

**Supplementary Online Material for “Earth-based Stellar Occultation Predictions for Jupiter, Saturn,  
Uranus, Neptune, Titan, and Triton: 2023–2050”**

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1. SATURN PREDICTION TABLES

Table 1. Geocentric Saturn Occultation Predictions 2023–2050 for  $K \leq 10$ 

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S23001**	2023-04-15 06:21:28.59	22 24 49.19365 -11 23 18.66374	4.3	0.607	160.37	28.51	10.410	-25.1	7.832	8.640	8.330	38.0	50.9
PgtX	2602435862784961664	22 24 49.20752 -11 23 19.23506	3.3	4.582	5.89	8.54		34.7	0.786	9.025	0	-11.3	14.5
S24001***	2024-08-06 17:12:21.22	23 18 59.47989 -06 43 01.47226	7.0	8.196	153.78	-15.13	8.814	87.4	7.716	9.161	8.444	136.2	146.4
PgtRgt	2631163146681256448	23 18 59.72295 -06 43 08.82476	7.2	52.390	5.01	2.62		34.2	0.913	8.857	0	-6.6	171.7
S25001	2025-09-26 07:27:05.92	23 55 44.80882 -03 12 06.45999	1.8	10.108	336.43	-19.92	8.551		9.739	11.904	11.223	242.1	174.1
PtRgt	2448869131022660480	23 55 44.53890 -03 11 57.19495	1.2	62.684	4.29	-1.64	64.889		0.353	11.899	0	-3.1	124.7
S26001	2026-10-15 23:54:31.88	00 41 06.80986 +01 28 47.59621	2.2	9.460	157.59	-19.36	8.454	79.7	9.863	11.655	11.066	347.5	167.5
PgtRgt	2549446927108355584	00 41 07.05038 +01 28 38.85143	1.7	58.005	3.28	-7.05		53.7		11.620	1	1.6	106.6
S26002	2026-11-13 13:30:06.95	00 34 20.90151 +00 49 07.78554	1.8	5.929	340.76	-12.23	8.670	-18.7	9.952	11.715	11.110	113.7	137.3
PgtRgt	2544086498687329408	00 34 20.77123 +00 49 13.38396	1.5	37.281	3.44	-6.30		-64.8		11.181	0	1.0	90.0
S26003	2026-11-17 10:13:33.22	00 33 42.50963 +00 45 49.64537	2.2	7.538	341.63	-10.75	8.715	-35.5	9.013	10.167	9.746	158.9	133.3
PgtRgt	2544083062713823104	00 33 42.35127 +00 45 56.79966	1.7	47.644	3.46	-6.23		-75.8	0.420	9.493	1	0.9	44.1
S29001	2029-01-08 15:58:37.65	02 10 28.40896 +10 31 35.98534	1.7	14.156	300.47	2.08	8.887		9.885	12.129	11.422	44.9	105.7
XRgt	2570406981697389568	02 10 27.58165 +10 31 43.16409	1.5	91.236	0.93	-16.93	4.107		0.284	9.672	0	10.7	172.4
S29002*	2029-07-19 00:57:19.09	03 22 51.43791 +16 17 15.28928	2.3	3.011	167.39	22.88	9.562	10.0	7.241	10.369	9.477	99.7	63.7
PgtRgt	54522689973491584	03 22 51.48358 +16 17 12.35144	1.9	20.879	-1.23	-22.65	23.656	34.2	1.510	10.515	0	16.4	158.5
S29003*	2029-10-23 19:01:26.43	03 23 54.21864 +16 03 39.93357	7.0	3.672	164.64	-17.79	8.211	37.8	9.565	11.224	10.679	93.6	157.4
PgtRgt	54500699740746240	03 23 54.28613 +16 03 36.39286	6.0	21.869	-1.26	-22.41	19.279	8.1	0.321	11.097	0	16.2	9.3
S29004	2029-11-14 11:03:18.54	03 17 04.99426 +15 37 35.41008	2.0	3.260	165.62	-20.04	8.145	34.6	8.898	11.211	10.484	190.0	177.4
PgtRgt	3039775592314752	03 17 05.05031 +15 37 32.25232	1.6	19.258	-1.05	-22.01	21.812	6.0	0.530	11.214	0	15.7	72.8
S29005	2029-11-14 12:31:33.69	03 17 03.81990 +15 37 29.22962	1.7	1.485	165.63	-20.04	8.145	24.1	8.377	10.903	10.160	167.9	177.3
PgtRgt	3039775591513728	03 17 03.84543 +15 37 27.79151	1.4	8.771	-1.05	-22.01	22.816	-5.6	0.696	10.905	0	15.7	72.1
S29006	2029-12-30 11:59:22.68	03 04 56.33769 +14 57 10.44926	2.0	4.436	171.04	-9.27	8.469	37.9	9.712	11.495	10.883	127.6	129.3
PgtRgt	30900679082708736	03 04 56.38536 +14 57 06.06781	1.6	27.246	-0.68	-21.38	8.540	20.9	0.318	10.661	0	15.1	166.6
S30001	2030-01-30 12:41:05.92	03 03 49.22502 +15 01 56.29874	1.7	12.524	151.03	5.92	8.936		9.810	12.364	11.580	86.3	97.5
XRt	30911738622828032	03 03 49.64381 +15 01 45.34232	1.7	81.172	-0.65	-21.46			0.398	11.042	0	15.1	138.0
S30002	2030-03-04 21:55:52.26	03 10 22.54854 +15 38 01.43190	2.0	5.061	341.39	22.07	9.477	-53.5	8.589	10.165	9.614	276.3	65.5
PgtRgt	31288909766656128	03 10 22.43673 +15 38 06.22882	1.7	34.790	-0.85	-22.05	23.247	-19.6		10.272	0	15.7	58.3
S30003	2030-03-07 22:38:48.34	03 11 19.24980 +15 42 35.64960	1.9	4.128	341.70	23.38	9.523	-47.3	6.224	8.804	8.027	262.9	62.7
PgtRgt	31196722588576128	03 11 19.16004 +15 42 39.56916	1.6	28.512	-0.88	-22.12	26.008	-12.2	2.163	8.974	0	15.8	21.6
S30004	2030-08-03 07:16:30.77	04 19 53.06611 +19 31 03.90032	2.4	0.761	171.77	22.68	9.482	-0.3	5.508	9.224	8.203	4.4	64.1
PgtRgt	48224275053110272	04 19 53.07384 +19 31 03.14766	1.9	5.230	-2.95	-25.38	23.045	11.3	3.908	9.361	0	19.6	110.3
S30005	2030-08-17 21:05:04.31	04 24 07.02059 +19 39 15.03689	2.4	8.458	173.02	16.34	9.255	62.3	7.562	9.005	8.493	143.9	77.1
PgtRgt	48279147555452544	04 24 07.09344 +19 39 06.64162	1.8	56.775	-3.07	-25.46	4.862	66.0	0.902	8.786	0	19.7	48.6
S30006	2030-10-14 20:07:08.59	04 26 18.86747 +19 35 28.18479	1.7	6.712	348.38	-10.66	8.364	-35.9	9.282	12.524	11.585	101.8	133.1
PgtRgt	48079238301299328	04 26 18.77185 +19 35 34.75963	1.3	40.716	-3.13	-25.37	8.396	-50.6	0.545	11.842	0	19.7	9.3
S30007*	2030-10-18 10:05:26.65	04 25 38.54922 +19 33 36.54719	3.2	3.761	348.83	-12.02	8.322	-15.5	8.395	11.909	10.924	248.6	136.8
PgtRgt	48089752381241856	04 25 38.49769 +19 33 40.23720	2.3	22.700	-3.11	-25.35	11.686	-32.1	0.871	11.357	0	19.6	33.6
S30008	2030-11-24 04:04:45.37	04 15 02.37895 +19 07 15.29075	1.6	8.094	170.53	-20.02	8.083	56.6	9.803	12.051	11.326	299.9	175.7
PgtRgt	48576973471345792	04 15 02.47293 +19 07 07.30733	1.2	47.451	-2.80	-25.04	12.500	46.2	0.333	12.052	0	19.2	160.1
S30009	2030-12-29 10:13:43.19	04 03 57.82181 +18 42 37.50194	1.5	0.488	172.28	-14.82	8.238	8.9	9.274	12.382	11.478	170.1	145.3
PgtRgt	50146633696229760	04 03 57.82645 +18 42 37.01844	1.0	2.916	-2.48	-24.75	15.124	-2.8		12.057	0	18.8	81.6
S31001	2031-02-06 21:16:04.46	03 59 25.97205 +18 39 44.69117	1.8	14.996	321.73	2.70	8.767		9.110	10.738	10.178	324.5	104.1
XRgt	49814924781710080	03 59 25.31845 +18 39 56.46490	1.0	95.354	-2.35	-24.75			0.442	8.562	0	18.8	68.5
S31002*	2031-02-26 09:14:58.57	04 01 32.49798 +18 51 20.21540	2.9	3.583	343.10	12.35	9.089	-39.1	9.755	12.339	11.554	126.1	85.0
PgtRgt	50185593342556032	04 01 32.42463 +18 51 23.64404	2.1	23.619	-2.41	-24.92	13.121	-9.5		11.816	0	18.9	26.3
S31003	2031-08-01 13:08:54.06	05 12 56.43379 +21 30 44.94500	2.5	6.481	355.77	28.96	9.663	-48.4	7.961	12.171	11.050	291.5	49.6
PgtRgt	3414247177797508736	05 12 56.39959 +21 30 51.40868	1.5	45.422	-4.41	-26.57	19.422	-48.7	1.486	12.573	0	21.5	152.1

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S31004	2031-08-05 19:59:41.13	05 14 43.31620 +21 32 30.69783	1.7	7.611	356.03	27.47	9.607	-57.9	9.370	12.273	11.394	185.1	53.3
PgtRgt	3414261574527884032	05 14 43.27850 +21 32 38.29089	1.1	53.036	-4.45	-26.57	13.701	-58.5	0.577	12.617	0	21.6	88.5
S31005	2031-12-07 22:48:51.34	05 14 22.94684 +21 26 04.29227	1.9	8.515	176.38	-20.01	8.045	53.2	8.976	12.134	11.189	20.3	175.5
PgtRgt	3414236732437048192	05 14 22.98540 +21 25 55.79392	1.0	49.686	-4.44	-26.46	11.608	54.4	0.624	12.134	0	21.5	94.8
S31006	2031-12-27 08:25:20.64	05 07 38.26262 +21 20 11.92765	2.1	3.230	176.66	-18.77	8.082	18.8	8.175	11.089	10.221	215.4	162.8
PgtRgt	3414944680488084736	05 07 38.27612 +21 20 08.70260	1.4	18.936	-4.27	-26.49	17.865	20.8	0.833	11.020	0	21.4	2.1
S31007	2031-12-31 04:12:59.78	05 06 24.16199 +21 19 03.96445	2.1	5.282	356.78	-18.06	8.103	-33.6	9.832	13.028	12.098	274.4	158.7
PgtRgt	3408942755748032256	05 06 24.14074 +21 19 09.23848	1.4	31.045	-4.24	-26.49	15.576	-31.6	0.396	12.917	0	21.4	48.0
S32001	2032-01-28 01:52:58.89	04 59 37.51508 +21 15 24.73080	2.2	5.150	180.06	-9.00	8.376	28.8	9.657	12.361	11.541	280.2	128.7
PgtRgt	3412081590864663552	04 59 37.51473 +21 15 19.58120	1.3	31.282	-4.07	-26.54	7.883	36.7	0.406	11.494	0	21.3	57.2
S32002	2032-03-03 05:04:18.38	04 59 06.97569 +21 22 42.83774	2.3	6.103	346.63	8.09	8.914	-49.4	9.760	12.255	11.475	197.6	93.1
PgtRgt	3412095914578812928	04 59 06.87465 +21 22 48.77557	1.3	39.459	-4.06	-26.68	6.762	-33.2	0.396	11.271	0	21.4	154.0
S32003	2032-03-14 04:10:44.16	05 00 57.02045 +21 27 54.29471	2.7	3.296	349.89	13.54	9.096	-28.7	7.132	10.149	9.274	200.7	82.6
PgtRgt	3412182058740339712	05 00 56.97903 +21 27 57.53943	2.0	21.744	-4.11	-26.73	13.019	-16.4	1.513	9.726	0	21.5	49.0
S32004	2032-03-31 03:39:52.66	05 05 28.93848 +21 37 47.65966	2.4	2.316	172.10	21.40	9.367	12.5	9.169	10.901	10.300	192.8	66.8
PgtRgt	3415157886960444416	05 05 28.96134 +21 37 45.36518	1.6	15.738	-4.23	-26.82	20.903	20.3	0.481	10.975	0	21.7	161.8
S32005	2032-04-07 06:17:50.19	05 07 55.43570 +21 42 17.13583	5.6	0.451	172.74	24.40	9.473	-0.0	4.775	5.723	5.437	146.9	60.4
PgtRgt	3415147613398691200	05 07 55.43982 +21 42 16.68826	4.0	3.099	-4.29	-26.85	24.527	6.5	3.014	5.939	0	21.7	98.9
S32006*	2032-04-15 03:43:39.65	05 10 57.98731 +21 47 27.05741	6.7	1.216	173.38	27.48	9.583	6.4	8.131	8.353	8.221	178.4	53.3
PgtRgt	3415066490056691712	05 10 57.99741 +21 47 25.84927	4.2	8.452	-4.37	-26.88	27.329	11.2	0.567	8.698	1	21.8	9.3
S32007	2032-08-13 11:15:07.97	06 13 02.35150 +22 24 35.07393	2.1	3.774	1.23	29.65	9.665	-20.7	9.500	12.325	11.477	322.5	47.8
PgtRgt	3376984939189479552	06 13 02.35737 +22 24 38.84675	1.6	26.457	-5.73	-26.23	27.654	-34.5	0.529	12.753	0	22.4	127.7
S32008	2032-08-17 12:16:36.32	06 14 46.69182 +22 24 11.09829	4.4	5.893	181.43	28.27	9.614	49.6	8.455	14.124	12.789	303.6	51.3
PgtRgt	3376976658492394752	06 14 46.68118 +22 24 05.20695	3.4	41.094	-5.76	-26.18	21.940	37.3	1.552	14.500	0	22.4	176.3
S32009	2032-08-17 22:39:58.99	06 14 57.57298 +22 23 54.85276	2.4	6.537	1.46	28.12	9.609	-42.9	7.585	9.958	9.209	147.4	51.7
PgtRgt	3376976795931337600	06 14 57.58501 +22 24 01.38777	1.8	45.559	-5.76	-26.17	19.789	-54.4	1.125	10.328	0	22.4	171.6
S32010	2032-08-30 09:18:38.68	06 19 46.96892 +22 21 56.16988	1.7	2.255	2.06	23.39	9.437	-7.6	9.353	13.200	12.159	336.6	62.5
PgtRgt	3376834885915089664	06 19 46.97476 +22 21 58.42307	1.4	15.431	-5.84	-26.02	23.565	-24.5	0.638	13.369	0	22.3	4.3
S32011	2032-09-03 15:59:45.04	06 21 14.77166 +22 21 03.85570	2.8	8.860	2.25	21.59	9.373	47.4	7.753	11.906	10.796	232.5	66.3
PRgt	3377160169558092928	06 21 14.79671 +22 21 12.70826	2.2	60.228	-5.87	-25.98	5.874	26.6	1.611	11.989	0	22.3	53.3
S32012	2032-11-28 00:33:18.58	06 22 55.70202 +22 19 57.18136	1.7	8.432	182.87	-16.28	8.143	47.4	9.414	12.028	11.227	20.4	150.5
PgtRgt	3377150793646825472	06 22 55.67162 +22 19 48.75954	1.2	49.796	-5.90	-25.91	10.372	60.1	0.398	11.805	0	22.3	93.9
S32013	2032-12-03 15:23:12.94	06 21 14.77166 +22 21 03.85494	2.5	5.649	182.81	-17.69	8.102	26.6	7.753	11.906	10.796	152.0	156.6
PgtRgt	3377160169558092928	06 21 14.75173 +22 20 58.21235	1.9	33.193	-5.87	-25.97	15.728	42.9	1.392	11.773	0	22.3	166.0
S32014	2032-12-08 04:44:50.03	06 19 46.96890 +22 21 56.16940	1.5	1.268	2.76	-18.60	8.075	-17.1	9.353	13.200	12.159	306.7	161.6
PgtRgt	3376834885915089664	06 19 46.97330 +22 21 57.43615	1.3	7.427	-5.84	-26.02	19.332	1.7	0.546	13.121	0	22.3	129.4
S32015	2032-12-12 03:15:23.13	06 18 27.75968 +22 23 00.59034	1.5	10.657	182.71	-19.21	8.057	26.6	9.427	13.219	12.173	324.9	165.9
PtRgt	3376843716366371072	06 18 27.72333 +22 22 49.94549	1.2	62.272	-5.82	-26.07	2.625	13.176	0	13.176	0	22.4	73.7
S32016* <sup>d</sup>	2032-12-31 14:13:22.91	06 11 34.64386 +22 27 05.81846	5.0	4.919	2.53	-19.88	8.039	-37.9	8.418	11.012	10.107	139.5	172.6
PgtRgt	3425016176936385024	06 11 34.65954 +22 27 10.73277	3.5	28.683	-5.70	-26.30	18.439	-21.8	0.622	11.006	0	22.4	175.0
S32017** <sup>d</sup>	2032-12-31 14:17:41.89	06 11 34.58368 +22 27 06.94337	3.7	3.832	2.53	-19.88	8.039	-31.6	8.418	11.212	9.997	138.4	172.6
PgtRgt	3425016176933235072	06 11 34.59590 +22 27 10.77172	2.7	22.345	-5.70	-26.30	19.364	-14.8	0.622	11.206	0	22.4	175.0
S33001	2033-01-09 17:50:35.74	06 08 25.46266 +22 29 01.83703	3.0	4.457	2.54	-18.75	8.072	-35.3	9.745	14.404	13.229	75.4	162.6
PgtRgt	3423573411521430400	06 08 25.47691 +22 29 06.28932	2.2	26.091	-5.65	-26.41	17.782	-18.9	0.555	14.334	0	22.5	52.3
S33002*	2033-01-14 23:11:23.95	06 06 44.20640 +22 30 06.44129	4.3	2.828	2.61	-17.72	8.102	-25.9	8.025	10.206	9.528	349.6	156.9
PgtRgt	3423761359289822592	06 06 44.21571 +22 30 09.26597	3.4	16.617	-5.62	-26.46	17.815	-8.5	0.733	10.075	0	22.5	16.9
S33003	2033-01-18 19:16:38.85	06 05 34.06377 +22 30 55.12756	2.2	0.913	182.69	-16.81	8.130	-3.5	9.957	13.921	12.853	44.2	152.7
PgtRgt	3423752455822302464	06 05 34.06067 +22 30 54.21594	1.5	5.381	-5.60	-26.50	17.458	14.6	0.417	13.733	0	22.5	63.7
S33004	2033-01-24 01:00:41.87	06 04 05.20643 +22 31 58.32111	1.3	4.274	182.89	-15.35	8.173	17.8	9.467	12.103	11.288	312.7	147.0
PgtRgt	3423796646740541568	06 04 05.19092 +22 31 54.05167	1.0	25.339	-5.57	-26.55	14.703	34.7	0.416	11.815	0	22.5	126.3

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S33005	2033-01-30 11:01:27.46	06 02 28.97310 +22 33 04.32277	3.7	1.131	3.29	-13.24	8.237	-16.6	6.474	11.453	10.183	155.8	140.2
PgtRgt	3423718336601355904	06 02 28.97781 +22 33 05.45194	2.7	6.759	-5.54	-26.61	13.811	2.6	2.998	11.006	0	22.5	146.3
S33006	2033-04-20 02:34:59.76	06 08 18.24073 +22 46 09.05082	3.0	0.373	359.09	23.61	9.444	2.5	9.572	10.309	9.973	205.3	62.0
PgtRgt	3425270542078711040	06 08 18.24034 +22 46 09.42397	2.1	2.558	-5.66	-26.69	23.935	-7.9	0.319	10.489	0	22.8	175.4
S33007	2033-04-20 13:13:12.07	06 08 27.81207 +22 46 13.59165	3.3	2.104	179.12	23.79	9.451	20.1	7.106	12.166	10.878	45.4	61.6
PgtRgt	3425270679517659520	06 08 27.81442 +22 46 11.48702	2.5	14.425	-5.66	-26.69	23.486	9.9	12.354	0	0	22.8	173.8
S33008	2033-04-23 10:58:11.48	06 09 32.23204 +22 46 24.61924	2.7	1.194	179.34	24.96	9.493	14.0	9.921	12.867	11.988	76.5	59.1
PgtRgt	3425088706047309056	06 09 32.23307 +22 46 23.42502	1.9	8.218	-5.68	-26.67	25.145	3.1	0.409	13.107	0	22.8	136.4
S33009	2033-04-25 05:08:23.69	06 10 12.53531 +22 46 21.91116	2.0	7.341	359.46	25.66	9.518	-51.2	9.835	12.783	11.919	162.4	57.5
PgtRgt	3425086511320434304	06 10 12.53035 +22 46 29.25116	1.5	50.674	-5.69	-26.65	15.194	-58.4	0.429	13.054	0	22.8	111.6
S33010	2033-04-26 08:41:41.37	06 10 39.39492 +22 46 37.24870	2.0	4.779	179.55	26.10	9.534	39.5	7.255	11.023	10.006	108.1	56.5
PgtRgt	3425075069527522816	06 10 39.39769 +22 46 32.46966	1.7	33.043	-5.70	-26.64	22.523	29.7	11.312	0	0	22.8	94.8
S33011	2033-12-02 17:31:36.54	07 26 21.95207 +21 35 49.33870	1.8	11.599	189.81	-13.31	8.247		9.250	11.491	10.800	137.3	140.4
XRt	865976491908550528	07 26 21.81042 +21 35 37.90866	1.5	69.379	-6.67	-23.56			0.451	11.049	0	21.5	88.8
S34001	2034-01-01 22:30:09.82	07 17 17.32241 +21 56 00.82338	2.5	7.948	8.77	-19.91	8.054	-61.8	9.829	10.812	10.450	30.6	173.2
PgtRgt	3367187431590960896	07 17 17.40951 +21 56 08.67796	2.0	46.425	-6.60	-24.15	16.189	-37.2	0.257	10.807	0	21.9	45.0
S34002	2034-01-03 00:24:32.29	07 16 54.81079 +21 56 59.78443	1.4	2.661	188.74	-19.98	8.052	-0.4	9.667	11.918	11.222	0.9	174.4
PgtRgt	3367197975733377920	07 16 54.78177 +21 56 57.15405	1.2	15.537	-6.60	-24.17	22.522	32.4	0.356	11.916	0	21.9	29.6
S34003	2034-01-19 05:06:05.54	07 11 14.72210 +22 08 50.23107	2.6	2.994	188.36	-19.47	8.068	2.2	8.027	11.124	10.245	273.1	167.7
PgtRgt	3367351460684986752	07 11 14.69078 +22 08 47.26860	2.0	17.518	-6.55	-24.51	21.538	33.8	11.095	0	0	22.1	174.6
S34004	2034-01-21 09:24:32.87	07 10 30.34676 +22 10 10.40201	1.9	7.156	8.33	-19.18	8.077	-56.9	8.294	10.363	9.684	206.2	165.4
PgtRgt	3367394105417878272	07 10 30.42141 +22 10 17.48250	1.6	41.922	-6.55	-24.56	16.852	-31.4	0.643	10.317	0	22.1	152.8
S34005*	2034-02-17 04:32:27.22	07 03 01.68880 +22 25 17.58032	4.0	11.656	8.67	-11.97	8.293		9.861	10.612	10.333	250.9	136.4
XRt	3368025396891496064	07 03 01.81554 +22 25 29.10300	3.1	70.110	-6.47	-25.01			0.236	10.054	0	22.4	159.1
S34006	2034-04-20 18:02:22.51	07 05 12.40591 +22 29 28.48602	2.0	1.101	184.81	17.45	9.252	20.1	9.429	11.695	10.999	347.3	74.8
PgtRgt	3367842156406157696	07 05 12.39928 +22 29 27.38853	1.8	7.386	-6.50	-25.02	18.843	-4.8	11.547	0	0	22.4	47.3
S34007	2034-04-23 11:26:48.50	07 05 57.90619 +22 28 36.77946	1.8	3.503	185.00	18.69	9.296	36.4	9.520	10.859	10.391	83.7	72.3
PgtRgt	3368201937227096448	07 05 57.88419 +22 28 33.28901	1.6	23.619	-6.51	-24.98	18.874	12.8	0.352	10.786	0	22.4	9.1
S34008	2034-10-06 02:31:11.04	08 22 45.60169 +19 34 00.96764	2.7	6.777	191.95	20.24	9.369	65.9	9.628	10.814	10.390	73.5	69.1
PgtRgt	663383232450046592	08 22 45.50243 +19 33 54.33663	1.8	46.050	-6.86	-19.99	18.298	34.3	0.336	10.827	0	19.4	5.8
S34009	2034-10-11 21:30:13.40	08 24 22.31727 +19 28 57.96807	1.7	7.705	11.84	17.60	9.278	-43.8	9.450	11.982	11.224	143.5	74.4
PgtRgt	663352102527165312	08 24 22.42908 +19 29 05.50780	1.3	51.845	-6.85	-19.86	12.943	-71.0	0.492	11.843	0	19.4	69.8
S35001	2035-01-10 04:17:56.19	08 19 00.04862 +19 58 33.14280	2.4	1.417	14.51	-19.39	8.113	-32.3	8.154	8.726	8.493	311.2	166.9
PgtRgt	663653059476188416	08 19 00.07382 +19 58 34.51363	1.7	8.336	-6.87	-20.50	26.870	15.3	0.505	8.692	0	19.9	171.9
S35002	2035-01-19 18:37:42.79	08 15 47.74524 +20 10 17.65251	2.2	12.111	194.10	-20.11	8.092		9.198	11.272	10.618	86.0	177.4
XRt	675600146664190976	08 15 47.53575 +20 10 05.90534	1.7	71.081	-6.87	-20.78			0.394	11.279	0	20.1	58.7
S36001*	2036-02-07 13:41:43.47	09 11 31.46269 +17 17 50.33569	13.0	4.491	18.25	-20.12	8.161	-53.9	9.876	12.072	11.376	155.7	177.1
PgtRgt	635022665744359424	09 11 31.56091 +17 17 54.59943	9.9	26.581	-6.68	-16.37	32.364	-1.5	0.316	12.079	0	17.1	58.0
S36002	2036-02-10 13:42:59.57	09 10 33.32855 +17 22 31.97519	2.9	3.402	198.11	-19.99	8.165	-6.2	9.081	11.049	10.424	152.1	173.9
PgtRgt	635033493357566592	09 10 33.25471 +17 22 28.74078	2.2	20.143	-6.69	-16.47	33.105	47.8	0.427	11.048	0	17.2	13.4
S36003	2036-03-07 16:54:24.82	09 02 57.02448 +17 56 45.35976	2.6	3.878	16.95	-15.00	8.315	-49.6	8.286	9.363	8.974	76.6	145.7
PgtRgt	612094279188742016	09 02 57.10375 +17 56 49.06853	1.9	23.385	-6.74	-17.25	23.001	1.0	0.542	9.050	0	17.8	29.7
S36004	2036-03-08 16:33:33.75	09 02 43.00257 +17 57 47.51897	2.1	2.683	16.91	-14.69	8.324	-42.8	9.611	11.766	11.102	80.8	144.7
PgtRgt	612094962086986240	09 02 43.05728 +17 57 50.08448	1.7	16.196	-6.74	-17.27	23.297	9.4	0.367	11.431	0	17.8	15.4
S36005	2036-06-12 07:57:09.26	09 10 33.32831 +17 22 31.96152	3.5	6.664	197.15	27.33	9.742	71.8	9.081	11.049	10.424	117.6	53.4
PgtRgt	635033493357566592	09 10 33.19107 +17 22 25.59279	2.7	47.085	-6.69	-16.47	32.240	31.3	0.509	11.388	0	17.2	164.8
S37001	2037-01-17 04:23:36.54	10 15 28.11203 +12 27 19.89904	2.3	11.797	23.98	-15.02	8.399		9.715	12.193	11.418	331.5	145.6
XRgt	3880691488115644288	10 15 28.43942 +12 27 30.67574	1.9	71.858	-6.02	-9.84				11.882	0	12.3	154.2
S37002	2037-02-15 02:44:09.31	10 07 29.39955 +13 16 06.38810	2.1	7.429	21.68	-20.15	8.248	-74.9	7.654	10.003	9.294	325.9	176.7
PgtRgt	3881962210025024896	10 07 29.58755 +13 16 13.29056	1.6	44.440	-6.13	-10.85	40.042	-23.3	0.905	10.011	0	13.1	176.1

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch		$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric	Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S37003	2037-03-06 12:59:46.54	10 01 35.84616	+13 49 33.76525	2.4	7.240	200.56	-18.69	8.292	23.0	6.648	8.853	8.166	151.3	161.8
PgtRgt	615385869108696960	10 01 35.67165	+13 49 26.98510	1.6	43.542	-6.21	-11.56	34.100	73.0	1.432	8.779	0	13.6	80.2
S37004	2037-03-30 09:07:28.03	09 55 49.78581	+14 19 44.14548	2.9	1.492	18.96	-12.06	8.494	-38.6	7.435	11.026	9.996	184.5	136.6
PgtRgt	615301245368208128	09 55 49.81917	+14 19 45.55568	2.3	9.194	-6.28	-12.21	26.435	19.5	1.493	10.477	0	14.2	28.8
S38001	2038-02-21 13:28:14.39	11 00 53.72962	+08 33 24.81189	3.8	11.985	24.06	-19.68	8.364		9.962	11.164	10.734	172.1	169.2
Xrt	3866733973980086272	11 00 54.05899	+08 33 35.75456	4.5	72.705	-5.33	-4.85			0.251	11.146	0	8.4	15.9
S38002	2038-06-16 01:30:44.82	10 48 51.55007	+09 37 38.65482	3.0	0.216	204.49	17.06	9.575	36.5	8.036	10.287	9.595	235.6	75.4
PgtX	3869381872857981312	10 48 51.54403	+09 37 38.45729	2.2	1.501	-5.53	-6.20		-33.5	0.863	10.115	0	9.4	90.4
S41001	2041-05-02 17:01:58.93	13 13 58.63922	-04 51 51.41827	3.8	8.212	20.56	-17.84	8.755	-79.4	8.025	10.266	9.574	82.5	156.7
PgtRgt	3635760154744472960	13 13 58.83220	-04 51 43.73062	2.9	52.141	-2.47	10.85		-41.8	0.843	10.142	0	-5.1	128.8
S43001*	2043-05-07 17:02:10.31	14 51 07.86038	-13 42 37.92962	35.5	8.328	16.50	-20.20	8.866	-71.2	8.781	11.095	10.232	102.4	176.7
PgtRgt	6311378304588033920	14 51 08.02269	-13 42 29.94528	30.5	53.553	0.27	20.17	10.883	-49.1	0.557	11.106	0	-13.9	161.2
S43002*	2043-09-21 17:47:59.65	14 51 30.48736	-14 14 12.21068	4.5	6.323	18.72	30.00	10.564	-38.2	9.858	12.253	11.509	316.0	46.7
PgtRgt	6310500993092031232	14 51 30.62698	-14 14 06.22282	3.6	48.448	0.28	20.69	25.043	-67.5		12.693	0	-14.4	168.0
S44001	2044-04-03 16:59:49.57	15 49 26.85740	-17 42 47.94148	4.2	4.646	15.48	-11.49	9.208	-45.6	9.546	11.389	10.761	150.3	134.9
PgtRgt	6260640928213402496	15 49 26.94419	-17 42 43.46468	3.3	31.024	2.04	23.89	11.290	-19.4		10.787	0	-17.8	153.2
S44002	2044-04-14 22:35:55.23	15 47 13.76245	-17 34 24.62381	3.9	2.464	14.24	-15.26	9.089	-30.2	9.044	11.609	10.843	54.7	146.4
PgtRgt	6260473355767708416	15 47 13.80489	-17 34 22.23604	3.0	16.243	1.97	23.77	16.355	-3.8	0.549	11.315	0	-17.7	8.3
S44003*	2044-04-30 20:13:23.19	15 43 07.65368	-17 20 07.83039	82.2	6.762	13.36	-18.91	8.976	-57.1	9.324	12.265	11.338	73.6	162.9
PgtRgt	6261279710107361664	15 43 07.76283	-17 20 01.25164	53.3	44.023	1.85	23.56	14.173	-37.7		12.204	0	-17.5	154.0
S44004	2044-05-15 13:25:51.47	15 38 45.15100	-17 05 33.93670	3.1	6.450	12.82	-20.18	8.936	-54.6	9.449	11.867	11.131	159.9	177.1
PgtRgt	6261454876055344896	15 38 45.25087	-17 05 27.64816	2.4	41.803	1.71	23.35	15.692	-35.3	0.442	11.876	0	-17.2	38.1
S44005	2044-05-19 00:08:21.51	15 37 42.11730	-17 02 05.64250	3.3	2.984	12.70	-20.18	8.936	-32.1	9.807	10.950	10.540	355.6	177.0
PgtRgt	6261454120140877568	15 37 42.16308	-17 02 02.73162	2.6	19.342	1.68	23.30	20.870	-8.7	0.288	10.959	0	-17.2	78.9
S44006*	2044-08-04 15:39:04.60	15 24 37.08133	-16 30 36.33750	10.7	3.765	31.71	4.19	9.721	4.7	8.914	11.253	10.515	43.1	100.7
PgtRgt	6258727945477949440	15 24 37.21895	-16 30 33.13509	8.1	26.543	1.29	22.86	6.359	-55.9	0.554	9.557	0	-16.7	33.5
S44007	2044-10-04 15:50:19.13	15 38 46.20878	-17 34 32.50620	3.9	0.308	194.96	30.60	10.649	17.2	9.655	12.278	11.468	343.7	45.1
PgtRgt	6261212227582346624	15 38 46.20325	-17 34 32.80473	2.4	2.382	1.72	23.84	34.455	-12.3	0.482	12.740	0	-17.7	106.3
S45001	2045-01-30 23:16:06.11	16 31 18.50317	-20 02 52.85013	4.8	5.361	7.32	23.72	10.416	-39.6	9.503	12.929	11.966	128.8	61.6
PgtRgt	6052759872519258496	16 31 18.55169	-20 02 47.53244	3.3	40.499	3.28	25.76	17.721	-46.6	0.636	13.114	0	-20.1	145.0
S45002	2045-04-13 21:11:33.28	16 37 30.34353	-20 06 17.14787	3.2	4.555	190.49	-10.77	9.284	25.4	9.500	12.905	11.950	89.7	133.0
PgtRgt	4130975995710675712	16 37 30.28470	-20 06 21.62672	2.2	30.672	3.45	25.74	9.665	39.0	0.549	12.233	0	-20.2	92.8
S45003	2045-05-19 15:24:13.37	16 28 42.04529	-19 46 17.52180	6.3	0.574	188.61	-19.74	9.002	-2.0	9.395	14.544	13.281	139.1	169.7
PgtRgt	6052826289893718656	16 28 42.03921	-19 46 18.08895	4.6	3.745	3.20	25.52	20.086	9.9		14.530	0	-19.9	151.3
S45004	2045-05-27 09:05:56.34	16 26 18.55888	-19 41 07.60575	5.4	6.841	188.44	-20.16	8.988	43.5	8.752	12.632	11.575	225.4	177.1
PgtRgt	6244970379252440576	16 26 18.48787	-19 41 14.37287	3.5	44.594	3.13	25.47	13.723	52.2	0.857	12.641	0	-19.8	43.4
S45005	2045-07-09 01:45:07.68	16 14 38.38860	-19 18 48.28145	4.1	1.142	186.13	-12.81	9.220	4.4	9.490	13.574	12.517	290.6	138.5
PgtRgt	6245607889838125824	16 14 38.37998	-19 18 49.41648	2.8	7.634	2.80	25.24	12.835	11.7	0.618	13.090	0	-19.4	149.5
S46001	2046-01-30 17:15:23.29	17 15 35.79705	-21 35 18.78879	6.9	5.304	183.87	28.48	10.620	42.8	9.870	14.564	13.358	230.6	50.7
PgtRgt	4115744431101769088	17 15 35.77136	-21 35 24.08029	4.8	40.851	4.48	26.60	21.243	43.8	0.724	14.948	0	-21.6	21.3
S46002	2046-02-02 00:07:11.87	17 16 27.28129	-21 36 17.26816	4.4	5.360	3.74	27.62	10.590	-44.3	9.653	13.344	12.321	125.6	52.8
PgtRgt	4115763981793858048	17 16 27.30636	-21 36 11.91928	3.0	41.171	4.50	26.60	20.473	-43.0	0.570	13.694	0	-21.7	10.1
S46003	2046-02-03 07:46:58.43	17 16 56.39433	-21 36 36.70867	5.5	1.440	183.66	27.11	10.572	10.6	9.727	14.118	12.934	9.5	54.0
PgtRgt	4115013943085406720	17 16 56.38774	-21 36 38.14549	3.9	11.040	4.51	26.60	26.696	12.5	0.668	14.448	0	-21.7	25.2
S46004	2046-02-05 02:28:59.57	17 17 34.79616	-21 37 16.33741	11.7	4.411	3.56	26.40	10.548	-36.4	7.791	12.996	11.607	87.4	55.7
PgtRgt	4115016039029356416	17 17 34.81584	-21 37 11.93441	7.5	33.744	4.53	26.59	22.066	-34.6	2.203	13.298	0	-21.7	46.3
S46005	2046-02-05 14:33:08.65	17 17 45.47524	-21 37 28.88521	5.5	7.741	3.53	26.20	10.541		9.931	14.073	12.960	265.9	56.1
PtRgt	4115015901590367104	17 17 45.50939	-21 37 21.15901	3.4	59.180	4.53	26.59	6.768		0.486	14.365	0	-21.7	52.2
S46006	2046-02-06 18:22:00.06	17 18 09.89281	-21 37 35.67596	7.1	6.210	183.45	25.72	10.525	50.1	9.262	14.005	12.743	207.7	57.2
PgtRgt	4115003596458033024	17 18 09.86598	-21 37 41.87502	4.1	47.406	4.54	26.59	16.316	51.8	0.908	14.278	0	-21.7	65.9

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S46007	2046-02-06 22:18:25.47	17 18 13.25854 -21 37 50.58195	5.7	5.843	3.45	25.66	10.523	-48.5	8.446	12.709	11.589	148.4	57.4
PgtRgt	4115005005207294464	17 18 13.28380 -21 37 44.74891	3.6	44.594	4.54	26.59	17.618	-46.7	1.149	12.980	0	-21.7	67.8
S46008	2046-02-07 05:07:58.44	17 18 19.18729 -21 37 49.15865	7.1	0.534	183.43	25.54	10.519	3.0	9.420	14.361	13.117	45.8	57.6
PgtRgt	4115004833408602496	17 18 19.18500 -21 37 49.69165	4.3	4.073	4.55	26.59	25.529	5.5	0.874	14.627	0	-21.7	71.1
S46009	2046-02-10 06:11:23.51	17 19 20.77609 -21 38 40.78554	8.4	0.997	3.25	24.26	10.475	-9.4	9.653	14.894	13.579	27.2	60.5
PgtRgt	4115094413578461184	17 19 20.78013 -21 38 39.79023	5.9	7.574	4.57	26.59	24.129	-6.5	0.867	15.103	0	-21.7	106.7
S46010	2046-02-11 12:30:36.68	17 19 45.46193 -21 39 04.87329	4.3	5.787	3.17	23.72	10.456	-47.9	8.500	13.169	11.990	291.2	61.7
PgtRgt	4115048715120678144	17 19 45.48489 -21 38 59.09489	2.9	43.889	4.58	26.58	16.583	-45.6	1.220	13.354	0	-21.7	121.6
S46011	2046-02-15 23:45:28.78	17 21 08.69235 -21 39 57.94109	4.8	2.634	182.89	21.76	10.389	18.9	8.986	13.244	12.116	118.4	65.8
PgtRgt	4115037685644211328	17 21 08.68282 -21 40 00.57138	3.1	19.845	4.61	26.57	20.650	22.5	0.863	13.335	0	-21.7	174.0
S46012	2046-02-18 11:34:18.59	17 21 52.13416 -21 40 39.16180	8.1	8.778	2.74	20.64	10.351		9.866	14.752	13.534	299.0	68.2
XRt	4115035486621485312	17 21 52.16428 -21 40 30.39335	5.1	65.904	4.63	26.57			0.698	14.786	0	-21.7	146.8
S46013	2046-02-27 16:17:33.27	17 24 13.54856 -21 41 49.37535	8.7	4.973	182.09	16.34	10.205	36.4	9.584	14.890	13.560	219.7	76.9
PgtRgt	4114859977094252544	17 24 13.53554 -21 41 54.34538	5.9	36.809	4.69	26.55	13.158	41.1	0.885	14.671	0	-21.7	14.5
S46014	2046-03-01 21:45:59.69	17 24 43.03136 -21 42 17.90890	16.1	9.161	1.92	15.26	10.168		7.501	14.040	12.497	135.5	79.0
XRt	4114859255539679488	17 24 43.05336 -21 42 08.75298	10.7	67.561	4.70	26.54				13.746	0	-21.7	15.7
S46015	2046-03-04 01:32:53.28	17 25 09.80284 -21 42 20.20449	5.1	0.403	181.72	14.20	10.133	-0.2	8.928	13.766	12.520	76.7	81.1
PgtRgt	4120816924928289024	17 25 09.80197 -21 42 20.60769	3.3	2.965	4.71	26.54	14.319	6.4	1.023	13.394	0	-21.7	41.1
S46016	2046-03-04 16:52:00.17	17 25 17.36705 -21 42 22.31067	5.5	1.420	181.67	13.89	10.122	7.6	9.962	11.863	11.210	206.4	81.7
PgtRgt	4120816473911221248	17 25 17.36414 -21 42 23.72935	3.5	10.421	4.71	26.54	13.817	14.2	0.348	11.467	0	-21.7	48.7
S46017	2046-03-07 09:18:11.18	17 25 47.39675 -21 42 33.72317	6.2	1.267	181.41	12.55	10.078	6.1	9.885	14.423	13.250	317.3	84.3
PgtRgt	4120814691545078784	17 25 47.39452 -21 42 34.98952	4.1	9.259	4.72	26.53	12.557	13.3		13.917	0	-21.7	80.2
S46018	2046-03-17 00:40:45.66	17 27 10.88217 -21 42 59.89520	6.7	7.877	359.99	7.71	9.917	-65.5	9.819	14.470	13.277	77.5	93.6
PgtRgt	4120805792372372224	17 27 10.88205 -21 42 52.01830	4.9	56.654	4.76	26.51	3.165	-61.0	0.622	13.436	0	-21.8	159.7
S46019	2046-03-18 10:02:26.13	17 27 19.71756 -21 42 54.10177	7.1	2.474	359.65	7.02	9.894	-23.9	9.861	14.747	13.508	295.8	94.9
PgtRgt	4120805173897032576	17 27 19.71647 -21 42 51.62815	4.9	17.750	4.76	26.50	6.939	-13.1	0.657	13.609	0	-21.8	140.5
S46020	2046-03-23 09:58:10.06	17 27 44.73429 -21 42 46.33527	16.8	1.619	357.69	4.53	9.811	-19.6	6.335	12.282	10.813	292.0	99.8
PgtRgt	4117826352042608384	17 27 44.72967 -21 42 44.71744	10.8	11.518	4.77	26.49	4.758	-4.4	5.115	10.670	0	-21.7	66.0
S46021*	2046-03-26 05:22:20.36	17 27 54.12477 -21 42 37.09412	44.8	0.106	175.32	3.15	9.765	-9.7	6.879	14.842	13.079	358.2	102.5
PgtRgt	4117826218935136512	17 27 54.12539 -21 42 37.19945	29.3	0.748	4.77	26.49	3.534	11.0		12.834	0	-21.7	25.7
S46022	2046-03-29 19:32:18.81	17 28 01.12314 -21 42 19.47588	6.6	4.597	165.68	1.40	9.707	13.0	9.850	14.538	13.336	142.2	106.1
PgtRgt	4117825497411079808	17 28 01.20474 -21 42 23.92952	4.2	32.360	4.77	26.48	1.683	49.6	0.622	11.654	0	-21.7	22.4
S46023	2046-04-10 10:08:39.99	17 27 46.15447 -21 41 18.60306	4.2	3.805	8.19	-4.23	9.527	-30.9	9.610	12.077	11.288	271.6	117.5
PgtRgt	4117826558200996608	17 27 46.19343 -21 41 14.83607	2.7	26.295	4.77	26.47	3.972	-24.1	0.440	10.391	0	-21.7	161.3
S46024	2046-04-20 09:06:40.51	17 26 48.60253 -21 39 39.52600	7.4	7.617	185.31	-8.56	9.387	56.3	8.993	14.355	13.021	277.1	127.5
PgtRgt	4120809400145112448	17 26 48.55198 -21 39 47.10985	5.9	51.855	4.75	26.46	4.531	57.0	1.152	13.434	0	-21.7	58.1
S46025	2046-04-20 10:35:15.69	17 26 48.03017 -21 39 53.03961	6.6	6.576	5.29	-8.59	9.386	-48.3	8.909	14.044	12.743	254.9	127.6
PgtRgt	4120809395806543360	17 26 48.07367 -21 39 46.49136	5.1	44.769	4.75	26.46	5.861	-47.4	1.665	13.126	0	-21.7	57.2
S46026	2046-05-06 14:47:39.62	17 23 54.55095 -21 36 44.09450	5.5	9.834	4.14	-14.52	9.198		9.009	14.255	12.959	175.1	144.0
XRt	4114864375140833152	17 23 54.60184 -21 36 34.28642	3.6	65.603	4.68	26.46			1.028	13.908	0	-21.7	149.1
S46027	2046-05-13 15:10:08.97	17 22 13.23785 -21 34 51.64217	4.4	2.985	183.94	-16.50	9.135	21.4	8.587	13.404	12.155	162.1	151.1
PgtRgt	4115061153348041088	17 22 13.22313 -21 34 54.62015	2.8	19.778	4.64	26.47	15.637	20.0	1.070	13.195	0	-21.6	116.3
S46028	2046-05-16 12:38:43.42	17 21 27.60140 -21 34 20.42497	4.4	9.335	3.89	-17.20	9.113		8.756	12.947	11.840	197.0	154.1
PtRgt	4115064177005187328	17 21 27.64684 -21 34 11.11112	3.0	61.697	4.62	26.47			0.846	12.784	0	-21.6	74.8
S46029	2046-05-18 13:03:11.39	17 20 54.76091 -21 33 38.52132	14.4	1.515	183.86	-17.65	9.099	11.3	7.532	13.797	12.275	188.7	156.2
PgtRgt	4115052494691697792	17 20 54.75360 -21 33 40.03263	10.7	9.996	4.60	26.47	17.434	9.6	3.182	13.661	0	-21.6	45.6
S46030	2046-05-23 21:50:56.70	17 19 23.26842 -21 32 05.72311	12.6	8.890	183.80	-18.67	9.067	66.6	8.342	14.422	12.957	51.1	161.7
PgtRgt	4115097501622093696	17 19 23.22621 -21 32 14.59369	8.5	58.459	4.57	26.48	5.362	66.2	1.964	14.347	0	-21.6	29.1
S46031	2046-05-23 22:30:32.58	17 19 22.77329 -21 32 07.92111	7.2	6.239	183.80	-18.68	9.066	44.2	9.114	14.596	13.281	41.2	161.7
PgtRgt	4115097505955028864	17 19 22.74367 -21 32 14.14676	4.7	41.028	4.57	26.48	13.828	42.9	1.006	14.522	0	-21.6	29.5

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S46032	2046-05-25 15:02:51.58	17 18 52.82674 -21 31 55.11580	8.6	8.593	3.78	-18.95	9.058	-62.8	8.447	14.204	12.822	151.3	163.4
PgtRgt	4115099842417337344	17 18 52.86732 -21 31 46.54196	5.5	56.449	4.55	26.48	7.192	-63.6	1.605	14.146	0	-21.6	50.5
S46033	2046-05-25 21:34:57.15	17 18 48.01096 -21 31 41.66501	11.2	0.402	183.78	-18.99	9.057	3.6	6.494	12.668	11.252	53.0	163.7
PgtRgt	4115099533179705856	17 18 48.00913 -21 31 42.06538	7.3	2.638	4.55	26.48	18.992	1.9	4.225	12.612	0	-21.6	53.8
S46034	2046-06-09 14:58:41.66	17 14 13.57945 -21 27 24.39083	4.0	9.355	183.65	-20.18	9.019		9.818	13.535	12.537	136.4	178.1
PRgt	4115807618662910464	17 14 13.53682 -21 27 33.72671	3.0	61.193	4.44	26.49	0.055		0.434	13.545	0	-21.5	117.6
S46035	2046-06-13 23:37:44.29	17 12 50.50336 -21 26 19.72822	8.6	0.525	183.61	-20.12	9.021	4.5	7.641	12.649	11.303	2.0	176.2
PgtRgt	4115816792713438208	17 12 50.50106 -21 26 20.25228	5.5	3.438	4.41	26.50	20.103	2.7	1.977	12.655	0	-21.5	55.9
S46036	2046-06-17 17:37:16.87	17 11 39.55411 -21 25 25.86036	4.6	7.652	3.56	-19.93	9.026	-53.8	8.499	11.728	10.810	88.1	172.5
PgtRgt	411563141759535264	17 11 39.58823 -21 25 18.22249	3.0	50.096	4.38	26.50	11.402	-54.9	0.844	11.724	0	-21.5	6.1
S46037	2046-06-18 08:28:10.09	17 11 27.94407 -21 25 13.35598	4.4	5.239	3.56	-19.89	9.028	-35.3	8.483	13.045	11.818	224.7	171.9
PgtRgt	4115632310948587136	17 11 27.96734 -21 25 08.12755	2.8	34.299	4.37	26.50	16.469	-36.8	1.152	13.039	0	-21.5	7.3
S46038	2046-06-19 15:05:13.58	17 11 04.13639 -21 24 38.23826	3.6	9.240	183.54	-19.79	9.031		9.278	12.797	11.822	124.1	170.6
PtRgt	4115635128445230336	17 11 04.09561 -21 24 47.46030	2.2	60.520	4.36	26.50	2.621		0.636	12.785	0	-21.5	22.7
S46039	2046-06-23 08:19:27.13	17 09 55.33950 -21 23 56.99554	10.9	8.438	3.48	-19.42	9.042	-61.0	8.135	13.607	12.175	221.6	166.8
PgtRgt	4115644135022847232	17 09 55.37619 -21 23 48.57322	8.1	55.337	4.33	26.51	8.242	-62.0	2.015	13.575	0	-21.5	69.1
S46040	2046-06-23 10:13:11.65	17 09 53.92654 -21 23 48.71122	4.8	1.366	3.48	-19.41	9.043	-8.4	9.866	13.797	12.752	193.1	166.8
PgtRgt	4115644203742327168	17 09 53.93248 -21 23 47.34729	3.4	8.962	4.33	26.51	19.216	-10.3	0.494	13.764	0	-21.5	70.1
S46041	2046-06-24 20:52:06.01	17 09 27.71642 -21 23 16.87625	5.4	8.290	183.45	-19.23	9.048	60.6	8.899	11.510	10.717	31.8	165.3
PgtRgt	4115644920969040128	17 09 27.68077 -21 23 25.15084	4.0	54.402	4.32	26.51	8.764	59.6		11.467	0	-21.4	87.4
S46042	2046-06-28 15:36:04.69	17 08 20.34752 -21 22 19.63569	3.6	9.530	183.36	-18.67	9.066		9.826	12.941	12.047	106.8	161.4
PRgt	4115671588455406336	17 08 20.30765 -21 22 29.14839	2.4	62.660	4.29	26.51			0.430	12.866	0	-21.4	132.5
S46043	2046-07-18 10:24:35.13	17 03 16.69742 -21 18 52.85802	9.6	3.369	2.30	-13.73	9.221	-21.7	6.020	11.030	9.759	163.9	141.4
PgtRgt	4127635408818049664	17 03 16.70716 -21 18 49.49172	6.3	22.531	4.17	26.54	12.823	-25.5	4.183	10.622	0	-21.4	43.2
S46044	2046-09-10 07:29:09.78	17 01 00.34235 -21 26 05.23599	4.2	5.497	191.45	10.05	10.003	48.3	8.176	10.891	10.079	154.1	89.2
PgtRgt	4126141275606002048	17 01 00.26424 -21 26 10.62397	3.1	39.883	4.11	26.70	8.088	35.5	0.888	10.143	0	-21.5	35.8
S46045	2046-10-08 02:54:20.24	17 07 20.31983 -21 39 51.85176	3.5	2.672	7.41	22.92	10.447	-17.9	9.383	12.550	11.646	197.0	63.4
PgtRgt	4115566786925875968	17 07 20.34461 -21 39 49.20152	2.5	20.248	4.28	26.82	21.818	-24.3	0.630	12.697	0	-21.7	41.2
S46046	2046-10-16 11:21:01.47	17 10 06.42158 -21 44 38.98907	4.5	3.082	6.74	26.31	10.567	-22.2	8.983	13.264	12.112	62.8	55.8
PgtRgt	4115597023494160768	17 10 06.44756 -21 44 35.92793	3.3	23.623	4.35	26.85	24.435	-27.1	0.988	13.562	0	-21.8	140.1
S46047	2046-10-21 03:21:07.45	17 11 48.28049 -21 47 12.68040	7.1	6.676	186.41	28.09	10.629	57.3	9.744	14.501	13.283	178.6	51.6
PgtRgt	4115428768187777664	17 11 48.22699 -21 47 19.31514	4.9	51.468	4.39	26.87	15.684	54.5	0.780	14.870	0	-21.8	161.9
S47001	2047-02-09 05:43:41.62	18 03 44.81816 -22 22 27.76139	8.9	6.044	179.54	29.18	10.666	45.4	9.924	14.924	13.677	46.4	48.9
PgtRgt	4069858065648142848	18 03 44.82170 -22 22 33.80507	6.4	46.752	5.56	26.40	19.667	54.7	0.664	15.335	0	-22.4	149.2
S47002	2047-02-09 13:29:09.93	18 03 52.40788 -22 22 39.50129	9.8	6.561	359.52	29.07	10.662	-59.2	7.366	12.795	11.493	289.8	49.2
PgtRgt	4069858095694490240	18 03 52.40399 -22 22 32.93921	6.6	50.735	5.56	26.40	17.176	-50.7	2.627	13.201	0	-22.4	144.7
S47003	2047-02-10 13:36:30.57	18 04 15.80468 -22 22 31.87880	18.0	1.803	359.47	28.70	10.649	-21.0	6.951	13.626	12.097	287.1	50.1
PgtRgt	4069670663323395456	18 04 15.80348 -22 22 30.07613	12.6	13.923	5.57	26.39	28.627	-8.0	5.039	14.018	0	-22.4	130.5
S47004	2047-02-10 16:56:48.79	18 04 19.02362 -22 22 34.18140	5.5	4.522	359.46	28.65	10.647	-42.3	8.842	13.836	12.601	236.9	50.2
PgtRgt	4069670461482190208	18 04 19.02057 -22 22 29.65978	4.0	34.917	5.57	26.39	24.259	-31.0	1.168	14.227	0	-22.4	128.5
S47005	2047-02-14 10:55:55.99	18 05 43.74634 -22 22 23.21436	33.5	6.533	359.27	27.24	10.598	-58.8	4.023	12.631	10.947	323.7	53.7
PgtRgt	4069679257568121856	18 05 43.74042 -22 22 16.68113	24.9	50.213	5.59	26.35	16.470	-49.8		12.966	0	-22.4	74.1
S47006	2047-02-15 09:30:31.01	18 06 04.38048 -22 22 16.73045	28.6	3.783	359.22	26.87	10.585	-36.5	7.107	14.184	12.621	344.3	54.6
PgtRgt	4069684205378965248	18 06 04.37679 -22 22 12.92185	20.9	29.038	5.60	26.34	24.379	-24.1	4.983	14.505	0	-22.4	60.6
S47007	2047-02-16 04:42:36.06	18 06 21.73216 -22 22 14.43596	48.9	4.860	359.18	26.56	10.574	-45.0	5.193	13.780	12.054	55.5	55.3
PgtRgt	4069681662758253056	18 06 21.72718 -22 22 09.57678	36.9	37.269	5.60	26.34	21.822	-33.4		14.088	0	-22.4	49.2
S47008	2047-02-24 18:04:29.84	18 09 15.10124 -22 21 27.33387	6.8	0.575	358.77	23.00	10.451	-12.1	9.980	14.514	13.369	207.3	63.3
PgtRgt	4069718324590454144	18 09 15.10035 -22 21 26.75944	4.9	4.355	5.66	26.26	23.645	3.0	0.576	14.666	0	-22.3	63.1
S47009	2047-02-25 23:55:07.18	18 09 38.35037 -22 21 27.14472	7.0	7.453	358.72	22.46	10.432	-66.1	8.661	14.039	12.731	118.5	64.4
PgtRgt	4069717603035913344	18 09 38.33835 -22 21 19.69326	5.1	56.394	5.66	26.25	9.816	-59.3	1.407	14.164	0	-22.3	78.1

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch		$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric	Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S47010	2047-02-27 11:41:03.82	18 10 05.48657	-22 21 03.19559	5.4	7.825	178.64	21.79	10.410	66.1	8.131	12.537	11.382	300.7	65.8
PgtRgt	4066738506328321280	18 10 05.49998	-22 21 11.01709	3.9	59.076	5.67	26.24	7.120	67.6	1.297	12.630	0	-22.3	95.9
S47011	2047-02-27 22:24:35.07	18 10 13.49761	-22 21 08.57099	9.7	0.196	358.62	21.59	10.403	-9.3	8.686	14.494	13.102	139.4	66.2
PgtRgt	4066738167103154816	18 10 13.49727	-22 21 08.37538	7.5	1.476	5.68	26.23	22.281	6.2	1.783	14.577	0	-22.3	101.2
S47012	2047-03-03 16:29:59.38	18 11 17.93104	-22 20 48.70811	41.7	3.116	358.45	19.89	10.345	-31.7	5.114	12.975	10.976	224.6	69.7
PgtRgt	4066729920765244160	18 11 17.92504	-22 20 45.59253	29.7	23.375	5.69	26.20	19.067	-17.0	12.969	0	0	-22.3	145.3
S47013	2047-03-07 20:26:29.75	18 12 23.50175	-22 20 17.22258	6.3	2.287	178.26	17.95	10.279	9.9	7.232	11.776	10.582	161.7	73.7
PgtRgt	4066727201974396800	18 12 23.50682	-22 20 19.50746	4.8	17.046	5.71	26.17	17.896	25.6	11.658	0	0	-22.3	162.3
S47014	2047-03-09 18:39:51.75	18 12 51.67442	-22 20 02.42320	11.1	4.918	178.17	17.04	10.248	31.5	9.241	14.772	13.385	186.6	75.5
PgtRgt	4090699342970404224	18 12 51.68574	-22 20 07.33834	8.0	36.550	5.72	26.16	14.326	45.3	14.598	0	0	-22.3	135.9
S47015	2047-03-13 02:42:45.96	18 13 37.16524	-22 19 37.48131	5.1	8.866	178.01	15.45	10.193		8.728	12.645	11.578	62.7	78.6
XRt	4090697173935886976	18 13 37.18750	-22 19 46.34103	3.4	65.547	5.74	26.13			0.947	12.365	0	-22.3	86.7
S47016	2047-03-13 17:14:09.38	18 13 44.98450	-22 19 41.15546	7.8	1.405	177.98	15.16	10.183	2.4	9.742	14.616	13.370	204.3	79.2
PgtRgt	4090697311376159872	18 13 44.98806	-22 19 42.55927	5.5	10.375	5.74	26.13	15.554	19.2	0.666	14.315	0	-22.3	77.6
S47017	2047-03-16 14:38:09.07	18 14 20.30487	-22 19 26.48287	6.6	1.795	357.84	13.76	10.136	-22.2	9.639	14.001	12.952	240.6	82.0
PgtRgt	4090690753034274688	18 14 20.29998	-22 19 24.68901	5.0	13.196	5.75	26.11	14.027	-5.2		13.595	0	-22.3	35.1
S47018	2047-03-18 15:32:10.92	18 14 43.22697	-22 19 20.87341	5.5	8.511	357.73	12.76	10.102		9.874	12.974	12.069	225.2	83.9
PtRgt	4090691298420625792	18 14 43.20272	-22 19 12.36821	4.1	62.355	5.75	26.10	1.068		0.421	12.486	0	-22.3	7.2
S47019	2047-03-21 03:25:15.54	18 15 08.97679	-22 18 56.62015	3.9	1.083	177.58	11.52	10.061	-0.7	9.725	12.370	11.564	44.6	86.3
PgtRgt	4090688588369979904	18 15 08.98015	-22 18 57.70171	2.9	7.906	5.76	26.08	11.972	17.1	0.444	11.772	0	-22.3	26.1
S47020	2047-03-21 22:19:02.54	18 15 16.58002	-22 18 50.21276	8.6	2.981	177.53	11.13	10.047	14.1	8.799	14.154	12.763	120.4	87.0
PgtRgt	4090687901106088320	18 15 16.58929	-22 18 53.19057	6.7	21.720	5.76	26.08	10.938	31.1	1.319	13.518	0	-22.3	36.0
S47021	2047-03-23 20:02:21.09	18 15 33.92477	-22 18 35.57334	5.9	6.983	177.40	10.18	10.016	49.0	9.679	14.365	13.149	152.8	88.9
PgtRgt	4090711162732709376	18 15 33.94758	-22 18 42.54870	4.7	50.721	5.77	26.07	60.8		0.689	13.632	0	-22.3	59.5
S47022	2047-03-26 06:57:12.05	18 15 54.12940	-22 18 38.96974	6.3	9.497	357.24	8.95	9.975		8.037	13.172	11.824	346.7	91.2
XRt	4090523695997367808	18 15 54.09648	-22 18 29.48349	4.7	68.706	5.78	26.06			1.712	12.299	0	-22.3	88.9
S47023*	2047-03-28 17:20:54.62	18 16 11.58167	-22 18 18.84621	23.2	1.497	357.03	7.73	9.934	-20.6	9.718	14.850	13.459	188.4	93.6
PgtRgt	4090524314472389888	18 16 11.57608	-22 18 17.35160	17.1	10.783	5.78	26.05	8.082	-1.7		13.818	0	-22.3	117.7
S47024	2047-03-29 14:05:34.50	18 16 17.20769	-22 18 19.47598	9.7	6.231	356.95	7.30	9.920	-54.8	9.171	14.795	13.399	236.5	94.4
PgtRgt	4090524275738786176	18 16 17.18379	-22 18 13.25375	7.1	44.828	5.78	26.04	5.440	-40.5	1.254	13.701	0	-22.3	127.9
S47025	2047-04-01 07:06:34.27	18 16 32.73047	-22 18 07.34205	12.1	6.177	356.62	5.94	9.874	-54.5	7.301	13.359	11.895	338.6	97.0
PgtRgt	4090521561319462912	18 16 32.70421	-22 18 01.17603	9.3	44.236	5.79	26.03	4.545	-39.5	3.371	12.040	0	-22.3	160.0
S47026	2047-04-03 08:25:51.85	18 16 42.38996	-22 17 52.23095	20.2	0.595	176.25	4.91	9.840	-6.1	8.076	14.391	12.778	316.8	99.0
PgtRgt	4090527406850443648	18 16 42.39277	-22 17 52.82461	15.3	4.246	5.79	26.03	5.329	14.8	2.424	12.867	0	-22.3	173.9
S47027	2047-04-12 04:51:52.82	18 17 03.55217	-22 17 25.88742	11.7	0.252	342.50	0.60	9.697	-39.8	9.252	14.933	13.543	1.7	107.6
PgtRgt	4090526857094420352	18 17 03.54671	-22 17 25.64711	8.3	1.772	5.79	26.01	1.455	19.1	1.129	11.122	0	-22.3	47.5
S47028	2047-04-23 23:39:32.80	18 16 40.00150	-22 17 13.91555	4.8	0.199	179.74	-4.96	9.516	8.1	9.731	13.540	12.505	68.0	119.2
PgtRgt	4090527471194540800	18 16 40.00156	-22 17 14.11444	3.7	1.373	5.79	26.02	5.217	-5.2	0.510	12.027	0	-22.3	105.9
S47029	2047-04-25 11:58:21.75	18 16 32.75592	-22 17 15.48557	5.6	0.702	359.51	-5.64	9.494	1.9	9.828	14.178	13.032	241.8	120.7
PgtRgt	4090521806211224192	18 16 32.75548	-22 17 14.78408	4.3	4.831	5.79	26.02	5.887	-11.9	0.560	12.804	0	-22.3	123.8
S47030	2047-05-01 17:08:15.76	18 15 53.25133	-22 17 14.27521	12.6	8.370	178.97	-8.32	9.408	66.9	8.486	14.548	13.060	158.0	126.9
PgtRgt	4090524000862230656	18 15 53.26215	-22 17 22.64377	9.7	57.112	5.77	26.04	3.267	61.0	1.765	13.595	0	-22.3	160.2
S47031	2047-05-03 06:48:05.61	18 15 40.87774	-22 17 23.98998	5.3	1.878	178.89	-8.96	9.387	20.7	7.443	11.836	10.667	311.5	128.5
PgtRgt	4090711605025997568	18 15 40.88041	-22 17 25.86678	4.2	12.785	5.77	26.05	9.090	5.9	1.816	10.964	0	-22.3	139.8
S47032	2047-05-05 00:04:28.18	18 15 26.23135	-22 17 28.76777	5.7	1.164	178.82	-9.65	9.365	15.8	9.251	14.231	12.972	50.6	130.2
PgtRgt	4090711506330287360	18 15 26.23307	-22 17 29.93119	4.4	7.904	5.77	26.05	9.918	0.7	0.854	13.439	0	-22.3	116.2
S47033	2047-05-06 03:20:36.55	18 15 15.95912	-22 17 40.44373	8.9	7.533	358.78	-10.09	9.351	-50.7	7.802	12.901	11.562	0.4	131.4
PgtRgt	4090712120423619200	18 15 15.94765	-22 17 32.91097	7.2	51.089	5.76	26.06	5.898	-60.4	1.806	12.159	0	-22.3	99.9
S47034	2047-05-06 23:09:28.61	18 15 08.16455	-22 17 28.37834	5.5	6.843	178.77	-10.41	9.340	55.1	8.376	12.854	11.680	62.4	132.2
PgtRgt	4090688897607666816	18 15 08.17523	-22 17 35.21889	4.2	46.360	5.76	26.06	7.134	44.1		12.145	0	-22.3	87.7

Table 1 continued on next page



Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch		$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric	Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S47035	2047-05-07 03:11:59.28	18 15 06.55837	-22 17 35.18653	4.4	0.518	178.76	-10.48	9.338	11.3	9.216	13.394	12.274	1.6	132.4
PgtRgt	40906888976073984	18 15 06.55918	-22 17 35.70419	3.4	3.507	5.76	26.06	10.834	-4.0	0.713	12.692	0	-22.3	85.2
S47036	2047-05-07 04:47:46.47	18 15 05.92453	-22 17 40.07121	7.6	4.174	358.75	-10.50	9.338	-22.7	6.715	11.707	10.398	337.6	132.4
PgtRgt	4090688893238936704	18 15 05.91804	-22 17 35.89722	5.9	28.269	5.76	26.06	9.679	-36.4	3.004	11.007	0	-22.3	84.2
S47037	2047-05-09 04:27:08.18	18 14 46.05020	-22 17 45.39855	27.5	3.394	358.71	-11.25	9.313	-16.7	6.910	14.876	13.197	340.7	134.4
PgtRgt	4090691646387294848	18 14 46.04468	-22 17 42.00561	20.6	22.924	5.75	26.07	10.821	-31.1	14.251	0	0	-22.3	54.1
S47038	2047-05-10 08:17:57.18	18 14 33.79642	-22 17 53.80553	5.5	7.927	358.68	-11.67	9.300	-54.2	8.667	12.956	11.834	281.8	135.6
PgtRgt	4090692333582114560	18 14 33.78333	-22 17 45.87914	4.0	53.468	5.75	26.08	6.109	-63.1	0.995	12.371	0	-22.3	36.5
S47039*	2047-05-17 11:47:33.55	18 13 08.18184	-22 18 12.40922	37.8	1.973	178.59	-14.13	9.222	21.4	8.751	14.496	13.082	222.0	142.8
PgtRgt	4090699652208475264	18 13 08.18535	-22 18 14.38174	27.8	13.197	5.73	26.12	14.272	6.1	1.208	14.118	0	-22.3	61.9
S47040	2047-05-18 23:45:28.49	18 12 48.15220	-22 18 28.66089	5.4	7.379	358.57	-14.60	9.207	-47.9	8.397	12.754	11.589	40.9	144.3
PgtRgt	4090746381455760640	18 12 48.13901	-22 18 21.28286	4.1	49.274	5.72	26.13	9.186	-58.4	12.413	0	0	-22.3	80.1
S47041	2047-05-23 13:40:21.51	18 11 42.76073	-22 18 50.17982	17.9	6.152	358.56	-15.94	9.165	-37.1	7.734	14.638	13.098	187.4	149.0
PgtRgt	4066730264362419840	18 11 42.74956	-22 18 44.02952	12.9	40.893	5.70	26.16	12.406	-49.4	14.391	0	0	-22.3	134.6
S47042	2047-05-25 09:54:10.94	18 11 14.80736	-22 19 00.20141	5.7	6.397	358.55	-16.43	9.149	-39.0	9.406	12.961	11.978	242.0	150.9
PgtRgt	4066741774875125632	18 11 14.79579	-22 18 53.80477	3.7	42.451	5.69	26.17	12.404	-51.0	0.528	12.747	0	-22.3	156.8
S47043	2047-05-26 06:11:36.47	18 11 01.69567	-22 19 07.90622	4.2	9.514	358.55	-16.64	9.142		8.709	13.176	12.012	296.8	151.7
PtRgt	4066736105518445696	18 11 01.67836	-22 18 58.39529	3.1	63.084	5.69	26.18			0.925	12.976	0	-22.3	167.0
S47044	2047-05-29 08:08:27.80	18 10 12.39595	-22 19 11.93376	4.2	3.700	178.56	-17.37	9.119	32.7	7.942	11.703	10.680	264.3	154.9
PgtRgt	4066739021724394752	18 10 12.40272	-22 19 15.63224	2.9	24.474	5.67	26.20	16.486	18.3	11.550	0	0	-22.3	153.9
S47045	2047-05-30 08:00:30.39	18 09 56.02214	-22 19 15.06460	3.5	6.285	178.56	-17.59	9.112	50.0	9.825	11.052	10.586	265.3	155.9
PgtRgt	4069741276896724096	18 09 56.03356	-22 19 21.34661	2.5	41.534	5.67	26.21	13.529	37.9	0.300	10.912	0	-22.3	141.0
S47046	2047-06-02 07:04:05.58	18 09 06.07295	-22 19 39.69556	4.1	0.991	358.57	-18.19	9.093	0.9	8.473	11.242	10.425	276.3	158.9
PgtRgt	4069721416966936064	18 09 06.07122	-22 19 38.70393	3.1	6.537	5.65	26.23	18.662	-14.5	0.783	11.139	0	-22.3	100.8
S47047	2047-06-02 20:31:28.24	18 08 56.42600	-22 19 47.54212	5.8	5.505	358.57	-18.29	9.090	-31.7	9.921	13.947	12.853	73.8	159.5
PgtRgt	4069720175703253248	18 08 56.41614	-22 19 42.03878	4.1	36.293	5.65	26.24	15.342	-44.6	0.456	13.851	0	-22.3	92.8
S47048	2047-06-04 04:07:35.67	18 08 33.50806	-22 19 45.62597	5.6	4.294	178.58	-18.53	9.082	36.5	9.701	12.749	11.811	318.4	160.8
PgtRgt	4069720725458625536	18 08 33.51577	-22 19 49.91785	3.9	28.286	5.64	26.25	17.027	22.6	12.666	0	0	-22.3	73.8
S47049	2047-06-04 13:54:29.17	18 08 26.36079	-22 19 49.52407	6.6	2.845	178.59	-18.60	9.080	26.9	9.529	14.355	13.147	171.2	161.3
PgtRgt	4069732343364137856	18 08 26.36585	-22 19 52.36831	4.9	18.737	5.64	26.25	18.288	12.1	0.761	14.276	0	-22.3	67.8
S47050	2047-06-08 18:54:46.44	18 07 10.97895	-22 20 09.18525	5.4	8.721	178.62	-19.23	9.060	66.9	8.663	13.992	12.708	91.7	165.6
PgtRgt	4069729457145628032	18 07 10.99413	-22 20 17.90413	3.5	57.308	5.62	26.29	7.837	61.2	1.136	13.949	0	-22.3	5.5
S47051	2047-06-10 07:14:43.50	18 06 43.26503	-22 20 24.03665	18.8	3.129	178.63	-19.42	9.054	28.6	7.426	14.361	12.820	265.1	167.1
PgtRgt	4069682659190601728	18 06 43.27044	-22 20 27.16524	13.7	20.550	5.61	26.30	18.888	14.2	3.624	14.329	0	-22.3	16.9
S47052	2047-06-12 05:51:42.73	18 06 07.31161	-22 20 46.44088	5.8	7.353	358.64	-19.63	9.047	-46.6	8.168	13.740	12.423	283.8	169.1
PgtRgt	4069684823854270464	18 06 07.29900	-22 20 39.09001	4.1	48.248	5.60	26.32	12.834	-57.0	1.745	13.719	0	-22.3	43.3
S47053	2047-06-17 14:16:07.73	18 04 26.39935	-22 21 15.68764	10.7	3.623	358.66	-20.05	9.034	-17.7	8.138	14.418	12.995	152.0	174.6
PgtRgt	4069694066624254720	18 04 26.39326	-22 21 12.06606	7.7	23.736	5.57	26.36	19.086	-31.7	14.420	0	0	-22.3	109.5
S47054	2047-06-18 14:39:24.02	18 04 06.99499	-22 21 09.54571	9.3	8.782	178.67	-20.10	9.033	67.0	6.923	12.488	11.152	145.1	175.6
PgtRgt	4069858370572479232	18 04 07.00975	-22 21 18.32400	6.7	57.530	5.56	26.37	8.084	61.7	2.922	12.493	0	-22.3	121.6
S47055	2047-06-21 00:42:56.63	18 03 20.69201	-22 21 27.18790	9.0	5.988	178.68	-20.17	9.031	47.3	8.959	14.967	13.551	351.6	177.9
PgtRgt	4069860539549347328	18 03 20.70194	-22 21 33.17449	6.3	39.220	5.55	26.40	16.159	35.3	1.223	14.976	0	-22.4	150.5
S47056*	2047-06-24 06:17:19.44	18 02 18.69103	-22 21 59.33978	5.5	6.482	358.70	-20.18	9.030	-39.2	9.016	13.627	12.448	264.6	178.1
PgtRgt	4069867613342031872	18 02 18.68040	-22 21 52.85986	3.9	42.450	5.53	26.42	15.248	-50.7	0.792	13.637	0	-22.4	168.9
S47057	2047-06-24 18:47:43.21	18 02 08.67408	-22 21 48.73105	35.1	7.284	178.70	-20.17	9.030	56.3	5.987	14.993	13.242	76.4	177.7
PgtRgt	4069866380704705024	18 02 08.68601	-22 21 56.01324	24.8	47.707	5.52	26.43	13.431	45.9	15.002	0	0	-22.4	162.3
S47058	2047-06-28 05:30:33.88	18 01 02.79355	-22 22 17.75700	9.3	1.038	358.71	-20.04	9.034	0.4	7.519	13.500	12.087	272.1	174.3
PgtRgt	4069541436347630592	18 01 02.79186	-22 22 16.71961	6.5	6.799	5.50	26.46	20.480	-14.5	2.612	13.502	0	-22.4	116.7
S47059	2047-06-30 16:21:35.15	18 00 16.28974	-22 22 36.63136	6.2	5.338	358.71	-19.88	9.039	-30.4	9.329	14.762	13.609	106.7	171.8
PgtRgt	4069543605322220800	18 00 16.28105	-22 22 31.29438	4.3	34.996	5.49	26.48	16.953	-42.9	0.841	14.756	0	-22.4	82.7

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S47060	2047-06-30 21:20:05.25	18 00 12.35998 -22 22 27.10840	6.4	5.413	178.71	-19.86	9.039	43.4	8.026	13.706	12.362	31.8	171.6
PgtRgt	406954432687646240	18 00 12.36880 -22 22 32.52042	4.3	35.490	5.49	26.48	16.824	31.0	1.698	13.698	0	-22.4	79.8
S47061	2047-07-01 15:43:18.75	17 59 57.93580 -22 22 34.41667	4.9	2.629	178.71	-19.80	9.041	25.0	8.300	12.894	11.705	115.2	170.8
PgtRgt	4069538687564667136	17 59 57.94015 -22 22 37.04355	3.7	17.237	5.48	26.49	19.566	10.8	1.175	12.883	0	-22.4	68.9
S47062	2047-07-02 10:53:27.70	17 59 42.96499 -22 22 49.52183	19.3	7.779	358.70	-19.72	9.043	-50.5	6.684	14.021	12.451	186.8	170.0
PgtRgt	4069550064953140480	17 59 42.95231 -22 22 41.74496	14.9	51.021	5.48	26.49	11.788	-59.9	5.725	14.006	0	-22.4	57.4
S47063	2047-07-04 03:06:29.64	17 59 11.72141 -22 22 59.30499	8.2	7.745	358.70	-19.56	9.048	-50.3	9.000	14.314	13.018	301.8	168.3
PgtRgt	4069549652636377472	17 59 11.70875 -22 22 51.56214	5.7	50.826	5.47	26.51	11.788	-59.7	1.108	14.290	0	-22.4	33.1
S47064	2047-07-10 12:32:28.87	17 57 15.68024 -22 23 32.67293	11.3	4.138	358.66	-18.69	9.075	-21.7	8.359	14.661	13.238	153.5	161.8
PgtRgt	4070277284502708608	17 57 15.67326 -22 23 28.53616	7.5	27.236	5.43	26.56	17.316	-35.0	1.901	14.588	0	-22.4	57.0
S47065	2047-07-10 16:46:22.41	17 57 12.57086 -22 23 37.29770	5.4	7.751	358.66	-18.66	9.076	-50.5	8.699	13.722	12.462	89.9	161.6
PgtRgt	4070277254475098368	17 57 12.55776 -22 23 29.54900	3.7	51.022	5.43	26.56	11.192	-59.9	1.105	13.647	0	-22.4	59.3
S47066	2047-07-22 03:22:11.02	17 54 03.50606 -22 24 45.52419	7.7	9.546	358.39	-16.22	9.154		9.171	14.576	13.235	278.8	150.0
PtRgt	4070253546298504960	17 54 03.48674 -22 24 35.98150	5.2	63.377	5.37	26.65	0.077		1.078	14.348	0	-22.4	159.8
S47067	2047-07-26 22:12:15.58	17 52 53.80908 -22 25 02.60619	3.6	2.163	178.18	-14.86	9.196	22.6	8.028	10.813	9.978	351.3	145.1
PgtRgt	4070232857366607616	17 52 53.81408 -22 25 04.76717	2.5	14.423	5.34	26.68	14.943	7.3	0.974	10.491	0	-22.4	94.8
S47068	2047-07-28 00:06:47.69	17 52 38.98511 -22 25 03.35890	7.4	8.042	178.12	-14.53	9.206	63.0	9.662	14.835	13.547	321.6	144.0
PgtRgt	4070420637736058752	17 52 39.00416 -22 25 11.39636	5.0	53.696	5.34	26.69	7.962	54.2	14.489	0	-22.4	79.6	
S47069*	2047-07-30 07:54:27.03	17 52 08.31751 -22 25 24.46324	7.6	1.426	177.97	-13.80	9.230	17.8	9.524	13.630	12.544	202.2	141.7
PgtRgt	4070419744383371392	17 52 08.32116 -22 25 25.88874	4.8	9.548	5.33	26.70	14.110	1.9	13.227	0	-22.4	46.6	
S47070	2047-07-30 17:12:54.24	17 52 03.36878 -22 25 28.88450	4.9	0.547	357.94	-13.67	9.234	4.3	9.669	13.235	12.230	62.2	141.3
PgtRgt	4070419843056128000	17 52 03.36736 -22 25 28.33826	3.1	3.660	5.33	26.71	14.120	-11.8	0.502	12.822	0	-22.4	41.1
S47071	2047-08-01 02:42:41.03	17 51 45.93955 -22 25 37.64032	9.5	0.403	357.84	-13.21	9.248	5.4	9.193	14.830	13.385	278.3	139.9
PgtRgt	4070416991228323840	17 51 45.93845 -22 25 37.23748	6.2	2.704	5.32	26.72	13.668	-11.0	14.380	0	-22.4	21.3	
S47072	2047-08-04 15:21:13.84	17 51 04.72703 -22 25 51.76252	8.5	8.610	177.50	-11.99	9.287	67.2	7.572	13.002	11.673	85.0	136.4
PgtRgt	4070427990723332608	17 51 04.75411 -22 26 00.36401	5.0	57.992	5.31	26.74	5.170	62.1	12.447	0	-22.4	28.3	
S47073	2047-08-06 12:37:52.03	17 50 44.48354 -22 26 20.45231	15.7	7.310	357.29	-11.31	9.309	-47.1	7.939	14.583	13.026	123.9	134.5
PgtRgt	4070428467350426752	17 50 44.45859 -22 26 13.15076	9.6	49.352	5.30	26.75	7.466	-58.7	13.964	0	-22.4	53.7	
S47074	2047-08-08 21:13:30.03	17 50 20.81756 -22 26 21.05803	6.6	8.535	176.95	-10.44	9.337	67.2	9.623	14.923	13.524	352.6	132.2
PgtRgt	4068930352767080960	17 50 20.85034 -22 26 29.58078	4.2	57.799	5.29	26.76	4.709	61.3	0.813	14.217	0	-22.5	83.9
S47075	2047-08-09 15:53:35.78	17 50 13.50682 -22 26 36.52025	13.5	1.406	356.83	-10.14	9.347	-0.7	8.493	14.969	13.445	71.8	131.4
PgtRgt	4068930146608710400	17 50 13.50120 -22 26 35.11624	8.2	9.533	5.29	26.76	10.496	-19.0	14.231	0	-22.5	93.6	
S47076	2047-08-10 10:57:44.04	17 50 06.18663 -22 26 32.23823	10.1	8.609	176.68	-9.83	9.357	67.4	8.236	14.203	12.753	144.9	130.6
PgtRgt	4068930180968516224	17 50 06.22258 -22 26 40.83260	6.1	58.422	5.29	26.77	4.285	62.8	13.432	0	-22.5	103.3	
S47077	2047-08-16 18:33:33.01	17 49 16.79412 -22 27 24.74355	9.5	3.990	175.03	-7.28	9.440	38.2	9.145	14.983	13.574	24.5	124.3
PgtRgt	4068976978949729664	17 49 16.81904 -22 27 28.71822	5.9	27.315	5.27	26.80	7.092	18.1	1.184	13.886	0	-22.5	177.4
S47078	2047-08-19 06:15:34.08	17 49 01.57337 -22 27 42.23525	13.2	6.663	173.94	-6.22	9.474	57.1	8.468	14.767	13.253	206.5	121.9
PgtRgt	4068971309590683776	17 49 01.62411 -22 27 48.86116	8.3	45.786	5.27	26.81	4.891	39.3	13.500	0	-22.5	148.8	
S47079	2047-08-23 22:08:25.21	17 48 40.01176 -22 28 39.24117	7.7	10.782	350.30	-4.18	9.542		8.829	14.389	13.012	323.6	117.3
XRt	4068973955290833152	17 48 39.88063 -22 28 28.61302	4.7	74.617	5.26	26.83			12.688	0	-22.5	83.7	
S47080	2047-08-24 04:46:51.29	17 48 39.00208 -22 28 41.32907	6.6	10.435	349.96	-4.05	9.546		9.898	14.558	13.356	223.7	117.1
XRt	4068973955290849152	17 48 38.87077 -22 28 31.05354	3.9	72.247	5.26	26.83			12.824	0	-22.5	79.7	
S47081	2047-09-01 09:01:51.81	17 48 22.56209 -22 29 44.37926	24.8	13.054	102.90	-0.82	9.670		6.765	14.471	12.719	151.9	109.1
XRgt	4068973130657345280	17 48 23.48029 -22 29 47.29317	16.0	91.557	5.25	26.86	1.486		11.001	0	-22.5	35.0	
S47082	2047-09-04 06:50:43.75	17 48 24.30212 -22 30 26.04068	19.8	11.761	34.60	1.46	9.716		8.020	14.990	13.386	181.8	106.3
XRgt	4068972370405701248	17 48 24.78404 -22 30 16.35926	12.0	82.882	5.26	26.86	0.128		12.146	0	-22.5	72.7	
S47083	2047-09-13 19:55:25.80	17 48 54.12593 -22 31 55.52302	11.1	2.638	188.97	5.91	9.871	23.5	8.557	14.694	13.197	336.3	97.1
PgtRgt	4068970450597019648	17 48 54.09625 -22 31 58.12854	6.9	18.884	5.27	26.88	5.780	15.8	13.369	0	-22.5	171.8	
S47084	2047-09-20 00:01:08.89	17 49 33.48982 -22 33 01.52222	21.5	6.593	186.20	8.94	9.973	51.8	7.434	14.878	13.191	269.0	91.3
PgtRgt	4068922724902655744	17 49 33.43839 -22 33 08.07704	13.2	47.692	5.28	26.89	5.728	50.5	3.070	14.004	0	-22.6	88.2

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch	$\sigma(\alpha_*)$ (km)	C/A (")	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S47085	2047-09-22 21:03:17.60	17 49 57.18756 -22 33 41.36248	8.3	0.051	185.42	10.35	10.021	0.5	9.946	14.982	13.699	310.7	88.6
PgtRgt	4068924713406728704	17 49 57.18721 -22 33 41.41349	4.7	0.372	5.29	26.89	10.432	0.2	0.782	14.267	0	-22.6	45.7
S47086	2047-09-23 03:37:27.17	17 49 59.66690 -22 33 38.28414	13.3	6.345	185.37	10.49	10.025	49.3	8.340	14.414	12.940	211.9	88.3
PgtRgt	4068924713406711936	17 49 59.62405 -22 33 44.60109	8.5	46.134	5.29	26.89	7.019	49.2	2.231	13.713	0	-22.6	41.7
S47087	2047-09-24 13:17:11.76	17 50 12.54206 -22 34 08.34437	11.1	7.408	5.05	11.18	10.049	-59.5	8.088	13.898	12.471	65.6	87.0
PgtRgt	4068924786489190400	17 50 12.58917 -22 34 00.96529	6.8	53.989	5.30	26.89	5.471	-59.2	1.977	13.266	0	-22.6	21.4
S47088	2047-09-29 04:10:38.07	17 51 00.89957 -22 34 52.35214	8.4	2.710	184.26	13.42	10.125	19.6	9.461	14.919	13.583	197.9	82.6
PgtRgt	4068913069813624960	17 51 00.88505 -22 34 55.05463	5.2	19.900	5.31	26.89	12.767	21.8	1.060	14.485	0	-22.6	41.7
S47089	2047-10-04 05:48:43.06	17 52 03.47702 -22 35 52.68114	7.0	1.534	183.60	15.83	10.208	10.0	9.694	14.417	13.198	168.7	77.9
PgtRgt	4070223928211293824	17 52 03.47006 -22 35 54.21185	4.1	11.355	5.34	26.88	15.642	13.7	0.751	14.164	0	-22.6	104.8
S47090	2047-10-04 10:32:52.35	17 52 06.10820 -22 35 55.86237	9.9	0.640	183.58	15.93	10.211	3.0	9.517	14.974	13.618	97.5	77.7
PgtRgt	4070223923834118528	17 52 06.10532 -22 35 56.50136	5.8	4.741	5.34	26.88	15.959	6.9	1.021	14.727	0	-22.6	107.2
S47091	2047-10-05 12:27:16.08	17 52 20.79754 -22 36 04.94047	5.6	4.064	183.46	16.43	10.228	29.7	9.321	12.988	11.971	67.8	76.7
PgtRgt	4070223550253062144	17 52 20.77989 -22 36 08.99635	3.7	30.151	5.34	26.88	14.424	33.3	0.661	12.775	0	-22.6	120.1
S47092	2047-10-05 21:25:06.42	17 52 25.93199 -22 36 19.58334	11.9	6.287	3.42	16.61	10.234	-51.4	9.414	14.849	13.504	293.0	76.4
PgtRgt	4070223374106290304	17 52 25.95905 -22 36 13.30710	8.0	46.670	5.34	26.88	10.979	-48.4	14.647	0	-22.6	124.5	
S47093	2047-10-06 04:38:50.13	17 52 30.15059 -22 36 22.15255	6.6	5.384	3.39	16.75	10.239	-43.9	9.657	14.331	13.138	184.3	76.1
PgtRgt	4070223309734818560	17 52 30.17355 -22 36 16.77815	4.2	39.982	5.34	26.88	12.857	-40.5	0.723	14.139	0	-22.6	128.1
S47094	2047-10-10 17:01:41.64	17 53 37.33478 -22 37 15.84604	15.7	7.765	2.94	18.84	10.311	-66.2	5.628	11.664	10.203	354.4	71.9
PgtRgt	4070214238762508928	17 53 37.36360 -22 37 08.09050	11.0	58.071	5.37	26.87	6.669	-64.6	7.785	11.599	0	-22.6	177.7
S47095	2047-10-17 11:34:40.94	17 55 31.79324 -22 38 22.63765	5.3	1.440	2.37	21.89	10.416	-14.6	9.455	13.561	12.445	70.0	65.6
PgtRgt	4070184929897406208	17 55 31.79754 -22 38 21.19875	4.0	10.879	5.41	26.85	21.703	-8.1	0.662	13.659	0	-22.6	89.0
S47096	2047-10-22 06:10:58.09	17 57 01.87649 -22 39 06.25454	6.1	2.515	182.01	23.95	10.487	16.4	9.782	14.274	13.107	146.6	61.2
PgtRgt	4070175343530903296	17 57 01.87011 -22 39 08.76842	4.1	19.132	5.44	26.83	22.971	23.5	0.655	14.469	0	-22.7	17.6
S47097	2047-11-08 16:39:52.42	18 03 28.84490 -22 41 27.19170	5.4	7.612	0.86	30.55	10.718		8.608	13.415	12.216	333.8	45.3
PRgt	4069655308837133184	18 03 28.85312 -22 41 19.58098	3.7	59.166	5.57	26.72	9.716		1.168	13.875	0	-22.7	159.9
S47098	2047-11-08 23:47:12.99	18 03 36.13760 -22 41 28.03065	9.1	6.956	0.84	30.65	10.721	-62.2	9.667	14.932	13.660	226.7	45.0
PgtRgt	4069655068318952704	18 03 36.14496 -22 41 21.07576	6.1	54.085	5.57	26.72	15.452	-56.6	0.801	15.395	0	-22.7	156.3
S48001	2048-02-17 14:04:48.63	18 51 34.16764 -22 16 43.50551	7.9	5.966	355.20	30.31	10.704	-58.4	9.568	10.428	10.078	285.1	46.0
PgtRgt	4078694050337001600	18 51 34.13175 -22 16 37.55933	6.4	46.318	6.32	25.16	22.150	-40.7	0.364	10.879	0	-22.2	89.2
S48002	2048-02-18 20:13:44.58	18 52 04.31820 -22 15 56.86269	6.7	5.321	175.15	29.87	10.688	34.0	8.779	12.906	11.764	191.8	47.1
PgtRgt	4078784416446059136	18 52 04.35066 -22 16 02.16270	5.7	41.246	6.33	25.13	24.405	53.3	1.063	13.342	0	-22.2	104.6
S48003	2048-02-20 05:35:55.52	18 52 37.37276 -22 15 30.88040	5.5	7.810	355.10	29.37	10.671		7.328	10.498	9.590	50.0	48.4
PtRgt	4078738683632141568	18 52 37.32471 -22 15 23.09848	4.2	60.444	6.34	25.11	8.734		1.705	10.915	1	-22.2	121.2
S48004*	2048-02-23 10:35:46.31	18 53 51.42399 -22 13 49.13217	6.7	4.504	174.97	28.20	10.630	25.8	8.409	10.853	10.092	332.2	51.4
PgtRgt	4078741947806914304	18 53 51.45248 -22 13 53.61757	5.6	34.722	6.35	25.05	25.523	47.1	0.813	11.226	0	-22.2	159.0
S48005	2048-05-10 18:53:47.47	19 05 12.54309 -21 59 19.43891	3.5	6.806	352.51	-7.49	9.426	-38.6	8.739	12.246	11.259	134.3	125.0
PgtRgt	4081586143861103872	19 05 12.47940 -21 59 12.68954	3.1	46.527	6.48	24.51	5.904	-60.8	0.834	11.180	0	-21.9	101.9
S48006	2048-05-31 10:46:01.57	19 01 35.50735 -22 05 28.67553	3.4	1.280	173.09	-14.99	9.184	23.4	9.899	12.294	11.553	235.0	145.7
PgtRgt	4081527178238361728	19 01 35.51847 -22 05 29.94438	3.2	8.523	6.44	24.71	16.646	-5.8	0.350	11.981	0	-22.0	17.0
S48007	2048-06-07 00:30:01.14	18 59 58.36034 -22 08 22.15388	3.2	10.260	353.23	-16.78	9.127		9.729	13.077	12.125	22.1	152.4
XRt	4081710216883709824	18 59 58.27329 -22 08 11.96567	3.0	67.918	6.42	24.80			12.887	0	-22.1	103.0	
S48008	2048-06-21 15:15:52.55	18 55 47.61494 -22 14 48.67100	4.2	6.750	173.54	-19.43	9.043	57.6	7.170	10.911	9.868	145.2	167.3
PgtRgt	4075747668408119424	18 55 47.66969 -22 14 55.37757	4.0	44.274	6.38	25.02	15.560	36.4	1.736	10.880	0	-22.2	74.7
S48009	2048-06-27 19:35:06.13	18 53 52.52290 -22 17 49.68846	3.8	4.841	173.66	-19.97	9.026	45.2	9.107	12.771	11.747	73.8	173.7
PgtRgt	4078728238271213568	18 53 52.56146 -22 17 54.49861	3.4	31.692	6.36	25.12	19.172	20.8	0.631	12.770	0	-22.2	18.0
S48010	2048-06-29 05:30:37.20	18 53 25.82167 -22 18 34.87945	4.5	0.738	173.69	-20.04	9.024	18.9	8.785	13.282	12.023	283.4	175.1
PgtRgt	4078739645704475392	18 53 25.82751 -22 18 35.61266	3.8	4.828	6.35	25.14	22.059	-8.9	13.284	0	-22.2	38.6	
S48011	2048-07-01 02:30:06.11	18 52 50.28680 -22 19 37.73209	3.6	7.667	353.72	-20.11	9.021	-44.9	8.489	11.856	10.913	326.6	177.0
PgtRgt	4078734521786991872	18 52 50.22642 -22 19 30.11024	2.8	50.163	6.34	25.17	13.841	-63.1	0.859	11.862	0	-22.3	64.4

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch		$\sigma(\alpha_*)$ (km)	C/A (″)	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric	Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S48012	2048-07-07 05:38:03.31	18 50 53.26956	-22 22 26.92997	4.0	10.221	173.82	-20.12	9.021		9.042	13.208	12.050	273.0	176.6
XRt	4078691542076154496	18 50 53.34889	-22 22 27.09188	3.4	66.877	6.32	25.27			0.778	13.214	0	-22.3	140.4
S48013	2048-07-07 06:31:41.49	18 50 52.63760	-22 22 27.89595	4.4	0.263	173.82	-20.12	9.021	15.5	9.388	13.448	12.321	259.6	176.5
PgtRgt	4078691542076153984	18 50 52.63963	-22 22 28.15709	3.6	1.719	6.32	25.27	22.127	-12.0	0.621	13.455	0	-22.3	140.9
S48014	2048-07-10 07:11:52.94	18 49 55.21502	-22 24 01.09508	4.2	6.986	353.87	-19.98	9.025	-38.7	9.473	13.556	12.432	246.3	173.5
PgtRgt	4078697314511943552	18 49 55.16119	-22 23 54.14872	3.4	45.732	6.31	25.32	15.439	-58.6	0.600	13.555	0	-22.3	176.9
S48015	2048-07-15 08:03:21.38	18 48 20.84877	-22 26 06.03391	4.3	7.897	173.92	-19.55	9.038	64.4	8.089	11.935	10.878	228.1	168.3
PgtRgt	4078863886201947904	18 48 20.90911	-22 26 13.88550	3.4	51.767	6.29	25.40	12.745	47.6	1.175	11.911	0	-22.4	120.6
S48016	2048-07-15 16:14:04.90	18 48 14.66439	-22 26 29.32861	4.7	6.195	353.93	-19.51	9.040	-32.0	9.352	12.950	11.946	105.0	167.9
PgtRgt	4078864062324524160	18 48 14.61719	-22 26 23.16713	3.8	40.613	6.29	25.40	16.604	-53.4	0.554	12.923	0	-22.4	116.2
S48017	2048-07-23 02:07:11.57	18 46 01.57259	-22 29 31.41017	5.1	7.054	173.97	-18.43	9.073	59.1	9.381	13.676	12.483	308.9	160.4
PgtRgt	4078499363737879296	18 46 01.62606	-22 29 38.42560	3.8	46.420	6.26	25.51	14.015	39.7		13.587	0	-22.4	12.5
S48018	2048-07-26 21:19:28.97	18 44 56.95746	-22 31 07.46659	5.3	5.573	173.97	-17.69	9.096	49.6	9.378	12.696	11.762	16.8	156.5
PgtRgt	4078542313406616064	18 44 56.99980	-22 31 13.00741	3.6	36.765	6.25	25.56	15.936	27.3	0.504	12.563	0	-22.5	43.9
S48019	2048-08-09 09:20:11.33	18 41 34.58490	-22 36 14.12131	3.9	0.311	353.71	-14.14	9.208	11.6	9.509	13.260	12.205	182.5	142.8
PgtRgt	4079186769028654976	18 41 34.58244	-22 36 13.81236	3.0	2.076	6.20	25.73	15.520	-15.8	0.495	12.883	0	-22.6	146.8
S48020	2048-08-11 13:45:16.82	18 41 06.69753	-22 37 00.96084	4.8	4.223	353.61	-13.42	9.231	-16.9	9.623	13.573	12.467	114.0	140.6
PgtRgt	4079185806956896640	18 41 06.66360	-22 36 56.76376	4.1	28.274	6.20	25.76	13.295	-41.6	0.486	13.140	0	-22.6	119.0
S48021	2048-08-15 01:45:15.01	18 40 25.18730	-22 38 03.53427	6.4	1.531	353.41	-12.21	9.269	3.3	9.552	13.875	12.684	290.3	137.1
PgtRgt	4079192094788578176	18 40 25.17461	-22 38 02.01383	4.8	10.289	6.19	25.79	13.303	-24.3	0.545	13.339	0	-22.6	72.3
S48022	2048-08-15 15:13:48.12	18 40 18.85272	-22 38 05.79620	4.8	6.315	173.37	-12.01	9.275	55.4	9.693	13.405	12.374	87.6	136.5
PgtRgt	4079192335306795520	18 40 18.90539	-22 38 12.06879	3.7	42.480	6.19	25.80	10.096	33.8	0.471	12.851	0	-22.6	64.6
S48023	2048-08-20 14:34:34.92	18 39 28.21993	-22 39 32.37143	10.8	3.773	172.91	-10.15	9.334	39.6	8.345	13.363	11.969	92.3	131.5
PgtRgt	4079194014569200256	18 39 28.25360	-22 39 36.11568	7.5	25.544	6.18	25.84	10.414	13.0	1.448	12.627	0	-22.6	6.4
S48024	2048-09-08 10:06:38.66	18 37 42.19987	-22 43 20.58566	6.2	11.393	160.02	-2.11	9.597		9.527	13.360	12.299	140.3	112.9
XRgt	4079225659884311424	18 37 42.48121	-22 43 31.29273	4.3	79.299	6.15	25.95	0.374		0.547	10.917	0	-22.7	111.0
S48025	2048-09-12 04:23:11.72	18 37 37.71685	-22 43 57.19279	19.0	15.767	107.95	-0.63	9.655		6.769	13.013	11.482	222.5	109.3
XRgt	4079225561137474944	18 37 38.80102	-22 44 02.05309	15.2	110.412	6.15	25.96	0.993		3.958	9.265	0	-22.7	59.5
S48026	2048-09-21 06:34:30.41	18 37 54.85955	-22 44 52.74859	4.7	0.433	184.27	4.22	9.801	1.1	9.476	13.518	12.408	180.7	100.5
PgtRgt	4079213603987017600	18 37 54.85722	-22 44 53.18086	3.7	3.081	6.16	25.97	4.410	5.2	0.601	11.829	0	-22.7	68.0
S48027	2048-10-02 11:56:41.60	18 39 02.85439	-22 45 15.82151	6.0	5.858	359.55	9.74	9.986	-50.7	9.321	13.385	12.257	89.4	89.7
PgtRgt	4079169795317238528	18 39 02.85110	-22 45 09.96410	4.3	42.424	6.17	25.94	7.286	-39.5	0.622	12.604	0	-22.7	153.3
S48028	2048-10-13 12:31:45.21	18 41 00.08460	-22 44 25.95101	12.3	6.835	178.09	15.15	10.168	48.8	8.396	13.888	12.448	70.3	79.3
PgtRgt	4079177904216153984	18 41 00.10106	-22 44 32.78256	9.6	50.407	6.20	25.88	9.261	60.4	1.625	13.586	0	-22.7	2.6
S48029*	2048-10-15 09:26:56.81	18 41 24.76599	-22 44 19.53600	11.0	1.333	177.92	16.04	10.198	1.2	9.200	10.721	10.180	114.7	77.5
PgtRgt	4079180682989178240	18 41 24.76953	-22 44 20.86683	8.7	9.856	6.21	25.87	16.577	19.3	0.471	10.482	0	-22.7	24.1
S48030	2048-10-15 14:16:14.64	18 41 27.48061	-22 44 13.41108	3.9	6.083	177.90	16.14	10.202	41.3	9.599	12.416	11.580	42.2	77.3
PgtRgt	4079180996592402176	18 41 27.49676	-22 44 19.48903	3.1	45.010	6.21	25.87	11.665	54.7	0.475	12.183	0	-22.7	26.9
S48031	2048-10-17 22:18:01.36	18 42 00.28937	-22 43 57.82449	4.6	4.247	177.71	17.24	10.239	24.9	9.383	13.040	12.012	279.6	75.1
PgtRgt	4078430987860855552	18 42 00.30163	-22 44 02.06838	3.6	31.541	6.22	25.85	15.591	41.1	0.633	12.879	0	-22.7	58.6
S48032	2048-10-21 20:58:42.39	18 43 00.32317	-22 43 33.93252	5.4	7.267	357.41	19.07	10.302	-64.9	9.793	12.948	12.030	295.8	71.4
PgtRgt	4078520671112709760	18 43 00.29954	-22 43 26.67118	4.4	54.298	6.23	25.82	9.897	-54.4	0.450	12.896	0	-22.7	109.7
S48033	2048-10-21 23:34:57.64	18 43 02.01764	-22 43 22.02994	5.4	3.564	177.41	19.12	10.304	19.0	9.347	13.207	12.158	256.6	71.3
PgtRgt	4078520705472441472	18 43 02.02927	-22 43 25.59026	4.4	26.633	6.23	25.81	18.181	36.6	0.633	13.158	0	-22.7	111.1
S48034	2048-10-22 11:38:08.45	18 43 10.11323	-22 43 27.68557	5.9	7.181	357.37	19.35	10.311	-64.4	9.301	13.469	12.337	75.4	70.9
PgtRgt	4078522109885851392	18 43 10.08943	-22 43 20.51168	4.4	53.707	6.23	25.81	10.401	-53.4	0.690	13.433	0	-22.7	117.3
S48035	2048-10-24 22:37:32.76	18 43 50.81399	-22 42 25.15838	5.4	1.684	177.21	20.46	10.350	3.4	9.089	12.942	11.882	268.3	68.6
PgtRgt	4078515517151580800	18 43 50.81998	-22 42 53.83887	4.4	12.641	6.24	25.79	21.107	22.9	0.727	12.967	0	-22.7	147.2
S48036	2048-10-27 03:53:25.53	18 44 29.40023	-22 42 27.86429	4.7	0.748	357.06	21.45	10.384	-15.9	9.014	13.249	12.085	187.3	66.5
PgtRgt	4078513386847518464	18 44 29.39746	-22 42 27.11722	3.7	5.634	6.25	25.76	22.538	4.2		13.325	0	-22.7	173.3

Table 1 continued on next page

Table 1 (continued)

Event ID	C/A Epoch	ICRS Star Coord at Epoch		$\sigma(\alpha_*)$ (km)	C/A ( $''$ )	PA (deg)	$v_{\text{sky}}$ (km/s)	Dist (au)	Lat I (deg)	K	G	RP	E $\lambda$ (deg)	S-G-T
Event type	Source ID	Geocentric	Object Position	$\sigma(\delta_*)$ (km)	C/A ( $10^3$ km)	P (deg)	B (deg)	$\dot{r}$ (km/s)	Lat E (deg)	$D_*$ (km)	$G_*$	DUP	$\phi$ (deg)	M-G-T
S48037	2048-10-28 13:41:30.73	18 44 54.77758	-22 42 16.64618	5.7	7.822	356.97	22.07	10.405	-67.9	9.213	13.097	12.047	39.0	65.2
PgtRgt	407846669195936512	18 44 54.74769	-22 42 08.83470	4.4	59.031	6.26	25.75	7.837	-65.2	0.684	13.204	0	-22.6	169.8
S48038	2048-11-15 18:22:00.09	18 51 18.08756	-22 36 35.87458	5.1	0.134	175.92	29.37	10.657	-10.4	8.469	12.454	11.352	312.5	48.4
PgtRgt	4078632267201650304	18 51 18.08830	-22 36 36.00681	4.3	1.035	6.34	25.49	31.432	12.6	1.077	12.871	0	-22.5	77.6
S49001	2049-02-28 02:27:37.57	19 40 22.87191	-21 15 23.99755	5.4	6.510	170.92	30.35	10.683	43.2	8.394	11.250	10.421	100.5	46.0
PgtRgt	6868088941842668672	19 40 22.94543	-21 15 30.42440	4.6	50.436	6.76	22.85	21.835	66.5	0.994	11.703	0	-21.1	7.7
S49002*	2049-02-28 13:39:20.91	19 40 34.15730	-21 15 13.11354	49.4	7.654	350.91	30.19	10.677	-68.6	6.667	8.044	7.560	292.2	46.4
PgtRgt	6868077259531603584	19 40 34.07084	-21 15 05.55448	40.0	59.271	6.76	22.83		-63.8	1.546	8.491	1	-21.1	3.0
S49003	2049-03-04 07:00:18.76	19 42 00.84758	-21 11 46.91972	4.8	3.262	170.80	28.87	10.631	9.8	8.626	10.967	10.244	28.6	49.8
PgtRgt	6868103819609232640	19 42 00.88489	-21 11 50.13819	3.6	25.147	6.77	22.74	31.690	42.6	0.728	11.365	0	-21.1	53.7
S49004	2049-06-29 02:31:30.39	19 46 07.85026	-21 10 15.40794	3.7	2.172	348.56	-18.78	9.033	5.2	9.142	11.610	10.870	341.7	162.5
PgtRgt	6865157575123037312	19 46 07.81950	-21 10 13.27707	3.1	14.232	6.80	22.60	22.947	-34.4	0.542	11.542	0	-21.0	150.5
S49005	2049-07-11 17:22:30.11	19 42 18.94176	-21 20 39.07198	3.9	8.792	168.98	-20.04	8.992	70.6	8.884	11.622	10.813	105.6	175.5
PgtRgt	6868046262751649024	19 42 19.06207	-21 20 47.70065	3.1	57.342	6.78	22.88	12.055	55.3	0.634	11.624	0	-21.2	51.6
S49006	2049-08-08 05:03:04.38	19 34 01.55136	-21 42 32.15528	3.5	3.894	169.61	-17.64	9.066	43.9	8.938	11.349	10.618	261.3	156.3
PgtRgt	6772123670047000320	19 34 01.60182	-21 42 35.98392	2.9	25.604	6.74	23.47	19.657	9.0	0.584	11.212	0	-21.6	47.9
S49007	2049-08-13 11:45:45.41	19 32 38.46198	-21 46 17.96029	4.2	9.862	349.65	-16.40	9.105		9.290	11.619	10.897	155.1	150.9
XRgt	6772120130997809536	19 32 38.33487	-21 46 08.25704	3.7	65.123	6.73	23.57	3.110		0.472	11.403	0	-21.7	30.9
S49008	2049-09-13 20:43:01.76	19 27 18.03435	-22 00 01.26297	4.2	6.195	167.35	-5.01	9.467	60.8	9.528	10.796	10.332	348.5	119.4
PgtRgt	6772487436602504704	19 27 18.13191	-22 00 07.30651	3.7	42.535	6.70	23.94	5.054	27.9	0.377	9.293	0	-21.9	89.7
S49009	2049-09-29 10:12:53.14	19 26 59.64923	-22 01 51.87540	3.3	3.127	179.88	2.39	9.706	16.0	8.540	11.879	10.922	130.6	104.1
PgtRgt	6772510698145393024	19 26 59.64976	-22 01 55.00113	3.1	22.013	6.70	23.98	2.580	30.2	0.898	9.570	0	-21.9	76.4
S49010	2049-10-09 01:50:53.48	19 27 39.71893	-22 01 04.57869	5.5	7.795	174.21	7.16	9.864	55.2	7.867	10.629	9.818	246.8	94.7
PgtRgt	6772486715049227264	19 27 39.77556	-22 01 12.33264	4.8	55.764	6.70	23.95	3.468	68.9	1.044	9.514	0	-21.9	58.2
S49011	2049-10-21 13:52:06.17	19 29 29.09954	-21 58 12.15870	3.7	0.668	172.73	13.35	10.071	-10.4	9.946	12.340	11.606	54.6	82.8
PgtRgt	6772479808740923008	19 29 29.10567	-21 58 12.81993	3.0	4.882	6.72	23.85	15.235	20.6	0.383	11.901	0	-21.9	141.6
S49012	2049-10-26 11:45:54.93	19 30 29.19868	-21 56 30.21515	6.5	6.546	352.40	15.75	10.151	-63.0	7.748	11.483	10.427	81.6	78.1
PgtRgt	6772102435731904640	19 30 29.13654	-21 56 23.72570	5.0	48.190	6.72	23.79	11.715	-40.9		11.224	0	-21.8	80.4
S49013	2049-10-26 23:56:13.78	19 30 35.81343	-21 56 05.99181	4.2	5.279	172.38	16.00	10.159	28.2	9.955	13.051	12.166	258.5	77.6
PgtRgt	6772102367012417792	19 30 35.86374	-21 56 11.22425	3.5	38.897	6.72	23.79	14.518	54.0		12.808	0	-21.8	73.7
S49014	2049-11-23 07:25:43.29	19 38 49.44615	-21 39 19.65793	3.9	4.515	171.11	27.92	10.566	21.5	9.753	12.575	11.670	121.3	52.1
PgtRgt	6771986334175542528	19 38 49.49622	-21 39 24.11682	3.1	34.599	6.77	23.29	27.713	51.1	0.517	12.937	0	-21.5	76.6

<sup>a</sup> A nearby event has the same 2MASS ID as this event, resulting in a corresponding K magnitude ambiguity.

\* Superscript \* indicates RUWE > 1.4, \*\* indicates RUWE > 2, and \*\*\* indicates RUWE > 5. See machine-readable file for RUWE values.