

14 Mar 2019 12:07

:54

Approved AGI Educational Alliance Partner

Satellite-CubeSat: Orbit Lifetime

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Ecc
entricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)
of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Height
unt			Orbit Co
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1 Jan 2021 18:00:15.965	6783.448697	6783.450000	0
.00043820	51.578172	13.831574	34.419711
408.285508	402.340492	5560.155313	
0			
2 Jan 2021 09:24:59.606	6783.378760	6783.380311	0
.00047812	51.578237	10.768541	31.201206
408.486600	402.000023	5560.069631	
10			
3 Jan 2021 00:49:42.811	6783.308519	6783.310340	0
.00051812	51.578332	8.376682	27.982654
408.687894	401.658786	5559.983602	
20			
3 Jan 2021 16:14:25.145	6783.237961	6783.240074	0
.00055809	51.578443	6.517041	24.764072
408.888699	401.317449	5559.897211	
30			
4 Jan 2021 07:39:06.607	6783.166948	6783.169373	0
.00059788	51.578553	5.083016	21.545470
409.087883	400.976863	5559.810286	
40			
4 Jan 2021 23:03:47.189	6783.095510	6783.098266	0
.00063750	51.578641	3.993140	18.326844
409.285514	400.637018	5559.722863	
50			
5 Jan 2021 14:28:26.886	6783.023497	6783.026605	0
.00067688	51.578691	3.183227	15.108183
409.480904	400.298305	5559.634758	
60			
6 Jan 2021 05:53:05.692	6782.950858	6782.954336	0
.00071600	51.578692	2.603512	11.889466
409.673943	399.960729	5559.545906	
70			
6 Jan 2021 21:17:43.599	6782.877672	6782.881537	0
.00075492	51.578643	2.216210	8.670668
409.865047	399.624027	5559.456404	
80			
7 Jan 2021 12:42:20.599	6782.803784	6782.808055	0
.00079358	51.578552	1.989046	5.451765
410.053768	399.288343	5559.366063	

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Coefficient
90										
8 Jan 2021 04:06:56.684	6782.729169	6782.733864	0.00083201	51.578437	1.897071	2.232741	410.240158	398.953570	5559.274849	0
100										
8 Jan 2021 19:31:31.846	6782.653940	6782.659077	0.00087025	51.578320	1.921758	359.013590	410.424704	398.619450	5559.182904	0
110										
9 Jan 2021 10:56:06.077	6782.577965	6782.583561	0.00090828	51.578223	2.045291	355.794320	410.607073	398.286049	5559.090062	0
120										
10 Jan 2021 02:20:39.367	6782.501252	6782.507323	0.00094612	51.578160	2.254295	352.574948	410.787374	397.953272	5558.996335	0
130										
10 Jan 2021 17:45:11.710	6782.423933	6782.430497	0.00098380	51.578138	2.539436	349.355499	410.966058	397.620937	5558.901884	0
140										
11 Jan 2021 09:09:43.097	6782.345919	6782.352994	0.00102131	51.578155	2.889899	346.135998	411.142882	397.289106	5558.806601	0
150										
12 Jan 2021 00:34:13.520	6782.267242	6782.274843	0.00105866	51.578199	3.298028	342.916467	411.317971	396.957715	5558.710523	0
160										
12 Jan 2021 15:58:42.973	6782.188052	6782.196197	0.00109588	51.578253	3.758919	339.696918	411.491679	396.626716	5558.613837	0
170										
13 Jan 2021 07:23:11.449	6782.108311	6782.117017	0.00113296	51.578298	4.265294	336.477355	411.663874	396.296159	5558.516494	0
180										
13 Jan 2021 22:47:38.942	6782.028127	6782.037410	0.00116992	51.578317	4.814055	333.257771	411.834832	395.965987	5558.418628	0
190										
14 Jan 2021 14:12:05.448	6781.947520	6781.957396	0.00120675	51.578300	5.399268	330.038152	412.004516	395.636276	5558.320262	0
200										
15 Jan 2021 05:36:30.961	6781.866574	6781.877060	0.00124346	51.578241	6.017296	326.818477				0

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
412.173083	395.307038	5558.221500								
210										
15 Jan 2021 21:00:55.478	6781.785352	6781.796465	0							
.00128008	51.578141	6.666694	323.598726							
412.340678	394.978252	5558.122420								
220										
16 Jan 2021 12:25:18.997	6781.703941	6781.715697	0							
.00131659	51.578009	7.342967	320.378878							
412.507424	394.649970	5558.023128								
230										
17 Jan 2021 03:49:41.515	6781.622433	6781.634847	0							
.00135301	51.577857	8.043745	317.158918							
412.673493	394.322202	5557.923737								
240										
17 Jan 2021 19:14:03.032	6781.540828	6781.553918	0							
.00138935	51.577700	8.768638	313.938837							
412.838884	393.994952	5557.824248								
250										
18 Jan 2021 10:38:23.548	6781.459287	6781.473069	0							
.00142562	51.577554	9.514166	310.718631							
413.003892	393.668246	5557.724859								
260										
19 Jan 2021 02:02:43.064	6781.377898	6781.392390	0							
.00146184	51.577430	10.278835	307.498305							
413.168685	393.342095	5557.625679								
270										
19 Jan 2021 17:27:01.583	6781.296594	6781.311811	0							
.00149798	51.577340	11.062924	304.277867							
413.333093	393.016529	5557.526622								
280										
20 Jan 2021 08:51:19.106	6781.215582	6781.231541	0							
.00153409	51.577289	11.863710	301.057330							
413.497538	392.691544	5557.427947								
290										
21 Jan 2021 00:15:35.639	6781.134921	6781.151640	0							
.00157016	51.577276	12.680353	297.836712							
413.662142	392.367138	5557.329725								
300										
21 Jan 2021 15:39:51.186	6781.054494	6781.071987	0							
.00160617	51.577297	13.513361	294.616028							
413.826574	392.043401	5557.231809								
310										
22 Jan 2021 07:04:05.751	6780.974521	6780.992808	0							
.00164217	51.577342	14.360624	291.395293							
413.991328	391.720287	5557.134475								
320										
22 Jan 2021 22:28:19.338	6780.894829	6780.913924	0							





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560										
7 Feb 2021 08:05:02.940	6779.040959	6779.083570								0
.00250712	51.576488	39.284670				210.854175				
417.942535	383.950604	5554.787663								
570										
7 Feb 2021 23:28:52.973	6778.959724	6779.003410								0
.00253856	51.576367	40.411605				207.631468				
418.075347	383.657473	5554.689139								
580										
8 Feb 2021 14:52:42.017	6778.877811	6778.922571								0
.00256960	51.576314	41.548551				204.408651				
418.204675	383.366467	5554.589780								
590										
9 Feb 2021 06:16:30.063	6778.795093	6778.840925								0
.00260021	51.576339	42.695575				201.185742				
418.330353	383.077497	5554.489431								
600										
9 Feb 2021 21:40:17.103	6778.711628	6778.758529								0
.00263034	51.576438	43.852800				197.962760				
418.451987	382.791070	5554.388159								
610										
10 Feb 2021 13:04:03.126	6778.627368	6778.675331								0
.00266001	51.576597	45.020535				194.739722				
418.569697	382.506965	5554.285904								
620										
11 Feb 2021 04:27:48.125	6778.542335	6778.591357								0
.00268920	51.576792	46.199060				191.516641				
418.683348	382.225366	5554.182694								
630										
11 Feb 2021 19:51:32.091	6778.456599	6778.506670								0
.00271784	51.576997	47.388363				188.293523				
418.792559	381.946780	5554.078610								
640										
12 Feb 2021 11:15:15.015	6778.370164	6778.421274								0
.00274594	51.577186	48.588952				185.070366				
418.897443	381.671105	5553.973655								
650										
13 Feb 2021 02:38:56.889	6778.283083	6778.335223								0
.00277349	51.577338	49.801128				181.847164				
418.997861	381.398585	5553.867895								
660										
13 Feb 2021 18:02:37.705	6778.195405	6778.248562								0
.00280041	51.577437	51.024716				178.623905				
419.093422	381.129701	5553.761385								
670										
14 Feb 2021 09:26:17.458	6778.107191	6778.161350								0
.00282671	51.577477	52.260433				175.400575				









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030										
9 Mar 2021 11:26:00.614	6774.792288	6774.859415	0							
.00314774	51.577179	107.683414	59.302030							
418.047919	375.396912	5549.596557	1							
040										
10 Mar 2021 02:48:59.035	6774.688930	6774.755519	0							
.00313512	51.577138	109.633950	56.075329							
417.858216	375.378823	5549.468899	1							
050										
10 Mar 2021 18:11:56.188	6774.584548	6774.650546	0							
.00312121	51.577132	111.613981	52.848512							
417.658682	375.368410	5549.339918	1							
060										
11 Mar 2021 09:34:52.058	6774.478914	6774.544269	0							
.00310599	51.577167	113.625473	49.621600							
417.448917	375.365621	5549.209336	1							
070										
12 Mar 2021 00:57:46.629	6774.372060	6774.436720	0							
.00308944	51.577240	115.669269	46.394610							
417.228929	375.370510	5549.077192	1							
080										
12 Mar 2021 16:20:39.888	6774.264260	6774.328173	0							
.00307160	51.577340	117.745255	43.167556							
416.999176	375.383171	5548.943824	1							
090										
13 Mar 2021 07:43:31.820	6774.155336	6774.218454	0							
.00305244	51.577456	119.855422	39.940446							
416.759317	375.403591	5548.809015	1							
100										
13 Mar 2021 23:06:22.413	6774.045563	6774.107837	0							
.00303199	51.577573	121.999869	36.713281							
416.509865	375.431808	5548.673105	1							
110										
14 Mar 2021 14:29:11.653	6773.934805	6773.996187	0							
.00301024	51.577678	124.180642	33.486055							
416.250523	375.467851	5548.535927	1							
120										
15 Mar 2021 05:51:59.530	6773.823154	6773.883599	0							
.00298718	51.577760	126.398902	30.258756							
415.981429	375.511769	5548.397597	1							
130										
15 Mar 2021 21:14:46.032	6773.710843	6773.770307	0							
.00296287	51.577811	128.655127	27.031372							
415.703139	375.563476	5548.258404	1							
140										
16 Mar 2021 12:37:31.149	6773.597754	6773.656195	0							
.00293728	51.577827	130.951473	23.803886							





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31 Mar 2021 21:36:24.940	6770.808106	6770.836269	0							
.00203946	51.576721	202.796625	306.306451							
406.508099	378.890439	5544.653977	1							
390										
1 Apr 2021 12:58:33.948	6770.688314	6770.715384	0							
.00199953	51.576812	206.692497	303.075798							
406.116638	379.040130	5544.505488	1							
400										
2 Apr 2021 04:20:41.450	6770.567701	6770.593729	0							
.00196070	51.576911	210.666510	299.845098							
405.731854	379.181604	5544.356055	1							
410										
2 Apr 2021 19:42:47.438	6770.446423	6770.471468	0							
.00192329	51.576992	214.714140	296.614354							
405.356059	379.312876	5544.205878	1							
420										
3 Apr 2021 11:04:51.900	6770.324192	6770.348311	0							
.00188742	51.577033	218.831823	293.383560							
404.989812	379.432810	5544.054603	1							
430										
4 Apr 2021 02:26:54.824	6770.200939	6770.224194	0							
.00185332	51.577021	223.013624	290.152695							
404.634576	379.539812	5543.902149	1							
440										
4 Apr 2021 17:48:56.200	6770.076895	6770.099353	0							
.00182130	51.576954	227.250665	286.921732							
404.292708	379.631997	5543.748808	1							
450										
5 Apr 2021 09:10:56.014	6769.951740	6769.973467	0							
.00179148	51.576841	231.535438	283.690643							
403.964736	379.708198	5543.594185	1							
460										
6 Apr 2021 00:32:54.254	6769.825314	6769.846382	0							
.00176409	51.576699	235.857876	280.459404							
403.652025	379.766738	5543.438090	1							
470										
6 Apr 2021 15:54:50.907	6769.698164	6769.718646	0							
.00173938	51.576549	240.204173	277.227997							
403.356753	379.806539	5543.281197	1							
480										
7 Apr 2021 07:16:45.962	6769.569857	6769.589824	0							
.00171744	51.576414	244.563354	273.996415							
403.079205	379.826444	5543.122973	1							
490										
7 Apr 2021 22:38:39.407	6769.440726	6769.460255	0							
.00169851	51.576313	248.919900	270.764658							
402.821234	379.825277	5542.963832	1							

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8 Apr 2021 14:00:31.233	6769.310487	6769.329653	0							
.00168262	51.576260	253.261212	267.532738							
402.582862	379.802443	5542.803423	1							
9 Apr 2021 05:22:21.426	6769.179183	6769.198059	0							
.00166987	51.576260	257.572720	264.300667							
402.364762	379.757356	5542.641798	1							
9 Apr 2021 20:44:09.977	6769.047158	6769.065820	0							
.00166039	51.576311	261.838268	261.068464							
402.168121	379.689520	5542.479382	1							
10 Apr 2021 12:05:56.877	6768.914172	6768.932693	0							
.00165413	51.576406	266.045855	257.836148							
401.992413	379.598973	5542.315877	1							
11 Apr 2021 03:27:42.117	6768.780299	6768.798752	0							
.00165109	51.576529	270.182696	254.603734							
401.837669	379.485835	5542.151374	1							
11 Apr 2021 18:49:25.687	6768.645864	6768.664320	0							
.00165129	51.576664	274.235776	251.371232							
401.704346	379.350294	5541.986270	1							
12 Apr 2021 10:11:07.583	6768.510708	6768.529238	0							
.00165460	51.576792	278.196866	248.138648							
401.591413	379.193063	5541.820369	1							
13 Apr 2021 01:32:47.797	6768.374944	6768.393616	0							
.00166092	51.576895	282.057859	244.905984							
401.498344	379.014887	5541.653806	1							
13 Apr 2021 16:54:26.324	6768.238850	6768.257731	0							
.00167019	51.576960	285.811282	241.673232							
401.425018	378.816443	5541.486922	1							
14 Apr 2021 08:16:03.162	6768.102373	6768.121526	0							
.00168223	51.576976	289.454056	238.440384							
401.370077	378.598974	5541.319647	1							
14 Apr 2021 23:37:38.308	6767.965852	6767.985341	0							
.00169693	51.576940	292.982770	235.207424							
401.333166	378.363516	5541.152398	1							
15 Apr 2021 14:59:11.763	6767.829093	6767.848978	0							
.00171411	51.576853	296.397108	231.974338							

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401.312803	378.111154	5540.984933	1							
620										
16 Apr 2021 06:20:43.525	6767.692336	6767.712675	0							
.00173358	51.576724	299.697668	228.741110							
401.308016	377.843333	5540.817542	1							
630										
16 Apr 2021 21:42:13.597	6767.555721	6767.576571	0							
.00175523	51.576567	302.885515	225.507726							
401.318241	377.560901	5540.650398	1							
640										
17 Apr 2021 13:03:41.982	6767.419327	6767.440742	0							
.00177885	51.576400	305.963984	222.274176							
401.341978	377.265506	5540.483592	1							
650										
18 Apr 2021 04:25:08.685	6767.283264	6767.305294	0							
.00180425	51.576244	308.936529	219.040454							
401.378190	376.958397	5540.317257	1							
660										
18 Apr 2021 19:46:33.710	6767.147570	6767.170266	0							
.00183135	51.576116	311.807042	215.806560							
401.426295	376.640237	5540.151439	1							
670										
19 Apr 2021 11:07:57.063	6767.012362	6767.035771	0							
.00185991	51.576036	314.580368	212.572500							
401.484838	376.312704	5539.986277	1							
680										
20 Apr 2021 02:29:18.754	6766.877704	6766.901870	0							
.00188978	51.576014	317.261342	209.338285							
401.552832	375.976909	5539.821847	1							
690										
20 Apr 2021 17:50:38.788	6766.743544	6766.768512	0							
.00192090	51.576053	319.855062	206.103928							
401.629785	375.633239	5539.658084	1							
700										
21 Apr 2021 09:11:57.175	6766.609995	6766.635805	0							
.00195304	51.576149	322.366583	202.869447							
401.714312	375.283299	5539.495123	1							
710										
22 Apr 2021 00:33:13.920	6766.476840	6766.503531	0							
.00198610	51.576284	324.801290	199.634855							
401.805496	374.927567	5539.332695	1							
720										
22 Apr 2021 15:54:29.033	6766.344406	6766.372015	0							
.00201999	51.576436	327.163656	196.400164							
401.903044	374.566986	5539.171199	1							
730										
23 Apr 2021 07:15:42.521	6766.212538	6766.241099	0							





Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
30 Apr 2021 23:28:19.074	6764.638949	6764.680947	0.00249168	51.575719	353.191912	154.337185	403.399380	369.688515	5537.094785	0
1 May 2021 14:49:11.638	6764.504716	6764.547946	0.00252797	51.575884	354.950068	151.100674	403.511533	369.310360	5536.931487	0
2 May 2021 06:10:02.554	6764.369227	6764.413696	0.00256396	51.576060	356.686019	147.864084	403.620352	368.933040	5536.766658	0
2 May 2021 21:30:51.807	6764.232658	6764.278374	0.00259970	51.576218	358.402067	144.627404	403.726480	368.556269	5536.600514	0
3 May 2021 12:51:39.382	6764.094561	6764.141529	0.00263507	51.576333	0.099422	141.390619	403.828486	368.180571	5536.432502	0
4 May 2021 04:12:25.260	6763.954805	6764.003025	0.00267002	51.576389	1.779605	138.153705	403.926017	367.806033	5536.262456	0
4 May 2021 19:33:09.422	6763.813678	6763.863156	0.00270463	51.576384	3.444514	134.916643	404.019874	367.432438	5536.090734	0
5 May 2021 10:53:51.850	6763.670697	6763.721431	0.00273876	51.576322	5.094988	131.679413	404.108660	367.060202	5535.916737	0
6 May 2021 02:14:32.519	6763.525782	6763.577768	0.00277240	51.576219	6.732220	128.442004	404.192117	366.689419	5535.740362	0
6 May 2021 17:35:11.409	6763.379317	6763.432555	0.00280562	51.576093	8.357832	125.204410	404.271145	366.319965	5535.562085	0
7 May 2021 08:55:48.498	6763.230826	6763.285310	0.00283828	51.575965	9.972337	121.966633	404.344425	365.952195	5535.381316	0
8 May 2021 00:16:23.761	6763.080122	6763.135844	0.00287040	51.575853	11.577038	118.728680	404.411733	365.585956	5535.197823	0

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
970										
8 May 2021 15:36:57.176	6762.927997	6762.984952	0							
.00290201	51.575773	13.172620	115.490561							
404.474192	365.221712	5535.012580	1							
980										
9 May 2021 06:57:28.722	6762.773858	6762.832036	0							
.00293302	51.575736	14.759721	112.252293							
404.530567	364.859506	5534.824856	1							
990										
9 May 2021 22:17:58.378	6762.618181	6762.677574	0							
.00296351	51.575747	16.339745	109.013888							
404.581824	364.499323	5534.635234	2							
000										
10 May 2021 13:38:26.123	6762.460599	6762.521193	0							
.00299337	51.575802	17.912785	105.775362							
404.626933	364.141453	5534.443260	2							
010										
11 May 2021 04:58:51.936	6762.301206	6762.362987	0							
.00302260	51.575896	19.479476	102.536724							
404.665933	363.786042	5534.249048	2							
020										
11 May 2021 20:19:15.797	6762.140471	6762.203429	0							
.00305127	51.576017	21.041176	99.297980							
404.699728	363.433129	5534.053178	2							
030										
12 May 2021 11:39:37.688	6761.978146	6762.042264	0							
.00307929	51.576150	22.597687	96.059131							
404.727521	363.083007	5533.855338	2							
040										
13 May 2021 02:59:57.592	6761.814383	6761.879644	0							
.00310665	51.576281	24.149468	92.820172							
404.749438	362.735850	5533.655714	2							
050										
13 May 2021 18:20:15.494	6761.649600	6761.715988	0							
.00313341	51.576395	25.697849	89.581092							
404.766243	362.391734	5533.454821	2							
060										
14 May 2021 09:40:31.381	6761.483685	6761.551182	0							
.00315952	51.576479	27.242312	86.341877							
404.777413	362.050952	5533.252519	2							
070										
15 May 2021 01:00:45.240	6761.316828	6761.385415	0							
.00318496	51.576525	28.783148	83.102510							
404.783141	361.713689	5533.049039	2							
080										
15 May 2021 16:20:57.062	6761.149348	6761.219007	0							
.00320977	51.576531	30.321701	79.862973							



Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
210	404.450257	357.717957	48.636872	51.576731	6758.976489	40.974322	5530.392572	2		
23 May 2021 23:40:24.605					6758.976489	6759.058028				0
220	404.397092	357.444964	50.160135	51.576807	6758.813797	37.732748	5530.192426	2		
24 May 2021 15:00:07.963					6758.813797	6758.896071				0
230	404.340389	357.177753	51.684124	51.576832	6758.652140	34.491039	5529.993660	2		
25 May 2021 06:19:49.348					6758.652140	6758.735119				0
240	404.279965	356.916273	53.208879	51.576806	6758.491215	31.249170	5529.796130	2		
25 May 2021 21:39:28.772					6758.491215	6758.574864				0
250	404.215015	356.660714	54.736328	51.576733	6758.331285	28.007116	5529.599458	2		
26 May 2021 12:59:06.245					6758.331285	6758.415573				0
260	404.146000	356.411145	56.265040	51.576632	6758.172301	24.764858	5529.403970	2		
27 May 2021 04:18:41.778					6758.172301	6758.257194				0
270	404.072739	356.167648	57.795240	51.576523	6758.013936	21.522392	5529.209604	2		
27 May 2021 19:38:15.382					6758.013936	6758.099395				0
280	403.994377	355.930412	59.328800	51.576426	6757.856386	18.279723	5529.015952	2		
28 May 2021 10:57:47.064					6757.856386	6757.942374				0
290	403.911384	355.699364	60.864319	51.576359	6757.699558	15.036869	5528.823258	2		
29 May 2021 02:17:16.835					6757.699558	6757.786037				0
300	403.823565	355.474509	62.402104	51.576329	6757.543140	11.793851	5528.631405	2		
29 May 2021 17:36:44.702					6757.543140	6757.630069				0
310	403.730086	355.256052	63.944092	51.576335	6757.387250	8.550694	5528.440007	2		
30 May 2021 08:56:10.670					6757.387250	6757.474589				0
320	403.631371	355.043807	65.489095	51.576369	6757.387250	5.307417	5528.249210	2		

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
31 May 2021 00:15:34.745	6757.231743	6757.319450	0							
.00360272	51.576418	67.037669	2.064034							
403.527170	354.837731	5528.058834	2							
330										
31 May 2021 15:34:56.930	6757.076418	6757.164448	0							
.00360939	51.576463	68.591667	358.820549							
403.416717	354.638179	5527.868628	2							
340										
1 Jun 2021 06:54:17.227	6756.921291	6757.009602	0							
.00361517	51.576492	70.150208	355.576957							
403.300317	354.444886	5527.678615	2							
350										
1 Jun 2021 22:13:35.638	6756.766149	6756.854691	0							
.00361995	51.576493	71.715286	352.333247							
403.177182	354.258200	5527.488525	2							
360										
2 Jun 2021 13:32:52.161	6756.611002	6756.699730	0							
.00362379	51.576459	73.286056	349.089401							
403.047575	354.077886	5527.298376	2							
370										
3 Jun 2021 04:52:06.796	6756.455749	6756.544615	0							
.00362665	51.576392	74.863138	345.845403							
402.911223	353.904007	5527.108040	2							
380										
3 Jun 2021 20:11:19.540	6756.300249	6756.389201	0							
.00362845	51.576297	76.448414	342.601235							
402.767400	353.737003	5526.917340	2							
390										
4 Jun 2021 11:30:30.389	6756.144485	6756.233473	0							
.00362922	51.576183	78.041190	339.356885							
402.616322	353.576625	5526.726256	2							
400										
5 Jun 2021 02:49:39.340	6755.988390	6756.077362	0							
.00362894	51.576063	79.642097	336.112344							
402.457752	353.422971	5526.534704	2							
410										
5 Jun 2021 18:08:46.387	6755.831895	6755.920795	0							
.00362752	51.575950	81.252851	332.867610							
402.291060	353.276531	5526.342596	2							
420										
6 Jun 2021 09:27:51.525	6755.674988	6755.763763	0							
.00362501	51.575855	82.872941	329.622686							
402.116482	353.137045	5526.149919	2							
430										
7 Jun 2021 00:46:54.749	6755.517652	6755.606248	0							
.00362138	51.575787	84.503024	326.377580							
401.933869	353.004627	5525.956650	2							

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
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440										
7 Jun 2021 16:05:56.053	6755.359871	6755.448229	0							
.00361656	51.575752	86.144655	323.132305							
401.742682	352.879777	5525.762767	2							
450										
8 Jun 2021 07:24:55.430	6755.201677	6755.289741	0							
.00361058	51.575749	87.797577	319.886875							
401.543248	352.762233	5525.568310	2							
460										
8 Jun 2021 22:43:52.876	6755.043071	6755.130782	0							
.00360338	51.575775	89.463259	316.641306							
401.335082	352.652482	5525.373278	2							
470										
9 Jun 2021 14:02:48.386	6754.884131	6754.971433	0							
.00359501	51.575823	91.141650	313.395611							
401.118596	352.550270	5525.177769	2							
480										
10 Jun 2021 05:21:41.954	6754.724930	6754.811767	0							
.00358545	51.575879	92.833565	310.149800							
400.893817	352.455716	5524.981874	2							
490										
10 Jun 2021 20:40:33.578	6754.565470	6754.651782	0							
.00357465	51.575930	94.540360	306.903879							
400.660299	352.369264	5524.785589	2							
500										
11 Jun 2021 11:59:23.255	6754.405922	6754.491654	0							
.00356266	51.575961	96.262366	303.657849							
400.418615	352.290693	5524.589132	2							
510										
12 Jun 2021 03:18:10.983	6754.246405	6754.331502	0							
.00354948	51.575961	98.000564	300.411703							
400.168890	352.220115	5524.392648	2							
520										
12 Jun 2021 18:36:56.762	6754.086880	6754.171284	0							
.00353506	51.575918	99.756219	297.165430							
399.910658	352.157910	5524.196084	2							
530										
13 Jun 2021 09:55:40.592	6753.927622	6754.011281	0							
.00351945	51.575829	101.530107	293.919012							
399.644663	352.103899	5523.999787	2							
540										
14 Jun 2021 01:14:22.478	6753.768779	6753.851639	0							
.00350266	51.575695	103.323398	290.672430							
399.371092	352.058186	5523.803936	2							
550										
14 Jun 2021 16:33:02.421	6753.610238	6753.692246	0							
.00348464	51.575524	105.137253	287.425663							



Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
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.00317807	51.574908	128.978215	248.450120							
395.171069	352.255321	5521.348722								2
680										
22 Jun 2021 23:32:49.222	6751.637871	6751.704670								0
.00314540	51.574766	131.179435	245.201347							
394.804508	352.330831	5521.170217								2
690										
23 Jun 2021 14:51:03.111	6751.495394	6751.560771								0
.00311179	51.574558	133.421082	241.952427							
394.433209	352.414334	5520.993710								2
700										
24 Jun 2021 06:09:15.253	6751.354479	6751.418412								0
.00307727	51.574306	135.704863	238.703338							
394.057373	352.505451	5520.819092								2
710										
24 Jun 2021 21:27:25.663	6751.214650	6751.277116								0
.00304180	51.574043	138.031440	235.454059							
393.676157	352.604075	5520.645781								2
720										
25 Jun 2021 12:45:34.357	6751.076257	6751.137240								0
.00300550	51.573802	140.403696	232.204585							
393.290781	352.709699	5520.474213								2
730										
26 Jun 2021 04:03:41.351	6750.939201	6750.998687								0
.00296841	51.573612	142.823488	228.954918							
392.901403	352.821971	5520.304270								2
740										
26 Jun 2021 19:21:46.656	6750.803039	6750.861013								0
.00293048	51.573491	145.291553	225.705072							
392.507248	352.940778	5520.135406								2
750										
27 Jun 2021 10:39:50.286	6750.668006	6750.724460								0
.00289184	51.573448	147.810882	222.455066							
392.109460	353.065461	5519.967919								2
760										
28 Jun 2021 01:57:52.251	6750.533964	6750.588894								0
.00285254	51.573477	150.383347	219.204922							
391.708220	353.195567	5519.801644								2
770										
28 Jun 2021 17:15:52.562	6750.400540	6750.453939								0
.00281255	51.573562	153.009670	215.954663							
391.302921	353.330956	5519.636120								2
780										
29 Jun 2021 08:33:51.226	6750.267847	6750.319716								0
.00277201	51.573682	155.692773	212.704302							
390.894664	353.470769	5519.471497								2
790										



Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
29 Jun 2021 23:51:48.250	6750.135765	6750.186108	0							
.00273093	51.573812	158.434001	209.453851							
390.483409	353.614806	5519.307628	2							
800										
30 Jun 2021 15:09:43.638	6750.003942	6750.052764	0							
.00268941	51.573926	161.234781	206.203310							
390.069397	353.762131	5519.144086	2							
810										
1 Jul 2021 06:27:37.393	6749.872410	6749.919723	0							
.00264754	51.574006	164.097379	202.952676							
389.653383	353.912063	5518.980917	2							
820										
1 Jul 2021 21:45:29.516	6749.740949	6749.786764	0							
.00260532	51.574036	167.022279	199.701936							
389.235120	354.064408	5518.817849	2							
830										
2 Jul 2021 13:03:20.007	6749.609497	6749.653833	0							
.00256294	51.574013	170.011668	196.451081							
388.815822	354.217845	5518.654818	2							
840										
3 Jul 2021 04:21:08.862	6749.477901	6749.520780	0							
.00252050	51.573938	173.066770	193.200097							
388.395963	354.371597	5518.491637	2							
850										
3 Jul 2021 19:38:56.080	6749.346043	6749.387488	0							
.00247802	51.573820	176.187688	189.948972							
387.975594	354.525382	5518.328167	2							
860										
4 Jul 2021 10:56:41.654	6749.213782	6749.253822	0							
.00243567	51.573672	179.376201	186.697695							
387.555803	354.677840	5518.164238	2							
870										
5 Jul 2021 02:14:25.578	6749.080987	6749.119654	0							
.00239358	51.573512	182.632851	183.446259							
387.137213	354.828096	5517.999697	2							
880										
5 Jul 2021 17:32:07.845	6748.947632	6748.984960	0							
.00235179	51.573359	185.956986	180.194662							
386.720127	354.975794	5517.834512	2							
890										
6 Jul 2021 08:49:48.445	6748.813542	6748.849570	0							
.00231050	51.573229	189.349651	176.942909							
386.305802	355.119338	5517.668474	2							
900										
7 Jul 2021 00:07:27.371	6748.678845	6748.713615	0							
.00226983	51.573138	192.809791	173.691004							
385.895041	355.258189	5517.501746	2							

	Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
910	7 Jul 2021 15:25:04.610	6748.543131	6748.576688	0							
	.00222989	51.573098	196.336364	170.438955							
	385.488242	355.391134	5517.333826	2							
920	8 Jul 2021 06:42:40.152	6748.406449	6748.438840	0							
	.00219085	51.573114	199.928064	167.186774							
	385.086659	355.517021	5517.164779	2							
930	8 Jul 2021 22:00:13.983	6748.268867	6748.300142	0							
	.00215281	51.573187	203.581689	163.934472							
	384.690940	355.635345	5516.994692	2							
940	9 Jul 2021 13:17:46.093	6748.130236	6748.160449	0							
	.00211597	51.573308	207.294995	160.682058							
	384.302326	355.744573	5516.823387	2							
950	10 Jul 2021 04:35:16.467	6747.990544	6748.019752	0							
	.00208047	51.573465	211.064127	157.429540							
	383.921801	355.843703	5516.650851	2							
960	10 Jul 2021 19:52:45.094	6747.849888	6747.878146	0							
	.00204642	51.573637	214.883494	154.176920							
	383.550119	355.932174	5516.477204	2							
970	11 Jul 2021 11:10:11.960	6747.708190	6747.735560	0							
	.00201401	51.573805	218.748518	150.924194							
	383.188542	356.008579	5516.302356	2							
980	12 Jul 2021 02:27:37.054	6747.565485	6747.592029	0							
	.00198338	51.573947	222.652904	147.671353							
	382.838052	356.072006	5516.126351	2							
990	12 Jul 2021 17:45:00.363	6747.421850	6747.447629	0							
	.00195462	51.574046	226.588452	144.418382							
	382.499335	356.121923	5515.949282	3							
000	13 Jul 2021 09:02:21.877	6747.277292	6747.302370	0							
	.00192791	51.574089	230.548449	141.165263							
	382.173560	356.157180	5515.771162	3							
010	14 Jul 2021 00:19:41.585	6747.132045	6747.156488	0							
	.00190334	51.574075	234.524085	137.911977							
	381.861631	356.177344	5515.592280	3							
020	14 Jul 2021 15:36:59.477	6746.985817	6747.009690	0							
	.00188102	51.574010	238.505833	134.658509							

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
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030	381.563939	356.181440				5515.412276				3
15 Jul 2021 06:54:15.544		6746.838827				6746.862195				0
.00186106	51.573911	242.485337				131.404847				
040	381.281489	356.168900				5515.231420				3
15 Jul 2021 22:11:29.776		6746.691194				6746.714123				0
.00184350	51.573804	246.451485				128.150992				
050	381.014684	356.139561				5515.049859				3
16 Jul 2021 13:28:42.169		6746.543081				6746.565637				0
.00182845	51.573715	250.396379				124.896950				
060	380.764387	356.092886				5514.867792				3
17 Jul 2021 04:45:52.717		6746.394589				6746.416837				0
.00181596	51.573672	254.310692				121.642743				
070	380.531047	356.028626				5514.685342				3
17 Jul 2021 20:03:01.416		6746.245653				6746.267658				0
.00180603	51.573693	258.183315				118.388396				
080	380.314587	355.946728				5514.502429				3
18 Jul 2021 11:20:08.265		6746.096512				6746.118338				0
.00179871	51.573783	262.007802				115.133938				
090	380.115635	355.847040				5514.319345				3
19 Jul 2021 02:37:13.261		6745.947256				6745.968967				0
.00179401	51.573937	265.776362				111.879393				
100	379.934323	355.729612				5514.136202				3
19 Jul 2021 17:54:16.404		6745.797752				6745.819412				0
.00179189	51.574132	269.479495				108.624776				
110	379.770176	355.594647				5513.952834				3
20 Jul 2021 09:11:17.695		6745.648281				6745.669952				0
.00179235	51.574340	273.113592				105.370091				
120	379.623586	355.442318				5513.769584				3
21 Jul 2021 00:28:17.135		6745.499014				6745.520757				0
.00179536	51.574529	276.673410				102.115325				
130	379.494379	355.273136				5513.586663				3
21 Jul 2021 15:45:14.726		6745.349525				6745.371400				0
.00180083	51.574672	280.152540				98.860457				
140	379.381680	355.087120				5513.403543				3
22 Jul 2021 07:02:10.469		6745.200197				6745.222265				0

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
150	379.285682	354.884847	283.550598	51.574749	6745.050787	95.605455	5513.220698	3		
22 Jul 2021 22:19:04.364					6745.073105					0
160	379.205330	354.666880	286.862657	51.574756	6744.924176	92.350291	5513.037825	3		
23 Jul 2021 13:35:56.413					6744.901550					0
170	379.140709	354.433642	290.090565	51.574699	6744.775456	89.094937	5512.855237	3		
24 Jul 2021 04:52:46.619					6744.752465					0
180	379.091261	354.185652	293.234029	51.574595	6744.626669	85.839377	5512.672908	3		
24 Jul 2021 20:09:34.984					6744.603257					0
190	379.055741	353.923598	296.290511	51.574467	6744.478016	82.583606	5512.490498	3		
25 Jul 2021 11:26:21.507					6744.454127					0
200	379.034141	353.647891	299.264134	51.574338	6744.329429	79.327627	5512.308253	3		
26 Jul 2021 02:43:06.191					6744.305010					0
210	379.025793	353.359066	302.156485	51.574228	6744.180637	76.071455	5512.126093	3		
26 Jul 2021 17:59:49.035					6744.155633					0
220	379.029386	353.057888	304.966715	51.574152	6744.031763	72.815111	5511.943683	3		
27 Jul 2021 09:16:30.038					6744.006122					0
230	379.044850	352.744676	307.700225	51.574117	6743.882754	69.558615	5511.761174	3		
28 Jul 2021 00:33:09.198					6743.856422					0
240	379.071477	352.420030	310.359658	51.574124	6743.733279	66.301988	5511.578502	3		
28 Jul 2021 15:49:46.513					6743.706207					0
250	379.107990	352.084568	312.945238	51.574165	6743.583424	63.045245	5511.395261	3		
29 Jul 2021 07:06:21.978					6743.555560					0
260	379.154273	351.738576	315.462808	51.574230	6743.583424	59.788398	5511.211556	3		

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
29 Jul 2021 22:22:55.587	6743.404287	6743.432992	0							
.00206321	51.574304	317.912944	56.531449							
379.209107	351.382878	5511.027146	3							
270										
30 Jul 2021 13:39:27.334	6743.252373	6743.281970	0							
.00209503	51.574373	320.301497	53.274396							
379.272357	351.017583	5510.842014	3							
280										
31 Jul 2021 04:55:57.211	6743.099695	6743.130234	0							
.00212811	51.574426	322.631644	50.017231							
379.343350	350.643118	5510.656009	3							
290										
31 Jul 2021 20:12:25.207	6742.946132	6742.977659	0							
.00216230	51.574453	324.904251	46.759940							
379.421003	350.260316	5510.468978	3							
300										
1 Aug 2021 11:28:51.314	6742.791595	6742.824159	0							
.00219759	51.574449	327.124871	43.502509							
379.505132	349.869185	5510.280815	3							
310										
2 Aug 2021 02:45:15.519	6742.635971	6742.669620	0							
.00223391	51.574413	329.296556	40.244920							
379.595114	349.470125	5510.091380	3							
320										
2 Aug 2021 18:01:37.808	6742.479219	6742.513996	0							
.00227112	51.574349	331.420222	36.987161							
379.690024	349.063969	5509.900619	3							
330										
3 Aug 2021 09:17:58.168	6742.321203	6742.357156	0							
.00230920	51.574264	333.500934	33.729219							
379.789630	348.650681	5509.708368	3							
340										
4 Aug 2021 00:34:16.585	6742.161892	6742.199065	0							
.00234809	51.574168	335.541456	30.471086							
379.893361	348.230768	5509.514586	3							
350										
4 Aug 2021 15:50:33.042	6742.001212	6742.039648	0							
.00238768	51.574073	337.542656	27.212760							
380.000453	347.804843	5509.319182	3							
360										
5 Aug 2021 07:06:47.523	6741.839069	6741.878811	0							
.00242793	51.573988	339.509041	23.954244							
380.110622	347.373001	5509.122039	3							
370										
5 Aug 2021 22:23:00.011	6741.675532	6741.716620	0							
.00246874	51.573924	341.441337	20.695545							
380.223196	346.936045	5508.923239	3							

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
6 Aug 2021 13:39:10.490	6741.510464	6741.552940	.00251009	51.573887	343.343708	17.436675	380.337865	346.494014	5508.722615	0
7 Aug 2021 04:55:18.940	6741.343852	6741.387753	.00255191	51.573878	345.218381	14.177646	380.454143	346.047363	5508.520148	0
7 Aug 2021 20:11:25.345	6741.175796	6741.221159	.00259409	51.573893	347.065875	10.918474	380.571478	345.596841	5508.315959	0
8 Aug 2021 11:27:29.688	6741.006203	6741.053064	.00263660	51.573926	348.889840	7.659169	380.689517	345.142611	5508.109932	0
9 Aug 2021 02:43:31.950	6740.835102	6740.883495	.00267937	51.573963	350.692144	4.399739	380.807820	344.685169	5507.902100	0
9 Aug 2021 17:59:32.114	6740.662595	6740.712551	.00272232	51.573991	352.473047	1.140184	380.925940	344.225161	5507.692587	0
10 Aug 2021 09:15:30.164	6740.488657	6740.540205	.00276540	51.573994	354.235725	357.880498	381.043506	343.762904	5507.481358	0
11 Aug 2021 00:31:26.083	6740.313357	6740.366525	.00280854	51.573961	355.981692	354.620667	381.160109	343.298941	5507.268497	0
11 Aug 2021 15:47:19.855	6740.136726	6740.191538	.00285168	51.573885	357.710959	351.360670	381.275387	342.833688	5507.054037	0
12 Aug 2021 07:03:11.465	6739.958810	6740.015288	.00289475	51.573769	359.426322	348.100484	381.388938	342.367639	5506.838032	0
12 Aug 2021 22:19:00.898	6739.779633	6739.837798	.00293771	51.573621	1.127653	344.840086	381.500465	341.901132	5506.620510	0
13 Aug 2021 13:34:48.140	6739.599254	6739.659124	.00298048	51.573457	2.817602	341.579460				0







Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
28 Aug 2021 19:42:02.358	6734.795052	6734.893128	0							
.00381608	51.571944	42.408435	263.267464							
382.457036	331.055221	5500.561738	3							
740										
29 Aug 2021 10:56:48.646	6734.560463	6734.659671	0							
.00383808	51.571961	44.098710	260.001979							
382.370842	330.674500	5500.275734	3							
750										
30 Aug 2021 02:11:32.053	6734.321206	6734.421479	0							
.00385872	51.571942	45.797951	256.736297							
382.270695	330.298264	5499.983936	3							
760										
30 Aug 2021 17:26:12.525	6734.077730	6734.179009	0							
.00387810	51.571881	47.505383	253.470401							
382.157829	329.926190	5499.686902	3							
770										
31 Aug 2021 08:40:50.005	6733.829215	6733.931432	0							
.00389607	51.571780	49.222788	250.204272							
382.030291	329.558573	5499.383617	3							
780										
31 Aug 2021 23:55:24.432	6733.575946	6733.679031	0							
.00391265	51.571646	50.949581	246.937891							
381.888591	329.195471	5499.074428	3							
790										
1 Sep 2021 15:09:55.747	6733.317605	6733.421489	0							
.00392786	51.571490	52.687039	243.671239							
381.732445	328.836534	5498.758948	3							
800										
2 Sep 2021 06:24:23.884	6733.053798	6733.158405	0							
.00394159	51.571331	54.435720	240.404300							
381.560732	328.482077	5498.436684	3							
810										
2 Sep 2021 21:38:48.781	6732.785202	6732.890462	0							
.00395395	51.571186	56.194886	237.137061							
381.374976	328.131948	5498.108476	3							
820										
3 Sep 2021 12:53:10.374	6732.510978	6732.616812	0							
.00396479	51.571074	57.965954	233.869517							
381.173249	327.786375	5497.773283	3							
830										
4 Sep 2021 04:07:28.592	6732.231083	6732.337410	0							
.00397410	51.571012	59.749153	230.601667							
380.955411	327.445410	5497.431053	3							
840										
4 Sep 2021 19:21:43.373	6731.946283	6732.053029	0							
.00398201	51.571012	61.543848	227.333517							
380.723110	327.108948	5497.082731	3							

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
5 Sep 2021 10:35:54.649	6731.655813	6731.762895	.00398835	51.571076	63.351140	224.065077	380.474552	326.777239	5496.727370	0
6 Sep 2021 01:50:02.353	6731.359726	6731.467060	.00399314	51.571201	65.171158	220.796360	380.209736	326.450383	5496.365033	0
6 Sep 2021 17:04:06.421	6731.058815	6731.166325	.00399649	51.571372	67.003474	217.527376	379.930355	326.128295	5495.996704	0
7 Sep 2021 08:18:06.788	6730.752454	6730.860054	.00399826	51.571567	68.848839	214.258138	379.634795	325.811313	5495.621603	0
7 Sep 2021 23:32:03.393	6730.441467	6730.549079	.00399858	51.571756	70.707055	210.988648	379.324724	325.499434	5495.240750	0
8 Sep 2021 14:45:56.176	6730.125245	6730.232784	.00399732	51.571911	72.578573	207.718905	378.998648	325.192920	5494.853389	0
9 Sep 2021 05:59:45.072	6729.804021	6729.911401	.00399445	51.572005	74.463472	204.448895	378.656711	324.892092	5494.459808	0
9 Sep 2021 21:13:30.024	6729.478495	6729.585637	.00399011	51.572020	76.361922	201.178599	378.300451	324.596823	5494.060871	0
10 Sep 2021 12:27:10.977	6729.148340	6729.255157	.00398416	51.571954	78.273985	197.907995	377.928578	324.307736	5493.656167	0
11 Sep 2021 03:40:47.874	6728.813782	6728.920187	.00397658	51.571818	80.199642	194.637056	377.541250	324.025125	5493.245977	0
11 Sep 2021 18:54:20.664	6728.475372	6728.581286	.00396748	51.571636	82.139489	191.365762	377.139812	323.748760	5492.830982	0
12 Sep 2021 10:07:49.298	6728.132953	6728.238289	.00395674	51.571442	84.092989	188.094101				0



Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
090	370.581055	320.856312	108.629847	51.571498	6723.378414	148.807300	5487.045429	4		
20 Sep 2021 15:56:23.731					6723.468711			0		
100	369.971261	320.692161	110.771833	51.571315	145.531045	5486.571748	4			
21 Sep 2021 07:08:49.740					6722.989278	6723.077862	0			
110	369.344836	320.536888	112.929480	51.571099	142.254362	5486.093337	4			
21 Sep 2021 22:21:10.955					6722.596147	6722.682948	0			
120	368.702409	320.389487	115.106877	51.570872	138.977248	5485.609964	4			
22 Sep 2021 13:33:27.323					6722.198679	6722.283623	0			
130	368.042499	320.250746	117.301447	51.570656	135.699705	5485.121205	4			
23 Sep 2021 04:45:38.788					6721.796535	6721.879547	0			
140	367.364621	320.120474	119.514011	51.570469	132.421739	5484.626648	4			
23 Sep 2021 19:57:45.290					6721.389574	6721.470593	0			
150	366.669548	319.997637	121.749354	51.570323	129.143362	5484.126134	4			
24 Sep 2021 11:09:46.766					6720.977232	6721.056189	0			
160	365.955556	319.882821	124.004921	51.570226	125.864582	5483.618967	4			
25 Sep 2021 02:21:43.145					6720.559103	6720.635933	0			
170	365.222154	319.775712	126.281965	51.570178	122.585410	5483.104653	4			
25 Sep 2021 17:33:34.355					6720.135182	6720.209829	0			
180	364.470366	319.675293	128.585994	51.570174	119.305853	5482.583200	4			
26 Sep 2021 08:45:20.320					6719.704681	6719.777089	0			
190	363.698272	319.581906	130.914655	51.570204	116.025913	5482.053641	4			
26 Sep 2021 23:57:00.947					6719.266121	6719.336235	0			
200	362.904437	319.494032	133.271966	51.570254	112.745587	5481.514170	4			

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
27 Sep 2021 15:08:36.151	6718.821755	6718.889531	0							
.00317607	51.570308	135.659771	109.464866							
362.092192	319.412870	5480.967561	4							
210										
28 Sep 2021 06:20:05.847	6718.369584	6718.434978	0							
.00311986	51.570351	138.078330	106.183736							
361.258542	319.337414	5480.411364	4							
220										
28 Sep 2021 21:31:29.939	6717.909920	6717.972899	0							
.00306181	51.570369	140.534502	102.902179							
360.405072	319.266725	5479.845978	4							
230										
29 Sep 2021 12:42:48.328	6717.441724	6717.502254	0							
.00300179	51.570352	143.026752	99.620172							
359.529790	319.200718	5479.270131	4							
240										
30 Sep 2021 03:54:00.906	6716.964650	6717.022703	0							
.00293983	51.570294	145.558088	96.337688							
358.632610	319.138796	5478.683408	4							
250										
30 Sep 2021 19:05:07.566	6716.479216	6716.534776	0							
.00287614	51.570197	148.136362	93.054704							
357.715474	319.080078	5478.086458	4							
260										
1 Oct 2021 10:16:08.197	6715.984360	6716.037413	0							
.00281061	51.570066	150.760834	89.771196							
356.776589	319.024237	5477.477987	4							
270										
2 Oct 2021 01:27:02.681	6715.479865	6715.530405	0							
.00274332	51.569913	153.435516	86.487145							
355.816220	318.970589	5476.857738	4							
280										
2 Oct 2021 16:37:50.904	6714.966420	6715.014452	0							
.00267448	51.569754	156.169478	83.202540							
354.836617	318.918287	5476.226571	4							
290										
3 Oct 2021 07:48:32.748	6714.443066	6714.488597	0							
.00260404	51.569608	158.963023	79.917376							
353.836415	318.866779	5475.583317	4							
300										
3 Oct 2021 22:59:08.097	6713.910569	6713.953620	0							
.00253225	51.569491	161.826204	76.631654							
352.818037	318.815204	5474.928929	4							
310										
4 Oct 2021 14:09:36.832	6713.368091	6713.408687	0							
.00245908	51.569417	164.760170	73.345386							
351.780515	318.762859	5474.262390	4							

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
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320										
5 Oct 2021 05:19:58.831	6712.815696	6712.853870	0							
.00238468	51.569394	167.771189	70.058584							
350.724877	318.708862	5473.583788	4							
330										
5 Oct 2021 20:30:13.976	6712.254181	6712.289977	0							
.00230931	51.569420	170.871113	66.771262							
349.653714	318.652240	5472.894115	4							
340										
6 Oct 2021 11:40:22.153	6711.682986	6711.716453	0							
.00223302	51.569485	174.062464	63.483431							
348.566874	318.592032	5472.192692	4							
350										
7 Oct 2021 02:50:23.245	6711.102337	6711.133533	0							
.00215603	51.569573	177.353139	60.195095							
347.465933	318.527134	5471.479809	4							
360										
7 Oct 2021 18:00:17.138	6710.512948	6710.541942	0							
.00207861	51.569662	180.757144	56.906246							
346.353551	318.456332	5470.756352	4							
370										
8 Oct 2021 09:10:03.726	6709.914594	6709.941459	0							
.00200093	51.569729	184.278203	53.616866							
345.230583	318.378334	5470.022055	4							
380										
9 Oct 2021 00:19:42.900	6709.307598	6709.332415	0							
.00192325	51.569755	187.925738	50.326926							
344.099156	318.291673	5469.277322	4							
390										
9 Oct 2021 15:29:14.558	6708.692488	6708.715347	0							
.00184589	51.569732	191.715940	47.036392							
342.961906	318.194788	5468.522813	4							
400										
10 Oct 2021 06:38:38.601	6708.069352	6708.090347	0							
.00176912	51.569658	195.652779	43.745230							
341.820756	318.085938	5467.758640	4							
410										
10 Oct 2021 21:47:54.933	6707.438479	6707.457711	0							
.00169327	51.569546	199.753642	40.453409							
340.678280	317.963141	5466.985166	4							
420										
11 Oct 2021 12:57:03.461	6706.800133	6706.817706	0							
.00161870	51.569413	204.021183	37.160908							
339.537037	317.824376	5466.202721	4							
430										
12 Oct 2021 04:06:04.097	6706.154591	6706.170615	0							
.00154577	51.569279	208.463844	33.867722							







Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
27 Oct 2021 06:58:41.707	6687.965439	6687.970547	.00087392	51.566613	324.714078	314.621097	315.678274	303.988819	5443.177647	0
27 Oct 2021 22:03:49.776	6687.026179	6687.031313	.00087616	51.566447	327.382935	311.309217	314.753252	303.035374	5442.031057	0
28 Oct 2021 13:08:46.222	6686.063221	6686.068372	.00087780	51.566241	329.856289	307.996406	313.800384	302.062361	5440.855611	0
29 Oct 2021 04:13:30.748	6685.075220	6685.080380	.00087861	51.565994	332.148165	304.682625	312.816940	301.069820	5439.649673	0
29 Oct 2021 19:18:03.048	6684.061802	6684.066964	.00087873	51.565709	334.296160	301.367830	311.803471	300.056456	5438.412794	0
30 Oct 2021 10:22:22.798	6683.020712	6683.025861	.00087773	51.565397	336.284619	298.051976	310.754722	299.023000	5437.142222	0
31 Oct 2021 01:26:29.653	6681.950591	6681.955712	.00087548	51.565074	338.122349	294.735022	309.668601	297.968824	5435.836305	0
31 Oct 2021 16:30:23.259	6680.851141	6680.856223	.00087217	51.564757	339.841578	291.416930	308.546072	296.892375	5434.494693	0
1 Nov 2021 07:34:03.243	6679.719952	6679.724978	.00086747	51.564466	341.421963	288.097670	307.382462	295.793495	5433.114446	0
1 Nov 2021 22:37:29.218	6678.556663	6678.561621	.00086158	51.564219	342.892815	284.777219	306.178740	294.670502	5431.695141	0
2 Nov 2021 13:40:40.779	6677.358817	6677.363690	.00085423	51.564023	344.230341	281.455563	304.930691	293.522689	5430.233785	0
3 Nov 2021 04:43:37.496	6676.124976	6676.129748	.00084543	51.563881	345.434745	278.132692	303.636938	292.348558	5428.728637	0

Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Count
790										
3 Nov 2021 19:46:18.928	6674.854481	6674.859139	0							
.00083535	51.563783	346.531686	274.808598							
302.298012	291.146266	5427.178907	4							
800										
4 Nov 2021 10:48:44.614	6673.544902	6673.549432	0							
.00082388	51.563709	347.491164	271.483270							
300.910623	289.914240	5425.581645	4							
810										
5 Nov 2021 01:50:54.070	6672.194635	6672.199025	0							
.00081107	51.563631	348.308146	268.156685							
299.473628	288.650421	5423.934911	4							
820										
5 Nov 2021 16:52:46.792	6670.802390	6670.806627	0							
.00079704	51.563523	349.005293	264.828812							
297.986559	287.352695	5422.237147	4							
830										
6 Nov 2021 07:54:22.257	6669.365765	6669.369842	0							
.00078185	51.563358	349.545143	261.499602							
296.447261	286.018422	5420.485446	4							
840										
6 Nov 2021 22:55:39.912	6667.882805	6667.886713	0							
.00076555	51.563123	349.948643	258.168992							
294.854300	284.645126	5418.677442	4							
850										
7 Nov 2021 13:56:39.180	6666.351071	6666.354804	0							
.00074831	51.562814	350.172926	254.836909							
293.206291	283.229318	5416.810185	4							
860										
8 Nov 2021 04:57:19.451	6664.768092	6664.771647	0							
.00073031	51.562445	350.204147	251.503274							
291.501975	281.767319	5414.880685	4							
870										
8 Nov 2021 19:57:40.084	6663.130546	6663.133919	0							
.00071152	51.562039	350.061334	248.168008							
289.737880	280.255959	5412.884918	4							
880										
9 Nov 2021 10:57:40.398	6661.435590	6661.438783	0							
.00069235	51.561624	349.694533	244.831036							
287.913857	278.689709	5410.819449	4							
890										
10 Nov 2021 01:57:19.674	6659.679587	6659.682604	0							
.00067307	51.561230	349.087851	241.492290							
286.028059	277.063149	5408.679880	4							
900										
10 Nov 2021 16:56:37.137	6657.857150	6657.859994	0							
.00065354	51.560881	348.261071	238.151712							



Time (UTCG)	Semi-parameter (km)	Semi-major Axis (km)	Eccentricity	Inclination (deg)	Arg of Perigee (deg)	RAAN (deg)	Height of Apogee (km)	Height of Perigee (km)	Sidereal Period (sec)	Orbit Co
030	18 Nov 2021 19:05:41.314	6623.894084	6623.896011	0						
040	19 Nov 2021 09:57:29.040	6619.750360	6619.752357	0						
050	20 Nov 2021 00:48:23.547	6615.136832	6615.138920	0						
060	20 Nov 2021 15:38:18.327	6609.918703	6609.920888	0						
070	21 Nov 2021 06:27:04.868	6603.899812	6603.902106	0						
080	21 Nov 2021 21:14:31.565	6596.764241	6596.766630	0						
090	22 Nov 2021 12:00:21.626	6587.970120	6587.972576	0						
100	23 Nov 2021 02:44:08.563	6576.453599	6576.456042	0						
110	23 Nov 2021 17:25:04.622	6559.755315	6559.757582	0						
120	23 Nov 2021 18:51:11.031	6556.679352	6556.681522	0						
130	23 Nov 2021 20:19:00.690	6553.193923	6553.196019	0						

