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Satellite Orbit Predictor

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Morton L. Friedman and

Major James "Bill" Garrett, USAF

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National Aeronautics and
Space Administration

Goddard Space Flight Center
Greenbelt, Maryland 20771

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Morton L. Friedman
Goddard Space Flight Center
Greenbelt, Maryland

Major James "Bill" Garrett, USAF
Scott Air Force Base
Belleville, Illinois

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**Scientific and Technical
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1983

SATELLITE ORBIT PREDICTOR

The satellite orbit predictor is a graphical aid for determining the relationship between the satellite (SARSAT or COSPAS) orbit, antenna coverage of the spacecraft and coverage of the LUTs. The predictor allows the user to quickly visualize if a selected position will probably be detected and is composed of a base map and a satellite track overlay for each satellite. Additionally, a table of equator crossings for each satellite is included.

In order for a LUT to receive ELT/EPIRB information from a satellite, mutual visibility between the satellite, LUT and ELT/EPIRB must occur. Mutual visibility requires two simultaneous conditions:

a. The satellite subtrack or ground track must lie within a LUT coverage circle for at least 4 minutes.

b. and the suspected ELT/EPIRB must lie within the satellite antenna coverage swath during the 4 minute period.

The base map is a polar stereographic projection of the northern hemisphere. The LUT coverage circles are based on the LUT seeing the satellite at the horizon. On projections of this type equal increments of latitude are not equidistant. Therefore, the map includes a dot matrix in the ocean areas with the dots printed as a one degree latitude by one degree longitude field. Another property of the projection is that the center of the LUT coverage does not coincide with the actual geographical position of the LUT.

The overlay shows the satellite ground track or subtrack (black) starting from the ascending node (northbound equator crossing) and continuing minute by minute across the overlay. In addition, the 10 degree coverage limits of the spacecraft antenna (red) are plotted on both sides of the subtrack. The yellow lines connecting the antenna coverage swath and the subtrack indicate time in minutes. Just to the west of the left hand antenna coverage limit is a short line segment (labeled "next pass") which is the index for the next ascending node equator crossing.

The table of satellite equator crossings contains the zulu date/time group that a satellite will cross the equator northbound, the orbit number, and the longitude that it will cross the equator. A particular orbit starts when the satellite crosses the equator northbound (ascending) and ends just prior to the next ascending node equator crossing. The longitudes are listed in degrees east longitude, i.e., a negative number in this column is a west longitude.

To use the predictor, first select an equator crossing from the table and then rotate the satellite overlay to position the satellite subtrack over the selected equator crossing longitude. The predictor now represents the satellite ground track for the selected orbit. Subsequent and previous orbit depictions can be obtained by using the "next pass" index.

For subsequent orbits... mark or note the longitude beneath the "next pass" index and rotate the overlay clockwise to position the satellite subtrack over the new equator crossing longitude. For previous orbits, rotate the overlay counterclockwise to position the "next pass" index over the present equator crossing. The ground track for the previous pass will be to the right of the original orbit, and the subtrack for subsequent orbits will be to the left of the original equator crossing. One can do this all the way around the wheel without sacrificing a great deal of accuracy.

So far we have just looked at positioning the overlay to obtain a depiction of a satellite ground track for a selected orbit number and then ground tracks for later and earlier orbits. Now let's examine what information we can get from the depiction. When the subtrack intersects a LUT coverage circle, the LUT will receive signals from the satellite for the time period that the subtrack is within a coverage circle. An ELT/EPIRB is visible to the satellite when it lies within the antenna coverage limits (red lines). Mutual visibility occurs when an ELT/EPIRB is within the satellites field-of-view at the same time that the satellite subtrack lies within a LUT coverage circle. From this, we can see for a selected orbit if a spacecraft will be seen by a LUT and approximately where ELTs/EPIRBs must be located to be processed by a LUT. The predictor can be used for more sophisticated problems such as approximate AOS and LOS at a LUT, next time an ELT/EPIRB will be in mutual visibility, and when/if an area of interest will be seen by a satellite and a LUT.

To determine approximate AOS and LOS at a LUT, refer to the equator crossing table and note the time (in zulu) that the satellite will cross the equator. Next, position the overlay as previously discussed and count the yellow lines from the equator to the point at which the subtrack intersects the LUT coverage circle. Add the number of minutes to the time of equator crossing and you have the approximate AOS. Continue counting the yellow lines until the subtrack exits the LUT circle and add them to the AOS time and you have the approximate LOS as well as the approximate duration of the pass. (See example 1.)

Finding out when the next time an ELT/EPIRB will be in mutual visibility of the satellite and LUT is simply a combination of the above two tasks. From the original orbit, move the overlay clockwise orbit-by-orbit using the "next pass" index until mutual visibility is established and then reference the equator crossing table for the time of equator crossing using the longitude now under the ascending node. By counting the minutes since equator crossing and adding them to the time of equator crossing, one comes up with the approximate time the ELT/EPIRB will next be in mutual visibility. (See example 2.)

Using the orbit predictor to determine when and if an area of interest will be viewed by the satellite and the LUT is a bit more complicated. First, locate the area of interest on the base map, refer to the equator crossing table for a longitude within plus or minus 20 degrees that has an equator crossing time within the appropriate time frame, position the overlay at the selected longitude and determine if mutual visibility will exist. (See example 3.) If there is not mutual visibility on that orbit, rotate the overlay using the "next pass" index until you determine that mutual visibility exists or that the interest area is too distant from a LUT or the satellite subtrack for mutual visibility to exist.

EXAMPLE NO. 1

1. Refer to the equator crossing table for time and longitude of the desired equator crossing:

TIME (GMT) day hr mn sc	E. LONGITUDE deg.dg	ORBIT
292 9 32 4	19.94	1523
292 11 17 26	-6.52	1524
292 13 2 48	-32.99	1525
292 14 48 9	-59.45	1526 <
292 16 33 31	-85.92	1527
292 18 18 52	-112.38	1528

From the equator crossing table, select orbit number 1526. The zulu date/time group for the equator crossing is 292 (19 Oct) 1448:09. The longitude of the equator crossing is 59.45 W.

2. Position the overlay so the subtrack coincides with the northbound equator crossing and then count the number of yellow lines (minutes) from equator crossing to the point where the subtrack enters a LUT circle (AOS) and exits a LUT circle (LOS).

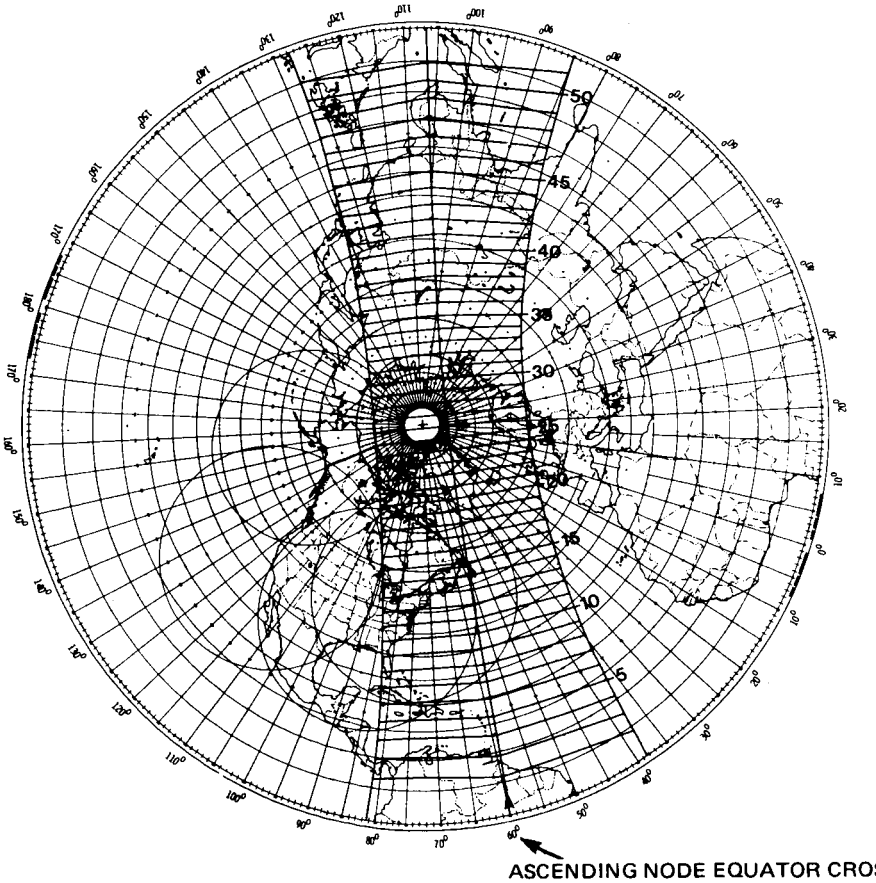

Figure 1

Position the overlay so the ascending node is set at 59.45 W. Now count the number of yellow lines from the equator until the subtrack intersects a LUT circle. In this case the subtrack intersects a lut circle 5 minutes after crossing the equator, the subtrack lies within the LUT circle for 14 minutes before exiting. Adding these times to the equator crossing time of 1448:09 yields an approximate AOS of 1453:09 and an approximate LOS of 1504:09.

EXAMPLE NO. 2

1. From the original orbit move the overlay clockwise using the "next pass" index until mutual visibility is established.

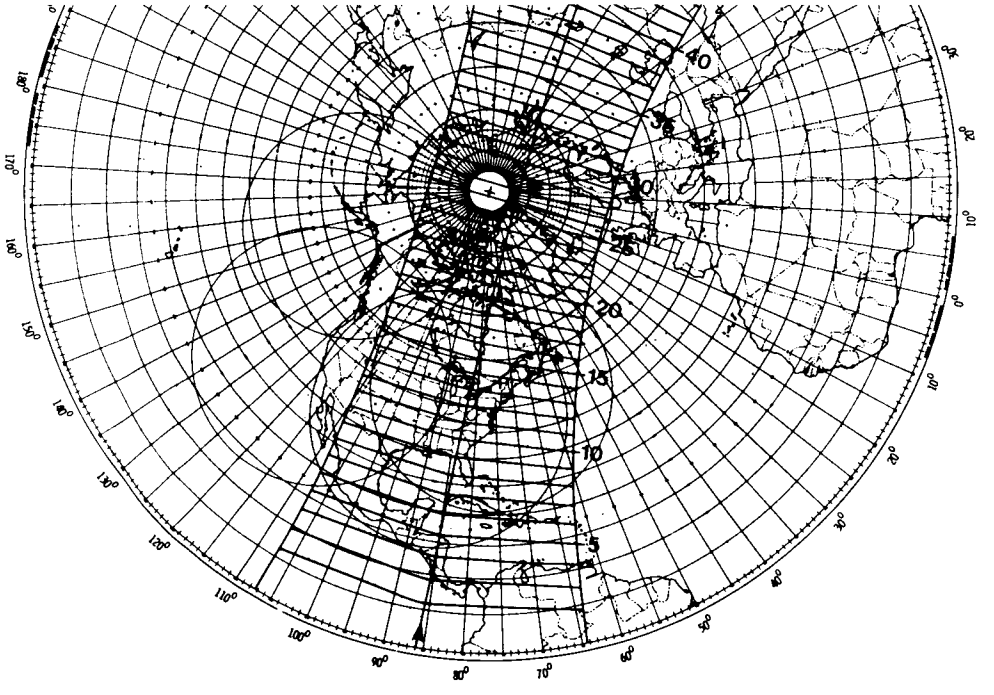

Figure 2

Assume there is an ELT located at 40 00.0 N. and 080 00.0 W. The original orbit (1526) is within mutual visibility, and we want to know the next time the ELT will be in mutual visibility. The "next pass" index is at approximately 087 W. rotate the overlay until the subtrack coincides with 087 W.

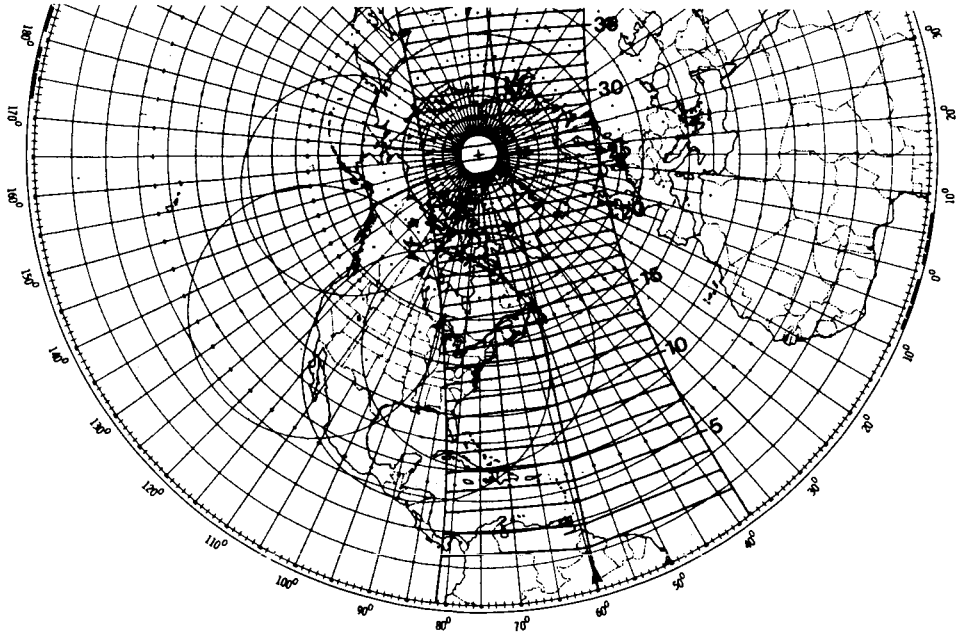

Figure 3

By looking at the subtrack and LUT circle, we see that the satellite will see the ELT and LUT on the next orbit (#1528). Adding the times to the equator crossing time (1633:31) gives us an approximate AOS of 1637, a 16 minute pass with an approximate LOS of 1653.

EXAMPLE NO. 3

SCENARIO: Assume you are interested in using the SARSAT system to locate the possible wreckage of a light aircraft that departed Charleston, South Carolina, enroute to Roanoke, Virginia. The aircraft departed Charleston at 1300Z on 19 October 1982 and never reached Roanoke.

1. Locate the route of flight or suspected ELT/EPIRB position on the base map and note the approximate longitude.

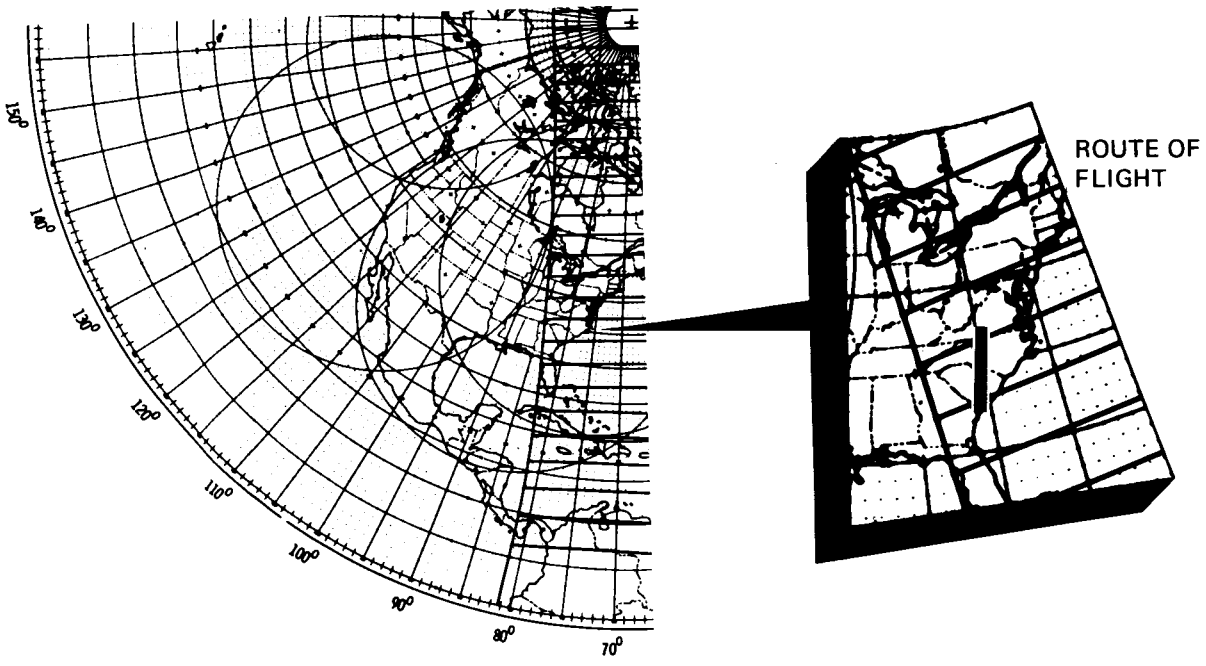

Figure 4

The route of flight is marked in the expanded box: approximate longitude is 080 W.

2. Refer to the equator crossing table and select an orbit within 20 degrees of the approximate longitude and within the appropriate time frame.

TIME (GMT)	E. LONGITUDE	ORBIT
day hr mn sc	deg.dg	
292 11 17 26	-6.52	1524
292 13 2 48	-32.99	1525
292 14 48 9	-59.45	1526
292 16 33 31	-85.92	1527
292 18 88 52	-112.38	1528

From the table there are two orbits that are within plus or minus 20 degrees of the route of flight; 1526 and 1527. Orbit #1526 is the earliest (1448Z) and is within our time frame.

3. Position the overlay at the selected longitude and determine if mutual visibility exists or will exist.

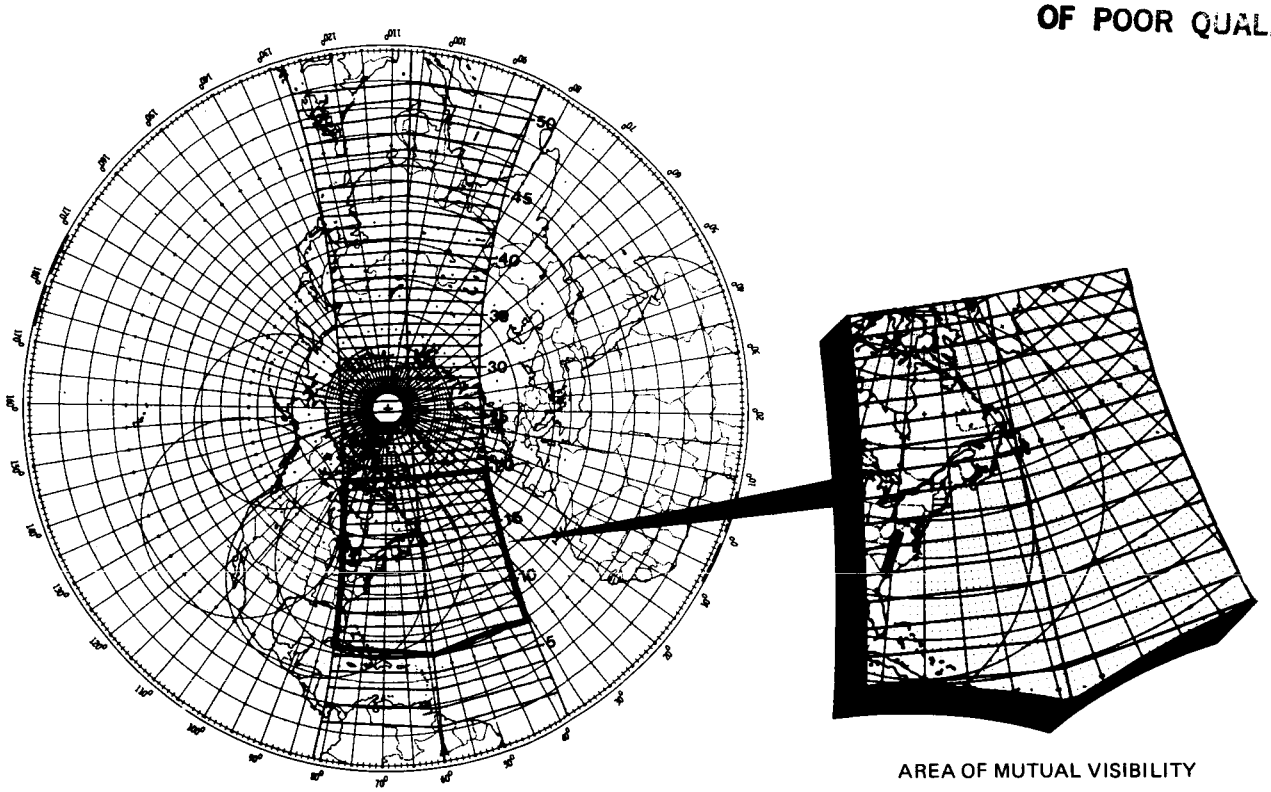

Figure 5

Remember, mutual visibility exists when the ELT/EPIRB is within the satellite antenna swath and the satellite subtrack is within a LUT circle. We can see that the ground track is within the LUT circle. Also, the route of flight we are interested in is within the antenna swath at the same time the ground track is within the LUT circle. Therefore, mutual visibility exists on orbit #1526.

CALENDAR, 1983

DAYS OF THE WEEK AND DAYS OF THE YEAR

Day of Month	JAN.		FEB.		MAR.		APR.		MAY		JUNE		JULY		AUG.		SEPT.		OCT.		NOV.		DEC.	
	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year	Week	Year
1	S.	1	Tu.	32	Tu.	60	F.	91	✠.	121	W.	152	F.	182	M.	213	Th.	244	S.	274	Tu.	305	Th.	335
2	✠.	2	W.	33	W.	61	S.	92	M.	122	Th.	153	S.	183	Tu.	214	F.	245	✠.	275	W.	306	F.	336
3	M.	3	Th.	34	Th.	62	✠.	93	Tu.	123	F.	154	✠.	184	W.	215	S.	246	M.	276	Th.	307	S.	337
4	Tu.	4	F.	35	F.	63	M.	94	W.	124	S.	155	M.	185	Th.	216	✠.	247	Tu.	277	F.	308	✠.	338
5	W.	5	S.	36	S.	64	Tu.	95	Th.	125	✠.	156	Tu.	186	F.	217	M.	248	W.	278	S.	309	M.	339
6	Th.	6	✠.	37	✠.	65	W.	96	F.	126	M.	157	W.	187	S.	218	Tu.	249	Th.	279	✠.	310	Tu.	340
7	F.	7	M.	38	M.	66	Th.	97	S.	127	Tu.	158	Th.	188	✠.	219	W.	250	F.	280	M.	311	W.	341
8	S.	8	Tu.	39	Tu.	67	F.	98	✠.	128	W.	159	F.	189	M.	220	Th.	251	S.	281	Tu.	312	Th.	342
9	✠.	9	W.	40	W.	68	S.	99	M.	129	Th.	160	S.	190	Tu.	221	F.	252	✠.	282	W.	313	F.	343
10	M.	10	Th.	41	Th.	69	✠.	100	Tu.	130	F.	161	✠.	191	W.	222	S.	253	M.	283	Th.	314	S.	344
11	Tu.	11	F.	42	F.	70	M.	101	W.	131	S.	162	M.	192	Th.	223	✠.	254	Tu.	284	F.	315	✠.	345
12	W.	12	S.	43	S.	71	Tu.	102	Th.	132	✠.	163	Tu.	193	F.	224	M.	255	W.	285	S.	316	M.	346
13	Th.	13	✠.	44	✠.	72	W.	103	F.	133	M.	164	W.	194	S.	225	Tu.	256	Th.	286	✠.	317	Tu.	347
14	F.	14	M.	45	M.	73	Th.	104	S.	134	Tu.	165	Th.	195	✠.	226	W.	257	F.	287	M.	318	W.	348
15	S.	15	Tu.	46	Tu.	74	F.	105	✠.	135	W.	166	F.	196	M.	227	Th.	258	S.	288	Tu.	319	Th.	349
16	✠.	16	W.	47	W.	75	S.	106	M.	136	Th.	167	S.	197	Tu.	228	F.	259	✠.	289	W.	320	F.	350
17	M.	17	Th.	48	Th.	76	✠.	107	Tu.	137	F.	168	✠.	198	W.	229	S.	260	M.	290	Th.	321	S.	351
18	Tu.	18	F.	49	F.	77	M.	108	W.	138	S.	169	M.	199	Th.	230	✠.	261	Tu.	291	F.	322	✠.	352
19	W.	19	S.	50	S.	78	Tu.	109	Th.	139	✠.	170	Tu.	200	F.	231	M.	262	W.	292	S.	323	M.	353
20	Th.	20	✠.	51	✠.	79	W.	110	F.	140	M.	171	W.	201	S.	232	Tu.	263	Th.	293	✠.	324	Tu.	354
21	F.	21	M.	52	M.	80	Th.	111	S.	141	Tu.	172	Th.	202	✠.	233	W.	264	F.	294	M.	325	W.	355
22	S.	22	Tu.	53	Tu.	81	F.	112	✠.	142	W.	173	F.	203	M.	234	Th.	265	S.	295	Tu.	326	Th.	356
23	✠.	23	W.	54	W.	82	S.	113	M.	143	Th.	174	S.	204	Tu.	235	F.	266	✠.	296	W.	327	F.	357
24	M.	24	Th.	55	Th.	83	✠.	114	Tu.	144	F.	175	✠.	205	W.	236	S.	267	M.	297	Th.	328	S.	358
25	Tu.	25	F.	56	F.	84	M.	115	W.	145	S.	176	M.	206	Th.	237	✠.	268	Tu.	298	F.	329	✠.	359
26	W.	26	S.	57	S.	85	Tu.	116	Th.	146	✠.	177	Tu.	207	F.	238	M.	269	W.	299	S.	330	M.	360
27	Th.	27	✠.	58	✠.	86	W.	117	F.	147	M.	178	W.	208	S.	239	Tu.	270	Th.	300	✠.	331	Tu.	361
28	F.	28	M.	59	M.	87	Th.	118	S.	148	Tu.	179	Th.	209	✠.	240	W.	271	F.	301	M.	332	W.	362
29	S.	29			Tu.	88	F.	119	✠.	149	W.	180	F.	210	M.	241	Th.	272	S.	302	Tu.	333	Th.	363
30	✠.	30			W.	89	S.	120	M.	150	Th.	181	S.	211	Tu.	242	F.	273	✠.	303	W.	334	F.	364
31	M.	31			Th.	90			Tu.	151			✠.	212	W.	243			M.	304			S.	365

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
118 01:31:57	172.37	4131	118 00:25:48	-83.26	468	118 00:38:09	-76.90	432
118 03:17:18	145.90	4132	118 02:10:41	-109.60	469	118 02:19:27	-102.22	433
118 05:02:40	119.44	4133	118 03:55:34	-135.95	470	118 04:00:45	-127.55	434
118 06:48:01	92.98	4134	118 05:40:26	-162.29	471	118 05:42:03	-152.87	435
118 08:33:23	66.51	4135	118 07:25:19	171.36	472	118 07:23:21	-178.19	436
118 10:18:44	40.05	4136	118 09:10:12	145.01	473	118 09:04:39	156.48	437
118 12:04:05	13.58	4137	118 10:55:05	118.67	474	118 10:45:57	131.16	438
118 13:49:27	-12.88	4138	118 12:39:58	92.32	475	118 12:27:15	105.83	439
118 15:34:48	-39.35	4139	118 14:24:51	65.98	476	118 14:08:33	80.51	440
118 17:20:09	-65.81	4140	118 16:09:44	39.63	477	118 15:49:51	55.19	441
118 19:05:31	-92.28	4141	118 17:54:36	13.28	478	118 17:31:09	29.86	442
118 20:50:52	-118.74	4142	118 19:39:29	-13.06	479	118 19:12:27	4.54	443
118 22:36:14	-145.21	4143	118 21:24:22	-39.41	480	118 20:53:45	-20.79	444
			118 23:09:15	-65.75	481	118 22:35:03	-46.11	445
119 00:21:35	-171.67	4144	119 00:54:08	-92.10	482	119 00:16:21	-71.43	446
119 02:06:56	161.86	4145	119 02:39:01	-118.44	483	119 01:57:39	-96.76	447
119 03:52:18	135.40	4146	119 04:23:54	-144.79	484	119 03:38:58	-122.09	448
119 05:37:39	108.93	4147	119 06:08:46	-171.14	485	119 05:20:16	-147.42	449
119 07:23:01	82.47	4148	119 07:53:39	162.52	486	119 07:01:34	-172.74	450
119 09:08:22	56.00	4149	119 09:38:32	136.17	487	119 08:42:52	161.93	451
119 10:53:43	29.54	4150	119 11:23:25	109.83	488	119 10:24:10	136.61	452
119 12:39:05	3.08	4151	119 13:08:18	83.48	489	119 12:05:28	111.29	453
119 14:24:26	-23.39	4152	119 14:53:11	57.14	490	119 13:46:46	85.96	454
119 16:09:47	-49.86	4153	119 16:38:04	30.79	491	119 15:28:04	60.64	455
119 17:55:09	-76.32	4154	119 18:22:56	4.44	492	119 17:09:22	35.31	456
119 19:40:30	-102.78	4155	119 20:07:49	-21.90	493	119 18:50:40	9.99	457
119 21:25:52	-129.25	4156	119 21:52:42	-48.25	494	119 20:31:58	-15.33	458
119 23:11:13	-155.71	4157	119 23:37:35	-74.59	495	119 22:13:16	-40.66	459
						119 23:54:34	-65.98	460
120 00:56:34	177.82	4158	120 01:22:28	-100.94	496	120 01:35:52	-91.31	461
120 02:41:56	151.36	4159	120 03:07:21	-127.28	497	120 03:17:10	-116.63	462
120 04:27:17	124.89	4160	120 04:52:14	-153.63	498	120 04:58:29	-141.97	463
120 06:12:38	98.43	4161	120 06:37:06	-179.98	499	120 06:39:47	-167.29	464
120 07:58:00	71.96	4162	120 08:21:59	153.68	500	120 08:21:05	167.39	465
120 09:43:21	45.50	4163	120 10:06:52	127.33	501	120 10:02:23	142.06	466
120 11:28:43	19.03	4164	120 11:51:45	100.99	502	120 11:43:41	116.74	467
120 13:14:04	-7.43	4165	120 13:36:38	74.64	503	120 13:24:59	91.41	468
120 14:59:25	-33.90	4166	120 15:21:31	48.29	504	120 15:06:17	66.09	469
120 16:44:47	-60.36	4167	120 17:06:24	21.95	505	120 16:47:35	40.77	470
120 18:30:08	-86.83	4168	120 18:51:16	-4.40	506	120 18:28:53	15.44	471
120 20:15:30	-113.29	4169	120 20:36:09	-30.74	507	120 20:10:11	-9.88	472
120 22:00:51	-139.76	4170	120 22:21:02	-57.09	508	120 21:51:29	-35.21	473
120 23:46:12	-166.22	4171				120 23:32:47	-60.53	474
121 01:31:34	167.31	4172	121 00:05:55	-83.44	509	121 01:14:05	-85.85	475
121 03:16:55	140.85	4173	121 01:50:48	-109.78	510	121 02:55:23	-111.18	476
121 05:02:16	114.38	4174	121 03:35:41	-136.13	511	121 04:36:41	-136.50	477
121 06:47:38	87.92	4175	121 05:20:34	-162.47	512	121 06:17:59	-161.82	478
121 08:32:59	61.45	4176	121 07:05:26	171.18	513	121 07:59:18	172.84	479
121 10:18:21	34.99	4177	121 08:50:19	144.83	514	121 09:40:36	147.51	480
121 12:03:42	8.53	4178	121 10:35:12	118.49	515	121 11:21:54	122.19	481
121 13:49:03	-17.94	4179	121 12:20:05	92.14	516	121 13:03:12	96.87	482
121 15:34:25	-44.40	4180	121 14:04:58	65.80	517	121 14:44:30	71.54	483
121 17:19:46	-70.87	4181	121 15:49:51	39.45	518	121 16:25:48	46.22	484
121 19:05:07	-97.34	4182	121 17:34:44	13.11	519	121 18:07:06	20.89	485
121 20:50:29	-123.80	4183	121 19:19:36	-13.24	520	121 19:48:24	-4.43	486
121 22:35:50	-150.26	4184	121 21:04:29	-39.59	521	121 21:29:42	-29.75	487
			121 22:49:22	-65.93	522	121 23:11:00	-55.08	488

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
122 00:21:12	-176.73	4185	122 00:34:15	-92.28	523	122 00:52:18	-80.40	489
122 02:06:33	156.81	4186	122 02:19:08	-118.62	524	122 02:33:36	-105.73	490
122 03:51:54	130.34	4187	122 04:04:01	-144.97	525	122 04:14:54	-131.05	491
122 05:37:16	103.88	4188	122 05:48:54	-171.31	526	122 05:56:12	-156.37	492
122 07:22:37	77.41	4189	122 07:33:46	162.34	527	122 07:37:30	178.30	493
122 09:07:58	50.95	4190	122 09:18:39	135.99	528	122 09:18:49	152.97	494
122 10:53:20	24.48	4191	122 11:03:32	109.65	529	122 11:00:07	127.64	495
122 12:38:41	-1.98	4192	122 12:48:25	83.30	530	122 12:41:25	102.32	496
122 14:24:03	-28.45	4193	122 14:33:18	56.96	531	122 14:22:43	76.99	497
122 16:09:24	-54.91	4194	122 16:18:11	30.61	532	122 16:04:01	51.67	498
122 17:54:45	-81.38	4195	122 18:03:04	4.26	533	122 17:45:19	26.35	499
122 19:40:07	-107.84	4196	122 19:47:56	-22.08	534	122 19:26:37	1.02	500
122 21:25:28	-134.31	4197	122 21:32:49	-48.43	535	122 21:07:55	-24.30	501
122 23:10:49	-160.77	4198	122 23:17:42	-74.77	536	122 22:49:13	-49.63	502
123 00:56:11	172.76	4199	123 01:02:35	-101.12	537	123 00:30:31	-74.95	503
123 02:41:32	146.30	4200	123 02:47:28	-127.47	538	123 02:11:49	-100.27	504
123 04:26:54	119.84	4201	123 04:32:21	-153.81	539	123 03:53:07	-125.60	505
123 06:12:15	93.37	4202	123 06:17:14	179.84	540	123 05:34:25	-150.92	506
123 07:57:36	66.90	4203	123 08:02:06	153.50	541	123 07:15:43	-176.25	507
123 09:42:58	40.44	4204	123 09:46:59	127.15	542	123 08:57:01	158.43	508
123 11:28:19	13.98	4205	123 11:31:52	100.80	543	123 10:38:19	133.11	509
123 13:13:41	-12.49	4206	123 13:16:45	74.46	544	123 12:19:38	107.77	510
123 14:59:02	-38.95	4207	123 15:01:38	48.11	545	123 14:00:56	82.45	511
123 16:44:23	-65.42	4208	123 16:46:31	21.77	546	123 15:42:14	57.12	512
123 18:29:45	-91.88	4209	123 18:31:24	-4.58	547	123 17:23:32	31.80	513
123 20:15:06	-118.35	4210	123 20:16:16	-30.93	548	123 19:04:50	6.47	514
123 22:00:27	-144.81	4211	123 22:01:09	-57.27	549	123 20:46:08	-18.85	515
123 23:45:49	-171.28	4212	123 23:46:02	-83.62	550	123 22:27:26	-44.17	516
124 01:31:10	162.26	4213	124 01:30:55	-109.96	551	124 00:08:44	-69.50	517
124 03:16:32	135.79	4214	124 03:15:48	-136.31	552	124 01:50:02	-94.82	518
124 05:01:53	109.33	4215	124 05:00:41	-162.65	553	124 03:31:20	-120.15	519
124 06:47:14	82.86	4216	124 06:45:34	171.00	554	124 05:12:38	-145.47	520
124 08:32:36	56.40	4217	124 08:30:27	144.66	555	124 06:53:56	-170.79	521
124 10:17:57	29.93	4218	124 10:15:19	118.31	556	124 08:35:14	163.88	522
124 12:03:18	3.47	4219	124 12:00:12	91.96	557	124 10:16:32	138.56	523
124 13:48:40	-23.00	4220	124 13:45:05	65.62	558	124 11:57:50	113.24	524
124 15:34:01	-49.46	4221	124 15:29:58	39.27	559	124 13:39:08	87.91	525
124 17:19:23	-75.92	4222	124 17:14:51	12.93	560	124 15:20:27	62.57	526
124 19:04:44	-102.39	4223	124 18:59:44	-13.42	561	124 17:01:45	37.25	527
124 20:50:05	-128.86	4224	124 20:44:37	-39.76	562	124 18:43:03	11.93	528
124 22:35:27	-155.32	4225	124 22:29:29	-66.11	563	124 20:24:21	-13.40	529
						124 22:05:39	-38.72	530
						124 23:46:57	-64.05	531
125 00:20:48	178.21	4226	125 00:14:22	-92.46	564	125 01:28:15	-89.37	532
125 02:06:09	151.75	4227	125 01:59:15	-118.80	565	125 03:09:33	-114.69	533
125 03:51:31	125.29	4228	125 03:44:08	-145.15	566	125 04:50:51	-140.02	534
125 05:36:52	98.82	4229	125 05:29:01	-171.49	567	125 06:32:09	-165.34	535
125 07:22:14	72.36	4230	125 07:13:54	162.16	568	125 08:13:27	169.33	536
125 09:07:35	45.89	4231	125 08:58:47	135.81	569	125 09:54:45	144.01	537
125 10:52:56	19.43	4232	125 10:43:39	109.47	570	125 11:36:03	118.69	538
125 12:38:18	-7.04	4233	125 12:28:32	83.12	571	125 13:17:21	93.36	539
125 14:23:39	-33.50	4234	125 14:13:25	56.77	572	125 14:58:39	68.04	540
125 16:09:00	-59.97	4235	125 15:58:18	30.43	573	125 16:39:58	42.70	541
125 17:54:22	-86.43	4236	125 17:43:11	4.08	574	125 18:21:16	17.38	542
125 19:39:43	-112.90	4237	125 19:28:04	-22.26	575	125 20:02:34	-7.95	543
125 21:25:05	-139.36	4238	125 21:12:57	-48.61	576	125 21:43:52	-33.27	544
125 23:10:26	-165.83	4239	125 22:57:49	-74.96	577	125 23:25:10	-58.59	545

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
126 00:55:47	167.71	4240	126 00:42:42	-101.30	578	126 01:06:28	-83.92	546
126 02:41:09	141.24	4241	126 02:27:35	-127.65	579	126 02:47:46	-109.24	547
126 04:26:30	114.78	4242	126 04:12:28	-153.99	580	126 04:29:04	-134.57	548
126 06:11:51	88.31	4243	126 05:57:21	179.66	581	126 06:10:22	-159.89	549
126 07:57:13	61.85	4244	126 07:42:14	153.32	582	126 07:51:40	174.79	550
126 09:42:34	35.38	4245	126 09:27:07	126.97	583	126 09:32:58	149.46	551
126 11:27:56	8.92	4246	126 11:11:59	100.62	584	126 11:14:16	124.14	552
126 13:13:17	-17.55	4247	126 12:56:52	74.28	585	126 12:55:34	98.81	553
126 14:58:38	-44.01	4248	126 14:41:45	47.93	586	126 14:36:52	73.49	554
126 16:44:00	-70.47	4249	126 16:26:38	21.59	587	126 16:18:10	48.17	555
126 18:29:21	-96.94	4250	126 18:11:31	-4.76	588	126 17:59:28	22.84	556
126 20:14:42	-123.41	4251	126 19:56:24	-31.10	589	126 19:40:47	-2.49	557
126 22:00:04	-149.87	4252	126 21:41:17	-57.45	590	126 21:22:05	-27.82	558
126 23:45:25	-176.33	4253	126 23:26:09	-83.80	591	126 23:03:23	-53.14	559
127 01:30:47	157.20	4254	127 01:11:02	-110.14	592	127 00:44:41	-78.47	560
127 03:16:08	130.74	4255	127 02:55:55	-136.49	593	127 02:25:59	-103.79	561
127 05:01:29	104.27	4256	127 04:40:48	-162.83	594	127 04:07:17	-129.11	562
127 06:46:51	77.81	4257	127 06:25:41	170.82	595	127 05:48:35	-154.44	563
127 08:32:12	51.34	4258	127 08:10:34	144.48	596	127 07:29:53	-179.76	564
127 10:17:33	24.88	4259	127 09:55:27	118.13	597	127 09:11:11	154.91	565
127 12:02:55	-1.59	4260	127 11:40:19	91.78	598	127 10:52:29	129.59	566
127 13:48:16	-28.05	4261	127 13:25:12	65.44	599	127 12:33:47	104.27	567
127 15:33:38	-54.52	4262	127 15:10:05	39.09	600	127 14:15:05	78.94	568
127 17:18:59	-80.98	4263	127 16:54:58	12.75	601	127 15:56:23	53.62	569
127 19:04:20	-107.45	4264	127 18:39:51	-13.60	602	127 17:37:41	28.29	570
127 20:49:42	-133.91	4265	127 20:24:44	-39.95	603	127 19:18:59	2.97	571
127 22:35:03	-160.38	4266	127 22:09:37	-66.29	604	127 21:00:17	-22.35	572
			127 23:54:29	-92.64	605	127 22:41:36	-47.69	573
128 00:20:24	173.16	4267	128 01:39:22	-118.98	606	128 00:22:54	-73.01	574
128 02:05:46	146.69	4268	128 03:24:15	-145.33	607	128 02:04:12	-98.34	575
128 03:51:07	120.23	4269	128 05:09:08	-171.68	608	128 03:45:30	-123.66	576
128 05:36:29	93.77	4270	128 06:54:01	161.98	609	128 05:26:48	-148.99	577
128 07:21:50	67.30	4271	128 08:38:54	135.63	610	128 07:08:06	-174.31	578
128 09:07:11	40.83	4272	128 10:23:47	109.29	611	128 08:49:24	160.37	579
128 10:52:33	14.37	4273	128 12:08:39	82.94	612	128 10:30:42	135.04	580
128 12:37:54	-12.09	4274	128 13:53:32	56.59	613	128 12:12:00	109.72	581
128 14:23:15	-38.56	4275	128 15:38:25	30.25	614	128 13:53:18	84.39	582
128 16:08:37	-65.02	4276	128 17:23:18	3.90	615	128 15:34:36	59.07	583
128 17:53:58	-91.49	4277	128 19:08:11	-22.44	616	128 17:15:54	33.75	584
128 19:39:20	-117.95	4278	128 20:53:04	-48.79	617	128 18:57:12	8.42	585
128 21:24:41	-144.42	4279	128 22:37:57	-75.13	618	128 20:38:30	-16.90	586
128 23:10:02	-170.88	4280				128 22:19:48	-42.23	587
129 00:55:24	162.65	4281	129 00:22:49	-101.48	619	129 00:01:06	-67.55	588
129 02:40:45	136.19	4282	129 02:07:42	-127.83	620	129 01:42:25	-92.89	589
129 04:26:06	109.72	4283	129 03:52:35	-154.17	621	129 03:23:43	-118.21	590
129 06:11:28	83.26	4284	129 05:37:28	179.48	622	129 05:05:01	-143.53	591
129 07:56:49	56.79	4285	129 07:22:21	153.14	623	129 06:46:19	168.86	592
129 09:42:10	30.33	4286	129 09:07:14	126.79	624	129 08:27:37	165.82	593
129 11:27:32	3.86	4287	129 10:52:07	100.45	625	129 10:08:55	140.49	594
129 13:12:53	-22.60	4288	129 12:36:59	74.10	626	129 11:50:13	115.17	595
129 14:58:15	-49.07	4289	129 14:21:52	47.75	627	129 13:31:31	89.85	596
129 16:43:36	-75.53	4290	129 16:06:45	21.41	628	129 15:12:49	64.52	597
129 18:28:57	-102.00	4291	129 17:51:38	-4.94	629	129 16:54:07	39.20	598
129 20:14:19	-128.46	4292	129 19:36:31	-31.28	630	129 18:35:25	13.87	599
129 21:59:40	-154.93	4293	129 21:21:24	-57.63	631	129 20:16:43	-11.45	600
129 23:45:01	178.61	4294	129 23:06:17	-83.97	632	129 21:58:01	-36.77	601
						129 23:39:19	-62.10	602

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
130 01:30:23	152.15	4295
130 03:15:44	125.68	4296
130 05:01:06	99.22	4297
130 06:46:27	72.75	4298
130 08:31:48	46.28	4299
130 10:17:10	19.82	4300
130 12:02:31	-6.64	4301
130 13:47:52	-33.11	4302
130 15:33:14	-59.57	4303
130 17:18:35	-86.04	4304
130 19:03:57	-112.50	4305
130 20:49:18	-138.97	4306
130 22:34:39	-165.43	4307
131 00:20:01	168.10	4308
131 02:05:22	141.64	4309
131 03:50:43	115.17	4310
131 05:36:05	88.71	4311
131 07:21:26	62.24	4312
131 09:06:48	35.78	4313
131 10:52:09	9.31	4314
131 12:37:30	-17.15	4315
131 14:22:52	-43.61	4316
131 16:08:13	-70.08	4317
131 17:53:34	-96.55	4318
131 19:38:56	-123.01	4319
131 21:24:17	-149.47	4320
131 23:09:38	-175.94	4321
132 00:55:00	157.60	4322
132 02:40:21	131.13	4323
132 04:25:43	104.67	4324
132 06:11:04	78.20	4325
132 07:56:25	51.74	4326
132 09:41:47	25.27	4327
132 11:27:08	-1.19	4328
132 13:12:29	-27.66	4329
132 14:57:51	-54.12	4330
132 16:43:12	-80.59	4331
132 18:28:34	-107.05	4332
132 20:13:55	-133.52	4333
132 21:59:16	-159.98	4334
132 23:44:38	173.56	4335
133 01:29:59	147.09	4336
133 03:15:20	120.62	4337
133 05:00:42	94.16	4338
133 06:46:03	67.69	4339
133 08:31:25	41.23	4340
133 10:16:46	14.77	4341
133 12:02:07	-11.70	4342
133 13:47:29	-38.16	4343
133 15:32:50	-64.62	4344
133 17:18:11	-91.09	4345
133 19:03:33	-117.56	4346
133 20:48:54	-144.02	4347
133 22:34:15	-170.49	4348

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
130 00:51:09	-110.32	633
130 02:36:02	-136.67	634
130 04:20:55	-163.01	635
130 06:05:48	170.64	636
130 07:50:41	144.30	637
130 09:35:34	117.95	638
130 11:20:27	91.60	639
130 13:05:19	65.26	640
130 14:50:12	38.91	641
130 16:35:05	12.57	642
130 18:19:58	-13.78	643
130 20:04:51	-40.13	644
130 21:49:44	-66.47	645
130 23:34:37	-92.82	646
131 01:19:29	-119.16	647
131 03:04:22	-145.51	648
131 04:49:15	-171.86	649
131 06:34:08	161.80	650
131 08:19:01	135.45	651
131 10:03:54	109.11	652
131 11:48:47	82.76	653
131 13:33:39	56.41	654
131 15:18:32	30.07	655
131 17:03:25	3.72	656
131 18:48:18	-22.62	657
131 20:33:11	-48.97	658
131 22:18:04	-75.31	659
132 00:02:57	-101.66	660
132 01:47:49	-128.01	661
132 03:32:42	-154.35	662
132 05:17:35	179.30	663
132 07:02:28	152.96	664
132 08:47:21	126.61	665
132 10:32:14	100.27	666
132 12:17:07	73.92	667
132 14:01:59	47.57	668
132 15:46:52	21.23	669
132 17:31:45	-5.12	670
132 19:16:38	-31.46	671
132 21:01:31	-57.81	672
132 22:46:24	-84.15	673
133 00:31:17	-110.50	674
133 02:16:09	-136.85	675
133 04:01:02	-163.19	676
133 05:45:55	170.46	677
133 07:30:48	144.12	678
133 09:15:41	117.77	679
133 11:00:34	91.42	680
133 12:45:27	65.08	681
133 14:30:19	38.73	682
133 16:15:12	12.39	683
133 18:00:05	-13.96	684
133 19:44:58	-40.31	685
133 21:29:51	-66.65	686
133 23:14:44	-93.00	687

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
130 01:20:37	-87.42	603
130 03:01:55	-112.75	604
130 04:43:14	-138.08	605
130 06:24:32	-163.41	606
130 08:05:50	171.27	607
130 09:47:08	145.95	608
130 11:28:26	120.62	609
130 13:09:44	95.30	610
130 14:51:02	69.97	611
130 16:32:20	44.65	612
130 18:13:38	19.33	613
130 19:54:56	-6.00	614
130 21:36:14	-31.32	615
130 23:17:32	-56.65	616
131 00:58:50	-81.97	617
131 02:40:08	-107.29	618
131 04:21:26	-132.62	619
131 06:02:44	-157.94	620
131 07:44:03	176.72	621
131 09:25:21	151.40	622
131 11:06:39	126.07	623
131 12:47:57	100.75	624
131 14:29:15	75.43	625
131 16:10:33	50.10	626
131 17:51:51	24.78	627
131 19:33:09	-.55	628
131 21:14:27	-25.87	629
131 22:55:45	-51.19	630
132 00:37:03	-76.52	631
132 02:18:21	-101.84	632
132 03:59:39	-127.17	633
132 05:40:57	-152.49	634
132 07:22:15	-177.81	635
132 09:03:33	156.86	636
132 10:44:51	131.54	637
132 12:26:10	106.20	638
132 14:07:28	80.88	639
132 15:48:46	55.55	640
132 17:30:04	30.23	641
132 19:11:22	4.91	642
132 20:52:40	-20.42	643
132 22:33:58	-45.74	644
133 00:15:16	-71.07	645
133 01:56:34	-96.39	646
133 03:37:52	-121.71	647
133 05:19:10	-147.04	648
133 07:00:28	-172.36	649
133 08:41:46	162.31	650
133 10:23:04	136.99	651
133 12:04:22	111.67	652
133 13:45:40	86.34	653
133 15:26:59	61.00	654
133 17:08:17	35.68	655
133 18:49:35	10.36	656
133 20:30:53	-14.97	657
133 22:12:11	-40.29	658
133 23:53:29	-65.62	659

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
134 00:19:37	163.05	4349	134 00:59:37	-119.34	688	134 01:34:47	-90.94	660
134 02:04:58	136.58	4350	134 02:44:29	-145.69	689	134 03:16:05	-116.26	661
134 03:50:20	110.12	4351	134 04:29:22	-172.04	690	134 04:57:23	-141.59	662
134 05:35:41	83.65	4352	134 06:14:15	161.62	691	134 06:38:41	-166.91	663
134 07:21:02	57.19	4353	134 07:59:08	135.27	692	134 08:19:59	167.77	664
134 09:06:24	30.72	4354	134 09:44:01	108.93	693	134 10:01:17	142.44	665
134 10:51:45	4.26	4355	134 11:28:54	82.58	694	134 11:42:35	117.12	666
134 12:37:06	-22.21	4356	134 13:13:47	56.24	695	134 13:23:53	91.79	667
134 14:22:28	-48.67	4357	134 14:58:39	29.89	696	134 15:05:11	66.47	668
134 16:07:49	-75.14	4358	134 16:43:32	3.54	697	134 16:46:29	41.15	669
134 17:53:11	-101.60	4359	134 18:28:25	-22.80	698	134 18:27:48	15.81	670
134 19:38:32	-128.06	4360	134 20:13:18	-49.15	699	134 20:09:06	-9.52	671
134 21:23:53	-154.53	4361	134 21:58:11	-75.49	700	134 21:50:24	-34.84	672
134 23:09:15	179.01	4362	134 23:43:04	-101.84	701	134 23:31:42	-60.16	673
135 00:54:36	152.54	4363	135 01:27:57	-128.18	702	135 01:13:00	-85.49	674
135 02:39:57	126.08	4364	135 03:12:49	-154.53	703	135 02:54:18	-110.81	675
135 04:25:19	99.61	4365	135 04:57:42	179.12	704	135 04:35:36	-136.14	676
135 06:10:40	73.15	4366	135 06:42:35	152.78	705	135 06:16:54	-161.46	677
135 07:56:01	46.68	4367	135 08:27:28	126.43	706	135 07:58:12	173.22	678
135 09:41:23	20.22	4368	135 10:12:21	100.09	707	135 09:39:30	147.89	679
135 11:26:44	-6.25	4369	135 11:57:14	73.74	708	135 11:20:48	122.57	680
135 13:12:06	-32.71	4370	135 13:42:07	47.40	709	135 13:02:06	97.24	681
135 14:57:27	-59.18	4371	135 15:26:59	21.05	710	135 14:43:24	71.92	682
135 16:42:48	-85.64	4372	135 17:11:52	-5.30	711	135 16:24:42	46.60	683
135 18:28:10	-112.11	4373	135 18:56:45	-31.64	712	135 18:06:00	21.27	684
135 20:13:31	-138.57	4374	135 20:41:38	-57.99	713	135 19:47:18	-4.05	685
135 21:58:52	-165.04	4375	135 22:26:31	-84.33	714	135 21:28:36	-29.38	686
135 23:44:14	168.50	4376				135 23:09:55	-54.71	687
136 01:29:35	142.03	4377	136 00:11:24	-110.68	715	136 00:51:13	-80.04	688
136 03:14:56	115.57	4378	136 01:56:16	-137.03	716	136 02:32:31	-105.36	689
136 05:00 18	89.11	4379	136 03:41:09	-163.37	717	136 04:13:49	-130.68	690
136 06:45:39	62.64	4380	136 05:26:02	170.28	718	136 05:55:07	-156.01	691
136 08:31:01	36.18	4381	136 07:10:55	143.94	719	136 07:36:25	178.67	692
136 10:16:22	9.71	4382	136 08:55:48	117.59	720	136 09:17:43	153.34	693
136 12:01:43	-16.75	4383	136 10:40:41	91.24	721	136 10:59:01	128.02	694
136 13:47:05	-43.22	4384	136 12:25:34	64.90	722	136 12:40:19	102.70	695
136 15:32:26	-69.68	4385	136 14:10:26	38.55	723	136 14:21:37	77.37	696
136 17:17:47	-96.15	4386	136 15:55:19	12.21	724	136 16:02:55	52.05	697
136 19:03:09	-122.61	4387	136 17:40:12	-14.14	725	136 17:44:13	26.72	698
136 20:48:30	-149.08	4388	136 19:25:05	-40.49	726	136 19:25:31	1.40	699
136 22:33:52	-175.54	4389	136 21:09:58	-66.83	727	136 21:06:49	-23.92	700
			136 22:54:51	-93.18	728	136 22:48:07	-49.25	701
137 00:19:13	157.99	4390	137 00:39:44	-119.52	729	137 00:29:25	-74.57	702
137 02:04:34	131.53	4391	137 02:24:36	-145.87	730	137 02:10:43	-99.90	703
137 03:49:56	105.06	4392	137 04:09:29	-172.22	731	137 03:52:02	-125.23	704
137 05:35:17	78.60	4393	137 05:54:22	161.44	732	137 05:33:20	-150.56	705
137 07:20:38	52.13	4394	137 07:39:15	135.09	733	137 07:14:38	-175.88	706
137 09:06:00	25.67	4395	137 09:24:08	108.75	734	137 08:55:56	158.80	707
137 10:51:21	-.80	4396	137 11:09:01	82.40	735	137 10:37:14	133.47	708
137 12:36:42	-27.26	4397	137 12:53:54	56.06	736	137 12:18:32	108.15	709
137 14:22:04	-53.72	4398	137 14:38:46	29.71	737	137 13:59:50	82.82	710
137 16:07:25	-80.19	4399	137 16:23:39	3.36	738	137 15:41:08	57.50	711
137 17:52:47	-106.65	4400	137 18:08:32	-22.98	739	137 17:22:26	32.18	712
137 19:38:08	-133.12	4401	137 19:53:25	-49.33	740	137 19:03:44	6.85	713
137 21:23:29	-159.58	4402	137 21:38:18	-75.67	741	137 20:45:02	-18.47	714
137 23:08:51	173.95	4403	137 23:23:11	-102.02	742	137 22:26:20	-43.80	715

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
138 00:54:12	147.49	4404	138 01:08:04	-128.36	743	138 00:07:38	-69.12	716
138 02:39:33	121.02	4405	138 02:52:56	-154.71	744	138 01:48:56	-94.44	717
138 04:24:55	94.56	4406	138 04:37:49	178.94	745	138 03:30:14	-119.77	718
138 06:10:16	68.09	4407	138 06:22:42	152.60	746	138 05:11:32	-145.09	719
138 07:55:37	41.63	4408	138 08:07:35	126.25	747	138 06:52:50	-170.42	720
138 09:40:59	15.16	4409	138 09:52:28	99.91	748	138 08:34:09	164.25	721
138 11:26:20	-11.30	4410	138 11:37:21	73.56	749	138 10:15:27	138.92	722
138 13:11:42	-37.77	4411	138 13:22:14	47.22	750	138 11:56:45	113.60	723
138 14:57:03	-64.23	4412	138 15:07:06	20.87	751	138 13:38:03	88.27	724
138 16:42:24	-90.70	4413	138 16:51:59	-5.48	752	138 15:19:21	62.95	725
138 18:27:46	-117.16	4414	138 18:36:52	-31.82	753	138 17:00:39	37.63	726
138 20:13:07	-143.63	4415	138 20:21:45	-58.17	754	138 18:41:57	12.30	727
138 21:58:28	-170.09	4416	138 22:06:38	-84.51	755	138 20:23:15	-13.02	728
138 23:43:50	163.45	4417	138 23:51:31	-110.86	756	138 22:04:33	-38.35	729
						138 23:45:51	-63.67	730
139 01:29:11	136.98	4418	139 01:36:23	-137.21	757	139 01:27:09	-88.99	731
139 03:14:32	110.51	4419	139 03:21:16	-163.55	758	139 03:08:27	-114.32	732
139 04:59:54	84.05	4420	139 05:06:09	170.10	759	139 04:49:45	-139.64	733
139 06:45:15	57.59	4421	139 06:51:02	143.76	760	139 06:31:03	-164.97	734
139 08:30:37	31.12	4422	139 08:35:55	117.41	761	139 08:12:21	169.71	735
139 10:15:58	4.66	4423	139 10:20:48	91.07	762	139 09:53:39	144.39	736
139 12:01:19	-21.81	4424	139 12:05:41	64.72	763	139 11:34:57	119.06	737
139 13:46:41	-48.27	4425	139 13:50:33	38.37	764	139 13:16:16	93.73	738
139 15:32:02	-74.74	4426	139 15:35:26	12.03	765	139 14:57:34	68.40	739
139 17:17:23	-101.20	4427	139 17:20:19	-14.32	766	139 16:38:52	43.08	740
139 19:02:45	-127.67	4428	139 19:05:12	-40.66	767	139 18:20:10	17.75	741
139 20:48:06	-154.13	4429	139 20:50:05	-67.01	768	139 20:01:28	-7.57	742
139 22:33:27	179.40	4430	139 22:34:58	-93.36	769	139 21:42:46	-32.89	743
						139 23:24:04	-58.22	744
140 00:18:49	152.94	4431	140 00:19:51	-119.70	770	140 01:05:22	-83.54	745
140 02:04:10	126.47	4432	140 02:04:43	-146.05	771	140 02:46:40	-108.87	746
140 03:49:32	100.01	4433	140 03:49:36	-172.39	772	140 04:27:58	-134.19	747
140 05:34:53	73.54	4434	140 05:34:29	161.26	773	140 06:09:16	-159.51	748
140 07:20:14	47.08	4435	140 07:19:22	134.91	774	140 07:50:34	175.16	749
140 09:05:36	20.62	4436	140 09:04:15	108.57	775	140 09:31:52	149.84	750
140 10:50:57	-5.85	4437	140 10:49:08	82.22	776	140 11:13:10	124.51	751
140 12:36:18	-32.32	4438	140 12:34:00	55.88	777	140 12:54:28	99.19	752
140 14:21:40	-58.78	4439	140 14:18:53	29.53	778	140 14:35:46	73.87	753
140 16:07:01	-85.24	4440	140 16:03:46	3.19	779	140 16:17:04	48.54	754
140 17:52:22	-111.71	4441	140 17:48:39	-23.16	780	140 17:58:22	23.22	755
140 19:37:44	-138.17	4442	140 19:33:32	-49.51	781	140 19:39:41	-2.12	756
140 21:23:05	-164.64	4443	140 21:18:25	-75.85	782	140 21:20:59	-27.44	757
140 23:08:27	168.90	4444	140 23:03:18	-102.20	783	140 23:02:17	-52.77	758
141 00:53:48	142.43	4445	141 00:48:10	-128.54	784	141 00:43:35	-78.09	759
141 02:39:09	115.97	4446	141 02:33:03	-154.89	785	141 02:24:53	-103.42	760
141 04:24:31	89.50	4447	141 04:17:56	178.76	786	141 04:06:11	-128.74	761
141 06:09:52	63.04	4448	141 06:02:49	152.42	787	141 05:47:29	-154.06	762
141 07:55:13	36.57	4449	141 07:47:42	126.07	788	141 07:28:47	-179.39	763
141 09:40:35	10.11	4450	141 09:32:35	99.73	789	141 09:10:05	155.29	764
141 11:25:56	-16.36	4451	141 11:17:28	73.38	790	141 10:51:23	129.96	765
141 13:11:17	-42.82	4452	141 13:02:20	47.03	791	141 12:32:41	104.64	766
141 14:56:39	-69.29	4453	141 14:47:13	20.69	792	141 14:13:59	79.32	767
141 16:42:00	-95.75	4454	141 16:32:06	-5.66	793	141 15:55:17	53.99	768
141 18:27:21	-122.22	4455	141 18:16:59	-32.00	794	141 17:36:35	28.67	769
141 20:12:43	-148.68	4456	141 20:01:52	-58.35	795	141 19:17:53	3.34	770
141 21:58:04	-175.15	4457	141 21:46:45	-84.69	796	141 20:59:11	-21.98	771
141 23:43:26	158.39	4458	141 23:31:37	-111.04	797	141 22:40:29	-47.30	772

West longitude is negative (-)

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
142 01:28:47	131.93	4459	142 01:16:30	-137.39	798	142 00:21:48	-72.64	773
142 03:14:08	105.46	4460	142 03:01:23	-163.73	799	142 02:03:06	-97.96	774
142 04:59:30	79.00	4461	142 04:46:16	169.92	800	142 03:44:24	-123.29	775
142 06:44:51	52.53	4462	142 06:31:09	143.58	801	142 05:25:42	-148.61	776
142 08:30:12	26.07	4463	142 08:16:02	117.23	802	142 07:07:00	-173.94	777
142 10:15:34	-.40	4464	142 10:00:55	90.89	803	142 08:48:18	160.74	778
142 12:00:55	-26.86	4465	142 11:45:47	64.54	804	142 10:29:36	135.42	779
142 13:46:16	-53.33	4466	142 13:30:40	38.19	805	142 12:10:54	110.09	780
142 15:31:38	-79.79	4467	142 15:15:33	11.85	806	142 13:52:12	84.77	781
142 17:16:59	-106.26	4468	142 17:00:26	-14.50	807	142 15:33:30	59.44	782
142 19:02:21	-132.72	4469	142 18:45:19	-40.84	808	142 17:14:48	34.12	783
142 20:47:42	-159.19	4470	142 20:30:12	-67.19	809	142 18:56:06	8.80	784
142 22:33:03	174.35	4471	142 22:15:05	-93.53	810	142 20:37:24	-16.53	785
			142 23:59:57	-119.88	811	142 22:18:42	-41.85	786
143 00:18:25	147.89	4472	143 01:44:50	-146.23	812	143 00:00:00	-67.18	787
143 02:03:46	121.42	4473	143 03:29:43	-172.57	813	143 01:41:18	-92.50	788
143 03:49:07	94.95	4474	143 05:14:36	161.08	814	143 03:22:36	-117.82	789
143 05:34:29	68.49	4475	143 06:59:29	134.74	815	143 05:03:54	-143.15	790
143 07:19:50	42.03	4476	143 08:44:22	108.39	816	143 06:45:13	-168.49	791
143 09:05:11	15.56	4477	143 10:29:14	82.04	817	143 08:26:31	166.19	792
143 10:50:33	-10.90	4478	143 12:14:07	55.70	818	143 10:07:49	140.87	793
143 12:35:54	-37.37	4479	143 13:59:00	29.35	819	143 11:49:07	115.54	794
143 14:21:16	-63.83	4480	143 15:43:53	3.01	820	143 13:30:25	90.22	795
143 16:06:37	-90.30	4481	143 17:28:46	-23.34	821	143 15:11:43	64.89	796
143 17:51:58	-116.76	4482	143 19:13:39	-49.68	822	143 16:53:01	39.57	797
143 19:37:20	-143.23	4483	143 20:58:32	-76.03	823	143 18:34:19	14.25	798
143 21:22:41	-169.69	4484	143 22:43:24	-102.38	824	143 20:15:37	-11.08	799
143 23:08:02	163.84	4485				143 21:56:55	-36.40	800
						143 23:38:13	-61.73	801
144 00:53:24	137.38	4486	144 00:28:17	-128.72	825	144 01:19:31	-87.05	802
144 02:38:45	110.91	4487	144 02:13:10	-155.07	826	144 03:00:49	-112.37	803
144 04:24:06	84.45	4488	144 03:58:03	178.59	827	144 04:42:07	-137.70	804
144 06:09:28	57.98	4489	144 05:42:56	152.24	828	144 06:23:25	-163.02	805
144 07:54:49	31.52	4490	144 07:27:49	125.90	829	144 08:04:43	171.65	806
144 09:40:10	5.05	4491	144 09:12:41	99.55	830	144 09:46:01	146.33	807
144 11:25:32	-21.41	4492	144 10:57:34	73.20	831	144 11:27:19	121.01	808
144 13:10:53	-47.88	4493	144 12:42:27	46.86	832	144 13:08:38	95.67	809
144 14:56:15	-74.34	4494	144 14:27:20	20.51	833	144 14:49:56	70.35	810
144 16:41:36	-100.80	4495	144 16:12:13	-5.83	834	144 16:31:14	45.02	811
144 18:26:57	-127.27	4496	144 17:57:06	-32.18	835	144 18:12:32	19.70	812
144 20:12:19	-153.73	4497	144 19:41:59	-58.52	836	144 19:53:50	-5.63	813
144 21:57:40	179.80	4498	144 21:26:51	-84.87	837	144 21:35:08	-30.95	814
144 23:43:01	153.34	4499	144 23:11:44	-111.22	838	144 23:16:26	-56.27	815
145 01:28:23	126.87	4500	145 00:56:37	-137.56	839	145 00:57:44	-81.60	816
145 03:13:44	100.41	4501	145 02:41:30	-163.91	840	145 02:39:02	-106.92	817
145 04:59:05	73.94	4502	145 04:26:23	169.75	841	145 04:20:20	-132.25	818
145 06:44:27	47.48	4503	145 06:11:16	143.40	842	145 06:01:38	-157.57	819
145 08:29:48	21.01	4504	145 07:56:08	117.05	843	145 07:42:56	177.11	820
145 10:15:09	-5.45	4505	145 09:41:01	90.71	844	145 09:24:14	151.78	821
145 12:00:31	-31.92	4506	145 11:25:54	64.36	845	145 11:05:32	126.46	822
145 13:45:52	-58.38	4507	145 13:10:47	38.02	846	145 12:46:50	101.13	823
145 15:31:14	-84.84	4508	145 14:55:40	11.67	847	145 14:28:08	75.81	824
145 17:16:35	-111.31	4509	145 16:40:33	-14.67	848	145 16:09:26	50.49	825
145 19:01:56	-137.78	4510	145 18:25:26	-41.02	849	145 17:50:44	25.16	826
145 20:47:18	-164.24	4511	145 20:10:18	-67.37	850	145 19:32:03	-.18	827
145 22:32:39	169.30	4512	145 21:55:11	-93.71	851	145 21:13:21	-25.50	828
			145 23:40:04	-120.06	852	145 22:54:39	-50.82	829

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
146 00:18:00	142.83	4513	146 01:24:57	-146.40	853	146 00:35:57	-76.15	830
146 02:03:22	116.37	4514	146 03:09:50	-172.75	854	146 02:17:15	-101.47	831
146 03:48:43	89.90	4515	146 04:54:43	160.91	855	146 03:58:33	-126.80	832
146 05:34:04	63.44	4516	146 06:39:35	134.56	856	146 05:39:51	-152.12	833
146 07:19:26	36.97	4517	146 08:24:28	108.21	857	146 07:21:09	-177.44	834
146 09:04:47	10.51	4518	146 10:09:21	81.87	858	146 09:02:27	157.23	835
146 10:50:08	-15.96	4519	146 11:54:14	55.52	859	146 10:43:45	131.91	836
146 12:35:30	-42.42	4520	146 13:39:07	29.18	860	146 12:25:03	106.58	837
146 14:20:51	-68.89	4521	146 15:24:00	2.83	861	146 14:06:21	81.26	838
146 16:06:13	-95.35	4522	146 17:08:53	-23.51	862	146 15:47:39	55.94	839
146 17:51:34	-121.82	4523	146 18:53:45	-49.86	863	146 17:28:57	30.61	840
146 19:36:55	-148.28	4524	146 20:38:38	-76.21	864	146 19:10:15	5.29	841
146 21:22:17	-174.74	4525	146 22:23:31	-102.55	865	146 20:51:33	-20.04	842
146 23:07:38	158.79	4526				146 22:32:51	-45.36	843
147 00:52:59	132.32	4527	147 00:08:24	-128.90	866	147 00:14:09	-70.68	844
147 02:38:21	105.86	4528	147 01:53:17	-155.24	867	147 01:55:28	-96.02	845
147 04:23:42	79.40	4529	147 03:38:10	178.41	868	147 03:36:46	-121.34	846
147 06:09:03	52.93	4530	147 05:23:02	152.06	869	147 05:18:04	-146.67	847
147 07:54:25	26.47	4531	147 07:07:55	125.72	870	147 06:59:22	-171.99	848
147 09:39:46	.00	4532	147 08:52:48	99.37	871	147 08:40:40	162.68	849
147 11:25:07	-26.46	4533	147 10:37:41	73.03	872	147 10:21:58	137.36	850
147 13:10:29	-52.93	4534	147 12:22:34	46.68	873	147 12:03:16	112.03	851
147 14:55:50	-79.39	4535	147 14:07:27	20.34	874	147 13:44:34	86.71	852
147 16:41:12	-105.86	4536	147 15:52:19	-6.01	875	147 15:25:52	61.39	853
147 18:26:33	-132.32	4537	147 17:37:12	-32.36	876	147 17:07:10	36.06	854
147 20:11:54	-158.79	4538	147 19:22:05	-58.70	877	147 18:48:28	10.74	855
147 21:57:16	174.75	4539	147 21:06:58	-85.05	878	147 20:29:46	-14.59	856
147 23:42:37	148.28	4540	147 22:51:51	-111.39	879	147 22:11:04	-39.91	857
						147 23:52:22	-65.23	858
148 01:27:58	121.82	4541	148 00:36:44	-137.74	880	148 01:33:40	-90.56	859
148 03:13:20	95.36	4542	148 02:21:37	-164.09	881	148 03:14:58	-115.88	860
148 04:58:41	68.89	4543	148 04:06:29	169.57	882	148 04:56:16	-141.21	861
148 06:44:02	42.42	4544	148 05:51:22	143.22	883	148 06:37:34	-166.53	862
148 08:29:24	15.96	4545	148 07:36:15	116.88	884	148 08:18:52	168.15	863
148 10:14:45	-10.50	4546	148 09:21:08	90.53	885	148 10:00:11	142.81	864
148 12:00:06	-36.97	4547	148 11:06:01	64.19	886	148 11:41:29	117.49	865
148 13:45:28	-63.43	4548	148 12:50:54	37.84	887	148 13:22:47	92.16	866
148 15:30:49	-89.90	4549	148 14:35:46	11.49	888	148 15:04:05	66.84	867
148 17:16:11	-116.36	4550	148 16:20:39	-14.85	889	148 16:45:23	41.51	868
148 19:01:32	-142.83	4551	148 18:05:32	-41.20	890	148 18:26:41	16.19	869
148 20:46:53	-169.29	4552	148 19:50:25	-67.54	891	148 20:07:59	-9.13	870
148 22:32:15	164.24	4553	148 21:35:18	-93.89	892	148 21:49:17	-34.46	871
			148 23:20:11	-120.23	893	148 23:30:35	-59.78	872
149 00:17:36	137.78	4554	149 01:05:03	-146.58	894	149 01:11:53	-85.11	873
149 02:02:57	111.31	4555	149 02:49:56	-172.93	895	149 02:53:11	-110.43	874
149 03:48:19	84.85	4556	149 04:34:49	160.73	896	149 04:34:29	-135.75	875
149 05:33:40	58.38	4557	149 06:19:42	134.38	897	149 06:15:47	-161.08	876
149 07:19:01	31.92	4558	149 08:04:35	108.04	898	149 07:57:05	173.60	877
149 09:04:23	5.46	4559	149 09:49:28	81.69	899	149 09:38:23	148.27	878
149 10:49:44	-21.01	4560	149 11:34:21	55.35	900	149 11:19:41	122.95	879
149 12:35:05	-47.48	4561	149 13:19:13	29.00	901	149 13:00:59	97.63	880
149 14:20:27	-73.94	4562	149 15:04:06	2.65	902	149 14:42:17	72.30	881
149 16:05:48	-100.40	4563	149 16:48:59	-23.69	903	149 16:23:35	46.98	882
149 17:51:10	-126.87	4564	149 18:33:52	-50.04	904	149 18:04:54	21.64	883
149 19:36:31	-153.33	4565	149 20:18:45	-76.38	905	149 19:46:12	-3.68	884
149 21:21:52	-179.80	4566	149 22:03:38	-102.73	906	149 21:27:30	-29.01	885
149 23:07:14	153.74	4567	149 23:48:30	-129.08	907	149 23:08:48	-54.33	886

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
150 00:52:35	127.27	4568	150 01:33:23	-155.42	908	150 00:50:06	-79.66	887
150 02:37:56	100.81	4569	150 03:18:16	178.23	909	150 02:31:24	-104.98	888
150 04:23:18	74.34	4570	150 05:03:09	151.89	910	150 04:12:42	-130.30	889
150 06:08:39	47.88	4571	150 06:48:02	125.54	911	150 05:54:00	-155.63	890
150 07:54:00	21.41	4572	150 08:32:55	99.20	912	150 07:35:18	179.05	891
150 09:39:22	-5.05	4573	150 10:17:47	72.85	913	150 09:16:36	153.72	892
150 11:24:43	-31.52	4574	150 12:02:40	46.50	914	150 10:57:54	128.40	893
150 13:10:04	-57.98	4575	150 13:47:33	20.16	915	150 12:39:12	103.08	894
150 14:55:26	-84.44	4576	150 15:32:26	-6.19	916	150 14:20:30	77.75	895
150 16:40:47	-110.91	4577	150 17:17:19	-32.53	917	150 16:01:48	52.43	896
150 18:26:08	-137.38	4578	150 19:02:12	-58.88	918	150 17:43:06	27.10	897
150 20:11:30	-163.84	4579	150 20:47:04	-85.23	919	150 19:24:24	1.78	898
150 21:56:51	169.70	4580	150 22:31:57	-111.57	920	150 21:05:42	-23.54	899
150 23:42:13	143.23	4581				150 22:47:00	-48.87	900
151 01:27:34	116.77	4582	151 00:16:50	-137.92	921	151 00:28:18	-74.19	901
151 03:12:55	90.30	4583	151 02:01:43	-164.26	922	151 02:09:37	-99.53	902
151 04:58:17	63.84	4584	151 03:46:36	169.39	923	151 03:50:55	-124.85	903
151 06:43:38	37.37	4585	151 05:31:29	143.05	924	151 05:32:13	-150.18	904
151 08:28:59	10.91	4586	151 07:16:21	116.70	925	151 07:13:31	-175.50	905
151 10:14:21	-15.56	4587	151 09:01:14	90.35	926	151 08:54:49	159.17	906
151 11:59:42	-42.02	4588	151 10:46:07	64.01	927	151 10:36:07	133.85	907
151 13:45:03	-68.49	4589	151 12:31:00	37.66	928	151 12:17:25	108.53	908
151 15:30:25	-94.95	4590	151 14:15:53	11.32	929	151 13:58:43	83.20	909
151 17:15:46	-121.42	4591	151 16:00:46	-15.03	930	151 15:40:01	57.88	910
151 19:01:07	-147.88	4592	151 17:45:39	-41.37	931	151 17:21:19	32.55	911
151 20:46:29	-174.34	4593	151 19:30:31	-67.72	932	151 19:02:37	7.23	912
151 22:31:50	159.19	4594	151 21:15:24	-94.07	933	151 20:43:55	-18.09	913
			151 23:00:17	-120.41	934	151 22:25:13	-43.42	914
152 00:17:11	132.72	4595	152 00:45:10	-146.76	935	152 00:06:31	-68.74	915
152 02:02:33	106.26	4596	152 02:30:03	-173.10	936	152 01:47:49	-94.07	916
152 03:47:54	79.80	4597	152 04:14:56	160.55	937	152 03:29:07	-119.39	917
152 05:33:16	53.33	4598	152 05:59:48	134.20	938	152 05:10:25	-144.71	918
152 07:18:37	26.87	4599	152 07:44:41	107.86	939	152 06:51:43	-170.04	919
152 09:03:58	.40	4600	152 09:29:34	81.51	940	152 08:33:01	164.64	920
152 10:49:20	-26.06	4601	152 11:14:27	55.17	941	152 10:14:19	139.31	921
152 12:34:41	-52.53	4602	152 12:59:20	28.82	942	152 11:55:38	113.98	922
152 14:20:02	-78.99	4603	152 14:44:13	2.48	943	152 13:36:56	88.65	923
152 16:05:24	-105.46	4604	152 16:29:05	-23.87	944	152 15:18:14	63.33	924
152 17:50:45	-131.92	4605	152 18:13:58	-50.22	945	152 16:59:32	38.00	925
152 19:36:06	-158.39	4606	152 19:58:51	-76.56	946	152 18:40:50	12.68	926
152 21:21:28	175.15	4607	152 21:43:44	-102.91	947	152 20:22:08	-12.64	927
152 23:06:49	148.68	4608	152 23:28:37	-129.25	948	152 22:03:26	-37.97	928
						152 23:44:44	-63.29	929
153 00:52:10	122.22	4609	153 01:13:30	-155.60	949	153 01:26:02	-88.62	930
153 02:37:32	95.76	4610	153 02:58:22	178.05	950	153 03:07:20	-113.94	931
153 04:22:53	69.29	4611	153 04:43:15	151.71	951	153 04:48:38	-139.26	932
153 06:08:14	42.82	4612	153 06:28:08	125.36	952	153 06:29:56	-164.59	933
153 07:53:36	16.36	4613	153 08:13:01	99.02	953	153 08:11:14	170.09	934
153 09:38:57	-10.10	4614	153 09:57:54	72.67	954	153 09:52:32	144.76	935
153 11:24:19	-36.57	4615	153 11:42:47	46.33	955	153 11:33:50	119.44	936
153 13:09:40	-63.03	4616	153 13:27:39	19.98	956	153 13:15:08	94.12	937
153 14:55:01	-89.50	4617	153 15:12:32	-6.37	957	153 14:56:26	68.79	938
153 16:40:23	-115.96	4618	153 16:57:25	-32.71	958	153 16:37:44	43.47	939
153 18:25:44	-142.43	4619	153 18:42:18	-59.06	959	153 18:19:02	18.14	940
153 20:11:05	-168.89	4620	153 20:27:11	-85.40	960	153 20:00:21	-7.19	941
153 21:56:27	164.64	4621	153 22:12:04	-111.75	961	153 21:41:39	-32.52	942
153 23:41:48	138.18	4622	153 23:56:56	-138.10	962	153 23:22:57	-57.84	943

West longitude is negative (-)

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
154 01:27:09	111.71	4623	154 01:41:49	-164.44	963	154 01:04:15	-83.17	944
154 03:12:31	85.25	4624	154 03:26:42	169.21	964	154 02:45:33	-108.49	945
154 04:57:52	58.78	4625	154 05:11:35	142.87	965	154 04:26:51	-133.81	946
154 06:43:13	32.32	4626	154 06:56:28	116.52	966	154 06:08:09	-159.14	947
154 08:28:35	5.86	4627	154 08:41:21	90.18	967	154 07:49:27	175.54	948
154 10:13:56	-20.61	4628	154 10:26:13	63.83	968	154 09:30:45	150.21	949
154 11:59:17	-47.08	4629	154 12:11:06	37.48	969	154 11:12:03	124.89	950
154 13:44:39	-73.54	4630	154 13:55:59	11.14	970	154 12:53:21	99.57	951
154 15:30:00	-100.00	4631	154 15:40:52	-15.21	971	154 14:34:39	74.24	952
154 17:15:22	-126.47	4632	154 17:25:45	-41.55	972	154 16:15:57	48.92	953
154 19:00:43	-152.93	4633	154 19:10:38	-67.90	973	154 17:57:15	23.59	954
154 20:46:04	-179.40	4634	154 20:55:30	-94.24	974	154 19:38:33	-1.73	955
154 22:31:26	154.14	4635	154 22:40:23	-120.59	975	154 21:19:51	-27.05	956
						154 23:01:09	-52.38	957
155 00:16:47	127.67	4636	155 00:25:16	-146.94	976	155 00:42:27	-77.70	958
155 02:02:08	101.21	4637	155 02:10:09	-173.28	977	155 02:23:45	-103.03	959
155 03:47:30	74.74	4638	155 03:55:02	160.37	978	155 04:05:03	-128.35	960
155 05:32:51	48.23	4639	155 05:39:55	134.03	979	155 05:46:22	-153.69	961
155 07:18:12	21.81	4640	155 07:24:47	107.68	980	155 07:27:40	-179.01	962
155 09:03:34	-4.65	4641	155 09:09:40	81.34	981	155 09:08:58	155.66	963
155 10:48:55	-31.12	4642	155 10:54:33	54.99	982	155 10:50:16	130.34	964
155 12:34:16	-57.58	4643	155 12:39:26	28.65	983	155 12:31:34	105.02	965
155 14:19:38	-84.04	4644	155 14:24:19	2.30	984	155 14:12:52	79.69	966
155 16:04:59	-110.51	4645	155 16:09:12	-24.05	985	155 15:54:10	54.37	967
155 17:50:20	-136.98	4646	155 17:54:04	-50.39	986	155 17:35:28	29.04	968
155 19:35:42	-163.44	4647	155 19:38:57	-76.74	987	155 19:16:46	3.72	969
155 21:21:03	170.10	4648	155 21:23:50	-103.08	988	155 20:58:04	-21.60	970
155 23:06:24	143.63	4649	155 23:08:43	-129.43	989	155 22:39:22	-46.93	971
156 00:51:46	117.17	4650	156 00:53:36	-155.77	990	156 00:20:40	-72.25	972
156 02:37:07	90.70	4651	156 02:38:29	177.88	991	156 02:01:58	-97.58	973
156 04:22:29	64.24	4652	156 04:23:21	151.53	992	156 03:43:16	-122.90	974
156 06:07:50	37.77	4653	156 06:08:14	125.19	993	156 05:24:34	-148.22	975
156 07:53:11	11.31	4654	156 07:53:07	98.84	994	156 07:05:52	-173.55	976
156 09:38:33	-15.16	4655	156 09:38:00	72.50	995	156 08:47:10	161.13	977
156 11:23:54	-41.62	4656	156 11:22:53	46.15	996	156 10:28:28	135.80	978
156 13:09:15	-68.09	4657	156 13:07:46	19.81	997	156 12:09:46	110.48	979
156 14:54:37	-94.55	4658	156 14:52:38	-6.54	998	156 13:51:04	85.15	980
156 16:39:58	-121.01	4659	156 16:37:31	-32.89	999	156 15:32:22	59.83	981
156 18:25:19	-147.48	4660	156 18:22:24	-59.23	1000	156 17:13:41	34.49	982
156 20:10:41	-173.94	4661	156 20:07:17	-85.58	1001	156 18:54:59	9.17	983
156 21:56:02	159.59	4662	156 21:52:10	-111.92	1002	156 20:36:17	-16.15	984
156 23:41:23	133.13	4663	156 23:37:03	-138.27	1003	156 22:17:35	-41.48	985
						156 23:58:53	-66.80	986
157 01:26:45	106.66	4664	157 01:21:55	-164.62	1004	157 01:40:11	-92.13	987
157 03:12:06	80.20	4665	157 03:06:48	169.04	1005	157 03:21:29	-117.45	988
157 04:57:27	53.73	4666	157 04:51:41	142.69	1006	157 05:02:47	-142.77	989
157 06:42:49	27.27	4667	157 06:36:34	116.35	1007	157 06:44:05	-168.10	990
157 08:28:10	.80	4668	157 08:21:27	90.00	1008	157 08:25:23	166.58	991
157 10:13:32	-25.66	4669	157 10:06:20	63.66	1009	157 10:06:41	141.25	992
157 11:58:53	-52.13	4670	157 11:51:12	37.31	1010	157 11:47:59	115.93	993
157 13:44:14	-78.59	4671	157 13:36:05	10.96	1011	157 13:29:17	90.60	994
157 15:29:36	-105.05	4672	157 15:20:58	-15.38	1012	157 15:10:35	65.28	995
157 17:14:57	-131.52	4673	157 17:05:51	-41.73	1013	157 16:51:53	39.96	996
157 19:00:18	-157.99	4674	157 18:50:44	-68.07	1014	157 18:33:11	14.63	997
157 20:45:40	175.55	4675	157 20:35:37	-94.42	1015	157 20:14:29	-10.69	998
157 22:31:01	149.09	4676	157 22:20:29	-120.77	1016	157 21:55:47	-36.02	999
						157 23:37:05	-61.34	1000

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
158 00:16:22	122.62	4677
158 02:01:44	96.16	4678
158 03:47:05	69.69	4679
158 05:32:26	43.23	4680
158 07:17:48	16.76	4681
158 09:03:09	-9.70	4682
158 10:48:30	-36.17	4683
158 12:33:52	-62.63	4684
158 14:19:13	-89.10	4685
158 16:04:34	-115.56	4686
158 17:49:56	-142.03	4687
158 19:35:17	-168.49	4688
158 21:20:38	165.04	4689
158 23:06:00	138.58	4690
159 00:51:21	112.11	4691
159 02:36:43	85.65	4692
159 04:22:04	59.19	4693
159 06:07:25	32.72	4694
159 07:52:47	6.26	4695
159 09:38:08	-20.21	4696
159 11:23:29	-46.67	4697
159 13:08:51	-73.14	4698
159 14:54:12	-99.60	4699
159 16:39:33	-126.07	4700
159 18:24:55	-152.53	4701
159 20:10:16	-179.00	4702
159 21:55:37	154.54	4703
159 23:40:59	128.08	4704
160 01:26:20	101.61	4705
160 03:11:41	75.14	4706
160 04:57:03	48.68	4707
160 06:42:24	22.22	4708
160 08:27:45	-4.25	4709
160 10:13:07	-30.71	4710
160 11:58:28	-57.18	4711
160 13:43:50	-83.64	4712
160 15:29:11	-110.11	4713
160 17:14:32	-136.57	4714
160 18:59:54	-163.04	4715
160 20:45:15	170.50	4716
160 22:30:36	144.03	4717
161 00:15:58	117.57	4718
161 02:01:19	91.10	4719
161 03:46:40	64.64	4720
161 05:32:02	38.18	4721
161 07:17:23	11.71	4722
161 09:02:44	-14.76	4723
161 10:48:06	-41.22	4724
161 12:33:27	-67.68	4725
161 14:18:48	-94.15	4726
161 16:04:10	-120.61	4727
161 17:49:31	-147.08	4728
161 19:34:52	-173.54	4729
161 21:20:14	159.99	4730
161 23:05:35	133.53	4731

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
158 00:05:22	-147.11	1017
158 01:50:15	-173.46	1018
158 03:35:08	160.20	1019
158 05:20:01	133.85	1020
158 07:04:54	107.51	1021
158 08:49:46	81.16	1022
158 10:34:39	54.81	1023
158 12:19:32	28.47	1024
158 14:04:25	2.12	1025
158 15:49:18	-24.22	1026
158 17:34:11	-50.57	1027
158 19:19:03	-76.91	1028
158 21:03:56	-103.26	1029
158 22:48:49	-129.60	1030
159 00:33:42	-155.95	1031
159 02:18:35	177.70	1032
159 04:03:27	151.36	1033
159 05:48:20	125.01	1034
159 07:33:13	98.67	1035
159 09:18:06	72.32	1036
159 11:02:59	45.98	1037
159 12:47:52	19.63	1038
159 14:32:44	-6.72	1039
159 16:17:37	-33.06	1040
159 18:02:30	-59.41	1041
159 19:47:23	-85.75	1042
159 21:32:16	-112.10	1043
159 23:17:09	-138.44	1044
160 01:02:01	-164.79	1045
160 02:46:54	168.86	1046
160 04:31:47	142.52	1047
160 06:16:40	116.17	1048
160 08:01:33	89.83	1049
160 09:46:26	63.48	1050
160 11:31:18	37.13	1051
160 13:16:11	10.79	1052
160 15:01:04	-15.56	1053
160 16:45:57	-41.90	1054
160 18:30:50	-68.25	1055
160 20:15:43	-94.59	1056
160 22:00:35	-120.94	1057
160 23:45:28	-147.29	1058
161 01:30:21	-173.63	1059
161 03:15:14	160.02	1060
161 05:00:07	133.68	1061
161 06:44:59	107.33	1062
161 08:29:52	80.99	1063
161 10:14:45	54.64	1064
161 11:59:38	28.30	1065
161 13:44:31	1.95	1066
161 15:29:24	-24.40	1067
161 17:14:16	-50.74	1068
161 18:59:09	-77.09	1069
161 20:44:02	-103.43	1070
161 22:28:55	-129.78	1071

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
158 01:18:23	-86.66	1001
158 02:59:42	-112.00	1002
158 04:41:00	-137.32	1003
158 06:22:18	-162.65	1004
158 08:03:36	172.03	1005
158 09:44:54	146.70	1006
158 11:26:12	121.38	1007
158 13:07:30	96.05	1008
158 14:48:48	70.73	1009
158 16:30:06	45.41	1010
158 18:11:24	20.08	1011
158 19:52:42	-5.24	1012
158 21:34:00	-30.57	1013
158 23:15:18	-55.89	1014
159 00:56:36	-81.21	1015
159 02:37:54	-106.54	1016
159 04:19:12	-131.86	1017
159 06:00:30	-157.19	1018
159 07:41:48	177.49	1019
159 09:23:06	152.17	1020
159 11:04:24	126.84	1021
159 12:45:42	101.52	1022
159 14:27:01	76.18	1023
159 16:08:19	50.86	1024
159 17:49:37	25.53	1025
159 19:30:55	.21	1026
159 21:12:13	-25.12	1027
159 22:53:31	-50.44	1028
160 00:34:49	-75.76	1029
160 02:16:07	-101.09	1030
160 03:57:25	-126.41	1031
160 05:38:43	-151.74	1032
160 07:20:01	-177.06	1033
160 09:01:19	157.62	1034
160 10:42:37	132.29	1035
160 12:23:55	106.97	1036
160 14:05:13	81.64	1037
160 15:46:31	56.32	1038
160 17:27:49	31.00	1039
160 19:09:07	5.67	1040
160 20:50:25	-19.65	1041
160 22:31:43	-44.98	1042
161 00:13:01	-70.30	1043
161 01:54:20	-95.64	1044
161 03:35:38	-120.96	1045
161 05:16:56	-146.29	1046
161 06:58:14	-171.61	1047
161 08:39:32	163.07	1048
161 10:20:50	137.74	1049
161 12:02:08	112.42	1050
161 13:43:26	87.09	1051
161 15:24:44	61.77	1052
161 17:06:02	36.45	1053
161 18:47:20	11.12	1054
161 20:28:38	-14.20	1055
161 22:09:56	-39.53	1056
161 23:51:14	-64.85	1057

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
162 00:50:57	107.06	4732	162 00:13:48	-156.12	1072	162 01:32:32	-90.18	1058
162 02:36:18	80.60	4733	162 01:58:41	177.53	1073	162 03:13:50	-115.50	1059
162 04:21:39	54.13	4734	162 03:43:33	151.18	1074	162 04:55:08	-140.82	1060
162 06:07:01	27.67	4735	162 05:28:26	124.84	1075	162 06:36:26	-166.15	1061
162 07:52:22	1.21	4736	162 07:13:19	98.49	1076	162 08:17:44	168.53	1062
162 09:37:43	-25.26	4737	162 08:58:12	72.15	1077	162 09:59:02	143.20	1063
162 11:23:05	-51.72	4738	162 10:43:05	45.80	1078	162 11:40:20	117.88	1064
162 13:08:26	-78.19	4739	162 12:27:57	19.45	1079	162 13:21:39	92.54	1065
162 14:53:47	-104.65	4740	162 14:12:50	-6.89	1080	162 15:02:57	67.22	1066
162 16:39:09	-131.12	4741	162 15:57:43	-33.24	1081	162 16:44:15	41.89	1067
162 18:24:30	-157.58	4742	162 17:42:36	-59.58	1082	162 18:25:33	16.57	1068
162 20:09:51	175.95	4743	162 19:27:29	-85.93	1083	162 20:06:51	-8.75	1069
162 21:55:13	149.49	4744	162 21:12:22	-112.27	1084	162 21:48:09	-34.08	1070
162 23:40:34	123.02	4745	162 22:57:14	-138.62	1085	162 23:29:27	-59.40	1071
163 01:25:55	96.56	4746	163 00:42:07	-164.97	1086	163 01:10:45	-84.73	1072
163 03:11:17	70.09	4747	163 02:27:00	168.69	1087	163 02:52:03	-110.05	1073
163 04:56:38	43.63	4748	163 04:11:53	142.34	1088	163 04:33:21	-135.37	1074
163 06:41:59	17.16	4749	163 05:56:46	116.00	1089	163 06:14:39	-160.70	1075
163 08:27:21	-9.30	4750	163 07:41:39	89.65	1090	163 07:55:57	173.98	1076
163 10:12:42	-35.77	4751	163 09:26:31	63.31	1091	163 09:37:15	148.65	1077
163 11:58:03	-62.23	4752	163 11:11:24	36.96	1092	163 11:18:33	123.33	1078
163 13:43:25	-88.69	4753	163 12:56:17	10.62	1093	163 12:59:51	98.01	1079
163 15:28:46	-115.16	4754	163 14:41:10	-15.73	1094	163 14:41:09	72.68	1080
163 17:14:08	-141.62	4755	163 16:26:03	-42.08	1095	163 16:22:27	47.36	1081
163 18:59:29	-168.09	4756	163 18:10:55	-68.42	1096	163 18:03:45	22.03	1082
163 20:44:50	165.45	4757	163 19:55:48	-94.77	1097	163 19:45:03	-3.29	1083
163 22:30:12	138.98	4758	163 21:40:41	-121.11	1098	163 21:26:21	-28.61	1084
			163 23:25:34	-147.46	1099	163 23:07:39	-53.94	1085
164 00:15:33	112.52	4759	164 01:10:27	-173.80	1100	164 00:48:57	-79.26	1086
164 02:00:54	86.05	4760	164 02:55:20	159.85	1101	164 02:30:16	-104.60	1087
164 03:46:16	59.59	4761	164 04:40:12	133.50	1102	164 04:11:34	-129.92	1088
164 05:31:37	33.12	4762	164 06:25:05	107.16	1103	164 05:52:52	-155.25	1089
164 07:16:58	6.66	4763	164 08:09:58	80.81	1104	164 07:34:10	179.43	1090
164 09:02:20	-19.81	4764	164 09:54:51	54.47	1105	164 09:15:28	154.10	1091
164 10:47:41	-46.27	4765	164 11:39:44	28.12	1106	164 10:56:46	128.78	1092
164 12:33:02	-72.74	4766	164 13:24:37	1.78	1107	164 12:38:04	103.46	1093
164 14:18:24	-99.20	4767	164 15:09:29	-24.57	1108	164 14:19:22	78.13	1094
164 16:03:45	-125.66	4768	164 16:54:22	-50.92	1109	164 16:00:40	52.81	1095
164 17:49:06	-152.13	4769	164 18:39:15	-77.26	1110	164 17:41:58	27.48	1096
164 19:34:28	-178.59	4770	164 20:24:08	-103.61	1111	164 19:23:16	2.16	1097
164 21:19:49	154.94	4771	164 22:09:01	-129.95	1112	164 21:04:34	-23.16	1098
164 23:05:10	128.48	4772	164 23:53:53	-156.30	1113	164 22:45:52	-48.49	1099
165 00:50:32	102.01	4773	165 01:38:46	177.35	1114	165 00:27:10	-73.81	1100
165 02:35:53	75.55	4774	165 03:23:39	151.01	1115	165 02:08:28	-99.14	1101
165 04:21:14	49.08	4775	165 05:08:32	124.66	1116	165 03:49:46	-124.46	1102
165 06:06:36	22.62	4776	165 06:53:25	98.32	1117	165 05:31:04	-149.79	1103
165 07:51:57	-3.85	4777	165 08:38:18	71.97	1118	165 07:12:22	-175.11	1104
165 09:37:19	-30.31	4778	165 10:23:10	45.63	1119	165 08:53:40	159.57	1105
165 11:22:40	-56.78	4779	165 12:08:03	19.28	1120	165 10:34:58	134.24	1106
165 13:08:01	-83.24	4780	165 13:52:56	-7.06	1121	165 12:16:16	108.92	1107
165 14:53:23	-109.70	4781	165 15:37:49	-33.41	1122	165 13:57:34	83.59	1108
165 16:38:44	-136.17	4782	165 17:22:42	-59.75	1123	165 15:38:53	58.26	1109
165 18:24:05	-162.64	4783	165 19:07:34	-86.10	1124	165 17:20:11	32.93	1110
165 20:09:27	170.90	4784	165 20:52:27	-112.45	1125	165 19:01:29	7.61	1111
165 21:54:48	144.44	4785	165 22:37:20	-138.79	1126	165 20:42:47	-17.72	1112
165 23:40:09	117.97	4786				165 22:24:05	-43.04	1113

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
166 01:25:31	91.51	4787	166 00:22:13	-165.14	1127	166 00:05:23	-68.36	1114
166 03:10:52	65.04	4788	166 02:07:06	168.52	1128	166 01:46:41	-93.69	1115
166 04:56:13	38.58	4789	166 03:51:59	142.17	1129	166 03:27:59	-119.01	1116
166 06:41:35	12.11	4790	166 05:36:51	115.82	1130	166 05:09:17	-144.34	1117
166 08:26:56	-14.35	4791	166 07:21:44	89.48	1131	166 06:50:35	-169.66	1118
166 10:12:17	-40.82	4792	166 09:06:37	63.13	1132	166 08:31:53	165.02	1119
166 11:57:39	-67.28	4793	166 10:51:30	36.79	1133	166 10:13:11	139.69	1120
166 13:43:00	-93.75	4794	166 12:36:23	10.44	1134	166 11:54:29	114.37	1121
166 15:28:21	-120.21	4795	166 14:21:15	-15.91	1135	166 13:35:47	89.04	1122
166 17:13:43	-146.68	4796	166 16:06:08	-42.25	1136	166 15:17:05	63.72	1123
166 18:59:04	-173.14	4797	166 17:51:01	-68.60	1137	166 16:58:23	38.40	1124
166 20:44:25	160.39	4798	166 19:35:54	-94.94	1138	166 18:39:41	13.07	1125
166 22:29:47	133.93	4799	166 21:20:47	-121.29	1139	166 20:20:59	-12.25	1126
			166 23:05:40	-147.63	1140	166 22:02:17	-37.58	1127
						166 23:43:35	-62.90	1128
167 00:15:08	107.47	4800	167 00:50:32	-173.98	1141	167 01:24:53	-88.22	1129
167 02:00:30	81.00	4801	167 02:35:25	159.68	1142	167 03:06:11	-113.55	1130
167 03:45:51	54.54	4802	167 04:20:18	133.33	1143	167 04:47:30	-138.89	1131
167 05:31:12	28.07	4803	167 06:05:11	106.98	1144	167 06:28:48	-164.21	1132
167 07:16:34	1.61	4804	167 07:50:04	80.64	1145	167 08:10:06	170.47	1133
167 09:01:55	-24.86	4805	167 09:34:56	54.29	1146	167 09:51:24	145.14	1134
167 10:47:16	-51.32	4806	167 11:19:49	27.95	1147	167 11:32:42	119.82	1135
167 12:32:38	-77.79	4807	167 13:04:42	1.60	1148	167 13:14:00	94.49	1136
167 14:17:59	-104.25	4808	167 14:49:35	-24.74	1149	167 14:55:18	69.17	1137
167 16:03:20	-130.72	4809	167 16:34:28	-51.09	1150	167 16:36:36	43.85	1138
167 17:48:42	-157.18	4810	167 18:19:21	-77.43	1151	167 18:17:54	18.52	1139
167 19:34:03	176.35	4811	167 20:04:13	-103.78	1152	167 19:59:12	-6.80	1140
167 21:19:24	149.89	4812	167 21:49:06	-130.13	1153	167 21:40:30	-32.13	1141
167 23:04:46	123.43	4813	167 23:33:59	-156.47	1154	167 23:21:48	-57.45	1142
168 00:50:07	96.96	4814	168 01:18:52	177.18	1155	168 01:03:06	-82.78	1143
168 02:35:28	70.49	4815	168 03:03:45	150.84	1156	168 02:44:24	-108.10	1144
168 04:20:50	44.03	4816	168 04:48:37	124.49	1157	168 04:25:42	-133.42	1145
168 06:06:11	17.57	4817	168 06:33:30	98.14	1158	168 06:07:00	-158.75	1146
168 07:51:32	-8.90	4818	168 08:18:23	71.80	1159	168 07:48:18	175.93	1147
168 09:36:54	-35.36	4819	168 10:03:16	45.45	1160	168 09:29:36	150.60	1148
168 11:22:15	-61.83	4820	168 11:48:09	19.11	1161	168 11:10:54	125.28	1149
168 13:07:36	-88.29	4821	168 13:33:02	-7.24	1162	168 12:52:12	99.96	1150
168 14:52:58	-114.76	4822	168 15:17:54	-33.58	1163	168 14:33:30	74.63	1151
168 16:38:19	-141.22	4823	168 17:02:47	-59.93	1164	168 16:14:48	49.31	1152
168 18:23:40	-167.69	4824	168 18:47:40	-86.27	1165	168 17:56:07	23.97	1153
168 20:09:02	165.85	4825	168 20:32:33	-112.62	1166	168 19:37:25	-1.35	1154
168 21:54:23	139.38	4826	168 22:17:26	-138.97	1167	168 21:18:43	-26.68	1155
168 23:39:45	112.92	4827				168 23:00:01	-52.00	1156
169 01:25:06	86.46	4828	169 00:02:18	-165.31	1168	169 00:41:19	-77.33	1157
169 03:10:27	59.99	4829	169 01:47:11	168.34	1169	169 02:22:37	-102.65	1158
169 04:55:49	33.53	4830	169 03:32:04	142.00	1170	169 04:03:55	-127.97	1159
169 06:41:10	7.06	4831	169 05:16:57	115.65	1171	169 05:45:13	-153.30	1160
169 08:26:31	-19.40	4832	169 07:01:50	89.31	1172	169 07:26:31	-178.62	1161
169 10:11:53	-45.87	4833	169 08:46:43	62.96	1173	169 09:07:49	156.05	1162
169 11:57:14	-72.33	4834	169 10:31:35	36.61	1174	169 10:49:07	130.73	1163
169 13:42:35	-98.80	4835	169 12:16:28	10.27	1175	169 12:30:25	105.41	1164
169 15:27:57	-125.26	4836	169 14:01:21	-16.08	1176	169 14:11:43	80.08	1165
169 17:13:18	-151.73	4837	169 15:46:14	-42.42	1177	169 15:53:01	54.76	1166
169 18:58:39	-178.19	4838	169 17:31:07	-68.77	1178	169 17:34:19	29.43	1167
169 20:44:01	155.34	4839	169 19:15:59	-95.12	1179	169 19:15:37	4.11	1168
169 22:29:22	128.88	4840	169 21:00:52	-121.46	1180	169 20:56:55	-21.22	1169
			169 22:45:45	-147.81	1181	169 22:38:13	-46.54	1170

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG deg.dg	ORBIT
170 00:14:43	102.41	4841
170 02:00:05	75.95	4842
170 03:45:26	49.48	4843
170 05:30:47	23.02	4844
170 07:16:09	-3.44	4845
170 09:01:30	-29.91	4846
170 10:46:51	-56.38	4847
170 12:32:13	-82.84	4848
170 14:17:34	-109.30	4849
170 16:02:56	-135.77	4850
170 17:48:17	-162.23	4851
170 19:33:38	171.38	4852
170 21:19:00	144.84	4853
170 23:04:21	118.37	4854
171 00:49:42	91.91	4855
171 02:35:04	65.45	4856
171 04:20:25	38.98	4857
171 06:05:46	12.51	4858
171 07:51:08	-13.95	4859
171 09:36:29	-40.41	4860
171 11:21:50	-66.88	4861
171 13:07:12	-93.34	4862
171 14:52:33	-119.81	4863
171 16:37:54	-146.27	4864
171 18:23:16	-172.74	4865
171 20:08:37	160.80	4866
171 21:53:58	134.33	4867
171 23:39:20	107.87	4868
172 01:24:41	81.40	4869
172 03:10:02	54.94	4870
172 04:55:24	28.47	4871
172 06:40:45	2.01	4872
172 08:26:07	-24.45	4873
172 10:11:28	-50.92	4874
172 11:56:49	-77.39	4875
172 13:42:11	-103.85	4876
172 15:27:32	-130.31	4877
172 17:12:53	-156.78	4878
172 18:58:15	176.76	4879
172 20:43:36	150.29	4880
172 22:28:57	123.83	4881
173 00:14:19	97.36	4882
173 01:59:40	70.90	4883
173 03:45:01	44.43	4884
173 05:30:23	17.97	4885
173 07:15:44	-8.50	4886
173 09:01:05	-34.96	4887
173 10:46:27	-61.42	4888
173 12:31:48	-87.89	4889
173 14:17:09	-114.36	4890
173 16:02:31	-140.82	4891
173 17:47:52	-167.28	4892
173 19:33:13	166.25	4893
173 21:18:35	139.79	4894
173 23:03:56	113.32	4895

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
170 00:30:38	-174.15	1182
170 02:15:31	159.50	1183
170 04:00:24	133.16	1184
170 05:45:16	106.81	1185
170 07:30:09	80.47	1186
170 09:15:02	54.12	1187
170 10:59:55	27.78	1188
170 12:44:48	1.43	1189
170 14:29:40	-24.92	1190
170 16:14:33	-51.26	1191
170 17:59:26	-77.61	1192
170 19:44:19	-103.95	1193
170 21:29:12	-130.30	1194
170 23:14:04	-156.65	1195
171 00:58:57	177.01	1196
171 02:43:50	150.66	1197
171 04:28:43	124.32	1198
171 06:13:36	97.97	1199
171 07:58:29	71.63	1200
171 09:43:21	45.28	1201
171 11:28:14	18.93	1202
171 13:13:07	-7.41	1203
171 14:58:00	-33.76	1204
171 16:42:53	-60.10	1205
171 18:27:45	-86.45	1206
171 20:12:38	-112.79	1207
171 21:57:31	-139.14	1208
171 23:42:24	-165.48	1209
172 01:27:17	168.17	1210
172 03:12:10	141.83	1211
172 04:57:02	115.48	1212
172 06:41:55	89.13	1213
172 08:26:48	62.79	1214
172 10:11:41	36.44	1215
172 11:56:34	10.10	1216
172 13:41:26	-16.25	1217
172 15:26:19	-42.60	1218
172 17:11:12	-68.94	1219
172 18:56:05	-95.29	1220
172 20:40:58	-121.63	1221
172 22:25:50	-147.98	1222
173 00:10:43	-174.32	1223
173 01:55:36	159.33	1224
173 03:40:29	132.99	1225
173 05:25:22	106.64	1226
173 07:10:15	80.29	1227
173 08:55:07	53.95	1228
173 10:40:00	27.60	1229
173 12:24:53	1.26	1230
173 14:09:46	-25.09	1231
173 15:54:39	-51.43	1232
173 17:39:31	-77.78	1233
173 19:24:24	-104.13	1234
173 21:09:17	-130.47	1235
173 22:54:10	-156.82	1236

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
170 00:19:31	-71.86	1171
170 02:00:49	-97.19	1172
170 03:42:07	-122.51	1173
170 05:23:25	-147.84	1174
170 07:04:43	-173.16	1175
170 08:46:02	161.50	1176
170 10:27:20	136.18	1177
170 12:08:38	110.85	1178
170 13:49:56	85.53	1179
170 15:31:14	60.21	1180
170 17:12:32	34.88	1181
170 18:53:50	9.56	1182
170 20:35:08	-15.77	1183
170 22:16:26	-41.09	1184
170 23:57:44	-66.41	1185
171 01:39:02	-91.74	1186
171 03:20:20	-117.06	1187
171 05:01:38	-142.39	1188
171 06:42:56	-167.71	1189
171 08:24:14	166.97	1190
171 10:05:32	141.64	1191
171 11:46:50	116.32	1192
171 13:28:08	90.99	1193
171 15:09:26	65.67	1194
171 16:50:44	40.35	1195
171 18:32:02	15.02	1196
171 20:13:20	-10.30	1197
171 21:54:38	-35.63	1198
171 23:35:57	-60.96	1199
172 01:17:15	-86.29	1200
172 02:58:33	-111.61	1201
172 04:39:51	-136.94	1202
172 06:21:09	-162.26	1203
172 08:02:27	172.41	1204
172 09:43:45	147.09	1205
172 11:25:03	121.77	1206
172 13:06:21	96.44	1207
172 14:47:39	71.12	1208
172 16:28:57	45.79	1209
172 18:10:15	20.47	1210
172 19:51:33	-4.85	1211
172 21:32:51	-30.18	1212
172 23:14:09	-55.50	1213
173 00:55:27	-80.83	1214
173 02:36:45	-106.15	1215
173 04:18:03	-131.47	1216
173 05:59:21	-156.80	1217
173 07:40:39	177.88	1218
173 09:21:57	152.55	1219
173 11:03:15	127.23	1220
173 12:44:33	101.91	1221
173 14:25:52	76.57	1222
173 16:07:10	51.24	1223
173 17:48:28	25.92	1224
173 19:29:46	.60	1225
173 21:11:04	-24.73	1226
173 22:52:22	-50.05	1227

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
174 00:49:18	86.86	4896	174 00:39:03	176.84	1237	174 00:33:40	-75.38	1228
174 02:34:39	60.39	4897	174 02:23:55	150.49	1238	174 02:14:58	-100.70	1229
174 04:20:00	33.93	4898	174 04:08:48	124.14	1239	174 03:56:16	-126.03	1230
174 06:05:22	7.46	4899	174 05:53:41	97.80	1240	174 05:37:34	-151.35	1231
174 07:50:43	-19.00	4900	174 07:38:34	71.45	1241	174 07:18:52	-176.67	1232
174 09:36:04	-45.47	4901	174 09:23:27	45.11	1242	174 09:00:10	158.00	1233
174 11:21:26	-71.93	4902	174 11:08:19	18.76	1243	174 10:41:28	132.68	1234
174 13:06:47	-98.40	4903	174 12:53:12	-7.58	1244	174 12:22:46	107.35	1235
174 14:52:08	-124.86	4904	174 14:38:05	-33.93	1245	174 14:04:04	82.03	1236
174 16:37:30	-151.32	4905	174 16:22:58	-60.27	1246	174 15:45:22	56.71	1237
174 18:22:51	-177.79	4906	174 18:07:51	-86.62	1247	174 17:26:40	31.38	1238
174 20:08:12	155.74	4907	174 19:52:44	-112.96	1248	174 19:07:58	6.06	1239
174 21:53:34	129.28	4908	174 21:37:36	-139.31	1249	174 20:49:16	-19.27	1240
174 23:38:55	102.82	4909	174 23:22:29	-165.66	1250	174 22:30:34	-44.59	1241
175 01:24:16	76.35	4910	175 01:07:22	168.00	1251	175 00:11:52	-69.91	1242
175 03:09:38	49.89	4911	175 02:52:15	141.65	1252	175 01:53:10	-95.24	1243
175 04:54:59	23.42	4912	175 04:37:08	115.31	1253	175 03:34:28	-120.56	1244
175 06:40:20	-3.04	4913	175 06:22:00	88.96	1254	175 05:15:47	-145.90	1245
175 08:25:42	-29.51	4914	175 08:06:53	62.61	1255	175 06:57:05	-171.22	1246
175 10:11:03	-55.97	4915	175 09:51:46	36.27	1256	175 08:38:23	163.45	1247
175 11:56:24	-82.44	4916	175 11:36:39	9.92	1257	175 10:19:41	138.13	1248
175 13:41:46	-108.90	4917	175 13:21:32	-16.42	1258	175 12:00:59	112.80	1249
175 15:27:07	-135.37	4918	175 15:06:24	-42.77	1259	175 13:42:17	87.48	1250
175 17:12:29	-161.83	4919	175 16:51:17	-69.11	1260	175 15:23:35	62.16	1251
175 18:57:50	171.71	4920	175 18:36:10	-95.46	1261	175 17:04:53	36.83	1252
175 20:43:11	145.24	4921	175 20:21:03	-121.80	1262	175 18:46:11	11.51	1253
175 22:28:33	118.78	4922	175 22:05:56	-148.15	1263	175 20:27:29	-13.82	1254
			175 23:50:49	-174.49	1264	175 22:08:47	-39.14	1255
						175 23:50:05	-64.47	1256
176 00:13:54	92.31	4923	176 01:35:41	159.16	1265	176 01:31:23	-89.79	1257
176 01:59:15	65.85	4924	176 03:20:34	132.81	1266	176 03:12:41	-115.11	1258
176 03:44:37	39.38	4925	176 05:05:27	106.47	1267	176 04:53:59	-140.44	1259
176 05:29:58	12.92	4926	176 06:50:20	80.12	1268	176 06:35:17	-165.76	1260
176 07:15:19	-13.55	4927	176 08:35:13	53.78	1269	176 08:16:35	168.91	1261
176 09:00:41	-40.01	4928	176 10:20:05	27.43	1270	176 09:57:53	143.59	1262
176 10:46:02	-66.48	4929	176 12:04:58	1.08	1271	176 11:39:11	118.27	1263
176 12:31:23	-92.94	4930	176 13:49:51	-25.26	1272	176 13:20:29	92.94	1264
176 14:16:45	-119.41	4931	176 15:34:44	-51.61	1273	176 15:01:47	67.62	1265
176 16:02:06	-145.87	4932	176 17:19:37	-77.95	1274	176 16:43:05	42.29	1266
176 17:47:27	-172.34	4933	176 19:04:29	-104.30	1275	176 18:24:23	16.97	1267
176 19:32:49	161.20	4934	176 20:49:22	-130.64	1276	176 20:05:42	-8.37	1268
176 21:18:10	134.73	4935	176 22:34:15	-156.99	1277	176 21:47:00	-33.69	1269
176 23:03:31	108.27	4936				176 23:28:18	-59.02	1270
177 00:48:53	81.81	4937	177 00:19:08	176.67	1278	177 01:09:36	-84.34	1271
177 02:34:14	55.34	4938	177 02:04:01	150.32	1279	177 02:50:54	-109.66	1272
177 04:19:36	28.88	4939	177 03:48:53	123.97	1280	177 04:32:12	-134.99	1273
177 06:04:57	2.41	4940	177 05:33:46	97.63	1281	177 06:13:30	-160.31	1274
177 07:50:18	-24.05	4941	177 07:18:39	71.28	1282	177 07:54:48	174.36	1275
177 09:35:40	-50.52	4942	177 09:03:32	44.94	1283	177 09:36:06	149.04	1276
177 11:21:01	-76.98	4943	177 10:48:25	18.59	1284	177 11:17:24	123.72	1277
177 13:06:22	-103.45	4944	177 12:33:18	-7.75	1285	177 12:58:42	98.39	1278
177 14:51:44	-129.91	4945	177 14:18:10	-34.10	1286	177 14:40:00	73.07	1279
177 16:37:05	-156.38	4946	177 16:03:03	-60.45	1287	177 16:21:18	47.74	1280
177 18:22:26	177.16	4947	177 17:47:56	-86.79	1288	177 18:02:36	22.42	1281
177 20:07:48	150.69	4948	177 19:32:49	-113.14	1289	177 19:43:54	-2.91	1282
177 21:53:09	124.23	4949	177 21:17:42	-139.48	1290	177 21:25:12	-28.23	1283
177 23:38:30	97.76	4950	177 23:02:34	-165.83	1291	177 23:06:30	-53.55	1284

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
178 01:23:52	71.30	4951
178 03:09:13	44.83	4952
178 04:54:34	18.37	4953
178 06:39:56	-8.09	4954
178 08:25:17	-34.56	4955
178 10:10:38	-61.02	4956
178 11:56:00	-87.49	4957
178 13:41:21	-113.95	4958
178 15:26:43	-140.42	4959
178 17:12:04	-166.88	4960
178 18:57:25	166.65	4961
178 20:42:47	140.19	4962
178 22:28:08	113.72	4963
179 00:13:29	87.26	4964
179 01:58:51	60.80	4965
179 03:44:12	34.33	4966
179 05:29:33	7.86	4967
179 07:14:55	-18.60	4968
179 09:00:16	-45.06	4969
179 10:45:37	-71.53	4970
179 12:30:59	-97.99	4971
179 14:16:20	-124.46	4972
179 16:01:41	-150.92	4973
179 17:47:03	-177.39	4974
179 19:32:24	156.15	4975
179 21:17:45	129.68	4976
179 23:03:07	103.22	4977
180 00:48:28	76.75	4978
180 02:33:49	50.29	4979
180 04:19:11	23.82	4980
180 06:04:32	-2.64	4981
180 07:49:54	-29.10	4982
180 09:35:15	-55.57	4983
180 11:20:36	-82.04	4984
180 13:05:58	-108.50	4985
180 14:51:19	-134.96	4986
180 16:36:40	-161.43	4987
180 18:22:02	172.11	4988
180 20:07:23	145.64	4989
180 21:52:44	119.18	4990
180 23:38:06	92.71	4991
181 01:23:27	66.25	4992
181 03:08:48	39.78	4993
181 04:54:10	13.32	4994
181 06:39:31	-13.15	4995
181 08:24:52	-39.61	4996
181 10:10:14	-66.08	4997
181 11:55:35	-92.54	4998
181 13:40:57	-119.00	4999
181 15:26:18	-145.47	5000
181 17:11:39	-171.93	5001
181 18:57:01	161.60	5002
181 20:42:22	135.14	5003
181 22:27:43	108.67	5004

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
178 00:47:27	167.83	1292
178 02:32:20	141.48	1293
178 04:17:13	115.14	1294
178 06:02:06	88.79	1295
178 07:46:58	62.44	1296
178 09:31:51	36.10	1297
178 11:16:44	9.75	1298
178 13:01:37	-16.59	1299
178 14:46:30	-42.94	1300
178 16:31:22	-69.29	1301
178 18:16:15	-95.63	1302
178 20:01:08	-121.98	1303
178 21:46:01	-148.32	1304
178 23:30:54	-174.67	1305
179 01:15:46	158.99	1306
179 03:00:39	132.64	1307
179 04:45:32	106.30	1308
179 06:30:25	79.95	1309
179 08:15:18	53.60	1310
179 10:00:11	27.26	1311
179 11:45:03	.91	1312
179 13:29:56	-25.43	1313
179 15:14:49	-51.78	1314
179 16:59:42	-78.12	1315
179 18:44:35	-104.47	1316
179 20:29:27	-130.82	1317
179 22:14:20	-157.16	1318
179 23:59:13	176.49	1319
180 01:44:06	150.15	1320
180 03:28:59	123.80	1321
180 05:13:51	97.46	1322
180 06:58:44	71.11	1323
180 08:43:37	44.77	1324
180 10:28:30	18.42	1325
180 12:13:23	-7.93	1326
180 13:58:15	-34.27	1327
180 15:43:08	-60.62	1328
180 17:28:01	-86.96	1329
180 19:12:54	-113.31	1330
180 20:57:47	-139.65	1331
180 22:42:39	-166.00	1332
181 00:27:32	167.65	1333
181 02:12:25	141.31	1334
181 03:57:18	114.96	1335
181 05:42:11	88.62	1336
181 07:27:04	62.27	1337
181 09:11:56	35.93	1338
181 10:56:49	9.58	1339
181 12:41:42	-16.76	1340
181 14:26:35	-43.11	1341
181 16:11:28	-69.46	1342
181 17:56:20	-95.80	1343
181 19:41:13	-122.15	1344
181 21:26:06	-148.49	1345
181 23:10:59	-174.84	1346

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
178 00:47:48	-78.88	1285
178 02:29:06	-104.20	1286
178 04:10:24	-129.53	1287
178 05:51:42	-154.85	1288
178 07:33:00	179.83	1289
178 09:14:18	154.50	1290
178 10:55:37	129.16	1291
178 12:36:55	103.84	1292
178 14:18:13	78.52	1293
178 15:59:31	53.19	1294
178 17:40:49	27.87	1295
178 19:22:07	2.54	1296
178 21:03:25	-22.78	1297
178 22:44:43	-48.10	1298
179 00:26:01	-73.43	1299
179 02:07:19	-98.75	1300
179 03:48:37	-124.08	1301
179 05:29:55	-149.40	1302
179 07:11:13	-174.72	1303
179 08:52:31	159.95	1304
179 10:33:49	134.63	1305
179 12:15:07	109.30	1306
179 13:56:25	83.98	1307
179 15:37:43	58.65	1308
179 17:19:01	33.33	1309
179 19:00:19	8.01	1310
179 20:41:37	-17.32	1311
179 22:22:55	-42.64	1312
180 00:04:13	-67.97	1313
180 01:45:32	-93.30	1314
180 03:26:50	-118.63	1315
180 05:08:08	-143.95	1316
180 06:49:26	-169.28	1317
180 08:30:44	165.40	1318
180 10:12:02	140.08	1319
180 11:53:20	114.75	1320
180 13:34:38	89.43	1321
180 15:15:56	64.10	1322
180 16:57:14	38.78	1323
180 18:38:32	13.46	1324
180 20:19:50	-11.87	1325
180 22:01:08	-37.19	1326
180 23:42:26	-62.52	1327
181 01:23:44	-87.84	1328
181 03:05:02	-113.16	1329
181 04:46:20	-138.49	1330
181 06:27:38	-163.81	1331
181 08:08:56	170.86	1332
181 09:50:14	145.54	1333
181 11:31:32	120.21	1334
181 13:12:50	94.89	1335
181 14:54:08	69.57	1336
181 16:35:27	44.23	1337
181 18:16:45	18.91	1338
181 19:58:03	-6.42	1339
181 21:39:21	-31.74	1340
181 23:20:39	-57.07	1341

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
182 00:13:05	82.21	5005	182 00:55:52	158.82	1347	182 01:01:57	-82.39	1342
182 01:58:26	55.74	5006	182 02:40:44	132.47	1348	182 02:43:15	-107.72	1343
182 03:43:47	29.28	5007	182 04:25:37	106.12	1349	182 04:24:33	-133.04	1344
182 05:29:09	2.81	5008	182 06:10:30	79.78	1350	182 06:05:51	-158.36	1345
182 07:14:30	-23.65	5009	182 07:55:23	53.43	1351	182 07:47:09	176.31	1346
182 08:59:51	-50.12	5010	182 09:40:16	27.09	1352	182 09:28:27	150.99	1347
182 10:45:13	-76.58	5011	182 11:25:08	.74	1353	182 11:09:45	125.66	1348
182 12:30:34	-103.05	5012	182 13:10:01	-25.60	1354	182 12:51:03	100.34	1349
182 14:15:55	-129.51	5013	182 14:54:54	-51.95	1355	182 14:32:21	75.02	1350
182 16:01:17	-155.97	5014	182 16:39:47	-78.29	1356	182 16:13:39	49.69	1351
182 17:46:38	177.56	5015	182 18:24:40	-104.64	1357	182 17:54:57	24.37	1352
182 19:31:59	151.09	5016	182 20:09:32	-130.99	1358	182 19:36:15	-.96	1353
182 21:17:21	124.63	5017	182 21:54:25	-157.33	1359	182 21:17:33	-26.28	1354
182 23:02:42	98.17	5018	182 23:39:18	176.32	1360	182 22:58:51	-51.60	1355
183 00:48:04	71.70	5019	183 01:24:11	149.98	1361	183 00:40:09	-76.93	1356
183 02:33:25	45.24	5020	183 03:09:04	123.63	1362	183 02:21:27	-102.25	1357
183 04:18:46	18.77	5021	183 04:53:56	97.28	1363	183 04:02:45	-127.58	1358
183 06:04:08	-7.69	5022	183 06:38:49	70.94	1364	183 05:44:03	-152.90	1359
183 07:49:29	-34.16	5023	183 08:23:42	44.59	1365	183 07:25:22	-178.24	1360
183 09:34:50	-60.62	5024	183 10:08:35	18.25	1366	183 09:06:40	156.44	1361
183 11:20:12	-87.09	5025	183 11:53:28	-8.10	1367	183 10:47:58	131.11	1362
183 13:05:33	-113.55	5026	183 13:38:21	-34.44	1368	183 12:29:16	105.79	1363
183 14:50:54	-140.02	5027	183 15:23:13	-60.79	1369	183 14:10:34	80.47	1364
183 16:36:16	-166.48	5028	183 17:08:06	-87.13	1370	183 15:51:52	55.14	1365
183 18:21:37	167.05	5029	183 18:52:59	-113.48	1371	183 17:33:10	29.82	1366
183 20:06:58	140.59	5030	183 20:37:52	-139.82	1372	183 19:14:28	4.49	1367
183 21:52:20	114.13	5031	183 22:22:45	-166.17	1373	183 20:55:46	-20.83	1368
183 23:37:41	87.66	5032				183 22:37:04	-46.16	1369
184 01:23:02	61.19	5033	184 00:07:37	167.48	1374	184 00:18:22	-71.48	1370
184 03:08:24	34.73	5034	184 01:52:30	141.14	1375	184 01:59:40	-96.80	1371
184 04:53:45	8.27	5035	184 03:37:23	114.79	1376	184 03:40:58	-122.13	1372
184 06:39:07	-18.20	5036	184 05:22:16	88.45	1377	184 05:22:16	-147.45	1373
184 08:24:28	-44.66	5037	184 07:07:09	62.10	1378	184 07:03:34	-172.78	1374
184 10:09:49	-71.13	5038	184 08:52:01	35.75	1379	184 08:44:52	161.90	1375
184 11:55:11	-97.59	5039	184 10:36:54	9.41	1380	184 10:26:10	136.58	1376
184 13:40:32	-124.06	5040	184 12:21:47	-16.94	1381	184 12:07:28	111.25	1377
184 15:25:53	-150.52	5041	184 14:06:40	-43.28	1382	184 13:48:46	85.93	1378
184 17:11:15	-176.99	5042	184 15:51:33	-69.63	1383	184 15:30:04	60.60	1379
184 18:56:36	156.55	5043	184 17:36:25	-95.97	1384	184 17:11:22	35.28	1380
184 20:41:57	130.08	5044	184 19:21:18	-122.32	1385	184 18:52:40	9.96	1381
184 22:27:19	103.62	5045	184 21:06:11	-148.66	1386	184 20:33:58	-15.37	1382
			184 22:51:04	-175.01	1387	184 22:15:17	-40.71	1383
						184 23:56:35	-66.03	1384
185 00:12:40	77.15	5046	185 00:35:57	158.65	1388	185 01:37:53	-91.35	1385
185 01:58:01	50.69	5047	185 02:20:49	132.30	1389	185 03:19:11	-116.68	1386
185 03:43:23	24.23	5048	185 04:05:42	105.95	1390	185 05:00:29	-142.00	1387
185 05:28:44	-2.24	5049	185 05:50:35	79.61	1391	185 06:41:47	-167.33	1388
185 07:14:05	-28.71	5050	185 07:35:28	53.26	1392	185 08:23:05	167.35	1389
185 08:59:27	-55.17	5051	185 09:20:21	26.92	1393	185 10:04:23	142.03	1390
185 10:44:48	-81.63	5052	185 11:05:13	.57	1394	185 11:45:41	116.70	1391
185 12:30:10	-108.10	5053	185 12:50:06	-25.78	1395	185 13:26:59	91.38	1392
185 14:15:31	-134.56	5054	185 14:34:59	-52.12	1396	185 15:08:17	66.05	1393
185 16:00:52	-161.03	5055	185 16:19:52	-78.47	1397	185 16:49:35	40.73	1394
185 17:46:14	172.51	5056	185 18:04:45	-104.81	1398	185 18:30:53	15.40	1395
185 19:31:35	146.04	5057	185 19:49:37	-131.16	1399	185 20:12:11	-9.92	1396
185 21:16:56	119.58	5058	185 21:34:30	-157.50	1400	185 21:53:29	-35.24	1397
185 23:02:18	93.11	5059	185 23:19:23	176.15	1401	185 23:34:47	-60.57	1398

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
186 00:47:39	66.65	5060	186 01:04:16	149.81	1402	186 01:16:05	-85.89	1399
186 02:33:00	40.18	5061	186 02:49:09	123.46	1403	186 02:57:23	-111.22	1400
186 04:18:22	13.72	5062	186 04:34:02	97.12	1404	186 04:38:41	-136.54	1401
186 06:03:43	-12.75	5063	186 06:18:54	70.77	1405	186 06:19:59	-161.86	1402
186 07:49:04	-39.21	5064	186 08:03:47	44.42	1406	186 08:01:17	172.81	1403
186 09:34:26	-65.67	5065	186 09:48:40	18.08	1407	186 09:42:35	147.49	1404
186 11:19:47	-92.14	5066	186 11:33:33	-8.27	1408	186 11:23:54	122.15	1405
186 13:05:08	-118.61	5067	186 13:18:26	-34.61	1409	186 13:05:12	96.83	1406
186 14:50:30	-145.07	5068	186 15:03:18	-60.96	1410	186 14:46:30	71.50	1407
186 16:35:51	-171.53	5069	186 16:48:11	-87.31	1411	186 16:27:48	46.18	1408
186 18:21:13	162.00	5070	186 18:33:04	-113.65	1412	186 18:09:06	20.85	1409
186 20:06:34	135.54	5071	186 20:17:57	-140.00	1413	186 19:50:24	-4.47	1410
186 21:51:55	109.07	5072	186 22:02:50	-166.34	1414	186 21:31:42	-29.79	1411
186 23:37:17	82.61	5073	186 23:47:42	167.31	1415	186 23:13:00	-55.12	1412
187 01:22:38	56.14	5074	187 01:32:35	140.97	1416	187 00:54:18	-80.44	1413
187 03:07:59	29.68	5075	187 03:17:28	114.62	1417	187 02:35:36	-105.77	1414
187 04:53:21	3.21	5076	187 05:02:21	88.28	1418	187 04:16:54	-131.09	1415
187 06:38:42	-23.25	5077	187 06:47:14	61.93	1419	187 05:58:12	-156.41	1416
187 08:24:03	-49.72	5078	187 08:32:06	35.58	1420	187 07:39:30	178.26	1417
187 10:09:25	-76.18	5079	187 10:16:59	9.24	1421	187 09:20:48	152.94	1418
187 11:54:46	-102.65	5080	187 12:01:52	-17.11	1422	187 11:02:06	127.61	1419
187 13:40:07	-129.11	5081	187 13:46:45	-43.45	1423	187 12:43:24	102.29	1420
187 15:25:29	-155.57	5082	187 15:31:38	-69.80	1424	187 14:24:42	76.97	1421
187 17:10:50	177.96	5083	187 17:16:30	-96.15	1425	187 16:06:00	51.64	1422
187 18:56:11	151.49	5084	187 19:01:23	-122.49	1426	187 17:47:18	26.32	1423
187 20:41:33	125.03	5085	187 20:46:16	-148.84	1427	187 19:28:36	.99	1424
187 22:26:54	98.57	5086	187 22:31:09	-175.18	1428	187 21:09:54	-24.33	1425
						187 22:51:12	-49.66	1426
188 00:12:16	72.10	5087	188 00:16:02	158.47	1429	188 00:32:30	-74.98	1427
188 01:57:37	45.64	5088	188 02:00:54	132.13	1430	188 02:13:49	-100.32	1428
188 03:42:58	19.17	5089	188 03:45:47	105.78	1431	188 03:55:07	-125.64	1429
188 05:28:20	-7.29	5090	188 05:30:40	79.44	1432	188 05:36:25	-150.96	1430
188 07:13:41	-33.76	5091	188 07:15:33	53.09	1433	188 07:17:43	-176.29	1431
188 08:59:02	-60.22	5092	188 09:00:26	26.75	1434	188 08:59:01	158.39	1432
188 10:44:24	-86.69	5093	188 10:45:18	.40	1435	188 10:40:19	133.06	1433
188 12:29:45	-113.15	5094	188 12:30:11	-25.95	1436	188 12:21:37	107.74	1434
188 14:15:06	-139.62	5095	188 14:15:04	-52.29	1437	188 14:02:55	82.41	1435
188 16:00:28	-166.08	5096	188 15:59:57	-78.64	1438	188 15:44:13	57.09	1436
188 17:45:49	167.45	5097	188 17:44:50	-104.98	1439	188 17:25:31	31.77	1437
188 19:31:10	140.99	5098	188 19:29:42	-131.33	1440	188 19:06:49	6.44	1438
188 21:16:32	114.53	5099	188 21:14:35	-157.68	1441	188 20:48:07	-18.88	1439
188 23:01:53	88.06	5100	188 22:59:28	175.98	1442	188 22:29:25	-44.21	1440
189 00:47:15	61.60	5101	189 00:44:21	149.63	1443	189 00:10:43	-69.53	1441
189 02:32:36	35.13	5102	189 02:29:14	123.29	1444	189 01:52:01	-94.85	1442
189 04:17:57	8.67	5103	189 04:14:07	96.94	1445	189 03:33:19	-120.18	1443
189 06:03:19	-17.80	5104	189 05:58:59	70.60	1446	189 05:14:37	-145.50	1444
189 07:48:40	-44.26	5105	189 07:43:52	44.25	1447	189 06:55:55	-170.83	1445
189 09:34:01	-70.73	5106	189 09:28:45	17.91	1448	189 08:37:13	163.85	1446
189 11:19:23	-97.19	5107	189 11:13:38	-8.44	1449	189 10:18:31	138.53	1447
189 13:04:44	-123.66	5108	189 12:58:31	-34.78	1450	189 11:59:49	113.20	1448
189 14:50:05	-150.12	5109	189 14:43:23	-61.13	1451	189 13:41:07	87.88	1449
189 16:35:27	-176.59	5110	189 16:28:16	-87.48	1452	189 15:22:26	62.54	1450
189 18:20:48	156.95	5111	189 18:13:09	-113.82	1453	189 17:03:44	37.22	1451
189 20:06:09	130.48	5112	189 19:58:02	-140.17	1454	189 18:45:02	11.89	1452
189 21:51:31	104.02	5113	189 21:42:55	-166.51	1455	189 20:26:20	-13.43	1453
189 23:36:52	77.55	5114	189 23:27:47	167.14	1456	189 22:07:38	-38.76	1454
						189 23:48:56	-64.08	1455

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
190 01:22:14	51.09	5115
190 03:07:35	24.63	5116
190 04:52:56	-1.84	5117
190 06:38:18	-28.30	5118
190 08:23:39	-54.77	5119
190 10:09:00	-81.23	5120
190 11:54:22	-107.70	5121
190 13:39:43	-134.16	5122
190 15:25:04	-160.63	5123
190 17:10:26	172.91	5124
190 18:55:47	146.44	5125
190 20:41:08	119.98	5126
190 22:26:30	93.51	5127
191 00:11:51	67.05	5128
191 01:57:13	40.59	5129
191 03:42:34	14.12	5130
191 05:27:55	-12.35	5131
191 07:13:17	-38.81	5132
191 08:58:38	-65.27	5133
191 10:43:59	-91.74	5134
191 12:29:21	-118.20	5135
191 14:14:42	-144.67	5136
191 16:00:03	-171.13	5137
191 17:45:25	162.40	5138
191 19:30:46	135.94	5139
191 21:16:07	109.47	5140
191 23:01:29	83.01	5141
192 00:46:50	56.54	5142
192 02:32:12	30.08	5143
192 04:17:33	3.61	5144
192 06:02:54	-22.85	5145
192 07:48:16	-49.31	5146
192 09:33:37	-75.78	5147
192 11:18:58	-102.25	5148
192 13:04:20	-128.71	5149
192 14:49:41	-155.17	5150
192 16:35:02	178.36	5151
192 18:20:24	151.90	5152
192 20:05:45	125.43	5153
192 21:51:06	98.96	5154
192 23:36:28	72.50	5155
193 01:21:49	46.04	5156
193 03:07:11	19.57	5157
193 04:52:32	-6.89	5158
193 06:37:53	-33.36	5159
193 08:23:15	-59.82	5160
193 10:08:36	-86.29	5161
193 11:53:57	-112.75	5162
193 13:39:19	-139.22	5163
193 15:24:40	-165.68	5164
193 17:10:01	167.85	5165
193 18:55:23	141.39	5166
193 20:40:44	114.92	5167
193 22:26:05	88.46	5168

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg dg	ORBIT
190 01:12:40	140.80	1457
190 02:57:33	114.45	1458
190 04:42:26	88.11	1459
190 06:27:19	61.76	1460
190 08:12:11	35.41	1461
190 09:57:04	9.07	1462
190 11:41:57	-17.28	1463
190 13:26:50	-43.62	1464
190 15:11:43	-69.97	1465
190 16:56:35	-96.32	1466
190 18:41:28	-122.66	1467
190 20:26:21	-149.01	1468
190 22:11:14	-175.35	1469
190 23:56:07	158.30	1470
191 01:40:59	131.96	1471
191 03:25:52	105.61	1472
191 05:10:45	79.27	1473
191 06:55:38	52.92	1474
191 08:40:31	26.58	1475
191 10:25:23	.23	1476
191 12:10:16	-26.12	1477
191 13:55:09	-52.46	1478
191 15:40:02	-78.81	1479
191 17:24:55	-105.15	1480
191 19:09:47	-131.50	1481
191 20:54:40	-157.85	1482
191 22:39:33	175.81	1483
192 00:24:26	149.46	1484
192 02:09:19	123.12	1485
192 03:54:12	96.77	1486
192 05:39:04	70.43	1487
192 07:23:57	44.08	1488
192 09:08:50	17.74	1489
192 10:53:43	-8.61	1490
192 12:38:36	-34.95	1491
192 14:23:28	-61.30	1492
192 16:08:21	-87.65	1493
192 17:53:14	-113.99	1494
192 19:38:07	-140.34	1495
192 21:23:00	-166.68	1496
192 23:07:52	166.97	1497
193 00:52:45	140.62	1498
193 02:37:38	114.28	1499
193 04:22:31	87.93	1500
193 06:07:24	61.59	1501
193 07:52:16	35.24	1502
193 09:37:09	8.90	1503
193 11:22:02	-17.45	1504
193 13:06:55	-43.79	1505
193 14:51:48	-70.14	1506
193 16:36:40	-96.49	1507
193 18:21:33	-122.83	1508
193 20:06:26	-149.18	1509
193 21:51:19	-175.52	1510
193 23:36:12	158.13	1511

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg dg	ORBIT
190 01:30:14	-89.40	1456
190 03:11:32	-114.73	1457
190 04:52:50	-140.05	1458
190 06:34:08	-165.38	1459
190 08:15:26	169.30	1460
190 09:56:44	143.97	1461
190 11:38:02	118.65	1462
190 13:19:20	93.33	1463
190 15:00:38	68.00	1464
190 16:41:56	42.68	1465
190 18:23:14	17.35	1466
190 20:04:32	-7.97	1467
190 21:45:50	-33.29	1468
190 23:27:08	-58.62	1469
191 01:08:26	-83.94	1470
191 02:49:44	-109.27	1471
191 04:31:03	-134.60	1472
191 06:12:21	-159.93	1473
191 07:53:39	174.75	1474
191 09:34:57	149.42	1475
191 11:16:15	124.10	1476
191 12:57:33	98.78	1477
191 14:38:51	73.45	1478
191 16:20:09	48.13	1479
191 18:01:27	22.80	1480
191 19:42:45	-2.52	1481
191 21:24:03	-27.84	1482
191 23:05:21	-53.17	1483
192 00:46:39	-78.49	1484
192 02:27:57	-103.82	1485
192 04:09:15	-129.14	1486
192 05:50:33	-154.46	1487
192 07:31:51	-179.79	1488
192 09:13:09	154.89	1489
192 10:54:27	129.56	1490
192 12:35:45	104.24	1491
192 14:17:03	78.91	1492
192 15:58:21	53.59	1493
192 17:39:40	28.25	1494
192 19:20:58	2.93	1495
192 21:02:16	-22.39	1496
192 22:43:34	-47.72	1497
193 00:24:52	-73.04	1498
193 02:06:10	-98.37	1499
193 03:47:28	-123.69	1500
193 05:28:46	-149.02	1501
193 07:10:04	-174.34	1502
193 08:51:22	160.34	1503
193 10:32:40	135.01	1504
193 12:13:58	109.69	1505
193 13:55:16	84.36	1506
193 15:36:34	59.04	1507
193 17:17:52	33.72	1508
193 18:59:10	8.39	1509
193 20:40:28	-16.93	1510
193 22:21:46	-42.26	1511

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
194 00:11:27	62.00	5169	194 01:21:04	131.78	1512	194 00:03:04	-67.58	1512
194 01:56:48	35.53	5170	194 03:05:57	105.44	1513	194 01:44:22	-92.90	1513
194 03:42:10	9.07	5171	194 04:50:50	79.09	1514	194 03:25:40	-118.23	1514
194 05:27:31	-17.40	5172	194 06:35:43	52.75	1515	194 05:06:58	-143.55	1515
194 07:12:52	-43.86	5173	194 08:20:36	26.40	1516	194 06:48:17	-168.89	1516
194 08:58:14	-70.33	5174	194 10:05:28	.06	1517	194 08:29:35	165.79	1517
194 10:43:35	-96.79	5175	194 11:50:21	-26.29	1518	194 10:10:53	140.46	1518
194 12:28:56	-123.26	5176	194 13:35:14	-52.63	1519	194 11:52:11	115.14	1519
194 14:14:18	-149.72	5177	194 15:20:07	-78.98	1520	194 13:33:29	89.81	1520
194 15:59:39	-176.19	5178	194 17:05:00	-105.32	1521	194 15:14:47	64.49	1521
194 17:45:00	157.35	5179	194 18:49:53	-131.67	1522	194 16:56:05	39.17	1522
194 19:30:22	130.88	5180	194 20:34:45	-158.02	1523	194 18:37:23	13.84	1523
194 21:15:43	104.42	5181	194 22:19:38	175.64	1524	194 20:18:41	-11.48	1524
194 23:01:05	77.96	5182				194 21:59:59	-36.81	1525
						194 23:41:17	-62.13	1526
195 00:46:26	51.49	5183	195 00:04:31	149.29	1525	195 01:22:35	-87.45	1527
195 02:31:47	25.02	5184	195 01:49:24	122.95	1526	195 03:03:53	-112.78	1528
195 04:17:09	-1.44	5185	195 03:34:17	96.60	1527	195 04:45:11	-138.10	1529
195 06:02:30	-27.90	5186	195 05:19:09	70.25	1528	195 06:26:29	-163.43	1530
195 07:47:51	-54.37	5187	195 07:04:02	43.91	1529	195 08:07:47	171.25	1531
195 09:33:13	-80.83	5188	195 08:48:55	17.56	1530	195 09:49:05	145.93	1532
195 11:18:34	-107.30	5189	195 10:33:48	-8.78	1531	195 11:30:23	120.60	1533
195 13:03:55	-133.76	5190	195 12:18:41	-35.13	1532	195 13:11:41	95.28	1534
195 14:49:17	-160.23	5191	195 14:03:33	-61.47	1533	195 14:52:59	69.95	1535
195 16:34:38	173.31	5192	195 15:48:26	-87.82	1534	195 16:34:17	44.63	1536
195 18:20:00	146.84	5193	195 17:33:19	-114.16	1535	195 18:15:36	19.29	1537
195 20:05:21	120.38	5194	195 19:18:12	-140.51	1536	195 19:56:54	-6.03	1538
195 21:50:42	93.91	5195	195 21:03:05	-166.85	1537	195 21:38:12	-31.36	1539
195 23:36:04	67.45	5196	195 22:47:57	166.80	1538	195 23:19:30	-56.68	1540
196 01:21:25	40.98	5197	196 00:32:50	140.45	1539	196 01:00:48	-82.00	1541
196 03:06:46	14.52	5198	196 02:17:43	114.11	1540	196 02:42:06	-107.33	1542
196 04:52:08	-11.95	5199	196 04:02:36	87.76	1541	196 04:23:24	-132.65	1543
196 06:37:29	-38.41	5200	196 05:47:29	61.42	1542	196 06:04:42	-157.98	1544
196 08:22:50	-64.88	5201	196 07:32:21	35.07	1543	196 07:46:00	176.70	1545
196 10:08:12	-91.34	5202	196 09:17:14	8.72	1544	196 09:27:18	151.38	1546
196 11:53:33	-117.81	5203	196 11:02:07	-17.62	1545	196 11:08:36	126.05	1547
196 13:38:54	-144.27	5204	196 12:47:00	-43.97	1546	196 12:49:54	100.73	1548
196 15:24:16	-170.73	5205	196 14:31:53	-70.31	1547	196 14:31:12	75.40	1549
196 17:09:37	162.80	5206	196 16:16:45	-96.66	1548	196 16:12:30	50.08	1550
196 18:54:59	136.34	5207	196 18:01:38	-123.00	1549	196 17:53:48	24.75	1551
196 20:40:20	109.87	5208	196 19:46:31	-149.35	1550	196 19:35:06	-.57	1552
196 22:25:41	83.41	5209	196 21:31:24	-175.69	1551	196 21:16:24	-25.89	1553
			196 23:16:17	157.96	1552	196 22:57:42	-51.22	1554
197 00:11:03	56.94	5210	197 01:01:10	131.62	1553	197 00:39:00	-76.54	1555
197 01:56:24	30.48	5211	197 02:46:02	105.27	1554	197 02:20:18	-101.87	1556
197 03:41:45	4.01	5212	197 04:30:55	78.92	1555	197 04:01:36	-127.19	1557
197 05:27:07	-22.45	5213	197 06:15:48	52.58	1556	197 05:42:55	-152.53	1558
197 07:12:28	-48.92	5214	197 08:00:41	26.23	1557	197 07:24:13	-177.85	1559
197 08:57:49	-75.38	5215	197 09:45:34	-.11	1558	197 09:05:31	156.82	1560
197 10:43:11	-101.85	5216	197 11:30:26	-26.46	1559	197 10:46:49	131.50	1561
197 12:28:32	-128.31	5217	197 13:15:19	-52.81	1560	197 12:28:07	106.18	1562
197 14:13:54	-154.77	5218	197 15:00:12	-79.15	1561	197 14:09:25	80.85	1563
197 15:59:15	178.76	5219	197 16:45:05	-105.50	1562	197 15:50:43	55.53	1564
197 17:44:36	152.29	5220	197 18:29:58	-131.84	1563	197 17:32:01	30.20	1565
197 19:29:58	125.83	5221	197 20:14:50	-158.19	1564	197 19:13:19	4.88	1566
197 21:15:19	99.36	5222	197 21:59:43	175.47	1565	197 20:54:37	-20.44	1567
197 23:00:40	72.90	5223	197 23:44:36	149.12	1566	197 22:35:55	-45.77	1568

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
198 00:46:02	46.44	5224	198 01:29:29	122.78	1567	198 00:17:13	-71.09	1569
198 02:31:23	19.97	5225	198 03:14:22	96.43	1568	198 01:58:31	-96.42	1570
198 04:16:44	-6.50	5226	198 04:59:14	70.08	1569	198 03:39:49	-121.74	1571
198 06:02:06	-32.96	5227	198 06:44:07	43.74	1570	198 05:21:07	-147.06	1572
198 07:47:27	-59.42	5228	198 08:29:00	17.39	1571	198 07:02:25	-172.39	1573
198 09:32:49	-85.89	5229	198 10:13:53	-8.95	1572	198 08:43:43	162.29	1574
198 11:18:10	-112.35	5230	198 11:58:46	-35.30	1573	198 10:25:01	136.96	1575
198 13:03:31	-138.82	5231	198 13:43:38	-61.65	1574	198 12:06:19	111.64	1576
198 14:48:53	-165.28	5232	198 15:28:31	-87.99	1575	198 13:47:37	86.32	1577
198 16:34:14	168.25	5233	198 17:13:24	-114.34	1576	198 15:28:55	60.99	1578
198 18:19:35	141.79	5234	198 18:58:17	-140.68	1577	198 17:10:14	35.65	1579
198 20:04:57	115.32	5235	198 20:43:10	-167.03	1578	198 18:51:32	10.33	1580
198 21:50:18	88.86	5236	198 22:28:03	166.63	1579	198 20:32:50	-14.99	1581
198 23:35:39	62.39	5237				198 22:14:08	-40.32	1582
						198 23:55:26	-65.64	1583
199 01:21:01	35.93	5238	199 00:12:55	140.28	1580	199 01:36:44	-90.97	1584
199 03:06:22	9.46	5239	199 01:57:48	113.94	1581	199 03:18:02	-116.29	1585
199 04:51:44	-17.00	5240	199 03:42:41	87.59	1582	199 04:59:20	-141.61	1586
199 06:37:05	-43.46	5241	199 05:27:34	61.25	1583	199 06:40:38	-166.94	1587
199 08:22:26	-69.93	5242	199 07:12:27	34.90	1584	199 08:21:56	167.74	1588
199 10:07:48	-96.39	5243	199 08:57:19	8.55	1585	199 10:03:14	142.41	1589
199 11:53:09	-122.86	5244	199 10:42:12	-17.79	1586	199 11:44:32	117.09	1590
199 13:38:30	-149.33	5245	199 12:27:05	-44.14	1587	199 13:25:50	91.77	1591
199 15:23:52	-175.79	5246	199 14:11:58	-70.48	1588	199 15:07:08	66.44	1592
199 17:09:13	157.75	5247	199 15:56:51	-96.83	1589	199 16:48:26	41.12	1593
199 18:54:34	131.28	5248	199 17:41:43	-123.18	1590	199 18:29:44	15.79	1594
199 20:39:56	104.82	5249	199 19:26:36	-149.52	1591	199 20:11:02	-9.53	1595
199 22:25:17	78.35	5250	199 21:11:29	-175.87	1592	199 21:52:20	-34.85	1596
			199 22:56:22	157.79	1593	199 23:33:38	-60.18	1597
200 00:10:39	51.89	5251	200 00:41:15	131.44	1594	200 01:14:56	-85.50	1598
200 01:56:00	25.42	5252	200 02:26:07	105.10	1595	200 02:56:15	-110.84	1599
200 03:41:21	-1.04	5253	200 04:11:00	78.75	1596	200 04:37:33	-136.16	1600
200 05:26:43	-27.51	5254	200 05:55:53	52.41	1597	200 06:18:51	-161.49	1601
200 07:12:04	-53.97	5255	200 07:40:46	26.06	1598	200 08:00:09	173.19	1602
200 08:57:25	-80.44	5256	200 09:25:39	-.28	1599	200 09:41:27	147.86	1603
200 10:42:47	-106.90	5257	200 11:10:32	-26.63	1600	200 11:22:45	122.54	1604
200 12:28:08	-133.37	5258	200 12:55:24	-52.98	1601	200 13:04:03	97.22	1605
200 14:13:30	-159.83	5259	200 14:40:17	-79.32	1602	200 14:45:21	71.89	1606
200 15:58:51	173.70	5260	200 16:25:10	-105.67	1603	200 16:26:39	46.57	1607
200 17:44:12	147.24	5261	200 18:10:03	-132.01	1604	200 18:07:57	21.24	1608
200 19:29:34	120.78	5262	200 19:54:56	-158.36	1605	200 19:49:15	-4.08	1609
200 21:14:55	94.31	5263	200 21:39:48	175.29	1606	200 21:30:33	-29.40	1610
200 23:00:16	67.84	5264	200 23:24:41	148.95	1607	200 23:11:51	-54.73	1611
201 00:45:38	41.38	5265	201 01:09:34	122.60	1608	201 00:53:09	-80.05	1612
201 02:30:59	14.92	5266	201 02:54:27	96.26	1609	201 02:34:27	-105.38	1613
201 04:16:20	-11.55	5267	201 04:39:20	69.91	1610	201 04:15:45	-130.70	1614
201 06:01:42	-38.01	5268	201 06:24:12	43.57	1611	201 05:57:03	-156.02	1615
201 07:47:03	-64.48	5269	201 08:09:05	17.22	1612	201 07:38:21	178.65	1616
201 09:32:25	-90.94	5270	201 09:53:58	-9.12	1613	201 09:19:39	153.33	1617
201 11:17:46	-117.41	5271	201 11:38:51	-35.47	1614	201 11:00:57	128.00	1618
201 13:03:07	-143.87	5272	201 13:23:44	-61.81	1615	201 12:42:15	102.68	1619
201 14:48:29	-170.34	5273	201 15:08:36	-88.16	1616	201 14:23:34	77.34	1620
201 16:33:50	163.20	5274	201 16:53:29	-114.51	1617	201 16:04:52	52.02	1621
201 18:19:11	136.73	5275	201 18:38:22	-140.85	1618	201 17:46:10	26.69	1622
201 20:04:33	110.27	5276	201 20:23:15	-167.20	1619	201 19:27:28	1.37	1623
201 21:49:54	83.80	5277	201 22:08:08	166.46	1620	201 21:08:46	-23.95	1624
201 23:35:15	57.34	5278	201 23:53:01	140.11	1621	201 22:50:04	-49.28	1625

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
202 01:20:37	30.87	5279
202 03:05:58	4.41	5280
202 04:51:20	-22.05	5281
202 06:36:41	-48.52	5282
202 08:22:02	-74.99	5283
202 10:07:24	-101.45	5284
202 11:52:45	-127.91	5285
202 13:38:06	-154.38	5286
202 15:23:28	179.16	5287
202 17:08:49	152.69	5288
202 18:54:11	126.23	5289
202 20:39:32	99.76	5290
202 22:24:53	73.30	5291
203 00:10:15	46.83	5292
203 01:55:36	20.37	5293
203 03:40:57	-6.10	5294
203 05:26:19	-32.56	5295
203 07:11:40	-59.03	5296
203 08:57:01	-85.49	5297
203 10:42:23	-111.96	5298
203 12:27:44	-138.42	5299
203 14:13:06	-164.88	5300
203 15:58:27	168.65	5301
203 17:43:48	142.18	5302
203 19:29:10	115.72	5303
203 21:14:31	89.26	5304
203 22:59:52	62.79	5305
204 00:45:14	36.33	5306
204 02:30:35	9.86	5307
204 04:15:57	-16.60	5308
204 06:01:18	-43.07	5309
204 07:46:39	-69.53	5310
204 09:32:01	-96.00	5311
204 11:17:22	-122.46	5312
204 13:02:43	-148.93	5313
204 14:48:05	-175.39	5314
204 16:33:26	158.14	5315
204 18:18:47	131.68	5316
204 20:04:09	105.21	5317
204 21:49:30	78.75	5318
204 23:34:52	52.29	5319
205 01:20:13	25.82	5320
205 03:05:34	-.65	5321
205 04:50:56	-27.11	5322
205 06:36:17	-53.58	5323
205 08:21:38	-80.04	5324
205 10:07:00	-106.50	5325
205 11:52:21	-132.97	5326
205 13:37:43	-159.43	5327
205 15:23:04	174.10	5328
205 17:08:25	147.64	5329
205 18:53:47	121.17	5330
205 20:39:08	94.71	5331
205 22:24:29	68.24	5332

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
202 01:37:53	113.76	1622
202 03:22:46	87.42	1623
202 05:07:39	61.07	1624
202 06:52:32	34.73	1625
202 08:37:25	8.38	1626
202 10:22:17	-17.96	1627
202 12:07:10	-44.31	1628
202 13:52:03	-70.65	1629
202 15:36:56	-97.00	1630
202 17:21:49	-123.34	1631
202 19:06:41	-149.69	1632
202 20:51:34	-176.04	1633
202 22:36:27	157.62	1634
203 00:21:20	131.27	1635
203 02:06:13	104.93	1636
203 03:51:05	78.58	1637
203 05:35:58	52.23	1638
203 07:20:51	25.89	1639
203 09:05:44	-.46	1640
203 10:50:37	-26.80	1641
203 12:35:30	-53.15	1642
203 14:20:22	-79.49	1643
203 16:05:15	-105.84	1644
203 17:50:08	-132.19	1645
203 19:35:01	-158.53	1646
203 21:19:54	175.12	1647
203 23:04:46	148.78	1648
204 00:49:39	122.43	1649
204 02:34:32	96.09	1650
204 04:19:25	69.74	1651
204 06:04:18	43.40	1652
204 07:49:10	17.05	1653
204 09:34:03	-9.30	1654
204 11:18:56	-35.64	1655
204 13:03:49	-61.99	1656
204 14:48:42	-88.33	1657
204 16:33:35	-114.68	1658
204 18:18:27	-141.03	1659
204 20:03:20	-167.37	1660
204 21:48:13	166.28	1661
204 23:33:06	139.94	1662
205 01:17:59	113.59	1663
205 03:02:51	87.25	1664
205 04:47:44	60.90	1665
205 06:32:37	34.56	1666
205 08:17:30	8.21	1667
205 10:02:23	-18.13	1668
205 11:47:15	-44.48	1669
205 13:32:08	-70.83	1670
205 15:17:01	-97.17	1671
205 17:01:54	-123.52	1672
205 18:46:47	-149.86	1673
205 20:31:40	-176.21	1674
205 22:16:32	157.44	1675

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
202 00:31:22	-74.60	1626
202 02:12:40	-99.93	1627
202 03:53:58	-125.25	1628
202 05:35:16	-150.57	1629
202 07:16:34	-175.90	1630
202 08:57:52	158.78	1631
202 10:39:10	133.45	1632
202 12:20:28	108.13	1633
202 14:01:46	82.81	1634
202 15:43:04	57.48	1635
202 17:24:22	32.16	1636
202 19:05:40	6.83	1637
202 20:46:58	-18.49	1638
202 22:28:16	-43.82	1639
203 00:09:35	-69.15	1640
203 01:50:53	-94.48	1641
203 03:32:11	-119.80	1642
203 05:13:29	-145.12	1643
203 06:54:47	-170.45	1644
203 08:36:05	164.23	1645
203 10:17:23	138.90	1646
203 11:58:41	113.58	1647
203 13:39:59	88.26	1648
203 15:21:17	62.93	1649
203 17:02:35	37.61	1650
203 18:43:53	12.28	1651
203 20:25:11	-13.04	1652
203 22:06:29	-38.36	1653
203 23:47:47	-63.69	1654
204 01:29:05	-89.01	1655
204 03:10:23	-114.34	1656
204 04:51:41	-139.66	1657
204 06:32:59	-164.99	1658
204 08:14:18	169.68	1659
204 09:55:36	144.35	1660
204 11:36:54	119.03	1661
204 13:18:12	93.71	1662
204 14:59:30	68.38	1663
204 16:40:48	43.06	1664
204 18:22:06	17.73	1665
204 20:03:24	-7.59	1666
204 21:44:42	-32.91	1667
204 23:26:00	-58.24	1668
205 01:07:18	-83.56	1669
205 02:48:36	-108.89	1670
205 04:29:54	-134.21	1671
205 06:11:12	-159.53	1672
205 07:52:30	175.14	1673
205 09:33:48	149.82	1674
205 11:15:06	124.49	1675
205 12:56:24	99.17	1676
205 14:37:42	73.85	1677
205 16:19:00	48.52	1678
205 18:00:19	23.18	1679
205 19:41:37	-2.14	1680
205 21:22:55	-27.46	1681
205 23:04:13	-52.79	1682

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
206 00:09:51	41.78	5333
206 01:55:12	15.31	5334
206 03:40:34	-11.15	5335
206 05:25:55	-37.62	5336
206 07:11:16	-64.08	5337
206 08:56:38	-90.55	5338
206 10:41:59	-117.01	5339
206 12:27:20	-143.48	5340
206 14:12:42	-169.94	5341
206 15:58:03	163.59	5342
206 17:43:24	137.13	5343
206 19:28:46	110.67	5344
206 21:14:07	84.20	5345
206 22:59:29	57.74	5346
207 00:44:50	31.27	5347
207 02:30:11	4.80	5348
207 04:15:33	-21.66	5349
207 06:00:54	-48.12	5350
207 07:46:15	-74.59	5351
207 09:31:37	-101.05	5352
207 11:16:58	-127.52	5353
207 13:02:20	-153.98	5354
207 14:47:41	179.55	5355
207 16:33:02	153.09	5356
207 18:18:24	126.62	5357
207 20:03:45	100.16	5358
207 21:49:06	73.69	5359
207 23:34:28	47.23	5360
208 01:19:49	20.76	5361
208 03:05:11	-5.70	5362
208 04:50:32	-32.17	5363
208 06:35:53	-58.63	5364
208 08:21:15	-85.09	5365
208 10:06:36	-111.56	5366
208 11:51:57	-138.03	5367
208 13:37:19	-164.49	5368
208 15:22:40	169.04	5369
208 17:08:02	142.58	5370
208 18:53:23	116.12	5371
208 20:38:44	89.65	5372
208 22:24:06	63.19	5373
209 00:09:27	36.72	5374
209 01:54:48	10.26	5375
209 03:40:10	-16.21	5376
209 05:25:31	-42.67	5377
209 07:10:53	-69.14	5378
209 08:56:14	-95.60	5379
209 10:41:35	-122.07	5380
209 12:26:57	-148.53	5381
209 14:12:18	-175.00	5382
209 15:57:39	158.54	5383
209 17:43:01	132.07	5384
209 19:28:22	105.61	5385
209 21:13:44	79.15	5386
209 22:59:05	52.68	5387

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
206 00:01:25	131.10	1676
206 01:46:18	104.75	1677
206 03:31:11	78.41	1678
206 05:16:04	52.06	1679
206 07:00:56	25.72	1680
206 08:45:49	-.63	1681
206 10:30:42	-26.98	1682
206 12:15:35	-53.32	1683
206 14:00:28	-79.67	1684
206 15:45:20	-106.01	1685
206 17:30:13	-132.36	1686
206 19:15:06	-158.70	1687
206 20:59:59	174.95	1688
206 22:44:52	148.61	1689
207 00:29:45	122.26	1690
207 02:14:37	95.91	1691
207 03:59:30	69.57	1692
207 05:44:23	43.22	1693
207 07:29:16	16.88	1694
207 09:14:09	-9.47	1695
207 10:59:01	-35.82	1696
207 12:43:54	-62.16	1697
207 14:28:47	-88.51	1698
207 16:13:40	-114.85	1699
207 17:58:33	-141.20	1700
207 19:43:26	-167.54	1701
207 21:28:18	166.11	1702
207 23:13:11	139.77	1703
208 00:58:04	113.42	1704
208 02:42:57	87.08	1705
208 04:27:50	60.73	1706
208 06:12:42	34.38	1707
208 07:57:35	8.04	1708
208 09:42:28	-18.31	1709
208 11:27:21	-44.65	1710
208 13:12:14	-71.00	1711
208 14:57:06	-97.35	1712
208 16:41:59	-123.69	1713
208 18:26:52	-150.04	1714
208 20:11:45	-176.38	1715
208 21:56:38	157.27	1716
208 23:41:31	130.93	1717
209 01:26:23	104.58	1718
209 03:11:16	78.23	1719
209 04:56:09	51.89	1720
209 06:41:02	25.54	1721
209 08:25:55	-.80	1722
209 10:10:47	-27.15	1723
209 11:55:40	-53.49	1724
209 13:40:33	-79.84	1725
209 15:25:26	-106.18	1726
209 17:10:19	-132.53	1727
209 18:55:12	-158.87	1728
209 20:40:04	174.78	1729
209 22:24:57	148.43	1730

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
206 00:45:31	-78.11	1683
206 02:26:49	-103.44	1684
206 04:08:07	-128.76	1685
206 05:49:25	-154.08	1686
206 07:30:43	-179.41	1687
206 09:12:01	155.27	1688
206 10:53:19	129.94	1689
206 12:34:37	104.62	1690
206 14:15:55	79.30	1691
206 15:57:13	53.97	1692
206 17:38:31	28.65	1693
206 19:19:49	3.32	1694
206 21:01:07	-22.00	1695
206 22:42:25	-47.32	1696
207 00:23:43	-72.65	1697
207 02:05:02	-97.99	1698
207 03:46:20	-123.31	1699
207 05:27:38	-148.63	1700
207 07:08:56	-173.96	1701
207 08:50:14	160.72	1702
207 10:31:32	135.39	1703
207 12:12:50	110.07	1704
207 13:54:08	84.75	1705
207 15:35:26	59.42	1706
207 17:16:44	34.10	1707
207 18:58:02	8.77	1708
207 20:39:20	-16.55	1709
207 22:20:38	-41.87	1710
208 00:01:56	-67.20	1711
208 01:43:14	-92.52	1712
208 03:24:32	-117.85	1713
208 05:05:50	-143.17	1714
208 06:47:08	-168.49	1715
208 08:28:26	166.18	1716
208 10:09:45	140.84	1717
208 11:51:03	115.52	1718
208 13:32:21	90.20	1719
208 15:13:39	64.87	1720
208 16:54:57	39.55	1721
208 18:36:15	14.22	1722
208 20:17:33	-11.10	1723
208 21:58:51	-36.42	1724
208 23:40:09	-61.75	1725
209 01:21:27	-87.07	1726
209 03:02:45	-112.40	1727
209 04:44:03	-137.72	1728
209 06:25:21	-163.04	1729
209 08:06:39	171.63	1730
209 09:47:57	146.31	1731
209 11:29:15	120.98	1732
209 13:10:33	95.66	1733
209 14:51:51	70.34	1734
209 16:33:09	45.01	1735
209 18:14:28	19.67	1736
209 19:55:46	-5.65	1737
209 21:37:04	-30.97	1738
209 23:18:22	-56.30	1739

West longitude is negative (-)

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
210 00:44:26	26.21	5388	210 00:09:50	122.09	1731	210 00:59:40	-81.62	1740
210 02:29:48	-.25	5389	210 01:54:43	95.74	1732	210 02:40:58	-106.95	1741
210 04:15:09	-26.72	5390	210 03:39:36	69.40	1733	210 04:22:16	-132.27	1742
210 06:00:30	-53.18	5391	210 05:24:28	43.05	1734	210 06:03:34	-157.59	1743
210 07:45:52	-79.64	5392	210 07:09:21	16.70	1735	210 07:44:52	177.08	1744
210 09:31:13	-106.11	5393	210 08:54:14	-9.64	1736	210 09:26:10	151.76	1745
210 11:16:35	-132.57	5394	210 10:39:07	-35.99	1737	210 11:07:28	126.43	1746
210 13:01:56	-159.04	5395	210 12:24:00	-62.33	1738	210 12:48:46	101.11	1747
210 14:47:17	174.50	5396	210 14:08:53	-88.68	1739	210 14:30:04	75.79	1748
210 16:32:39	148.03	5397	210 15:53:45	-115.03	1740	210 16:11:22	50.46	1749
210 18:18:00	121.57	5398	210 17:38:38	-141.37	1741	210 17:52:40	25.14	1750
210 20:03:21	95.10	5399	210 19:23:31	-167.72	1742	210 19:33:58	-.19	1751
210 21:48:43	68.64	5400	210 21:08:24	165.94	1743	210 21:15:16	-25.51	1752
210 23:34:04	42.17	5401	210 22:53:17	139.59	1744	210 22:56:34	-50.83	1753
211 01:19:26	15.71	5402	211 00:38:09	113.25	1745	211 00:37:53	-76.17	1754
211 03:04:47	-10.76	5403	211 02:23:02	86.90	1746	211 02:19:11	-101.49	1755
211 04:50:08	-37.22	5404	211 04:07:55	60.56	1747	211 04:00:29	-126.82	1756
211 06:35:30	-63.69	5405	211 05:52:48	34.21	1748	211 05:41:47	-152.14	1757
211 08:20:51	-90.15	5406	211 07:37:41	7.87	1749	211 07:23:05	-177.47	1758
211 10:06:12	-116.62	5407	211 09:22:34	-18.48	1750	211 09:04:23	157.21	1759
211 11:51:34	-143.08	5408	211 11:07:26	-44.83	1751	211 10:45:41	131.89	1760
211 13:36:55	-169.55	5409	211 12:52:19	-71.17	1752	211 12:26:59	106.56	1761
211 15:22:17	163.99	5410	211 14:37:12	-97.52	1753	211 14:08:17	81.24	1762
211 17:07:38	137.52	5411	211 16:22:05	-123.86	1754	211 15:49:35	55.91	1763
211 18:52:59	111.06	5412	211 18:06:58	-150.21	1755	211 17:30:53	30.59	1764
211 20:38:21	84.60	5413	211 19:51:50	-176.56	1756	211 19:12:11	5.27	1765
211 22:23:42	58.13	5414	211 21:36:43	157.10	1757	211 20:53:29	-20.06	1766
			211 23:21:36	130.75	1758	211 22:34:47	-45.38	1767
212 00:09:03	31.66	5415	212 01:06:29	104.41	1759	212 00:16:05	-70.71	1768
212 01:54:25	5.20	5416	212 02:51:22	78.06	1760	212 01:57:23	-96.03	1769
212 03:39:46	-21.26	5417	212 04:36:15	51.72	1761	212 03:38:41	-121.35	1770
212 05:25:08	-47.73	5418	212 06:21:07	25.37	1762	212 05:19:59	-146.68	1771
212 07:10:29	-74.19	5419	212 08:06:00	-.98	1763	212 07:01:18	-172.02	1772
212 08:55:50	-100.66	5420	212 09:50:53	-27.32	1764	212 08:42:36	162.66	1773
212 10:41:12	-127.12	5421	212 11:35:46	-53.67	1765	212 10:23:54	137.34	1774
212 12:26:33	-153.59	5422	212 13:20:39	-80.01	1766	212 12:05:12	112.01	1775
212 14:11:54	179.95	5423	212 15:05:32	-106.36	1767	212 13:46:30	86.69	1776
212 15:57:16	153.48	5424	212 16:50:24	-132.70	1768	212 15:27:48	61.36	1777
212 17:42:37	127.02	5425	212 18:35:17	-159.05	1769	212 17:09:06	36.04	1778
212 19:27:59	100.55	5426	212 20:20:10	174.60	1770	212 18:50:24	10.72	1779
212 21:13:20	74.09	5427	212 22:05:03	148.26	1771	212 20:31:42	-14.61	1780
212 22:58:41	47.62	5428	212 23:49:56	121.91	1772	212 22:13:00	-39.93	1781
						212 23:54:18	-65.26	1782
213 00:44:03	21.16	5429	213 01:34:48	95.57	1773	213 01:35:36	-90.58	1783
213 02:29:24	-5.31	5430	213 03:19:41	69.22	1774	213 03:16:54	-115.90	1784
213 04:14:45	-31.77	5431	213 05:04:34	42.88	1775	213 04:58:12	-141.23	1785
213 06:00:07	-58.24	5432	213 06:49:27	16.53	1776	213 06:39:30	-166.55	1786
213 07:45:28	-84.70	5433	213 08:34:20	-9.81	1777	213 08:20:48	168.12	1787
213 09:30:50	-111.16	5434	213 10:19:13	-36.16	1778	213 10:02:06	142.80	1788
213 11:16:11	-137.63	5435	213 12:04:05	-62.51	1779	213 11:43:24	117.48	1789
213 13:01:32	-164.10	5436	213 13:48:58	-88.85	1780	213 13:24:43	92.14	1790
213 14:46:54	169.44	5437	213 15:33:51	-115.20	1781	213 15:06:01	66.82	1791
213 16:32:15	142.97	5438	213 17:18:44	-141.54	1782	213 16:47:19	41.49	1792
213 18:17:36	116.51	5439	213 19:03:37	-167.89	1783	213 18:28:37	16.17	1793
213 20:02:58	90.05	5440	213 20:48:29	165.76	1784	213 20:09:55	-9.16	1794
213 21:48:19	63.58	5441	213 22:33:22	139.42	1785	213 21:51:13	-34.48	1795
213 23:33:41	37.12	5442				213 23:32:31	-59.80	1796

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
214 01:19:02	10.65	5443	214 00:18:15	113.07	1786	214 01:13:49	-85.13	1797
214 03:04:23	-15.81	5444	214 02:03:08	86.73	1787	214 02:55:07	-110.45	1798
214 04:49:45	-42.28	5445	214 03:48:01	60.38	1788	214 04:36:25	-135.78	1799
214 06:35:06	-68.74	5446	214 05:32:54	34.04	1789	214 06:17:43	-161.10	1800
214 08:20:27	-95.21	5447	214 07:17:46	7.69	1790	214 07:59:01	173.58	1801
214 10:05:49	-121.67	5448	214 09:02:39	-18.66	1791	214 09:40:19	148.25	1802
214 11:51:10	-148.14	5449	214 10:47:32	-45.00	1792	214 11:21:37	122.93	1803
214 13:36:32	-174.60	5450	214 12:32:25	-71.35	1793	214 13:02:55	97.60	1804
214 15:21:53	158.93	5451	214 14:17:18	-97.69	1794	214 14:44:13	72.28	1805
214 17:07:14	132.47	5452	214 16:02:11	-124.04	1795	214 16:25:31	46.96	1806
214 18:52:36	106.00	5453	214 17:47:03	-150.38	1796	214 18:06:49	21.63	1807
214 20:37:57	79.54	5454	214 19:31:56	-176.73	1797	214 19:48:08	-3.71	1808
214 22:23:18	53.07	5455	214 21:16:49	156.93	1798	214 21:29:26	-29.03	1809
			214 23:01:42	130.58	1799	214 23:10:44	-54.35	1810
215 00:08:40	26.61	5456	215 00:46:35	104.23	1800	215 00:52:02	-79.68	1811
215 01:54:01	.14	5457	215 02:31:27	77.89	1801	215 02:33:20	-105.00	1812
215 03:39:23	-26.32	5458	215 04:16:20	51.54	1802	215 04:14:38	-130.33	1813
215 05:24:44	-52.79	5459	215 06:01:13	25.20	1803	215 05:55:56	-155.65	1814
215 07:10:05	-79.25	5460	215 07:46:06	-1.15	1804	215 07:37:14	179.03	1815
215 08:55:27	-105.71	5461	215 09:30:59	-27.49	1805	215 09:18:32	153.70	1816
215 10:40:48	-132.18	5462	215 11:15:52	-53.84	1806	215 10:59:50	128.38	1817
215 12:26:10	-158.64	5463	215 13:00:44	-80.19	1807	215 12:41:08	103.05	1818
215 14:11:31	174.89	5464	215 14:45:37	-106.53	1808	215 14:22:26	77.73	1819
215 15:56:52	148.42	5465	215 16:30:30	-132.88	1809	215 16:03:44	52.41	1820
215 17:42:14	121.96	5466	215 18:15:23	-159.22	1810	215 17:45:02	27.08	1821
215 19:27:35	95.50	5467	215 20:00:16	174.43	1811	215 19:26:20	1.76	1822
215 21:12:56	69.03	5468	215 21:45:09	148.09	1812	215 21:07:38	-23.57	1823
215 22:58:18	42.57	5469	215 23:30:01	121.74	1813	215 22:48:56	-48.89	1824
216 00:43:39	16.10	5470	216 01:14:54	95.39	1814	216 00:30:14	-74.21	1825
216 02:29:01	-10.36	5471	216 02:59:47	69.05	1815	216 02:11:33	-99.55	1826
216 04:14:22	-36.83	5472	216 04:44:40	42.70	1816	216 03:52:51	-124.87	1827
216 05:59:43	-63.29	5473	216 06:29:33	16.36	1817	216 05:34:09	-150.20	1828
216 07:45:05	-89.76	5474	216 08:14:25	-9.99	1818	216 07:15:27	-175.52	1829
216 09:30:26	-116.22	5475	216 09:59:18	-36.34	1819	216 08:56:45	159.15	1830
216 11:15:47	-142.69	5476	216 11:44:11	-62.68	1820	216 10:38:03	133.83	1831
216 13:01:09	-169.15	5477	216 13:29:04	-89.03	1821	216 12:19:21	108.51	1832
216 14:46:30	164.38	5478	216 15:13:57	-115.37	1822	216 14:00:39	83.18	1833
216 16:31:52	137.92	5479	216 16:58:50	-141.72	1823	216 15:41:57	57.86	1834
216 18:17:13	111.45	5480	216 18:43:42	-168.06	1824	216 17:23:15	32.53	1835
216 20:02:34	84.99	5481	216 20:28:35	165.59	1825	216 19:04:33	7.21	1836
216 21:47:56	58.52	5482	216 22:13:28	139.24	1826	216 20:45:51	-18.11	1837
216 23:33:17	32.06	5483	216 23:58:21	112.90	1827	216 22:27:09	-43.44	1838
217 01:18:38	5.59	5484	217 01:43:14	86.55	1828	217 00:08:27	-68.76	1839
217 03:04:00	-20.87	5485	217 03:28:07	60.21	1829	217 01:49:45	-94.09	1840
217 04:49:21	-47.34	5486	217 05:12:59	33.86	1830	217 03:31:03	-119.41	1841
217 06:34:43	-73.80	5487	217 06:57:52	7.52	1831	217 05:12:21	-144.73	1842
217 08:20:04	-100.27	5488	217 08:42:45	-18.83	1832	217 06:53:40	-170.07	1843
217 10:05:25	-126.73	5489	217 10:27:38	-45.17	1833	217 08:34:58	164.60	1844
217 11:50:47	-153.19	5490	217 12:12:31	-71.52	1834	217 10:16:16	139.28	1845
217 13:36:08	-179.66	5491	217 13:57:24	-97.87	1835	217 11:57:34	113.96	1846
217 15:21:30	153.88	5492	217 15:42:16	-124.21	1836	217 13:38:52	88.63	1847
217 17:06:51	127.41	5493	217 17:27:09	-150.56	1837	217 15:20:10	63.31	1848
217 18:52:12	100.95	5494	217 19:12:02	-176.90	1838	217 17:01:28	37.98	1849
217 20:37:34	74.48	5495	217 20:56:55	156.75	1839	217 18:42:46	12.66	1850
217 22:22:55	48.02	5496	217 22:41:48	130.41	1840	217 20:24:04	-12.66	1851
						217 22:05:22	-37.99	1852
						217 23:46:40	-63.31	1853

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
218 00:08:16	21.55	5497	218 00:26:40	104.06	1841	218 01:27:58	-88.64	1854
218 01:53:38	-4.91	5498	218 02:11:33	77.71	1842	218 03:09:16	-113.96	1855
218 03:38:59	-31.38	5499	218 03:56:26	51.37	1843	218 04:50:34	-139.28	1856
218 05:24:21	-57.84	5500	218 05:41:19	25.02	1844	218 06:31:52	-164.61	1857
218 07:09:42	-84.31	5501	218 07:26:12	-1.32	1845	218 08:13:10	170.07	1858
218 08:55:03	-110.77	5502	218 09:11:05	-27.67	1846	218 09:54:28	144.74	1859
218 10:40:25	-137.24	5503	218 10:55:57	-54.02	1847	218 11:35:46	119.42	1860
218 12:25:46	-163.70	5504	218 12:40:50	-80.36	1848	218 13:17:05	94.08	1861
218 14:11:07	169.83	5505	218 14:25:43	-106.71	1849	218 14:58:23	68.76	1862
218 15:56:29	143.37	5506	218 16:10:36	-133.05	1850	218 16:39:41	43.44	1863
218 17:41:50	116.90	5507	218 17:55:29	-159.40	1851	218 18:20:59	18.11	1864
218 19:27:12	90.44	5508	218 19:40:22	174.26	1852	218 20:02:17	-7.21	1865
218 21:12:33	63.97	5509	218 21:25:14	147.91	1853	218 21:43:35	-32.54	1866
218 22:57:54	37.51	5510	218 23:10:07	121.56	1854	218 23:24:53	-57.86	1867
219 00:43:16	11.04	5511	219 00:55:00	95.22	1855	219 01:06:11	-83.18	1868
219 02:28:37	-15.42	5512	219 02:39:53	68.87	1856	219 02:47:29	-108.51	1869
219 04:13:59	-41.88	5513	219 04:24:46	42.53	1857	219 04:28:47	-133.83	1870
219 05:59:20	-68.35	5514	219 06:09:39	16.18	1858	219 06:10:05	-159.16	1871
219 07:44:41	-94.82	5515	219 07:54:31	-10.17	1859	219 07:51:23	175.52	1872
219 09:30:03	-121.28	5516	219 09:39:24	-36.51	1860	219 09:32:41	150.20	1873
219 11:15:24	-147.74	5517	219 11:24:17	-62.86	1861	219 11:13:59	124.87	1874
219 13:00:45	-174.21	5518	219 13:09:10	-89.20	1862	219 12:55:17	99.55	1875
219 14:46:07	159.33	5519	219 14:54:03	-115.55	1863	219 14:36:35	74.22	1876
219 16:31:28	132.86	5520	219 16:38:56	-141.89	1864	219 16:17:53	48.90	1877
219 18:16:50	106.40	5521	219 18:23:48	-168.24	1865	219 17:59:12	23.56	1878
219 20:02:11	79.93	5522	219 20:08:41	165.42	1866	219 19:40:30	-1.76	1879
219 21:47:32	53.47	5523	219 21:53:34	139.07	1867	219 21:21:48	-27.09	1880
219 23:32:54	27.00	5524	219 23:38:27	112.72	1868	219 23:03:06	-52.41	1881
220 01:18:15	.54	5525	220 01:23:20	86.38	1869	220 00:44:24	-77.73	1882
220 03:03:36	-25.93	5526	220 03:08:13	60.03	1870	220 02:25:42	-103.06	1883
220 04:48:58	-52.39	5527	220 04:53:05	33.69	1871	220 04:07:00	-128.38	1884
220 06:34:19	-78.86	5528	220 06:37:58	7.34	1872	220 05:48:18	-153.71	1885
220 08:19:41	-105.32	5529	220 08:22:51	-19.00	1873	220 07:29:36	-179.03	1886
220 10:05:02	-131.79	5530	220 10:07:44	-45.35	1874	220 09:10:54	155.65	1887
220 11:50:23	-158.25	5531	220 11:52:37	-71.69	1875	220 10:52:12	130.32	1888
220 13:35:45	175.28	5532	220 13:37:30	-98.04	1876	220 12:33:30	105.00	1889
220 15:21:06	148.82	5533	220 15:22:22	-124.39	1877	220 14:14:48	79.67	1890
220 17:06:28	122.35	5534	220 17:07:15	-150.73	1878	220 15:56:06	54.35	1891
220 18:51:49	95.89	5535	220 18:52:08	-177.08	1879	220 17:37:24	29.03	1892
220 20:37:10	69.42	5536	220 20:37:01	156.58	1880	220 19:18:42	3.70	1893
220 22:22:32	42.96	5537	220 22:21:54	130.23	1881	220 21:00:00	-21.62	1894
						220 22:41:19	-46.96	1895
221 00:07:53	16.49	5538	221 00:06:46	103.88	1882	221 00:22:37	-72.28	1896
221 01:53:14	-9.97	5539	221 01:51:39	77.54	1883	221 02:03:55	-97.61	1897
221 03:38:36	-36.43	5540	221 03:36:32	51.19	1884	221 03:45:13	-122.93	1898
221 05:23:57	-62.90	5541	221 05:21:25	24.85	1885	221 05:26:31	-148.25	1899
221 07:09:19	-89.36	5542	221 07:06:18	-1.50	1886	221 07:07:49	-173.58	1900
221 08:54:40	-115.83	5543	221 08:51:11	-27.84	1887	221 08:49:07	161.10	1901
221 10:40:01	-142.30	5544	221 10:36:03	-54.19	1888	221 10:30:25	135.77	1902
221 12:25:23	-168.76	5545	221 12:20:56	-80.54	1889	221 12:11:43	110.45	1903
221 14:10:44	164.78	5546	221 14:05:49	-106.88	1890	221 13:53:01	85.13	1904
221 15:56:05	138.31	5547	221 15:50:42	-133.23	1891	221 15:34:19	59.80	1905
221 17:41:27	111.85	5548	221 17:35:35	-159.57	1892	221 17:15:37	34.48	1906
221 19:26:48	85.38	5549	221 19:20:28	174.08	1893	221 18:56:55	9.15	1907
221 21:12:10	58.92	5550	221 21:05:20	147.73	1894	221 20:38:13	-16.17	1908
221 22:57:31	32.45	5551	221 22:50:13	121.39	1895	221 22:19:31	-41.49	1909

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
222 00:42:52	5.99	5552	222 00:35:06	95.04	1896	222 00:00:49	-66.82	1910
222 02:28:14	-20.48	5553	222 02:19:59	68.70	1897	222 01:42:07	-92.14	1911
222 04:13:35	-46.94	5554	222 04:04:52	42.35	1898	222 03:23:26	-117.48	1912
222 05:58:57	-73.41	5555	222 05:49:45	16.01	1899	222 05:04:44	-142.80	1913
222 07:44:18	-99.87	5556	222 07:34:37	-10.34	1900	222 06:46:02	-168.13	1914
222 09:29:39	-126.34	5557	222 09:19:30	-36.69	1901	222 08:27:20	166.55	1915
222 11:15:01	-152.80	5558	222 11:04:23	-63.03	1902	222 10:08:38	141.23	1916
222 13:00:22	-179.27	5559	222 12:49:16	-89.38	1903	222 11:49:56	115.90	1917
222 14:45:43	154.27	5560	222 14:34:09	-115.72	1904	222 13:31:14	90.58	1918
222 16:31:05	127.80	5561	222 16:19:02	-142.07	1905	222 15:12:32	65.25	1919
222 18:16:26	101.34	5562	222 18:03:54	-168.42	1906	222 16:53:50	39.93	1920
222 20:01:48	74.87	5563	222 19:48:47	165.24	1907	222 18:35:08	14.61	1921
222 21:47:09	48.41	5564	222 21:33:40	138.89	1908	222 20:16:26	-10.72	1922
222 23:32:30	21.94	5565	222 23:18:33	112.55	1909	222 21:57:44	-36.04	1923
						222 23:39:02	-61.37	1924
223 01:17:52	-4.52	5566	223 01:03:26	86.20	1910	223 01:20:20	-86.69	1925
223 03:03:13	-30.99	5567	223 02:48:19	59.86	1911	223 03:01:38	-112.01	1926
223 04:48:35	-57.45	5568	223 04:33:11	33.51	1912	223 04:42:56	-137.34	1927
223 06:33:56	-83.91	5569	223 06:18:04	7.17	1913	223 06:24:15	-162.68	1928
223 08:19:17	-110.38	5570	223 08:02:57	-19.18	1914	223 08:05:33	172.00	1929
223 10:04:39	-136.84	5571	223 09:47:50	-45.53	1915	223 09:46:51	146.68	1930
223 11:50:00	-163.31	5572	223 11:32:43	-71.87	1916	223 11:28:09	121.35	1931
223 13:35:21	170.22	5573	223 13:17:36	-98.22	1917	223 13:09:27	96.03	1932
223 15:20:43	143.76	5574	223 15:02:28	-124.56	1918	223 14:50:45	70.70	1933
223 17:06:04	117.30	5575	223 16:47:21	-150.91	1919	223 16:32:03	45.38	1934
223 18:51:26	90.83	5576	223 18:32:14	-177.25	1920	223 18:13:21	20.06	1935
223 20:36:47	64.37	5577	223 20:17:07	156.40	1921	223 19:54:39	-5.27	1936
223 22:22:08	37.90	5578	223 22:02:00	130.05	1922	223 21:35:57	-30.59	1937
			223 23:46:53	103.71	1923	223 23:17:15	-55.91	1938
224 00:07:30	11.44	5579	224 01:31:45	77.36	1924	224 00:58:33	-81.24	1939
224 01:52:51	-15.03	5580	224 03:16:38	51.02	1925	224 02:39:51	-106.56	1940
224 03:38:13	-41.49	5581	224 05:01:31	24.67	1926	224 04:21:09	-131.89	1941
224 05:23:34	-67.96	5582	224 06:46:24	-1.67	1927	224 06:02:27	-157.21	1942
224 07:08:55	-94.42	5583	224 08:31:17	-28.02	1928	224 07:43:45	177.47	1943
224 08:54:17	-120.89	5584	224 10:16:10	-54.37	1929	224 09:25:03	152.14	1944
224 10:39:38	-147.35	5585	224 12:01:02	-80.71	1930	224 11:06:22	126.80	1945
224 12:24:59	-173.82	5586	224 13:45:55	-107.06	1931	224 12:47:40	101.48	1946
224 14:10:21	159.72	5587	224 15:30:48	-133.40	1932	224 14:28:58	76.16	1947
224 15:55:42	133.25	5588	224 17:15:41	-159.75	1933	224 16:10:16	50.83	1948
224 17:41:04	106.79	5589	224 19:00:34	173.91	1934	224 17:51:34	25.51	1949
224 19:26:25	80.32	5590	224 20:45:27	147.56	1935	224 19:32:52	.18	1950
224 21:11:46	53.86	5591	224 22:30:20	121.21	1936	224 21:14:10	-25.14	1951
224 22:57:08	27.39	5592				224 22:55:28	-50.46	1952
225 00:42:29	.93	5593	225 00:15:12	94.87	1937	225 00:36:46	-75.79	1953
225 02:27:51	-25.53	5594	225 02:00:05	68.52	1938	225 02:18:04	-101.11	1954
225 04:13:12	-52.00	5595	225 03:44:58	42.18	1939	225 03:59:22	-126.44	1955
225 05:58:33	-78.47	5596	225 05:29:51	15.83	1940	225 05:40:40	-151.76	1956
225 07:43:55	-104.93	5597	225 07:14:44	-10.51	1941	225 07:21:58	-177.08	1957
225 09:29:16	-131.40	5598	225 08:59:37	-36.86	1942	225 09:03:16	157.59	1958
225 11:14:37	-157.86	5599	225 10:44:29	-63.21	1943	225 10:44:34	132.27	1959
225 12:59:59	175.68	5600	225 12:29:22	-89.55	1944	225 12:25:52	106.95	1960
225 14:45:20	149.21	5601	225 14:14:15	-115.90	1945	225 14:07:11	81.61	1961
225 16:30:42	122.75	5602	225 15:59:08	-142.24	1946	225 15:48:29	56.28	1962
225 18:16:03	96.28	5603	225 17:44:01	-168.59	1947	225 17:29:47	30.96	1963
225 20:01:24	69.82	5604	225 19:28:54	165.07	1948	225 19:11:05	5.64	1964
225 21:46:46	43.35	5605	225 21:13:46	138.72	1949	225 20:52:23	-19.69	1965
225 23:32:07	16.89	5606	225 22:58:39	112.37	1950	225 22:33:41	-45.01	1966

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
226 01:17:29	-9.58	5607
226 03:02:50	-36.04	5608
226 04:48:11	-62.51	5609
226 06:33:33	-88.97	5610
226 08:18:54	-115.44	5611
226 10:04:15	-141.90	5612
226 11:49:37	-168.37	5613
226 13:34:58	165.17	5614
226 15:20:20	138.70	5615
226 17:05:41	112.24	5616
226 18:51:02	85.77	5617
226 20:36:24	59.31	5618
226 22:21:45	32.84	5619
227 00:07:07	6.38	5620
227 01:52:28	-20.09	5621
227 03:37:49	-46.55	5622
227 05:23:11	-73.01	5623
227 07:08:32	-99.48	5624
227 08:53:53	-125.95	5625
227 10:39:15	-152.41	5626
227 12:24:36	-178.88	5627
227 14:09:58	154.66	5628
227 15:55:19	128.20	5629
227 17:40:40	101.73	5630
227 19:26:02	75.27	5631
227 21:11:23	48.80	5632
227 22:56:45	22.34	5633
228 00:42:06	-4.13	5634
228 02:27:27	-30.59	5635
228 04:12:49	-57.06	5636
228 05:58:10	-83.52	5637
228 07:43:31	-109.99	5638
228 09:28:53	-136.45	5639
228 11:14:14	-162.92	5640
228 12:59:36	170.62	5641
228 14:44:57	144.15	5642
228 16:30:18	117.69	5643
228 18:15:40	91.22	5644
228 20:01:01	64.76	5645
228 21:46:23	38.29	5646
228 23:31:44	11.83	5647
229 01:17:05	-14.64	5648
229 03:02:27	-41.10	5649
229 04:47:48	-67.57	5650
229 06:33:09	-94.03	5651
229 08:18:31	-120.50	5652
229 10:03:52	-146.96	5653
229 11:49:14	-173.42	5654
229 13:34:35	160.11	5655
229 15:19:56	133.64	5656
229 17:05:18	107.18	5657
229 18:50:39	80.71	5658
229 20:36:01	54.25	5659
229 22:21:22	27.79	5660

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
226 00:43:32	86.03	1951
226 02:28:25	59.68	1952
226 04:13:18	33.34	1953
226 05:58:11	6.99	1954
226 07:43:03	-19.36	1955
226 09:27:56	-45.70	1956
226 11:12:49	-72.05	1957
226 12:57:42	-98.39	1958
226 14:42:35	-124.74	1959
226 16:27:28	-151.08	1960
226 18:12:20	-177.43	1961
226 19:57:13	156.22	1962
226 21:42:06	129.88	1963
226 23:26:59	103.53	1964
227 01:11:52	77.19	1965
227 02:56:45	50.84	1966
227 04:41:37	24.49	1967
227 06:26:30	-1.85	1968
227 08:11:23	-28.20	1969
227 09:56:16	-54.54	1970
227 11:41:09	-80.89	1971
227 13:26:02	-107.23	1972
227 15:10:54	-133.58	1973
227 16:55:47	-159.93	1974
227 18:40:40	173.73	1975
227 20:25:33	147.38	1976
227 22:10:26	121.04	1977
227 23:55:19	94.69	1978
228 01:40:12	68.35	1979
228 03:25:04	42.00	1980
228 05:09:57	15.65	1981
228 06:54:50	-10.69	1982
228 08:39:43	-37.04	1983
228 10:24:36	-63.38	1984
228 12:09:29	-89.73	1985
228 13:54:21	-116.08	1986
228 15:39:14	-142.42	1987
228 17:24:07	-168.77	1988
228 19:09:00	164.89	1989
228 20:53:53	138.54	1990
228 22:38:46	112.20	1991
229 00:23:38	85.85	1992
229 02:08:31	59.50	1993
229 03:53:24	33.16	1994
229 05:38:17	6.81	1995
229 07:23:10	-19.53	1996
229 09:08:03	-45.88	1997
229 10:52:56	-72.22	1998
229 12:37:48	-98.57	1999
229 14:22:41	-124.92	2000
229 16:07:34	-151.26	2001
229 17:52:27	-177.61	2002
229 19:37:20	156.05	2003
229 21:22:13	129.70	2004
229 23:07:05	103.35	2005

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
226 00:14:59	-70.34	1967
226 01:56:17	-95.66	1968
226 03:37:35	-120.98	1969
226 05:18:53	-146.31	1970
226 07:00:11	-171.63	1971
226 08:41:29	163.04	1972
226 10:22:47	137.72	1973
226 12:04:05	112.40	1974
226 13:45:23	87.07	1975
226 15:26:41	61.75	1976
226 17:07:59	36.42	1977
226 18:49:18	11.09	1978
226 20:30:36	-14.24	1979
226 22:11:54	-39.56	1980
226 23:53:12	-64.88	1981
227 01:34:30	-90.21	1982
227 03:15:48	-115.53	1983
227 04:57:06	-140.86	1984
227 06:38:24	-166.18	1985
227 08:19:42	168.50	1986
227 10:01:00	143.17	1987
227 11:42:18	117.85	1988
227 13:23:36	92.52	1989
227 15:04:54	67.20	1990
227 16:46:12	41.88	1991
227 18:27:30	16.55	1992
227 20:08:48	-8.77	1993
227 21:50:07	-34.11	1994
227 23:31:25	-59.43	1995
228 01:12:43	-84.76	1996
228 02:54:01	-110.08	1997
228 04:35:19	-135.40	1998
228 06:16:37	-160.73	1999
228 07:57:55	173.95	2000
228 09:39:13	148.62	2001
228 11:20:31	123.30	2002
228 13:01:49	97.98	2003
228 14:43:07	72.65	2004
228 16:24:25	47.33	2005
228 18:05:43	22.00	2006
228 19:47:01	-3.32	2007
228 21:28:19	-28.64	2008
228 23:09:37	-53.97	2009
229 00:50:56	-79.30	2010
229 02:32:14	-104.63	2011
229 04:13:32	-129.95	2012
229 05:54:50	-155.28	2013
229 07:36:08	179.40	2014
229 09:17:26	154.08	2015
229 10:58:44	128.75	2016
229 12:40:02	103.43	2017
229 14:21:20	78.10	2018
229 16:02:38	52.78	2019
229 17:43:56	27.46	2020
229 19:25:14	2.13	2021
229 21:06:32	-23.19	2022
229 22:47:50	-48.52	2023

West longitude is negative (-)

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
230 00:06:43	1.32	5661	230 00:51:58	77.01	2006	230 00:29:08	-73.84	2024
230 01:52:05	-25.14	5662	230 02:36:51	50.66	2007	230 02:10:26	-99.16	2025
230 03:37:26	-51.61	5663	230 04:21:44	24.32	2008	230 03:51:45	-124.50	2026
230 05:22:47	-78.07	5664	230 06:06:37	-2.03	2009	230 05:33:03	-149.83	2027
230 07:08:09	-104.54	5665	230 07:51:30	-28.37	2010	230 07:14:21	-175.15	2028
230 08:53:30	-131.00	5666	230 09:36:22	-54.72	2011	230 08:55:39	159.53	2029
230 10:38:52	-157.47	5667	230 11:21:15	-81.07	2012	230 10:36:57	134.20	2030
230 12:24:13	176.07	5668	230 13:06:08	-107.41	2013	230 12:18:15	108.88	2031
230 14:09:34	149.60	5669	230 14:51:01	-133.76	2014	230 13:59:33	83.56	2032
230 15:54:56	123.14	5670	230 16:35:54	-160.10	2015	230 15:40:51	58.23	2033
230 17:40:17	96.67	5671	230 18:20:47	173.55	2016	230 17:22:09	32.91	2034
230 19:25:39	70.21	5672	230 20:05:40	147.21	2017	230 19:03:27	7.58	2035
230 21:11:00	43.74	5673	230 21:50:32	120.86	2018	230 20:44:45	-17.74	2036
230 22:56:21	17.28	5674	230 23:35:25	94.51	2019	230 22:26:03	-43.06	2037
231 00:41:43	-9.19	5675	231 01:20:18	68.17	2020	231 00:07:21	-68.39	2038
231 02:27:04	-35.65	5676	231 03:05:11	41.82	2021	231 01:48:39	-93.71	2039
231 04:12:25	-62.12	5677	231 04:50:04	15.48	2022	231 03:29:57	-119.04	2040
231 05:57:47	-88.58	5678	231 06:34:57	-10.87	2023	231 05:11:15	-144.36	2041
231 07:43:08	-115.05	5679	231 08:19:49	-37.22	2024	231 06:52:33	-169.68	2042
231 09:28:30	-141.51	5680	231 10:04:42	-63.56	2025	231 08:33:52	164.98	2043
231 11:13:51	-167.98	5681	231 11:49:35	-89.91	2026	231 10:15:10	139.65	2044
231 12:59:12	165.56	5682	231 13:34:28	-116.25	2027	231 11:56:28	114.33	2045
231 14:44:34	139.10	5683	231 15:19:21	-142.60	2028	231 13:37:46	89.01	2046
231 16:29:55	112.63	5684	231 17:04:14	-168.94	2029	231 15:19:04	63.68	2047
231 18:15:17	86.17	5685	231 18:49:06	164.71	2030	231 17:00:22	38.36	2048
231 20:00:38	59.70	5686	231 20:33:59	138.36	2031	231 18:41:40	13.04	2049
231 21:45:59	33.23	5687	231 22:18:52	112.02	2032	231 20:22:58	-12.29	2050
231 23:31:21	6.77	5688				231 22:04:16	-37.61	2051
						231 23:45:34	-62.94	2052
232 01:16:42	-19.69	5689	232 00:03:45	85.67	2033	232 01:26:52	-88.26	2053
232 03:02:04	-46.16	5690	232 01:48:38	59.33	2034	232 03:08:10	-113.58	2054
232 04:47:25	-72.62	5691	232 03:33:31	32.98	2035	232 04:49:28	-138.91	2055
232 06:32:46	-99.09	5692	232 05:18:24	6.64	2036	232 06:30:46	-164.23	2056
232 08:18:08	-125.55	5693	232 07:03:16	-19.71	2037	232 08:12:04	170.44	2057
232 10:03:29	-152.02	5694	232 08:48:09	-46.06	2038	232 09:53:22	145.12	2058
232 11:48:50	-178.48	5695	232 10:33:02	-72.40	2039	232 11:34:41	119.78	2059
232 13:34:12	155.05	5696	232 12:17:55	-98.75	2040	232 13:15:59	94.46	2060
232 15:19:33	128.59	5697	232 14:02:48	-125.09	2041	232 14:57:17	69.13	2061
232 17:04:55	102.12	5698	232 15:47:41	-151.44	2042	232 16:38:35	43.81	2062
232 18:50:16	75.66	5699	232 17:32:33	-177.79	2043	232 18:19:53	18.49	2063
232 20:35:37	49.19	5700	232 19:17:26	155.87	2044	232 20:01:11	-6.84	2064
232 22:20:59	22.73	5701	232 21:02:19	129.52	2045	232 21:42:29	-32.16	2065
			232 22:47:12	103.18	2046	232 23:23:47	-57.49	2066
233 00:06:20	-3.74	5702	233 00:32:05	76.83	2047	233 01:05:05	-82.81	2067
233 01:51:42	-30.20	5703	233 02:16:58	50.49	2048	233 02:46:23	-108.13	2068
233 03:37:03	-56.67	5704	233 04:01:51	24.14	2049	233 04:27:41	-133.46	2069
233 05:22:24	-83.13	5705	233 05:46:43	-2.21	2050	233 06:08:59	-158.78	2070
233 07:07:46	-109.60	5706	233 07:31:36	-28.55	2051	233 07:50:17	175.90	2071
233 08:53:07	-136.06	5707	233 09:16:29	-54.90	2052	233 09:31:35	150.57	2072
233 10:38:28	-162.53	5708	233 11:01:22	-81.24	2053	233 11:12:53	125.25	2073
233 12:23:50	171.01	5709	233 12:46:15	-107.59	2054	233 12:54:11	99.92	2074
233 14:09:11	144.54	5710	233 14:31:08	-133.93	2055	233 14:35:30	74.59	2075
233 15:54:33	118.08	5711	233 16:16:00	-160.28	2056	233 16:16:48	49.26	2076
233 17:39:54	91.61	5712	233 18:00:53	173.37	2057	233 17:58:06	23.94	2077
233 19:25:15	65.15	5713	233 19:45:46	147.03	2058	233 19:39:24	-1.39	2078
233 21:10:37	38.69	5714	233 21:30:39	120.68	2059	233 21:20:42	-26.71	2079
233 22:55:58	12.22	5715	233 23:15:32	94.34	2060	233 23:02:00	-52.03	2080

West longitude is negative (-)

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
234 00:41:20	-14.24	5716	234 01:00:25	67.99	2061	234 00:43:18	-77.36	2081
234 02:26:41	-40.71	5717	234 02:45:18	41.65	2062	234 02:24:36	-102.68	2082
234 04:12:02	-67.18	5718	234 04:30:10	15.30	2063	234 04:05:54	-128.01	2083
234 05:57:24	-93.64	5719	234 06:15:03	-11.05	2064	234 05:47:12	-153.33	2084
234 07:42:45	-120.10	5720	234 07:59:56	-37.39	2065	234 07:28:30	-178.65	2085
234 09:28:06	-146.57	5721	234 09:44:49	-63.74	2066	234 09:09:48	156.02	2086
234 11:13:28	-173.03	5722	234 11:29:42	-90.08	2067	234 10:51:06	130.70	2087
234 12:58:49	160.50	5723	234 13:14:35	-116.43	2068	234 12:32:24	105.38	2088
234 14:44:11	134.04	5724	234 14:59:27	-142.78	2069	234 14:13:42	80.05	2089
234 16:29:32	107.57	5725	234 16:44:20	-169.12	2070	234 15:55:01	54.71	2090
234 18:14:53	81.11	5726	234 18:29:13	164.53	2071	234 17:36:19	29.39	2091
234 20:00:15	54.64	5727	234 20:14:06	138.19	2072	234 19:17:37	4.07	2092
234 21:45:36	28.18	5728	234 21:58:59	111.84	2073	234 20:58:55	-21.26	2093
234 23:30:58	1.71	5729	234 23:43:52	85.50	2074	234 22:40:13	-46.58	2094
235 01:16:19	-24.75	5730	235 01:28:45	59.15	2075	235 00:21:31	-71.91	2095
235 03:01:40	-51.22	5731	235 03:13:37	32.80	2076	235 02:02:49	-97.23	2096
235 04:47:02	-77.68	5732	235 04:58:30	6.46	2077	235 03:44:07	-122.55	2097
235 06:32:23	-104.15	5733	235 06:43:23	-19.89	2078	235 05:25:25	-147.88	2098
235 08:17:44	-130.61	5734	235 08:28:16	-46.23	2079	235 07:06:43	-173.20	2099
235 10:03:06	-157.08	5735	235 10:13:09	-72.58	2080	235 08:48:01	161.47	2100
235 11:48:27	176.46	5736	235 11:58:02	-98.92	2081	235 10:29:19	136.15	2101
235 13:33:49	149.99	5737	235 13:42:54	-125.27	2082	235 12:10:37	110.83	2102
235 15:19:10	123.53	5738	235 15:27:47	-151.62	2083	235 13:51:55	85.50	2103
235 17:04:31	97.06	5739	235 17:12:40	-177.96	2084	235 15:33:13	60.18	2104
235 18:49:53	70.60	5740	235 18:57:33	155.69	2085	235 17:14:31	34.86	2105
235 20:35:14	44.13	5741	235 20:42:26	129.35	2086	235 18:55:50	9.52	2106
235 22:20:36	17.67	5742	235 22:27:19	103.00	2087	235 20:37:08	-15.81	2107
						235 22:18:26	-41.13	2108
						235 23:59:44	-66.45	2109
236 00:05:57	-8.80	5743	236 00:12:12	76.65	2088	236 01:41:02	-91.78	2110
236 01:51:18	-35.26	5744	236 01:57:04	50.31	2089	236 03:22:20	-117.10	2111
236 03:36:40	-61.72	5745	236 03:41:57	23.96	2090	236 05:03:38	-142.43	2112
236 05:22:01	-88.19	5746	236 05:26:50	-2.38	2091	236 06:44:56	-167.75	2113
236 07:07:23	-114.65	5747	236 07:11:43	-28.73	2092	236 08:26:14	166.93	2114
236 08:52:44	-141.12	5748	236 08:56:36	-55.08	2093	236 10:07:32	141.60	2115
236 10:38:05	-167.59	5749	236 10:41:29	-81.42	2094	236 11:48:50	116.28	2116
236 12:23:27	165.95	5750	236 12:26:22	-107.77	2095	236 13:30:08	90.95	2117
236 14:08:48	139.49	5751	236 14:11:14	-134.11	2096	236 15:11:26	65.63	2118
236 15:54:09	113.02	5752	236 15:56:07	-160.46	2097	236 16:52:44	40.31	2119
236 17:39:31	86.56	5753	236 17:41:00	173.20	2098	236 18:34:02	14.98	2120
236 19:24:52	60.09	5754	236 19:25:53	146.85	2099	236 20:15:20	-10.34	2121
236 21:10:14	33.63	5755	236 21:10:46	120.50	2100	236 21:56:39	-35.68	2122
236 22:55:35	7.16	5756	236 22:55:39	94.16	2101	236 23:37:57	-61.00	2123
237 00:40:56	-19.30	5757	237 00:40:31	67.81	2102	237 01:19:15	-86.33	2124
237 02:26:18	-45.77	5758	237 02:25:24	41.47	2103	237 03:00:33	-111.65	2125
237 04:11:39	-72.23	5759	237 04:10:17	15.12	2104	237 04:41:51	-136.97	2126
237 05:57:01	-98.70	5760	237 05:55:10	-11.23	2105	237 06:23:09	-162.30	2127
237 07:42:22	-125.16	5761	237 07:40:03	-37.57	2106	237 08:04:27	172.38	2128
237 09:27:43	-151.63	5762	237 09:24:56	-63.92	2107	237 09:45:45	147.05	2129
237 11:13:05	-178.09	5763	237 11:09:49	-90.26	2108	237 11:27:03	121.73	2130
237 12:58:26	155.44	5764	237 12:54:41	-116.61	2109	237 13:08:21	96.41	2131
237 14:43:47	128.98	5765	237 14:39:34	-142.96	2110	237 14:49:39	71.08	2132
237 16:29:09	102.51	5766	237 16:24:27	-169.30	2111	237 16:30:57	45.76	2133
237 18:14:30	76.05	5767	237 18:09:20	164.35	2112	237 18:12:15	20.43	2134
237 19:59:52	49.59	5768	237 19:54:13	138.01	2113	237 19:53:33	-4.89	2135
237 21:45:13	23.12	5769	237 21:39:06	111.66	2114	237 21:34:51	-30.21	2136
237 23:30:34	-3.35	5770	237 23:23:59	85.32	2115	237 23:16:09	-55.54	2137

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
238 01:15:56	-29.81	5771	238 01:08:51	58.97	2116	238 00:57:28	-80.87	2138
238 03:01:17	-56.28	5772	238 02:53:44	32.62	2117	238 02:38:46	-106.20	2139
238 04:46:39	-82.74	5773	238 04:38:37	6.28	2118	238 04:20:04	-131.52	2140
238 06:32:00	-109.20	5774	238 06:23:30	-20.07	2119	238 06:01:22	-156.85	2141
238 08:17:21	-135.67	5775	238 08:08:23	-46.41	2120	238 07:42:40	177.83	2142
238 10:02:43	-162.13	5776	238 09:53:16	-72.76	2121	238 09:23:58	152.51	2143
238 11:48:04	171.40	5777	238 11:38:08	-99.11	2122	238 11:05:16	127.18	2144
238 13:33:25	144.93	5778	238 13:23:01	-125.45	2123	238 12:46:34	101.86	2145
238 15:18:47	118.47	5779	238 15:07:54	-151.80	2124	238 14:27:52	76.53	2146
238 17:04:08	92.01	5780	238 16:52:47	-178.14	2125	238 16:09:10	51.21	2147
238 18:49:30	65.54	5781	238 18:37:40	155.51	2126	238 17:50:28	25.89	2148
238 20:34:51	39.08	5782	238 20:22:33	129.17	2127	238 19:31:46	.56	2149
238 22:20:12	12.61	5783	238 22:07:26	102.82	2128	238 21:13:04	-24.76	2150
			238 23:52:18	76.47	2129	238 22:54:22	-50.09	2151
239 00:05:34	-13.85	5784	239 01:37:11	50.13	2130	239 00:35:40	-75.41	2152
239 01:50:55	-40.32	5785	239 03:22:04	23.78	2131	239 02:16:58	-100.73	2153
239 03:36:17	-66.78	5786	239 05:06:57	-2.56	2132	239 03:58:17	-126.07	2154
239 05:21:38	-93.25	5787	239 06:51:50	-28.91	2133	239 05:39:35	-151.39	2155
239 07:06:59	-119.71	5788	239 08:36:43	-55.25	2134	239 07:20:53	-176.72	2156
239 08:52:21	-146.18	5789	239 10:21:36	-81.60	2135	239 09:02:11	157.96	2157
239 10:37:42	-172.64	5790	239 12:06:28	-107.95	2136	239 10:43:29	132.63	2158
239 12:23:03	160.89	5791	239 13:51:21	-134.29	2137	239 12:24:47	107.31	2159
239 14:08:25	134.43	5792	239 15:36:14	-160.64	2138	239 14:06:05	81.99	2160
239 15:53:46	107.96	5793	239 17:21:07	173.02	2139	239 15:47:23	56.66	2161
239 17:39:08	81.50	5794	239 19:06:00	146.67	2140	239 17:28:41	31.34	2162
239 19:24:29	55.03	5795	239 20:50:53	120.33	2141	239 19:09:59	6.01	2163
239 21:09:50	28.57	5796	239 22:35:46	93.98	2142	239 20:51:17	-19.31	2164
239 22:55:12	2.10	5797				239 22:32:35	-44.63	2165
240 00:40:33	-24.36	5798	240 00:20:38	67.63	2143	240 00:13:53	-69.96	2166
240 02:25:55	-50.82	5799	240 02:05:31	41.29	2144	240 01:55:11	-95.28	2167
240 04:11:16	-77.29	5800	240 03:50:24	14.94	2145	240 03:36:29	-120.61	2168
240 05:56:37	-103.76	5801	240 05:35:17	-11.40	2146	240 05:17:47	-145.93	2169
240 07:41:59	-130.22	5802	240 07:20:10	-37.75	2147	240 06:59:06	-171.27	2170
240 09:27:20	-156.69	5803	240 09:05:03	-64.09	2148	240 08:40:24	163.41	2171
240 11:12:41	176.85	5804	240 10:49:55	-90.44	2149	240 10:21:42	138.09	2172
240 12:58:03	150.39	5805	240 12:34:48	-116.79	2150	240 12:03:00	112.76	2173
240 14:43:24	123.92	5806	240 14:19:41	-143.13	2151	240 13:44:18	87.44	2174
240 16:28:46	97.46	5807	240 16:04:34	-169.48	2152	240 15:25:36	62.11	2175
240 18:14:07	70.99	5808	240 17:49:27	164.18	2153	240 17:06:54	36.79	2176
240 19:59:28	44.52	5809	240 19:34:20	137.83	2154	240 18:48:12	11.47	2177
240 21:44:50	18.06	5810	240 21:19:13	111.48	2155	240 20:29:30	-13.86	2178
240 23:30:11	-8.40	5811	240 23:04:05	85.14	2156	240 22:10:48	-39.18	2179
						240 23:52:06	-64.51	2180
241 01:15:33	-34.87	5812	241 00:48:58	58.79	2157	241 01:33:24	-89.83	2181
241 03:00:54	-61.33	5813	241 02:33:51	32.45	2158	241 03:14:42	-115.15	2182
241 04:46:15	-87.80	5814	241 04:18:44	6.10	2159	241 04:56:00	-140.48	2183
241 06:31:37	-114.26	5815	241 06:03:37	-20.25	2160	241 06:37:18	-165.80	2184
241 08:16:58	-140.73	5816	241 07:48:30	-46.59	2161	241 08:18:37	168.86	2185
241 10:02:19	-167.19	5817	241 09:33:23	-72.94	2162	241 09:59:55	143.54	2186
241 11:47:41	166.34	5818	241 11:18:15	-99.28	2163	241 11:41:13	118.21	2187
241 13:33:02	139.88	5819	241 13:03:08	-125.63	2164	241 13:22:31	92.89	2188
241 15:18:24	113.41	5820	241 14:48:01	-151.98	2165	241 15:03:49	67.57	2189
241 17:03:45	86.95	5821	241 16:32:54	-178.32	2166	241 16:45:07	42.24	2190
241 18:49:06	60.48	5822	241 18:17:47	155.33	2167	241 18:26:25	16.92	2191
241 20:34:28	34.02	5823	241 20:02:40	128.99	2168	241 20:07:43	-8.41	2192
241 22:19:49	7.55	5824	241 21:47:33	102.64	2169	241 21:49:01	-33.73	2193
			241 23:32:25	76.29	2170	241 23:30:19	-59.05	2194

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
242 00:05:11	-18.91	5825
242 01:50:32	-45.38	5826
242 03:35:53	-71.84	5827
242 05:21:15	-98.30	5828
242 07:06:36	-124.77	5829
242 08:51:57	-151.24	5830
242 10:37:19	-177.70	5831
242 12:22:40	155.83	5832
242 14:08:02	129.37	5833
242 15:53:23	102.91	5834
242 17:38:44	76.44	5835
242 19:24:06	49.98	5836
242 21:09:27	23.51	5837
242 22:54:49	-2.95	5838
243 00:40:10	-29.42	5839
243 02:25:31	-55.88	5840
243 04:10:53	-82.35	5841
243 05:56:14	-108.81	5842
243 07:41:35	-135.28	5843
243 09:26:57	-161.74	5844
243 11:12:18	171.79	5845
243 12:57:40	145.33	5846
243 14:43:01	118.86	5847
243 16:28:22	92.40	5848
243 18:13:44	65.93	5849
243 19:59:05	39.47	5850
243 21:44:27	13.00	5851
243 23:29:48	-13.46	5852
244 01:15:09	-39.93	5853
244 03:00:31	-66.39	5854
244 04:45:52	-92.86	5855
244 06:31:13	-119.32	5856
244 08:16:35	-145.79	5857
244 10:01:56	-172.25	5858
244 11:47:18	161.29	5859
244 13:32:39	134.82	5860
244 15:18:00	108.35	5861
244 17:03:22	81.89	5862
244 18:48:43	55.43	5863
244 20:34:05	28.96	5864
244 22:19:26	2.50	5865
245 00:04:47	-23.97	5866
245 01:50:09	-50.43	5867
245 03:35:30	-76.90	5868
245 05:20:51	-103.36	5869
245 07:06:13	-129.83	5870
245 08:51:34	-156.29	5871
245 10:36:56	177.24	5872
245 12:22:17	150.78	5873
245 14:07:38	124.31	5874
245 15:53:00	97.85	5875
245 17:38:21	71.38	5876
245 19:23:43	44.92	5877
245 21:09:04	18.45	5878
245 22:54:25	-8.01	5879

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
242 01:17:18	49.95	2171
242 03:02:11	23.60	2172
242 04:47:04	-2.74	2173
242 06:31:57	-29.09	2174
242 08:16:50	-55.43	2175
242 10:01:43	-81.78	2176
242 11:46:35	-108.13	2177
242 13:31:28	-134.47	2178
242 15:16:21	-160.82	2179
242 17:01:14	172.84	2180
242 18:46:07	146.49	2181
242 20:31:00	120.15	2182
242 22:15:52	93.80	2183
243 00:00:45	67.45	2184
243 01:45:38	41.11	2185
243 03:30:31	14.76	2186
243 05:15:24	-11.58	2187
243 07:00:17	-37.93	2188
243 08:45:10	-64.27	2189
243 10:30:02	-90.62	2190
243 12:14:55	-116.97	2191
243 13:59:48	-143.31	2192
243 15:44:41	-169.66	2193
243 17:29:34	164.00	2194
243 19:14:27	137.65	2195
243 20:59:20	111.31	2196
243 22:44:12	84.96	2197
244 00:29:05	58.61	2198
244 02:13:58	32.27	2199
244 03:58:51	5.92	2200
244 05:43:44	-20.42	2201
244 07:28:37	-46.77	2202
244 09:13:30	-73.12	2203
244 10:58:22	-99.46	2204
244 12:43:15	-125.81	2205
244 14:28:08	-152.15	2206
244 16:13:01	-178.50	2207
244 17:57:54	155.15	2208
244 19:42:47	128.81	2209
244 21:27:40	102.46	2210
244 23:12:32	76.12	2211
245 00:57:25	49.77	2212
245 02:42:18	23.42	2213
245 04:27:11	-2.92	2214
245 06:12:04	-29.27	2215
245 07:56:57	-55.61	2216
245 09:41:50	-81.96	2217
245 11:26:42	-108.31	2218
245 13:11:35	-134.65	2219
245 14:56:28	-161.00	2220
245 16:41:21	172.66	2221
245 18:26:14	146.31	2222
245 20:11:07	119.97	2223
245 21:56:00	93.62	2224
245 23:40:52	67.27	2225

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
242 01:11:37	-84.38	2195
242 02:52:55	-109.70	2196
242 04:34:13	-135.03	2197
242 06:15:31	-160.35	2198
242 07:56:49	174.33	2199
242 09:38:07	149.00	2200
242 11:19:26	123.67	2201
242 13:00:44	98.34	2202
242 14:42:02	73.02	2203
242 16:23:20	47.69	2204
242 18:04:38	22.37	2205
242 19:45:56	-2.95	2206
242 21:27:14	-28.28	2207
242 23:08:32	-53.60	2208
243 00:49:50	-78.93	2209
243 02:31:08	-104.25	2210
243 04:12:26	-129.57	2211
243 05:53:44	-154.90	2212
243 07:35:02	179.78	2213
243 09:16:20	154.45	2214
243 10:57:38	129.13	2215
243 12:38:56	103.81	2216
243 14:20:15	78.47	2217
243 16:01:33	53.15	2218
243 17:42:51	27.82	2219
243 19:24:09	2.50	2220
243 21:05:27	-22.83	2221
243 22:46:45	-48.15	2222
244 00:28:03	-73.47	2223
244 02:09:21	-98.80	2224
244 03:50:39	-124.12	2225
244 05:31:57	-149.45	2226
244 07:13:15	-174.77	2227
244 08:54:33	159.91	2228
244 10:35:51	134.58	2229
244 12:17:09	109.26	2230
244 13:58:27	83.93	2231
244 15:39:45	58.61	2232
244 17:21:04	33.27	2233
244 19:02:22	7.95	2234
244 20:43:40	-17.37	2235
244 22:24:58	-42.70	2236
245 00:06:16	-68.02	2237
245 01:47:34	-93.35	2238
245 03:28:52	-118.67	2239
245 05:10:10	-143.99	2240
245 06:51:28	-169.32	2241
245 08:32:46	165.36	2242
245 10:14:04	140.03	2243
245 11:55:22	114.71	2244
245 13:36:40	89.39	2245
245 15:17:58	64.06	2246
245 16:59:16	38.74	2247
245 18:40:34	13.41	2248
245 20:21:53	-11.92	2249
245 22:03:11	-37.25	2250
245 23:44:29	-62.57	2251

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
246 00:39:47	-34.48	5880
246 02:25:08	-60.94	5881
246 04:10:29	-87.41	5882
246 05:55:51	-113.87	5883
246 07:41:12	-140.34	5884
246 09:26:34	-166.80	5885
246 11:11:55	166.73	5886
246 12:57:16	140.27	5887
246 14:42:38	113.81	5888
246 16:27:59	87.34	5889
246 18:13:20	60.87	5890
246 19:58:42	34.41	5891
246 21:44:03	7.95	5892
246 23:29:25	-18.52	5893
247 01:14:46	-44.98	5894
247 03:00:07	-71.45	5895
247 04:45:29	-97.91	5896
247 06:30:50	-124.38	5897
247 08:16:12	-150.84	5898
247 10:01:33	-177.31	5899
247 11:46:54	156.23	5900
247 13:32:16	129.76	5901
247 15:17:37	103.30	5902
247 17:02:58	76.83	5903
247 18:48:20	50.37	5904
247 20:33:41	23.90	5905
247 22:19:03	-2.56	5906
248 00:04:24	-29.03	5907
248 01:49:45	-55.49	5908
248 03:35:07	-81.96	5909
248 05:20:28	-108.42	5910
248 07:05:50	-134.88	5911
248 08:51:11	-161.35	5912
248 10:36:32	172.18	5913
248 12:21:54	145.72	5914
248 14:07:15	119.25	5915
248 15:52:36	92.79	5916
248 17:37:58	66.33	5917
248 19:23:19	39.86	5918
248 21:08:41	13.40	5919
248 22:54:02	-13.07	5920
249 00:39:23	-39.53	5921
249 02:24:45	-66.00	5922
249 04:10:06	-92.46	5923
249 05:55:27	-118.93	5924
249 07:40:49	-145.39	5925
249 09:26:10	-171.86	5926
249 11:11:32	161.68	5927
249 12:56:53	135.21	5928
249 14:42:14	108.75	5929
249 16:27:36	82.28	5930
249 18:12:57	55.82	5931
249 19:58:19	29.35	5932
249 21:43:40	2.89	5933
249 23:29:01	-23.58	5934

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
246 01:25:45	40.93	2226
246 03:10:38	14.58	2227
246 04:55:31	-11.76	2228
246 06:40:24	-38.11	2229
246 08:25:17	-64.45	2230
246 10:10:10	-90.80	2231
246 11:55:02	-117.15	2232
246 13:39:55	-143.49	2233
246 15:24:48	-169.84	2234
246 17:09:41	163.82	2235
246 18:54:34	137.47	2236
246 20:39:27	111.13	2237
246 22:24:20	84.78	2238
247 00:09:12	58.43	2239
247 01:54:05	32.09	2240
247 03:38:58	5.74	2241
247 05:23:51	-20.60	2242
247 07:08:44	-46.95	2243
247 08:53:37	-73.30	2244
247 10:38:30	-99.64	2245
247 12:23:22	-125.99	2246
247 14:08:15	-152.33	2247
247 15:53:08	-178.68	2248
247 17:38:01	154.97	2249
247 19:22:54	128.63	2250
247 21:07:47	102.28	2251
247 22:52:40	75.94	2252
248 00:37:32	49.59	2253
248 02:22:25	23.24	2254
248 04:07:18	-3.10	2255
248 05:52:11	-29.45	2256
248 07:37:04	-55.79	2257
248 09:21:57	-82.14	2258
248 11:06:50	-108.48	2259
248 12:51:42	-134.83	2260
248 14:36:35	-161.18	2261
248 16:21:28	172.48	2262
248 18:06:21	146.13	2263
248 19:51:14	119.79	2264
248 21:36:07	93.44	2265
248 23:21:00	67.10	2266
249 01:05:52	40.75	2267
249 02:50:45	14.40	2268
249 04:35:38	-11.94	2269
249 06:20:31	-38.29	2270
249 08:05:24	-64.63	2271
249 09:50:17	-90.98	2272
249 11:35:10	-117.32	2273
249 13:20:02	-143.67	2274
249 15:04:55	-170.02	2275
249 16:49:48	163.64	2276
249 18:34:41	137.29	2277
249 20:19:34	110.95	2278
249 22:04:27	84.60	2279
249 23:49:20	58.25	2280

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
246 01:25:47	-87.89	2252
246 03:07:05	-113.22	2253
246 04:48:23	-138.54	2254
246 06:29:41	-163.87	2255
246 08:10:59	170.81	2256
246 09:52:17	145.49	2257
246 11:33:35	120.16	2258
246 13:14:53	94.84	2259
246 14:56:11	69.51	2260
246 16:37:29	44.19	2261
246 18:18:47	18.87	2262
246 20:00:05	-6.46	2263
246 21:41:23	-31.78	2264
246 23:22:42	-57.12	2265
247 01:04:00	-82.44	2266
247 02:45:18	-107.77	2267
247 04:26:36	-133.09	2268
247 06:07:54	-158.41	2269
247 07:49:12	176.26	2270
247 09:30:30	150.94	2271
247 11:11:48	125.61	2272
247 12:53:06	100.29	2273
247 14:34:24	74.97	2274
247 16:15:42	49.64	2275
247 17:57:00	24.32	2276
247 19:38:18	-1.01	2277
247 21:19:36	-26.33	2278
247 23:00:54	-51.65	2279
248 00:42:12	-76.98	2280
248 02:23:31	-102.32	2281
248 04:04:49	-127.64	2282
248 05:46:07	-152.96	2283
248 07:27:25	-178.29	2284
248 09:08:43	156.39	2285
248 10:50:01	131.07	2286
248 12:31:19	105.74	2287
248 14:12:37	80.42	2288
248 15:53:55	55.09	2289
248 17:35:13	29.77	2290
248 19:16:31	4.45	2291
248 20:57:49	-20.88	2292
248 22:39:07	-46.20	2293
249 00:20:25	-71.53	2294
249 02:01:43	-96.85	2295
249 03:43:01	-122.17	2296
249 05:24:20	-147.51	2297
249 07:05:38	-172.84	2298
249 08:46:56	161.84	2299
249 10:28:14	136.52	2300
249 12:09:32	111.19	2301
249 13:50:50	85.87	2302
249 15:32:08	60.55	2303
249 17:13:26	35.22	2304
249 18:54:44	9.90	2305
249 20:36:02	-15.43	2306
249 22:17:20	-40.75	2307
249 23:58:38	-66.07	2308

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
250 01:14:23	-50.04	5935	250 01:34:12	31.91	2281	250 01:39:56	-91.40	2309
250 02:59:44	-76.51	5936	250 03:19:05	5.56	2282	250 03:21:14	-116.72	2310
250 04:45:05	-102.97	5937	250 05:03:58	-20.78	2283	250 05:02:32	-142.05	2311
250 06:30:27	-129.44	5938	250 06:48:51	-47.13	2284	250 06:43:50	-167.37	2312
250 08:15:48	-155.90	5939	250 08:33:44	-73.48	2285	250 08:25:08	167.31	2313
250 10:01:10	177.64	5940	250 10:18:37	-99.82	2286	250 10:06:27	141.97	2314
250 11:46:31	151.17	5941	250 12:03:30	-126.17	2287	250 11:47:45	116.64	2315
250 13:31:52	124.70	5942	250 13:48:22	-152.51	2288	250 13:29:03	91.32	2316
250 15:17:14	98.24	5943	250 15:33:15	-178.86	2289	250 15:10:21	66.00	2317
250 17:02:35	71.78	5944	250 17:18:08	154.79	2290	250 16:51:39	40.67	2318
250 18:47:56	45.31	5945	250 19:03:01	128.45	2291	250 18:32:57	15.35	2319
250 20:33:18	18.85	5946	250 20:47:54	102.10	2292	250 20:14:15	-9.98	2320
250 22:18:39	-7.62	5947	250 22:32:47	75.76	2293	250 21:55:33	-35.30	2321
						250 23:36:51	-60.62	2322
251 00:04:01	-34.08	5948	251 00:17:40	49.41	2294	251 01:18:09	-85.95	2323
251 01:49:22	-60.55	5949	251 02:02:32	23.06	2295	251 02:59:27	-111.27	2324
251 03:34:43	-87.01	5950	251 03:47:25	-3.28	2296	251 04:40:45	-136.59	2325
251 05:20:05	-113.48	5951	251 05:32:18	-29.63	2297	251 06:22:03	-161.92	2326
251 07:05:26	-139.94	5952	251 07:17:11	-55.97	2298	251 08:03:21	172.76	2327
251 08:50:48	-166.41	5953	251 09:02:04	-82.32	2299	251 09:44:39	147.43	2328
251 10:36:09	167.13	5954	251 10:46:57	-108.66	2300	251 11:25:57	122.11	2329
251 12:21:30	140.66	5955	251 12:31:50	-135.01	2301	251 13:07:16	96.77	2330
251 14:06:52	114.20	5956	251 14:16:42	-161.36	2302	251 14:48:34	71.45	2331
251 15:52:13	87.73	5957	251 16:01:35	172.30	2303	251 16:29:52	46.12	2332
251 17:37:34	61.27	5958	251 17:46:28	145.95	2304	251 18:11:10	20.80	2333
251 19:22:56	34.80	5959	251 19:31:21	119.61	2305	251 19:52:28	-4.52	2334
251 21:08:17	8.34	5960	251 21:16:14	93.26	2306	251 21:33:46	-29.85	2335
251 22:53:39	-18.12	5961	251 23:01:07	66.92	2307	251 23:15:04	-55.17	2336
252 00:39:00	-44.59	5962	252 00:46:00	40.57	2308	252 00:56:22	-80.50	2337
252 02:24:21	-71.06	5963	252 02:30:52	14.22	2309	252 02:37:40	-105.82	2338
252 04:09:43	-97.52	5964	252 04:15:45	-12.12	2310	252 04:18:58	-131.14	2339
252 05:55:04	-123.99	5965	252 06:00:38	-38.47	2311	252 06:00:16	-156.47	2340
252 07:40:25	-150.45	5966	252 07:45:31	-64.81	2312	252 07:41:34	178.21	2341
252 09:25:47	-176.91	5967	252 09:30:24	-91.16	2313	252 09:22:52	152.88	2342
252 11:11:08	156.62	5968	252 11:15:17	-117.51	2314	252 11:04:10	127.56	2343
252 12:56:30	130.16	5969	252 13:00:10	-143.85	2315	252 12:45:28	102.24	2344
252 14:41:51	103.69	5970	252 14:45:02	-170.20	2316	252 14:26:46	76.91	2345
252 16:27:12	77.22	5971	252 16:29:55	163.46	2317	252 16:08:05	51.58	2346
252 18:12:34	50.76	5972	252 18:14:48	137.11	2318	252 17:49:23	26.25	2347
252 19:57:55	24.30	5973	252 19:59:41	110.76	2319	252 19:30:41	.93	2348
252 21:43:16	-2.17	5974	252 21:44:34	84.42	2320	252 21:11:59	-24.40	2349
252 23:28:38	-28.63	5975	252 23:29:27	58.07	2321	252 22:53:17	-49.72	2350
253 01:13:59	-55.10	5976	253 01:14:20	31.73	2322	253 00:34:35	-75.04	2351
253 02:59:21	-81.56	5977	253 02:59:12	5.38	2323	253 02:15:53	-100.37	2352
253 04:44:42	-108.03	5978	253 04:44:05	-20.97	2324	253 03:57:11	-125.69	2353
253 06:30:03	-134.49	5979	253 06:28:58	-47.31	2325	253 05:38:29	-151.02	2354
253 08:15:25	-160.96	5980	253 08:13:51	-73.66	2326	253 07:19:47	-176.34	2355
253 10:00:46	172.58	5981	253 09:58:44	-100.00	2327	253 09:01:05	158.34	2356
253 11:46:08	146.11	5982	253 11:43:37	-126.35	2328	253 10:42:23	133.01	2357
253 13:31:29	119.65	5983	253 13:28:30	-152.69	2329	253 12:23:41	107.69	2358
253 15:16:50	93.18	5984	253 15:13:22	-179.04	2330	253 14:04:59	82.36	2359
253 17:02:12	66.72	5985	253 16:58:15	154.61	2331	253 15:46:17	57.04	2360
253 18:47:33	40.25	5986	253 18:43:08	128.27	2332	253 17:27:35	31.72	2361
253 20:32:54	13.79	5987	253 20:28:01	101.92	2333	253 19:08:53	6.39	2362
253 22:18:16	-12.68	5988	253 22:12:54	75.58	2334	253 20:50:12	-18.94	2363
			253 23:57:47	49.23	2335	253 22:31:30	-44.27	2364

West longitude is negative (-).

Satellite C1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
254 00:03:37	-39.14	5989
254 01:48:59	-65.60	5990
254 03:34:20	-92.07	5991
254 05:19:41	-118.54	5992
254 07:05:03	-145.00	5993
254 08:50:24	-171.46	5994
254 10:35:45	162.07	5995
254 12:21:07	135.61	5996
254 14:06:28	109.14	5997
254 15:51:50	82.68	5998
254 17:37:11	56.21	5999
254 19:22:32	29.75	6000
254 21:07:54	3.28	6001
254 22:53:15	-23.18	6002
255 00:38:36	-49.65	6003
255 02:23:58	-76.11	6004
255 04:09:19	-102.58	6005
255 05:54:41	-129.04	6006
255 07:40:02	-155.51	6007
255 09:25:23	178.03	6008
255 11:10:45	151.56	6009
255 12:56:06	125.10	6010
255 14:41:27	98.63	6011
255 16:26:49	72.17	6012
255 18:12:10	45.70	6013
255 19:57:32	19.24	6014
255 21:42:53	-7.22	6015
255 23:28:14	-33.69	6016
256 01:13:36	-60.15	6017
256 02:58:57	-86.62	6018
256 04:44:18	-113.09	6019
256 06:29:40	-139.55	6020
256 08:15:01	-166.01	6021
256 10:00:23	167.52	6022
256 11:45:44	141.06	6023
256 13:31:05	114.59	6024
256 15:16:27	88.13	6025
256 17:01:48	61.66	6026
256 18:47:09	35.20	6027
256 20:32:31	8.73	6028
256 22:17:52	-17.73	6029
257 00:03:14	-44.20	6030
257 01:48:35	-70.66	6031
257 03:33:56	-97.13	6032
257 05:19:18	-123.59	6033
257 07:04:39	-150.06	6034
257 08:50:00	-176.52	6035
257 10:35:22	157.01	6036
257 12:20:43	130.55	6037
257 14:06:05	104.09	6038
257 15:51:26	77.62	6039
257 17:36:47	51.15	6040
257 19:22:09	24.69	6041
257 21:07:30	-1.77	6042
257 22:52:51	-28.24	6043

Satellite C2

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
254 01:42:40	22.89	2336
254 03:27:32	-3.46	2337
254 05:12:25	-29.81	2338
254 06:57:18	-56.15	2339
254 08:42:11	-82.50	2340
254 10:27:04	-108.84	2341
254 12:11:57	-135.19	2342
254 13:56:50	-161.53	2343
254 15:41:42	172.12	2344
254 17:26:35	145.77	2345
254 19:11:28	119.43	2346
254 20:56:21	93.08	2347
254 22:41:14	66.74	2348
255 00:26:07	40.39	2349
255 02:11:00	14.04	2350
255 03:55:52	-12.30	2351
255 05:40:45	-38.65	2352
255 07:25:38	-64.99	2353
255 09:10:31	-91.34	2354
255 10:55:24	-117.69	2355
255 12:40:17	-144.03	2356
255 14:25:10	-170.38	2357
255 16:10:02	163.28	2358
255 17:54:55	136.93	2359
255 19:39:48	110.58	2360
255 21:24:41	84.24	2361
255 23:09:34	57.89	2362
256 00:54:27	31.55	2363
256 02:39:20	5.20	2364
256 04:24:12	-21.15	2365
256 06:09:05	-47.49	2366
256 07:53:58	-73.84	2367
256 09:38:51	-100.18	2368
256 11:23:44	-126.53	2369
256 13:08:37	-152.87	2370
256 14:53:30	-179.22	2371
256 16:38:22	154.43	2372
256 18:23:15	128.09	2373
256 20:08:08	101.74	2374
256 21:53:01	75.40	2375
256 23:37:54	49.05	2376
257 01:22:47	22.71	2377
257 03:07:40	-3.64	2378
257 04:52:32	-29.99	2379
257 06:37:25	-56.33	2380
257 08:22:18	-82.68	2381
257 10:07:11	-109.02	2382
257 11:52:04	-135.37	2383
257 13:36:57	-161.71	2384
257 15:21:50	171.94	2385
257 17:06:42	145.59	2386
257 18:51:35	119.25	2387
257 20:36:28	92.90	2388
257 22:21:21	66.56	2389

Satellite S1

TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
254 00:12:48	-69.59	2365
254 01:54:06	-94.92	2366
254 03:35:24	-120.24	2367
254 05:16:42	-145.56	2368
254 06:58:00	-170.89	2369
254 08:39:18	163.79	2370
254 10:20:36	138.46	2371
254 12:01:54	113.14	2372
254 13:43:12	87.82	2373
254 15:24:30	62.49	2374
254 17:05:48	37.17	2375
254 18:47:06	11.84	2376
254 20:28:24	-13.48	2377
254 22:09:42	-38.80	2378
254 23:51:01	-64.14	2379
255 01:32:19	-89.46	2380
255 03:13:37	-114.79	2381
255 04:54:55	-140.11	2382
255 06:36:13	-165.44	2383
255 08:17:31	169.24	2384
255 09:58:49	143.92	2385
255 11:40:07	118.59	2386
255 13:21:25	93.27	2387
255 15:02:43	67.94	2388
255 16:44:01	42.62	2389
255 18:25:19	17.30	2390
255 20:06:37	-8.03	2391
255 21:47:55	-33.35	2392
255 23:29:13	-58.68	2393
256 01:10:31	-84.00	2394
256 02:51:49	-109.32	2395
256 04:33:08	-134.66	2396
256 06:14:26	-159.99	2397
256 07:55:44	174.69	2398
256 09:37:02	149.37	2399
256 11:18:20	124.04	2400
256 12:59:38	98.72	2401
256 14:40:56	73.39	2402
256 16:22:14	48.07	2403
256 18:03:32	22.75	2404
256 19:44:50	-2.58	2405
256 21:26:08	-27.90	2406
256 23:07:26	-53.23	2407
257 00:48:44	-78.55	2408
257 02:30:02	-103.87	2409
257 04:11:20	-129.20	2410
257 05:52:38	-154.52	2411
257 07:33:56	-179.84	2412
257 09:15:15	154.82	2413
257 10:56:33	129.49	2414
257 12:37:51	104.17	2415
257 14:19:09	78.85	2416
257 16:00:27	53.52	2417
257 17:41:45	28.20	2418
257 19:23:03	2.87	2419
257 21:04:21	-22.45	2420
257 22:45:39	-47.77	2421

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
258 00:38:13	-54.70	6044	258 00:06:14	40.21	2390	258 00:26:57	-73.10	2422
258 02:23:34	-81.17	6045	258 01:51:07	13.86	2391	258 02:08:15	-98.42	2423
258 04:08:56	-107.63	6046	258 03:36:00	-12.48	2392	258 03:49:33	-123.75	2424
258 05:54:17	-134.10	6047	258 05:20:52	-38.83	2393	258 05:30:51	-149.07	2425
258 07:39:38	-160.56	6048	258 07:05:45	-65.17	2394	258 07:12:09	-174.39	2426
258 09:25:00	172.97	6049	258 08:50:38	-91.52	2395	258 08:53:27	160.28	2427
258 11:10:21	146.51	6050	258 10:35:31	-117.87	2396	258 10:34:45	134.96	2428
258 12:55:42	120.04	6051	258 12:20:24	-144.21	2397	258 12:16:03	109.63	2429
258 14:41:04	93.58	6052	258 14:05:17	-170.56	2398	258 13:57:22	84.30	2430
258 16:26:25	67.11	6053	258 15:50:10	163.10	2399	258 15:38:40	58.97	2431
258 18:11:47	40.65	6054	258 17:35:02	136.75	2400	258 17:19:58	33.65	2432
258 19:57:08	14.18	6055	258 19:19:55	110.40	2401	258 19:01:16	8.33	2433
258 21:42:29	-12.28	6056	258 21:04:48	84.06	2402	258 20:42:34	-17.00	2434
258 23:27:51	-38.75	6057	258 22:49:41	57.71	2403	258 22:23:52	-42.32	2435
259 01:13:12	-65.21	6058	259 00:34:34	31.37	2404	259 00:05:10	-67.65	2436
259 02:58:33	-91.68	6059	259 02:19:27	5.02	2405	259 01:46:28	-92.97	2437
259 04:43:55	-118.14	6060	259 04:04:20	-21.32	2406	259 03:27:46	-118.29	2438
259 06:29:16	-144.61	6061	259 05:49:12	-47.67	2407	259 05:09:04	-143.62	2439
259 08:14:38	-171.07	6062	259 07:34:05	-74.02	2408	259 06:50:22	-168.94	2440
259 09:59:59	162.47	6063	259 09:18:58	-100.36	2409	259 08:31:40	165.73	2441
259 11:45:20	136.00	6064	259 11:03:51	-126.71	2410	259 10:12:58	140.41	2442
259 13:30:42	109.54	6065	259 12:48:44	-153.05	2411	259 11:54:16	115.09	2443
259 15:16:03	83.07	6066	259 14:33:37	-179.40	2412	259 13:35:34	89.76	2444
259 17:01:24	56.60	6067	259 16:18:30	154.26	2413	259 15:16:52	64.44	2445
259 18:46:46	30.14	6068	259 18:03:22	127.91	2414	259 16:58:10	39.11	2446
259 20:32:07	3.68	6069	259 19:48:15	101.56	2415	259 18:39:29	13.78	2447
259 22:17:29	-22.79	6070	259 21:33:08	75.22	2416	259 20:20:47	-11.55	2448
			259 23:18:01	48.87	2417	259 22:02:05	-36.87	2449
						259 23:43:23	-62.20	2450
260 00:02:50	-49.25	6071	260 01:02:54	22.53	2418	260 01:24:41	-87.52	2451
260 01:48:11	-75.72	6072	260 02:47:47	-3.82	2419	260 03:05:59	-112.84	2452
260 03:33:33	-102.18	6073	260 04:32:40	-30.16	2420	260 04:47:17	-138.17	2453
260 05:18:54	-128.65	6074	260 06:17:32	-56.51	2421	260 06:28:35	-163.49	2454
260 07:04:15	-155.11	6075	260 08:02:25	-82.86	2422	260 08:09:53	171.18	2455
260 08:49:37	178.42	6076	260 09:47:18	-109.20	2423	260 09:51:11	145.86	2456
260 10:34:58	151.96	6077	260 11:32:11	-135.55	2424	260 11:32:29	120.54	2457
260 12:20:20	125.49	6078	260 13:17:04	-161.89	2425	260 13:13:47	95.21	2458
260 14:05:41	99.03	6079	260 15:01:57	171.76	2426	260 14:55:05	69.89	2459
260 15:51:02	72.56	6080	260 16:46:50	145.41	2427	260 16:36:23	44.56	2460
260 17:36:24	46.10	6081	260 18:31:42	119.07	2428	260 18:17:41	19.24	2461
260 19:21:45	19.63	6082	260 20:16:35	92.72	2429	260 19:58:59	-6.08	2462
260 21:07:06	-6.83	6083	260 22:01:28	66.38	2430	260 21:40:17	-31.41	2463
260 22:52:28	-33.29	6084	260 23:46:21	40.03	2431	260 23:21:35	-56.73	2464
261 00:37:49	-59.76	6085	261 01:31:14	13.68	2432	261 01:02:54	-82.07	2465
261 02:23:11	-86.22	6086	261 03:16:07	-12.66	2433	261 02:44:12	-107.39	2466
261 04:08:32	-112.69	6087	261 05:01:00	-39.01	2434	261 04:25:30	-132.72	2467
261 05:53:53	-139.15	6088	261 06:45:52	-65.35	2435	261 06:06:48	-158.04	2468
261 07:39:15	-165.62	6089	261 08:30:45	-91.70	2436	261 07:48:06	176.64	2469
261 09:24:36	167.92	6090	261 10:15:38	-118.05	2437	261 09:29:24	151.31	2470
261 11:09:57	141.45	6091	261 12:00:31	-144.39	2438	261 11:10:42	125.99	2471
261 12:55:19	114.99	6092	261 13:45:24	-170.74	2439	261 12:52:00	100.66	2472
261 14:40:40	88.52	6093	261 15:30:17	162.92	2440	261 14:33:18	75.34	2473
261 16:26:01	62.06	6094	261 17:15:10	136.57	2441	261 16:14:36	50.02	2474
261 18:11:23	35.59	6095	261 19:00:02	110.22	2442	261 17:55:54	24.69	2475
261 19:56:44	9.13	6096	261 20:44:55	83.88	2443	261 19:37:12	-.63	2476
261 21:42:06	-17.34	6097	261 22:29:48	57.53	2444	261 21:18:30	-25.96	2477
261 23:27:27	-43.80	6098				261 22:59:48	-51.28	2478

West longitude is negative (-)

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
262 01:12:48	-70.27	6099	262 00:14:41	31.19	2445	262 00:41:06	-76.60	2479
262 02:58:10	-96.73	6100	262 01:59:34	4.84	2446	262 02:22:24	-101.93	2480
262 04:43:31	-123.20	6101	262 03:44:27	-21.50	2447	262 04:03:42	-127.25	2481
262 06:28:52	-149.66	6102	262 05:29:20	-47.85	2448	262 05:45:01	-152.59	2482
262 08:14:14	-176.13	6103	262 07:14:12	-74.20	2449	262 07:26:19	-177.91	2483
262 09:59:35	157.41	6104	262 08:59:05	-100.54	2450	262 09:07:37	156.76	2484
262 11:44:57	130.95	6105	262 10:43:58	-126.89	2451	262 10:48:55	131.44	2485
262 13:30:18	104.48	6106	262 12:28:51	-153.23	2452	262 12:30:13	106.11	2486
262 15:15:39	78.01	6107	262 14:13:44	-179.58	2453	262 14:11:31	80.79	2487
262 17:01:01	51.55	6108	262 15:58:37	154.08	2454	262 15:52:49	55.47	2488
262 18:46:22	25.09	6109	262 17:43:30	127.73	2455	262 17:34:07	30.14	2489
262 20:31:43	-1.38	6110	262 19:28:22	101.38	2456	262 19:15:25	4.82	2490
262 22:17:05	-27.84	6111	262 21:13:15	75.04	2457	262 20:56:43	-20.51	2491
			262 22:58:08	48.69	2458	262 22:38:01	-45.83	2492
263 00:02:26	-54.31	6112	263 00:43:01	22.35	2459	263 00:19:19	-71.15	2493
263 01:47:48	-80.77	6113	263 02:27:54	-4.00	2460	263 02:00:37	-96.48	2494
263 03:33:09	-107.24	6114	263 04:12:47	-30.34	2461	263 03:41:55	-121.80	2495
263 05:18:30	-133.70	6115	263 05:57:40	-56.69	2462	263 05:23:13	-147.13	2496
263 07:03:52	-160.17	6116	263 07:42:32	-83.04	2463	263 07:04:31	-172.45	2497
263 08:49:13	173.37	6117	263 09:27:25	-109.38	2464	263 08:45:49	162.23	2498
263 10:34:34	146.90	6118	263 11:12:18	-135.73	2465	263 10:27:07	136.90	2499
263 12:19:56	120.44	6119	263 12:57:11	-162.07	2466	263 12:08:26	111.57	2500
263 14:05:17	93.97	6120	263 14:42:04	171.58	2467	263 13:49:44	86.24	2501
263 15:50:38	67.51	6121	263 16:26:57	145.23	2468	263 15:31:02	60.92	2502
263 17:36:00	41.04	6122	263 18:11:50	118.89	2469	263 17:12:20	35.59	2503
263 19:21:21	14.58	6123	263 19:56:42	92.54	2470	263 18:53:38	10.27	2504
263 21:06:43	-11.88	6124	263 21:41:35	66.20	2471	263 20:34:56	-15.05	2505
263 22:52:04	-38.35	6125	263 23:26:28	39.85	2472	263 22:16:14	-40.38	2506
						263 23:57:32	-65.70	2507
264 00:37:25	-64.82	6126	264 01:11:21	13.50	2473	264 01:38:50	-91.03	2508
264 02:22:47	-91.28	6127	264 02:56:14	-12.84	2474	264 03:20:08	-116.35	2509
264 04:08:08	-117.74	6128	264 04:41:07	-39.19	2475	264 05:01:26	-141.67	2510
264 05:53:29	-144.21	6129	264 06:25:59	-65.53	2476	264 06:42:44	-167.00	2511
264 07:38:51	-170.67	6130	264 08:10:52	-91.88	2477	264 08:24:02	167.68	2512
264 09:24:12	162.86	6131	264 09:55:45	-118.23	2478	264 10:05:20	142.35	2513
264 11:09:34	136.40	6132	264 11:40:38	-144.57	2479	264 11:46:38	117.03	2514
264 12:54:55	109.93	6133	264 13:25:31	-170.92	2480	264 13:27:56	91.71	2515
264 14:40:16	83.47	6134	264 15:10:24	162.74	2481	264 15:09:14	66.38	2516
264 16:25:38	57.00	6135	264 16:55:17	136.39	2482	264 16:50:32	41.06	2517
264 18:10:59	30.54	6136	264 18:40:09	110.04	2483	264 18:31:51	15.72	2518
264 19:56:20	4.07	6137	264 20:25:02	83.70	2484	264 20:13:09	-9.60	2519
264 21:41:42	-22.39	6138	264 22:09:55	57.35	2485	264 21:54:27	-34.93	2520
264 23:27:03	-48.86	6139	264 23:54:48	31.01	2486	264 23:35:45	-60.25	2521
265 01:12:24	-75.32	6140	265 01:39:41	4.66	2487	265 01:17:03	-85.58	2522
265 02:57:46	-101.79	6141	265 03:24:34	-21.68	2488	265 02:58:21	-110.90	2523
265 04:43:07	-128.25	6142	265 05:09:27	-48.03	2489	265 04:39:39	-136.22	2524
265 06:28:29	-154.71	6143	265 06:54:19	-74.38	2490	265 06:20:57	-161.55	2525
265 08:13:50	178.82	6144	265 08:39:12	-100.72	2491	265 08:02:15	173.13	2526
265 09:59:11	152.35	6145	265 10:24:05	-127.07	2492	265 09:43:33	147.80	2527
265 11:44:33	125.89	6146	265 12:08:58	-153.41	2493	265 11:24:51	122.48	2528
265 13:29:54	99.42	6147	265 13:53:51	-179.76	2494	265 13:06:09	97.16	2529
265 15:15:15	72.96	6148	265 15:38:44	153.90	2495	265 14:47:27	71.83	2530
265 17:00:37	46.50	6149	265 17:23:37	127.55	2496	265 16:28:45	46.51	2531
265 18:45:58	20.03	6150	265 19:08:29	101.20	2497	265 18:10:03	21.18	2532
265 20:31:20	-6.43	6151	265 20:53:22	74.86	2498	265 19:51:21	-4.14	2533
265 22:16:41	-32.90	6152	265 22:38:15	48.51	2499	265 21:32:39	-29.46	2534
						265 23:13:57	-54.79	2535

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
266 00:02:02	-59.36	6153	266 00:23:08	22.17	2500	266 00:55:16	-80.12	2536
266 01:47:24	-85.83	6154	266 02:08:01	-4.18	2501	266 02:36:34	-105.45	2537
266 03:32:45	-112.29	6155	266 03:52:54	-30.52	2502	266 04:17:52	-130.77	2538
266 05:18:06	-138.76	6156	266 05:37:47	-56.87	2503	266 05:59:10	-156.10	2539
266 07:03:28	-165.22	6157	266 07:22:39	-83.22	2504	266 07:40:28	178.58	2540
266 08:48:49	168.31	6158	266 09:07:32	-109.56	2505	266 09:21:46	153.26	2541
266 10:34:10	141.85	6159	266 10:52:25	-135.91	2506	266 11:03:04	127.93	2542
266 12:19:32	115.38	6160	266 12:37:18	-162.25	2507	266 12:44:22	102.61	2543
266 14:04:53	88.92	6161	266 14:22:11	171.40	2508	266 14:25:40	77.28	2544
266 15:50:15	62.45	6162	266 16:07:04	145.06	2509	266 16:06:58	51.96	2545
266 17:35:36	35.99	6163	266 17:51:56	118.71	2510	266 17:48:16	26.64	2546
266 19:20:57	9.52	6164	266 19:36:49	92.36	2511	266 19:29:34	1.31	2547
266 21:06:19	-16.94	6165	266 21:21:42	66.02	2512	266 21:10:52	-24.01	2548
266 22:51:40	-43.41	6166	266 23:06:35	39.67	2513	266 22:52:10	-49.34	2549
267 00:37:01	-69.87	6167	267 00:51:28	13.33	2514	267 00:33:28	-74.66	2550
267 02:22:23	-96.33	6168	267 02:36:21	-13.02	2515	267 02:14:46	-99.98	2551
267 04:07:44	-122.80	6169	267 04:21:14	-39.37	2516	267 03:56:04	-125.31	2552
267 05:53:06	-149.26	6170	267 06:06:06	-65.71	2517	267 05:37:22	-150.63	2553
267 07:38:27	-175.73	6171	267 07:50:59	-92.06	2518	267 07:18:41	-175.97	2554
267 09:23:48	157.81	6172	267 09:35:52	-118.40	2519	267 08:59:59	158.71	2555
267 11:09:10	131.34	6173	267 11:20:45	-144.75	2520	267 10:41:17	133.38	2556
267 12:54:31	104.88	6174	267 13:05:38	-171.10	2521	267 12:22:35	108.06	2557
267 14:39:52	78.41	6175	267 14:50:31	162.56	2522	267 14:03:53	82.73	2558
267 16:25:14	51.95	6176	267 16:35:24	136.21	2523	267 15:45:11	57.41	2559
267 18:10:35	25.48	6177	267 18:20:16	109.87	2524	267 17:26:29	32.09	2560
267 19:55:56	-.98	6178	267 20:05:09	83.52	2525	267 19:07:47	6.76	2561
267 21:41:18	-27.45	6179	267 21:50:02	57.17	2526	267 20:49:05	-18.56	2562
267 23:26:39	-53.91	6180	267 23:34:55	30.83	2527	267 22:30:23	-43.89	2563
268 01:12:01	-80.38	6181	268 01:19:48	4.48	2528	268 00:11:41	-69.21	2564
268 02:57:22	-106.84	6182	268 03:04:41	-21.86	2529	268 01:52:59	-94.53	2565
268 04:42:43	-133.31	6183	268 04:49:34	-48.21	2530	268 03:34:17	-119.86	2566
268 06:28:05	-159.77	6184	268 06:34:26	-74.55	2531	268 05:15:35	-145.18	2567
268 08:13:26	173.76	6185	268 08:19:19	-100.90	2532	268 06:56:53	-170.51	2568
268 09:58:47	147.30	6186	268 10:04:12	-127.25	2533	268 08:38:11	164.17	2569
268 11:44:09	120.84	6187	268 11:49:05	-153.59	2534	268 10:19:29	138.85	2570
268 13:29:30	94.37	6188	268 13:33:58	-179.94	2535	268 12:00:47	113.52	2571
268 15:14:51	67.90	6189	268 15:18:51	153.72	2536	268 13:42:05	88.20	2572
268 17:00:13	41.44	6190	268 17:03:43	127.37	2537	268 15:23:24	62.86	2573
268 18:45:34	14.98	6191	268 18:48:36	101.02	2538	268 17:04:42	37.54	2574
268 20:30:56	-11.49	6192	268 20:33:29	74.68	2539	268 18:46:00	12.21	2575
269 22:16:17	-37.95	6193	268 22:18:22	48.33	2540	268 20:27:18	-13.11	2576
						268 22:08:36	-38.44	2577
						268 23:49:54	-63.76	2578
269 00:01:38	-64.42	6194	269 00:03:15	21.99	2541	269 01:31:12	-89.08	2579
269 01:47:00	-90.88	6195	269 01:48:08	-4.36	2542	269 03:12:30	-114.41	2580
269 03:32:21	-117.35	6196	269 03:33:01	-30.70	2543	269 04:53:48	-139.73	2581
269 05:17:42	-143.81	6197	269 05:17:53	-57.05	2544	269 06:35:06	-165.06	2582
269 07:03:04	-170.28	6198	269 07:02:46	-83.40	2545	269 08:16:24	169.62	2583
269 08:48:25	163.26	6199	269 08:47:39	-109.74	2546	269 09:57:42	144.30	2584
269 10:33:46	136.79	6200	269 10:32:32	-136.09	2547	269 11:39:00	118.97	2585
269 12:19:08	110.33	6201	269 12:17:25	-162.43	2548	269 13:20:18	93.65	2586
269 14:04:29	83.86	6202	269 14:02:18	171.22	2549	269 15:01:36	68.32	2587
269 15:49:51	57.40	6203	269 15:47:11	144.88	2550	269 16:42:54	43.00	2588
269 17:35:12	30.93	6204	269 17:32:03	118.53	2551	269 18:24:12	17.68	2589
269 19:20:33	4.47	6205	269 19:16:56	92.18	2552	269 20:05:30	-7.65	2590
269 21:05:55	-21.99	6206	269 21:01:49	65.84	2553	269 21:46:48	-32.97	2591
269 22:51:16	-48.46	6207	269 22:46:42	39.49	2554	269 23:28:07	-58.31	2592

West longitude is negative (-).

Satellite C1			Satellite C2			Satellite S1		
TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT	TIME (GMT) day hr mn sc	E. LONG. deg.dg	ORBIT
270 00:36:37	-74.93	6208	270 00:31:35	13.15	2555	270 01:09:25	-83.63	2593
270 02:21:59	-101.39	6209	270 02:16:28	-13.20	2556	270 02:50:43	-108.96	2594
270 04:07:20	-127.85	6210	270 04:01:20	-39.55	2557	270 04:32:01	-134.28	2595
270 05:52:41	-154.32	6211	270 05:46:13	-65.89	2558	270 06:13:19	-159.61	2596
270 07:38:03	179.22	6212	270 07:31:06	-92.24	2559	270 07:54:37	175.07	2597
270 09:23:24	152.75	6213	270 09:15:59	-118.58	2560	270 09:35:55	149.75	2598
270 11:08:46	126.29	6214	270 11:00:52	-144.93	2561	270 11:17:13	124.42	2599
270 12:54:07	99.82	6215	270 12:45:45	-171.27	2562	270 12:58:31	99.10	2600
270 14:39:28	73.36	6216	270 14:30:38	162.38	2563	270 14:39:49	73.77	2601
270 16:24:50	46.89	6217	270 16:15:30	136.03	2564	270 16:21:07	48.45	2602
270 18:10:11	20.43	6218	270 18:00:23	109.69	2565	270 18:02:25	23.13	2603
270 19:55:32	-6.04	6219	270 19:45:16	83.34	2566	270 19:43:43	-2.20	2604
270 21:40:54	-32.50	6220	270 21:30:09	57.00	2567	270 21:25:01	-27.52	2605
270 23:26:15	-58.97	6221	270 23:15:02	30.65	2568	270 23:06:19	-52.85	2606
271 01:11:36	-85.43	6222	271 00:59:55	4.31	2569	271 00:47:37	-78.17	2607
271 02:56:58	-111.90	6223	271 02:44:48	-22.04	2570	271 02:28:55	-103.49	2608
271 04:42:19	-138.36	6224	271 04:29:40	-48.39	2571	271 04:10:13	-128.82	2609
271 06:27:41	-164.82	6225	271 06:14:33	-74.73	2572	271 05:51:31	-154.14	2610
271 08:13:02	168.71	6226	271 07:59:26	-101.08	2573	271 07:32:50	-179.48	2611
271 09:58:23	142.24	6227	271 09:44:19	-127.42	2574	271 09:14:08	155.20	2612
271 11:43:45	115.78	6228	271 11:29:12	-153.77	2575	271 10:55:26	129.87	2613
271 13:29:06	89.32	6229	271 13:14:05	179.89	2576	271 12:36:44	104.55	2614
271 15:14:27	62.85	6230	271 14:58:57	153.54	2577	271 14:18:02	79.23	2615
271 16:59:49	36.39	6231	271 16:43:50	127.19	2578	271 15:59:20	53.90	2616
271 18:45:10	9.92	6232	271 18:28:43	100.85	2579	271 17:40:38	28.58	2617
271 20:30:31	-16.54	6233	271 20:13:36	74.50	2580	271 19:21:56	3.25	2618
271 22:15:53	-43.01	6234	271 21:58:29	48.16	2581	271 21:03:14	-22.07	2619
			271 23:43:22	21.81	2582	271 22:44:32	-47.40	2620
272 00:01:14	-69.47	6235	272 01:28:15	-4.54	2583	272 00:25:50	-72.72	2621
272 01:46:36	-95.94	6236	272 03:13:07	-30.88	2584	272 02:07:08	-98.04	2622
272 03:31:57	-122.40	6237	272 04:58:00	-57.23	2585	272 03:48:26	-123.37	2623
272 05:17:18	-148.87	6238	272 06:42:53	-83.57	2586	272 05:29:44	-148.69	2624
272 07:02:40	-175.33	6239	272 08:27:46	-109.92	2587	272 07:11:02	-174.02	2625
272 08:48:01	158.20	6240	272 10:12:39	-136.26	2588	272 08:52:20	160.66	2626
272 10:33:22	131.74	6241	272 11:57:32	-162.61	2589	272 10:33:38	135.34	2627
272 12:18:44	105.28	6242	272 13:42:24	171.04	2590	272 12:14:56	110.01	2628
272 14:04:05	78.81	6243	272 15:27:17	144.70	2591	272 13:56:14	84.69	2629
272 15:49:26	52.34	6244	272 17:12:10	118.35	2592	272 15:37:32	59.36	2630
272 17:34:48	25.88	6245	272 18:57:03	92.01	2593	272 17:18:51	34.03	2631
272 19:20:09	-.58	6246	272 20:41:56	65.66	2594	272 19:00:09	8.70	2632
272 21:05:31	-27.05	6247	272 22:26:49	39.31	2595	272 20:41:27	-16.62	2633
272 22:50:52	-53.51	6248				272 22:22:45	-41.94	2634
273 00:36:13	-79.98	6249	273 00:11:42	12.97	2596	273 00:04:03	-67.27	2635
273 02:21:35	-106.44	6250	273 01:56:34	-13.38	2597	273 01:45:21	-92.59	2636
273 04:06:56	-132.91	6251	273 03:41:27	-39.72	2598	273 03:26:39	-117.92	2637
273 05:52:17	-159.37	6252	273 05:26:20	-66.07	2599	273 05:07:57	-143.24	2638
273 07:37:39	174.16	6253	273 07:11:13	-92.41	2600	273 06:49:15	-168.57	2639
273 09:23:00	147.70	6254	273 08:56:06	-118.76	2601	273 08:30:33	166.11	2640
273 11:08:21	121.23	6255	273 10:40:59	-145.11	2602	273 10:11:51	140.79	2641
273 12:53:43	94.77	6256	273 12:25:51	-171.45	2603	273 11:53:09	115.46	2642
273 14:39:04	68.30	6257	273 14:10:44	162.20	2604	273 13:34:27	90.14	2643
273 16:24:25	41.84	6258	273 15:55:37	135.86	2605	273 15:15:45	64.81	2644
273 18:09:47	15.37	6259	273 17:40:30	109.51	2606	273 16:57:03	39.49	2645
273 19:55:08	-11.09	6260	273 19:25:23	83.16	2607	273 18:38:21	14.17	2646
273 21:40:30	-37.55	6261	273 21:10:16	56.82	2608	273 20:19:39	-11.16	2647
273 23:25:51	-64.02	6262	273 22:55:09	30.47	2609	273 22:00:57	-36.48	2648
						273 23:42:15	-61.81	2649

West longitude is negative (-).

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Morton L. Friedman: Goddard Space Flight Center, Greenbelt, Maryland.
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16. Abstract

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