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Minor Planet Center



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M.P.E.C. 2013-H16

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DAILY ORBIT UPDATE (2013 APR. 18 UT)

Update to [MPEC 2013-H11](#)

Full-precision elements for the objects listed here are available at

<http://www.minorplanetcenter.org/iau/MPCORB.html>

New multiple-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Opp	C
J98M17L	16.3	0.15	K134I	317.448	311.181	306.731	16.149	0.13612	3.04161	4	X
J98S31E	15.3	0.15	K134I	198.517	25.664	345.665	20.719	0.02382	3.13917	5	X
J99C45S	16.7	0.15	K134I	70.586	328.915	134.258	7.391	0.39586	2.73254	4	X
J99V11L	17.6	0.15	K134I	227.085	302.721	58.138	35.294	0.21514	1.80489	5	X
K00C73T	17.2	0.15	K134I	2.084	71.465	137.149	12.231	0.19202	2.59713	4	X
K00CC5J	16.1	0.15	K134I	72.754	6.327	125.739	10.632	0.14313	2.58208	4	X
K00D58B	17.1	0.15	K134I	24.840	205.859	333.834	11.814	0.09884	2.61291	5	X
K00DB1B	17.0	0.15	K134I	340.941	239.385	341.977	2.942	0.19907	2.62485	5	X
K00J78Y	16.0	0.15	K134I	39.716	67.200	85.302	13.485	0.21393	2.66027	4	X
K00K37N	16.6	0.15	K134I	8.123	137.510	51.901	9.110	0.12245	2.68836	5	X
K00SL8L	16.2	0.15	K134I	266.444	252.459	61.619	10.759	0.23312	2.29121	5	X
K00U16H	15.8	0.15	K134I	229.987	301.491	61.558	24.208	0.31361	2.29425	4	X
K01D97Q	16.2	0.15	K134I	16.951	203.369	347.205	14.634	0.08183	2.46835	6	X
K01S33M	16.7	0.15	K134I	315.998	279.849	8.036	28.734	0.32754	2.60692	4	X
K01S75N	17.8	0.15	K134I	145.855	29.652	356.817	18.772	0.09793	1.89252	3	X
K01U01R	15.4	0.15	K134I	287.444	267.396	59.958	27.408	0.41194	2.63785	6	X
K01VC9D	16.7	0.15	K134I	291.306	123.969	182.054	14.692	0.18041	2.68349	6	X
K01XD4N	16.4	0.15	K134I	197.758	302.370	81.372	10.074	0.16778	2.78543	5	X
K02A04Q	16.7	0.15	K134I	77.645	330.933	115.576	25.635	0.30150	2.31092	4	X
K02C34K	15.6	0.15	K134I	96.205	350.055	100.809	9.978	0.05297	2.98672	5	X
K02CQ4W	18.2	0.15	K134I	66.695	353.284	144.240	6.018	0.12918	2.31895	5	X
K02ED6W	16.8	0.15	K134I	30.369	21.860	161.954	8.753	0.11743	3.01764	5	X
K02G00S	19.9	0.15	K134I	307.082	264.103	34.787	19.764	0.40377	1.35255	4	X
K02G06F	15.8	0.15	K134I	27.332	129.734	32.024	18.717	0.17781	3.10661	5	X
K02GA3R	17.0	0.15	K134I	327.654	159.292	82.483	9.142	0.15833	2.39066	5	X
K02GA6G	15.3	0.15	K134I	1.942	145.443	49.911	20.102	0.15430	3.11009	4	X
K02GH9S	17.5	0.15	K134I	335.654	164.114	71.892	12.426	0.14793	2.37451	5	X
K02J56G	17.1	0.15	K134I	33.772	115.779	50.643	23.316	0.04305	1.97912	6	X
K02J70E	17.6	0.15	K134I	320.446	174.685	106.923	6.506	0.38002	2.38806	4	X

Minor Planets	K02JE5U	15.6	0.15	K134I	23.175	30.909	158.294	19.086	0.15318	3.10582	4	X
Comets	K02L29R	17.0	0.15	K134I	315.730	141.154	127.658	7.234	0.10981	2.39837	8	X
Animations	K02O36H	17.3	0.15	K134I	263.587	209.709	113.312	7.556	0.11483	2.47005	4	X
	K02Q61G	17.3	0.15	K134I	182.436	224.917	169.873	11.353	0.11534	2.52785	6	X
General	K02Ta9S	16.6	0.15	K134I	4.729	54.132	151.911	12.245	0.13584	2.61287	8	X
MPC Blog	K02U08K	16.7	0.15	K134I	162.092	311.313	93.926	11.471	0.19939	2.62534	4	X
Contact Us	K02VB8X	15.8	0.15	K134I	141.261	359.556	45.374	15.389	0.10969	2.69864	6	X
Index	K03C17A	16.5	0.15	K134I	105.353	327.162	141.691	15.965	0.07596	2.75436	4	X
Site Map	K03E30A	16.6	0.15	K134I	83.188	321.537	155.453	10.067	0.17795	2.80348	5	X
	K03G49E	17.2	0.15	K134I	313.773	150.623	104.523	7.375	0.07441	2.25758	7	X
Links	K03Q05M	15.9	0.15	K134I	260.498	69.719	248.597	22.717	0.16038	2.33772	5	X
Minor Planet Center	K03Q45N	15.4	0.15	K134I	266.312	154.559	157.009	20.128	0.10638	3.20172	5	X
Central Bureau for Astro. Tel.	K03Q52Y	17.4	0.15	K134I	296.689	293.853	355.446	4.618	0.18504	2.31280	7	X
Cometary Science Archive	K03Q71Q	16.8	0.15	K134I	275.441	138.272	190.699	22.613	0.21713	2.31944	5	X
Smithsonian Astro. Obs.	K03QB4U	15.6	0.15	K134I	309.680	113.803	176.307	16.305	0.21127	3.09235	6	X
	K03R02M	16.2	0.15	K134I	265.320	178.674	153.622	11.580	0.21916	3.13808	3	X
	K03S79D	14.8	0.15	K134I	314.503	276.832	355.539	31.884	0.19276	3.20305	4	X
	K03SV9S	17.5	0.15	K134I	273.196	166.387	153.421	6.897	0.11861	2.35684	7	X
	K03SX2D	17.4	0.15	K134I	356.477	161.128	56.753	14.572	0.07975	2.41675	4	X
	K03UV9B	17.2	0.15	K134I	200.135	234.604	150.612	6.667	0.14147	2.40077	7	X
	K03WA5B	15.7	0.15	K134I	224.311	277.959	80.708	13.071	0.09986	3.41859	4	X
	K04B08O	17.2	0.15	K134I	346.477	84.582	134.800	9.172	0.12838	2.61036	5	X
	K04B71M	16.6	0.15	K134I	119.372	321.767	127.625	11.757	0.12386	2.57948	6	X
	K04B85Y	16.1	0.15	K134I	81.396	313.738	134.412	33.026	0.26088	2.61051	5	X
	K04C79P	16.8	0.15	K134I	59.643	1.984	138.324	8.623	0.13071	2.64190	7	X
	K04E07Z	16.2	0.15	K134I	309.507	283.375	348.690	11.768	0.11198	2.66704	5	X
	K04E09K	17.2	0.15	K134I	348.036	80.823	152.588	30.530	0.35416	2.71142	2	X
	K04E34S	16.1	0.15	K134I	18.225	165.733	14.486	15.199	0.11067	2.70454	5	X
	K04E52R	16.5	0.15	K134I	120.739	293.033	163.615	14.030	0.02236	2.64259	8	X
	K04E81M	16.1	0.15	K134I	25.947	122.091	60.700	14.514	0.16581	2.67884	6	X
	K04E86U	16.8	0.15	K134I	11.691	69.022	131.780	5.393	0.23252	2.67034	3	X
	K04F44T	15.9	0.15	K134I	309.878	79.098	179.181	25.045	0.10546	2.72085	2	X
	K04F53L	16.5	0.15	K134I	1.300	241.661	328.347	10.824	0.14841	2.64493	4	X
	K04H07U	16.5	0.15	K134I	39.641	68.249	82.757	4.633	0.12869	2.74733	5	X
	K04H08S	17.5	0.15	K134I	333.257	178.313	61.638	8.409	0.24549	2.74155	3	X
	K04R22O	16.1	0.15	K134I	288.159	312.152	352.171	8.107	0.22056	2.92372	5	X
	K04RF1Q	16.9	0.15	K134I	265.111	143.765	177.539	9.990	0.09043	2.97472	6	X
	K04RL2D	15.6	0.15	K134I	238.011	28.904	305.517	12.404	0.07773	3.06070	5	X
	K04RQ8J	16.1	0.15	K134I	349.563	59.156	172.791	12.532	0.09974	2.98137	6	X
	K04RY0P	15.9	0.15	K134I	252.189	269.999	78.237	13.329	0.23771	2.97971	7	X
	K04T05H	16.6	0.15	K134I	322.666	204.859	39.789	7.060	0.07951	2.26968	3	X
	K04T12P	17.8	0.15	K134I	255.239	96.785	224.640	24.784	0.15886	1.78951	5	X
	K04T07K	15.2	0.15	K134I	208.010	263.656	115.902	12.685	0.20994	3.09908	7	X
	K04V15E	15.1	0.15	K134I	187.876	291.698	101.540	18.755	0.16569	3.20228	4	X
	K04XD1N	17.2	0.15	K134I	71.695	50.563	52.203	10.724	0.20405	2.38992	5	X
	K05A40W	17.2	0.15	K134I	51.734	25.439	116.619	7.961	0.19999	2.41755	3	X
	K05B40Q	17.2	0.15	K134I	167.309	282.073	121.628	7.772	0.09654	2.36269	7	X
	K05F08Q	17.0	0.15	K134I	0.887	81.640	118.956	23.768	0.08464	1.91234	6	X
	K05G22O	18.6	0.15	K134I	30.506	18.757	61.986	1.587	0.82421	1.91446	3	X
	K05GA7Q	18.2	0.15	K134I	11.832	162.181	21.110	21.753	0.08769	1.92938	2	X
	K05J03O	19.9	0.15	K134I	275.552	294.324	17.750	29.112	0.33102	1.36273	2	X
	K05J68R	16.9	0.15	K134I	347.329	138.648	90.397	14.111	0.14615	2.52699	6	X
	K05J74L	16.2	0.15	K134I	30.401	300.066	228.220	28.243	0.14247	2.55242	5	X
	K05JC2L	17.5	0.15	K134I	339.080	120.588	103.510	5.279	0.15650	2.55822	3	X
	K05JH6V	16.6	0.15	K134I	322.226	103.451	149.982	13.915	0.12266	2.55713	5	X
	K05K04O	17.1	0.15	K134I	336.485	175.486	74.836	11.109	0.13395	2.52718	5	X
	K05K07L	17.0	0.15	K134I	6.012	70.453	138.304	13.898	0.19925	2.54593	4	X
	K05K11O	17.2	0.15	K134I	316.018	127.003	148.147	5.894	0.15594	2.54606	6	X
	K05L08Z	17.0	0.15	K134I	246.327	246.869	104.738	13.419	0.17856	2.56547	3	X
	K05N16D	16.6	0.15	K134I	293.603	179.194	110.127	12.835	0.10547	2.65857	7	X
	K05N87G	16.6	0.15	K134I	279.197	258.176	73.793	13.632	0.28574	2.63818	4	X
	K05O25W	16.5	0.15	K134I	312.877	110.099	164.569	13.242	0.25938	2.65258	5	X
	K05Q17C	16.4	0.15	K134I	301.742	146.878	155.734	13.303	0.27301	2.65552	6	X
	K05Q20H	16.5	0.15	K134I	239.641	198.024	161.255	10.538	0.21895	2.72493	6	X
	K05QI9A	15.8	0.15	K134I	291.681	182.696	126.873	12.563	0.20857	2.71950	6	X
	K05R13K	16.9	0.15	K134I	260.450	228.919	111.422	9.470	0.27373	2.67724	4	X
	K05SB3J	17.1	0.15	K134I	311.921	117.928	173.142	13.659	0.17932	2.65443	5	X
	K05SG7L	16.2	0.15	K134I	250.978	224.303	119.163	9.457	0.22588	2.76807	7	X
	K05SM1W	16.8	0.15	K134I	259.144	203.214	141.068	12.946	0.20147	2.71797	6	X
	K05SS7T	16.5	0.15	K134I	62.245	53.716	88.582	14.145	0.10439	3.00386	4	X
	K05T14V	16.4	0.15	K134I	286.165	178.969	124.571	8.852	0.14153	2.72629	4	X
	K05T54Q	15.9	0.15	K134I	285.479	271.795	46.062	9.571	0.24350	2.72545	5	X
	K05TD5X	16.4	0.15	K134I	242.707	159.653	185.980	13.452	0.10590	2.79689	4	X
	K05TE9Q	17.0	0.15	K134I	276.538	142.093	179.005	9.324	0.12890	2.76891	5	X
	K05UW5T	16.4	0.15	K134I	358.804	120.852	76.504	2.602	0.12821	2.97661	5	X
	K05UX6M	16.7	0.15	K134I	79.608	353.660	127.878	2.209	0.12821	3.06288	5	X
	K05Uj4D	15.6	0.15	K134I	85.493	34.253	68.815	17.972	0.19273	3.15899	4	X

K05Up5L	16.7	0.15	K134I	293.410	131.607	166.218	15.405	0.15329	2.83893	4	X
K05W02F	16.0	0.15	K134I	91.996	25.967	80.325	18.464	0.16905	3.12584	3	X
K05W51Q	15.8	0.15	K134I	355.927	147.425	74.650	11.495	0.06503	3.06324	5	X
K05WB5S	16.6	0.15	K134I	281.392	244.064	49.461	15.602	0.14030	2.86362	5	X
K05WE0G	16.0	0.15	K134I	227.873	266.594	91.648	8.043	0.13307	3.02904	7	X
K05WE8J	15.9	0.15	K134I	113.714	344.364	79.813	11.352	0.16166	3.12320	4	X
K05X03V	15.8	0.15	K134I	70.276	49.942	75.265	11.085	0.16232	3.16351	4	X
K05X78Q	15.6	0.15	K134I	150.067	3.143	40.864	11.882	0.07392	3.09223	5	X
K05Y02B	16.0	0.15	K134I	341.415	320.647	267.310	15.148	0.03397	3.04691	5	X
K05Y21C	16.2	0.15	K134I	104.434	8.382	104.404	11.193	0.02602	3.14906	3	X
K05Y78Z	16.2	0.15	K134I	352.414	118.965	105.085	12.013	0.03883	3.16465	3	X
K05YA2J	15.8	0.15	K134I	163.474	302.533	105.559	10.103	0.09167	3.11508	5	X
K05YB3T	15.4	0.15	K134I	145.313	338.130	89.272	9.673	0.06228	3.16350	5	X
K05YC7O	16.1	0.15	K134I	128.793	5.094	69.803	18.783	0.19677	3.13260	4	X
K05YF0T	15.6	0.15	K134I	147.382	330.748	94.428	11.455	0.06604	3.16469	4	X
K05YL5O	15.8	0.15	K134I	67.771	65.719	74.611	17.612	0.09582	3.07905	6	X
K05YR0J	16.0	0.15	K134I	235.807	219.091	132.980	11.425	0.07285	3.11011	4	X
K05YR9N	16.1	0.15	K134I	155.364	315.864	106.254	10.925	0.07208	3.12307	5	X
K06A05R	17.3	0.15	K134I	14.232	83.670	94.678	22.259	0.04432	2.26203	4	X
K06A11R	16.8	0.15	K134I	341.441	110.600	123.822	14.291	0.05423	3.19336	4	X
K06B22W	18.0	0.15	K134I	356.954	79.292	124.656	2.826	0.09238	2.23228	3	X
K06B24H	16.0	0.15	K134I	232.160	224.188	131.258	10.131	0.14628	3.10399	5	X
K06B30M	15.5	0.15	K134I	158.526	293.069	125.012	13.924	0.12805	3.19482	4	X
K06B88Y	18.2	0.15	K134I	19.272	169.200	345.307	1.887	0.16080	2.28380	4	X
K06BD3W	18.0	0.15	K134I	38.809	354.433	151.909	7.328	0.15980	2.27112	5	X
K06BO6N	17.8	0.15	K134I	16.363	56.916	125.120	2.787	0.06407	2.23959	8	X
K06D14W	15.4	0.15	K134I	172.094	303.970	97.818	10.475	0.08652	3.23548	5	X
K06F39X	18.2	0.15	K134I	47.171	115.183	32.145	6.720	0.14657	2.28122	3	X
K06F44D	17.5	0.15	K134I	335.446	141.547	94.946	6.953	0.12948	2.27821	5	X
K06F53R	17.8	0.15	K134I	327.057	194.204	50.560	3.019	0.18180	2.32806	3	X
K06G41A	17.4	0.15	K134I	18.890	47.829	138.497	7.437	0.16026	2.28677	3	X
K06HA8O	17.5	0.15	K134I	13.147	49.577	152.669	6.091	0.12748	2.30092	5	X
K06Q32V	17.3	0.15	K134I	294.660	127.728	167.484	11.247	0.25961	2.43665	4	X
K06R03M	18.0	0.15	K134I	108.001	66.295	353.775	20.268	0.09739	1.92994	5	X
K06R05M	17.9	0.15	K134I	101.314	272.637	191.702	22.528	0.07547	1.87248	4	X
K06S13W	17.1	0.15	K134I	195.472	204.795	184.353	16.923	0.12691	2.56949	5	X
K06SQ3Y	16.5	0.15	K134I	321.712	19.688	238.181	8.595	0.15312	2.57417	4	X
K06T31J	18.4	0.15	K134I	297.176	239.188	29.781	21.947	0.07899	1.88686	2	X
K06U70D	15.2	0.15	K134I	137.859	19.047	50.244	37.267	0.17411	2.75554	6	X
K06UF6A	16.7	0.15	K134I	67.269	359.987	138.453	6.278	0.12418	2.68486	4	X
K06V48C	16.2	0.15	K134I	329.285	50.307	222.960	10.813	0.16000	2.57403	7	X
K06V74J	16.6	0.15	K134I	229.708	285.137	74.158	15.339	0.13121	2.65658	4	X
K06V81T	18.6	0.15	K134I	64.693	92.197	30.292	20.734	0.08640	1.92643	3	X
K06V82L	16.5	0.15	K134I	312.687	32.551	243.247	13.635	0.06864	2.63572	5	X
K06V85D	16.4	0.15	K134I	160.740	323.457	85.971	9.583	0.18600	2.72050	4	X
K06V86L	17.0	0.15	K134I	255.818	267.797	77.559	7.445	0.25043	2.53961	5	X
K06VA3J	17.1	0.15	K134I	253.521	251.358	79.474	14.433	0.12986	2.66393	5	X
K06W33S	16.5	0.15	K134I	265.523	208.101	86.883	7.195	0.01407	2.76173	7	X
K06WC3Y	16.5	0.15	K134I	40.970	130.136	32.298	7.352	0.06562	2.78151	5	X
K06WG1E	16.4	0.15	K134I	27.790	105.009	74.838	9.832	0.10722	2.77490	6	X
K06X67L	17.0	0.15	K134I	10.836	10.927	173.913	17.075	0.14700	2.77201	4	X
K07A00N	16.1	0.15	K134I	263.786	264.249	72.442	14.798	0.22260	2.61987	4	X
K07C19N	15.9	0.15	K134I	91.162	14.029	98.887	16.377	0.08910	2.84542	5	X
K07C33O	16.3	0.15	K134I	357.039	258.216	317.080	9.283	0.05625	3.00158	6	X
K07D32Y	15.8	0.15	K134I	17.520	40.001	157.747	10.235	0.05972	3.09857	3	X
K07D35V	16.1	0.15	K134I	37.649	11.903	168.359	10.154	0.04106	3.07203	6	X
K07D91H	15.8	0.15	K134I	346.189	82.037	151.654	12.529	0.10848	3.06030	4	X
K07D96O	16.4	0.15	K134I	345.451	59.833	174.165	12.172	0.09691	3.11842	3	X
K07E53Y	15.6	0.15	K134I	112.945	250.193	201.253	25.229	0.20321	3.20251	4	X
K07E72K	15.6	0.15	K134I	163.721	31.638	9.410	16.606	0.09611	3.17305	3	X
K07ED2F	16.4	0.15	K134I	56.409	332.134	178.364	12.964	0.10541	3.14978	5	X
K07ED6B	15.8	0.15	K134I	259.459	149.557	178.663	16.918	0.11907	3.09678	4	X
K07EF1U	15.7	0.15	K134I	359.130	37.478	162.372	17.013	0.07239	3.20595	4	X
K07EF7T	16.4	0.15	K134I	13.943	58.813	142.210	10.477	0.16867	3.05968	5	X
K07F12E	15.1	0.15	K134I	335.590	97.992	160.900	21.408	0.19686	3.19273	6	X
K07F35N	15.4	0.15	K134I	113.195	315.382	131.434	11.401	0.04023	3.15370	4	X
K07G11L	16.3	0.15	K134I	3.390	79.170	139.025	9.178	0.08018	3.12692	5	X
K07Q05L	17.9	0.15	K134I	239.851	217.201	138.080	6.715	0.17976	2.22908	5	X
K07R55B	16.9	0.15	K134I	51.863	285.371	188.651	28.329	0.36049	2.59484	5	X
K07R93L	17.4	0.15	K134I	281.726	252.538	44.624	5.563	0.15966	2.26136	5	X
K07R95U	17.7	0.15	K134I	201.601	215.678	163.790	6.271	0.12837	2.31864	4	X
K07RG9K	17.0	0.15	K134I	0.022	66.609	151.460	6.393	0.05461	2.27119	3	X
K07RW3X	17.1	0.15	K134I	237.666	239.898	91.503	7.966	0.14136	2.31719	6	X
K07RW3Y	17.4	0.15	K134I	112.595	32.914	47.661	1.843	0.15601	2.44962	5	X
K07S21O	17.5	0.15	K134I	247.392	219.871	126.788	5.739	0.15504	2.26358	4	X
K07TD4S	17.5	0.15	K134I	258.667	341.862	338.753	5.535	0.11183	2.25898	3	X

K07TI1E	17.2	0.15	K134I	184.354	251.761	139.202	6.799	0.11376	2.35055	5	X
K07TI2P	16.8	0.15	K134I	181.416	296.321	101.076	10.724	0.12535	2.36680	5	X
K07TT2A	17.2	0.15	K134I	317.528	241.742	7.598	7.013	0.08822	2.32707	3	X
K07TX8L	17.4	0.15	K134I	15.537	149.260	26.542	6.795	0.06755	2.41519	4	X
K07Ta4D	16.7	0.15	K134I	115.532	342.395	105.318	13.639	0.12605	2.62298	5	X
K07Tj1W	15.9	0.15	K134I	265.175	91.857	231.006	22.507	0.25177	2.31399	5	X
K07U18A	16.9	0.15	K134I	136.567	302.617	122.087	7.287	0.20013	2.45127	4	X
K07U50Y	16.5	0.15	K134I	168.105	322.004	86.323	10.616	0.10492	2.41928	5	X
K07VP1U	16.6	0.15	K134I	61.123	13.236	95.909	10.559	0.29723	2.67786	4	X
K07VU3L	16.6	0.15	K134I	176.998	279.463	118.740	10.947	0.21383	2.36351	4	X
K07W52U	16.8	0.15	K134I	66.156	21.962	96.695	10.519	0.16365	2.56937	6	X
K07W55S	16.2	0.15	K134I	123.326	318.370	69.437	34.130	0.28894	2.60249	4	X
K07W58W	17.3	0.15	K134I	78.807	20.668	94.493	15.331	0.19820	2.64051	3	X
K07X30Y	17.0	0.15	K134I	81.380	11.886	111.134	7.605	0.13520	2.62434	4	X
K07X50Z	16.5	0.15	K134I	75.317	48.270	71.441	15.057	0.20640	2.69135	4	X
K08A05J	16.8	0.15	K134I	64.181	22.675	121.553	8.691	0.10376	2.65754	5	X
K08A15Q	17.4	0.15	K134I	116.819	319.383	130.626	14.924	0.03813	2.61328	3	X
K08A21C	16.6	0.15	K134I	298.249	149.481	119.543	5.777	0.07361	2.70801	7	X
K08A22V	16.7	0.15	K134I	112.261	347.376	115.180	7.046	0.02370	2.64946	5	X
K08A39J	17.1	0.15	K134I	105.931	350.206	117.308	6.849	0.05811	2.62211	4	X
K08A41T	17.4	0.15	K134I	97.069	301.717	154.033	5.444	0.22195	2.62923	3	X
K08A81A	16.6	0.15	K134I	259.937	183.966	140.427	14.992	0.07961	2.59441	4	X
K08B13C	17.1	0.15	K134I	28.571	83.521	92.351	13.436	0.15615	2.69588	4	X
K08C15N	16.2	0.15	K134I	36.187	35.128	135.210	8.673	0.14806	2.74342	4	X
K08C19J	17.0	0.15	K134I	32.240	64.377	103.594	11.105	0.14747	2.71490	4	X
K08C37K	17.2	0.15	K134I	84.857	317.441	161.067	9.280	0.10455	2.71626	3	X
K08C43W	16.5	0.15	K134I	211.105	227.013	139.344	12.376	0.05845	2.71126	4	X
K08C44M	17.1	0.15	K134I	89.310	347.819	134.500	6.579	0.08965	2.70974	3	X
K08C67P	17.1	0.15	K134I	309.290	178.095	97.467	7.213	0.10644	2.69789	4	X
K08CA7Z	16.8	0.15	K134I	127.061	297.883	141.510	13.174	0.16753	2.67845	3	X
K08CB9N	16.8	0.15	K134I	339.551	82.335	141.270	5.342	0.15070	2.76957	4	X
K08CC6Q	16.9	0.15	K134I	295.989	333.703	298.973	2.225	0.03088	2.70856	5	X
K08CE7L	16.5	0.15	K134I	329.837	76.533	168.830	11.607	0.04248	2.70934	5	X
K08CH8F	16.3	0.15	K134I	325.990	157.519	82.252	8.536	0.09190	2.72283	6	X
K08D56V	16.6	0.15	K134I	50.957	69.453	84.448	13.543	0.14455	2.77277	3	X
K08D70R	16.2	0.15	K134I	339.694	189.820	26.012	10.884	0.05370	2.82979	4	X
K08D75S	17.2	0.15	K134I	73.483	347.713	149.553	5.370	0.05030	2.72420	3	X
K08E01M	16.4	0.15	K134I	353.508	290.136	279.605	11.830	0.14798	2.72793	4	X
K08E17Q	15.9	0.15	K134I	319.861	273.386	350.559	14.362	0.13134	2.86621	5	X
K08E70O	18.6	0.15	K134I	103.479	86.529	339.678	20.494	0.07793	1.85034	2	X
K08E76H	18.8	0.15	K134I	293.567	262.319	15.495	21.235	0.13827	1.84747	4	X
K08E86Z	16.4	0.15	K134I	70.901	329.308	171.822	9.441	0.09129	2.78901	5	X
K08E93S	15.9	0.15	K134I	243.708	191.153	144.656	15.717	0.01369	2.73393	6	X
K08EB5X	17.4	0.15	K134I	83.302	299.498	180.593	13.185	0.15361	2.77268	5	X
K08F76Q	18.0	0.15	K134I	123.100	223.739	181.874	22.298	0.11079	1.85249	4	X
K08G80E	16.8	0.15	K134I	102.017	345.438	124.812	6.748	0.03172	2.84127	5	X
K08G87W	15.6	0.15	K134I	305.612	92.276	162.666	11.384	0.04912	2.97112	4	X
K08H07L	15.9	0.15	K134I	315.503	93.383	161.116	12.518	0.15850	3.01726	6	X
K08H25O	15.9	0.15	K134I	212.360	286.129	85.707	12.259	0.13446	2.99178	5	X
K08J02R	17.9	0.15	K134I	202.046	303.433	72.776	23.226	0.12368	1.85477	5	X
K08J09B	15.6	0.15	K134I	208.310	282.043	66.195	13.570	0.03605	3.13331	4	X
K08J12W	16.2	0.15	K134I	308.782	151.704	125.000	9.575	0.07070	2.99016	5	X
K08J14P	19.3	0.15	K134I	311.508	206.323	129.118	10.714	0.61793	1.85475	3	X
K08J18D	16.0	0.15	K134I	80.161	37.024	90.215	10.747	0.05807	3.02648	4	X
K08J22D	16.2	0.15	K134I	337.807	174.010	68.695	15.249	0.08187	2.96890	4	X
K08J33G	15.8	0.15	K134I	311.151	98.051	175.894	15.976	0.12388	3.03616	4	X
K08K01Y	17.8	0.15	K134I	106.116	29.650	75.309	20.603	0.05071	1.86512	5	X
K08K16O	16.1	0.15	K134I	85.872	335.609	149.734	10.609	0.04419	3.03216	4	X
K08K32M	16.1	0.15	K134I	42.375	352.061	184.465	10.001	0.03569	2.97212	5	X
K08K39B	16.6	0.15	K134I	31.708	352.072	193.299	14.488	0.07383	3.01551	4	X
K08L08L	16.3	0.15	K134I	337.863	116.025	128.644	10.676	0.06215	2.96841	4	X
K08L12B	16.6	0.15	K134I	18.114	101.388	94.077	11.685	0.11941	2.99244	4	X
K08L12K	18.2	0.15	K134I	281.374	88.861	198.096	21.363	0.06725	1.89826	6	X
K08L13L	16.8	0.15	K134I	308.367	109.699	176.995	11.387	0.14293	2.97312	6	X
K08Q15Q	16.5	0.15	K134I	332.957	113.503	177.994	20.992	0.36680	3.06031	5	X
K08UC9B	18.0	0.15	K134I	42.764	231.578	235.756	5.948	0.26724	2.35360	3	X
K08W77W	17.9	0.15	K134I	26.678	65.029	79.605	7.810	0.35208	2.39088	3	X
K08WA6Q	17.6	0.15	K134I	95.371	62.100	32.324	6.210	0.05328	2.20057	4	X
K08Y18V	17.6	0.15	K134I	144.477	318.345	105.002	8.518	0.08289	2.24789	4	X
K08Y38D	17.0	0.15	K134I	27.788	84.304	100.314	7.748	0.04014	2.22709	7	X
K08Y79R	17.2	0.15	K134I	105.244	326.896	137.765	7.533	0.05663	2.27541	3	X
K08YA1Q	18.0	0.15	K134I	6.903	78.107	127.524	6.005	0.17721	2.30531	4	X
K08YD3S	17.4	0.15	K134I	47.991	46.188	89.562	6.872	0.17077	2.37283	4	X
K08YE6D	17.4	0.15	K134I	44.944	29.375	126.736	8.538	0.15271	2.33678	6	X
K09A01Z	17.4	0.15	K134I	112.039	325.638	117.712	7.402	0.21555	2.24671	5	X
K09BA5Y	18.2	0.15	K134I	355.564	305.205	268.352	1.193	0.28062	2.43532	4	X
K09BA6O	17.4	0.15	K134I	24.291	65.580	120.374	5.583	0.15164	2.37670	7	X

K09BC5N	17.3	0.15	K134I	138.539	322.195	103.821	7.477	0.16894	2.29572	5	X
K09BH2T	17.4	0.15	K134I	62.266	277.584	189.487	6.250	0.19883	2.41332	4	X
K09BI9J	17.5	0.15	K134I	329.443	87.990	150.930	5.794	0.12192	2.37552	5	X
K09C05E	18.0	0.15	K134I	27.774	44.198	136.856	7.947	0.11155	2.29389	5	X
K09C30X	17.6	0.15	K134I	359.131	179.096	15.543	2.863	0.13630	2.45771	4	X
K09C33G	17.6	0.15	K134I	333.749	107.378	138.222	8.341	0.05911	2.35978	6	X
K09D19S	17.3	0.15	K134I	21.603	104.151	65.902	10.507	0.17466	2.46359	4	X
K09D77U	17.2	0.15	K134I	58.840	117.696	346.376	15.054	0.07444	2.52816	4	X
K09D94E	17.4	0.15	K134I	81.642	4.773	120.974	6.464	0.05423	2.42226	5	X
K09DC1Z	18.0	0.15	K134I	341.041	80.882	164.314	11.057	0.20509	2.43112	4	X
K09E21S	17.3	0.15	K134I	24.158	354.083	174.003	6.408	0.14220	2.42381	4	X
K09E28F	17.6	0.15	K134I	53.630	37.668	114.894	3.354	0.13059	2.47303	5	X
K09F41C	17.7	0.15	K134I	105.832	312.737	156.867	6.988	0.05155	2.38370	5	X
K09F47W	17.2	0.15	K134I	341.325	199.822	33.095	16.935	0.09291	2.51636	4	X
K09H18U	16.5	0.15	K134I	350.381	8.681	209.035	18.390	0.15402	2.58566	6	X
K09H44Q	16.8	0.15	K134I	138.655	281.678	152.493	11.783	0.09148	2.54968	6	X
K09H65L	17.0	0.15	K134I	334.777	170.868	72.129	9.911	0.08203	2.55044	6	X
K09H73B	17.0	0.15	K134I	359.738	109.233	93.543	9.453	0.11126	2.57942	5	X
K09H75P	16.8	0.15	K134I	353.550	93.480	128.915	5.797	0.15121	2.52869	6	X
K09H91W	15.5	0.15	K134I	234.868	302.415	49.218	31.632	0.23413	2.62923	3	X
K09H97J	17.6	0.15	K134I	324.282	32.406	192.721	16.057	0.20411	2.67008	4	X
K09J00L	16.5	0.15	K134I	296.132	232.325	53.674	13.477	0.23551	2.62180	7	X
K09J01X	16.4	0.15	K134I	283.160	170.163	137.812	11.787	0.25055	2.63139	6	X
K09J07F	16.3	0.15	K134I	306.195	194.635	83.641	17.079	0.13735	2.58637	4	X
K09J12P	16.7	0.15	K134I	309.344	208.830	59.348	12.644	0.15348	2.59690	5	X
K09K08B	16.4	0.15	K134I	311.642	131.537	145.914	11.687	0.17621	2.61739	6	X
K09K08N	17.1	0.15	K134I	261.384	170.628	170.866	12.624	0.21884	2.59904	4	X
K09K16F	17.3	0.15	K134I	327.266	157.084	104.637	6.810	0.14445	2.55129	6	X
K09L05G	16.5	0.15	K134I	273.524	198.034	128.346	12.161	0.20365	2.78750	8	X
K09L06F	16.3	0.15	K134I	318.450	175.739	111.400	14.956	0.23374	2.67153	7	X
K09O15U	16.6	0.15	K134I	300.037	143.806	156.939	9.346	0.18684	2.78014	3	X
K09Q32E	16.2	0.15	K134I	139.359	288.058	148.171	15.757	0.06876	3.11985	3	X
K09Q42P	15.8	0.15	K134I	235.075	202.797	151.023	7.774	0.15742	3.09859	5	X
K09R58S	15.6	0.15	K134I	299.935	256.283	30.702	20.948	0.29847	3.11104	4	X
K09R64E	15.2	0.15	K134I	294.815	338.066	304.861	11.500	0.11739	3.09155	3	X
K09S14Z	18.1	0.15	K134I	115.690	37.456	26.162	38.157	0.17041	1.85840	3	X
K09S15C	21.4	0.15	K134I	36.263	333.774	178.679	6.844	0.17926	1.26560	3	X
K09S22M	16.0	0.15	K134I	308.079	62.343	174.051	19.859	0.12617	3.20510	4	X
K09S97D	16.6	0.15	K134I	268.847	144.513	182.768	13.223	0.16843	2.97447	4	X
K09SN5N	15.5	0.15	K134I	270.739	276.794	63.117	26.678	0.30200	3.17961	3	X
K09SQ3S	16.2	0.15	K134I	255.057	159.480	178.391	16.330	0.07865	3.18596	6	X
K09SY0E	15.9	0.15	K134I	266.541	208.016	132.626	11.919	0.23136	3.04782	5	X
K09V76P	18.8	0.15	K134I	97.361	232.137	231.836	18.487	0.16260	1.82262	2	K
K10H71H	17.2	0.15	K134I	279.527	198.424	116.625	6.356	0.18445	2.30514	6	X
K10L09J	16.3	0.15	K134I	349.566	232.809	354.510	10.719	0.25519	2.32625	6	X
K10LA2T	16.3	0.15	K134I	359.460	286.044	274.652	15.639	0.20125	2.57595	2	X
K10LA4A	17.7	0.15	K134I	311.123	174.961	116.348	9.068	0.24687	2.17067	3	X
K10M10B	17.2	0.15	K134I	286.331	189.424	131.310	6.721	0.26212	2.33032	6	X
K10M89L	16.9	0.15	K134I	197.846	282.453	99.482	7.213	0.16244	2.70397	7	X
K10N01D	17.1	0.15	K134I	311.902	151.328	122.490	27.413	0.23862	2.23539	4	X
K10P41N	17.1	0.15	K134I	246.524	216.887	132.211	8.721	0.14893	2.64443	4	X
K10P57K	17.3	0.15	K134I	302.962	96.234	170.202	1.370	0.16520	2.38381	5	X
K10P73V	17.0	0.15	K134I	233.388	198.288	152.648	15.105	0.14617	2.46670	4	X
K10R51F	15.5	0.15	K134I	69.311	105.663	14.538	9.956	0.04607	3.05883	5	X
K10RG5F	16.8	0.15	K134I	252.338	150.586	186.277	14.861	0.13836	2.57499	5	X
K10RH7Q	16.9	0.15	K134I	270.199	173.877	122.981	4.280	0.07853	2.76954	5	X
K10T34Q	16.4	0.15	K134I	359.349	189.948	43.521	6.108	0.18161	2.53578	4	X
K10TA3Z	15.2	0.15	K134I	28.710	135.110	20.994	27.802	0.15969	3.20474	3	X
K10U95D	16.4	0.15	K134I	235.481	297.334	61.342	15.048	0.23643	2.66785	4	X
K10V01Z	16.3	0.15	K134I	112.300	196.747	254.041	7.640	0.03581	3.08572	5	X
K10V28R	15.5	0.15	K134I	154.302	352.114	62.123	17.712	0.10637	3.07933	5	X
K10V37F	15.5	0.15	K134I	171.111	314.956	88.717	17.471	0.23388	3.10245	4	X
K10VC0S	15.7	0.15	K134I	300.245	221.248	71.815	16.193	0.13169	2.85122	7	X
K10VI2N	16.1	0.15	K134I	220.497	285.318	77.009	15.818	0.16875	2.86878	5	X
K10W21M	15.8	0.15	K134I	316.810	201.421	64.846	14.833	0.08172	3.08426	5	X
K10X06X	16.7	0.15	K134I	261.348	213.592	120.196	10.095	0.15369	2.78028	5	X
K10X60U	16.7	0.15	K134I	270.147	251.863	83.500	16.786	0.24219	2.66276	5	X
K10X76P	15.8	0.15	K134I	209.578	272.987	95.412	10.308	0.09966	3.13440	4	X
K10X80T	14.8	0.15	K134I	12.287	83.039	104.471	15.546	0.13608	3.93993	5	X
K11S35K	17.2	0.15	K134I	36.981	321.812	193.024	21.464	0.14179	2.29153	3	X
K11SF9J	16.1	0.15	K134I	41.944	111.342	353.531	15.665	0.25430	3.10633	3	X
K11U04G	18.2	0.15	K134I	301.528	248.389	23.577	21.650	0.13594	1.90213	2	X
K11UC9B	16.3	0.15	K134I	36.704	117.649	34.999	11.807	0.07709	2.63653	4	X
K11UI8N	17.5	0.15	K134I	117.099	6.950	79.736	8.842	0.10293	2.32196	4	X
K11UP0U	17.0	0.15	K134I	71.496	49.412	68.910	13.032	0.11866	2.65429	4	X
K11UQ6X	17.8	0.15	K134I	281.200	241.879	62.654	22.181	0.07702	1.94352	4	X
K11Ue4X	16.5	0.15	K134I	38.746	304.329	177.722	8.417	0.15827	2.79266	6	X

K11W27B	18.2	0.15	K134I	119.317	334.733	106.894	4.909	0.16798	2.37017	5 X
K11W95U	19.2	0.15	K134I	311.670	242.188	67.842	6.724	0.42461	1.66626	2 X
K11WB4E	15.9	0.15	K134I	111.710	234.024	190.035	28.156	0.16004	2.69916	6 X
K11WB6N	16.3	0.15	K134I	39.868	258.442	260.352	11.158	0.12025	2.61878	5 X
K11Y07L	16.2	0.15	K134I	127.825	333.736	105.383	14.817	0.16389	2.77589	3 X
K11Y07R	16.1	0.15	K134I	87.403	4.247	99.393	11.846	0.17441	3.15475	4 X
K11Y19N	16.5	0.15	K134I	162.061	263.738	150.225	16.210	0.09597	2.72951	6 X
K11Y59S	16.2	0.15	K134I	145.763	309.335	116.939	15.844	0.07383	2.73978	5 X
K11Y60V	17.0	0.15	K134I	228.571	207.289	155.458	7.155	0.12801	2.39381	6 X
K11Y68M	15.4	0.15	K134I	26.582	88.389	76.349	12.042	0.10539	3.33093	5 X
K11Y69F	16.1	0.15	K134I	85.899	350.982	121.529	11.805	0.16985	3.14947	3 X
K12A12S	15.1	0.15	K134I	44.706	175.423	340.951	16.319	0.05773	3.19072	4 X
K12A18U	17.2	0.15	K134I	212.231	240.362	131.101	10.407	0.10103	2.52749	4 X
K12A19H	15.6	0.15	K134I	332.775	104.522	146.375	10.104	0.03099	3.13047	6 X
K12A21E	15.8	0.15	K134I	66.285	330.307	168.971	8.043	0.13652	3.11881	5 X
K12B00N	16.5	0.15	K134I	83.000	23.673	107.205	10.049	0.03567	2.70317	4 X
K12B04J	16.6	0.15	K134I	107.855	348.330	117.435	9.214	0.05520	2.71551	4 X
K12B09H	16.1	0.15	K134I	157.977	251.160	163.682	10.781	0.07950	3.19549	4 X
K12B09S	15.6	0.15	K134I	146.369	279.156	153.047	16.364	0.05163	3.20133	7 X
K12B11S	15.8	0.15	K134I	16.600	64.625	134.029	10.240	0.04107	3.17577	5 X
K12B14O	16.5	0.15	K134I	172.148	322.954	82.400	15.647	0.09106	2.58248	7 X
K12B21J	15.3	0.15	K134I	8.876	280.008	274.179	14.254	0.04787	3.18724	4 X
K12B30Q	15.7	0.15	K134I	8.355	68.988	124.525	11.306	0.06864	3.12808	5 X
K12B30V	16.2	0.15	K134I	114.702	327.151	128.718	15.289	0.06891	2.77167	4 X
K12B32S	15.9	0.15	K134I	82.571	15.755	100.913	12.385	0.04914	3.13206	6 X
K12B33S	17.1	0.15	K134I	215.810	322.025	40.516	3.510	0.17576	2.45256	3 X
K12B43L	16.0	0.15	K134I	341.956	120.537	115.640	9.159	0.14567	3.14365	2 X
K12B43T	16.5	0.15	K134I	232.685	239.318	109.137	6.224	0.01226	2.71133	5 X
K12B58Q	16.0	0.15	K134I	294.202	182.988	105.457	9.297	0.19328	2.75529	6 X
K12B70Y	16.2	0.15	K134I	99.956	333.806	125.876	11.533	0.17624	3.15955	5 X
K12B76D	16.0	0.15	K134I	302.507	148.478	136.381	10.072	0.05382	3.01176	6 X
K12B89E	16.0	0.15	K134I	354.364	111.408	115.772	11.963	0.05568	3.03654	5 X
K12B90O	15.9	0.15	K134I	149.075	258.216	165.435	11.843	0.11642	3.04771	5 X
K12B95A	16.5	0.15	K134I	118.756	300.634	153.634	8.689	0.10383	3.05507	5 X
K12BB0R	16.0	0.15	K134I	130.728	308.593	136.050	11.185	0.06739	3.11903	4 X
K12BD3R	15.5	0.15	K134I	67.657	48.765	99.453	10.931	0.01835	3.08489	5 X
K12BD9D	16.2	0.15	K134I	63.146	353.217	161.828	9.216	0.03053	3.17693	5 X
K12BE5O	17.1	0.15	K134I	262.879	198.548	135.998	7.681	0.15890	2.30385	7 X
K12BE6B	15.6	0.15	K134I	141.212	279.369	136.404	10.868	0.03450	3.20417	7 X
K12BE7A	16.7	0.15	K134I	163.955	281.384	127.746	9.907	0.02498	2.96234	5 X
K12BF1W	16.3	0.15	K134I	94.660	279.064	191.007	8.145	0.15933	3.20475	5 X
K12C05J	15.9	0.15	K134I	117.511	343.459	100.257	11.098	0.19652	3.14426	3 X
K12C05X	15.9	0.15	K134I	224.948	241.198	109.985	11.907	0.06304	3.10166	5 X
K12C07Z	16.1	0.15	K134I	121.568	287.783	153.121	12.146	0.12155	3.22948	5 X
K12C09V	16.0	0.15	K134I	101.449	322.791	150.510	10.103	0.03226	3.17740	4 X
K12C09Y	15.8	0.15	K134I	179.837	252.650	148.237	10.738	0.01123	3.07009	5 X
K12C16C	16.3	0.15	K134I	292.609	145.024	144.687	9.497	0.02202	3.12953	6 X
K12C16P	15.5	0.15	K134I	302.999	149.766	135.332	12.472	0.05114	3.12869	4 X
K12C25S	15.8	0.15	K134I	121.682	277.036	169.419	18.871	0.14247	3.18829	4 X
K12C29P	16.9	0.15	K134I	231.219	211.441	143.990	7.029	0.05667	2.79238	5 X
K12C30E	16.2	0.15	K134I	282.051	223.162	75.975	10.528	0.04119	2.88006	6 X
K12C30F	16.0	0.15	K134I	116.526	13.892	85.949	11.756	0.02100	2.90338	5 X
K12C34A	15.3	0.15	K134I	300.658	147.313	134.117	10.303	0.07939	3.12277	6 X
K12C38X	15.9	0.15	K134I	94.386	344.701	138.808	10.360	0.02153	3.05140	4 X
K12C41X	16.3	0.15	K134I	280.104	166.933	145.240	16.746	0.08022	2.80846	4 X
K12C43B	16.2	0.15	K134I	109.676	355.367	103.256	10.196	0.09157	3.13254	3 X
K12C51H	15.4	0.15	K134I	156.771	260.935	156.733	17.422	0.11540	3.14041	7 X
K12C53U	15.5	0.15	K134I	144.267	309.889	122.380	12.462	0.03507	3.13358	5 X
K12D47O	16.4	0.15	K134I	269.177	189.167	139.565	14.459	0.18621	2.53701	9 X
K12O00P	14.0	0.15	K134I	0.004	351.429	267.371	114.829	0.996641074	5.51025	2 W
K13A20D	16.5	0.15	K134I	49.106	86.844	355.520	27.328	0.39586	2.61180	3 X
K13C03F	17.2	0.15	K134I	148.524	35.124	351.588	18.800	0.02947	2.00275	3 X
K13C58K	12.5	0.15	K134I	53.878	296.815	161.202	25.791	0.08915	5.21113	10 X
K13CC1W	16.7	0.15	K134I	18.789	168.760	342.927	12.498	0.09651	2.63984	4 X
K13CG8S	16.9	0.15	K134I	19.962	157.291	351.812	13.314	0.17065	2.61851	4 X
K13E01K	16.4	0.15	K134I	29.381	321.520	178.498	12.686	0.10688	2.68277	3 X
K13E93M	16.6	0.15	K134I	333.896	54.786	182.188	7.965	0.17346	2.77009	2 X
K13EA8B	16.4	0.15	K134I	323.325	60.472	194.131	21.363	0.22185	3.10111	2 X
K13EB8H	16.2	0.15	K134I	74.094	301.584	170.513	11.543	0.09045	2.72526	3 X

New perturbed one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc C
K12U68W	24.8	0.15	K134I	73.555	102.381	15.414	2.473	0.15536	1.13591	178 X
K12Y06N	22.2	0.15	K134I	22.067	207.779	291.633	5.673	0.51876	2.12470	80 X
K13A60K	18.1	0.15	K134I	24.787	300.747	180.505	11.086	0.39622	2.68139	97 X
K13C35W	21.0	0.15	K134I	13.140	198.046	339.292	5.884	0.41257	1.93991	61 X
K13E27W	18.0	0.15	K134I	7.670	205.626	302.228	24.192	0.59453	2.45735	40 X

K13E28K	23.3	0.15	K134I	2.497	53.759	144.917	3.698	0.50902	2.35769	40	X
K13E89R	20.2	0.15	K134I	333.627	283.526	1.064	26.970	0.53616	1.69465	33	X
K13E89V	19.4	0.15	K134I	346.904	250.677	11.527	24.598	0.59820	2.62917	40	X
K13EA8W	19.9	0.15	K134I	14.283	161.969	350.434	26.697	0.45822	2.27296	32	X
K13EC6O	19.9	0.15	K134I	347.341	147.622	154.198	2.936	0.78550	2.28928	33	X
K13F07Z	22.9	0.15	K134I	280.295	321.225	8.263	8.633	0.40343	0.92146	31	X
K13F13Y	20.5	0.15	K134I	355.616	13.526	199.315	16.251	0.13606	1.26229	24	X
K13G03M	26.4	0.15	K134I	237.653	321.560	28.053	0.026	0.28772	0.83604	10	X
K13G07Y	20.3	0.15	K134I	258.761	128.523	189.935	29.590	0.23054	1.24653	15	X
K13G34D	22.3	0.15	K134I	22.112	263.371	260.298	4.578	0.25225	1.61825	11	X
K13G35J	15.7	0.15	K134I	48.707	219.492	291.300	41.188	0.49015	2.14871	11	X
K13G38Q	23.2	0.15	K134I	344.168	40.092	206.208	8.134	0.42526	1.74594	11	X
K13G38R	21.8	0.15	K134I	334.792	68.127	218.897	4.594	0.55677	1.78820	10	X
K13G38T	19.2	0.15	K134I	344.304	268.328	333.894	41.698	0.71400	1.84768	11	X
K13G38U	20.6	0.15	K134I	313.149	65.890	206.957	17.852	0.27304	1.57873	11	X
K13G55C	24.5	0.15	K134I	351.338	204.879	22.608	18.028	0.37131	1.63619	7	X
K13G66S	21.0	0.15	K134I	23.057	272.813	204.734	2.448	0.58577	2.02612	7	X
K13G66U	24.7	0.15	K134I	293.017	269.633	23.902	14.914	0.17310	1.10745	7	X
K13G68V	19.0	0.15	K134I	30.134	257.077	169.016	5.987	0.86759	1.70308	7	X
K13G69F	19.5	0.15	K134I	295.971	152.965	174.981	9.958	0.49458	1.96097	7	X
K13G69G	18.6	0.15	K134I	319.111	143.133	184.322	9.047	0.67645	2.67016	8	X
K13G69H	23.1	0.15	K134I	354.965	196.016	27.139	9.747	0.51202	2.50955	7	X
K13G69K	23.6	0.15	K134I	344.685	38.003	208.857	13.016	0.42872	1.71647	6	X
K13G73Z	19.0	0.15	K134I	40.940	340.224	116.970	7.320	0.61610	2.37189	6	X
K13G79U	21.3	0.15	K134I	356.654	50.857	170.717	2.221	0.40365	2.13823	4	X
K13G79X	20.8	0.15	K134I	162.006	195.115	205.222	23.934	0.41153	1.05754	4	X
K13G84E	19.6	0.15	K134I	23.173	18.239	92.791	12.821	0.62458	1.84714	4	X
K13G84F	24.9	0.15	K134I	50.621	118.682	26.984	15.570	0.12596	1.16014	3	X
K13H00A	16.6	0.15	K134I	357.780	152.260	42.792	16.835	0.62328	4.52717	90	X

New one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc	C
K13CC3T	16.9	0.15	K1339	318.103	225.703	350.503	6.706	0.14829	2.63339	64	W
K13CC9Z	13.2	0.15	K1339	19.569	335.962	163.812	29.357	0.02329	5.25843	67	X
K13CE9O	17.1	0.15	K1339	68.544	90.228	352.353	13.009	0.11473	2.53850	71	X
K13CH1T	18.2	0.15	K1339	20.906	263.035	233.885	1.514	0.13411	2.30815	61	X
K13CH6N	17.3	0.15	K1339	13.504	331.908	171.922	8.181	0.15067	2.39512	67	X
K13CI3C	16.3	0.15	K1339	5.217	79.843	72.714	15.259	0.23505	3.20413	70	W
K13D01O	16.5	0.15	K1339	292.473	151.684	100.008	14.625	0.16648	2.42342	68	W
K13E14U	17.3	0.15	K1339	248.660	298.009	350.074	7.153	0.11829	2.35200	62	X
K13E93F	16.6	0.15	K133T	345.071	299.195	285.667	7.963	0.22297	2.59878	37	X
K13EA5B	16.7	0.15	K133T	2.868	354.882	219.654	14.272	0.27095	2.57887	36	X
K13EA7K	17.3	0.15	K133T	349.826	71.404	137.150	13.143	0.21570	2.62014	35	X
K13EB1S	18.0	0.15	K133T	218.845	319.587	18.365	21.161	0.09600	1.89117	35	X
K13F00A	17.5	0.15	K1339	52.730	89.102	35.082	20.544	0.04883	1.89281	43	X
K13F09A	16.2	0.15	K133T	44.464	101.502	23.500	25.869	0.29904	3.13475	29	X
K13F12S	18.7	0.15	K133T	42.891	309.683	198.671	21.172	0.06593	1.94750	26	X
K13G06P	16.5	0.15	K133T	331.559	177.456	51.633	12.976	0.14899	3.00877	15	X
K13G06Q	17.7	0.15	K133T	21.895	68.270	91.144	5.532	0.17011	2.67827	29	X
K13G09G	16.5	0.15	K133T	294.025	266.548	3.856	7.440	0.18050	2.69727	15	X
K13G11Z	16.9	0.15	K133T	352.086	15.987	189.646	24.079	0.15060	2.45354	28	X
K13G23E	18.7	0.15	K133T	62.962	286.258	199.202	21.111	0.08494	1.79717	13	W
K13G37N	17.7	0.15	K133T	8.802	53.842	131.503	6.008	0.10198	2.30767	13	X
K13G42G	16.9	0.15	K133T	321.670	238.870	25.420	31.315	0.29133	2.59985	31	W
K13G50Q	16.7	0.15	K133T	3.056	102.066	86.020	16.993	0.19018	3.13400	9	X
K13G51A	18.3	0.15	K133T	359.844	249.048	310.956	3.949	0.10890	2.21446	8	X
K13G52A	15.3	0.15	K133T	153.785	344.516	73.805	18.037	0.08617	3.25629	7	X
K13G52J	16.6	0.15	K133T	11.382	15.234	185.698	19.953	0.08948	3.13327	7	X
K13G68T	18.3	0.15	K133T	55.042	85.202	41.232	21.837	0.13863	1.88757	6	X
K13G70X	17.3	0.15	K133T	21.831	52.039	109.697	14.792	0.19491	2.66198	8	X
K13G72E	17.3	0.15	K133T	318.721	78.538	197.087	7.168	0.32322	2.77406	6	W
K13G75K	17.6	0.15	K133T	322.022	200.912	45.073	1.513	0.07453	2.45041	6	X
K13G76J	16.5	0.15	K133T	312.067	140.476	117.882	26.356	0.17907	2.72273	6	X
K13G76T	15.9	0.15	K133T	25.154	95.635	74.563	13.934	0.19177	3.08013	6	X
K13G77F	16.7	0.15	K133T	15.237	2.539	186.222	13.408	0.17547	2.63207	6	X
K13G79Q	17.2	0.15	K133T	11.772	94.221	95.622	5.659	0.18746	2.39291	4	X
K13G79R	16.3	0.15	K133T	283.025	120.381	175.615	9.576	0.05440	2.96176	4	X
K13G80J	17.7	0.15	K133T	32.892	296.939	204.197	28.520	0.37898	2.67697	4	X
K13G81J	18.1	0.15	K133T	331.052	177.800	58.523	22.845	0.03718	1.89646	7	X
K13G83F	17.3	0.15	K133T	281.693	203.073	100.287	7.784	0.11408	2.36970	3	X

New observations:

K02G00S	KC2013	04	17.81327	11	55	31.48	+26	18	17.3	19.0	VqEH016151
K02G00S	KC2013	04	17.81950	11	55	29.32	+26	18	08.2	19.0	VqEH016151
K02G00S	KC2013	04	17.82262	11	55	28.26	+26	18	03.7	18.9	VqEH016151
K05G22O	C2013	03	02.38944	18	44	35.74	-20	53	13.2	19.7	VuEH016807
K05G22O	C2013	03	02.39239	18	44	35.01	-20	53	14.1	19.7	VuEH016807

K05G22O	C2013	03	02.39560	18	44	34.24	-20	53	15.0	20.0	VuEH016807
K05G22O	C2013	03	02.40176	18	44	32.76	-20	53	16.9	19.8	VuEH016807
K05J03O	KC2013	04	18.16438	11	09	07.52	+14	24	22.4	20.2	RoEH016291
K05J03O	KC2013	04	18.16602	11	09	07.24	+14	24	19.8	20.5	RoEH016291
K05J03O	KC2013	04	18.16766	11	09	06.98	+14	24	17.5	20.7	RoEH016291
K08J14P	C2013	04	16.56491	14	57	16.727+08	22	24	27	20.3	iLEH016F51
K08J14P	C2013	04	16.57694	14	57	15.853+08	22	24	16	20.4	iLEH016F51
K09S15C	KC2013	04	14.97695	11	22	55.71	+27	46	06.8	18.8	RqEH016160
K09S15C	KC2013	04	14.97941	11	22	56.33	+27	46	06.9	18.8	RqEH016160
K09S15C	KC2013	04	14.98188	11	22	56.98	+27	46	06.9	18.8	RqEH016160
K11W95U	C2013	04	17.51529	15	05	06.372-04	45	14	20	19.1	wLEH016F51
K11W95U	C2013	04	17.53043	15	05	05.665-04	45	11	08	19.2	wLEH016F51
K11W95U	C2013	04	17.56076	15	05	04.252-04	45	04	71	19.1	wLEH016F51
K12U68W	C2013	04	05.31514	15	01	03.83	-18	33	01.0	21.1	VuEH016807
K12U68W	C2013	04	05.32110	15	01	02.51	-18	33	05.8	21.0	VuEH016807
K12U68W	C2013	04	05.32660	15	01	01.29	-18	33	10.3	20.9	VuEH016807
K12Y06N	C2013	03	02.22936	12	16	00.88	-49	42	21.4	19.2	VuEH016807
K12Y06N	C2013	03	02.23527	12	16	02.13	-49	42	17.5	19.5	VuEH016807
K13C35W	C2013	03	17.39523	13	30	39.47	-25	19	40.4	18.9	VuEH016807
K13C35W	C2013	03	17.39766	13	30	39.73	-25	19	47.5	19.0	VuEH016807
K13C35W	C2013	03	17.40008	13	30	39.99	-25	19	54.6	19.0	VuEH016807
K13C35W	C2013	03	17.40251	13	30	40.25	-25	20	01.8	19.0	VuEH016807
K13C35W	C2013	03	17.40495	13	30	40.51	-25	20	09.1	18.9	VuEH016807
K13E27W	C2013	04	14.97033	06	32	37.71	-14	58	15.0	18.9	VuEH016807
K13E27W	C2013	04	14.97281	06	32	38.30	-14	58	21.1	18.9	VuEH016807
K13E27W	C2013	04	14.97529	06	32	38.88	-14	58	27.4	18.8	VuEH016807
K13E27W	C2013	04	14.97741	06	32	39.42	-14	58	32.0	19.2	VuEH016807
K13E28K	C2013	04	17.29322	14	03	14.27	+12	00	10.8		oEH016711
K13E28K	IC2013	04	17.29623	14	03	14.84	+12	00	09.0		oEH016711
K13E28K	C2013	04	17.29939	14	03	15.36	+12	00	06.6		oEH016711
K13E89R	C2013	04	14.96950	09	24	31.54	-37	37	43.4	19.2	VuEH016807
K13E89R	C2013	04	14.97196	09	24	29.82	-37	37	50.6	19.2	VuEH016807
K13E89R	C2013	04	14.97443	09	24	28.09	-37	37	58.8	19.1	VuEH016807
K13E89R	C2013	04	14.97690	09	24	26.34	-37	38	06.1	19.3	VuEH016807
K13E89V	C2013	04	16.10073	12	01	50.15	-23	43	34.0	18.5	VuEH016807
K13E89V	C2013	04	16.10318	12	01	49.41	-23	43	44.6	18.5	VuEH016807
K13E89V	C2013	04	16.10564	12	01	48.67	-23	43	55.0	18.4	VuEH016807
K13E89V	C2013	04	16.10811	12	01	47.93	-23	44	05.6	18.5	VuEH016807
K13E89V	C2013	04	16.11056	12	01	47.19	-23	44	16.1	18.4	VuEH016807
K13EA8W	C2013	04	16.07844	09	34	06.40	-13	15	02.4	20.5	VuEH016807
K13EA8W	C2013	04	16.08205	09	34	06.58	-13	15	10.6	20.3	VuEH016807
K13EA8W	C2013	04	16.08567	09	34	06.76	-13	15	18.8	20.5	VuEH016807
K13EA8W	C2013	04	16.08928	09	34	06.93	-13	15	27.1	20.5	VuEH016807
K13EA8W	C2013	04	16.09290	09	34	07.12	-13	15	35.5	20.5	VuEH016807
K13EC6O	KC2013	04	14.91699	09	44	47.50	+39	31	04.0	17.0	RqEH016160
K13EC6O	KC2013	04	14.91808	09	44	45.13	+39	31	18.7	17.0	RqEH016160
K13EC6O	KC2013	04	14.91880	09	44	43.56	+39	31	28.4	17.0	RqEH016160
K13EC6O	KC2013	04	14.91958	09	44	41.87	+39	31	38.7	17.0	RqEH016160
K13EC6O	KC2013	04	14.92060	09	44	39.65	+39	31	52.5	17.1	RqEH016160
K13EC6O	C2013	04	17.14477	08	10	25.71	+46	08	59.1	17.6	VuEH016703
K13EC6O	C2013	04	17.15212	08	10	04.44	+46	09	46.4	17.6	VuEH016703
K13EC6O	C2013	04	17.15936	08	09	43.38	+46	10	32.3	17.5	VuEH016703
K13F07Z	C2013	04	16.03393	07	52	28.66	-16	34	02.2	20.1	VuEH016807
K13F07Z	C2013	04	16.03640	07	52	25.19	-16	33	57.0	20.1	VuEH016807
K13F07Z	C2013	04	16.03887	07	52	21.73	-16	33	51.7	20.0	VuEH016807
K13F07Z	C2013	04	16.04135	07	52	18.28	-16	33	46.4	20.2	VuEH016807
K13F07Z	KC2013	04	18.12051	07	09	03.13	-15	13	49.3	19.4	RoEH016291
K13F07Z	KC2013	04	18.12163	07	09	01.81	-15	13	46.4	19.7	RoEH016291
K13F13Y	KC2013	04	17.79814	13	25	46.07	+17	05	16.8	15.9	VqEH016151
K13F13Y	KC2013	04	17.79902	13	25	46.30	+17	05	24.1	16.6	VqEH016151
K13F13Y	KC2013	04	17.79989	13	25	46.48	+17	05	31.7	16.8	VqEH016151
K13F13Y	KC2013	04	17.80075	13	25	46.65	+17	05	39.5	16.8	VqEH016151
K13F13Y	KC2013	04	17.80161	13	25	46.83	+17	05	47.0	17.1	VqEH016151
K13F13Y	KC2013	04	17.80248	13	25	47.00	+17	05	55.1	17.0	VqEH016151
K13F13Y	KC2013	04	17.80335	13	25	47.18	+17	06	03.1	16.9	VqEH016151
K13F13Y	KC2013	04	17.87783	13	26	03.62	+17	17	26.6	16.7	VuEH016I76
K13F13Y	KC2013	04	17.88053	13	26	04.16	+17	17	51.2	16.7	VuEH016I76
K13F13Y	KC2013	04	17.88258	13	26	04.60	+17	18	10.0	16.9	VuEH016I76
K13F13Y	KC2013	04	17.88461	13	26	05.00	+17	18	28.4	16.7	VuEH016I76
K13F13Y	KC2013	04	17.88661	13	26	05.41	+17	18	46.8	16.8	VuEH016I76
K13F13Y	KC2013	04	17.88791	13	26	05.69	+17	18	58.3	17.1	VuEH016I76
K13F13Y	C2013	04	18.04288	13	26	41.00	+17	42	02.9	16.7	RqEH016I15
K13F13Y	C2013	04	18.04408	13	26	41.23	+17	42	13.4	16.8	RqEH016I15
K13F13Y	C2013	04	18.04528	13	26	41.50	+17	42	24.7	16.8	RqEH016I15
K13G03M	JC2013	04	11.17882	09	16	36.62	+15	53	35.6	22.1	RoEH016695
K13G03M	JC2013	04	11.18992	09	16	26.03	+15	54	19.0	21.8	RoEH016695
K13G03M	JC2013	04	11.19310	09	16	23.03	+15	54	32.1	21.6	RoEH016695

K13G07Y	KC2013	04	18.14951	10	50	53.22	+12	47	26.1	20.2	RoEH016291
K13G07Y	KC2013	04	18.15187	10	50	53.16	+12	47	33.5	20.3	RoEH016291
K13G07Y	KC2013	04	18.15424	10	50	53.09	+12	47	40.6	20.3	RoEH016291
K13G34D	KC2013	04	18.17518	11	18	25.87	-13	39	34.8	20.9	RoEH016291
K13G34D	KC2013	04	18.18386	11	18	26.60	-13	39	29.5	21.0	RoEH016291
K13G34D	KC2013	04	18.19256	11	18	27.27	-13	39	24.0	20.9	RoEH016291
K13G35J	C2013	04	17.36678520	33	17.45	-45	17	43.1	19.2	RtEH016W85	
K13G35J	C2013	04	17.37043720	33	17.58	-45	17	41.9	19.1	RtEH016W85	
K13G35J	C2013	04	17.37407620	33	17.71	-45	17	40.9	19.1	RtEH016W85	
K13G35J	C2013	04	17.37771820	33	17.84	-45	17	39.8	19.1	RtEH016W85	
K13G35J	C2013	04	17.38136320	33	17.96	-45	17	38.7	19.1	RtEH016W85	
K13G35J	C2013	04	17.38500120	33	18.09	-45	17	37.6	19.1	RtEH016W85	
K13G35J	C2013	04	17.38863520	33	18.22	-45	17	36.5	19.1	RtEH016W85	
K13G35J	C2013	04	17.39227620	33	18.35	-45	17	35.5	19.2	RtEH016W85	
K13G35J	C2013	04	17.39591320	33	18.47	-45	17	34.4	19.1	RtEH016W85	
K13G35J	C2013	04	17.39955120	33	18.60	-45	17	33.4	19.1	RtEH016W85	
K13G35J	C2013	04	17.40319320	33	18.73	-45	17	32.2	19.1	RtEH016W85	
K13G35J	QC2013	04	17.80545	20	33	33.53	-45	15	28.5	19.5	VqEH016E12
K13G35J	QC2013	04	17.80917	20	33	33.64	-45	15	27.7	19.6	VqEH016E12
K13G38Q	C2013	04	15.96905	11	31	30.48	-02	00	31.1	20.0	VuEH016807
K13G38Q	C2013	04	15.97148	11	31	30.61	-02	00	19.5	20.0	VuEH016807
K13G38Q	C2013	04	15.97391	11	31	30.74	-02	00	08.0	20.1	VuEH016807
K13G38Q	C2013	04	15.97635	11	31	30.87	-01	59	56.7	20.3	VuEH016807
K13G38Q	HC2013	04	18.16116	11	34	41.80	+01	04	58.7	19.2	RoEH016291
K13G38Q	HC2013	04	18.16163	11	34	41.82	+01	05	01.0	19.0	RoEH016291
K13G38Q	HC2013	04	18.16209	11	34	41.85	+01	05	03.8	19.5	RoEH016291
K13G38Q	KC2013	04	18.19577	11	34	45.05	+01	08	03.8	19.1	RtEH016G58
K13G38Q	KC2013	04	18.19966	11	34	45.31	+01	08	25.4	19.0	RtEH016G58
K13G38Q	KC2013	04	18.20336	11	34	45.58	+01	08	45.7	19.1	RtEH016G58
K13G38R	KC2013	04	18.10437	12	15	51.54	-10	52	15.6		qEH016I15
K13G38R	KC2013	04	18.10879	12	15	50.33	-10	52	06.6		qEH016I15
K13G38R	KC2013	04	18.11320	12	15	49.19	-10	51	57.3		qEH016I15
K13G38R	HC2013	04	18.15809	12	15	40.03	-10	50	15.8	18.6	RoEH016291
K13G38R	HC2013	04	18.15869	12	15	39.87	-10	50	14.4	18.5	RoEH016291
K13G38R	HC2013	04	18.15929	12	15	39.74	-10	50	13.4	18.9	RoEH016291
K13G38T	KC2013	04	18.12731	05	36	13.63	+24	09	40.8	20.6	RoEH016291
K13G38T	KC2013	04	18.13032	05	36	13.78	+24	09	32.1	20.3	RoEH016291
K13G38T	KC2013	04	18.13333	05	36	13.93	+24	09	24.0	20.3	RoEH016291
K13G38U	C2013	04	14.97312	11	21	23.93	-08	10	09.5	20.5	VuEH016807
K13G38U	C2013	04	14.97925	11	21	23.74	-08	09	53.0	20.5	VuEH016807
K13G38U	C2013	04	14.98232	11	21	23.62	-08	09	45.0	20.3	VuEH016807
K13G38U	C2013	04	15.98565	11	21	00.59	-07	25	30.8	20.5	VuEH016807
K13G38U	C2013	04	15.98927	11	21	00.48	-07	25	21.2	20.5	VuEH016807
K13G38U	C2013	04	15.99290	11	21	00.38	-07	25	11.6	20.4	VuEH016807
K13G38U	C2013	04	15.99653	11	21	00.30	-07	25	01.9	20.3	VuEH016807
K13G38U	C2013	04	16.00015	11	21	00.20	-07	24	52.5	20.5	VuEH016807
K13G38U	KC2013	04	18.14254	11	20	22.06	-05	50	33.9	19.7	RoEH016291
K13G38U	KC2013	04	18.14395	11	20	22.03	-05	50	30.5	19.5	RoEH016291
K13G38U	KC2013	04	18.14536	11	20	22.00	-05	50	26.6	19.9	RoEH016291
K13G55C	C2013	04	15.04470	12	05	54.05	-11	42	35.7	19.8	VuEH016807
K13G55C	C2013	04	15.04718	12	05	52.56	-11	43	35.1	19.1	VuEH016807
K13G55C	C2013	04	15.04966	12	05	51.07	-11	44	34.7	19.8	VuEH016807
K13G55C	C2013	04	15.05215	12	05	49.55	-11	45	34.9	19.8	VuEH016807
K13G55C	C2013	04	17.15927	11	44	22.04	-26	10	29.0	19.6	VuEH016807
K13G55C	C2013	04	17.16177	11	44	20.20	-26	11	30.4	19.5	VuEH016807
K13G55C	C2013	04	17.16427	11	44	18.34	-26	12	32.0	19.8	VuEH016807
K13G55C	C2013	04	17.16679	11	44	16.51	-26	13	33.3	19.9	VuEH016807
K13G55C	C2013	04	17.16930	11	44	14.66	-26	14	34.9	19.7	VuEH016807
K13G66S	C2013	04	15.96885	11	07	32.36	+04	11	24.1	19.7	VuEH016807
K13G66S	C2013	04	15.97131	11	07	33.00	+04	11	21.8	20.1	VuEH016807
K13G66S	C2013	04	15.97379	11	07	33.64	+04	11	19.7	19.8	VuEH016807
K13G66S	C2013	04	15.97626	11	07	34.27	+04	11	17.5	20.1	VuEH016807
K13G66S	C2013	04	17.13753	11	12	30.31	+03	53	55.2	19.9	VuEH016807
K13G66S	C2013	04	17.14005	11	12	30.90	+03	53	52.9	20.3	VuEH016807
K13G66S	C2013	04	17.14257	11	12	31.49	+03	53	50.7	20.1	VuEH016807
K13G66S	C2013	04	17.14508	11	12	32.07	+03	53	48.6	20.4	VuEH016807
K13G66S	C2013	04	17.14759	11	12	32.67	+03	53	46.6	20.2	VuEH016807
K13G66U	KC2013	04	18.13819	12	12	08.85	-16	41	25.2	19.3	RoEH016291
K13G66U	KC2013	04	18.13889	12	12	08.25	-16	41	33.7	18.9	RoEH016291
K13G66U	KC2013	04	18.13958	12	12	07.68	-16	41	41.7	19.2	RoEH016291
K13G68V	IC2013	04	17.35144	14	33	09.18	-00	58	00.6		oEH016711
K13G68V	C2013	04	17.35413	14	33	08.27	-00	57	57.4		oEH016711
K13G68V	C2013	04	17.35696	14	33	07.30	-00	57	54.2		oEH016711
K13G68V	C2013	04	17.50281	14	32	17.842	-00	55	04.45	18.6	wLEH016F51
K13G68V	C2013	04	17.51798	14	32	12.589	-00	54	47.22	18.6	wLEH016F51
K13G68V	C2013	04	17.53313	14	32	07.379	-00	54	30.05	18.5	wLEH016F51
K13G68V	KC2013	04	17.93596	14	29	53.95	-00	47	06.0	18.5	VqEH016A13

K13G68V	KC2013	04	17.93912	14	29	52.91	-00	47	02.6	18.6	VqEH016A13
K13G68V	KC2013	04	17.96218	14	29	45.18	-00	46	36.7	18.4	VqEH016A13
K13G68V	KC2013	04	17.96428	14	29	44.48	-00	46	34.6	18.6	VqEH016A13
K13G68V	KC2013	04	17.98817	14	29	36.47	-00	46	08.7	18.8	VqEH016A13
K13G68V	KC2013	04	17.99131	14	29	35.40	-00	46	04.7	18.7	VqEH016A13
K13G69F	C2013	04	15.17512	13	47	00.91	-00	22	12.9	21.4	VuEH016807
K13G69F	C2013	04	15.18333	13	47	00.26	-00	22	05.6	21.5	VuEH016807
K13G69F	C2013	04	15.19112	13	46	59.65	-00	21	58.6	21.8	VuEH016807
K13G69F	C2013	04	17.23420	13	44	21.17	+00	08	35.4	21.6	VuEH016807
K13G69F	C2013	04	17.25027	13	44	19.88	+00	08	49.4	21.6	VuEH016807
K13G69G	C2013	04	15.13910	13	25	16.09	-03	32	05.4	21.5	VuEH016807
K13G69G	C2013	04	15.14637	13	25	15.52	-03	32	00.4	21.3	VuEH016807
K13G69G	C2013	04	15.15290	13	25	15.06	-03	31	55.2	21.6	VuEH016807
K13G69G	KC2013	04	18.21347	13	21	18.99	-02	55	25.5	20.4	RoEH016291
K13G69G	KC2013	04	18.21781	13	21	18.65	-02	55	21.7	20.7	RoEH016291
K13G69G	KC2013	04	18.22360	13	21	18.17	-02	55	17.6	20.7	RoEH016291
K13G69H	C2013	04	15.10864	12	55	05.37	-01	51	35.3	21.3	VuEH016807
K13G69H	C2013	04	15.11287	12	55	05.25	-01	51	46.4	21.1	VuEH016807
K13G69H	C2013	04	15.11709	12	55	05.15	-01	51	57.2	21.2	VuEH016807
K13G69H	C2013	04	15.12131	12	55	05.02	-01	52	08.2	21.4	VuEH016807
K13G69H	KC2013	04	18.20115	12	54	25.15	-04	11	22.7	20.5	RoEH016291
K13G69H	KC2013	04	18.20438	12	54	25.07	-04	11	32.0		oEH016291
K13G69H	KC2013	04	18.20763	12	54	25.04	-04	11	40.7	20.7	RoEH016291
K13G69K	C2013	04	15.96873	11	43	43.10	-15	24	10.7	19.2	VuEH016807
K13G69K	C2013	04	15.97120	11	43	43.63	-15	23	49.9	18.9	VuEH016807
K13G69K	C2013	04	15.97367	11	43	44.15	-15	23	29.2	18.9	VuEH016807
K13G69K	C2013	04	15.97615	11	43	44.69	-15	23	08.4	19.0	VuEH016807
K13G69K	C2013	04	15.97862	11	43	45.21	-15	22	47.5	19.2	VuEH016807
K13G69K	C2013	04	17.12230	11	48	44.44	-12	23	51.7	18.9	VuEH016807
K13G69K	C2013	04	17.12479	11	48	45.04	-12	23	25.9	18.9	VuEH016807
K13G69K	C2013	04	17.12732	11	48	45.64	-12	22	59.8	19.0	VuEH016807
K13G69K	C2013	04	17.12985	11	48	46.25	-12	22	33.8	19.1	VuEH016807
K13G69K	C2013	04	17.13237	11	48	46.86	-12	22	07.9	19.1	VuEH016807
K13G69K	QC2013	04	17.45477	11	50	26.96	-11	25	07.8	18.9	VqEH016E12
K13G69K	QC2013	04	17.45795	11	50	27.78	-11	24	33.4	18.7	VqEH016E12
K13G69K	KC2013	04	18.06259	11	53	43.16	-09	31	58.6		qEH016I15
K13G69K	KC2013	04	18.07162	11	53	45.83	-09	30	10.1		qEH016I15
K13G69K	KC2013	04	18.08066	11	53	48.47	-09	28	21.4		qEH016I15
K13G73Z	C2013	04	17.18210	14	38	46.30	-00	14	18.2	21.2	VuEH016807
K13G73Z	C2013	04	17.18634	14	38	45.88	-00	14	16.5	21.0	VuEH016807
K13G73Z	C2013	04	17.19058	14	38	45.48	-00	14	15.0	21.1	VuEH016807
K13G73Z	C2013	04	17.19482	14	38	45.08	-00	14	14.2	21.1	VuEH016807
K13G79U	C2013	04	17.30795	15	18	09.58	-11	37	07.0	20.3	VuEH016807
K13G79U	C2013	04	17.31044	15	18	09.77	-11	37	06.2	20.2	VuEH016807
K13G79U	C2013	04	17.31294	15	18	09.96	-11	37	05.4	20.0	VuEH016807
K13G79U	C2013	04	17.31543	15	18	10.19	-11	37	04.9	19.9	VuEH016807
K13G79X	C2013	04	17.26563	14	38	35.00	-06	59	55.2	21.0	VuEH016807
K13G79X	C2013	04	17.27064	14	38	34.25	-06	59	41.4	20.9	VuEH016807
K13G79X	C2013	04	17.27513	14	38	33.56	-06	59	29.1	20.9	VuEH016807
K13G84E	C2013	04	17.55709	12	35	49.27	+61	59	12.0	19.3	RoEH016300
K13G84E	C2013	04	17.55979	12	35	49.76	+61	58	50.9	19.4	RoEH016300
K13G84E	C2013	04	17.56249	12	35	50.21	+61	58	30.5	19.5	RoEH016300
K13G84E	C2013	04	17.56519	12	35	50.78	+61	58	09.4	19.4	RoEH016300
K13G84E	C2013	04	17.56789	12	35	51.22	+61	57	47.7	19.5	RoEH016300
K13G84E	C2013	04	17.57327	12	35	52.09	+61	57	06.4	19.2	RoEH016300
K13G84E	C2013	04	17.57596	12	35	52.44	+61	56	45.8	19.4	RoEH016300
K13G84F	IC2013	04	18.04708514	06	40.34	-19	23	29.4			tEH016W87
K13G84F	KC2013	04	18.05058614	06	38.68	-19	24	06.7		20.3	RtEH016W87
K13G84F	KC2013	04	18.05392014	06	37.12	-19	24	41.7		20.2	RtEH016W87
K13G84F	IC2013	04	18.05724714	06	35.57	-19	25	16.3			tEH016W87
D6874	C2013	04	17.51660	15	16	47.568	-05	03	17.46	20.8	wLEH016F51
D6874	C2013	04	17.53175	15	16	46.637	-05	03	10.22	20.6	wLEH016F51
D6874	C2013	04	17.54694	15	16	45.701	-05	03	02.96	20.7	wLEH016F51
D6874	C2013	04	17.56208	15	16	44.775	-05	02	55.80	20.8	wLEH016F51
D9289	C2013	04	17.35589	14	00	59.01	+33	51	50.8	20.4	rNEH016I41
D9289	C2013	04	17.40579	14	00	50.59	+33	51	59.9	20.3	rNEH016I41
D9289	C2013	04	17.42897	14	00	46.65	+33	52	04.2	20.2	rNEH016I41
D9289	C2013	04	17.45199	14	00	42.77	+33	52	08.2	20.3	rNEH016I41
E1531	C2013	04	17.51463	14	52	41.746	-04	05	38.27	19.2	wLEH016F51
E1531	C2013	04	17.52978	14	52	37.622	-04	05	45.98	19.2	wLEH016F51
E1531	C2013	04	17.54497	14	52	33.490	-04	05	53.99	19.3	wLEH016F51
E3637	C2013	04	17.56516	14	42	25.347	+46	57	23.20	20.2	rLEH016F51
E3637	C2013	04	17.57533	14	42	23.948	+46	57	27.71	20.2	rLEH016F51
E3637	C2013	04	17.58611	14	42	22.431	+46	57	31.95	20.3	iLEH016F51
L0012	C2013	04	17.50621	14	35	57.867	+01	28	11.00	19.4	wLEH016F51
L0012	C2013	04	17.52137	14	35	56.926	+01	28	20.04	19.5	wLEH016F51
L0012	C2013	04	17.53653	14	35	56.002	+01	28	29.14	19.4	wLEH016F51

L0012	C2013 04 17.55169 14 35 55.072+01 28 38.17	19.4 wLEH016F51
L4869	KC2013 04 14.94825 10 48 06.73 +09 58 01.0	18.8 RqEH016160
L4869	KC2013 04 14.95072 10 48 06.76 +09 58 00.4	18.6 RqEH016160
L4869	KC2013 04 14.95319 10 48 06.79 +09 58 00.1	18.7 RqEH016160
R5974	C2013 04 17.13743 08 03 49.89 +45 16 56.1	18.5 VuEH016703
R5974	C2013 04 17.14477 08 03 47.08 +45 16 52.5	18.4 VuEH016703
R5974	C2013 04 17.15212 08 03 44.28 +45 16 46.7	18.8 VuEH016703
R5974	C2013 04 17.15936 08 03 41.65 +45 16 42.5	18.2 VuEH016703

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