-0.02
50	SLD 16	84	5	2449	4.68	-1.81	-0.02
50	SLV 1	1128	-12	3210	-14.02	41.78	0.05
50	SLV 2	1128	-12	3210	-14.02	41.78	0.05
50	SLV 3	1091	6	3255	17.82	40.08	-0.02
50	SLV 4	1091	6	3255	17.82	40.08	-0.02
50	SLV 5	672	-31	2769	-52.62	23	0.12
50	SLV 6	672	-31	2769	-52.62	23	0.12
50	SLV 7	550	29	2919	53.53	17.33	-0.12
50	SLV 8	550	29	2919	53.53	17.33	-0.12
50	SLV 9	245	-29	2436	-53.86	5.2	0.12
50	SLV 10	245	-29	2436	-53.86	5.2	0.12
50	SLV 11	123	31	2586	52.3	-0.46	-0.13
50	SLV 12	123	31	2586	52.3	-0.46	-0.13
50	SLV 13	-297	-6	2099	-18.14	-17.55	0.02
50	SLV 14	-297	-6	2099	-18.14	-17.55	0.02
50	SLV 15	-333	12	2145	13.7	-19.25	-0.05
50	SLV 16	-333	12	2145	13.7	-19.25	-0.05
51	SLU 1	298	0	2378	-0.13	15.4	0
51	SLU 2	288	0	2388	-0.75	14.95	0
51	SLU 3	298	0	2378	-0.13	15.4	0
51	SLU 4	292	0	2384	-0.5	15.13	0
51	SLU 5	288	0	2388	-0.75	14.95	0
51	SLU 6	298	0	2378	-0.13	15.4	0
51	SLU 7	292	0	2384	-0.5	15.13	0
51	SLU 8	298	0	2378	-0.13	15.4	0
51	SLU 9	292	0	2384	-0.5	15.13	0
51	SLU 10	517	0	3466	-0.81	24.79	0
51	SLU 11	527	0	3455	-0.18	25.24	0
51	SLU 12	521	0	3462	-0.56	24.97	0
51	SLU 13	517	0	3466	-0.81	24.79	0
51	SLU 14	527	0	3455	-0.18	25.24	0
51	SLU 15	521	0	3462	-0.56	24.97	0
51	SLU 16	527	0	3455	-0.18	25.24	0
51	SLU 17	521	0	3462	-0.56	24.97	0
51	SLU 18	625	0	3917	-0.21	29.46	0
51	SLU 19	619	0	3924	-0.58	29.19	0
51	SLU 20	625	0	3917	-0.21	29.46	0
51	SLU 21	619	0	3924	-0.58	29.19	0
51	SLU 22	414	0	2979	-0.15	20.4	0
51	SLU 23	404	0	2989	-0.77	19.95	0
51	SLU 24	414	0	2979	-0.15	20.4	0
51	SLU 25	408	0	2985	-0.52	20.13	0
51	SLU 26	404	0	2989	-0.77	19.95	0
51	SLU 27	414	0	2979	-0.15	20.4	0
51	SLU 28	408	0	2985	-0.52	20.13	0
51	SLU 29	414	0	2979	-0.15	20.4	0
51	SLU 30	408	0	2985	-0.52	20.13	0
51	SLU 31	633	0	4067	-0.83	29.8	0
51	SLU 32	643	0	4057	-0.21	30.25	0
51	SLU 33	637	0	4063	-0.58	29.98	0
51	SLU 34	633	0	4067	-0.83	29.8	0
51	SLU 35	643	0	4057	-0.21	30.25	0
51	SLU 36	637	0	4063	-0.58	29.98	0
51	SLU 37	643	0	4057	-0.21	30.25	0
51	SLU 38	637	0	4063	-0.58	29.98	0
51	SLU 39	741	0	4519	-0.23	34.47	0
51	SLU 40	735	0	4525	-0.61	34.2	0
51	SLU 41	741	0	4519	-0.23	34.47	0
51	SLU 42	735	0	4525	-0.61	34.2	0
51	SLU 43	347	0	2885	-0.16	18.3	0
51	SLU 44	338	0	2895	-0.78	17.85	0
51	SLU 45	347	0	2885	-0.16	18.3	0
51	SLU 46	341	0	2891	-0.53	18.03	0
51	SLU 47	338	0	2895	-0.78	17.85	0
51	SLU 48	347	0	2885	-0.16	18.3	0
51	SLU 49	341	0	2891	-0.53	18.03	0
51	SLU 50	347	0	2885	-0.16	18.3	0
51	SLU 51	341	0	2891	-0.53	18.03	0
51	SLU 52	567	0	3973	-0.84	27.7	0
51	SLU 53	576	0	3962	-0.21	28.14	0
51	SLU 54	571	0	3969	-0.59	27.87	0
51	SLU 55	567	0	3973	-0.84	27.7	0
51	SLU 56	576	0	3962	-0.21	28.14	0
51	SLU 57	571	0	3969	-0.59	27.87	0
51	SLU 58	576	0	3962	-0.21	28.14	0
51	SLU 59	571	0	3969	-0.59	27.87	0
51	SLU 60	675	0	4424	-0.24	32.36	0
51	SLU 61	669	0	4431	-0.61	32.09	0
51	SLU 62	675	0	4424	-0.24	32.36	0
51	SLU 63	669	0	4431	-0.61	32.09	0
51	SLU 64	463	0	3486	-0.18	23.3	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
51	SLU 65	453	0	3496	-0.8	22.86	0
51	SLU 66	463	0	3486	-0.18	23.3	0
51	SLU 67	457	0	3492	-0.55	23.04	0
51	SLU 68	453	0	3496	-0.8	22.86	0
51	SLU 69	463	0	3486	-0.18	23.3	0
51	SLU 70	457	0	3492	-0.55	23.04	0
51	SLU 71	463	0	3486	-0.18	23.3	0
51	SLU 72	457	0	3492	-0.55	23.04	0
51	SLU 73	682	1	4574	-0.86	32.7	0
51	SLU 74	692	0	4564	-0.24	33.15	0
51	SLU 75	686	0	4570	-0.61	32.88	0
51	SLU 76	682	1	4574	-0.86	32.7	0
51	SLU 77	692	0	4564	-0.24	33.15	0
51	SLU 78	686	0	4570	-0.61	32.88	0
51	SLU 79	692	0	4564	-0.24	33.15	0
51	SLU 80	686	0	4570	-0.61	32.88	0
51	SLU 81	790	0	5026	-0.26	37.37	0
51	SLU 82	785	0	5032	-0.64	37.1	0
51	SLU 83	790	0	5026	-0.26	37.37	0
51	SLU 84	785	0	5032	-0.64	37.1	0
51	SLE RA 1	331	0	2549	-0.13	16.83	0
51	SLE RA 2	324	0	2556	-0.55	16.53	0
51	SLE RA 3	331	0	2549	-0.13	16.83	0
51	SLE RA 4	327	0	2554	-0.38	16.65	0
51	SLE RA 5	324	0	2556	-0.55	16.53	0
51	SLE RA 6	331	0	2549	-0.13	16.83	0
51	SLE RA 7	327	0	2554	-0.38	16.65	0
51	SLE RA 8	331	0	2549	-0.13	16.83	0
51	SLE RA 9	327	0	2554	-0.38	16.65	0
51	SLE RA 10	477	0	3275	-0.59	23.09	0
51	SLE RA 11	484	0	3268	-0.17	23.39	0
51	SLE RA 12	480	0	3272	-0.42	23.21	0
51	SLE RA 13	477	0	3275	-0.59	23.09	0
51	SLE RA 14	484	0	3268	-0.17	23.39	0
51	SLE RA 15	480	0	3272	-0.42	23.21	0
51	SLE RA 16	484	0	3268	-0.17	23.39	0
51	SLE RA 17	480	0	3272	-0.42	23.21	0
51	SLE RA 18	549	0	3576	-0.19	26.2	0
51	SLE RA 19	545	0	3580	-0.44	26.02	0
51	SLE RA 20	549	0	3576	-0.19	26.2	0
51	SLE RA 21	545	0	3580	-0.44	26.02	0
51	SLE FR 1	331	0	2549	-0.13	16.83	0
51	SLE FR 2	330	0	2551	-0.22	16.77	0
51	SLE FR 3	331	0	2549	-0.13	16.83	0
51	SLE FR 4	395	0	2859	-0.23	19.58	0
51	SLE FR 5	396	0	2857	-0.15	19.64	0
51	SLE FR 6	440	0	3063	-0.16	21.51	0
51	SLE QP 1	331	0	2549	-0.13	16.83	0
51	SLE QP 2	396	0	2857	-0.15	19.64	0
51	SLD 1	698	4	3070	-7.3	32.73	-0.02
51	SLD 2	698	4	3070	-7.3	32.73	-0.02
51	SLD 3	685	-6	3083	8.8	32.16	0.03
51	SLD 4	685	-6	3083	8.8	32.16	0.03
51	SLD 5	507	15	2902	-26.72	24.43	-0.07
51	SLD 6	507	15	2902	-26.72	24.43	-0.07
51	SLD 7	463	-16	2944	26.96	22.53	0.08
51	SLD 8	463	-16	2944	26.96	22.53	0.08
51	SLD 9	330	16	2771	-27.26	16.75	-0.08
51	SLD 10	330	16	2771	-27.26	16.75	-0.08
51	SLD 11	286	-15	2812	26.42	14.85	0.07
51	SLD 12	286	-15	2812	26.42	14.85	0.07
51	SLD 13	108	6	2632	-9.1	7.12	-0.03
51	SLD 14	108	6	2632	-9.1	7.12	-0.03
51	SLD 15	95	-3	2644	7	6.55	0.01
51	SLD 16	95	-3	2644	7	6.55	0.01
51	SLV 1	1101	10	3354	-20.61	50.26	-0.04
51	SLV 2	1101	10	3354	-20.61	50.26	-0.04
51	SLV 3	1069	-16	3389	24.83	48.89	0.08
51	SLV 4	1069	-16	3389	24.83	48.89	0.08
51	SLV 5	657	42	2954	-75.2	30.9	-0.2
51	SLV 6	657	42	2954	-75.2	30.9	-0.2
51	SLV 7	549	-43	3069	76.26	26.34	0.21
51	SLV 8	549	-43	3069	76.26	26.34	0.21
51	SLV 9	244	43	2646	-76.56	12.94	-0.21
51	SLV 10	244	43	2646	-76.56	12.94	-0.21
51	SLV 11	136	-41	2761	74.9	8.38	0.2
51	SLV 12	136	-41	2761	74.9	8.38	0.2
51	SLV 13	-276	16	2326	-25.13	-9.61	-0.08
51	SLV 14	-276	16	2326	-25.13	-9.61	-0.08
51	SLV 15	-309	-10	2361	20.31	-10.98	0.04
51	SLV 16	-309	-10	2361	20.31	-10.98	0.04
52	SLU 1	166	0	2496	-0.12	3.7	0
52	SLU 2	159	0	2504	-0.75	3.45	0
52	SLU 3	166	0	2496	-0.12	3.7	0
52	SLU 4	162	0	2501	-0.5	3.55	0
52	SLU 5	159	0	2504	-0.75	3.45	0
52	SLU 6	166	0	2496	-0.12	3.7	0
52	SLU 7	162	0	2501	-0.5	3.55	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
52	SLU 8	166	0	2496	-0.12	3.7	0
52	SLU 9	162	0	2501	-0.5	3.55	0
52	SLU 10	329	0	3680	-0.81	9.64	0
52	SLU 11	336	0	3672	-0.17	9.89	0
52	SLU 12	332	0	3677	-0.55	9.74	0
52	SLU 13	329	0	3680	-0.81	9.64	0
52	SLU 14	336	0	3672	-0.17	9.89	0
52	SLU 15	332	0	3677	-0.55	9.74	0
52	SLU 16	336	0	3672	-0.17	9.89	0
52	SLU 17	332	0	3677	-0.55	9.74	0
52	SLU 18	409	0	4176	-0.19	12.55	0
52	SLU 19	404	0	4181	-0.57	12.4	0
52	SLU 20	409	0	4176	-0.19	12.55	0
52	SLU 21	404	0	4181	-0.57	12.4	0
52	SLU 22	250	0	3148	-0.14	6.73	0
52	SLU 23	243	0	3156	-0.78	6.48	0
52	SLU 24	250	0	3148	-0.14	6.73	0
52	SLU 25	246	0	3153	-0.52	6.58	0
52	SLU 26	243	0	3156	-0.78	6.48	0
52	SLU 27	250	0	3148	-0.14	6.73	0
52	SLU 28	246	0	3153	-0.52	6.58	0
52	SLU 29	250	0	3148	-0.14	6.73	0
52	SLU 30	246	0	3153	-0.52	6.58	0
52	SLU 31	413	0	4332	-0.83	12.67	0
52	SLU 32	420	0	4324	-0.19	12.92	0
52	SLU 33	416	0	4329	-0.57	12.77	0
52	SLU 34	413	0	4332	-0.83	12.67	0
52	SLU 35	420	0	4324	-0.19	12.92	0
52	SLU 36	416	0	4329	-0.57	12.77	0
52	SLU 37	420	0	4324	-0.19	12.92	0
52	SLU 38	416	0	4329	-0.57	12.77	0
52	SLU 39	493	0	4828	-0.21	15.57	0
52	SLU 40	488	0	4832	-0.59	15.42	0
52	SLU 41	493	0	4828	-0.21	15.57	0
52	SLU 42	488	0	4832	-0.59	15.42	0
52	SLU 43	187	0	3022	-0.15	3.78	0
52	SLU 44	180	0	3029	-0.78	3.53	0
52	SLU 45	187	0	3022	-0.15	3.78	0
52	SLU 46	183	0	3026	-0.53	3.63	0
52	SLU 47	180	0	3029	-0.78	3.53	0
52	SLU 48	187	0	3022	-0.15	3.78	0
52	SLU 49	183	0	3026	-0.53	3.63	0
52	SLU 50	187	0	3022	-0.15	3.78	0
52	SLU 51	183	0	3026	-0.53	3.63	0
52	SLU 52	350	0	4205	-0.83	9.72	0
52	SLU 53	357	0	4198	-0.2	9.97	0
52	SLU 54	353	0	4202	-0.58	9.82	0
52	SLU 55	350	0	4205	-0.83	9.72	0
52	SLU 56	357	0	4198	-0.2	9.97	0
52	SLU 57	353	0	4202	-0.58	9.82	0
52	SLU 58	357	0	4198	-0.2	9.97	0
52	SLU 59	353	0	4202	-0.58	9.82	0
52	SLU 60	430	0	4701	-0.22	12.62	0
52	SLU 61	426	0	4706	-0.6	12.47	0
52	SLU 62	430	0	4701	-0.22	12.62	0
52	SLU 63	426	0	4706	-0.6	12.47	0
52	SLU 64	271	0	3673	-0.17	6.8	0
52	SLU 65	264	0	3681	-0.8	6.55	0
52	SLU 66	271	0	3673	-0.17	6.8	0
52	SLU 67	267	0	3678	-0.55	6.65	0
52	SLU 68	264	0	3681	-0.8	6.55	0
52	SLU 69	271	0	3673	-0.17	6.8	0
52	SLU 70	267	0	3678	-0.55	6.65	0
52	SLU 71	271	0	3673	-0.17	6.8	0
52	SLU 72	267	0	3678	-0.55	6.65	0
52	SLU 73	434	0	4857	-0.86	12.74	0
52	SLU 74	441	0	4849	-0.22	12.99	0
52	SLU 75	437	0	4854	-0.6	12.84	0
52	SLU 76	434	0	4857	-0.86	12.74	0
52	SLU 77	441	0	4849	-0.22	12.99	0
52	SLU 78	437	0	4854	-0.6	12.84	0
52	SLU 79	441	0	4849	-0.22	12.99	0
52	SLU 80	437	0	4854	-0.6	12.84	0
52	SLU 81	514	0	5353	-0.24	15.65	0
52	SLU 82	509	0	5358	-0.62	15.5	0
52	SLU 83	514	0	5353	-0.24	15.65	0
52	SLU 84	509	0	5358	-0.62	15.5	0
52	SLE RA 1	190	0	2682	-0.13	4.57	0
52	SLE RA 2	186	0	2687	-0.55	4.4	0
52	SLE RA 3	190	0	2682	-0.13	4.57	0
52	SLE RA 4	187	0	2685	-0.38	4.47	0
52	SLE RA 5	186	0	2687	-0.55	4.4	0
52	SLE RA 6	190	0	2682	-0.13	4.57	0
52	SLE RA 7	187	0	2685	-0.38	4.47	0
52	SLE RA 8	190	0	2682	-0.13	4.57	0
52	SLE RA 9	187	0	2685	-0.38	4.47	0
52	SLE RA 10	299	0	3471	-0.58	8.53	0
52	SLE RA 11	303	0	3466	-0.16	8.69	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
52	SLE RA 12	301	0	3469	-0.41	8.59	0
52	SLE RA 13	299	0	3471	-0.58	8.53	0
52	SLE RA 14	303	0	3466	-0.16	8.69	0
52	SLE RA 15	301	0	3469	-0.41	8.59	0
52	SLE RA 16	303	0	3466	-0.16	8.69	0
52	SLE RA 17	301	0	3469	-0.41	8.59	0
52	SLE RA 18	352	0	3802	-0.18	10.46	0
52	SLE RA 19	349	0	3805	-0.43	10.36	0
52	SLE RA 20	352	0	3802	-0.18	10.46	0
52	SLE RA 21	349	0	3805	-0.43	10.36	0
52	SLE FR 1	190	0	2682	-0.13	4.57	0
52	SLE FR 2	189	0	2683	-0.21	4.53	0
52	SLE FR 3	190	0	2682	-0.13	4.57	0
52	SLE FR 4	238	0	3019	-0.23	6.3	0
52	SLE FR 5	239	0	3018	-0.14	6.34	0
52	SLE FR 6	271	0	3242	-0.15	7.51	0
52	SLE QP 1	190	0	2682	-0.13	4.57	0
52	SLE QP 2	239	0	3018	-0.14	6.34	0
52	SLD 1	524	5	3199	-9.5	18.68	-0.02
52	SLD 2	524	5	3199	-9.5	18.68	-0.02
52	SLD 3	511	-7	3209	11.18	18.11	0.04
52	SLD 4	511	-7	3209	11.18	18.11	0.04
52	SLD 5	344	19	3057	-34.31	10.91	-0.1
52	SLD 6	344	19	3057	-34.31	10.91	-0.1
52	SLD 7	301	-20	3091	34.61	9	0.1
52	SLD 8	301	-20	3091	34.61	9	0.1
52	SLD 9	176	20	2946	-34.9	3.67	-0.1
52	SLD 10	176	20	2946	-34.9	3.67	-0.1
52	SLD 11	134	-19	2980	34.02	1.76	0.1
52	SLD 12	134	-19	2980	34.02	1.76	0.1
52	SLD 13	-34	7	2828	-11.46	-5.44	-0.04
52	SLD 14	-34	7	2828	-11.46	-5.44	-0.04
52	SLD 15	-46	-5	2838	9.21	-6.01	0.02
52	SLD 16	-46	-5	2838	9.21	-6.01	0.02
52	SLV 1	904	13	3440	-26.95	35.13	-0.05
52	SLV 2	904	13	3440	-26.95	35.13	-0.05
52	SLV 3	873	-19	3467	31.6	33.69	0.12
52	SLV 4	873	-19	3467	31.6	33.69	0.12
52	SLV 5	486	53	3103	-96.99	17.16	-0.27
52	SLV 6	486	53	3103	-96.99	17.16	-0.27
52	SLV 7	381	-55	3195	98.19	12.36	0.29
52	SLV 8	381	-55	3195	98.19	12.36	0.29
52	SLV 9	96	55	2842	-98.47	0.31	-0.29
52	SLV 10	96	55	2842	-98.47	0.31	-0.29
52	SLV 11	-9	-53	2934	96.7	-4.49	0.27
52	SLV 12	-9	-53	2934	96.7	-4.49	0.27
52	SLV 13	-395	19	2570	-31.89	-21.02	-0.12
52	SLV 14	-395	19	2570	-31.89	-21.02	-0.12
52	SLV 15	-427	-13	2597	26.67	-22.46	0.05
52	SLV 16	-427	-13	2597	26.67	-22.46	0.05
53	SLU 1	148	0	2591	-0.12	8.35	0
53	SLU 2	142	0	2597	-0.76	8.05	0
53	SLU 3	148	0	2591	-0.12	8.35	0
53	SLU 4	144	0	2594	-0.51	8.17	0
53	SLU 5	142	0	2597	-0.76	8.05	0
53	SLU 6	148	0	2591	-0.12	8.35	0
53	SLU 7	144	0	2594	-0.51	8.17	0
53	SLU 8	148	0	2591	-0.12	8.35	0
53	SLU 9	144	0	2594	-0.51	8.17	0
53	SLU 10	275	0	3853	-0.81	13.94	0
53	SLU 11	281	0	3847	-0.17	14.24	0
53	SLU 12	278	0	3851	-0.55	14.06	0
53	SLU 13	275	0	3853	-0.81	13.94	0
53	SLU 14	281	0	3847	-0.17	14.24	0
53	SLU 15	278	0	3851	-0.55	14.06	0
53	SLU 16	281	0	3847	-0.17	14.24	0
53	SLU 17	278	0	3851	-0.55	14.06	0
53	SLU 18	339	0	4386	-0.19	16.77	0
53	SLU 19	335	0	4389	-0.57	16.59	0
53	SLU 20	339	0	4386	-0.19	16.77	0
53	SLU 21	335	0	4389	-0.57	16.59	0
53	SLU 22	213	0	3284	-0.14	11.23	0
53	SLU 23	207	0	3290	-0.78	10.94	0
53	SLU 24	213	0	3284	-0.14	11.23	0
53	SLU 25	209	0	3288	-0.52	11.06	0
53	SLU 26	207	0	3290	-0.78	10.94	0
53	SLU 27	213	0	3284	-0.14	11.23	0
53	SLU 28	209	0	3288	-0.52	11.06	0
53	SLU 29	213	0	3284	-0.14	11.23	0
53	SLU 30	209	0	3288	-0.52	11.06	0
53	SLU 31	340	0	4546	-0.83	16.83	0
53	SLU 32	346	0	4541	-0.18	17.13	0
53	SLU 33	342	0	4544	-0.57	16.95	0
53	SLU 34	340	0	4546	-0.83	16.83	0
53	SLU 35	346	0	4541	-0.18	17.13	0
53	SLU 36	342	0	4544	-0.57	16.95	0
53	SLU 37	346	0	4541	-0.18	17.13	0
53	SLU 38	342	0	4544	-0.57	16.95	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
53	SLU 39	403	0	5079	-0.2	19.66	0
53	SLU 40	400	0	5083	-0.59	19.48	0
53	SLU 41	403	0	5079	-0.2	19.66	0
53	SLU 42	400	0	5083	-0.59	19.48	0
53	SLU 43	170	0	3131	-0.15	9.86	0
53	SLU 44	164	0	3136	-0.79	9.56	0
53	SLU 45	170	0	3131	-0.15	9.86	0
53	SLU 46	166	0	3134	-0.54	9.68	0
53	SLU 47	164	0	3136	-0.79	9.56	0
53	SLU 48	170	0	3131	-0.15	9.86	0
53	SLU 49	166	0	3134	-0.54	9.68	0
53	SLU 50	170	0	3131	-0.15	9.86	0
53	SLU 51	166	0	3134	-0.54	9.68	0
53	SLU 52	297	0	4393	-0.84	15.46	0
53	SLU 53	304	0	4387	-0.2	15.75	0
53	SLU 54	300	0	4391	-0.58	15.58	0
53	SLU 55	297	0	4393	-0.84	15.46	0
53	SLU 56	304	0	4387	-0.2	15.75	0
53	SLU 57	300	0	4391	-0.58	15.58	0
53	SLU 58	304	0	4387	-0.2	15.75	0
53	SLU 59	300	0	4391	-0.58	15.58	0
53	SLU 60	361	0	4926	-0.21	18.28	0
53	SLU 61	357	0	4929	-0.6	18.1	0
53	SLU 62	361	0	4926	-0.21	18.28	0
53	SLU 63	357	0	4929	-0.6	18.1	0
53	SLU 64	235	0	3824	-0.17	12.75	0
53	SLU 65	229	0	3830	-0.81	12.45	0
53	SLU 66	235	0	3824	-0.17	12.75	0
53	SLU 67	231	0	3827	-0.55	12.57	0
53	SLU 68	229	0	3830	-0.81	12.45	0
53	SLU 69	235	0	3824	-0.17	12.75	0
53	SLU 70	231	0	3827	-0.55	12.57	0
53	SLU 71	235	0	3824	-0.17	12.75	0
53	SLU 72	231	0	3827	-0.55	12.57	0
53	SLU 73	362	0	5086	-0.86	18.35	0
53	SLU 74	368	0	5080	-0.21	18.64	0
53	SLU 75	365	0	5084	-0.6	18.47	0
53	SLU 76	362	0	5086	-0.86	18.35	0
53	SLU 77	368	0	5080	-0.21	18.64	0
53	SLU 78	365	0	5084	-0.6	18.47	0
53	SLU 79	368	0	5080	-0.21	18.64	0
53	SLU 80	365	0	5084	-0.6	18.47	0
53	SLU 81	426	0	5619	-0.23	21.17	0
53	SLU 82	422	0	5622	-0.62	20.99	0
53	SLU 83	426	0	5619	-0.23	21.17	0
53	SLU 84	422	0	5622	-0.62	20.99	0
53	SLE RA 1	167	0	2789	-0.12	9.17	0
53	SLE RA 2	162	0	2793	-0.55	8.97	0
53	SLE RA 3	167	0	2789	-0.12	9.17	0
53	SLE RA 4	164	0	2791	-0.38	9.05	0
53	SLE RA 5	162	0	2793	-0.55	8.97	0
53	SLE RA 6	167	0	2789	-0.12	9.17	0
53	SLE RA 7	164	0	2791	-0.38	9.05	0
53	SLE RA 8	167	0	2789	-0.12	9.17	0
53	SLE RA 9	164	0	2791	-0.38	9.05	0
53	SLE RA 10	251	0	3631	-0.58	12.9	0
53	SLE RA 11	255	0	3627	-0.16	13.1	0
53	SLE RA 12	253	0	3629	-0.41	12.98	0
53	SLE RA 13	251	0	3631	-0.58	12.9	0
53	SLE RA 14	255	0	3627	-0.16	13.1	0
53	SLE RA 15	253	0	3629	-0.41	12.98	0
53	SLE RA 16	255	0	3627	-0.16	13.1	0
53	SLE RA 17	253	0	3629	-0.41	12.98	0
53	SLE RA 18	294	0	3986	-0.17	14.79	0
53	SLE RA 19	291	0	3988	-0.43	14.67	0
53	SLE RA 20	294	0	3986	-0.17	14.79	0
53	SLE RA 21	291	0	3988	-0.43	14.67	0
53	SLE FR 1	167	0	2789	-0.12	9.17	0
53	SLE FR 2	166	0	2790	-0.21	9.13	0
53	SLE FR 3	167	0	2789	-0.12	9.17	0
53	SLE FR 4	204	0	3149	-0.22	10.82	0
53	SLE FR 5	205	0	3148	-0.14	10.86	0
53	SLE FR 6	230	0	3387	-0.15	11.98	0
53	SLE QP 1	167	0	2789	-0.12	9.17	0
53	SLE QP 2	205	0	3148	-0.14	10.86	0
53	SLD 1	474	6	3278	-11.52	22.8	-0.02
53	SLD 2	474	6	3278	-11.52	22.8	-0.02
53	SLD 3	462	-8	3286	13.45	22.29	0.05
53	SLD 4	462	-8	3286	13.45	22.29	0.05
53	SLD 5	303	22	3175	-41.43	15.21	-0.11
53	SLD 6	303	22	3175	-41.43	15.21	-0.11
53	SLD 7	264	-23	3202	41.82	13.52	0.12
53	SLD 8	264	-23	3202	41.82	13.52	0.12
53	SLD 9	145	23	3094	-42.09	8.19	-0.12
53	SLD 10	145	23	3094	-42.09	8.19	-0.12
53	SLD 11	106	-22	3121	41.15	6.5	0.11
53	SLD 12	106	-22	3121	41.15	6.5	0.11
53	SLD 13	-53	8	3010	-13.73	-0.58	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
53	SLD 14	-53	8	3010	-13.73	-0.58	-0.05
53	SLD 15	-64	-5	3018	11.24	-1.09	0.02
53	SLD 16	-64	-5	3018	11.24	-1.09	0.02
53	SLV 1	832	16	3452	-32.82	38.78	-0.06
53	SLV 2	832	16	3452	-32.82	38.78	-0.06
53	SLV 3	804	-23	3475	38.09	37.57	0.15
53	SLV 4	804	-23	3475	38.09	37.57	0.15
53	SLV 5	435	64	3206	-117.5	21.07	-0.33
53	SLV 6	435	64	3206	-117.5	21.07	-0.33
53	SLV 7	342	-66	3280	118.88	17.03	0.36
53	SLV 8	342	-66	3280	118.88	17.03	0.36
53	SLV 9	67	67	3016	-119.16	4.68	-0.36
53	SLV 10	67	67	3016	-119.16	4.68	-0.36
53	SLV 11	-26	-64	3090	117.22	0.64	0.33
53	SLV 12	-26	-64	3090	117.22	0.64	0.33
53	SLV 13	-395	23	2821	-38.37	-15.86	-0.15
53	SLV 14	-395	23	2821	-38.37	-15.86	-0.15
53	SLV 15	-423	-16	2844	32.55	-17.07	0.06
53	SLV 16	-423	-16	2844	32.55	-17.07	0.06
54	SLU 1	14	0	2674	-0.12	-1.93	0
54	SLU 2	10	0	2679	-0.78	-2.09	0
54	SLU 3	14	0	2674	-0.12	-1.93	0
54	SLU 4	12	0	2677	-0.51	-2.03	0
54	SLU 5	10	0	2679	-0.78	-2.09	0
54	SLU 6	14	0	2674	-0.12	-1.93	0
54	SLU 7	12	0	2677	-0.51	-2.03	0
54	SLU 8	14	0	2674	-0.12	-1.93	0
54	SLU 9	12	0	2677	-0.51	-2.03	0
54	SLU 10	78	0	4001	-0.82	0.05	0
54	SLU 11	83	0	3996	-0.16	0.22	0
54	SLU 12	80	0	3999	-0.56	0.12	0
54	SLU 13	78	0	4001	-0.82	0.05	0
54	SLU 14	83	0	3996	-0.16	0.22	0
54	SLU 15	80	0	3999	-0.56	0.12	0
54	SLU 16	83	0	3996	-0.16	0.22	0
54	SLU 17	80	0	3999	-0.56	0.12	0
54	SLU 18	112	0	4563	-0.18	1.14	0
54	SLU 19	109	0	4566	-0.58	1.04	0
54	SLU 20	112	0	4563	-0.18	1.14	0
54	SLU 21	109	0	4566	-0.58	1.04	0
54	SLU 22	45	0	3401	-0.14	-1.06	0
54	SLU 23	40	0	3406	-0.79	-1.22	0
54	SLU 24	45	0	3401	-0.14	-1.06	0
54	SLU 25	42	0	3404	-0.53	-1.15	0
54	SLU 26	40	0	3406	-0.79	-1.22	0
54	SLU 27	45	0	3401	-0.14	-1.06	0
54	SLU 28	42	0	3404	-0.53	-1.15	0
54	SLU 29	45	0	3401	-0.14	-1.06	0
54	SLU 30	42	0	3404	-0.53	-1.15	0
54	SLU 31	109	0	4728	-0.84	0.93	0
54	SLU 32	113	0	4723	-0.18	1.09	0
54	SLU 33	110	0	4726	-0.57	0.99	0
54	SLU 34	109	0	4728	-0.84	0.93	0
54	SLU 35	113	0	4723	-0.18	1.09	0
54	SLU 36	110	0	4726	-0.57	0.99	0
54	SLU 37	113	0	4723	-0.18	1.09	0
54	SLU 38	110	0	4726	-0.57	0.99	0
54	SLU 39	142	0	5290	-0.2	2.01	0
54	SLU 40	140	0	5293	-0.59	1.91	0
54	SLU 41	142	0	5290	-0.2	2.01	0
54	SLU 42	140	0	5293	-0.59	1.91	0
54	SLU 43	8	0	3227	-0.15	-2.81	0
54	SLU 44	4	0	3231	-0.8	-2.97	0
54	SLU 45	8	0	3227	-0.15	-2.81	0
54	SLU 46	6	0	3230	-0.54	-2.91	0
54	SLU 47	4	0	3231	-0.8	-2.97	0
54	SLU 48	8	0	3227	-0.15	-2.81	0
54	SLU 49	6	0	3230	-0.54	-2.91	0
54	SLU 50	8	0	3227	-0.15	-2.81	0
54	SLU 51	6	0	3230	-0.54	-2.91	0
54	SLU 52	72	0	4554	-0.85	-0.82	0
54	SLU 53	77	0	4549	-0.19	-0.66	0
54	SLU 54	74	0	4552	-0.59	-0.76	0
54	SLU 55	72	0	4554	-0.85	-0.82	0
54	SLU 56	77	0	4549	-0.19	-0.66	0
54	SLU 57	74	0	4552	-0.59	-0.76	0
54	SLU 58	77	0	4549	-0.19	-0.66	0
54	SLU 59	74	0	4552	-0.59	-0.76	0
54	SLU 60	106	0	5116	-0.21	0.26	0
54	SLU 61	103	0	5119	-0.61	0.16	0
54	SLU 62	106	0	5116	-0.21	0.26	0
54	SLU 63	103	0	5119	-0.61	0.16	0
54	SLU 64	39	0	3954	-0.17	-1.93	0
54	SLU 65	34	0	3959	-0.82	-2.1	0
54	SLU 66	39	0	3954	-0.17	-1.93	0
54	SLU 67	36	0	3957	-0.56	-2.03	0
54	SLU 68	34	0	3959	-0.82	-2.1	0
54	SLU 69	39	0	3954	-0.17	-1.93	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
54	SLU 70	36	0	3957	-0.56	-2.03	0
54	SLU 71	39	0	3954	-0.17	-1.93	0
54	SLU 72	36	0	3957	-0.56	-2.03	0
54	SLU 73	103	0	5281	-0.87	0.05	0
54	SLU 74	107	0	5276	-0.21	0.21	0
54	SLU 75	104	0	5279	-0.6	0.11	0
54	SLU 76	103	0	5281	-0.87	0.05	0
54	SLU 77	107	0	5276	-0.21	0.21	0
54	SLU 78	104	0	5279	-0.6	0.11	0
54	SLU 79	107	0	5276	-0.21	0.21	0
54	SLU 80	104	0	5279	-0.6	0.11	0
54	SLU 81	136	0	5843	-0.23	1.13	0
54	SLU 82	134	0	5846	-0.62	1.03	0
54	SLU 83	136	0	5843	-0.23	1.13	0
54	SLU 84	134	0	5846	-0.62	1.03	0
54	SLE RA 1	23	0	2882	-0.13	-1.68	0
54	SLE RA 2	20	0	2885	-0.56	-1.79	0
54	SLE RA 3	23	0	2882	-0.13	-1.68	0
54	SLE RA 4	21	0	2883	-0.39	-1.74	0
54	SLE RA 5	20	0	2885	-0.56	-1.79	0
54	SLE RA 6	23	0	2882	-0.13	-1.68	0
54	SLE RA 7	21	0	2883	-0.39	-1.74	0
54	SLE RA 8	23	0	2882	-0.13	-1.68	0
54	SLE RA 9	21	0	2883	-0.39	-1.74	0
54	SLE RA 10	66	0	3767	-0.59	-0.36	0
54	SLE RA 11	69	0	3763	-0.15	-0.25	0
54	SLE RA 12	67	0	3765	-0.42	-0.31	0
54	SLE RA 13	66	0	3767	-0.59	-0.36	0
54	SLE RA 14	69	0	3763	-0.15	-0.25	0
54	SLE RA 15	67	0	3765	-0.42	-0.31	0
54	SLE RA 16	69	0	3763	-0.15	-0.25	0
54	SLE RA 17	67	0	3765	-0.42	-0.31	0
54	SLE RA 18	88	0	4141	-0.17	0.37	0
54	SLE RA 19	86	0	4143	-0.43	0.3	0
54	SLE RA 20	88	0	4141	-0.17	0.37	0
54	SLE RA 21	86	0	4143	-0.43	0.3	0
54	SLE FR 1	23	0	2882	-0.13	-1.68	0
54	SLE FR 2	23	0	2882	-0.21	-1.7	0
54	SLE FR 3	23	0	2882	-0.13	-1.68	0
54	SLE FR 4	42	0	3260	-0.23	-1.09	0
54	SLE FR 5	43	0	3259	-0.14	-1.07	0
54	SLE FR 6	56	0	3511	-0.15	-0.66	0
54	SLE QP 1	23	0	2882	-0.13	-1.68	0
54	SLE QP 2	43	0	3259	-0.14	-1.07	0
54	SLD 1	289	7	3341	-13.36	10.22	-0.03
54	SLD 2	289	7	3341	-13.36	10.22	-0.03
54	SLD 3	278	-10	3348	15.69	9.72	0.05
54	SLD 4	278	-10	3348	15.69	9.72	0.05
54	SLD 5	133	26	3273	-48.16	3.07	-0.13
54	SLD 6	133	26	3273	-48.16	3.07	-0.13
54	SLD 7	97	-27	3297	48.67	1.42	0.13
54	SLD 8	97	-27	3297	48.67	1.42	0.13
54	SLD 9	-12	27	3222	-48.94	-3.55	-0.13
54	SLD 10	-12	27	3222	-48.94	-3.55	-0.13
54	SLD 11	-48	-26	3246	47.89	-5.2	0.13
54	SLD 12	-48	-26	3246	47.89	-5.2	0.13
54	SLD 13	-193	10	3170	-15.96	-11.85	-0.05
54	SLD 14	-193	10	3170	-15.96	-11.85	-0.05
54	SLD 15	-204	-6	3178	13.09	-12.35	0.03
54	SLD 16	-204	-6	3178	13.09	-12.35	0.03
54	SLV 1	618	20	3451	-38.22	25.26	-0.1
54	SLV 2	618	20	3451	-38.22	25.26	-0.1
54	SLV 3	591	-27	3470	44.42	24.03	0.13
54	SLV 4	591	-27	3470	44.42	24.03	0.13
54	SLV 5	255	77	3287	-136.91	8.69	-0.38
54	SLV 6	255	77	3287	-136.91	8.69	-0.38
54	SLV 7	167	-79	3353	138.58	4.61	0.39
54	SLV 8	167	-79	3353	138.58	4.61	0.39
54	SLV 9	-82	79	3166	-138.85	-6.74	-0.39
54	SLV 10	-82	79	3166	-138.85	-6.74	-0.39
54	SLV 11	-170	-77	3232	136.63	-10.82	0.38
54	SLV 12	-170	-77	3232	136.63	-10.82	0.38
54	SLV 13	-506	27	3048	-44.7	-26.16	-0.14
54	SLV 14	-506	27	3048	-44.7	-26.16	-0.14
54	SLV 15	-532	-19	3068	37.95	-27.39	0.1
54	SLV 16	-532	-19	3068	37.95	-27.39	0.1
55	SLU 1	-71	0	2727	-0.12	-1.22	0
55	SLU 2	-75	0	2732	-0.78	-1.43	0
55	SLU 3	-71	0	2727	-0.12	-1.22	0
55	SLU 4	-73	0	2730	-0.52	-1.35	0
55	SLU 5	-75	0	2732	-0.78	-1.43	0
55	SLU 6	-71	0	2727	-0.12	-1.22	0
55	SLU 7	-73	0	2730	-0.52	-1.35	0
55	SLU 8	-71	0	2727	-0.12	-1.22	0
55	SLU 9	-73	0	2730	-0.52	-1.35	0
55	SLU 10	-71	0	4101	-0.83	-0.88	0
55	SLU 11	-67	0	4096	-0.16	-0.67	0
55	SLU 12	-69	0	4099	-0.56	-0.8	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
55	SLU 13	-71	0	4101	-0.83	-0.88	0
55	SLU 14	-67	0	4096	-0.16	-0.67	0
55	SLU 15	-69	0	4099	-0.56	-0.8	0
55	SLU 16	-67	0	4096	-0.16	-0.67	0
55	SLU 17	-69	0	4099	-0.56	-0.8	0
55	SLU 18	-65	0	4683	-0.18	-0.43	0
55	SLU 19	-68	0	4685	-0.58	-0.56	0
55	SLU 20	-65	0	4683	-0.18	-0.43	0
55	SLU 21	-68	0	4685	-0.58	-0.56	0
55	SLU 22	-75	0	3478	-0.14	-1.19	0
55	SLU 23	-79	0	3482	-0.8	-1.4	0
55	SLU 24	-75	0	3478	-0.14	-1.19	0
55	SLU 25	-77	0	3481	-0.54	-1.32	0
55	SLU 26	-79	0	3482	-0.8	-1.4	0
55	SLU 27	-75	0	3478	-0.14	-1.19	0
55	SLU 28	-77	0	3481	-0.54	-1.32	0
55	SLU 29	-75	0	3478	-0.14	-1.19	0
55	SLU 30	-77	0	3481	-0.54	-1.32	0
55	SLU 31	-75	0	4851	-0.84	-0.85	0
55	SLU 32	-71	0	4847	-0.18	-0.64	0
55	SLU 33	-73	0	4850	-0.58	-0.76	0
55	SLU 34	-75	0	4851	-0.84	-0.85	0
55	SLU 35	-71	0	4847	-0.18	-0.64	0
55	SLU 36	-73	0	4850	-0.58	-0.76	0
55	SLU 37	-71	0	4847	-0.18	-0.64	0
55	SLU 38	-73	0	4850	-0.58	-0.76	0
55	SLU 39	-69	0	5433	-0.2	-0.4	0
55	SLU 40	-72	0	5436	-0.6	-0.53	0
55	SLU 41	-69	0	5433	-0.2	-0.4	0
55	SLU 42	-72	0	5436	-0.6	-0.53	0
55	SLU 43	-90	0	3287	-0.15	-1.6	0
55	SLU 44	-95	0	3292	-0.81	-1.81	0
55	SLU 45	-90	0	3287	-0.15	-1.6	0
55	SLU 46	-93	0	3290	-0.55	-1.73	0
55	SLU 47	-95	0	3292	-0.81	-1.81	0
55	SLU 48	-90	0	3287	-0.15	-1.6	0
55	SLU 49	-93	0	3290	-0.55	-1.73	0
55	SLU 50	-90	0	3287	-0.15	-1.6	0
55	SLU 51	-93	0	3290	-0.55	-1.73	0
55	SLU 52	-91	0	4661	-0.86	-1.26	0
55	SLU 53	-87	0	4656	-0.19	-1.05	0
55	SLU 54	-89	0	4659	-0.59	-1.17	0
55	SLU 55	-91	0	4661	-0.86	-1.26	0
55	SLU 56	-87	0	4656	-0.19	-1.05	0
55	SLU 57	-89	0	4659	-0.59	-1.17	0
55	SLU 58	-87	0	4656	-0.19	-1.05	0
55	SLU 59	-89	0	4659	-0.59	-1.17	0
55	SLU 60	-85	0	5243	-0.21	-0.81	0
55	SLU 61	-88	0	5246	-0.61	-0.94	0
55	SLU 62	-85	0	5243	-0.21	-0.81	0
55	SLU 63	-88	0	5246	-0.61	-0.94	0
55	SLU 64	-94	0	4038	-0.17	-1.57	0
55	SLU 65	-99	0	4043	-0.83	-1.78	0
55	SLU 66	-94	0	4038	-0.17	-1.57	0
55	SLU 67	-97	0	4041	-0.57	-1.69	0
55	SLU 68	-99	0	4043	-0.83	-1.78	0
55	SLU 69	-94	0	4038	-0.17	-1.57	0
55	SLU 70	-97	0	4041	-0.57	-1.69	0
55	SLU 71	-94	0	4038	-0.17	-1.57	0
55	SLU 72	-97	0	4041	-0.57	-1.69	0
55	SLU 73	-95	0	5412	-0.87	-1.23	0
55	SLU 74	-91	0	5407	-0.21	-1.01	0
55	SLU 75	-93	0	5410	-0.61	-1.14	0
55	SLU 76	-95	0	5412	-0.87	-1.23	0
55	SLU 77	-91	0	5407	-0.21	-1.01	0
55	SLU 78	-93	0	5410	-0.61	-1.14	0
55	SLU 79	-91	0	5407	-0.21	-1.01	0
55	SLU 80	-93	0	5410	-0.61	-1.14	0
55	SLU 81	-89	0	5994	-0.23	-0.78	0
55	SLU 82	-92	0	5997	-0.63	-0.91	0
55	SLU 83	-89	0	5994	-0.23	-0.78	0
55	SLU 84	-92	0	5997	-0.63	-0.91	0
55	SLE RA 1	-72	0	2941	-0.13	-1.21	0
55	SLE RA 2	-75	0	2945	-0.57	-1.35	0
55	SLE RA 3	-72	0	2941	-0.13	-1.21	0
55	SLE RA 4	-73	0	2943	-0.39	-1.3	0
55	SLE RA 5	-75	0	2945	-0.57	-1.35	0
55	SLE RA 6	-72	0	2941	-0.13	-1.21	0
55	SLE RA 7	-73	0	2943	-0.39	-1.3	0
55	SLE RA 8	-72	0	2941	-0.13	-1.21	0
55	SLE RA 9	-73	0	2943	-0.39	-1.3	0
55	SLE RA 10	-72	0	3857	-0.6	-0.99	0
55	SLE RA 11	-69	0	3854	-0.16	-0.84	0
55	SLE RA 12	-71	0	3856	-0.42	-0.93	0
55	SLE RA 13	-72	0	3857	-0.6	-0.99	0
55	SLE RA 14	-69	0	3854	-0.16	-0.84	0
55	SLE RA 15	-71	0	3856	-0.42	-0.93	0
55	SLE RA 16	-69	0	3854	-0.16	-0.84	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
55	SLE RA 17	-71	0	3856	-0.42	-0.93	0
55	SLE RA 18	-68	0	4245	-0.17	-0.69	0
55	SLE RA 19	-70	0	4247	-0.43	-0.77	0
55	SLE RA 20	-68	0	4245	-0.17	-0.69	0
55	SLE RA 21	-70	0	4247	-0.43	-0.77	0
55	SLE FR 1	-72	0	2941	-0.13	-1.21	0
55	SLE FR 2	-72	0	2942	-0.22	-1.24	0
55	SLE FR 3	-72	0	2941	-0.13	-1.21	0
55	SLE FR 4	-71	0	3333	-0.23	-1.08	0
55	SLE FR 5	-71	0	3333	-0.14	-1.05	0
55	SLE FR 6	-70	0	3593	-0.15	-0.95	0
55	SLE QP 1	-72	0	2941	-0.13	-1.21	0
55	SLE QP 2	-71	0	3333	-0.14	-1.05	0
55	SLD 1	144	9	3183	-15.08	9.35	-0.03
55	SLD 2	144	9	3183	-15.08	9.35	-0.03
55	SLD 3	135	-12	3192	17.94	8.9	0.05
55	SLD 4	135	-12	3192	17.94	8.9	0.05
55	SLD 5	8	35	3275	-54.69	2.74	-0.12
55	SLD 6	8	35	3275	-54.69	2.74	-0.12
55	SLD 7	-23	-36	3303	55.36	1.26	0.13
55	SLD 8	-23	-36	3303	55.36	1.26	0.13
55	SLD 9	-118	36	3362	-55.63	-3.37	-0.13
55	SLD 10	-118	36	3362	-55.63	-3.37	-0.13
55	SLD 11	-149	-35	3390	54.41	-4.84	0.12
55	SLD 12	-149	-35	3390	54.41	-4.84	0.12
55	SLD 13	-276	12	3473	-18.22	-11.01	-0.05
55	SLD 14	-276	12	3473	-18.22	-11.01	-0.05
55	SLD 15	-286	-9	3482	14.8	-11.45	0.03
55	SLD 16	-286	-9	3482	14.8	-11.45	0.03
55	SLV 1	431	26	2983	-43.29	23.25	-0.08
55	SLV 2	431	26	2983	-43.29	23.25	-0.08
55	SLV 3	409	-35	3005	50.8	22.2	0.14
55	SLV 4	409	-35	3005	50.8	22.2	0.14
55	SLV 5	114	101	3195	-155.79	7.83	-0.36
55	SLV 6	114	101	3195	-155.79	7.83	-0.36
55	SLV 7	39	-104	3267	157.85	4.33	0.38
55	SLV 8	39	-104	3267	157.85	4.33	0.38
55	SLV 9	-180	104	3398	-158.13	-6.43	-0.38
55	SLV 10	-180	104	3398	-158.13	-6.43	-0.38
55	SLV 11	-256	-101	3470	155.51	-9.94	0.36
55	SLV 12	-256	-101	3470	155.51	-9.94	0.36
55	SLV 13	-550	35	3660	-51.08	-24.3	-0.14
55	SLV 14	-550	35	3660	-51.08	-24.3	-0.14
55	SLV 15	-573	-26	3682	43.01	-25.36	0.08
55	SLV 16	-573	-26	3682	43.01	-25.36	0.08
56	SLU 1	-267	0	2830	-0.12	-15.84	0
56	SLU 2	-270	1	2836	-0.74	-15.96	0
56	SLU 3	-267	0	2830	-0.12	-15.84	0
56	SLU 4	-269	0	2833	-0.49	-15.91	0
56	SLU 5	-270	1	2836	-0.74	-15.96	0
56	SLU 6	-267	0	2830	-0.12	-15.84	0
56	SLU 7	-269	0	2833	-0.49	-15.91	0
56	SLU 8	-267	0	2830	-0.12	-15.84	0
56	SLU 9	-269	0	2833	-0.49	-15.91	0
56	SLU 10	-372	1	4260	-0.77	-21.93	0
56	SLU 11	-369	0	4254	-0.16	-21.8	0
56	SLU 12	-371	0	4258	-0.53	-21.88	0
56	SLU 13	-372	1	4260	-0.77	-21.93	0
56	SLU 14	-369	0	4254	-0.16	-21.8	0
56	SLU 15	-371	0	4258	-0.53	-21.88	0
56	SLU 16	-369	0	4254	-0.16	-21.8	0
56	SLU 17	-371	0	4258	-0.53	-21.88	0
56	SLU 18	-412	0	4865	-0.17	-24.36	0
56	SLU 19	-414	0	4868	-0.54	-24.43	0
56	SLU 20	-412	0	4865	-0.17	-24.36	0
56	SLU 21	-414	0	4868	-0.54	-24.43	0
56	SLU 22	-327	0	3612	-0.13	-19.31	0
56	SLU 23	-330	1	3618	-0.75	-19.44	0
56	SLU 24	-327	0	3612	-0.13	-19.31	0
56	SLU 25	-329	0	3615	-0.5	-19.39	0
56	SLU 26	-330	1	3618	-0.75	-19.44	0
56	SLU 27	-327	0	3612	-0.13	-19.31	0
56	SLU 28	-329	0	3615	-0.5	-19.39	0
56	SLU 29	-327	0	3612	-0.13	-19.31	0
56	SLU 30	-329	0	3615	-0.5	-19.39	0
56	SLU 31	-432	1	5042	-0.79	-25.4	0
56	SLU 32	-429	0	5036	-0.17	-25.28	0
56	SLU 33	-430	0	5040	-0.54	-25.35	0
56	SLU 34	-432	1	5042	-0.79	-25.4	0
56	SLU 35	-429	0	5036	-0.17	-25.28	0
56	SLU 36	-430	0	5040	-0.54	-25.35	0
56	SLU 37	-429	0	5036	-0.17	-25.28	0
56	SLU 38	-430	0	5040	-0.54	-25.35	0
56	SLU 39	-472	0	5647	-0.19	-27.83	0
56	SLU 40	-474	0	5650	-0.56	-27.91	0
56	SLU 41	-472	0	5647	-0.19	-27.83	0
56	SLU 42	-474	0	5650	-0.56	-27.91	0
56	SLU 43	-327	0	3410	-0.15	-19.39	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
56	SLU 44	-330	1	3417	-0.76	-19.52	0
56	SLU 45	-327	0	3410	-0.15	-19.39	0
56	SLU 46	-329	0	3414	-0.52	-19.47	0
56	SLU 47	-330	1	3417	-0.76	-19.52	0
56	SLU 48	-327	0	3410	-0.15	-19.39	0
56	SLU 49	-329	0	3414	-0.52	-19.47	0
56	SLU 50	-327	0	3410	-0.15	-19.39	0
56	SLU 51	-329	0	3414	-0.52	-19.47	0
56	SLU 52	-431	1	4841	-0.8	-25.49	0
56	SLU 53	-428	0	4835	-0.19	-25.36	0
56	SLU 54	-430	0	4839	-0.56	-25.44	0
56	SLU 55	-431	1	4841	-0.8	-25.49	0
56	SLU 56	-428	0	4835	-0.19	-25.36	0
56	SLU 57	-430	0	4839	-0.56	-25.44	0
56	SLU 58	-428	0	4835	-0.19	-25.36	0
56	SLU 59	-430	0	4839	-0.56	-25.44	0
56	SLU 60	-472	0	5445	-0.2	-27.92	0
56	SLU 61	-474	0	5449	-0.57	-27.99	0
56	SLU 62	-472	0	5445	-0.2	-27.92	0
56	SLU 63	-474	0	5449	-0.57	-27.99	0
56	SLU 64	-387	0	4192	-0.16	-22.87	0
56	SLU 65	-390	1	4198	-0.78	-23	0
56	SLU 66	-387	0	4192	-0.16	-22.87	0
56	SLU 67	-389	0	4196	-0.53	-22.95	0
56	SLU 68	-390	1	4198	-0.78	-23	0
56	SLU 69	-387	0	4192	-0.16	-22.87	0
56	SLU 70	-389	0	4196	-0.53	-22.95	0
56	SLU 71	-387	0	4192	-0.16	-22.87	0
56	SLU 72	-389	0	4196	-0.53	-22.95	0
56	SLU 73	-491	1	5623	-0.82	-28.96	0
56	SLU 74	-488	0	5617	-0.2	-28.84	0
56	SLU 75	-490	0	5621	-0.57	-28.91	0
56	SLU 76	-491	1	5623	-0.82	-28.96	0
56	SLU 77	-488	0	5617	-0.2	-28.84	0
56	SLU 78	-490	0	5621	-0.57	-28.91	0
56	SLU 79	-488	0	5617	-0.2	-28.84	0
56	SLU 80	-490	0	5621	-0.57	-28.91	0
56	SLU 81	-532	0	6227	-0.22	-31.39	0
56	SLU 82	-534	0	6231	-0.59	-31.47	0
56	SLU 83	-532	0	6227	-0.22	-31.39	0
56	SLU 84	-534	0	6231	-0.59	-31.47	0
56	SLE RA 1	-284	0	3053	-0.12	-16.83	0
56	SLE RA 2	-286	0	3057	-0.53	-16.91	0
56	SLE RA 3	-284	0	3053	-0.12	-16.83	0
56	SLE RA 4	-286	0	3055	-0.37	-16.88	0
56	SLE RA 5	-286	0	3057	-0.53	-16.91	0
56	SLE RA 6	-284	0	3053	-0.12	-16.83	0
56	SLE RA 7	-286	0	3055	-0.37	-16.88	0
56	SLE RA 8	-284	0	3053	-0.12	-16.83	0
56	SLE RA 9	-286	0	3055	-0.37	-16.88	0
56	SLE RA 10	-354	0	4007	-0.56	-20.89	0
56	SLE RA 11	-352	0	4003	-0.15	-20.81	0
56	SLE RA 12	-353	0	4005	-0.39	-20.86	0
56	SLE RA 13	-354	0	4007	-0.56	-20.89	0
56	SLE RA 14	-352	0	4003	-0.15	-20.81	0
56	SLE RA 15	-353	0	4005	-0.39	-20.86	0
56	SLE RA 16	-352	0	4003	-0.15	-20.81	0
56	SLE RA 17	-353	0	4005	-0.39	-20.86	0
56	SLE RA 18	-381	0	4410	-0.16	-22.51	0
56	SLE RA 19	-382	0	4412	-0.41	-22.56	0
56	SLE RA 20	-381	0	4410	-0.16	-22.51	0
56	SLE RA 21	-382	0	4412	-0.41	-22.56	0
56	SLE FR 1	-284	0	3053	-0.12	-16.83	0
56	SLE FR 2	-285	0	3054	-0.2	-16.85	0
56	SLE FR 3	-284	0	3053	-0.12	-16.83	0
56	SLE FR 4	-314	0	3461	-0.22	-18.55	0
56	SLE FR 5	-313	0	3460	-0.13	-18.53	0
56	SLE FR 6	-333	0	3731	-0.14	-19.67	0
56	SLE QP 1	-284	0	3053	-0.12	-16.83	0
56	SLE QP 2	-313	0	3460	-0.13	-18.53	0
56	SLD 1	-142	15	3063	-15.92	-8.59	0.02
56	SLD 2	-142	15	3063	-15.92	-8.59	0.02
56	SLD 3	-150	-20	3078	19.57	-9.03	-0.07
56	SLD 4	-150	-20	3078	19.57	-9.03	-0.07
56	SLD 5	-250	57	3317	-58.7	-14.89	0.15
56	SLD 6	-250	57	3317	-58.7	-14.89	0.15
56	SLD 7	-276	-58	3369	59.61	-16.35	-0.16
56	SLD 8	-276	-58	3369	59.61	-16.35	-0.16
56	SLD 9	-351	58	3551	-59.87	-20.72	0.16
56	SLD 10	-351	58	3551	-59.87	-20.72	0.16
56	SLD 11	-376	-57	3603	58.43	-22.18	-0.14
56	SLD 12	-376	-57	3603	58.43	-22.18	-0.14
56	SLD 13	-477	20	3842	-19.84	-28.03	0.07
56	SLD 14	-477	20	3842	-19.84	-28.03	0.07
56	SLD 15	-485	-14	3857	15.65	-28.47	-0.02
56	SLD 16	-485	-14	3857	15.65	-28.47	-0.02
56	SLV 1	86	43	2533	-46	4.66	0.07
56	SLV 2	86	43	2533	-46	4.66	0.07

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
56	SLV 3	67	-57	2571	55.43	3.58	-0.19
56	SLV 4	67	-57	2571	55.43	3.58	-0.19
56	SLV 5	-165	165	3124	-167.72	-9.94	0.41
56	SLV 6	-165	165	3124	-167.72	-9.94	0.41
56	SLV 7	-227	-169	3251	170.37	-13.54	-0.44
56	SLV 8	-227	-169	3251	170.37	-13.54	-0.44
56	SLV 9	-399	169	3669	-170.63	-23.53	0.44
56	SLV 10	-399	169	3669	-170.63	-23.53	0.44
56	SLV 11	-462	-165	3796	167.46	-27.13	-0.4
56	SLV 12	-462	-165	3796	167.46	-27.13	-0.4
56	SLV 13	-694	57	4349	-55.7	-40.64	0.19
56	SLV 14	-694	57	4349	-55.7	-40.64	0.19
56	SLV 15	-713	-43	4387	45.73	-41.72	-0.06
56	SLV 16	-713	-43	4387	45.73	-41.72	-0.06
57	SLU 1	-405	0	1650	-0.05	-8.76	-0.01
57	SLU 2	-407	0	1655	-0.3	-8.86	-0.04
57	SLU 3	-405	0	1650	-0.05	-8.76	-0.01
57	SLU 4	-406	0	1653	-0.2	-8.82	-0.03
57	SLU 5	-407	0	1655	-0.3	-8.86	-0.04
57	SLU 6	-405	0	1650	-0.05	-8.76	-0.01
57	SLU 7	-406	0	1653	-0.2	-8.82	-0.03
57	SLU 8	-405	0	1650	-0.05	-8.76	-0.01
57	SLU 9	-406	0	1653	-0.2	-8.82	-0.03
57	SLU 10	-602	0	2476	-0.31	-13.1	-0.05
57	SLU 11	-600	0	2471	-0.06	-13	-0.01
57	SLU 12	-602	0	2474	-0.21	-13.06	-0.03
57	SLU 13	-602	0	2476	-0.31	-13.1	-0.05
57	SLU 14	-600	0	2471	-0.06	-13	-0.01
57	SLU 15	-602	0	2474	-0.21	-13.06	-0.03
57	SLU 16	-600	0	2471	-0.06	-13	-0.01
57	SLU 17	-602	0	2474	-0.21	-13.06	-0.03
57	SLU 18	-684	0	2823	-0.07	-14.81	-0.01
57	SLU 19	-685	0	2826	-0.22	-14.87	-0.03
57	SLU 20	-684	0	2823	-0.07	-14.81	-0.01
57	SLU 21	-685	0	2826	-0.22	-14.87	-0.03
57	SLU 22	-514	0	2103	-0.06	-11.18	-0.01
57	SLU 23	-516	0	2108	-0.3	-11.28	-0.04
57	SLU 24	-514	0	2103	-0.06	-11.18	-0.01
57	SLU 25	-515	0	2106	-0.2	-11.24	-0.03
57	SLU 26	-516	0	2108	-0.3	-11.28	-0.04
57	SLU 27	-514	0	2103	-0.06	-11.18	-0.01
57	SLU 28	-515	0	2106	-0.2	-11.24	-0.03
57	SLU 29	-514	0	2103	-0.06	-11.18	-0.01
57	SLU 30	-515	0	2106	-0.2	-11.24	-0.03
57	SLU 31	-712	0	2929	-0.32	-15.51	-0.05
57	SLU 32	-709	0	2924	-0.07	-15.41	-0.01
57	SLU 33	-711	0	2927	-0.22	-15.47	-0.03
57	SLU 34	-712	0	2929	-0.32	-15.51	-0.05
57	SLU 35	-709	0	2924	-0.07	-15.41	-0.01
57	SLU 36	-711	0	2927	-0.22	-15.47	-0.03
57	SLU 37	-709	0	2924	-0.07	-15.41	-0.01
57	SLU 38	-711	0	2927	-0.22	-15.47	-0.03
57	SLU 39	-793	0	3276	-0.08	-17.23	-0.01
57	SLU 40	-794	0	3279	-0.23	-17.29	-0.03
57	SLU 41	-793	0	3276	-0.08	-17.23	-0.01
57	SLU 42	-794	0	3279	-0.23	-17.29	-0.03
57	SLU 43	-489	0	1990	-0.06	-10.57	-0.01
57	SLU 44	-491	0	1995	-0.31	-10.66	-0.05
57	SLU 45	-489	0	1990	-0.06	-10.57	-0.01
57	SLU 46	-490	0	1993	-0.21	-10.62	-0.03
57	SLU 47	-491	0	1995	-0.31	-10.66	-0.05
57	SLU 48	-489	0	1990	-0.06	-10.57	-0.01
57	SLU 49	-490	0	1993	-0.21	-10.62	-0.03
57	SLU 50	-489	0	1990	-0.06	-10.57	-0.01
57	SLU 51	-490	0	1993	-0.21	-10.62	-0.03
57	SLU 52	-686	0	2816	-0.32	-14.9	-0.05
57	SLU 53	-684	0	2811	-0.08	-14.8	-0.01
57	SLU 54	-686	0	2814	-0.22	-14.86	-0.03
57	SLU 55	-686	0	2816	-0.32	-14.9	-0.05
57	SLU 56	-684	0	2811	-0.08	-14.8	-0.01
57	SLU 57	-686	0	2814	-0.22	-14.86	-0.03
57	SLU 58	-684	0	2811	-0.08	-14.8	-0.01
57	SLU 59	-686	0	2814	-0.22	-14.86	-0.03
57	SLU 60	-768	0	3163	-0.08	-16.61	-0.01
57	SLU 61	-769	0	3166	-0.23	-16.67	-0.03
57	SLU 62	-768	0	3163	-0.08	-16.61	-0.01
57	SLU 63	-769	0	3166	-0.23	-16.67	-0.03
57	SLU 64	-598	0	2443	-0.07	-12.98	-0.01
57	SLU 65	-600	0	2448	-0.31	-13.08	-0.05
57	SLU 66	-598	0	2443	-0.07	-12.98	-0.01
57	SLU 67	-599	0	2446	-0.22	-13.04	-0.03
57	SLU 68	-600	0	2448	-0.31	-13.08	-0.05
57	SLU 69	-598	0	2443	-0.07	-12.98	-0.01
57	SLU 70	-599	0	2446	-0.22	-13.04	-0.03
57	SLU 71	-598	0	2443	-0.07	-12.98	-0.01
57	SLU 72	-599	0	2446	-0.22	-13.04	-0.03
57	SLU 73	-796	-1	3269	-0.33	-17.31	-0.05
57	SLU 74	-793	0	3264	-0.08	-17.21	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
57	SLU 75	-795	0	3267	-0.23	-17.27	-0.03
57	SLU 76	-796	-1	3269	-0.33	-17.31	-0.05
57	SLU 77	-793	0	3264	-0.08	-17.21	-0.01
57	SLU 78	-795	0	3267	-0.23	-17.27	-0.03
57	SLU 79	-793	0	3264	-0.08	-17.21	-0.01
57	SLU 80	-795	0	3267	-0.23	-17.27	-0.03
57	SLU 81	-877	0	3616	-0.09	-19.03	-0.01
57	SLU 82	-878	0	3619	-0.24	-19.09	-0.04
57	SLU 83	-877	0	3616	-0.09	-19.03	-0.01
57	SLU 84	-878	0	3619	-0.24	-19.09	-0.04
57	SLE RA 1	-436	0	1779	-0.05	-9.45	-0.01
57	SLE RA 2	-437	0	1783	-0.22	-9.52	-0.03
57	SLE RA 3	-436	0	1779	-0.05	-9.45	-0.01
57	SLE RA 4	-437	0	1781	-0.15	-9.49	-0.02
57	SLE RA 5	-437	0	1783	-0.22	-9.52	-0.03
57	SLE RA 6	-436	0	1779	-0.05	-9.45	-0.01
57	SLE RA 7	-437	0	1781	-0.15	-9.49	-0.02
57	SLE RA 8	-436	0	1779	-0.05	-9.45	-0.01
57	SLE RA 9	-437	0	1781	-0.15	-9.49	-0.02
57	SLE RA 10	-568	0	2330	-0.23	-12.34	-0.03
57	SLE RA 11	-566	0	2327	-0.06	-12.28	-0.01
57	SLE RA 12	-567	0	2329	-0.16	-12.32	-0.02
57	SLE RA 13	-568	0	2330	-0.23	-12.34	-0.03
57	SLE RA 14	-566	0	2327	-0.06	-12.28	-0.01
57	SLE RA 15	-567	0	2329	-0.16	-12.32	-0.02
57	SLE RA 16	-566	0	2327	-0.06	-12.28	-0.01
57	SLE RA 17	-567	0	2329	-0.16	-12.32	-0.02
57	SLE RA 18	-622	0	2561	-0.07	-13.49	-0.01
57	SLE RA 19	-623	0	2564	-0.16	-13.53	-0.02
57	SLE RA 20	-622	0	2561	-0.07	-13.49	-0.01
57	SLE RA 21	-623	0	2564	-0.16	-13.53	-0.02
57	SLE FR 1	-436	0	1779	-0.05	-9.45	-0.01
57	SLE FR 2	-436	0	1780	-0.08	-9.47	-0.01
57	SLE FR 3	-436	0	1779	-0.05	-9.45	-0.01
57	SLE FR 4	-492	0	2015	-0.09	-10.68	-0.01
57	SLE FR 5	-492	0	2014	-0.05	-10.66	-0.01
57	SLE FR 6	-529	0	2170	-0.06	-11.47	-0.01
57	SLE QP 1	-436	0	1779	-0.05	-9.45	-0.01
57	SLE QP 2	-492	0	2014	-0.05	-10.66	-0.01
57	SLD 1	-352	-5	1616	-7.34	-5.42	-1.14
57	SLD 2	-352	-5	1616	-7.34	-5.42	-1.14
57	SLD 3	-357	10	1631	9.5	-5.63	1.5
57	SLD 4	-357	10	1631	9.5	-5.63	1.5
57	SLD 5	-441	-24	1872	-27.77	-8.76	-4.35
57	SLD 6	-441	-24	1872	-27.77	-8.76	-4.35
57	SLD 7	-460	25	1922	28.34	-9.49	4.45
57	SLD 8	-460	25	1922	28.34	-9.49	4.45
57	SLD 9	-524	-25	2106	-28.45	-11.84	-4.46
57	SLD 10	-524	-25	2106	-28.45	-11.84	-4.46
57	SLD 11	-542	24	2156	27.66	-12.57	4.33
57	SLD 12	-542	24	2156	27.66	-12.57	4.33
57	SLD 13	-626	-10	2397	-9.6	-15.69	-1.52
57	SLD 14	-626	-10	2397	-9.6	-15.69	-1.52
57	SLD 15	-632	5	2412	7.23	-15.91	1.12
57	SLD 16	-632	5	2412	7.23	-15.91	1.12
57	SLV 1	-164	-13	1085	-21.37	1.59	-3.32
57	SLV 2	-164	-13	1085	-21.37	1.59	-3.32
57	SLV 3	-178	25	1121	26.86	1.08	4.25
57	SLV 4	-178	25	1121	26.86	1.08	4.25
57	SLV 5	-373	-61	1680	-79.6	-6.2	-12.47
57	SLV 6	-373	-61	1680	-79.6	-6.2	-12.47
57	SLV 7	-418	65	1801	81.17	-7.93	12.74
57	SLV 8	-418	65	1801	81.17	-7.93	12.74
57	SLV 9	-565	-65	2227	-81.28	-13.4	-12.75
57	SLV 10	-565	-65	2227	-81.28	-13.4	-12.75
57	SLV 11	-611	61	2348	79.49	-15.13	12.45
57	SLV 12	-611	61	2348	79.49	-15.13	12.45
57	SLV 13	-806	-25	2907	-26.97	-22.4	-4.26
57	SLV 14	-806	-25	2907	-26.97	-22.4	-4.26
57	SLV 15	-819	13	2943	21.26	-22.92	3.3
57	SLV 16	-819	13	2943	21.26	-22.92	3.3
58	SLU 1	402	0	1607	-0.05	10.56	0.01
58	SLU 2	405	-1	1613	-0.3	10.66	0.04
58	SLU 3	402	0	1607	-0.05	10.56	0.01
58	SLU 4	404	0	1610	-0.2	10.62	0.03
58	SLU 5	405	-1	1613	-0.3	10.66	0.04
58	SLU 6	402	0	1607	-0.05	10.56	0.01
58	SLU 7	404	0	1610	-0.2	10.62	0.03
58	SLU 8	402	0	1607	-0.05	10.56	0.01
58	SLU 9	404	0	1610	-0.2	10.62	0.03
58	SLU 10	590	-1	2402	-0.31	14.9	0.05
58	SLU 11	588	0	2396	-0.06	14.8	0.01
58	SLU 12	589	0	2400	-0.21	14.86	0.03
58	SLU 13	590	-1	2402	-0.31	14.9	0.05
58	SLU 14	588	0	2396	-0.06	14.8	0.01
58	SLU 15	589	0	2400	-0.21	14.86	0.03
58	SLU 16	588	0	2396	-0.06	14.8	0.01
58	SLU 17	589	0	2400	-0.21	14.86	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
58	SLU 18	667	0	2734	-0.07	16.61	0.01
58	SLU 19	669	0	2738	-0.22	16.67	0.03
58	SLU 20	667	0	2734	-0.07	16.61	0.01
58	SLU 21	669	0	2738	-0.22	16.67	0.03
58	SLU 22	506	0	2043	-0.05	12.99	0.01
58	SLU 23	509	-1	2049	-0.3	13.09	0.04
58	SLU 24	506	0	2043	-0.05	12.99	0.01
58	SLU 25	508	0	2047	-0.2	13.05	0.03
58	SLU 26	509	-1	2049	-0.3	13.09	0.04
58	SLU 27	506	0	2043	-0.05	12.99	0.01
58	SLU 28	508	0	2047	-0.2	13.05	0.03
58	SLU 29	506	0	2043	-0.05	12.99	0.01
58	SLU 30	508	0	2047	-0.2	13.05	0.03
58	SLU 31	695	-1	2838	-0.32	17.33	0.05
58	SLU 32	692	0	2833	-0.07	17.22	0.01
58	SLU 33	694	0	2836	-0.22	17.29	0.03
58	SLU 34	695	-1	2838	-0.32	17.33	0.05
58	SLU 35	692	0	2833	-0.07	17.22	0.01
58	SLU 36	694	0	2836	-0.22	17.29	0.03
58	SLU 37	692	0	2833	-0.07	17.22	0.01
58	SLU 38	694	0	2836	-0.22	17.29	0.03
58	SLU 39	771	0	3171	-0.08	19.04	0.01
58	SLU 40	773	0	3174	-0.23	19.1	0.03
58	SLU 41	771	0	3171	-0.08	19.04	0.01
58	SLU 42	773	0	3174	-0.23	19.1	0.03
58	SLU 43	487	0	1939	-0.06	12.89	0.01
58	SLU 44	490	-1	1945	-0.31	12.99	0.04
58	SLU 45	487	0	1939	-0.06	12.89	0.01
58	SLU 46	489	0	1943	-0.21	12.95	0.03
58	SLU 47	490	-1	1945	-0.31	12.99	0.04
58	SLU 48	487	0	1939	-0.06	12.89	0.01
58	SLU 49	489	0	1943	-0.21	12.95	0.03
58	SLU 50	487	0	1939	-0.06	12.89	0.01
58	SLU 51	489	0	1943	-0.21	12.95	0.03
58	SLU 52	675	-1	2734	-0.32	17.23	0.05
58	SLU 53	673	0	2729	-0.07	17.13	0.01
58	SLU 54	674	0	2732	-0.22	17.19	0.03
58	SLU 55	675	-1	2734	-0.32	17.23	0.05
58	SLU 56	673	0	2729	-0.07	17.13	0.01
58	SLU 57	674	0	2732	-0.22	17.19	0.03
58	SLU 58	673	0	2729	-0.07	17.13	0.01
58	SLU 59	674	0	2732	-0.22	17.19	0.03
58	SLU 60	752	0	3067	-0.08	18.95	0.01
58	SLU 61	754	-1	3070	-0.23	19.01	0.03
58	SLU 62	752	0	3067	-0.08	18.95	0.01
58	SLU 63	754	-1	3070	-0.23	19.01	0.03
58	SLU 64	591	0	2376	-0.07	15.32	0.01
58	SLU 65	594	-1	2381	-0.32	15.42	0.05
58	SLU 66	591	0	2376	-0.07	15.32	0.01
58	SLU 67	593	0	2379	-0.22	15.38	0.03
58	SLU 68	594	-1	2381	-0.32	15.42	0.05
58	SLU 69	591	0	2376	-0.07	15.32	0.01
58	SLU 70	593	0	2379	-0.22	15.38	0.03
58	SLU 71	591	0	2376	-0.07	15.32	0.01
58	SLU 72	593	0	2379	-0.22	15.38	0.03
58	SLU 73	779	-1	3171	-0.33	19.66	0.05
58	SLU 74	777	0	3165	-0.08	19.56	0.01
58	SLU 75	778	-1	3168	-0.23	19.62	0.03
58	SLU 76	779	-1	3171	-0.33	19.66	0.05
58	SLU 77	777	0	3165	-0.08	19.56	0.01
58	SLU 78	778	-1	3168	-0.23	19.62	0.03
58	SLU 79	777	0	3165	-0.08	19.56	0.01
58	SLU 80	778	-1	3168	-0.23	19.62	0.03
58	SLU 81	856	0	3503	-0.09	21.38	0.01
58	SLU 82	858	-1	3507	-0.24	21.44	0.03
58	SLU 83	856	0	3503	-0.09	21.38	0.01
58	SLU 84	858	-1	3507	-0.24	21.44	0.03
58	SLE RA 1	432	0	1732	-0.05	11.25	0.01
58	SLE RA 2	434	0	1735	-0.22	11.32	0.03
58	SLE RA 3	432	0	1732	-0.05	11.25	0.01
58	SLE RA 4	433	0	1734	-0.15	11.29	0.02
58	SLE RA 5	434	0	1735	-0.22	11.32	0.03
58	SLE RA 6	432	0	1732	-0.05	11.25	0.01
58	SLE RA 7	433	0	1734	-0.15	11.29	0.02
58	SLE RA 8	432	0	1732	-0.05	11.25	0.01
58	SLE RA 9	433	0	1734	-0.15	11.29	0.02
58	SLE RA 10	557	0	2262	-0.23	14.14	0.03
58	SLE RA 11	556	0	2258	-0.06	14.08	0.01
58	SLE RA 12	557	0	2260	-0.16	14.12	0.02
58	SLE RA 13	557	0	2262	-0.23	14.14	0.03
58	SLE RA 14	556	0	2258	-0.06	14.08	0.01
58	SLE RA 15	557	0	2260	-0.16	14.12	0.02
58	SLE RA 16	556	0	2258	-0.06	14.08	0.01
58	SLE RA 17	557	0	2260	-0.16	14.12	0.02
58	SLE RA 18	609	0	2483	-0.06	15.29	0.01
58	SLE RA 19	610	0	2485	-0.16	15.33	0.02
58	SLE RA 20	609	0	2483	-0.06	15.29	0.01
58	SLE RA 21	610	0	2485	-0.16	15.33	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
58	SLE FR 1	432	0	1732	-0.05	11.25	0.01
58	SLE FR 2	432	0	1732	-0.08	11.26	0.01
58	SLE FR 3	432	0	1732	-0.05	11.25	0.01
58	SLE FR 4	485	0	1958	-0.09	12.48	0.01
58	SLE FR 5	485	0	1957	-0.05	12.46	0.01
58	SLE FR 6	520	0	2107	-0.06	13.27	0.01
58	SLE QP 1	432	0	1732	-0.05	11.25	0.01
58	SLE QP 2	485	0	1957	-0.05	12.46	0.01
58	SLD 1	613	-6	2311	-7.52	17.34	1.2
58	SLD 2	613	-6	2311	-7.52	17.34	1.2
58	SLD 3	618	10	2325	8.97	17.55	-1.45
58	SLD 4	618	10	2325	8.97	17.55	-1.45
58	SLD 5	515	-25	2042	-27.3	13.61	4.39
58	SLD 6	515	-25	2042	-27.3	13.61	4.39
58	SLD 7	533	26	2089	27.66	14.3	-4.45
58	SLD 8	533	26	2089	27.66	14.3	-4.45
58	SLD 9	437	-26	1825	-27.77	10.62	4.47
58	SLD 10	437	-26	1825	-27.77	10.62	4.47
58	SLD 11	455	25	1872	27.19	11.32	-4.37
58	SLD 12	455	25	1872	27.19	11.32	-4.37
58	SLD 13	351	-10	1589	-9.08	7.38	1.47
58	SLD 14	351	-10	1589	-9.08	7.38	1.47
58	SLD 15	357	5	1603	7.41	7.58	-1.19
58	SLD 16	357	5	1603	7.41	7.58	-1.19
58	SLV 1	784	-15	2783	-21.77	23.84	3.48
58	SLV 2	784	-15	2783	-21.77	23.84	3.48
58	SLV 3	797	26	2817	25.54	24.34	-4.13
58	SLV 4	797	26	2817	25.54	24.34	-4.13
58	SLV 5	555	-66	2154	-78.32	15.13	12.58
58	SLV 6	555	-66	2154	-78.32	15.13	12.58
58	SLV 7	598	69	2266	79.37	16.78	-12.77
58	SLV 8	598	69	2266	79.37	16.78	-12.77
58	SLV 9	372	-69	1648	-79.48	8.15	12.78
58	SLV 10	372	-69	1648	-79.48	8.15	12.78
58	SLV 11	415	66	1760	78.21	9.8	-12.57
58	SLV 12	415	66	1760	78.21	9.8	-12.57
58	SLV 13	173	-26	1097	-25.65	0.58	4.14
58	SLV 14	173	-26	1097	-25.65	0.58	4.14
58	SLV 15	186	15	1131	21.66	1.08	-3.46
58	SLV 16	186	15	1131	21.66	1.08	-3.46
59	SLU 1	208	0	2775	-0.14	9.96	0
59	SLU 2	213	1	2782	-0.77	10.15	0
59	SLU 3	208	0	2775	-0.14	9.96	0
59	SLU 4	211	0	2780	-0.52	10.08	0
59	SLU 5	213	1	2782	-0.77	10.15	0
59	SLU 6	208	0	2775	-0.14	9.96	0
59	SLU 7	211	0	2780	-0.52	10.08	0
59	SLU 8	208	0	2775	-0.14	9.96	0
59	SLU 9	211	0	2780	-0.52	10.08	0
59	SLU 10	287	1	4171	-0.82	14.18	0
59	SLU 11	283	0	4164	-0.18	13.99	0
59	SLU 12	286	0	4168	-0.56	14.1	0
59	SLU 13	287	1	4171	-0.82	14.18	0
59	SLU 14	283	0	4164	-0.18	13.99	0
59	SLU 15	286	0	4168	-0.56	14.1	0
59	SLU 16	283	0	4164	-0.18	13.99	0
59	SLU 17	286	0	4168	-0.56	14.1	0
59	SLU 18	315	0	4759	-0.2	15.71	0
59	SLU 19	318	0	4763	-0.58	15.83	0
59	SLU 20	315	0	4759	-0.2	15.71	0
59	SLU 21	318	0	4763	-0.58	15.83	0
59	SLU 22	255	0	3538	-0.16	12.44	0
59	SLU 23	259	1	3545	-0.79	12.64	0
59	SLU 24	255	0	3538	-0.16	12.44	0
59	SLU 25	257	0	3542	-0.54	12.56	0
59	SLU 26	259	1	3545	-0.79	12.64	0
59	SLU 27	255	0	3538	-0.16	12.44	0
59	SLU 28	257	0	3542	-0.54	12.56	0
59	SLU 29	255	0	3538	-0.16	12.44	0
59	SLU 30	257	0	3542	-0.54	12.56	0
59	SLU 31	334	1	4933	-0.84	16.67	0
59	SLU 32	329	0	4926	-0.2	16.47	0
59	SLU 33	332	0	4930	-0.58	16.59	0
59	SLU 34	334	1	4933	-0.84	16.67	0
59	SLU 35	329	0	4926	-0.2	16.47	0
59	SLU 36	332	0	4930	-0.58	16.59	0
59	SLU 37	329	0	4926	-0.2	16.47	0
59	SLU 38	332	0	4930	-0.58	16.59	0
59	SLU 39	362	0	5521	-0.22	18.2	0
59	SLU 40	364	0	5526	-0.6	18.31	0
59	SLU 41	362	0	5521	-0.22	18.2	0
59	SLU 42	364	0	5526	-0.6	18.31	0
59	SLU 43	255	0	3346	-0.17	12.1	0
59	SLU 44	259	1	3354	-0.81	12.29	0
59	SLU 45	255	0	3346	-0.17	12.1	0
59	SLU 46	258	0	3351	-0.55	12.21	0
59	SLU 47	259	1	3354	-0.81	12.29	0
59	SLU 48	255	0	3346	-0.17	12.1	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
59	SLU 49	258	0	3351	-0.55	12.21	0
59	SLU 50	255	0	3346	-0.17	12.1	0
59	SLU 51	258	0	3351	-0.55	12.21	0
59	SLU 52	334	1	4742	-0.85	16.32	0
59	SLU 53	330	0	4735	-0.22	16.12	0
59	SLU 54	332	0	4739	-0.6	16.24	0
59	SLU 55	334	1	4742	-0.85	16.32	0
59	SLU 56	330	0	4735	-0.22	16.12	0
59	SLU 57	332	0	4739	-0.6	16.24	0
59	SLU 58	330	0	4735	-0.22	16.12	0
59	SLU 59	332	0	4739	-0.6	16.24	0
59	SLU 60	362	0	5330	-0.24	17.85	0
59	SLU 61	364	0	5334	-0.62	17.97	0
59	SLU 62	362	0	5330	-0.24	17.85	0
59	SLU 63	364	0	5334	-0.62	17.97	0
59	SLU 64	301	0	4109	-0.19	14.58	0
59	SLU 65	305	1	4116	-0.83	14.77	0
59	SLU 66	301	0	4109	-0.19	14.58	0
59	SLU 67	304	0	4113	-0.57	14.7	0
59	SLU 68	305	1	4116	-0.83	14.77	0
59	SLU 69	301	0	4109	-0.19	14.58	0
59	SLU 70	304	0	4113	-0.57	14.7	0
59	SLU 71	301	0	4109	-0.19	14.58	0
59	SLU 72	304	0	4113	-0.57	14.7	0
59	SLU 73	380	1	5505	-0.87	18.8	0
59	SLU 74	376	0	5497	-0.24	18.61	0
59	SLU 75	379	0	5502	-0.62	18.72	0
59	SLU 76	380	1	5505	-0.87	18.8	0
59	SLU 77	376	0	5497	-0.24	18.61	0
59	SLU 78	379	0	5502	-0.62	18.72	0
59	SLU 79	376	0	5497	-0.24	18.61	0
59	SLU 80	379	0	5502	-0.62	18.72	0
59	SLU 81	408	0	6092	-0.25	20.33	0
59	SLU 82	411	0	6097	-0.64	20.45	0
59	SLU 83	408	0	6092	-0.25	20.33	0
59	SLU 84	411	0	6097	-0.64	20.45	0
59	SLE RA 1	222	0	2993	-0.14	10.67	0
59	SLE RA 2	224	0	2998	-0.57	10.8	0
59	SLE RA 3	222	0	2993	-0.14	10.67	0
59	SLE RA 4	223	0	2996	-0.4	10.75	0
59	SLE RA 5	224	0	2998	-0.57	10.8	0
59	SLE RA 6	222	0	2993	-0.14	10.67	0
59	SLE RA 7	223	0	2996	-0.4	10.75	0
59	SLE RA 8	222	0	2993	-0.14	10.67	0
59	SLE RA 9	223	0	2996	-0.4	10.75	0
59	SLE RA 10	274	0	3924	-0.6	13.48	0
59	SLE RA 11	272	0	3919	-0.17	13.36	0
59	SLE RA 12	273	0	3922	-0.43	13.43	0
59	SLE RA 13	274	0	3924	-0.6	13.48	0
59	SLE RA 14	272	0	3919	-0.17	13.36	0
59	SLE RA 15	273	0	3922	-0.43	13.43	0
59	SLE RA 16	272	0	3919	-0.17	13.36	0
59	SLE RA 17	273	0	3922	-0.43	13.43	0
59	SLE RA 18	293	0	4315	-0.19	14.51	0
59	SLE RA 19	295	0	4318	-0.44	14.58	0
59	SLE RA 20	293	0	4315	-0.19	14.51	0
59	SLE RA 21	295	0	4318	-0.44	14.58	0
59	SLE FR 1	222	0	2993	-0.14	10.67	0
59	SLE FR 2	222	0	2994	-0.23	10.7	0
59	SLE FR 3	222	0	2993	-0.14	10.67	0
59	SLE FR 4	244	0	3391	-0.24	11.85	0
59	SLE FR 5	243	0	3390	-0.15	11.82	0
59	SLE FR 6	257	0	3654	-0.16	12.59	0
59	SLE QP 1	222	0	2993	-0.14	10.67	0
59	SLE QP 2	243	0	3390	-0.15	11.82	0
59	SLD 1	400	15	3732	-15.41	21.06	-0.01
59	SLD 2	400	15	3732	-15.41	21.06	-0.01
59	SLD 3	408	-18	3747	17.82	21.48	0.02
59	SLD 4	408	-18	3747	17.82	21.48	0.02
59	SLD 5	279	55	3470	-55.12	13.95	-0.04
59	SLD 6	279	55	3470	-55.12	13.95	-0.04
59	SLD 7	304	-56	3519	55.63	15.36	0.05
59	SLD 8	304	-56	3519	55.63	15.36	0.05
59	SLD 9	182	56	3260	-55.94	8.28	-0.05
59	SLD 10	182	56	3260	-55.94	8.28	-0.05
59	SLD 11	207	-55	3309	54.81	9.69	0.04
59	SLD 12	207	-55	3309	54.81	9.69	0.04
59	SLD 13	78	19	3033	-18.13	2.16	-0.02
59	SLD 14	78	19	3033	-18.13	2.16	-0.02
59	SLD 15	86	-15	3047	15.1	2.58	0
59	SLD 16	86	-15	3047	15.1	2.58	0
59	SLV 1	610	44	4189	-44.39	33.39	-0.01
59	SLV 2	610	44	4189	-44.39	33.39	-0.01
59	SLV 3	628	-53	4224	50.81	34.39	0.05
59	SLV 4	628	-53	4224	50.81	34.39	0.05
59	SLV 5	326	160	3577	-157.82	16.78	-0.11
59	SLV 6	326	160	3577	-157.82	16.78	-0.11
59	SLV 7	385	-163	3693	159.53	20.1	0.12

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
59	SLV 8	385	-163	3693	159.53	20.1	0.12
59	SLV 9	101	163	3087	-159.84	3.54	-0.12
59	SLV 10	101	163	3087	-159.84	3.54	-0.12
59	SLV 11	160	-160	3203	157.51	6.86	0.11
59	SLV 12	160	-160	3203	157.51	6.86	0.11
59	SLV 13	-142	53	2556	-51.12	-10.75	-0.05
59	SLV 14	-142	53	2556	-51.12	-10.75	-0.05
59	SLV 15	-124	-44	2590	44.08	-9.75	0.01
59	SLV 16	-124	-44	2590	44.08	-9.75	0.01
60	SLU 1	64	0	2676	-0.16	4.29	0
60	SLU 2	69	0	2683	-0.86	4.53	0
60	SLU 3	64	0	2676	-0.16	4.29	0
60	SLU 4	67	0	2680	-0.58	4.43	0
60	SLU 5	69	0	2683	-0.86	4.53	0
60	SLU 6	64	0	2676	-0.16	4.29	0
60	SLU 7	67	0	2680	-0.58	4.43	0
60	SLU 8	64	0	2676	-0.16	4.29	0
60	SLU 9	67	0	2680	-0.58	4.43	0
60	SLU 10	44	1	4025	-0.92	3.69	0
60	SLU 11	38	0	4018	-0.22	3.45	0
60	SLU 12	42	0	4022	-0.64	3.59	0
60	SLU 13	44	1	4025	-0.92	3.69	0
60	SLU 14	38	0	4018	-0.22	3.45	0
60	SLU 15	42	0	4022	-0.64	3.59	0
60	SLU 16	38	0	4018	-0.22	3.45	0
60	SLU 17	42	0	4022	-0.64	3.59	0
60	SLU 18	28	0	4592	-0.24	3.09	0
60	SLU 19	31	0	4597	-0.66	3.23	0
60	SLU 20	28	0	4592	-0.24	3.09	0
60	SLU 21	31	0	4597	-0.66	3.23	0
60	SLU 22	57	0	3410	-0.19	4.14	0
60	SLU 23	62	0	3417	-0.88	4.38	0
60	SLU 24	57	0	3410	-0.19	4.14	0
60	SLU 25	60	0	3415	-0.61	4.28	0
60	SLU 26	62	0	3417	-0.88	4.38	0
60	SLU 27	57	0	3410	-0.19	4.14	0
60	SLU 28	60	0	3415	-0.61	4.28	0
60	SLU 29	57	0	3410	-0.19	4.14	0
60	SLU 30	60	0	3415	-0.61	4.28	0
60	SLU 31	37	1	4759	-0.94	3.54	0
60	SLU 32	32	0	4752	-0.24	3.3	0
60	SLU 33	35	0	4756	-0.66	3.44	0
60	SLU 34	37	1	4759	-0.94	3.54	0
60	SLU 35	32	0	4752	-0.24	3.3	0
60	SLU 36	35	0	4756	-0.66	3.44	0
60	SLU 37	32	0	4752	-0.24	3.3	0
60	SLU 38	35	0	4756	-0.66	3.44	0
60	SLU 39	21	0	5327	-0.27	2.94	0
60	SLU 40	24	0	5331	-0.68	3.08	0
60	SLU 41	21	0	5327	-0.27	2.94	0
60	SLU 42	24	0	5331	-0.68	3.08	0
60	SLU 43	85	0	3227	-0.2	5.63	0
60	SLU 44	90	1	3234	-0.9	5.87	0
60	SLU 45	85	0	3227	-0.2	5.63	0
60	SLU 46	88	0	3231	-0.62	5.77	0
60	SLU 47	90	1	3234	-0.9	5.87	0
60	SLU 48	85	0	3227	-0.2	5.63	0
60	SLU 49	88	0	3231	-0.62	5.77	0
60	SLU 50	85	0	3227	-0.2	5.63	0
60	SLU 51	88	0	3231	-0.62	5.77	0
60	SLU 52	65	1	4576	-0.96	5.03	0
60	SLU 53	60	0	4569	-0.26	4.79	0
60	SLU 54	63	0	4573	-0.68	4.93	0
60	SLU 55	65	1	4576	-0.96	5.03	0
60	SLU 56	60	0	4569	-0.26	4.79	0
60	SLU 57	63	0	4573	-0.68	4.93	0
60	SLU 58	60	0	4569	-0.26	4.79	0
60	SLU 59	63	0	4573	-0.68	4.93	0
60	SLU 60	49	0	5143	-0.28	4.43	0
60	SLU 61	52	0	5148	-0.7	4.57	0
60	SLU 62	49	0	5143	-0.28	4.43	0
60	SLU 63	52	0	5148	-0.7	4.57	0
60	SLU 64	78	0	3961	-0.23	5.48	0
60	SLU 65	84	1	3968	-0.93	5.72	0
60	SLU 66	78	0	3961	-0.23	5.48	0
60	SLU 67	81	0	3966	-0.65	5.62	0
60	SLU 68	84	1	3968	-0.93	5.72	0
60	SLU 69	78	0	3961	-0.23	5.48	0
60	SLU 70	81	0	3966	-0.65	5.62	0
60	SLU 71	78	0	3961	-0.23	5.48	0
60	SLU 72	81	0	3966	-0.65	5.62	0
60	SLU 73	58	1	5310	-0.98	4.88	0
60	SLU 74	53	0	5303	-0.28	4.64	0
60	SLU 75	56	0	5307	-0.7	4.78	0
60	SLU 76	58	1	5310	-0.98	4.88	0
60	SLU 77	53	0	5303	-0.28	4.64	0
60	SLU 78	56	0	5307	-0.7	4.78	0
60	SLU 79	53	0	5303	-0.28	4.64	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
60	SLU 80	56	0	5307	-0.7	4.78	0
60	SLU 81	42	0	5878	-0.31	4.28	0
60	SLU 82	45	0	5882	-0.73	4.42	0
60	SLU 83	42	0	5878	-0.31	4.28	0
60	SLU 84	45	0	5882	-0.73	4.42	0
60	SLE RA 1	62	0	2886	-0.17	4.25	0
60	SLE RA 2	65	0	2891	-0.64	4.41	0
60	SLE RA 3	62	0	2886	-0.17	4.25	0
60	SLE RA 4	64	0	2889	-0.45	4.34	0
60	SLE RA 5	65	0	2891	-0.64	4.41	0
60	SLE RA 6	62	0	2886	-0.17	4.25	0
60	SLE RA 7	64	0	2889	-0.45	4.34	0
60	SLE RA 8	62	0	2886	-0.17	4.25	0
60	SLE RA 9	64	0	2889	-0.45	4.34	0
60	SLE RA 10	48	0	3785	-0.67	3.85	0
60	SLE RA 11	45	0	3780	-0.21	3.69	0
60	SLE RA 12	47	0	3783	-0.49	3.78	0
60	SLE RA 13	48	0	3785	-0.67	3.85	0
60	SLE RA 14	45	0	3780	-0.21	3.69	0
60	SLE RA 15	47	0	3783	-0.49	3.78	0
60	SLE RA 16	45	0	3780	-0.21	3.69	0
60	SLE RA 17	47	0	3783	-0.49	3.78	0
60	SLE RA 18	38	0	4163	-0.22	3.45	0
60	SLE RA 19	40	0	4166	-0.5	3.54	0
60	SLE RA 20	38	0	4163	-0.22	3.45	0
60	SLE RA 21	40	0	4166	-0.5	3.54	0
60	SLE FR 1	62	0	2886	-0.17	4.25	0
60	SLE FR 2	62	0	2887	-0.26	4.28	0
60	SLE FR 3	62	0	2886	-0.17	4.25	0
60	SLE FR 4	55	0	3270	-0.28	4.04	0
60	SLE FR 5	54	0	3269	-0.19	4.01	0
60	SLE FR 6	50	0	3525	-0.2	3.85	0
60	SLE QP 1	62	0	2886	-0.17	4.25	0
60	SLE QP 2	54	0	3269	-0.19	4.01	0
60	SLD 1	257	8	3399	-13.73	13.83	0.05
60	SLD 2	257	8	3399	-13.73	13.83	0.05
60	SLD 3	266	-11	3406	15.83	14.25	-0.11
60	SLD 4	266	-11	3406	15.83	14.25	-0.11
60	SLD 5	101	31	3296	-49.08	6.31	0.26
60	SLD 6	101	31	3296	-49.08	6.31	0.26
60	SLD 7	132	-32	3322	49.45	7.73	-0.27
60	SLD 8	132	-32	3322	49.45	7.73	-0.27
60	SLD 9	-23	32	3216	-49.82	0.29	0.27
60	SLD 10	-23	32	3216	-49.82	0.29	0.27
60	SLD 11	8	-31	3242	48.71	1.71	-0.26
60	SLD 12	8	-31	3242	48.71	1.71	-0.26
60	SLD 13	-157	11	3132	-16.2	-6.24	0.11
60	SLD 14	-157	11	3132	-16.2	-6.24	0.11
60	SLD 15	-148	-8	3140	13.36	-5.81	-0.05
60	SLD 16	-148	-8	3140	13.36	-5.81	-0.05
60	SLV 1	526	24	3572	-39.37	26.92	0.17
60	SLV 2	526	24	3572	-39.37	26.92	0.17
60	SLV 3	548	-32	3591	45.12	27.94	-0.3
60	SLV 4	548	-32	3591	45.12	27.94	-0.3
60	SLV 5	163	91	3332	-140.07	9.34	0.76
60	SLV 6	163	91	3332	-140.07	9.34	0.76
60	SLV 7	235	-93	3394	141.54	12.72	-0.8
60	SLV 8	235	-93	3394	141.54	12.72	-0.8
60	SLV 9	-126	94	3144	-141.91	-4.71	0.8
60	SLV 10	-126	94	3144	-141.91	-4.71	0.8
60	SLV 11	-54	-91	3207	139.7	-1.33	-0.76
60	SLV 12	-54	-91	3207	139.7	-1.33	-0.76
60	SLV 13	-439	32	2947	-45.49	-19.92	0.3
60	SLV 14	-439	32	2947	-45.49	-19.92	0.3
60	SLV 15	-417	-24	2966	38.99	-18.91	-0.17
60	SLV 16	-417	-24	2966	38.99	-18.91	-0.17
61	SLU 1	-100	0	2609	-0.18	-5.51	0
61	SLU 2	-94	0	2618	-0.88	-5.26	0
61	SLU 3	-100	0	2609	-0.18	-5.51	0
61	SLU 4	-97	0	2614	-0.6	-5.36	0
61	SLU 5	-94	0	2618	-0.88	-5.26	0
61	SLU 6	-100	0	2609	-0.18	-5.51	0
61	SLU 7	-97	0	2614	-0.6	-5.36	0
61	SLU 8	-100	0	2609	-0.18	-5.51	0
61	SLU 9	-97	0	2614	-0.6	-5.36	0
61	SLU 10	-206	0	3907	-0.94	-10.07	0.01
61	SLU 11	-212	0	3898	-0.24	-10.32	0
61	SLU 12	-209	0	3904	-0.66	-10.17	0
61	SLU 13	-206	0	3907	-0.94	-10.07	0.01
61	SLU 14	-212	0	3898	-0.24	-10.32	0
61	SLU 15	-209	0	3904	-0.66	-10.17	0
61	SLU 16	-212	0	3898	-0.24	-10.32	0
61	SLU 17	-209	0	3904	-0.66	-10.17	0
61	SLU 18	-260	0	4451	-0.27	-12.39	0
61	SLU 19	-257	0	4456	-0.69	-12.23	0
61	SLU 20	-260	0	4451	-0.27	-12.39	0
61	SLU 21	-257	0	4456	-0.69	-12.23	0
61	SLU 22	-153	0	3316	-0.21	-7.75	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
61	SLU 23	-146	0	3325	-0.91	-7.49	0.01
61	SLU 24	-153	0	3316	-0.21	-7.75	0
61	SLU 25	-149	0	3321	-0.63	-7.6	0
61	SLU 26	-146	0	3325	-0.91	-7.49	0.01
61	SLU 27	-153	0	3316	-0.21	-7.75	0
61	SLU 28	-149	0	3321	-0.63	-7.6	0
61	SLU 29	-153	0	3316	-0.21	-7.75	0
61	SLU 30	-149	0	3321	-0.63	-7.6	0
61	SLU 31	-259	0	4614	-0.97	-12.3	0.01
61	SLU 32	-265	0	4605	-0.27	-12.56	0
61	SLU 33	-261	0	4611	-0.69	-12.41	0
61	SLU 34	-259	0	4614	-0.97	-12.3	0.01
61	SLU 35	-265	0	4605	-0.27	-12.56	0
61	SLU 36	-261	0	4611	-0.69	-12.41	0
61	SLU 37	-265	0	4605	-0.27	-12.56	0
61	SLU 38	-261	0	4611	-0.69	-12.41	0
61	SLU 39	-313	0	5158	-0.29	-14.62	0
61	SLU 40	-309	0	5163	-0.72	-14.47	0
61	SLU 41	-313	0	5158	-0.29	-14.62	0
61	SLU 42	-309	0	5163	-0.72	-14.47	0
61	SLU 43	-112	0	3149	-0.23	-6.4	0
61	SLU 44	-106	0	3158	-0.93	-6.15	0.01
61	SLU 45	-112	0	3149	-0.23	-6.4	0
61	SLU 46	-109	0	3154	-0.65	-6.25	0
61	SLU 47	-106	0	3158	-0.93	-6.15	0.01
61	SLU 48	-112	0	3149	-0.23	-6.4	0
61	SLU 49	-109	0	3154	-0.65	-6.25	0
61	SLU 50	-112	0	3149	-0.23	-6.4	0
61	SLU 51	-109	0	3154	-0.65	-6.25	0
61	SLU 52	-218	1	4448	-0.99	-10.96	0.01
61	SLU 53	-224	0	4439	-0.29	-11.21	0
61	SLU 54	-221	0	4444	-0.71	-11.06	0
61	SLU 55	-218	1	4448	-0.99	-10.96	0.01
61	SLU 56	-224	0	4439	-0.29	-11.21	0
61	SLU 57	-221	0	4444	-0.71	-11.06	0
61	SLU 58	-224	0	4439	-0.29	-11.21	0
61	SLU 59	-221	0	4444	-0.71	-11.06	0
61	SLU 60	-273	0	4991	-0.31	-13.27	0
61	SLU 61	-269	0	4997	-0.73	-13.12	0
61	SLU 62	-273	0	4991	-0.31	-13.27	0
61	SLU 63	-269	0	4997	-0.73	-13.12	0
61	SLU 64	-165	0	3856	-0.25	-8.64	0
61	SLU 65	-159	0	3865	-0.95	-8.38	0.01
61	SLU 66	-165	0	3856	-0.25	-8.64	0
61	SLU 67	-161	0	3861	-0.67	-8.48	0
61	SLU 68	-159	0	3865	-0.95	-8.38	0.01
61	SLU 69	-165	0	3856	-0.25	-8.64	0
61	SLU 70	-161	0	3861	-0.67	-8.48	0
61	SLU 71	-165	0	3856	-0.25	-8.64	0
61	SLU 72	-161	0	3861	-0.67	-8.48	0
61	SLU 73	-271	1	5154	-1.02	-13.19	0.01
61	SLU 74	-277	0	5145	-0.31	-13.45	0
61	SLU 75	-273	0	5151	-0.73	-13.29	0
61	SLU 76	-271	1	5154	-1.02	-13.19	0.01
61	SLU 77	-277	0	5145	-0.31	-13.45	0
61	SLU 78	-273	0	5151	-0.73	-13.29	0
61	SLU 79	-277	0	5145	-0.31	-13.45	0
61	SLU 80	-273	0	5151	-0.73	-13.29	0
61	SLU 81	-325	0	5698	-0.34	-15.51	0
61	SLU 82	-321	0	5704	-0.76	-15.36	0
61	SLU 83	-325	0	5698	-0.34	-15.51	0
61	SLU 84	-321	0	5704	-0.76	-15.36	0
61	SLE RA 1	-115	0	2811	-0.19	-6.15	0
61	SLE RA 2	-111	0	2817	-0.66	-5.98	0
61	SLE RA 3	-115	0	2811	-0.19	-6.15	0
61	SLE RA 4	-113	0	2814	-0.47	-6.05	0
61	SLE RA 5	-111	0	2817	-0.66	-5.98	0
61	SLE RA 6	-115	0	2811	-0.19	-6.15	0
61	SLE RA 7	-113	0	2814	-0.47	-6.05	0
61	SLE RA 8	-115	0	2811	-0.19	-6.15	0
61	SLE RA 9	-113	0	2814	-0.47	-6.05	0
61	SLE RA 10	-186	0	3676	-0.7	-9.19	0
61	SLE RA 11	-190	0	3670	-0.23	-9.36	0
61	SLE RA 12	-188	0	3674	-0.51	-9.26	0
61	SLE RA 13	-186	0	3676	-0.7	-9.19	0
61	SLE RA 14	-190	0	3670	-0.23	-9.36	0
61	SLE RA 15	-188	0	3674	-0.51	-9.26	0
61	SLE RA 16	-190	0	3670	-0.23	-9.36	0
61	SLE RA 17	-188	0	3674	-0.51	-9.26	0
61	SLE RA 18	-222	0	4039	-0.25	-10.73	0
61	SLE RA 19	-220	0	4042	-0.53	-10.63	0
61	SLE RA 20	-222	0	4039	-0.25	-10.73	0
61	SLE RA 21	-220	0	4042	-0.53	-10.63	0
61	SLE FR 1	-115	0	2811	-0.19	-6.15	0
61	SLE FR 2	-114	0	2812	-0.28	-6.12	0
61	SLE FR 3	-115	0	2811	-0.19	-6.15	0
61	SLE FR 4	-146	0	3180	-0.3	-7.49	0
61	SLE FR 5	-147	0	3179	-0.2	-7.53	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
61	SLE FR 6	-169	0	3425	-0.22	-8.44	0
61	SLE QP 1	-115	0	2811	-0.19	-6.15	0
61	SLE QP 2	-147	0	3179	-0.2	-7.53	0
61	SLD 1	90	6	3050	-11.5	3.54	0.06
61	SLD 2	90	6	3050	-11.5	3.54	0.06
61	SLD 3	101	-9	3056	13.48	4.04	-0.1
61	SLD 4	101	-9	3056	13.48	4.04	-0.1
61	SLD 5	-92	24	3130	-41.48	-4.97	0.26
61	SLD 6	-92	24	3130	-41.48	-4.97	0.26
61	SLD 7	-56	-24	3152	41.79	-3.29	-0.27
61	SLD 8	-56	-24	3152	41.79	-3.29	-0.27
61	SLD 9	-238	24	3206	-42.2	-11.76	0.27
61	SLD 10	-238	24	3206	-42.2	-11.76	0.27
61	SLD 11	-202	-23	3228	41.07	-10.08	-0.26
61	SLD 12	-202	-23	3228	41.07	-10.08	-0.26
61	SLD 13	-395	9	3302	-13.89	-19.09	0.1
61	SLD 14	-395	9	3302	-13.89	-19.09	0.1
61	SLD 15	-385	-5	3308	11.09	-18.59	-0.06
61	SLD 16	-385	-5	3308	11.09	-18.59	-0.06
61	SLV 1	407	17	2876	-32.81	18.3	0.18
61	SLV 2	407	17	2876	-32.81	18.3	0.18
61	SLV 3	432	-24	2892	38.39	19.49	-0.27
61	SLV 4	432	-24	2892	38.39	19.49	-0.27
61	SLV 5	-20	67	3064	-117.97	-1.58	0.75
61	SLV 6	-20	67	3064	-117.97	-1.58	0.75
61	SLV 7	65	-70	3118	119.36	2.38	-0.77
61	SLV 8	65	-70	3118	119.36	2.38	-0.77
61	SLV 9	-360	70	3241	-119.77	-17.43	0.77
61	SLV 10	-360	70	3241	-119.77	-17.43	0.77
61	SLV 11	-275	-67	3295	117.56	-13.47	-0.74
61	SLV 12	-275	-67	3295	117.56	-13.47	-0.74
61	SLV 13	-727	25	3466	-38.8	-34.54	0.27
61	SLV 14	-727	25	3466	-38.8	-34.54	0.27
61	SLV 15	-701	-16	3482	32.4	-33.35	-0.18
61	SLV 16	-701	-16	3482	32.4	-33.35	-0.18
62	SLU 1	-159	0	2507	-0.2	-4.19	0
62	SLU 2	-151	0	2519	-0.9	-3.86	0.01
62	SLU 3	-159	0	2507	-0.2	-4.19	0
62	SLU 4	-154	0	2515	-0.62	-3.99	0
62	SLU 5	-151	0	2519	-0.9	-3.86	0.01
62	SLU 6	-159	0	2507	-0.2	-4.19	0
62	SLU 7	-154	0	2515	-0.62	-3.99	0
62	SLU 8	-159	0	2507	-0.2	-4.19	0
62	SLU 9	-154	0	2515	-0.62	-3.99	0
62	SLU 10	-319	1	3730	-0.97	-10.22	0.01
62	SLU 11	-327	0	3718	-0.27	-10.55	0
62	SLU 12	-322	0	3725	-0.69	-10.35	0
62	SLU 13	-319	1	3730	-0.97	-10.22	0.01
62	SLU 14	-327	0	3718	-0.27	-10.55	0
62	SLU 15	-322	0	3725	-0.69	-10.35	0
62	SLU 16	-327	0	3718	-0.27	-10.55	0
62	SLU 17	-322	0	3725	-0.69	-10.35	0
62	SLU 18	-398	0	4237	-0.29	-13.28	0
62	SLU 19	-394	0	4244	-0.72	-13.08	0.01
62	SLU 20	-398	0	4237	-0.29	-13.28	0
62	SLU 21	-394	0	4244	-0.72	-13.08	0.01
62	SLU 22	-241	0	3173	-0.23	-7.28	0
62	SLU 23	-233	1	3185	-0.93	-6.95	0.01
62	SLU 24	-241	0	3173	-0.23	-7.28	0
62	SLU 25	-236	0	3180	-0.65	-7.08	0
62	SLU 26	-233	1	3185	-0.93	-6.95	0.01
62	SLU 27	-241	0	3173	-0.23	-7.28	0
62	SLU 28	-236	0	3180	-0.65	-7.08	0
62	SLU 29	-241	0	3173	-0.23	-7.28	0
62	SLU 30	-236	0	3180	-0.65	-7.08	0
62	SLU 31	-401	1	4395	-1	-13.31	0.01
62	SLU 32	-409	0	4383	-0.29	-13.64	0
62	SLU 33	-404	0	4391	-0.72	-13.45	0.01
62	SLU 34	-401	1	4395	-1	-13.31	0.01
62	SLU 35	-409	0	4383	-0.29	-13.64	0
62	SLU 36	-404	0	4391	-0.72	-13.45	0.01
62	SLU 37	-409	0	4383	-0.29	-13.64	0
62	SLU 38	-404	0	4391	-0.72	-13.45	0.01
62	SLU 39	-481	0	4902	-0.32	-16.37	0
62	SLU 40	-476	0	4909	-0.75	-16.17	0.01
62	SLU 41	-481	0	4902	-0.32	-16.37	0
62	SLU 42	-476	0	4909	-0.75	-16.17	0.01
62	SLU 43	-179	0	3031	-0.25	-4.38	0
62	SLU 44	-171	1	3043	-0.95	-4.05	0.01
62	SLU 45	-179	0	3031	-0.25	-4.38	0
62	SLU 46	-174	0	3039	-0.67	-4.18	0
62	SLU 47	-171	1	3043	-0.95	-4.05	0.01
62	SLU 48	-179	0	3031	-0.25	-4.38	0
62	SLU 49	-174	0	3039	-0.67	-4.18	0
62	SLU 50	-179	0	3031	-0.25	-4.38	0
62	SLU 51	-174	0	3039	-0.67	-4.18	0
62	SLU 52	-338	1	4254	-1.02	-10.41	0.01
62	SLU 53	-346	0	4242	-0.31	-10.74	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
62	SLU 54	-342	0	4249	-0.74	-10.55	0.01
62	SLU 55	-338	1	4254	-1.02	-10.41	0.01
62	SLU 56	-346	0	4242	-0.31	-10.74	0
62	SLU 57	-342	0	4249	-0.74	-10.55	0.01
62	SLU 58	-346	0	4242	-0.31	-10.74	0
62	SLU 59	-342	0	4249	-0.74	-10.55	0.01
62	SLU 60	-418	0	4761	-0.34	-13.47	0
62	SLU 61	-413	0	4768	-0.77	-13.27	0.01
62	SLU 62	-418	0	4761	-0.34	-13.47	0
62	SLU 63	-413	0	4768	-0.77	-13.27	0.01
62	SLU 64	-261	0	3697	-0.28	-7.48	0
62	SLU 65	-253	1	3709	-0.98	-7.15	0.01
62	SLU 66	-261	0	3697	-0.28	-7.48	0
62	SLU 67	-256	0	3704	-0.7	-7.28	0
62	SLU 68	-253	1	3709	-0.98	-7.15	0.01
62	SLU 69	-261	0	3697	-0.28	-7.48	0
62	SLU 70	-256	0	3704	-0.7	-7.28	0
62	SLU 71	-261	0	3697	-0.28	-7.48	0
62	SLU 72	-256	0	3704	-0.7	-7.28	0
62	SLU 73	-420	1	4919	-1.05	-13.51	0.01
62	SLU 74	-428	0	4908	-0.34	-13.84	0
62	SLU 75	-424	0	4915	-0.77	-13.64	0.01
62	SLU 76	-420	1	4919	-1.05	-13.51	0.01
62	SLU 77	-428	0	4908	-0.34	-13.84	0
62	SLU 78	-424	0	4915	-0.77	-13.64	0.01
62	SLU 79	-428	0	4908	-0.34	-13.84	0
62	SLU 80	-424	0	4915	-0.77	-13.64	0.01
62	SLU 81	-500	0	5426	-0.37	-16.57	0
62	SLU 82	-495	0	5433	-0.79	-16.37	0.01
62	SLU 83	-500	0	5426	-0.37	-16.57	0
62	SLU 84	-495	0	5433	-0.79	-16.37	0.01
62	SLE RA 1	-183	0	2698	-0.21	-5.07	0
62	SLE RA 2	-177	0	2705	-0.67	-4.85	0
62	SLE RA 3	-183	0	2698	-0.21	-5.07	0
62	SLE RA 4	-179	0	2702	-0.49	-4.94	0
62	SLE RA 5	-177	0	2705	-0.67	-4.85	0
62	SLE RA 6	-183	0	2698	-0.21	-5.07	0
62	SLE RA 7	-179	0	2702	-0.49	-4.94	0
62	SLE RA 8	-183	0	2698	-0.21	-5.07	0
62	SLE RA 9	-179	0	2702	-0.49	-4.94	0
62	SLE RA 10	-289	0	3513	-0.72	-9.09	0.01
62	SLE RA 11	-294	0	3505	-0.25	-9.31	0
62	SLE RA 12	-291	0	3509	-0.53	-9.18	0
62	SLE RA 13	-289	0	3513	-0.72	-9.09	0.01
62	SLE RA 14	-294	0	3505	-0.25	-9.31	0
62	SLE RA 15	-291	0	3509	-0.53	-9.18	0
62	SLE RA 16	-294	0	3505	-0.25	-9.31	0
62	SLE RA 17	-291	0	3509	-0.53	-9.18	0
62	SLE RA 18	-342	0	3850	-0.27	-11.13	0
62	SLE RA 19	-339	0	3855	-0.55	-11	0
62	SLE RA 20	-342	0	3850	-0.27	-11.13	0
62	SLE RA 21	-339	0	3855	-0.55	-11	0
62	SLE FR 1	-183	0	2698	-0.21	-5.07	0
62	SLE FR 2	-181	0	2699	-0.3	-5.03	0
62	SLE FR 3	-183	0	2698	-0.21	-5.07	0
62	SLE FR 4	-229	0	3045	-0.32	-6.85	0
62	SLE FR 5	-230	0	3043	-0.23	-6.89	0
62	SLE FR 6	-262	0	3274	-0.24	-8.1	0
62	SLE QP 1	-183	0	2698	-0.21	-5.07	0
62	SLE QP 2	-230	0	3043	-0.23	-6.89	0
62	SLD 1	31	5	2861	-9.34	4.6	0.05
62	SLD 2	31	5	2861	-9.34	4.6	0.05
62	SLD 3	42	-7	2868	11.15	5.08	-0.09
62	SLD 4	42	-7	2868	11.15	5.08	-0.09
62	SLD 5	-169	19	2978	-34.04	-4.18	0.23
62	SLD 6	-169	19	2978	-34.04	-4.18	0.23
62	SLD 7	-131	-20	3002	34.27	-2.57	-0.24
62	SLD 8	-131	-20	3002	34.27	-2.57	-0.24
62	SLD 9	-329	20	3085	-34.72	-11.21	0.24
62	SLD 10	-329	20	3085	-34.72	-11.21	0.24
62	SLD 11	-291	-19	3109	33.59	-9.6	-0.22
62	SLD 12	-291	-19	3109	33.59	-9.6	-0.22
62	SLD 13	-503	8	3218	-11.6	-18.86	0.09
62	SLD 14	-503	8	3218	-11.6	-18.86	0.09
62	SLD 15	-491	-4	3226	8.89	-18.38	-0.05
62	SLD 16	-491	-4	3226	8.89	-18.38	-0.05
62	SLV 1	378	13	2617	-26.49	19.89	0.15
62	SLV 2	378	13	2617	-26.49	19.89	0.15
62	SLV 3	405	-20	2636	31.71	21.04	-0.24
62	SLV 4	405	-20	2636	31.71	21.04	-0.24
62	SLV 5	-89	54	2888	-96.38	-0.6	0.64
62	SLV 6	-89	54	2888	-96.38	-0.6	0.64
62	SLV 7	1	-56	2949	97.63	3.23	-0.66
62	SLV 8	1	-56	2949	97.63	3.23	-0.66
62	SLV 9	-462	56	3138	-98.08	-17.01	0.67
62	SLV 10	-462	56	3138	-98.08	-17.01	0.67
62	SLV 11	-372	-54	3199	95.93	-13.18	-0.64
62	SLV 12	-372	-54	3199	95.93	-13.18	-0.64

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
62	SLV 13	-866	20	3451	-32.16	-34.82	0.24
62	SLV 14	-866	20	3451	-32.16	-34.82	0.24
62	SLV 15	-839	-13	3470	26.04	-33.67	-0.15
62	SLV 16	-839	-13	3470	26.04	-33.67	-0.15
63	SLU 1	-293	0	2378	-0.22	-14.55	0
63	SLU 2	-283	1	2394	-0.92	-14.18	0.01
63	SLU 3	-293	0	2378	-0.22	-14.55	0
63	SLU 4	-287	0	2388	-0.64	-14.33	0.01
63	SLU 5	-283	1	2394	-0.92	-14.18	0.01
63	SLU 6	-293	0	2378	-0.22	-14.55	0
63	SLU 7	-287	0	2388	-0.64	-14.33	0.01
63	SLU 8	-293	0	2378	-0.22	-14.55	0
63	SLU 9	-287	0	2388	-0.64	-14.33	0.01
63	SLU 10	-517	1	3501	-1	-24.24	0.01
63	SLU 11	-527	0	3485	-0.29	-24.61	0
63	SLU 12	-521	0	3494	-0.72	-24.39	0.01
63	SLU 13	-517	1	3501	-1	-24.24	0.01
63	SLU 14	-527	0	3485	-0.29	-24.61	0
63	SLU 15	-521	0	3494	-0.72	-24.39	0.01
63	SLU 16	-527	0	3485	-0.29	-24.61	0
63	SLU 17	-521	0	3494	-0.72	-24.39	0.01
63	SLU 18	-627	0	3959	-0.33	-28.92	0
63	SLU 19	-621	1	3969	-0.75	-28.7	0.01
63	SLU 20	-627	0	3959	-0.33	-28.92	0
63	SLU 21	-621	1	3969	-0.75	-28.7	0.01
63	SLU 22	-410	0	2989	-0.25	-19.58	0
63	SLU 23	-401	1	3005	-0.95	-19.21	0.01
63	SLU 24	-410	0	2989	-0.25	-19.58	0
63	SLU 25	-404	0	2999	-0.67	-19.36	0.01
63	SLU 26	-401	1	3005	-0.95	-19.21	0.01
63	SLU 27	-410	0	2989	-0.25	-19.58	0
63	SLU 28	-404	0	2999	-0.67	-19.36	0.01
63	SLU 29	-410	0	2989	-0.25	-19.58	0
63	SLU 30	-404	0	2999	-0.67	-19.36	0.01
63	SLU 31	-635	1	4112	-1.03	-29.28	0.01
63	SLU 32	-644	0	4096	-0.33	-29.65	0
63	SLU 33	-638	1	4106	-0.75	-29.42	0.01
63	SLU 34	-635	1	4112	-1.03	-29.28	0.01
63	SLU 35	-644	0	4096	-0.33	-29.65	0
63	SLU 36	-638	1	4106	-0.75	-29.42	0.01
63	SLU 37	-644	0	4096	-0.33	-29.65	0
63	SLU 38	-638	1	4106	-0.75	-29.42	0.01
63	SLU 39	-744	0	4570	-0.36	-33.96	0
63	SLU 40	-739	1	4580	-0.78	-33.74	0.01
63	SLU 41	-744	0	4570	-0.36	-33.96	0
63	SLU 42	-739	1	4580	-0.78	-33.74	0.01
63	SLU 43	-340	0	2882	-0.27	-17.19	0
63	SLU 44	-331	1	2898	-0.97	-16.82	0.01
63	SLU 45	-340	0	2882	-0.27	-17.19	0
63	SLU 46	-334	0	2891	-0.69	-16.96	0.01
63	SLU 47	-331	1	2898	-0.97	-16.82	0.01
63	SLU 48	-340	0	2882	-0.27	-17.19	0
63	SLU 49	-334	0	2891	-0.69	-16.96	0.01
63	SLU 50	-340	0	2882	-0.27	-17.19	0
63	SLU 51	-334	0	2891	-0.69	-16.96	0.01
63	SLU 52	-565	1	4004	-1.05	-26.88	0.01
63	SLU 53	-574	0	3988	-0.35	-27.25	0
63	SLU 54	-569	1	3998	-0.77	-27.03	0.01
63	SLU 55	-565	1	4004	-1.05	-26.88	0.01
63	SLU 56	-574	0	3988	-0.35	-27.25	0
63	SLU 57	-569	1	3998	-0.77	-27.03	0.01
63	SLU 58	-574	0	3988	-0.35	-27.25	0
63	SLU 59	-569	1	3998	-0.77	-27.03	0.01
63	SLU 60	-675	0	4463	-0.38	-31.56	0
63	SLU 61	-669	1	4472	-0.8	-31.34	0.01
63	SLU 62	-675	0	4463	-0.38	-31.56	0
63	SLU 63	-669	1	4472	-0.8	-31.34	0.01
63	SLU 64	-458	0	3493	-0.31	-22.22	0
63	SLU 65	-448	1	3509	-1.01	-21.85	0.01
63	SLU 66	-458	0	3493	-0.31	-22.22	0
63	SLU 67	-452	0	3503	-0.73	-22	0.01
63	SLU 68	-448	1	3509	-1.01	-21.85	0.01
63	SLU 69	-458	0	3493	-0.31	-22.22	0
63	SLU 70	-452	0	3503	-0.73	-22	0.01
63	SLU 71	-458	0	3493	-0.31	-22.22	0
63	SLU 72	-452	0	3503	-0.73	-22	0.01
63	SLU 73	-682	1	4616	-1.08	-31.91	0.01
63	SLU 74	-692	0	4600	-0.38	-32.28	0
63	SLU 75	-686	1	4609	-0.8	-32.06	0.01
63	SLU 76	-682	1	4616	-1.08	-31.91	0.01
63	SLU 77	-692	0	4600	-0.38	-32.28	0
63	SLU 78	-686	1	4609	-0.8	-32.06	0.01
63	SLU 79	-692	0	4600	-0.38	-32.28	0
63	SLU 80	-686	1	4609	-0.8	-32.06	0.01
63	SLU 81	-792	0	5074	-0.41	-36.6	0
63	SLU 82	-786	1	5084	-0.83	-36.37	0.01
63	SLU 83	-792	0	5074	-0.41	-36.6	0
63	SLU 84	-786	1	5084	-0.83	-36.37	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
63	SLE RA 1	-326	0	2553	-0.23	-15.99	0
63	SLE RA 2	-320	0	2563	-0.7	-15.74	0.01
63	SLE RA 3	-326	0	2553	-0.23	-15.99	0
63	SLE RA 4	-322	0	2559	-0.51	-15.84	0
63	SLE RA 5	-320	0	2563	-0.7	-15.74	0.01
63	SLE RA 6	-326	0	2553	-0.23	-15.99	0
63	SLE RA 7	-322	0	2559	-0.51	-15.84	0
63	SLE RA 8	-326	0	2553	-0.23	-15.99	0
63	SLE RA 9	-322	0	2559	-0.51	-15.84	0
63	SLE RA 10	-476	1	3301	-0.75	-22.45	0.01
63	SLE RA 11	-482	0	3290	-0.28	-22.69	0
63	SLE RA 12	-478	0	3297	-0.56	-22.55	0
63	SLE RA 13	-476	1	3301	-0.75	-22.45	0.01
63	SLE RA 14	-482	0	3290	-0.28	-22.69	0
63	SLE RA 15	-478	0	3297	-0.56	-22.55	0
63	SLE RA 16	-482	0	3290	-0.28	-22.69	0
63	SLE RA 17	-478	0	3297	-0.56	-22.55	0
63	SLE RA 18	-549	0	3607	-0.3	-25.57	0
63	SLE RA 19	-545	0	3613	-0.58	-25.42	0.01
63	SLE RA 20	-549	0	3607	-0.3	-25.57	0
63	SLE RA 21	-545	0	3613	-0.58	-25.42	0.01
63	SLE FR 1	-326	0	2553	-0.23	-15.99	0
63	SLE FR 2	-325	0	2555	-0.32	-15.94	0
63	SLE FR 3	-326	0	2553	-0.23	-15.99	0
63	SLE FR 4	-392	0	2871	-0.34	-18.81	0
63	SLE FR 5	-393	0	2869	-0.25	-18.86	0
63	SLE FR 6	-438	0	3080	-0.26	-20.78	0
63	SLE QP 1	-326	0	2553	-0.23	-15.99	0
63	SLE QP 2	-393	0	2869	-0.25	-18.86	0
63	SLD 1	-105	4	2648	-7.19	-6.03	0.03
63	SLD 2	-105	4	2648	-7.19	-6.03	0.03
63	SLD 3	-93	-6	2657	8.68	-5.46	-0.07
63	SLD 4	-93	-6	2657	8.68	-5.46	-0.07
63	SLD 5	-326	15	2789	-26.4	-15.88	0.17
63	SLD 6	-326	15	2789	-26.4	-15.88	0.17
63	SLD 7	-284	-16	2819	26.5	-13.98	-0.18
63	SLD 8	-284	-16	2819	26.5	-13.98	-0.18
63	SLD 9	-502	16	2919	-27	-23.75	0.19
63	SLD 10	-502	16	2919	-27	-23.75	0.19
63	SLD 11	-460	-15	2948	25.91	-21.85	-0.17
63	SLD 12	-460	-15	2948	25.91	-21.85	-0.17
63	SLD 13	-693	6	3080	-9.18	-32.26	0.08
63	SLD 14	-693	6	3080	-9.18	-32.26	0.08
63	SLD 15	-681	-3	3089	6.69	-31.69	-0.03
63	SLD 16	-681	-3	3089	6.69	-31.69	-0.03
63	SLV 1	278	10	2354	-20.18	11.08	0.09
63	SLV 2	278	10	2354	-20.18	11.08	0.09
63	SLV 3	308	-16	2376	24.69	12.43	-0.2
63	SLV 4	308	-16	2376	24.69	12.43	-0.2
63	SLV 5	-237	41	2681	-74.29	-11.93	0.47
63	SLV 6	-237	41	2681	-74.29	-11.93	0.47
63	SLV 7	-138	-43	2755	75.29	-7.42	-0.5
63	SLV 8	-138	-43	2755	75.29	-7.42	-0.5
63	SLV 9	-649	43	2983	-75.79	-30.3	0.5
63	SLV 10	-649	43	2983	-75.79	-30.3	0.5
63	SLV 11	-549	-41	3057	73.79	-25.79	-0.47
63	SLV 12	-549	-41	3057	73.79	-25.79	-0.47
63	SLV 13	-1094	16	3361	-25.19	-50.15	0.2
63	SLV 14	-1094	16	3361	-25.19	-50.15	0.2
63	SLV 15	-1064	-9	3384	19.68	-48.8	-0.09
63	SLV 16	-1064	-9	3384	19.68	-48.8	-0.09
64	SLU 1	-297	0	2230	-0.24	-8.32	0
64	SLU 2	-285	1	2251	-0.94	-7.84	0.01
64	SLU 3	-297	0	2230	-0.24	-8.32	0
64	SLU 4	-290	1	2243	-0.66	-8.03	0.01
64	SLU 5	-285	1	2251	-0.94	-7.84	0.01
64	SLU 6	-297	0	2230	-0.24	-8.32	0
64	SLU 7	-290	1	2243	-0.66	-8.03	0.01
64	SLU 8	-297	0	2230	-0.24	-8.32	0
64	SLU 9	-290	1	2243	-0.66	-8.03	0.01
64	SLU 10	-552	1	3233	-1.02	-17.72	0.01
64	SLU 11	-564	0	3211	-0.33	-18.19	0
64	SLU 12	-557	1	3224	-0.74	-17.91	0.01
64	SLU 13	-552	1	3233	-1.02	-17.72	0.01
64	SLU 14	-564	0	3211	-0.33	-18.19	0
64	SLU 15	-557	1	3224	-0.74	-17.91	0.01
64	SLU 16	-564	0	3211	-0.33	-18.19	0
64	SLU 17	-557	1	3224	-0.74	-17.91	0.01
64	SLU 18	-679	0	3632	-0.36	-22.42	0
64	SLU 19	-672	1	3645	-0.78	-22.14	0.01
64	SLU 20	-679	0	3632	-0.36	-22.42	0
64	SLU 21	-672	1	3645	-0.78	-22.14	0.01
64	SLU 22	-433	0	2775	-0.28	-13.35	0
64	SLU 23	-422	1	2797	-0.97	-12.87	0.01
64	SLU 24	-433	0	2775	-0.28	-13.35	0
64	SLU 25	-426	1	2788	-0.69	-13.06	0.01
64	SLU 26	-422	1	2797	-0.97	-12.87	0.01
64	SLU 27	-433	0	2775	-0.28	-13.35	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
64	SLU 28	-426	1	2788	-0.69	-13.06	0.01
64	SLU 29	-433	0	2775	-0.28	-13.35	0
64	SLU 30	-426	1	2788	-0.69	-13.06	0.01
64	SLU 31	-689	1	3779	-1.06	-22.75	0.01
64	SLU 32	-700	0	3757	-0.36	-23.22	0
64	SLU 33	-694	1	3770	-0.78	-22.94	0.01
64	SLU 34	-689	1	3779	-1.06	-22.75	0.01
64	SLU 35	-700	0	3757	-0.36	-23.22	0
64	SLU 36	-694	1	3770	-0.78	-22.94	0.01
64	SLU 37	-700	0	3757	-0.36	-23.22	0
64	SLU 38	-694	1	3770	-0.78	-22.94	0.01
64	SLU 39	-815	0	4178	-0.4	-27.45	0
64	SLU 40	-808	1	4191	-0.82	-27.17	0.01
64	SLU 41	-815	0	4178	-0.4	-27.45	0
64	SLU 42	-808	1	4191	-0.82	-27.17	0.01
64	SLU 43	-339	0	2711	-0.3	-9.09	0
64	SLU 44	-327	1	2733	-1	-8.61	0.01
64	SLU 45	-339	0	2711	-0.3	-9.09	0
64	SLU 46	-332	1	2724	-0.72	-8.8	0.01
64	SLU 47	-327	1	2733	-1	-8.61	0.01
64	SLU 48	-339	0	2711	-0.3	-9.09	0
64	SLU 49	-332	1	2724	-0.72	-8.8	0.01
64	SLU 50	-339	0	2711	-0.3	-9.09	0
64	SLU 51	-332	1	2724	-0.72	-8.8	0.01
64	SLU 52	-595	1	3715	-1.08	-18.49	0.01
64	SLU 53	-606	0	3693	-0.39	-18.96	0
64	SLU 54	-599	1	3706	-0.8	-18.68	0.01
64	SLU 55	-595	1	3715	-1.08	-18.49	0.01
64	SLU 56	-606	0	3693	-0.39	-18.96	0
64	SLU 57	-599	1	3706	-0.8	-18.68	0.01
64	SLU 58	-606	0	3693	-0.39	-18.96	0
64	SLU 59	-599	1	3706	-0.8	-18.68	0.01
64	SLU 60	-721	0	4114	-0.42	-23.19	0
64	SLU 61	-714	1	4127	-0.84	-22.91	0.01
64	SLU 62	-721	0	4114	-0.42	-23.19	0
64	SLU 63	-714	1	4127	-0.84	-22.91	0.01
64	SLU 64	-475	0	3257	-0.34	-14.12	0
64	SLU 65	-464	1	3279	-1.03	-13.64	0.01
64	SLU 66	-475	0	3257	-0.34	-14.12	0
64	SLU 67	-469	1	3270	-0.75	-13.83	0.01
64	SLU 68	-464	1	3279	-1.03	-13.64	0.01
64	SLU 69	-475	0	3257	-0.34	-14.12	0
64	SLU 70	-469	1	3270	-0.75	-13.83	0.01
64	SLU 71	-475	0	3257	-0.34	-14.12	0
64	SLU 72	-469	1	3270	-0.75	-13.83	0.01
64	SLU 73	-731	1	4261	-1.12	-23.52	0.01
64	SLU 74	-743	0	4239	-0.42	-23.99	0
64	SLU 75	-736	1	4252	-0.84	-23.71	0.01
64	SLU 76	-731	1	4261	-1.12	-23.52	0.01
64	SLU 77	-743	0	4239	-0.42	-23.99	0
64	SLU 78	-736	1	4252	-0.84	-23.71	0.01
64	SLU 79	-743	0	4239	-0.42	-23.99	0
64	SLU 80	-736	1	4252	-0.84	-23.71	0.01
64	SLU 81	-857	0	4660	-0.46	-28.22	0.01
64	SLU 82	-850	1	4673	-0.88	-27.94	0.01
64	SLU 83	-857	0	4660	-0.46	-28.22	0.01
64	SLU 84	-850	1	4673	-0.88	-27.94	0.01
64	SLE RA 1	-336	0	2386	-0.25	-9.75	0
64	SLE RA 2	-328	1	2400	-0.71	-9.44	0.01
64	SLE RA 3	-336	0	2386	-0.25	-9.75	0
64	SLE RA 4	-331	0	2394	-0.53	-9.56	0.01
64	SLE RA 5	-328	1	2400	-0.71	-9.44	0.01
64	SLE RA 6	-336	0	2386	-0.25	-9.75	0
64	SLE RA 7	-331	0	2394	-0.53	-9.56	0.01
64	SLE RA 8	-336	0	2386	-0.25	-9.75	0
64	SLE RA 9	-331	0	2394	-0.53	-9.56	0.01
64	SLE RA 10	-506	1	3054	-0.77	-16.02	0.01
64	SLE RA 11	-514	0	3040	-0.31	-16.34	0
64	SLE RA 12	-509	1	3049	-0.59	-16.15	0.01
64	SLE RA 13	-506	1	3054	-0.77	-16.02	0.01
64	SLE RA 14	-514	0	3040	-0.31	-16.34	0
64	SLE RA 15	-509	1	3049	-0.59	-16.15	0.01
64	SLE RA 16	-514	0	3040	-0.31	-16.34	0
64	SLE RA 17	-509	1	3049	-0.59	-16.15	0.01
64	SLE RA 18	-590	0	3321	-0.33	-19.16	0
64	SLE RA 19	-586	1	3329	-0.61	-18.97	0.01
64	SLE RA 20	-590	0	3321	-0.33	-19.16	0
64	SLE RA 21	-586	1	3329	-0.61	-18.97	0.01
64	SLE FR 1	-336	0	2386	-0.25	-9.75	0
64	SLE FR 2	-334	0	2388	-0.34	-9.69	0
64	SLE FR 3	-336	0	2386	-0.25	-9.75	0
64	SLE FR 4	-411	0	2669	-0.37	-12.51	0
64	SLE FR 5	-412	0	2666	-0.28	-12.58	0
64	SLE FR 6	-463	0	2853	-0.29	-14.46	0
64	SLE QP 1	-336	0	2386	-0.25	-9.75	0
64	SLE QP 2	-412	0	2666	-0.28	-12.58	0
64	SLD 1	-113	-4	2428	-5.02	-0.03	-0.04
64	SLD 2	-113	-4	2428	-5.02	-0.03	-0.04

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
64	SLD 3	-101	3	2439	6.1	0.48	0.02
64	SLD 4	-101	3	2439	6.1	0.48	0.02
64	SLD 5	-341	-11	2578	-18.56	-9.58	-0.12
64	SLD 6	-341	-11	2578	-18.56	-9.58	-0.12
64	SLD 7	-300	11	2615	18.5	-7.88	0.11
64	SLD 8	-300	11	2615	18.5	-7.88	0.11
64	SLD 9	-524	-11	2717	-19.05	-17.27	-0.11
64	SLD 10	-524	-11	2717	-19.05	-17.27	-0.11
64	SLD 11	-483	12	2754	18.01	-15.57	0.12
64	SLD 12	-483	12	2754	18.01	-15.57	0.12
64	SLD 13	-724	-2	2893	-6.65	-25.63	-0.02
64	SLD 14	-724	-2	2893	-6.65	-25.63	-0.02
64	SLD 15	-711	5	2904	4.47	-25.12	0.05
64	SLD 16	-711	5	2904	4.47	-25.12	0.05
64	SLV 1	285	-11	2111	-13.86	16.66	-0.12
64	SLV 2	285	-11	2111	-13.86	16.66	-0.12
64	SLV 3	315	7	2139	17.41	17.89	0.06
64	SLV 4	315	7	2139	17.41	17.89	0.06
64	SLV 5	-248	-30	2457	-51.77	-5.67	-0.3
64	SLV 6	-248	-30	2457	-51.77	-5.67	-0.3
64	SLV 7	-149	29	2550	52.45	-1.57	0.29
64	SLV 8	-149	29	2550	52.45	-1.57	0.29
64	SLV 9	-675	-28	2782	-53	-23.58	-0.28
64	SLV 10	-675	-28	2782	-53	-23.58	-0.28
64	SLV 11	-576	30	2875	51.22	-19.48	0.31
64	SLV 12	-576	30	2875	51.22	-19.48	0.31
64	SLV 13	-1139	-6	3193	-17.96	-43.04	-0.05
64	SLV 14	-1139	-6	3193	-17.96	-43.04	-0.05
64	SLV 15	-1109	12	3222	13.31	-41.81	0.12
64	SLV 16	-1109	12	3222	13.31	-41.81	0.12
65	SLU 1	-458	0	2055	-0.26	-22.83	0
65	SLU 2	-445	1	2084	-0.92	-22.34	0.01
65	SLU 3	-458	0	2055	-0.26	-22.83	0
65	SLU 4	-450	1	2072	-0.66	-22.54	0.01
65	SLU 5	-445	1	2084	-0.92	-22.34	0.01
65	SLU 6	-458	0	2055	-0.26	-22.83	0
65	SLU 7	-450	1	2072	-0.66	-22.54	0.01
65	SLU 8	-458	0	2055	-0.26	-22.83	0
65	SLU 9	-450	1	2072	-0.66	-22.54	0.01
65	SLU 10	-777	1	2918	-1.02	-36.65	0.01
65	SLU 11	-790	0	2889	-0.35	-37.14	0
65	SLU 12	-782	1	2906	-0.75	-36.84	0.01
65	SLU 13	-777	1	2918	-1.02	-36.65	0.01
65	SLU 14	-790	0	2889	-0.35	-37.14	0
65	SLU 15	-782	1	2906	-0.75	-36.84	0.01
65	SLU 16	-790	0	2889	-0.35	-37.14	0
65	SLU 17	-782	1	2906	-0.75	-36.84	0.01
65	SLU 18	-933	1	3246	-0.39	-43.27	0.01
65	SLU 19	-925	1	3264	-0.79	-42.98	0.01
65	SLU 20	-933	1	3246	-0.39	-43.27	0.01
65	SLU 21	-925	1	3264	-0.79	-42.98	0.01
65	SLU 22	-630	0	2522	-0.3	-30.22	0
65	SLU 23	-617	1	2551	-0.96	-29.73	0.01
65	SLU 24	-630	0	2522	-0.3	-30.22	0
65	SLU 25	-622	1	2539	-0.7	-29.92	0.01
65	SLU 26	-617	1	2551	-0.96	-29.73	0.01
65	SLU 27	-630	0	2522	-0.3	-30.22	0
65	SLU 28	-622	1	2539	-0.7	-29.92	0.01
65	SLU 29	-630	0	2522	-0.3	-30.22	0
65	SLU 30	-622	1	2539	-0.7	-29.92	0.01
65	SLU 31	-950	1	3385	-1.06	-44.04	0.01
65	SLU 32	-963	1	3356	-0.39	-44.53	0.01
65	SLU 33	-955	1	3373	-0.79	-44.23	0.01
65	SLU 34	-950	1	3385	-1.06	-44.04	0.01
65	SLU 35	-963	1	3356	-0.39	-44.53	0.01
65	SLU 36	-955	1	3373	-0.79	-44.23	0.01
65	SLU 37	-963	1	3356	-0.39	-44.53	0.01
65	SLU 38	-955	1	3373	-0.79	-44.23	0.01
65	SLU 39	-1105	1	3713	-0.43	-50.66	0.01
65	SLU 40	-1097	1	3731	-0.83	-50.37	0.01
65	SLU 41	-1105	1	3713	-0.43	-50.66	0.01
65	SLU 42	-1097	1	3731	-0.83	-50.37	0.01
65	SLU 43	-536	0	2511	-0.32	-27.15	0
65	SLU 44	-523	1	2541	-0.99	-26.65	0.01
65	SLU 45	-536	0	2511	-0.32	-27.15	0
65	SLU 46	-528	1	2529	-0.72	-26.85	0.01
65	SLU 47	-523	1	2541	-0.99	-26.65	0.01
65	SLU 48	-536	0	2511	-0.32	-27.15	0
65	SLU 49	-528	1	2529	-0.72	-26.85	0.01
65	SLU 50	-536	0	2511	-0.32	-27.15	0
65	SLU 51	-528	1	2529	-0.72	-26.85	0.01
65	SLU 52	-855	1	3374	-1.08	-40.96	0.01
65	SLU 53	-868	1	3345	-0.41	-41.46	0.01
65	SLU 54	-861	1	3363	-0.81	-41.16	0.01
65	SLU 55	-855	1	3374	-1.08	-40.96	0.01
65	SLU 56	-868	1	3345	-0.41	-41.46	0.01
65	SLU 57	-861	1	3363	-0.81	-41.16	0.01
65	SLU 58	-868	1	3345	-0.41	-41.46	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
65	SLU 59	-861	1	3363	-0.81	-41.16	0.01
65	SLU 60	-1011	1	3702	-0.45	-47.59	0.01
65	SLU 61	-1003	1	3720	-0.85	-47.29	0.01
65	SLU 62	-1011	1	3702	-0.45	-47.59	0.01
65	SLU 63	-1003	1	3720	-0.85	-47.29	0.01
65	SLU 64	-708	0	2978	-0.36	-34.54	0
65	SLU 65	-695	1	3008	-1.03	-34.04	0.01
65	SLU 66	-708	0	2978	-0.36	-34.54	0
65	SLU 67	-701	1	2996	-0.76	-34.24	0.01
65	SLU 68	-695	1	3008	-1.03	-34.04	0.01
65	SLU 69	-708	0	2978	-0.36	-34.54	0
65	SLU 70	-701	1	2996	-0.76	-34.24	0.01
65	SLU 71	-708	0	2978	-0.36	-34.54	0
65	SLU 72	-701	1	2996	-0.76	-34.24	0.01
65	SLU 73	-1028	1	3841	-1.12	-48.35	0.01
65	SLU 74	-1041	1	3812	-0.45	-48.84	0.01
65	SLU 75	-1033	1	3830	-0.85	-48.55	0.01
65	SLU 76	-1028	1	3841	-1.12	-48.35	0.01
65	SLU 77	-1041	1	3812	-0.45	-48.84	0.01
65	SLU 78	-1033	1	3830	-0.85	-48.55	0.01
65	SLU 79	-1041	1	3812	-0.45	-48.84	0.01
65	SLU 80	-1033	1	3830	-0.85	-48.55	0.01
65	SLU 81	-1183	1	4169	-0.49	-54.98	0.01
65	SLU 82	-1175	1	4187	-0.89	-54.68	0.01
65	SLU 83	-1183	1	4169	-0.49	-54.98	0.01
65	SLU 84	-1175	1	4187	-0.89	-54.68	0.01
65	SLE RA 1	-507	0	2188	-0.27	-24.94	0
65	SLE RA 2	-498	1	2208	-0.71	-24.61	0.01
65	SLE RA 3	-507	0	2188	-0.27	-24.94	0
65	SLE RA 4	-502	1	2200	-0.54	-24.74	0.01
65	SLE RA 5	-498	1	2208	-0.71	-24.61	0.01
65	SLE RA 6	-507	0	2188	-0.27	-24.94	0
65	SLE RA 7	-502	1	2200	-0.54	-24.74	0.01
65	SLE RA 8	-507	0	2188	-0.27	-24.94	0
65	SLE RA 9	-502	1	2200	-0.54	-24.74	0.01
65	SLE RA 10	-720	1	2764	-0.78	-34.15	0.01
65	SLE RA 11	-729	0	2744	-0.33	-34.48	0
65	SLE RA 12	-723	1	2756	-0.6	-34.28	0.01
65	SLE RA 13	-720	1	2764	-0.78	-34.15	0.01
65	SLE RA 14	-729	0	2744	-0.33	-34.48	0
65	SLE RA 15	-723	1	2756	-0.6	-34.28	0.01
65	SLE RA 16	-729	0	2744	-0.33	-34.48	0
65	SLE RA 17	-723	1	2756	-0.6	-34.28	0.01
65	SLE RA 18	-824	0	2982	-0.36	-38.57	0
65	SLE RA 19	-818	1	2994	-0.62	-38.37	0.01
65	SLE RA 20	-824	0	2982	-0.36	-38.57	0
65	SLE RA 21	-818	1	2994	-0.62	-38.37	0.01
65	SLE FR 1	-507	0	2188	-0.27	-24.94	0
65	SLE FR 2	-505	0	2192	-0.36	-24.88	0
65	SLE FR 3	-507	0	2188	-0.27	-24.94	0
65	SLE FR 4	-600	0	2430	-0.39	-28.96	0
65	SLE FR 5	-602	0	2427	-0.3	-29.03	0
65	SLE FR 6	-665	0	2585	-0.31	-31.76	0
65	SLE QP 1	-507	0	2188	-0.27	-24.94	0
65	SLE QP 2	-602	0	2427	-0.3	-29.03	0
65	SLD 1	-281	-3	2189	-2.92	-14.34	-0.03
65	SLD 2	-281	-3	2189	-2.92	-14.34	-0.03
65	SLD 3	-267	2	2203	3.61	-14.96	0.02
65	SLD 4	-267	2	2203	3.61	-14.96	0.02
65	SLD 5	-526	-10	2334	-10.99	-23.68	-0.08
65	SLD 6	-526	-10	2334	-10.99	-23.68	-0.08
65	SLD 7	-481	10	2381	10.78	-25.76	0.08
65	SLD 8	-481	10	2381	10.78	-25.76	0.08
65	SLD 9	-723	-9	2473	-11.38	-32.3	-0.08
65	SLD 10	-723	-9	2473	-11.38	-32.3	-0.08
65	SLD 11	-678	10	2519	10.4	-34.38	0.09
65	SLD 12	-678	10	2519	10.4	-34.38	0.09
65	SLD 13	-937	-2	2650	-4.2	-43.1	-0.01
65	SLD 14	-937	-2	2650	-4.2	-43.1	-0.01
65	SLD 15	-923	4	2664	2.33	-43.72	0.04
65	SLD 16	-923	4	2664	2.33	-43.72	0.04
65	SLV 1	147	-9	1871	-7.84	5.3	-0.08
65	SLV 2	147	-9	1871	-7.84	5.3	-0.08
65	SLV 3	180	6	1907	10.41	3.81	0.05
65	SLV 4	180	6	1907	10.41	3.81	0.05
65	SLV 5	-426	-26	2206	-30.23	-16.47	-0.22
65	SLV 6	-426	-26	2206	-30.23	-16.47	-0.22
65	SLV 7	-319	25	2325	30.59	-21.44	0.21
65	SLV 8	-319	25	2325	30.59	-21.44	0.21
65	SLV 9	-885	-24	2529	-31.18	-36.62	-0.21
65	SLV 10	-885	-24	2529	-31.18	-36.62	-0.21
65	SLV 11	-778	26	2647	29.64	-41.59	0.23
65	SLV 12	-778	26	2647	29.64	-41.59	0.23
65	SLV 13	-1383	-5	2946	-11	-61.87	-0.04
65	SLV 14	-1383	-5	2946	-11	-61.87	-0.04
65	SLV 15	-1351	10	2982	7.25	-63.36	0.09
65	SLV 16	-1351	10	2982	7.25	-63.36	0.09
66	SLU 1	-429	0	1860	-0.25	-11.58	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
66	SLU 2	-415	1	1899	-0.83	-11.05	0.01
66	SLU 3	-429	0	1860	-0.25	-11.58	0
66	SLU 4	-421	1	1884	-0.6	-11.26	0.01
66	SLU 5	-415	1	1899	-0.83	-11.05	0.01
66	SLU 6	-429	0	1860	-0.25	-11.58	0
66	SLU 7	-421	1	1884	-0.6	-11.26	0.01
66	SLU 8	-429	0	1860	-0.25	-11.58	0
66	SLU 9	-421	1	1884	-0.6	-11.26	0.01
66	SLU 10	-758	1	2569	-0.92	-23.27	0.01
66	SLU 11	-772	1	2530	-0.34	-23.81	0
66	SLU 12	-763	1	2554	-0.68	-23.48	0.01
66	SLU 13	-758	1	2569	-0.92	-23.27	0.01
66	SLU 14	-772	1	2530	-0.34	-23.81	0
66	SLU 15	-763	1	2554	-0.68	-23.48	0.01
66	SLU 16	-772	1	2530	-0.34	-23.81	0
66	SLU 17	-763	1	2554	-0.68	-23.48	0.01
66	SLU 18	-918	1	2817	-0.38	-29.04	0
66	SLU 19	-910	1	2841	-0.72	-28.72	0.01
66	SLU 20	-918	1	2817	-0.38	-29.04	0
66	SLU 21	-910	1	2841	-0.72	-28.72	0.01
66	SLU 22	-610	1	2238	-0.29	-18.05	0
66	SLU 23	-596	1	2277	-0.87	-17.51	0.01
66	SLU 24	-610	1	2238	-0.29	-18.05	0
66	SLU 25	-602	1	2262	-0.63	-17.73	0.01
66	SLU 26	-596	1	2277	-0.87	-17.51	0.01
66	SLU 27	-610	1	2238	-0.29	-18.05	0
66	SLU 28	-602	1	2262	-0.63	-17.73	0.01
66	SLU 29	-610	1	2238	-0.29	-18.05	0
66	SLU 30	-602	1	2262	-0.63	-17.73	0.01
66	SLU 31	-939	2	2947	-0.95	-29.73	0.01
66	SLU 32	-953	1	2908	-0.38	-30.27	0
66	SLU 33	-944	1	2931	-0.72	-29.95	0.01
66	SLU 34	-939	2	2947	-0.95	-29.73	0.01
66	SLU 35	-953	1	2908	-0.38	-30.27	0
66	SLU 36	-944	1	2931	-0.72	-29.95	0.01
66	SLU 37	-953	1	2908	-0.38	-30.27	0
66	SLU 38	-944	1	2931	-0.72	-29.95	0.01
66	SLU 39	-1099	1	3195	-0.41	-35.51	0.01
66	SLU 40	-1091	1	3218	-0.76	-35.19	0.01
66	SLU 41	-1099	1	3195	-0.41	-35.51	0.01
66	SLU 42	-1091	1	3218	-0.76	-35.19	0.01
66	SLU 43	-495	1	2289	-0.31	-12.84	0
66	SLU 44	-482	1	2328	-0.89	-12.31	0.01
66	SLU 45	-495	1	2289	-0.31	-12.84	0
66	SLU 46	-487	1	2312	-0.66	-12.52	0.01
66	SLU 47	-482	1	2328	-0.89	-12.31	0.01
66	SLU 48	-495	1	2289	-0.31	-12.84	0
66	SLU 49	-487	1	2312	-0.66	-12.52	0.01
66	SLU 50	-495	1	2289	-0.31	-12.84	0
66	SLU 51	-487	1	2312	-0.66	-12.52	0.01
66	SLU 52	-824	2	2998	-0.98	-24.53	0.01
66	SLU 53	-838	1	2959	-0.4	-25.06	0.01
66	SLU 54	-830	1	2982	-0.75	-24.74	0.01
66	SLU 55	-824	2	2998	-0.98	-24.53	0.01
66	SLU 56	-838	1	2959	-0.4	-25.06	0.01
66	SLU 57	-830	1	2982	-0.75	-24.74	0.01
66	SLU 58	-838	1	2959	-0.4	-25.06	0.01
66	SLU 59	-830	1	2982	-0.75	-24.74	0.01
66	SLU 60	-985	1	3246	-0.44	-30.3	0.01
66	SLU 61	-977	1	3269	-0.78	-29.98	0.01
66	SLU 62	-985	1	3246	-0.44	-30.3	0.01
66	SLU 63	-977	1	3269	-0.78	-29.98	0.01
66	SLU 64	-676	1	2667	-0.35	-19.31	0
66	SLU 65	-663	1	2706	-0.93	-18.77	0.01
66	SLU 66	-676	1	2667	-0.35	-19.31	0
66	SLU 67	-668	1	2690	-0.69	-18.99	0.01
66	SLU 68	-663	1	2706	-0.93	-18.77	0.01
66	SLU 69	-676	1	2667	-0.35	-19.31	0
66	SLU 70	-668	1	2690	-0.69	-18.99	0.01
66	SLU 71	-676	1	2667	-0.35	-19.31	0
66	SLU 72	-668	1	2690	-0.69	-18.99	0.01
66	SLU 73	-1005	2	3375	-1.02	-30.99	0.01
66	SLU 74	-1019	1	3337	-0.44	-31.53	0.01
66	SLU 75	-1011	1	3360	-0.78	-31.21	0.01
66	SLU 76	-1005	2	3375	-1.02	-30.99	0.01
66	SLU 77	-1019	1	3337	-0.44	-31.53	0.01
66	SLU 78	-1011	1	3360	-0.78	-31.21	0.01
66	SLU 79	-1019	1	3337	-0.44	-31.53	0.01
66	SLU 80	-1011	1	3360	-0.78	-31.21	0.01
66	SLU 81	-1166	1	3624	-0.47	-36.77	0.01
66	SLU 82	-1158	1	3647	-0.82	-36.44	0.01
66	SLU 83	-1166	1	3624	-0.47	-36.77	0.01
66	SLU 84	-1158	1	3647	-0.82	-36.44	0.01
66	SLE RA 1	-481	0	1968	-0.26	-13.43	0
66	SLE RA 2	-471	1	1994	-0.64	-13.07	0.01
66	SLE RA 3	-481	0	1968	-0.26	-13.43	0
66	SLE RA 4	-475	1	1984	-0.49	-13.22	0.01
66	SLE RA 5	-471	1	1994	-0.64	-13.07	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
66	SLE RA 6	-481	0	1968	-0.26	-13.43	0
66	SLE RA 7	-475	1	1984	-0.49	-13.22	0.01
66	SLE RA 8	-481	0	1968	-0.26	-13.43	0
66	SLE RA 9	-475	1	1984	-0.49	-13.22	0.01
66	SLE RA 10	-700	1	2441	-0.7	-21.22	0.01
66	SLE RA 11	-709	1	2415	-0.32	-21.58	0
66	SLE RA 12	-704	1	2430	-0.55	-21.36	0.01
66	SLE RA 13	-700	1	2441	-0.7	-21.22	0.01
66	SLE RA 14	-709	1	2415	-0.32	-21.58	0
66	SLE RA 15	-704	1	2430	-0.55	-21.36	0.01
66	SLE RA 16	-709	1	2415	-0.32	-21.58	0
66	SLE RA 17	-704	1	2430	-0.55	-21.36	0.01
66	SLE RA 18	-807	1	2606	-0.34	-25.07	0
66	SLE RA 19	-801	1	2622	-0.58	-24.86	0.01
66	SLE RA 20	-807	1	2606	-0.34	-25.07	0
66	SLE RA 21	-801	1	2622	-0.58	-24.86	0.01
66	SLE FR 1	-481	0	1968	-0.26	-13.43	0
66	SLE FR 2	-479	1	1974	-0.34	-13.36	0
66	SLE FR 3	-481	0	1968	-0.26	-13.43	0
66	SLE FR 4	-577	1	2165	-0.36	-16.85	0
66	SLE FR 5	-578	1	2160	-0.28	-16.92	0
66	SLE FR 6	-644	1	2287	-0.3	-19.25	0
66	SLE QP 1	-481	0	1968	-0.26	-13.43	0
66	SLE QP 2	-578	1	2160	-0.28	-16.92	0
66	SLD 1	-258	-4	1933	-1.17	-4.02	-0.03
66	SLD 2	-258	-4	1933	-1.17	-4.02	-0.03
66	SLD 3	-246	3	1950	1.6	-3.52	0.02
66	SLD 4	-246	3	1950	1.6	-3.52	0.02
66	SLD 5	-501	-12	2065	-4.75	-13.8	-0.07
66	SLD 6	-501	-12	2065	-4.75	-13.8	-0.07
66	SLD 7	-460	12	2123	4.48	-12.15	0.08
66	SLD 8	-460	12	2123	4.48	-12.15	0.08
66	SLD 9	-697	-11	2196	-5.05	-21.7	-0.07
66	SLD 10	-697	-11	2196	-5.05	-21.7	-0.07
66	SLD 11	-656	13	2254	4.18	-20.04	0.08
66	SLD 12	-656	13	2254	4.18	-20.04	0.08
66	SLD 13	-911	-2	2369	-2.17	-30.33	-0.01
66	SLD 14	-911	-2	2369	-2.17	-30.33	-0.01
66	SLD 15	-899	5	2387	0.6	-29.83	0.03
66	SLD 16	-899	5	2387	0.6	-29.83	0.03
66	SLV 1	167	-11	1629	-2.9	13.11	-0.08
66	SLV 2	167	-11	1629	-2.9	13.11	-0.08
66	SLV 3	197	8	1673	4.75	14.33	0.05
66	SLV 4	197	8	1673	4.75	14.33	0.05
66	SLV 5	-399	-33	1933	-12.68	-9.76	-0.21
66	SLV 6	-399	-33	1933	-12.68	-9.76	-0.21
66	SLV 7	-301	32	2082	12.83	-5.7	0.21
66	SLV 8	-301	32	2082	12.83	-5.7	0.21
66	SLV 9	-856	-31	2238	-13.4	-28.14	-0.2
66	SLV 10	-856	-31	2238	-13.4	-28.14	-0.2
66	SLV 11	-758	34	2387	12.11	-24.09	0.22
66	SLV 12	-758	34	2387	12.11	-24.09	0.22
66	SLV 13	-1354	-7	2646	-5.32	-48.18	-0.04
66	SLV 14	-1354	-7	2646	-5.32	-48.18	-0.04
66	SLV 15	-1324	13	2691	2.33	-46.96	0.08
66	SLV 16	-1324	13	2691	2.33	-46.96	0.08
67	SLU 1	-645	0	1676	-0.17	-32.23	0
67	SLU 2	-634	1	1727	-0.54	-31.88	0
67	SLU 3	-645	0	1676	-0.17	-32.23	0
67	SLU 4	-638	1	1707	-0.39	-32.02	0
67	SLU 5	-634	1	1727	-0.54	-31.88	0
67	SLU 6	-645	0	1676	-0.17	-32.23	0
67	SLU 7	-638	1	1707	-0.39	-32.02	0
67	SLU 8	-645	0	1676	-0.17	-32.23	0
67	SLU 9	-638	1	1707	-0.39	-32.02	0
67	SLU 10	-1029	1	2245	-0.61	-49.28	0
67	SLU 11	-1040	1	2194	-0.23	-49.63	0
67	SLU 12	-1033	1	2225	-0.46	-49.42	0
67	SLU 13	-1029	1	2245	-0.61	-49.28	0
67	SLU 14	-1040	1	2194	-0.23	-49.63	0
67	SLU 15	-1033	1	2225	-0.46	-49.42	0
67	SLU 16	-1040	1	2194	-0.23	-49.63	0
67	SLU 17	-1033	1	2225	-0.46	-49.42	0
67	SLU 18	-1209	1	2416	-0.26	-57.09	0
67	SLU 19	-1203	1	2447	-0.48	-56.88	0
67	SLU 20	-1209	1	2416	-0.26	-57.09	0
67	SLU 21	-1203	1	2447	-0.48	-56.88	0
67	SLU 22	-855	0	1969	-0.2	-41.44	0
67	SLU 23	-845	1	2019	-0.57	-41.09	0
67	SLU 24	-855	0	1969	-0.2	-41.44	0
67	SLU 25	-849	1	1999	-0.42	-41.23	0
67	SLU 26	-845	1	2019	-0.57	-41.09	0
67	SLU 27	-855	0	1969	-0.2	-41.44	0
67	SLU 28	-849	1	1999	-0.42	-41.23	0
67	SLU 29	-855	0	1969	-0.2	-41.44	0
67	SLU 30	-849	1	1999	-0.42	-41.23	0
67	SLU 31	-1240	1	2537	-0.63	-58.49	0
67	SLU 32	-1251	1	2487	-0.26	-58.85	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
67	SLU 33	-1244	1	2517	-0.48	-58.63	0
67	SLU 34	-1240	1	2537	-0.63	-58.49	0
67	SLU 35	-1251	1	2487	-0.26	-58.85	0
67	SLU 36	-1244	1	2517	-0.48	-58.63	0
67	SLU 37	-1251	1	2487	-0.26	-58.85	0
67	SLU 38	-1244	1	2517	-0.48	-58.63	0
67	SLU 39	-1420	1	2709	-0.29	-66.31	0
67	SLU 40	-1413	1	2739	-0.51	-66.09	0
67	SLU 41	-1420	1	2709	-0.29	-66.31	0
67	SLU 42	-1413	1	2739	-0.51	-66.09	0
67	SLU 43	-766	1	2079	-0.21	-38.74	0
67	SLU 44	-755	1	2129	-0.59	-38.39	0
67	SLU 45	-766	1	2079	-0.21	-38.74	0
67	SLU 46	-759	1	2109	-0.44	-38.53	0
67	SLU 47	-755	1	2129	-0.59	-38.39	0
67	SLU 48	-766	1	2079	-0.21	-38.74	0
67	SLU 49	-759	1	2109	-0.44	-38.53	0
67	SLU 50	-766	1	2079	-0.21	-38.74	0
67	SLU 51	-759	1	2109	-0.44	-38.53	0
67	SLU 52	-1150	1	2647	-0.65	-55.79	0
67	SLU 53	-1161	1	2597	-0.28	-56.15	0
67	SLU 54	-1155	1	2627	-0.5	-55.93	0
67	SLU 55	-1150	1	2647	-0.65	-55.79	0
67	SLU 56	-1161	1	2597	-0.28	-56.15	0
67	SLU 57	-1155	1	2627	-0.5	-55.93	0
67	SLU 58	-1161	1	2597	-0.28	-56.15	0
67	SLU 59	-1155	1	2627	-0.5	-55.93	0
67	SLU 60	-1330	1	2819	-0.3	-63.6	0
67	SLU 61	-1324	1	2849	-0.53	-63.39	0
67	SLU 62	-1330	1	2819	-0.3	-63.6	0
67	SLU 63	-1324	1	2849	-0.53	-63.39	0
67	SLU 64	-977	1	2371	-0.24	-47.96	0
67	SLU 65	-966	1	2422	-0.61	-47.6	0
67	SLU 66	-977	1	2371	-0.24	-47.96	0
67	SLU 67	-970	1	2402	-0.46	-47.74	0
67	SLU 68	-966	1	2422	-0.61	-47.6	0
67	SLU 69	-977	1	2371	-0.24	-47.96	0
67	SLU 70	-970	1	2402	-0.46	-47.74	0
67	SLU 71	-977	1	2371	-0.24	-47.96	0
67	SLU 72	-970	1	2402	-0.46	-47.74	0
67	SLU 73	-1361	1	2940	-0.67	-65	0
67	SLU 74	-1372	1	2889	-0.3	-65.36	0
67	SLU 75	-1365	1	2920	-0.53	-65.14	0
67	SLU 76	-1361	1	2940	-0.67	-65	0
67	SLU 77	-1372	1	2889	-0.3	-65.36	0
67	SLU 78	-1365	1	2920	-0.53	-65.14	0
67	SLU 79	-1372	1	2889	-0.3	-65.36	0
67	SLU 80	-1365	1	2920	-0.53	-65.14	0
67	SLU 81	-1541	1	3111	-0.33	-72.82	0
67	SLU 82	-1535	1	3142	-0.55	-72.6	0
67	SLU 83	-1541	1	3111	-0.33	-72.82	0
67	SLU 84	-1535	1	3142	-0.55	-72.6	0
67	SLE RA 1	-705	0	1760	-0.18	-34.86	0
67	SLE RA 2	-698	1	1793	-0.43	-34.63	0
67	SLE RA 3	-705	0	1760	-0.18	-34.86	0
67	SLE RA 4	-701	1	1780	-0.33	-34.72	0
67	SLE RA 5	-698	1	1793	-0.43	-34.63	0
67	SLE RA 6	-705	0	1760	-0.18	-34.86	0
67	SLE RA 7	-701	1	1780	-0.33	-34.72	0
67	SLE RA 8	-705	0	1760	-0.18	-34.86	0
67	SLE RA 9	-701	1	1780	-0.33	-34.72	0
67	SLE RA 10	-961	1	2139	-0.47	-46.23	0
67	SLE RA 11	-968	1	2105	-0.22	-46.47	0
67	SLE RA 12	-964	1	2125	-0.37	-46.32	0
67	SLE RA 13	-961	1	2139	-0.47	-46.23	0
67	SLE RA 14	-968	1	2105	-0.22	-46.47	0
67	SLE RA 15	-964	1	2125	-0.37	-46.32	0
67	SLE RA 16	-968	1	2105	-0.22	-46.47	0
67	SLE RA 17	-964	1	2125	-0.37	-46.32	0
67	SLE RA 18	-1081	1	2253	-0.24	-51.44	0
67	SLE RA 19	-1077	1	2273	-0.39	-51.3	0
67	SLE RA 20	-1081	1	2253	-0.24	-51.44	0
67	SLE RA 21	-1077	1	2273	-0.39	-51.3	0
67	SLE FR 1	-705	0	1760	-0.18	-34.86	0
67	SLE FR 2	-703	1	1766	-0.23	-34.82	0
67	SLE FR 3	-705	0	1760	-0.18	-34.86	0
67	SLE FR 4	-816	1	1915	-0.25	-39.79	0
67	SLE FR 5	-818	0	1908	-0.2	-39.84	0
67	SLE FR 6	-893	1	2006	-0.21	-43.15	0
67	SLE QP 1	-705	0	1760	-0.18	-34.86	0
67	SLE QP 2	-818	0	1908	-0.2	-39.84	0
67	SLD 1	-487	-3	1671	-0.19	-24.53	0
67	SLD 2	-487	-3	1671	-0.19	-24.53	0
67	SLD 3	-475	2	1693	0.45	-25.13	0
67	SLD 4	-475	2	1693	0.45	-25.13	0
67	SLD 5	-737	-9	1804	-1.17	-34.35	-0.01
67	SLD 6	-737	-9	1804	-1.17	-34.35	-0.01
67	SLD 7	-697	10	1876	0.97	-36.32	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
67	SLD 8	-697	10	1876	0.97	-36.32	0.01
67	SLD 9	-939	-9	1940	-1.37	-43.35	-0.01
67	SLD 10	-939	-9	1940	-1.37	-43.35	-0.01
67	SLD 11	-899	10	2011	0.78	-45.33	0.01
67	SLD 12	-899	10	2011	0.78	-45.33	0.01
67	SLD 13	-1160	-1	2123	-0.85	-54.54	0
67	SLD 14	-1160	-1	2123	-0.85	-54.54	0
67	SLD 15	-1148	4	2144	-0.2	-55.14	0.01
67	SLD 16	-1148	4	2144	-0.2	-55.14	0.01
67	SLV 1	-47	-10	1355	-0.28	-4.05	-0.01
67	SLV 2	-47	-10	1355	-0.28	-4.05	-0.01
67	SLV 3	-18	6	1410	1.45	-5.48	0
67	SLV 4	-18	6	1410	1.45	-5.48	0
67	SLV 5	-630	-27	1659	-2.85	-26.94	-0.03
67	SLV 6	-630	-27	1659	-2.85	-26.94	-0.03
67	SLV 7	-534	26	1841	2.92	-31.69	0.03
67	SLV 8	-534	26	1841	2.92	-31.69	0.03
67	SLV 9	-1102	-25	1974	-3.32	-47.98	-0.02
67	SLV 10	-1102	-25	1974	-3.32	-47.98	-0.02
67	SLV 11	-1005	28	2157	2.46	-52.73	0.03
67	SLV 12	-1005	28	2157	2.46	-52.73	0.03
67	SLV 13	-1618	-5	2406	-1.84	-74.2	0
67	SLV 14	-1618	-5	2406	-1.84	-74.2	0
67	SLV 15	-1589	11	2460	-0.11	-75.62	0.02
67	SLV 16	-1589	11	2460	-0.11	-75.62	0.02
68	SLU 1	-417	27	3276	-2.31	-12.29	0
68	SLU 2	-418	53	3412	-3.88	-12.21	0
68	SLU 3	-417	27	3276	-2.31	-12.29	0
68	SLU 4	-417	43	3358	-3.25	-12.24	0
68	SLU 5	-418	53	3412	-3.88	-12.21	0
68	SLU 6	-417	27	3276	-2.31	-12.29	0
68	SLU 7	-417	43	3358	-3.25	-12.24	0
68	SLU 8	-417	27	3276	-2.31	-12.29	0
68	SLU 9	-417	43	3358	-3.25	-12.24	0
68	SLU 10	-643	62	4285	-4.55	-20.6	0
68	SLU 11	-642	36	4149	-2.98	-20.69	0
68	SLU 12	-643	52	4231	-3.92	-20.63	0
68	SLU 13	-643	62	4285	-4.55	-20.6	0
68	SLU 14	-642	36	4149	-2.98	-20.69	0
68	SLU 15	-643	52	4231	-3.92	-20.63	0
68	SLU 16	-642	36	4149	-2.98	-20.69	0
68	SLU 17	-643	52	4231	-3.92	-20.63	0
68	SLU 18	-739	40	4523	-3.26	-24.28	0
68	SLU 19	-739	56	4605	-4.21	-24.23	0
68	SLU 20	-739	40	4523	-3.26	-24.28	0
68	SLU 21	-739	56	4605	-4.21	-24.23	0
68	SLU 22	-539	32	3759	-2.61	-16.82	0
68	SLU 23	-540	58	3896	-4.19	-16.74	0
68	SLU 24	-539	32	3759	-2.61	-16.82	0
68	SLU 25	-539	47	3841	-3.56	-16.77	0
68	SLU 26	-540	58	3896	-4.19	-16.74	0
68	SLU 27	-539	32	3759	-2.61	-16.82	0
68	SLU 28	-539	47	3841	-3.56	-16.77	0
68	SLU 29	-539	32	3759	-2.61	-16.82	0
68	SLU 30	-539	47	3841	-3.56	-16.77	0
68	SLU 31	-765	67	4769	-4.86	-25.13	0
68	SLU 32	-764	41	4632	-3.28	-25.22	0
68	SLU 33	-765	57	4714	-4.23	-25.17	0
68	SLU 34	-765	67	4769	-4.86	-25.13	0
68	SLU 35	-764	41	4632	-3.28	-25.22	0
68	SLU 36	-765	57	4714	-4.23	-25.17	0
68	SLU 37	-764	41	4632	-3.28	-25.22	0
68	SLU 38	-765	57	4714	-4.23	-25.17	0
68	SLU 39	-861	45	5006	-3.57	-28.81	0
68	SLU 40	-862	60	5088	-4.52	-28.76	0
68	SLU 41	-861	45	5006	-3.57	-28.81	0
68	SLU 42	-862	60	5088	-4.52	-28.76	0
68	SLU 43	-500	34	4093	-2.89	-14.43	0
68	SLU 44	-501	60	4229	-4.47	-14.34	0
68	SLU 45	-500	34	4093	-2.89	-14.43	0
68	SLU 46	-500	49	4175	-3.84	-14.38	0
68	SLU 47	-501	60	4229	-4.47	-14.34	0
68	SLU 48	-500	34	4093	-2.89	-14.43	0
68	SLU 49	-500	49	4175	-3.84	-14.38	0
68	SLU 50	-500	34	4093	-2.89	-14.43	0
68	SLU 51	-500	49	4175	-3.84	-14.38	0
68	SLU 52	-726	69	5102	-5.14	-22.74	0
68	SLU 53	-725	43	4966	-3.56	-22.82	0
68	SLU 54	-726	59	5048	-4.51	-22.77	0
68	SLU 55	-726	69	5102	-5.14	-22.74	0
68	SLU 56	-725	43	4966	-3.56	-22.82	0
68	SLU 57	-726	59	5048	-4.51	-22.77	0
68	SLU 58	-725	43	4966	-3.56	-22.82	0
68	SLU 59	-726	59	5048	-4.51	-22.77	0
68	SLU 60	-822	47	5340	-3.85	-26.42	0
68	SLU 61	-823	62	5422	-4.8	-26.37	0
68	SLU 62	-822	47	5340	-3.85	-26.42	0
68	SLU 63	-823	62	5422	-4.8	-26.37	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
68	SLU 64	-622	38	4576	-3.2	-18.96	0
68	SLU 65	-623	64	4713	-4.78	-18.87	0
68	SLU 66	-622	38	4576	-3.2	-18.96	0
68	SLU 67	-623	54	4658	-4.15	-18.91	0
68	SLU 68	-623	64	4713	-4.78	-18.87	0
68	SLU 69	-622	38	4576	-3.2	-18.96	0
68	SLU 70	-623	54	4658	-4.15	-18.91	0
68	SLU 71	-622	38	4576	-3.2	-18.96	0
68	SLU 72	-623	54	4658	-4.15	-18.91	0
68	SLU 73	-849	73	5586	-5.45	-27.27	0
68	SLU 74	-847	48	5449	-3.87	-27.35	0
68	SLU 75	-848	63	5531	-4.82	-27.3	0
68	SLU 76	-849	73	5586	-5.45	-27.27	0
68	SLU 77	-847	48	5449	-3.87	-27.35	0
68	SLU 78	-848	63	5531	-4.82	-27.3	0
68	SLU 79	-847	48	5449	-3.87	-27.35	0
68	SLU 80	-848	63	5531	-4.82	-27.3	0
68	SLU 81	-944	52	5823	-4.16	-30.95	0
68	SLU 82	-945	67	5905	-5.1	-30.9	0
68	SLU 83	-944	52	5823	-4.16	-30.95	0
68	SLU 84	-945	67	5905	-5.1	-30.9	0
68	SLE RA 1	-452	29	3414	-2.4	-13.59	0
68	SLE RA 2	-452	46	3505	-3.45	-13.53	0
68	SLE RA 3	-452	29	3414	-2.4	-13.59	0
68	SLE RA 4	-452	39	3468	-3.03	-13.55	0
68	SLE RA 5	-452	46	3505	-3.45	-13.53	0
68	SLE RA 6	-452	29	3414	-2.4	-13.59	0
68	SLE RA 7	-452	39	3468	-3.03	-13.55	0
68	SLE RA 8	-452	29	3414	-2.4	-13.59	0
68	SLE RA 9	-452	39	3468	-3.03	-13.55	0
68	SLE RA 10	-603	52	4087	-3.89	-19.13	0
68	SLE RA 11	-602	35	3996	-2.84	-19.18	0
68	SLE RA 12	-602	45	4050	-3.47	-19.15	0
68	SLE RA 13	-603	52	4087	-3.89	-19.13	0
68	SLE RA 14	-602	35	3996	-2.84	-19.18	0
68	SLE RA 15	-602	45	4050	-3.47	-19.15	0
68	SLE RA 16	-602	35	3996	-2.84	-19.18	0
68	SLE RA 17	-602	45	4050	-3.47	-19.15	0
68	SLE RA 18	-666	37	4245	-3.03	-21.58	0
68	SLE RA 19	-667	48	4300	-3.66	-21.55	0
68	SLE RA 20	-666	37	4245	-3.03	-21.58	0
68	SLE RA 21	-667	48	4300	-3.66	-21.55	0
68	SLE FR 1	-452	29	3414	-2.4	-13.59	0
68	SLE FR 2	-452	32	3432	-2.61	-13.58	0
68	SLE FR 3	-452	29	3414	-2.4	-13.59	0
68	SLE FR 4	-516	35	3681	-2.8	-15.97	0
68	SLE FR 5	-516	31	3663	-2.59	-15.99	0
68	SLE FR 6	-559	33	3829	-2.71	-17.58	0
68	SLE QP 1	-452	29	3414	-2.4	-13.59	0
68	SLE QP 2	-516	31	3663	-2.59	-15.99	0
68	SLD 1	-331	49	3055	-3.26	-8.14	0
68	SLD 2	-331	49	3055	-3.26	-8.14	0
68	SLD 3	-325	-53	3108	1.05	-7.89	0.01
68	SLD 4	-325	-53	3108	1.05	-7.89	0.01
68	SLD 5	-468	191	3400	-9.32	-14.01	-0.01
68	SLD 6	-468	191	3400	-9.32	-14.01	-0.01
68	SLD 7	-451	-149	3577	5.04	-13.18	0.01
68	SLD 8	-451	-149	3577	5.04	-13.18	0.01
68	SLD 9	-581	211	3749	-10.21	-18.79	-0.01
68	SLD 10	-581	211	3749	-10.21	-18.79	-0.01
68	SLD 11	-563	-129	3926	4.15	-17.96	0.01
68	SLD 12	-563	-129	3926	4.15	-17.96	0.01
68	SLD 13	-707	116	4219	-6.22	-24.08	-0.01
68	SLD 14	-707	116	4219	-6.22	-24.08	-0.01
68	SLD 15	-701	14	4272	-1.91	-23.83	0
68	SLD 16	-701	14	4272	-1.91	-23.83	0
68	SLV 1	-84	72	2241	-4.15	2.29	0.01
68	SLV 2	-84	72	2241	-4.15	2.29	0.01
68	SLV 3	-71	-171	2377	6.11	2.89	0.02
68	SLV 4	-71	-171	2377	6.11	2.89	0.02
68	SLV 5	-406	412	3030	-18.61	-11.42	-0.02
68	SLV 6	-406	412	3030	-18.61	-11.42	-0.02
68	SLV 7	-363	-398	3484	15.58	-9.41	0.03
68	SLV 8	-363	-398	3484	15.58	-9.41	0.03
68	SLV 9	-669	461	3843	-20.75	-22.56	-0.03
68	SLV 10	-669	461	3843	-20.75	-22.56	-0.03
68	SLV 11	-626	-350	4296	13.44	-20.55	0.02
68	SLV 12	-626	-350	4296	13.44	-20.55	0.02
68	SLV 13	-961	234	4949	-11.28	-34.86	-0.02
68	SLV 14	-961	234	4949	-11.28	-34.86	-0.02
68	SLV 15	-948	-9	5085	-1.02	-34.26	0
68	SLV 16	-948	-9	5085	-1.02	-34.26	0
69	SLU 1	-9	-142	2094	6.58	-0.06	-0.03
69	SLU 2	-9	-132	2209	6.83	1.39	-0.03
69	SLU 3	-9	-142	2094	6.58	-0.06	-0.03
69	SLU 4	-9	-136	2163	6.73	0.81	-0.03
69	SLU 5	-9	-132	2209	6.83	1.39	-0.03
69	SLU 6	-9	-142	2094	6.58	-0.06	-0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
69	SLU 7	-9	-136	2163	6.73	0.81	-0.03
69	SLU 8	-9	-142	2094	6.58	-0.06	-0.03
69	SLU 9	-9	-136	2163	6.73	0.81	-0.03
69	SLU 10	-13	-199	2651	9.53	0.92	-0.05
69	SLU 11	-12	-209	2536	9.28	-0.54	-0.05
69	SLU 12	-13	-203	2605	9.43	0.34	-0.05
69	SLU 13	-13	-199	2651	9.53	0.92	-0.05
69	SLU 14	-12	-209	2536	9.28	-0.54	-0.05
69	SLU 15	-13	-203	2605	9.43	0.34	-0.05
69	SLU 16	-12	-209	2536	9.28	-0.54	-0.05
69	SLU 17	-13	-203	2605	9.43	0.34	-0.05
69	SLU 18	-14	-238	2725	10.44	-0.74	-0.05
69	SLU 19	-14	-232	2794	10.59	0.13	-0.05
69	SLU 20	-14	-238	2725	10.44	-0.74	-0.05
69	SLU 21	-14	-232	2794	10.59	0.13	-0.05
69	SLU 22	-11	-178	2339	8	-0.35	-0.04
69	SLU 23	-11	-169	2454	8.24	1.1	-0.04
69	SLU 24	-11	-178	2339	8	-0.35	-0.04
69	SLU 25	-11	-173	2408	8.14	0.52	-0.04
69	SLU 26	-11	-169	2454	8.24	1.1	-0.04
69	SLU 27	-11	-178	2339	8	-0.35	-0.04
69	SLU 28	-11	-173	2408	8.14	0.52	-0.04
69	SLU 29	-11	-178	2339	8	-0.35	-0.04
69	SLU 30	-11	-173	2408	8.14	0.52	-0.04
69	SLU 31	-15	-236	2895	10.94	0.63	-0.06
69	SLU 32	-14	-246	2780	10.7	-0.83	-0.06
69	SLU 33	-15	-240	2849	10.85	0.05	-0.06
69	SLU 34	-15	-236	2895	10.94	0.63	-0.06
69	SLU 35	-14	-246	2780	10.7	-0.83	-0.06
69	SLU 36	-15	-240	2849	10.85	0.05	-0.06
69	SLU 37	-14	-246	2780	10.7	-0.83	-0.06
69	SLU 38	-15	-240	2849	10.85	0.05	-0.06
69	SLU 39	-16	-275	2970	11.86	-1.03	-0.06
69	SLU 40	-16	-269	3038	12	-0.16	-0.06
69	SLU 41	-16	-275	2970	11.86	-1.03	-0.06
69	SLU 42	-16	-269	3038	12	-0.16	-0.06
69	SLU 43	-10	-171	2639	8.07	0.02	-0.04
69	SLU 44	-11	-162	2754	8.31	1.47	-0.04
69	SLU 45	-10	-171	2639	8.07	0.02	-0.04
69	SLU 46	-11	-166	2708	8.21	0.89	-0.04
69	SLU 47	-11	-162	2754	8.31	1.47	-0.04
69	SLU 48	-10	-171	2639	8.07	0.02	-0.04
69	SLU 49	-11	-166	2708	8.21	0.89	-0.04
69	SLU 50	-10	-171	2639	8.07	0.02	-0.04
69	SLU 51	-11	-166	2708	8.21	0.89	-0.04
69	SLU 52	-15	-229	3195	11.02	1	-0.05
69	SLU 53	-14	-239	3080	10.77	-0.46	-0.05
69	SLU 54	-14	-233	3149	10.92	0.42	-0.05
69	SLU 55	-15	-229	3195	11.02	1	-0.05
69	SLU 56	-14	-239	3080	10.77	-0.46	-0.05
69	SLU 57	-14	-233	3149	10.92	0.42	-0.05
69	SLU 58	-14	-239	3080	10.77	-0.46	-0.05
69	SLU 59	-14	-233	3149	10.92	0.42	-0.05
69	SLU 60	-16	-268	3269	11.93	-0.66	-0.06
69	SLU 61	-16	-262	3338	12.08	0.21	-0.06
69	SLU 62	-16	-268	3269	11.93	-0.66	-0.06
69	SLU 63	-16	-262	3338	12.08	0.21	-0.06
69	SLU 64	-12	-208	2883	9.48	-0.27	-0.05
69	SLU 65	-13	-199	2998	9.73	1.18	-0.05
69	SLU 66	-12	-208	2883	9.48	-0.27	-0.05
69	SLU 67	-13	-202	2952	9.63	0.6	-0.05
69	SLU 68	-13	-199	2998	9.73	1.18	-0.05
69	SLU 69	-12	-208	2883	9.48	-0.27	-0.05
69	SLU 70	-13	-202	2952	9.63	0.6	-0.05
69	SLU 71	-12	-208	2883	9.48	-0.27	-0.05
69	SLU 72	-13	-202	2952	9.63	0.6	-0.05
69	SLU 73	-17	-266	3440	12.43	0.71	-0.06
69	SLU 74	-16	-276	3325	12.19	-0.75	-0.06
69	SLU 75	-16	-270	3394	12.33	0.13	-0.06
69	SLU 76	-17	-266	3440	12.43	0.71	-0.06
69	SLU 77	-16	-276	3325	12.19	-0.75	-0.06
69	SLU 78	-16	-270	3394	12.33	0.13	-0.06
69	SLU 79	-16	-276	3325	12.19	-0.75	-0.06
69	SLU 80	-16	-270	3394	12.33	0.13	-0.06
69	SLU 81	-18	-305	3514	13.34	-0.95	-0.07
69	SLU 82	-18	-299	3583	13.49	-0.08	-0.07
69	SLU 83	-18	-305	3514	13.34	-0.95	-0.07
69	SLU 84	-18	-299	3583	13.49	-0.08	-0.07
69	SLE RA 1	-9	-152	2164	6.98	-0.15	-0.03
69	SLE RA 2	-9	-146	2241	7.15	0.82	-0.03
69	SLE RA 3	-9	-152	2164	6.98	-0.15	-0.03
69	SLE RA 4	-9	-148	2210	7.08	0.43	-0.03
69	SLE RA 5	-9	-146	2241	7.15	0.82	-0.03
69	SLE RA 6	-9	-152	2164	6.98	-0.15	-0.03
69	SLE RA 7	-9	-148	2210	7.08	0.43	-0.03
69	SLE RA 8	-9	-152	2164	6.98	-0.15	-0.03
69	SLE RA 9	-9	-148	2210	7.08	0.43	-0.03
69	SLE RA 10	-12	-191	2535	8.95	0.51	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
69	SLE RA 11	-12	-197	2458	8.79	-0.46	-0.05
69	SLE RA 12	-12	-193	2504	8.88	0.12	-0.05
69	SLE RA 13	-12	-191	2535	8.95	0.51	-0.05
69	SLE RA 14	-12	-197	2458	8.79	-0.46	-0.05
69	SLE RA 15	-12	-193	2504	8.88	0.12	-0.05
69	SLE RA 16	-12	-197	2458	8.79	-0.46	-0.05
69	SLE RA 17	-12	-193	2504	8.88	0.12	-0.05
69	SLE RA 18	-13	-216	2585	9.56	-0.6	-0.05
69	SLE RA 19	-13	-213	2631	9.66	-0.02	-0.05
69	SLE RA 20	-13	-216	2585	9.56	-0.6	-0.05
69	SLE RA 21	-13	-213	2631	9.66	-0.02	-0.05
69	SLE FR 1	-9	-152	2164	6.98	-0.15	-0.03
69	SLE FR 2	-9	-151	2179	7.02	0.05	-0.03
69	SLE FR 3	-9	-152	2164	6.98	-0.15	-0.03
69	SLE FR 4	-10	-170	2306	7.79	-0.09	-0.04
69	SLE FR 5	-10	-171	2290	7.76	-0.28	-0.04
69	SLE FR 6	-11	-184	2374	8.27	-0.37	-0.04
69	SLE QP 1	-9	-152	2164	6.98	-0.15	-0.03
69	SLE QP 2	-10	-171	2290	7.76	-0.28	-0.04
69	SLD 1	-4	-64	1992	3.53	2.1	-0.03
69	SLD 2	-4	-64	1992	3.53	2.1	-0.03
69	SLD 3	-8	-159	2045	7.53	0.7	-0.03
69	SLD 4	-8	-159	2045	7.53	0.7	-0.03
69	SLD 5	-3	5	2121	0.42	2.55	-0.04
69	SLD 6	-3	5	2121	0.42	2.55	-0.04
69	SLD 7	-15	-312	2297	13.76	-2.1	-0.03
69	SLD 8	-15	-312	2297	13.76	-2.1	-0.03
69	SLD 9	-6	-31	2284	1.75	1.54	-0.05
69	SLD 10	-6	-31	2284	1.75	1.54	-0.05
69	SLD 11	-17	-348	2460	15.1	-3.11	-0.04
69	SLD 12	-17	-348	2460	15.1	-3.11	-0.04
69	SLD 13	-13	-184	2535	7.98	-1.27	-0.05
69	SLD 14	-13	-184	2535	7.98	-1.27	-0.05
69	SLD 15	-16	-279	2588	11.99	-2.66	-0.05
69	SLD 16	-16	-279	2588	11.99	-2.66	-0.05
69	SLV 1	5	83	1591	-2.26	5.57	-0.02
69	SLV 2	5	83	1591	-2.26	5.57	-0.02
69	SLV 3	-5	-143	1726	7.22	1.78	-0.01
69	SLV 4	-5	-143	1726	7.22	1.78	-0.01
69	SLV 5	9	247	1875	-9.64	7.23	-0.04
69	SLV 6	9	247	1875	-9.64	7.23	-0.04
69	SLV 7	-23	-505	2326	21.99	-5.41	-0.02
69	SLV 8	-23	-505	2326	21.99	-5.41	-0.02
69	SLV 9	2	162	2254	-6.47	4.85	-0.06
69	SLV 10	2	162	2254	-6.47	4.85	-0.06
69	SLV 11	-29	-590	2705	25.15	-7.79	-0.03
69	SLV 12	-29	-590	2705	25.15	-7.79	-0.03
69	SLV 13	-16	-200	2854	8.29	-2.35	-0.07
69	SLV 14	-16	-200	2854	8.29	-2.35	-0.07
69	SLV 15	-25	-426	2989	17.78	-6.14	-0.06
69	SLV 16	-25	-426	2989	17.78	-6.14	-0.06
70	SLU 1	8	-134	2297	2.13	-0.11	0.03
70	SLU 2	9	-124	2402	0.93	-1.69	0.03
70	SLU 3	8	-134	2297	2.13	-0.11	0.03
70	SLU 4	9	-128	2360	1.41	-1.06	0.03
70	SLU 5	9	-124	2402	0.93	-1.69	0.03
70	SLU 6	8	-134	2297	2.13	-0.11	0.03
70	SLU 7	9	-128	2360	1.41	-1.06	0.03
70	SLU 8	8	-134	2297	2.13	-0.11	0.03
70	SLU 9	9	-128	2360	1.41	-1.06	0.03
70	SLU 10	12	-198	2840	2.58	-1.29	0.04
70	SLU 11	12	-207	2735	3.79	0.29	0.04
70	SLU 12	12	-201	2798	3.06	-0.66	0.04
70	SLU 13	12	-198	2840	2.58	-1.29	0.04
70	SLU 14	12	-207	2735	3.79	0.29	0.04
70	SLU 15	12	-201	2798	3.06	-0.66	0.04
70	SLU 16	12	-207	2735	3.79	0.29	0.04
70	SLU 17	12	-201	2798	3.06	-0.66	0.04
70	SLU 18	13	-238	2923	4.5	0.47	0.05
70	SLU 19	13	-233	2986	3.77	-0.48	0.04
70	SLU 20	13	-238	2923	4.5	0.47	0.05
70	SLU 21	13	-233	2986	3.77	-0.48	0.04
70	SLU 22	10	-175	2562	3.12	0.14	0.03
70	SLU 23	11	-165	2667	1.92	-1.44	0.03
70	SLU 24	10	-175	2562	3.12	0.14	0.03
70	SLU 25	10	-169	2625	2.4	-0.81	0.03
70	SLU 26	11	-165	2667	1.92	-1.44	0.03
70	SLU 27	10	-175	2562	3.12	0.14	0.03
70	SLU 28	10	-169	2625	2.4	-0.81	0.03
70	SLU 29	10	-175	2562	3.12	0.14	0.03
70	SLU 30	10	-169	2625	2.4	-0.81	0.03
70	SLU 31	14	-239	3105	3.58	-1.04	0.05
70	SLU 32	14	-248	3000	4.78	0.54	0.05
70	SLU 33	14	-242	3063	4.06	-0.41	0.05
70	SLU 34	14	-239	3105	3.58	-1.04	0.05
70	SLU 35	14	-248	3000	4.78	0.54	0.05
70	SLU 36	14	-242	3063	4.06	-0.41	0.05
70	SLU 37	14	-248	3000	4.78	0.54	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
70	SLU 38	14	-242	3063	4.06	-0.41	0.05
70	SLU 39	15	-279	3188	5.49	0.72	0.05
70	SLU 40	15	-274	3251	4.77	-0.23	0.05
70	SLU 41	15	-279	3188	5.49	0.72	0.05
70	SLU 42	15	-274	3251	4.77	-0.23	0.05
70	SLU 43	10	-160	2895	2.43	-0.23	0.03
70	SLU 44	11	-150	3000	1.22	-1.81	0.03
70	SLU 45	10	-160	2895	2.43	-0.23	0.03
70	SLU 46	10	-154	2958	1.71	-1.18	0.03
70	SLU 47	11	-150	3000	1.22	-1.81	0.03
70	SLU 48	10	-160	2895	2.43	-0.23	0.03
70	SLU 49	10	-154	2958	1.71	-1.18	0.03
70	SLU 50	10	-160	2895	2.43	-0.23	0.03
70	SLU 51	10	-154	2958	1.71	-1.18	0.03
70	SLU 52	14	-223	3438	2.88	-1.41	0.05
70	SLU 53	14	-233	3334	4.09	0.18	0.05
70	SLU 54	14	-227	3396	3.36	-0.77	0.05
70	SLU 55	14	-223	3438	2.88	-1.41	0.05
70	SLU 56	14	-233	3334	4.09	0.18	0.05
70	SLU 57	14	-227	3396	3.36	-0.77	0.05
70	SLU 58	14	-233	3334	4.09	0.18	0.05
70	SLU 59	14	-227	3396	3.36	-0.77	0.05
70	SLU 60	15	-264	3521	4.8	0.35	0.05
70	SLU 61	15	-259	3584	4.07	-0.6	0.05
70	SLU 62	15	-264	3521	4.8	0.35	0.05
70	SLU 63	15	-259	3584	4.07	-0.6	0.05
70	SLU 64	12	-201	3160	3.42	0.02	0.04
70	SLU 65	13	-191	3265	2.22	-1.56	0.04
70	SLU 66	12	-201	3160	3.42	0.02	0.04
70	SLU 67	12	-195	3223	2.7	-0.93	0.04
70	SLU 68	13	-191	3265	2.22	-1.56	0.04
70	SLU 69	12	-201	3160	3.42	0.02	0.04
70	SLU 70	12	-195	3223	2.7	-0.93	0.04
70	SLU 71	12	-201	3160	3.42	0.02	0.04
70	SLU 72	12	-195	3223	2.7	-0.93	0.04
70	SLU 73	16	-265	3703	3.87	-1.16	0.05
70	SLU 74	15	-274	3599	5.08	0.43	0.05
70	SLU 75	16	-268	3661	4.36	-0.52	0.05
70	SLU 76	16	-265	3703	3.87	-1.16	0.05
70	SLU 77	15	-274	3599	5.08	0.43	0.05
70	SLU 78	16	-268	3661	4.36	-0.52	0.05
70	SLU 79	15	-274	3599	5.08	0.43	0.05
70	SLU 80	16	-268	3661	4.36	-0.52	0.05
70	SLU 81	17	-305	3786	5.79	0.6	0.06
70	SLU 82	17	-300	3849	5.07	-0.35	0.06
70	SLU 83	17	-305	3786	5.79	0.6	0.06
70	SLU 84	17	-300	3849	5.07	-0.35	0.06
70	SLE RA 1	9	-145	2373	2.41	-0.04	0.03
70	SLE RA 2	9	-139	2443	1.61	-1.09	0.03
70	SLE RA 3	9	-145	2373	2.41	-0.04	0.03
70	SLE RA 4	9	-141	2415	1.93	-0.67	0.03
70	SLE RA 5	9	-139	2443	1.61	-1.09	0.03
70	SLE RA 6	9	-145	2373	2.41	-0.04	0.03
70	SLE RA 7	9	-141	2415	1.93	-0.67	0.03
70	SLE RA 8	9	-145	2373	2.41	-0.04	0.03
70	SLE RA 9	9	-141	2415	1.93	-0.67	0.03
70	SLE RA 10	11	-188	2735	2.72	-0.82	0.04
70	SLE RA 11	11	-194	2665	3.52	0.23	0.04
70	SLE RA 12	11	-190	2707	3.04	-0.4	0.04
70	SLE RA 13	11	-188	2735	2.72	-0.82	0.04
70	SLE RA 14	11	-194	2665	3.52	0.23	0.04
70	SLE RA 15	11	-190	2707	3.04	-0.4	0.04
70	SLE RA 16	11	-194	2665	3.52	0.23	0.04
70	SLE RA 17	11	-190	2707	3.04	-0.4	0.04
70	SLE RA 18	12	-215	2790	3.99	0.35	0.04
70	SLE RA 19	12	-211	2832	3.51	-0.29	0.04
70	SLE RA 20	12	-215	2790	3.99	0.35	0.04
70	SLE RA 21	12	-211	2832	3.51	-0.29	0.04
70	SLE FR 1	9	-145	2373	2.41	-0.04	0.03
70	SLE FR 2	9	-144	2387	2.25	-0.25	0.03
70	SLE FR 3	9	-145	2373	2.41	-0.04	0.03
70	SLE FR 4	10	-165	2512	2.73	-0.13	0.03
70	SLE FR 5	10	-166	2498	2.89	0.08	0.03
70	SLE FR 6	10	-180	2582	3.2	0.16	0.04
70	SLE QP 1	9	-145	2373	2.41	-0.04	0.03
70	SLE QP 2	10	-166	2498	2.89	0.08	0.03
70	SLD 1	13	-180	2765	2.71	1.96	0.05
70	SLD 2	13	-180	2765	2.71	1.96	0.05
70	SLD 3	17	-296	2835	7.49	3.46	0.04
70	SLD 4	17	-296	2835	7.49	3.46	0.04
70	SLD 5	4	7	2472	-4.41	-1.62	0.05
70	SLD 6	4	7	2472	-4.41	-1.62	0.05
70	SLD 7	18	-382	2705	11.51	3.36	0.02
70	SLD 8	18	-382	2705	11.51	3.36	0.02
70	SLD 9	1	50	2291	-5.74	-3.2	0.04
70	SLD 10	1	50	2291	-5.74	-3.2	0.04
70	SLD 11	15	-339	2524	10.19	1.78	0.02
70	SLD 12	15	-339	2524	10.19	1.78	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
70	SLD 13	3	-36	2161	-1.71	-3.3	0.03
70	SLD 14	3	-36	2161	-1.71	-3.3	0.03
70	SLD 15	7	-153	2231	3.07	-1.81	0.02
70	SLD 16	7	-153	2231	3.07	-1.81	0.02
70	SLV 1	16	-197	3116	2.44	4.21	0.07
70	SLV 2	16	-197	3116	2.44	4.21	0.07
70	SLV 3	27	-474	3311	13.78	8.3	0.05
70	SLV 4	27	-474	3311	13.78	8.3	0.05
70	SLV 5	-6	244	2387	-14.45	-4.89	0.07
70	SLV 6	-6	244	2387	-14.45	-4.89	0.07
70	SLV 7	32	-678	3038	23.35	8.75	0.01
70	SLV 8	32	-678	3038	23.35	8.75	0.01
70	SLV 9	-12	346	1958	-17.58	-8.59	0.06
70	SLV 10	-12	346	1958	-17.58	-8.59	0.06
70	SLV 11	25	-577	2609	20.22	5.04	-0.01
70	SLV 12	25	-577	2609	20.22	5.04	-0.01
70	SLV 13	-7	141	1685	-8	-8.15	0.02
70	SLV 14	-7	141	1685	-8	-8.15	0.02
70	SLV 15	4	-136	1881	3.34	-4.05	0
70	SLV 16	4	-136	1881	3.34	-4.05	0
71	SLU 1	2	-149	1921	3.17	3.97	0
71	SLU 2	3	-141	2038	2.02	7.37	0
71	SLU 3	2	-149	1921	3.17	3.97	0
71	SLU 4	2	-144	1991	2.48	6.01	0
71	SLU 5	3	-141	2038	2.02	7.37	0
71	SLU 6	2	-149	1921	3.17	3.97	0
71	SLU 7	2	-144	1991	2.48	6.01	0
71	SLU 8	2	-149	1921	3.17	3.97	0
71	SLU 9	2	-144	1991	2.48	6.01	0
71	SLU 10	3	-194	2381	3.16	8.3	0
71	SLU 11	2	-202	2264	4.31	4.9	0
71	SLU 12	3	-198	2334	3.62	6.94	0
71	SLU 13	3	-194	2381	3.16	8.3	0
71	SLU 14	2	-202	2264	4.31	4.9	0
71	SLU 15	3	-198	2334	3.62	6.94	0
71	SLU 16	2	-202	2264	4.31	4.9	0
71	SLU 17	3	-198	2334	3.62	6.94	0
71	SLU 18	2	-225	2411	4.8	5.3	0
71	SLU 19	3	-220	2481	4.11	7.34	0
71	SLU 20	2	-225	2411	4.8	5.3	0
71	SLU 21	3	-220	2481	4.11	7.34	0
71	SLU 22	2	-180	2110	3.91	4.37	0
71	SLU 23	3	-172	2228	2.76	7.77	0
71	SLU 24	2	-180	2110	3.91	4.37	0
71	SLU 25	2	-175	2181	3.22	6.41	0
71	SLU 26	3	-172	2228	2.76	7.77	0
71	SLU 27	2	-180	2110	3.91	4.37	0
71	SLU 28	2	-175	2181	3.22	6.41	0
71	SLU 29	2	-180	2110	3.91	4.37	0
71	SLU 30	2	-175	2181	3.22	6.41	0
71	SLU 31	3	-225	2571	3.9	8.7	0
71	SLU 32	2	-233	2454	5.05	5.3	0
71	SLU 33	3	-228	2524	4.36	7.34	0
71	SLU 34	3	-225	2571	3.9	8.7	0
71	SLU 35	2	-233	2454	5.05	5.3	0
71	SLU 36	3	-228	2524	4.36	7.34	0
71	SLU 37	2	-233	2454	5.05	5.3	0
71	SLU 38	3	-228	2524	4.36	7.34	0
71	SLU 39	2	-256	2601	5.54	5.7	0
71	SLU 40	3	-251	2671	4.85	7.74	0.01
71	SLU 41	2	-256	2601	5.54	5.7	0
71	SLU 42	3	-251	2671	4.85	7.74	0.01
71	SLU 43	2	-184	2432	3.86	5.03	0
71	SLU 44	3	-176	2549	2.71	8.43	0
71	SLU 45	2	-184	2432	3.86	5.03	0
71	SLU 46	3	-179	2502	3.17	7.07	0
71	SLU 47	3	-176	2549	2.71	8.43	0
71	SLU 48	2	-184	2432	3.86	5.03	0
71	SLU 49	3	-179	2502	3.17	7.07	0
71	SLU 50	2	-184	2432	3.86	5.03	0
71	SLU 51	3	-179	2502	3.17	7.07	0
71	SLU 52	4	-229	2893	3.85	9.35	0
71	SLU 53	2	-237	2775	5	5.95	0
71	SLU 54	3	-232	2846	4.31	7.99	0
71	SLU 55	4	-229	2893	3.85	9.35	0
71	SLU 56	2	-237	2775	5	5.95	0
71	SLU 57	3	-232	2846	4.31	7.99	0
71	SLU 58	2	-237	2775	5	5.95	0
71	SLU 59	3	-232	2846	4.31	7.99	0
71	SLU 60	3	-260	2922	5.49	6.35	0.01
71	SLU 61	3	-255	2993	4.8	8.39	0.01
71	SLU 62	3	-260	2922	5.49	6.35	0.01
71	SLU 63	3	-255	2993	4.8	8.39	0.01
71	SLU 64	2	-214	2622	4.61	5.43	0
71	SLU 65	3	-206	2739	3.46	8.83	0
71	SLU 66	2	-214	2622	4.61	5.43	0
71	SLU 67	3	-209	2692	3.92	7.47	0
71	SLU 68	3	-206	2739	3.46	8.83	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
71	SLU 69	2	-214	2622	4.61	5.43	0
71	SLU 70	3	-209	2692	3.92	7.47	0
71	SLU 71	2	-214	2622	4.61	5.43	0
71	SLU 72	3	-209	2692	3.92	7.47	0
71	SLU 73	4	-259	3082	4.6	9.75	0.01
71	SLU 74	2	-267	2965	5.75	6.35	0.01
71	SLU 75	3	-262	3035	5.06	8.39	0.01
71	SLU 76	4	-259	3082	4.6	9.75	0.01
71	SLU 77	2	-267	2965	5.75	6.35	0.01
71	SLU 78	3	-262	3035	5.06	8.39	0.01
71	SLU 79	2	-267	2965	5.75	6.35	0.01
71	SLU 80	3	-262	3035	5.06	8.39	0.01
71	SLU 81	3	-290	3112	6.24	6.75	0.01
71	SLU 82	3	-285	3182	5.55	8.79	0.01
71	SLU 83	3	-290	3112	6.24	6.75	0.01
71	SLU 84	3	-285	3182	5.55	8.79	0.01
71	SLE RA 1	2	-158	1975	3.38	4.09	0
71	SLE RA 2	3	-153	2053	2.61	6.35	0
71	SLE RA 3	2	-158	1975	3.38	4.09	0
71	SLE RA 4	2	-155	2022	2.92	5.45	0
71	SLE RA 5	3	-153	2053	2.61	6.35	0
71	SLE RA 6	2	-158	1975	3.38	4.09	0
71	SLE RA 7	2	-155	2022	2.92	5.45	0
71	SLE RA 8	2	-158	1975	3.38	4.09	0
71	SLE RA 9	2	-155	2022	2.92	5.45	0
71	SLE RA 10	3	-188	2282	3.37	6.97	0
71	SLE RA 11	2	-193	2204	4.14	4.71	0
71	SLE RA 12	2	-190	2251	3.68	6.07	0
71	SLE RA 13	3	-188	2282	3.37	6.97	0
71	SLE RA 14	2	-193	2204	4.14	4.71	0
71	SLE RA 15	2	-190	2251	3.68	6.07	0
71	SLE RA 16	2	-193	2204	4.14	4.71	0
71	SLE RA 17	2	-190	2251	3.68	6.07	0
71	SLE RA 18	2	-209	2302	4.47	4.97	0
71	SLE RA 19	2	-205	2349	4.01	6.33	0
71	SLE RA 20	2	-209	2302	4.47	4.97	0
71	SLE RA 21	2	-205	2349	4.01	6.33	0
71	SLE FR 1	2	-158	1975	3.38	4.09	0
71	SLE FR 2	2	-157	1991	3.23	4.54	0
71	SLE FR 3	2	-158	1975	3.38	4.09	0
71	SLE FR 4	2	-172	2089	3.55	4.81	0
71	SLE FR 5	2	-173	2073	3.71	4.35	0
71	SLE FR 6	2	-183	2138	3.92	4.53	0
71	SLE QP 1	2	-158	1975	3.38	4.09	0
71	SLE QP 2	2	-173	2073	3.71	4.35	0
71	SLD 1	1	-75	1854	-0.01	9.12	-0.01
71	SLD 2	1	-75	1854	-0.01	9.12	-0.01
71	SLD 3	-4	-169	1918	3.85	6.74	-0.03
71	SLD 4	-4	-169	1918	3.85	6.74	-0.03
71	SLD 5	8	-2	1909	-3.26	9.39	0.03
71	SLD 6	8	-2	1909	-3.26	9.39	0.03
71	SLD 7	-7	-314	2124	9.6	1.46	-0.03
71	SLD 8	-7	-314	2124	9.6	1.46	-0.03
71	SLD 9	10	-33	2022	-2.19	7.24	0.04
71	SLD 10	10	-33	2022	-2.19	7.24	0.04
71	SLD 11	-5	-345	2237	10.67	-0.69	-0.02
71	SLD 12	-5	-345	2237	10.67	-0.69	-0.02
71	SLD 13	7	-178	2228	3.56	1.96	0.03
71	SLD 14	7	-178	2228	3.56	1.96	0.03
71	SLD 15	3	-271	2292	7.42	-0.42	0.02
71	SLD 16	3	-271	2292	7.42	-0.42	0.02
71	SLV 1	0	58	1556	-5.08	15.99	-0.02
71	SLV 2	0	58	1556	-5.08	15.99	-0.02
71	SLV 3	-12	-163	1721	4.05	9.58	-0.07
71	SLV 4	-12	-163	1721	4.05	9.58	-0.07
71	SLV 5	19	232	1667	-12.79	17.57	0.07
71	SLV 6	19	232	1667	-12.79	17.57	0.07
71	SLV 7	-21	-506	2218	17.67	-3.81	-0.1
71	SLV 8	-21	-506	2218	17.67	-3.81	-0.1
71	SLV 9	24	160	1928	-10.25	12.51	0.1
71	SLV 10	24	160	1928	-10.25	12.51	0.1
71	SLV 11	-16	-579	2479	20.2	-8.86	-0.06
71	SLV 12	-16	-579	2479	20.2	-8.86	-0.06
71	SLV 13	16	-183	2425	3.36	-0.87	0.08
71	SLV 14	16	-183	2425	3.36	-0.87	0.08
71	SLV 15	4	-405	2590	12.5	-7.28	0.03
71	SLV 16	4	-405	2590	12.5	-7.28	0.03
72	SLU 1	-4	-199	2103	10.14	-4.76	0
72	SLU 2	-5	-218	2211	11.98	-8.52	0.01
72	SLU 3	-4	-199	2103	10.14	-4.76	0
72	SLU 4	-4	-210	2168	11.24	-7.01	0.01
72	SLU 5	-5	-218	2211	11.98	-8.52	0.01
72	SLU 6	-4	-199	2103	10.14	-4.76	0
72	SLU 7	-4	-210	2168	11.24	-7.01	0.01
72	SLU 8	-4	-199	2103	10.14	-4.76	0
72	SLU 9	-4	-210	2168	11.24	-7.01	0.01
72	SLU 10	-6	-297	2541	15.67	-9.62	0.01
72	SLU 11	-4	-278	2433	13.83	-5.87	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
72	SLU 12	-5	-289	2498	14.94	-8.12	0.01
72	SLU 13	-6	-297	2541	15.67	-9.62	0.01
72	SLU 14	-4	-278	2433	13.83	-5.87	0
72	SLU 15	-5	-289	2498	14.94	-8.12	0.01
72	SLU 16	-4	-278	2433	13.83	-5.87	0
72	SLU 17	-5	-289	2498	14.94	-8.12	0.01
72	SLU 18	-5	-312	2575	15.41	-6.34	0
72	SLU 19	-5	-323	2639	16.52	-8.59	0.01
72	SLU 20	-5	-312	2575	15.41	-6.34	0
72	SLU 21	-5	-323	2639	16.52	-8.59	0.01
72	SLU 22	-4	-243	2307	12.1	-5.29	0
72	SLU 23	-5	-262	2415	13.94	-9.04	0.01
72	SLU 24	-4	-243	2307	12.1	-5.29	0
72	SLU 25	-5	-254	2372	13.2	-7.54	0.01
72	SLU 26	-5	-262	2415	13.94	-9.04	0.01
72	SLU 27	-4	-243	2307	12.1	-5.29	0
72	SLU 28	-5	-254	2372	13.2	-7.54	0.01
72	SLU 29	-4	-243	2307	12.1	-5.29	0
72	SLU 30	-5	-254	2372	13.2	-7.54	0.01
72	SLU 31	-6	-341	2745	17.63	-10.15	0.01
72	SLU 32	-5	-322	2638	15.79	-6.4	0
72	SLU 33	-5	-333	2702	16.9	-8.65	0.01
72	SLU 34	-6	-341	2745	17.63	-10.15	0.01
72	SLU 35	-5	-322	2638	15.79	-6.4	0
72	SLU 36	-5	-333	2702	16.9	-8.65	0.01
72	SLU 37	-5	-322	2638	15.79	-6.4	0
72	SLU 38	-5	-333	2702	16.9	-8.65	0.01
72	SLU 39	-5	-356	2779	17.38	-6.87	0
72	SLU 40	-6	-367	2844	18.48	-9.12	0.01
72	SLU 41	-5	-356	2779	17.38	-6.87	0
72	SLU 42	-6	-367	2844	18.48	-9.12	0.01
72	SLU 43	-5	-244	2664	12.5	-6.01	0.01
72	SLU 44	-6	-262	2772	14.35	-9.76	0.01
72	SLU 45	-5	-244	2664	12.5	-6.01	0.01
72	SLU 46	-5	-255	2729	13.61	-8.26	0.01
72	SLU 47	-6	-262	2772	14.35	-9.76	0.01
72	SLU 48	-5	-244	2664	12.5	-6.01	0.01
72	SLU 49	-5	-255	2729	13.61	-8.26	0.01
72	SLU 50	-5	-244	2664	12.5	-6.01	0.01
72	SLU 51	-5	-255	2729	13.61	-8.26	0.01
72	SLU 52	-7	-342	3102	18.04	-10.87	0.01
72	SLU 53	-5	-323	2994	16.2	-7.12	0
72	SLU 54	-6	-334	3059	17.3	-9.37	0.01
72	SLU 55	-7	-342	3102	18.04	-10.87	0.01
72	SLU 56	-5	-323	2994	16.2	-7.12	0
72	SLU 57	-6	-334	3059	17.3	-9.37	0.01
72	SLU 58	-5	-323	2994	16.2	-7.12	0
72	SLU 59	-6	-334	3059	17.3	-9.37	0.01
72	SLU 60	-6	-357	3136	17.78	-7.59	0
72	SLU 61	-6	-368	3200	18.89	-9.84	0.01
72	SLU 62	-6	-357	3136	17.78	-7.59	0
72	SLU 63	-6	-368	3200	18.89	-9.84	0.01
72	SLU 64	-5	-288	2868	14.47	-6.54	0.01
72	SLU 65	-6	-306	2976	16.31	-10.29	0.01
72	SLU 66	-5	-288	2868	14.47	-6.54	0.01
72	SLU 67	-6	-299	2933	15.57	-8.79	0.01
72	SLU 68	-6	-306	2976	16.31	-10.29	0.01
72	SLU 69	-5	-288	2868	14.47	-6.54	0.01
72	SLU 70	-6	-299	2933	15.57	-8.79	0.01
72	SLU 71	-5	-288	2868	14.47	-6.54	0.01
72	SLU 72	-6	-299	2933	15.57	-8.79	0.01
72	SLU 73	-7	-385	3306	20	-11.4	0.01
72	SLU 74	-6	-367	3199	18.16	-7.64	0
72	SLU 75	-6	-378	3263	19.27	-9.89	0.01
72	SLU 76	-7	-385	3306	20	-11.4	0.01
72	SLU 77	-6	-367	3199	18.16	-7.64	0
72	SLU 78	-6	-378	3263	19.27	-9.89	0.01
72	SLU 79	-6	-367	3199	18.16	-7.64	0
72	SLU 80	-6	-378	3263	19.27	-9.89	0.01
72	SLU 81	-6	-401	3340	19.74	-8.12	0
72	SLU 82	-7	-412	3405	20.85	-10.37	0.01
72	SLU 83	-6	-401	3340	19.74	-8.12	0
72	SLU 84	-7	-412	3405	20.85	-10.37	0.01
72	SLE RA 1	-4	-212	2162	10.7	-4.91	0
72	SLE RA 2	-5	-224	2233	11.92	-7.42	0.01
72	SLE RA 3	-4	-212	2162	10.7	-4.91	0
72	SLE RA 4	-4	-219	2205	11.43	-6.41	0.01
72	SLE RA 5	-5	-224	2233	11.92	-7.42	0.01
72	SLE RA 6	-4	-212	2162	10.7	-4.91	0
72	SLE RA 7	-4	-219	2205	11.43	-6.41	0.01
72	SLE RA 8	-4	-212	2162	10.7	-4.91	0
72	SLE RA 9	-4	-219	2205	11.43	-6.41	0.01
72	SLE RA 10	-5	-277	2453	14.39	-8.15	0.01
72	SLE RA 11	-4	-264	2382	13.16	-5.65	0
72	SLE RA 12	-5	-272	2425	13.9	-7.15	0.01
72	SLE RA 13	-5	-277	2453	14.39	-8.15	0.01
72	SLE RA 14	-4	-264	2382	13.16	-5.65	0
72	SLE RA 15	-5	-272	2425	13.9	-7.15	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
72	SLE RA 16	-4	-264	2382	13.16	-5.65	0
72	SLE RA 17	-5	-272	2425	13.9	-7.15	0.01
72	SLE RA 18	-4	-287	2476	14.21	-5.97	0
72	SLE RA 19	-5	-294	2519	14.95	-7.47	0.01
72	SLE RA 20	-4	-287	2476	14.21	-5.97	0
72	SLE RA 21	-5	-294	2519	14.95	-7.47	0.01
72	SLE FR 1	-4	-212	2162	10.7	-4.91	0
72	SLE FR 2	-4	-214	2176	10.94	-5.41	0
72	SLE FR 3	-4	-212	2162	10.7	-4.91	0
72	SLE FR 4	-4	-237	2270	12	-5.73	0
72	SLE FR 5	-4	-234	2256	11.75	-5.23	0
72	SLE FR 6	-4	-249	2319	12.46	-5.44	0
72	SLE QP 1	-4	-212	2162	10.7	-4.91	0
72	SLE QP 2	-4	-234	2256	11.75	-5.23	0
72	SLD 1	-11	-248	2427	12.53	-1.13	-0.01
72	SLD 2	-11	-248	2427	12.53	-1.13	-0.01
72	SLD 3	-7	-365	2497	17.4	1.22	-0.01
72	SLD 4	-7	-365	2497	17.4	1.22	-0.01
72	SLD 5	-13	-61	2202	4.6	-7.57	-0.01
72	SLD 6	-13	-61	2202	4.6	-7.57	-0.01
72	SLD 7	3	-451	2434	20.83	0.28	0.01
72	SLD 8	3	-451	2434	20.83	0.28	0.01
72	SLD 9	-10	-18	2078	2.68	-10.74	0
72	SLD 10	-10	-18	2078	2.68	-10.74	0
72	SLD 11	6	-408	2310	18.9	-2.89	0.02
72	SLD 12	6	-408	2310	18.9	-2.89	0.02
72	SLD 13	-1	-104	2015	6.11	-11.68	0.02
72	SLD 14	-1	-104	2015	6.11	-11.68	0.02
72	SLD 15	4	-221	2084	10.98	-9.33	0.02
72	SLD 16	4	-221	2084	10.98	-9.33	0.02
72	SLV 1	-22	-267	2650	13.69	3.98	-0.04
72	SLV 2	-22	-267	2650	13.69	3.98	-0.04
72	SLV 3	-9	-544	2844	25.22	10.35	-0.02
72	SLV 4	-9	-544	2844	25.22	10.35	-0.02
72	SLV 5	-29	176	2080	-5.15	-12.13	-0.04
72	SLV 6	-29	176	2080	-5.15	-12.13	-0.04
72	SLV 7	14	-747	2727	33.27	9.11	0.02
72	SLV 8	14	-747	2727	33.27	9.11	0.02
72	SLV 9	-22	279	1785	-9.77	-19.57	-0.01
72	SLV 10	-22	279	1785	-9.77	-19.57	-0.01
72	SLV 11	21	-644	2432	28.65	1.67	0.04
72	SLV 12	21	-644	2432	28.65	1.67	0.04
72	SLV 13	1	75	1668	-1.71	-20.81	0.03
72	SLV 14	1	75	1668	-1.71	-20.81	0.03
72	SLV 15	14	-201	1862	9.81	-14.44	0.05
72	SLV 16	14	-201	1862	9.81	-14.44	0.05
73	SLU 1	9	-241	1748	11.54	7.96	0.05
73	SLU 2	13	-266	1844	13.37	13.71	0.07
73	SLU 3	9	-241	1748	11.54	7.96	0.05
73	SLU 4	12	-256	1806	12.64	11.41	0.06
73	SLU 5	13	-266	1844	13.37	13.71	0.07
73	SLU 6	9	-241	1748	11.54	7.96	0.05
73	SLU 7	12	-256	1806	12.64	11.41	0.06
73	SLU 8	9	-241	1748	11.54	7.96	0.05
73	SLU 9	12	-256	1806	12.64	11.41	0.06
73	SLU 10	16	-334	2126	16.7	15.91	0.08
73	SLU 11	12	-309	2030	14.86	10.16	0.06
73	SLU 12	14	-324	2088	15.96	13.61	0.08
73	SLU 13	16	-334	2126	16.7	15.91	0.08
73	SLU 14	12	-309	2030	14.86	10.16	0.06
73	SLU 15	14	-324	2088	15.96	13.61	0.08
73	SLU 16	12	-309	2030	14.86	10.16	0.06
73	SLU 17	14	-324	2088	15.96	13.61	0.08
73	SLU 18	13	-338	2151	16.29	11.11	0.07
73	SLU 19	15	-353	2208	17.39	14.55	0.08
73	SLU 20	13	-338	2151	16.29	11.11	0.07
73	SLU 21	15	-353	2208	17.39	14.55	0.08
73	SLU 22	10	-278	1904	13.26	8.98	0.06
73	SLU 23	14	-303	1999	15.1	14.72	0.08
73	SLU 24	10	-278	1904	13.26	8.98	0.06
73	SLU 25	13	-293	1961	14.36	12.42	0.07
73	SLU 26	14	-303	1999	15.1	14.72	0.08
73	SLU 27	10	-278	1904	13.26	8.98	0.06
73	SLU 28	13	-293	1961	14.36	12.42	0.07
73	SLU 29	10	-278	1904	13.26	8.98	0.06
73	SLU 30	13	-293	1961	14.36	12.42	0.07
73	SLU 31	17	-371	2281	18.42	16.92	0.09
73	SLU 32	13	-346	2185	16.58	11.17	0.07
73	SLU 33	15	-361	2243	17.69	14.62	0.08
73	SLU 34	17	-371	2281	18.42	16.92	0.09
73	SLU 35	13	-346	2185	16.58	11.17	0.07
73	SLU 36	15	-361	2243	17.69	14.62	0.08
73	SLU 37	13	-346	2185	16.58	11.17	0.07
73	SLU 38	15	-361	2243	17.69	14.62	0.08
73	SLU 39	14	-376	2306	18.01	12.12	0.08
73	SLU 40	16	-391	2364	19.11	15.56	0.09
73	SLU 41	14	-376	2306	18.01	12.12	0.08
73	SLU 42	16	-391	2364	19.11	15.56	0.09

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
73	SLU 43	12	-300	2220	14.41	10.01	0.06
73	SLU 44	16	-325	2315	16.25	15.75	0.08
73	SLU 45	12	-300	2220	14.41	10.01	0.06
73	SLU 46	14	-315	2277	15.51	13.45	0.08
73	SLU 47	16	-325	2315	16.25	15.75	0.08
73	SLU 48	12	-300	2220	14.41	10.01	0.06
73	SLU 49	14	-315	2277	15.51	13.45	0.08
73	SLU 50	12	-300	2220	14.41	10.01	0.06
73	SLU 51	14	-315	2277	15.51	13.45	0.08
73	SLU 52	18	-394	2597	19.57	17.95	0.1
73	SLU 53	14	-368	2501	17.73	12.21	0.08
73	SLU 54	16	-384	2559	18.84	15.65	0.09
73	SLU 55	18	-394	2597	19.57	17.95	0.1
73	SLU 56	14	-368	2501	17.73	12.21	0.08
73	SLU 57	16	-384	2559	18.84	15.65	0.09
73	SLU 58	14	-368	2501	17.73	12.21	0.08
73	SLU 59	16	-384	2559	18.84	15.65	0.09
73	SLU 60	15	-398	2622	19.16	13.15	0.08
73	SLU 61	17	-413	2680	20.26	16.59	0.1
73	SLU 62	15	-398	2622	19.16	13.15	0.08
73	SLU 63	17	-413	2680	20.26	16.59	0.1
73	SLU 64	13	-337	2375	16.13	11.02	0.07
73	SLU 65	17	-363	2470	17.97	16.76	0.09
73	SLU 66	13	-337	2375	16.13	11.02	0.07
73	SLU 67	15	-352	2432	17.23	14.47	0.08
73	SLU 68	17	-363	2470	17.97	16.76	0.09
73	SLU 69	13	-337	2375	16.13	11.02	0.07
73	SLU 70	15	-352	2432	17.23	14.47	0.08
73	SLU 71	13	-337	2375	16.13	11.02	0.07
73	SLU 72	15	-352	2432	17.23	14.47	0.08
73	SLU 73	19	-431	2752	21.29	18.96	0.1
73	SLU 74	15	-406	2657	19.45	13.22	0.08
73	SLU 75	17	-421	2714	20.56	16.66	0.1
73	SLU 76	19	-431	2752	21.29	18.96	0.1
73	SLU 77	15	-406	2657	19.45	13.22	0.08
73	SLU 78	17	-421	2714	20.56	16.66	0.1
73	SLU 79	15	-406	2657	19.45	13.22	0.08
73	SLU 80	17	-421	2714	20.56	16.66	0.1
73	SLU 81	16	-435	2777	20.88	14.16	0.09
73	SLU 82	18	-450	2835	21.98	17.61	0.1
73	SLU 83	16	-435	2777	20.88	14.16	0.09
73	SLU 84	18	-450	2835	21.98	17.61	0.1
73	SLE RA 1	10	-251	1793	12.03	8.25	0.05
73	SLE RA 2	12	-268	1856	13.25	12.08	0.07
73	SLE RA 3	10	-251	1793	12.03	8.25	0.05
73	SLE RA 4	11	-261	1831	12.76	10.55	0.06
73	SLE RA 5	12	-268	1856	13.25	12.08	0.07
73	SLE RA 6	10	-251	1793	12.03	8.25	0.05
73	SLE RA 7	11	-261	1831	12.76	10.55	0.06
73	SLE RA 8	10	-251	1793	12.03	8.25	0.05
73	SLE RA 9	11	-261	1831	12.76	10.55	0.06
73	SLE RA 10	14	-314	2044	15.47	13.55	0.08
73	SLE RA 11	11	-297	1981	14.25	9.72	0.06
73	SLE RA 12	13	-307	2019	14.98	12.02	0.07
73	SLE RA 13	14	-314	2044	15.47	13.55	0.08
73	SLE RA 14	11	-297	1981	14.25	9.72	0.06
73	SLE RA 15	13	-307	2019	14.98	12.02	0.07
73	SLE RA 16	11	-297	1981	14.25	9.72	0.06
73	SLE RA 17	13	-307	2019	14.98	12.02	0.07
73	SLE RA 18	12	-316	2061	15.2	10.35	0.07
73	SLE RA 19	13	-326	2099	15.93	12.65	0.07
73	SLE RA 20	12	-316	2061	15.2	10.35	0.07
73	SLE RA 21	13	-326	2099	15.93	12.65	0.07
73	SLE FR 1	10	-251	1793	12.03	8.25	0.05
73	SLE FR 2	10	-255	1805	12.27	9.02	0.06
73	SLE FR 3	10	-251	1793	12.03	8.25	0.05
73	SLE FR 4	11	-274	1886	13.22	9.65	0.06
73	SLE FR 5	10	-271	1873	12.98	8.88	0.06
73	SLE FR 6	11	-284	1927	13.61	9.3	0.06
73	SLE QP 1	10	-251	1793	12.03	8.25	0.05
73	SLE QP 2	10	-271	1873	12.98	8.88	0.06
73	SLD 1	7	-167	1693	8.65	17.02	0.04
73	SLD 2	7	-167	1693	8.65	17.02	0.04
73	SLD 3	3	-266	1757	12.79	13.86	0.02
73	SLD 4	3	-266	1757	12.79	13.86	0.02
73	SLD 5	15	-89	1721	5.4	16.12	0.09
73	SLD 6	15	-89	1721	5.4	16.12	0.09
73	SLD 7	2	-420	1937	19.2	5.58	0.01
73	SLD 8	2	-420	1937	19.2	5.58	0.01
73	SLD 9	18	-122	1810	6.76	12.18	0.1
73	SLD 10	18	-122	1810	6.76	12.18	0.1
73	SLD 11	5	-453	2026	20.56	1.65	0.02
73	SLD 12	5	-453	2026	20.56	1.65	0.02
73	SLD 13	17	-276	1989	13.17	3.9	0.09
73	SLD 14	17	-276	1989	13.17	3.9	0.09
73	SLD 15	13	-375	2054	17.31	0.74	0.07
73	SLD 16	13	-375	2054	17.31	0.74	0.07
73	SLV 1	3	-26	1446	2.77	28.5	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
73	SLV 2	3	-26	1446	2.77	28.5	0.03
73	SLV 3	-7	-260	1611	12.56	20.11	-0.03
73	SLV 4	-7	-260	1611	12.56	20.11	-0.03
73	SLV 5	24	159	1496	-4.92	27.49	0.15
73	SLV 6	24	159	1496	-4.92	27.49	0.15
73	SLV 7	-10	-624	2044	27.69	-0.48	-0.07
73	SLV 8	-10	-624	2044	27.69	-0.48	-0.07
73	SLV 9	31	82	1702	-1.73	18.24	0.18
73	SLV 10	31	82	1702	-1.73	18.24	0.18
73	SLV 11	-3	-700	2251	30.88	-9.73	-0.03
73	SLV 12	-3	-700	2251	30.88	-9.73	-0.03
73	SLV 13	27	-281	2136	13.4	-2.34	0.15
73	SLV 14	27	-281	2136	13.4	-2.34	0.15
73	SLV 15	17	-516	2300	23.19	-10.73	0.08
73	SLV 16	17	-516	2300	23.19	-10.73	0.08
74	SLU 1	-12	-142	2003	2.02	-9.31	0
74	SLU 2	-17	-145	2111	0.79	-15.74	0.01
74	SLU 3	-12	-142	2003	2.02	-9.31	0
74	SLU 4	-15	-144	2068	1.28	-13.17	0.01
74	SLU 5	-17	-145	2111	0.79	-15.74	0.01
74	SLU 6	-12	-142	2003	2.02	-9.31	0
74	SLU 7	-15	-144	2068	1.28	-13.17	0.01
74	SLU 8	-12	-142	2003	2.02	-9.31	0
74	SLU 9	-15	-144	2068	1.28	-13.17	0.01
74	SLU 10	-20	-197	2396	1.74	-18.18	0.01
74	SLU 11	-15	-194	2288	2.97	-11.75	0
74	SLU 12	-18	-196	2353	2.23	-15.61	0.01
74	SLU 13	-20	-197	2396	1.74	-18.18	0.01
74	SLU 14	-15	-194	2288	2.97	-11.75	0
74	SLU 15	-18	-196	2353	2.23	-15.61	0.01
74	SLU 16	-15	-194	2288	2.97	-11.75	0
74	SLU 17	-18	-196	2353	2.23	-15.61	0.01
74	SLU 18	-17	-217	2410	3.37	-12.8	0
74	SLU 19	-19	-218	2475	2.64	-16.66	0.01
74	SLU 20	-17	-217	2410	3.37	-12.8	0
74	SLU 21	-19	-218	2475	2.64	-16.66	0.01
74	SLU 22	-14	-174	2180	2.73	-10.51	0
74	SLU 23	-18	-177	2288	1.5	-16.94	0.01
74	SLU 24	-14	-174	2180	2.73	-10.51	0
74	SLU 25	-17	-176	2245	1.99	-14.37	0.01
74	SLU 26	-18	-177	2288	1.5	-16.94	0.01
74	SLU 27	-14	-174	2180	2.73	-10.51	0
74	SLU 28	-17	-176	2245	1.99	-14.37	0.01
74	SLU 29	-14	-174	2180	2.73	-10.51	0
74	SLU 30	-17	-176	2245	1.99	-14.37	0.01
74	SLU 31	-21	-229	2573	2.45	-19.38	0.01
74	SLU 32	-17	-226	2465	3.68	-12.95	0
74	SLU 33	-19	-227	2530	2.94	-16.81	0.01
74	SLU 34	-21	-229	2573	2.45	-19.38	0.01
74	SLU 35	-17	-226	2465	3.68	-12.95	0
74	SLU 36	-19	-227	2530	2.94	-16.81	0.01
74	SLU 37	-17	-226	2465	3.68	-12.95	0
74	SLU 38	-19	-227	2530	2.94	-16.81	0.01
74	SLU 39	-18	-248	2587	4.08	-14	0
74	SLU 40	-21	-250	2652	3.34	-17.86	0.01
74	SLU 41	-18	-248	2587	4.08	-14	0
74	SLU 42	-21	-250	2652	3.34	-17.86	0.01
74	SLU 43	-15	-175	2544	2.39	-11.69	0
74	SLU 44	-20	-178	2652	1.15	-18.12	0.01
74	SLU 45	-15	-175	2544	2.39	-11.69	0
74	SLU 46	-18	-176	2609	1.65	-15.55	0.01
74	SLU 47	-20	-178	2652	1.15	-18.12	0.01
74	SLU 48	-15	-175	2544	2.39	-11.69	0
74	SLU 49	-18	-176	2609	1.65	-15.55	0.01
74	SLU 50	-15	-175	2544	2.39	-11.69	0
74	SLU 51	-18	-176	2609	1.65	-15.55	0.01
74	SLU 52	-23	-229	2937	2.1	-20.56	0.01
74	SLU 53	-18	-226	2829	3.33	-14.13	0.01
74	SLU 54	-21	-228	2893	2.59	-17.99	0.01
74	SLU 55	-23	-229	2937	2.1	-20.56	0.01
74	SLU 56	-18	-226	2829	3.33	-14.13	0.01
74	SLU 57	-21	-228	2893	2.59	-17.99	0.01
74	SLU 58	-18	-226	2829	3.33	-14.13	0.01
74	SLU 59	-21	-228	2893	2.59	-17.99	0.01
74	SLU 60	-20	-249	2951	3.74	-15.18	0.01
74	SLU 61	-22	-250	3016	3	-19.04	0.01
74	SLU 62	-20	-249	2951	3.74	-15.18	0.01
74	SLU 63	-22	-250	3016	3	-19.04	0.01
74	SLU 64	-17	-206	2721	3.1	-12.89	0
74	SLU 65	-21	-209	2828	1.86	-19.32	0.01
74	SLU 66	-17	-206	2721	3.1	-12.89	0
74	SLU 67	-20	-208	2785	2.36	-16.75	0.01
74	SLU 68	-21	-209	2828	1.86	-19.32	0.01
74	SLU 69	-17	-206	2721	3.1	-12.89	0
74	SLU 70	-20	-208	2785	2.36	-16.75	0.01
74	SLU 71	-17	-206	2721	3.1	-12.89	0
74	SLU 72	-20	-208	2785	2.36	-16.75	0.01
74	SLU 73	-24	-261	3113	2.81	-21.76	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
74	SLU 74	-20	-258	3005	4.04	-15.33	0.01
74	SLU 75	-23	-259	3070	3.3	-19.19	0.01
74	SLU 76	-24	-261	3113	2.81	-21.76	0.01
74	SLU 77	-20	-258	3005	4.04	-15.33	0.01
74	SLU 78	-23	-259	3070	3.3	-19.19	0.01
74	SLU 79	-20	-258	3005	4.04	-15.33	0.01
74	SLU 80	-23	-259	3070	3.3	-19.19	0.01
74	SLU 81	-21	-280	3128	4.45	-16.38	0.01
74	SLU 82	-24	-282	3192	3.71	-20.24	0.01
74	SLU 83	-21	-280	3128	4.45	-16.38	0.01
74	SLU 84	-24	-282	3192	3.71	-20.24	0.01
74	SLE RA 1	-13	-151	2054	2.23	-9.65	0
74	SLE RA 2	-16	-153	2126	1.4	-13.94	0.01
74	SLE RA 3	-13	-151	2054	2.23	-9.65	0
74	SLE RA 4	-15	-153	2097	1.73	-12.22	0.01
74	SLE RA 5	-16	-153	2126	1.4	-13.94	0.01
74	SLE RA 6	-13	-151	2054	2.23	-9.65	0
74	SLE RA 7	-15	-153	2097	1.73	-12.22	0.01
74	SLE RA 8	-13	-151	2054	2.23	-9.65	0
74	SLE RA 9	-15	-153	2097	1.73	-12.22	0.01
74	SLE RA 10	-18	-188	2316	2.03	-15.57	0.01
74	SLE RA 11	-15	-186	2244	2.86	-11.28	0
74	SLE RA 12	-16	-187	2287	2.36	-13.85	0.01
74	SLE RA 13	-18	-188	2316	2.03	-15.57	0.01
74	SLE RA 14	-15	-186	2244	2.86	-11.28	0
74	SLE RA 15	-16	-187	2287	2.36	-13.85	0.01
74	SLE RA 16	-15	-186	2244	2.86	-11.28	0
74	SLE RA 17	-16	-187	2287	2.36	-13.85	0.01
74	SLE RA 18	-16	-201	2325	3.13	-11.98	0
74	SLE RA 19	-17	-202	2368	2.63	-14.55	0.01
74	SLE RA 20	-16	-201	2325	3.13	-11.98	0
74	SLE RA 21	-17	-202	2368	2.63	-14.55	0.01
74	SLE FR 1	-13	-151	2054	2.23	-9.65	0
74	SLE FR 2	-13	-152	2068	2.06	-10.51	0
74	SLE FR 3	-13	-151	2054	2.23	-9.65	0
74	SLE FR 4	-14	-167	2150	2.33	-11.21	0
74	SLE FR 5	-14	-166	2135	2.5	-10.35	0
74	SLE FR 6	-14	-176	2190	2.68	-10.82	0
74	SLE QP 1	-13	-151	2054	2.23	-9.65	0
74	SLE QP 2	-14	-166	2135	2.5	-10.35	0
74	SLD 1	-7	-171	2277	2.36	-3.41	-0.01
74	SLD 2	-7	-171	2277	2.36	-3.41	-0.01
74	SLD 3	-4	-288	2340	7.11	-0.37	-0.01
74	SLD 4	-4	-288	2340	7.11	-0.37	-0.01
74	SLD 5	-17	9	2082	-4.74	-12.89	-0.01
74	SLD 6	-17	9	2082	-4.74	-12.89	-0.01
74	SLD 7	-5	-379	2292	11.08	-2.73	0.01
74	SLD 8	-5	-379	2292	11.08	-2.73	0.01
74	SLD 9	-22	47	1978	-6.08	-17.97	0
74	SLD 10	-22	47	1978	-6.08	-17.97	0
74	SLD 11	-10	-341	2189	9.73	-7.81	0.02
74	SLD 12	-10	-341	2189	9.73	-7.81	0.02
74	SLD 13	-23	-45	1931	-2.12	-20.33	0.01
74	SLD 14	-23	-45	1931	-2.12	-20.33	0.01
74	SLD 15	-20	-161	1994	2.63	-17.28	0.02
74	SLD 16	-20	-161	1994	2.63	-17.28	0.02
74	SLV 1	0	-179	2456	2.18	5.51	-0.04
74	SLV 2	0	-179	2456	2.18	5.51	-0.04
74	SLV 3	10	-454	2632	13.41	13.55	-0.02
74	SLV 4	10	-454	2632	13.41	13.55	-0.02
74	SLV 5	-24	247	1965	-14.63	-17.79	-0.03
74	SLV 6	-24	247	1965	-14.63	-17.79	-0.03
74	SLV 7	8	-670	2551	22.8	9.02	0.02
74	SLV 8	8	-670	2551	22.8	9.02	0.02
74	SLV 9	-35	337	1720	-17.81	-29.72	-0.01
74	SLV 10	-35	337	1720	-17.81	-29.72	-0.01
74	SLV 11	-3	-580	2306	19.62	-2.91	0.04
74	SLV 12	-3	-580	2306	19.62	-2.91	0.04
74	SLV 13	-37	122	1639	-8.41	-34.25	0.03
74	SLV 14	-37	122	1639	-8.41	-34.25	0.03
74	SLV 15	-28	-153	1814	2.82	-26.21	0.04
74	SLV 16	-28	-153	1814	2.82	-26.21	0.04
75	SLU 1	14	-189	1582	3.3	11.07	0.11
75	SLU 2	20	-206	1652	2.69	19.22	0.16
75	SLU 3	14	-189	1582	3.3	11.07	0.11
75	SLU 4	18	-199	1624	2.94	15.96	0.14
75	SLU 5	20	-206	1652	2.69	19.22	0.16
75	SLU 6	14	-189	1582	3.3	11.07	0.11
75	SLU 7	18	-199	1624	2.94	15.96	0.14
75	SLU 8	14	-189	1582	3.3	11.07	0.11
75	SLU 9	18	-199	1624	2.94	15.96	0.14
75	SLU 10	24	-251	1887	3.26	22.43	0.19
75	SLU 11	17	-234	1817	3.87	14.28	0.14
75	SLU 12	22	-244	1859	3.5	19.17	0.17
75	SLU 13	24	-251	1887	3.26	22.43	0.19
75	SLU 14	17	-234	1817	3.87	14.28	0.14
75	SLU 15	22	-244	1859	3.5	19.17	0.17
75	SLU 16	17	-234	1817	3.87	14.28	0.14

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
75	SLU 17	22	-244	1859	3.5	19.17	0.17
75	SLU 18	19	-253	1918	4.11	15.65	0.15
75	SLU 19	23	-264	1960	3.75	20.54	0.18
75	SLU 20	19	-253	1918	4.11	15.65	0.15
75	SLU 21	23	-264	1960	3.75	20.54	0.18
75	SLU 22	15	-215	1710	3.78	12.56	0.12
75	SLU 23	22	-232	1781	3.17	20.71	0.17
75	SLU 24	15	-215	1710	3.78	12.56	0.12
75	SLU 25	20	-226	1752	3.41	17.45	0.15
75	SLU 26	22	-232	1781	3.17	20.71	0.17
75	SLU 27	15	-215	1710	3.78	12.56	0.12
75	SLU 28	20	-226	1752	3.41	17.45	0.15
75	SLU 29	15	-215	1710	3.78	12.56	0.12
75	SLU 30	20	-226	1752	3.41	17.45	0.15
75	SLU 31	26	-277	2016	3.74	23.92	0.2
75	SLU 32	19	-260	1946	4.34	15.77	0.15
75	SLU 33	23	-271	1988	3.98	20.66	0.18
75	SLU 34	26	-277	2016	3.74	23.92	0.2
75	SLU 35	19	-260	1946	4.34	15.77	0.15
75	SLU 36	23	-271	1988	3.98	20.66	0.18
75	SLU 37	19	-260	1946	4.34	15.77	0.15
75	SLU 38	23	-271	1988	3.98	20.66	0.18
75	SLU 39	21	-280	2047	4.59	17.14	0.16
75	SLU 40	25	-290	2089	4.22	22.03	0.2
75	SLU 41	21	-280	2047	4.59	17.14	0.16
75	SLU 42	25	-290	2089	4.22	22.03	0.2
75	SLU 43	17	-237	2012	4.13	13.88	0.14
75	SLU 44	24	-254	2082	3.52	22.03	0.19
75	SLU 45	17	-237	2012	4.13	13.88	0.14
75	SLU 46	21	-247	2054	3.76	18.77	0.17
75	SLU 47	24	-254	2082	3.52	22.03	0.19
75	SLU 48	17	-237	2012	4.13	13.88	0.14
75	SLU 49	21	-247	2054	3.76	18.77	0.17
75	SLU 50	17	-237	2012	4.13	13.88	0.14
75	SLU 51	21	-247	2054	3.76	18.77	0.17
75	SLU 52	28	-299	2318	4.09	25.24	0.22
75	SLU 53	21	-282	2248	4.69	17.09	0.17
75	SLU 54	25	-292	2290	4.33	21.98	0.2
75	SLU 55	28	-299	2318	4.09	25.24	0.22
75	SLU 56	21	-282	2248	4.69	17.09	0.17
75	SLU 57	25	-292	2290	4.33	21.98	0.2
75	SLU 58	21	-282	2248	4.69	17.09	0.17
75	SLU 59	25	-292	2290	4.33	21.98	0.2
75	SLU 60	23	-301	2348	4.94	18.46	0.18
75	SLU 61	27	-311	2391	4.57	23.35	0.21
75	SLU 62	23	-301	2348	4.94	18.46	0.18
75	SLU 63	27	-311	2391	4.57	23.35	0.21
75	SLU 64	19	-263	2141	4.6	15.37	0.15
75	SLU 65	26	-280	2211	3.99	23.52	0.2
75	SLU 66	19	-263	2141	4.6	15.37	0.15
75	SLU 67	23	-273	2183	4.24	20.26	0.18
75	SLU 68	26	-280	2211	3.99	23.52	0.2
75	SLU 69	19	-263	2141	4.6	15.37	0.15
75	SLU 70	23	-273	2183	4.24	20.26	0.18
75	SLU 71	19	-263	2141	4.6	15.37	0.15
75	SLU 72	23	-273	2183	4.24	20.26	0.18
75	SLU 73	30	-325	2446	4.56	26.73	0.23
75	SLU 74	23	-308	2376	5.17	18.58	0.18
75	SLU 75	27	-318	2418	4.81	23.47	0.21
75	SLU 76	30	-325	2446	4.56	26.73	0.23
75	SLU 77	23	-308	2376	5.17	18.58	0.18
75	SLU 78	27	-318	2418	4.81	23.47	0.21
75	SLU 79	23	-308	2376	5.17	18.58	0.18
75	SLU 80	27	-318	2418	4.81	23.47	0.21
75	SLU 81	24	-327	2477	5.41	19.95	0.19
75	SLU 82	28	-338	2519	5.05	24.84	0.22
75	SLU 83	24	-327	2477	5.41	19.95	0.19
75	SLU 84	28	-338	2519	5.05	24.84	0.22
75	SLE RA 1	14	-197	1618	3.44	11.5	0.11
75	SLE RA 2	19	-208	1665	3.03	16.93	0.15
75	SLE RA 3	14	-197	1618	3.44	11.5	0.11
75	SLE RA 4	17	-204	1646	3.19	14.76	0.13
75	SLE RA 5	19	-208	1665	3.03	16.93	0.15
75	SLE RA 6	14	-197	1618	3.44	11.5	0.11
75	SLE RA 7	17	-204	1646	3.19	14.76	0.13
75	SLE RA 8	14	-197	1618	3.44	11.5	0.11
75	SLE RA 9	17	-204	1646	3.19	14.76	0.13
75	SLE RA 10	21	-238	1822	3.41	19.07	0.17
75	SLE RA 11	17	-227	1775	3.81	13.63	0.13
75	SLE RA 12	19	-233	1804	3.57	16.89	0.15
75	SLE RA 13	21	-238	1822	3.41	19.07	0.17
75	SLE RA 14	17	-227	1775	3.81	13.63	0.13
75	SLE RA 15	19	-233	1804	3.57	16.89	0.15
75	SLE RA 16	17	-227	1775	3.81	13.63	0.13
75	SLE RA 17	19	-233	1804	3.57	16.89	0.15
75	SLE RA 18	18	-240	1843	3.98	14.55	0.14
75	SLE RA 19	21	-246	1871	3.73	17.81	0.16
75	SLE RA 20	18	-240	1843	3.98	14.55	0.14

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
75	SLE RA 21	21	-246	1871	3.73	17.81	0.16
75	SLE FR 1	14	-197	1618	3.44	11.5	0.11
75	SLE FR 2	15	-199	1628	3.35	12.58	0.12
75	SLE FR 3	14	-197	1618	3.44	11.5	0.11
75	SLE FR 4	16	-212	1695	3.52	13.5	0.13
75	SLE FR 5	15	-210	1686	3.6	12.41	0.12
75	SLE FR 6	16	-218	1731	3.71	13.02	0.13
75	SLE QP 1	14	-197	1618	3.44	11.5	0.11
75	SLE QP 2	15	-210	1686	3.6	12.41	0.12
75	SLD 1	8	-105	1527	3.55	19.96	0.07
75	SLD 2	8	-105	1527	3.55	19.96	0.07
75	SLD 3	4	-211	1584	7.46	24.02	0.04
75	SLD 4	4	-211	1584	7.46	24.02	0.04
75	SLD 5	19	-18	1551	-2.35	8.53	0.15
75	SLD 6	19	-18	1551	-2.35	8.53	0.15
75	SLD 7	6	-370	1742	10.69	22.04	0.05
75	SLD 8	6	-370	1742	10.69	22.04	0.05
75	SLD 9	24	-49	1629	-3.5	2.79	0.19
75	SLD 10	24	-49	1629	-3.5	2.79	0.19
75	SLD 11	12	-401	1821	9.55	16.3	0.09
75	SLD 12	12	-401	1821	9.55	16.3	0.09
75	SLD 13	27	-209	1787	-0.27	0.81	0.2
75	SLD 14	27	-209	1787	-0.27	0.81	0.2
75	SLD 15	23	-314	1845	3.65	4.86	0.17
75	SLD 16	23	-314	1845	3.65	4.86	0.17
75	SLV 1	-2	36	1310	3.46	29.6	0
75	SLV 2	-2	36	1310	3.46	29.6	0
75	SLV 3	-12	-213	1454	12.7	40.22	-0.07
75	SLV 4	-12	-213	1454	12.7	40.22	-0.07
75	SLV 5	25	242	1354	-10.46	1.46	0.2
75	SLV 6	25	242	1354	-10.46	1.46	0.2
75	SLV 7	-8	-589	1835	20.35	36.87	-0.06
75	SLV 8	-8	-589	1835	20.35	36.87	-0.06
75	SLV 9	39	170	1536	-13.15	-12.04	0.3
75	SLV 10	39	170	1536	-13.15	-12.04	0.3
75	SLV 11	5	-661	2018	17.66	23.37	0.04
75	SLV 12	5	-661	2018	17.66	23.37	0.04
75	SLV 13	42	-206	1917	-5.5	-15.4	0.32
75	SLV 14	42	-206	1917	-5.5	-15.4	0.32
75	SLV 15	32	-455	2062	3.74	-4.77	0.24
75	SLV 16	32	-455	2062	3.74	-4.77	0.24
76	SLU 1	-18	-210	1915	12.48	-12.81	0
76	SLU 2	-26	-253	2011	15.85	-22.08	0
76	SLU 3	-18	-210	1915	12.48	-12.81	0
76	SLU 4	-23	-236	1973	14.5	-18.37	0
76	SLU 5	-26	-253	2011	15.85	-22.08	0
76	SLU 6	-18	-210	1915	12.48	-12.81	0
76	SLU 7	-23	-236	1973	14.5	-18.37	0
76	SLU 8	-18	-210	1915	12.48	-12.81	0
76	SLU 9	-23	-236	1973	14.5	-18.37	0
76	SLU 10	-31	-317	2265	19.6	-25.6	0
76	SLU 11	-22	-273	2169	16.22	-16.32	0
76	SLU 12	-27	-299	2226	18.25	-21.89	0
76	SLU 13	-31	-317	2265	19.6	-25.6	0
76	SLU 14	-22	-273	2169	16.22	-16.32	0
76	SLU 15	-27	-299	2226	18.25	-21.89	0
76	SLU 16	-22	-273	2169	16.22	-16.32	0
76	SLU 17	-27	-299	2226	18.25	-21.89	0
76	SLU 18	-24	-300	2278	17.83	-17.83	0
76	SLU 19	-29	-326	2335	19.85	-23.39	0
76	SLU 20	-24	-300	2278	17.83	-17.83	0
76	SLU 21	-29	-326	2335	19.85	-23.39	0
76	SLU 22	-20	-246	2073	14.46	-14.53	0
76	SLU 23	-28	-289	2168	17.83	-23.81	0
76	SLU 24	-20	-246	2073	14.46	-14.53	0
76	SLU 25	-25	-272	2130	16.48	-20.1	0
76	SLU 26	-28	-289	2168	17.83	-23.81	0
76	SLU 27	-20	-246	2073	14.46	-14.53	0
76	SLU 28	-25	-272	2130	16.48	-20.1	0
76	SLU 29	-20	-246	2073	14.46	-14.53	0
76	SLU 30	-25	-272	2130	16.48	-20.1	0
76	SLU 31	-33	-353	2422	21.58	-27.33	0
76	SLU 32	-25	-309	2327	18.2	-18.05	0
76	SLU 33	-30	-335	2384	20.23	-23.62	0
76	SLU 34	-33	-353	2422	21.58	-27.33	0
76	SLU 35	-25	-309	2327	18.2	-18.05	0
76	SLU 36	-30	-335	2384	20.23	-23.62	0
76	SLU 37	-25	-309	2327	18.2	-18.05	0
76	SLU 38	-30	-335	2384	20.23	-23.62	0
76	SLU 39	-27	-336	2435	19.81	-19.56	0
76	SLU 40	-32	-362	2493	21.83	-25.12	0
76	SLU 41	-27	-336	2435	19.81	-19.56	0
76	SLU 42	-32	-362	2493	21.83	-25.12	0
76	SLU 43	-22	-261	2436	15.54	-16.05	0
76	SLU 44	-31	-304	2531	18.91	-25.33	0
76	SLU 45	-22	-261	2436	15.54	-16.05	0
76	SLU 46	-27	-287	2493	17.57	-21.62	0
76	SLU 47	-31	-304	2531	18.91	-25.33	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
76	SLU 48	-22	-261	2436	15.54	-16.05	0
76	SLU 49	-27	-287	2493	17.57	-21.62	0
76	SLU 50	-22	-261	2436	15.54	-16.05	0
76	SLU 51	-27	-287	2493	17.57	-21.62	0
76	SLU 52	-35	-367	2785	22.66	-28.85	0
76	SLU 53	-27	-324	2690	19.29	-19.57	0
76	SLU 54	-32	-350	2747	21.31	-25.14	0
76	SLU 55	-35	-367	2785	22.66	-28.85	0
76	SLU 56	-27	-324	2690	19.29	-19.57	0
76	SLU 57	-32	-350	2747	21.31	-25.14	0
76	SLU 58	-27	-324	2690	19.29	-19.57	0
76	SLU 59	-32	-350	2747	21.31	-25.14	0
76	SLU 60	-29	-351	2799	20.89	-21.08	0
76	SLU 61	-34	-377	2856	22.92	-26.64	0
76	SLU 62	-29	-351	2799	20.89	-21.08	0
76	SLU 63	-34	-377	2856	22.92	-26.64	0
76	SLU 64	-25	-296	2593	17.52	-17.78	0
76	SLU 65	-33	-340	2689	20.89	-27.06	0
76	SLU 66	-25	-296	2593	17.52	-17.78	0
76	SLU 67	-30	-323	2651	19.54	-23.35	0
76	SLU 68	-33	-340	2689	20.89	-27.06	0
76	SLU 69	-25	-296	2593	17.52	-17.78	0
76	SLU 70	-30	-323	2651	19.54	-23.35	0
76	SLU 71	-25	-296	2593	17.52	-17.78	0
76	SLU 72	-30	-323	2651	19.54	-23.35	0
76	SLU 73	-37	-403	2943	24.64	-30.58	0
76	SLU 74	-29	-360	2847	21.27	-21.3	0
76	SLU 75	-34	-386	2904	23.29	-26.86	0
76	SLU 76	-37	-403	2943	24.64	-30.58	0
76	SLU 77	-29	-360	2847	21.27	-21.3	0
76	SLU 78	-34	-386	2904	23.29	-26.86	0
76	SLU 79	-29	-360	2847	21.27	-21.3	0
76	SLU 80	-34	-386	2904	23.29	-26.86	0
76	SLU 81	-31	-387	2956	22.87	-22.81	0
76	SLU 82	-36	-413	3013	24.9	-28.37	0
76	SLU 83	-31	-387	2956	22.87	-22.81	0
76	SLU 84	-36	-413	3013	24.9	-28.37	0
76	SLE RA 1	-19	-220	1960	13.04	-13.3	0
76	SLE RA 2	-24	-249	2024	15.29	-19.48	0
76	SLE RA 3	-19	-220	1960	13.04	-13.3	0
76	SLE RA 4	-22	-238	1998	14.39	-17.01	0
76	SLE RA 5	-24	-249	2024	15.29	-19.48	0
76	SLE RA 6	-19	-220	1960	13.04	-13.3	0
76	SLE RA 7	-22	-238	1998	14.39	-17.01	0
76	SLE RA 8	-19	-220	1960	13.04	-13.3	0
76	SLE RA 9	-22	-238	1998	14.39	-17.01	0
76	SLE RA 10	-27	-291	2193	17.79	-21.83	0
76	SLE RA 11	-22	-262	2130	15.54	-15.64	0
76	SLE RA 12	-25	-280	2168	16.89	-19.35	0
76	SLE RA 13	-27	-291	2193	17.79	-21.83	0
76	SLE RA 14	-22	-262	2130	15.54	-15.64	0
76	SLE RA 15	-25	-280	2168	16.89	-19.35	0
76	SLE RA 16	-22	-262	2130	15.54	-15.64	0
76	SLE RA 17	-25	-280	2168	16.89	-19.35	0
76	SLE RA 18	-23	-280	2202	16.61	-16.65	0
76	SLE RA 19	-26	-298	2240	17.96	-20.36	0
76	SLE RA 20	-23	-280	2202	16.61	-16.65	0
76	SLE RA 21	-26	-298	2240	17.96	-20.36	0
76	SLE FR 1	-19	-220	1960	13.04	-13.3	0
76	SLE FR 2	-20	-226	1973	13.49	-14.54	0
76	SLE FR 3	-19	-220	1960	13.04	-13.3	0
76	SLE FR 4	-21	-244	2046	14.56	-15.54	0
76	SLE FR 5	-20	-238	2033	14.11	-14.3	0
76	SLE FR 6	-21	-250	2081	14.83	-14.97	0
76	SLE QP 1	-19	-220	1960	13.04	-13.3	0
76	SLE QP 2	-20	-238	2033	14.11	-14.3	0
76	SLD 1	-10	-247	2168	14.82	-5.02	-0.01
76	SLD 2	-10	-247	2168	14.82	-5.02	-0.01
76	SLD 3	-6	-366	2219	19.83	-0.93	-0.01
76	SLD 4	-6	-366	2219	19.83	-0.93	-0.01
76	SLD 5	-22	-60	1996	6.74	-17.71	-0.01
76	SLD 6	-22	-60	1996	6.74	-17.71	-0.01
76	SLD 7	-10	-458	2166	23.41	-4.1	0
76	SLD 8	-10	-458	2166	23.41	-4.1	0
76	SLD 9	-30	-19	1899	4.81	-24.51	0
76	SLD 10	-30	-19	1899	4.81	-24.51	0
76	SLD 11	-17	-417	2070	21.49	-10.9	0.01
76	SLD 12	-17	-417	2070	21.49	-10.9	0.01
76	SLD 13	-34	-110	1846	8.4	-27.67	0.01
76	SLD 14	-34	-110	1846	8.4	-27.67	0.01
76	SLD 15	-30	-230	1897	13.4	-23.59	0.01
76	SLD 16	-30	-230	1897	13.4	-23.59	0.01
76	SLV 1	4	-260	2341	15.93	7.03	-0.03
76	SLV 2	4	-260	2341	15.93	7.03	-0.03
76	SLV 3	13	-543	2483	27.82	17.63	-0.02
76	SLV 4	13	-543	2483	27.82	17.63	-0.02
76	SLV 5	-27	184	1910	-3.38	-23.98	-0.02
76	SLV 6	-27	184	1910	-3.38	-23.98	-0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
76	SLV 7	5	-759	2383	36.26	11.35	0.01
76	SLV 8	5	-759	2383	36.26	11.35	0.01
76	SLV 9	-44	282	1683	-8.04	-39.96	-0.01
76	SLV 10	-44	282	1683	-8.04	-39.96	-0.01
76	SLV 11	-12	-661	2156	31.6	-4.62	0.02
76	SLV 12	-12	-661	2156	31.6	-4.62	0.02
76	SLV 13	-53	67	1583	0.4	-46.23	0.02
76	SLV 14	-53	67	1583	0.4	-46.23	0.02
76	SLV 15	-43	-216	1725	12.29	-35.63	0.03
76	SLV 16	-43	-216	1725	12.29	-35.63	0.03
77	SLU 1	16	-208	1425	12.3	13.13	0.14
77	SLU 2	25	-251	1462	15.31	23.52	0.22
77	SLU 3	16	-208	1425	12.3	13.13	0.14
77	SLU 4	22	-234	1447	14.1	19.36	0.19
77	SLU 5	25	-251	1462	15.31	23.52	0.22
77	SLU 6	16	-208	1425	12.3	13.13	0.14
77	SLU 7	22	-234	1447	14.1	19.36	0.19
77	SLU 8	16	-208	1425	12.3	13.13	0.14
77	SLU 9	22	-234	1447	14.1	19.36	0.19
77	SLU 10	30	-300	1658	18.37	27.43	0.26
77	SLU 11	21	-257	1620	15.36	17.04	0.18
77	SLU 12	26	-283	1643	17.16	23.27	0.23
77	SLU 13	30	-300	1658	18.37	27.43	0.26
77	SLU 14	21	-257	1620	15.36	17.04	0.18
77	SLU 15	26	-283	1643	17.16	23.27	0.23
77	SLU 16	21	-257	1620	15.36	17.04	0.18
77	SLU 17	26	-283	1643	17.16	23.27	0.23
77	SLU 18	22	-278	1704	16.67	18.72	0.2
77	SLU 19	28	-304	1726	18.47	24.95	0.25
77	SLU 20	22	-278	1704	16.67	18.72	0.2
77	SLU 21	28	-304	1726	18.47	24.95	0.25
77	SLU 22	18	-234	1531	13.84	14.94	0.16
77	SLU 23	27	-278	1569	16.85	25.33	0.24
77	SLU 24	18	-234	1531	13.84	14.94	0.16
77	SLU 25	24	-261	1554	15.64	21.17	0.21
77	SLU 26	27	-278	1569	16.85	25.33	0.24
77	SLU 27	18	-234	1531	13.84	14.94	0.16
77	SLU 28	24	-261	1554	15.64	21.17	0.21
77	SLU 29	18	-234	1531	13.84	14.94	0.16
77	SLU 30	24	-261	1554	15.64	21.17	0.21
77	SLU 31	32	-327	1764	19.91	29.24	0.28
77	SLU 32	23	-283	1727	16.9	18.85	0.2
77	SLU 33	28	-310	1749	18.7	25.09	0.25
77	SLU 34	32	-327	1764	19.91	29.24	0.28
77	SLU 35	23	-283	1727	16.9	18.85	0.2
77	SLU 36	28	-310	1749	18.7	25.09	0.25
77	SLU 37	23	-283	1727	16.9	18.85	0.2
77	SLU 38	28	-310	1749	18.7	25.09	0.25
77	SLU 39	25	-304	1810	18.21	20.53	0.22
77	SLU 40	30	-330	1833	20.01	26.77	0.27
77	SLU 41	25	-304	1810	18.21	20.53	0.22
77	SLU 42	30	-330	1833	20.01	26.77	0.27
77	SLU 43	20	-261	1816	15.46	16.44	0.18
77	SLU 44	29	-305	1853	18.47	26.83	0.26
77	SLU 45	20	-261	1816	15.46	16.44	0.18
77	SLU 46	26	-287	1838	17.27	22.68	0.22
77	SLU 47	29	-305	1853	18.47	26.83	0.26
77	SLU 48	20	-261	1816	15.46	16.44	0.18
77	SLU 49	26	-287	1838	17.27	22.68	0.22
77	SLU 50	20	-261	1816	15.46	16.44	0.18
77	SLU 51	26	-287	1838	17.27	22.68	0.22
77	SLU 52	34	-354	2049	21.53	30.75	0.3
77	SLU 53	25	-310	2011	18.52	20.36	0.22
77	SLU 54	30	-336	2034	20.33	26.59	0.26
77	SLU 55	34	-354	2049	21.53	30.75	0.3
77	SLU 56	25	-310	2011	18.52	20.36	0.22
77	SLU 57	30	-336	2034	20.33	26.59	0.26
77	SLU 58	25	-310	2011	18.52	20.36	0.22
77	SLU 59	30	-336	2034	20.33	26.59	0.26
77	SLU 60	27	-331	2095	19.83	22.03	0.23
77	SLU 61	32	-357	2117	21.64	28.27	0.28
77	SLU 62	27	-331	2095	19.83	22.03	0.23
77	SLU 63	32	-357	2117	21.64	28.27	0.28
77	SLU 64	22	-288	1922	17	18.26	0.2
77	SLU 65	31	-331	1960	20.01	28.65	0.28
77	SLU 66	22	-288	1922	17	18.26	0.2
77	SLU 67	28	-314	1945	18.81	24.49	0.24
77	SLU 68	31	-331	1960	20.01	28.65	0.28
77	SLU 69	22	-288	1922	17	18.26	0.2
77	SLU 70	28	-314	1945	18.81	24.49	0.24
77	SLU 71	22	-288	1922	17	18.26	0.2
77	SLU 72	28	-314	1945	18.81	24.49	0.24
77	SLU 73	36	-380	2155	23.07	32.56	0.32
77	SLU 74	27	-337	2118	20.06	22.17	0.24
77	SLU 75	32	-363	2140	21.87	28.4	0.28
77	SLU 76	36	-380	2155	23.07	32.56	0.32
77	SLU 77	27	-337	2118	20.06	22.17	0.24
77	SLU 78	32	-363	2140	21.87	28.4	0.28

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
77	SLU 79	27	-337	2118	20.06	22.17	0.24
77	SLU 80	32	-363	2140	21.87	28.4	0.28
77	SLU 81	29	-358	2201	21.37	23.85	0.25
77	SLU 82	34	-384	2224	23.18	30.08	0.3
77	SLU 83	29	-358	2201	21.37	23.85	0.25
77	SLU 84	34	-384	2224	23.18	30.08	0.3
77	SLE RA 1	17	-215	1455	12.74	13.64	0.15
77	SLE RA 2	23	-245	1480	14.74	20.57	0.2
77	SLE RA 3	17	-215	1455	12.74	13.64	0.15
77	SLE RA 4	20	-233	1470	13.94	17.8	0.18
77	SLE RA 5	23	-245	1480	14.74	20.57	0.2
77	SLE RA 6	17	-215	1455	12.74	13.64	0.15
77	SLE RA 7	20	-233	1470	13.94	17.8	0.18
77	SLE RA 8	17	-215	1455	12.74	13.64	0.15
77	SLE RA 9	20	-233	1470	13.94	17.8	0.18
77	SLE RA 10	26	-277	1611	16.78	23.18	0.23
77	SLE RA 11	20	-248	1586	14.78	16.25	0.17
77	SLE RA 12	23	-266	1601	15.98	20.41	0.2
77	SLE RA 13	26	-277	1611	16.78	23.18	0.23
77	SLE RA 14	20	-248	1586	14.78	16.25	0.17
77	SLE RA 15	23	-266	1601	15.98	20.41	0.2
77	SLE RA 16	20	-248	1586	14.78	16.25	0.17
77	SLE RA 17	23	-266	1601	15.98	20.41	0.2
77	SLE RA 18	21	-262	1641	15.65	17.37	0.18
77	SLE RA 19	25	-279	1656	16.86	21.53	0.22
77	SLE RA 20	21	-262	1641	15.65	17.37	0.18
77	SLE RA 21	25	-279	1656	16.86	21.53	0.22
77	SLE FR 1	17	-215	1455	12.74	13.64	0.15
77	SLE FR 2	18	-221	1460	13.14	15.03	0.16
77	SLE FR 3	17	-215	1455	12.74	13.64	0.15
77	SLE FR 4	19	-235	1516	14.02	16.15	0.17
77	SLE FR 5	18	-229	1511	13.61	14.76	0.16
77	SLE FR 6	19	-239	1548	14.2	15.51	0.16
77	SLE QP 1	17	-215	1455	12.74	13.64	0.15
77	SLE QP 2	18	-229	1511	13.61	14.76	0.16
77	SLD 1	28	-119	1362	9.1	24.09	0.24
77	SLD 2	28	-119	1362	9.1	24.09	0.24
77	SLD 3	33	-237	1409	13.85	29.12	0.28
77	SLD 4	33	-237	1409	13.85	29.12	0.28
77	SLD 5	14	-17	1396	5.04	9.94	0.12
77	SLD 6	14	-17	1396	5.04	9.94	0.12
77	SLD 7	29	-411	1551	20.9	26.69	0.25
77	SLD 8	29	-411	1551	20.9	26.69	0.25
77	SLD 9	6	-48	1471	6.33	2.83	0.06
77	SLD 10	6	-48	1471	6.33	2.83	0.06
77	SLD 11	22	-442	1626	22.18	19.59	0.19
77	SLD 12	22	-442	1626	22.18	19.59	0.19
77	SLD 13	3	-222	1614	13.38	0.41	0.04
77	SLD 14	3	-222	1614	13.38	0.41	0.04
77	SLD 15	7	-340	1660	18.13	5.44	0.08
77	SLD 16	7	-340	1660	18.13	5.44	0.08
77	SLV 1	42	32	1159	2.94	36.04	0.34
77	SLV 2	42	32	1159	2.94	36.04	0.34
77	SLV 3	54	-248	1275	14.27	49.13	0.45
77	SLV 4	54	-248	1275	14.27	49.13	0.45
77	SLV 5	7	274	1229	-6.77	1.29	0.06
77	SLV 6	7	274	1229	-6.77	1.29	0.06
77	SLV 7	47	-660	1617	30.99	44.93	0.4
77	SLV 8	47	-660	1617	30.99	44.93	0.4
77	SLV 9	-11	201	1405	-3.76	-15.4	-0.08
77	SLV 10	-11	201	1405	-3.76	-15.4	-0.08
77	SLV 11	29	-733	1793	34	28.23	0.26
77	SLV 12	29	-733	1793	34	28.23	0.26
77	SLV 13	-18	-211	1747	12.96	-19.6	-0.13
77	SLV 14	-18	-211	1747	12.96	-19.6	-0.13
77	SLV 15	-6	-491	1863	24.29	-6.51	-0.03
77	SLV 16	-6	-491	1863	24.29	-6.51	-0.03
78	SLU 1	-21	-79	1897	-1.91	-14.96	0
78	SLU 2	-33	-88	1992	-3.54	-26.94	0.01
78	SLU 3	-21	-79	1897	-1.91	-14.96	0
78	SLU 4	-28	-84	1954	-2.89	-22.14	0
78	SLU 5	-33	-88	1992	-3.54	-26.94	0.01
78	SLU 6	-21	-79	1897	-1.91	-14.96	0
78	SLU 7	-28	-84	1954	-2.89	-22.14	0
78	SLU 8	-21	-79	1897	-1.91	-14.96	0
78	SLU 9	-28	-84	1954	-2.89	-22.14	0
78	SLU 10	-38	-104	2242	-4.38	-31.2	0.01
78	SLU 11	-27	-95	2148	-2.75	-19.22	0
78	SLU 12	-34	-101	2204	-3.73	-26.41	0
78	SLU 13	-38	-104	2242	-4.38	-31.2	0.01
78	SLU 14	-27	-95	2148	-2.75	-19.22	0
78	SLU 15	-34	-101	2204	-3.73	-26.41	0
78	SLU 16	-27	-95	2148	-2.75	-19.22	0
78	SLU 17	-34	-101	2204	-3.73	-26.41	0
78	SLU 18	-29	-102	2255	-3.12	-21.05	0
78	SLU 19	-36	-108	2312	-4.09	-28.24	0
78	SLU 20	-29	-102	2255	-3.12	-21.05	0
78	SLU 21	-36	-108	2312	-4.09	-28.24	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
78	SLU 22	-24	-92	2050	-2.09	-17.04	0
78	SLU 23	-36	-101	2144	-3.72	-29.02	0.01
78	SLU 24	-24	-92	2050	-2.09	-17.04	0
78	SLU 25	-31	-97	2106	-3.07	-24.22	0
78	SLU 26	-36	-101	2144	-3.72	-29.02	0.01
78	SLU 27	-24	-92	2050	-2.09	-17.04	0
78	SLU 28	-31	-97	2106	-3.07	-24.22	0
78	SLU 29	-24	-92	2050	-2.09	-17.04	0
78	SLU 30	-31	-97	2106	-3.07	-24.22	0
78	SLU 31	-41	-117	2394	-4.56	-33.28	0.01
78	SLU 32	-29	-108	2300	-2.93	-21.3	0
78	SLU 33	-36	-114	2357	-3.91	-28.49	0
78	SLU 34	-41	-117	2394	-4.56	-33.28	0.01
78	SLU 35	-29	-108	2300	-2.93	-21.3	0
78	SLU 36	-36	-114	2357	-3.91	-28.49	0
78	SLU 37	-29	-108	2300	-2.93	-21.3	0
78	SLU 38	-36	-114	2357	-3.91	-28.49	0
78	SLU 39	-32	-115	2407	-3.29	-23.13	0
78	SLU 40	-39	-121	2464	-4.27	-30.32	0
78	SLU 41	-32	-115	2407	-3.29	-23.13	0
78	SLU 42	-39	-121	2464	-4.27	-30.32	0
78	SLU 43	-26	-98	2414	-2.42	-18.73	0
78	SLU 44	-38	-107	2509	-4.05	-30.71	0.01
78	SLU 45	-26	-98	2414	-2.42	-18.73	0
78	SLU 46	-33	-104	2471	-3.4	-25.92	0
78	SLU 47	-38	-107	2509	-4.05	-30.71	0.01
78	SLU 48	-26	-98	2414	-2.42	-18.73	0
78	SLU 49	-33	-104	2471	-3.4	-25.92	0
78	SLU 50	-26	-98	2414	-2.42	-18.73	0
78	SLU 51	-33	-104	2471	-3.4	-25.92	0
78	SLU 52	-44	-124	2759	-4.9	-34.98	0.01
78	SLU 53	-32	-114	2665	-3.27	-23	0
78	SLU 54	-39	-120	2721	-4.24	-30.18	0
78	SLU 55	-44	-124	2759	-4.9	-34.98	0.01
78	SLU 56	-32	-114	2665	-3.27	-23	0
78	SLU 57	-39	-120	2721	-4.24	-30.18	0
78	SLU 58	-32	-114	2665	-3.27	-23	0
78	SLU 59	-39	-120	2721	-4.24	-30.18	0
78	SLU 60	-34	-121	2772	-3.63	-24.83	0
78	SLU 61	-41	-127	2828	-4.61	-32.01	0
78	SLU 62	-34	-121	2772	-3.63	-24.83	0
78	SLU 63	-41	-127	2828	-4.61	-32.01	0
78	SLU 64	-29	-111	2567	-2.6	-20.81	0
78	SLU 65	-41	-120	2661	-4.23	-32.79	0.01
78	SLU 66	-29	-111	2567	-2.6	-20.81	0
78	SLU 67	-36	-117	2623	-3.58	-28	0
78	SLU 68	-41	-120	2661	-4.23	-32.79	0.01
78	SLU 69	-29	-111	2567	-2.6	-20.81	0
78	SLU 70	-36	-117	2623	-3.58	-28	0
78	SLU 71	-29	-111	2567	-2.6	-20.81	0
78	SLU 72	-36	-117	2623	-3.58	-28	0
78	SLU 73	-47	-137	2911	-5.07	-37.06	0.01
78	SLU 74	-35	-127	2817	-3.44	-25.08	0
78	SLU 75	-42	-133	2874	-4.42	-32.26	0
78	SLU 76	-47	-137	2911	-5.07	-37.06	0.01
78	SLU 77	-35	-127	2817	-3.44	-25.08	0
78	SLU 78	-42	-133	2874	-4.42	-32.26	0
78	SLU 79	-35	-127	2817	-3.44	-25.08	0
78	SLU 80	-42	-133	2874	-4.42	-32.26	0
78	SLU 81	-37	-134	2924	-3.81	-26.9	0
78	SLU 82	-44	-140	2981	-4.78	-34.09	0
78	SLU 83	-37	-134	2924	-3.81	-26.9	0
78	SLU 84	-44	-140	2981	-4.78	-34.09	0
78	SLE RA 1	-22	-83	1941	-1.96	-15.55	0
78	SLE RA 2	-30	-89	2004	-3.05	-23.54	0
78	SLE RA 3	-22	-83	1941	-1.96	-15.55	0
78	SLE RA 4	-27	-86	1979	-2.61	-20.34	0
78	SLE RA 5	-30	-89	2004	-3.05	-23.54	0
78	SLE RA 6	-22	-83	1941	-1.96	-15.55	0
78	SLE RA 7	-27	-86	1979	-2.61	-20.34	0
78	SLE RA 8	-22	-83	1941	-1.96	-15.55	0
78	SLE RA 9	-27	-86	1979	-2.61	-20.34	0
78	SLE RA 10	-33	-100	2171	-3.61	-26.38	0
78	SLE RA 11	-26	-94	2108	-2.52	-18.4	0
78	SLE RA 12	-30	-97	2145	-3.18	-23.19	0
78	SLE RA 13	-33	-100	2171	-3.61	-26.38	0
78	SLE RA 14	-26	-94	2108	-2.52	-18.4	0
78	SLE RA 15	-30	-97	2145	-3.18	-23.19	0
78	SLE RA 16	-26	-94	2108	-2.52	-18.4	0
78	SLE RA 17	-30	-97	2145	-3.18	-23.19	0
78	SLE RA 18	-27	-98	2179	-2.76	-19.61	0
78	SLE RA 19	-32	-102	2217	-3.42	-24.41	0
78	SLE RA 20	-27	-98	2179	-2.76	-19.61	0
78	SLE RA 21	-32	-102	2217	-3.42	-24.41	0
78	SLE FR 1	-22	-83	1941	-1.96	-15.55	0
78	SLE FR 2	-23	-84	1953	-2.18	-17.15	0
78	SLE FR 3	-22	-83	1941	-1.96	-15.55	0
78	SLE FR 4	-25	-89	2025	-2.42	-18.37	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
78	SLE FR 5	-23	-87	2012	-2.2	-16.77	0
78	SLE FR 6	-25	-90	2060	-2.36	-17.58	0
78	SLE QP 1	-22	-83	1941	-1.96	-15.55	0
78	SLE QP 2	-23	-87	2012	-2.2	-16.77	0
78	SLD 1	-6	28	2154	-2.11	-0.98	-0.02
78	SLD 2	-6	28	2154	-2.11	-0.98	-0.02
78	SLD 3	-11	-89	2201	-6.8	-6.29	-0.01
78	SLD 4	-11	-89	2201	-6.8	-6.29	-0.01
78	SLD 5	-10	125	1982	4.95	-3.98	-0.01
78	SLD 6	-10	125	1982	4.95	-3.98	-0.01
78	SLD 7	-28	-265	2141	-10.7	-21.68	0
78	SLD 8	-28	-265	2141	-10.7	-21.68	0
78	SLD 9	-19	90	1883	6.3	-11.86	0
78	SLD 10	-19	90	1883	6.3	-11.86	0
78	SLD 11	-36	-299	2042	-9.35	-29.56	0.01
78	SLD 12	-36	-299	2042	-9.35	-29.56	0.01
78	SLD 13	-36	-86	1823	2.4	-27.25	0.01
78	SLD 14	-36	-86	1823	2.4	-27.25	0.01
78	SLD 15	-41	-203	1871	-2.3	-32.56	0.02
78	SLD 16	-41	-203	1871	-2.3	-32.56	0.02
78	SLV 1	18	189	2335	-2.04	21.01	-0.04
78	SLV 2	18	189	2335	-2.04	21.01	-0.04
78	SLV 3	5	-88	2462	-13.16	7.28	-0.03
78	SLV 4	5	-88	2462	-13.16	7.28	-0.03
78	SLV 5	9	416	1917	14.72	15.38	-0.02
78	SLV 6	9	416	1917	14.72	15.38	-0.02
78	SLV 7	-35	-508	2340	-22.36	-30.38	0
78	SLV 8	-35	-508	2340	-22.36	-30.38	0
78	SLV 9	-12	333	1685	17.96	-3.16	0
78	SLV 10	-12	333	1685	17.96	-3.16	0
78	SLV 11	-56	-591	2108	-19.13	-48.92	0.03
78	SLV 12	-56	-591	2108	-19.13	-48.92	0.03
78	SLV 13	-51	-87	1563	8.76	-40.82	0.03
78	SLV 14	-51	-87	1563	8.76	-40.82	0.03
78	SLV 15	-65	-364	1690	-2.37	-54.55	0.04
78	SLV 16	-65	-364	1690	-2.37	-54.55	0.04
79	SLU 1	18	-23	1429	-3.43	14.28	0.16
79	SLU 2	30	-30	1466	-4.62	26.62	0.26
79	SLU 3	18	-23	1429	-3.43	14.28	0.16
79	SLU 4	25	-27	1451	-4.14	21.68	0.22
79	SLU 5	30	-30	1466	-4.62	26.62	0.26
79	SLU 6	18	-23	1429	-3.43	14.28	0.16
79	SLU 7	25	-27	1451	-4.14	21.68	0.22
79	SLU 8	18	-23	1429	-3.43	14.28	0.16
79	SLU 9	25	-27	1451	-4.14	21.68	0.22
79	SLU 10	35	-27	1661	-5.97	30.97	0.31
79	SLU 11	23	-19	1624	-4.78	18.63	0.2
79	SLU 12	30	-24	1646	-5.5	26.03	0.27
79	SLU 13	35	-27	1661	-5.97	30.97	0.31
79	SLU 14	23	-19	1624	-4.78	18.63	0.2
79	SLU 15	30	-24	1646	-5.5	26.03	0.27
79	SLU 16	23	-19	1624	-4.78	18.63	0.2
79	SLU 17	30	-24	1646	-5.5	26.03	0.27
79	SLU 18	25	-18	1707	-5.36	20.5	0.22
79	SLU 19	32	-22	1730	-6.08	27.9	0.29
79	SLU 20	25	-18	1707	-5.36	20.5	0.22
79	SLU 21	32	-22	1730	-6.08	27.9	0.29
79	SLU 22	20	-24	1533	-3.92	16.29	0.18
79	SLU 23	32	-31	1570	-5.11	28.63	0.29
79	SLU 24	20	-24	1533	-3.92	16.29	0.18
79	SLU 25	27	-28	1555	-4.64	23.69	0.24
79	SLU 26	32	-31	1570	-5.11	28.63	0.29
79	SLU 27	20	-24	1533	-3.92	16.29	0.18
79	SLU 28	27	-28	1555	-4.64	23.69	0.24
79	SLU 29	20	-24	1533	-3.92	16.29	0.18
79	SLU 30	27	-28	1555	-4.64	23.69	0.24
79	SLU 31	37	-28	1765	-6.47	32.98	0.33
79	SLU 32	25	-21	1728	-5.28	20.64	0.23
79	SLU 33	32	-25	1750	-5.99	28.04	0.29
79	SLU 34	37	-28	1765	-6.47	32.98	0.33
79	SLU 35	25	-21	1728	-5.28	20.64	0.23
79	SLU 36	32	-25	1750	-5.99	28.04	0.29
79	SLU 37	25	-21	1728	-5.28	20.64	0.23
79	SLU 38	32	-25	1750	-5.99	28.04	0.29
79	SLU 39	27	-19	1811	-5.86	22.51	0.25
79	SLU 40	35	-24	1834	-6.57	29.91	0.31
79	SLU 41	27	-19	1811	-5.86	22.51	0.25
79	SLU 42	35	-24	1834	-6.57	29.91	0.31
79	SLU 43	22	-29	1822	-4.28	17.88	0.2
79	SLU 44	34	-36	1859	-5.48	30.21	0.3
79	SLU 45	22	-29	1822	-4.28	17.88	0.2
79	SLU 46	29	-33	1844	-5	25.28	0.26
79	SLU 47	34	-36	1859	-5.48	30.21	0.3
79	SLU 48	22	-29	1822	-4.28	17.88	0.2
79	SLU 49	29	-33	1844	-5	25.28	0.26
79	SLU 50	22	-29	1822	-4.28	17.88	0.2
79	SLU 51	29	-33	1844	-5	25.28	0.26
79	SLU 52	39	-33	2054	-6.83	34.56	0.35

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
79	SLU 53	27	-26	2017	-5.64	22.23	0.24
79	SLU 54	34	-30	2039	-6.35	29.63	0.31
79	SLU 55	39	-33	2054	-6.83	34.56	0.35
79	SLU 56	27	-26	2017	-5.64	22.23	0.24
79	SLU 57	34	-30	2039	-6.35	29.63	0.31
79	SLU 58	27	-26	2017	-5.64	22.23	0.24
79	SLU 59	34	-30	2039	-6.35	29.63	0.31
79	SLU 60	29	-24	2100	-6.22	24.09	0.26
79	SLU 61	37	-29	2123	-6.94	31.49	0.33
79	SLU 62	29	-24	2100	-6.22	24.09	0.26
79	SLU 63	37	-29	2123	-6.94	31.49	0.33
79	SLU 64	24	-30	1926	-4.78	19.89	0.22
79	SLU 65	36	-37	1963	-5.97	32.22	0.33
79	SLU 66	24	-30	1926	-4.78	19.89	0.22
79	SLU 67	32	-35	1948	-5.5	27.29	0.28
79	SLU 68	36	-37	1963	-5.97	32.22	0.33
79	SLU 69	24	-30	1926	-4.78	19.89	0.22
79	SLU 70	32	-35	1948	-5.5	27.29	0.28
79	SLU 71	24	-30	1926	-4.78	19.89	0.22
79	SLU 72	32	-35	1948	-5.5	27.29	0.28
79	SLU 73	42	-34	2158	-7.33	36.57	0.37
79	SLU 74	30	-27	2121	-6.14	24.24	0.27
79	SLU 75	37	-31	2143	-6.85	31.64	0.33
79	SLU 76	42	-34	2158	-7.33	36.57	0.37
79	SLU 77	30	-27	2121	-6.14	24.24	0.27
79	SLU 78	37	-31	2143	-6.85	31.64	0.33
79	SLU 79	30	-27	2121	-6.14	24.24	0.27
79	SLU 80	37	-31	2143	-6.85	31.64	0.33
79	SLU 81	32	-26	2204	-6.72	26.1	0.29
79	SLU 82	39	-30	2227	-7.43	33.5	0.35
79	SLU 83	32	-26	2204	-6.72	26.1	0.29
79	SLU 84	39	-30	2227	-7.43	33.5	0.35
79	SLE RA 1	18	-23	1458	-3.57	14.86	0.16
79	SLE RA 2	26	-28	1483	-4.36	23.08	0.24
79	SLE RA 3	18	-23	1458	-3.57	14.86	0.16
79	SLE RA 4	23	-26	1473	-4.05	19.79	0.21
79	SLE RA 5	26	-28	1483	-4.36	23.08	0.24
79	SLE RA 6	18	-23	1458	-3.57	14.86	0.16
79	SLE RA 7	23	-26	1473	-4.05	19.79	0.21
79	SLE RA 8	18	-23	1458	-3.57	14.86	0.16
79	SLE RA 9	23	-26	1473	-4.05	19.79	0.21
79	SLE RA 10	30	-26	1613	-5.27	25.98	0.27
79	SLE RA 11	22	-21	1588	-4.47	17.76	0.19
79	SLE RA 12	27	-24	1603	-4.95	22.69	0.24
79	SLE RA 13	30	-26	1613	-5.27	25.98	0.27
79	SLE RA 14	22	-21	1588	-4.47	17.76	0.19
79	SLE RA 15	27	-24	1603	-4.95	22.69	0.24
79	SLE RA 16	22	-21	1588	-4.47	17.76	0.19
79	SLE RA 17	27	-24	1603	-4.95	22.69	0.24
79	SLE RA 18	23	-20	1644	-4.86	19	0.21
79	SLE RA 19	28	-23	1659	-5.34	23.93	0.25
79	SLE RA 20	23	-20	1644	-4.86	19	0.21
79	SLE RA 21	28	-23	1659	-5.34	23.93	0.25
79	SLE FR 1	18	-23	1458	-3.57	14.86	0.16
79	SLE FR 2	20	-24	1463	-3.73	16.5	0.18
79	SLE FR 3	18	-23	1458	-3.57	14.86	0.16
79	SLE FR 4	21	-23	1519	-4.11	17.74	0.19
79	SLE FR 5	20	-22	1514	-3.96	16.1	0.18
79	SLE FR 6	21	-21	1551	-4.21	16.93	0.19
79	SLE QP 1	18	-23	1458	-3.57	14.86	0.16
79	SLE QP 2	20	-22	1514	-3.96	16.1	0.18
79	SLD 1	31	-16	1350	-3.91	26.05	0.28
79	SLD 2	31	-16	1350	-3.91	26.05	0.28
79	SLD 3	37	-128	1404	0.22	32.01	0.33
79	SLD 4	37	-128	1404	0.22	32.01	0.33
79	SLD 5	14	149	1384	-10.2	10.05	0.13
79	SLD 6	14	149	1384	-10.2	10.05	0.13
79	SLD 7	34	-223	1562	3.55	29.9	0.3
79	SLD 8	34	-223	1562	3.55	29.9	0.3
79	SLD 9	6	179	1466	-11.46	2.3	0.05
79	SLD 10	6	179	1466	-11.46	2.3	0.05
79	SLD 11	25	-193	1645	2.29	22.14	0.23
79	SLD 12	25	-193	1645	2.29	22.14	0.23
79	SLD 13	3	84	1624	-8.13	0.19	0.02
79	SLD 14	3	84	1624	-8.13	0.19	0.02
79	SLD 15	8	-28	1678	-4.01	6.15	0.08
79	SLD 16	8	-28	1678	-4.01	6.15	0.08
79	SLV 1	46	-7	1127	-3.86	38.77	0.41
79	SLV 2	46	-7	1127	-3.86	38.77	0.41
79	SLV 3	61	-271	1260	5.89	54.22	0.54
79	SLV 4	61	-271	1260	5.89	54.22	0.54
79	SLV 5	5	384	1196	-18.72	-0.54	0.04
79	SLV 6	5	384	1196	-18.72	-0.54	0.04
79	SLV 7	55	-498	1640	13.79	50.98	0.49
79	SLV 8	55	-498	1640	13.79	50.98	0.49
79	SLV 9	-15	454	1388	-21.7	-18.78	-0.14
79	SLV 10	-15	454	1388	-21.7	-18.78	-0.14
79	SLV 11	34	-428	1832	10.8	32.74	0.31

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
79	SLV 12	34	-428	1832	10.8	32.74	0.31
79	SLV 13	-21	227	1768	-13.81	-22.03	-0.19
79	SLV 14	-21	227	1768	-13.81	-22.03	-0.19
79	SLV 15	-6	-37	1901	-4.05	-6.57	-0.05
79	SLV 16	-6	-37	1901	-4.05	-6.57	-0.05
80	SLU 1	-22	-161	1909	13.06	-15.7	0
80	SLU 2	-38	-216	2003	17.79	-29.91	0.01
80	SLU 3	-22	-161	1909	13.06	-15.7	0
80	SLU 4	-31	-194	1965	15.9	-24.23	0.01
80	SLU 5	-38	-216	2003	17.79	-29.91	0.01
80	SLU 6	-22	-161	1909	13.06	-15.7	0
80	SLU 7	-31	-194	1965	15.9	-24.23	0.01
80	SLU 8	-22	-161	1909	13.06	-15.7	0
80	SLU 9	-31	-194	1965	15.9	-24.23	0.01
80	SLU 10	-44	-249	2264	21.08	-34.55	0.01
80	SLU 11	-29	-193	2170	16.36	-20.34	0
80	SLU 12	-38	-227	2226	19.19	-28.87	0.01
80	SLU 13	-44	-249	2264	21.08	-34.55	0.01
80	SLU 14	-29	-193	2170	16.36	-20.34	0
80	SLU 15	-38	-227	2226	19.19	-28.87	0.01
80	SLU 16	-29	-193	2170	16.36	-20.34	0
80	SLU 17	-38	-227	2226	19.19	-28.87	0.01
80	SLU 18	-31	-207	2282	17.77	-22.33	0
80	SLU 19	-40	-240	2338	20.61	-30.85	0.01
80	SLU 20	-31	-207	2282	17.77	-22.33	0
80	SLU 21	-40	-240	2338	20.61	-30.85	0.01
80	SLU 22	-25	-180	2065	14.76	-17.94	0
80	SLU 23	-41	-235	2158	19.48	-32.15	0.01
80	SLU 24	-25	-180	2065	14.76	-17.94	0
80	SLU 25	-35	-213	2121	17.59	-26.47	0.01
80	SLU 26	-41	-235	2158	19.48	-32.15	0.01
80	SLU 27	-25	-180	2065	14.76	-17.94	0
80	SLU 28	-35	-213	2121	17.59	-26.47	0.01
80	SLU 29	-25	-180	2065	14.76	-17.94	0
80	SLU 30	-35	-213	2121	17.59	-26.47	0.01
80	SLU 31	-47	-268	2419	22.78	-36.79	0.01
80	SLU 32	-32	-213	2326	18.06	-22.58	0
80	SLU 33	-41	-246	2382	20.89	-31.1	0.01
80	SLU 34	-47	-268	2419	22.78	-36.79	0.01
80	SLU 35	-32	-213	2326	18.06	-22.58	0
80	SLU 36	-41	-246	2382	20.89	-31.1	0.01
80	SLU 37	-32	-213	2326	18.06	-22.58	0
80	SLU 38	-41	-246	2382	20.89	-31.1	0.01
80	SLU 39	-34	-227	2438	19.47	-24.57	0
80	SLU 40	-43	-260	2494	22.3	-33.09	0.01
80	SLU 41	-34	-227	2438	19.47	-24.57	0
80	SLU 42	-43	-260	2494	22.3	-33.09	0.01
80	SLU 43	-28	-203	2429	16.4	-19.65	0
80	SLU 44	-43	-258	2522	21.13	-33.85	0.01
80	SLU 45	-28	-203	2429	16.4	-19.65	0
80	SLU 46	-37	-236	2485	19.24	-28.17	0.01
80	SLU 47	-43	-258	2522	21.13	-33.85	0.01
80	SLU 48	-28	-203	2429	16.4	-19.65	0
80	SLU 49	-37	-236	2485	19.24	-28.17	0.01
80	SLU 50	-28	-203	2429	16.4	-19.65	0
80	SLU 51	-37	-236	2485	19.24	-28.17	0.01
80	SLU 52	-49	-290	2783	24.42	-38.49	0.01
80	SLU 53	-34	-235	2690	19.7	-24.28	0
80	SLU 54	-43	-268	2746	22.53	-32.81	0.01
80	SLU 55	-49	-290	2783	24.42	-38.49	0.01
80	SLU 56	-34	-235	2690	19.7	-24.28	0
80	SLU 57	-43	-268	2746	22.53	-32.81	0.01
80	SLU 58	-34	-235	2690	19.7	-24.28	0
80	SLU 59	-43	-268	2746	22.53	-32.81	0.01
80	SLU 60	-37	-249	2802	21.11	-26.27	0.01
80	SLU 61	-46	-282	2858	23.94	-34.8	0.01
80	SLU 62	-37	-249	2802	21.11	-26.27	0.01
80	SLU 63	-46	-282	2858	23.94	-34.8	0.01
80	SLU 64	-31	-222	2584	18.1	-21.88	0
80	SLU 65	-46	-277	2678	22.82	-36.09	0.01
80	SLU 66	-31	-222	2584	18.1	-21.88	0
80	SLU 67	-40	-255	2640	20.93	-30.41	0.01
80	SLU 68	-46	-277	2678	22.82	-36.09	0.01
80	SLU 69	-31	-222	2584	18.1	-21.88	0
80	SLU 70	-40	-255	2640	20.93	-30.41	0.01
80	SLU 71	-31	-222	2584	18.1	-21.88	0
80	SLU 72	-40	-255	2640	20.93	-30.41	0.01
80	SLU 73	-53	-310	2939	26.12	-40.73	0.01
80	SLU 74	-37	-254	2845	21.39	-26.52	0.01
80	SLU 75	-46	-287	2901	24.23	-35.05	0.01
80	SLU 76	-53	-310	2939	26.12	-40.73	0.01
80	SLU 77	-37	-254	2845	21.39	-26.52	0.01
80	SLU 78	-46	-287	2901	24.23	-35.05	0.01
80	SLU 79	-37	-254	2845	21.39	-26.52	0.01
80	SLU 80	-46	-287	2901	24.23	-35.05	0.01
80	SLU 81	-40	-268	2957	22.81	-28.51	0.01
80	SLU 82	-49	-301	3013	25.64	-37.04	0.01
80	SLU 83	-40	-268	2957	22.81	-28.51	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
80	SLU 84	-49	-301	3013	25.64	-37.04	0.01
80	SLE RA 1	-23	-167	1954	13.55	-16.34	0
80	SLE RA 2	-33	-203	2016	16.7	-25.81	0.01
80	SLE RA 3	-23	-167	1954	13.55	-16.34	0
80	SLE RA 4	-29	-189	1991	15.44	-22.03	0.01
80	SLE RA 5	-33	-203	2016	16.7	-25.81	0.01
80	SLE RA 6	-23	-167	1954	13.55	-16.34	0
80	SLE RA 7	-29	-189	1991	15.44	-22.03	0.01
80	SLE RA 8	-23	-167	1954	13.55	-16.34	0
80	SLE RA 9	-29	-189	1991	15.44	-22.03	0.01
80	SLE RA 10	-38	-225	2190	18.89	-28.91	0.01
80	SLE RA 11	-27	-188	2128	15.75	-19.43	0
80	SLE RA 12	-33	-210	2165	17.64	-25.12	0.01
80	SLE RA 13	-38	-225	2190	18.89	-28.91	0.01
80	SLE RA 14	-27	-188	2128	15.75	-19.43	0
80	SLE RA 15	-33	-210	2165	17.64	-25.12	0.01
80	SLE RA 16	-27	-188	2128	15.75	-19.43	0
80	SLE RA 17	-33	-210	2165	17.64	-25.12	0.01
80	SLE RA 18	-29	-197	2202	16.69	-20.76	0
80	SLE RA 19	-35	-219	2240	18.58	-26.44	0.01
80	SLE RA 20	-29	-197	2202	16.69	-20.76	0
80	SLE RA 21	-35	-219	2240	18.58	-26.44	0.01
80	SLE FR 1	-23	-167	1954	13.55	-16.34	0
80	SLE FR 2	-25	-174	1966	14.18	-18.24	0
80	SLE FR 3	-23	-167	1954	13.55	-16.34	0
80	SLE FR 4	-27	-183	2041	15.12	-19.56	0
80	SLE FR 5	-25	-176	2028	14.49	-17.67	0
80	SLE FR 6	-26	-182	2078	15.12	-18.55	0
80	SLE QP 1	-23	-167	1954	13.55	-16.34	0
80	SLE QP 2	-25	-176	2028	14.49	-17.67	0
80	SLD 1	-6	-53	2167	8.78	-0.97	-0.01
80	SLD 2	-6	-53	2167	8.78	-0.97	-0.01
80	SLD 3	-13	-172	2227	13.88	-7.42	0
80	SLD 4	-13	-172	2227	13.88	-7.42	0
80	SLD 5	-9	42	1980	5.03	-2.87	0
80	SLD 6	-9	42	1980	5.03	-2.87	0
80	SLD 7	-32	-356	2178	22.05	-24.38	0.01
80	SLD 8	-32	-356	2178	22.05	-24.38	0.01
80	SLD 9	-18	4	1879	6.93	-10.95	0
80	SLD 10	-18	4	1879	6.93	-10.95	0
80	SLD 11	-41	-393	2077	23.95	-32.47	0.01
80	SLD 12	-41	-393	2077	23.95	-32.47	0.01
80	SLD 13	-37	-179	1830	15.1	-27.91	0.01
80	SLD 14	-37	-179	1830	15.1	-27.91	0.01
80	SLD 15	-44	-298	1889	20.2	-34.37	0.01
80	SLD 16	-44	-298	1889	20.2	-34.37	0.01
80	SLV 1	20	122	2348	0.58	22.4	-0.02
80	SLV 2	20	122	2348	0.58	22.4	-0.02
80	SLV 3	2	-162	2497	12.8	5.73	-0.01
80	SLV 4	2	-162	2497	12.8	5.73	-0.01
80	SLV 5	15	344	1898	-8.2	19.64	-0.01
80	SLV 6	15	344	1898	-8.2	19.64	-0.01
80	SLV 7	-44	-603	2395	32.5	-35.94	0.01
80	SLV 8	-44	-603	2395	32.5	-35.94	0.01
80	SLV 9	-6	251	1662	-3.52	0.6	0
80	SLV 10	-6	251	1662	-3.52	0.6	0
80	SLV 11	-65	-696	2158	37.18	-54.98	0.02
80	SLV 12	-65	-696	2158	37.18	-54.98	0.02
80	SLV 13	-52	-189	1560	16.18	-41.06	0.02
80	SLV 14	-52	-189	1560	16.18	-41.06	0.02
80	SLV 15	-70	-473	1709	28.4	-57.74	0.02
80	SLV 16	-70	-473	1709	28.4	-57.74	0.02
81	SLU 1	19	-56	1520	8.34	14.49	0.14
81	SLU 2	34	-93	1567	11.74	28.27	0.25
81	SLU 3	19	-56	1520	8.34	14.49	0.14
81	SLU 4	28	-78	1548	10.38	22.76	0.21
81	SLU 5	34	-93	1567	11.74	28.27	0.25
81	SLU 6	19	-56	1520	8.34	14.49	0.14
81	SLU 7	28	-78	1548	10.38	22.76	0.21
81	SLU 8	19	-56	1520	8.34	14.49	0.14
81	SLU 9	28	-78	1548	10.38	22.76	0.21
81	SLU 10	39	-96	1781	13.61	32.76	0.29
81	SLU 11	25	-59	1734	10.21	18.98	0.18
81	SLU 12	34	-81	1762	12.25	27.25	0.25
81	SLU 13	39	-96	1781	13.61	32.76	0.29
81	SLU 14	25	-59	1734	10.21	18.98	0.18
81	SLU 15	34	-81	1762	12.25	27.25	0.25
81	SLU 16	25	-59	1734	10.21	18.98	0.18
81	SLU 17	34	-81	1762	12.25	27.25	0.25
81	SLU 18	27	-61	1826	11.01	20.9	0.2
81	SLU 19	36	-83	1854	13.05	29.17	0.27
81	SLU 20	27	-61	1826	11.01	20.9	0.2
81	SLU 21	36	-83	1854	13.05	29.17	0.27
81	SLU 22	22	-59	1633	9.21	16.55	0.16
81	SLU 23	36	-95	1679	12.62	30.34	0.27
81	SLU 24	22	-59	1633	9.21	16.55	0.16
81	SLU 25	30	-81	1661	11.26	24.82	0.23
81	SLU 26	36	-95	1679	12.62	30.34	0.27

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
81	SLU 27	22	-59	1633	9.21	16.55	0.16
81	SLU 28	30	-81	1661	11.26	24.82	0.23
81	SLU 29	22	-59	1633	9.21	16.55	0.16
81	SLU 30	30	-81	1661	11.26	24.82	0.23
81	SLU 31	42	-98	1894	14.49	34.83	0.31
81	SLU 32	27	-62	1847	11.08	21.04	0.2
81	SLU 33	36	-84	1875	13.12	29.31	0.27
81	SLU 34	42	-98	1894	14.49	34.83	0.31
81	SLU 35	27	-62	1847	11.08	21.04	0.2
81	SLU 36	36	-84	1875	13.12	29.31	0.27
81	SLU 37	27	-62	1847	11.08	21.04	0.2
81	SLU 38	36	-84	1875	13.12	29.31	0.27
81	SLU 39	30	-63	1939	11.88	22.97	0.22
81	SLU 40	39	-85	1967	13.92	31.24	0.29
81	SLU 41	30	-63	1939	11.88	22.97	0.22
81	SLU 42	39	-85	1967	13.92	31.24	0.29
81	SLU 43	24	-72	1937	10.54	18.12	0.18
81	SLU 44	39	-109	1984	13.94	31.91	0.29
81	SLU 45	24	-72	1937	10.54	18.12	0.18
81	SLU 46	33	-94	1965	12.58	26.39	0.24
81	SLU 47	39	-109	1984	13.94	31.91	0.29
81	SLU 48	24	-72	1937	10.54	18.12	0.18
81	SLU 49	33	-94	1965	12.58	26.39	0.24
81	SLU 50	24	-72	1937	10.54	18.12	0.18
81	SLU 51	33	-94	1965	12.58	26.39	0.24
81	SLU 52	44	-112	2198	15.81	36.4	0.33
81	SLU 53	29	-75	2151	12.41	22.61	0.22
81	SLU 54	38	-97	2179	14.45	30.88	0.28
81	SLU 55	44	-112	2198	15.81	36.4	0.33
81	SLU 56	29	-75	2151	12.41	22.61	0.22
81	SLU 57	38	-97	2179	14.45	30.88	0.28
81	SLU 58	29	-75	2151	12.41	22.61	0.22
81	SLU 59	38	-97	2179	14.45	30.88	0.28
81	SLU 60	32	-77	2243	13.21	24.54	0.24
81	SLU 61	41	-99	2271	15.25	32.81	0.3
81	SLU 62	32	-77	2243	13.21	24.54	0.24
81	SLU 63	41	-99	2271	15.25	32.81	0.3
81	SLU 64	26	-75	2050	11.42	20.19	0.2
81	SLU 65	41	-111	2097	14.82	33.98	0.3
81	SLU 66	26	-75	2050	11.42	20.19	0.2
81	SLU 67	35	-97	2078	13.46	28.46	0.26
81	SLU 68	41	-111	2097	14.82	33.98	0.3
81	SLU 69	26	-75	2050	11.42	20.19	0.2
81	SLU 70	35	-97	2078	13.46	28.46	0.26
81	SLU 71	26	-75	2050	11.42	20.19	0.2
81	SLU 72	35	-97	2078	13.46	28.46	0.26
81	SLU 73	47	-114	2311	16.69	38.47	0.35
81	SLU 74	32	-78	2264	13.28	24.68	0.24
81	SLU 75	41	-100	2292	15.33	32.95	0.3
81	SLU 76	47	-114	2311	16.69	38.47	0.35
81	SLU 77	32	-78	2264	13.28	24.68	0.24
81	SLU 78	41	-100	2292	15.33	32.95	0.3
81	SLU 79	32	-78	2264	13.28	24.68	0.24
81	SLU 80	41	-100	2292	15.33	32.95	0.3
81	SLU 81	35	-79	2356	14.08	26.6	0.26
81	SLU 82	43	-101	2384	16.13	34.88	0.32
81	SLU 83	35	-79	2356	14.08	26.6	0.26
81	SLU 84	43	-101	2384	16.13	34.88	0.32
81	SLE RA 1	20	-57	1552	8.59	15.08	0.15
81	SLE RA 2	30	-81	1583	10.86	24.27	0.22
81	SLE RA 3	20	-57	1552	8.59	15.08	0.15
81	SLE RA 4	26	-72	1571	9.95	20.59	0.19
81	SLE RA 5	30	-81	1583	10.86	24.27	0.22
81	SLE RA 6	20	-57	1552	8.59	15.08	0.15
81	SLE RA 7	26	-72	1571	9.95	20.59	0.19
81	SLE RA 8	20	-57	1552	8.59	15.08	0.15
81	SLE RA 9	26	-72	1571	9.95	20.59	0.19
81	SLE RA 10	33	-83	1726	12.1	27.26	0.25
81	SLE RA 11	24	-59	1695	9.83	18.07	0.18
81	SLE RA 12	29	-74	1714	11.2	23.58	0.22
81	SLE RA 13	33	-83	1726	12.1	27.26	0.25
81	SLE RA 14	24	-59	1695	9.83	18.07	0.18
81	SLE RA 15	29	-74	1714	11.2	23.58	0.22
81	SLE RA 16	24	-59	1695	9.83	18.07	0.18
81	SLE RA 17	29	-74	1714	11.2	23.58	0.22
81	SLE RA 18	25	-60	1756	10.37	19.35	0.19
81	SLE RA 19	31	-75	1775	11.73	24.87	0.23
81	SLE RA 20	25	-60	1756	10.37	19.35	0.19
81	SLE RA 21	31	-75	1775	11.73	24.87	0.23
81	SLE FR 1	20	-57	1552	8.59	15.08	0.15
81	SLE FR 2	22	-62	1558	9.04	16.91	0.16
81	SLE FR 3	20	-57	1552	8.59	15.08	0.15
81	SLE FR 4	23	-63	1619	9.58	18.2	0.17
81	SLE FR 5	21	-58	1613	9.12	16.36	0.16
81	SLE FR 6	22	-59	1654	9.48	17.21	0.17
81	SLE QP 1	20	-57	1552	8.59	15.08	0.15
81	SLE QP 2	21	-58	1613	9.12	16.36	0.16
81	SLD 1	32	-51	1430	4.95	25.68	0.24

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
81	SLD 2	32	-51	1430	4.95	25.68	0.24
81	SLD 3	39	-159	1500	9.46	32.41	0.3
81	SLD 4	39	-159	1500	9.46	32.41	0.3
81	SLD 5	14	109	1453	1.02	8.96	0.1
81	SLD 6	14	109	1453	1.02	8.96	0.1
81	SLD 7	38	-253	1685	16.07	31.37	0.28
81	SLD 8	38	-253	1685	16.07	31.37	0.28
81	SLD 9	5	138	1542	2.18	1.34	0.04
81	SLD 10	5	138	1542	2.18	1.34	0.04
81	SLD 11	29	-225	1774	17.22	23.76	0.21
81	SLD 12	29	-225	1774	17.22	23.76	0.21
81	SLD 13	4	44	1727	8.78	0.31	0.02
81	SLD 14	4	44	1727	8.78	0.31	0.02
81	SLD 15	11	-65	1797	13.3	7.03	0.07
81	SLD 16	11	-65	1797	13.3	7.03	0.07
81	SLV 1	45	-39	1179	-0.78	37.49	0.35
81	SLV 2	45	-39	1179	-0.78	37.49	0.35
81	SLV 3	64	-298	1352	10.03	54.92	0.49
81	SLV 4	64	-298	1352	10.03	54.92	0.49
81	SLV 5	0	340	1220	-10.24	-3.73	0.01
81	SLV 6	0	340	1220	-10.24	-3.73	0.01
81	SLV 7	62	-523	1798	25.79	54.35	0.47
81	SLV 8	62	-523	1798	25.79	54.35	0.47
81	SLV 9	-20	407	1429	-7.54	-21.64	-0.15
81	SLV 10	-20	407	1429	-7.54	-21.64	-0.15
81	SLV 11	42	-456	2006	28.49	36.45	0.31
81	SLV 12	42	-456	2006	28.49	36.45	0.31
81	SLV 13	-21	183	1874	8.22	-22.2	-0.17
81	SLV 14	-21	183	1874	8.22	-22.2	-0.17
81	SLV 15	-3	-76	2047	19.02	-4.77	-0.04
81	SLV 16	-3	-76	2047	19.02	-4.77	-0.04
82	SLU 1	-21	24	2020	-7.74	-14.87	0
82	SLU 2	-40	34	2146	-10.79	-30.36	0.01
82	SLU 3	-21	24	2020	-7.74	-14.87	0
82	SLU 4	-33	30	2096	-9.57	-24.16	0.01
82	SLU 5	-40	34	2146	-10.79	-30.36	0.01
82	SLU 6	-21	24	2020	-7.74	-14.87	0
82	SLU 7	-33	30	2096	-9.57	-24.16	0.01
82	SLU 8	-21	24	2020	-7.74	-14.87	0
82	SLU 9	-33	30	2096	-9.57	-24.16	0.01
82	SLU 10	-46	66	2453	-14.03	-34.9	0.01
82	SLU 11	-28	56	2327	-10.98	-19.4	0
82	SLU 12	-39	62	2403	-12.81	-28.7	0.01
82	SLU 13	-46	66	2453	-14.03	-34.9	0.01
82	SLU 14	-28	56	2327	-10.98	-19.4	0
82	SLU 15	-39	62	2403	-12.81	-28.7	0.01
82	SLU 16	-28	56	2327	-10.98	-19.4	0
82	SLU 17	-39	62	2403	-12.81	-28.7	0.01
82	SLU 18	-30	70	2459	-12.36	-21.35	0
82	SLU 19	-42	76	2534	-14.2	-30.64	0.01
82	SLU 20	-30	70	2459	-12.36	-21.35	0
82	SLU 21	-42	76	2534	-14.2	-30.64	0.01
82	SLU 22	-25	36	2197	-9.1	-17.03	0
82	SLU 23	-43	45	2323	-12.16	-32.53	0.01
82	SLU 24	-25	36	2197	-9.1	-17.03	0
82	SLU 25	-36	41	2272	-10.93	-26.33	0.01
82	SLU 26	-43	45	2323	-12.16	-32.53	0.01
82	SLU 27	-25	36	2197	-9.1	-17.03	0
82	SLU 28	-36	41	2272	-10.93	-26.33	0.01
82	SLU 29	-25	36	2197	-9.1	-17.03	0
82	SLU 30	-36	41	2272	-10.93	-26.33	0.01
82	SLU 31	-49	77	2629	-15.39	-37.06	0.01
82	SLU 32	-31	68	2503	-12.34	-21.57	0
82	SLU 33	-42	73	2579	-14.17	-30.87	0.01
82	SLU 34	-49	77	2629	-15.39	-37.06	0.01
82	SLU 35	-31	68	2503	-12.34	-21.57	0
82	SLU 36	-42	73	2579	-14.17	-30.87	0.01
82	SLU 37	-31	68	2503	-12.34	-21.57	0
82	SLU 38	-42	73	2579	-14.17	-30.87	0.01
82	SLU 39	-34	81	2635	-13.73	-23.51	0.01
82	SLU 40	-45	87	2711	-15.56	-32.81	0.01
82	SLU 41	-34	81	2635	-13.73	-23.51	0.01
82	SLU 42	-45	87	2711	-15.56	-32.81	0.01
82	SLU 43	-27	27	2566	-9.59	-18.58	0
82	SLU 44	-45	37	2692	-12.65	-34.08	0.01
82	SLU 45	-27	27	2566	-9.59	-18.58	0
82	SLU 46	-38	33	2641	-11.43	-27.88	0.01
82	SLU 47	-45	37	2692	-12.65	-34.08	0.01
82	SLU 48	-27	27	2566	-9.59	-18.58	0
82	SLU 49	-38	33	2641	-11.43	-27.88	0.01
82	SLU 50	-27	27	2566	-9.59	-18.58	0
82	SLU 51	-38	33	2641	-11.43	-27.88	0.01
82	SLU 52	-52	69	2999	-15.89	-38.61	0.01
82	SLU 53	-33	59	2873	-12.83	-23.12	0
82	SLU 54	-44	65	2948	-14.66	-32.42	0.01
82	SLU 55	-52	69	2999	-15.89	-38.61	0.01
82	SLU 56	-33	59	2873	-12.83	-23.12	0
82	SLU 57	-44	65	2948	-14.66	-32.42	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
82	SLU 58	-33	59	2873	-12.83	-23.12	0
82	SLU 59	-44	65	2948	-14.66	-32.42	0.01
82	SLU 60	-36	73	3004	-14.22	-25.06	0.01
82	SLU 61	-47	79	3080	-16.05	-34.36	0.01
82	SLU 62	-36	73	3004	-14.22	-25.06	0.01
82	SLU 63	-47	79	3080	-16.05	-34.36	0.01
82	SLU 64	-30	39	2742	-10.96	-20.75	0
82	SLU 65	-48	49	2868	-14.01	-36.24	0.01
82	SLU 66	-30	39	2742	-10.96	-20.75	0
82	SLU 67	-41	45	2818	-12.79	-30.05	0.01
82	SLU 68	-48	49	2868	-14.01	-36.24	0.01
82	SLU 69	-30	39	2742	-10.96	-20.75	0
82	SLU 70	-41	45	2818	-12.79	-30.05	0.01
82	SLU 71	-30	39	2742	-10.96	-20.75	0
82	SLU 72	-41	45	2818	-12.79	-30.05	0.01
82	SLU 73	-55	81	3175	-17.25	-40.78	0.01
82	SLU 74	-36	71	3049	-14.19	-25.29	0.01
82	SLU 75	-47	77	3125	-16.03	-34.58	0.01
82	SLU 76	-55	81	3175	-17.25	-40.78	0.01
82	SLU 77	-36	71	3049	-14.19	-25.29	0.01
82	SLU 78	-47	77	3125	-16.03	-34.58	0.01
82	SLU 79	-36	71	3049	-14.19	-25.29	0.01
82	SLU 80	-47	77	3125	-16.03	-34.58	0.01
82	SLU 81	-39	85	3181	-15.58	-27.23	0.01
82	SLU 82	-50	90	3256	-17.41	-36.53	0.01
82	SLU 83	-39	85	3181	-15.58	-27.23	0.01
82	SLU 84	-50	90	3256	-17.41	-36.53	0.01
82	SLE RA 1	-22	27	2071	-8.13	-15.48	0
82	SLE RA 2	-35	34	2155	-10.17	-25.81	0.01
82	SLE RA 3	-22	27	2071	-8.13	-15.48	0
82	SLE RA 4	-30	31	2121	-9.35	-21.68	0.01
82	SLE RA 5	-35	34	2155	-10.17	-25.81	0.01
82	SLE RA 6	-22	27	2071	-8.13	-15.48	0
82	SLE RA 7	-30	31	2121	-9.35	-21.68	0.01
82	SLE RA 8	-22	27	2071	-8.13	-15.48	0
82	SLE RA 9	-30	31	2121	-9.35	-21.68	0.01
82	SLE RA 10	-39	55	2359	-12.32	-28.84	0.01
82	SLE RA 11	-27	49	2275	-10.29	-18.51	0
82	SLE RA 12	-34	53	2326	-11.51	-24.71	0.01
82	SLE RA 13	-39	55	2359	-12.32	-28.84	0.01
82	SLE RA 14	-27	49	2275	-10.29	-18.51	0
82	SLE RA 15	-34	53	2326	-11.51	-24.71	0.01
82	SLE RA 16	-27	49	2275	-10.29	-18.51	0
82	SLE RA 17	-34	53	2326	-11.51	-24.71	0.01
82	SLE RA 18	-28	58	2363	-11.21	-19.81	0
82	SLE RA 19	-36	62	2413	-12.43	-26	0.01
82	SLE RA 20	-28	58	2363	-11.21	-19.81	0
82	SLE RA 21	-36	62	2413	-12.43	-26	0.01
82	SLE FR 1	-22	27	2071	-8.13	-15.48	0
82	SLE FR 2	-25	29	2087	-8.54	-17.55	0
82	SLE FR 3	-22	27	2071	-8.13	-15.48	0
82	SLE FR 4	-27	38	2175	-9.46	-18.85	0
82	SLE FR 5	-24	36	2158	-9.05	-16.78	0
82	SLE FR 6	-25	43	2217	-9.67	-17.65	0
82	SLE QP 1	-22	27	2071	-8.13	-15.48	0
82	SLE QP 2	-24	36	2158	-9.05	-16.78	0
82	SLD 1	-6	153	2295	-9.62	-0.91	0.01
82	SLD 2	-6	153	2295	-9.62	-0.91	0.01
82	SLD 3	-15	42	2374	-14.15	-8.19	0.02
82	SLD 4	-15	42	2374	-14.15	-8.19	0.02
82	SLD 5	-6	241	2080	-2.36	-0.97	0
82	SLD 6	-6	241	2080	-2.36	-0.97	0
82	SLD 7	-35	-131	2343	-17.45	-25.25	0.02
82	SLD 8	-35	-131	2343	-17.45	-25.25	0.02
82	SLD 9	-14	204	1974	-0.66	-8.31	-0.01
82	SLD 10	-14	204	1974	-0.66	-8.31	-0.01
82	SLD 11	-43	-168	2237	-15.75	-32.59	0.01
82	SLD 12	-43	-168	2237	-15.75	-32.59	0.01
82	SLD 13	-33	31	1943	-3.96	-25.37	-0.01
82	SLD 14	-33	31	1943	-3.96	-25.37	-0.01
82	SLD 15	-42	-81	2022	-8.48	-32.65	-0.01
82	SLD 16	-42	-81	2022	-8.48	-32.65	-0.01
82	SLV 1	19	321	2473	-10.56	21.48	0.03
82	SLV 2	19	321	2473	-10.56	21.48	0.03
82	SLV 3	-3	55	2667	-21.33	2.67	0.04
82	SLV 4	-3	55	2667	-21.33	2.67	0.04
82	SLV 5	23	524	1958	6.82	23.22	-0.01
82	SLV 6	23	524	1958	6.82	23.22	-0.01
82	SLV 7	-52	-360	2606	-29.06	-39.47	0.03
82	SLV 8	-52	-360	2606	-29.06	-39.47	0.03
82	SLV 9	4	433	1711	10.95	5.91	-0.03
82	SLV 10	4	433	1711	10.95	5.91	-0.03
82	SLV 11	-71	-451	2359	-24.93	-56.79	0.01
82	SLV 12	-71	-451	2359	-24.93	-56.79	0.01
82	SLV 13	-45	18	1649	3.22	-36.23	-0.03
82	SLV 14	-45	18	1649	3.22	-36.23	-0.03
82	SLV 15	-67	-248	1844	-7.55	-55.04	-0.02
82	SLV 16	-67	-248	1844	-7.55	-55.04	-0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
83	SLU 1	18	108	1755	-10.2	13.35	0.09
83	SLU 2	36	123	1854	-12.98	27.72	0.18
83	SLU 3	18	108	1755	-10.2	13.35	0.09
83	SLU 4	29	117	1814	-11.87	21.97	0.14
83	SLU 5	36	123	1854	-12.98	27.72	0.18
83	SLU 6	18	108	1755	-10.2	13.35	0.09
83	SLU 7	29	117	1814	-11.87	21.97	0.14
83	SLU 8	18	108	1755	-10.2	13.35	0.09
83	SLU 9	29	117	1814	-11.87	21.97	0.14
83	SLU 10	41	175	2130	-16.72	31.93	0.21
83	SLU 11	24	160	2031	-13.95	17.57	0.12
83	SLU 12	34	169	2091	-15.61	26.19	0.17
83	SLU 13	41	175	2130	-16.72	31.93	0.21
83	SLU 14	24	160	2031	-13.95	17.57	0.12
83	SLU 15	34	169	2091	-15.61	26.19	0.17
83	SLU 16	24	160	2031	-13.95	17.57	0.12
83	SLU 17	34	169	2091	-15.61	26.19	0.17
83	SLU 18	26	183	2150	-15.56	19.37	0.14
83	SLU 19	37	192	2209	-17.22	27.99	0.19
83	SLU 20	26	183	2150	-15.56	19.37	0.14
83	SLU 21	37	192	2209	-17.22	27.99	0.19
83	SLU 22	21	131	1898	-11.86	15.29	0.11
83	SLU 23	38	146	1996	-14.64	29.65	0.19
83	SLU 24	21	131	1898	-11.86	15.29	0.11
83	SLU 25	31	140	1957	-13.53	23.9	0.16
83	SLU 26	38	146	1996	-14.64	29.65	0.19
83	SLU 27	21	131	1898	-11.86	15.29	0.11
83	SLU 28	31	140	1957	-13.53	23.9	0.16
83	SLU 29	21	131	1898	-11.86	15.29	0.11
83	SLU 30	31	140	1957	-13.53	23.9	0.16
83	SLU 31	44	199	2272	-18.38	33.86	0.22
83	SLU 32	27	184	2174	-15.61	19.5	0.14
83	SLU 33	37	193	2233	-17.27	28.12	0.19
83	SLU 34	44	199	2272	-18.38	33.86	0.22
83	SLU 35	27	184	2174	-15.61	19.5	0.14
83	SLU 36	37	193	2233	-17.27	28.12	0.19
83	SLU 37	27	184	2174	-15.61	19.5	0.14
83	SLU 38	37	193	2233	-17.27	28.12	0.19
83	SLU 39	29	206	2292	-17.22	21.31	0.15
83	SLU 40	39	215	2351	-18.88	29.92	0.2
83	SLU 41	29	206	2292	-17.22	21.31	0.15
83	SLU 42	39	215	2351	-18.88	29.92	0.2
83	SLU 43	23	132	2233	-12.69	16.7	0.12
83	SLU 44	40	147	2332	-15.47	31.06	0.2
83	SLU 45	23	132	2233	-12.69	16.7	0.12
83	SLU 46	33	141	2292	-14.36	25.32	0.17
83	SLU 47	40	147	2332	-15.47	31.06	0.2
83	SLU 48	23	132	2233	-12.69	16.7	0.12
83	SLU 49	33	141	2292	-14.36	25.32	0.17
83	SLU 50	23	132	2233	-12.69	16.7	0.12
83	SLU 51	33	141	2292	-14.36	25.32	0.17
83	SLU 52	46	200	2608	-19.22	35.28	0.23
83	SLU 53	29	185	2509	-16.44	20.91	0.15
83	SLU 54	39	194	2568	-18.11	29.53	0.2
83	SLU 55	46	200	2608	-19.22	35.28	0.23
83	SLU 56	29	185	2509	-16.44	20.91	0.15
83	SLU 57	39	194	2568	-18.11	29.53	0.2
83	SLU 58	29	185	2509	-16.44	20.91	0.15
83	SLU 59	39	194	2568	-18.11	29.53	0.2
83	SLU 60	31	207	2628	-18.05	22.72	0.16
83	SLU 61	41	216	2687	-19.71	31.34	0.21
83	SLU 62	31	207	2628	-18.05	22.72	0.16
83	SLU 63	41	216	2687	-19.71	31.34	0.21
83	SLU 64	26	156	2375	-14.35	18.63	0.13
83	SLU 65	43	171	2474	-17.13	32.99	0.22
83	SLU 66	26	156	2375	-14.35	18.63	0.13
83	SLU 67	36	165	2434	-16.02	27.25	0.18
83	SLU 68	43	171	2474	-17.13	32.99	0.22
83	SLU 69	26	156	2375	-14.35	18.63	0.13
83	SLU 70	36	165	2434	-16.02	27.25	0.18
83	SLU 71	26	156	2375	-14.35	18.63	0.13
83	SLU 72	36	165	2434	-16.02	27.25	0.18
83	SLU 73	48	223	2750	-20.88	37.21	0.24
83	SLU 74	31	208	2652	-18.1	22.84	0.16
83	SLU 75	42	217	2711	-19.77	31.46	0.21
83	SLU 76	48	223	2750	-20.88	37.21	0.24
83	SLU 77	31	208	2652	-18.1	22.84	0.16
83	SLU 78	42	217	2711	-19.77	31.46	0.21
83	SLU 79	31	208	2652	-18.1	22.84	0.16
83	SLU 80	42	217	2711	-19.77	31.46	0.21
83	SLU 81	34	231	2770	-19.71	24.65	0.17
83	SLU 82	44	240	2829	-21.37	33.27	0.22
83	SLU 83	34	231	2770	-19.71	24.65	0.17
83	SLU 84	44	240	2829	-21.37	33.27	0.22
83	SLE RA 1	19	115	1796	-10.68	13.91	0.1
83	SLE RA 2	31	125	1862	-12.53	23.48	0.15
83	SLE RA 3	19	115	1796	-10.68	13.91	0.1
83	SLE RA 4	26	121	1835	-11.79	19.65	0.13

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
83	SLE RA 5	31	125	1862	-12.53	23.48	0.15
83	SLE RA 6	19	115	1796	-10.68	13.91	0.1
83	SLE RA 7	26	121	1835	-11.79	19.65	0.13
83	SLE RA 8	19	115	1796	-10.68	13.91	0.1
83	SLE RA 9	26	121	1835	-11.79	19.65	0.13
83	SLE RA 10	34	160	2046	-15.02	26.29	0.17
83	SLE RA 11	23	150	1980	-13.17	16.72	0.12
83	SLE RA 12	30	156	2019	-14.28	22.46	0.15
83	SLE RA 13	34	160	2046	-15.02	26.29	0.17
83	SLE RA 14	23	150	1980	-13.17	16.72	0.12
83	SLE RA 15	30	156	2019	-14.28	22.46	0.15
83	SLE RA 16	23	150	1980	-13.17	16.72	0.12
83	SLE RA 17	30	156	2019	-14.28	22.46	0.15
83	SLE RA 18	24	165	2059	-14.25	17.92	0.13
83	SLE RA 19	31	171	2098	-15.36	23.66	0.16
83	SLE RA 20	24	165	2059	-14.25	17.92	0.13
83	SLE RA 21	31	171	2098	-15.36	23.66	0.16
83	SLE FR 1	19	115	1796	-10.68	13.91	0.1
83	SLE FR 2	21	117	1809	-11.05	15.82	0.11
83	SLE FR 3	19	115	1796	-10.68	13.91	0.1
83	SLE FR 4	23	132	1888	-12.12	17.03	0.12
83	SLE FR 5	21	130	1875	-11.75	15.11	0.11
83	SLE FR 6	22	140	1927	-12.46	15.91	0.11
83	SLE QP 1	19	115	1796	-10.68	13.91	0.1
83	SLE QP 2	21	130	1875	-11.75	15.11	0.11
83	SLD 1	28	119	1671	-7.23	22.69	0.15
83	SLD 2	28	119	1671	-7.23	22.69	0.15
83	SLD 3	37	27	1751	-10.76	29.87	0.2
83	SLD 4	37	27	1751	-10.76	29.87	0.2
83	SLD 5	10	267	1692	-5.05	6.49	0.06
83	SLD 6	10	267	1692	-5.05	6.49	0.06
83	SLD 7	39	-41	1959	-16.8	30.43	0.2
83	SLD 8	39	-41	1959	-16.8	30.43	0.2
83	SLD 9	3	301	1791	-6.7	-0.21	0.01
83	SLD 10	3	301	1791	-6.7	-0.21	0.01
83	SLD 11	32	-7	2057	-18.45	23.73	0.16
83	SLD 12	32	-7	2057	-18.45	23.73	0.16
83	SLD 13	4	232	1999	-12.73	0.35	0.02
83	SLD 14	4	232	1999	-12.73	0.35	0.02
83	SLD 15	13	140	2079	-16.26	7.53	0.06
83	SLD 16	13	140	2079	-16.26	7.53	0.06
83	SLV 1	38	105	1391	-1.02	32.12	0.21
83	SLV 2	38	105	1391	-1.02	32.12	0.21
83	SLV 3	60	-114	1592	-9.36	50.69	0.32
83	SLV 4	60	-114	1592	-9.36	50.69	0.32
83	SLV 5	-8	454	1425	4.11	-7.95	-0.03
83	SLV 6	-8	454	1425	4.11	-7.95	-0.03
83	SLV 7	66	-275	2095	-23.67	53.95	0.34
83	SLV 8	66	-275	2095	-23.67	53.95	0.34
83	SLV 9	-25	535	1655	0.18	-23.73	-0.13
83	SLV 10	-25	535	1655	0.18	-23.73	-0.13
83	SLV 11	49	-195	2325	-27.6	38.17	0.24
83	SLV 12	49	-195	2325	-27.6	38.17	0.24
83	SLV 13	-19	374	2158	-14.14	-20.47	-0.11
83	SLV 14	-19	374	2158	-14.14	-20.47	-0.11
83	SLV 15	4	155	2359	-22.47	-1.9	0
83	SLV 16	4	155	2359	-22.47	-1.9	0
84	SLU 1	-17	-139	2166	15.11	-12.16	0
84	SLU 2	-37	-194	2336	20.84	-27.35	0.01
84	SLU 3	-17	-139	2166	15.11	-12.16	0
84	SLU 4	-29	-172	2268	18.55	-21.27	0
84	SLU 5	-37	-194	2336	20.84	-27.35	0.01
84	SLU 6	-17	-139	2166	15.11	-12.16	0
84	SLU 7	-29	-172	2268	18.55	-21.27	0
84	SLU 8	-17	-139	2166	15.11	-12.16	0
84	SLU 9	-29	-172	2268	18.55	-21.27	0
84	SLU 10	-43	-200	2706	23.97	-31.18	0.01
84	SLU 11	-23	-145	2536	18.24	-16	0
84	SLU 12	-35	-178	2638	21.68	-25.11	0
84	SLU 13	-43	-200	2706	23.97	-31.18	0.01
84	SLU 14	-23	-145	2536	18.24	-16	0
84	SLU 15	-35	-178	2638	21.68	-25.11	0
84	SLU 16	-23	-145	2536	18.24	-16	0
84	SLU 17	-35	-178	2638	21.68	-25.11	0
84	SLU 18	-25	-147	2694	19.59	-17.65	0
84	SLU 19	-37	-180	2796	23.02	-26.76	0
84	SLU 20	-25	-147	2694	19.59	-17.65	0
84	SLU 21	-37	-180	2796	23.02	-26.76	0
84	SLU 22	-20	-144	2373	16.68	-13.98	0
84	SLU 23	-40	-199	2543	22.4	-29.16	0.01
84	SLU 24	-20	-144	2373	16.68	-13.98	0
84	SLU 25	-32	-177	2475	20.11	-23.09	0
84	SLU 26	-40	-199	2543	22.4	-29.16	0.01
84	SLU 27	-20	-144	2373	16.68	-13.98	0
84	SLU 28	-32	-177	2475	20.11	-23.09	0
84	SLU 29	-20	-144	2373	16.68	-13.98	0
84	SLU 30	-32	-177	2475	20.11	-23.09	0
84	SLU 31	-45	-205	2913	25.54	-33	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
84	SLU 32	-25	-150	2742	19.81	-17.82	0
84	SLU 33	-37	-183	2844	23.24	-26.93	0
84	SLU 34	-45	-205	2913	25.54	-33	0.01
84	SLU 35	-25	-150	2742	19.81	-17.82	0
84	SLU 36	-37	-183	2844	23.24	-26.93	0
84	SLU 37	-25	-150	2742	19.81	-17.82	0
84	SLU 38	-37	-183	2844	23.24	-26.93	0
84	SLU 39	-28	-152	2900	21.15	-19.46	0
84	SLU 40	-40	-185	3003	24.58	-28.57	0
84	SLU 41	-28	-152	2900	21.15	-19.46	0
84	SLU 42	-40	-185	3003	24.58	-28.57	0
84	SLU 43	-22	-179	2745	19.11	-15.19	0
84	SLU 44	-42	-234	2916	24.84	-30.37	0.01
84	SLU 45	-22	-179	2745	19.11	-15.19	0
84	SLU 46	-34	-212	2847	22.55	-24.3	0
84	SLU 47	-42	-234	2916	24.84	-30.37	0.01
84	SLU 48	-22	-179	2745	19.11	-15.19	0
84	SLU 49	-34	-212	2847	22.55	-24.3	0
84	SLU 50	-22	-179	2745	19.11	-15.19	0
84	SLU 51	-34	-212	2847	22.55	-24.3	0
84	SLU 52	-47	-239	3285	27.97	-34.21	0.01
84	SLU 53	-27	-185	3115	22.24	-19.03	0
84	SLU 54	-39	-218	3217	25.68	-28.14	0
84	SLU 55	-47	-239	3285	27.97	-34.21	0.01
84	SLU 56	-27	-185	3115	22.24	-19.03	0
84	SLU 57	-39	-218	3217	25.68	-28.14	0
84	SLU 58	-27	-185	3115	22.24	-19.03	0
84	SLU 59	-39	-218	3217	25.68	-28.14	0
84	SLU 60	-29	-187	3273	23.58	-20.67	0
84	SLU 61	-41	-220	3375	27.02	-29.78	0
84	SLU 62	-29	-187	3273	23.58	-20.67	0
84	SLU 63	-41	-220	3375	27.02	-29.78	0
84	SLU 64	-24	-184	2952	20.67	-17	0
84	SLU 65	-44	-239	3122	26.4	-32.19	0.01
84	SLU 66	-24	-184	2952	20.67	-17	0
84	SLU 67	-36	-217	3054	24.11	-26.11	0
84	SLU 68	-44	-239	3122	26.4	-32.19	0.01
84	SLU 69	-24	-184	2952	20.67	-17	0
84	SLU 70	-36	-217	3054	24.11	-26.11	0
84	SLU 71	-24	-184	2952	20.67	-17	0
84	SLU 72	-36	-217	3054	24.11	-26.11	0
84	SLU 73	-50	-245	3492	29.53	-36.03	0.01
84	SLU 74	-30	-190	3321	23.8	-20.84	0
84	SLU 75	-42	-223	3423	27.24	-29.95	0
84	SLU 76	-50	-245	3492	29.53	-36.03	0.01
84	SLU 77	-30	-190	3321	23.8	-20.84	0
84	SLU 78	-42	-223	3423	27.24	-29.95	0
84	SLU 79	-30	-190	3321	23.8	-20.84	0
84	SLU 80	-42	-223	3423	27.24	-29.95	0
84	SLU 81	-32	-192	3479	25.15	-22.49	0
84	SLU 82	-44	-225	3582	28.58	-31.6	0
84	SLU 83	-32	-192	3479	25.15	-22.49	0
84	SLU 84	-44	-225	3582	28.58	-31.6	0
84	SLE RA 1	-18	-141	2225	15.56	-12.68	0
84	SLE RA 2	-31	-177	2339	19.38	-22.8	0
84	SLE RA 3	-18	-141	2225	15.56	-12.68	0
84	SLE RA 4	-26	-162	2293	17.85	-18.75	0
84	SLE RA 5	-31	-177	2339	19.38	-22.8	0
84	SLE RA 6	-18	-141	2225	15.56	-12.68	0
84	SLE RA 7	-26	-162	2293	17.85	-18.75	0
84	SLE RA 8	-18	-141	2225	15.56	-12.68	0
84	SLE RA 9	-26	-162	2293	17.85	-18.75	0
84	SLE RA 10	-35	-181	2585	21.47	-25.36	0
84	SLE RA 11	-22	-144	2471	17.65	-15.24	0
84	SLE RA 12	-30	-166	2540	19.94	-21.31	0
84	SLE RA 13	-35	-181	2585	21.47	-25.36	0
84	SLE RA 14	-22	-144	2471	17.65	-15.24	0
84	SLE RA 15	-30	-166	2540	19.94	-21.31	0
84	SLE RA 16	-22	-144	2471	17.65	-15.24	0
84	SLE RA 17	-30	-166	2540	19.94	-21.31	0
84	SLE RA 18	-23	-146	2577	18.54	-16.34	0
84	SLE RA 19	-31	-168	2645	20.83	-22.41	0
84	SLE RA 20	-23	-146	2577	18.54	-16.34	0
84	SLE RA 21	-31	-168	2645	20.83	-22.41	0
84	SLE FR 1	-18	-141	2225	15.56	-12.68	0
84	SLE FR 2	-21	-148	2248	16.32	-14.71	0
84	SLE FR 3	-18	-141	2225	15.56	-12.68	0
84	SLE FR 4	-22	-149	2353	17.22	-15.8	0
84	SLE FR 5	-20	-142	2331	16.45	-13.78	0
84	SLE FR 6	-21	-143	2401	17.05	-14.51	0
84	SLE QP 1	-18	-141	2225	15.56	-12.68	0
84	SLE QP 2	-20	-142	2331	16.45	-13.78	0
84	SLD 1	-5	-15	2471	10.34	-0.37	0.01
84	SLD 2	-5	-15	2471	10.34	-0.37	0.01
84	SLD 3	-15	-126	2571	15.28	-7.86	0.01
84	SLD 4	-15	-126	2571	15.28	-7.86	0.01
84	SLD 5	0	65	2220	7.13	1.61	-0.01
84	SLD 6	0	65	2220	7.13	1.61	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
84	SLD 7	-34	-306	2555	23.59	-23.37	0.01
84	SLD 8	-34	-306	2555	23.59	-23.37	0.01
84	SLD 9	-5	22	2106	9.32	-4.19	-0.01
84	SLD 10	-5	22	2106	9.32	-4.19	-0.01
84	SLD 11	-40	-349	2441	25.78	-29.17	0
84	SLD 12	-40	-349	2441	25.78	-29.17	0
84	SLD 13	-24	-159	2090	17.63	-19.69	-0.01
84	SLD 14	-24	-159	2090	17.63	-19.69	-0.01
84	SLD 15	-35	-270	2191	22.57	-27.19	-0.01
84	SLD 16	-35	-270	2191	22.57	-27.19	-0.01
84	SLV 1	17	170	2653	1.48	18.74	0.02
84	SLV 2	17	170	2653	1.48	18.74	0.02
84	SLV 3	-9	-95	2898	13.31	-0.6	0.03
84	SLV 4	-9	-95	2898	13.31	-0.6	0.03
84	SLV 5	31	354	2056	-5.99	25.31	-0.02
84	SLV 6	31	354	2056	-5.99	25.31	-0.02
84	SLV 7	-57	-530	2873	33.46	-39.16	0.03
84	SLV 8	-57	-530	2873	33.46	-39.16	0.03
84	SLV 9	17	246	1789	-0.55	11.6	-0.03
84	SLV 10	17	246	1789	-0.55	11.6	-0.03
84	SLV 11	-71	-638	2606	38.9	-52.86	0.01
84	SLV 12	-71	-638	2606	38.9	-52.86	0.01
84	SLV 13	-30	-190	1763	19.59	-26.95	-0.03
84	SLV 14	-30	-190	1763	19.59	-26.95	-0.03
84	SLV 15	-56	-455	2008	31.43	-46.29	-0.02
84	SLV 16	-56	-455	2008	31.43	-46.29	-0.02
85	SLU 1	14	-87	1966	12.84	10.58	0.05
85	SLU 2	32	-138	2107	17.95	24.13	0.11
85	SLU 3	14	-87	1966	12.84	10.58	0.05
85	SLU 4	25	-117	2051	15.91	18.71	0.09
85	SLU 5	32	-138	2107	17.95	24.13	0.11
85	SLU 6	14	-87	1966	12.84	10.58	0.05
85	SLU 7	25	-117	2051	15.91	18.71	0.09
85	SLU 8	14	-87	1966	12.84	10.58	0.05
85	SLU 9	25	-117	2051	15.91	18.71	0.09
85	SLU 10	37	-128	2447	20.26	27.55	0.13
85	SLU 11	19	-78	2306	15.15	14	0.07
85	SLU 12	30	-108	2390	18.21	22.13	0.1
85	SLU 13	37	-128	2447	20.26	27.55	0.13
85	SLU 14	19	-78	2306	15.15	14	0.07
85	SLU 15	30	-108	2390	18.21	22.13	0.1
85	SLU 16	19	-78	2306	15.15	14	0.07
85	SLU 17	30	-108	2390	18.21	22.13	0.1
85	SLU 18	21	-73	2451	16.14	15.47	0.08
85	SLU 19	31	-104	2536	19.2	23.6	0.11
85	SLU 20	21	-73	2451	16.14	15.47	0.08
85	SLU 21	31	-104	2536	19.2	23.6	0.11
85	SLU 22	16	-82	2140	13.84	12.14	0.06
85	SLU 23	34	-132	2281	18.96	25.69	0.12
85	SLU 24	16	-82	2140	13.84	12.14	0.06
85	SLU 25	27	-112	2225	16.91	20.27	0.1
85	SLU 26	34	-132	2281	18.96	25.69	0.12
85	SLU 27	16	-82	2140	13.84	12.14	0.06
85	SLU 28	27	-112	2225	16.91	20.27	0.1
85	SLU 29	16	-82	2140	13.84	12.14	0.06
85	SLU 30	27	-112	2225	16.91	20.27	0.1
85	SLU 31	39	-123	2620	21.27	29.11	0.13
85	SLU 32	21	-72	2479	16.15	15.56	0.08
85	SLU 33	32	-102	2564	19.22	23.69	0.11
85	SLU 34	39	-123	2620	21.27	29.11	0.13
85	SLU 35	21	-72	2479	16.15	15.56	0.08
85	SLU 36	32	-102	2564	19.22	23.69	0.11
85	SLU 37	21	-72	2479	16.15	15.56	0.08
85	SLU 38	32	-102	2564	19.22	23.69	0.11
85	SLU 39	23	-68	2625	17.14	17.03	0.08
85	SLU 40	34	-98	2710	20.21	25.16	0.12
85	SLU 41	23	-68	2625	17.14	17.03	0.08
85	SLU 42	34	-98	2710	20.21	25.16	0.12
85	SLU 43	18	-115	2496	16.35	13.22	0.07
85	SLU 44	36	-166	2637	21.46	26.77	0.12
85	SLU 45	18	-115	2496	16.35	13.22	0.07
85	SLU 46	29	-146	2581	19.41	21.35	0.1
85	SLU 47	36	-166	2637	21.46	26.77	0.12
85	SLU 48	18	-115	2496	16.35	13.22	0.07
85	SLU 49	29	-146	2581	19.41	21.35	0.1
85	SLU 50	18	-115	2496	16.35	13.22	0.07
85	SLU 51	29	-146	2581	19.41	21.35	0.1
85	SLU 52	40	-156	2977	23.77	30.19	0.14
85	SLU 53	22	-106	2836	18.65	16.64	0.08
85	SLU 54	33	-136	2920	21.72	24.77	0.12
85	SLU 55	40	-156	2977	23.77	30.19	0.14
85	SLU 56	22	-106	2836	18.65	16.64	0.08
85	SLU 57	33	-136	2920	21.72	24.77	0.12
85	SLU 58	22	-106	2836	18.65	16.64	0.08
85	SLU 59	33	-136	2920	21.72	24.77	0.12
85	SLU 60	24	-102	2981	19.64	18.11	0.09
85	SLU 61	35	-132	3066	22.71	26.24	0.12
85	SLU 62	24	-102	2981	19.64	18.11	0.09

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
85	SLU 63	35	-132	3066	22.71	26.24	0.12
85	SLU 64	20	-110	2670	17.35	14.78	0.07
85	SLU 65	38	-160	2811	22.47	28.33	0.13
85	SLU 66	20	-110	2670	17.35	14.78	0.07
85	SLU 67	31	-140	2755	20.42	22.91	0.11
85	SLU 68	38	-160	2811	22.47	28.33	0.13
85	SLU 69	20	-110	2670	17.35	14.78	0.07
85	SLU 70	31	-140	2755	20.42	22.91	0.11
85	SLU 71	20	-110	2670	17.35	14.78	0.07
85	SLU 72	31	-140	2755	20.42	22.91	0.11
85	SLU 73	42	-151	3151	24.77	31.75	0.15
85	SLU 74	24	-100	3010	19.66	18.2	0.09
85	SLU 75	35	-131	3094	22.73	26.33	0.12
85	SLU 76	42	-151	3151	24.77	31.75	0.15
85	SLU 77	24	-100	3010	19.66	18.2	0.09
85	SLU 78	35	-131	3094	22.73	26.33	0.12
85	SLU 79	24	-100	3010	19.66	18.2	0.09
85	SLU 80	35	-131	3094	22.73	26.33	0.12
85	SLU 81	26	-96	3155	20.65	19.67	0.1
85	SLU 82	37	-126	3240	23.72	27.8	0.13
85	SLU 83	26	-96	3155	20.65	19.67	0.1
85	SLU 84	37	-126	3240	23.72	27.8	0.13
85	SLE RA 1	15	-86	2016	13.13	11.03	0.06
85	SLE RA 2	27	-119	2110	16.54	20.06	0.09
85	SLE RA 3	15	-86	2016	13.13	11.03	0.06
85	SLE RA 4	22	-106	2072	15.17	16.45	0.08
85	SLE RA 5	27	-119	2110	16.54	20.06	0.09
85	SLE RA 6	15	-86	2016	13.13	11.03	0.06
85	SLE RA 7	22	-106	2072	15.17	16.45	0.08
85	SLE RA 8	15	-86	2016	13.13	11.03	0.06
85	SLE RA 9	22	-106	2072	15.17	16.45	0.08
85	SLE RA 10	30	-113	2336	18.07	22.34	0.1
85	SLE RA 11	18	-79	2242	14.66	13.31	0.07
85	SLE RA 12	25	-99	2298	16.71	18.73	0.09
85	SLE RA 13	30	-113	2336	18.07	22.34	0.1
85	SLE RA 14	18	-79	2242	14.66	13.31	0.07
85	SLE RA 15	25	-99	2298	16.71	18.73	0.09
85	SLE RA 16	18	-79	2242	14.66	13.31	0.07
85	SLE RA 17	25	-99	2298	16.71	18.73	0.09
85	SLE RA 18	19	-77	2339	15.32	14.28	0.07
85	SLE RA 19	26	-97	2396	17.37	19.7	0.09
85	SLE RA 20	19	-77	2339	15.32	14.28	0.07
85	SLE RA 21	26	-97	2396	17.37	19.7	0.09
85	SLE FR 1	15	-86	2016	13.13	11.03	0.06
85	SLE FR 2	17	-93	2035	13.81	12.83	0.06
85	SLE FR 3	15	-86	2016	13.13	11.03	0.06
85	SLE FR 4	19	-90	2132	14.47	13.81	0.07
85	SLE FR 5	16	-83	2113	13.79	12	0.06
85	SLE FR 6	17	-81	2177	14.23	12.65	0.06
85	SLE QP 1	15	-86	2016	13.13	11.03	0.06
85	SLE QP 2	16	-83	2113	13.79	12	0.06
85	SLD 1	20	-94	1891	14	17.13	0.08
85	SLD 2	20	-94	1891	14	17.13	0.08
85	SLD 3	29	-187	1983	18.24	24.2	0.11
85	SLD 4	29	-187	1983	18.24	24.2	0.11
85	SLD 5	2	54	1908	7.41	2.82	0.02
85	SLD 6	2	54	1908	7.41	2.82	0.02
85	SLD 7	35	-255	2213	21.57	26.38	0.12
85	SLD 8	35	-255	2213	21.57	26.38	0.12
85	SLD 9	-3	88	2013	6.01	-2.37	0
85	SLD 10	-3	88	2013	6.01	-2.37	0
85	SLD 11	30	-221	2318	20.16	21.18	0.1
85	SLD 12	30	-221	2318	20.16	21.18	0.1
85	SLD 13	3	20	2243	9.33	-0.19	0.01
85	SLD 14	3	20	2243	9.33	-0.19	0.01
85	SLD 15	13	-72	2334	13.57	6.87	0.04
85	SLD 16	13	-72	2334	13.57	6.87	0.04
85	SLV 1	23	-109	1585	14.13	23.32	0.11
85	SLV 2	23	-109	1585	14.13	23.32	0.11
85	SLV 3	48	-330	1817	24.45	41.55	0.19
85	SLV 4	48	-330	1817	24.45	41.55	0.19
85	SLV 5	-20	246	1602	-1.75	-12.25	-0.04
85	SLV 6	-20	246	1602	-1.75	-12.25	-0.04
85	SLV 7	64	-494	2376	32.63	48.51	0.22
85	SLV 8	64	-494	2376	32.63	48.51	0.22
85	SLV 9	-32	327	1849	-5.06	-24.51	-0.1
85	SLV 10	-32	327	1849	-5.06	-24.51	-0.1
85	SLV 11	52	-412	2623	29.33	36.25	0.16
85	SLV 12	52	-412	2623	29.33	36.25	0.16
85	SLV 13	-16	164	2409	3.12	-17.54	-0.07
85	SLV 14	-16	164	2409	3.12	-17.54	-0.07
85	SLV 15	9	-58	2641	13.44	0.69	0.01
85	SLV 16	9	-58	2641	13.44	0.69	0.01
86	SLU 1	-9	17	2387	-9.22	-7.62	-0.01
86	SLU 2	-27	19	2615	-12.71	-20.17	-0.01
86	SLU 3	-9	17	2387	-9.22	-7.62	-0.01
86	SLU 4	-20	18	2524	-11.32	-15.15	-0.01
86	SLU 5	-27	19	2615	-12.71	-20.17	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
86	SLU 6	-9	17	2387	-9.22	-7.62	-0.01
86	SLU 7	-20	18	2524	-11.32	-15.15	-0.01
86	SLU 8	-9	17	2387	-9.22	-7.62	-0.01
86	SLU 9	-20	18	2524	-11.32	-15.15	-0.01
86	SLU 10	-30	71	3076	-17.21	-22.69	-0.01
86	SLU 11	-12	69	2849	-13.72	-10.13	-0.01
86	SLU 12	-23	70	2985	-15.81	-17.67	-0.01
86	SLU 13	-30	71	3076	-17.21	-22.69	-0.01
86	SLU 14	-12	69	2849	-13.72	-10.13	-0.01
86	SLU 15	-23	70	2985	-15.81	-17.67	-0.01
86	SLU 16	-12	69	2849	-13.72	-10.13	-0.01
86	SLU 17	-23	70	2985	-15.81	-17.67	-0.01
86	SLU 18	-13	91	3046	-15.65	-11.21	-0.01
86	SLU 19	-24	92	3183	-17.74	-18.75	-0.01
86	SLU 20	-13	91	3046	-15.65	-11.21	-0.01
86	SLU 21	-24	92	3183	-17.74	-18.75	-0.01
86	SLU 22	-10	39	2639	-11.2	-8.79	-0.01
86	SLU 23	-28	41	2866	-14.69	-21.35	-0.01
86	SLU 24	-10	39	2639	-11.2	-8.79	-0.01
86	SLU 25	-21	40	2775	-13.29	-16.33	-0.01
86	SLU 26	-28	41	2866	-14.69	-21.35	-0.01
86	SLU 27	-10	39	2639	-11.2	-8.79	-0.01
86	SLU 28	-21	40	2775	-13.29	-16.33	-0.01
86	SLU 29	-10	39	2639	-11.2	-8.79	-0.01
86	SLU 30	-21	40	2775	-13.29	-16.33	-0.01
86	SLU 31	-31	93	3328	-19.18	-23.86	-0.01
86	SLU 32	-13	91	3100	-15.69	-11.31	-0.01
86	SLU 33	-24	92	3237	-17.79	-18.84	-0.01
86	SLU 34	-31	93	3328	-19.18	-23.86	-0.01
86	SLU 35	-13	91	3100	-15.69	-11.31	-0.01
86	SLU 36	-24	92	3237	-17.79	-18.84	-0.01
86	SLU 37	-13	91	3100	-15.69	-11.31	-0.01
86	SLU 38	-24	92	3237	-17.79	-18.84	-0.01
86	SLU 39	-14	113	3298	-17.62	-12.39	-0.01
86	SLU 40	-25	114	3435	-19.71	-19.92	-0.01
86	SLU 41	-14	113	3298	-17.62	-12.39	-0.01
86	SLU 42	-25	114	3435	-19.71	-19.92	-0.01
86	SLU 43	-11	15	3017	-11.32	-9.5	-0.01
86	SLU 44	-29	17	3244	-14.8	-22.06	-0.01
86	SLU 45	-11	15	3017	-11.32	-9.5	-0.01
86	SLU 46	-22	16	3153	-13.41	-17.04	-0.01
86	SLU 47	-29	17	3244	-14.8	-22.06	-0.01
86	SLU 48	-11	15	3017	-11.32	-9.5	-0.01
86	SLU 49	-22	16	3153	-13.41	-17.04	-0.01
86	SLU 50	-11	15	3017	-11.32	-9.5	-0.01
86	SLU 51	-22	16	3153	-13.41	-17.04	-0.01
86	SLU 52	-32	69	3706	-19.3	-24.57	-0.01
86	SLU 53	-14	67	3478	-15.81	-12.02	-0.01
86	SLU 54	-25	68	3615	-17.9	-19.55	-0.01
86	SLU 55	-32	69	3706	-19.3	-24.57	-0.01
86	SLU 56	-14	67	3478	-15.81	-12.02	-0.01
86	SLU 57	-25	68	3615	-17.9	-19.55	-0.01
86	SLU 58	-14	67	3478	-15.81	-12.02	-0.01
86	SLU 59	-25	68	3615	-17.9	-19.55	-0.01
86	SLU 60	-15	89	3676	-17.74	-13.1	-0.01
86	SLU 61	-26	90	3813	-19.83	-20.63	-0.01
86	SLU 62	-15	89	3676	-17.74	-13.1	-0.01
86	SLU 63	-26	90	3813	-19.83	-20.63	-0.01
86	SLU 64	-12	37	3269	-13.29	-10.68	-0.01
86	SLU 65	-30	38	3496	-16.78	-23.23	-0.01
86	SLU 66	-12	37	3269	-13.29	-10.68	-0.01
86	SLU 67	-23	38	3405	-15.38	-18.21	-0.01
86	SLU 68	-30	38	3496	-16.78	-23.23	-0.01
86	SLU 69	-12	37	3269	-13.29	-10.68	-0.01
86	SLU 70	-23	38	3405	-15.38	-18.21	-0.01
86	SLU 71	-12	37	3269	-13.29	-10.68	-0.01
86	SLU 72	-23	38	3405	-15.38	-18.21	-0.01
86	SLU 73	-33	90	3958	-21.27	-25.75	-0.01
86	SLU 74	-15	89	3730	-17.78	-13.19	-0.01
86	SLU 75	-26	90	3867	-19.88	-20.72	-0.01
86	SLU 76	-33	90	3958	-21.27	-25.75	-0.01
86	SLU 77	-15	89	3730	-17.78	-13.19	-0.01
86	SLU 78	-26	90	3867	-19.88	-20.72	-0.01
86	SLU 79	-15	89	3730	-17.78	-13.19	-0.01
86	SLU 80	-26	90	3867	-19.88	-20.72	-0.01
86	SLU 81	-16	111	3928	-19.71	-14.27	-0.01
86	SLU 82	-27	112	4064	-21.8	-21.8	-0.01
86	SLU 83	-16	111	3928	-19.71	-14.27	-0.01
86	SLU 84	-27	112	4064	-21.8	-21.8	-0.01
86	SLE RA 1	-9	24	2459	-9.79	-7.95	-0.01
86	SLE RA 2	-21	25	2611	-12.11	-16.32	-0.01
86	SLE RA 3	-9	24	2459	-9.79	-7.95	-0.01
86	SLE RA 4	-16	24	2550	-11.18	-12.98	-0.01
86	SLE RA 5	-21	25	2611	-12.11	-16.32	-0.01
86	SLE RA 6	-9	24	2459	-9.79	-7.95	-0.01
86	SLE RA 7	-16	24	2550	-11.18	-12.98	-0.01
86	SLE RA 8	-9	24	2459	-9.79	-7.95	-0.01
86	SLE RA 9	-16	24	2550	-11.18	-12.98	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
86	SLE RA 10	-23	59	2918	-15.11	-18	-0.01
86	SLE RA 11	-11	58	2767	-12.78	-9.63	-0.01
86	SLE RA 12	-18	59	2858	-14.18	-14.65	-0.01
86	SLE RA 13	-23	59	2918	-15.11	-18	-0.01
86	SLE RA 14	-11	58	2767	-12.78	-9.63	-0.01
86	SLE RA 15	-18	59	2858	-14.18	-14.65	-0.01
86	SLE RA 16	-11	58	2767	-12.78	-9.63	-0.01
86	SLE RA 17	-18	59	2858	-14.18	-14.65	-0.01
86	SLE RA 18	-12	73	2899	-14.07	-10.35	-0.01
86	SLE RA 19	-19	74	2990	-15.46	-15.37	-0.01
86	SLE RA 20	-12	73	2899	-14.07	-10.35	-0.01
86	SLE RA 21	-19	74	2990	-15.46	-15.37	-0.01
86	SLE FR 1	-9	24	2459	-9.79	-7.95	-0.01
86	SLE FR 2	-12	24	2489	-10.25	-9.63	-0.01
86	SLE FR 3	-9	24	2459	-9.79	-7.95	-0.01
86	SLE FR 4	-12	39	2621	-11.54	-10.35	-0.01
86	SLE FR 5	-10	38	2591	-11.07	-8.67	-0.01
86	SLE FR 6	-11	48	2679	-11.93	-9.15	-0.01
86	SLE QP 1	-9	24	2459	-9.79	-7.95	-0.01
86	SLE QP 2	-10	38	2591	-11.07	-8.67	-0.01
86	SLD 1	1	64	2757	-12.54	0.97	0
86	SLD 2	1	64	2757	-12.54	0.97	0
86	SLD 3	-10	166	2885	-16.81	-5.66	0.01
86	SLD 4	-10	166	2885	-16.81	-5.66	0.01
86	SLD 5	9	-109	2446	-5.03	4.27	-0.01
86	SLD 6	9	-109	2446	-5.03	4.27	-0.01
86	SLD 7	-26	232	2874	-19.28	-17.82	0
86	SLD 8	-26	232	2874	-19.28	-17.82	0
86	SLD 9	6	-155	2308	-2.87	0.48	-0.02
86	SLD 10	6	-155	2308	-2.87	0.48	-0.02
86	SLD 11	-29	186	2735	-17.11	-21.62	0
86	SLD 12	-29	186	2735	-17.11	-21.62	0
86	SLD 13	-10	-90	2296	-5.33	-11.68	-0.02
86	SLD 14	-10	-90	2296	-5.33	-11.68	-0.02
86	SLD 15	-21	13	2425	-9.6	-18.31	-0.02
86	SLD 16	-21	13	2425	-9.6	-18.31	-0.02
86	SLV 1	16	107	2977	-14.77	14.87	0.01
86	SLV 2	16	107	2977	-14.77	14.87	0.01
86	SLV 3	-11	351	3289	-24.95	-2.2	0.02
86	SLV 4	-11	351	3289	-24.95	-2.2	0.02
86	SLV 5	39	-311	2234	3.27	24.29	-0.02
86	SLV 6	39	-311	2234	3.27	24.29	-0.02
86	SLV 7	-52	502	3273	-30.69	-32.63	0.02
86	SLV 8	-52	502	3273	-30.69	-32.63	0.02
86	SLV 9	32	-425	1909	8.54	15.28	-0.03
86	SLV 10	32	-425	1909	8.54	15.28	-0.03
86	SLV 11	-59	387	2948	-25.41	-41.64	0
86	SLV 12	-59	387	2948	-25.41	-41.64	0
86	SLV 13	-9	-274	1893	2.81	-15.14	-0.04
86	SLV 14	-9	-274	1893	2.81	-15.14	-0.04
86	SLV 15	-36	-30	2205	-7.38	-32.22	-0.03
86	SLV 16	-36	-30	2205	-7.38	-32.22	-0.03
87	SLU 1	6	23	2215	-9.13	6.35	0.02
87	SLU 2	22	15	2403	-12.01	17.21	0.06
87	SLU 3	6	23	2215	-9.13	6.35	0.02
87	SLU 4	15	18	2328	-10.86	12.86	0.04
87	SLU 5	22	15	2403	-12.01	17.21	0.06
87	SLU 6	6	23	2215	-9.13	6.35	0.02
87	SLU 7	15	18	2328	-10.86	12.86	0.04
87	SLU 8	6	23	2215	-9.13	6.35	0.02
87	SLU 9	15	18	2328	-10.86	12.86	0.04
87	SLU 10	24	70	2827	-16.52	19.35	0.06
87	SLU 11	8	78	2640	-13.64	8.49	0.03
87	SLU 12	18	74	2752	-15.37	15.01	0.05
87	SLU 13	24	70	2827	-16.52	19.35	0.06
87	SLU 14	8	78	2640	-13.64	8.49	0.03
87	SLU 15	18	74	2752	-15.37	15.01	0.05
87	SLU 16	8	78	2640	-13.64	8.49	0.03
87	SLU 17	18	74	2752	-15.37	15.01	0.05
87	SLU 18	9	102	2821	-15.57	9.41	0.03
87	SLU 19	19	97	2934	-17.3	15.93	0.05
87	SLU 20	9	102	2821	-15.57	9.41	0.03
87	SLU 21	19	97	2934	-17.3	15.93	0.05
87	SLU 22	7	49	2431	-11.14	7.32	0.02
87	SLU 23	23	41	2619	-14.02	18.18	0.06
87	SLU 24	7	49	2431	-11.14	7.32	0.02
87	SLU 25	16	44	2544	-12.87	13.83	0.05
87	SLU 26	23	41	2619	-14.02	18.18	0.06
87	SLU 27	7	49	2431	-11.14	7.32	0.02
87	SLU 28	16	44	2544	-12.87	13.83	0.05
87	SLU 29	7	49	2431	-11.14	7.32	0.02
87	SLU 30	16	44	2544	-12.87	13.83	0.05
87	SLU 31	25	96	3043	-18.54	20.32	0.07
87	SLU 32	9	104	2856	-15.65	9.46	0.03
87	SLU 33	19	99	2968	-17.38	15.98	0.05
87	SLU 34	25	96	3043	-18.54	20.32	0.07
87	SLU 35	9	104	2856	-15.65	9.46	0.03
87	SLU 36	19	99	2968	-17.38	15.98	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
87	SLU 37	9	104	2856	-15.65	9.46	0.03
87	SLU 38	19	99	2968	-17.38	15.98	0.05
87	SLU 39	10	127	3038	-17.59	10.38	0.03
87	SLU 40	20	123	3150	-19.32	16.9	0.06
87	SLU 41	10	127	3038	-17.59	10.38	0.03
87	SLU 42	20	123	3150	-19.32	16.9	0.06
87	SLU 43	8	21	2805	-11.18	7.92	0.03
87	SLU 44	23	14	2993	-14.06	18.78	0.06
87	SLU 45	8	21	2805	-11.18	7.92	0.03
87	SLU 46	17	17	2918	-12.91	14.44	0.05
87	SLU 47	23	14	2993	-14.06	18.78	0.06
87	SLU 48	8	21	2805	-11.18	7.92	0.03
87	SLU 49	17	17	2918	-12.91	14.44	0.05
87	SLU 50	8	21	2805	-11.18	7.92	0.03
87	SLU 51	17	17	2918	-12.91	14.44	0.05
87	SLU 52	25	69	3418	-18.57	20.92	0.07
87	SLU 53	10	76	3230	-15.69	10.06	0.03
87	SLU 54	19	72	3343	-17.42	16.58	0.06
87	SLU 55	25	69	3418	-18.57	20.92	0.07
87	SLU 56	10	76	3230	-15.69	10.06	0.03
87	SLU 57	19	72	3343	-17.42	16.58	0.06
87	SLU 58	10	76	3230	-15.69	10.06	0.03
87	SLU 59	19	72	3343	-17.42	16.58	0.06
87	SLU 60	11	100	3412	-17.62	10.98	0.04
87	SLU 61	20	95	3524	-19.35	17.5	0.06
87	SLU 62	11	100	3412	-17.62	10.98	0.04
87	SLU 63	20	95	3524	-19.35	17.5	0.06
87	SLU 64	9	47	3022	-13.19	8.89	0.03
87	SLU 65	24	39	3209	-16.07	19.75	0.07
87	SLU 66	9	47	3022	-13.19	8.89	0.03
87	SLU 67	18	42	3134	-14.92	15.41	0.05
87	SLU 68	24	39	3209	-16.07	19.75	0.07
87	SLU 69	9	47	3022	-13.19	8.89	0.03
87	SLU 70	18	42	3134	-14.92	15.41	0.05
87	SLU 71	9	47	3022	-13.19	8.89	0.03
87	SLU 72	18	42	3134	-14.92	15.41	0.05
87	SLU 73	26	94	3634	-20.58	21.89	0.07
87	SLU 74	11	102	3446	-17.7	11.03	0.04
87	SLU 75	20	97	3559	-19.43	17.55	0.06
87	SLU 76	26	94	3634	-20.58	21.89	0.07
87	SLU 77	11	102	3446	-17.7	11.03	0.04
87	SLU 78	20	97	3559	-19.43	17.55	0.06
87	SLU 79	11	102	3446	-17.7	11.03	0.04
87	SLU 80	20	97	3559	-19.43	17.55	0.06
87	SLU 81	12	126	3628	-19.64	11.95	0.04
87	SLU 82	21	121	3741	-21.36	18.47	0.06
87	SLU 83	12	126	3628	-19.64	11.95	0.04
87	SLU 84	21	121	3741	-21.36	18.47	0.06
87	SLE RA 1	6	30	2277	-9.7	6.62	0.02
87	SLE RA 2	17	25	2402	-11.63	13.86	0.05
87	SLE RA 3	6	30	2277	-9.7	6.62	0.02
87	SLE RA 4	13	27	2352	-10.86	10.97	0.04
87	SLE RA 5	17	25	2402	-11.63	13.86	0.05
87	SLE RA 6	6	30	2277	-9.7	6.62	0.02
87	SLE RA 7	13	27	2352	-10.86	10.97	0.04
87	SLE RA 8	6	30	2277	-9.7	6.62	0.02
87	SLE RA 9	13	27	2352	-10.86	10.97	0.04
87	SLE RA 10	18	62	2685	-14.63	15.29	0.05
87	SLE RA 11	8	67	2560	-12.71	8.05	0.03
87	SLE RA 12	14	64	2635	-13.86	12.4	0.04
87	SLE RA 13	18	62	2685	-14.63	15.29	0.05
87	SLE RA 14	8	67	2560	-12.71	8.05	0.03
87	SLE RA 15	14	64	2635	-13.86	12.4	0.04
87	SLE RA 16	8	67	2560	-12.71	8.05	0.03
87	SLE RA 17	14	64	2635	-13.86	12.4	0.04
87	SLE RA 18	9	83	2681	-14	8.67	0.03
87	SLE RA 19	15	80	2756	-15.15	13.01	0.04
87	SLE RA 20	9	83	2681	-14	8.67	0.03
87	SLE RA 21	15	80	2756	-15.15	13.01	0.04
87	SLE FR 1	6	30	2277	-9.7	6.62	0.02
87	SLE FR 2	8	29	2302	-10.09	8.07	0.03
87	SLE FR 3	6	30	2277	-9.7	6.62	0.02
87	SLE FR 4	9	45	2423	-11.38	8.69	0.03
87	SLE FR 5	7	46	2398	-10.99	7.24	0.02
87	SLE FR 6	7	57	2479	-11.85	7.65	0.03
87	SLE QP 1	6	30	2277	-9.7	6.62	0.02
87	SLE QP 2	7	46	2398	-10.99	7.24	0.02
87	SLD 1	7	18	2138	-5.84	9.89	0.03
87	SLD 2	7	18	2138	-5.84	9.89	0.03
87	SLD 3	16	-66	2251	-9.32	15.91	0.05
87	SLD 4	16	-66	2251	-9.32	15.91	0.05
87	SLD 5	-8	166	2149	-4.17	-1.09	0
87	SLD 6	-8	166	2149	-4.17	-1.09	0
87	SLD 7	25	-116	2525	-15.77	18.96	0.06
87	SLD 8	25	-116	2525	-15.77	18.96	0.06
87	SLD 9	-10	208	2271	-6.22	-4.49	-0.01
87	SLD 10	-10	208	2271	-6.22	-4.49	-0.01
87	SLD 11	22	-74	2648	-17.81	15.56	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
87	SLD 12	22	-74	2648	-17.81	15.56	0.05
87	SLD 13	-2	159	2546	-12.67	-1.43	0
87	SLD 14	-2	159	2546	-12.67	-1.43	0
87	SLD 15	7	74	2659	-16.14	4.58	0.01
87	SLD 16	7	74	2659	-16.14	4.58	0.01
87	SLV 1	5	-22	1776	1.33	12.9	0.05
87	SLV 2	5	-22	1776	1.33	12.9	0.05
87	SLV 3	30	-223	2062	-6.9	28.38	0.1
87	SLV 4	30	-223	2062	-6.9	28.38	0.1
87	SLV 5	-31	331	1777	5.17	-14.53	-0.04
87	SLV 6	-31	331	1777	5.17	-14.53	-0.04
87	SLV 7	52	-340	2731	-22.23	37.05	0.12
87	SLV 8	52	-340	2731	-22.23	37.05	0.12
87	SLV 9	-38	433	2065	0.25	-22.57	-0.07
87	SLV 10	-38	433	2065	0.25	-22.57	-0.07
87	SLV 11	45	-239	3019	-27.16	29	0.09
87	SLV 12	45	-239	3019	-27.16	29	0.09
87	SLV 13	-16	316	2735	-15.09	-13.9	-0.05
87	SLV 14	-16	316	2735	-15.09	-13.9	-0.05
87	SLV 15	9	114	3021	-23.31	1.57	0
87	SLV 16	9	114	3021	-23.31	1.57	0
88	SLU 1	4	-311	2695	25.46	-2.29	-0.03
88	SLU 2	-7	-452	2890	34.21	-9.78	-0.05
88	SLU 3	4	-311	2695	25.46	-2.29	-0.03
88	SLU 4	-3	-396	2812	30.71	-6.78	-0.04
88	SLU 5	-7	-452	2890	34.21	-9.78	-0.05
88	SLU 6	4	-311	2695	25.46	-2.29	-0.03
88	SLU 7	-3	-396	2812	30.71	-6.78	-0.04
88	SLU 8	4	-311	2695	25.46	-2.29	-0.03
88	SLU 9	-3	-396	2812	30.71	-6.78	-0.04
88	SLU 10	-6	-486	3469	39.41	-10.64	-0.05
88	SLU 11	5	-345	3274	30.67	-3.16	-0.03
88	SLU 12	-2	-430	3391	35.92	-7.65	-0.05
88	SLU 13	-6	-486	3469	39.41	-10.64	-0.05
88	SLU 14	5	-345	3274	30.67	-3.16	-0.03
88	SLU 15	-2	-430	3391	35.92	-7.65	-0.05
88	SLU 16	5	-345	3274	30.67	-3.16	-0.03
88	SLU 17	-2	-430	3391	35.92	-7.65	-0.05
88	SLU 18	5	-360	3522	32.9	-3.53	-0.04
88	SLU 19	-2	-444	3639	38.15	-8.02	-0.05
88	SLU 20	5	-360	3522	32.9	-3.53	-0.04
88	SLU 21	-2	-444	3639	38.15	-8.02	-0.05
88	SLU 22	4	-329	3008	28.04	-2.67	-0.03
88	SLU 23	-6	-470	3204	36.79	-10.15	-0.05
88	SLU 24	4	-329	3008	28.04	-2.67	-0.03
88	SLU 25	-2	-414	3126	33.29	-7.16	-0.04
88	SLU 26	-6	-470	3204	36.79	-10.15	-0.05
88	SLU 27	4	-329	3008	28.04	-2.67	-0.03
88	SLU 28	-2	-414	3126	33.29	-7.16	-0.04
88	SLU 29	4	-329	3008	28.04	-2.67	-0.03
88	SLU 30	-2	-414	3126	33.29	-7.16	-0.04
88	SLU 31	-6	-504	3783	41.99	-11.02	-0.06
88	SLU 32	5	-364	3587	33.25	-3.53	-0.04
88	SLU 33	-1	-448	3705	38.5	-8.02	-0.05
88	SLU 34	-6	-504	3783	41.99	-11.02	-0.06
88	SLU 35	5	-364	3587	33.25	-3.53	-0.04
88	SLU 36	-1	-448	3705	38.5	-8.02	-0.05
88	SLU 37	5	-364	3587	33.25	-3.53	-0.04
88	SLU 38	-1	-448	3705	38.5	-8.02	-0.05
88	SLU 39	5	-378	3836	35.48	-3.9	-0.04
88	SLU 40	-1	-463	3953	40.73	-8.39	-0.05
88	SLU 41	5	-378	3836	35.48	-3.9	-0.04
88	SLU 42	-1	-463	3953	40.73	-8.39	-0.05
88	SLU 43	5	-398	3396	32.22	-2.85	-0.03
88	SLU 44	-6	-539	3591	40.96	-10.34	-0.05
88	SLU 45	5	-398	3396	32.22	-2.85	-0.03
88	SLU 46	-2	-483	3513	37.46	-7.34	-0.05
88	SLU 47	-6	-539	3591	40.96	-10.34	-0.05
88	SLU 48	5	-398	3396	32.22	-2.85	-0.03
88	SLU 49	-2	-483	3513	37.46	-7.34	-0.05
88	SLU 50	5	-398	3396	32.22	-2.85	-0.03
88	SLU 51	-2	-483	3513	37.46	-7.34	-0.05
88	SLU 52	-5	-573	4170	46.17	-11.2	-0.06
88	SLU 53	6	-433	3975	37.42	-3.72	-0.04
88	SLU 54	-1	-517	4092	42.67	-8.21	-0.05
88	SLU 55	-5	-573	4170	46.17	-11.2	-0.06
88	SLU 56	6	-433	3975	37.42	-3.72	-0.04
88	SLU 57	-1	-517	4092	42.67	-8.21	-0.05
88	SLU 58	6	-433	3975	37.42	-3.72	-0.04
88	SLU 59	-1	-517	4092	42.67	-8.21	-0.05
88	SLU 60	6	-447	4223	39.66	-4.09	-0.04
88	SLU 61	0	-532	4340	44.9	-8.58	-0.06
88	SLU 62	6	-447	4223	39.66	-4.09	-0.04
88	SLU 63	0	-532	4340	44.9	-8.58	-0.06
88	SLU 64	5	-416	3709	34.8	-3.23	-0.04
88	SLU 65	-5	-557	3905	43.54	-10.71	-0.06
88	SLU 66	5	-416	3709	34.8	-3.23	-0.04
88	SLU 67	-1	-501	3826	40.04	-7.72	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
88	SLU 68	-5	-557	3905	43.54	-10.71	-0.06
88	SLU 69	5	-416	3709	34.8	-3.23	-0.04
88	SLU 70	-1	-501	3826	40.04	-7.72	-0.05
88	SLU 71	5	-416	3709	34.8	-3.23	-0.04
88	SLU 72	-1	-501	3826	40.04	-7.72	-0.05
88	SLU 73	-5	-591	4484	48.75	-11.58	-0.07
88	SLU 74	6	-451	4288	40	-4.09	-0.05
88	SLU 75	0	-535	4406	45.25	-8.58	-0.06
88	SLU 76	-5	-591	4484	48.75	-11.58	-0.07
88	SLU 77	6	-451	4288	40	-4.09	-0.05
88	SLU 78	0	-535	4406	45.25	-8.58	-0.06
88	SLU 79	6	-451	4288	40	-4.09	-0.05
88	SLU 80	0	-535	4406	45.25	-8.58	-0.06
88	SLU 81	6	-465	4537	42.24	-4.46	-0.05
88	SLU 82	0	-550	4654	47.48	-8.95	-0.06
88	SLU 83	6	-465	4537	42.24	-4.46	-0.05
88	SLU 84	0	-550	4654	47.48	-8.95	-0.06
88	SLE RA 1	4	-316	2784	26.2	-2.4	-0.03
88	SLE RA 2	-3	-410	2915	32.03	-7.39	-0.04
88	SLE RA 3	4	-316	2784	26.2	-2.4	-0.03
88	SLE RA 4	0	-373	2862	29.7	-5.39	-0.04
88	SLE RA 5	-3	-410	2915	32.03	-7.39	-0.04
88	SLE RA 6	4	-316	2784	26.2	-2.4	-0.03
88	SLE RA 7	0	-373	2862	29.7	-5.39	-0.04
88	SLE RA 8	4	-316	2784	26.2	-2.4	-0.03
88	SLE RA 9	0	-373	2862	29.7	-5.39	-0.04
88	SLE RA 10	-3	-433	3301	35.5	-7.97	-0.05
88	SLE RA 11	5	-339	3170	29.67	-2.98	-0.03
88	SLE RA 12	0	-395	3249	33.17	-5.97	-0.04
88	SLE RA 13	-3	-433	3301	35.5	-7.97	-0.05
88	SLE RA 14	5	-339	3170	29.67	-2.98	-0.03
88	SLE RA 15	0	-395	3249	33.17	-5.97	-0.04
88	SLE RA 16	5	-339	3170	29.67	-2.98	-0.03
88	SLE RA 17	0	-395	3249	33.17	-5.97	-0.04
88	SLE RA 18	5	-349	3336	31.16	-3.22	-0.04
88	SLE RA 19	0	-405	3414	34.66	-6.22	-0.04
88	SLE RA 20	5	-349	3336	31.16	-3.22	-0.04
88	SLE RA 21	0	-405	3414	34.66	-6.22	-0.04
88	SLE FR 1	4	-316	2784	26.2	-2.4	-0.03
88	SLE FR 2	3	-335	2810	27.37	-3.4	-0.03
88	SLE FR 3	4	-316	2784	26.2	-2.4	-0.03
88	SLE FR 4	3	-345	2976	28.85	-3.65	-0.03
88	SLE FR 5	4	-326	2950	27.69	-2.65	-0.03
88	SLE FR 6	4	-333	3060	28.68	-2.81	-0.03
88	SLE QP 1	4	-316	2784	26.2	-2.4	-0.03
88	SLE QP 2	4	-326	2950	27.69	-2.65	-0.03
88	SLD 1	10	-181	3181	20.72	2.49	-0.02
88	SLD 2	10	-181	3181	20.72	2.49	-0.02
88	SLD 3	2	-290	3378	25.69	-1.78	-0.03
88	SLD 4	2	-290	3378	25.69	-1.78	-0.03
88	SLD 5	18	-118	2720	18.05	5.36	-0.01
88	SLD 6	18	-118	2720	18.05	5.36	-0.01
88	SLD 7	-8	-480	3378	34.63	-8.85	-0.04
88	SLD 8	-8	-480	3378	34.63	-8.85	-0.04
88	SLD 9	17	-172	2522	20.74	3.56	-0.02
88	SLD 10	17	-172	2522	20.74	3.56	-0.02
88	SLD 11	-10	-535	3180	37.32	-10.66	-0.05
88	SLD 12	-10	-535	3180	37.32	-10.66	-0.05
88	SLD 13	6	-363	2521	29.68	-3.52	-0.03
88	SLD 14	6	-363	2521	29.68	-3.52	-0.03
88	SLD 15	-2	-471	2719	34.66	-7.78	-0.04
88	SLD 16	-2	-471	2719	34.66	-7.78	-0.04
88	SLV 1	20	30	3486	10.62	10	-0.01
88	SLV 2	20	30	3486	10.62	10	-0.01
88	SLV 3	0	-232	3969	22.6	-0.97	-0.03
88	SLV 4	0	-232	3969	22.6	-0.97	-0.03
88	SLV 5	40	178	2379	4.39	17.78	0.01
88	SLV 6	40	178	2379	4.39	17.78	0.01
88	SLV 7	-28	-696	3987	44.34	-18.78	-0.07
88	SLV 8	-28	-696	3987	44.34	-18.78	-0.07
88	SLV 9	36	43	1912	11.03	13.48	0
88	SLV 10	36	43	1912	11.03	13.48	0
88	SLV 11	-31	-831	3521	50.99	-23.08	-0.07
88	SLV 12	-31	-831	3521	50.99	-23.08	-0.07
88	SLV 13	9	-420	1931	32.77	-4.33	-0.03
88	SLV 14	9	-420	1931	32.77	-4.33	-0.03
88	SLV 15	-11	-682	2413	44.76	-15.3	-0.06
88	SLV 16	-11	-682	2413	44.76	-15.3	-0.06
89	SLU 1	-5	-304	2507	25.06	1.72	0.02
89	SLU 2	4	-441	2650	33.53	8.07	0.05
89	SLU 3	-5	-304	2507	25.06	1.72	0.02
89	SLU 4	0	-386	2593	30.14	5.53	0.03
89	SLU 5	4	-441	2650	33.53	8.07	0.05
89	SLU 6	-5	-304	2507	25.06	1.72	0.02
89	SLU 7	0	-386	2593	30.14	5.53	0.03
89	SLU 8	-5	-304	2507	25.06	1.72	0.02
89	SLU 9	0	-386	2593	30.14	5.53	0.03
89	SLU 10	3	-468	3172	38.25	8.76	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
89	SLU 11	-6	-332	3029	29.79	2.41	0.02
89	SLU 12	-1	-414	3115	34.87	6.22	0.04
89	SLU 13	3	-468	3172	38.25	8.76	0.05
89	SLU 14	-6	-332	3029	29.79	2.41	0.02
89	SLU 15	-1	-414	3115	34.87	6.22	0.04
89	SLU 16	-6	-332	3029	29.79	2.41	0.02
89	SLU 17	-1	-414	3115	34.87	6.22	0.04
89	SLU 18	-6	-343	3253	31.81	2.7	0.02
89	SLU 19	-1	-426	3339	36.89	6.51	0.04
89	SLU 20	-6	-343	3253	31.81	2.7	0.02
89	SLU 21	-1	-426	3339	36.89	6.51	0.04
89	SLU 22	-5	-315	2776	27.17	2.01	0.02
89	SLU 23	3	-452	2919	35.64	8.36	0.05
89	SLU 24	-5	-315	2776	27.17	2.01	0.02
89	SLU 25	0	-397	2861	32.25	5.82	0.04
89	SLU 26	3	-452	2919	35.64	8.36	0.05
89	SLU 27	-5	-315	2776	27.17	2.01	0.02
89	SLU 28	0	-397	2861	32.25	5.82	0.04
89	SLU 29	-5	-315	2776	27.17	2.01	0.02
89	SLU 30	0	-397	2861	32.25	5.82	0.04
89	SLU 31	2	-479	3441	40.37	9.04	0.05
89	SLU 32	-7	-342	3298	31.9	2.7	0.02
89	SLU 33	-1	-425	3384	36.98	6.5	0.04
89	SLU 34	2	-479	3441	40.37	9.04	0.05
89	SLU 35	-7	-342	3298	31.9	2.7	0.02
89	SLU 36	-1	-425	3384	36.98	6.5	0.04
89	SLU 37	-7	-342	3298	31.9	2.7	0.02
89	SLU 38	-1	-425	3384	36.98	6.5	0.04
89	SLU 39	-7	-354	3522	33.92	2.99	0.03
89	SLU 40	-2	-436	3607	39	6.8	0.04
89	SLU 41	-7	-354	3522	33.92	2.99	0.03
89	SLU 42	-2	-436	3607	39	6.8	0.04
89	SLU 43	-6	-391	3167	31.86	2.14	0.02
89	SLU 44	3	-528	3310	40.32	8.49	0.05
89	SLU 45	-6	-391	3167	31.86	2.14	0.02
89	SLU 46	-1	-474	3253	36.94	5.95	0.04
89	SLU 47	3	-528	3310	40.32	8.49	0.05
89	SLU 48	-6	-391	3167	31.86	2.14	0.02
89	SLU 49	-1	-474	3253	36.94	5.95	0.04
89	SLU 50	-6	-391	3167	31.86	2.14	0.02
89	SLU 51	-1	-474	3253	36.94	5.95	0.04
89	SLU 52	2	-556	3832	45.05	9.17	0.05
89	SLU 53	-7	-419	3689	36.58	2.83	0.03
89	SLU 54	-2	-501	3775	41.66	6.63	0.04
89	SLU 55	2	-556	3832	45.05	9.17	0.05
89	SLU 56	-7	-419	3689	36.58	2.83	0.03
89	SLU 57	-2	-501	3775	41.66	6.63	0.04
89	SLU 58	-7	-419	3689	36.58	2.83	0.03
89	SLU 59	-2	-501	3775	41.66	6.63	0.04
89	SLU 60	-8	-431	3913	38.61	3.12	0.03
89	SLU 61	-2	-513	3999	43.69	6.93	0.05
89	SLU 62	-8	-431	3913	38.61	3.12	0.03
89	SLU 63	-2	-513	3999	43.69	6.93	0.05
89	SLU 64	-7	-402	3435	33.97	2.43	0.02
89	SLU 65	2	-539	3579	42.44	8.77	0.05
89	SLU 66	-7	-402	3435	33.97	2.43	0.02
89	SLU 67	-1	-484	3521	39.05	6.23	0.04
89	SLU 68	2	-539	3579	42.44	8.77	0.05
89	SLU 69	-7	-402	3435	33.97	2.43	0.02
89	SLU 70	-1	-484	3521	39.05	6.23	0.04
89	SLU 71	-7	-402	3435	33.97	2.43	0.02
89	SLU 72	-1	-484	3521	39.05	6.23	0.04
89	SLU 73	1	-567	4101	47.16	9.46	0.06
89	SLU 74	-8	-430	3958	38.69	3.11	0.03
89	SLU 75	-2	-512	4044	43.77	6.92	0.05
89	SLU 76	1	-567	4101	47.16	9.46	0.06
89	SLU 77	-8	-430	3958	38.69	3.11	0.03
89	SLU 78	-2	-512	4044	43.77	6.92	0.05
89	SLU 79	-8	-430	3958	38.69	3.11	0.03
89	SLU 80	-2	-512	4044	43.77	6.92	0.05
89	SLU 81	-8	-442	4181	40.72	3.41	0.03
89	SLU 82	-3	-524	4267	45.8	7.22	0.05
89	SLU 83	-8	-442	4181	40.72	3.41	0.03
89	SLU 84	-3	-524	4267	45.8	7.22	0.05
89	SLE RA 1	-5	-307	2584	25.67	1.8	0.02
89	SLE RA 2	1	-398	2679	31.31	6.03	0.04
89	SLE RA 3	-5	-307	2584	25.67	1.8	0.02
89	SLE RA 4	-1	-362	2641	29.05	4.34	0.03
89	SLE RA 5	1	-398	2679	31.31	6.03	0.04
89	SLE RA 6	-5	-307	2584	25.67	1.8	0.02
89	SLE RA 7	-1	-362	2641	29.05	4.34	0.03
89	SLE RA 8	-5	-307	2584	25.67	1.8	0.02
89	SLE RA 9	-1	-362	2641	29.05	4.34	0.03
89	SLE RA 10	0	-417	3027	34.46	6.49	0.04
89	SLE RA 11	-6	-325	2932	28.82	2.26	0.02
89	SLE RA 12	-2	-380	2989	32.2	4.8	0.03
89	SLE RA 13	0	-417	3027	34.46	6.49	0.04
89	SLE RA 14	-6	-325	2932	28.82	2.26	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
89	SLE RA 15	-2	-380	2989	32.2	4.8	0.03
89	SLE RA 16	-6	-325	2932	28.82	2.26	0.02
89	SLE RA 17	-2	-380	2989	32.2	4.8	0.03
89	SLE RA 18	-6	-333	3081	30.17	2.46	0.02
89	SLE RA 19	-2	-388	3138	33.55	5	0.03
89	SLE RA 20	-6	-333	3081	30.17	2.46	0.02
89	SLE RA 21	-2	-388	3138	33.55	5	0.03
89	SLE FR 1	-5	-307	2584	25.67	1.8	0.02
89	SLE FR 2	-4	-325	2603	26.8	2.65	0.02
89	SLE FR 3	-5	-307	2584	25.67	1.8	0.02
89	SLE FR 4	-4	-333	2752	28.14	2.85	0.02
89	SLE FR 5	-5	-315	2733	27.02	2	0.02
89	SLE FR 6	-6	-320	2832	27.92	2.13	0.02
89	SLE QP 1	-5	-307	2584	25.67	1.8	0.02
89	SLE QP 2	-5	-315	2733	27.02	2	0.02
89	SLD 1	-7	-337	2369	21.65	2.86	0.02
89	SLD 2	-7	-337	2369	21.65	2.86	0.02
89	SLD 3	0	-436	2541	26.32	6.62	0.03
89	SLD 4	0	-436	2541	26.32	6.62	0.03
89	SLD 5	-16	-172	2362	18.31	-3.44	-0.01
89	SLD 6	-16	-172	2362	18.31	-3.44	-0.01
89	SLD 7	7	-501	2937	33.9	9.08	0.05
89	SLD 8	7	-501	2937	33.9	9.08	0.05
89	SLD 9	-18	-129	2529	20.13	-5.09	-0.01
89	SLD 10	-18	-129	2529	20.13	-5.09	-0.01
89	SLD 11	6	-458	3103	35.72	7.44	0.04
89	SLD 12	6	-458	3103	35.72	7.44	0.04
89	SLD 13	-11	-194	2925	27.71	-2.62	0
89	SLD 14	-11	-194	2925	27.71	-2.62	0
89	SLD 15	-4	-293	3097	32.39	1.13	0.02
89	SLD 16	-4	-293	3097	32.39	1.13	0.02
89	SLV 1	-9	-364	1864	14.11	3.7	0.01
89	SLV 2	-9	-364	1864	14.11	3.7	0.01
89	SLV 3	9	-606	2293	25.69	13.35	0.06
89	SLV 4	9	-606	2293	25.69	13.35	0.06
89	SLV 5	-33	38	1822	5.58	-12.12	-0.05
89	SLV 6	-33	38	1822	5.58	-12.12	-0.05
89	SLV 7	26	-770	3251	44.19	20.03	0.09
89	SLV 8	26	-770	3251	44.19	20.03	0.09
89	SLV 9	-36	140	2215	9.84	-16.04	-0.06
89	SLV 10	-36	140	2215	9.84	-16.04	-0.06
89	SLV 11	22	-668	3643	48.46	16.12	0.09
89	SLV 12	22	-668	3643	48.46	16.12	0.09
89	SLV 13	-20	-24	3173	28.34	-9.35	-0.02
89	SLV 14	-20	-24	3173	28.34	-9.35	-0.02
89	SLV 15	-2	-266	3601	39.92	0.3	0.02
89	SLV 16	-2	-266	3601	39.92	0.3	0.02
90	SLU 1	367	-317	3242	2.83	3.59	0.02
90	SLU 2	182	-361	3243	3.41	-7.66	-0.08
90	SLU 3	367	-317	3242	2.83	3.59	0.02
90	SLU 4	256	-343	3242	3.18	-3.16	-0.04
90	SLU 5	182	-361	3243	3.41	-7.66	-0.08
90	SLU 6	367	-317	3242	2.83	3.59	0.02
90	SLU 7	256	-343	3242	3.18	-3.16	-0.04
90	SLU 8	367	-317	3242	2.83	3.59	0.02
90	SLU 9	256	-343	3242	3.18	-3.16	-0.04
90	SLU 10	280	-408	3984	2.81	-6.65	-0.06
90	SLU 11	465	-364	3983	2.24	4.6	0.03
90	SLU 12	354	-391	3984	2.58	-2.15	-0.02
90	SLU 13	280	-408	3984	2.81	-6.65	-0.06
90	SLU 14	465	-364	3983	2.24	4.6	0.03
90	SLU 15	354	-391	3984	2.58	-2.15	-0.02
90	SLU 16	465	-364	3983	2.24	4.6	0.03
90	SLU 17	354	-391	3984	2.58	-2.15	-0.02
90	SLU 18	507	-385	4301	1.98	5.03	0.04
90	SLU 19	396	-411	4302	2.32	-1.72	-0.02
90	SLU 20	507	-385	4301	1.98	5.03	0.04
90	SLU 21	396	-411	4302	2.32	-1.72	-0.02
90	SLU 22	425	-345	3648	2.7	4.48	0.03
90	SLU 23	240	-389	3649	3.28	-6.78	-0.07
90	SLU 24	425	-345	3648	2.7	4.48	0.03
90	SLU 25	314	-371	3648	3.04	-2.27	-0.03
90	SLU 26	240	-389	3649	3.28	-6.78	-0.07
90	SLU 27	425	-345	3648	2.7	4.48	0.03
90	SLU 28	314	-371	3648	3.04	-2.27	-0.03
90	SLU 29	425	-345	3648	2.7	4.48	0.03
90	SLU 30	314	-371	3648	3.04	-2.27	-0.03
90	SLU 31	338	-436	4391	2.68	-5.77	-0.05
90	SLU 32	523	-392	4390	2.1	5.49	0.04
90	SLU 33	412	-419	4390	2.45	-1.27	-0.01
90	SLU 34	338	-436	4391	2.68	-5.77	-0.05
90	SLU 35	523	-392	4390	2.1	5.49	0.04
90	SLU 36	412	-419	4390	2.45	-1.27	-0.01
90	SLU 37	523	-392	4390	2.1	5.49	0.04
90	SLU 38	412	-419	4390	2.45	-1.27	-0.01
90	SLU 39	565	-412	4707	1.85	5.92	0.05
90	SLU 40	454	-439	4708	2.19	-0.83	-0.01
90	SLU 41	565	-412	4707	1.85	5.92	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
90	SLU 42	454	-439	4708	2.19	-0.83	-0.01
90	SLU 43	457	-402	4075	3.73	4.37	0.02
90	SLU 44	272	-446	4076	4.3	-6.89	-0.08
90	SLU 45	457	-402	4075	3.73	4.37	0.02
90	SLU 46	346	-429	4075	4.07	-2.38	-0.04
90	SLU 47	272	-446	4076	4.3	-6.89	-0.08
90	SLU 48	457	-402	4075	3.73	4.37	0.02
90	SLU 49	346	-429	4075	4.07	-2.38	-0.04
90	SLU 50	457	-402	4075	3.73	4.37	0.02
90	SLU 51	346	-429	4075	4.07	-2.38	-0.04
90	SLU 52	370	-494	4818	3.71	-5.88	-0.06
90	SLU 53	555	-450	4817	3.13	5.38	0.04
90	SLU 54	444	-476	4817	3.48	-1.38	-0.02
90	SLU 55	370	-494	4818	3.71	-5.88	-0.06
90	SLU 56	555	-450	4817	3.13	5.38	0.04
90	SLU 57	444	-476	4817	3.48	-1.38	-0.02
90	SLU 58	555	-450	4817	3.13	5.38	0.04
90	SLU 59	444	-476	4817	3.48	-1.38	-0.02
90	SLU 60	597	-470	5135	2.87	5.81	0.04
90	SLU 61	486	-497	5135	3.22	-0.94	-0.01
90	SLU 62	597	-470	5135	2.87	5.81	0.04
90	SLU 63	486	-497	5135	3.22	-0.94	-0.01
90	SLU 64	515	-430	4481	3.59	5.25	0.03
90	SLU 65	330	-474	4482	4.17	-6	-0.07
90	SLU 66	515	-430	4481	3.59	5.25	0.03
90	SLU 67	404	-457	4482	3.94	-1.5	-0.03
90	SLU 68	330	-474	4482	4.17	-6	-0.07
90	SLU 69	515	-430	4481	3.59	5.25	0.03
90	SLU 70	404	-457	4482	3.94	-1.5	-0.03
90	SLU 71	515	-430	4481	3.59	5.25	0.03
90	SLU 72	404	-457	4482	3.94	-1.5	-0.03
90	SLU 73	428	-522	5224	3.57	-4.99	-0.05
90	SLU 74	613	-478	5223	3	6.26	0.05
90	SLU 75	502	-504	5223	3.34	-0.49	-0.01
90	SLU 76	428	-522	5224	3.57	-4.99	-0.05
90	SLU 77	613	-478	5223	3	6.26	0.05
90	SLU 78	502	-504	5223	3.34	-0.49	-0.01
90	SLU 79	613	-478	5223	3	6.26	0.05
90	SLU 80	502	-504	5223	3.34	-0.49	-0.01
90	SLU 81	655	-498	5541	2.74	6.69	0.05
90	SLU 82	544	-524	5541	3.09	-0.06	0
90	SLU 83	655	-498	5541	2.74	6.69	0.05
90	SLU 84	544	-524	5541	3.09	-0.06	0
90	SLE RA 1	384	-325	3358	2.79	3.85	0.02
90	SLE RA 2	260	-354	3358	3.18	-3.66	-0.04
90	SLE RA 3	384	-325	3358	2.79	3.85	0.02
90	SLE RA 4	310	-342	3358	3.02	-0.66	-0.02
90	SLE RA 5	260	-354	3358	3.18	-3.66	-0.04
90	SLE RA 6	384	-325	3358	2.79	3.85	0.02
90	SLE RA 7	310	-342	3358	3.02	-0.66	-0.02
90	SLE RA 8	384	-325	3358	2.79	3.85	0.02
90	SLE RA 9	310	-342	3358	3.02	-0.66	-0.02
90	SLE RA 10	325	-386	3853	2.78	-2.98	-0.03
90	SLE RA 11	449	-356	3852	2.4	4.52	0.03
90	SLE RA 12	375	-374	3853	2.63	0.02	-0.01
90	SLE RA 13	325	-386	3853	2.78	-2.98	-0.03
90	SLE RA 14	449	-356	3852	2.4	4.52	0.03
90	SLE RA 15	375	-374	3853	2.63	0.02	-0.01
90	SLE RA 16	449	-356	3852	2.4	4.52	0.03
90	SLE RA 17	375	-374	3853	2.63	0.02	-0.01
90	SLE RA 18	477	-370	4064	2.23	4.81	0.04
90	SLE RA 19	403	-388	4064	2.46	0.3	0
90	SLE RA 20	477	-370	4064	2.23	4.81	0.04
90	SLE RA 21	403	-388	4064	2.46	0.3	0
90	SLE FR 1	384	-325	3358	2.79	3.85	0.02
90	SLE FR 2	359	-331	3358	2.87	2.35	0.01
90	SLE FR 3	384	-325	3358	2.79	3.85	0.02
90	SLE FR 4	387	-344	3570	2.7	2.63	0.01
90	SLE FR 5	411	-338	3570	2.62	4.13	0.02
90	SLE FR 6	430	-347	3711	2.51	4.33	0.03
90	SLE QP 1	384	-325	3358	2.79	3.85	0.02
90	SLE QP 2	411	-338	3570	2.62	4.13	0.02
90	SLD 1	591	-257	4237	1.72	11.84	0.1
90	SLD 2	591	-257	4237	1.72	11.84	0.1
90	SLD 3	482	-321	3894	-0.73	6.4	0.05
90	SLD 4	482	-321	3894	-0.73	6.4	0.05
90	SLD 5	631	-217	4290	6.07	14.69	0.13
90	SLD 6	631	-217	4290	6.07	14.69	0.13
90	SLD 7	267	-430	3147	-2.1	-3.43	-0.05
90	SLD 8	267	-430	3147	-2.1	-3.43	-0.05
90	SLD 9	556	-247	3993	7.35	11.7	0.1
90	SLD 10	556	-247	3993	7.35	11.7	0.1
90	SLD 11	192	-459	2849	-0.83	-6.42	-0.08
90	SLD 12	192	-459	2849	-0.83	-6.42	-0.08
90	SLD 13	341	-356	3245	5.98	1.86	0
90	SLD 14	341	-356	3245	5.98	1.86	0
90	SLD 15	232	-419	2902	3.52	-3.57	-0.05
90	SLD 16	232	-419	2902	3.52	-3.57	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
90	SLV 1	847	-141	5165	0.28	22.96	0.22
90	SLV 2	847	-141	5165	0.28	22.96	0.22
90	SLV 3	565	-292	4314	-5.55	8.89	0.09
90	SLV 4	565	-292	4314	-5.55	8.89	0.09
90	SLV 5	970	-50	5339	10.76	31.12	0.28
90	SLV 6	970	-50	5339	10.76	31.12	0.28
90	SLV 7	30	-553	2502	-8.67	-15.78	-0.16
90	SLV 8	30	-553	2502	-8.67	-15.78	-0.16
90	SLV 9	793	-123	4637	13.91	24.05	0.21
90	SLV 10	793	-123	4637	13.91	24.05	0.21
90	SLV 11	-147	-627	1801	-5.51	-22.85	-0.23
90	SLV 12	-147	-627	1801	-5.51	-22.85	-0.23
90	SLV 13	258	-385	2825	10.79	-0.62	-0.04
90	SLV 14	258	-385	2825	10.79	-0.62	-0.04
90	SLV 15	-24	-536	1974	4.97	-14.69	-0.17
90	SLV 16	-24	-536	1974	4.97	-14.69	-0.17
91	SLU 1	403	-6	2669	1.08	28.88	0.03
91	SLU 2	67	-5	2783	6.44	18.31	0.03
91	SLU 3	403	-6	2669	1.08	28.88	0.03
91	SLU 4	201	-5	2738	4.29	22.54	0.03
91	SLU 5	67	-5	2783	6.44	18.31	0.03
91	SLU 6	403	-6	2669	1.08	28.88	0.03
91	SLU 7	201	-5	2738	4.29	22.54	0.03
91	SLU 8	403	-6	2669	1.08	28.88	0.03
91	SLU 9	201	-5	2738	4.29	22.54	0.03
91	SLU 10	195	-6	3398	6.8	27.14	0.04
91	SLU 11	531	-7	3284	1.44	37.71	0.03
91	SLU 12	330	-6	3353	4.66	31.37	0.04
91	SLU 13	195	-6	3398	6.8	27.14	0.04
91	SLU 14	531	-7	3284	1.44	37.71	0.03
91	SLU 15	330	-6	3353	4.66	31.37	0.04
91	SLU 16	531	-7	3284	1.44	37.71	0.03
91	SLU 17	330	-6	3353	4.66	31.37	0.04
91	SLU 18	586	-8	3548	1.6	41.5	0.04
91	SLU 19	384	-7	3616	4.82	35.15	0.04
91	SLU 20	586	-8	3548	1.6	41.5	0.04
91	SLU 21	384	-7	3616	4.82	35.15	0.04
91	SLU 22	478	-7	3006	1.27	33.63	0.03
91	SLU 23	142	-5	3120	6.63	23.06	0.04
91	SLU 24	478	-7	3006	1.27	33.63	0.03
91	SLU 25	276	-6	3074	4.49	27.29	0.03
91	SLU 26	142	-5	3120	6.63	23.06	0.04
91	SLU 27	478	-7	3006	1.27	33.63	0.03
91	SLU 28	276	-6	3074	4.49	27.29	0.03
91	SLU 29	478	-7	3006	1.27	33.63	0.03
91	SLU 30	276	-6	3074	4.49	27.29	0.03
91	SLU 31	270	-7	3735	7	31.89	0.05
91	SLU 32	606	-8	3621	1.64	42.46	0.04
91	SLU 33	404	-7	3689	4.85	36.11	0.04
91	SLU 34	270	-7	3735	7	31.89	0.05
91	SLU 35	606	-8	3621	1.64	42.46	0.04
91	SLU 36	404	-7	3689	4.85	36.11	0.04
91	SLU 37	606	-8	3621	1.64	42.46	0.04
91	SLU 38	404	-7	3689	4.85	36.11	0.04
91	SLU 39	661	-8	3884	1.79	46.24	0.04
91	SLU 40	459	-8	3953	5.01	39.9	0.04
91	SLU 41	661	-8	3884	1.79	46.24	0.04
91	SLU 42	459	-8	3953	5.01	39.9	0.04
91	SLU 43	498	-7	3355	1.33	35.92	0.03
91	SLU 44	162	-6	3469	6.69	25.35	0.04
91	SLU 45	498	-7	3355	1.33	35.92	0.03
91	SLU 46	296	-7	3423	4.55	29.58	0.04
91	SLU 47	162	-6	3469	6.69	25.35	0.04
91	SLU 48	498	-7	3355	1.33	35.92	0.03
91	SLU 49	296	-7	3423	4.55	29.58	0.04
91	SLU 50	498	-7	3355	1.33	35.92	0.03
91	SLU 51	296	-7	3423	4.55	29.58	0.04
91	SLU 52	290	-7	4083	7.06	34.18	0.05
91	SLU 53	626	-9	3970	1.7	44.75	0.04
91	SLU 54	425	-8	4038	4.92	38.41	0.04
91	SLU 55	290	-7	4083	7.06	34.18	0.05
91	SLU 56	626	-9	3970	1.7	44.75	0.04
91	SLU 57	425	-8	4038	4.92	38.41	0.04
91	SLU 58	626	-9	3970	1.7	44.75	0.04
91	SLU 59	425	-8	4038	4.92	38.41	0.04
91	SLU 60	681	-9	4233	1.86	48.53	0.04
91	SLU 61	480	-8	4301	5.07	42.19	0.05
91	SLU 62	681	-9	4233	1.86	48.53	0.04
91	SLU 63	480	-8	4301	5.07	42.19	0.05
91	SLU 64	573	-8	3691	1.53	40.67	0.04
91	SLU 65	237	-7	3805	6.89	30.1	0.04
91	SLU 66	573	-8	3691	1.53	40.67	0.04
91	SLU 67	371	-7	3760	4.74	34.32	0.04
91	SLU 68	237	-7	3805	6.89	30.1	0.04
91	SLU 69	573	-8	3691	1.53	40.67	0.04
91	SLU 70	371	-7	3760	4.74	34.32	0.04
91	SLU 71	573	-8	3691	1.53	40.67	0.04
91	SLU 72	371	-7	3760	4.74	34.32	0.04

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
91	SLU 73	365	-8	4420	7.25	38.92	0.05
91	SLU 74	701	-9	4306	1.89	49.5	0.04
91	SLU 75	500	-9	4375	5.11	43.15	0.05
91	SLU 76	365	-8	4420	7.25	38.92	0.05
91	SLU 77	701	-9	4306	1.89	49.5	0.04
91	SLU 78	500	-9	4375	5.11	43.15	0.05
91	SLU 79	701	-9	4306	1.89	49.5	0.04
91	SLU 80	500	-9	4375	5.11	43.15	0.05
91	SLU 81	756	-10	4570	2.05	53.28	0.05
91	SLU 82	554	-9	4638	5.27	46.94	0.05
91	SLU 83	756	-10	4570	2.05	53.28	0.05
91	SLU 84	554	-9	4638	5.27	46.94	0.05
91	SLE RA 1	424	-6	2766	1.13	30.24	0.03
91	SLE RA 2	200	-5	2841	4.71	23.19	0.03
91	SLE RA 3	424	-6	2766	1.13	30.24	0.03
91	SLE RA 4	290	-6	2811	3.28	26.01	0.03
91	SLE RA 5	200	-5	2841	4.71	23.19	0.03
91	SLE RA 6	424	-6	2766	1.13	30.24	0.03
91	SLE RA 7	290	-6	2811	3.28	26.01	0.03
91	SLE RA 8	424	-6	2766	1.13	30.24	0.03
91	SLE RA 9	290	-6	2811	3.28	26.01	0.03
91	SLE RA 10	286	-6	3251	4.95	29.08	0.04
91	SLE RA 11	510	-7	3175	1.38	36.13	0.03
91	SLE RA 12	375	-6	3221	3.52	31.9	0.04
91	SLE RA 13	286	-6	3251	4.95	29.08	0.04
91	SLE RA 14	510	-7	3175	1.38	36.13	0.03
91	SLE RA 15	375	-6	3221	3.52	31.9	0.04
91	SLE RA 16	510	-7	3175	1.38	36.13	0.03
91	SLE RA 17	375	-6	3221	3.52	31.9	0.04
91	SLE RA 18	546	-7	3351	1.48	38.65	0.03
91	SLE RA 19	412	-7	3397	3.63	34.42	0.04
91	SLE RA 20	546	-7	3351	1.48	38.65	0.03
91	SLE RA 21	412	-7	3397	3.63	34.42	0.04
91	SLE FR 1	424	-6	2766	1.13	30.24	0.03
91	SLE FR 2	379	-6	2781	1.85	28.83	0.03
91	SLE FR 3	424	-6	2766	1.13	30.24	0.03
91	SLE FR 4	416	-6	2956	1.95	31.35	0.03
91	SLE FR 5	461	-6	2941	1.24	32.76	0.03
91	SLE FR 6	485	-7	3058	1.31	34.44	0.03
91	SLE QP 1	424	-6	2766	1.13	30.24	0.03
91	SLE QP 2	461	-6	2941	1.24	32.76	0.03
91	SLD 1	732	-3	3158	-2.92	45	0.03
91	SLD 2	732	-3	3158	-2.92	45	0.03
91	SLD 3	552	-1	3345	0.76	37.65	0.04
91	SLD 4	552	-1	3345	0.76	37.65	0.04
91	SLD 5	816	-8	2722	-5.58	47.57	0.02
91	SLD 6	816	-8	2722	-5.58	47.57	0.02
91	SLD 7	215	-2	3346	6.66	23.09	0.04
91	SLD 8	215	-2	3346	6.66	23.09	0.04
91	SLD 9	707	-11	2536	-4.19	42.44	0.02
91	SLD 10	707	-11	2536	-4.19	42.44	0.02
91	SLD 11	106	-5	3160	8.05	17.95	0.03
91	SLD 12	106	-5	3160	8.05	17.95	0.03
91	SLD 13	370	-12	2537	1.72	27.87	0.02
91	SLD 14	370	-12	2537	1.72	27.87	0.02
91	SLD 15	189	-10	2724	5.39	20.53	0.03
91	SLD 16	189	-10	2724	5.39	20.53	0.03
91	SLV 1	1121	3	3447	-9.05	62.37	0.03
91	SLV 2	1121	3	3447	-9.05	62.37	0.03
91	SLV 3	656	7	3906	0.33	43.45	0.04
91	SLV 4	656	7	3906	0.33	43.45	0.04
91	SLV 5	1365	-11	2397	-16.07	70.35	0.02
91	SLV 6	1365	-11	2397	-16.07	70.35	0.02
91	SLV 7	-187	5	3927	15.18	7.27	0.05
91	SLV 8	-187	5	3927	15.18	7.27	0.05
91	SLV 9	1108	-18	1956	-12.71	58.26	0.01
91	SLV 10	1108	-18	1956	-12.71	58.26	0.01
91	SLV 11	-444	-2	3486	18.54	-4.82	0.04
91	SLV 12	-444	-2	3486	18.54	-4.82	0.04
91	SLV 13	266	-20	1977	2.15	22.08	0.01
91	SLV 14	266	-20	1977	2.15	22.08	0.01
91	SLV 15	-200	-15	2436	11.52	3.15	0.02
91	SLV 16	-200	-15	2436	11.52	3.15	0.02
92	SLU 1	37	4	2474	-0.7	-7.19	0
92	SLU 2	-411	6	2576	10.7	-28.59	-0.01
92	SLU 3	37	4	2474	-0.7	-7.19	0
92	SLU 4	-232	5	2535	6.14	-20.03	-0.01
92	SLU 5	-411	6	2576	10.7	-28.59	-0.01
92	SLU 6	37	4	2474	-0.7	-7.19	0
92	SLU 7	-232	5	2535	6.14	-20.03	-0.01
92	SLU 8	37	4	2474	-0.7	-7.19	0
92	SLU 9	-232	5	2535	6.14	-20.03	-0.01
92	SLU 10	-386	7	3138	10.79	-30.11	-0.01
92	SLU 11	63	5	3036	-0.61	-8.71	0
92	SLU 12	-207	7	3097	6.23	-21.55	-0.01
92	SLU 13	-386	7	3138	10.79	-30.11	-0.01
92	SLU 14	63	5	3036	-0.61	-8.71	0
92	SLU 15	-207	7	3097	6.23	-21.55	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
92	SLU 16	63	5	3036	-0.61	-8.71	0
92	SLU 17	-207	7	3097	6.23	-21.55	-0.01
92	SLU 18	73	6	3276	-0.58	-9.36	0
92	SLU 19	-196	7	3337	6.26	-22.2	-0.01
92	SLU 20	73	6	3276	-0.58	-9.36	0
92	SLU 21	-196	7	3337	6.26	-22.2	-0.01
92	SLU 22	62	4	2788	-0.64	-7.35	0
92	SLU 23	-386	7	2889	10.76	-28.75	-0.01
92	SLU 24	62	4	2788	-0.64	-7.35	0
92	SLU 25	-207	6	2849	6.2	-20.19	-0.01
92	SLU 26	-386	7	2889	10.76	-28.75	-0.01
92	SLU 27	62	4	2788	-0.64	-7.35	0
92	SLU 28	-207	6	2849	6.2	-20.19	-0.01
92	SLU 29	62	4	2788	-0.64	-7.35	0
92	SLU 30	-207	6	2849	6.2	-20.19	-0.01
92	SLU 31	-361	8	3451	10.84	-30.27	-0.01
92	SLU 32	88	6	3349	-0.56	-8.87	0
92	SLU 33	-182	7	3410	6.28	-21.71	-0.01
92	SLU 34	-361	8	3451	10.84	-30.27	-0.01
92	SLU 35	88	6	3349	-0.56	-8.87	0
92	SLU 36	-182	7	3410	6.28	-21.71	-0.01
92	SLU 37	88	6	3349	-0.56	-8.87	0
92	SLU 38	-182	7	3410	6.28	-21.71	-0.01
92	SLU 39	98	6	3590	-0.52	-9.52	0
92	SLU 40	-171	8	3651	6.32	-22.36	-0.01
92	SLU 41	98	6	3590	-0.52	-9.52	0
92	SLU 42	-171	8	3651	6.32	-22.36	-0.01
92	SLU 43	40	5	3109	-0.92	-9.29	0
92	SLU 44	-409	7	3211	10.48	-30.69	-0.01
92	SLU 45	40	5	3109	-0.92	-9.29	0
92	SLU 46	-229	6	3170	5.92	-22.13	-0.01
92	SLU 47	-409	7	3211	10.48	-30.69	-0.01
92	SLU 48	40	5	3109	-0.92	-9.29	0
92	SLU 49	-229	6	3170	5.92	-22.13	-0.01
92	SLU 50	40	5	3109	-0.92	-9.29	0
92	SLU 51	-229	6	3170	5.92	-22.13	-0.01
92	SLU 52	-384	8	3772	10.56	-32.21	-0.01
92	SLU 53	65	6	3671	-0.84	-10.81	0
92	SLU 54	-204	8	3732	6	-23.65	-0.01
92	SLU 55	-384	8	3772	10.56	-32.21	-0.01
92	SLU 56	65	6	3671	-0.84	-10.81	0
92	SLU 57	-204	8	3732	6	-23.65	-0.01
92	SLU 58	65	6	3671	-0.84	-10.81	0
92	SLU 59	-204	8	3732	6	-23.65	-0.01
92	SLU 60	76	7	3911	-0.8	-11.46	0
92	SLU 61	-193	8	3972	6.04	-24.3	-0.01
92	SLU 62	76	7	3911	-0.8	-11.46	0
92	SLU 63	-193	8	3972	6.04	-24.3	-0.01
92	SLU 64	65	5	3422	-0.87	-9.45	0
92	SLU 65	-384	8	3524	10.53	-30.85	-0.01
92	SLU 66	65	5	3422	-0.87	-9.45	0
92	SLU 67	-204	7	3484	5.97	-22.29	-0.01
92	SLU 68	-384	8	3524	10.53	-30.85	-0.01
92	SLU 69	65	5	3422	-0.87	-9.45	0
92	SLU 70	-204	7	3484	5.97	-22.29	-0.01
92	SLU 71	65	5	3422	-0.87	-9.45	0
92	SLU 72	-204	7	3484	5.97	-22.29	-0.01
92	SLU 73	-358	9	4086	10.62	-32.37	-0.01
92	SLU 74	90	7	3984	-0.78	-10.97	0
92	SLU 75	-179	8	4045	6.06	-23.81	-0.01
92	SLU 76	-358	9	4086	10.62	-32.37	-0.01
92	SLU 77	90	7	3984	-0.78	-10.97	0
92	SLU 78	-179	8	4045	6.06	-23.81	-0.01
92	SLU 79	90	7	3984	-0.78	-10.97	0
92	SLU 80	-179	8	4045	6.06	-23.81	-0.01
92	SLU 81	101	7	4225	-0.75	-11.62	0
92	SLU 82	-168	9	4286	6.09	-24.46	-0.01
92	SLU 83	101	7	4225	-0.75	-11.62	0
92	SLU 84	-168	9	4286	6.09	-24.46	-0.01
92	SLE RA 1	44	4	2564	-0.68	-7.23	0
92	SLE RA 2	-255	5	2632	6.92	-21.5	-0.01
92	SLE RA 3	44	4	2564	-0.68	-7.23	0
92	SLE RA 4	-135	5	2605	3.88	-15.79	-0.01
92	SLE RA 5	-255	5	2632	6.92	-21.5	-0.01
92	SLE RA 6	44	4	2564	-0.68	-7.23	0
92	SLE RA 7	-135	5	2605	3.88	-15.79	-0.01
92	SLE RA 8	44	4	2564	-0.68	-7.23	0
92	SLE RA 9	-135	5	2605	3.88	-15.79	-0.01
92	SLE RA 10	-238	6	3006	6.98	-22.51	-0.01
92	SLE RA 11	61	5	2938	-0.62	-8.25	0
92	SLE RA 12	-118	6	2979	3.94	-16.81	-0.01
92	SLE RA 13	-238	6	3006	6.98	-22.51	-0.01
92	SLE RA 14	61	5	2938	-0.62	-8.25	0
92	SLE RA 15	-118	6	2979	3.94	-16.81	-0.01
92	SLE RA 16	61	5	2938	-0.62	-8.25	0
92	SLE RA 17	-118	6	2979	3.94	-16.81	-0.01
92	SLE RA 18	68	5	3099	-0.6	-8.68	0
92	SLE RA 19	-111	6	3139	3.96	-17.24	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
92	SLE RA 20	68	5	3099	-0.6	-8.68	0
92	SLE RA 21	-111	6	3139	3.96	-17.24	-0.01
92	SLE FR 1	44	4	2564	-0.68	-7.23	0
92	SLE FR 2	-15	4	2577	0.84	-10.09	0
92	SLE FR 3	44	4	2564	-0.68	-7.23	0
92	SLE FR 4	-8	5	2738	0.86	-10.52	0
92	SLE FR 5	52	4	2724	-0.66	-7.67	0
92	SLE FR 6	56	5	2831	-0.64	-7.96	0
92	SLE QP 1	44	4	2564	-0.68	-7.23	0
92	SLE QP 2	52	4	2724	-0.66	-7.67	0
92	SLD 1	344	9	2873	-8.63	5.55	-0.02
92	SLD 2	344	9	2873	-8.63	5.55	-0.02
92	SLD 3	143	12	2985	-0.31	-3.47	-0.02
92	SLD 4	143	12	2985	-0.31	-3.47	-0.02
92	SLD 5	444	2	2598	-15.67	9.98	0
92	SLD 6	444	2	2598	-15.67	9.98	0
92	SLD 7	-225	10	2973	12.07	-20.09	-0.02
92	SLD 8	-225	10	2973	12.07	-20.09	-0.02
92	SLD 9	329	-1	2475	-13.38	4.75	0.01
92	SLD 10	329	-1	2475	-13.38	4.75	0.01
92	SLD 11	-340	6	2851	14.35	-25.31	-0.01
92	SLD 12	-340	6	2851	14.35	-25.31	-0.01
92	SLD 13	-40	-3	2463	-1.01	-11.87	0.02
92	SLD 14	-40	-3	2463	-1.01	-11.87	0.02
92	SLD 15	-241	-1	2576	7.31	-20.89	0.01
92	SLD 16	-241	-1	2576	7.31	-20.89	0.01
92	SLV 1	765	16	3075	-20.56	24.64	-0.04
92	SLV 2	765	16	3075	-20.56	24.64	-0.04
92	SLV 3	245	22	3349	0.7	1.25	-0.05
92	SLV 4	245	22	3349	0.7	1.25	-0.05
92	SLV 5	1055	-1	2415	-38.87	37.51	0.01
92	SLV 6	1055	-1	2415	-38.87	37.51	0.01
92	SLV 7	-679	18	3326	31.99	-40.48	-0.04
92	SLV 8	-679	18	3326	31.99	-40.48	-0.04
92	SLV 9	782	-9	2122	-33.3	25.14	0.03
92	SLV 10	782	-9	2122	-33.3	25.14	0.03
92	SLV 11	-951	9	3033	37.55	-52.85	-0.01
92	SLV 12	-951	9	3033	37.55	-52.85	-0.01
92	SLV 13	-142	-13	2100	-2.01	-16.58	0.04
92	SLV 14	-142	-13	2100	-2.01	-16.58	0.04
92	SLV 15	-662	-8	2373	19.25	-39.98	0.03
92	SLV 16	-662	-8	2373	19.25	-39.98	0.03
93	SLU 1	106	10	2299	-2.15	13.11	-0.04
93	SLU 2	-244	8	2330	16.85	2.28	-0.04
93	SLU 3	106	10	2299	-2.15	13.11	-0.04
93	SLU 4	-104	9	2317	9.25	6.61	-0.04
93	SLU 5	-244	8	2330	16.85	2.28	-0.04
93	SLU 6	106	10	2299	-2.15	13.11	-0.04
93	SLU 7	-104	9	2317	9.25	6.61	-0.04
93	SLU 8	106	10	2299	-2.15	13.11	-0.04
93	SLU 9	-104	9	2317	9.25	6.61	-0.04
93	SLU 10	-194	11	2839	16.77	6.87	-0.05
93	SLU 11	156	14	2808	-2.23	17.7	-0.05
93	SLU 12	-54	12	2826	9.17	11.2	-0.05
93	SLU 13	-194	11	2839	16.77	6.87	-0.05
93	SLU 14	156	14	2808	-2.23	17.7	-0.05
93	SLU 15	-54	12	2826	9.17	11.2	-0.05
93	SLU 16	156	14	2808	-2.23	17.7	-0.05
93	SLU 17	-54	12	2826	9.17	11.2	-0.05
93	SLU 18	177	15	3026	-2.27	19.67	-0.06
93	SLU 19	-33	14	3045	9.13	13.17	-0.06
93	SLU 20	177	15	3026	-2.27	19.67	-0.06
93	SLU 21	-33	14	3045	9.13	13.17	-0.06
93	SLU 22	138	12	2590	-2.19	15.57	-0.04
93	SLU 23	-212	10	2622	16.81	4.74	-0.04
93	SLU 24	138	12	2590	-2.19	15.57	-0.04
93	SLU 25	-72	10	2609	9.21	9.07	-0.04
93	SLU 26	-212	10	2622	16.81	4.74	-0.04
93	SLU 27	138	12	2590	-2.19	15.57	-0.04
93	SLU 28	-72	10	2609	9.21	9.07	-0.04
93	SLU 29	138	12	2590	-2.19	15.57	-0.04
93	SLU 30	-72	10	2609	9.21	9.07	-0.04
93	SLU 31	-162	13	3131	16.73	9.33	-0.06
93	SLU 32	188	15	3099	-2.27	20.16	-0.06
93	SLU 33	-22	14	3118	9.13	13.66	-0.06
93	SLU 34	-162	13	3131	16.73	9.33	-0.06
93	SLU 35	188	15	3099	-2.27	20.16	-0.06
93	SLU 36	-22	14	3118	9.13	13.66	-0.06
93	SLU 37	188	15	3099	-2.27	20.16	-0.06
93	SLU 38	-22	14	3118	9.13	13.66	-0.06
93	SLU 39	209	16	3318	-2.31	22.12	-0.06
93	SLU 40	-1	15	3336	9.09	15.63	-0.06
93	SLU 41	209	16	3318	-2.31	22.12	-0.06
93	SLU 42	-1	15	3336	9.09	15.63	-0.06
93	SLU 43	128	13	2888	-2.78	16.2	-0.05
93	SLU 44	-222	11	2920	16.22	5.37	-0.05
93	SLU 45	128	13	2888	-2.78	16.2	-0.05
93	SLU 46	-82	12	2907	8.62	9.71	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
93	SLU 47	-222	11	2920	16.22	5.37	-0.05
93	SLU 48	128	13	2888	-2.78	16.2	-0.05
93	SLU 49	-82	12	2907	8.62	9.71	-0.05
93	SLU 50	128	13	2888	-2.78	16.2	-0.05
93	SLU 51	-82	12	2907	8.62	9.71	-0.05
93	SLU 52	-173	14	3429	16.14	9.96	-0.06
93	SLU 53	177	16	3397	-2.86	20.79	-0.06
93	SLU 54	-33	15	3416	8.54	14.29	-0.06
93	SLU 55	-173	14	3429	16.14	9.96	-0.06
93	SLU 56	177	16	3397	-2.86	20.79	-0.06
93	SLU 57	-33	15	3416	8.54	14.29	-0.06
93	SLU 58	177	16	3397	-2.86	20.79	-0.06
93	SLU 59	-33	15	3416	8.54	14.29	-0.06
93	SLU 60	198	18	3615	-2.9	22.76	-0.07
93	SLU 61	-12	16	3634	8.5	16.26	-0.07
93	SLU 62	198	18	3615	-2.9	22.76	-0.07
93	SLU 63	-12	16	3634	8.5	16.26	-0.07
93	SLU 64	159	14	3180	-2.82	18.66	-0.05
93	SLU 65	-191	12	3211	16.18	7.83	-0.05
93	SLU 66	159	14	3180	-2.82	18.66	-0.05
93	SLU 67	-51	13	3199	8.58	12.16	-0.05
93	SLU 68	-191	12	3211	16.18	7.83	-0.05
93	SLU 69	159	14	3180	-2.82	18.66	-0.05
93	SLU 70	-51	13	3199	8.58	12.16	-0.05
93	SLU 71	159	14	3180	-2.82	18.66	-0.05
93	SLU 72	-51	13	3199	8.58	12.16	-0.05
93	SLU 73	-141	15	3720	16.1	12.42	-0.07
93	SLU 74	209	18	3689	-2.9	23.25	-0.07
93	SLU 75	-1	16	3708	8.5	16.75	-0.07
93	SLU 76	-141	15	3720	16.1	12.42	-0.07
93	SLU 77	209	18	3689	-2.9	23.25	-0.07
93	SLU 78	-1	16	3708	8.5	16.75	-0.07
93	SLU 79	209	18	3689	-2.9	23.25	-0.07
93	SLU 80	-1	16	3708	8.5	16.75	-0.07
93	SLU 81	230	19	3907	-2.94	25.22	-0.07
93	SLU 82	20	18	3926	8.46	18.72	-0.07
93	SLU 83	230	19	3907	-2.94	25.22	-0.07
93	SLU 84	20	18	3926	8.46	18.72	-0.07
93	SLE RA 1	116	11	2382	-2.16	13.81	-0.04
93	SLE RA 2	-118	9	2403	10.51	6.6	-0.04
93	SLE RA 3	116	11	2382	-2.16	13.81	-0.04
93	SLE RA 4	-24	10	2395	5.44	9.48	-0.04
93	SLE RA 5	-118	9	2403	10.51	6.6	-0.04
93	SLE RA 6	116	11	2382	-2.16	13.81	-0.04
93	SLE RA 7	-24	10	2395	5.44	9.48	-0.04
93	SLE RA 8	116	11	2382	-2.16	13.81	-0.04
93	SLE RA 9	-24	10	2395	5.44	9.48	-0.04
93	SLE RA 10	-85	12	2742	10.45	9.65	-0.05
93	SLE RA 11	149	13	2721	-2.21	16.87	-0.05
93	SLE RA 12	9	12	2734	5.39	12.54	-0.05
93	SLE RA 13	-85	12	2742	10.45	9.65	-0.05
93	SLE RA 14	149	13	2721	-2.21	16.87	-0.05
93	SLE RA 15	9	12	2734	5.39	12.54	-0.05
93	SLE RA 16	149	13	2721	-2.21	16.87	-0.05
93	SLE RA 17	9	12	2734	5.39	12.54	-0.05
93	SLE RA 18	163	14	2867	-2.24	18.18	-0.05
93	SLE RA 19	23	13	2879	5.36	13.85	-0.05
93	SLE RA 20	163	14	2867	-2.24	18.18	-0.05
93	SLE RA 21	23	13	2879	5.36	13.85	-0.05
93	SLE FR 1	116	11	2382	-2.16	13.81	-0.04
93	SLE FR 2	69	10	2386	0.38	12.37	-0.04
93	SLE FR 3	116	11	2382	-2.16	13.81	-0.04
93	SLE FR 4	83	11	2532	0.35	13.68	-0.04
93	SLE FR 5	130	12	2527	-2.18	15.13	-0.04
93	SLE FR 6	139	12	2624	-2.2	16	-0.05
93	SLE QP 1	116	11	2382	-2.16	13.81	-0.04
93	SLE QP 2	130	12	2527	-2.18	15.13	-0.04
93	SLD 1	405	14	2715	-13.87	26.19	-0.06
93	SLD 2	405	14	2715	-13.87	26.19	-0.06
93	SLD 3	235	21	2630	0.13	19.82	-0.08
93	SLD 4	235	21	2630	0.13	19.82	-0.08
93	SLD 5	470	2	2713	-26.93	28.11	-0.02
93	SLD 6	470	2	2713	-26.93	28.11	-0.02
93	SLD 7	-97	25	2429	19.75	6.87	-0.09
93	SLD 8	-97	25	2429	19.75	6.87	-0.09
93	SLD 9	356	-1	2626	-24.12	23.38	0
93	SLD 10	356	-1	2626	-24.12	23.38	0
93	SLD 11	-211	21	2342	22.57	2.14	-0.07
93	SLD 12	-211	21	2342	22.57	2.14	-0.07
93	SLD 13	25	2	2425	-4.49	10.43	0
93	SLD 14	25	2	2425	-4.49	10.43	0
93	SLD 15	-145	9	2340	9.51	4.06	-0.03
93	SLD 16	-145	9	2340	9.51	4.06	-0.03
93	SLV 1	798	18	2980	-31.67	41.91	-0.09
93	SLV 2	798	18	2980	-31.67	41.91	-0.09
93	SLV 3	358	35	2773	4.16	25.45	-0.14
93	SLV 4	358	35	2773	4.16	25.45	-0.14
93	SLV 5	998	-12	2977	-65.37	48.12	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
93	SLV 6	998	-12	2977	-65.37	48.12	0.02
93	SLV 7	-470	44	2287	54.06	-6.74	-0.15
93	SLV 8	-470	44	2287	54.06	-6.74	-0.15
93	SLV 9	729	-20	2767	-58.42	36.99	0.06
93	SLV 10	729	-20	2767	-58.42	36.99	0.06
93	SLV 11	-739	35	2078	61.01	-17.87	-0.11
93	SLV 12	-739	35	2078	61.01	-17.87	-0.11
93	SLV 13	-98	-11	2282	-8.52	4.8	0.05
93	SLV 14	-98	-11	2282	-8.52	4.8	0.05
93	SLV 15	-539	5	2075	27.31	-11.66	0
93	SLV 16	-539	5	2075	27.31	-11.66	0
94	SLU 1	-125	12	2092	-2.23	-9.72	-0.08
94	SLU 2	-485	3	2079	25.46	-26.32	-0.03
94	SLU 3	-125	12	2092	-2.23	-9.72	-0.08
94	SLU 4	-341	6	2084	14.39	-19.68	-0.05
94	SLU 5	-485	3	2079	25.46	-26.32	-0.03
94	SLU 6	-125	12	2092	-2.23	-9.72	-0.08
94	SLU 7	-341	6	2084	14.39	-19.68	-0.05
94	SLU 8	-125	12	2092	-2.23	-9.72	-0.08
94	SLU 9	-341	6	2084	14.39	-19.68	-0.05
94	SLU 10	-500	6	2529	25.64	-28.29	-0.05
94	SLU 11	-140	16	2542	-2.05	-11.7	-0.1
94	SLU 12	-356	10	2535	14.57	-21.65	-0.07
94	SLU 13	-500	6	2529	25.64	-28.29	-0.05
94	SLU 14	-140	16	2542	-2.05	-11.7	-0.1
94	SLU 15	-356	10	2535	14.57	-21.65	-0.07
94	SLU 16	-140	16	2542	-2.05	-11.7	-0.1
94	SLU 17	-356	10	2535	14.57	-21.65	-0.07
94	SLU 18	-146	18	2735	-1.97	-12.54	-0.11
94	SLU 19	-363	12	2728	14.65	-22.5	-0.08
94	SLU 20	-146	18	2735	-1.97	-12.54	-0.11
94	SLU 21	-363	12	2728	14.65	-22.5	-0.08
94	SLU 22	-127	14	2356	-2.17	-10.41	-0.09
94	SLU 23	-487	4	2343	25.52	-27.01	-0.04
94	SLU 24	-127	14	2356	-2.17	-10.41	-0.09
94	SLU 25	-343	8	2348	14.45	-20.37	-0.06
94	SLU 26	-487	4	2343	25.52	-27.01	-0.04
94	SLU 27	-127	14	2356	-2.17	-10.41	-0.09
94	SLU 28	-343	8	2348	14.45	-20.37	-0.06
94	SLU 29	-127	14	2356	-2.17	-10.41	-0.09
94	SLU 30	-343	8	2348	14.45	-20.37	-0.06
94	SLU 31	-502	8	2793	25.7	-28.99	-0.06
94	SLU 32	-142	18	2806	-1.99	-12.39	-0.11
94	SLU 33	-358	12	2799	14.63	-22.35	-0.08
94	SLU 34	-502	8	2793	25.7	-28.99	-0.06
94	SLU 35	-142	18	2806	-1.99	-12.39	-0.11
94	SLU 36	-358	12	2799	14.63	-22.35	-0.08
94	SLU 37	-142	18	2806	-1.99	-12.39	-0.11
94	SLU 38	-358	12	2799	14.63	-22.35	-0.08
94	SLU 39	-148	19	2999	-1.91	-13.24	-0.12
94	SLU 40	-365	13	2992	14.7	-23.2	-0.09
94	SLU 41	-148	19	2999	-1.91	-13.24	-0.12
94	SLU 42	-365	13	2992	14.7	-23.2	-0.09
94	SLU 43	-161	16	2629	-2.91	-12.39	-0.1
94	SLU 44	-522	6	2616	24.78	-28.99	-0.05
94	SLU 45	-161	16	2629	-2.91	-12.39	-0.1
94	SLU 46	-378	10	2621	13.7	-22.35	-0.07
94	SLU 47	-522	6	2616	24.78	-28.99	-0.05
94	SLU 48	-161	16	2629	-2.91	-12.39	-0.1
94	SLU 49	-378	10	2621	13.7	-22.35	-0.07
94	SLU 50	-161	16	2629	-2.91	-12.39	-0.1
94	SLU 51	-378	10	2621	13.7	-22.35	-0.07
94	SLU 52	-537	9	3066	24.96	-30.97	-0.07
94	SLU 53	-176	19	3080	-2.73	-14.37	-0.12
94	SLU 54	-393	13	3072	13.88	-24.33	-0.09
94	SLU 55	-537	9	3066	24.96	-30.97	-0.07
94	SLU 56	-176	19	3080	-2.73	-14.37	-0.12
94	SLU 57	-393	13	3072	13.88	-24.33	-0.09
94	SLU 58	-176	19	3080	-2.73	-14.37	-0.12
94	SLU 59	-393	13	3072	13.88	-24.33	-0.09
94	SLU 60	-183	21	3273	-2.66	-15.22	-0.13
94	SLU 61	-399	15	3265	13.96	-25.18	-0.1
94	SLU 62	-183	21	3273	-2.66	-15.22	-0.13
94	SLU 63	-399	15	3265	13.96	-25.18	-0.1
94	SLU 64	-163	17	2893	-2.86	-13.09	-0.11
94	SLU 65	-524	7	2880	24.83	-29.69	-0.06
94	SLU 66	-163	17	2893	-2.86	-13.09	-0.11
94	SLU 67	-380	11	2885	13.76	-23.05	-0.08
94	SLU 68	-524	7	2880	24.83	-29.69	-0.06
94	SLU 69	-163	17	2893	-2.86	-13.09	-0.11
94	SLU 70	-380	11	2885	13.76	-23.05	-0.08
94	SLU 71	-163	17	2893	-2.86	-13.09	-0.11
94	SLU 72	-380	11	2885	13.76	-23.05	-0.08
94	SLU 73	-539	11	3330	25.01	-31.66	-0.08
94	SLU 74	-179	21	3344	-2.68	-15.07	-0.13
94	SLU 75	-395	15	3336	13.94	-25.03	-0.1
94	SLU 76	-539	11	3330	25.01	-31.66	-0.08
94	SLU 77	-179	21	3344	-2.68	-15.07	-0.13

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
94	SLU 78	-395	15	3336	13.94	-25.03	-0.1
94	SLU 79	-179	21	3344	-2.68	-15.07	-0.13
94	SLU 80	-395	15	3336	13.94	-25.03	-0.1
94	SLU 81	-185	22	3537	-2.6	-15.91	-0.14
94	SLU 82	-401	17	3529	14.02	-25.87	-0.11
94	SLU 83	-185	22	3537	-2.6	-15.91	-0.14
94	SLU 84	-401	17	3529	14.02	-25.87	-0.11
94	SLE RA 1	-125	13	2167	-2.21	-9.92	-0.08
94	SLE RA 2	-366	6	2159	16.25	-20.98	-0.05
94	SLE RA 3	-125	13	2167	-2.21	-9.92	-0.08
94	SLE RA 4	-269	9	2162	8.87	-16.56	-0.06
94	SLE RA 5	-366	6	2159	16.25	-20.98	-0.05
94	SLE RA 6	-125	13	2167	-2.21	-9.92	-0.08
94	SLE RA 7	-269	9	2162	8.87	-16.56	-0.06
94	SLE RA 8	-125	13	2167	-2.21	-9.92	-0.08
94	SLE RA 9	-269	9	2162	8.87	-16.56	-0.06
94	SLE RA 10	-376	9	2459	16.37	-22.3	-0.06
94	SLE RA 11	-135	15	2468	-2.09	-11.23	-0.1
94	SLE RA 12	-280	11	2462	8.99	-17.87	-0.08
94	SLE RA 13	-376	9	2459	16.37	-22.3	-0.06
94	SLE RA 14	-135	15	2468	-2.09	-11.23	-0.1
94	SLE RA 15	-280	11	2462	8.99	-17.87	-0.08
94	SLE RA 16	-135	15	2468	-2.09	-11.23	-0.1
94	SLE RA 17	-280	11	2462	8.99	-17.87	-0.08
94	SLE RA 18	-140	16	2596	-2.04	-11.8	-0.1
94	SLE RA 19	-284	12	2591	9.04	-18.44	-0.08
94	SLE RA 20	-140	16	2596	-2.04	-11.8	-0.1
94	SLE RA 21	-284	12	2591	9.04	-18.44	-0.08
94	SLE FR 1	-125	13	2167	-2.21	-9.92	-0.08
94	SLE FR 2	-173	12	2166	1.48	-12.13	-0.07
94	SLE FR 3	-125	13	2167	-2.21	-9.92	-0.08
94	SLE FR 4	-178	13	2294	1.53	-12.69	-0.08
94	SLE FR 5	-130	14	2296	-2.16	-10.48	-0.09
94	SLE FR 6	-132	15	2382	-2.12	-10.86	-0.09
94	SLE QP 1	-125	13	2167	-2.21	-9.92	-0.08
94	SLE QP 2	-130	14	2296	-2.16	-10.48	-0.09
94	SLD 1	162	26	2450	-17.44	2.09	-0.17
94	SLD 2	162	26	2450	-17.44	2.09	-0.17
94	SLD 3	-1	14	2373	2.66	-5.09	-0.09
94	SLD 4	-1	14	2373	2.66	-5.09	-0.09
94	SLD 5	204	37	2459	-37.22	4.18	-0.22
94	SLD 6	204	37	2459	-37.22	4.18	-0.22
94	SLD 7	-337	-5	2202	29.77	-19.75	0.02
94	SLD 8	-337	-5	2202	29.77	-19.75	0.02
94	SLD 9	78	33	2390	-34.09	-1.21	-0.2
94	SLD 10	78	33	2390	-34.09	-1.21	-0.2
94	SLD 11	-463	-9	2133	32.91	-25.14	0.05
94	SLD 12	-463	-9	2133	32.91	-25.14	0.05
94	SLD 13	-258	14	2220	-6.98	-15.88	-0.08
94	SLD 14	-258	14	2220	-6.98	-15.88	-0.08
94	SLD 15	-421	2	2142	13.12	-23.05	-0.01
94	SLD 16	-421	2	2142	13.12	-23.05	-0.01
94	SLV 1	576	44	2671	-40.99	20.02	-0.28
94	SLV 2	576	44	2671	-40.99	20.02	-0.28
94	SLV 3	155	12	2483	10.51	1.42	-0.1
94	SLV 4	155	12	2483	10.51	1.42	-0.1
94	SLV 5	720	71	2693	-91.92	26.89	-0.42
94	SLV 6	720	71	2693	-91.92	26.89	-0.42
94	SLV 7	-682	-35	2068	79.75	-35.13	0.19
94	SLV 8	-682	-35	2068	79.75	-35.13	0.19
94	SLV 9	423	63	2525	-84.07	14.16	-0.36
94	SLV 10	423	63	2525	-84.07	14.16	-0.36
94	SLV 11	-979	-44	1899	87.6	-47.85	0.25
94	SLV 12	-979	-44	1899	87.6	-47.85	0.25
94	SLV 13	-414	15	2109	-14.82	-22.38	-0.08
94	SLV 14	-414	15	2109	-14.82	-22.38	-0.08
94	SLV 15	-835	-16	1921	36.68	-40.99	0.11
94	SLV 16	-835	-16	1921	36.68	-40.99	0.11
95	SLU 1	-10	11	1850	-0.98	4.57	-0.1
95	SLU 2	-272	-7	1810	35.46	-3.81	0.04
95	SLU 3	-10	11	1850	-0.98	4.57	-0.1
95	SLU 4	-167	0	1826	20.88	-0.46	-0.02
95	SLU 5	-272	-7	1810	35.46	-3.81	0.04
95	SLU 6	-10	11	1850	-0.98	4.57	-0.1
95	SLU 7	-167	0	1826	20.88	-0.46	-0.02
95	SLU 8	-10	11	1850	-0.98	4.57	-0.1
95	SLU 9	-167	0	1826	20.88	-0.46	-0.02
95	SLU 10	-252	-4	2195	36.29	-1.65	0.01
95	SLU 11	10	14	2235	-0.14	6.73	-0.12
95	SLU 12	-147	3	2211	21.72	1.7	-0.04
95	SLU 13	-252	-4	2195	36.29	-1.65	0.01
95	SLU 14	10	14	2235	-0.14	6.73	-0.12
95	SLU 15	-147	3	2211	21.72	1.7	-0.04
95	SLU 16	10	14	2235	-0.14	6.73	-0.12
95	SLU 17	-147	3	2211	21.72	1.7	-0.04
95	SLU 18	19	15	2400	0.22	7.65	-0.14
95	SLU 19	-138	4	2376	22.08	2.63	-0.06
95	SLU 20	19	15	2400	0.22	7.65	-0.14

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
95	SLU 21	-138	4	2376	22.08	2.63	-0.06
95	SLU 22	1	12	2080	-0.65	5.65	-0.11
95	SLU 23	-261	-6	2040	35.79	-2.72	0.02
95	SLU 24	1	12	2080	-0.65	5.65	-0.11
95	SLU 25	-156	1	2056	21.21	0.63	-0.03
95	SLU 26	-261	-6	2040	35.79	-2.72	0.02
95	SLU 27	1	12	2080	-0.65	5.65	-0.11
95	SLU 28	-156	1	2056	21.21	0.63	-0.03
95	SLU 29	1	12	2080	-0.65	5.65	-0.11
95	SLU 30	-156	1	2056	21.21	0.63	-0.03
95	SLU 31	-241	-3	2425	36.62	-0.57	0
95	SLU 32	21	15	2465	0.19	7.81	-0.14
95	SLU 33	-136	4	2441	22.05	2.79	-0.06
95	SLU 34	-241	-3	2425	36.62	-0.57	0
95	SLU 35	21	15	2465	0.19	7.81	-0.14
95	SLU 36	-136	4	2441	22.05	2.79	-0.06
95	SLU 37	21	15	2465	0.19	7.81	-0.14
95	SLU 38	-136	4	2441	22.05	2.79	-0.06
95	SLU 39	30	16	2630	0.55	8.74	-0.15
95	SLU 40	-127	6	2606	22.41	3.71	-0.07
95	SLU 41	30	16	2630	0.55	8.74	-0.15
95	SLU 42	-127	6	2606	22.41	3.71	-0.07
95	SLU 43	-17	14	2327	-1.39	5.57	-0.12
95	SLU 44	-279	-4	2286	35.05	-2.81	0.01
95	SLU 45	-17	14	2327	-1.39	5.57	-0.12
95	SLU 46	-174	3	2302	20.47	0.54	-0.04
95	SLU 47	-279	-4	2286	35.05	-2.81	0.01
95	SLU 48	-17	14	2327	-1.39	5.57	-0.12
95	SLU 49	-174	3	2302	20.47	0.54	-0.04
95	SLU 50	-17	14	2327	-1.39	5.57	-0.12
95	SLU 51	-174	3	2302	20.47	0.54	-0.04
95	SLU 52	-259	-1	2671	35.89	-0.65	-0.02
95	SLU 53	3	17	2711	-0.55	7.73	-0.15
95	SLU 54	-154	6	2687	21.31	2.7	-0.07
95	SLU 55	-259	-1	2671	35.89	-0.65	-0.02
95	SLU 56	3	17	2711	-0.55	7.73	-0.15
95	SLU 57	-154	6	2687	21.31	2.7	-0.07
95	SLU 58	3	17	2711	-0.55	7.73	-0.15
95	SLU 59	-154	6	2687	21.31	2.7	-0.07
95	SLU 60	12	18	2876	-0.19	8.65	-0.16
95	SLU 61	-145	7	2852	21.67	3.62	-0.08
95	SLU 62	12	18	2876	-0.19	8.65	-0.16
95	SLU 63	-145	7	2852	21.67	3.62	-0.08
95	SLU 64	-6	15	2557	-1.06	6.65	-0.13
95	SLU 65	-268	-3	2516	35.38	-1.73	0
95	SLU 66	-6	15	2557	-1.06	6.65	-0.13
95	SLU 67	-163	4	2532	20.81	1.62	-0.05
95	SLU 68	-268	-3	2516	35.38	-1.73	0
95	SLU 69	-6	15	2557	-1.06	6.65	-0.13
95	SLU 70	-163	4	2532	20.81	1.62	-0.05
95	SLU 71	-6	15	2557	-1.06	6.65	-0.13
95	SLU 72	-163	4	2532	20.81	1.62	-0.05
95	SLU 73	-248	0	2901	36.22	0.43	-0.03
95	SLU 74	14	18	2941	-0.22	8.81	-0.16
95	SLU 75	-143	7	2917	21.64	3.78	-0.08
95	SLU 76	-248	0	2901	36.22	0.43	-0.03
95	SLU 77	14	18	2941	-0.22	8.81	-0.16
95	SLU 78	-143	7	2917	21.64	3.78	-0.08
95	SLU 79	14	18	2941	-0.22	8.81	-0.16
95	SLU 80	-143	7	2917	21.64	3.78	-0.08
95	SLU 81	23	19	3106	0.14	9.74	-0.17
95	SLU 82	-134	8	3082	22	4.71	-0.09
95	SLU 83	23	19	3106	0.14	9.74	-0.17
95	SLU 84	-134	8	3082	22	4.71	-0.09
95	SLE RA 1	-7	11	1916	-0.88	4.88	-0.1
95	SLE RA 2	-182	-1	1889	23.41	-0.71	-0.01
95	SLE RA 3	-7	11	1916	-0.88	4.88	-0.1
95	SLE RA 4	-112	4	1900	13.69	1.53	-0.05
95	SLE RA 5	-182	-1	1889	23.41	-0.71	-0.01
95	SLE RA 6	-7	11	1916	-0.88	4.88	-0.1
95	SLE RA 7	-112	4	1900	13.69	1.53	-0.05
95	SLE RA 8	-7	11	1916	-0.88	4.88	-0.1
95	SLE RA 9	-112	4	1900	13.69	1.53	-0.05
95	SLE RA 10	-168	1	2146	23.96	0.73	-0.03
95	SLE RA 11	6	13	2173	-0.33	6.32	-0.12
95	SLE RA 12	-98	6	2156	14.25	2.97	-0.07
95	SLE RA 13	-168	1	2146	23.96	0.73	-0.03
95	SLE RA 14	6	13	2173	-0.33	6.32	-0.12
95	SLE RA 15	-98	6	2156	14.25	2.97	-0.07
95	SLE RA 16	6	13	2173	-0.33	6.32	-0.12
95	SLE RA 17	-98	6	2156	14.25	2.97	-0.07
95	SLE RA 18	12	14	2283	-0.09	6.93	-0.13
95	SLE RA 19	-93	7	2266	14.49	3.58	-0.07
95	SLE RA 20	12	14	2283	-0.09	6.93	-0.13
95	SLE RA 21	-93	7	2266	14.49	3.58	-0.07
95	SLE FR 1	-7	11	1916	-0.88	4.88	-0.1
95	SLE FR 2	-42	9	1911	3.97	3.76	-0.08
95	SLE FR 3	-7	11	1916	-0.88	4.88	-0.1

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
95	SLE FR 4	-36	10	2021	4.21	4.38	-0.09
95	SLE FR 5	-1	12	2026	-0.65	5.49	-0.11
95	SLE FR 6	3	13	2099	-0.49	5.91	-0.11
95	SLE QP 1	-7	11	1916	-0.88	4.88	-0.1
95	SLE QP 2	-1	12	2026	-0.65	5.49	-0.11
95	SLD 1	288	27	1968	-19.12	16.16	-0.23
95	SLD 2	288	27	1968	-19.12	16.16	-0.23
95	SLD 3	156	9	1887	6.76	11.41	-0.09
95	SLD 4	156	9	1887	6.76	11.41	-0.09
95	SLD 5	286	44	2130	-45.44	15.9	-0.36
95	SLD 6	286	44	2130	-45.44	15.9	-0.36
95	SLD 7	-155	-16	1863	40.83	0.06	0.11
95	SLD 8	-155	-16	1863	40.83	0.06	0.11
95	SLD 9	152	40	2189	-42.12	10.93	-0.33
95	SLD 10	152	40	2189	-42.12	10.93	-0.33
95	SLD 11	-289	-19	1922	44.15	-4.91	0.14
95	SLD 12	-289	-19	1922	44.15	-4.91	0.14
95	SLD 13	-158	15	2165	-8.05	-0.42	-0.13
95	SLD 14	-158	15	2165	-8.05	-0.42	-0.13
95	SLD 15	-291	-3	2084	17.83	-5.17	0.01
95	SLD 16	-291	-3	2084	17.83	-5.17	0.01
95	SLV 1	695	49	1883	-47.85	31.13	-0.41
95	SLV 2	695	49	1883	-47.85	31.13	-0.41
95	SLV 3	353	3	1684	18.57	18.85	-0.05
95	SLV 4	353	3	1684	18.57	18.85	-0.05
95	SLV 5	727	92	2285	-115.54	31.8	-0.74
95	SLV 6	727	92	2285	-115.54	31.8	-0.74
95	SLV 7	-414	-59	1621	105.86	-9.12	0.45
95	SLV 8	-414	-59	1621	105.86	-9.12	0.45
95	SLV 9	411	84	2431	-107.15	20.11	-0.67
95	SLV 10	411	84	2431	-107.15	20.11	-0.67
95	SLV 11	-729	-68	1767	114.25	-20.82	0.52
95	SLV 12	-729	-68	1767	114.25	-20.82	0.52
95	SLV 13	-356	21	2368	-19.86	-7.86	-0.17
95	SLV 14	-356	21	2368	-19.86	-7.86	-0.17
95	SLV 15	-698	-25	2169	46.56	-20.14	0.19
95	SLV 16	-698	-25	2169	46.56	-20.14	0.19
96	SLU 1	-30	9	1703	0.86	-4.34	-0.09
96	SLU 2	-297	-15	1638	45.12	-15.28	0.11
96	SLU 3	-30	9	1703	0.86	-4.34	-0.09
96	SLU 4	-190	-5	1664	27.41	-10.9	0.03
96	SLU 5	-297	-15	1638	45.12	-15.28	0.11
96	SLU 6	-30	9	1703	0.86	-4.34	-0.09
96	SLU 7	-190	-5	1664	27.41	-10.9	0.03
96	SLU 8	-30	9	1703	0.86	-4.34	-0.09
96	SLU 9	-190	-5	1664	27.41	-10.9	0.03
96	SLU 10	-280	-13	1990	46.74	-15.56	0.08
96	SLU 11	-14	11	2056	2.49	-4.62	-0.11
96	SLU 12	-174	-3	2016	29.04	-11.18	0.01
96	SLU 13	-280	-13	1990	46.74	-15.56	0.08
96	SLU 14	-14	11	2056	2.49	-4.62	-0.11
96	SLU 15	-174	-3	2016	29.04	-11.18	0.01
96	SLU 16	-14	11	2056	2.49	-4.62	-0.11
96	SLU 17	-174	-3	2016	29.04	-11.18	0.01
96	SLU 18	-6	12	2206	3.18	-4.74	-0.12
96	SLU 19	-167	-2	2167	29.74	-11.3	-0.01
96	SLU 20	-6	12	2206	3.18	-4.74	-0.12
96	SLU 21	-167	-2	2167	29.74	-11.3	-0.01
96	SLU 22	-20	9	1914	1.52	-4.42	-0.1
96	SLU 23	-287	-14	1849	45.78	-15.36	0.1
96	SLU 24	-20	9	1914	1.52	-4.42	-0.1
96	SLU 25	-181	-5	1875	28.08	-10.98	0.02
96	SLU 26	-287	-14	1849	45.78	-15.36	0.1
96	SLU 27	-20	9	1914	1.52	-4.42	-0.1
96	SLU 28	-181	-5	1875	28.08	-10.98	0.02
96	SLU 29	-20	9	1914	1.52	-4.42	-0.1
96	SLU 30	-181	-5	1875	28.08	-10.98	0.02
96	SLU 31	-271	-12	2201	47.41	-15.64	0.07
96	SLU 32	-4	12	2267	3.15	-4.7	-0.12
96	SLU 33	-164	-2	2227	29.7	-11.26	-0.01
96	SLU 34	-271	-12	2201	47.41	-15.64	0.07
96	SLU 35	-4	12	2267	3.15	-4.7	-0.12
96	SLU 36	-164	-2	2227	29.7	-11.26	-0.01
96	SLU 37	-4	12	2267	3.15	-4.7	-0.12
96	SLU 38	-164	-2	2227	29.7	-11.26	-0.01
96	SLU 39	3	13	2418	3.85	-4.82	-0.13
96	SLU 40	-157	-1	2378	30.4	-11.38	-0.02
96	SLU 41	3	13	2418	3.85	-4.82	-0.13
96	SLU 42	-157	-1	2378	30.4	-11.38	-0.02
96	SLU 43	-43	11	2142	0.89	-5.62	-0.11
96	SLU 44	-309	-13	2076	45.15	-16.55	0.09
96	SLU 45	-43	11	2142	0.89	-5.62	-0.11
96	SLU 46	-203	-3	2102	27.44	-12.18	0.01
96	SLU 47	-309	-13	2076	45.15	-16.55	0.09
96	SLU 48	-43	11	2142	0.89	-5.62	-0.11
96	SLU 49	-203	-3	2102	27.44	-12.18	0.01
96	SLU 50	-43	11	2142	0.89	-5.62	-0.11
96	SLU 51	-203	-3	2102	27.44	-12.18	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
96	SLU 52	-293	-10	2428	46.77	-16.83	0.06
96	SLU 53	-26	13	2494	2.52	-5.9	-0.14
96	SLU 54	-186	-1	2455	29.07	-12.46	-0.02
96	SLU 55	-293	-10	2428	46.77	-16.83	0.06
96	SLU 56	-26	13	2494	2.52	-5.9	-0.14
96	SLU 57	-186	-1	2455	29.07	-12.46	-0.02
96	SLU 58	-26	13	2494	2.52	-5.9	-0.14
96	SLU 59	-186	-1	2455	29.07	-12.46	-0.02
96	SLU 60	-19	14	2645	3.21	-6.02	-0.15
96	SLU 61	-179	0	2606	29.77	-12.58	-0.03
96	SLU 62	-19	14	2645	3.21	-6.02	-0.15
96	SLU 63	-179	0	2606	29.77	-12.58	-0.03
96	SLU 64	-33	12	2353	1.55	-5.7	-0.12
96	SLU 65	-300	-12	2287	45.81	-16.63	0.07
96	SLU 66	-33	12	2353	1.55	-5.7	-0.12
96	SLU 67	-193	-2	2314	28.11	-12.26	0
96	SLU 68	-300	-12	2287	45.81	-16.63	0.07
96	SLU 69	-33	12	2353	1.55	-5.7	-0.12
96	SLU 70	-193	-2	2314	28.11	-12.26	0
96	SLU 71	-33	12	2353	1.55	-5.7	-0.12
96	SLU 72	-193	-2	2314	28.11	-12.26	0
96	SLU 73	-283	-9	2640	47.44	-16.91	0.05
96	SLU 74	-16	14	2705	3.18	-5.98	-0.15
96	SLU 75	-176	0	2666	29.73	-12.54	-0.03
96	SLU 76	-283	-9	2640	47.44	-16.91	0.05
96	SLU 77	-16	14	2705	3.18	-5.98	-0.15
96	SLU 78	-176	0	2666	29.73	-12.54	-0.03
96	SLU 79	-16	14	2705	3.18	-5.98	-0.15
96	SLU 80	-176	0	2666	29.73	-12.54	-0.03
96	SLU 81	-9	15	2856	3.88	-6.1	-0.16
96	SLU 82	-169	1	2817	30.43	-12.66	-0.04
96	SLU 83	-9	15	2856	3.88	-6.1	-0.16
96	SLU 84	-169	1	2817	30.43	-12.66	-0.04
96	SLE RA 1	-27	9	1764	1.05	-4.36	-0.09
96	SLE RA 2	-205	-7	1720	30.55	-11.65	0.04
96	SLE RA 3	-27	9	1764	1.05	-4.36	-0.09
96	SLE RA 4	-134	-1	1737	18.75	-8.74	-0.01
96	SLE RA 5	-205	-7	1720	30.55	-11.65	0.04
96	SLE RA 6	-27	9	1764	1.05	-4.36	-0.09
96	SLE RA 7	-134	-1	1737	18.75	-8.74	-0.01
96	SLE RA 8	-27	9	1764	1.05	-4.36	-0.09
96	SLE RA 9	-134	-1	1737	18.75	-8.74	-0.01
96	SLE RA 10	-194	-5	1955	31.64	-11.84	0.02
96	SLE RA 11	-16	10	1998	2.13	-4.55	-0.11
96	SLE RA 12	-123	1	1972	19.84	-8.93	-0.03
96	SLE RA 13	-194	-5	1955	31.64	-11.84	0.02
96	SLE RA 14	-16	10	1998	2.13	-4.55	-0.11
96	SLE RA 15	-123	1	1972	19.84	-8.93	-0.03
96	SLE RA 16	-16	10	1998	2.13	-4.55	-0.11
96	SLE RA 17	-123	1	1972	19.84	-8.93	-0.03
96	SLE RA 18	-12	11	2099	2.6	-4.63	-0.12
96	SLE RA 19	-118	2	2073	20.3	-9.01	-0.04
96	SLE RA 20	-12	11	2099	2.6	-4.63	-0.12
96	SLE RA 21	-118	2	2073	20.3	-9.01	-0.04
96	SLE FR 1	-27	9	1764	1.05	-4.36	-0.09
96	SLE FR 2	-63	6	1755	6.95	-5.82	-0.07
96	SLE FR 3	-27	9	1764	1.05	-4.36	-0.09
96	SLE FR 4	-58	6	1855	7.41	-5.9	-0.07
96	SLE FR 5	-23	9	1864	1.51	-4.45	-0.1
96	SLE FR 6	-20	10	1931	1.82	-4.5	-0.1
96	SLE QP 1	-27	9	1764	1.05	-4.36	-0.09
96	SLE QP 2	-23	9	1864	1.51	-4.45	-0.1
96	SLD 1	295	26	1988	-19.62	8.24	-0.25
96	SLD 2	295	26	1988	-19.62	8.24	-0.25
96	SLD 3	165	4	1905	11.31	2.9	-0.06
96	SLD 4	165	4	1905	11.31	2.9	-0.06
96	SLD 5	270	47	2026	-51.73	7.46	-0.43
96	SLD 6	270	47	2026	-51.73	7.46	-0.43
96	SLD 7	-164	-24	1752	51.36	-10.34	0.2
96	SLD 8	-164	-24	1752	51.36	-10.34	0.2
96	SLD 9	118	43	1977	-48.33	1.45	-0.4
96	SLD 10	118	43	1977	-48.33	1.45	-0.4
96	SLD 11	-315	-28	1702	54.76	-16.35	0.23
96	SLD 12	-315	-28	1702	54.76	-16.35	0.23
96	SLD 13	-210	14	1823	-8.28	-11.79	-0.14
96	SLD 14	-210	14	1823	-8.28	-11.79	-0.14
96	SLD 15	-340	-7	1741	22.65	-17.13	0.05
96	SLD 16	-340	-7	1741	22.65	-17.13	0.05
96	SLV 1	739	51	2174	-52.62	26.02	-0.47
96	SLV 2	739	51	2174	-52.62	26.02	-0.47
96	SLV 3	403	-3	1966	26.84	12.22	0.01
96	SLV 4	403	-3	1966	26.84	12.22	0.01
96	SLV 5	716	104	2272	-135.23	25.62	-0.94
96	SLV 6	716	104	2272	-135.23	25.62	-0.94
96	SLV 7	-405	-77	1579	129.62	-20.37	0.66
96	SLV 8	-405	-77	1579	129.62	-20.37	0.66
96	SLV 9	360	96	2149	-126.59	11.48	-0.86
96	SLV 10	360	96	2149	-126.59	11.48	-0.86

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
96	SLV 11	-761	-85	1456	138.26	-34.51	0.74
96	SLV 12	-761	-85	1456	138.26	-34.51	0.74
96	SLV 13	-448	22	1763	-23.81	-21.12	-0.21
96	SLV 14	-448	22	1763	-23.81	-21.12	-0.21
96	SLV 15	-784	-32	1555	55.65	-34.91	0.27
96	SLV 16	-784	-32	1555	55.65	-34.91	0.27
97	SLU 1	133	8	1699	2.54	7.14	-0.08
97	SLU 2	-79	-17	1575	53.37	-0.34	0.15
97	SLU 3	133	8	1699	2.54	7.14	-0.08
97	SLU 4	6	-7	1624	33.04	2.65	0.06
97	SLU 5	-79	-17	1575	53.37	-0.34	0.15
97	SLU 6	133	8	1699	2.54	7.14	-0.08
97	SLU 7	6	-7	1624	33.04	2.65	0.06
97	SLU 8	133	8	1699	2.54	7.14	-0.08
97	SLU 9	6	-7	1624	33.04	2.65	0.06
97	SLU 10	-18	-15	1938	55.67	2.54	0.13
97	SLU 11	195	10	2062	4.85	10.03	-0.1
97	SLU 12	67	-5	1988	35.34	5.54	0.04
97	SLU 13	-18	-15	1938	55.67	2.54	0.13
97	SLU 14	195	10	2062	4.85	10.03	-0.1
97	SLU 15	67	-5	1988	35.34	5.54	0.04
97	SLU 16	195	10	2062	4.85	10.03	-0.1
97	SLU 17	67	-5	1988	35.34	5.54	0.04
97	SLU 18	221	11	2218	5.84	11.26	-0.11
97	SLU 19	94	-4	2144	36.33	6.77	0.03
97	SLU 20	221	11	2218	5.84	11.26	-0.11
97	SLU 21	94	-4	2144	36.33	6.77	0.03
97	SLU 22	166	9	1916	3.49	8.67	-0.09
97	SLU 23	-46	-16	1791	54.31	1.18	0.14
97	SLU 24	166	9	1916	3.49	8.67	-0.09
97	SLU 25	39	-6	1841	33.99	4.18	0.05
97	SLU 26	-46	-16	1791	54.31	1.18	0.14
97	SLU 27	166	9	1916	3.49	8.67	-0.09
97	SLU 28	39	-6	1841	33.99	4.18	0.05
97	SLU 29	166	9	1916	3.49	8.67	-0.09
97	SLU 30	39	-6	1841	33.99	4.18	0.05
97	SLU 31	15	-14	2155	56.62	4.07	0.12
97	SLU 32	228	11	2279	5.8	11.55	-0.11
97	SLU 33	100	-4	2205	36.29	7.06	0.03
97	SLU 34	15	-14	2155	56.62	4.07	0.12
97	SLU 35	228	11	2279	5.8	11.55	-0.11
97	SLU 36	100	-4	2205	36.29	7.06	0.03
97	SLU 37	228	11	2279	5.8	11.55	-0.11
97	SLU 38	100	-4	2205	36.29	7.06	0.03
97	SLU 39	254	12	2435	6.78	12.78	-0.12
97	SLU 40	127	-3	2360	37.28	8.29	0.02
97	SLU 41	254	12	2435	6.78	12.78	-0.12
97	SLU 42	127	-3	2360	37.28	8.29	0.02
97	SLU 43	162	10	2134	2.98	8.77	-0.1
97	SLU 44	-51	-15	2010	53.81	1.28	0.13
97	SLU 45	162	10	2134	2.98	8.77	-0.1
97	SLU 46	34	-5	2060	33.48	4.28	0.04
97	SLU 47	-51	-15	2010	53.81	1.28	0.13
97	SLU 48	162	10	2134	2.98	8.77	-0.1
97	SLU 49	34	-5	2060	33.48	4.28	0.04
97	SLU 50	162	10	2134	2.98	8.77	-0.1
97	SLU 51	34	-5	2060	33.48	4.28	0.04
97	SLU 52	11	-13	2373	56.11	4.16	0.11
97	SLU 53	223	12	2498	5.29	11.65	-0.13
97	SLU 54	96	-3	2423	35.78	7.16	0.02
97	SLU 55	11	-13	2373	56.11	4.16	0.11
97	SLU 56	223	12	2498	5.29	11.65	-0.13
97	SLU 57	96	-3	2423	35.78	7.16	0.02
97	SLU 58	223	12	2498	5.29	11.65	-0.13
97	SLU 59	96	-3	2423	35.78	7.16	0.02
97	SLU 60	250	13	2653	6.28	12.88	-0.13
97	SLU 61	122	-2	2579	36.77	8.39	0.01
97	SLU 62	250	13	2653	6.28	12.88	-0.13
97	SLU 63	122	-2	2579	36.77	8.39	0.01
97	SLU 64	195	11	2351	3.93	10.29	-0.11
97	SLU 65	-18	-14	2227	54.75	2.8	0.12
97	SLU 66	195	11	2351	3.93	10.29	-0.11
97	SLU 67	67	-4	2276	34.42	5.8	0.03
97	SLU 68	-18	-14	2227	54.75	2.8	0.12
97	SLU 69	195	11	2351	3.93	10.29	-0.11
97	SLU 70	67	-4	2276	34.42	5.8	0.03
97	SLU 71	195	11	2351	3.93	10.29	-0.11
97	SLU 72	67	-4	2276	34.42	5.8	0.03
97	SLU 73	44	-12	2590	57.06	5.69	0.1
97	SLU 74	256	13	2714	6.24	13.17	-0.13
97	SLU 75	129	-2	2640	36.73	8.68	0.01
97	SLU 76	44	-12	2590	57.06	5.69	0.1
97	SLU 77	256	13	2714	6.24	13.17	-0.13
97	SLU 78	129	-2	2640	36.73	8.68	0.01
97	SLU 79	256	13	2714	6.24	13.17	-0.13
97	SLU 80	129	-2	2640	36.73	8.68	0.01
97	SLU 81	283	14	2870	7.22	14.41	-0.14
97	SLU 82	155	-1	2796	37.72	9.92	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
97	SLU 83	283	14	2870	7.22	14.41	-0.14
97	SLU 84	155	-1	2796	37.72	9.92	0
97	SLE RA 1	142	8	1761	2.81	7.58	-0.08
97	SLE RA 2	1	-8	1678	36.7	2.59	0.07
97	SLE RA 3	142	8	1761	2.81	7.58	-0.08
97	SLE RA 4	57	-2	1711	23.14	4.59	0.01
97	SLE RA 5	1	-8	1678	36.7	2.59	0.07
97	SLE RA 6	142	8	1761	2.81	7.58	-0.08
97	SLE RA 7	57	-2	1711	23.14	4.59	0.01
97	SLE RA 8	142	8	1761	2.81	7.58	-0.08
97	SLE RA 9	57	-2	1711	23.14	4.59	0.01
97	SLE RA 10	42	-7	1920	38.23	4.51	0.06
97	SLE RA 11	184	10	2003	4.35	9.5	-0.1
97	SLE RA 12	99	0	1953	24.68	6.51	-0.01
97	SLE RA 13	42	-7	1920	38.23	4.51	0.06
97	SLE RA 14	184	10	2003	4.35	9.5	-0.1
97	SLE RA 15	99	0	1953	24.68	6.51	-0.01
97	SLE RA 16	184	10	2003	4.35	9.5	-0.1
97	SLE RA 17	99	0	1953	24.68	6.51	-0.01
97	SLE RA 18	201	10	2107	5.01	10.32	-0.11
97	SLE RA 19	116	0	2057	25.34	7.33	-0.01
97	SLE RA 20	201	10	2107	5.01	10.32	-0.11
97	SLE RA 21	116	0	2057	25.34	7.33	-0.01
97	SLE FR 1	142	8	1761	2.81	7.58	-0.08
97	SLE FR 2	114	5	1744	9.59	6.58	-0.05
97	SLE FR 3	142	8	1761	2.81	7.58	-0.08
97	SLE FR 4	132	6	1848	10.25	7.41	-0.06
97	SLE FR 5	160	9	1865	3.47	8.4	-0.09
97	SLE FR 6	172	9	1934	3.91	8.95	-0.1
97	SLE QP 1	142	8	1761	2.81	7.58	-0.08
97	SLE QP 2	160	9	1865	3.47	8.4	-0.09
97	SLD 1	459	26	1990	-19.73	19.53	-0.26
97	SLD 2	459	26	1990	-19.73	19.53	-0.26
97	SLD 3	356	3	1908	15.5	15.71	-0.04
97	SLD 4	356	3	1908	15.5	15.71	-0.04
97	SLD 5	407	50	2027	-56.93	17.54	-0.47
97	SLD 6	407	50	2027	-56.93	17.54	-0.47
97	SLD 7	62	-28	1753	60.53	4.8	0.26
97	SLD 8	62	-28	1753	60.53	4.8	0.26
97	SLD 9	258	46	1976	-53.58	12.01	-0.44
97	SLD 10	258	46	1976	-53.58	12.01	-0.44
97	SLD 11	-87	-32	1702	63.88	-0.73	0.29
97	SLD 12	-87	-32	1702	63.88	-0.73	0.29
97	SLD 13	-36	15	1821	-8.56	1.1	-0.15
97	SLD 14	-36	15	1821	-8.56	1.1	-0.15
97	SLD 15	-139	-8	1739	26.68	-2.73	0.07
97	SLD 16	-139	-8	1739	26.68	-2.73	0.07
97	SLV 1	876	53	2180	-56.03	35.02	-0.51
97	SLV 2	876	53	2180	-56.03	35.02	-0.51
97	SLV 3	608	-6	1969	34.57	25.11	0.05
97	SLV 4	608	-6	1969	34.57	25.11	0.05
97	SLV 5	781	113	2279	-151.78	31.42	-1.07
97	SLV 6	781	113	2279	-151.78	31.42	-1.07
97	SLV 7	-112	-86	1576	150.21	-1.62	0.8
97	SLV 8	-112	-86	1576	150.21	-1.62	0.8
97	SLV 9	432	104	2154	-143.26	18.42	-0.99
97	SLV 10	432	104	2154	-143.26	18.42	-0.99
97	SLV 11	-461	-95	1450	158.73	-14.62	0.89
97	SLV 12	-461	-95	1450	158.73	-14.62	0.89
97	SLV 13	-288	25	1760	-27.62	-8.3	-0.23
97	SLV 14	-288	25	1760	-27.62	-8.3	-0.23
97	SLV 15	-556	-35	1549	62.97	-18.22	0.33
97	SLV 16	-556	-35	1549	62.97	-18.22	0.33
98	SLU 1	132	9	1830	3.94	2.87	-0.08
98	SLU 2	-45	-17	1650	60.47	-4.27	0.12
98	SLU 3	132	9	1830	3.94	2.87	-0.08
98	SLU 4	26	-6	1722	37.86	-1.41	0.04
98	SLU 5	-45	-17	1650	60.47	-4.27	0.12
98	SLU 6	132	9	1830	3.94	2.87	-0.08
98	SLU 7	26	-6	1722	37.86	-1.41	0.04
98	SLU 8	132	9	1830	3.94	2.87	-0.08
98	SLU 9	26	-6	1722	37.86	-1.41	0.04
98	SLU 10	13	-14	2063	63.33	-2.65	0.09
98	SLU 11	191	12	2243	6.8	4.48	-0.11
98	SLU 12	84	-4	2135	40.72	0.2	0.01
98	SLU 13	13	-14	2063	63.33	-2.65	0.09
98	SLU 14	191	12	2243	6.8	4.48	-0.11
98	SLU 15	84	-4	2135	40.72	0.2	0.01
98	SLU 16	191	12	2243	6.8	4.48	-0.11
98	SLU 17	84	-4	2135	40.72	0.2	0.01
98	SLU 18	216	13	2421	8.03	5.17	-0.12
98	SLU 19	109	-2	2313	41.94	0.89	0
98	SLU 20	216	13	2421	8.03	5.17	-0.12
98	SLU 21	109	-2	2313	41.94	0.89	0
98	SLU 22	164	11	2074	5.12	3.77	-0.09
98	SLU 23	-13	-16	1894	61.64	-3.36	0.1
98	SLU 24	164	11	2074	5.12	3.77	-0.09
98	SLU 25	58	-5	1966	39.03	-0.51	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
98	SLU 26	-13	-16	1894	61.64	-3.36	0.1
98	SLU 27	164	11	2074	5.12	3.77	-0.09
98	SLU 28	58	-5	1966	39.03	-0.51	0.03
98	SLU 29	164	11	2074	5.12	3.77	-0.09
98	SLU 30	58	-5	1966	39.03	-0.51	0.03
98	SLU 31	45	-13	2307	64.5	-1.75	0.08
98	SLU 32	223	13	2487	7.98	5.38	-0.12
98	SLU 33	116	-2	2379	41.89	1.1	0
98	SLU 34	45	-13	2307	64.5	-1.75	0.08
98	SLU 35	223	13	2487	7.98	5.38	-0.12
98	SLU 36	116	-2	2379	41.89	1.1	0
98	SLU 37	223	13	2487	7.98	5.38	-0.12
98	SLU 38	116	-2	2379	41.89	1.1	0
98	SLU 39	248	14	2665	9.21	6.07	-0.13
98	SLU 40	141	-1	2557	43.12	1.79	-0.01
98	SLU 41	248	14	2665	9.21	6.07	-0.13
98	SLU 42	141	-1	2557	43.12	1.79	-0.01
98	SLU 43	161	12	2295	4.73	3.42	-0.1
98	SLU 44	-17	-14	2115	61.25	-3.71	0.09
98	SLU 45	161	12	2295	4.73	3.42	-0.1
98	SLU 46	54	-4	2187	38.64	-0.86	0.02
98	SLU 47	-17	-14	2115	61.25	-3.71	0.09
98	SLU 48	161	12	2295	4.73	3.42	-0.1
98	SLU 49	54	-4	2187	38.64	-0.86	0.02
98	SLU 50	161	12	2295	4.73	3.42	-0.1
98	SLU 51	54	-4	2187	38.64	-0.86	0.02
98	SLU 52	42	-12	2529	64.11	-2.1	0.07
98	SLU 53	220	14	2709	7.59	5.03	-0.13
98	SLU 54	113	-1	2601	41.5	0.75	-0.01
98	SLU 55	42	-12	2529	64.11	-2.1	0.07
98	SLU 56	220	14	2709	7.59	5.03	-0.13
98	SLU 57	113	-1	2601	41.5	0.75	-0.01
98	SLU 58	220	14	2709	7.59	5.03	-0.13
98	SLU 59	113	-1	2601	41.5	0.75	-0.01
98	SLU 60	245	16	2886	8.81	5.72	-0.14
98	SLU 61	138	0	2778	42.72	1.44	-0.02
98	SLU 62	245	16	2886	8.81	5.72	-0.14
98	SLU 63	138	0	2778	42.72	1.44	-0.02
98	SLU 64	193	13	2539	5.9	4.32	-0.11
98	SLU 65	16	-13	2359	62.42	-2.81	0.08
98	SLU 66	193	13	2539	5.9	4.32	-0.11
98	SLU 67	87	-3	2431	39.81	0.04	0
98	SLU 68	16	-13	2359	62.42	-2.81	0.08
98	SLU 69	193	13	2539	5.9	4.32	-0.11
98	SLU 70	87	-3	2431	39.81	0.04	0
98	SLU 71	193	13	2539	5.9	4.32	-0.11
98	SLU 72	87	-3	2431	39.81	0.04	0
98	SLU 73	74	-11	2773	65.28	-1.2	0.06
98	SLU 74	252	16	2953	8.76	5.93	-0.14
98	SLU 75	145	0	2845	42.67	1.65	-0.02
98	SLU 76	74	-11	2773	65.28	-1.2	0.06
98	SLU 77	252	16	2953	8.76	5.93	-0.14
98	SLU 78	145	0	2845	42.67	1.65	-0.02
98	SLU 79	252	16	2953	8.76	5.93	-0.14
98	SLU 80	145	0	2845	42.67	1.65	-0.02
98	SLU 81	277	17	3130	9.99	6.62	-0.15
98	SLU 82	170	1	3022	43.9	2.34	-0.03
98	SLU 83	277	17	3130	9.99	6.62	-0.15
98	SLU 84	170	1	3022	43.9	2.34	-0.03
98	SLE RA 1	142	10	1899	4.28	3.13	-0.09
98	SLE RA 2	23	-8	1779	41.96	-1.63	0.05
98	SLE RA 3	142	10	1899	4.28	3.13	-0.09
98	SLE RA 4	70	-1	1827	26.89	0.27	-0.01
98	SLE RA 5	23	-8	1779	41.96	-1.63	0.05
98	SLE RA 6	142	10	1899	4.28	3.13	-0.09
98	SLE RA 7	70	-1	1827	26.89	0.27	-0.01
98	SLE RA 8	142	10	1899	4.28	3.13	-0.09
98	SLE RA 9	70	-1	1827	26.89	0.27	-0.01
98	SLE RA 10	62	-6	2055	43.87	-0.55	0.03
98	SLE RA 11	180	11	2175	6.19	4.2	-0.1
98	SLE RA 12	109	1	2103	28.8	1.35	-0.02
98	SLE RA 13	62	-6	2055	43.87	-0.55	0.03
98	SLE RA 14	180	11	2175	6.19	4.2	-0.1
98	SLE RA 15	109	1	2103	28.8	1.35	-0.02
98	SLE RA 16	180	11	2175	6.19	4.2	-0.1
98	SLE RA 17	109	1	2103	28.8	1.35	-0.02
98	SLE RA 18	197	12	2293	7	4.66	-0.11
98	SLE RA 19	126	2	2221	29.61	1.81	-0.03
98	SLE RA 20	197	12	2293	7	4.66	-0.11
98	SLE RA 21	126	2	2221	29.61	1.81	-0.03
98	SLE FR 1	142	10	1899	4.28	3.13	-0.09
98	SLE FR 2	118	6	1875	11.82	2.18	-0.06
98	SLE FR 3	142	10	1899	4.28	3.13	-0.09
98	SLE FR 4	135	7	1994	12.63	2.64	-0.07
98	SLE FR 5	158	10	2018	5.1	3.59	-0.09
98	SLE FR 6	169	11	2096	5.64	3.89	-0.1
98	SLE QP 1	142	10	1899	4.28	3.13	-0.09
98	SLE QP 2	158	10	2018	5.1	3.59	-0.09

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
98	SLD 1	441	29	2164	-19.68	14.88	-0.24
98	SLD 2	441	29	2164	-19.68	14.88	-0.24
98	SLD 3	360	3	2074	19.37	11.49	-0.04
98	SLD 4	360	3	2074	19.37	11.49	-0.04
98	SLD 5	367	54	2198	-61.55	12.11	-0.44
98	SLD 6	367	54	2198	-61.55	12.11	-0.44
98	SLD 7	95	-30	1898	68.59	0.82	0.23
98	SLD 8	95	-30	1898	68.59	0.82	0.23
98	SLD 9	221	51	2137	-58.4	6.35	-0.41
98	SLD 10	221	51	2137	-58.4	6.35	-0.41
98	SLD 11	-50	-33	1837	71.74	-4.94	0.25
98	SLD 12	-50	-33	1837	71.74	-4.94	0.25
98	SLD 13	-43	18	1961	-9.17	-4.32	-0.15
98	SLD 14	-43	18	1961	-9.17	-4.32	-0.15
98	SLD 15	-125	-8	1871	29.87	-7.7	0.05
98	SLD 16	-125	-8	1871	29.87	-7.7	0.05
98	SLV 1	833	57	2380	-58.41	30.52	-0.46
98	SLV 2	833	57	2380	-58.41	30.52	-0.46
98	SLV 3	622	-8	2146	42.01	21.77	0.05
98	SLV 4	622	-8	2146	42.01	21.77	0.05
98	SLV 5	681	122	2482	-166.26	24.94	-0.97
98	SLV 6	681	122	2482	-166.26	24.94	-0.97
98	SLV 7	-23	-93	1701	168.47	-4.23	0.72
98	SLV 8	-23	-93	1701	168.47	-4.23	0.72
98	SLV 9	339	114	2335	-158.28	11.4	-0.9
98	SLV 10	339	114	2335	-158.28	11.4	-0.9
98	SLV 11	-364	-102	1554	176.45	-17.77	0.79
98	SLV 12	-364	-102	1554	176.45	-17.77	0.79
98	SLV 13	-306	29	1890	-31.81	-14.6	-0.23
98	SLV 14	-306	29	1890	-31.81	-14.6	-0.23
98	SLV 15	-517	-36	1655	68.61	-23.35	0.28
98	SLV 16	-517	-36	1655	68.61	-23.35	0.28
99	SLU 1	159	10	1989	5.31	7.3	-0.06
99	SLU 2	50	-18	1774	67.03	3.36	0.09
99	SLU 3	159	10	1989	5.31	7.3	-0.06
99	SLU 4	93	-7	1860	42.34	4.94	0.03
99	SLU 5	50	-18	1774	67.03	3.36	0.09
99	SLU 6	159	10	1989	5.31	7.3	-0.06
99	SLU 7	93	-7	1860	42.34	4.94	0.03
99	SLU 8	159	10	1989	5.31	7.3	-0.06
99	SLU 9	93	-7	1860	42.34	4.94	0.03
99	SLU 10	109	-15	2242	70.43	5.94	0.07
99	SLU 11	218	13	2457	8.72	9.88	-0.08
99	SLU 12	153	-4	2328	45.75	7.52	0.01
99	SLU 13	109	-15	2242	70.43	5.94	0.07
99	SLU 14	218	13	2457	8.72	9.88	-0.08
99	SLU 15	153	-4	2328	45.75	7.52	0.01
99	SLU 16	218	13	2457	8.72	9.88	-0.08
99	SLU 17	153	-4	2328	45.75	7.52	0.01
99	SLU 18	244	14	2657	10.17	10.99	-0.09
99	SLU 19	179	-2	2528	47.2	8.62	0
99	SLU 20	244	14	2657	10.17	10.99	-0.09
99	SLU 21	179	-2	2528	47.2	8.62	0
99	SLU 22	191	11	2263	6.71	8.69	-0.07
99	SLU 23	82	-17	2048	68.42	4.75	0.08
99	SLU 24	191	11	2263	6.71	8.69	-0.07
99	SLU 25	126	-5	2134	43.74	6.33	0.02
99	SLU 26	82	-17	2048	68.42	4.75	0.08
99	SLU 27	191	11	2263	6.71	8.69	-0.07
99	SLU 28	126	-5	2134	43.74	6.33	0.02
99	SLU 29	191	11	2263	6.71	8.69	-0.07
99	SLU 30	126	-5	2134	43.74	6.33	0.02
99	SLU 31	142	-14	2516	71.83	7.33	0.06
99	SLU 32	251	14	2731	10.11	11.27	-0.09
99	SLU 33	185	-2	2602	47.14	8.91	0
99	SLU 34	142	-14	2516	71.83	7.33	0.06
99	SLU 35	251	14	2731	10.11	11.27	-0.09
99	SLU 36	185	-2	2602	47.14	8.91	0
99	SLU 37	251	14	2731	10.11	11.27	-0.09
99	SLU 38	185	-2	2602	47.14	8.91	0
99	SLU 39	276	16	2931	11.57	12.38	-0.1
99	SLU 40	211	-1	2802	48.6	10.01	-0.01
99	SLU 41	276	16	2931	11.57	12.38	-0.1
99	SLU 42	211	-1	2802	48.6	10.01	-0.01
99	SLU 43	195	13	2491	6.43	9.01	-0.08
99	SLU 44	86	-15	2276	68.15	5.07	0.07
99	SLU 45	195	13	2491	6.43	9.01	-0.08
99	SLU 46	130	-4	2362	43.46	6.65	0.01
99	SLU 47	86	-15	2276	68.15	5.07	0.07
99	SLU 48	195	13	2491	6.43	9.01	-0.08
99	SLU 49	130	-4	2362	43.46	6.65	0.01
99	SLU 50	195	13	2491	6.43	9.01	-0.08
99	SLU 51	130	-4	2362	43.46	6.65	0.01
99	SLU 52	146	-12	2744	71.55	7.65	0.05
99	SLU 53	255	16	2959	9.83	11.59	-0.1
99	SLU 54	190	-1	2830	46.86	9.23	-0.01
99	SLU 55	146	-12	2744	71.55	7.65	0.05
99	SLU 56	255	16	2959	9.83	11.59	-0.1

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
99	SLU 57	190	-1	2830	46.86	9.23	-0.01
99	SLU 58	255	16	2959	9.83	11.59	-0.1
99	SLU 59	190	-1	2830	46.86	9.23	-0.01
99	SLU 60	281	17	3160	11.29	12.7	-0.11
99	SLU 61	215	0	3031	48.32	10.33	-0.02
99	SLU 62	281	17	3160	11.29	12.7	-0.11
99	SLU 63	215	0	3031	48.32	10.33	-0.02
99	SLU 64	228	14	2766	7.82	10.41	-0.09
99	SLU 65	119	-14	2551	69.54	6.46	0.06
99	SLU 66	228	14	2766	7.82	10.41	-0.09
99	SLU 67	162	-3	2637	44.85	8.04	0
99	SLU 68	119	-14	2551	69.54	6.46	0.06
99	SLU 69	228	14	2766	7.82	10.41	-0.09
99	SLU 70	162	-3	2637	44.85	8.04	0
99	SLU 71	228	14	2766	7.82	10.41	-0.09
99	SLU 72	162	-3	2637	44.85	8.04	0
99	SLU 73	178	-11	3018	72.94	9.04	0.05
99	SLU 74	287	17	3234	11.23	12.98	-0.11
99	SLU 75	222	0	3104	48.26	10.62	-0.02
99	SLU 76	178	-11	3018	72.94	9.04	0.05
99	SLU 77	287	17	3234	11.23	12.98	-0.11
99	SLU 78	222	0	3104	48.26	10.62	-0.02
99	SLU 79	287	17	3234	11.23	12.98	-0.11
99	SLU 80	222	0	3104	48.26	10.62	-0.02
99	SLU 81	313	18	3434	12.68	14.09	-0.12
99	SLU 82	247	2	3305	49.71	11.73	-0.03
99	SLU 83	313	18	3434	12.68	14.09	-0.12
99	SLU 84	247	2	3305	49.71	11.73	-0.03
99	SLE RA 1	168	11	2067	5.71	7.7	-0.07
99	SLE RA 2	95	-8	1924	46.86	5.07	0.04
99	SLE RA 3	168	11	2067	5.71	7.7	-0.07
99	SLE RA 4	124	-1	1981	30.4	6.12	-0.01
99	SLE RA 5	95	-8	1924	46.86	5.07	0.04
99	SLE RA 6	168	11	2067	5.71	7.7	-0.07
99	SLE RA 7	124	-1	1981	30.4	6.12	-0.01
99	SLE RA 8	168	11	2067	5.71	7.7	-0.07
99	SLE RA 9	124	-1	1981	30.4	6.12	-0.01
99	SLE RA 10	135	-6	2236	49.12	6.79	0.02
99	SLE RA 11	208	13	2379	7.98	9.42	-0.08
99	SLE RA 12	164	1	2293	32.67	7.84	-0.02
99	SLE RA 13	135	-6	2236	49.12	6.79	0.02
99	SLE RA 14	208	13	2379	7.98	9.42	-0.08
99	SLE RA 15	164	1	2293	32.67	7.84	-0.02
99	SLE RA 16	208	13	2379	7.98	9.42	-0.08
99	SLE RA 17	164	1	2293	32.67	7.84	-0.02
99	SLE RA 18	225	13	2513	8.95	10.15	-0.09
99	SLE RA 19	181	2	2427	33.64	8.58	-0.02
99	SLE RA 20	225	13	2513	8.95	10.15	-0.09
99	SLE RA 21	181	2	2427	33.64	8.58	-0.02
99	SLE FR 1	168	11	2067	5.71	7.7	-0.07
99	SLE FR 2	154	7	2038	13.94	7.17	-0.05
99	SLE FR 3	168	11	2067	5.71	7.7	-0.07
99	SLE FR 4	171	8	2172	14.91	7.91	-0.05
99	SLE FR 5	185	11	2201	6.68	8.44	-0.07
99	SLE FR 6	196	12	2290	7.33	8.93	-0.08
99	SLE QP 1	168	11	2067	5.71	7.7	-0.07
99	SLE QP 2	185	11	2201	6.68	8.44	-0.07
99	SLD 1	429	30	2356	-19.16	17.74	-0.18
99	SLD 2	429	30	2356	-19.16	17.74	-0.18
99	SLD 3	381	3	2246	23.24	15.92	-0.03
99	SLD 4	381	3	2246	23.24	15.92	-0.03
99	SLD 5	332	59	2414	-65.38	13.97	-0.35
99	SLD 6	332	59	2414	-65.38	13.97	-0.35
99	SLD 7	170	-33	2047	75.96	7.93	0.18
99	SLD 8	170	-33	2047	75.96	7.93	0.18
99	SLD 9	200	56	2354	-62.6	8.94	-0.33
99	SLD 10	200	56	2354	-62.6	8.94	-0.33
99	SLD 11	38	-36	1987	78.75	2.9	0.2
99	SLD 12	38	-36	1987	78.75	2.9	0.2
99	SLD 13	-11	20	2156	-9.87	0.95	-0.12
99	SLD 14	-11	20	2156	-9.87	0.95	-0.12
99	SLD 15	-59	-7	2046	32.53	-0.86	0.04
99	SLD 16	-59	-7	2046	32.53	-0.86	0.04
99	SLV 1	765	59	2583	-59.54	30.52	-0.35
99	SLV 2	765	59	2583	-59.54	30.52	-0.35
99	SLV 3	640	-12	2298	49.55	25.81	0.05
99	SLV 4	640	-12	2298	49.55	25.81	0.05
99	SLV 5	549	133	2747	-178.64	22.2	-0.77
99	SLV 6	549	133	2747	-178.64	22.2	-0.77
99	SLV 7	132	-103	1799	185	6.51	0.58
99	SLV 8	132	-103	1799	185	6.51	0.58
99	SLV 9	238	125	2603	-171.64	10.36	-0.72
99	SLV 10	238	125	2603	-171.64	10.36	-0.72
99	SLV 11	-179	-110	1655	192.01	-5.33	0.62
99	SLV 12	-179	-110	1655	192.01	-5.33	0.62
99	SLV 13	-270	34	2103	-36.19	-8.94	-0.2
99	SLV 14	-270	34	2103	-36.19	-8.94	-0.2
99	SLV 15	-395	-36	1819	72.91	-13.65	0.21

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
99	SLV 16	-395	-36	1819	72.91	-13.65	0.21
100	SLU 1	75	10	2108	6.69	1.45	-0.05
100	SLU 2	19	-22	1897	72.9	-0.72	0.08
100	SLU 3	75	10	2108	6.69	1.45	-0.05
100	SLU 4	42	-9	1981	46.42	0.15	0.03
100	SLU 5	19	-22	1897	72.9	-0.72	0.08
100	SLU 6	75	10	2108	6.69	1.45	-0.05
100	SLU 7	42	-9	1981	46.42	0.15	0.03
100	SLU 8	75	10	2108	6.69	1.45	-0.05
100	SLU 9	42	-9	1981	46.42	0.15	0.03
100	SLU 10	50	-19	2403	76.84	0.08	0.06
100	SLU 11	106	12	2614	10.64	2.25	-0.06
100	SLU 12	73	-6	2488	50.36	0.95	0.01
100	SLU 13	50	-19	2403	76.84	0.08	0.06
100	SLU 14	106	12	2614	10.64	2.25	-0.06
100	SLU 15	73	-6	2488	50.36	0.95	0.01
100	SLU 16	106	12	2614	10.64	2.25	-0.06
100	SLU 17	73	-6	2488	50.36	0.95	0.01
100	SLU 18	119	14	2831	12.33	2.6	-0.06
100	SLU 19	86	-5	2705	52.05	1.3	0.01
100	SLU 20	119	14	2831	12.33	2.6	-0.06
100	SLU 21	86	-5	2705	52.05	1.3	0.01
100	SLU 22	91	11	2403	8.31	1.87	-0.05
100	SLU 23	36	-20	2192	74.51	-0.3	0.07
100	SLU 24	91	11	2403	8.31	1.87	-0.05
100	SLU 25	58	-8	2277	48.03	0.57	0.02
100	SLU 26	36	-20	2192	74.51	-0.3	0.07
100	SLU 27	91	11	2403	8.31	1.87	-0.05
100	SLU 28	58	-8	2277	48.03	0.57	0.02
100	SLU 29	91	11	2403	8.31	1.87	-0.05
100	SLU 30	58	-8	2277	48.03	0.57	0.02
100	SLU 31	67	-18	2699	78.45	0.5	0.06
100	SLU 32	122	14	2910	12.25	2.67	-0.06
100	SLU 33	89	-5	2783	51.97	1.37	0.01
100	SLU 34	67	-18	2699	78.45	0.5	0.06
100	SLU 35	122	14	2910	12.25	2.67	-0.06
100	SLU 36	89	-5	2783	51.97	1.37	0.01
100	SLU 37	122	14	2910	12.25	2.67	-0.06
100	SLU 38	89	-5	2783	51.97	1.37	0.01
100	SLU 39	136	15	3127	13.94	3.02	-0.07
100	SLU 40	102	-4	3000	53.66	1.71	0
100	SLU 41	136	15	3127	13.94	3.02	-0.07
100	SLU 42	102	-4	3000	53.66	1.71	0
100	SLU 43	92	12	2639	8.15	1.75	-0.06
100	SLU 44	36	-19	2428	74.35	-0.43	0.06
100	SLU 45	92	12	2639	8.15	1.75	-0.06
100	SLU 46	59	-7	2512	47.87	0.44	0.02
100	SLU 47	36	-19	2428	74.35	-0.43	0.06
100	SLU 48	92	12	2639	8.15	1.75	-0.06
100	SLU 49	59	-7	2512	47.87	0.44	0.02
100	SLU 50	92	12	2639	8.15	1.75	-0.06
100	SLU 51	59	-7	2512	47.87	0.44	0.02
100	SLU 52	67	-16	2934	78.3	0.38	0.05
100	SLU 53	123	15	3145	12.09	2.55	-0.07
100	SLU 54	89	-4	3019	51.82	1.25	0
100	SLU 55	67	-16	2934	78.3	0.38	0.05
100	SLU 56	123	15	3145	12.09	2.55	-0.07
100	SLU 57	89	-4	3019	51.82	1.25	0
100	SLU 58	123	15	3145	12.09	2.55	-0.07
100	SLU 59	89	-4	3019	51.82	1.25	0
100	SLU 60	136	16	3362	13.78	2.89	-0.08
100	SLU 61	103	-3	3236	53.51	1.59	0
100	SLU 62	136	16	3362	13.78	2.89	-0.08
100	SLU 63	103	-3	3236	53.51	1.59	0
100	SLU 64	108	13	2934	9.76	2.16	-0.06
100	SLU 65	53	-18	2723	75.96	-0.01	0.06
100	SLU 66	108	13	2934	9.76	2.16	-0.06
100	SLU 67	75	-5	2808	49.48	0.86	0.01
100	SLU 68	53	-18	2723	75.96	-0.01	0.06
100	SLU 69	108	13	2934	9.76	2.16	-0.06
100	SLU 70	75	-5	2808	49.48	0.86	0.01
100	SLU 71	108	13	2934	9.76	2.16	-0.06
100	SLU 72	75	-5	2808	49.48	0.86	0.01
100	SLU 73	84	-15	3230	79.91	0.79	0.04
100	SLU 74	139	16	3441	13.7	2.96	-0.08
100	SLU 75	106	-3	3314	53.43	1.66	0
100	SLU 76	84	-15	3230	79.91	0.79	0.04
100	SLU 77	139	16	3441	13.7	2.96	-0.08
100	SLU 78	106	-3	3314	53.43	1.66	0
100	SLU 79	139	16	3441	13.7	2.96	-0.08
100	SLU 80	106	-3	3314	53.43	1.66	0
100	SLU 81	152	17	3658	15.4	3.31	-0.08
100	SLU 82	119	-1	3531	55.12	2.01	-0.01
100	SLU 83	152	17	3658	15.4	3.31	-0.08
100	SLU 84	119	-1	3531	55.12	2.01	-0.01
100	SLE RA 1	80	10	2192	7.15	1.57	-0.05
100	SLE RA 2	43	-11	2052	51.29	0.12	0.03
100	SLE RA 3	80	10	2192	7.15	1.57	-0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
100	SLE RA 4	57	-3	2108	33.64	0.7	0
100	SLE RA 5	43	-11	2052	51.29	0.12	0.03
100	SLE RA 6	80	10	2192	7.15	1.57	-0.05
100	SLE RA 7	57	-3	2108	33.64	0.7	0
100	SLE RA 8	80	10	2192	7.15	1.57	-0.05
100	SLE RA 9	57	-3	2108	33.64	0.7	0
100	SLE RA 10	63	-9	2389	53.92	0.66	0.02
100	SLE RA 11	100	12	2530	9.78	2.11	-0.06
100	SLE RA 12	78	-1	2445	36.26	1.24	-0.01
100	SLE RA 13	63	-9	2389	53.92	0.66	0.02
100	SLE RA 14	100	12	2530	9.78	2.11	-0.06
100	SLE RA 15	78	-1	2445	36.26	1.24	-0.01
100	SLE RA 16	100	12	2530	9.78	2.11	-0.06
100	SLE RA 17	78	-1	2445	36.26	1.24	-0.01
100	SLE RA 18	109	13	2674	10.91	2.34	-0.06
100	SLE RA 19	87	0	2590	37.39	1.47	-0.01
100	SLE RA 20	109	13	2674	10.91	2.34	-0.06
100	SLE RA 21	87	0	2590	37.39	1.47	-0.01
100	SLE FR 1	80	10	2192	7.15	1.57	-0.05
100	SLE FR 2	72	6	2164	15.98	1.28	-0.03
100	SLE FR 3	80	10	2192	7.15	1.57	-0.05
100	SLE FR 4	81	7	2309	17.11	1.51	-0.03
100	SLE FR 5	89	11	2337	8.28	1.8	-0.05
100	SLE FR 6	94	11	2433	9.03	1.95	-0.05
100	SLE QP 1	80	10	2192	7.15	1.57	-0.05
100	SLE QP 2	89	11	2337	8.28	1.8	-0.05
100	SLD 1	321	30	2484	-18.1	11.35	-0.14
100	SLD 2	321	30	2484	-18.1	11.35	-0.14
100	SLD 3	293	0	2346	27.04	10.18	-0.02
100	SLD 4	293	0	2346	27.04	10.18	-0.02
100	SLD 5	200	62	2590	-68.09	6.44	-0.26
100	SLD 6	200	62	2590	-68.09	6.44	-0.26
100	SLD 7	108	-38	2131	82.37	2.55	0.14
100	SLD 8	108	-38	2131	82.37	2.55	0.14
100	SLD 9	69	60	2543	-65.8	1.06	-0.24
100	SLD 10	69	60	2543	-65.8	1.06	-0.24
100	SLD 11	-23	-41	2084	84.65	-2.83	0.16
100	SLD 12	-23	-41	2084	84.65	-2.83	0.16
100	SLD 13	-116	22	2327	-10.47	-6.58	-0.08
100	SLD 14	-116	22	2327	-10.47	-6.58	-0.08
100	SLD 15	-144	-8	2190	34.66	-7.75	0.04
100	SLD 16	-144	-8	2190	34.66	-7.75	0.04
100	SLV 1	636	59	2701	-59.29	24.33	-0.27
100	SLV 2	636	59	2701	-59.29	24.33	-0.27
100	SLV 3	567	-17	2349	56.86	21.4	0.04
100	SLV 4	567	-17	2349	56.86	21.4	0.04
100	SLV 5	358	142	2979	-188.14	13	-0.58
100	SLV 6	358	142	2979	-188.14	13	-0.58
100	SLV 7	126	-114	1808	199.01	3.25	0.44
100	SLV 8	126	-114	1808	199.01	3.25	0.44
100	SLV 9	51	136	2866	-182.45	0.36	-0.54
100	SLV 10	51	136	2866	-182.45	0.36	-0.54
100	SLV 11	-181	-120	1695	204.71	-9.39	0.48
100	SLV 12	-181	-120	1695	204.71	-9.39	0.48
100	SLV 13	-390	39	2324	-40.3	-17.8	-0.14
100	SLV 14	-390	39	2324	-40.3	-17.8	-0.14
100	SLV 15	-459	-38	1973	75.85	-20.73	0.17
100	SLV 16	-459	-38	1973	75.85	-20.73	0.17
101	SLU 1	46	9	2152	7.79	2.28	-0.03
101	SLU 2	29	-26	1956	77.13	1.25	0.06
101	SLU 3	46	9	2152	7.79	2.28	-0.03
101	SLU 4	36	-12	2035	49.39	1.66	0.02
101	SLU 5	29	-26	1956	77.13	1.25	0.06
101	SLU 6	46	9	2152	7.79	2.28	-0.03
101	SLU 7	36	-12	2035	49.39	1.66	0.02
101	SLU 8	46	9	2152	7.79	2.28	-0.03
101	SLU 9	36	-12	2035	49.39	1.66	0.02
101	SLU 10	46	-23	2477	81.5	2.04	0.05
101	SLU 11	64	11	2673	12.16	3.06	-0.04
101	SLU 12	53	-9	2555	53.76	2.45	0.02
101	SLU 13	46	-23	2477	81.5	2.04	0.05
101	SLU 14	64	11	2673	12.16	3.06	-0.04
101	SLU 15	53	-9	2555	53.76	2.45	0.02
101	SLU 16	64	11	2673	12.16	3.06	-0.04
101	SLU 17	53	-9	2555	53.76	2.45	0.02
101	SLU 18	71	12	2896	14.03	3.4	-0.04
101	SLU 19	61	-8	2779	55.63	2.78	0.01
101	SLU 20	71	12	2896	14.03	3.4	-0.04
101	SLU 21	61	-8	2779	55.63	2.78	0.01
101	SLU 22	55	10	2455	9.57	2.71	-0.03
101	SLU 23	38	-25	2259	78.91	1.69	0.06
101	SLU 24	55	10	2455	9.57	2.71	-0.03
101	SLU 25	45	-11	2338	51.18	2.1	0.02
101	SLU 26	38	-25	2259	78.91	1.69	0.06
101	SLU 27	55	10	2455	9.57	2.71	-0.03
101	SLU 28	45	-11	2338	51.18	2.1	0.02
101	SLU 29	55	10	2455	9.57	2.71	-0.03
101	SLU 30	45	-11	2338	51.18	2.1	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
101	SLU 31	56	-22	2780	83.28	2.47	0.05
101	SLU 32	73	12	2976	13.94	3.5	-0.04
101	SLU 33	62	-8	2858	55.55	2.88	0.01
101	SLU 34	56	-22	2780	83.28	2.47	0.05
101	SLU 35	73	12	2976	13.94	3.5	-0.04
101	SLU 36	62	-8	2858	55.55	2.88	0.01
101	SLU 37	73	12	2976	13.94	3.5	-0.04
101	SLU 38	62	-8	2858	55.55	2.88	0.01
101	SLU 39	80	13	3199	15.81	3.83	-0.04
101	SLU 40	70	-7	3082	57.42	3.22	0.01
101	SLU 41	80	13	3199	15.81	3.83	-0.04
101	SLU 42	70	-7	3082	57.42	3.22	0.01
101	SLU 43	57	11	2694	9.51	2.82	-0.03
101	SLU 44	40	-24	2498	78.85	1.79	0.05
101	SLU 45	57	11	2694	9.51	2.82	-0.03
101	SLU 46	47	-10	2576	51.11	2.2	0.02
101	SLU 47	40	-24	2498	78.85	1.79	0.05
101	SLU 48	57	11	2694	9.51	2.82	-0.03
101	SLU 49	47	-10	2576	51.11	2.2	0.02
101	SLU 50	57	11	2694	9.51	2.82	-0.03
101	SLU 51	47	-10	2576	51.11	2.2	0.02
101	SLU 52	57	-21	3019	83.22	2.57	0.04
101	SLU 53	74	13	3215	13.88	3.6	-0.04
101	SLU 54	64	-7	3097	55.49	2.98	0.01
101	SLU 55	57	-21	3019	83.22	2.57	0.04
101	SLU 56	74	13	3215	13.88	3.6	-0.04
101	SLU 57	64	-7	3097	55.49	2.98	0.01
101	SLU 58	74	13	3215	13.88	3.6	-0.04
101	SLU 59	64	-7	3097	55.49	2.98	0.01
101	SLU 60	82	14	3438	15.75	3.93	-0.05
101	SLU 61	71	-6	3320	57.36	3.32	0.01
101	SLU 62	82	14	3438	15.75	3.93	-0.05
101	SLU 63	71	-6	3320	57.36	3.32	0.01
101	SLU 64	66	12	2997	11.29	3.25	-0.04
101	SLU 65	49	-22	2801	80.64	2.22	0.05
101	SLU 66	66	12	2997	11.29	3.25	-0.04
101	SLU 67	56	-9	2879	52.9	2.63	0.01
101	SLU 68	49	-22	2801	80.64	2.22	0.05
101	SLU 69	66	12	2997	11.29	3.25	-0.04
101	SLU 70	56	-9	2879	52.9	2.63	0.01
101	SLU 71	66	12	2997	11.29	3.25	-0.04
101	SLU 72	56	-9	2879	52.9	2.63	0.01
101	SLU 73	66	-20	3322	85.01	3	0.04
101	SLU 74	84	14	3518	15.67	4.03	-0.05
101	SLU 75	73	-6	3400	57.27	3.42	0.01
101	SLU 76	66	-20	3322	85.01	3	0.04
101	SLU 77	84	14	3518	15.67	4.03	-0.05
101	SLU 78	73	-6	3400	57.27	3.42	0.01
101	SLU 79	84	14	3518	15.67	4.03	-0.05
101	SLU 80	73	-6	3400	57.27	3.42	0.01
101	SLU 81	91	16	3741	17.54	4.37	-0.05
101	SLU 82	81	-5	3623	59.14	3.75	0
101	SLU 83	91	16	3741	17.54	4.37	-0.05
101	SLU 84	81	-5	3623	59.14	3.75	0
101	SLE RA 1	49	9	2239	8.3	2.4	-0.03
101	SLE RA 2	37	-14	2108	54.52	1.72	0.03
101	SLE RA 3	49	9	2239	8.3	2.4	-0.03
101	SLE RA 4	42	-5	2160	36.03	1.99	0.01
101	SLE RA 5	37	-14	2108	54.52	1.72	0.03
101	SLE RA 6	49	9	2239	8.3	2.4	-0.03
101	SLE RA 7	42	-5	2160	36.03	1.99	0.01
101	SLE RA 8	49	9	2239	8.3	2.4	-0.03
101	SLE RA 9	42	-5	2160	36.03	1.99	0.01
101	SLE RA 10	49	-12	2455	57.44	2.24	0.02
101	SLE RA 11	60	11	2586	11.21	2.93	-0.03
101	SLE RA 12	54	-3	2508	38.95	2.52	0
101	SLE RA 13	49	-12	2455	57.44	2.24	0.02
101	SLE RA 14	60	11	2586	11.21	2.93	-0.03
101	SLE RA 15	54	-3	2508	38.95	2.52	0
101	SLE RA 16	60	11	2586	11.21	2.93	-0.03
101	SLE RA 17	54	-3	2508	38.95	2.52	0
101	SLE RA 18	65	11	2735	12.46	3.15	-0.04
101	SLE RA 19	59	-2	2656	40.19	2.74	0
101	SLE RA 20	65	11	2735	12.46	3.15	-0.04
101	SLE RA 21	59	-2	2656	40.19	2.74	0
101	SLE FR 1	49	9	2239	8.3	2.4	-0.03
101	SLE FR 2	47	4	2213	17.54	2.27	-0.02
101	SLE FR 3	49	9	2239	8.3	2.4	-0.03
101	SLE FR 4	52	5	2362	18.79	2.49	-0.02
101	SLE FR 5	54	10	2388	9.54	2.63	-0.03
101	SLE FR 6	57	10	2487	10.38	2.78	-0.03
101	SLE QP 1	49	9	2239	8.3	2.4	-0.03
101	SLE QP 2	54	10	2388	9.54	2.63	-0.03
101	SLD 1	277	29	2520	-16.91	11.62	-0.09
101	SLD 2	277	29	2520	-16.91	11.62	-0.09
101	SLD 3	263	-3	2360	30.04	10.97	0
101	SLD 4	263	-3	2360	30.04	10.97	0
101	SLD 5	143	64	2671	-69.6	6.3	-0.17

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
101	SLD 6	143	64	2671	-69.6	6.3	-0.17
101	SLD 7	94	-42	2136	86.9	4.15	0.11
101	SLD 8	94	-42	2136	86.9	4.15	0.11
101	SLD 9	13	62	2639	-67.81	1.1	-0.17
101	SLD 10	13	62	2639	-67.81	1.1	-0.17
101	SLD 11	-35	-44	2105	88.69	-1.05	0.11
101	SLD 12	-35	-44	2105	88.69	-1.05	0.11
101	SLD 13	-155	22	2416	-10.95	-5.72	-0.06
101	SLD 14	-155	22	2416	-10.95	-5.72	-0.06
101	SLD 15	-170	-10	2255	36	-6.36	0.02
101	SLD 16	-170	-10	2255	36	-6.36	0.02
101	SLV 1	580	59	2718	-58.21	23.82	-0.17
101	SLV 2	580	59	2718	-58.21	23.82	-0.17
101	SLV 3	544	-23	2310	62.62	22.19	0.05
101	SLV 4	544	-23	2310	62.62	22.19	0.05
101	SLV 5	265	148	3104	-194.03	11.45	-0.4
101	SLV 6	265	148	3104	-194.03	11.45	-0.4
101	SLV 7	147	-124	1747	208.72	6.02	0.32
101	SLV 8	147	-124	1747	208.72	6.02	0.32
101	SLV 9	-39	143	3028	-189.63	-0.77	-0.38
101	SLV 10	-39	143	3028	-189.63	-0.77	-0.38
101	SLV 11	-158	-129	1671	213.12	-6.2	0.34
101	SLV 12	-158	-129	1671	213.12	-6.2	0.34
101	SLV 13	-436	42	2465	-43.53	-16.93	-0.11
101	SLV 14	-436	42	2465	-43.53	-16.93	-0.11
101	SLV 15	-472	-39	2058	77.3	-18.56	0.11
101	SLV 16	-472	-39	2058	77.3	-18.56	0.11
102	SLU 1	9	8	2175	8.25	0.4	-0.02
102	SLU 2	30	-28	1997	78.83	1.67	0.04
102	SLU 3	9	8	2175	8.25	0.4	-0.02
102	SLU 4	22	-13	2069	50.6	1.17	0.02
102	SLU 5	30	-28	1997	78.83	1.67	0.04
102	SLU 6	9	8	2175	8.25	0.4	-0.02
102	SLU 7	22	-13	2069	50.6	1.17	0.02
102	SLU 8	9	8	2175	8.25	0.4	-0.02
102	SLU 9	22	-13	2069	50.6	1.17	0.02
102	SLU 10	34	-25	2525	83.38	1.86	0.04
102	SLU 11	13	10	2703	12.81	0.59	-0.02
102	SLU 12	25	-11	2596	55.15	1.36	0.01
102	SLU 13	34	-25	2525	83.38	1.86	0.04
102	SLU 14	13	10	2703	12.81	0.59	-0.02
102	SLU 15	25	-11	2596	55.15	1.36	0.01
102	SLU 16	13	10	2703	12.81	0.59	-0.02
102	SLU 17	25	-11	2596	55.15	1.36	0.01
102	SLU 18	15	11	2929	14.76	0.67	-0.02
102	SLU 19	27	-10	2822	57.1	1.44	0.01
102	SLU 20	15	11	2929	14.76	0.67	-0.02
102	SLU 21	27	-10	2822	57.1	1.44	0.01
102	SLU 22	11	9	2481	10.11	0.46	-0.02
102	SLU 23	31	-27	2304	80.69	1.73	0.04
102	SLU 24	11	9	2481	10.11	0.46	-0.02
102	SLU 25	23	-12	2375	52.46	1.23	0.02
102	SLU 26	31	-27	2304	80.69	1.73	0.04
102	SLU 27	11	9	2481	10.11	0.46	-0.02
102	SLU 28	23	-12	2375	52.46	1.23	0.02
102	SLU 29	11	9	2481	10.11	0.46	-0.02
102	SLU 30	23	-12	2375	52.46	1.23	0.02
102	SLU 31	35	-24	2831	85.24	1.92	0.03
102	SLU 32	15	11	3009	14.67	0.65	-0.02
102	SLU 33	27	-10	2902	57.01	1.42	0.01
102	SLU 34	35	-24	2831	85.24	1.92	0.03
102	SLU 35	15	11	3009	14.67	0.65	-0.02
102	SLU 36	27	-10	2902	57.01	1.42	0.01
102	SLU 37	15	11	3009	14.67	0.65	-0.02
102	SLU 38	27	-10	2902	57.01	1.42	0.01
102	SLU 39	17	12	3235	16.62	0.73	-0.02
102	SLU 40	29	-9	3129	58.96	1.5	0.01
102	SLU 41	17	12	3235	16.62	0.73	-0.02
102	SLU 42	29	-9	3129	58.96	1.5	0.01
102	SLU 43	12	10	2723	10.09	0.5	-0.02
102	SLU 44	32	-26	2545	80.66	1.78	0.04
102	SLU 45	12	10	2723	10.09	0.5	-0.02
102	SLU 46	24	-11	2616	52.43	1.27	0.01
102	SLU 47	32	-26	2545	80.66	1.78	0.04
102	SLU 48	12	10	2723	10.09	0.5	-0.02
102	SLU 49	24	-11	2616	52.43	1.27	0.01
102	SLU 50	12	10	2723	10.09	0.5	-0.02
102	SLU 51	24	-11	2616	52.43	1.27	0.01
102	SLU 52	36	-23	3073	85.22	1.97	0.03
102	SLU 53	16	12	3250	14.64	0.69	-0.02
102	SLU 54	28	-9	3144	56.99	1.46	0.01
102	SLU 55	36	-23	3073	85.22	1.97	0.03
102	SLU 56	16	12	3250	14.64	0.69	-0.02
102	SLU 57	28	-9	3144	56.99	1.46	0.01
102	SLU 58	16	12	3250	14.64	0.69	-0.02
102	SLU 59	28	-9	3144	56.99	1.46	0.01
102	SLU 60	17	13	3477	16.6	0.77	-0.03
102	SLU 61	29	-8	3370	58.94	1.54	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
102	SLU 62	17	13	3477	16.6	0.77	-0.03
102	SLU 63	29	-8	3370	58.94	1.54	0.01
102	SLU 64	13	11	3029	11.95	0.56	-0.02
102	SLU 65	34	-24	2851	82.52	1.83	0.04
102	SLU 66	13	11	3029	11.95	0.56	-0.02
102	SLU 67	26	-10	2922	54.3	1.33	0.01
102	SLU 68	34	-24	2851	82.52	1.83	0.04
102	SLU 69	13	11	3029	11.95	0.56	-0.02
102	SLU 70	26	-10	2922	54.3	1.33	0.01
102	SLU 71	13	11	3029	11.95	0.56	-0.02
102	SLU 72	26	-10	2922	54.3	1.33	0.01
102	SLU 73	38	-22	3379	87.08	2.02	0.03
102	SLU 74	17	14	3557	16.51	0.75	-0.03
102	SLU 75	29	-8	3450	58.85	1.52	0.01
102	SLU 76	38	-22	3379	87.08	2.02	0.03
102	SLU 77	17	14	3557	16.51	0.75	-0.03
102	SLU 78	29	-8	3450	58.85	1.52	0.01
102	SLU 79	17	14	3557	16.51	0.75	-0.03
102	SLU 80	29	-8	3450	58.85	1.52	0.01
102	SLU 81	19	15	3783	18.46	0.83	-0.03
102	SLU 82	31	-7	3676	60.8	1.6	0.01
102	SLU 83	19	15	3783	18.46	0.83	-0.03
102	SLU 84	31	-7	3676	60.8	1.6	0.01
102	SLE RA 1	10	8	2263	8.78	0.42	-0.02
102	SLE RA 2	23	-15	2144	55.83	1.27	0.02
102	SLE RA 3	10	8	2263	8.78	0.42	-0.02
102	SLE RA 4	18	-6	2192	37.01	0.93	0.01
102	SLE RA 5	23	-15	2144	55.83	1.27	0.02
102	SLE RA 6	10	8	2263	8.78	0.42	-0.02
102	SLE RA 7	18	-6	2192	37.01	0.93	0.01
102	SLE RA 8	10	8	2263	8.78	0.42	-0.02
102	SLE RA 9	18	-6	2192	37.01	0.93	0.01
102	SLE RA 10	26	-14	2496	58.87	1.39	0.02
102	SLE RA 11	12	10	2614	11.82	0.55	-0.02
102	SLE RA 12	21	-4	2543	40.05	1.06	0
102	SLE RA 13	26	-14	2496	58.87	1.39	0.02
102	SLE RA 14	12	10	2614	11.82	0.55	-0.02
102	SLE RA 15	21	-4	2543	40.05	1.06	0
102	SLE RA 16	12	10	2614	11.82	0.55	-0.02
102	SLE RA 17	21	-4	2543	40.05	1.06	0
102	SLE RA 18	14	11	2765	13.12	0.6	-0.02
102	SLE RA 19	22	-4	2694	41.35	1.11	0
102	SLE RA 20	14	11	2765	13.12	0.6	-0.02
102	SLE RA 21	22	-4	2694	41.35	1.11	0
102	SLE FR 1	10	8	2263	8.78	0.42	-0.02
102	SLE FR 2	13	4	2239	18.19	0.59	-0.01
102	SLE FR 3	10	8	2263	8.78	0.42	-0.02
102	SLE FR 4	14	4	2390	19.5	0.64	-0.01
102	SLE FR 5	11	9	2413	10.09	0.47	-0.02
102	SLE FR 6	12	10	2514	10.95	0.51	-0.02
102	SLE QP 1	10	8	2263	8.78	0.42	-0.02
102	SLE QP 2	11	9	2413	10.09	0.47	-0.02
102	SLD 1	225	28	2533	-16.26	9.27	-0.02
102	SLD 2	225	28	2533	-16.26	9.27	-0.02
102	SLD 3	238	-4	2361	31.38	9.91	0.04
102	SLD 4	238	-4	2361	31.38	9.91	0.04
102	SLD 5	55	64	2711	-70.07	2.14	-0.1
102	SLD 6	55	64	2711	-70.07	2.14	-0.1
102	SLD 7	100	-44	2136	88.72	4.28	0.08
102	SLD 8	100	-44	2136	88.72	4.28	0.08
102	SLD 9	-78	63	2691	-68.55	-3.33	-0.11
102	SLD 10	-78	63	2691	-68.55	-3.33	-0.11
102	SLD 11	-33	-46	2116	90.24	-1.19	0.06
102	SLD 12	-33	-46	2116	90.24	-1.19	0.06
102	SLD 13	-216	23	2466	-11.2	-8.96	-0.07
102	SLD 14	-216	23	2466	-11.2	-8.96	-0.07
102	SLD 15	-203	-10	2294	36.43	-8.32	-0.02
102	SLD 16	-203	-10	2294	36.43	-8.32	-0.02
102	SLV 1	512	57	2713	-57.42	21.08	-0.02
102	SLV 2	512	57	2713	-57.42	21.08	-0.02
102	SLV 3	545	-26	2277	65.17	22.69	0.11
102	SLV 4	545	-26	2277	65.17	22.69	0.11
102	SLV 5	111	150	3166	-196.1	4.23	-0.22
102	SLV 6	111	150	3166	-196.1	4.23	-0.22
102	SLV 7	221	-128	1710	212.54	9.57	0.23
102	SLV 8	221	-128	1710	212.54	9.57	0.23
102	SLV 9	-199	146	3117	-192.37	-8.62	-0.26
102	SLV 10	-199	146	3117	-192.37	-8.62	-0.26
102	SLV 11	-89	-132	1661	216.27	-3.28	0.19
102	SLV 12	-89	-132	1661	216.27	-3.28	0.19
102	SLV 13	-523	44	2550	-45	-21.74	-0.15
102	SLV 14	-523	44	2550	-45	-21.74	-0.15
102	SLV 15	-490	-39	2113	77.6	-20.14	-0.01
102	SLV 16	-490	-39	2113	77.6	-20.14	-0.01
103	SLU 1	-21	8	2168	7.94	-1.46	-0.01
103	SLU 2	10	-27	1987	77.61	-0.87	0.03
103	SLU 3	-21	8	2168	7.94	-1.46	-0.01
103	SLU 4	-3	-13	2059	49.74	-1.11	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
103	SLU 5	10	-27	1987	77.61	-0.87	0.03
103	SLU 6	-21	8	2168	7.94	-1.46	-0.01
103	SLU 7	-3	-13	2059	49.74	-1.11	0.01
103	SLU 8	-21	8	2168	7.94	-1.46	-0.01
103	SLU 9	-3	-13	2059	49.74	-1.11	0.01
103	SLU 10	1	-24	2512	82.04	-1.45	0.02
103	SLU 11	-30	11	2693	12.38	-2.03	-0.01
103	SLU 12	-12	-10	2584	54.18	-1.68	0.01
103	SLU 13	1	-24	2512	82.04	-1.45	0.02
103	SLU 14	-30	11	2693	12.38	-2.03	-0.01
103	SLU 15	-12	-10	2584	54.18	-1.68	0.01
103	SLU 16	-30	11	2693	12.38	-2.03	-0.01
103	SLU 17	-12	-10	2584	54.18	-1.68	0.01
103	SLU 18	-34	12	2918	14.28	-2.28	-0.01
103	SLU 19	-16	-9	2810	56.08	-1.93	0.01
103	SLU 20	-34	12	2918	14.28	-2.28	-0.01
103	SLU 21	-16	-9	2810	56.08	-1.93	0.01
103	SLU 22	-25	9	2473	9.76	-1.69	-0.01
103	SLU 23	6	-26	2292	79.43	-1.1	0.02
103	SLU 24	-25	9	2473	9.76	-1.69	-0.01
103	SLU 25	-7	-12	2364	51.56	-1.34	0.01
103	SLU 26	6	-26	2292	79.43	-1.1	0.02
103	SLU 27	-25	9	2473	9.76	-1.69	-0.01
103	SLU 28	-7	-12	2364	51.56	-1.34	0.01
103	SLU 29	-25	9	2473	9.76	-1.69	-0.01
103	SLU 30	-7	-12	2364	51.56	-1.34	0.01
103	SLU 31	-3	-23	2817	83.86	-1.68	0.02
103	SLU 32	-34	12	2998	14.19	-2.26	-0.01
103	SLU 33	-16	-9	2889	55.99	-1.91	0.01
103	SLU 34	-3	-23	2817	83.86	-1.68	0.02
103	SLU 35	-34	12	2998	14.19	-2.26	-0.01
103	SLU 36	-16	-9	2889	55.99	-1.91	0.01
103	SLU 37	-34	12	2998	14.19	-2.26	-0.01
103	SLU 38	-16	-9	2889	55.99	-1.91	0.01
103	SLU 39	-38	13	3223	16.09	-2.51	-0.01
103	SLU 40	-20	-8	3114	57.89	-2.16	0.01
103	SLU 41	-38	13	3223	16.09	-2.51	-0.01
103	SLU 42	-20	-8	3114	57.89	-2.16	0.01
103	SLU 43	-26	11	2713	9.7	-1.81	-0.01
103	SLU 44	5	-24	2533	79.37	-1.23	0.02
103	SLU 45	-26	11	2713	9.7	-1.81	-0.01
103	SLU 46	-7	-10	2605	51.5	-1.46	0.01
103	SLU 47	5	-24	2533	79.37	-1.23	0.02
103	SLU 48	-26	11	2713	9.7	-1.81	-0.01
103	SLU 49	-7	-10	2605	51.5	-1.46	0.01
103	SLU 50	-26	11	2713	9.7	-1.81	-0.01
103	SLU 51	-7	-10	2605	51.5	-1.46	0.01
103	SLU 52	-4	-22	3058	83.8	-1.8	0.02
103	SLU 53	-35	13	3239	14.14	-2.39	-0.01
103	SLU 54	-17	-8	3130	55.94	-2.04	0.01
103	SLU 55	-4	-22	3058	83.8	-1.8	0.02
103	SLU 56	-35	13	3239	14.14	-2.39	-0.01
103	SLU 57	-17	-8	3130	55.94	-2.04	0.01
103	SLU 58	-35	13	3239	14.14	-2.39	-0.01
103	SLU 59	-17	-8	3130	55.94	-2.04	0.01
103	SLU 60	-39	14	3464	16.04	-2.63	-0.01
103	SLU 61	-20	-7	3355	57.84	-2.28	0.01
103	SLU 62	-39	14	3464	16.04	-2.63	-0.01
103	SLU 63	-20	-7	3355	57.84	-2.28	0.01
103	SLU 64	-30	12	3018	11.52	-2.04	-0.01
103	SLU 65	1	-23	2838	81.19	-1.46	0.02
103	SLU 66	-30	12	3018	11.52	-2.04	-0.01
103	SLU 67	-12	-9	2910	53.32	-1.69	0.01
103	SLU 68	1	-23	2838	81.19	-1.46	0.02
103	SLU 69	-30	12	3018	11.52	-2.04	-0.01
103	SLU 70	-12	-9	2910	53.32	-1.69	0.01
103	SLU 71	-30	12	3018	11.52	-2.04	-0.01
103	SLU 72	-12	-9	2910	53.32	-1.69	0.01
103	SLU 73	-8	-21	3363	85.62	-2.04	0.02
103	SLU 74	-39	14	3544	15.95	-2.62	-0.01
103	SLU 75	-21	-7	3435	57.75	-2.27	0.01
103	SLU 76	-8	-21	3363	85.62	-2.04	0.02
103	SLU 77	-39	14	3544	15.95	-2.62	-0.01
103	SLU 78	-21	-7	3435	57.75	-2.27	0.01
103	SLU 79	-39	14	3544	15.95	-2.62	-0.01
103	SLU 80	-21	-7	3435	57.75	-2.27	0.01
103	SLU 81	-43	15	3769	17.85	-2.87	-0.01
103	SLU 82	-25	-6	3660	59.65	-2.52	0.01
103	SLU 83	-43	15	3769	17.85	-2.87	-0.01
103	SLU 84	-25	-6	3660	59.65	-2.52	0.01
103	SLE RA 1	-22	9	2255	8.46	-1.52	-0.01
103	SLE RA 2	-2	-15	2134	54.91	-1.13	0.01
103	SLE RA 3	-22	9	2255	8.46	-1.52	-0.01
103	SLE RA 4	-10	-5	2183	36.33	-1.29	0.01
103	SLE RA 5	-2	-15	2134	54.91	-1.13	0.01
103	SLE RA 6	-22	9	2255	8.46	-1.52	-0.01
103	SLE RA 7	-10	-5	2183	36.33	-1.29	0.01
103	SLE RA 8	-22	9	2255	8.46	-1.52	-0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
103	SLE RA 9	-10	-5	2183	36.33	-1.29	0.01
103	SLE RA 10	-8	-13	2484	57.86	-1.52	0.01
103	SLE RA 11	-28	10	2605	11.42	-1.9	-0.01
103	SLE RA 12	-16	-4	2533	39.28	-1.67	0
103	SLE RA 13	-8	-13	2484	57.86	-1.52	0.01
103	SLE RA 14	-28	10	2605	11.42	-1.9	-0.01
103	SLE RA 15	-16	-4	2533	39.28	-1.67	0
103	SLE RA 16	-28	10	2605	11.42	-1.9	-0.01
103	SLE RA 17	-16	-4	2533	39.28	-1.67	0
103	SLE RA 18	-31	11	2755	12.68	-2.07	-0.01
103	SLE RA 19	-19	-3	2683	40.55	-1.84	0
103	SLE RA 20	-31	11	2755	12.68	-2.07	-0.01
103	SLE RA 21	-19	-3	2683	40.55	-1.84	0
103	SLE FR 1	-22	9	2255	8.46	-1.52	-0.01
103	SLE FR 2	-18	4	2231	17.75	-1.44	0
103	SLE FR 3	-22	9	2255	8.46	-1.52	-0.01
103	SLE FR 4	-21	5	2381	19.02	-1.61	0
103	SLE FR 5	-25	9	2405	9.73	-1.69	-0.01
103	SLE FR 6	-27	10	2505	10.57	-1.8	-0.01
103	SLE QP 1	-22	9	2255	8.46	-1.52	-0.01
103	SLE QP 2	-25	9	2405	9.73	-1.69	-0.01
103	SLD 1	185	22	2452	-10.95	6.93	-0.01
103	SLD 2	185	22	2452	-10.95	6.93	-0.01
103	SLD 3	203	-10	2285	36.17	7.59	0.02
103	SLD 4	203	-10	2285	36.17	7.59	0.02
103	SLD 5	11	62	2671	-67.95	-0.11	-0.05
103	SLD 6	11	62	2671	-67.95	-0.11	-0.05
103	SLD 7	71	-45	2117	89.13	2.11	0.05
103	SLD 8	71	-45	2117	89.13	2.11	0.05
103	SLD 9	-121	64	2693	-69.68	-5.48	-0.06
103	SLD 10	-121	64	2693	-69.68	-5.48	-0.06
103	SLD 11	-60	-43	2139	87.4	-3.26	0.04
103	SLD 12	-60	-43	2139	87.4	-3.26	0.04
103	SLD 13	-253	28	2524	-16.71	-10.97	-0.04
103	SLD 14	-253	28	2524	-16.71	-10.97	-0.04
103	SLD 15	-235	-4	2358	30.41	-10.3	-0.01
103	SLD 16	-235	-4	2358	30.41	-10.3	-0.01
103	SLV 1	468	43	2527	-43.7	18.54	-0.01
103	SLV 2	468	43	2527	-43.7	18.54	-0.01
103	SLV 3	512	-39	2106	77.56	20.15	0.06
103	SLV 4	512	-39	2106	77.56	20.15	0.06
103	SLV 5	55	144	3081	-190.22	1.93	-0.12
103	SLV 6	55	144	3081	-190.22	1.93	-0.12
103	SLV 7	204	-130	1676	214	7.31	0.13
103	SLV 8	204	-130	1676	214	7.31	0.13
103	SLV 9	-254	148	3134	-194.54	-10.68	-0.14
103	SLV 10	-254	148	3134	-194.54	-10.68	-0.14
103	SLV 11	-105	-125	1729	209.67	-5.31	0.11
103	SLV 12	-105	-125	1729	209.67	-5.31	0.11
103	SLV 13	-562	58	2704	-58.11	-23.52	-0.08
103	SLV 14	-562	58	2704	-58.11	-23.52	-0.08
103	SLV 15	-517	-24	2282	63.16	-21.91	-0.01
103	SLV 16	-517	-24	2282	63.16	-21.91	-0.01
104	SLU 1	-41	9	2155	6.88	-0.27	0
104	SLU 2	37	-23	1963	73.54	3.81	0.02
104	SLU 3	-41	9	2155	6.88	-0.27	0
104	SLU 4	6	-10	2040	46.88	2.18	0.01
104	SLU 5	37	-23	1963	73.54	3.81	0.02
104	SLU 6	-41	9	2155	6.88	-0.27	0
104	SLU 7	6	-10	2040	46.88	2.18	0.01
104	SLU 8	-41	9	2155	6.88	-0.27	0
104	SLU 9	6	-10	2040	46.88	2.18	0.01
104	SLU 10	20	-20	2484	77.57	3.53	0.02
104	SLU 11	-59	12	2676	10.9	-0.54	0
104	SLU 12	-12	-7	2561	50.9	1.9	0.01
104	SLU 13	20	-20	2484	77.57	3.53	0.02
104	SLU 14	-59	12	2676	10.9	-0.54	0
104	SLU 15	-12	-7	2561	50.9	1.9	0.01
104	SLU 16	-59	12	2676	10.9	-0.54	0
104	SLU 17	-12	-7	2561	50.9	1.9	0.01
104	SLU 18	-66	13	2899	12.63	-0.66	0
104	SLU 19	-19	-6	2784	52.63	1.79	0.01
104	SLU 20	-66	13	2899	12.63	-0.66	0
104	SLU 21	-19	-6	2784	52.63	1.79	0.01
104	SLU 22	-51	11	2457	8.53	-0.49	0
104	SLU 23	28	-22	2265	75.2	3.59	0.02
104	SLU 24	-51	11	2457	8.53	-0.49	0
104	SLU 25	-4	-9	2342	48.53	1.96	0.01
104	SLU 26	28	-22	2265	75.2	3.59	0.02
104	SLU 27	-51	11	2457	8.53	-0.49	0
104	SLU 28	-4	-9	2342	48.53	1.96	0.01
104	SLU 29	-51	11	2457	8.53	-0.49	0
104	SLU 30	-4	-9	2342	48.53	1.96	0.01
104	SLU 31	10	-19	2786	79.22	3.31	0.02
104	SLU 32	-69	13	2978	12.56	-0.76	0
104	SLU 33	-22	-6	2863	52.56	1.68	0.01
104	SLU 34	10	-19	2786	79.22	3.31	0.02
104	SLU 35	-69	13	2978	12.56	-0.76	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
104	SLU 36	-22	-6	2863	52.56	1.68	0.01
104	SLU 37	-69	13	2978	12.56	-0.76	0
104	SLU 38	-22	-6	2863	52.56	1.68	0.01
104	SLU 39	-76	15	3201	14.28	-0.88	0
104	SLU 40	-29	-5	3086	54.28	1.57	0.01
104	SLU 41	-76	15	3201	14.28	-0.88	0
104	SLU 42	-29	-5	3086	54.28	1.57	0.01
104	SLU 43	-50	12	2698	8.37	-0.27	0
104	SLU 44	29	-20	2506	75.04	3.8	0.02
104	SLU 45	-50	12	2698	8.37	-0.27	0
104	SLU 46	-3	-8	2583	48.37	2.17	0.01
104	SLU 47	29	-20	2506	75.04	3.8	0.02
104	SLU 48	-50	12	2698	8.37	-0.27	0
104	SLU 49	-3	-8	2583	48.37	2.17	0.01
104	SLU 50	-50	12	2698	8.37	-0.27	0
104	SLU 51	-3	-8	2583	48.37	2.17	0.01
104	SLU 52	11	-18	3027	79.06	3.53	0.02
104	SLU 53	-67	15	3219	12.4	-0.55	0
104	SLU 54	-21	-5	3104	52.4	1.9	0.01
104	SLU 55	11	-18	3027	79.06	3.53	0.02
104	SLU 56	-67	15	3219	12.4	-0.55	0
104	SLU 57	-21	-5	3104	52.4	1.9	0.01
104	SLU 58	-67	15	3219	12.4	-0.55	0
104	SLU 59	-21	-5	3104	52.4	1.9	0.01
104	SLU 60	-75	16	3442	14.12	-0.66	0
104	SLU 61	-28	-4	3327	54.12	1.78	0.01
104	SLU 62	-75	16	3442	14.12	-0.66	0
104	SLU 63	-28	-4	3327	54.12	1.78	0.01
104	SLU 64	-60	13	3000	10.03	-0.49	0
104	SLU 65	19	-19	2808	76.7	3.58	0.02
104	SLU 66	-60	13	3000	10.03	-0.49	0
104	SLU 67	-13	-6	2885	50.03	1.95	0.01
104	SLU 68	19	-19	2808	76.7	3.58	0.02
104	SLU 69	-60	13	3000	10.03	-0.49	0
104	SLU 70	-13	-6	2885	50.03	1.95	0.01
104	SLU 71	-60	13	3000	10.03	-0.49	0
104	SLU 72	-13	-6	2885	50.03	1.95	0.01
104	SLU 73	1	-16	3329	80.72	3.31	0.02
104	SLU 74	-77	16	3521	14.05	-0.77	0
104	SLU 75	-30	-4	3406	54.05	1.68	0.01
104	SLU 76	1	-16	3329	80.72	3.31	0.02
104	SLU 77	-77	16	3521	14.05	-0.77	0
104	SLU 78	-30	-4	3406	54.05	1.68	0.01
104	SLU 79	-77	16	3521	14.05	-0.77	0
104	SLU 80	-30	-4	3406	54.05	1.68	0.01
104	SLU 81	-85	17	3744	15.78	-0.88	0
104	SLU 82	-38	-2	3629	55.78	1.56	0.01
104	SLU 83	-85	17	3744	15.78	-0.88	0
104	SLU 84	-38	-2	3629	55.78	1.56	0.01
104	SLE RA 1	-44	10	2241	7.35	-0.33	0
104	SLE RA 2	9	-12	2114	51.79	2.38	0.01
104	SLE RA 3	-44	10	2241	7.35	-0.33	0
104	SLE RA 4	-12	-3	2165	34.02	1.3	0.01
104	SLE RA 5	9	-12	2114	51.79	2.38	0.01
104	SLE RA 6	-44	10	2241	7.35	-0.33	0
104	SLE RA 7	-12	-3	2165	34.02	1.3	0.01
104	SLE RA 8	-44	10	2241	7.35	-0.33	0
104	SLE RA 9	-12	-3	2165	34.02	1.3	0.01
104	SLE RA 10	-3	-10	2461	54.48	2.2	0.01
104	SLE RA 11	-56	12	2589	10.03	-0.51	0
104	SLE RA 12	-24	-1	2512	36.7	1.12	0.01
104	SLE RA 13	-3	-10	2461	54.48	2.2	0.01
104	SLE RA 14	-56	12	2589	10.03	-0.51	0
104	SLE RA 15	-24	-1	2512	36.7	1.12	0.01
104	SLE RA 16	-56	12	2589	10.03	-0.51	0
104	SLE RA 17	-24	-1	2512	36.7	1.12	0.01
104	SLE RA 18	-61	12	2738	11.18	-0.59	0
104	SLE RA 19	-29	-1	2661	37.85	1.04	0.01
104	SLE RA 20	-61	12	2738	11.18	-0.59	0
104	SLE RA 21	-29	-1	2661	37.85	1.04	0.01
104	SLE FR 1	-44	10	2241	7.35	-0.33	0
104	SLE FR 2	-33	5	2216	16.24	0.21	0
104	SLE FR 3	-44	10	2241	7.35	-0.33	0
104	SLE FR 4	-38	6	2365	17.39	0.13	0
104	SLE FR 5	-49	11	2390	8.5	-0.41	0
104	SLE FR 6	-52	11	2490	9.27	-0.46	0
104	SLE QP 1	-44	10	2241	7.35	-0.33	0
104	SLE QP 2	-49	11	2390	8.5	-0.41	0
104	SLD 1	150	22	2404	-10.46	7.57	0.01
104	SLD 2	150	22	2404	-10.46	7.57	0.01
104	SLD 3	183	-9	2260	34.97	9.18	0.02
104	SLD 4	183	-9	2260	34.97	9.18	0.02
104	SLD 5	-40	60	2614	-66.09	-0.45	-0.02
104	SLD 6	-40	60	2614	-66.09	-0.45	-0.02
104	SLD 7	71	-41	2132	85.34	4.9	0.03
104	SLD 8	71	-41	2132	85.34	4.9	0.03
104	SLD 9	-169	63	2649	-68.34	-5.72	-0.03
104	SLD 10	-169	63	2649	-68.34	-5.72	-0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
104	SLD 11	-58	-39	2167	83.09	-0.37	0.02
104	SLD 12	-58	-39	2167	83.09	-0.37	0.02
104	SLD 13	-281	30	2521	-17.97	-9.99	-0.02
104	SLD 14	-281	30	2521	-17.97	-9.99	-0.02
104	SLD 15	-247	-1	2377	27.46	-8.39	-0.01
104	SLD 16	-247	-1	2377	27.46	-8.39	-0.01
104	SLV 1	415	40	2434	-40.44	18.16	0.02
104	SLV 2	415	40	2434	-40.44	18.16	0.02
104	SLV 3	500	-38	2066	76.45	22.3	0.05
104	SLV 4	500	-38	2066	76.45	22.3	0.05
104	SLV 5	-38	138	2961	-183.46	-1.13	-0.05
104	SLV 6	-38	138	2961	-183.46	-1.13	-0.05
104	SLV 7	244	-122	1736	206.16	12.69	0.07
104	SLV 8	244	-122	1736	206.16	12.69	0.07
104	SLV 9	-342	144	3045	-189.17	-13.51	-0.07
104	SLV 10	-342	144	3045	-189.17	-13.51	-0.07
104	SLV 11	-59	-117	1820	200.46	0.31	0.05
104	SLV 12	-59	-117	1820	200.46	0.31	0.05
104	SLV 13	-597	59	2715	-59.45	-23.12	-0.05
104	SLV 14	-597	59	2715	-59.45	-23.12	-0.05
104	SLV 15	-512	-19	2347	57.44	-18.97	-0.02
104	SLV 16	-512	-19	2347	57.44	-18.97	-0.02
105	SLU 1	-128	11	2077	5.29	-6.27	0.01
105	SLU 2	-27	-17	1870	67.2	-3.33	0.01
105	SLU 3	-128	11	2077	5.29	-6.27	0.01
105	SLU 4	-67	-6	1953	42.43	-4.51	0.01
105	SLU 5	-27	-17	1870	67.2	-3.33	0.01
105	SLU 6	-128	11	2077	5.29	-6.27	0.01
105	SLU 7	-67	-6	1953	42.43	-4.51	0.01
105	SLU 8	-128	11	2077	5.29	-6.27	0.01
105	SLU 9	-67	-6	1953	42.43	-4.51	0.01
105	SLU 10	-76	-14	2366	70.61	-5.64	0.01
105	SLU 11	-177	14	2573	8.69	-8.57	0.01
105	SLU 12	-116	-3	2449	45.84	-6.81	0.01
105	SLU 13	-76	-14	2366	70.61	-5.64	0.01
105	SLU 14	-177	14	2573	8.69	-8.57	0.01
105	SLU 15	-116	-3	2449	45.84	-6.81	0.01
105	SLU 16	-177	14	2573	8.69	-8.57	0.01
105	SLU 17	-116	-3	2449	45.84	-6.81	0.01
105	SLU 18	-197	15	2785	10.15	-9.56	0.01
105	SLU 19	-137	-1	2661	47.3	-7.8	0.01
105	SLU 20	-197	15	2785	10.15	-9.56	0.01
105	SLU 21	-137	-1	2661	47.3	-7.8	0.01
105	SLU 22	-153	12	2365	6.7	-7.38	0.01
105	SLU 23	-53	-16	2159	68.61	-4.45	0.01
105	SLU 24	-153	12	2365	6.7	-7.38	0.01
105	SLU 25	-93	-5	2241	43.85	-5.63	0.01
105	SLU 26	-53	-16	2159	68.61	-4.45	0.01
105	SLU 27	-153	12	2365	6.7	-7.38	0.01
105	SLU 28	-93	-5	2241	43.85	-5.63	0.01
105	SLU 29	-153	12	2365	6.7	-7.38	0.01
105	SLU 30	-93	-5	2241	43.85	-5.63	0.01
105	SLU 31	-101	-13	2655	72.02	-6.76	0.02
105	SLU 32	-202	15	2861	10.11	-9.69	0.01
105	SLU 33	-142	-1	2737	47.25	-7.93	0.01
105	SLU 34	-101	-13	2655	72.02	-6.76	0.02
105	SLU 35	-202	15	2861	10.11	-9.69	0.01
105	SLU 36	-142	-1	2737	47.25	-7.93	0.01
105	SLU 37	-202	15	2861	10.11	-9.69	0.01
105	SLU 38	-142	-1	2737	47.25	-7.93	0.01
105	SLU 39	-223	17	3074	11.56	-10.68	0.01
105	SLU 40	-162	0	2950	48.71	-8.92	0.01
105	SLU 41	-223	17	3074	11.56	-10.68	0.01
105	SLU 42	-162	0	2950	48.71	-8.92	0.01
105	SLU 43	-157	13	2601	6.39	-7.76	0.01
105	SLU 44	-57	-14	2395	68.3	-4.83	0.01
105	SLU 45	-157	13	2601	6.39	-7.76	0.01
105	SLU 46	-97	-3	2477	43.53	-6	0.01
105	SLU 47	-57	-14	2395	68.3	-4.83	0.01
105	SLU 48	-157	13	2601	6.39	-7.76	0.01
105	SLU 49	-97	-3	2477	43.53	-6	0.01
105	SLU 50	-157	13	2601	6.39	-7.76	0.01
105	SLU 51	-97	-3	2477	43.53	-6	0.01
105	SLU 52	-106	-11	2891	71.71	-7.14	0.02
105	SLU 53	-206	17	3097	9.79	-10.07	0.01
105	SLU 54	-146	0	2973	46.94	-8.31	0.01
105	SLU 55	-106	-11	2891	71.71	-7.14	0.02
105	SLU 56	-206	17	3097	9.79	-10.07	0.01
105	SLU 57	-146	0	2973	46.94	-8.31	0.01
105	SLU 58	-206	17	3097	9.79	-10.07	0.01
105	SLU 59	-146	0	2973	46.94	-8.31	0.01
105	SLU 60	-227	18	3310	11.25	-11.06	0.01
105	SLU 61	-167	1	3186	48.4	-9.3	0.01
105	SLU 62	-227	18	3310	11.25	-11.06	0.01
105	SLU 63	-167	1	3186	48.4	-9.3	0.01
105	SLU 64	-183	15	2890	7.8	-8.88	0.01
105	SLU 65	-82	-13	2683	69.71	-5.95	0.01
105	SLU 66	-183	15	2890	7.8	-8.88	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
105	SLU 67	-122	-2	2766	44.95	-7.12	0.01
105	SLU 68	-82	-13	2683	69.71	-5.95	0.01
105	SLU 69	-183	15	2890	7.8	-8.88	0.01
105	SLU 70	-122	-2	2766	44.95	-7.12	0.01
105	SLU 71	-183	15	2890	7.8	-8.88	0.01
105	SLU 72	-122	-2	2766	44.95	-7.12	0.01
105	SLU 73	-131	-10	3179	73.12	-8.25	0.02
105	SLU 74	-231	18	3386	11.21	-11.19	0.01
105	SLU 75	-171	1	3262	48.35	-9.43	0.01
105	SLU 76	-131	-10	3179	73.12	-8.25	0.02
105	SLU 77	-231	18	3386	11.21	-11.19	0.01
105	SLU 78	-171	1	3262	48.35	-9.43	0.01
105	SLU 79	-231	18	3386	11.21	-11.19	0.01
105	SLU 80	-171	1	3262	48.35	-9.43	0.01
105	SLU 81	-252	19	3598	12.67	-12.17	0.01
105	SLU 82	-192	3	3474	49.81	-10.42	0.01
105	SLU 83	-252	19	3598	12.67	-12.17	0.01
105	SLU 84	-192	3	3474	49.81	-10.42	0.01
105	SLE RA 1	-135	11	2160	5.69	-6.59	0.01
105	SLE RA 2	-68	-8	2022	46.97	-4.63	0.01
105	SLE RA 3	-135	11	2160	5.69	-6.59	0.01
105	SLE RA 4	-95	0	2077	30.45	-5.41	0.01
105	SLE RA 5	-68	-8	2022	46.97	-4.63	0.01
105	SLE RA 6	-135	11	2160	5.69	-6.59	0.01
105	SLE RA 7	-95	0	2077	30.45	-5.41	0.01
105	SLE RA 8	-135	11	2160	5.69	-6.59	0.01
105	SLE RA 9	-95	0	2077	30.45	-5.41	0.01
105	SLE RA 10	-100	-5	2352	49.24	-6.17	0.01
105	SLE RA 11	-168	13	2490	7.96	-8.12	0.01
105	SLE RA 12	-127	2	2407	32.73	-6.95	0.01
105	SLE RA 13	-100	-5	2352	49.24	-6.17	0.01
105	SLE RA 14	-168	13	2490	7.96	-8.12	0.01
105	SLE RA 15	-127	2	2407	32.73	-6.95	0.01
105	SLE RA 16	-168	13	2490	7.96	-8.12	0.01
105	SLE RA 17	-127	2	2407	32.73	-6.95	0.01
105	SLE RA 18	-181	14	2632	8.93	-8.78	0.01
105	SLE RA 19	-141	3	2549	33.7	-7.61	0.01
105	SLE RA 20	-181	14	2632	8.93	-8.78	0.01
105	SLE RA 21	-141	3	2549	33.7	-7.61	0.01
105	SLE FR 1	-135	11	2160	5.69	-6.59	0.01
105	SLE FR 2	-122	7	2132	13.94	-6.19	0.01
105	SLE FR 3	-135	11	2160	5.69	-6.59	0.01
105	SLE FR 4	-136	8	2274	14.92	-6.85	0.01
105	SLE FR 5	-149	12	2301	6.66	-7.24	0.01
105	SLE FR 6	-158	13	2396	7.31	-7.68	0.01
105	SLE QP 1	-135	11	2160	5.69	-6.59	0.01
105	SLE QP 2	-149	12	2301	6.66	-7.24	0.01
105	SLD 1	47	21	2276	-9.98	0.82	0.02
105	SLD 2	47	21	2276	-9.98	0.82	0.02
105	SLD 3	93	-7	2161	32.7	2.52	0.03
105	SLD 4	93	-7	2161	32.7	2.52	0.03
105	SLD 5	-160	57	2469	-63.05	-7.41	0
105	SLD 6	-160	57	2469	-63.05	-7.41	0
105	SLD 7	-7	-36	2084	79.2	-1.73	0.02
105	SLD 8	-7	-36	2084	79.2	-1.73	0.02
105	SLD 9	-291	60	2518	-65.87	-12.76	-0.01
105	SLD 10	-291	60	2518	-65.87	-12.76	-0.01
105	SLD 11	-138	-33	2134	76.38	-7.08	0.01
105	SLD 12	-138	-33	2134	76.38	-7.08	0.01
105	SLD 13	-391	31	2442	-19.37	-17.01	-0.01
105	SLD 14	-391	31	2442	-19.37	-17.01	-0.01
105	SLD 15	-345	3	2326	23.3	-15.31	-0.01
105	SLD 16	-345	3	2326	23.3	-15.31	-0.01
105	SLV 1	307	35	2251	-36.28	11.54	0.04
105	SLV 2	307	35	2251	-36.28	11.54	0.04
105	SLV 3	425	-36	1956	73.49	15.87	0.06
105	SLV 4	425	-36	1956	73.49	15.87	0.06
105	SLV 5	-190	127	2734	-172.71	-8.17	-0.01
105	SLV 6	-190	127	2734	-172.71	-8.17	-0.01
105	SLV 7	201	-111	1749	193.2	6.25	0.05
105	SLV 8	201	-111	1749	193.2	6.25	0.05
105	SLV 9	-499	135	2853	-179.87	-20.74	-0.03
105	SLV 10	-499	135	2853	-179.87	-20.74	-0.03
105	SLV 11	-107	-103	1868	186.04	-6.32	0.02
105	SLV 12	-107	-103	1868	186.04	-6.32	0.02
105	SLV 13	-723	60	2646	-60.16	-30.35	-0.04
105	SLV 14	-723	60	2646	-60.16	-30.35	-0.04
105	SLV 15	-605	-11	2351	49.61	-26.03	-0.03
105	SLV 16	-605	-11	2351	49.61	-26.03	-0.03
106	SLU 1	-130	11	1949	3.58	-2.24	0.01
106	SLU 2	51	-13	1754	59.69	5.7	0.01
106	SLU 3	-130	11	1949	3.58	-2.24	0.01
106	SLU 4	-22	-3	1832	37.24	2.52	0.01
106	SLU 5	51	-13	1754	59.69	5.7	0.01
106	SLU 6	-130	11	1949	3.58	-2.24	0.01
106	SLU 7	-22	-3	1832	37.24	2.52	0.01
106	SLU 8	-130	11	1949	3.58	-2.24	0.01
106	SLU 9	-22	-3	1832	37.24	2.52	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
106	SLU 10	-3	-9	2207	62.42	4.51	0.01
106	SLU 11	-184	15	2402	6.31	-3.42	0.02
106	SLU 12	-76	0	2285	39.98	1.34	0.01
106	SLU 13	-3	-9	2207	62.42	4.51	0.01
106	SLU 14	-184	15	2402	6.31	-3.42	0.02
106	SLU 15	-76	0	2285	39.98	1.34	0.01
106	SLU 16	-184	15	2402	6.31	-3.42	0.02
106	SLU 17	-76	0	2285	39.98	1.34	0.01
106	SLU 18	-207	16	2596	7.49	-3.93	0.02
106	SLU 19	-99	2	2479	41.15	0.83	0.02
106	SLU 20	-207	16	2596	7.49	-3.93	0.02
106	SLU 21	-99	2	2479	41.15	0.83	0.02
106	SLU 22	-161	13	2213	4.73	-3.02	0.01
106	SLU 23	20	-11	2018	60.84	4.91	0.01
106	SLU 24	-161	13	2213	4.73	-3.02	0.01
106	SLU 25	-52	-2	2096	38.39	1.74	0.01
106	SLU 26	20	-11	2018	60.84	4.91	0.01
106	SLU 27	-161	13	2213	4.73	-3.02	0.01
106	SLU 28	-52	-2	2096	38.39	1.74	0.01
106	SLU 29	-161	13	2213	4.73	-3.02	0.01
106	SLU 30	-52	-2	2096	38.39	1.74	0.01
106	SLU 31	-34	-8	2471	63.58	3.72	0.01
106	SLU 32	-215	16	2665	7.47	-4.21	0.02
106	SLU 33	-106	2	2548	41.13	0.55	0.02
106	SLU 34	-34	-8	2471	63.58	3.72	0.01
106	SLU 35	-215	16	2665	7.47	-4.21	0.02
106	SLU 36	-106	2	2548	41.13	0.55	0.02
106	SLU 37	-215	16	2665	7.47	-4.21	0.02
106	SLU 38	-106	2	2548	41.13	0.55	0.02
106	SLU 39	-238	18	2860	8.64	-4.72	0.02
106	SLU 40	-129	3	2743	42.3	0.04	0.02
106	SLU 41	-238	18	2860	8.64	-4.72	0.02
106	SLU 42	-129	3	2743	42.3	0.04	0.02
106	SLU 43	-159	14	2443	4.26	-2.64	0.02
106	SLU 44	22	-10	2248	60.36	5.3	0.01
106	SLU 45	-159	14	2443	4.26	-2.64	0.02
106	SLU 46	-50	0	2326	37.92	2.12	0.01
106	SLU 47	22	-10	2248	60.36	5.3	0.01
106	SLU 48	-159	14	2443	4.26	-2.64	0.02
106	SLU 49	-50	0	2326	37.92	2.12	0.01
106	SLU 50	-159	14	2443	4.26	-2.64	0.02
106	SLU 51	-50	0	2326	37.92	2.12	0.01
106	SLU 52	-32	-6	2701	63.1	4.11	0.02
106	SLU 53	-213	18	2896	6.99	-3.82	0.02
106	SLU 54	-104	3	2779	40.66	0.94	0.02
106	SLU 55	-32	-6	2701	63.1	4.11	0.02
106	SLU 56	-213	18	2896	6.99	-3.82	0.02
106	SLU 57	-104	3	2779	40.66	0.94	0.02
106	SLU 58	-213	18	2896	6.99	-3.82	0.02
106	SLU 59	-104	3	2779	40.66	0.94	0.02
106	SLU 60	-236	19	3090	8.17	-4.33	0.02
106	SLU 61	-127	5	2973	41.83	0.43	0.02
106	SLU 62	-236	19	3090	8.17	-4.33	0.02
106	SLU 63	-127	5	2973	41.83	0.43	0.02
106	SLU 64	-189	16	2707	5.41	-3.42	0.02
106	SLU 65	-8	-8	2512	61.52	4.51	0.01
106	SLU 66	-189	16	2707	5.41	-3.42	0.02
106	SLU 67	-81	1	2590	39.07	1.34	0.01
106	SLU 68	-8	-8	2512	61.52	4.51	0.01
106	SLU 69	-189	16	2707	5.41	-3.42	0.02
106	SLU 70	-81	1	2590	39.07	1.34	0.01
106	SLU 71	-189	16	2707	5.41	-3.42	0.02
106	SLU 72	-81	1	2590	39.07	1.34	0.01
106	SLU 73	-62	-5	2965	64.25	3.32	0.02
106	SLU 74	-243	19	3160	8.14	-4.61	0.02
106	SLU 75	-135	5	3043	41.81	0.15	0.02
106	SLU 76	-62	-5	2965	64.25	3.32	0.02
106	SLU 77	-243	19	3160	8.14	-4.61	0.02
106	SLU 78	-135	5	3043	41.81	0.15	0.02
106	SLU 79	-243	19	3160	8.14	-4.61	0.02
106	SLU 80	-135	5	3043	41.81	0.15	0.02
106	SLU 81	-266	20	3354	9.32	-5.12	0.02
106	SLU 82	-158	6	3237	42.98	-0.36	0.02
106	SLU 83	-266	20	3354	9.32	-5.12	0.02
106	SLU 84	-158	6	3237	42.98	-0.36	0.02
106	SLE RA 1	-139	12	2024	3.91	-2.46	0.01
106	SLE RA 2	-18	-4	1894	41.31	2.83	0.01
106	SLE RA 3	-139	12	2024	3.91	-2.46	0.01
106	SLE RA 4	-66	2	1946	26.35	0.71	0.01
106	SLE RA 5	-18	-4	1894	41.31	2.83	0.01
106	SLE RA 6	-139	12	2024	3.91	-2.46	0.01
106	SLE RA 7	-66	2	1946	26.35	0.71	0.01
106	SLE RA 8	-139	12	2024	3.91	-2.46	0.01
106	SLE RA 9	-66	2	1946	26.35	0.71	0.01
106	SLE RA 10	-54	-2	2196	43.14	2.04	0.01
106	SLE RA 11	-175	14	2326	5.73	-3.25	0.02
106	SLE RA 12	-102	4	2248	28.17	-0.08	0.01
106	SLE RA 13	-54	-2	2196	43.14	2.04	0.01

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
106	SLE RA 14	-175	14	2326	5.73	-3.25	0.02
106	SLE RA 15	-102	4	2248	28.17	-0.08	0.01
106	SLE RA 16	-175	14	2326	5.73	-3.25	0.02
106	SLE RA 17	-102	4	2248	28.17	-0.08	0.01
106	SLE RA 18	-190	15	2455	6.51	-3.59	0.02
106	SLE RA 19	-118	5	2378	28.96	-0.42	0.01
106	SLE RA 20	-190	15	2455	6.51	-3.59	0.02
106	SLE RA 21	-118	5	2378	28.96	-0.42	0.01
106	SLE FR 1	-139	12	2024	3.91	-2.46	0.01
106	SLE FR 2	-115	8	1998	11.39	-1.4	0.01
106	SLE FR 3	-139	12	2024	3.91	-2.46	0.01
106	SLE FR 4	-130	9	2128	12.17	-1.74	0.01
106	SLE FR 5	-154	13	2154	4.69	-2.8	0.01
106	SLE FR 6	-164	13	2240	5.21	-3.03	0.01
106	SLE QP 1	-139	12	2024	3.91	-2.46	0.01
106	SLE QP 2	-154	13	2154	4.69	-2.8	0.01
106	SLD 1	34	19	2100	-9.39	4.19	-0.01
106	SLD 2	34	19	2100	-9.39	4.19	-0.01
106	SLD 3	110	-6	2011	29.75	7.35	0
106	SLD 4	110	-6	2011	29.75	7.35	0
106	SLD 5	-213	53	2273	-58.9	-5.51	-0.01
106	SLD 6	-213	53	2273	-58.9	-5.51	-0.01
106	SLD 7	40	-31	1975	71.57	5.05	0.03
106	SLD 8	40	-31	1975	71.57	5.05	0.03
106	SLD 9	-349	56	2332	-62.19	-10.65	0
106	SLD 10	-349	56	2332	-62.19	-10.65	0
106	SLD 11	-95	-27	2034	68.28	-0.09	0.04
106	SLD 12	-95	-27	2034	68.28	-0.09	0.04
106	SLD 13	-418	31	2296	-20.37	-12.96	0.02
106	SLD 14	-418	31	2296	-20.37	-12.96	0.02
106	SLD 15	-342	6	2207	18.77	-9.79	0.03
106	SLD 16	-342	6	2207	18.77	-9.79	0.03
106	SLV 1	278	30	2035	-31.67	13.21	-0.04
106	SLV 2	278	30	2035	-31.67	13.21	-0.04
106	SLV 3	475	-34	1805	68.96	21.47	-0.01
106	SLV 4	475	-34	1805	68.96	21.47	-0.01
106	SLV 5	-324	115	2467	-158.84	-10.52	-0.05
106	SLV 6	-324	115	2467	-158.84	-10.52	-0.05
106	SLV 7	334	-98	1700	176.59	17	0.05
106	SLV 8	334	-98	1700	176.59	17	0.05
106	SLV 9	-642	124	2607	-167.21	-22.6	-0.02
106	SLV 10	-642	124	2607	-167.21	-22.6	-0.02
106	SLV 11	16	-90	1840	168.21	4.92	0.07
106	SLV 12	16	-90	1840	168.21	4.92	0.07
106	SLV 13	-783	59	2502	-59.58	-27.07	0.04
106	SLV 14	-783	59	2502	-59.58	-27.07	0.04
106	SLV 15	-586	-5	2272	41.05	-18.81	0.06
106	SLV 16	-586	-5	2272	41.05	-18.81	0.06
107	SLU 1	-177	10	1782	2.05	-9.29	0.02
107	SLU 2	38	-12	1634	51.96	-2.31	0
107	SLU 3	-177	10	1782	2.05	-9.29	0.02
107	SLU 4	-48	-3	1693	32	-5.1	0.01
107	SLU 5	38	-12	1634	51.96	-2.31	0
107	SLU 6	-177	10	1782	2.05	-9.29	0.02
107	SLU 7	-48	-3	1693	32	-5.1	0.01
107	SLU 8	-177	10	1782	2.05	-9.29	0.02
107	SLU 9	-48	-3	1693	32	-5.1	0.01
107	SLU 10	-36	-9	2028	54.09	-5.92	0.01
107	SLU 11	-251	13	2176	4.18	-12.9	0.03
107	SLU 12	-122	0	2087	34.13	-8.71	0.02
107	SLU 13	-36	-9	2028	54.09	-5.92	0.01
107	SLU 14	-251	13	2176	4.18	-12.9	0.03
107	SLU 15	-122	0	2087	34.13	-8.71	0.02
107	SLU 16	-251	13	2176	4.18	-12.9	0.03
107	SLU 17	-122	0	2087	34.13	-8.71	0.02
107	SLU 18	-283	15	2345	5.09	-14.44	0.04
107	SLU 19	-154	1	2256	35.04	-10.25	0.02
107	SLU 20	-283	15	2345	5.09	-14.44	0.04
107	SLU 21	-154	1	2256	35.04	-10.25	0.02
107	SLU 22	-216	12	2013	2.96	-11.11	0.03
107	SLU 23	-1	-10	1865	52.88	-4.13	0
107	SLU 24	-216	12	2013	2.96	-11.11	0.03
107	SLU 25	-87	-2	1924	32.91	-6.92	0.01
107	SLU 26	-1	-10	1865	52.88	-4.13	0
107	SLU 27	-216	12	2013	2.96	-11.11	0.03
107	SLU 28	-87	-2	1924	32.91	-6.92	0.01
107	SLU 29	-216	12	2013	2.96	-11.11	0.03
107	SLU 30	-87	-2	1924	32.91	-6.92	0.01
107	SLU 31	-76	-7	2259	55.01	-7.73	0.01
107	SLU 32	-291	15	2407	5.09	-14.71	0.04
107	SLU 33	-162	1	2318	35.04	-10.53	0.02
107	SLU 34	-76	-7	2259	55.01	-7.73	0.01
107	SLU 35	-291	15	2407	5.09	-14.71	0.04
107	SLU 36	-162	1	2318	35.04	-10.53	0.02
107	SLU 37	-291	15	2407	5.09	-14.71	0.04
107	SLU 38	-162	1	2318	35.04	-10.53	0.02
107	SLU 39	-323	16	2576	6	-16.26	0.04
107	SLU 40	-194	3	2487	35.95	-12.07	0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
107	SLU 41	-323	16	2576	6	-16.26	0.04
107	SLU 42	-194	3	2487	35.95	-12.07	0.02
107	SLU 43	-216	13	2238	2.35	-11.46	0.03
107	SLU 44	-1	-9	2090	52.26	-4.48	0.01
107	SLU 45	-216	13	2238	2.35	-11.46	0.03
107	SLU 46	-87	0	2149	32.3	-7.27	0.02
107	SLU 47	-1	-9	2090	52.26	-4.48	0.01
107	SLU 48	-216	13	2238	2.35	-11.46	0.03
107	SLU 49	-87	0	2149	32.3	-7.27	0.02
107	SLU 50	-216	13	2238	2.35	-11.46	0.03
107	SLU 51	-87	0	2149	32.3	-7.27	0.02
107	SLU 52	-76	-6	2484	54.39	-8.08	0.01
107	SLU 53	-290	16	2632	4.48	-15.06	0.04
107	SLU 54	-162	3	2543	34.43	-10.87	0.02
107	SLU 55	-76	-6	2484	54.39	-8.08	0.01
107	SLU 56	-290	16	2632	4.48	-15.06	0.04
107	SLU 57	-162	3	2543	34.43	-10.87	0.02
107	SLU 58	-290	16	2632	4.48	-15.06	0.04
107	SLU 59	-162	3	2543	34.43	-10.87	0.02
107	SLU 60	-322	17	2800	5.39	-16.6	0.04
107	SLU 61	-194	4	2712	35.34	-12.42	0.03
107	SLU 62	-322	17	2800	5.39	-16.6	0.04
107	SLU 63	-194	4	2712	35.34	-12.42	0.03
107	SLU 64	-256	14	2468	3.26	-13.27	0.03
107	SLU 65	-41	-8	2320	53.18	-6.29	0.01
107	SLU 66	-256	14	2468	3.26	-13.27	0.03
107	SLU 67	-127	1	2380	33.21	-9.09	0.02
107	SLU 68	-41	-8	2320	53.18	-6.29	0.01
107	SLU 69	-256	14	2468	3.26	-13.27	0.03
107	SLU 70	-127	1	2380	33.21	-9.09	0.02
107	SLU 71	-256	14	2468	3.26	-13.27	0.03
107	SLU 72	-127	1	2380	33.21	-9.09	0.02
107	SLU 73	-115	-5	2714	55.31	-9.9	0.02
107	SLU 74	-330	17	2862	5.39	-16.88	0.04
107	SLU 75	-201	4	2774	35.34	-12.69	0.03
107	SLU 76	-115	-5	2714	55.31	-9.9	0.02
107	SLU 77	-330	17	2862	5.39	-16.88	0.04
107	SLU 78	-201	4	2774	35.34	-12.69	0.03
107	SLU 79	-330	17	2862	5.39	-16.88	0.04
107	SLU 80	-201	4	2774	35.34	-12.69	0.03
107	SLU 81	-362	19	3031	6.3	-18.42	0.05
107	SLU 82	-233	5	2942	36.25	-14.23	0.03
107	SLU 83	-362	19	3031	6.3	-18.42	0.05
107	SLU 84	-233	5	2942	36.25	-14.23	0.03
107	SLE RA 1	-188	11	1848	2.31	-9.81	0.03
107	SLE RA 2	-45	-4	1749	35.59	-5.16	0.01
107	SLE RA 3	-188	11	1848	2.31	-9.81	0.03
107	SLE RA 4	-102	2	1789	22.27	-7.02	0.02
107	SLE RA 5	-45	-4	1749	35.59	-5.16	0.01
107	SLE RA 6	-188	11	1848	2.31	-9.81	0.03
107	SLE RA 7	-102	2	1789	22.27	-7.02	0.02
107	SLE RA 8	-188	11	1848	2.31	-9.81	0.03
107	SLE RA 9	-102	2	1789	22.27	-7.02	0.02
107	SLE RA 10	-94	-2	2012	37.01	-7.56	0.01
107	SLE RA 11	-238	13	2111	3.73	-12.21	0.03
107	SLE RA 12	-152	4	2051	23.69	-9.42	0.02
107	SLE RA 13	-94	-2	2012	37.01	-7.56	0.01
107	SLE RA 14	-238	13	2111	3.73	-12.21	0.03
107	SLE RA 15	-152	4	2051	23.69	-9.42	0.02
107	SLE RA 16	-238	13	2111	3.73	-12.21	0.03
107	SLE RA 17	-152	4	2051	23.69	-9.42	0.02
107	SLE RA 18	-259	14	2223	4.34	-13.24	0.03
107	SLE RA 19	-173	5	2164	24.3	-10.45	0.02
107	SLE RA 20	-259	14	2223	4.34	-13.24	0.03
107	SLE RA 21	-173	5	2164	24.3	-10.45	0.02
107	SLE FR 1	-188	11	1848	2.31	-9.81	0.03
107	SLE FR 2	-159	8	1828	8.96	-8.88	0.02
107	SLE FR 3	-188	11	1848	2.31	-9.81	0.03
107	SLE FR 4	-181	9	1941	9.57	-9.91	0.02
107	SLE FR 5	-209	12	1961	2.92	-10.84	0.03
107	SLE FR 6	-223	12	2036	3.32	-11.53	0.03
107	SLE QP 1	-188	11	1848	2.31	-9.81	0.03
107	SLE QP 2	-209	12	1961	2.92	-10.84	0.03
107	SLD 1	-13	17	1911	-8.6	-3.06	0.02
107	SLD 2	-13	17	1911	-8.6	-3.06	0.02
107	SLD 3	91	-6	1833	26.54	0.82	-0.01
107	SLD 4	91	-6	1833	26.54	0.82	-0.01
107	SLD 5	-308	47	2063	-53.84	-14.39	0.08
107	SLD 6	-308	47	2063	-53.84	-14.39	0.08
107	SLD 7	38	-28	1805	63.31	-1.46	-0.04
107	SLD 8	38	-28	1805	63.31	-1.46	-0.04
107	SLD 9	-456	51	2116	-57.47	-20.22	0.09
107	SLD 10	-456	51	2116	-57.47	-20.22	0.09
107	SLD 11	-111	-24	1858	59.68	-7.29	-0.02
107	SLD 12	-111	-24	1858	59.68	-7.29	-0.02
107	SLD 13	-509	29	2088	-20.71	-22.5	0.07
107	SLD 14	-509	29	2088	-20.71	-22.5	0.07
107	SLD 15	-405	7	2010	14.44	-18.62	0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
107	SLD 16	-405	7	2010	14.44	-18.62	0.03
107	SLV 1	239	25	1846	-26.87	7.01	0.02
107	SLV 2	239	25	1846	-26.87	7.01	0.02
107	SLV 3	507	-33	1650	63.42	17	-0.07
107	SLV 4	507	-33	1650	63.42	17	-0.07
107	SLV 5	-482	103	2224	-142.96	-20.63	0.16
107	SLV 6	-482	103	2224	-142.96	-20.63	0.16
107	SLV 7	413	-89	1570	158.01	12.66	-0.14
107	SLV 8	413	-89	1570	158.01	12.66	-0.14
107	SLV 9	-831	112	2352	-152.17	-34.34	0.19
107	SLV 10	-831	112	2352	-152.17	-34.34	0.19
107	SLV 11	64	-80	1697	148.79	-1.05	-0.1
107	SLV 12	64	-80	1697	148.79	-1.05	-0.1
107	SLV 13	-926	56	2272	-57.59	-38.68	0.13
107	SLV 14	-926	56	2272	-57.59	-38.68	0.13
107	SLV 15	-657	-1	2075	32.7	-28.69	0.04
107	SLV 16	-657	-1	2075	32.7	-28.69	0.04
108	SLU 1	-27	9	1715	0.62	2.17	0.03
108	SLU 2	259	-11	1641	44	14.18	-0.02
108	SLU 3	-27	9	1715	0.62	2.17	0.03
108	SLU 4	145	-3	1671	26.65	9.38	0
108	SLU 5	259	-11	1641	44	14.18	-0.02
108	SLU 6	-27	9	1715	0.62	2.17	0.03
108	SLU 7	145	-3	1671	26.65	9.38	0
108	SLU 8	-27	9	1715	0.62	2.17	0.03
108	SLU 9	145	-3	1671	26.65	9.38	0
108	SLU 10	226	-9	2001	45.55	13.96	-0.01
108	SLU 11	-60	12	2075	2.17	1.94	0.04
108	SLU 12	112	-1	2031	28.2	9.15	0.01
108	SLU 13	226	-9	2001	45.55	13.96	-0.01
108	SLU 14	-60	12	2075	2.17	1.94	0.04
108	SLU 15	112	-1	2031	28.2	9.15	0.01
108	SLU 16	-60	12	2075	2.17	1.94	0.04
108	SLU 17	112	-1	2031	28.2	9.15	0.01
108	SLU 18	-74	13	2230	2.83	1.85	0.04
108	SLU 19	98	0	2185	28.86	9.05	0.01
108	SLU 20	-74	13	2230	2.83	1.85	0.04
108	SLU 21	98	0	2185	28.86	9.05	0.01
108	SLU 22	-47	10	1926	1.3	1.85	0.03
108	SLU 23	239	-10	1852	44.69	13.87	-0.02
108	SLU 24	-47	10	1926	1.3	1.85	0.03
108	SLU 25	125	-2	1882	27.33	9.06	0
108	SLU 26	239	-10	1852	44.69	13.87	-0.02
108	SLU 27	-47	10	1926	1.3	1.85	0.03
108	SLU 28	125	-2	1882	27.33	9.06	0
108	SLU 29	-47	10	1926	1.3	1.85	0.03
108	SLU 30	125	-2	1882	27.33	9.06	0
108	SLU 31	206	-8	2213	46.23	13.64	-0.01
108	SLU 32	-80	13	2287	2.85	1.63	0.04
108	SLU 33	92	0	2242	28.88	8.84	0.01
108	SLU 34	206	-8	2213	46.23	13.64	-0.01
108	SLU 35	-80	13	2287	2.85	1.63	0.04
108	SLU 36	92	0	2242	28.88	8.84	0.01
108	SLU 37	-80	13	2287	2.85	1.63	0.04
108	SLU 38	92	0	2242	28.88	8.84	0.01
108	SLU 39	-94	14	2441	3.51	1.53	0.04
108	SLU 40	78	1	2397	29.54	8.74	0.01
108	SLU 41	-94	14	2441	3.51	1.53	0.04
108	SLU 42	78	1	2397	29.54	8.74	0.01
108	SLU 43	-28	12	2157	0.57	2.93	0.04
108	SLU 44	258	-9	2083	43.95	14.94	-0.01
108	SLU 45	-28	12	2157	0.57	2.93	0.04
108	SLU 46	144	-1	2113	26.6	10.13	0.01
108	SLU 47	258	-9	2083	43.95	14.94	-0.01
108	SLU 48	-28	12	2157	0.57	2.93	0.04
108	SLU 49	144	-1	2113	26.6	10.13	0.01
108	SLU 50	-28	12	2157	0.57	2.93	0.04
108	SLU 51	144	-1	2113	26.6	10.13	0.01
108	SLU 52	225	-6	2443	45.5	14.71	-0.01
108	SLU 53	-61	14	2517	2.12	2.7	0.04
108	SLU 54	111	2	2473	28.15	9.91	0.01
108	SLU 55	225	-6	2443	45.5	14.71	-0.01
108	SLU 56	-61	14	2517	2.12	2.7	0.04
108	SLU 57	111	2	2473	28.15	9.91	0.01
108	SLU 58	-61	14	2517	2.12	2.7	0.04
108	SLU 59	111	2	2473	28.15	9.91	0.01
108	SLU 60	-75	15	2672	2.78	2.61	0.05
108	SLU 61	97	3	2627	28.81	9.81	0.02
108	SLU 62	-75	15	2672	2.78	2.61	0.05
108	SLU 63	97	3	2627	28.81	9.81	0.02
108	SLU 64	-48	13	2368	1.25	2.61	0.04
108	SLU 65	238	-8	2294	44.64	14.62	-0.01
108	SLU 66	-48	13	2368	1.25	2.61	0.04
108	SLU 67	124	0	2324	27.28	9.82	0.01
108	SLU 68	238	-8	2294	44.64	14.62	-0.01
108	SLU 69	-48	13	2368	1.25	2.61	0.04
108	SLU 70	124	0	2324	27.28	9.82	0.01
108	SLU 71	-48	13	2368	1.25	2.61	0.04

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
108	SLU 72	124	0	2324	27.28	9.82	0.01
108	SLU 73	205	-5	2655	46.19	14.4	0
108	SLU 74	-81	15	2729	2.8	2.39	0.05
108	SLU 75	91	3	2684	28.83	9.59	0.02
108	SLU 76	205	-5	2655	46.19	14.4	0
108	SLU 77	-81	15	2729	2.8	2.39	0.05
108	SLU 78	91	3	2684	28.83	9.59	0.02
108	SLU 79	-81	15	2729	2.8	2.39	0.05
108	SLU 80	91	3	2684	28.83	9.59	0.02
108	SLU 81	-95	16	2883	3.46	2.29	0.05
108	SLU 82	77	4	2839	29.49	9.5	0.02
108	SLU 83	-95	16	2883	3.46	2.29	0.05
108	SLU 84	77	4	2839	29.49	9.5	0.02
108	SLE RA 1	-32	10	1775	0.81	2.08	0.03
108	SLE RA 2	158	-4	1726	29.74	10.09	0
108	SLE RA 3	-32	10	1775	0.81	2.08	0.03
108	SLE RA 4	82	1	1746	18.17	6.88	0.01
108	SLE RA 5	158	-4	1726	29.74	10.09	0
108	SLE RA 6	-32	10	1775	0.81	2.08	0.03
108	SLE RA 7	82	1	1746	18.17	6.88	0.01
108	SLE RA 8	-32	10	1775	0.81	2.08	0.03
108	SLE RA 9	82	1	1746	18.17	6.88	0.01
108	SLE RA 10	136	-3	1966	30.77	9.94	0
108	SLE RA 11	-54	11	2015	1.85	1.93	0.03
108	SLE RA 12	60	3	1986	19.2	6.73	0.01
108	SLE RA 13	136	-3	1966	30.77	9.94	0
108	SLE RA 14	-54	11	2015	1.85	1.93	0.03
108	SLE RA 15	60	3	1986	19.2	6.73	0.01
108	SLE RA 16	-54	11	2015	1.85	1.93	0.03
108	SLE RA 17	60	3	1986	19.2	6.73	0.01
108	SLE RA 18	-64	12	2118	2.29	1.86	0.04
108	SLE RA 19	51	4	2089	19.64	6.67	0.02
108	SLE RA 20	-64	12	2118	2.29	1.86	0.04
108	SLE RA 21	51	4	2089	19.64	6.67	0.02
108	SLE FR 1	-32	10	1775	0.81	2.08	0.03
108	SLE FR 2	6	7	1765	6.6	3.68	0.02
108	SLE FR 3	-32	10	1775	0.81	2.08	0.03
108	SLE FR 4	-4	8	1868	7.04	3.62	0.03
108	SLE FR 5	-42	10	1878	1.26	2.01	0.03
108	SLE FR 6	-48	11	1947	1.55	1.97	0.03
108	SLE QP 1	-32	10	1775	0.81	2.08	0.03
108	SLE QP 2	-42	10	1878	1.26	2.01	0.03
108	SLD 1	140	14	1849	-7.78	8.57	0.04
108	SLD 2	140	14	1849	-7.78	8.57	0.04
108	SLD 3	274	-6	1770	23.02	13.95	-0.01
108	SLD 4	274	-6	1770	23.02	13.95	-0.01
108	SLD 5	-190	43	1990	-48.17	-4.17	0.11
108	SLD 6	-190	43	1990	-48.17	-4.17	0.11
108	SLD 7	256	-26	1725	54.5	13.75	-0.06
108	SLD 8	256	-26	1725	54.5	13.75	-0.06
108	SLD 9	-339	47	2031	-51.99	-9.72	0.13
108	SLD 10	-339	47	2031	-51.99	-9.72	0.13
108	SLD 11	106	-22	1767	50.68	8.2	-0.05
108	SLD 12	106	-22	1767	50.68	8.2	-0.05
108	SLD 13	-358	27	1987	-20.51	-9.92	0.08
108	SLD 14	-358	27	1987	-20.51	-9.92	0.08
108	SLD 15	-224	7	1907	10.29	-4.55	0.02
108	SLD 16	-224	7	1907	10.29	-4.55	0.02
108	SLV 1	370	20	1809	-22.19	16.76	0.05
108	SLV 2	370	20	1809	-22.19	16.76	0.05
108	SLV 3	717	-32	1613	56.86	30.73	-0.08
108	SLV 4	717	-32	1613	56.86	30.73	-0.08
108	SLV 5	-444	92	2155	-125.67	-14.74	0.24
108	SLV 6	-444	92	2155	-125.67	-14.74	0.24
108	SLV 7	712	-81	1502	137.83	31.81	-0.21
108	SLV 8	712	-81	1502	137.83	31.81	-0.21
108	SLV 9	-795	102	2255	-135.32	-27.78	0.27
108	SLV 10	-795	102	2255	-135.32	-27.78	0.27
108	SLV 11	361	-72	1602	128.18	18.77	-0.18
108	SLV 12	361	-72	1602	128.18	18.77	-0.18
108	SLV 13	-800	53	2144	-54.35	-26.7	0.15
108	SLV 14	-800	53	2144	-54.35	-26.7	0.15
108	SLV 15	-454	1	1948	24.7	-12.73	0.01
108	SLV 16	-454	1	1948	24.7	-12.73	0.01
109	SLU 1	-33	10	1780	-0.83	-5.96	0.04
109	SLU 2	247	-8	1767	35.21	2.84	0
109	SLU 3	-33	10	1780	-0.83	-5.96	0.04
109	SLU 4	135	-1	1772	20.79	-0.68	0.01
109	SLU 5	247	-8	1767	35.21	2.84	0
109	SLU 6	-33	10	1780	-0.83	-5.96	0.04
109	SLU 7	135	-1	1772	20.79	-0.68	0.01
109	SLU 8	-33	10	1780	-0.83	-5.96	0.04
109	SLU 9	135	-1	1772	20.79	-0.68	0.01
109	SLU 10	210	-5	2132	36.12	0.04	0.01
109	SLU 11	-70	13	2145	0.09	-8.77	0.05
109	SLU 12	98	2	2137	21.71	-3.49	0.03
109	SLU 13	210	-5	2132	36.12	0.04	0.01
109	SLU 14	-70	13	2145	0.09	-8.77	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
109	SLU 15	98	2	2137	21.71	-3.49	0.03
109	SLU 16	-70	13	2145	0.09	-8.77	0.05
109	SLU 17	98	2	2137	21.71	-3.49	0.03
109	SLU 18	-86	14	2302	0.48	-9.98	0.05
109	SLU 19	82	3	2293	22.1	-4.69	0.03
109	SLU 20	-86	14	2302	0.48	-9.98	0.05
109	SLU 21	82	3	2293	22.1	-4.69	0.03
109	SLU 22	-53	11	1994	-0.4	-7.33	0.04
109	SLU 23	227	-7	1980	35.63	1.48	0
109	SLU 24	-53	11	1994	-0.4	-7.33	0.04
109	SLU 25	115	0	1986	21.22	-2.04	0.02
109	SLU 26	227	-7	1980	35.63	1.48	0
109	SLU 27	-53	11	1994	-0.4	-7.33	0.04
109	SLU 28	115	0	1986	21.22	-2.04	0.02
109	SLU 29	-53	11	1994	-0.4	-7.33	0.04
109	SLU 30	115	0	1986	21.22	-2.04	0.02
109	SLU 31	190	-4	2345	36.54	-1.33	0.01
109	SLU 32	-90	14	2359	0.51	-10.14	0.05
109	SLU 33	78	3	2351	22.13	-4.85	0.03
109	SLU 34	190	-4	2345	36.54	-1.33	0.01
109	SLU 35	-90	14	2359	0.51	-10.14	0.05
109	SLU 36	78	3	2351	22.13	-4.85	0.03
109	SLU 37	-90	14	2359	0.51	-10.14	0.05
109	SLU 38	78	3	2351	22.13	-4.85	0.03
109	SLU 39	-106	15	2515	0.9	-11.34	0.06
109	SLU 40	62	4	2507	22.52	-6.06	0.03
109	SLU 41	-106	15	2515	0.9	-11.34	0.06
109	SLU 42	62	4	2507	22.52	-6.06	0.03
109	SLU 43	-36	13	2241	-1.22	-7.29	0.05
109	SLU 44	244	-5	2228	34.82	1.52	0.01
109	SLU 45	-36	13	2241	-1.22	-7.29	0.05
109	SLU 46	132	2	2233	20.4	-2	0.02
109	SLU 47	244	-5	2228	34.82	1.52	0.01
109	SLU 48	-36	13	2241	-1.22	-7.29	0.05
109	SLU 49	132	2	2233	20.4	-2	0.02
109	SLU 50	-36	13	2241	-1.22	-7.29	0.05
109	SLU 51	132	2	2233	20.4	-2	0.02
109	SLU 52	207	-2	2593	35.73	-1.29	0.02
109	SLU 53	-73	15	2606	-0.31	-10.09	0.06
109	SLU 54	95	5	2598	21.31	-4.81	0.03
109	SLU 55	207	-2	2593	35.73	-1.29	0.02
109	SLU 56	-73	15	2606	-0.31	-10.09	0.06
109	SLU 57	95	5	2598	21.31	-4.81	0.03
109	SLU 58	-73	15	2606	-0.31	-10.09	0.06
109	SLU 59	95	5	2598	21.31	-4.81	0.03
109	SLU 60	-89	16	2762	0.09	-11.3	0.06
109	SLU 61	79	6	2754	21.71	-6.01	0.04
109	SLU 62	-89	16	2762	0.09	-11.3	0.06
109	SLU 63	79	6	2754	21.71	-6.01	0.04
109	SLU 64	-56	14	2455	-0.8	-8.65	0.05
109	SLU 65	224	-4	2441	35.24	0.16	0.01
109	SLU 66	-56	14	2455	-0.8	-8.65	0.05
109	SLU 67	112	3	2447	20.82	-3.37	0.03
109	SLU 68	224	-4	2441	35.24	0.16	0.01
109	SLU 69	-56	14	2455	-0.8	-8.65	0.05
109	SLU 70	112	3	2447	20.82	-3.37	0.03
109	SLU 71	-56	14	2455	-0.8	-8.65	0.05
109	SLU 72	112	3	2447	20.82	-3.37	0.03
109	SLU 73	187	-1	2806	36.15	-2.65	0.02
109	SLU 74	-93	16	2820	0.12	-11.46	0.06
109	SLU 75	75	6	2811	21.74	-6.17	0.04
109	SLU 76	187	-1	2806	36.15	-2.65	0.02
109	SLU 77	-93	16	2820	0.12	-11.46	0.06
109	SLU 78	75	6	2811	21.74	-6.17	0.04
109	SLU 79	-93	16	2820	0.12	-11.46	0.06
109	SLU 80	75	6	2811	21.74	-6.17	0.04
109	SLU 81	-109	17	2976	0.51	-12.66	0.07
109	SLU 82	59	7	2968	22.13	-7.38	0.04
109	SLU 83	-109	17	2976	0.51	-12.66	0.07
109	SLU 84	59	7	2968	22.13	-7.38	0.04
109	SLE RA 1	-39	10	1841	-0.71	-6.35	0.04
109	SLE RA 2	148	-2	1832	23.32	-0.48	0.01
109	SLE RA 3	-39	10	1841	-0.71	-6.35	0.04
109	SLE RA 4	73	3	1836	13.71	-2.83	0.02
109	SLE RA 5	148	-2	1832	23.32	-0.48	0.01
109	SLE RA 6	-39	10	1841	-0.71	-6.35	0.04
109	SLE RA 7	73	3	1836	13.71	-2.83	0.02
109	SLE RA 8	-39	10	1841	-0.71	-6.35	0.04
109	SLE RA 9	73	3	1836	13.71	-2.83	0.02
109	SLE RA 10	123	0	2076	23.93	-2.35	0.02
109	SLE RA 11	-63	12	2085	-0.1	-8.23	0.05
109	SLE RA 12	49	5	2079	14.32	-4.7	0.03
109	SLE RA 13	123	0	2076	23.93	-2.35	0.02
109	SLE RA 14	-63	12	2085	-0.1	-8.23	0.05
109	SLE RA 15	49	5	2079	14.32	-4.7	0.03
109	SLE RA 16	-63	12	2085	-0.1	-8.23	0.05
109	SLE RA 17	49	5	2079	14.32	-4.7	0.03
109	SLE RA 18	-74	13	2189	0.16	-9.03	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
109	SLE RA 19	38	6	2183	14.58	-5.51	0.03
109	SLE RA 20	-74	13	2189	0.16	-9.03	0.05
109	SLE RA 21	38	6	2183	14.58	-5.51	0.03
109	SLE FR 1	-39	10	1841	-0.71	-6.35	0.04
109	SLE FR 2	-1	8	1839	4.1	-5.18	0.03
109	SLE FR 3	-39	10	1841	-0.71	-6.35	0.04
109	SLE FR 4	-12	9	1944	4.36	-5.98	0.04
109	SLE FR 5	-49	11	1946	-0.44	-7.16	0.04
109	SLE FR 6	-56	12	2015	-0.27	-7.69	0.04
109	SLE QP 1	-39	10	1841	-0.71	-6.35	0.04
109	SLE QP 2	-49	11	1946	-0.44	-7.16	0.04
109	SLD 1	122	13	1830	-6.98	-0.24	0.04
109	SLD 2	122	13	1830	-6.98	-0.24	0.04
109	SLD 3	266	-5	1914	18.95	5.03	-0.01
109	SLD 4	266	-5	1914	18.95	5.03	-0.01
109	SLD 5	-216	39	1783	-41.73	-13.07	0.11
109	SLD 6	-216	39	1783	-41.73	-13.07	0.11
109	SLD 7	264	-21	2064	44.7	4.49	-0.04
109	SLD 8	264	-21	2064	44.7	4.49	-0.04
109	SLD 9	-362	43	1827	-45.59	-18.81	0.12
109	SLD 10	-362	43	1827	-45.59	-18.81	0.12
109	SLD 11	118	-17	2108	40.84	-1.24	-0.03
109	SLD 12	118	-17	2108	40.84	-1.24	-0.03
109	SLD 13	-365	27	1977	-19.84	-19.35	0.09
109	SLD 14	-365	27	1977	-19.84	-19.35	0.09
109	SLD 15	-221	9	2061	6.09	-14.08	0.04
109	SLD 16	-221	9	2061	6.09	-14.08	0.04
109	SLV 1	337	17	1668	-17.56	8.52	0.04
109	SLV 2	337	17	1668	-17.56	8.52	0.04
109	SLV 3	709	-29	1872	48.9	22.08	-0.07
109	SLV 4	709	-29	1872	48.9	22.08	-0.07
109	SLV 5	-499	81	1552	-106.38	-23.03	0.21
109	SLV 6	-499	81	1552	-106.38	-23.03	0.21
109	SLV 7	743	-70	2234	115.15	22.19	-0.17
109	SLV 8	743	-70	2234	115.15	22.19	-0.17
109	SLV 9	-842	92	1657	-116.04	-36.51	0.25
109	SLV 10	-842	92	1657	-116.04	-36.51	0.25
109	SLV 11	400	-59	2339	105.49	8.72	-0.13
109	SLV 12	400	-59	2339	105.49	8.72	-0.13
109	SLV 13	-807	51	2019	-49.79	-36.4	0.16
109	SLV 14	-807	51	2019	-49.79	-36.4	0.16
109	SLV 15	-435	6	2223	16.67	-22.83	0.04
109	SLV 16	-435	6	2223	16.67	-22.83	0.04
110	SLU 1	135	11	2013	-1.9	10.74	0.04
110	SLU 2	488	0	2050	25.81	26.46	0.02
110	SLU 3	135	11	2013	-1.9	10.74	0.04
110	SLU 4	347	4	2035	14.72	20.17	0.03
110	SLU 5	488	0	2050	25.81	26.46	0.02
110	SLU 6	135	11	2013	-1.9	10.74	0.04
110	SLU 7	347	4	2035	14.72	20.17	0.03
110	SLU 8	135	11	2013	-1.9	10.74	0.04
110	SLU 9	347	4	2035	14.72	20.17	0.03
110	SLU 10	504	3	2472	26.13	28.78	0.03
110	SLU 11	150	14	2434	-1.58	13.07	0.05
110	SLU 12	362	7	2457	15.05	22.5	0.04
110	SLU 13	504	3	2472	26.13	28.78	0.03
110	SLU 14	150	14	2434	-1.58	13.07	0.05
110	SLU 15	362	7	2457	15.05	22.5	0.04
110	SLU 16	150	14	2434	-1.58	13.07	0.05
110	SLU 17	362	7	2457	15.05	22.5	0.04
110	SLU 18	157	16	2615	-1.44	14.07	0.06
110	SLU 19	369	9	2637	15.19	23.49	0.05
110	SLU 20	157	16	2615	-1.44	14.07	0.06
110	SLU 21	369	9	2637	15.19	23.49	0.05
110	SLU 22	137	12	2255	-1.72	11.57	0.04
110	SLU 23	490	1	2292	25.98	27.29	0.03
110	SLU 24	137	12	2255	-1.72	11.57	0.04
110	SLU 25	349	6	2277	14.9	21	0.03
110	SLU 26	490	1	2292	25.98	27.29	0.03
110	SLU 27	137	12	2255	-1.72	11.57	0.04
110	SLU 28	349	6	2277	14.9	21	0.03
110	SLU 29	137	12	2255	-1.72	11.57	0.04
110	SLU 30	349	6	2277	14.9	21	0.03
110	SLU 31	506	4	2713	26.31	29.61	0.04
110	SLU 32	152	15	2676	-1.4	13.9	0.06
110	SLU 33	364	9	2699	15.23	23.33	0.05
110	SLU 34	506	4	2713	26.31	29.61	0.04
110	SLU 35	152	15	2676	-1.4	13.9	0.06
110	SLU 36	364	9	2699	15.23	23.33	0.05
110	SLU 37	152	15	2676	-1.4	13.9	0.06
110	SLU 38	364	9	2699	15.23	23.33	0.05
110	SLU 39	159	17	2857	-1.26	14.9	0.06
110	SLU 40	371	10	2879	15.37	24.32	0.05
110	SLU 41	159	17	2857	-1.26	14.9	0.06
110	SLU 42	371	10	2879	15.37	24.32	0.05
110	SLU 43	174	14	2534	-2.53	13.68	0.05
110	SLU 44	528	3	2571	25.17	29.4	0.03
110	SLU 45	174	14	2534	-2.53	13.68	0.05

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
110	SLU 46	386	7	2556	14.09	23.11	0.04
110	SLU 47	528	3	2571	25.17	29.4	0.03
110	SLU 48	174	14	2534	-2.53	13.68	0.05
110	SLU 49	386	7	2556	14.09	23.11	0.04
110	SLU 50	174	14	2534	-2.53	13.68	0.05
110	SLU 51	386	7	2556	14.09	23.11	0.04
110	SLU 52	544	6	2992	25.5	31.72	0.04
110	SLU 53	190	17	2955	-2.21	16.01	0.06
110	SLU 54	402	10	2978	14.42	25.44	0.05
110	SLU 55	544	6	2992	25.5	31.72	0.04
110	SLU 56	190	17	2955	-2.21	16.01	0.06
110	SLU 57	402	10	2978	14.42	25.44	0.05
110	SLU 58	190	17	2955	-2.21	16.01	0.06
110	SLU 59	402	10	2978	14.42	25.44	0.05
110	SLU 60	197	18	3136	-2.07	17	0.07
110	SLU 61	409	12	3158	14.56	26.43	0.06
110	SLU 62	197	18	3136	-2.07	17	0.07
110	SLU 63	409	12	3158	14.56	26.43	0.06
110	SLU 64	176	15	2776	-2.36	14.51	0.06
110	SLU 65	530	4	2813	25.35	30.23	0.04
110	SLU 66	176	15	2776	-2.36	14.51	0.06
110	SLU 67	388	8	2798	14.27	23.94	0.04
110	SLU 68	530	4	2813	25.35	30.23	0.04
110	SLU 69	176	15	2776	-2.36	14.51	0.06
110	SLU 70	388	8	2798	14.27	23.94	0.04
110	SLU 71	176	15	2776	-2.36	14.51	0.06
110	SLU 72	388	8	2798	14.27	23.94	0.04
110	SLU 73	546	7	3234	25.68	32.55	0.05
110	SLU 74	192	18	3197	-2.03	16.84	0.07
110	SLU 75	404	12	3219	14.6	26.27	0.06
110	SLU 76	546	7	3234	25.68	32.55	0.05
110	SLU 77	192	18	3197	-2.03	16.84	0.07
110	SLU 78	404	12	3219	14.6	26.27	0.06
110	SLU 79	192	18	3197	-2.03	16.84	0.07
110	SLU 80	404	12	3219	14.6	26.27	0.06
110	SLU 81	199	20	3378	-1.89	17.83	0.07
110	SLU 82	411	13	3400	14.74	27.26	0.06
110	SLU 83	199	20	3378	-1.89	17.83	0.07
110	SLU 84	411	13	3400	14.74	27.26	0.06
110	SLE RA 1	135	11	2082	-1.85	10.98	0.04
110	SLE RA 2	371	4	2107	16.62	21.46	0.03
110	SLE RA 3	135	11	2082	-1.85	10.98	0.04
110	SLE RA 4	277	7	2097	9.23	17.27	0.03
110	SLE RA 5	371	4	2107	16.62	21.46	0.03
110	SLE RA 6	135	11	2082	-1.85	10.98	0.04
110	SLE RA 7	277	7	2097	9.23	17.27	0.03
110	SLE RA 8	135	11	2082	-1.85	10.98	0.04
110	SLE RA 9	277	7	2097	9.23	17.27	0.03
110	SLE RA 10	381	6	2388	16.84	23.01	0.04
110	SLE RA 11	146	13	2363	-1.63	12.53	0.05
110	SLE RA 12	287	9	2378	9.45	18.82	0.04
110	SLE RA 13	381	6	2388	16.84	23.01	0.04
110	SLE RA 14	146	13	2363	-1.63	12.53	0.05
110	SLE RA 15	287	9	2378	9.45	18.82	0.04
110	SLE RA 16	146	13	2363	-1.63	12.53	0.05
110	SLE RA 17	287	9	2378	9.45	18.82	0.04
110	SLE RA 18	150	14	2483	-1.54	13.2	0.05
110	SLE RA 19	291	10	2498	9.54	19.48	0.05
110	SLE RA 20	150	14	2483	-1.54	13.2	0.05
110	SLE RA 21	291	10	2498	9.54	19.48	0.05
110	SLE FR 1	135	11	2082	-1.85	10.98	0.04
110	SLE FR 2	182	10	2087	1.84	13.08	0.04
110	SLE FR 3	135	11	2082	-1.85	10.98	0.04
110	SLE FR 4	187	11	2207	1.94	13.74	0.04
110	SLE FR 5	140	12	2202	-1.76	11.65	0.04
110	SLE FR 6	143	13	2283	-1.7	12.09	0.05
110	SLE QP 1	135	11	2082	-1.85	10.98	0.04
110	SLE QP 2	140	12	2202	-1.76	11.65	0.04
110	SLD 1	271	12	2070	-5.73	16.42	0.04
110	SLD 2	271	12	2070	-5.73	16.42	0.04
110	SLD 3	435	-2	2155	14.63	23.31	0
110	SLD 4	435	-2	2155	14.63	23.31	0
110	SLD 5	-70	32	2035	-33.83	2.64	0.09
110	SLD 6	-70	32	2035	-33.83	2.64	0.09
110	SLD 7	477	-12	2316	34.04	25.59	-0.02
110	SLD 8	477	-12	2316	34.04	25.59	-0.02
110	SLD 9	-198	37	2089	-37.55	-2.29	0.11
110	SLD 10	-198	37	2089	-37.55	-2.29	0.11
110	SLD 11	349	-8	2370	30.31	20.65	0
110	SLD 12	349	-8	2370	30.31	20.65	0
110	SLD 13	-156	26	2250	-18.15	-0.02	0.09
110	SLD 14	-156	26	2250	-18.15	-0.02	0.09
110	SLD 15	8	13	2334	2.21	6.87	0.05
110	SLD 16	8	13	2334	2.21	6.87	0.05
110	SLV 1	428	12	1890	-12.42	22.01	0.03
110	SLV 2	428	12	1890	-12.42	22.01	0.03
110	SLV 3	855	-22	2092	39.67	39.92	-0.06
110	SLV 4	855	-22	2092	39.67	39.92	-0.06

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
110	SLV 5	-420	63	1803	-83.96	-12.42	0.17
110	SLV 6	-420	63	1803	-83.96	-12.42	0.17
110	SLV 7	1001	-49	2475	89.67	47.3	-0.11
110	SLV 8	1001	-49	2475	89.67	47.3	-0.11
110	SLV 9	-722	74	1929	-93.19	-24.01	0.2
110	SLV 10	-722	74	1929	-93.19	-24.01	0.2
110	SLV 11	700	-39	2602	80.44	35.71	-0.08
110	SLV 12	700	-39	2602	80.44	35.71	-0.08
110	SLV 13	-575	47	2313	-43.19	-16.63	0.15
110	SLV 14	-575	47	2313	-43.19	-16.63	0.15
110	SLV 15	-149	13	2514	8.9	1.29	0.06
110	SLV 16	-149	13	2514	8.9	1.29	0.06
111	SLU 1	-95	9	2244	-1.88	-13.36	0.02
111	SLU 2	233	6	2314	17.25	-3.44	0.03
111	SLU 3	-95	9	2244	-1.88	-13.36	0.02
111	SLU 4	102	7	2286	9.6	-7.4	0.02
111	SLU 5	233	6	2314	17.25	-3.44	0.03
111	SLU 6	-95	9	2244	-1.88	-13.36	0.02
111	SLU 7	102	7	2286	9.6	-7.4	0.02
111	SLU 8	-95	9	2244	-1.88	-13.36	0.02
111	SLU 9	102	7	2286	9.6	-7.4	0.02
111	SLU 10	184	9	2796	17.28	-8.26	0.03
111	SLU 11	-145	12	2726	-1.85	-18.18	0.03
111	SLU 12	52	10	2768	9.63	-12.23	0.03
111	SLU 13	184	9	2796	17.28	-8.26	0.03
111	SLU 14	-145	12	2726	-1.85	-18.18	0.03
111	SLU 15	52	10	2768	9.63	-12.23	0.03
111	SLU 16	-145	12	2726	-1.85	-18.18	0.03
111	SLU 17	52	10	2768	9.63	-12.23	0.03
111	SLU 18	-166	14	2932	-1.83	-20.24	0.03
111	SLU 19	31	12	2974	9.65	-14.29	0.03
111	SLU 20	-166	14	2932	-1.83	-20.24	0.03
111	SLU 21	31	12	2974	9.65	-14.29	0.03
111	SLU 22	-126	11	2514	-1.82	-15.86	0.02
111	SLU 23	202	7	2584	17.31	-5.94	0.03
111	SLU 24	-126	11	2514	-1.82	-15.86	0.02
111	SLU 25	71	9	2556	9.65	-9.91	0.03
111	SLU 26	202	7	2584	17.31	-5.94	0.03
111	SLU 27	-126	11	2514	-1.82	-15.86	0.02
111	SLU 28	71	9	2556	9.65	-9.91	0.03
111	SLU 29	-126	11	2514	-1.82	-15.86	0.02
111	SLU 30	71	9	2556	9.65	-9.91	0.03
111	SLU 31	152	10	3066	17.34	-10.76	0.04
111	SLU 32	-176	14	2996	-1.79	-20.68	0.03
111	SLU 33	21	12	3038	9.69	-14.73	0.03
111	SLU 34	152	10	3066	17.34	-10.76	0.04
111	SLU 35	-176	14	2996	-1.79	-20.68	0.03
111	SLU 36	21	12	3038	9.69	-14.73	0.03
111	SLU 37	-176	14	2996	-1.79	-20.68	0.03
111	SLU 38	21	12	3038	9.69	-14.73	0.03
111	SLU 39	-197	15	3203	-1.77	-22.75	0.03
111	SLU 40	0	13	3245	9.71	-16.8	0.04
111	SLU 41	-197	15	3203	-1.77	-22.75	0.03
111	SLU 42	0	13	3245	9.71	-16.8	0.04
111	SLU 43	-113	12	2824	-2.47	-16.5	0.03
111	SLU 44	216	9	2894	16.66	-6.58	0.03
111	SLU 45	-113	12	2824	-2.47	-16.5	0.03
111	SLU 46	84	10	2866	9.01	-10.55	0.03
111	SLU 47	216	9	2894	16.66	-6.58	0.03
111	SLU 48	-113	12	2824	-2.47	-16.5	0.03
111	SLU 49	84	10	2866	9.01	-10.55	0.03
111	SLU 50	-113	12	2824	-2.47	-16.5	0.03
111	SLU 51	84	10	2866	9.01	-10.55	0.03
111	SLU 52	166	11	3376	16.7	-11.41	0.04
111	SLU 53	-163	15	3306	-2.43	-21.33	0.03
111	SLU 54	34	13	3348	9.05	-15.37	0.04
111	SLU 55	166	11	3376	16.7	-11.41	0.04
111	SLU 56	-163	15	3306	-2.43	-21.33	0.03
111	SLU 57	34	13	3348	9.05	-15.37	0.04
111	SLU 58	-163	15	3306	-2.43	-21.33	0.03
111	SLU 59	34	13	3348	9.05	-15.37	0.04
111	SLU 60	-184	16	3513	-2.42	-23.39	0.04
111	SLU 61	13	14	3555	9.06	-17.44	0.04
111	SLU 62	-184	16	3513	-2.42	-23.39	0.04
111	SLU 63	13	14	3555	9.06	-17.44	0.04
111	SLU 64	-144	13	3094	-2.41	-19.01	0.03
111	SLU 65	185	10	3164	16.72	-9.09	0.03
111	SLU 66	-144	13	3094	-2.41	-19.01	0.03
111	SLU 67	53	11	3136	9.07	-13.06	0.03
111	SLU 68	185	10	3164	16.72	-9.09	0.03
111	SLU 69	-144	13	3094	-2.41	-19.01	0.03
111	SLU 70	53	11	3136	9.07	-13.06	0.03
111	SLU 71	-144	13	3094	-2.41	-19.01	0.03
111	SLU 72	53	11	3136	9.07	-13.06	0.03
111	SLU 73	135	13	3647	16.76	-13.91	0.04
111	SLU 74	-194	16	3576	-2.37	-23.83	0.04
111	SLU 75	3	14	3618	9.11	-17.88	0.04
111	SLU 76	135	13	3647	16.76	-13.91	0.04

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
111	SLU 77	-194	16	3576	-2.37	-23.83	0.04
111	SLU 78	3	14	3618	9.11	-17.88	0.04
111	SLU 79	-194	16	3576	-2.37	-23.83	0.04
111	SLU 80	3	14	3618	9.11	-17.88	0.04
111	SLU 81	-215	17	3783	-2.36	-25.9	0.04
111	SLU 82	-18	15	3825	9.12	-19.94	0.04
111	SLU 83	-215	17	3783	-2.36	-25.9	0.04
111	SLU 84	-18	15	3825	9.12	-19.94	0.04
111	SLE RA 1	-104	10	2321	-1.87	-14.07	0.02
111	SLE RA 2	115	8	2367	10.89	-7.46	0.03
111	SLE RA 3	-104	10	2321	-1.87	-14.07	0.02
111	SLE RA 4	27	8	2349	5.79	-10.1	0.02
111	SLE RA 5	115	8	2367	10.89	-7.46	0.03
111	SLE RA 6	-104	10	2321	-1.87	-14.07	0.02
111	SLE RA 7	27	8	2349	5.79	-10.1	0.02
111	SLE RA 8	-104	10	2321	-1.87	-14.07	0.02
111	SLE RA 9	27	8	2349	5.79	-10.1	0.02
111	SLE RA 10	82	10	2689	10.91	-10.67	0.03
111	SLE RA 11	-137	12	2642	-1.84	-17.29	0.03
111	SLE RA 12	-6	10	2670	5.81	-13.32	0.03
111	SLE RA 13	82	10	2689	10.91	-10.67	0.03
111	SLE RA 14	-137	12	2642	-1.84	-17.29	0.03
111	SLE RA 15	-6	10	2670	5.81	-13.32	0.03
111	SLE RA 16	-137	12	2642	-1.84	-17.29	0.03
111	SLE RA 17	-6	10	2670	5.81	-13.32	0.03
111	SLE RA 18	-151	13	2780	-1.83	-18.66	0.03
111	SLE RA 19	-20	11	2808	5.82	-14.69	0.03
111	SLE RA 20	-151	13	2780	-1.83	-18.66	0.03
111	SLE RA 21	-20	11	2808	5.82	-14.69	0.03
111	SLE FR 1	-104	10	2321	-1.87	-14.07	0.02
111	SLE FR 2	-60	9	2330	0.68	-12.75	0.02
111	SLE FR 3	-104	10	2321	-1.87	-14.07	0.02
111	SLE FR 4	-74	10	2468	0.7	-14.13	0.03
111	SLE FR 5	-118	11	2459	-1.86	-15.45	0.02
111	SLE FR 6	-128	11	2550	-1.85	-16.37	0.03
111	SLE QP 1	-104	10	2321	-1.87	-14.07	0.02
111	SLE QP 2	-118	11	2459	-1.86	-15.45	0.02
111	SLD 1	-5	-1	2308	-3.42	-10.15	0
111	SLD 2	-5	-1	2308	-3.42	-10.15	0
111	SLD 3	160	7	2391	10.93	-4.06	0.01
111	SLD 4	160	7	2391	10.93	-4.06	0.01
111	SLD 5	-336	-4	2288	-24.09	-23.1	0
111	SLD 6	-336	-4	2288	-24.09	-23.1	0
111	SLD 7	217	21	2564	23.74	-2.79	0.04
111	SLD 8	217	21	2564	23.74	-2.79	0.04
111	SLD 9	-453	0	2353	-27.45	-28.11	0.01
111	SLD 10	-453	0	2353	-27.45	-28.11	0.01
111	SLD 11	99	26	2629	20.37	-7.79	0.05
111	SLD 12	99	26	2629	20.37	-7.79	0.05
111	SLD 13	-397	14	2526	-14.64	-26.84	0.04
111	SLD 14	-397	14	2526	-14.64	-26.84	0.04
111	SLD 15	-231	22	2609	-0.29	-20.74	0.05
111	SLD 16	-231	22	2609	-0.29	-20.74	0.05
111	SLV 1	128	-17	2105	-6.45	-3.66	-0.04
111	SLV 2	128	-17	2105	-6.45	-3.66	-0.04
111	SLV 3	557	2	2301	30.19	12.03	-0.01
111	SLV 4	557	2	2301	30.19	12.03	-0.01
111	SLV 5	-695	-26	2055	-58.8	-35.72	-0.04
111	SLV 6	-695	-26	2055	-58.8	-35.72	-0.04
111	SLV 7	735	37	2709	63.32	16.6	0.05
111	SLV 8	735	37	2709	63.32	16.6	0.05
111	SLV 9	-971	-15	2208	-67.03	-47.5	-0.01
111	SLV 10	-971	-15	2208	-67.03	-47.5	-0.01
111	SLV 11	459	47	2862	55.09	4.82	0.08
111	SLV 12	459	47	2862	55.09	4.82	0.08
111	SLV 13	-793	19	2616	-33.9	-42.93	0.06
111	SLV 14	-793	19	2616	-33.9	-42.93	0.06
111	SLV 15	-364	38	2812	2.74	-27.24	0.09
111	SLV 16	-364	38	2812	2.74	-27.24	0.09
112	SLU 1	-12	3	2457	-0.52	8.55	0
112	SLU 2	408	5	2575	10.94	28.89	0.01
112	SLU 3	-12	3	2457	-0.52	8.55	0
112	SLU 4	240	4	2528	6.35	20.75	0
112	SLU 5	408	5	2575	10.94	28.89	0.01
112	SLU 6	-12	3	2457	-0.52	8.55	0
112	SLU 7	240	4	2528	6.35	20.75	0
112	SLU 8	-12	3	2457	-0.52	8.55	0
112	SLU 9	240	4	2528	6.35	20.75	0
112	SLU 10	388	6	3115	11.09	30.75	0.01
112	SLU 11	-32	5	2997	-0.37	10.41	0
112	SLU 12	220	6	3068	6.51	22.62	0
112	SLU 13	388	6	3115	11.09	30.75	0.01
112	SLU 14	-32	5	2997	-0.37	10.41	0
112	SLU 15	220	6	3068	6.51	22.62	0
112	SLU 16	-32	5	2997	-0.37	10.41	0
112	SLU 17	220	6	3068	6.51	22.62	0
112	SLU 18	-41	5	3228	-0.3	11.21	0
112	SLU 19	211	6	3299	6.57	23.42	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
112	SLU 20	-41	5	3228	-0.3	11.21	0
112	SLU 21	211	6	3299	6.57	23.42	0
112	SLU 22	-35	4	2751	-0.42	8.83	0
112	SLU 23	385	6	2868	11.05	29.17	0.01
112	SLU 24	-35	4	2751	-0.42	8.83	0
112	SLU 25	217	5	2821	6.46	21.03	0
112	SLU 26	385	6	2868	11.05	29.17	0.01
112	SLU 27	-35	4	2751	-0.42	8.83	0
112	SLU 28	217	5	2821	6.46	21.03	0
112	SLU 29	-35	4	2751	-0.42	8.83	0
112	SLU 30	217	5	2821	6.46	21.03	0
112	SLU 31	365	7	3408	11.2	31.03	0.01
112	SLU 32	-55	5	3291	-0.26	10.69	0
112	SLU 33	197	6	3361	6.62	22.9	0
112	SLU 34	365	7	3408	11.2	31.03	0.01
112	SLU 35	-55	5	3291	-0.26	10.69	0
112	SLU 36	197	6	3361	6.62	22.9	0
112	SLU 37	-55	5	3291	-0.26	10.69	0
112	SLU 38	197	6	3361	6.62	22.9	0
112	SLU 39	-64	6	3522	-0.2	11.49	0
112	SLU 40	188	7	3593	6.68	23.69	0
112	SLU 41	-64	6	3522	-0.2	11.49	0
112	SLU 42	188	7	3593	6.68	23.69	0
112	SLU 43	-8	4	3093	-0.72	11.02	0
112	SLU 44	413	6	3211	10.75	31.36	0.01
112	SLU 45	-8	4	3093	-0.72	11.02	0
112	SLU 46	245	5	3164	6.16	23.22	0
112	SLU 47	413	6	3211	10.75	31.36	0.01
112	SLU 48	-8	4	3093	-0.72	11.02	0
112	SLU 49	245	5	3164	6.16	23.22	0
112	SLU 50	-8	4	3093	-0.72	11.02	0
112	SLU 51	245	5	3164	6.16	23.22	0
112	SLU 52	392	7	3751	10.9	33.22	0.01
112	SLU 53	-28	5	3633	-0.57	12.88	0
112	SLU 54	224	6	3704	6.31	25.09	0
112	SLU 55	392	7	3751	10.9	33.22	0.01
112	SLU 56	-28	5	3633	-0.57	12.88	0
112	SLU 57	224	6	3704	6.31	25.09	0
112	SLU 58	-28	5	3633	-0.57	12.88	0
112	SLU 59	224	6	3704	6.31	25.09	0
112	SLU 60	-37	6	3865	-0.5	13.68	0
112	SLU 61	216	7	3935	6.38	25.89	0
112	SLU 62	-37	6	3865	-0.5	13.68	0
112	SLU 63	216	7	3935	6.38	25.89	0
112	SLU 64	-31	5	3387	-0.61	11.3	0
112	SLU 65	390	6	3505	10.85	31.64	0.01
112	SLU 66	-31	5	3387	-0.61	11.3	0
112	SLU 67	222	6	3458	6.27	23.5	0
112	SLU 68	390	6	3505	10.85	31.64	0.01
112	SLU 69	-31	5	3387	-0.61	11.3	0
112	SLU 70	222	6	3458	6.27	23.5	0
112	SLU 71	-31	5	3387	-0.61	11.3	0
112	SLU 72	222	6	3458	6.27	23.5	0
112	SLU 73	369	8	4045	11.01	33.5	0.01
112	SLU 74	-51	6	3927	-0.46	13.16	0
112	SLU 75	201	7	3998	6.42	25.36	0
112	SLU 76	369	8	4045	11.01	33.5	0.01
112	SLU 77	-51	6	3927	-0.46	13.16	0
112	SLU 78	201	7	3998	6.42	25.36	0
112	SLU 79	-51	6	3927	-0.46	13.16	0
112	SLU 80	201	7	3998	6.42	25.36	0
112	SLU 81	-60	6	4159	-0.39	13.96	-0.01
112	SLU 82	193	7	4229	6.49	26.16	0
112	SLU 83	-60	6	4159	-0.39	13.96	-0.01
112	SLU 84	193	7	4229	6.49	26.16	0
112	SLE RA 1	-18	3	2541	-0.49	8.63	0
112	SLE RA 2	262	5	2619	7.15	22.19	0
112	SLE RA 3	-18	3	2541	-0.49	8.63	0
112	SLE RA 4	150	4	2588	4.09	16.77	0
112	SLE RA 5	262	5	2619	7.15	22.19	0
112	SLE RA 6	-18	3	2541	-0.49	8.63	0
112	SLE RA 7	150	4	2588	4.09	16.77	0
112	SLE RA 8	-18	3	2541	-0.49	8.63	0
112	SLE RA 9	150	4	2588	4.09	16.77	0
112	SLE RA 10	248	5	2979	7.25	23.43	0
112	SLE RA 11	-32	4	2901	-0.39	9.87	0
112	SLE RA 12	136	5	2948	4.2	18.01	0
112	SLE RA 13	248	5	2979	7.25	23.43	0
112	SLE RA 14	-32	4	2901	-0.39	9.87	0
112	SLE RA 15	136	5	2948	4.2	18.01	0
112	SLE RA 16	-32	4	2901	-0.39	9.87	0
112	SLE RA 17	136	5	2948	4.2	18.01	0
112	SLE RA 18	-38	5	3055	-0.35	10.4	0
112	SLE RA 19	130	5	3102	4.24	18.54	0
112	SLE RA 20	-38	5	3055	-0.35	10.4	0
112	SLE RA 21	130	5	3102	4.24	18.54	0
112	SLE FR 1	-18	3	2541	-0.49	8.63	0
112	SLE FR 2	38	4	2557	1.03	11.34	0

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
112	SLE FR 3	-18	3	2541	-0.49	8.63	0
112	SLE FR 4	32	4	2711	1.08	11.87	0
112	SLE FR 5	-24	4	2695	-0.45	9.16	0
112	SLE FR 6	-28	4	2798	-0.42	9.52	0
112	SLE QP 1	-18	3	2541	-0.49	8.63	0
112	SLE QP 2	-24	4	2695	-0.45	9.16	0
112	SLD 1	62	-5	2486	-0.27	12.74	-0.03
112	SLD 2	62	-5	2486	-0.27	12.74	-0.03
112	SLD 3	256	-2	2587	8.32	21.58	-0.02
112	SLD 4	256	-2	2587	8.32	21.58	-0.02
112	SLD 5	-292	-3	2479	-13.42	-3.17	-0.02
112	SLD 6	-292	-3	2479	-13.42	-3.17	-0.02
112	SLD 7	354	6	2817	15.21	26.29	0
112	SLD 8	354	6	2817	15.21	26.29	0
112	SLD 9	-402	1	2574	-16.11	-7.97	-0.01
112	SLD 10	-402	1	2574	-16.11	-7.97	-0.01
112	SLD 11	244	11	2912	12.52	21.49	0.02
112	SLD 12	244	11	2912	12.52	21.49	0.02
112	SLD 13	-304	10	2803	-9.22	-3.26	0.01
112	SLD 14	-304	10	2803	-9.22	-3.26	0.01
112	SLD 15	-111	12	2905	-0.63	5.58	0.02
112	SLD 16	-111	12	2905	-0.63	5.58	0.02
112	SLV 1	155	-16	2200	-0.58	16.47	-0.06
112	SLV 2	155	-16	2200	-0.58	16.47	-0.06
112	SLV 3	659	-10	2445	21.31	39.48	-0.04
112	SLV 4	659	-10	2445	21.31	39.48	-0.04
112	SLV 5	-734	-12	2175	-33.7	-23.55	-0.05
112	SLV 6	-734	-12	2175	-33.7	-23.55	-0.05
112	SLV 7	944	10	2992	39.29	53.16	0.02
112	SLV 8	944	10	2992	39.29	53.16	0.02
112	SLV 9	-993	-2	2398	-40.19	-34.83	-0.02
112	SLV 10	-993	-2	2398	-40.19	-34.83	-0.02
112	SLV 11	685	20	3216	32.8	41.87	0.04
112	SLV 12	685	20	3216	32.8	41.87	0.04
112	SLV 13	-707	17	2945	-22.21	-21.16	0.03
112	SLV 14	-707	17	2945	-22.21	-21.16	0.03
112	SLV 15	-204	24	3191	-0.32	1.85	0.05
112	SLV 16	-204	24	3191	-0.32	1.85	0.05
113	SLU 1	-401	-6	2681	1.18	-29.25	-0.03
113	SLU 2	-93	-5	2780	6.54	-20.06	-0.03
113	SLU 3	-401	-6	2681	1.18	-29.25	-0.03
113	SLU 4	-216	-5	2740	4.4	-23.74	-0.03
113	SLU 5	-93	-5	2780	6.54	-20.06	-0.03
113	SLU 6	-401	-6	2681	1.18	-29.25	-0.03
113	SLU 7	-216	-5	2740	4.4	-23.74	-0.03
113	SLU 8	-401	-6	2681	1.18	-29.25	-0.03
113	SLU 9	-216	-5	2740	4.4	-23.74	-0.03
113	SLU 10	-223	-6	3375	6.93	-29.04	-0.04
113	SLU 11	-531	-8	3276	1.57	-38.23	-0.03
113	SLU 12	-346	-7	3335	4.79	-32.72	-0.04
113	SLU 13	-223	-6	3375	6.93	-29.04	-0.04
113	SLU 14	-531	-8	3276	1.57	-38.23	-0.03
113	SLU 15	-346	-7	3335	4.79	-32.72	-0.04
113	SLU 16	-531	-8	3276	1.57	-38.23	-0.03
113	SLU 17	-346	-7	3335	4.79	-32.72	-0.04
113	SLU 18	-586	-8	3531	1.73	-42.08	-0.03
113	SLU 19	-402	-7	3590	4.95	-36.57	-0.04
113	SLU 20	-586	-8	3531	1.73	-42.08	-0.03
113	SLU 21	-402	-7	3590	4.95	-36.57	-0.04
113	SLU 22	-476	-7	2997	1.39	-33.95	-0.03
113	SLU 23	-168	-6	3096	6.75	-24.77	-0.04
113	SLU 24	-476	-7	2997	1.39	-33.95	-0.03
113	SLU 25	-291	-6	3056	4.6	-28.44	-0.03
113	SLU 26	-168	-6	3096	6.75	-24.77	-0.04
113	SLU 27	-476	-7	2997	1.39	-33.95	-0.03
113	SLU 28	-291	-6	3056	4.6	-28.44	-0.03
113	SLU 29	-476	-7	2997	1.39	-33.95	-0.03
113	SLU 30	-291	-6	3056	4.6	-28.44	-0.03
113	SLU 31	-298	-7	3691	7.13	-33.75	-0.04
113	SLU 32	-606	-8	3592	1.77	-42.93	-0.04
113	SLU 33	-421	-7	3651	4.99	-37.43	-0.04
113	SLU 34	-298	-7	3691	7.13	-33.75	-0.04
113	SLU 35	-606	-8	3592	1.77	-42.93	-0.04
113	SLU 36	-421	-7	3651	4.99	-37.43	-0.04
113	SLU 37	-606	-8	3592	1.77	-42.93	-0.04
113	SLU 38	-421	-7	3651	4.99	-37.43	-0.04
113	SLU 39	-661	-9	3847	1.94	-46.78	-0.04
113	SLU 40	-477	-8	3906	5.16	-41.27	-0.04
113	SLU 41	-661	-9	3847	1.94	-46.78	-0.04
113	SLU 42	-477	-8	3906	5.16	-41.27	-0.04
113	SLU 43	-495	-8	3377	1.47	-36.4	-0.03
113	SLU 44	-188	-7	3476	6.83	-27.22	-0.04
113	SLU 45	-495	-8	3377	1.47	-36.4	-0.03
113	SLU 46	-311	-7	3437	4.68	-30.9	-0.04
113	SLU 47	-188	-7	3476	6.83	-27.22	-0.04
113	SLU 48	-495	-8	3377	1.47	-36.4	-0.03
113	SLU 49	-311	-7	3437	4.68	-30.9	-0.04
113	SLU 50	-495	-8	3377	1.47	-36.4	-0.03

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
113	SLU 51	-311	-7	3437	4.68	-30.9	-0.04
113	SLU 52	-318	-8	4071	7.22	-36.2	-0.05
113	SLU 53	-625	-9	3972	1.85	-45.39	-0.04
113	SLU 54	-441	-8	4031	5.07	-39.88	-0.04
113	SLU 55	-318	-8	4071	7.22	-36.2	-0.05
113	SLU 56	-625	-9	3972	1.85	-45.39	-0.04
113	SLU 57	-441	-8	4031	5.07	-39.88	-0.04
113	SLU 58	-625	-9	3972	1.85	-45.39	-0.04
113	SLU 59	-441	-8	4031	5.07	-39.88	-0.04
113	SLU 60	-681	-10	4227	2.02	-49.24	-0.04
113	SLU 61	-496	-9	4286	5.24	-43.73	-0.05
113	SLU 62	-681	-10	4227	2.02	-49.24	-0.04
113	SLU 63	-496	-9	4286	5.24	-43.73	-0.05
113	SLU 64	-570	-9	3693	1.67	-41.11	-0.03
113	SLU 65	-263	-7	3792	7.03	-31.93	-0.04
113	SLU 66	-570	-9	3693	1.67	-41.11	-0.03
113	SLU 67	-386	-8	3752	4.89	-35.6	-0.04
113	SLU 68	-263	-7	3792	7.03	-31.93	-0.04
113	SLU 69	-570	-9	3693	1.67	-41.11	-0.03
113	SLU 70	-386	-8	3752	4.89	-35.6	-0.04
113	SLU 71	-570	-9	3693	1.67	-41.11	-0.03
113	SLU 72	-386	-8	3752	4.89	-35.6	-0.04
113	SLU 73	-393	-9	4387	7.42	-40.91	-0.05
113	SLU 74	-700	-10	4288	2.06	-50.09	-0.04
113	SLU 75	-516	-9	4347	5.27	-44.58	-0.05
113	SLU 76	-393	-9	4387	7.42	-40.91	-0.05
113	SLU 77	-700	-10	4288	2.06	-50.09	-0.04
113	SLU 78	-516	-9	4347	5.27	-44.58	-0.05
113	SLU 79	-700	-10	4288	2.06	-50.09	-0.04
113	SLU 80	-516	-9	4347	5.27	-44.58	-0.05
113	SLU 81	-756	-10	4543	2.22	-53.94	-0.04
113	SLU 82	-571	-10	4602	5.44	-48.43	-0.05
113	SLU 83	-756	-10	4543	2.22	-53.94	-0.04
113	SLU 84	-571	-10	4602	5.44	-48.43	-0.05
113	SLE RA 1	-422	-6	2772	1.24	-30.59	-0.03
113	SLE RA 2	-217	-6	2837	4.82	-24.47	-0.03
113	SLE RA 3	-422	-6	2772	1.24	-30.59	-0.03
113	SLE RA 4	-299	-6	2811	3.39	-26.92	-0.03
113	SLE RA 5	-217	-6	2837	4.82	-24.47	-0.03
113	SLE RA 6	-422	-6	2772	1.24	-30.59	-0.03
113	SLE RA 7	-299	-6	2811	3.39	-26.92	-0.03
113	SLE RA 8	-422	-6	2772	1.24	-30.59	-0.03
113	SLE RA 9	-299	-6	2811	3.39	-26.92	-0.03
113	SLE RA 10	-304	-6	3234	5.07	-30.46	-0.04
113	SLE RA 11	-509	-7	3168	1.5	-36.58	-0.03
113	SLE RA 12	-386	-7	3208	3.64	-32.91	-0.03
113	SLE RA 13	-304	-6	3234	5.07	-30.46	-0.04
113	SLE RA 14	-509	-7	3168	1.5	-36.58	-0.03
113	SLE RA 15	-386	-7	3208	3.64	-32.91	-0.03
113	SLE RA 16	-509	-7	3168	1.5	-36.58	-0.03
113	SLE RA 17	-386	-7	3208	3.64	-32.91	-0.03
113	SLE RA 18	-546	-8	3338	1.61	-39.14	-0.03
113	SLE RA 19	-423	-7	3378	3.75	-35.47	-0.04
113	SLE RA 20	-546	-8	3338	1.61	-39.14	-0.03
113	SLE RA 21	-423	-7	3378	3.75	-35.47	-0.04
113	SLE FR 1	-422	-6	2772	1.24	-30.59	-0.03
113	SLE FR 2	-381	-6	2785	1.96	-29.37	-0.03
113	SLE FR 3	-422	-6	2772	1.24	-30.59	-0.03
113	SLE FR 4	-418	-7	2955	2.07	-31.93	-0.03
113	SLE FR 5	-459	-7	2942	1.35	-33.16	-0.03
113	SLE FR 6	-484	-7	3055	1.42	-34.87	-0.03
113	SLE QP 1	-422	-6	2772	1.24	-30.59	-0.03
113	SLE QP 2	-459	-7	2942	1.35	-33.16	-0.03
113	SLD 1	-366	-13	2595	2.05	-28.15	-0.02
113	SLD 2	-366	-13	2595	2.05	-28.15	-0.02
113	SLD 3	-197	-11	2764	5.87	-21.48	-0.02
113	SLD 4	-197	-11	2764	5.87	-21.48	-0.02
113	SLD 5	-689	-11	2581	-4.24	-41.77	-0.02
113	SLD 6	-689	-11	2581	-4.24	-41.77	-0.02
113	SLD 7	-123	-5	3145	8.51	-19.53	-0.03
113	SLD 8	-123	-5	3145	8.51	-19.53	-0.03
113	SLD 9	-795	-8	2738	-5.81	-46.78	-0.02
113	SLD 10	-795	-8	2738	-5.81	-46.78	-0.02
113	SLD 11	-230	-2	3302	6.94	-24.54	-0.04
113	SLD 12	-230	-2	3302	6.94	-24.54	-0.04
113	SLD 13	-722	-3	3119	-3.17	-44.84	-0.03
113	SLD 14	-722	-3	3119	-3.17	-44.84	-0.03
113	SLD 15	-552	-1	3289	0.66	-38.17	-0.04
113	SLD 16	-552	-1	3289	0.66	-38.17	-0.04
113	SLV 1	-260	-21	2117	2.73	-22.03	0
113	SLV 2	-260	-21	2117	2.73	-22.03	0
113	SLV 3	178	-16	2532	12.47	-4.92	-0.01
113	SLV 4	178	-16	2532	12.47	-4.92	-0.01
113	SLV 5	-1063	-18	2064	-13.01	-55.77	0
113	SLV 6	-1063	-18	2064	-13.01	-55.77	0
113	SLV 7	396	-3	3449	19.46	1.27	-0.04
113	SLV 8	396	-3	3449	19.46	1.27	-0.04
113	SLV 9	-1314	-11	2434	-16.76	-67.58	-0.02

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
113	SLV 10	-1314	-11	2434	-16.76	-67.58	-0.02
113	SLV 11	145	4	3819	15.71	-10.54	-0.05
113	SLV 12	145	4	3819	15.71	-10.54	-0.05
113	SLV 13	-1097	3	3351	-9.77	-61.39	-0.04
113	SLV 14	-1097	3	3351	-9.77	-61.39	-0.04
113	SLV 15	-659	7	3767	-0.03	-44.28	-0.05
113	SLV 16	-659	7	3767	-0.03	-44.28	-0.05
114	SLU 1	-367	-314	3152	2.23	-3.3	-0.02
114	SLU 2	-187	-353	3123	2.78	7.65	0.07
114	SLU 3	-367	-314	3152	2.23	-3.3	-0.02
114	SLU 4	-259	-337	3134	2.56	3.27	0.04
114	SLU 5	-187	-353	3123	2.78	7.65	0.07
114	SLU 6	-367	-314	3152	2.23	-3.3	-0.02
114	SLU 7	-259	-337	3134	2.56	3.27	0.04
114	SLU 8	-367	-314	3152	2.23	-3.3	-0.02
114	SLU 9	-259	-337	3134	2.56	3.27	0.04
114	SLU 10	-283	-395	3814	1.89	6.72	0.05
114	SLU 11	-463	-356	3842	1.34	-4.23	-0.03
114	SLU 12	-355	-380	3825	1.67	2.34	0.02
114	SLU 13	-283	-395	3814	1.89	6.72	0.05
114	SLU 14	-463	-356	3842	1.34	-4.23	-0.03
114	SLU 15	-355	-380	3825	1.67	2.34	0.02
114	SLU 16	-463	-356	3842	1.34	-4.23	-0.03
114	SLU 17	-355	-380	3825	1.67	2.34	0.02
114	SLU 18	-504	-374	4138	0.96	-4.62	-0.04
114	SLU 19	-396	-398	4121	1.29	1.95	0.01
114	SLU 20	-504	-374	4138	0.96	-4.62	-0.04
114	SLU 21	-396	-398	4121	1.29	1.95	0.01
114	SLU 22	-423	-336	3515	1.9	-4.17	-0.03
114	SLU 23	-243	-375	3487	2.45	6.78	0.06
114	SLU 24	-423	-336	3515	1.9	-4.17	-0.03
114	SLU 25	-315	-360	3498	2.23	2.4	0.03
114	SLU 26	-243	-375	3487	2.45	6.78	0.06
114	SLU 27	-423	-336	3515	1.9	-4.17	-0.03
114	SLU 28	-315	-360	3498	2.23	2.4	0.03
114	SLU 29	-423	-336	3515	1.9	-4.17	-0.03
114	SLU 30	-315	-360	3498	2.23	2.4	0.03
114	SLU 31	-340	-418	4178	1.57	5.85	0.04
114	SLU 32	-520	-378	4206	1.01	-5.1	-0.05
114	SLU 33	-412	-402	4189	1.34	1.47	0.01
114	SLU 34	-340	-418	4178	1.57	5.85	0.04
114	SLU 35	-520	-378	4206	1.01	-5.1	-0.05
114	SLU 36	-412	-402	4189	1.34	1.47	0.01
114	SLU 37	-520	-378	4206	1.01	-5.1	-0.05
114	SLU 38	-412	-402	4189	1.34	1.47	0.01
114	SLU 39	-561	-397	4502	0.63	-5.49	-0.06
114	SLU 40	-453	-420	4485	0.96	1.08	0
114	SLU 41	-561	-397	4502	0.63	-5.49	-0.06
114	SLU 42	-453	-420	4485	0.96	1.08	0
114	SLU 43	-457	-400	3972	3.01	-3.99	-0.02
114	SLU 44	-277	-440	3944	3.56	6.96	0.07
114	SLU 45	-457	-400	3972	3.01	-3.99	-0.02
114	SLU 46	-349	-424	3955	3.34	2.58	0.04
114	SLU 47	-277	-440	3944	3.56	6.96	0.07
114	SLU 48	-457	-400	3972	3.01	-3.99	-0.02
114	SLU 49	-349	-424	3955	3.34	2.58	0.04
114	SLU 50	-457	-400	3972	3.01	-3.99	-0.02
114	SLU 51	-349	-424	3955	3.34	2.58	0.04
114	SLU 52	-374	-482	4635	2.68	6.03	0.05
114	SLU 53	-554	-443	4663	2.12	-4.92	-0.04
114	SLU 54	-446	-466	4646	2.45	1.65	0.02
114	SLU 55	-374	-482	4635	2.68	6.03	0.05
114	SLU 56	-554	-443	4663	2.12	-4.92	-0.04
114	SLU 57	-446	-466	4646	2.45	1.65	0.02
114	SLU 58	-554	-443	4663	2.12	-4.92	-0.04
114	SLU 59	-446	-466	4646	2.45	1.65	0.02
114	SLU 60	-595	-461	4959	1.74	-5.32	-0.04
114	SLU 61	-487	-484	4942	2.07	1.25	0.01
114	SLU 62	-595	-461	4959	1.74	-5.32	-0.04
114	SLU 63	-487	-484	4942	2.07	1.25	0.01
114	SLU 64	-514	-423	4336	2.68	-4.86	-0.03
114	SLU 65	-334	-462	4308	3.23	6.09	0.06
114	SLU 66	-514	-423	4336	2.68	-4.86	-0.03
114	SLU 67	-406	-446	4319	3.01	1.71	0.03
114	SLU 68	-334	-462	4308	3.23	6.09	0.06
114	SLU 69	-514	-423	4336	2.68	-4.86	-0.03
114	SLU 70	-406	-446	4319	3.01	1.71	0.03
114	SLU 71	-514	-423	4336	2.68	-4.86	-0.03
114	SLU 72	-406	-446	4319	3.01	1.71	0.03
114	SLU 73	-430	-504	4998	2.35	5.16	0.04
114	SLU 74	-610	-465	5027	1.79	-5.79	-0.05
114	SLU 75	-502	-489	5010	2.12	0.78	0.01
114	SLU 76	-430	-504	4998	2.35	5.16	0.04
114	SLU 77	-610	-465	5027	1.79	-5.79	-0.05
114	SLU 78	-502	-489	5010	2.12	0.78	0.01
114	SLU 79	-610	-465	5027	1.79	-5.79	-0.05
114	SLU 80	-502	-489	5010	2.12	0.78	0.01
114	SLU 81	-652	-483	5323	1.41	-6.19	-0.06

Nodo	Cont.	Reazione a traslazione			Reazione a rotazione		
Ind.	N.br.	x	y	z	x	y	z
114	SLU 82	-544	-507	5306	1.74	0.38	0
114	SLU 83	-652	-483	5323	1.41	-6.19	-0.06
114	SLU 84	-544	-507	5306	1.74	0.38	0
114	SLE RA 1	-383	-320	3255	2.13	-3.55	-0.02
114	SLE RA 2	-263	-346	3236	2.5	3.75	0.04
114	SLE RA 3	-383	-320	3255	2.13	-3.55	-0.02
114	SLE RA 4	-311	-336	3244	2.35	0.83	0.02
114	SLE RA 5	-263	-346	3236	2.5	3.75	0.04
114	SLE RA 6	-383	-320	3255	2.13	-3.55	-0.02
114	SLE RA 7	-311	-336	3244	2.35	0.83	0.02
114	SLE RA 8	-383	-320	3255	2.13	-3.55	-0.02
114	SLE RA 9	-311	-336	3244	2.35	0.83	0.02
114	SLE RA 10	-327	-375	3697	1.91	3.13	0.03
114	SLE RA 11	-447	-348	3716	1.54	-4.17	-0.03
114	SLE RA 12	-375	-364	3705	1.76	0.21	0
114	SLE RA 13	-327	-375	3697	1.91	3.13	0.03
114	SLE RA 14	-447	-348	3716	1.54	-4.17	-0.03
114	SLE RA 15	-375	-364	3705	1.76	0.21	0
114	SLE RA 16	-447	-348	3716	1.54	-4.17	-0.03
114	SLE RA 17	-375	-364	3705	1.76	0.21	0
114	SLE RA 18	-475	-360	3913	1.29	-4.43	-0.04
114	SLE RA 19	-403	-376	3902	1.51	-0.05	0
114	SLE RA 20	-475	-360	3913	1.29	-4.43	-0.04
114	SLE RA 21	-403	-376	3902	1.51	-0.05	0
114	SLE FR 1	-383	-320	3255	2.13	-3.55	-0.02
114	SLE FR 2	-359	-325	3252	2.21	-2.09	-0.01
114	SLE FR 3	-383	-320	3255	2.13	-3.55	-0.02
114	SLE FR 4	-386	-337	3449	1.95	-2.35	-0.01
114	SLE FR 5	-410	-332	3453	1.88	-3.81	-0.02
114	SLE FR 6	-429	-340	3584	1.71	-3.99	-0.03
114	SLE QP 1	-383	-320	3255	2.13	-3.55	-0.02
114	SLE QP 2	-410	-332	3453	1.88	-3.81	-0.02
114	SLD 1	-342	-278	2881	2.5	-1.73	0
114	SLD 2	-342	-278	2881	2.5	-1.73	0
114	SLD 3	-237	-333	3182	4.73	3.6	0.05
114	SLD 4	-237	-333	3182	4.73	3.6	0.05
114	SLD 5	-549	-233	2824	-1.32	-11.27	-0.09
114	SLD 6	-549	-233	2824	-1.32	-11.27	-0.09
114	SLD 7	-199	-416	3829	6.12	6.49	0.07
114	SLD 8	-199	-416	3829	6.12	6.49	0.07
114	SLD 9	-621	-249	3077	-2.36	-14.12	-0.12
114	SLD 10	-621	-249	3077	-2.36	-14.12	-0.12
114	SLD 11	-272	-432	4082	5.07	3.65	0.04
114	SLD 12	-272	-432	4082	5.07	3.65	0.04
114	SLD 13	-584	-332	3723	-0.97	-11.23	-0.1
114	SLD 14	-584	-332	3723	-0.97	-11.23	-0.1
114	SLD 15	-479	-387	4025	1.26	-5.9	-0.05
114	SLD 16	-479	-387	4025	1.26	-5.9	-0.05
114	SLV 1	-261	-203	2088	3.41	0.46	0.03
114	SLV 2	-261	-203	2088	3.41	0.46	0.03
114	SLV 3	9	-334	2835	8.73	14.28	0.16
114	SLV 4	9	-334	2835	8.73	14.28	0.16
114	SLV 5	-776	-95	1911	-5.73	-23.49	-0.2
114	SLV 6	-776	-95	1911	-5.73	-23.49	-0.2
114	SLV 7	126	-531	4400	12	22.57	0.23
114	SLV 8	126	-531	4400	12	22.57	0.23
114	SLV 9	-946	-133	2506	-8.25	-30.2	-0.28
114	SLV 10	-946	-133	2506	-8.25	-30.2	-0.28
114	SLV 11	-45	-570	4995	9.48	15.86	0.16
114	SLV 12	-45	-570	4995	9.48	15.86	0.16
114	SLV 13	-830	-331	4071	-4.98	-21.9	-0.21
114	SLV 14	-830	-331	4071	-4.98	-21.9	-0.21
114	SLV 15	-559	-462	4818	0.34	-8.09	-0.08
114	SLV 16	-559	-462	4818	0.34	-8.09	-0.08

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: 0.934679
Traslazione Y: 0.95403

Traslazione Z: 0
Rotazione X: 0.946896
Rotazione Y: 0.901755
Rotazione Z: 0.745481

Modo	Periodo	Massa X	Massa Y	Massa Z	Massa rot. X	Massa rot. Y	Massa rot. Z	Massa sX	Massa sY
1	9.195872469	0.000000079	0.109887369	0	0.220737334	0.000000109	0.077680134	0.000000079	0.109887369
2	4.304163137	0.00000003	0.000028619	0	0.000046167	0.000000059	0.004597569	0.00000003	0.000028619
3	3.282269699	0.000001636	0.100472595	0	0.184194427	0.000001867	0.072154321	0.000001636	0.100472595
4	3.165029521	0.000030856	0.095959637	0	0.150085631	0.000037765	0.077241934	0.000030856	0.095959637
5	2.696323772	0	0.061107147	0	0.000147536	0.00000001	0.043270576	0	0.061107147
6	2.505343111	0.000001057	0.045713975	0	0.048762599	0.000001516	0.03232679	0.000001057	0.045713975
7	1.70202473	0.000007716	0.000012511	0	0.00001852	0.000011833	0.000064456	0.000007716	0.000012511
8	1.61373098	0.000025157	0.000000005	0	0.000004814	0.000036928	0.003435638	0.000025157	0.000000005
9	1.568181986	0.000816629	0.000007634	0	0.000018876	0.001192025	0.010142195	0.000816629	0.000007634
10	1.393920252	0.00108292	0.000275505	0	0.000179605	0.001561812	0.004398945	0.00108292	0.000275505
11	1.239649867	0.000005174	0.004375886	0	0.011989447	0.000007256	0.003525153	0.000005174	0.004375886
12	1.145736963	0.000049138	0.055143219	0	0.001111097	0.000030664	0.044393811	0.000049138	0.055143219
13	1.021059507	0.000023074	0.007738351	0	0.000995527	0.00002745	0.005532756	0.000023074	0.007738351
14	0.977143519	0.000015837	0.082188376	0	0.008184081	0.000019683	0.057622015	0.000015837	0.082188376
15	0.962447825	0.00001549	0.00077576	0	0.002709601	0.000018415	0.000097169	0.00001549	0.00077576
16	0.954022781	0.000204024	0.010497946	0	0.016227537	0.000276715	0.008385348	0.000204024	0.010497946
17	0.939685871	0.000007713	0.002423457	0	0.001871431	0.000009049	0.001702734	0.000007713	0.002423457
18	0.850168451	0.000748379	0.000006667	0	0.000360158	0.001068503	0.001445477	0.000748379	0.000006667
19	0.787529326	0.0026174	0.000154281	0	0.000306275	0.0038729	0.003151879	0.0026174	0.000154281
20	0.766699867	0.00002773	0.014249246	0	0.0275635	0.000045112	0.00918236	0.00002773	0.014249246
21	0.753757256	0.000874718	0.000950044	0	0.001845652	0.001310213	0.000203083	0.000874718	0.000950044
22	0.714418446	0.00561493	0.005931034	0	0.007268203	0.007719186	0.005627656	0.00561493	0.005931034
23	0.689121198	0.000170154	0.000000423	0	0.000002387	0.000244423	0.002729077	0.000170154	0.000000423
24	0.677741398	0.004469683	0.000288587	0	0.000287453	0.005394678	0.004027266	0.004469683	0.000288587
25	0.643088316	0.037507871	0.000173628	0	0.000429568	0.056172919	0.003774224	0.037507871	0.000173628
26	0.624505196	0.000685649	0.000016559	0	0.000049796	0.00108564	0.000771535	0.000685649	0.000016559
27	0.58022694	0.001982635	0.000217985	0	0.000013731	0.00262857	0.000057782	0.001982635	0.000217985
28	0.574966312	0.002773572	0.000015267	0	0.000145025	0.0037328	0.00002563	0.002773572	0.000015267
29	0.550336432	0.025519722	0.000005924	0	0.000036223	0.034588743	0.000020786	0.025519722	0.000005924
30	0.527154828	0.000309223	0.001331329	0	0.004403862	0.00044772	0.000884898	0.000309223	0.001331329
31	0.496766722	0.000008155	0.006185825	0	0.001134832	0.000003641	0.003946273	0.000008155	0.006185825
32	0.491526214	0.004117217	0.000006764	0	0.000000158	0.003720508	0.006519533	0.004117217	0.000006764
33	0.483677052	0.00630506	0.00006543	0	0.000032686	0.011610831	0.001062704	0.00630506	0.00006543
34	0.435100718	0.000004277	0.004896834	0	0.001010651	0.000003983	0.003719554	0.000004277	0.004896834
35	0.417470751	0.000676917	0.01535661	0	0.001016252	0.000057014	0.013756855	0.000676917	0.01535661
36	0.408619684	0.000024206	0.007760657	0	0.011054836	0.000045125	0.005942489	0.000024206	0.007760657
37	0.393802974	0.000403697	0.000188239	0	0.000217839	0.000006817	0.001117139	0.000403697	0.000188239
38	0.365941125	0.000706853	0.003583647	0	0.002889321	0.000102975	0.001492289	0.000706853	0.003583647
39	0.349944654	0.004864624	0.000714297	0	0.000463381	0.001108726	0.000082598	0.004864624	0.000714297
40	0.332587442	0.014883075	0.005033501	0	0.001426168	0.002664069	0.004671132	0.014883075	0.005033501
41	0.311496494	0.014946768	0.003523294	0	0.001055909	0.002140311	0.000432289	0.014946768	0.003523294
42	0.290450396	0.002258571	0.003339188	0	0.002193135	0.00025183	0.003068552	0.002258571	0.003339188
43	0.278538801	0.01279478	0.0001594	0	0.000718599	0.002760535	0.000044315	0.01279478	0.0001594
44	0.238829903	0.000000028	0.010003299	0	0.004474889	0.000000174	0.009196114	0.000000028	0.010003299
45	0.213446282	0.014789167	0.000265714	0	0.000021503	0.00014473	0.000795038	0.014789167	0.000265714
46	0.187440693	0.00156129	0.012531431	0	0.004060547	0.000011732	0.009791068	0.00156129	0.012531431
47	0.180302368	0.014527702	0.0003762	0	0.000672212	0.003638424	0.000446084	0.014527702	0.0003762
48	0.135564388	0.000132409	0.014127403	0	0.007722611	0.000780255	0.010476223	0.000132409	0.014127403
49	0.123997228	0.032971692	0.000190889	0	0.000056109	0.033453201	0.001674471	0.032971692	0.000190889
50	0.08519516	0.001047283	0.024350014	0	0.013440924	0.000312534	0.016536068	0.001047283	0.024350014
51	0.072296482	0.302655097	0.00000049	0	0.000000456	0.441455107	0.004831307	0.302655097	0.00000049
52	0.052459807	0.046913435	0.003765096	0	0.00132251	0.048339767	0.000354364	0.046913435	0.003765096
53	0.044358255	0.336408317	0.00109824	0	0.000650376	0.217416386	0.006455523	0.336408317	0.00109824
54	0.040600227	0.005240978	0.068899301	0	0.054720955	0.002838845	0.052116214	0.005240978	0.068899301
55	0.039050446	0.001533351	0.162672982	0	0.140814234	0.000486219	0.105395208	0.001533351	0.162672982
56	0.034678381	0.02786886	0.004148053	0	0.004088285	0.006657816	0.002161893	0.02786886	0.004148053
57	0.030272355	0.000792083	0.000347804	0	0.000615014	0.000085067	0.000393602	0.000792083	0.000347804
58	0.025133419	0.000233269	0.000006501	0	0.00001645	0.000005587	0.000039519	0.000233269	0.000006501
59	0.022400917	0.000108835	0.000025531	0	0.000315562	0.000015914	0.000093743	0.000108835	0.000025531
60	0.020002837	0.00003929	0.000001326	0	0.00004125	0.000029598	0.000004602	0.00003929	0.000001326
61	0.019253034	0.000042769	0.000166022	0	0.000409869	0.000015466	0.000152239	0.000042769	0.000166022
62	0.016838857	0.000130033	0.000030241	0	0.00003508	0.000000418	0.000131488	0.000130033	0.000030241
63	0.01306181	0.00001951	0.000000435	0	0.000087456	0.000002515	0.000018691	0.00001951	0.000000435
64	0.012744218	0.000080821	0.000244621	0	0.000119107	0.000007006	0.000009657	0.000080821	0.000244621
65	0.010531092	0.000000164	0.000015697	0	0.000000935	0.000037112	0.000079329	0.000000164	0.000015697

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: Pesi strutturali

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	0	-205584.468	-241711.4	1634458.57	0
Reazioni	0	0	205584.468	241711.4	-1634458.57	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	-50179.157	-53598.65	395658.55	0
Reazioni	0	0	50179.157	53598.65	-395658.55	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	-58568.535	-66008.04	465415.64	0
Reazioni	0	0	58568.535	66008.04	-465415.64	0
P-Delta	0	0	0	0	0	0
Totale	0	0	0	0	0	0

Bilancio in condizione di carico: Vento

Contributo	Fx	Fy	Fz	Mx	My	Mz
Forze applicate	0	1024.868	0	-3057.82	0	8121.73
Reazioni	0	-1024.868	0	3057.82	0	-8121.73
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	61217.449	0	0	0	222554.62	-68483.05
Reazioni	-61217.449	0	0	0	-222554.62	68483.05
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	60174.579	0	-218763.29	0	477198.29
Reazioni	0	-60174.579	0	218763.29	0	-477198.29
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	26033.714	0	0	0	94644.96	-29123.53
Reazioni	-26033.714	0	0	0	-94644.96	29123.53
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	25518.125	0	-92770.55	0	202364.62
Reazioni	0	-25518.125	0	92770.55	0	-202364.62
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	31479.13	1843.75	0	4576.3725	9.575E04	3.993E04	31485.57	178	15562.09	91	0	0
SLV Y	1843.75	15560.94	0	4.046E04	4499.3709	1.220E05	31485.57	178	15562.09	91	0	0
X SLD	13449.85	782.11	0	1928.74	4.098E04	1.702E04	13452.49	178	6509.38	91	0	0
Y SLD	782.11	6508.84	0	1.701E04	1901.7833	5.101E04	13452.49	178	6509.38	91	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	11724
Elemento min. diagonale	907.77596954
Elemento max diagonale	423718778.910085
Rapporto max/min	466765.80249719
Elementi non nulli	308936

SIDEL
INGEGNERIA

TABULATI DI CALCOLO – VERIFICHE
SALA COMUNE
STATO DI FATTO

Sommario

1 Verifiche 3
1.1 Verifica regolarità strutturale 3
1.2 Verifica sismica globale 5
1.3 Verifiche maschi in muratura 10
1.4 Verifiche travi di accoppiamento in muratura 53

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 (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 (limite=4) al livello Rialzato
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 72.2/20.9=3.5 (limite=1,3) tra il livello Primo ed il precedente
Ok - Criterio G1 (Rastremazione di piano) rispettato, con rapporto massimo 0 (limite=0,1) tra il livello Primo ed il precedente
Ok - Criterio G2 (Rastremazione totale) rispettato, con rapporto massimo 0 (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	0.02	10.08	0				101.4919	101.4919	1	10.12	10.08	1	9999	1	9999
Primo	4.9	0.03	10.08	0				100.704	100.7043	1	10.08	10.05	1	9999	1	9999

Verifiche di regolarità in elevazione

Rapporto di regolarità per la condizione D (Altezza elementi sismoresistenti): 3.81/3.81=0.01.

Livello			E1			E2			E3			F			G1			G2		
Descr	Q	Qinf	E1n	E1d	E1r	E2n	E2d	E2r	E3n	E3d	E3r	Fn	Fd	Fr	G1n	G1d	G1r	G2n	G2d	G2r
Primo	4.9	1.09	70694	67695	1.04							72.2	20.9	3.46	0	10.08	0	0	10.08	0

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	106640	-39592	2.7	74543	-3255	22.9
Rialzato	1.09	SLV 2	106640	-39592	2.7	74543	-3255	22.9
Rialzato	1.09	SLV 3	105106	-39318	2.7	75366	3607	20.9
Rialzato	1.09	SLV 4	105106	-39318	2.7	75366	3607	20.9
Rialzato	1.09	SLV 5	108834	-12292	8.9	71962	-11384	6.3
Rialzato	1.09	SLV 6	108834	-12292	8.9	71962	-11384	6.3
Rialzato	1.09	SLV 7	103722	-11381	9.1	77195	11489	6.7
Rialzato	1.09	SLV 8	103722	-11381	9.1	77195	11489	6.7
Rialzato	1.09	SLV 9	109181	11381	9.6	68277	-11489	5.9
Rialzato	1.09	SLV 10	109181	11381	9.6	68277	-11489	5.9
Rialzato	1.09	SLV 11	104069	12292	8.5	78017	11384	6.9
Rialzato	1.09	SLV 12	104069	12292	8.5	78017	11384	6.9
Rialzato	1.09	SLV 13	107796	39318	2.7	65783	-3607	18.2
Rialzato	1.09	SLV 14	107796	39318	2.7	65783	-3607	18.2
Rialzato	1.09	SLV 15	106263	39592	2.7	75112	3255	23.1
Rialzato	1.09	SLV 16	106263	39592	2.7	75112	3255	23.1
Primo	4.9	SLV 1	58839	-15053	3.9	42326	-691	61.3
Primo	4.9	SLV 2	58839	-15053	3.9	42326	-691	61.3
Primo	4.9	SLV 3	55125	-15009	3.7	42424	588	72.2
Primo	4.9	SLV 4	55125	-15009	3.7	42424	588	72.2
Primo	4.9	SLV 5	56009	-4582	12.2	34725	-2146	16.2
Primo	4.9	SLV 6	56009	-4582	12.2	34725	-2146	16.2
Primo	4.9	SLV 7	46209	-4436	10.4	38512	2115	18.2
Primo	4.9	SLV 8	46209	-4436	10.4	38512	2115	18.2
Primo	4.9	SLV 9	58771	4436	13.2	33803	-2115	16
Primo	4.9	SLV 10	58771	4436	13.2	33803	-2115	16
Primo	4.9	SLV 11	46907	4582	10.2	37701	2146	17.6
Primo	4.9	SLV 12	46907	4582	10.2	37701	2146	17.6
Primo	4.9	SLV 13	58985	15009	3.9	26299	-588	44.8
Primo	4.9	SLV 14	58985	15009	3.9	26299	-588	44.8
Primo	4.9	SLV 15	50138	15053	3.3	36306	691	52.6
Primo	4.9	SLV 16	50138	15053	3.3	36306	691	52.6

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

Rottura a taglio

Moltiplicatore: 0
Trave di accoppiamento 3
Lunghezza: 1; altezza: 0.51; spessore: 0.3; distanza: 0
Combinazione SLV 1 V= 863 V orto= 0 Vp= 1117 Vt= 1275
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: 0.009
Trave di accoppiamento 18
Lunghezza: 0.5; altezza: 2; spessore: 0.3; distanza: 0.5
Combinazione SLV 7 M= 3164.63 M orto= 30.7 Mu= 3165.81
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: 0.38

Maschio 17
Lunghezza: 0.3; altezza: 3.81; spessore: 0.16; sezione a quota: 2.995
Combinazione SLV 15 fd= 143750 Ta= 0.15 Wa= 288 N= -129 M= 10.06 Mc= 10.13
Tempo di ritorno 40 anni
Indicatore iTr=(Tr/Tr,SLVrif)^.41 = 0.363
PGA 0.09
Indicatore iPGA=PGA/PGA,SLVrif = 0.368
Fattore di accelerazione fa = 0.3657

Rottura per meccanismi locali di collasso

Moltiplicatore: 0.061
Maschio 23
Lunghezza: 1.93; altezza: 3.81; spessore: 0.3 f.agg.= 0 a.lim.= 5.120199
Combinazione SLV 15 N top= -2130 N base= -6272 T orto= 21 α0= 0.053 M*= 552.9 e*= 0.889 a0*= 0.4349
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 (ζE)	TR	(TR/TRrif)^.41	fa
Maschio 21	PF	0.028	SLV 7	0	0	0	0	0
Maschio 21	V	0.027	SLV 7	0	0	0	0	0
Maschio 17	PFFP	0.38	SLV 15	0.0898	0.3677	40	0.3626	0.3657
Maschio 23	R	0.061	SLV 15	0	0	0	0	0
Trave di accoppiamento 18	PF	0.009	SLV 7	0	0	0	0	0
Trave di accoppiamento 3	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	4.713	SLU 31	Si
Maschio 1	V SLU	26.11	SLU 73	Si
Maschio 1	PF	2.043	SLV 13	Si
Maschio 1	V	6.933	SLV 5	Si
Maschio 1	PFFP	7.196	SLV 9	Si
Maschio 1	R	0.075	SLV 7	No
Maschio 2	PF SLU	2.762	SLU 81	Si
Maschio 2	V SLU	9.338	SLU 81	Si
Maschio 2	PF	0	SLV 3	No
Maschio 2	V	0	SLV 1	No
Maschio 2	PFFP	2.854	SLV 15	Si
Maschio 2	R	0	SLV 14	No
Maschio 3	PF SLU	4.726	SLU 43	Si
Maschio 3	V SLU	8.248	SLU 73	Si
Maschio 3	PF	0	SLV 3	No
Maschio 3	V	0	SLV 3	No
Maschio 3	PFFP	6.022	SLV 15	Si
Maschio 3	R	0	SLV 16	No
Maschio 4	PF SLU	4.241	SLU 81	Si
Maschio 4	V SLU	2.479	SLU 81	Si
Maschio 4	PF	3.313	SLV 13	Si
Maschio 4	V	1.761	SLV 1	Si
Maschio 4	PFFP	18.237	SLV 13	Si
Maschio 4	R	0.07	SLV 11	No
Maschio 5	PF SLU	4.221	SLU 81	Si
Maschio 5	V SLU	2.222	SLU 81	Si
Maschio 5	PF	3.656	SLV 1	Si
Maschio 5	V	1.673	SLV 13	Si
Maschio 5	PFFP	17.919	SLV 1	Si
Maschio 5	R	0.062	SLV 7	No
Maschio 6	PF SLU	4.516	SLU 2	Si
Maschio 6	V SLU	2.136	SLU 2	Si
Maschio 6	PF	2.771	SLV 11	Si
Maschio 6	V	1.228	SLV 11	Si
Maschio 6	PFFP	16.869	SLV 11	Si
Maschio 6	R	0.083	SLV 9	No
Maschio 7	PF SLU	67.329	SLU 2	Si
Maschio 7	V SLU	40.244	SLU 2	Si
Maschio 7	PF	12.982	SLV 15	Si
Maschio 7	V	2.478	SLV 3	Si
Maschio 7	PFFP	12.586	SLV 11	Si
Maschio 7	R	0.114	SLV 5	No
Maschio 8	PF SLU	5.291	SLU 2	Si
Maschio 8	V SLU	2.062	SLU 2	Si
Maschio 8	PF	2.95	SLV 5	Si
Maschio 8	V	1.212	SLV 7	Si
Maschio 8	PFFP	17.675	SLV 1	Si
Maschio 8	R	0.08	SLV 5	No
Maschio 9	PF SLU	20.911	SLU 43	Si
Maschio 9	V SLU	5.178	SLU 82	Si
Maschio 9	PF	4.21	SLV 11	Si
Maschio 9	V	2.461	SLV 3	Si
Maschio 9	PFFP	16.136	SLV 7	Si
Maschio 9	R	0.128	SLV 9	No

Desc.	Stato limite	Coeff.s.	Comb.	Verifica
Maschio 10	PF SLU	18.211	SLU 40	Si
Maschio 10	V SLU	4.599	SLU 82	Si
Maschio 10	PF	4.45	SLV 3	Si
Maschio 10	V	2.526	SLV 15	Si
Maschio 10	PFFP	18.787	SLV 3	Si
Maschio 10	R	0.133	SLV 11	No
Maschio 11	PF SLU	23.848	SLU 40	Si
Maschio 11	V SLU	3.86	SLU 73	Si
Maschio 11	PF	4.735	SLV 3	Si
Maschio 11	V	1.877	SLV 11	Si
Maschio 11	PFFP	9.941	SLV 3	Si
Maschio 11	R	0.098	SLV 11	No
Maschio 12	PF SLU	9.883	SLU 31	Si
Maschio 12	V SLU	28.013	SLU 23	Si
Maschio 12	PF	4.178	SLV 11	Si
Maschio 12	V	2.827	SLV 9	Si
Maschio 12	PFFP	11.784	SLV 1	Si
Maschio 12	R	0.061	SLV 11	No
Maschio 13	PF SLU	6.532	SLU 31	Si
Maschio 13	V SLU	7.29	SLU 81	Si
Maschio 13	PF	8.124	SLV 3	Si
Maschio 13	V	2.524	SLV 9	Si
Maschio 13	PFFP	10.868	SLV 5	Si
Maschio 13	R	0.059	SLV 9	No
Maschio 14	PF SLU	3.937	SLU 31	Si
Maschio 14	V SLU	34.434	SLU 73	Si
Maschio 14	PF	1.953	SLV 13	Si
Maschio 14	V	16.284	SLV 5	Si
Maschio 14	PFFP	0	SLV 1	No
Maschio 14	R	0.064	SLV 15	No
Maschio 17	PF SLU	0	SLU 1	No
Maschio 17	V SLU	0	SLU 1	No
Maschio 17	PF	0	SLV 16	No
Maschio 17	V	0	SLV 11	No
Maschio 17	PFFP	0	SLV 16	No
Maschio 17	R	0	SLV 5	No
Maschio 18	PF SLU	86.523	SLU 40	Si
Maschio 18	V SLU	309.215	SLU 64	Si
Maschio 18	PF	3.083	SLV 13	Si
Maschio 18	V	1.203	SLV 3	Si
Maschio 18	PFFP	2.201	SLV 5	Si
Maschio 18	R	0.09	SLV 11	No
Maschio 19	PF SLU	0	SLU 1	No
Maschio 19	V SLU	0	SLU 1	No
Maschio 19	PF	0	SLV 4	No
Maschio 19	V	0	SLV 1	No
Maschio 19	PFFP	0	SLV 4	No
Maschio 19	R	0	SLV 5	No
Maschio 20	PF SLU	0	SLU 2	No
Maschio 20	V SLU	0	SLU 2	No
Maschio 20	PF	0	SLV 7	No
Maschio 20	V	0	SLV 7	No
Maschio 20	PFFP	1.532	SLV 15	Si
Maschio 20	R	0.032	SLV 3	No
Maschio 21	PF SLU	0	SLU 76	No
Maschio 21	V SLU	0	SLU 1	No
Maschio 21	PF	0	SLV 12	No
Maschio 21	V	0	SLV 3	No
Maschio 21	PFFP	0	SLV 11	No
Maschio 21	R	0.042	SLV 7	No
Maschio 22	PF SLU	0	SLU 2	No
Maschio 22	V SLU	0	SLU 2	No
Maschio 22	PF	0	SLV 7	No
Maschio 22	V	0	SLV 7	No
Maschio 22	PFFP	0	SLV 7	No
Maschio 22	R	0.041	SLV 9	No
Maschio 23	PF SLU	0	SLU 2	No
Maschio 23	V SLU	0	SLU 2	No
Maschio 23	PF	0	SLV 7	No
Maschio 23	V	0	SLV 7	No
Maschio 23	PFFP	1.121	SLV 1	Si
Maschio 23	R	0.003	SLV 1	No
Maschio 24	PF SLU	19.839	SLU 43	Si
Maschio 24	V SLU	187.087	SLU 73	Si
Maschio 24	PF	3.562	SLV 7	Si
Maschio 24	V	3.174	SLV 1	Si
Maschio 24	PFFP	1.881	SLV 9	Si
Maschio 24	R	0.053	SLV 1	No
Maschio 25	PF SLU	1.949	SLU 31	Si
Maschio 25	V SLU	5.065	SLU 43	Si
Maschio 25	PF	0	SLV 11	No
Maschio 25	V	0	SLV 11	No
Maschio 25	PFFP	0	SLV 7	No
Maschio 25	R	0.016	SLV 5	No
Maschio 26	PF SLU	3.272	SLU 2	Si
Maschio 26	V SLU	2.855	SLU 73	Si
Maschio 26	PF	2.45	SLV 11	Si
Maschio 26	V	2.09	SLV 11	Si

Desc.	Stato limite	Coeff.s.	Comb.	Verifica
Maschio 26	PFFP	1.464	SLV 3	Si
Maschio 26	R	0.065	SLV 15	No
Maschio 27	PF SLU	4.506	SLU 81	Si
Maschio 27	V SLU	1.925	SLU 31	Si
Maschio 27	PF	0	SLV 10	No
Maschio 27	V	0	SLV 9	No
Maschio 27	PFFP	0	SLV 10	No
Maschio 27	R	0.021	SLV 7	No

Verifica maschi in muratura

Maschio	Stato limite	Molt.	Comb.	PGA	iPGA (ζE)	TR	(TR/TRrif)^.41	Verifica
1	PF	1.5	SLV 9	0.362	1.483	1618	1.653	Si
	V	1.496	SLV 9	0.362	1.483	1618	1.653	Si
	PFFP	1.787	SLV 9	0.362	1.483	1618	1.653	Si
	R	0.101	SLV 7	0.02	0.08	1	0.08	No
2	PF	0.236	SLV 9	0.055	0.226	12	0.221	No
	V	0.23	SLV 9	0.053	0.218	11	0.214	No
	PFFP	1.378	SLV 15	0.335	1.371	1248	1.486	Si
	R	0.095	SLV 5	0.02	0.08	1	0.08	No
3	PF	0.834	SLV 3	0.202	0.827	287	0.813	No
	V	0.578	SLV 3	0.138	0.565	113	0.555	No
	PFFP	1.481	SLV 15	0.36	1.472	1579	1.636	Si
	R	0.137	SLV 5	0.031	0.127	3	0.125	No
4	PF	3.876	SLV 13	0.362	1.483	1618	1.653	Si
	V	2.108	SLV 1	0.362	1.483	1618	1.653	Si
	PFFP	1000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.082	SLV 5	0	0	0	0	No
5	PF	1000	SLV 1	0.362	1.483	1618	1.653	Si
	V	1.983	SLV 13	0.362	1.483	1618	1.653	Si
	PFFP	1000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.082	SLV 5	0	0	0	0	No
6	PF	2.186	SLV 11	0.362	1.483	1618	1.653	Si
	V	1.146	SLV 11	0.279	1.143	708	1.178	Si
	PFFP	1000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.101	SLV 5	0.02	0.08	1	0.08	No
7	PF	2.755	SLV 11	0.362	1.483	1618	1.653	Si
	V	2.398	SLV 3	0.362	1.483	1618	1.653	Si
	PFFP	2.899	SLV 11	0.362	1.483	1618	1.653	Si
	R	0.135	SLV 5	0.031	0.127	3	0.125	No
8	PF	2.937	SLV 7	0.362	1.483	1618	1.653	Si
	V	1.217	SLV 7	0.296	1.212	845	1.266	Si
	PFFP	1000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.098	SLV 5	0.02	0.08	1	0.08	No
9	PF	2.528	SLV 11	0.362	1.483	1618	1.653	Si
	V	2.53	SLV 11	0.362	1.483	1618	1.653	Si
	PFFP	3.478	SLV 7	0.362	1.483	1618	1.653	Si
	R	0.143	SLV 5	0.031	0.127	3	0.125	No
10	PF	3.811	SLV 3	0.362	1.483	1618	1.653	Si
	V	2.862	SLV 3	0.362	1.483	1618	1.653	Si
	PFFP	1000	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.143	SLV 11	0.031	0.127	3	0.125	No
11	PF	3.066	SLV 3	0.362	1.483	1618	1.653	Si
	V	2.031	SLV 11	0.362	1.483	1618	1.653	Si
	PFFP	3.671	SLV 3	0.362	1.483	1618	1.653	Si
	R	0.132	SLV 7	0.026	0.107	2	0.106	No
12	PF	2.745	SLV 5	0.362	1.483	1618	1.653	Si
	V	2.052	SLV 9	0.362	1.483	1618	1.653	Si
	PFFP	4.017	SLV 1	0.362	1.483	1618	1.653	Si
	R	0.089	SLV 11	0.02	0.08	1	0.08	No
13	PF	2.673	SLV 5	0.362	1.483	1618	1.653	Si
	V	2.574	SLV 9	0.362	1.483	1618	1.653	Si
	PFFP	2.443	SLV 5	0.362	1.483	1618	1.653	Si
	R	0.094	SLV 5	0.02	0.08	1	0.08	No
14	PF	1.338	SLV 13	0.325	1.331	1134	1.429	Si
	V	1.33	SLV 13	0.323	1.323	1111	1.417	Si
	PFFP	0.932	SLV 1	0.227	0.929	390	0.922	No
	R	0.077	SLV 15	0	0	0	0	No
17	PF	0.144	SLV 15	0.031	0.127	3	0.125	No
	V	0.115	SLV 15	0.026	0.107	2	0.106	No
	PFFP	0.38	SLV 15	0.09	0.368	40	0.363	No
	R	0.148	SLV 7	0.031	0.127	3	0.125	No
18	PF	3.064	SLV 13	0.362	1.483	1618	1.653	Si
	V	1.203	SLV 3	0.293	1.198	816	1.248	Si
	PFFP	2.172	SLV 5	0.362	1.483	1618	1.653	Si
	R	0.154	SLV 11	0.035	0.143	4	0.141	No
19	PF	0.334	SLV 3	0.078	0.318	28	0.313	No
	V	0.334	SLV 3	0.078	0.318	28	0.313	No
	PFFP	0.483	SLV 3	0.114	0.468	72	0.461	No
	R	0.15	SLV 7	0.035	0.143	4	0.141	No
20	PF	0.557	SLV 7	0.133	0.546	105	0.539	No
	V	0.252	SLV 7	0.059	0.242	14	0.236	No
	PFFP	1.325	SLV 15	0.322	1.319	1098	1.41	Si
	R	0.063	SLV 3	0	0	0	0	No
21	PF	0.028	SLV 7	0	0	0	0	No
	V	0.027	SLV 7	0	0	0	0	No
	PFFP	0.986	SLV 11	0.241	0.986	457	0.984	No
	R	0.065	SLV 3	0	0	0	0	No
22	PF	0.507	SLV 11	0.121	0.495	83	0.489	No

Maschio	Stato limite	Molt.	Comb.	PGA	iPGA (ζE)	TR	(TR/TRrif)^.41	Verifica
	V	0.458	SLV 11	0.109	0.445	64	0.44	No
	PFFP	0.688	SLV 7	0.166	0.678	173	0.661	No
	R	0.063	SLV 13	0	0	0	0	No
23	PF	0.559	SLV 11	0.134	0.548	106	0.541	No
	V	0.233	SLV 11	0.053	0.218	11	0.214	No
	PFFP	1.054	SLV 1	0.257	1.053	554	1.065	Si
	R	0.061	SLV 15	0	0	0	0	No
24	PF	2.498	SLV 7	0.362	1.483	1618	1.653	Si
	V	2.494	SLV 7	0.362	1.483	1618	1.653	Si
	PFFP	1.783	SLV 9	0.362	1.483	1618	1.653	Si
	R	0.065	SLV 1	0	0	0	0	No
25	PF	0.45	SLV 15	0.107	0.436	61	0.431	No
	V	0.425	SLV 15	0.1	0.41	52	0.404	No
	PFFP	0.514	SLV 11	0.123	0.503	86	0.496	No
	R	0.078	SLV 1	0	0	0	0	No
26	PF	1.489	SLV 3	0.362	1.48	1607	1.648	Si
	V	1.468	SLV 3	0.357	1.459	1534	1.617	Si
	PFFP	1.397	SLV 3	0.339	1.39	1305	1.513	Si
	R	0.078	SLV 13	0	0	0	0	No
27	PF	0.619	SLV 9	0.149	0.608	135	0.597	No
	V	0.598	SLV 9	0.143	0.587	124	0.577	No
	PFFP	0.605	SLV 9	0.145	0.593	127	0.582	No
	R	0.073	SLV 3	0	0	0	0	No

Verifica travi di collegamento in muratura

Trave	Stato limite	Molt.	Comb.	PGA	iPGA (ζE)	TR	(TR/TRrif)^.41	Verifica
1	F	1.393	SLV 13	0.339	1.386	1293	1.508	Si
	V	0.178	SLV 9	0.041	0.169	6	0.167	No
2	F	0.659	SLV 3	0.158	0.648	156	0.633	No
	V	0.086	SLV 13	0.02	0.08	1	0.08	No
3	F	1.335	SLV 15	0.325	1.329	1125	1.424	Si
	V	0	SLV 1	0	0	0	0	No
4	F	1.847	SLV 5	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
5	F	1.014	SLV 5	0.248	1.014	494	1.016	Si
	V	0	SLV 1	0	0	0	0	No
6	F	2.043	SLV 9	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
7	F	1.575	SLV 13	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
8	F	2.582	SLV 1	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
9	F	1000	SLV 1	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
10	F	2.616	SLV 7	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
11	F	3.321	SLV 7	0.362	1.483	1618	1.653	Si
	V	0	SLV 1	0	0	0	0	No
12	F	1.301	SLV 15	0.316	1.295	1034	1.376	Si
	V	0	SLV 1	0	0	0	0	No
13	F	1.235	SLV 13	0.3	1.23	881	1.288	Si
	V	0.06	SLV 13	0	0	0	0	No
14	F	1.12	SLV 1	0.273	1.117	662	1.146	Si
	V	0	SLV 1	0	0	0	0	No
15	F	1.487	SLV 13	0.361	1.478	1600	1.645	Si
	V	0	SLV 1	0	0	0	0	No
16	F	0.731	SLV 11	0.176	0.722	200	0.701	No
	V	0	SLV 1	0	0	0	0	No
17	F	0.393	SLV 7	0.093	0.38	43	0.373	No
	V	0	SLV 1	0	0	0	0	No
18	F	0.009	SLV 7	0	0	0	0	No
	V	0	SLV 1	0	0	0	0	No
19	F	0.688	SLV 7	0.166	0.678	173	0.661	No
	V	0.272	SLV 13	0.062	0.256	17	0.255	No
20	F	0.424	SLV 11	0.101	0.414	53	0.407	No
	V	0	SLV 1	0	0	0	0	No
21	F	0.312	SLV 11	0.074	0.303	25	0.299	No
	V	0	SLV 1	0	0	0	0	No
22	F	0.798	SLV 11	0.193	0.791	254	0.774	No
	V	0.095	SLV 3	0.02	0.08	1	0.08	No
23	F	2.501	SLV 11	0.362	1.483	1618	1.653	Si
	V	0.212	SLV 11	0.049	0.201	9	0.197	No
24	F	0.743	SLV 11	0.18	0.735	210	0.716	No
	V	0.44	SLV 1	0.104	0.427	57	0.419	No
25	F	1.752	SLV 7	0.362	1.483	1618	1.653	Si
	V	0.298	SLV 7	0.07	0.286	22	0.284	No

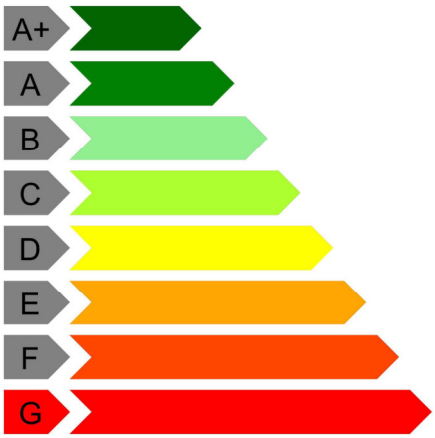
Periodi di ritorno e accelerazioni di aggancio per gli Stati Limite

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

Classe PAM



Classe IS-V

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]*
σ0: tensione media di compressione. [daN/m²]
*Mu: momento flettente ultimo. [daN*m]*
c.s.: coefficiente di sicurezza.
Verifica: stato di verifica.
V par: taglio nel piano. [daN]
σN: tensione media di compressione sulla parte reagente. [daN/m²]
l': lunghezza della parte compressa della parete. [m]
fvd: resistenza a taglio di calcolo. [daN/m²]
Vt scorr.: taglio ultimo per verifica a scorrimento. [daN]
Vt fess.diag.: taglio ultimo per verifica a fessurazione diagonale regolare [C8.7.1.17]. [daN]
Vt,lim: taglio limite [C8.7.1.18]. [daN]
c.s.: coefficiente di sicurezza a taglio.
fd: resistenza a compressione di calcolo. [daN/m²]
Sa: accelerazione massima, adimensionalizzata rispetto a g, che l'elemento strutturale subisce durante il sisma.
*M: momento flettente fuori piano. [daN*m]*
*Mc: 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]
α0: moltiplicatore secondo [C8.7.1.1].
M: massa partecipante al cinematismo. [daN/(m/s²)]*
e: frazione di massa partecipante della muratura [C8.7.1.5].*
a0: accelerazione spettrale di attivazione del meccanismo [C8.7.1.8]. [m/s²]*
aLim: 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; PFFP_SLV=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
3.114	-2.82	3.114	5.915	L1	L2	8.735	0.45	2.68	2.68	2.68			

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 73	-1.59	-65224	26297.12	16593	226837.53	8.626	Si
SLU 73	1.09	-38101	28323.38	9693	146605.12	5.176	Si
SLU 13	-1.59	-49958	21502.1	12709	184147.41	8.564	Si
SLU 13	1.09	-29800	24910.6	7581	118037.39	4.738	Si
SLU 31	-1.59	-53681	24256.41	13657	195144.28	8.045	Si
SLU 31	1.09	-32348	26950	8229	127006.34	4.713	Si
SLU 5	-1.59	-43944	15188.52	11179	165583.57	10.902	Si
SLU 5	1.09	-25176	19821.74	6405	101312.27	5.111	Si
SLU 34	-1.59	-53681	24256.41	13657	195144.28	8.045	Si
SLU 34	1.09	-32348	26950	8229	127006.34	4.713	Si
SLU 26	-1.59	-47666	17942.84	12127	177191.26	9.875	Si
SLU 26	1.09	-27725	21861.14	7053	110602.6	5.059	Si
SLU 23	-1.59	-47666	17942.84	12127	177191.26	9.875	Si
SLU 23	1.09	-27725	21861.14	7053	110602.6	5.059	Si
SLU 76	-1.59	-65224	26297.12	16593	226837.53	8.626	Si
SLU 76	1.09	-38101	28323.38	9693	146605.12	5.176	Si
SLU 2	-1.59	-43944	15188.52	11179	165583.57	10.902	Si
SLU 2	1.09	-25176	19821.74	6405	101312.27	5.111	Si
SLU 10	-1.59	-49958	21502.1	12709	184147.41	8.564	Si
SLU 10	1.09	-29800	24910.6	7581	118037.39	4.738	Si

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 16	-1.59	-34299	22446.84	8726	139102.84	6.197	Si
SLV 16	1.09	-23225	32012.33	5908	96528.91	3.015	Si
SLV 2	-1.59	-56729	2635.11	14432	218500.93	82.919	Si
SLV 2	1.09	-25053	-14121.7	6373	103709.75	7.344	Si
SLV 4	-1.59	-64800	-1943.81	16485	244829.32	125.953	Si
SLV 4	1.09	-31520	-16681.39	8019	128629.96	7.711	Si
SLV 10	-1.59	-27489	23831.12	6993	113184.97	4.749	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 10	1.09	-12115	20515.53	3082	51577.12	2.514	Si
SLV 1	-1.59	-56729	2635.11	14432	218500.93	82.919	Si
SLV 1	1.09	-25053	-14121.7	6373	103709.75	7.344	Si
SLV 9	-1.59	-27489	23831.12	6993	113184.97	4.749	Si
SLV 9	1.09	-12115	20515.53	3082	51577.12	2.514	Si
SLV 15	-1.59	-34299	22446.84	8726	139102.84	6.197	Si
SLV 15	1.09	-23225	32012.33	5908	96528.91	3.015	Si
SLV 13	-1.59	-26229	27025.77	6673	108297.69	4.007	Si
SLV 13	1.09	-16757	34572.02	4263	70632.93	2.043	Si
SLV 14	-1.59	-26229	27025.77	6673	108297.69	4.007	Si
SLV 14	1.09	-16757	34572.02	4263	70632.93	2.043	Si
SLV 3	-1.59	-64800	-1943.81	16485	244829.32	125.953	Si
SLV 3	1.09	-31520	-16681.39	8019	128629.96	7.711	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 73	-1.59	-65224	658	26297.12		16593	8.735	7768	30534			46.38	Si
SLU 73	1.09	-38101	1031	28323.38		9693	8.735	6848	26918			26.11	Si
SLU 34	-1.59	-53681	629	24256.41		13657	8.735	7376	28995			46.08	Si
SLU 34	1.09	-32348	986	26950		8229	8.735	6653	26151			26.53	Si
SLU 55	-1.59	-61501	652	23542.8		15646	8.735	7642	30038			46.07	Si
SLU 55	1.09	-35553	996	26283.98		9045	8.735	6762	26578			26.7	Si
SLU 65	-1.59	-59210	646	19983.54		15063	8.735	7564	29732			46.05	Si
SLU 65	1.09	-33478	940	23234.52		8517	8.735	6691	26301			27.97	Si
SLU 68	-1.59	-59210	646	19983.54		15063	8.735	7564	29732			46.05	Si
SLU 68	1.09	-33478	940	23234.52		8517	8.735	6691	26301			27.97	Si
SLU 31	-1.59	-53681	629	24256.41		13657	8.735	7376	28995			46.08	Si
SLU 31	1.09	-32348	986	26950		8229	8.735	6653	26151			26.53	Si
SLU 52	-1.59	-61501	652	23542.8		15646	8.735	7642	30038			46.07	Si
SLU 52	1.09	-35553	996	26283.98		9045	8.735	6762	26578			26.7	Si
SLU 10	-1.59	-49958	623	21502.1		12709	8.735	7250	28499			45.75	Si
SLU 10	1.09	-29800	950	24910.6		7581	8.735	6566	25811			27.16	Si
SLU 76	-1.59	-65224	658	26297.12		16593	8.735	7768	30534			46.38	Si
SLU 76	1.09	-38101	1031	28323.38		9693	8.735	6848	26918			26.11	Si
SLU 13	-1.59	-49958	623	21502.1		12709	8.735	7250	28499			45.75	Si
SLU 13	1.09	-29800	950	24910.6		7581	8.735	6566	25811			27.16	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 5	-1.59	-36639	-5781	16513.92		9321	8.735	10198	40084			6.93	Si
SLV 5	1.09	-14604	-3188	5907.42		3715	8.735	9076	35677			11.19	Si
SLV 15	-1.59	-34299	2631	22446.84		8726	8.735	10078	39616			15.06	Si
SLV 15	1.09	-23225	4067	32012.33		5908	8.735	9515	37401			9.2	Si
SLV 16	-1.59	-34299	2631	22446.84		8726	8.735	10078	39616			15.06	Si
SLV 16	1.09	-23225	4067	32012.33		5908	8.735	9515	37401			9.2	Si
SLV 11	-1.59	-54390	6001	8568.03		13837	8.735	11101	43634			7.27	Si
SLV 11	1.09	-33674	3642	11983.21		8567	8.735	10047	39491			10.84	Si
SLV 6	-1.59	-36639	-5781	16513.92		9321	8.735	10198	40084			6.93	Si
SLV 6	1.09	-14604	-3188	5907.42		3715	8.735	9076	35677			11.19	Si
SLV 12	-1.59	-54390	6001	8568.03		13837	8.735	11101	43634			7.27	Si
SLV 12	1.09	-33674	3642	11983.21		8567	8.735	10047	39491			10.84	Si
SLV 9	-1.59	-27489	-5284	23831.12		6993	8.735	9732	38254			7.24	Si
SLV 9	1.09	-12115	-1331	20515.53		3356	8.0223	9005	32506			24.42	Si
SLV 8	-1.59	-63540	5503	1250.83		16165	8.735	11566	45464			8.26	Si
SLV 8	1.09	-36162	1786	-2624.9		9200	8.735	10173	39989			22.39	Si
SLV 10	-1.59	-27489	-5284	23831.12		6993	8.735	9732	38254			7.24	Si
SLV 10	1.09	-12115	-1331	20515.53		3356	8.0223	9005	32506			24.42	Si
SLV 7	-1.59	-63540	5503	1250.83		16165	8.735	11566	45464			8.26	Si
SLV 7	1.09	-36162	1786	-2624.9		9200	8.735	10173	39989			22.39	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 9	143750	0.24	4500	-17687	532.65	3832.99	7.2	Si
SLV 10	143750	0.24	4500	-17687	532.65	3832.99	7.2	Si
SLV 14	143750	0.24	4975	-19555	532.65	4220.66	7.92	Si
SLV 13	143750	0.24	4975	-19555	532.65	4220.66	7.92	Si
SLV 6	143750	0.24	6186	-24314	532.65	5193.64	9.75	Si
SLV 5	143750	0.24	6186	-24314	532.65	5193.64	9.75	Si
SLV 16	143750	0.24	7068	-27782	532.65	5889.46	11.06	Si
SLV 15	143750	0.24	7068	-27782	532.65	5889.46	11.06	Si
SLV 2	143750	0.24	10594	-41644	532.65	8557.5	16.07	Si
SLV 1	143750	0.24	10594	-41644	532.65	8557.5	16.07	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 8	-36162	-63540	-2358	0.05	5192	0.924	0.78216	10.4695	No
SLV 7	-36162	-63540	-2358	0.05	5192	0.924	0.78216	10.4695	No
SLV 11	-33674	-54390	-2038	0.055	4941.9	0.921	0.87065	10.4695	No
SLV 12	-33674	-54390	-2038	0.055	4941.9	0.921	0.87065	10.4695	No
SLV 3	-31520	-64800	-2099	0.052	4725.9	0.918	0.82549	9.11363	No
SLV 4	-31520	-64800	-2099	0.052	4725.9	0.918	0.82549	9.11363	No
SLV 1	-25053	-56729	-1557	0.062	4080.4	0.909	0.98939	9.11363	No
SLV 2	-25053	-56729	-1557	0.062	4080.4	0.909	0.98939	9.11363	No
SLV 16	-23225	-34299	-1031	0.077	3899.1	0.907	1.23035	9.11363	No

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 15	-23225	-34299	-1031	0.077	3899.1	0.907	1.23035	9.11363	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.713	SLU 31	Si
V_SLU	26.11	SLU 73	Si
PF_SLV	2.043	SLV 13	Si
V_SLV	6.933	SLV 5	Si
PFFP_SLV	7.196	SLV 9	Si
R_SLV	0.075	SLV 7	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
3.201	-2.917	3.114	-2.82	L1	L2	0.13	0.45	2.68	2.68	2.68			

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 83	-0.2	-1515	-24.45	25797	67.53	2.762	Si
SLU 83	0.2	-1460	-2.14	24861	66.17	30.941	Si
SLU 74	-0.2	-1469	-23.07	25020	66.41	2.878	Si
SLU 74	0.2	-1414	-2.36	24084	64.98	27.583	Si
SLU 53	-0.2	-1385	-21.33	23589	64.2	3.009	Si
SLU 53	0.2	-1330	-2.26	22653	62.65	27.679	Si
SLU 60	-0.2	-1431	-22.71	24366	65.42	2.881	Si
SLU 60	0.2	-1376	-2.05	23430	63.94	31.25	Si
SLU 62	-0.2	-1431	-22.71	24366	65.42	2.881	Si
SLU 62	0.2	-1376	-2.05	23430	63.94	31.25	Si
SLU 81	-0.2	-1515	-24.45	25797	67.53	2.762	Si
SLU 81	0.2	-1460	-2.14	24861	66.17	30.941	Si
SLU 39	-0.2	-1242	-20.73	21150	59.98	2.894	Si
SLU 39	0.2	-1200	-1.52	20430	58.63	38.48	Si
SLU 79	-0.2	-1469	-23.07	25020	66.41	2.878	Si
SLU 79	0.2	-1414	-2.36	24084	64.98	27.583	Si
SLU 77	-0.2	-1469	-23.07	25020	66.41	2.878	Si
SLU 77	0.2	-1414	-2.36	24084	64.98	27.583	Si
SLU 41	-0.2	-1242	-20.73	21150	59.98	2.894	Si
SLU 41	0.2	-1200	-1.52	20430	58.63	38.48	Si

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	-0.2	-1434	145.13	0	0	0	No, e>l/2
SLV 3	0.2	-1475	-167.58	0	0	0	No, e>l/2
SLV 11	-0.2	-1151	81.24	0	0	0	No, e>l/2
SLV 11	0.2	-1146	-99.58	0	0	0	No, e>l/2
SLV 8	-0.2	-1342	153.81	0	0	0	No, e>l/2
SLV 8	0.2	-1376	-174.59	0	0	0	No, e>l/2
SLV 4	-0.2	-1434	145.13	0	0	0	No, e>l/2
SLV 4	0.2	-1475	-167.58	0	0	0	No, e>l/2
SLV 9	-0.2	-779	-185.43	0	0	0	No, e>l/2
SLV 9	0.2	-659	170.52	0	0	0	No, e>l/2
SLV 6	-0.2	-969	-112.86	0	0	0	No, e>l/2
SLV 6	0.2	-890	95.51	0	0	0	No, e>l/2
SLV 10	-0.2	-779	-185.43	0	0	0	No, e>l/2
SLV 10	0.2	-659	170.52	0	0	0	No, e>l/2
SLV 5	-0.2	-969	-112.86	0	0	0	No, e>l/2
SLV 5	0.2	-890	95.51	0	0	0	No, e>l/2
SLV 12	-0.2	-1151	81.24	0	0	0	No, e>l/2
SLV 12	0.2	-1146	-99.58	0	0	0	No, e>l/2
SLV 7	-0.2	-1342	153.81	0	0	0	No, e>l/2
SLV 7	0.2	-1376	-174.59	0	0	0	No, e>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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 53	-0.2	-1385	-48	-21.33		23589	0.1305	8701	511			10.72	Si
SLU 53	0.2	-1330	-48	-2.26		22653	0.1305	8576	504			10.56	Si
SLU 74	-0.2	-1469	-52	-23.07		25020	0.1305	8892	522			10.08	Si
SLU 74	0.2	-1414	-52	-2.36		24084	0.1305	8767	515			9.94	Si
SLU 77	-0.2	-1469	-52	-23.07		25020	0.1305	8892	522			10.08	Si
SLU 77	0.2	-1414	-52	-2.36		24084	0.1305	8767	515			9.94	Si
SLU 81	-0.2	-1515	-56	-24.45		25797	0.1305	8995	528			9.47	Si
SLU 81	0.2	-1460	-56	-2.14		24861	0.1305	8870	521			9.34	Si
SLU 60	-0.2	-1431	-52	-22.71		24366	0.1305	8804	517			10.01	Si
SLU 60	0.2	-1376	-52	-2.05		23430	0.1305	8680	510			9.87	Si
SLU 79	-0.2	-1469	-52	-23.07		25020	0.1305	8892	522			10.08	Si
SLU 79	0.2	-1414	-52	-2.36		24084	0.1305	8767	515			9.94	Si

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 41	-0.2	-1242	-48	-20.73		21150	0.1305	8375	492			10.24	Si
SLU 41	0.2	-1200	-48	-1.52		20430	0.1305	8279	486			10.13	Si
SLU 62	-0.2	-1431	-52	-22.71		24366	0.1305	8804	517			10.01	Si
SLU 62	0.2	-1376	-52	-2.05		23430	0.1305	8680	510			9.87	Si
SLU 39	-0.2	-1242	-48	-20.73		21150	0.1305	8375	492			10.24	Si
SLU 39	0.2	-1200	-48	-1.52		20430	0.1305	8279	486			10.13	Si
SLU 83	-0.2	-1515	-56	-24.45		25797	0.1305	8995	528			9.47	Si
SLU 83	0.2	-1460	-56	-2.14		24861	0.1305	8870	521			9.34	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 5	-0.2	-969	-482	-112.86		0	0	8333	0			0	No, Vu<V
SLV 5	0.2	-890	-542	95.51		0	0	8333	0			0	No, Vu<V
SLV 9	-0.2	-779	-856	-185.43		0	0	8333	0			0	No, Vu<V
SLV 9	0.2	-659	-927	170.52		0	0	8333	0			0	No, Vu<V
SLV 1	-0.2	-1322	400	65.13		61299	0.0479	16250	350			0.88	No, Vu<V
SLV 1	0.2	-1329	397	-86.55		0	0	8333	0			0	No, Vu<V
SLV 8	-0.2	-1342	787	153.81		0	0	8333	0			0	No, Vu<V
SLV 8	0.2	-1376	858	-174.59		0	0	8333	0			0	No, Vu<V
SLV 6	-0.2	-969	-482	-112.86		0	0	8333	0			0	No, Vu<V
SLV 6	0.2	-890	-542	95.51		0	0	8333	0			0	No, Vu<V
SLV 4	-0.2	-1434	780	145.13		0	0	8333	0			0	No, Vu<V
SLV 4	0.2	-1475	817	-167.58		0	0	8333	0			0	No, Vu<V
SLV 2	-0.2	-1322	400	65.13		61299	0.0479	16250	350			0.88	No, Vu<V
SLV 2	0.2	-1329	397	-86.55		0	0	8333	0			0	No, Vu<V
SLV 3	-0.2	-1434	780	145.13		0	0	8333	0			0	No, Vu<V
SLV 3	0.2	-1475	817	-167.58		0	0	8333	0			0	No, Vu<V
SLV 7	-0.2	-1342	787	153.81		0	0	8333	0			0	No, Vu<V
SLV 7	0.2	-1376	858	-174.59		0	0	8333	0			0	No, Vu<V
SLV 10	-0.2	-779	-856	-185.43		0	0	8333	0			0	No, Vu<V
SLV 10	0.2	-659	-927	170.52		0	0	8333	0			0	No, Vu<V

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 15	143750	0.24	1719	-101	7.84	22.38	2.85	Si
SLV 16	143750	0.24	1719	-101	7.84	22.38	2.85	Si
SLV 14	143750	0.24	2070	-122	7.84	26.88	3.43	Si
SLV 13	143750	0.24	2070	-122	7.84	26.88	3.43	Si
SLV 11	143750	0.24	2840	-167	7.84	36.65	4.67	Si
SLV 12	143750	0.24	2840	-167	7.84	36.65	4.67	Si
SLV 10	143750	0.24	4011	-236	7.84	51.26	6.54	Si
SLV 9	143750	0.24	4011	-236	7.84	51.26	6.54	Si
SLV 7	143750	0.24	4153	-244	7.84	53	6.76	Si
SLV 8	143750	0.24	4153	-244	7.84	53	6.76	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 2	-82	-941	-104	0	33.4	0.896	0	9.11363	No
SLV 7	959	-1266	133	0	0	0	0	10.4695	No, Trazione
SLV 8	959	-1266	133	0	0	0	0	10.4695	No, Trazione
SLV 9	-2402	77	-162	0	0	0	0	10.4695	No, Trazione
SLV 6	-1772	-225	-187	0	202.6	0.967	0	10.4695	No
SLV 1	-82	-941	-104	0	33.4	0.896	0	9.11363	No
SLV 5	-1772	-225	-187	0	202.6	0.967	0	10.4695	No
SLV 3	738	-1253	-8	0	0	0	0	9.11363	No, Trazione
SLV 10	-2402	77	-162	0	0	0	0	10.4695	No, Trazione
SLV 4	738	-1253	-8	0	0	0	0	9.11363	No, Trazione

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	2.762	SLU 81	Si
V_SLU	9.338	SLU 81	Si
PF_SLV	0	SLV 3	No
V_SLV	0	SLV 1	No
PFFP_SLV	2.854	SLV 15	Si
R_SLV	0	SLV 14	No

Maschio 3

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
3.959	-3.756	3.603	-3.363	L1	L2	0.53	0.45	2.68	2.68	2.68			

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 51	-0.2	-3563	162.73	14925	771.87	4.743	Si
SLU 51	0.2	-3339	101	13989	733.64	7.264	Si
SLU 64	-0.2	-4125	177.04	17279	861.98	4.869	Si
SLU 64	0.2	-3901	121.84	16343	827.18	6.789	Si
SLU 50	-0.2	-3622	165.4	15173	781.75	4.726	Si
SLU 50	0.2	-3399	117.59	14237	743.89	6.326	Si
SLU 47	-0.2	-3523	160.95	14760	765.23	4.755	Si
SLU 47	0.2	-3300	89.94	13824	726.76	8.08	Si
SLU 45	-0.2	-3622	165.4	15173	781.75	4.726	Si
SLU 45	0.2	-3399	117.59	14237	743.89	6.326	Si
SLU 44	-0.2	-3523	160.95	14760	765.23	4.755	Si
SLU 44	0.2	-3300	89.94	13824	726.76	8.08	Si
SLU 49	-0.2	-3563	162.73	14925	771.87	4.743	Si
SLU 49	0.2	-3339	101	13989	733.64	7.264	Si
SLU 48	-0.2	-3622	165.4	15173	781.75	4.726	Si
SLU 48	0.2	-3399	117.59	14237	743.89	6.326	Si
SLU 43	-0.2	-3622	165.4	15173	781.75	4.726	Si
SLU 43	0.2	-3399	117.59	14237	743.89	6.326	Si
SLU 46	-0.2	-3563	162.73	14925	771.87	4.743	Si
SLU 46	0.2	-3339	101	13989	733.64	7.264	Si

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	-0.2	-2863	812.69	0	0	0	No, e>l/2
SLV 3	0.2	-2742	-489.43	11487	658.94	1.346	Si
SLV 9	-0.2	-3897	-495.57	16324	895.5	1.807	Si
SLV 9	0.2	-3748	646.36	15702	866.43	1.34	Si
SLV 4	-0.2	-2863	812.69	0	0	0	No, e>l/2
SLV 4	0.2	-2742	-489.43	11487	658.94	1.346	Si
SLV 7	-0.2	-2727	771.57	0	0	0	No, e>l/2
SLV 7	0.2	-2531	-461.27	10604	613.17	1.329	Si
SLV 13	-0.2	-3761	-536.69	15754	868.89	1.619	Si
SLV 13	0.2	-3538	674.53	14819	824.52	1.222	Si
SLV 8	-0.2	-2727	771.57	0	0	0	No, e>l/2
SLV 8	0.2	-2531	-461.27	10604	613.17	1.329	Si
SLV 2	-0.2	-3160	528.41	13236	747.28	1.414	Si
SLV 2	0.2	-3065	-239.4	12837	727.44	3.039	Si
SLV 1	-0.2	-3160	528.41	13236	747.28	1.414	Si
SLV 1	0.2	-3065	-239.4	12837	727.44	3.039	Si
SLV 10	-0.2	-3897	-495.57	16324	895.5	1.807	Si
SLV 10	0.2	-3748	646.36	15702	866.43	1.34	Si
SLV 14	-0.2	-3761	-536.69	15754	868.89	1.619	Si
SLV 14	0.2	-3538	674.53	14819	824.52	1.222	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 52	-0.2	-4396	218	176.26		18416	0.5305	8011	1912			8.78	Si
SLU 52	0.2	-4173	218	89.11		17480	0.5305	7886	1883			8.64	Si
SLU 31	-0.2	-4196	214	152.8		17576	0.5305	7899	1886			8.83	Si
SLU 31	0.2	-4024	214	67.33		16856	0.5305	7803	1863			8.72	Si
SLU 84	-0.2	-5312	230	196.25		22254	0.5305	8523	2035			8.83	Si
SLU 84	0.2	-5089	230	104.05		21318	0.5305	8398	2005			8.7	Si
SLU 34	-0.2	-4196	214	152.8		17576	0.5305	7899	1886			8.83	Si
SLU 34	0.2	-4024	214	67.33		16856	0.5305	7803	1863			8.72	Si
SLU 82	-0.2	-5312	230	196.25		22254	0.5305	8523	2035			8.83	Si
SLU 82	0.2	-5089	230	104.05		21318	0.5305	8398	2005			8.7	Si
SLU 61	-0.2	-4810	212	184.61		20147	0.5305	8242	1967			9.28	Si
SLU 61	0.2	-4586	212	99.81		19211	0.5305	8117	1938			9.14	Si
SLU 63	-0.2	-4810	212	184.61		20147	0.5305	8242	1967			9.28	Si
SLU 63	0.2	-4586	212	99.81		19211	0.5305	8117	1938			9.14	Si
SLU 73	-0.2	-4899	236	187.9		20522	0.5305	8292	1979			8.37	Si
SLU 73	0.2	-4675	236	93.35		19586	0.5305	8167	1950			8.25	Si
SLU 76	-0.2	-4899	236	187.9		20522	0.5305	8292	1979			8.37	Si
SLU 76	0.2	-4675	236	93.35		19586	0.5305	8167	1950			8.25	Si
SLU 55	-0.2	-4396	218	176.26		18416	0.5305	8011	1912			8.78	Si
SLU 55	0.2	-4173	218	89.11		17480	0.5305	7886	1883			8.64	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 10	-0.2	-3897	-2574	-495.57		20906	0.4142	12515	2333			0.91	No, Vu<V
SLV 10	0.2	-3748	-2576	646.36		29920	0.2784	14317	1794			0.7	No, Vu<V
SLV 7	-0.2	-2727	2801	771.57		0	0	8333	0			0	No, Vu<V
SLV 7	0.2	-2531	2803	-461.27		22585	0.2491	12850	1440			0.51	No, Vu<V
SLV 8	-0.2	-2727	2801	771.57		0	0	8333	0			0	No, Vu<V
SLV 8	0.2	-2531	2803	-461.27		22585	0.2491	12850	1440			0.51	No, Vu<V
SLV 2	-0.2	-3160	1518	528.41		23882	0.294	13110	1734			1.14	Si
SLV 2	0.2	-3065	1524	-239.4		12837	0.5305	10901	2602			1.71	Si
SLV 14	-0.2	-3761	-2538	-536.69		22735	0.3676	12880	2131			0.84	No, Vu<V
SLV 14	0.2	-3538	-2545	674.53		35142	0.2237	15362	1546			0.61	No, Vu<V
SLV 13	-0.2	-3761	-2538	-536.69		22735	0.3676	12880	2131			0.84	No, Vu<V
SLV 13	0.2	-3538	-2545	674.53		35142	0.2237	15362	1546			0.61	No, Vu<V
SLV 1	-0.2	-3160	1518	528.41		23882	0.294	13110	1734			1.14	Si
SLV 1	0.2	-3065	1524	-239.4		12837	0.5305	10901	2602			1.71	Si
SLV 3	-0.2	-2863	2766	812.69		0	0	8333	0			0	No, Vu<V
SLV 3	0.2	-2742	2772	-489.43		23414	0.2603	13016	1524			0.55	No, Vu<V

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 9	-0.2	-3897	-2574	-495.57		20906	0.4142	12515	2333			0.91	No, Vu<V
SLV 9	0.2	-3748	-2576	646.36		29920	0.2784	14317	1794			0.7	No, Vu<V
SLV 4	-0.2	-2863	2766	812.69		0	0	8333	0			0	No, Vu<V
SLV 4	0.2	-2742	2772	-489.43		23414	0.2603	13016	1524			0.55	No, Vu<V

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 15	143750	0.24	3686	-880	31.88	191.98	6.02	Si
SLV 16	143750	0.24	3686	-880	31.88	191.98	6.02	Si
SLV 11	143750	0.24	4832	-1153	31.88	249.27	7.82	Si
SLV 12	143750	0.24	4832	-1153	31.88	249.27	7.82	Si
SLV 13	143750	0.24	5617	-1341	31.88	287.81	9.03	Si
SLV 14	143750	0.24	5617	-1341	31.88	287.81	9.03	Si
SLV 7	143750	0.24	7746	-1849	31.88	389.67	12.22	Si
SLV 8	143750	0.24	7746	-1849	31.88	389.67	12.22	Si
SLV 10	143750	0.24	11269	-2690	31.88	549.45	17.23	Si
SLV 9	143750	0.24	11269	-2690	31.88	549.45	17.23	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 16	930	-3187	-110	0	0	0	0	9.11363	No, Trazione
SLV 14	1934	-4321	19	0	0	0	0	9.11363	No, Trazione
SLV 6	-752	-5206	234	0	172.8	0.891	0	10.4695	No
SLV 15	930	-3187	-110	0	0	0	0	9.11363	No, Trazione
SLV 13	1934	-4321	19	0	0	0	0	9.11363	No, Trazione
SLV 5	-752	-5206	234	0	172.8	0.891	0	10.4695	No
SLV 9	1028	-5407	204	0	0	0	0	10.4695	No, Trazione
SLV 10	1028	-5407	204	0	0	0	0	10.4695	No, Trazione
SLV 11	-2317	-1630	-226	0.023	327.5	0.926	0.35543	10.4695	No
SLV 12	-2317	-1630	-226	0.023	327.5	0.926	0.35543	10.4695	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.726	SLU 43	Si
V_SLU	8.248	SLU 73	Si
PF_SLV	0	SLV 3	No
V_SLV	0	SLV 3	No
PFFP_SLV	6.022	SLV 15	Si
R_SLV	0	SLV 16	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
7.664	1.239	3.114	1.239	L1	L2	4.55	0.3	2.68	2.68	2.68			

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 39	-1.59	-49635	-14106.13	36362	62514.96	4.432	Si
SLU 39	0.58	-45003	-12049.71	32968	60946.05	5.058	Si
SLU 40	-1.59	-49737	-14015.05	36436	62539.66	4.462	Si
SLU 40	0.58	-45026	-12017.24	32985	60955.97	5.072	Si
SLU 81	-1.59	-55299	-14910.65	40511	63240.41	4.241	Si
SLU 81	0.58	-49001	-12584.05	35897	62352.08	4.955	Si
SLU 82	-1.59	-55401	-14819.56	40586	63241.44	4.267	Si
SLU 82	0.58	-49024	-12551.58	35914	62358.26	4.968	Si
SLU 77	-1.59	-50268	-12997.83	36826	62661.36	4.821	Si
SLU 77	0.58	-43776	-10791.87	32070	60383.37	5.595	Si
SLU 41	-1.59	-49635	-14106.13	36362	62514.96	4.432	Si
SLU 41	0.58	-45003	-12049.71	32968	60946.05	5.058	Si
SLU 74	-1.59	-50268	-12997.83	36826	62661.36	4.821	Si
SLU 74	0.58	-43776	-10791.87	32070	60383.37	5.595	Si
SLU 42	-1.59	-49737	-14015.05	36436	62539.66	4.462	Si
SLU 42	0.58	-45026	-12017.24	32985	60955.97	5.072	Si
SLU 83	-1.59	-55299	-14910.65	40511	63240.41	4.241	Si
SLU 83	0.58	-49001	-12584.05	35897	62352.08	4.955	Si
SLU 84	-1.59	-55401	-14819.56	40586	63241.44	4.267	Si
SLU 84	0.58	-49024	-12551.58	35914	62358.26	4.968	Si

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 15	-1.59	-30005	-16401.62	21981	55982.39	3.413	Si
SLV 15	0.58	-21712	-7895.07	15906	42964.92	5.442	Si
SLV 12	-1.59	-31938	-9666.47	23397	58746.45	6.077	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 12	0.58	-25542	-5961.29	18712	49210.41	8.255	Si
SLV 6	-1.59	-31178	-4978.54	22841	57672.14	11.584	Si
SLV 6	0.58	-27091	-5716.75	19846	51622.37	9.03	Si
SLV 5	-1.59	-31178	-4978.54	22841	57672.14	11.584	Si
SLV 5	0.58	-27091	-5716.75	19846	51622.37	9.03	Si
SLV 14	-1.59	-29447	-16652.02	21573	55165.99	3.313	Si
SLV 14	0.58	-21311	-8221.14	15612	42289.29	5.144	Si
SLV 9	-1.59	-30079	-10501.13	22035	56090.13	5.341	Si
SLV 9	0.58	-24208	-7048.2	17734	47080.71	6.68	Si
SLV 16	-1.59	-30005	-16401.62	21981	55982.39	3.413	Si
SLV 16	0.58	-21712	-7895.07	15906	42964.92	5.442	Si
SLV 13	-1.59	-29447	-16652.02	21573	55165.99	3.313	Si
SLV 13	0.58	-21311	-8221.14	15612	42289.29	5.144	Si
SLV 11	-1.59	-31938	-9666.47	23397	58746.45	6.077	Si
SLV 11	0.58	-25542	-5961.29	18712	49210.41	8.255	Si
SLV 10	-1.59	-30079	-10501.13	22035	56090.13	5.341	Si
SLV 10	0.58	-24208	-7048.2	17734	47080.71	6.68	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 39	-1.59	-49635	5650	-14106.13		36362	4.5501	10404	14201			2.51	Si
SLU 39	0.58	-45003	4742	-12049.71		32968	4.5501	9951	13584			2.86	Si
SLU 82	-1.59	-55401	5911	-14819.56		40586	4.5501	10833	14788			2.5	Si
SLU 82	0.58	-49024	4945	-12551.58		35914	4.5501	10344	14120			2.86	Si
SLU 81	-1.59	-55299	5964	-14910.65		40511	4.5501	10833	14788			2.48	Si
SLU 81	0.58	-49001	4995	-12584.05		35897	4.5501	10342	14117			2.83	Si
SLU 83	-1.59	-55299	5964	-14910.65		40511	4.5501	10833	14788			2.48	Si
SLU 83	0.58	-49001	4995	-12584.05		35897	4.5501	10342	14117			2.83	Si
SLU 41	-1.59	-49635	5650	-14106.13		36362	4.5501	10404	14201			2.51	Si
SLU 41	0.58	-45003	4742	-12049.71		32968	4.5501	9951	13584			2.86	Si
SLU 74	-1.59	-50268	5179	-12997.83		36826	4.5501	10466	14286			2.76	Si
SLU 74	0.58	-43776	4325	-10791.87		32070	4.5501	9831	13420			3.1	Si
SLU 42	-1.59	-49737	5597	-14015.05		36436	4.5501	10414	14215			2.54	Si
SLU 42	0.58	-45026	4691	-12017.24		32985	4.5501	9954	13587			2.9	Si
SLU 40	-1.59	-49737	5597	-14015.05		36436	4.5501	10414	14215			2.54	Si
SLU 40	0.58	-45026	4691	-12017.24		32985	4.5501	9954	13587			2.9	Si
SLU 77	-1.59	-50268	5179	-12997.83		36826	4.5501	10466	14286			2.76	Si
SLU 77	0.58	-43776	4325	-10791.87		32070	4.5501	9831	13420			3.1	Si
SLU 84	-1.59	-55401	5911	-14819.56		40586	4.5501	10833	14788			2.5	Si
SLU 84	0.58	-49024	4945	-12551.58		35914	4.5501	10344	14120			2.86	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 14	-1.59	-29447	-4124	-16652.02		21573	4.5501	12648	17265			4.19	Si
SLV 14	0.58	-21311	-4409	-8221.14		15612	4.5501	11456	15638			3.55	Si
SLV 6	-1.59	-31178	5556	-4978.54		22841	4.5501	12901	17611			3.17	Si
SLV 6	0.58	-27091	4787	-5716.75		19846	4.5501	12303	16793			3.51	Si
SLV 5	-1.59	-31178	5556	-4978.54		22841	4.5501	12901	17611			3.17	Si
SLV 5	0.58	-27091	4787	-5716.75		19846	4.5501	12303	16793			3.51	Si
SLV 4	-1.59	-33668	9913	2007.02		24665	4.5501	13266	18109			1.83	Si
SLV 4	0.58	-31322	9210	-3456.9		22946	4.5501	12922	17640			1.92	Si
SLV 3	-1.59	-33668	9913	2007.02		24665	4.5501	13266	18109			1.83	Si
SLV 3	0.58	-31322	9210	-3456.9		22946	4.5501	12922	17640			1.92	Si
SLV 16	-1.59	-30005	-4430	-16401.62		21981	4.5501	12730	17376			3.92	Si
SLV 16	0.58	-21712	-4598	-7895.07		15906	4.5501	11514	15718			3.42	Si
SLV 13	-1.59	-29447	-4124	-16652.02		21573	4.5501	12648	17265			4.19	Si
SLV 13	0.58	-21311	-4409	-8221.14		15612	4.5501	11456	15638			3.55	Si
SLV 2	-1.59	-33111	10219	1756.62		24256	4.5501	13185	17997			1.76	Si
SLV 2	0.58	-30921	9399	-3782.98		22653	4.5501	12864	17560			1.87	Si
SLV 1	-1.59	-33111	10219	1756.62		24256	4.5501	13185	17997			1.76	Si
SLV 1	0.58	-30921	9399	-3782.98		22653	4.5501	12864	17560			1.87	Si
SLV 15	-1.59	-30005	-4430	-16401.62		21981	4.5501	12730	17376			3.92	Si
SLV 15	0.58	-21712	-4598	-7895.07		15906	4.5501	11514	15718			3.42	Si

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

quota -0.25 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 14	143750	0.24	19978	-27271	187.63	3421.82	18.24	Si
SLV 13	143750	0.24	19978	-27271	187.63	3421.82	18.24	Si
SLV 16	143750	0.24	20346	-27772	187.63	3472.2	18.51	Si
SLV 15	143750	0.24	20346	-27772	187.63	3472.2	18.51	Si
SLV 9	143750	0.24	20786	-28374	187.63	3532.02	18.82	Si
SLV 10	143750	0.24	20786	-28374	187.63	3532.02	18.82	Si
SLV 6	143750	0.24	21846	-29820	187.63	3673.27	19.58	Si
SLV 5	143750	0.24	21846	-29820	187.63	3673.27	19.58	Si
SLV 11	143750	0.24	22010	-30045	187.63	3694.88	19.69	Si
SLV 12	143750	0.24	22010	-30045	187.63	3694.88	19.69	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.05 Ta = 0.04

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 11	-24330	-31938	-292	0.052	2994.2	0.95	0.79657	11.37227	No
SLV 12	-24330	-31938	-292	0.052	2994.2	0.95	0.79657	11.37227	No
SLV 9	-23173	-30079	288	0.052	2876.7	0.948	0.79792	11.37227	No
SLV 10	-23173	-30079	288	0.052	2876.7	0.948	0.79792	11.37227	No
SLV 6	-25719	-31178	292	0.052	3135.2	0.952	0.79793	11.37227	No

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 5	-25719	-31178	292	0.052	3135.2	0.952	0.79793	11.37227	No
SLV 7	-26876	-33037	-288	0.053	3252.7	0.954	0.80063	11.37227	No
SLV 8	-26876	-33037	-288	0.053	3252.7	0.954	0.80063	11.37227	No
SLV 1	-29094	-33111	93	0.059	3478.1	0.956	0.89326	11.37227	No
SLV 2	-29094	-33111	93	0.059	3478.1	0.956	0.89326	11.37227	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.241	SLU 81	Si
V_SLU	2.479	SLU 81	Si
PF_SLV	3.313	SLV 13	Si
V_SLV	1.761	SLV 1	Si
PFFP_SLV	18.237	SLV 13	Si
R_SLV	0.07	SLV 11	No

Maschio 5

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
12.744	1.239	8.664	1.239	L1	L2	4.08	0.3	2.68	2.68	2.68			

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 74	-1.59	-44694	10541.29	36515	50303.02	4.772	Si
SLU 74	0.58	-38448	8978.91	31412	48186.52	5.367	Si
SLU 77	-1.59	-44694	10541.29	36515	50303.02	4.772	Si
SLU 77	0.58	-38448	8978.91	31412	48186.52	5.367	Si
SLU 42	-1.59	-44293	11253.95	36188	50215.14	4.462	Si
SLU 42	0.58	-39608	9924.52	32360	48700.51	4.907	Si
SLU 81	-1.59	-49190	12043.92	40189	50838.32	4.221	Si
SLU 81	0.58	-43058	10447.78	35179	49902.9	4.776	Si
SLU 84	-1.59	-49325	11941.05	40299	50841.59	4.258	Si
SLU 84	0.58	-43107	10398.65	35219	49916.57	4.8	Si
SLU 39	-1.59	-44158	11356.83	36078	50184.09	4.419	Si
SLU 39	0.58	-39559	9973.65	32320	48679.78	4.881	Si
SLU 82	-1.59	-49325	11941.05	40299	50841.59	4.258	Si
SLU 82	0.58	-43107	10398.65	35219	49916.57	4.8	Si
SLU 40	-1.59	-44293	11253.95	36188	50215.14	4.462	Si
SLU 40	0.58	-39608	9924.52	32360	48700.51	4.907	Si
SLU 83	-1.59	-49190	12043.92	40189	50838.32	4.221	Si
SLU 83	0.58	-43058	10447.78	35179	49902.9	4.776	Si
SLU 41	-1.59	-44158	11356.83	36078	50184.09	4.419	Si
SLU 41	0.58	-39559	9973.65	32320	48679.78	4.881	Si

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 2	-1.59	-27083	12374.05	22127	45242.63	3.656	Si
SLV 2	0.58	-18667	5500.06	15251	33326.03	6.059	Si
SLV 6	-1.59	-27164	8035.95	22193	45347.98	5.643	Si
SLV 6	0.58	-21291	5331.28	17395	37249.35	6.987	Si
SLV 10	-1.59	-27620	4234.72	22566	45937.35	10.848	Si
SLV 10	0.58	-23851	5016.79	19487	40895.76	8.152	Si
SLV 4	-1.59	-27469	12291.18	22443	45743.43	3.722	Si
SLV 4	0.58	-18977	5330.24	15505	33800.47	6.341	Si
SLV 5	-1.59	-27164	8035.95	22193	45347.98	5.643	Si
SLV 5	0.58	-21291	5331.28	17395	37249.35	6.987	Si
SLV 7	-1.59	-28452	7759.73	23246	46998.64	6.057	Si
SLV 7	0.58	-22327	4765.22	18241	38746.41	8.131	Si
SLV 8	-1.59	-28452	7759.73	23246	46998.64	6.057	Si
SLV 8	0.58	-22327	4765.22	18241	38746.41	8.131	Si
SLV 9	-1.59	-27620	4234.72	22566	45937.35	10.848	Si
SLV 9	0.58	-23851	5016.79	19487	40895.76	8.152	Si
SLV 3	-1.59	-27469	12291.18	22443	45743.43	3.722	Si
SLV 3	0.58	-18977	5330.24	15505	33800.47	6.341	Si
SLV 1	-1.59	-27083	12374.05	22127	45242.63	3.656	Si
SLV 1	0.58	-18667	5500.06	15251	33326.03	6.059	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 42	-1.59	-44293	-5602	11253.95		36188	4.0799	10381	12706			2.27	Si
SLU 42	0.58	-39608	-4608	9924.52		32360	4.0799	9870	12081			2.62	Si
SLU 82	-1.59	-49325	-5916	11941.05		40299	4.0799	10833	13260			2.24	Si
SLU 82	0.58	-43107	-4858	10398.65		35219	4.0799	10251	12547			2.58	Si
SLU 77	-1.59	-44694	-5181	10541.29		36515	4.0799	10424	12759			2.46	Si
SLU 77	0.58	-38448	-4248	8978.91		31412	4.0799	9744	11926			2.81	Si
SLU 41	-1.59	-44158	-5652	11356.83		36078	4.0799	10366	12688			2.24	Si
SLU 41	0.58	-39559	-4657	9973.65		32320	4.0799	9865	12074			2.59	Si

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 81	-1.59	-49190	-5967	12043.92		40189	4.0799	10833	13260			2.22	Si
SLU 81	0.58	-43058	-4907	10447.78		35179	4.0799	10246	12541			2.56	Si
SLU 39	-1.59	-44158	-5652	11356.83		36078	4.0799	10366	12688			2.24	Si
SLU 39	0.58	-39559	-4657	9973.65		32320	4.0799	9865	12074			2.59	Si
SLU 83	-1.59	-49190	-5967	12043.92		40189	4.0799	10833	13260			2.22	Si
SLU 83	0.58	-43058	-4907	10447.78		35179	4.0799	10246	12541			2.56	Si
SLU 40	-1.59	-44293	-5602	11253.95		36188	4.0799	10381	12706			2.27	Si
SLU 40	0.58	-39608	-4608	9924.52		32360	4.0799	9870	12081			2.62	Si
SLU 74	-1.59	-44694	-5181	10541.29		36515	4.0799	10424	12759			2.46	Si
SLU 74	0.58	-38448	-4248	8978.91		31412	4.0799	9744	11926			2.81	Si
SLU 84	-1.59	-49325	-5916	11941.05		40299	4.0799	10833	13260			2.24	Si
SLU 84	0.58	-43107	-4858	10398.65		35219	4.0799	10251	12547			2.58	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 9	-1.59	-27620	-5250	4234.72		22566	4.0799	12846	15724			3	Si
SLV 9	0.58	-23851	-4170	5016.79		19487	4.0799	12231	14970			3.59	Si
SLV 11	-1.59	-28908	-4442	3958.5		23618	4.0799	13057	15981			3.6	Si
SLV 11	0.58	-24887	-3784	4450.73		20333	4.0799	12400	15177			4.01	Si
SLV 16	-1.59	-28989	-9276	-379.59		23684	4.0799	13070	15998			1.72	Si
SLV 16	0.58	-27512	-7699	4281.95		22477	4.0799	12829	15702			2.04	Si
SLV 3	-1.59	-27469	3727	12291.18		22443	4.0799	12822	15694			4.21	Si
SLV 3	0.58	-18977	3100	5330.24		15505	4.0799	11434	13995			4.51	Si
SLV 10	-1.59	-27620	-5250	4234.72		22566	4.0799	12846	15724			3	Si
SLV 10	0.58	-23851	-4170	5016.79		19487	4.0799	12231	14970			3.59	Si
SLV 15	-1.59	-28989	-9276	-379.59		23684	4.0799	13070	15998			1.72	Si
SLV 15	0.58	-27512	-7699	4281.95		22477	4.0799	12829	15702			2.04	Si
SLV 4	-1.59	-27469	3727	12291.18		22443	4.0799	12822	15694			4.21	Si
SLV 4	0.58	-18977	3100	5330.24		15505	4.0799	11434	13995			4.51	Si
SLV 14	-1.59	-28602	-9518	-296.72		23368	4.0799	13007	15920			1.67	Si
SLV 14	0.58	-27201	-7815	4451.76		22223	4.0799	12778	15640			2	Si
SLV 12	-1.59	-28908	-4442	3958.5		23618	4.0799	13057	15981			3.6	Si
SLV 12	0.58	-24887	-3784	4450.73		20333	4.0799	12400	15177			4.01	Si
SLV 13	-1.59	-28602	-9518	-296.72		23368	4.0799	13007	15920			1.67	Si
SLV 13	0.58	-27201	-7815	4451.76		22223	4.0799	12778	15640			2	Si

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

quota -0.25 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 2	143750	0.24	19548	-23926	168.24	3014.74	17.92	Si
SLV 1	143750	0.24	19548	-23926	168.24	3014.74	17.92	Si
SLV 3	143750	0.24	19842	-24286	168.24	3051.36	18.14	Si
SLV 4	143750	0.24	19842	-24286	168.24	3051.36	18.14	Si
SLV 6	143750	0.24	20678	-25309	168.24	3153.92	18.75	Si
SLV 5	143750	0.24	20678	-25309	168.24	3153.92	18.75	Si
SLV 7	143750	0.24	21659	-26510	168.24	3271.65	19.45	Si
SLV 8	143750	0.24	21659	-26510	168.24	3271.65	19.45	Si
SLV 10	143750	0.24	21941	-26855	168.24	3304.93	19.64	Si
SLV 9	143750	0.24	21941	-26855	168.24	3304.93	19.64	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.05 Ta = 0.04

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 8	-21565	-28452	-403	0.046	2659.4	0.95	0.70804	11.37227	No
SLV 7	-21565	-28452	-403	0.046	2659.4	0.95	0.70804	11.37227	No
SLV 9	-23438	-27620	401	0.047	2849.5	0.953	0.71758	11.37227	No
SLV 10	-23438	-27620	401	0.047	2849.5	0.953	0.71758	11.37227	No
SLV 6	-20868	-27164	375	0.047	2588.6	0.949	0.72238	11.37227	No
SLV 5	-20868	-27164	375	0.047	2588.6	0.949	0.72238	11.37227	No
SLV 12	-24135	-28908	-378	0.048	2920.3	0.954	0.73345	11.37227	No
SLV 11	-24135	-28908	-378	0.048	2920.3	0.954	0.73345	11.37227	No
SLV 13	-26680	-28602	158	0.056	3179	0.957	0.85352	11.37227	No
SLV 14	-26680	-28602	158	0.056	3179	0.957	0.85352	11.37227	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.221	SLU 81	Si
V_SLU	2.222	SLU 81	Si
PF_SLV	3.656	SLV 1	Si
V_SLV	1.673	SLV 13	Si
PFFP_SLV	17.919	SLV 1	Si
R_SLV	0.062	SLV 7	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
3.114	5.915	5.239	5.915	L1	L2	2.125	0.45	2.68	2.68	2.68			

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 26	-0.2	-13340	-1076.62	13947	11749.12	10.913	Si
SLU 26	0.2	-12408	-2049.03	12973	11086.51	5.411	Si
SLU 10	-0.2	-14759	-1139.17	15430	12713.3	11.16	Si
SLU 10	0.2	-13850	-2124.02	14481	12102.32	5.698	Si
SLU 23	-0.2	-13340	-1076.62	13947	11749.12	10.913	Si
SLU 23	0.2	-12408	-2049.03	12973	11086.51	5.411	Si
SLU 68	-0.2	-16165	-1051.59	16901	13614.69	12.947	Si
SLU 68	0.2	-15036	-2086.68	15720	12895.24	6.18	Si
SLU 44	-0.2	-14316	-1149.6	14968	12418.64	10.803	Si
SLU 44	0.2	-13166	-2182.19	13766	11627.68	5.328	Si
SLU 13	-0.2	-14759	-1139.17	15430	12713.3	11.16	Si
SLU 13	0.2	-13850	-2124.02	14481	12102.32	5.698	Si
SLU 47	-0.2	-14316	-1149.6	14968	12418.64	10.803	Si
SLU 47	0.2	-13166	-2182.19	13766	11627.68	5.328	Si
SLU 5	-0.2	-11491	-1174.63	12014	10410.58	8.863	Si
SLU 5	0.2	-10539	-2144.54	11019	9684.95	4.516	Si
SLU 2	-0.2	-11491	-1174.63	12014	10410.58	8.863	Si
SLU 2	0.2	-10539	-2144.54	11019	9684.95	4.516	Si
SLU 65	-0.2	-16165	-1051.59	16901	13614.69	12.947	Si
SLU 65	0.2	-15036	-2086.68	15720	12895.24	6.18	Si

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 14	-0.2	-13056	2021.85	13650	12324.71	6.096	Si
SLV 14	0.2	-11889	1370.49	12431	11349.85	8.282	Si
SLV 7	-0.2	-11428	-2638.2	11948	10957.17	4.153	Si
SLV 7	0.2	-10990	-3775.21	11490	10580.95	2.803	Si
SLV 6	-0.2	-14826	2494.32	15500	13756.79	5.515	Si
SLV 6	0.2	-14354	3666.38	15008	13380.99	3.65	Si
SLV 9	-0.2	-14558	3105.36	15220	13543.61	4.361	Si
SLV 9	0.2	-13760	3808.85	14387	12901.51	3.387	Si
SLV 12	-0.2	-11160	-2027.16	11668	10727.43	5.292	Si
SLV 12	0.2	-10396	-3632.75	10869	10065.12	2.771	Si
SLV 13	-0.2	-13056	2021.85	13650	12324.71	6.096	Si
SLV 13	0.2	-11889	1370.49	12431	11349.85	8.282	Si
SLV 8	-0.2	-11428	-2638.2	11948	10957.17	4.153	Si
SLV 8	0.2	-10990	-3775.21	11490	10580.95	2.803	Si
SLV 5	-0.2	-14826	2494.32	15500	13756.79	5.515	Si
SLV 5	0.2	-14354	3666.38	15008	13380.99	3.65	Si
SLV 10	-0.2	-14558	3105.36	15220	13543.61	4.361	Si
SLV 10	0.2	-13760	3808.85	14387	12901.51	3.387	Si
SLV 11	-0.2	-11160	-2027.16	11668	10727.43	5.292	Si
SLV 11	0.2	-10396	-3632.75	10869	10065.12	2.771	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 13	-0.2	-14759	3129	-1139.17		15430	2.1255	7613	7281			2.33	Si
SLU 13	0.2	-13850	3067	-2124.02		14481	2.1255	7486	7160			2.33	Si
SLU 68	-0.2	-16165	3293	-1051.59		16901	2.1255	7809	7469			2.27	Si
SLU 68	0.2	-15036	3226	-2086.68		15720	2.1255	7652	7318			2.27	Si
SLU 10	-0.2	-14759	3129	-1139.17		15430	2.1255	7613	7281			2.33	Si
SLU 10	0.2	-13850	3067	-2124.02		14481	2.1255	7486	7160			2.33	Si
SLU 26	-0.2	-13340	3136	-1076.62		13947	2.1255	7415	7092			2.26	Si
SLU 26	0.2	-12408	3080	-2049.03		12973	2.1255	7285	6968			2.26	Si
SLU 2	-0.2	-11491	3196	-1174.63		12014	2.1255	7157	6846			2.14	Si
SLU 2	0.2	-10539	3145	-2144.54		11019	2.1255	7025	6719			2.14	Si
SLU 5	-0.2	-11491	3196	-1174.63		12014	2.1255	7157	6846			2.14	Si
SLU 5	0.2	-10539	3145	-2144.54		11019	2.1255	7025	6719			2.14	Si
SLU 23	-0.2	-13340	3136	-1076.62		13947	2.1255	7415	7092			2.26	Si
SLU 23	0.2	-12408	3080	-2049.03		12973	2.1255	7285	6968			2.26	Si
SLU 65	-0.2	-16165	3293	-1051.59		16901	2.1255	7809	7469			2.27	Si
SLU 65	0.2	-15036	3226	-2086.68		15720	2.1255	7652	7318			2.27	Si
SLU 44	-0.2	-14316	3353	-1149.6		14968	2.1255	7551	7222			2.15	Si
SLU 44	0.2	-13166	3292	-2182.19		13766	2.1255	7391	7069			2.15	Si
SLU 47	-0.2	-14316	3353	-1149.6		14968	2.1255	7551	7222			2.15	Si
SLU 47	0.2	-13166	3292	-2182.19		13766	2.1255	7391	7069			2.15	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 1	-0.2	-13949	-5003	-14.93		14584	2.1255	11250	10760			2.15	Si
SLV 1	0.2	-13870	-5372	895.62		14501	2.1255	11234	10744			2	Si
SLV 12	-0.2	-11160	7961	-2027.16		11668	2.1255	10667	10202			1.28	Si
SLV 12	0.2	-10396	8186	-3632.75		10869	2.1255	10507	10050			1.23	Si
SLV 15	-0.2	-12036	5837	482.09		12584	2.1255	10850	10378			1.78	Si
SLV 15	0.2	-10880	6115	-861.99		11376	2.1255	10608	10146			1.66	Si
SLV 5	-0.2	-14826	-7127	2494.32		15500	2.1255	11433	10936			1.53	Si
SLV 5	0.2	-14354	-7443	3666.38		15008	2.1255	11335	10841			1.46	Si
SLV 11	-0.2	-11160	7961	-2027.16		11668	2.1255	10667	10202			1.28	Si
SLV 11	0.2	-10396	8186	-3632.75		10869	2.1255	10507	10050			1.23	Si
SLV 2	-0.2	-13949	-5003	-14.93		14584	2.1255	11250	10760			2.15	Si
SLV 2	0.2	-13870	-5372	895.62		14501	2.1255	11234	10744			2	Si
SLV 7	-0.2	-11428	5879	-2638.2		11948	2.1255	10723	10256			1.74	Si
SLV 7	0.2	-10990	5944	-3775.21		11490	2.1255	10631	10168			1.71	Si

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 6	-0.2	-14826	-7127	2494.32		15500	2.1255	11433	10936			1.53	Si
SLV 6	0.2	-14354	-7443	3666.38		15008	2.1255	11335	10841			1.46	Si
SLV 8	-0.2	-11428	5879	-2638.2		11948	2.1255	10723	10256			1.74	Si
SLV 8	0.2	-10990	5944	-3775.21		11490	2.1255	10631	10168			1.71	Si
SLV 16	-0.2	-12036	5837	482.09		12584	2.1255	10850	10378			1.78	Si
SLV 16	0.2	-10880	6115	-861.99		11376	2.1255	10608	10146			1.66	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 11	143750	0.24	11004	-10525	127.74	2154.87	16.87	Si
SLV 12	143750	0.24	11004	-10525	127.74	2154.87	16.87	Si
SLV 15	143750	0.24	11520	-11018	127.74	2245.35	17.58	Si
SLV 16	143750	0.24	11520	-11018	127.74	2245.35	17.58	Si
SLV 8	143750	0.24	11543	-11040	127.74	2249.37	17.61	Si
SLV 7	143750	0.24	11543	-11040	127.74	2249.37	17.61	Si
SLV 13	143750	0.24	12500	-11956	127.74	2414.85	18.9	Si
SLV 14	143750	0.24	12500	-11956	127.74	2414.85	18.9	Si
SLV 4	143750	0.24	13315	-12735	127.74	2553.12	19.99	Si
SLV 3	143750	0.24	13315	-12735	127.74	2553.12	19.99	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 10	-9579	-14182	-529	0.056	1341.9	0.927	0.87387	10.4695	No
SLV 9	-9579	-14182	-529	0.056	1341.9	0.927	0.87387	10.4695	No
SLV 6	-9746	-15176	-530	0.056	1358.7	0.928	0.87782	10.4695	No
SLV 5	-9746	-15176	-530	0.056	1358.7	0.928	0.87782	10.4695	No
SLV 13	-9282	-12420	-413	0.065	1311.9	0.926	1.01993	9.11363	No
SLV 14	-9282	-12420	-413	0.065	1311.9	0.926	1.01993	9.11363	No
SLV 2	-9839	-15736	-417	0.066	1368	0.929	1.02594	9.11363	No
SLV 1	-9839	-15736	-417	0.066	1368	0.929	1.02594	9.11363	No
SLV 8	-9454	-13459	-204	0.083	1329.2	0.927	1.30236	10.4695	No
SLV 7	-9454	-13459	-204	0.083	1329.2	0.927	1.30236	10.4695	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.516	SLU 2	Si
V_SLU	2.136	SLU 2	Si
PF_SLV	2.771	SLV 11	Si
V_SLV	1.228	SLV 11	Si
PFFP_SLV	16.869	SLV 11	Si
R_SLV	0.083	SLV 9	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
6.239	5.915	9.889	5.915	L1	L2	3.649	0.45	2.68	2.68	2.68			

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 5	-0.2	-14342	213.74	8733	23363.42	109.309	Si
SLU 5	0.2	-13177	321.93	8024	21675.41	67.329	Si
SLU 44	-0.2	-18616	231.42	11336	29240.12	126.35	Si
SLU 44	0.2	-17105	340.69	10416	27219.86	79.897	Si
SLU 68	-0.2	-21856	225.34	13309	33363.74	148.062	Si
SLU 68	0.2	-20335	336.45	12383	31463.78	93.517	Si
SLU 23	-0.2	-17582	207.65	10707	27864.81	134.19	Si
SLU 23	0.2	-16407	317.7	9991	26265.42	82.675	Si
SLU 47	-0.2	-18616	231.42	11336	29240.12	126.35	Si
SLU 47	0.2	-17105	340.69	10416	27219.86	79.897	Si
SLU 13	-0.2	-20015	222.67	12188	31056.5	139.471	Si
SLU 13	0.2	-18851	330.73	11479	29548.75	89.343	Si
SLU 65	-0.2	-21856	225.34	13309	33363.74	148.062	Si
SLU 65	0.2	-20335	336.45	12383	31463.78	93.517	Si
SLU 26	-0.2	-17582	207.65	10707	27864.81	134.19	Si
SLU 26	0.2	-16407	317.7	9991	26265.42	82.675	Si
SLU 2	-0.2	-14342	213.74	8733	23363.42	109.309	Si
SLU 2	0.2	-13177	321.93	8024	21675.41	67.329	Si
SLU 10	-0.2	-20015	222.67	12188	31056.5	139.471	Si
SLU 10	0.2	-18851	330.73	11479	29548.75	89.343	Si

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 1	-0.2	-22402	-2265.07	13641	36311.75	16.031	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 1	0.2	-21322	588.25	12984	34770.39	59.108	Si
SLV 4	-0.2	-18617	-2364.51	11337	30817.49	13.033	Si
SLV 4	0.2	-17291	317.79	10529	28831.57	90.725	Si
SLV 7	-0.2	-14192	-823.19	8642	24063.12	29.232	Si
SLV 7	0.2	-12604	-273.57	7675	21553.43	78.787	Si
SLV 8	-0.2	-14192	-823.19	8642	24063.12	29.232	Si
SLV 8	0.2	-12604	-273.57	7675	21553.43	78.787	Si
SLV 13	-0.2	-22374	2470.12	13625	36272.66	14.685	Si
SLV 13	0.2	-21364	-199.83	13010	34831.75	174.31	Si
SLV 14	-0.2	-22374	2470.12	13625	36272.66	14.685	Si
SLV 14	0.2	-21364	-199.83	13010	34831.75	174.31	Si
SLV 16	-0.2	-18589	2370.69	11320	30776.5	12.982	Si
SLV 16	0.2	-17334	-470.28	10555	28896.07	61.444	Si
SLV 3	-0.2	-18617	-2364.51	11337	30817.49	13.033	Si
SLV 3	0.2	-17291	317.79	10529	28831.57	90.725	Si
SLV 15	-0.2	-18589	2370.69	11320	30776.5	12.982	Si
SLV 15	0.2	-17334	-470.28	10555	28896.07	61.444	Si
SLV 2	-0.2	-22402	-2265.07	13641	36311.75	16.031	Si
SLV 2	0.2	-21322	588.25	12984	34770.39	59.108	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 65	-0.2	-21856	-278	225.34		13309	3.6493	7330	12037			43.31	Si
SLU 65	0.2	-20335	-278	336.45		12383	3.6493	7207	11835			42.58	Si
SLU 10	-0.2	-20015	-270	222.67		12188	3.6493	7181	11792			43.67	Si
SLU 10	0.2	-18851	-270	330.73		11479	3.6493	7086	11637			43.1	Si
SLU 68	-0.2	-21856	-278	225.34		13309	3.6493	7330	12037			43.31	Si
SLU 68	0.2	-20335	-278	336.45		12383	3.6493	7207	11835			42.58	Si
SLU 47	-0.2	-18616	-273	231.42		11336	3.6493	7067	11605			42.54	Si
SLU 47	0.2	-17105	-273	340.69		10416	3.6493	6944	11404			41.8	Si
SLU 23	-0.2	-17582	-275	207.65		10707	3.6493	6983	11468			41.63	Si
SLU 23	0.2	-16407	-275	317.7		9991	3.6493	6888	11311			41.06	Si
SLU 26	-0.2	-17582	-275	207.65		10707	3.6493	6983	11468			41.63	Si
SLU 26	0.2	-16407	-275	317.7		9991	3.6493	6888	11311			41.06	Si
SLU 13	-0.2	-20015	-270	222.67		12188	3.6493	7181	11792			43.67	Si
SLU 13	0.2	-18851	-270	330.73		11479	3.6493	7086	11637			43.1	Si
SLU 2	-0.2	-14342	-270	213.74		8733	3.6493	6720	11036			40.82	Si
SLU 2	0.2	-13177	-270	321.93		8024	3.6493	6625	10880			40.24	Si
SLU 44	-0.2	-18616	-273	231.42		11336	3.6493	7067	11605			42.54	Si
SLU 44	0.2	-17105	-273	340.69		10416	3.6493	6944	11404			41.8	Si
SLU 5	-0.2	-14342	-270	213.74		8733	3.6493	6720	11036			40.82	Si
SLU 5	0.2	-13177	-270	321.93		8024	3.6493	6625	10880			40.24	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 13	-0.2	-22374	6670	2470.12		13625	3.6493	11058	18160			2.72	Si
SLV 13	0.2	-21364	6888	-199.83		13010	3.6493	10935	17958			2.61	Si
SLV 7	-0.2	-14192	-2661	-823.19		8642	3.6493	10062	16523			6.21	Si
SLV 7	0.2	-12604	-2542	-273.57		7675	3.6493	9868	16206			6.37	Si
SLV 16	-0.2	-18589	6248	2370.69		11320	3.6493	10597	17403			2.79	Si
SLV 16	0.2	-17334	6588	-470.28		10555	3.6493	10444	17152			2.6	Si
SLV 2	-0.2	-22402	-6279	-2265.07		13641	3.6493	11062	18165			2.89	Si
SLV 2	0.2	-21322	-6619	588.25		12984	3.6493	10930	17949			2.71	Si
SLV 4	-0.2	-18617	-6701	-2364.51		11337	3.6493	10601	17408			2.6	Si
SLV 4	0.2	-17291	-6919	317.79		10529	3.6493	10439	17143			2.48	Si
SLV 3	-0.2	-18617	-6701	-2364.51		11337	3.6493	10601	17408			2.6	Si
SLV 3	0.2	-17291	-6919	317.79		10529	3.6493	10439	17143			2.48	Si
SLV 8	-0.2	-14192	-2661	-823.19		8642	3.6493	10062	16523			6.21	Si
SLV 8	0.2	-12604	-2542	-273.57		7675	3.6493	9868	16206			6.37	Si
SLV 15	-0.2	-18589	6248	2370.69		11320	3.6493	10597	17403			2.79	Si
SLV 15	0.2	-17334	6588	-470.28		10555	3.6493	10444	17152			2.6	Si
SLV 14	-0.2	-22374	6670	2470.12		13625	3.6493	11058	18160			2.72	Si
SLV 14	0.2	-21364	6888	-199.83		13010	3.6493	10935	17958			2.61	Si
SLV 1	-0.2	-22402	-6279	-2265.07		13641	3.6493	11062	18165			2.89	Si
SLV 1	0.2	-21322	-6619	588.25		12984	3.6493	10930	17949			2.71	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 11	143750	0.24	7994	-13127	219.33	2760.4	12.59	Si
SLV 12	143750	0.24	7994	-13127	219.33	2760.4	12.59	Si
SLV 7	143750	0.24	8005	-13145	219.33	2763.96	12.6	Si
SLV 8	143750	0.24	8005	-13145	219.33	2763.96	12.6	Si
SLV 16	143750	0.24	10279	-16880	219.33	3478.53	15.86	Si
SLV 15	143750	0.24	10279	-16880	219.33	3478.53	15.86	Si
SLV 4	143750	0.24	10316	-16941	219.33	3489.89	15.91	Si
SLV 3	143750	0.24	10316	-16941	219.33	3489.89	15.91	Si
SLV 13	143750	0.24	12249	-20115	219.33	4072.2	18.57	Si
SLV 14	143750	0.24	12249	-20115	219.33	4072.2	18.57	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 5	-18803	-26136	-499	0.077	2541.6	0.933	1.19365	10.4695	No
SLV 6	-18803	-26136	-499	0.077	2541.6	0.933	1.19365	10.4695	No
SLV 9	-18670	-26147	-497	0.077	2528.2	0.933	1.19477	10.4695	No

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 10	-18670	-26147	-497	0.077	2528.2	0.933	1.19477	10.4695	No
SLV 2	-15327	-22492	-276	0.087	2191.1	0.925	1.36579	9.11363	No
SLV 1	-15327	-22492	-276	0.087	2191.1	0.925	1.36579	9.11363	No
SLV 13	-14884	-22530	-269	0.087	2146.6	0.923	1.37439	9.11363	No
SLV 14	-14884	-22530	-269	0.087	2146.6	0.923	1.37439	9.11363	No
SLV 8	-8430	-15764	146	0.099	1503.3	0.902	1.59572	10.4695	No
SLV 7	-8430	-15764	146	0.099	1503.3	0.902	1.59572	10.4695	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	67.329	SLU 2	Si
V_SLU	40.244	SLU 2	Si
PF_SLV	12.982	SLV 15	Si
V_SLV	2.478	SLV 3	Si
PFFP_SLV	12.586	SLV 11	Si
R_SLV	0.114	SLV 5	No

Maschio 8

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
10.889	5.915	12.744	5.915	L1	L2	1.855	0.45	2.68	2.68	2.68			

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 68	-0.2	-14961	391.48	17920	10824.9	27.651	Si
SLU 68	0.2	-13943	1353.15	16700	10281.8	7.598	Si
SLU 2	-0.2	-10749	580.44	12875	8394.7	14.463	Si
SLU 2	0.2	-9879	1480.42	11833	7832.43	5.291	Si
SLU 65	-0.2	-14961	391.48	17920	10824.9	27.651	Si
SLU 65	0.2	-13943	1353.15	16700	10281.8	7.598	Si
SLU 10	-0.2	-13665	485.38	16368	10128.73	20.867	Si
SLU 10	0.2	-12844	1400.34	15385	9664.45	6.902	Si
SLU 47	-0.2	-13354	510.36	15995	9954.88	19.506	Si
SLU 47	0.2	-12309	1470.68	14744	9351.45	6.359	Si
SLU 23	-0.2	-12356	461.57	14800	9378.94	20.32	Si
SLU 23	0.2	-11512	1362.89	13789	8871.1	6.509	Si
SLU 5	-0.2	-10749	580.44	12875	8394.7	14.463	Si
SLU 5	0.2	-9879	1480.42	11833	7832.43	5.291	Si
SLU 26	-0.2	-12356	461.57	14800	9378.94	20.32	Si
SLU 26	0.2	-11512	1362.89	13789	8871.1	6.509	Si
SLU 44	-0.2	-13354	510.36	15995	9954.88	19.506	Si
SLU 44	0.2	-12309	1470.68	14744	9351.45	6.359	Si
SLU 13	-0.2	-13665	485.38	16368	10128.73	20.867	Si
SLU 13	0.2	-12844	1400.34	15385	9664.45	6.902	Si

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 2	-0.2	-10910	-1982.67	13068	9037.73	4.558	Si
SLV 2	0.2	-9807	-1434.29	11747	8222.94	5.733	Si
SLV 8	-0.2	-11512	912.67	13789	9473.78	10.38	Si
SLV 8	0.2	-10504	2443.22	12582	8740.42	3.577	Si
SLV 12	-0.2	-12059	1545.2	14444	9863.9	6.384	Si
SLV 12	0.2	-11445	2669.53	13708	9425.24	3.531	Si
SLV 9	-0.2	-12114	-1773.85	14510	9902.65	5.583	Si
SLV 9	0.2	-12061	-2889.69	14447	9865.52	3.414	Si
SLV 5	-0.2	-11567	-2406.38	13855	9513.08	3.953	Si
SLV 5	0.2	-11121	-3116	13321	9191.25	2.95	Si
SLV 10	-0.2	-12114	-1773.85	14510	9902.65	5.583	Si
SLV 10	0.2	-12061	-2889.69	14447	9865.52	3.414	Si
SLV 6	-0.2	-11567	-2406.38	13855	9513.08	3.953	Si
SLV 6	0.2	-11121	-3116	13321	9191.25	2.95	Si
SLV 7	-0.2	-11512	912.67	13789	9473.78	10.38	Si
SLV 7	0.2	-10504	2443.22	12582	8740.42	3.577	Si
SLV 1	-0.2	-10910	-1982.67	13068	9037.73	4.558	Si
SLV 1	0.2	-9807	-1434.29	11747	8222.94	5.733	Si
SLV 11	-0.2	-12059	1545.2	14444	9863.9	6.384	Si
SLV 11	0.2	-11445	2669.53	13708	9425.24	3.531	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 65	-0.2	-14961	-3028	391.48		17920	1.8552	7945	6633			2.19	Si
SLU 65	0.2	-13943	-2964	1353.15		16700	1.8552	7782	6497			2.19	Si
SLU 5	-0.2	-10749	-2937	580.44		12875	1.8552	7272	6071			2.07	Si
SLU 5	0.2	-9879	-2888	1480.42		11833	1.8552	7133	5955			2.06	Si
SLU 26	-0.2	-12356	-2872	461.57		14800	1.8552	7529	6286			2.19	Si
SLU 26	0.2	-11512	-2818	1362.89		13789	1.8552	7394	6173			2.19	Si

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 52	-0.2	-16270	-3026	415.3		19488	1.8552	8154	6807			2.25	Si
SLU 52	0.2	-15275	-2955	1390.6		18297	1.8552	7995	6675			2.26	Si
SLU 44	-0.2	-13354	-3093	510.36		15995	1.8552	7688	6419			2.08	Si
SLU 44	0.2	-12309	-3034	1470.68		14744	1.8552	7521	6279			2.07	Si
SLU 2	-0.2	-10749	-2937	580.44		12875	1.8552	7272	6071			2.07	Si
SLU 2	0.2	-9879	-2888	1480.42		11833	1.8552	7133	5955			2.06	Si
SLU 55	-0.2	-16270	-3026	415.3		19488	1.8552	8154	6807			2.25	Si
SLU 55	0.2	-15275	-2955	1390.6		18297	1.8552	7995	6675			2.26	Si
SLU 23	-0.2	-12356	-2872	461.57		14800	1.8552	7529	6286			2.19	Si
SLU 23	0.2	-11512	-2818	1362.89		13789	1.8552	7394	6173			2.19	Si
SLU 68	-0.2	-14961	-3028	391.48		17920	1.8552	7945	6633			2.19	Si
SLU 68	0.2	-13943	-2964	1353.15		16700	1.8552	7782	6497			2.19	Si
SLU 47	-0.2	-13354	-3093	510.36		15995	1.8552	7688	6419			2.08	Si
SLU 47	0.2	-12309	-3034	1470.68		14744	1.8552	7521	6279			2.07	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	-0.2	-11512	-7300	912.67		13789	1.8552	11091	9260			1.27	Si
SLV 8	0.2	-10504	-7475	2443.22		12582	1.8552	10850	9058			1.21	Si
SLV 10	-0.2	-12114	6479	-1773.85		14510	1.8552	11235	9380			1.45	Si
SLV 10	0.2	-12061	6743	-2889.69		14447	1.8552	11223	9369			1.39	Si
SLV 3	-0.2	-10893	-5169	-986.96		13048	1.8552	10943	9136			1.77	Si
SLV 3	0.2	-9622	-5404	233.47		11526	1.8552	10638	8882			1.64	Si
SLV 11	-0.2	-12059	-5525	1545.2		14444	1.8552	11222	9369			1.7	Si
SLV 11	0.2	-11445	-5559	2669.53		13708	1.8552	11075	9246			1.66	Si
SLV 5	-0.2	-11567	4704	-2406.38		13855	1.8552	11104	9271			1.97	Si
SLV 5	0.2	-11121	4827	-3116		13321	1.8552	10997	9181			1.9	Si
SLV 6	-0.2	-11567	4704	-2406.38		13855	1.8552	11104	9271			1.97	Si
SLV 6	0.2	-11121	4827	-3116		13321	1.8552	10997	9181			1.9	Si
SLV 12	-0.2	-12059	-5525	1545.2		14444	1.8552	11222	9369			1.7	Si
SLV 12	0.2	-11445	-5559	2669.53		13708	1.8552	11075	9246			1.66	Si
SLV 4	-0.2	-10893	-5169	-986.96		13048	1.8552	10943	9136			1.77	Si
SLV 4	0.2	-9622	-5404	233.47		11526	1.8552	10638	8882			1.64	Si
SLV 9	-0.2	-12114	6479	-1773.85		14510	1.8552	11235	9380			1.45	Si
SLV 9	0.2	-12061	6743	-2889.69		14447	1.8552	11223	9369			1.39	Si
SLV 7	-0.2	-11512	-7300	912.67		13789	1.8552	11091	9260			1.27	Si
SLV 7	0.2	-10504	-7475	2443.22		12582	1.8552	10850	9058			1.21	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 2	143750	0.24	11592	-9677	111.5	1970.83	17.68	Si
SLV 1	143750	0.24	11592	-9677	111.5	1970.83	17.68	Si
SLV 3	143750	0.24	11630	-9710	111.5	1976.75	17.73	Si
SLV 4	143750	0.24	11630	-9710	111.5	1976.75	17.73	Si
SLV 6	143750	0.24	12684	-10589	111.5	2135.22	19.15	Si
SLV 5	143750	0.24	12684	-10589	111.5	2135.22	19.15	Si
SLV 8	143750	0.24	12813	-10697	111.5	2154.5	19.32	Si
SLV 7	143750	0.24	12813	-10697	111.5	2154.5	19.32	Si
SLV 10	143750	0.24	13659	-11403	111.5	2278.89	20.44	Si
SLV 9	143750	0.24	13659	-11403	111.5	2278.89	20.44	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 5	-7429	-9635	-461	0.053	1077.4	0.923	0.83533	10.4695	No
SLV 6	-7429	-9635	-461	0.053	1077.4	0.923	0.83533	10.4695	No
SLV 10	-8512	-10713	-491	0.053	1186.4	0.928	0.8357	10.4695	No
SLV 9	-8512	-10713	-491	0.053	1186.4	0.928	0.8357	10.4695	No
SLV 14	-10195	-13449	-435	0.062	1356.4	0.936	0.96632	9.11363	No
SLV 13	-10195	-13449	-435	0.062	1356.4	0.936	0.96632	9.11363	No
SLV 1	-6585	-9856	-335	0.065	992.8	0.918	1.02385	9.11363	No
SLV 2	-6585	-9856	-335	0.065	992.8	0.918	1.02385	9.11363	No
SLV 11	-9711	-14937	-230	0.079	1307.5	0.934	1.22551	10.4695	No
SLV 12	-9711	-14937	-230	0.079	1307.5	0.934	1.22551	10.4695	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	5.291	SLU 2	Si
V_SLU	2.062	SLU 2	Si
PF_SLV	2.95	SLV 5	Si
V_SLV	1.212	SLV 7	Si
PFFP_SLV	17.675	SLV 1	Si
R_SLV	0.08	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
7.964	-3.756	3.959	-3.756	L1	L2	4.005	0.45	2.68	2.68	2.68			

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 43	-1.59	-32191	-1743.55	17863	50321.51	28.861	Si
SLU 43	0.61	-22583	-1829.72	12532	38261.67	20.911	Si
SLU 44	-1.59	-32128	-1701.18	17828	50250.93	29.539	Si
SLU 44	0.61	-22581	-1799.32	12530	38258.61	21.263	Si
SLU 45	-1.59	-32191	-1743.55	17863	50321.51	28.861	Si
SLU 45	0.61	-22583	-1829.72	12532	38261.67	20.911	Si
SLU 69	-1.59	-36453	-1738.6	20228	54865.29	31.557	Si
SLU 69	0.61	-26720	-1984.08	14827	43763.25	22.057	Si
SLU 48	-1.59	-32191	-1743.55	17863	50321.51	28.861	Si
SLU 48	0.61	-22583	-1829.72	12532	38261.67	20.911	Si
SLU 49	-1.59	-32153	-1718.13	17842	50279.18	29.264	Si
SLU 49	0.61	-22582	-1811.48	12531	38259.84	21.121	Si
SLU 50	-1.59	-32191	-1743.55	17863	50321.51	28.861	Si
SLU 50	0.61	-22583	-1829.72	12532	38261.67	20.911	Si
SLU 46	-1.59	-32153	-1718.13	17842	50279.18	29.264	Si
SLU 46	0.61	-22582	-1811.48	12531	38259.84	21.121	Si
SLU 51	-1.59	-32153	-1718.13	17842	50279.18	29.264	Si
SLU 51	0.61	-22582	-1811.48	12531	38259.84	21.121	Si
SLU 47	-1.59	-32128	-1701.18	17828	50250.93	29.539	Si
SLU 47	0.61	-22581	-1799.32	12530	38258.61	21.263	Si

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 7	-1.59	-21354	-5597.62	11850	38610.62	6.898	Si
SLV 7	0.61	-17478	-4271.17	9699	32218.28	7.543	Si
SLV 2	-1.59	-29913	7140.76	16599	51758.56	7.248	Si
SLV 2	0.61	-24399	-1807.46	13539	43440.54	24.034	Si
SLV 1	-1.59	-29913	7140.76	16599	51758.56	7.248	Si
SLV 1	0.61	-24399	-1807.46	13539	43440.54	24.034	Si
SLV 8	-1.59	-21354	-5597.62	11850	38610.62	6.898	Si
SLV 8	0.61	-17478	-4271.17	9699	32218.28	7.543	Si
SLV 5	-1.59	-36215	6938.43	20096	60587.1	8.732	Si
SLV 5	0.61	-26844	590.56	14896	47197.37	79.92	Si
SLV 15	-1.59	-28599	-9734.19	15870	49826.18	5.119	Si
SLV 15	0.61	-19209	-1276.22	10659	35107.54	27.509	Si
SLV 11	-1.59	-22297	-9531.86	12373	40124.78	4.21	Si
SLV 11	0.61	-16764	-3674.24	9303	31011.17	8.44	Si
SLV 12	-1.59	-22297	-9531.86	12373	40124.78	4.21	Si
SLV 12	0.61	-16764	-3674.24	9303	31011.17	8.44	Si
SLV 16	-1.59	-28599	-9734.19	15870	49826.18	5.119	Si
SLV 16	0.61	-19209	-1276.22	10659	35107.54	27.509	Si
SLV 6	-1.59	-36215	6938.43	20096	60587.1	8.732	Si
SLV 6	0.61	-26844	590.56	14896	47197.37	79.92	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 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 40	-1.59	-40869	2837	-1100.72		22679	4.0046	8579	15461			5.45	Si
SLU 40	0.61	-33395	2321	-1832.05		18532	4.0046	8026	14464			6.23	Si
SLU 42	-1.59	-40869	2837	-1100.72		22679	4.0046	8579	15461			5.45	Si
SLU 42	0.61	-33395	2321	-1832.05		18532	4.0046	8026	14464			6.23	Si
SLU 76	-1.59	-43921	2879	-1550.07		24373	4.0046	8805	15868			5.51	Si
SLU 76	0.61	-34276	2335	-2127.1		19020	4.0046	8092	14582			6.24	Si
SLU 73	-1.59	-43921	2879	-1550.07		24373	4.0046	8805	15868			5.51	Si
SLU 73	0.61	-34276	2335	-2127.1		19020	4.0046	8092	14582			6.24	Si
SLU 81	-1.59	-47212	3112	-1529.81		26198	4.0046	9049	16306			5.24	Si
SLU 81	0.61	-37517	2521	-2231.82		20819	4.0046	8331	15014			5.96	Si
SLU 39	-1.59	-40907	2801	-1126.15		22700	4.0046	8582	15466			5.52	Si
SLU 39	0.61	-33397	2282	-1850.29		18532	4.0046	8027	14464			6.34	Si
SLU 82	-1.59	-47174	3148	-1504.39		26177	4.0046	9046	16301			5.18	Si
SLU 82	0.61	-37516	2559	-2213.58		20818	4.0046	8331	15014			5.87	Si
SLU 41	-1.59	-40907	2801	-1126.15		22700	4.0046	8582	15466			5.52	Si
SLU 41	0.61	-33397	2282	-1850.29		18532	4.0046	8027	14464			6.34	Si
SLU 83	-1.59	-47212	3112	-1529.81		26198	4.0046	9049	16306			5.24	Si
SLU 83	0.61	-37517	2521	-2231.82		20819	4.0046	8331	15014			5.96	Si
SLU 84	-1.59	-47174	3148	-1504.39		26177	4.0046	9046	16301			5.18	Si
SLU 84	0.61	-37516	2559	-2213.58		20818	4.0046	8331	15014			5.87	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 7	-1.59	-21354	3963	-5597.62		11850	4.0046	10703	19288			4.87	Si
SLV 7	0.61	-17478	4114	-4271.17		9699	4.0046	10273	18513			4.5	Si
SLV 2	-1.59	-29913	7983	7140.76		16599	4.0046	11653	21000			2.63	Si
SLV 2	0.61	-24399	6639	-1807.46		13539	4.0046	11041	19897			3	Si
SLV 3	-1.59	-25455	8169	3379.94		14125	4.0046	11158	20108			2.46	Si
SLV 3	0.61	-21589	7269	-3265.98		11980	4.0046	10729	19335			2.66	Si
SLV 16	-1.59	-28599	-4471	-9734.19		15870	4.0046	11507	20737			4.64	Si
SLV 16	0.61	-19209	-3843	-1276.22		10659	4.0046	10465	18859			4.91	Si
SLV 14	-1.59	-33057	-4658	-5973.37		18344	4.0046	12002	21629			4.64	Si
SLV 14	0.61	-22019	-4472	182.3		12219	4.0046	10777	19421			4.34	Si
SLV 8	-1.59	-21354	3963	-5597.62		11850	4.0046	10703	19288			4.87	Si

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	0.61	-17478	4114	-4271.17		9699	4.0046	10273	18513			4.5	Si
SLV 1	-1.59	-29913	7983	7140.76		16599	4.0046	11653	21000			2.63	Si
SLV 1	0.61	-24399	6639	-1807.46		13539	4.0046	11041	19897			3	Si
SLV 13	-1.59	-33057	-4658	-5973.37		18344	4.0046	12002	21629			4.64	Si
SLV 13	0.61	-22019	-4472	182.3		12219	4.0046	10777	19421			4.34	Si
SLV 15	-1.59	-28599	-4471	-9734.19		15870	4.0046	11507	20737			4.64	Si
SLV 15	0.61	-19209	-3843	-1276.22		10659	4.0046	10465	18859			4.91	Si
SLV 4	-1.59	-25455	8169	3379.94		14125	4.0046	11158	20108			2.46	Si
SLV 4	0.61	-21589	7269	-3265.98		11980	4.0046	10729	19335			2.66	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 7	143750	0.24	10645	-19184	244.2	3940.33	16.14	Si
SLV 8	143750	0.24	10645	-19184	244.2	3940.33	16.14	Si
SLV 12	143750	0.24	10765	-19400	244.2	3980.41	16.3	Si
SLV 11	143750	0.24	10765	-19400	244.2	3980.41	16.3	Si
SLV 3	143750	0.24	12868	-23189	244.2	4668.06	19.12	Si
SLV 4	143750	0.24	12868	-23189	244.2	4668.06	19.12	Si
SLV 16	143750	0.24	13267	-23909	244.2	4795.42	19.64	Si
SLV 15	143750	0.24	13267	-23909	244.2	4795.42	19.64	Si
SLV 1	143750	0.24	14893	-26838	244.2	5302.54	21.71	Si
SLV 2	143750	0.24	14893	-26838	244.2	5302.54	21.71	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 10	-25472	-37158	272	0.087	3278.6	0.941	1.34415	10.4695	No
SLV 9	-25472	-37158	272	0.087	3278.6	0.941	1.34415	10.4695	No
SLV 6	-24539	-36215	278	0.087	3184	0.94	1.34458	10.4695	No
SLV 5	-24539	-36215	278	0.087	3184	0.94	1.34458	10.4695	No
SLV 11	-15655	-22297	-272	0.089	2287.5	0.922	1.39724	10.4695	No
SLV 12	-15655	-22297	-272	0.089	2287.5	0.922	1.39724	10.4695	No
SLV 7	-14722	-21354	-266	0.089	2193.8	0.919	1.40962	10.4695	No
SLV 8	-14722	-21354	-266	0.089	2193.8	0.919	1.40962	10.4695	No
SLV 14	-23125	-33057	75	0.095	3041	0.938	1.46515	9.11363	No
SLV 13	-23125	-33057	75	0.095	3041	0.938	1.46515	9.11363	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	20.911	SLU 43	Si
V_SLU	5.178	SLU 82	Si
PF_SLV	4.21	SLV 11	Si
V_SLV	2.461	SLV 3	Si
PFFP_SLV	16.136	SLV 7	Si
R_SLV	0.128	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
12.744	-3.756	8.964	-3.756	L1	L2	3.78	0.45	2.68	2.68	2.68			

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 38	-1.59	-33823	2414.71	19883	48327.83	20.014	Si
SLU 38	0.61	-27492	2008.6	16161	41656.1	20.739	Si
SLU 41	-1.59	-36632	2534.79	21534	50937.5	20.095	Si
SLU 41	0.61	-30281	2220.3	17800	44729.26	20.146	Si
SLU 36	-1.59	-33823	2414.71	19883	48327.83	20.014	Si
SLU 36	0.61	-27492	2008.6	16161	41656.1	20.739	Si
SLU 84	-1.59	-42658	2866.06	25075	55809.97	19.473	Si
SLU 84	0.61	-34417	2372.01	20231	48897.33	20.614	Si
SLU 40	-1.59	-36246	2778.06	21306	50591.24	18.211	Si
SLU 40	0.61	-30015	2400.52	17644	44444.93	18.515	Si
SLU 31	-1.59	-33566	2576.89	19731	48077.7	18.657	Si
SLU 31	0.61	-27315	2128.74	16057	41453.25	19.473	Si
SLU 42	-1.59	-36246	2778.06	21306	50591.24	18.211	Si
SLU 42	0.61	-30015	2400.52	17644	44444.93	18.515	Si
SLU 82	-1.59	-42658	2866.06	25075	55809.97	19.473	Si
SLU 82	0.61	-34417	2372.01	20231	48897.33	20.614	Si
SLU 34	-1.59	-33566	2576.89	19731	48077.7	18.657	Si
SLU 34	0.61	-27315	2128.74	16057	41453.25	19.473	Si
SLU 33	-1.59	-33823	2414.71	19883	48327.83	20.014	Si
SLU 33	0.61	-27492	2008.6	16161	41656.1	20.739	Si

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 15	-1.59	-28539	-6521.99	16776	46537.22	7.135	Si
SLV 15	0.61	-25003	-417.54	14698	41575.68	99.572	Si
SLV 13	-1.59	-29769	-7149.53	17499	48210.69	6.743	Si
SLV 13	0.61	-25348	-1445.6	14900	42069.65	29.102	Si
SLV 3	-1.59	-25786	9594.38	15158	42694.12	4.45	Si
SLV 3	0.61	-16964	3123.31	9972	29447.46	9.428	Si
SLV 7	-1.59	-25314	4685.79	14880	42020.97	8.968	Si
SLV 7	0.61	-19375	3083.41	11389	33208.77	10.77	Si
SLV 1	-1.59	-27017	8966.84	15881	44429.19	4.955	Si
SLV 1	0.61	-17308	2095.24	10174	29991.86	14.314	Si
SLV 8	-1.59	-25314	4685.79	14880	42020.97	8.968	Si
SLV 8	0.61	-19375	3083.41	11389	33208.77	10.77	Si
SLV 16	-1.59	-28539	-6521.99	16776	46537.22	7.135	Si
SLV 16	0.61	-25003	-417.54	14698	41575.68	99.572	Si
SLV 4	-1.59	-25786	9594.38	15158	42694.12	4.45	Si
SLV 4	0.61	-16964	3123.31	9972	29447.46	9.428	Si
SLV 14	-1.59	-29769	-7149.53	17499	48210.69	6.743	Si
SLV 14	0.61	-25348	-1445.6	14900	42069.65	29.102	Si
SLV 2	-1.59	-27017	8966.84	15881	44429.19	4.955	Si
SLV 2	0.61	-17308	2095.24	10174	29991.86	14.314	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 41	-1.59	-36632	-2905	2534.79		21534	3.7804	8427	14335			4.93	Si
SLU 41	0.61	-30281	-2416	2220.3		17800	3.7804	7929	13488			5.58	Si
SLU 82	-1.59	-42658	-3292	2866.06		25075	3.7804	8899	15139			4.6	Si
SLU 82	0.61	-34417	-2732	2372.01		20231	3.7804	8253	14040			5.14	Si
SLU 40	-1.59	-36246	-2971	2778.06		21306	3.7804	8396	14284			4.81	Si
SLU 40	0.61	-30015	-2487	2400.52		17644	3.7804	7908	13453			5.41	Si
SLU 84	-1.59	-42658	-3292	2866.06		25075	3.7804	8899	15139			4.6	Si
SLU 84	0.61	-34417	-2732	2372.01		20231	3.7804	8253	14040			5.14	Si
SLU 39	-1.59	-36632	-2905	2534.79		21534	3.7804	8427	14335			4.93	Si
SLU 39	0.61	-30281	-2416	2220.3		17800	3.7804	7929	13488			5.58	Si
SLU 73	-1.59	-39978	-3029	2664.89		23500	3.7804	8689	14781			4.88	Si
SLU 73	0.61	-31718	-2510	2100.23		18645	3.7804	8041	13680			5.45	Si
SLU 81	-1.59	-43044	-3226	2622.79		25303	3.7804	8929	15190			4.71	Si
SLU 81	0.61	-34683	-2660	2191.79		20388	3.7804	8274	14075			5.29	Si
SLU 83	-1.59	-43044	-3226	2622.79		25303	3.7804	8929	15190			4.71	Si
SLU 83	0.61	-34683	-2660	2191.79		20388	3.7804	8274	14075			5.29	Si
SLU 76	-1.59	-39978	-3029	2664.89		23500	3.7804	8689	14781			4.88	Si
SLU 76	0.61	-31718	-2510	2100.23		18645	3.7804	8041	13680			5.45	Si
SLU 42	-1.59	-36246	-2971	2778.06		21306	3.7804	8396	14284			4.81	Si
SLU 42	0.61	-30015	-2487	2400.52		17644	3.7804	7908	13453			5.41	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 15	-1.59	-28539	-7870	-6521.99		16776	3.7804	11689	19884			2.53	Si
SLV 15	0.61	-25003	-6636	-417.54		14698	3.7804	11273	19177			2.89	Si
SLV 2	-1.59	-27017	4239	8966.84		15881	3.7804	11510	19580			4.62	Si
SLV 2	0.61	-17308	3710	2095.24		10174	3.7804	10368	17638			4.75	Si
SLV 4	-1.59	-25786	3305	9594.38		15158	3.7804	11365	19334			5.85	Si
SLV 4	0.61	-16964	2655	3123.31		9972	3.7804	10328	17569			6.62	Si
SLV 3	-1.59	-25786	3305	9594.38		15158	3.7804	11365	19334			5.85	Si
SLV 3	0.61	-16964	2655	3123.31		9972	3.7804	10328	17569			6.62	Si
SLV 14	-1.59	-29769	-6937	-7149.53		17499	3.7804	11833	20130			2.9	Si
SLV 14	0.61	-25348	-5581	-1445.6		14900	3.7804	11313	19246			3.45	Si
SLV 12	-1.59	-26140	-5048	-149.12		15366	3.7804	11406	19404			3.84	Si
SLV 12	0.61	-21787	-4614	2021.16		12807	3.7804	10895	18534			4.02	Si
SLV 11	-1.59	-26140	-5048	-149.12		15366	3.7804	11406	19404			3.84	Si
SLV 11	0.61	-21787	-4614	2021.16		12807	3.7804	10895	18534			4.02	Si
SLV 16	-1.59	-28539	-7870	-6521.99		16776	3.7804	11689	19884			2.53	Si
SLV 16	0.61	-25003	-6636	-417.54		14698	3.7804	11273	19177			2.89	Si
SLV 13	-1.59	-29769	-6937	-7149.53		17499	3.7804	11833	20130			2.9	Si
SLV 13	0.61	-25348	-5581	-1445.6		14900	3.7804	11313	19246			3.45	Si
SLV 1	-1.59	-27017	4239	8966.84		15881	3.7804	11510	19580			4.62	Si
SLV 1	0.61	-17308	3710	2095.24		10174	3.7804	10368	17638			4.75	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.24	12617	-21464	230.52	4330.76	18.79	Si
SLV 4	143750	0.24	12617	-21464	230.52	4330.76	18.79	Si
SLV 2	143750	0.24	12930	-21997	230.52	4425.53	19.2	Si
SLV 1	143750	0.24	12930	-21997	230.52	4425.53	19.2	Si
SLV 7	143750	0.24	13501	-22967	230.52	4596.67	19.94	Si
SLV 8	143750	0.24	13501	-22967	230.52	4596.67	19.94	Si
SLV 5	143750	0.24	14544	-24742	230.52	4904.39	21.28	Si
SLV 6	143750	0.24	14544	-24742	230.52	4904.39	21.28	Si
SLV 12	143750	0.24	14571	-24788	230.52	4912.24	21.31	Si
SLV 11	143750	0.24	14571	-24788	230.52	4912.24	21.31	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 12	-20798	-26140	-197	0.09	2766.2	0.936	1.39599	10.4695	No
SLV 11	-20798	-26140	-197	0.09	2766.2	0.936	1.39599	10.4695	No
SLV 10	-20688	-30241	176	0.091	2755.2	0.935	1.41011	10.4695	No
SLV 9	-20688	-30241	176	0.091	2755.2	0.935	1.41011	10.4695	No
SLV 8	-18654	-25314	-188	0.091	2549.7	0.931	1.41787	10.4695	No
SLV 7	-18654	-25314	-188	0.091	2549.7	0.931	1.41787	10.4695	No
SLV 5	-18545	-29416	185	0.091	2538.6	0.931	1.42034	10.4695	No
SLV 6	-18545	-29416	185	0.091	2538.6	0.931	1.42034	10.4695	No
SLV 16	-23260	-28539	-78	0.094	3015.4	0.94	1.4486	9.11363	No
SLV 15	-23260	-28539	-78	0.094	3015.4	0.94	1.4486	9.11363	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	18.211	SLU 40	Si
V_SLU	4.599	SLU 82	Si
PF_SLV	4.45	SLV 3	Si
V_SLV	2.526	SLV 15	Si
PFFP_SLV	18.787	SLV 3	Si
R_SLV	0.133	SLV 11	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
12.744	-1.751	12.744	-3.756	L1	L2	2.005	0.45	2.68	2.68	2.68			

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 41	-0.2	-9116	300.74	10102	8006.62	26.623	Si
SLU 41	0.2	-7988	284.2	8852	7138.67	25.119	Si
SLU 39	-0.2	-9116	300.74	10102	8006.62	26.623	Si
SLU 39	0.2	-7988	284.2	8852	7138.67	25.119	Si
SLU 38	-0.2	-8475	175.46	9392	7518.07	42.849	Si
SLU 38	0.2	-7369	232.39	8166	6647.48	28.604	Si
SLU 42	-0.2	-8952	232.06	9920	7882.7	33.968	Si
SLU 42	0.2	-7798	293.09	8642	6989.58	23.848	Si
SLU 36	-0.2	-8475	175.46	9392	7518.07	42.849	Si
SLU 36	0.2	-7369	232.39	8166	6647.48	28.604	Si
SLU 33	-0.2	-8475	175.46	9392	7518.07	42.849	Si
SLU 33	0.2	-7369	232.39	8166	6647.48	28.604	Si
SLU 37	-0.2	-8639	244.13	9574	7644.12	31.311	Si
SLU 37	0.2	-7558	223.5	8375	6798.78	30.42	Si
SLU 34	-0.2	-8366	129.67	9271	7433.63	57.326	Si
SLU 34	0.2	-7242	238.32	8026	6546.06	27.467	Si
SLU 40	-0.2	-8952	232.06	9920	7882.7	33.968	Si
SLU 40	0.2	-7798	293.09	8642	6989.58	23.848	Si
SLU 31	-0.2	-8366	129.67	9271	7433.63	57.326	Si
SLU 31	0.2	-7242	238.32	8026	6546.06	27.467	Si

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	-0.2	-6355	-1268.14	7042	6004.23	4.735	Si
SLV 3	0.2	-6289	-468.13	6969	5946.17	12.702	Si
SLV 7	-0.2	-7257	-1104.12	8042	6797.59	6.157	Si
SLV 7	0.2	-6247	-112.67	6923	5908.52	52.441	Si
SLV 14	-0.2	-8412	1450.43	9322	7790.59	5.371	Si
SLV 14	0.2	-6566	595.42	7276	6191.28	10.398	Si
SLV 4	-0.2	-6355	-1268.14	7042	6004.23	4.735	Si
SLV 4	0.2	-6289	-468.13	6969	5946.17	12.702	Si
SLV 8	-0.2	-7257	-1104.12	8042	6797.59	6.157	Si
SLV 8	0.2	-6247	-112.67	6923	5908.52	52.441	Si
SLV 2	-0.2	-6234	-748.92	6908	5897.23	7.874	Si
SLV 2	0.2	-6381	-457.06	7071	6027.63	13.188	Si
SLV 10	-0.2	-7509	1286.41	8321	7016.18	5.454	Si
SLV 10	0.2	-6608	239.96	7323	6228.68	25.958	Si
SLV 1	-0.2	-6234	-748.92	6908	5897.23	7.874	Si
SLV 1	0.2	-6381	-457.06	7071	6027.63	13.188	Si
SLV 9	-0.2	-7509	1286.41	8321	7016.18	5.454	Si
SLV 9	0.2	-6608	239.96	7323	6228.68	25.958	Si
SLV 13	-0.2	-8412	1450.43	9322	7790.59	5.371	Si
SLV 13	0.2	-6566	595.42	7276	6191.28	10.398	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 55	-0.2	-9562	-1452	28.39		10597	2.0053	6968	6288			4.33	Si
SLU 55	0.2	-8257	-1449	127.89		9150	2.0053	6776	6114			4.22	Si
SLU 82	-0.2	-10795	-1562	212.89		11962	2.0053	7151	6453			4.13	Si

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 82	0.2	-9392	-1559	264.83		10408	2.0053	6943	6266			4.02	Si
SLU 52	-0.2	-9562	-1452	28.39		10597	2.0053	6968	6288			4.33	Si
SLU 52	0.2	-8257	-1449	127.89		9150	2.0053	6776	6114			4.22	Si
SLU 31	-0.2	-8366	-1480	129.67		9271	2.0053	6792	6129			4.14	Si
SLU 31	0.2	-7242	-1478	238.32		8026	2.0053	6626	5979			4.05	Si
SLU 76	-0.2	-10209	-1607	110.5		11313	2.0053	7064	6374			3.97	Si
SLU 76	0.2	-8836	-1604	210.06		9792	2.0053	6861	6191			3.86	Si
SLU 84	-0.2	-10795	-1562	212.89		11962	2.0053	7151	6453			4.13	Si
SLU 84	0.2	-9392	-1559	264.83		10408	2.0053	6943	6266			4.02	Si
SLU 73	-0.2	-10209	-1607	110.5		11313	2.0053	7064	6374			3.97	Si
SLU 73	0.2	-8836	-1604	210.06		9792	2.0053	6861	6191			3.86	Si
SLU 40	-0.2	-8952	-1436	232.06		9920	2.0053	6878	6207			4.32	Si
SLU 40	0.2	-7798	-1433	293.09		8642	2.0053	6708	6053			4.22	Si
SLU 34	-0.2	-8366	-1480	129.67		9271	2.0053	6792	6129			4.14	Si
SLU 34	0.2	-7242	-1478	238.32		8026	2.0053	6626	5979			4.05	Si
SLU 42	-0.2	-8952	-1436	232.06		9920	2.0053	6878	6207			4.32	Si
SLU 42	0.2	-7798	-1433	293.09		8642	2.0053	6708	6053			4.22	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 11	-0.2	-7911	-4091	-444.32		8766	2.0053	10087	9102			2.22	Si
SLV 11	0.2	-6302	-4678	203.07		6984	2.0053	9730	8780			1.88	Si
SLV 6	-0.2	-6856	2635	626.6		7597	2.0053	9853	8891			3.37	Si
SLV 6	0.2	-6553	3226	-75.79		7262	2.0053	9786	8830			2.74	Si
SLV 5	-0.2	-6856	2635	626.6		7597	2.0053	9853	8891			3.37	Si
SLV 5	0.2	-6553	3226	-75.79		7262	2.0053	9786	8830			2.74	Si
SLV 7	-0.2	-7257	-3284	-1104.12		8042	2.0053	9942	8971			2.73	Si
SLV 7	0.2	-6247	-3837	-112.67		6923	2.0053	9718	8769			2.29	Si
SLV 12	-0.2	-7911	-4091	-444.32		8766	2.0053	10087	9102			2.22	Si
SLV 12	0.2	-6302	-4678	203.07		6984	2.0053	9730	8780			1.88	Si
SLV 9	-0.2	-7509	1828	1286.41		8321	2.0053	9998	9022			4.94	Si
SLV 9	0.2	-6608	2386	239.96		7323	2.0053	9798	8842			3.71	Si
SLV 16	-0.2	-8532	-2961	931.21		9455	2.0053	10224	9226			3.12	Si
SLV 16	0.2	-6474	-3186	584.35		7174	2.0053	9768	8815			2.77	Si
SLV 8	-0.2	-7257	-3284	-1104.12		8042	2.0053	9942	8971			2.73	Si
SLV 8	0.2	-6247	-3837	-112.67		6923	2.0053	9718	8769			2.29	Si
SLV 10	-0.2	-7509	1828	1286.41		8321	2.0053	9998	9022			4.94	Si
SLV 10	0.2	-6608	2386	239.96		7323	2.0053	9798	8842			3.71	Si
SLV 15	-0.2	-8532	-2961	931.21		9455	2.0053	10224	9226			3.12	Si
SLV 15	0.2	-6474	-3186	584.35		7174	2.0053	9768	8815			2.77	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.24	6217	-5610	120.52	1198.1	9.94	Si
SLV 4	143750	0.24	6217	-5610	120.52	1198.1	9.94	Si
SLV 2	143750	0.24	6409	-5783	120.52	1232.95	10.23	Si
SLV 1	143750	0.24	6409	-5783	120.52	1232.95	10.23	Si
SLV 7	143750	0.24	6974	-6294	120.52	1335.22	11.08	Si
SLV 8	143750	0.24	6974	-6294	120.52	1335.22	11.08	Si
SLV 5	143750	0.24	7612	-6869	120.52	1449.32	12.03	Si
SLV 6	143750	0.24	7612	-6869	120.52	1449.32	12.03	Si
SLV 11	143750	0.24	7815	-7052	120.52	1485.19	12.32	Si
SLV 12	143750	0.24	7815	-7052	120.52	1485.19	12.32	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 11	-2970	-10634	-291	0.063	665.3	0.891	1.02568	10.4695	No
SLV 12	-2970	-10634	-291	0.063	665.3	0.891	1.02568	10.4695	No
SLV 8	-3538	-8807	-290	0.065	719.6	0.895	1.05942	10.4695	No
SLV 7	-3538	-8807	-290	0.065	719.6	0.895	1.05942	10.4695	No
SLV 16	-2401	-12827	-198	0.081	612.1	0.889	1.31894	9.11363	No
SLV 15	-2401	-12827	-198	0.081	612.1	0.889	1.31894	9.11363	No
SLV 3	-4296	-6739	-194	0.082	793.1	0.9	1.32919	9.11363	No
SLV 4	-4296	-6739	-194	0.082	793.1	0.9	1.32919	9.11363	No
SLV 1	-4377	-6793	-112	0.095	801	0.9	1.529	9.11363	No
SLV 2	-4377	-6793	-112	0.095	801	0.9	1.529	9.11363	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	23.848	SLU 40	Si
V_SLU	3.86	SLU 73	Si
PF_SLV	4.735	SLV 3	Si
V_SLV	1.877	SLV 11	Si
PFFP_SLV	9.941	SLV 3	Si
R_SLV	0.098	SLV 11	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
12.744	2.899	12.744	-0.751	L1	L2	3.65	0.45	2.68	2.68	2.68			

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 2	-0.2	-15755	-2191.99	9592	25367.37	11.573	Si
SLU 2	0.2	-14396	-2311.72	8765	23445.96	10.142	Si
SLU 76	-0.2	-24126	-3189.35	14689	36090.6	11.316	Si
SLU 76	0.2	-22055	-3259.85	13428	33615.21	10.312	Si
SLU 26	-0.2	-17321	-2410.35	10546	27518.57	11.417	Si
SLU 26	0.2	-15827	-2512.98	9636	25467.91	10.135	Si
SLU 31	-0.2	-20200	-2874.34	12298	31299.05	10.889	Si
SLU 31	0.2	-18500	-2943.91	11263	29094.37	9.883	Si
SLU 13	-0.2	-18634	-2655.97	11345	29270.82	11.021	Si
SLU 13	0.2	-17069	-2742.65	10392	27176.79	9.909	Si
SLU 10	-0.2	-18634	-2655.97	11345	29270.82	11.021	Si
SLU 10	0.2	-17069	-2742.65	10392	27176.79	9.909	Si
SLU 73	-0.2	-24126	-3189.35	14689	36090.6	11.316	Si
SLU 73	0.2	-22055	-3259.85	13428	33615.21	10.312	Si
SLU 23	-0.2	-17321	-2410.35	10546	27518.57	11.417	Si
SLU 23	0.2	-15827	-2512.98	9636	25467.91	10.135	Si
SLU 34	-0.2	-20200	-2874.34	12298	31299.05	10.889	Si
SLU 34	0.2	-18500	-2943.91	11263	29094.37	9.883	Si
SLU 5	-0.2	-15755	-2191.99	9592	25367.37	11.573	Si
SLU 5	0.2	-14396	-2311.72	8765	23445.96	10.142	Si

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 15	-0.2	-19538	-4786.34	11895	32185.9	6.725	Si
SLV 15	0.2	-15290	-3035.61	9309	25778.36	8.492	Si
SLV 9	-0.2	-15070	3507.23	9175	25437.48	7.253	Si
SLV 9	0.2	-11757	3283.48	7158	20198.95	6.152	Si
SLV 5	-0.2	-13381	4493.23	8147	22792.22	5.073	Si
SLV 5	0.2	-11887	3364.77	7237	20409.07	6.066	Si
SLV 8	-0.2	-17224	-6496.36	10486	28736.12	4.423	Si
SLV 8	0.2	-17557	-6211.03	10689	29239.05	4.708	Si
SLV 12	-0.2	-18913	-7482.36	11515	31263.34	4.178	Si
SLV 12	0.2	-17427	-6292.31	10610	29042.38	4.616	Si
SLV 11	-0.2	-18913	-7482.36	11515	31263.34	4.178	Si
SLV 11	0.2	-17427	-6292.31	10610	29042.38	4.616	Si
SLV 6	-0.2	-13381	4493.23	8147	22792.22	5.073	Si
SLV 6	0.2	-11887	3364.77	7237	20409.07	6.066	Si
SLV 7	-0.2	-17224	-6496.36	10486	28736.12	4.423	Si
SLV 7	0.2	-17557	-6211.03	10689	29239.05	4.708	Si
SLV 10	-0.2	-15070	3507.23	9175	25437.48	7.253	Si
SLV 10	0.2	-11757	3283.48	7158	20198.95	6.152	Si
SLV 16	-0.2	-19538	-4786.34	11895	32185.9	6.725	Si
SLV 16	0.2	-15290	-3035.61	9309	25778.36	8.492	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 23	-0.2	-17321	400	-2410.35		10546	3.65	6962	11434			28.59	Si
SLU 23	0.2	-15827	401	-2512.98		9636	3.65	6840	11235			28.01	Si
SLU 68	-0.2	-21247	416	-2725.37		12936	3.65	7280	11958			28.73	Si
SLU 68	0.2	-19382	417	-2828.92		11800	3.65	7129	11709			28.06	Si
SLU 5	-0.2	-15755	391	-2191.99		9592	3.65	6835	11226			28.73	Si
SLU 5	0.2	-14396	392	-2311.72		8765	3.65	6724	11044			28.19	Si
SLU 34	-0.2	-20200	402	-2874.34		12298	3.65	7195	11818			29.37	Si
SLU 34	0.2	-18500	404	-2943.91		11263	3.65	7057	11592			28.72	Si
SLU 65	-0.2	-21247	416	-2725.37		12936	3.65	7280	11958			28.73	Si
SLU 65	0.2	-19382	417	-2828.92		11800	3.65	7129	11709			28.06	Si
SLU 31	-0.2	-20200	402	-2874.34		12298	3.65	7195	11818			29.37	Si
SLU 31	0.2	-18500	404	-2943.91		11263	3.65	7057	11592			28.72	Si
SLU 44	-0.2	-19681	407	-2507		11983	3.65	7153	11749			28.88	Si
SLU 44	0.2	-17951	408	-2627.66		10929	3.65	7013	11518			28.24	Si
SLU 26	-0.2	-17321	400	-2410.35		10546	3.65	6962	11434			28.59	Si
SLU 26	0.2	-15827	401	-2512.98		9636	3.65	6840	11235			28.01	Si
SLU 47	-0.2	-19681	407	-2507		11983	3.65	7153	11749			28.88	Si
SLU 47	0.2	-17951	408	-2627.66		10929	3.65	7013	11518			28.24	Si
SLU 2	-0.2	-15755	391	-2191.99		9592	3.65	6835	11226			28.73	Si
SLU 2	0.2	-14396	392	-2311.72		8765	3.65	6724	11044			28.19	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	-0.2	-17224	-4824	-6496.36		10486	3.65	10431	17132			3.55	Si
SLV 8	0.2	-17557	-5538	-6211.03		10689	3.65	10471	17199			3.11	Si
SLV 5	-0.2	-13381	4712	4493.23		8147	3.65	9963	16364			3.47	Si
SLV 5	0.2	-11887	5424	3364.77		7237	3.65	9781	16065			2.96	Si
SLV 7	-0.2	-17224	-4824	-6496.36		10486	3.65	10431	17132			3.55	Si
SLV 7	0.2	-17557	-5538	-6211.03		10689	3.65	10471	17199			3.11	Si

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 14	-0.2	-18385	1911	-1489.46		11194	3.65	10572	17365			9.09	Si
SLV 14	0.2	-13589	2129	-162.88		8273	3.65	9988	16405			7.7	Si
SLV 11	-0.2	-18913	-4576	-7482.36		11515	3.65	10636	17470			3.82	Si
SLV 11	0.2	-17427	-5288	-6292.31		10610	3.65	10455	17173			3.25	Si
SLV 10	-0.2	-15070	4960	3507.23		9175	3.65	10168	16701			3.37	Si
SLV 10	0.2	-11757	5674	3283.48		7158	3.65	9765	16039			2.83	Si
SLV 6	-0.2	-13381	4712	4493.23		8147	3.65	9963	16364			3.47	Si
SLV 6	0.2	-11887	5424	3364.77		7237	3.65	9781	16065			2.96	Si
SLV 13	-0.2	-18385	1911	-1489.46		11194	3.65	10572	17365			9.09	Si
SLV 13	0.2	-13589	2129	-162.88		8273	3.65	9988	16405			7.7	Si
SLV 9	-0.2	-15070	4960	3507.23		9175	3.65	10168	16701			3.37	Si
SLV 9	0.2	-11757	5674	3283.48		7158	3.65	9765	16039			2.83	Si
SLV 12	-0.2	-18913	-4576	-7482.36		11515	3.65	10636	17470			3.82	Si
SLV 12	0.2	-17427	-5288	-6292.31		10610	3.65	10455	17173			3.25	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 2	143750	0.24	7449	-12234	219.37	2584.94	11.78	Si
SLV 1	143750	0.24	7449	-12234	219.37	2584.94	11.78	Si
SLV 6	143750	0.24	7554	-12407	219.37	2618.97	11.94	Si
SLV 5	143750	0.24	7554	-12407	219.37	2618.97	11.94	Si
SLV 3	143750	0.24	8147	-13381	219.37	2809.94	12.81	Si
SLV 4	143750	0.24	8147	-13381	219.37	2809.94	12.81	Si
SLV 9	143750	0.24	8342	-13701	219.37	2872.27	13.09	Si
SLV 10	143750	0.24	8342	-13701	219.37	2872.27	13.09	Si
SLV 7	143750	0.24	9880	-16228	219.37	3356.03	15.3	Si
SLV 8	143750	0.24	9880	-16228	219.37	3356.03	15.3	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 12	-11137	-21524	-991	0.04	1771.5	0.912	0.64358	10.4695	No
SLV 11	-11137	-21524	-991	0.04	1771.5	0.912	0.64358	10.4695	No
SLV 7	-11088	-18965	-955	0.043	1766.7	0.912	0.67897	10.4695	No
SLV 8	-11088	-18965	-955	0.043	1766.7	0.912	0.67897	10.4695	No
SLV 15	-10569	-23399	-817	0.051	1715	0.91	0.80815	9.11363	No
SLV 16	-10569	-23399	-817	0.051	1715	0.91	0.80815	9.11363	No
SLV 4	-10406	-14867	-699	0.058	1698.8	0.909	0.93397	9.11363	No
SLV 3	-10406	-14867	-699	0.058	1698.8	0.909	0.93397	9.11363	No
SLV 14	-10033	-22446	-634	0.062	1661.8	0.908	0.99972	9.11363	No
SLV 13	-10033	-22446	-634	0.062	1661.8	0.908	0.99972	9.11363	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	9.883	SLU 31	Si
V_SLU	28.013	SLU 23	Si
PF_SLV	4.178	SLV 11	Si
V_SLV	2.827	SLV 9	Si
PFFP_SLV	11.784	SLV 1	Si
R_SLV	0.061	SLV 11	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
12.744	5.915	12.744	3.899	L1	L2	2.016	0.45	2.68	2.68	2.68			

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 13	-0.2	-12717	-1253.37	14020	10610.39	8.466	Si
SLU 13	0.2	-12306	-1511.49	13567	10336.72	6.839	Si
SLU 76	-0.2	-16159	-1473.74	17815	12723.96	8.634	Si
SLU 76	0.2	-15520	-1776.24	17111	12356.05	6.956	Si
SLU 73	-0.2	-16159	-1473.74	17815	12723.96	8.634	Si
SLU 73	0.2	-15520	-1776.24	17111	12356.05	6.956	Si
SLU 40	-0.2	-14032	-1337.86	15471	11456.35	8.563	Si
SLU 40	0.2	-13436	-1592.61	14812	11078.42	6.956	Si
SLU 55	-0.2	-15156	-1321.66	16709	12141.08	9.186	Si
SLU 55	0.2	-14554	-1607.89	16046	11778.76	7.326	Si
SLU 10	-0.2	-12717	-1253.37	14020	10610.39	8.466	Si
SLU 10	0.2	-12306	-1511.49	13567	10336.72	6.839	Si
SLU 52	-0.2	-15156	-1321.66	16709	12141.08	9.186	Si
SLU 52	0.2	-14554	-1607.89	16046	11778.76	7.326	Si
SLU 42	-0.2	-14032	-1337.86	15471	11456.35	8.563	Si
SLU 42	0.2	-13436	-1592.61	14812	11078.42	6.956	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLU 31	-0.2	-13721	-1405.44	15127	11260.06	8.012	Si
SLU 31	0.2	-13272	-1679.84	14632	10973.25	6.532	Si
SLU 34	-0.2	-13721	-1405.44	15127	11260.06	8.012	Si
SLU 34	0.2	-13272	-1679.84	14632	10973.25	6.532	Si

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 12	-0.2	-13754	-928.82	15163	12141.26	13.072	Si
SLV 12	0.2	-12452	-1174.99	13728	11139.11	9.48	Si
SLV 1	-0.2	-6560	-542.44	7232	6219.65	11.466	Si
SLV 1	0.2	-6634	-606.59	7314	6285.7	10.362	Si
SLV 8	-0.2	-12103	-1008.11	13344	10865.95	10.779	Si
SLV 8	0.2	-11196	-1233.62	12343	10143.52	8.223	Si
SLV 4	-0.2	-8230	-800.06	9073	7678.07	9.597	Si
SLV 4	0.2	-8063	-927.56	8890	7535.08	8.124	Si
SLV 7	-0.2	-12103	-1008.11	13344	10865.95	10.779	Si
SLV 7	0.2	-11196	-1233.62	12343	10143.52	8.223	Si
SLV 16	-0.2	-13731	-535.75	15138	12124.06	22.63	Si
SLV 16	0.2	-12249	-732.13	13505	10980.68	14.998	Si
SLV 2	-0.2	-6560	-542.44	7232	6219.65	11.466	Si
SLV 2	0.2	-6634	-606.59	7314	6285.7	10.362	Si
SLV 15	-0.2	-13731	-535.75	15138	12124.06	22.63	Si
SLV 15	0.2	-12249	-732.13	13505	10980.68	14.998	Si
SLV 3	-0.2	-8230	-800.06	9073	7678.07	9.597	Si
SLV 3	0.2	-8063	-927.56	8890	7535.08	8.124	Si
SLV 11	-0.2	-13754	-928.82	15163	12141.26	13.072	Si
SLV 11	0.2	-12452	-1174.99	13728	11139.11	9.48	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 62	-0.2	-14626	849	-940.74		16125	2.0156	7705	6989			8.23	Si
SLU 62	0.2	-13685	772	-1147.83		15088	2.0156	7567	6864			8.89	Si
SLU 79	-0.2	-14756	868	-951.51		16269	2.0156	7725	7007			8.07	Si
SLU 79	0.2	-13799	791	-1154.86		15214	2.0156	7584	6879			8.7	Si
SLU 83	-0.2	-15629	977	-1092.81		17231	2.0156	7853	7123			7.29	Si
SLU 83	0.2	-14651	894	-1316.18		16153	2.0156	7709	6993			7.82	Si
SLU 77	-0.2	-14756	868	-951.51		16269	2.0156	7725	7007			8.07	Si
SLU 77	0.2	-13799	791	-1154.86		15214	2.0156	7584	6879			8.7	Si
SLU 74	-0.2	-14756	868	-951.51		16269	2.0156	7725	7007			8.07	Si
SLU 74	0.2	-13799	791	-1154.86		15214	2.0156	7584	6879			8.7	Si
SLU 81	-0.2	-15629	977	-1092.81		17231	2.0156	7853	7123			7.29	Si
SLU 81	0.2	-14651	894	-1316.18		16153	2.0156	7709	6993			7.82	Si
SLU 35	-0.2	-12318	790	-883.22		13580	2.0156	7366	6681			8.46	Si
SLU 35	0.2	-11551	724	-1058.47		12735	2.0156	7254	6579			9.08	Si
SLU 39	-0.2	-13191	899	-1024.52		14543	2.0156	7495	6798			7.56	Si
SLU 39	0.2	-12403	827	-1219.78		13674	2.0156	7379	6693			8.09	Si
SLU 60	-0.2	-14626	849	-940.74		16125	2.0156	7705	6989			8.23	Si
SLU 60	0.2	-13685	772	-1147.83		15088	2.0156	7567	6864			8.89	Si
SLU 41	-0.2	-13191	899	-1024.52		14543	2.0156	7495	6798			7.56	Si
SLU 41	0.2	-12403	827	-1219.78		13674	2.0156	7379	6693			8.09	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 11	-0.2	-13754	-1173	-928.82		15163	2.0156	11366	10309			8.79	Si
SLV 11	0.2	-12452	-1978	-1174.99		13728	2.0156	11079	10049			5.08	Si
SLV 9	-0.2	-8187	2943	-70.07		9026	2.0156	10139	9196			3.12	Si
SLV 9	0.2	-7688	3604	-105.11		8475	2.0156	10028	9096			2.52	Si
SLV 6	-0.2	-6537	2206	-149.37		7207	2.0156	9775	8866			4.02	Si
SLV 6	0.2	-6432	2909	-163.74		7091	2.0156	9752	8845			3.04	Si
SLV 13	-0.2	-12061	2363	-278.13		13297	2.0156	10993	9971			4.22	Si
SLV 13	0.2	-10820	2460	-411.17		11929	2.0156	10719	9723			3.95	Si
SLV 7	-0.2	-12103	-1910	-1008.11		13344	2.0156	11002	9979			5.22	Si
SLV 7	0.2	-11196	-2672	-1233.62		12343	2.0156	10802	9798			3.67	Si
SLV 12	-0.2	-13754	-1173	-928.82		15163	2.0156	11366	10309			8.79	Si
SLV 12	0.2	-12452	-1978	-1174.99		13728	2.0156	11079	10049			5.08	Si
SLV 8	-0.2	-12103	-1910	-1008.11		13344	2.0156	11002	9979			5.22	Si
SLV 8	0.2	-11196	-2672	-1233.62		12343	2.0156	10802	9798			3.67	Si
SLV 5	-0.2	-6537	2206	-149.37		7207	2.0156	9775	8866			4.02	Si
SLV 5	0.2	-6432	2909	-163.74		7091	2.0156	9752	8845			3.04	Si
SLV 14	-0.2	-12061	2363	-278.13		13297	2.0156	10993	9971			4.22	Si
SLV 14	0.2	-10820	2460	-411.17		11929	2.0156	10719	9723			3.95	Si
SLV 10	-0.2	-8187	2943	-70.07		9026	2.0156	10139	9196			3.12	Si
SLV 10	0.2	-7688	3604	-105.11		8475	2.0156	10028	9096			2.52	Si

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

quota -0.25 Wa 0.08 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 5	143750	0.24	6833	-6198	121.14	1316.52	10.87	Si
SLV 6	143750	0.24	6833	-6198	121.14	1316.52	10.87	Si
SLV 2	143750	0.24	6911	-6268	121.14	1330.62	10.98	Si
SLV 1	143750	0.24	6911	-6268	121.14	1330.62	10.98	Si
SLV 9	143750	0.24	8498	-7708	121.14	1613.61	13.32	Si
SLV 10	143750	0.24	8498	-7708	121.14	1613.61	13.32	Si
SLV 3	143750	0.24	8642	-7839	121.14	1638.98	13.53	Si
SLV 4	143750	0.24	8642	-7839	121.14	1638.98	13.53	Si
SLV 13	143750	0.24	12459	-11301	121.14	2283.47	18.85	Si
SLV 14	143750	0.24	12459	-11301	121.14	2283.47	18.85	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = -0.25 Wa = 0.08 Ta = 0.0267

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 9	-2203	-9636	-387	0.038	596.1	0.889	0.6147	10.4695	No
SLV 10	-2203	-9636	-387	0.038	596.1	0.889	0.6147	10.4695	No
SLV 6	-2475	-8041	-349	0.049	621	0.889	0.79332	10.4695	No
SLV 5	-2475	-8041	-349	0.049	621	0.889	0.79332	10.4695	No
SLV 13	-5037	-13660	-437	0.049	867.9	0.905	0.78594	9.11363	No
SLV 14	-5037	-13660	-437	0.049	867.9	0.905	0.78594	9.11363	No
SLV 11	-11209	-15818	-401	0.068	1487	0.936	1.05168	10.4695	No
SLV 12	-11209	-15818	-401	0.068	1487	0.936	1.05168	10.4695	No
SLV 15	-7739	-15514	-441	0.058	1137.2	0.921	0.91593	9.11363	No
SLV 16	-7739	-15514	-441	0.058	1137.2	0.921	0.91593	9.11363	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	6.532	SLU 31	Si
V_SLU	7.29	SLU 81	Si
PF_SLV	8.124	SLV 3	Si
V_SLV	2.524	SLV 9	Si
PFFP_SLV	10.868	SLV 5	Si
R_SLV	0.059	SLV 9	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
3.039	-2.737	3.039	5.99	L2	L3	8.727	0.3	3.81	3.81	3.81			

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 13	1.09	-27698	26579.61	10580	105162.98	3.957	Si
SLU 13	4.9	-993	260.99	379	4312.55	16.524	Si
SLU 26	1.09	-25735	23731.49	9830	98742.83	4.161	Si
SLU 26	4.9	-669	213.37	256	2909.72	13.637	Si
SLU 23	1.09	-25735	23731.49	9830	98742.83	4.161	Si
SLU 23	4.9	-669	213.37	256	2909.72	13.637	Si
SLU 10	1.09	-27698	26579.61	10580	105162.98	3.957	Si
SLU 10	4.9	-993	260.99	379	4312.55	16.524	Si
SLU 2	1.09	-23537	21822.28	8990	91366.33	4.187	Si
SLU 2	4.9	-404	183.63	154	1758.35	9.576	Si
SLU 34	1.09	-29897	28488.82	11419	112165.1	3.937	Si
SLU 34	4.9	-1258	290.73	481	5457.53	18.772	Si
SLU 5	1.09	-23537	21822.28	8990	91366.33	4.187	Si
SLU 5	4.9	-404	183.63	154	1758.35	9.576	Si
SLU 76	1.09	-35142	30086.77	13423	128072.87	4.257	Si
SLU 76	4.9	-1282	294.21	490	5561.11	18.902	Si
SLU 73	1.09	-35142	30086.77	13423	128072.87	4.257	Si
SLU 73	4.9	-1282	294.21	490	5561.11	18.902	Si
SLU 31	1.09	-29897	28488.82	11419	112165.1	3.937	Si
SLU 31	4.9	-1258	290.73	481	5457.53	18.772	Si

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 8	1.09	-33593	5774.5	12831	131189.26	22.719	Si
SLV 8	4.9	-641	826.19	245	2792.78	3.38	Si
SLV 3	1.09	-28554	-11349.56	10907	113473.95	9.998	Si
SLV 3	4.9	-921	897.31	352	4005.95	4.464	Si
SLV 14	1.09	-15074	30175.9	5758	62675.07	2.077	Si
SLV 14	4.9	-334	-744.98	128	1455.23	1.953	Si
SLV 16	1.09	-21507	31883.69	8215	87535.94	2.745	Si
SLV 16	4.9	-285	-412.87	109	1242.77	3.01	Si
SLV 13	1.09	-15074	30175.9	5758	62675.07	2.077	Si
SLV 13	4.9	-334	-744.98	128	1455.23	1.953	Si
SLV 10	1.09	-10035	13051.84	3833	42414.08	3.25	Si
SLV 10	4.9	-613	-673.86	234	2670.73	3.963	Si
SLV 7	1.09	-33593	5774.5	12831	131189.26	22.719	Si
SLV 7	4.9	-641	826.19	245	2792.78	3.38	Si
SLV 4	1.09	-28554	-11349.56	10907	113473.95	9.998	Si
SLV 4	4.9	-921	897.31	352	4005.95	4.464	Si
SLV 15	1.09	-21507	31883.69	8215	87535.94	2.745	Si
SLV 15	4.9	-285	-412.87	109	1242.77	3.01	Si
SLV 9	1.09	-10035	13051.84	3833	42414.08	3.25	Si
SLV 9	4.9	-613	-673.86	234	2670.73	3.963	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 31	1.09	-29897	534	28488.82		11419	8.7269	7078	18531			34.68	Si
SLU 31	4.9	-1258	75	290.73		481	8.7269	5620	14713			196.25	Si
SLU 10	1.09	-27698	517	26579.61		10580	8.7269	6966	18238			35.26	Si
SLU 10	4.9	-993	75	260.99		379	8.7269	5606	14677			194.87	Si
SLU 34	1.09	-29897	534	28488.82		11419	8.7269	7078	18531			34.68	Si
SLU 34	4.9	-1258	75	290.73		481	8.7269	5620	14713			196.25	Si
SLU 65	1.09	-30980	516	25329.44		11833	8.7269	7133	18676			36.2	Si
SLU 65	4.9	-693	76	216.84		265	8.7269	5591	14637			192.35	Si
SLU 52	1.09	-32943	541	28177.56		12583	8.7269	7233	18937			34.98	Si
SLU 52	4.9	-1017	76	264.46		388	8.7269	5607	14680			194.43	Si
SLU 73	1.09	-35142	558	30086.77		13423	8.7269	7345	19230			34.43	Si
SLU 73	4.9	-1282	75	294.21		490	8.7269	5621	14716			195.81	Si
SLU 13	1.09	-27698	517	26579.61		10580	8.7269	6966	18238			35.26	Si
SLU 13	4.9	-993	75	260.99		379	8.7269	5606	14677			194.87	Si
SLU 68	1.09	-30980	516	25329.44		11833	8.7269	7133	18676			36.2	Si
SLU 68	4.9	-693	76	216.84		265	8.7269	5591	14637			192.35	Si
SLU 76	1.09	-35142	558	30086.77		13423	8.7269	7345	19230			34.43	Si
SLU 76	4.9	-1282	75	294.21		490	8.7269	5621	14716			195.81	Si
SLU 55	1.09	-32943	541	28177.56		12583	8.7269	7233	18937			34.98	Si
SLU 55	4.9	-1017	76	264.46		388	8.7269	5607	14680			194.43	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	1.09	-33593	1379	5774.5		12831	8.7269	10900	28536			20.7	Si
SLV 8	4.9	-641	-103	826.19		245	8.7269	8382	21946			213.71	Si
SLV 15	1.09	-21507	1120	31883.69		8295	8.643	9992	25909			23.13	Si
SLV 15	4.9	-285	452	-412.87		109	8.7269	8355	21874			48.36	Si
SLV 6	1.09	-12149	-1489	81.87		4641	8.7269	9261	24247			16.28	Si
SLV 6	4.9	-804	-164	-280.81		307	8.7269	8395	21978			134.33	Si
SLV 12	1.09	-31479	1723	18744.48		12024	8.7269	10738	28113			16.32	Si
SLV 12	4.9	-451	163	433.14		172	8.7269	8368	21907			134.14	Si
SLV 7	1.09	-33593	1379	5774.5		12831	8.7269	10900	28536			20.7	Si
SLV 7	4.9	-641	-103	826.19		245	8.7269	8382	21946			213.71	Si
SLV 16	1.09	-21507	1120	31883.69		8295	8.643	9992	25909			23.13	Si
SLV 16	4.9	-285	452	-412.87		109	8.7269	8355	21874			48.36	Si
SLV 9	1.09	-10035	-1145	13051.84		3833	8.7269	9100	23824			20.8	Si
SLV 9	4.9	-613	102	-673.86		234	8.7269	8380	21940			214.28	Si
SLV 11	1.09	-31479	1723	18744.48		12024	8.7269	10738	28113			16.32	Si
SLV 11	4.9	-451	163	433.14		172	8.7269	8368	21907			134.14	Si
SLV 10	1.09	-10035	-1145	13051.84		3833	8.7269	9100	23824			20.8	Si
SLV 10	4.9	-613	102	-673.86		234	8.7269	8380	21940			214.28	Si
SLV 5	1.09	-12149	-1489	81.87		4641	8.7269	9261	24247			16.28	Si
SLV 5	4.9	-804	-164	-280.81		307	8.7269	8395	21978			134.33	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 1	143750	0.47	0	-8631	1394.17	0	0	No, e>t/2
SLV 2	143750	0.47	0	-8631	1394.17	0	0	No, e>t/2
SLV 5	143750	0.47	3652	-9562	1394.17	1391.36	1	No, M>Mu
SLV 6	143750	0.47	3652	-9562	1394.17	1391.36	1	No, M>Mu
SLV 3	143750	0.47	3789	-9921	1394.17	1442.02	1.03	Si
SLV 4	143750	0.47	3789	-9921	1394.17	1442.02	1.03	Si
SLV 9	143750	0.47	4450	-11649	1394.17	1683.79	1.21	Si
SLV 10	143750	0.47	4450	-11649	1394.17	1683.79	1.21	Si
SLV 7	143750	0.47	5295	-13862	1394.17	1989.25	1.43	Si
SLV 8	143750	0.47	5295	-13862	1394.17	1989.25	1.43	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 15	-285	-21507	147	0.062	1832	0.985	0.91021	14.16882	No
SLV 16	-285	-21507	147	0.062	1832	0.985	0.91021	14.16882	No
SLV 2	-970	-22121	-113	0.064	1847.8	0.958	0.96367	14.16882	No
SLV 1	-970	-22121	-113	0.064	1847.8	0.958	0.96367	14.16882	No
SLV 13	-334	-15074	92	0.067	1832.6	0.983	0.99662	14.16882	No
SLV 14	-334	-15074	92	0.067	1832.6	0.983	0.99662	14.16882	No
SLV 3	-921	-28554	-59	0.069	1846.2	0.96	1.0467	14.16882	No
SLV 4	-921	-28554	-59	0.069	1846.2	0.96	1.0467	14.16882	No
SLV 12	-451	-31479	138	0.062	1834.4	0.978	0.92526	10.08848	No
SLV 11	-451	-31479	138	0.062	1834.4	0.978	0.92526	10.08848	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	3.937	SLU 31	Si
V_SLU	34.434	SLU 73	Si
PF_SLV	1.953	SLV 13	Si
V_SLV	16.284	SLV 5	Si
PFFP_SLV	0	SLV 1	No
R_SLV	0.064	SLV 15	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
3.339	1.239	3.039	1.239	L2	L3	0.3	0.16	3.81	3.81	3.81			

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 51	1.09	-2130	-47.39	44365	145.46	3.069	Si
SLU 51	3.19	-117	63.85	0	0	0	No, e>l/2
SLU 46	1.09	-2130	-47.39	44365	145.46	3.069	Si
SLU 46	3.19	-117	63.85	0	0	0	No, e>l/2
SLU 1	1.09	-1660	-33.63	34592	143.3	4.261	Si
SLU 1	3.19	-159	46.53	0	0	0	No, e>l/2
SLU 43	1.09	-2147	-47.75	44722	145.22	3.041	Si
SLU 43	3.19	-128	64.86	0	0	0	No, e>l/2
SLU 50	1.09	-2147	-47.75	44722	145.22	3.041	Si
SLU 50	3.19	-128	64.86	0	0	0	No, e>l/2
SLU 45	1.09	-2147	-47.75	44722	145.22	3.041	Si
SLU 45	3.19	-128	64.86	0	0	0	No, e>l/2
SLU 44	1.09	-2118	-47.15	44128	145.6	3.088	Si
SLU 44	3.19	-110	63.18	0	0	0	No, e>l/2
SLU 48	1.09	-2147	-47.75	44722	145.22	3.041	Si
SLU 48	3.19	-128	64.86	0	0	0	No, e>l/2
SLU 47	1.09	-2118	-47.15	44128	145.6	3.088	Si
SLU 47	3.19	-110	63.18	0	0	0	No, e>l/2
SLU 49	1.09	-2130	-47.39	44365	145.46	3.069	Si
SLU 49	3.19	-117	63.85	0	0	0	No, e>l/2

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 12	1.09	-1675	-23.18	34905	179.52	7.745	Si
SLV 12	3.19	-84	62.66	0	0	0	No, e>l/2
SLV 10	1.09	-992	3.83	20676	123.67	32.255	Si
SLV 10	3.19	-203	15.49	4234	29.43	1.9	Si
SLV 8	1.09	-2368	-49.75	49343	211.8	4.257	Si
SLV 8	3.19	-549	52.6	11435	74.63	1.419	Si
SLV 9	1.09	-992	3.83	20676	123.67	32.255	Si
SLV 9	3.19	-203	15.49	4234	29.43	1.9	Si
SLV 14	1.09	-423	25.38	8812	58.87	2.32	Si
SLV 14	3.19	382	43.73	0	0	0	No, Trazione
SLV 7	1.09	-2368	-49.75	49343	211.8	4.257	Si
SLV 7	3.19	-549	52.6	11435	74.63	1.419	Si
SLV 16	1.09	-628	17.28	13081	84.1	4.868	Si
SLV 16	3.19	417	57.89	0	0	0	No, Trazione
SLV 11	1.09	-1675	-23.18	34905	179.52	7.745	Si
SLV 11	3.19	-84	62.66	0	0	0	No, e>l/2
SLV 15	1.09	-628	17.28	13081	84.1	4.868	Si
SLV 15	3.19	417	57.89	0	0	0	No, Trazione
SLV 13	1.09	-423	25.38	8812	58.87	2.32	Si
SLV 13	3.19	382	43.73	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	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 44	1.09	-2118	32	-47.15		44128	0.3	10833	520			16.15	Si
SLU 44	3.19	-110	-260	63.18		0	0	5556	0			0	No, Vu<V
SLU 51	1.09	-2130	34	-47.39		44365	0.3	10833	520			15.1	Si
SLU 51	3.19	-117	-263	63.85		0	0	5556	0			0	No, Vu<V
SLU 50	1.09	-2147	38	-47.75		44722	0.3	10833	520			13.75	Si
SLU 50	3.19	-128	-268	64.86		0	0	5556	0			0	No, Vu<V
SLU 47	1.09	-2118	32	-47.15		44128	0.3	10833	520			16.15	Si
SLU 47	3.19	-110	-260	63.18		0	0	5556	0			0	No, Vu<V
SLU 1	1.09	-1660	41	-33.63		34592	0.3	10168	488			11.96	Si
SLU 1	3.19	-159	-200	46.53		0	0	5556	0			0	No, Vu<V
SLU 46	1.09	-2130	34	-47.39		44365	0.3	10833	520			15.1	Si
SLU 46	3.19	-117	-263	63.85		0	0	5556	0			0	No, Vu<V
SLU 43	1.09	-2147	38	-47.75		44722	0.3	10833	520			13.75	Si
SLU 43	3.19	-128	-268	64.86		0	0	5556	0			0	No, Vu<V
SLU 48	1.09	-2147	38	-47.75		44722	0.3	10833	520			13.75	Si
SLU 48	3.19	-128	-268	64.86		0	0	5556	0			0	No, Vu<V
SLU 49	1.09	-2130	34	-47.39		44365	0.3	10833	520			15.1	Si
SLU 49	3.19	-117	-263	63.85		0	0	5556	0			0	No, Vu<V
SLU 45	1.09	-2147	38	-47.75		44722	0.3	10833	520			13.75	Si
SLU 45	3.19	-128	-268	64.86		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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 15	1.09	-628	-139	17.28		13081	0.3	10950	526			3.78	Si
SLV 15	3.19	417	172	57.89		0	0	8333	0			0	No, Vu<V

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 12	1.09	-1675	27	-23.18		34905	0.3	15314	735			26.96	Si
SLV 12	3.19	-84	-163	62.66		0	0	8333	0			0	No, Vu<V
SLV 16	1.09	-628	-139	17.28		13081	0.3	10950	526			3.78	Si
SLV 16	3.19	417	172	57.89		0	0	8333	0			0	No, Vu<V
SLV 11	1.09	-1675	27	-23.18		34905	0.3	15314	735			26.96	Si
SLV 11	3.19	-84	-163	62.66		0	0	8333	0			0	No, Vu<V
SLV 3	1.09	-2938	308	-71.3		61206	0.3	16250	780			2.53	Si
SLV 3	3.19	-1134	-590	24.35		23618	0.3	13057	627			1.06	Si
SLV 13	1.09	-423	-147	25.38		9792	0.27	10292	445			3.02	Si
SLV 13	3.19	382	231	43.73		0	0	8333	0			0	No, Vu<V
SLV 8	1.09	-2368	161	-49.75		49343	0.3	16250	780			4.83	Si
SLV 8	3.19	-549	-392	52.6		21108	0.1625	12555	326			0.83	No, Vu<V
SLV 4	1.09	-2938	308	-71.3		61206	0.3	16250	780			2.53	Si
SLV 4	3.19	-1134	-590	24.35		23618	0.3	13057	627			1.06	Si
SLV 14	1.09	-423	-147	25.38		9792	0.27	10292	445			3.02	Si
SLV 14	3.19	382	231	43.73		0	0	8333	0			0	No, Vu<V
SLV 7	1.09	-2368	161	-49.75		49343	0.3	16250	780			4.83	Si
SLV 7	3.19	-549	-392	52.6		21108	0.1625	12555	326			0.83	No, Vu<V

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

quota 2.995 Wa 0.03 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 10	143750	0.47	0	-296	26.51	0	0	No, e>t/2
SLV 9	143750	0.47	0	-296	26.51	0	0	No, e>t/2
SLV 11	143750	0.47	0	-97	26.51	0	0	No, e>t/2
SLV 12	143750	0.47	0	-97	26.51	0	0	No, e>t/2
SLV 16	143750	0.47	0	323	26.51	0	0	No, Trazione
SLV 13	143750	0.47	0	263	26.51	0	0	No, Trazione
SLV 15	143750	0.47	0	323	26.51	0	0	No, Trazione
SLV 14	143750	0.47	0	263	26.51	0	0	No, Trazione
SLV 7	143750	0.47	10756	-516	26.51	37.67	1.42	Si
SLV 8	143750	0.47	10756	-516	26.51	37.67	1.42	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.03 Ta = 0.1515

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 11	-363	-1675	-19	0	63.7	0.903	0	2.39674	No
SLV 9	-316	-992	19	0	59.1	0.899	0	2.39674	No
SLV 7	-352	-2368	-19	0	62.6	0.902	0	2.39674	No
SLV 8	-352	-2368	-19	0	62.6	0.902	0	2.39674	No
SLV 6	-305	-1685	19	0	58	0.898	0	2.39674	No
SLV 10	-316	-992	19	0	59.1	0.899	0	2.39674	No
SLV 5	-305	-1685	19	0	58	0.898	0	2.39674	No
SLV 12	-363	-1675	-19	0	63.7	0.903	0	2.39674	No
SLV 4	-323	-2938	-7	0.014	59.8	0.899	0.22745	2.39674	No
SLV 3	-323	-2938	-7	0.014	59.8	0.899	0.22745	2.39674	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 1	No
V_SLU	0	SLU 1	No
PF_SLV	0	SLV 16	No
V_SLV	0	SLV 11	No
PFFP_SLV	0	SLV 16	No
R_SLV	0	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
11.519	1.239	4.239	1.239	L2	L3	7.28	0.16	3.81	3.81	3.81			

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 81	1.09	-51589	-824.65	44290	85683.11	103.903	Si
SLU 81	3.19	-45399	-880.78	38976	86183.26	97.849	Si
SLU 19	1.09	-41469	-792.45	35602	84975.02	107.23	Si
SLU 19	3.19	-36812	-814.2	31604	82008.86	100.723	Si
SLU 82	1.09	-51590	-877.54	44291	85682.87	97.64	Si
SLU 82	3.19	-45400	-917.28	38977	86183.38	93.956	Si
SLU 42	1.09	-47998	-962.05	41207	86331.36	89.737	Si
SLU 42	3.19	-43134	-989.7	37031	85631.45	86.523	Si
SLU 41	1.09	-47997	-909.16	41206	86331.39	94.958	Si
SLU 41	3.19	-43133	-953.2	37031	85631.21	89.836	Si
SLU 21	1.09	-41469	-792.45	35602	84975.02	107.23	Si
SLU 21	3.19	-36812	-814.2	31604	82008.86	100.723	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLU 83	1.09	-51589	-824.65	44290	85683.11	103.903	Si
SLU 83	3.19	-45399	-880.78	38976	86183.26	97.849	Si
SLU 84	1.09	-51590	-877.54	44291	85682.87	97.64	Si
SLU 84	3.19	-45400	-917.28	38977	86183.38	93.956	Si
SLU 39	1.09	-47997	-909.16	41206	86331.39	94.958	Si
SLU 39	3.19	-43133	-953.2	37031	85631.21	89.836	Si
SLU 40	1.09	-47998	-962.05	41207	86331.36	89.737	Si
SLU 40	3.19	-43134	-989.7	37031	85631.45	86.523	Si

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 4	1.09	-25857	24504.8	22199	77021.18	3.143	Si
SLV 4	3.19	-20940	-1072.9	17977	65006.22	60.589	Si
SLV 14	1.09	-25558	-24756.94	21942	76325.74	3.083	Si
SLV 14	3.19	-21044	726.87	18066	65273	89.8	Si
SLV 2	1.09	-25483	24305.94	21878	76150.85	3.133	Si
SLV 2	3.19	-20798	-1259.92	17855	64640.75	51.306	Si
SLV 1	1.09	-25483	24305.94	21878	76150.85	3.133	Si
SLV 1	3.19	-20798	-1259.92	17855	64640.75	51.306	Si
SLV 3	1.09	-25857	24504.8	22199	77021.18	3.143	Si
SLV 3	3.19	-20940	-1072.9	17977	65006.22	60.589	Si
SLV 10	1.09	-25096	-7816.93	21545	75241.21	9.625	Si
SLV 10	3.19	-20792	-186.7	17850	64625.74	346.153	Si
SLV 13	1.09	-25558	-24756.94	21942	76325.74	3.083	Si
SLV 13	3.19	-21044	726.87	18066	65273	89.8	Si
SLV 9	1.09	-25096	-7816.93	21545	75241.21	9.625	Si
SLV 9	3.19	-20792	-186.7	17850	64625.74	346.153	Si
SLV 16	1.09	-25932	-24558.08	22263	77194.64	3.143	Si
SLV 16	3.19	-21186	913.89	18188	65636.67	71.821	Si
SLV 15	1.09	-25932	-24558.08	22263	77194.64	3.143	Si
SLV 15	3.19	-21186	913.89	18188	65636.67	71.821	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 71	1.09	-29557	31	2.78		25375	7.28	8939	10412			335.84	Si
SLU 71	3.19	-23367	31	-62.24		20061	7.28	8230	9587			309.22	Si
SLU 64	1.09	-29557	31	2.78		25375	7.28	8939	10412			335.84	Si
SLU 64	3.19	-23367	31	-62.24		20061	7.28	8230	9587			309.22	Si
SLU 43	1.09	-23029	28	172.38		19771	7.28	8192	9542			337.89	Si
SLU 43	3.19	-17045	28	113.26		14633	7.28	7507	8744			309.63	Si
SLU 48	1.09	-23029	28	172.38		19771	7.28	8192	9542			337.89	Si
SLU 48	3.19	-17045	28	113.26		14633	7.28	7507	8744			309.63	Si
SLU 29	1.09	-25964	25	-81.73		22291	7.28	8528	9933			393.92	Si
SLU 29	3.19	-21101	25	-134.66		18115	7.28	7971	9285			368.21	Si
SLU 50	1.09	-23029	28	172.38		19771	7.28	8192	9542			337.89	Si
SLU 50	3.19	-17045	28	113.26		14633	7.28	7507	8744			309.63	Si
SLU 45	1.09	-23029	28	172.38		19771	7.28	8192	9542			337.89	Si
SLU 45	3.19	-17045	28	113.26		14633	7.28	7507	8744			309.63	Si
SLU 69	1.09	-29557	31	2.78		25375	7.28	8939	10412			335.84	Si
SLU 69	3.19	-23367	31	-62.24		20061	7.28	8230	9587			309.22	Si
SLU 66	1.09	-29557	31	2.78		25375	7.28	8939	10412			335.84	Si
SLU 66	3.19	-23367	31	-62.24		20061	7.28	8230	9587			309.22	Si
SLU 27	1.09	-25964	25	-81.73		22291	7.28	8528	9933			393.92	Si
SLU 27	3.19	-21101	25	-134.66		18115	7.28	7971	9285			368.21	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 1	1.09	-25483	11815	24305.94		21878	7.28	12709	14803			1.25	Si
SLV 1	3.19	-20798	11489	-1259.92		17855	7.28	11904	13866			1.21	Si
SLV 3	1.09	-25857	11803	24504.8		22199	7.28	12773	14878			1.26	Si
SLV 3	3.19	-20940	11547	-1072.9		17977	7.28	11929	13895			1.2	Si
SLV 8	1.09	-26320	3538	7564.79		22596	7.28	12853	14971			4.23	Si
SLV 8	3.19	-21191	3567	-159.33		18193	7.28	11972	13945			3.91	Si
SLV 13	1.09	-25558	-11758	-24756.94		21942	7.28	12722	14818			1.26	Si
SLV 13	3.19	-21044	-11502	726.87		18066	7.28	11947	13915			1.21	Si
SLV 2	1.09	-25483	11815	24305.94		21878	7.28	12709	14803			1.25	Si
SLV 2	3.19	-20798	11489	-1259.92		17855	7.28	11904	13866			1.21	Si
SLV 16	1.09	-25932	-11770	-24558.08		22263	7.28	12786	14893			1.27	Si
SLV 16	3.19	-21186	-11444	913.89		18188	7.28	11971	13944			1.22	Si
SLV 15	1.09	-25932	-11770	-24558.08		22263	7.28	12786	14893			1.27	Si
SLV 15	3.19	-21186	-11444	913.89		18188	7.28	11971	13944			1.22	Si
SLV 4	1.09	-25857	11803	24504.8		22199	7.28	12773	14878			1.26	Si
SLV 4	3.19	-20940	11547	-1072.9		17977	7.28	11929	13895			1.2	Si
SLV 14	1.09	-25558	-11758	-24756.94		21942	7.28	12722	14818			1.26	Si
SLV 14	3.19	-21044	-11502	726.87		18066	7.28	11947	13915			1.21	Si
SLV 7	1.09	-26320	3538	7564.79		22596	7.28	12853	14971			4.23	Si
SLV 7	3.19	-21191	3567	-159.33		18193	7.28	11972	13945			3.91	Si

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

quota 2.995 Wa 0.03 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 6	143750	0.47	17787	-20718	643.37	1416.16	2.2	Si
SLV 5	143750	0.47	17787	-20718	643.37	1416.16	2.2	Si
SLV 10	143750	0.47	17850	-20792	643.37	1420.35	2.21	Si
SLV 9	143750	0.47	17850	-20792	643.37	1420.35	2.21	Si
SLV 2	143750	0.47	17855	-20798	643.37	1420.68	2.21	Si
SLV 1	143750	0.47	17855	-20798	643.37	1420.68	2.21	Si

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 4	143750	0.47	17977	-20940	643.37	1428.71	2.22	Si
SLV 3	143750	0.47	17977	-20940	643.37	1428.71	2.22	Si
SLV 13	143750	0.47	18066	-21044	643.37	1434.57	2.23	Si
SLV 14	143750	0.47	18066	-21044	643.37	1434.57	2.23	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.03 Ta = 0.1515

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 12	-15099	-26343	-222	0.014	2173.6	0.924	0.2165	2.39674	No
SLV 11	-15099	-26343	-222	0.014	2173.6	0.924	0.2165	2.39674	No
SLV 6	-15087	-25073	222	0.014	2172.5	0.924	0.21665	2.39674	No
SLV 5	-15087	-25073	222	0.014	2172.5	0.924	0.21665	2.39674	No
SLV 8	-15101	-26320	-178	0.016	2173.8	0.924	0.25323	2.39674	No
SLV 7	-15101	-26320	-178	0.016	2173.8	0.924	0.25323	2.39674	No
SLV 10	-15085	-25096	177	0.016	2172.2	0.924	0.25339	2.39674	No
SLV 9	-15085	-25096	177	0.016	2172.2	0.924	0.25339	2.39674	No
SLV 16	-15091	-25932	-134	0.018	2172.8	0.924	0.28884	2.39674	No
SLV 15	-15091	-25932	-134	0.018	2172.8	0.924	0.28884	2.39674	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	86.523	SLU 40	Si
V_SLU	309.215	SLU 64	Si
PF_SLV	3.083	SLV 13	Si
V_SLV	1.203	SLV 3	Si
PFFP_SLV	2.201	SLV 5	Si
R_SLV	0.09	SLV 11	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
12.819	1.239	12.519	1.239	L2	L3	0.3	0.16	3.81	3.81	3.81			

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 44	1.09	-2030	42.49	42286	146.41	3.446	Si
SLU 44	3.19	-188	-55.76	0	0	0	No, e>l/2
SLU 45	1.09	-2031	42.04	42319	146.4	3.483	Si
SLU 45	3.19	-214	-55.97	0	0	0	No, e>l/2
SLU 47	1.09	-2030	42.49	42286	146.41	3.446	Si
SLU 47	3.19	-188	-55.76	0	0	0	No, e>l/2
SLU 50	1.09	-2031	42.04	42319	146.4	3.483	Si
SLU 50	3.19	-214	-55.97	0	0	0	No, e>l/2
SLU 48	1.09	-2031	42.04	42319	146.4	3.483	Si
SLU 48	3.19	-214	-55.97	0	0	0	No, e>l/2
SLU 46	1.09	-2030	42.31	42300	146.41	3.46	Si
SLU 46	3.19	-198	-55.85	0	0	0	No, e>l/2
SLU 1	1.09	-1569	28.97	32683	140.9	4.864	Si
SLU 1	3.19	-230	-39.29	0	0	0	No, e>l/2
SLU 49	1.09	-2030	42.31	42300	146.41	3.46	Si
SLU 49	3.19	-198	-55.85	0	0	0	No, e>l/2
SLU 43	1.09	-2031	42.04	42319	146.4	3.483	Si
SLU 43	3.19	-214	-55.97	0	0	0	No, e>l/2
SLU 51	1.09	-2030	42.31	42300	146.41	3.46	Si
SLU 51	3.19	-198	-55.85	0	0	0	No, e>l/2

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 7	1.09	-1525	13.28	31766	169.25	12.747	Si
SLV 7	3.19	-210	-48.69	0	0	0	No, e>l/2
SLV 16	1.09	-2580	53.52	53752	216.76	4.05	Si
SLV 16	3.19	-1175	-22.31	24482	140.95	6.318	Si
SLV 1	1.09	-610	-17.64	12708	81.98	4.647	Si
SLV 1	3.19	251	-29.9	0	0	0	No, Trazione
SLV 11	1.09	-2079	33.63	43304	201.29	5.985	Si
SLV 11	3.19	-645	-42.87	13430	86.07	2.008	Si
SLV 2	1.09	-610	-17.64	12708	81.98	4.647	Si
SLV 2	3.19	251	-29.9	0	0	0	No, Trazione
SLV 3	1.09	-734	-14.33	15291	96.32	6.721	Si
SLV 3	3.19	272	-41.71	0	0	0	No, Trazione
SLV 4	1.09	-734	-14.33	15291	96.32	6.721	Si
SLV 4	3.19	272	-41.71	0	0	0	No, Trazione
SLV 8	1.09	-1525	13.28	31766	169.25	12.747	Si
SLV 8	3.19	-210	-48.69	0	0	0	No, e>l/2
SLV 15	1.09	-2580	53.52	53752	216.76	4.05	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 15	3.19	-1175	-22.31	24482	140.95	6.318	Si
SLV 12	1.09	-2079	33.63	43304	201.29	5.985	Si
SLV 12	3.19	-645	-42.87	13430	86.07	2.008	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 45	1.09	-2031	-53	42.04		42319	0.3	10833	520			9.73	Si
SLU 45	3.19	-214	241	-55.97		0	0	5556	0			0	No, Vu<V
SLU 49	1.09	-2030	-49	42.31		42300	0.3	10833	520			10.59	Si
SLU 49	3.19	-198	240	-55.85		0	0	5556	0			0	No, Vu<V
SLU 51	1.09	-2030	-49	42.31		42300	0.3	10833	520			10.59	Si
SLU 51	3.19	-198	240	-55.85		0	0	5556	0			0	No, Vu<V
SLU 50	1.09	-2031	-53	42.04		42319	0.3	10833	520			9.73	Si
SLU 50	3.19	-214	241	-55.97		0	0	5556	0			0	No, Vu<V
SLU 44	1.09	-2030	-46	42.49		42286	0.3	10833	520			11.26	Si
SLU 44	3.19	-188	240	-55.76		0	0	5556	0			0	No, Vu<V
SLU 43	1.09	-2031	-53	42.04		42319	0.3	10833	520			9.73	Si
SLU 43	3.19	-214	241	-55.97		0	0	5556	0			0	No, Vu<V
SLU 1	1.09	-1569	-54	28.97		32683	0.3	9913	476			8.82	Si
SLU 1	3.19	-230	179	-39.29		0	0	5556	0			0	No, Vu<V
SLU 47	1.09	-2030	-46	42.49		42286	0.3	10833	520			11.26	Si
SLU 47	3.19	-188	240	-55.76		0	0	5556	0			0	No, Vu<V
SLU 46	1.09	-2030	-49	42.31		42300	0.3	10833	520			10.59	Si
SLU 46	3.19	-198	240	-55.85		0	0	5556	0			0	No, Vu<V
SLU 48	1.09	-2031	-53	42.04		42319	0.3	10833	520			9.73	Si
SLU 48	3.19	-214	241	-55.97		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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 2	1.09	-610	185	-17.64		12708	0.3	10875	522			2.83	Si
SLV 2	3.19	251	-244	-29.9		0	0	8333	0			0	No, Vu<V
SLV 8	1.09	-1525	-44	13.28		31766	0.3	14686	705			15.91	Si
SLV 8	3.19	-210	133	-48.69		0	0	8333	0			0	No, Vu<V
SLV 4	1.09	-734	167	-14.33		15291	0.3	11391	547			3.28	Si
SLV 4	3.19	272	-191	-41.71		0	0	8333	0			0	No, Vu<V
SLV 3	1.09	-734	167	-14.33		15291	0.3	11391	547			3.28	Si
SLV 3	3.19	272	-191	-41.71		0	0	8333	0			0	No, Vu<V
SLV 14	1.09	-2456	-360	50.21		51169	0.3	16250	780			2.16	Si
SLV 14	3.19	-1196	507	-10.51		24911	0.3	13315	639			1.26	Si
SLV 7	1.09	-1525	-44	13.28		31766	0.3	14686	705			15.91	Si
SLV 7	3.19	-210	133	-48.69		0	0	8333	0			0	No, Vu<V
SLV 1	1.09	-610	185	-17.64		12708	0.3	10875	522			2.83	Si
SLV 1	3.19	251	-244	-29.9		0	0	8333	0			0	No, Vu<V
SLV 16	1.09	-2580	-378	53.52		53752	0.3	16250	780			2.06	Si
SLV 16	3.19	-1175	560	-22.31		24482	0.3	13230	635			1.13	Si
SLV 15	1.09	-2580	-378	53.52		53752	0.3	16250	780			2.06	Si
SLV 15	3.19	-1175	560	-22.31		24482	0.3	13230	635			1.13	Si
SLV 13	1.09	-2456	-360	50.21		51169	0.3	16250	780			2.16	Si
SLV 13	3.19	-1196	507	-10.51		24911	0.3	13315	639			1.26	Si

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

quota 2.995 Wa 0.03 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.47	0	185	26.51	0	0	No, Trazione
SLV 2	143750	0.47	0	143	26.51	0	0	No, Trazione
SLV 1	143750	0.47	0	143	26.51	0	0	No, Trazione
SLV 8	143750	0.47	0	-224	26.51	0	0	No, e>t/2
SLV 7	143750	0.47	0	-224	26.51	0	0	No, e>t/2
SLV 4	143750	0.47	0	185	26.51	0	0	No, Trazione
SLV 6	143750	0.47	7637	-367	26.51	27.49	1.04	Si
SLV 5	143750	0.47	7637	-367	26.51	27.49	1.04	Si
SLV 11	143750	0.47	12867	-618	26.51	44.21	1.67	Si
SLV 12	143750	0.47	12867	-618	26.51	44.21	1.67	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.03 Ta = 0.1515

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 11	-357	-2079	-18	0	63.1	0.903	0	2.39674	No
SLV 12	-357	-2079	-18	0	63.1	0.903	0	2.39674	No
SLV 8	-359	-1525	-18	0	63.3	0.903	0	2.39674	No
SLV 7	-359	-1525	-18	0	63.3	0.903	0	2.39674	No
SLV 5	-348	-1111	18	0	62.3	0.902	0	2.39674	No
SLV 10	-346	-1665	18	0	62	0.902	0	2.39674	No
SLV 9	-346	-1665	18	0	62	0.902	0	2.39674	No
SLV 6	-348	-1111	18	0	62.3	0.902	0	2.39674	No
SLV 3	-358	-734	-6	0.016	63.2	0.903	0.26035	2.39674	No
SLV 4	-358	-734	-6	0.016	63.2	0.903	0.26035	2.39674	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 1	No
V_SLU	0	SLU 1	No
PF_SLV	0	SLV 4	No
V_SLV	0	SLV 1	No
PFFP_SLV	0	SLV 4	No
R_SLV	0	SLV 5	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
3.039	5.99	5.239	5.99	L2	L3	2.2	0.3	3.81	3.81	3.81			

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 5	2.09	-3317	-4866.72	0	0	0	No, e>l/2
SLU 5	3.99	-4659	2916.62	7058	4681.83	1.605	Si
SLU 2	2.09	-3317	-4866.72	0	0	0	No, e>l/2
SLU 2	3.99	-4659	2916.62	7058	4681.83	1.605	Si
SLU 65	2.09	-5278	-5508.11	7996	5237.27	0.951	No, M>Mu
SLU 65	3.99	-6485	3601.36	9824	6274.69	1.742	Si
SLU 26	2.09	-4134	-5088.47	0	0	0	No, e>l/2
SLU 26	3.99	-5831	3335.01	8833	5719.77	1.715	Si
SLU 44	2.09	-4462	-5286.36	0	0	0	No, e>l/2
SLU 44	3.99	-5313	3182.97	8049	5268.13	1.655	Si
SLU 23	2.09	-4134	-5088.47	0	0	0	No, e>l/2
SLU 23	3.99	-5831	3335.01	8833	5719.77	1.715	Si
SLU 68	2.09	-5278	-5508.11	7996	5237.27	0.951	No, M>Mu
SLU 68	3.99	-6485	3601.36	9824	6274.69	1.742	Si
SLU 13	2.09	-5195	-5323.94	7870	5163.53	0.97	No, M>Mu
SLU 13	3.99	-7528	3948.8	11403	7122.84	1.804	Si
SLU 10	2.09	-5195	-5323.94	7870	5163.53	0.97	No, M>Mu
SLU 10	3.99	-7528	3948.8	11403	7122.84	1.804	Si
SLU 47	2.09	-4462	-5286.36	0	0	0	No, e>l/2
SLU 47	3.99	-5313	3182.97	8049	5268.13	1.655	Si

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 7	2.09	-4133	-7350.09	0	0	0	No, e>l/2
SLV 7	3.99	-6731	4604.1	10197	6787.87	1.474	Si
SLV 8	2.09	-4133	-7350.09	0	0	0	No, e>l/2
SLV 8	3.99	-6731	4604.1	10197	6787.87	1.474	Si
SLV 3	2.09	-6455	-5122.84	9778	6533.7	1.275	Si
SLV 3	3.99	-5972	3415.53	9046	6083.87	1.781	Si
SLV 4	2.09	-6455	-5122.84	9778	6533.7	1.275	Si
SLV 4	3.99	-5972	3415.53	9046	6083.87	1.781	Si
SLV 12	2.09	-3241	-6278.37	0	0	0	No, e>l/2
SLV 12	3.99	-6283	4084.55	9517	6374.09	1.561	Si
SLV 16	2.09	-3482	-1550.43	5275	3665.62	2.364	Si
SLV 16	3.99	-4477	1683.67	6782	4652.29	2.763	Si
SLV 9	2.09	-6903	3657.62	10457	6945.1	1.899	Si
SLV 9	3.99	-2618	-1043.24	3966	2786.99	2.671	Si
SLV 15	2.09	-3482	-1550.43	5275	3665.62	2.364	Si
SLV 15	3.99	-4477	1683.67	6782	4652.29	2.763	Si
SLV 10	2.09	-6903	3657.62	10457	6945.1	1.899	Si
SLV 10	3.99	-2618	-1043.24	3966	2786.99	2.671	Si
SLV 11	2.09	-3241	-6278.37	0	0	0	No, e>l/2
SLV 11	3.99	-6283	4084.55	9517	6374.09	1.561	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 13	2.09	-5195	-7687	-5323.94		76540	0.2262	10833	735			0.1	No, Vu<V
SLU 13	3.99	-7528	-7548	3948.8		14530	1.727	7493	3882			0.51	No, Vu<V
SLU 47	2.09	-4462	-6811	-5286.36		0	0	5556	0			0	No, Vu<V
SLU 47	3.99	-5313	-6674	3182.97		11780	1.5035	7126	3214			0.48	No, Vu<V
SLU 44	2.09	-4462	-6811	-5286.36		0	0	5556	0			0	No, Vu<V
SLU 44	3.99	-5313	-6674	3182.97		11780	1.5035	7126	3214			0.48	No, Vu<V
SLU 10	2.09	-5195	-7687	-5323.94		76540	0.2262	10833	735			0.1	No, Vu<V
SLU 10	3.99	-7528	-7548	3948.8		14530	1.727	7493	3882			0.51	No, Vu<V
SLU 23	2.09	-4134	-6887	-5088.47		0	0	5556	0			0	No, Vu<V
SLU 23	3.99	-5831	-6755	3335.01		12264	1.5849	7191	3419			0.51	No, Vu<V
SLU 5	2.09	-3317	-6320	-4866.72		0	0	5556	0			0	No, Vu<V
SLU 5	3.99	-4659	-6195	2916.62		10916	1.4226	7011	2992			0.48	No, Vu<V
SLU 26	2.09	-4134	-6887	-5088.47		0	0	5556	0			0	No, Vu<V
SLU 26	3.99	-5831	-6755	3335.01		12264	1.5849	7191	3419			0.51	No, Vu<V
SLU 2	2.09	-3317	-6320	-4866.72		0	0	5556	0			0	No, Vu<V
SLU 2	3.99	-4659	-6195	2916.62		10916	1.4226	7011	2992			0.48	No, Vu<V
SLU 65	2.09	-5278	-7378	-5508.11		103466	0.17	10833	553			0.07	No, Vu<V
SLU 65	3.99	-6485	-7235	3601.36		13224	1.6347	7319	3589			0.5	No, Vu<V
SLU 68	2.09	-5278	-7378	-5508.11		103466	0.17	10833	553			0.07	No, Vu<V
SLU 68	3.99	-6485	-7235	3601.36		13224	1.6347	7319	3589			0.5	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 7	2.09	-4133	-9757	-7350.09		0	0	8333	0			0	No, Vu<V
SLV 7	3.99	-6731	-9093	4604.1		17968	1.2487	11927	4468			0.49	No, Vu<V
SLV 15	2.09	-3482	-2280	-1550.43		5907	1.9649	9515	5609			2.46	Si
SLV 15	3.99	-4477	-4009	1683.67		6869	2.1725	9707	6327			1.58	Si
SLV 3	2.09	-6455	-7109	-5122.84		23392	0.9198	13012	3591			0.51	No, Vu<V
SLV 3	3.99	-5972	-5235	3415.53		12560	1.5848	10845	5156			0.98	No, Vu<V
SLV 12	2.09	-3241	-8308	-6278.37		0	0	8333	0			0	No, Vu<V
SLV 12	3.99	-6283	-8725	4084.55		15509	1.3503	11435	4632			0.53	No, Vu<V
SLV 8	2.09	-4133	-9757	-7350.09		0	0	8333	0			0	No, Vu<V
SLV 8	3.99	-6731	-9093	4604.1		17968	1.2487	11927	4468			0.49	No, Vu<V
SLV 9	2.09	-6903	4086	3657.62		13447	1.7112	11023	5659			1.38	Si
SLV 9	3.99	-2618	3524	-1043.24		4145	2.1053	9162	5787			1.64	Si
SLV 11	2.09	-3241	-8308	-6278.37		0	0	8333	0			0	No, Vu<V
SLV 11	3.99	-6283	-8725	4084.55		15509	1.3503	11435	4632			0.53	No, Vu<V
SLV 4	2.09	-6455	-7109	-5122.84		23392	0.9198	13012	3591			0.51	No, Vu<V
SLV 4	3.99	-5972	-5235	3415.53		12560	1.5848	10845	5156			0.98	No, Vu<V
SLV 10	2.09	-6903	4086	3657.62		13447	1.7112	11023	5659			1.38	Si
SLV 10	3.99	-2618	3524	-1043.24		4145	2.1053	9162	5787			1.64	Si
SLV 16	2.09	-3482	-2280	-1550.43		5907	1.9649	9515	5609			2.46	Si
SLV 16	3.99	-4477	-4009	1683.67		6869	2.1725	9707	6327			1.58	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 15	143750	0.47	5576	-3681	344.05	526.93	1.53	Si
SLV 16	143750	0.47	5576	-3681	344.05	526.93	1.53	Si
SLV 13	143750	0.47	5589	-3689	344.05	528.11	1.53	Si
SLV 14	143750	0.47	5589	-3689	344.05	528.11	1.53	Si
SLV 12	143750	0.47	7244	-4782	344.05	674.81	1.96	Si
SLV 11	143750	0.47	7244	-4782	344.05	674.81	1.96	Si
SLV 10	143750	0.47	7288	-4811	344.05	678.62	1.97	Si
SLV 9	143750	0.47	7288	-4811	344.05	678.62	1.97	Si
SLV 7	143750	0.47	8688	-5735	344.05	799.09	2.32	Si
SLV 8	143750	0.47	8688	-5735	344.05	799.09	2.32	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 4	-2353	-9158	142	0.028	623.4	0.889	0.45748	14.16882	No
SLV 3	-2353	-9158	142	0.028	623.4	0.889	0.45748	14.16882	No
SLV 13	-2244	-4402	-128	0.031	613.5	0.889	0.50292	14.16882	No
SLV 14	-2244	-4402	-128	0.031	613.5	0.889	0.50292	14.16882	No
SLV 2	-2302	-9347	83	0.041	618.8	0.889	0.66623	14.16882	No
SLV 1	-2302	-9347	83	0.041	618.8	0.889	0.66623	14.16882	No
SLV 8	-2392	-7207	137	0.029	627	0.889	0.47689	10.08848	No
SLV 7	-2392	-7207	137	0.029	627	0.889	0.47689	10.08848	No
SLV 16	-2295	-4214	-69	0.044	618.1	0.889	0.71564	14.16882	No
SLV 15	-2295	-4214	-69	0.044	618.1	0.889	0.71564	14.16882	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 2	No
V_SLU	0	SLU 2	No
PF_SLV	0	SLV 7	No
V_SLV	0	SLV 7	No
PFFP_SLV	1.532	SLV 15	Si
R_SLV	0.032	SLV 3	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
6.239	5.99	6.789	5.99	L2	L3	0.549	0.3	3.81	3.81	3.81			

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 47	3.09	324	-430.61	0	0	0	No, Trazione
SLU 47	3.99	1498	555.68	0	0	0	No, Trazione
SLU 44	3.09	324	-430.61	0	0	0	No, Trazione
SLU 44	3.99	1498	555.68	0	0	0	No, Trazione
SLU 1	3.09	-946	-83.46	5736	241.51	2.894	Si
SLU 1	3.99	-272	91.71	0	0	0	No, e>l/2
SLU 46	3.09	-248	-300.83	0	0	0	No, e>l/2
SLU 46	3.99	789	381.27	0	0	0	No, Trazione

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLU 49	3.09	-248	-300.83	0	0	0	No, e>l/2
SLU 49	3.99	789	381.27	0	0	0	No, Trazione
SLU 38	3.09	-1334	-298.73	8089	330	1.105	Si
SLU 38	3.99	-29	344.72	0	0	0	No, e>l/2
SLU 45	3.09	-1107	-106.16	6715	279.08	2.629	Si
SLU 45	3.99	-275	119.64	0	0	0	No, e>l/2
SLU 43	3.09	-1107	-106.16	6715	279.08	2.629	Si
SLU 43	3.99	-275	119.64	0	0	0	No, e>l/2
SLU 48	3.09	-1107	-106.16	6715	279.08	2.629	Si
SLU 48	3.99	-275	119.64	0	0	0	No, e>l/2
SLU 40	3.09	-1715	-304.63	10404	411.02	1.349	Si
SLU 40	3.99	-282	341.55	0	0	0	No, e>l/2

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 8	3.09	1032	-707.89	0	0	0	No, Trazione
SLV 8	3.99	2479	901.03	0	0	0	No, Trazione
SLV 3	3.09	-485	-486.45	0	0	0	No, e>l/2
SLV 3	3.99	897	565.31	0	0	0	No, Trazione
SLV 11	3.09	955	-568.41	0	0	0	No, Trazione
SLV 11	3.99	2143	747.71	0	0	0	No, Trazione
SLV 10	3.09	-3636	529.19	22054	818.57	1.547	Si
SLV 10	3.99	-3492	-722.52	21182	793.06	1.098	Si
SLV 4	3.09	-485	-486.45	0	0	0	No, e>l/2
SLV 4	3.99	897	565.31	0	0	0	No, Trazione
SLV 16	3.09	-741	-21.53	4496	196.16	9.113	Si
SLV 16	3.99	-220	54.26	1334	59.78	1.102	Si
SLV 15	3.09	-741	-21.53	4496	196.16	9.113	Si
SLV 15	3.99	-220	54.26	1334	59.78	1.102	Si
SLV 9	3.09	-3636	529.19	22054	818.57	1.547	Si
SLV 9	3.99	-3492	-722.52	21182	793.06	1.098	Si
SLV 7	3.09	1032	-707.89	0	0	0	No, Trazione
SLV 7	3.99	2479	901.03	0	0	0	No, Trazione
SLV 12	3.09	955	-568.41	0	0	0	No, Trazione
SLV 12	3.99	2143	747.71	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	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 38	3.09	-1334	-1118	-298.73		29205	0.1522	9450	431			0.39	No, Vu<V
SLU 38	3.99	-29	-407	344.72		0	0	5556	0			0	No, Vu<V
SLU 1	3.09	-946	-350	-83.46		5736	0.5495	6320	1042			2.98	Si
SLU 1	3.99	-272	-109	91.71		0	0	5556	0			0	No, Vu<V
SLU 43	3.09	-1107	-437	-106.16		6877	0.5366	6473	1042			2.38	Si
SLU 43	3.99	-275	-144	119.64		0	0	5556	0			0	No, Vu<V
SLU 49	3.09	-248	-1044	-300.83		0	0	5556	0			0	No, Vu<V
SLU 49	3.99	789	-475	381.27		0	0	5556	0			0	No, Vu<V
SLU 45	3.09	-1107	-437	-106.16		6877	0.5366	6473	1042			2.38	Si
SLU 45	3.99	-275	-144	119.64		0	0	5556	0			0	No, Vu<V
SLU 48	3.09	-1107	-437	-106.16		6877	0.5366	6473	1042			2.38	Si
SLU 48	3.99	-275	-144	119.64		0	0	5556	0			0	No, Vu<V
SLU 44	3.09	324	-1449	-430.61		0	0	5556	0			0	No, Vu<V
SLU 44	3.99	1498	-696	555.68		0	0	5556	0			0	No, Vu<V
SLU 47	3.09	324	-1449	-430.61		0	0	5556	0			0	No, Vu<V
SLU 47	3.99	1498	-696	555.68		0	0	5556	0			0	No, Vu<V
SLU 46	3.09	-248	-1044	-300.83		0	0	5556	0			0	No, Vu<V
SLU 46	3.99	789	-475	381.27		0	0	5556	0			0	No, Vu<V
SLU 40	3.09	-1715	-1166	-304.63		19620	0.2914	8172	714			0.61	No, Vu<V
SLU 40	3.99	-282	-396	341.55		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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 10	3.09	-3636	1569	529.19		31268	0.3876	14587	1696			1.08	Si
SLV 10	3.99	-3492	1204	-722.52		57199	0.2035	16250	992			0.82	No, Vu<V
SLV 4	3.09	-485	-1523	-486.45		0	0	8333	0			0	No, Vu<V
SLV 4	3.99	897	-1037	565.31		0	0	8333	0			0	No, Vu<V
SLV 11	3.09	955	-2005	-568.41		0	0	8333	0			0	No, Vu<V
SLV 11	3.99	2143	-1042	747.71		0	0	8333	0			0	No, Vu<V
SLV 7	3.09	1032	-2360	-707.89		0	0	8333	0			0	No, Vu<V
SLV 7	3.99	2479	-1403	901.03		0	0	8333	0			0	No, Vu<V
SLV 14	3.09	-2118	732	307.76		18180	0.3884	11969	1395			1.9	Si
SLV 14	3.99	-1911	838	-386.81		29366	0.2169	14206	924			1.1	Si
SLV 13	3.09	-2118	732	307.76		18180	0.3884	11969	1395			1.9	Si
SLV 13	3.99	-1911	838	-386.81		29366	0.2169	14206	924			1.1	Si
SLV 9	3.09	-3636	1569	529.19		31268	0.3876	14587	1696			1.08	Si
SLV 9	3.99	-3492	1204	-722.52		57199	0.2035	16250	992			0.82	No, Vu<V
SLV 8	3.09	1032	-2360	-707.89		0	0	8333	0			0	No, Vu<V
SLV 8	3.99	2479	-1403	901.03		0	0	8333	0			0	No, Vu<V
SLV 12	3.09	955	-2005	-568.41		0	0	8333	0			0	No, Vu<V
SLV 12	3.99	2143	-1042	747.71		0	0	8333	0			0	No, Vu<V
SLV 3	3.09	-485	-1523	-486.45		0	0	8333	0			0	No, Vu<V
SLV 3	3.99	897	-1037	565.31		0	0	8333	0			0	No, Vu<V

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 12	143750	0.47	0	-572	85.92	0	0	No, e>t/2
SLV 11	143750	0.47	0	-572	85.92	0	0	No, e>t/2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 16	143750	0.47	4268	-704	85.92	101.85	1.19	Si
SLV 15	143750	0.47	4268	-704	85.92	101.85	1.19	Si
SLV 8	143750	0.47	5157	-850	85.92	122.14	1.42	Si
SLV 7	143750	0.47	5157	-850	85.92	122.14	1.42	Si
SLV 14	143750	0.47	6639	-1094	85.92	155.25	1.81	Si
SLV 13	143750	0.47	6639	-1094	85.92	155.25	1.81	Si
SLV 4	143750	0.47	9892	-1631	85.92	224.8	2.62	Si
SLV 3	143750	0.47	9892	-1631	85.92	224.8	2.62	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 8	-383	-851	35	0.026	137.7	0.893	0.42825	10.08848	No
SLV 7	-383	-851	35	0.026	137.7	0.893	0.42825	10.08848	No
SLV 3	-490	-1310	23	0.038	146.9	0.889	0.62733	14.16882	No
SLV 4	-490	-1310	23	0.038	146.9	0.889	0.62733	14.16882	No
SLV 14	-608	-1148	-20	0.041	157.5	0.889	0.67073	14.16882	No
SLV 13	-608	-1148	-20	0.041	157.5	0.889	0.67073	14.16882	No
SLV 9	-715	-1607	-32	0.032	167.5	0.89	0.52268	10.08848	No
SLV 10	-715	-1607	-32	0.032	167.5	0.89	0.52268	10.08848	No
SLV 12	-389	-722	27	0.035	138.2	0.892	0.5631	10.08848	No
SLV 11	-389	-722	27	0.035	138.2	0.892	0.5631	10.08848	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 76	No
V_SLU	0	SLU 1	No
PF_SLV	0	SLV 12	No
V_SLV	0	SLV 3	No
PFFP_SLV	0	SLV 11	No
R_SLV	0.042	SLV 7	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
7.289	5.99	9.889	5.99	L2	L3	2.6	0.3	3.81	3.81	3.81			

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 5	3.09	-2032	-1003.73	2605	2556.52	2.547	Si
SLU 5	3.99	-644	-2916.63	0	0	0	No, e>l/2
SLU 44	3.09	-2863	-1099.99	3671	3553.72	3.231	Si
SLU 44	3.99	-1028	-3114.84	0	0	0	No, e>l/2
SLU 47	3.09	-2863	-1099.99	3671	3553.72	3.231	Si
SLU 47	3.99	-1028	-3114.84	0	0	0	No, e>l/2
SLU 65	3.09	-4161	-1192.27	5335	5054.81	4.24	Si
SLU 65	3.99	-2224	-3177.66	0	0	0	No, e>l/2
SLU 4	3.09	-2921	-772.77	3745	3622.14	4.687	Si
SLU 4	3.99	-1446	-2042.97	0	0	0	No, e>l/2
SLU 26	3.09	-3330	-1096	4270	4101.76	3.742	Si
SLU 26	3.99	-1839	-2979.45	0	0	0	No, e>l/2
SLU 7	3.09	-2921	-772.77	3745	3622.14	4.687	Si
SLU 7	3.99	-1446	-2042.97	0	0	0	No, e>l/2
SLU 9	3.09	-2921	-772.77	3745	3622.14	4.687	Si
SLU 9	3.99	-1446	-2042.97	0	0	0	No, e>l/2
SLU 23	3.09	-3330	-1096	4270	4101.76	3.742	Si
SLU 23	3.99	-1839	-2979.45	0	0	0	No, e>l/2
SLU 2	3.09	-2032	-1003.73	2605	2556.52	2.547	Si
SLU 2	3.99	-644	-2916.63	0	0	0	No, e>l/2

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	3.09	-4437	-2151.46	5689	5498.9	2.556	Si
SLV 3	3.99	-3488	-659.53	4472	4367.68	6.622	Si
SLV 11	3.09	-1713	-510.75	2196	2186.46	4.281	Si
SLV 11	3.99	-435	-4524.74	0	0	0	No, e>l/2
SLV 6	3.09	-9362	-516.5	12004	10974.51	21.248	Si
SLV 6	3.99	-7248	2946.53	9293	8704.82	2.954	Si
SLV 8	3.09	-1738	-1412.78	2229	2218.64	1.57	Si
SLV 8	3.99	-803	-3836.52	0	0	0	No, e>l/2
SLV 4	3.09	-4437	-2151.46	5689	5498.9	2.556	Si
SLV 4	3.99	-3488	-659.53	4472	4367.68	6.622	Si
SLV 12	3.09	-1713	-510.75	2196	2186.46	4.281	Si
SLV 12	3.99	-435	-4524.74	0	0	0	No, e>l/2
SLV 7	3.09	-1738	-1412.78	2229	2218.64	1.57	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 7	3.99	-803	-3836.52	0	0	0	No, e>l/2
SLV 15	3.09	-4351	855.33	5579	5397.86	6.311	Si
SLV 15	3.99	-2261	-2953.58	0	0	0	No, e>l/2
SLV 16	3.09	-4351	855.33	5579	5397.86	6.311	Si
SLV 16	3.99	-2261	-2953.58	0	0	0	No, e>l/2
SLV 5	3.09	-9362	-516.5	12004	10974.51	21.248	Si
SLV 5	3.99	-7248	2946.53	9293	8704.82	2.954	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 23	3.09	-3330	2130	-1096		4270	2.5998	6125	4777			2.24	Si
SLU 23	3.99	-1839	1858	-2979.45		0	0	5556	0			0	No, Vu<V
SLU 65	3.09	-4161	2267	-1192.27		5335	2.5998	6267	4888			2.16	Si
SLU 65	3.99	-2224	1971	-3177.66		0	0	5556	0			0	No, Vu<V
SLU 2	3.09	-2032	2036	-1003.73		2801	2.4176	5929	4300			2.11	Si
SLU 2	3.99	-644	1819	-2916.63		0	0	5556	0			0	No, Vu<V
SLU 5	3.09	-2032	2036	-1003.73		2801	2.4176	5929	4300			2.11	Si
SLU 5	3.99	-644	1819	-2916.63		0	0	5556	0			0	No, Vu<V
SLU 4	3.09	-2921	1447	-772.77		3745	2.5998	6055	4722			3.26	Si
SLU 4	3.99	-1446	1259	-2042.97		0	0	5556	0			0	No, Vu<V
SLU 26	3.09	-3330	2130	-1096		4270	2.5998	6125	4777			2.24	Si
SLU 26	3.99	-1839	1858	-2979.45		0	0	5556	0			0	No, Vu<V
SLU 7	3.09	-2921	1447	-772.77		3745	2.5998	6055	4722			3.26	Si
SLU 7	3.99	-1446	1259	-2042.97		0	0	5556	0			0	No, Vu<V
SLU 44	3.09	-2863	2173	-1099.99		3671	2.5998	6045	4715			2.17	Si
SLU 44	3.99	-1028	1931	-3114.84		0	0	5556	0			0	No, Vu<V
SLU 9	3.09	-2921	1447	-772.77		3745	2.5998	6055	4722			3.26	Si
SLU 9	3.99	-1446	1259	-2042.97		0	0	5556	0			0	No, Vu<V
SLU 47	3.09	-2863	2173	-1099.99		3671	2.5998	6045	4715			2.17	Si
SLU 47	3.99	-1028	1931	-3114.84		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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 13	3.09	-6638	2915	1124.22		8511	2.5998	10036	7827			2.69	Si
SLV 13	3.99	-4195	1944	-918.67		5378	2.5998	9409	7338			3.78	Si
SLV 8	3.09	-1738	2310	-1412.78		3964	1.4618	9126	4002			1.73	Si
SLV 8	3.99	-803	2362	-3836.52		0	0	8333	0			0	No, Vu<V
SLV 16	3.09	-4351	4454	855.33		5579	2.5998	9449	7370			1.65	Si
SLV 16	3.99	-2261	3492	-2953.58		0	0	8333	0			0	No, Vu<V
SLV 1	3.09	-6724	-3145	-1882.58		8621	2.5998	10058	7844			2.49	Si
SLV 1	3.99	-5421	-2574	1375.38		6951	2.5998	9723	7584			2.95	Si
SLV 7	3.09	-1738	2310	-1412.78		3964	1.4618	9126	4002			1.73	Si
SLV 7	3.99	-803	2362	-3836.52		0	0	8333	0			0	No, Vu<V
SLV 12	3.09	-1713	4128	-510.75		2196	2.5998	8773	6842			1.66	Si
SLV 12	3.99	-435	3717	-4524.74		0	0	8333	0			0	No, Vu<V
SLV 11	3.09	-1713	4128	-510.75		2196	2.5998	8773	6842			1.66	Si
SLV 11	3.99	-435	3717	-4524.74		0	0	8333	0			0	No, Vu<V
SLV 14	3.09	-6638	2915	1124.22		8511	2.5998	10036	7827			2.69	Si
SLV 14	3.99	-4195	1944	-918.67		5378	2.5998	9409	7338			3.78	Si
SLV 15	3.09	-4351	4454	855.33		5579	2.5998	9449	7370			1.65	Si
SLV 15	3.99	-2261	3492	-2953.58		0	0	8333	0			0	No, Vu<V
SLV 2	3.09	-6724	-3145	-1882.58		8621	2.5998	10058	7844			2.49	Si
SLV 2	3.99	-5421	-2574	1375.38		6951	2.5998	9723	7584			2.95	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 11	143750	0.47	0	-811	406.49	0	0	No, e>t/2
SLV 8	143750	0.47	0	-539	406.49	0	0	No, e>t/2
SLV 7	143750	0.47	0	-539	406.49	0	0	No, e>t/2
SLV 12	143750	0.47	0	-811	406.49	0	0	No, e>t/2
SLV 4	143750	0.47	4096	-3195	406.49	463.15	1.14	Si
SLV 3	143750	0.47	4096	-3195	406.49	463.15	1.14	Si
SLV 15	143750	0.47	5260	-4102	406.49	588.85	1.45	Si
SLV 16	143750	0.47	5260	-4102	406.49	588.85	1.45	Si
SLV 1	143750	0.47	7364	-5743	406.49	809.57	1.99	Si
SLV 2	143750	0.47	7364	-5743	406.49	809.57	1.99	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 10	-3009	-11578	-184	0.026	757.6	0.889	0.41704	10.08848	No
SLV 9	-3009	-11578	-184	0.026	757.6	0.889	0.41704	10.08848	No
SLV 5	-3054	-10811	-177	0.027	761.7	0.889	0.44004	10.08848	No
SLV 6	-3054	-10811	-177	0.027	761.7	0.889	0.44004	10.08848	No
SLV 8	-2430	-244	157	0.029	705.1	0.889	0.47888	10.08848	No
SLV 7	-2430	-244	157	0.029	705.1	0.889	0.47888	10.08848	No
SLV 11	-2386	-1011	149	0.031	701.1	0.889	0.50147	10.08848	No
SLV 12	-2386	-1011	149	0.031	701.1	0.889	0.50147	10.08848	No
SLV 13	-2739	-8774	-76	0.045	732.8	0.889	0.73191	14.16882	No
SLV 14	-2739	-8774	-76	0.045	732.8	0.889	0.73191	14.16882	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 2	No
V_SLU	0	SLU 2	No

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0	SLV 7	No
V_SLV	0	SLV 7	No
PFFP_SLV	0	SLV 7	No
R_SLV	0.041	SLV 9	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
10.889	5.99	12.819	5.99	L2	L3	1.93	0.3	3.81	3.81	3.81			

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 5	2.09	-2841	3944.11	0	0	0	No, e>l/2
SLU 5	3.99	-4647	-2944.73	8025	4043.06	1.373	Si
SLU 44	2.09	-3838	4300.02	0	0	0	No, e>l/2
SLU 44	3.99	-5266	-3203.22	9094	4515.17	1.41	Si
SLU 13	2.09	-4443	4372.48	0	0	0	No, e>l/2
SLU 13	3.99	-7272	-3882.35	12559	5936.61	1.529	Si
SLU 2	2.09	-2841	3944.11	0	0	0	No, e>l/2
SLU 2	3.99	-4647	-2944.73	8025	4043.06	1.373	Si
SLU 26	2.09	-3516	4137.16	0	0	0	No, e>l/2
SLU 26	3.99	-5715	-3327.62	9870	4847.7	1.457	Si
SLU 23	2.09	-3516	4137.16	0	0	0	No, e>l/2
SLU 23	3.99	-5715	-3327.62	9870	4847.7	1.457	Si
SLU 65	2.09	-4513	4493.07	0	0	0	No, e>l/2
SLU 65	3.99	-6335	-3586.12	10939	5292.74	1.476	Si
SLU 68	2.09	-4513	4493.07	0	0	0	No, e>l/2
SLU 68	3.99	-6335	-3586.12	10939	5292.74	1.476	Si
SLU 47	2.09	-3838	4300.02	0	0	0	No, e>l/2
SLU 47	3.99	-5266	-3203.22	9094	4515.17	1.41	Si
SLU 10	2.09	-4443	4372.48	0	0	0	No, e>l/2
SLU 10	3.99	-7272	-3882.35	12559	5936.61	1.529	Si

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	2.09	-2611	1134.2	4509	2426.91	2.14	Si
SLV 3	3.99	-3515	-1780.13	6071	3224.22	1.811	Si
SLV 15	2.09	-6210	4334.72	10724	5467.25	1.261	Si
SLV 15	3.99	-6535	-3212.39	11286	5724.84	1.782	Si
SLV 5	2.09	-5325	-2728.52	9196	4752.6	1.742	Si
SLV 5	3.99	-1606	1270.73	2774	1515.12	1.192	Si
SLV 16	2.09	-6210	4334.72	10724	5467.25	1.261	Si
SLV 16	3.99	-6535	-3212.39	11286	5724.84	1.782	Si
SLV 8	2.09	-3087	4937.48	0	0	0	No, e>l/2
SLV 8	3.99	-6169	-4194.11	10654	5435.12	1.296	Si
SLV 11	2.09	-4167	5897.64	0	0	0	No, e>l/2
SLV 11	3.99	-7075	-4623.79	12219	6145.83	1.329	Si
SLV 6	2.09	-5325	-2728.52	9196	4752.6	1.742	Si
SLV 6	3.99	-1606	1270.73	2774	1515.12	1.192	Si
SLV 4	2.09	-2611	1134.2	4509	2426.91	2.14	Si
SLV 4	3.99	-3515	-1780.13	6071	3224.22	1.811	Si
SLV 12	2.09	-4167	5897.64	0	0	0	No, e>l/2
SLV 12	3.99	-7075	-4623.79	12219	6145.83	1.329	Si
SLV 7	2.09	-3087	4937.48	0	0	0	No, e>l/2
SLV 7	3.99	-6169	-4194.11	10654	5435.12	1.296	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 2	2.09	-2841	5640	3944.11		0	0	5556	0			0	No, Vu<V
SLU 2	3.99	-4647	5518	-2944.73		15579	0.9943	7633	2277			0.41	No, Vu<V
SLU 13	2.09	-4443	6887	4372.48		0	0	5556	0			0	No, Vu<V
SLU 13	3.99	-7272	6752	-3882.35		18736	1.2938	8054	3126			0.46	No, Vu<V
SLU 26	2.09	-3516	6162	4137.16		0	0	5556	0			0	No, Vu<V
SLU 26	3.99	-5715	6034	-3327.62		16585	1.1487	7767	2677			0.44	No, Vu<V
SLU 10	2.09	-4443	6887	4372.48		0	0	5556	0			0	No, Vu<V
SLU 10	3.99	-7272	6752	-3882.35		18736	1.2938	8054	3126			0.46	No, Vu<V
SLU 5	2.09	-2841	5640	3944.11		0	0	5556	0			0	No, Vu<V
SLU 5	3.99	-4647	5518	-2944.73		15579	0.9943	7633	2277			0.41	No, Vu<V
SLU 23	2.09	-3516	6162	4137.16		0	0	5556	0			0	No, Vu<V
SLU 23	3.99	-5715	6034	-3327.62		16585	1.1487	7767	2677			0.44	No, Vu<V
SLU 65	2.09	-4513	6603	4493.07		0	0	5556	0			0	No, Vu<V
SLU 65	3.99	-6335	6465	-3586.12		17640	1.1971	7908	2840			0.44	No, Vu<V
SLU 68	2.09	-4513	6603	4493.07		0	0	5556	0			0	No, Vu<V
SLU 68	3.99	-6335	6465	-3586.12		17640	1.1971	7908	2840			0.44	No, Vu<V
SLU 47	2.09	-3838	6082	4300.02		0	0	5556	0			0	No, Vu<V
SLU 47	3.99	-5266	5949	-3203.22		16396	1.0706	7742	2487			0.42	No, Vu<V

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 44	2.09	-3838	6082	4300.02		0	0	5556	0			0	No, Vu<V
SLU 44	3.99	-5266	5949	-3203.22		16396	1.0706	7742	2487			0.42	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 15	2.09	-6210	6432	4334.72		25834	0.8012	13500	3245			0.5	No, Vu<V
SLV 15	3.99	-6535	4211	-3212.39		15333	1.4207	11400	4859			1.15	Si
SLV 5	2.09	-5325	-3350	-2728.52		13069	1.3582	10947	4461			1.33	Si
SLV 5	3.99	-1606	-2781	1270.73		10255	0.5222	10384	1627			0.58	No, Vu<V
SLV 8	2.09	-3087	7123	4937.48		0	0	8333	0			0	No, Vu<V
SLV 8	3.99	-6169	7769	-4194.11		24027	0.8559	13139	3374			0.43	No, Vu<V
SLV 7	2.09	-3087	7123	4937.48		0	0	8333	0			0	No, Vu<V
SLV 7	3.99	-6169	7769	-4194.11		24027	0.8559	13139	3374			0.43	No, Vu<V
SLV 3	2.09	-2611	1856	1134.2		5466	1.5922	9427	4503			2.43	Si
SLV 3	3.99	-3515	4004	-1780.13		8515	1.3762	10036	4144			1.03	Si
SLV 6	2.09	-5325	-3350	-2728.52		13069	1.3582	10947	4461			1.33	Si
SLV 6	3.99	-1606	-2781	1270.73		10255	0.5222	10384	1627			0.58	No, Vu<V
SLV 12	2.09	-4167	8496	5897.64		0	0	8333	0			0	No, Vu<V
SLV 12	3.99	-7075	7831	-4623.79		25228	0.9349	13379	3752			0.48	No, Vu<V
SLV 16	2.09	-6210	6432	4334.72		25834	0.8012	13500	3245			0.5	No, Vu<V
SLV 16	3.99	-6535	4211	-3212.39		15333	1.4207	11400	4859			1.15	Si
SLV 11	2.09	-4167	8496	5897.64		0	0	8333	0			0	No, Vu<V
SLV 11	3.99	-7075	7831	-4623.79		25228	0.9349	13379	3752			0.48	No, Vu<V
SLV 4	2.09	-2611	1856	1134.2		5466	1.5922	9427	4503			2.43	Si
SLV 4	3.99	-3515	4004	-1780.13		8515	1.3762	10036	4144			1.03	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 1	143750	0.47	4029	-2333	301.8	338.45	1.12	Si
SLV 2	143750	0.47	4029	-2333	301.8	338.45	1.12	Si
SLV 4	143750	0.47	4548	-2634	301.8	380.35	1.26	Si
SLV 3	143750	0.47	4548	-2634	301.8	380.35	1.26	Si
SLV 5	143750	0.47	6371	-3689	301.8	524.54	1.74	Si
SLV 6	143750	0.47	6371	-3689	301.8	524.54	1.74	Si
SLV 8	143750	0.47	8100	-4691	301.8	656.94	2.18	Si
SLV 7	143750	0.47	8100	-4691	301.8	656.94	2.18	Si
SLV 10	143750	0.47	8897	-5152	301.8	716.52	2.37	Si
SLV 9	143750	0.47	8897	-5152	301.8	716.52	2.37	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 2	-1921	-3035	-223	0.002	533.9	0.889	0.03672	14.16882	No
SLV 1	-1921	-3035	-223	0.002	533.9	0.889	0.03672	14.16882	No
SLV 15	-2316	-9139	238	0.002	570.1	0.889	0.0372	14.16882	No
SLV 16	-2316	-9139	238	0.002	570.1	0.889	0.0372	14.16882	No
SLV 14	-2072	-8366	182	0.014	547.6	0.889	0.22521	14.16882	No
SLV 13	-2072	-8366	182	0.014	547.6	0.889	0.22521	14.16882	No
SLV 4	-2164	-3808	-167	0.018	556.1	0.889	0.29176	14.16882	No
SLV 3	-2164	-3808	-167	0.018	556.1	0.889	0.29176	14.16882	No
SLV 5	-1689	-4000	-146	0.021	513.3	0.89	0.34015	10.08848	No
SLV 6	-1689	-4000	-146	0.021	513.3	0.89	0.34015	10.08848	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	0	SLU 2	No
V_SLU	0	SLU 2	No
PF_SLV	0	SLV 7	No
V_SLV	0	SLV 7	No
PFFP_SLV	1.121	SLV 1	Si
R_SLV	0.003	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
12.819	-3.756	3.959	-3.756	L2	L3	8.86	0.3	3.81	3.81	3.81			

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 44	1.09	-32501	-5401.28	12228	122367.61	22.655	Si
SLU 44	4.9	-6405	201.91	2410	27534.72	136.37	Si
SLU 45	1.09	-32885	-6227.97	12372	123555.56	19.839	Si
SLU 45	4.9	-6408	196.9	2411	27546.84	139.904	Si
SLU 47	1.09	-32501	-5401.28	12228	122367.61	22.655	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLU 47	4.9	-6405	201.91	2410	27534.72	136.37	Si
SLU 49	1.09	-32655	-5731.96	12286	122843.51	21.431	Si
SLU 49	4.9	-6406	199.91	2410	27539.57	137.762	Si
SLU 51	1.09	-32655	-5731.96	12286	122843.51	21.431	Si
SLU 51	4.9	-6406	199.91	2410	27539.57	137.762	Si
SLU 43	1.09	-32885	-6227.97	12372	123555.56	19.839	Si
SLU 43	4.9	-6408	196.9	2411	27546.84	139.904	Si
SLU 48	1.09	-32885	-6227.97	12372	123555.56	19.839	Si
SLU 48	4.9	-6408	196.9	2411	27546.84	139.904	Si
SLU 46	1.09	-32655	-5731.96	12286	122843.51	21.431	Si
SLU 46	4.9	-6406	199.91	2410	27539.57	137.762	Si
SLU 50	1.09	-32885	-6227.97	12372	123555.56	19.839	Si
SLU 50	4.9	-6408	196.9	2411	27546.84	139.904	Si
SLU 1	1.09	-26421	-4398.01	9940	102761.1	23.365	Si
SLU 1	4.9	-5955	190.86	2240	25653.44	134.407	Si

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 9	1.09	-36225	22313.18	13629	142576.8	6.39	Si
SLV 9	4.9	-9965	418.66	3749	42792.18	102.213	Si
SLV 7	1.09	-24446	-28117.74	9197	100145.54	3.562	Si
SLV 7	4.9	-9728	263.85	3660	41803.16	158.433	Si
SLV 11	1.09	-28165	-28258.49	10596	113951.26	4.032	Si
SLV 11	4.9	-9747	658	3667	41884.35	63.654	Si
SLV 3	1.09	-22929	-10253.44	8626	94402.59	9.207	Si
SLV 3	4.9	-9781	-279.76	3680	42026.41	150.225	Si
SLV 12	1.09	-28165	-28258.49	10596	113951.26	4.032	Si
SLV 12	4.9	-9747	658	3667	41884.35	63.654	Si
SLV 4	1.09	-22929	-10253.44	8626	94402.59	9.207	Si
SLV 4	4.9	-9781	-279.76	3680	42026.41	150.225	Si
SLV 5	1.09	-32506	22453.94	12229	129588.75	5.771	Si
SLV 5	4.9	-9946	24.51	3742	42711.11	1000	Si
SLV 8	1.09	-24446	-28117.74	9197	100145.54	3.562	Si
SLV 8	4.9	-9728	263.85	3660	41803.16	158.433	Si
SLV 10	1.09	-36225	22313.18	13629	142576.8	6.39	Si
SLV 10	4.9	-9965	418.66	3749	42792.18	102.213	Si
SLV 6	1.09	-32506	22453.94	12229	129588.75	5.771	Si
SLV 6	4.9	-9946	24.51	3742	42711.11	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 non sismiche, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 80	1.09	-46357	-105	-496.89		17441	8.86	7881	20948			199.68	Si
SLU 80	4.9	-20028	-3	726.27		7535	8.86	6560	17437			1000	Si
SLU 73	1.09	-46204	-112	-166.22		17383	8.86	7873	20927			187.09	Si
SLU 73	4.9	-20027	-5	728.28		7535	8.86	6560	17437			1000	Si
SLU 84	1.09	-50403	-113	1108.51		18963	8.86	8084	21487			190.81	Si
SLU 84	4.9	-24200	-3	887.83		9104	8.86	6769	17993			1000	Si
SLU 55	1.09	-41941	-103	-1655.34		15779	8.86	7659	20359			197.26	Si
SLU 55	4.9	-16139	-5	578.88		6072	8.86	6365	16918			1000	Si
SLU 82	1.09	-50403	-113	1108.51		18963	8.86	8084	21487			190.81	Si
SLU 82	4.9	-24200	-3	887.83		9104	8.86	6769	17993			1000	Si
SLU 52	1.09	-41941	-103	-1655.34		15779	8.86	7659	20359			197.26	Si
SLU 52	4.9	-16139	-5	578.88		6072	8.86	6365	16918			1000	Si
SLU 76	1.09	-46204	-112	-166.22		17383	8.86	7873	20927			187.09	Si
SLU 76	4.9	-20027	-5	728.28		7535	8.86	6560	17437			1000	Si
SLU 63	1.09	-46140	-104	-380.61		17359	8.86	7870	20919			201.23	Si
SLU 63	4.9	-20311	-3	738.43		7642	8.86	6574	17475			1000	Si
SLU 78	1.09	-46357	-105	-496.89		17441	8.86	7881	20948			199.68	Si
SLU 78	4.9	-20028	-3	726.27		7535	8.86	6560	17437			1000	Si
SLU 75	1.09	-46357	-105	-496.89		17441	8.86	7881	20948			199.68	Si
SLU 75	4.9	-20028	-3	726.27		7535	8.86	6560	17437			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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 3	1.09	-22929	7887	-10253.44		8626	8.86	10059	26736			3.39	Si
SLV 3	4.9	-9781	3311	-279.76		3680	8.86	9069	24106			7.28	Si
SLV 11	1.09	-28165	-3695	-28258.49		10596	8.86	10453	27783			7.52	Si
SLV 11	4.9	-9747	-1333	658		3667	8.86	9067	24099			18.07	Si
SLV 13	1.09	-37743	-8011	4448.89		14200	8.86	11173	29699			3.71	Si
SLV 13	4.9	-9912	-3310	962.27		3729	8.86	9079	24132			7.29	Si
SLV 14	1.09	-37743	-8011	4448.89		14200	8.86	11173	29699			3.71	Si
SLV 14	4.9	-9912	-3310	962.27		3729	8.86	9079	24132			7.29	Si
SLV 15	1.09	-35325	-8699	-10722.62		13290	8.86	10991	29215			3.36	Si
SLV 15	4.9	-9846	-3497	1034.07		3704	8.86	9074	24119			6.9	Si
SLV 4	1.09	-22929	7887	-10253.44		8626	8.86	10059	26736			3.39	Si
SLV 4	4.9	-9781	3311	-279.76		3680	8.86	9069	24106			7.28	Si
SLV 1	1.09	-25346	8574	4918.06		9536	8.86	10241	27219			3.17	Si
SLV 1	4.9	-9847	3499	-351.56		3705	8.86	9074	24119			6.89	Si
SLV 16	1.09	-35325	-8699	-10722.62		13290	8.86	10991	29215			3.36	Si
SLV 16	4.9	-9846	-3497	1034.07		3704	8.86	9074	24119			6.9	Si
SLV 2	1.09	-25346	8574	4918.06		9536	8.86	10241	27219			3.17	Si
SLV 2	4.9	-9847	3499	-351.56		3705	8.86	9074	24119			6.89	Si
SLV 12	1.09	-28165	-3695	-28258.49		10596	8.86	10453	27783			7.52	Si
SLV 12	4.9	-9747	-1333	658		3667	8.86	9067	24099			18.07	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 10	143750	0.47	7088	-18840	1415.43	2662.05	1.88	Si
SLV 9	143750	0.47	7088	-18840	1415.43	2662.05	1.88	Si
SLV 6	143750	0.47	7137	-18970	1415.43	2679.34	1.89	Si
SLV 5	143750	0.47	7137	-18970	1415.43	2679.34	1.89	Si
SLV 13	143750	0.47	7363	-19571	1415.43	2758.74	1.95	Si
SLV 14	143750	0.47	7363	-19571	1415.43	2758.74	1.95	Si
SLV 2	143750	0.47	7527	-20006	1415.43	2816	1.99	Si
SLV 1	143750	0.47	7527	-20006	1415.43	2816	1.99	Si
SLV 15	143750	0.47	7648	-20328	1415.43	2858.34	2.02	Si
SLV 16	143750	0.47	7648	-20328	1415.43	2858.34	2.02	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 1	-9847	-25346	240	0.046	2544.3	0.889	0.74602	14.16882	No
SLV 2	-9847	-25346	240	0.046	2544.3	0.889	0.74602	14.16882	No
SLV 16	-9846	-35325	-234	0.046	2544.3	0.889	0.75107	14.16882	No
SLV 15	-9846	-35325	-234	0.046	2544.3	0.889	0.75107	14.16882	No
SLV 5	-9946	-32506	441	0.035	2553.4	0.889	0.57343	10.08848	No
SLV 6	-9946	-32506	441	0.035	2553.4	0.889	0.57343	10.08848	No
SLV 11	-9747	-28165	-435	0.035	2535.2	0.889	0.57782	10.08848	No
SLV 12	-9747	-28165	-435	0.035	2535.2	0.889	0.57782	10.08848	No
SLV 9	-9965	-36225	371	0.039	2555.2	0.889	0.63326	10.08848	No
SLV 10	-9965	-36225	371	0.039	2555.2	0.889	0.63326	10.08848	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	19.839	SLU 43	Si
V_SLU	187.087	SLU 73	Si
PF_SLV	3.562	SLV 7	Si
V_SLV	3.174	SLV 1	Si
PFFP_SLV	1.881	SLV 9	Si
R_SLV	0.053	SLV 1	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
12.819	-1.751	12.819	-3.756	L2	L3	2.005	0.3	3.81	3.81	3.81			

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 42	2.09	-3411	466.17	5671	3182.32	6.827	Si
SLU 42	3.99	-1409	633.13	2343	1372.44	2.168	Si
SLU 40	2.09	-3411	466.17	5671	3182.32	6.827	Si
SLU 40	3.99	-1409	633.13	2343	1372.44	2.168	Si
SLU 34	2.09	-3172	371.25	5273	2974.57	8.012	Si
SLU 34	3.99	-1233	618.46	2050	1205.39	1.949	Si
SLU 23	2.09	-2586	271.67	4299	2456.43	9.042	Si
SLU 23	3.99	-951	423.55	1581	935.26	2.208	Si
SLU 26	2.09	-2586	271.67	4299	2456.43	9.042	Si
SLU 26	3.99	-951	423.55	1581	935.26	2.208	Si
SLU 31	2.09	-3172	371.25	5273	2974.57	8.012	Si
SLU 31	3.99	-1233	618.46	2050	1205.39	1.949	Si
SLU 73	2.09	-3751	461.58	6235	3473.17	7.525	Si
SLU 73	3.99	-1473	644.19	2449	1432.94	2.224	Si
SLU 10	2.09	-2879	324.03	4786	2717.39	8.386	Si
SLU 10	3.99	-1099	541.16	1826	1076.75	1.99	Si
SLU 76	2.09	-3751	461.58	6235	3473.17	7.525	Si
SLU 76	3.99	-1473	644.19	2449	1432.94	2.224	Si
SLU 13	2.09	-2879	324.03	4786	2717.39	8.386	Si
SLU 13	3.99	-1099	541.16	1826	1076.75	1.99	Si

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 5	2.09	-3857	-7	6411	3663.9	523.572	Si
SLV 5	3.99	-1325	-1039.86	2203	1304.85	1.255	Si
SLV 12	2.09	-1175	801.01	1953	1159.1	1.447	Si
SLV 12	3.99	-822	1543.64	0	0	0	No, e>l/2
SLV 6	2.09	-3857	-7	6411	3663.9	523.572	Si
SLV 6	3.99	-1325	-1039.86	2203	1304.85	1.255	Si
SLV 14	2.09	-394	2699.21	0	0	0	No, e>l/2
SLV 14	3.99	-322	526.54	0	0	0	No, e>l/2
SLV 8	2.09	-2564	-532.98	4262	2481.04	4.655	Si
SLV 8	3.99	-1277	1179.14	2123	1258.55	1.067	Si
SLV 13	2.09	-394	2699.21	0	0	0	No, e>l/2

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLV 13	3.99	-322	526.54	0	0	0	No, e>l/2
SLV 7	2.09	-2564	-532.98	4262	2481.04	4.655	Si
SLV 7	3.99	-1277	1179.14	2123	1258.55	1.067	Si
SLV 16	2.09	-7	2541.42	0	0	0	No, e>l/2
SLV 16	3.99	-308	1192.24	0	0	0	No, e>l/2
SLV 15	2.09	-7	2541.42	0	0	0	No, e>l/2
SLV 15	3.99	-308	1192.24	0	0	0	No, e>l/2
SLV 11	2.09	-1175	801.01	1953	1159.1	1.447	Si
SLV 11	3.99	-822	1543.64	0	0	0	No, e>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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 69	2.09	-3136	612	492.61		5214	2.0053	6251	3760			6.14	Si
SLU 69	3.99	-1330	608	277.15		2210	2.0053	5850	3519			5.79	Si
SLU 50	2.09	-2844	695	445.4		4727	2.0053	6186	3721			5.35	Si
SLU 50	3.99	-1195	691	199.85		1986	2.0053	5820	3501			5.06	Si
SLU 71	2.09	-3136	612	492.61		5214	2.0053	6251	3760			6.14	Si
SLU 71	3.99	-1330	608	277.15		2210	2.0053	5850	3519			5.79	Si
SLU 49	2.09	-2861	547	367.03		4756	2.0053	6190	3724			6.81	Si
SLU 49	3.99	-1112	542	303.13		1848	2.0053	5802	3490			6.44	Si
SLU 43	2.09	-2844	695	445.4		4727	2.0053	6186	3721			5.35	Si
SLU 43	3.99	-1195	691	199.85		1986	2.0053	5820	3501			5.06	Si
SLU 48	2.09	-2844	695	445.4		4727	2.0053	6186	3721			5.35	Si
SLU 48	3.99	-1195	691	199.85		1986	2.0053	5820	3501			5.06	Si
SLU 51	2.09	-2861	547	367.03		4756	2.0053	6190	3724			6.81	Si
SLU 51	3.99	-1112	542	303.13		1848	2.0053	5802	3490			6.44	Si
SLU 66	2.09	-3136	612	492.61		5214	2.0053	6251	3760			6.14	Si
SLU 66	3.99	-1330	608	277.15		2210	2.0053	5850	3519			5.79	Si
SLU 45	2.09	-2844	695	445.4		4727	2.0053	6186	3721			5.35	Si
SLU 45	3.99	-1195	691	199.85		1986	2.0053	5820	3501			5.06	Si
SLU 64	2.09	-3136	612	492.61		5214	2.0053	6251	3760			6.14	Si
SLU 64	3.99	-1330	608	277.15		2210	2.0053	5850	3519			5.79	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 15	2.09	-7	1743	2541.42		0	0	8333	0			0	No, Vu<V
SLV 15	3.99	-308	2086	1192.24		0	0	8333	0			0	No, Vu<V
SLV 14	2.09	-394	2751	2699.21		0	0	8333	0			0	No, Vu<V
SLV 14	3.99	-322	2319	526.54		0	0	8333	0			0	No, Vu<V
SLV 12	2.09	-1175	-706	801.01		4069	0.9625	9147	2641			3.74	Si
SLV 12	3.99	-822	571	1543.64		0	0	8333	0			0	No, Vu<V
SLV 10	2.09	-2467	2655	1326.99		5898	1.3946	9513	3980			1.5	Si
SLV 10	3.99	-870	1347	-675.36		4269	0.6793	9187	1872			1.39	Si
SLV 11	2.09	-1175	-706	801.01		4069	0.9625	9147	2641			3.74	Si
SLV 11	3.99	-822	571	1543.64		0	0	8333	0			0	No, Vu<V
SLV 13	2.09	-394	2751	2699.21		0	0	8333	0			0	No, Vu<V
SLV 13	3.99	-322	2319	526.54		0	0	8333	0			0	No, Vu<V
SLV 16	2.09	-7	1743	2541.42		0	0	8333	0			0	No, Vu<V
SLV 16	3.99	-308	2086	1192.24		0	0	8333	0			0	No, Vu<V
SLV 7	2.09	-2564	-1797	-532.98		4262	2.0053	9186	5526			3.08	Si
SLV 7	3.99	-1277	-495	1179.14		17834	0.2388	11900	852			1.72	Si
SLV 9	2.09	-2467	2655	1326.99		5898	1.3946	9513	3980			1.5	Si
SLV 9	3.99	-870	1347	-675.36		4269	0.6793	9187	1872			1.39	Si
SLV 8	2.09	-2564	-1797	-532.98		4262	2.0053	9186	5526			3.08	Si
SLV 8	3.99	-1277	-495	1179.14		17834	0.2388	11900	852			1.72	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 13	143750	0.47	0	-1462	313.54	0	0	No, e>t/2
SLV 15	143750	0.47	0	-416	313.54	0	0	No, e>t/2
SLV 7	143750	0.47	0	-806	313.54	0	0	No, e>t/2
SLV 12	143750	0.47	0	-63	313.54	0	0	No, e>t/2
SLV 16	143750	0.47	0	-416	313.54	0	0	No, e>t/2
SLV 14	143750	0.47	0	-1462	313.54	0	0	No, e>t/2
SLV 11	143750	0.47	0	-63	313.54	0	0	No, e>t/2
SLV 8	143750	0.47	0	-806	313.54	0	0	No, e>t/2
SLV 4	143750	0.47	4809	-2893	313.54	416.91	1.33	Si
SLV 3	143750	0.47	4809	-2893	313.54	416.91	1.33	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 5	-71	-5472	142	0.011	421	0.984	0.16174	10.08848	No
SLV 6	-71	-5472	142	0.011	421	0.984	0.16174	10.08848	No
SLV 11	-112	-316	-141	0.012	421.7	0.976	0.17943	10.08848	No
SLV 12	-112	-316	-141	0.012	421.7	0.976	0.17943	10.08848	No
SLV 10	-104	-4643	137	0.014	421.5	0.978	0.20466	10.08848	No
SLV 9	-104	-4643	137	0.014	421.5	0.978	0.20466	10.08848	No
SLV 7	-79	-1145	-135	0.014	421.1	0.983	0.20773	10.08848	No
SLV 8	-79	-1145	-135	0.014	421.1	0.983	0.20773	10.08848	No
SLV 2	-35	-4926	51	0.054	420.7	0.992	0.78919	14.16882	No
SLV 1	-35	-4926	51	0.054	420.7	0.992	0.78919	14.16882	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	1.949	SLU 31	Si
V_SLU	5.065	SLU 43	Si
PF_SLV	0	SLV 11	No
V_SLV	0	SLV 11	No
PFFP_SLV	0	SLV 7	No
R_SLV	0.016	SLV 5	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	l	Sp.	h netta	h ini.	h fin.	a	a.s.,sx	a.s.,dx
12.819	2.899	12.819	-0.751	L2	L3	3.65	0.3	3.81	3.81	3.81			

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 13	2.09	-8329	-3869.56	7607	13781.66	3.562	Si
SLU 13	3.99	-4462	190.46	4075	7736.6	40.62	Si
SLU 5	2.09	-6393	-3309.88	5838	10831.13	3.272	Si
SLU 5	3.99	-3137	269.01	2865	5524.45	20.536	Si
SLU 10	2.09	-8329	-3869.56	7607	13781.66	3.562	Si
SLU 10	3.99	-4462	190.46	4075	7736.6	40.62	Si
SLU 47	2.09	-8021	-3644.65	7325	13322.03	3.655	Si
SLU 47	3.99	-3907	248.72	3568	6818.23	27.413	Si
SLU 23	2.09	-7309	-3548.68	6675	12246.57	3.451	Si
SLU 23	3.99	-3729	234.31	3406	6521.49	27.832	Si
SLU 2	2.09	-6393	-3309.88	5838	10831.13	3.272	Si
SLU 2	3.99	-3137	269.01	2865	5524.45	20.536	Si
SLU 31	2.09	-9246	-4108.36	8444	15124.49	3.681	Si
SLU 31	3.99	-5054	155.76	4616	8701.55	55.863	Si
SLU 34	2.09	-9246	-4108.36	8444	15124.49	3.681	Si
SLU 34	3.99	-5054	155.76	4616	8701.55	55.863	Si
SLU 26	2.09	-7309	-3548.68	6675	12246.57	3.451	Si
SLU 26	3.99	-3729	234.31	3406	6521.49	27.832	Si
SLU 44	2.09	-8021	-3644.65	7325	13322.03	3.655	Si
SLU 44	3.99	-3907	248.72	3568	6818.23	27.413	Si

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 10	2.09	-7058	1391.78	6446	12202.14	8.767	Si
SLV 10	3.99	-4328	-2184.79	3953	7643.76	3.499	Si
SLV 4	2.09	-7837	-1834.04	7157	13464.62	7.342	Si
SLV 4	3.99	-1994	1310.85	1821	3584.54	2.735	Si
SLV 15	2.09	-6784	-3340.62	6196	11753.27	3.518	Si
SLV 15	3.99	-5586	-528.66	5101	9768.86	18.478	Si
SLV 9	2.09	-7058	1391.78	6446	12202.14	8.767	Si
SLV 9	3.99	-4328	-2184.79	3953	7643.76	3.499	Si
SLV 3	2.09	-7837	-1834.04	7157	13464.62	7.342	Si
SLV 3	3.99	-1994	1310.85	1821	3584.54	2.735	Si
SLV 7	2.09	-7519	-4625.62	6867	12951.22	2.8	Si
SLV 7	3.99	-3251	1905.46	2969	5789.44	3.038	Si
SLV 16	2.09	-6784	-3340.62	6196	11753.27	3.518	Si
SLV 16	3.99	-5586	-528.66	5101	9768.86	18.478	Si
SLV 8	2.09	-7519	-4625.62	6867	12951.22	2.8	Si
SLV 8	3.99	-3251	1905.46	2969	5789.44	3.038	Si
SLV 12	2.09	-7203	-5077.6	6578	12438.26	2.45	Si
SLV 12	3.99	-4329	1353.61	3953	7644.73	5.648	Si
SLV 11	2.09	-7203	-5077.6	6578	12438.26	2.45	Si
SLV 11	3.99	-4329	1353.61	3953	7644.73	5.648	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 68	2.09	-8937	-2203	-3883.44		8162	3.65	6644	7275			3.3	Si
SLU 68	3.99	-4499	-2203	214.02		4109	3.65	6103	6683			3.03	Si
SLU 31	2.09	-9246	-2215	-4108.36		8444	3.65	6681	7316			3.3	Si
SLU 31	3.99	-5054	-2214	155.76		4616	3.65	6171	6757			3.05	Si
SLU 65	2.09	-8937	-2203	-3883.44		8162	3.65	6644	7275			3.3	Si
SLU 65	3.99	-4499	-2203	214.02		4109	3.65	6103	6683			3.03	Si
SLU 52	2.09	-9957	-2319	-4204.33		9093	3.65	6768	7411			3.2	Si
SLU 52	3.99	-5232	-2319	170.17		4778	3.65	6193	6781			2.92	Si
SLU 34	2.09	-9246	-2215	-4108.36		8444	3.65	6681	7316			3.3	Si
SLU 34	3.99	-5054	-2214	155.76		4616	3.65	6171	6757			3.05	Si
SLU 73	2.09	-10874	-2403	-4443.12		9930	3.65	6880	7533			3.13	Si
SLU 73	3.99	-5824	-2403	135.47		5319	3.65	6265	6860			2.86	Si
SLU 47	2.09	-8021	-2119	-3644.65		7325	3.65	6532	7153			3.38	Si
SLU 47	3.99	-3907	-2119	248.72		3568	3.65	6031	6604			3.12	Si

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 55	2.09	-9957	-2319	-4204.33		9093	3.65	6768	7411			3.2	Si
SLU 55	3.99	-5232	-2319	170.17		4778	3.65	6193	6781			2.92	Si
SLU 44	2.09	-8021	-2119	-3644.65		7325	3.65	6532	7153			3.38	Si
SLU 44	3.99	-3907	-2119	248.72		3568	3.65	6031	6604			3.12	Si
SLU 76	2.09	-10874	-2403	-4443.12		9930	3.65	6880	7533			3.13	Si
SLU 76	3.99	-5824	-2403	135.47		5319	3.65	6265	6860			2.86	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 10	2.09	-7058	3079	1391.78		6446	3.65	9623	10537			3.42	Si
SLV 10	3.99	-4328	1860	-2184.79		3953	3.65	9124	9991			5.37	Si
SLV 15	2.09	-6784	-2009	-3340.62		6196	3.65	9572	10482			5.22	Si
SLV 15	3.99	-5586	-2432	-528.66		5101	3.65	9354	10242			4.21	Si
SLV 12	2.09	-7203	-4710	-5077.6		7145	3.3603	9762	9841			2.09	Si
SLV 12	3.99	-4329	-3925	1353.61		3953	3.65	9124	9991			2.55	Si
SLV 9	2.09	-7058	3079	1391.78		6446	3.65	9623	10537			3.42	Si
SLV 9	3.99	-4328	1860	-2184.79		3953	3.65	9124	9991			5.37	Si
SLV 6	2.09	-7374	3100	1843.76		6735	3.65	9680	10600			3.42	Si
SLV 6	3.99	-3251	2315	-1632.94		2969	3.65	8927	9775			4.22	Si
SLV 16	2.09	-6784	-2009	-3340.62		6196	3.65	9572	10482			5.22	Si
SLV 16	3.99	-5586	-2432	-528.66		5101	3.65	9354	10242			4.21	Si
SLV 7	2.09	-7519	-4688	-4625.62		6906	3.6295	9714	10577			2.26	Si
SLV 7	3.99	-3251	-3469	1905.46		2969	3.65	8927	9775			2.82	Si
SLV 8	2.09	-7519	-4688	-4625.62		6906	3.6295	9714	10577			2.26	Si
SLV 8	3.99	-3251	-3469	1905.46		2969	3.65	8927	9775			2.82	Si
SLV 5	2.09	-7374	3100	1843.76		6735	3.65	9680	10600			3.42	Si
SLV 5	3.99	-3251	2315	-1632.94		2969	3.65	8927	9775			4.22	Si
SLV 11	2.09	-7203	-4710	-5077.6		7145	3.3603	9762	9841			2.09	Si
SLV 11	3.99	-4329	-3925	1353.61		3953	3.65	9124	9991			2.55	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 3	143750	0.47	5319	-5824	570.7	835.61	1.46	Si
SLV 4	143750	0.47	5319	-5824	570.7	835.61	1.46	Si
SLV 2	143750	0.47	5343	-5850	570.7	839.14	1.47	Si
SLV 1	143750	0.47	5343	-5850	570.7	839.14	1.47	Si
SLV 7	143750	0.47	5731	-6276	570.7	897.24	1.57	Si
SLV 8	143750	0.47	5731	-6276	570.7	897.24	1.57	Si
SLV 5	143750	0.47	5810	-6362	570.7	908.94	1.59	Si
SLV 6	143750	0.47	5810	-6362	570.7	908.94	1.59	Si
SLV 12	143750	0.47	6109	-6689	570.7	953.19	1.67	Si
SLV 11	143750	0.47	6109	-6689	570.7	953.19	1.67	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 16	-750	-10777	59	0.059	787.3	0.935	0.91673	14.16882	No
SLV 15	-750	-10777	59	0.059	787.3	0.935	0.91673	14.16882	No
SLV 13	-814	-10387	56	0.06	790.6	0.932	0.92818	14.16882	No
SLV 14	-814	-10387	56	0.06	790.6	0.932	0.92818	14.16882	No
SLV 1	-179	-6789	-56	0.063	767.1	0.979	0.93167	14.16882	No
SLV 2	-179	-6789	-56	0.063	767.1	0.979	0.93167	14.16882	No
SLV 4	-115	-7179	-52	0.064	766.2	0.986	0.94461	14.16882	No
SLV 3	-115	-7179	-52	0.064	766.2	0.986	0.94461	14.16882	No
SLV 12	-453	-9973	25	0.069	774.5	0.954	1.04562	10.08848	No
SLV 11	-453	-9973	25	0.069	774.5	0.954	1.04562	10.08848	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	3.272	SLU 2	Si
V_SLU	2.855	SLU 73	Si
PF_SLV	2.45	SLV 11	Si
V_SLV	2.09	SLV 11	Si
PFFP_SLV	1.464	SLV 3	Si
R_SLV	0.065	SLV 15	No

Maschio 27

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
12.819	5.99	12.819	3.899	L2	L3	2.091	0.3	3.81	3.81	3.81			

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 83	2.09	-9020	-1723.25	14382	7764.47	4.506	Si

Comb.	Quota	N	M	σ0	Mu	c.s.	Verifica
SLU 83	3.99	-2834	-3.68	4518	2798.09	759.675	Si
SLU 20	2.09	-7096	-1367.22	11314	6387.32	4.672	Si
SLU 20	3.99	-2230	-10.75	3556	2229.78	207.326	Si
SLU 79	2.09	-8371	-1570.31	13346	7316.4	4.659	Si
SLU 79	3.99	-2623	16.91	4182	2600.93	153.824	Si
SLU 39	2.09	-7774	-1517.56	12395	6889.83	4.54	Si
SLU 39	3.99	-2452	-26.42	3909	2440.06	92.36	Si
SLU 41	2.09	-7774	-1517.56	12395	6889.83	4.54	Si
SLU 41	3.99	-2452	-26.42	3909	2440.06	92.36	Si
SLU 74	2.09	-8371	-1570.31	13346	7316.4	4.659	Si
SLU 74	3.99	-2623	16.91	4182	2600.93	153.824	Si
SLU 77	2.09	-8371	-1570.31	13346	7316.4	4.659	Si
SLU 77	3.99	-2623	16.91	4182	2600.93	153.824	Si
SLU 81	2.09	-9020	-1723.25	14382	7764.47	4.506	Si
SLU 81	3.99	-2834	-3.68	4518	2798.09	759.675	Si
SLU 62	2.09	-8342	-1572.9	13301	7296.54	4.639	Si
SLU 62	3.99	-2613	11.98	4165	2591.27	216.283	Si
SLU 60	2.09	-8342	-1572.9	13301	7296.54	4.639	Si
SLU 60	3.99	-2613	11.98	4165	2591.27	216.283	Si

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 5	2.09	-1427	726.56	2275	1464.05	2.015	Si
SLV 5	3.99	-582	-534.29	928	603.83	1.13	Si
SLV 10	2.09	-133	-733.08	0	0	0	No, e>l/2
SLV 10	3.99	99	-1027.6	0	0	0	No, Trazione
SLV 15	2.09	-4832	-3734.81	7705	4732.85	1.267	Si
SLV 15	3.99	-1042	-536.32	1662	1074.86	2.004	Si
SLV 3	2.09	-9147	1130.66	14584	8420.52	7.447	Si
SLV 3	3.99	-3312	1108.05	5281	3312.69	2.99	Si
SLV 13	2.09	-1966	-3135.36	0	0	0	No, e>l/2
SLV 13	3.99	-149	-1028.69	0	0	0	No, e>l/2
SLV 16	2.09	-4832	-3734.81	7705	4732.85	1.267	Si
SLV 16	3.99	-1042	-536.32	1662	1074.86	2.004	Si
SLV 14	2.09	-1966	-3135.36	0	0	0	No, e>l/2
SLV 14	3.99	-149	-1028.69	0	0	0	No, e>l/2
SLV 9	2.09	-133	-733.08	0	0	0	No, e>l/2
SLV 9	3.99	99	-1027.6	0	0	0	No, Trazione
SLV 6	2.09	-1427	726.56	2275	1464.05	2.015	Si
SLV 6	3.99	-582	-534.29	928	603.83	1.13	Si
SLV 4	2.09	-9147	1130.66	14584	8420.52	7.447	Si
SLV 4	3.99	-3312	1108.05	5281	3312.69	2.99	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, γM = 3

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLU 55	2.09	-11128	1645	-1534.71		17743	2.0906	7921	4968			3.02	Si
SLU 55	3.99	-3221	1861	422.44		5135	2.0906	6240	3914			2.1	Si
SLU 40	2.09	-9835	1536	-1586.4		15681	2.0906	7646	4796			3.12	Si
SLU 40	3.99	-2944	1697	207.5		4693	2.0906	6181	3877			2.29	Si
SLU 73	2.09	-11806	1803	-1685.05		18824	2.0906	8065	5059			2.81	Si
SLU 73	3.99	-3442	2026	406.78		5489	2.0906	6287	3943			1.95	Si
SLU 34	2.09	-10560	1811	-1479.36		16836	2.0906	7800	4892			2.7	Si
SLU 34	3.99	-3060	2022	384.04		4879	2.0906	6206	3892			1.93	Si
SLU 13	2.09	-9882	1653	-1329.02		15755	2.0906	7656	4802			2.91	Si
SLU 13	3.99	-2839	1857	399.71		4526	2.0906	6159	3863			2.08	Si
SLU 31	2.09	-10560	1811	-1479.36		16836	2.0906	7800	4892			2.7	Si
SLU 31	3.99	-3060	2022	384.04		4879	2.0906	6206	3892			1.93	Si
SLU 76	2.09	-11806	1803	-1685.05		18824	2.0906	8065	5059			2.81	Si
SLU 76	3.99	-3442	2026	406.78		5489	2.0906	6287	3943			1.95	Si
SLU 52	2.09	-11128	1645	-1534.71		17743	2.0906	7921	4968			3.02	Si
SLU 52	3.99	-3221	1861	422.44		5135	2.0906	6240	3914			2.1	Si
SLU 10	2.09	-9882	1653	-1329.02		15755	2.0906	7656	4802			2.91	Si
SLU 10	3.99	-2839	1857	399.71		4526	2.0906	6159	3863			2.08	Si
SLU 42	2.09	-9835	1536	-1586.4		15681	2.0906	7646	4796			3.12	Si
SLU 42	3.99	-2944	1697	207.5		4693	2.0906	6181	3877			2.29	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, γM = 2

Comb.	Quota	N	V par	M	σ0	σN	l'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 8	2.09	-10981	2209	-1271.62		17508	2.0906	11835	7423			3.36	Si
SLV 8	3.99	-3560	2453	1106.96		5676	2.0906	9469	5939			2.42	Si
SLV 7	2.09	-10981	2209	-1271.62		17508	2.0906	11835	7423			3.36	Si
SLV 7	3.99	-3560	2453	1106.96		5676	2.0906	9469	5939			2.42	Si
SLV 10	2.09	-133	-1584	-733.08		0	0	8333	0			0	No, Vu<V
SLV 10	3.99	99	-1723	-1027.6		0	0	8333	0			0	No, Vu<V
SLV 9	2.09	-133	-1584	-733.08		0	0	8333	0			0	No, Vu<V
SLV 9	3.99	99	-1723	-1027.6		0	0	8333	0			0	No, Vu<V
SLV 5	2.09	-1427	-712	726.56		2957	1.6087	8925	4307			6.05	Si
SLV 5	3.99	-582	-788	-534.29		5076	0.3822	9349	1072			1.36	Si
SLV 14	2.09	-1966	-1579	-3135.36		0	0	8333	0			0	No, Vu<V
SLV 14	3.99	-149	-1680	-1028.69		0	0	8333	0			0	No, Vu<V
SLV 13	2.09	-1966	-1579	-3135.36		0	0	8333	0			0	No, Vu<V
SLV 13	3.99	-149	-1680	-1028.69		0	0	8333	0			0	No, Vu<V
SLV 3	2.09	-9147	2204	1130.66		14584	2.0906	11250	7056			3.2	Si
SLV 3	3.99	-3312	2410	1108.05		5281	2.0906	9390	5889			2.44	Si
SLV 4	2.09	-9147	2204	1130.66		14584	2.0906	11250	7056			3.2	Si
SLV 4	3.99	-3312	2410	1108.05		5281	2.0906	9390	5889			2.44	Si
SLV 6	2.09	-1427	-712	726.56		2957	1.6087	8925	4307			6.05	Si

Comb.	Quota	N	V par	M	σ0	σN	I'	fvd	Vt scorr.	Vt fess.diag.	Vt,lim	c.s.	Verifica
SLV 6	3.99	-582	-788	-534.29		5076	0.3822	9349	1072			1.36	Si

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

quota 2.995 Wa 0.05 denominatore 8 γM = 2

Comb.	fd	Sa	σ0	N	M	Mc	Coeff.s.	Verifica
SLV 5	143750	0.47	0	-684	326.89	0	0	No, e>t/2
SLV 9	143750	0.47	0	184	326.89	0	0	No, Trazione
SLV 14	143750	0.47	0	-1215	326.89	0	0	No, e>t/2
SLV 10	143750	0.47	0	184	326.89	0	0	No, Trazione
SLV 13	143750	0.47	0	-1215	326.89	0	0	No, e>t/2
SLV 6	143750	0.47	0	-684	326.89	0	0	No, e>t/2
SLV 16	143750	0.47	5233	-3282	326.89	471.2	1.44	Si
SLV 15	143750	0.47	5233	-3282	326.89	471.2	1.44	Si
SLV 1	143750	0.47	6548	-4107	326.89	583.03	1.78	Si
SLV 2	143750	0.47	6548	-4107	326.89	583.03	1.78	Si

Verifica dei meccanismi locali di collasso con analisi cinematica lineare

forza di aggancio al piano = 0 quota mezzeria = 2.995 Wa = 0.05 Ta = 0.0808

Comb.	N top	N base	V orto	α0	M*	e*	a0*	aLim	Verifica
SLV 7	-143	-12415	142	0.014	440.2	0.972	0.21688	10.08848	No
SLV 8	-143	-12415	142	0.014	440.2	0.972	0.21688	10.08848	No
SLV 12	-160	-11766	141	0.015	440.6	0.969	0.22191	10.08848	No
SLV 11	-160	-11766	141	0.015	440.6	0.969	0.22191	10.08848	No
SLV 5	-139	-1618	-119	0.024	440.1	0.972	0.36567	10.08848	No
SLV 6	-139	-1618	-119	0.024	440.1	0.972	0.36567	10.08848	No
SLV 10	-155	-969	-119	0.024	440.5	0.97	0.36649	10.08848	No
SLV 9	-155	-969	-119	0.024	440.5	0.97	0.36649	10.08848	No
SLV 4	-123	-9393	51	0.054	439.7	0.975	0.80845	14.16882	No
SLV 3	-123	-9393	51	0.054	439.7	0.975	0.80845	14.16882	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLU	4.506	SLU 81	Si
V_SLU	1.925	SLU 31	Si
PF_SLV	0	SLV 10	No
V_SLV	0	SLV 9	No
PFFP_SLV	0	SLV 10	No
R_SLV	0.021	SLV 7	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]*
***fb_**: resistenza normalizzata a compressione in direzione orizzontale dei blocchi. [daN/m²]*
***fhk**: resistenza caratteristica a compressione della muratura utilizzata in direzione orizzontale. [daN/m²]*
***fvk0**: resistenza caratteristica a taglio in assenza di carichi verticali. [daN/m²]*
***fhmedio**: resistenza media a compressione della muratura utilizzata in direzione orizzontale. [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.*
***fvk,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.*
***γM**: 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]*
***Vt**: resistenza a taglio secondo [7.8.4]. [daN]*
***Vp**: 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
3.603	-3.363	-1.59	-0.2	1.39	3.201	-2.917	-1.59	-0.2	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_	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	-591	-323.3	2098.31	SLU 62	6.49	Si
fin.	3	-406	-124.84	2098.31	SLU 62	16.81	Si
ini.	3	-638	-325.92	2098.31	SLU 82	6.44	Si
fin.	3	-412	-142.16	2098.31	SLU 82	14.76	Si
ini.	3	-637	-351.93	2098.31	SLU 83	5.96	Si
fin.	3	-430	-135.89	2098.31	SLU 83	15.44	Si
ini.	3	-602	-332.71	2098.31	SLU 74	6.31	Si
fin.	3	-413	-129.49	2098.31	SLU 74	16.2	Si
ini.	3	-602	-332.71	2098.31	SLU 77	6.31	Si
fin.	3	-413	-129.49	2098.31	SLU 77	16.2	Si
ini.	3	-591	-323.3	2098.31	SLU 60	6.49	Si
fin.	3	-406	-124.84	2098.31	SLU 60	16.81	Si
ini.	3	-638	-325.92	2098.31	SLU 84	6.44	Si
fin.	3	-412	-142.16	2098.31	SLU 84	14.76	Si
ini.	3	-603	-306.71	2098.31	SLU 78	6.84	Si
fin.	3	-395	-135.77	2098.31	SLU 78	15.45	Si
ini.	3	-602	-332.71	2098.31	SLU 79	6.31	Si
fin.	3	-413	-129.49	2098.31	SLU 79	16.2	Si
ini.	3	-637	-351.93	2098.31	SLU 81	5.96	Si
fin.	3	-430	-135.89	2098.31	SLU 81	15.44	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	-299.66	-650			2409	907	SLU 41	1.39	Si
fin.	3	0	-114.91	854			2409	907	SLU 41	1.06	Si
ini.	3	0	-323.3	-665			2409	907	SLU 60	1.36	Si
fin.	3	0	-124.84	904			2409	907	SLU 60	1	Si
ini.	3	0	-351.93	-742			2409	907	SLU 81	1.22	Si
fin.	3	0	-135.89	995			2409	907	SLU 81	0.91	No
ini.	3	0	-351.93	-742			2409	907	SLU 83	1.22	Si
fin.	3	0	-135.89	995			2409	907	SLU 83	0.91	No
ini.	3	0	-332.71	-688			2409	907	SLU 74	1.32	Si
fin.	3	0	-129.49	937			2409	907	SLU 74	0.97	No
ini.	3	0	-325.92	-779			2409	907	SLU 84	1.16	Si
fin.	3	0	-142.16	880			2409	907	SLU 84	1.03	Si
ini.	3	0	-332.71	-688			2409	907	SLU 77	1.32	Si
fin.	3	0	-129.49	937			2409	907	SLU 77	0.97	No
ini.	3	0	-332.71	-688			2409	907	SLU 79	1.32	Si
fin.	3	0	-129.49	937			2409	907	SLU 79	0.97	No
ini.	3	0	-325.92	-779			2409	907	SLU 82	1.16	Si
fin.	3	0	-142.16	880			2409	907	SLU 82	1.03	Si
ini.	3	0	-323.3	-665			2409	907	SLU 62	1.36	Si
fin.	3	0	-124.84	904			2409	907	SLU 62	1	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-1266	1129.78	2209.71	SLV 7	1.96	Si
fin.	2	-105	-844.2	2209.71	SLV 7	2.62	Si
ini.	2	442	-1585.69	2209.71	SLV 9	1.39	Si
fin.	2	-482	664.26	2209.71	SLV 9	3.33	Si
ini.	2	442	-1585.69	2209.71	SLV 10	1.39	Si
fin.	2	-482	664.26	2209.71	SLV 10	3.33	Si
ini.	2	-1266	1129.78	2209.71	SLV 8	1.96	Si
fin.	2	-105	-844.2	2209.71	SLV 8	2.62	Si
ini.	2	156	-1036.49	2209.71	SLV 16	2.13	Si
fin.	2	-252	315.04	2209.71	SLV 16	7.01	Si
ini.	2	532	-1650.35	2209.71	SLV 14	1.34	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	2	-362	663.33	2209.71	SLV 14	3.33	Si
ini.	2	-1356	1194.43	2209.71	SLV 3	1.85	Si
fin.	2	-225	-843.27	2209.71	SLV 3	2.62	Si
ini.	2	-1356	1194.43	2209.71	SLV 4	1.85	Si
fin.	2	-225	-843.27	2209.71	SLV 4	2.62	Si
ini.	2	156	-1036.49	2209.71	SLV 15	2.13	Si
fin.	2	-252	315.04	2209.71	SLV 15	7.01	Si
ini.	2	532	-1650.35	2209.71	SLV 13	1.34	Si
fin.	2	-362	663.33	2209.71	SLV 13	3.33	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	460.5	-4113			3613	1360	SLV 12	0.33	No
fin.	2	0	-496.71	-1979			3613	1360	SLV 12	0.69	No
ini.	2	0	1129.78	-4751			3613	1360	SLV 7	0.29	No
fin.	2	0	-844.2	-3418			3613	1360	SLV 7	0.4	No
ini.	2	0	-1585.69	3847			3613	1360	SLV 9	0.35	No
fin.	2	0	664.26	4691			3613	1360	SLV 9	0.29	No
ini.	2	0	460.5	-4113			3613	1360	SLV 11	0.33	No
fin.	2	0	-496.71	-1979			3613	1360	SLV 11	0.69	No
ini.	2	0	-1650.35	1805			3613	1360	SLV 14	0.75	No
fin.	2	0	663.33	4036			3613	1360	SLV 14	0.34	No
ini.	2	0	-916.42	3209			3613	1360	SLV 5	0.42	No
fin.	2	0	316.77	3251			3613	1360	SLV 5	0.42	No
ini.	2	0	-1650.35	1805			3613	1360	SLV 13	0.75	No
fin.	2	0	663.33	4036			3613	1360	SLV 13	0.34	No
ini.	2	0	1129.78	-4751			3613	1360	SLV 8	0.29	No
fin.	2	0	-844.2	-3418			3613	1360	SLV 8	0.4	No
ini.	2	0	-1585.69	3847			3613	1360	SLV 10	0.35	No
fin.	2	0	664.26	4691			3613	1360	SLV 10	0.29	No
ini.	2	0	-916.42	3209			3613	1360	SLV 6	0.42	No
fin.	2	0	316.77	3251			3613	1360	SLV 6	0.42	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.339	SLV 13	Si
V_SLV	0.286	SLV 7	No
PF_SLU	5.962	SLU 81	Si
V_SLU	0.911	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
3.603	-3.363	0.2	1.09	0.89	3.201	-2.917	0.2	1.09	0.89	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_	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	122	-365.64	1223.31	SLU 74	3.35	Si
fin.	3	122	-255.93	1223.31	SLU 74	4.78	Si
ini.	3	164	-367.96	1223.31	SLU 82	3.32	Si
fin.	3	164	-279.11	1223.31	SLU 82	4.38	Si
ini.	3	122	-363.35	1223.31	SLU 62	3.37	Si
fin.	3	122	-253.64	1223.31	SLU 62	4.82	Si
ini.	3	136	-389.92	1223.31	SLU 83	3.14	Si
fin.	3	136	-265.73	1223.31	SLU 83	4.6	Si
ini.	3	164	-367.96	1223.31	SLU 84	3.32	Si
fin.	3	164	-279.11	1223.31	SLU 84	4.38	Si
ini.	3	122	-365.64	1223.31	SLU 77	3.35	Si
fin.	3	122	-255.93	1223.31	SLU 77	4.78	Si
ini.	3	122	-363.35	1223.31	SLU 60	3.37	Si
fin.	3	122	-253.64	1223.31	SLU 60	4.82	Si
ini.	3	136	-389.92	1223.31	SLU 81	3.14	Si
fin.	3	136	-265.73	1223.31	SLU 81	4.6	Si
ini.	3	150	-343.68	1223.31	SLU 78	3.56	Si
fin.	3	150	-269.32	1223.31	SLU 78	4.54	Si
ini.	3	122	-365.64	1223.31	SLU 79	3.35	Si
fin.	3	122	-255.93	1223.31	SLU 79	4.78	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	-389.92	819			1542	580	SLU 81	0.71	No
fin.	3	0	-265.73	-450			1542	580	SLU 81	1.29	Si
ini.	3	0	-365.64	766			1542	580	SLU 79	0.76	No
fin.	3	0	-255.93	-451			1542	580	SLU 79	1.29	Si
ini.	3	0	-365.64	766			1542	580	SLU 74	0.76	No
fin.	3	0	-255.93	-451			1542	580	SLU 74	1.29	Si

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-363.35	745			1542	580	SLU 60	0.78	No
fin.	3	0	-253.64	-434			1542	580	SLU 60	1.34	Si
ini.	3	0	-343.68	707			1542	580	SLU 78	0.82	No
fin.	3	0	-269.32	-510			1542	580	SLU 78	1.14	Si
ini.	3	0	-365.64	766			1542	580	SLU 77	0.76	No
fin.	3	0	-255.93	-451			1542	580	SLU 77	1.29	Si
ini.	3	0	-363.35	745			1542	580	SLU 62	0.78	No
fin.	3	0	-253.64	-434			1542	580	SLU 62	1.34	Si
ini.	3	0	-367.96	760			1542	580	SLU 82	0.76	No
fin.	3	0	-279.11	-509			1542	580	SLU 82	1.14	Si
ini.	3	0	-389.92	819			1542	580	SLU 83	0.71	No
fin.	3	0	-265.73	-450			1542	580	SLU 83	1.29	Si
ini.	3	0	-367.96	760			1542	580	SLU 84	0.76	No
fin.	3	0	-279.11	-509			1542	580	SLU 84	1.14	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	1419	-123.31	1334.71	SLV 2	10.82	Si
fin.	2	664	-1262.71	1334.71	SLV 2	1.06	Si
ini.	2	1703	293.53	1334.71	SLV 3	4.55	Si
fin.	2	1022	-1929.13	1334.71	SLV 3	0.69	No
ini.	2	994	546.64	1334.71	SLV 7	2.44	Si
fin.	2	902	-1717.69	1334.71	SLV 7	0.78	No
ini.	2	-1552	-789.6	1334.71	SLV 14	1.69	Si
fin.	2	-871	1562.81	1334.71	SLV 14	0.85	No
ini.	2	-843	-1042.71	1334.71	SLV 9	1.28	Si
fin.	2	-751	1351.37	1334.71	SLV 9	0.99	No
ini.	2	1703	293.53	1334.71	SLV 4	4.55	Si
fin.	2	1022	-1929.13	1334.71	SLV 4	0.69	No
ini.	2	-843	-1042.71	1334.71	SLV 10	1.28	Si
fin.	2	-751	1351.37	1334.71	SLV 10	0.99	No
ini.	2	-1552	-789.6	1334.71	SLV 13	1.69	Si
fin.	2	-871	1562.81	1334.71	SLV 13	0.85	No
ini.	2	994	546.64	1334.71	SLV 8	2.44	Si
fin.	2	902	-1717.69	1334.71	SLV 8	0.78	No
ini.	2	1419	-123.31	1334.71	SLV 1	10.82	Si
fin.	2	664	-1262.71	1334.71	SLV 1	1.06	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	-1042.71	4397			2314	871	SLV 9	0.2	No
fin.	2	0	1351.37	3567			2314	871	SLV 9	0.24	No
ini.	2	0	-789.6	4639			2314	871	SLV 14	0.19	No
fin.	2	0	1562.81	3469			2314	871	SLV 14	0.25	No
ini.	2	0	293.53	-3611			2314	871	SLV 4	0.24	No
fin.	2	0	-1929.13	-4159			2314	871	SLV 4	0.21	No
ini.	2	0	546.64	-3369			2314	871	SLV 8	0.26	No
fin.	2	0	-1717.69	-4257			2314	871	SLV 8	0.2	No
ini.	2	0	-372.76	2894			2314	871	SLV 15	0.3	No
fin.	2	0	896.39	1644			2314	871	SLV 15	0.53	No
ini.	2	0	-789.6	4639			2314	871	SLV 13	0.19	No
fin.	2	0	1562.81	3469			2314	871	SLV 13	0.25	No
ini.	2	0	-372.76	2894			2314	871	SLV 16	0.3	No
fin.	2	0	896.39	1644			2314	871	SLV 16	0.53	No
ini.	2	0	-1042.71	4397			2314	871	SLV 10	0.2	No
fin.	2	0	1351.37	3567			2314	871	SLV 10	0.24	No
ini.	2	0	546.64	-3369			2314	871	SLV 7	0.26	No
fin.	2	0	-1717.69	-4257			2314	871	SLV 7	0.2	No
ini.	2	0	293.53	-3611			2314	871	SLV 3	0.24	No
fin.	2	0	-1929.13	-4159			2314	871	SLV 3	0.21	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.692	SLV 3	No
V_SLV	0.188	SLV 13	No
PF_SLU	3.137	SLU 81	Si
V_SLU	0.709	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
8.664	1.239	0.58	1.09	0.51	7.664	1.239	0.58	1.09	0.51	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	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	-1361	-310.08	395.89	SLU 73	1.28	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	3	-1719	-393.19	395.89	SLU 73	1.01	Si
ini.	3	-1361	-310.08	395.89	SLU 76	1.28	Si
fin.	3	-1719	-393.19	395.89	SLU 76	1.01	Si
ini.	3	-1494	-348.92	395.89	SLU 81	1.13	Si
fin.	3	-1894	-441.79	395.89	SLU 81	0.9	No
ini.	3	-1360	-324.08	395.89	SLU 40	1.22	Si
fin.	3	-1726	-408.24	395.89	SLU 40	0.97	No
ini.	3	-1355	-323.51	395.89	SLU 39	1.22	Si
fin.	3	-1722	-408.01	395.89	SLU 39	0.97	No
ini.	3	-1499	-349.49	395.89	SLU 82	1.13	Si
fin.	3	-1899	-442.02	395.89	SLU 82	0.9	No
ini.	3	-1355	-323.51	395.89	SLU 41	1.22	Si
fin.	3	-1722	-408.01	395.89	SLU 41	0.97	No
ini.	3	-1494	-348.92	395.89	SLU 83	1.13	Si
fin.	3	-1894	-441.79	395.89	SLU 83	0.9	No
ini.	3	-1499	-349.49	395.89	SLU 84	1.13	Si
fin.	3	-1899	-442.02	395.89	SLU 84	0.9	No
ini.	3	-1360	-324.08	395.89	SLU 42	1.22	Si
fin.	3	-1726	-408.24	395.89	SLU 42	0.97	No

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	-348.92	1615			393	148	SLU 83	0.09	No
fin.	3	0	-441.79	-3404			393	148	SLU 83	0.04	No
ini.	3	0	-324.08	1486			393	148	SLU 40	0.1	No
fin.	3	0	-408.24	-3137			393	148	SLU 40	0.05	No
ini.	3	0	-348.92	1615			393	148	SLU 81	0.09	No
fin.	3	0	-441.79	-3404			393	148	SLU 81	0.04	No
ini.	3	0	-324.08	1486			393	148	SLU 42	0.1	No
fin.	3	0	-408.24	-3137			393	148	SLU 42	0.05	No
ini.	3	0	-310.08	1443			393	148	SLU 73	0.1	No
fin.	3	0	-393.19	-3032			393	148	SLU 73	0.05	No
ini.	3	0	-349.49	1617			393	148	SLU 84	0.09	No
fin.	3	0	-442.02	-3405			393	148	SLU 84	0.04	No
ini.	3	0	-349.49	1617			393	148	SLU 82	0.09	No
fin.	3	0	-442.02	-3405			393	148	SLU 82	0.04	No
ini.	3	0	-323.51	1485			393	148	SLU 39	0.1	No
fin.	3	0	-408.01	-3137			393	148	SLU 39	0.05	No
ini.	3	0	-310.08	1443			393	148	SLU 76	0.1	No
fin.	3	0	-393.19	-3032			393	148	SLU 76	0.05	No
ini.	3	0	-323.51	1485			393	148	SLU 41	0.1	No
fin.	3	0	-408.01	-3137			393	148	SLU 41	0.05	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-333	97.37	558.31	SLV 3	5.73	Si
fin.	2	-1849	-448.08	558.31	SLV 3	1.25	Si
ini.	2	-1385	-463.74	558.31	SLV 16	1.2	Si
fin.	2	-299	-20.83	558.31	SLV 16	26.81	Si
ini.	2	-749	-101.74	558.31	SLV 8	5.49	Si
fin.	2	-1353	-301.12	558.31	SLV 8	1.85	Si
ini.	2	-1343	-461.41	558.31	SLV 14	1.21	Si
fin.	2	-260	-18.61	558.31	SLV 14	29.99	Si
ini.	2	-292	99.7	558.31	SLV 1	5.6	Si
fin.	2	-1810	-445.87	558.31	SLV 1	1.25	Si
ini.	2	-1385	-463.74	558.31	SLV 15	1.2	Si
fin.	2	-299	-20.83	558.31	SLV 15	26.81	Si
ini.	2	-749	-101.74	558.31	SLV 7	5.49	Si
fin.	2	-1353	-301.12	558.31	SLV 7	1.85	Si
ini.	2	-333	97.37	558.31	SLV 4	5.73	Si
fin.	2	-1849	-448.08	558.31	SLV 4	1.25	Si
ini.	2	-292	99.7	558.31	SLV 2	5.6	Si
fin.	2	-1810	-445.87	558.31	SLV 2	1.25	Si
ini.	2	-1343	-461.41	558.31	SLV 13	1.21	Si
fin.	2	-260	-18.61	558.31	SLV 13	29.99	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	-101.74	618			589	222	SLV 7	0.36	No
fin.	2	0	-301.12	-2179			589	222	SLV 7	0.1	No
ini.	2	0	-101.74	618			589	222	SLV 8	0.36	No
fin.	2	0	-301.12	-2179			589	222	SLV 8	0.1	No
ini.	2	0	-463.74	1784			589	222	SLV 15	0.12	No
fin.	2	0	-20.83	-706			589	222	SLV 15	0.31	No
ini.	2	0	-93.97	561			589	222	SLV 5	0.4	No
fin.	2	0	-293.75	-2102			589	222	SLV 5	0.11	No
ini.	2	0	99.7	-57			589	222	SLV 1	3.86	Si
fin.	2	0	-445.87	-2908			589	222	SLV 1	0.08	No
ini.	2	0	97.37	-40			589	222	SLV 4	5.51	Si
fin.	2	0	-448.08	-2931			589	222	SLV 4	0.08	No
ini.	2	0	-463.74	1784			589	222	SLV 16	0.12	No
fin.	2	0	-20.83	-706			589	222	SLV 16	0.31	No
ini.	2	0	99.7	-57			589	222	SLV 2	3.86	Si
fin.	2	0	-445.87	-2908			589	222	SLV 2	0.08	No
ini.	2	0	97.37	-40			589	222	SLV 3	5.51	Si
fin.	2	0	-448.08	-2931			589	222	SLV 3	0.08	No
ini.	2	0	-93.97	561			589	222	SLV 6	0.4	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
fin.	2	0	-293.75	-2102			589	222	SLV 6	0.11	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.204	SLV 15	Si
V_SLV	0.076	SLV 3	No
PF_SLU	0.896	SLU 82	No
V_SLU	0.043	SLU 82	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
5.239	5.915	-1.59	-0.2	1.39	6.239	5.915	-1.59	-0.2	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	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	-2149	320.76	2098.31	SLU 23	6.54	Si
fin.	3	-1815	56.06	2098.31	SLU 23	37.43	Si
ini.	3	-2333	337.51	2098.31	SLU 47	6.22	Si
fin.	3	-1973	52.1	2098.31	SLU 47	40.27	Si
ini.	3	-2149	320.76	2098.31	SLU 26	6.54	Si
fin.	3	-1815	56.06	2098.31	SLU 26	37.43	Si
ini.	3	-2333	337.51	2098.31	SLU 44	6.22	Si
fin.	3	-1973	52.1	2098.31	SLU 44	40.27	Si
ini.	3	-2571	302.28	2098.31	SLU 55	6.94	Si
fin.	3	-2289	99.72	2098.31	SLU 55	21.04	Si
ini.	3	-2010	336.37	2098.31	SLU 2	6.24	Si
fin.	3	-1634	31.8	2098.31	SLU 2	65.98	Si
ini.	3	-2571	302.28	2098.31	SLU 52	6.94	Si
fin.	3	-2289	99.72	2098.31	SLU 52	21.04	Si
ini.	3	-2472	321.9	2098.31	SLU 65	6.52	Si
fin.	3	-2154	76.37	2098.31	SLU 65	27.48	Si
ini.	3	-2010	336.37	2098.31	SLU 5	6.24	Si
fin.	3	-1634	31.8	2098.31	SLU 5	65.98	Si
ini.	3	-2472	321.9	2098.31	SLU 68	6.52	Si
fin.	3	-2154	76.37	2098.31	SLU 68	27.48	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	-78.85	-1702			2409	907	SLU 81	0.53	No
fin.	3	0	207.99	2455			2409	907	SLU 81	0.37	No
ini.	3	0	-63.75	-1602			2409	907	SLU 74	0.57	No
fin.	3	0	187.59	2248			2409	907	SLU 74	0.4	No
ini.	3	0	-63.24	-1556			2409	907	SLU 60	0.58	No
fin.	3	0	183.73	2183			2409	907	SLU 60	0.42	No
ini.	3	0	286.66	-2245			2409	907	SLU 76	0.4	No
fin.	3	0	123.98	1416			2409	907	SLU 76	0.64	No
ini.	3	0	-63.75	-1602			2409	907	SLU 79	0.57	No
fin.	3	0	187.59	2248			2409	907	SLU 79	0.4	No
ini.	3	0	286.66	-2245			2409	907	SLU 73	0.4	No
fin.	3	0	123.98	1416			2409	907	SLU 73	0.64	No
ini.	3	0	-78.85	-1702			2409	907	SLU 83	0.53	No
fin.	3	0	207.99	2455			2409	907	SLU 83	0.37	No
ini.	3	0	-79.99	-1459			2409	907	SLU 41	0.62	No
fin.	3	0	187.69	2182			2409	907	SLU 41	0.42	No
ini.	3	0	-63.24	-1556			2409	907	SLU 62	0.58	No
fin.	3	0	183.73	2183			2409	907	SLU 62	0.42	No
ini.	3	0	-63.75	-1602			2409	907	SLU 77	0.57	No
fin.	3	0	187.59	2248			2409	907	SLU 77	0.4	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-3795	1152.32	2209.71	SLV 11	1.92	Si
fin.	2	-2346	-305.32	2209.71	SLV 11	7.24	Si
ini.	2	-2669	855.49	2209.71	SLV 16	2.58	Si
fin.	2	-1171	-555.21	2209.71	SLV 16	3.98	Si
ini.	2	-2669	855.49	2209.71	SLV 15	2.58	Si
fin.	2	-1171	-555.21	2209.71	SLV 15	3.98	Si
ini.	2	-17	-912.63	2209.71	SLV 1	2.42	Si
fin.	2	-1789	787.09	2209.71	SLV 1	2.81	Si
ini.	2	720	-860.15	2209.71	SLV 9	2.57	Si
fin.	2	-238	178.02	2209.71	SLV 9	12.41	Si
ini.	2	-17	-912.63	2209.71	SLV 2	2.42	Si
fin.	2	-1789	787.09	2209.71	SLV 2	2.81	Si
ini.	2	1110	-1209.46	2209.71	SLV 5	1.83	Si
fin.	2	-614	537.2	2209.71	SLV 5	4.11	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	720	-860.15	2209.71	SLV 10	2.57	Si
fin.	2	-238	178.02	2209.71	SLV 10	12.41	Si
ini.	2	1110	-1209.46	2209.71	SLV 6	1.83	Si
fin.	2	-614	537.2	2209.71	SLV 6	4.11	Si
ini.	2	-3795	1152.32	2209.71	SLV 12	1.92	Si
fin.	2	-2346	-305.32	2209.71	SLV 12	7.24	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	855.49	-3842			3613	1360	SLV 15	0.35	No
fin.	2	0	-555.21	-803			3613	1360	SLV 15	1.69	Si
ini.	2	0	-308.89	260			3613	1360	SLV 3	5.22	Si
fin.	2	0	642.09	3319			3613	1360	SLV 3	0.41	No
ini.	2	0	855.49	-3842			3613	1360	SLV 16	0.35	No
fin.	2	0	-555.21	-803			3613	1360	SLV 16	1.69	Si
ini.	2	0	803.01	-2817			3613	1360	SLV 8	0.48	No
fin.	2	0	53.87	1459			3613	1360	SLV 8	0.93	No
ini.	2	0	-912.63	1667			3613	1360	SLV 2	0.82	No
fin.	2	0	787.09	3676			3613	1360	SLV 2	0.37	No
ini.	2	0	1152.32	-4047			3613	1360	SLV 12	0.34	No
fin.	2	0	-305.32	222			3613	1360	SLV 12	6.11	Si
ini.	2	0	1152.32	-4047			3613	1360	SLV 11	0.34	No
fin.	2	0	-305.32	222			3613	1360	SLV 11	6.11	Si
ini.	2	0	803.01	-2817			3613	1360	SLV 7	0.48	No
fin.	2	0	53.87	1459			3613	1360	SLV 7	0.93	No
ini.	2	0	-912.63	1667			3613	1360	SLV 1	0.82	No
fin.	2	0	787.09	3676			3613	1360	SLV 1	0.37	No
ini.	2	0	-308.89	260			3613	1360	SLV 4	5.22	Si
fin.	2	0	642.09	3319			3613	1360	SLV 4	0.41	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.827	SLV 5	Si
V_SLV	0.336	SLV 11	No
PF_SLU	6.217	SLU 44	Si
V_SLU	0.369	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
5.239	5.915	0.2	1.09	0.89	6.239	5.915	0.2	1.09	0.89	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	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	-336	58.72	1223.31	SLU 76	20.83	Si
fin.	3	-2066	-295.54	1223.31	SLU 76	4.14	Si
ini.	3	-310	78.87	1223.31	SLU 31	15.51	Si
fin.	3	-1955	-274.67	1223.31	SLU 31	4.45	Si
ini.	3	-336	58.72	1223.31	SLU 73	20.83	Si
fin.	3	-2066	-295.54	1223.31	SLU 73	4.14	Si
ini.	3	-260	137	1223.31	SLU 44	8.93	Si
fin.	3	-1900	-281.18	1223.31	SLU 44	4.35	Si
ini.	3	-260	137	1223.31	SLU 47	8.93	Si
fin.	3	-1900	-281.18	1223.31	SLU 47	4.35	Si
ini.	3	-310	78.87	1223.31	SLU 34	15.51	Si
fin.	3	-1955	-274.67	1223.31	SLU 34	4.45	Si
ini.	3	-287	84.35	1223.31	SLU 55	14.5	Si
fin.	3	-1988	-288.65	1223.31	SLU 55	4.24	Si
ini.	3	-309	111.37	1223.31	SLU 68	10.98	Si
fin.	3	-1977	-288.07	1223.31	SLU 68	4.25	Si
ini.	3	-309	111.37	1223.31	SLU 65	10.98	Si
fin.	3	-1977	-288.07	1223.31	SLU 65	4.25	Si
ini.	3	-287	84.35	1223.31	SLU 52	14.5	Si
fin.	3	-1988	-288.65	1223.31	SLU 52	4.24	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	-42.72	727			1373	517	SLU 75	0.71	No
fin.	3	0	-222.38	-3266			1373	517	SLU 75	0.16	No
ini.	3	0	84.35	-274			1373	517	SLU 52	1.89	Si
fin.	3	0	-288.65	-3377			1373	517	SLU 52	0.15	No
ini.	3	0	-65.29	862			1373	517	SLU 82	0.6	No
fin.	3	0	-225.58	-3461			1373	517	SLU 82	0.15	No
ini.	3	0	-42.72	727			1373	517	SLU 80	0.71	No
fin.	3	0	-222.38	-3266			1373	517	SLU 80	0.16	No
ini.	3	0	-65.29	862			1373	517	SLU 84	0.6	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
fin.	3	0	-225.58	-3461			1373	517	SLU 84	0.15	No
ini.	3	0	-42.72	727			1373	517	SLU 78	0.71	No
fin.	3	0	-222.38	-3266			1373	517	SLU 78	0.16	No
ini.	3	0	84.35	-274			1373	517	SLU 55	1.89	Si
fin.	3	0	-288.65	-3377			1373	517	SLU 55	0.15	No
ini.	3	0	58.72	-69			1373	517	SLU 73	7.43	Si
fin.	3	0	-295.54	-3636			1373	517	SLU 73	0.14	No
ini.	3	0	58.72	-69			1373	517	SLU 76	7.43	Si
fin.	3	0	-295.54	-3636			1373	517	SLU 76	0.14	No
ini.	3	0	78.87	-339			1373	517	SLU 34	1.52	Si
fin.	3	0	-274.67	-3244			1373	517	SLU 34	0.16	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	121	-905.39	1334.71	SLV 9	1.47	Si
fin.	2	4571	159.31	1334.71	SLV 9	8.38	Si
ini.	2	191	-1317.29	1334.71	SLV 6	1.01	Si
fin.	2	5153	484.4	1334.71	SLV 6	2.76	Si
ini.	2	-520	1079.64	1334.71	SLV 12	1.24	Si
fin.	2	-6165	-647.46	1334.71	SLV 12	2.06	Si
ini.	2	-520	1079.64	1334.71	SLV 11	1.24	Si
fin.	2	-6165	-647.46	1334.71	SLV 11	2.06	Si
ini.	2	48	-1103.06	1334.71	SLV 1	1.21	Si
fin.	2	2075	581.31	1334.71	SLV 1	2.3	Si
ini.	2	191	-1317.29	1334.71	SLV 5	1.01	Si
fin.	2	5153	484.4	1334.71	SLV 5	2.76	Si
ini.	2	48	-1103.06	1334.71	SLV 2	1.21	Si
fin.	2	2075	581.31	1334.71	SLV 2	2.3	Si
ini.	2	-377	865.42	1334.71	SLV 16	1.54	Si
fin.	2	-3087	-744.37	1334.71	SLV 16	1.79	Si
ini.	2	-377	865.42	1334.71	SLV 15	1.54	Si
fin.	2	-3087	-744.37	1334.71	SLV 15	1.79	Si
ini.	2	121	-905.39	1334.71	SLV 10	1.47	Si
fin.	2	4571	159.31	1334.71	SLV 10	8.38	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	-905.39	5407			2059	775	SLV 10	0.14	No
fin.	2	0	159.31	-102			2059	775	SLV 10	7.6	Si
ini.	2	0	-905.39	5407			2059	775	SLV 9	0.14	No
fin.	2	0	159.31	-102			2059	775	SLV 9	7.6	Si
ini.	2	0	-1317.29	6198			2059	775	SLV 6	0.13	No
fin.	2	0	484.4	700			2059	775	SLV 6	1.11	Si
ini.	2	0	1079.64	-3638			2059	775	SLV 11	0.21	No
fin.	2	0	-647.46	-4317			2059	775	SLV 11	0.18	No
ini.	2	0	-1317.29	6198			2059	775	SLV 5	0.13	No
fin.	2	0	484.4	700			2059	775	SLV 5	1.11	Si
ini.	2	0	-1103.06	3954			2059	775	SLV 1	0.2	No
fin.	2	0	581.31	161			2059	775	SLV 1	4.81	Si
ini.	2	0	-1103.06	3954			2059	775	SLV 2	0.2	No
fin.	2	0	581.31	161			2059	775	SLV 2	4.81	Si
ini.	2	0	865.42	-1394			2059	775	SLV 15	0.56	No
fin.	2	0	-744.37	-3778			2059	775	SLV 15	0.21	No
ini.	2	0	1079.64	-3638			2059	775	SLV 12	0.21	No
fin.	2	0	-647.46	-4317			2059	775	SLV 12	0.18	No
ini.	2	0	865.42	-1394			2059	775	SLV 16	0.56	No
fin.	2	0	-744.37	-3778			2059	775	SLV 16	0.21	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.013	SLV 5	Si
V_SLV	0.125	SLV 5	No
PF_SLU	4.139	SLU 73	Si
V_SLU	0.142	SLU 73	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
9.889	5.915	-1.59	-0.2	1.39	10.889	5.915	-1.59	-0.2	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	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	-1517	-15.04	2098.31	SLU 5	139.47	Si
fin.	3	-2061	316.93	2098.31	SLU 5	6.62	Si
ini.	3	-1715	-10.82	2098.31	SLU 23	193.86	Si
fin.	3	-2180	307.02	2098.31	SLU 23	6.83	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-1877	-17.06	2098.31	SLU 47	123	Si
fin.	3	-2378	322.74	2098.31	SLU 47	6.5	Si
ini.	3	-2233	-4.14	2098.31	SLU 55	506.8	Si
fin.	3	-2590	299.25	2098.31	SLU 55	7.01	Si
ini.	3	-1517	-15.04	2098.31	SLU 2	139.47	Si
fin.	3	-2061	316.93	2098.31	SLU 2	6.62	Si
ini.	3	-2075	-12.84	2098.31	SLU 65	163.43	Si
fin.	3	-2496	312.83	2098.31	SLU 65	6.71	Si
ini.	3	-2233	-4.14	2098.31	SLU 52	506.8	Si
fin.	3	-2590	299.25	2098.31	SLU 52	7.01	Si
ini.	3	-2075	-12.84	2098.31	SLU 68	163.43	Si
fin.	3	-2496	312.83	2098.31	SLU 68	6.71	Si
ini.	3	-1877	-17.06	2098.31	SLU 44	123	Si
fin.	3	-2378	322.74	2098.31	SLU 44	6.5	Si
ini.	3	-1715	-10.82	2098.31	SLU 26	193.86	Si
fin.	3	-2180	307.02	2098.31	SLU 26	6.83	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	10.88	-4054			2409	907	SLU 82	0.22	No
fin.	3	0	155.71	3417			2409	907	SLU 82	0.27	No
ini.	3	0	18.77	-4666			2409	907	SLU 81	0.19	No
fin.	3	0	-29.63	2946			2409	907	SLU 81	0.31	No
ini.	3	0	14.55	-4238			2409	907	SLU 60	0.21	No
fin.	3	0	-19.72	2732			2409	907	SLU 60	0.33	No
ini.	3	0	14.55	-4238			2409	907	SLU 62	0.21	No
fin.	3	0	-19.72	2732			2409	907	SLU 62	0.33	No
ini.	3	0	18.77	-4666			2409	907	SLU 83	0.19	No
fin.	3	0	-29.63	2946			2409	907	SLU 83	0.31	No
ini.	3	0	13.23	-4340			2409	907	SLU 77	0.21	No
fin.	3	0	-19.56	2792			2409	907	SLU 77	0.32	No
ini.	3	0	10.88	-4054			2409	907	SLU 84	0.22	No
fin.	3	0	155.71	3417			2409	907	SLU 84	0.27	No
ini.	3	0	13.23	-4340			2409	907	SLU 74	0.21	No
fin.	3	0	-19.56	2792			2409	907	SLU 74	0.32	No
ini.	3	0	13.23	-4340			2409	907	SLU 79	0.21	No
fin.	3	0	-19.56	2792			2409	907	SLU 79	0.32	No
ini.	3	0	20.78	-4051			2409	907	SLU 39	0.22	No
fin.	3	0	-35.44	2491			2409	907	SLU 39	0.36	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-2429	83.31	2209.71	SLV 12	26.52	Si
fin.	2	-3508	784.61	2209.71	SLV 12	2.82	Si
ini.	2	-1355	128.84	2209.71	SLV 10	17.15	Si
fin.	2	1424	-1082.58	2209.71	SLV 10	2.04	Si
ini.	2	-2448	353.41	2209.71	SLV 13	6.25	Si
fin.	2	264	-773.16	2209.71	SLV 13	2.86	Si
ini.	2	-740	-77.3	2209.71	SLV 6	28.58	Si
fin.	2	939	-787.64	2209.71	SLV 6	2.81	Si
ini.	2	-2448	353.41	2209.71	SLV 14	6.25	Si
fin.	2	264	-773.16	2209.71	SLV 14	2.86	Si
ini.	2	-740	-77.3	2209.71	SLV 5	28.58	Si
fin.	2	939	-787.64	2209.71	SLV 5	2.81	Si
ini.	2	-1814	-122.84	2209.71	SLV 8	17.99	Si
fin.	2	-3993	1079.56	2209.71	SLV 8	2.05	Si
ini.	2	-1355	128.84	2209.71	SLV 9	17.15	Si
fin.	2	1424	-1082.58	2209.71	SLV 9	2.04	Si
ini.	2	-1814	-122.84	2209.71	SLV 7	17.99	Si
fin.	2	-3993	1079.56	2209.71	SLV 7	2.05	Si
ini.	2	-2429	83.31	2209.71	SLV 11	26.52	Si
fin.	2	-3508	784.61	2209.71	SLV 11	2.82	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	-122.84	-1228			3613	1360	SLV 8	1.11	Si
fin.	2	0	1079.56	5151			3613	1360	SLV 8	0.26	No
ini.	2	0	128.84	-4527			3613	1360	SLV 9	0.3	No
fin.	2	0	-1082.58	-1297			3613	1360	SLV 9	1.05	Si
ini.	2	0	-347.4	-448			3613	1360	SLV 4	3.04	Si
fin.	2	0	770.14	4766			3613	1360	SLV 4	0.29	No
ini.	2	0	353.41	-5307			3613	1360	SLV 14	0.26	No
fin.	2	0	-773.16	-913			3613	1360	SLV 14	1.49	Si
ini.	2	0	339.75	-4701			3613	1360	SLV 15	0.29	No
fin.	2	0	-213	651			3613	1360	SLV 15	2.09	Si
ini.	2	0	339.75	-4701			3613	1360	SLV 16	0.29	No
fin.	2	0	-213	651			3613	1360	SLV 16	2.09	Si
ini.	2	0	-122.84	-1228			3613	1360	SLV 7	1.11	Si
fin.	2	0	1079.56	5151			3613	1360	SLV 7	0.26	No
ini.	2	0	-347.4	-448			3613	1360	SLV 3	3.04	Si
fin.	2	0	770.14	4766			3613	1360	SLV 3	0.29	No
ini.	2	0	128.84	-4527			3613	1360	SLV 10	0.3	No
fin.	2	0	-1082.58	-1297			3613	1360	SLV 10	1.05	Si
ini.	2	0	353.41	-5307			3613	1360	SLV 13	0.26	No
fin.	2	0	-773.16	-913			3613	1360	SLV 13	1.49	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.041	SLV 9	Si
V_SLV	0.256	SLV 13	No
PF_SLU	6.502	SLU 44	Si
V_SLU	0.194	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
9.889	5.915	0.2	1.09	0.89	10.889	5.915	0.2	1.09	0.89	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	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	-1716	122.57	1223.31	SLU 84	9.98	Si
fin.	3	274	-352.03	1223.31	SLU 84	3.48	Si
ini.	3	-746	86.45	1223.31	SLU 77	14.15	Si
fin.	3	24	-351.96	1223.31	SLU 77	3.48	Si
ini.	3	-746	86.45	1223.31	SLU 79	14.15	Si
fin.	3	24	-351.96	1223.31	SLU 79	3.48	Si
ini.	3	-704	88.35	1223.31	SLU 60	13.85	Si
fin.	3	62	-350.38	1223.31	SLU 60	3.49	Si
ini.	3	-666	94.62	1223.31	SLU 41	12.93	Si
fin.	3	10	-342.97	1223.31	SLU 41	3.57	Si
ini.	3	-781	100.75	1223.31	SLU 83	12.14	Si
fin.	3	29	-387.1	1223.31	SLU 83	3.16	Si
ini.	3	-1716	122.57	1223.31	SLU 82	9.98	Si
fin.	3	274	-352.03	1223.31	SLU 82	3.48	Si
ini.	3	-746	86.45	1223.31	SLU 74	14.15	Si
fin.	3	24	-351.96	1223.31	SLU 74	3.48	Si
ini.	3	-704	88.35	1223.31	SLU 62	13.85	Si
fin.	3	62	-350.38	1223.31	SLU 62	3.49	Si
ini.	3	-781	100.75	1223.31	SLU 81	12.14	Si
fin.	3	29	-387.1	1223.31	SLU 81	3.16	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	108.28	4371			1373	517	SLU 80	0.12	No
fin.	3	0	-316.88	-1087			1373	517	SLU 80	0.48	No
ini.	3	0	122.83	4664			1373	517	SLU 73	0.11	No
fin.	3	0	-293.5	-256			1373	517	SLU 73	2.01	Si
ini.	3	0	108.28	4371			1373	517	SLU 75	0.12	No
fin.	3	0	-316.88	-1087			1373	517	SLU 75	0.48	No
ini.	3	0	122.83	4664			1373	517	SLU 76	0.11	No
fin.	3	0	-293.5	-256			1373	517	SLU 76	2.01	Si
ini.	3	0	122.57	4686			1373	517	SLU 82	0.11	No
fin.	3	0	-352.03	-1285			1373	517	SLU 82	0.4	No
ini.	3	0	110.18	4261			1373	517	SLU 63	0.12	No
fin.	3	0	-315.3	-1001			1373	517	SLU 63	0.52	No
ini.	3	0	108.28	4371			1373	517	SLU 78	0.12	No
fin.	3	0	-316.88	-1087			1373	517	SLU 78	0.48	No
ini.	3	0	110.18	4261			1373	517	SLU 61	0.12	No
fin.	3	0	-315.3	-1001			1373	517	SLU 61	0.52	No
ini.	3	0	122.57	4686			1373	517	SLU 84	0.11	No
fin.	3	0	-352.03	-1285			1373	517	SLU 84	0.4	No
ini.	3	0	100.75	4246			1373	517	SLU 81	0.12	No
fin.	3	0	-387.1	-2531			1373	517	SLU 81	0.2	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	6175	2.38	1334.71	SLV 9	561.94	Si
fin.	2	-1013	-515.56	1334.71	SLV 9	2.59	Si
ini.	2	-4538	-36.79	1334.71	SLV 4	36.28	Si
fin.	2	223	482.29	1334.71	SLV 4	2.77	Si
ini.	2	-115	178.63	1334.71	SLV 15	7.47	Si
fin.	2	457	-874.93	1334.71	SLV 15	1.53	Si
ini.	2	-920	-83.34	1334.71	SLV 2	16.02	Si
fin.	2	-418	428.91	1334.71	SLV 2	3.11	Si
ini.	2	3502	132.08	1334.71	SLV 13	10.11	Si
fin.	2	-183	-928.31	1334.71	SLV 13	1.44	Si
ini.	2	-920	-83.34	1334.71	SLV 1	16.02	Si
fin.	2	-418	428.91	1334.71	SLV 1	3.11	Si
ini.	2	3502	132.08	1334.71	SLV 14	10.11	Si
fin.	2	-183	-928.31	1334.71	SLV 14	1.44	Si
ini.	2	6175	2.38	1334.71	SLV 10	561.94	Si
fin.	2	-1013	-515.56	1334.71	SLV 10	2.59	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-4538	-36.79	1334.71	SLV 3	36.28	Si
fin.	2	223	482.29	1334.71	SLV 3	2.77	Si
ini.	2	-115	178.63	1334.71	SLV 16	7.47	Si
fin.	2	457	-874.93	1334.71	SLV 16	1.53	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	92.92	4998			2059	775	SLV 7	0.16	No
fin.	2	0	69.54	3686			2059	775	SLV 7	0.21	No
ini.	2	0	157.54	4600			2059	775	SLV 11	0.17	No
fin.	2	0	-337.62	2787			2059	775	SLV 11	0.28	No
ini.	2	0	132.08	1245			2059	775	SLV 13	0.62	No
fin.	2	0	-928.31	-4431			2059	775	SLV 13	0.17	No
ini.	2	0	-62.25	549			2059	775	SLV 5	1.41	Si
fin.	2	0	-108.4	-5803			2059	775	SLV 5	0.13	No
ini.	2	0	157.54	4600			2059	775	SLV 12	0.17	No
fin.	2	0	-337.62	2787			2059	775	SLV 12	0.28	No
ini.	2	0	2.38	151			2059	775	SLV 10	5.12	Si
fin.	2	0	-515.56	-6703			2059	775	SLV 10	0.12	No
ini.	2	0	2.38	151			2059	775	SLV 9	5.12	Si
fin.	2	0	-515.56	-6703			2059	775	SLV 9	0.12	No
ini.	2	0	92.92	4998			2059	775	SLV 8	0.16	No
fin.	2	0	69.54	3686			2059	775	SLV 8	0.21	No
ini.	2	0	-62.25	549			2059	775	SLV 6	1.41	Si
fin.	2	0	-108.4	-5803			2059	775	SLV 6	0.13	No
ini.	2	0	132.08	1245			2059	775	SLV 14	0.62	No
fin.	2	0	-928.31	-4431			2059	775	SLV 14	0.17	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.438	SLV 13	Si
V_SLV	0.116	SLV 9	No
PF_SLU	3.16	SLU 81	Si
V_SLU	0.11	SLU 82	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
8.964	-3.756	0.61	1.09	0.48	7.964	-3.756	0.61	1.09	0.48	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	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	-1182	-118.15	505.81	SLU 76	4.28	Si
fin.	3	-946	-262.47	505.81	SLU 76	1.93	Si
ini.	3	-1189	-118.84	505.81	SLU 78	4.26	Si
fin.	3	-948	-262.35	505.81	SLU 78	1.93	Si
ini.	3	-1279	-129.12	505.81	SLU 83	3.92	Si
fin.	3	-1022	-286.67	505.81	SLU 83	1.76	Si
ini.	3	-1189	-118.84	505.81	SLU 75	4.26	Si
fin.	3	-948	-262.35	505.81	SLU 75	1.93	Si
ini.	3	-1182	-118.15	505.81	SLU 73	4.28	Si
fin.	3	-946	-262.47	505.81	SLU 73	1.93	Si
ini.	3	-1268	-128.1	505.81	SLU 84	3.95	Si
fin.	3	-1019	-286.85	505.81	SLU 84	1.76	Si
ini.	3	-1279	-129.12	505.81	SLU 81	3.92	Si
fin.	3	-1022	-286.67	505.81	SLU 81	1.76	Si
ini.	3	-1268	-128.1	505.81	SLU 82	3.95	Si
fin.	3	-1019	-286.85	505.81	SLU 82	1.76	Si
ini.	3	-1189	-118.84	505.81	SLU 80	4.26	Si
fin.	3	-948	-262.35	505.81	SLU 80	1.93	Si
ini.	3	-1200	-119.87	505.81	SLU 79	4.22	Si
fin.	3	-950	-262.16	505.81	SLU 79	1.93	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	-119.87	3179			555	209	SLU 77	0.07	No
fin.	3	0	-262.16	-2271			555	209	SLU 77	0.09	No
ini.	3	0	-119.87	3179			555	209	SLU 79	0.07	No
fin.	3	0	-262.16	-2271			555	209	SLU 79	0.09	No
ini.	3	0	-118.84	3168			555	209	SLU 78	0.07	No
fin.	3	0	-262.35	-2273			555	209	SLU 78	0.09	No
ini.	3	0	-119.87	3179			555	209	SLU 74	0.07	No
fin.	3	0	-262.16	-2271			555	209	SLU 74	0.09	No
ini.	3	0	-118.84	3168			555	209	SLU 80	0.07	No
fin.	3	0	-262.35	-2273			555	209	SLU 80	0.09	No
ini.	3	0	-128.1	3445			555	209	SLU 84	0.06	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
fin.	3	0	-286.85	-2475			555	209	SLU 84	0.08	No
ini.	3	0	-118.84	3168			555	209	SLU 75	0.07	No
fin.	3	0	-262.35	-2273			555	209	SLU 75	0.09	No
ini.	3	0	-129.12	3455			555	209	SLU 83	0.06	No
fin.	3	0	-286.67	-2473			555	209	SLU 83	0.08	No
ini.	3	0	-128.1	3445			555	209	SLU 82	0.06	No
fin.	3	0	-286.85	-2475			555	209	SLU 82	0.08	No
ini.	3	0	-129.12	3455			555	209	SLU 81	0.06	No
fin.	3	0	-286.67	-2473			555	209	SLU 81	0.08	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	47	28.5	617.21	SLV 1	21.65	Si
fin.	2	-1357	-341.35	617.21	SLV 1	1.81	Si
ini.	2	-1664	-186.54	617.21	SLV 16	3.31	Si
fin.	2	103	7.4	617.21	SLV 16	83.37	Si
ini.	2	-351	-29.13	617.21	SLV 5	21.19	Si
fin.	2	-970	-266.11	617.21	SLV 5	2.32	Si
ini.	2	-85	16.88	617.21	SLV 4	36.57	Si
fin.	2	-1276	-310.47	617.21	SLV 4	1.99	Si
ini.	2	-351	-29.13	617.21	SLV 6	21.19	Si
fin.	2	-970	-266.11	617.21	SLV 6	2.32	Si
ini.	2	-1664	-186.54	617.21	SLV 15	3.31	Si
fin.	2	103	7.4	617.21	SLV 15	83.37	Si
ini.	2	47	28.5	617.21	SLV 2	21.65	Si
fin.	2	-1357	-341.35	617.21	SLV 2	1.81	Si
ini.	2	-1532	-174.91	617.21	SLV 13	3.53	Si
fin.	2	22	-23.47	617.21	SLV 13	26.29	Si
ini.	2	-85	16.88	617.21	SLV 3	36.57	Si
fin.	2	-1276	-310.47	617.21	SLV 3	1.99	Si
ini.	2	-1532	-174.91	617.21	SLV 14	3.53	Si
fin.	2	22	-23.47	617.21	SLV 14	26.29	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	16.88	1136			832	313	SLV 3	0.28	No
fin.	2	0	-310.47	-2327			832	313	SLV 3	0.13	No
ini.	2	0	28.5	1011			832	313	SLV 1	0.31	No
fin.	2	0	-341.35	-2460			832	313	SLV 1	0.13	No
ini.	2	0	16.88	1136			832	313	SLV 4	0.28	No
fin.	2	0	-310.47	-2327			832	313	SLV 4	0.13	No
ini.	2	0	-128.9	2558			832	313	SLV 11	0.12	No
fin.	2	0	-67.83	-959			832	313	SLV 11	0.33	No
ini.	2	0	-186.54	3097			832	313	SLV 15	0.1	No
fin.	2	0	7.4	-461			832	313	SLV 15	0.68	No
ini.	2	0	-128.9	2558			832	313	SLV 12	0.12	No
fin.	2	0	-67.83	-959			832	313	SLV 12	0.33	No
ini.	2	0	-174.91	2972			832	313	SLV 13	0.11	No
fin.	2	0	-23.47	-595			832	313	SLV 13	0.53	No
ini.	2	0	28.5	1011			832	313	SLV 2	0.31	No
fin.	2	0	-341.35	-2460			832	313	SLV 2	0.13	No
ini.	2	0	-174.91	2972			832	313	SLV 14	0.11	No
fin.	2	0	-23.47	-595			832	313	SLV 14	0.53	No
ini.	2	0	-186.54	3097			832	313	SLV 16	0.1	No
fin.	2	0	7.4	-461			832	313	SLV 16	0.68	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.808	SLV 1	Si
V_SLV	0.101	SLV 15	No
PF_SLU	1.763	SLU 82	Si
V_SLU	0.06	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
12.744	-0.751	-1.59	-0.2	1.39	12.744	-1.751	-1.59	-0.2	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	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	-2167	141.87	2098.31	SLU 76	14.79	Si
fin.	3	-1756	30.52	2098.31	SLU 76	68.74	Si
ini.	3	-2221	149.25	2098.31	SLU 84	14.06	Si
fin.	3	-1752	-0.3	2098.31	SLU 84	7065.91	Si
ini.	3	-2115	139.54	2098.31	SLU 75	15.04	Si
fin.	3	-1667	-3.34	2098.31	SLU 75	629.17	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	-2143	145.75	2098.31	SLU 81	14.4	Si
fin.	3	-1618	-51.09	2098.31	SLU 81	41.07	Si
ini.	3	-2167	141.87	2098.31	SLU 73	14.79	Si
fin.	3	-1756	30.52	2098.31	SLU 73	68.74	Si
ini.	3	-2143	145.75	2098.31	SLU 83	14.4	Si
fin.	3	-1618	-51.09	2098.31	SLU 83	41.07	Si
ini.	3	-2083	136.92	2098.31	SLU 61	15.33	Si
fin.	3	-1645	-1.1	2098.31	SLU 61	1913.13	Si
ini.	3	-2115	139.54	2098.31	SLU 80	15.04	Si
fin.	3	-1667	-3.34	2098.31	SLU 80	629.17	Si
ini.	3	-2221	149.25	2098.31	SLU 82	14.06	Si
fin.	3	-1752	-0.3	2098.31	SLU 82	7065.91	Si
ini.	3	-2115	139.54	2098.31	SLU 78	15.04	Si
fin.	3	-1667	-3.34	2098.31	SLU 78	629.17	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	145.75	-2993			2409	907	SLU 81	0.3	No
fin.	3	0	-51.09	1892			2409	907	SLU 81	0.48	No
ini.	3	0	145.75	-2993			2409	907	SLU 83	0.3	No
fin.	3	0	-51.09	1892			2409	907	SLU 83	0.48	No
ini.	3	0	136.04	-2873			2409	907	SLU 74	0.32	No
fin.	3	0	-54.12	1820			2409	907	SLU 74	0.5	No
ini.	3	0	133.42	-2833			2409	907	SLU 62	0.32	No
fin.	3	0	-51.89	1803			2409	907	SLU 62	0.5	No
ini.	3	0	149.25	-2933			2409	907	SLU 82	0.31	No
fin.	3	0	-0.3	1995			2409	907	SLU 82	0.45	No
ini.	3	0	133.42	-2833			2409	907	SLU 60	0.32	No
fin.	3	0	-51.89	1803			2409	907	SLU 60	0.5	No
ini.	3	0	136.04	-2873			2409	907	SLU 79	0.32	No
fin.	3	0	-54.12	1820			2409	907	SLU 79	0.5	No
ini.	3	0	136.04	-2873			2409	907	SLU 77	0.32	No
fin.	3	0	-54.12	1820			2409	907	SLU 77	0.5	No
ini.	3	0	139.54	-2814			2409	907	SLU 80	0.32	No
fin.	3	0	-3.34	1923			2409	907	SLU 80	0.47	No
ini.	3	0	149.25	-2933			2409	907	SLU 84	0.31	No
fin.	3	0	-0.3	1995			2409	907	SLU 84	0.45	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-436	-273.06	2209.71	SLV 8	8.09	Si
fin.	2	-1893	351.55	2209.71	SLV 8	6.29	Si
ini.	2	-2397	455.01	2209.71	SLV 9	4.86	Si
fin.	2	-228	-442.03	2209.71	SLV 9	5	Si
ini.	2	-2397	455.01	2209.71	SLV 10	4.86	Si
fin.	2	-228	-442.03	2209.71	SLV 10	5	Si
ini.	2	-819	25.73	2209.71	SLV 2	85.89	Si
fin.	2	150	-379.36	2209.71	SLV 2	5.82	Si
ini.	2	-436	-273.06	2209.71	SLV 7	8.09	Si
fin.	2	-1893	351.55	2209.71	SLV 7	6.29	Si
ini.	2	-927	-177.03	2209.71	SLV 12	12.48	Si
fin.	2	-2422	469.95	2209.71	SLV 12	4.7	Si
ini.	2	-927	-177.03	2209.71	SLV 11	12.48	Si
fin.	2	-2422	469.95	2209.71	SLV 11	4.7	Si
ini.	2	-819	25.73	2209.71	SLV 1	85.89	Si
fin.	2	150	-379.36	2209.71	SLV 1	5.82	Si
ini.	2	-1906	358.98	2209.71	SLV 6	6.16	Si
fin.	2	301	-560.42	2209.71	SLV 6	3.94	Si
ini.	2	-1906	358.98	2209.71	SLV 5	6.16	Si
fin.	2	301	-560.42	2209.71	SLV 5	3.94	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	-273.06	-222			3613	1360	SLV 8	6.11	Si
fin.	2	0	351.55	3055			3613	1360	SLV 8	0.45	No
ini.	2	0	358.98	-3616			3613	1360	SLV 6	0.38	No
fin.	2	0	-560.42	-809			3613	1360	SLV 6	1.68	Si
ini.	2	0	345.84	-2954			3613	1360	SLV 14	0.46	No
fin.	2	0	15.29	1303			3613	1360	SLV 14	1.04	Si
ini.	2	0	345.84	-2954			3613	1360	SLV 13	0.46	No
fin.	2	0	15.29	1303			3613	1360	SLV 13	1.04	Si
ini.	2	0	-273.06	-222			3613	1360	SLV 7	6.11	Si
fin.	2	0	351.55	3055			3613	1360	SLV 7	0.45	No
ini.	2	0	-177.03	-465			3613	1360	SLV 11	2.92	Si
fin.	2	0	469.95	3406			3613	1360	SLV 11	0.4	No
ini.	2	0	-177.03	-465			3613	1360	SLV 12	2.92	Si
fin.	2	0	469.95	3406			3613	1360	SLV 12	0.4	No
ini.	2	0	455.01	-3859			3613	1360	SLV 10	0.35	No
fin.	2	0	-442.03	-459			3613	1360	SLV 10	2.97	Si
ini.	2	0	455.01	-3859			3613	1360	SLV 9	0.35	No
fin.	2	0	-442.03	-459			3613	1360	SLV 9	2.97	Si
ini.	2	0	358.98	-3616			3613	1360	SLV 5	0.38	No
fin.	2	0	-560.42	-809			3613	1360	SLV 5	1.68	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	3.943	SLV 5	Si

Stato limite	Coeff.s.	Comb.	Verifica
V_SLV	0.352	SLV 9	No
PF_SLU	14.059	SLU 82	Si
V_SLU	0.303	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
12.744	-0.751	0.2	1.09	0.89	12.744	-1.751	0.2	1.09	0.89	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	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	141	-78.17	1223.31	SLU 83	15.65	Si
fin.	3	171	-236.03	1223.31	SLU 83	5.18	Si
ini.	3	139	-71.82	1223.31	SLU 77	17.03	Si
fin.	3	151	-222.45	1223.31	SLU 77	5.5	Si
ini.	3	139	-71.82	1223.31	SLU 79	17.03	Si
fin.	3	151	-222.45	1223.31	SLU 79	5.5	Si
ini.	3	141	-78.17	1223.31	SLU 81	15.65	Si
fin.	3	171	-236.03	1223.31	SLU 81	5.18	Si
ini.	3	-146	-98.67	1223.31	SLU 84	12.4	Si
fin.	3	127	-218.66	1223.31	SLU 84	5.59	Si
ini.	3	-146	-98.67	1223.31	SLU 82	12.4	Si
fin.	3	127	-218.66	1223.31	SLU 82	5.59	Si
ini.	3	122	-70.72	1223.31	SLU 60	17.3	Si
fin.	3	138	-217.32	1223.31	SLU 60	5.63	Si
ini.	3	-148	-92.33	1223.31	SLU 78	13.25	Si
fin.	3	106	-205.07	1223.31	SLU 78	5.97	Si
ini.	3	122	-70.72	1223.31	SLU 62	17.3	Si
fin.	3	138	-217.32	1223.31	SLU 62	5.63	Si
ini.	3	139	-71.82	1223.31	SLU 74	17.03	Si
fin.	3	151	-222.45	1223.31	SLU 74	5.5	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	-71.82	1126			1373	517	SLU 79	0.46	No
fin.	3	0	-222.45	-1370			1373	517	SLU 79	0.38	No
ini.	3	0	-71.82	1126			1373	517	SLU 74	0.46	No
fin.	3	0	-222.45	-1370			1373	517	SLU 74	0.38	No
ini.	3	0	-70.72	1117			1373	517	SLU 62	0.46	No
fin.	3	0	-217.32	-1349			1373	517	SLU 62	0.38	No
ini.	3	0	-70.72	1117			1373	517	SLU 60	0.46	No
fin.	3	0	-217.32	-1349			1373	517	SLU 60	0.38	No
ini.	3	0	-64.37	1067			1373	517	SLU 58	0.48	No
fin.	3	0	-203.73	-1308			1373	517	SLU 58	0.39	No
ini.	3	0	-78.17	1175			1373	517	SLU 81	0.44	No
fin.	3	0	-236.03	-1410			1373	517	SLU 81	0.37	No
ini.	3	0	-78.17	1175			1373	517	SLU 83	0.44	No
fin.	3	0	-236.03	-1410			1373	517	SLU 83	0.37	No
ini.	3	0	-71.82	1126			1373	517	SLU 77	0.46	No
fin.	3	0	-222.45	-1370			1373	517	SLU 77	0.38	No
ini.	3	0	-64.37	1067			1373	517	SLU 56	0.48	No
fin.	3	0	-203.73	-1308			1373	517	SLU 56	0.39	No
ini.	3	0	-64.37	1067			1373	517	SLU 53	0.48	No
fin.	3	0	-203.73	-1308			1373	517	SLU 53	0.39	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	2643	-8.02	1334.71	SLV 2	166.52	Si
fin.	2	4371	-358.98	1334.71	SLV 2	3.72	Si
ini.	2	892	445.91	1334.71	SLV 9	2.99	Si
fin.	2	2242	-221.93	1334.71	SLV 9	6.01	Si
ini.	2	2160	385.75	1334.71	SLV 5	3.46	Si
fin.	2	4245	-324.44	1334.71	SLV 5	4.11	Si
ini.	2	892	445.91	1334.71	SLV 10	2.99	Si
fin.	2	2242	-221.93	1334.71	SLV 10	6.01	Si
ini.	2	-1957	-478.65	1334.71	SLV 11	2.79	Si
fin.	2	-4074	21.09	1334.71	SLV 11	63.28	Si
ini.	2	-689	-538.8	1334.71	SLV 7	2.48	Si
fin.	2	-2071	-81.42	1334.71	SLV 7	16.39	Si
ini.	2	-1957	-478.65	1334.71	SLV 12	2.79	Si
fin.	2	-4074	21.09	1334.71	SLV 12	63.28	Si
ini.	2	2643	-8.02	1334.71	SLV 1	166.52	Si
fin.	2	4371	-358.98	1334.71	SLV 1	3.72	Si
ini.	2	-689	-538.8	1334.71	SLV 8	2.48	Si
fin.	2	-2071	-81.42	1334.71	SLV 8	16.39	Si
ini.	2	2160	385.75	1334.71	SLV 6	3.46	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	2	4245	-324.44	1334.71	SLV 6	4.11	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	-285.38	2472			2059	775	SLV 4	0.31	No
fin.	2	0	-286.07	-1674			2059	775	SLV 4	0.46	No
ini.	2	0	-538.8	1200			2059	775	SLV 7	0.65	No
fin.	2	0	-81.42	-1035			2059	775	SLV 7	0.75	No
ini.	2	0	-538.8	1200			2059	775	SLV 8	0.65	No
fin.	2	0	-81.42	-1035			2059	775	SLV 8	0.75	No
ini.	2	0	385.75	1417			2059	775	SLV 5	0.55	No
fin.	2	0	-324.44	-1394			2059	775	SLV 5	0.56	No
ini.	2	0	445.91	393			2059	775	SLV 10	1.97	Si
fin.	2	0	-221.93	-955			2059	775	SLV 10	0.81	No
ini.	2	0	385.75	1417			2059	775	SLV 6	0.55	No
fin.	2	0	-324.44	-1394			2059	775	SLV 6	0.56	No
ini.	2	0	-8.02	2537			2059	775	SLV 2	0.31	No
fin.	2	0	-358.98	-1782			2059	775	SLV 2	0.43	No
ini.	2	0	-8.02	2537			2059	775	SLV 1	0.31	No
fin.	2	0	-358.98	-1782			2059	775	SLV 1	0.43	No
ini.	2	0	-285.38	2472			2059	775	SLV 3	0.31	No
fin.	2	0	-286.07	-1674			2059	775	SLV 3	0.46	No
ini.	2	0	445.91	393			2059	775	SLV 9	1.97	Si
fin.	2	0	-221.93	-955			2059	775	SLV 9	0.81	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.477	SLV 7	Si
V_SLV	0.305	SLV 1	No
PF_SLU	5.183	SLU 81	Si
V_SLU	0.366	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
12.744	3.899	-1.59	-0.2	1.39	12.744	2.899	-1.59	-0.2	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	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	-1158	-305.46	2098.31	SLU 44	6.87	Si
fin.	3	-1499	161.71	2098.31	SLU 44	12.98	Si
ini.	3	-1382	-328.63	2098.31	SLU 52	6.38	Si
fin.	3	-1769	208.85	2098.31	SLU 52	10.05	Si
ini.	3	-1792	-224.89	2098.31	SLU 83	9.33	Si
fin.	3	-2175	310.77	2098.31	SLU 83	6.75	Si
ini.	3	-1498	-340.99	2098.31	SLU 73	6.15	Si
fin.	3	-1913	233.74	2098.31	SLU 73	8.98	Si
ini.	3	-1382	-328.63	2098.31	SLU 55	6.38	Si
fin.	3	-1769	208.85	2098.31	SLU 55	10.05	Si
ini.	3	-1498	-340.99	2098.31	SLU 76	6.15	Si
fin.	3	-1913	233.74	2098.31	SLU 76	8.98	Si
ini.	3	-1274	-317.81	2098.31	SLU 65	6.6	Si
fin.	3	-1643	186.6	2098.31	SLU 65	11.25	Si
ini.	3	-1158	-305.46	2098.31	SLU 47	6.87	Si
fin.	3	-1499	161.71	2098.31	SLU 47	12.98	Si
ini.	3	-1274	-317.81	2098.31	SLU 68	6.6	Si
fin.	3	-1643	186.6	2098.31	SLU 68	11.25	Si
ini.	3	-1792	-224.89	2098.31	SLU 81	9.33	Si
fin.	3	-2175	310.77	2098.31	SLU 81	6.75	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	-300.51	-538			2409	907	SLU 84	1.69	Si
fin.	3	0	276.67	2378			2409	907	SLU 84	0.38	No
ini.	3	0	-224.89	-578			2409	907	SLU 83	1.57	Si
fin.	3	0	310.77	2293			2409	907	SLU 83	0.4	No
ini.	3	0	-224.89	-578			2409	907	SLU 81	1.57	Si
fin.	3	0	310.77	2293			2409	907	SLU 81	0.4	No
ini.	3	0	-290.58	-500			2409	907	SLU 80	1.81	Si
fin.	3	0	256.47	2249			2409	907	SLU 80	0.4	No
ini.	3	0	-288.15	-496			2409	907	SLU 63	1.83	Si
fin.	3	0	251.79	2219			2409	907	SLU 63	0.41	No
ini.	3	0	-340.99	-474			2409	907	SLU 76	1.91	Si
fin.	3	0	233.74	2305			2409	907	SLU 76	0.39	No
ini.	3	0	-340.99	-474			2409	907	SLU 73	1.91	Si
fin.	3	0	233.74	2305			2409	907	SLU 73	0.39	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	-290.58	-500			2409	907	SLU 78	1.81	Si
fin.	3	0	256.47	2249			2409	907	SLU 78	0.4	No
ini.	3	0	-290.58	-500			2409	907	SLU 75	1.81	Si
fin.	3	0	256.47	2249			2409	907	SLU 75	0.4	No
ini.	3	0	-300.51	-538			2409	907	SLU 82	1.69	Si
fin.	3	0	276.67	2378			2409	907	SLU 82	0.38	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-126	-490.21	2209.71	SLV 4	4.51	Si
fin.	2	-758	174.41	2209.71	SLV 4	12.67	Si
ini.	2	-1888	-154.24	2209.71	SLV 15	14.33	Si
fin.	2	-2396	524.71	2209.71	SLV 15	4.21	Si
ini.	2	-362	-771.13	2209.71	SLV 8	2.87	Si
fin.	2	-1694	657.08	2209.71	SLV 8	3.36	Si
ini.	2	-1980	468.26	2209.71	SLV 9	4.72	Si
fin.	2	-1151	-266.59	2209.71	SLV 9	8.29	Si
ini.	2	-890	-670.34	2209.71	SLV 12	3.3	Si
fin.	2	-2185	762.17	2209.71	SLV 12	2.9	Si
ini.	2	-126	-490.21	2209.71	SLV 3	4.51	Si
fin.	2	-758	174.41	2209.71	SLV 3	12.67	Si
ini.	2	-1980	468.26	2209.71	SLV 10	4.72	Si
fin.	2	-1151	-266.59	2209.71	SLV 10	8.29	Si
ini.	2	-362	-771.13	2209.71	SLV 7	2.87	Si
fin.	2	-1694	657.08	2209.71	SLV 7	3.36	Si
ini.	2	-890	-670.34	2209.71	SLV 11	3.3	Si
fin.	2	-2185	762.17	2209.71	SLV 11	2.9	Si
ini.	2	-1888	-154.24	2209.71	SLV 16	14.33	Si
fin.	2	-2396	524.71	2209.71	SLV 16	4.21	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	187.34	-1142			3613	1360	SLV 14	1.19	Si
fin.	2	0	216.08	1512			3613	1360	SLV 14	0.9	No
ini.	2	0	187.34	-1142			3613	1360	SLV 13	1.19	Si
fin.	2	0	216.08	1512			3613	1360	SLV 13	0.9	No
ini.	2	0	-154.24	-397			3613	1360	SLV 16	3.43	Si
fin.	2	0	524.71	2187			3613	1360	SLV 16	0.62	No
ini.	2	0	468.26	-1727			3613	1360	SLV 9	0.79	No
fin.	2	0	-266.59	467			3613	1360	SLV 9	2.91	Si
ini.	2	0	-670.34	756			3613	1360	SLV 12	1.8	Si
fin.	2	0	762.17	2719			3613	1360	SLV 12	0.5	No
ini.	2	0	-670.34	756			3613	1360	SLV 11	1.8	Si
fin.	2	0	762.17	2719			3613	1360	SLV 11	0.5	No
ini.	2	0	468.26	-1727			3613	1360	SLV 10	0.79	No
fin.	2	0	-266.59	467			3613	1360	SLV 10	2.91	Si
ini.	2	0	-771.13	1000			3613	1360	SLV 7	1.36	Si
fin.	2	0	657.08	2499			3613	1360	SLV 7	0.54	No
ini.	2	0	-154.24	-397			3613	1360	SLV 15	3.43	Si
fin.	2	0	524.71	2187			3613	1360	SLV 15	0.62	No
ini.	2	0	-771.13	1000			3613	1360	SLV 8	1.36	Si
fin.	2	0	657.08	2499			3613	1360	SLV 8	0.54	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.866	SLV 7	Si
V_SLV	0.5	SLV 11	No
PF_SLU	6.154	SLU 73	Si
V_SLU	0.381	SLU 82	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
12.744	3.899	0.2	1.09	0.89	12.744	2.899	0.2	1.09	0.89	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	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	526	-306.92	1223.31	SLU 77	3.99	Si
fin.	3	401	7.13	1223.31	SLU 77	171.54	Si
ini.	3	1247	-327.07	1223.31	SLU 84	3.74	Si
fin.	3	656	-28.64	1223.31	SLU 84	42.71	Si
ini.	3	1247	-327.07	1223.31	SLU 82	3.74	Si
fin.	3	656	-28.64	1223.31	SLU 82	42.71	Si
ini.	3	1186	-305.82	1223.31	SLU 80	4	Si
fin.	3	621	-27.04	1223.31	SLU 80	45.24	Si
ini.	3	526	-306.92	1223.31	SLU 79	3.99	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	3	401	7.13	1223.31	SLU 79	171.54	Si
ini.	3	588	-328.17	1223.31	SLU 83	3.73	Si
fin.	3	436	5.53	1223.31	SLU 83	221.18	Si
ini.	3	526	-306.92	1223.31	SLU 74	3.99	Si
fin.	3	401	7.13	1223.31	SLU 74	171.54	Si
ini.	3	588	-328.17	1223.31	SLU 81	3.73	Si
fin.	3	436	5.53	1223.31	SLU 81	221.18	Si
ini.	3	1186	-305.82	1223.31	SLU 78	4	Si
fin.	3	621	-27.04	1223.31	SLU 78	45.24	Si
ini.	3	1186	-305.82	1223.31	SLU 75	4	Si
fin.	3	621	-27.04	1223.31	SLU 75	45.24	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	-279.26	1328			1373	517	SLU 52	0.39	No
fin.	3	0	-47.83	-1754			1373	517	SLU 52	0.29	No
ini.	3	0	-255.51	1261			1373	517	SLU 68	0.41	No
fin.	3	0	-46.09	-1698			1373	517	SLU 68	0.3	No
ini.	3	0	-229.68	1186			1373	517	SLU 47	0.44	No
fin.	3	0	-44.09	-1650			1373	517	SLU 47	0.31	No
ini.	3	0	-328.17	1601			1373	517	SLU 81	0.32	No
fin.	3	0	5.53	-1205			1373	517	SLU 81	0.43	No
ini.	3	0	-279.26	1328			1373	517	SLU 55	0.39	No
fin.	3	0	-47.83	-1754			1373	517	SLU 55	0.29	No
ini.	3	0	-328.17	1601			1373	517	SLU 83	0.32	No
fin.	3	0	5.53	-1205			1373	517	SLU 83	0.43	No
ini.	3	0	-305.09	1403			1373	517	SLU 73	0.37	No
fin.	3	0	-49.83	-1802			1373	517	SLU 73	0.29	No
ini.	3	0	-305.09	1403			1373	517	SLU 76	0.37	No
fin.	3	0	-49.83	-1802			1373	517	SLU 76	0.29	No
ini.	3	0	-255.51	1261			1373	517	SLU 65	0.41	No
fin.	3	0	-46.09	-1698			1373	517	SLU 65	0.3	No
ini.	3	0	-229.68	1186			1373	517	SLU 44	0.44	No
fin.	3	0	-44.09	-1650			1373	517	SLU 44	0.31	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	2751	-956.46	1334.71	SLV 7	1.4	Si
fin.	2	-603	554.44	1334.71	SLV 7	2.41	Si
ini.	2	534	-824.6	1334.71	SLV 11	1.62	Si
fin.	2	-926	1025.48	1334.71	SLV 11	1.3	Si
ini.	2	106	411.7	1334.71	SLV 6	3.24	Si
fin.	2	1442	-1010.02	1334.71	SLV 6	1.32	Si
ini.	2	-2977	-191.91	1334.71	SLV 15	6.95	Si
fin.	2	-586	1027.47	1334.71	SLV 15	1.3	Si
ini.	2	3618	-220.99	1334.71	SLV 1	6.04	Si
fin.	2	1103	-1012.01	1334.71	SLV 1	1.32	Si
ini.	2	-2977	-191.91	1334.71	SLV 16	6.95	Si
fin.	2	-586	1027.47	1334.71	SLV 16	1.3	Si
ini.	2	3618	-220.99	1334.71	SLV 2	6.04	Si
fin.	2	1103	-1012.01	1334.71	SLV 2	1.32	Si
ini.	2	534	-824.6	1334.71	SLV 12	1.62	Si
fin.	2	-926	1025.48	1334.71	SLV 12	1.3	Si
ini.	2	2751	-956.46	1334.71	SLV 8	1.4	Si
fin.	2	-603	554.44	1334.71	SLV 8	2.41	Si
ini.	2	106	411.7	1334.71	SLV 5	3.24	Si
fin.	2	1442	-1010.02	1334.71	SLV 5	1.32	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	-220.99	781			2059	775	SLV 1	0.99	No
fin.	2	0	-1012.01	-2059			2059	775	SLV 1	0.38	No
ini.	2	0	-631.43	468			2059	775	SLV 4	1.66	Si
fin.	2	0	-542.67	-2989			2059	775	SLV 4	0.26	No
ini.	2	0	-220.99	781			2059	775	SLV 2	0.99	No
fin.	2	0	-1012.01	-2059			2059	775	SLV 2	0.38	No
ini.	2	0	543.56	1764			2059	775	SLV 10	0.44	No
fin.	2	0	-538.98	1226			2059	775	SLV 10	0.63	No
ini.	2	0	-824.6	722			2059	775	SLV 11	1.07	Si
fin.	2	0	1025.48	-1874			2059	775	SLV 11	0.41	No
ini.	2	0	-824.6	722			2059	775	SLV 12	1.07	Si
fin.	2	0	1025.48	-1874			2059	775	SLV 12	0.41	No
ini.	2	0	-956.46	436			2059	775	SLV 7	1.78	Si
fin.	2	0	554.44	-2889			2059	775	SLV 7	0.27	No
ini.	2	0	-956.46	436			2059	775	SLV 8	1.78	Si
fin.	2	0	554.44	-2889			2059	775	SLV 8	0.27	No
ini.	2	0	-631.43	468			2059	775	SLV 3	1.66	Si
fin.	2	0	-542.67	-2989			2059	775	SLV 3	0.26	No
ini.	2	0	543.56	1764			2059	775	SLV 9	0.44	No
fin.	2	0	-538.98	1226			2059	775	SLV 9	0.63	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.299	SLV 15	Si
V_SLV	0.259	SLV 3	No
PF_SLU	3.728	SLU 81	Si
V_SLU	0.287	SLU 73	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
3.872	-3.659	3.09	4.9	1.81	3.201	-2.917	3.09	4.9	1.81	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	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	42	249.02	2666.22	SLU 84	10.71	Si
fin.	3	42	219.19	2666.22	SLU 84	12.16	Si
ini.	3	42	231.8	2666.22	SLU 78	11.5	Si
fin.	3	42	199.24	2666.22	SLU 78	13.38	Si
ini.	3	40	230.85	2666.22	SLU 61	11.55	Si
fin.	3	40	200.16	2666.22	SLU 61	13.32	Si
ini.	3	42	249.02	2666.22	SLU 82	10.71	Si
fin.	3	42	219.19	2666.22	SLU 82	12.16	Si
ini.	3	40	234.9	2666.22	SLU 73	11.35	Si
fin.	3	40	182.02	2666.22	SLU 73	14.65	Si
ini.	3	42	231.8	2666.22	SLU 75	11.5	Si
fin.	3	42	199.24	2666.22	SLU 75	13.38	Si
ini.	3	43	244.37	2666.22	SLU 83	10.91	Si
fin.	3	43	245.03	2666.22	SLU 83	10.88	Si
ini.	3	42	231.8	2666.22	SLU 80	11.5	Si
fin.	3	42	199.24	2666.22	SLU 80	13.38	Si
ini.	3	43	244.37	2666.22	SLU 81	10.91	Si
fin.	3	43	245.03	2666.22	SLU 81	10.88	Si
ini.	3	40	234.9	2666.22	SLU 76	11.35	Si
fin.	3	40	182.02	2666.22	SLU 76	14.65	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	244.37	1669			2091	787	SLU 83	0.47	No
fin.	3	0	245.03	-1692			2091	787	SLU 83	0.47	No
ini.	3	0	230.85	1494			2091	787	SLU 61	0.53	No
fin.	3	0	200.16	-1576			2091	787	SLU 61	0.5	No
ini.	3	0	234.9	1468			2091	787	SLU 76	0.54	No
fin.	3	0	182.02	-1594			2091	787	SLU 76	0.49	No
ini.	3	0	231.8	1489			2091	787	SLU 75	0.53	No
fin.	3	0	199.24	-1574			2091	787	SLU 75	0.5	No
ini.	3	0	244.37	1669			2091	787	SLU 81	0.47	No
fin.	3	0	245.03	-1692			2091	787	SLU 81	0.47	No
ini.	3	0	249.02	1639			2091	787	SLU 82	0.48	No
fin.	3	0	219.19	-1723			2091	787	SLU 82	0.46	No
ini.	3	0	230.85	1494			2091	787	SLU 63	0.53	No
fin.	3	0	200.16	-1576			2091	787	SLU 63	0.5	No
ini.	3	0	249.02	1639			2091	787	SLU 84	0.48	No
fin.	3	0	219.19	-1723			2091	787	SLU 84	0.46	No
ini.	3	0	234.9	1468			2091	787	SLU 73	0.54	No
fin.	3	0	182.02	-1594			2091	787	SLU 73	0.49	No
ini.	3	0	231.8	1489			2091	787	SLU 78	0.53	No
fin.	3	0	199.24	-1574			2091	787	SLU 78	0.5	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-703	1164.1	2833.31	SLV 8	2.43	Si
fin.	2	-105	-1659.35	2833.31	SLV 8	1.71	Si
ini.	2	-361	454.89	2833.31	SLV 3	6.23	Si
fin.	2	788	-2028.94	2833.31	SLV 3	1.4	Si
ini.	2	19	455.44	2833.31	SLV 16	6.22	Si
fin.	2	-962	1561.52	2833.31	SLV 16	1.81	Si
ini.	2	770	-861.49	2833.31	SLV 10	3.29	Si
fin.	2	171	1952.28	2833.31	SLV 10	1.45	Si
ini.	2	19	455.44	2833.31	SLV 15	6.22	Si
fin.	2	-962	1561.52	2833.31	SLV 15	1.81	Si
ini.	2	427	-152.29	2833.31	SLV 14	18.61	Si
fin.	2	-721	2321.87	2833.31	SLV 14	1.22	Si
ini.	2	770	-861.49	2833.31	SLV 9	3.29	Si
fin.	2	171	1952.28	2833.31	SLV 9	1.45	Si
ini.	2	-703	1164.1	2833.31	SLV 7	2.43	Si
fin.	2	-105	-1659.35	2833.31	SLV 7	1.71	Si
ini.	2	427	-152.29	2833.31	SLV 13	18.61	Si
fin.	2	-721	2321.87	2833.31	SLV 13	1.22	Si
ini.	2	-361	454.89	2833.31	SLV 4	6.23	Si
fin.	2	788	-2028.94	2833.31	SLV 4	1.4	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	454.89	-2561			3137	1180	SLV 4	0.46	No
fin.	2	0	-2028.94	-4169			3137	1180	SLV 4	0.28	No
ini.	2	0	455.44	3301			3137	1180	SLV 15	0.36	No
fin.	2	0	1561.52	998			3137	1180	SLV 15	1.18	Si
ini.	2	0	-861.49	3837			3137	1180	SLV 10	0.31	No
fin.	2	0	1952.28	1784			3137	1180	SLV 10	0.66	No
ini.	2	0	-152.29	4495			3137	1180	SLV 13	0.26	No
fin.	2	0	2321.87	2195			3137	1180	SLV 13	0.54	No
ini.	2	0	-861.49	3837			3137	1180	SLV 9	0.31	No
fin.	2	0	1952.28	1784			3137	1180	SLV 9	0.66	No
ini.	2	0	454.89	-2561			3137	1180	SLV 3	0.46	No
fin.	2	0	-2028.94	-4169			3137	1180	SLV 3	0.28	No
ini.	2	0	1164.1	-1902			3137	1180	SLV 7	0.62	No
fin.	2	0	-1659.35	-3757			3137	1180	SLV 7	0.31	No
ini.	2	0	455.44	3301			3137	1180	SLV 16	0.36	No
fin.	2	0	1561.52	998			3137	1180	SLV 16	1.18	Si
ini.	2	0	1164.1	-1902			3137	1180	SLV 8	0.62	No
fin.	2	0	-1659.35	-3757			3137	1180	SLV 8	0.31	No
ini.	2	0	-152.29	4495			3137	1180	SLV 14	0.26	No
fin.	2	0	2321.87	2195			3137	1180	SLV 14	0.54	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.22	SLV 13	Si
V_SLV	0.263	SLV 13	No
PF_SLU	10.707	SLU 82	Si
V_SLU	0.457	SLU 82	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
4.239	1.239	3.19	4.9	1.71	3.339	1.239	3.19	4.9	1.71	0.9	0.16	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	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	65	2300.28	2052.6	SLU 40	0.89	No
fin.	3	65	1165.43	2052.6	SLU 40	1.76	Si
ini.	3	175	2233.46	2052.6	SLU 83	0.92	No
fin.	3	175	1241.82	2052.6	SLU 83	1.65	Si
ini.	3	175	2233.46	2052.6	SLU 81	0.92	No
fin.	3	175	1241.82	2052.6	SLU 81	1.65	Si
ini.	3	86	1846.5	2052.6	SLU 21	1.11	Si
fin.	3	86	1003.19	2052.6	SLU 21	2.05	Si
ini.	3	65	2300.28	2052.6	SLU 42	0.89	No
fin.	3	65	1165.43	2052.6	SLU 42	1.76	Si
ini.	3	86	1846.5	2052.6	SLU 19	1.11	Si
fin.	3	86	1003.19	2052.6	SLU 19	2.05	Si
ini.	3	134	2239.01	2052.6	SLU 82	0.92	No
fin.	3	134	1244.53	2052.6	SLU 82	1.65	Si
ini.	3	134	2239.01	2052.6	SLU 84	0.92	No
fin.	3	134	1244.53	2052.6	SLU 84	1.65	Si
ini.	3	106	2294.73	2052.6	SLU 41	0.89	No
fin.	3	106	1162.72	2052.6	SLU 41	1.77	Si
ini.	3	106	2294.73	2052.6	SLU 39	0.89	No
fin.	3	106	1162.72	2052.6	SLU 39	1.77	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	1846.5	444			1054	397	SLU 19	0.89	No
fin.	3	0	1003.19	-3261			1054	397	SLU 19	0.12	No
ini.	3	0	2300.28	352			1054	397	SLU 40	1.13	Si
fin.	3	0	1165.43	-4014			1054	397	SLU 40	0.1	No
ini.	3	0	2294.73	355			1054	397	SLU 39	1.12	Si
fin.	3	0	1162.72	-4011			1054	397	SLU 39	0.1	No
ini.	3	0	1846.5	444			1054	397	SLU 21	0.89	No
fin.	3	0	1003.19	-3261			1054	397	SLU 21	0.12	No
ini.	3	0	2294.73	355			1054	397	SLU 41	1.12	Si
fin.	3	0	1162.72	-4011			1054	397	SLU 41	0.1	No
ini.	3	0	2239.01	600			1054	397	SLU 82	0.66	No
fin.	3	0	1244.53	-3961			1054	397	SLU 82	0.1	No
ini.	3	0	2239.01	600			1054	397	SLU 84	0.66	No
fin.	3	0	1244.53	-3961			1054	397	SLU 84	0.1	No
ini.	3	0	2300.28	352			1054	397	SLU 42	1.13	Si
fin.	3	0	1165.43	-4014			1054	397	SLU 42	0.1	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	3	0	2233.46	604			1054	397	SLU 83	0.66	No
fin.	3	0	1241.82	-3958			1054	397	SLU 83	0.1	No
ini.	3	0	2233.46	604			1054	397	SLU 81	0.66	No
fin.	3	0	1241.82	-3958			1054	397	SLU 81	0.1	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	834	1359.91	2365.9	SLV 5	1.74	Si
fin.	2	712	725.61	2365.9	SLV 5	3.26	Si
ini.	2	-2261	-693.07	2365.9	SLV 15	3.41	Si
fin.	2	-1645	110.56	2365.9	SLV 15	21.4	Si
ini.	2	1018	969.07	2365.9	SLV 8	2.44	Si
fin.	2	757	788.55	2365.9	SLV 8	3	Si
ini.	2	834	1359.91	2365.9	SLV 6	1.74	Si
fin.	2	712	725.61	2365.9	SLV 6	3.26	Si
ini.	2	2629	2191.77	2365.9	SLV 1	1.08	Si
fin.	2	2013	1100.85	2365.9	SLV 1	2.15	Si
ini.	2	2684	2074.52	2365.9	SLV 3	1.14	Si
fin.	2	2026	1119.73	2365.9	SLV 3	2.11	Si
ini.	2	2629	2191.77	2365.9	SLV 2	1.08	Si
fin.	2	2013	1100.85	2365.9	SLV 2	2.15	Si
ini.	2	-2261	-693.07	2365.9	SLV 16	3.41	Si
fin.	2	-1645	110.56	2365.9	SLV 16	21.4	Si
ini.	2	1018	969.07	2365.9	SLV 7	2.44	Si
fin.	2	757	788.55	2365.9	SLV 7	3	Si
ini.	2	2684	2074.52	2365.9	SLV 4	1.14	Si
fin.	2	2026	1119.73	2365.9	SLV 4	2.11	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	-693.07	2716			1581	595	SLV 15	0.22	No
fin.	2	0	110.56	14			1581	595	SLV 15	42.14	Si
ini.	2	0	2074.52	-1297			1581	595	SLV 4	0.46	No
fin.	2	0	1119.73	-2694			1581	595	SLV 4	0.22	No
ini.	2	0	2191.77	-1432			1581	595	SLV 2	0.42	No
fin.	2	0	1100.85	-2842			1581	595	SLV 2	0.21	No
ini.	2	0	-575.82	2582			1581	595	SLV 14	0.23	No
fin.	2	0	91.67	-133			1581	595	SLV 14	4.46	Si
ini.	2	0	-693.07	2716			1581	595	SLV 16	0.22	No
fin.	2	0	110.56	14			1581	595	SLV 16	42.14	Si
ini.	2	0	-575.82	2582			1581	595	SLV 13	0.23	No
fin.	2	0	91.67	-133			1581	595	SLV 13	4.46	Si
ini.	2	0	2191.77	-1432			1581	595	SLV 1	0.42	No
fin.	2	0	1100.85	-2842			1581	595	SLV 1	0.21	No
ini.	2	0	1359.91	-184			1581	595	SLV 6	3.23	Si
fin.	2	0	725.61	-2066			1581	595	SLV 6	0.29	No
ini.	2	0	2074.52	-1297			1581	595	SLV 3	0.46	No
fin.	2	0	1119.73	-2694			1581	595	SLV 3	0.22	No
ini.	2	0	1359.91	-184			1581	595	SLV 5	3.23	Si
fin.	2	0	725.61	-2066			1581	595	SLV 5	0.29	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.079	SLV 1	Si
V_SLV	0.209	SLV 1	No
PF_SLU	0.892	SLU 40	No
V_SLU	0.099	SLU 40	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
12.519	1.239	3.19	4.9	1.71	11.519	1.239	3.19	4.9	1.71	1	0.16	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	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	148	1312.67	2052.6	SLU 81	1.56	Si
fin.	3	148	2383.02	2052.6	SLU 81	0.86	No
ini.	3	52	1062.09	2052.6	SLU 34	1.93	Si
fin.	3	52	1962.44	2052.6	SLU 34	1.05	Si
ini.	3	85	1229.33	2052.6	SLU 39	1.67	Si
fin.	3	85	2429.42	2052.6	SLU 39	0.84	No
ini.	3	115	1317.87	2052.6	SLU 84	1.56	Si
fin.	3	115	2384.35	2052.6	SLU 84	0.86	No
ini.	3	85	1229.33	2052.6	SLU 41	1.67	Si
fin.	3	85	2429.42	2052.6	SLU 41	0.84	No
ini.	3	148	1312.67	2052.6	SLU 83	1.56	Si

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
fin.	3	148	2383.02	2052.6	SLU 83	0.86	No
ini.	3	115	1317.87	2052.6	SLU 82	1.56	Si
fin.	3	115	2384.35	2052.6	SLU 82	0.86	No
ini.	3	52	1234.54	2052.6	SLU 42	1.66	Si
fin.	3	52	2430.74	2052.6	SLU 42	0.84	No
ini.	3	52	1062.09	2052.6	SLU 31	1.93	Si
fin.	3	52	1962.44	2052.6	SLU 31	1.05	Si
ini.	3	52	1234.54	2052.6	SLU 40	1.66	Si
fin.	3	52	2430.74	2052.6	SLU 40	0.84	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	1058.92	3587			1054	397	SLU 18	0.11	No
fin.	3	0	1953.35	-1964			1054	397	SLU 18	0.2	No
ini.	3	0	1234.54	4386			1054	397	SLU 42	0.09	No
fin.	3	0	2430.74	-2191			1054	397	SLU 42	0.18	No
ini.	3	0	1312.67	4377			1054	397	SLU 81	0.09	No
fin.	3	0	2383.02	-2441			1054	397	SLU 81	0.16	No
ini.	3	0	1229.33	4390			1054	397	SLU 41	0.09	No
fin.	3	0	2429.42	-2187			1054	397	SLU 41	0.18	No
ini.	3	0	1317.87	4373			1054	397	SLU 82	0.09	No
fin.	3	0	2384.35	-2445			1054	397	SLU 82	0.16	No
ini.	3	0	1317.87	4373			1054	397	SLU 84	0.09	No
fin.	3	0	2384.35	-2445			1054	397	SLU 84	0.16	No
ini.	3	0	1058.92	3587			1054	397	SLU 20	0.11	No
fin.	3	0	1953.35	-1964			1054	397	SLU 20	0.2	No
ini.	3	0	1312.67	4377			1054	397	SLU 83	0.09	No
fin.	3	0	2383.02	-2441			1054	397	SLU 83	0.16	No
ini.	3	0	1229.33	4390			1054	397	SLU 39	0.09	No
fin.	3	0	2429.42	-2187			1054	397	SLU 39	0.18	No
ini.	3	0	1234.54	4386			1054	397	SLU 40	0.09	No
fin.	3	0	2430.74	-2191			1054	397	SLU 40	0.18	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	yM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	1892	1052.57	2365.9	SLV 14	2.25	Si
fin.	2	3177	1865.31	2365.9	SLV 14	1.27	Si
ini.	2	1892	1052.57	2365.9	SLV 13	2.25	Si
fin.	2	3177	1865.31	2365.9	SLV 13	1.27	Si
ini.	2	-452	452.67	2365.9	SLV 5	5.23	Si
fin.	2	-817	666.38	2365.9	SLV 5	3.55	Si
ini.	2	775	824.35	2365.9	SLV 11	2.87	Si
fin.	2	1140	1010.08	2365.9	SLV 11	2.34	Si
ini.	2	602	711.28	2365.9	SLV 9	3.33	Si
fin.	2	1004	1260.12	2365.9	SLV 9	1.88	Si
ini.	2	602	711.28	2365.9	SLV 10	3.33	Si
fin.	2	1004	1260.12	2365.9	SLV 10	1.88	Si
ini.	2	1944	1086.49	2365.9	SLV 15	2.18	Si
fin.	2	3218	1790.3	2365.9	SLV 15	1.32	Si
ini.	2	-452	452.67	2365.9	SLV 6	5.23	Si
fin.	2	-817	666.38	2365.9	SLV 6	3.55	Si
ini.	2	1944	1086.49	2365.9	SLV 16	2.18	Si
fin.	2	3218	1790.3	2365.9	SLV 16	1.32	Si
ini.	2	775	824.35	2365.9	SLV 12	2.87	Si
fin.	2	1140	1010.08	2365.9	SLV 12	2.34	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	224.46	-336			1581	595	SLV 4	1.77	Si
fin.	2	0	-188.85	-3251			1581	595	SLV 4	0.18	No
ini.	2	0	1052.57	3631			1581	595	SLV 14	0.16	No
fin.	2	0	1865.31	576			1581	595	SLV 14	1.03	Si
ini.	2	0	711.28	2415			1581	595	SLV 10	0.25	No
fin.	2	0	1260.12	-606			1581	595	SLV 10	0.98	No
ini.	2	0	1086.49	3517			1581	595	SLV 16	0.17	No
fin.	2	0	1790.3	472			1581	595	SLV 16	1.26	Si
ini.	2	0	190.54	-222			1581	595	SLV 2	2.68	Si
fin.	2	0	-113.84	-3147			1581	595	SLV 2	0.19	No
ini.	2	0	190.54	-222			1581	595	SLV 1	2.68	Si
fin.	2	0	-113.84	-3147			1581	595	SLV 1	0.19	No
ini.	2	0	1052.57	3631			1581	595	SLV 13	0.16	No
fin.	2	0	1865.31	576			1581	595	SLV 13	1.03	Si
ini.	2	0	711.28	2415			1581	595	SLV 9	0.25	No
fin.	2	0	1260.12	-606			1581	595	SLV 9	0.98	No
ini.	2	0	224.46	-336			1581	595	SLV 3	1.77	Si
fin.	2	0	-188.85	-3251			1581	595	SLV 3	0.18	No
ini.	2	0	1086.49	3517			1581	595	SLV 15	0.17	No
fin.	2	0	1790.3	472			1581	595	SLV 15	1.26	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.268	SLV 13	Si
V_SLV	0.164	SLV 13	No
PF_SLU	0.844	SLU 40	No
V_SLU	0.09	SLU 39	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
5.239	5.99	1.09	2.09	1	6.239	5.99	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	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	11901	-1188.03	1248.72	SLU 55	1.05	Si
fin.	3	13602	1714.48	1248.72	SLU 55	0.73	No
ini.	3	11217	-1131.85	1248.72	SLU 10	1.1	Si
fin.	3	12833	1609.64	1248.72	SLU 10	0.78	No
ini.	3	11780	-1205.68	1248.72	SLU 31	1.04	Si
fin.	3	13424	1713.87	1248.72	SLU 31	0.73	No
ini.	3	11217	-1131.85	1248.72	SLU 13	1.1	Si
fin.	3	12833	1609.64	1248.72	SLU 13	0.78	No
ini.	3	11121	-1083.07	1248.72	SLU 65	1.15	Si
fin.	3	12789	1570.85	1248.72	SLU 65	0.79	No
ini.	3	12465	-1261.86	1248.72	SLU 73	0.99	No
fin.	3	14194	1818.71	1248.72	SLU 73	0.69	No
ini.	3	11780	-1205.68	1248.72	SLU 34	1.04	Si
fin.	3	13424	1713.87	1248.72	SLU 34	0.73	No
ini.	3	12465	-1261.86	1248.72	SLU 76	0.99	No
fin.	3	14194	1818.71	1248.72	SLU 76	0.69	No
ini.	3	11121	-1083.07	1248.72	SLU 68	1.15	Si
fin.	3	12789	1570.85	1248.72	SLU 68	0.79	No
ini.	3	11901	-1188.03	1248.72	SLU 52	1.05	Si
fin.	3	13602	1714.48	1248.72	SLU 52	0.73	No

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	-1188.03	3126			1155	435	SLU 52	0.14	No
fin.	3	0	1714.48	2740			1155	435	SLU 52	0.16	No
ini.	3	0	-1261.86	3262			1155	435	SLU 76	0.13	No
fin.	3	0	1818.71	3011			1155	435	SLU 76	0.14	No
ini.	3	0	-1131.85	2966			1155	435	SLU 10	0.15	No
fin.	3	0	1609.64	2537			1155	435	SLU 10	0.17	No
ini.	3	0	-1205.68	3103			1155	435	SLU 34	0.14	No
fin.	3	0	1713.87	2809			1155	435	SLU 34	0.15	No
ini.	3	0	-1083.07	2941			1155	435	SLU 65	0.15	No
fin.	3	0	1570.85	2351			1155	435	SLU 65	0.18	No
ini.	3	0	-1188.03	3126			1155	435	SLU 55	0.14	No
fin.	3	0	1714.48	2740			1155	435	SLU 55	0.16	No
ini.	3	0	-1083.07	2941			1155	435	SLU 68	0.15	No
fin.	3	0	1570.85	2351			1155	435	SLU 68	0.18	No
ini.	3	0	-1261.86	3262			1155	435	SLU 73	0.13	No
fin.	3	0	1818.71	3011			1155	435	SLU 73	0.14	No
ini.	3	0	-1205.68	3103			1155	435	SLU 31	0.14	No
fin.	3	0	1713.87	2809			1155	435	SLU 31	0.15	No
ini.	3	0	-1131.85	2966			1155	435	SLU 13	0.15	No
fin.	3	0	1609.64	2537			1155	435	SLU 13	0.17	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	17197	-1521.13	1415.81	SLV 8	0.93	No
fin.	2	20235	1695.67	1415.81	SLV 8	0.83	No
ini.	2	-1410	-1264.97	1415.81	SLV 1	1.12	Si
fin.	2	-4670	175.1	1415.81	SLV 1	8.09	Si
ini.	2	-11	1073.31	1415.81	SLV 13	1.32	Si
fin.	2	1852	278.07	1415.81	SLV 13	5.09	Si
ini.	2	-1410	-1264.97	1415.81	SLV 2	1.12	Si
fin.	2	-4670	175.1	1415.81	SLV 2	8.09	Si
ini.	2	-11	1073.31	1415.81	SLV 14	1.32	Si
fin.	2	1852	278.07	1415.81	SLV 14	5.09	Si
ini.	2	17617	-819.65	1415.81	SLV 11	1.73	Si
fin.	2	22192	1726.57	1415.81	SLV 11	0.82	No
ini.	2	17617	-819.65	1415.81	SLV 12	1.73	Si
fin.	2	22192	1726.57	1415.81	SLV 12	0.82	No
ini.	2	17197	-1521.13	1415.81	SLV 7	0.93	No
fin.	2	20235	1695.67	1415.81	SLV 7	0.83	No
ini.	2	6952	-1760.92	1415.81	SLV 4	0.8	No
fin.	2	5771	860.27	1415.81	SLV 4	1.65	Si
ini.	2	6952	-1760.92	1415.81	SLV 3	0.8	No
fin.	2	5771	860.27	1415.81	SLV 3	1.65	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	-1264.97	1883			1733	652	SLV 1	0.35	No
fin.	2	0	175.1	2420			1733	652	SLV 1	0.27	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-1521.13	3517			1733	652	SLV 8	0.19	No
fin.	2	0	1695.67	3132			1733	652	SLV 8	0.21	No
ini.	2	0	833.52	-1881			1733	652	SLV 9	0.35	No
fin.	2	0	-557.33	-630			1733	652	SLV 9	1.03	Si
ini.	2	0	-819.65	2485			1733	652	SLV 11	0.26	No
fin.	2	0	1726.57	2178			1733	652	SLV 11	0.3	No
ini.	2	0	-1264.97	1883			1733	652	SLV 2	0.35	No
fin.	2	0	175.1	2420			1733	652	SLV 2	0.27	No
ini.	2	0	-1760.92	3193			1733	652	SLV 4	0.2	No
fin.	2	0	860.27	3262			1733	652	SLV 4	0.2	No
ini.	2	0	-819.65	2485			1733	652	SLV 12	0.26	No
fin.	2	0	1726.57	2178			1733	652	SLV 12	0.3	No
ini.	2	0	-1760.92	3193			1733	652	SLV 3	0.2	No
fin.	2	0	860.27	3262			1733	652	SLV 3	0.2	No
ini.	2	0	-1521.13	3517			1733	652	SLV 7	0.19	No
fin.	2	0	1695.67	3132			1733	652	SLV 7	0.21	No
ini.	2	0	833.52	-1881			1733	652	SLV 10	0.35	No
fin.	2	0	-557.33	-630			1733	652	SLV 10	1.03	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.804	SLV 3	No
V_SLV	0.185	SLV 7	No
PF_SLU	0.687	SLU 73	No
V_SLU	0.133	SLU 73	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
5.239	5.99	3.99	4.9	0.91	6.239	5.99	3.99	4.9	0.91	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	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	-7993	-1419.7	1091.22	SLU 52	0.77	No
fin.	3	-7993	1752.98	1091.22	SLU 52	0.62	No
ini.	3	-8553	-1502.52	1091.22	SLU 73	0.73	No
fin.	3	-8553	1846.78	1091.22	SLU 73	0.59	No
ini.	3	-8074	-1416.85	1091.22	SLU 31	0.77	No
fin.	3	-8074	1743.05	1091.22	SLU 31	0.63	No
ini.	3	-7201	-1308.43	1091.22	SLU 68	0.83	No
fin.	3	-7201	1624.15	1091.22	SLU 68	0.67	No
ini.	3	-8074	-1416.85	1091.22	SLU 34	0.77	No
fin.	3	-8074	1743.05	1091.22	SLU 34	0.63	No
ini.	3	-7993	-1419.7	1091.22	SLU 55	0.77	No
fin.	3	-7993	1752.98	1091.22	SLU 55	0.62	No
ini.	3	-7514	-1334.03	1091.22	SLU 10	0.82	No
fin.	3	-7514	1649.25	1091.22	SLU 10	0.66	No
ini.	3	-7201	-1308.43	1091.22	SLU 65	0.83	No
fin.	3	-7201	1624.15	1091.22	SLU 65	0.67	No
ini.	3	-8553	-1502.52	1091.22	SLU 76	0.73	No
fin.	3	-8553	1846.78	1091.22	SLU 76	0.59	No
ini.	3	-7514	-1334.03	1091.22	SLU 13	0.82	No
fin.	3	-7514	1649.25	1091.22	SLU 13	0.66	No

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	-1502.52	4656			957	360	SLU 73	0.08	No
fin.	3	0	1846.78	2215			957	360	SLU 73	0.16	No
ini.	3	0	-1416.85	4370			957	360	SLU 31	0.08	No
fin.	3	0	1743.05	2121			957	360	SLU 31	0.17	No
ini.	3	0	-1419.7	4286			957	360	SLU 52	0.08	No
fin.	3	0	1752.98	2195			957	360	SLU 52	0.16	No
ini.	3	0	-1502.52	4656			957	360	SLU 76	0.08	No
fin.	3	0	1846.78	2215			957	360	SLU 76	0.16	No
ini.	3	0	-1196.14	4060			957	360	SLU 42	0.09	No
fin.	3	0	1449	1440			957	360	SLU 42	0.25	No
ini.	3	0	-1419.7	4286			957	360	SLU 55	0.08	No
fin.	3	0	1752.98	2195			957	360	SLU 55	0.16	No
ini.	3	0	-1281.8	4345			957	360	SLU 84	0.08	No
fin.	3	0	1552.73	1534			957	360	SLU 84	0.23	No
ini.	3	0	-1281.8	4345			957	360	SLU 82	0.08	No
fin.	3	0	1552.73	1534			957	360	SLU 82	0.23	No
ini.	3	0	-1416.85	4370			957	360	SLU 34	0.08	No
fin.	3	0	1743.05	2121			957	360	SLU 34	0.17	No
ini.	3	0	-1196.14	4060			957	360	SLU 40	0.09	No
fin.	3	0	1449	1440			957	360	SLU 40	0.25	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-8835	-1682.27	1258.31	SLV 7	0.75	No
fin.	2	-8575	2360.68	1258.31	SLV 7	0.53	No
ini.	2	3572	451.3	1258.31	SLV 5	2.79	Si
fin.	2	3390	-1018.64	1258.31	SLV 5	1.24	Si
ini.	2	3268	763.62	1258.31	SLV 9	1.65	Si
fin.	2	3007	-1273.93	1258.31	SLV 9	0.99	No
ini.	2	-4137	-1299.89	1258.31	SLV 4	0.97	No
fin.	2	-3941	1475.75	1258.31	SLV 4	0.85	No
ini.	2	3572	451.3	1258.31	SLV 6	2.79	Si
fin.	2	3390	-1018.64	1258.31	SLV 6	1.24	Si
ini.	2	-4137	-1299.89	1258.31	SLV 3	0.97	No
fin.	2	-3941	1475.75	1258.31	SLV 3	0.85	No
ini.	2	-8835	-1682.27	1258.31	SLV 8	0.75	No
fin.	2	-8575	2360.68	1258.31	SLV 8	0.53	No
ini.	2	-9139	-1369.95	1258.31	SLV 11	0.92	No
fin.	2	-8957	2105.39	1258.31	SLV 11	0.6	No
ini.	2	3268	763.62	1258.31	SLV 10	1.65	Si
fin.	2	3007	-1273.93	1258.31	SLV 10	0.99	No
ini.	2	-9139	-1369.95	1258.31	SLV 12	0.92	No
fin.	2	-8957	2105.39	1258.31	SLV 12	0.6	No

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	451.3	-793			1435	540	SLV 6	0.68	No
fin.	2	0	-1018.64	-2209			1435	540	SLV 6	0.24	No
ini.	2	0	-1682.27	4831			1435	540	SLV 8	0.11	No
fin.	2	0	2360.68	3494			1435	540	SLV 8	0.15	No
ini.	2	0	-1369.95	4262			1435	540	SLV 11	0.13	No
fin.	2	0	2105.39	2913			1435	540	SLV 11	0.19	No
ini.	2	0	451.3	-793			1435	540	SLV 5	0.68	No
fin.	2	0	-1018.64	-2209			1435	540	SLV 5	0.24	No
ini.	2	0	-1682.27	4831			1435	540	SLV 7	0.11	No
fin.	2	0	2360.68	3494			1435	540	SLV 7	0.15	No
ini.	2	0	-1299.89	3527			1435	540	SLV 3	0.15	No
fin.	2	0	1475.75	2176			1435	540	SLV 3	0.25	No
ini.	2	0	763.62	-1362			1435	540	SLV 9	0.4	No
fin.	2	0	-1273.93	-2790			1435	540	SLV 9	0.19	No
ini.	2	0	-1369.95	4262			1435	540	SLV 12	0.13	No
fin.	2	0	2105.39	2913			1435	540	SLV 12	0.19	No
ini.	2	0	-1299.89	3527			1435	540	SLV 4	0.15	No
fin.	2	0	1475.75	2176			1435	540	SLV 4	0.25	No
ini.	2	0	763.62	-1362			1435	540	SLV 10	0.4	No
fin.	2	0	-1273.93	-2790			1435	540	SLV 10	0.19	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.533	SLV 7	No
V_SLV	0.112	SLV 7	No
PF_SLU	0.591	SLU 73	No
V_SLU	0.077	SLU 73	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
6.789	5.99	1.09	3.09	2	7.289	5.99	1.09	3.09	2	0.5	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	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	16270	8472.19	2998.72	SLU 52	0.35	No
fin.	3	16636	9851.67	2998.72	SLU 52	0.3	No
ini.	3	16016	8403.3	2998.72	SLU 31	0.36	No
fin.	3	16372	9765.24	2998.72	SLU 31	0.31	No
ini.	3	16935	8908.51	2998.72	SLU 76	0.34	No
fin.	3	17310	10362.06	2998.72	SLU 76	0.29	No
ini.	3	16935	8908.51	2998.72	SLU 73	0.34	No
fin.	3	17310	10362.06	2998.72	SLU 73	0.29	No
ini.	3	15351	7966.98	2998.72	SLU 13	0.38	No
fin.	3	15698	9254.85	2998.72	SLU 13	0.32	No
ini.	3	15372	7868.52	2998.72	SLU 65	0.38	No
fin.	3	15729	9147.5	2998.72	SLU 65	0.33	No
ini.	3	16270	8472.19	2998.72	SLU 55	0.35	No
fin.	3	16636	9851.67	2998.72	SLU 55	0.3	No
ini.	3	15351	7966.98	2998.72	SLU 10	0.38	No
fin.	3	15698	9254.85	2998.72	SLU 10	0.32	No

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	3	16016	8403.3	2998.72	SLU 34	0.36	No
fin.	3	16372	9765.24	2998.72	SLU 34	0.31	No
ini.	3	15372	7868.52	2998.72	SLU 68	0.38	No
fin.	3	15729	9147.5	2998.72	SLU 68	0.33	No

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	8908.51	2656			2311	870	SLU 73	0.33	No
fin.	3	0	10362.06	2746			2311	870	SLU 73	0.32	No
ini.	3	0	8472.19	2548			2311	870	SLU 55	0.34	No
fin.	3	0	9851.67	2520			2311	870	SLU 55	0.35	No
ini.	3	0	7020.19	2149			2311	870	SLU 63	0.4	No
fin.	3	0	8185.16	2491			2311	870	SLU 63	0.35	No
ini.	3	0	7456.51	2257			2311	870	SLU 82	0.39	No
fin.	3	0	8695.55	2718			2311	870	SLU 82	0.32	No
ini.	3	0	8908.51	2656			2311	870	SLU 76	0.33	No
fin.	3	0	10362.06	2746			2311	870	SLU 76	0.32	No
ini.	3	0	8403.3	2450			2311	870	SLU 34	0.35	No
fin.	3	0	9765.24	2502			2311	870	SLU 34	0.35	No
ini.	3	0	7456.51	2257			2311	870	SLU 84	0.39	No
fin.	3	0	8695.55	2718			2311	870	SLU 84	0.32	No
ini.	3	0	8403.3	2450			2311	870	SLU 31	0.35	No
fin.	3	0	9765.24	2502			2311	870	SLU 31	0.35	No
ini.	3	0	7020.19	2149			2311	870	SLU 61	0.4	No
fin.	3	0	8185.16	2491			2311	870	SLU 61	0.35	No
ini.	3	0	8472.19	2548			2311	870	SLU 52	0.34	No
fin.	3	0	9851.67	2520			2311	870	SLU 52	0.35	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-15379	-6899.97	3165.81	SLV 9	0.46	No
fin.	2	-16778	-7998.2	3165.81	SLV 9	0.4	No
ini.	2	24300	12108.99	3165.81	SLV 8	0.26	No
fin.	2	25860	14129.29	3165.81	SLV 8	0.22	No
ini.	2	24300	12108.99	3165.81	SLV 7	0.26	No
fin.	2	25860	14129.29	3165.81	SLV 7	0.22	No
ini.	2	13160	7007.27	3165.81	SLV 16	0.45	No
fin.	2	11917	5908.13	3165.81	SLV 16	0.54	No
ini.	2	25812	12962.98	3165.81	SLV 11	0.24	No
fin.	2	26400	13866.97	3165.81	SLV 11	0.23	No
ini.	2	-15379	-6899.97	3165.81	SLV 10	0.46	No
fin.	2	-16778	-7998.2	3165.81	SLV 10	0.4	No
ini.	2	25812	12962.98	3165.81	SLV 12	0.24	No
fin.	2	26400	13866.97	3165.81	SLV 12	0.23	No
ini.	2	-16891	-7753.96	3165.81	SLV 5	0.41	No
fin.	2	-17318	-7735.88	3165.81	SLV 5	0.41	No
ini.	2	-16891	-7753.96	3165.81	SLV 6	0.41	No
fin.	2	-17318	-7735.88	3165.81	SLV 6	0.41	No
ini.	2	13160	7007.27	3165.81	SLV 15	0.45	No
fin.	2	11917	5908.13	3165.81	SLV 15	0.54	No

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	12108.99	3199			3466	1304	SLV 8	0.41	No
fin.	2	0	14129.29	2697			3466	1304	SLV 8	0.48	No
ini.	2	0	1048.39	-1584			3466	1304	SLV 14	0.82	No
fin.	2	0	-651.42	-1689			3466	1304	SLV 14	0.77	No
ini.	2	0	1048.39	-1584			3466	1304	SLV 13	0.82	No
fin.	2	0	-651.42	-1689			3466	1304	SLV 13	0.77	No
ini.	2	0	12962.98	2003			3466	1304	SLV 12	0.65	No
fin.	2	0	13866.97	1007			3466	1304	SLV 12	1.3	Si
ini.	2	0	-1798.25	2405			3466	1304	SLV 2	0.54	No
fin.	2	0	222.96	3944			3466	1304	SLV 2	0.33	No
ini.	2	0	12108.99	3199			3466	1304	SLV 7	0.41	No
fin.	2	0	14129.29	2697			3466	1304	SLV 7	0.48	No
ini.	2	0	-1798.25	2405			3466	1304	SLV 1	0.54	No
fin.	2	0	222.96	3944			3466	1304	SLV 1	0.33	No
ini.	2	0	4160.63	3416			3466	1304	SLV 3	0.38	No
fin.	2	0	6782.51	4278			3466	1304	SLV 3	0.3	No
ini.	2	0	4160.63	3416			3466	1304	SLV 4	0.38	No
fin.	2	0	6782.51	4278			3466	1304	SLV 4	0.3	No
ini.	2	0	12962.98	2003			3466	1304	SLV 11	0.65	No
fin.	2	0	13866.97	1007			3466	1304	SLV 11	1.3	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.224	SLV 7	No
V_SLV	0.305	SLV 3	No
PF_SLU	0.289	SLU 73	No
V_SLU	0.317	SLU 73	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
6.789	5.99	3.89	4.9	1.01	7.289	5.99	3.89	4.9	1.01	0.5	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	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	-9596	1323.86	1266.22	SLU 34	0.96	No
fin.	3	-9596	1411.3	1266.22	SLU 34	0.9	No
ini.	3	-8700	1231.75	1266.22	SLU 68	1.03	Si
fin.	3	-8700	1374.54	1266.22	SLU 68	0.92	No
ini.	3	-10164	1403.19	1266.22	SLU 76	0.9	No
fin.	3	-10164	1497.85	1266.22	SLU 76	0.85	No
ini.	3	-8700	1231.75	1266.22	SLU 65	1.03	Si
fin.	3	-8700	1374.54	1266.22	SLU 65	0.92	No
ini.	3	-10164	1403.19	1266.22	SLU 73	0.9	No
fin.	3	-10164	1497.85	1266.22	SLU 73	0.85	No
ini.	3	-8987	1251.65	1266.22	SLU 13	1.01	Si
fin.	3	-8987	1357.54	1266.22	SLU 13	0.93	No
ini.	3	-9596	1323.86	1266.22	SLU 31	0.96	No
fin.	3	-9596	1411.3	1266.22	SLU 31	0.9	No
ini.	3	-9554	1330.98	1266.22	SLU 52	0.95	No
fin.	3	-9554	1444.1	1266.22	SLU 52	0.88	No
ini.	3	-9554	1330.98	1266.22	SLU 55	0.95	No
fin.	3	-9554	1444.1	1266.22	SLU 55	0.88	No
ini.	3	-8987	1251.65	1266.22	SLU 10	1.01	Si
fin.	3	-8987	1357.54	1266.22	SLU 10	0.93	No

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	669.94	405			1167	439	SLU 74	1.08	Si
fin.	3	0	613.57	-799			1167	439	SLU 74	0.55	No
ini.	3	0	743.41	428			1167	439	SLU 81	1.02	Si
fin.	3	0	666.41	-960			1167	439	SLU 81	0.46	No
ini.	3	0	671.2	405			1167	439	SLU 62	1.09	Si
fin.	3	0	612.66	-810			1167	439	SLU 62	0.54	No
ini.	3	0	669.94	405			1167	439	SLU 79	1.08	Si
fin.	3	0	613.57	-799			1167	439	SLU 79	0.55	No
ini.	3	0	664.08	360			1167	439	SLU 39	1.22	Si
fin.	3	0	579.86	-937			1167	439	SLU 39	0.47	No
ini.	3	0	669.94	405			1167	439	SLU 77	1.08	Si
fin.	3	0	613.57	-799			1167	439	SLU 77	0.55	No
ini.	3	0	743.41	428			1167	439	SLU 83	1.02	Si
fin.	3	0	666.41	-960			1167	439	SLU 83	0.46	No
ini.	3	0	591.87	336			1167	439	SLU 18	1.31	Si
fin.	3	0	526.11	-787			1167	439	SLU 18	0.56	No
ini.	3	0	664.08	360			1167	439	SLU 41	1.22	Si
fin.	3	0	579.86	-937			1167	439	SLU 41	0.47	No
ini.	3	0	671.2	405			1167	439	SLU 60	1.09	Si
fin.	3	0	612.66	-810			1167	439	SLU 60	0.54	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	4431	-778.38	1433.31	SLV 9	1.84	Si
fin.	2	4579	-1099.73	1433.31	SLV 9	1.3	Si
ini.	2	-4719	805.64	1433.31	SLV 3	1.78	Si
fin.	2	-4706	1122.78	1433.31	SLV 3	1.28	Si
ini.	2	-11280	1591.36	1433.31	SLV 12	0.9	No
fin.	2	-11466	1721.36	1433.31	SLV 12	0.83	No
ini.	2	4921	-758.22	1433.31	SLV 5	1.89	Si
fin.	2	5107	-920.29	1433.31	SLV 5	1.56	Si
ini.	2	-11280	1591.36	1433.31	SLV 11	0.9	No
fin.	2	-11466	1721.36	1433.31	SLV 11	0.83	No
ini.	2	4921	-758.22	1433.31	SLV 6	1.89	Si
fin.	2	5107	-920.29	1433.31	SLV 6	1.56	Si
ini.	2	-4719	805.64	1433.31	SLV 4	1.78	Si
fin.	2	-4706	1122.78	1433.31	SLV 4	1.28	Si
ini.	2	-10789	1611.52	1433.31	SLV 8	0.89	No
fin.	2	-10938	1900.81	1433.31	SLV 8	0.75	No
ini.	2	-10789	1611.52	1433.31	SLV 7	0.89	No
fin.	2	-10938	1900.81	1433.31	SLV 7	0.75	No
ini.	2	4431	-778.38	1433.31	SLV 10	1.84	Si
fin.	2	4579	-1099.73	1433.31	SLV 10	1.3	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	-778.38	-651			1750	659	SLV 9	1.01	Si
fin.	2	0	-1099.73	-1306			1750	659	SLV 9	0.5	No
ini.	2	0	738.43	-279			1750	659	SLV 16	2.36	Si
fin.	2	0	524.62	-944			1750	659	SLV 16	0.7	No
ini.	2	0	27.51	-699			1750	659	SLV 14	0.94	No
fin.	2	0	-321.71	-1354			1750	659	SLV 14	0.49	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-778.38	-651			1750	659	SLV 10	1.01	Si
fin.	2	0	-1099.73	-1306			1750	659	SLV 10	0.5	No
ini.	2	0	27.51	-699			1750	659	SLV 13	0.94	No
fin.	2	0	-321.71	-1354			1750	659	SLV 13	0.49	No
ini.	2	0	805.64	1258			1750	659	SLV 3	0.52	No
fin.	2	0	1122.78	556			1750	659	SLV 3	1.18	Si
ini.	2	0	805.64	1258			1750	659	SLV 4	0.52	No
fin.	2	0	1122.78	556			1750	659	SLV 4	1.18	Si
ini.	2	0	1611.52	1210			1750	659	SLV 8	0.54	No
fin.	2	0	1900.81	509			1750	659	SLV 8	1.3	Si
ini.	2	0	1611.52	1210			1750	659	SLV 7	0.54	No
fin.	2	0	1900.81	509			1750	659	SLV 7	1.3	Si
ini.	2	0	738.43	-279			1750	659	SLV 15	2.36	Si
fin.	2	0	524.62	-944			1750	659	SLV 15	0.7	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.754	SLV 7	No
V_SLV	0.487	SLV 13	No
PF_SLU	0.845	SLU 73	No
V_SLU	0.457	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
9.889	5.99	1.09	2.09	1	10.889	5.99	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	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	13269	2175.32	1248.72	SLU 73	0.57	No
fin.	3	10533	-1447.61	1248.72	SLU 73	0.86	No
ini.	3	12726	2057.27	1248.72	SLU 52	0.61	No
fin.	3	10035	-1366.59	1248.72	SLU 52	0.91	No
ini.	3	12726	2057.27	1248.72	SLU 55	0.61	No
fin.	3	10035	-1366.59	1248.72	SLU 55	0.91	No
ini.	3	13269	2175.32	1248.72	SLU 76	0.57	No
fin.	3	10533	-1447.61	1248.72	SLU 76	0.86	No
ini.	3	11989	1894.28	1248.72	SLU 65	0.66	No
fin.	3	9347	-1249.77	1248.72	SLU 65	1	No
ini.	3	12004	1928.07	1248.72	SLU 10	0.65	No
fin.	3	9447	-1298.93	1248.72	SLU 10	0.96	No
ini.	3	12546	2046.12	1248.72	SLU 31	0.61	No
fin.	3	9944	-1379.95	1248.72	SLU 31	0.9	No
ini.	3	12546	2046.12	1248.72	SLU 34	0.61	No
fin.	3	9944	-1379.95	1248.72	SLU 34	0.9	No
ini.	3	11989	1894.28	1248.72	SLU 68	0.66	No
fin.	3	9347	-1249.77	1248.72	SLU 68	1	No
ini.	3	12004	1928.07	1248.72	SLU 13	0.65	No
fin.	3	9447	-1298.93	1248.72	SLU 13	0.96	No

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	1745.14	-3606			1155	435	SLU 63	0.12	No
fin.	3	0	-1138.19	-2260			1155	435	SLU 63	0.19	No
ini.	3	0	1742.75	-3587			1155	435	SLU 80	0.12	No
fin.	3	0	-1134.42	-2260			1155	435	SLU 80	0.19	No
ini.	3	0	1863.2	-3966			1155	435	SLU 82	0.11	No
fin.	3	0	-1219.21	-2403			1155	435	SLU 82	0.18	No
ini.	3	0	2175.32	-3874			1155	435	SLU 76	0.11	No
fin.	3	0	-1447.61	-3084			1155	435	SLU 76	0.14	No
ini.	3	0	1742.75	-3587			1155	435	SLU 75	0.12	No
fin.	3	0	-1134.42	-2260			1155	435	SLU 75	0.19	No
ini.	3	0	2175.32	-3874			1155	435	SLU 73	0.11	No
fin.	3	0	-1447.61	-3084			1155	435	SLU 73	0.14	No
ini.	3	0	1733.99	-3619			1155	435	SLU 40	0.12	No
fin.	3	0	-1151.55	-2314			1155	435	SLU 40	0.19	No
ini.	3	0	1733.99	-3619			1155	435	SLU 42	0.12	No
fin.	3	0	-1151.55	-2314			1155	435	SLU 42	0.19	No
ini.	3	0	1863.2	-3966			1155	435	SLU 84	0.11	No
fin.	3	0	-1219.21	-2403			1155	435	SLU 84	0.18	No
ini.	3	0	1745.14	-3606			1155	435	SLU 61	0.12	No
fin.	3	0	-1138.19	-2260			1155	435	SLU 61	0.19	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	9896	1156.16	1415.81	SLV 4	1.22	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	2	7995	372.14	1415.81	SLV 4	3.8	Si
ini.	2	-2797	203.07	1415.81	SLV 13	6.97	Si
fin.	2	-1972	-1167.73	1415.81	SLV 13	1.21	Si
ini.	2	7446	1236.49	1415.81	SLV 15	1.15	Si
fin.	2	5160	-1787.57	1415.81	SLV 15	0.79	No
ini.	2	20254	2414.02	1415.81	SLV 11	0.59	No
fin.	2	14473	-1754.82	1415.81	SLV 11	0.81	No
ini.	2	20254	2414.02	1415.81	SLV 12	0.59	No
fin.	2	14473	-1754.82	1415.81	SLV 12	0.81	No
ini.	2	-2797	203.07	1415.81	SLV 14	6.97	Si
fin.	2	-1972	-1167.73	1415.81	SLV 14	1.21	Si
ini.	2	7446	1236.49	1415.81	SLV 16	1.15	Si
fin.	2	5160	-1787.57	1415.81	SLV 16	0.79	No
ini.	2	9896	1156.16	1415.81	SLV 3	1.22	Si
fin.	2	7995	372.14	1415.81	SLV 3	3.8	Si
ini.	2	20989	2389.93	1415.81	SLV 7	0.59	No
fin.	2	15324	-1106.9	1415.81	SLV 7	1.28	Si
ini.	2	20989	2389.93	1415.81	SLV 8	0.59	No
fin.	2	15324	-1106.9	1415.81	SLV 8	1.28	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	2414.02	-3252			1733	652	SLV 11	0.2	No
fin.	2	0	-1754.82	-3422			1733	652	SLV 11	0.19	No
ini.	2	0	2389.93	-2448			1733	652	SLV 7	0.27	No
fin.	2	0	-1106.9	-2355			1733	652	SLV 7	0.28	No
ini.	2	0	203.07	-2982			1733	652	SLV 14	0.22	No
fin.	2	0	-1167.73	-1683			1733	652	SLV 14	0.39	No
ini.	2	0	-1054.79	-591			1733	652	SLV 6	1.1	Si
fin.	2	0	959.23	2233			1733	652	SLV 6	0.29	No
ini.	2	0	203.07	-2982			1733	652	SLV 13	0.22	No
fin.	2	0	-1167.73	-1683			1733	652	SLV 13	0.39	No
ini.	2	0	1236.49	-3539			1733	652	SLV 15	0.18	No
fin.	2	0	-1787.57	-3060			1733	652	SLV 15	0.21	No
ini.	2	0	1236.49	-3539			1733	652	SLV 16	0.18	No
fin.	2	0	-1787.57	-3060			1733	652	SLV 16	0.21	No
ini.	2	0	2414.02	-3252			1733	652	SLV 12	0.2	No
fin.	2	0	-1754.82	-3422			1733	652	SLV 12	0.19	No
ini.	2	0	2389.93	-2448			1733	652	SLV 8	0.27	No
fin.	2	0	-1106.9	-2355			1733	652	SLV 8	0.28	No
ini.	2	0	-1054.79	-591			1733	652	SLV 5	1.1	Si
fin.	2	0	959.23	2233			1733	652	SLV 5	0.29	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.586	SLV 11	No
V_SLV	0.184	SLV 15	No
PF_SLU	0.574	SLU 73	No
V_SLU	0.11	SLU 82	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
9.889	5.99	3.99	4.9	0.91	10.889	5.99	3.99	4.9	0.91	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	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	-6720	1888.49	1091.22	SLU 10	0.58	No
fin.	3	-6720	-1423.25	1091.22	SLU 10	0.77	No
ini.	3	-6433	1868.14	1091.22	SLU 68	0.58	No
fin.	3	-6433	-1405.61	1091.22	SLU 68	0.78	No
ini.	3	-6433	1868.14	1091.22	SLU 65	0.58	No
fin.	3	-6433	-1405.61	1091.22	SLU 65	0.78	No
ini.	3	-6720	1888.49	1091.22	SLU 13	0.58	No
fin.	3	-6720	-1423.25	1091.22	SLU 13	0.77	No
ini.	3	-7667	2116.21	1091.22	SLU 73	0.52	No
fin.	3	-7667	-1602.41	1091.22	SLU 73	0.68	No
ini.	3	-7667	2116.21	1091.22	SLU 76	0.52	No
fin.	3	-7667	-1602.41	1091.22	SLU 76	0.68	No
ini.	3	-7151	2012.14	1091.22	SLU 52	0.54	No
fin.	3	-7151	-1519.3	1091.22	SLU 52	0.72	No
ini.	3	-7236	1992.56	1091.22	SLU 34	0.55	No
fin.	3	-7236	-1506.36	1091.22	SLU 34	0.72	No
ini.	3	-7236	1992.56	1091.22	SLU 31	0.55	No
fin.	3	-7236	-1506.36	1091.22	SLU 31	0.72	No
ini.	3	-7151	2012.14	1091.22	SLU 55	0.54	No

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	3	-7151	-1519.3	1091.22	SLU 55	0.72	No

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	2012.14	-2136			957	360	SLU 55	0.17	No
fin.	3	0	-1519.3	-4855			957	360	SLU 55	0.07	No
ini.	3	0	2116.21	-2054			957	360	SLU 76	0.18	No
fin.	3	0	-1602.41	-5296			957	360	SLU 76	0.07	No
ini.	3	0	2116.21	-2054			957	360	SLU 73	0.18	No
fin.	3	0	-1602.41	-5296			957	360	SLU 73	0.07	No
ini.	3	0	1655.15	-1068			957	360	SLU 40	0.34	No
fin.	3	0	-1266.17	-4675			957	360	SLU 40	0.08	No
ini.	3	0	1992.56	-1931			957	360	SLU 34	0.19	No
fin.	3	0	-1506.36	-4983			957	360	SLU 34	0.07	No
ini.	3	0	1992.56	-1931			957	360	SLU 31	0.19	No
fin.	3	0	-1506.36	-4983			957	360	SLU 31	0.07	No
ini.	3	0	2012.14	-2136			957	360	SLU 52	0.17	No
fin.	3	0	-1519.3	-4855			957	360	SLU 52	0.07	No
ini.	3	0	1778.8	-1190			957	360	SLU 82	0.3	No
fin.	3	0	-1362.22	-4988			957	360	SLU 82	0.07	No
ini.	3	0	1655.15	-1068			957	360	SLU 42	0.34	No
fin.	3	0	-1266.17	-4675			957	360	SLU 42	0.08	No
ini.	3	0	1778.8	-1190			957	360	SLU 84	0.3	No
fin.	3	0	-1362.22	-4988			957	360	SLU 84	0.07	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-7456	2635.79	1258.31	SLV 12	0.48	No
fin.	2	-7783	-1813.29	1258.31	SLV 12	0.69	No
ini.	2	2406	-1372.35	1258.31	SLV 5	0.92	No
fin.	2	2732	823.06	1258.31	SLV 5	1.53	Si
ini.	2	2406	-1372.35	1258.31	SLV 6	0.92	No
fin.	2	2732	823.06	1258.31	SLV 6	1.53	Si
ini.	2	-8064	2514.06	1258.31	SLV 8	0.5	No
fin.	2	-8162	-1511.56	1258.31	SLV 8	0.83	No
ini.	2	-3083	1417.56	1258.31	SLV 16	0.89	No
fin.	2	-3526	-1348.19	1258.31	SLV 16	0.93	No
ini.	2	3014	-1250.62	1258.31	SLV 10	1.01	Si
fin.	2	3112	521.33	1258.31	SLV 10	2.41	Si
ini.	2	-3083	1417.56	1258.31	SLV 15	0.89	No
fin.	2	-3526	-1348.19	1258.31	SLV 15	0.93	No
ini.	2	3014	-1250.62	1258.31	SLV 9	1.01	Si
fin.	2	3112	521.33	1258.31	SLV 9	2.41	Si
ini.	2	-8064	2514.06	1258.31	SLV 7	0.5	No
fin.	2	-8162	-1511.56	1258.31	SLV 7	0.83	No
ini.	2	-7456	2635.79	1258.31	SLV 11	0.48	No
fin.	2	-7783	-1813.29	1258.31	SLV 11	0.69	No

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	2514.06	-3043			1435	540	SLV 7	0.18	No
fin.	2	0	-1511.56	-4774			1435	540	SLV 7	0.11	No
ini.	2	0	1417.56	-2152			1435	540	SLV 16	0.25	No
fin.	2	0	-1348.19	-3956			1435	540	SLV 16	0.14	No
ini.	2	0	-1372.35	3180			1435	540	SLV 5	0.17	No
fin.	2	0	823.06	1440			1435	540	SLV 5	0.38	No
ini.	2	0	-1250.62	2587			1435	540	SLV 10	0.21	No
fin.	2	0	521.33	814			1435	540	SLV 10	0.66	No
ini.	2	0	2635.79	-3637			1435	540	SLV 12	0.15	No
fin.	2	0	-1813.29	-5400			1435	540	SLV 12	0.1	No
ini.	2	0	-1250.62	2587			1435	540	SLV 9	0.21	No
fin.	2	0	521.33	814			1435	540	SLV 9	0.66	No
ini.	2	0	1417.56	-2152			1435	540	SLV 15	0.25	No
fin.	2	0	-1348.19	-3956			1435	540	SLV 15	0.14	No
ini.	2	0	2514.06	-3043			1435	540	SLV 8	0.18	No
fin.	2	0	-1511.56	-4774			1435	540	SLV 8	0.11	No
ini.	2	0	2635.79	-3637			1435	540	SLV 11	0.15	No
fin.	2	0	-1813.29	-5400			1435	540	SLV 11	0.1	No
ini.	2	0	-1372.35	3180			1435	540	SLV 6	0.17	No
fin.	2	0	823.06	1440			1435	540	SLV 6	0.38	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.477	SLV 11	No
V_SLV	0.1	SLV 11	No
PF_SLU	0.516	SLU 73	No
V_SLU	0.068	SLU 73	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
12.819	-0.751	1.09	2.09	1	12.819	-1.751	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	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	1834	-14.92	1248.72	SLU 80	83.7	Si
fin.	3	1580	370.71	1248.72	SLU 80	3.37	Si
ini.	3	2046	-55.73	1248.72	SLU 55	22.41	Si
fin.	3	1645	380.03	1248.72	SLU 55	3.29	Si
ini.	3	1834	-14.92	1248.72	SLU 75	83.7	Si
fin.	3	1580	370.71	1248.72	SLU 75	3.37	Si
ini.	3	1834	-14.92	1248.72	SLU 78	83.7	Si
fin.	3	1580	370.71	1248.72	SLU 78	3.37	Si
ini.	3	2099	-52.36	1248.72	SLU 76	23.85	Si
fin.	3	1683	393.85	1248.72	SLU 76	3.17	Si
ini.	3	2046	-55.73	1248.72	SLU 52	22.41	Si
fin.	3	1645	380.03	1248.72	SLU 52	3.29	Si
ini.	3	1817	-15.67	1248.72	SLU 63	79.67	Si
fin.	3	1558	369.32	1248.72	SLU 63	3.38	Si
ini.	3	1870	-12.3	1248.72	SLU 84	101.49	Si
fin.	3	1597	383.14	1248.72	SLU 84	3.26	Si
ini.	3	1870	-12.3	1248.72	SLU 82	101.49	Si
fin.	3	1597	383.14	1248.72	SLU 82	3.26	Si
ini.	3	2099	-52.36	1248.72	SLU 73	23.85	Si
fin.	3	1683	393.85	1248.72	SLU 73	3.17	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	-55.73	254			1155	435	SLU 52	1.71	Si
fin.	3	0	380.03	988			1155	435	SLU 52	0.44	No
ini.	3	0	-12.3	11			1155	435	SLU 82	41.05	Si
fin.	3	0	383.14	1000			1155	435	SLU 82	0.43	No
ini.	3	0	-14.92	40			1155	435	SLU 78	10.89	Si
fin.	3	0	370.71	939			1155	435	SLU 78	0.46	No
ini.	3	0	-58.81	236			1155	435	SLU 34	1.85	Si
fin.	3	0	329.83	942			1155	435	SLU 34	0.46	No
ini.	3	0	-58.81	236			1155	435	SLU 31	1.85	Si
fin.	3	0	329.83	942			1155	435	SLU 31	0.46	No
ini.	3	0	-52.36	217			1155	435	SLU 76	2	Si
fin.	3	0	393.85	1054			1155	435	SLU 76	0.41	No
ini.	3	0	-52.36	217			1155	435	SLU 73	2	Si
fin.	3	0	393.85	1054			1155	435	SLU 73	0.41	No
ini.	3	0	-14.92	40			1155	435	SLU 80	10.89	Si
fin.	3	0	370.71	939			1155	435	SLU 80	0.46	No
ini.	3	0	-55.73	254			1155	435	SLU 55	1.71	Si
fin.	3	0	380.03	988			1155	435	SLU 55	0.44	No
ini.	3	0	-12.3	11			1155	435	SLU 84	41.05	Si
fin.	3	0	383.14	1000			1155	435	SLU 84	0.43	No

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-361	-944.42	1415.81	SLV 8	1.5	Si
fin.	2	2433	1353.86	1415.81	SLV 8	1.05	Si
ini.	2	5552	-107.08	1415.81	SLV 16	13.22	Si
fin.	2	7891	1227.71	1415.81	SLV 16	1.15	Si
ini.	2	2349	-858.21	1415.81	SLV 12	1.65	Si
fin.	2	5963	1713.07	1415.81	SLV 12	0.83	No
ini.	2	5552	-107.08	1415.81	SLV 15	13.22	Si
fin.	2	7891	1227.71	1415.81	SLV 15	1.15	Si
ini.	2	-241	914.29	1415.81	SLV 6	1.55	Si
fin.	2	-3824	-1230.25	1415.81	SLV 6	1.15	Si
ini.	2	2469	1000.5	1415.81	SLV 10	1.42	Si
fin.	2	-294	-871.04	1415.81	SLV 10	1.63	Si
ini.	2	-361	-944.42	1415.81	SLV 7	1.5	Si
fin.	2	2433	1353.86	1415.81	SLV 7	1.05	Si
ini.	2	-241	914.29	1415.81	SLV 5	1.55	Si
fin.	2	-3824	-1230.25	1415.81	SLV 5	1.15	Si
ini.	2	2469	1000.5	1415.81	SLV 9	1.42	Si
fin.	2	-294	-871.04	1415.81	SLV 9	1.63	Si
ini.	2	2349	-858.21	1415.81	SLV 11	1.65	Si
fin.	2	5963	1713.07	1415.81	SLV 11	0.83	No

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	-394.46	-665			1733	652	SLV 3	0.98	No
fin.	2	0	30.35	2025			1733	652	SLV 3	0.32	No
ini.	2	0	-944.42	736			1733	652	SLV 8	0.89	No
fin.	2	0	1353.86	1680			1733	652	SLV 8	0.39	No
ini.	2	0	163.16	-1343			1733	652	SLV 1	0.49	No
fin.	2	0	-744.89	1552			1733	652	SLV 1	0.42	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-944.42	736			1733	652	SLV 7	0.89	No
fin.	2	0	1353.86	1680			1733	652	SLV 7	0.39	No
ini.	2	0	-394.46	-665			1733	652	SLV 4	0.98	No
fin.	2	0	30.35	2025			1733	652	SLV 4	0.32	No
ini.	2	0	914.29	-1524			1733	652	SLV 5	0.43	No
fin.	2	0	-1230.25	103			1733	652	SLV 5	6.31	Si
ini.	2	0	914.29	-1524			1733	652	SLV 6	0.43	No
fin.	2	0	-1230.25	103			1733	652	SLV 6	6.31	Si
ini.	2	0	163.16	-1343			1733	652	SLV 2	0.49	No
fin.	2	0	-744.89	1552			1733	652	SLV 2	0.42	No
ini.	2	0	-858.21	1259			1733	652	SLV 12	0.52	No
fin.	2	0	1713.07	912			1733	652	SLV 12	0.72	No
ini.	2	0	-858.21	1259			1733	652	SLV 11	0.52	No
fin.	2	0	1713.07	912			1733	652	SLV 11	0.72	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.826	SLV 11	No
V_SLV	0.322	SLV 3	No
PF_SLU	3.171	SLU 73	Si
V_SLU	0.413	SLU 73	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
12.819	-0.751	3.99	4.9	0.91	12.819	-1.751	3.99	4.9	0.91	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	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	-445	-163.24	1091.22	SLU 47	6.68	Si
fin.	3	-445	207.05	1091.22	SLU 47	5.27	Si
ini.	3	-234	-184.71	1091.22	SLU 52	5.91	Si
fin.	3	-234	195.46	1091.22	SLU 52	5.58	Si
ini.	3	-151	-193.43	1091.22	SLU 76	5.64	Si
fin.	3	-151	191.28	1091.22	SLU 76	5.7	Si
ini.	3	-263	-140.63	1091.22	SLU 2	7.76	Si
fin.	3	-263	182.26	1091.22	SLU 2	5.99	Si
ini.	3	-263	-140.63	1091.22	SLU 5	7.76	Si
fin.	3	-263	182.26	1091.22	SLU 5	5.99	Si
ini.	3	-361	-171.97	1091.22	SLU 65	6.35	Si
fin.	3	-361	202.88	1091.22	SLU 65	5.38	Si
ini.	3	-234	-184.71	1091.22	SLU 55	5.91	Si
fin.	3	-234	195.46	1091.22	SLU 55	5.58	Si
ini.	3	-151	-193.43	1091.22	SLU 73	5.64	Si
fin.	3	-151	191.28	1091.22	SLU 73	5.7	Si
ini.	3	-445	-163.24	1091.22	SLU 44	6.68	Si
fin.	3	-445	207.05	1091.22	SLU 44	5.27	Si
ini.	3	-361	-171.97	1091.22	SLU 68	6.35	Si
fin.	3	-361	202.88	1091.22	SLU 68	5.38	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	-180.52	619			957	360	SLU 84	0.58	No
fin.	3	0	144.57	26			957	360	SLU 84	13.66	Si
ini.	3	0	-180.52	619			957	360	SLU 82	0.58	No
fin.	3	0	144.57	26			957	360	SLU 82	13.66	Si
ini.	3	0	-193.43	679			957	360	SLU 73	0.53	No
fin.	3	0	191.28	86			957	360	SLU 73	4.19	Si
ini.	3	0	-184.71	670			957	360	SLU 52	0.54	No
fin.	3	0	195.46	86			957	360	SLU 52	4.21	Si
ini.	3	0	-171.97	669			957	360	SLU 65	0.54	No
fin.	3	0	202.88	76			957	360	SLU 65	4.73	Si
ini.	3	0	-184.71	670			957	360	SLU 55	0.54	No
fin.	3	0	195.46	86			957	360	SLU 55	4.21	Si
ini.	3	0	-193.43	679			957	360	SLU 76	0.53	No
fin.	3	0	191.28	86			957	360	SLU 76	4.19	Si
ini.	3	0	-171.97	669			957	360	SLU 68	0.54	No
fin.	3	0	202.88	76			957	360	SLU 68	4.73	Si
ini.	3	0	-163.24	660			957	360	SLU 44	0.55	No
fin.	3	0	207.05	76			957	360	SLU 44	4.76	Si
ini.	3	0	-163.24	660			957	360	SLU 47	0.55	No
fin.	3	0	207.05	76			957	360	SLU 47	4.76	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-2150	-331.16	1258.31	SLV 15	3.8	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	2	-2180	321.02	1258.31	SLV 15	3.92	Si
ini.	2	-2150	-331.16	1258.31	SLV 16	3.8	Si
fin.	2	-2180	321.02	1258.31	SLV 16	3.92	Si
ini.	2	-704	307.11	1258.31	SLV 9	4.1	Si
fin.	2	-634	-328.66	1258.31	SLV 9	3.83	Si
ini.	2	-704	307.11	1258.31	SLV 10	4.1	Si
fin.	2	-634	-328.66	1258.31	SLV 10	3.83	Si
ini.	2	-1145	-559.39	1258.31	SLV 11	2.25	Si
fin.	2	-1220	545.34	1258.31	SLV 11	2.31	Si
ini.	2	290	371.44	1258.31	SLV 5	3.39	Si
fin.	2	364	-398.58	1258.31	SLV 5	3.16	Si
ini.	2	-151	-495.06	1258.31	SLV 8	2.54	Si
fin.	2	-221	475.42	1258.31	SLV 8	2.65	Si
ini.	2	-1145	-559.39	1258.31	SLV 12	2.25	Si
fin.	2	-1220	545.34	1258.31	SLV 12	2.31	Si
ini.	2	290	371.44	1258.31	SLV 6	3.39	Si
fin.	2	364	-398.58	1258.31	SLV 6	3.16	Si
ini.	2	-151	-495.06	1258.31	SLV 7	2.54	Si
fin.	2	-221	475.42	1258.31	SLV 7	2.65	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	307.11	-127			1435	540	SLV 10	4.25	Si
fin.	2	0	-328.66	-579			1435	540	SLV 10	0.93	No
ini.	2	0	371.44	-299			1435	540	SLV 6	1.8	Si
fin.	2	0	-398.58	-756			1435	540	SLV 6	0.71	No
ini.	2	0	-559.39	1084			1435	540	SLV 12	0.5	No
fin.	2	0	545.34	633			1435	540	SLV 12	0.85	No
ini.	2	0	307.11	-127			1435	540	SLV 9	4.25	Si
fin.	2	0	-328.66	-579			1435	540	SLV 9	0.93	No
ini.	2	0	-559.39	1084			1435	540	SLV 11	0.5	No
fin.	2	0	545.34	633			1435	540	SLV 11	0.85	No
ini.	2	0	-331.16	861			1435	540	SLV 15	0.63	No
fin.	2	0	321.02	416			1435	540	SLV 15	1.3	Si
ini.	2	0	-331.16	861			1435	540	SLV 16	0.63	No
fin.	2	0	321.02	416			1435	540	SLV 16	1.3	Si
ini.	2	0	371.44	-299			1435	540	SLV 5	1.8	Si
fin.	2	0	-398.58	-756			1435	540	SLV 5	0.71	No
ini.	2	0	-495.06	912			1435	540	SLV 8	0.59	No
fin.	2	0	475.42	456			1435	540	SLV 8	1.19	Si
ini.	2	0	-495.06	912			1435	540	SLV 7	0.59	No
fin.	2	0	475.42	456			1435	540	SLV 7	1.19	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	2.249	SLV 11	Si
V_SLV	0.498	SLV 11	No
PF_SLU	5.27	SLU 44	Si
V_SLU	0.531	SLU 73	No

Trave di accoppiamento 24

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
12.819	3.899	1.09	2.09	1	12.819	2.899	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	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	-350	138.79	1248.72	SLU 81	9	Si
fin.	3	-199	239.45	1248.72	SLU 81	5.22	Si
ini.	3	-2689	-32.61	1248.72	SLU 73	38.29	Si
fin.	3	-1832	249.09	1248.72	SLU 73	5.01	Si
ini.	3	-2689	-32.61	1248.72	SLU 76	38.29	Si
fin.	3	-1832	249.09	1248.72	SLU 76	5.01	Si
ini.	3	-1709	39.48	1248.72	SLU 78	31.63	Si
fin.	3	-1145	235.11	1248.72	SLU 78	5.31	Si
ini.	3	-1709	39.48	1248.72	SLU 75	31.63	Si
fin.	3	-1145	235.11	1248.72	SLU 75	5.31	Si
ini.	3	-1870	-11.63	1248.72	SLU 42	107.36	Si
fin.	3	-1283	237.16	1248.72	SLU 42	5.27	Si
ini.	3	-350	138.79	1248.72	SLU 83	9	Si
fin.	3	-199	239.45	1248.72	SLU 83	5.22	Si
ini.	3	-1820	30.65	1248.72	SLU 82	40.75	Si
fin.	3	-1230	260.41	1248.72	SLU 82	4.8	Si
ini.	3	-1870	-11.63	1248.72	SLU 40	107.36	Si
fin.	3	-1283	237.16	1248.72	SLU 40	5.27	Si
ini.	3	-1820	30.65	1248.72	SLU 84	40.75	Si

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
fin.	3	-1230	260.41	1248.72	SLU 84	4.8	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	-12	-747			1155	435	SLU 65	0.58	No
fin.	3	0	190.06	279			1155	435	SLU 65	1.56	Si
ini.	3	0	-25.63	-787			1155	435	SLU 52	0.55	No
fin.	3	0	223.7	375			1155	435	SLU 52	1.16	Si
ini.	3	0	-74.89	-758			1155	435	SLU 34	0.57	No
fin.	3	0	225.84	449			1155	435	SLU 34	0.97	No
ini.	3	0	-32.61	-821			1155	435	SLU 76	0.53	No
fin.	3	0	249.09	451			1155	435	SLU 76	0.96	No
ini.	3	0	-74.89	-758			1155	435	SLU 31	0.57	No
fin.	3	0	225.84	449			1155	435	SLU 31	0.97	No
ini.	3	0	-32.61	-821			1155	435	SLU 73	0.53	No
fin.	3	0	249.09	451			1155	435	SLU 73	0.96	No
ini.	3	0	-67.91	-723			1155	435	SLU 10	0.6	No
fin.	3	0	200.46	373			1155	435	SLU 10	1.17	Si
ini.	3	0	-67.91	-723			1155	435	SLU 13	0.6	No
fin.	3	0	200.46	373			1155	435	SLU 13	1.17	Si
ini.	3	0	-12	-747			1155	435	SLU 68	0.58	No
fin.	3	0	190.06	279			1155	435	SLU 68	1.56	Si
ini.	3	0	-25.63	-787			1155	435	SLU 55	0.55	No
fin.	3	0	223.7	375			1155	435	SLU 55	1.16	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	-2466	-746.65	1415.81	SLV 11	1.9	Si
fin.	2	1972	1858.43	1415.81	SLV 11	0.76	No
ini.	2	2388	996.77	1415.81	SLV 5	1.42	Si
fin.	2	-1925	-1597.2	1415.81	SLV 5	0.89	No
ini.	2	6090	1467.22	1415.81	SLV 9	0.96	No
fin.	2	933	-1383.1	1415.81	SLV 9	1.02	Si
ini.	2	-2466	-746.65	1415.81	SLV 12	1.9	Si
fin.	2	1972	1858.43	1415.81	SLV 12	0.76	No
ini.	2	-6167	-1217.1	1415.81	SLV 7	1.16	Si
fin.	2	-886	1644.33	1415.81	SLV 7	0.86	No
ini.	2	7414	1241.23	1415.81	SLV 14	1.14	Si
fin.	2	4632	1.22	1415.81	SLV 14	1164.48	Si
ini.	2	2388	996.77	1415.81	SLV 6	1.42	Si
fin.	2	-1925	-1597.2	1415.81	SLV 6	0.89	No
ini.	2	6090	1467.22	1415.81	SLV 10	0.96	No
fin.	2	933	-1383.1	1415.81	SLV 10	1.02	Si
ini.	2	7414	1241.23	1415.81	SLV 13	1.14	Si
fin.	2	4632	1.22	1415.81	SLV 13	1164.48	Si
ini.	2	-6167	-1217.1	1415.81	SLV 8	1.16	Si
fin.	2	-886	1644.33	1415.81	SLV 8	0.86	No

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	-326.95	-1123			1733	652	SLV 2	0.58	No
fin.	2	0	-712.45	767			1733	652	SLV 2	0.85	No
ini.	2	0	-991.11	-996			1733	652	SLV 3	0.65	No
fin.	2	0	260.01	805			1733	652	SLV 3	0.81	No
ini.	2	0	996.77	-727			1733	652	SLV 6	0.9	No
fin.	2	0	-1597.2	289			1733	652	SLV 6	2.26	Si
ini.	2	0	-326.95	-1123			1733	652	SLV 1	0.58	No
fin.	2	0	-712.45	767			1733	652	SLV 1	0.85	No
ini.	2	0	577.07	558			1733	652	SLV 15	1.17	Si
fin.	2	0	973.68	-436			1733	652	SLV 15	1.5	Si
ini.	2	0	577.07	558			1733	652	SLV 16	1.17	Si
fin.	2	0	973.68	-436			1733	652	SLV 16	1.5	Si
ini.	2	0	996.77	-727			1733	652	SLV 5	0.9	No
fin.	2	0	-1597.2	289			1733	652	SLV 5	2.26	Si
ini.	2	0	-991.11	-996			1733	652	SLV 4	0.65	No
fin.	2	0	260.01	805			1733	652	SLV 4	0.81	No
ini.	2	0	1241.23	431			1733	652	SLV 13	1.51	Si
fin.	2	0	1.22	-474			1733	652	SLV 13	1.38	Si
ini.	2	0	1241.23	431			1733	652	SLV 14	1.51	Si
fin.	2	0	1.22	-474			1733	652	SLV 14	1.38	Si

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	0.762	SLV 11	No
V_SLV	0.581	SLV 1	No
PF_SLU	4.795	SLU 82	Si
V_SLU	0.529	SLU 73	No

Trave di accoppiamento 25

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
12.819	3.899	3.99	4.9	0.91	12.819	2.899	3.99	4.9	0.91	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	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	2078	-256.36	1091.22	SLU 10	4.26	Si
fin.	3	2078	110.52	1091.22	SLU 10	9.87	Si
ini.	3	1839	-254.25	1091.22	SLU 42	4.29	Si
fin.	3	1839	91.03	1091.22	SLU 42	11.99	Si
ini.	3	2251	-283.1	1091.22	SLU 76	3.85	Si
fin.	3	2251	112.27	1091.22	SLU 76	9.72	Si
ini.	3	2078	-256.36	1091.22	SLU 13	4.26	Si
fin.	3	2078	110.52	1091.22	SLU 13	9.87	Si
ini.	3	1839	-254.25	1091.22	SLU 40	4.29	Si
fin.	3	1839	91.03	1091.22	SLU 40	11.99	Si
ini.	3	2084	-253.41	1091.22	SLU 55	4.31	Si
fin.	3	2084	101.9	1091.22	SLU 55	10.71	Si
ini.	3	2251	-283.1	1091.22	SLU 73	3.85	Si
fin.	3	2251	112.27	1091.22	SLU 73	9.72	Si
ini.	3	2084	-253.41	1091.22	SLU 52	4.31	Si
fin.	3	2084	101.9	1091.22	SLU 52	10.71	Si
ini.	3	2245	-286.04	1091.22	SLU 34	3.81	Si
fin.	3	2245	120.88	1091.22	SLU 34	9.03	Si
ini.	3	2245	-286.04	1091.22	SLU 31	3.81	Si
fin.	3	2245	120.88	1091.22	SLU 31	9.03	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	-253.41	702			957	360	SLU 52	0.51	No
fin.	3	0	101.9	-83			957	360	SLU 52	4.32	Si
ini.	3	0	-209.35	645			957	360	SLU 65	0.56	No
fin.	3	0	86.8	-146			957	360	SLU 65	2.47	Si
ini.	3	0	-251.31	683			957	360	SLU 82	0.53	No
fin.	3	0	82.42	-108			957	360	SLU 82	3.33	Si
ini.	3	0	-251.31	683			957	360	SLU 84	0.53	No
fin.	3	0	82.42	-108			957	360	SLU 84	3.33	Si
ini.	3	0	-286.04	677			957	360	SLU 31	0.53	No
fin.	3	0	120.88	66			957	360	SLU 31	5.49	Si
ini.	3	0	-283.1	744			957	360	SLU 76	0.48	No
fin.	3	0	112.27	-46			957	360	SLU 76	7.76	Si
ini.	3	0	-209.35	645			957	360	SLU 68	0.56	No
fin.	3	0	86.8	-146			957	360	SLU 68	2.47	Si
ini.	3	0	-286.04	677			957	360	SLU 34	0.53	No
fin.	3	0	120.88	66			957	360	SLU 34	5.49	Si
ini.	3	0	-253.41	702			957	360	SLU 55	0.51	No
fin.	3	0	101.9	-83			957	360	SLU 55	4.32	Si
ini.	3	0	-283.1	744			957	360	SLU 73	0.48	No
fin.	3	0	112.27	-46			957	360	SLU 73	7.76	Si

Verifiche a pressoflessione delle travi in muratura in combinazioni sismiche

Sezione	γM	N	M	Mu	Comb.	c.s.	Verifica
ini.	2	1705	-503.01	1258.31	SLV 12	2.5	Si
fin.	2	2223	78.59	1258.31	SLV 12	16.01	Si
ini.	2	-1334	513.88	1258.31	SLV 14	2.45	Si
fin.	2	-2091	-237.26	1258.31	SLV 14	5.3	Si
ini.	2	2428	-741.21	1258.31	SLV 8	1.7	Si
fin.	2	3277	191.47	1258.31	SLV 8	6.57	Si
ini.	2	2089	-621.21	1258.31	SLV 3	2.03	Si
fin.	2	2846	224	1258.31	SLV 3	5.62	Si
ini.	2	-1674	633.89	1258.31	SLV 10	1.99	Si
fin.	2	-2522	-204.74	1258.31	SLV 10	6.15	Si
ini.	2	2428	-741.21	1258.31	SLV 7	1.7	Si
fin.	2	3277	191.47	1258.31	SLV 7	6.57	Si
ini.	2	-1334	513.88	1258.31	SLV 13	2.45	Si
fin.	2	-2091	-237.26	1258.31	SLV 13	5.3	Si
ini.	2	-1674	633.89	1258.31	SLV 9	1.99	Si
fin.	2	-2522	-204.74	1258.31	SLV 9	6.15	Si
ini.	2	2089	-621.21	1258.31	SLV 4	2.03	Si
fin.	2	2846	224	1258.31	SLV 4	5.62	Si
ini.	2	1705	-503.01	1258.31	SLV 11	2.5	Si
fin.	2	2223	78.59	1258.31	SLV 11	16.01	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	-621.21	970			1435	540	SLV 4	0.56	No
fin.	2	0	224	376			1435	540	SLV 4	1.44	Si
ini.	2	0	-741.21	1069			1435	540	SLV 8	0.51	No
fin.	2	0	191.47	418			1435	540	SLV 8	1.29	Si
ini.	2	0	633.89	-439			1435	540	SLV 10	1.23	Si
fin.	2	0	-204.74	-1002			1435	540	SLV 10	0.54	No

Sezione	γM	N	M	V	Vt	Vp	Vt fess. diag.	Vt,lim	Comb.	c.s.	Verifica
ini.	2	0	-503.01	786			1435	540	SLV 12	0.69	No
fin.	2	0	78.59	118			1435	540	SLV 12	4.57	Si
ini.	2	0	513.88	-340			1435	540	SLV 14	1.59	Si
fin.	2	0	-237.26	-960			1435	540	SLV 14	0.56	No
ini.	2	0	-741.21	1069			1435	540	SLV 7	0.51	No
fin.	2	0	191.47	418			1435	540	SLV 7	1.29	Si
ini.	2	0	-621.21	970			1435	540	SLV 3	0.56	No
fin.	2	0	224	376			1435	540	SLV 3	1.44	Si
ini.	2	0	-503.01	786			1435	540	SLV 11	0.69	No
fin.	2	0	78.59	118			1435	540	SLV 11	4.57	Si
ini.	2	0	633.89	-439			1435	540	SLV 9	1.23	Si
fin.	2	0	-204.74	-1002			1435	540	SLV 9	0.54	No
ini.	2	0	513.88	-340			1435	540	SLV 13	1.59	Si
fin.	2	0	-237.26	-960			1435	540	SLV 13	0.56	No

Tabella dei coefficienti di sicurezza minimi

Stato limite	Coeff.s.	Comb.	Verifica
PF_SLV	1.698	SLV 7	Si
V_SLV	0.505	SLV 7	No
PF_SLU	3.815	SLU 31	Si
V_SLU	0.484	SLU 73	No