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## MPEC 2021-W29 : DAILY ORBIT UPDATE (2021 November 20)

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M.P.E.C. 2021-W29

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DAILY ORBIT UPDATE (2021 November 20)

Update to 2021-W28

Full-precision elements for the objects listed here are available at  
<https://www.minorplanetcenter.net/iau/MPCORB.html>

**New identifications:**

K09W90E    K17QB1F	Weryk
K18F46C    K19N21U	Odasso

**New multiple-opposition orbits:**

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Opp C
J96R04P	17.5	0.15	K221L	36.925	15.528	356.854	7.007	0.24499	2.32836	11 X
J97A12F	17.2	0.15	K221L	2.328	298.710	130.125	12.903	0.28314	2.61586	6 X
K00S34N	17.1	0.15	K221L	26.312	2.638	3.822	6.414	0.26036	2.59978	8 X
K00SU8Z	17.9	0.15	K221L	49.509	18.374	334.801	6.610	0.24769	2.30331	6 X
K00Sb6B	17.4	0.15	K221L	24.462	237.267	150.756	15.808	0.15567	2.59546	6 X
K00Sb7P	17.1	0.15	K221L	358.140	168.023	254.529	14.096	0.10273	2.57156	6 X
K00T76N	17.2	0.15	K221L	322.999	119.836	47.004	15.174	0.09528	2.53135	10 X
K02P07R	18.2	0.15	K221L	64.407	176.288	145.286	13.222	0.29182	2.41511	4 X
K02P08F	18.5	0.15	K221L	157.864	126.230	146.006	24.671	0.04237	1.91506	7 X
K02RD7O	20.4	0.15	K221L	29.997	198.379	179.933	7.017	0.45203	2.15483	3 X
K02S46Y	18.1	0.15	K221L	34.125	330.399	35.595	7.513	0.36911	2.43557	3 X
K02TV6Y	17.4	0.15	K221L	39.397	208.359	165.951	14.753	0.11839	2.43938	10 X
K02U72D	17.5	0.15	K221L	32.813	47.390	18.737	10.626	0.24670	2.78821	7 X
K03O12W	17.1	0.15	K221L	76.450	174.203	131.252	14.323	0.30223	2.67753	8 X
K03SN4D	16.7	0.15	K221L	35.371	47.885	20.353	16.637	0.24712	2.66890	8 X
K03SQ1U	16.8	0.15	K221L	15.492	38.605	349.347	6.388	0.34408	3.31951	4 X
K03Si3R	17.5	0.15	K221L	38.698	68.692	352.831	13.068	0.28097	2.66371	5 X
K03UX4V	17.3	0.15	K221L	39.018	10.904	356.353	5.812	0.04192	2.70293	8 X
K03Ug7R	17.2	0.15	K221L	355.136	175.218	252.596	12.644	0.17255	2.73293	6 X
K03WG3U	18.9	0.15	K221L	33.714	303.263	68.338	7.447	0.17103	2.36736	4 X
K03Y49Y	18.4	0.15	K221L	17.133	119.294	268.828	6.335	0.32954	2.36731	2 X
K04P29N	16.4	0.15	K221L	19.687	251.665	134.492	1.878	0.18870	3.12216	12 X
K04Q00K	16.4	0.15	K221L	16.936	237.849	156.692	16.977	0.20466	3.11524	7 X
K04Q07M	17.5	0.15	K221L	40.973	220.560	141.473	14.088	0.20682	2.58774	6 X
K04R38J	17.4	0.15	K221L	9.024	259.089	150.074	12.592	0.40368	3.17761	3 X
K04RA6L	17.1	0.15	K221L	6.213	222.941	188.123	33.276	0.27343	2.62225	5 X
K04RB1P	18.2	0.15	K221L	9.997	267.722	114.579	14.144	0.62186	4.17301	2 X
K04T12N	18.2	0.15	K221L	64.997	125.109	216.445	24.840	0.11131	1.81691	6 X
K04TB1E	17.4	0.15	K221L	25.536	221.023	181.161	17.346	0.29438	2.61526	6 X
K04TD0P	17.5	0.15	K221L	28.061	144.508	234.790	11.834	0.28373	2.61823	5 X

K04TD4J	16.9	0.15	K221L	342.906	76.054	40.313	23.528	0.46181	3.17316	5 X
K04TK8A	17.9	0.15	K221L	22.164	31.388	40.682	13.843	0.31799	2.60519	4 X
K04TQ2U	17.6	0.15	K221L	31.168	242.333	134.046	14.045	0.27547	2.62106	4 X
K04U00E	21.4	0.15	K221L	10.115	217.656	225.442	14.565	0.64539	2.63404	2 X
K04VD6C	17.2	0.15	K221L	39.586	109.227	216.017	26.030	0.35122	2.64095	5 X
K04VDBM	18.0	0.15	K221L	349.978	209.429	231.547	5.762	0.27048	2.64359	6 X
K04W13L	17.3	0.15	K221L	34.391	143.145	229.350	14.591	0.21735	2.63509	6 X
K04X46N	18.5	0.15	K221L	296.017	28.863	94.728	6.003	0.07442	2.29730	6 X
K04Y32E	17.5	0.15	K221L	42.482	94.743	294.175	26.452	0.40173	2.61870	5 X
K04Y41L	17.4	0.15	K221L	330.676	340.906	124.081	14.986	0.20669	2.68111	7 X
K05B00Y	16.6	0.15	K221L	42.640	119.207	301.601	21.149	0.07684	2.64198	7 X
K05NC5O	13.4	0.15	K221L	35.476	280.171	82.653	33.237	0.03067	5.19411	8 X
K05Q74S	16.4	0.15	K221L	13.189	178.238	179.841	12.262	0.29404	3.07150	7 X
K05S01N	16.5	0.15	K221L	5.564	3.522	14.901	20.352	0.32023	3.08614	4 X
K05SB6O	17.9	0.15	K221L	38.845	60.161	314.433	6.884	0.13518	2.16684	9 X
K05SS9E	16.3	0.15	K221L	8.933	177.559	209.137	8.502	0.25968	3.04748	7 X
K05Ut4N	17.1	0.15	K221L	7.991	297.793	113.093	18.039	0.30666	3.06682	4 X
K05V00R	20.7	0.15	K221L	52.983	270.910	49.947	34.948	0.52239	1.92695	3 X
K05VF5O	16.9	0.15	K221L	21.367	306.088	76.283	12.402	0.19138	3.08873	5 X
K05WJ1R	16.0	0.15	K221L	311.412	258.849	211.213	13.861	0.15093	3.10268	11 X
K05XC5P	15.9	0.15	K221L	23.214	344.366	38.304	19.527	0.19573	3.08081	9 X
K06A79H	15.8	0.15	K221L	36.481	244.582	129.499	27.028	0.18262	3.16621	10 X
K06AA5W	18.0	0.15	K221L	16.244	97.270	305.907	4.350	0.26819	2.56546	4 X
K06BA5O	17.7	0.15	K221L	15.214	283.310	119.456	13.493	0.17348	2.57955	5 X
K06HB4T	16.8	0.15	K221L	6.865	72.857	38.405	15.584	0.21794	3.15621	6 X
K06J84G	16.5	0.15	K221L	9.687	334.014	72.231	26.999	0.13975	2.70932	6 X
K06T00O	23.2	0.15	K221L	17.524	202.694	204.744	4.717	0.51408	2.41900	2 X
K06VB8J	16.6	0.15	K221L	4.965	58.504	56.776	15.682	0.10574	2.85686	6 X
K07BB7C	16.4	0.15	K221L	310.182	318.067	172.912	28.626	0.17367	3.06969	8 X
K07F53H	17.3	0.15	K221L	26.088	1.487	25.252	7.152	0.08965	2.55385	8 X
K07HA4B	17.0	0.15	K221L	59.026	207.432	131.459	16.374	0.21793	2.66498	7 X
K07P32R	16.7	0.15	K221L	52.701	105.566	239.913	3.100	0.13591	2.73458	11 X
K07R08A	17.9	0.15	K221L	26.832	99.786	276.020	7.334	0.24051	2.76759	5 X
K07RC6D	18.3	0.15	K221L	62.149	204.299	172.613	22.967	0.10575	1.96127	6 X
K07RZ0C	17.4	0.15	K221L	353.573	263.769	174.090	16.028	0.27932	2.75296	6 X
K07X19U	17.5	0.15	K221L	33.433	90.752	284.756	6.580	0.13895	2.32725	11 X
K08K44F	16.1	0.15	K221L	273.112	62.920	86.527	26.938	0.12584	3.05573	5 X
K08L19H	17.7	0.15	K221L	35.626	261.832	114.186	16.415	0.15334	2.51918	7 X
K08R49J	19.0	0.15	K221L	31.783	190.661	184.454	12.195	0.18102	2.62092	3 X
K08S54K	17.4	0.15	K221L	14.527	27.716	10.730	13.002	0.20448	2.64997	4 X
K08SO4K	17.6	0.15	K221L	0.329	196.568	223.298	4.630	0.22141	2.64550	8 X
K08SP0R	17.9	0.15	K221L	25.585	152.980	226.921	5.559	0.38847	2.65006	4 X
K08SY1J	17.0	0.15	K221L	31.753	346.487	27.435	14.888	0.08541	2.64925	6 X
K08TC8E	18.7	0.15	K221L	44.250	138.953	229.533	5.732	0.19297	2.18770	6 X
K08TF7P	17.3	0.15	K221L	25.592	331.089	50.215	14.970	0.28534	2.65033	4 X
K08Uf7Y	18.4	0.15	K221L	22.314	352.980	34.830	5.902	0.30428	2.67803	3 X
K08VA4L	17.5	0.15	K221L	18.867	288.614	103.932	13.772	0.27160	2.66260	4 X
K08W10Y	17.7	0.15	K221L	22.905	134.318	256.002	4.563	0.21926	2.67217	7 X
K08WC4F	18.5	0.15	K221L	59.324	287.104	61.823	22.768	0.11645	1.91115	5 X
K08X02Q	20.3	0.15	K221L	25.313	355.033	34.557	14.521	0.55287	2.20160	4 X
K08Y26L	17.6	0.15	K221L	6.573	302.612	117.589	13.018	0.26895	2.69734	5 X
K08YH8J	17.7	0.15	K221L	74.940	50.077	272.088	6.771	0.19853	2.26349	6 X
K09A54G	17.6	0.15	K221L	10.182	283.303	117.329	15.346	0.30510	2.73026	6 X
K09B40Z	17.8	0.15	K221L	4.436	295.355	127.609	16.695	0.25638	2.73208	6 X
K09D93H	17.5	0.15	K221L	345.389	66.383	30.771	8.628	0.31014	2.74401	6 X
K09Q07F	18.1	0.15	K221L	11.370	125.677	279.838	5.136	0.22002	2.48417	5 X
K09W90E	18.1	0.15	K221L	320.113	41.341	28.124	5.053	0.20027	2.61172	4 V
K09WP5L	15.1	0.15	K221L	120.119	43.753	234.008	8.894	0.01968	3.47272	13 X
K09Y26Q	17.4	0.15	K221L	16.779	295.219	102.085	15.821	0.10729	2.59843	6 X
K10C37D	17.5	0.15	K221L	5.404	272.532	140.894	11.853	0.17313	2.61294	3 X
K10CE3B	16.5	0.15	K221L	320.969	354.703	107.554	16.899	0.10467	2.62368	13 X
K10E14Y	17.1	0.15	K221L	29.057	236.954	142.759	11.994	0.21770	2.55277	10 X
K10E41S	17.1	0.15	K221L	346.263	272.949	182.078	21.633	0.08974	2.65629	10 X
K10G12L	17.2	0.15	K221L	9.430	71.213	339.791	8.170	0.16103	2.57771	7 X
K10G73Q	16.3	0.15	K221L	330.898	35.809	87.155	34.714	0.29899	2.56586	5 X
K10H13Y	17.2	0.15	K221L	59.290	341.653	41.162	15.849	0.31954	2.53191	7 X
K10H30E	18.3	0.15	K221L	48.824	257.479	55.966	20.597	0.42409	3.07054	3 X
K10H58A	16.9	0.15	K221L	33.765	238.231	133.282	16.836	0.19461	2.98806	10 X
K10J60A	17.2	0.15	K221L	42.709	194.515	148.602	9.474	0.28300	3.04851	5 X
K10JE6D	17.3	0.15	K221L	61.014	201.298	125.983	10.219	0.16864	3.02559	4 X
K10L84N	16.1	0.15	K221L	43.213	253.271	84.691	21.679	0.28075	3.08754	10 X
K10M77X	16.5	0.15	K221L	55.112	241.931	97.919	17.874	0.13720	3.07612	8 X
K10OA1E	17.9	0.15	K221L	19.145	174.746	194.381	18.412	0.57043	3.14055	2 X
K10OA8Z	17.4	0.15	K221L	34.813	277.280	63.537	25.081	0.38330	3.13185	3 X
K10OB2N	16.6	0.15	K221L	29.176	197.302	177.138	19.418	0.18480	3.12567	7 X
K10OC8K	17.6	0.15	K221L	7.130	298.482	103.891	8.752	0.17180	3.11129	4 X
K10Q03L	16.5	0.15	K221L	43.174	190.439	157.506	16.816	0.24980	3.05711	8 X
K10RB2L	16.7	0.15	K221L	15.690	18.443	12.608	16.119	0.13360	3.08562	6 X
K10RL9U	18.1	0.15	K221L	14.062	28.915	17.288	4.795	0.16169	2.36648	8 X
K10RMOB	14.5	0.15	K221L	339.377	8.849	51.057	24.571	0.10697	5.16826	3 X
K10T13V	17.6	0.15	K221L	339.073	250.698	199.847	25.711	0.24463	3.07957	3 X
K10TJ9G	16.6	0.15	K221L	342.485	256.075	188.711	24.773	0.21851	3.04828	6 X
K10TN2C	17.0	0.15	K221L	25.299	311.183	62.498	11.580	0.04846	3.14606	5 X
K10U98T	16.8	0.15	K221L	23.256	133.299	245.766	10.387	0.18487	3.15141	5 X
K10UA1G	13.3	0.15	K221L	239.714	239.568	280.678	10.435	0.01654	5.25092	17 X
K10UD1Y	17.5	0.15	K221L	63.602	218.023	112.419	11.004	0.09859	3.14259	3 X
K10V28J	16.0	0.15	K221L	12.668	144.690	247.295	9.883	0.13748	3.13353	7 X
K10V86O	17.7	0.15	K221L	34.569	304.171	74.132	23.458	0.08830	1.98020	8 X
K10VK0R	16.1	0.15	K221L	330.188	237.376	215.759	25.618	0.19596	3.15112	6 X
K10VR4G	16.4	0.15	K221L	43.647	92.266	257.047	11.858	0.21717	3.14582	6 X
K10VR4S	14.6	0.15	K221L	347.851	348.674	61.530	22.213	0.07341	5.28242	4 X
K10W74H	16.3	0.15	K221L	35.562	255.202	105.693	17.494	0.27559	3.13283	8 X
K10Y03J	18.0	0.15	K221L	351.905	140.273	299.198	4.648	0.22687	2.41778	6 X

K11A27M	18.4	0.15	K221L	91.619	70.107	296.261	16.277	0.09336	1.97451	7	X
K11B45Y	15.8	0.15	K221L	316.911	207.543	333.987	19.938	0.17110	3.15488	9	X
K11C62R	17.8	0.15	K221L	309.675	39.836	118.769	22.889	0.25181	2.43955	6	X
K11D53Q	17.4	0.15	K221L	46.541	17.566	338.868	7.642	0.14918	2.54489	7	X
K11FG1V	17.7	0.15	K221L	34.481	348.886	25.436	17.551	0.15373	2.55530	5	X
K11G92J	17.2	0.15	K221L	21.056	15.758	16.416	15.254	0.22451	2.57149	5	X
K11HA5E	17.8	0.15	K221L	355.134	286.257	150.177	14.644	0.18644	2.54139	5	X
K11L14Q	16.4	0.15	K221L	340.498	272.372	168.635	22.074	0.05023	2.64108	8	X
K11O00Y	16.3	0.15	K221L	304.723	199.180	268.452	11.756	0.01639	2.73270	12	X
K11S63X	16.8	0.15	K221L	48.280	206.731	152.418	15.960	0.13719	2.90231	7	X
K11SG6M	18.4	0.15	K221L	28.032	193.681	196.188	3.741	0.17999	2.22946	6	X
K11U58H	18.6	0.15	K221L	108.072	99.932	193.651	16.913	0.15914	2.20965	6	X
K11UD0U	16.7	0.15	K221L	34.476	91.508	274.251	7.348	0.21356	2.93253	11	X
K11Um2U	17.3	0.15	K221L	3.943	233.862	170.041	11.200	0.07108	2.99523	7	X
K11W86Y	17.1	0.15	K221L	17.119	154.633	237.308	12.253	0.18252	2.96568	3	X
K11Y85W	18.7	0.15	K221L	84.568	254.986	81.647	23.090	0.09212	1.87314	3	X
K12A04G	13.9	0.15	K221L	344.576	314.942	111.704	30.889	0.11169	5.16590	8	X
K12D49N	17.4	0.15	K221L	342.584	70.184	8.896	22.820	0.28453	2.34122	4	X
K12D87F	16.0	0.15	K221L	296.966	133.115	355.631	9.197	0.16207	3.13281	9	X
K12F00K	17.7	0.15	K221L	52.931	110.603	314.024	19.312	0.05856	1.87362	7	X
K12M17C	17.1	0.15	K221L	42.037	113.220	289.437	29.460	0.27103	2.58874	5	X
K12P30D	16.3	0.15	K221L	59.531	206.076	132.707	14.853	0.17661	2.63627	12	X
K12P30T	17.3	0.15	K221L	64.102	349.472	329.333	5.268	0.28206	2.65421	6	X
K12S74U	17.6	0.15	K221L	342.759	289.214	149.180	15.239	0.11394	2.66078	7	X
K12S97F	17.5	0.15	K221L	26.029	355.678	27.667	14.950	0.18450	2.69364	4	X
K12TC6G	16.8	0.15	K221L	23.363	252.638	137.314	14.285	0.23867	2.69370	7	X
K12TV1Y	17.6	0.15	K221L	32.194	54.460	14.637	12.272	0.24929	2.65248	6	X
K12Tc0Z	18.0	0.15	K221L	10.366	226.428	181.019	16.039	0.28269	2.73070	3	X
K12Tc2Y	17.7	0.15	K221L	9.272	304.557	94.587	5.797	0.12834	2.71118	6	X
K12UG1O	18.2	0.15	K221L	24.265	144.672	234.991	12.419	0.32700	2.74302	2	X
K12UI5R	17.4	0.15	K221L	349.899	310.571	134.631	14.222	0.24132	2.69318	5	X
K12UN8J	17.9	0.15	K221L	18.313	202.698	197.672	32.382	0.17054	2.68066	3	X
K12V16G	16.5	0.15	K221L	44.103	0.748	52.406	15.628	0.20786	2.66462	10	X
K12W26N	16.9	0.15	K221L	52.799	356.967	54.852	12.668	0.17605	2.65242	7	X
K12X29L	19.0	0.15	K221L	0.471	355.681	67.708	9.877	0.32427	2.76323	2	X
K12X38L	18.4	0.15	K221L	0.738	334.337	79.434	14.830	0.17643	2.78635	3	X
K12XB4P	16.1	0.15	K221L	6.682	37.255	70.312	22.810	0.03893	2.66425	9	X
K12XB9O	16.0	0.15	K221L	246.101	174.649	58.034	14.382	0.02133	2.67437	13	X
K13A15U	15.9	0.15	K221L	331.513	208.093	297.673	27.642	0.16075	2.77626	8	X
K13A95Q	13.6	0.15	K221L	357.738	278.897	110.211	19.521	0.12698	5.17981	9	X
K13D14C	16.8	0.15	K221L	42.607	222.593	134.699	18.357	0.21627	2.96762	5	X
K13E59V	16.9	0.15	K221L	347.308	255.078	167.289	9.141	0.06155	3.03062	9	X
K13HC3R	16.4	0.15	K221L	30.944	27.892	345.649	12.235	0.10572	3.17250	6	X
K13J69C	15.9	0.15	K221L	69.526	306.461	88.802	28.336	0.17219	3.12920	5	X
K13Q48H	19.0	0.15	K221L	10.854	284.210	139.942	6.530	0.52962	2.50531	3	X
K13S24J	17.8	0.15	K221L	148.162	37.018	236.705	19.595	0.05401	1.91252	7	X
K13WA1T	17.1	0.15	K221L	26.638	343.682	20.984	4.293	0.21223	2.59061	11	X
K13Y03Q	16.7	0.15	K221L	349.159	207.665	229.612	8.127	0.13713	2.57166	11	X
K13YC1R	17.9	0.15	K221L	27.147	121.229	260.287	2.970	0.28789	2.59865	5	X
K13YG8Z	18.0	0.15	K221L	20.309	262.306	132.340	13.972	0.26418	2.60996	4	X
K14A58K	17.1	0.15	K221L	349.326	292.739	146.739	14.068	0.14391	2.65181	7	X
K14B52E	17.3	0.15	K221L	27.872	266.151	104.398	17.061	0.21124	2.66215	5	X
K14B53E	18.1	0.15	K221L	4.989	24.778	34.108	4.497	0.22122	2.59674	5	X
K14B62G	16.8	0.15	K221L	23.253	110.569	338.554	14.481	0.08693	2.57607	6	X
K14B87D	18.8	0.15	K221L	353.668	277.792	151.118	6.895	0.18862	2.64014	3	X
K14DF6N	17.0	0.15	K221L	5.021	274.702	152.075	21.684	0.12233	2.55438	5	X
K14E49S	16.0	0.15	K221L	161.727	103.222	137.650	15.444	0.11230	2.85359	12	X
K14F26R	16.8	0.15	K221L	5.581	190.755	214.659	9.686	0.12241	2.78194	8	X
K14H85S	17.7	0.15	K221L	30.511	201.548	174.678	9.999	0.08792	2.93918	6	X
K14JC6X	17.2	0.15	K221L	93.254	227.729	63.997	11.862	0.10548	3.09465	7	X
K14JC7F	17.2	0.15	K221L	290.839	9.283	109.762	7.532	0.01936	2.97552	9	X
K14JC7G	17.0	0.15	K221L	72.418	150.309	167.642	13.121	0.16035	3.15093	7	X
K14OA9N	16.5	0.15	K221L	28.228	119.358	321.407	18.053	0.18214	3.05162	5	X
K14OF5E	19.3	0.15	K221L	33.143	295.151	82.065	6.488	0.18181	2.23014	4	X
K14OJ1B	15.4	0.15	K221L	49.599	76.427	354.274	15.482	0.07254	3.17570	12	X
K14OR0Y	16.5	0.15	K221L	2.967	104.327	13.550	14.106	0.09869	2.97696	8	X
K14QF1F	17.4	0.15	K221L	28.515	348.174	38.625	4.190	0.18226	2.27241	11	X
K14QZ6M	15.8	0.15	K221L	151.775	323.721	7.432	12.479	0.05470	3.09983	12	X
K14S66P	18.9	0.15	K221L	54.574	242.370	104.407	4.822	0.15218	2.26046	5	X
K14T97M	19.1	0.15	K221L	1.112	326.794	94.352	6.059	0.17805	2.34179	3	X
K14T99Z	18.2	0.15	K221L	359.335	340.969	85.653	23.756	0.13655	2.31116	4	X
K14UB6F	19.9	0.15	K221L	0.209	13.950	79.189	28.410	0.20829	1.76831	2	X
K14UE9Q	16.1	0.15	K221L	52.398	40.436	14.828	12.975	0.12677	3.22941	8	X
K14WS4T	19.5	0.15	K221L	20.404	289.309	107.495	5.818	0.23039	2.33263	2	X
K14WV7S	19.1	0.15	K221L	36.827	272.453	88.622	8.421	0.28784	2.31136	3	X
K14Wv7D	19.0	0.15	K221L	149.377	200.470	75.359	23.875	0.04061	1.81989	5	X
K15BT7C	17.1	0.15	K221L	53.247	212.915	144.465	16.023	0.13565	2.52817	11	X
K15D31O	17.3	0.15	K221L	68.986	209.625	129.740	12.888	0.04749	2.56065	7	X
K15D47Q	17.3	0.15	K221L	66.771	192.566	141.974	17.102	0.17676	2.57383	9	X
K15DF5V	17.9	0.15	K221L	135.475	132.935	163.314	25.402	0.05125	1.83447	8	X
K15E64A	17.7	0.15	K221L	316.940	129.719	38.417	12.116	0.15487	2.39088	9	X
K15F09P	17.7	0.15	K221L	8.192	305.022	107.497	13.680	0.17069	2.53073	3	X
K15F18E	17.3	0.15	K221L	321.016	326.473	140.396	15.763	0.10162	2.53608	6	X
K15FB7M	19.7	0.15	K221L	27.252	203.108	199.810	22.448	0.12114	1.85470	3	X
K15FR7H	17.7	0.15	K221L	16.384	246.329	154.514	15.155	0.10626	2.53980	4	X
K15FY9Y	17.1	0.15	K221L	51.098	237.250	121.043	14.807	0.11177	2.64303	7	X
K15FZ1M	17.2	0.15	K221L	357.970	312.775	106.811	15.630	0.07289	2.51453	7	X
K15G27B	16.5	0.15	K221L	82.096	222.889	81.694	22.237	0.19024	2.77490	6	X
K15HM5B	19.7	0.15	K221L	50.740	315.017	52.271	23.205	0.04065	1.90515	2	X
K15J00O	18.4	0.15	K221L	48.496	278.341	101.628	22.340	0.10924	1.89403	5	X
K15K00C	17.6	0.15	K221L	276.824	68.787	75.862	22.915	0.08742	1.90994	9	X
K15K02X	16.9	0.15	K221L	272.005	235.890	275.831	11.139	0.12745	2.54952	10	X
K15K26Y	16.8	0.15	K221L	26.766	64.603	319.754	5.574	0.05343	2.68529	11	X

K15KK6Z	17.3	0.15	K221L	25.909	285.745	96.644	10.377	0.07579	2.79442	8 X
K15M42L	17.3	0.15	K221L	19.975	290.228	97.506	13.940	0.16778	2.78307	6 X
K15M50J	16.8	0.15	K221L	36.089	254.646	105.105	16.934	0.25702	3.16909	5 X
K15MC8H	15.9	0.15	K221L	25.040	274.725	110.783	17.800	0.20212	3.05226	10 X
K15MD3U	16.8	0.15	K221L	46.317	87.547	251.524	14.245	0.29415	3.12986	5 X
K15MG9G	17.1	0.15	K221L	36.452	239.716	119.274	18.163	0.26007	3.09493	3 X
K15N17Z	17.2	0.15	K221L	22.578	244.637	128.658	15.379	0.34137	3.21326	3 X
K15O31L	16.4	0.15	K221L	69.984	181.789	133.352	18.949	0.20804	3.13177	11 X
K15O49T	16.8	0.15	K221L	43.994	249.863	92.470	15.704	0.24148	3.14087	5 X
K15O51P	17.3	0.15	K221L	20.743	295.092	76.928	10.957	0.23957	3.16795	3 X
K15O63R	16.6	0.15	K221L	2.714	299.895	109.362	17.275	0.21031	3.18772	6 X
K15O86V	16.3	0.15	K221L	11.407	11.867	20.322	18.131	0.19052	3.20737	6 X
K15P43F	16.2	0.15	K221L	26.088	268.946	114.474	17.254	0.04316	3.04018	11 X
K15PF9H	16.6	0.15	K221L	46.927	226.701	126.713	21.763	0.20207	3.08708	6 X
K15PP4X	16.5	0.15	K221L	52.741	202.546	138.485	16.738	0.25253	2.97685	10 X
K15PR5R	16.9	0.15	K221L	359.204	333.488	66.976	10.158	0.10228	3.13760	5 X
K15PR7F	16.9	0.15	K221L	31.032	234.993	132.695	17.629	0.23151	3.15797	5 X
K15PU3S	16.0	0.15	K221L	72.010	283.390	46.445	10.349	0.08654	3.11295	12 X
K15PW9M	17.0	0.15	K221L	8.644	273.703	131.262	13.739	0.29384	3.18208	4 X
K15PX5W	17.3	0.15	K221L	32.678	266.017	92.407	16.534	0.28219	3.12805	4 X
K15PY9S	16.9	0.15	K221L	36.065	177.862	180.851	19.355	0.20748	3.12907	4 X
K15PZ1E	17.4	0.15	K221L	353.842	347.535	65.270	11.003	0.10489	3.12839	4 X
K15PZ2X	17.0	0.15	K221L	49.258	261.808	90.810	10.731	0.06776	3.11817	7 X
K15PZ3B	17.4	0.15	K221L	29.740	267.017	116.237	26.204	0.28631	3.14670	2 X
K15RC2O	16.1	0.15	K221L	94.334	331.159	41.622	13.078	0.16151	2.86959	8 X
K15T96Z	15.7	0.15	K221L	11.340	6.499	27.475	10.276	0.10086	3.37820	11 X
K15TI6Q	16.8	0.15	K221L	357.896	58.104	58.824	17.099	0.21142	3.09284	5 X
K15TY0K	16.6	0.15	K221L	341.966	336.617	89.458	17.965	0.14578	3.15931	4 X
K15TY2H	16.0	0.15	K221L	358.925	21.222	28.251	27.302	0.17957	3.18248	6 X
K15UA5Q	17.8	0.15	K221L	345.301	250.628	188.252	15.990	0.27980	3.17276	4 X
K15V43T	16.5	0.15	K221L	47.971	169.161	190.627	26.914	0.13224	3.08049	8 X
K15VD7D	16.1	0.15	K221L	33.236	24.660	46.155	13.784	0.12896	3.10830	11 X
K15VF5P	16.1	0.15	K221L	340.254	79.742	65.987	25.902	0.24431	3.17919	6 X
K15W02W	16.3	0.15	K221L	30.163	80.048	355.207	12.890	0.27138	3.21276	9 X
K15W14X	15.5	0.15	K221L	338.337	147.517	285.938	8.753	0.08052	3.44847	11 X
K15X72C	17.0	0.15	K221L	1.636	259.823	171.597	25.410	0.28075	3.18237	5 X
K15X88Q	16.6	0.15	K221L	29.737	231.683	139.685	17.150	0.22976	3.20020	5 X
K16GL5H	14.3	0.15	K221L	8.345	234.769	164.495	25.086	0.10481	5.14960	7 X
K16H13L	18.1	0.15	K221L	9.344	23.988	31.153	5.437	0.15540	2.34300	9 X
K16K07Y	13.7	0.15	K221L	317.704	12.690	78.299	33.856	0.12332	5.26987	6 X
K16L58T	17.0	0.15	K221L	28.569	223.059	162.672	16.129	0.16602	2.72322	7 X
K16L78U	17.1	0.15	K221L	55.008	256.954	89.575	31.769	0.20296	2.67713	4 X
K16N04P	17.1	0.15	K221L	53.784	220.606	120.457	16.000	0.22656	2.73242	5 X
K16N34N	17.2	0.15	K221L	54.475	226.024	127.493	14.455	0.11117	2.67406	7 X
K16N59M	17.4	0.15	K221L	7.923	111.324	294.255	7.110	0.20859	2.75700	6 X
K16NF4D	17.1	0.15	K221L	328.314	356.374	99.031	14.478	0.14590	2.69632	7 X
K16PB0Z	16.9	0.15	K221L	340.240	146.268	359.938	10.860	0.13440	2.47856	6 X
K16PK1G	17.6	0.15	K221L	7.508	64.190	340.916	7.600	0.20808	2.78716	3 X
K16PM7A	17.3	0.15	K221L	25.611	269.949	106.190	7.106	0.07922	2.88236	4 X
K16Q95M	17.5	0.15	K221L	19.293	138.057	305.316	17.902	0.19465	2.60218	4 X
K16QD7X	17.7	0.15	K221L	42.665	234.952	127.045	6.868	0.07756	2.87149	3 X
K16R08C	17.3	0.15	K221L	342.447	254.797	178.687	12.888	0.17257	2.76802	6 X
K16SA9J	17.9	0.15	K221L	8.266	306.656	91.711	8.579	0.24064	2.94608	5 X
K16TG7Z	17.2	0.15	K221L	25.556	269.000	113.347	16.585	0.16744	2.99149	7 X
K16TH9L	17.1	0.15	K221L	357.558	261.204	155.723	15.803	0.13632	3.00931	4 X
K16UR7A	17.1	0.15	K221L	33.077	256.483	96.590	9.608	0.22721	3.05926	3 X
K16V20Z	16.3	0.15	K221L	311.750	137.925	48.445	13.257	0.24751	2.90552	7 X
K16V52E	16.8	0.15	K221L	16.532	325.984	45.056	19.304	0.23176	3.10456	3 X
K16V54R	17.2	0.15	K221L	41.240	284.816	71.439	14.121	0.12512	3.08218	2 X
K16V55E	16.5	0.15	K221L	17.553	303.835	80.028	28.258	0.19858	3.18150	4 X
K16W51A	16.7	0.15	K221L	24.176	241.805	137.617	16.140	0.27054	3.04298	8 X
K16W76L	18.3	0.15	K221L	19.233	284.104	98.750	12.479	0.38527	3.00121	3 X
K16X07C	16.0	0.15	K221L	16.203	0.450	31.283	17.162	0.09359	3.01821	11 X
K16Y02C	17.3	0.15	K221L	349.748	235.521	189.204	15.844	0.12254	3.09394	4 X
K17A31L	19.2	0.15	K221L	85.755	202.661	136.784	24.034	0.06562	1.93712	4 X
K17A49P	17.4	0.15	K221L	345.505	4.540	66.281	15.881	0.16431	3.22835	3 X
K17B04D	16.2	0.15	K221L	353.674	122.575	301.915	8.951	0.20312	3.18484	7 X
K17B11Q	16.2	0.15	K221L	27.739	101.909	342.128	16.092	0.12949	3.03163	8 X
K17B93C	19.2	0.15	K221L	92.875	240.081	97.340	25.425	0.09459	1.93454	4 X
K17BB3Q	17.0	0.15	K221L	337.423	15.064	67.883	16.277	0.22424	3.19149	3 X
K17BE7O	16.7	0.15	K221L	15.186	273.896	128.967	26.372	0.25679	3.19951	5 X
K17D99L	16.4	0.15	K221L	29.395	96.107	335.828	14.870	0.21229	3.16539	10 X
K17DB7R	16.5	0.15	K221L	350.570	185.808	300.170	16.700	0.21780	3.07338	6 X
K17E14B	16.0	0.15	K221L	337.309	96.655	58.123	14.633	0.10313	3.09411	13 X
K17F17N	16.1	0.15	K221L	296.016	214.573	347.621	16.447	0.16328	3.12770	8 X
K17F90D	18.8	0.15	K221L	355.664	47.543	40.686	24.854	0.24393	1.95747	3 X
K17FK1S	17.5	0.15	K221L	16.592	273.612	142.707	25.088	0.38112	3.19608	3 X
K17H44G	17.0	0.15	K221L	358.861	122.940	4.298	12.625	0.28448	3.12425	6 X
K17M04W	20.1	0.15	K221L	344.911	210.021	287.391	30.339	0.22557	1.17350	3 X
K17N22D	18.7	0.15	K221L	69.262	227.721	103.305	6.773	0.14192	2.37211	5 X
K17RB6N	18.9	0.15	K221L	32.934	265.926	99.460	8.008	0.22217	2.52536	2 X
K17S03Z	18.5	0.15	K221L	14.802	259.586	145.722	12.474	0.22293	2.47585	3 X
K17SK9P	17.8	0.15	K221L	14.871	254.724	147.950	12.033	0.19246	2.54626	5 X
K17SM2L	18.6	0.15	K221L	47.877	221.594	122.725	5.539	0.18862	2.55767	3 X
K17SS4Z	18.7	0.15	K221L	16.145	272.378	133.702	13.111	0.29551	2.55737	3 X
K17SS5F	18.8	0.15	K221L	350.866	312.932	124.847	7.657	0.21916	2.47665	3 X
K17T34E	18.0	0.15	K221L	356.490	355.670	55.343	11.151	0.07165	2.59288	3 X
K17U55S	18.5	0.15	K221L	12.164	336.550	63.955	17.509	0.20585	2.56241	4 X
K17U61M	18.2	0.15	K221L	337.152	268.001	188.821	11.960	0.24489	2.59406	2 X
K17U62L	18.4	0.15	K221L	30.841	280.763	85.061	5.722	0.27547	2.60729	2 X
K17U69B	18.4	0.15	K221L	44.113	185.663	166.301	14.771	0.30555	2.54806	2 X
K17U75M	19.9	0.15	K221L	29.441	317.417	50.292	34.379	0.34570	2.55644	2 X
K17UG7R	18.9	0.15	K221L	4.527	267.128	145.817	6.831	0.13183	2.55127	2 X

K17V01Q	19.1	0.15	K221L	353.652	71.639	33.922	27.119	0.45905	2.53183	4 X
K17V04C	17.7	0.15	K221L	21.888	24.477	8.475	7.041	0.24706	2.54328	6 X
K17V25P	17.5	0.15	K221L	23.269	3.551	6.186	4.336	0.30095	2.59134	6 X
K17W12N	15.3	0.15	K221L	247.813	86.785	70.740	27.412	0.02030	3.15219	9 X
K17W19Y	17.5	0.15	K221L	15.409	210.549	196.779	25.976	0.23295	2.56616	4 X
K17W42S	17.9	0.15	K221L	27.070	8.943	70.365	26.004	0.21619	2.34423	4 X
K17W43X	17.5	0.15	K221L	33.368	143.365	233.660	12.588	0.16871	2.61783	6 X
K17X00A	18.2	0.15	K221L	341.760	247.176	207.427	28.879	0.37602	2.59434	2 X
K17X63M	18.9	0.15	K221L	4.033	162.993	263.893	6.583	0.35888	2.57910	3 X
K17X72R	17.5	0.15	K221L	109.725	198.293	100.182	30.227	0.17866	2.61386	3 X
K17X83R	18.3	0.15	K221L	4.546	322.008	93.024	13.870	0.25882	2.73860	2 X
K17X84D	19.1	0.15	K221L	5.556	346.302	69.527	7.514	0.31367	2.60054	2 X
K17Y01X	18.2	0.15	K221L	35.192	98.128	286.857	25.514	0.48535	2.57883	2 X
K18A15X	18.0	0.15	K221L	19.466	287.225	98.760	5.894	0.19761	2.59506	3 X
K18A16C	16.9	0.15	K221L	30.431	282.435	102.189	25.331	0.21261	2.71541	6 X
K18A52A	17.4	0.15	K221L	339.801	298.135	135.399	9.267	0.07714	2.99422	7 X
K18B23S	15.8	0.15	K221L	304.746	7.345	111.818	23.105	0.09223	3.16843	7 X
K18C09R	16.3	0.15	K221L	287.949	198.419	0.658	11.346	0.08646	2.62871	11 X
K18C10D	17.2	0.15	K221L	8.827	60.053	54.670	14.712	0.20730	2.54051	7 X
K18C22O	18.7	0.15	K221L	1.009	299.613	143.242	15.852	0.28245	2.68953	2 X
K18E06C	16.7	0.15	K221L	8.816	92.804	17.590	11.477	0.09228	2.63871	7 X
K18F46C	17.3	0.15	K221L	254.210	196.041	131.488	12.842	0.25784	2.37230	8 V
K18M24W	18.7	0.15	K221L	103.272	226.861	99.845	23.728	0.10409	1.90402	3 X
K18P68Y	14.5	0.15	K221L	329.176	312.440	144.079	26.065	0.06045	5.25086	6 V
K19F03V	16.6	0.15	K221L	4.101	39.699	357.010	12.940	0.16183	2.68412	10 X
K19GC2N	17.4	0.15	K221L	32.185	267.142	98.782	6.574	0.08234	2.85699	6 X
K19N47N	14.5	0.15	K221L	352.042	305.031	105.975	15.927	0.18110	5.27539	3 X
K20A22Z	18.8	0.15	K221L	31.164	306.813	89.536	21.384	0.09211	1.83758	5 X
K20F38H	19.1	0.15	K221L	117.455	120.131	197.983	25.629	0.06843	1.91213	3 X
K20H35O	16.6	0.15	K221L	41.150	234.428	109.226	15.863	0.29490	3.06849	6 X
K20HA0Z	17.5	0.15	K221L	66.853	206.800	118.173	15.016	0.26189	2.66701	6 X
K20O86S	15.3	0.15	K221L	2.807	54.216	342.454	7.366	0.60782	8.23874	2 X
K20RC0E	14.9	0.15	K221L	326.969	253.488	185.073	32.151	0.08653	5.18736	4 X
K21J24Q	17.8	0.15	K221L	20.518	308.795	60.092	5.993	0.66956	3.22569	5 X
K21M01H	18.2	0.15	K221L	40.845	101.580	233.748	28.404	0.42251	2.75914	3 X
K21N39M	20.2	0.15	K221L	23.990	266.843	135.566	4.735	0.48211	2.03887	2 X
K21N51X	17.4	0.15	K221L	18.104	141.177	253.576	12.862	0.19710	2.65755	4 X
K21Q05C	17.9	0.15	K221L	19.738	280.140	115.678	11.055	0.34966	2.62552	3 X
K21R04N	17.7	0.15	K221L	29.508	208.401	168.938	14.175	0.26379	2.64593	4 X
K21R10H	18.3	0.15	K221L	34.696	236.195	140.882	14.675	0.17746	2.39257	5 X
K21R10J	17.2	0.15	K221L	21.587	268.976	113.449	16.302	0.21359	3.17007	4 X
K21R19Y	19.3	0.15	K221L	22.819	294.885	87.639	17.664	0.35028	2.58304	2 X
K21R23K	14.7	0.15	K221L	344.485	301.902	148.603	24.597	0.09239	5.13436	5 X
K21R54U	18.7	0.15	K221L	48.956	245.852	81.836	7.905	0.34144	2.63478	4 X
K21R63R	17.1	0.15	K221L	23.462	271.792	108.377	12.882	0.03911	3.00828	7 X
K21R69Y	17.5	0.15	K221L	42.442	275.299	61.740	20.076	0.28871	3.13961	3 X
K21R93A	15.0	0.15	K221L	312.391	20.930	73.402	16.608	0.09601	5.11490	2 X
K21RB1L	16.8	0.15	K221L	322.223	302.386	152.832	10.599	0.19457	3.16735	6 X
K21RB4B	19.0	0.15	K221L	45.123	260.730	96.705	5.991	0.20752	2.23462	4 X
K21RC9F	17.2	0.15	K221L	2.666	305.060	91.018	10.453	0.08313	3.13852	4 X
K21RD8Q	19.2	0.15	K221L	87.319	160.950	194.188	22.522	0.06020	1.87467	3 X
K21S07J	19.1	0.15	K221L	15.199	304.722	97.855	6.276	0.15414	2.24682	4 X
K21S07K	17.2	0.15	K221L	358.685	312.294	98.029	7.638	0.13365	3.05903	4 X
K21S08Q	17.0	0.15	K221L	347.176	247.533	187.082	18.130	0.21974	3.07177	8 X
K21S10Q	17.8	0.15	K221L	69.056	187.503	146.281	6.988	0.04688	2.71523	5 X
K21S11K	17.7	0.15	K221L	331.987	287.886	158.877	14.081	0.09747	2.72120	4 X
K21S12U	18.1	0.15	K221L	40.968	276.355	81.564	13.515	0.18322	2.64378	2 X
K21S37M	18.9	0.15	K221L	61.294	170.259	174.387	8.438	0.11612	2.32614	4 X
K21S43X	17.6	0.15	K221L	3.822	255.393	150.634	10.336	0.12754	3.02294	5 X
K21T07S	17.8	0.15	K221L	60.916	153.492	165.231	13.357	0.27052	3.03505	4 X
K21T12M	19.1	0.15	K221L	17.276	324.272	71.741	7.487	0.19871	2.27939	3 X
K21T18P	14.6	0.15	K221L	341.786	323.508	85.758	9.750	0.09159	5.25522	5 X
K21T28Z	18.6	0.15	K221L	337.965	348.658	98.231	7.654	0.13828	2.58251	4 X
K21T42Z	18.2	0.15	K221L	0.259	241.266	206.370	29.753	0.26922	2.65909	3 X
K21U09D	18.8	0.15	K221L	10.609	326.652	101.403	24.244	0.11937	1.88358	4 X

New perturbed one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc C
K21P10E	20.7	0.15	K221L	35.294	136.983	220.616	4.822	0.46731	2.17047	99 X
K21P86L	18.3	0.15	K221L	27.146	83.095	297.003	5.073	0.31546	2.61396	105 X
K21Q00S	18.9	0.15	K221L	43.773	139.495	204.732	31.263	0.37644	2.63390	91 X
K21R13K	18.1	0.15	K221L	26.759	225.302	154.855	14.064	0.27445	2.64330	76 X
K21R15G	20.5	0.15	K221L	9.886	169.195	252.993	8.773	0.51071	2.67666	75 X
K21R42M	18.7	0.15	K221L	45.502	178.013	192.398	26.244	0.27120	2.31862	76 X
K21R46R	14.4	0.15	K221L	316.807	33.809	48.810	27.162	0.12480	5.28703	76 X
K21R55A	18.8	0.15	K221L	48.017	246.197	103.810	6.720	0.16248	2.47395	76 X
K21R55H	17.5	0.15	K221L	330.424	301.891	150.434	10.847	0.20026	3.02888	65 X
K21R62X	18.6	0.15	K221L	43.104	285.360	61.610	12.996	0.29480	2.62513	76 X
K21R64M	14.8	0.15	K221L	326.452	23.057	59.140	25.751	0.15002	5.18976	65 X
K21R89P	17.6	0.15	K221L	46.091	272.934	64.794	12.866	0.20505	3.01570	72 X
K21R94V	19.0	0.15	K221L	51.121	233.395	123.445	7.028	0.12023	2.28641	70 X
K21RA2A	18.1	0.15	K221L	73.205	260.592	88.244	24.943	0.11490	1.88621	73 X
K21RA7Y	17.5	0.15	K221L	28.386	323.405	44.510	29.553	0.21743	2.80335	67 X
K21RB6D	17.6	0.15	K221L	12.850	220.681	170.985	11.766	0.11464	3.05953	70 X
K21RB6L	18.0	0.15	K221L	26.534	338.380	34.629	14.892	0.26432	2.64084	72 X
K21RD3L	18.8	0.15	K221L	31.945	300.815	98.123	24.285	0.09193	1.92852	73 X
K21RE1X	14.7	0.15	K221L	351.934	0.518	38.053	34.246	0.04565	5.21516	65 X
K21RE2U	17.6	0.15	K221L	22.716	303.036	68.713	13.490	0.17105	3.16115	65 X
K21RE2W	19.7	0.15	K221L	55.066	258.288	102.903	22.466	0.26150	2.11893	65 X
K21RE3U	18.3	0.15	K221L	24.665	270.272	95.762	9.989	0.31397	3.13841	72 X
K21RE3Z	19.4	0.15	K221L	39.407	246.491	120.254	6.376	0.26296	2.27630	71 X
K21S03V	20.8	0.15	K221L	10.695	314.353	95.598	3.366	0.48817	2.83796	51 X
K21S08G	18.4	0.15	K221L	40.268	264.981	83.068	8.629	0.23869	2.79873	51 X

K21S12W	19.1	0.15	K221L	53.041	211.957	138.005	7.455	0.19299	2.20187	50	X
K21S18S	18.7	0.15	K221L	30.387	171.403	191.726	17.985	0.27524	3.09615	52	X
K21S19J	19.0	0.15	K221L	19.060	216.098	174.851	8.134	0.21148	2.74234	52	X
K21S25G	18.7	0.15	K221L	56.573	180.654	153.130	7.278	0.22475	2.64727	52	X
K21S27E	19.5	0.15	K221L	4.050	254.855	165.338	11.817	0.29083	2.64772	50	X
K21S30E	18.1	0.15	K221L	22.122	314.155	68.470	7.828	0.20947	2.64486	53	X
K21S34C	18.6	0.15	K221L	3.954	299.829	112.586	4.936	0.19827	2.62854	52	X
K21S36Q	18.4	0.15	K221L	10.265	324.292	78.817	15.499	0.22023	2.64688	54	X
K21S38P	18.5	0.15	K221L	24.615	315.530	59.880	19.683	0.30923	2.77930	54	X
K21S45F	21.4	0.15	K221L	13.201	224.114	190.443	10.111	0.37832	2.36908	52	X
K21T00R	21.0	0.15	K221L	26.969	329.215	56.104	15.484	0.36449	2.18175	48	X
K21T04H	19.9	0.15	K221L	11.061	29.312	71.269	22.390	0.37548	1.79557	65	X
K21T09C	18.0	0.15	K221L	32.016	313.297	50.086	13.081	0.14726	2.89652	47	X
K21T09D	17.6	0.15	K221L	62.565	240.096	84.501	8.986	0.16657	3.10275	47	X
K21T12N	17.4	0.15	K221L	39.485	240.778	105.722	9.161	0.17374	3.23571	47	X
K21T18S	17.2	0.15	K221L	340.959	22.304	48.779	17.777	0.16339	3.12690	47	X
K21T23L	18.8	0.15	K221L	333.225	7.181	92.245	6.641	0.18838	2.31738	47	X
K21T24U	19.5	0.15	K221L	266.783	98.332	62.244	23.697	0.03736	1.84806	36	X
K21T37K	20.0	0.15	K221L	25.723	286.218	104.134	6.480	0.21277	2.29009	47	X
K21T65Q	19.5	0.15	K221L	47.957	233.439	129.040	7.003	0.15702	2.17295	40	X
K21T78K	17.2	0.15	K221L	49.421	283.556	59.806	10.713	0.10657	3.12865	40	X
K21T78L	18.1	0.15	K221L	1.244	356.650	50.703	15.141	0.23711	3.18741	47	X
K21T82T	19.2	0.15	K221L	57.690	147.048	181.810	13.380	0.27685	2.59438	37	X
K21U00R	17.6	0.15	K221L	5.059	9.056	6.469	25.348	0.63838	4.54858	30	X
K21U05U	19.2	0.15	K221L	356.981	99.017	62.329	44.929	0.72562	1.92037	22	X
K21U06Q	19.0	0.15	K221L	70.412	129.298	222.332	48.429	0.21342	2.19099	20	X
K21U19P	18.7	0.15	K221L	352.748	257.039	204.379	30.431	0.24967	2.55985	21	X
K21U20N	23.6	0.15	K221L	8.074	316.639	133.334	2.296	0.55012	2.31323	20	X
K21U24B	19.2	0.15	K221L	344.326	271.567	179.997	8.219	0.22657	2.36900	22	X
K21U43X	18.9	0.15	K221L	22.883	309.072	92.142	32.046	0.25238	2.60780	22	X
K21V00R	23.4	0.15	K221L	16.197	40.029	54.741	21.938	0.34094	1.46847	19	X
K21V01R	29.6	0.15	K221L	344.389	279.366	231.528	2.110	0.12250	0.97297	6	X
K21V05S	26.3	0.15	K221L	337.288	124.190	52.538	9.842	0.25240	0.92072	8	X
K21V07X	24.6	0.15	K221L	351.258	354.334	150.197	2.208	0.23971	1.12191	10	X
K21V09C	27.0	0.15	K221L	22.978	34.135	54.808	10.805	0.24999	1.29800	9	X

New observations:

K02RD7O	C2021	11	19.33730	01	38	08.479-12	38	34.21	19.6	iUEW029F51
K02RD7O	C2021	11	19.35024	01	38	10.378-12	38	22.26	19.7	iUEW029F51
K02RD7O	C2021	11	19.36321	01	38	12.271-12	38	10.13	19.6	iUEW029F51
K04U00E	C2021	11	04.89873	23	41	28.68 +20	48	00.3	16.6	RVEW029B18
K04U00E	C2021	11	04.90201	23	41	28.85 +20	47	30.9	16.8	RVEW029B18
K04U00E	C2021	11	04.90530	23	41	29.05 +20	47	00.1	16.7	RVEW029B18
K04U00E	C2021	11	04.90859	23	41	29.24 +20	46	28.7	16.9	RVEW029B18
K04U00E	C2021	11	04.91187	23	41	29.45 +20	45	59.1	16.8	RVEW029B18
K04U00E	C2021	11	04.91516	23	41	29.53 +20	45	29.3	16.8	RVEW029B18
K04U00E	C2021	11	04.91845	23	41	29.76 +20	44	58.0	16.5	RVEW029B18
K05V00R	C2021	11	19.34572	01	26	24.109+00	23	46.95	20.7	wUEW029F52
K05V00R	C2021	11	19.35728	01	26	22.898+00	24	42.76	20.6	wUEW029F52
K05V00R	C2021	11	19.36891	01	26	21.685+00	25	38.63	21.0	wUEW029F52
K05V00R	C2021	11	19.38048	01	26	20.463+00	26	34.33	21.3	wUEW029F52
K06T00O	C2021	11	19.35920	01	49	26.927-01	00	35.05	21.3	wUEW029F52
K06T00O	C2021	11	19.37082	01	49	29.062-01	00	35.64	21.3	wUEW029F52
K06T00O	C2021	11	19.38239	01	49	31.216-01	00	36.21	21.1	wUEW029F52
K08X02Q	KC2021	11	17.88824821	26	03.70	+54	01	09.1	17.9	GVEW029Z80
K08X02Q	KC2021	11	17.89323421	26	05.48	+54	02	03.4	17.7	GVEW029Z80
K08X02Q	KC2021	11	17.89821121	26	07.26	+54	02	57.5	17.5	GVEW029Z80
K13Q48H	C2021	11	19.32012501	05	23.05	-20	43	59.2	18.41	oVEW029T05
K13Q48H	C2021	11	19.32333301	05	23.37	-20	43	57.8	18.72	oVEW029T05
K13Q48H	C2021	11	19.32974201	05	23.98	-20	43	53.2	18.88	oVEW029T05
K13Q48H	C2021	11	19.34346701	05	25.33	-20	43	44.1	18.60	oVEW029T05
K17M04W	KC2021	11	09.22218518	58	41.270+62	45	58.42	21.32	GVEW029T12	
K21J24Q	KC2021	11	17.93728006	16	35.15	+25	26	43.1	VEW029Z80	
K21J24Q	KC2021	11	17.94454606	16	34.61	+25	26	50.7	17.3	GVEW029Z80
K21N39M	C2021	11	19.33248601	02	38.32	-33	08	43.4	18.09	oVEW029T05
K21N39M	C2021	11	19.33569301	02	39.60	-33	08	35.6	18.06	oVEW029T05
K21N39M	C2021	11	19.34255301	02	42.28	-33	08	19.0	18.16	oVEW029T05
K21N39M	C2021	11	19.35445001	02	46.95	-33	07	49.7	18.09	oVEW029T05
K21P10E	C2021	11	19.29628	00	35	08.587+02	47	44.10	20.0	iUEW029F52
K21P10E	C2021	11	19.30787	00	35	10.681+02	47	49.17	20.4	iUEW029F52
K21P10E	C2021	11	19.33106	00	35	14.910+02	47	59.28	20.2	iUEW029F52
K21T04H	KC2021	11	20.03968007	19	02.02	+15	57	57.6	18.5	GVEW029595
K21T04H	KC2021	11	20.05168807	19	04.65	+15	58	52.6	18.4	GVEW029595
K21T04H	KC2021	11	20.05769107	19	05.97	+15	59	20.0	18.2	GVEW029595
K21U05U	C2021	11	19.39911902	56	44.082-23	27	32.40	18.70	iUEW029F52	
K21U05U	C2021	11	19.41061702	56	38.854-23	27	25.23	18.81	iUEW029F52	
K21U05U	C2021	11	19.42212202	56	33.608-23	27	17.96	18.91	iUEW029F52	
K21U05U	C2021	11	19.43365702	56	28.354-23	27	10.65	18.74	iUEW029F52	
K21U20N	C2021	11	19.34888401	56	20.852-05	24	25.50	21.00	wUEW029F52	
K21U20N	C2021	11	19.36045701	56	21.322-05	24	32.97	21.13	wUEW029F52	
K21U20N	C2021	11	19.37209301	56	21.793-05	24	40.72	21.11	wUEW029F52	
K21U20N	C2021	11	19.38364801	56	22.280-05	24	48.29	21.15	wUEW029F52	
K21V00R	KC2021	11	20.01719801	36	03.89	+33	31	27.1	17.3	GVEW029595
K21V00R	KC2021	11	20.02283901	35	55.14	+33	34	42.0	17.2	GVEW029595
K21V00R	KC2021	11	20.03411201	35	37.71	+33	41	11.9	17.2	GVEW029595
K21V00R	KC2021	11	20.04068601	35	27.52	+33	44	58.8	17.1	GVEW029595
K21V01R	KC2021	11	09.20070217	24	46.727+34	14	57.56	21.48	GVEW029T12	
K21V05S	KC2021	11	17.91357622	33	00.75	+61	45	58.9	VEW029Z80	
K21V05S	KC2021	11	17.92384522	30	28.93	+61	44	01.2	VEW029Z80	
K21V07X	C2021	11	19.37274904	04	33.257-14	26	04.91	20.39	wUEW029F51	
K21V07X	C2021	11	19.38419904	04	32.472-14	27	16.82	20.44	wUEW029F51	
K21V07X	C2021	11	19.39563704	04	31.676-14	28	28.22	20.35	wUEW029F51	
K21V09C	6C2021	11	20.34884	05	16	20.57	+61	28	21.3	GVEW029290

K21V09C	6C2021	11	20.35562	05	16	34.73	+61	33	00.4
K21V09C	6C2021	11	20.35964	05	16	43.13	+61	35	45.0
K21V09C	6C2021	11	20.36325	05	16	50.74	+61	38	12.9
02329	C2021	11	19.48422706	35	00.66	-14	36	22.5	
02329	C2021	11	19.48735406	35	00.45	-14	36	23.5	
02329	C2021	11	19.49285106	35	00.09	-14	36	26.5	
02329	C2021	11	19.51551606	34	58.58	-14	36	36.4	
03691	C2021	11	17.82424309	15	14.27	+44	07	49.0	
03691	C2021	11	17.83468109	15	15.07	+44	07	52.2	
03691	C2021	11	17.84511809	15	15.91	+44	07	55.6	
03691	C2021	11	18.82714009	16	35.07	+44	12	35.0	
03691	C2021	11	18.83387409	16	35.58	+44	12	36.9	
03691	C2021	11	18.84060909	16	36.11	+44	12	38.8	
04341	C2021	11	19.19042021	28	27.60	-45	04	25.1	
04341	C2021	11	19.19087721	28	27.37	-45	04	25.5	
04341	C2021	11	19.19362121	28	26.58	-45	04	24.9	
04341	C2021	11	19.19407821	28	26.49	-45	04	24.5	
04341	C2021	11	19.19911521	28	25.11	-45	04	24.2	
04341	C2021	11	19.19957321	28	24.96	-45	04	24.5	
04341	C2021	11	19.20967121	28	22.13	-45	04	22.9	
04341	C2021	11	19.21012721	28	22.00	-45	04	22.5	
04660	C2021	11	19.19009	03	15	51.02	+35	09	16.0
04660	C2021	11	19.19598	03	15	51.24	+35	09	31.6
04660	C2021	11	19.20162	03	15	51.43	+35	09	46.7
04660	C2021	11	19.20532	03	15	51.56	+35	09	56.7
05131	C2021	11	19.42664204	33	06.68	-28	36	55.1	
05131	C2021	11	19.42847504	33	06.48	-28	36	54.5	
05131	C2021	11	19.43405704	33	05.87	-28	36	54.1	
05131	C2021	11	19.43957604	33	05.20	-28	36	53.8	
07482	C2021	11	19.57221107	13	23.87	-41	04	20.3	
07482	C2021	11	19.57541407	13	24.01	-41	04	23.4	
07482	C2021	11	19.61072407	13	25.63	-41	04	55.8	
07482	C2021	11	19.63895707	13	26.84	-41	05	21.7	
12711	C2021	11	17.82946209	54	03.17	+37	51	19.9	
12711	C2021	11	17.83990009	54	03.63	+37	51	12.2	
12711	C2021	11	17.85033709	54	04.07	+37	51	04.2	
12711	C2021	11	19.59547609	55	19.501	+37	28	33.51	
12711	C2021	11	19.60903209	55	19.999	+37	28	23.17	
12711	C2021	11	19.62258309	55	20.497	+37	28	12.78	
12711	C2021	11	19.63616809	55	20.994	+37	28	02.33	
17511	C2021	11	17.82815709	24	05.90	+37	42	14.5	
17511	C2021	11	17.83859509	24	08.68	+37	42	13.8	
17511	C2021	11	17.84903309	24	11.45	+37	42	13.2	
17511	C2021	11	18.80515609	28	34.27	+37	40	34.7	
17511	C2021	11	18.81189009	28	36.06	+37	40	34.2	
17511	C2021	11	18.81862409	28	37.89	+37	40	33.7	
17511	C2021	11	19.59397909	32	13.423	+37	38	57.29	
17511	C2021	11	19.60753509	32	17.246	+37	38	55.57	
17511	C2021	11	19.62108609	32	20.839	+37	38	54.00	
17511	C2021	11	19.63466709	32	24.597	+37	38	52.16	
18882	C2021	11	17.79430708	45	14.09	+52	58	39.9	
18882	C2021	11	17.79496608	45	14.10	+52	58	40.2	
18882	C2021	11	17.80474508	45	14.28	+52	58	36.5	
18882	C2021	11	17.80539708	45	14.30	+52	58	36.3	
18882	C2021	11	17.81518308	45	14.51	+52	58	33.4	
18882	C2021	11	17.81583508	45	14.56	+52	58	33.2	
52750	C2021	11	19.19179121	16	49.20	-41	52	50.2	
52750	C2021	11	19.19499421	16	48.93	-41	52	51.2	
52750	C2021	11	19.20231821	16	48.42	-41	52	54.9	
52750	C2021	11	19.21241621	16	47.65	-41	52	59.9	
D7052	C2021	11	19.53931808	49	31.432	+30	21	19.62	
D7052	C2021	11	19.54995608	49	31.502	+30	21	25.36	
D7052	C2021	11	19.56242508	49	31.541	+30	21	31.86	
D7052	C2021	11	19.57397008	49	31.607	+30	21	37.97	
D8175	C2021	11	18.80726009	05	46.24	+32	47	12.9	
D8175	C2021	11	18.81399409	05	45.74	+32	47	23.8	
D8175	C2021	11	18.82072809	05	45.14	+32	47	34.4	
D8175	C2021	11	19.54235	09	04	54.402	+33	06	59.34
D8175	C2021	11	19.55298	09	04	53.470	+33	07	17.18
D8175	C2021	11	19.56546	09	04	52.382	+33	07	38.34
D8175	C2021	11	19.57749	09	04	51.348	+33	07	58.27
D8175	C2021	11	19.59759	09	04	49.560	+33	08	31.59
D8175	C2021	11	19.61568	09	04	47.955	+33	09	01.13
D8175	C2021	11	19.62820	09	04	46.825	+33	09	21.83
D8852	C2021	11	19.33843901	25	01.83	-18	56	21.8	
D8852	C2021	11	19.34209501	25	01.17	-18	55	46.2	
D8852	C2021	11	19.34850001	25	00.07	-18	54	42.9	
D8852	C2021	11	19.35856901	24	58.30	-18	53	03.5	
D8937	C2021	11	19.58846509	35	39.46	-20	09	22.6	
D8937	C2021	11	19.59170609	35	38.97	-20	09	11.1	
D8937	C2021	11	19.59723809	35	38.14	-20	08	50.6	
D8937	C2021	11	19.60732609	35	36.60	-20	08	13.5	
G2273	C2021	11	20.25942401	25	04.593	+17	55	51.57	
G2273	C2021	11	20.26984101	25	04.386	+17	55	36.63	
G2273	C2021	11	20.29102101	25	03.951	+17	55	06.20	
G3696	C2021	11	18.80599809	16	26.84	+34	26	19.8	
G3696	C2021	11	18.81273209	16	26.85	+34	26	45.1	
G3696	C2021	11	18.81946609	16	26.85	+34	27	10.4	
G3696	C2021	11	19.59910809	16	31.120	+35	15	46.50	
G3696	C2021	11	19.61719309	16	31.045	+35	16	52.92	
G3696	C2021	11	19.62971609	16	30.976	+35	17	40.60	
G3696	C2021	11	19.64067909	16	30.923	+35	18	21.13	
H0891	C2021	11	17.76509608	10	13.48	+36	48	13.4	

20.4	GVEW029290
20.5	GVEW029290
20.6	GVEW029290
17.50	oVEW029T05
17.97	oVEW029T05
18.10	oVEW029T05
18.04	oVEW029T05
18.4	RVEW029D29
18.5	RVEW029D29
18.3	RVEW029D29
17.7	RVEW029D29
17.7	RVEW029D29
17.7	RVEW029D29
16.84	oVEW029T05
16.72	oVEW029T05
16.61	oVEW029T05
16.79	oVEW029T05
16.59	oVEW029T05
16.47	oVEW029T05
16.54	oVEW029T05
16.86	oVEW029T05
14.5	VqEW029V40
14.6	VqEW029V40
14.7	VqEW029V40
14.7	VqEW029V40
18.19	oVEW029T05
18.27	oVEW029T05
18.39	oVEW029T05
18.18	oVEW029T05
17.44	oVEW029T05
17.59	oVEW029T05
17.77	oVEW029T05
17.04	oVEW029T05
18.1	RVEW029D29
18.2	RVEW029D29
18.5	RVEW029D29
18.31	zUEW029F52
18.69	zUEW029F52
18.46	zUEW029F52
18.15	zUEW029F52
17.9	RVEW029D29
18.1	RVEW029D29
18.2	RVEW029D29
18.0	RVEW029D29
17.9	RVEW029D29
18.1	RVEW029D29
18.84	zUEW029F52
19.06	zUEW029F52
19.28	zUEW029F52
19.51	zUEW029F52
18.6	RVEW029D29
18.3	RVEW029D29
18.1	RVEW029D29
18.3	RVEW029D29
18.3	RVEW029D29
18.5	RVEW029D29
17.24	oVEW029T05
17.44	oVEW029T05
17.15	oVEW029T05
17.10	oVEW029T05
20.77	zUEW029F51
20.71	zUEW029F51
20.83	zUEW029F51
20.80	zUEW029F51
18.8	RVEW029D29
19.3	RVEW029D29
18.9	RVEW029D29
20.6	zUEW029F51
20.5	zUEW029F51
20.7	zUEW029F51
20.3	zUEW029F51
19.9	zUEW029F51
19.9	zUEW029F51
19.8	zUEW029F51
17.76	oVEW029T05
17.96	oVEW029T05
17.86	oVEW029T05
17.76	oVEW029T05
17.93	oVEW029T05
17.81	oVEW029T05
17.85	oVEW029T05
17.67	oVEW029T05
18.77	iUEW029F51
18.71	iUEW029F51
18.26	iUEW029F51
16.7	RVEW029D29
16.7	RVEW029D29
16.8	RVEW029D29
18.96	zUEW029F51
19.06	zUEW029F51
18.93	zUEW029F51
18.89	zUEW029F51
18.5	RVEW029D29

H0891	C2021	11	17.77553308	10	15.20	+36	48	13.6	18.3	RVEW029D29	
H0891	C2021	11	17.78597108	10	16.90	+36	48	13.5	18.5	RVEW029D29	
H0891	C2021	11	18.76293508	13	03.19	+36	47	30.2	18.7	RVEW029D29	
H0891	C2021	11	18.76966908	13	04.32	+36	47	30.7	18.0	RVEW029D29	
H0891	C2021	11	18.77640308	13	05.43	+36	47	30.6	18.4	RVEW029D29	
H0891	C2021	11	19.49043508	15	07.338	+36	46	52.97	18.85z	UEW029F52	
H0891	C2021	11	19.50699508	15	10.059	+36	46	52.47	18.64z	UEW029F52	
H0891	C2021	11	19.52351908	15	12.798	+36	46	51.95	18.63z	UEW029F52	
H0891	C2021	11	19.54007308	15	15.544	+36	46	51.30	18.74z	UEW029F52	
H0903	C2021	11	18.85022108	41	36.39	+15	42	03.5	19.4	RVEW029D29	
H0903	C2021	11	18.85695508	41	38.13	+15	42	01.1	19.5	RVEW029D29	
H0903	C2021	11	18.86368908	41	39.81	+15	41	57.9	19.2	RVEW029D29	
O9886	C2021	11	17.82946209	49	44.94	+38	38	24.3	19.1	RVEW029D29	
O9886	C2021	11	17.83990009	49	45.18	+38	38	13.0	19.1	RVEW029D29	
O9886	C2021	11	17.85033709	49	45.40	+38	38	01.6	18.9	RVEW029D29	
O9886	C2021	11	19.59547609	50	24.890	+38	05	56.78	18.73z	UEW029F52	
O9886	C2021	11	19.60903209	50	25.071	+38	05	42.09	18.82z	UEW029F52	
O9886	C2021	11	19.62258309	50	25.240	+38	05	27.62	18.84z	UEW029F52	
O9886	C2021	11	19.63616809	50	25.419	+38	05	12.61	18.77z	UEW029F52	
Q7337	C2021	11	18.79457208	27	29.67	+39	41	41.1	17.9	RVEW029D29	
Q7337	C2021	11	18.80130608	27	28.14	+39	42	08.1	17.5	RVEW029D29	
V8160	C2021	11	18.84853708	12	05.53	+18	02	24.1	17.5	RVEW029D29	
V8160	C2021	11	18.85527108	12	06.87	+18	02	18.2	17.5	RVEW029D29	
V8160	C2021	11	18.86200508	12	08.22	+18	02	12.4	17.4	RVEW029D29	
c0636	C2021	11	19.42664204	27	01.73	-27	40	25.7	18.54o	VEW029T05	
c0636	C2021	11	19.42847504	27	01.24	-27	40	25.5	18.77o	VEW029T05	
c0636	C2021	11	19.43405704	26	59.89	-27	40	25.6	18.30o	VEW029T05	
c0636	C2021	11	19.43957604	26	58.47	-27	40	25.7	18.66o	VEW029T05	
c6847	C2021	11	17.72632506	39	55.11	+36	30	52.4	19.2	RVEW029D29	
c6847	C2021	11	17.72697706	39	55.06	+36	30	52.4	19.3	RVEW029D29	
c6847	C2021	11	17.73676206	39	53.99	+36	30	55.3	19.3	RVEW029D29	
c6847	C2021	11	17.73741506	39	53.88	+36	30	56.5	19.3	RVEW029D29	
c6847	C2021	11	17.74720006	39	52.83	+36	31	00.0	19.4	RVEW029D29	
c6847	C2021	11	17.74785206	39	52.78	+36	31	00.8	19.0	RVEW029D29	
f0195	C2021	11	18.85190407	51	50.74	+15	29	44.0	17.8	RVEW029D29	
f0195	C2021	11	18.85863807	51	52.03	+15	29	43.6	17.8	RVEW029D29	
f0195	C2021	11	18.86537207	51	53.34	+15	29	43.0	17.9	RVEW029D29	
f2983	C2021	11	17.73023907	31	26.44	+44	17	38.2	19.4	RVEW029D29	
f2983	C2021	11	17.74067607	31	29.18	+44	17	46.2	19.5	RVEW029D29	
h9877	C2021	11	18.84811607	54	07.63	+18	25	59.1	19.4	RVEW029D29	
h9877	C2021	11	18.86158407	54	10.77	+18	26	30.3	19.7	RVEW029D29	
i6938	C2021	11	19.54538	08	29	33.777	+34	29	39.90	21.2	zUEW029F51
i6938	C2021	11	19.55649	08	29	34.790	+34	29	27.29	20.9	zUEW029F51
i6938	C2021	11	19.56897	08	29	35.909	+34	29	13.61	21.3	zUEW029F51
m1442	C2021	11	18.70288606	42	41.18	+58	28	50.9	19.0	RVEW029D29	
p8771	C2021	11	17.82228609	04	43.63	+36	43	34.6	20.0	RVEW029D29	
p8771	C2021	11	17.83272409	04	45.08	+36	44	00.9	19.9	RVEW029D29	
p8771	C2021	11	17.84316209	04	46.53	+36	44	25.6	19.3	RVEW029D29	
p8771	C2021	11	18.80431409	06	59.77	+37	23	16.2	19.7	RVEW029D29	
p8771	C2021	11	18.81104809	07	00.72	+37	23	32.5	19.6	RVEW029D29	
p8771	C2021	11	18.81778209	07	01.64	+37	23	49.1	19.8	RVEW029D29	

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