Table T9:Residuals per site of the ITRF96 combination

10002 GRASSE

DOMES NUM.	CDP NUM.	*	RX m	RY m	RZ m	NX	NY	NZ	RE m	RN m	RU m	EPOCH y
Positions												
M003	7605	TIE10002	-.0012	-.0007	.0013	2.6	.1	.7	-.0005	.0018	-.0001	93: 1
M003	7605	R GSFC	.0277	.0078	.0170	.3	.1	.0	.0045	-.0073	.0323	93: 1
M003	7605	R NOAA	.0112	.0043	.0099	.1	.4	-.5	.0029	-.0009	.0153	93: 1
M003	7605	P CODE	.0081	-.0036	.0039	.3	-.2	-.3	-.0046	-.0024	.0082	95: 76
M006	GRAS	TIE10002	-.0123	-.0012	-.0019	.0	.0	.0	.0003	.0071	-.0102	93: 1
M006	GRAS	P CODE	.0051	.0000	.0052	.7	.4	-.5	-.0006	.0003	.0072	95: 76
M006	GRAS	P CODE	.0016	.0013	.0040	.0	.0	.0	.0011	.0017	.0040	95: 76
M006	GRAS	P04 EUR	.0047	.0006	.0040	.5	.0	-.1	.0000	-.0003	.0062	96: 90
M006	GRAS	P03 EUR	.0022	-.0015	.0023	.9	.4	-.1	-.0018	.0003	.0030	96:339
M006	GRAS	P MIT	.0074	-.0025	.0081	.3	.0	.4	-.0034	.0010	.0107	97:151
M006	GRAS	P NCL	.0017	-.0034	.0031	.1	-.8	.5	-.0036	.0014	.0030	96: 1
M006	GRAS	P JPL	.0115	.0012	.0114	1.2	.0	1.5	-.0002	.0003	.0162	96: 1
S001	7835	TIE10002	.0000	.0000	.0000	3.2	.4	.2	.0000	.0000	.0000	93: 1
S001	7835	L CSR	-.0028	.0005	.0044	-.2	.0	1.4	.0009	.0051	.0010	93: 1
S001	7835	L GSFC	.0087	-.0080	-.0130	.6	.8	-1.5	-.0090	-.0147	-.0035	86:182
S002	7845	TIE10002	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S014		TIE10002	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1

		RVX m/y	RVY m/y	RVZ m/y	NVX	NVY	NVZ	RVE m/y	RVN m/y	RVU m/y
Velocities										
M003	7605 R GSFC	-.0002	.0001	.0001	-.8	-.3	.0	.0001	.0002	.0000
M003	7605 R NOAA	-.0002	.0002	.0017	.0	.0	.0	.0002	.0014	.0011
M003	7605 P CODE	-.0005	-.0015	.0013	-.1	-.7	1.0	-.0014	.0014	.0004
M006	GRAS P CODE	-.0005	-.0014	.0013	.5	.1	.3	-.0014	.0015	.0004
M006	GRAS P CODE	-.0005	-.0015	.0013	.3	.0	.4	-.0014	.0014	.0004
M006	GRAS P04 EUR	.0006	.0095	-.0017	.0	.7	.3	.0093	-.0025	.0000
M006	GRAS P03 EUR	.0016	-.0010	-.0014	.2	.4	.4	-.0012	-.0020	.0000
M006	GRAS P MIT	-.0036	.0006	.0029	-1.1	-.5	-.3	.0010	.0045	-.0005
M006	GRAS P NCL	.0040	.0050	.0026	1.7	-.2	.7	.0045	-.0012	.0051
M006	GRAS P JPL	-.0014	-.0023	-.0021	-.3	-.1	-.2	-.0021	-.0004	-.0027
S001	7835 L CSR	.0011	.0003	.0061	2.9	.7	2.0	.0002	.0037	.0050
S001	7835 L GSFC	-.0007	.0010	.0019	.1	.5	-.1	.0011	.0018	.0009

10003 TOULOUSE

Positions											
M003	7608	TIE10003	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M003	7608	R GSFC	.0061	.0098	.0370	.1	.4	.7	.0097	.0224	.0301	93: 1
M003	7608	R NOAA	.0051	.0133	.0402	.0	.9	1.2	.0132	.0254	.0316	93: 1
M004	TOUL	TIE10003	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001	TLSA	TIE10003	-.0006	.0005	.0006	-.1	.1	.1	.0005	.0008	.0000	93: 1
S001	TLSA	D GRGS	.0210	-.0345	-.0344	.6	-.6	-1.3	-.0350	-.0388	-.0091	93: 1
S001	TLSA	D CSR	.0082	-.0116	-.0044	.2	-.2	-.1	-.0118	-.0086	.0027	93: 1
S001	TLSA	D IGN	-.0133	-.0036	.0064	-.4	-.1	1.1	-.0032	.0139	-.0053	95:100
S003	TLHA	TIE10003	-.0006	.0005	.0006	-.1	.1	.1	.0005	.0008	.0000	93: 1

Velocities										
M003	7608 R GSFC	-.0118	.0168	.0119	-.5	.6	.0	.0171	.0165	.0000
M003	7608 R NOAA	-.0117	.0168	.0134	.0	.0	.0	.0171	.0175	.0011
S001	TLSA D GRGS	-.0067	.0089	.0066	.2	-.4	-1.2	.0091	.0093	-.0001
S001	TLSA D CSR	-.0031	.0101	.0062	.1	.2	.3	.0102	.0064	.0022
S001	TLSA D IGN	-.0109	.0170	.0118	-.5	1.1	.4	.0173	.0158	.0006

10004 BREST

Positions

M002 7604 TIE10004	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7604 R GSFC	-.0135	-.0018	-.0151	-.1	.0	-.1	-.0029	-.0001	-.0202	93: 1
M002 7604 R NOAA	.0098	-.0010	.0153	.0	.0	.0	-.0002	.0028	.0180	93: 1
S001 TIE10004	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1

Velocities

M002 7604 R GSFC	.0007	.0004	-.0006	.0	.0	.0	.0005	-.0009	.0000
M002 7604 R NOAA	.0010	.0003	.0011	.0	.0	.0	.0003	.0000	.0015

10202 REYKJAVIK

Positions

M001 REYK P CODE	.0084	.0003	.0071	.7	.4	.2	.0034	-.0038	.0097	95: 76
M001 REYK P04 EUR	.0024	-.0010	.0101	-.1	-.2	1.7	-.0001	.0020	.0102	96: 90
M001 REYK P03 EUR	.0020	-.0021	.0042	.8	.9	.3	-.0011	-.0006	.0049	96:339
M001 REYK P MIT	-.0045	-.0024	-.0008	-1.3	-.4	.4	-.0040	.0026	-.0022	97:151
M001 REYK P NCL	.0029	-.0047	.0038	.5	-1.1	-1.0	-.0032	-.0023	.0054	96: 1
M001 REYK P JPL	.0004	-.0078	.0051	-.1	-1.0	.2	-.0071	-.0008	.0061	96: 1
S001 REYA D GRGS	-.0351	.0251	.0026	-1.0	1.1	.4	.0101	.0389	-.0159	93: 1
S001 REYA D CSR	-.0156	-.0278	-.0293	-.4	-.6	-.7	-.0317	-.0091	-.0282	93: 1
S001 REYA D IGN	.0112	.0025	-.0076	1.1	-.4	.1	.0065	-.0118	-.0027	95:100

Velocities

M001 REYK P CODE	-.0025	-.0046	.0004	.1	-.1	.4	-.0052	.0007	.0002
M001 REYK P04 EUR	-.0075	-.0423	-.0043	-.3	-3.0	-.1	-.0420	-.0099	.0000
M001 REYK P03 EUR	-.0081	-.0104	.0018	-.3	-1.5	.1	-.0127	.0041	.0000
M001 REYK P MIT	-.0050	.0008	-.0005	-1.4	-.3	.7	-.0011	.0042	-.0026
M001 REYK P NCL	-.0052	.0069	-.0084	-.8	.6	-.2	.0045	.0030	-.0108
M001 REYK P JPL	-.0010	.0079	-.0039	.1	-.3	.3	.0070	.0018	-.0052
S001 REYA D GRGS	.0054	-.0051	.0020	-1.0	1.0	.8	-.0027	-.0054	.0048
S001 REYA D CSR	.0050	-.0037	.0122	-.4	-.7	.3	-.0016	-.0002	.0136
S001 REYA D IGN	-.0007	.0108	.0062	.3	.7	.1	.0097	.0069	.0035

10204 HOEFN

Positions

M001 7635 R GSFC	.0046	-.0027	.0134	.1	.1	.0	-.0014	.0012	.0143	93: 1
M001 7635 R NOAA	.0005	-.0015	.0074	-.1	.0	.0	-.0013	.0024	.0071	93: 1

Velocities

M001 7635 R GSFC	.0008	.0007	-.0003	.0	.0	.0	.0009	-.0007	.0000
M001 7635 R NOAA	.0013	.0000	.0018	.0	.0	.0	.0003	-.0004	.0021

10302 TROMSO

Positions

M002 7602 TIE10302	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7602 R GSFC	.0054	-.0445	-.0033	.2	-3.2	.5	-.0439	.0076	-.0063	93: 1
M002 7602 R NOAA	.0176	-.0421	.0375	.5	-4.5	1.2	-.0456	.0103	.0362	93: 1
M002 7602 L CSR	-.0213	-.0136	-.0429	.3	.3	-.1	-.0060	.0082	-.0487	93: 1
M003 TROM TIE10302	.0009	-.0069	.0005	.3	-2.3	.2	-.0068	.0015	.0000	93: 1
M003 TROM P EMR	.0022	-.0076	.0089	.7	.5	-.3	-.0078	.0035	.0082	96: 1
M003 TROM P GFZ	-.0116	-.0140	.0197	-.1	.8	.0	-.0094	.0214	.0131	94:365
M003 TROM P CODE	.0000	-.0018	-.0029	-.7	.7	.2	-.0017	-.0004	-.0029	95: 76
M003 TROM P04 EUR	.0010	-.0004	-.0038	-.3	.8	-.4	-.0007	-.0021	-.0033	96: 90
M003 TROM P03 EUR	-.0037	.0004	-.0106	-.6	2.4	-1.2	.0016	-.0005	-.0111	96:339
M003 TROM P MIT	-.0047	-.0002	-.0106	-.6	.3	-1.1	.0014	.0005	-.0115	97:151
M003 TROM P NCL	.0033	-.0029	.0076	1.1	-.6	.0	-.0038	.0006	.0079	96: 1
M003 TROM P JPL	.0028	.0010	.0067	.8	.4	.2	.0001	-.0005	.0073	96: 1

```
S010 TROA TIE10302     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1

Velocities
M002 7602 R GSFC      -.0006 -.0134 -.0062   .1   .8   .0 -.0124  .0025 -.0075
M002 7602 R NOAA       .0011 -.0157  .0053  -.3   .1   .2 -.0152  .0056  .0035
M002 7602 L CSR       -.0112 -.0160 -.0123   .1   .0  -.1 -.0115  .0105 -.0171
M003 TROM P EMR       -.0001 -.0009 -.0016  -.1   .1  -.4 -.0008 -.0002 -.0017
M003 TROM P GFZ       -.0039 -.0016 -.0030  -.5  -.9   .4 -.0003  .0029 -.0042
M003 TROM P CODE       .0002 -.0044  .0025  -.2 -1.7   .4 -.0042  .0021  .0019
M003 TROM P04 EUR     -.0231 -.0337  .0122  -.6 -2.2   .0 -.0244  .0350  .0000
M003 TROM P03 EUR     -.0031  .0187 -.0012   .7  1.9   .1  .0187 -.0034  .0000
M003 TROM P MIT       -.0054  .0041 -.0093   .5   .9  -.1  .0057  .0003 -.0101
M003 TROM P NCL       -.0056  .0016 -.0147  -.5 -1.4  -.1  .0033 -.0007 -.0154
M003 TROM P JPL       -.0008 -.0029 -.0004  -.5 -1.8  -.1 -.0025  .0015 -.0010

10307 OSLO

Positions
M001 OSLO P03 EUR      .0028 -.0022  .0042   .5  -.6   .0 -.0027  .0001  .0048 96:339
M001 OSLO P MIT        .0263  .0022  .0462  1.3   .1  1.0 -.0025  .0006  .0531 97:151
M001 OSLO P NCL       -.0758  .0322 -.1123 -1.3  4.6  -.1  .0453  .0028 -.1316 96:  1

Velocities
M001 OSLO P03 EUR     -.0122  .0255  .0043  -.8  3.8   .0  .0273  .0085  .0000
M001 OSLO P MIT        .0614  .0090  .1137   .7  -.1   .2 -.0022  .0037  .1295
M001 OSLO P NCL        .0740 -.0329  .1081  -.2 -2.0  -.1 -.0457 -.0033  .1271

10317 NY-ALESUND

Positions
M001 NYAL TIE10317     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M001 NYAL P GFZ       -.0091 -.0194  .0309   .4  -.4   .1 -.0171  .0186  .0278 94:365
M001 NYAL P CODE       .0038 -.0020  .0015  1.0 -1.3  -.5 -.0028 -.0030  .0021 95: 76
M001 NYAL P04 EUR      .0037 -.0008  .0000   .2   .7  -.3 -.0015 -.0034  .0006 96: 90
M001 NYAL P03 EUR     -.0028 -.0019 -.0124 -1.0   .6   .1 -.0013  .0007 -.0127 96:339
M001 NYAL P MIT       -.0067 -.0009 -.0146  -.7   .0 -2.1  .0004  .0038 -.0156 97:151
M001 NYAL P NCL        .0015 -.0028  .0066   .1   .0   .5 -.0031  .0004  .0067 96:  1
S002 SPIA TIE10317     .0000 -.0032 -.0075   .0  -.9 -2.2 -.0031 -.0008 -.0075 93:  1
S002 SPIA D GRGS      -.0043  .0091  .0396  -.2   .5  1.8  .0098  .0099  .0385 93:  1
S002 SPIA D CSR       -.0467 -.0500  .1389  -.2  -.2   .4 -.0393  .0817  .1256 93:  1
S002 SPIA D IGN       -.0168  .0078  .0393 -1.7  1.0  4.4  .0111  .0221  .0358 95:100
S003 7331 R GSFC       .0013 -.0033  .0052   .3   .0  -.2 -.0035  .0005  .0052 93:  1
S003 7331 R GIUB       .0207 -.0100  .0462   .4  1.0  1.7 -.0141 -.0090  .0488 93:  1
S003 7331 R NOAA       .0079 -.0003  .0291  1.1   .5   .5 -.0019 -.0019  .0301 93:  1

Velocities
M001 NYAL P GFZ       -.0055  .0022 -.0102  -.7  -.2   .3  .0033  .0029 -.0109
M001 NYAL P CODE      -.0008 -.0030 -.0010  -.2 -2.0   .3 -.0028  .0012 -.0012
M001 NYAL P04 EUR     -.0261 -.0467  .0069  -.1 -2.4   .1 -.0403  .0358  .0000
M001 NYAL P03 EUR     -.0199  .0022  .0037 -1.8  1.3   .2  .0063  .0194  .0000
M001 NYAL P MIT       -.0083  .0030 -.0091   .4   .4   .4  .0047  .0056 -.0104
M001 NYAL P NCL       -.0032  .0037 -.0141  -.4  -.5   .2  .0043 -.0004 -.0143
S002 SPIA D GRGS       .0057  .0053 -.0075  1.1  2.5  1.9  .0040 -.0080 -.0061
S002 SPIA D CSR        .0044  .0097 -.0126  -.2  -.1   .4  .0085 -.0086 -.0112
S002 SPIA D IGN       -.0006  .0015  .0027   .4   .3  -.9  .0016  .0008  .0026
S003 7331 R GSFC      -.0007  .0005 -.0015  -.2  -.6 -1.2  .0006  .0003 -.0016
S003 7331 R GIUB      -.0003 -.0010 -.0002   .0   .0   .0 -.0009  .0005 -.0003
S003 7331 R NOAA      -.0016 -.0017 -.0005   .0   .0   .0 -.0014  .0018 -.0008

10322 DOMEN/VARDO

Positions
M002 VARD P03 EUR      .0012  .0004  .0030   .5   .6   .0 -.0003 -.0002  .0033 96:339
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M002 VARD P MIT	-.0006	.0018	-.0068	.1	-.2	-.1	.0019	-.0027	-.0062	97:151
M002 VARD P NCL	.0275	.0081	.0676	.5	.0	.0	-.0072	-.0034	.0730	96: 1
Velocities										
M002 VARD P03 EUR	-.0093	-.0056	.0039	.5	-.1	.0	.0000	.0115	.0000	
M002 VARD P MIT	-.0114	.0031	-.0149	-.4	.5	-.5	.0085	.0027	-.0168	
M002 VARD P NCL	-.0282	-.0072	-.0695	-.1	.1	.3	.0083	.0029	-.0748	
10325 HONEFOSS										
Positions										
M001 HONE P JPL	-.1081	.0647	-.1288	.0	.0	.0	.0829	.0182	-.1589	96: 1
Velocities										
M001 HONE P JPL	-.0232	.0116	-.0268	-.1	-.3	.2	.0155	.0047	-.0336	
10329 TRYSIL										
Positions										
M001 7607 R GSFC	.0000	-.0025	.0052	.0	.0	-.1	-.0025	.0029	.0043	93: 1
M001 7607 R NOAA	.0032	-.0014	.0156	.0	.0	.0	-.0020	.0049	.0150	93: 1
Velocities										
M001 7607 R GSFC	.0005	.0017	.0024	.0	.2	.2	.0016	.0004	.0025	
M001 7607 R NOAA	-.0009	-.0013	-.0014	.0	-.1	-.1	-.0010	.0004	-.0018	
10330 STAVANGER										
Positions										
M001 STAV P03 EUR	.0018	-.0029	.0034	.5	-1.0	.2	-.0031	.0004	.0037	96:339
M001 STAV P MIT	.0073	-.0052	.0124	.3	-.2	.1	-.0059	.0006	.0141	97:151
M001 STAV P NCL	-.0007	.0050	-.0185	.0	.6	-.7	.0050	-.0093	-.0160	96: 1
Velocities										
M001 STAV P03 EUR	-.0022	.0093	.0008	.4	1.2	.0	.0094	.0015	.0000	
M001 STAV P MIT	.0132	-.0086	.0283	.4	-1.0	.1	-.0099	.0040	.0306	
M001 STAV P NCL	-.0005	-.0043	.0163	-.3	-.3	.2	-.0042	.0092	.0135	
10331 TRONDHEIM										
Positions										
M001 TRON P03 EUR	.0020	-.0008	.0048	.5	.1	.3	-.0012	.0005	.0051	96:339
M001 TRON P MIT	.0035	.0019	.0068	.2	.2	-.1	.0012	-.0003	.0077	97:151
M001 TRON P NCL	.0230	-.0008	.0246	.5	-.5	-.4	-.0049	-.0091	.0321	96: 1
Velocities										
M001 TRON P03 EUR	-.0030	-.0050	.0019	.5	-.5	.0	-.0044	.0043	.0000	
M001 TRON P MIT	.0026	.0061	.0157	.3	.7	-.1	.0056	.0038	.0157	
M001 TRON P NCL	-.0244	.0017	-.0278	-.3	.3	.1	.0061	.0088	-.0355	
10402 ONSALA										
Positions										
M004 ONSA TIE10402	.0072	.0015	.0017	.0	.0	.0	.0000	-.0053	.0054	93: 1
M004 ONSA P GFZ	-.0122	-.0177	.0148	-2.4	-3.2	2.5	-.0148	.0211	.0040	94:365
M004 ONSA P CODE	-.0002	-.0034	.0003	-.1	-2.0	.8	-.0033	.0009	-.0002	95: 76
M004 ONSA P04 EUR	-.0007	-.0014	-.0029	-.2	-.7	.1	-.0012	-.0007	-.0029	96: 90
M004 ONSA P03 EUR	-.0037	-.0022	-.0059	-.9	1.2	-1.0	-.0014	.0003	-.0071	96:339
M004 ONSA P MIT	-.0048	-.0021	-.0041	-.9	.1	-1.0	-.0010	.0021	-.0063	97:151
M004 ONSA P NCL	-.0001	-.0034	.0018	-.3	-.3	.9	-.0034	.0016	.0011	96: 1
M004 ONSA P JPL	-.0001	.0001	.0015	-.1	.1	.6	.0001	.0008	.0012	96: 1
M006 7211 TIE10402	.0000	.0000	.0000	-1.7	-.4	-.4	.0000	.0000	.0000	93: 1
M006 7211 R GSFC	.0045	-.0009	.0159	.2	.1	.1	-.0018	.0051	.0157	93: 1

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S002 7213 TIE10402     .0000  .0001  .0001 -1.7  -.3  -.3  .0001  .0000  .0001 93:  1
S002 7213 R GSFC       .0008 -.0026  .0088   .9  -.7  1.5 -.0027  .0045  .0076 93:  1
S002 7213 R GIUB       .0085 -.0032  .0105  1.2  -.4   .6 -.0049 -.0008  .0130 93:  1
S002 7213 R NOAA       .0018 -.0015  .0105   .8  -.4   .8 -.0018  .0044  .0096 93:  1

Velocities
M004 CNSA P GFZ       -.0030  .0026 -.0005 -1.7  -.5   .8  .0032  .0017 -.0017
M004 CNSA P CODE      -.0005 -.0008  .0023  -.4  -.5   .4 -.0007  .0017  .0016
M004 CNSA P04 EUR     -.0057 -.0070  .0045  -.3 -1.2   .3 -.0056  .0083  .0000
M004 CNSA P03 EUR     -.0033  .0017  .0019   .0  1.2   .4  .0023  .0035  .0000
M004 CNSA P MIT       -.0102  .0023 -.0097  -.9   .3 -2.0  .0044  .0027 -.0132
M004 CNSA P NCL       -.0041  .0033 -.0107 -1.3  -.5 -1.5  .0041 -.0030 -.0108
M004 CNSA P JPL       -.0015  .0003 -.0008   .0  1.1  -.4  .0006  .0008 -.0015
M006 7211 R GSFC      -.0017  .0000 -.0025   .0   .0   .0  .0004  .0001 -.0030
S002 7213 R GSFC      -.0017  .0000 -.0025 -1.4 -1.1  -.3  .0004  .0001 -.0030
S002 7213 R GIUB       .0002 -.0007 -.0001 -1.5   .3  -.3 -.0007 -.0001  .0000
S002 7213 R NOAA      -.0013 -.0004 -.0006 -1.2   .1  -.1 -.0001  .0008 -.0012

10403 KIRUNA

Positions
M002 KIRU P04 EUR      .0039 -.0009 -.0020   .1  -.2 -1.1 -.0022 -.0038 -.0006 96: 90
M002 KIRU P03 EUR     -.0040 -.0038 -.0105  -.7  -.6  -.5 -.0021  .0008 -.0116 96:339
M002 KIRU P MIT       -.0076 -.0034 -.0173  -.8  -.2 -1.7 -.0004  .0012 -.0192 97:151
M002 KIRU P NCL        .0106 -.0011  .0217  2.7  -.3   .4 -.0048 -.0006  .0236 96:  1
M002 KIRU P JPL        .0041  .0004  .0091  1.1  -.2   .6 -.0011 -.0003  .0099 96:  1

Velocities
M002 KIRU P04 EUR     -.0172 -.0286  .0107  -.2 -2.0   .0 -.0206  .0284  .0000
M002 KIRU P03 EUR     -.0095 -.0045  .0043  -.7 -1.3   .1 -.0008  .0113  .0000
M002 KIRU P MIT       -.0145  .0003 -.0191  -.7   .2  -.3  .0055  .0052 -.0228
M002 KIRU P NCL       -.0200  .0003 -.0417 -2.0   .7   .2  .0074  .0015 -.0457
M002 KIRU P JPL        .0001 -.0014 -.0033  -.1  -.1 -1.1 -.0013 -.0009 -.0032

10405 MAARTSBO

Positions
M002 MAR6 P03 EUR     -.0006 -.0012 -.0013   .1   .3  -.1 -.0010  .0001 -.0016 96:339
M002 MAR6 P MIT        .0002  .0016  .0014   .1   .0   .0  .0015  .0001  .0015 97:151
M002 MAR6 P NCL        .0107 -.0120  .0144   .2 -1.2   .1 -.0146  .0013  .0158 96:  1

Velocities
M002 MAR6 P03 EUR     -.0051 -.0087  .0042   .1 -1.3   .0 -.0068  .0086  .0000
M002 MAR6 P MIT       -.0075  .0066 -.0017  -.2   .7  -.3  .0085  .0037 -.0041
M002 MAR6 P NCL       -.0113  .0132 -.0161  -.3   .6  -.3  .0160 -.0020 -.0174

10422 KIRUNA

Positions
M001 KIR0 P03 EUR      .0002 -.0009 -.0003   .4   .0   .0 -.0009  .0000 -.0003 96:339
M001 KIR0 P MIT       -.0075 -.0091 -.0266  -.2  -.7  -.8 -.0058 -.0005 -.0285 97:151

Velocities
M001 KIR0 P03 EUR     -.0095 -.0045  .0043   .0   .0   .0 -.0008  .0113  .0000
M001 KIR0 P MIT       -.0300 -.0291 -.0735  -.3 -1.8  -.7 -.0164  .0079 -.0826

10423 VISBY

Positions
M001 VIS0 P03 EUR     -.0010 -.0014 -.0022  -.1   .4  -.2 -.0010 -.0001 -.0026 96:339
M001 VIS0 P MIT        .0016  .0021  .0034   .1   .1   .0  .0015  .0000  .0040 97:151
M001 VIS0 P NCL        .0081 -.0055  .0157   .1  -.1   .3 -.0078  .0033  .0165 96:  1
```

Velocities

M001 VIS0 P03 EUR	-.0063	-.0061	.0050	-.3	-.4	.0	-.0038	.0093	.0000	
M001 VIS0 P MIT	-.0058	.0082	-.0002	-.1	.7	-.4	.0096	.0023	-.0017	
M001 VIS0 P NCL	-.0087	.0065	-.0174	-.1	.2	-.2	.0089	-.0041	-.0180	

10424 VILHELMINA

Positions

M001 VIL0 P03 EUR	.0006	-.0002	-.0005	.4	.6	-.3	-.0003	-.0007	-.0003	96:339
M001 VIL0 P MIT	-.0028	.0021	-.0090	.0	.1	-.4	.0028	-.0019	-.0091	97:151
M001 VIL0 P NCL	.0270	-.0104	.0485	.5	-1.3	.4	-.0177	.0000	.0536	96: 1

Velocities

M001 VIL0 P03 EUR	-.0092	-.0125	.0059	.0	-1.5	.0	-.0094	.0138	.0000	
M001 VIL0 P MIT	-.0145	.0057	-.0240	-.1	.9	-.7	.0096	.0008	-.0270	
M001 VIL0 P NCL	-.0274	.0118	-.0499	.0	.6	-.1	.0191	-.0006	-.0549	

10503 METSAHOVI

Positions

M002 7601 TIE10503	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7601 R GSFC	.0097	.0001	.0097	.1	.0	-.1	-.0039	-.0028	.0128	93: 1
M002 7601 R NOAA	.0248	.0050	.0345	.6	-.2	-.3	-.0056	-.0042	.0422	93: 1
S001 7805 TIE10503	.0000	.0001	.0000	.0	.0	.0	.0001	.0000	.0000	93: 1
S001 7805 L CSR	.0821	-.1130	.1269	.4	-.9	.2	-.1368	.0386	.1241	93: 1
S011 METS TIE10503	.0020	-.0031	.0024	.5	-.8	.6	-.0036	.0007	.0023	93: 1
S011 METS P GFZ	-.0119	-.0121	.0170	-.1	1.0	-.2	-.0061	.0222	.0069	94:365
S011 METS P CODE	.0011	-.0023	.0025	.4	-.4	.4	-.0025	.0012	.0022	95: 76
S011 METS P04 EUR	.0017	-.0015	-.0031	-1.0	-1.7	-2.4	-.0020	-.0024	-.0022	96: 90
S011 METS P03 EUR	-.0025	-.0027	-.0026	-.5	.3	.2	-.0014	.0017	-.0039	96:339
S011 METS P MIT	-.0053	-.0033	-.0029	-.9	-.2	-.4	-.0008	.0039	-.0056	97:151
S011 METS P NCL	.0006	-.0035	.0011	-.2	-.5	.2	-.0034	.0014	.0005	96: 1
S011 METS P JPL	.0021	.0023	.0056	.4	.5	.6	.0012	.0004	.0063	96: 1
S013 META TIE10503	-.0005	.0015	-.0015	-.2	.5	-.5	.0016	-.0009	-.0012	93: 1
S013 META D GRGS	.0043	-.0118	-.0065	.1	-.1	.1	-.0125	-.0024	-.0061	93: 1
S013 META D CSR	.0130	-.0293	.0194	.1	-.6	.4	-.0320	.0099	.0167	93: 1
S013 META D IGN	-.0010	-.0347	.0157	.1	-1.6	1.7	-.0312	.0210	.0061	95:100

Velocities

M002 7601 R GSFC	.0002	-.0003	.0000	-.3	-.2	.0	-.0003	-.0001	.0000	
M002 7601 R NOAA	-.0001	-.0007	.0019	.0	.0	.0	-.0006	.0013	.0015	
S001 7805 L CSR	-.0103	.0550	-.0320	.1	1.2	-.7	.0543	-.0274	-.0212	
S011 METS P GFZ	-.0042	-.0007	-.0041	-.6	.2	-.9	.0011	.0015	-.0056	
S011 METS P CODE	-.0020	-.0034	-.0003	-1.0	-1.4	.4	-.0023	.0027	-.0019	
S011 METS P04 EUR	-.0109	-.0075	.0073	-.5	-1.1	-1.5	-.0023	.0149	-.0002	
S011 METS P03 EUR	-.0077	.0004	.0037	-1.9	-.4	-1.7	.0036	.0078	-.0002	
S011 METS P MIT	-.0090	.0012	-.0023	-.5	.1	.0	.0049	.0056	-.0058	
S011 METS P NCL	-.0027	.0034	-.0066	-.7	-.3	-.8	.0042	-.0024	-.0063	
S011 METS P JPL	-.0024	-.0022	-.0033	-1.0	-.4	-1.1	-.0010	.0010	-.0044	
S013 META D GRGS	.0136	-.0008	.0078	1.5	.1	.6	-.0064	-.0066	.0127	
S013 META D CSR	.0147	.0064	.0030	.7	-.7	.6	-.0003	-.0124	.0105	
S013 META D IGN	-.0003	-.0095	-.0033	.1	-.5	-.9	-.0085	.0020	-.0050	

10511 VAASA

Positions

M001 VAAS P03 EUR	.0013	.0002	.0023	.4	.7	.0	-.0003	-.0001	.0026	96:339
M001 VAAS P MIT	.0062	.0035	.0119	.4	.0	.3	.0010	-.0009	.0138	97:151
M001 VAAS P NCL	.0155	-.0112	.0210	.3	-1.2	.3	-.0161	.0005	.0234	96: 1

Velocities

M001 VAAS P03 EUR	-.0059	-.0099	.0047	.2	-1.1	.0	-.0070	.0102	.0000	
M001 VAAS P MIT	.0067	.0110	.0264	-.1	.5	-.4	.0077	.0029	.0282	

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M001 VAAS P NCL       -.0168  .0120 -.0244  -.3   .5  -.1  .0174 -.0011 -.0268

10512 JOENSUU

Positions
M001 JOEN P03 EUR     -.0009 -.0009 -.0025   .2   .5  -.1 -.0003 -.0001 -.0028 96:339
M001 JOEN P MIT       -.0013 -.0003 -.0058  -.1  -.1   .0  .0004 -.0015 -.0057 97:151

Velocities
M001 JOEN P03 EUR     -.0076 -.0058  .0050  -.2  -.4   .0 -.0012  .0108  .0000
M001 JOEN P MIT       -.0156  .0001 -.0217  -.4   .4  -.6  .0079  .0018 -.0254

10513 SODANKYLA/PITTIO

Positions
M001 SODA P03 EUR     -.0025 -.0021  .0019   .0   .0   .0 -.0007  .0036  .0005 96:339
M001 SODA P MIT        .0074 -.0012 -.0070   .3  -.5  -.4 -.0044 -.0083 -.0041 97:151

Velocities
M001 SODA P03 EUR      .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M001 SODA P MIT        .0184 -.0066 -.0287   .4  -.2  -.6 -.0141 -.0236 -.0213

11001 GRAZ

Positions
M002 GRAZ TIE11001     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 GRAZ P CODE      -.0056 -.0025 -.0075 -1.4   .2 -1.8 -.0009 -.0007 -.0097 95: 76
M002 GRAZ P CODE      -.0003 -.0019  .0019   .1   .0   .0 -.0017  .0019  .0009 95: 76
M002 GRAZ P04 EUR     -.0006 -.0005 -.0040  -.4   .2 -1.9 -.0003 -.0022 -.0034 96: 90
M002 GRAZ P03 EUR     -.0016 -.0024 -.0004  -.2   .5  1.1 -.0019  .0014 -.0018 96:339
M002 GRAZ P MIT        .0059 -.0006  .0132   .2   .1  1.3 -.0022  .0049  .0134 97:151
M002 GRAZ P NCL       -.0034 -.0046 -.0048  -.8  -.9 -1.0 -.0035  .0001 -.0066 96:  1
M002 GRAZ P JPL        .0083  .0027  .0078  1.1   .2   .1  .0004 -.0011  .0117 96:  1
S002 7839 TIE11001    -.0009 -.0014 -.0011  -.3  -.5  -.4 -.0011  .0002 -.0017 93:  1
S002 7839 L CSR       -.0012  .0006  .0026  1.1   .0  -.5  .0009  .0026  .0012 93:  1
S002 7839 L GSFC      -.0174 -.0250 -.0162 -1.0  -.6 -1.8 -.0194  .0061 -.0279 86:182

Velocities
M002 GRAZ P CODE       .0007 -.0002  .0037   .3  -.6  2.0 -.0004  .0021  .0031
M002 GRAZ P CODE       .0007 -.0002  .0037   .0   .0   .0 -.0004  .0021  .0031
M002 GRAZ P04 EUR     -.0045 -.0021  .0045   .3  -.4  -.4 -.0008  .0067 -.0001
M002 GRAZ P03 EUR      .0007  .0026 -.0013   .3   .8  -.5  .0023 -.0019  .0000
M002 GRAZ P MIT        .0028  .0046  .0114  1.1   .3  1.3  .0037  .0049  .0110
M002 GRAZ P NCL        .0059  .0059  .0089   .0  -.8  1.9  .0042  .0007  .0114
M002 GRAZ P JPL        .0038 -.0001  .0054   .5  -.2  1.1 -.0011  .0010  .0064
S002 7839 L CSR        .0049  .0022  .0071  8.0  2.9 -2.4  .0008  .0009  .0089
S002 7839 L GSFC       .0016  .0028 -.0003  -.8   .1 -3.0  .0023 -.0019  .0014

11006 HAFELEKAR

Positions
S003 HFLK P04 EUR      .0064  .0021  .0018  1.3  1.3 -3.2  .0008 -.0037  .0058 96: 90
S003 HFLK P03 EUR     -.0009 -.0025 -.0012   .1  -.4  -.6 -.0023  .0002 -.0019 96:339
S003 HFLK P MIT        .0017 -.0013  .0012  -.1   .1  -.3 -.0016 -.0002  .0018 97:151
S003 HFLK P NCL        .0030 -.0058  .0072   .4 -2.1  1.3 -.0063  .0036  .0065 96:  1
S003 HFLK P JPL        .0681  .0446  .0772   .1   .1   .0  .0303 -.0033  .1080 96:  1

Velocities
S003 HFLK P04 EUR     -.0036 -.0047  .0041  -.1  -.8   .0 -.0039  .0061  .0000
S003 HFLK P03 EUR      .0046  .0014 -.0044  2.0   .7  -.1  .0004 -.0065  .0000
S003 HFLK P MIT       -.0049  .0030 -.0083  -.2   .2 -1.3  .0039 -.0025 -.0089
S003 HFLK P NCL       -.0035  .0074 -.0076  -.7   .4   .7  .0080 -.0037 -.0069
S003 HFLK P JPL       -.0717 -.0535 -.0794   .2  -.1   .8 -.0383  .0056 -.1132
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11101 SOFIA

Positions

M001 7505 L CSR	.1486	.1601	.1809	.3	.1	-.1	.0880	-.0020	.2697	93: 1

Velocities

M001 7505 L CSR	-.0610	-.0553	-.0531	.1	-.1	-.3	-.0265	.0136	-.0933	

11206 PENC

Positions

M006 PENC P04 EUR	.0035	-.0016	.0010	.2	-.7	.1	-.0027	-.0014	.0026	96: 90
M006 PENC P03 EUR	-.0011	-.0025	-.0012	.0	-.3	-.5	-.0020	.0006	-.0021	96:339
M006 PENC P MIT	.0080	-.0002	.0131	.3	.2	.6	-.0029	.0032	.0147	97:151
M006 PENC P NCL	-.0079	-.0052	-.0124	-.8	.1	-.8	-.0023	-.0016	-.0153	96: 1
M006 PENC P JPL	.0540	.0575	.0362	.1	.1	-.1	.0364	-.0275	.0738	96: 1

Velocities

M006 PENC P04 EUR	-.0067	.0111	.0024	.0	-.4	.0	.0127	.0036	.0000	
M006 PENC P03 EUR	.0013	.0026	-.0019	.8	.1	-.1	.0020	-.0028	.0000	
M006 PENC P MIT	.0019	.0045	.0086	.6	.0	.3	.0036	.0034	.0085	
M006 PENC P NCL	.0108	.0070	.0170	.2	.1	.5	.0030	.0022	.0210	
M006 PENC P JPL	-.1170	-.0835	-.1118	-1.6	-.4	-.3	-.0402	.0271	-.1755	

11502 PECNY/ONDREJOV

Positions

M002 GOPE P CODE	-.0025	-.0043	.0009	-.1	-.7	.8	-.0035	.0032	-.0016	95: 76
M002 GOPE P04 EUR	.0007	-.0004	.0020	-.1	.1	.3	-.0005	.0008	.0019	96: 90
M002 GOPE P03 EUR	-.0004	-.0024	.0003	.3	-.4	.5	-.0023	.0010	-.0005	96:339
M002 GOPE P MIT	.0019	-.0016	.0075	-.2	.0	.6	-.0021	.0038	.0067	97:151
M002 GOPE P NCL	.0011	-.0017	.0002	.1	.9	-1.0	-.0019	-.0004	.0006	96: 1
M002 GOPE P JPL	-.0496	-.0107	-.0661	-4.5	-.3	-1.5	.0023	-.0038	-.0833	96: 1

Velocities

M002 GOPE P CODE	.0046	.0014	.0073	.5	-.5	.6	.0002	.0011	.0087	
M002 GOPE P04 EUR	.0033	-.0010	-.0025	.4	-.6	.0	-.0018	-.0038	.0000	
M002 GOPE P03 EUR	.0004	.0037	-.0011	.5	1.8	.0	.0035	-.0017	.0000	
M002 GOPE P MIT	-.0054	.0017	.0014	-.5	.0	-.1	.0030	.0046	-.0020	
M002 GOPE P NCL	.0005	.0030	.0021	.3	.2	.3	.0027	.0004	.0024	
M002 GOPE P JPL	.0073	-.0081	.0042	-1.8	-.7	-.4	-.0097	-.0011	.0065	

11507 MODRA-PIESKY

Positions

M001 MOPI P03 EUR	.0018	-.0018	.0030	.5	.2	.4	-.0022	.0012	.0030	96:339
M001 MOPI P MIT	.0378	.0110	.0491	2.1	.6	2.1	-.0007	.0032	.0629	97:151
M001 MOPI P NCL	-.0713	-.0393	-.0872	-1.5	-1.7	-.2	-.0164	.0017	-.1182	96: 1

Velocities

M001 MOPI P03 EUR	.0011	-.0004	-.0008	.1	-.9	.0	-.0007	-.0013	.0000	
M001 MOPI P MIT	.0875	.0353	.1106	1.9	.8	.6	.0078	.0032	.1452	
M001 MOPI P NCL	.0682	.0395	.0843	-.9	1.1	-.4	.0174	-.0015	.1141	

12204 JOZEFOSLAW

Positions

M001 JOZE P CODE	-.0027	-.0039	-.0011	-.4	-.5	.7	-.0026	.0024	-.0032	95: 76
M001 JOZE P04 EUR	.0058	.0008	.0062	.7	.1	-.3	-.0013	-.0007	.0084	96: 90
M001 JOZE P03 EUR	.0009	-.0018	.0021	1.0	-.2	.4	-.0020	.0012	.0018	96:339
M001 JOZE P MIT	.0051	-.0010	.0116	.1	.0	1.4	-.0027	.0036	.0119	97:151
M001 JOZE P JPL	-.0382	-.0115	-.0591	-5.4	-.6	-2.9	.0029	-.0049	-.0711	96: 1

Velocities

M001 JOZE P CODE	.0059	.0017	.0113	1.4	.0	.6	-.0005	.0021	.0127	
M001 JOZE P04 EUR	-.0014	.0058	-.0006	.5	.4	-.1	.0060	-.0010	.0000	
M001 JOZE P03 EUR	-.0006	.0030	-.0004	.1	.4	.0	.0030	-.0006	.0000	
M001 JOZE P MIT	-.0046	.0006	.0034	-.3	-.5	.0	.0022	.0053	.0002	
M001 JOZE P JPL	.0030	-.0017	.0016	1.0	-.2	.7	-.0027	-.0007	.0026	

12205 BOROWIEC

Positions

M002 BOR1 TIE12205	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 BOR1 P CODE	.0002	-.0022	.0011	.4	-.2	-.3	-.0022	.0010	.0007	95: 76
M002 BOR1 P04 EUR	.0015	-.0004	.0005	.1	-.2	-.6	-.0009	-.0007	.0011	96: 90
M002 BOR1 P03 EUR	-.0021	-.0032	-.0021	-.5	-.6	.5	-.0024	.0011	-.0035	96:339
M002 BOR1 P MIT	-.0010	.0007	.0048	-.3	.2	.7	.0009	.0036	.0033	97:151
M002 BOR1 P NCL	.0002	-.0028	.0016	-.1	-.6	.1	-.0028	.0015	.0009	96: 1
M002 BOR1 P JPL	.0032	.0002	.0035	.7	-.6	.5	-.0007	-.0004	.0047	96: 1
S001 7811 TIE12205	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001 7811 L CSR	.0153	-.0038	-.0058	.1	-.1	-.2	-.0082	-.0142	.0037	93: 1

Velocities

M002 BOR1 P CODE	.0010	-.0004	.0053	.2	.4	.4	-.0007	.0026	.0047
M002 BOR1 P04 EUR	-.0020	.0004	.0014	.3	-.8	.0	.0010	.0022	.0000
M002 BOR1 P03 EUR	-.0027	.0035	.0012	-1.7	1.4	.1	.0041	.0019	.0000
M002 BOR1 P MIT	-.0062	.0012	.0003	-.8	-.1	-.7	.0030	.0046	-.0032
M002 BOR1 P NCL	-.0012	.0036	-.0038	-.4	.2	-.6	.0038	-.0023	-.0031
M002 BOR1 P JPL	-.0024	-.0032	-.0015	-.2	-.5	1.3	-.0024	.0017	-.0032
S001 7811 L CSR	-.0051	.0064	.0115	.0	.1	.0	.0076	.0095	.0073

12207 BOROWA GORA

Positions

M002 BOGO P03 EUR	-.0016	-.0027	-.0015	-.4	-.1	-.3	-.0020	.0010	-.0027	96:339
M002 BOGO P MIT	.0051	-.0008	.0109	.2	.0	.7	-.0026	.0031	.0113	97:151
M002 BOGO P NCL	-.0043	-.0039	-.0061	-.5	.0	-.4	-.0021	.0006	-.0081	96: 1

Velocities

M002 BOGO P03 EUR	-.0021	.0031	.0006	-.1	.3	.0	.0037	.0010	.0000
M002 BOGO P MIT	-.0028	.0032	.0067	.1	.0	.2	.0040	.0052	.0044
M002 BOGO P NCL	.0063	.0054	.0089	.5	.0	.4	.0028	-.0008	.0118

12209 LAMKOWKO

Positions

M001 LAMA P CODE	-.0065	-.0038	-.0071	-1.0	.7	-.1	-.0013	.0018	-.0101	95: 76
M001 LAMA P04 EUR	.0027	.0000	.0020	-.3	-.8	.0	-.0009	-.0009	.0031	96: 90
M001 LAMA P03 EUR	.0005	-.0022	.0012	.6	-.8	-.2	-.0023	.0009	.0008	96:339
M001 LAMA P MIT	-.0008	-.0006	.0037	-.4	.0	.4	-.0003	.0030	.0024	97:151
M001 LAMA P NCL	-.0051	-.0067	-.0088	-.8	-1.4	-.5	-.0044	.0006	-.0113	96: 1
M001 LAMA P JPL	.0037	-.0007	.0052	.3	-.3	1.3	-.0020	.0004	.0061	96: 1

Velocities

M001 LAMA P CODE	.0026	-.0002	.0069	-.6	1.1	-.2	-.0011	.0021	.0070
M001 LAMA P04 EUR	.0017	.0017	-.0016	.7	.2	.0	.0010	-.0027	.0000
M001 LAMA P03 EUR	-.0032	.0038	.0012	-.6	.7	.0	.0047	.0020	.0000
M001 LAMA P MIT	-.0045	.0049	.0036	.0	.5	.2	.0061	.0041	.0014
M001 LAMA P NCL	.0074	.0087	.0126	.2	.2	.1	.0055	-.0007	.0160
M001 LAMA P JPL	.0013	-.0038	-.0004	-.1	-.3	.1	-.0040	-.0001	-.0004

12217 WROCLAW

Positions

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M001 WROC P03 EUR     -.0018 -.0024 -.0017   .0   .2  -.1 -.0018  .0008 -.0028 96:339
M001 WROC P MIT        .0031 -.0006  .0080   .0   .1   .1 -.0015  .0029  .0080 97:151
M001 WROC P NCL        .0129  .0029  .0078   .2   .1  -.2 -.0010 -.0053  .0144 96:  1

Velocities
M001 WROC P03 EUR     -.0009  .0008  .0005   .1   .1   .0  .0010  .0008  .0000
M001 WROC P MIT       -.0048  .0048  .0025  -.2   .4  -.3  .0060  .0040 -.0001
M001 WROC P NCL       -.0110 -.0014 -.0055  -.1  -.1   .0  .0019  .0050 -.0112

12302 RIGA

Positions
M001 7560 TIE12302     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M001 7560 L CSR        .0193  .0497  .0068   .1   .3  -.2  .0375 -.0280  .0264 93:  1
M002 RIGA TIE12302     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 RIGA P03 EUR     -.0008 -.0017 -.0022   .0   .3  -.1 -.0012  .0000 -.0026 96:339
M002 RIGA P MIT        .0108  .0054  .0175   .5   .1   .4  .0005 -.0005  .0212 97:151
M002 RIGA P NCL       -.0301 -.0264 -.0524  -.4  -.9  -.1 -.0119  .0035 -.0648 96:  1
S002 1884 TIE12302     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
S002 1884 L CSR       -.0027  .0379 -.0054   .0   .2  -.1  .0358 -.0138  .0025 93:  1

Velocities
M001 7560 L CSR        .0023 -.0148 -.0004   .0   .0   .0 -.0145  .0031 -.0025
M002 RIGA P03 EUR     -.0046 -.0045  .0039   .0  -.3   .0 -.0022  .0072  .0000
M002 RIGA P MIT        .0161  .0175  .0354   .0   .5  -.4  .0094  .0010  .0416
M002 RIGA P NCL        .0291  .0273  .0502  -.2   .5   .0  .0130 -.0042  .0627
S002 1884 L CSR        .0023 -.0148 -.0004   .0  -.2   .0 -.0145  .0031 -.0025

12309 MENDELEEVO

Positions
M001 MDVO P CODE      -.0010 -.0029  .0016   .0   .0   .0 -.0017  .0030 -.0001 95: 76
M002 MDVO P CODE       .0093  .0044  .0261  2.8  -.1   .9 -.0021  .0062  .0273 95: 76
M002 MDVO P04 EUR      .0123  .0061  .0225  1.4  -.3   .9 -.0026  .0014  .0262 96: 90
M002 MDVO P03 EUR      .0040  .0021  .0090  1.7   .7   .1 -.0007  .0013  .0100 96:339
M002 MDVO P MIT        .0006 -.0011  .0018   .0   .1   .0 -.0013  .0011  .0014 97:151
M002 MDVO P JPL       -.0380 -.0260 -.0740 -3.5 -1.0 -1.9  .0023 -.0032 -.0870 96:  1

Velocities
M001 MDVO P CODE       .0039  .0003  .0053   .3  -.2  -.9 -.0022  .0002  .0062
M002 MDVO P CODE       .0039  .0003  .0053   .5  -.3   .2 -.0022  .0002  .0062
M002 MDVO P04 EUR     -.0233 -.0081  .0158 -1.3 -1.1   .1  .0076  .0283  .0000
M002 MDVO P03 EUR     -.0079  .0013  .0037  -.9  -.7   .0  .0058  .0067  .0000
M002 MDVO P MIT        .0004  .0033  .0057  1.2  -.1   .5  .0024  .0013  .0060
M002 MDVO P JPL        .0076  .0050  .0077 -4.6  -.5 -3.5 -.0006 -.0032  .0115

12313 IRKOUTSK

Positions
M001 IRKT P EMR       -.0055 -.0063  .0067  -.5   .2   .1  .0069  .0079  .0024 96:  1
M001 IRKT P GFZ       -.0076  .0003  .0328  -.5   .6   .8  .0073  .0184  .0272 94:365
M001 IRKT P CODE      -.0022  .0101  .0311   .3  1.7  1.4 -.0003  .0109  .0309 95: 76
M001 IRKT P MIT       -.0010  .0031  .0118  -.6  1.0  2.1  .0001  .0046  .0113 97:151
M001 IRKT P JPL        .0022 -.0235 -.0317   .4 -3.7 -1.3  .0037 -.0009 -.0393 96:  1

Velocities
M001 IRKT P EMR        .0009 -.0023 -.0032 -1.2   .2   .4 -.0003  .0000 -.0041
M001 IRKT P GFZ       -.0052 -.0029 -.0084   .0   .9  -.4  .0058 -.0039 -.0076
M001 IRKT P CODE       .0007 -.0026  .0017   .5  -.5  -.1  .0000  .0032 -.0003
M001 IRKT P MIT       -.0078  .0122  .0092  -.6  1.4  -.9  .0045 -.0052  .0157
M001 IRKT P JPL        .0093 -.0056 -.0066  2.0 -2.9 -1.4 -.0077  .0021 -.0100

12329 SAKHALINS
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Positions

S001 SAKA D CSR	.0076	.0093	-.0112	.0	.1	-.3	-.0121	-.0073	-.0085	93: 1
S001 SAKA D IGN	.0050	-.0058	-.0049	-.2	-.1	-.1	.0016	.0022	-.0087	95:100

Velocities

S001 SAKA D CSR	-.0044	-.0063	-.0009	-.3	.2	-.6	.0077	-.0004	-.0009	
S001 SAKA D IGN	.0033	-.0004	.0040	.3	.2	-.1	-.0017	.0049	.0010	

12330 ZWENIGOROD

Positions

M001 ZWEN P GFZ	-.0134	-.0103	.0165	-.1	.3	.2	-.0002	.0233	.0041	94:365
M001 ZWEN P04 EUR	.0076	.0025	.0076	1.0	-.5	-.9	-.0026	-.0020	.0105	96: 90
M001 ZWEN P03 EUR	-.0043	-.0043	-.0044	-.7	.2	.4	-.0009	.0026	-.0070	96:339
M001 ZWEN P MIT	-.0025	-.0037	-.0026	-.4	-.2	-.2	-.0014	.0020	-.0045	97:151
M001 ZWEN P NCL	.0011	-.0014	.0053	-.1	.1	-.1	-.0018	.0029	.0044	96: 1
M001 ZWEN P JPL	.0035	.0024	.0062	.4	.2	1.0	-.0002	.0000	.0075	96: 1

Velocities

M001 ZWEN P GFZ	-.0012	-.0036	-.0032	.2	-.9	-1.2	-.0021	.0008	-.0044	
M001 ZWEN P04 EUR	-.0112	.0019	.0053	-.3	-.1	.1	.0082	.0095	.0000	
M001 ZWEN P03 EUR	-.0087	.0015	.0042	-.7	-.5	.0	.0064	.0074	.0000	
M001 ZWEN P MIT	-.0072	.0016	-.0018	.1	.2	.2	.0056	.0029	-.0042	
M001 ZWEN P NCL	-.0016	.0015	-.0077	.0	.0	-.1	.0021	-.0040	-.0066	
M001 ZWEN P JPL	.0026	-.0011	.0078	.1	.0	.8	-.0024	.0032	.0073	

12334 KITAB

Positions

M001 KIT3 TIE12334	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 KIT3 P EMR	-.0090	-.0076	-.0022	-1.4	.3	.7	.0053	.0050	-.0095	96: 1
M001 KIT3 P GFZ	-.0080	-.0089	.0158	-.2	-.1	.0	.0038	.0194	.0012	94:365
M001 KIT3 P CODE	-.0018	-.0116	.0034	-.2	-.5	.6	-.0029	.0098	-.0067	95: 76
M001 KIT3 P MIT	.0028	.0002	.0005	-.3	.6	-.5	-.0025	-.0004	.0014	97:151
M001 KIT3 P NCL	-.0025	-.0056	-.0015	-1.1	-.3	.0	.0001	.0026	-.0057	96: 1
M001 KIT3 P JPL	.0020	.0005	.0009	.6	-.2	.4	-.0017	-.0001	.0015	96: 1
S004 KITA TIE12334	-.0004	-.0002	.0002	-.3	-.2	.1	.0003	.0004	-.0002	93: 1
S004 KITA D GRGS	.0304	-.0006	.0054	.5	.3	.2	-.0282	-.0030	.0122	93: 1
S004 KITA D CSR	.0462	.0219	-.0221	.6	.8	-.8	-.0339	-.0413	.0157	93: 1
S004 KITA D IGN	.0313	-.0160	-.0027	1.4	-.1	-.1	-.0351	-.0005	-.0036	95:100
S005 KITB D IGN	-.0029	-.0457	.0461	.1	-.2	.3	-.0152	.0630	-.0044	95:100

Velocities

M001 KIT3 P EMR	.0113	-.0005	.0014	.7	.0	-.2	-.0106	-.0015	.0040	
M001 KIT3 P GFZ	-.0014	-.0008	-.0007	1.1	-.8	-.7	.0009	.0003	-.0014	
M001 KIT3 P CODE	.0016	.0081	.0109	.5	.2	.4	.0017	.0033	.0131	
M001 KIT3 P MIT	-.0023	.0066	.0034	.5	.8	.3	.0047	-.0007	.0062	
M001 KIT3 P NCL	.0038	.0068	.0025	.1	.0	.1	-.0008	-.0030	.0076	
M001 KIT3 P JPL	-.0002	.0037	.0036	-.3	.7	.2	.0017	.0007	.0049	
S004 KITA D GRGS	-.0023	-.0004	-.0005	1.0	.4	.3	.0019	.0004	-.0013	
S004 KITA D CSR	-.0008	.0044	-.0006	.8	1.6	-.9	.0025	-.0029	.0025	
S004 KITA D IGN	.0055	-.0158	.0128	.1	-.8	.5	-.0112	.0177	-.0015	
S005 KITB D IGN	-.0035	.0174	-.0215	-.1	.1	-.1	.0101	-.0259	-.0022	

12337 SIMEIS

Positions

M001 7561 L CSR	-.0083	.0113	.0154	.0	.0	.0	.0141	.0114	.0104	93: 1
S003 1873 L CSR	.0158	.0251	-.0043	.0	.0	.0	.0120	-.0221	.0164	93: 1
S006 1893 L CSR	.0156	.0189	.0006	.0	.0	.0	.0070	-.0160	.0172	93: 1
S008 7332 R GSFC	.0239	-.0007	.0241	.4	-.6	-.2	-.0139	.0036	.0307	93: 1
S008 7332 R GIUB	-.0039	.0047	.0242	.0	-.1	-.4	.0060	.0177	.0165	93: 1

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S008 7332 R NOAA       .0197  .0062  .0391   .7  -.3   .0 -.0059  .0141  .0415 93:  1

Velocities
M001 7561 L CSR        .0022  .0070  .0137   .0  -.1   .0  .0046  .0058  .0137
S003 1873 L CSR        .0022  .0070  .0137   .0   .1   .1  .0046  .0058  .0137
S006 1893 L CSR        .0022  .0070  .0137   .0   .1   .0  .0046  .0058  .0137
S008 7332 R GSFC      -.0098  .0007 -.0061   .0   .0   .0  .0061  .0011 -.0098
S008 7332 R GIUB      -.0001  .0000 -.0011   .0   .0   .0  .0000 -.0008 -.0008
S008 7332 R NOAA      -.0010 -.0003 -.0003   .0   .0   .0  .0003  .0005 -.0009

12338 BADARY

Positions
S001 BADA D GRGS       .0352  .0140 -.0092   .8   .4  -.2 -.0374 -.0105 -.0034 93:  1
S001 BADA D CSR        .0107 -.0221  .0100  -.1  -.6   .1 -.0058  .0249 -.0070 93:  1
S001 BADA D IGN       -.0027  .0002 -.0112  -.1   .5  -.4  .0026 -.0076 -.0084 95:100

Velocities
S001 BADA D GRGS      -.0103 -.0057  .0029   .5   .0   .2  .0113  .0045  .0002
S001 BADA D CSR       -.0097 -.0101  .0040  -.7 -1.1   .5  .0116  .0086 -.0017
S001 BADA D IGN        .0003 -.0025  .0074   .0   .1   .2  .0002  .0065  .0043

12341 OMSOMOLSK-NA-MUR

Positions
S001 1868 L CSR       -.0389 -.2767 -.0619   .0  -.3   .0  .2282  .0856 -.1501 93:  1

Velocities
S001 1868 L CSR        .0213  .0999  .0030   .0   .1   .0 -.0873 -.0391  .0358

12342 USSURIISK

Positions
S001 7247 R GSFC       .0048 -.0032 -.0031   .0   .0   .0 -.0015  .0016 -.0061 93:  1

Velocities
S001 7247 R GSFC       .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

12348 BISHKEK

Positions
M001 POL2 P CODE       .0039  .0005  .0121   .2   .3  -.1 -.0036  .0079  .0093 95: 76
M001 POL2 P MIT        .0013  .0017  .0059  -.1   .4   .3 -.0008  .0030  .0054 97:151
M001 POL2 P NCL       -.0013 -.0047 -.0006  -.1  -.2   .0  .0000  .0029 -.0040 96:  1
M001 POL2 P JPL       -.0027  .0019 -.0018  -.3   .2   .3  .0031 -.0021 -.0004 96:  1

Velocities
M001 POL2 P CODE      -.0026 -.0028  .0037   .1   .0  -.1  .0018  .0050  .0000
M001 POL2 P MIT       -.0042  .0038 -.0003   .1  -.4  -.7  .0051 -.0020  .0016
M001 POL2 P NCL        .0012  .0023 -.0023  -.4  -.5  -.2 -.0006 -.0034  .0003
M001 POL2 P JPL        .0062 -.0074  .0016  -.1   .0   .9 -.0079  .0049 -.0030

12350 SVETLOE

Positions
M001 SVTL P03 EUR      .0002 -.0003 -.0011   .0   .3   .0 -.0003 -.0006 -.0009 96:339
M001 SVTL P MIT        .0028  .0019  .0033   .1   .0   .2  .0003 -.0013  .0045 97:151
M001 SVTL P NCL        .0083 -.0236  .0116   .1  -.7   .3 -.0246  .0096  .0079 96:  1

Velocities
M001 SVTL P03 EUR     -.0071 -.0102  .0063  -.4  -.6   .0 -.0053  .0128  .0000
M001 SVTL P MIT       -.0054  .0073  .0017  -.3   .4  -.4  .0090  .0018  .0010
M001 SVTL P NCL       -.0095  .0244 -.0144  -.2   .3   .0  .0259 -.0105 -.0106
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12602 DIONYSOS

Positions

M002 7515 TIE12602	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7515 L CSR	-.0067	.0235	.0267	.1	.3	.1	.0242	.0189	.0191	93: 1
M002 7515 L GSFC	.0143	-.0260	-.0222	.4	-.1	-.6	-.0296	-.0190	-.0117	86:182
S001 7940 TIE12602	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S011 DIOA TIE12602	.0000	.0001	.0001	.0	.0	.0	.0001	.0000	.0001	93: 1
S011 DIOA D GRGS	-.0147	-.0579	-.0197	-.1	-.6	.0	-.0470	.0073	-.0413	93: 1
S011 DIOA D CSR	.0285	.0616	-.0053	.1	.6	.1	.0447	-.0356	.0370	93: 1
S011 DIOA D IGN	-.0205	-.0187	.0116	-.4	-.4	1.5	-.0088	.0254	-.0135	95:100

Velocities

M002 7515 L CSR	.0001	.0072	.0136	.3	.1	.0	.0065	.0089	.0108
M002 7515 L GSFC	-.0005	.0088	.0090	.3	.3	.6	.0082	.0052	.0080
S011 DIOA D GRGS	.0042	.0224	-.0029	-.1	.1	-.9	.0188	-.0102	.0084
S011 DIOA D CSR	.0009	-.0050	.0038	.5	.7	.1	-.0050	.0038	.0014
S011 DIOA D IGN	-.0159	.0150	.0050	-.1	.4	.0	.0202	.0092	-.0036

12612 ASKITES

Positions

M001 7510 L CSR	.0059	.0084	.0331	.2	.0	.1	.0051	.0191	.0284	93: 1
M001 7510 L GSFC	.0190	-.0175	-.0080	.4	.1	-.1	-.0240	-.0123	.0020	86:182

Velocities

M001 7510 L CSR	.0033	.0037	.0169	.3	.2	.0	.0019	.0097	.0145
M001 7510 L GSFC	-.0032	.0040	.0006	.2	.2	.0	.0050	.0012	-.0005

12613 ROUMELLI

Positions

M001 7517 L CSR	-.0251	.0034	-.0029	-.1	.1	-.1	.0135	.0100	-.0191	93: 1
M001 7517 L GSFC	.0161	-.0133	-.0103	.3	.2	.0	-.0188	-.0137	.0015	86:182

Velocities

M001 7517 L CSR	-.0054	.0025	.0058	.1	.2	.0	.0045	.0070	.0002
M001 7517 L GSFC	-.0025	.0008	.0019	.1	.0	.0	.0018	.0027	-.0004

12614 KARITSA

Positions

M001 7520 L CSR	-.0196	-.0011	-.0108	-.2	-.1	-.3	.0059	.0037	-.0213	93: 1
M001 7520 L GSFC	.0203	-.0145	-.0003	.4	.1	.0	-.0207	-.0091	.0105	86:182

Velocities

M001 7520 L CSR	.0007	.0019	.0086	.5	.0	-.6	.0015	.0058	.0065
M001 7520 L GSFC	-.0035	.0025	.0004	-.3	.1	.1	.0036	.0018	-.0016

12615 KATAVIA

Positions

M001 7512 L CSR	-.0150	.0055	-.0064	.0	.1	-.2	.0119	.0011	-.0124	93: 1
M001 7512 L GSFC	.0182	-.0100	-.0030	.2	.0	-.3	-.0173	-.0092	.0075	86:182

Velocities

M001 7512 L CSR	-.0033	.0026	.0048	.1	.2	.0	.0038	.0049	.0015
M001 7512 L GSFC	-.0017	.0003	.0029	.1	.0	.2	.0010	.0031	.0006

12616 XRISOKALARIA

Positions

M001 7525 L CSR	-.0114	.0017	-.0006	.0	.0	-.3	.0058	.0055	-.0083	93: 1
M001 7525 L GSFC	.0127	-.0164	-.0047	.3	.1	.0	-.0200	-.0071	.0017	86:182
Velocities										
M001 7525 L CSR	-.0004	.0019	.0068	.4	-.1	-.8	.0020	.0052	.0044	
M001 7525 L GSFC	-.0020	.0019	.0005	-.2	.0	.2	.0025	.0011	-.0006	
12706 LAMPEDUSA										
Positions										
M001 7544 L CSR	-.0256	.0013	.0013	-.1	.0	.0	.0068	.0154	-.0194	93: 1
M001 7544 L GSFC	.0006	-.0152	-.0124	.0	.0	-.1	-.0150	-.0085	-.0094	86:182
Velocities										
M001 7544 L CSR	-.0065	.0029	.0048	.1	.1	-.4	.0042	.0072	-.0019	
M001 7544 L GSFC	.0048	.0043	.0041	.2	.2	.0	.0032	.0000	.0070	
12711 BOLOGNA										
Positions										
M002 7546 TIE12711	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7546 L CSR	-.1013	-.1208	-.0779	.0	.0	.0	-.0979	.0312	-.1427	93: 1
M003 MEDI TIE12711	-.0030	-.0006	.0001	-2.0	-.4	.1	.0000	.0022	-.0021	93: 1
M003 MEDI P04 EUR	.0092	.0056	.0018	1.3	2.8	-3.4	.0036	-.0058	.0084	96: 90
M003 MEDI P03 EUR	.0000	-.0028	.0009	.5	-1.2	1.0	-.0028	.0010	.0002	96:339
M003 MEDI P MIT	.0018	-.0079	.0164	-.2	-.3	.9	-.0081	.0116	.0117	97:151
M003 MEDI P NCL	.0098	.0067	-.0101	1.1	5.5	-8.5	.0046	-.0149	.0007	96: 1
M003 MEDI P JPL	-.4592	-.1419	-.5033	-.5	-.2	-.3	-.0463	-.0234	-.6940	96: 1
S001 7230 TIE12711	.0013	.0003	-.0012	1.3	.3	-.2	.0000	-.0018	.0001	93: 1
S001 7230 R GSFC	-.0024	-.0012	.0038	.0	.6	.3	-.0006	.0045	.0008	93: 1
S001 7230 R GIUB	-.0125	.0000	-.0113	-1.8	-.3	.8	.0025	.0005	-.0166	93: 1
S001 7230 R NOAA	-.0075	-.0016	.0047	-3.2	-.1	.2	-.0001	.0087	-.0021	93: 1
Velocities										
M002 7546 L CSR	-.0146	.0003	-.0004	.1	.5	.1	.0032	.0097	-.0105	
M003 MEDI P04 EUR	-.0081	-.0053	.0091	.3	1.6	-.3	-.0036	.0128	.0000	
M003 MEDI P03 EUR	-.0033	-.0097	.0053	-3.0	-5.6	-.2	-.0088	.0074	.0000	
M003 MEDI P MIT	-.0107	-.0095	.0116	-1.1	-1.1	2.3	-.0071	.0170	-.0007	
M003 MEDI P NCL	-.0075	-.0068	.0168	1.0	-1.1	1.9	-.0052	.0181	.0056	
M003 MEDI P JPL	.5328	.1624	.5849	-.2	-.2	.8	.0515	.0281	.8056	
S001 7230 R GSFC	.0039	.0018	.0035	2.3	1.7	.1	.0010	-.0004	.0054	
S001 7230 R GIUB	.0038	.0023	.0038	1.3	1.5	.4	.0015	-.0002	.0056	
S001 7230 R NOAA	.0030	.0016	.0046	2.3	1.4	.2	.0010	.0010	.0055	
12717 NOTO										
Positions										
M001 7543 TIE12717	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 7543 L CSR	-.0164	.0029	-.0105	-.1	.0	-.3	.0071	.0007	-.0184	93: 1
M003 NOTO TIE12717	-.0009	.0008	.0022	-.6	.6	1.5	.0010	.0022	.0008	93: 1
M003 NOTO P04 EUR	.0051	.0006	.0030	.4	-.8	-.6	-.0008	-.0007	.0059	96: 90
M003 NOTO P03 EUR	-.0028	-.0028	-.0023	-.5	.6	.1	-.0020	.0002	-.0042	96:339
M003 NOTO P MIT	-.0087	-.0052	.0033	-1.2	.1	.3	-.0028	.0085	-.0059	97:151
M003 NOTO P NCL	-.0020	-.0068	-.0013	-.4	-2.2	.0	-.0060	.0012	-.0037	96: 1
M003 NOTO P JPL	.0042	-.0008	.0030	.2	-.3	.5	-.0018	.0001	.0049	96: 1
S001 7547 TIE12717	.0038	-.0033	-.0089	1.3	-1.1	-3.0	-.0042	-.0088	-.0031	93: 1
S001 7547 R GSFC	.0023	.0020	.0091	.4	.3	.4	.0014	.0056	.0077	93: 1
S001 7547 R GIUB	-.0062	.0110	-.0005	1.1	1.3	.8	.0123	.0014	-.0028	93: 1
S001 7547 R NOAA	.0082	.0068	.0199	.9	1.3	.0	.0044	.0101	.0196	93: 1
Velocities										
M001 7543 L CSR	.0043	.0001	.0066	.2	-.2	-.1	-.0010	.0027	.0073	
M003 NOTO P04 EUR	-.0008	.0169	-.0048	-.1	1.6	.0	.0166	-.0060	.0000	

M003 NOTO P03 EUR	.0017	.0035	-.0034	-.3	1.5	.0	.0030	-.0042	.0000	
M003 NOTO P MIT	-.0143	.0022	-.0015	-.3	.4	.1	.0058	.0068	-.0115	
M003 NOTO P NCL	.0026	.0085	.0022	-.8	.8	-.3	.0075	-.0011	.0051	
M003 NOTO P JPL	-.0110	-.0084	-.0073	-.3	-1.0	.6	-.0053	.0019	-.0146	
S001 7547 R GSFC	.0013	.0007	.0026	-.1	.1	1.3	.0003	.0012	.0027	
S001 7547 R GIUB	.0023	.0013	.0042	1.2	-.7	1.9	.0007	.0018	.0045	
S001 7547 R NOAA	.0019	.0018	.0036	-.2	-.5	.1	.0012	.0015	.0040	

12718 TRIESTE

Positions

M002 7550 L CSR	-.0574	-.0042	-.1095	.0	.0	-.1	.0097	-.0360	-.1180	93: 1

Velocities

M002 7550 L CSR	-.0109	-.0012	-.0139	.0	.0	.0	.0014	-.0019	-.0175	

12725 CAGLIARI

Positions

M002 7545 TIE12725	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7545 L CSR	-.0325	.0435	.0186	-.2	1.0	.0	.0480	.0304	-.0079	93: 1
M002 7545 L GSFC	-.0489	.0625	.0364	-.9	1.3	.5	.0693	.0526	-.0069	86:182
M003 CAGL TIE12725	-.0001	.0002	.0001	-.1	.2	.1	.0002	.0001	.0000	93: 1
M003 CAGL P04 EUR	-.0021	.0046	.0045	-.7	1.7	1.4	.0049	.0043	.0018	96: 90
M003 CAGL P03 EUR	-.0011	-.0032	-.0015	-.2	-1.6	-.5	-.0030	-.0002	-.0022	96:339
M003 CAGL P MIT	.0010	-.0051	.0031	-.3	-.1	.0	-.0052	.0023	.0021	97:151
M003 CAGL P NCL	.0053	-.0002	.0064	.4	.9	.3	-.0011	.0017	.0081	96: 1
M003 CAGL P JPL	.1067	.0043	.0548	.1	.0	-.1	-.0124	-.0245	.1169	96: 1
S013 7548 L CSR	.2366	.2077	-.0105	.1	.2	-.1	.1683	-.1761	.1998	93: 1

Velocities

M002 7545 L CSR	.0010	.0000	.0006	.5	-1.6	-1.7	-.0001	-.0001	.0012	
M002 7545 L GSFC	.0071	-.0075	-.0043	-.3	.4	.5	-.0085	-.0070	.0018	
M003 CAGL P04 EUR	.0083	.0004	-.0104	-.2	.3	-1.0	-.0009	-.0133	-.0001	
M003 CAGL P03 EUR	.0045	-.0050	-.0048	1.6	-1.3	-1.6	-.0056	-.0060	-.0001	
M003 CAGL P MIT	-.0101	-.0043	-.0104	-.6	-.3	-.8	-.0027	-.0014	-.0148	
M003 CAGL P NCL	-.0036	.0009	-.0052	.6	-.6	-.1	.0015	-.0019	-.0060	
M003 CAGL P JPL	-.1207	-.0068	-.0569	.1	-.1	1.3	.0122	.0318	-.1292	
S013 7548 L CSR	.0010	.0000	.0007	-3.6	-.4	-2.9	-.0001	-.0001	.0012	

12734 MATERA

Positions

M004 7541 TIE12734	.0017	-.0034	.0018	.0	.0	.0	-.0038	.0010	.0017	93: 1
M004 7541 L CSR	.0069	.0097	-.0078	.2	.2	-.5	.0073	-.0120	.0020	93: 1
M005 7540 TIE12734	.0017	-.0034	.0017	.0	.0	.0	-.0037	.0009	.0017	93: 1
M005 7540 L CSR	.0018	-.0026	-.0176	-.1	-.2	.0	-.0030	-.0140	-.0107	93: 1
M007 TIE12734	.0017	-.0034	.0017	.0	.0	.0	-.0037	.0009	.0017	93: 1
M008 MATE TIE12734	.0000	.0000	.0000	-.5	1.0	-.5	.0000	.0000	.0000	93: 1
M008 MATE P GFZ	-.0136	-.0153	.0115	-.5	.3	-.4	-.0107	.0201	-.0057	94:365
M008 MATE P CODE	-.0001	-.0029	.0016	.6	-1.8	1.4	-.0027	.0018	.0003	95: 76
M008 MATE P04 EUR	.0024	-.0035	.0027	.2	-2.3	.3	-.0040	.0012	.0027	96: 90
M008 MATE P03 EUR	-.0022	-.0019	-.0023	-.3	1.3	-.9	-.0012	.0000	-.0035	96:339
M008 MATE P MIT	-.0010	-.0021	.0044	-.9	.1	.3	-.0017	.0043	.0017	97:151
M008 MATE P JPL	.0078	.0019	.0083	.8	.0	.8	-.0004	.0011	.0116	96: 1
S001 7939 TIE12734	.0017	-.0034	.0017	.3	-.6	.3	-.0037	.0009	.0017	93: 1
S001 7939 L CSR	.0197	.0112	.0117	.6	.9	-.7	.0051	-.0055	.0244	93: 1
S001 7939 L GSFC	.0015	-.0120	-.0060	-.4	-.1	-.1	-.0119	-.0033	-.0054	86:182
S005 7243 TIE12734	.0067	-.0072	.0001	.7	-.5	-.2	-.0088	-.0028	.0034	93: 1
S005 7243 R GSFC	-.0027	-.0002	.0024	-.5	.5	-.6	.0006	.0035	-.0004	93: 1
S005 7243 R GIUB	-.0069	.0049	-.0024	.4	.3	.8	.0067	.0015	-.0055	93: 1
S005 7243 R NOAA	.0045	.0022	.0175	.6	.2	.6	.0008	.0100	.0152	93: 1

Velocities

M004 7541 L CSR	.0018	.0017	.0046	1.1	.2	-1.7	.0011	.0021	.0047	
M005 7540 L CSR	.0018	.0017	.0046	.0	.0	.0	.0011	.0021	.0047	
M008 MATE P GFZ	-.0034	.0003	-.0006	-.7	-.9	-.8	.0012	.0016	-.0028	
M008 MATE P CODE	-.0006	.0013	.0035	-.3	-.2	1.2	.0015	.0027	.0021	
M008 MATE P04 EUR	.0010	.0016	-.0016	-.3	2.3	.0	.0012	-.0021	.0000	
M008 MATE P03 EUR	.0002	.0010	-.0005	-.6	.0	-.1	.0009	-.0007	.0000	
M008 MATE P MIT	-.0117	.0017	-.0076	-1.6	.2	-1.1	.0050	.0013	-.0131	
M008 MATE P JPL	.0017	-.0004	.0030	.0	-.1	.4	-.0009	.0013	.0031	
S001 7939 L CSR	.0018	.0017	.0046	.0	.0	.0	.0011	.0021	.0047	
S001 7939 L GSFC	.0003	.0016	-.0011	.5	.1	-.2	.0014	-.0013	-.0002	
S005 7243 R GSFC	.0000	-.0002	.0017	-.6	-.4	.5	-.0002	.0013	.0011	
S005 7243 R GIUB	-.0015	.0005	.0000	-.9	-.2	.0	.0009	.0008	-.0009	
S005 7243 R NOAA	.0022	-.0001	.0045	.6	-.8	.9	-.0007	.0021	.0045	

12741 VENICE

Positions

M001 VENE P03 EUR	-.0013	-.0022	-.0006	.0	.1	.1	-.0019	.0008	-.0017	96:339
M001 VENE P MIT	-.0034	-.0030	.0011	-.4	.1	-.4	-.0022	.0036	-.0020	97:151
M001 VENE P NCL	.0128	-.0059	.0195	.3	-.8	1.4	-.0085	.0057	.0218	96: 1

Velocities

M001 VENE P03 EUR	-.0032	-.0051	.0042	-1.1	-1.0	.0	-.0043	.0059	.0000
M001 VENE P MIT	-.0190	-.0002	-.0137	-.4	.3	-.3	.0039	.0036	-.0228
M001 VENE P NCL	-.0109	.0073	-.0178	.0	.5	-1.0	.0095	-.0060	-.0190

12749 MONTE VENDA

Positions

M001 7542 L CSR	-.0901	-.0083	-.1787	.0	.1	-.2	.0101	-.0617	-.1903	93: 1

Velocities

M001 7542 L CSR	-.0548	-.0095	-.1209	.0	.0	.0	.0018	-.0455	-.1251

12750 PADOVA

Positions

M001 UPAD P CODE	-.0001	-.0018	.0014	.0	.0	.0	-.0017	.0013	.0007	95: 76
M002 UPAD P CODE	.0002	-.0022	.0024	.5	-.8	.8	-.0022	.0019	.0015	95: 76
M002 UPAD P04 EUR	.0004	.0002	.0031	.1	.2	.9	.0001	.0018	.0025	96: 90
M002 UPAD P03 EUR	-.0006	-.0024	.0003	.3	-.4	.7	-.0023	.0010	-.0006	96:339
M002 UPAD P MIT	.0038	-.0030	.0099	-.1	-.1	.7	-.0037	.0047	.0092	97:151
M002 UPAD P NCL	-.0056	-.0032	-.0069	-1.2	.8	-.7	-.0020	-.0005	-.0093	96: 1
M002 UPAD P JPL	-.0444	-.0058	-.0484	-4.8	.0	-1.1	.0035	-.0022	-.0658	96: 1

Velocities

M001 UPAD P CODE	.0026	.0002	.0054	.2	-.3	.0	-.0004	.0020	.0056
M002 UPAD P CODE	.0026	.0002	.0054	-.1	-1.0	.4	-.0004	.0020	.0056
M002 UPAD P04 EUR	-.0036	-.0080	.0051	-.8	-1.1	.0	-.0071	.0072	.0000
M002 UPAD P03 EUR	.0022	.0018	-.0025	.7	.8	-.1	.0013	-.0036	.0000
M002 UPAD P MIT	-.0029	.0001	.0042	-.3	-.4	.3	.0007	.0050	.0011
M002 UPAD P NCL	.0097	.0050	.0116	.8	.6	-.4	.0029	.0006	.0156
M002 UPAD P JPL	.0013	-.0045	.0013	.3	-.5	.9	-.0047	.0006	.0012

13101 BRUSSELS

Positions

M004 BRUS P CODE	-.0017	-.0026	-.0007	-.7	-.2	.4	-.0025	.0010	-.0018	95: 76
M004 BRUS P04 EUR	-.0008	-.0002	-.0010	.3	-.3	.3	-.0001	.0000	-.0013	96: 90
M004 BRUS P03 EUR	-.0018	-.0024	-.0015	-.4	.1	.6	-.0022	.0006	-.0024	96:339
M004 BRUS P MIT	-.0010	-.0014	.0058	-.2	.2	.2	-.0013	.0045	.0038	97:151
M004 BRUS P NCL	.0018	-.0028	.0018	.3	-.6	-1.1	-.0029	-.0001	.0024	96: 1

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M004 BRUS P JPL        .0049  .0003  .0071  1.0  -.1  1.1 -.0001  .0007  .0086 96:  1

Velocities
M004 BRUS P CODE       .0012 -.0003  .0027   .0  -.6  -.4 -.0004  .0008  .0029
M004 BRUS P04 EUR      .0010 -.0039 -.0006   .2 -1.1  -.1 -.0040 -.0009  .0000
M004 BRUS P03 EUR     -.0015 -.0018  .0013  -.8  -.4   .0 -.0017  .0021  .0000
M004 BRUS P MIT       -.0057  .0027  .0030  -.7  -.1  -.5  .0031  .0061 -.0011
M004 BRUS P NCL       -.0016  .0040 -.0013   .1   .2   .1  .0041  .0002 -.0018
M004 BRUS P JPL       -.0014 -.0017 -.0013  -.1   .0   .1 -.0016  .0003 -.0020

13112 DENTERGEM

Positions
M001 DENT P04 EUR     -.0027 -.0011 -.0011  -.3  -.5   .8 -.0009  .0014 -.0026 96: 90
M001 DENT P03 EUR     -.0011 -.0021 -.0006   .0   .4   .0 -.0020  .0005 -.0012 96:339
M001 DENT P MIT        .0002 -.0032  .0044  -.2   .0   .0 -.0032  .0028  .0035 97:151
M001 DENT P NCL        .0025 -.0012  .0030   .2   .6   .0 -.0013  .0000  .0038 96:  1

Velocities
M001 DENT P04 EUR      .0041 -.0031 -.0032   .3   .4  -.1 -.0033 -.0050  .0000
M001 DENT P03 EUR     -.0019 -.0022  .0016  -.4  -.3   .1 -.0020  .0026  .0000
M001 DENT P MIT       -.0051 -.0018  .0013  -.4  -.4   .0 -.0015  .0049 -.0022
M001 DENT P NCL       -.0011  .0022 -.0016   .2   .0  -.2  .0023 -.0003 -.0018

13113 DOURBES

Positions
M001 DOUR P04 EUR      .0002  .0006  .0020   .3   .6   .7  .0005  .0011  .0017 96: 90
M001 DOUR P03 EUR     -.0012 -.0022 -.0006   .0   .1   .2 -.0021  .0007 -.0014 96:339
M001 DOUR P MIT        .0027 -.0020  .0076   .0   .1   .2 -.0022  .0029  .0075 97:151
M001 DOUR P NCL       -.0027 -.0040 -.0028  -.4  -.6   .0 -.0038  .0005 -.0040 96:  1

Velocities
M001 DOUR P04 EUR      .0001 -.0114  .0007  -.3  -.7  -.1 -.0113  .0010  .0000
M001 DOUR P03 EUR     -.0016 -.0007  .0014  -.2   .3   .0 -.0006  .0022  .0000
M001 DOUR P MIT       -.0006  .0009  .0063   .0   .0   .2  .0009  .0044  .0045
M001 DOUR P NCL        .0046  .0055  .0048   .1   .0  -.2  .0051 -.0008  .0069

13114 WAREMME

Positions
M001 WARE P04 EUR      .0010  .0004  .0040   .5   .4   .9  .0004  .0018  .0038 96: 90
M001 WARE P03 EUR     -.0013 -.0023 -.0012   .0  -.1  -.1 -.0022  .0004 -.0019 96:339
M001 WARE P MIT        .0024 -.0024  .0078   .0   .0   .2 -.0026  .0032  .0074 97:151
M001 WARE P NCL       -.0007 -.0043 -.0031  -.1  -.5  -.6 -.0042 -.0011 -.0031 96:  1

Velocities
M001 WARE P04 EUR      .0050 -.0099 -.0033   .3  -.4  -.1 -.0103 -.0053  .0000
M001 WARE P03 EUR     -.0015 -.0011  .0013  -.2   .1   .0 -.0009  .0021  .0000
M001 WARE P MIT       -.0011  .0004  .0074   .0  -.1   .3  .0005  .0055  .0051
M001 WARE P NCL        .0020  .0058  .0047  -.3   .2  -.2  .0055  .0011  .0052

13201 CHILBOLTON

Positions
S002 7215 R GSFC       .0250 -.0003  .0121   .1   .0   .0  .0003 -.0119  .0251 93:  1
S002 7215 R NOAA       .0073  .0040  .0031   .0  -.1   .0  .0042 -.0036  .0069 93:  1

Velocities
S002 7215 R GSFC       .0009  .0000 -.0007   .0   .0   .0  .0001 -.0011  .0000
S002 7215 R NOAA       .0011 -.0001  .0010   .0   .0   .0 -.0001 -.0002  .0015

13212 HERSTMONCEUX
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Positions

M007 HERS TIE13212	.0004	-.0058	-.0065	.0	.0	.0	-.0058	-.0044	-.0048	93: 1
M007 HERS P CODE	-.0023	-.0015	-.0024	-.9	-.5	1.4	-.0015	.0003	-.0034	95: 76
M007 HERS P04 EUR	-.0037	.0008	-.0014	-1.1	1.3	2.2	.0008	.0020	-.0034	96: 90
M007 HERS P03 EUR	.0009	-.0023	.0013	.7	-.3	-.1	-.0024	.0001	.0016	96:339
M007 HERS P MIT	.0035	-.0030	.0062	.1	.0	-.1	-.0030	.0012	.0070	97:151
M007 HERS P NCL	-.0015	-.0022	.0020	-.4	.6	2.1	-.0022	.0024	.0006	96: 1
M007 HERS P JPL	.0045	.0007	.0077	.7	.2	1.1	.0007	.0014	.0089	96: 1
S001 7840 TIE13212	.0000	.0000	.0000	-.1	1.9	2.2	.0000	.0000	.0000	93: 1
S001 7840 L CSR	-.0026	.0002	-.0002	-.7	-.2	-1.0	.0003	.0019	-.0019	93: 1
S001 7840 L GSFC	-.0147	-.0184	-.0087	-1.2	-.5	-2.0	-.0183	.0060	-.0161	86:182

Velocities

M007 HERS P CODE	.0010	-.0001	.0035	-.1	-.4	2.1	-.0001	.0014	.0034
M007 HERS P04 EUR	.0039	-.0179	-.0032	.6	-1.4	-.3	-.0179	-.0050	.0000
M007 HERS P03 EUR	.0010	.0001	-.0008	.6	.9	-.4	.0001	-.0013	.0000
M007 HERS P MIT	.0044	.0003	.0074	.6	-.1	.1	.0003	.0012	.0085
M007 HERS P NCL	.0051	.0030	.0010	1.0	-.7	-1.2	.0030	-.0033	.0041
M007 HERS P JPL	.0003	.0009	.0033	-.2	.5	.9	.0009	.0019	.0028
S001 7840 L CSR	.0059	.0014	.0088	.5	.1	.6	.0014	.0010	.0105
S001 7840 L GSFC	.0030	.0025	.0014	.3	.7	1.8	.0024	-.0015	.0030

13296 CARNUSTY

Positions

M002 7603 R GSFC	-.0182	.0034	-.0321	-.1	.1	-.2	.0025	-.0025	-.0369	93: 1
M002 7603 R NOAA	.0116	-.0007	.0220	.0	.0	.1	-.0001	.0025	.0247	93: 1

Velocities

M002 7603 R GSFC	.0017	.0020	-.0011	.0	.0	.0	.0021	-.0020	.0000
M002 7603 R NOAA	.0020	.0017	.0008	.0	.0	.0	.0018	-.0012	.0017

13402 SAN FERNANDO

Positions

M004 SFER P04 EUR	-.0067	-.0039	-.0048	.1	-.2	.0	-.0046	-.0002	-.0078	96: 90
M004 SFER P03 EUR	-.0004	-.0009	-.0007	-.1	1.1	-.1	-.0009	-.0004	-.0006	96:339
M004 SFER P MIT	.0053	.0045	.0029	.2	.2	.3	.0050	-.0005	.0056	97:151
M004 SFER P NCL	.0011	-.0105	.0050	.0	-2.3	.9	-.0103	.0027	.0048	96: 1

Velocities

M004 SFER P04 EUR	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000
M004 SFER P03 EUR	.0075	.0104	-.0085	1.3	2.6	-.1	.0111	-.0106	.0000
M004 SFER P MIT	.0021	.0096	-.0062	-.2	.6	-.6	.0097	-.0057	-.0029
M004 SFER P NCL	-.0002	.0128	-.0046	-.1	.0	.0	.0127	-.0028	-.0040

13406 VILLAFRANCA

Positions

M001 VILL P04 EUR	-.0034	-.0002	-.0007	-.2	-.3	.9	-.0004	.0017	-.0030	96: 90
M001 VILL P03 EUR	-.0016	-.0021	-.0008	-.2	.1	.4	-.0022	.0003	-.0016	96:339
M001 VILL P MIT	.0044	-.0033	.0009	.5	-.3	-.1	-.0030	-.0023	.0040	97:151
M001 VILL P NCL	-.0008	-.0020	-.0004	-.2	.4	-.6	-.0021	.0001	-.0007	96: 1
M001 VILL P JPL	.0009	-.0011	.0015	-.2	-.1	.8	-.0010	.0006	.0017	96: 1

Velocities

M001 VILL P04 EUR	.0054	.0000	-.0063	.9	.0	.0	.0004	-.0083	.0000
M001 VILL P03 EUR	.0024	-.0025	-.0030	-.2	-.2	-.1	-.0023	-.0040	.0000
M001 VILL P MIT	-.0039	.0021	-.0051	-1.3	.5	-.7	.0018	-.0013	-.0063
M001 VILL P NCL	.0023	.0028	.0019	-.1	.0	-.2	.0030	.0001	.0028
M001 VILL P JPL	.0035	-.0046	.0043	.3	-.5	.4	-.0043	.0008	.0057

13407 MADRID

Positions

S001 1563 R JPL	.0150	.0016	-.0042	.0	.0	.0	.0027	-.0128	.0086	93: 1
S003 1561 R GSFC	-.0254	.0504	-.0673	-.1	.6	-.4	.0484	-.0323	-.0658	93: 1
S003 1561 R JPL	.0153	.0012	-.0022	.0	-.1	.2	.0024	-.0115	.0102	93: 1
S010 1565 TIE13407	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S010 1565 R GSFC	.0020	-.0006	.0017	.8	.0	-.7	-.0004	.0000	.0027	93: 1
S010 1565 R GIUB	-.0087	.0044	-.0240	1.3	.0	-1.3	.0038	-.0125	-.0224	93: 1
S010 1565 R NOAA	-.0051	.0023	.0012	-.1	.4	-.3	.0019	.0043	-.0032	93: 1
S010 1565 R JPL	-.0093	.0068	-.0115	.0	.0	.0	.0061	-.0025	-.0149	93: 1
S012 MADR TIE13407	.0086	.0012	-.0063	2.9	.4	-2.1	.0018	-.0103	.0024	93: 1
S012 MADR P EMR	.0029	-.0036	.0035	.2	1.0	.7	-.0033	.0007	.0046	96: 1
S012 MADR P GFZ	-.0242	-.0167	.0027	-3.3	-.2	-.2	-.0185	.0169	-.0157	94:365
S012 MADR P CODE	-.0132	-.0010	-.0102	-2.7	-.2	.6	-.0020	.0007	-.0166	95: 76
S012 MADR P CODE	.0031	-.0036	.0049	.4	-.4	.2	-.0034	.0016	.0058	95: 76
S012 MADR P04 EUR	-.0114	-.0001	-.0081	-1.2	-.6	.5	-.0009	.0012	-.0139	96: 90
S012 MADR P03 EUR	-.0030	-.0017	-.0025	-.1	.2	-.3	-.0019	-.0001	-.0038	96:339
S012 MADR P03 EUR	-.0066	-.0035	-.0034	-.7	-.3	.2	-.0040	.0016	-.0070	96:339
S012 MADR P MIT	.0154	.0013	.0028	2.2	.4	-.6	.0024	-.0077	.0134	97:151
S012 MADR P NCL	-.0009	-.0033	.0010	-.7	-.5	.3	-.0034	.0012	.0002	96: 1
S012 MADR P JPL	.0094	-.0011	.0094	1.8	-.1	1.4	-.0004	.0010	.0133	96: 1

Velocities

S003 1561 R GSFC	.0012	.0007	.0015	.6	.5	.7	.0008	.0004	.0018
S010 1565 R GSFC	.0012	.0007	.0015	.0	.0	.0	.0008	.0004	.0018
S010 1565 R GIUB	.0026	.0016	.0025	.5	-.6	-.1	.0017	.0003	.0035
S010 1565 R NOAA	-.0013	.0007	-.0005	-.5	-.4	.1	.0006	.0005	-.0013
S012 MADR P EMR	.0021	.0000	.0008	.6	.3	-.5	.0001	-.0008	.0021
S012 MADR P GFZ	.0011	.0035	.0026	.2	.2	-.5	.0035	.0014	.0023
S012 MADR P CODE	.0022	.0012	.0023	.4	-.1	.2	.0013	.0004	.0032
S012 MADR P CODE	.0022	.0012	.0023	.0	-.2	.1	.0013	.0004	.0032
S012 MADR P04 EUR	.0014	.0060	-.0012	.2	.6	.0	.0061	-.0015	.0000
S012 MADR P03 EUR	.0009	-.0099	-.0019	.0	.0	.0	-.0098	-.0025	.0000
S012 MADR P03 EUR	.0009	-.0099	-.0019	.6	-.9	-.1	-.0098	-.0025	.0000
S012 MADR P MIT	.0108	.0053	.0017	.6	1.1	-.8	.0061	-.0054	.0090
S012 MADR P NCL	.0099	.0046	.0049	1.3	.6	-1.2	.0053	-.0025	.0104
S012 MADR P JPL	.0023	.0002	.0026	-.2	.5	-.2	.0004	.0005	.0034

13410 ROQUETES

Positions

M001 EBRE P03 EUR	-.0020	-.0020	-.0013	.1	.1	-.2	-.0020	.0003	-.0024	96:339
M001 EBRE P MIT	-.0032	-.0006	-.0007	-.7	.0	-.1	-.0006	.0015	-.0029	97:151
M001 EBRE P NCL	.0113	-.0078	.0169	.3	-1.2	.9	-.0079	.0054	.0196	96: 1
M001 EBRE P JPL	.0147	.0036	.0009	.4	.2	-.6	.0035	-.0089	.0117	96: 1

Velocities

M001 EBRE P03 EUR	-.0001	-.0070	.0002	-.4	-1.2	.0	-.0070	.0002	.0000
M001 EBRE P MIT	-.0149	.0023	-.0153	-.4	-.2	-.1	.0024	-.0019	-.0213
M001 EBRE P NCL	-.0101	.0091	-.0159	.1	.3	.1	.0092	-.0055	-.0180
M001 EBRE P JPL	-.0084	-.0113	.0099	.3	-.3	1.0	-.0112	.0130	.0000

13420 YEBES

Positions

S001 7333 R GSFC	.0044	-.0038	.0167	.0	-.1	.2	-.0036	.0097	.0143	93: 1
S001 7333 R GIUB	-.0238	.0093	-.0334	-.2	.0	-.1	.0080	-.0096	-.0401	93: 1

Velocities

S001 7333 R GSFC	.0013	.0011	-.0015	.0	.0	.0	.0012	-.0019	.0000
S001 7333 R GIUB	.0012	-.0002	.0003	.0	.0	.0	-.0002	-.0006	.0011

13502 DELFT

Positions

M004 DELF P04 EUR	-.0042	-.0001	.0001	-.6	.2	1.1	.0002	.0033	-.0025	96: 90
M004 DELF P03 EUR	-.0011	-.0023	-.0011	-.1	.0	-.2	-.0022	.0004	-.0017	96:339
M004 DELF P MIT	.0012	-.0025	.0067	-.1	.0	.1	-.0026	.0033	.0059	97:151
M004 DELF P NCL	.0002	-.0037	-.0027	-.1	-.5	-.9	-.0037	-.0016	-.0022	96: 1

Velocities

M004 DELF P04 EUR	.0094	-.0102	-.0067	.0	-.3	.0	-.0109	-.0109	.0000
M004 DELF P03 EUR	-.0021	-.0019	.0018	-.4	-.1	.1	-.0018	.0029	.0000
M004 DELF P MIT	-.0031	-.0003	.0066	-.3	-.2	.3	.0000	.0065	.0032
M004 DELF P NCL	.0018	.0052	.0053	.5	.3	-.4	.0051	.0015	.0055

13504 KOOTWIJK

Positions

M002 8833 TIE13504	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 8833 L CSR	.0048	-.0229	.0064	.1	-.1	.0	-.0233	.0019	.0066	93: 1
M003 KOSG TIE13504	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M003 KOSG P EMR	-.0004	-.0066	.0029	-.6	.8	1.1	-.0065	.0026	.0016	96: 1
M003 KOSG P GFZ	-.0101	-.0175	.0162	-.7	-.6	-.4	-.0164	.0193	.0055	94:365
M003 KOSG P CODE	.0006	-.0016	.0015	.2	-.6	1.3	-.0016	.0006	.0014	95: 76
M003 KOSG P04 EUR	-.0052	-.0020	-.0056	-1.4	-2.0	1.4	-.0015	.0008	-.0078	96: 90
M003 KOSG P03 EUR	-.0020	-.0022	-.0024	-.7	.9	-.1	-.0020	.0003	-.0032	96:339
M003 KOSG P MIT	-.0002	-.0012	.0040	.1	.2	.1	-.0012	.0027	.0029	97:151
M003 KOSG P NCL	.0013	-.0031	.0036	.1	-.4	1.2	-.0032	.0014	.0034	96: 1
M003 KOSG P JPL	.0049	-.0006	.0063	1.4	-.4	.4	-.0011	.0001	.0080	96: 1
S001 7833 TIE13504	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001 7833 L CSR	-.0117	.0147	-.0292	-.6	.1	-.1	.0158	-.0099	-.0293	93: 1

Velocities

M002 8833 L CSR	.0093	-.0037	.0131	.2	.1	.0	-.0046	.0010	.0158
M003 KOSG P EMR	.0010	.0002	-.0001	.3	.5	-.1	.0001	-.0008	.0005
M003 KOSG P GFZ	-.0020	.0007	.0007	-.3	-1.5	.2	.0009	.0020	-.0007
M003 KOSG P CODE	-.0003	-.0010	.0016	.0	-1.4	.5	-.0009	.0013	.0010
M003 KOSG P04 EUR	.0009	-.0055	-.0003	.5	-.4	-.1	-.0056	-.0004	.0000
M003 KOSG P03 EUR	-.0011	-.0021	.0010	-.8	-1.0	.1	-.0020	.0017	.0000
M003 KOSG P MIT	-.0037	.0027	.0040	.1	-.2	.0	.0031	.0051	.0011
M003 KOSG P NCL	.0012	.0046	-.0019	.1	.5	-.8	.0045	-.0024	-.0005
M003 KOSG P JPL	-.0004	-.0012	.0008	-.8	-.7	.7	-.0011	.0010	.0003
S001 7833 L CSR	.0093	-.0037	.0131	.0	.0	.0	-.0046	.0010	.0158

14001 ZIMMERWALD

Positions

M004 ZIMM TIE14001	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M004 ZIMM P CODE	.0035	-.0026	.0051	1.5	-1.8	1.0	-.0031	.0012	.0058	95: 76
M004 ZIMM P04 EUR	-.0031	.0007	-.0019	-.7	1.7	.8	.0011	.0009	-.0035	96: 90
M004 ZIMM P03 EUR	-.0013	-.0022	-.0010	-.1	.6	.4	-.0021	.0005	-.0018	96:339
M004 ZIMM P MIT	.0035	-.0041	.0121	-.1	-.2	.9	-.0045	.0061	.0109	97:151
M004 ZIMM P JPL	-.0411	-.0034	-.0492	-4.9	-.1	-2.3	.0019	-.0035	-.0641	96: 1
S001 7810 TIE14001	-.0008	-.0009	-.0021	-.3	-.3	-.7	-.0008	-.0008	-.0022	93: 1
S001 7810 L CSR	-.0115	-.0003	-.0119	-.5	-.3	-1.0	.0012	.0002	-.0165	93: 1
S001 7810 L GSFC	-.0081	-.0136	-.0071	-.1	.1	-.6	-.0124	.0023	-.0119	86:182

Velocities

M004 ZIMM P CODE	.0004	.0004	.0031	.1	-1.1	.7	.0003	.0018	.0026
M004 ZIMM P04 EUR	.0016	.0009	-.0016	.3	-.4	.0	.0006	-.0024	.0000
M004 ZIMM P03 EUR	-.0011	-.0044	.0016	-1.2	-2.4	.1	-.0043	.0024	.0000
M004 ZIMM P MIT	-.0027	-.0025	.0088	-.6	-.9	1.3	-.0021	.0082	.0044
M004 ZIMM P JPL	-.0023	-.0047	-.0025	.7	-.3	.3	-.0044	.0004	-.0038
S001 7810 L CSR	.0038	-.0010	.0046	1.7	-.7	-1.4	-.0015	.0005	.0058

S001 7810 L GSFC	.0039	.0019	.0023	1.1	.2	2.5	.0013	-.0014	.0044	

14106 POTSDAM

Positions

M003 POTS TIE14106	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M003 POTS P GFZ	-.0151	-.0150	.0091	-.6	.3	-.7	-.0112	.0199	-.0038	94:365
M003 POTS P CODE	-.0031	-.0024	-.0027	-.9	.7	.0	-.0017	.0012	-.0043	95: 76
M003 POTS P04 EUR	.0022	.0000	.0022	.6	-1.0	.3	-.0005	-.0004	.0030	96: 90
M003 POTS P03 EUR	.0008	-.0019	.0020	1.0	.1	.5	-.0020	.0010	.0018	96:339
M003 POTS P MIT	.0008	-.0013	.0021	-.3	.2	.1	-.0015	.0009	.0019	97:151
M003 POTS P NCL	-.0012	-.0036	-.0007	-.5	-.2	.1	-.0032	.0011	-.0018	96: 1
M003 POTS P JPL	.0041	.0020	.0066	.4	.4	1.4	.0010	.0005	.0080	96: 1
S001 1181 L CSR	.0370	.0652	-.0792	.0	.4	-.7	.0552	-.0886	-.0317	93: 1
S001 1181 L GSFC	-.0093	-.0086	-.0036	-.6	-.6	-1.1	-.0063	.0066	-.0096	86:182
S009 7836 TIE14106	-.0007	.0002	.0004	-.2	.1	.1	.0003	.0008	.0000	93: 1
S009 7836 L CSR	-.0122	-.0028	-.0246	.0	-.3	-.7	.0001	-.0051	-.0271	93: 1

Velocities

M003 POTS P GFZ	-.0022	-.0005	.0008	-.7	-.3	-.3	.0000	.0023	-.0008
M003 POTS P CODE	.0001	-.0012	.0030	-.8	.1	.3	-.0012	.0020	.0022
M003 POTS P04 EUR	-.0013	-.0034	.0015	.0	-.4	-.2	-.0031	.0025	.0000
M003 POTS P03 EUR	-.0014	.0023	.0007	-.3	1.2	-.2	.0026	.0011	.0000
M003 POTS P MIT	-.0040	.0039	.0035	.2	.5	.4	.0047	.0045	.0009
M003 POTS P NCL	.0023	.0047	.0017	-.3	.2	-.7	.0040	-.0016	.0034
M003 POTS P JPL	-.0037	-.0016	-.0038	-.4	.0	.0	-.0007	.0008	-.0054
S001 1181 L CSR	.0071	.0025	.0156	.0	.0	.0	.0008	.0036	.0169
S001 1181 L GSFC	.0082	.0037	.0015	2.9	1.2	3.1	.0017	-.0061	.0066
S009 7836 L CSR	.0071	.0025	.0156	.8	-.2	-1.4	.0008	.0036	.0169

14201 WETTZELL

Positions

M003 7595 TIE14201	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M004 7596 TIE14201	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M004 7596 L CSR	-.0553	.0578	-.0456	-.2	.5	.3	.0687	.0012	-.0613	93: 1
M005 7597 TIE14201	.0000	.0001	.0000	.0	.0	.0	.0001	.0000	.0000	93: 1
M005 7597 L CSR	-.0172	-.0046	-.0111	-.1	-.2	-.2	-.0006	.0062	-.0200	93: 1
M006 7598 TIE14201	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M007 7599 L CSR	.2861	.0822	.0823	.1	-.1	.1	.0164	-.1710	.2567	93: 1
M009 WETT TIE14201	-.0024	.0005	-.0029	-.7	.1	-.9	.0010	-.0002	-.0037	93: 1
M009 WETT P EMR	.0023	-.0037	.0075	.4	.3	1.2	-.0041	.0039	.0066	96: 1
M009 WETT P GFZ	-.0108	-.0148	.0158	.1	.3	.3	-.0120	.0208	.0030	94:365
M009 WETT P CODE	-.0021	-.0016	-.0018	-.2	.3	.4	-.0011	.0007	-.0029	95: 76
M009 WETT P04 EUR	.0002	-.0040	-.0069	-.1	-3.5	-3.0	-.0039	-.0040	-.0057	96: 90
M009 WETT P MIT	.0057	-.0058	-.0038	.4	-.1	-1.7	-.0070	-.0057	-.0001	97:151
M009 WETT P NCL	.0006	-.0021	.0028	-.1	.9	.7	-.0022	.0017	.0021	96: 1
M009 WETT P JPL	.0071	.0007	.0077	1.0	.0	.1	-.0009	-.0004	.0104	96: 1
M010 WTZR TIE14201	.0016	-.0007	.0038	.6	-.3	1.3	-.0011	.0014	.0038	93: 1
M010 WTZR P EMR	.0032	-.0048	.0053	-.1	.0	1.0	-.0054	.0019	.0054	96: 1
M010 WTZR P GFZ	-.0137	-.0162	.0140	-.4	-.6	-.2	-.0128	.0220	-.0005	94:365
M010 WTZR P CODE	.0004	-.0027	.0030	-.6	-.3	.6	-.0028	.0021	.0021	95: 76
M010 WTZR P04 EUR	-.0006	.0005	.0001	.1	.2	.3	.0006	.0004	-.0002	96: 90
M010 WTZR P03 EUR	-.0029	-.0026	-.0029	-1.1	.6	-.5	-.0018	.0007	-.0044	96:339
M010 WTZR P MIT	.0005	-.0011	.0034	-.1	.4	.3	-.0012	.0020	.0027	97:151
M010 WTZR P NCL	.0007	-.0039	.0013	.0	-1.2	.6	-.0039	.0010	.0008	96: 1
M010 WTZR P JPL	.0077	.0008	.0088	.5	.2	.6	-.0009	-.0001	.0117	96: 1
S002 7834 TIE14201	.0000	.0000	.0000	.1	.0	-.1	.0000	.0000	.0000	93: 1
S002 7834 L CSR	-.0165	-.0068	-.0194	-.6	-.9	1.3	-.0030	.0006	-.0262	93: 1
S002 7834 L GSFC	-.0088	-.0177	-.0066	-.2	-.2	-1.2	-.0153	.0052	-.0132	86:182
S004 7224 TIE14201	-.0007	.0001	-.0016	-.2	.0	-.5	.0003	-.0006	-.0016	93: 1
S004 7224 R GSFC	-.0016	-.0022	.0040	-1.3	-.3	-.9	-.0018	.0042	.0016	93: 1
S004 7224 R GIUB	.0008	-.0002	.0017	.0	.0	.0	-.0004	.0005	.0017	93: 1

S004 7224 R NOAA	.0053	.0004	.0170	1.8	.9	1.9	-.0008	.0071	.0163	93:	1
S018 8834 TIE14201	-.0003	-.0013	.0001	-.1	-.4	.0	-.0012	.0005	-.0003	93:	1
S018 8834 L CSR	.0085	.0069	.0239	.7	.8	-.3	.0049	.0082	.0245	93:	1

Velocities

M004 7596 L CSR	-.0001	.0000	-.0003	-.1	.0	-.1	.0000	-.0001	-.0003		
M005 7597 L CSR	-.0001	.0000	-.0003	.3	.0	-1.5	.0000	-.0001	-.0003		
M007 7599 L CSR	-.0001	.0000	-.0003	1.8	.4	2.8	.0000	-.0001	-.0003		
M009 WETT P EMR	.0010	-.0011	-.0005	.1	-.1	-.6	-.0013	-.0008	.0001		
M009 WETT P GFZ	-.0024	.0001	-.0018	-.2	-.7	-1.4	.0007	.0006	-.0029		
M009 WETT P CODE	-.0001	-.0008	.0010	.7	-1.3	1.2	-.0007	.0009	.0006		
M009 WETT P04 EUR	.0062	.0009	-.0051	.8	.6	1.9	-.0005	-.0081	.0002		
M009 WETT P MIT	-.0037	.0011	-.0042	.4	.1	-1.3	.0019	-.0002	-.0054		
M009 WETT P NCL	.0281	-.0097	-.0134	1.3	-1.2	-.4	-.0157	-.0279	.0064		
M009 WETT P JPL	.0007	-.0020	.0009	-.3	-.9	-.2	-.0021	.0004	.0008		
M010 WTZR P EMR	.0000	-.0004	-.0006	.5	-.4	-.4	-.0004	-.0004	-.0005		
M010 WTZR P GFZ	-.0025	.0001	-.0017	.0	-.3	-.1	.0007	.0007	-.0029		
M010 WTZR P CODE	-.0004	-.0004	.0012	-.3	-1.1	1.7	-.0003	.0012	.0006		
M010 WTZR P04 EUR	.0001	.0001	.0001	1.6	1.0	-.9	.0000	.0000	.0002		
M010 WTZR P03 EUR	.0002	.0000	.0002	1.9	.4	1.8	.0000	.0000	.0002		
M010 WTZR P MIT	-.0059	.0033	.0000	-.5	.2	-.3	.0045	.0037	-.0033		
M010 WTZR P NCL	.0009	.0056	.0010	-.3	.8	-1.1	.0052	-.0010	.0021		
M010 WTZR P JPL	-.0070	-.0040	-.0062	.4	-.2	.8	-.0023	.0017	-.0097		
S002 7834 L CSR	-.0001	.0000	-.0003	-.6	-.1	-.9	.0000	-.0001	-.0003		
S002 7834 L GSFC	.0022	.0016	-.0003	.3	-.1	.5	.0011	-.0021	.0014		
S004 7224 R GSFC	-.0006	.0002	-.0009	-.5	1.3	-1.3	.0004	-.0002	-.0010		
S004 7224 R GIUB	-.0010	.0003	-.0010	.0	.0	.0	.0005	.0000	-.0014		
S004 7224 R NOAA	-.0002	.0003	.0014	.2	.5	.6	.0003	.0010	.0010		
S018 8834 L CSR	-.0001	.0000	-.0003	.3	.0	.5	.0000	-.0001	-.0003		

14202 HOHENBUNSTORF

Positions

M002 7600 R GSFC	.0150	.0001	.0163	.2	.1	.2	-.0027	-.0020	.0219	93:	1
M002 7600 R NOAA	.0019	-.0017	.0069	-.2	.0	.0	-.0020	.0029	.0065	93:	1

Velocities

M002 7600 R GSFC	.0011	.0007	-.0009	.0	.0	.0	.0005	-.0015	.0000		
M002 7600 R NOAA	.0009	.0005	.0009	.0	.0	.0	.0003	-.0003	.0013		

14208 OBERPFAFFENHOFEN

Positions

M001 OBER P GFZ	-.0022	-.0207	.0088	.7	-.1	-.2	-.0199	.0105	.0024	94:365	
M001 OBER P03 EUR	-.0019	-.0020	-.0019	.0	.4	-.2	-.0016	.0004	-.0029	96:339	
M001 OBER P MIT	.0018	-.0036	.0103	.1	.0	.6	-.0039	.0061	.0083	97:151	
M001 OBER P NCL	.0055	-.0115	-.0030	.2	-.6	-.4	-.0124	-.0044	-.0001	96:	1
M001 OBER P JPL	.0702	.0133	.1014	.0	.0	.1	-.0007	.0145	.1231	96:	1

Velocities

M001 OBER P GFZ	-.0069	.0024	.0046	-.6	-1.1	-.2	.0037	.0077	-.0008		
M001 OBER P03 EUR	.0000	.0000	.0000	.1	.0	.0	.0000	.0000	.0000		
M001 OBER P MIT	-.0032	.0069	.0134	-.2	.6	.9	.0074	.0103	.0087		
M001 OBER P NCL	-.0051	.0119	.0035	-.3	.0	-.3	.0127	.0043	.0008		
M001 OBER P JPL	-.0778	-.0208	-.1110	.0	-.3	1.0	-.0052	-.0143	-.1363		

14209 EFFELSBERG

Positions

S001 7203 R GSFC	-.0123	-.0029	-.0072	-1.5	-.6	.6	-.0014	.0051	-.0135	93:	1
S001 7203 R GSFC	.0066	-.0003	.0144	.0	.0	.0	-.0011	.0041	.0152	93:	1
S001 7203 R GIUB	.0011	-.0024	-.0065	.1	-.4	-1.1	-.0026	-.0048	-.0045	93:	1
S001 7203 R NOAA	.0100	.0006	.0195	.9	-.3	1.7	-.0006	.0046	.0214	93:	1

Velocities

S001 7203 R GSFC	-.0018	-.0002	-.0023	-.7	-.1	-.1	.0001	-.0001	-.0030		
S001 7203 R GSFC	-.0157	.0178	.0058	.0	.0	.0	.0195	.0141	-.0041		
S001 7203 R GIUB	.0036	.0014	.0070	.7	-.2	.2	.0009	.0015	.0078		
S001 7203 R NOAA	-.0013	-.0007	-.0012	-.1	-.6	.1	-.0006	.0003	-.0018		

14213 HOHENPEISSENBERG

Positions

M002 7630 R GSFC	.0117	-.0003	.0191	.1	.0	.0	-.0026	.0044	.0219	93:	1
M002 7630 R NOAA	.0008	-.0005	.0111	-.1	.0	.0	-.0006	.0070	.0087	93:	1

Velocities

M002 7630 R GSFC	.0001	-.0001	.0000	.0	.0	.0	-.0001	-.0001	.0000		
M002 7630 R NOAA	-.0001	-.0001	.0016	.0	.0	.0	-.0001	.0012	.0011		

14260 KARLSBURG

Positions

M001 7632 R GSFC	-.0045	-.0029	.0043	.0	.0	.1	-.0017	.0066	.0005	93:	1
M001 7632 R NOAA	.0054	-.0005	.0143	.0	.0	-.1	-.0017	.0043	.0146	93:	1

Velocities

M001 7632 R GSFC	-.0007	.0003	.0005	.0	.0	.0	.0004	.0008	.0000		
M001 7632 R NOAA	-.0008	.0000	.0022	.0	.0	.0	.0002	.0019	.0013		

14261 KIRSCHBERG

Positions

M001 7631 R GSFC	.0044	-.0029	.0109	.1	-.1	.0	-.0039	.0041	.0107	93:	1
M001 7631 R NOAA	.0039	-.0001	.0146	.0	.0	.1	-.0011	.0062	.0138	93:	1

Velocities

M001 7631 R GSFC	.0008	-.0009	-.0004	.0	.0	.0	-.0010	-.0007	.0000		
M001 7631 R NOAA	.0007	-.0010	.0013	.0	.0	.0	-.0012	.0005	.0012		

20702 BAR GIYYORA

Positions

M001 7530 L CSR	-.0122	.0040	.0097	.0	.0	.0	.0103	.0122	-.0014	93:	1

Velocities

M001 7530 L CSR	-.0063	.0009	.0074	.0	-.1	-.3	.0043	.0088	-.0001		

20801 DIYARBAKIR

Positions

M001 7575 L CSR	-.0089	-.0062	-.0412	.0	.1	-.1	.0010	-.0258	-.0339	93:	1

Velocities

M001 7575 L CSR	-.0046	-.0021	-.0021	.0	.0	.0	.0013	.0014	-.0051		

20802 YOZGAT

Positions

M001 7585 L CSR	-.0604	-.0235	-.0389	-.4	-.2	-.1	.0152	.0104	-.0733	93:	1
M001 7585 L GSFC	.0178	-.0058	-.0107	.1	.1	-.1	-.0149	-.0155	.0018	86:	182

Velocities

M001 7585 L CSR	-.0132	-.0019	.0025	.2	.3	.0	.0060	.0096	-.0076		
M001 7585 L GSFC	-.0021	.0051	.0005	.0	.5	.0	.0054	-.0004	.0013		

20803 MELENGICLICK

Positions

M001 7580 L CSR	-.0366	-.0073	-.0183	-.2	.0	-.2	.0139	.0064	-.0386	93: 1
M001 7580 L GSFC	.0176	-.0094	-.0122	.2	.1	-.1	-.0175	-.0155	.0002	86:182

Velocities

M001 7580 L CSR	-.0072	-.0003	.0032	.3	.0	-.4	.0037	.0063	-.0030
M001 7580 L GSFC	-.0015	.0005	.0020	.2	.1	.1	.0012	.0022	.0004

20804 YIGILCA

Positions

M001 7587 L CSR	-.0083	.0052	.0085	.1	.0	-.1	.0087	.0093	.0023	93: 1
M001 7587 L GSFC	.0219	-.0002	-.0143	.2	.2	-.2	-.0116	-.0230	.0047	86:182

Velocities

M001 7587 L CSR	-.0020	.0036	.0105	.2	.1	-.3	.0042	.0079	.0070
M001 7587 L GSFC	-.0045	-.0003	.0023	.0	.1	.1	.0021	.0044	-.0015

20805 ANKARA

Positions

M001 7589 TIE20805	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 7589 L CSR	.1024	.1982	.1574	.9	1.4	.1	.1113	-.0033	.2493	93: 1
M002 ANKR TIE20805	-.0003	.0020	.0000	.0	.2	.0	.0018	-.0006	.0006	93: 1
M002 ANKR P CODE	.0020	-.0014	.0059	-.2	-.2	.0	-.0023	.0039	.0045	95: 76
M002 ANKR P04 EUR	.0153	.0075	.0126	1.5	-1.1	-.9	-.0020	-.0012	.0211	96: 90
M002 ANKR P03 EUR	-.0024	-.0028	-.0021	.1	.6	.0	-.0011	.0007	-.0040	96:339
M002 ANKR P MIT	-.0013	-.0019	.0027	-.5	.1	.1	-.0008	.0034	.0001	97:151
M002 ANKR P NCL	-.0004	-.0032	.0012	-.1	-.5	.0	-.0025	.0022	-.0009	96: 1
M002 ANKR P JPL	.0041	.0013	.0038	.3	.0	.9	-.0011	.0002	.0056	96: 1

Velocities

M001 7589 L CSR	-.0107	-.0422	.0311	.2	1.4	.0	-.0297	.0442	-.0045
M002 ANKR P CODE	-.0040	-.0013	.0013	-1.4	-1.4	-2.6	.0011	.0037	-.0023
M002 ANKR P04 EUR	.0087	.0014	-.0096	.5	.0	.3	-.0035	-.0125	.0000
M002 ANKR P03 EUR	-.0014	.0033	-.0007	-.7	.0	.2	.0035	-.0009	.0000
M002 ANKR P MIT	-.0088	.0032	-.0012	-.4	.1	-.3	.0075	.0027	-.0051
M002 ANKR P NCL	-.0004	.0028	-.0020	-.2	-.3	.3	.0026	-.0022	-.0004
M002 ANKR P JPL	-.0019	-.0064	-.0024	.1	-.3	.7	-.0044	.0014	-.0054

21501 EVEREST

Positions

S001 EVEB D GRGS	.0564	-.0255	-.0249	.5	-.3	-.4	-.0577	-.0115	-.0314	93: 1
S001 EVEB D CSR	-.0241	.0078	.0332	-.4	.1	.6	.0244	.0262	.0213	93: 1
S001 EVEB D IGN	.0146	-.0134	-.0303	.2	-.5	-1.2	-.0153	-.0209	-.0253	95:100

Velocities

S001 EVEB D GRGS	-.0190	.0070	.0140	.4	-.1	.8	.0194	.0095	.0118
S001 EVEB D CSR	-.0116	-.0068	.0128	-.9	-.1	1.6	.0112	.0147	-.0005
S001 EVEB D IGN	.0009	.0070	.0096	-.1	.9	-.1	-.0005	.0052	.0107

21601 BEIJING

Positions

S004 7249 L CSR	.0420	-.1938	-.2444	.1	-.1	-.2	.0468	-.0655	-.3043	93: 1

Velocities

S004 7249 L CSR	.0485	.0681	-.0148	.0	.1	.0	-.0734	-.0370	.0214

21602 WUHAN

Positions

M001 WUHN P CODE	-.0061	-.0092	.0094	.5	-.4	-.4	.0094	.0111	-.0003	95: 76
M001 WUHN P MIT	.0060	-.0089	-.0033	.4	-1.3	-.6	-.0018	.0025	-.0107	97:151
M001 WUHN P NCL	-.0090	.0082	.0116	-.2	-.2	.2	.0048	.0043	.0155	96: 1
M001 WUHN P JPL	-.0271	.0246	.0281	-.3	-.1	.3	.0146	.0071	.0432	96: 1
S003 7236 L CSR	.0024	-.0015	-.0175	.1	.1	-.1	-.0015	-.0139	-.0109	93: 1

Velocities

M001 WUHN P CODE	.0055	-.0006	.0049	.3	.0	.0	-.0048	.0057	.0001
M001 WUHN P MIT	.0081	-.0213	-.0139	1.0	-1.0	-.2	.0014	-.0004	-.0266
M001 WUHN P NCL	.0084	-.0012	-.0091	-.6	.3	.0	-.0072	-.0055	-.0085
M001 WUHN P JPL	.0217	-.0033	-.0166	-1.1	.4	.1	-.0184	-.0082	-.0187
S003 7236 L CSR	.0096	.0068	.0020	.1	.1	-.1	-.0115	.0005	.0030

21604 PURPLE MOUNTAIN

Positions

S003 PURA D GRGS	-.0036	.0196	.0015	.0	.4	.0	-.0063	-.0088	.0168	93: 1
S003 PURA D CSR	-.0273	-.0094	-.0141	-.4	.0	-.2	.0285	-.0146	-.0034	93: 1
S003 PURA D IGN	.0092	.0044	-.0049	.3	.3	-.4	-.0101	-.0038	-.0031	95:100

Velocities

S003 PURA D GRGS	-.0005	-.0159	-.0021	.1	-.7	.3	.0081	.0055	-.0127
S003 PURA D CSR	.0169	.0034	.0032	.1	.0	-.2	-.0165	.0055	-.0027
S003 PURA D IGN	-.0002	.0004	.0072	-.2	.3	.0	.0000	.0058	.0042

21605 SHANGHAI

Positions

M002 SHAO P CODE	-.0038	-.0215	-.0009	.1	.0	-.4	.0144	.0077	-.0145	95: 76
M002 SHAO P MIT	.0046	-.0004	.0009	-.1	.0	-.2	-.0038	.0022	-.0019	97:151
M002 SHAO P NCL	-.0011	-.0024	.0016	.2	.3	.1	.0021	.0021	-.0004	96: 1
M002 SHAO P JPL	-.0031	.0024	.0010	-1.0	.0	-.1	.0014	-.0010	.0036	96: 1
S001 7837 TIE21605	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001 7837 L CSR	-.0217	.0178	.0198	.0	.2	.1	.0094	.0033	.0329	93: 1
S001 7837 L GSFC	.0183	-.0339	.0575	.1	-.3	.9	.0019	.0691	-.0033	86:182
S008 7226 R GSFC	.0015	.0063	.0182	.0	.0	.1	-.0045	.0132	.0133	93: 1
S009 7227 TIE21605	-.0001	-.0004	.0007	.0	-.1	.2	.0003	.0007	.0001	93: 1
S009 7227 R GSFC	-.0010	.0013	.0061	-.2	.1	-.3	.0002	.0044	.0046	93: 1
S009 7227 R GIUB	-.0180	-.0525	.0012	.1	-1.0	-.2	.0426	.0194	-.0298	93: 1
S009 7227 R NOAA	.0050	-.0035	.0112	.3	.2	-.2	-.0025	.0125	.0010	93: 1

Velocities

M002 SHAO P CODE	.0012	.0126	.0149	.0	.2	.6	-.0076	.0075	.0163
M002 SHAO P MIT	-.0008	.0006	-.0031	.2	-.4	-1.2	.0003	-.0031	-.0008
M002 SHAO P NCL	.0030	.0026	-.0036	-.2	-.7	-.4	-.0040	-.0034	-.0013
M002 SHAO P JPL	.0027	.0018	.0028	-1.9	-1.1	-.8	-.0033	.0024	.0016
S001 7837 L CSR	-.0053	.0107	.0063	.0	.4	-.3	-.0010	-.0008	.0134
S001 7837 L GSFC	-.0057	.0070	-.0014	-1.0	-.1	1.2	.0013	-.0058	.0069
S008 7226 R GSFC	.0017	.0020	.0002	.3	.7	.8	-.0025	-.0003	.0008
S009 7227 R GSFC	.0017	.0019	.0002	.5	-.7	-.2	-.0025	-.0003	.0007
S009 7227 R GIUB	-.0071	-.0046	.0010	.0	.0	.0	.0085	.0010	.0003
S009 7227 R NOAA	-.0004	.0018	.0074	-.5	.4	.5	-.0006	.0054	.0053

21611 CHANGCHUN

Positions

S001 7237 L CSR	-.0001	-.1165	-.0850	.1	-.1	.0	.0676	.0043	-.1273	93: 1

Velocities

S001 7237 L CSR	.0554	.0919	-.0183	.0	.1	.0	-.0984	-.0428	.0181

21612 URUMQI

Positions

S001 7330 R GSFC	-.0025	.0001	-.0339	.0	.0	-.6	.0025	-.0246	-.0233	93:	1
S001 7330 R NOAA	-.0030	.0478	.1042	-.1	.3	.6	.0053	.0429	.1062	93:	1

Velocities

S001 7330 R GSFC	.0007	-.0062	.0065	.0	.0	.0	-.0010	.0090	.0000
S001 7330 R NOAA	-.0016	-.0091	.0107	.0	.0	.0	.0012	.0141	.0007

21613 LHASA

Positions

M001 LHAS P GFZ	.0050	-.0144	.0080	.4	-.3	-.8	-.0048	.0141	-.0086	94:365
M001 LHAS P CODE	-.0085	-.0042	.0099	-.3	.2	.2	.0086	.0106	.0014	95: 76
M001 LHAS P MIT	.0026	-.0049	-.0023	-.2	-1.3	-1.0	-.0025	.0005	-.0054	97:151
M001 LHAS P NCL	-.0021	.0050	.0059	-.2	.9	.5	.0020	.0027	.0073	96: 1
M001 LHAS P JPL	.0003	.0066	.0041	-.1	.6	.5	-.0005	.0003	.0077	96: 1

Velocities

M001 LHAS P GFZ	-.0130	.0000	.0008	-.5	.4	.2	.0130	.0006	.0006
M001 LHAS P CODE	.0048	.0020	.0076	.2	.1	.3	-.0048	.0057	.0054
M001 LHAS P MIT	-.0033	-.0072	-.0032	.1	-2.2	-.1	.0035	.0008	-.0078
M001 LHAS P NCL	.0032	-.0052	-.0068	.0	-.2	-.2	-.0031	-.0033	-.0079
M001 LHAS P JPL	.0001	-.0061	-.0020	-.3	-.1	-.1	.0000	.0013	-.0063

21614 SHAANXI

Positions

M001 XIAN P CODE	.0000	-.0007	.0245	-.1	.2	.0	.0002	.0207	.0133	95: 76
M001 XIAN P NCL	-.0196	-.0042	.0149	-.2	-.5	.3	.0198	.0109	.0105	96: 1
M001 XIAN P JPL	.0345	-.1448	-.0981	.3	-.6	.2	.0150	.0026	-.1776	96: 1

Velocities

M001 XIAN P CODE	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000
M001 XIAN P NCL	.0206	.0063	-.0146	.0	.2	.5	-.0215	-.0116	-.0089
M001 XIAN P JPL	-.0483	.1828	.1288	.0	-.3	.2	-.0146	-.0001	.2283

21701 KASHIMA

Positions

S001 1856 R GSFC	-.0007	-.0011	.0070	-.2	-.1	-.2	.0013	.0057	.0040	93: 1
S001 1856 R GIUB	-.0281	.0076	.0977	-.6	.6	-.2	.0119	.0635	.0788	93: 1
S001 1856 R NOAA	.0092	-.0072	.0053	1.1	-.5	-.1	-.0003	.0111	-.0063	93: 1
S004 1857 R GSFC	-.0095	.0043	.0134	-1.4	.4	.2	.0027	.0049	.0160	93: 1
S004 1857 R GIUB	-.0281	.0064	.1030	-.7	.5	.4	.0129	.0682	.0814	93: 1
S004 1857 R NOAA	.0040	-.0017	.0073	.3	.4	-.4	-.0012	.0084	.0009	93: 1

Velocities

S001 1856 R GSFC	.0020	.0001	-.0033	1.5	-.1	-.1	-.0014	-.0018	-.0031
S001 1856 R GIUB	-.0014	.0020	.0204	.1	-.2	-.1	-.0007	.0151	.0139
S001 1856 R NOAA	.0012	-.0005	.0035	.0	.3	.1	-.0004	.0035	.0011
S004 1857 R GSFC	-.0012	.0014	-.0019	-.4	-.1	-.6	-.0003	-.0026	.0004
S004 1857 R GIUB	-.0014	.0020	.0204	.0	.0	.0	-.0007	.0151	.0139
S004 1857 R NOAA	-.0079	.0061	.0105	-2.0	1.1	-.1	.0003	.0026	.0143

21702 MIZUSAWA

Positions

S009 7314 R GSFC	.0062	.0077	.0123	.0	.1	.0	-.0099	.0096	.0078	93: 1
S010 7324 R GSFC	-.0097	.0040	.0174	-.2	.0	.2	.0030	.0071	.0188	93: 1
S010 7324 R NOAA	-.0034	-.0112	.0040	-.1	-.4	-.3	.0108	.0059	-.0008	93: 1

Velocities

S009 7314 R GSFC	.0079	.0082	.0012	.5	.2	.0	-.0113	.0016	.0000		
S010 7324 R GSFC	.0071	.0061	.0021	.5	.0	.0	-.0092	.0027	.0000		
S010 7324 R NOAA	.0062	.0052	.0045	.0	.0	.0	-.0080	.0045	.0017		

21704 TOKYO

Positions

S002 7308 L CSR	.0145	-.0078	-.0358	.0	.0	.0	-.0035	-.0197	-.0340	93:	1

Velocities

S002 7308 L CSR	-.0014	.0062	.0097	.0	.1	.0	-.0038	.0049	.0098		

21718 MIYAZAKI

Positions

S001 7312 R GSFC	-.0102	-.0003	.0229	.0	.0	.0	.0078	.0160	.0177	93:	1

Velocities

S001 7312 R GSFC	.0002	.0003	-.0002	.0	.0	.0	-.0003	-.0002	.0000		

21725 NOBEYAMA

Positions

S001 7244 R GSFC	.0472	-.1238	-.0857	.1	-.5	-.2	.0614	-.0005	-.1453	93:	1
S001 7244 R NOAA	.0065	-.0031	-.0028	.1	.1	-.1	-.0020	.0018	-.0072	93:	1

Velocities

S001 7244 R GSFC	.0215	-.0505	-.0420	.0	.0	-.1	.0236	-.0049	-.0648		
S001 7244 R NOAA	-.0074	.0044	.0000	.0	.0	.0	.0016	-.0049	.0069		

21726 SIMOSATO

Positions

S001 7838 L CSR	-.0066	-.0001	-.0032	.1	.4	.0	.0046	-.0052	.0021	93:	1
S001 7838 L GSFC	.0229	.0364	.0104	.7	1.9	-.1	-.0421	.0038	.0132	86:	182

Velocities

S001 7838 L CSR	-.0027	-.0026	.0033	.1	1.0	-.2	.0038	.0026	.0019		
S001 7838 L GSFC	-.0038	-.0059	-.0011	-.2	-.3	.1	.0069	-.0002	-.0017		

21729 USUDA

Positions

S001 7246 R GSFC	.0351	.0305	.0275	.2	.7	.3	-.0461	.0257	.0114	93:	1
S007 USUD P GFZ	.0021	.0006	.0200	1.7	1.5	1.7	-.0018	.0168	.0109	94:	365
S007 USUD P CODE	-.0029	-.0190	-.0011	1.2	-.4	-1.5	.0161	.0053	-.0091	95:	76
S007 USUD P MIT	.0054	-.0032	.0035	.2	-.7	1.2	-.0012	.0065	-.0029	97:	151
S007 USUD P NCL	-.0017	-.0022	.0022	.4	-.2	.3	.0028	.0019	.0011	96:	1
S007 USUD P JPL	.0001	.0014	-.0017	-.1	.1	-.7	-.0011	-.0019	-.0003	96:	1

Velocities

S001 7246 R GSFC	.0168	.0132	.0052	.6	.2	.0	-.0210	.0064	.0000		
S007 USUD P GFZ	-.0097	-.0099	-.0073	-.2	-1.1	-1.1	.0138	-.0063	-.0038		
S007 USUD P CODE	-.0035	.0140	.0178	-2.0	.8	2.4	-.0082	.0074	.0202		
S007 USUD P MIT	-.0011	.0017	-.0029	.0	.1	-.7	-.0005	-.0035	-.0002		
S007 USUD P NCL	.0038	.0035	-.0050	-.5	.3	-1.3	-.0051	-.0037	-.0033		
S007 USUD P JPL	.0012	-.0044	.0040	.0	-.4	1.2	.0025	.0054	-.0007		

21730 TSUKUBA

Positions

S001 7311 TIE21730	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1

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S001 7311 R GSFC      -.0194  .0031  .0267  -.2  -.2   .0  .0100  .0116  .0293 93:  1
S005 TSKB TIE21730    -.0003 -.0003 -.0001  -.1  -.1   .0  .0004 -.0001  .0000 93:  1
S005 TSKB P EMR       -.0085 -.0141  .0046  -.6 -1.5   .5  .0162  .0052  .0006 96:  1
S005 TSKB P GFZ        .0037 -.0014  .0181   .3   .3   .3 -.0013  .0169  .0077 94:365
S005 TSKB P CODE      -.0011 -.0191 -.0028  1.1   .5 -1.2  .0154  .0045 -.0108 95: 76
S005 TSKB P MIT        .0073 -.0037 -.0026   .5  -.5  -.1 -.0018  .0027 -.0080 97:151
S005 TSKB P NCL       -.0034 -.0017  .0033  -.2  -.7   .1  .0035  .0018  .0032 96:  1
S005 TSKB P JPL       -.0019  .0004  .0002   .0  -.1   .2  .0009 -.0008  .0015 96:  1

Velocities
S001 7311 R GSFC       .0036 -.0004 -.0023   .5   .5   .2 -.0020 -.0001 -.0038
S005 TSKB P EMR       -.0100  .0091  .0102 -1.7   .2   .6 -.0005  .0003  .0170
S005 TSKB P GFZ       -.0104 -.0083 -.0067   .5  -.1  -.4  .0130 -.0069 -.0018
S005 TSKB P CODE      -.0030  .0124  .0172  -.7   .1   .5 -.0075  .0079  .0184
S005 TSKB P MIT        .0029  .0005 -.0078   .6   .3 -2.0 -.0022 -.0052 -.0062
S005 TSKB P NCL        .0056  .0038 -.0055  -.7  1.0 -1.1 -.0065 -.0033 -.0047
S005 TSKB P JPL       -.0014 -.0013  .0030  -.5  -.2   .0  .0018  .0023  .0019

21731 SHINTOTSUGAWA

Positions
S001 7315 R GSFC      -.0058 -.0009  .0165   .0   .0   .0  .0043  .0092  .0143 93:  1

Velocities
S001 7315 R GSFC       .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

21732 CHICHIJIMA

Positions
S001 7316 TIE21732     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
S001 7316 R GSFC      -.0097 -.0013  .0184   .0   .0   .0  .0069  .0132  .0145 93:  1
S002 7844 TIE21732     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1

Velocities
S001 7316 R GSFC      -.0001  .0000 -.0002   .0   .0   .0  .0000 -.0002  .0000

21733 MINAMI TORI SIMA

Positions
S002 7310 R GSFC      -.0090 -.0005  .0057  -.2  -.2  -.2  .0044  .0019  .0095 93:  1
S002 7310 R NOAA       .0099 -.0013  .0104   .1   .0   .4 -.0032  .0134 -.0044 93:  1

Velocities
S002 7310 R GSFC       .0009  .0004 -.0032   .0   .0   .1 -.0008 -.0027 -.0019
S002 7310 R NOAA      -.0026  .0033  .0024  -.1  -.1  -.1 -.0018  .0007  .0044

21737 SAGARA

Positions
S001 7325 R GSFC      -.0007 -.0011  .0067   .0   .0   .0  .0013  .0057  .0036 93:  1

Velocities
S001 7325 R GSFC       .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

21738 DAITO

Positions
S001 7326 R GSFC      -.0070 -.0025  .0099   .0   .0   .0  .0070  .0077  .0068 93:  1

Velocities
S001 7326 R GSFC       .0000  .0001  .0000   .0   .0   .0 -.0001  .0000  .0000

22006 MANILLE
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Positions

S001 MANA D GRGS	-.0204	.0007	.0066	-.2	.2	.3	.0171	.0036	.0124	93: 1
S001 MANA D CSR	.0385	.0143	-.0096	.3	-.1	-.4	-.0404	-.0073	-.0098	93: 1
S001 MANA D IGN	.0129	-.0100	-.0092	.2	-.1	-.7	-.0059	-.0050	-.0171	95:100

Velocities

S001 MANA D GRGS	.0000	-.0028	.0006	-.3	.1	.6	.0015	.0012	-.0022	
S001 MANA D CSR	.0014	-.0035	-.0027	.3	.1	-.5	.0006	-.0017	-.0043	
S001 MANA D IGN	.0056	.0009	.0069	.2	.2	.0	-.0053	.0072	-.0003	

22306 BANGALORE

Positions

M001 IISC P CODE	-.0035	-.0064	.0074	.0	.0	.0	.0021	.0088	-.0052	95: 76
M002 IISC P EMR	-.0009	.0197	.0077	.1	.6	.7	.0051	.0033	.0203	96: 1
M002 IISC P GFZ	-.0015	.0113	.0295	.1	.8	.5	.0039	.0263	.0170	94:365
M002 IISC P CODE	.0177	.0489	.0249	1.8	2.6	.6	-.0067	.0126	.0559	95: 76
M002 IISC P MIT	.0057	.0217	.0092	.5	3.8	.4	-.0009	.0039	.0239	97:151
M002 IISC P JPL	.0057	.0394	.0079	.4	2.8	.0	.0029	-.0013	.0405	96: 1

Velocities

M001 IISC P CODE	-.0054	-.0005	.0063	-.3	.0	-.5	.0051	.0065	-.0001	
M002 IISC P EMR	.0022	.0121	-.0067	.0	2.3	-.2	.0004	-.0092	.0104	
M002 IISC P GFZ	.0010	.0010	-.0064	.5	.0	-.5	-.0007	-.0065	-.0003	
M002 IISC P CODE	-.0054	-.0004	.0063	.0	-.3	.1	.0051	.0065	-.0001	
M002 IISC P MIT	.0099	.0585	.0164	2.3	6.2	.1	.0029	.0026	.0614	
M002 IISC P JPL	.0058	.0076	.0068	.9	2.1	.4	-.0041	.0047	.0100	

23101 CIBINONG

Positions

S001 CIBB D GRGS	-.0638	.0212	.0296	-.5	.4	.9	.0549	.0338	.0352	93: 1
S001 CIBB D CSR	-.0084	-.0063	-.0037	.0	-.2	-.3	.0099	-.0041	-.0031	93: 1
S001 CIBB D IGN	.0317	-.0110	-.0180	1.0	-.2	-.8	-.0272	-.0201	-.0175	95:100

Velocities

S001 CIBB D GRGS	.0092	-.0094	-.0036	-.7	.1	1.2	-.0061	-.0049	-.0112	
S001 CIBB D CSR	.0266	.0014	-.0140	.7	.1	-.8	-.0259	-.0146	-.0048	
S001 CIBB D IGN	-.0042	.0036	.0101	-.3	.3	-.1	.0030	.0106	.0035	

23501 COLOMBO

Positions

S001 COLA D CSR	-.0078	-.0036	.0016	-.2	.0	.1	.0070	.0022	-.0047	93: 1
S001 COLA D IGN	.0214	-.0108	-.0091	.9	.0	-.7	-.0230	-.0082	-.0079	95:100

Velocities

S001 COLA D CSR	-.0294	.0040	.0082	-1.3	.0	.7	.0296	.0083	-.0002	
S001 COLA D IGN	-.0043	-.0029	.0096	-.1	-.1	.0	.0037	.0099	-.0025	

23601 TAIPEI

Positions

M001 TAIW P EMR	-.0068	-.0141	-.0001	-.3	-1.1	.8	.0131	.0035	-.0077	96: 1
M001 TAIW P GFZ	.0101	.0005	.0175	1.4	1.5	-1.4	-.0089	.0179	.0029	94:365
M001 TAIW P CODE	-.0040	-.0216	.0025	-.8	-3.2	2.1	.0147	.0092	-.0138	95: 76
M001 TAIW P CODE	-.0022	-.0229	.0041	-.1	.0	-.1	.0139	.0115	-.0149	95: 76
M001 TAIW P MIT	.0114	-.0089	.0018	.9	-1.3	.7	-.0051	.0073	-.0115	97:151
M001 TAIW P NCL	-.0044	.0003	.0019	-.4	-.3	-1.0	.0036	.0007	.0032	96: 1
M001 TAIW P JPL	-.0078	.0034	-.0004	-1.0	-.3	-1.5	.0049	-.0033	.0061	96: 1

Velocities

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M001 TAIW P EMR      -.0039  .0112  .0054 -1.1   .3   .0 -.0025  .0000  .0128
M001 TAIW P GFZ      -.0145 -.0053 -.0045  -.4   .3  -.7  .0152 -.0054  .0008
M001 TAIW P CODE      .0003  .0136  .0115  -.7  1.0  1.7 -.0074  .0056  .0152
M001 TAIW P CODE      .0004  .0136  .0116   .1   .0   .0 -.0074  .0057  .0152
M001 TAIW P MIT       .0070 -.0050 -.0012  1.4  -.7   .6 -.0034  .0023 -.0077
M001 TAIW P NCL       .0052  .0048 -.0001  -.6   .4   .8 -.0069 -.0007  .0012
M001 TAIW P JPL      -.0013 -.0023  .0036   .7  -.2  1.9  .0023  .0038  .0004

23902 TAEJON

Positions
M001 TAEJ P CODE     -.0176  .0019  .0235  -.7  1.2  1.6  .0128  .0117  .0238 95: 76
M001 TAEJ P CODE     -.0116 -.0042  .0186   .0   .0   .0  .0117  .0128  .0140 95: 76
M001 TAEJ P MIT       .0089 -.0055  .0012   .6  -.7   .6 -.0037  .0068 -.0072 97:151
M001 TAEJ P JPL       .0201 -.0320 -.0336  1.4 -1.4 -1.0  .0035 -.0047 -.0502 96:  1

Velocities
M001 TAEJ P CODE      .0061  .0018  .0031   .2  -.3   .3 -.0060  .0039  .0000
M001 TAEJ P CODE      .0061  .0018  .0031   .0   .0   .0 -.0060  .0039  .0000
M001 TAEJ P MIT       .0110 -.0026 -.0074  2.1   .0  -.6 -.0072 -.0007 -.0114
M001 TAEJ P JPL       .0063 -.0103 -.0093  1.6 -1.7 -1.5  .0013 -.0004 -.0152

24901 BAHRAIN

Positions
M002 BAHR P CODE      .0119  .0185  .0253   .3  1.1  1.1  .0025  .0130  .0308 95: 76
M002 BAHR P MIT      -.0237 -.0302 -.0110 -4.1 -3.2  -.2 -.0009  .0071 -.0392 97:151
M002 BAHR P NCL      -.0026 -.0230 -.0087  -.1  -.8  -.2 -.0126  .0007 -.0212 96:  1
M002 BAHR P JPL      -.0211 -.0266 -.0273  -.2  -.1  -.7 -.0006 -.0095 -.0425 96:  1

Velocities
M002 BAHR P CODE     -.0007  .0003  .0009  -.3   .6  -.2  .0008  .0009  .0002
M002 BAHR P MIT      -.0479 -.0481 -.0334 -1.2 -1.1 -1.0  .0065 -.0001 -.0754
M002 BAHR P NCL       .0134  .0378  .0180  1.8   .8   .3  .0137 -.0005  .0418
M002 BAHR P JPL       .0370  .0352  .0405   .5  -.4   .7 -.0062  .0140  .0634

30101 HELWAN

Positions
S001 7831 L CSR      -.0091  .0027  .0071   .0   .0   .0  .0070  .0094 -.0020 93:  1

Velocities
S001 7831 L CSR      -.0038  .0023  .0074   .1   .0  -.3  .0039  .0074  .0019

30302 HARTEBEESTHOEK

Positions
M002 HART TIE30302   -.0068 -.0107  .0153   .0   .0   .0 -.0063  .0090 -.0166 93:  1
M002 HART P EMR       .0163 -.0222 -.0129   .6   .4  -.6 -.0272 -.0098  .0093 96:  1
M002 HART P GFZ      -.0192 -.0053  .0024  -.9   .5 -3.5  .0043 -.0063 -.0186 94:365
M002 HART P CODE      .0067  .0009  .0007   .6  -.7  -.3 -.0023  .0034  .0054 95: 76
M002 HART P MIT       .0005  .0022 -.0006  -.8   .4  -.3  .0017  .0001  .0016 97:151
M002 HART P JPL      -.0109 -.0081  .0096 -1.1  -.7  1.4 -.0021  .0028 -.0163 96:  1
M003 7501 L CSR      -.0009  .0218  .0281  -.1  -.2  -.1  .0197  .0294 -.0039 93:  1
M004 HRAO P CODE     -.0038  .0066  .0086  -.2   .2  -.1  .0076  .0076 -.0040 95: 76
M004 HRAO P MIT      -.0017 -.0008  .0046  -.4   .5  -.1  .0001  .0033 -.0037 97:151
M004 HRAO P NCL      -.0288 -.0252  .0230  -.1  -.1   .0 -.0090  .0045 -.0436 96:  1
M004 HRAO P JPL       .0860  .0300 -.0392   .1   .0   .0 -.0134  .0041  .0982 96:  1
M007 HARK TIE30302   -.0068 -.0107  .0153   .0   .0   .0 -.0063  .0090 -.0166 93:  1
S001 7232 TIE30302    .0000  .0000  .0000   .7  1.1 -1.5  .0000  .0000  .0000 93:  1
S001 7232 R GSFC     -.0142 -.0024 -.0029  -.3  -.5  -.3  .0045 -.0086 -.0111 93:  1
S001 7232 R GIUB     -.0866  .0304 -.0103  -.7   .4  -.9  .0672 -.0366 -.0518 93:  1
S001 7232 R NOAA      .0021  .0115  .0263  -.5   .9  1.0  .0091  .0268 -.0050 93:  1
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S005 HBLA D IGN        .7165-1.0195 -.0646   .0  -.1   .0-1.2357  .0119  .1725 95:100
S202 HBKA TIE30302     .0127  .0080  .0085  1.3   .8   .8  .0012  .0141  .0097 93:  1
S202 HBKA D GRGS      -.0293 -.0065  .0039  -.6  -.2   .1  .0079 -.0092 -.0277 93:  1
S202 HBKA D CSR       -.0132 -.0096 -.0267  -.3  -.3  -.7 -.0024 -.0311 -.0029 93:  1
S202 HBKA D IGN       -.0189 -.0319  .0182  -.6 -1.4  1.1 -.0194  .0026 -.0364 95:100

Velocities
M002 HART P EMR        .0069 -.0017  .0011  1.0  -.3   .6 -.0047  .0033  .0043
M002 HART P GFZ        .0028 -.0015  .0040   .7   .8 -1.1 -.0026  .0044 -.0001
M002 HART P CODE       .0035  .0089 -.0013  1.4   .4   .4  .0062  .0020  .0071
M002 HART P MIT       -.0026  .0096 -.0007  1.4  1.1   .1  .0097  .0003  .0023
M002 HART P JPL        .0022  .0000  .0032   .4  -.2  1.9 -.0010  .0038  .0004
M003 7501 L CSR        .0063 -.0035 -.0182   .1   .0  -.1 -.0060 -.0146  .0115
M004 HRAO P CODE      -.0002  .0005 -.0016   .1   .6  -.9  .0006 -.0014  .0007
M004 HRAO P MIT        .0004  .0028  .0042  1.1   .3   .2  .0023  .0045 -.0003
M004 HRAO P NCL        .0463  .0308 -.0314   .5  -.2   .0  .0058 -.0040  .0635
M004 HRAO P JPL       -.0790 -.0344  .0409   .7  -.2  1.1  .0062 -.0007 -.0952
S001 7232 R GSFC       .0053 -.0010  .0031   .4 -1.1  1.0 -.0034  .0046  .0024
S001 7232 R GIUB      -.0019  .0058  .0021   .9   .2   .0  .0061  .0023  .0000
S001 7232 R NOAA       .0035  .0047  .0060   .7   .3   .8  .0025  .0078  .0021
S005 HBLA D IGN       -.3249  .4536  .0397   .0   .0   .0  .5527  .0022 -.0864
S202 HBKA D GRGS       .0045  .0027 -.0070  -.8   .0  -.9  .0003 -.0040  .0078
S202 HBKA D CSR        .0084  .0045 -.0113   .0  -.1 -2.2  .0001 -.0060  .0135
S202 HBKA D IGN       -.0102  .0021  .0100  -.6   .4  -.6  .0066  .0055 -.0116

30313 MARION ISLAND

Positions
S001 MARA D GRGS      -.0034  .0082 -.0149  -.1   .2  -.2  .0085 -.0085  .0125 93:  1
S001 MARA D CSR       -.0147 -.0175  .0039  -.2  -.4   .2 -.0048 -.0137 -.0181 93:  1
S001 MARA D IGN        .0064 -.0152  .0051  1.1   .0   .1 -.0159  .0004 -.0066 95:100

Velocities
S001 MARA D GRGS       .0015  .0029  .0008   .0   .7  -.1  .0014  .0027  .0014
S001 MARA D CSR       -.0069 -.0003 -.0077  -.8  -.2  -.2  .0040 -.0094  .0017
S001 MARA D IGN       -.0019 -.0044  .0119  -.6  -.2  -.4 -.0023  .0050 -.0115

30314 SUTHERLAND

Positions
M001 7502 L CSR        .0812  .0992  .0325   .2   .0   .1  .0639  .0870  .0764 93:  1

Velocities
M001 7502 L CSR       -.1100 -.1115 -.0210  -.2  -.1  -.2 -.0652 -.0940 -.1091

30602 ASCENSION

Positions
M001 ASC1 P GFZ       -.0146 -.0257  .0076  -.3  -.2   .5 -.0285  .0065 -.0088 94:365
M001 ASC1 P CODE      -.0025  .0107 -.0069   .1   .1  -.3  .0098 -.0075 -.0040 95: 76
M001 ASC1 P MIT       -.0088  .0021 -.0038 -1.1   .2  -.2 -.0002 -.0050 -.0085 97:151
M001 ASC1 P NCL        .0040 -.0037  .0027   .1  -.1  -.1 -.0026  .0033  .0043 96:  1
M001 ASC1 P JPL        .0083 -.0055  .0027   .2  -.1   .6 -.0033  .0040  .0090 96:  1
S004 ASDB D IGN       -.0025 -.0224 -.0689   .0   .0   .0 -.0223 -.0678  .0126 95:100

Velocities
M001 ASC1 P GFZ        .0068  .0114  .0028  -.3  -.2 -1.3  .0127  .0033  .0034
M001 ASC1 P CODE      -.0002 -.0018  .0015   .1  -.1  -.2 -.0018  .0015  .0000
M001 ASC1 P MIT       -.0104  .0073  .0004   .0   .6   .4  .0044 -.0012 -.0118
M001 ASC1 P NCL       -.0012  .0037 -.0039   .5  -.5   .9  .0032 -.0042 -.0015
M001 ASC1 P JPL       -.0017  .0008 -.0016   .5  -.3   .6  .0003 -.0019 -.0016
S004 ASDB D IGN       -.0067  .0190  .0440   .0   .0   .0  .0167  .0421 -.0172
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30604 TRISTAN DA CUNHA

Positions

S001 TRIA D GRGS	-.0036	-.0397	-.0208	-.2	-.7	-.5	-.0395	-.0136	.0165	93: 1
S001 TRIA D CSR	.0018	.0257	.0360	.0	.4	.9	.0255	.0265	-.0246	93: 1
S001 TRIA D IGN	-.0102	.0188	-.0223	-.1	.9	-1.4	.0162	-.0262	.0023	95:100

Velocities

S001 TRIA D GRGS	.0052	-.0009	.0127	.5	-1.1	1.2	.0003	.0133	-.0035
S001 TRIA D CSR	.0087	-.0127	.0168	.5	-.1	2.1	-.0105	.0202	-.0011
S001 TRIA D IGN	-.0074	.0025	.0130	-.6	-.4	-.1	.0009	.0057	-.0140

30606 SAINTE-HELENE

Positions

S002 HELA D GRGS	.0063	-.0218	.0053	.1	-.2	.2	-.0211	.0075	.0067	93: 1
S002 HELA D CSR	.0135	.0324	.0227	.1	.3	.3	.0335	.0246	.0036	93: 1
S002 HELA D IGN	-.0064	.0138	-.0226	.1	.4	-1.7	.0131	-.0238	-.0012	95:100

Velocities

S002 HELA D GRGS	.0004	-.0176	.0100	.3	-1.3	1.7	-.0174	.0102	-.0007
S002 HELA D CSR	-.0109	-.0009	.0094	-.5	.5	.8	-.0019	.0061	-.0129
S002 HELA D IGN	-.0015	.0042	.0076	.1	.1	.0	.0040	.0068	-.0040

30802 DIEGO GARCIA

Positions

M001 DGAR P CODE	-.0056	-.0132	.0203	-.2	-.1	-.7	.0014	.0183	-.0167	95: 76
M001 DGAR P JPL	-.0395	.0149	.0323	-.3	.1	.8	.0422	.0324	-.0019	96: 1

Velocities

M001 DGAR P CODE	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000
M001 DGAR P JPL	.0532	-.0070	-.0312	.3	.1	1.3	-.0528	-.0298	.0133

31303 MASPALOMAS

Positions

M001 MASP P GFZ	-.0210	-.0125	.0053	-.8	.5	-.1	-.0177	.0126	-.0124	94:365
M001 MASP P CODE	.0026	.0001	.0021	.1	.2	.9	.0008	.0007	.0032	95: 76
M001 MASP P JPL	-.0055	.0082	-.0003	.1	.0	.3	.0064	.0033	-.0067	96: 1
M002 MAS1 P GFZ	-.0210	-.0123	.0054	-.1	.3	.3	-.0175	.0126	-.0125	94:365
M002 MAS1 P CODE	-.0021	-.0004	-.0020	-.1	-.2	-.2	-.0009	-.0009	-.0026	95: 76
M002 MAS1 P CODE	-.0041	-.0020	-.0024	-.1	-.1	.2	-.0030	-.0005	-.0042	95: 76
M002 MAS1 P04 EUR	.0061	-.0019	.0036	.4	-.2	.6	-.0002	.0002	.0073	96: 90
M002 MAS1 P03 EUR	.0022	-.0027	.0012	.4	.1	.5	-.0020	-.0003	.0031	96:339
M002 MAS1 P MIT	-.0036	-.0020	-.0049	-.9	-.4	.0	-.0029	-.0030	-.0048	97:151
M002 MAS1 P NCL	.0018	-.0032	.0024	.0	.1	-.7	-.0026	.0009	.0034	96: 1
M002 MAS1 P JPL	.0032	-.0037	.0037	.7	-.8	.6	-.0027	.0013	.0053	96: 1

Velocities

M001 MASP P GFZ	.0049	.0006	.0055	-.5	-.3	.7	.0018	.0027	.0066
M001 MASP P CODE	.0016	.0047	-.0002	.3	1.2	.4	.0050	-.0003	.0002
M001 MASP P JPL	-.0013	.0041	.0003	.3	.1	.0	.0036	.0014	-.0019
M002 MAS1 P GFZ	.0048	.0006	.0055	-.4	.1	.8	.0018	.0027	.0065
M002 MAS1 P CODE	.0016	.0047	-.0002	.0	.0	.0	.0050	-.0003	.0002
M002 MAS1 P CODE	.0016	.0047	-.0002	.1	.2	.0	.0050	-.0003	.0002
M002 MAS1 P04 EUR	.0073	.0183	-.0041	.2	1.0	.0	.0196	-.0046	.0000
M002 MAS1 P03 EUR	.0050	-.0010	-.0097	1.6	.3	-.2	.0004	-.0109	.0000
M002 MAS1 P MIT	-.0040	.0040	-.0058	-.3	.3	-.2	.0028	-.0029	-.0070
M002 MAS1 P NCL	-.0031	.0032	-.0026	-.3	-1.1	.4	.0023	-.0005	-.0046
M002 MAS1 P JPL	-.0005	-.0006	.0001	-.1	-.3	.2	-.0007	.0002	-.0002

31901 FLORES

Positions

S001 FLOA D CSR	-.0129	.0033	-.0125	.0	.0	.0	-.0039	-.0015	-.0177	93: 1
S001 FLOA D IGN	-.0304	-.0309	-.0502	-.2	-.2	-.5	-.0422	-.0324	-.0396	95:100

Velocities

S001 FLOA D CSR	.0210	-.0021	-.0069	.0	.0	.0	.0091	-.0174	.0104	
S001 FLOA D IGN	-.0113	-.0081	-.0071	.2	-.2	.5	-.0128	-.0020	-.0087	

31903 SANTA MARIA

Positions

S001 SAMB TIE31903	-.0234	-.0043	.0101	.0	.0	.0	-.0139	.0197	-.0094	93: 1
S001 SAMB D GRGS	-.0388	.0656	.0279	-.3	.7	.5	.0429	.0602	-.0336	93: 1
S001 SAMB D CSR	.0402	-.0475	-.0220	-.2	-.9	-.4	-.0259	-.0516	.0319	93: 1
S001 SAMB D IGN	.0539	.0353	-.0068	.7	-.2	.0	.0548	-.0257	.0229	95:100

Velocities

S001 SAMB D GRGS	-.0141	-.0217	-.0109	-1.7	1.1	.7	-.0256	-.0066	-.0094	
S001 SAMB D CSR	-.0202	-.0234	.0144	-.2	-1.3	.7	-.0298	.0165	.0020	
S001 SAMB D IGN	-.0363	-.0286	.0135	.3	.0	-.1	-.0413	.0232	-.0084	

31906 SAO MIGUEL

Positions

M001 7609 TIE31903	.0000	.0000	.0000	.6	.1	-.3	.0000	.0000	.0000	93: 1
M001 7609 R GSFC	-.0060	-.0015	.0009	-.1	-.1	.1	-.0040	.0036	-.0032	93: 1
M001 7609 R NOAA	-.0108	.0062	.0005	-.3	.0	.1	.0009	.0080	-.0095	93: 1

Velocities

M001 7609 R GSFC	-.0015	-.0013	.0010	.0	.0	.0	-.0018	.0013	.0000	
M001 7609 R NOAA	.0004	.0023	.0035	.0	.0	.0	.0022	.0031	.0016	

32809 LIBREVILLE

Positions

S002 LIBA D GRGS	.0074	-.0165	-.0236	.1	-.1	-.6	-.0175	-.0236	.0044	93: 1
S002 LIBA D CSR	.0054	.0143	-.0001	.1	.1	-.2	.0132	-.0001	.0077	93: 1
S002 LIBA D IGN	-.0130	-.0015	.0114	-.2	.0	1.1	.0007	.0115	-.0130	95:100

Velocities

S002 LIBA D GRGS	-.0005	-.0019	.0016	.2	-.2	-.9	-.0018	.0016	-.0008	
S002 LIBA D CSR	-.0060	.0145	.0142	-.2	.4	.3	.0153	.0142	-.0034	
S002 LIBA D IGN	-.0015	.0003	.0096	.2	.1	-.3	.0006	.0096	-.0013	

33201 MALINDI

Positions

M001 MALI P EMR	-.0145	.0190	-.0041	-.4	1.3	.3	.0239	-.0041	.0014	96: 1
M001 MALI P GFZ	.0003	-.0297	.0016	.1	-.6	-.4	-.0229	.0006	-.0189	94:365
M001 MALI P CODE	-.0014	-.0030	.0046	.6	-.1	.1	-.0013	.0044	-.0033	95: 76
M001 MALI P MIT	.0015	-.0031	.0013	-.5	-.3	-.4	-.0033	.0013	-.0009	97:151
M001 MALI P NCL	.0074	.0002	.0013	.5	-.3	.1	-.0047	.0016	.0057	96: 1
M001 MALI P JPL	.0059	.0088	-.0009	.2	.3	.5	.0029	-.0004	.0103	96: 1

Velocities

M001 MALI P EMR	.0254	-.0487	-.0021	-.6	1.3	.7	-.0536	-.0027	-.0119	
M001 MALI P GFZ	-.0155	.0161	.0056	-1.6	1.3	-1.3	.0223	.0055	-.0017	
M001 MALI P CODE	-.0009	.0015	.0044	-.1	-.3	-.5	.0018	.0044	.0000	
M001 MALI P MIT	-.0026	.0069	.0025	1.0	.6	.3	.0070	.0026	.0023	
M001 MALI P NCL	-.0088	-.0039	-.0005	.3	-.4	.3	.0027	-.0010	-.0092	
M001 MALI P JPL	.0027	-.0185	.0055	.3	-.4	1.0	-.0159	.0050	-.0101	

33710 ARLIT

Positions

S001 ARLA TIE33710	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001 ARLA D CSR	-.0406	.0246	.1125	.1	.1	.0	.0296	.1185	.0010	93: 1
S001 ARLA D IGN	-.0437	-.1633	.2812	.0	-.2	.9	-.1563	.2870	.0295	95:100
S002 ARMA TIE33710	.0001	.0000	.0002	.0	.0	.0	.0000	.0001	.0002	93: 1
S002 ARMA D GRGS	.0157	.0224	-.0225	.2	.2	-.3	.0203	-.0273	.0102	93: 1
S002 ARMA D CSR	-.0396	.0031	.0305	-.3	-.4	.4	.0082	.0414	-.0270	93: 1
S002 ARMA D IGN	-.0153	-.0054	.0047	-.4	-.5	1.1	-.0033	.0095	-.0135	95:100

Velocities

S001 ARLA D CSR	.0095	.0130	.0088	1.9	-1.3	-.1	.0117	.0048	.0134
S001 ARLA D IGN	-.0120	-.0373	.0778	.0	.0	.0	-.0355	.0791	.0092
S002 ARMA D GRGS	.0041	-.0118	.0014	.6	.0	-.5	-.0123	.0005	.0029
S002 ARMA D CSR	.0092	.0133	.0088	-.4	.4	.8	.0120	.0048	.0131
S002 ARMA D IGN	-.0041	-.0065	.0129	.2	.2	-.8	-.0059	.0138	-.0005

34101 DAKAR

Positions

S004 DAKA D GRGS	-.0335	-.0094	.0116	-.4	.1	.2	-.0190	.0187	-.0253	93: 1
S004 DAKA D CSR	.0071	.0142	-.0031	.1	.2	-.1	.0157	-.0036	.0016	93: 1
S004 DAKA D IGN	.0129	.0230	-.0221	.9	.6	-1.5	.0258	-.0228	-.0004	95:100

Velocities

S004 DAKA D GRGS	-.0034	-.0192	.0077	-1.1	-.7	1.5	-.0193	.0068	.0044
S004 DAKA D CSR	-.0073	-.0084	.0295	-.2	.0	1.1	-.0102	.0297	.0032
S004 DAKA D IGN	-.0028	.0043	.0063	.0	.1	-.2	.0032	.0071	-.0022

39801 SEYCHELLES

Positions

M001 SEY1 P GFZ	-.0109	.0150	.0062	.0	.5	-.7	.0175	.0067	.0056	94:365
M001 SEY1 P CODE	-.0335	.0210	-.0039	-.6	.4	-.5	.0396	-.0040	-.0014	95: 76
M001 SEY1 P MIT	.0183	-.0018	.0094	.7	-.6	.7	-.0161	.0100	.0081	97:151
M001 SEY1 P JPL	-.0146	.0081	-.0010	-.3	.3	.1	.0166	-.0011	-.0015	96: 1

Velocities

M001 SEY1 P GFZ	-.0004	-.0002	-.0004	-.8	-.6	-.8	.0002	-.0004	-.0003
M001 SEY1 P CODE	.0186	-.0114	.0122	.2	-.1	.2	-.0218	.0123	.0001
M001 SEY1 P MIT	.0168	.0045	.0093	1.2	-.3	.6	-.0113	.0104	.0124
M001 SEY1 P JPL	.0011	.0297	-.0027	.3	-.2	.0	.0159	-.0007	.0252

39901 DJIBOUTI

Positions

S002 DJIA D GRGS	-.0284	.0231	.0024	-.5	.3	.3	.0363	.0033	-.0045	93: 1
S002 DJIA D CSR	.0176	.0122	-.0279	.2	.4	-.5	-.0030	-.0315	.0152	93: 1
S002 DJIA D IGN	-.0093	-.0256	.0112	-.1	-.8	1.4	-.0124	.0158	-.0215	95:100

Velocities

S002 DJIA D GRGS	.0041	-.0006	-.0052	-.6	.7	-.6	-.0032	-.0056	.0016
S002 DJIA D CSR	.0122	-.0013	-.0062	1.1	.7	-1.2	-.0093	-.0077	.0067
S002 DJIA D IGN	-.0005	.0014	.0087	.2	.2	-.3	.0014	.0084	.0023

40101 ST. JOHNS

Positions

M001 STJO P EMR	-.0011	-.0069	-.0048	-.5	.6	-1.6	-.0050	-.0068	-.0003	96: 1
M001 STJO P GFZ	-.0184	-.0133	.0076	-1.0	.2	-.1	-.0226	.0056	.0052	94:365
M001 STJO P CODE	.0062	-.0039	.0043	1.7	-.3	.5	.0025	-.0022	.0079	95: 76
M001 STJO P MIT	-.0043	.0016	-.0010	-.8	.6	.6	-.0024	.0022	-.0034	97:151

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M001 STJO P NCL        .0018 -.0023  .0026  -.1 -1.0 -1.3  .0000 -.0004  .0039 96:  1
M001 STJO P JPL       -.0002 -.0043  .0021   .2  -.9  -.4 -.0028 -.0010  .0038 96:  1

Velocities
M001 STJO P EMR       -.0023 -.0020  .0086   .0  -.3  3.0 -.0030  .0057  .0065
M001 STJO P GFZ        .0011 -.0013  .0038  -.2 -1.2   .2  .0001  .0013  .0039
M001 STJO P CODE       .0006 -.0002 -.0028   .5  -.8  -.9  .0003 -.0022 -.0017
M001 STJO P MIT       -.0022  .0038 -.0041  -.4   .7  -.5  .0006  .0005 -.0059
M001 STJO P NCL       -.0034  .0057 -.0026  -.2  1.2  2.5  .0007  .0031 -.0063
M001 STJO P JPL       -.0005 -.0011  .0007  -.1  -.6  -.6 -.0011  .0001  .0009

40102 OTTAWA

Positions
S005 OTTA TIE40104    -.0080 -.0420  .0385  -.2  -.8   .8 -.0181 -.0005  .0545 93:  1
S005 OTTA D CSR       -.0070  .0386 -.0293   .0   .0   .0  .0027  .0073 -.0484 93:  1
S005 OTTA D IGN       -.0227 -.0097 -.1147  -.1   .0  -.5 -.0244 -.0833 -.0790 95:100
S006 OTTB D GRGS       .0162 -.0117  .0124   .2  -.3   .3  .0129 -.0022  .0196 93:  1
S006 OTTB D CSR       -.0471 -.0492 -.1201  -.3  -.4 -1.4 -.0578 -.1100 -.0602 93:  1
S006 OTTB D IGN       -.0053  .0063  .0168  -.3   .7   .9 -.0035  .0171  .0068 95:100

Velocities
S005 OTTA D CSR        .0187  .0187  .0082   .0   .0   .0  .0227  .0153 -.0036
S005 OTTA D IGN       -.0142 -.0172 -.0086  -.4 -1.1   .8 -.0180 -.0154  .0032
S006 OTTB D GRGS       .0009 -.0003 -.0009   .8  -.6   .5  .0008 -.0010 -.0003
S006 OTTB D CSR        .0187  .0187  .0082   .0  -.2 -3.1  .0227  .0153 -.0036
S006 OTTB D IGN        .0007  .0133 -.0123   .3   .3  -.2  .0040  .0004 -.0177

40104 ALGONQUIN

Positions
M002 ALGO TIE40104     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 ALGO P EMR        .0026 -.0075 -.0013   .6  -.9 -1.2  .0010 -.0065  .0045 96:  1
M002 ALGO P GFZ       -.0171 -.0143  .0119  -.4  -.1  1.4 -.0197  .0007  .0158 94:365
M002 ALGO P CODE       .0041 -.0053  .0046   .8 -1.4   .9  .0029 -.0011  .0076 95: 76
M002 ALGO P MIT       -.0036 -.0034  .0018  -.2  -.5   .7 -.0042 -.0006  .0030 97:151
M002 ALGO P NCL        .0010 -.0020  .0033   .2  -.2   .1  .0006  .0008  .0039 96:  1
M002 ALGO P JPL       -.0007 -.0062  .0039  -.4 -1.9 -1.1 -.0020 -.0015  .0070 96:  1
M003 7410 TIE40104     .0000  .0000  .0000   .0   .0   .0  .0000 -.0001  .0000 93:  1
M003 7410 L CSR       -.0142  .0043  .0135  -.1   .2   .1 -.0130  .0145  .0047 93:  1
S001 7282 TIE40104    -.0018 -.0021  .0063  -.6  -.7  2.1 -.0022  .0032  .0057 93:  1
S001 7282 R GSFC       .0003  .0032 -.0028  -.6  1.3  -.8  .0010  .0002 -.0041 93:  1
S001 7282 R GIUB       .0037 -.0015  .0066  -.1   .1   .0  .0033  .0029  .0063 93:  1
S001 7282 R NOAA       .0009  .0058  .0004  -.6   .9  -.6  .0021  .0043 -.0035 93:  1

Velocities
M002 ALGO P EMR       -.0030  .0016 -.0026  -.7   .6  -.5 -.0026 -.0003 -.0034
M002 ALGO P GFZ       -.0005 -.0005  .0008 -1.5  -.3   .5 -.0006  .0003  .0008
M002 ALGO P CODE       .0006  .0017 -.0041   .1   .7  -.1  .0009 -.0018 -.0041
M002 ALGO P MIT       -.0012 -.0020  .0005   .1  -.5  -.3 -.0016 -.0009  .0015
M002 ALGO P NCL       -.0013  .0044 -.0062  -.1   .6  -.2 -.0003 -.0010 -.0076
M002 ALGO P JPL       -.0025  .0007  .0000 -1.5   .8   .9 -.0023  .0009 -.0008
M003 7410 L CSR        .0162  .0017 -.0039   .0   .1   .3  .0162 -.0040 -.0016
S001 7282 R GSFC      -.0012  .0033 -.0036  -.7  2.0   .0 -.0004  .0000 -.0050
S001 7282 R GIUB       .0007  .0022 -.0001 -1.0   .9   .3  .0011  .0014 -.0015
S001 7282 R NOAA      -.0004  .0013 -.0010  -.4   .7   .4 -.0001  .0003 -.0016

40105 PENTICTON

Positions
M001 7283 TIE40105     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M001 7283 R GSFC       .0201  .0334 -.0496   .2   .1  -.1  .0009 -.0028 -.0630 93:  1
M001 7283 R NOAA       .0447  .0772 -.1013   .4   .2  -.1  .0007  .0016 -.1350 93:  1
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M002 DRAO TIE40105    -.0001 -.0004 -.0003   .0  -.1  -.1  .0001 -.0005  .0000 93:  1
M002 DRAO P EMR        .0014 -.0116  .0028  -.9  -.9   .2  .0070 -.0053  .0083 96:  1
M002 DRAO P GFZ       -.0153 -.0067  .0087   .0 1.0   .5 -.0100 -.0045  .0153 94:365
M002 DRAO P CODE       .0020  .0005 -.0022   .2   .1   .9  .0015 -.0003 -.0025 95: 76
M002 DRAO P MIT       -.0047  .0037 -.0031   .0   .9  -.2 -.0059 -.0013 -.0029 97:151
M002 DRAO P NCL       -.0002 -.0037  .0053  -.8  -.4  -.1  .0017  .0009  .0062 96:  1

Velocities
M001 7283 R GSFC       .0062  .0151 -.0189   .3   .3   .4 -.0021  .0000 -.0249
M001 7283 R NOAA       .0146  .0270 -.0333   .5   .2   .4 -.0006  .0016 -.0453
M002 DRAO P EMR        .0000  .0040 -.0074   .2 1.6 -1.4 -.0020 -.0022 -.0079
M002 DRAO P GFZ       -.0014 -.0049  .0008  -.7  -.2   .9  .0012 -.0033  .0039
M002 DRAO P CODE       .0005 -.0038  .0042  -.8  -.6  -.3  .0023  .0004  .0052
M002 DRAO P MIT       -.0025  .0028 -.0037   .4   .5  -.4 -.0036 -.0015 -.0036
M002 DRAO P NCL        .0022  .0089 -.0115   .8   .7   .1 -.0025 -.0008 -.0145

40114 OTTAWA NRC

Positions
M001 NRC1 P EMR        .0027 -.0090 -.0003   .5  -.1  -.9  .0003 -.0068  .0064 96:  1
M001 NRC1 P MIT       -.0037  .0000 -.0019  -.2   .1   .1 -.0036 -.0006 -.0020 97:151
M001 NRC1 P NCL        .0018 -.0023  .0047   .1  -.1   .3  .0012  .0014  .0053 96:  1

Velocities
M001 NRC1 P EMR       -.0045 -.0018  .0025  -.7  -.4 1.0 -.0048  .0013  .0022
M001 NRC1 P MIT       -.0014  .0019 -.0024   .2   .0  .0 -.0008 -.0001 -.0033
M001 NRC1 P NCL       -.0022  .0027 -.0051   .0  -.1  .2 -.0014 -.0013 -.0058

40118 WHITEHORSE

Positions
M001 7284 R GSFC      -.2608 -.2279  .3899  -.7   .0 -.7 -.0228 -.1107  .5091 93:  1
M001 7284 R GSFC      -.1553 -.1314  .2275   .0   .0  .0 -.0166 -.0656  .2976 93:  1
M001 7284 R NOAA       .0154  .0089 -.0086   .1   .0  .2  .0046  .0108 -.0159 93:  1

Velocities
M001 7284 R GSFC      -.0410 -.0324  .0543   .1   .1  .0 -.0060 -.0188  .0728
M001 7284 R GSFC      -.0230  .0074 -.0216   .0   .0  .0 -.0214 -.0202 -.0135
M001 7284 R NOAA       .0030  .0016 -.0027   .0   .0  .0  .0010  .0015 -.0039

40127 YELLOWKNIFE

Positions
M001 7285 TIE40127     .0000  .0000  .0000   .0   .0  .0  .0000  .0000  .0000 93:  1
M001 7285 R GSFC      -.0038 -.0273  .0523  -.1  -.3  .0  .0079  .0008  .0586 93:  1
M001 7285 R NOAA      -.0029  .0135  .0005  -.5  -.4 -.2 -.0082  .0101 -.0047 93:  1
M003 YELL TIE40127     .0018  .0028 -.0026   .6   .9 -.9  .0005  .0017 -.0038 93:  1
M003 YELL P EMR        .0042 -.0086 -.0045   .5   .2  .0  .0073 -.0074 -.0012 96:  1
M003 YELL P GFZ       -.0181 -.0103  .0106 -1.7  1.0  .0 -.0122 -.0101  .0172 94:365
M003 YELL P CODE      -.0107  .0018  .0104 -2.7  1.9 1.3 -.0105  .0023  .0105 95: 76
M003 YELL P CODE       .0028 -.0023  .0034  -.4   .9 1.0  .0035  .0007  .0034 95: 76
M003 YELL P MIT       -.0100 -.0063  .0127 -1.2 -1.1 3.2 -.0065 -.0029  .0158 97:151
M003 YELL P NCL        .0034  .0020 -.0039  1.2  -.5  .3  .0022  .0011 -.0049 96:  1
M003 YELL P JPL       -.0015 -.0031  .0025  -.5  -.6 -.6 -.0001 -.0019  .0038 96:  1
M004 7296 TIE40127    -.0012  .0037 -.0028  -.4  1.2 -.9 -.0027  .0012 -.0038 93:  1
M004 7296 R GSFC      -.0042 -.0194  .0392 -1.2 -2.0 1.1  .0042  .0009  .0437 93:  1
M004 7296 R NOAA      -.0036 -.0160  .0351 -1.6 -2.0  .9  .0033  .0020  .0385 93:  1
S007 YELA TIE40127    -.0003 -.0069  .0053  -.1 -2.3 1.8  .0026 -.0032  .0077 93:  1
S007 YELA D GRGS       .0061  .0473 -.0477   .0  2.0 -.9 -.0141  .0184 -.0634 93:  1
S007 YELA D CSR        .0049  .0244 -.0560   .0   .4 -2.0 -.0057 -.0044 -.0608 93:  1
S007 YELA D IGN       -.0022  .0529 -.0525  -.3  4.2 -2.2 -.0239  .0177 -.0684 95:100

Velocities
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M001 7285 R GSFC	.0004	.0045	-.0080	.5	1.1	.0	-.0015	.0001	-.0090	
M001 7285 R NOAA	.0016	.0076	-.0120	.0	.0	.0	-.0017	.0012	-.0141	
M003 YELL P EMR	-.0015	.0003	-.0023	.0	.0	.0	-.0015	-.0013	-.0019	
M003 YELL P GFZ	-.0018	-.0006	-.0037	.2	1.1	.2	-.0014	-.0028	-.0026	
M003 YELL P CODE	.0004	-.0004	-.0010	.4	-1.3	-.8	.0005	-.0007	-.0008	
M003 YELL P CODE	.0007	-.0007	-.0010	-.3	-.2	.0	.0009	-.0008	-.0007	
M003 YELL P MIT	-.0109	-.0059	.0129	-1.6	-.8	1.3	-.0075	-.0028	.0160	
M003 YELL P NCL	-.0046	-.0040	.0077	-.3	-.2	-.3	-.0025	-.0014	.0093	
M003 YELL P JPL	.0004	.0017	-.0039	1.4	1.0	-.5	-.0003	-.0003	-.0042	
M004 7296 R GSFC	.0004	.0045	-.0080	.0	.0	.0	-.0015	.0001	-.0090	
M004 7296 R NOAA	.0016	.0076	-.0120	.4	1.9	-.2	-.0017	.0012	-.0141	
S007 YELA D GRGS	.0005	.0010	.0003	.2	4.1	-1.6	.0000	.0011	-.0003	
S007 YELA D CSR	.0106	-.0021	.0009	.9	.7	-2.7	.0105	.0026	-.0004	
S007 YELA D IGN	-.0025	.0016	-.0009	-.1	-1.2	.5	-.0029	.0000	-.0010	

40128 CHURCHILL

Positions

M002 CHUR P EMR	.0027	-.0115	.0017	.2	-.7	.2	.0036	-.0088	.0073	96: 1
M002 CHUR P CODE	.0017	-.0012	.0038	-.2	.1	.0	.0018	.0010	.0038	95: 76
M002 CHUR P MIT	-.0053	.0018	-.0028	-.4	.4	-.1	-.0054	-.0002	-.0031	97:151
M002 CHUR P NCL	.0003	-.0028	.0073	-.2	-.1	.5	.0005	.0014	.0077	96: 1
M002 CHUR P JPL	-.0033	-.0062	.0033	.0	.0	.0	-.0029	-.0038	.0062	96: 1

Velocities

M002 CHUR P EMR	-.0027	.0043	-.0057	-.2	.5	.3	-.0030	.0006	-.0070
M002 CHUR P CODE	.0019	-.0022	-.0012	.2	-.3	.2	.0020	-.0024	.0000
M002 CHUR P MIT	-.0040	.0000	-.0017	-.1	-.4	-.1	-.0040	-.0011	-.0013
M002 CHUR P NCL	-.0008	.0044	-.0099	-.3	.3	-.1	-.0011	-.0014	-.0107
M002 CHUR P JPL	.0015	.0031	.0035	-.1	-.1	.2	.0012	.0046	.0014

40129 ALBERT_HEAD

Positions

M001 7289 TIE40129	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 7289 R GSFC	.0074	.0003	.0207	.1	.0	.2	.0060	.0170	.0126	93: 1
M001 7289 R NOAA	.0175	.0061	.0074	.2	-.4	.6	.0112	.0159	-.0043	93: 1
M002 PGC1 P JPL	.0571	-.1847	.0854	.1	-.1	.1	.1495	-.0357	.1451	96: 1
M003 ALBH TIE40129	.0001	.0001	.0001	.0	.0	.0	.0001	.0002	.0000	93: 1
M003 ALBH P EMR	.0026	-.0093	-.0005	.7	-2.5	-1.9	.0073	-.0050	.0038	96: 1
M003 ALBH P CODE	-.0006	-.0072	.0068	-.4	-.9	.8	.0034	-.0002	.0093	95: 76
M003 ALBH P MIT	-.0071	-.0018	.0011	-.5	.0	.2	-.0050	-.0033	.0045	97:151
M003 ALBH P NCL	.0003	-.0030	.0049	.1	-.9	.7	.0019	.0015	.0053	96: 1
M003 ALBH P JPL	-.0025	-.0034	.0023	-.6	-.4	-.7	-.0002	-.0016	.0045	96: 1

Velocities

M001 7289 R GSFC	.0067	.0006	.0037	.5	.0	.0	.0052	.0056	.0000
M001 7289 R NOAA	.0076	-.0022	.0066	.0	.0	.0	.0075	.0062	.0034
M002 PGC1 P JPL	.0151	-.0519	.0250	.0	.0	-.1	.0412	-.0098	.0418
M003 ALBH P EMR	-.0013	-.0033	.0026	-.5	-.4	-.1	.0007	-.0009	.0043
M003 ALBH P CODE	.0020	.0014	-.0013	1.8	1.5	-2.4	.0009	.0008	-.0025
M003 ALBH P MIT	-.0071	-.0032	.0026	-.3	-.5	.0	-.0042	-.0032	.0063
M003 ALBH P NCL	.0003	.0047	-.0073	.2	.2	.0	-.0023	-.0017	-.0082
M003 ALBH P JPL	-.0017	-.0018	.0024	-.4	-.2	.2	-.0004	-.0002	.0034

40130 HOLBERG

Positions

M001 HOLB P MIT	-.0066	-.0011	.0042	-.1	.0	.2	-.0045	-.0012	.0064	97:151

Velocities

M001 HOLB P MIT	-.0087	-.0060	.0100	-.1	-.1	.0	-.0031	-.0015	.0141

40132 LA GRANDE

Positions

M001 7411 L CSR	.2124	-.1365	-.0208	.3	-.1	-.1	.1812	-.1541	.0874	93:	1

Velocities

M001 7411 L CSR	-.1278	.0732	.0103	.0	.0	.0	-.1108	.0843	-.0492

40133 SCHEFFERVILLE

Positions

M001 SCHE P EMR	.0012	-.0094	-.0015	.2	.0	.0	-.0026	-.0083	.0041	96:	1
M001 SCHE P MIT	-.0044	.0050	-.0060	-.1	.1	.1	-.0021	.0017	-.0085	97:	151
M001 SCHE P NCL	.0012	-.0033	.0056	.0	-.3	.2	-.0002	.0004	.0066	96:	1

Velocities

M001 SCHE P EMR	-.0033	-.0028	.0036	-.1	-.2	.1	-.0041	.0010	.0037
M001 SCHE P MIT	-.0037	.0065	-.0048	.1	.1	.1	-.0009	.0033	-.0082
M001 SCHE P NCL	-.0013	.0070	-.0068	.0	.1	.2	.0016	.0018	-.0096

40134 WILLIAMS LAKE

Positions

M001 WILL P EMR	.0023	-.0106	.0009	.1	-.1	.3	.0076	-.0056	.0055	96:	1
M001 WILL P MIT	-.0073	-.0030	.0047	-.3	-.2	.6	-.0046	-.0022	.0076	97:	151
M001 WILL P NCL	.0004	-.0018	.0043	-.2	-.1	.4	.0013	.0016	.0042	96:	1

Velocities

M001 WILL P EMR	-.0004	.0004	-.0026	.2	.2	-.2	-.0005	-.0015	-.0021
M001 WILL P MIT	-.0042	-.0006	.0036	.4	-.3	-.2	-.0032	.0000	.0045
M001 WILL P NCL	.0010	.0033	-.0071	.1	.0	-.1	-.0009	-.0018	-.0076

40135 FLIN FLON

Positions

M001 FLIN P CODE	.0006	-.0009	.0044	-.2	.1	.2	.0008	.0020	.0040	95:	76
M001 FLIN P MIT	-.0057	-.0020	.0017	-.5	-.1	.3	-.0052	-.0016	.0032	97:	151
M001 FLIN P NCL	-.0032	-.0162	.0252	-.6	-.2	.2	.0002	.0010	.0301	96:	1
M001 FLIN P JPL	-.0093	-.0070	-.0205	.0	.1	-.2	-.0077	-.0190	-.0117	96:	1

Velocities

M001 FLIN P CODE	.0023	-.0024	-.0013	.1	-.1	.3	.0027	-.0023	.0000
M001 FLIN P MIT	-.0061	-.0031	.0041	-.5	-.1	.0	-.0053	-.0011	.0058
M001 FLIN P NCL	.0040	.0216	-.0332	.3	.5	-.3	-.0005	-.0012	-.0398
M001 FLIN P JPL	.0072	-.0051	.0413	-.4	-.7	.1	.0081	.0210	.0357

40136 WHITEHORSE GPS

Positions

M001 WHIT P CODE	.0026	.0014	.0032	.1	.2	.0	.0009	.0040	.0014	95:	76
M001 WHIT P MIT	-.0065	-.0029	.0107	-.3	-.1	1.5	-.0025	-.0006	.0126	97:	151
M001 WHIT P NCL	.0042	.0057	-.0116	.2	.2	-.1	-.0010	.0005	-.0135	96:	1
M001 WHIT P JPL	.0120	-.0403	-.1107	.0	-.1	-.3	.0371	-.0714	-.0869	96:	1

Velocities

M001 WHIT P CODE	.0019	-.0030	-.0005	.0	-.1	.1	.0035	-.0009	.0000
M001 WHIT P MIT	-.0147	-.0084	.0189	-.8	-.4	.1	-.0044	-.0051	.0245
M001 WHIT P NCL	-.0041	-.0056	.0111	.5	.0	-.7	.0011	-.0006	.0131
M001 WHIT P JPL	-.0200	.0468	.1438	-.2	.1	.4	-.0473	.0866	.1163

40137 LAC DU BONNET

Positions

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M001 DUBO P MIT       -.0049 -.0055  .0025  -.2  -.2   .0 -.0043 -.0030  .0058 97:151
M001 DUBO P JPL        .1445 -.1030  .0206   .2  -.1  -.2  .1543 -.0543  .0719 96:  1

Velocities
M001 DUBO P MIT        .0036 -.0207  .0296   .4  -.2   .3  .0057  .0033  .0357
M001 DUBO P JPL       -.1664  .1113 -.0110   .0  -.3   .3 -.1769  .0650 -.0684

40400 PASADENA

Positions
M001 7896 TIE40400     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M003 7263 TIE40400     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M003 7263 R GSFC       .0462  .0423 -.0238   .4  -.3   .8  .0208  .0135 -.0622 93:  1
M003 7263 R NOAA       .0181  .0124 -.0139   .0  -.1   .1  .0101 -.0005 -.0239 93:  1
M005 7264 TIE40400     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M006 JPL0 TIE40400    -.0004  .0001  .0000  -.1   .0   .0 -.0005 -.0001  .0000 93:  1
M006 JPL0 P JPL        .0601 -.0440  .0141   .4  -.4   .0  .0738  .0058  .0165 96:  1
M007 JPLM P GFZ       -.0154 -.0054  .0101   .2   .2   .4 -.0110  .0016  .0156 94:365
M007 JPLM P MIT       -.0011 -.0025  .0033   .4  -.4   .5  .0002  .0012  .0041 97:151
M007 JPLM P NCL       -.0007  .0003  .0018  -.4   .7  -.3 -.0008  .0015  .0010 96:  1
M007 JPLM P JPL       -.0031 -.0054  .0031  -.7  -.5  -.2 -.0002 -.0009  .0069 96:  1
M101 WLSN P JPL        .0009  .0006 -.0010   .7  -.2  -.7  .0005 -.0003 -.0014 96:  1
M301 BRAN P JPL        .0002  .0002 -.0003   .1   .1  -.1  .0000  .0000 -.0004 96:  1
S201 CIT1 P JPL        .0005  .0003 -.0006   .1   .1  -.2  .0003 -.0002 -.0008 96:  1

Velocities
M003 7263 R GSFC       .0078  .0093 -.0074   .3  -.7  1.2  .0025  .0005 -.0140
M003 7263 R NOAA       .0029  .0025 -.0036   .2  -.3  -.3  .0014 -.0010 -.0049
M006 JPL0 P JPL        .0087 -.0102  .0063  -.7   .5   .1  .0125  .0025  .0076
M007 JPLM P GFZ       -.0012 -.0070  .0017 -1.1   .9   .2  .0022 -.0024  .0065
M007 JPLM P MIT       -.0003 -.0021  .0029   .1   .1   .4  .0007  .0012  .0033
M007 JPLM P NCL        .0041  .0024 -.0057   .4   .1  -.4  .0024 -.0024 -.0065
M007 JPLM P JPL        .0020  .0037 -.0031   .1   .3  -.4  .0000 -.0002 -.0052
M101 WLSN P JPL        .0062  .0048 -.0079   .5   .1  -.5  .0032 -.0025 -.0104
M301 BRAN P JPL        .0043  .0075 -.0075   .2   .3  -.3  .0003 -.0014 -.0114
S201 CIT1 P JPL        .0043  .0040 -.0063   .2   .1  -.4  .0020 -.0021 -.0081

40403 PALOS_VERDES

Positions
M001 7268 R GSFC      -.0122 -.0349  .0383  -.1  -.1   .3  .0059  .0116  .0516 93:  1
M001 7268 R NOAA      -.0218 -.0402  .0528  -.3   .0   .5  .0000  .0185  .0673 93:  1
M002 PVEP P JPL        .0002  .0003 -.0005   .2   .0  -.4  .0000 -.0002 -.0006 96:  1

Velocities
M001 7268 R GSFC      -.0036 -.0064  .0051  -.1   .1   .0 -.0001  .0002  .0089
M001 7268 R NOAA      -.0058 -.0098  .0115  -.1  -.1   .3 -.0005  .0032  .0159
M002 PVEP P JPL        .0008  .0017 -.0026   .1   .1  -.2 -.0001 -.0011 -.0030

40404 HOLCOMB/PEARBLOS

Positions
M001 7254 R GSFC      -.0232 -.0507  .0440  -.2   .1   .2  .0032  .0047  .0708 93:  1
M001 7254 R NOAA      -.0482 -.0893  .0702  -.4  -.1   .2 -.0008  .0004  .1234 93:  1
M101 HOLC P JPL        .0001  .0001 -.0001   .1   .1  -.1  .0000  .0000 -.0002 96:  1

Velocities
M001 7254 R GSFC      -.0043 -.0077  .0045  -.2  -.3   .3 -.0002 -.0013  .0098
M001 7254 R NOAA      -.0085 -.0147  .0108   .1   .0   .0 -.0007 -.0007  .0200
M101 HOLC P JPL        .0035  .0078 -.0066   .2   .3  -.2 -.0006 -.0006 -.0108

40405 GOLDSTONE
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Positions

M001	7085	TIE40405	-.0043	.0005	-.0123	.0	.0	.0	-.0041	-.0109	-.0059	93: 1
M001	7085	L CSR	-.2508	-.1514	-.2544	-.3	-.1	-.5	-.1552	-.3513	.0550	93: 1
M002	7115	TIE40405	-.0241	-.0258	.0123	-.9	-1.2	1.1	-.0099	-.0095	.0348	93: 1
M002	7115	L CSR	-.0706	-.0351	.0266	.0	-1.5	-.8	-.0472	-.0147	.0669	93: 1
M006	7265	TIE40405	.0049	.0063	-.0046	.7	.3	.5	.0015	.0008	-.0091	93: 1
M006	7265	L CSR	-.0099	.0461	-.0406	.3	-.3	-.3	-.0297	-.0120	-.0534	93: 1
M013	7288	TIE40405	.0000	.0000	.0000	-.3	-.3	1.1	.0000	.0000	.0000	93: 1
M013	7288	R GSFC	.0002	-.0004	-.0001	.1	.1	.0	.0003	-.0002	.0002	93: 1
M013	7288	R NOAA	.0062	.0042	.0012	.0	.0	.1	.0036	.0048	-.0047	93: 1
M013	7288	L CSR	-.0037	.0204	-.0166	.4	-.2	-.1	-.0125	-.0039	-.0231	93: 1
M013	7288	L GSFC	-.0041	.0190	-.0191	.4	.3	-1.1	-.0123	-.0069	-.0234	86:182
S001	1514	TIE40405	-.0065	-.0003	-.0094	-.7	-.3	.9	-.0057	-.0095	-.0028	93: 1
S001	1514	R JPL	.0232	-.0005	-.0168	2.3	-.6	-1.6	.0209	-.0078	-.0179	93: 1
S003	1512	R JPL	.0157	.0290	-.0119	.8	1.1	.2	.0009	.0093	-.0338	93: 1
S005	GOMA	TIE40405	-.0249	-.0265	.0108	-.2	-.2	-.4	-.0103	-.0113	.0347	93: 1
S005	GOMA	D GRGS	-.0337	.0097	.0192	-.2	.0	.2	-.0345	.0119	.0164	93: 1
S005	GOMA	D CSR	.0170	-.0146	.1499	.3	-.9	1.8	.0217	.1193	.0909	93: 1
S005	GOMA	D IGN	.0092	.0273	-.0124	.4	1.1	.2	-.0041	.0063	-.0305	95:100
S009	7222	TIE40405	.0049	.0063	-.0046	.3	.1	-.1	.0016	.0007	-.0091	93: 1
S009	7222	R GSFC	-.0002	-.0062	.0071	-.9	.5	1.0	.0026	.0025	.0087	93: 1
S009	7222	R GSFC	-.0002	-.0063	.0088	-.2	-.1	.2	.0026	.0039	.0098	93: 1
S009	7222	R GIUB	-.0088	-.0083	.0500	-.8	-.7	1.6	-.0041	.0342	.0382	93: 1
S009	7222	R NOAA	.0024	.0000	.0085	-.1	-.6	2.9	.0021	.0076	.0040	93: 1
S009	7222	R NOAA	.0033	.0009	.0054	.2	.2	-.1	.0025	.0057	.0012	93: 1
S014	1513	TIE40405	-.0240	-.0260	.0129	.1	-.1	.3	-.0097	-.0091	.0352	93: 1
S014	1513	R GSFC	-.0034	-.0040	.0098	-.4	.3	1.1	-.0013	.0051	.0098	93: 1
S014	1513	R NOAA	-.0034	-.0041	.0214	.5	-.1	1.1	-.0012	.0145	.0165	93: 1
S014	1513	R JPL	.0237	.0427	-.0205	1.4	1.2	.4	.0019	.0114	-.0517	93: 1
S019	1515	TIE40405	-.0021	.0019	-.0165	.7	.4	-1.4	-.0027	-.0131	-.0102	93: 1
S019	1515	R GSFC	.0128	-.0072	.0193	.1	-.3	1.0	.0147	.0154	.0117	93: 1
S019	1515	R GSFC	-.0039	.0022	-.0054	.2	.1	.4	-.0045	-.0043	-.0033	93: 1
S019	1515	R NOAA	.0063	-.0004	.0016	.1	-.6	1.0	.0058	.0027	-.0011	93: 1
S019	1515	R NOAA	-.0013	-.0040	.0046	-.4	-.1	-.5	.0007	.0013	.0061	93: 1
S019	1515	R JPL	-.0009	-.0105	.0079	-1.1	-2.0	.1	.0040	.0008	.0125	93: 1
S028	GOL0	TIE40405	.0017	-.0027	-.0020	.2	-.2	-.2	.0028	-.0026	.0001	93: 1
S028	GOL0	P JPL	.0149	-.0147	.0180	.1	-.1	.2	.0199	.0110	.0157	96: 1
S031	GOLD	P EMR	-.0005	-.0110	.0036	-.6	-.1	-.8	.0045	-.0029	.0103	96: 1
S031	GOLD	P GFZ	-.0195	-.0053	.0102	-1.9	1.9	-.4	-.0149	.0005	.0170	94:365
S031	GOLD	P GFZ	-.0210	-.0026	.0081	-.5	1.0	-.2	-.0176	-.0002	.0143	94:365
S031	GOLD	P CODE	.0018	.0093	-.0096	-1.1	4.3	-1.4	-.0026	-.0025	-.0130	95: 76
S031	GOLD	P MIT	-.0016	.0027	-.0043	.6	.4	-.1	-.0027	-.0026	-.0038	97:151
S031	GOLD	P NCL	-.0004	-.0026	.0046	-.7	.7	.8	.0008	.0023	.0047	96: 1
S031	GOLD	P JPL	-.0024	-.0075	.0036	-.6	-.9	-.7	.0012	-.0016	.0084	96: 1
S035	GOLA	TIE40405	-.0003	.0004	.0010	-.1	.1	.3	-.0004	.0009	.0004	93: 1
S035	GOLA	D GRGS	.0448	-.0195	-.0234	.3	.0	-.2	.0488	-.0174	-.0158	93: 1
S035	GOLA	D CSR	.0340	.0020	-.0138	.5	-.2	-.3	.0294	-.0014	-.0220	93: 1
S035	GOLA	D IGN	.0084	.0037	-.0628	-.3	.4	-1.4	.0058	-.0471	-.0421	95:100
S037	GOMB	TIE40405	-.0244	-.0260	.0118	.0	.0	.0	-.0101	-.0101	.0348	93: 1
S037	GOMB	D IGN	-.1497	.1526	-.0046	-.1	.3	.0	-.2024	.0359	-.0588	95:100

Velocities

M001	7085	L CSR	-.0009	-.0012	-.0017	.1	.4	.4	-.0003	-.0023	.0002	
M002	7115	L CSR	-.0009	-.0012	-.0017	.5	.3	-.5	-.0003	-.0023	.0002	
M006	7265	L CSR	-.0009	-.0012	-.0017	.0	.2	.9	-.0003	-.0022	.0002	
M013	7288	R GSFC	-.0005	.0000	-.0013	.1	.1	.1	-.0005	-.0012	-.0006	
M013	7288	R NOAA	-.0003	-.0006	.0013	.2	.1	.1	.0000	.0006	.0013	
M013	7288	L CSR	-.0009	-.0012	-.0017	-2.7	-2.5	-4.6	-.0003	-.0022	.0002	
M013	7288	L GSFC	.0018	.0029	.0028	.3	1.1	-.7	.0003	.0043	-.0012	
S005	GOMA	D GRGS	.0211	-.0053	.0017	.6	.4	1.5	.0213	.0041	-.0029	
S005	GOMA	D CSR	.0111	-.0189	-.0293	-4.4	-3.5	-1.2	.0185	-.0308	-.0072	
S005	GOMA	D IGN	.0036	-.0020	.0086	.2	.4	.2	.0041	.0070	.0051	
S009	7222	R GSFC	-.0005	.0000	-.0013	.4	-1.1	1.7	-.0005	-.0012	-.0006	

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S009 7222 R GSFC      -.0161  .0079 -.0056   .0   .0   .0 -.0180 -.0047 -.0031
S009 7222 R GIUB      -.0014 -.0015  .0112  -.2   .6  1.1 -.0006  .0080  .0081
S009 7222 R NOAA      -.0003 -.0006  .0013  -.9   .4  1.4  .0000  .0006  .0013
S009 7222 R NOAA      -.0003 -.0006  .0013   .0   .0   .0  .0000  .0006  .0013
S014 1513 R GSFC      -.0004  .0004 -.0011   .2  -.9  2.1 -.0005 -.0008 -.0007
S014 1513 R NOAA      -.0020 -.0028  .0049  -.4  1.0  2.3 -.0006  .0020  .0056
S019 1515 R GSFC       .0028  .0006  .0010   .6  -.3  -.6  .0022  .0019 -.0009
S019 1515 R GSFC      -.0162  .0079 -.0056   .0   .0   .0 -.0180 -.0047 -.0031
S019 1515 R NOAA      -.0003 -.0007  .0013  -.3  -.1  -.1  .0000  .0006  .0013
S019 1515 R NOAA      -.0003 -.0007  .0013  -.3  -.1   .0  .0000  .0006  .0013
S028 GOL0 P JPL        .0011 -.0048  .0067  -.2   .0   .1  .0031  .0033  .0070
S031 GOLD P EMR        .0006 -.0033  .0006   .1   .3   .6  .0020 -.0011  .0026
S031 GOLD P GFZ        .0028 -.0076  .0012   .4  -.6   .0  .0060 -.0022  .0052
S031 GOLD P GFZ        .0028 -.0076  .0012  -.4   .2  -.2  .0059 -.0022  .0052
S031 GOLD P CODE       .0034 -.0036  .0033   .3 -2.4  1.0  .0047  .0018  .0033
S031 GOLD P MIT       -.0044 -.0030 -.0016  -.6 -1.0  -.3 -.0026 -.0040  .0029
S031 GOLD P NCL        .0030  .0015 -.0054  1.1 -2.7   .7  .0020 -.0028 -.0053
S031 GOLD P JPL        .0008 -.0013  .0033   .2   .0  1.3  .0013  .0022  .0026
S035 GOLA D GRGS      -.0053 -.0070  .0125   .6  -.2  -.4 -.0016  .0052  .0142
S035 GOLA D CSR        .0126 -.0180 -.0293  9.0  3.9   .1  .0194 -.0299 -.0085
S035 GOLA D IGN       -.0038  .0043 -.0084  -.3  -.2  1.0 -.0053 -.0056 -.0066
S037 GOMB D IGN        .1016 -.0784  .0060   .6   .0   .3  .1260 -.0090  .0232

40406 PRESIDIO

Positions
M001 7252 R GSFC       .0154  .0035 -.0198   .0  -.1  -.2  .0111 -.0088 -.0210 93:  1
M001 7252 R GSFC       .0067  .0004 -.0071   .0   .0   .0  .0054 -.0031 -.0075 93:  1
M001 7252 R NOAA       .0083  .0028  .0011   .0   .0   .1  .0055  .0051 -.0047 93:  1

Velocities
M001 7252 R GSFC       .0017  .0016 -.0063   .0   .0   .0  .0005 -.0036 -.0056
M001 7252 R GSFC      -.0193  .0299 -.0013   .0   .0   .0 -.0323  .0081 -.0126
M001 7252 R NOAA       .0010  .0007 -.0004   .0   .0   .0  .0005  .0004 -.0012

40407 PINYON

Positions
M001 7256 TIE40407     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M001 7256 R GSFC       .0298  .0110  .0349   .3  -.6  1.3  .0218  .0419  .0000 93:  1
M001 7256 R NOAA       .0102 -.0233  .0690   .0  -.7  1.7  .0195  .0484  .0518 93:  1
M002 PIN1 TIE40407     .0010  .0009  .0021   .3   .3   .7  .0005  .0024  .0001 93:  1
M002 PIN1 P JPL        .0222  .0282 -.0365   .1   .0  -.5  .0073 -.0110 -.0495 96:  1
M003 PIN1 P JPL       -.0015 -.0007  .0026  -.3   .1   .9 -.0011  .0014  .0025 96:  1

Velocities
M001 7256 R GSFC       .0052  .0045  .0009   .2  -.1  -.4  .0027  .0042 -.0048
M001 7256 R NOAA       .0017 -.0028  .0090   .3  -.1  -.6  .0028  .0065  .0064
M002 PIN1 P JPL        .0070  .0080 -.0081  -.4  -.3  1.5  .0027 -.0011 -.0131
M003 PIN1 P JPL       -.0063 -.0036  .0124  -.7   .1  2.4 -.0041  .0069  .0119

40408 FAIRBANKS

Positions
M001 FAIR TIE40408     .0080  .0034 -.0013   .0   .0   .0  .0014  .0072 -.0048 93:  1
M001 FAIR P EMR        .0011 -.0159  .0062 -1.0 -1.5   .6  .0140 -.0043  .0088 96:  1
M001 FAIR P GFZ       -.0064 -.0079  .0001  1.6   .9  -.1  .0032 -.0087  .0042 94:365
M001 FAIR P CODE       .0048  .0022 -.0100  3.1  -.4 -1.3  .0007  .0005 -.0113 95: 76
M001 FAIR P MIT       -.0076 -.0032  .0123  -.8  -.4  2.9 -.0014 -.0022  .0146 97:151
M001 FAIR P NCL        .0004  .0009 -.0016  -.2  1.3  -.8 -.0005  .0001 -.0018 96:  1
M001 FAIR P JPL       -.0039 -.0029  .0079 -1.4  -.6   .1  .0004 -.0011  .0092 96:  1
S002 7225 TIE40408     .0000  .0000  .0000 -2.7 -1.1   .4  .0000  .0000  .0000 93:  1
S002 7225 R GSFC       .0024 -.0014  .0033  2.0  1.0  -.5  .0025  .0026  .0025 93:  1
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S002 7225 R GIUB       .0129 -.0102  .0492  1.0  1.2 -1.2  .0156  .0257  .0423 93:  1
S002 7225 R NOAA       .0004 -.0039  .0123 -1.1 -2.7   .2  .0035  .0036  .0118 93:  1
S004 FAIA TIE40408     .0048  .0112  .0035  1.5  3.5  1.1 -.0069  .0106 -.0011 93:  1
S004 FAIA D GRGS      -.0156 -.0541 -.0262 -1.1 -1.8 -1.3  .0373 -.0493 -.0059 93:  1
S004 FAIA D CSR        .0081 -.0005  .0122   .1  -.2   .4  .0047  .0111  .0083 93:  1
S004 FAIA D IGN       -.0153 -.0587 -.0164 -2.0 -5.7 -1.7  .0413 -.0472  .0040 95:100

Velocities
M001 FAIR P EMR       -.0025 -.0009  .0034  -.7  -.5   .9 -.0006 -.0009  .0042
M001 FAIR P GFZ       -.0096 -.0028  .0038 -2.3  2.0  -.6 -.0028 -.0071  .0075
M001 FAIR P CODE       .0035 -.0028  .0014  1.6 -1.1  -.6  .0043  .0020  .0007
M001 FAIR P MIT       -.0084 -.0048  .0091  -.4  -.9  -.2 -.0005 -.0050  .0123
M001 FAIR P NCL       -.0044 -.0037  .0124 -1.6 -1.1   .8  .0008  .0001  .0136
M001 FAIR P JPL       -.0023 -.0014  .0031  -.5  -.2  -.2 -.0001 -.0011  .0040
S002 7225 R GSFC      -.0003  .0009 -.0024  2.1  1.0  -.8 -.0009 -.0008 -.0022
S002 7225 R GIUB       .0038 -.0016  .0110   .6  1.2  -.1  .0034  .0068  .0090
S002 7225 R NOAA       .0002 -.0010  .0010   .1  -.1 -1.2  .0009  .0001  .0010
S004 FAIA D GRGS       .0004 -.0071  .0028 -1.9 -4.6 -2.6  .0062 -.0020  .0040
S004 FAIA D CSR        .0083 -.0058 -.0002   .6  -.6   .6  .0094  .0034 -.0018
S004 FAIA D IGN        .0022 -.0072  .0017   .1  -.1  -.5  .0073 -.0011  .0024

40410 POINT REYES

Positions
M001 7251 R GSFC       .0067  .0044 -.0092   .0   .0   .0  .0032 -.0027 -.0114 93:  1
M001 7251 R NOAA       .0029  .0005  .0047   .0   .0   .0  .0022  .0049  .0014 93:  1

Velocities
M001 7251 R GSFC       .0016  .0033 -.0057   .1  -.1   .2 -.0005 -.0023 -.0064
M001 7251 R NOAA      -.0005 -.0007  .0010  -.1   .0  -.2 -.0001  .0002  .0013

40412 AUSTIN

Positions
M003 7271 R GSFC      -.0094 -.0057  .0018  -.1   .0  -.1 -.0086 -.0019  .0068 93:  1
M003 7271 R NOAA       .0019 -.0005  .0122   .0  -.1   .1  .0020  .0104  .0063 93:  1

Velocities
M003 7271 R GSFC      -.0020 -.0006 -.0015   .0   .0   .0 -.0019 -.0018  .0000
M003 7271 R NOAA      -.0005 -.0030  .0010   .0   .0   .0 -.0001 -.0007  .0031

40416 YAKATAGA

Positions
M001 7277 R GSFC       .0516  .0217 -.0819   .2   .1  -.2  .0142  .0062 -.0980 93:  1
M001 7277 R GSFC       .0268  .0089 -.0383  -.2   .1   .2  .0093  .0040 -.0465 93:  1
M001 7277 R NOAA      -.0354 -.0287  .1079  -.2   .0   .3  .0012  .0144  .1163 93:  1
M001 7277 R NOAA      -.0177 -.0159  .0640   .2  -.1  -.2  .0019  .0113  .0673 93:  1

Velocities
M001 7277 R GSFC       .0084  .0046 -.0184   .1  -.1  -.4  .0014 -.0010 -.0207
M001 7277 R GSFC      -.0153  .0274  .0102   .0   .0   .0 -.0311  .0090  .0066
M001 7277 R NOAA      -.0063 -.0051  .0189  -.1   .1   .3  .0002  .0025  .0204
M001 7277 R NOAA      -.0063 -.0051  .0189   .0   .0   .0  .0002  .0025  .0204

40419 KODIAK

Positions
M001 7278 R GSFC      -.0118 -.0069  .0336  -.1   .1   .1  .0007  .0064  .0358 93:  1
M001 7278 R NOAA       .0126  .0012 -.0086   .1  -.1  -.1  .0048  .0053 -.0135 93:  1

Velocities
M001 7278 R GSFC      -.0039 -.0008  .0042  -.1  -.1  -.3 -.0011 -.0010  .0056
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M001 7278 R NOAA      .0033  .0004 -.0034   .1   .0   .2  .0011  .0008 -.0045

40420 VANDENB/HARVEST

Positions
M001 7111 TIE40420    .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 7223 TIE40420    .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 7223 R GSFC      .0084  .0160 -.0161   .4  1.2  -.5 -.0009 -.0030 -.0241 93:  1
M002 7223 R NOAA      .0173  .0307 -.0221   .9  1.6  -.9 -.0008  .0018 -.0416 93:  1
M004 7887 TIE40420    .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M007 VNDP TIE40420   -.0025  .0022  .0013  -.8   .7   .4 -.0033  .0014  .0003 93:  1
M007 VNDP P JPL      -.0091 -.0294  .0163 -1.3 -2.6  -.8  .0071 -.0036  .0340 96:  1
M101 HARV P MIT      -.0045 -.0157  .0215   .0  -.3   .5  .0042  .0088  .0252 97:151
M101 HARV P NCL       .0078  .0008  .0057   .4  -.3  1.2  .0063  .0074 -.0006 96:  1
M101 HARV P JPL       .0005 -.0058  .0068   .0  -.9  1.6  .0034  .0029  .0078 96:  1

Velocities
M002 7223 R GSFC      .0018  .0055 -.0070   .9   .9  -.1 -.0013 -.0025 -.0086
M002 7223 R NOAA      .0025  .0054 -.0047   .1   .2  -.3 -.0006 -.0005 -.0076
M007 VNDP P JPL      -.0136 -.0228  .0179 -2.9 -1.2  -.2 -.0001 -.0003  .0320
M101 HARV P MIT      -.0052 -.0141  .0127  -.4   .1  -.6  .0027  .0021  .0194
M101 HARV P NCL      -.0019 -.0045  .0064   .0  -.6   .1  .0007  .0026  .0076
M101 HARV P JPL      -.0013 -.0058  .0094  -.2  -.9  2.3  .0019  .0045  .0100

40421 NOME

Positions
M001 7279 R GSFC     -.0146 -.0126  .0369  -.1  -.2   .0  .0085  .0002  .0408 93:  1
M001 7279 R NOAA      .0071  .0024 -.0017   .1   .2   .0 -.0006  .0060 -.0047 93:  1

Velocities
M001 7279 R GSFC     -.0030 -.0012  .0032   .1  -.1   .0  .0004 -.0015  .0043
M001 7279 R NOAA      .0009  .0001 -.0004  -.1   .1  -.1  .0001  .0006 -.0007

40423 SANDPOINT

Positions
M001 7280 R GSFC      .0022 -.0019  .0135   .0   .0   .1  .0025  .0089  .0103 93:  1
M001 7280 R NOAA     -.0014 -.0039  .0130   .0   .0  -.1  .0032  .0052  .0122 93:  1

Velocities
M001 7280 R GSFC      .0004  .0006 -.0017   .1  -.1  -.2 -.0005 -.0005 -.0017
M001 7280 R NOAA     -.0008 -.0010  .0028  -.1   .1   .1  .0007  .0007  .0029

40424 KAUAI

Positions
M004 KOKB TIE40424    .0024 -.0018 -.0022   .0   .0   .0  .0025 -.0014 -.0023 93:  1
M004 KOKB P EMR      -.0007 -.0012  .0010  -.2  1.6 -1.1  .0009  .0006  .0014 96:  1
M004 KOKB P GFZ      -.0099 -.0022  .0181 -1.0  -.3   .0 -.0014  .0130  .0162 94:365
M004 KOKB P CODE     -.0051 -.0072 -.0012  -.9 -1.0 -1.7  .0050 -.0039  .0063 95: 76
M004 KOKB P MIT      -.0064 -.0013  .0054 -1.1  -.3  1.5 -.0010  .0026  .0081 97:151
M004 KOKB P NCL       .0021  .0024  .0005   .2   .9   .2 -.0015  .0015 -.0024 96:  1
M004 KOKB P JPL       .0015  .0024 -.0024   .3   .6 -1.1 -.0017 -.0014 -.0029 96:  1
M006 KOK2 P NCL       .0088 -.0024  .0001   .3  -.3   .2  .0053  .0028 -.0068 96:  1
M006 KOK2 P JPL      -.0004 -.0062  .0018   .0  -.6   .1  .0057  .0007  .0031 96:  1
S001 1311 TIE40424    .0000  .0000  .0000  -.8   .6   .7  .0000  .0000  .0000 93:  1
S001 1311 R GSFC      .0024 -.0006  .0023   .2   .4   .6  .0014  .0029 -.0010 93:  1
S001 1311 R GIUB     -.0134  .0032  .0836  1.4   .5  1.1 -.0077  .0732  .0421 93:  1
S001 1311 R NOAA      .0014 -.0007  .0066  -.4  -.6 -2.4  .0011  .0065  .0015 93:  1
S007 7298 R GSFC     -.0004 -.0013  .0010  -.4  -.3  -.8  .0011  .0006  .0012 93:  1
S007 7298 R GIUB     -.0225  .0012  .0835  -.8   .2  1.2 -.0089  .0696  .0506 93:  1
S007 7298 R NOAA     -.0097 -.0050  .0115 -2.7   .2 -3.0  .0013  .0066  .0143 93:  1
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S008 KOKA TIE40424    -.0015 -.0013  .0005  -.5  -.4   .2  .0006 -.0002  .0019 93:  1
S008 KOKA D GRGS       .0193  .0264  .0072   .3   .9   .6 -.0181  .0170 -.0226 93:  1
S008 KOKA D CSR        .0107  .0317  .0074   .3   .2   .0 -.0260  .0148 -.0167 93:  1
S008 KOKA D IGN        .0221  .0175 -.0279  1.3  1.2 -1.6 -.0088 -.0158 -.0353 95:100

Velocities
M004 KOKB P EMR       -.0001 -.0032 -.0001   .0  -.2  -.3  .0030 -.0006  .0011
M004 KOKB P GFZ       -.0013 -.0064 -.0062 -1.3  -.9  -.1  .0056 -.0071  .0008
M004 KOKB P CODE      -.0020  .0011  .0083  -.2   .2   .4 -.0017  .0071  .0045
M004 KOKB P MIT       -.0068 -.0043  .0010  -.5  -.4  -.7  .0017 -.0021  .0077
M004 KOKB P NCL       -.0063 -.0064  .0003  -.8 -1.2   .1  .0038 -.0028  .0076
M004 KOKB P JPL       -.0022 -.0028  .0038  -.6  -.6  1.6  .0018  .0024  .0043
M006 KOK2 P NCL        .0407 -.0234 -.0082   .1  -.5   .2  .0360  .0037 -.0309
M006 KOK2 P JPL        .0265 -.0247  .0014   .4  -.1   .0  .0324  .0074 -.0146
S001 1311 R GSFC       .0021  .0020 -.0042   .9  -.1  -.3 -.0011 -.0028 -.0040
S001 1311 R GIUB       .0000  .0024  .0162   .0   .0   .0 -.0022  .0153  .0053
S001 1311 R NOAA       .0019  .0017 -.0002  -.5   .3  -.3 -.0010  .0007 -.0023
S007 7298 R GSFC       .0032  .0022 -.0023  1.6   .2  3.6 -.0009 -.0007 -.0044
S007 7298 R GIUB       .0000  .0024  .0162  1.5   .9  3.4 -.0022  .0153  .0053
S007 7298 R NOAA       .0019  .0017 -.0002  -.2   .0  -.1 -.0010  .0007 -.0023
S008 KOKA D GRGS      -.0005  .0010 -.0023   .9  2.1  1.0 -.0011 -.0021 -.0008
S008 KOKA D CSR        .0010  .0072  .0065   .4   .8   .6 -.0064  .0074 -.0008
S008 KOKA D IGN        .0101  .0023  .0039   .5   .1   .5  .0013  .0074 -.0080

40425 SOURDOUGH

Positions
M001 7281 R GSFC       .0295 -.0459  .1025   .1  -.7   .6  .0545  .0456  .0919 93:  1
M001 7281 R GSFC       .0192 -.0251  .0505   .0   .0   .0  .0316  .0246  .0441 93:  1
M001 7281 R NOAA      -.0049 -.0022  .0175  -.1   .2  -.1 -.0010  .0034  .0180 93:  1

Velocities
M001 7281 R GSFC       .0038 -.0053  .0104   .1  -.1  -.3  .0065  .0049  .0091
M001 7281 R GSFC      -.0228 -.0005 -.0099   .0   .0   .0 -.0125 -.0215  .0000
M001 7281 R NOAA      -.0009 -.0006  .0027  -.1   .1   .1  .0000  .0002  .0029

40427 FORT ORD

Positions
M001 7266 R GSFC      -.0016 -.0080  .0075   .0   .0   .3  .0029  .0015  .0106 93:  1
M001 7266 R NOAA       .0141  .0154 -.0196   .1  -.1  -.4  .0038 -.0035 -.0281 93:  1
M002 7241 R GSFC      -.0016 -.0065  .0048   .1  -.1   .1  .0021  .0001  .0079 93:  1
M002 7241 R GSFC      -.0019 -.0058  .0033   .0   .0  -.1  .0014 -.0009  .0068 93:  1
M002 7241 R NOAA       .0126  .0133 -.0157  -.1   .0   .0  .0037 -.0019 -.0238 93:  1
M002 7241 R NOAA       .0118  .0132 -.0106   .0   .0   .1  .0031  .0019 -.0203 93:  1

Velocities
M001 7266 R GSFC      -.0016 -.0009 -.0016  -.2   .2   .1 -.0009 -.0022  .0003
M001 7266 R NOAA       .0026  .0034 -.0045   .2  -.2  -.1  .0004 -.0011 -.0061
M002 7241 R GSFC      -.0015 -.0009 -.0016  1.0  -.2  -.3 -.0008 -.0022  .0003
M002 7241 R GSFC      -.0326  .0284  .0224   .0   .0   .0 -.0426  .0221  .0077
M002 7241 R NOAA       .0026  .0034 -.0045   .0   .0   .0  .0004 -.0011 -.0061
M002 7241 R NOAA       .0026  .0034 -.0045   .0   .0   .0  .0004 -.0011 -.0061

40428 SANTA PAOLA

Positions
M001 7255 R GSFC      -.0015 -.0116 -.0006  -.1   .0  -.1  .0043 -.0066  .0086 93:  1
M001 7255 R NOAA       .0133  .0214 -.0078   .1   .1   .1  .0013  .0077 -.0252 93:  1

Velocities
M001 7255 R GSFC      -.0004 -.0008 -.0034   .0   .0   .0  .0000 -.0033 -.0012
M001 7255 R NOAA       .0018  .0038 -.0020   .0   .0   .0 -.0003  .0008 -.0046
```

40430 BLACK BUTTE

Positions

M001 7269 R GSFC	.0125	.0083	-.0065	.1	-.1	.0	.0076	.0018	-.0143	93:	1
M001 7269 R NOAA	-.0011	-.0074	.0115	-.1	.1	.0	.0022	.0055	.0123	93:	1

Velocities

M001 7269 R GSFC	.0010	.0012	-.0024	-.1	-.1	.0	.0004	-.0012	-.0025
M001 7269 R NOAA	-.0008	-.0014	.0013	.0	.1	.0	-.0001	.0002	.0020

40431 DEADMAN LAKE

Positions

M001 7267 R GSFC	.1353	.2069	-.1761	.3	-.1	-.2	.0297	-.0074	-.3020	93:	1
M001 7267 R NOAA	.0029	.0018	.0035	.0	.0	.0	.0018	.0045	-.0005	93:	1

Velocities

M001 7267 R GSFC	.0243	.0390	-.0348	.0	.0	.0	.0045	-.0030	-.0574
M001 7267 R NOAA	-.0008	-.0007	.0017	.0	.0	.0	-.0004	.0009	.0018

40432 ELY

Positions

M001 7286 TIE40432	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M001 7286 R GSFC	.0001	-.0123	.0083	.0	-.1	.0	.0052	-.0006	.0139	93:	1
M001 7286 R NOAA	.0045	.0070	.0019	.0	.1	.0	.0012	.0068	-.0052	93:	1
M002 7257 TIE40432	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1

Velocities

M001 7286 R GSFC	-.0001	-.0005	-.0018	.0	-.1	.1	.0002	-.0017	-.0008
M001 7286 R NOAA	.0004	.0007	-.0001	.0	.1	.0	.0001	.0004	-.0007

40433 QUINCY

Positions

M001 7051 TIE40433	.0000	-.0001	-.0001	.0	.0	.0	.0001	-.0001	.0000	93:	1
M001 7051 L CSR	-.0234	-.0333	.0908	-.4	.2	.6	-.0029	.0435	.0895	93:	1
M002 7109 TIE40433	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M002 7109 L CSR	-.0001	-.0011	-.0024	.5	-.5	-.2	.0005	-.0024	-.0008	93:	1
M002 7109 L GSFC	-.0144	.0089	.0108	1.6	-.5	.9	-.0169	.0084	.0068	86:	182
M004 7221 TIE40433	.0016	.0001	.0001	.8	.1	.1	.0013	.0007	-.0006	93:	1
M004 7221 R GSFC	-.0031	-.0113	.0084	-.1	-.1	.7	.0032	-.0008	.0141	93:	1
M004 7221 R NOAA	.0255	.0362	-.0245	.4	.2	.6	.0033	.0096	-.0495	93:	1
M004 7221 P CODE	.0044	.0016	-.0050	1.5	-.8	-1.3	.0030	-.0015	-.0060	95:	76
M004 7221 P MIT	.0003	.0103	-.0082	.4	.9	-.5	-.0051	-.0005	-.0122	97:	151
M004 7221 P NCL	.0010	-.0009	.0021	.1	-.1	-.2	.0013	.0015	.0015	96:	1
M004 7221 P JPL	-.0063	-.0155	.0119	-1.0	-1.6	-.3	.0026	-.0015	.0203	96:	1
M005 7886 TIE40433	.0001	-.0001	.0000	.0	.0	.0	.0002	-.0001	.0000	93:	1
M005 7886 L CSR	-.0146	.0211	-.0183	-.2	.7	.3	-.0233	-.0072	-.0199	93:	1
M006 7260 TIE40433	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1

Velocities

M001 7051 L CSR	.0012	-.0029	-.0006	.0	.0	.0	.0025	-.0017	.0011
M002 7109 L CSR	.0012	-.0029	-.0006	1.4	-2.2	.5	.0025	-.0017	.0011
M002 7109 L GSFC	.0024	-.0010	-.0013	-.4	.6	.1	.0026	-.0008	-.0011
M004 7221 R GSFC	-.0006	-.0001	-.0006	.3	-1.0	1.4	-.0005	-.0007	-.0001
M004 7221 R NOAA	.0061	.0095	-.0058	.5	.3	1.0	.0003	.0028	-.0124
M004 7221 P CODE	.0004	.0015	.0005	.7	.0	.3	-.0005	.0014	-.0008
M004 7221 P MIT	-.0022	.0036	-.0066	.0	.2	-.4	-.0037	-.0038	-.0058
M004 7221 P NCL	.0012	.0094	-.0100	.3	2.2	-.1	-.0038	-.0021	-.0131
M004 7221 P JPL	-.0025	-.0016	.0042	.3	1.4	.5	-.0013	.0015	.0047
M005 7886 L CSR	.0012	-.0029	-.0006	.0	.0	.0	.0025	-.0017	.0011

40434 MOUNT HOPKINS

Positions

M002 7888 L CSR	.3036	.4529	.1242	.5	.1	.3	.1223	.3848	-.3869	93: 1
S001 7921 L CSR	.4064	.6582	.1686	.4	.2	.0	.1451	.5426	-.5580	93: 1

Velocities

M002 7888 L CSR	.0320	.0353	.0085	.0	.0	.0	.0173	.0305	-.0333	
S001 7921 L CSR	.0320	.0353	.0085	.0	.0	.0	.0173	.0305	-.0333	

40436 SAN DIEGO

Positions

M002 7062 TIE40436	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7062 L CSR	.1045	-.0937	-.2953	-.2	-.2	-.2	.1355	-.2683	-.1284	93: 1
M003 7035 TIE40436	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M003 7035 L CSR	.0469	-.0262	-.1268	.2	-.2	-.5	.0537	-.1080	-.0665	93: 1
M003 7035 L GSFC	-.0293	.0129	.0083	-.7	.2	.3	-.0320	.0061	.0059	86:182

Velocities

M002 7062 L CSR	.0149	-.0118	-.0312	.0	.0	.0	.0186	-.0283	-.0136	
M003 7035 L CSR	.0149	-.0118	-.0312	.0	.1	-.3	.0186	-.0283	-.0136	
M003 7035 L GSFC	.0034	-.0023	.0020	.5	-.3	.1	.0041	.0014	.0015	

40437 MAMMOTH LAKES

Positions

M001 7259 R GSFC	-.0390	-.1775	.0615	-.2	-.3	-.1	.0517	-.0577	.1755	93: 1
M001 7259 R NOAA	-.0162	-.0189	.0227	-.4	.5	.1	-.0050	.0031	.0332	93: 1
M002 CASA P MIT	-.0061	-.0050	.0023	-.1	-.4	.0	-.0029	-.0027	.0072	97:151
M002 CASA P NCL	-.0013	-.0040	.0093	-.1	.1	.4	.0008	.0048	.0090	96: 1
M002 CASA P JPL	-.0002	-.0010	.0002	-.1	-.3	-.1	.0003	-.0004	.0008	96: 1

Velocities

M001 7259 R GSFC	-.0122	-.0296	.0110	-.6	.9	.0	.0036	-.0107	.0319	
M001 7259 R NOAA	-.0111	-.0081	.0099	.0	.0	.0	-.0058	.0002	.0159	
M002 CASA P MIT	-.0083	-.0109	.0089	-.3	-.2	.1	-.0020	-.0012	.0161	
M002 CASA P NCL	.0067	.0103	-.0181	.5	-.3	-.2	.0008	-.0068	-.0207	
M002 CASA P JPL	.0006	-.0016	.0025	.5	-.6	.2	.0013	.0013	.0025	

40438 BEAR LAKE

Positions

M001 7082 TIE40438	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 7082 L CSR	.0197	-.1018	-.0968	-.1	-.3	.0	.0555	-.1306	.0004	93: 1
M001 7082 L GSFC	-.0133	.0204	-.0099	-.1	.3	-.1	-.0199	.0021	-.0171	86:182
M002 7046 TIE40438	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 7046 L CSR	.0042	-.0162	-.0247	.0	-.1	-.1	.0098	-.0275	-.0064	93: 1

Velocities

M001 7082 L CSR	.0073	-.0113	-.0170	.0	.0	.0	.0110	-.0179	-.0055	
M001 7082 L GSFC	.0010	-.0039	.0014	.0	-.1	-.1	.0023	-.0011	.0034	
M002 7046 L CSR	.0073	-.0113	-.0170	-.1	.1	-.3	.0110	-.0179	-.0055	

40439 OWENS VALLEY

Positions

M001 7114 TIE40439	-.0001	.0000	-.0001	.0	.0	.0	-.0001	-.0001	.0000	93: 1
M001 7114 L CSR	-.0559	.0616	.0976	.0	-.8	.3	-.0784	.0945	.0370	93: 1
M003 7084 TIE40439	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M003 7084 L CSR	-.2827	.2291	.1051	-.3	.4	.2	-.3575	.1246	.0096	93: 1
M004 7853 TIE40439	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1

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M004 7853 R GSFC       .0021 -.0595 -.0500  -.9  -.2  -.3  .0301 -.0709  .0107 93:  1
M004 7853 R NOAA       .0123 -.0464 -.0625  -.4  -.6  -.4  .0328 -.0710 -.0099 93:  1
M004 7853 L CSR       -.0063 -.0429 -.0237   .3 -1.5 -1.6  .0148 -.0436  .0181 93:  1
S002 7207 TIE40439     .0010 -.0099 -.0059   .2 -1.1  -.7  .0056 -.0097  .0030 93:  1
S002 7207 R GSFC       .0222 -.0353 -.0792  1.5 -3.6 -7.2  .0363 -.0755 -.0316 93:  1
S002 7207 R GIUB       .0040  .0166 -.0449   .3  1.8 -1.6 -.0043 -.0257 -.0403 93:  1
S002 7207 R NOAA       .0184 -.0486 -.0686   .4  -.5 -1.1  .0392 -.0752 -.0144 93:  1
S006 7616 R GSFC      -.0014  .0100  .0138 -1.0  3.8  5.6 -.0060  .0159  .0019 93:  1
S006 7616 R GIUB      -.0061 -.0093  .0676  -.1 -1.3  3.9 -.0010  .0472  .0497 93:  1
S006 7616 R NOAA       .0008  .0119  .0212   .6  2.7  2.8 -.0050  .0235  .0042 93:  1

Velocities
M001 7114 L CSR        .0000  .0014  .0014   .0   .4   .5 -.0006  .0019 -.0001
M003 7084 L CSR        .0000  .0014  .0014   .1   .0   .1 -.0006  .0019 -.0001
M004 7853 R GSFC       .0021 -.0028 -.0151   .0   .0   .0  .0032 -.0129 -.0079
M004 7853 R NOAA       .0026 -.0042 -.0126   .0   .0  -.1  .0043 -.0115 -.0057
M004 7853 L CSR        .0000  .0013  .0014   .1  4.9  5.7 -.0006  .0018 -.0001
S002 7207 R GSFC       .0021 -.0028 -.0151   .7  -.1 -2.3  .0032 -.0129 -.0079
S002 7207 R GIUB       .0005  .0048 -.0052   .0   .0   .0 -.0019 -.0014 -.0066
S002 7207 R NOAA       .0026 -.0042 -.0126  1.4 -3.1 -8.3  .0043 -.0115 -.0057
S006 7616 R GSFC       .0012 -.0068 -.0111  -.8 -3.2 -7.9  .0043 -.0121 -.0024
S006 7616 R GIUB       .0005  .0048 -.0052   .0   .0   .0 -.0019 -.0014 -.0066
S006 7616 R NOAA       .0026 -.0042 -.0126  -.1   .2   .2  .0043 -.0115 -.0057

40440 WESTFORD

Positions
M001 7091 TIE40440     .0047  .0063 -.0005   .0   .0   .0  .0064  .0027 -.0036 93:  1
M001 7091 L CSR       -.0006 -.0506  .0523   .1  -.5   .4 -.0166  .0061  .0705 93:  1
S002 7205 TIE40440     .0051  .0079 -.0006   .4   .8  -.1  .0074  .0035 -.0047 93:  1
S002 7205 R GSFC      -.0025 -.0041  .0038  -.5  -.7   .1 -.0037  .0007  .0048 93:  1
S002 7205 R GIUB      -.0012 -.0015  .0027   .2  -.3   .3 -.0016  .0013  .0026 93:  1
S002 7205 R NOAA      -.0006  .0057  .0021   .8  1.8   .2  .0012  .0054 -.0027 93:  1
S003 7209 TIE40440     .0000  .0000  .0000 -1.6 -1.6   .1  .0000  .0000  .0000 93:  1
S003 7209 R GSFC       .0021 -.0044  .0065  1.8  -.4   .7  .0006  .0015  .0079 93:  1
S003 7209 R GIUB      -.0013  .0013 -.0019 -1.9  -.2  -.8 -.0008 -.0002 -.0025 93:  1
S003 7209 R NOAA       .0007  .0040  .0027 -1.0  2.8   .6  .0020  .0044 -.0007 93:  1
S020 WES2 TIE40440    -.0066  .0124 -.0200 -1.6  2.1 -3.3 -.0023 -.0053 -.0237 93:  1
S020 WES2 P GFZ       -.0185 -.0134  .0086  -.7  -.5  -.8 -.0218  .0017  .0108 94:365
S020 WES2 P CODE       .0068 -.0078  .0049  1.9  -.7 -1.3  .0040 -.0029  .0103 95: 76
S020 WES2 P MIT       -.0054 -.0059  .0022  -.4  -.6   .5 -.0070 -.0010  .0044 97:151
S020 WES2 P NCL        .0014 -.0012  .0054   .1  -.5  2.0  .0009  .0029  .0048 96:  1
S020 WES2 P JPL       -.0015 -.0059  .0035  -.1 -1.1  -.3 -.0032 -.0008  .0061 96:  1

Velocities
M001 7091 L CSR        .0088 -.0209  .0188  2.5 -1.2  1.4  .0017 -.0015  .0293
S002 7205 R GSFC      -.0019  .0017 -.0027 -2.4   .5 -1.6 -.0013 -.0005 -.0034
S002 7205 R GIUB       .0001  .0002  .0000   .0   .0   .0  .0001  .0001 -.0001
S002 7205 R NOAA      -.0010  .0016 -.0021  1.3  1.9  -.6 -.0004 -.0003 -.0028
S003 7209 R GSFC      -.0009  .0015 -.0019  -.9  2.3 -1.3 -.0004 -.0003 -.0025
S003 7209 R GIUB       .0001  .0002  .0000   .3   .0   .0  .0001  .0001 -.0001
S003 7209 R NOAA      -.0004  .0006 -.0015   .3   .4  -.8 -.0001 -.0006 -.0015
S020 WES2 P GFZ        .0011 -.0020  .0050  -.3  -.7  1.8  .0004  .0022  .0051
S020 WES2 P CODE      -.0008  .0032 -.0042  -.5   .5  1.7  .0003 -.0008 -.0053
S020 WES2 P MIT       -.0035  .0044 -.0088  -.4  1.1 -1.6 -.0019 -.0029 -.0099
S020 WES2 P NCL       -.0024  .0044 -.0083  -.4   .5   .4 -.0009 -.0028 -.0093
S020 WES2 P JPL       -.0013 -.0011  .0031   .1   .0  1.3 -.0015  .0019  .0025

40441 GREENBANK

Positions
S001 7204 R GSFC       .0012 -.0039  .0026   .2  -.2  -.6  .0004 -.0005  .0048 93:  1
S001 7204 R NOAA       .0031  .0112  .0119   .6  1.1  2.5  .0051  .0158 -.0008 93:  1
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S004 7214 R GSFC      -.0063 -.0158  .0122 -1.6 -1.5   .2 -.0090  .0006  .0189 93:  1
S004 7214 R GSFC       .0020 -.0040  .0035   .0   .0  -.1  .0013  .0001  .0055 93:  1
S004 7214 R GIUB      -.0011 -.0036  .0091  1.4  -.1   .4 -.0017  .0050  .0083 93:  1
S004 7214 R NOAA       .0014  .0021  .0060 -1.1   .5   .0  .0018  .0058  .0023 93:  1
S005 7248 R GSFC       .0016 -.0035  .0032   .0   .0   .0  .0010  .0002  .0049 93:  1
S007 7208 R GSFC      -.0006  .0108 -.0019   .5  1.0   .9  .0014  .0052 -.0096 93:  1

Velocities
S001 7204 R GSFC      -.0013  .0016 -.0021  -.4   .1  -.2 -.0010 -.0005 -.0027
S001 7204 R NOAA      -.0006  .0012 -.0012  -.3   .3  -.9 -.0003 -.0001 -.0018
S004 7214 R GSFC      -.0012  .0015 -.0014  -.2   .5   .8 -.0010 -.0001 -.0022
S004 7214 R GSFC      -.0166  .0019 -.0012   .0   .0   .0 -.0160  .0021 -.0045
S004 7214 R GIUB       .0006  .0010 -.0003  1.4  -.3  -.1  .0007  .0003 -.0009
S004 7214 R NOAA       .0003  .0013 -.0012  -.4  1.1   .6  .0006 -.0002 -.0017
S005 7248 R GSFC      -.0013  .0016 -.0021   .0   .0   .0 -.0010 -.0005 -.0027
S007 7208 R GSFC       .0000 -.0034  .0001  -.1  -.2  -.2 -.0006 -.0020  .0027

40442 FORT DAVIS

Positions
M001 7086 TIE40442     .0008 -.0006 -.0001   .0   .0   .0  .0009 -.0003  .0003 93:  1
M001 7086 L CSR        .0061 -.0452  .0170  -.1  -.6   .6  .0168 -.0070  .0451 93:  1
M005 7885 TIE40442     .0008 -.0006 -.0001   .0   .0   .0  .0009 -.0003  .0003 93:  1
M005 7885 L CSR        .0511 -.0937  .0338   .0  -.1   .0  .0723 -.0110  .0848 93:  1
M006 7080 TIE40442     .0023  .0043 -.0091   .3   .3 -1.0  .0012 -.0054 -.0087 93:  1
M006 7080 L CSR        .0001 -.0028 -.0008   .0  -.4   .7  .0008 -.0021  .0019 93:  1
M006 7080 L GSFC      -.0146  .0368 -.0184  -.9  1.8  -.3 -.0231  .0006 -.0371 86:182
M008 7850 TIE40442     .0022 -.0005  .0016   .5   .0   .6  .0023  .0013  .0008 93:  1
M008 7850 R GSFC      -.0002 -.0144  .0094   .1  -.1   .2  .0033  .0010  .0169 93:  1
M008 7850 L CSR       -.0023 -.0070  .0180  -.2   .1  1.0 -.0006  .0117  .0155 93:  1
M009 7900 TIE40442    -.0005  .0001 -.0001  -.6  -.3  1.0 -.0006 -.0001  .0000 93:  1
M009 7900 R GSFC       .0165 -.0020  .0005   .8  -.6   .2  .0165  .0015 -.0015 93:  1
M012 MDO1 TIE40442     .0036 -.0003  .0037   .5   .1   .7  .0036  .0035  .0014 93:  1
M012 MDO1 P GFZ       -.0165 -.0078  .0120   .1  -.1   .8 -.0141  .0044  .0161 94:365
M012 MDO1 P CODE       .0045  .0067 -.0062   .5   .2   .7  .0028 -.0015 -.0097 95: 76
M012 MDO1 P MIT       -.0048  .0049 -.0095   .1   .9 -1.2 -.0058 -.0063 -.0079 97:151
M012 MDO1 P NCL        .0018  .0011  .0019   .0   .6   .4  .0015  .0024 -.0003 96:  1
M012 MDO1 P JPL       -.0033 -.0144  .0072  -.8 -1.7  -.6  .0003 -.0014  .0164 96:  1
S001 7086 TIE40442     .0008 -.0006 -.0001   .0   .0   .0  .0009 -.0003  .0003 93:  1
S002 7206 TIE40442     .0008 -.0006 -.0001   .0   .0   .0  .0009 -.0003  .0003 93:  1
S003 7216 TIE40442     .0000  .0000  .0000  -.5  -.1   .7  .0000  .0000  .0000 93:  1
S003 7216 R GSFC      -.0036 -.0206  .0113 -2.0   .1  1.4  .0015 -.0010  .0237 93:  1
S003 7216 R GIUB      -.0094 -.0054  .0373   .4  -.3   .9 -.0078  .0283  .0254 93:  1
S003 7216 R NOAA       .0025 -.0005  .0062 -1.0  1.0  3.7  .0025  .0054  .0031 93:  1
S017 7613 TIE40442    -.0076 -.0013  .0023 -2.5  -.4   .8 -.0071  .0004  .0038 93:  1
S017 7613 R GSFC       .0020 -.0028  .0019   .7  -.2 -1.0  .0026  .0005  .0029 93:  1
S017 7613 R GIUB      -.0115  .0041  .0286   .1   .6  -.1 -.0122  .0252  .0136 93:  1
S017 7613 R NOAA       .0013  .0046  .0046  -.5  1.5   .8  .0002  .0064 -.0018 93:  1

Velocities
M001 7086 L CSR        .0028 -.0074  .0008   .0   .0   .0  .0045 -.0026  .0060
M005 7885 L CSR        .0028 -.0074  .0008   .0   .0   .0  .0045 -.0026  .0060
M006 7080 L CSR        .0028 -.0074  .0008   .7 -1.5  2.3  .0045 -.0026  .0060
M006 7080 L GSFC       .0026 -.0044  .0014   .7  -.2  -.5  .0036 -.0006  .0039
M008 7850 R GSFC      -.0010 -.0027 -.0009   .2   .1   .3 -.0003 -.0022  .0020
M008 7850 L CSR        .0028 -.0074  .0008   .0   .0   .0  .0045 -.0026  .0060
M009 7900 R GSFC      -.0010 -.0027 -.0009  -.2   .0  -.2 -.0003 -.0022  .0020
M012 MDO1 P GFZ        .0018 -.0054 -.0008   .2  -.3 -1.3  .0030 -.0031  .0037
M012 MDO1 P CODE       .0004  .0015 -.0025   .5   .3  -.4  .0000 -.0013 -.0026
M012 MDO1 P MIT       -.0037  .0019 -.0051  -.4  -.1  -.6 -.0041 -.0039 -.0034
M012 MDO1 P NCL       -.0001  .0059 -.0090   .5   .7 -1.1 -.0015 -.0048 -.0095
M012 MDO1 P JPL       -.0015 -.0022  .0012   .4   .7 -1.2 -.0009 -.0002  .0027
S003 7216 R GSFC      -.0010 -.0027 -.0009 -1.5   .3  1.8 -.0003 -.0022  .0020
```

S003 7216 R GIUB	-.0014	-.0008	.0082	.9	-.1	-1.4	-.0012	.0065	.0052		
S003 7216 R NOAA	.0000	-.0007	-.0006	-4.5	1.7	4.1	.0002	-.0009	.0003		
S017 7613 R GSFC	.0003	.0002	-.0033	.5	-1.8	-3.4	.0002	-.0027	-.0019		
S017 7613 R GIUB	-.0001	-.0012	.0030	.0	.0	.0	.0002	.0020	.0026		
S017 7613 R NOAA	.0016	-.0019	-.0010	.8	-.6	.4	.0020	-.0016	.0008		

40445 MAUI

Positions

M001 7210 TIE40445	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M001 7210 L CSR	-.0003	-.0014	-.0029	-.1	.0	.3	.0011	-.0030	-.0002	93:	1
M001 7210 L GSFC	-.0157	.0313	.0007	.9	1.3	.0	-.0350	.0000	.0019	86:	182
M002 7120 TIE40445	.0002	-.0002	.0001	.1	-.1	.0	.0003	.0001	.0000	93:	1
M002 7120 R GSFC	.0092	-.0031	-.0069	.1	-.2	-.3	.0066	-.0039	-.0092	93:	1
M002 7120 R NOAA	-.0133	-.0008	.0110	-.1	.7	.0	-.0046	.0059	.0156	93:	1
M002 7120 L CSR	-.0750	-.0341	-.0040	.2	-.3	.0	.0010	-.0329	.0757	93:	1
S005 7210 TIE40445	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1

Velocities

M001 7210 L CSR	-.0029	-.0030	-.0001	-3.5	1.1	.3	.0016	-.0015	.0035		
M001 7210 L GSFC	.0044	-.0030	-.0011	1.1	.7	.0	.0045	.0000	-.0030		
M002 7120 R GSFC	.0021	.0020	-.0041	.2	.1	.3	-.0010	-.0029	-.0040		
M002 7120 R NOAA	.0008	.0042	.0012	.0	.0	.0	-.0035	.0020	-.0018		
M002 7120 L CSR	-.0029	-.0030	-.0001	.0	.0	.0	.0016	-.0015	.0035		

40449 OCOTILLO

Positions

M001 7270 R GSFC	.0093	.0492	-.0163	.0	.2	.0	-.0130	.0124	-.0495	93:	1
M001 7270 R NOAA	.0025	-.0116	.0093	.0	-.1	.1	.0073	.0028	.0129	93:	1

Velocities

M001 7270 R GSFC	-.0020	.0010	.0000	.0	.0	.0	-.0023	.0000	.0000		
M001 7270 R NOAA	-.0003	-.0028	.0020	.0	.0	.0	.0009	.0003	.0033		

40451 WASHINGTON

Positions

M101 7101 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M101 7101 L CSR	-.0765	-.0191	.0821	-.1	-.1	.1	-.0789	.0631	.0526	93:	1
M102 7102 TIE40451	-.0047	.0006	.0018	-1.1	.1	.4	-.0044	.0024	-.0001	93:	1
M102 7102 R GSFC	.0089	-.0062	.0035	.5	.4	-.3	.0073	-.0024	.0085	93:	1
M102 7102 R NOAA	.0085	-.0092	.0054	.6	.1	-.8	.0062	-.0026	.0119	93:	1
M102 7102 L CSR	-.0084	.0052	.0163	.4	-.3	-.2	-.0070	.0171	.0048	93:	1
M103 7103 TIE40451	-.0001	.0000	.0000	.6	-.1	-.2	-.0001	.0000	.0000	93:	1
M103 7103 L CSR	.0446	-.0208	.0313	1.0	-.1	-.3	.0387	.0051	.0433	93:	1
M104 7104 TIE40451	.0000	.0000	.0000	.5	-.1	-.2	.0000	.0000	.0000	93:	1
M104 7104 L CSR	-.1137	.0447	-.0487	-.3	-.1	-.2	-.1005	.0059	-.0846	93:	1
M105 7105 TIE40451	.0000	.0000	.0000	.8	-.1	-.3	.0000	.0000	.0000	93:	1
M105 7105 L CSR	-.0003	-.0010	.0007	-.2	-.5	.9	-.0005	.0000	.0011	93:	1
M105 7105 L GSFC	.0026	-.0110	.0092	2.1	-.3	.0	.0000	.0000	.0146	86:	182
M106 7100 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M106 7100 L CSR	-.0544	-.1232	-.4058	-.1	-.1	-.4	-.0811	-.3829	-.1720	93:	1
M107 7064 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M108 7065 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M108 7065 L CSR	-.5214	.0965	.5306	.1	.1	.5	-.4857	.5462	.1688	93:	1
M111 7899 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M111 7899 L CSR	.0273	-.0437	.0315	.4	.0	-.2	.0166	-.0062	.0577	93:	1
M112 7063 TIE40451	-.0003	.0000	-.0001	-.1	.0	.0	-.0003	-.0001	-.0001	93:	1
M112 7063 L CSR	.0005	-.0093	.0730	.9	-.6	.2	-.0017	.0509	.0531	93:	1
M114 7125 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1
M114 7125 L CSR	-.0275	.0564	.0290	.0	.2	.4	-.0139	.0610	-.0292	93:	1
M116 7130 TIE40451	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93:	1

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M116 7130 L CSR        .0078 -.0081  .0053   .1   .0   .0  .0057 -.0019  .0108 93:  1
M117 7920 TIE40451     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M117 7920 L CSR       -.0070 -.0019 -.0050   .1  -.1  -.2 -.0073 -.0041 -.0029 93:  1
M118 7889 TIE40451     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M120 7918 TIE40451     .0008  .0000 -.0001   .3   .0   .0  .0007 -.0002  .0001 93:  1
M120 7918 L CSR       -.0013 -.0015 -.0029  -.4  -.2   .2 -.0016 -.0030 -.0010 93:  1
M121 7919 L CSR        .0543  .0598  .0185   .2   .0  -.1  .0665  .0433 -.0239 93:  1
M123 GODE TIE40451     .0038 -.0112 -.0003  1.3 -3.7  -.1  .0011 -.0077  .0090 93:  1
M123 GODE P CODE       .0052  .0070 -.0063   .1  2.0   .3  .0067 -.0014 -.0084 95: 76
M123 GODE P MIT       -.0121  .0154 -.0151 -1.3  1.9  -.8 -.0083 -.0006 -.0233 97:151
M123 GODE P NCL       -.0002  .0115 -.0075  -.8  2.0  -.3  .0024  .0013 -.0134 96:  1
M125 7108 TIE40451     .0078  .0039  .0022  2.6  1.3   .7  .0085  .0030 -.0001 93:  1
M125 7108 R GSFC       .0048 -.0091  .0018  -.8  -.5  -.9  .0026 -.0049  .0088 93:  1
M125 7108 R NOAA       .0037 -.0081  .0090  -.5 -1.4  -.1  .0018  .0015  .0124 93:  1

Velocities
M101 7101 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M102 7102 R GSFC      -.0036  .0030 -.0014 -1.3  -.9   .8 -.0028  .0013 -.0038
M102 7102 R NOAA      -.0031  .0001 -.0001 -1.4 -1.1  1.0 -.0030  .0005 -.0007
M102 7102 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M103 7103 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M104 7104 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M105 7105 L CSR        .0000  .0000  .0000 -3.8  1.8  3.0  .0000  .0000  .0000
M105 7105 L GSFC      -.0006  .0025 -.0020 -2.4   .3  -.1  .0000  .0000 -.0032
M106 7100 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M108 7065 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M111 7899 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M112 7063 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M114 7125 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M116 7130 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M117 7920 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M120 7918 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M121 7919 L CSR        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000
M123 GODE P CODE      -.0033  .0044 -.0068 -2.5   .6   .0 -.0022 -.0021 -.0082
M123 GODE P MIT       -.0070  .0053 -.0048  -.7  -.4   .1 -.0056  .0005 -.0082
M123 GODE P NCL       -.0062  .0050 -.0057 -2.9  -.4   .5 -.0049 -.0005 -.0084
M125 7108 R GSFC      -.0036  .0030 -.0014   .0   .0   .0 -.0028  .0013 -.0038
M125 7108 R NOAA      -.0031  .0001 -.0001   .0   .0   .0 -.0030  .0005 -.0007

40452 BLOOMINGTON

Positions
M001 7291 R GSFC       .0019  .0063  .0015   .0   .0   .0  .0022  .0050 -.0038 93:  1
M001 7291 R NOAA       .0013 -.0254  .0360   .0  -.1   .1 -.0003  .0119  .0424 93:  1

Velocities
M001 7291 R GSFC      -.0003 -.0002 -.0002   .0   .0   .0 -.0003 -.0003  .0000
M001 7291 R NOAA       .0012 -.0021  .0022   .0   .0   .0  .0011  .0004  .0031

40453 CARROLLTON

Positions
M001 7228 R GSFC      -.0104  .0338 -.0063  -.1   .1   .0 -.0074  .0139 -.0323 93:  1
M001 7228 R NOAA       .0105 -.1848  .1291   .1  -.3   .0 -.0053  .0052  .2255 93:  1

Velocities
M001 7228 R GSFC      -.0014  .0005  .0010   .0   .0   .0 -.0013  .0011  .0000
M001 7228 R NOAA       .0002 -.0014  .0033   .0   .0   .0  .0000  .0020  .0030

40454 LEONARD

Positions
M001 7292 R GSFC       .0009  .0015  .0091   .0   .1   .0  .0008  .0083  .0041 93:  1
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M001 7292 R NOAA       .0013 -.0071  .0156   .0  -.1   .1  .0020  .0085  .0147 93:  1

Velocities
M001 7292 R GSFC      -.0007  .0001  .0001   .0   .0   .0 -.0007  .0001  .0000
M001 7292 R NOAA       .0008 -.0021  .0027   .0   .0   .0  .0010  .0010  .0032

40455 MILES CITY

Positions
M001 7038 R GSFC      -.0014  .0100 -.0033   .0   .1   .0 -.0041  .0044 -.0088 93:  1
M001 7038 R NOAA      -.0009 -.0038  .0157   .0  -.1   .0  .0002  .0080  .0140 93:  1

Velocities
M001 7038 R GSFC      -.0016 -.0001 -.0005   .0   .0   .1 -.0015 -.0007  .0000
M001 7038 R NOAA      -.0003 -.0025  .0022   .0   .0   .0  .0004 -.0003  .0033

40456 PIETOWN

Positions
M001 PIE1 TIE40456    -.0008 -.0016  .0022   .0   .0   .0 -.0003  .0008  .0027 93:  1
M001 PIE1 P CODE       .0058  .0100 -.0091  1.8   .4  1.3  .0024 -.0011 -.0145 95: 76
M001 PIE1 P MIT       -.0053  .0015 -.0040   .0   .3  -.2 -.0055 -.0034 -.0021 97:151
M001 PIE1 P NCL        .0035  .0056 -.0015   .9   .4   .2  .0016  .0024 -.0061 96:  1
M001 PIE1 P JPL       -.0029 -.0127  .0067  -.7 -1.6  -.7  .0012 -.0018  .0145 96:  1
S001 7234 TIE40456     .0000  .0000  .0000   .3   .5  -.7  .0000  .0000  .0000 93:  1
S001 7234 R GSFC       .0019 -.0002  .0008   .6   .6 -1.0  .0019  .0009  .0001 93:  1
S001 7234 R GIUB      -.0076 -.0065  .0388  -.5 -1.1  1.6 -.0052  .0272  .0289 93:  1
S001 7234 R NOAA       .0014 -.0011  .0086 -2.3  -.3   .6  .0016  .0067  .0053 93:  1

Velocities
M001 PIE1 P CODE       .0011  .0022 -.0032  1.2   .7 -2.2  .0004 -.0012 -.0038
M001 PIE1 P MIT       -.0039  .0009 -.0060  -.4   .2 -1.1 -.0040 -.0052 -.0031
M001 PIE1 P NCL       -.0007  .0044 -.0085  1.1   .8 -1.6 -.0020 -.0048 -.0081
M001 PIE1 P JPL       -.0008  .0009 -.0009   .4  1.3 -1.9 -.0010 -.0004 -.0009
S001 7234 R GSFC       .0000  .0000 -.0019   .8 -1.7  -.6  .0000 -.0016 -.0011
S001 7234 R GIUB      -.0016 -.0013  .0092 -1.4   .1   .8 -.0011  .0066  .0066
S001 7234 R NOAA      -.0004 -.0013  .0010  -.9  -.9  -.2  .0000  .0001  .0017

40457 SEATTLE

Positions
M001 7229 R GSFC      -.0177 -.0299  .0360  -.1   .1   .0  .0009 -.0014  .0500 93:  1
M001 7229 R NOAA       .0168  .0214 -.0176   .1   .0   .0  .0028  .0081 -.0312 93:  1

Velocities
M001 7229 R GSFC      -.0062 -.0065  .0060  -.1   .1   .0 -.0018 -.0025  .0104
M001 7229 R NOAA       .0048  .0065 -.0073   .1   .0   .0  .0006  .0011 -.0108

40458 SADDLE PEAK

Positions
M001 SPK1 P JPL        .0000  .0000  .0000   .1   .0  -.2  .0000  .0000  .0000 96:  1

Velocities
M001 SPK1 P JPL        .0000  .0000  .0000   .1   .0   .0  .0000  .0000  .0000

40460 SCRIPPS_3

Positions
M004 SIO3 P JPL        .0000  .0000  .0000   .2   .0  -.3  .0000  .0000  .0000 96:  1

Velocities
M004 SIO3 P JPL        .0000  .0000  .0000   .0   .1   .2  .0000  .0000  .0000
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40461 WHITTIER

Positions

M001 WHC1 P JPL	-.0001	-.0001	.0001	.2	.0	-.3	-.0001	.0000	.0002	96: 1
M002 WHI1 P JPL	.0001	.0000	-.0001	.3	.0	-.3	.0001	.0000	-.0001	96: 1

Velocities

M001 WHC1 P JPL	.0004	-.0007	.0029	.1	.0	.7	.0007	.0022	.0020
M002 WHI1 P JPL	-.0004	.0006	-.0025	.1	.1	-.2	-.0007	-.0019	-.0017

40463 LOS ALAMOS

Positions

S001 7611 R GSFC	.0010	-.0035	.0020	-.7	-.1	-1.2	.0019	-.0002	.0037	93: 1
S001 7611 R GIUB	-.0056	-.0007	.0308	.3	.0	2.2	-.0051	.0236	.0198	93: 1
S001 7611 R NOAA	.0023	.0008	.0056	-.2	.4	-.1	.0020	.0053	.0021	93: 1

Velocities

S001 7611 R GSFC	.0007	.0008	-.0036	.5	-1.0	-2.4	.0004	-.0023	-.0028
S001 7611 R GIUB	-.0014	.0003	.0052	-1.1	.2	1.8	-.0015	.0041	.0031
S001 7611 R NOAA	.0001	.0006	-.0021	-.2	.2	-.5	-.0001	-.0013	-.0017

40465 NORTH LIBERTY

Positions

M001 NLIB TIE40465	.0024	-.0009	-.0014	.0	.0	.0	.0024	-.0016	-.0003	93: 1
M001 NLIB P GFZ	-.0188	-.0054	.0084	-.7	.8	1.5	-.0187	.0024	.0100	94:365
M001 NLIB P CODE	.0039	.0005	-.0002	.4	.0	.9	.0038	.0002	-.0006	95: 76
M001 NLIB P MIT	-.0049	.0018	-.0058	-.2	.5	-.5	-.0049	-.0032	-.0051	97:151
M001 NLIB P NCL	.0011	.0004	.0018	-.5	.4	.2	.0011	.0016	.0008	96: 1
M001 NLIB P JPL	-.0009	-.0044	.0023	-.2	-.6	-.4	-.0008	-.0013	.0049	96: 1
S001 7612 TIE40465	.0000	.0000	.0000	-.8	.3	.5	.0000	.0000	.0000	93: 1
S001 7612 R GSFC	.0030	-.0082	.0090	.4	-.7	.9	.0032	.0013	.0120	93: 1
S001 7612 R GIUB	.0003	-.0046	.0231	-.2	-.1	-.6	.0005	.0141	.0188	93: 1
S001 7612 R NOAA	.0040	.0117	-.0023	.4	.5	.0	.0037	.0061	-.0103	93: 1

Velocities

M001 NLIB P GFZ	.0003	-.0070	.0028	-1.3	-.2	.0	.0005	-.0026	.0071
M001 NLIB P CODE	.0002	.0000	-.0036	.2	.3	-.2	.0002	-.0027	-.0024
M001 NLIB P MIT	-.0015	.0012	-.0041	-.1	.0	-.5	-.0015	-.0023	-.0035
M001 NLIB P NCL	-.0015	.0014	-.0049	.2	.2	-.7	-.0015	-.0027	-.0042
M001 NLIB P JPL	-.0024	.0006	.0002	-.6	.4	-.3	-.0024	.0005	-.0002
S001 7612 R GSFC	-.0010	.0026	-.0041	.1	.3	.5	-.0010	-.0013	-.0047
S001 7612 R GIUB	.0003	.0034	-.0005	.0	.0	.0	.0002	.0019	-.0029
S001 7612 R NOAA	-.0011	-.0122	.0074	.0	-.9	-1.5	-.0007	-.0026	.0140

40466 KITT PEAK

Positions

S001 7610 R GSFC	.0011	-.0014	.0057	-.1	.1	.7	.0015	.0043	.0038	93: 1
S001 7610 R GIUB	-.0126	-.0052	.0535	.0	.1	-.5	-.0098	.0404	.0364	93: 1
S001 7610 R NOAA	.0024	.0122	.0067	.2	.7	1.1	-.0022	.0121	-.0068	93: 1

Velocities

S001 7610 R GSFC	.0008	.0003	-.0058	.4	-.7	-2.2	.0006	-.0046	-.0035
S001 7610 R GIUB	-.0001	.0000	-.0003	.0	.0	.0	-.0001	-.0002	-.0001
S001 7610 R NOAA	-.0007	-.0107	.0014	-.3	.0	-.3	.0033	-.0043	.0094

40469 CHINA LAKE

Positions

M001 COSO P JPL	.0000	.0000	.0000	.0	.0	-.1	.0000	.0000	.0000	96: 1

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Velocities
M001 COSO P JPL        .0000  .0000  .0000   .0   .1   .0  .0000  .0000  .0000

40471 HANCOCK

Positions
S001 7618 R GSFC       .0057 -.0134  .0063  1.1  -.5  -.8  .0013 -.0053  .0149 93:  1
S001 7618 R GIUB       .0004 -.0043  .0023  -.1  -.4 -1.4 -.0010 -.0012  .0047 93:  1
S001 7618 R NOAA       .0050  .0124 -.0150  -.3   .4 -1.2  .0086 -.0040 -.0177 93:  1

Velocities
S001 7618 R GSFC      -.0020  .0027  .0003  -.8 -1.0  1.4 -.0011  .0024 -.0021
S001 7618 R GIUB       .0006  .0013  .0022   .0   .0   .0  .0010  .0023  .0007
S001 7618 R NOAA      -.0031 -.0070  .0093  -.2  -.2 -1.7 -.0051  .0029  .0106

40473 BREWSTER

Positions
S001 7614 R GSFC       .0066  .0053  .0034   .9  -.7   .3  .0031  .0082 -.0028 93:  1
S001 7614 R GIUB       .0066 -.0084  .0603  -.8   .5  1.3  .0099  .0372  .0476 93:  1
S001 7614 R NOAA       .0133  .0129 -.0011   .3   .0   .1  .0052  .0125 -.0127 93:  1

Velocities
S001 7614 R GSFC      -.0034 -.0045 -.0025  -.7  -.6   .7 -.0008 -.0059  .0019
S001 7614 R GIUB       .0015 -.0008 -.0007   .0   .0   .0  .0017 -.0004 -.0006
S001 7614 R NOAA      -.0058 -.0065  .0024  2.8  1.1   .9 -.0018 -.0048  .0075

40474 LAKE_MATHEWS

Positions
M001 MATH P JPL        .0000  .0000  .0000   .0   .1  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 MATH P JPL        .0000  .0000  .0000   .0   .1   .1  .0000  .0000  .0000

40477 MAUNA KEA

Positions
M001 MKEA P CODE      -.0038 -.0025  .0110  -.1   .3  1.0  .0007  .0088  .0080 95: 76
M001 MKEA P MIT       -.0018  .0018 -.0013  -.2  -.1   .2 -.0024 -.0015  .0004 97:151
M001 MKEA P NCL       -.0189 -.0027  .0082  -.3   .1   .0 -.0054  .0015  .0200 96:  1
M001 MKEA P JPL        .1065  .0658 -.0588   .3   .2  -.2 -.0156 -.0132 -.1368 96:  1
S001 7617 R GSFC       .0035  .0039 -.0013   .1  -.4 -1.0 -.0021  .0004 -.0049 93:  1
S001 7617 R GIUB      -.0226  .0004  .1033  1.2  -.8   .1 -.0097  .0902  .0542 93:  1
S001 7617 R NOAA       .0127  .0107  .0090   .5   .4   .5 -.0045  .0139 -.0120 93:  1

Velocities
M001 MKEA P CODE       .0002 -.0006 -.0008   .2 -1.2 -2.1  .0006 -.0008 -.0002
M001 MKEA P MIT       -.0003 -.0006 -.0041   .0   .1  -.6  .0004 -.0040 -.0009
M001 MKEA P NCL        .0204  .0012 -.0101   .2   .1  -.2  .0074 -.0031 -.0213
M001 MKEA P JPL       -.1304 -.0814  .0747   .0  -.1   .6  .0199  .0186  .1688
S001 7617 R GSFC      -.0004 -.0001 -.0022 -1.1  1.3  1.7 -.0001 -.0022 -.0004
S001 7617 R GIUB       .0003  .0044  .0020   .0   .0   .0 -.0038  .0026 -.0013
S001 7617 R NOAA      -.0091 -.0080  .0005  -.3  -.2   .9  .0035 -.0035  .0111

40478 OATT MOUNTAIN

Positions
M002 ROCK P JPL        .0004  .0000 -.0001   .2   .0  -.2  .0003  .0000 -.0002 96:  1
S101 OAT2 P JPL        .0001  .0000  .0000   .1   .0  -.2  .0001  .0000  .0000 96:  1

Velocities
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M002 ROCK P JPL       -.0031  .0003  .0010  -.1   .1   .0 -.0029  .0002  .0016
S101 QAT2 P JPL        .0015 -.0001 -.0005   .1   .0   .1  .0014 -.0001 -.0008

40479 BLYTHE

Positions
M001 BLYT P JPL        .0000  .0000  .0000   .1   .0  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 BLYT P JPL        .0000  .0000  .0000  -.1   .1   .1  .0000  .0000  .0000

40480 BOMMER CANYON

Positions
M001 TRAK P JPL       -.0001 -.0001  .0000  -.1  -.1  -.1  .0000 -.0001  .0001 96:  1

Velocities
M001 TRAK P JPL        .0003  .0006 -.0001  -.1   .0  -.1  .0000  .0002 -.0006

40481 YUCAIPA

Positions
M001 CRFP P JPL        .0000  .0000  .0000   .1   .1  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 CRFP P JPL        .0000  .0000  .0000  -.1   .1   .1  .0000  .0000  .0000

40482 LONG BEACH CITY

Positions
M001 LBCH P JPL       -.0003 -.0007  .0001  -.1  -.1  -.1  .0001 -.0003  .0007 96:  1

Velocities
M001 LBCH P JPL        .0010  .0027 -.0001   .0   .0   .0 -.0004  .0015 -.0025

40483 WESTLAKE

Positions
S001 AOA1 P JPL        .0000 -.0001  .0000  -.1   .0   .0  .0000  .0000  .0001 96:  1

Velocities
S001 AOA1 P JPL        .0000  .0000  .0000  -.1   .0   .0  .0000  .0000 -.0001

40484 CHILAO FLATES

Positions
M001 CHIL P JPL        .0000  .0000  .0000   .1   .0  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 CHIL P JPL        .0000  .0000  .0000   .0   .1   .1  .0000  .0000  .0000

40485 LONGDON YARD

Positions
M001 LONG P JPL        .0000  .0000  .0000   .0   .1   .0  .0000  .0000  .0000 96:  1

Velocities
M001 LONG P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

40487 LOS ANGELES

Positions
M001 USC1 P JPL        .0000 -.0001  .0001   .1   .0  -.3  .0000  .0001  .0002 96:  1
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M002 UCLP P JPL        .0000  .0000 -.0001   .2   .0  -.4  .0000  .0000 -.0001 96:  1

Velocities
M001 USC1 P JPL        .0002 -.0005  .0009   .0   .0   .3  .0004  .0006  .0008
M002 UCLP P JPL       -.0002  .0003 -.0007   .0   .1   .0 -.0003 -.0005 -.0005

40488 CATALINA ISLAND

Positions
M001 CAT1 P NCL        .0030  .0009 -.0010   .0   .0  -.1  .0022  .0004 -.0024 96:  1
M001 CAT1 P JPL       -.0005 -.0006  .0002  -.1  -.1  -.1 -.0002 -.0003  .0007 96:  1

Velocities
M001 CAT1 P NCL        .0009  .0127 -.0236  -.1   .0  -.1 -.0053 -.0133 -.0227
M001 CAT1 P JPL        .0011  .0016 -.0003  -.1   .0  -.1  .0002  .0008 -.0018

40489 HAT CREEK

Positions
S001 7218 R GSFC       .0040  .0015 -.0014   .1   .0  1.1  .0027  .0012 -.0035 93:  1
S001 7218 R GIUB      -.0063  .0262  .0301  -.2   .9  1.2 -.0190  .0352  .0052 93:  1
S001 7218 R NOAA       .0057  .0029  .0000   .1  -.3  -.1  .0033  .0035 -.0041 93:  1

Velocities
S001 7218 R GSFC       .0004  .0015 -.0041   .6 -1.5  -.8 -.0005 -.0021 -.0038
S001 7218 R GIUB      -.0009  .0034  .0082  -.1  1.2  -.8 -.0025  .0079  .0035
S001 7218 R NOAA       .0005  .0001  .0004   .1   .4  1.5  .0004  .0006  .0000

40490 MARYLAND POINT

Positions
S001 7217 R GSFC      -.0041 -.0193  .0035  -.3  -.6  -.4 -.0082 -.0084  .0162 93:  1
S001 7217 R GIUB      -.0080  .0128  .0003  -.2  -.2   .5 -.0050  .0091 -.0110 93:  1
S001 7217 R NOAA       .0006  .0413 -.0329  -.1   .6  -.3  .0097 -.0009 -.0519 93:  1

Velocities
S001 7217 R GSFC      -.0014 -.0004 -.0021   .0   .2   .4 -.0015 -.0017 -.0013
S001 7217 R GIUB      -.0010  .0037 -.0025   .0   .0   .0 -.0001  .0004 -.0046
S001 7217 R NOAA       .0003  .0043 -.0062   .3   .0  -.3  .0012 -.0023 -.0071

40491 FLAGSTAFF

Positions
M002 7891 TIE40491     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M003 7261 TIE40491     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M003 7261 R GSFC       .0039  .0024  .0011   .0   .0   .0  .0028  .0030 -.0024 93:  1
M003 7261 R NOAA       .0022 -.0027  .0062   .0   .0   .0  .0030  .0040  .0050 93:  1

Velocities
M003 7261 R GSFC      -.0005 -.0004 -.0012  -.2   .0   .1 -.0003 -.0013 -.0002
M003 7261 R NOAA       .0004  .0003 -.0006   .1   .0   .0  .0003 -.0002 -.0007

40492 VERNAL

Positions
M001 7892 L CSR       -.4226 -.7603 -.3946   .2  -.2  -.2 -.1435 -.8560  .3987 93:  1
M002 7290 R GSFC       .0043 -.0007 -.0018   .0   .0  -.1  .0043 -.0009 -.0018 93:  1
M002 7290 R NOAA       .0054  .0076  .0024   .0   .0   .0  .0026  .0076 -.0053 93:  1

Velocities
M001 7892 L CSR       -.0362 -.0773 -.0389  -.1   .0   .1 -.0083 -.0846  .0396
M002 7290 R GSFC       .0010  .0033 -.0054   .1   .1  -.1 -.0001 -.0019 -.0062
M002 7290 R NOAA       .0010  .0010 -.0003   .0  -.1   .0  .0006  .0006 -.0012
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40493 YUMA

Positions

M001 7894 R GSFC	.0110	.0146	-.0163	.1	.0	-.2	.0041	-.0040	-.0238	93: 1
M001 7894 R NOAA	-.0010	-.0097	.0149	-.1	.0	.1	.0031	.0075	.0159	93: 1
M001 7894 L CSR	-.3805	.1379	.2161	.3	.0	-.3	-.4035	.1649	.1429	93: 1

Velocities

M001 7894 R GSFC	.0011	.0027	-.0048	-.1	-.2	-.1	-.0001	-.0025	-.0050
M001 7894 R NOAA	-.0006	-.0015	.0015	.1	.0	.1	.0001	.0003	.0022
M001 7894 L CSR	-.0360	.0061	.0236	.1	.0	.0	-.0353	.0148	.0206

40496 PLATTEVILLE

Positions

M001 7112 TIE40496	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 7112 L CSR	.0042	.0260	-.0317	.3	.3	.2	-.0026	-.0073	-.0405	93: 1
M001 7112 L GSFC	-.0089	.0143	.0127	.7	.4	.3	-.0123	.0172	-.0007	86:182
M002 7258 TIE40496	.0000	.0000	.0001	.0	.0	.1	.0000	.0001	.0000	93: 1
M002 7258 R GSFC	.0121	.0276	-.0224	.3	.1	.1	.0047	.0020	-.0372	93: 1
M002 7258 R NOAA	.0048	.0079	.0064	-.2	.2	-.2	.0026	.0106	-.0026	93: 1

Velocities

M001 7112 L CSR	.0029	.0012	-.0075	.3	.9	.1	.0025	-.0045	-.0063
M001 7112 L GSFC	.0014	-.0033	-.0013	-.7	-.5	-.3	.0022	-.0028	.0014
M002 7258 R GSFC	.0013	.0047	-.0054	.1	-.3	.4	.0000	-.0010	-.0072
M002 7258 R NOAA	.0005	-.0003	.0017	.0	.0	.1	.0005	.0012	.0012

40497 MONUMENT PEAK

Positions

M001 7110 TIE40497	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M001 7110 L CSR	.0001	-.0009	-.0022	.2	-.1	-.3	.0005	-.0022	-.0005	93: 1
M001 7110 L GSFC	-.0214	-.0014	.0130	.6	-1.8	1.6	-.0185	.0050	.0161	86:182
M002 7220 TIE40497	-.0001	.0000	.0000	.0	.0	.0	-.0001	.0000	.0000	93: 1
M002 7220 L CSR	.0253	-.0323	-.0097	.4	-.3	.2	.0371	-.0177	.0096	93: 1
M003 7274 TIE40436	-.0023	-.0073	.0097	.0	-.1	.2	.0012	.0040	.0116	93: 1
M003 7274 TIE40497	-.0013	.0032	.0037	-.4	1.1	1.2	-.0026	.0044	.0001	93: 1
M003 7274 R GSFC	.0117	-.0102	.0231	.1	-.3	1.5	.0150	.0173	.0158	93: 1
M003 7274 R NOAA	.0308	.0112	.0127	.5	-1.4	1.0	.0226	.0235	-.0130	93: 1
M003 7274 L CSR	.0012	-.0514	-.0108	.1	-.3	-.2	.0239	-.0338	.0324	93: 1
M004 MONP P CODE	.0033	-.0021	-.0035	-.1	-.5	.1	.0038	-.0032	-.0016	95: 76
M004 MONP P MIT	-.0022	-.0004	.0028	.2	.0	.4	-.0018	.0016	.0026	97:151
M004 MONP P NCL	.0086	.0129	-.0119	.2	-.1	-.3	.0019	-.0016	-.0194	96: 1
M004 MONP P JPL	.0053	-.0032	-.0033	.9	-1.0	-2.0	.0062	-.0031	-.0014	96: 1

Velocities

M001 7110 L CSR	.0011	-.0028	-.0011	-.4	-1.2	-.9	.0023	-.0020	.0011
M001 7110 L GSFC	.0030	.0003	-.0016	-.6	.6	.0	.0025	-.0005	-.0023
M002 7220 L CSR	.0011	-.0028	-.0011	.0	.2	.0	.0023	-.0020	.0011
M003 7274 R GSFC	.0007	-.0016	.0032	-.1	.0	2.6	.0014	.0021	.0027
M003 7274 R NOAA	.0038	.0004	.0034	-.2	.1	1.2	.0032	.0040	.0001
M003 7274 L CSR	.0011	-.0028	-.0011	.0	.0	.0	.0023	-.0020	.0011
M004 MONP P CODE	-.0001	.0012	.0016	-1.1	1.2	1.8	-.0006	.0019	.0000
M004 MONP P MIT	-.0052	-.0096	.0064	-.2	-.4	.2	-.0004	-.0006	.0127
M004 MONP P NCL	-.0089	-.0128	.0123	-.1	.8	.5	-.0023	.0019	.0196
M004 MONP P JPL	-.0147	-.0107	.0145	-1.0	.3	1.3	-.0084	.0035	.0214

40498 VLA

Positions

S001 7619 R GSFC	.0030	-.0019	.0369	.0	.0	.0	.0034	.0301	.0214	93: 1

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Velocities
S001 7619 R GSFC       .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

40499 RICHMOND

Positions
M002 7295 TIE40499     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 7295 L CSR        .0003 -.0128  .0056   .0  -.2   .4 -.0018 -.0004  .0138 93:  1
M002 7295 L GSFC      -.0937  .0131 -.0294  -.5   .2  -.4 -.0902 -.0142 -.0385 86:182
M002 7295 P GFZ       -.0133 -.0151  .0042   .6  -.4 -1.6 -.0156 -.0017  .0133 94:365
M002 7295 P CODE       .0066  .0031 -.0102   .4   .3 -1.3  .0070 -.0084 -.0062 95: 76
M002 7295 P JPL        .0064 -.0027  .0032   .1   .0  -.1  .0059  .0013  .0048 96:  1
M005 RCM4 TIE40499    -.0002  .0003  .0004  -.1   .1   .1 -.0001  .0005 -.0001 93:  1
M005 RCM4 P GFZ       -.0160 -.0083  .0049   .1   .3  -.3 -.0172  .0020  .0070 94:365
M005 RCM4 P CODE       .0038 -.0064 -.0003   .0  -.2   .2  .0027 -.0033  .0062 95: 76
M005 RCM4 P JPL       -.0084 -.0557  .0321   .0  -.1   .0 -.0176  .0058  .0621 96:  1
S001 7219 TIE40499     .0079  .0013 -.0066  2.6   .7 -3.3  .0080 -.0059 -.0028 93:  1
S001 7219 R GSFC       .0037 -.0192  .0116  1.3 -1.7 -2.2  .0004  .0020  .0226 93:  1
S001 7219 R GIUB      -.0140 -.0162  .0168   .4 -2.9  1.8 -.0165  .0093  .0195 93:  1
S001 7219 R NOAA       .0037 -.0077  .0165   .3 -1.6  3.7  .0023  .0114  .0145 93:  1
S015 RICA TIE40499     .0000 -.0001 -.0001   .0   .0   .0  .0000 -.0001  .0001 93:  1
S015 RICA D IGN       -.0587  .0621  .0327  -.1   .2   .5 -.0475  .0602 -.0499 95:100
S016 RIDA TIE40499    -.0001 -.0027 -.0032   .0  -.8 -1.0 -.0006 -.0040  .0011 93:  1
S016 RIDA D GRGS       .0135  .0593  .0182  -.1  1.2  1.1  .0232  .0407 -.0428 93:  1
S016 RIDA D CSR       -.0126 -.0295 -.0265   .0  -.4  -.3 -.0174 -.0356  .0129 93:  1
S016 RIDA D IGN        .0065  .0457  .0164   .0  2.2  2.3  .0141  .0338 -.0326 95:100
S018 RCM5 TIE40499    -.0051 -.0060  .0073 -1.7 -2.0  2.4 -.0060  .0044  .0077 93:  1
S018 RCM5 P EMR        .0094 -.0031 -.0001  1.3  1.1  -.7  .0087 -.0020  .0041 96:  1
S018 RCM5 P GFZ       -.0211  .0144 -.0028  -.8  2.5  -.1 -.0184  .0051 -.0172 94:365
S018 RCM5 P CODE       .0055 -.0022 -.0020   .3  -.8   .1  .0051 -.0031  .0019 95: 76
S018 RCM5 P MIT       -.0112 -.0003 -.0070 -1.1  -.2  -.5 -.0111 -.0056 -.0045 97:151
S018 RCM5 P NCL        .0019  .0063 -.0007  -.6  1.0  -.6  .0029  .0019 -.0056 96:  1
S018 RCM5 P JPL       -.0013 -.0035  .0014   .0  -.4   .3 -.0019 -.0001  .0035 96:  1
S019 7201 R GSFC      -.0023  .0101 -.0070  -.1   .0   .0 -.0006 -.0018 -.0124 93:  1
S019 7201 R GIUB      -.0002  .0038 -.0131   .3   .1  -.1  .0005 -.0102 -.0091 93:  1
S020 RCM6 P GFZ       -.0112 -.0158  .0119   .3   .0  -.1 -.0136  .0048  .0175 94:365
S020 RCM6 P CODE       .0059 -.0014 -.0024  -.1   .2   .2  .0056 -.0032  .0011 95: 76
S020 RCM6 P MIT       -.0086  .0001 -.0042  -.9  -.1  -.2 -.0085 -.0031 -.0032 97:151
S020 RCM6 P NCL        .0313 -.0597  .0172  1.3   .4  -.8  .0209 -.0122  .0653 96:  1

Velocities
M002 7295 L CSR        .0059 -.0059  .0032   .3   .0   .4  .0048 -.0001  .0076
M002 7295 L GSFC       .0138 -.0039  .0059   .3  -.4   .9  .0129  .0027  .0081
M002 7295 P GFZ        .0036 -.0096  .0057  -.4  -.9   .9  .0019  .0008  .0116
M002 7295 P CODE      -.0016  .0030 -.0040  -.9  -.1   .8 -.0011 -.0022 -.0046
M002 7295 P JPL       -.0006  .0090 -.0010  -.5  1.2   .9  .0009  .0029 -.0086
M005 RCM4 P GFZ        .0036 -.0096  .0057   .0   .0   .1  .0019  .0008  .0116
M005 RCM4 P CODE      -.0016  .0030 -.0040   .0   .0   .0 -.0011 -.0022 -.0046
M005 RCM4 P JPL       -.0067 -.0112  .0097  -.2   .6   .2 -.0085  .0045  .0131
S001 7219 R GSFC       .0006 -.0031  .0016  -.1  -.3   .0  .0000  .0001  .0035
S001 7219 R GIUB      -.0027 -.0033  .0041  1.5   .7   .8 -.0032  .0025  .0043
S001 7219 R NOAA       .0006 -.0028  .0017   .8   .1 -1.0  .0001  .0002  .0033
S015 RICA D IGN       -.0113 -.0028  .0176   .1  -.9  -.1 -.0116  .0155  .0084
S016 RIDA D GRGS       .0002 -.0038 -.0020   .3  1.8  1.5 -.0004 -.0034  .0025
S016 RIDA D CSR        .0146 -.0003 -.0007   .3  -.7  -.2  .0143 -.0019  .0021
S016 RIDA D IGN        .0102  .0073  .0096   .6  -.2   .6  .0113  .0110 -.0008
S018 RCM5 P EMR        .0067 -.0158  .0090  1.1  -.6   .2  .0040  .0009  .0190
S018 RCM5 P GFZ        .0036 -.0096  .0057   .0  -.1  -.5  .0019  .0008  .0116
S018 RCM5 P CODE      -.0016  .0030 -.0040  -.1   .0   .1 -.0011 -.0022 -.0046
S018 RCM5 P MIT       -.0081 -.0014 -.0038  -.8  -.8  -.4 -.0082 -.0035 -.0016
S018 RCM5 P NCL       -.0038 -.0112  .0030  -.3  -.1   .6 -.0056 -.0018  .0107
S018 RCM5 P JPL       -.0007 -.0095  .0054   .2 -1.7   .1 -.0023  .0009  .0107
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S019 7201 R GSFC       .0006 -.0031  .0016   .0   .0   .0  .0000  .0001  .0035
S019 7201 R GIUB      -.0027 -.0033  .0041   .0   .0   .0 -.0032  .0025  .0043
S020 RCM6 P GFZ        .0019 -.0017  .0014  1.1 -1.9  -.7  .0016  .0004  .0024
S020 RCM6 P CODE      -.0016  .0030 -.0040   .0   .1   .2 -.0011 -.0022 -.0046
S020 RCM6 P MIT       -.0034  .0102 -.0079   .3   .3  -.3 -.0016 -.0025 -.0130
S020 RCM6 P NCL       -.0314  .0577 -.0181  -.2   .1   .0 -.0213  .0106 -.0639

40503 SOCORRO ISLAND

Positions
S002 SOCA TIE40503     .0000  .0001  .0001   .0   .0   .0  .0000  .0001  .0000 93:  1
S002 SOCA D IGN        .7662-1.3475 -.2410   .0  -.1   .0 1.1974 -.5442  .8549 95:100
S003 SODA TIE40503     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
S003 SODA D CSR       -.0277  .0884  .0468  -.2  1.2   .7 -.0574  .0676 -.0538 93:  1
S003 SODA D IGN       -.0033 -.0047 -.0047  -.1  -.4   .4 -.0014 -.0063  .0038 95:100

Velocities
S002 SOCA D IGN        .1465 -.2580 -.0334  -.4   .8  1.0  .2290 -.0922  .1678
S003 SODA D CSR        .0083 -.0205 -.0266  -.2   .7  -.3  .0151 -.0304  .0068
S003 SODA D IGN        .0045  .0097  .0049   .0   .0  -.1  .0007  .0081 -.0086

40504 MAZATLAN

Positions
M001 7122 L CSR        .0006 -.0038 -.0034   .1  -.1  -.1  .0017 -.0045  .0019 93:  1
M001 7122 L GSFC      -.0146  .0106 -.0006  1.2   .0  -.9 -.0170  .0018 -.0058 86:182

Velocities
M001 7122 L CSR        .0022 -.0040 -.0018  -.1   .3   .0  .0032 -.0029  .0022
M001 7122 L GSFC       .0039  .0042 -.0056   .1   .3  -.6  .0026 -.0031 -.0069

40505 CABO SAN LUCAS

Positions
M001 7882 L CSR       -.0020 -.0049 -.0032  -.2   .2   .2 -.0002 -.0051  .0037 93:  1
M001 7882 L GSFC      -.0396  .0201  .0112  -.1   .1   .1 -.0441  .0124 -.0007 86:182

Velocities
M001 7882 L CSR        .0027 -.0069 -.0013  -.2   .1   .1  .0049 -.0034  .0046
M001 7882 L GSFC       .0094 -.0048 -.0035   .6  -.3  -.2  .0105 -.0038 -.0002

40506 ENSENADA

Positions
M001 7883 L CSR       -.0035 -.0203  .0027  -.2  -.3   .1  .0058 -.0079  .0184 93:  1
M001 7883 L GSFC      -.0202  .0252  .0101   .0   .1  -.1 -.0292  .0158 -.0064 86:182

Velocities
M001 7883 L CSR        .0051 -.0070 -.0028   .0   .1   .1  .0077 -.0045  .0020
M001 7883 L GSFC       .0028 -.0028 -.0016  -.1   .0   .1  .0037 -.0020  .0002

40508 CICESE

Positions
M001 CICE P MIT        .0010  .0632 -.0756   .2   .7 -1.0 -.0274 -.0341 -.0882 97:151
M001 CICE P NCL        .0016  .0005  .0026   .1   .1   .2  .0012  .0028  .0004 96:  1
M001 CICE P JPL        .0017  .0044 -.0036   .4   .5  -.3 -.0004 -.0006 -.0059 96:  1

Velocities
M001 CICE P MIT       -.0018  .0435 -.0585  -.2   .6 -1.0 -.0212 -.0296 -.0632
M001 CICE P NCL        .0142  .0458 -.0346   .3   .5  -.3 -.0079 -.0044 -.0585
M001 CICE P JPL       -.0032 -.0124  .0102  -.5  -.7   .4  .0027  .0021  .0161
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40701 SANTIAGO DE CUBA

Positions

S001 1953 L CSR	.0104	-.0087	-.0001	.0	.0	.0	.0079	-.0039	.0103	93:	1

Velocities

S001 1953 L CSR	-.0055	.0149	-.0043	-.1	.1	.0	-.0017	.0014	-.0163

41507 RIO GRANDE

Positions

S003 RIOA TIE41507	.0005	.0001	-.0008	.0	.0	.0	.0005	-.0004	.0007	93:	1
S003 RIOA D GRGS	.0187	.0043	.0016	.5	.2	.0	.0189	.0035	.0005	93:	1
S003 RIOA D CSR	-.0057	.0086	.0109	-.3	.3	.2	-.0020	-.0017	-.0147	93:	1
S003 RIOA D IGN	.0251	.0090	.0091	.6	-.2	.4	.0266	.0063	-.0067	95:	100
S004 RIOB TIE41507	.0000	.0000	.0000	-.2	.0	.3	.0000	.0000	.0000	93:	1
S004 RIOB D GRGS	.0257	.0052	-.0085	.5	.0	-.8	.0257	-.0010	.0097	93:	1
S004 RIOB D IGN	.0623	-.0284	.0095	1.0	-.4	.0	.0469	.0459	.0218	95:	100

Velocities

S003 RIOA D GRGS	-.0145	-.0030	.0025	-.5	.1	.5	-.0145	-.0007	-.0036
S003 RIOA D CSR	-.0094	-.0156	-.0034	-.8	-.3	.0	-.0146	.0068	.0092
S003 RIOA D IGN	.0139	.0083	.0196	-.2	.3	.5	.0159	.0096	-.0172
S004 RIOB D GRGS	-.0145	-.0030	.0025	.0	.0	.0	-.0145	-.0007	-.0036
S004 RIOB D IGN	-.0463	.0214	.0044	.0	-.1	.2	-.0347	-.0275	-.0256

41510 LA PLATA

Positions

M001 LPGS P GFZ	-.0214	-.0065	.0051	-.2	.2	-.2	-.0215	.0008	-.0077	94:	365
M001 LPGS P CODE	.0018	.0007	.0022	-.5	.2	.1	.0019	.0020	-.0009	95:	76
M001 LPGS P MIT	-.0097	.0116	-.0031	-.6	.8	-.5	-.0021	-.0112	-.0105	97:	151
M001 LPGS P NCL	.0036	-.0045	.0030	.4	-.3	-.1	.0006	.0057	.0030	96:	1
M001 LPGS P JPL	.0018	-.0033	-.0005	.5	.0	.1	-.0003	.0017	.0034	96:	1

Velocities

M001 LPGS P GFZ	.0101	-.0052	.0039	-.4	-1.2	.3	.0058	.0088	.0058
M001 LPGS P CODE	-.0008	.0080	-.0104	-.2	-.3	.0	.0036	-.0126	.0000
M001 LPGS P MIT	-.0083	.0126	-.0002	-.6	.6	-.1	-.0003	-.0088	-.0122
M001 LPGS P NCL	-.0079	.0110	-.0036	-.4	.3	.1	-.0009	-.0106	-.0090
M001 LPGS P JPL	-.0035	-.0003	.0010	.4	-.1	.2	-.0031	-.0001	-.0019

41602 FORTALEZA

Positions

M001 FORT TIE41602	-.0048	.0024	-.0009	.0	.0	.0	-.0011	-.0013	-.0051	93:	1
M001 FORT P EMR	.0144	-.0131	.0021	1.7	1.2	-.7	-.0013	.0034	.0193	96:	1
M001 FORT P GFZ	.0021	-.0194	.0054	1.7	.2	-1.2	-.0139	.0063	.0133	94:	365
M001 FORT P CODE	.0230	-.0180	-.0044	2.1	-.6	-.4	.0002	-.0024	.0294	95:	76
M001 FORT P MIT	-.0078	.0032	-.0085	-.9	.4	-1.3	-.0024	-.0090	-.0075	97:	151
M001 FORT P NCL	.0081	-.0043	.0044	.9	.4	.3	.0017	.0050	.0087	96:	1
M001 FORT P JPL	-.0047	-.0015	.0031	-.3	-.7	2.1	-.0041	.0029	-.0030	96:	1
S001 7297 TIE41602	.0000	.0000	.0000	1.6	-.8	.3	.0000	.0000	.0000	93:	1
S001 7297 R GSFC	-.0133	.0087	-.0068	-1.0	.2	-.3	-.0014	-.0078	-.0153	93:	1
S001 7297 R GIUB	-.0507	.0195	-.0395	-3.3	-1.2	-2.5	-.0162	-.0429	-.0491	93:	1
S001 7297 R NOAA	.0037	.0074	.0092	.0	.3	-.1	.0081	.0091	-.0023	93:	1

Velocities

M001 FORT P EMR	-.0002	-.0063	.0046	.5	-.2	.9	-.0050	.0048	.0034
M001 FORT P GFZ	.0093	-.0021	.0042	1.4	.2	-1.6	.0041	.0047	.0083
M001 FORT P CODE	-.0042	.0078	-.0044	.7	-1.0	.3	.0035	-.0049	-.0079
M001 FORT P MIT	-.0087	.0084	-.0038	-.9	.5	-.3	.0012	-.0046	-.0117
M001 FORT P NCL	-.0162	.0071	-.0071	-.7	-1.2	-.6	-.0045	-.0083	-.0165

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M001 FORT P JPL        .0026  .0030  .0008   .4   .2   .5  .0040  .0008  .0002
S001 7297 R GSFC       .0011  .0021  .0015 -3.0  2.2   .4  .0023  .0015 -.0005
S001 7297 R GIUB      -.0032  .0052 -.0013  -.9  -.5  -.6  .0021 -.0017 -.0057
S001 7297 R NOAA      -.0022  .0025  .0030  -.6  -.1  1.4  .0006  .0027 -.0035

41604 NATAL

Positions
S001 7929 L CSR        .4429 -.2623 -.1374   .0   .0   .0  .0406 -.0837  .5246 93:  1

Velocities
S001 7929 L CSR        .0337 -.0096 -.0064   .0   .0   .0  .0116 -.0029  .0336

41606 BRASILIA

Positions
M001 BRAZ P GFZ       -.0072 -.0083  .0048   .4   .6   .0 -.0110  .0050  .0000 94:365
M001 BRAZ P CODE       .0117 -.0140 -.0075   .1  -.3  -.3 -.0008 -.0022  .0196 95: 76
M001 BRAZ P MIT       -.0064  .0005 -.0081  -.4  -.1  -.8 -.0044 -.0090 -.0022 97:151
M001 BRAZ P NCL       -.0005  .0024  .0049  -.1   .4  -.7  .0012  .0041 -.0034 96:  1
M001 BRAZ P JPL       -.0024 -.0054  .0020   .0  -.5   .8 -.0054  .0026  .0018 96:  1

Velocities
M001 BRAZ P GFZ       -.0018  .0008  .0058  -.4  -.5  -.5 -.0008  .0051 -.0033
M001 BRAZ P CODE      -.0068  .0157 -.0027   .0   .4   .0  .0055 -.0071 -.0148
M001 BRAZ P MIT       -.0003 -.0009 -.0057   .3  -.3  -.3 -.0008 -.0053  .0020
M001 BRAZ P NCL       -.0020 -.0014 -.0077  -.1  -.7   .8 -.0024 -.0075  .0019
M001 BRAZ P JPL       -.0107  .0137  .0033  -.6   .2  -.8  .0013 -.0016 -.0176

41609 CACHOEIRA PAULIS

Positions
S001 CACB D GRGS       .0582  .0514  .0257   .9   .4   .9  .0775  .0255 -.0055 93:  1
S001 CACB D CSR        .0264 -.0239 -.0007   .4  -.3  -.1  .0017  .0131  .0331 93:  1
S001 CACB D IGN       -.0049  .0006 -.0117   .5   .2  -.6 -.0030 -.0123  .0009 95:100

Velocities
S001 CACB D GRGS      -.0172 -.0117 -.0025   .7   .6  1.1 -.0204 -.0038 -.0026
S001 CACB D CSR       -.0473 -.0046 -.0109 -1.6   .1  -.4 -.0366 -.0217 -.0236
S001 CACB D IGN        .0037  .0002  .0145   .0  -.6   .3  .0028  .0144 -.0033

41703 EASTER ISLAND

Positions
M001 7061 TIE41703     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 7097 TIE41703     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M002 7097 L CSR        .0019  .0077 -.0052  -.4   .5   .0 -.0008 -.0082 -.0047 93:  1
M002 7097 L GSFC      -.0096  .0403  .0071  1.0  1.2   .6 -.0225 -.0095 -.0343 86:182
M003 EISL TIE41703     .0000 -.0004 -.0020   .0  -.1  -.7  .0002 -.0016  .0013 93:  1
M003 EISL P GFZ       -.0265 -.0194  .0070 -1.0 -1.2  2.0 -.0186  .0186  .0209 94:365
M003 EISL P CODE       .0140 -.0348 -.0231  -.1 -2.8 -1.2  .0248 -.0077  .0356 95: 76
M003 EISL P MIT       -.0044  .0206  .0035   .3  1.6   .1 -.0110 -.0051 -.0175 97:151
M003 EISL P JPL       -.0026  .0066  .0051  -.4   .9   .9 -.0046  .0021 -.0071 96:  1
S008 EASA TIE41703    -.0010  .0010  .0019  -.3   .3   .6 -.0013  .0014 -.0014 93:  1
S008 EASA D GRGS       .0282 -.0538 -.0232   .7 -1.1  -.6  .0445 -.0018  .0475 93:  1
S008 EASA D CSR        .0061 -.0023  .0010   .3   .0   .0  .0065  .0009 -.0003 93:  1
S008 EASA D IGN        .0361 -.0190 -.0209  1.9 -1.1 -1.9  .0404 -.0158  .0148 95:100

Velocities
M002 7097 L CSR        .0052  .0022 -.0024  1.2  -.9   .0  .0042 -.0039 -.0023
M002 7097 L GSFC       .0026 -.0031 -.0107   .3   .4 -1.6  .0035 -.0086  .0067
M003 EISL P GFZ        .0097 -.0079 -.0030 -1.5  -.5  -.7  .0118 -.0007  .0051
M003 EISL P CODE      -.0095  .0376  .0126   .1   .6  -.3 -.0214 -.0035 -.0345
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M003 EISL P MIT       -.0034  .0071 -.0018  -.6 -1.9  -.1 -.0056 -.0041 -.0041
M003 EISL P JPL        .0029  .0093  .0039   .2   .2   .3 -.0004 -.0010 -.0105
S008 EASA D GRGS      -.0084  .0139  .0038   .6  -.5  -.8 -.0126 -.0013 -.0109
S008 EASA D CSR       -.0154  .0018 -.0077  -.3  -.2  -.5 -.0152 -.0053  .0066
S008 EASA D IGN        .0007  .0001  .0042  -.6   .0  -.3  .0006  .0037 -.0022

41705 SANTIAGO

Positions
M001 7400 TIE41705     .0003  .0000  .0001   .0   .0   .0  .0002  .0001  .0000 93:  1
M001 7400 L CSR       -.4119  .0902 -.0421 -3.2  -.2  -.8 -.3588 -.1563 -.1624 93:  1
M002      TIE41705     .0000  .0000  .0000  -.1   .0   .0  .0000  .0000  .0000 93:  1
M003 SANT TIE41705     .0000  .0000  .0000  -.1   .0   .0  .0000  .0000  .0000 93:  1
M003 SANT P EMR       -.0125 -.0116  .0151  -.8   .1   .2 -.0157  .0163 -.0025 96:  1
M003 SANT P GFZ       -.0207 -.0081  .0058   .3  -.5  -.7 -.0222  .0052 -.0025 94:365
M003 SANT P CODE       .0106 -.0166 -.0109   .5 -2.0   .4  .0045  .0014  .0220 95: 76
M003 SANT P MIT       -.0078  .0053 -.0063  -.4   .5  -.6 -.0057 -.0095 -.0029 97:151
M003 SANT P NCL        .0033 -.0054  .0018   .4  -.5 -1.1  .0013  .0049  .0042 96:  1
M003 SANT P JPL       -.0032  .0035  .0055  -.7   .3  1.7 -.0019  .0023 -.0067 96:  1
M004 7404 L CSR        .2415 -.2103 -.0866   .1  -.1   .1  .1583  .0798  .2804 93:  1
S006 1404 TIE41705    -.0015  .0011  .0002  -.5   .4   .1 -.0011 -.0007 -.0014 93:  1
S006 1404 R GSFC       .0029 -.0003 -.0088   .7   .1  -.1  .0026 -.0067  .0059 93:  1
S006 1404 R GIUB      -.0753  .0125 -.0139   .5 -1.1   .4 -.0670 -.0317 -.0231 93:  1
S006 1404 R NOAA       .0077  .0006  .0160   .3  -.4  1.3  .0075  .0144 -.0071 93:  1
S007 SANA TIE41705    -.0008  .0138  .0131   .0   .4   .4  .0039  .0036 -.0183 93:  1
S007 SANA D GRGS      -.0036 -.0186  .0245   .1  -.2   .6 -.0096  .0294  .0002 93:  1
S007 SANA D CSR        .0046 -.0040 -.0090   .1   .0  -.1  .0030 -.0046  .0094 93:  1
S007 SANA D IGN       -.0026 -.0006  .0097   .1  -.3   .6 -.0027  .0079 -.0055 95:100
S008 SAOB TIE41705     .0003 -.0001  .0002   .0   .0   .0  .0002  .0002  .0000 93:  1
S008 SAOB D IGN       -.0050  .1543  .0301   .0   .1  -.5  .0464 -.0553 -.1398 95:100

Velocities
M001 7400 L CSR        .0075  .0121 -.0112   .0   .0   .0  .0110 -.0143 -.0014
M003 SANT P EMR       -.0023 -.0005  .0036  -.5  -.1   .8 -.0024  .0028 -.0022
M003 SANT P GFZ        .0152 -.0112 -.0020  1.2  -.5 -2.2  .0106  .0068  .0142
M003 SANT P CODE      -.0056  .0159 -.0041   .1   .3 -1.1 -.0001 -.0126 -.0119
M003 SANT P MIT       -.0046  .0045 -.0041  -.1   .0  -.1 -.0029 -.0065 -.0026
M003 SANT P NCL       -.0062  .0128 -.0018  -.6   .4   .7 -.0016 -.0093 -.0109
M003 SANT P JPL        .0025  .0023 -.0018   .6   .2 -1.3  .0031 -.0023 -.0001
M004 7404 L CSR        .0075  .0121 -.0112   .2   .0   .0  .0110 -.0143 -.0014
S006 1404 R GSFC       .0001  .0004 -.0028  -.3  -.5 -1.5  .0002 -.0025  .0012
S006 1404 R GIUB      -.0044  .0042 -.0040   .7  -.6  -.5 -.0027 -.0064 -.0023
S006 1404 R NOAA      -.0016  .0060 -.0062  -.2  -.2  -.3  .0005 -.0086 -.0018
S007 SANA D GRGS       .0063  .0004 -.0142   .6  -.5  -.1  .0061 -.0109  .0092
S007 SANA D CSR       -.0239  .0067 -.0202 -1.0   .6 -1.5 -.0203 -.0247 -.0009
S007 SANA D IGN       -.0052 -.0042  .0133  -.3  -.3   .0 -.0063  .0123 -.0055
S008 SAOB D IGN       -.0040 -.0674 -.0297   .0   .0   .0 -.0261  .0092  .0684

41706 CERRO TOLOLO

Positions
M001 7401 L CSR        .0108  .0037  .0015   .0   .0   .0  .0114  .0013 -.0007 93:  1

Velocities
M001 7401 L CSR        .0061  .0061 -.0005   .0   .0   .1  .0078 -.0023 -.0030

41709 SEST

Positions
S001 7239 R GSFC      -.0006 -.0215 -.0040   .1  -.3   .1 -.0077  .0064  .0195 93:  1
S001 7239 R NOAA       .0027  .0158  .0178   .0   .2   .0  .0078  .0087 -.0209 93:  1

Velocities
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S001 7239 R GSFC      -.0012 -.0017  .0022   .0   .0   .0 -.0017  .0025  .0000
S001 7239 R NOAA      -.0008 -.0032  .0036   .0   .0   .0 -.0018  .0045  .0006

41901 BOGOTA

Positions
M001 BOGT P GFZ       -.0086  .0073  .0129   .9  1.2  1.9 -.0063  .0136 -.0083 94:365
M001 BOGT P CODE       .0093  .0176 -.0010 -1.0  1.3  1.7  .0137  .0001 -.0144 95: 76
M001 BOGT P MIT       -.0029 -.0066  .0029   .3  -.5  1.8 -.0046  .0024  .0058 97:151
M001 BOGT P JPL       -.0183 -.0046 -.0073  -.8  -.5 -1.5 -.0188 -.0072 -.0012 96:  1

Velocities
M001 BOGT P GFZ       -.0006  .0008 -.0030  1.3  1.3 -1.7 -.0003 -.0029 -.0012
M001 BOGT P CODE      -.0043 -.0022 -.0077   .3  -.6   .4 -.0047 -.0078  .0004
M001 BOGT P MIT        .0115 -.0044  .0143  2.0   .9  5.2  .0098  .0136  .0085
M001 BOGT P JPL        .0158 -.0104 -.0077  -.6 -1.1 -3.6  .0123 -.0089  .0137

42004 SAN CRISTOBAL

Positions
S001 GALA D GRGS       .0092  .0264  .0137   .2   .6   .4  .0094  .0133 -.0265 93:  1
S001 GALA D CSR       -.0186 -.0142 -.0550  -.1  -.1  -.8 -.0187 -.0548  .0149 93:  1
S001 GALA D IGN        .0003  .0140  .0009   .1   .4   .0  .0004  .0006 -.0140 95:100

Velocities
S001 GALA D GRGS      -.0021 -.0166 -.0056   .2  -.4  -.2 -.0022 -.0054  .0166
S001 GALA D CSR       -.0062  .0086  .0211   .1   .0  -.3 -.0062  .0209 -.0090
S001 GALA D IGN       -.0025  .0112  .0095  -.3   .2   .2 -.0024  .0093 -.0114

42005 SANTA CRUZ

Positions
M001 GALA P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 96:  1

Velocities
M001 GALA P JPL        .0000  .0000  .0000   .1   .1  -.1  .0000  .0000  .0000

42202 AREQUIPA

Positions
M003 7403 TIE42202     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M003 7403 L CSR        .0035  .0011 -.0008   .5   .1  -.1  .0037 -.0008  .0003 93:  1
M003 7403 L GSFC      -.0259 -.0032 -.0100  1.2   .7 -2.1 -.0256 -.0110 -.0021 86:182
M004 AREQ TIE42202    -.0001  .0001 -.0003   .0   .0  -.1  .0000 -.0003  .0000 93:  1
M004 AREQ P CODE       .0128 -.0142 -.0044   .2   .0   .2  .0076  .0007  .0180 95: 76
M005 AREQ TIE42202     .0014  .0008 -.0036   .5   .3 -1.2  .0016 -.0035  .0007 93:  1
M005 AREQ P EMR       -.0086 -.0173  .0088 -1.2 -2.2  2.5 -.0136  .0123  .0106 96:  1
M005 AREQ P GFZ       -.0136 -.0268  .0026  1.1 -1.5  1.0 -.0214  .0085  .0195 94:365
M005 AREQ P CODE       .0133 -.0203 -.0085  1.4  -.1  -.4  .0062 -.0015  .0249 95: 76
M005 AREQ P MIT       -.0076  .0101 -.0096  -.4  1.1 -1.4 -.0040 -.0126 -.0088 97:151
M005 AREQ P NCL        .0008 -.0020  .0054   .0  -.2   .8  .0001  .0058  .0006 96:  1
M005 AREQ P JPL       -.0075  .0024  .0045 -1.3  -.7  1.9 -.0064  .0030 -.0057 96:  1
S001 7907 TIE42202     .0021 -.0001  .0025   .7   .0   .8  .0020  .0026  .0000 93:  1
S001 7907 L CSR       -.0127  .0142 -.0212 -1.6  -.7 -2.1 -.0075 -.0253 -.0108 93:  1
S005 AREA TIE42202     .0000 -.0004 -.0010   .0  -.1  -.3 -.0001 -.0008  .0006 93:  1
S005 AREA D GRGS       .0305 -.0184  .0240   .2  -.1   .4  .0231  .0307  .0192 93:  1
S005 AREA D CSR        .0247 -.0061  .0098   .2   .0   .2  .0214  .0133  .0103 93:  1
S005 AREA D IGN       -.0021  .0450  .0310  -.1  1.3  1.2  .0123  .0175 -.0504 95:100

Velocities
M003 7403 L CSR        .0021  .0044 -.0016  -.6  -.3  -.8  .0034 -.0025 -.0029
M003 7403 L GSFC       .0025 -.0004  .0008 -1.0 -1.0   .0  .0022  .0011  .0009
M004 AREQ P CODE      -.0058  .0158 -.0054  -.6   .1  -.9 -.0005 -.0100 -.0146
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M005 AREQ P EMR      -.0050  .0075  .0041  -.7   .4  1.1 -.0024  .0015 -.0095
M005 AREQ P GFZ       .0098  .0022  .0032   .7  -.6 -1.1  .0100  .0034  .0001
M005 AREQ P CODE     -.0058  .0158 -.0054   .2   .2  -.5 -.0005 -.0100 -.0146
M005 AREQ P MIT      -.0001  .0088 -.0070   .9   .2 -1.1  .0027 -.0091 -.0061
M005 AREQ P NCL      -.0047  .0110 -.0090 -1.0   .9 -1.8 -.0010 -.0120 -.0089
M005 AREQ P JPL      -.0004  .0057  .0002  -.1  -.1  -.3  .0014 -.0014 -.0054
S001 7907 L CSR       .0021  .0044 -.0016   .0   .0   .0  .0034 -.0025 -.0029
S005 AREA D GRGS     -.0057  .0100  .0013   .4   .3   .8 -.0022 -.0019 -.0112
S005 AREA D CSR      -.0243  .0144 -.0011  -.4   .5   .7 -.0184 -.0071 -.0202
S005 AREA D IGN      -.0123  .0033  .0137  -.5   .0   .0 -.0107  .0111 -.0106

42501 BERMUDA

Positions
M002 7294 R GSFC     -.0142  .0461 -.0311  -.2   .2  -.1  .0069 -.0007 -.0570 93:  1
M002 7294 R NOAA      .0032  .0000  .0209   .0   .0   .5  .0029  .0169  .0124 93:  1
S004 BRMU P GFZ      -.0228 -.0024  .0033  -.5   .5   .6 -.0216  .0069 -.0046 94:365
S004 BRMU P CODE      .0045  .0006 -.0027  -.6   .3  -.3  .0043 -.0030 -.0002 95: 76
S004 BRMU P MIT      -.0063  .0013 -.0058  -.6   .3  -.4 -.0052 -.0028 -.0064 97:151
S004 BRMU P NCL       .0028 -.0022  .0041   .8   .9  -.2  .0016  .0018  .0048 96:  1
S004 BRMU P JPL      -.0003 -.0088  .0052   .3 -1.4   .7 -.0040  .0002  .0094 96:  1

Velocities
M002 7294 R GSFC     -.0007  .0000  .0005   .0   .3   .0 -.0007  .0006  .0000
M002 7294 R NOAA      .0009 -.0012  .0024   .0   .0   .0  .0003  .0013  .0025
S004 BRMU P GFZ       .0057 -.0069  .0062   .1  -.4  -.3  .0023  .0006  .0106
S004 BRMU P CODE     -.0004  .0015 -.0034  -.1  -.1  -.1  .0003 -.0021 -.0031
S004 BRMU P MIT      -.0040  .0057 -.0065  -.6  1.0  -.6 -.0012 -.0018 -.0093
S004 BRMU P NCL      -.0038  .0030 -.0053  -.3  -.6   .5 -.0022 -.0022 -.0065
S004 BRMU P JPL       .0014 -.0043  .0048   .6  -.4   .5 -.0005  .0017  .0063

43001 THULE

Positions
M001 THUL P GFZ      -.0106 -.0200  .0203  1.1  -.2  -.4 -.0171 -.0097  .0232 94:365
M001 THUL P CODE      .0039  .0010  .0029  -.1   .6   .8  .0040  .0002  .0030 95: 76
M001 THUL P04 EUR     .0067 -.0047  .0157   .7  -.1  -.2  .0046 -.0030  .0169 96: 90
M001 THUL P03 EUR     .0000 -.0008 -.0060   .0   .3  -.7 -.0003 -.0021 -.0056 96:339
M001 THUL P MIT       .0088 -.0057  .0454   .3  -.1   .4  .0062  .0023  .0462 97:151
M001 THUL P NCL       .0021 -.0030  .0081   .9   .3  1.3  .0008 -.0016  .0087 96:  1
M001 THUL P JPL       .0005 -.0050  .0105   .2 -1.3   .2 -.0014 -.0023  .0113 96:  1

Velocities
M001 THUL P GFZ      -.0076  .0029 -.0041 -1.7  -.9   .0 -.0060  .0044 -.0052
M001 THUL P CODE      .0006 -.0043  .0012   .0   .5   .0 -.0010 -.0038  .0021
M001 THUL P04 EUR    -.0164 -.0545 -.0107   .9 -1.3   .1 -.0351 -.0462  .0000
M001 THUL P03 EUR    -.0170 -.0014  .0012  -.6   .7   .2 -.0164  .0050  .0000
M001 THUL P MIT       .0005 -.0046  .0301  -.4  -.2   .1 -.0012  .0026  .0303
M001 THUL P NCL      -.0035  .0063 -.0181  -.5  1.0  -.5 -.0010  .0027 -.0193
M001 THUL P JPL      -.0033  .0023 -.0093  -.5  -.5   .1 -.0022  .0011 -.0098

43005 KELLYVILLE

Positions
M001 KELY P04 EUR     .0050  .0013  .0043  -.1   .4   .2  .0047 -.0003  .0048 96: 90
M001 KELY P03 EUR     .0028 -.0050  .0084   .9  -.1  -.1 -.0010 -.0020  .0099 96:339
M001 KELY P MIT      -.0052 -.0027  .0030  -.9  -.2   .7 -.0058  .0023  .0023 97:151
M001 KELY P NCL      -.0013 -.0015 -.0016  -.4  -.2  -.2 -.0020 -.0010 -.0014 96:  1
M001 KELY P JPL      -.0019  .0002 -.0017  -.2   .0   .1 -.0014  .0006 -.0021 96:  1

Velocities
M001 KELY P04 EUR    -.0185 -.0578 -.0141   .5  -.7   .0 -.0507 -.0361  .0000
M001 KELY P03 EUR    -.0138 -.0067  .0015  -.9  -.3   .1 -.0150  .0038  .0000
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M001 KELY P MIT       -.0023 -.0023  .0047  -.3  -.3   .2 -.0032  .0016  .0045
M001 KELY P NCL        .0006  .0037 -.0015  -.4   .2   .0  .0028  .0017 -.0023
M001 KELY P JPL       -.0024 -.0027  .0043  -.2  -.2   .3 -.0036  .0011  .0042

43201 SAINTE CROIX

Positions
M001 CRO1 P CODE       .0165 -.0383  .0120  1.4 -3.3   .9 -.0015 -.0013  .0434 95: 76
M001 CRO1 P MIT        .0041 -.0216  .0075  1.1 -2.3   .8 -.0056  .0006  .0225 97:151
M001 CRO1 P NCL        .0011  .0035  .0023  -.1   .8  -.1  .0025  .0030 -.0019 96:  1
M001 CRO1 P JPL       -.0163  .0317 -.0105 -2.1  2.2   .3 -.0011  .0009 -.0371 96:  1
S001 7615 R GSFC       .0141 -.0229  .0028  2.4   .8  -.9  .0029 -.0054  .0263 93:  1
S001 7615 R GIUB      -.0398  .0011 -.0219 -3.1 -1.8 -1.1 -.0355 -.0154 -.0239 93:  1
S001 7615 R NOAA       .0153  .0062  .0100   .4   .7   .4  .0165  .0092  .0040 93:  1

Velocities
M001 CRO1 P CODE       .0040  .0007 -.0047  -.2  -.2  -.5  .0039 -.0048 -.0004
M001 CRO1 P MIT        .0163 -.0346  .0120  2.1 -3.3   .5 -.0001 -.0002  .0401
M001 CRO1 P NCL        .0185 -.0460  .0115  3.8 -1.8   .1 -.0030 -.0041  .0506
M001 CRO1 P JPL       -.0081  .0057 -.0018 -2.5  1.3   .2 -.0048  .0009 -.0087
S001 7615 R GSFC      -.0035  .0087  .0005  -.1  -.6  -.4  .0006  .0033 -.0088
S001 7615 R GIUB       .0143  .0098  .0090   .0   .0   .0  .0171  .0094  .0001
S001 7615 R NOAA      -.0125 -.0018 -.0052  -.3   .4  1.0 -.0121 -.0038 -.0051

49901 WRIGHTWOOD

Positions
M001 TABL P JPL        .0000  .0000  .0000   .1   .0  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 TABL P JPL        .0000  .0000  .0000   .1   .0  -.1  .0000  .0000  .0000

49902 MOUNT LEEP

Positions
M001 LEEP P JPL        .0000  .0000  .0000   .0   .1  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 LEEP P JPL        .0000  .0000  .0000   .0   .1   .0  .0000  .0000  .0000

49903 HOLLYDALE

Positions
M001 HOLP P JPL        .0000  .0000  .0000   .0   .1  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 HOLP P JPL        .0000  .0000  .0000   .0   .1   .0  .0000  .0000  .0000

49904 DURMIDHILL

Positions
M001 DHLG P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 96:  1

Velocities
M001 DHLG P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

49905 PACOIMA/FIRE CAM

Positions
M001 DAM1 P JPL        .0002 -.0001  .0002   .1   .0   .0  .0002  .0001  .0001 96:  1
M002 DAM2 P JPL        .0015 -.0015 -.0002   .1  -.1  -.1  .0020 -.0005  .0004 96:  1
M003 CMP9 P JPL       -.0001  .0000  .0000   .0   .1  -.1 -.0001  .0000  .0000 96:  1
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Velocities
M001 DAM1 P JPL       -.0014  .0019 -.0020   .0   .1  -.1 -.0021 -.0011 -.0020
M002 DAM2 P JPL       -.0041  .0045  .0004   .0   .1   .0 -.0057  .0015 -.0015
M003 CMP9 P JPL        .0015 -.0013  .0007   .0   .0   .1  .0019  .0003  .0007

49906 CLAREMONT

Positions
M001 CLAR P JPL        .0000  .0000  .0000   .1   .0  -.1  .0000  .0000  .0000 96:  1

Velocities
M001 CLAR P JPL        .0000  .0000  .0000   .0   .1   .0  .0000  .0000  .0000

49907 SOLOMONS ISLAND

Positions
S001 SOL1 P JPL        .0000  .0000  .0000   .0   .0   .2  .0000  .0000  .0000 96:  1

Velocities
S001 SOL1 P JPL        .0000  .0000  .0000   .0   .1   .4  .0000  .0000  .0000

49908 ANNAPOLIS

Positions
S001 USNA P JPL        .0000  .0000  .0000   .0   .0   .3  .0000  .0000  .0000 96:  1

Velocities
S001 USNA P JPL        .0000  .0000  .0000   .0   .0   .6  .0000  .0000  .0000

49909 SAN NICOLAS IS.

Positions
S001 SNI1 P JPL       -.0006 -.0020  .0010   .0   .0   .0  .0005 -.0003  .0022 96:  1

Velocities
S001 SNI1 P JPL        .0008  .0027 -.0014   .0   .0   .0 -.0006  .0003 -.0031

49910 NORTHRIDGE

Positions
S001 CSN1 P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 96:  1

Velocities
S001 CSN1 P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

49911 AZUSA

Positions
M001 AZU1 P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 96:  1

Velocities
M001 AZU1 P JPL        .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000

50103 CANBERRA/ORRORAL

Positions
M108 TIDB TIE50103    -.0027 -.0021 -.0035   .0   .0   .0  .0032 -.0021  .0030 93:  1
M108 TIDB P EMR        .0101 -.0294  .0053  1.7  1.4   .9  .0200 -.0095 -.0225 96:  1
M108 TIDB P GFZ       -.0228 -.0009  .0158 -2.5 -1.3  1.1  .0125  .0239  .0064 94:365
M108 TIDB P CODE       .0092 -.0096  .0089   .3 -1.0  1.8  .0035 -.0002 -.0156 95: 76
M108 TIDB P CODE       .0198 -.0159  .0144   .7  -.5   .7  .0034 -.0028 -.0289 95: 76
M108 TIDB P MIT       -.0096  .0121 -.0086 -1.9  1.4  -.8 -.0054  .0013  .0168 97:151
M108 TIDB P MIT       -.0197  .0235 -.0142 -2.9  2.5  -.3 -.0100  .0052  .0319 97:151
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M108 TIDB P NCL        .0089 -.0067  .0062  1.7  -.4  -.1  .0012 -.0014 -.0126 96:  1
M108 TIDB P JPL        .0065 -.0036  .0068   .1  -.9   .7 -.0002  .0012 -.0100 96:  1
S001 1543 TIE50103    -.0016  .0009 -.0010   .2   .7   .6  .0000  .0003  .0021 93:  1
S001 1543 R GSFC      -.3225  .2699 -.3847  -.1   .0   .1 -.0651 -.0729  .5615 93:  1
S001 1543 R JPL        .0525 -.0039  .0296  2.9  -.9  1.0 -.0237 -.0031 -.0555 93:  1
S003 7943 TIE50103    -.0356  .0071 -.0332 -1.2   .3 -1.1  .0123 -.0071  .0471 93:  1
S003 7943 L CSR       -.1867  .1345 -.1449   .0   .0   .0 -.0190  .0158  .2708 93:  1
S005 1542 TIE50103     .0001 -.0001 -.0010   .7   .1   .4  .0000 -.0009  .0004 93:  1
S005 1542 R JPL        .0782 -.0182  .0832  2.4  -.2  2.4 -.0247  .0235 -.1105 93:  1
S007 7843 TIE50103    -.0361  .0076 -.0334  -.5   .1  -.4  .0121 -.0069  .0478 93:  1
S007 7843 L CSR        .0030 -.0009 -.0042   .3   .2  -.5 -.0008 -.0051  .0000 93:  1
S007 7843 L GSFC       .0692  .0326  .0130  1.8  1.3  -.6 -.0637 -.0141 -.0421 86:182
S010 1545 TIE50103     .0000  .0000  .0000   .9   .2  1.1  .0000  .0000  .0000 93:  1
S010 1545 R GSFC      -.0100  .0085 -.0141 -2.0  -.3  -.1 -.0021 -.0040  .0187 93:  1
S010 1545 R GIUB      -.0820  .0301  .0687   .5   .6  -.8  .0165  .1057  .0302 93:  1
S010 1545 R NOAA      -.0134  .0152  .0084 -1.5   .6  -.2 -.0061  .0181  .0109 93:  1
S010 1545 R JPL        .0110  .0047  .0017  -.3   .0   .0 -.0097 -.0027 -.0067 93:  1
S201 ORRA TIE50103    -.0338  .0067 -.0358   .8  -.3  -.8  .0117 -.0102  .0472 93:  1
S201 ORRA D GRGS      -.0405 -.0236  .0440  -.6  -.2   .9  .0411  .0488 -.0073 93:  1
S201 ORRA D CSR       -.0182  .0143  .0299  -.6   .2  1.3 -.0029  .0377  .0012 93:  1
S201 ORRA D IGN       -.0813 -.0121  .0484 -1.3   .9  2.1  .0523  .0763  .0233 95:100
S202 ORRB TIE50103    -.0360  .0074 -.0335   .0  -.1   .0  .0122 -.0071  .0477 93:  1
S202 ORRB D IGN        .0988  .0420 -.0840  -.4  1.0  -.1 -.0870 -.1050 -.0022 95:100

Velocities
M108 TIDB P EMR        .0046 -.0030  .0051   .9  1.2   .5  .0002  .0009 -.0074
M108 TIDB P GFZ        .0048 -.0152 -.0009  -.4 -2.5  1.3  .0106 -.0076 -.0093
M108 TIDB P CODE      -.0125  .0083  .0007  -.9   .2   .5 -.0007  .0093  .0118
M108 TIDB P CODE      -.0125  .0083  .0007   .5  -.2   .2 -.0007  .0093  .0118
M108 TIDB P MIT       -.0125  .0081 -.0076 -1.1  1.4  -.3 -.0005  .0024  .0165
M108 TIDB P MIT       -.0055  .0075 -.0031  2.5   .2   .6 -.0036  .0025  .0088
M108 TIDB P NCL       -.0112  .0117 -.0133  -.8  1.1  -.7 -.0043 -.0018  .0204
M108 TIDB P JPL       -.0142  .0120 -.0133  -.8   .2  -.2 -.0030 -.0002  .0227
S001 1543 R GSFC       .0045 -.0032  .0046   .0   .0   .0  .0004  .0006 -.0072
S003 7943 L CSR       -.0052  .0028 -.0006   .0  -.1   .0  .0003  .0029  .0052
S007 7843 L CSR       -.0052  .0028 -.0006 -2.0  1.1   .5  .0003  .0029  .0052
S007 7843 L GSFC      -.0093 -.0047 -.0014   .0  -.3   .5  .0089  .0021  .0053
S010 1545 R GSFC       .0045 -.0032  .0046  1.3   .1  -.4  .0004  .0006 -.0072
S010 1545 R GIUB      -.0184  .0034  .0218  -.7 -1.3   .2  .0066  .0279  .0017
S010 1545 R NOAA       .0032 -.0011  .0089  1.0 -1.2  1.3 -.0007  .0053 -.0078
S201 ORRA D GRGS      -.0283  .0101 -.0093 -2.3   .9  1.6  .0060  .0096  .0294
S201 ORRA D CSR       -.0013 -.0118 -.0002  -.3  -.4   .4  .0108 -.0030 -.0039
S201 ORRA D IGN       -.0149 -.0112  .0193  1.0  -.8 -1.5  .0173  .0197 -.0056
S202 ORRB D IGN       -.0665  .0192  .0531  -.1   .7   .5  .0178  .0821  .0234

50107 YARRAGADEE

Positions
M001 7090 TIE50107     .0000  .0000  .0000   .0   .0   .0  .0000  .0000  .0000 93:  1
M001 7090 L CSR       -.0003  .0003 -.0008  -.1   .0  -.9  .0001 -.0005  .0007 93:  1
M001 7090 L GSFC       .0434  .0230  .0078  4.1  1.4  -.7 -.0491  .0079 -.0018 86:182
M004 YAR1 TIE50107     .0008  .0065  .0011   .3  2.2   .4 -.0035  .0037  .0043 93:  1
M004 YAR1 P EMR        .0033 -.0215 -.0085  1.0   .4  -.1  .0062 -.0175 -.0141 96:  1
M004 YAR1 P GFZ       -.0150  .0023  .0167  -.7   .9   .4  .0125  .0187 -.0007 94:365
M004 YAR1 P CODE       .0024 -.0041  .0078  -.7  -.2  1.4 -.0004  .0045 -.0079 95: 76
M004 YAR1 P MIT        .0047 -.0099  .0157   .6 -2.2  2.4  .0000  .0084 -.0172 97:151
M004 YAR1 P NCL        .0016 -.0020 -.0005  -.3  -.7  -.9 -.0006 -.0016 -.0019 96:  1
M004 YAR1 P JPL       -.0022  .0047 -.0020  -.6   .8   .6  .0000  .0008  .0055 96:  1
S006 YARA TIE50107     .0016 -.0007 -.0014   .5  -.2  -.5 -.0011 -.0019 -.0005 93:  1
S006 YARA D GRGS      -.0269 -.0111  .0350  -.7   .0  1.1  .0291  .0313 -.0157 93:  1
S006 YARA D CSR       -.0283 -.0006  .0014  -.6   .2   .2  .0258  .0068  .0095 93:  1
S006 YARA D IGN       -.0214 -.0158 -.0055  -.7  -.1  -.2  .0262 -.0073 -.0018 95:100
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Velocities

M001 7090 L CSR	-.0014	.0016	.0021	3.0	1.0	-2.3	.0006	.0028	.0008	
M001 7090 L GSFC	-.0063	-.0034	-.0010	-1.7	-.6	1.4	.0071	-.0011	.0002	
M004 YAR1 P EMR	.0010	-.0084	.0027	-.3	-.5	.2	.0027	-.0015	-.0083	
M004 YAR1 P GFZ	-.0021	-.0185	-.0021	.0	-2.2	-.5	.0098	-.0095	-.0128	
M004 YAR1 P CODE	-.0050	.0001	.0076	.2	-.9	1.3	.0045	.0077	-.0017	
M004 YAR1 P MIT	-.0028	-.0070	.0055	-1.0	-.4	1.2	.0055	.0023	-.0072	
M004 YAR1 P NCL	.0031	-.0088	.0048	.0	-.3	-.7	.0010	-.0003	-.0104	
M004 YAR1 P JPL	.0024	-.0026	.0021	.8	-.8	.1	-.0011	.0002	-.0040	
S006 YARA D GRGS	-.0089	.0048	.0067	-1.7	.4	3.0	.0060	.0099	.0038	
S006 YARA D CSR	-.0147	.0024	-.0073	-1.4	.6	-.4	.0122	-.0023	.0110	
S006 YARA D IGN	.0041	-.0080	.0051	.2	-.5	-.7	-.0003	.0000	-.0104	

50108 PARKES

Positions

S001 7202 R GSFC	-.0092	.0082	-.0138	.0	.0	.0	-.0021	-.0049	.0177	93: 1

Velocities

S001 7202 R GSFC	.0068	-.0031	.0057	.0	.0	.0	-.0009	.0008	-.0093	

50116 HOBART

Positions

M003 HOB1 P GFZ	-.0164	-.0047	.0268	.1	-.4	1.3	.0127	.0274	-.0099	94:365
M003 HOB1 P CODE	.0029	-.0007	.0032	-.8	.5	1.2	-.0010	.0004	-.0043	95: 76
M004 HOB2 P GFZ	-.0310	-.0027	.0064	-.9	-1.7	-.7	.0189	.0215	.0137	94:365
M004 HOB2 P CODE	.0117	-.0087	.0081	1.1	.3	.0	.0010	-.0039	-.0162	95: 76
M004 HOB2 P MIT	-.0027	.0095	.0028	-.5	.8	.9	-.0066	.0071	.0035	97:151
M004 HOB2 P NCL	.0026	-.0019	.0004	.2	-.5	-.8	.0002	-.0019	-.0026	96: 1
M004 HOB2 P JPL	-.0014	-.0013	.0019	.3	-.4	.4	.0018	.0017	-.0009	96: 1
S002 7242 R GSFC	-.0046	.0075	-.0092	-.2	.0	.0	-.0038	-.0013	.0120	93: 1
S002 7242 R GIUB	-.1161	.0427	.0548	-1.1	.5	-.6	.0265	.1223	.0514	93: 1
S002 7242 R NOAA	-.0034	.0093	.0165	-.3	-.6	-.1	-.0060	.0175	-.0055	93: 1

Velocities

M003 HOB1 P GFZ	.0093	-.0169	.0072	1.4	.1	.3	.0092	-.0062	-.0173	
M003 HOB1 P CODE	-.0149	.0096	-.0003	-1.0	-.5	1.3	.0000	.0118	.0132	
M004 HOB2 P GFZ	.0092	-.0168	.0073	-.3	-.2	.3	.0092	-.0061	-.0173	
M004 HOB2 P CODE	-.0149	.0096	-.0002	-.4	.3	.5	.0000	.0119	.0132	
M004 HOB2 P MIT	-.0016	.0015	.0057	.9	.3	.9	-.0003	.0057	-.0023	
M004 HOB2 P NCL	.0033	.0012	.0035	.6	.8	1.6	-.0027	.0011	-.0039	
M004 HOB2 P JPL	-.0023	.0034	.0023	.4	.0	.6	-.0017	.0042	.0012	
S002 7242 R GSFC	.0031	-.0015	.0024	.1	.0	-.1	-.0004	-.0006	-.0042	
S002 7242 R GIUB	-.0061	.0007	.0242	-1.2	-.3	.5	.0027	.0215	-.0124	
S002 7242 R NOAA	.0017	.0010	.0054	-.2	-.7	-.6	-.0017	.0034	-.0044	

50127 COCO ISLAND

Positions

M001 COCO P GFZ	-.0238	-.0209	.0106	-.5	-.4	-.2	.0261	.0066	-.0197	94:365
M001 COCO P CODE	-.0017	.0187	-.0039	-.1	1.1	-.4	-.0006	.0002	.0191	95: 76
M001 COCO P MIT	.0042	.0017	.0084	.6	-.3	.6	-.0043	.0085	-.0006	97:151
M001 COCO P JPL	-.0234	-.0120	-.0092	-.3	-.2	-.7	.0247	-.0109	-.0070	96: 1

Velocities

M001 COCO P GFZ	-.0002	.0000	-.0008	-.3	.6	.0	.0002	-.0007	.0002	
M001 COCO P CODE	-.0028	.0020	.0109	.2	-.5	.0	.0025	.0111	-.0001	
M001 COCO P MIT	.0011	.0039	.0125	1.3	.2	.6	-.0015	.0130	.0010	
M001 COCO P JPL	.0340	.0105	.0181	-.3	-.4	.3	-.0350	.0190	.0024	

50133 PERTH

Positions

M001 PERT P CODE	-.0057	.0143	-.0058	-.7	.4	-.4	-.0011	.0031	.0161	95: 76
M001 PERT P MIT	.0039	-.0029	.0051	.3	-.9	.1	-.0023	.0021	-.0063	97:151
M001 PERT P NCL	.0022	-.0030	.0002	.2	-.1	-.5	-.0006	-.0017	-.0032	96: 1
M001 PERT P JPL	.0002	-.0036	.0031	.4	-1.1	.1	.0014	.0009	-.0045	96: 1

Velocities

M001 PERT P CODE	-.0041	-.0017	.0097	-1.3	.8	.2	.0045	.0084	-.0049
M001 PERT P MIT	-.0008	-.0059	.0086	.6	-1.0	.1	.0033	.0047	-.0087
M001 PERT P NCL	.0002	-.0012	.0009	-.2	-1.3	-.1	.0003	.0002	-.0015
M001 PERT P JPL	-.0004	.0042	-.0018	-.4	.2	.0	-.0015	.0005	.0043

50135 MACQUARIE ISLAND

Positions

M001 MAC1 P GFZ	-.0269	-.0060	.0176	-.7	-.3	.6	.0153	.0289	-.0010	94:365
M001 MAC1 P CODE	.0106	-.0014	.0066	.8	.9	.3	-.0025	-.0046	-.0114	95: 76
M001 MAC1 P MIT	.0012	.0075	.0041	.1	1.0	1.1	-.0074	.0037	-.0024	97:151
M001 MAC1 P NCL	.0012	-.0013	-.0021	.0	-.1	-.8	.0007	-.0025	.0008	96: 1
M001 MAC1 P JPL	-.0048	.0044	-.0051	-.8	.4	.2	-.0024	.0020	.0077	96: 1

Velocities

M001 MAC1 P GFZ	.0028	-.0137	-.0057	-.8	-.8	-.3	.0118	-.0095	.0002
M001 MAC1 P CODE	-.0073	.0020	.0053	.2	.1	.3	.0008	.0092	.0000
M001 MAC1 P MIT	.0011	.0000	.0062	.8	.6	.4	-.0004	.0028	-.0056
M001 MAC1 P NCL	.0030	.0005	.0034	.4	-.1	.5	-.0015	-.0001	-.0043
M001 MAC1 P JPL	-.0028	-.0020	-.0014	.2	-.6	.0	.0029	.0007	.0022

50137 ALICE SPRINGS

Positions

M001 ALIC P MIT	-.0003	.0022	.0048	.0	.0	.4	-.0013	.0051	-.0003	97:151

Velocities

M001 ALIC P MIT	-.0056	-.0003	.0014	.1	.2	.6	.0043	.0027	.0028

50139 KARRATHA

Positions

M001 KARR P MIT	.0009	.0005	.0078	.2	.1	.2	-.0010	.0072	-.0028	97:151

Velocities

M001 KARR P MIT	-.0040	-.0026	.0062	.0	.1	.6	.0047	.0056	-.0026

50140 TOWNSVILLE

Positions

M001 TOW2 P MIT	-.0019	.0028	.0024	-.2	-.1	.4	-.0013	.0033	.0021	97:151

Velocities

M001 TOW2 P MIT	-.0086	.0013	-.0027	-.1	-.3	-.3	.0036	.0001	.0084

50207 CHATHAM ISLAND

Positions

M001 CHAT P GFZ	-.0058	-.0354	.0097	.9	-1.8	-2.3	.0349	.0125	-.0011	94:365
M001 CHAT P CODE	-.0109	.0292	-.0149	-1.5	2.1	-.6	-.0298	-.0044	.0169	95: 76
M001 CHAT P MIT	-.0130	-.0081	-.0165	-2.4	-2.2	-2.2	.0073	-.0026	.0211	97:151
M001 CHAT P NCL	-.0079	.0110	-.0073	-.9	2.8	.4	-.0115	-.0002	.0103	96: 1
M001 CHAT P JPL	.0456	.0148	.0454	4.3	2.2	1.8	-.0121	.0005	-.0649	96: 1

Velocities

M001 CHAT P GFZ	-.0013	.0037	.0014	-.8	3.6	.9	-.0037	.0017	-.0002

M001 CHAT P CODE	-.0037	-.0182	.0055	-.1	.1	.6	.0179	.0073	-.0004	
M001 CHAT P MIT	-.0251	-.0178	-.0256	-3.3	-3.6	-2.1	.0162	-.0003	.0366	
M001 CHAT P NCL	.0036	-.0174	-.0024	-1.2	-1.8	-.7	.0176	-.0035	-.0002	
M001 CHAT P JPL	-.0510	-.0189	-.0466	1.7	.9	1.5	.0159	.0026	.0698	

50209 AUCKLAND

Positions

M001 AUCK P CODE	-.0187	.0203	-.0202	-2.3	-1.4	-1.3	-.0186	-.0040	.0285	95: 76
M001 AUCK P MIT	-.0119	-.0004	-.0114	-1.7	-.4	-.9	.0014	-.0021	.0163	97:151
M001 AUCK P NCL	-.0100	.0074	-.0089	-1.2	1.6	-1.1	-.0065	-.0008	.0138	96: 1
M001 AUCK P JPL	.0617	.0005	.0458	6.6	.6	1.6	-.0060	.0001	-.0766	96: 1

Velocities

M001 AUCK P CODE	-.0058	-.0113	.0072	.3	.2	.6	.0118	.0086	-.0004
M001 AUCK P MIT	-.0257	-.0074	-.0160	-3.7	-.5	-.2	.0097	.0021	.0295
M001 AUCK P NCL	-.0051	-.0091	-.0061	-2.7	-.8	-1.8	.0096	-.0024	.0070
M001 AUCK P JPL	-.0006	-.0035	.0016	2.0	.1	1.0	.0035	.0014	-.0007

50501 GUAM

Positions

M002 GUAM TIE50501	.0017	.0002	.0052	.0	.0	.0	-.0011	.0053	.0000	93: 1
M002 GUAM P EMR	-.0099	-.0146	.0024	-1.3	-1.9	1.1	.0176	.0024	.0003	96: 1
M002 GUAM P GFZ	.0141	-.0005	.0150	-.5	-.1	-1.4	-.0077	.0174	-.0080	94:365
M002 GUAM P CODE	.0048	-.0227	-.0026	-.1	.6	-1.2	.0158	.0015	-.0171	95: 76
M002 GUAM P MIT	.0048	.0013	-.0030	-.2	-.2	-.8	-.0039	-.0021	-.0038	97:151
M002 GUAM P NCL	-.0039	-.0009	.0018	-.5	-.1	.8	.0030	.0011	.0031	96: 1
M002 GUAM P JPL	-.0119	.0037	.0027	-1.3	-.8	.5	.0038	-.0002	.0122	96: 1
S001 GUAB TIE50501	.0000	.0000	.0000	-.3	.0	-1.0	.0000	.0000	.0000	93: 1
S001 GUAB D GRGS	-.0065	.0348	-.0168	-.1	.2	-.3	-.0247	-.0222	.0207	93: 1
S001 GUAB D CSR	.0503	-.0004	-.0578	.0	-.3	-.8	-.0286	-.0465	-.0538	93: 1
S001 GUAB D IGN	.0261	-.0038	.0288	.8	.3	2.2	-.0119	.0335	-.0161	95:100

Velocities

M002 GUAM P EMR	-.0020	.0097	.0039	-.2	.8	1.3	-.0068	.0021	.0079
M002 GUAM P GFZ	-.0089	-.0101	-.0051	-.2	1.4	-1.0	.0134	-.0053	.0002
M002 GUAM P CODE	-.0005	.0126	.0128	.5	.0	-.6	-.0100	.0107	.0105
M002 GUAM P MIT	-.0006	.0018	-.0009	-.4	.0	-.4	-.0011	-.0012	.0013
M002 GUAM P NCL	.0083	.0014	-.0041	.2	.2	.1	-.0059	-.0026	-.0067
M002 GUAM P JPL	.0045	-.0013	.0014	-.2	.2	-.2	-.0015	.0024	-.0040
S001 GUAB D GRGS	.0067	-.0012	.0081	.1	.3	.8	-.0029	.0093	-.0041
S001 GUAB D CSR	-.0112	-.0023	.0187	.2	-.2	-.3	.0083	.0163	.0120
S001 GUAB D IGN	.0086	.0061	.0051	.1	.0	.0	-.0099	.0058	-.0022

50503 AMERICAN SAMOA

Positions

M001 7096 L CSR	.8781	.1059	1.0804	.2	-.1	.0	.0370	.8280	-1.1237	93: 1

Velocities

M001 7096 L CSR	.0713	.0037	.0877	-.1	.1	.0	.0078	.0674	-.0905

50505 KWAJALEIN ATOLL

Positions

M001 7092 TIE50505	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S003 4968 TIE50505	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S003 4968 R GSFC	.0370	-.0079	-.0112	.1	-.1	.0	-.0003	-.0049	-.0391	93: 1
S003 4968 R NOAA	-.0067	.0121	.0102	-.2	.0	-.1	-.0104	.0085	.0107	93: 1

Velocities

S003 4968 R GSFC	.0078	.0006	-.0049	.1	.1	.3	-.0023	-.0036	-.0082

```
S003 4968 R NOAA      -.0008  .0038  .0021   .0   .0  -.3 -.0035  .0018  .0019

50506 KWAJALEIN ATOLL

Positions
M001 KWJ1 P GFZ       -.0246 -.0084  .0139  -.5  -.2 -1.0  .0134  .0104  .0241 94:365
M001 KWJ1 P CODE      -.0141 -.0050 -.0126  -.7   .5  -.5  .0079 -.0143  .0106 95: 76
M001 KWJ1 P MIT        .0081  .0063  .0008   .3  1.1   .7 -.0079  .0018 -.0064 97:151
M001 KWJ1 P NCL       -.0010 -.0031 -.0055  -.1  -.3 -2.1  .0032 -.0055 -.0005 96:  1
M001 KWJ1 P JPL        .0049 -.0066 -.0110   .2  -.3 -1.4  .0054 -.0099 -.0077 96:  1

Velocities
M001 KWJ1 P GFZ        .0026 -.0009 -.0019   .2  -.4   .0  .0003 -.0015 -.0029
M001 KWJ1 P CODE       .0027  .0047  .0183  -.7  1.1   .8 -.0052  .0184  .0012
M001 KWJ1 P MIT        .0112  .0041  .0005   .1   .8  1.0 -.0064  .0020 -.0098
M001 KWJ1 P NCL        .0055  .0038  .0050   .3   .1   .5 -.0048  .0056 -.0037
M001 KWJ1 P JPL       -.0086  .0092  .0176  -.1   .0   .1 -.0072  .0159  .0129

51001 PORT MORESBY

Positions
S001 MORA D GRGS       .0047  .0119  .0009  -.1  -.1   .1 -.0125  .0013  .0024 93:  1
S001 MORA D CSR       -.0044 -.0024 -.0079  -.2  -.1  -.1  .0043 -.0074  .0036 93:  1
S001 MORA D IGN        .0196 -.0062  .0248   .4   .0   .6 -.0054  .0212 -.0236 95:100

Velocities
S001 MORA D GRGS      -.0063  .0069 -.0075  -.3   .3  -.2 -.0024 -.0059  .0101
S001 MORA D CSR        .0128 -.0016 -.0199   .4  -.2 -1.2 -.0056 -.0215 -.0082
S001 MORA D IGN        .0079 -.0004  .0168  -.1   .0  -.2 -.0040  .0154 -.0095

66001 MC MURDO

Positions
M001 MCMU P CODE      -.0067 -.0092 -.0512  -.4  -.4 -1.2  .0104 -.0065  .0509 95: 76
M003 MCM4 P EMR        .0017 -.0436  .0147  1.5  -.1  2.9  .0420 -.0083 -.0168 96:  1
M003 MCM4 P GFZ       -.0146 -.0056  .0891  1.8  -.4  2.2  .0088  .0314 -.0844 94:365
M003 MCM4 P CODE       .0309 -.0005  .0753  2.7  -.6  3.5 -.0066 -.0136 -.0800 95: 76
M003 MCM4 P MIT        .0039  .0073  .0217  1.0  1.2  3.9 -.0080  .0025 -.0217 97:151
M003 MCM4 P JPL        .0027  .0030  .0140   .7   .9  1.0 -.0036  .0010 -.0140 96:  1
S006 MCM2 P GFZ       -.0311 -.0048  .0017 -2.0  -.4  -.5  .0118  .0289  .0044 94:365
S006 MCM2 P CODE       .0102  .0057 -.0228   .6  1.0  -.3 -.0079 -.0132  .0205 95: 76
S006 MCM2 P JPL       -.0012 -.0012 -.0253   .5   .1  -.3  .0014 -.0044  .0249 96:  1

Velocities
M001 MCMU P CODE      -.0210  .0059 -.0343 -1.9   .5 -1.6 -.0009  .0141  .0381
M003 MCM4 P EMR       -.0047 -.0015 -.0174 -1.0   .3  -.8  .0026  .0005  .0179
M003 MCM4 P GFZ        .0053 -.0133 -.0176  -.4  -.2   .5  .0118 -.0118  .0155
M003 MCM4 P CODE      -.0210  .0059 -.0343  -.1   .1   .2 -.0009  .0141  .0381
M003 MCM4 P MIT        .0083  .0003  .0548  2.3  1.0  8.7 -.0022  .0037 -.0553
M003 MCM4 P JPL       -.0080  .0009 -.0237 -1.3  -.9  -.6  .0010  .0028  .0248
S006 MCM2 P GFZ        .0053 -.0134 -.0176   .8  -.5  -.9  .0118 -.0118  .0155
S006 MCM2 P CODE      -.0210  .0059 -.0343   .0   .0   .0 -.0009  .0141  .0381
S006 MCM2 P JPL       -.0010 -.0045 -.0116   .1  -.4   .8  .0046 -.0025  .0114

66004 MAWSON STATION

Positions
M001 MAW1 P MIT        .0009  .0023  .0047  -.6   .0  -.5  .0002  .0041 -.0034 97:151

Velocities
M001 MAW1 P MIT       -.0026 -.0017  .0071  -.1  -.4   .4  .0015  .0002 -.0076

66006 SYOWA
```

Positions

S001 SYOB D GRGS	-.0102	-.0086	.0325	-.8	-.1	1.1	-.0001	-.0008	-.0352	93: 1
S001 SYOB D CSR	.0044	-.0263	-.0802	.1	-.4	-1.2	-.0231	-.0412	.0700	93: 1
S001 SYOB D IGN	.0028	-.0052	-.0111	1.4	.5	-.8	-.0058	-.0050	.0100	95:100

Velocities

S001 SYOB D GRGS	.0025	.0003	-.0041	-1.4	.0	2.0	-.0013	.0005	.0046	
S001 SYOB D CSR	-.0001	.0017	.0245	-.3	-.8	-.7	.0014	.0097	-.0225	
S001 SYOB D IGN	.0028	-.0038	.0116	-1.3	-1.1	.1	-.0047	.0039	-.0109	

66007 ROTHERA

Positions

S001 ROTA D GRGS	.0002	-.0049	.0007	.0	.4	.1	-.0017	.0045	.0012	93: 1
S001 ROTA D CSR	-.0123	-.0079	.0188	-.5	.0	.1	-.0144	.0097	-.0163	93: 1
S001 ROTA D IGN	.0060	-.0005	-.0046	1.0	-.1	.0	.0053	.0007	.0052	95:100

Velocities

S001 ROTA D GRGS	-.0031	.0001	.0014	-.4	.6	.7	-.0028	-.0006	-.0017	
S001 ROTA D CSR	.0040	.0000	.0061	-.5	.2	.4	.0038	.0037	-.0051	
S001 ROTA D IGN	-.0021	.0011	.0132	-.8	-.3	-.1	-.0015	.0033	-.0129	

66008 O'HIGGIN

Positions

M001 OHIG TIE66008	.0018	.0015	-.0023	.0	.0	.0	.0023	-.0013	.0019	93: 1
M001 OHIG P GFZ	-.0376	-.0124	.0150	.0	-1.6	.6	-.0385	-.0017	-.0177	94:365
M001 OHIG P CODE	.0025	-.0101	.0045	-.4	-.4	.6	-.0032	.0109	.0004	95: 76
M001 OHIG P MIT	-.0072	.0147	.0077	-.4	2.0	1.2	.0017	-.0111	-.0142	97:151
M001 OHIG P JPL	-.0044	-.0027	.0040	-.5	-.7	.6	-.0052	.0018	-.0036	96: 1
S001 7245 TIE66008	.0000	.0000	.0000	-.6	-.5	.8	.0000	.0000	.0000	93: 1
S001 7245 R GSFC	.0197	-.0222	-.0749	.9	-.4	-.9	.0049	-.0075	.0801	93: 1
S001 7245 R GIUB	-.0890	.0140	-.0447	1.1	-1.1	-1.2	-.0680	-.0730	.0134	93: 1
S001 7245 R NOAA	.0293	-.0174	-.0584	1.8	-.9	-1.8	.0156	.0009	.0658	93: 1

Velocities

M001 OHIG P GFZ	.0179	-.0034	-.0011	-.5	-1.1	.2	.0134	.0105	.0066	
M001 OHIG P CODE	-.0035	.0198	-.0097	.0	.5	-.4	.0075	-.0210	.0004	
M001 OHIG P MIT	-.0058	.0119	.0085	-.2	1.0	.3	.0015	-.0080	-.0135	
M001 OHIG P JPL	.0009	.0074	.0039	-.2	.1	.1	.0047	-.0034	-.0060	
S001 7245 R GSFC	.0008	.0081	.0117	1.3	.4	-1.2	.0050	-.0005	-.0134	
S001 7245 R GIUB	-.0052	.0079	-.0020	1.0	-.1	-.7	-.0002	-.0094	-.0025	
S001 7245 R NOAA	-.0006	-.0002	-.0002	.0	.0	.0	-.0006	-.0002	.0001	

66010 DAVIS

Positions

M001 DAV1 P EMR	.0093	-.0452	-.0015	.5	-2.3	-.7	-.0185	-.0399	-.0140	96: 1
M001 DAV1 P GFZ	-.0289	.0044	-.0007	.0	1.0	.3	.0292	-.0019	.0000	94:365
M001 DAV1 P CODE	.0093	.0073	-.0046	.0	1.0	-.3	-.0076	.0068	.0076	95: 76
M001 DAV1 P MIT	.0017	.0049	.0037	-.1	.3	.6	-.0006	.0062	-.0016	97:151
M001 DAV1 P NCL	.0033	-.0033	.0039	.3	-.3	.1	-.0039	-.0009	-.0046	96: 1
M001 DAV1 P JPL	.0004	-.0006	.0089	.4	-.3	.6	-.0005	.0028	-.0085	96: 1

Velocities

M001 DAV1 P EMR	.0042	-.0052	.0031	.2	1.1	.1	-.0052	-.0028	-.0044	
M001 DAV1 P GFZ	.0002	-.0137	.0037	-.8	-.4	-.1	-.0030	-.0111	-.0083	
M001 DAV1 P CODE	-.0104	.0027	-.0013	-.3	.3	-.9	.0107	.0000	.0014	
M001 DAV1 P MIT	-.0044	.0002	.0066	-.5	-.8	.4	.0044	.0018	-.0064	
M001 DAV1 P NCL	-.0003	.0028	-.0014	.3	-.4	.5	.0009	.0020	.0023	
M001 DAV1 P JPL	.0024	-.0021	.0053	.1	-.7	.1	-.0028	.0004	-.0055	

66011 CASEY

Positions

M001 CAS1 P EMR	.0065	-.0434	.0007	.2	-.9	-1.0	.0091	-.0390	-.0179	96: 1
M001 CAS1 P GFZ	-.0268	-.0077	.0248	-.3	-.3	.3	.0278	.0120	-.0218	94:365
M001 CAS1 P CODE	.0097	.0062	-.0020	.5	.0	.4	-.0113	.0014	.0028	95: 76
M001 CAS1 P MIT	.0009	.0038	.0108	-.1	.0	1.7	-.0022	.0073	-.0086	97:151
M001 CAS1 P NCL	.0028	-.0031	.0027	.4	-.6	-.2	-.0015	-.0025	-.0040	96: 1
M001 CAS1 P JPL	.0009	.0027	.0021	.5	.7	.8	-.0018	.0029	-.0010	96: 1

Velocities

M001 CAS1 P EMR	-.0055	-.0027	-.0024	.2	-2.4	-1.3	.0061	-.0015	.0020
M001 CAS1 P GFZ	-.0008	-.0110	-.0081	-.5	-1.0	.4	.0046	-.0124	.0033
M001 CAS1 P CODE	-.0126	.0028	-.0015	-.5	.3	-.5	.0108	.0058	.0042
M001 CAS1 P MIT	-.0018	-.0022	.0135	.2	-.7	.9	.0025	.0041	-.0129
M001 CAS1 P NCL	-.0003	.0082	-.0138	.5	1.1	-.8	-.0026	.0016	.0158
M001 CAS1 P JPL	.0000	.0046	-.0084	.0	.4	-.2	-.0016	.0006	.0094

91201 KERGUELEN

Positions

M002 KERG TIE91201	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M002 KERG P EMR	.0100	-.0431	-.0024	.7	-2.5	-.6	-.0239	-.0298	-.0224	96: 1
M002 KERG P GFZ	-.0296	.0069	.0053	.6	.6	.2	.0301	.0008	-.0063	94:365
M002 KERG P CODE	.0043	.0123	-.0044	-.3	.6	.3	.0001	.0070	.0118	95: 76
M002 KERG P MIT	.0040	-.0024	.0060	.1	-.7	.5	-.0046	.0033	-.0051	97:151
M002 KERG P NCL	.0022	-.0025	.0004	.0	-.4	-.6	-.0029	-.0010	-.0013	96: 1
M002 KERG P JPL	-.0028	-.0070	.0119	-.3	-1.4	1.0	.0002	.0020	-.0140	96: 1
S002 KERA TIE91201	-.0038	.0003	.0046	-1.2	.1	1.5	.0037	.0023	-.0041	93: 1
S002 KERA D GRGS	.0663	-.0267	-.0017	.9	-.3	.2	-.0715	-.0031	-.0005	93: 1
S002 KERA D CSR	.0084	-.0303	-.0088	.1	-.7	-.3	-.0182	-.0253	-.0100	93: 1
S002 KERA D IGN	.1007	-.0183	-.0523	1.9	.1	-1.4	-.1009	-.0213	.0506	95:100
S003 KERB TIE91201	.0015	.0028	-.0006	.5	.9	-.2	-.0004	.0020	.0025	93: 1
S003 KERB D GRGS	.0294	-.0407	.0412	-2.9	-2.0	2.6	-.0414	.0053	-.0498	93: 1
S003 KERB D CSR	-.0294	.0245	-.0027	-.8	1.1	-.1	.0360	.0082	.0106	93: 1
S003 KERB D IGN	.1139	-.0625	-.0356	3.2	-1.4	-1.7	-.1283	-.0387	.0138	95:100

Velocities

M002 KERG P EMR	.0078	-.0030	-.0041	.7	.4	-1.0	-.0084	-.0028	.0030
M002 KERG P GFZ	.0000	-.0086	-.0034	-1.0	.8	.0	-.0030	-.0084	-.0027
M002 KERG P CODE	-.0039	.0035	.0005	.4	1.5	-.6	.0049	.0018	.0010
M002 KERG P MIT	-.0032	.0008	.0050	.4	.1	-.3	.0033	.0031	-.0040
M002 KERG P NCL	.0019	.0031	-.0006	.3	.1	.4	-.0008	.0023	.0027
M002 KERG P JPL	.0036	-.0009	.0006	.0	-.6	.2	-.0037	.0007	-.0002
S002 KERA D GRGS	.0050	.0052	-.0272	2.3	-.1	-2.9	-.0030	-.0127	.0249
S002 KERA D CSR	.0141	-.0074	-.0156	.6	-.9	-.9	-.0158	-.0118	.0104
S002 KERA D IGN	.0339	.0119	-.0042	-1.3	1.5	1.4	-.0279	.0145	.0179
S003 KERB D GRGS	.0050	.0052	-.0272	.0	.0	.0	-.0030	-.0127	.0249
S003 KERB D CSR	.0141	-.0074	-.0156	-2.6	3.2	-3.0	-.0158	-.0118	.0104
S003 KERB D IGN	-.0291	.0096	-.0011	1.9	-1.1	-2.1	.0306	-.0013	.0004

91401 AMSTERDAM

Positions

S001 AMSA D GRGS	.0515	-.0214	.0158	.6	-.2	.6	-.0549	.0065	-.0174	93: 1
S001 AMSA D CSR	-.0389	.0178	.0096	-.6	.4	.1	.0418	.0131	.0013	93: 1
S001 AMSA D IGN	.0161	-.0203	-.0057	1.0	-.1	-.8	-.0201	-.0145	-.0094	95:100

Velocities

S001 AMSA D GRGS	-.0128	.0083	-.0061	.1	.0	.5	.0143	-.0015	.0079
S001 AMSA D CSR	-.0109	-.0016	-.0036	-1.3	.4	.0	.0103	-.0052	-.0009
S001 AMSA D IGN	.0012	-.0029	.0133	-.2	-.1	.1	-.0018	.0089	-.0102

91501 ILE DES PETRELS

Positions

M001	TIE91501	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001 ADEA	TIE91501	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
S001 ADEA	D GRGS	.0087	-.0061	-.0114	.6	-.3	-.3	-.0009	-.0143	.0063	93: 1
S001 ADEA	D CSR	.0163	.0118	.0051	.8	.4	.3	-.0195	-.0025	-.0067	93: 1
S001 ADEA	D IGN	-.0106	-.0028	.0113	-1.0	-.2	.6	.0089	.0103	-.0079	95:100

Velocities

S001 ADEA	D GRGS	.0043	.0034	-.0017	1.1	-.6	-.4	-.0054	-.0017	.0011
S001 ADEA	D CSR	.0058	.0003	-.0026	1.0	.7	.6	-.0040	-.0049	.0007
S001 ADEA	D IGN	.0043	-.0006	.0130	.7	.2	.2	-.0023	.0018	-.0134

92201 PAPEETE

Positions

M003 PAMA	P EMR	-.0189	-.0310	-.0002	-1.0	.1	.2	.0171	.0095	.0305	96: 1
M003 PAMA	P GFZ	-.0116	.0054	.0203	-1.1	.3	.3	-.0105	.0215	.0008	94:365
M003 PAMA	P CODE	.0276	-.0090	-.0003	1.0	.0	.1	.0217	-.0061	-.0182	95: 76
M003 PAMA	P MIT	.0073	.0103	.0000	1.1	.2	.3	-.0052	-.0035	-.0110	97:151
M003 PAMA	P NCL	-.0052	-.0033	-.0007	-1.0	-.1	.6	.0002	.0012	.0060	96: 1
M003 PAMA	P JPL	-.0045	-.0025	-.0019	-.4	-.2	.0	-.0001	-.0003	.0055	96: 1
M006 TAHI	TIE92201	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M006 TAHI	P MIT	.0147	.0302	.0075	.5	1.5	.5	-.0186	-.0013	-.0289	97:151
S007 PAPB	TIE92201	-.0002	-.0002	.0000	-.1	-.1	.0	.0001	.0001	.0002	93: 1
S007 PAPB	D IGN	.0220	.0232	-.0138	.1	.3	-.2	-.0089	-.0225	-.0251	95:100

Velocities

M003 PAMA	P EMR	-.0165	.0120	-.0021	-2.2	1.0	.7	-.0187	.0005	.0084
M003 PAMA	P GFZ	.0084	-.0080	-.0022	.7	-.4	.3	.0111	-.0030	-.0024
M003 PAMA	P CODE	-.0138	.0066	.0026	.0	.0	.2	-.0127	.0051	.0073
M003 PAMA	P MIT	.0083	.0056	.0003	.0	-.4	-.2	-.0006	-.0028	-.0097
M003 PAMA	P NCL	.0123	.0058	-.0012	.2	.2	-.3	.0012	-.0052	-.0126
M003 PAMA	P JPL	.0016	.0000	.0028	.0	.1	.1	.0008	.0022	-.0021
M006 TAHI	P MIT	.3680	.5210	.1822	.5	1.6	.4	-.2633	-.0017	-.6089
S007 PAPB	D IGN	.0030	.0015	.0172	.4	.6	.0	.0003	.0153	-.0084

92202 HUAHINE

Positions

M002 7121	TIE92202	.0001	-.0001	-.0001	.0	.0	.0	.0001	-.0001	.0000	93: 1
M002 7121	L CSR	-.0629	-.0195	-.0267	.1	.6	.4	-.0134	-.0070	.0694	93: 1
M004 7123	TIE92202	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M004 7123	L CSR	-.0166	-.0139	-.0115	-.4	-.1	.2	.0041	-.0049	.0236	93: 1
M004 7123	L GSFC	-.0077	.0235	-.0081	.6	-.1	-.8	-.0243	-.0090	-.0021	86:182
S009 HUAA	TIE92202	.0000	-.0001	.0002	.0	.0	.1	.0001	.0002	.0000	93: 1
S009 HUAA	D CSR	.0010	.0143	.0159	.0	.2	.3	-.0120	.0129	-.0120	93: 1
S009 HUAA	D IGN	.0103	.0158	-.0155	.0	.5	-.7	-.0088	-.0197	-.0115	95:100

Velocities

M002 7121	L CSR	-.0064	-.0073	-.0046	.0	.0	.0	.0032	-.0018	.0101
M004 7123	L CSR	-.0064	-.0073	-.0046	-.4	.4	-.1	.0032	-.0018	.0101
M004 7123	L GSFC	.0029	-.0014	.0023	-.2	.2	.1	.0026	.0017	-.0024
S009 HUAA	D CSR	-.0100	.0139	.0003	-.2	.3	.4	-.0170	.0008	.0018
S009 HUAA	D IGN	.0078	-.0016	.0118	.2	-.6	1.1	.0052	.0096	-.0091

92701 NOUMEA

Positions

S001 NOUA	D GRGS	.0004	.0520	-.0047	.0	.2	-.2	-.0506	.0002	.0127	93: 1
S001 NOUA	D CSR	.0270	-.0417	-.0250	.3	-.5	-.3	.0342	-.0368	-.0239	93: 1
S001 NOUA	D IGN	.0054	-.0012	.0033	.1	.0	.0	-.0001	.0010	-.0064	95:100

Velocities

S001 NOUA D GRGS	.0038	-.0033	-.0009	.5	.1	-.2	.0023	-.0025	-.0038	
S001 NOUA D CSR	-.0013	-.0021	-.0030	.4	-.8	-.7	.0023	-.0025	.0018	
S001 NOUA D IGN	.0036	.0003	.0079	-.1	.1	.3	-.0012	.0060	-.0061	

92901 WALLIS

Positions

S001 WALA D GRGS	-.0111	-.0029	.0197	.0	-.5	.1	.0022	.0218	.0065	93: 1
S001 WALA D CSR	.0127	.0110	.0021	.2	.1	.0	-.0101	-.0010	-.0135	93: 1
S001 WALA D IGN	.0123	-.0044	-.0091	.2	.0	-.9	.0052	-.0116	-.0096	95:100

Velocities

S001 WALA D GRGS	.0004	.0056	-.0059	.3	-.1	-.2	-.0056	-.0059	.0006	
S001 WALA D CSR	.0007	.0113	.0005	.2	.7	.2	-.0112	.0001	-.0015	
S001 WALA D IGN	.0051	.0023	.0091	.0	.0	.2	-.0019	.0076	-.0072	

97301 KOUROU

Positions

M210 KOUR TIE97301	.0000	.0000	.0000	.0	.0	.0	.0000	.0000	.0000	93: 1
M210 KOUR P GFZ	-.0148	-.0042	.0072	.5	1.7	-.6	-.0144	.0077	-.0049	94:365
M210 KOUR P CODE	.0017	-.0015	-.0034	.1	-.1	-2.0	.0005	-.0036	.0019	95: 76
M210 KOUR P MIT	-.0130	.0091	-.0050	-1.1	.7	.0	-.0049	-.0036	-.0155	97:151
M210 KOUR P JPL	-.0007	-.0069	.0012	.0	-.8	.4	-.0047	.0008	.0052	96: 1
S004 KRUB TIE97301	.0107	-.0152	-.0216	.4	-.6	-.9	-.0007	-.0231	.0166	93: 1
S004 KRUB D GRGS	-.0309	-.0016	.0122	-.2	.2	.0	-.0255	.0137	-.0163	93: 1
S004 KRUB D CSR	.0179	-.0256	-.0252	.3	-.3	-.4	-.0013	-.0279	.0288	93: 1
S004 KRUB D IGN	-.0018	.0097	-.0015	.1	.2	.2	.0044	-.0008	-.0089	95:100
S005 KRUA TIE97301	.0046	-.0011	-.0019	.2	.0	-.1	.0030	-.0022	.0035	93: 1
S005 KRUA D IGN	-.2305	.0157	-.4277	-.4	.2	-1.6	-.1737	-.4124	-.1898	95:100

Velocities

M210 KOUR P GFZ	.0110	-.0078	.0059	1.2	-.2	-.3	.0041	.0047	.0134
M210 KOUR P CODE	-.0030	.0082	-.0056	-.6	.8	-1.7	.0026	-.0049	-.0088
M210 KOUR P MIT	-.0099	.0131	-.0042	-.8	1.0	.2	.0001	-.0027	-.0168
M210 KOUR P JPL	.0002	.0033	.0000	.3	.9	.4	.0022	.0002	-.0025
S004 KRUB D GRGS	.0026	.0049	-.0043	.0	.1	.0	.0051	-.0041	-.0027
S004 KRUB D CSR	-.0059	.0066	.0149	.1	-.2	.8	-.0006	.0156	-.0075
S004 KRUB D IGN	.0072	.0179	.0055	.4	.5	-.2	.0166	.0063	-.0094
S005 KRUA D IGN	-.0422	.0015	-.0948	.7	-.4	-.2	-.0327	-.0920	-.0351

97401 LA REUNION

Positions

S001 REUA D GRGS	.0075	.0039	.0020	.0	.1	.0	-.0040	.0046	.0063	93: 1
S001 REUA D CSR	-.0116	-.0177	-.0192	-.2	-.3	-.4	-.0004	-.0256	-.0128	93: 1
S001 REUA D IGN	.0113	-.0182	.0050	1.2	.3	.7	-.0196	.0015	-.0098	95:100

Velocities

S001 REUA D GRGS	-.0056	.0012	-.0036	.0	.0	.0	.0053	-.0041	-.0008
S001 REUA D CSR	-.0028	.0076	-.0052	-.3	-.3	-1.1	.0066	-.0032	.0062
S001 REUA D IGN	.0002	-.0046	.0111	-.3	-.2	-.4	-.0027	.0090	-.0074