

[Printer-friendly version](#)

Search MPC/CBAT

IAU Minor Planet Center

MPC Operations Status

[Processing \(Info\)](#)[ECS: Accessible](#)[MPC Status Page](#)

Observer Services (NEOs)

[NEO Services Overview](#)
[NEO Confirmation](#)
[NEO Confirmation \(RA order\)](#)
[NEO Ratings](#)
[NEO Page](#)
[NEO Observation Planning Aid](#)
[NEOChecker](#)
[NEOCMTChecker](#)

Observer Services

[Services Overview](#)
[IAUMail](#)
[Minor Planet & Comet Ephem.](#)
[Natural Satellite Ephemerides](#)
[New Object Ephemerides](#)
[MPCChecker](#)
[CMTChecker](#)
[Distant Artificial Satellites](#)
[Observing List Customizer](#)
[Sky Coverage](#)

Orbital Elements

[Orbital Elements Overview](#)
[MPCORB](#)
[Orbital Elements for Programs](#)

[MPCAT](#)[MPCUPDATE](#)

Astrometric Observations

[MPCAT-OBS](#)[MPCOBS](#)

Publications

[Publications Overview](#)[MPECs](#)[MPC Archive](#)[MPC RSS Feeds](#)[CBAT RSS Feeds](#)

Documentation

[Documentation Overview](#)[Minor Body Astrometry](#)[What's New](#)

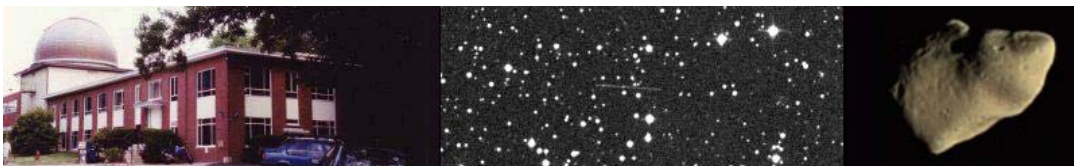
Lists and Plots

[Lists and Plots Overview](#)[Minor Planets](#)[Comets](#)[Animations](#)

General Information

[Astronomical Headlines](#)[Press Information Sheets](#)

General



MPEC 2011-J22 : DAILY ORBIT UPDATE (2011 MAY 5 UT)

The following [Minor Planet Electronic Circular](#) may be linked-to from your own Web pages, but must not otherwise be [redistributed electronically](#).

A form allowing access to any *MPEC* is at [the bottom of this page](#).

[Read MPEC 2011-J21](#)[Read MPEC 2011-J23](#)

M.P.E.C. 2011-J22

Issued 2011 May 5, 07:08 UT

The Minor Planet Electronic Circulars contain information on unusual minor planets and routine data on comets. They are published on behalf of Commission 20 of the International Astronomical Union by the Minor Planet Center, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.

Prepared using the [Tamkin Foundation Computer Network](#)

MPC@CFA.HARVARD.EDU

URL <http://www.minorplanetcenter.net/>

ISSN 1523-6714

DAILY ORBIT UPDATE (2011 MAY 5 UT)

Update to [MPEC 2011-J16](#)

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

New identification:

K02JC1B	K11H73R	MPCS
K02QB3S	K11H71Q	MPCS
K02TF9G	K11H78A	MPCS
K05Q12B	K11H72H	MPCS
K05S41S	K11H71G	MPCS
K05WE5X	K11H72G	MPCS
K06DF0L	K11H70M	MPCS
K06H77J	K11J02D	MPCS
K06M09Q	K11H77J	MPCS
K07E73J	K11H70N	MPCS
K07E99D	K11H63R	MPCS
K07H87A	K11H71D	MPCS
K08CK5P	K11B77Y	MPCS
K08RE3U	K11H77M	MPCS
K08S02Q	K11H65G	MPCS
K08SL9W	J99VL6B	MPCW
K08T53P	K11H76B	MPCS
K08UD9Y	K02S63W	MPCW
K10GC6K	K11J01M	MPCS

New double designation:

J99VL6B	J99VM7C	MPCW
K09W24J	K09VB6W	MPCW

New multiple-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Opp	C
J96X03M	16.5	0.15	K1128	186.305	355.586	22.910	8.893	0.11099	2.57767	6	X
J98H49K	22.3	0.15	K1128	358.166	81.459	57.388	7.620	0.33158	1.38217	2	X
J99H01D	20.4	0.15	K1128	182.965	147.916	209.910	18.213	0.41786	1.13146	4	X
J99TA8Z	15.9	0.15	K1128	295.066	119.716	199.082	15.412	0.22905	2.56478	3	X
J99TV7O	17.2	0.15	K1128	297.667	92.733	193.628	11.355	0.26298	2.60783	5	X
K00EF2T	17.0	0.15	K1128	0.531	71.153	111.318	3.264	0.14488	2.35005	4	X
K00H46B	17.3	0.15	K1128	287.983	217.789	42.474	21.482	0.04950	1.96762	4	X
K00HA2C	15.3	0.15	K1128	311.503	212.559	58.114	23.572	0.19888	3.11962	5	X
K00K12C	17.1	0.15	K1128	286.098	239.718	58.492	5.927	0.21085	2.38306	6	X
K00L22E	15.4	0.15	K1128	353.810	130.881	87.832	16.526	0.16757	3.12101	6	X

Contact Us
Index
Site Map
Search Site
Tech Info
Documentation
Links
Minor Planet Center
Central Bureau for Astro. Tel.
Cometary Science Lab/Archive
International Comet Quarterly
Smithsonian Astro. Obs.

K01H03S	18.7	0.15	K1128	69.507	56.341	40.324	16.186	0.08467	1.58668	9 X
K01H03S	18.7	0.15	K1128	66.688	92.541	216.261	20.966	0.09641	1.87241	3 S
K01H03S	18.7	0.15	K1128	69.497	71.408	241.767	19.579	0.12388	1.93418	4 X
K01H03S	18.7	0.15	K1128	91	16.587		17.089	0.30945	3.08584	5 X
K01H03S	18.7	0.15	K1128	59	139.551		18.048	0.14358	3.12295	4 X
K01H03S	18.7	0.15	K1128	35	181.811		9.148	0.31401	3.03342	5 X
K01H03S	18.7	0.15	K1128	30	42.740		4.550	0.52668	2.24165	3 X
K01H03S	18.7	0.15	K1128	242.079	230.168	108.730	17.890	0.21457	3.20430	4 X
K01H03S	18.7	0.15	K1128	337.277	358.180	270.282	24.725	0.17093	2.26805	4 X
K01H03S	18.7	0.15	K1128	91.438	257.239		24.608	0.34644	3.09357	5 X
K01R51E	15.4	0.15	K1128	297.275	237.903	70.309	15.438	0.32012	3.06410	4 X
K01R59W	17.5	0.15	K1128	267.485	223.143	90.555	3.244	0.23429	2.31438	4 S
K01R65S	14.9	0.15	K1128	230.071	105.940	244.697	6.826	0.14712	3.23928	3 S
K01SQ40	17.7	0.15	K1128	224.543	127.188	208.490	20.920	0.09079	1.91254	4 X
K01TK9Q	18.7	0.15	K1128	114.675	215.574	209.023	21.024	0.08813	1.94995	2 S
K01U40U	16.7	0.15	K1128	172.773	200.184	196.794	6.348	0.10842	2.40702	4 W
K01UA7Z	17.5	0.15	K1128	249.053	222.374	115.912	1.615	0.23274	2.35249	4 S
K01UI6F	14.9	0.15	K1128	291.374	102.981	213.716	25.169	0.22726	3.10541	4 X
K01W01G	17.4	0.15	K1128	161.298	314.137	73.947	23.552	0.09211	1.95784	3 X
K01X04H	16.4	0.15	K1128	26.755	76.390	64.110	29.982	0.26983	2.58647	3 X
K01X48H	16.1	0.15	K1128	32.639	242.666	255.217	20.389	0.04030	1.96276	6 X
K01X76W	17.6	0.15	K1128	79.717	294.748	87.322	7.481	0.36382	2.62144	3 W
K01XP9P	17.4	0.15	K1128	81.096	344.053	96.120	5.572	0.27010	2.54748	4 X
K01Y18Q	15.3	0.15	K1128	320.892	54.369	102.704	18.622	0.16379	2.74795	4 X
K02A13F	15.6	0.15	K1128	312.752	298.429	305.513	12.122	0.11706	2.61863	5 X
K02A300	16.9	0.15	K1128	116.029	262.014	173.441	0.571	0.18789	2.52997	5 S
K02A61X	15.7	0.15	K1128	36.526	24.988	138.579	8.389	0.13842	2.60034	6 X
K02A67J	16.5	0.15	K1128	315.680	150.118	105.704	7.632	0.17441	2.53503	7 X
K02AF0E	15.8	0.15	K1128	328.903	134.486	109.862	8.850	0.18184	2.55781	6 X
K02AF3T	16.0	0.15	K1128	32.951	29.159	126.966	13.085	0.10554	2.61775	5 X
K02B27G	15.8	0.15	K1128	359.996	119.091	79.230	13.248	0.22459	2.59236	4 X
K02C07P	16.4	0.15	K1128	346.621	102.855	123.037	9.449	0.23536	2.60094	5 X
K02CD9X	16.4	0.15	K1128	25.550	247.148	270.856	4.203	0.16634	2.63507	6 X
K02CE4M	16.6	0.15	K1128	352.357	25.716	170.246	4.591	0.18998	2.66830	4 X
K02CJ0Q	16.9	0.15	K1128	334.232	265.565	320.257	3.869	0.14685	2.61416	4 X
K02CN7J	15.3	0.15	K1128	306.655	290.139	349.122	13.780	0.19434	2.63141	6 X
K02E75V	16.7	0.15	K1128	3.642	355.564	194.524	13.402	0.23167	2.66507	4 X
K02F34E	16.5	0.15	K1128	339.824	94.315	137.567	8.465	0.21371	2.68446	5 X
K02G58J	15.8	0.15	K1128	16.208	230.039	303.728	9.919	0.14327	2.68313	3 X
K02G72D	15.8	0.15	K1128	316.698	240.577	24.400	14.875	0.14234	2.65964	6 X
K02G91P	16.9	0.15	K1128	344.673	60.689	168.307	12.293	0.22054	2.68578	2 S
K02GF3V	15.8	0.15	K1128	287.840	209.666	79.903	14.469	0.08911	2.69984	4 X
K02J19Y	16.1	0.15	K1128	286.352	226.723	69.571	14.373	0.18281	2.73956	5 X
K02J380	16.8	0.15	K1128	306.415	29.204	242.986	8.353	0.24962	2.73892	5 X
K02JC1B	16.2	0.15	K1128	318.150	152.838	102.768	15.681	0.10045	2.71147	2 S
K02JC4X	15.8	0.15	K1128	282.013	153.258	148.848	9.998	0.18573	2.74617	6 X
K02JE1E	17.3	0.15	K1128	334.562	53.164	179.875	7.833	0.27364	2.74113	3 X
K02M03W	16.0	0.15	K1128	320.432	173.777	127.780	11.270	0.43136	2.76139	4 X
K02P16N	16.8	0.15	K1128	299.663	163.832	136.979	10.413	0.20099	2.79806	3 S
K02QB3S	17.7	0.15	K1128	306.558	11.593	267.776	7.380	0.26853	2.84854	2 S
K02R91Y	15.3	0.15	K1128	211.197	330.153	2.046	17.293	0.25209	3.11509	3 W
K02S08G	15.2	0.15	K1128	145.542	41.328	16.485	9.370	0.07065	3.12000	6 S
K02T60D	19.3	0.15	K1128	94.862	343.829	62.679	7.412	0.08257	1.20205	3 X
K02TF9G	15.5	0.15	K1128	211.632	276.049	91.357	11.206	0.15815	3.05808	2 S
K02TU5Y	16.0	0.15	K1128	344.248	98.747	127.199	7.030	0.14932	3.06352	5 X
K02TX4M	16.9	0.15	K1128	209.943	195.577	172.739	12.185	0.06366	3.04009	4 S
K02U52Q	15.9	0.15	K1128	220.476	182.143	176.582	12.206	0.10980	3.05198	5 X
K02U54M	15.6	0.15	K1128	130.575	359.262	73.563	8.535	0.11656	3.17059	4 S
K02U67Y	16.0	0.15	K1128	72.755	319.878	171.955	10.386	0.04673	3.13169	6 X
K02VA9B	15.8	0.15	K1128	0.336	272.820	256.436	19.296	0.27512	2.41428	3 X
K03A77S	15.9	0.15	K1128	353.101	125.436	344.519	14.594	0.18241	2.56449	5 X
K03B65R	16.9	0.15	K1128	343.599	284.662	284.257	4.288	0.14943	2.43242	5 X
K03F15V	17.6	0.15	K1128	354.790	345.097	207.609	15.754	0.10614	1.90935	2 X
K03G10V	16.1	0.15	K1128	348.417	86.361	44.566	27.864	0.25788	2.61550	4 X
K03H43F	16.8	0.15	K1128	307.567	208.392	39.609	7.755	0.16636	2.55002	4 X
K03L00G	18.5	0.15	K1128	347.701	18.830	124.513	11.883	0.73445	1.91320	3 X
K03L02S	15.4	0.15	K1128	329.383	68.668	214.909	13.710	0.26154	2.54530	5 X
K03M05W	16.3	0.15	K1128	274.455	212.887	118.208	14.938	0.26147	2.59041	3 X
K03O19B	16.2	0.15	K1128	343.255	48.240	194.862	12.097	0.23833	2.55932	4 X
K03Q25J	16.0	0.15	K1128	298.026	321.548	317.853	9.093	0.16971	2.67135	6 X
K03Q41R	16.0	0.15	K1128	287.643	308.767	350.703	11.080	0.26830	2.66112	3 W
K03QA8A	16.8	0.15	K1128	287.981	274.879	36.133	15.249	0.39075	2.62994	2 S
K03SA5R	16.8	0.15	K1128	142.661	31.369	8.454	2.091	0.08050	2.93084	6 S
K03SC1E	17.5	0.15	K1128	254.481	74.244	250.237	4.641	0.15223	2.72135	3 S
K03SU0T	16.0	0.15	K1128	237.759	66.566	271.244	5.888	0.03912	2.76586	5 X
K03SW3U	16.9	0.15	K1128	113.172	25.755	336.405	6.496	0.16865	3.14109	3 W
K03Se7X	16.1	0.15	K1128	5.757	107.200	101.915	15.898	0.10109	2.89636	4 X
K03UG6L	15.3	0.15	K1128	58.019	261.391	217.390	25.134	0.29983	3.16315	4 X
K03UW4X	16.7	0.15	K1128	347.170	64.490	209.515	17.246	0.20073	2.51447	2 S
K03UX7J	15.4	0.15	K1128	206.253	252.419	11.546	9.036	0.06098	3.16534	3 X
K03Ub1Q	17.0	0.15	K1128	275.441	47.501	264.942	9.697	0.24411	2.64032	3 W
K03W59C	15.1	0.15	K1128	29.913	281.503	237.573	11.776	0.13369	3.10339	5 X
K04B89L	16.4	0.15	K1128	344.574	287.502	282.657	7.169	0.26694	2.25126	4 X
K04F01G	19.3	0.15	K1128	325.693	21.628	187.433	24.189	0.28554	1.75114	3 X
K04F04U	18.4	0.15	K1128	52.571	46.255	31.616	23.254	0.26367	1.26010	3 X
K04F27G	16.9	0.15	K1128	309.823	246.129	0.323	6.746	0.05682	2.26342	5 X

K04FC2E	17.0	0.15	K1128	325.370	188.266	37.753	7.191	0.18376	2.31541	5	X
K04G38E	16.4	0.15	K1128	321.201	348.431	210.854	24.395	0.17314	2.33660	4	X
K04H48S	16.7	0.15	K1128	333.594	321.815	273.132	6.993	0.17285	2.28814	4	X
K04J33J	18.0	0.15	K1128	292.522	195.456	84.183	6.399	0.21850	2.33096	2	S
K04J44C	17.6	0.15	K1128	318.086	83.619	175.981	6.859	0.25617	2.30391	3	X
K04N15S	16.8	0.15	K1128	276.705	131.066	168.360	2.796	0.18886	2.40272	5	X
K04P79U	16.6	0.15	K1128	171.607	14.609	319.991	16.687	0.21755	2.68138	2	W
K04S60U	14.6	0.15	K1128	48.515	110.706	96.420	16.696	0.12266	3.17435	6	X
K04T36N	17.7	0.15	K1128	90.884	70.333	22.054	3.438	0.16793	2.73118	4	S
K04TM0T	15.9	0.15	K1128	177.357	355.308	15.629	13.883	0.10917	2.71406	3	X
K04TZ1E	16.9	0.15	K1128	201.362	309.046	49.105	12.688	0.08054	2.66330	4	W
K04XC0P	15.9	0.15	K1128	245.262	262.724	71.102	15.630	0.10451	2.64932	4	X
K04XJ1R	14.7	0.15	K1128	335.084	228.990	323.616	25.952	0.21948	3.16708	3	X
K04Y00W	15.3	0.15	K1128	356.119	189.529	319.475	24.456	0.46600	3.23324	4	X
K04Y14D	16.0	0.15	K1128	228.836	250.016	108.840	12.498	0.21373	2.68394	4	S
K05A10V	15.7	0.15	K1128	4.071	216.702	322.867	13.458	0.19270	3.08307	3	X
K05A17G	15.4	0.15	K1128	189.197	260.829	110.837	17.963	0.17376	2.79902	7	X
K05C78Y	16.0	0.15	K1128	28.135	358.956	168.952	18.562	0.23349	3.07514	3	W
K05E55T	16.2	0.15	K1128	198.591	203.286	169.933	10.607	0.05312	3.02465	7	X
K05EA4A	16.3	0.15	K1128	348.750	49.856	167.336	17.066	0.18664	3.15279	3	S
K05EF3V	14.7	0.15	K1128	310.027	209.141	58.701	28.736	0.15440	3.16016	5	X
K05EM3E	15.3	0.15	K1128	327.911	96.365	139.241	16.824	0.11225	3.23037	3	X
K05G29C	14.8	0.15	K1128	342.458	35.474	207.842	16.701	0.10220	3.16258	5	X
K05G46W	15.6	0.15	K1128	175.870	205.220	191.782	17.662	0.18244	3.05946	4	X
K05N98P	18.3	0.15	K1128	263.017	189.423	113.635	3.920	0.13549	2.17952	4	W
K05NA1J	17.7	0.15	K1128	326.845	88.716	145.621	5.160	0.10154	2.16410	5	X
K05O00B	17.5	0.15	K1128	282.812	13.716	297.970	6.610	0.35765	2.14734	6	X
K05O04N	18.3	0.15	K1128	261.430	303.365	5.398	4.922	0.25507	2.18291	2	W
K05O27Q	17.2	0.15	K1128	212.017	302.711	356.892	9.739	0.19199	2.31966	3	W
K05Q12B	18.1	0.15	K1128	245.892	63.377	266.602	3.418	0.21041	2.19253	2	S
K05Q41S	18.0	0.15	K1128	228.498	133.578	207.220	3.267	0.18492	2.23220	3	W
K05Q71H	17.2	0.15	K1128	246.603	160.477	179.084	3.988	0.31558	2.20866	3	W
K05Q98Q	17.6	0.15	K1128	242.446	325.246	1.621	6.958	0.17649	2.21383	3	W
K05QD5F	17.2	0.15	K1128	85.574	94.767	3.636	7.041	0.04031	2.34060	4	S
K05QE2P	15.7	0.15	K1128	280.164	347.809	310.531	1.746	0.19196	3.94998	2	W
K05QI8A	18.5	0.15	K1128	117.147	358.921	359.027	6.570	0.22238	2.55876	3	W
K05QI9B	15.0	0.15	K1128	281.877	258.573	55.403	12.396	0.30751	3.95692	2	S
K05S14S	17.5	0.15	K1128	221.395	307.052	38.433	7.016	0.20234	2.24755	3	W
K05S35Z	17.5	0.15	K1128	154.167	192.268	210.245	4.747	0.16075	2.37036	3	W
K05S41S	17.9	0.15	K1128	305.196	25.465	226.374	6.445	0.15174	2.29170	2	S
K05S44S	17.4	0.15	K1128	158.656	170.367	227.264	3.565	0.13383	2.35553	4	W
K05S94L	17.2	0.15	K1128	278.786	118.082	176.469	8.441	0.08937	2.19822	3	X
K05SE7Y	17.1	0.15	K1128	269.528	261.935	23.204	23.006	0.20682	2.28704	3	W
K05SM4X	18.0	0.15	K1128	241.507	268.363	57.939	4.008	0.18123	2.26615	3	W
K05T14N	17.5	0.15	K1128	190.051	299.763	78.163	4.318	0.23834	2.27965	3	W
K05TA5E	16.7	0.15	K1128	257.527	28.435	299.070	3.864	0.27749	2.22245	6	X
K05U05O	20.4	0.15	K1128	359.699	76.298	50.801	19.679	0.15010	1.16052	2	X
K05U33G	17.7	0.15	K1128	216.573	129.690	212.610	5.539	0.12946	2.34212	3	W
K05U52Y	17.5	0.15	K1128	101.419	272.580	93.439	4.203	0.31187	2.63206	2	W
K05U67R	16.4	0.15	K1128	255.714	246.896	73.455	7.562	0.20155	2.25792	6	X
K05UA3A	16.0	0.15	K1128	297.304	66.633	54.252	16.778	0.18321	3.09308	3	W
K05UT8D	17.6	0.15	K1128	238.528	91.560	233.457	7.543	0.07774	2.37066	3	W
K05UY9Z	17.2	0.15	K1128	134.838	308.812	92.624	9.669	0.20818	2.45987	3	X
K05VD5R	17.0	0.15	K1128	21.939	53.798	79.025	9.431	0.19069	2.67324	3	W
K05WB8M	15.9	0.15	K1128	65.111	156.611	317.241	4.487	0.14745	2.54567	5	X
K05WE5X	18.0	0.15	K1128	261.214	42.577	274.534	3.190	0.20876	2.31726	2	S
K05WJ00	16.9	0.15	K1128	69.685	281.444	111.723	8.794	0.31622	2.74742	2	W
K05WK3K	17.4	0.15	K1128	58.128	274.601	149.101	13.119	0.25297	2.69388	2	W
K05Y25X	15.5	0.15	K1128	52.580	95.246	293.140	9.534	0.04992	3.12917	4	S
K05Y72G	16.1	0.15	K1128	349.543	242.436	324.529	3.636	0.09919	2.55282	6	X
K05Y83H	17.0	0.15	K1128	0.737	38.634	122.706	8.987	0.15553	2.77400	2	S
K05Y85R	16.8	0.15	K1128	355.046	95.539	104.333	16.775	0.17035	2.64739	2	S
K05YB5D	16.0	0.15	K1128	333.703	138.009	99.950	9.602	0.08097	2.56489	5	X
K05YH6T	16.7	0.15	K1128	296.571	335.839	295.350	3.904	0.14133	2.55810	5	X
K05YJ1G	16.6	0.15	K1128	307.884	152.945	114.524	13.643	0.25360	2.62006	4	X
K05YJ6D	16.1	0.15	K1128	40.171	301.360	223.102	24.781	0.21877	2.54726	3	X
K05YQ9O	16.5	0.15	K1128	52.471	351.742	140.154	9.485	0.20162	2.74249	3	W
K06A21Q	15.8	0.15	K1128	356.849	121.622	97.948	15.714	0.06281	2.57072	4	X
K06B62Z	16.6	0.15	K1128	99.081	334.118	140.804	15.186	0.05635	2.59625	3	S
K06BI9H	17.3	0.15	K1128	65.316	117.089	356.484	8.744	0.09975	2.77593	3	W
K06BP1R	16.9	0.15	K1128	314.751	286.859	313.729	2.446	0.14594	2.77254	5	X
K06BQ6N	15.9	0.15	K1128	3.332	2.834	190.953	11.852	0.17216	2.95712	4	X
K06DC1K	16.6	0.15	K1128	333.031	177.652	49.133	8.556	0.14834	2.75956	5	X
K06DE0M	16.4	0.15	K1128	341.699	90.124	133.617	6.996	0.15521	2.78579	4	X
K06DF0L	16.8	0.15	K1128	127.909	210.102	213.814	2.933	0.08355	2.75862	2	S
K06E57A	16.6	0.15	K1128	73.118	273.565	189.673	7.944	0.17223	2.76416	4	S
K06E63G	16.6	0.15	K1128	0.680	358.839	195.523	8.656	0.24005	2.85059	4	X
K06F01N	17.4	0.15	K1128	30.375	345.352	183.822	1.181	0.14271	2.77333	3	W
K06F10M	15.5	0.15	K1128	342.550	36.829	135.333	11.252	0.19452	2.97639	4	S
K06F50L	15.9	0.15	K1128	310.070	121.155	78.023	23.669	0.18398	3.12103	2	W
K06H46E	15.6	0.15	K1128	15.621	63.492	113.876	14.053	0.12048	2.85762	4	X
K06H59T	15.8	0.15	K1128	314.172	189.166	69.501	13.579	0.15230	2.92611	4	X
K06H71R	15.9	0.15	K1128	228.620	237.096	75.784	12.711	0.06599	3.15708	3	S
K06H77J	16.7	0.15	K1128	306.560	132.990	122.428	11.265	0.15209	3.05055	2	S
K06H91C	16.0	0.15	K1128	223.564	160.762	193.792	11.046	0.14211	2.96806	4	S
K06J48W	15.4	0.15	K1128	310.573	224.972	31.433	12.102	0.20436	3.03382	3	X

K06K06P	16.2	0.15	K1128	240.909	257.346	66.909	0.302	0.16046	3.10733	4	S
K06K43Y	16.7	0.15	K1128	66.891	16.838	128.245	10.151	0.09288	2.81719	3	S
K06K54E	15.8	0.15	K1128	115.320	340.712	80.863	10.010	0.10286	3.20009	4	S
K06K67M	15.6	0.15	K1128	343.292	347.205	230.179	13.369	0.19450	3.02002	4	X
K06K73D	16.7	0.15	K1128	300.928	74.364	183.713	10.239	0.03173	3.07015	3	S
K06K88N	16.5	0.15	K1128	351.841	86.528	126.239	16.636	0.04881	3.03883	4	X
K06KA3N	16.8	0.15	K1128	310.727	336.400	248.545	19.179	0.05442	1.88379	5	X
K06L04K	14.8	0.15	K1128	248.362	218.985	114.138	17.755	0.18532	3.12402	6	X
K06M09Q	16.3	0.15	K1128	307.832	146.886	133.824	17.853	0.18719	3.13594	2	S
K06O06C	16.2	0.15	K1128	325.099	137.292	135.006	17.278	0.32022	3.07814	2	S
K06O21Q	17.7	0.15	K1128	120.679	5.866	352.264	7.455	0.29430	2.25220	2	W
K06Q87A	18.5	0.15	K1128	94.657	206.799	176.892	4.329	0.23309	2.22287	2	W
K06QD2M	17.2	0.15	K1128	298.329	244.716	8.910	21.278	0.13764	1.92095	5	X
K06R51D	18.2	0.15	K1128	82.960	219.449	187.814	5.592	0.15629	2.24743	3	W
K06R81C	16.0	0.15	K1128	259.429	27.096	8.496	10.416	0.12014	3.12423	3	W
K06S17R	16.4	0.15	K1128	316.120	197.533	207.577	7.718	0.18643	2.78253	3	W
K06SD4V	18.8	0.15	K1128	300.967	64.303	217.289	21.547	0.48006	1.86773	3	X
K06SS1E	16.2	0.15	K1128	333.885	19.848	56.031	14.310	0.13971	2.62148	3	W
K06SZ4F	17.5	0.15	K1128	134.800	298.764	48.488	6.490	0.22291	2.21749	3	W
K06Sc8L	16.6	0.15	K1128	253.523	84.756	76.016	12.636	0.08124	2.57118	4	W
K06T56E	18.6	0.15	K1128	0.345	9.706	40.851	2.456	0.21757	2.61476	3	W
K06T56F	18.8	0.15	K1128	105.295	222.027	210.436	1.380	0.10767	2.14942	4	W
K06UI2A	16.3	0.15	K1128	347.063	0.561	66.523	13.360	0.15668	2.61354	2	W
K06V01K	17.5	0.15	K1128	285.852	229.624	237.002	6.611	0.18488	2.80214	3	W
K06V48Z	18.0	0.15	K1128	71.443	218.905	248.044	4.496	0.13738	2.20212	3	S
K06VA9R	16.6	0.15	K1128	10.002	314.699	78.916	14.191	0.26066	2.62411	2	W
K06W33T	17.2	0.15	K1128	355.159	255.428	152.263	2.546	0.19426	2.67506	3	W
K06WA0D	17.4	0.15	K1128	2.567	304.784	103.831	5.248	0.25506	2.60369	2	W
K06WE1Y	16.3	0.15	K1128	62.011	240.802	78.690	16.847	0.18070	2.71146	2	W
K06WE8J	16.4	0.15	K1128	23.358	282.341	88.871	13.297	0.31244	2.64323	2	W
K06X43K	17.5	0.15	K1128	38.483	218.549	286.625	5.651	0.15048	2.30280	4	W
K06X50T	17.4	0.15	K1128	31.073	151.238	270.705	3.312	0.22591	2.56878	3	W
K06X60B	17.6	0.15	K1128	315.987	160.781	86.818	6.877	0.13998	2.22455	6	X
K06X62G	16.7	0.15	K1128	339.805	15.953	116.831	34.480	0.19042	2.61395	3	X
K06Y13L	16.7	0.15	K1128	13.468	91.388	327.997	27.077	0.39915	2.60319	3	X
K07B29N	17.3	0.15	K1128	336.003	103.494	122.141	6.456	0.08591	2.25307	4	X
K07B46L	18.1	0.15	K1128	351.010	146.624	64.413	2.117	0.13600	2.33348	4	S
K07B46Q	16.9	0.15	K1128	23.022	53.413	116.755	6.331	0.05187	2.32443	6	X
K07B73D	16.7	0.15	K1128	339.461	61.595	93.438	30.460	0.34829	2.59275	3	X
K07BA2L	16.8	0.15	K1128	293.931	191.978	15.430	5.575	0.13817	2.70013	3	W
K07C16U	17.3	0.15	K1128	92.289	359.446	88.015	7.353	0.09488	2.32372	3	S
K07C17P	18.1	0.15	K1128	5.003	101.350	68.139	2.330	0.11809	2.40481	2	X
K07C26J	18.3	0.15	K1128	52.396	42.995	74.890	4.653	0.18157	2.34192	4	W
K07C46D	17.1	0.15	K1128	344.596	58.117	155.290	6.528	0.08482	2.31901	5	X
K07D06Q	17.7	0.15	K1128	17.616	243.459	280.217	3.227	0.18569	2.41183	4	W
K07D26Q	18.2	0.15	K1128	126.429	308.336	114.638	3.213	0.07357	2.34695	4	S
K07D46R	17.3	0.15	K1128	313.310	21.169	127.833	5.509	0.17864	2.65538	3	W
K07D49M	17.0	0.15	K1128	53.496	304.763	164.967	22.832	0.29140	2.37422	3	W
K07D72L	18.4	0.15	K1128	290.293	236.813	3.992	4.652	0.29724	2.63438	2	W
K07D91P	17.5	0.15	K1128	71.215	338.456	147.123	5.941	0.09622	2.30761	4	W
K07E12J	16.7	0.15	K1128	327.123	302.941	290.514	5.029	0.14739	2.37949	7	X
K07E17E	16.8	0.15	K1128	0.019	23.211	170.266	7.485	0.07846	2.39488	2	X
K07E34Z	16.4	0.15	K1128	28.998	285.238	163.155	22.113	0.06845	2.65281	4	W
K07E44F	17.2	0.15	K1128	1.728	9.622	184.108	10.391	0.07285	2.42423	5	X
K07E56Q	17.4	0.15	K1128	305.011	142.404	141.166	5.499	0.27438	2.45682	3	X
K07E73J	18.7	0.15	K1128	334.935	181.624	38.932	1.772	0.13967	2.42185	2	S
K07E96Z	17.8	0.15	K1128	10.989	8.341	197.083	5.601	0.15997	2.38612	3	W
K07E99D	17.4	0.15	K1128	35.007	30.984	112.844	2.192	0.12881	2.43513	2	S
K07EM1L	17.5	0.15	K1128	318.758	55.387	206.938	2.336	0.15137	2.42385	4	S
K07F45U	18.6	0.15	K1128	43.671	324.399	178.706	1.476	0.13684	2.39693	3	S
K07G27D	16.6	0.15	K1128	334.680	146.516	78.786	5.956	0.16455	2.55465	4	X
K07G74E	17.3	0.15	K1128	344.132	139.695	74.949	11.102	0.22588	2.45146	2	X
K07H54X	16.9	0.15	K1128	313.129	99.825	172.222	8.656	0.19271	2.46699	6	X
K07H67A	15.8	0.15	K1128	248.561	275.361	66.210	29.480	0.32271	2.62579	2	S
K07H87A	17.5	0.15	K1128	299.593	91.039	170.484	4.898	0.16727	2.61931	2	S
K07H97J	16.8	0.15	K1128	332.307	88.020	143.309	6.182	0.13163	2.56478	2	X
K07H97N	16.3	0.15	K1128	62.122	22.604	114.022	6.888	0.03463	2.52220	4	X
K07H97Z	16.7	0.15	K1128	305.265	167.239	93.125	15.346	0.16427	2.60352	2	X
K07J10W	17.2	0.15	K1128	338.619	332.927	242.688	3.621	0.18369	2.56643	4	X
K07J17H	17.0	0.15	K1128	292.768	238.040	65.113	11.045	0.32187	2.55867	3	X
K07J32H	16.6	0.15	K1128	286.148	208.139	77.416	6.929	0.12532	2.57655	4	X
K07K07B	16.1	0.15	K1128	312.400	185.198	68.945	8.809	0.15956	2.60928	5	X
K07K09P	16.6	0.15	K1128	307.539	105.430	171.765	12.084	0.27693	2.58343	6	X
K07L19Q	17.2	0.15	K1128	307.929	207.662	110.905	17.045	0.62752	2.60948	3	X
K07L20J	16.9	0.15	K1128	352.901	7.570	188.331	5.459	0.19650	2.59782	5	X
K07L27W	16.8	0.15	K1128	329.159	13.621	175.493	15.642	0.13896	2.79569	4	S
K07L34P	16.9	0.15	K1128	219.929	175.089	163.177	13.149	0.11317	2.64403	4	X
K07P04M	17.0	0.15	K1128	295.800	256.630	56.135	28.016	0.39870	2.68087	2	W
K07P26J	16.8	0.15	K1128	286.754	323.400	343.949	8.436	0.28871	2.74525	3	W
K07P28N	16.5	0.15	K1128	235.080	157.385	174.459	8.004	0.25220	3.04738	3	W
K07R99S	16.6	0.15	K1128	302.095	110.885	190.045	12.512	0.27320	2.67343	6	X
K07RC6P	16.0	0.15	K1128	310.534	78.715	188.120	11.153	0.18294	3.03943	3	X
K07RE6R	15.2	0.15	K1128	257.869	62.339	259.637	8.074	0.05880	2.97282	6	X
K07RL8Y	16.1	0.15	K1128	238.929	266.181	61.880	1.866	0.11305	3.23717	5	S
K07RM1V	16.3	0.15	K1128	275.077	109.247	204.704	9.238	0.10184	3.12400	3	S
K07RN9D	15.8	0.15	K1128	209.087	292.234	79.165	6.587	0.06501	3.10107	4	S

K07RR5T	15.4	0.15	K1128	275.080	221.950	110.072	22.803	0.29635	2.77559	6	X
K07S22Z	18.1	0.15	K1128	350.944	103.064	305.670	5.928	0.15294	2.20461	3	W
K07T30Z	15.4	0.15	K1128	258.806	306.114	29.774	14.955	0.25091	3.09126	3	W
K07T59L	18.2	0.15	K1128	55.718	151.420	161.577	3.911	0.12930	2.16098	3	W
K07TA9F	16.3	0.15	K1128	304.053	91.868	207.099	18.487	0.32037	2.77531	2	X
K07TH1W	15.0	0.15	K1128	276.279	252.634	42.736	16.400	0.22198	3.13635	2	S
K07TJ7K	15.8	0.15	K1128	243.352	162.690	157.406	9.887	0.07487	3.17906	2	S
K07TK8P	14.9	0.15	K1128	234.945	263.691	97.384	16.270	0.18591	3.15756	4	X
K07TR4Z	16.6	0.15	K1128	237.785	62.861	271.828	1.873	0.08557	3.06387	3	S
K07Tg7V	15.1	0.15	K1128	243.210	283.370	64.621	17.101	0.23743	3.13671	2	W
K07U94D	16.5	0.15	K1128	273.654	320.413	29.165	9.008	0.05513	3.00783	3	W
K07V99E	15.9	0.15	K1128	185.938	9.336	59.449	11.106	0.07632	3.15334	3	W
K07VL2E	15.5	0.15	K1128	271.211	266.262	70.607	11.255	0.29616	3.00342	3	W
K07VV8M	14.2	0.15	K1128	340.665	346.699	242.808	17.448	0.19892	3.98161	3	X
K07X50T	17.1	0.15	K1128	16.077	43.369	119.206	24.704	0.07782	1.94932	2	W
K07Y27P	17.5	0.15	K1128	351.561	350.737	78.677	9.048	0.16617	2.28637	3	W
K08A92U	17.1	0.15	K1128	281.682	64.007	8.240	4.626	0.11170	2.74406	3	W
K08AB5K	18.1	0.15	K1128	279.163	0.267	155.783	3.088	0.13269	2.45321	3	W
K08B20H	18.2	0.15	K1128	309.824	163.933	318.451	0.908	0.13408	2.34903	3	W
K08C43Y	17.4	0.15	K1128	250.236	119.299	115.805	6.287	0.17852	2.30762	3	W
K08CK5P	16.5	0.15	K1128	351.342	268.387	147.567	11.489	0.14487	2.65025	2	S
K08D53Q	17.0	0.15	K1128	261.146	307.240	185.919	8.243	0.22725	2.73333	3	W
K08D69K	17.8	0.15	K1128	316.051	219.292	18.620	19.076	0.06713	1.99271	3	X
K08F30C	18.2	0.15	K1128	247.272	283.035	339.623	5.250	0.14243	2.17912	3	W
K08F79P	18.8	0.15	K1128	273.287	234.352	7.899	6.478	0.17010	2.22616	2	W
K08G89P	16.3	0.15	K1128	179.023	176.793	56.156	2.433	0.27498	3.04844	3	W
K08GC3U	16.8	0.15	K1128	116.176	320.366	359.955	9.464	0.03365	2.64598	3	W
K08H06E	18.5	0.15	K1128	254.414	216.073	39.871	5.900	0.19835	2.30382	2	W
K08H38G	16.6	0.15	K1128	239.981	1.922	229.701	16.726	0.22947	2.60783	3	W
K08J02V	24.7	0.15	K1128	342.156	138.410	48.526	3.185	0.51910	2.08184	2	S
K08J05F	17.3	0.15	K1128	247.657	226.674	340.443	4.224	0.15059	2.44655	3	W
K08J11R	18.4	0.15	K1128	272.211	148.540	92.471	3.569	0.13120	2.32871	2	W
K08J24F	15.8	0.15	K1128	16.365	341.590	106.841	22.643	0.04696	2.68473	4	X
K08N03Y	17.6	0.15	K1128	251.116	98.400	230.676	11.130	0.22421	2.39591	3	W
K08O03Q	16.1	0.15	K1128	152.013	196.214	154.470	15.847	0.28905	3.06204	3	W
K08O03R	17.2	0.15	K1128	294.336	53.252	234.464	5.676	0.18112	2.22741	4	S
K08P04A	16.4	0.15	K1128	233.271	142.049	150.453	12.999	0.18094	2.66237	2	W
K08Q05U	15.9	0.15	K1128	195.048	236.857	145.779	31.628	0.25738	2.61382	4	W
K08Q17W	16.3	0.15	K1128	11.515	341.028	200.757	14.748	0.04993	2.54461	2	X
K08Q40X	16.3	0.15	K1128	291.917	42.432	228.668	14.909	0.11412	2.52414	2	S
K08Q48G	17.8	0.15	K1128	238.078	63.016	269.288	0.509	0.18781	2.47560	3	W
K08R23A	16.6	0.15	K1128	217.272	158.227	171.715	6.578	0.06269	2.76309	3	W
K08R25O	17.7	0.15	K1128	231.884	81.156	266.611	3.897	0.24930	2.41668	2	W
K08R34L	16.6	0.15	K1128	356.741	17.574	184.011	13.415	0.10428	2.61370	2	W
K08R40Y	17.9	0.15	K1128	238.725	171.426	175.304	6.837	0.16503	2.42533	2	W
K08R44H	16.8	0.15	K1128	175.705	335.977	23.859	2.034	0.07708	2.90725	3	W
K08R86Q	16.6	0.15	K1128	200.444	354.043	321.633	9.700	0.17074	3.03904	2	W
K08RB3T	17.1	0.15	K1128	169.111	159.641	222.281	2.695	0.10351	2.74664	4	W
K08RE0B	16.0	0.15	K1128	284.504	121.655	178.887	8.612	0.16478	2.57278	6	X
K08RE3U	18.2	0.15	K1128	289.520	96.702	196.773	5.109	0.18863	2.31672	2	S
K08S01F	16.3	0.15	K1128	187.820	237.939	136.558	9.059	0.30000	2.67763	3	S
K08S02Q	17.4	0.15	K1128	272.171	217.755	86.690	6.294	0.22767	2.35611	2	S
K08S03U	15.4	0.15	K1128	204.371	179.518	166.315	14.319	0.03906	2.75124	5	S
K08S14J	18.1	0.15	K1128	264.998	131.258	161.109	2.979	0.23129	2.38363	2	W
K08S76F	17.9	0.15	K1128	269.242	77.467	220.763	2.756	0.19910	2.44801	3	S
K08S91K	16.9	0.15	K1128	221.118	33.665	312.189	1.653	0.10611	2.66433	3	W
K08SA2Z	16.0	0.15	K1128	153.610	221.516	176.639	11.583	0.12834	3.01014	2	S
K08SA4G	16.1	0.15	K1128	122.344	230.530	203.840	6.857	0.13166	3.07046	2	W
K08SA4S	16.0	0.15	K1128	144.757	10.595	34.299	6.126	0.10963	3.08500	2	W
K08SB6Z	16.8	0.15	K1128	351.040	21.612	205.794	14.306	0.23217	2.54927	3	X
K08SC1D	16.2	0.15	K1128	86.451	243.965	211.743	7.750	0.05768	3.16564	4	W
K08SC1S	16.8	0.15	K1128	206.346	151.001	209.346	5.577	0.04314	2.76751	4	S
K08SD4A	17.0	0.15	K1128	257.815	323.465	312.570	4.448	0.19523	2.56927	3	W
K08SE0N	15.8	0.15	K1128	205.923	26.948	305.315	11.255	0.06988	2.88943	4	S
K08SE4D	15.7	0.15	K1128	245.627	220.738	122.998	9.439	0.17162	2.61685	4	W
K08SF2R	17.8	0.15	K1128	248.730	325.358	358.345	2.448	0.20681	2.41516	3	S
K08SF4S	17.0	0.15	K1128	276.516	236.861	69.103	2.262	0.18775	2.36530	6	X
K08SF5E	16.2	0.15	K1128	223.763	312.382	21.585	13.674	0.13098	2.65585	3	S
K08SG7J	16.5	0.15	K1128	185.026	351.523	40.515	3.113	0.20533	2.68935	3	W
K08SG8C	17.1	0.15	K1128	276.937	115.427	199.879	21.728	0.27912	2.35428	2	W
K08SH7U	16.0	0.15	K1128	129.477	42.193	26.582	10.418	0.06107	3.07889	3	S
K08SJ6L	16.6	0.15	K1128	245.141	276.696	45.649	4.917	0.07033	2.79312	4	W
K08SK2X	17.3	0.15	K1128	250.460	294.720	29.002	7.767	0.15705	2.62139	2	W
K08SK6W	16.2	0.15	K1128	212.840	293.570	60.701	10.353	0.09796	2.80863	2	W
K08SK7W	16.0	0.15	K1128	256.328	215.514	104.004	15.285	0.20848	2.52937	6	X
K08SL3M	18.0	0.15	K1128	289.857	72.391	213.557	2.579	0.16840	2.41438	3	S
K08SL9W	17.0	0.15	K1128	187.022	175.838	195.971	4.039	0.12350	2.73105	5	W
K08SO0B	16.9	0.15	K1128	205.995	277.554	82.650	4.936	0.15475	2.71723	3	W
K08SP7G	16.4	0.15	K1128	168.020	344.388	31.770	10.270	0.05878	3.15962	2	W
K08SS0H	16.6	0.15	K1128	179.832	303.522	73.288	3.969	0.18634	2.73848	3	W
K08SS5O	17.6	0.15	K1128	266.783	127.723	181.821	6.356	0.14197	2.38263	3	W
K08SU1L	15.9	0.15	K1128	155.445	297.845	107.742	4.484	0.02185	2.76990	4	X
K08T07R	16.3	0.15	K1128	116.559	37.573	23.803	9.303	0.06002	3.03022	3	W
K08T19V	17.1	0.15	K1128	235.134	134.561	210.959	8.906	0.21888	2.57751	3	W
K08T53P	16.7	0.15	K1128	86.482	72.022	37.880	6.582	0.04257	2.87748	2	S
K08T63H	16.6	0.15	K1128	196.439	134.254	205.990	10.116	0.07574	3.06791	4	W

K08T66B	17.0	0.15	K1128	203.115	185.472	177.359	3.145	0.06168	2.79325	3	W
K08TA8L	15.9	0.15	K1128	344.684	62.295	159.720	6.536	0.19430	2.57935	4	X
K08TH1D	16.8	0.15	K1128	68.505	91.706	42.912	9.653	0.01519	2.87392	4	S
K08U27X	16.7	0.15	K1128	220.540	145.636	206.061	5.214	0.05714	2.80969	4	S
K08U37S	16.0	0.15	K1128	60.546	255.882	243.483	8.356	0.04288	3.17128	3	W
K08U75O	16.1	0.15	K1128	204.576	108.927	254.187	10.950	0.06734	3.04270	2	W
K08U91C	15.9	0.15	K1128	208.921	299.076	71.229	15.230	0.25675	2.70528	3	W
K08U91D	16.3	0.15	K1128	220.324	330.352	17.873	13.376	0.27519	2.65460	4	W
K08U98S	17.6	0.15	K1128	276.565	290.278	67.478	6.662	0.17148	2.24624	3	W
K08UB3Y	16.1	0.15	K1128	103.397	226.845	230.879	14.354	0.04074	3.03355	4	S
K08UD9Y	16.3	0.15	K1128	156.945	350.204	45.140	5.544	0.12852	3.13203	4	W
K08UE1R	17.1	0.15	K1128	222.935	140.396	205.736	2.839	0.18084	2.76873	3	S
K08UF4K	16.6	0.15	K1128	315.490	209.320	49.110	2.762	0.03487	2.73287	3	S
K08UG2F	16.1	0.15	K1128	61.681	104.554	19.048	11.969	0.03533	3.18630	2	S
K08UG9S	15.4	0.15	K1128	2.339	134.575	62.360	13.081	0.08772	3.12350	4	X
K08UK1T	15.5	0.15	K1128	168.597	350.251	45.429	16.816	0.14411	3.00749	2	W
K08UM1J	16.3	0.15	K1128	123.058	50.327	23.474	10.879	0.05183	3.17785	4	S
K08UR7M	15.8	0.15	K1128	82.653	251.023	218.092	11.585	0.06043	3.15794	4	W
K08UX0N	16.0	0.15	K1128	204.648	300.449	46.074	9.044	0.06964	3.06227	2	S
K08V15H	17.0	0.15	K1128	211.073	280.326	84.568	0.747	0.17347	2.68057	4	W
K08V20J	16.8	0.15	K1128	190.187	217.745	158.283	2.140	0.07664	3.02925	4	S
K08V23W	16.3	0.15	K1128	186.180	301.806	74.849	14.623	0.18142	3.01770	2	W
K08V25H	16.6	0.15	K1128	206.068	236.078	108.913	3.030	0.06512	3.03287	4	S
K08V52B	17.0	0.15	K1128	267.976	116.418	182.162	4.628	0.09628	2.74489	3	W
K08V65L	17.4	0.15	K1128	240.910	118.350	218.759	5.497	0.04968	2.71642	4	W
K08W17N	17.1	0.15	K1128	223.937	150.065	198.129	5.000	0.15184	2.68340	4	W
K08W21W	15.5	0.15	K1128	259.882	264.291	55.775	13.709	0.17480	2.64517	4	X
K08W35C	16.3	0.15	K1128	115.687	40.093	52.607	19.991	0.09898	2.98287	4	W
K08W63U	17.2	0.15	K1128	290.239	224.076	74.889	17.279	0.21046	2.43613	5	X
K08W83M	15.2	0.15	K1128	234.388	244.157	100.367	10.615	0.07503	2.97325	6	X
K08WA5X	15.6	0.15	K1128	142.959	256.252	165.842	10.584	0.10690	3.07770	2	S
K08WC2W	15.9	0.15	K1128	290.681	234.751	62.636	13.729	0.25823	2.64483	3	X
K08WD1F	15.9	0.15	K1128	247.941	144.578	198.601	12.662	0.19998	2.57937	5	X
K08X09B	15.9	0.15	K1128	280.999	198.926	112.318	8.891	0.20360	2.61915	6	X
K08Y44C	16.0	0.15	K1128	261.399	230.888	101.490	14.101	0.14382	3.07495	5	X
K09A01U	14.3	0.15	K1128	92.912	269.732	133.866	26.184	0.49823	4.57868	2	W
K09BB5H	16.6	0.15	K1128	133.484	8.096	116.244	12.492	0.08806	3.05579	4	W
K09BF7J	18.4	0.15	K1128	173.362	49.054	148.418	2.052	0.13339	2.29180	3	W
K09DC2H	17.2	0.15	K1128	136.436	171.631	61.353	2.343	0.14458	2.44935	3	W
K09HA5J	18.4	0.15	K1128	160.557	187.441	46.170	3.034	0.12434	2.38606	3	W
K09M02Q	17.4	0.15	K1128	117.990	243.114	117.753	6.773	0.22353	2.33092	4	W
K09P01T	16.7	0.15	K1128	109.559	26.043	336.026	12.012	0.29767	2.65000	2	W
K09Q02Y	17.9	0.15	K1128	81.340	86.863	320.351	6.297	0.19632	2.58065	3	W
K09Q08X	17.8	0.15	K1128	117.711	356.245	10.439	1.050	0.19147	2.45478	3	W
K09Q19T	18.0	0.15	K1128	126.731	19.661	338.117	1.937	0.21614	2.36316	3	W
K09Q61F	16.9	0.15	K1128	76.459	51.142	336.004	19.211	0.32342	3.10689	3	W
K09R00Z	17.2	0.15	K1128	100.766	188.801	188.213	10.508	0.32495	2.78876	2	W
K09R27R	14.6	0.15	K1128	106.578	3.262	335.295	15.585	0.21833	3.14342	3	X
K09R42A	18.1	0.15	K1128	157.866	19.563	326.976	5.821	0.18447	2.28769	2	W
K09R71V	16.5	0.15	K1128	132.927	311.261	16.030	4.862	0.13248	3.08743	3	W
K09S20F	17.0	0.15	K1128	150.186	5.574	332.422	10.980	0.26715	2.39489	3	W
K09S23P	17.7	0.15	K1128	86.705	33.226	346.842	3.774	0.20536	2.78677	2	W
K09S28U	18.2	0.15	K1128	123.532	207.268	193.505	3.845	0.10889	2.23682	5	W
K09S50Z	16.7	0.15	K1128	83.092	13.071	6.363	5.829	0.31070	3.06622	3	W
K09S56L	16.6	0.15	K1128	283.703	240.590	324.421	6.621	0.02599	2.73494	4	W
K09S65W	16.9	0.15	K1128	67.875	336.983	76.505	3.065	0.10562	3.02646	3	W
K09S76M	16.7	0.15	K1128	89.778	236.183	154.213	6.651	0.21880	3.01404	2	W
K09S77E	17.3	0.15	K1128	219.798	209.035	67.164	6.945	0.08826	2.54703	3	W
K09SA1L	16.6	0.15	K1128	111.045	90.575	291.575	8.153	0.20480	2.67033	3	W
K09SC7V	16.5	0.15	K1128	118.669	65.019	311.454	12.237	0.21393	2.61021	2	W
K09SF5R	15.4	0.15	K1128	15.748	97.372	12.576	16.255	0.19657	3.11279	3	S
K09SF8W	16.9	0.15	K1128	63.513	232.792	219.839	9.520	0.25179	2.75265	3	W
K09SI3E	17.4	0.15	K1128	138.126	11.905	326.382	5.862	0.23426	2.64329	2	W
K09SL5C	17.2	0.15	K1128	113.805	351.633	53.675	4.023	0.18943	2.42178	3	W
K09SM2S	18.1	0.15	K1128	124.709	75.085	297.451	2.690	0.15696	2.41948	3	W
K09SM7P	17.0	0.15	K1128	135.790	252.937	91.735	1.818	0.08244	2.76507	5	W
K09SR5C	17.8	0.15	K1128	145.168	220.627	135.382	1.840	0.20002	2.36190	3	W
K09SX8A	16.6	0.15	K1128	125.365	2.311	7.319	12.575	0.27786	2.59416	3	W
K09SX9X	16.1	0.15	K1128	81.611	25.387	88.063	15.702	0.12528	2.75933	2	W
K09SX9Z	16.9	0.15	K1128	343.707	342.685	234.684	10.001	0.07861	2.28643	4	S
K09SY9Z	17.5	0.15	K1128	32.170	284.876	216.059	8.292	0.11172	2.27082	2	W
K09SZ4J	16.5	0.15	K1128	2.026	131.203	58.419	14.283	0.18469	2.60223	2	X
K09T06U	17.5	0.15	K1128	130.507	176.742	233.769	7.009	0.23146	2.20523	3	W
K09T25E	17.5	0.15	K1128	270.260	87.548	211.288	20.554	0.08518	1.86169	3	X
K09T36R	17.4	0.15	K1128	114.645	337.009	73.495	12.489	0.23454	2.43483	2	W
K09T42M	16.9	0.15	K1128	75.967	196.992	215.800	4.265	0.17020	3.09393	2	W
K09T45R	17.0	0.15	K1128	130.192	201.587	158.370	12.648	0.20384	2.60863	3	W
K09U10D	17.3	0.15	K1128	90.190	283.875	96.730	2.641	0.18715	3.08995	2	W
K09U14O	15.7	0.15	K1128	67.568	196.446	265.331	21.039	0.04901	2.68499	3	W
K09U18X	17.2	0.15	K1128	118.420	13.168	353.507	9.015	0.17374	2.75732	2	W
K09U21H	16.7	0.15	K1128	29.460	91.800	61.394	9.762	0.13829	2.41130	3	X
K09U25O	18.0	0.15	K1128	129.501	218.408	200.713	2.622	0.14313	2.22954	3	S
K09U72W	17.2	0.15	K1128	119.134	23.958	39.607	6.021	0.22038	2.33964	3	W
K09U73Q	17.2	0.15	K1128	143.206	312.023	37.420	6.807	0.06639	2.72264	3	W
K09U77N	16.7	0.15	K1128	43.482	171.478	278.705	2.197	0.17526	3.11507	2	W
K09U86R	16.3	0.15	K1128	103.101	357.555	11.414	7.113	0.27106	3.13429	2	W

K09U93R	18.2	0.15	K1128	102.933	44.643	33.458	3.699	0.13673	2.35039	3	W
K09UA6T	16.6	0.15	K1128	115.405	261.892	97.620	2.617	0.17108	3.22001	3	W
K09UA7Q	17.0	0.15	K1128	159.392	106.552	244.472	4.767	0.10567	2.67087	2	W
K09UC8P	17.6	0.15	K1128	81.157	209.106	207.860	4.866	0.11985	2.71551	2	W
K09UD3N	17.8	0.15	K1128	41.827	340.845	114.829	1.565	0.03626	2.76679	2	W
K09UF1K	14.9	0.15	K1128	89.035	112.469	272.348	15.554	0.08426	3.20461	3	W
K09V10D	17.6	0.15	K1128	91.579	48.443	36.240	6.603	0.23058	2.55968	3	W
K09V58H	16.7	0.15	K1128	98.457	240.342	150.245	1.997	0.20176	3.03187	2	W
K09V64X	16.8	0.15	K1128	105.453	97.595	294.647	4.124	0.13222	2.98830	4	W
K09V70M	16.0	0.15	K1128	256.442	198.712	51.428	10.448	0.05713	3.11376	4	W
K09V83H	17.1	0.15	K1128	47.363	133.834	353.960	4.362	0.13235	2.54510	3	W
K09V89C	17.2	0.15	K1128	85.615	39.282	32.318	8.247	0.21260	2.76255	3	W
K09VB5X	16.6	0.15	K1128	103.491	322.044	78.995	6.634	0.13732	3.10891	3	W
K09W01L	18.7	0.15	K1128	204.084	322.947	65.046	29.010	0.33509	1.78643	2	S
K09W17H	18.5	0.15	K1128	49.176	190.046	303.084	0.606	0.12168	2.32768	3	S
K09W20E	17.4	0.15	K1128	154.949	117.217	273.354	5.883	0.12879	2.32479	3	W
K09W24J	17.2	0.15	K1128	85.205	30.927	66.294	9.615	0.13152	2.36395	2	W
K09W39Z	17.4	0.15	K1128	312.420	189.946	59.568	8.145	0.14330	2.26229	2	W
K09WE3K	17.7	0.15	K1128	58.423	72.781	47.238	6.255	0.14178	2.37342	3	X
K09WG1K	18.1	0.15	K1128	173.206	318.812	42.636	5.821	0.11088	2.37707	3	S
K09WH1V	16.9	0.15	K1128	99.347	126.802	267.706	7.817	0.15040	3.02796	2	W
K09WH3U	16.7	0.15	K1128	123.515	91.427	275.200	6.683	0.22387	2.86289	2	W
K09WI5Q	17.9	0.15	K1128	79.125	218.743	238.694	5.805	0.06079	2.38256	2	W
K09WP1N	16.5	0.15	K1128	65.545	37.279	72.954	9.744	0.17446	2.74764	2	W
K09WP9U	15.5	0.15	K1128	52.500	24.326	102.374	14.698	0.19127	3.28539	2	W
K09WQ0D	16.3	0.15	K1128	54.624	56.403	81.235	4.579	0.11852	3.15695	2	W
K09WQ1U	16.0	0.15	K1128	320.402	128.818	105.480	11.993	0.07492	3.10486	3	W
K09X01P	15.5	0.15	K1128	35.199	101.766	32.693	11.218	0.16785	2.98354	2	X
K09X21M	16.6	0.15	K1128	84.447	4.807	101.738	5.494	0.02401	2.76902	2	S
K09Y05T	16.5	0.15	K1128	296.333	168.027	107.536	15.943	0.08722	2.60631	2	S
K09Y14W	16.7	0.15	K1128	349.454	147.146	70.316	5.900	0.08331	2.72877	4	S
K09Y19M	16.2	0.15	K1128	113.565	334.153	101.735	8.588	0.10887	2.72974	2	W
K09Y20P	16.1	0.15	K1128	3.195	101.586	95.797	10.361	0.16761	3.05762	5	X
K09Y21A	16.1	0.15	K1128	92.304	359.644	85.107	8.328	0.22429	2.99198	3	W
K09Y22N	15.9	0.15	K1128	88.847	349.030	86.550	14.074	0.21175	3.13846	3	W
K09Y23T	15.7	0.15	K1128	85.692	19.968	88.145	22.469	0.03906	2.65776	4	S
K10A10P	16.6	0.15	K1128	315.103	168.311	85.978	9.150	0.13644	2.61091	6	X
K10A24K	15.3	0.15	K1128	6.453	77.393	117.388	14.566	0.04956	3.18261	3	X
K10A41P	16.2	0.15	K1128	167.039	259.141	127.122	7.369	0.07829	2.77161	6	W
K10A59H	15.2	0.15	K1128	102.966	324.899	104.108	29.687	0.17490	3.19465	2	W
K10A64V	17.1	0.15	K1128	21.848	75.572	85.373	11.206	0.04233	2.77878	3	W
K10B02V	15.8	0.15	K1128	1.581	95.474	112.631	10.905	0.04064	3.02129	4	W
K10C41L	14.8	0.15	K1128	193.586	264.394	100.935	17.317	0.02237	3.12289	4	X
K10CC3U	17.2	0.15	K1128	131.048	153.022	285.489	4.165	0.24054	2.59636	3	W
K10CE6C	15.9	0.15	K1128	97.309	357.795	111.317	16.932	0.06692	3.07486	3	W
K10CG4M	16.1	0.15	K1128	283.455	159.318	136.460	21.874	0.14809	3.07759	2	W
K10CH6X	15.8	0.15	K1128	251.731	180.378	156.554	18.408	0.24696	2.75122	8	X
K10E02V	15.3	0.15	K1128	160.893	290.968	111.385	15.772	0.04585	3.22201	8	X
K10G42Q	16.0	0.15	K1128	324.947	123.174	115.888	3.643	0.15754	3.11014	4	X
K10G59N	15.5	0.15	K1128	66.108	62.836	63.511	16.632	0.18917	3.05883	3	W
K10GC6K	15.2	0.15	K1128	173.415	255.123	137.310	17.243	0.12026	3.21143	2	S
K10H15O	16.5	0.15	K1128	121.833	359.676	82.014	9.665	0.12802	2.64379	3	W
K10R52D	16.7	0.15	K1128	50.649	219.348	116.900	1.937	0.17918	3.09783	3	W
K11C66A	15.7	0.15	K1128	342.282	286.181	287.468	21.255	0.46945	3.12987	3	X
K11C75U	15.7	0.15	K1128	330.357	117.913	105.154	23.537	0.33847	3.10352	3	X
K11D24T	17.0	0.15	K1128	304.737	121.579	107.975	5.370	0.12572	2.28727	3	S
K11E77O	16.4	0.15	K1128	301.430	103.221	126.182	2.902	0.05189	2.95133	4	S
K11E77Q	17.1	0.15	K1128	316.159	63.657	150.606	5.368	0.06619	2.77938	2	S
K11E78E	15.5	0.15	K1128	204.062	255.377	92.900	10.992	0.12192	3.05583	3	X
K11E79J	17.8	0.15	K1128	91.339	69.895	352.293	7.827	0.19710	2.24781	3	S
K11F01C	15.5	0.15	K1128	36.845	304.560	205.513	14.910	0.11958	2.75302	5	X
K11F02B	15.4	0.15	K1128	338.072	18.684	205.860	27.804	0.12384	3.08750	2	X
K11F06O	15.5	0.15	K1128	321.056	75.250	191.666	12.939	0.26077	3.16930	2	X
K11F12D	16.5	0.15	K1128	3.325	349.196	203.877	15.234	0.11268	2.56252	5	X
K11F13E	17.0	0.15	K1128	312.796	94.481	159.423	6.796	0.09806	2.42408	4	X
K11F29Y	16.3	0.15	K1128	337.867	26.399	201.676	16.893	0.23923	2.76070	3	X
K11F36N	17.7	0.15	K1128	0.022	116.614	57.814	3.809	0.10477	2.25610	5	X
K11F45Q	16.0	0.15	K1128	345.103	55.217	156.432	5.948	0.10873	3.08562	2	S
K11F62U	18.1	0.15	K1128	5.243	145.779	21.626	3.571	0.15807	2.47541	2	S
K11FD1G	16.3	0.15	K1128	83.707	218.398	213.573	0.994	0.12353	2.92213	2	S
K11FE8J	17.0	0.15	K1128	276.099	242.392	44.982	7.280	0.13872	2.25401	2	X
K11FF0K	17.7	0.15	K1128	297.605	175.471	86.713	6.291	0.14419	2.19828	2	S
K11FF2J	16.5	0.15	K1128	340.762	20.370	196.076	5.727	0.24039	2.61853	6	X
K11G04Y	16.1	0.15	K1128	301.584	191.795	56.251	8.169	0.09582	2.70842	3	S
K11G31G	17.3	0.15	K1128	335.297	35.875	181.642	2.074	0.16932	2.34578	5	X
K11G31J	17.6	0.15	K1128	329.320	47.674	177.829	2.205	0.16337	2.32127	5	X
K11G31Q	17.2	0.15	K1128	52.894	185.177	296.904	1.957	0.08138	2.62505	3	S
K11G36N	18.2	0.15	K1128	5.628	327.175	206.427	11.216	0.18690	2.30220	2	X
K11G58V	18.1	0.15	K1128	11.509	118.576	49.400	2.470	0.17355	2.41971	3	S
K11G59A	15.3	0.15	K1128	304.542	243.405	18.567	10.803	0.07213	3.09112	2	X
K11G59X	16.7	0.15	K1128	288.889	192.609	87.072	7.124	0.10794	2.35558	4	X
K11G61W	17.1	0.15	K1128	309.726	127.429	143.835	12.617	0.29423	2.61006	2	X
K11G65B	16.9	0.15	K1128	281.708	135.627	144.904	6.621	0.10672	2.46427	2	S
K11G67N	16.2	0.15	K1128	278.468	158.662	115.222	5.471	0.03022	2.78955	2	S
K11G67T	16.6	0.15	K1128	8.039	19.595	145.879	5.470	0.28498	3.02906	3	S
K11G69O	15.4	0.15	K1128	194.950	166.908	199.792	12.502	0.08685	3.08474	2	S

K11G71U	17.3	0.15	K1128	311.968	184.013	61.580	11.030	0.18861	2.37611	2	S
K11G71V	16.1	0.15	K1128	295.235	199.276	72.692	7.562	0.12894	2.66873	3	X
K11G72Y	16.3	0.15	K1128	296.228	66.328	197.034	7.784	0.05594	3.15865	2	S
K11H01P	16.6	0.15	K1128	288.952	198.328	74.789	10.407	0.13378	2.52789	3	S
K11H01Q	16.1	0.15	K1128	330.803	57.948	167.901	13.198	0.11788	2.71785	3	S
K11H03S	16.7	0.15	K1128	62.153	76.254	41.744	11.636	0.04706	2.90007	2	S
K11H05Z	16.6	0.15	K1128	348.613	64.823	143.967	5.578	0.19638	2.61638	2	X
K11H06A	17.2	0.15	K1128	330.652	61.359	176.267	7.342	0.19180	2.61786	2	X
K11H06K	17.2	0.15	K1128	287.137	205.741	74.199	7.685	0.16183	2.25458	2	S
K11H10V	16.9	0.15	K1128	211.098	302.567	40.210	8.936	0.16836	2.45157	2	S
K11H11B	16.7	0.15	K1128	343.524	189.299	12.220	3.488	0.08245	2.60422	3	S
K11H11E	18.3	0.15	K1128	6.819	22.926	146.467	1.788	0.12746	2.36630	2	S
K11H11T	17.9	0.15	K1128	327.203	127.331	118.646	3.387	0.17832	2.45430	2	S
K11H17Y	15.5	0.15	K1128	221.094	139.966	187.818	10.047	0.01504	3.25822	2	S
K11H18E	16.6	0.15	K1128	313.334	33.405	204.831	17.232	0.07141	2.74831	2	S
K11H21Y	16.0	0.15	K1128	16.316	353.461	188.946	10.999	0.09708	3.11128	3	S
K11H34L	16.2	0.15	K1128	7.858	319.638	213.932	9.487	0.17306	3.15244	2	S
K11H36G	16.6	0.15	K1128	94.287	9.569	74.743	4.380	0.06495	2.86982	2	S
K11H56U	17.7	0.15	K1128	7.725	132.257	27.165	14.342	0.28643	2.69256	2	S

New perturbed one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc	C
K11A05G	21.8	0.15	K1128	334.456	53.506	135.734	3.682	0.39055	1.43051	116	X
K11B12A	22.5	0.15	K1128	352.223	288.740	243.589	0.131	0.57433	2.48503	99	W
K11E78Z	17.3	0.15	K1128	319.544	179.506	110.000	17.837	0.53859	2.40099	50	X
K11G00C	22.0	0.15	K1128	335.209	342.083	242.431	2.532	0.49147	2.24536	33	W
K11G00F	20.9	0.15	K1128	315.004	202.151	26.128	34.899	0.32325	1.57503	33	W
K11G44L	20.5	0.15	K1128	120.234	334.958	38.805	20.129	0.52655	0.89631	28	X
K11G54Z	22.0	0.15	K1128	297.141	15.162	213.681	9.968	0.13916	1.33243	29	X
K11G60C	19.0	0.15	K1128	302.680	241.453	16.466	44.682	0.40232	1.77276	26	X
K11G60L	21.5	0.15	K1128	339.929	22.947	174.575	8.927	0.35203	1.96129	25	X
K11G62L	19.5	0.15	K1128	2.937	244.249	189.969	15.702	0.70691	1.14006	21	X
K11G65Q	18.7	0.15	K1128	343.110	111.303	92.033	22.390	0.43023	2.18387	20	X
K11G77P	16.0	0.15	K1128	2.898	29.009	169.885	9.010	0.15336	3.20634	39	X
K11H00H	25.2	0.15	K1128	321.399	150.157	46.301	3.438	0.21374	1.30556	11	X
K11H00P	21.9	0.15	K1128	310.600	45.749	229.881	3.760	0.48043	1.92558	10	X
K11H00T	21.8	0.15	K1128	318.502	163.213	90.240	7.080	0.44865	1.92472	9	W
K11H01H	21.7	0.15	K1128	310.045	223.388	71.817	11.207	0.59950	1.89684	10	X
K11H04S	20.8	0.15	K1128	5.356	314.187	117.536	5.454	0.68030	0.93859	8	W
K11H05O	24.1	0.15	K1128	185.244	289.153	48.600	11.353	0.13675	1.05584	7	X
K11H07J	22.0	0.15	K1128	241.093	297.835	34.115	1.143	0.51890	1.25070	7	X
K11H07L	20.2	0.15	K1128	331.365	359.018	208.687	10.432	0.28911	1.64013	6	X
K11H24C	24.3	0.15	K1128	310.780	69.550	228.524	1.989	0.60804	1.96764	6	W
K11H27V	16.1	0.15	K1128	297.720	199.246	81.998	10.796	0.17083	2.66042	11	X
K11H31V	18.4	0.15	K1128	12.775	312.292	205.427	13.392	0.19217	2.43180	30	S
K11H34C	16.4	0.15	K1128	311.421	231.022	12.337	11.040	0.08727	3.17564	35	S
K11H36C	20.8	0.15	K1128	266.685	121.547	200.836	15.463	0.40717	1.63960	5	X
K11H56S	17.6	0.15	K1128	325.933	200.579	29.360	11.831	0.20099	2.77241	50	S
K11H60R	24.6	0.15	K1128	348.660	300.449	220.224	3.860	0.59712	2.19545	4	X
K11H63D	22.6	0.15	K1128	296.850	135.839	176.000	5.393	0.51233	2.03056	4	S
K11J00A	21.3	0.15	K1128	345.751	286.553	215.041	41.475	0.28814	1.18755	3	X
K11J00K	18.4	0.15	K1128	319.562	10.760	202.181	6.879	0.47830	1.97777	3	S
K11J00L	21.7	0.15	K1128	333.477	191.219	59.366	10.886	0.52688	2.69032	2	W
K11J01D	21.7	0.15	K1128	346.093	85.433	34.322	21.911	0.35671	1.10953	1	X
K11J01E	21.3	0.15	K1128	353.110	295.901	213.492	35.528	0.32357	1.52984	1	W
K11J01X	17.9	0.15	K1128	296.944	227.595	127.922	23.424	0.67615	1.63202	2	S
K11J01Y	24.3	0.15	K1128	343.692	277.356	216.561	2.601	0.41283	1.26455	2	X

New one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc	C
K11A45K	18.1	0.15	K1128	29.374	135.649	312.437	4.641	0.24473	2.57483	76	S
K11C05F	17.9	0.15	K1128	25.513	115.904	346.934	0.541	0.15703	2.42023	52	S
K11C36V	18.4	0.15	K1128	3.073	155.898	337.127	0.778	0.13296	2.43461	38	S
K11C59P	16.8	0.15	K1128	294.541	44.754	173.136	1.090	0.09242	3.18997	33	S
K11C60B	16.9	0.15	K1128	111.191	217.320	162.263	2.119	0.11941	3.15049	30	S
K11D11R	18.0	0.15	K112S	332.459	222.143	347.003	3.875	0.18044	2.67845	36	S
K11D22T	17.4	0.15	K112S	337.723	200.193	2.815	12.220	0.11996	2.66132	33	S
K11D41C	16.2	0.15	K112S	268.220	286.036	350.685	24.568	0.13453	2.78523	39	S
K11E39R	16.8	0.15	K113K	273.860	273.241	30.062	14.529	0.21777	2.60590	53	S
K11E43A	18.6	0.15	K112S	6.407	166.789	350.283	0.763	0.11133	2.24937	25	S
K11E67E	19.6	0.15	K113K	353.074	355.571	190.414	3.852	0.17180	2.26893	20	S
K11E78P	16.5	0.15	K113K	24.176	105.888	50.826	1.839	0.13185	3.14522	50	S
K11F06E	18.1	0.15	K112S	358.506	61.023	122.385	4.670	0.20305	2.57792	27	S
K11F17L	15.9	0.15	K113K	290.416	130.180	138.642	5.769	0.09279	2.59363	38	S
K11F22L	16.8	0.15	K112S	41.841	313.537	176.968	14.509	0.13799	3.01138	26	S
K11F28X	17.8	0.15	K113K	0.117	18.638	170.619	14.625	0.19213	2.67032	29	S
K11F30L	17.3	0.15	K113K	9.855	199.393	320.427	2.812	0.07129	2.66867	5	S
K11F35G	16.4	0.15	K1149	25.334	106.613	59.578	4.765	0.09155	3.13754	30	S
K11F44B	16.9	0.15	K112S	24.411	330.050	176.720	1.589	0.15413	3.15037	29	S
K11F45L	16.6	0.15	K113K	346.347	169.923	41.258	4.772	0.16650	3.06247	63	W
K11F45R	18.2	0.15	K1149	350.095	130.366	89.031	3.290	0.18114	2.37515	39	S
K11F45S	17.9	0.15	K1149	34.645	42.764	118.076	3.230	0.13369	2.33077	35	S
K11F48N	17.7	0.15	K1149	41.793	59.949	112.124	7.048	0.02521	2.19252	36	S
K11F48O	15.7	0.15	K1149	56.200	71.977	87.113	11.138	0.04531	3.07753	36	S
K11F51L	17.5	0.15	K1149	18.686	149.232	17.437	2.592	0.14442	2.32340	26	S
K11F54U	17.4	0.15	K113K	281.550	191.161	89.916	2.369	0.20772	2.58159	6	S

K11F66P	18.3	0.15	K113K	342.872	309.576	251.381	1.745	0.14582	2.40470	6 S
K11F69E	17.0	0.15	K113K	62.045	282.096	174.736	21.590	0.12327	2.68794	8 S
K11FC6F	16.8	0.15	K113K	291.392	284.903	311.619	10.622	0.05239	2.71220	8 S
K11FC6G	17.5	0.15	K113K	328.998	235.282	330.467	23.665	0.14537	2.74708	8 S
K11FD0N	17.7	0.15	K113K	302.387	271.674	340.401	5.547	0.20748	2.46507	5 S
K11FD8G	16.3	0.15	K112S	214.013	345.442	339.464	2.761	0.08884	3.00647	29 S
K11FE3Y	18.2	0.15	K1149	350.461	7.430	202.611	1.923	0.17406	2.35880	30 S
K11FF4N	17.3	0.15	K112S	305.356	233.187	35.944	8.739	0.14259	2.59789	36 S
K11G07R	16.5	0.15	K113K	124.438	241.546	194.502	23.598	0.04329	2.57168	14 S
K11G21E	15.7	0.15	K113K	328.068	250.155	340.660	10.752	0.08181	3.02775	30 S
K11G33M	17.9	0.15	K1149	319.998	57.699	200.958	13.130	0.22704	2.62948	25 S
K11G33Z	18.8	0.15	K113K	335.116	231.459	352.364	2.056	0.12991	2.35397	54 S
K11G33Z	16.5	0.15	K1149	0.627	252.326	305.393	2.176	0.06356	2.99663	30 S
K11G34X	17.1	0.15	K113K	139.243	47.583	3.885	7.529	0.03675	2.53070	51 S
K11G36X	16.6	0.15	K1149	56.598	283.723	214.594	21.186	0.07887	2.59089	27 S
K11G49G	17.3	0.15	K113K	354.386	12.307	193.269	1.430	0.18896	3.06819	48 S
K11G49J	16.1	0.15	K1149	4.898	351.615	202.914	24.818	0.15363	3.14397	31 W
K11G49P	18.5	0.15	K113K	10.815	344.521	190.905	3.452	0.23952	2.39594	53 S
K11G54R	16.5	0.15	K113K	160.280	186.384	197.601	2.477	0.11318	2.92548	4 S
K11G55G	17.0	0.15	K113K	310.951	153.830	124.838	2.391	0.26424	2.61782	61 W
K11G56R	16.7	0.15	K1149	323.515	249.169	24.177	5.632	0.24040	2.58576	26 S
K11G58C	16.1	0.15	K1149	52.827	88.028	44.817	22.241	0.23762	3.11732	26 S
K11G58L	16.4	0.15	K1149	15.138	142.046	49.825	13.272	0.09606	2.61150	38 W
K11G60P	16.4	0.15	K1149	90.343	14.354	91.747	10.024	0.09807	2.76721	17 S
K11G61U	16.6	0.15	K1149	311.576	182.462	95.424	15.215	0.22812	2.62566	29 W
K11G62Z	16.7	0.15	K1149	353.090	314.015	243.174	3.454	0.05858	3.08626	20 W
K11G63X	17.0	0.15	K1149	24.372	84.109	90.763	5.950	0.16322	2.54364	28 W
K11G70Q	16.3	0.15	K1149	299.317	96.341	198.851	12.180	0.15682	2.80170	21 W
K11H01E	18.1	0.15	K114T	299.349	141.958	146.158	28.577	0.12504	1.98655	11 S
K11H03Z	17.2	0.15	K1149	334.021	113.396	130.660	13.833	0.17769	2.75647	21 S
K11H04B	15.0	0.15	K114T	344.120	72.358	190.477	13.992	0.22340	2.97538	7 W
K11H05V	17.8	0.15	K114T	340.517	155.195	87.587	3.647	0.17751	2.41687	11 W
K11H06B	17.1	0.15	K114T	328.386	199.560	69.378	11.662	0.22377	2.43887	11 W
K11H06Q	17.1	0.15	K114T	1.968	37.125	179.403	7.337	0.16511	2.55369	7 W
K11H08C	17.6	0.15	K114T	295.351	89.312	208.038	20.342	0.08471	1.96549	7 W
K11H12F	17.7	0.15	K1149	317.783	160.434	100.760	3.512	0.13312	2.26278	25 S
K11H17Z	18.5	0.15	K1149	349.077	343.447	228.304	0.900	0.08873	2.26242	36 S
K11H18H	17.3	0.15	K114T	6.602	179.176	17.492	3.747	0.18615	2.60071	7 S
K11H18V	16.4	0.15	K114T	336.709	161.822	94.863	10.812	0.16046	2.77039	8 W
K11H18X	16.5	0.15	K1149	286.517	224.012	90.490	12.911	0.17438	2.61619	12 W
K11H18Y	16.4	0.15	K1149	321.941	180.463	85.536	13.502	0.09160	2.69292	12 W
K11H21T	17.7	0.15	K114T	343.416	160.401	84.382	5.341	0.22265	2.68271	7 W
K11H22E	17.9	0.15	K114T	344.122	104.690	139.940	3.338	0.22034	2.41284	7 W
K11H22F	15.8	0.15	K114T	49.941	297.858	207.903	27.108	0.24018	3.22914	7 W
K11H22L	16.8	0.15	K114T	359.273	148.508	72.465	9.726	0.19309	2.74578	7 W
K11H25K	18.3	0.15	K1149	283.606	140.928	166.400	5.599	0.16665	2.17636	24 S
K11H25S	18.0	0.15	K114T	352.674	149.218	83.918	7.637	0.29816	2.62063	7 W
K11H25U	17.1	0.15	K1149	305.935	156.195	123.373	7.076	0.10381	2.35846	24 S
K11H25Y	15.7	0.15	K114T	168.688	350.868	63.566	23.773	0.03958	2.65331	7 W
K11H25Z	16.6	0.15	K1149	288.190	182.990	126.626	8.117	0.15632	2.35168	12 W
K11H28O	14.8	0.15	K114T	355.635	13.490	214.526	30.930	0.08868	3.26386	4 S
K11H28R	17.4	0.15	K114T	335.690	157.812	89.068	6.695	0.08438	2.33520	7 W
K11H28T	18.0	0.15	K114T	350.394	62.677	174.340	6.828	0.23946	2.34121	7 W
K11H28V	16.7	0.15	K114T	340.446	149.564	93.384	6.643	0.06534	2.61824	7 W
K11H28W	16.9	0.15	K114T	320.640	99.402	176.595	5.526	0.16905	2.30100	7 W
K11H28Y	16.7	0.15	K114T	9.149	114.197	102.310	8.109	0.04881	2.37874	7 W
K11H29G	16.1	0.15	K114T	342.657	180.050	63.909	9.520	0.18815	3.06916	7 W
K11H29P	16.2	0.15	K114T	5.147	150.585	60.506	10.668	0.17452	2.98058	6 W
K11H32C	16.5	0.15	K114T	349.705	154.258	86.569	13.701	0.12813	2.64672	8 W
K11H32G	16.5	0.15	K114T	312.652	152.595	149.300	8.766	0.24037	2.61601	8 W
K11H32M	15.6	0.15	K114T	331.903	147.837	104.850	9.393	0.04690	3.08739	7 W
K11H32R	15.8	0.15	K114T	305.177	140.095	153.381	7.582	0.15563	3.12333	7 W
K11H33U	18.1	0.15	K114T	358.930	80.562	143.886	4.937	0.10890	2.23628	7 W
K11H38H	16.4	0.15	K114T	342.926	163.460	78.322	11.353	0.09296	2.59151	7 W
K11H44O	15.1	0.15	K114T	306.053	190.822	100.819	9.770	0.14623	3.18680	7 W
K11H44P	16.0	0.15	K114T	293.157	245.372	70.395	17.427	0.22941	3.12966	7 W
K11H44W	16.4	0.15	K114T	318.469	210.517	81.599	11.546	0.25927	3.11411	7 W
K11H48J	17.2	0.15	K1149	309.404	148.778	138.345	8.674	0.23388	2.47350	19 S
K11H53K	18.3	0.15	K114T	30.256	152.948	16.238	10.118	0.08505	2.59291	6 W
K11H54O	16.0	0.15	K114T	338.727	67.898	195.390	11.907	0.21106	3.10029	11 W
K11H56J	15.9	0.15	K114T	29.955	91.058	96.423	8.405	0.10248	3.13213	7 W
K11H58Z	15.5	0.15	K114T	131.694	354.989	89.722	12.417	0.08495	3.05174	6 W
K11H59E	17.9	0.15	K114T	354.231	49.965	181.262	8.405	0.15419	2.39340	6 W
K11H59P	17.5	0.15	K114T	318.569	108.499	181.719	10.706	0.22758	2.42676	8 W
K11H60P	16.2	0.15	K1149	123.354	352.451	82.309	16.877	0.00639	3.08891	31 S
K11H62L	17.3	0.15	K114T	20.161	133.540	77.288	22.256	0.03787	1.89931	4 W
K11H65L	17.3	0.15	K1149	331.377	73.751	184.415	13.613	0.25666	3.17779	9 S
K11H65V	18.2	0.15	K1149	314.413	39.070	228.222	0.625	0.23646	2.46209	6 S
K11H69T	17.5	0.15	K1149	36.707	122.095	36.783	5.316	0.11775	2.60474	10 S
K11H71Y	17.1	0.15	K114T	285.739	152.721	178.564	3.661	0.24695	2.57921	7 S
K11H73E	17.8	0.15	K114T	1.765	53.087	164.442	8.358	0.20199	2.60202	3 S
K11H73H	16.6	0.15	K114T	72.798	34.455	101.603	9.292	0.11469	2.69343	4 S
K11H73J	17.3	0.15	K114T	348.531	108.265	126.461	6.850	0.09418	2.69240	3 S
K11J00U	15.3	0.15	K114T	308.804	107.461	172.097	27.950	0.05183	3.09886	3 W
K11J00W	17.1	0.15	K114T	3.636	128.280	74.315	27.486	0.43922	3.55564	2 S
K11J01C	17.2	0.15	K114T	326.429	197.998	81.338	28.868	0.29652	2.29906	1 W

K11J01P	17.9	0.15	K114T	9.660	85.734	113.590	33.720	0.45721	3.55443	3ES
K11J01Q	16.2	0.15	K114T	202.143	302.067	2.688	27.257	0.15336	2.68923	1ES
K11J01R	18.5	0.15	K114T	255.873	122.211	221.767	19.435	0.15498	1.92309	1ES
K11J01S	18.4	0.15	K114T	296.663	249.591	46.900	24.950	0.09848	1.87940	1ES
K11J01T	18.4	0.15	K114T	140.073	359.502	73.137	21.823	0.07154	1.86298	1ES
K11J01V	18.3	0.15	K114T	78.061	286.700	217.511	30.768	0.16856	2.04076	1ES
K11J01W	16.4	0.15	K114T	335.351	210.058	9.360	24.870	0.48386	3.37269	3 S

New observations:

J98H49K	HC2011	05	01.29579	15	55	05.38	-08	37	16.2	20.7	VoEJ022691
J98H49K	HC2011	05	01.31352	15	55	01.66	-08	37	56.1	20.6	VoEJ022691
J98H49K	HC2011	05	01.33124	15	54	57.92	-08	38	34.9	20.7	VoEJ022691
J99H01D	tC2011	04	28.21555	12	59	43.86	-05	24	35.9	20.1	VoEJ022691
J99H01D	tC2011	04	28.25892	12	59	37.56	-05	22	41.7	20.4	VoEJ022691
K01QI1P	C2011	05	04.24164	13	03	57.90	-04	50	20.8	16.9	cEJ022704
K01QI1P	C2011	05	04.25263	13	03	56.88	-04	50	27.8	17.3	cEJ022704
K01QI1P	C2011	05	04.26275	13	03	55.95	-04	50	34.9	17.2	cEJ022704
K01QI1P	C2011	05	04.27393	13	03	54.92	-04	50	42.4	17.1	cEJ022704
K01QI1P	C2011	05	04.28875	13	03	53.57	-04	50	52.5	17.1	cEJ022704
K01QI1P	C2011	05	04.31210	13	03	51.04	-04	51	08.9	17.0	RuEJ022H45
K01QI1P	C2011	05	04.31384	13	03	50.90	-04	51	10.1	17.1	RuEJ022H45
K01QI1P	C2011	05	04.31568	13	03	50.74	-04	51	11.7	17.1	RuEJ022H45
K01QI1P	C2011	05	04.31656	13	03	50.67	-04	51	12.1	17.0	RuEJ022H45
K01QI1P	C2011	05	04.31759	13	03	50.58	-04	51	12.7	16.9	RuEJ022H45
K02T60D	KC2011	05	01.86493	11	42	12.61	+17	03	23.2	18.7	RcEJ022A24
K02T60D	KC2011	05	01.87453	11	42	12.50	+17	03	08.6	18.7	RcEJ022A24
K02T60D	KC2011	05	01.88104	11	42	12.44	+17	02	59.4	18.8	RcEJ022A24
K02T60D	KC2011	05	01.89787	11	42	12.24	+17	02	35.8	19.1	RcEJ022A24
K02T60D	KC2011	05	01.90438	11	42	12.19	+17	02	26.6	19.2	RcEJ022A24
K02T60D	KC2011	05	01.91398	11	42	12.02	+17	02	11.9	18.7	RcEJ022A24
K03L00G	KC2011	05	04.42757	21	00	02.07	+06	49	46.6	19.1	RuEJ022H36
K03L00G	IC2011	05	04.43203	21	00	01.24	+06	49	42.7	19.0	RuEJ022H36
K04F01G	KC2011	05	01.86860	12	16	38.70	+33	28	13.2	18.1	RcEJ022A24
K04F01G	KC2011	05	01.87805	12	16	39.83	+33	28	30.5	18.2	RcEJ022A24
K04F01G	KC2011	05	01.88447	12	16	40.59	+33	28	42.5	18.1	RcEJ022A24
K04F01G	KC2011	05	01.90109	12	16	42.53	+33	29	13.2	18.3	RcEJ022A24
K04F01G	KC2011	05	01.90751	12	16	43.28	+33	29	25.1	18.0	RcEJ022A24
K04F01G	KC2011	05	01.91697	12	16	44.39	+33	29	42.2	18.0	RcEJ022A24
K04F04U	C2011	05	04.24078	12	46	19.05	-08	06	13.6	18.7	cEJ022704
K04F04U	C2011	05	04.25178	12	46	17.55	-08	06	29.8	18.9	cEJ022704
K04F04U	C2011	05	04.26190	12	46	16.19	-08	06	43.1	18.9	cEJ022704
K04F04U	C2011	05	04.27307	12	46	14.66	-08	06	59.0	19.0	cEJ022704
K04F04U	C2011	05	04.28790	12	46	12.66	-08	07	19.2	19.1	cEJ022704
K05U05O	C2011	05	04.19028	11	10	20.28	+37	02	51.1	20.1	VrEJ022703
K05U05O	C2011	05	04.19474	11	10	20.49	+37	02	25.9	19.6	VrEJ022703
K05U05O	C2011	05	04.19924	11	10	20.64	+37	01	55.9	21.1	VrEJ022703
K05U05O	C2011	05	04.20375	11	10	21.03	+37	01	28.3	21.0	VrEJ022703
K06SD4V	C2011	05	04.19091	11	13	26.95	-04	56	27.0	17.7	cEJ022704
K06SD4V	C2011	05	04.20110	11	13	26.79	-04	55	44.8	17.9	cEJ022704
K06SD4V	C2011	05	04.21124	11	13	26.59	-04	55	04.5	17.8	cEJ022704
K06SD4V	C2011	05	04.22136	11	13	26.41	-04	54	23.2	18.0	cEJ022704
K06SD4V	C2011	05	04.23150	11	13	26.23	-04	53	42.4	17.9	cEJ022704
K07L19Q	C2011	05	04.33117	14	09	32.73	+21	54	30.6	19.5	RuEJ022H45
K07L19Q	C2011	05	04.33456	14	09	32.42	+21	54	31.7	19.7	RuEJ022H45
K07L19Q	C2011	05	04.33591	14	09	32.28	+21	54	32.5	19.7	RuEJ022H45
K07L19Q	C2011	05	04.33870	14	09	32.05	+21	54	33.7	19.6	RuEJ022H45
K07L19Q	C2011	05	04.34784	14	09	31.20	+21	54	37.2	19.5	RuEJ022H45
K11A05G	KC2011	05	03.45016	21	43	32.96	-02	56	19.5	22.7	RoEJ022H01
K11A05G	KC2011	05	03.46026	21	43	33.50	-02	56	20.3	22.0	RoEJ022H01
K11A05G	C2011	05	04.43714	21	44	31.21	-02	57	30.9	22.1	RoEJ022H01
K11A05G	C2011	05	04.44620	21	44	31.70	-02	57	31.3	22.0	RoEJ022H01
K11A05G	C2011	05	04.45191	21	44	32.01	-02	57	31.9	22.2	RoEJ022H01
K11A05G	C2011	05	04.45821	21	44	32.33	-02	57	32.3	21.5	RoEJ022H01
K11B12A	C2011	05	04.34713	16	04	07.20	-20	57	22.7	21.2	VoEJ022807
K11B12A	C2011	05	04.35239	16	04	06.96	-20	57	21.9	20.7	VoEJ022807
K11B12A	C2011	05	04.35784	16	04	06.70	-20	57	20.7	21.5	VoEJ022807
K11E78Z	C2011	05	04.38027	16	57	47.31	+26	36	00.2	17.8	RuEJ022H45
K11E78Z	C2011	05	04.38291	16	57	47.48	+26	36	02.8	17.7	RuEJ022H45
K11E78Z	C2011	05	04.38404	16	57	47.56	+26	36	04.0	17.7	RuEJ022H45
K11E78Z	C2011	05	04.38584	16	57	47.67	+26	36	05.7	17.8	RuEJ022H45
K11E78Z	C2011	05	04.38707	16	57	47.76	+26	36	06.7	18.0	RuEJ022H45
K11E78Z	C2011	05	04.38810	16	57	47.82	+26	36	08.0	17.9	RuEJ022H45
K11G00C	C2011	05	04.33653	15	40	34.59	-25	56	07.2	18.9	VoEJ022807
K11G00C	C2011	05	04.33977	15	40	35.53	-25	56	05.9	18.9	VoEJ022807
K11G00C	C2011	05	04.34291	15	40	36.43	-25	56	04.8	18.8	VoEJ022807
K11G00F	C2011	05	04.02207	08	42	31.93	-55	49	15.0	19.6	VoEJ022807
K11G00F	C2011	05	04.02753	08	42	28.88	-55	49	23.6	19.7	VoEJ022807
K11G00F	C2011	05	04.03317	08	42	25.71	-55	49	32.4	19.7	VoEJ022807
K11G44L	C2011	05	02.99700	11	56	16.82	+13	15	10.5	21.1	VoEJ022807
K11G44L	C2011	05	03.00286	11	56	15.55	+13	15	03.8	20.8	VoEJ022807
K11G44L	C2011	05	03.00921	11	56	14.14	+13	14	57.1	20.9	VoEJ022807
K11G44L	C2011	05	03.01536	11	56	12.82	+13	14	50.4	20.9	VoEJ022807
K11G54Z	KC2011	05	04.17777	12	23	13.41	+02	34	20.5	19.4	VoEJ022H21
K11G54Z	KC2011	05	04.18436	12	23	14.08	+02	34	39.8	19.7	VoEJ022H21
K11G54Z	KC2011	05	04.18755	12	23	14.41	+02	34	49.2	19.3	VoEJ022H21
K11G60C	C2011	05	04.13783	09	33	19.78	-05	57	34.6	19.1	cEJ022704

K11G60C	C2011	05	04.14917	09	33	17.66	-05	58	21.9	19.5	cEJ022704
K11G60C	C2011	05	04.15937	09	33	15.79	-05	59	04.5	19.8	cEJ022704
K11G60C	C2011	05	04.16946	09	33	13.95	-05	59	46.1	19.4	cEJ022704
K11G60C	C2011	05	04.18079	09	33	11.75	-06	00	32.4	19.7	cEJ022704
K11G60L	C2011	05	04.32009	14	28	12.86	+13	41	28.9	20.3	RuEJ022H45
K11G60L	C2011	05	04.32206	14	28	12.94	+13	41	30.0	20.2	RuEJ022H45
K11G60L	C2011	05	04.32368	14	28	12.99	+13	41	30.2	20.2	RuEJ022H45
K11G60L	C2011	05	04.32566	14	28	13.07	+13	41	30.5	20.2	RuEJ022H45
K11G60L	C2011	05	04.32762	14	28	13.14	+13	41	31.5	20.4	RuEJ022H45
K11G60L	C2011	05	04.32963	14	28	13.20	+13	41	31.9	20.1	RuEJ022H45
K11G62L	C2011	05	04.15295	14	46	25.84	+12	24	57.8	19.9	RuEJ022H15
K11G62L	C2011	05	04.16603	14	46	22.79	+12	25	04.6	19.7	RuEJ022H15
K11G62L	C2011	05	04.17906	14	46	19.74	+12	25	11.3	19.2	RuEJ022H15
K11G62L	C2011	05	04.19221	14	46	16.67	+12	25	18.1	19.1	RuEJ022H15
K11G62L	C2011	05	04.35053	14	45	39.26	+12	26	40.4	19.8	RuEJ022H45
K11G62L	C2011	05	04.35212	14	45	38.93	+12	26	41.0	19.8	RuEJ022H45
K11G62L	C2011	05	04.35382	14	45	38.58	+12	26	41.5	19.8	RuEJ022H45
K11G62L	C2011	05	04.35578	14	45	38.06	+12	26	43.1	19.7	RuEJ022H45
K11G62L	C2011	05	04.35749	14	45	37.70	+12	26	43.6	19.9	RuEJ022H45
K11G62L	C2011	05	04.35969	14	45	37.19	+12	26	44.6	19.9	RuEJ022H45
K11G65Q	C2011	05	04.36325717	28	41.49	+28	26	46.5	19.4	VoEJ022H21	
K11G65Q	C2011	05	04.36494217	28	41.44	+28	26	43.6	19.2	VoEJ022H21	
K11G65Q	C2011	05	04.36662617	28	41.39	+28	26	40.7	19.4	VoEJ022H21	
K11G65Q	C2011	05	04.36830917	28	41.35	+28	26	38.2	19.3	VoEJ022H21	
K11H00H	tC2011	04	30.32697	15	56	32.86	-10	24	16.0	19.3	VoEJ022691
K11H00H	tC2011	04	30.34474	15	56	35.91	-10	26	43.1	20.4	VoEJ022691
K11H00H	tC2011	04	30.36251	15	56	38.98	-10	29	09.2	20.7	VoEJ022691
K11H00H	C2011	05	04.32574	16	11	40.66	-18	27	24.9	19.7	VoEJ022807
K11H00H	C2011	05	04.32835	16	11	41.00	-18	27	41.2	20.2	VoEJ022807
K11H00H	C2011	05	04.33094	16	11	41.34	-18	27	57.6	20.3	VoEJ022807
K11H00H	C2011	05	04.33354	16	11	41.68	-18	28	13.8	19.7	VoEJ022807
K11H00O	C2011	05	03.37244	15	33	00.50	+18	06	52.4	19.1	VrEJ022703
K11H00O	C2011	05	03.38214	15	33	00.72	+18	06	50.2	19.0	VrEJ022703
K11H00O	C2011	05	03.39193	15	33	01.00	+18	06	49.4	18.9	VrEJ022703
K11H00P	C2011	05	04.22809014	17	20.91	-17	51	08.4	18.6	VoEJ022H21	
K11H00P	C2011	05	04.22976314	17	21.05	-17	51	07.2	18.6	VoEJ022H21	
K11H00P	C2011	05	04.23184214	17	21.19	-17	51	05.4	18.8	VoEJ022H21	
K11H00P	C2011	05	04.23371914	17	21.32	-17	51	03.8	18.8	VoEJ022H21	
K11H00T	C2011	05	04.31263	16	37	34.30	+23	54	45.3	19.3	VoEJ022807
K11H00T	C2011	05	04.31590	16	37	35.39	+23	54	44.6	19.6	VoEJ022807
K11H00T	C2011	05	04.31886	16	37	36.37	+23	54	44.5	19.5	VoEJ022807
K11H00T	C2011	05	04.32279	16	37	37.69	+23	54	43.8	19.4	VoEJ022807
K11H01H	KC2011	05	04.36309	18	07	09.01	+57	34	05.6	19.7	RuEJ022H36
K11H01H	KC2011	05	04.38419	18	07	50.73	+57	37	32.0	19.5	RuEJ022H36
K11H01H	KC2011	05	04.38702	18	07	54.98	+57	38	00.4	20.2	VoEJ022H21
K11H01H	KC2011	05	04.39478	18	08	10.39	+57	39	16.2	20.5	VoEJ022H21
K11H01H	KC2011	05	04.39647	18	08	13.79	+57	39	32.4	20.5	VoEJ022H21
K11H01H	KC2011	05	04.39847	18	08	18.95	+57	39	53.9	19.8	RuEJ022H36
K11H04S	C2011	05	03.31346	16	20	50.66	-01	31	36.3	20.5	VoEJ022807
K11H04S	C2011	05	03.32040	16	20	48.20	-01	31	32.6	20.2	VoEJ022807
K11H04S	C2011	05	03.32737	16	20	45.78	-01	31	28.5	20.3	VoEJ022807
K11H04S	KC2011	05	04.30114916	15	12.62	-01	22	51.7	19.9	VoEJ022H21	
K11H04S	KC2011	05	04.34275816	14	58.11	-01	22	29.5	19.7	VoEJ022H21	
K11H04S	KC2011	05	04.34732916	14	56.56	-01	22	27.4	18.6	VoEJ022H21	
K11H05O	C2011	05	03.33714	16	37	09.61	-13	14	10.6	20.7	VoEJ022807
K11H05O	C2011	05	03.34234	16	37	09.18	-13	14	39.2	21.0	VoEJ022807
K11H05O	C2011	05	03.34754	16	37	08.81	-13	15	07.4	20.7	VoEJ022807
K11H05O	cc2011	05	04.29279	16	36	21.86	-14	46	59.2	19.5	RuEJ022H36
K11H05O	C2011	05	04.29390	16	36	19.59	-14	45	26.0	20.8	VoEJ022807
K11H05O	C2011	05	04.29935	16	36	19.10	-14	45	58.5	20.8	VoEJ022807
K11H05O	cc2011	05	04.30081	16	36	21.26	-14	47	47.1	20.2	RuEJ022H36
K11H05O	C2011	05	04.30459	16	36	18.64	-14	46	29.4	21.0	VoEJ022807
K11H05O	KC2011	05	04.32062	16	36	19.40	-14	49	45.3	19.9	RuEJ022H36
K11H05O	KC2011	05	04.37416	16	36	13.96	-14	55	04.0	20.6	VoEJ022H21
K11H05O	KC2011	05	04.37838	16	36	13.64	-14	55	29.2	20.2	VoEJ022H21
K11H05O	KC2011	05	04.38101	16	36	13.44	-14	55	44.6	20.7	VoEJ022H21
K11H05O	JC2011	05	04.39126	16	36	14.44	-14	56	39.8	20.6	VoEJ022695
K11H05O	JC2011	05	04.40041	16	36	13.60	-14	57	34.2	20.5	VoEJ022695
K11H05O	JC2011	05	04.40171	16	36	13.46	-14	57	42.7	20.9	VoEJ022695
K11H07J	C2011	05	03.10168	11	39	07.41	+02	30	13.2	21.6	VoEJ022807
K11H07J	C2011	05	03.11640	11	39	03.75	+02	30	33.5	21.3	VoEJ022807
K11H07J	C2011	05	03.13077	11	39	00.23	+02	30	51.5	21.4	VoEJ022807
K11H07L	KC2011	05	04.35481717	10	40.06	-02	32	55.4	19.8	VoEJ022H21	
K11H07L	KC2011	05	04.35698617	10	40.19	-02	32	49.0	20.2	VoEJ022H21	
K11H07L	KC2011	05	04.35898317	10	40.30	-02	32	43.6	20.1	VoEJ022H21	
K11H07L	KC2011	05	04.36093617	10	40.43	-02	32	38.1	20.3	VoEJ022H21	
K11H07L	C2011	05	04.38875	17	10	42.09	-02	31	18.5	19.0	RuEJ022H45
K11H07L	C2011	05	04.39027	17	10	42.13	-02	31	13.9	18.8	RuEJ022H45
K11H07L	C2011	05	04.39183	17	10	42.25	-02	31	09.1	19.0	RuEJ022H45
K11H07L	C2011	05	04.39922	17	10	42.62	-02	30	48.7	19.0	RuEJ022H45
K11H07L	C2011	05	04.40070	17	10	42.71	-02	30	44.5	18.7	RuEJ022H45
K11H07L	C2011	05	04.40302	17	10	42.83	-02	30	37.8	18.9	RuEJ022H45
K11H07L	C2011	05	04.40517	17	10	42.95	-02	30	31.8	18.7	RuEJ022H45
K11H07L	C2011	05	04.40671	17	10	43.03	-02	30	27.0	18.8	RuEJ022H45
K11H24C	C2011	05	04.19847613	32	43.22	-13	08	17.2	20.0	VoEJ022H21	
K11H24C	C2011	05	04.20791413	32	39.97	-13	07	56.0	19.2	VoEJ022H21	

K11H24C	C2011	05	04.21111013	32	38.88	-13	07	49.1	20.1	VoEJ022H21	
K11H24C	C2011	05	04.22383	13	32	32.45	-13	05	14.1	20.4	VoEJ022807
K11H24C	C2011	05	04.22893	13	32	30.66	-13	05	01.5	19.7	VoEJ022807
K11H24C	C2011	05	04.23399	13	32	28.88	-13	04	49.8	19.7	VoEJ022807
K11H36C	C2011	05	03.23582	14	40	33.71	+01	39	53.4	20.9	VoEJ022807
K11H36C	C2011	05	03.24544	14	40	32.91	+01	40	15.5	20.6	VoEJ022807
K11H36C	C2011	05	03.25474	14	40	32.16	+01	40	36.8	20.9	VoEJ022807
K11H60R	C2011	05	04.21538213	51	28.53	-09	53	00.6	20.2	VoEJ022H21	
K11H60R	C2011	05	04.22154813	51	31.41	-09	53	01.8	20.0	VoEJ022H21	
K11H60R	C2011	05	04.22455713	51	32.78	-09	53	02.6	20.6	VoEJ022H21	
K11J00A	KC2011	05	04.24822	14	39	11.53	+57	13	45.2	18.2	RtEJ022G56
K11J00A	KC2011	05	04.25723	14	39	10.01	+57	13	47.3	18.4	RtEJ022G56
K11J00A	KC2011	05	04.27036	14	39	08.32	+57	13	50.1	18.7	RtEJ022G56
K11J00A	KC2011	05	04.28459	14	39	06.04	+57	13	53.7	18.4	RtEJ022G56
K11J00K	C2011	05	04.15178	07	55	25.03	+17	09	14.2		oEJ022291
K11J00K	HC2011	05	04.15631	07	55	25.83	+17	09	13.9		oEJ022291
K11J00K	HC2011	05	04.16019	07	55	26.75	+17	09	14.2		oEJ022291
K11J00L	KC2011	05	02.01724	14	57	24.37	-02	34	48.1	19.8	RvEJ022204
K11J00L	KC2011	05	02.02870	14	57	24.18	-02	35	06.9		vEJ022204
K11J01D	C2011	05	04.13589	09	15	48.00	-05	01	37.2	19.2	cEJ022704
K11J01D	C2011	05	04.14731	09	15	55.73	-05	04	29.1	19.9	cEJ022704
K11J01D	C2011	05	04.15751	09	16	02.64	-05	07	05.1	19.6	cEJ022704
K11J01D	C2011	05	04.16760	09	16	09.47	-05	09	37.5	19.6	cEJ022704
K11J01D	C2011	05	04.17892	09	16	17.19	-05	12	27.6	19.5	cEJ022704
K11J01E	KC2011	05	04.01934	13	04	28.39	+07	08	11.9	20.0	RuEJ022J18
K11J01E	KC2011	05	04.02433	13	04	29.00	+07	08	44.2	20.0	RuEJ022J18
K11J01E	KC2011	05	04.03265	13	04	30.00	+07	09	37.5	20.1	RuEJ022J18
K11J01E	C2011	05	04.18556	13	04	49.31	+07	26	31.6	20.4	VoEJ022807
K11J01E	C2011	05	04.19063	13	04	49.85	+07	27	03.9	20.2	VoEJ022807
K11J01Y	C2011	05	04.18800	12	37	28.39	+04	13	34.0	19.1	cEJ022704
K11J01Y	C2011	05	04.19818	12	37	42.55	+04	11	59.7	18.7	cEJ022704
K11J01Y	C2011	05	04.20832	12	37	56.57	+04	10	24.3	18.8	cEJ022704
K11J01Y	C2011	05	04.21844	12	38	10.59	+04	08	50.2	18.4	cEJ022704
K11J01Y	C2011	05	04.22856	12	38	24.48	+04	07	16.0	18.7	cEJ022704
01866	C2011	05	04.36138	15	57	21.00	+01	43	34.2	14.8	RuEJ022H45
01866	C2011	05	04.36314	15	57	20.79	+01	43	33.7	14.8	RuEJ022H45
01866	C2011	05	04.36506	15	57	20.57	+01	43	33.0	14.8	RuEJ022H45
01866	C2011	05	04.36666	15	57	20.38	+01	43	32.5	14.9	RuEJ022H45
01866	C2011	05	04.36788	15	57	20.24	+01	43	32.0	14.8	RuEJ022H45
04401	KC2011	05	01.87685	12	33	59.69	-03	42	35.4	18.5	RcEJ022A24
04401	KC2011	05	01.88634	12	33	59.11	-03	42	39.4	18.6	RcEJ022A24
04401	KC2011	05	01.89278	12	33	58.74	-03	42	42.3	18.6	RcEJ022A24
04401	KC2011	05	01.90943	12	33	57.75	-03	42	50.1	18.8	RcEJ022A24
04401	KC2011	05	01.92536	12	33	56.74	-03	42	55.8	18.4	RcEJ022A24
04401	C2011	05	04.23919	12	31	46.47	-03	58	34.8	18.9	cEJ022704
04401	C2011	05	04.25019	12	31	45.87	-03	58	38.1	19.2	cEJ022704
04401	C2011	05	04.26031	12	31	45.39	-03	58	43.7	19.6	cEJ022704
04401	C2011	05	04.27149	12	31	44.73	-03	58	47.8	19.4	cEJ022704
04954	C2011	05	04.85870	10	18	33.84	+10	35	32.5	16.0	RaEJ022233
04954	C2011	05	04.86271	10	18	33.97	+10	35	30.1	16.0	RaEJ022233
04954	C2011	05	04.86595	10	18	34.05	+10	35	28.4	16.1	RaEJ022233
05626	C2011	05	04.24642	13	45	49.39	-07	09	11.4	18.9	cEJ022704
05626	C2011	05	04.25653	13	45	48.85	-07	09	08.1	19.3	cEJ022704
05626	C2011	05	04.26665	13	45	48.30	-07	09	05.6	19.3	cEJ022704
05626	C2011	05	04.27781	13	45	47.65	-07	09	01.2	18.9	cEJ022704
05626	C2011	05	04.29263	13	45	46.83	-07	08	56.7	19.0	cEJ022704
08507	C2011	05	04.13668	09	19	00.91	-05	38	59.6	19.3	cEJ022704
08507	C2011	05	04.14802	09	19	00.60	-05	38	57.4	19.6	cEJ022704
08507	C2011	05	04.15823	09	19	00.42	-05	38	54.9	19.7	cEJ022704
08507	C2011	05	04.16832	09	19	00.14	-05	38	52.6	19.3	cEJ022704
08507	C2011	05	04.17964	09	18	59.95	-05	38	50.1	19.4	cEJ022704
20086	C2011	05	04.65252	15	06	22.89	-31	02	50.7	17.3	VrEJ022E12
20086	C2011	05	04.66317	15	06	22.50	-31	02	34.1	17.2	VrEJ022E12
20086	C2011	05	04.67383	15	06	22.14	-31	02	18.0	17.1	VrEJ022E12
20086	C2011	05	04.68458	15	06	21.74	-31	02	01.5	17.0	VrEJ022E12
23187	KC2011	05	01.83577	11	11	09.17	+59	50	58.7	17.9	RcEJ022A24
23187	KC2011	05	01.85272	11	11	11.34	+59	50	45.0	18.2	RcEJ022A24
23187	KC2011	05	01.87703	11	11	14.48	+59	50	24.5	18.0	RcEJ022A24
23187	KC2011	05	01.90431	11	11	17.96	+59	50	02.7	17.9	RcEJ022A24
24445	KC2011	05	01.88240	12	49	37.53	-05	20	00.5	18.1	RcEJ022A24
24445	KC2011	05	01.89442	12	49	37.01	-05	19	52.3	18.3	RcEJ022A24
24445	KC2011	05	01.90178	12	49	36.67	-05	19	47.2	18.4	RcEJ022A24
24445	KC2011	05	01.91184	12	49	36.23	-05	19	40.3	18.3	RcEJ022A24
24445	KC2011	05	01.91920	12	49	35.89	-05	19	35.3	18.4	RcEJ022A24
24445	KC2011	05	01.93123	12	49	35.37	-05	19	27.3	18.3	RcEJ022A24
24445	C2011	05	04.24020	12	48	00.67	-04	54	08.2	19.0	cEJ022704
24445	C2011	05	04.25120	12	48	00.18	-04	54	02.5	19.3	cEJ022704
24445	C2011	05	04.26132	12	47	59.78	-04	53	54.5	19.2	cEJ022704
24445	C2011	05	04.27250	12	47	59.27	-04	53	47.2	19.0	cEJ022704
24445	C2011	05	04.28732	12	47	58.68	-04	53	38.3	19.6	cEJ022704
53435	KC2011	05	01.87980	12	39	11.54	+09	25	37.0	18.2	RcEJ022A24
53435	KC2011	05	01.88929	12	39	11.11	+09	25	36.2	18.2	RcEJ022A24
53435	KC2011	05	01.89573	12	39	10.81	+09	25	35.8	18.3	RcEJ022A24
53435	KC2011	05	01.91238	12	39	10.05	+09	25	34.8	18.3	RcEJ022A24
53435	KC2011	05	01.91883	12	39	09.75	+09	25	33.9	17.9	RcEJ022A24
53435	KC2011	05	01.92832	12	39	09.33	+09	25	33.9	18.0	RcEJ022A24

86326	HC2011	04	29.38804	16	24	27.11	+05	05	34.4	21.2	VoEJ022691
86326	HC2011	04	29.42348	16	24	24.58	+05	05	34.3	21.2	VoEJ022691
89958	KC2011	05	01.87426	12	23	36.81	+03	55	03.4	17.6	RcEJ022A24
89958	KC2011	05	01.88622	12	23	35.98	+03	55	07.3	18.0	RcEJ022A24
89958	KC2011	05	01.89353	12	23	35.45	+03	55	09.9	18.1	RcEJ022A24
89958	KC2011	05	01.90353	12	23	34.67	+03	55	13.3	17.9	RcEJ022A24
89958	KC2011	05	01.91084	12	23	34.16	+03	55	15.9	17.7	RcEJ022A24
89958	KC2011	05	01.92279	12	23	33.33	+03	55	19.9	17.9	RcEJ022A24
89958	C2011	05	04.18815	12	21	08.46	+04	06	51.7	19.3	cEJ022704
89958	C2011	05	04.19833	12	21	07.84	+04	06	54.3	19.2	cEJ022704
89958	C2011	05	04.20847	12	21	07.21	+04	06	56.6	19.4	cEJ022704
89958	C2011	05	04.21859	12	21	06.58	+04	06	59.4	19.2	cEJ022704
89958	C2011	05	04.22872	12	21	06.01	+04	07	02.1	19.0	cEJ022704
D6617	C2011	05	04.13411	10	22	54.15	-00	10	58.3	19.3	VrEJ022703
D6617	C2011	05	04.14541	10	22	54.15	-00	10	52.4	19.4	VrEJ022703
D6617	C2011	05	04.15266	10	22	54.12	-00	10	49.8	19.8	VrEJ022703
D6617	C2011	05	04.15891	10	22	54.08	-00	10	47.1	19.4	VrEJ022703
E1525	KC2011	05	01.86229	11	35	01.27	+32	53	21.4	17.9	RcEJ022A24
E1525	KC2011	05	01.87437	11	34	56.79	+32	53	07.5	18.1	RcEJ022A24
E1525	KC2011	05	01.88176	11	34	54.05	+32	52	58.8	18.4	RcEJ022A24
E1525	KC2011	05	01.89187	11	34	50.37	+32	52	47.2	18.8	RcEJ022A24
E1525	KC2011	05	01.89927	11	34	47.61	+32	52	39.3	18.9	RcEJ022A24
E1525	KC2011	05	01.91134	11	34	43.19	+32	52	25.0	18.0	RcEJ022A24
E1531	C2011	05	04.18757	13	13	11.02	+00	29	54.2	19.3	cEJ022704
E1531	C2011	05	04.19775	13	13	09.07	+00	29	44.5	19.5	cEJ022704
E1531	C2011	05	04.20787	13	13	06.91	+00	29	36.5	19.5	cEJ022704
E1531	C2011	05	04.21800	13	13	04.85	+00	29	27.8	20.1	cEJ022704
E1531	C2011	05	04.22812	13	13	02.86	+00	29	17.9	20.0	cEJ022704
E4332	KC2011	05	01.87157	12	20	53.43	+51	55	00.3	18.8	RcEJ022A24
E4332	KC2011	05	01.88105	12	20	52.53	+51	55	05.7	18.9	RcEJ022A24
E4332	KC2011	05	01.88750	12	20	51.93	+51	55	09.2	18.8	RcEJ022A24
E4332	KC2011	05	01.90416	12	20	50.35	+51	55	18.4	18.6	RcEJ022A24
E4332	KC2011	05	01.91060	12	20	49.73	+51	55	22.2	18.6	RcEJ022A24
E4332	KC2011	05	01.92009	12	20	48.92	+51	55	28.2	18.4	RcEJ022A24
G3250	C2011	05	02.17289	17	12	20.97	+39	51	43.5	17.2	VcEJ022I28
G3250	C2011	05	02.18337	17	12	20.49	+39	51	53.1	17.0	VcEJ022I28
G3250	C2011	05	02.19387	17	12	19.99	+39	52	02.2	17.2	VcEJ022I28
I9263	HC2011	04	29.21503	14	57	13.11	-08	33	03.1		oEJ022691
I9263	HC2011	04	29.23277	14	57	12.38	-08	32	57.8		oEJ022691
I9263	HC2011	04	29.25051	14	57	11.47	-08	32	52.5		oEJ022691
Q0141	KC2011	05	01.83378	11	05	40.17	+12	17	26.6	16.2	RcEJ022A24
Q0141	KC2011	05	01.84737	11	05	41.42	+12	15	46.4	16.5	RcEJ022A24
Q0141	KC2011	05	01.85649	11	05	42.26	+12	14	39.2	16.6	RcEJ022A24
Q0141	KC2011	05	01.87959	11	05	44.40	+12	11	49.1	17.4	RcEJ022A24
Q0141	KC2011	05	01.90231	11	05	46.56	+12	09	01.8	16.2	RcEJ022A24
R4138	KC2011	05	01.86008	11	15	03.04	+32	32	53.9	16.0	RcEJ022A24
R4138	KC2011	05	01.86034	11	15	02.88	+32	32	55.5	16.0	RcEJ022A24
R4138	KC2011	05	01.86060	11	15	02.80	+32	32	57.1	16.0	RcEJ022A24
R4138	KC2011	05	01.90914	11	14	38.95	+32	38	10.3	16.0	RcEJ022A24
R4138	KC2011	05	01.90940	11	14	38.80	+32	38	12.5	16.1	RcEJ022A24
R4138	KC2011	05	01.90966	11	14	38.67	+32	38	14.0	16.0	RcEJ022A24

A. U. Tomatic

(C) Copyright 2011 MPC

M.P.E.C. 2011-J22

[Read MPEC 2011-J21](#)[Read MPEC 2011-J23](#)

Display MPEC number:

Clear

Enter an [MPEC](#) number in one of the following forms:

- 1997-B01 (the full form)
- J97B01 (the packed version of the full form)
- B01 (the abbreviated form)