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MPEC 2021-W32 : DAILY ORBIT UPDATE (2021 November 21)

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M.P.E.C. 2021-W32

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DAILY ORBIT UPDATE (2021 November 21)

Update to 2021-W29

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

New identifications:

K15FR4F	K17P20G		Weryk
K01FN5L	K10JG5J		Weryk
K05X36X	K11FB8P	K12M10E	Weryk
K02RP6Q	K09SU5Z		Weryk
K12BE6V	K15P89K		Weryk
K11D48U	K19U63Y		Weryk

New multiple-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Opp	C
J94Y04U	16.3	0.15	K221L	202.763	75.667	126.630	10.235	0.03332	3.16471	8	X
J95V06P	16.9	0.15	K221L	358.360	345.904	57.021	11.197	0.05661	3.02922	9	X
J96R20O	14.0	0.15	K221L	27.031	187.266	177.871	28.389	0.02489	5.27237	8	X
J98H25L	17.1	0.15	K221L	30.424	48.857	29.249	14.486	0.12637	2.56207	9	X
J98S21A	17.5	0.15	K221L	52.042	139.944	202.413	0.653	0.20187	2.44508	12	X
J98U01Q	16.7	0.15	K221L	10.861	183.668	222.410	64.014	0.50997	3.23055	4	X
J99P09O	16.7	0.15	K221L	44.219	229.948	136.124	12.551	0.10909	3.03828	9	X
J99TL6M	18.9	0.15	K221L	31.734	327.171	23.066	17.047	0.42069	2.38374	3	X
J99U37U	16.3	0.15	K221L	61.650	8.107	42.714	11.673	0.01982	3.04404	10	X
J99U57H	18.0	0.15	K221L	69.473	278.767	39.318	2.890	0.19540	2.38850	9	X
K00Q07C	16.8	0.15	K221L	50.397	167.091	149.261	14.958	0.26154	2.59659	11	X
K00QL1S	18.0	0.15	K221L	20.265	214.624	158.925	6.820	0.34838	2.59999	4	X
K00R52P	17.1	0.15	K221L	7.977	77.514	319.683	26.663	0.44256	2.60878	4	X
K00S08X	18.6	0.15	K221L	24.620	47.781	312.825	4.749	0.41558	2.60863	3	X
K00S08D	17.2	0.15	K221L	24.346	339.655	39.605	15.001	0.12128	2.61051	6	X
K00T42M	17.0	0.15	K221L	25.214	338.444	22.392	14.655	0.26655	2.60406	7	X
K00T61F	17.6	0.15	K221L	38.309	335.157	26.059	35.044	0.25541	2.60028	3	X
K00WK3R	17.9	0.15	K221L	23.663	222.381	170.273	15.517	0.14495	2.60157	5	X
K01FK8X	17.9	0.15	K221L	39.512	187.556	177.473	6.800	0.09265	2.39471	11	X
K01FM2O	19.1	0.15	K221L	34.694	343.264	23.874	1.606	0.19663	2.39510	5	X
K01FN5L	17.6	0.15	K221L	208.589	114.412	184.518	8.804	0.16706	2.64215	8	V
K01QD6F	18.5	0.15	K221L	54.654	112.276	210.142	8.649	0.32113	2.23284	6	X
K01RD9V	17.0	0.15	K221L	51.657	42.118	1.224	11.969	0.19365	2.84987	10	X
K01UG4P	18.2	0.15	K221L	25.946	261.647	114.924	3.866	0.23485	2.23979	8	X
K01UI5J	16.0	0.15	K221L	68.540	296.209	17.357	11.827	0.12997	2.90951	10	X
K01YG2O	17.4	0.15	K221L	355.528	297.748	132.537	12.708	0.23434	2.55299	7	X

K01YG2R	16.7	0.15	K221L	359.657	316.450	91.968	22.533	0.06637	2.57680	9 X
K01YG4D	17.9	0.15	K221L	33.003	31.135	27.821	9.845	0.24300	2.52453	7 X
K02AE5P	16.8	0.15	K221L	321.697	334.220	127.385	10.777	0.08017	2.98752	9 X
K02E58B	16.4	0.15	K221L	148.808	335.132	337.543	13.133	0.07694	2.56982	12 X
K02P63P	18.7	0.15	K221L	51.042	189.369	144.331	4.135	0.34903	2.42265	5 X
K02Q67A	16.7	0.15	K221L	136.882	350.588	342.731	14.050	0.07123	2.69326	10 X
K02RP6Q	18.4	0.15	K221L	159.615	86.052	301.108	3.456	0.12804	2.30789	7 V
K02S74X	17.2	0.15	K221L	14.787	193.759	175.939	18.072	0.31151	2.84262	4 X
K02T61V	18.4	0.15	K221L	345.167	235.123	206.424	20.833	0.09763	1.94234	7 X
K02T69P	21.8	0.15	K221L	24.102	317.001	94.439	1.974	0.46951	1.94758	2 X
K02Tc3H	17.7	0.15	K221L	29.877	236.783	134.644	10.390	0.25544	2.44114	7 X
K02U11N	19.6	0.15	K221L	25.455	353.031	53.258	22.780	0.11366	1.78235	4 X
K02X00A	19.4	0.15	K221L	350.469	35.148	95.818	3.299	0.62371	2.83291	2 X
K03B98T	16.9	0.15	K221L	7.994	305.699	94.178	16.759	0.25818	2.89484	5 X
K03G59O	17.5	0.15	K221L	60.911	222.148	118.695	6.040	0.12401	2.60540	8 X
K03H60K	16.1	0.15	K221L	26.781	280.412	93.602	16.587	0.11589	3.05115	9 X
K03H60W	13.5	0.15	K221L	348.444	330.305	81.336	12.974	0.03369	5.18821	12 X
K03K00O	16.6	0.15	K221L	107.464	69.837	232.030	13.237	0.04558	2.60097	12 X
K03N14T	17.0	0.15	K221L	86.503	183.979	132.511	14.162	0.14844	2.62341	8 X
K03Q76F	17.8	0.15	K221L	27.244	40.593	319.888	8.674	0.23545	2.34613	7 X
K03S68E	18.2	0.15	K221L	49.520	153.527	191.295	12.238	0.16642	2.70329	3 X
K03SB9L	17.7	0.15	K221L	16.598	299.549	77.175	3.457	0.22160	2.35183	7 X
K03SC7K	16.4	0.15	K221L	34.295	70.999	3.607	14.335	0.08991	2.63493	7 X
K03SL1K	16.7	0.15	K221L	95.144	320.680	22.077	12.933	0.29841	2.64732	10 X
K03SX2Q	17.1	0.15	K221L	22.482	204.467	155.586	11.607	0.31198	2.74214	4 X
K03Sd5K	17.6	0.15	K221L	134.235	151.119	110.975	7.545	0.12837	2.34735	8 X
K03Sd8Q	16.7	0.15	K221L	120.735	279.560	58.467	14.659	0.14229	2.65068	9 X
K03Sh8M	16.1	0.15	K221L	260.866	337.230	184.086	18.940	0.09316	3.21916	10 X
K03S14H	18.7	0.15	K221L	37.500	317.651	49.560	2.442	0.19209	2.34952	7 X
K03U48B	18.1	0.15	K221L	26.928	151.432	216.321	9.484	0.28858	2.72319	4 X
K03Uc1R	16.5	0.15	K221L	353.500	82.934	35.010	9.390	0.04562	3.15644	9 X
K03Ui9O	17.4	0.15	K221L	33.375	230.867	139.014	7.109	0.05757	2.72803	9 X
K03W10F	17.3	0.15	K221L	23.144	49.322	34.292	12.604	0.23788	2.69365	6 X
K03WG4U	18.7	0.15	K221L	38.011	290.991	71.822	2.393	0.19841	2.36775	7 X
K04B68C	18.4	0.15	K221L	47.770	121.108	306.219	20.072	0.02727	1.87917	5 X
K04D82O	17.2	0.15	K221L	356.115	104.927	307.438	11.418	0.35381	2.79622	6 X
K04D88M	17.9	0.15	K221L	20.189	275.182	108.104	8.242	0.23101	2.80649	6 X
K04E15Y	16.7	0.15	K221L	333.415	316.880	169.239	28.909	0.19381	2.78164	9 X
K04F97B	15.5	0.15	K221L	11.498	311.207	54.063	12.787	0.07713	2.92506	13 X
K04L33H	17.1	0.15	K221L	102.737	194.194	113.731	14.806	0.05676	2.51490	10 X
K04N19V	17.6	0.15	K221L	23.875	211.163	144.102	8.530	0.38012	2.61308	4 X
K04PB8P	16.7	0.15	K221L	131.985	348.989	279.250	11.217	0.09852	2.56812	8 X
K04Q32Q	18.5	0.15	K221L	15.303	223.993	173.421	12.372	0.26564	2.60918	3 X
K04R69Z	18.0	0.15	K221L	62.212	174.383	140.416	4.585	0.28422	2.60795	7 X
K04R79Z	18.4	0.15	K221L	35.700	279.195	88.662	6.356	0.36202	2.25994	5 X
K04R97J	17.5	0.15	K221L	66.139	107.379	205.384	12.112	0.26284	2.60890	9 X
K04RF5W	16.8	0.15	K221L	19.219	195.416	183.127	17.547	0.21061	3.15710	5 X
K04RF7R	17.5	0.15	K221L	7.688	199.116	196.507	14.027	0.25771	2.62087	8 X
K04RG6L	17.9	0.15	K221L	83.234	141.922	158.793	12.568	0.25046	2.58897	7 X
K04RK7F	16.8	0.15	K221L	35.841	106.803	223.371	11.892	0.29155	2.62346	8 X
K04RM2N	18.2	0.15	K221L	34.439	143.730	206.685	33.185	0.38130	2.62644	3 X
K04RN7C	18.3	0.15	K221L	72.525	125.071	180.815	12.527	0.29625	2.60311	7 X
K04RS2D	16.1	0.15	K221L	4.315	233.208	174.060	11.897	0.07395	3.12513	11 X
K04T14L	18.0	0.15	K221L	356.363	226.876	206.684	22.577	0.34467	2.27555	4 X
K04T29N	18.5	0.15	K221L	52.785	315.238	23.399	7.030	0.19642	2.26085	4 X
K04T64X	17.6	0.15	K221L	23.434	345.214	34.646	4.901	0.29105	2.62527	6 X
K04T79V	16.1	0.15	K221L	355.511	39.469	358.379	10.719	0.07240	3.18597	10 X
K04T98E	16.1	0.15	K221L	136.817	292.194	33.612	10.786	0.10486	3.05377	9 X
K04TD2X	17.4	0.15	K221L	8.856	147.830	233.803	11.654	0.29953	2.64387	4 X
K04TK0P	17.3	0.15	K221L	357.684	9.718	35.953	7.224	0.29271	2.64305	5 X
K04TK8A	17.9	0.15	K221L	22.164	31.388	40.682	13.843	0.31799	2.60519	4 X
K04TMOQ	17.0	0.15	K221L	354.449	18.823	32.388	14.866	0.08321	2.63742	6 X
K04TP5K	18.1	0.15	K221L	3.644	352.015	53.123	2.819	0.14806	2.62233	4 X
K04TU2H	17.7	0.15	K221L	14.806	26.368	9.012	5.722	0.19824	2.62142	5 X
K04TY4B	17.8	0.15	K221L	35.176	152.038	215.909	12.415	0.24703	2.62344	7 X
K04XD9P	17.5	0.15	K221L	92.358	235.896	71.758	7.543	0.11438	2.31101	10 X
K04XE1B	16.9	0.15	K221L	25.875	289.961	95.202	7.079	0.11167	2.66424	9 X
K04XE1S	16.7	0.15	K221L	42.680	228.058	108.366	7.500	0.11969	2.71195	12 X
K04XG6E	16.9	0.15	K221L	40.210	14.614	63.924	16.050	0.05268	2.57821	7 X
K04XJ4K	17.4	0.15	K221L	12.306	243.272	135.801	5.499	0.16114	2.70735	9 X
K04Y32E	17.5	0.15	K221L	42.482	94.743	294.175	26.452	0.40173	2.61870	5 X
K04Y40B	17.8	0.15	K221L	335.360	348.019	90.886	5.786	0.13018	2.66869	7 X
K05B00Y	16.6	0.15	K221L	42.640	119.208	301.601	21.149	0.07684	2.64198	7 X
K05C13N	17.5	0.15	K221L	352.902	306.566	115.882	9.880	0.18910	2.70223	6 X
K05C84C	18.0	0.15	K221L	14.300	115.515	335.190	11.099	0.26850	2.63716	6 X
K05F14N	16.5	0.15	K221L	259.728	201.942	19.667	14.474	0.05326	2.69265	11 X
K05NC4M	17.0	0.15	K221L	18.873	129.008	313.054	15.254	0.19626	2.88687	5 X
K05P09T	17.0	0.15	K221L	31.334	226.175	137.837	10.122	0.28518	3.01270	4 X
K05Q11N	20.1	0.15	K221L	35.905	135.328	223.695	5.635	0.40323	2.17360	4 X
K05R47F	17.4	0.15	K221L	8.084	318.407	88.886	12.331	0.30974	3.06950	3 X
K05S60C	18.2	0.15	K221L	49.601	343.382	16.529	7.432	0.22485	2.16678	8 X
K05SS6C	17.3	0.15	K221L	5.743	315.432	86.507	11.048	0.07517	3.05519	6 X
K05T13O	16.8	0.15	K221L	28.777	272.289	58.407	8.088	0.40606	3.06598	5 X
K05TD8M	18.3	0.15	K221L	45.863	203.575	161.039	3.775	0.19306	2.17008	7 X
K05TH3B	16.6	0.15	K221L	23.766	309.693	34.034	27.698	0.43893	3.08026	6 X
K05TM1G	19.0	0.15	K221L	32.803	203.852	192.755	20.960	0.08322	1.91516	3 X
K05U29M	17.0	0.15	K221L	7.529	336.368	45.534	15.800	0.26879	3.09810	5 X
K05U32M	16.9	0.15	K221L	38.366	312.691	41.800	19.197	0.10590	3.08215	5 X
K05UC0J	18.6	0.15	K221L	23.111	8.810	23.955	3.051	0.13763	2.17569	7 X
K05UI5R	16.4	0.15	K221L	23.576	324.418	57.649	11.500	0.07912	3.09038	8 X
K05UN6S	17.5	0.15	K221L	42.796	285.815	61.551	17.178	0.21843	3.08097	2 X
K05Uq4N	8.9	0.15	K221L	21.226	50.751	39.188	17.781	0.12820	21.46259	12 X
K05V33D	17.4	0.15	K221L	50.896	264.579	57.814	11.539	0.30086	3.07604	4 X

K05X09E	16.5	0.15	K221L	12.695	55.812	45.019	10.637	0.07628	2.99928	11	X
K05X36X	17.0	0.15	K221L	82.981	57.234	296.631	4.935	0.13839	2.53428	8	V
K05XB9O	15.7	0.15	K221L	101.167	197.812	108.809	13.528	0.08119	3.12130	11	X
K05YF8Z	16.7	0.15	K221L	30.683	256.690	122.972	11.795	0.13222	3.14042	7	X
K05YT3P	16.2	0.15	K221L	87.582	229.744	71.995	17.998	0.18170	3.10347	10	X
K05YT7D	17.8	0.15	K221L	345.656	344.266	93.760	14.552	0.12864	2.56998	5	X
K06AA8Q	17.7	0.15	K221L	26.913	264.674	119.234	6.193	0.19434	2.57247	5	X
K06B07R	17.8	0.15	K221L	67.453	89.470	304.132	17.748	0.09364	1.93253	6	X
K06B16A	16.6	0.15	K221L	25.060	259.835	123.741	10.910	0.11080	3.16908	8	X
K06B69C	16.3	0.15	K221L	262.046	51.771	91.631	6.402	0.07784	3.22283	13	X
K06B06R	16.9	0.15	K221L	11.697	257.860	138.717	10.434	0.07766	3.17771	7	X
K06BS1H	16.9	0.15	K221L	359.026	268.254	152.581	14.674	0.30203	3.17231	3	X
K06BU0Y	16.2	0.15	K221L	318.353	316.197	161.219	17.227	0.18381	3.14529	7	X
K06C32V	18.7	0.15	K221L	359.244	225.400	199.740	4.266	0.31232	2.57069	4	X
K06DB6T	15.9	0.15	K221L	285.815	78.510	51.775	16.548	0.06421	3.23831	9	X
K06E77M	17.4	0.15	K221L	359.810	13.262	35.635	6.069	0.23202	2.63122	6	X
K06G56M	16.8	0.15	K221L	355.789	79.315	44.481	13.770	0.25879	3.14939	9	X
K06HA1Z	17.6	0.15	K221L	61.137	227.705	94.513	6.774	0.14719	2.34687	9	X
K06HB8V	16.1	0.15	K221L	254.801	172.158	57.447	20.033	0.10989	3.21704	10	X
K06HC3C	7.3	0.15	K221L	162.526	31.850	57.211	12.612	0.13494	36.58089	4	A
K06K82C	17.8	0.15	K221L	73.743	222.352	97.872	10.312	0.24507	2.35098	8	X
K06Q33L	18.6	0.15	K221L	27.940	165.347	199.838	6.999	0.44938	2.41535	4	X
K06Q62U	17.3	0.15	K221L	29.964	247.741	121.534	5.742	0.19557	2.39606	10	X
K06QK8A	18.1	0.15	K221L	341.561	258.386	185.218	5.700	0.08249	2.37406	9	X
K06SG0Z	18.4	0.15	K221L	2.488	359.792	54.757	3.421	0.23525	2.41965	6	X
K06Ua7K	16.8	0.15	K221L	334.743	248.145	206.516	18.833	0.22335	2.87750	6	X
K06V06C	17.9	0.15	K221L	11.101	347.506	52.924	15.723	0.22950	2.43125	6	X
K06VB8J	16.6	0.15	K221L	4.965	58.504	56.776	15.682	0.10574	2.85686	6	X
K07A32A	17.1	0.15	K221L	0.918	301.676	120.386	13.632	0.22547	2.99134	7	X
K07BA4Y	16.8	0.15	K221L	174.039	106.589	124.377	11.828	0.02387	3.08944	8	X
K07E44M	16.6	0.15	K221L	200.298	57.838	150.676	15.703	0.12788	3.12669	5	X
K07H39Y	15.7	0.15	K221L	21.136	322.325	60.097	10.299	0.08972	3.22333	9	X
K07H56O	18.0	0.15	K221L	53.112	283.573	40.835	24.201	0.26556	2.25165	5	X
K07L00X	15.7	0.15	K221L	57.021	47.170	251.029	26.390	0.21254	2.73140	8	X
K07P19F	18.5	0.15	K221L	66.137	187.882	144.464	11.148	0.22226	2.27659	4	X
K07P30V	17.2	0.15	K221L	26.209	12.279	337.916	12.067	0.30261	2.78919	3	X
K07Q07E	17.1	0.15	K221L	54.540	188.925	153.680	21.188	0.30479	2.74319	6	X
K07R22W	18.4	0.15	K221L	38.125	189.284	174.724	9.632	0.22521	2.29318	3	X
K07RH3F	18.1	0.15	K221L	33.274	204.217	164.331	8.010	0.20950	2.30412	5	X
K07RJ8J	14.7	0.15	K221L	45.875	220.319	153.373	24.695	0.05370	5.18516	8	X
K07RW3M	17.7	0.15	K221L	21.702	63.093	14.852	9.184	0.25616	2.73935	5	X
K07RW3S	17.4	0.15	K221L	8.482	264.680	142.410	5.585	0.17025	2.78202	7	X
K07RX6U	18.7	0.15	K221L	44.381	224.010	141.249	10.105	0.23063	2.29233	5	X
K07T04H	17.3	0.15	K221L	46.616	48.910	337.560	10.348	0.34244	2.74821	5	X
K07T23C	20.4	0.15	K221L	10.023	14.142	55.354	12.897	0.60852	2.81940	2	X
K07T91L	18.5	0.15	K221L	43.246	146.893	209.413	2.408	0.25404	2.28620	5	X
K07TD5L	17.3	0.15	K221L	52.167	180.151	168.849	6.526	0.03145	2.75573	9	X
K07TP4H	19.0	0.15	K221L	35.887	185.466	187.034	5.462	0.24977	2.30857	3	X
K07TQ7K	17.4	0.15	K221L	351.459	34.656	27.102	13.741	0.18538	2.80281	6	X
K07T16L	16.8	0.15	K221L	319.616	139.203	41.290	13.879	0.18781	2.69787	8	X
K07U35E	18.7	0.15	K221L	19.123	223.760	169.826	6.777	0.25150	2.30610	4	X
K07VM8C	18.1	0.15	K221L	27.534	348.456	27.396	6.207	0.24954	2.32305	5	X
K07VO3Z	17.2	0.15	K221L	18.079	334.553	47.652	12.203	0.16593	2.83191	7	X
K07VP7W	18.4	0.15	K221L	16.418	283.039	112.840	6.500	0.21706	2.31933	5	X
K07VY6U	18.1	0.15	K221L	71.380	220.347	98.978	7.169	0.25505	2.31638	4	X
K07W50R	19.6	0.15	K221L	23.779	300.242	86.759	4.749	0.24382	2.32045	3	X
K08AE7X	18.6	0.15	K221L	338.964	284.383	158.890	6.798	0.08942	2.35928	7	X
K08B62E	19.2	0.15	K221L	2.258	154.188	305.147	0.561	0.13655	2.32260	4	V
K08C07V	16.6	0.15	K221L	183.093	73.582	144.550	10.791	0.05177	2.95904	11	X
K08CH6S	17.2	0.15	K221L	352.425	143.196	0.171	13.687	0.22939	2.79651	5	X
K08CN2M	18.2	0.15	K221L	30.772	212.684	169.371	7.144	0.12813	2.38761	7	X
K08G19Q	16.9	0.15	K221L	161.091	58.791	175.373	16.644	0.17957	3.12207	7	X
K08L01Y	17.7	0.15	K221L	37.076	210.591	144.707	16.585	0.22758	2.56050	5	X
K08M01U	19.7	0.15	K221L	42.301	56.553	296.293	40.758	0.43665	1.89571	3	X
K08N05J	16.9	0.15	K221L	1.142	163.314	229.600	13.366	0.24965	2.66429	6	X
K08O14J	16.6	0.15	K221L	72.384	195.831	131.630	12.857	0.19497	2.59088	12	X
K08O24T	17.7	0.15	K221L	41.105	185.654	157.394	13.917	0.29753	2.64395	4	X
K08O33B	18.4	0.15	K221L	39.163	208.095	150.829	15.759	0.31076	2.62664	3	X
K08P04J	16.7	0.15	K221L	61.124	217.560	115.952	15.552	0.13112	2.60020	11	X
K08Q31G	17.1	0.15	K221L	34.224	9.245	328.097	13.631	0.26518	2.66254	5	X
K08Q51H	17.9	0.15	K221L	38.125	176.272	180.837	12.167	0.19580	2.64840	4	X
K08R80Q	18.0	0.15	K221L	12.945	230.792	177.521	12.247	0.29115	2.64522	4	X
K08R90Z	14.4	0.15	K221L	36.934	203.653	159.508	14.483	0.11540	5.10965	6	X
K08RI0S	18.2	0.15	K221L	38.924	189.483	173.255	10.667	0.19716	2.64203	3	X
K08SJ4D	17.1	0.15	K221L	347.247	260.625	178.490	11.799	0.14773	2.65184	9	X
K08SK4R	19.2	0.15	K221L	41.958	195.742	169.474	5.145	0.16734	2.20232	3	X
K08SZ1M	17.7	0.15	K221L	19.369	17.451	13.628	6.044	0.25495	2.63620	5	X
K08SZ2U	17.8	0.15	K221L	18.457	187.585	187.442	15.946	0.31221	2.69085	3	X
K08SZ3X	19.2	0.15	K221L	9.347	223.102	187.304	12.320	0.28597	2.64631	2	X
K08TK3A	17.8	0.15	K221L	38.423	231.493	125.625	6.385	0.16674	2.66355	4	X
K08U95S	17.2	0.15	K221L	104.477	319.788	47.501	15.023	0.07367	2.53856	9	X
K08UJ8W	17.0	0.15	K221L	356.770	347.643	55.460	14.207	0.28012	2.69981	6	X
K08UJ9Z	17.6	0.15	K221L	28.707	145.084	217.406	11.177	0.29484	2.66051	6	X
K08UM9C	16.9	0.15	K221L	3.835	145.062	267.418	11.455	0.16957	2.67446	7	X
K08UT0F	17.6	0.15	K221L	10.349	256.939	147.351	3.027	0.29453	2.68288	4	X
K08Uf1Y	17.8	0.15	K221L	9.705	276.663	125.658	3.383	0.14052	2.69212	5	X
K08Uf1Z	18.6	0.15	K221L	28.764	299.787	66.648	6.051	0.25551	2.21018	5	X
K08Uf9N	18.3	0.15	K221L	7.288	229.929	181.155	4.767	0.18223	2.66510	5	X
K08V87Q	17.2	0.15	K221L	55.807	223.462	125.554	8.513	0.13115	2.68445	8	X
K08W54M	18.6	0.15	K221L	46.193	312.611	52.877	21.642	0.10865	1.90607	4	X
K08WB0Z	17.5	0.15	K221L	335.396	97.510	67.469	25.939	0.32354	2.62397	4	X
K08WE6V	18.3	0.15	K221L	300.573	74.098	57.035	22.175	0.09798	1.94858	6	X
K08X02Q	20.2	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
K08Y27T	16.5	0.15	K221L	295.303	36.657	78.512	15.467	0.06897	2.73100	10	X
K08YE0T	17.2	0.15	K221L	352.769	301.818	130.110	13.305	0.10938	2.74046	7	X
K08YE4L	17.3	0.15	K221L	3.094	287.886	124.188	14.799	0.08868	2.76016	7	X
K08YE7C	18.8	0.15	K221L	34.298	87.176	292.243	6.322	0.18584	2.22431	6	X
K08YG0B	18.1	0.15	K221L	29.012	94.728	318.170	7.436	0.36386	2.68329	5	X
K08YH9T	16.8	0.15	K221L	46.333	236.737	101.021	14.250	0.21396	2.78146	9	X
K09A53B	16.5	0.15	K221L	82.624	196.262	121.210	22.526	0.15989	2.77064	8	X
K09A64V	18.9	0.15	K221L	5.214	298.072	123.412	12.239	0.28808	2.71010	4	X
K09B44J	17.1	0.15	K221L	321.703	337.797	140.872	21.951	0.18311	2.74611	7	X
K09B95M	16.6	0.15	K221L	41.871	116.810	307.254	21.324	0.06809	2.67058	7	X
K09BA9L	17.2	0.15	K221L	0.003	240.493	176.911	4.685	0.10624	2.77738	10	X
K09F33W	16.6	0.15	K221L	135.151	100.904	167.290	10.099	0.03079	2.87596	8	X
K09J11H	16.9	0.15	K221L	344.479	72.450	76.007	25.400	0.16276	2.72769	6	X
K09R72K	14.2	0.15	K221L	353.671	221.021	193.592	10.471	0.19309	5.20094	8	X
K09SN8N	14.0	0.15	K221L	0.652	252.378	140.950	15.446	0.20420	5.21198	8	X
K09S07H	14.0	0.15	K221L	355.647	208.247	197.201	23.542	0.11280	5.20650	8	X
K09S07Y	14.4	0.15	K221L	330.978	250.798	176.081	5.995	0.04588	5.05575	12	X
K09SX2U	16.3	0.15	K221L	59.773	63.196	317.276	12.483	0.28880	3.17183	6	X
K09SD0H	16.8	0.15	K221L	46.728	210.994	142.854	8.677	0.06786	3.22068	7	X
K09Se0W	17.0	0.15	K221L	49.910	9.801	27.726	11.108	0.21345	3.15922	6	X
K09Sf9N	14.5	0.15	K221L	320.428	282.878	152.539	8.154	0.08957	5.27447	6	X
K09U03P	13.2	0.15	K221L	33.278	290.548	71.933	14.179	0.03327	5.21328	13	X
K09UG2B	16.3	0.15	K221L	1.197	111.963	359.822	9.065	0.07293	3.18715	7	X
K09W15S	18.1	0.15	K221L	357.544	256.874	171.328	3.212	0.20972	2.54765	5	X
K09WL5H	18.1	0.15	K221L	9.508	240.649	169.254	6.245	0.26281	2.54086	7	X
K09WR1A	17.4	0.15	K221L	357.649	308.371	98.511	6.447	0.25199	2.61292	8	X
K09Y27D	18.1	0.15	K221L	1.283	235.762	183.120	4.998	0.22718	2.55545	5	X
K10A01H	17.8	0.15	K221L	354.336	315.638	116.246	13.872	0.14182	2.58762	3	X
K10A48R	17.1	0.15	K221L	19.993	153.837	233.010	5.320	0.11789	2.62385	14	X
K10A98H	17.4	0.15	K221L	352.423	315.208	107.164	14.682	0.15878	2.52155	6	X
K10AE4A	17.0	0.15	K221L	331.953	331.151	119.668	22.821	0.07140	2.61434	8	X
K10B42Z	13.7	0.15	K221L	4.072	335.935	59.999	27.066	0.07567	5.27935	10	X
K10B62A	16.5	0.15	K221L	359.482	53.817	64.033	23.179	0.15191	3.16126	5	X
K10B66Q	16.7	0.15	K221L	56.979	321.844	342.671	30.126	0.17358	2.58806	7	X
K10B70A	17.7	0.15	K221L	341.079	197.120	309.065	15.094	0.24077	2.58559	5	X
K10CN7J	16.3	0.15	K221L	32.381	59.430	23.570	15.171	0.07150	3.16302	10	X
K10D23G	16.7	0.15	K221L	308.538	355.074	106.676	13.487	0.06191	2.79395	10	X
K10D33E	16.4	0.15	K221L	334.041	46.164	21.770	9.917	0.08641	3.40856	7	X
K10EG9Z	16.7	0.15	K221L	74.661	235.960	80.822	27.240	0.03376	2.62320	7	X
K10G36Q	17.8	0.15	K221L	353.036	287.054	154.424	11.630	0.26424	2.55698	7	X
K10GI9H	17.2	0.15	K221L	60.761	1.010	20.311	8.261	0.23661	2.53689	7	X
K10H13Y	17.1	0.15	K221L	59.290	341.653	41.162	15.849	0.31954	2.53191	7	X
K10J22U	17.4	0.15	K221L	350.584	6.694	65.275	13.190	0.17697	2.61026	5	X
K10J83D	16.5	0.15	K221L	214.110	139.474	58.648	18.237	0.07501	2.76424	8	X
K10J97Z	16.8	0.15	K221L	28.183	283.141	78.007	15.352	0.27780	3.06397	5	X
K10JG9V	17.2	0.15	K221L	126.020	175.239	96.930	24.703	0.15460	2.26410	7	X
K10K22R	17.1	0.15	K221L	305.088	291.916	210.148	26.056	0.29939	2.59803	8	X
K10K33T	16.7	0.15	K221L	99.800	208.604	96.075	15.259	0.09144	2.97787	9	X
K10L23O	17.8	0.15	K221L	282.395	68.600	75.879	12.483	0.14098	2.65963	6	X
K10L57M	17.0	0.15	K221L	99.164	218.772	80.399	10.870	0.04195	3.02927	8	X
K10L84G	17.0	0.15	K221L	358.667	343.666	56.433	10.424	0.29592	3.12008	4	X
K10L84N	16.1	0.15	K221L	43.213	253.271	84.691	21.679	0.28075	3.08754	10	X
K10L90T	17.5	0.15	K221L	19.975	203.741	177.122	16.020	0.27506	3.08646	4	X
K10LA8Q	15.9	0.15	K221L	28.267	224.756	125.230	17.918	0.24478	2.96210	13	X
K10LE5D	17.2	0.15	K221L	2.187	232.166	180.372	22.761	0.32973	3.08028	3	X
K10M24X	16.6	0.15	K221L	20.374	211.440	157.793	20.014	0.28453	3.11298	5	X
K10M25O	16.5	0.15	K221L	31.704	248.009	127.261	12.100	0.11842	3.05448	9	X
K10N24K	16.8	0.15	K221L	30.979	80.910	248.123	12.002	0.31727	3.15202	6	X
K10O0A1E	17.9	0.15	K221L	19.145	174.746	194.381	18.412	0.57043	3.14055	2	X
K10O0A5Y	15.4	0.15	K221L	112.959	231.296	53.627	19.040	0.06791	3.12049	11	X
K10O0A8X	17.2	0.15	K221L	28.410	267.179	104.840	10.159	0.16112	3.13125	4	X
K10OB2N	16.6	0.15	K221L	29.176	197.302	177.138	19.418	0.18480	3.12567	7	X
K10P38Z	16.9	0.15	K221L	333.497	321.511	129.488	15.797	0.15989	3.11827	4	X
K10P70S	16.8	0.15	K221L	45.436	192.782	154.384	11.463	0.23835	3.13438	6	X
K10P74P	16.6	0.15	K221L	58.869	171.186	147.189	15.587	0.25382	3.05006	7	X
K10R09C	16.9	0.15	K221L	28.457	252.040	106.926	9.727	0.29327	3.09700	5	X
K10R67B	18.3	0.15	K221L	36.655	255.656	115.970	2.426	0.18511	2.35375	8	X
K10R69S	17.2	0.15	K221L	17.509	192.679	172.866	17.721	0.28649	3.13185	4	X
K10RC4T	18.2	0.15	K221L	51.405	294.920	51.227	2.246	0.20127	2.36682	8	X
K10RK0B	18.3	0.15	K221L	31.633	289.687	87.756	2.883	0.23275	2.37333	5	X
K10S17G	17.0	0.15	K221L	50.636	149.753	188.790	18.416	0.28013	3.08739	4	X
K10S37Z	17.9	0.15	K221L	46.223	313.808	33.623	5.599	0.24126	2.36984	6	X
K10T07V	16.6	0.15	K221L	332.867	260.146	187.404	14.243	0.20484	3.07482	9	X
K10T48U	16.9	0.15	K221L	343.874	230.701	203.301	15.939	0.16943	3.10099	5	X
K10TJ8F	13.9	0.15	K221L	354.631	344.285	54.356	34.492	0.01952	5.14154	4	X
K10U35L	18.8	0.15	K221L	11.369	280.973	129.107	3.195	0.20128	2.37120	4	X
K10UB6G	17.7	0.15	K221L	356.570	351.964	73.822	8.022	0.10901	2.37311	7	X
K10V52C	14.4	0.15	K221L	318.984	26.509	55.592	23.941	0.09625	5.14860	4	X
K10V75X	16.9	0.15	K221L	341.710	9.595	68.330	18.578	0.23567	3.15424	4	X
K10V82U	13.0	0.15	K221L	359.227	343.345	55.698	35.872	0.05107	5.16865	9	X
K10VA3V	16.8	0.15	K221L	30.964	295.098	64.866	14.715	0.29513	3.16637	5	X
K10VJ8B	16.8	0.15	K221L	358.578	158.260	254.920	23.259	0.24800	2.40988	4	X
K10VO5X	14.7	0.15	K221L	337.693	267.882	152.676	7.055	0.13403	5.19294	6	X
K10VP1Y	18.2	0.15	K221L	50.646	263.150	86.242	2.401	0.19250	2.38865	8	X
K10VR1M	14.5	0.15	K221L	345.047	348.665	64.718	11.511	0.03830	5.08197	7	X
K10W78W	14.7	0.15	K221L	290.822	51.696	60.147	20.543	0.09606	5.19427	5	X
K10XB5O	14.7	0.15	K221L	334.613	310.813	121.355	9.456	0.12523	5.25358	5	X
K11A34F	16.8	0.15	K221L	282.756	132.123	352.185	7.700	0.08237	2.48339	9	X
K11B11E	15.3	0.15	K221L	328.104	191.813	319.408	21.247	0.12258	3.18330	9	X
K11BG5S	16.6	0.15	K221L	40.256	98.895	318.131	15.430	0.21430	3.16284	7	X
K11BH9E	17.5	0.15	K221L	21.672	108.690	322.383	13.290	0.26076	3.11098	5	X
K11C51A	17.4	0.15	K221L	342.988	243.224	196.958	6.562	0.17922	2.45891	8	X

K11C88R	17.0	0.15	K221L	133.760	83.942	163.871	13.299	0.24240	2.63114	9 X
K11D48U	19.1	0.15	K221L	218.669	336.520	99.935	3.119	0.07817	2.17549	4 V
K11E47A	16.3	0.15	K221L	6.257	106.865	12.702	16.564	0.15635	3.15576	7 X
K11G90R	17.3	0.15	K221L	96.011	316.322	35.021	14.024	0.20482	2.55139	11 X
K11G92U	17.3	0.15	K221L	61.787	247.320	97.959	12.618	0.10256	2.57986	8 X
K11K36H	17.7	0.15	K221L	63.411	192.188	142.173	10.570	0.22027	2.74219	4 X
K11L20D	16.3	0.15	K221L	18.927	165.974	195.022	11.665	0.50195	2.96104	9 X
K11Q43X	17.1	0.15	K221L	6.321	218.673	193.591	13.130	0.23179	2.84300	5 X
K11SB8J	17.6	0.15	K221L	42.810	255.811	80.792	10.264	0.21390	2.25265	7 X
K11SO7V	18.1	0.15	K221L	22.848	168.430	215.458	4.143	0.21087	2.24685	10 X
K11SP0Y	15.7	0.15	K221L	89.720	303.831	353.923	12.791	0.16502	2.97364	12 X
K11SQ5F	16.5	0.15	K221L	68.164	214.783	120.068	3.157	0.07355	2.89339	11 X
K11U36H	16.8	0.15	K221L	273.209	70.346	64.522	9.735	0.09945	3.00680	9 X
K11UE8H	18.6	0.15	K221L	53.330	318.146	28.561	7.326	0.16767	2.22750	7 X
K11Um2C	19.3	0.15	K221L	34.129	206.638	166.804	4.983	0.17193	2.26038	3 X
K11W43D	17.7	0.15	K221L	9.454	345.685	49.646	6.900	0.16420	2.27397	11 X
K11Y07C	15.9	0.15	K221L	60.003	242.571	84.371	16.009	0.10468	3.08130	11 X
K11Y88Z	16.7	0.15	K221L	26.614	267.870	108.646	12.208	0.09019	3.10496	8 X
K11Y95R	16.7	0.15	K221L	7.932	270.459	124.346	13.502	0.21064	3.00083	5 X
K12A29Z	17.1	0.15	K221L	295.789	24.692	96.598	10.818	0.08379	3.08483	4 X
K12A34E	17.5	0.15	K221L	320.626	355.932	110.596	9.103	0.19955	3.02618	5 X
K12B12P	17.2	0.15	K221L	355.043	281.641	126.666	10.263	0.36104	3.06320	4 X
K12B79G	16.8	0.15	K221L	358.608	296.853	117.645	6.203	0.14604	3.08826	9 X
K12BC1H	16.2	0.15	K221L	236.262	62.114	144.172	23.339	0.17124	3.12097	11 X
K12BC6C	18.9	0.15	K221L	316.764	341.722	132.844	6.808	0.13121	2.31945	5 X
K12BE6V	17.2	0.15	K221L	343.111	292.270	122.721	21.915	0.21445	3.11970	4 V
K12C02F	17.2	0.15	K221L	333.854	296.768	150.505	9.635	0.21043	3.09212	6 X
K12C49G	17.5	0.15	K221L	85.269	242.007	76.477	7.587	0.13313	2.36102	12 X
K12C53O	16.5	0.15	K221L	350.789	297.201	122.870	16.363	0.17837	3.10190	7 X
K12D53D	15.9	0.15	K221L	318.295	47.750	52.833	6.067	0.14095	3.22041	12 X
K12DC6F	17.3	0.15	K221L	26.308	35.548	318.108	8.401	0.25447	2.47134	7 X
K12DC7V	17.3	0.15	K221L	336.855	301.836	169.773	17.091	0.31070	3.07727	5 X
K12E14A	16.8	0.15	K221L	316.030	316.920	161.951	18.496	0.21487	3.14421	4 X
K12F91D	17.2	0.15	K221L	333.532	255.476	189.869	15.681	0.17599	3.21244	3 X
K12G13U	17.4	0.15	K221L	79.409	126.034	169.886	13.284	0.28018	2.58332	6 X
K12G23E	15.4	0.15	K221L	242.991	223.329	13.541	13.888	0.12751	3.14676	13 X
K12H11C	15.8	0.15	K221L	262.114	163.388	49.100	10.883	0.01948	3.13735	11 X
K12K18K	18.4	0.15	K221L	28.832	220.758	118.815	16.277	0.55227	2.74174	3 X
K12M02J	17.6	0.15	K221L	31.335	230.242	139.573	12.265	0.20158	2.58025	7 X
K12M17C	17.1	0.15	K221L	42.037	113.220	289.437	29.460	0.27103	2.58874	5 X
K12P16L	17.9	0.15	K221L	78.530	222.926	75.144	13.311	0.29087	2.63862	3 X
K12P17U	18.5	0.15	K221L	47.353	218.344	167.559	29.611	0.24058	2.02338	5 X
K12P48H	17.2	0.15	K221L	24.163	272.020	120.408	13.839	0.18738	2.60677	5 X
K12Q29F	17.9	0.15	K221L	39.337	296.996	50.475	15.648	0.32109	2.72620	5 X
K12Q53B	17.2	0.15	K221L	29.062	195.983	182.269	13.575	0.21179	2.67463	8 X
K12Q59Q	18.1	0.15	K221L	10.695	275.308	120.959	5.066	0.12322	2.64541	5 X
K12Q61F	17.0	0.15	K221L	23.346	338.906	29.740	15.304	0.26715	2.70558	4 X
K12R03Q	17.9	0.15	K221L	45.082	183.180	170.546	14.062	0.25174	2.67474	4 X
K12R32S	17.5	0.15	K221L	27.842	245.131	133.361	7.951	0.29380	2.69575	4 X
K12R36Y	16.7	0.15	K221L	3.804	352.402	30.784	16.078	0.18119	2.76608	4 X
K12S05B	17.9	0.15	K221L	66.613	135.297	184.989	12.897	0.27994	2.68790	4 X
K12S62P	16.1	0.15	K221L	326.819	86.120	347.717	24.111	0.19644	2.75899	8 X
K12T35N	17.0	0.15	K221L	63.714	19.548	12.364	14.311	0.24737	2.61072	9 X
K12T53R	17.2	0.15	K221L	34.598	178.949	180.162	1.961	0.23218	2.73720	9 X
K12TI0K	17.6	0.15	K221L	347.927	143.678	353.971	12.607	0.24640	2.59254	5 X
K12TI7Y	17.3	0.15	K221L	30.050	343.327	32.611	14.397	0.20253	2.70987	6 X
K12TR2K	17.3	0.15	K221L	44.206	161.035	195.916	4.503	0.12768	2.72113	7 X
K12TT8D	17.4	0.15	K221L	318.719	288.952	195.876	12.426	0.26387	2.68157	7 X
K12TV1G	16.1	0.15	K221L	335.944	280.942	164.569	15.496	0.08609	2.69219	9 X
K12TV3B	15.8	0.15	K221L	109.126	219.220	65.523	14.521	0.13186	2.77804	10 X
K12TV5W	17.2	0.15	K221L	19.611	199.262	184.670	9.608	0.31442	2.76320	9 X
K12Tb8J	17.5	0.15	K221L	43.738	178.269	167.209	9.027	0.25070	2.74468	4 X
K12U00M	16.6	0.15	K221L	74.846	332.809	43.964	12.670	0.20417	2.62646	8 X
K12U38J	15.6	0.15	K221L	13.963	347.295	1.896	10.970	0.39094	4.51123	4 X
K12U40W	17.7	0.15	K221L	40.562	295.816	61.206	4.215	0.20832	2.73081	4 X
K12U98K	18.0	0.15	K221L	33.944	136.622	231.483	12.640	0.26131	2.71773	3 X
K12UA0E	17.4	0.15	K221L	7.432	227.212	180.404	4.749	0.11543	2.74277	9 X
K12UJ6A	17.6	0.15	K221L	14.900	208.659	193.978	16.141	0.28579	2.75040	3 X
K12V16G	16.5	0.15	K221L	44.103	0.748	52.406	15.628	0.20786	2.66462	10 X
K12V16Z	16.4	0.15	K221L	134.433	291.472	42.627	11.233	0.14702	2.60274	12 X
K12V85Y	16.3	0.15	K221L	81.978	176.872	110.302	12.932	0.23642	2.83209	11 X
K12VD7Z	18.4	0.15	K221L	33.273	284.047	74.104	9.278	0.35263	2.75211	2 X
K12W44C	17.8	0.15	K221L	8.528	349.197	57.766	10.296	0.19210	2.77423	3 X
K12X10H	16.9	0.15	K221L	8.266	140.082	255.347	7.157	0.30150	2.78099	9 X
K12X65V	17.0	0.15	K221L	62.498	158.350	171.107	7.034	0.17826	2.80677	8 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
K13A17U	16.5	0.15	K221L	35.925	256.150	111.653	10.649	0.11539	2.90816	9 X
K13A25B	17.9	0.15	K221L	356.398	326.581	96.461	8.957	0.20507	2.78842	2 X
K13A31B	17.4	0.15	K221L	26.590	234.751	151.445	10.496	0.14828	2.77536	9 X
K13A86Q	17.6	0.15	K221L	353.664	320.515	105.027	15.519	0.12698	2.84328	4 X
K13AA4U	17.8	0.15	K221L	29.058	114.346	310.272	13.400	0.25877	2.73407	4 X
K13ADM1	13.5	0.15	K221L	321.533	283.952	160.306	24.484	0.09419	5.23852	11 X
K13AH3A	14.9	0.15	K221L	241.526	353.748	161.205	15.190	0.01355	5.20880	7 X
K13AH9Y	16.7	0.15	K221L	61.823	180.739	158.388	17.226	0.09094	2.90977	8 X
K13B00X	13.7	0.15	K221L	124.697	164.742	109.059	16.012	0.03328	5.20690	8 X
K13B91U	17.0	0.15	K221L	68.091	199.090	138.981	18.899	0.07433	2.91790	4 X
K13C39S	14.0	0.15	K221L	298.004	339.524	123.597	10.254	0.04405	5.31778	12 X
K13C48Y	14.3	0.15	K221L	347.600	265.191	134.083	11.065	0.03272	5.17787	10 X
K13C56K	15.5	0.15	K221L	116.443	122.749	150.981	26.890	0.13848	3.10890	11 X
K13CC2R	15.6	0.15	K221L	96.684	229.406	67.953	28.547	0.13731	3.08221	10 X
K13CN7F	14.7	0.15	K221L	19.595	225.019	149.299	15.475	0.06998	5.22749	4 X

K13D10W	16.8	0.15	K221L	259.031	215.696	6.383	11.086	0.02010	2.76466	9 X
K13E90K	16.4	0.15	K221L	345.170	176.594	322.173	13.005	0.13859	2.78809	9 X
K13F05M	16.1	0.15	K221L	185.978	169.543	38.424	22.086	0.16034	3.17333	8 X
K13G11U	17.7	0.15	K221L	69.654	322.689	1.323	6.600	0.23860	2.32281	6 X
K13G40Y	15.6	0.15	K221L	227.639	115.930	68.040	27.078	0.11552	3.15049	6 X
K13G81T	15.2	0.15	K221L	178.900	102.120	88.391	9.400	0.05862	3.39133	15 X
K13GDOG	17.4	0.15	K221L	139.457	182.780	85.523	5.649	0.10995	2.29416	12 X
K13H45S	16.9	0.15	K221L	66.537	28.959	7.758	12.176	0.08213	2.97984	9 X
K13HG2E	16.3	0.15	K221L	307.836	6.823	101.358	18.217	0.07493	3.18615	8 X
K13J43B	16.3	0.15	K221L	72.021	342.169	49.236	12.116	0.09333	3.04430	8 X
K13N39C	17.9	0.15	K221L	50.035	242.682	104.117	22.904	0.26050	2.44321	3 X
K13N40Q	18.6	0.15	K221L	63.140	102.849	302.011	19.315	0.07449	1.83164	5 X
K13P85R	18.3	0.15	K221L	43.770	228.334	132.559	3.266	0.20830	2.46165	4 X
K13P86P	18.7	0.15	K221L	19.528	307.122	90.090	3.646	0.23727	2.47223	3 X
K13Q48H	19.0	0.15	K221L	10.854	284.210	139.942	6.530	0.52962	2.50531	3 X
K13Q60E	18.4	0.15	K221L	23.630	32.410	355.540	3.600	0.28997	2.47851	3 X
K13Q74C	17.7	0.15	K221L	41.811	69.609	256.959	9.504	0.19198	2.53036	5 X
K13Q82S	17.5	0.15	K221L	23.963	207.562	154.190	14.097	0.31634	2.52799	8 X
K13R70H	16.0	0.15	K221L	54.740	184.277	131.571	9.700	0.25621	3.93565	3 X
K13RE3G	15.6	0.15	K221L	15.052	49.642	36.658	12.298	0.23604	3.98701	7 X
K13T04S	20.9	0.15	K221L	25.040	186.339	217.306	2.630	0.36120	1.92812	2 X
K13TH3U	18.2	0.15	K221L	27.231	14.692	353.744	6.227	0.27140	2.53647	5 X
K13U23K	17.5	0.15	K221L	343.867	261.593	190.074	12.108	0.22300	2.56471	4 X
K13V04G	16.2	0.15	K221L	20.622	320.392	44.206	18.354	0.19797	2.58826	12 X
K13V11T	18.3	0.15	K221L	40.849	244.655	77.269	7.644	0.41996	2.57317	4 X
K13V29M	18.0	0.15	K221L	56.899	283.878	62.021	11.015	0.16008	2.55863	5 X
K13V32Z	17.9	0.15	K221L	21.026	211.700	178.987	8.505	0.16230	2.56570	4 X
K13V36D	18.1	0.15	K221L	26.029	238.936	138.969	5.853	0.16786	2.56466	5 X
K13V43N	17.8	0.15	K221L	302.001	57.604	66.172	13.599	0.11928	2.58049	5 X
K13W21T	16.7	0.15	K221L	103.693	198.084	93.887	14.603	0.16148	2.56911	11 X
K13W23T	16.6	0.15	K221L	150.597	124.160	135.445	11.448	0.09801	2.57193	15 X
K13W34P	19.0	0.15	K221L	19.384	155.938	237.328	4.144	0.32887	2.54266	4 X
K13W56Y	17.7	0.15	K221L	13.479	113.642	258.056	11.490	0.26634	2.59090	4 X
K13W66S	17.9	0.15	K221L	78.437	275.503	64.208	23.370	0.05467	1.95531	7 X
K13W85E	16.9	0.15	K221L	344.946	352.117	90.475	13.929	0.12627	2.56807	11 X
K13WA4C	17.6	0.15	K221L	5.431	331.728	65.135	7.627	0.23697	2.58046	4 X
K13WB4R	17.7	0.15	K221L	30.045	0.057	23.149	15.133	0.19798	2.54924	3 X
K13WB4Y	18.2	0.15	K221L	22.461	315.895	70.418	33.852	0.26245	2.56332	3 X
K13WB5M	17.1	0.15	K221L	66.588	268.726	66.232	14.078	0.07881	2.60834	6 X
K13WD7P	17.8	0.15	K221L	38.690	182.675	177.034	4.543	0.13101	2.59888	7 X
K13X15L	18.6	0.15	K221L	352.256	6.114	71.548	5.382	0.23165	2.56151	3 X
K13X29D	17.5	0.15	K221L	35.882	86.302	339.087	12.516	0.16864	2.51180	5 X
K13Y21G	17.3	0.15	K221L	322.861	84.999	36.110	28.590	0.34983	2.60111	4 X
K13Y38J	18.6	0.15	K221L	52.668	347.302	67.348	21.397	0.07869	1.88921	5 X
K13Y38W	17.2	0.15	K221L	16.530	303.050	85.025	15.032	0.19254	2.58193	8 X
K13Y50R	17.3	0.15	K221L	8.432	127.160	256.411	30.474	0.28918	2.58176	5 X
K13Y58S	16.7	0.15	K221L	340.235	319.448	117.732	18.918	0.14199	2.62994	9 X
K13Y63R	17.8	0.15	K221L	17.331	288.836	104.564	14.344	0.28328	2.62554	4 X
K13Y68K	16.6	0.15	K221L	41.812	243.520	127.143	7.608	0.02839	2.71759	13 X
K13Y73K	17.5	0.15	K221L	14.405	313.958	84.914	5.459	0.22882	2.62328	4 X
K13Y81E	17.9	0.15	K221L	21.666	73.472	319.377	3.053	0.27454	2.59582	8 X
K13YB0C	16.6	0.15	K221L	9.772	274.872	163.142	31.180	0.26505	2.56074	5 X
K13YF5H	17.5	0.15	K221L	33.871	56.180	4.822	8.101	0.20816	2.52642	8 X
K13YG0B	18.1	0.15	K221L	353.350	303.158	125.030	14.724	0.14097	2.61521	4 X
K14A11T	16.7	0.15	K221L	21.294	187.605	197.480	5.776	0.36179	2.58788	13 X
K14A28R	18.1	0.15	K221L	346.847	352.186	95.650	15.067	0.21824	2.58522	4 X
K14A32V	17.3	0.15	K221L	357.481	326.613	98.519	14.498	0.22122	2.61832	4 X
K14A44L	18.6	0.15	K221L	352.970	2.350	67.329	7.546	0.35221	2.59310	4 X
K14A47T	17.9	0.15	K221L	12.149	293.072	108.690	4.887	0.20820	2.63455	3 X
K14A52W	16.7	0.15	K221L	283.872	139.944	54.302	15.764	0.04978	2.54753	9 X
K14A53P	17.6	0.15	K221L	340.421	26.631	67.682	15.482	0.22570	2.59411	5 X
K14A58K	17.1	0.15	K221L	349.326	292.739	146.739	14.068	0.14391	2.65181	7 X
K14B28F	18.7	0.15	K221L	328.358	334.936	133.373	5.895	0.24519	2.60709	4 X
K14B29K	17.7	0.15	K221L	7.025	294.288	126.324	6.589	0.30471	2.60072	4 X
K14B36O	17.4	0.15	K221L	357.642	336.147	94.451	6.255	0.26490	2.61810	7 X
K14B62G	16.7	0.15	K221L	23.253	110.569	338.554	14.481	0.08693	2.57607	6 X
K14B70N	17.5	0.15	K221L	23.129	210.404	185.059	14.767	0.11889	2.56819	6 X
K14D01F	16.9	0.15	K221L	31.474	223.389	155.263	13.814	0.09340	2.73202	8 X
K14D40E	16.9	0.15	K221L	357.232	293.997	133.651	12.056	0.16698	2.62741	9 X
K14D91F	14.8	0.15	K221L	10.414	227.779	157.038	14.761	0.09509	5.18373	6 X
K14D94T	15.1	0.15	K221L	0.112	234.607	163.863	12.259	0.11207	5.10781	6 X
K14E26T	12.8	0.15	K221L	331.184	266.065	160.192	18.466	0.07990	5.29733	20 X
K14E34P	13.8	0.15	K221L	342.831	33.896	23.495	21.628	0.19553	5.15489	6 X
K14E44N	17.5	0.15	K221L	359.893	280.266	143.024	13.213	0.25679	2.68630	6 X
K14EP6Y	16.8	0.15	K221L	20.352	302.297	87.816	15.046	0.10832	2.70828	6 X
K14F58H	16.8	0.15	K221L	328.936	259.833	189.337	8.957	0.12930	2.79037	12 X
K14G40P	15.1	0.15	K221L	81.470	192.800	99.753	14.525	0.11359	3.12719	14 X
K14G47Q	15.3	0.15	K221L	65.424	236.619	70.053	27.996	0.23245	3.17472	8 X
K14G88N	17.2	0.15	K221L	323.435	15.639	61.773	10.481	0.02219	2.89808	7 X
K14H92R	17.3	0.15	K221L	27.405	308.379	60.695	10.902	0.11847	2.99863	4 X
K14HB4X	16.8	0.15	K221L	50.507	270.434	77.253	10.365	0.10995	3.02336	8 X
K14HC1D	16.1	0.15	K221L	94.728	116.137	183.558	9.416	0.08782	3.03982	11 X
K14HL9D	17.5	0.15	K221L	285.262	1.588	131.390	8.788	0.08028	2.83751	4 X
K14J76R	16.2	0.15	K221L	19.944	255.513	117.675	26.805	0.18905	3.17591	6 X
K14J82M	16.2	0.15	K221L	56.802	255.519	72.306	20.116	0.17919	3.19368	7 X
K14J92K	17.4	0.15	K221L	340.277	99.889	41.756	13.691	0.21596	2.64723	7 X
K14K03M	16.0	0.15	K221L	92.706	194.646	102.351	11.244	0.11259	3.07289	13 X
K14K28E	16.4	0.15	K221L	64.354	192.969	147.991	10.398	0.07287	2.96888	11 X
K14K41X	16.0	0.15	K221L	43.968	278.022	80.559	16.998	0.12642	3.05041	9 X
K14L02D	17.0	0.15	K221L	38.649	255.044	96.900	5.596	0.14949	3.12977	6 X
K14M19G	18.9	0.15	K221L	47.833	93.339	237.186	36.837	0.45112	1.75665	3 X
K14M78P	16.9	0.15	K221L	55.048	42.252	5.297	9.671	0.14896	3.02512	7 X
K14N36W	16.0	0.15	K221L	113.765	309.341	55.384	15.063	0.04109	3.02123	10 X

K14086A	18.8	0.15	K221L	49.622	255.453	100.400	5.977	0.20801	2.23425	4 X
K140F9B	18.4	0.15	K221L	10.262	21.745	20.444	5.751	0.14640	2.22268	6 X
K140P4T	16.7	0.15	K221L	23.240	115.930	320.752	15.437	0.19870	3.06187	10 X
K140c1R	15.7	0.15	K221L	82.009	199.669	116.112	28.276	0.12780	3.14940	11 X
K14Q26U	17.9	0.15	K221L	15.748	199.037	194.344	6.663	0.09156	2.27372	10 X
K14Q65K	19.1	0.15	K221L	50.551	177.859	172.947	7.701	0.17776	2.24672	2 X
K14QE6B	18.3	0.15	K221L	37.948	7.826	359.016	1.288	0.20455	2.27640	6 X
K14QN3U	16.2	0.15	K221L	16.248	107.537	354.689	16.560	0.12094	3.12485	10 X
K14QP8L	16.2	0.15	K221L	336.057	93.155	45.525	16.532	0.03795	3.14788	10 X
K14QQ3Y	16.3	0.15	K221L	341.812	105.899	34.408	16.815	0.05250	3.10642	7 X
K14QR5R	16.2	0.15	K221L	49.169	49.833	13.760	13.285	0.09180	3.21893	8 X
K14QZ6M	15.8	0.15	K221L	151.775	323.721	7.432	12.479	0.05470	3.09983	12 X
K14Qa1S	18.6	0.15	K221L	31.328	202.918	175.057	9.997	0.16378	2.29291	3 X
K14Qa2E	17.8	0.15	K221L	17.704	200.227	178.570	27.018	0.24886	2.29209	6 X
K14Qd2E	16.5	0.15	K221L	50.062	356.274	58.367	12.590	0.05473	3.12149	9 X
K14Qd9T	18.8	0.15	K221L	58.837	255.148	77.835	1.718	0.26453	2.28722	3 X
K14Qg7G	18.5	0.15	K221L	44.859	202.860	160.634	6.474	0.18486	2.26962	8 X
K14Qk3O	16.3	0.15	K221L	64.602	4.203	45.204	11.517	0.03166	3.15454	9 X
K14Qu4D	18.7	0.15	K221L	21.236	22.643	12.288	5.739	0.22396	2.26526	5 X
K14Qu4G	19.4	0.15	K221L	24.454	235.127	156.165	4.856	0.28577	2.27770	4 X
K14R78K	18.5	0.15	K221L	59.586	227.006	112.773	7.397	0.15425	2.26405	6 X
K14S02C	18.4	0.15	K221L	50.720	120.511	223.028	3.903	0.22439	2.28917	6 X
K14S40W	16.7	0.15	K221L	17.011	69.460	21.129	12.521	0.07775	3.13371	7 X
K14SI8S	18.9	0.15	K221L	70.332	176.352	151.444	6.201	0.14439	2.28386	4 X
K14Se5M	18.8	0.15	K221L	13.276	272.589	138.104	7.710	0.10681	2.26870	6 X
K14T35J	17.9	0.15	K221L	359.792	243.224	181.542	8.742	0.27662	2.34223	8 X
K14T82P	17.8	0.15	K221L	29.650	217.866	152.806	6.358	0.18188	2.32919	11 X
K14TB6X	18.9	0.15	K221L	43.534	276.842	80.364	21.547	0.25009	2.31795	3 X
K14UH4N	17.6	0.15	K221L	145.542	126.669	127.359	7.113	0.08031	2.34474	10 X
K14UK6X	18.4	0.15	K221L	26.427	334.309	44.679	2.638	0.25378	2.34148	5 X
K14V25K	18.9	0.15	K221L	34.592	333.591	55.100	3.624	0.22150	2.31709	2 V
K14W30U	18.0	0.15	K221L	4.601	195.329	213.080	4.634	0.15358	2.34383	11 X
K14W55X	18.8	0.15	K221L	39.619	279.329	84.445	1.696	0.23723	2.34121	4 X
K14W76U	17.9	0.15	K221L	27.518	177.435	205.995	3.977	0.10349	2.34059	12 X
K14W79J	18.7	0.15	K221L	21.476	170.655	217.058	5.355	0.09908	2.34407	4 X
K14WG0L	18.9	0.15	K221L	24.201	251.791	132.886	5.565	0.17611	2.34156	5 X
K14WG4R	16.8	0.15	K221L	332.206	200.792	250.708	11.579	0.16560	2.35046	11 X
K14WJ2K	17.9	0.15	K221L	51.140	200.946	147.520	10.440	0.16859	2.36071	9 X
K14WN3T	18.8	0.15	K221L	12.243	271.282	138.798	3.175	0.16382	2.28042	6 X
K14WW1P	18.5	0.15	K221L	29.069	264.552	123.378	7.175	0.20375	2.31275	9 X
K14Wc9W	15.9	0.15	K221L	43.122	47.077	14.696	9.657	0.07215	3.39142	11 X
K14Wd0W	18.0	0.15	K221L	40.381	31.499	306.175	7.051	0.23764	2.38293	5 X
K14Wf7C	18.3	0.15	K221L	7.985	301.367	113.692	7.709	0.15976	2.34619	6 X
K14Wk4Y	17.9	0.15	K221L	12.224	342.192	66.477	12.515	0.19955	2.34117	7 X
K14Wl7B	18.3	0.15	K221L	54.286	231.991	123.044	7.019	0.15440	2.35689	5 X
K14Wm5U	18.7	0.15	K221L	29.673	245.717	136.919	5.781	0.24250	2.32930	3 X
K14Ww4A	18.3	0.15	K221L	59.589	266.279	80.704	5.031	0.13177	2.36899	6 X
K14Wx5J	19.0	0.15	K221L	345.630	288.062	153.802	6.054	0.18835	2.36238	5 X
K14Wy2S	18.6	0.15	K221L	28.616	318.426	60.747	2.373	0.19862	2.35429	5 X
K14Wy5U	17.2	0.15	K221L	118.891	323.853	67.928	12.623	0.04712	3.21244	2 V
K14X35M	18.2	0.15	K221L	126.723	322.890	83.354	2.378	0.18742	3.09685	3 V
K14X54Z	18.2	0.15	K221L	340.176	24.005	79.432	25.647	0.25050	2.35152	3 X
K14X55C	18.5	0.15	K221L	18.843	279.216	114.455	22.652	0.29304	2.32992	2 V
K14X55D	17.6	0.15	K221L	177.354	17.539	82.003	17.914	0.20458	2.78029	3 V
K14Y13T	17.4	0.15	K221L	19.702	290.596	90.203	11.891	0.27799	2.38453	9 X
K14Y89M	18.8	0.15	K221L	16.098	302.137	97.287	2.392	0.17726	2.40830	5 X
K14Y92V	18.9	0.15	K221L	12.401	299.680	101.749	5.886	0.12222	2.42925	4 X
K14Y92X	17.3	0.15	K221L	45.778	200.087	95.783	29.581	0.09681	2.63216	2 V
K14Y92Y	18.6	0.15	K221L	294.651	169.043	314.020	9.296	0.16650	2.42367	3 V
K14Y92Z	19.4	0.15	K221L	4.950	58.412	8.757	2.530	0.19350	2.36767	4 V
K15A01D	18.0	0.15	K221L	347.261	311.621	124.634	11.745	0.17132	2.33860	7 X
K15AK7Y	18.1	0.15	K221L	49.332	197.491	148.637	5.971	0.25830	2.33023	6 X
K15AN5U	17.4	0.15	K221L	51.292	169.897	172.682	13.421	0.20832	2.53103	12 X
K15B08G	17.9	0.15	K221L	2.170	329.462	102.095	11.914	0.20853	2.36593	6 X
K15Bf4T	17.7	0.15	K221L	24.139	274.100	93.544	5.358	0.17465	2.52249	11 X
K15Bi1W	16.9	0.15	K221L	180.032	101.666	133.500	9.016	0.06555	2.54015	11 X
K15Bi7X	17.2	0.15	K221L	116.772	173.345	119.841	12.696	0.10394	2.55560	9 X
K15Bj0R	17.1	0.15	K221L	54.663	290.549	42.631	1.748	0.12453	2.60175	13 X
K15Bj3U	17.7	0.15	K221L	50.970	224.015	120.813	3.690	0.24290	2.52473	9 X
K15Bp5H	18.1	0.15	K221L	61.268	317.353	27.243	20.357	0.12778	1.86522	4 X
K15Bu4R	17.1	0.15	K221L	136.655	167.223	97.942	12.334	0.08038	2.57475	8 X
K15Bv3N	17.6	0.15	K221L	39.582	222.935	128.822	14.328	0.22778	2.56374	4 X
K15C41A	18.6	0.15	K221L	33.010	86.813	335.471	6.433	0.20283	2.32687	8 X
K15DC7S	17.0	0.15	K221L	42.226	274.383	90.716	11.663	0.13147	2.58616	10 X
K15DL7M	17.4	0.15	K221L	147.313	88.393	169.971	13.544	0.07364	2.61968	9 X
K15DM6H	18.0	0.15	K221L	170.752	120.109	156.944	24.045	0.04149	1.88540	8 X
K15E54V	16.8	0.15	K221L	29.181	182.946	175.173	15.662	0.14359	2.58548	9 X
K15E64T	16.8	0.15	K221L	282.551	307.187	183.374	22.015	0.04719	2.60134	7 X
K15F19X	17.2	0.15	K221L	27.075	292.926	98.154	12.484	0.11647	2.59544	7 X
K15F37F	19.1	0.15	K221L	52.255	339.908	29.165	15.362	0.41582	1.52608	5 X
K15FH4U	17.1	0.15	K221L	85.006	232.821	59.711	15.188	0.19673	2.83792	4 X
K15FJ7V	16.5	0.15	K221L	39.742	11.817	324.293	12.255	0.10206	2.70651	7 X
K15FN0D	17.0	0.15	K221L	341.043	251.118	169.556	13.299	0.13900	2.58200	10 X
K15FO8N	17.1	0.15	K221L	305.645	35.854	86.467	5.881	0.11209	2.52682	10 X
K15FR4F	17.1	0.15	K221L	234.544	322.746	115.583	6.766	0.02603	2.88856	3 V
K15FW1J	17.3	0.15	K221L	19.152	247.966	154.106	16.761	0.02566	2.58952	5 X
K15FW8S	17.7	0.15	K221L	351.533	263.895	171.689	14.770	0.09466	2.55241	4 X
K15FY4L	16.5	0.15	K221L	353.791	14.474	31.517	22.642	0.05045	2.63048	6 X
K15Fg8F	18.0	0.15	K221L	301.590	35.260	77.657	15.365	0.03298	2.59711	6 X
K15F16G	14.7	0.15	K221L	286.484	346.293	123.435	10.214	0.06236	5.20819	6 X
K15Fj1U	18.4	0.15	K221L	91.828	140.195	198.969	23.234	0.13349	1.92088	3 X
K15G31D	17.0	0.15	K221L	60.303	136.913	186.581	4.955	0.17459	2.77292	13 X
K15G51B	19.3	0.15	K221L	311.987	56.611	56.879	23.114	0.01085	1.88854	4 X

K15G64W	19.5	0.15	K221L	347.264	247.868	205.169	21.872	0.07258	1.85307	5 X
K15K09H	17.1	0.15	K221L	357.689	211.505	197.653	13.772	0.16496	2.76753	7 X
K15KA0A	16.2	0.15	K221L	37.527	217.096	117.941	6.390	0.20402	2.97823	12 X
K15KG3J	18.5	0.15	K221L	56.073	242.150	140.654	24.415	0.08403	1.90377	7 X
K15KG4Q	16.5	0.15	K221L	5.159	263.223	146.119	16.370	0.23539	3.15208	6 X
K15KI7M	17.2	0.15	K221L	270.262	41.617	92.821	5.665	0.01671	2.78002	10 X
K15L11T	16.9	0.15	K221L	50.397	257.981	78.826	22.165	0.29489	3.08072	3 X
K15L24E	18.3	0.15	K221L	29.779	254.669	78.569	10.999	0.57315	3.20981	2 X
K15L27H	16.2	0.15	K221L	76.871	223.073	100.948	16.354	0.14970	2.87255	10 X
K15L31C	16.8	0.15	K221L	44.807	238.488	112.939	12.537	0.20809	3.05104	5 X
K15L46J	17.3	0.15	K221L	68.289	128.812	183.062	16.835	0.25146	3.09014	4 X
K15L52H	17.3	0.15	K221L	55.066	239.640	85.953	14.093	0.30480	3.08196	4 X
K15M24J	19.1	0.15	K221L	293.439	74.305	64.390	21.015	0.07837	1.88832	4 V
K15M28T	16.2	0.15	K221L	35.203	59.510	268.264	8.569	0.28788	3.01031	9 X
K15M30L	16.6	0.15	K221L	28.454	263.043	120.981	12.400	0.13388	2.72401	8 X
K15M31M	16.8	0.15	K221L	87.938	234.949	75.814	21.641	0.12760	2.79677	6 X
K15M32N	16.7	0.15	K221L	48.166	188.103	156.744	8.405	0.09215	2.81536	9 X
K15MA0C	15.6	0.15	K221L	47.184	166.205	160.246	27.914	0.12039	3.12881	11 X
K15MI7P	16.4	0.15	K221L	28.922	226.133	141.727	8.930	0.08751	3.23722	6 X
K15N25J	16.4	0.15	K221L	72.728	171.155	153.524	12.155	0.19374	3.05707	7 X
K15N37T	17.2	0.15	K221L	71.410	185.192	139.270	11.662	0.08564	3.06599	4 X
K15O01X	15.9	0.15	K221L	74.910	148.910	147.096	17.050	0.24274	3.10074	11 X
K15O09G	16.8	0.15	K221L	38.612	197.057	155.260	19.114	0.23511	3.09308	4 X
K15O27N	16.5	0.15	K221L	6.448	264.927	141.271	8.719	0.18929	3.13699	8 X
K15O30D	16.6	0.15	K221L	28.938	255.185	123.381	10.600	0.10507	3.13689	5 X
K15O41F	16.5	0.15	K221L	211.459	294.274	335.519	13.812	0.10812	2.75643	9 X
K15O69A	16.9	0.15	K221L	87.498	134.209	168.288	8.853	0.10252	3.02068	12 X
K15O93O	16.6	0.15	K221L	33.091	323.924	39.031	13.355	0.14603	3.21478	6 X
K15O94N	16.7	0.15	K221L	31.378	221.986	152.717	10.994	0.14287	3.11194	7 X
K15OC8X	17.2	0.15	K221L	34.550	24.817	39.290	10.158	0.20343	2.90021	7 X
K15P08B	17.0	0.15	K221L	84.213	121.907	170.491	17.212	0.24646	3.11959	6 X
K15P14S	17.4	0.15	K221L	65.185	243.343	89.673	9.001	0.08386	2.99055	6 X
K15P15E	17.2	0.15	K221L	119.507	194.376	88.806	9.898	0.04554	2.94637	9 X
K15P64G	16.9	0.15	K221L	17.408	265.246	129.312	10.463	0.09939	2.96456	7 X
K15P71X	17.6	0.15	K221L	54.277	199.571	138.142	9.872	0.15786	3.05047	4 X
K15P85A	17.3	0.15	K221L	59.612	215.858	122.507	11.296	0.10633	3.01290	5 X
K15PC6V	16.8	0.15	K221L	32.064	226.073	130.500	15.794	0.22985	3.13894	9 X
K15PE2N	17.3	0.15	K221L	353.879	299.533	111.774	11.907	0.01715	3.00365	8 X
K15PE8G	16.1	0.15	K221L	18.455	235.374	127.303	14.016	0.17354	3.18536	9 X
K15PL5Z	16.4	0.15	K221L	4.913	200.500	201.820	17.083	0.20779	3.16259	6 X
K15PR7D	16.2	0.15	K221L	7.957	256.181	138.790	23.255	0.18422	3.15956	6 X
K15PS3O	15.9	0.15	K221L	0.264	274.191	135.957	26.653	0.22579	3.16660	8 X
K15PU1F	16.3	0.15	K221L	32.677	226.615	140.222	12.985	0.26004	3.17885	8 X
K15PU1P	16.5	0.15	K221L	31.364	231.141	125.876	11.362	0.18619	3.20479	8 X
K15PV5S	17.1	0.15	K221L	22.849	113.677	327.747	14.117	0.11603	2.86727	8 X
K15PY5W	17.0	0.15	K221L	22.775	242.251	169.832	25.740	0.23713	3.17141	3 X
K15PZ3E	17.2	0.15	K221L	9.696	231.105	167.609	10.670	0.03963	3.05292	6 V
K15Q06E	17.1	0.15	K221L	46.053	207.637	146.610	10.088	0.09659	3.10494	11 X
K15R63Q	18.0	0.15	K221L	307.485	192.860	359.405	18.941	0.07888	1.91394	6 X
K15R98G	15.6	0.15	K221L	80.524	143.080	173.557	26.689	0.04470	3.14651	12 X
K15RK3Z	17.4	0.15	K221L	351.652	264.259	172.745	13.539	0.26669	3.22647	3 X
K15RP6B	16.5	0.15	K221L	35.585	37.596	32.238	12.742	0.04970	3.10052	9 X
K15RY7Q	16.9	0.15	K221L	326.490	40.077	51.393	27.620	0.15408	3.25451	2 X
K15RY9R	16.9	0.15	K221L	12.829	234.160	166.648	22.766	0.17239	3.18157	5 X
K15S04F	15.3	0.15	K221L	345.144	105.844	275.555	12.239	0.08102	3.42870	12 X
K15S31Z	16.9	0.15	K221L	6.484	54.372	50.453	14.364	0.26740	3.17701	5 X
K15T36C	16.9	0.15	K221L	69.537	240.566	82.193	10.626	0.09545	3.16736	6 X
K15T48R	16.8	0.15	K221L	354.604	232.263	192.804	13.458	0.25654	3.19968	5 X
K15TA7A	16.3	0.15	K221L	22.808	21.653	63.462	17.041	0.18807	3.12365	7 X
K15TH9X	16.4	0.15	K221L	347.887	69.617	67.993	16.718	0.24059	3.10784	9 X
K15TI6Q	16.8	0.15	K221L	357.896	58.104	58.824	17.099	0.21142	3.09284	5 X
K15TN0D	17.2	0.15	K221L	41.091	60.583	329.737	12.434	0.34159	3.19102	6 X
K15Ta8M	16.7	0.15	K221L	349.572	267.376	167.830	13.293	0.17370	3.24009	5 X
K15Te4R	17.0	0.15	K221L	60.164	128.998	192.393	19.176	0.19875	3.33170	4 X
K15Tf7B	17.2	0.15	K221L	38.214	80.244	329.755	14.927	0.24384	3.14421	5 X
K15V45E	16.8	0.15	K221L	37.016	159.334	198.331	8.047	0.20759	3.15735	5 X
K15V52N	16.5	0.15	K221L	24.700	293.775	87.296	17.822	0.11615	3.23658	7 X
K15V63C	16.3	0.15	K221L	358.910	35.170	80.420	29.099	0.15753	3.10067	7 X
K15VC1P	16.1	0.15	K221L	1.881	41.976	75.524	18.947	0.19539	3.13226	11 X
K15VD7D	16.1	0.15	K221L	33.236	24.660	46.155	13.784	0.12896	3.10830	11 X
K15X88R	16.4	0.15	K221L	33.072	248.966	118.240	16.601	0.12487	3.19694	6 X
K15X89S	16.4	0.15	K221L	11.885	338.281	56.613	28.893	0.14863	3.21317	6 X
K15XY9S	16.2	0.15	K221L	51.779	352.748	71.150	24.269	0.12920	3.09430	6 X
K15XZ5H	16.9	0.15	K221L	40.525	355.825	57.328	18.834	0.24668	3.13609	5 X
K15Xb8W	19.4	0.15	K221L	46.934	189.003	168.009	2.876	0.28851	2.12712	3 X
K15Xc2K	15.5	0.15	K221L	324.670	96.101	78.021	23.404	0.04023	3.07099	8 X
K16A14J	18.6	0.15	K221L	49.303	258.771	98.314	3.111	0.18383	2.16544	8 X
K16AW0X	16.6	0.15	K221L	52.092	226.190	150.976	21.327	0.01999	3.39640	5 X
K16BA7J	18.9	0.15	K221L	348.045	291.918	142.512	8.189	0.08999	2.23377	4 X
K16C77J	18.4	0.15	K221L	91.976	185.737	120.765	8.823	0.14505	2.30912	4 X
K16CO8F	18.2	0.15	K221L	18.818	30.938	6.510	27.691	0.36139	2.20943	5 X
K16F20X	18.1	0.15	K221L	76.469	165.451	133.259	5.229	0.26386	2.56664	8 X
K16G83F	18.0	0.15	K221L	44.417	200.543	148.498	3.077	0.21326	2.45940	6 X
K16GI4W	17.0	0.15	K221L	37.055	265.807	64.616	13.397	0.29125	2.65372	6 X
K16GO1Y	17.4	0.15	K221L	97.733	224.571	61.004	10.427	0.19027	2.58269	6 X
K16GQ8S	17.3	0.15	K221L	55.168	320.281	16.623	12.740	0.20323	2.58997	5 X
K16GQ9B	17.7	0.15	K221L	40.736	229.970	127.295	5.203	0.21377	2.58176	5 X
K16GV1D	18.4	0.15	K221L	31.463	217.983	155.660	2.253	0.21609	2.36714	6 X
K16J17H	20.3	0.15	K221L	75.616	274.376	81.102	24.939	0.27030	1.39323	3 X
K16J42K	17.5	0.15	K221L	70.677	201.072	122.856	12.752	0.19432	2.58335	4 X
K16J43G	17.4	0.15	K221L	45.727	227.162	119.472	14.461	0.28863	2.61619	7 X
K16L10O	17.4	0.15	K221L	47.309	174.621	152.737	15.419	0.34437	2.67665	5 X
K16L46N	17.4	0.15	K221L	40.970	274.729	81.349	14.141	0.20235	2.60319	8 X

K16L57G	17.1	0.15	K221L	24.236	225.573	160.653	9.732	0.15981	2.74231	9 X
K16N08H	16.7	0.15	K221L	26.144	245.884	136.944	7.203	0.17598	2.70404	11 X
K16N87A	17.0	0.15	K221L	22.344	243.935	146.466	9.213	0.12510	2.72716	11 X
K16NA4B	17.1	0.15	K221L	7.503	295.499	119.077	13.719	0.17931	2.78285	4 X
K16NF5J	18.1	0.15	K221L	31.738	182.192	181.622	13.642	0.22242	2.76188	4 X
K16P02U	17.8	0.15	K221L	30.769	281.016	93.352	6.087	0.16995	2.75185	5 X
K16P10Z	17.3	0.15	K221L	63.952	32.398	336.066	7.859	0.31422	2.69572	8 X
K16PBOZ	16.8	0.15	K221L	340.240	146.268	359.938	10.860	0.13440	2.47856	6 X
K16PFI1G	18.1	0.15	K221L	7.513	240.228	161.228	9.098	0.18393	2.78225	4 X
K16PFF6M	17.3	0.15	K221L	8.795	244.671	164.161	9.308	0.17966	2.78589	7 X
K16PM4D	17.6	0.15	K221L	5.183	338.034	77.349	12.919	0.25820	2.79130	4 X
K16PM5H	17.4	0.15	K221L	7.937	309.633	98.466	10.222	0.15844	2.80770	6 X
K16Q05O	17.2	0.15	K221L	25.482	226.888	150.519	12.861	0.10329	2.75021	5 X
K16Q25K	17.6	0.15	K221L	104.243	107.981	181.420	17.498	0.13835	2.72877	5 X
K16Q34P	17.0	0.15	K221L	92.373	48.477	330.778	10.266	0.01216	2.49099	7 X
K16Q90U	15.4	0.15	K221L	52.407	272.858	48.994	10.667	0.14145	3.06849	13 X
K16Q95M	17.5	0.15	K221L	19.293	138.057	305.316	17.902	0.19465	2.60218	4 X
K16QD6J	17.6	0.15	K221L	344.066	269.194	177.515	24.011	0.19480	2.73896	4 X
K16R58C	17.1	0.15	K221L	1.296	250.597	159.449	15.214	0.14472	2.85647	4 X
K16R77T	17.0	0.15	K221L	18.061	267.731	116.516	11.742	0.10057	2.99689	7 X
K16S20T	17.4	0.15	K221L	27.396	320.526	52.788	10.357	0.21418	2.91244	3 X
K16S48U	17.0	0.15	K221L	37.631	6.427	57.638	15.700	0.16867	2.71963	7 X
K16S54V	17.1	0.15	K221L	51.864	279.620	53.852	7.986	0.24433	2.92919	6 X
K16S70H	17.4	0.15	K221L	353.970	302.587	127.817	15.394	0.24599	2.96733	3 X
K16S76W	17.3	0.15	K221L	71.243	157.700	161.254	9.391	0.18410	2.93006	5 X
K16S97P	17.1	0.15	K221L	9.018	254.569	142.726	14.708	0.27394	2.96874	5 X
K16SA7X	18.0	0.15	K221L	4.232	320.480	95.521	9.334	0.20526	2.89428	2 X
K16T07G	17.4	0.15	K221L	35.434	56.279	17.253	14.176	0.20005	2.65311	4 X
K16T10B	18.7	0.15	K221L	355.046	245.631	176.136	24.689	0.15863	1.86669	4 X
K16T53U	17.4	0.15	K221L	40.343	67.001	349.186	9.073	0.20253	2.75275	8 X
K16T73P	16.4	0.15	K221L	44.844	145.592	165.981	18.303	0.28361	2.98360	11 X
K16TT1S	17.2	0.15	K221L	346.952	223.781	207.235	14.147	0.16633	2.99401	3 X
K16U35P	17.3	0.15	K221L	351.282	29.209	27.138	7.859	0.13351	2.98814	6 X
K16UFOG	17.4	0.15	K221L	346.260	134.725	4.909	13.704	0.20096	2.68592	4 X
K16UO8U	16.7	0.15	K221L	3.208	325.832	74.138	17.835	0.11538	3.02339	6 X
K16UQ1B	17.7	0.15	K221L	2.981	107.163	358.936	7.432	0.18730	2.78608	5 X
K16UR5V	17.1	0.15	K221L	30.217	212.016	156.693	10.540	0.11643	3.01149	8 X
K16V03V	19.5	0.15	K221L	358.405	29.932	76.031	4.715	0.62910	2.96138	3 X
K16V05E	18.6	0.15	K221L	5.209	268.506	154.469	3.043	0.48191	3.01035	3 X
K16V12A	16.3	0.15	K221L	39.911	307.991	16.227	24.417	0.20117	3.10667	5 X
K16V17N	17.1	0.15	K221L	1.318	290.866	114.595	10.923	0.09048	3.01972	7 X
K16V20Z	16.3	0.15	K221L	311.750	137.925	48.445	13.257	0.24751	2.90552	7 X
K16V28J	16.2	0.15	K221L	25.772	291.682	79.573	19.575	0.10372	3.12183	6 X
K16V56Q	17.3	0.15	K221L	12.525	313.897	81.443	10.294	0.07998	2.97386	5 V
K16W16U	18.5	0.15	K221L	308.542	67.143	61.111	22.434	0.08367	1.86241	6 X
K16W21R	18.5	0.15	K221L	31.133	327.169	70.782	22.066	0.09629	1.85698	4 X
K16W23M	18.5	0.15	K221L	356.431	32.443	38.756	22.391	0.08731	1.83772	6 X
K16X14Q	16.0	0.15	K221L	96.804	229.163	72.002	10.500	0.07031	3.16945	12 X
K16X27L	17.0	0.15	K221L	35.305	114.546	309.903	24.099	0.18085	2.78790	5 X
K16X34Y	16.7	0.15	K221L	24.009	15.445	347.575	7.532	0.13801	3.16857	6 X
K17A01A	16.9	0.15	K221L	322.191	32.632	64.496	16.633	0.15831	3.22193	3 X
K17A43F	18.6	0.15	K221L	36.731	139.564	294.343	19.883	0.03925	1.87508	4 X
K17B04J	16.1	0.15	K221L	319.185	72.868	35.835	26.461	0.26361	3.22182	5 X
K17B07D	16.0	0.15	K221L	320.134	42.981	52.347	27.831	0.19114	3.24076	5 X
K17B17D	16.6	0.15	K221L	20.261	94.497	269.011	23.347	0.33734	3.10003	6 X
K17B19J	16.3	0.15	K221L	2.738	141.910	329.400	9.483	0.16455	3.02002	11 X
K17B66Z	16.9	0.15	K221L	322.689	131.755	32.936	13.338	0.21020	3.03228	5 X
K17BD4U	17.1	0.15	K221L	15.548	95.456	352.482	11.938	0.12684	3.05215	4 X
K17BJ4E	17.2	0.15	K221L	341.257	351.988	95.119	18.881	0.20868	3.18953	2 X
K17D11J	15.8	0.15	K221L	126.373	337.248	358.568	10.205	0.07903	3.13648	11 X
K17D57F	17.0	0.15	K221L	28.266	29.874	48.260	11.921	0.17027	3.05981	6 X
K17D80W	15.7	0.15	K221L	244.748	268.435	328.382	17.440	0.13743	3.19672	11 X
K17D99L	16.4	0.15	K221L	29.395	96.107	335.828	14.870	0.21229	3.16539	10 X
K17DB7R	16.4	0.15	K221L	350.571	185.808	300.170	16.700	0.21780	3.07338	6 X
K17E00Q	18.3	0.15	K221L	39.556	137.071	289.796	18.149	0.10985	1.88464	6 X
K17E02M	18.3	0.15	K221L	13.867	306.166	128.650	24.001	0.10316	1.93212	8 X
K17H21G	16.0	0.15	K221L	274.769	202.553	7.633	10.009	0.06465	3.18071	10 X
K17H50K	16.6	0.15	K221L	351.240	68.908	65.940	13.997	0.26238	3.17050	9 X
K17H82J	18.6	0.15	K221L	70.309	157.997	170.095	4.264	0.18896	2.21305	6 X
K17K44Y	19.2	0.15	K221L	68.745	232.890	82.474	11.407	0.29227	2.34032	2 X
K17M03S	18.8	0.15	K221L	43.719	212.019	141.789	6.001	0.33290	2.34668	5 X
K17O68E	17.4	0.15	K221L	26.260	63.880	272.930	25.744	0.42552	2.61501	3 X
K17OC7Z	18.2	0.15	K221L	34.571	249.337	93.565	8.116	0.29871	2.52963	5 X
K17OC9K	18.9	0.15	K221L	38.573	235.008	125.467	5.635	0.20633	2.45340	3 X
K17OD1Z	18.9	0.15	K221L	35.424	249.581	125.126	12.825	0.24222	2.36628	2 X
K17P32G	18.2	0.15	K221L	3.676	254.693	158.363	3.895	0.20770	2.37623	5 X
K17P44V	18.7	0.15	K221L	34.110	286.364	73.274	7.495	0.36132	2.55092	3 X
K17P48X	17.7	0.15	K221L	25.600	18.389	5.331	13.930	0.19096	2.55544	4 X
K17Q08V	18.4	0.15	K221L	15.124	237.629	161.559	8.927	0.21882	2.41000	4 X
K17R02H	17.8	0.15	K221L	29.642	65.950	266.754	27.067	0.45747	2.60635	3 X
K17R04N	18.2	0.15	K221L	13.170	252.949	143.776	6.007	0.12266	2.40379	7 X
K17R51Z	18.5	0.15	K221L	19.799	225.106	164.965	6.272	0.08435	2.43935	5 X
K17R72R	18.6	0.15	K221L	12.186	249.015	151.377	4.750	0.18748	2.46675	3 X
K17S07E	17.4	0.15	K221L	22.434	217.481	145.791	12.986	0.28132	2.56659	7 X
K17S29P	17.6	0.15	K221L	31.064	168.381	200.641	13.606	0.25639	2.61389	5 X
K17SD8L	18.1	0.15	K221L	6.425	258.170	156.799	13.160	0.25994	2.59020	3 X
K17SE0G	17.6	0.15	K221L	38.092	277.793	99.837	15.521	0.08832	2.55175	4 X
K17SF1Q	17.9	0.15	K221L	54.121	229.201	118.936	15.526	0.15040	2.58303	4 X
K17SG5G	17.8	0.15	K221L	47.222	233.929	124.531	14.370	0.20426	2.56814	4 X
K17SL4Q	18.1	0.15	K221L	33.572	238.953	128.969	5.772	0.32177	2.57449	4 X
K17SM5T	17.9	0.15	K221L	94.314	244.956	62.405	18.160	0.08636	2.55219	6 X
K17S01O	18.8	0.15	K221L	27.952	221.899	153.087	7.154	0.32229	2.58830	2 X
K17SR8V	18.6	0.15	K221L	43.834	155.469	184.223	13.539	0.30864	2.60096	2 X

K17SR9K	18.8	0.15	K221L	15.058	279.250	118.884	9.701	0.21269	2.60651	2 X
K17SS3A	19.3	0.15	K221L	47.721	195.478	142.990	5.745	0.27483	2.55416	2 X
K17SS4X	18.7	0.15	K221L	44.818	205.335	146.775	10.522	0.21643	2.59226	3 X
K17SS5C	18.4	0.15	K221L	48.643	218.561	129.158	15.098	0.27416	2.52772	2 X
K17U03B	17.5	0.15	K221L	339.229	261.340	182.975	25.683	0.37030	2.63980	5 X
K17U54X	17.6	0.15	K221L	359.409	38.317	22.551	13.966	0.25156	2.57725	4 X
K17U55V	18.4	0.15	K221L	22.889	310.358	71.011	14.620	0.26327	2.58607	2 X
K17U55X	18.2	0.15	K221L	27.820	175.838	195.219	3.614	0.27798	2.59724	4 X
K17U65X	17.8	0.15	K221L	28.658	199.801	188.387	14.888	0.17968	2.57359	2 X
K17U93M	17.4	0.15	K221L	60.473	304.687	23.047	7.959	0.27544	2.56062	8 X
K17UG3G	18.5	0.15	K221L	7.545	256.714	159.945	13.605	0.17291	2.55371	3 X
K17UG6G	18.3	0.15	K221L	355.729	12.706	54.121	4.769	0.24115	2.61941	3 X
K17V01C	17.5	0.15	K221L	8.578	65.802	324.287	28.140	0.38433	2.63834	6 X
K17V12A	18.4	0.15	K221L	13.467	316.112	90.397	11.661	0.22913	2.55954	5 X
K17V33L	18.1	0.15	K221L	0.036	291.556	138.562	6.181	0.27412	2.56967	4 X
K17V42O	17.7	0.15	K221L	82.657	249.639	50.617	13.955	0.17556	2.62365	5 X
K17W11O	18.5	0.15	K221L	20.255	195.063	195.451	37.894	0.34475	2.61555	2 X
K17W20N	17.4	0.15	K221L	8.752	344.108	62.557	33.854	0.16254	2.59725	3 X
K17W25M	17.7	0.15	K221L	359.201	307.957	111.793	16.890	0.21075	2.60331	3 X
K17W25Y	17.4	0.15	K221L	4.365	222.971	169.226	13.194	0.30823	2.64152	4 X
K17W36B	17.6	0.15	K221L	33.048	261.598	90.758	5.901	0.29253	2.63638	3 X
K17W65E	17.7	0.15	K221L	38.982	243.523	106.533	13.789	0.28655	2.64757	2 X
K17W69N	19.9	0.15	K221L	14.443	247.150	151.347	5.715	0.35004	2.57726	2 X
K17W70N	17.9	0.15	K221L	36.720	237.518	125.982	12.185	0.19503	2.63362	3 X
K17X03K	17.3	0.15	K221L	15.399	311.352	70.946	31.189	0.28835	2.62869	6 X
K17X09P	18.0	0.15	K221L	57.226	274.782	47.508	5.739	0.31721	2.58699	6 X
K17X29R	17.7	0.15	K221L	33.912	291.525	77.195	4.856	0.20976	2.58617	6 X
K17X50L	17.6	0.15	K221L	41.385	279.096	73.036	13.976	0.22765	2.61390	5 X
K17X70E	17.7	0.15	K221L	358.182	300.314	120.458	4.343	0.18667	2.74033	6 X
K17X79G	17.8	0.15	K221L	22.055	286.702	106.776	13.703	0.27353	2.64495	4 X
K17X79N	17.1	0.15	K221L	6.631	326.387	72.849	14.260	0.16203	2.67416	6 X
K17X82P	17.6	0.15	K221L	38.775	280.383	85.250	7.573	0.05274	2.68320	8 X
K17X83R	18.3	0.15	K221L	4.546	322.008	93.024	13.870	0.25882	2.73860	2 X
K17Y01X	18.2	0.15	K221L	35.192	98.128	286.857	25.514	0.48535	2.57883	2 X
K17Y20N	17.7	0.15	K221L	82.594	28.929	334.270	12.499	0.20672	2.54384	6 X
K18A00P	17.3	0.15	K221L	30.358	35.249	321.742	32.300	0.16888	2.59513	3 X
K18A02W	18.3	0.15	K221L	0.731	286.968	139.188	12.233	0.31977	2.53751	4 X
K18A23D	17.0	0.15	K221L	155.395	150.620	91.845	11.345	0.04315	3.10336	5 X
K18A27X	17.2	0.15	K221L	30.253	224.586	147.976	11.061	0.02752	3.11467	6 X
K18A51J	18.3	0.15	K221L	358.366	331.316	96.285	15.490	0.27087	2.72154	3 X
K18B09Z	17.0	0.15	K221L	317.580	201.693	274.184	8.680	0.22429	2.75474	7 X
K18B11B	16.6	0.15	K221L	8.422	62.055	69.641	22.417	0.10508	2.62595	8 X
K18C05H	16.7	0.15	K221L	334.196	303.821	149.938	15.531	0.10778	2.83771	8 X
K18C08D	17.2	0.15	K221L	46.770	96.902	315.016	12.266	0.18640	2.58996	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
K18F12Q	17.4	0.15	K221L	7.801	92.693	17.015	12.854	0.21096	2.65491	4 X
K18L01A	19.1	0.15	K221L	77.047	269.725	68.792	23.084	0.13136	1.87033	3 X
K18L03M	18.7	0.15	K221L	24.134	157.214	223.003	21.549	0.12798	1.89600	4 X
K18V72D	18.8	0.15	K221L	46.333	304.820	50.044	3.727	0.22440	2.13989	4 X
K18VA4Z	18.2	0.15	K221L	252.438	176.661	251.225	2.169	0.06811	2.61424	3 V
K18VF0D	19.2	0.15	K221L	64.318	216.151	121.373	4.574	0.17020	2.15608	2 X
K18X33V	18.6	0.15	K221L	30.524	284.316	80.835	6.673	0.26549	2.22893	4 X
K19A42T	18.4	0.15	K221L	5.654	339.997	72.336	1.851	0.15734	2.28136	9 X
K19A44Q	18.0	0.15	K221L	284.833	51.533	120.554	23.057	0.22832	2.28702	7 X
K19F03M	17.5	0.15	K221L	334.821	164.500	340.766	8.317	0.11333	2.23889	10 X
K19J62K	17.1	0.15	K221L	287.472	35.073	89.547	10.966	0.04344	3.06486	8 X
K19J80C	17.3	0.15	K221L	22.355	283.458	99.368	10.792	0.01708	3.11253	5 X
K19M17U	15.2	0.15	K221L	7.614	245.994	144.591	9.273	0.09524	5.06150	5 X
K19N59Z	14.4	0.15	K221L	2.790	298.487	91.767	16.249	0.13769	5.18080	6 X
K19Q03G	15.7	0.15	K221L	284.438	312.645	172.107	27.407	0.03356	3.17358	9 X
K20B61S	19.0	0.15	K221L	292.300	61.360	77.450	20.640	0.05732	1.82355	5 X
K20H15M	16.6	0.15	K221L	51.538	243.963	82.855	27.160	0.26403	3.14746	4 X
K20H20C	17.7	0.15	K221L	69.266	235.396	91.484	14.254	0.18624	2.64617	3 X
K20H35O	16.6	0.15	K221L	41.150	234.428	109.226	15.863	0.29490	3.06849	6 X
K20H61K	17.9	0.15	K221L	75.245	228.673	99.013	13.275	0.10971	2.42819	6 X
K20H93Y	18.7	0.15	K221L	24.695	306.898	106.775	24.030	0.09226	1.94642	4 V
K20HB4X	17.3	0.15	K221L	46.735	226.900	114.456	16.454	0.27631	3.05462	3 X
K20K28Q	16.9	0.15	K221L	38.893	280.715	62.458	21.717	0.28224	3.13532	4 X
K20K40Q	16.8	0.15	K221L	39.591	204.852	134.540	26.014	0.28419	3.34633	3 X
K20OA4G	17.2	0.15	K221L	46.407	264.530	112.122	27.340	0.15580	3.07966	2 V
K20P20E	14.5	0.15	K221L	10.824	227.368	150.002	12.773	0.07723	5.24473	8 X
K20P56N	14.5	0.15	K221L	303.947	23.647	67.793	9.349	0.05815	5.22223	6 X
K20Q84R	17.0	0.15	K221L	356.550	314.859	125.708	20.211	0.17998	3.09319	3 V
K20T77R	15.2	0.15	K221L	349.879	254.680	155.652	12.772	0.11461	5.26973	2 X
K21J24Q	17.8	0.15	K221L	20.518	308.795	60.092	5.993	0.66956	3.22569	5 X
K21N31L	17.9	0.15	K221L	16.194	236.890	139.853	9.534	0.27126	2.54734	3 X
K21N39M	20.2	0.15	K221L	23.990	266.843	135.566	4.735	0.48211	2.03887	2 X
K21N50A	17.1	0.15	K221L	5.367	201.690	192.086	17.050	0.30153	3.04365	3 X
K21R04N	17.6	0.15	K221L	29.508	208.401	168.938	14.175	0.26379	2.64593	4 X
K21R15V	18.2	0.15	K221L	14.558	293.500	112.552	13.821	0.27321	2.60865	3 X
K21R21W	17.9	0.15	K221L	46.973	183.959	171.924	18.076	0.22673	2.61197	2 X
K21R22H	17.3	0.15	K221L	12.133	298.391	98.252	10.388	0.18748	2.69382	5 X
K21R43K	17.7	0.15	K221L	351.349	320.018	102.006	8.593	0.14665	3.05886	5 X
K21R57U	17.0	0.15	K221L	359.951	210.898	192.011	17.172	0.11443	3.21044	3 X
K21R63J	17.4	0.15	K221L	52.249	197.470	153.580	12.753	0.15076	2.70608	4 X
K21R64O	14.7	0.15	K221L	316.667	10.741	75.007	17.403	0.08782	5.21014	5 X
K21R72K	18.6	0.15	K221L	50.046	148.476	186.857	4.365	0.31353	2.57160	4 X
K21R84R	18.1	0.15	K221L	358.635	260.842	149.355	5.276	0.09892	2.69550	6 X
K21R91G	17.1	0.15	K221L	353.915	230.407	190.567	10.121	0.20118	3.14637	4 X
K21RA7H	17.1	0.15	K221L	344.481	4.598	56.966	11.228	0.12497	3.15812	4 X
K21RA7L	17.1	0.15	K221L	15.223	258.625	142.018	12.072	0.18798	3.08997	4 X
K21S13M	17.7	0.15	K221L	25.721	291.276	91.842	3.940	0.12852	2.64265	4 X

K21S27L	17.4	0.15	K221L	4.979	235.554	168.466	10.915	0.08334	3.01271	5 X
K21S27P	18.1	0.15	K221L	74.565	174.471	150.184	13.317	0.11408	2.69605	4 X
K21S27X	16.8	0.15	K221L	266.410	65.965	83.123	13.327	0.09408	3.15795	7 X
K21T07Y	18.7	0.15	K221L	39.444	227.385	141.123	2.489	0.20029	2.35736	7 X
K21TA1U	17.0	0.15	K221L	76.883	133.229	187.425	15.371	0.10108	3.08243	4 V
K21TA1V	14.7	0.15	K221L	325.474	256.295	170.507	20.183	0.05413	5.31447	4 V
K21V27H	17.0	0.15	K221L	16.713	153.280	283.170	30.720	0.32791	3.15502	4 X

New perturbed one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc C
K21M01O	18.4	0.15	K221L	24.552	337.860	19.729	14.470	0.55988	2.81129	146 X
K21P89L	18.4	0.15	K221L	31.403	321.851	39.647	14.886	0.29555	2.61943	106 X
K21PC6U	18.1	0.15	K221L	28.316	321.182	33.536	15.640	0.31246	3.08656	103 X
K21Q03Q	20.3	0.15	K221L	14.597	4.871	42.310	4.927	0.50888	2.65427	82 X
K21Q63Z	18.2	0.15	K221L	5.476	274.005	140.395	13.340	0.26870	2.67606	80 X
K21R10Z	17.7	0.15	K221L	14.996	239.917	153.423	14.040	0.23111	2.72552	76 X
K21R22T	17.2	0.15	K221L	340.308	243.225	209.155	24.083	0.33519	3.17034	76 X
K21R26G	19.1	0.15	K221L	24.169	348.998	35.189	7.832	0.37721	2.60129	72 X
K21R30S	19.1	0.15	K221L	30.564	190.523	183.861	12.451	0.26401	2.38638	72 X
K21R32M	19.2	0.15	K221L	12.369	2.358	47.502	8.859	0.36306	2.59134	71 X
K21R32N	19.4	0.15	K221L	21.249	270.243	116.637	5.278	0.38561	2.70631	72 X
K21R35Z	18.4	0.15	K221L	10.374	290.868	119.111	8.247	0.35121	2.89828	73 X
K21R83H	16.9	0.15	K221L	27.877	334.382	47.462	33.727	0.19046	2.62287	71 X
K21R86E	17.8	0.15	K221L	29.229	186.456	180.815	10.201	0.18047	3.02783	70 X
K21R99Q	17.6	0.15	K221L	10.746	259.954	133.195	10.458	0.27253	3.19378	72 X
K21R99Z	18.0	0.15	K221L	35.253	307.636	55.272	10.817	0.26445	2.61829	76 X
K21RA0C	18.8	0.15	K221L	3.717	38.373	26.427	19.020	0.42117	3.00226	71 X
K21RA2Z	19.3	0.15	K221L	33.151	249.597	110.277	6.970	0.30589	2.61976	72 X
K21RA3X	18.6	0.15	K221L	353.658	358.256	97.065	10.607	0.52472	3.19260	76 X
K21RA4D	20.1	0.15	K221L	26.578	306.567	76.906	6.572	0.21843	2.20798	72 X
K21RC3F	18.3	0.15	K221L	356.167	279.183	155.329	11.807	0.27816	2.64925	72 X
K21RD8Z	18.7	0.15	K221L	38.307	224.140	142.833	15.524	0.24895	2.61845	73 X
K21S20C	18.6	0.15	K221L	10.971	358.478	49.036	9.368	0.20302	2.36108	53 X
K21S31N	18.3	0.15	K221L	32.056	315.504	48.495	11.756	0.31259	2.77215	53 X
K21S39N	18.4	0.15	K221L	10.729	325.444	78.766	18.301	0.22581	2.63366	51 X
K21S46N	18.0	0.15	K221L	342.713	302.894	132.171	10.439	0.15068	3.08208	50 V
K21T07V	22.8	0.15	K221L	10.399	195.670	230.585	2.152	0.61686	2.84240	46 X
K21T21Q	22.6	0.15	K221L	6.713	263.249	202.696	4.283	0.54865	2.10022	38 X
K21T28W	18.5	0.15	K221L	14.168	352.953	47.028	22.026	0.30936	2.60613	45 X
K21T33B	18.9	0.15	K221L	344.500	274.761	202.536	26.839	0.42351	2.60574	47 X
K21T74R	17.7	0.15	K221L	5.076	315.511	94.312	17.428	0.24085	3.15814	37 X
K21T95C	17.9	0.15	K221L	356.794	308.962	125.327	14.201	0.23501	2.62839	46 X
K21TA1W	17.4	0.15	K221L	26.021	224.633	153.724	9.388	0.10442	3.03930	47 V
K21TA1X	15.1	0.15	K221L	344.678	314.186	100.276	8.753	0.08612	5.27816	47 V
K21TA1Y	18.2	0.15	K221L	16.758	263.549	126.143	6.074	0.19767	2.99050	47 V
K21U20P	24.2	0.15	K221L	9.582	54.994	52.634	14.802	0.41051	1.57041	37 X
K21V00R	23.4	0.15	K221L	16.195	40.027	54.740	21.941	0.34101	1.46864	19 X
K21V12O	24.2	0.15	K221L	4.925	248.728	235.706	5.145	0.58571	1.95897	20 X
K21V26Q	24.2	0.15	K221L	82.092	133.437	240.623	17.954	0.15916	1.13783	6 X

New observations:

K02T69P	C2021	11	20.36028502	47	17.608-08	40	08.90		16.71iUEW032F51
K02T69P	C2021	11	20.37161302	47	25.491-08	39	02.61		16.68iUEW032F51
K02T69P	C2021	11	20.38294902	47	33.376-08	37	56.07		16.71iUEW032F51
K02T69P	C2021	11	20.39428902	47	41.253-08	36	49.42		16.70iUEW032F51
K02T69P	C2021	11	20.47067202	48	34.63-08	29	16.9		16.54oVEW032T05
K02T69P	C2021	11	20.47393002	48	36.91-08	28	57.8		16.77oVEW032T05
K02T69P	C2021	11	20.47946402	48	40.82-08	28	24.6		16.64oVEW032T05
K02T69P	C2021	11	20.49164002	48	49.46-08	27	11.8		16.58oVEW032T05
K02T69P	KC2021	11	20.78509102	52	42.69-07	59	11.8		16.5 GVEW032L18
K02T69P	KC2021	11	20.78584202	52	43.30-07	59	08.0		16.4 GVEW032L18
K02T69P	KC2021	11	20.78659402	52	43.77-07	59	03.5		17.2 GVEW032L18
K02X00A	C2021	11	20.40553201	40	45.764+04	19	32.57		20.51iUEW032F51
K02X00A	C2021	11	20.41699501	40	44.838+04	19	29.28		20.71iUEW032F51
K02X00A	C2021	11	20.42851901	40	43.888+04	19	26.26		20.64iUEW032F51
K02X00A	C2021	11	20.44000601	40	42.982+04	19	23.17		20.76iUEW032F51
K05Q11N	C2021	11	19.30850200	23	05.528+03	36	47.46		20.34iUEW032F52
K05Q11N	C2021	11	19.32009700	23	06.957+03	36	48.72		20.55iUEW032F52
K05Q11N	C2021	11	19.33170900	23	08.396+03	36	49.56		20.25iUEW032F52
K07T23C	C2021	11	20.45264302	08	44.02+12	38	35.3		16.96oVEW032T05
K07T23C	C2021	11	20.45553302	08	44.08+12	38	57.0		16.97oVEW032T05
K07T23C	C2021	11	20.46105302	08	44.25+12	39	37.8		16.96oVEW032T05
K07T23C	C2021	11	20.47296602	08	44.62+12	41	06.1		16.77oVEW032T05
K07T23C	KC2021	11	20.74362702	09	02.73+13	14	26.7		16.6 GVEW032L18
K07T23C	KC2021	11	20.74478302	09	02.68+13	14	35.3		16.6 GVEW032L18
K07T23C	KC2021	11	20.74594002	09	02.70+13	14	44.1		16.5 GVEW032L18
K08M01U	C2021	11	09.21672118	17	47.131+49	56	39.72		21.41GVEW032T12
K08M01U	C2021	11	09.21789118	17	47.315+49	56	41.27		21.56GVEW032T12
K08M01U	C2021	11	09.21967018	17	47.615+49	56	43.75		21.56GVEW032T12
K08X02Q	KC2021	11	20.75048421	46	30.32+61	41	45.0		17.6 GVEW032L18
K08X02Q	KC2021	11	20.75146721	46	30.61+61	41	53.3		17.6 GVEW032L18
K08X02Q	KC2021	11	20.75245021	46	31.13+61	42	01.3		17.4 GVEW032L18
K08X02Q	KC2021	11	20.75343421	46	31.48+61	42	09.5		17.7 GVEW032L18
K12K18K	C2021	11	20.29976601	01	02.426-30	48	08.31		19.87iUEW032F51
K12K18K	C2021	11	20.31075101	01	03.415-30	47	44.98		19.91iUEW032F51
K12K18K	C2021	11	20.32173301	01	04.403-30	47	21.64		19.97iUEW032F51
K12K18K	C2021	11	20.33272301	01	05.384-30	46	58.36		19.69iUEW032F51
K13Q48H	C2021	11	20.33377	01	07.15.309-20	32	25.85		18.4 iUEW032F52
K13Q48H	C2021	11	20.34448	01	07.16.395-20	32	18.17		18.3 iUEW032F52
K13Q48H	C2021	11	20.35518	01	07.17.478-20	32	10.43		18.4 iUEW032F52
K13Q48H	C2021	11	20.36600	01	07.18.582-20	32	02.51		18.4 iUEW032F52
K13T04S	C2021	11	20.40140	01	10.15.044+05	05	02.87		19.7 iUEW032F51
K13T04S	C2021	11	20.41287	01	10.16.283+05	05	04.84		19.6 iUEW032F51

K13T04S	C2021	11	20.42434	01	10	17.531+05	05	06.85	
K13T04S	C2021	11	20.43585	01	10	18.791+05	05	09.02	
K14M19G	C2021	11	21.22267821	13	33.006+20	58	23.06		
K14M19G	C2021	11	21.23548321	13	38.506+20	58	00.36		
K14M19G	C2021	11	21.24832921	13	44.173+20	57	37.74		
K14M19G	C2021	11	21.26118521	13	49.924+20	57	13.99		
K15F37F	KC2021	11	19.82072	18	05	20.37	+63	28	50.4
K15F37F	KC2021	11	19.83348	18	05	23.96	+63	30	27.5
K15F37F	KC2021	11	19.84626	18	05	27.55	+63	32	04.5
K15F37F	KC2021	11	20.73637	18	09	49.78	+65	24	54.8
K15F37F	KC2021	11	20.74569	18	09	52.50	+65	26	00.6
K15F37F	KC2021	11	20.75751618	09	56.25	+65	27	09.6	
K15F37F	KC2021	11	20.75867118	09	56.46	+65	27	18.9	
K15F37F	KC2021	11	20.75982918	09	56.70	+65	27	26.6	
K16J17H	C2021	11	20.44974505	35	35.413-24	08	35.43		
K16J17H	C2021	11	20.47002005	35	30.765-24	06	51.03		
K16V03V	C2021	11	20.30927100	50	37.956-02	10	11.94		
K16V03V	C2021	11	20.31966300	50	37.392-02	10	09.64		
K16V03V	C2021	11	20.32997500	50	36.863-02	10	07.01		
K21J24Q	KC2021	11	17.95298006	16	34.27	+25	26	57.9	
K21J24Q	KC2021	11	17.95532106	16	34.15	+25	27	00.4	
K21J24Q	KC2021	11	17.95763006	16	33.97	+25	27	03.4	
K21N39M	C2021	11	20.29977	01	09	26.495-32	28	33.69	
K21N39M	C2021	11	20.32173	01	09	35.112-32	27	37.59	
K21N39M	KC2021	11	21.43354	01	17	21.94	-31	37	22.7
K21N39M	KC2021	11	21.44235	01	17	25.41	-31	36	58.3
K21N39M	KC2021	11	21.45124	01	17	28.96	-31	36	32.9
K21N39M	KC2021	11	21.45910	01	17	32.13	-31	36	11.5
K21T07V	C2021	11	20.38076301	29	14.732+08	09	58.01		
K21T07V	C2021	11	20.39482801	29	18.721+08	10	03.85		
K21T07V	C2021	11	20.40890001	29	22.725+08	10	09.41		
K21T07V	C2021	11	20.42307801	29	26.758+08	10	15.05		
K21T21Q	C2021	11	20.36093202	58	13.801-08	33	52.57		
K21T21Q	C2021	11	20.38359302	58	16.524-08	36	00.13		
K21T21Q	C2021	11	20.39493102	58	17.882-08	37	03.71		
K21U20P	C2021	11	20.25426301	04	23.736+21	49	10.98		
K21U20P	C2021	11	20.26463301	04	14.797+21	51	41.19		
K21U20P	C2021	11	20.27506101	04	05.778+21	54	12.25		
K21U20P	C2021	11	20.28564701	03	56.566+21	56	45.99		
K21V00R	KC2021	11	20.73003401	17	02.70	+40	19	21.8	
K21V00R	KC2021	11	20.73177001	16	59.56	+40	20	20.5	
K21V00R	KC2021	11	20.73351901	16	56.35	+40	21	19.9	
K21V120	6C2021	11	21.26761	02	29	36.70	+11	35	12.9
K21V120	6C2021	11	21.26812	02	29	36.60	+11	35	08.7
K21V120	6C2021	11	21.26864	02	29	36.49	+11	35	04.4
K21V120	6C2021	11	21.26915	02	29	36.39	+11	35	00.3
K21V26Q	KC2021	11	20.73657423	00	27.00	+66	51	09.2	
K21V26Q	KC2021	11	20.73749923	00	34.78	+66	50	45.6	
K21V26Q	KC2021	11	20.73842523	00	42.73	+66	50	22.3	
K21V26Q	6C2021	11	21.15237	00	00	05.91	+62	54	29.8
K21V26Q	6C2021	11	21.16800	00	02	05.88	+62	42	39.8
K21V26Q	6C2021	11	21.16882	00	02	12.18	+62	42	01.9
01036	C2021	11	20.61585810	31	17.13	-16	06	14.8	
01036	C2021	11	20.61938310	31	17.23	-16	06	16.4	
01036	C2021	11	20.63779610	31	17.71	-16	06	24.8	
01036	C2021	11	20.64751210	31	17.96	-16	06	29.1	
01862	KC2021	11	20.70867420	58	17.84	-11	47	07.1	
01862	KC2021	11	20.70936620	58	18.41	-11	47	02.8	
01862	KC2021	11	20.71006020	58	18.96	-11	46	58.5	
01943	C2021	11	21.21844622	54	08.388+03	19	24.33		
01943	C2021	11	21.23103622	54	09.277+03	19	23.04		
01943	C2021	11	21.24366322	54	10.168+03	19	21.68		
01943	C2021	11	21.25816722	54	11.190+03	19	20.21		
02329	C2021	11	20.49874006	33	54.08	-14	43	40.8	
02329	C2021	11	20.50148406	33	53.85	-14	43	40.7	
02329	C2021	11	20.50468606	33	53.64	-14	43	42.8	
02329	C2021	11	20.51019606	33	53.28	-14	43	45.5	
03103	C2021	11	20.61036510	16	59.10	-10	16	39.9	
03103	C2021	11	20.61402810	16	59.54	-10	16	38.0	
03103	C2021	11	20.62121310	17	00.38	-10	16	34.3	
03103	C2021	11	20.63963010	17	02.52	-10	16	25.0	
03352	C2021	11	20.37222823	37	22.69	-10	34	54.0	
03352	C2021	11	20.37544223	37	22.69	-10	34	53.7	
03352	C2021	11	20.38232423	37	22.80	-10	34	51.6	
03352	C2021	11	20.39288023	37	22.91	-10	34	47.8	
03352	C2021	11	21.26826023	37	35.245-10	29	59.87		
03352	C2021	11	21.27949423	37	35.375-10	29	56.09		
03352	C2021	11	21.29069223	37	35.508-10	29	52.28		
03352	C2021	11	21.30191923	37	35.643-10	29	48.48		
03691	C2021	11	20.58613909	18	52.73	+44	21	18.4	
03691	C2021	11	20.58797909	18	52.78	+44	21	18.4	
03691	C2021	11	20.59490709	18	53.32	+44	21	20.9	
03691	C2021	11	20.61019609	18	54.47	+44	21	25.8	
04954	C2021	11	20.78717	20	43	36.69	-19	29	23.6
05653	C2021	11	19.86505510	58	03.66	+15	38	34.3	
05653	C2021	11	19.87683910	58	06.04	+15	38	20.4	
05653	C2021	11	19.88862410	58	08.41	+15	38	06.4	
05751	C2021	11	19.22361223	56	20.324-22	04	03.29		
05751	C2021	11	19.23591923	56	20.191-22	03	59.30		
05751	C2021	11	19.24673523	56	20.074-22	03	55.73		
07341	C2021	11	20.35570722	46	35.57	+13	34	37.0	
07341	C2021	11	20.35892222	46	35.38	+13	34	35.0	
07341	C2021	11	20.36535022	46	35.00	+13	34	30.9	

19.7	iUEW032F51
19.3	iUEW032F51
20.26	iUEW032F52
20.39	iUEW032F52
20.33	iUEW032F52
20.24	iUEW032F52
17.8	GXEW032Z43
17.3	GXEW032Z43
17.5	GXEW032Z43
17.3	GXEW032L63
17.1	GXEW032L63
17.6	GVEW032L18
17.6	GVEW032L18
17.4	GVEW032L18
18.77	iUEW032F52
18.94	iUEW032F52
20.07	iUEW032F52
19.98	iUEW032F52
19.88	iUEW032F52
17.7	RVEW032160
17.7	RVEW032160
18.3	iUEW032F51
18.4	iUEW032F51
18.4	GVEW032R66
17.9	GVEW032R66
18.0	GVEW032R66
18.1	GVEW032R66
19.43	iUEW032F52
19.43	iUEW032F52
19.44	iUEW032F52
19.52	iUEW032F52
18.82	iUEW032F51
18.92	iUEW032F51
18.98	iUEW032F51
19.34	iUEW032F51
19.00	iUEW032F51
18.99	iUEW032F51
18.91	iUEW032F51
18.2	GVEW032L18
18.1	GVEW032L18
17.6	GVEW032L18
19.4	GVEW032290
19.4	GVEW032290
19.3	GVEW032290
19.4	GVEW032290
17.0	GVEW032L18
17.4	GVEW032L18
16.6	GVEW032L18
17.7	GVEW032290
17.9	GVEW032290
18.0	GVEW032290
15.49	oVEW032T05
15.54	oVEW032T05
15.51	oVEW032T05
15.52	oVEW032T05
16.2	GVEW032L18
16.7	GVEW032L18
15.8	GVEW032L18
18.06	iUEW032F51
18.60	iUEW032F51
18.07	iUEW032F51
18.02	iUEW032F51
18.24	oVEW032T05
18.09	oVEW032T05
17.91	oVEW032T05
18.36	oVEW032T05
16.46	oVEW032T05
16.62	oVEW032T05
16.67	oVEW032T05
17.14	oVEW032T05
18.62	oVEW032T05
18.17	oVEW032T05
18.27	oVEW032T05
18.30	oVEW032T05
18.31	iUEW032F51
18.35	iUEW032F51
18.17	iUEW032F51
18.32	iUEW032F51
17.84	oVEW032T08
17.90	oVEW032T08
17.77	oVEW032T08
18.03	oVEW032T08
14.5	RVEW032L92
18.5	RVEW032D29
18.2	RVEW032D29
18.3	RVEW032D29
18.76	iUEW032F52
18.73	iUEW032F52
18.82	iUEW032F52
16.14	oVEW032T05
16.23	oVEW032T05
16.37	oVEW032T05

07341	C2021	11	20.37774622	46	34.27	+13	34	23.1	16.40oVEW032T05
11284	C2021	11	20.24762523	56	43.879	+04	00	56.07	19.90iUEW032F52
11284	C2021	11	20.25842223	56	43.816	+04	00	55.17	19.40iUEW032F52
11284	C2021	11	20.26918423	56	43.790	+04	00	54.27	19.32iUEW032F52
11284	C2021	11	20.27997123	56	43.735	+04	00	53.17	19.37iUEW032F52
11405	C2021	11	20.60807810	11	38.05	-01	29	43.6	18.66oVEW032T05
11405	C2021	11	20.61127910	11	38.43	-01	29	45.3	18.58oVEW032T05
11405	C2021	11	20.61723710	11	39.21	-01	29	47.3	18.77oVEW032T05
11405	C2021	11	20.63549410	11	41.71	-01	29	55.5	18.87oVEW032T05
12711	C2021	11	20.58861009	55	58.608	+37	15	35.84	17.97zUEW032F52
12711	C2021	11	20.60217609	55	59.067	+37	15	25.39	18.07zUEW032F52
12711	C2021	11	20.60230409	55	59.08	+37	15	25.6	17.86oVEW032T08
12711	C2021	11	20.60783709	55	59.25	+37	15	20.8	17.94oVEW032T08
12711	C2021	11	20.61204209	55	59.40	+37	15	18.3	18.21oVEW032T08
12711	C2021	11	20.61571809	55	59.528	+37	15	14.96	18.39zUEW032F52
12711	C2021	11	20.62930309	55	59.985	+37	15	04.44	18.52zUEW032F52
12711	C2021	11	20.63063109	56	00.02	+37	15	03.5	18.39oVEW032T08
12923	C2021	11	20.39379800	14	53.49	-08	42	17.8	16.47oVEW032T05
12923	C2021	11	20.39793600	14	54.08	-08	42	12.9	16.47oVEW032T05
12923	C2021	11	20.40531000	14	55.14	-08	42	04.5	16.41oVEW032T05
12923	C2021	11	20.41586700	14	56.67	-08	41	52.3	16.40oVEW032T05
16816	C2021	11	20.29573300	34	38.662	-04	49	22.53	19.43iUEW032F52
16816	C2021	11	20.29640000	34	38.607	-04	49	22.22	19.39iUEW032F52
16816	C2021	11	20.30602000	34	38.033	-04	49	19.46	19.58iUEW032F52
16816	C2021	11	20.31642200	34	37.399	-04	49	16.34	19.55iUEW032F52
16816	C2021	11	20.31709000	34	37.368	-04	49	16.00	19.83iUEW032F52
16816	C2021	11	20.32670500	34	36.788	-04	49	12.95	19.53iUEW032F52
16816	C2021	11	20.32742600	34	36.738	-04	49	12.75	19.57iUEW032F52
17181	C2021	11	20.61082210	40	07.39	-01	50	26.8	17.92oVEW032T05
17181	C2021	11	20.61494210	40	09.36	-01	50	32.4	17.89oVEW032T05
17181	C2021	11	20.62396410	40	13.68	-01	50	43.7	17.79oVEW032T05
17181	C2021	11	20.62946910	40	16.34	-01	50	51.1	17.79oVEW032T05
17181	C2021	11	20.63642010	40	19.68	-01	50	59.9	17.91oVEW032T05
17181	C2021	11	20.64055010	40	21.66	-01	51	04.9	17.59oVEW032T05
17181	C2021	11	20.64380010	40	23.21	-01	51	08.9	17.85oVEW032T05
17181	C2021	11	20.65489910	40	28.49	-01	51	22.8	17.63oVEW032T05
17511	C2021	11	20.58982809	36	54.08	+37	36	20.8	17.91oVEW032T08
17511	C2021	11	20.59010809	36	54.150	+37	36	20.42	19.19zUEW032F52
17511	C2021	11	20.59536909	36	55.58	+37	36	20.1	17.90oVEW032T08
17511	C2021	11	20.59814809	36	56.36	+37	36	20.0	18.05oVEW032T08
17511	C2021	11	20.60367209	36	57.935	+37	36	18.41	19.25zUEW032F52
17511	C2021	11	20.61296309	37	00.46	+37	36	17.5	18.20oVEW032T08
17511	C2021	11	20.61721609	37	01.663	+37	36	16.30	19.45zUEW032F52
18882	C2021	11	20.56952208	46	08.52	+52	43	00.6	17.86oVEW032T08
18882	C2021	11	20.57137308	46	08.52	+52	42	59.7	18.19oVEW032T08
18882	C2021	11	20.57415008	46	08.44	+52	42	58.3	18.26oVEW032T08
18882	C2021	11	20.58060408	46	08.50	+52	42	56.4	18.03oVEW032T08
19548	C2021	11	20.39379800	23	20.68	-09	34	59.1	16.99oVEW032T05
19548	C2021	11	20.39793600	23	20.62	-09	34	57.1	16.67oVEW032T05
19548	C2021	11	20.40531000	23	20.56	-09	34	54.0	16.82oVEW032T05
19548	C2021	11	20.41586700	23	20.44	-09	34	48.8	16.76oVEW032T05
25330	C2021	11	20.29195600	13	28.096	-07	36	27.74	17.67iUEW032F52
25330	C2021	11	20.30224300	13	27.422	-07	36	17.11	17.59iUEW032F52
25330	C2021	11	20.31253900	13	26.758	-07	36	06.51	17.69iUEW032F52
25330	C2021	11	20.32291900	13	26.086	-07	35	55.83	17.63iUEW032F52
25330	C2021	11	20.38644600	13	22.01	-07	34	50.3	17.57oVEW032T05
25330	C2021	11	20.39057500	13	21.74	-07	34	45.9	17.63oVEW032T05
25330	C2021	11	20.39839400	13	21.25	-07	34	38.0	17.71oVEW032T05
25330	C2021	11	20.40942500	13	20.56	-07	34	26.1	18.01oVEW032T05
31345	C2021	11	19.75021307	16	27.95	+13	21	47.4	17.8 RVEW032D29
31345	C2021	11	19.76831007	16	27.76	+13	21	33.8	18.3 RVEW032D29
32906	C2021	11	20.32335222	18	24.46	+37	41	55.3	16.64oVEW032T08
32906	C2021	11	20.33074222	18	24.93	+37	41	59.6	16.62oVEW032T08
32906	C2021	11	20.34885322	18	26.16	+37	42	09.9	16.52oVEW032T08
32906	C2021	11	20.35162722	18	26.37	+37	42	11.5	16.51oVEW032T08
42286	C2021	11	20.40814401	56	50.820	-00	00	12.80	18.68iUEW032F51
42286	C2021	11	20.41960201	56	49.580	-00	00	07.33	18.63iUEW032F51
42286	C2021	11	20.43114601	56	48.330	-00	00	01.81	18.75iUEW032F51
42286	C2021	11	20.44262401	56	47.094	+00	00	03.74	18.84iUEW032F51
54789	C2021	11	20.62533711	03	17.67	+01	00	49.3	17.49oVEW032T05
54789	C2021	11	20.64517411	03	21.70	+01	00	47.0	17.82oVEW032T05
54789	C2021	11	20.64935311	03	22.56	+01	00	46.7	17.71oVEW032T05
54789	C2021	11	20.65862511	03	24.48	+01	00	45.4	17.80oVEW032T05
68031	C2021	11	20.49874006	34	20.84	-12	29	25.4	18.42oVEW032T05
68031	C2021	11	20.50148406	34	20.82	-12	29	27.0	18.47oVEW032T05
68031	C2021	11	20.50468606	34	20.86	-12	29	27.7	18.43oVEW032T05
68031	C2021	11	20.51019606	34	20.85	-12	29	30.2	18.62oVEW032T05
68350	C2021	11	20.61036510	17	51.34	-06	21	43.1	18.03oVEW032T05
68350	C2021	11	20.61402810	17	51.96	-06	21	41.8	18.11oVEW032T05
68350	C2021	11	20.62121310	17	53.18	-06	21	39.1	18.09oVEW032T05
68350	C2021	11	20.63963010	17	56.37	-06	21	32.2	17.99oVEW032T05
68548	C2021	11	20.48057608	46	15.423	+34	59	02.59	19.51zUEW032F52
68548	C2021	11	20.49110108	46	15.220	+34	59	01.96	19.53zUEW032F52
68548	C2021	11	20.49349508	46	15.172	+34	59	01.81	19.80zUEW032F51
68548	C2021	11	20.50161808	46	14.988	+34	59	01.08	19.79zUEW032F52
68548	C2021	11	20.50411208	46	14.950	+34	59	00.78	19.71zUEW032F51
68548	C2021	11	20.51217608	46	14.791	+34	59	00.23	19.62zUEW032F52
68548	C2021	11	20.51473408	46	14.731	+34	59	00.03	19.64zUEW032F51
68548	C2021	11	20.52536508	46	14.503	+34	58	59.03	19.60zUEW032F51
85628	C2021	11	19.82656209	33	58.38	+22	12	30.9	17.5 RVEW032D29
85628	C2021	11	19.83960909	34	02.82	+22	12	39.2	17.3 RVEW032D29
85628	C2021	11	19.85265609	34	07.28	+22	12	47.5	17.5 RVEW032D29
87311	C2021	11	20.60807810	19	07.36	-03	21	36.0	17.60oVEW032T05

87311	C2021	11	20.61082210	19	08.27	-03	21	42.2	17.83oVEW032T05
87311	C2021	11	20.61127910	19	08.41	-03	21	42.8	17.61oVEW032T05
87311	C2021	11	20.61494210	19	09.64	-03	21	50.8	17.75oVEW032T05
87311	C2021	11	20.61723710	19	10.41	-03	21	55.9	17.80oVEW032T05
87311	C2021	11	20.62396410	19	12.67	-03	22	10.4	17.80oVEW032T05
87311	C2021	11	20.63549410	19	16.54	-03	22	35.3	17.91oVEW032T05
87311	C2021	11	20.64380010	19	19.29	-03	22	53.3	17.75oVEW032T05
A0756	C2021	11	20.55827308	21	49.50	-13	34	21.0	16.52oVEW032T05
A0756	C2021	11	20.56101808	21	50.31	-13	34	27.1	16.35oVEW032T05
A0756	C2021	11	20.56872208	21	52.58	-13	34	45.0	16.27oVEW032T05
A0756	C2021	11	20.57421308	21	54.18	-13	34	57.6	16.25oVEW032T05
D7805	C2021	11	20.62360410	40	41.14	+39	27	47.3	18.07oVEW032T08
D7805	C2021	11	20.62878710	40	41.67	+39	27	49.9	17.94oVEW032T08
D7805	C2021	11	20.64528210	40	43.20	+39	28	00.4	18.20oVEW032T08
D7805	C2021	11	20.65129810	40	43.74	+39	28	04.3	18.32oVEW032T08
D8175	C2021	11	20.47908 09	03	43.682+33	32	16.99	19.6 zUEW032F52	
D8175	C2021	11	20.48960 09	03	42.772+33	32	34.78	19.6 zUEW032F52	
D8175	C2021	11	20.51068 09	03	40.889+33	33	11.44	19.7 zUEW032F52	
D8175	C2021	11	20.63749 09	03	28.993+33	36	44.87	20.4 zUEW032F52	
D8175	C2021	11	20.64203 09	03	28.552+33	36	52.50	20.1 zUEW032F52	
D8175	C2021	11	20.65111 09	03	27.689+33	37	07.40	20.2 zUEW032F52	
D8852	C2021	11	20.33629 01	22	36.770-16	16	12.47	19.0 iUEW032F52	
D8852	C2021	11	20.34699 01	22	35.075-16	14	31.78	19.0 iUEW032F52	
D8852	C2021	11	20.35772 01	22	33.385-16	12	51.43	18.8 iUEW032F52	
D8852	C2021	11	20.36855 01	22	31.677-16	11	09.73	18.6 iUEW032F52	
D8852	C2021	11	20.42737101	22	22.53	-16	01	57.2	18.25oVEW032T05
D8852	C2021	11	20.43150801	22	21.91	-16	01	17.9	18.26oVEW032T05
D8852	C2021	11	20.43749101	22	20.97	-16	00	22.4	18.15oVEW032T05
D8852	C2021	11	20.44806301	22	19.37	-15	58	42.6	18.18oVEW032T05
D8852	KC2021	11	20.76573601	21	40.10	-15	09	57.3	17.5 GVEW032L18
D8852	KC2021	11	20.76943501	21	39.58	-15	09	22.5	17.7 GVEW032L18
D8852	KC2021	11	20.77313901	21	38.98	-15	08	48.2	17.9 GVEW032L18
D8937	C2021	11	20.63084709	33	08.06	-19	04	47.5	17.97oVEW032T05
D8937	C2021	11	20.63502709	33	07.39	-19	04	31.7	18.22oVEW032T05
D8937	C2021	11	20.64284109	33	06.20	-19	04	02.1	18.26oVEW032T05
D8937	C2021	11	20.65720109	33	04.03	-19	03	08.7	17.99oVEW032T05
E2781	C2021	11	19.45008321	45	36.60	+23	37	50.8	18.3 RVEW032D29
E2781	C2021	11	19.45976321	45	37.72	+23	37	33.2	18.9 RVEW032D29
E2781	C2021	11	19.46944321	45	38.84	+23	37	16.5	18.4 RVEW032D29
F2742	C2021	11	20.53606409	25	02.78	+80	13	48.6	17.31oVEW032T08
F2742	C2021	11	20.56030209	23	01.96	+80	16	33.6	17.25oVEW032T08
F2742	C2021	11	20.56352709	22	45.74	+80	16	55.0	17.14oVEW032T08
F2742	C2021	11	20.56906309	22	18.04	+80	17	31.6	17.27oVEW032T08
F9857	C2021	11	20.55735908	06	25.85	-06	59	46.8	13.56oVEW032T05
F9857	C2021	11	20.56056108	06	24.98	-07	00	03.4	13.52oVEW032T05
F9857	C2021	11	20.56330408	06	24.23	-07	00	17.5	13.50oVEW032T05
F9857	C2021	11	20.56917908	06	22.64	-07	00	47.9	13.55oVEW032T05
G3696	C2021	11	20.61342509	16	32.58	+36	18	48.4	17.32oVEW032T08
G3696	C2021	11	20.61716609	16	32.58	+36	19	02.8	17.25oVEW032T08
G3696	C2021	11	20.64189909	16	32.28	+36	20	35.2	17.55oVEW032T08
H0891	C2021	11	20.53053608	18	04.46	+36	45	46.9	17.99oVEW032T08
H0891	C2021	11	20.53329808	18	04.94	+36	45	46.8	18.11oVEW032T08
H0891	C2021	11	20.54272 08	18	06.480+36	45	45.54	18.7 zUEW032F52	
H0891	C2021	11	20.55777 08	18	08.950+36	45	44.67	18.6 zUEW032F52	
H0891	C2021	11	20.55884208	18	09.12	+36	45	44.9	18.32oVEW032T08
H0891	C2021	11	20.56491208	18	10.18	+36	45	44.0	18.16oVEW032T08
H0891	C2021	11	20.56767808	18	10.65	+36	45	44.4	18.05oVEW032T08
H0891	C2021	11	20.57091108	18	11.10	+36	45	44.6	18.03oVEW032T08
H0891	C2021	11	20.57599208	18	11.98	+36	45	44.6	18.27oVEW032T08
H0903	C2021	11	19.82235308	45	54.11	+15	34	25.3	19.1 RVEW032D29
H0903	C2021	11	19.83540008	45	57.59	+15	34	19.8	18.8 RVEW032D29
Q7337	C2021	11	20.56859908	20	52.54	+41	36	42.5	17.27oVEW032T08
Q7337	C2021	11	20.57044908	20	52.09	+41	36	50.3	17.05oVEW032T08
Q7337	C2021	11	20.57322908	20	51.44	+41	37	00.6	17.15oVEW032T08
Q7337	C2021	11	20.57922208	20	49.90	+41	37	24.0	17.18oVEW032T08
U3174	C2021	11	20.29770800	41	53.150-01	06	36.98	18.91iUEW032F52	
U3174	C2021	11	20.30799800	41	53.373-01	06	41.84	19.01iUEW032F52	
U3174	C2021	11	20.31840300	41	53.595-01	06	46.73	19.06iUEW032F52	
U3174	C2021	11	20.32871600	41	53.814-01	06	51.57	19.03iUEW032F52	
V8160	C2021	11	19.82361608	15	29.10	+17	48	09.0	17.4 RVEW032D29
V8160	C2021	11	19.83666308	15	31.68	+17	47	57.9	17.4 RVEW032D29
V8160	C2021	11	19.84971008	15	34.22	+17	47	46.4	17.4 RVEW032D29
W9669	C2021	11	20.34511122	37	29.33	-04	31	26.6	18.23oVEW032T05
W9669	C2021	11	20.34926522	37	30.20	-04	31	22.4	18.32oVEW032T05
W9669	C2021	11	20.35479222	37	31.26	-04	31	17.8	18.29oVEW032T05
W9669	C2021	11	20.36763622	37	33.97	-04	31	05.8	18.10oVEW032T05
Z3938	C2021	11	20.40049800	43	58.34	+41	17	37.0	17.61oVEW032T08
Z3938	C2021	11	20.40418300	43	59.00	+41	17	35.7	17.90oVEW032T08
Z3938	C2021	11	20.43354900	44	04.41	+41	17	25.0	17.86oVEW032T08
Z3938	C2021	11	20.44049800	44	05.66	+41	17	21.9	17.95oVEW032T08
f0195	C2021	11	19.72959007	54	46.72	+15	28	36.3	18.2 RVEW032D29
f0195	C2021	11	19.74768707	54	50.24	+15	28	34.4	18.3 RVEW032D29
f0195	C2021	11	19.76578507	54	53.71	+15	28	33.8	17.9 RVEW032D29
f1201	C2021	11	20.21479622	07	54.117-14	33	44.57	20.14iUEW032F52	
f1201	C2021	11	20.22572122	07	55.026-14	33	43.70	20.08iUEW032F52	
f1201	C2021	11	20.23679122	07	55.909-14	33	42.97	20.03iUEW032F52	
f5713	C2021	11	20.60205509	58	07.72	+01	05	31.5	17.52oVEW032T05
f5713	C2021	11	20.60436409	58	08.81	+01	05	30.0	17.68oVEW032T05
f5713	C2021	11	20.60482209	58	08.96	+01	05	29.3	17.72oVEW032T05
f5713	C2021	11	20.60762109	58	10.24	+01	05	27.3	17.98oVEW032T05
f5713	C2021	11	20.60990709	58	11.29	+01	05	25.8	17.43oVEW032T05
f5713	C2021	11	20.61448509	58	13.36	+01	05	22.4	17.83oVEW032T05
f5713	C2021	11	20.62259009	58	17.03	+01	05	16.5	17.87oVEW032T05

f5713	C2021	11	20.63272409	58	21.62	+01	05	09.7	18.20oVEW032T05
h4632	C2021	11	21.22204921	18	35.296+19	00	48.58	20.29iUEW032F52	
h4632	C2021	11	21.24769921	18	44.224+19	01	10.50	20.76iUEW032F52	
h4632	C2021	11	21.26055621	18	48.648+19	01	21.15	20.60iUEW032F52	
h8429	C2021	11	19.23229923	00	15.995-01	55	14.38	19.97iUEW032F51	
h8429	C2021	11	19.24430023	00	18.455-01	55	04.65	20.39iUEW032F51	
h8429	C2021	11	19.25634523	00	20.892-01	54	55.30	20.40iUEW032F51	
i2742	C2021	11	21.37804200	48	48.358+08	10	18.88	17.99iUEW032F52	
i2742	C2021	11	21.39074900	48	50.175+08	09	50.24	17.90iUEW032F52	
i2742	C2021	11	21.41052100	48	53.013+08	09	05.49	18.00iUEW032F52	
i2742	C2021	11	21.42856300	48	55.620+08	08	24.65	18.20iUEW032F52	
15665	C2021	11	19.81814508	34	26.29	+12	00	33.7	19.3 RVEW032D29
15665	C2021	11	19.84423908	34	30.68	+12	00	17.8	18.6 RVEW032D29

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