

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 1 Fri	saral	0505	0512	87	162 346 S -N	CP
Dec 1 Fri	ajisai	0512	0515	26	144 115 SE-SE	
Dec 1 Fri	lares	0514	0517	26	322 3 NW-N	
Dec 1 Fri	lageos2	0535	0620	60	194 62 S -NE	
Dec 1 Fri	hy2d	0553	0558	30	302 16 NW-N	
Dec 1 Fri	geoik2	0602	0608	35	50 149 NE-SE	
Dec 1 Fri	hy2b	0608	0614	47	47 163 NE-S	
Dec 1 Fri	paz	0608	0611	44	54 160 NE-S	
Dec 1 Fri	terrasarx	0634	0639	87	15 194 N -S	
Dec 1 Fri	hy2c	0634	0640	43	298 183 NW-S	
Dec 1 Fri	tandemx	0634	0639	86	15 194 N -S	
Dec 1 Fri	ajisai	0709	0719	61	220 80 SW-E	
Dec 1 Fri	geoik2	0745	0751	47	347 233 N -SW	
Dec 1 Fri	hy2b	0751	0757	37	341 244 N -SW	
Dec 1 Fri	lageos1	0812	0856	85	145 328 SE-NW	
Dec 1 Fri	swarmc	0849	0852	43	37 143 NE-SE	
Dec 1 Fri	swarma	0849	0852	37	38 135 NE-SE	
Dec 1 Fri	stella	0902	0909	75	8 205 N -SW	
Dec 1 Fri	ajisai	0910	0921	82	263 90 W -E	
Dec 1 Fri	lares	0913	0923	43	345 101 N -E	
Dec 1 Fri	lageos2	0936	1025	86	265 90 W -E	
Dec 1 Fri	sentinel3b	0955	1000	40	50 155 NE-SE	
Dec 1 Fri	starlette	1010	1018	51	213 87 SW-E	
Dec 1 Fri	icesat2	1011	1015	68	6 185 N -S	
Dec 1 Fri	sentinel3a	1032	1039	73	20 192 N -S	
Dec 1 Fri	swot	1047	1054	54	231 7 SW-N	
Dec 1 Fri	lares	1111	1122	67	318 169 NW-S	
Dec 1 Fri	ajisai	1112	1124	71	277 122 W -SE	
Dec 1 Fri	hy2d	1117	1126	74	326 135 NW-SE	
Dec 1 Fri	cryosat2	1126	1130	51	342 215 N -SW	
Dec 1 Fri	sentinel3b	1135	1140	35	335 242 NW-SW	
Dec 1 Fri	starlette	1159	1208	80	256 88 W -E	
Dec 1 Fri	swarmb	1248	1252	67	170 7 S -N	
Dec 1 Fri	ajisai	1315	1322	34	258 176 W -S	
Dec 1 Fri	lares2	1321	1409	74	183 32 S -NE	
Dec 1 Fri	lageos2	1341	1426	65	296 157 NW-SE	
Dec 1 Fri	jason3	1344	1353	41	163 56 S -NE	
Dec 1 Fri	starlette	1347	1357	74	274 114 W -SE	
Dec 1 Fri	sentinel6a	1445	1457	80	208 41 SW-NE	
Dec 1 Fri	starlette	1537	1543	37	260 168 W -S	
Dec 1 Fri	jason3	1539	1549	64	242 32 SW-NE	
Dec 1 Fri	larets	1539	1543	55	357 221 N -SW	
Dec 1 Fri	hy2b	1613	1619	35	104 8 E -N	
Dec 1 Fri	gracefol	1631	1634	33	122 32 SE-NE	
Dec 1 Fri	sentinel6a	1644	1652	41	282 23 W -NE	
Dec 1 Fri	paz	1652	1654	41	103 8 E -N	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 1 Fri	tandemx	1718	1722	65	159 349 S -N	TS
Dec 1 Fri	terrasarx	1718	1722	66	159 349 S -N	
Dec 1 Fri	lares2	1725	1811	54	273 54 W -NE	
Dec 1 Fri	jason3	1738	1745	31	307 25 NW-NE	
Dec 1 Fri	geoik2	1746	1755	67	178 338 S -N	
Dec 1 Fri	hy2b	1756	1802	49	205 325 SW-NW	
Dec 1 Fri	sentinel6a	1843	1849	28	337 31 NW-NE	
Dec 1 Fri	stella	1848	1853	47	119 4 SE-N	
Dec 1 Fri	saral	1850	1856	64	4 216 N -SW	

Dec 1 Fri	jason3	1937	1943	29	342	48	N	-NE
Dec 1 Fri	swot	1941	1948	62	358	146	N	-SE
Dec 1 Fri	sentinel3a	2019	2023	35	100	18	E	-N
Dec 1 Fri	lageos1	2025	2056	37	47	142	NE	-SE
Dec 1 Fri	stella	2029	2032	30	247	304	SW	-NW
Dec 1 Fri	sentinel6a	2041	2049	38	344	81	N	-E
Dec 1 Fri	swarmc	2104	2105	32	106	42	E	-NE
Dec 1 Fri	swarma	2104	2105	29	108	48	E	-NE
Dec 1 Fri	sentinel3b	2118	2126	82	169	343	S	-N
Dec 1 Fri	jason3	2133	2143	54	334	110	NW	-E
Dec 1 Fri	lares2	2133	2222	72	324	132	NW	-SE
Dec 1 Fri	hy2c	2150	2158	89	217	39	SW	-NE
Dec 1 Fri	sentinel3a	2158	2203	40	211	317	SW	-NW
Dec 1 Fri	icesat2	2225	2228	35	231	324	SW	-NW
Dec 1 Fri	sentinel6a	2235	2247	84	320	146	NW	-SE
Dec 1 Fri	cryosat2	2239	2245	75	177	354	S	-N
Dec 1 Fri	jason3	2329	2339	51	305	177	NW	-S
Dec 1 Fri	hy2c	2340	2345	31	300	15	NW	-N
Dec 1 Fri	lageos1	2356	0039	81	33	232	NE	-SW
Dec 2 Sat	swarmb	0013	0017	53	20	160	N	-S
Dec 2 Sat	sentinel6a	0036	0037	25	257	246	W	-SW
Dec 2 Sat	larets	0110	0115	38	114	6	SE	-N
Dec 2 Sat	beaconc	0128	0134	31	199	120	S	-SE
Dec 2 Sat	lares2	0132	0208	43	323	224	NW	-SW
Dec 2 Sat	lares	0206	0218	83	208	33	SW	-NE
Dec 2 Sat	hy2d	0236	0242	35	156	63	SE	-NE
Dec 2 Sat	larets	0248	0251	29	234	301	SW	-NW
Dec 2 Sat	hy2c	0319	0323	27	4	61	N	-NE
Dec 2 Sat	beaconc	0321	0327	37	222	132	SW	-SE
Dec 2 Sat	lageos1	0327	0403	52	53	298	NE	-NW
Dec 2 Sat	lageos2	0351	0423	36	151	68	SE	-E
Dec 2 Sat	lares	0407	0415	36	287	15	W	-N
Dec 2 Sat	hy2d	0422	0430	58	245	31	SW	-NE
Dec 2 Sat	saral	0434	0440	50	131	1	SE	-N
Dec 2 Sat	hy2c	0505	0513	70	328	131	NW	-SE
Dec 2 Sat	beaconc	0516	0517	25	203	189	SW	-S
Dec 2 Sat	gracefol	0526	0529	36	321	224	NW	-SW
Dec 2 Sat	paz	0551	0553	29	69	127	E	-SE
Dec 2 Sat	hy2d	0614	0615	25	343	357	N	-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 2 Sat	ajisai	0615	0626	49	204 81	SW-E VS
Dec 2 Sat	saral	0616	0618	27	259 296	W -NW
Dec 2 Sat	tandemx	0617	0621	55	32 172	NE-S
Dec 2 Sat	terrasarx	0617	0621	55	32 172	NE-S
Dec 2 Sat	geoik2	0618	0625	46	41 164	NE-S
Dec 2 Sat	hy2b	0629	0637	65	26 184	NE-S
Dec 2 Sat	lageos1	0651	0733	73	116 326	SE-NW
Dec 2 Sat	hy2c	0654	0657	27	268 222	W -SW
Dec 2 Sat	lageos2	0740	0829	85	236 72	SW-E
Dec 2 Sat	geoik2	0801	0807	37	343 243	N -SW
Dec 2 Sat	lares	0810	0816	30	1 65	N -NE
Dec 2 Sat	ajisai	0816	0828	81	252 84	W -E
Dec 2 Sat	stella	0836	0842	65	28 181	NE-S
Dec 2 Sat	swot	0904	0909	33	134 50	SE-NE
Dec 2 Sat	icesat2	0945	0949	45	31 158	NE-S
Dec 2 Sat	hy2d	0950	0955	36	355 80	N -E
Dec 2 Sat	lares	1007	1018	75	334 138	NW-SE
Dec 2 Sat	sentinel3a	1007	1013	50	37 169	NE-S
Dec 2 Sat	ajisai	1018	1030	79	276 110	W -E
Dec 2 Sat	lageos1	1028	1106	46	201 322	S -NW
Dec 2 Sat	starlette	1029	1038	64	230 83	SW-E
Dec 2 Sat	cryosat2	1036	1041	62	26 168	NE-S

Dec	2	Sat	swot	1048	1054	47	243	1	SW-N
Dec	2	Sat	sentinel3b	1109	1114	55	351	225	N -SW
Dec	2	Sat	hy2d	1136	1144	71	314	157	NW-SE
Dec	2	Sat	lageos2	1146	1234	85	289	124	W -SE
Dec	2	Sat	lares2	1157	1236	50	147	35	SE-NE
Dec	2	Sat	lares	1206	1213	33	291	216	W -SW
Dec	2	Sat	starlette	1218	1227	83	266	95	W -E
Dec	2	Sat	ajisai	1220	1230	45	269	157	W -SE
Dec	2	Sat	swarmb	1232	1236	55	143	13	SE-N
Dec	2	Sat	sentinel6a	1315	1322	34	148	67	SE-NE
Dec	2	Sat	jason3	1406	1416	60	187	47	S -NE
Dec	2	Sat	starlette	1407	1416	62	275	128	W -SE
Dec	2	Sat	larets	1439	1443	41	57	158	NE-S
Dec	2	Sat	sentinel6a	1509	1519	74	231	35	SW-NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer		
Dec	2	Sat	lares2	1547	1636	66	240 40 SW-NE	MW
Dec	2	Sat	lageos2	1552	1622	36	290 209 W -SW	
Dec	2	Sat	jason3	1602	1612	49	262 30 W -NE	
Dec	2	Sat	geoik2	1622	1626	32	85 17 E -N	
Dec	2	Sat	hy2b	1635	1641	48	119 2 SE-N	
Dec	2	Sat	tandemx	1701	1705	48	131 1 SE-N	
Dec	2	Sat	terrasarx	1701	1705	48	132 1 SE-N	
Dec	2	Sat	sentinel6a	1708	1715	34	303 24 NW-NE	
Dec	2	Sat	gracefol	1741	1743	31	254 317 W -NW	
Dec	2	Sat	jason3	1802	1807	28	324 20 NW-N	
Dec	2	Sat	geoik2	1803	1810	54	196 332 S -NW	
Dec	2	Sat	paz	1809	1811	27	247 301 SW-NW	
Dec	2	Sat	hy2b	1819	1824	35	233 316 SW-NW	
Dec	2	Sat	saral	1820	1826	71	24 186 NE-S	
Dec	2	Sat	stella	1822	1826	30	94 20 E -N	
Dec	2	Sat	sentinel6a	1907	1912	28	341 36 N -NE	
Dec	2	Sat	swot	1942	1949	70	349 151 N -SE	
Dec	2	Sat	lares2	1959	2046	57	313 100 NW-E	
Dec	2	Sat	jason3	2000	2007	33	344 65 N -NE	
Dec	2	Sat	stella	2001	2007	48	204 329 SW-NW	
Dec	2	Sat	hy2c	2024	2029	33	142 65 SE-NE	
Dec	2	Sat	sentinel3b	2054	2100	64	137 353 SE-N	
Dec	2	Sat	sentinel6a	2103	2113	48	335 102 NW-E	
Dec	2	Sat	sentinel3a	2132	2138	63	185 336 S -NW	
Dec	2	Sat	cryosat2	2149	2154	38	124 20 SE-N	
Dec	2	Sat	jason3	2156	2206	72	328 129 NW-SE	
Dec	2	Sat	icesat2	2159	2203	64	196 348 S -N	
Dec	2	Sat	hy2c	2209	2217	61	241 32 SW-NE	
Dec	2	Sat	swarma	2211	2215	36	228 341 SW-N	
Dec	2	Sat	swarmc	2212	2214	32	264 326 W -NW	
Dec	2	Sat	lageos1	2233	2317	75	33 203 NE-SW	
Dec	2	Sat	sentinel6a	2259	2309	62	311 168 NW-S	
Dec	2	Sat	cryosat2	2329	2332	31	250 314 W -NW	
Dec	2	Sat	jason3	2353	0000	35	285 203 W -SW	
Dec	2	Sat	swarmb	2357	0000	42	43 143 NE-SE	

Dec	2	Sat	lares2	2359	0045	66	327	187	NW-S
Dec	3	Sun	hy2c	0000	0002	25	327	356	NW-N
Dec	3	Sun	beaconc	0045	0049	29	178	126	S -SE
Dec	3	Sun	lares	0103	0113	51	170	46	S -NE
Dec	3	Sun	larets	0146	0152	74	155	348	SE-N
Dec	3	Sun	lageos1	0207	0245	57	40	276	NE-W
Dec	3	Sun	beaconc	0236	0243	38	225	126	SW-SE
Dec	3	Sun	hy2d	0254	0301	55	181	49	S -NE
Dec	3	Sun	lares	0301	0311	53	252	22	W -N
Dec	3	Sun	hy2c	0337	0342	35	354	77	N -E
Dec	3	Sun	saral	0404	0408	30	95	20	E -N
Dec	3	Sun	beaconc	0430	0434	28	225	168	SW-S
Dec	3	Sun	hy2d	0441	0448	43	269	24	W -NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer		
Dec	3	Sun	gracefol	0501	0505	57	345 194 N -S	AS
Dec	3	Sun	lares	0505	0507	25	337 357 NW-N	
Dec	3	Sun	ajisai	0522	0531	38	183 88 S -E	
Dec	3	Sun	hy2c	0524	0531	76	314 153 NW-SE	
Dec	3	Sun	lageos1	0532	0611	59	89 320 E -NW	
Dec	3	Sun	saral	0543	0548	47	209 326 SW-NW	
Dec	3	Sun	lageos2	0548	0634	66	202 63 S -NE	
Dec	3	Sun	tandemx	0601	0604	35	73 156 E -SE	
Dec	3	Sun	terrasarx	0601	0604	35	72 156 E -SE	
Dec	3	Sun	geoik2	0633	0640	58	32 174 NE-S	
Dec	3	Sun	hy2b	0651	0659	80	15 200 N -S	
Dec	3	Sun	paz	0708	0711	38	319 230 NW-SW	
Dec	3	Sun	ajisai	0722	0733	74	239 82 SW-E	
Dec	3	Sun	stella	0810	0815	41	50 156 NE-SE	
Dec	3	Sun	geoik2	0817	0821	30	328 263 NW-W	
Dec	3	Sun	starlette	0900	0907	41	193 92 S -E	
Dec	3	Sun	lageos1	0901	0944	70	166 327 S -NW	
Dec	3	Sun	lares	0903	0913	47	347 107 N -E	
Dec	3	Sun	swot	0905	0910	39	135 43 SE-NE	
Dec	3	Sun	ajisai	0923	0935	84	272 100 W -E	
Dec	3	Sun	swarmc	0931	0935	42	326 205 NW-SW	
Dec	3	Sun	swarma	0931	0935	48	334 201 NW-S	
Dec	3	Sun	sentinel3a	0942	0946	32	63 140 NE-SE	
Dec	3	Sun	lageos2	0950	1039	86	271 96 W -E	
Dec	3	Sun	stella	0950	0954	35	334 252 NW-W	
Dec	3	Sun	hy2d	1008	1015	49	343 108 N -E	
Dec	3	Sun	lares2	1040	1100	30	99 47 E -NE	
Dec	3	Sun	sentinel3b	1043	1049	81	13 200 N -S	
Dec	3	Sun	starlette	1048	1057	75	246 85 SW-E	
Dec	3	Sun	swot	1049	1055	41	254 360 W -N	
Dec	3	Sun	lares	1101	1111	59	313 177 NW-S	
Dec	3	Sun	sentinel3a	1121	1127	43	349 231 N -SW	
Dec	3	Sun	cryosat2	1124	1129	47	340 219 N -SW	
Dec	3	Sun	ajisai	1125	1136	57	277 142 W -SE	
Dec	3	Sun	hy2d	1155	1202	46	298 179 NW-S	
Dec	3	Sun	swarmb	1215	1219	40	138 23 SE-NE	
Dec	3	Sun	starlette	1237	1246	78	272 104 W -E	
Dec	3	Sun	sentinel6a	1336	1346	50	177 51 S -NE	
Dec	3	Sun	lageos2	1355	1438	59	297 166 NW-S	
Dec	3	Sun	lares2	1414	1503	86	207 34 SW-NE	
Dec	3	Sun	starlette	1427	1434	48	267 150 W -SE	
Dec	3	Sun	jason3	1428	1439	83	212 40 SW-NE	
Dec	3	Sun	larets	1515	1520	86	16 196 N -S	
Dec	3	Sun	sentinel6a	1532	1542	56	253 31 W -NE	

OBSERVING SCHEDULE (Times are in U.T.)							
Date	Satellite	Start	End	Elev	Direction	Observer	
Dec 3 Sun	jason3	1626	1634	39	285 24 W	-NE	TS
Dec 3 Sun	geoik2	1636	1642	39	109 6 E	-N	
Dec 3 Sun	tandemx	1644	1647	33	112 23 E	-NE	
Dec 3 Sun	terrasarx	1644	1647	33	112 23 E	-NE	
Dec 3 Sun	hy2b	1656	1704	65	145 350	SE-N	
Dec 3 Sun	gracefol	1715	1719	53	206 345	SW-N	
Dec 3 Sun	sentinel6a	1732	1738	30	321 27	NW-NE	
Dec 3 Sun	saral	1749	1754	41	46 154	NE-SE	
Dec 3 Sun	paz	1751	1755	39	212 327	SW-NW	
Dec 3 Sun	geoik2	1818	1825	43	206 325	SW-NW	
Dec 3 Sun	lares2	1822	1907	52	293 69	NW-E	
Dec 3 Sun	jason3	1826	1831	28	339 33	N	-NE
Dec 3 Sun	hy2b	1843	1844	25	269 284	W	-W
Dec 3 Sun	saral	1929	1933	33	331 251	NW-W	
Dec 3 Sun	sentinel6a	1930	1936	31	344 53	N	-NE
Dec 3 Sun	stella	1934	1940	72	173 340	S	-N
Dec 3 Sun	swot	1943	1950	84	344 160	N	-S
Dec 3 Sun	jason3	2023	2031	40	345 84	N	-E
Dec 3 Sun	sentinel3b	2028	2033	40	115 11	SE-N	
Dec 3 Sun	hy2c	2041	2048	52	178 51	S	-NE
Dec 3 Sun	sentinel3a	2106	2112	72	155 348	SE-N	
Dec 3 Sun	lageos1	2111	2150	51	38 169	NE-S	
Dec 3 Sun	sentinel6a	2126	2136	62	332 119	NW-SE	
Dec 3 Sun	icesat2	2133	2137	59	151 3	SE-N	
Dec 3 Sun	swarmc	2144	2148	56	205 349	SW-N	
Dec 3 Sun	swarma	2144	2148	68	196 353	S	-N
Dec 3 Sun	sentinel3b	2208	2213	35	221 316	SW-NW	
Dec 3 Sun	jason3	2218	2229	82	319 149	NW-SE	
Dec 3 Sun	lares2	2227	2316	88	327 155	NW-SE	
Dec 3 Sun	hy2c	2228	2235	45	265 24	W	-NE
Dec 3 Sun	cryosat2	2237	2243	70	182 352	S	-N
Dec 3 Sun	sentinel6a	2322	2331	43	299 190	NW-S	
Dec 3 Sun	swarmb	2341	2343	31	67 125	NE-SE	
Dec 4 Mon	beaconc	0001	0004	26	169 132	S	-SE
Dec 4 Mon	lares	0002	0007	28	122 70	SE-E	
Dec 4 Mon	lageos1	0045	0126	69	34 250	NE-W	
Dec 4 Mon	beaconc	0152	0158	37	217 128	SW-SE	
Dec 4 Mon	lares	0156	0207	84	215 31	SW-NE	
Dec 4 Mon	larets	0223	0228	49	204 330	SW-NW	
Dec 4 Mon	lares2	0230	0248	28	309 262	NW-W	
Dec 4 Mon	hy2d	0312	0319	84	212 41	SW-NE	
Dec 4 Mon	beaconc	0345	0351	32	231 149	SW-SE	
Dec 4 Mon	hy2c	0355	0402	46	343 104	N	-E
Dec 4 Mon	lares	0357	0404	33	293 10	NW-N	
Dec 4 Mon	lageos2	0401	0438	42	163 65	S	-NE
Dec 4 Mon	lageos1	0413	0450	52	66 309	NE-NW	
Dec 4 Mon	ajisai	0431	0435	27	146 106	SE-E	
Dec 4 Mon	gracefol	0436	0440	63	12 170	N	-S

OBSERVING SCHEDULE (Times are in U.T.)							
Date	Satellite	Start	End	Elev	Direction	Observer	
Dec 4 Mon	hy2d	0501	0506	32	300 17	NW-N	VS
Dec 4 Mon	saral	0511	0517	73	168 343	S	-N
Dec 4 Mon	hy2b	0532	0535	27	73 119	E	-SE

Dec 4 Mon	hy2c	0542	0549	50	301 177	NW-S
Dec 4 Mon	ajisai	0628	0639	63	224 81	SW-E
Dec 4 Mon	geoik2	0648	0656	70	23 188	NE-S
Dec 4 Mon	paz	0650	0654	57	356 212	N -SW
Dec 4 Mon	hy2b	0714	0721	62	0 217	N -SW
Dec 4 Mon	terrasarx	0718	0720	31	308 249	NW-W
Dec 4 Mon	tandemx	0718	0720	31	307 249	NW-W
Dec 4 Mon	lageos1	0738	0821	86	135 328	SE-NW
Dec 4 Mon	lageos2	0754	0843	88	244 75	SW-E
Dec 4 Mon	lares	0759	0806	32	355 71	N -E
Dec 4 Mon	ajisai	0829	0841	82	265 92	W -E
Dec 4 Mon	swarmc	0904	0908	78	353 184	N -S
Dec 4 Mon	swarma	0904	0909	86	359 178	N -S
Dec 4 Mon	swot	0905	0911	46	151 36	SE-NE
Dec 4 Mon	starlette	0918	0927	54	218 84	SW-E
Dec 4 Mon	stella	0923	0929	54	354 221	N -SW
Dec 4 Mon	lares	0956	1008	79	330 144	NW-SE
Dec 4 Mon	sentinel3b	1017	1023	59	34 178	NE-S
Dec 4 Mon	hy2d	1026	1034	68	330 129	NW-SE
Dec 4 Mon	icesat2	1028	1031	46	320 215	NW-SW
Dec 4 Mon	ajisai	1031	1043	68	278 125	W -SE
Dec 4 Mon	cryosat2	1034	1039	67	21 171	N -S
Dec 4 Mon	swot	1050	1055	35	264 351	W -N
Dec 4 Mon	sentinel3a	1055	1101	67	5 211	N -SW
Dec 4 Mon	starlette	1107	1116	80	259 89	W -E
Dec 4 Mon	lageos1	1125	1151	32	234 311	SW-NW
Dec 4 Mon	swarmb	1159	1202	31	118 36	SE-NE
Dec 4 Mon	lageos2	1200	1247	81	291 132	W -SE
Dec 4 Mon	ajisai	1234	1241	32	258 186	W -S
Dec 4 Mon	lares2	1244	1330	67	174 32	S -NE
Dec 4 Mon	starlette	1257	1305	70	273 117	W -SE
Dec 4 Mon	jason3	1257	1304	36	149 64	SE-NE
Dec 4 Mon	sentinel6a	1358	1409	72	201 43	S -NE
Dec 4 Mon	starlette	1447	1453	35	253 167	W -S
Dec 4 Mon	jason3	1451	1501	70	236 34	SW-NE
Dec 4 Mon	larets	1551	1556	44	350 231	N -SW
Dec 4 Mon	sentinel6a	1555	1604	44	271 24	W -NE
Dec 4 Mon	lageos2	1608	1631	30	284 223	W -SW

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 4 Mon	lares2	1644	1731	56	264 49 W	-NE MW
Dec 4 Mon	gracefol	1650	1654	79	175 2 S	-N
Dec 4 Mon	jason3	1650	1657	33	306 26	NW-NE
Dec 4 Mon	geoik2	1651	1657	49	122 2	SE-N
Dec 4 Mon	hy2b	1718	1726	77	164 343	S -N
Dec 4 Mon	paz	1734	1738	63	191 338	S -N
Dec 4 Mon	sentinel6a	1756	1800	28	337 22	NW-N
Dec 4 Mon	terrasarx	1801	1804	33	225 311	SW-NW
Dec 4 Mon	tandemx	1801	1804	33	225 312	SW-NW
Dec 4 Mon	geoik2	1834	1839	33	224 309	SW-NW
Dec 4 Mon	jason3	1849	1854	28	342 38	N -NE
Dec 4 Mon	saral	1857	1903	55	357 218	N -SW
Dec 4 Mon	stella	1908	1914	66	140 352	SE-N
Dec 4 Mon	swot	1944	1951	79	338 168	N -S
Dec 4 Mon	sentinel6a	1953	2001	36	345 78	N -E
Dec 4 Mon	lageos1	1954	2016	30	57 122	NE-SE

Dec 4 Mon	sentinel3b	2004	2006	27	73	36	E -NE
Dec 4 Mon	sentinel3a	2040	2046	50	130	1	SE-N
Dec 4 Mon	jason3	2045	2055	50	336	105	NW-E
Dec 4 Mon	lares2	2054	2142	67	322	123	NW-SE
Dec 4 Mon	hy2c	2059	2106	79	207	42	SW-NE
Dec 4 Mon	icesat2	2108	2110	33	98	32	E -NE
Dec 4 Mon	swarmc	2118	2122	75	169	6	S -N
Dec 4 Mon	swarma	2118	2122	61	161	10	S -N
Dec 4 Mon	sentinel3b	2142	2148	55	198	333	S -NW
Dec 4 Mon	cryosat2	2147	2152	40	129	19	SE-N
Dec 4 Mon	sentinel6a	2148	2159	83	323	139	NW-SE
Dec 4 Mon	sentinel3a	2222	2225	28	253	305	W -NW
Dec 4 Mon	jason3	2241	2251	58	309	171	NW-S
Dec 4 Mon	hy2c	2248	2253	34	298	17	NW-N
Dec 4 Mon	lageos1	2322	0005	88	32	222	NE-SW
Dec 4 Mon	swarmb	2325	2326	25	84	108	E -E
Dec 4 Mon	cryosat2	2327	2330	29	251	311	W -NW
Dec 4 Mon	sentinel6a	2346	2351	28	279	224	W -SW
Dec 5 Tue	lares	0052	0103	58	179	42	S -NE
Dec 5 Tue	lares2	0053	0132	48	324	214	NW-SW
Dec 5 Tue	swarmb	0059	0101	29	303	245	NW-SW
Dec 5 Tue	beaconc	0107	0114	36	217	123	SW-SE
Dec 5 Tue	larets	0122	0127	48	124	1	SE-N
Dec 5 Tue	hy2d	0145	0149	31	138	75	SE-E
Dec 5 Tue	hy2c	0228	0230	26	20	48	N -NE
Dec 5 Tue	lares	0251	0301	49	260	22	W -N
Dec 5 Tue	lageos1	0254	0330	52	48	292	NE-W
Dec 5 Tue	beaconc	0301	0307	35	226	141	SW-SE
Dec 5 Tue	hy2d	0330	0338	66	238	33	SW-NE
Dec 5 Tue	gracefol	0412	0415	38	55	147	NE-SE
Dec 5 Tue	hy2c	0413	0421	63	332	125	NW-SE
Dec 5 Tue	saral	0440	0446	55	132	356	SE-N
Dec 5 Tue	hy2d	0521	0523	26	328	358	NW-N
Dec 5 Tue	ajisai	0534	0545	51	208	81	SW-E
Dec 5 Tue	hy2b	0553	0559	37	51	151	NE-SE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 5 Tue	lageos2	0600	0648	71	212 64	SW-NE RS
Dec 5 Tue	hy2c	0601	0606	32	283 206	W -SW
Dec 5 Tue	lageos1	0618	0659	68	106 325	E -NW
Dec 5 Tue	paz	0633	0637	66	16 193	N -S
Dec 5 Tue	lares	0656	0658	25	9 29	N -NE
Dec 5 Tue	terrasarx	0700	0704	45	345 220	N -SW
Dec 5 Tue	tandemx	0700	0704	46	344 220	N -SW
Dec 5 Tue	geoik2	0704	0711	83	15 200	N -S
Dec 5 Tue	ajisai	0735	0747	80	255 85	W -E
Dec 5 Tue	hy2b	0736	0742	45	350 237	N -SW
Dec 5 Tue	starlette	0751	0756	31	163 98	S -E
Dec 5 Tue	swarma	0838	0842	45	27 155	NE-SE
Dec 5 Tue	swarmc	0838	0842	54	24 161	NE-S
Dec 5 Tue	lares	0852	0903	52	341 114	N -SE
Dec 5 Tue	stella	0856	0903	84	15 199	N -S
Dec 5 Tue	hy2d	0858	0903	33	357 77	N -E
Dec 5 Tue	swot	0905	0912	55	166 31	S -NE
Dec 5 Tue	starlette	0937	0946	66	235 84	SW-E
Dec 5 Tue	ajisai	0937	0949	78	276 112	W -E
Dec 5 Tue	sentinel3b	0951	0956	37	48 149	NE-SE
Dec 5 Tue	lageos1	0952	1032	54	189 324	S -NW
Dec 5 Tue	icesat2	1001	1005	86	4 187	N -S
Dec 5 Tue	lageos2	1004	1053	86	276 102	W -E
Dec 5 Tue	sentinel3a	1029	1035	76	22 188	N -S
Dec 5 Tue	hy2d	1044	1052	79	318 149	NW-SE
Dec 5 Tue	lares	1050	1101	53	313 182	NW-S
Dec 5 Tue	swot	1051	1055	31	274 341	W -N
Dec 5 Tue	lares2	1121	1157	44	136 36	SE-NE
Dec 5 Tue	cryosat2	1122	1127	44	338 223	N -SW

Dec	5	Tue	starlette	1126	1135	78	268	96	W	-E
Dec	5	Tue	sentinel3b	1131	1136	38	341	242	N	-SW
Dec	5	Tue	ajisai	1139	1149	43	269	160	W	-S
Dec	5	Tue	starlette	1316	1324	59	272	133	W	-SE
Dec	5	Tue	jason3	1318	1328	53	179	49	S	-NE
Dec	5	Tue	lagesos2	1409	1450	54	297	176	NW	-S
Dec	5	Tue	sentinel6a	1421	1431	79	224	37	SW	-NE
Dec	5	Tue	laretts	1450	1455	52	34	169	NE	-S
Dec	5	Tue	lares2	1508	1556	71	232	37	SW	-NE
Dec	5	Tue	jason3	1514	1524	54	257	31	W	-NE
Dec	5	Tue	sentinel6a	1619	1627	36	292	25	W	-NE
Dec	5	Tue	gracefol	1626	1629	47	131	20	SE	-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer		
Dec	5	Tue	geoik2	1706	1713	62	137 353 SE-N	TS
Dec	5	Tue	jason3	1714	1719	29	323 20 NW-N	
Dec	5	Tue	paz	1716	1721	79	160 349 S -N	
Dec	5	Tue	hy2b	1741	1748	62	189 335 S -NW	
Dec	5	Tue	terrasarx	1744	1748	51	208 334 SW-NW	
Dec	5	Tue	tandemx	1744	1747	51	209 326 SW-NW	
Dec	5	Tue	swot	1802	1804	25	47 78 NE-E	
Dec	5	Tue	sentinel6a	1819	1824	28	341 36 N -NE	
Dec	5	Tue	saral	1826	1832	78	21 192 N -S	
Dec	5	Tue	stella	1842	1847	41	107 4 E -N	
Dec	5	Tue	geoik2	1851	1853	26	256 288 W -W	
Dec	5	Tue	jason3	1912	1919	32	345 63 N -NE	
Dec	5	Tue	lares2	1919	2005	55	309 90 NW-E	
Dec	5	Tue	hy2c	1932	1936	29	138 78 SE-E	
Dec	5	Tue	swot	1944	1951	68	334 177 NW-S	
Dec	5	Tue	sentinel3a	2015	2020	33	102 12 E -N	
Dec	5	Tue	sentinel6a	2015	2024	44	337 92 NW-E	
Dec	5	Tue	stella	2022	2026	33	233 312 SW-NW	
Dec	5	Tue	swarmc	2051	2055	41	142 22 SE-N	
Dec	5	Tue	swarma	2052	2055	36	117 27 SE-NE	
Dec	5	Tue	jason3	2108	2118	66	331 123 NW-SE	
Dec	5	Tue	sentinel3b	2116	2122	83	166 344 S -N	
Dec	5	Tue	hy2c	2117	2125	69	234 34 SW-NE	
Dec	5	Tue	sentinel3a	2154	2200	43	205 325 SW-NW	
Dec	5	Tue	lagesos1	2159	2242	67	34 192 NE-S	
Dec	5	Tue	sentinel6a	2211	2222	70	314 159 NW-S	
Dec	5	Tue	icesat2	2216	2218	32	253 317 W -NW	
Dec	5	Tue	cryosat2	2235	2241	68	186 349 S -N	
Dec	5	Tue	jason3	2304	2312	40	296 197 NW-S	
Dec	5	Tue	hy2c	2308	2311	27	327 10 NW-N	
Dec	5	Tue	lares2	2320	0007	72	328 179 NW-S	
Dec	5	Tue	lares	2351	2357	32	130 65 SE-NE	
Dec	6	Wed	beaconc	0023	0030	35	208 118 SW-SE	
Dec	6	Wed	swarmb	0042	0046	37	321 212 NW-SW	
Dec	6	Wed	lagesos1	0133	0212	60	38 268 NE-W	
Dec	6	Wed	lares	0145	0157	75	222 30 SW-NE	
Dec	6	Wed	laretts	0158	0204	76	170 343 S -N	
Dec	6	Wed	hy2d	0202	0209	48	173 52 S -NE	
Dec	6	Wed	beaconc	0216	0223	37	230 133 SW-SE	
Dec	6	Wed	hy2c	0245	0250	32	357 74 N -E	
Dec	6	Wed	lares	0347	0354	31	299 13 NW-N	



Dec 6 Wed	hy2d	0349	0356	47	264	26	W	-NE
Dec 6 Wed	saral	0410	0414	33	89	13	E	-N
Dec 6 Wed	lageos2	0412	0452	48	174	64	S	-NE
Dec 6 Wed	hy2c	0431	0439	85	320	146	NW	-SE
Dec 6 Wed	ajisai	0441	0450	40	187	89	S	-E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 6 Wed	lageos1	0500	0537	56	81 317 E	-NW MW
Dec 6 Wed	gracefol	0522	0523	27	281 252 W	-W
Dec 6 Wed	saral	0548	0554	42	207 327 SW	-NW
Dec 6 Wed	hy2b	0615	0622	53	39 172 NE	-S
Dec 6 Wed	paz	0616	0620	52	40 175 NE	-S
Dec 6 Wed	ajisai	0641	0653	75	242 81 SW	-E
Dec 6 Wed	tandemx	0643	0647	68	3 202 N	-S
Dec 6 Wed	terrasarx	0643	0647	66	3 202 N	-S
Dec 6 Wed	geoik2	0719	0726	70	6 212 N	-SW
Dec 6 Wed	lares	0749	0756	35	357 77 N	-E
Dec 6 Wed	hy2b	0759	0804	33	329 251 NW	-W
Dec 6 Wed	starlette	0808	0816	43	200 87 S	-E
Dec 6 Wed	lageos2	0808	0857	88	251 80 W	-E
Dec 6 Wed	swarmc	0812	0814	31	60 123 NE	-SE
Dec 6 Wed	lageos1	0826	0910	77	155 328 SE	-NW
Dec 6 Wed	stella	0830	0836	58	36 177 NE	-S
Dec 6 Wed	ajisai	0843	0855	84	272 102 W	-E
Dec 6 Wed	swot	0906	0913	62	172 26 S	-NE
Dec 6 Wed	hy2d	0916	0923	44	346 103 N	-E
Dec 6 Wed	icesat2	0936	0939	48	44 157 NE	-SE
Dec 6 Wed	lares	0946	0957	89	328 150 NW	-SE
Dec 6 Wed	starlette	0956	1005	74	249 86 W	-E
Dec 6 Wed	sentinel3a	1004	1009	48	48 164 NE	-S
Dec 6 Wed	cryosat2	1032	1037	73	17 175 N	-S
Dec 6 Wed	ajisai	1045	1056	55	273 142 W	-SE
Dec 6 Wed	hy2d	1103	1110	54	303 172 NW	-S
Dec 6 Wed	sentinel3b	1105	1111	57	356 218 N	-SW
Dec 6 Wed	sentinel3a	1144	1148	30	327 254 NW	-W
Dec 6 Wed	starlette	1146	1155	78	272 106 W	-E
Dec 6 Wed	lageos2	1214	1301	76	294 140 NW	-SE
Dec 6 Wed	sentinel6a	1249	1257	44	164 58 S	-NE
Dec 6 Wed	swarmb	1301	1304	39	239 334 SW	-NW
Dec 6 Wed	starlette	1335	1343	46	269 150 W	-SE
Dec 6 Wed	lares2	1335	1424	86	199 33 S	-NE
Dec 6 Wed	jason3	1340	1351	75	204 42 SW	-NE
Dec 6 Wed	sentinel6a	1444	1454	62	247 32 SW	-NE
Dec 6 Wed	larets	1527	1532	72	4 207 N	-SW
Dec 6 Wed	jason3	1537	1546	42	274 25 W	-NE
Dec 6 Wed	hy2b	1620	1626	40	112 9 E	-N
Dec 6 Wed	sentinel6a	1643	1650	31	310 27 NW	-NE

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 6 Wed	paz	1700	1703	51	120 5 SE-N	VS
Dec 6 Wed	geoik2	1721	1728	79	153 348 SE-N	
Dec 6 Wed	terrasarx	1726	1731	81	171 344 S -N	
Dec 6 Wed	tandemx	1726	1731	80	171 344 S -N	
Dec 6 Wed	jason3	1738	1742	28	339 24 N -NE	
Dec 6 Wed	lares2	1742	1827	52	287 63 W -NE	
Dec 6 Wed	saral	1755	1800	46	50 163 NE-S	
Dec 6 Wed	swot	1802	1805	28	35 85 NE-E	
Dec 6 Wed	hy2b	1803	1810	44	207 326 SW-NW	
Dec 6 Wed	stella	1817	1819	27	67 30 NE-NE	
Dec 6 Wed	sentinel6a	1842	1848	30	344 51 N -NE	
Dec 6 Wed	jason3	1935	1943	37	346 81 N -E	
Dec 6 Wed	saral	1935	1938	31	321 261 NW-W	
Dec 6 Wed	swot	1945	1952	60	327 184 NW-S	
Dec 6 Wed	hy2c	1949	1956	45	170 54 S -NE	
Dec 6 Wed	stella	1954	2000	54	192 329 S -NW	
Dec 6 Wed	swarmc	2026	2027	25	87 59 E -NE	
Dec 6 Wed	lageos1	2038	2114	44	42 157 NE-SE	
Dec 6 Wed	sentinel6a	2038	2048	57	334 114 NW-SE	
Dec 6 Wed	sentinel3b	2050	2056	58	136 355 SE-N	
Dec 6 Wed	sentinel3a	2128	2134	68	179 337 S -NW	
Dec 6 Wed	jason3	2130	2141	88	322 143 NW-SE	
Dec 6 Wed	hy2c	2136	2143	50	260 26 W -NE	
Dec 6 Wed	cryosat2	2145	2150	43	133 18 SE-N	
Dec 6 Wed	lares2	2148	2237	82	326 147 NW-SE	
Dec 6 Wed	icesat2	2149	2153	56	196 346 S -N	
Dec 6 Wed	swarmc	2200	2202	25	267 320 W -NW	
Dec 6 Wed	swarma	2200	2202	29	259 319 W -NW	
Dec 6 Wed	sentinel6a	2234	2243	49	302 183 NW-S	
Dec 6 Wed	cryosat2	2326	2328	27	270 309 W -NW	
Dec 6 Wed	jason3	2329	2332	26	266 233 W -SW	
Dec 6 Wed	beaconc	2339	2345	32	198 122 S -SE	
Dec 7 Thu	lageos1	0010	0053	75	33 241 NE-SW	
Dec 7 Thu	swarmb	0025	0029	52	338 205 N -SW	
Dec 7 Thu	lares	0041	0053	64	188 39 S -NE	
Dec 7 Thu	larets	0059	0102	30	79 17 E -N	
Dec 7 Thu	beaconc	0131	0139	39	232 126 SW-SE	
Dec 7 Thu	lares2	0149	0215	33	315 247 NW-SW	
Dec 7 Thu	hy2d	0220	0227	74	202 44 S -NE	
Dec 7 Thu	larets	0235	0239	39	215 314 SW-NW	
Dec 7 Thu	lageos2	0239	0248	25	111 88 E -E	
Dec 7 Thu	lares	0240	0250	45	261 18 W -N	
Dec 7 Thu	hy2c	0303	0309	42	346 92 N -E	
Dec 7 Thu	beaconc	0326	0329	27	220 180 SW-S	
Dec 7 Thu	lageos1	0340	0416	51	59 304 NE-NW	
Dec 7 Thu	ajisai	0349	0355	29	159 99 S -E	
Dec 7 Thu	hy2d	0408	0414	35	285 19 W -N	
Dec 7 Thu	hy2c	0450	0457	58	306 169 NW-S	
Dec 7 Thu	gracefol	0456	0500	45	327 206 NW-SW	
Dec 7 Thu	saral	0516	0523	77	173 341 S -N	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 7 Thu	ajisai	0547	0558	66	227 81 SW-E	RS
Dec 7 Thu	geoik2	0553	0557	30	71 135 E -SE	
Dec 7 Thu	paz	0559	0602	35	59 149 NE-SE	
Dec 7 Thu	lageos2	0613	0702	76	220 66 SW-NE	
Dec 7 Thu	tandemx	0626	0630	67	30 185 NE-S	
Dec 7 Thu	terrasarx	0626	0630	66	29 184 NE-S	
Dec 7 Thu	hy2b	0637	0644	76	25 188 NE-S	
Dec 7 Thu	lares	0645	0649	26	3 43 N -NE	
Dec 7 Thu	lageos1	0704	0747	79	126 327 SE-NW	
Dec 7 Thu	geoik2	0734	0741	55	359 224 N -SW	

Dec 7 Thu	ajisai	0748	0800	85	266	93	W -E
Dec 7 Thu	stella	0804	0808	36	60	144	NE-SE
Dec 7 Thu	starlette	0827	0835	55	218	85	SW-E
Dec 7 Thu	lares	0842	0852	57	342	117	N -SE
Dec 7 Thu	swot	0906	0913	74	185	24	S -NE
Dec 7 Thu	swarma	0919	0923	38	326	211	NW-SW
Dec 7 Thu	swarmc	0919	0922	34	318	226	NW-SW
Dec 7 Thu	hy2d	0934	0942	61	334	122	NW-SE
Dec 7 Thu	sentinel3a	0939	0942	30	77	134	E -SE
Dec 7 Thu	stella	0943	0948	39	345	243	N -SW
Dec 7 Thu	ajisai	0950	1002	66	278	128	W -SE
Dec 7 Thu	starlette	1016	1025	80	260	90	W -E
Dec 7 Thu	lageos2	1018	1107	88	281	109	W -E
Dec 7 Thu	sentinel3b	1039	1045	75	16	196	N -S
Dec 7 Thu	lares	1040	1050	47	307	190	NW-S
Dec 7 Thu	lageos1	1046	1119	39	216	318	SW-NW
Dec 7 Thu	sentinel3a	1117	1123	46	353	230	N -SW
Dec 7 Thu	cryosat2	1120	1125	40	337	227	NW-SW
Dec 7 Thu	hy2d	1122	1127	34	283	202	W -S
Dec 7 Thu	ajisai	1154	1200	30	250	189	W -S
Dec 7 Thu	starlette	1205	1214	70	274	119	W -SE
Dec 7 Thu	lares2	1207	1251	61	165	33	S -NE
Dec 7 Thu	jason3	1210	1216	32	135	67	SE-NE
Dec 7 Thu	swarmb	1244	1248	50	215	348	SW-N
Dec 7 Thu	sentinel6a	1310	1321	64	193	45	S -NE
Dec 7 Thu	starlette	1355	1401	34	257	173	W -S
Dec 7 Thu	jason3	1403	1413	77	228	36	SW-NE
Dec 7 Thu	lageos2	1423	1502	48	296	185	NW-S
Dec 7 Thu	larets	1427	1430	33	73	142	E -SE
Dec 7 Thu	sentinel6a	1507	1516	47	266	26	W -NE
Dec 7 Thu	jason3	1601	1609	35	295	26	NW-NE
Dec 7 Thu	lares2	1604	1651	59	256	45	W -NE
Dec 7 Thu	larets	1604	1608	35	327	240	NW-SW
Dec 7 Thu	hy2b	1642	1649	54	128	356	SE-N
Dec 7 Thu	paz	1643	1646	34	99	15	E -N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 7 Thu	sentinel6a	1707	1712	28	327 22	NW-N TS
Dec 7 Thu	tandemx	1709	1713	64	147 357	SE-N
Dec 7 Thu	terrasarx	1709	1713	64	148 357	SE-N
Dec 7 Thu	gracefol	1710	1714	36	224 339	SW-N
Dec 7 Thu	saral	1725	1727	26	87 123	E -SE
Dec 7 Thu	geoik2	1736	1743	81	168 341	S -N
Dec 7 Thu	jason3	1801	1806	28	343 38	N -NE
Dec 7 Thu	swot	1802	1807	33	23 106	NE-E
Dec 7 Thu	hy2b	1826	1831	31	231 310	SW-NW
Dec 7 Thu	saral	1903	1908	53	349 225	N -SW
Dec 7 Thu	sentinel6a	1905	1912	34	346 69	N -E
Dec 7 Thu	stella	1928	1934	83	165 344	S -N
Dec 7 Thu	swot	1946	1952	50	318 195	NW-S
Dec 7 Thu	jason3	1957	2006	46	338 95	N -E
Dec 7 Thu	hy2c	2007	2014	69	198 46	S -NE
Dec 7 Thu	lares2	2015	2102	63	320 114	NW-SE
Dec 7 Thu	sentinel3b	2025	2030	38	103 6	E -N
Dec 7 Thu	sentinel6a	2100	2111	77	325 133	NW-SE
Dec 7 Thu	sentinel3a	2102	2108	73	152 351	SE-N
Dec 7 Thu	icesat2	2123	2127	57	156 3	SE-N
Dec 7 Thu	swarmc	2133	2136	44	240 342	SW-N
Dec 7 Thu	swarma	2133	2136	52	226 345	SW-N
Dec 7 Thu	jason3	2153	2203	65	312 164	NW-S

Dec 7 Thu	hy2c	2155	2201	37	282	19	W -N
Dec 7 Thu	sentinel3b	2205	2209	37	230	314	SW-NW
Dec 7 Thu	cryosat2	2233	2239	65	190	347	S -N
Dec 7 Thu	lageos1	2248	2331	83	33	212	NE-SW
Dec 7 Thu	beaconc	2255	2300	30	188	127	S -SE
Dec 7 Thu	sentinel6a	2258	2304	32	281	211	W -SW
Dec 7 Thu	lares	2339	2347	36	147	59	SE-NE
Dec 8 Fri	swarmb	0009	0013	65	345	189	N -S
Dec 8 Fri	lares2	0014	0056	54	326	204	NW-SW
Dec 8 Fri	beaconc	0047	0054	40	225	127	SW-SE
Dec 8 Fri	hy2d	0054	0056	26	121	90	SE-E
Dec 8 Fri	larets	0134	0139	60	137	356	SE-N
Dec 8 Fri	lares	0135	0146	70	229	27	SW-NE
Dec 8 Fri	lageos1	0220	0257	54	45	285	NE-W
Dec 8 Fri	hy2d	0238	0246	74	230	36	SW-NE
Dec 8 Fri	beaconc	0241	0246	31	227	160	SW-S
Dec 8 Fri	hy2c	0321	0329	57	335	119	NW-SE
Dec 8 Fri	lares	0337	0343	29	305	8	NW-N
Dec 8 Fri	lageos2	0424	0506	54	183	63	S -NE
Dec 8 Fri	hy2d	0428	0432	28	313	12	NW-N
Dec 8 Fri	gracefol	0431	0435	67	355	185	N -S
Dec 8 Fri	saral	0445	0451	61	141	356	SE-N
Dec 8 Fri	ajisai	0453	0504	54	212	82	SW-E
Dec 8 Fri	hy2c	0509	0515	37	286	191	W -S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 8 Fri	lageos1	0545	0625	63	97 322 E	-NW MW
Dec 8 Fri	geoik2	0607	0613	38	49 152	NE-SE
Dec 8 Fri	tandemx	0609	0612	44	54 159	NE-S
Dec 8 Fri	terrasarx	0609	0612	44	53 159	NE-S
Dec 8 Fri	ajisai	0654	0706	81	257 86	W -E
Dec 8 Fri	hy2b	0659	0706	78	11 206	N -SW
Dec 8 Fri	starlette	0659	0704	33	171 101	S -E
Dec 8 Fri	paz	0716	0719	32	320 239	NW-SW
Dec 8 Fri	lares	0738	0747	37	351 90	N -E
Dec 8 Fri	geoik2	0750	0756	44	345 235	N -SW
Dec 8 Fri	hy2d	0806	0811	31	359 74	N -E
Dec 8 Fri	lageos2	0822	0911	86	258 84	W -E
Dec 8 Fri	starlette	0846	0855	68	236 83	SW-E
Dec 8 Fri	swarnc	0852	0856	60	343 196	N -S
Dec 8 Fri	swarma	0853	0857	72	341 187	N -S
Dec 8 Fri	ajisai	0856	0908	75	277 115	W -SE
Dec 8 Fri	swot	0907	0914	85	195 19	S -N
Dec 8 Fri	lageos1	0916	0958	61	177 326	S -NW
Dec 8 Fri	stella	0916	0922	62	3 218	N -SW
Dec 8 Fri	lares	0935	0947	79	325 157	NW-SE
Dec 8 Fri	hy2d	0952	1000	83	322 142	NW-SE
Dec 8 Fri	sentinel3b	1013	1019	55	34 173	NE-S
Dec 8 Fri	icesat2	1018	1021	44	321 217	NW-SW
Dec 8 Fri	cryosat2	1030	1035	78	12 179	N -S
Dec 8 Fri	starlette	1035	1044	83	268 98	W -E
Dec 8 Fri	lares2	1045	1118	38	126 38	SE-NE
Dec 8 Fri	sentinel3a	1051	1058	73	8 207	N -SW
Dec 8 Fri	ajisai	1058	1108	41	270 164	W -S
Dec 8 Fri	starlette	1224	1233	58	274 134	W -SE
Dec 8 Fri	swarmb	1227	1231	71	193 354	S -N
Dec 8 Fri	lageos2	1228	1314	71	295 148	NW-SE
Dec 8 Fri	jason3	1230	1239	47	172 56	S -NE
Dec 8 Fri	sentinel6a	1333	1343	81	216 39	SW-NE
Dec 8 Fri	jason3	1426	1436	59	251 32	W -NE
Dec 8 Fri	lares2	1428	1517	76	223 36	SW-NE
Dec 8 Fri	larets	1502	1508	63	25 185	NE-S

Dec 8 Fri sentinel6a 1531 1539 38 289 26 W -NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 8 Fri	jason3	1625	1631	30	313 20 NW-N	VS
Dec 8 Fri	gracefol	1645	1649	61	195 352 S -N	
Dec 8 Fri	tandemx	1653	1656	41	103 9 E -N	
Dec 8 Fri	terrasarx	1653	1656	42	105 9 E -N	
Dec 8 Fri	hy2b	1704	1711	75	149 348 SE-N	
Dec 8 Fri	sentinel6a	1731	1736	28	341 35 N -NE	
Dec 8 Fri	geoik2	1751	1759	63	181 337 S -NW	
Dec 8 Fri	paz	1800	1803	33	241 320 SW-NW	
Dec 8 Fri	swot	1803	1808	37	24 114 NE-SE	
Dec 8 Fri	jason3	1824	1830	30	346 54 N -NE	
Dec 8 Fri	saral	1831	1837	81	16 196 N -S	
Dec 8 Fri	lares2	1839	1925	53	304 83 NW-E	
Dec 8 Fri	stella	1901	1907	58	137 357 SE-N	
Dec 8 Fri	sentinel6a	1927	1936	41	338 88 N -E	
Dec 8 Fri	swot	1947	1953	43	309 200 NW-S	
Dec 8 Fri	sentinel3b	2001	2002	26	59 41 NE-NE	
Dec 8 Fri	jason3	2020	2030	60	334 117 NW-SE	
Dec 8 Fri	hy2c	2025	2033	77	226 37 SW-NE	
Dec 8 Fri	sentinel3a	2037	2042	48	119 4 SE-N	
Dec 8 Fri	icesat2	2058	2101	34	100 18 E -N	
Dec 8 Fri	swarmc	2106	2110	79	190 0 S -N	
Dec 8 Fri	swarma	2106	2110	73	178 4 S -N	
Dec 8 Fri	sentinel6a	2123	2134	78	317 152 NW-SE	
Dec 8 Fri	lageos1	2125	2206	59	36 181 NE-S	
Dec 8 Fri	sentinel3b	2138	2144	58	191 333 S -NW	
Dec 8 Fri	cryosat2	2143	2148	47	137 16 SE-N	
Dec 8 Fri	beaconc	2212	2215	27	167 132 S -SE	
Dec 8 Fri	hy2c	2215	2219	29	311 11 NW-N	
Dec 8 Fri	jason3	2216	2225	46	300 186 NW-S	
Dec 8 Fri	sentinel3a	2218	2221	30	246 303 SW-NW	
Dec 8 Fri	lares2	2241	2329	79	328 170 NW-S	
Dec 8 Fri	cryosat2	2324	2325	25	269 289 W -W	
Dec 8 Fri	swarmb	2352	2356	79	1 177 N -S	
Dec 9 Sat	beaconc	0003	0010	39	216 121 SW-SE	
Dec 9 Sat	lares	0031	0042	72	194 37 S -NE	
Dec 9 Sat	lageos1	0059	0139	64	36 259 NE-W	
Dec 9 Sat	hy2d	0110	0116	41	166 62 S -NE	

## OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 9 Sat	hy2c	0153	0157	30	358 60 N -NE	
Dec 9 Sat	beaconc	0156	0202	34	233 151 SW-SE	
Dec 9 Sat	larets	0210	0215	62	184 334 S -NW	
Dec 9 Sat	lares	0230	0240	41	268 20 W -N	
Dec 9 Sat	lageos2	0243	0307	31	136 75 SE-E	
Dec 9 Sat	hy2d	0257	0304	53	258 28 W -NE	
Dec 9 Sat	hy2c	0339	0347	82	324 138 NW-SE	
Dec 9 Sat	ajisai	0400	0409	42	191 89 S -E	
Dec 9 Sat	gracefol	0406	0410	50	22 162 N -S	
Dec 9 Sat	saral	0415	0419	35	101 17 E -N	
Dec 9 Sat	lageos1	0426	0503	54	73 314 E -NW	
Dec 9 Sat	hy2b	0539	0543	30	66 130 NE-SE	
Dec 9 Sat	tandemx	0552	0555	29	69 145 E -SE	
Dec 9 Sat	terrasarx	0552	0555	29	68 145 E -SE	
Dec 9 Sat	saral	0554	0559	39	218 320 SW-NW	
Dec 9 Sat	ajisai	0600	0612	76	245 82 SW-E	
Dec 9 Sat	geoik2	0622	0629	49	40 167 NE-S	RS
Dec 9 Sat	lageos2	0627	0716	81	228 69 SW-E	
Dec 9 Sat	lares	0635	0639	27	6 48 N -NE	
Dec 9 Sat	paz	0658	0702	48	351 222 N -SW	
Dec 9 Sat	starlette	0717	0724	45	198 89 S -E	
Dec 9 Sat	hy2b	0721	0728	57	359 223 N -SW	
Dec 9 Sat	lageos1	0752	0836	85	145 328 SE-NW	
Dec 9 Sat	ajisai	0802	0814	82	273 104 W -E	
Dec 9 Sat	geoik2	0805	0810	35	341 255 N -W	
Dec 9 Sat	hy2d	0824	0830	39	349 91 N -E	
Dec 9 Sat	swarmc	0826	0830	70	11 171 N -S	
Dec 9 Sat	swarma	0826	0830	57	16 164 N -S	
Dec 9 Sat	lares	0831	0842	62	337 125 NW-SE	
Dec 9 Sat	stella	0850	0856	74	20 193 N -S	
Dec 9 Sat	starlette	0905	0914	78	251 86 W -E	
Dec 9 Sat	swot	0907	0915	73	204 16 SW-N	
Dec 9 Sat	cryosat2	0940	0944	30	52 132 NE-SE	
Dec 9 Sat	sentinel3b	0948	0952	35	61 143 NE-SE	
Dec 9 Sat	icesat2	0951	0955	84	3 189 N -S	
Dec 9 Sat	ajisai	1004	1015	53	273 145 W -SE	
Dec 9 Sat	hy2d	1011	1018	62	307 165 NW-S	
Dec 9 Sat	sentinel3a	1025	1032	71	23 186 NE-S	
Dec 9 Sat	lares	1030	1039	42	301 198 NW-S	
Dec 9 Sat	lageos2	1032	1121	88	285 116 W -SE	
Dec 9 Sat	starlette	1054	1103	77	273 108 W -E	
Dec 9 Sat	cryosat2	1119	1123	37	321 231 NW-SW	
Dec 9 Sat	sentinel3b	1127	1132	39	346 243 N -SW	

## OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 9 Sat	sentinel6a	1201	1209	39	158 61 S -NE	
Dec 9 Sat	swarmb	1211	1215	74	175 4 S -N	
Dec 9 Sat	starlette	1244	1251	44	264 155 W -SE	
Dec 9 Sat	jason3	1252	1302	68	196 46 S -NE	

Dec 9 Sat	lares2	1257	1345	79	190	32	S -NE	
Dec 9 Sat	sentinel6a	1355	1406	68	237	34	SW-NE	
Dec 9 Sat	lageos2	1438	1513	42	293	195	NW-S	
Dec 9 Sat	jason3	1449	1458	46	270	26	W -NE	
Dec 9 Sat	larets	1539	1544	57	353	217	N -SW	
Dec 9 Sat	sentinel6a	1555	1601	32	309	19	NW-N	
Dec 9 Sat	gracefol	1620	1624	63	163	8	S -N	TS
Dec 9 Sat	geoik2	1625	1630	34	100	16	E -N	
Dec 9 Sat	lares2	1702	1747	53	280	57	W -NE	
Dec 9 Sat	hy2b	1726	1733	78	172	340	S -N	
Dec 9 Sat	paz	1742	1746	49	201	332	S -NW	
Dec 9 Sat	sentinel6a	1754	1759	29	345	41	N -NE	
Dec 9 Sat	saral	1800	1806	50	39	170	NE-S	
Dec 9 Sat	swot	1803	1809	42	11	123	N -SE	
Dec 9 Sat	geoik2	1807	1814	51	200	330	S -NW	
Dec 9 Sat	terrasarx	1810	1812	27	245	299	SW-NW	
Dec 9 Sat	tandemx	1810	1812	27	246	300	SW-NW	
Dec 9 Sat	stella	1835	1840	37	111	12	E -N	
Dec 9 Sat	jason3	1847	1854	35	348	71	N -E	
Dec 9 Sat	hy2c	1857	1903	39	163	64	S -NE	
Dec 9 Sat	saral	1941	1944	28	310	257	NW-W	
Dec 9 Sat	swot	1948	1953	37	299	211	NW-SW	
Dec 9 Sat	sentinel6a	1950	2000	53	337	109	NW-E	
Dec 9 Sat	lageos1	2005	2036	37	47	142	NE-SE	
Dec 9 Sat	sentinel3a	2012	2016	31	89	16	E -N	
Dec 9 Sat	stella	2015	2020	38	219	319	SW-NW	
Dec 9 Sat	swarma	2039	2043	46	149	21	SE-N	
Dec 9 Sat	swarmc	2039	2043	50	152	15	SE-N	
Dec 9 Sat	jason3	2042	2053	81	324	136	NW-SE	
Dec 9 Sat	hy2c	2044	2051	56	253	29	W -NE	
Dec 9 Sat	lares2	2109	2158	76	325	138	NW-SE	
Dec 9 Sat	sentinel3b	2112	2118	74	161	346	S -N	
Dec 9 Sat	sentinel6a	2146	2156	55	306	173	NW-S	
Dec 9 Sat	sentinel3a	2151	2156	47	210	325	SW-NW	
Dec 9 Sat	icesat2	2206	2208	31	256	318	W -NW	
Dec 9 Sat	cryosat2	2231	2237	61	194	345	S -N	
Dec 9 Sat	jason3	2240	2246	30	278	212	W -SW	
Dec 9 Sat	beaconc	2318	2326	38	216	116	SW-SE	
Dec 9 Sat	lares	2328	2337	41	156	54	SE-NE	
Dec 9 Sat	swarmb	2336	2340	61	21	165	N -S	
Dec 9 Sat	lageos1	2336	0019	81	33	232	NE-SW	
Dec 10 Sun	lares2	0109	0141	38	319	233	NW-SW	
Dec 10 Sun	larets	0110	0114	36	106	12	E -N	
Dec 10 Sun	beaconc	0111	0118	37	236	142	SW-SE	
Dec 10 Sun	lares	0125	0136	63	237	26	SW-NE	
Dec 10 Sun	hy2d	0128	0135	65	193	47	S -NE	

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 10 Sun	hy2c	0211	0217	38	349 88 N -E	
Dec 10 Sun	larets	0248	0251	31	242 308 SW-NW	
Dec 10 Sun	lageos1	0307	0343	52	54 298 NE-NW	
Dec 10 Sun	ajisai	0308	0314	31	162 99 S -E	
Dec 10 Sun	hy2d	0316	0322	38	281 20 W -N	
Dec 10 Sun	lares	0328	0332	28	320 2 NW-N	
Dec 10 Sun	gracefol	0342	0344	31	64 127 NE-SE	
Dec 10 Sun	hy2c	0358	0405	66	310 162 NW-S	
Dec 10 Sun	lageos2	0436	0520	60	193 63 S -NE	
Dec 10 Sun	ajisai	0506	0518	67	231 80 SW-E	
Dec 10 Sun	saral	0522	0528	65	180 337 S -NW	
Dec 10 Sun	hy2b	0600	0607	43	44 161 NE-S	
Dec 10 Sun	lageos1	0631	0713	73	116 326 SE-NW	RS
Dec 10 Sun	geoik2	0637	0644	62	30 177 NE-S	
Dec 10 Sun	paz	0641	0645	69	6 202 N -S	
Dec 10 Sun	ajisai	0707	0720	86	268 94 W -E	

Dec 10 Sun	tandemx	0709	0712	39	321	231	NW-SW
Dec 10 Sun	terrasarx	0709	0712	39	322	231	NW-SW
Dec 10 Sun	lares	0728	0737	40	353	96	N -E
Dec 10 Sun	starlette	0735	0744	59	223	83	SW-E
Dec 10 Sun	hy2b	0743	0749	41	350	245	N -SW
Dec 10 Sun	swarmc	0759	0803	38	30	147	NE-SE
Dec 10 Sun	swarma	0800	0803	34	54	140	NE-SE
Dec 10 Sun	stella	0823	0829	52	35	168	NE-S
Dec 10 Sun	lageos2	0836	0925	86	264	90	W -E
Dec 10 Sun	hy2d	0842	0849	55	337	112	NW-E
Dec 10 Sun	swot	0908	0915	69	214	11	SW-N
Dec 10 Sun	ajisai	0909	0921	64	278	131	W -SE
Dec 10 Sun	starlette	0924	0933	82	262	91	W -E
Dec 10 Sun	lares	0925	0936	73	322	164	NW-S
Dec 10 Sun	icesat2	0926	0929	50	46	160	NE-S
Dec 10 Sun	sentinel3a	1000	1005	45	47	159	NE-S
Dec 10 Sun	lageos1	1008	1046	46	201	322	S -NW
Dec 10 Sun	cryosat2	1028	1034	82	8	184	N -S
Dec 10 Sun	hy2d	1030	1036	40	287	187	W -S
Dec 10 Sun	sentinel3b	1101	1107	61	1	216	N -SW
Dec 10 Sun	starlette	1113	1122	66	275	122	W -SE
Dec 10 Sun	lares2	1130	1212	55	156	34	SE-NE
Dec 10 Sun	sentinel3a	1140	1144	32	333	256	NW-W
Dec 10 Sun	swarmb	1154	1158	59	159	14	S -N
Dec 10 Sun	sentinel6a	1223	1232	57	181	50	S -NE
Dec 10 Sun	lageos2	1241	1326	66	297	157	NW-SE
Dec 10 Sun	starlette	1304	1309	32	250	180	W -S
Dec 10 Sun	jason3	1314	1325	83	219	38	SW-NE
Dec 10 Sun	sentinel6a	1419	1429	52	261	32	W -NE
Dec 10 Sun	larets	1438	1443	42	47	161	NE-S
Dec 10 Sun	jason3	1513	1521	37	292	26	W -NE
Dec 10 Sun	lares2	1524	1612	63	247	43	SW-NE
Dec 10 Sun	gracefol	1556	1559	38	118	24	SE-NE
Dec 10 Sun	hy2b	1606	1611	32	96	16	E -N
Dec 10 Sun	geoik2	1640	1646	42	112	4	E -N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 10 Sun	jason3	1713	1718	28	343 37 N -NE	AS
Dec 10 Sun	paz	1725	1729	76	173 344 S -N	
Dec 10 Sun	saral	1730	1733	29	76 132 E -SE	
Dec 10 Sun	hy2b	1748	1755	56	193 330 S -NW	
Dec 10 Sun	terrasarx	1752	1756	39	210 326 SW-NW	
Dec 10 Sun	tandemx	1752	1756	39	211 327 SW-NW	
Dec 10 Sun	swot	1803	1810	50	1 132 N -SE	
Dec 10 Sun	stella	1811	1812	25	59 41 NE-NE	
Dec 10 Sun	sentinel6a	1817	1823	32	347 58 N -NE	
Dec 10 Sun	geoik2	1823	1828	40	221 316 SW-NW	
Dec 10 Sun	saral	1908	1914	46	351 226 N -SW	
Dec 10 Sun	jason3	1909	1918	43	339 91 N -E	
Dec 10 Sun	hy2c	1915	1922	60	189 49 S -NE	
Dec 10 Sun	lares2	1935	2022	59	316 105 NW-E	
Dec 10 Sun	stella	1948	1954	61	188 334 S -NW	
Dec 10 Sun	swot	1949	1953	31	290 223 W -SW	
Dec 10 Sun	sentinel6a	2012	2023	70	328 127 NW-SE	
Dec 10 Sun	swarmc	2013	2016	31	115 33 SE-NE	
Dec 10 Sun	swarma	2014	2016	27	90 39 E -NE	
Dec 10 Sun	sentinel3b	2046	2052	55	135 358 SE-N	
Dec 10 Sun	hy2c	2103	2109	40	278 21 W -N	
Dec 10 Sun	jason3	2105	2115	73	315 157 NW-SE	
Dec 10 Sun	sentinel3a	2124	2131	75	174 340 S -N	
Dec 10 Sun	icesat2	2139	2143	58	200 346 S -N	
Dec 10 Sun	cryosat2	2141	2147	50	142 8 SE-N	
Dec 10 Sun	sentinel6a	2209	2217	37	293 198 NW-S	
Dec 10 Sun	lageos1	2213	2257	75	33 203 NE-SW	
Dec 10 Sun	sentinel3b	2229	2230	25	272 290 W -W	
Dec 10 Sun	beaconc	2234	2241	36	206 118 SW-SE	
Dec 10 Sun	swarmb	2319	2323	45	26 151 NE-SE	



Dec 10 Sun	lares2	2335	0019	61	327 195	NW-S
Dec 11 Mon	lares	0020	0032	78	202 35	S -NE
Dec 11 Mon	beaconc	0027	0034	40	230 134	SW-SE
Dec 11 Mon	hy2d	0146	0154	83	221 38	SW-NE
Dec 11 Mon	larets	0146	0151	76	152 350	SE-N
Dec 11 Mon	lageos1	0147	0225	57	40 276	NE-W
Dec 11 Mon	lares	0221	0229	38	283 15	W -N
Dec 11 Mon	beaconc	0222	0224	26	216 190	SW-S
Dec 11 Mon	hy2c	0229	0236	51	338 108	N -E
Dec 11 Mon	lageos2	0252	0323	36	150 69	SE-E
Dec 11 Mon	hy2d	0336	0340	30	312 13	NW-N
Dec 11 Mon	ajisai	0412	0423	56	215 82	SW-E
Dec 11 Mon	hy2c	0417	0423	43	290 185	W -S
Dec 11 Mon	gracefo1	0451	0454	33	309 224	NW-SW
Dec 11 Mon	saral	0451	0457	66	144 352	SE-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 11 Mon	lageos1	0512	0551	59	89 320 E	-NW VS
Dec 11 Mon	starlette	0607	0613	34	178 95 S	-E
Dec 11 Mon	ajisai	0613	0625	83	259 88 W	-E
Dec 11 Mon	hy2b	0622	0629	60	32 176 NE	-S
Dec 11 Mon	paz	0624	0628	59	28 183 NE	-S
Dec 11 Mon	lares	0624	0630	29	0 62 N	-NE
Dec 11 Mon	lageos2	0640	0729	85	236 72 SW	-E
Dec 11 Mon	tandemx	0651	0655	58	357 213 N	-SW
Dec 11 Mon	terrasarx	0651	0655	59	357 213 N	-SW
Dec 11 Mon	geoik2	0652	0700	73	21 191 N	-S
Dec 11 Mon	starlette	0754	0803	71	240 84 SW	-E
Dec 11 Mon	stella	0758	0802	32	70 144 E	-SE
Dec 11 Mon	hy2b	0806	0810	30	333 268 NW	-W
Dec 11 Mon	ajisai	0815	0827	74	277 117 W	-SE
Dec 11 Mon	lares	0821	0832	69	336 132 NW	-SE
Dec 11 Mon	lageos1	0841	0924	69	166 327 S	-NW
Dec 11 Mon	hy2d	0900	0908	76	326 135 NW	-SE
Dec 11 Mon	swarma	0908	0910	30	291 231 W	-SW
Dec 11 Mon	swot	0909	0916	59	225 8 SW	-N
Dec 11 Mon	stella	0937	0942	44	343 234 N	-SW
Dec 11 Mon	cryosat2	0938	0942	33	49 134 NE	-SE
Dec 11 Mon	starlette	0943	0953	78	270 99 W	-E
Dec 11 Mon	lares2	1011	1038	33	112 41 E	-NE
Dec 11 Mon	ajisai	1018	1027	39	263 167 W	-S
Dec 11 Mon	lares	1020	1028	37	295 206 NW	-SW
Dec 11 Mon	sentinel3b	1035	1041	81	18 193 N	-S
Dec 11 Mon	lageos2	1046	1134	85	288 123 W	-SE
Dec 11 Mon	sentinel3a	1114	1119	50	347 229 N	-SW
Dec 11 Mon	cryosat2	1117	1121	34	320 234 NW	-SW
Dec 11 Mon	starlette	1133	1141	55	270 138 W	-SE
Dec 11 Mon	swarmb	1138	1142	45	134 18 SE	-N
Dec 11 Mon	jason3	1143	1151	41	159 59 S	-NE
Dec 11 Mon	sentinel6a	1245	1255	77	208 41 SW	-NE
Dec 11 Mon	jason3	1337	1348	65	241 34 SW	-NE
Dec 11 Mon	lares2	1349	1438	82	214 34 SW	-NE
Dec 11 Mon	sentinel6a	1442	1451	41	278 26 W	-NE
Dec 11 Mon	lageos2	1453	1523	36	289 208 W	-SW
Dec 11 Mon	larets	1514	1520	72	16 195 N	-S
Dec 11 Mon	jason3	1537	1543	31	311 21 NW	-N
Dec 11 Mon	hy2b	1628	1634	44	109 2 E	-N

OBSERVING SCHEDULE (Times are in U.T.)							
Date	Satellite	Start	End	Elev	Direction	Observer	
Dec 11 Mon	geoik2	1655	1701	52	125 0 SE-N	MW	
Dec 11 Mon	gracefo1	1706	1708	27	268 321 W -NW		
Dec 11 Mon	paz	1708	1712	63	136 354 SE-N		
Dec 11 Mon	terrasarx	1735	1739	60	189 338 S -N		
Dec 11 Mon	tandemx	1735	1739	62	190 338 S -N		
Dec 11 Mon	jason3	1736	1741	29	346 43 N -NE		
Dec 11 Mon	lares2	1759	1844	52	298 75 NW-E		
Dec 11 Mon	swot	1804	1811	58	359 141 N -SE		
Dec 11 Mon	hy2b	1811	1817	39	219 321 SW-NW		
Dec 11 Mon	saral	1837	1843	79	11 201 N -S		
Dec 11 Mon	sentinel6a	1839	1847	39	340 78 N -E		
Dec 11 Mon	geoik2	1839	1843	31	241 307 SW-NW		
Dec 11 Mon	stella	1921	1927	79	157 347 SE-N		
Dec 11 Mon	jason3	1932	1942	55	337 112 NW-E		
Dec 11 Mon	hy2c	1933	1941	82	217 39 SW-NE		
Dec 11 Mon	swot	1950	1953	27	282 235 W -SW		
Dec 11 Mon	sentinel3b	2021	2026	36	105 10 E -N		
Dec 11 Mon	sentinel6a	2035	2046	85	320 146 NW-SE		
Dec 11 Mon	lageos1	2051	2130	51	38 169 NE-S		
Dec 11 Mon	sentinel3a	2058	2105	70	149 351 SE-N		
Dec 11 Mon	icesat2	2113	2117	66	155 1 SE-N		
Dec 11 Mon	swarma	2121	2124	40	242 339 SW-N		
Dec 11 Mon	swarmc	2121	2124	34	254 338 W -N		
Dec 11 Mon	hy2c	2122	2127	31	296 13 NW-N		
Dec 11 Mon	jason3	2128	2137	52	303 179 NW-S		
Dec 11 Mon	beaconc	2150	2156	33	195 122 S -SE		
Dec 11 Mon	sentinel3b	2201	2206	39	223 323 SW-NW		
Dec 11 Mon	lares2	2203	2251	86	327 162 NW-S		
Dec 11 Mon	cryosat2	2230	2235	57	207 342 SW-N		
Dec 11 Mon	swarmb	2303	2306	35	48 135 NE-SE		
Dec 11 Mon	lares	2317	2327	46	165 49 S -NE		
Dec 11 Mon	beaconc	2342	2350	41	231 126 SW-SE		
Dec 12 Tue	hy2d	0019	0024	36	147 65 SE-NE		
Dec 12 Tue	lageos1	0025	0106	69	34 250 NE-W		
Dec 12 Tue	hy2c	0101	0105	27	360 58 N -NE		
Dec 12 Tue	lares	0115	0125	57	246 23 SW-NE		
Dec 12 Tue	beaconc	0136	0141	30	233 170 SW-S		
Dec 12 Tue	hy2d	0204	0212	59	244 30 SW-NE		
Dec 12 Tue	lares2	0210	0216	25	297 282 NW-W		
Dec 12 Tue	larets	0222	0227	49	196 326 S -NW		
Dec 12 Tue	hy2c	0247	0255	73	327 131 NW-SE		
Dec 12 Tue	lares	0318	0322	26	325 5 NW-N		
Dec 12 Tue	ajisai	0319	0329	44	194 84 S -E		
Dec 12 Tue	lageos1	0353	0430	52	66 309 NE-NW		
Dec 12 Tue	hy2d	0356	0357	25	339 353 N -N		
Dec 12 Tue	saral	0420	0425	39	112 9 E -N		
Dec 12 Tue	gracefo1	0426	0430	57	332 197 NW-S		
Dec 12 Tue	hy2c	0436	0439	27	271 226 W -SW		
Dec 12 Tue	lageos2	0500	0534	65	202 63 S -NE		
Dec 12 Tue	ajisai	0519	0531	77	248 83 W -E		
Dec 12 Tue	saral	0600	0604	34	229 312 SW-NW		
Dec 12 Tue	paz	0607	0611	42	50 167 NE-S		

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 12 Tue	starlette	0625	0633	47	205 86 SW-E	CP
Dec 12 Tue	tandemx	0634	0638	70	16 193 N -S	
Dec 12 Tue	terrasarx	0634	0638	73	16 193 N -S	
Dec 12 Tue	hy2b	0644	0652	80	19 195 N -S	
Dec 12 Tue	geoik2	0708	0715	80	12 203 N -SW	
Dec 12 Tue	lares	0717	0727	44	347 103 N -E	
Dec 12 Tue	lageos1	0718	0801	86	135 328 SE-NW	
Dec 12 Tue	ajisai	0721	0733	80	274 106 W -E	
Dec 12 Tue	swot	0727	0731	30	121 54 SE-NE	
Dec 12 Tue	hy2d	0732	0738	36	351 87 N -E	
Dec 12 Tue	starlette	0813	0822	77	254 87 W -E	
Dec 12 Tue	swarmc	0840	0844	45	332 205 NW-SW	
Dec 12 Tue	swarma	0840	0844	55	340 201 N -S	
Dec 12 Tue	lageos2	0850	0939	85	270 95 W -E	
Dec 12 Tue	stella	0910	0916	66	5 210 N -SW	
Dec 12 Tue	swot	0910	0916	50	236 1 SW-N	
Dec 12 Tue	lares	0915	0926	65	317 169 NW-S	
Dec 12 Tue	hy2d	0919	0926	71	312 157 NW-SE	
Dec 12 Tue	ajisai	0923	0934	50	273 149 W -SE	
Dec 12 Tue	starlette	1003	1012	75	273 110 W -E	
Dec 12 Tue	icesat2	1007	1011	41	336 216 NW-SW	
Dec 12 Tue	sentinel3b	1009	1015	53	34 169 NE-S	
Dec 12 Tue	cryosat2	1026	1032	81	4 187 N -S	
Dec 12 Tue	sentinel3a	1048	1054	75	8 204 N -SW	
Dec 12 Tue	lageos1	1105	1131	32	234 311 SW-NW	
Dec 12 Tue	sentinel6a	1114	1121	34	144 64 SE-NE	
Dec 12 Tue	swarmb	1122	1125	33	107 28 E -NE	
Dec 12 Tue	starlette	1152	1200	42	267 155 W -SE	
Dec 12 Tue	jason3	1204	1214	60	189 48 S -NE	
Dec 12 Tue	lares2	1219	1306	73	181 32 S -NE	
Dec 12 Tue	lageos2	1255	1339	60	297 165 NW-S	
Dec 12 Tue	sentinel6a	1307	1318	75	230 36 SW-NE	
Dec 12 Tue	jason3	1401	1410	49	265 27 W -NE	
Dec 12 Tue	sentinel6a	1506	1513	34	298 20 NW-N	
Dec 12 Tue	larets	1551	1556	45	345 227 N -SW	
Dec 12 Tue	lares2	1621	1707	55	271 52 W -NE	
Dec 12 Tue	gracefol	1640	1644	46	219 345 SW-N	
Dec 12 Tue	hy2b	1649	1656	61	137 355 SE-N	
Dec 12 Tue	paz	1651	1654	41	108 11 E -N	

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 12 Tue	sentinel6a	1706	1711	28	345 41 N -NE	RS
Dec 12 Tue	geoik2	1710	1717	66	141 351 SE-N	
Dec 12 Tue	tandemx	1718	1722	77	156 349 SE-N	
Dec 12 Tue	terrasarx	1718	1722	75	157 349 SE-N	
Dec 12 Tue	jason3	1759	1806	33	349 69 N -E	
Dec 12 Tue	swot	1805	1812	66	355 150 N -SE	
Dec 12 Tue	saral	1805	1811	56	32 172 NE-S	
Dec 12 Tue	hy2c	1806	1811	33	146 67 SE-NE	
Dec 12 Tue	hy2b	1834	1838	28	242 303 SW-NW	
Dec 12 Tue	stella	1855	1901	51	127 358 SE-N	
Dec 12 Tue	geoik2	1856	1857	25	272 287 W -W	

Dec 12 Tue	sentinel6a	1902	1911	48	339	99	N -E
Dec 12 Tue	lageos1	1934	1956	30	57	122	NE-SE
Dec 12 Tue	saral	1946	1948	26	319	281	NW-W
Dec 12 Tue	hy2c	1951	1959	63	240	31	SW-NE
Dec 12 Tue	jason3	1954	2005	73	327	130	NW-SE
Dec 12 Tue	lares2	2030	2118	71	324	129	NW-SE
Dec 12 Tue	sentinel3a	2033	2039	44	120	1	SE-N
Dec 12 Tue	stella	2037	2039	27	261	297	W -NW
Dec 12 Tue	icesat2	2047	2050	36	120	25	SE-NE
Dec 12 Tue	swarmc	2053	2057	63	200	350	S -N
Dec 12 Tue	swarma	2054	2058	71	198	358	S -N
Dec 12 Tue	sentinel6a	2058	2108	62	309	166	NW-S
Dec 12 Tue	beaconc	2106	2112	30	185	117	S -SE
Dec 12 Tue	sentinel3b	2134	2140	62	185	334	S -NW
Dec 12 Tue	cryosat2	2139	2145	53	146	7	SE-N
Dec 12 Tue	hy2c	2143	2145	25	338	6	N -N
Dec 12 Tue	jason3	2151	2158	35	290	207	W -SW
Dec 12 Tue	sentinel3a	2214	2218	31	240	313	SW-NW
Dec 12 Tue	lares	2218	2220	25	102	82	E -E
Dec 12 Tue	swarmb	2247	2249	26	70	119	E -SE
Dec 12 Tue	beaconc	2258	2306	41	223	120	SW-SE
Dec 12 Tue	lageos1	2302	2345	88	32	222	NE-SW
Dec 13 Wed	lares	0010	0021	87	209	33	SW-NE
Dec 13 Wed	swarmb	0022	0024	27	288	238	W -SW
Dec 13 Wed	lares2	0029	0105	44	323	223	NW-SW
Dec 13 Wed	hy2d	0036	0043	56	184	50	S -NE
Dec 13 Wed	beaconc	0051	0058	34	238	151	SW-SE
Dec 13 Wed	hy2c	0119	0125	34	351	84	N -E
Dec 13 Wed	larets	0122	0126	45	116	7	SE-N
Dec 13 Wed	lares	0211	0219	35	290	17	W -N
Dec 13 Wed	hy2d	0224	0230	42	277	22	W -N
Dec 13 Wed	ajisai	0226	0234	33	173	92	S -E
Dec 13 Wed	lageos1	0234	0310	52	48	292	NE-W
Dec 13 Wed	lageos2	0302	0338	42	162	65	S -NE
Dec 13 Wed	hy2c	0306	0314	75	315	152	NW-SE
Dec 13 Wed	gracefol	0401	0405	75	8	177	N -S
Dec 13 Wed	ajisai	0425	0437	69	234	80	SW-E
Dec 13 Wed	starlette	0458	0501	26	150	112	SE-E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 13 Wed	saral	0528	0534	63	190 336	S -NW TS
Dec 13 Wed	geoik2	0543	0544	25	93 108	E -E
Dec 13 Wed	paz	0550	0553	29	66 143	NE-SE
Dec 13 Wed	lageos1	0558	0639	68	107 325	E -NW
Dec 13 Wed	lares	0613	0620	31	354 68	N -E
Dec 13 Wed	terrasarx	0617	0621	51	37 174	NE-S
Dec 13 Wed	tandemx	0617	0621	51	38 174	NE-S
Dec 13 Wed	ajisai	0627	0639	85	269 96	W -E
Dec 13 Wed	starlette	0644	0652	60	224 85	SW-E
Dec 13 Wed	lageos2	0654	0743	88	243 75	SW-E
Dec 13 Wed	hy2b	0706	0714	69	8 210	N -SW
Dec 13 Wed	geoik2	0723	0730	66	3 215	N -SW
Dec 13 Wed	swot	0727	0732	36	136 47	SE-NE
Dec 13 Wed	hy2d	0750	0757	49	341 106	N -E
Dec 13 Wed	lares	0810	0822	74	332 139	NW-SE
Dec 13 Wed	swarmc	0813	0818	86	356 180	N -S
Dec 13 Wed	swarma	0814	0818	74	4 175	N -S
Dec 13 Wed	ajisai	0829	0840	62	275 134	W -SE
Dec 13 Wed	starlette	0833	0842	80	263 92	W -E
Dec 13 Wed	stella	0843	0850	74	23 188	NE-S
Dec 13 Wed	swot	0911	0917	43	248 360	W -N
Dec 13 Wed	lageos1	0932	1012	53	189 324	S -NW
Dec 13 Wed	cryosat2	0936	0940	36	46 136	NE-SE
Dec 13 Wed	hy2d	0937	0944	46	301 181	NW-S

Dec 13	Wed	icesat2	0941	0945	66	1	190	N	-S
Dec 13	Wed	sentinel3b	0944	0948	33	58	137	NE	-SE
Dec 13	Wed	lares	1010	1017	32	288	214	W	-SW
Dec 13	Wed	sentinel3a	1022	1028	65	30	182	NE	-S
Dec 13	Wed	starlette	1022	1031	66	274	123	W	-SE
Dec 13	Wed	lares2	1054	1133	48	145	35	SE	-NE
Dec 13	Wed	lageos2	1100	1148	81	291	131	W	-SE
Dec 13	Wed	cryosat2	1115	1119	32	320	238	NW	-SW
Dec 13	Wed	sentinel3b	1124	1129	42	338	234	N	-SW
Dec 13	Wed	sentinel6a	1135	1144	50	174	53	S	-NE
Dec 13	Wed	starlette	1212	1217	30	254	187	W	-S
Dec 13	Wed	jason3	1226	1237	82	212	40	SW	-NE
Dec 13	Wed	sentinel6a	1330	1341	56	251	33	W	-NE
Dec 13	Wed	jason3	1424	1433	39	281	27	W	-NE
Dec 13	Wed	lares2	1444	1532	67	238	39	SW	-NE
Dec 13	Wed	larets	1450	1455	53	39	171	NE	-S
Dec 13	Wed	lageos2	1509	1531	31	282	224	W	-SW
Dec 13	Wed	sentinel6a	1530	1536	30	316	23	NW	-NE
Dec 13	Wed	gracefo1	1615	1619	70	183	358	S	-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer	
Dec 13	Wed	terrasarx	1701	1705	51	125 359 SE-N	MW
Dec 13	Wed	tandemx	1701	1705	51	123 359 SE-N	
Dec 13	Wed	hy2b	1711	1718	82	157 346 SE-N	
Dec 13	Wed	geoik2	1725	1732	83	157 346 SE-N	
Dec 13	Wed	sentinel6a	1729	1735	31	348 57 N -NE	
Dec 13	Wed	saral	1735	1739	31	65 141 NE-SE	
Dec 13	Wed	swot	1805	1812	76	347 156 N -SE	
Dec 13	Wed	paz	1808	1810	28	243 298 SW-NW	
Dec 13	Wed	jason3	1821	1830	40	340 87 N -E	
Dec 13	Wed	hy2c	1823	1830	52	180 52 S -NE	
Dec 13	Wed	stella	1829	1834	33	101 10 E -N	
Dec 13	Wed	lares2	1856	1942	56	313 97 NW-E	
Dec 13	Wed	saral	1914	1919	43	342 234 N -SW	
Dec 13	Wed	sentinel6a	1924	1935	63	330 121 NW-SE	
Dec 13	Wed	stella	2008	2014	42	206 325 SW-NW	
Dec 13	Wed	sentinel3a	2008	2012	29	92 20 E -N	
Dec 13	Wed	hy2c	2010	2017	45	263 23 W -NE	
Dec 13	Wed	jason3	2017	2027	80	319 150 NW-SE	
Dec 13	Wed	beaconc	2023	2026	27	164 131 S -SE	
Dec 13	Wed	swarma	2027	2031	54	158 13 S -N	
Dec 13	Wed	swarmc	2027	2031	68	164 8 S -N	
Dec 13	Wed	sentinel3b	2108	2114	79	157 348 SE-N	
Dec 13	Wed	sentinel6a	2121	2129	43	296 193 NW-S	
Dec 13	Wed	lageos1	2139	2222	67	34 192 NE-S	
Dec 13	Wed	sentinel3a	2147	2153	50	203 331 SW-NW	
Dec 13	Wed	icesat2	2155	2158	32	239 324 SW-NW	
Dec 13	Wed	beaconc	2213	2221	40	222 121 SW-SE	
Dec 13	Wed	cryosat2	2228	2233	53	211 339 SW-N	
Dec 13	Wed	lares2	2256	2342	67	327 185 NW-S	
Dec 13	Wed	lares	2307	2317	52	169 44 S -NE	
Dec 14	Thu	swarmb	0005	0008	35	304 220 NW-SW	
Dec 14	Thu	beaconc	0007	0014	37	232 142 SW-SE	
Dec 14	Thu	hy2d	0054	0102	82	212 40 SW-NE	
Dec 14	Thu	lares	0104	0115	53	249 23 W -NE	
Dec 14	Thu	lageos1	0113	0152	60	38 268 NE-W	
Dec 14	Thu	hy2c	0137	0144	46	341 103 N -E	
Dec 14	Thu	larets	0158	0203	82	169 343 S -N	

Dec 14 Thu	hy2d	0243	0248	32	296	15	NW-N
Dec 14 Thu	lares	0309	0311	25	340	360	N -N
Dec 14 Thu	hy2c	0324	0331	49	303	178	NW-S
Dec 14 Thu	ajisai	0331	0342	58	219	82	SW-E
Dec 14 Thu	gracefol	0336	0340	44	35	156	NE-SE
Dec 14 Thu	lageos1	0439	0517	56	81	317	E -NW
Dec 14 Thu	saral	0456	0502	73	152	351	SE-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction		Observer
Dec 14 Thu	lageos2	0501	0548	71	211	64	SW-NE AS
Dec 14 Thu	starlette	0515	0522	37	186	90	S -E
Dec 14 Thu	ajisai	0532	0544	85	261	89	W -E
Dec 14 Thu	hy2b	0546	0551	34	58	141	NE-SE
Dec 14 Thu	geoik2	0557	0601	32	71	138	E -SE
Dec 14 Thu	terrasarx	0600	0603	35	54	146	NE-SE
Dec 14 Thu	tandemx	0600	0603	35	56	147	NE-SE
Dec 14 Thu	hy2d	0623	0625	26	17	47	N -NE
Dec 14 Thu	starlette	0703	0712	71	241	83	SW-E
Dec 14 Thu	lares	0706	0716	48	342	105	N -E
Dec 14 Thu	paz	0707	0710	40	324	231	NW-SW
Dec 14 Thu	swot	0727	0733	42	150	40	SE-NE
Dec 14 Thu	hy2b	0728	0735	50	358	230	N -SW
Dec 14 Thu	ajisai	0734	0746	73	278	120	W -SE
Dec 14 Thu	geoik2	0738	0745	52	357	226	N -SW
Dec 14 Thu	swarmc	0747	0751	50	27	158	NE-S
Dec 14 Thu	swarma	0747	0751	42	27	151	NE-SE
Dec 14 Thu	lageos1	0806	0850	77	155	328	SE-NW
Dec 14 Thu	hy2d	0808	0816	68	329	128	NW-SE
Dec 14 Thu	stella	0817	0823	45	43	165	NE-S
Dec 14 Thu	starlette	0852	0901	82	270	101	W -E
Dec 14 Thu	lares	0904	0915	59	316	177	NW-S
Dec 14 Thu	lageos2	0904	0953	86	275	102	W -E
Dec 14 Thu	swot	0912	0917	38	259	351	W -N
Dec 14 Thu	icesat2	0915	0919	49	32	165	NE-S
Dec 14 Thu	ajisai	0937	0945	37	263	176	W -S
Dec 14 Thu	sentinel3a	0956	1001	41	45	153	NE-SE
Dec 14 Thu	stella	0957	1001	32	336	259	NW-W
Dec 14 Thu	cryosat2	1024	1030	76	1	191	N -S
Dec 14 Thu	starlette	1041	1050	53	272	139	W -SE
Dec 14 Thu	jason3	1055	1103	36	154	61	SE-NE
Dec 14 Thu	sentinel3b	1057	1104	66	5	211	N -SW
Dec 14 Thu	sentinel3a	1136	1141	35	338	246	N -SW
Dec 14 Thu	sentinel6a	1157	1207	71	199	44	S -NE
Dec 14 Thu	swarmb	1223	1227	35	233	339	SW-N
Dec 14 Thu	jason3	1249	1300	71	234	35	SW-NE
Dec 14 Thu	lageos2	1309	1351	54	297	174	NW-S
Dec 14 Thu	lares2	1311	1359	88	206	33	SW-NE
Dec 14 Thu	sentinel6a	1354	1403	44	274	27	W -NE
Dec 14 Thu	jason3	1448	1455	33	301	21	NW-N
Dec 14 Thu	larets	1526	1532	67	8	205	N -SW
Dec 14 Thu	gracefol	1550	1554	49	148	13	SE-N

## OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 14 Thu	tandemx	1644	1647	34	103 17 E -N	RS
Dec 14 Thu	terrasarx	1644	1647	34	105 18 E -N	
Dec 14 Thu	lares2	1719	1804	52	292 68 W -E	
Dec 14 Thu	hy2b	1733	1741	69	178 338 S -N	
Dec 14 Thu	geoik2	1740	1747	77	172 339 S -N	
Dec 14 Thu	paz	1750	1754	40	209 327 SW-NW	
Dec 14 Thu	sentinel6a	1751	1759	36	341 75 N -E	
Dec 14 Thu	swot	1806	1813	88	341 164 N -S	
Dec 14 Thu	hy2c	1841	1849	77	208 42 SW-NE	
Dec 14 Thu	saral	1842	1848	73	8 206 N -SW	
Dec 14 Thu	jason3	1844	1853	51	339 103 N -E	
Dec 14 Thu	stella	1941	1948	70	177 339 S -N	
Dec 14 Thu	sentinel6a	1947	1958	83	323 140 NW-SE	
Dec 14 Thu	swarmc	2001	2004	38	113 24 SE-NE	
Dec 14 Thu	swarma	2001	2004	34	118 30 SE-NE	
Dec 14 Thu	lageos1	2018	2054	44	42 157 NE-SE	
Dec 14 Thu	hy2c	2030	2035	34	294 14 NW-N	
Dec 14 Thu	jason3	2040	2050	59	306 169 NW-S	
Dec 14 Thu	sentinel3b	2043	2048	52	124 2 SE-N	
Dec 14 Thu	sentinel3a	2121	2127	78	173 342 S -N	
Dec 14 Thu	lares2	2124	2212	87	327 153 NW-SE	
Dec 14 Thu	icesat2	2128	2132	58	196 343 S -N	
Dec 14 Thu	beaconc	2129	2137	39	213 115 SW-SE	
Dec 14 Thu	cryosat2	2137	2143	57	151 5 SE-N	
Dec 14 Thu	sentinel6a	2145	2150	28	274 219 W -SW	
Dec 14 Thu	lares	2206	2211	28	119 68 SE-E	
Dec 14 Thu	sentinel3b	2224	2227	27	249 302 W -NW	
Dec 14 Thu	beaconc	2322	2330	39	235 134 SW-SE	
Dec 14 Thu	hy2d	2327	2332	31	142 68 SE-E	
Dec 14 Thu	swarmb	2348	2352	47	325 204 NW-SW	
Dec 14 Thu	lageos1	2350	0033	75	33 241 NE-SW	
Dec 14 Thu	lares	2359	0011	82	216 31 SW-NE	
Dec 15 Fri	hy2c	0010	0012	26	16 45 N -NE	
Dec 15 Fri	larets	0058	0101	30	91 25 E -NE	
Dec 15 Fri	hy2d	0112	0120	65	237 33 SW-NE	
Dec 15 Fri	lares2	0126	0146	29	311 259 NW-W	
Dec 15 Fri	hy2c	0155	0203	65	330 124 NW-SE	
Dec 15 Fri	lares	0201	0208	33	296 12 NW-N	
Dec 15 Fri	larets	0235	0239	39	222 320 SW-NW	
Dec 15 Fri	ajisai	0238	0248	46	198 84 S -E	
Dec 15 Fri	hy2d	0303	0306	26	324 7 NW-N	
Dec 15 Fri	gracefol	0312	0314	27	75 126 E -SE	
Dec 15 Fri	lageos2	0313	0353	48	172 63 S -NE	
Dec 15 Fri	lageos1	0320	0356	51	60 305 NE-NW	
Dec 15 Fri	hy2c	0344	0348	31	273 209 W -SW	
Dec 15 Fri	saral	0426	0431	42	108 3 E -N	
Dec 15 Fri	ajisai	0438	0450	79	250 84 W -E	
Dec 15 Fri	starlette	0533	0541	49	211 88 SW-E	

## OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 15 Fri	lares	0603	0610	33	357 73 N -E	CP
Dec 15 Fri	saral	0606	0610	32	241 315 SW-NW	
Dec 15 Fri	hy2b	0608	0614	47	47 163 NE-S	
Dec 15 Fri	geoik2	0611	0617	40	47 154 NE-SE	
Dec 15 Fri	ajisai	0640	0652	79	275 108 W -E	

Dec 15 Fri	hy2d	0640	0645	33	354	74	N -E
Dec 15 Fri	lageos1	0644	0727	80	126	327	SE-NW
Dec 15 Fri	paz	0649	0653	59	358	212	N -SW
Dec 15 Fri	lageos2	0708	0757	88	251	79	W -E
Dec 15 Fri	tandemx	0717	0720	32	325	242	NW-SW
Dec 15 Fri	terrasarx	0717	0720	32	327	243	NW-SW
Dec 15 Fri	starlette	0722	0731	80	255	87	W -E
Dec 15 Fri	swot	0728	0734	50	154	34	SE-NE
Dec 15 Fri	hy2b	0751	0757	37	341	244	N -SW
Dec 15 Fri	geoik2	0754	0800	42	343	237	N -SW
Dec 15 Fri	lares	0800	0811	83	330	144	NW-SE
Dec 15 Fri	hy2d	0827	0834	81	317	149	NW-SE
Dec 15 Fri	ajisai	0842	0853	48	273	152	W -SE
Dec 15 Fri	starlette	0911	0920	75	274	113	W -SE
Dec 15 Fri	swot	0913	0918	33	268	351	W -N
Dec 15 Fri	stella	0930	0936	49	354	227	N -SW
Dec 15 Fri	cryosat2	0934	0939	39	43	148	NE-SE
Dec 15 Fri	lageos1	1026	1059	39	216	318	SW-NW
Dec 15 Fri	sentinel3b	1031	1038	79	20	190	N -S
Dec 15 Fri	starlette	1101	1108	40	262	161	W -S
Dec 15 Fri	sentinel3a	1110	1116	52	353	222	N -SW
Dec 15 Fri	cryosat2	1113	1117	30	319	241	NW-SW
Dec 15 Fri	lageos2	1114	1201	76	294	139	NW-SE
Dec 15 Fri	jason3	1116	1126	53	182	51	S -NE
Dec 15 Fri	lares2	1142	1227	66	172	32	S -NE
Dec 15 Fri	swarmb	1206	1210	48	214	343	SW-N
Dec 15 Fri	sentinel6a	1219	1230	83	223	37	SW-NE
Dec 15 Fri	jason3	1312	1322	54	254	29	W -NE
Dec 15 Fri	sentinel6a	1418	1425	36	296	21	NW-N
Dec 15 Fri	larets	1426	1430	32	62	146	NE-SE
Dec 15 Fri	gracefol	1526	1528	30	103	41	E -NE
Dec 15 Fri	lares2	1541	1627	57	263	48	W -NE
Dec 15 Fri	larets	1603	1607	36	339	246	N -SW
Dec 15 Fri	hy2b	1613	1619	35	104	8	E -N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 15 Fri	jason3	1711	1717	32	350 59 N -NE	TS
Dec 15 Fri	hy2c	1715	1718	29	127 81 SE-E	
Dec 15 Fri	paz	1733	1737	64	188 339 S -N	
Dec 15 Fri	geoik2	1755	1802	60	185 331 S -NW	
Dec 15 Fri	hy2b	1756	1802	49	205 325 SW-NW	
Dec 15 Fri	terrasarx	1801	1804	33	233 317 SW-NW	
Dec 15 Fri	tandemx	1801	1804	33	235 318 SW-NW	
Dec 15 Fri	swot	1807	1814	73	334 172 NW-S	
Dec 15 Fri	saral	1811	1817	60	32 179 NE-S	
Dec 15 Fri	sentinel6a	1814	1823	45	340 95 N -E	
Dec 15 Fri	hy2c	1859	1907	69	233 34 SW-NE	
Dec 15 Fri	jason3	1906	1917	66	329 124 NW-SE	
Dec 15 Fri	stella	1915	1921	70	148 350 SE-N	
Dec 15 Fri	lares2	1951	2039	66	322 121 NW-SE	
Dec 15 Fri	sentinel6a	2010	2020	69	313 160 NW-S	
Dec 15 Fri	sentinel3b	2018	2022	34	91 13 E -N	
Dec 15 Fri	beaconc	2045	2052	36	203 117 SW-SE	
Dec 15 Fri	hy2c	2050	2053	27	323 7 NW-N	



Dec 15 Fri	sentinel3a	2055	2101	63	141	353	SE-N
Dec 15 Fri	icesat2	2102	2106	62	160	2	S -N
Dec 15 Fri	jason3	2103	2111	40	293	195	NW-S
Dec 15 Fri	swarma	2109	2111	31	257	321	W -NW
Dec 15 Fri	swarmc	2109	2111	27	269	323	W -NW
Dec 15 Fri	sentinel3b	2157	2202	42	216	322	SW-NW
Dec 15 Fri	cryosat2	2226	2231	49	214	337	SW-NW
Dec 15 Fri	lageos1	2228	2311	83	33	213	NE-SW
Dec 15 Fri	beaconc	2237	2246	41	236	127	SW-SE
Dec 15 Fri	lares	2256	2307	59	179	41	S -NE
Dec 15 Fri	swarmb	2331	2335	61	344	194	N -S
Dec 15 Fri	hy2d	2344	2351	48	176	53	S -NE
Dec 15 Fri	lares2	2350	0029	50	324	212	NW-SW
Dec 16 Sat	hy2c	0027	0032	32	353	71	N -E
Dec 16 Sat	beaconc	0032	0036	28	227	179	SW-S
Dec 16 Sat	lares	0054	0104	48	256	19	W -N
Dec 16 Sat	hy2d	0131	0138	47	261	24	W -NE
Dec 16 Sat	larets	0133	0139	56	141	355	SE-N
Dec 16 Sat	lageos2	0140	0148	25	109	89	E -E
Dec 16 Sat	ajisai	0145	0153	35	177	93	S -E
Dec 16 Sat	lageos1	0200	0237	54	45	285	NE-W
Dec 16 Sat	hy2c	0214	0222	84	320	145	NW-SE
Dec 16 Sat	ajisai	0344	0356	71	237	81	SW-E
Dec 16 Sat	saral	0356	0358	26	70	33	E -NE
Dec 16 Sat	starlette	0406	0410	27	157	105	SE-E
Dec 16 Sat	gracefol	0421	0424	40	306	214	NW-SW
Dec 16 Sat	lares	0500	0502	25	12	32	N -NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 16 Sat	lageos2	0514	0602	76	219 66	SW-NE VS
Dec 16 Sat	lageos1	0525	0605	63	98 323	E -NW
Dec 16 Sat	saral	0533	0539	55	192 332	S -NW
Dec 16 Sat	ajisai	0546	0558	83	270 98	W -E
Dec 16 Sat	starlette	0552	0601	63	229 83	SW-E
Dec 16 Sat	geoik2	0626	0633	52	38 170	NE-S
Dec 16 Sat	hy2b	0629	0637	65	27 184	NE-S
Dec 16 Sat	paz	0632	0636	67	17 192	N -S
Dec 16 Sat	lares	0656	0706	52	343 112	N -E
Dec 16 Sat	hy2d	0658	0705	44	343 101	N -E
Dec 16 Sat	tandemx	0700	0703	49	335 224	NW-SW
Dec 16 Sat	terrasarx	0700	0703	49	337 226	NW-SW
Dec 16 Sat	swot	0728	0735	59	169 28	S -NE
Dec 16 Sat	starlette	0741	0750	83	265 94	W -E
Dec 16 Sat	ajisai	0748	0759	60	276 137	W -SE
Dec 16 Sat	geoik2	0809	0814	34	340 256	N -W
Dec 16 Sat	swarma	0828	0832	40	328 208	NW-SW
Dec 16 Sat	swarmc	0828	0831	37	317 221	NW-SW
Dec 16 Sat	hy2d	0845	0852	53	305 174	NW-S
Dec 16 Sat	lares	0854	0904	52	311 185	NW-S
Dec 16 Sat	lageos1	0856	0938	61	177 326	S -NW
Dec 16 Sat	stella	0903	0910	78	11 204	N -SW
Dec 16 Sat	lageos2	0918	1007	88	280 108	W -E
Dec 16 Sat	starlette	0930	0939	63	275 127	W -SE
Dec 16 Sat	icesat2	0957	1000	42	320 220	NW-SW
Dec 16 Sat	sentinel3b	1006	1011	49	44 163	NE-S
Dec 16 Sat	lares2	1018	1054	43	135 36	SE-NE
Dec 16 Sat	cryosat2	1022	1028	71	358 194	N -S
Dec 16 Sat	sentinel3a	1044	1050	73	12 201	N -S
Dec 16 Sat	sentinel6a	1047	1056	44	167 56	S -NE

Dec 16 Sat	jason3	1138	1149	75	205	42	SW-NE
Dec 16 Sat	sentinel3b	1146	1150	30	331	258	NW-W
Dec 16 Sat	swarmb	1150	1154	65	206	354	SW-N
Dec 16 Sat	sentinel6a	1242	1253	62	245	34	SW-NE
Dec 16 Sat	lageos2	1324	1402	48	295	185	NW-S
Dec 16 Sat	jason3	1336	1345	42	277	28	W -NE
Dec 16 Sat	lares2	1404	1453	72	229	37	SW-NE
Dec 16 Sat	sentinel6a	1442	1448	31	315	23	NW-NE
Dec 16 Sat	lares2	1502	1507	68	29	182	NE-S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 16 Sat	geoik2	1629	1634	36	102 15 E -N	AS
Dec 16 Sat	hy2b	1635	1641	48	119 2 SE-N	
Dec 16 Sat	gracefol	1635	1638	34	242 331 SW-NW	
Dec 16 Sat	sentinel6a	1641	1646	30	349 47 N -NE	
Dec 16 Sat	paz	1715	1720	78	158 350 S -N	
Dec 16 Sat	hy2c	1731	1738	45	173 56 S -NE	
Dec 16 Sat	jason3	1733	1741	37	341 77 N -E	
Dec 16 Sat	saral	1740	1745	35	54 150 NE-SE	
Dec 16 Sat	terrasarx	1743	1747	50	196 330 S -NW	
Dec 16 Sat	tandemx	1743	1747	49	197 331 S -NW	
Dec 16 Sat	swot	1807	1814	64	331 181 NW-S	
Dec 16 Sat	geoik2	1811	1817	48	204 323 SW-NW	
Dec 16 Sat	lares2	1816	1902	54	309 90 NW-E	
Dec 16 Sat	hy2b	1819	1824	35	232 316 SW-NW	
Dec 16 Sat	sentinel6a	1836	1846	58	332 112 NW-E	
Dec 16 Sat	stella	1849	1854	46	116 4 SE-N	
Dec 16 Sat	hy2c	1918	1925	50	257 25 W -NE	
Dec 16 Sat	saral	1919	1924	39	346 242 N -SW	
Dec 16 Sat	jason3	1929	1939	82	322 143 NW-SE	
Dec 16 Sat	beaconc	2001	2007	33	192 120 S -SE	
Dec 16 Sat	stella	2030	2033	30	248 305 W -NW	
Dec 16 Sat	sentinel3a	2030	2035	41	106 4 E -N	
Dec 16 Sat	sentinel6a	2033	2042	49	299 181 NW-S	
Dec 16 Sat	icesat2	2036	2039	35	126 29 SE-NE	
Dec 16 Sat	swarma	2041	2045	56	205 348 SW-N	
Dec 16 Sat	swarmc	2041	2045	45	216 346 SW-N	
Dec 16 Sat	lageos1	2105	2146	59	36 181 NE-S	
Dec 16 Sat	jason3	2127	2131	26	272 229 W -SW	
Dec 16 Sat	sentinel3b	2130	2137	68	180 338 S -N	
Dec 16 Sat	cryosat2	2135	2141	62	155 4 SE-N	
Dec 16 Sat	beaconc	2153	2201	42	229 125 SW-SE	
Dec 16 Sat	lares	2154	2201	32	137 62 SE-NE	
Dec 16 Sat	sentinel3a	2210	2214	33	233 312 SW-NW	
Dec 16 Sat	lares2	2217	2304	74	328 177 NW-S	
Dec 16 Sat	swarmb	2314	2319	85	357 180 N -S	
Dec 16 Sat	beaconc	2347	2353	32	232 159 SW-S	
Dec 16 Sat	lares	2349	0001	75	223 30 SW-NE	
Dec 17 Sun	hy2d	0002	0010	74	203 43 SW-NE	
Dec 17 Sun	lageos1	0039	0119	64	36 259 NE-W	
Dec 17 Sun	hy2c	0045	0052	42	344 98 N -E	
Dec 17 Sun	ajisai	0054	0057	25	141 112 SE-E	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 17 Sun	lares	0151	0157	31	302 7 NW-N	
Dec 17 Sun	hy2d	0151	0156	35	294 16 NW-N	
Dec 17 Sun	larets	0210	0215	66	186 337 S -NW	
Dec 17 Sun	hy2c	0232	0240	56	307 166 NW-S	
Dec 17 Sun	ajisai	0250	0302	60	222 80 SW-E	
Dec 17 Sun	lageos2	0324	0407	53	183 62 S -NE	
Dec 17 Sun	gracefol	0355	0359	70	351 192 N -S	
Dec 17 Sun	lageos1	0406	0443	54	73 314 E -NW	
Dec 17 Sun	starlette	0424	0430	38	183 93 S -E	
Dec 17 Sun	ajisai	0452	0504	85	262 90 W -E	
Dec 17 Sun	saral	0502	0508	78	157 347 SE-N	
Dec 17 Sun	hy2d	0531	0532	25	18 32 N -NE	
Dec 17 Sun	lares	0552	0600	35	351 79 N -E	RS
Dec 17 Sun	starlette	0611	0620	74	245 85 SW-E	
Dec 17 Sun	paz	0615	0619	51	41 174 NE-S	
Dec 17 Sun	geoik2	0641	0648	66	28 181 NE-S	
Dec 17 Sun	tandemx	0642	0647	75	7 201 N -S	
Dec 17 Sun	terrasarx	0642	0647	76	7 201 N -S	
Dec 17 Sun	hy2b	0651	0659	80	15 200 N -S	
Dec 17 Sun	ajisai	0653	0705	71	279 123 W -SE	
Dec 17 Sun	hy2d	0716	0724	60	332 121 NW-SE	
Dec 17 Sun	lageos2	0722	0811	86	257 84 W -E	
Dec 17 Sun	swot	0728	0736	67	181 24 S -NE	
Dec 17 Sun	lageos1	0732	0816	85	145 328 SE-NW	
Dec 17 Sun	lares	0749	0801	85	327 151 NW-SE	
Dec 17 Sun	starlette	0800	0809	78	272 103 W -E	
Dec 17 Sun	swarmc	0801	0805	60	345 191 N -S	
Dec 17 Sun	swarma	0801	0805	77	352 186 N -S	
Dec 17 Sun	stella	0837	0843	63	29 181 NE-S	
Dec 17 Sun	ajisai	0856	0904	35	263 180 W -S	
Dec 17 Sun	hy2d	0904	0910	34	287 195 W -S	
Dec 17 Sun	icesat2	0930	0934	75	1 191 N -S	
Dec 17 Sun	cryosat2	0932	0937	42	39 150 NE-SE	
Dec 17 Sun	sentinel3b	0941	0944	31	72 131 E -SE	
Dec 17 Sun	starlette	0950	0958	50	268 144 W -SE	
Dec 17 Sun	jason3	1008	1014	31	140 71 SE-E	
Dec 17 Sun	sentinel3a	1018	1024	61	30 178 NE-S	
Dec 17 Sun	sentinel6a	1109	1119	63	192 46 S -NE	
Dec 17 Sun	sentinel3b	1120	1125	45	344 233 N -SW	
Dec 17 Sun	lageos2	1128	1214	71	295 148 NW-SE	
Dec 17 Sun	swarmb	1133	1137	67	181 2 S -N	
Dec 17 Sun	jason3	1201	1212	79	227 37 SW-NE	
Dec 17 Sun	lares2	1232	1320	84	197 33 S -NE	
Dec 17 Sun	sentinel6a	1306	1315	47	270 28 W -NE	
Dec 17 Sun	jason3	1400	1407	35	299 22 NW-N	
Dec 17 Sun	larets	1538	1544	55	360 215 N -SW	
Dec 17 Sun	gracefol	1610	1613	59	214 346 SW-N	
Dec 17 Sun	swot	1625	1629	30	36 101 NE-E	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer

Dec 17 Sun	lares2	1638	1724	52	284	63	W -NE	MW
Dec 17 Sun	geoik2	1644	1650	44	114	3	SE-N	
Dec 17 Sun	hy2b	1656	1704	65	145	350	SE-N	
Dec 17 Sun	paz	1659	1702	50	117	5	SE-N	
Dec 17 Sun	sentinel6a	1703	1711	34	342	72	N -E	
Dec 17 Sun	tandemx	1726	1730	65	172	344	S -N	
Dec 17 Sun	terrasarx	1726	1730	68	172	343	S -N	
Dec 17 Sun	hy2c	1749	1757	69	199	44	S -NE	
Dec 17 Sun	jason3	1756	1805	46	341	98	N -E	
Dec 17 Sun	swot	1808	1815	55	323	187	NW-S	
Dec 17 Sun	stella	1823	1827	30	92	19	E -N	
Dec 17 Sun	geoik2	1827	1832	38	224	314	SW-NW	
Dec 17 Sun	hy2b	1843	1844	25	269	284	W -W	
Dec 17 Sun	saral	1848	1854	67	2	210	N -SW	
Dec 17 Sun	sentinel6a	1859	1909	76	326	132	NW-SE	
Dec 17 Sun	beaconc	1917	1922	30	181	124	S -SE	
Dec 17 Sun	hy2c	1937	1943	37	279	16	W -N	
Dec 17 Sun	lageos1	1945	2016	37	47	142	NE-SE	
Dec 17 Sun	jason3	1951	2002	66	313	163	NW-S	
Dec 17 Sun	stella	2002	2007	49	205	324	SW-NW	
Dec 17 Sun	sentinel3a	2005	2008	28	78	24	E -NE	
Dec 17 Sun	swarmc	2014	2018	80	182	2	S -N	
Dec 17 Sun	swarma	2015	2019	76	171	5	S -N	
Dec 17 Sun	lares2	2045	2134	81	326	145	NW-SE	
Dec 17 Sun	cryosat2	2047	2049	26	82	43	E -NE	
Dec 17 Sun	sentinel6a	2056	2103	33	286	207	W -SW	
Dec 17 Sun	sentinel3b	2104	2111	77	154	349	SE-N	
Dec 17 Sun	beaconc	2108	2117	42	228	119	SW-SE	
Dec 17 Sun	sentinel3a	2143	2149	52	197	331	S -NW	
Dec 17 Sun	icesat2	2144	2147	31	236	322	SW-NW	
Dec 17 Sun	cryosat2	2224	2229	45	217	334	SW-NW	
Dec 17 Sun	hy2d	2236	2239	26	125	81	SE-E	
Dec 17 Sun	lares	2245	2256	66	188	40	S -NE	
Dec 17 Sun	swamb	2258	2302	60	13	168	N -S	
Dec 17 Sun	beaconc	2302	2309	36	236	150	SW-SE	
Dec 17 Sun	lageos1	2316	2359	81	33	232	NE-SW	
Dec 18 Mon	hy2d	0020	0028	72	229	35	SW-NE	
Dec 18 Mon	lares	0044	0054	44	264	20	W -N	
Dec 18 Mon	lares2	0045	0113	34	317	243	NW-SW	
Dec 18 Mon	hy2c	0103	0111	57	333	118	NW-SE	
Dec 18 Mon	larets	0110	0114	37	97	9	E -N	
Dec 18 Mon	lageos2	0144	0208	30	134	74	SE-E	
Dec 18 Mon	ajisai	0157	0207	48	202	84	S -E	
Dec 18 Mon	hy2d	0210	0214	28	309	9	NW-N	
Dec 18 Mon	lageos1	0247	0323	51	54	298	NE-NW	
Dec 18 Mon	larets	0247	0251	31	230	314	SW-NW	
Dec 18 Mon	hy2c	0251	0257	37	289	193	W -S	
Dec 18 Mon	gracefol	0330	0334	64	13	165	N -S	
Dec 18 Mon	ajisai	0357	0409	81	253	85	W -E	
Dec 18 Mon	saral	0431	0436	47	120	5	SE-N	
Dec 18 Mon	starlette	0442	0450	51	211	84	SW-E	
Dec 18 Mon	lares	0449	0453	26	5	46	N -NE	

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 18 Mon	lageos2	0527	0616	80	227 68	SW-E AS
Dec 18 Mon	hy2b	0532	0535	27	73 119	E -SE
Dec 18 Mon	hy2d	0548	0553	31	355 71	N -E
Dec 18 Mon	paz	0558	0601	34	62 149	NE-SE
Dec 18 Mon	ajisai	0559	0611	79	276 110	W -E
Dec 18 Mon	lageos1	0611	0653	73	116 326	SE-NW
Dec 18 Mon	saral	0612	0615	29	253 308	W -NW
Dec 18 Mon	tandemx	0625	0629	67	25 182	NE-S
Dec 18 Mon	terrasarx	0625	0629	69	24 181	NE-S
Dec 18 Mon	starlette	0630	0639	79	258 89	W -E
Dec 18 Mon	lares	0645	0656	57	338 119	N -SE
Dec 18 Mon	geoik2	0656	0704	75	19 194	N -S

Dec 18 Mon	hy2b	0714	0721	62	0	216	N	-SW
Dec 18 Mon	swot	0729	0736	81	190	21	S	-N
Dec 18 Mon	swarmc	0734	0738	66	9	165	N	-S
Dec 18 Mon	swarma	0735	0739	56	24	162	NE	-S
Dec 18 Mon	hy2d	0735	0742	88	322	142	NW	-SE
Dec 18 Mon	ajisai	0801	0812	46	273	155	W	-SE
Dec 18 Mon	stella	0811	0816	40	52	156	NE	-SE
Dec 18 Mon	starlette	0820	0829	72	273	114	W	-SE
Dec 18 Mon	lares	0844	0853	46	305	194	NW	-S
Dec 18 Mon	icesat2	0904	0908	48	29	165	NE	-S
Dec 18 Mon	lageos2	0932	1021	88	284	116	W	-SE
Dec 18 Mon	lageos1	0948	1026	46	201	322	S	-NW
Dec 18 Mon	stella	0951	0955	35	333	250	NW	-W
Dec 18 Mon	sentinel3a	0953	0958	39	58	157	NE	-SE
Dec 18 Mon	starlette	1010	1016	38	255	167	W	-S
Dec 18 Mon	cryosat2	1020	1026	65	355	198	N	-S
Dec 18 Mon	jason3	1029	1038	47	170	54	S	-NE
Dec 18 Mon	sentinel3b	1054	1100	70	3	208	N	-SW
Dec 18 Mon	lares2	1104	1148	59	163	33	S	-NE
Dec 18 Mon	swarmb	1116	1121	67	165	8	S	-N
Dec 18 Mon	sentinel6a	1131	1142	88	216	39	SW	-NE
Dec 18 Mon	sentinel3a	1132	1137	36	343	246	N	-SW
Dec 18 Mon	jason3	1224	1234	59	248	30	W	-NE
Dec 18 Mon	sentinel6a	1329	1337	38	285	22	W	-N
Dec 18 Mon	lageos2	1338	1413	42	294	196	NW	-S
Dec 18 Mon	jason3	1424	1430	30	317	24	NW	-NE
Dec 18 Mon	larets	1438	1442	40	55	155	NE	-SE
Dec 18 Mon	lares2	1500	1548	60	253	45	W	-NE
Dec 18 Mon	gracefo1	1545	1549	77	165	3	S	-N
Dec 18 Mon	jason3	1623	1629	30	350	57	N	-NE
Dec 18 Mon	swot	1625	1630	35	23	110	NE	-E
Dec 18 Mon	paz	1642	1645	33	95	14	E	-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 18 Mon	geoik2	1659	1705	55	128 358	SE-N VS
Dec 18 Mon	tandemx	1709	1713	59	142 355	SE-N
Dec 18 Mon	terrasarx	1709	1713	57	143 356	SE-N
Dec 18 Mon	hy2b	1718	1726	77	164 343	S -N
Dec 18 Mon	sentinel6a	1726	1734	41	342 85	N -E
Dec 18 Mon	hy2c	1807	1815	76	225 36	SW-NE
Dec 18 Mon	swot	1809	1815	46	314 198	NW-S
Dec 18 Mon	saral	1816	1823	69	25 185	NE-S
Dec 18 Mon	jason3	1818	1828	60	331 115	NW-SE
Dec 18 Mon	beaconc	1834	1837	26	161 128	S -SE
Dec 18 Mon	geoik2	1843	1847	29	243 306	SW-NW
Dec 18 Mon	lares2	1911	1959	62	318 113	NW-SE
Dec 18 Mon	sentinel6a	1921	1932	77	318 153	NW-SE
Dec 18 Mon	stella	1935	1941	71	172 341	S -N
Dec 18 Mon	swarma	1948	1952	41	141 21	SE-N
Dec 18 Mon	swarmc	1948	1951	50	141 23	SE-NE
Dec 18 Mon	hy2c	1957	2001	29	308 8	NW-N
Dec 18 Mon	jason3	2015	2024	45	296 184	NW-S
Dec 18 Mon	beaconc	2024	2032	41	219 119	SW-SE
Dec 18 Mon	sentinel3b	2039	2045	49	123 359	SE-N
Dec 18 Mon	sentinel3a	2117	2123	74	167 343	S -N
Dec 18 Mon	icesat2	2117	2121	58	196 342	S -N
Dec 18 Mon	cryosat2	2133	2139	68	160 2	S -N
Dec 18 Mon	lares	2143	2151	37	146 57	SE-NE
Dec 18 Mon	lageos1	2153	2237	75	33 203	NE-SW

Dec 18 Mon	beaconc	2217	2225	39	239 141	SW-SE
Dec 18 Mon	sentinel3b	2220	2223	29	243 299	SW-NW
Dec 18 Mon	swarmb	2241	2245	50	21 152	N -SE
Dec 18 Mon	hy2d	2252	2259	42	169 57	S -NE
Dec 18 Mon	lares2	2311	2353	56	326 202	NW-S
Dec 18 Mon	hy2c	2336	2340	30	9 69	N -E
Dec 18 Mon	lares	2339	2350	69	231 27	SW-NE
Dec 19 Tue	hy2d	0039	0046	53	255 27	W -NE
Dec 19 Tue	ajisai	0104	0113	37	181 87	S -E
Dec 19 Tue	hy2c	0122	0130	82	325 139	NW-SE
Dec 19 Tue	lageos1	0127	0205	57	40 276	NE-W
Dec 19 Tue	lares	0141	0147	29	308 10	NW-N
Dec 19 Tue	larets	0145	0151	68	153 350	SE-N
Dec 19 Tue	ajisai	0303	0315	73	240 81	SW-E
Dec 19 Tue	gracefol	0306	0309	37	52 142	NE-SE
Dec 19 Tue	starlette	0314	0318	28	165 109	S -E
Dec 19 Tue	lageos2	0336	0421	59	193 62	S -NE
Dec 19 Tue	saral	0401	0404	28	81 25	E -NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 19 Tue	lageos1	0500	0531	59	89 320 E	-NW TS
Dec 19 Tue	starlette	0501	0509	64	230 84	SW-E
Dec 19 Tue	ajisai	0505	0517	81	271 100	W -E
Dec 19 Tue	saral	0539	0544	51	202 326	S -NW
Dec 19 Tue	lares	0542	0550	38	353 86	N -E
Dec 19 Tue	hy2b	0553	0559	37	51 151	NE-SE
Dec 19 Tue	hy2d	0606	0612	40	346 89	N -E
Dec 19 Tue	tandemx	0608	0612	42	43 164	NE-S
Dec 19 Tue	terrasarx	0608	0612	43	42 163	NE-S
Dec 19 Tue	starlette	0650	0659	79	266 95	W -E
Dec 19 Tue	ajisai	0707	0718	58	276 140	W -SE
Dec 19 Tue	swarmc	0708	0711	37	42 137	NE-SE
Dec 19 Tue	swarma	0709	0711	31	65 126	NE-SE
Dec 19 Tue	geoik2	0712	0719	75	9 206	N -SW
Dec 19 Tue	paz	0715	0718	33	317 237	NW-SW
Dec 19 Tue	swot	0730	0737	81	200 17	S -N
Dec 19 Tue	hy2b	0736	0742	45	350 237	N -SW
Dec 19 Tue	lageos2	0736	0826	86	264 89	W -E
Dec 19 Tue	lares	0739	0750	79	324 158	NW-S
Dec 19 Tue	hy2d	0753	0801	61	309 163	NW-S
Dec 19 Tue	lageos1	0821	0904	69	166 327	S -NW
Dec 19 Tue	starlette	0839	0848	62	273 128	W -SE
Dec 19 Tue	stella	0924	0930	56	354 219	N -SW
Dec 19 Tue	cryosat2	0930	0935	45	35 153	NE-SE
Dec 19 Tue	lares2	0943	1014	37	122 39	SE-NE
Dec 19 Tue	sentinel6a	1000	1008	39	154 58	SE-NE
Dec 19 Tue	sentinel3b	1028	1034	71	26 187	NE-S
Dec 19 Tue	jason3	1051	1101	68	195 45	S -NE
Dec 19 Tue	swarmb	1100	1104	47	141 17	SE-N
Dec 19 Tue	sentinel3a	1106	1112	55	358 220	N -SW
Dec 19 Tue	lageos2	1142	1227	66	296 156	NW-SE
Dec 19 Tue	sentinel6a	1154	1205	68	238 35	SW-NE
Dec 19 Tue	jason3	1248	1257	45	273 29	W -NE
Dec 19 Tue	lares2	1325	1414	77	221 36	SW-NE
Dec 19 Tue	sentinel6a	1353	1400	32	304 23	NW-NE
Dec 19 Tue	larets	1514	1519	84	18 193	N -S
Dec 19 Tue	gracefol	1520	1523	43	130 24	SE-NE
Dec 19 Tue	swot	1625	1631	40	11 118	N -SE

Dec 19 Tue	hy2c	1640	1646	39	155	59	SE-NE
Dec 19 Tue	jason3	1645	1653	35	342	74	N -E
Dec 19 Tue	tandemx	1652	1656	40	117	5	SE-N
Dec 19 Tue	terrasarx	1652	1656	40	119	5	SE-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 19 Tue	geoik2	1714	1721	69	145 350	SE-N RS
Dec 19 Tue	lares2	1736	1821	53	304 81	NW-E
Dec 19 Tue	hy2b	1741	1748	62	189 335	S -NW
Dec 19 Tue	saral	1746	1750	38	60 148	NE-SE
Dec 19 Tue	sentinel6a	1748	1758	53	334 106	NW-E
Dec 19 Tue	paz	1758	1801	33	218 309	SW-NW
Dec 19 Tue	swot	1810	1815	40	305 210	NW-SW
Dec 19 Tue	hy2c	1826	1833	56	251 27	W -NE
Dec 19 Tue	jason3	1841	1851	78	325 136	NW-SE
Dec 19 Tue	stella	1908	1915	65	144 352	SE-N
Dec 19 Tue	swarmc	1922	1924	28	100 43	E -NE
Dec 19 Tue	swarma	1923	1924	25	80 54	E -NE
Dec 19 Tue	saral	1925	1930	36	337 241	NW-SW
Dec 19 Tue	beaconc	1940	1948	39	209 114	SW-SE
Dec 19 Tue	sentinel6a	1944	1954	55	308 175	NW-S
Dec 19 Tue	sentinel3b	2014	2018	32	94 18	E -N
Dec 19 Tue	lageos1	2031	2110	52	38 169	NE-S
Dec 19 Tue	jason3	2038	2044	30	284 216	W -SW
Dec 19 Tue	cryosat2	2045	2047	28	84 43	E -NE
Dec 19 Tue	sentinel3a	2051	2057	60	139 356	SE-N
Dec 19 Tue	icesat2	2051	2055	62	160 1	S -N
Dec 19 Tue	swarma	2057	2058	25	273 302	W -NW
Dec 19 Tue	beaconc	2133	2141	41	233 132	SW-SE
Dec 19 Tue	lares2	2138	2226	81	328 168	NW-S
Dec 19 Tue	sentinel3b	2153	2158	45	209 322	SW-NW
Dec 19 Tue	cryosat2	2222	2227	41	219 331	SW-NW
Dec 19 Tue	swarmb	2225	2228	37	43 136	NE-SE
Dec 19 Tue	lares	2235	2246	73	194 37	S -NE
Dec 19 Tue	hy2d	2310	2317	64	194 48	S -NE
Dec 19 Tue	beaconc	2328	2331	26	220 186	SW-S
Dec 19 Tue	hy2c	2353	2359	38	346 85	N -E
Dec 20 Wed	lageos1	0005	0046	69	34 250	NE-W
Dec 20 Wed	ajisai	0012	0017	27	153 104	SE-E
Dec 20 Wed	lares	0034	0043	41	271 15	W -N
Dec 20 Wed	hy2d	0058	0104	39	278 18	W -N
Dec 20 Wed	hy2c	0140	0148	64	311 159	NW-S
Dec 20 Wed	lageos2	0153	0224	36	148 68	SE-E
Dec 20 Wed	ajisai	0209	0221	62	226 80	SW-E
Dec 20 Wed	larets	0222	0227	52	200 330	S -NW
Dec 20 Wed	starlette	0332	0339	40	191 88	S -E
Dec 20 Wed	lageos1	0333	0410	52	66 309	NE-NW
Dec 20 Wed	ajisai	0411	0423	83	264 91	W -E
Dec 20 Wed	gracefol	0416	0418	30	284 232	W -SW
Dec 20 Wed	lares	0438	0443	27	359 51	N -NE

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 20 Wed	saral	0507	0513	82	164 345 S -N	CP
Dec 20 Wed	starlette	0520	0529	73	246 84 SW-E	
Dec 20 Wed	lageos2	0541	0630	84	235 71 SW-E	
Dec 20 Wed	geoik2	0546	0549	27	77 124 E -SE	
Dec 20 Wed	terrasarx	0552	0554	28	79 135 E -SE	
Dec 20 Wed	tandemx	0552	0554	28	83 137 E -SE	
Dec 20 Wed	ajisai	0613	0624	69	277 126 W -SE	
Dec 20 Wed	hy2b	0615	0622	53	39 172 NE-S	
Dec 20 Wed	hy2d	0624	0632	53	335 115 NW-SE	
Dec 20 Wed	lares	0635	0646	63	338 126 N -SE	
Dec 20 Wed	paz	0657	0701	48	349 219 N -SW	
Dec 20 Wed	lageos1	0658	0741	86	136 328 SE-NW	
Dec 20 Wed	starlette	0709	0718	80	272 105 W -E	
Dec 20 Wed	geoik2	0727	0734	62	1 217 N -SW	
Dec 20 Wed	swot	0730	0738	71	208 14 SW-N	
Dec 20 Wed	hy2b	0759	0804	33	329 251 NW-W	
Dec 20 Wed	hy2d	0812	0818	39	290 189 W -S	
Dec 20 Wed	swarma	0816	0819	34	311 223 NW-SW	
Dec 20 Wed	ajisai	0816	0823	33	256 183 W -S	
Dec 20 Wed	lares	0834	0842	41	299 203 NW-SW	
Dec 20 Wed	stella	0857	0903	82	15 198 N -S	
Dec 20 Wed	starlette	0858	0906	49	270 149 W -SE	
Dec 20 Wed	icesat2	0946	0949	42	318 219 NW-SW	
Dec 20 Wed	lageos2	0946	1035	85	288 123 W -SE	
Dec 20 Wed	sentinel3b	1002	1008	45	43 166 NE-S	
Dec 20 Wed	cryosat2	1018	1024	61	352 201 N -S	
Dec 20 Wed	sentinel6a	1021	1031	56	184 49 S -NE	
Dec 20 Wed	sentinel3a	1040	1046	83	15 198 N -S	
Dec 20 Wed	swarmb	1044	1047	36	112 27 E -NE	
Dec 20 Wed	lageos1	1045	1111	32	234 310 SW-NW	
Dec 20 Wed	jason3	1113	1124	86	220 38 SW-NE	
Dec 20 Wed	sentinel3b	1143	1146	32	319 260 NW-W	
Dec 20 Wed	lares2	1154	1242	78	188 32 S -NE	
Dec 20 Wed	sentinel6a	1217	1227	51	258 30 W -NE	
Dec 20 Wed	jason3	1311	1319	37	287 23 W -NE	
Dec 20 Wed	lageos2	1353	1423	36	290 208 W -SW	
Dec 20 Wed	larets	1551	1555	45	339 231 N -SW	
Dec 20 Wed	lares2	1558	1643	53	277 56 W -NE	
Dec 20 Wed	sentinel6a	1615	1622	32	342 62 N -NE	
Dec 20 Wed	hy2b	1620	1626	40	112 9 E -N	
Dec 20 Wed	swot	1626	1632	46	10 128 N -SE	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 20 Wed	hy2c	1657	1704	60	190 50 S -NE	AS
Dec 20 Wed	jason3	1708	1717	43	342 93 N -E	
Dec 20 Wed	geoik2	1729	1736	86	161 344 S -N	
Dec 20 Wed	paz	1741	1745	53	203 334 SW-NW	
Dec 20 Wed	hy2b	1803	1810	44	207 326 SW-NW	
Dec 20 Wed	tandemx	1810	1812	27	260 309 W -NW	



Dec 20	Wed	terrasarx	1810	1812	27	257	308	W	-NW
Dec 20	Wed	swot	1811	1816	34	295	213	NW	-SW
Dec 20	Wed	sentinel6a	1811	1821	69	329	125	NW	-SE
Dec 20	Wed	stella	1843	1848	40	105	4	E	-N
Dec 20	Wed	hy2c	1845	1851	41	275	18	W	-N
Dec 20	Wed	saral	1853	1859	61	2	216	N	-SW
Dec 20	Wed	beaconc	1855	1903	36	207	115	SW	-SE
Dec 20	Wed	jason3	1903	1914	74	316	156	NW	-SE
Dec 20	Wed	lageos1	1914	1937	30	57	125	NE	-SE
Dec 20	Wed	lares2	2006	2054	75	325	136	NW	-SE
Dec 20	Wed	sentinel6a	2008	2015	37	289	202	W	-S
Dec 20	Wed	stella	2023	2027	34	234	313	SW	-NW
Dec 20	Wed	icesat2	2025	2028	36	124	27	SE	-NE
Dec 20	Wed	sentinel3a	2026	2031	39	108	7	E	-N
Dec 20	Wed	swarma	2029	2033	42	223	345	SW	-N
Dec 20	Wed	swarmc	2029	2032	38	238	335	SW	-NW
Dec 20	Wed	beaconc	2048	2057	42	234	125	SW	-SE
Dec 20	Wed	sentinel3b	2127	2133	72	180	339	S	-N
Dec 20	Wed	cryosat2	2131	2137	74	165	360	S	-N
Dec 20	Wed	lares	2132	2141	42	155	52	SE	-NE
Dec 20	Wed	sentinel3a	2206	2211	36	227	321	SW	-NW
Dec 20	Wed	swarmb	2209	2211	28	67	120	NE	-SE
Dec 20	Wed	beaconc	2242	2248	30	235	167	SW	-S
Dec 20	Wed	lageos1	2242	2325	88	32	222	NE	-SW
Dec 20	Wed	hy2d	2328	2336	76	221	38	SW	-NE
Dec 20	Wed	lares	2329	2340	62	239	27	SW	-NE
Dec 20	Wed	swarmb	2344	2345	25	289	262	W	-W
Dec 21	Thu	lares2	0005	0038	39	321	231	NW	-SW
Dec 21	Thu	hy2c	0011	0019	51	336	112	NW	-E
Dec 21	Thu	ajisai	0116	0127	51	206	80	SW	-E
Dec 21	Thu	hy2d	0118	0122	30	308	10	NW	-N
Dec 21	Thu	larets	0121	0126	46	124	3	SE	-N
Dec 21	Thu	lares	0132	0136	27	323	4	NW	-N
Dec 21	Thu	hy2c	0159	0205	43	293	187	NW	-S
Dec 21	Thu	lageos1	0214	0250	52	48	292	NE	-W
Dec 21	Thu	larets	0301	0302	25	275	294	W	-NW
Dec 21	Thu	ajisai	0317	0329	82	254	85	W	-E
Dec 21	Thu	lageos2	0348	0435	65	202	63	S	-NE
Dec 21	Thu	starlette	0350	0358	53	217	86	SW	-E
Dec 21	Thu	gracefol	0350	0354	49	331	203	NW	-SW
Dec 21	Thu	saral	0436	0442	50	131	359	SE	-N
Dec 21	Thu	hy2d	0457	0500	28	11	57	N	-NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer	
Dec 21	Thu	ajisai	0518	0530	78	277 113 W -SE	MW
Dec 21	Thu	lares	0531	0540	41	347 93 N -E	
Dec 21	Thu	lageos1	0538	0619	68	107 325 E -NW	
Dec 21	Thu	starlette	0539	0548	81	259 89 W -E	
Dec 21	Thu	geoik2	0600	0605	34	55 140 NE-SE	
Dec 21	Thu	saral	0618	0620	26	264 299 W -NW	
Dec 21	Thu	hy2b	0637	0644	75	25 188 NE-S	
Dec 21	Thu	paz	0640	0644	66	7 200 N -S	
Dec 21	Thu	hy2d	0643	0650	78	327 134 NW-SE	
Dec 21	Thu	tandemx	0708	0711	39	335 237 NW-SW	
Dec 21	Thu	terrasarx	0708	0712	38	337 227 NW-SW	
Dec 21	Thu	ajisai	0721	0730	44	268 163 W -S	
Dec 21	Thu	starlette	0728	0737	72	274 117 W -SE	
Dec 21	Thu	lares	0729	0740	72	321 164 NW-S	
Dec 21	Thu	swot	0731	0738	64	219 9 SW-N	
Dec 21	Thu	geoik2	0742	0749	49	355 229 N -SW	
Dec 21	Thu	swarma	0749	0753	55	338 194 N -S	
Dec 21	Thu	swarmc	0749	0752	52	324 204 NW-SW	
Dec 21	Thu	lageos2	0750	0840	86	270 95 W -E	

Dec 21 Thu	stella	0831	0837	57	38	176	NE-S
Dec 21 Thu	lageos1	0912	0952	53	189	324	S -NW
Dec 21 Thu	starlette	0918	0925	36	259	165	W -S
Dec 21 Thu	icesat2	0919	0923	68	360	191	N -S
Dec 21 Thu	cryosat2	0928	0933	49	32	156	NE-SE
Dec 21 Thu	jason3	0941	0950	41	163	56	S -NE
Dec 21 Thu	sentinel3a	1014	1020	58	31	173	NE-S
Dec 21 Thu	lares2	1028	1109	53	152	33	SE-NE
Dec 21 Thu	sentinel6a	1043	1054	80	208	41	SW-NE
Dec 21 Thu	sentinel3b	1116	1122	48	349	225	N -SW
Dec 21 Thu	jason3	1136	1146	64	242	32	SW-NE
Dec 21 Thu	lageos2	1156	1239	60	297	165	NW-S
Dec 21 Thu	sentinel6a	1241	1249	41	281	23	W -NE
Dec 21 Thu	jason3	1336	1342	31	316	24	NW-NE
Dec 21 Thu	lares2	1420	1508	64	245	41	SW-NE
Dec 21 Thu	larets	1450	1455	50	46	172	NE-S
Dec 21 Thu	gracefo1	1604	1608	39	221	341	SW-N
Dec 21 Thu	swot	1626	1633	54	360	137	N -SE
Dec 21 Thu	sentinel6a	1638	1646	38	343	81	N -E
Dec 21 Thu	hy2b	1642	1649	54	128	356	SE-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 21 Thu	hy2c	1715	1723	78	217 39	SW-NE TS
Dec 21 Thu	paz	1723	1728	85	169 345	S -N
Dec 21 Thu	jason3	1730	1740	55	333 110	NW-E
Dec 21 Thu	geoik2	1744	1751	73	176 337	S -NW
Dec 21 Thu	terrasarx	1752	1755	42	220 320	SW-NW
Dec 21 Thu	tandemx	1752	1755	42	223 322	SW-NW
Dec 21 Thu	swot	1812	1815	29	287 236	W -SW
Dec 21 Thu	beaconc	1812	1818	33	188 118	S -SE
Dec 21 Thu	stella	1818	1820	27	65 29	NE-NE
Dec 21 Thu	saral	1822	1828	70	23 188	NE-S
Dec 21 Thu	hy2b	1826	1831	31	231 310	SW-NW
Dec 21 Thu	lares2	1832	1919	59	316 104	NW-E
Dec 21 Thu	sentinel6a	1833	1844	83	320 146	NW-SE
Dec 21 Thu	hy2c	1905	1909	31	306 10	NW-N
Dec 21 Thu	jason3	1926	1936	51	306 178	NW-S
Dec 21 Thu	stella	1955	2001	55	192 330	S -NW
Dec 21 Thu	sentinel3a	2002	2004	26	64 29	NE-NE
Dec 21 Thu	swarmc	2002	2006	66	201 356	S -N
Dec 21 Thu	swarma	2002	2006	70	188 359	S -N
Dec 21 Thu	beaconc	2003	2012	43	233 123	SW-SE
Dec 21 Thu	sentinel6a	2033	2034	25	258 247	W -SW
Dec 21 Thu	cryosat2	2042	2046	30	107 28	E -NE
Dec 21 Thu	sentinel3b	2101	2107	70	147 351	SE-N
Dec 21 Thu	lageos1	2119	2202	67	34 193	NE-S
Dec 21 Thu	icesat2	2133	2136	31	242 325	SW-NW
Dec 21 Thu	sentinel3a	2139	2145	56	191 331	S -NW
Dec 21 Thu	beaconc	2157	2204	34	239 157	SW-SE
Dec 21 Thu	hy2d	2201	2206	36	151 67	SE-NE
Dec 21 Thu	cryosat2	2221	2225	38	238 329	SW-NW
Dec 21 Thu	lares	2224	2236	80	203 34	SW-NE
Dec 21 Thu	lares2	2232	2316	62	327 193	NW-S
Dec 21 Thu	hy2c	2244	2247	28	10 55	N -NE

Dec 21 Thu	swarmb	2327	2330	33	303	223	NW-SW
Dec 21 Thu	hy2d	2347	2354	59	248	29	W -NE
Dec 22 Fri	ajisai	0023	0032	39	184	87	S -E
Dec 22 Fri	lares	0024	0033	38	277	17	W -N
Dec 22 Fri	hy2c	0030	0037	74	330	130	NW-SE
Dec 22 Fri	lageos1	0053	0132	60	38	268	NE-W
Dec 22 Fri	larets	0157	0203	73	167	344	S -N
Dec 22 Fri	lageos2	0202	0239	41	162	65	S -NE
Dec 22 Fri	hy2c	0219	0222	27	260	217	W -SW
Dec 22 Fri	ajisai	0222	0234	75	243	82	SW-E
Dec 22 Fri	starlette	0223	0227	30	160	103	S -E
Dec 22 Fri	gracefol	0325	0329	70	0	182	N -S
Dec 22 Fri	saral	0406	0410	30	91	17	E -N
Dec 22 Fri	starlette	0409	0418	67	235	83	SW-E
Dec 22 Fri	lageos1	0419	0457	56	81	317	E -NW
Dec 22 Fri	ajisai	0424	0436	83	273	101	W -E
Dec 22 Fri	lares	0428	0433	29	3	56	N -NE
Dec 22 Fri	hy2d	0514	0520	36	348	84	N -E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 22 Fri	saral	0544	0550	45	201 327 S	-NW VS
Dec 22 Fri	swot	0550	0553	28	107 59 E	-NE
Dec 22 Fri	lageos2	0554	0644	88	243 75	SW-E
Dec 22 Fri	starlette	0558	0607	83	268 97	W -E
Dec 22 Fri	geoik2	0615	0621	43	46 157	NE-SE
Dec 22 Fri	paz	0623	0627	64	33 183	NE-S
Dec 22 Fri	lares	0625	0636	69	337 133	NW-SE
Dec 22 Fri	ajisai	0626	0637	55	276 144	W -SE
Dec 22 Fri	terrasarx	0651	0655	58	352 210	N -SW
Dec 22 Fri	tandemx	0651	0655	60	350 209	N -SW
Dec 22 Fri	hy2b	0659	0706	78	11 206	N -SW
Dec 22 Fri	hy2d	0701	0709	69	313 156	NW-SE
Dec 22 Fri	swarma	0722	0726	69	6 170	N -S
Dec 22 Fri	swarmc	0722	0726	73	1 177	N -S
Dec 22 Fri	swot	0732	0739	54	230 7	SW-N
Dec 22 Fri	lageos1	0746	0830	77	156 328	SE-NW
Dec 22 Fri	starlette	0747	0756	59	274 132	W -SE
Dec 22 Fri	geoik2	0758	0804	39	341 240	N -SW
Dec 22 Fri	stella	0805	0809	35	62 144	NE-SE
Dec 22 Fri	lares	0824	0831	36	292 211	W -SW
Dec 22 Fri	icesat2	0853	0857	51	34 166	NE-S
Dec 22 Fri	lares2	0909	0934	32	108 43	E -NE
Dec 22 Fri	sentinel6a	0912	0919	34	149 67	SE-NE
Dec 22 Fri	stella	0944	0949	40	345 241	N -SW
Dec 22 Fri	sentinel3a	0949	0954	36	56 152	NE-SE
Dec 22 Fri	lageos2	1000	1048	81	291 131	W -SE
Dec 22 Fri	jason3	1003	1013	60	187 47	S -NE
Dec 22 Fri	cryosat2	1016	1022	57	350 205	N -SW
Dec 22 Fri	sentinel3b	1050	1056	70	8 206	N -SW
Dec 22 Fri	sentinel6a	1106	1117	74	231 36	SW-NE
Dec 22 Fri	sentinel3a	1129	1134	38	334 237	NW-SW
Dec 22 Fri	swarmb	1145	1148	33	236 324	SW-NW
Dec 22 Fri	jason3	1159	1209	49	262 30	W -NE
Dec 22 Fri	lares2	1246	1335	83	212 34	SW-NE
Dec 22 Fri	sentinel6a	1305	1312	34	302 24	NW-NE
Dec 22 Fri	lageos2	1409	1432	31	284 223	W -SW
Dec 22 Fri	larets	1526	1531	75	7 205	N -SW
Dec 22 Fri	gracefol	1539	1543	61	191 355	S -N
Dec 22 Fri	hy2c	1548	1553	33	149 70	SE-E
Dec 22 Fri	jason3	1557	1604	33	343 65	N -NE
Dec 22 Fri	geoik2	1619	1623	31	79 15	E -N
Dec 22 Fri	swot	1627	1634	63	357 145	N -SE

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 22 Fri	lares2	1655	1741	52	296 74 NW-E	RS
Dec 22 Fri	sentinel6a	1700	1710	48	335 102 NW-E	
Dec 22 Fri	hy2b	1704	1711	75	149 348 SE-N	
Dec 22 Fri	paz	1706	1710	60	144 358 SE-N	
Dec 22 Fri	beaconc	1728	1733	29	177 122 S -SE	
Dec 22 Fri	hy2c	1734	1741	63	244 30 SW-NE	
Dec 22 Fri	terrasarx	1734	1738	65	182 336 S -NW	
Dec 22 Fri	tandemx	1734	1738	64	183 336 S -NW	
Dec 22 Fri	saral	1751	1756	43	49 158 NE-S	
Dec 22 Fri	jason3	1753	1803	71	328 129 NW-SE	
Dec 22 Fri	geoik2	1759	1806	56	189 330 S -NW	
Dec 22 Fri	sentinel6a	1856	1906	62	311 168 NW-S	
Dec 22 Fri	beaconc	1919	1928	42	225 117 SW-SE	
Dec 22 Fri	hy2c	1925	1927	25	334 2 NW-N	
Dec 22 Fri	stella	1928	1935	87	163 344 S -N	
Dec 22 Fri	saral	1931	1935	33	326 249 NW-W	
Dec 22 Fri	swarmc	1935	1939	56	161 11 S -N	
Dec 22 Fri	swarma	1936	1939	56	142 18 SE-N	
Dec 22 Fri	jason3	1950	1957	35	286 204 W -SW	
Dec 22 Fri	lageos1	1958	2034	44	42 157 NE-SE	
Dec 22 Fri	sentinel3b	2035	2041	45	123 2 SE-N	
Dec 22 Fri	lares2	2059	2148	87	327 160 NW-S	
Dec 22 Fri	icesat2	2106	2110	53	200 344 S -N	
Dec 22 Fri	sentinel3a	2113	2119	81	163 345 S -N	
Dec 22 Fri	beaconc	2113	2120	37	234 147 SW-SE	
Dec 22 Fri	lares	2121	2131	47	165 47 S -NE	
Dec 22 Fri	cryosat2	2129	2135	79	169 358 S -N	
Dec 22 Fri	sentinel3b	2216	2220	30	237 310 SW-NW	
Dec 22 Fri	hy2d	2218	2225	56	186 52 S -NE	
Dec 22 Fri	hy2c	2301	2307	35	348 82 N -E	
Dec 22 Fri	swarmb	2310	2314	44	321 206 NW-SW	
Dec 22 Fri	lares	2318	2329	57	243 23 SW-NE	
Dec 22 Fri	lageos1	2330	0013	74	33 241 NE-SW	
Dec 22 Fri	ajisai	2331	2336	29	156 105 SE-E	
Dec 23 Sat	hy2d	0006	0012	42	273 20 W -N	
Dec 23 Sat	hy2c	0048	0056	72	316 152 NW-SE	
Dec 23 Sat	larets	0058	0101	29	81 20 E -N	
Dec 23 Sat	lares2	0105	0116	26	302 274 NW-W	
Dec 23 Sat	lares	0122	0125	26	328 359 NW-N	
Dec 23 Sat	ajisai	0129	0140	65	226 80 SW-E	
Dec 23 Sat	larets	0234	0239	41	211 324 SW-NW	
Dec 23 Sat	starlette	0240	0247	42	199 91 S -E	
Dec 23 Sat	gracefol	0300	0304	48	28 159 NE-S	
Dec 23 Sat	lageos1	0300	0336	51	60 305 NE-NW	
Dec 23 Sat	ajisai	0330	0342	81	266 93 W -E	
Dec 23 Sat	lageos2	0401	0449	70	210 64 SW-NE	
Dec 23 Sat	starlette	0428	0437	77	250 86 W -E	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer

Dec 23 Sat	saral	0513	0519	78	171	342	S -N	TS
Dec 23 Sat	lares	0521	0530	45	349	100	N -E	
Dec 23 Sat	ajisai	0532	0544	67	277	127	W -SE	
Dec 23 Sat	hy2d	0532	0539	48	338	104	N -E	
Dec 23 Sat	hy2b	0539	0543	30	66	130	NE-SE	
Dec 23 Sat	swot	0549	0554	33	136	51	SE-NE	
Dec 23 Sat	paz	0606	0609	42	59	159	NE-S	
Dec 23 Sat	starlette	0617	0626	77	273	107	W -E	
Dec 23 Sat	lageos1	0624	0707	80	126	327	SE-NW	
Dec 23 Sat	geoik2	0630	0637	56	36	173	NE-S	
Dec 23 Sat	tandemx	0633	0638	84	16	193	N -S	
Dec 23 Sat	terrasarx	0634	0638	79	18	193	N -S	
Dec 23 Sat	swarmc	0655	0659	43	26	153	NE-SE	
Dec 23 Sat	swarma	0656	0659	41	44	143	NE-SE	
Dec 23 Sat	lares	0718	0729	64	319	172	NW-S	
Dec 23 Sat	hy2d	0720	0726	45	294	183	NW-S	
Dec 23 Sat	hy2b	0721	0728	57	359	223	N -SW	
Dec 23 Sat	swot	0733	0739	46	241	360	SW-N	
Dec 23 Sat	ajisai	0735	0742	31	256	187	W -S	
Dec 23 Sat	lageos2	0805	0854	86	275	101	W -E	
Dec 23 Sat	starlette	0807	0815	46	266	149	W -SE	
Dec 23 Sat	geoik2	0813	0818	32	338	258	N -W	
Dec 23 Sat	stella	0917	0923	63	3	217	N -SW	
Dec 23 Sat	cryosat2	0926	0931	53	28	159	NE-S	
Dec 23 Sat	sentinel6a	0933	0943	50	177	51	S -NE	
Dec 23 Sat	lageos1	1006	1039	39	216	317	SW-NW	
Dec 23 Sat	sentinel3b	1024	1030	66	27	183	NE-S	
Dec 23 Sat	jason3	1025	1036	84	212	40	SW-NE	
Dec 23 Sat	sentinel3a	1102	1108	60	1	219	N -SW	
Dec 23 Sat	lares2	1116	1203	71	179	32	S -NE	
Dec 23 Sat	swarmb	1128	1132	44	218	341	SW-N	
Dec 23 Sat	sentinel6a	1129	1139	56	253	31	W -NE	
Dec 23 Sat	lageos2	1210	1251	54	296	175	NW-S	
Dec 23 Sat	jason3	1223	1231	39	284	23	W -NE	
Dec 23 Sat	sentinel6a	1329	1335	30	320	27	NW-NE	
Dec 23 Sat	larets	1426	1429	32	70	138	E -SE	
Dec 23 Sat	gracefol	1514	1518	55	156	10	SE-N	
Dec 23 Sat	lares2	1517	1604	55	269	52	W -NE	
Dec 23 Sat	sentinel6a	1527	1533	31	343	52	N -NE	
Dec 23 Sat	larets	1603	1607	37	332	240	NW-SW	
Dec 23 Sat	hy2c	1605	1612	52	182	54	S -NE	

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 23 Sat	jason3	1620	1628	40	344 84 N -E	MW
Dec 23 Sat	swot	1627	1635	69	349 153 N -SE	
Dec 23 Sat	geoik2	1633	1639	38	104 5 E -N	
Dec 23 Sat	paz	1649	1653	38	121 8 SE-N	
Dec 23 Sat	tandemx	1717	1721	69	157 350 SE-N	
Dec 23 Sat	terrasarx	1717	1721	74	158 351 S -N	
Dec 23 Sat	sentinel6a	1723	1733	62	332 119 NW-SE	
Dec 23 Sat	hy2b	1726	1733	78	172 340 S -N	
Dec 23 Sat	hy2c	1753	1759	44	270 21 W -N	
Dec 23 Sat	geoik2	1815	1821	45	207 321 SW-NW	
Dec 23 Sat	jason3	1815	1826	82	319 149 NW-SE	
Dec 23 Sat	beaconc	1835	1843	40	216 117 SW-SE	
Dec 23 Sat	saral	1859	1905	56	354 218 N -SW	

Dec 23 Sat	stella	1902	1908	56	135 357	SE-N
Dec 23 Sat	swarmc	1909	1912	35	116 28	SE-NE
Dec 23 Sat	swarma	1910	1912	31	95 38	E -NE
Dec 23 Sat	sentinel6a	1919	1928	43	300 190	NW-S
Dec 23 Sat	lares2	1926	2015	70	322 128	NW-SE
Dec 23 Sat	sentinel3b	2011	2014	30	79 22	E -N
Dec 23 Sat	lares	2022	2024	25	99 80	E -E
Dec 23 Sat	beaconc	2028	2036	40	236 138	SW-SE
Dec 23 Sat	cryosat2	2040	2044	33	110 27	E -NE
Dec 23 Sat	icesat2	2040	2044	70	156 0	SE-N
Dec 23 Sat	sentinel3a	2047	2053	57	138 359	SE-N
Dec 23 Sat	sentinel3b	2149	2155	48	202 329	S -NW
Dec 23 Sat	lageos1	2208	2251	83	33 213	NE-SW
Dec 23 Sat	lares	2214	2225	87	210 33	SW-NE
Dec 23 Sat	cryosat2	2219	2223	35	239 326	SW-NW
Dec 23 Sat	hy2d	2236	2244	77	213 40	SW-NE
Dec 23 Sat	swarmb	2253	2257	55	339 197	N -S
Dec 23 Sat	hy2c	2319	2326	46	339 101	N -E
Dec 23 Sat	lares2	2326	0003	45	323 219	NW-SW
Dec 24 Sun	lares	0014	0022	35	284 12	W -N
Dec 24 Sun	hy2d	0025	0030	32	293 12	NW-N
Dec 24 Sun	ajisai	0035	0046	53	210 81	SW-E
Dec 24 Sun	hy2c	0107	0114	49	297 174	NW-S
Dec 24 Sun	larets	0133	0138	58	136 358	SE-N
Dec 24 Sun	lageos1	0140	0217	54	45 285	NE-W
Dec 24 Sun	lageos2	0213	0253	47	172 63	S -NE
Dec 24 Sun	gracefol	0236	0238	30	71 127	E -SE
Dec 24 Sun	ajisai	0236	0248	82	256 86	W -E
Dec 24 Sun	starlette	0259	0307	55	217 84	SW-E
Dec 24 Sun	hy2d	0405	0408	26	12 56	N -NE
Dec 24 Sun	lares	0417	0424	31	356 70	N -E
Dec 24 Sun	ajisai	0438	0450	77	276 114	W -SE
Dec 24 Sun	saral	0442	0447	57	131 359	SE-N
Dec 24 Sun	starlette	0447	0456	80	261 91	W -E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 24 Sun	lageos1	0505	0545	63	98 323	E -NW RS
Dec 24 Sun	paz	0549	0551	27	76 130	E -SE
Dec 24 Sun	swot	0550	0555	39	137 44	SE-NE
Dec 24 Sun	hy2d	0551	0558	69	332 127	NW-SE
Dec 24 Sun	hy2b	0600	0607	42	44 161	NE-S
Dec 24 Sun	lageos2	0608	0658	89	250 79	W -E
Dec 24 Sun	lares	0614	0625	76	332 139	NW-SE
Dec 24 Sun	tandemx	0616	0620	54	32 170	NE-S
Dec 24 Sun	terrasarx	0617	0621	54	47 176	NE-S
Dec 24 Sun	swarmc	0629	0631	27	61 116	NE-SE
Dec 24 Sun	starlette	0637	0646	68	273 119	W -SE
Dec 24 Sun	ajisai	0640	0649	41	268 167	W -S
Dec 24 Sun	geoik2	0645	0652	70	26 184	NE-S
Dec 24 Sun	swot	0734	0740	40	252 359	W -N
Dec 24 Sun	hy2b	0743	0749	41	350 245	N -SW
Dec 24 Sun	lares	0814	0820	32	286 220	W -SW
Dec 24 Sun	starlette	0827	0833	34	252 171	W -S
Dec 24 Sun	lageos1	0836	0918	61	177 326	S -NW
Dec 24 Sun	stella	0851	0857	75	21 192	N -S
Dec 24 Sun	jason3	0854	0901	36	150 65	SE-NE
Dec 24 Sun	icesat2	0934	0938	40	331 215	NW-SW
Dec 24 Sun	lares2	0951	1030	47	143 35	SE-NE
Dec 24 Sun	sentinel6a	0955	1006	72	201 43	S -NE
Dec 24 Sun	sentinel3b	0958	1004	42	42 161	NE-S
Dec 24 Sun	lageos2	1014	1102	77	294 139	NW-SE
Dec 24 Sun	cryosat2	1014	1020	54	348 209	N -SW

Dec 24 Sun	sentinel3a	1036	1043	86	17 195	N -S
Dec 24 Sun	jason3	1048	1058	70	235 34	SW-NE
Dec 24 Sun	swarmb	1111	1116	62	200 353	S -N
Dec 24 Sun	sentinel3b	1139	1143	34	325 249	NW-W
Dec 24 Sun	sentinel6a	1153	1202	43	278 30	W -NE
Dec 24 Sun	jason3	1247	1254	33	305 25	NW-NE
Dec 24 Sun	lares2	1341	1429	68	237 39	SW-NE
Dec 24 Sun	gracefo1	1450	1453	34	107 24	E -NE
Dec 24 Sun	larets	1501	1507	64	26 182	NE-S
Dec 24 Sun	sentinel6a	1550	1558	36	345 78	N -E
Dec 24 Sun	hy2b	1606	1611	32	96 16	E -N
Dec 24 Sun	hy2c	1623	1631	74	208 42	SW-NE
Dec 24 Sun	swot	1628	1635	82	344 160	N -S
Dec 24 Sun	jason3	1642	1652	50	335 105	NW-E
Dec 24 Sun	geoik2	1648	1654	47	116 1	SE-N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 24 Sun	tandemx	1700	1704	47	131 2	SE-N
Dec 24 Sun	terrasarx	1700	1704	49	133 3	SE-N
Dec 24 Sun	sentinel6a	1745	1756	83	323 139	NW-SE
Dec 24 Sun	hy2b	1748	1755	56	193 330	S -NW
Dec 24 Sun	beaconc	1751	1758	38	206 118	SW-SE
Dec 24 Sun	lares2	1752	1838	56	312 95	NW-E
Dec 24 Sun	paz	1807	1809	28	254 307	W -NW
Dec 24 Sun	hy2c	1812	1817	34	290 12	W -N
Dec 24 Sun	saral	1827	1834	83	18 193	N -S
Dec 24 Sun	geoik2	1831	1836	35	227 313	SW-NW
Dec 24 Sun	stella	1836	1841	36	109 12	E -N
Dec 24 Sun	jason3	1838	1848	58	309 171	NW-S
Dec 24 Sun	beaconc	1943	1952	42	238 130	SW-SE
Dec 24 Sun	sentinel6a	1943	1948	28	280 224	W -SW
Dec 24 Sun	icesat2	2014	2017	37	111 20	E -N
Dec 24 Sun	stella	2016	2021	39	219 320	SW-NW
Dec 24 Sun	swarma	2017	2020	35	247 335	SW-NW
Dec 24 Sun	swarmc	2017	2019	30	266 324	W -NW
Dec 24 Sun	sentinel3a	2022	2027	37	109 11	E -N
Dec 24 Sun	lageos1	2045	2126	59	36 181	NE-S
Dec 24 Sun	hy2d	2109	2114	31	146 71	SE-E
Dec 24 Sun	lares	2110	2121	53	174 43	S -NE
Dec 24 Sun	sentinel3b	2123	2129	72	174 340	S -N
Dec 24 Sun	cryosat2	2127	2133	84	173 355	S -N
Dec 24 Sun	beaconc	2138	2143	28	228 174	SW-S
Dec 24 Sun	hy2c	2152	2154	26	12 41	N -NE
Dec 24 Sun	lares2	2153	2239	69	327 183	NW-S
Dec 24 Sun	sentinel3a	2202	2207	38	220 320	SW-NW
Dec 24 Sun	swarmb	2236	2241	81	354 183	N -S
Dec 24 Sun	hy2d	2255	2302	67	241 32	SW-NE
Dec 24 Sun	lares	2308	2319	52	251 24	W -NE
Dec 24 Sun	hy2c	2338	2345	65	334 123	NW-SE
Dec 24 Sun	ajisai	2342	2351	41	188 87	S -E
Dec 25 Mon	lageos1	0019	0059	64	36 259	NE-W
Dec 25 Mon	lageos2	0041	0047	25	107 93	E -E
Dec 25 Mon	hy2d	0045	0048	26	320 4	NW-N
Dec 25 Mon	lares	0113	0115	25	342 2	N -N
Dec 25 Mon	hy2c	0126	0131	32	277 201	W -S

Dec 25 Mon	starlette	0131	0136	31	169	98	S -E
Dec 25 Mon	ajisai	0142	0154	77	244	82	SW-E
Dec 25 Mon	larets	0209	0215	63	180	339	S -N
Dec 25 Mon	starlette	0318	0326	67	236	84	SW-E
Dec 25 Mon	ajisai	0343	0355	83	274	103	W -E
Dec 25 Mon	gracefol	0345	0348	36	305	218	NW-SW
Dec 25 Mon	lageos1	0346	0423	54	73	314	E -NW
Dec 25 Mon	saral	0411	0415	34	102	21	E -N
Dec 25 Mon	lageos2	0414	0503	76	219	66	SW-NE
Dec 25 Mon	hy2d	0422	0428	33	350	81	N -E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 25 Mon	starlette	0507	0516	78	268 98	W -E
Dec 25 Mon	lares	0510	0520	48	343 107	N -E
Dec 25 Mon	ajisai	0545	0556	53	276 147	W -SE
Dec 25 Mon	swot	0550	0556	45	153 37	SE-NE
Dec 25 Mon	saral	0550	0555	41	212 320	SW-NW
Dec 25 Mon	terrasarx	0600	0603	35	67 153	NE-SE
Dec 25 Mon	tandemx	0600	0603	34	72 155	E -SE
Dec 25 Mon	hy2d	0609	0617	77	318 149	NW-SE
Dec 25 Mon	hy2b	0622	0629	60	32 176	NE-S
Dec 25 Mon	starlette	0656	0704	57	271 137	W -SE
Dec 25 Mon	geoik2	0700	0708	77	17 197	N -S
Dec 25 Mon	paz	0705	0709	40	339 225	N -SW
Dec 25 Mon	lares	0708	0719	58	314 177	NW-S
Dec 25 Mon	lageos1	0712	0756	85	146 328	SE-NW
Dec 25 Mon	swot	0735	0740	35	263 350	W -N
Dec 25 Mon	swarmc	0736	0739	40	321 218	NW-SW
Dec 25 Mon	swarma	0736	0740	46	334 206	NW-SW
Dec 25 Mon	hy2b	0806	0810	30	333 268	NW-W
Dec 25 Mon	lageos2	0819	0908	88	280 108	W -E
Dec 25 Mon	stella	0824	0830	50	36 168	NE-S
Dec 25 Mon	icesat2	0908	0912	80	357 190	N -S
Dec 25 Mon	jason3	0915	0925	53	180 49	S -NE
Dec 25 Mon	cryosat2	0924	0930	57	24 168	NE-S
Dec 25 Mon	sentinel3a	1011	1017	55	40 174	NE-S
Dec 25 Mon	sentinel6a	1018	1028	79	224 37	SW-NE
Dec 25 Mon	swarmb	1055	1059	72	187 360	S -N
Dec 25 Mon	jason3	1111	1121	53	256 31	W -NE
Dec 25 Mon	sentinel3b	1112	1118	50	354 224	N -SW
Dec 25 Mon	lares2	1207	1256	89	203 33	SW-NE
Dec 25 Mon	sentinel6a	1216	1224	36	291 25	W -NE
Dec 25 Mon	lageos2	1224	1303	48	296 184	NW-S
Dec 25 Mon	jason3	1509	1516	32	344 62	N -NE
Dec 25 Mon	larets	1538	1543	60	357 216	N -SW
Dec 25 Mon	gracefol	1559	1602	31	246 328	SW-NW
Dec 25 Mon	sentinel6a	1612	1621	44	337 92	NW-E
Dec 25 Mon	lares2	1615	1700	52	290 66	W -NE
Dec 25 Mon	hy2b	1628	1634	44	109 2	E -N
Dec 25 Mon	swot	1629	1636	81	338 168	N -S
Dec 25 Mon	hy2c	1642	1649	71	236 33	SW-NE
Dec 25 Mon	tandemx	1644	1646	32	85 24	E -NE
Dec 25 Mon	terrasarx	1644	1647	33	89 11	E -N



OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 25 Mon	geoik2	1702	1709	58	138 357 SE-N	
Dec 25 Mon	jason3	1705	1715	66	331 123 NW-SE	
Dec 25 Mon	beaconc	1707	1714	35	195 113 S -SE	
Dec 25 Mon	paz	1749	1752	44	218 322 SW-NW	
Dec 25 Mon	saral	1756	1802	46	39 166 NE-S	
Dec 25 Mon	sentinel6a	1808	1819	70	314 159 NW-S	
Dec 25 Mon	hy2b	1811	1817	39	219 321 SW-NW	
Dec 25 Mon	hy2c	1832	1835	27	319 4 NW-N	
Dec 25 Mon	geoik2	1847	1851	27	244 306 SW-NW	
Dec 25 Mon	beaconc	1859	1907	42	231 128 SW-SE	
Dec 25 Mon	jason3	1901	1910	40	297 192 NW-S	
Dec 25 Mon	lageos1	1925	1956	37	47 142 NE-SE	
Dec 25 Mon	saral	1937	1940	30	315 258 NW-W	
Dec 25 Mon	stella	1949	1955	63	188 335 S -NW	
Dec 25 Mon	swarmc	1949	1953	50	211 349 SW-N	
Dec 25 Mon	swarma	1950	1953	63	212 349 SW-N	
Dec 25 Mon	sentinel3a	1959	2000	25	50 34 NE-NE	
Dec 25 Mon	lares	2009	2015	29	127 65 SE-NE	
Dec 25 Mon	lares2	2020	2109	85	327 151 NW-SE	
Dec 25 Mon	cryosat2	2038	2042	35	114 26 SE-NE	
Dec 25 Mon	beaconc	2053	2059	32	233 164 SW-S	
Dec 25 Mon	sentinel3b	2057	2103	64	145 353 SE-N	
Dec 25 Mon	icesat2	2122	2124	31	260 319 W -NW	
Dec 25 Mon	hy2d	2126	2133	48	178 55 S -NE	
Dec 25 Mon	sentinel3a	2135	2141	62	185 332 S -NW	
Dec 25 Mon	lares	2203	2215	79	217 31 SW-NE	
Dec 25 Mon	hy2c	2210	2214	32	3 68 N -E	
Dec 25 Mon	cryosat2	2217	2221	32	240 323 SW-NW	
Dec 25 Mon	swarmb	2220	2224	70	11 171 N -S	
Dec 25 Mon	ajisai	2250	2256	31	159 97 S -E	
Dec 25 Mon	lageos1	2256	2339	81	33 232 NE-SW	
Dec 25 Mon	hy2d	2314	2320	47	268 22 W -N	
Dec 25 Mon	hy2c	2356	0004	78	320 145 NW-SE	
Dec 26 Tue	lares	0005	0012	32	299 14 NW-N	
Dec 26 Tue	lares2	0022	0045	30	313 253 NW-W	
Dec 26 Tue	ajisai	0048	0059	67	229 81 SW-E	
Dec 26 Tue	larets	0109	0113	36	107 15 E -N	
Dec 26 Tue	starlette	0149	0156	43	198 87 S -E	
Dec 26 Tue	lageos2	0225	0307	53	182 63 S -NE	
Dec 26 Tue	lageos1	0227	0303	51	54 299 NE-NW	
Dec 26 Tue	larets	0247	0250	32	238 307 SW-NW	
Dec 26 Tue	ajisai	0249	0301	83	267 94 W -E	
Dec 26 Tue	gracefol	0319	0323	62	347 197 N -S	
Dec 26 Tue	starlette	0337	0345	75	251 87 W -E	
Dec 26 Tue	lares	0407	0414	33	359 76 N -E	
Dec 26 Tue	hy2d	0440	0447	44	341 99 N -E	
Dec 26 Tue	ajisai	0451	0503	64	278 130 W -SE	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 26 Tue	saral	0518	0524	73	175 339 S -N	
Dec 26 Tue	starlette	0526	0535	77	273 109 W -E	
Dec 26 Tue	swot	0550	0557	55	167 31 S -NE	
Dec 26 Tue	lageos1	0551	0633	73	116 326 SE-NW	
Dec 26 Tue	lares	0604	0615	84	330 146 NW-SE	
Dec 26 Tue	lageos2	0622	0712	87	257 84 W -E	
Dec 26 Tue	hy2d	0628	0635	53	299 170 NW-S	

Dec 26 Tue	hy2b	0644	0652	80	19	195	N	-S
Dec 26 Tue	paz	0648	0652	62	353	208	N	-SW
Dec 26 Tue	ajisai	0655	0700	29	248	197	W	-S
Dec 26 Tue	swarmc	0709	0713	63	349	186	N	-S
Dec 26 Tue	swarma	0710	0714	85	355	180	N	-S
Dec 26 Tue	geoik2	0715	0723	71	10	209	N	-SW
Dec 26 Tue	starlette	0716	0723	44	260	154	W	-SE
Dec 26 Tue	terrasarx	0717	0719	32	312	251	NW	-W
Dec 26 Tue	tandemx	0717	0719	32	308	248	NW	-W
Dec 26 Tue	swot	0736	0740	31	272	340	W	-N
Dec 26 Tue	stella	0759	0803	31	72	144	E	-SE
Dec 26 Tue	icesat2	0841	0845	50	28	164	NE	-S
Dec 26 Tue	sentinel6a	0846	0855	44	164	53	S	-NE
Dec 26 Tue	lageos1	0929	1006	46	203	322	SW	-NW
Dec 26 Tue	jason3	0937	0948	76	204	42	SW	-NE
Dec 26 Tue	stella	0938	0943	45	343	233	N	-SW
Dec 26 Tue	sentinel3a	0945	0950	34	54	147	NE	-SE
Dec 26 Tue	cryosat2	1013	1018	50	334	212	NW	-SW
Dec 26 Tue	lageos2	1028	1115	72	295	147	NW	-SE
Dec 26 Tue	swarmb	1038	1042	67	167	9	S	-N
Dec 26 Tue	lares2	1039	1124	65	170	32	S	-NE
Dec 26 Tue	sentinel6a	1041	1051	61	247	32	SW	-NE
Dec 26 Tue	sentinel3b	1046	1052	77	11	203	N	-SW
Dec 26 Tue	sentinel3a	1125	1130	41	340	237	N	-SW
Dec 26 Tue	jason3	1135	1143	42	281	24	W	-NE
Dec 26 Tue	sentinel6a	1240	1247	31	310	27	NW	-NE
Dec 26 Tue	lares2	1437	1524	58	261	48	W	-NE
Dec 26 Tue	larets	1437	1442	40	46	158	NE	-S
Dec 26 Tue	sentinel6a	1439	1445	30	344	51	N	-NE
Dec 26 Tue	hy2c	1514	1520	45	165	57	S	-NE
Dec 26 Tue	jason3	1532	1540	37	345	80	N	-E
Dec 26 Tue	gracefol	1534	1537	53	223	343	SW	-N
Dec 26 Tue	larets	1615	1618	30	327	261	NW	-W
Dec 26 Tue	beaconc	1623	1629	31	184	116	S	-SE
Dec 26 Tue	swot	1629	1637	67	334	175	NW	-S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 26 Tue	sentinel6a	1635	1645	57	334 114	NW-SE
Dec 26 Tue	hy2b	1649	1656	61	137 355	SE-N
Dec 26 Tue	hy2c	1700	1708	49	255 29	W -NE
Dec 26 Tue	geoik2	1717	1725	73	152 348	SE-N
Dec 26 Tue	saral	1726	1729	27	73 127	E -SE
Dec 26 Tue	jason3	1727	1738	87	322 143	NW-SE
Dec 26 Tue	paz	1731	1735	67	181 338	S -N
Dec 26 Tue	tandemx	1800	1803	34	225 313	SW-NW
Dec 26 Tue	terrasarx	1800	1803	33	221 310	SW-NW
Dec 26 Tue	beaconc	1814	1823	43	230 121	SW-SE
Dec 26 Tue	sentinel6a	1831	1840	48	303 184	NW-S
Dec 26 Tue	hy2b	1834	1838	28	242 303	SW-NW
Dec 26 Tue	lares2	1847	1935	65	321 119	NW-SE
Dec 26 Tue	saral	1904	1910	50	355 225	N -SW
Dec 26 Tue	stella	1922	1928	76	156 348	SE-N
Dec 26 Tue	swarmc	1922	1926	73	176 5	S -N
Dec 26 Tue	swarma	1923	1927	68	164 8	S -N
Dec 26 Tue	jason3	1926	1929	26	267 234	W -SW
Dec 26 Tue	beaconc	2008	2015	35	237 154	SW-SE
Dec 26 Tue	sentinel3b	2032	2037	43	111 5	E -N

Dec 26 Tue	icesat2	2054	2058	58	196	342	S	-N
Dec 26 Tue	lares	2100	2110	59	179	43	S	-NE
Dec 26 Tue	sentinel3a	2109	2116	84	159	346	S	-N
Dec 26 Tue	cryosat2	2126	2131	83	179	353	S	-N
Dec 26 Tue	lageos1	2133	2217	76	33	203	NE	-SW
Dec 26 Tue	hy2d	2144	2152	71	204	43	SW	-NE
Dec 26 Tue	swarmb	2203	2207	50	22	157	N	-SE
Dec 26 Tue	sentinel3b	2212	2216	32	231	309	SW	-NW
Dec 26 Tue	hy2c	2228	2234	42	352	96	N	-E
Dec 26 Tue	lares2	2246	2327	51	325	209	NW	-SW
Dec 26 Tue	lares	2258	2308	47	258	20	W	-N
Dec 26 Tue	hy2d	2333	2338	35	290	13	W	-N
Dec 26 Tue	ajisai	2354	0005	56	213	81	SW	-E
Dec 27 Wed	hy2c	0015	0022	57	302	167	NW	-S
Dec 27 Wed	lageos2	0045	0108	30	132	75	SE	-E
Dec 27 Wed	lageos1	0107	0145	56	41	276	NE	-W
Dec 27 Wed	larets	0145	0150	74	150	351	SE	-N
Dec 27 Wed	ajisai	0155	0207	81	258	87	W	-E
Dec 27 Wed	starlette	0207	0215	57	224	85	SW	-E
Dec 27 Wed	gracefol	0254	0258	71	9	171	N	-S
Dec 27 Wed	lares	0304	0306	25	14	34	N	-NE
Dec 27 Wed	hy2d	0313	0315	25	13	42	N	-NE
Dec 27 Wed	starlette	0356	0405	82	262	92	W	-E
Dec 27 Wed	ajisai	0357	0409	75	277	117	W	-SE
Dec 27 Wed	lageos2	0427	0516	80	227	68	SW	-E
Dec 27 Wed	lageos1	0432	0511	59	89	320	E	-NW
Dec 27 Wed	saral	0447	0453	60	141	354	SE	-N
Dec 27 Wed	hy2d	0459	0506	61	337	120	NW	-SE
Dec 27 Wed	lares	0500	0510	53	344	114	N	-SE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 27 Wed	starlette	0545	0554	67	274 122	W -SE
Dec 27 Wed	geoik2	0550	0553	28	77 126	E -SE
Dec 27 Wed	swot	0551	0558	63	173 26	S -NE
Dec 27 Wed	ajisai	0559	0608	39	268 171	W -S
Dec 27 Wed	paz	0630	0635	81	18 191	N -S
Dec 27 Wed	swarmc	0642	0646	58	14 161	N -S
Dec 27 Wed	swarma	0643	0647	50	27 158	NE-S
Dec 27 Wed	hy2d	0647	0652	34	277 198	W -S
Dec 27 Wed	lares	0658	0708	51	309 185	NW-S
Dec 27 Wed	tandemx	0659	0703	47	345 218	N -SW
Dec 27 Wed	terrasarx	0659	0703	46	347 220	N -SW
Dec 27 Wed	hy2b	0706	0714	69	8 210	N -SW
Dec 27 Wed	geoik2	0731	0738	58	359 220	N -SW
Dec 27 Wed	starlette	0736	0741	32	244 177	SW-S
Dec 27 Wed	lageos1	0801	0844	69	166 327	S -NW
Dec 27 Wed	jason3	0807	0813	32	136 68	SE-E
Dec 27 Wed	lageos2	0833	0922	89	284 115	W -SE
Dec 27 Wed	sentinel6a	0907	0918	64	193 45	S -NE
Dec 27 Wed	stella	0911	0917	66	6 209	N -SW
Dec 27 Wed	lares2	0916	0950	41	131 37	SE-NE
Dec 27 Wed	cryosat2	0922	0928	61	21 171	N -S
Dec 27 Wed	jason3	1000	1010	76	228 36	SW-NE
Dec 27 Wed	sentinel3b	1020	1026	64	28 179	NE-S
Dec 27 Wed	swarmb	1022	1026	53	138 14	SE-N
Dec 27 Wed	sentinel3a	1059	1105	64	359 213	N -SW
Dec 27 Wed	sentinel6a	1104	1114	47	266 31	W -NE
Dec 27 Wed	jason3	1159	1206	35	303 25	NW-NE
Dec 27 Wed	lageos2	1238	1314	42	294 194	NW-S
Dec 27 Wed	lares2	1301	1350	73	228 37	SW-NE
Dec 27 Wed	sentinel6a	1502	1509	34	346 68	N -E
Dec 27 Wed	gracefol	1508	1512	84	177 1	S -N
Dec 27 Wed	larets	1513	1519	76	18 193	N -S

Dec 27	Wed	hy2c	1531	1539	66	200	45	S	-NE
Dec 27	Wed	jason3	1554	1603	46	337	95	NW	-E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 27	Wed	swot	1630	1637	60	327 185 NW-S
Dec 27	Wed	sentinel6a	1657	1708	76	325 133 NW-SE
Dec 27	Wed	hy2b	1711	1718	82	157 346 SE-N
Dec 27	Wed	lares2	1712	1758	54	307 87 NW-E
Dec 27	Wed	paz	1714	1718	63	154 352 SE-N
Dec 27	Wed	hy2c	1720	1726	37	287 22 W -N
Dec 27	Wed	beaconc	1730	1738	41	222 120 SW-SE
Dec 27	Wed	geoik2	1733	1740	84	165 343 S -N
Dec 27	Wed	tandemx	1743	1746	53	209 328 SW-NW
Dec 27	Wed	terrasarx	1743	1747	52	205 334 SW-NW
Dec 27	Wed	jason3	1750	1800	66	312 164 NW-S
Dec 27	Wed	saral	1833	1839	75	15 198 N -S
Dec 27	Wed	sentinel6a	1855	1901	32	282 211 W -SW
Dec 27	Wed	swarma	1856	1900	37	137 23 SE-NE
Dec 27	Wed	stella	1856	1902	50	125 358 SE-N
Dec 27	Wed	swarmc	1856	1859	45	130 24 SE-NE
Dec 27	Wed	beaconc	1923	1931	38	240 144 SW-SE
Dec 27	Wed	lares	1958	2005	33	135 60 SE-NE
Dec 27	Wed	sentinel3b	2007	2010	29	82 26 E -NE
Dec 27	Wed	lageos1	2011	2051	52	38 171 NE-S
Dec 27	Wed	hy2d	2018	2021	26	129 85 SE-E
Dec 27	Wed	icesat2	2028	2032	64	158 1 S -N
Dec 27	Wed	cryosat2	2036	2040	38	117 25 SE-NE
Dec 27	Wed	stella	2037	2040	27	244 299 SW-NW
Dec 27	Wed	sentinel3a	2044	2050	54	128 357 SE-N
Dec 27	Wed	lares2	2114	2201	75	328 175 NW-S
Dec 27	Wed	sentinel3b	2145	2151	51	196 329 S -NW
Dec 27	Wed	swarmb	2147	2150	40	50 143 NE-SE
Dec 27	Wed	lares	2153	2204	75	225 28 SW-NE
Dec 27	Wed	hy2d	2202	2210	75	229 34 SW-NE
Dec 27	Wed	cryosat2	2215	2219	30	241 321 SW-NW
Dec 27	Wed	sentinel3a	2226	2228	26	263 298 W -NW
Dec 27	Wed	hy2c	2246	2253	58	338 117 N -SE
Dec 27	Wed	ajisai	2301	2310	44	192 87 S -E
Dec 27	Wed	lageos1	2345	0026	69	34 251 NE-W
Dec 27	Wed	hy2d	2353	2356	28	320 5 NW-N
Dec 27	Wed	lares	2355	0001	30	305 9 NW-N
Dec 28	Thu	hy2c	0033	0039	37	292 196 W -S
Dec 28	Thu	starlette	0039	0044	33	179 102 S -E
Dec 28	Thu	ajisai	0101	0113	78	247 83 SW-E
Dec 28	Thu	larets	0221	0227	51	193 333 S -NW
Dec 28	Thu	starlette	0226	0235	70	241 83 SW-E
Dec 28	Thu	gracefol	0230	0233	41	51 147 NE-SE
Dec 28	Thu	lageos2	0236	0321	59	192 63 S -NE
Dec 28	Thu	ajisai	0303	0315	82	274 105 W -E

Dec 28 Thu	lageos1	0313	0350	52	66	309	NE-NW
Dec 28 Thu	hy2d	0331	0335	30	5	68	N -E
Dec 28 Thu	lares	0356	0404	35	353	82	N -E
Dec 28 Thu	starlette	0415	0424	82	270	100	W -E
Dec 28 Thu	saral	0417	0421	36	96	13	E -N
Dec 28 Thu	ajisai	0505	0515	50	272	151	W -SE
Dec 28 Thu	hy2d	0517	0525	81	322	142	NW-SE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction		Observer
Dec 28 Thu	hy2b	0546	0551	34	58	141	NE-SE
Dec 28 Thu	swot	0551	0558	73	186	24	S -NE
Dec 28 Thu	lares	0553	0605	81	327	152	NW-SE
Dec 28 Thu	saral	0556	0601	37	223	322	SW-NW
Dec 28 Thu	geoik2	0604	0609	36	54	143	NE-SE
Dec 28 Thu	starlette	0605	0613	54	267	138	W -SE
Dec 28 Thu	paz	0613	0617	50	36	169	NE-S
Dec 28 Thu	swarmc	0616	0619	33	51	137	NE-SE
Dec 28 Thu	swarma	0617	0619	29	67	124	NE-SE
Dec 28 Thu	lageos2	0637	0726	86	264	89	W -E
Dec 28 Thu	lageos1	0638	0721	87	136	328	SE-NW
Dec 28 Thu	terrasarx	0642	0646	65	5	201	N -S
Dec 28 Thu	tandemx	0642	0646	71	4	201	N -S
Dec 28 Thu	hy2b	0728	0735	50	358	230	N -SW
Dec 28 Thu	geoik2	0746	0753	46	353	231	N -SW
Dec 28 Thu	jason3	0827	0837	47	173	52	S -NE
Dec 28 Thu	stella	0844	0851	73	24	187	NE-S
Dec 28 Thu	icesat2	0922	0926	40	335	216	NW-SW
Dec 28 Thu	sentinel6a	0930	0940	81	216	39	SW-NE
Dec 28 Thu	sentinel3b	0955	1000	40	54	157	NE-SE
Dec 28 Thu	swarmb	1005	1009	38	131	22	SE-N
Dec 28 Thu	cryosat2	1011	1016	47	332	216	NW-SW
Dec 28 Thu	jason3	1023	1033	59	251	32	W -NE
Dec 28 Thu	lageos1	1025	1051	32	234	310	SW-NW
Dec 28 Thu	sentinel3a	1033	1039	77	21	192	N -S
Dec 28 Thu	lageos2	1042	1127	66	296	156	NW-SE
Dec 28 Thu	sentinel6a	1128	1136	38	289	25	W -NE
Dec 28 Thu	lares2	1129	1217	83	195	33	S -NE
Dec 28 Thu	sentinel3b	1135	1139	35	331	249	NW-W
Dec 28 Thu	jason3	1223	1228	30	322	19	NW-N
Dec 28 Thu	jason3	1421	1427	30	345	53	N -NE
Dec 28 Thu	gracefol	1444	1447	48	131	19	SE-N
Dec 28 Thu	swot	1447	1452	33	21	105	N -E
Dec 28 Thu	sentinel6a	1524	1533	41	338	88	N -E
Dec 28 Thu	lares2	1535	1620	52	284	61	W -NE
Dec 28 Thu	hy2c	1549	1557	80	225	36	SW-NE
Dec 28 Thu	larets	1550	1555	48	348	226	N -SW
Dec 28 Thu	jason3	1617	1627	60	333	117	NW-SE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction		Observer
Dec 28 Thu	swot	1631	1637	50	319	196	NW-S

Dec 28 Thu	beaconc	1646	1654	39	213	115	SW-SE
Dec 28 Thu	paz	1657	1701	46	125	2	SE-N
Dec 28 Thu	sentinel6a	1720	1731	78	317	152	NW-SE
Dec 28 Thu	tandemx	1725	1729	79	170	344	S -N
Dec 28 Thu	terrasarx	1725	1730	83	170	345	S -N
Dec 28 Thu	hy2b	1733	1741	69	178	338	S -N
Dec 28 Thu	hy2c	1739	1743	29	304	5	NW-N
Dec 28 Thu	geoik2	1748	1755	69	180	336	S -NW
Dec 28 Thu	saral	1802	1807	52	42	167	NE-S
Dec 28 Thu	jason3	1813	1822	46	300	186	NW-S
Dec 28 Thu	swarmc	1830	1831	26	90	62	E -NE
Dec 28 Thu	stella	1830	1834	33	100	21	E -N
Dec 28 Thu	beaconc	1839	1847	40	234	135	SW-SE
Dec 28 Thu	lageos1	1853	1917	31	54	125	NE-SE
Dec 28 Thu	lares2	1941	2030	79	325	143	NW-SE
Dec 28 Thu	saral	1942	1945	28	323	267	NW-W
Dec 28 Thu	icesat2	2002	2005	37	114	21	SE-N
Dec 28 Thu	swarmc	2005	2006	25	293	317	NW-NW
Dec 28 Thu	swarma	2005	2007	28	275	327	W -NW
Dec 28 Thu	stella	2009	2015	43	206	326	SW-NW
Dec 28 Thu	sentinel3a	2019	2023	34	95	15	E -N
Dec 28 Thu	hy2d	2035	2041	41	161	58	S -NE
Dec 28 Thu	beaconc	2035	2037	25	210	189	SW-S
Dec 28 Thu	lares	2049	2100	67	188	39	S -NE
Dec 28 Thu	hy2c	2118	2122	29	5	66	N -NE
Dec 28 Thu	sentinel3b	2119	2125	77	169	342	S -N
Dec 28 Thu	cryosat2	2124	2129	78	185	350	S -N
Dec 28 Thu	swarmb	2130	2133	30	49	128	NE-SE
Dec 28 Thu	sentinel3a	2158	2203	41	214	319	SW-NW
Dec 28 Thu	ajisai	2208	2215	33	171	98	S -E
Dec 28 Thu	hy2d	2221	2228	52	253	25	W -NE
Dec 28 Thu	lageos1	2222	2305	88	32	223	NE-SW
Dec 28 Thu	lares	2248	2258	44	266	21	W -N
Dec 28 Thu	hy2c	2304	2312	78	324	138	NW-SE
Dec 28 Thu	lares2	2342	0011	35	317	240	NW-SW
Dec 29 Fri	ajisai	0007	0018	69	233	81	SW-E
Dec 29 Fri	lageos2	0053	0124	36	148	69	SE-E
Dec 29 Fri	starlette	0057	0104	45	206	90	SW-E
Dec 29 Fri	larets	0121	0125	44	116	9	SE-N
Dec 29 Fri	lageos1	0154	0230	52	48	292	NE-W
Dec 29 Fri	gracefol	0206	0207	25	90	114	E -SE
Dec 29 Fri	ajisai	0208	0220	85	269	96	W -E
Dec 29 Fri	starlette	0245	0254	79	254	87	W -E
Dec 29 Fri	lares	0253	0257	26	8	48	N -NE
Dec 29 Fri	larets	0300	0301	26	264	285	W -W
Dec 29 Fri	gracefol	0340	0341	27	280	252	W -W
Dec 29 Fri	hy2d	0349	0355	40	354	94	N -E
Dec 29 Fri	ajisai	0410	0422	62	278	133	W -SE
Dec 29 Fri	starlette	0435	0443	74	272	112	W -E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 29 Fri	lageos2	0500	0530	84	235 71	SW-E
Dec 29 Fri	lageos1	0518	0559	68	107 325	E -NW
Dec 29 Fri	saral	0524	0530	66	184 337	S -NW
Dec 29 Fri	hy2d	0535	0543	61	310 163	NW-S
Dec 29 Fri	swot	0552	0559	87	195 19	S -N
Dec 29 Fri	paz	0557	0559	32	81 142	E -SE
Dec 29 Fri	hy2b	0608	0614	47	47 163	NE-S
Dec 29 Fri	ajisai	0614	0619	27	249 200	W -S
Dec 29 Fri	geoik2	0619	0625	46	44 160	NE-S
Dec 29 Fri	starlette	0624	0631	41	264 160	W -S
Dec 29 Fri	tandemx	0625	0629	67	33 184	NE-S
Dec 29 Fri	terrasarx	0625	0629	64	31 183	NE-S
Dec 29 Fri	lares	0648	0657	45	303 193	NW-S
Dec 29 Fri	swarmc	0724	0726	32	289 228	W -SW

Dec 29 Fri	swarma	0724	0727	37	311	218	NW-SW
Dec 29 Fri	hy2b	0751	0757	37	341	244	N -SW
Dec 29 Fri	sentinel6a	0758	0806	39	158	61	S -NE
Dec 29 Fri	geoik2	0802	0807	37	339	250	N -W
Dec 29 Fri	stella	0818	0824	44	44	165	NE-S
Dec 29 Fri	lageos2	0847	0935	85	288	123	W -SE
Dec 29 Fri	jason3	0849	0900	68	197	44	S -NE
Dec 29 Fri	lageos1	0852	0932	53	189	324	S -NW
Dec 29 Fri	icesat2	0856	0900	79	358	190	N -S
Dec 29 Fri	cryosat2	0920	0926	64	17	174	N -S
Dec 29 Fri	sentinel6a	0953	1003	68	240	34	SW-NE
Dec 29 Fri	stella	0958	1002	33	336	258	NW-W
Dec 29 Fri	lares2	1001	1045	58	161	33	S -NE
Dec 29 Fri	sentinel3a	1007	1013	50	40	170	NE-S
Dec 29 Fri	jason3	1046	1055	45	269	26	W -NE
Dec 29 Fri	sentinel3b	1108	1114	55	358	223	N -SW
Dec 29 Fri	sentinel6a	1152	1159	32	308	27	NW-NE
Dec 29 Fri	lageos2	1253	1324	37	291	207	W -SW
Dec 29 Fri	lares2	1357	1444	61	252	43	W -NE
Dec 29 Fri	hy2c	1422	1428	38	158	60	S -NE
Dec 29 Fri	jason3	1444	1451	35	346	70	N -E
Dec 29 Fri	swot	1448	1453	37	23	113	NE-SE
Dec 29 Fri	larets	1449	1454	51	39	168	NE-S
Dec 29 Fri	sentinel6a	1547	1557	53	336	108	NW-E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 29 Fri	beaconc	1602	1609	36	203 116	SW-SE RS
Dec 29 Fri	hy2c	1608	1616	55	249 31	W -NE
Dec 29 Fri	hy2b	1613	1619	35	104 8	E -N
Dec 29 Fri	geoik2	1622	1627	33	95 14	E -N
Dec 29 Fri	swot	1632	1638	43	310 201	NW-S
Dec 29 Fri	jason3	1639	1650	80	324 136	NW-SE
Dec 29 Fri	paz	1640	1643	32	103 20	E -N
Dec 29 Fri	terrasarx	1708	1712	63	146 358	SE-N
Dec 29 Fri	tandemx	1708	1712	60	145 357	SE-N
Dec 29 Fri	saral	1731	1735	29	63 137	NE-SE
Dec 29 Fri	sentinel6a	1743	1753	55	306 173	NW-S
Dec 29 Fri	beaconc	1754	1803	42	235 127	SW-SE
Dec 29 Fri	hy2b	1756	1802	49	205 325	SW-NW
Dec 29 Fri	geoik2	1803	1810	53	192 328	S -NW
Dec 29 Fri	lares2	1808	1855	61	318 110	NW-E
Dec 29 Fri	jason3	1837	1843	30	279 213	W -SW
Dec 29 Fri	saral	1910	1915	46	347 232	N -SW
Dec 29 Fri	swarmc	1936	1940	41	220 342	SW-N
Dec 29 Fri	swarma	1937	1941	48	222 349	SW-N
Dec 29 Fri	stella	1942	1948	71	177 337	S -NW
Dec 29 Fri	lares	1947	1955	37	144 55	SE-NE
Dec 29 Fri	beaconc	1949	1954	29	225 170	SW-S
Dec 29 Fri	cryosat2	2034	2039	41	121 14	SE-N
Dec 29 Fri	hy2d	2052	2100	63	196 46	S -NE
Dec 29 Fri	sentinel3b	2053	2059	63	142 356	SE-N
Dec 29 Fri	lageos1	2059	2142	68	34 193	NE-S
Dec 29 Fri	icesat2	2110	2112	31	260 319	W -NW

Dec 29 Fri	sentinel3a	2132	2138	66	187 337	S -NW
Dec 29 Fri	hy2c	2136	2142	38	355 92	N -E
Dec 29 Fri	lares	2143	2154	68	233 27	SW-NE
Dec 29 Fri	lares2	2207	2250	57	326 200	NW-S
Dec 29 Fri	cryosat2	2214	2217	28	261 319	W -NW
Dec 29 Fri	hy2d	2240	2247	39	275 24	W -NE
Dec 29 Fri	swarmb	2249	2251	31	289 233	W -SW
Dec 29 Fri	ajisai	2313	2324	58	217 81	SW-E
Dec 29 Fri	hy2c	2322	2330	66	312 160	NW-S
Dec 29 Fri	lares	2345	2351	29	310 12	NW-N
Dec 30 Sat	lageos1	0033	0112	60	38 268	NE-W
Dec 30 Sat	ajisai	0114	0126	82	260 88	W -E
Dec 30 Sat	starlette	0116	0124	59	225 84	SW-E
Dec 30 Sat	larets	0157	0202	87	166 344	S -N
Dec 30 Sat	lageos2	0249	0335	65	201 63	S -NE
Dec 30 Sat	starlette	0305	0313	79	264 93	W -E
Dec 30 Sat	gracefol	0314	0317	45	323 215	NW-SW
Dec 30 Sat	ajisai	0316	0328	72	278 119	W -SE
Dec 30 Sat	lares	0345	0354	38	347 88	N -E
Dec 30 Sat	lageos1	0359	0437	56	81 317	E -NW
Dec 30 Sat	hy2d	0407	0414	55	341 114	N -SE
Dec 30 Sat	saral	0452	0459	70	149 351	SE-N
Dec 30 Sat	starlette	0454	0502	63	272 126	W -SE
Dec 30 Sat	ajisai	0519	0527	37	261 174	W -S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 30 Sat	lares	0543	0554	79	324 159	NW-S MW
Dec 30 Sat	swot	0553	0600	76	206 15	SW-N
Dec 30 Sat	hy2d	0554	0600	40	293 192	NW-S
Dec 30 Sat	tandemx	0608	0611	43	59 160	NE-S
Dec 30 Sat	terrasarx	0608	0611	43	54 158	NE-S
Dec 30 Sat	hy2b	0629	0637	65	27 184	NE-S
Dec 30 Sat	geoik2	0634	0641	59	34 176	NE-S
Dec 30 Sat	starlette	0644	0649	30	250 184	W -S
Dec 30 Sat	lageos2	0651	0740	86	270 95	W -E
Dec 30 Sat	swarmc	0656	0700	55	340 196	N -S
Dec 30 Sat	swarma	0657	0701	65	341 189	N -S
Dec 30 Sat	paz	0713	0716	35	327 240	NW-SW
Dec 30 Sat	lageos1	0726	0810	77	156 328	SE-NW
Dec 30 Sat	geoik2	0818	0822	30	322 259	NW-W
Dec 30 Sat	sentinel6a	0820	0830	57	182 47	S -NE
Dec 30 Sat	icesat2	0829	0833	48	29 163	NE-S
Dec 30 Sat	lares2	0841	0911	36	119 39	SE-NE
Dec 30 Sat	jason3	0912	0922	81	220 38	SW-NE
Dec 30 Sat	stella	0931	0937	49	354 225	N -SW
Dec 30 Sat	sentinel3a	0942	0946	32	67 142	NE-SE
Dec 30 Sat	cryosat2	1009	1014	43	331 219	NW-SW
Dec 30 Sat	sentinel6a	1016	1026	52	261 31	W -NE
Dec 30 Sat	sentinel3b	1042	1049	86	14 199	N -S
Dec 30 Sat	lageos2	1056	1140	60	297 164	NW-S
Dec 30 Sat	swarmb	1107	1110	32	248 330	W -NW
Dec 30 Sat	jason3	1110	1118	37	291 26	W -NE
Dec 30 Sat	sentinel3a	1121	1126	44	346 236	N -SW
Dec 30 Sat	lares2	1222	1311	79	219 35	SW-NE
Dec 30 Sat	sentinel6a	1414	1421	32	347 66	N -NE
Dec 30 Sat	hy2c	1439	1447	59	192 47	S -NE
Dec 30 Sat	swot	1448	1454	43	10 123	N -SE
Dec 30 Sat	jason3	1506	1515	43	338 90	N -E
Dec 30 Sat	beaconc	1518	1524	33	192 119	S -SE
Dec 30 Sat	larets	1525	1531	73	10 203	N -SW
Dec 30 Sat	gracefol	1528	1531	37	230 329	SW-NW
Dec 30 Sat	sentinel6a	1609	1620	70	327 127	NW-SE
Dec 30 Sat	hy2c	1627	1634	41	272 24	W -NE



## OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Dec 30 Sat	lares2	1632	1717	52	302 79 NW-E	TS
Dec 30 Sat	swot	1633	1638	37	301 212 NW-SW	
Dec 30 Sat	hy2b	1635	1641	48	119 2 SE-N	
Dec 30 Sat	geoik2	1637	1643	40	106 3 E -N	
Dec 30 Sat	tandemx	1651	1655	39	122 8 SE-N	
Dec 30 Sat	terrasarx	1652	1655	40	103 9 E -N	
Dec 30 Sat	jason3	1702	1712	73	315 157 NW-SE	
Dec 30 Sat	beaconc	1710	1718	42	228 125 SW-SE	
Dec 30 Sat	paz	1757	1800	36	234 320 SW-NW	
Dec 30 Sat	sentinel6a	1806	1814	37	293 199 NW-S	
Dec 30 Sat	geoik2	1819	1825	42	210 320 SW-NW	
Dec 30 Sat	hy2b	1819	1824	35	233 316 SW-NW	
Dec 30 Sat	saral	1838	1845	80	11 202 N -S	
Dec 30 Sat	beaconc	1904	1910	32	230 160 SW-S	
Dec 30 Sat	swarmc	1909	1913	74	189 358 S -N	
Dec 30 Sat	swarma	1910	1914	68	182 2 S -N	
Dec 30 Sat	stella	1916	1922	70	147 350 SE-N	
Dec 30 Sat	lageos1	1938	2014	44	42 158 NE-S	
Dec 30 Sat	sentinel3b	2028	2033	41	111 8 E -N	
Dec 30 Sat	lares2	2035	2123	82	328 166 NW-S	
Dec 30 Sat	lares	2038	2050	73	197 36 S -NE	
Dec 30 Sat	icesat2	2042	2046	58	196 343 S -N	
Dec 30 Sat	sentinel3a	2106	2112	76	153 348 SE-N	
Dec 30 Sat	hy2d	2110	2118	82	221 37 SW-NE	
Dec 30 Sat	cryosat2	2122	2127	72	190 348 S -N	
Dec 30 Sat	hy2c	2154	2201	52	342 111 N -E	
Dec 30 Sat	sentinel3b	2208	2213	35	225 319 SW-NW	
Dec 30 Sat	ajisai	2220	2230	46	196 83 S -E	
Dec 30 Sat	swarmb	2231	2235	41	329 213 NW-SW	
Dec 30 Sat	lares	2238	2247	40	273 17 W -N	
Dec 30 Sat	hy2d	2300	2304	30	304 7 NW-N	
Dec 30 Sat	lageos1	2310	2353	74	33 241 NE-SW	
Dec 30 Sat	hy2c	2341	2348	43	296 182 NW-S	
Dec 30 Sat	starlette	2348	2353	34	175 96 S -E	
Dec 31 Sun	ajisai	0020	0032	78	249 83 W -E	
Dec 31 Sun	larets	0057	0100	29	92 28 E -NE	
Dec 31 Sun	lageos2	0103	0139	41	160 65 S -NE	
Dec 31 Sun	starlette	0135	0143	69	242 85 SW-E	
Dec 31 Sun	ajisai	0222	0234	80	275 107 W -E	
Dec 31 Sun	larets	0234	0238	40	218 320 SW-NW	
Dec 31 Sun	hy2d	0239	0243	28	7 65 N -NE	
Dec 31 Sun	lageos1	0240	0316	51	60 305 NE-NW	
Dec 31 Sun	lares	0242	0247	28	2 53 N -NE	
Dec 31 Sun	gracefol	0249	0253	77	353 186 N -S	
Dec 31 Sun	starlette	0324	0333	78	270 102 W -E	
Dec 31 Sun	saral	0422	0427	40	108 6 E -N	
Dec 31 Sun	ajisai	0424	0434	48	272 154 W -SE	
Dec 31 Sun	hy2d	0425	0433	76	327 135 NW-SE	
Dec 31 Sun	lares	0439	0450	64	338 128 N -SE	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 31 Sun	lageos2	0500	0544	87	242 75 SW-E	RS
Dec 31 Sun	starlette	0513	0521	51	270 142 W -SE	
Dec 31 Sun	tandemx	0551	0553	28	74 130 E -SE	
Dec 31 Sun	terrasarx	0551	0553	28	69 126 E -SE	
Dec 31 Sun	swot	0553	0600	67	213 10 SW-N	
Dec 31 Sun	saral	0602	0606	34	236 315 SW-NW	
Dec 31 Sun	lageos1	0604	0647	80	126 327 SE-NW	
Dec 31 Sun	hy2d	0615	0616	25	248 233 W -SW	
Dec 31 Sun	swarmc	0629	0633	72	5 171 N -S	
Dec 31 Sun	swarma	0630	0634	59	14 166 N -S	
Dec 31 Sun	lares	0637	0646	40	304 202 NW-S	
Dec 31 Sun	geoik2	0649	0656	74	24 188 NE-S	
Dec 31 Sun	hy2b	0651	0659	80	15 200 N -S	
Dec 31 Sun	paz	0655	0659	53	354 220 N -SW	
Dec 31 Sun	jason3	0740	0748	41	160 59 S -NE	
Dec 31 Sun	sentinel6a	0842	0852	77	208 41 SW-NE	
Dec 31 Sun	lageos2	0901	0949	81	291 130 W -SE	
Dec 31 Sun	stella	0904	0911	80	12 203 N -SW	
Dec 31 Sun	cryosat2	0918	0924	67	14 177 N -S	
Dec 31 Sun	jason3	0934	0945	65	240 33 SW-NE	
Dec 31 Sun	lageos1	0946	1019	38	216 317 SW-NW	
Dec 31 Sun	sentinel3b	1016	1023	60	29 179 NE-S	
Dec 31 Sun	sentinel6a	1039	1048	41	277 26 W -NE	
Dec 31 Sun	swarmb	1050	1054	42	231 344 SW-N	
Dec 31 Sun	lares2	1051	1138	76	186 32 S -NE	
Dec 31 Sun	sentinel3a	1055	1101	66	3 210 N -SW	
Dec 31 Sun	jason3	1134	1140	31	310 20 NW-N	
Dec 31 Sun	lageos2	1309	1333	31	285 221 W -SW	
Dec 31 Sun	larets	1425	1429	31	60 143 NE-SE	
Dec 31 Sun	sentinel6a	1436	1445	39	339 84 N -E	
Dec 31 Sun	swot	1449	1455	50	9 132 N -SE	
Dec 31 Sun	lares2	1454	1540	53	275 55 W -NE	
Dec 31 Sun	hy2c	1457	1505	85	217 39 SW-NE	
Dec 31 Sun	gracefo1	1503	1507	65	201 353 S -N	
Dec 31 Sun	jason3	1529	1539	55	336 111 NW-E	
Dec 31 Sun	larets	1602	1607	38	342 235 N -SW	
Dec 31 Sun	beaconc	1625	1634	42	228 119 SW-SE	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Dec 31 Sun	sentinel6a	1632	1643	85	320 146 NW-SE	
Dec 31 Sun	swot	1634	1638	31	292 224 W -SW	
Dec 31 Sun	hy2c	1647	1652	31	302 17 NW-N	
Dec 31 Sun	geoik2	1651	1658	50	128 360 SE-N	
Dec 31 Sun	hy2b	1656	1704	65	144 350 SE-N	
Dec 31 Sun	jason3	1725	1734	52	304 180 NW-S	
Dec 31 Sun	paz	1739	1743	52	195 334 S -NW	
Dec 31 Sun	saral	1807	1813	56	33 175 NE-S	

Dec 31 Sun	tandemx	1809	1811	27	251 305	W -NW
Dec 31 Sun	terrasarx	1809	1811	27	246 301	SW-NW
Dec 31 Sun	beaconc	1819	1826	35	234 150	SW-SE
Dec 31 Sun	lageos1	1828	1830	25	81 86	E -E
Dec 31 Sun	geoik2	1835	1840	33	229 312	SW-NW
Dec 31 Sun	swarma	1843	1847	47	149 18	SE-N
Dec 31 Sun	hy2b	1843	1844	25	269 284	W -W
Dec 31 Sun	swarmc	1843	1846	57	143 17	SE-N
Dec 31 Sun	stella	1850	1855	45	114 4	SE-N
Dec 31 Sun	lares2	1902	1951	74	324 134	NW-SE
Dec 31 Sun	lares	1936	1945	42	154 50	SE-NE
Dec 31 Sun	hy2d	1943	1949	36	155 61	SE-NE
Dec 31 Sun	saral	1948	1950	25	313 277	NW-W
Dec 31 Sun	sentinel3b	2004	2006	27	67 31	NE-NE
Dec 31 Sun	icesat2	2016	2020	68	154 1	SE-N
Dec 31 Sun	hy2c	2026	2029	28	6 52	N -NE
Dec 31 Sun	stella	2030	2034	31	231 307	SW-NW
Dec 31 Sun	cryosat2	2032	2037	44	126 13	SE-N
Dec 31 Sun	sentinel3a	2040	2046	49	127 359	SE-N
Dec 31 Sun	ajisai	2127	2135	34	175 91	S -E
Dec 31 Sun	hy2d	2129	2136	59	246 28	SW-NE
Dec 31 Sun	lares	2132	2143	62	237 24	SW-NE
Dec 31 Sun	sentinel3b	2141	2147	56	191 330	S -NW
Dec 31 Sun	lageos1	2148	2231	84	33 213	NE-SW
Dec 31 Sun	cryosat2	2212	2214	26	261 301	W -NW
Dec 31 Sun	hy2c	2212	2220	72	329 132	NW-SE
Dec 31 Sun	swarmb	2215	2219	56	327 197	NW-S
Dec 31 Sun	sentinel3a	2222	2224	27	258 295	W -NW
Dec 31 Sun	lares2	2302	2336	41	321 228	NW-SW
Dec 31 Sun	ajisai	2326	2338	71	236 80	SW-E
Dec 31 Sun	lares	2335	2340	27	316 7	NW-N
Jan 1 Mon	hy2c	0001	0004	27	264 220	W -SW
Jan 1 Mon	starlette	0006	0013	47	205 86	SW-E
Jan 1 Mon	lageos1	0120	0157	54	45 285	NE-W
Jan 1 Mon	ajisai	0128	0140	85	270 97	W -E
Jan 1 Mon	larets	0132	0138	54	139 356	SE-N
Jan 1 Mon	starlette	0154	0202	77	256 88	W -E

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Jan 1 Mon	gracefol	0224	0228	57	28 165	NE-S
Jan 1 Mon	hy2d	0257	0302	36	357 82	N -E
Jan 1 Mon	lageos2	0301	0349	70	210 64	SW-NE
Jan 1 Mon	ajisai	0330	0341	60	275 136	W -SE
Jan 1 Mon	lares	0335	0344	41	349 95	N -E
Jan 1 Mon	starlette	0343	0352	74	274 113	W -SE
Jan 1 Mon	swot	0412	0415	26	110 63	E -NE
Jan 1 Mon	hy2d	0443	0451	69	314 156	NW-SE
Jan 1 Mon	lageos1	0445	0525	63	98 323	E -NW
Jan 1 Mon	saral	0529	0535	60	186 333	S -NW
Jan 1 Mon	lares	0532	0544	70	322 165	NW-S
Jan 1 Mon	hy2b	0532	0535	27	73 119	E -SE
Jan 1 Mon	starlette	0533	0540	39	258 159	W -S
Jan 1 Mon	ajisai	0535	0537	25	231 212	SW-SW
Jan 1 Mon	swot	0554	0601	59	224 7	SW-N
Jan 1 Mon	swarmc	0603	0606	41	45 145	NE-SE
Jan 1 Mon	swarma	0604	0607	35	60 144	NE-SE
Jan 1 Mon	paz	0638	0642	72	10 199	N -S
Jan 1 Mon	geoik2	0704	0712	78	15 200	N -S
Jan 1 Mon	lageos2	0705	0754	86	275 101	W -E

Jan	1	Mon	tandemx	0707	0711	39	341	227	N	-SW
Jan	1	Mon	terrasarx	0708	0711	40	321	229	NW	-SW
Jan	1	Mon	sentinel6a	0711	0718	34	144	64	SE	-NE
Jan	1	Mon	hy2b	0714	0721	62	0	216	N	-SW
Jan	1	Mon	jason3	0801	0811	61	190	49	S	-NE
Jan	1	Mon	lageos1	0816	0858	61	177	326	S	-NW
Jan	1	Mon	stella	0838	0844	61	31	180	NE	-S
Jan	1	Mon	sentinel6a	0904	0915	75	230	35	SW	-NE
Jan	1	Mon	icesat2	0910	0914	42	331	213	NW	-SW
Jan	1	Mon	lares2	0925	1006	52	151	33	SE	-NE
Jan	1	Mon	sentinel3b	0951	0956	38	53	152	NE	-SE
Jan	1	Mon	jason3	0958	1007	49	264	27	W	-NE
Jan	1	Mon	cryosat2	1007	1012	40	329	223	NW	-SW
Jan	1	Mon	sentinel3a	1029	1035	70	23	188	NE	-S
Jan	1	Mon	swarmb	1033	1037	53	210	350	SW	-N
Jan	1	Mon	sentinel6a	1103	1111	34	298	27	NW	-NE
Jan	1	Mon	lageos2	1110	1152	55	297	173	NW	-S
Jan	1	Mon	sentinel3b	1131	1136	38	336	239	NW	-SW
Jan	1	Mon	lares2	1317	1405	65	243	41	SW	-NE
Jan	1	Mon	hy2c	1330	1335	33	152	73	SE	-E
Jan	1	Mon	jason3	1356	1403	33	347	68	N	-E
Jan	1	Mon	gracefol	1438	1442	66	159	6	S	-N
Jan	1	Mon	swot	1449	1456	58	358	141	N	-SE
Jan	1	Mon	sentinel6a	1459	1508	48	338	99	N	-E
Jan	1	Mon	larets	1501	1506	64	29	179	NE	-S
Jan	1	Mon	hy2c	1516	1524	63	242	33	SW	-NE
Jan	1	Mon	beaconc	1541	1549	40	220	118	SW	-SE
Jan	1	Mon	jason3	1551	1602	73	327	130	NW	-SE
Jan	1	Mon	sentinel6a	1655	1705	62	309	167	NW	-S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer	
Jan	1	Mon	geoik2	1706	1713	62	141 355 SE-N
Jan	1	Mon	hy2c	1707	1709	25	330 359 NW-N
Jan	1	Mon	hy2b	1718	1726	77	164 343 S -N
Jan	1	Mon	paz	1722	1726	80	167 346 S -N
Jan	1	Mon	lares2	1728	1815	58	314 102 NW-E
Jan	1	Mon	beaconc	1734	1742	38	238 141 SW-SE
Jan	1	Mon	saral	1737	1741	32	70 146 E -SE
Jan	1	Mon	jason3	1748	1756	35	291 201 W -S
Jan	1	Mon	tandemx	1751	1755	42	215 330 SW-NW
Jan	1	Mon	terrasarx	1751	1755	41	211 328 SW-NW
Jan	1	Mon	swarmc	1816	1819	32	122 36 SE-NE
Jan	1	Mon	swarma	1817	1819	28	111 52 E -NE
Jan	1	Mon	stella	1824	1828	29	90 19 E -N
Jan	1	Mon	geoik2	1852	1854	26	261 292 W -W
Jan	1	Mon	saral	1916	1921	42	336 233 NW-SW
Jan	1	Mon	icesat2	1950	1953	35	104 19 E -N
Jan	1	Mon	hy2d	2000	2008	55	188 49 S -NE
Jan	1	Mon	stella	2003	2008	50	205 325 SW-NW
Jan	1	Mon	sentinel3a	2015	2019	33	98 20 E -N
Jan	1	Mon	lageos1	2025	2107	60	35 183 NE-S
Jan	1	Mon	lares	2028	2039	82	203 35 SW-NE
Jan	1	Mon	ajisai	2036	2038	25	138 119 SE-SE
Jan	1	Mon	hy2c	2044	2049	35	357 79 N -E
Jan	1	Mon	sentinel3b	2115	2122	86	165 344 S -N
Jan	1	Mon	cryosat2	2120	2125	67	195 345 S -N
Jan	1	Mon	lares2	2128	2213	64	327 191 NW-S
Jan	1	Mon	hy2d	2148	2155	43	270 25 W -NE
Jan	1	Mon	sentinel3a	2154	2200	43	207 327 SW-NW
Jan	1	Mon	swarmb	2158	2202	69	349 186 N -S
Jan	1	Mon	lares	2228	2237	37	280 18 W -N
Jan	1	Mon	hy2c	2230	2238	74	316 153 NW-SE
Jan	1	Mon	ajisai	2232	2243	60	221 82 SW-E
Jan	1	Mon	lageos1	2359	0039	64	36 260 NE-W
Jan	2	Tue	starlette	0025	0032	61	225 85 SW-E

Jan	2	Tue	ajisai	0033	0045	85	262	90	W	-E
Jan	2	Tue	lageos2	0114	0153	47	171	64	S	-NE
Jan	2	Tue	gracefol	0159	0202	33	49	136	NE	-SE
Jan	2	Tue	larets	0209	0214	70	182	337	S	-NW
Jan	2	Tue	starlette	0213	0222	83	266	94	W	-E
Jan	2	Tue	lares	0231	0237	29	356	59	N	-NE
Jan	2	Tue	ajisai	0235	0247	71	278	122	W	-SE
Jan	2	Tue	hy2d	0315	0322	49	345	109	N	-E
Jan	2	Tue	lageos1	0326	0403	54	74	314	E	-NW
Jan	2	Tue	starlette	0403	0411	62	269	127	W	-SE
Jan	2	Tue	swot	0412	0416	31	123	56	SE	-NE
Jan	2	Tue	lares	0428	0440	69	334	135	NW	-SE
Jan	2	Tue	ajisai	0438	0446	35	261	178	W	-S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer		
Jan	2	Tue	saral	0500	0504	71	153 349 SE-N	CP
Jan	2	Tue	hy2d	0502	0509	46	297 178 NW-S	
Jan	2	Tue	lageos2	0509	0558	88	250 79 W -E	
Jan	2	Tue	hy2b	0553	0559	37	51 151 NE-SE	
Jan	2	Tue	starlette	0553	0557	27	243 190 SW-S	
Jan	2	Tue	swot	0555	0601	50	235 360 SW-N	
Jan	2	Tue	paz	0621	0625	58	33 180 NE-S	
Jan	2	Tue	lares	0627	0635	35	298 210 NW-SW	
Jan	2	Tue	terrasarx	0650	0654	58	357 211 N -SW	
Jan	2	Tue	tandemx	0650	0654	57	355 210 N -SW	
Jan	2	Tue	lageos1	0652	0736	85	146 328 SE-NW	
Jan	2	Tue	swarma	0711	0714	30	307 226 NW-SW	
Jan	2	Tue	swarmc	0711	0713	27	286 234 W -SW	
Jan	2	Tue	geoik2	0719	0727	67	8 211 N -SW	
Jan	2	Tue	sentinel6a	0732	0741	50	174 53 S -NE	
Jan	2	Tue	hy2b	0736	0742	45	350 237 N -SW	
Jan	2	Tue	lares2	0807	0830	31	105 45 E -NE	
Jan	2	Tue	stella	0812	0817	39	54 155 NE-SE	
Jan	2	Tue	jason3	0824	0834	81	212 40 SW-NE	
Jan	2	Tue	icesat2	0843	0847	77	2 190 N -S	
Jan	2	Tue	lageos2	0915	1002	77	293 138 NW-SE	
Jan	2	Tue	cryosat2	0916	0922	71	10 181 N -S	
Jan	2	Tue	sentinel6a	0928	0938	56	255 32 W -NE	
Jan	2	Tue	stella	0952	0956	36	332 249 NW-W	
Jan	2	Tue	sentinel3a	1003	1009	47	40 166 NE-S	
Jan	2	Tue	swarmb	1016	1020	73	189 357 S -N	
Jan	2	Tue	jason3	1022	1030	39	288 26 W -NE	
Jan	2	Tue	sentinel3b	1105	1111	59	354 216 N -SW	
Jan	2	Tue	sentinel6a	1128	1133	30	325 22 NW-N	
Jan	2	Tue	lares2	1143	1232	84	210 34 SW-NE	
Jan	2	Tue	sentinel3a	1144	1147	31	322 263 NW-W	
Jan	2	Tue	sentinel6a	1326	1332	31	348 56 N -NE	
Jan	2	Tue	hy2c	1348	1355	51	176 50 S -NE	
Jan	2	Tue	gracefol	1413	1416	38	128 30 SE-NE	
Jan	2	Tue	jason3	1418	1427	40	339 87 N -E	
Jan	2	Tue	swot	1450	1457	67	355 149 N -SE	
Jan	2	Tue	beaconc	1457	1504	37	211 119 SW-SE	
Jan	2	Tue	sentinel6a	1521	1532	63	330 121 NW-SE	
Jan	2	Tue	hy2c	1535	1542	45	267 26 W -NE	
Jan	2	Tue	larets	1537	1543	59	2 214 N -SW	
Jan	2	Tue	lares2	1552	1637	52	296 72 NW-E	
Jan	2	Tue	jason3	1614	1625	81	319 149 NW-SE	
Jan	2	Tue	beaconc	1650	1658	40	232 133 SW-SE	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Jan 2 Tue	paz	1704	1708	58	143 1 SE-N	VS
Jan 2 Tue	sentinel6a	1718	1727	43	296 188 NW-S	
Jan 2 Tue	geoik2	1721	1729	75	155 347 SE-N	
Jan 2 Tue	tandemx	1733	1738	68	180 340 S -N	
Jan 2 Tue	terrasarx	1734	1738	65	189 339 S -N	
Jan 2 Tue	hy2b	1741	1748	62	189 335 S -NW	
Jan 2 Tue	saral	1844	1850	69	6 207 N -SW	
Jan 2 Tue	beaconc	1845	1848	26	218 186 SW-S	
Jan 2 Tue	lageos1	1905	1936	37	47 142 NE-SE	
Jan 2 Tue	swarmc	1924	1927	34	255 338 W -N	
Jan 2 Tue	swarma	1924	1927	38	231 331 SW-NW	
Jan 2 Tue	lares	1925	1935	48	164 46 S -NE	
Jan 2 Tue	stella	1936	1942	74	170 341 S -N	
Jan 2 Tue	lares2	1956	2045	89	327 158 NW-S	
Jan 2 Tue	hy2d	2018	2026	81	213 40 SW-NE	
Jan 2 Tue	cryosat2	2030	2035	48	130 12 SE-N	
Jan 2 Tue	sentinel3b	2050	2056	59	132 354 SE-N	
Jan 2 Tue	icesat2	2057	2100	33	240 326 SW-NW	
Jan 2 Tue	hy2c	2102	2109	46	346 106 N -E	
Jan 2 Tue	lares	2122	2133	56	245 24 SW-NE	
Jan 2 Tue	sentinel3a	2128	2134	68	180 338 S -N	
Jan 2 Tue	ajisai	2139	2149	48	200 83 S -E	
Jan 2 Tue	swarmb	2141	2145	69	5 173 N -S	
Jan 2 Tue	hy2d	2208	2213	32	302 19 NW-N	
Jan 2 Tue	cryosat2	2211	2212	25	280 299 W -NW	
Jan 2 Tue	lageos1	2236	2319	81	33 232 NE-SW	
Jan 2 Tue	hy2c	2249	2256	50	300 175 NW-S	
Jan 2 Tue	starlette	2256	2302	35	186 92 S -E	
Jan 2 Tue	lares	2326	2329	26	330 1 NW-N	
Jan 2 Tue	ajisai	2339	2351	79	252 84 W -E	
Jan 2 Tue	lageos2	2343	2346	25	103 96 E -E	
Jan 3 Wed	lares2	0000	0015	27	306 268 NW-W	
Jan 3 Wed	starlette	0044	0052	74	243 84 SW-E	
Jan 3 Wed	larets	0109	0113	35	98 10 E -N	
Jan 3 Wed	ajisai	0141	0153	78	276 109 W -E	
Jan 3 Wed	hy2d	0147	0150	27	8 52 N -NE	
Jan 3 Wed	lageos1	0207	0243	51	54 299 NE-NW	
Jan 3 Wed	starlette	0233	0241	79	270 104 W -E	
Jan 3 Wed	larets	0246	0250	32	227 314 SW-NW	
Jan 3 Wed	gracefol	0308	0311	33	319 231 NW-SW	
Jan 3 Wed	lageos2	0314	0403	75	218 66 SW-NE	
Jan 3 Wed	lares	0324	0334	45	344 102 N -E	
Jan 3 Wed	hy2d	0333	0341	69	331 129 NW-SE	
Jan 3 Wed	ajisai	0343	0353	46	272 158 W -S	
Jan 3 Wed	swot	0412	0417	36	137 48 SE-NE	
Jan 3 Wed	starlette	0422	0430	49	266 143 W -SE	
Jan 3 Wed	saral	0427	0432	44	119 8 SE-N	

OBSERVING SCHEDULE (Times are in U.T.)						
Date	Satellite	Start	End	Elev	Direction	Observer
Jan 3 Wed	hy2d	0521	0525	29	278 217 W -SW	TS
Jan 3 Wed	lares	0522	0533	64	318 172 NW-S	

Jan	3	Wed	lageos1	0531	0613	74	117	326	SE-NW
Jan	3	Wed	geoik2	0553	0558	30	62	139	NE-SE
Jan	3	Wed	swot	0556	0602	43	246	359	SW-N
Jan	3	Wed	paz	0604	0607	40	57	155	NE-SE
Jan	3	Wed	saral	0607	0611	31	230	307	SW-NW
Jan	3	Wed	hy2b	0615	0622	53	39	172	NE-S
Jan	3	Wed	terrasarx	0633	0637	66	18	192	N -S
Jan	3	Wed	tandemx	0633	0637	73	19	192	N -S
Jan	3	Wed	swarmc	0643	0647	43	330	205	NW-SW
Jan	3	Wed	swarma	0644	0648	52	330	198	NW-S
Jan	3	Wed	jason3	0652	0700	36	155	62	SE-NE
Jan	3	Wed	lageos2	0719	0808	87	280	108	W -E
Jan	3	Wed	geoik2	0735	0742	55	356	223	N -SW
Jan	3	Wed	sentinel6a	0754	0804	70	200	44	S -NE
Jan	3	Wed	hy2b	0759	0804	33	329	251	NW-W
Jan	3	Wed	icesat2	0817	0821	50	38	165	NE-S
Jan	3	Wed	cryosat2	0827	0830	31	63	127	NE-SE
Jan	3	Wed	jason3	0846	0857	71	234	35	SW-NE
Jan	3	Wed	lageos1	0909	0946	46	203	322	SW-NW
Jan	3	Wed	stella	0925	0931	57	355	218	N -SW
Jan	3	Wed	sentinel6a	0951	1000	44	274	27	W -NE
Jan	3	Wed	swarmb	0959	1004	76	172	6	S -N
Jan	3	Wed	cryosat2	1005	1010	37	328	226	NW-SW
Jan	3	Wed	lares2	1013	1059	70	177	32	S -NE
Jan	3	Wed	sentinel3b	1038	1045	83	16	196	N -S
Jan	3	Wed	jason3	1046	1052	33	309	20	NW-N
Jan	3	Wed	sentinel3a	1117	1123	46	351	228	N -SW
Jan	3	Wed	lageos2	1124	1203	49	296	184	NW-S
Jan	3	Wed	sentinel6a	1348	1356	36	340	74	N -E
Jan	3	Wed	hy2c	1405	1413	78	209	42	SW-NE
Jan	3	Wed	beaconc	1413	1420	34	201	115	S -SE
Jan	3	Wed	lares2	1414	1500	55	268	50	W -NE
Jan	3	Wed	larets	1437	1441	39	54	151	NE-SE
Jan	3	Wed	jason3	1441	1450	51	338	102	N -E
Jan	3	Wed	swot	1450	1458	74	346	157	N -SE
Jan	3	Wed	sentinel6a	1544	1555	83	323	140	NW-SE
Jan	3	Wed	hy2c	1554	1600	34	287	19	W -N
Jan	3	Wed	beaconc	1605	1613	41	234	131	SW-SE
Jan	3	Wed	larets	1615	1618	31	318	254	NW-W
Jan	3	Wed	hy2b	1620	1626	40	112	9	E -N
Jan	3	Wed	jason3	1637	1647	58	307	170	NW-S
Jan	3	Wed	paz	1648	1651	37	98	10	E -N

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer		
Jan	3	Wed	terrasarx	1716	1721	77	158 350 S -N	MW
Jan	3	Wed	tandemx	1716	1720	76	157 352 SE-N	
Jan	3	Wed	geoik2	1737	1744	80	170 341 S -N	
Jan	3	Wed	sentinel6a	1742	1747	28	275 220 W -SW	
Jan	3	Wed	beaconc	1800	1805	29	223 167 SW-S	
Jan	3	Wed	hy2b	1803	1810	44	207 326 SW-NW	
Jan	3	Wed	saral	1813	1819	64	33 181 NE-S	
Jan	3	Wed	lares2	1823	1911	69	322 125 NW-SE	
Jan	3	Wed	lares	1825	1828	26	107 77 E -E	
Jan	3	Wed	hy2d	1852	1856	31	136 74 SE-E	
Jan	3	Wed	swarmc	1856	1900	59	202 351 S -N	
Jan	3	Wed	swarma	1857	1901	62	197 356 S -N	
Jan	3	Wed	stella	1909	1916	64	143 352 SE-N	
Jan	3	Wed	hy2c	1934	1937	26	8 51 N -NE	
Jan	3	Wed	lares	2017	2029	83	211 32 SW-NE	

Jan 3 Wed	sentinel3b	2024	2029	38	112	12	E -N
Jan 3 Wed	icesat2	2030	2034	60	200	347	S -N
Jan 3 Wed	hy2d	2037	2045	67	239	34	SW-NE
Jan 3 Wed	ajisai	2046	2054	37	178	91	S -E
Jan 3 Wed	sentinel3a	2102	2108	68	150	350	SE-N
Jan 3 Wed	lageos1	2113	2157	76	33	203	NE-SW
Jan 3 Wed	cryosat2	2118	2124	61	199	347	S -N
Jan 3 Wed	hy2c	2120	2128	65	333	126	NW-SE
Jan 3 Wed	swarmb	2124	2128	57	16	158	N -S
Jan 3 Wed	sentinel3b	2204	2209	37	219	318	SW-NW
Jan 3 Wed	lares	2218	2226	34	286	14	W -N
Jan 3 Wed	lares2	2222	2300	46	324	218	NW-SW
Jan 3 Wed	hy2d	2228	2230	26	331	0	NW-N
Jan 3 Wed	ajisai	2245	2257	72	239	81	SW-E
Jan 3 Wed	hy2c	2308	2313	32	281	204	W -SW
Jan 3 Wed	starlette	2315	2321	49	204	89	SW-E
Jan 4 Thu	lageos1	0047	0125	56	41	276	NE-W
Jan 4 Thu	ajisai	0047	0059	83	271	99	W -E
Jan 4 Thu	starlette	0103	0111	80	257	89	W -E
Jan 4 Thu	lageos2	0125	0208	53	182	62	S -NE
Jan 4 Thu	larets	0144	0150	66	151	351	SE-N
Jan 4 Thu	hy2d	0205	0210	33	359	78	N -E
Jan 4 Thu	lares	0221	0228	31	359	72	N -E
Jan 4 Thu	gracefol	0243	0247	53	338	199	N -S
Jan 4 Thu	ajisai	0249	0300	58	275	139	W -SE
Jan 4 Thu	starlette	0252	0300	70	272	116	W -SE
Jan 4 Thu	hy2d	0351	0359	77	318	149	NW-SE
Jan 4 Thu	saral	0358	0400	27	64	28	NE-NE
Jan 4 Thu	swot	0412	0418	43	151	41	SE-NE
Jan 4 Thu	lageos1	0412	0451	59	89	320	E -NW
Jan 4 Thu	lares	0418	0429	78	333	140	NW-SE
Jan 4 Thu	starlette	0442	0448	36	251	165	W -S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer
Jan 4 Thu	lageos2	0523	0612	87	257 83 W -E	RS
Jan 4 Thu	saral	0535	0541	54	196 333 S -NW	
Jan 4 Thu	paz	0547	0549	26	74 127 E -SE	
Jan 4 Thu	swot	0557	0602	38	257 350 W -N	
Jan 4 Thu	geoik2	0608	0614	38	53 155 NE-SE	
Jan 4 Thu	tandemx	0616	0620	53	46 175 NE-S	
Jan 4 Thu	swarmc	0616	0620	73	355 181 N -S	
Jan 4 Thu	terrasarx	0616	0620	51	41 174 NE-S	
Jan 4 Thu	swarma	0617	0621	66	2 176 N -S	
Jan 4 Thu	lares	0617	0624	31	292 219 W -SW	
Jan 4 Thu	sentinel6a	0624	0629	29	131 74 SE-E	
Jan 4 Thu	hy2b	0637	0644	75	25 188 NE-S	
Jan 4 Thu	jason3	0714	0723	54	177 52 S -NE	
Jan 4 Thu	lageos1	0741	0824	69	167 327 S -NW	
Jan 4 Thu	geoik2	0750	0756	44	351 240 N -SW	
Jan 4 Thu	sentinel6a	0816	0827	82	223 37 SW-NE	
Jan 4 Thu	lares2	0849	0926	46	140 36 SE-NE	
Jan 4 Thu	stella	0858	0904	81	16 197 N -S	
Jan 4 Thu	jason3	0910	0919	54	259 28 W -NE	
Jan 4 Thu	cryosat2	0914	0920	75	7 184 N -S	
Jan 4 Thu	lageos2	0929	1015	72	295 147 NW-SE	
Jan 4 Thu	swarmb	0943	0947	54	147 14 SE-N	
Jan 4 Thu	sentinel3b	1013	1019	56	38 175 NE-S	
Jan 4 Thu	sentinel6a	1015	1023	36	295 28 NW-NE	
Jan 4 Thu	sentinel3a	1051	1057	71	7 208 N -SW	
Jan 4 Thu	lares2	1237	1326	69	234 39 SW-NE	
Jan 4 Thu	jason3	1308	1314	32	348 58 N -NE	
Jan 4 Thu	beaconc	1329	1335	30	192 118 S -SE	



Jan	4	Thu	sentinel6a	1411	1420	45	340	94	N	-E
Jan	4	Thu	hy2c	1424	1432	71	235	35	SW	-NE
Jan	4	Thu	swot	1451	1458	86	341	165	N	-S
Jan	4	Thu	gracefol	1457	1501	44	216	344	SW	-N
Jan	4	Thu	jason3	1503	1514	67	329	124	NW	-SE
Jan	4	Thu	larets	1513	1519	78	19	192	N	-S
Jan	4	Thu	beaconc	1521	1529	41	227	123	SW	-SE
Jan	4	Thu	sentinel6a	1607	1617	69	313	160	NW	-S

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer		
Jan	4	Thu	hy2b	1642	1649	54	128 356 SE-N	TS
Jan	4	Thu	lares2	1649	1735	55	311 94 NW-E	
Jan	4	Thu	tandemx	1659	1703	49	133 4 SE-N	
Jan	4	Thu	terrasarx	1700	1703	50	118 6 SE-N	
Jan	4	Thu	jason3	1700	1708	40	294 195 NW-S	
Jan	4	Thu	beaconc	1715	1721	32	228 157 SW-SE	
Jan	4	Thu	saral	1742	1746	36	59 144 NE-SE	
Jan	4	Thu	geoik2	1752	1759	65	184 334 S -NW	
Jan	4	Thu	paz	1805	1807	29	251 307 W -NW	
Jan	4	Thu	hy2b	1826	1831	31	231 310 SW-NW	
Jan	4	Thu	swarmc	1829	1833	70	170 9 S -N	
Jan	4	Thu	swarma	1830	1834	57	161 12 S -N	
Jan	4	Thu	stella	1844	1849	40	103 4 E -N	
Jan	4	Thu	hy2d	1909	1915	47	172 57 S -NE	
Jan	4	Thu	lares	1914	1924	54	174 45 S -NE	
Jan	4	Thu	saral	1921	1926	39	341 240 N -SW	
Jan	4	Thu	lagesos1	1951	2031	52	37 171 NE-S	
Jan	4	Thu	hy2c	1952	1957	32	359 76 N -E	
Jan	4	Thu	ajisai	1954	1958	27	150 111 SE-E	
Jan	4	Thu	sentinel3b	2000	2002	25	71 35 E -NE	
Jan	4	Thu	icesat2	2003	2007	60	157 3 SE-N	
Jan	4	Thu	stella	2024	2028	35	235 314 SW-NW	
Jan	4	Thu	cryosat2	2028	2033	52	135 10 SE-N	
Jan	4	Thu	sentinel3a	2036	2042	47	126 2 SE-N	
Jan	4	Thu	lares2	2049	2136	70	328 182 NW-S	
Jan	4	Thu	hy2d	2056	2103	47	265 27 W -NE	
Jan	4	Thu	swarmb	2108	2111	42	41 142 NE-SE	
Jan	4	Thu	lares	2112	2122	51	253 20 W -N	
Jan	4	Thu	sentinel3b	2138	2144	60	194 335 S -NW	
Jan	4	Thu	hy2c	2138	2146	81	320 145 NW-SE	
Jan	4	Thu	starlette	2148	2150	26	140 111 SE-E	
Jan	4	Thu	ajisai	2151	2203	62	224 79 SW-E	
Jan	4	Thu	sentinel3a	2217	2221	29	234 307 SW-NW	
Jan	4	Thu	lares	2317	2318	25	345 355 N -N	
Jan	4	Thu	lagesos1	2325	0006	69	34 251 NE-W	
Jan	4	Thu	starlette	2333	2341	62	232 84 SW-E	
Jan	4	Thu	lagesos2	2346	0008	30	131 76 SE-E	
Jan	4	Thu	ajisai	2353	0005	86	264 91 W -E	
Jan	5	Fri	starlette	0122	0130	76	267 96 W -E	
Jan	5	Fri	ajisai	0154	0206	69	279 125 W -SE	

Jan	5	Fri	gracefol	0218	0222	68	7	177	N	-S
Jan	5	Fri	larets	0221	0226	55	196	331	S	-NW
Jan	5	Fri	hy2d	0223	0229	43	348	97	N	-E
Jan	5	Fri	lageos1	0253	0330	52	67	309	NE	-NW
Jan	5	Fri	starlette	0311	0319	58	272	131	W	-SE
Jan	5	Fri	lares	0314	0324	49	345	109	N	-E
Jan	5	Fri	lageos2	0328	0417	80	226	68	SW	-E
Jan	5	Fri	ajisai	0357	0405	33	262	181	W	-S
Jan	5	Fri	hy2d	0410	0417	53	301	172	NW	-S
Jan	5	Fri	swot	0413	0419	50	155	34	SE	-NE

OBSERVING SCHEDULE (Times are in U.T.)

Date	Satellite	Start	End	Elev	Direction	Observer					
Jan	5	Fri	starlette	0503	0505	25	223	197	SW	-S	CP
Jan	5	Fri	saral	0503	0510	84	160	346	S	-N	
Jan	5	Fri	lares	0512	0522	57	313	180	NW	-S	
Jan	5	Fri	swarmc	0549	0553	51	19	155	N	-SE	
Jan	5	Fri	swarma	0550	0554	43	26	152	NE	-SE	
Jan	5	Fri	swot	0558	0603	33	267	350	W	-N	
Jan	5	Fri	terrasarx	0559	0602	34	60	148	NE	-SE	
Jan	5	Fri	tandemx	0559	0602	34	66	151	NE	-SE	
Jan	5	Fri	lageos1	0618	0701	87	136	328	SE	-NW	
Jan	5	Fri	geoik2	0623	0629	49	42	164	NE	-S	
Jan	5	Fri	sentinel6a	0644	0653	44	168	56	S	-NE	
Jan	5	Fri	hy2b	0659	0706	78	11	206	N	-SW	
Jan	5	Fri	paz	0703	0707	41	342	224	N	-SW	
Jan	5	Fri	lageos2	0733	0822	88	284	115	W	-SE	
Jan	5	Fri	jason3	0736	0746	75	204	43	SW	-NE	
Jan	5	Fri	geoik2	0806	0811	35	337	251	NW	-W	
Jan	5	Fri	cryosat2	0825	0828	34	60	128	NE	-SE	
Jan	5	Fri	stella	0832	0838	56	39	176	NE	-S	
Jan	5	Fri	sentinel6a	0839	0850	62	244	34	SW	-NE	
Jan	5	Fri	icesat2	0857	0901	44	339	215	N	-SW	
Jan	5	Fri	swarmb	0926	0930	40	137	23	SE	-NE	
Jan	5	Fri	jason3	0933	0942	42	276	27	W	-NE	
Jan	5	Fri	sentinel3b	0947	0952	35	51	147	NE	-SE	
Jan	5	Fri	cryosat2	1003	1007	35	327	240	NW	-SW	
Jan	5	Fri	lageos1	1005	1031	32	234	310	SW	-NW	
Jan	5	Fri	sentinel3a	1025	1031	70	25	184	NE	-S	
Jan	5	Fri	sentinel6a	1039	1045	31	314	22	NW	-N	
Jan	5	Fri	lares2	1104	1153	88	202	33	S	-NE	
Jan	5	Fri	sentinel3b	1127	1132	40	342	239	N	-SW	
Jan	5	Fri	lageos2	1139	1214	43	293	195	NW	-S	
Jan	5	Fri	sentinel6a	1238	1244	30	348	55	N	-NE	
Jan	5	Fri	hy2c	1256	1302	44	168	59	S	-NE	
Jan	5	Fri	jason3	1330	1338	37	340	77	N	-E	
Jan	5	Fri	gracefol	1432	1436	68	183	358	S	-N	
Jan	5	Fri	sentinel6a	1433	1443	58	331	112	NW	-E	
Jan	5	Fri	beaconc	1437	1444	40	219	123	SW	-SE	
Jan	5	Fri	hy2c	1443	1450	50	262	28	W	-NE	
Jan	5	Fri	swot	1452	1459	74	334	172	NW	-S	
Jan	5	Fri	lares2	1512	1557	52	290	66	W	-NE	
Jan	5	Fri	jason3	1526	1537	84	322	143	NW	-SE	
Jan	5	Fri	larets	1550	1555	47	343	223	N	-SW	
Jan	5	Fri	geoik2	1626	1631	35	96	12	E	-N	
Jan	5	Fri	beaconc	1630	1637	35	233	148	SW	-SE	
Jan	5	Fri	sentinel6a	1630	1639	49	300	182	NW	-S	