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MPEC 2019-U27 : DAILY ORBIT UPDATE (2019 October 18)

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M.P.E.C. 2019-U27

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DAILY ORBIT UPDATE (2019 October 18)

Update to 2019-U11

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

Erroneous identifications:

# K03Se7D	K17F58T	MPO404926
# K16U91D	K15PD3C	MPO394645
# K16Q60D	K11UY2V	MPO389313

New identifications:

K01V75Y	K08EC50	K14SS6G	Weryk
K02G57F	K08E49V		Weryk
K03S00F	K19Q03C		Manca
K03S00F	K19Q03C		Matson
K03Se7D	K16A13X		Weryk
K03Ub5U	K07M01H		Weryk
K03Uf8C	K03Ub9U	K16W10X	Weryk
K03WI5U	K13EA7E	K17DC1F	Weryk
K04RQ8N	K10AE3T		Weryk
K04Ta8K	K07EI8S	K08RE4N K15E43L	Weryk
K05EF7X	K07VI3Q		Weryk
K05EK9F	K16B53D		Weryk
K05EP2A	K16GL1F		Weryk
K05GJ2W	K03Sb5U		Weryk
K05JH7K	K14HK1G		Weryk
K05Q77A	K18S04Y		Weryk
K05V23A	K14S16Z		Weryk
K05YS5K	K19G08B		Odasso
K06BM2L	K09W96N		Weryk
K06H58Y	K02TH2V		Weryk
K06K18H	K14WT5O		Weryk
K06KA0F	K19G19N		Weryk
K06UD0C	K14O25Q		Weryk
K06UR0N	K15N22B		Weryk
K06V20T	K14EK8B		Weryk
K06WB9K	K14V06E		Weryk
K07A01Y	K16O02T		Weryk
K07E06E	K04RQ0S		Weryk
K07H24S	K15F89O		Weryk
K07T61S	K07Tf5X		Weryk

K07V33Y	K10KC9J		Weryk
K07Y39E	K14D62L		Weryk
K08G94T	K12C57R		Weryk
K08UH6O	K15Bb6H		Weryk
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K08W31S	K15TQ3G		Weryk
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K09A05U	K17SB0E		Weryk
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K10G23J	K18X05J		Weryk
K10RJ0H	K17S49J		Mimeev
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K10W50N	K05WL2D		Weryk
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K15M85Y	K13A93N		Weryk
K15MA7W	K15PN2S		Weryk
K15MD2Z	K05GD2J		MPCW
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K18R34P	K16J08J			Weryk
K18R34R	K17F98Y			Weryk
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K18R36T	K17FD7D			Weryk
K18R37F	K17K06Q			Weryk
K18R37Q	K15VC3D			Lopez
K18R37X	K14M47K	K15XY4Z		Weryk
K18S01G	K16CA4D			Lopez
K18S01Z	K11UC9E	K17E04T		Weryk
K18S04L	K11SK6K			Weryk
K18S04M	K14Wn6A			Weryk
K18S04S	K14Wc2Q			Weryk
K18S04Z	K11Q95T			Lopez
K18S05B	K15BL4O			Weryk
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K18S09P	K15BB6B			Weryk
K18S10E	K14QG6W	K16C55J		Weryk
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K18U18N	K07D63B			Weryk
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K18V14J	K10T51F			Weryk
K18V14M	K14Y23N			Weryk

K18V14R	K08R28V	K10E40J	K13B19Y	K15TB1Z	Weryk
K18V14Y	K14Wo4A				Weryk
K18V15E	K11K15A				Lopez
K18V15F	K08FC1Y				Weryk
K18V15J	K14SL2T				Weryk
K18V15M	K08WC0T	K16F58G			Weryk
K18V15Q	K15AM1B				Lopez
K18V15S	K14UH2X				Weryk
K18V15T	K05YP7F				Weryk
K18V16H	K16GN9D				Weryk
K18V16J	K15B61H				Weryk
K18V16X	K07S09Y	K15E52A			Weryk
K18V17H	K14HI3E	K17FF4L			Weryk
K18V17Q	K06BK5E				Weryk
K18V18X	K15BL1G	K16E63G			Weryk
K18V19D	K12H83K				Weryk
K18V19E	K06P06X				Weryk
K18V20E	K09B13W	K15H08K			Weryk
K18V20J	K14S41C				Weryk
K18V20Y	K14Y10T				Weryk
K18V21B	K04TQ6L				Weryk
K18V21F	K09V03P				Weryk
K18V22Y	K11SM9M	K16AC2A			Weryk
K18V23B	K05R02B	K14UM2X			Weryk
K18V23F	K14UL8W				Weryk
K18V23M	K04TO2B	K10HC7A			Lopez
K18V23P	K13W61T	K15E56B			Weryk
K18V23T	K15DF7X				Weryk
K18V24F	K15BA3X				Weryk
K18V24R	K12J22J	K14Wd3D	K16GE5P		Weryk
K18V24Y	K12J32S	K15B51Y			Weryk
K18V26K	K14UL6Y				Weryk
K18V26L	K15FV2P				Weryk
K18V26X	K11B02G	K16E82U			Weryk
K18V26Y	K16GI0L				Weryk
K18V27P	K15W14B				Weryk
K18V28P	K16E69A				Weryk
K18V29D	K07UD6V				Weryk
K18V29G	K13A66X				Weryk
K18V29L	K15FI9J				Weryk
K18V29Y	K17G06A				Lopez
K18V31G	K14Wd3X	K16EA7M			Weryk
K18V33K	K15A42A				Weryk
K18V33U	K15BK7V				Weryk
K18V34U	K09BD1Y				Weryk
K18V35A	K14Qc7J				Weryk
K18V35B	K07TP6T				Weryk
K18V35F	K15BR0Y				Weryk
K18V35J	K14UJ9H				Weryk
K18V36D	K13YE7H				Weryk
K18V36M	K15A11C				Weryk
K18V36N	K11U14U	K14O57H			Weryk
K18V43E	K14W40D				Weryk
K18V43Y	K13GA6S				Weryk
K18V45E	K07UD7O				Weryk
K18V45S	K12A02G				Weryk
K18V46A	K15AM3A				Weryk
K18V46E	K07TM0C	K15D53K			Weryk
K18V47B	K15DK3F	K17M10D			Weryk
K18V48X	K16A20A				Weryk
K18V48Y	K02N73H				Weryk
K18V50M	K14WC8C				Weryk
K18V51X	K10GD6Q				Weryk
K18V52L	K10A72Z				Weryk
K18V54O	K15BR2C				Weryk
K18V55A	K11FA3A				Weryk
K18V58L	K16CE1A				Weryk
K18V58S	K14Qn1T				Weryk
K18V59M	K13YF0O	K15FA9F			Weryk
K18V59T	K14Wg9X	K16CN4R			Weryk
K18V59W	K09SR6B	K15B55L			Weryk
K18V59Z	K11UG4P				Weryk
K18V60B	K15FT1Z				Weryk
K18V60P	K15BO5G				Weryk
K18V60Y	K11Y77U				Weryk
K18V61A	K14R49U				Weryk
K18V61C	K16C63M				Weryk
K18V61F	K09UD6Q				Weryk
K18V61L	K15AP9O				Weryk
K18V61O	K15XU4R				Weryk
K18V61V	K16L21J				Weryk
K18V61Z	K14Wo3D				Weryk
K18V62A	K01XG1T	K09R24Y	K12J44O		Weryk
K18V62P	K14S75U				Weryk
K18V62Z	K09A29L	K16AA7T			Weryk
K18V63N	K10X88T	K14UM2F			Weryk
K18V63Z	K14QY8S				Weryk
K18V64T	K04XI5N				Weryk
K18V65Q	K14Y36A				Weryk
K18V66A	K14Q89A				Weryk
K18V66K	K14W16T				Weryk
K18V66P	K09W42G				Weryk
K18V66T	K03SB3B	K15AR7U			Weryk

K18V67X	K11WA5T	K16C32R					Weryk
K18V68J	K13W300						Weryk
K18V68X	K15DH4A						Weryk
K18V69M	K11A75Y	K12K40Z	K14Y41S				Weryk
K18V70E	K11WE7A						Lopez
K18V70U	K14S80L	K16C67S					Weryk
K18V71W	K05W61H						Weryk
K18V72A	K12K05Z						Weryk
K18V73H	K06X29W	K14X13R					Weryk
K18V73M	K14O94H	K16A94C					Weryk
K18V75S	K07W45P						Weryk
K18V76K	K12V27K						Weryk
K18V76S	K10TD6W						Weryk
K18V76V	K14Y17R	K16GH1Q					Weryk
K18V76Y	K14Wm00						Weryk
K18V77V	K11W47J						Weryk
K18V78A	K14Wg50						Weryk
K18V78S	K07U10V						Weryk
K18V78U	K14S77L						Weryk
K18V79B	K07X02N						Weryk
K18V79S	K13W83U						Weryk
K18V79W	K02CQ5T	K05V93P	K09SL9X	K15A18C			Weryk
K18V80E	K06BE0Z	K09V94D	K13S13Q				Weryk
K18V80O	K07X25Y	K12C26D					Weryk
K18V80P	K07G63Y	K08P16Q	K12L18D	K15BS1H	K16GD2G		Weryk
K18V81D	K07O07T						Weryk
K18V81R	K15B37G						Weryk
K18V82A	K14Wo4W						Weryk
K18V82B	K14Wf4U						Lopez
K18V82E	K08YB1Q						Weryk
K18V82T	K14WG5N						Weryk
K18V82U	K15FI0B						Weryk
K18V83C	K14Wo5A	K16E51D					Weryk
K18V83D	K07J25A						Lopez
K18V83F	K14X05W						Weryk
K18V83Q	K15DA4M						Weryk
K18V83S	K10F270	K15D65S					Weryk
K18V83T	K15AB4Z						Weryk
K18V83U	K15DD20						Weryk
K18V83X	K15BK8D						Weryk
K18V83Z	K07RL8N						Weryk
K18V84A	K15AL0W						Weryk
K18V84B	K11WD9C	K16D15Z					Weryk
K18V84C	K15F88R						Weryk
K18V84D	K12B67V						Weryk
K18V84H	K02Y13K	K06X28N	K14X39Q				Weryk
K18V84M	K07TQ5Q	K14R05T					Weryk
K18V85G	K16E94C						Weryk
K18V86D	K10V78K	K14Wo0D					Weryk
K18V86E	K16L140						Weryk
K18V86S	K07RR50	K11W90X	K17H21B				Weryk
K18V86X	K15F58G	K16K01Z					Weryk
K18V87Q	K11Q77B						Lopez
K18V88K	K14WY70						Weryk
K18V88M	K14W39H						Weryk
K18V89R	K07TX5Z						Weryk
K18V90P	K09B65Q	K16D13K					Weryk
K18V92A	K08RC4R	K15BG4E					Weryk
K18V94Q	K16EG7S						Weryk
K18V95T	K11WE6R						Weryk
K18V97T	K09WJ0E	K17Q39U					Weryk
K18V97Y	K11H96U						Lopez
K18V98E	K07VX8H	K14QY4M					Weryk
K18V98P	K14P65S						Weryk
K18V99Q	K11W720	K14QJ8P					Weryk
K18V99W	K14Wm3U						Weryk
K18VA0D	K05X26Z	K11F12J					Weryk
K18VA0K	K14W570						Weryk
K18VA0P	K05T97G						Weryk
K18VA0S	K14V27D						Weryk
K18VA0Z	K15F92V						Weryk
K18VA2E	K14SS4B						Weryk
K18VA3Y	K14U62W						Weryk
K18VA4H	K09S89K						Weryk
K18VA5M	K07F28G	K11A48Z					Weryk
K18VA8A	K07J46F						Weryk
K18VA8J	K16A84J						Weryk
K18VA8O	K14WP1G						Weryk
K18VA9N	K14OT8U						Weryk
K18VB0V	K09B04Y	K10LA4S	K15KC3T				Weryk
K18VB0Y	K07Y51G	K14Qa1B					Weryk
K18VB2M	K07RR10	K12UD10					Weryk
K18X03C	K15HA6Q						Lopez
K18X06J	K15TQ0Y						Lopez
K18X08T	K05Y89R	K11Q65Y	K16CG5R				Weryk
K18X09C	K16G03T						Weryk
K18X09F	K15B43E						Weryk
K18X09Z	K09WD1N						Weryk
K18X13B	K12Q02S						Weryk
K18X14H	K06X36M	K14Wm6B					Weryk
K18X15D	K14T85L						Weryk
K18X15F	K07W08Z						Weryk
K18X15H	K12J34Y	K16CQ10					Weryk

K18X15N	K14QY7A	K16CP7Q		Weryk
K18X15X	K15A03B			Weryk
K18X16D	K07V59X			Weryk
K18X16K	K15B51L			Weryk
K18X17L	K12UH0Z	K14C12G	K16N14K	Weryk
K18X17Q	K15E19A			Weryk
K18X17R	K11C47J	K16GN9L		Weryk
K18Y03C	K14N35K			Lopez
K18Y03F	K07VH4Y	K16P70U		Weryk
K18Y04W	K12XA0K	K15N20K		Weryk
K19E03M	K10CB8T			Weryk
K19F03F	K16P27F			Lopez
K19F03H	K12Q17C			Weryk
K19F03J	K06U54R	K11T06X		Weryk
K19F03K	K14X20K			Weryk
K19F03N	K15FY2R			Weryk
K19F04B	K10EC6H			Weryk
K19F04D	K15P06Q			Weryk
K19F04O	K15E61U			Weryk
K19F04X	K10C58M	K17W06E		Weryk
K19G01A	K09O20O	K12TV9P		Lopez
K19G06T	K06H71J			Weryk
K19G07T	K15A22J			Weryk
K19G08H	K13Y51X			Weryk
K19G08P	K06BL3T	K15H46U	K17SB0B	Weryk
K19G09B	K10W47S			Weryk
K19G09P	K07W09P	K09F51B	K14X20U	Weryk
K19G10Y	K15L07V			Weryk
K19G15N	K07U74F			Weryk
K19G15T	K15RC5N			Weryk
K19G16E	K05V13H			Weryk
K19G22H	K07P45W			Weryk
K19J07O	K15A09F			Williams
K19J08E	K16E85M			MPCW
K19K04S	K06BH6J	K10G72T	K15A47Z	MPCW
K19L00E	K06B89E			MPCW
K19M01U	K15U47G			Lopez
K19N03U	K17B88R			Lopez
K19Q00L	K10Y03E			Doppler
K00U16S	K19U00A			Weryk

New multiple-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Opp	C
J98E03X	18.8	0.15	K194R	264.092	94.835	328.470	19.361	0.09864	1.83218	5	X
K00CD9T	17.3	0.15	K194R	51.706	8.666	146.758	4.046	0.03188	2.77790	10	W
K00U16S	18.2	0.15	K194R	311.581	307.680	56.940	8.992	0.40916	2.44850	6	V
K01Q34C	20.1	0.15	K194R	128.357	215.379	271.640	6.236	0.18747	1.12833	4	X
K01QA7D	17.5	0.15	K194R	319.977	55.768	290.845	22.809	0.10921	1.86718	5	X
K01R47N	18.0	0.15	K194R	293.247	6.722	4.707	20.468	0.15618	1.87655	7	X
K01S38V	16.9	0.15	K194R	323.941	323.147	17.714	11.434	0.33184	2.75208	4	X
K01U18C	18.9	0.15	K194R	314.339	134.101	277.010	6.220	0.51990	2.72496	4	X
K01V75Y	17.2	0.15	K194R	71.544	74.365	218.934	9.122	0.14682	2.69980	9	W
K01X31D	16.4	0.15	K194R	347.493	97.822	278.965	27.071	0.41620	2.72400	6	X
K01XM9R	17.2	0.15	K194R	326.534	120.704	261.683	10.990	0.34958	2.73678	4	X
K02G57F	16.7	0.15	K194R	315.439	228.682	356.129	26.633	0.19069	3.17386	4	W
K02N07U	17.8	0.15	K194R	315.693	41.445	309.482	7.835	0.37383	2.26551	4	X
K02N82O	17.3	0.15	K194R	318.559	78.530	309.635	11.823	0.28707	2.58731	6	X
K02O32W	15.8	0.15	K194R	329.693	85.906	258.798	22.748	0.36472	3.20321	4	X
K02P02J	16.3	0.15	K194R	350.670	77.355	284.538	25.141	0.21243	3.10718	4	X
K02PK2N	17.0	0.15	K194R	305.474	161.768	242.706	13.025	0.25986	2.59573	6	X
K02R07E	18.2	0.15	K194R	305.478	33.383	335.291	13.362	0.21684	1.99468	6	X
K02RC9V	15.6	0.15	K194R	324.535	18.817	12.969	25.742	0.30694	3.14294	4	X
K02T69H	17.5	0.15	K194R	310.357	64.690	11.768	29.211	0.37147	2.60406	4	X
K02TK6T	17.2	0.15	K194R	308.478	74.626	18.935	28.511	0.37144	2.60118	4	X
K02VC2C	17.5	0.15	K194R	313.888	343.145	17.076	10.076	0.34852	2.65682	4	X
K02X68Y	16.8	0.15	K194R	323.344	100.548	319.868	24.818	0.34465	2.60815	6	X
K03S00F	19.7	0.15	K194R	291.530	33.033	76.628	5.599	0.77809	2.17540	2	W
K03S79O	14.7	0.15	K194R	332.557	163.937	227.928	7.902	0.28727	3.97782	6	X
K03Se7D	15.8	0.15	K194R	352.047	212.780	106.530	11.813	0.12710	3.12560	12	W
K03Ub5U	16.2	0.15	K194R	136.643	340.771	202.749	8.883	0.03373	3.06932	8	W
K03Uf8C	19.1	0.15	K194R	264.381	348.132	72.250	2.363	0.12779	2.17727	3	W
K03WI5U	18.2	0.15	K194R	240.137	95.733	342.318	2.977	0.22160	2.57256	7	W
K03Y92A	14.5	0.15	K194R	48.274	7.472	276.406	27.546	0.17048	3.14830	13	X
K04F29F	18.1	0.15	K194R	265.440	40.126	68.597	8.200	0.61740	1.91707	5	X
K04RQ8N	17.7	0.15	K194R	107.966	248.771	182.015	4.162	0.23782	2.61726	6	W
K04T14P	18.0	0.15	K194R	263.282	84.977	20.386	25.401	0.20952	1.82822	5	X
K04TB2K	17.4	0.15	K194R	299.180	93.041	0.149	21.355	0.31709	2.39314	4	X
K04Ta8K	17.3	0.15	K194R	267.681	75.867	205.340	3.819	0.22745	2.54993	8	W
K05EF7X	18.4	0.15	K194R	62.618	247.164	175.820	5.252	0.21945	2.34703	6	W
K05EK9F	16.6	0.15	K194R	222.812	337.284	141.006	10.947	0.07588	3.12577	7	W
K05EP2A	16.4	0.15	K194R	261.195	297.650	196.988	9.451	0.01670	3.11472	7	W
K05GJ2W	18.0	0.15	K194R	117.738	253.078	170.040	3.664	0.18817	2.73149	5	W
K05JH7K	17.7	0.15	K194R	40.115	203.845	30.643	4.274	0.16837	2.68674	5	W
K05P11Y	17.9	0.15	K194R	317.173	42.173	326.357	3.750	0.16017	2.28486	8	X
K05Q77A	17.5	0.15	K194R	154.323	287.962	323.854	3.139	0.16427	2.18882	10	W
K05SI6Z	16.1	0.15	K194R	327.108	338.589	40.612	10.076	0.29164	2.78614	7	X
K05SL4S	16.8	0.15	K194R	335.871	120.199	242.076	11.178	0.23617	2.78630	6	X
K05T63X	18.6	0.15	K194R	324.207	350.254	4.229	2.356	0.23978	2.30772	3	X
K05T70H	18.1	0.15	K194R	338.270	309.481	20.143	1.426	0.12941	2.32586	6	X
K05Ue5Z	17.7	0.15	K194R	300.837	67.525	350.483	19.635	0.19669	1.95072	6	X
K05V23A	17.7	0.15	K194R	278.476	305.184	152.997	2.349	0.24968	2.79969	6	W
K05W00D	21.9	0.15	K194R	308.280	160.967	227.679	26.157	0.56005	2.30736	3	X
K05YS5K	16.5	0.15	K194R	134.593	334.643	80.808	9.773	0.06551	2.54916	12	W

K06A09D	17.1	0.15	K194R	264.144	169.460	307.761	23.557	0.21615	2.34204	5	X
K06BM2L	16.9	0.15	K194R	174.026	357.783	208.604	1.243	0.02457	2.91744	11	W
K06E70J	16.0	0.15	K194R	321.088	9.061	11.576	10.624	0.08098	3.05228	8	X
K06F00J	20.3	0.15	K194R	187.514	229.177	187.672	27.711	0.28758	1.17929	3	X
K06H58Y	15.4	0.15	K194R	125.348	317.666	301.385	8.474	0.25543	3.05022	12	W
K06K18H	16.2	0.15	K194R	256.303	312.099	158.483	10.564	0.02757	3.06976	10	W
K06KA0F	20.1	0.15	K194R	313.147	244.544	50.377	24.478	0.37165	1.89084	2	W
K06M00A	19.0	0.15	K194R	336.088	81.693	241.038	24.752	0.53045	2.64695	3	X
K06Q05M	17.2	0.15	K194R	315.413	263.106	94.780	9.215	0.34014	2.67374	5	X
K06Q06G	18.0	0.15	K194R	326.909	356.480	341.588	20.990	0.16472	1.88419	5	X
K06Q33E	17.3	0.15	K194R	340.971	91.018	206.300	21.803	0.38969	2.66551	4	X
K06Q35S	17.4	0.15	K194R	327.801	271.778	58.056	7.184	0.30913	2.67290	6	X
K06S05Q	17.1	0.15	K194R	336.448	325.872	30.833	5.893	0.25552	2.65473	6	X
K06Sq4D	18.2	0.15	K194R	286.931	152.343	252.752	3.863	0.12564	2.21833	6	X
K06UD0C	17.8	0.15	K194R	319.086	112.747	275.727	0.695	0.08233	2.66731	7	W
K06UK4A	17.5	0.15	K194R	322.742	149.664	226.255	6.424	0.32482	2.66785	6	X
K06UR0N	16.0	0.15	K194R	272.423	5.237	228.019	9.656	0.08053	3.12306	8	W
K06V20T	16.7	0.15	K194R	122.824	126.778	239.451	5.508	0.15249	3.13930	6	W
K06WB9K	17.9	0.15	K194R	26.886	142.458	268.316	8.513	0.20256	2.54374	4	W
K06WC8O	17.2	0.15	K194R	328.329	117.080	249.650	6.317	0.31456	2.68793	6	X
K07A01Y	18.3	0.15	K194R	341.865	42.910	299.973	17.662	0.08157	1.92179	6	W
K07C15U	15.9	0.15	K194R	272.071	139.910	323.709	25.291	0.14281	2.73872	5	X
K07E06E	16.9	0.15	K194R	306.633	3.284	326.342	1.653	0.05203	3.02025	8	W
K07H24S	16.8	0.15	K194R	66.403	234.444	207.223	12.734	0.06094	2.64416	9	W
K07O06S	17.2	0.15	K194R	328.792	331.313	34.807	18.537	0.56678	3.32329	4	X
K07R14G	16.1	0.15	K194R	330.626	98.753	325.032	24.799	0.29436	3.17556	6	X
K07T61S	18.1	0.15	K194R	221.712	295.859	24.548	5.866	0.21339	2.22067	7	W
K07V33Y	17.6	0.15	K194R	266.226	276.416	43.748	4.165	0.07901	2.74257	5	W
K07Y39E	16.8	0.15	K194R	119.775	0.367	43.568	3.438	0.13577	2.98595	10	W
K08CI9X	18.0	0.15	K194R	122.893	234.495	327.299	22.648	0.08225	1.83504	5	X
K08G94T	17.3	0.15	K194R	247.467	343.754	126.195	6.112	0.07232	2.71048	7	W
K08L12P	18.7	0.15	K194R	209.103	256.976	220.972	20.320	0.08653	1.87969	3	X
K08Q29N	17.7	0.15	K194R	322.065	216.818	141.040	5.387	0.15454	2.36035	6	X
K08R64N	17.5	0.15	K194R	354.886	169.843	148.503	5.509	0.21558	2.36558	6	X
K08UH6O	17.5	0.15	K194R	356.873	26.519	23.819	7.958	0.04476	2.99394	5	W
K08V14P	16.6	0.15	K194R	311.535	77.336	357.746	22.933	0.43145	3.13742	4	X
K08V44E	17.5	0.15	K194R	310.591	10.902	328.412	5.616	0.14933	2.47040	6	W
K08W31S	18.2	0.15	K194R	328.592	124.106	267.785	5.504	0.10353	2.38947	7	W
K08WB1C	18.4	0.15	K194R	150.051	101.628	326.056	1.372	0.18702	2.65044	4	W
K08WD6R	17.5	0.15	K194R	146.253	279.501	256.513	16.500	0.09798	2.00578	6	X
K09A05U	17.3	0.15	K194R	56.593	338.298	88.147	3.179	0.09856	2.92150	6	W
K09C30T	17.8	0.15	K194R	324.140	2.058	84.962	2.640	0.14783	2.39052	7	W
K09D18J	17.4	0.15	K194R	217.087	238.391	4.485	2.039	0.16363	2.37671	12	W
K09D25H	17.4	0.15	K194R	359.882	337.532	340.642	9.530	0.07015	2.58030	7	W
K09R02J	18.2	0.15	K194R	296.428	17.262	3.565	46.739	0.38825	2.25098	2	X
K09S90N	18.6	0.15	K194R	180.257	165.857	259.831	3.900	0.16774	2.37007	6	W
K09S96L	16.8	0.15	K194R	102.113	81.088	53.512	5.734	0.05435	2.44711	10	W
K09SE9O	18.5	0.15	K194R	330.412	46.460	304.496	5.777	0.18514	2.20522	7	X
K09UB8K	17.2	0.15	K194R	37.551	326.678	199.389	5.988	0.08090	2.44788	10	W
K09UE2Z	16.8	0.15	K194R	91.299	264.705	51.437	7.113	0.21331	2.76810	6	W
K09V12H	18.6	0.15	K194R	36.127	122.848	314.518	1.131	0.20535	2.67957	4	W
K09V38Q	18.7	0.15	K194R	278.058	150.539	258.865	1.962	0.20762	2.26778	6	W
K09V43A	15.6	0.15	K194R	349.523	100.349	246.894	10.809	0.17594	3.00162	11	X
K09V89N	18.6	0.15	K194R	283.309	133.134	280.586	6.988	0.10444	2.25991	6	W
K09Y06K	15.4	0.15	K194R	339.288	77.263	345.282	26.163	0.23366	3.04841	7	X
K10A60R	15.6	0.15	K194R	205.842	61.157	82.610	11.921	0.10838	3.15292	9	W
K10B87Y	15.9	0.15	K194R	289.412	159.525	318.520	27.541	0.17594	3.17701	6	X
K10C71M	18.1	0.15	K194R	238.131	229.308	241.465	4.791	0.17647	2.31709	5	X
K10D12L	15.3	0.15	K194R	258.379	197.529	288.393	27.870	0.18847	3.10168	4	X
K10E94P	16.5	0.15	K194R	234.251	318.695	12.543	8.698	0.11098	2.67963	7	W
K10E95N	17.7	0.15	K194R	108.042	211.472	71.132	3.403	0.20540	2.34705	10	W
K10G00Y	16.5	0.15	K194R	41.306	331.645	294.688	32.346	0.21944	2.60861	2	X
K10G23J	19.5	0.15	K194R	29.094	313.897	122.217	18.188	0.52287	2.72202	2	W
K10R20E	17.1	0.15	K194R	307.206	100.760	301.299	11.482	0.27298	2.69114	7	X
K10RJ0H	19.0	0.15	K194R	157.067	34.278	335.183	6.494	0.14563	2.28468	4	W
K10T82O	16.4	0.15	K194R	288.474	53.265	289.493	4.712	0.08366	2.88695	7	W
K10U07H	19.1	0.15	K194R	326.401	0.459	9.392	15.649	0.53591	2.71761	3	X
K10W50N	16.2	0.15	K194R	311.080	76.937	254.312	10.459	0.12216	2.99387	6	W
K11B32Q	18.5	0.15	K194R	79.187	30.858	74.215	3.352	0.15630	2.43062	4	W
K11B44S	16.7	0.15	K194R	101.447	51.847	204.968	3.330	0.15751	3.02757	8	W
K11B65P	18.2	0.15	K194R	122.514	92.886	29.412	5.029	0.07519	2.34852	6	W
K11BD0D	16.9	0.15	K194R	215.023	289.323	145.452	12.855	0.04960	3.18537	5	W
K11C03X	17.1	0.15	K194R	216.638	99.259	97.761	12.314	0.09757	2.80989	7	W
K11C14N	18.8	0.15	K194R	30.256	23.719	149.781	51.437	0.47466	2.47416	3	X
K11C83C	17.6	0.15	K194R	262.409	248.823	278.585	3.570	0.05685	2.77264	5	W
K11Q97O	17.3	0.15	K194R	187.620	183.009	211.544	3.214	0.17998	2.83538	5	W
K11SG5U	16.9	0.15	K194R	256.514	21.131	309.156	7.538	0.25472	2.74547	5	W
K11T00N	17.4	0.15	K194R	347.960	73.103	236.281	28.076	0.39325	2.59078	4	X
K11UA3M	16.6	0.15	K194R	354.137	69.870	253.967	11.141	0.21206	2.58827	8	X
K11UP5B	16.9	0.15	K194R	300.389	286.279	28.962	12.833	0.27269	2.69189	6	W
K11W64H	16.1	0.15	K194R	325.672	119.386	255.383	16.729	0.14705	2.58423	8	X
K11WE6X	16.8	0.15	K194R	343.684	94.215	243.697	23.800	0.17766	2.61878	5	X
K11Y39U	17.1	0.15	K194R	297.994	90.377	335.379	27.764	0.35413	2.59848	5	X
K12A10X	17.3	0.15	K194R	1.996	12.829	343.287	20.475	0.06841	1.93717	9	X
K12B22R	16.5	0.15	K194R	50.460	37.575	258.899	29.840	0.01355	2.59725	5	X
K12B61F	16.9	0.15	K194R	318.488	117.877	300.706	28.420	0.36520	2.55579	4	X
K12BD2Z	17.2	0.15	K194R	312.657	283.650	234.838	4.499	0.11553	2.41073	10	W
K12BE4W	17.2	0.15	K194R	161.803	353.778	142.581	2.500	0.02854	2.92215	10	W
K12D17C	16.4	0.15	K194R	123.891	109.925	148.421	14.333	0.16457	2.78019	9	W
K12D40K	17.1	0.15	K194R	156.055	264.249	354.203	12.091	0.17740	2.70376	7	W
K12K09R	16.4	0.15	K194R	75.161	257.297	103.760	10.362	0.16808	2.75600	10	W
K12P04E	17.5	0.15	K194R	80.501	173.583	231.361	1.189	0.06885	2.86641	8	W
K12S11G	17.3	0.15	K194R	19.149	295.956	353.010	8.841	0.18238	2.31631	4	X

K12TH0T	17.4	0.15	K194R	171.726	200.303	202.380	10.443	0.21152	2.65535	5	W
K12TU7G	18.6	0.15	K194R	324.952	301.467	45.433	7.065	0.28169	2.30547	3	X
K12TW2F	16.8	0.15	K194R	357.115	31.713	268.383	22.954	0.24941	2.32084	7	X
K12TW2J	17.7	0.15	K194R	304.357	91.874	334.599	21.015	0.28355	2.27150	7	X
K12U61O	18.8	0.15	K194R	78.514	3.862	191.468	22.367	0.08496	1.82308	4	W
K12U71L	18.3	0.15	K194R	293.710	14.649	17.752	1.394	0.17982	2.33617	5	W
K12UC0O	17.6	0.15	K194R	339.089	348.532	349.545	5.976	0.25767	2.33101	7	X
K12UC5R	16.1	0.15	K194R	39.735	203.507	237.800	16.393	0.21232	3.14835	5	W
K12V06L	20.8	0.15	K194R	285.950	19.204	19.508	8.729	0.56533	2.34472	2	V
K12V34M	17.2	0.15	K194R	298.225	120.613	275.839	19.172	0.25564	2.32421	6	X
K12XF5B	15.7	0.15	K194R	329.576	34.918	311.658	11.397	0.20721	2.46613	8	X
K12Y07Y	17.1	0.15	K194R	290.273	149.943	312.438	22.015	0.22734	2.28454	4	X
K13B78H	17.1	0.15	K194R	272.485	133.541	323.427	24.556	0.21850	2.40416	5	X
K13CM1Y	14.4	0.15	K194R	256.525	129.327	286.679	7.674	0.08461	5.12916	4	W
K13H54O	17.7	0.15	K194R	270.453	170.322	261.738	3.355	0.17047	2.60502	7	W
K13H61B	17.4	0.15	K194R	308.164	343.348	2.718	6.222	0.06737	2.87697	6	W
K13HC5L	17.2	0.15	K194R	1.455	81.919	243.965	9.205	0.20741	2.81636	7	X
K13J05X	18.5	0.15	K194R	277.271	18.020	33.148	22.319	0.07640	1.88924	5	X
K13J11M	15.8	0.15	K194R	18.990	311.963	46.072	16.508	0.30911	2.70058	9	X
K13Q93C	16.1	0.15	K194R	326.211	29.785	339.186	7.792	0.19345	3.23203	9	X
K13R20K	16.3	0.15	K194R	354.154	20.771	27.404	2.239	0.10406	2.92187	9	W
K13R36X	17.2	0.15	K194R	357.878	12.604	6.339	5.095	0.13548	3.09224	5	W
K13T09L	16.3	0.15	K194R	334.914	57.803	12.992	26.760	0.25675	3.15082	5	X
K13T37J	18.3	0.15	K194R	37.068	146.082	194.634	22.287	0.10538	1.96389	6	X
K13T48E	16.1	0.15	K194R	340.433	75.298	347.694	25.854	0.18965	3.10035	5	X
K13V05V	16.5	0.15	K194R	56.449	176.618	171.268	8.734	0.11509	3.07094	8	W
K13V09C	13.3	0.15	K194R	210.960	241.293	108.010	15.247	0.07457	5.29879	10	W
K13W05L	16.3	0.15	K194R	40.082	314.974	102.457	16.236	0.13263	2.88053	7	W
K13WB4A	17.7	0.15	K194R	328.856	321.863	12.190	8.011	0.16226	2.14545	8	X
K14B67P	17.5	0.15	K194R	90.886	69.272	130.975	9.195	0.06243	2.38437	6	W
K14C07Y	17.3	0.15	K194R	30.163	36.039	142.191	18.172	0.26926	2.77491	4	W
K14C14E	17.6	0.15	K194R	347.660	127.765	25.871	20.919	0.06162	1.90216	9	X
K14EM6L	17.0	0.15	K194R	187.017	124.620	240.672	5.114	0.12048	2.84894	9	W
K14G09K	18.2	0.15	K194R	144.714	345.173	207.652	2.897	0.20045	2.34425	2	W
K14H44G	16.8	0.15	K194R	272.763	199.045	147.397	5.867	0.05522	2.73429	7	W
K14HJ2H	19.0	0.15	K194R	282.319	142.208	236.462	31.706	0.34477	1.74979	3	X
K14M08T	16.7	0.15	K194R	348.015	72.939	262.895	18.882	0.22595	2.80920	5	X
K14N55W	18.6	0.15	K194R	103.102	258.487	70.315	4.230	0.22064	2.36730	4	W
K14N64U	21.5	0.15	K194R	296.675	359.719	5.518	6.129	0.38005	1.83833	2	X
K14P68F	18.2	0.15	K194R	326.982	14.108	342.043	22.561	0.58532	2.86086	2	X
K14QH6D	17.0	0.15	K194R	343.785	146.869	146.727	1.464	0.20397	3.09969	8	W
K14QP4S	16.8	0.15	K194R	322.360	249.184	72.991	9.070	0.22204	3.13612	3	W
K14Qb7V	16.9	0.15	K194R	325.655	41.477	334.267	6.322	0.05757	2.87831	8	X
K14Qd1T	20.0	0.15	K194R	255.662	102.558	327.283	26.924	0.21035	1.83129	2	V
K14R18F	15.5	0.15	K194R	51.910	189.364	120.116	22.704	0.04108	3.03841	10	W
K14SB2E	18.2	0.15	K194R	356.215	206.646	219.536	1.140	0.13419	2.56134	5	W
K14SE2C	18.1	0.15	K194R	242.401	246.009	142.893	24.547	0.18971	1.92523	4	W
K14SF9U	17.6	0.15	K194R	71.766	225.890	100.964	2.819	0.17452	2.59318	8	W
K14SL3D	17.4	0.15	K194R	306.102	304.265	101.179	10.364	0.30810	3.05750	3	W
K14SS4M	17.3	0.15	K194R	314.555	87.775	354.604	24.997	0.34497	2.78104	4	X
K14SU3Z	18.2	0.15	K194R	359.238	54.838	102.414	24.494	0.69019	1.64398	6	X
K14T85Q	16.3	0.15	K194R	330.687	198.958	164.404	11.647	0.25114	3.02069	8	X
K14U57K	16.6	0.15	K194R	304.549	183.053	267.913	20.460	0.53915	2.88816	5	X
K14U93K	19.1	0.15	K194R	99.653	345.461	40.576	1.777	0.24836	2.35503	2	W
K14UB5O	16.1	0.15	K194R	309.101	159.398	260.063	31.472	0.32400	3.14474	3	X
K14UE9B	16.1	0.15	K194R	85.405	27.722	226.083	8.634	0.05028	3.12787	7	X
K14UL8E	16.2	0.15	K194R	275.781	136.860	342.643	24.670	0.10701	2.72816	6	X
K14UN8Q	16.8	0.15	K194R	306.802	54.498	347.765	8.531	0.12156	3.00410	6	X
K14W30U	17.8	0.15	K194R	89.891	195.334	213.183	4.635	0.15505	2.34342	9	X
K14WZ5J	16.2	0.15	K194R	321.756	127.907	274.006	22.316	0.35478	3.15334	5	X
K14Wa4O	17.9	0.15	K194R	191.975	222.436	273.642	19.827	0.04718	1.86972	5	X
K14Wg6J	15.7	0.15	K194R	309.667	113.585	309.421	25.663	0.13643	3.14268	5	X
K14Wn7L	16.0	0.15	K194R	8.573	29.094	307.182	9.027	0.09661	3.05872	6	X
K14Wp1R	18.7	0.15	K194R	283.141	85.508	337.100	18.845	0.18742	1.85923	6	X
K14X31X	17.5	0.15	K194R	347.186	344.451	290.873	35.855	0.87232	2.81677	3	X
K14Y00E	17.7	0.15	K194R	12.350	225.816	258.699	17.414	0.29818	2.58232	2	W
K14Y32A	15.9	0.15	K194R	328.021	36.701	47.980	17.871	0.32272	3.09033	6	X
K14Y34Z	17.7	0.15	K194R	0.673	26.074	277.331	23.276	0.09412	1.94736	4	X
K15A27P	16.6	0.15	K194R	316.133	332.949	79.902	2.694	0.18433	3.16163	7	X
K15Bp3O	17.4	0.15	K194R	219.895	189.912	319.452	22.252	0.10026	1.87871	8	X
K15Bu0G	15.2	0.15	K194R	275.019	241.379	278.155	21.078	0.17507	3.07716	10	W
K15C00W	18.4	0.15	K194R	287.166	114.969	286.226	17.524	0.10490	1.94882	5	X
K15C60G	16.1	0.15	K194R	309.765	119.029	315.022	25.947	0.19819	3.10596	5	X
K15DB7E	16.2	0.15	K194R	320.998	99.265	336.560	26.173	0.17198	3.08512	4	X
K15DE1V	18.5	0.15	K194R	333.605	61.438	289.178	17.447	0.04858	1.94134	3	X
K15DJ3V	16.3	0.15	K194R	265.329	149.187	337.017	28.219	0.16834	3.17484	4	X
K15E19D	17.0	0.15	K194R	23.625	53.031	30.575	4.579	0.07983	2.76856	9	W
K15F03K	19.1	0.15	K194R	298.822	311.608	145.032	23.486	0.02640	1.83272	2	W
K15F35F	19.9	0.15	K194R	164.193	35.356	235.174	8.818	0.52072	1.88334	3	W
K15F36H	17.8	0.15	K194R	295.887	66.144	356.796	19.818	0.12718	1.94082	5	X
K15F53M	18.3	0.15	K194R	280.737	103.261	303.202	18.607	0.10886	1.91338	5	X
K15FC2S	16.9	0.15	K194R	328.906	352.495	182.474	4.930	0.04495	2.75452	10	W
K15FY2X	15.8	0.15	K194R	238.821	332.948	265.025	8.603	0.03977	3.02685	8	W
K15Fd5K	17.9	0.15	K194R	337.147	151.867	74.035	3.578	0.14101	2.65162	4	W
K15G36X	18.4	0.15	K194R	56.373	163.649	352.501	3.265	0.19436	2.39445	4	W
K15H04D	13.9	0.15	K194R	324.871	59.198	287.102	11.320	0.06051	5.16621	6	W
K15H71Q	16.5	0.15	K194R	141.883	148.761	206.120	10.168	0.13283	3.03920	9	W
K15H95W	17.8	0.15	K194R	43.633	80.564	116.200	3.475	0.12691	2.40536	7	W
K15HI6V	16.4	0.15	K194R	184.028	26.018	282.713	9.528	0.14297	3.13881	6	W
K15J01D	20.6	0.15	K194R	252.613	127.880	221.192	19.140	0.22210	1.21685	2	X
K15M85Y	16.2	0.15	K194R	90.352	286.711	182.016	7.005	0.07661	2.99966	10	W
K15MD2Z	17.5	0.15	K194R	311.230	191.663	78.016	3.434	0.19267	2.79710	4	W
K15P32C	18.4	0.15	K194R	321.907	98.283	170.039	8.578	0.41335	2.71015	3	W

K15PM8C	19.5	0.15	K194R	235.873	141.501	319.744	12.362	0.50147	1.53204	5	X
K15R35Z	18.9	0.15	K194R	308.327	195.686	243.227	10.243	0.70352	2.48377	3	X
K15R82D	18.2	0.15	K194R	311.403	201.023	160.980	16.043	0.33875	2.56938	3	X
K15T80W	18.1	0.15	K194R	341.657	2.914	21.798	5.648	0.22663	2.44040	2	W
K15T87Z	17.1	0.15	K194R	211.411	335.386	124.899	3.093	0.02546	2.86514	11	W
K15TA9C	16.3	0.15	K194R	187.449	253.930	174.209	10.519	0.10732	3.45246	7	W
K15TK2Q	16.9	0.15	K194R	313.372	199.102	185.842	9.629	0.15843	2.56006	10	X
K15TU2G	17.6	0.15	K194R	318.521	225.810	146.453	7.833	0.21738	2.56126	6	X
K15TV8Y	17.2	0.15	K194R	315.789	29.455	272.232	0.815	0.08724	2.93047	8	W
K15U68A	16.6	0.15	K194R	272.000	311.939	20.019	0.731	0.17614	3.09394	6	W
K15V40T	16.9	0.15	K194R	260.991	231.439	207.155	21.290	0.03830	2.64037	7	X
K15V47T	18.8	0.15	K194R	14.444	319.078	24.662	2.855	0.23113	2.30358	2	W
K15V63L	17.8	0.15	K194R	298.651	212.635	192.851	12.922	0.26836	2.63533	6	X
K15VD0F	17.7	0.15	K194R	51.443	188.929	128.914	2.237	0.20288	2.35807	8	W
K15VE2L	16.7	0.15	K194R	353.479	276.332	20.777	24.469	0.59606	2.55477	4	X
K15VF9V	17.5	0.15	K194R	322.563	192.645	169.127	3.687	0.11460	2.64354	7	X
K15W13J	17.9	0.15	K194R	287.442	117.844	325.322	29.874	0.36567	2.60342	3	X
K15X18O	17.8	0.15	K194R	265.454	303.626	78.781	9.565	0.24114	2.93204	2	W
K15XG8J	15.4	0.15	K194R	257.422	194.282	263.024	33.048	0.19614	2.62925	5	X
K15XH1A	17.4	0.15	K194R	326.307	47.880	322.490	5.712	0.35608	2.55665	7	X
K15Xa3X	16.1	0.15	K194R	0.520	45.840	280.146	19.802	0.15112	2.77767	5	X
K16A32S	18.4	0.15	K194R	316.665	341.569	132.661	3.900	0.07275	2.38987	4	W
K16A73M	17.2	0.15	K194R	317.806	107.110	279.200	15.773	0.33911	2.77771	3	X
K16AO2O	15.6	0.15	K194R	31.034	353.934	303.971	29.862	0.25193	3.16881	4	X
K16C45B	15.7	0.15	K194R	7.523	209.591	128.632	17.939	0.11090	3.14473	11	W
K16D19L	18.1	0.15	K194R	231.542	353.970	269.602	3.217	0.18439	2.37440	7	W
K16E27X	20.2	0.15	K194R	324.326	38.032	237.197	11.672	0.74338	2.15078	3	X
K16EB9G	17.2	0.15	K194R	327.481	73.102	5.855	10.923	0.04922	2.76630	4	W
K16G04G	16.9	0.15	K194R	266.751	266.592	190.395	12.329	0.20071	3.07809	4	W
K16G31C	16.3	0.15	K194R	57.818	153.257	185.452	4.185	0.08050	3.10501	10	W
K16G41E	16.6	0.15	K194R	29.706	313.048	52.819	1.891	0.09803	3.08527	10	W
K16G51V	16.0	0.15	K194R	7.750	182.825	202.300	10.083	0.02253	3.13957	7	W
K16G64Y	16.7	0.15	K194R	326.079	298.794	146.866	4.566	0.03868	2.97166	10	W
K16H11Q	14.0	0.15	K194R	252.804	29.040	19.636	7.490	0.09991	5.18761	8	W
K16L38E	17.6	0.15	K194R	15.102	332.390	190.644	6.443	0.04611	2.34100	9	W
K16L57P	16.4	0.15	K194R	306.567	274.808	270.528	9.111	0.03309	3.14140	8	W
K16N70G	17.1	0.15	K194R	152.756	174.670	182.714	3.886	0.05153	3.08135	6	W
K16N70R	16.4	0.15	K194R	139.007	56.706	297.326	7.748	0.08141	3.18748	7	W
K16O03R	17.7	0.15	K194R	318.200	273.994	29.403	6.768	0.16822	2.28653	7	W
K16PA9H	17.2	0.15	K194R	58.932	75.575	69.851	5.772	0.03269	2.55167	9	W
K16Q41T	17.5	0.15	K194R	274.032	108.620	181.412	11.943	0.18343	2.55341	5	W
K16Q42T	16.5	0.15	K194R	181.124	42.733	288.693	8.023	0.15917	3.09552	6	W
K16Q60D	16.8	0.15	K194R	159.782	165.825	183.374	9.803	0.10544	3.11000	6	W
K16Q72V	18.3	0.15	K194R	213.549	103.481	313.446	1.413	0.23723	2.42285	5	W
K16U55K	17.6	0.15	K194R	269.671	129.710	305.916	23.898	0.19365	2.27053	4	X
K16U91D	17.0	0.15	K194R	43.114	193.353	335.167	1.533	0.05336	2.99688	9	W
K16U95Q	17.5	0.15	K194R	240.382	145.205	220.522	6.209	0.06933	2.58060	6	W
K16U98K	17.6	0.15	K194R	237.926	110.605	224.855	3.988	0.17715	2.79581	5	W
K16V18Q	17.3	0.15	K194R	200.604	151.898	306.472	7.694	0.16133	2.34203	5	W
K16W01J	21.3	0.15	K194R	153.935	87.675	82.048	2.889	0.50316	1.33958	4	X
K16W37X	18.3	0.15	K194R	217.789	37.537	64.323	3.913	0.13141	2.30920	5	W
K16W53K	15.8	0.15	K194R	167.022	159.516	254.256	15.680	0.08326	3.18157	6	W
K16W54D	17.2	0.15	K194R	307.198	261.994	91.461	7.829	0.14779	2.32126	8	W
K16X10Y	17.0	0.15	K194R	294.445	3.117	305.308	4.610	0.10874	2.74742	10	W
K17A12J	17.8	0.15	K194R	257.065	263.839	145.075	2.967	0.18751	2.45972	7	W
K17B83U	16.9	0.15	K194R	162.348	69.917	102.717	10.851	0.16058	2.67139	7	W
K17F31O	17.2	0.15	K194R	229.634	97.648	5.059	13.399	0.23302	2.66524	5	W
K17FF8A	17.3	0.15	K194R	185.771	17.970	151.742	12.637	0.10256	2.72909	9	W
K17G04E	18.2	0.15	K194R	64.615	89.536	331.203	17.508	0.06732	1.87263	7	W
K17H09K	15.8	0.15	K194R	112.747	110.899	100.509	6.204	0.12087	3.21496	8	W
K17H14F	17.9	0.15	K194R	186.990	4.664	238.068	3.885	0.14326	2.29008	10	W
K17H16X	16.2	0.15	K194R	49.248	115.191	186.821	10.152	0.02051	3.12040	10	W
K17H42L	16.8	0.15	K194R	118.112	68.722	200.005	4.973	0.02380	2.79469	8	W
K17K18U	16.5	0.15	K194R	115.422	164.923	101.211	13.057	0.00736	2.92466	7	W
K17K30F	16.7	0.15	K194R	120.303	202.520	76.428	13.411	0.10328	2.78187	7	W
K17O18Y	19.7	0.15	K194R	181.995	281.596	119.446	24.498	0.09684	1.74706	3	W
K17P27R	16.7	0.15	K194R	113.523	341.100	29.703	5.534	0.17421	2.70476	10	W
K17P41B	16.6	0.15	K194R	128.614	181.274	153.063	6.532	0.02705	2.71604	12	W
K17Q52N	16.1	0.15	K194R	104.747	4.938	335.047	1.136	0.08200	3.13189	13	W
K17Q59Z	17.1	0.15	K194R	178.573	178.437	131.857	7.419	0.15213	2.65396	7	W
K17R08T	17.5	0.15	K194R	200.945	99.558	175.265	2.184	0.05496	2.71196	7	W
K17R16Z	16.3	0.15	K194R	123.831	308.655	16.927	12.485	0.14263	3.16680	7	W
K17R39O	18.3	0.15	K194R	47.269	267.833	205.101	1.109	0.14338	2.41622	5	W
K17R87O	18.0	0.15	K194R	157.326	155.523	184.114	4.052	0.14530	2.55428	8	W
K17RA0C	16.2	0.15	K194R	301.296	341.822	186.841	10.931	0.04750	3.00144	7	W
K17S03H	17.0	0.15	K194R	67.324	210.520	191.650	9.794	0.11864	3.17195	6	W
K17S46R	16.8	0.15	K194R	144.098	84.959	255.203	4.794	0.16656	2.63861	8	W
K17S77M	17.6	0.15	K194R	239.877	249.919	6.611	2.856	0.03610	2.66933	8	W
K17S89F	18.1	0.15	K194R	180.107	72.587	254.262	1.302	0.23599	2.41332	6	W
K17S98Y	16.3	0.15	K194R	79.867	241.096	142.300	7.583	0.17787	3.38642	6	W
K17SA9U	18.2	0.15	K194R	176.938	155.461	171.620	1.312	0.18764	2.36871	5	W
K17SB2Y	17.4	0.15	K194R	225.556	75.939	172.681	8.615	0.15476	2.73273	7	W
K17U20K	16.8	0.15	K194R	174.210	152.872	154.908	6.850	0.04430	2.78672	10	W
K17U40C	17.4	0.15	K194R	138.815	61.456	314.485	3.253	0.08632	2.78779	6	W
K17V16B	17.5	0.15	K194R	72.570	114.637	344.936	11.707	0.16552	2.61034	5	W
K17X62D	19.5	0.15	K194R	295.855	77.329	259.817	26.595	0.31194	1.64287	5	X
K17Y09S	17.8	0.15	K194R	186.872	250.045	91.604	7.761	0.22049	2.52191	7	W
K18B03N	20.4	0.15	K194R	149.694	147.814	95.399	12.826	0.29955	1.55210	3	V
K18C00O	16.6	0.15	K194R	49.012	57.343	101.216	31.456	0.22095	2.60020	6	W
K18C13V	21.0	0.15	K194R	47.351	242.613	123.667	16.817	0.14754	1.33369	2	V
K18E00S	18.5	0.15	K194R	266.839	125.645	287.543	20.105	0.13487	1.87100	4	X
K18E02T	19.1	0.15	K194R	144.822	324.661	335.262	50.068	0.64246	1.64601	2	V
K18E04E	20.5	0.15	K194R	115.948	128.535	167.072	21.527	0.14479	1.51137	2	V

K18K00T	21.1	0.15	K194R	196.537	25.484	224.957	15.213	0.18576	1.42050	3	V
K18L02K	19.8	0.15	K194R	120.313	308.106	16.758	19.493	0.44740	1.73649	2	V
K18L04R	18.5	0.15	K194R	13.894	106.920	243.289	0.621	0.29864	2.38533	4	W
K18L05Z	20.1	0.15	K194R	66.629	159.360	171.059	9.462	0.50929	2.42816	2	V
K18N04R	20.2	0.15	K194R	58.771	272.237	121.003	61.582	0.52709	2.13345	2	V
K18N14W	16.8	0.15	K194R	23.441	276.806	113.197	13.265	0.18766	2.58279	9	W
K18O02C	15.8	0.15	K194R	56.978	124.618	176.124	5.117	0.16122	3.19973	10	W
K18P20T	21.8	0.15	K194R	60.949	221.745	139.884	6.918	0.43975	2.31598	2	V
K18P21K	25.9	0.15	K194R	44.040	224.306	305.429	1.196	0.08056	0.98800	2	X
K18Q06P	16.5	0.15	K194R	76.230	72.162	247.287	13.790	0.17935	2.68041	4	W
K18R07R	20.8	0.15	K194R	104.642	248.448	108.386	7.004	0.36976	1.71555	2	V
K18R08N	17.5	0.15	K194R	64.297	237.006	142.545	31.747	0.36224	2.57839	2	W
K18R15E	17.1	0.15	K194R	81.386	309.070	21.396	13.578	0.26686	2.59853	6	W
K18R15H	18.1	0.15	K194R	69.330	207.946	158.781	4.938	0.24170	2.33407	6	W
K18R15K	16.9	0.15	K194R	32.849	18.315	37.233	12.924	0.20474	2.59093	5	W
K18R15Q	16.5	0.15	K194R	48.475	350.627	48.296	10.749	0.20053	2.58521	9	W
K18R23S	16.2	0.15	K194R	27.082	273.365	104.356	7.104	0.07789	2.85629	7	W
K18R24G	17.6	0.15	K194R	21.908	335.735	75.512	6.429	0.15040	2.29969	7	W
K18R24S	17.2	0.15	K194R	28.173	338.697	61.403	5.299	0.19749	2.48494	6	W
K18R28B	17.3	0.15	K194R	29.978	163.546	226.667	8.105	0.22194	2.29572	7	W
K18R28O	16.1	0.15	K194R	115.484	359.588	276.913	13.558	0.15786	2.63667	9	W
K18R28T	16.1	0.15	K194R	94.187	87.216	207.297	3.523	0.10347	3.08571	10	W
K18R28Y	17.5	0.15	K194R	51.381	161.920	188.212	17.201	0.21066	2.66029	5	W
K18R29J	16.2	0.15	K194R	27.126	44.069	323.597	15.926	0.15677	3.10592	4	W
K18R29O	18.5	0.15	K194R	46.309	164.404	214.411	4.550	0.24666	2.30245	5	W
K18R29Q	18.5	0.15	K194R	80.887	81.523	249.133	4.961	0.20767	2.22218	2	W
K18R29Y	15.8	0.15	K194R	45.412	275.149	75.933	10.293	0.07737	3.16764	6	W
K18R30Q	15.7	0.15	K194R	8.892	208.182	192.249	15.087	0.06852	3.09277	10	W
K18R30U	17.3	0.15	K194R	88.701	93.855	230.341	5.225	0.16613	2.33706	9	W
K18R31A	18.8	0.15	K194R	101.566	140.559	193.723	23.321	0.15462	1.94132	4	W
K18R31J	16.8	0.15	K194R	110.681	312.970	346.958	9.825	0.10395	2.54017	6	W
K18R31P	16.8	0.15	K194R	32.957	247.137	145.824	12.857	0.18343	2.58204	7	W
K18R31T	16.5	0.15	K194R	66.852	245.733	96.122	9.812	0.20251	2.59738	8	W
K18R31U	16.8	0.15	K194R	25.685	343.560	63.416	11.140	0.27472	2.69898	5	W
K18R31Y	16.7	0.15	K194R	48.709	252.692	126.037	15.104	0.18988	2.56701	9	W
K18R32A	17.7	0.15	K194R	58.936	268.634	101.162	5.298	0.25436	2.37509	5	W
K18R32P	16.7	0.15	K194R	118.307	321.464	308.757	7.641	0.15523	2.56938	9	W
K18R32R	18.0	0.15	K194R	41.855	98.895	284.224	3.978	0.16941	2.28269	5	W
K18R32U	17.1	0.15	K194R	82.823	43.494	281.960	5.774	0.11563	2.38594	9	W
K18R33M	16.6	0.15	K194R	69.927	81.122	260.839	5.107	0.13689	2.69877	11	W
K18R33O	15.9	0.15	K194R	21.470	172.219	214.081	8.073	0.08631	3.07668	7	W
K18R33U	16.2	0.15	K194R	72.990	100.529	207.957	14.320	0.22200	3.08698	8	W
K18R33X	16.0	0.15	K194R	56.181	8.030	328.869	8.920	0.10046	3.14348	7	W
K18R33Z	17.8	0.15	K194R	39.721	183.496	200.980	9.662	0.14268	2.36376	7	W
K18R34C	17.1	0.15	K194R	33.133	29.393	349.237	4.742	0.13971	2.70124	9	W
K18R34P	15.2	0.15	K194R	69.778	232.953	89.962	10.381	0.14184	3.47788	7	W
K18R34R	16.9	0.15	K194R	93.745	307.536	346.151	12.471	0.25382	2.67368	8	W
K18R35D	18.4	0.15	K194R	84.294	97.729	243.740	18.944	0.08548	1.96111	3	W
K18R35E	17.3	0.15	K194R	24.390	211.777	184.552	33.452	0.23501	2.60383	2	W
K18R35J	17.4	0.15	K194R	113.952	67.937	223.811	23.277	0.19760	2.24431	6	W
K18R35X	17.5	0.15	K194R	68.651	246.389	95.322	7.326	0.14369	2.42261	7	W
K18R35Y	18.1	0.15	K194R	41.010	88.958	332.890	18.115	0.13439	1.89560	3	W
K18R36F	17.5	0.15	K194R	75.830	140.381	180.966	13.764	0.27517	2.63909	4	W
K18R36L	18.9	0.15	K194R	74.756	330.322	13.316	2.686	0.23105	2.28800	3	W
K18R36T	17.4	0.15	K194R	90.718	293.484	29.333	7.383	0.14794	2.31313	5	W
K18R37F	16.9	0.15	K194R	87.548	175.265	142.245	15.885	0.13510	2.54639	8	W
K18R37Q	18.6	0.15	K194R	73.847	343.630	12.444	8.361	0.17086	2.14714	3	W
K18R37X	17.5	0.15	K194R	105.794	35.390	260.722	9.069	0.26948	2.32171	5	W
K18S01G	18.5	0.15	K194R	64.523	82.631	283.494	10.896	0.33334	2.34749	3	W
K18S01Z	16.5	0.15	K194R	125.618	319.082	336.596	24.489	0.20783	2.30772	9	W
K18S04L	18.3	0.15	K194R	75.664	43.150	292.949	2.389	0.14783	2.29172	8	W
K18S04M	15.8	0.15	K194R	7.965	186.503	209.031	11.887	0.12533	3.11027	7	W
K18S04S	17.0	0.15	K194R	66.136	86.517	247.854	11.310	0.13138	2.69310	5	W
K18S04Z	18.2	0.15	K194R	75.354	247.440	86.443	4.201	0.25969	2.29297	5	W
K18S05B	16.0	0.15	K194R	45.340	266.808	90.420	7.326	0.16200	2.89643	10	W
K18S05C	17.2	0.15	K194R	91.108	233.429	83.104	7.853	0.13553	2.38642	7	W
K18S05D	16.3	0.15	K194R	58.213	229.213	113.386	10.323	0.09930	2.78837	7	W
K18S05T	16.5	0.15	K194R	112.320	133.348	163.168	15.369	0.16345	2.57012	8	W
K18S05U	17.1	0.15	K194R	41.221	231.153	158.575	12.088	0.19987	2.60432	7	W
K18S05W	17.3	0.15	K194R	43.640	243.964	143.914	13.268	0.25271	2.57020	5	W
K18S05X	17.0	0.15	K194R	67.732	315.470	26.267	13.683	0.21361	2.70966	6	W
K18S06A	15.4	0.15	K194R	357.984	45.664	38.014	26.049	0.29337	3.25113	7	W
K18S06D	15.9	0.15	K194R	31.297	111.946	278.995	15.143	0.14511	3.08457	6	W
K18S06H	16.7	0.15	K194R	86.144	18.434	288.217	8.493	0.09983	2.64726	9	W
K18S06M	17.7	0.15	K194R	89.767	29.508	279.184	4.389	0.22777	2.33032	4	W
K18S06O	15.3	0.15	K194R	104.295	296.332	345.863	25.982	0.15644	3.13479	8	W
K18S06P	17.3	0.15	K194R	117.186	339.158	317.068	6.641	0.11768	2.26337	8	W
K18S06T	18.0	0.15	K194R	59.187	88.575	266.441	9.233	0.18979	2.46509	2	W
K18S06U	19.0	0.15	K194R	38.794	56.608	332.726	5.883	0.38418	2.58339	3	W
K18S06X	18.1	0.15	K194R	100.498	319.590	10.473	19.864	0.06696	1.90758	5	W
K18S07G	17.7	0.15	K194R	85.197	319.789	9.875	7.464	0.20803	2.28468	7	W
K18S07K	15.5	0.15	K194R	71.987	257.050	73.590	13.137	0.18471	3.03521	9	W
K18S07L	17.6	0.15	K194R	66.668	285.144	75.199	7.221	0.12255	2.30146	8	W
K18S07M	16.6	0.15	K194R	25.569	247.062	159.623	15.183	0.25041	2.80389	6	W
K18S07Q	17.0	0.15	K194R	76.875	245.093	79.533	14.233	0.28801	2.58849	8	W
K18S08N	17.7	0.15	K194R	31.311	254.850	134.841	7.625	0.10442	2.42219	7	W
K18S08Q	17.5	0.15	K194R	80.001	229.871	75.459	7.768	0.34701	2.55955	5	W
K18S08S	16.6	0.15	K194R	5.332	245.799	170.447	13.517	0.20411	2.99066	5	W
K18S08T	16.9	0.15	K194R	46.536	281.038	84.968	4.817	0.15233	2.67634	8	W
K18S08W	16.0	0.15	K194R	20.814	10.717	24.477	9.430	0.14729	3.06222	9	W
K18S09P	16.5	0.15	K194R	45.636	220.491	149.609	8.560	0.19143	2.84781	8	W
K18S10E	17.3	0.15	K194R	46.206	246.114	117.312	8.897	0.19533	2.58097	7	W
K18S10G	16.2	0.15	K194R	26.048	261.479	115.105	11.614	0.15679	2.97004	6	W

K18S10K	15.6	0.15	K194R	330.306	170.771	273.141	9.412	0.07661	3.15075	7	W
K18S10V	18.1	0.15	K194R	84.219	173.579	162.270	6.796	0.16699	2.30020	4	W
K18S10W	16.1	0.15	K194R	2.662	55.964	11.589	17.051	0.14478	2.87003	9	W
K18S10X	15.8	0.15	K194R	40.813	194.197	172.762	11.338	0.06366	3.16626	6	W
K18S10Z	17.1	0.15	K194R	63.987	221.314	131.570	7.753	0.14777	2.57217	9	W
K18S11N	16.7	0.15	K194R	64.162	312.630	11.775	34.742	0.25816	2.75537	5	W
K18S12F	17.0	0.15	K194R	16.022	307.708	123.700	9.645	0.29606	2.79628	5	W
K18S12G	18.0	0.15	K194R	59.746	229.429	151.730	6.071	0.18578	2.20072	6	W
K18S12J	16.4	0.15	K194R	92.521	195.831	111.216	14.036	0.20586	2.70986	6	W
K18S12L	16.6	0.15	K194R	75.669	240.504	98.517	15.803	0.29937	2.64110	9	W
K18S12M	16.5	0.15	K194R	34.048	69.248	334.924	14.290	0.13451	2.57112	4	W
K18S12N	15.6	0.15	K194R	37.346	207.512	146.053	18.857	0.21259	3.17568	8	W
K18S12U	18.4	0.15	K194R	133.884	304.143	351.333	18.419	0.10918	1.96057	4	W
K18S12V	17.2	0.15	K194R	65.461	177.212	172.984	11.095	0.14331	2.56345	6	W
K18S12Z	19.0	0.15	K194R	69.473	230.877	127.823	4.768	0.18239	2.16792	2	W
K18S13E	16.6	0.15	K194R	24.960	271.531	123.984	14.068	0.31317	3.15761	4	W
K18S13G	15.5	0.15	K194R	26.995	263.125	136.670	26.150	0.20268	3.16249	10	W
K18S13S	17.3	0.15	K194R	63.190	355.168	342.853	11.065	0.20201	2.69692	4	W
K18S13Z	16.9	0.15	K194R	47.898	17.101	350.688	13.499	0.18297	2.60317	6	W
K18S14K	16.2	0.15	K194R	70.471	28.352	298.298	11.348	0.18772	2.60712	7	W
K18S14R	17.7	0.15	K194R	30.058	82.469	0.250	21.553	0.10091	1.91945	7	W
K18S14W	16.4	0.15	K194R	327.452	241.487	199.294	9.940	0.09902	2.97252	7	W
K18S14Y	18.0	0.15	K194R	44.076	212.483	160.225	3.241	0.21527	2.60268	3	W
K18S14Z	17.2	0.15	K194R	114.612	27.016	284.124	5.977	0.13585	2.22969	8	W
K18S15D	17.8	0.15	K194R	37.169	217.819	172.350	3.435	0.21084	2.28886	7	W
K18S15E	17.2	0.15	K194R	51.226	144.253	200.047	3.631	0.10727	2.75825	14	W
K18T00H	18.5	0.15	K194R	44.327	280.949	100.057	6.887	0.35162	2.60155	3	W
K18T00L	19.2	0.15	K194R	34.815	5.573	49.507	13.629	0.41334	2.59818	2	W
K18T01H	17.9	0.15	K194R	331.026	163.444	309.547	15.497	0.12894	1.99681	4	W
K18T05X	21.0	0.15	K194R	92.868	200.723	111.993	1.777	0.44646	2.17561	3	W
K18T06E	23.3	0.15	K194R	240.284	277.499	16.926	19.082	0.02577	1.12689	2	W
K18T07Y	17.8	0.15	K194R	59.286	339.618	23.126	5.402	0.27265	2.55734	4	W
K18T07Z	16.1	0.15	K194R	95.469	229.652	48.987	22.907	0.34928	3.06112	4	W
K18T08Z	16.4	0.15	K194R	31.920	147.953	245.985	4.872	0.10766	2.85379	11	W
K18T09C	17.1	0.15	K194R	64.599	115.315	244.861	5.358	0.06581	2.68186	8	W
K18T09D	17.0	0.15	K194R	28.036	68.610	313.901	5.976	0.07326	2.73149	8	W
K18T09S	17.7	0.15	K194R	95.386	317.179	355.560	4.243	0.24930	2.31989	5	W
K18T10L	17.6	0.15	K194R	27.604	46.293	10.914	9.585	0.20284	2.37795	5	W
K18T10Q	16.1	0.15	K194R	33.079	220.008	158.972	14.700	0.15473	3.10227	7	W
K18T11W	17.4	0.15	K194R	33.765	344.711	61.005	2.276	0.18549	2.44194	10	W
K18T11X	17.8	0.15	K194R	31.445	277.921	125.896	3.515	0.21413	2.63004	5	W
K18T11Z	16.4	0.15	K194R	335.570	290.721	178.567	16.305	0.22402	3.17102	6	W
K18T12A	17.1	0.15	K194R	339.692	23.150	91.210	7.179	0.20534	2.53142	8	W
K18T12E	15.4	0.15	K194R	31.223	69.449	328.626	14.032	0.04991	3.15734	8	W
K18T12O	16.9	0.15	K194R	108.203	162.817	143.942	7.001	0.08437	2.60524	9	W
K18T12X	17.1	0.15	K194R	31.657	237.594	151.647	3.841	0.12702	2.36540	11	W
K18T13A	16.6	0.15	K194R	52.773	345.137	11.236	14.184	0.19975	2.60539	8	W
K18T13C	17.3	0.15	K194R	75.990	141.400	188.359	5.897	0.14449	2.46396	6	W
K18T13K	16.6	0.15	K194R	86.766	53.305	281.445	13.678	0.15939	2.61194	6	W
K18T13L	16.6	0.15	K194R	103.214	294.567	22.881	15.245	0.14781	2.61051	8	W
K18T13O	18.2	0.15	K194R	170.932	264.775	355.586	19.008	0.05656	1.96378	6	W
K18T14A	18.3	0.15	K194R	100.451	265.625	40.067	5.636	0.25111	2.26921	4	W
K18T14C	18.0	0.15	K194R	23.823	256.943	159.316	5.297	0.13702	2.28644	5	W
K18T14K	18.7	0.15	K194R	75.769	264.324	88.772	3.089	0.19962	2.16656	3	W
K18T14V	17.1	0.15	K194R	57.330	67.417	301.127	11.455	0.21191	2.56926	4	W
K18T14W	16.3	0.15	K194R	72.346	327.935	22.192	12.224	0.12481	2.83578	6	W
K18T15B	16.2	0.15	K194R	39.243	220.281	142.763	2.622	0.16863	3.21992	7	W
K18U02B	17.7	0.15	K194R	98.267	100.157	258.575	20.228	0.03639	1.88857	4	W
K18U02X	18.5	0.15	K194R	171.100	356.780	284.525	18.049	0.09661	1.84302	4	W
K18U03N	17.6	0.15	K194R	106.341	354.785	318.740	6.458	0.20340	2.19016	9	W
K18U03S	16.7	0.15	K194R	83.215	25.036	298.637	12.749	0.18025	2.64074	7	W
K18U03T	17.2	0.15	K194R	73.119	21.197	320.872	13.068	0.18888	2.53719	5	W
K18U03W	17.0	0.15	K194R	83.705	2.149	329.552	13.987	0.11762	2.64633	6	W
K18U04O	15.9	0.15	K194R	50.959	128.041	240.657	9.816	0.11660	3.11058	8	W
K18U04T	17.4	0.15	K194R	48.288	110.376	290.888	11.457	0.19377	2.41262	4	W
K18U04V	17.0	0.15	K194R	35.771	58.115	328.156	7.871	0.16634	2.78349	6	W
K18U05E	16.3	0.15	K194R	26.832	61.376	332.470	9.254	0.11590	3.11417	6	W
K18U05J	15.5	0.15	K194R	110.689	78.891	222.113	17.483	0.05088	3.10708	8	W
K18U05O	17.4	0.15	K194R	63.781	338.475	12.896	14.669	0.26910	2.58372	4	W
K18U05U	16.6	0.15	K194R	52.640	30.991	342.196	4.935	0.10266	2.73404	11	W
K18U05Y	16.9	0.15	K194R	53.392	133.917	233.593	6.072	0.24349	2.78110	6	W
K18U06A	16.6	0.15	K194R	73.568	327.561	22.211	10.711	0.13738	2.59286	7	W
K18U06F	17.2	0.15	K194R	55.178	66.135	326.850	13.046	0.24598	2.73336	6	W
K18U06J	17.5	0.15	K194R	67.668	286.720	67.877	2.199	0.19671	2.42947	5	W
K18U06R	18.5	0.15	K194R	60.105	291.925	79.036	3.020	0.22766	2.34304	5	W
K18U06Y	16.3	0.15	K194R	352.129	256.499	196.797	12.164	0.21726	2.87247	8	W
K18U07H	17.4	0.15	K194R	44.052	338.552	56.413	5.395	0.13243	2.31285	7	W
K18U07K	16.5	0.15	K194R	6.889	258.897	160.999	6.409	0.06374	2.83270	9	W
K18U07L	17.7	0.15	K194R	54.301	252.886	121.799	3.224	0.20805	2.46313	8	W
K18U07M	16.5	0.15	K194R	60.979	264.481	88.574	3.280	0.08569	2.89353	10	W
K18U07Q	18.3	0.15	K194R	20.936	29.304	45.516	11.022	0.35838	2.75752	3	W
K18U08B	17.8	0.15	K194R	71.049	186.102	178.152	6.892	0.13694	2.21552	7	W
K18U08C	16.2	0.15	K194R	90.095	264.053	64.886	6.372	0.03185	2.80985	9	W
K18U08Q	18.1	0.15	K194R	73.461	139.733	217.676	3.555	0.22036	2.35729	5	W
K18U08T	16.1	0.15	K194R	49.904	330.580	40.425	18.460	0.13167	3.18234	6	W
K18U09W	18.6	0.15	K194R	51.210	301.763	92.630	2.564	0.18669	2.37626	4	W
K18U09Y	18.3	0.15	K194R	97.740	185.852	156.522	2.383	0.17559	2.13131	5	W
K18U10A	16.3	0.15	K194R	17.481	211.003	206.555	8.107	0.08423	3.15505	8	W
K18U10P	15.2	0.15	K194R	358.498	19.766	44.263	18.597	0.03357	3.56937	6	W
K18U10X	17.7	0.15	K194R	58.859	174.624	209.564	7.631	0.14362	2.28139	6	W
K18U11A	18.2	0.15	K194R	61.408	240.408	126.698	1.351	0.19106	2.56932	3	W
K18U11V	18.4	0.15	K194R	37.769	292.615	117.444	3.074	0.17930	2.45370	2	W
K18U11Z	16.0	0.15	K194R	350.159	60.521	47.513	26.113	0.27627	3.10591	6	W

K18U12J	18.2	0.15	K194R	75.333	220.732	139.086	4.224	0.24052	2.32497	5	W
K18U12R	18.8	0.15	K194R	53.081	297.712	99.155	4.261	0.22702	2.26691	3	W
K18U12X	17.4	0.15	K194R	68.633	165.019	193.056	11.490	0.19739	2.64500	4	W
K18U13F	16.4	0.15	K194R	71.871	229.817	123.677	7.399	0.12764	2.88106	6	W
K18U13G	17.3	0.15	K194R	65.583	173.654	192.220	12.756	0.16897	2.62825	5	W
K18U13K	17.8	0.15	K194R	20.216	28.120	61.087	14.860	0.33161	2.44426	3	W
K18U14D	15.9	0.15	K194R	77.863	265.260	54.191	25.875	0.36531	3.09409	5	W
K18U14W	16.5	0.15	K194R	1.262	20.165	61.685	13.107	0.18020	3.12456	6	W
K18U15D	18.0	0.15	K194R	69.344	272.289	95.714	7.183	0.15517	2.34815	5	W
K18U15Z	16.7	0.15	K194R	32.076	240.119	154.143	6.390	0.02593	2.73052	10	W
K18U16D	18.1	0.15	K194R	81.705	161.404	183.083	6.539	0.20700	2.24478	8	W
K18U16F	17.8	0.15	K194R	22.441	331.887	89.212	3.285	0.18348	2.42380	5	W
K18U17G	17.3	0.15	K194R	32.704	195.795	207.917	13.417	0.17376	2.61394	5	W
K18U17S	16.8	0.15	K194R	93.839	202.221	131.675	2.867	0.13922	2.66106	12	W
K18U17T	17.4	0.15	K194R	52.591	288.423	94.628	13.757	0.28348	2.67425	3	W
K18U17V	17.3	0.15	K194R	45.661	263.998	127.550	13.020	0.27018	2.63015	6	W
K18U18E	17.4	0.15	K194R	122.669	270.288	41.600	6.846	0.13415	2.29387	7	W
K18U18J	16.4	0.15	K194R	40.918	156.502	241.039	9.992	0.08281	3.01984	7	W
K18U18N	16.7	0.15	K194R	33.172	37.942	27.691	11.803	0.20892	2.57657	4	W
K18U18T	17.3	0.15	K194R	50.518	19.735	3.854	14.101	0.18741	2.53582	5	W
K18U18W	15.9	0.15	K194R	323.587	112.642	2.001	10.227	0.10116	3.08303	9	W
K18U18X	18.8	0.15	K194R	64.223	99.586	274.207	5.242	0.25195	2.23866	6	W
K18U18Y	16.9	0.15	K194R	29.120	155.024	252.794	9.061	0.19728	2.72771	6	W
K18V02G	18.3	0.15	K194R	188.081	198.244	91.466	23.871	0.02692	1.83959	5	W
K18V04O	16.9	0.15	K194R	35.682	32.586	62.607	33.894	0.26394	2.60886	3	W
K18V08C	18.2	0.15	K194R	48.048	232.073	199.875	21.105	0.08614	1.87439	6	W
K18V09P	19.7	0.15	K194R	79.208	161.869	253.254	38.840	0.32072	1.87373	2	V
K18V10A	19.7	0.15	K194R	145.253	279.397	84.837	33.508	0.25428	1.40938	2	V
K18V10E	16.2	0.15	K194R	287.482	37.111	117.000	14.305	0.19466	2.67925	9	W
K18V10Z	16.6	0.15	K194R	354.037	85.040	359.924	24.491	0.23092	2.64573	6	W
K18V11Z	17.7	0.15	K194R	133.528	119.147	177.481	3.936	0.15688	2.30032	7	W
K18V12W	17.4	0.15	K194R	58.108	168.731	203.977	5.754	0.10408	2.43168	11	W
K18V13G	16.1	0.15	K194R	51.068	318.772	48.218	12.362	0.08670	3.17782	7	W
K18V14E	16.7	0.15	K194R	68.453	115.578	244.295	28.822	0.19768	2.59474	4	W
K18V14J	18.6	0.15	K194R	29.042	221.802	201.302	20.853	0.08845	1.93119	3	W
K18V14M	17.5	0.15	K194R	43.985	11.134	357.096	14.442	0.27208	2.59744	2	W
K18V14R	17.6	0.15	K194R	16.521	237.599	183.119	6.702	0.08061	2.22073	8	W
K18V14Y	18.0	0.15	K194R	24.796	247.218	172.151	8.765	0.21881	2.54865	3	W
K18V15E	18.5	0.15	K194R	96.800	234.676	91.978	6.939	0.23734	2.19033	4	W
K18V15F	17.2	0.15	K194R	68.753	253.703	96.422	7.510	0.20052	2.64058	5	W
K18V15J	17.6	0.15	K194R	68.999	164.379	182.674	14.415	0.27069	2.58635	4	W
K18V15M	16.1	0.15	K194R	41.179	297.585	84.754	11.131	0.10382	3.05836	6	W
K18V15Q	18.5	0.15	K194R	34.479	236.400	175.303	10.528	0.31902	2.58658	2	W
K18V15S	16.5	0.15	K194R	31.378	317.358	89.827	10.733	0.00297	2.56269	10	W
K18V15T	17.5	0.15	K194R	31.158	264.656	144.325	8.803	0.21872	2.72839	6	W
K18V16H	16.2	0.15	K194R	313.464	48.288	82.162	14.750	0.11988	2.83972	5	W
K18V16J	16.2	0.15	K194R	78.470	225.087	105.996	11.964	0.17780	3.08249	6	W
K18V16X	15.7	0.15	K194R	13.775	231.990	179.654	18.337	0.08989	3.10271	7	W
K18V17H	17.9	0.15	K194R	101.796	209.212	116.101	5.291	0.20698	2.20108	7	W
K18V17Q	17.4	0.15	K194R	93.463	195.868	140.044	6.417	0.17358	2.29967	8	W
K18V18X	16.8	0.15	K194R	74.961	98.101	270.991	13.152	0.26621	2.56342	7	W
K18V19D	16.3	0.15	K194R	15.595	339.292	101.165	22.858	0.02504	2.64026	6	W
K18V19E	15.7	0.15	K194R	71.837	230.036	125.982	19.019	0.23452	3.15049	9	W
K18V20E	16.2	0.15	K194R	8.285	279.821	159.268	17.433	0.16714	2.98990	8	W
K18V20J	17.7	0.15	K194R	28.938	285.806	143.216	13.022	0.15499	2.37184	4	W
K18V20Y	18.0	0.15	K194R	65.715	99.803	265.246	4.105	0.26155	2.55286	3	W
K18V21B	16.6	0.15	K194R	28.113	188.809	210.089	16.034	0.12387	2.80544	5	W
K18V21F	16.6	0.15	K194R	55.859	150.048	215.673	4.729	0.13262	2.73472	10	W
K18V22Y	17.6	0.15	K194R	56.912	242.926	144.434	5.910	0.23589	2.32336	7	W
K18V23B	16.1	0.15	K194R	4.110	148.531	280.340	21.320	0.04415	2.63263	6	W
K18V23F	16.8	0.15	K194R	38.150	48.363	342.469	14.753	0.11335	2.55504	6	W
K18V23M	17.6	0.15	K194R	29.402	178.593	238.830	9.308	0.37166	2.78575	5	W
K18V23P	16.3	0.15	K194R	354.919	128.437	325.788	9.230	0.07095	2.98409	7	W
K18V23T	16.4	0.15	K194R	62.255	247.264	106.537	4.672	0.11013	3.09840	9	W
K18V24F	15.8	0.15	K194R	46.937	63.249	317.132	14.110	0.11391	3.09435	7	W
K18V24R	16.3	0.15	K194R	315.355	193.621	311.734	7.319	0.05777	2.57395	8	W
K18V24Y	16.2	0.15	K194R	347.750	208.929	250.720	20.800	0.06901	2.66122	6	W
K18V26K	16.8	0.15	K194R	54.815	289.852	96.713	15.506	0.11781	2.52861	4	W
K18V26L	17.4	0.15	K194R	6.967	314.688	151.915	12.422	0.36053	2.75092	2	W
K18V26X	16.5	0.15	K194R	81.558	230.328	118.733	12.575	0.20502	2.64025	11	W
K18V26Y	16.7	0.15	K194R	37.002	235.635	177.654	15.165	0.15063	2.70516	6	W
K18V27P	17.9	0.15	K194R	70.123	27.608	19.965	21.167	0.09075	1.95627	5	W
K18V28P	17.1	0.15	K194R	76.625	302.477	57.646	14.759	0.30612	2.56923	5	W
K18V29D	16.2	0.15	K194R	6.794	65.721	352.604	16.061	0.19984	3.14363	5	W
K18V29G	17.4	0.15	K194R	119.747	13.157	290.515	6.121	0.12188	2.18031	8	W
K18V29L	16.0	0.15	K194R	16.531	98.645	313.172	21.152	0.09672	3.14734	5	W
K18V29Y	17.8	0.15	K194R	107.452	109.426	258.630	19.006	0.07769	1.87283	5	W
K18V31G	17.1	0.15	K194R	69.660	343.313	24.207	17.678	0.16695	2.54022	3	W
K18V33K	17.6	0.15	K194R	22.719	130.305	304.267	10.553	0.25666	2.64634	3	W
K18V33U	17.3	0.15	K194R	22.498	176.725	254.825	10.056	0.18975	2.60207	4	W
K18V34U	16.1	0.15	K194R	64.267	226.846	150.038	10.437	0.12890	3.03488	8	W
K18V35A	17.4	0.15	K194R	79.903	301.036	40.558	12.102	0.24996	2.40530	4	W
K18V35B	15.9	0.15	K194R	48.363	337.169	40.469	17.327	0.17431	3.10636	7	W
K18V35F	17.5	0.15	K194R	43.436	21.230	15.802	7.987	0.17596	2.56155	4	W
K18V35J	16.2	0.15	K194R	115.016	280.613	26.866	13.409	0.17949	2.56682	8	W
K18V36D	16.3	0.15	K194R	26.593	42.824	10.525	7.005	0.11274	3.13649	8	W
K18V36M	17.0	0.15	K194R	12.829	69.613	12.116	12.760	0.25358	2.66936	6	W
K18V36N	17.9	0.15	K194R	62.291	48.230	339.558	4.887	0.06825	2.29507	7	W
K18V43E	17.4	0.15	K194R	330.278	223.539	268.357	6.027	0.15821	2.54918	6	W
K18V43Y	16.8	0.15	K194R	107.444	296.667	7.434	10.683	0.27465	2.55437	6	W
K18V45E	15.3	0.15	K194R	80.686	99.429	242.435	20.435	0.09523	3.16896	6	W
K18V45S	16.9	0.15	K194R	194.762	332.077	275.214	6.960	0.09554	2.45410	7	W
K18V46A	16.0	0.15	K194R	188.584	340.508	262.925	8.986	0.08456	3.02565	7	W

K18V46E	16.5	0.15	K194R	341.831	92.859	9.429	10.347	0.07481	3.01782	5	W
K18V47B	16.1	0.15	K194R	44.660	129.515	256.736	7.522	0.09472	3.16320	7	W
K18V48X	18.5	0.15	K194R	53.759	121.685	280.904	4.843	0.13357	2.20380	5	W
K18V48Y	17.1	0.15	K194R	223.351	298.780	288.254	5.765	0.10368	2.42189	7	W
K18V50M	18.1	0.15	K194R	48.790	357.593	34.809	14.143	0.29631	2.53133	3	W
K18V51X	16.9	0.15	K194R	342.940	197.785	270.336	3.662	0.14648	3.00221	7	W
K18V52L	17.0	0.15	K194R	32.042	36.858	13.809	4.321	0.19275	2.83325	7	W
K18V54O	17.1	0.15	K194R	31.252	57.178	358.748	3.963	0.10889	2.56498	8	W
K18V55A	17.1	0.15	K194R	329.217	111.279	14.626	15.299	0.14574	2.70957	6	W
K18V58L	18.1	0.15	K194R	50.985	128.957	263.532	5.293	0.12740	2.36829	4	W
K18V58S	18.0	0.15	K194R	50.740	17.770	15.700	2.028	0.20818	2.42886	6	W
K18V59M	16.5	0.15	K194R	10.149	202.664	235.900	9.313	0.18614	3.04282	7	W
K18V59T	16.8	0.15	K194R	131.666	261.770	41.349	9.223	0.11348	2.54842	7	W
K18V59W	17.7	0.15	K194R	35.114	19.086	32.866	7.502	0.20607	2.69011	3	W
K18V59Z	17.7	0.15	K194R	90.345	284.773	69.512	8.489	0.17729	2.28946	5	W
K18V60B	16.5	0.15	K194R	31.908	344.381	70.227	11.832	0.11101	2.97881	5	W
K18V60P	16.9	0.15	K194R	64.838	245.206	133.593	4.888	0.11646	2.80544	8	W
K18V60Y	17.4	0.15	K194R	79.713	182.220	187.480	6.716	0.15059	2.32295	7	W
K18V61A	17.6	0.15	K194R	14.676	293.699	163.232	5.148	0.19436	2.42023	7	W
K18V61C	18.2	0.15	K194R	26.347	345.383	96.652	6.597	0.13775	2.29392	6	W
K18V61F	16.7	0.15	K194R	70.623	163.469	204.950	12.913	0.19089	2.71417	6	W
K18V61L	17.6	0.15	K194R	36.072	208.476	214.899	12.957	0.23512	2.55952	2	W
K18V61O	18.4	0.15	K194R	110.020	187.222	147.079	2.751	0.21629	2.12311	5	W
K18V61V	16.1	0.15	K194R	68.629	289.105	85.918	11.949	0.07878	3.09424	7	W
K18V61Z	17.3	0.15	K194R	84.072	152.846	204.662	9.903	0.19874	2.52147	8	W
K18V62A	16.6	0.15	K194R	34.358	330.314	94.075	10.466	0.05089	2.63805	8	W
K18V62P	17.7	0.15	K194R	53.470	315.287	96.511	6.787	0.13291	2.32938	7	W
K18V62Z	18.0	0.15	K194R	72.945	288.692	92.931	7.842	0.19429	2.26008	4	W
K18V63N	16.6	0.15	K194R	323.232	216.591	273.214	18.184	0.17277	2.54317	5	W
K18V63Z	18.2	0.15	K194R	53.541	57.127	336.553	2.385	0.19471	2.42293	6	W
K18V64T	15.8	0.15	K194R	3.621	102.367	276.920	13.346	0.07389	2.93652	8	W
K18V65Q	17.9	0.15	K194R	25.562	5.085	63.870	4.571	0.17538	2.58326	5	W
K18V66A	17.7	0.15	K194R	75.061	141.988	230.363	5.301	0.11882	2.33693	7	W
K18V66K	17.9	0.15	K194R	31.089	301.259	112.356	6.111	0.22132	2.59764	4	W
K18V66P	16.1	0.15	K194R	311.979	251.054	259.461	9.278	0.08399	2.77209	10	W
K18V66T	16.8	0.15	K194R	39.348	99.063	292.518	13.582	0.15938	2.86783	7	W
K18V67X	17.3	0.15	K194R	315.186	240.414	274.037	5.703	0.13037	2.33981	7	W
K18V68J	16.2	0.15	K194R	283.915	277.952	243.276	8.929	0.03513	2.99316	6	W
K18V68X	15.9	0.15	K194R	292.234	270.823	244.860	14.418	0.05769	3.08552	5	W
K18V69M	17.3	0.15	K194R	18.058	33.816	52.202	13.296	0.24637	2.57098	5	W
K18V70E	18.3	0.15	K194R	71.685	347.774	22.519	3.034	0.23986	2.33106	4	W
K18V70U	17.7	0.15	K194R	45.223	21.984	31.484	7.106	0.11769	2.34073	7	W
K18V71W	17.1	0.15	K194R	67.188	324.286	51.170	8.826	0.15330	2.64654	5	W
K18V72A	18.8	0.15	K194R	21.416	51.271	53.208	21.506	0.09646	1.86989	5	W
K18V73H	17.9	0.15	K194R	11.659	200.094	257.014	6.937	0.18028	2.55020	3	W
K18V73M	18.3	0.15	K194R	73.991	129.700	253.308	6.995	0.12025	2.27458	5	W
K18V75S	15.7	0.15	K194R	145.230	348.642	270.629	15.778	0.12057	3.21967	6	W
K18V76K	16.1	0.15	K194R	82.456	103.618	235.657	10.355	0.15242	3.23480	8	W
K18V76S	17.3	0.15	K194R	317.114	75.411	68.049	6.671	0.07839	2.45919	8	W
K18V76V	16.7	0.15	K194R	302.942	92.265	60.771	9.653	0.07613	2.64533	8	W
K18V76Y	16.2	0.15	K194R	215.000	12.315	214.717	8.886	0.00894	2.96770	9	W
K18V77V	18.0	0.15	K194R	64.166	252.445	127.823	2.885	0.21927	2.31467	6	W
K18V78A	17.6	0.15	K194R	358.187	48.570	59.681	14.695	0.22009	2.64435	4	W
K18V78S	16.2	0.15	K194R	68.809	120.707	221.230	25.098	0.31982	3.08739	3	W
K18V78U	17.9	0.15	K194R	97.913	262.012	83.225	7.662	0.12893	2.35444	4	W
K18V79B	17.2	0.15	K194R	53.290	288.621	71.009	14.009	0.35251	3.13406	5	W
K18V79S	16.5	0.15	K194R	39.443	319.143	80.049	11.356	0.04443	3.03131	6	W
K18V79W	17.2	0.15	K194R	18.838	315.024	123.545	4.603	0.18235	2.66829	8	W
K18V80E	17.2	0.15	K194R	14.901	277.060	166.068	3.508	0.17285	2.73611	8	W
K18V80O	18.1	0.15	K194R	46.604	295.985	113.525	3.182	0.20200	2.38206	5	W
K18V80P	16.3	0.15	K194R	77.363	137.814	222.024	9.157	0.13820	2.79649	9	W
K18V81D	17.7	0.15	K194R	84.585	274.450	81.517	2.984	0.24669	2.32088	8	W
K18V81R	17.6	0.15	K194R	54.838	271.001	119.681	3.054	0.21107	2.57676	6	W
K18V82A	16.4	0.15	K194R	332.601	281.357	218.451	15.802	0.15380	2.57225	6	W
K18V82B	19.0	0.15	K194R	42.414	285.461	123.335	4.977	0.31162	2.54366	3	W
K18V82E	15.9	0.15	K194R	114.985	228.898	78.151	16.290	0.19020	2.98369	11	W
K18V82T	17.2	0.15	K194R	57.118	321.717	67.582	16.077	0.12705	2.55916	5	W
K18V82U	16.6	0.15	K194R	22.630	261.648	161.667	6.091	0.14388	3.05302	9	W
K18V83C	16.7	0.15	K194R	65.976	157.374	225.740	14.922	0.20297	2.53859	5	W
K18V83D	17.8	0.15	K194R	61.319	194.869	228.295	21.022	0.08675	1.86028	5	W
K18V83F	18.2	0.15	K194R	60.559	341.018	22.240	7.237	0.28668	2.56553	2	W
K18V83Q	16.2	0.15	K194R	26.247	307.041	87.964	11.773	0.15162	2.92976	8	W
K18V83S	16.1	0.15	K194R	33.240	240.705	141.210	14.410	0.12959	3.08677	8	W
K18V83T	17.5	0.15	K194R	25.330	285.180	124.177	10.516	0.26047	2.72991	5	W
K18V83U	16.3	0.15	K194R	358.113	320.914	111.913	13.681	0.20583	3.12736	6	W
K18V83X	16.2	0.15	K194R	81.606	222.035	105.757	14.255	0.13769	2.77497	8	W
K18V83Z	16.1	0.15	K194R	79.982	171.890	141.498	17.028	0.21462	3.07330	8	W
K18V84A	17.1	0.15	K194R	46.384	237.858	137.139	14.131	0.21175	2.66375	6	W
K18V84B	18.0	0.15	K194R	23.579	108.487	331.310	3.313	0.15311	2.34307	5	W
K18V84C	15.6	0.15	K194R	350.686	185.931	273.991	9.038	0.06015	2.97936	7	W
K18V84D	17.4	0.15	K194R	333.969	187.300	307.316	5.964	0.06637	2.35378	8	W
K18V84H	16.7	0.15	K194R	64.893	102.934	277.540	3.774	0.23333	2.54125	7	W
K18V84M	17.3	0.15	K194R	1.270	215.111	241.654	5.547	0.13917	2.36346	7	W
K18V85G	17.3	0.15	K194R	86.873	219.169	130.905	12.756	0.20341	2.55048	5	W
K18V86D	17.0	0.15	K194R	31.583	333.894	94.610	9.662	0.16008	2.47601	7	W
K18V86E	15.5	0.15	K194R	126.740	190.274	114.420	14.564	0.04687	3.20425	6	W
K18V86S	17.0	0.15	K194R	135.615	225.570	80.812	23.065	0.22085	2.31277	6	W
K18V86X	15.5	0.15	K194R	269.093	307.191	223.598	15.285	0.06122	3.04218	8	W
K18V87Q	19.2	0.15	K194R	89.821	37.002	298.635	3.277	0.25344	2.27265	4	W
K18V88K	17.8	0.15	K194R	60.090	351.869	20.771	8.116	0.19421	2.56008	2	W
K18V88M	18.4	0.15	K194R	67.244	342.257	11.635	4.782	0.30028	2.53684	2	W
K18V89R	18.8	0.15	K194R	57.676	58.199	323.861	2.261	0.23815	2.35584	4	W
K18V90P	18.9	0.15	K194R	23.868	153.424	284.676	1.617	0.20940	2.29500	5	W

K18V92A	17.0	0.15	K194R	42.720	20.541	10.568	3.000	0.10147	2.86202	9	W
K18V94Q	18.4	0.15	K194R	0.777	93.200	10.949	2.400	0.14878	2.40355	5	W
K18V95T	18.2	0.15	K194R	81.258	123.567	233.360	4.897	0.18237	2.32912	5	W
K18V97T	16.9	0.15	K194R	291.046	255.464	253.257	3.223	0.00390	2.78548	10	W
K18V97Y	18.9	0.15	K194R	99.794	290.227	39.254	6.141	0.25945	2.16687	5	W
K18V98E	17.8	0.15	K194R	127.755	6.782	293.984	1.744	0.19219	2.34106	9	W
K18V98P	18.1	0.15	K194R	87.383	97.098	250.133	3.265	0.18050	2.35885	7	W
K18V99Q	18.5	0.15	K194R	12.097	201.010	251.980	4.086	0.18885	2.34193	6	W
K18V99W	17.3	0.15	K194R	14.312	60.570	17.401	4.392	0.14316	2.58586	8	W
K18VA0D	17.3	0.15	K194R	334.177	169.828	311.296	1.978	0.12989	2.71592	11	W
K18VA0K	17.7	0.15	K194R	347.292	233.324	234.042	7.873	0.12429	2.57604	5	W
K18VA0P	17.2	0.15	K194R	81.704	99.799	258.137	2.270	0.00875	2.65012	9	W
K18VA0S	17.3	0.15	K194R	67.104	10.665	0.252	1.983	0.06168	2.60799	8	W
K18VA0Z	16.6	0.15	K194R	21.072	177.089	234.659	6.758	0.04355	3.10804	8	W
K18VA2E	18.0	0.15	K194R	27.673	194.034	228.874	5.769	0.09066	2.41960	6	W
K18VA3Y	17.8	0.15	K194R	35.097	61.903	355.339	1.771	0.17136	2.45722	6	W
K18VA4H	17.8	0.15	K194R	75.695	125.049	231.943	5.347	0.13691	2.67150	5	W
K18VA5M	17.4	0.15	K194R	19.385	164.314	259.477	1.397	0.06528	2.67311	6	W
K18VA8A	16.6	0.15	K194R	318.545	258.717	228.895	12.153	0.11444	2.74589	9	W
K18VA8J	17.8	0.15	K194R	105.831	102.895	238.094	1.772	0.17363	2.13296	9	W
K18VA8O	17.1	0.15	K194R	252.860	149.502	56.321	7.805	0.07597	2.39828	9	W
K18VA9N	18.0	0.15	K194R	46.100	213.164	193.282	1.109	0.18966	2.44893	7	W
K18VB0V	16.5	0.15	K194R	317.687	286.013	227.193	15.066	0.21964	3.01448	6	W
K18VB0Y	18.1	0.15	K194R	51.733	300.335	100.739	0.989	0.18287	2.42143	7	W
K18VB2M	15.9	0.15	K194R	106.115	267.202	58.948	10.936	0.12136	3.14882	10	W
K18X03C	18.5	0.15	K194R	20.250	47.402	71.221	17.010	0.37650	2.66492	2	W
K18X06J	18.1	0.15	K194R	75.583	126.512	309.694	17.817	0.09773	1.89658	3	W
K18X08T	17.8	0.15	K194R	89.313	261.578	110.160	5.562	0.17503	2.21521	7	W
K18X09C	16.9	0.15	K194R	41.794	328.783	91.081	9.976	0.06270	2.54135	8	W
K18X09F	16.7	0.15	K194R	8.142	197.997	263.783	28.555	0.12246	2.56692	4	W
K18X09Z	17.1	0.15	K194R	4.527	226.775	243.076	7.907	0.23270	2.74309	5	W
K18X13B	16.1	0.15	K194R	70.957	241.155	107.476	20.872	0.39316	3.12102	5	W
K18X14H	17.0	0.15	K194R	65.582	298.558	87.967	3.636	0.12887	2.55921	9	W
K18X15D	17.9	0.15	K194R	45.032	349.099	67.116	5.589	0.28876	2.44045	6	W
K18X15F	16.5	0.15	K194R	62.071	114.946	259.889	13.293	0.24189	3.09077	6	W
K18X15H	16.7	0.15	K194R	321.861	254.100	259.189	4.442	0.10359	2.55478	9	W
K18X15N	17.2	0.15	K194R	64.607	314.986	76.537	13.398	0.16903	2.34402	8	W
K18X15X	18.0	0.15	K194R	3.969	37.693	83.400	9.378	0.29653	2.66433	2	W
K18X16D	16.6	0.15	K194R	49.656	170.209	225.661	8.650	0.17193	3.05391	6	W
K18X16K	16.7	0.15	K194R	42.870	177.606	236.637	13.411	0.15001	2.59784	9	W
K18X17L	15.4	0.15	K194R	41.776	296.495	112.400	17.450	0.24108	3.14875	9	W
K18X17Q	16.1	0.15	K194R	21.804	54.265	27.010	14.262	0.07018	2.76501	8	W
K18X17R	16.5	0.15	K194R	6.585	42.150	64.129	12.220	0.14484	2.60815	9	W
K18Y00J	18.4	0.15	K194R	18.749	153.743	26.003	18.077	0.55862	2.31309	3	V
K18Y01B	20.0	0.15	K194R	22.944	289.941	209.391	6.404	0.54648	2.58125	3	V
K18Y03C	18.2	0.15	K194R	95.508	329.844	42.823	8.022	0.28191	2.30246	4	W
K18Y03F	16.4	0.15	K194R	6.684	111.179	39.813	13.516	0.16871	2.93573	8	W
K18Y04W	15.8	0.15	K194R	322.353	280.508	278.284	8.824	0.03939	2.99417	6	W
K19E03M	16.8	0.15	K194R	33.838	147.884	350.178	13.200	0.20386	2.68993	7	W
K19F03F	18.6	0.15	K194R	348.490	227.631	354.365	21.148	0.35624	2.27780	2	W
K19F03H	17.6	0.15	K194R	140.536	69.430	328.957	19.845	0.05000	1.89412	6	W
K19F03J	15.7	0.15	K194R	294.025	356.226	249.187	9.049	0.05101	2.98103	8	W
K19F03K	17.4	0.15	K194R	359.864	305.053	240.662	7.119	0.13164	2.23173	8	W
K19F03N	16.8	0.15	K194R	33.478	167.739	342.995	3.780	0.18271	2.54420	9	W
K19F04B	16.7	0.15	K194R	21.861	116.374	45.203	13.578	0.20262	2.69167	7	W
K19F04D	16.3	0.15	K194R	339.031	138.775	87.693	15.658	0.09652	2.66916	9	W
K19F04O	17.6	0.15	K194R	9.676	348.876	201.713	5.643	0.16261	2.42392	6	W
K19F04X	16.8	0.15	K194R	347.208	272.105	287.016	7.108	0.22553	2.69122	9	W
K19G01A	17.5	0.15	K194R	93.792	288.389	169.937	22.488	0.10761	1.93102	8	W
K19G06T	18.1	0.15	K194R	37.128	38.879	103.766	5.278	0.12186	2.22573	6	W
K19G07T	18.1	0.15	K194R	30.167	32.512	126.207	9.761	0.13797	2.29133	5	W
K19G08H	16.5	0.15	K194R	34.437	9.115	133.770	19.390	0.28365	2.73358	6	W
K19G08P	17.2	0.15	K194R	63.690	290.333	164.379	12.974	0.21287	2.62194	9	W
K19G09B	17.5	0.15	K194R	301.112	3.064	253.950	5.466	0.15930	2.33353	9	W
K19G09P	17.4	0.15	K194R	329.627	194.969	34.058	8.983	0.06817	2.22198	8	W
K19G10Y	17.3	0.15	K194R	333.987	49.903	194.382	11.136	0.13950	2.64277	6	W
K19G15N	18.5	0.15	K194R	58.202	275.734	220.603	3.702	0.07751	2.24694	6	W
K19G15T	16.8	0.15	K194R	320.054	294.695	321.130	3.672	0.18514	3.00286	6	W
K19G16E	17.6	0.15	K194R	55.208	254.248	239.524	6.546	0.10763	2.51748	7	W
K19G22H	17.5	0.15	K194R	332.880	91.097	157.752	17.981	0.30302	2.60193	4	W
K19J07O	18.7	0.15	K194R	12.404	109.156	82.280	4.200	0.15026	2.33355	4	W
K19J08E	18.6	0.15	K194R	242.108	185.286	167.455	25.543	0.13508	1.92367	3	W
K19K04S	13.8	0.15	K194R	282.157	143.380	127.988	22.904	0.10743	5.17251	7	W
K19L00E	14.2	0.15	K194R	292.580	121.603	135.276	30.657	0.07986	5.17927	7	W
K19M01U	18.1	0.15	K194R	332.721	152.512	194.825	19.687	0.34434	2.57563	3	W
K19N03U	17.4	0.15	K194R	279.912	11.414	348.085	7.450	0.34445	2.55642	3	W
K19O00F	17.2	0.15	K194R	323.509	89.105	279.822	27.142	0.34075	2.56464	4	X
K19Q00L	19.4	0.15	K194R	303.498	134.708	271.681	6.520	0.53059	2.72158	2	W
K19R03F	17.1	0.15	K194R	319.357	74.814	306.813	15.275	0.27788	2.54235	3	X
K19S00A	17.6	0.15	K194R	313.593	35.827	329.074	24.928	0.25941	2.26405	4	X
K19U00A	18.3	0.15	K194R	311.581	307.680	56.940	8.992	0.40916	2.44850	5	V

New perturbed one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc	C
K14DA7H	17.7	0.15	K194R	97.740	110.622	330.682	4.449	0.15848	2.82455	34	W
K14DC7R	17.0	0.15	K194R	126.194	234.535	175.186	12.314	0.03874	2.91536	24	W
K14G30R	18.9	0.15	K194R	122.114	21.935	207.404	0.729	0.14332	2.36356	46	W
K14T14G	16.8	0.15	K194R	318.961	147.973	228.447	11.121	0.08138	3.02309	30	W
K15M46V	17.1	0.15	K194R	263.481	333.237	323.534	9.909	0.21821	3.06923	81	W
K15MA7W	18.4	0.15	K194R	322.176	181.766	123.100	4.346	0.19305	2.59486	47	W
K15R65T	17.5	0.15	K194R	238.085	76.250	2.585	22.274	0.06677	2.60875	57	W
K16F47G	18.3	0.15	K194R	246.771	207.309	358.267	13.154	0.18405	2.64895	56	W
K19J01F	23.6	0.15	K194R	277.488	55.924	271.590	1.590	0.22531	1.26560	165	X

K19J02P	19.5	0.15	K194R	333.900	68.128	226.432	27.579	0.57076	2.28391	167	X
K19K04Q	17.6	0.15	K194R	317.513	133.063	229.790	26.561	0.39540	2.28822	141	X
K19L04X	21.8	0.15	K194R	283.798	68.560	270.068	2.939	0.30708	1.46100	146	X
K19M00W	22.1	0.15	K194R	328.734	65.026	245.789	6.087	0.48031	2.15641	89	X
K19N01D	18.2	0.15	K194R	334.454	58.033	292.039	15.478	0.57721	3.18084	108	X
K19O00J	19.1	0.15	K194R	337.552	92.178	311.353	39.199	0.75097	3.31891	92	X
K19O01L	22.0	0.15	K194R	271.153	141.145	221.982	10.645	0.28837	1.46418	86	X
K19P02E	20.5	0.15	K194R	227.081	97.919	339.845	32.840	0.37790	1.33249	63	X
K19Q00X	19.8	0.15	K194R	297.443	119.087	316.639	27.153	0.62919	2.15519	67	X
K19Q01C	20.6	0.15	K194R	328.325	151.519	177.870	21.383	0.49325	2.41137	59	X
K19Q01S	23.0	0.15	K194R	332.819	96.997	209.591	8.514	0.56821	2.35483	145	X
K19Q04K	20.7	0.15	K194R	313.457	169.954	308.421	20.395	0.88920	2.54354	26	X
K19R00V	23.6	0.15	K194R	279.545	125.919	312.557	4.650	0.61655	1.78776	17	X
K19R01U	22.1	0.15	K194R	339.529	324.011	338.031	18.931	0.61167	2.77531	28	X
K19R03L	21.6	0.15	K194R	215.525	151.348	320.784	10.044	0.54170	1.34224	68	X
K19S00M	20.8	0.15	K194R	320.419	164.788	209.286	19.331	0.53973	2.55987	31	X
K19S02Z	19.7	0.15	K194R	284.423	155.529	222.433	22.455	0.24851	1.68337	27	X
K19S03J	24.0	0.15	K194R	306.492	18.053	6.311	7.260	0.46002	2.18577	26	X
K19S05V	21.5	0.15	K194R	324.830	349.528	9.879	10.681	0.52860	2.65196	22	X
K19S08J	24.5	0.15	K194R	258.701	216.132	199.198	8.280	0.37055	1.56464	18	X
K19S10A	22.6	0.15	K194R	312.680	19.552	25.543	5.118	0.49784	2.58454	21	X
K19S10B	22.8	0.15	K194R	318.872	72.949	320.903	3.434	0.54373	2.72382	18	X
K19S10W	23.2	0.15	K194R	199.770	20.570	107.905	1.477	0.56240	1.28558	18	X
K19T00B	27.2	0.15	K194R	278.418	350.767	319.967	0.508	0.21028	1.18958	17	X
K19T00L	24.1	0.15	K194R	295.386	166.681	202.314	6.222	0.41801	1.83079	17	X
K19T00P	20.7	0.15	K194R	300.323	145.991	187.984	27.323	0.22660	1.66346	17	X
K19T01O	25.3	0.15	K194R	298.179	261.032	54.267	1.917	0.34121	1.45917	15	X
K19T01P	21.0	0.15	K194R	145.125	126.234	12.073	25.213	0.26932	1.29552	15	X
K19T02F	26.4	0.15	K194R	116.397	300.916	173.891	2.410	0.08017	1.04395	19	X
K19T02Q	24.8	0.15	K194R	318.242	44.593	22.950	8.480	0.67489	2.88956	13	X
K19T02R	23.3	0.15	K194R	289.783	62.683	24.614	12.700	0.60438	2.14013	13	X
K19T05F	19.3	0.15	K194R	310.421	63.664	14.807	28.465	0.45364	2.57920	11	X
K19T05P	25.2	0.15	K194R	275.638	262.134	204.993	8.758	0.65990	1.88364	10	X
K19T06D	18.0	0.15	K194R	326.370	119.517	278.525	28.904	0.38075	2.60046	11	X
K19T06T	18.5	0.15	K194R	310.949	53.623	5.435	30.994	0.37394	2.57087	52	X
K19T08B	21.4	0.15	K194R	310.445	345.651	350.697	11.730	0.52693	1.90038	2	B

New one-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Arc	C
K19T07Z	19.4	0.15	K19A4	344.586	265.172	174.130	28.755	0.43141	2.69129	9	B
K19T08A	18.9	0.15	K19A4	5.592	278.938	84.972	27.902	0.41269	2.57482	4	B

New observations:

K01Q34C	KC2019	10	07.94584922	24	15.42	+25	18	28.2	18.7	RqEU027160	
K01Q34C	KC2019	10	07.94795722	24	15.14	+25	18	26.4	18.4	RqEU027160	
K01Q34C	KC2019	10	07.95003322	24	14.85	+25	18	23.7	18.1	RqEU027160	
K01Q34C	KC2019	10	16.78255	22	08	44.56	+22	19	18.5	19.5	VtEU027240
K01Q34C	KC2019	10	16.78631	22	08	44.20	+22	19	13.7	19.0	VtEU027240
K01Q34C	KC2019	10	16.78970	22	08	43.89	+22	19	09.2	19.0	VtEU027240
K04F29F	C2019	10	17.31130522	50	07.80	-29	08	10.8	18.07	oVEU027T05	
K04F29F	C2019	10	17.31663222	50	06.95	-29	08	12.3	18.19	oVEU027T05	
K04F29F	C2019	10	17.33269022	50	04.29	-29	08	17.1	18.13	oVEU027T05	
K04F29F	C2019	10	17.36829822	49	58.38	-29	08	27.1	18.42	oVEU027T05	
K05W00D	C2019	10	18.14060	18	42	08.13	+48	11	22.2	21.3	GVEU027G96
K05W00D	C2019	10	18.14586	18	42	08.98	+48	11	21.4	21.0	GVEU027G96
K05W00D	C2019	10	18.15638	18	42	10.75	+48	11	18.9	21.4	GVEU027G96
K06F00J	KC2019	07	13.16094816	39	38.19	+43	00	48.6	22.2	VuEU027H21	
K06F00J	KC2019	07	13.17179616	39	37.27	+43	00	40.4	22.1	VuEU027H21	
K06F00J	KC2019	07	13.18506516	39	36.16	+43	00	30.2	21.7	VuEU027H21	
K06M00A	C2019	10	18.20788	23	06	01.31	+45	16	24.0		VEU027G96
K06M00A	C2019	10	18.21343	23	06	02.07	+45	16	10.2	19.6	GVEU027G96
K06M00A	C2019	10	18.21874	23	06	02.80	+45	15	56.8	19.8	GVEU027G96
K06M00A	C2019	10	18.22397	23	06	03.51	+45	15	43.6	19.6	GVEU027G96
K09Q36B	KC2019	10	07.93860222	02	33.58	+28	29	56.3	18.0	RqEU027160	
K09Q36B	KC2019	10	07.94068522	02	32.98	+28	29	55.8	17.8	RqEU027160	
K09Q36B	KC2019	10	07.94275322	02	32.37	+28	29	54.7	17.8	RqEU027160	
K10U07H	C2019	10	15.35620001	56	14.27	+31	55	12.4	17.84	rUEU027I41	
K10U07H	C2019	10	15.35666001	56	14.26	+31	55	13.6	17.77	rUEU027I41	
K10U07H	C2019	10	16.25740001	55	27.45	+32	39	47.3	18.12	gUEU027I41	
K10U07H	C2019	10	17.48886201	54	18.66	+33	38	52.3	18.27	oVEU027T08	
K10U07H	C2019	10	17.49443901	54	18.29	+33	39	08.1	18.59	oVEU027T08	
K10U07H	C2019	10	17.49922301	54	17.94	+33	39	20.6	18.20	oVEU027T08	
K10U07H	C2019	10	17.51150701	54	17.14	+33	39	55.3	18.15	oVEU027T08	
K11C14N	KC2019	06	21.22770519	33	48.62	+44	34	46.2	22.3	VuEU027H21	
K11C14N	KC2019	06	21.27789819	33	44.18	+44	34	22.5	22.6	VuEU027H21	
K11C14N	KC2019	06	21.28399419	33	43.62	+44	34	18.9	22.4	VuEU027H21	
K14HJ2H	C2019	10	18.15923	19	29	55.05	+48	29	35.6	19.8	GVEU027G96
K14HJ2H	C2019	10	18.16565	19	29	56.74	+48	29	28.2	20.0	GVEU027G96
K14HJ2H	C2019	10	18.17208	19	29	58.42	+48	29	20.6	19.7	GVEU027G96
K14HJ2H	C2019	10	18.17850	19	30	00.13	+48	29	13.1	19.7	GVEU027G96
K14N64U	KC2019	10	15.13228322	46	51.27	-00	23	24.1	19.2	VuEU027H21	
K14N64U	KC2019	10	15.13499422	46	51.64	-00	23	15.6	19.4	VuEU027H21	
K14N64U	KC2019	10	15.13761822	46	52.00	-00	23	07.2	19.4	VuEU027H21	
K14N64U	KC2019	10	15.14024222	46	52.33	-00	22	58.8	19.3	VuEU027H21	
K14N64U	KC2019	10	15.14286622	46	52.71	-00	22	50.5	19.3	VuEU027H21	
K14P68F	KC2019	10	03.85365	19	59	42.87	-05	58	26.3	18.2	GVEU027130
K14P68F	KC2019	10	03.85663	19	59	43.15	-05	58	13.7	18.1	GVEU027130
K14P68F	KC2019	10	03.85987	19	59	43.57	-05	58	00.1	18.4	GVEU027130
K14P68F	KC2019	10	07.78163220	07	37.95	-01	30	34.6	18.4	RqEU027160	
K14P68F	KC2019	10	07.78366520	07	38.22	-01	30	25.0	18.3	RqEU027160	
K14P68F	KC2019	10	07.78571220	07	38.48	-01	30	17.6	18.3	RqEU027160	
K14P68F	KC2019	10	15.04504220	23	19.20	+06	01	22.7	19.1	VuEU027H21	
K14P68F	KC2019	10	15.04712520	23	19.48	+06	01	30.0	18.9	VuEU027H21	

K14P68F	KC2019	10	15.04927920	23	19.73	+06	01	37.4	19.1	VuEU027H21	
K14SU3Z	C2019	06	25.09374915	22	55.40	+27	50	11.9	16.7	VuEU027H21	
K14SU3Z	C2019	06	25.09637215	22	56.22	+27	49	31.7	16.7	VuEU027H21	
K14SU3Z	C2019	06	25.09899515	22	57.01	+27	48	51.6	17.0	VuEU027H21	
K14SU3Z	C2019	06	25.10162615	22	57.83	+27	48	11.0	16.9	VuEU027H21	
K14SU3Z	C2019	06	25.10425515	22	58.62	+27	47	30.6	16.9	VuEU027H21	
K14SU3Z	C2019	06	25.10687215	22	59.41	+27	46	50.4	16.9	VuEU027H21	
K14SU3Z	C2019	06	25.11105915	23	00.67	+27	45	46.1	16.8	VuEU027H21	
K14X31X	KC2019	10	18.33098	06	17	39.16	+64	26	22.5	20.3	RoEU027291
K14X31X	KC2019	10	18.33986	06	17	37.81	+64	26	28.0	20.6	RoEU027291
K14X31X	KC2019	10	18.34872	06	17	36.46	+64	26	34.3	20.5	RoEU027291
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K15J01D	C2019	10	18.13712	17	18	51.83	+46	23	52.4	19.1	GVEU027703
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K15PM8C	KC2019	10	16.79274	20	33	29.04	+21	46	03.8	19.2	GVEU027130
K15PM8C	KC2019	10	16.79622	20	33	28.24	+21	46	05.5	19.2	GVEU027130
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K15R35Z	C2019	09	28.18336	20	18	07.99	+44	18	56.8	17.7	GVEU027654
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K19S10B	C2019	10	18.14361	00	26	12.23	+18	26 47.2
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K19T04Q	C2019	10	18.19071	02	04	44.11	+27	53 34.0
K19T04Q	C2019	10	18.19107	02	04	44.01	+27	53 31.6
K19T04Q	C2019	10	18.19142	02	04	43.86	+27	53 27.6
K19T05P	KC2019	10	15.07119922	47	19.89	+13	50 27.1	
K19T05P	KC2019	10	15.07288822	47	16.70	+13	50 10.5	
K19T05P	KC2019	10	15.07457722	47	13.51	+13	49 54.3	
K19T05P	KC2019	10	15.07626722	47	10.31	+13	49 38.6	
K19T05P	KC2019	10	15.07795722	47	07.11	+13	49 22.6	
K19T05P	KC2019	10	15.08004122	47	03.11	+13	49 02.3	
K19T05P	C2019	10	16.29287	21	57	47.10	+09	10 12.0
K19T05P	C2019	10	16.29328	21	57	45.73	+09	10 03.9
K19T05P	C2019	10	16.29410	21	57	43.02	+09	09 47.9
K19T05P	C2019	10	16.29451	21	57	41.65	+09	09 40.0
K19T06L	C2019	10	18.10110	01	06	46.68	+08	20 46.8
K19T06L	C2019	10	18.10152	01	06	46.54	+08	20 43.4
01620	oC2019	09	27.19023	20	18	24.54	-03	27 49.2
01620	oC2019	09	27.19423	20	18	25.43	-03	27 40.5
01620	oC2019	09	28.19083	20	22	15.77	-02	52 32.0
01620	oC2019	09	28.19484	20	22	16.64	-02	52 23.7
01620	oC2019	09	28.23761	20	22	25.72	-02	50 57.3
01620	oC2019	09	28.24162	20	22	26.59	-02	50 49.0
01620	KC2019	10	07.90119220	53	38.91	+01	29 21.8	
01620	KC2019	10	07.90327720	53	39.24	+01	29 24.4	
01620	KC2019	10	07.90537620	53	39.58	+01	29 27.1	
01620	KC2019	10	16.76765	21	16	33.47	+04	05 57.4
01620	KC2019	10	16.77105	21	16	33.94	+04	06 00.4
01620	KC2019	10	16.77406	21	16	34.36	+04	06 03.1
01620	C2019	10	17.34033321	17	54.62	+04	14 29.2	
01620	C2019	10	17.34339921	17	55.04	+04	14 32.0	
01620	C2019	10	17.34619721	17	55.42	+04	14 34.3	
01620	C2019	10	17.34921521	17	55.83	+04	14 36.9	
01620	C2019	10	17.34967621	17	55.90	+04	14 37.4	
01620	C2019	10	17.35715121	17	56.92	+04	14 43.9	
01620	C2019	10	17.36051621	17	57.37	+04	14 46.6	
01620	C2019	10	17.36819921	17	58.42	+04	14 53.4	
01627	C2019	10	17.57458809	13	02.85	+13	39 13.0	
01627	C2019	10	17.58033509	13	03.24	+13	39 12.0	
01627	C2019	10	17.59138409	13	03.99	+13	39 09.0	
01627	C2019	10	17.64564309	13	07.61	+13	38 54.8	
01865	KC2019	10	07.89387520	46	41.97	+04	59 23.2	
01865	KC2019	10	07.89603120	46	42.00	+04	59 20.7	
01865	KC2019	10	07.89817220	46	42.08	+04	59 18.1	
01866	C2019	10	17.54131608	25	58.40	+14	55 12.7	
01866	C2019	10	17.55036608	25	59.33	+14	55 43.4	
01866	C2019	10	17.56407508	26	00.74	+14	56 29.6	
01866	C2019	10	17.64610208	26	09.08	+15	01 06.2	
02059	KC2019	10	07.92432621	13	05.45	-03	10 40.9	
02059	KC2019	10	07.92634621	13	05.61	-03	10 43.5	
02059	KC2019	10	07.92837521	13	05.79	-03	10 45.4	
02059	C2019	10	15.04897321	24	32.75	-05	26 25.9	
02059	C2019	10	15.05072221	24	32.92	-05	26 28.3	
02059	C2019	10	15.05247121	24	33.11	-05	26 29.7	
02059	C2019	10	15.05421921	24	33.30	-05	26 31.5	
02059	C2019	10	15.05596921	24	33.48	-05	26 33.5	
02059	C2019	10	15.05771821	24	33.67	-05	26 35.4	
02059	C2019	10	15.05946621	24	33.86	-05	26 37.4	
02100	C2019	10	16.84431	21	53	23.28	-41	31 47.3
02100	C2019	10	16.85188	21	53	21.75	-41	32 00.0
02212	C2019	10	17.59507110	04	18.64	+22	16 27.6	

17.7	VuEU027H21
22.6	GVEU027I52
22.1	GVEU027I52
	VEU027I52
19.9	GVEU027I52
20.3	GVEU027I52
20.5	RoEU027E10
20.4	RoEU027E10
20.2	RoEU027E10
20.3	RoEU027E10
21.9	RoEU027291
	oEU027291
19.9	RoEU027691
20.2	RoEU027691
20.1	RoEU027691
20.9	GVEU027I52
20.9	GVEU027I52
20.7	GVEU027I52
20.4	GVEU027I52
	oEU027291
22.2	RoEU027291
	oEU027291
	oEU027291
21.3	RoEU027291
21.2	RoEU027291
20.7	GVEU027J95
20.0	GVEU027J95
	VEU027J95
19.3	RoEU027291
19.4	RoEU027291
19.3	RoEU027291
19.0	RoEU027691
18.8	RoEU027691
19.0	RoEU027691
19.4	GVEU027I52
20.0	GVEU027I52
	VEU027I52
19.5	VuEU027H21
19.5	VuEU027H21
19.6	VuEU027H21
19.7	VuEU027H21
19.8	VuEU027H21
19.9	VuEU027H21
19.4	RoEU027F65
19.2	RoEU027F65
18.8	RoEU027F65
19.1	RoEU027F65
19.4	GVEU027I52
19.2	GVEU027I52
15.3	GVEU027654
15.3	GVEU027654
14.9	GVEU027654
14.9	GVEU027654
14.0	GVEU027654
14.0	GVEU027654
14.0	RqEU027160
14.2	RqEU027160
13.7	RqEU027160
16.4	VtEU027240
16.5	VtEU027240
16.5	VtEU027240
15.62	oVEU027T08
15.40	oVEU027T08
15.44	oVEU027T08
15.28	oVEU027T08
15.33	oVEU027T08
15.17	oVEU027T08
15.12	oVEU027T08
15.06	oVEU027T08
17.65	oVEU027T08
17.55	oVEU027T08
18.30	oVEU027T08
17.56	oVEU027T08
	qEU027160
18.0	RqEU027160
18.2	RqEU027160
13.39	oVEU027T08
13.41	oVEU027T08
13.44	oVEU027T08
13.40	oVEU027T08
16.4	RqEU027160
16.1	RqEU027160
16.2	RqEU027160
16.3	VuEU027H21
16.4	VuEU027H21
16.5	VuEU027H21
16.4	VuEU027H21
16.6	VuEU027H21
16.5	VuEU027H21
16.5	VuEU027H21
14.9	RoEU027K95
14.9	RoEU027K95
16.75	oVEU027T08

02212	C2019	10	17.59830810	04	19.35	+22	16	24.2	16.70oVEU027T08		
02212	C2019	10	17.60386510	04	20.58	+22	16	18.7	16.84oVEU027T08		
02212	C2019	10	17.61449210	04	22.88	+22	16	08.0	16.64oVEU027T08		
03200	C2019	10	15.22526802	00	38.89	+51	30	19.8	16.5 VuEU027H21		
03200	C2019	10	15.22701602	00	38.39	+51	30	17.6	16.3 VuEU027H21		
03200	C2019	10	15.22876502	00	37.87	+51	30	15.4	16.5 VuEU027H21		
03200	C2019	10	15.23051302	00	37.36	+51	30	13.1	16.6 VuEU027H21		
03200	C2019	10	15.23576202	00	35.85	+51	30	06.9	16.5 VuEU027H21		
03200	C2019	10	15.23751102	00	35.36	+51	30	04.7	16.5 VuEU027H21		
03200	C2019	10	15.23908502	00	34.91	+51	30	02.9	16.4 VuEU027H21		
03200	C2019	10	17.28284	01	51	07.42	+50	45	39.8	16.4 GVEU027G96	
03200	C2019	10	17.28908	01	51	05.68	+50	45	31.2	16.4 GVEU027G96	
03200	C2019	10	17.29532	01	51	03.96	+50	45	22.7	16.6 GVEU027G96	
03200	C2019	10	17.30157	01	51	02.22	+50	45	14.1	16.5 GVEU027G96	
04183	KC2019	10	16.81722	00	15	18.24	+12	30	09.1	18.5 VtEU027240	
04183	KC2019	10	16.82173	00	15	17.91	+12	30	06.8	18.5 VtEU027240	
04183	KC2019	10	16.82549	00	15	17.63	+12	30	05.0	18.4 VtEU027240	
04183	C2019	10	17.39103800	14	38.06	+12	25	30.4	17.96oVEU027T08		
04183	C2019	10	17.39430900	14	37.81	+12	25	28.6	17.86oVEU027T08		
04183	C2019	10	17.41478100	14	36.33	+12	25	18.7	17.98oVEU027T08		
04183	C2019	10	17.42591300	14	35.52	+12	25	13.1	18.02oVEU027T08		
05626	C2019	10	17.50313507	57	00.55	+14	59	28.9	15.88oVEU027T08		
05626	C2019	10	17.50854207	57	01.53	+14	59	25.4	15.93oVEU027T08		
05626	C2019	10	17.51572307	57	02.83	+14	59	20.4	15.89oVEU027T08		
05626	C2019	10	17.51908307	57	03.41	+14	59	18.2	15.84oVEU027T08		
09400	S2019	10	14.62961	21	21	39.96	-33	23	12.0	18 RLEU027C51	
09400	s2019	10	14.62961	1	+	4822.3987	-	3238.5392	-	3654.5169	EU027C51
09400	S2019	10	14.76052	21	21	31.38	-33	18	14.5	LEU027C51	
09400	s2019	10	14.76052	1	+	4848.0761	-	3249.3079	-	3610.6725	EU027C51
09400	S2019	10	15.08765	21	21	10.32	-33	05	49.1	LEU027C51	
09400	s2019	10	15.08765	1	+	4882.8613	-	3241.1946	-	3570.8182	EU027C51
09400	S2019	10	15.15310	21	21	06.17	-33	03	20.0	LEU027C51	
09400	s2019	10	15.15310	1	+	4895.5368	-	3246.2854	-	3548.7454	EU027C51
09400	S2019	10	15.21842	21	21	02.04	-33	00	50.9	LEU027C51	
09400	s2019	10	15.21842	1	+	4879.1797	-	3217.2438	-	3597.4424	EU027C51
09400	S2019	10	15.34933	21	20	53.89	-32	55	52.6	LEU027C51	
09400	s2019	10	15.34933	1	+	4904.6883	-	3227.4889	-	3553.2536	EU027C51
09400	S2019	10	15.48023	21	20	45.69	-32	50	52.3	LEU027C51	
09400	s2019	10	15.48023	1	+	4929.9719	-	3237.4369	-	3508.8790	EU027C51
09400	S2019	10	15.61101	21	20	37.65	-32	45	53.6	LEU027C51	
09400	s2019	10	15.61101	1	+	4926.4561	-	3213.6364	-	3535.6213	EU027C51
09400	C2019	10	17.28182021	19	01.45	-31	41	56.7	16.39oVEU027T05		
09400	C2019	10	17.28505021	19	01.27	-31	41	49.3	16.32oVEU027T05		
09400	C2019	10	17.29523021	19	00.68	-31	41	25.8	16.32oVEU027T05		
09400	C2019	10	17.30099121	19	00.35	-31	41	12.1	16.32oVEU027T05		
18172	C2019	10	15.18609201	35	38.76	+57	23	42.3	16.1 VuEU027H21		
18172	C2019	10	15.18784301	35	38.61	+57	23	47.4	16.1 VuEU027H21		
18172	C2019	10	15.18959001	35	38.44	+57	23	52.7	16.1 VuEU027H21		
18172	C2019	10	15.19134001	35	38.30	+57	23	57.8	16.2 VuEU027H21		
18172	C2019	10	15.19309101	35	38.14	+57	24	02.5	16.1 VuEU027H21		
18172	C2019	10	15.19484001	35	38.00	+57	24	08.0	16.1 VuEU027H21		
18172	C2019	10	15.19661001	35	37.84	+57	24	13.3	16.0 VuEU027H21		
18172	C2019	10	15.19835901	35	37.68	+57	24	18.3	16.0 VuEU027H21		
66146	C2019	10	17.28044821	03	53.91	-33	07	59.0	14.43oVEU027T05		
66146	C2019	10	17.28367821	03	54.12	-33	07	54.6	14.41oVEU027T05		
66146	C2019	10	17.29568821	03	54.89	-33	07	39.0	14.44oVEU027T05		
66146	C2019	10	17.30144821	03	55.26	-33	07	31.6	14.44oVEU027T05		
85839	C2019	10	17.46648801	47	57.24	+10	18	20.2	18.15oVEU027T08		
85839	C2019	10	17.47397201	47	56.45	+10	18	17.4	18.40oVEU027T08		
85839	C2019	10	17.48399701	47	55.43	+10	18	16.3	18.49oVEU027T08		
85839	C2019	10	17.49107001	47	54.77	+10	18	15.0	18.38oVEU027T08		
87311	C2019	10	17.51710307	50	38.36	+11	48	59.3	18.44oVEU027T08		
87311	C2019	10	17.52046307	50	39.04	+11	48	54.6	18.47oVEU027T08		
87311	C2019	10	17.53696807	50	42.62	+11	48	39.1	18.32oVEU027T08		
87311	C2019	10	17.53742807	50	42.73	+11	48	37.5	18.85oVEU027T08		
89830	C2019	10	17.50412	10	32	08.73	+58	07	09.0	16.6 GVEU027G96	
89830	C2019	10	17.50795	10	32	10.44	+58	07	11.4	16.7 GVEU027G96	
89830	C2019	10	17.51177	10	32	12.14	+58	07	13.7	16.6 GVEU027G96	
89830	C2019	10	17.51561	10	32	13.84	+58	07	15.9	16.6 GVEU027G96	
90403	KC2019	10	07.88836520	56	42.75	+33	21	45.5	18.5 RqEU027160		
90403	KC2019	10	07.89041620	56	42.86	+33	21	43.4	18.0 RqEU027160		
90403	KC2019	10	16.79981	21	07	34.94	+30	20	43.8	18.6 VtEU027240	
90403	KC2019	10	16.80395	21	07	35.26	+30	20	39.1	18.9 VtEU027240	
90403	KC2019	10	16.80733	21	07	35.54	+30	20	35.2	19.1 VtEU027240	
B2221	C2019	10	18.13677	18	34	18.77	+43	42	41.4	VEU027G96	
B2221	C2019	10	18.14203	18	34	19.51	+43	42	37.5	19.8 GVEU027G96	
B2221	C2019	10	18.14730	18	34	20.29	+43	42	33.2	20.0 GVEU027G96	
B2221	C2019	10	18.15255	18	34	21.08	+43	42	28.7	19.9 GVEU027G96	
D6993	C2019	10	17.30467421	32	37.87	-27	47	31.2	16.51oVEU027T05		
D6993	C2019	10	17.31850321	32	33.48	-27	46	12.8	16.55oVEU027T05		
D6993	C2019	10	17.32576121	32	31.16	-27	45	31.5	16.55oVEU027T05		
D7084	C2019	10	18.16603	18	03	10.97	+61	50	01.0	17.5 GVEU027703	
D7084	C2019	10	18.17145	18	03	14.21	+61	50	04.1	17.5 GVEU027703	
D7084	C2019	10	18.17687	18	03	17.47	+61	50	07.2	17.3 GVEU027703	
D7084	C2019	10	18.18230	18	03	20.73	+61	50	10.1	17.3 GVEU027703	
E0333	KC2019	10	15.21434200	21	07.21	+08	29	27.3	18.1 VuEU027H21		
E0333	KC2019	10	15.21585100	21	06.81	+08	29	27.5	18.3 VuEU027H21		
E0333	KC2019	10	15.21721500	21	06.48	+08	29	27.7	18.7 VuEU027H21		
E0333	KC2019	10	15.21865100	21	06.12	+08	29	27.8	18.8 VuEU027H21		
E0333	KC2019	10	15.22008800	21	05.75	+08	29	27.9	18.3 VuEU027H21		
E0333	KC2019	10	15.22152200	21	05.39	+08	29	28.4	18.6 VuEU027H21		
E0333	KC2019	10	15.22389000	21	04.78	+08	29	28.5	18.6 VuEU027H21		
E0333	C2019	10	17.39057800	12	26.64	+08	33	37.4	18.42oVEU027T08		

E0333	C2019	10	17.39384900	12	25.82	+08	33	37.4	18.30oVEU027T08	
E0333	C2019	10	17.40113100	12	24.00	+08	33	38.8	18.34oVEU027T08	
E0333	C2019	10	17.41764400	12	20.12	+08	33	39.7	18.52oVEU027T08	
E1593	C2019	10	17.49629802	05	41.53	+23	09	23.0	16.39oVEU027T08	
E1593	C2019	10	17.49968302	05	41.15	+23	09	19.7	16.46oVEU027T08	
E1593	C2019	10	17.50593402	05	40.43	+23	09	13.3	16.48oVEU027T08	
E1593	C2019	10	17.52359002	05	38.44	+23	08	55.3	16.58oVEU027T08	
F3814	C2019	10	14.35051004	53	44.79	+31	52	58.8	16.92rUEU027I41	
F3814	C2019	10	14.35095904	53	44.70	+31	52	58.5	16.87rUEU027I41	
F3814	C2019	10	14.35417004	53	44.07	+31	52	56.3	16.81rUEU027I41	
F3814	C2019	10	14.35810004	53	43.30	+31	52	53.5	16.87rUEU027I41	
F3842	C2019	10	17.40313100	13	26.31	-34	52	54.0	15.73oVEU027T05	
F3842	C2019	10	17.40999200	13	27.62	-34	52	45.4	15.74oVEU027T05	
F3842	C2019	10	17.41377700	13	28.36	-34	52	40.7	16.74oVEU027T05	
F5140	C2019	10	17.36882	07	12	50.47	+52	36	34.8	20.1 GVEU027G96
F5140	C2019	10	17.37403	07	12	51.42	+52	36	41.7	20.9 GVEU027G96
F5140	C2019	10	17.37924	07	12	52.12	+52	36	49.3	20.9 GVEU027G96
F5140	C2019	10	17.38445	07	12	52.97	+52	36	56.3	20.9 GVEU027G96
G2082	KC2019	10	15.11151821	04	00.14	+72	52	27.6	15.8 VuEU027H21	
G2082	KC2019	10	15.11324121	04	03.17	+72	52	25.2	15.9 VuEU027H21	
G2082	KC2019	10	15.11467721	04	05.67	+72	52	23.3	15.9 VuEU027H21	
G2082	KC2019	10	15.11611121	04	08.12	+72	52	21.2	15.9 VuEU027H21	
G2082	KC2019	10	15.11754421	04	10.66	+72	52	19.3	15.9 VuEU027H21	
G2082	KC2019	10	15.11898021	04	13.18	+72	52	17.3	15.9 VuEU027H21	
G2082	KC2019	10	15.12041821	04	15.67	+72	52	15.2	15.9 VuEU027H21	
G2273	C2019	10	16.25345002	21	00.13	+34	21	54.3	19.16gUEU027I41	
G2273	C2019	10	16.25740002	20	59.79	+34	21	48.8	19.17gUEU027I41	
G2273	C2019	10	16.29816002	20	56.10	+34	20	52.8	18.93gUEU027I41	
G2273	C2019	10	16.29861002	20	56.04	+34	20	51.9	19.06gUEU027I41	
G2273	C2019	10	16.37236002	20	49.32	+34	19	08.5	18.22rUEU027I41	
G2273	C2019	10	16.39005002	20	47.70	+34	18	44.3	18.23rUEU027I41	
G2723	KC2019	10	15.24507403	16	19.68	+33	22	04.7	18.8 VuEU027H21	
G2723	KC2019	10	15.24795703	16	19.56	+33	22	08.0	18.1 VuEU027H21	
G2723	KC2019	10	15.25127103	16	19.44	+33	22	11.1	18.7 VuEU027H21	
L4088	C2019	10	17.52715308	16	27.33	+07	44	53.8	16.18oVEU027T08	
L4088	C2019	10	17.53018308	16	27.59	+07	44	56.9	16.28oVEU027T08	
L4088	C2019	10	17.53558708	16	28.03	+07	45	02.8	16.48oVEU027T08	
L4088	C2019	10	17.54758608	16	29.05	+07	45	16.3	16.67oVEU027T08	
N7805	C2019	10	18.12238	17	32	36.04	+63	15	59.8	17.5 GVEU027703
N7805	C2019	10	18.12791	17	32	35.26	+63	15	58.3	18.0 GVEU027703
N7805	C2019	10	18.13343	17	32	34.79	+63	15	56.2	18.1 GVEU027703
N7805	C2019	10	18.13896	17	32	34.21	+63	15	54.6	18.0 GVEU027703
O8926	KC2019	10	15.24668201	04	08.23	+73	06	03.3	17.0 VuEU027H21	
O8926	KC2019	10	15.24811901	04	07.54	+73	06	09.1	16.9 VuEU027H21	
O8926	KC2019	10	15.24956101	04	06.82	+73	06	14.9	16.8 VuEU027H21	
O8926	KC2019	10	15.25100001	04	06.10	+73	06	20.6	16.9 VuEU027H21	
O8926	KC2019	10	15.25243701	04	05.39	+73	06	26.5	16.9 VuEU027H21	
R6397	C2019	10	16.41688007	41	19.64	+26	32	13.1	19.28rUEU027I41	
R6397	C2019	10	16.46065007	41	24.35	+26	32	00.2	19.27rUEU027I41	
T7418	KC2019	10	15.09667520	51	39.48	+00	55	05.9	17.7 VuEU027H21	
T7418	KC2019	10	15.09811220	51	39.74	+00	55	06.7	17.7 VuEU027H21	
T7418	KC2019	10	15.10384820	51	40.78	+00	55	10.5	17.5 VuEU027H21	
T7418	KC2019	10	15.10528320	51	41.05	+00	55	11.4	17.5 VuEU027H21	
T7418	KC2019	10	15.10671320	51	41.31	+00	55	12.3	17.4 VuEU027H21	
T7418	KC2019	10	15.10831320	51	41.61	+00	55	13.3	17.5 VuEU027H21	
U3262	C2019	10	17.34810	06	57	35.60	+51	20	34.5	19.4 GVEU027G96
U3262	C2019	10	17.35323	06	57	37.32	+51	20	41.7	19.4 GVEU027G96
U3262	C2019	10	17.35840	06	57	39.04	+51	20	49.0	19.4 GVEU027G96
U3262	C2019	10	17.36356	06	57	40.74	+51	20	56.4	19.2 GVEU027G96
W6291	KC2019	10	15.16255300	19	01.70	+46	43	43.1	17.5 VuEU027H21	
W6291	KC2019	10	15.16391500	19	01.73	+46	43	31.3	17.6 VuEU027H21	
W6291	KC2019	10	15.16527600	19	01.75	+46	43	19.0	17.5 VuEU027H21	
W6291	KC2019	10	15.16663800	19	01.80	+46	43	06.9	17.4 VuEU027H21	
W6291	KC2019	10	15.16800200	19	01.83	+46	42	55.0	17.4 VuEU027H21	
W6291	KC2019	10	15.16936300	19	01.84	+46	42	42.9	17.4 VuEU027H21	
W6291	KC2019	10	15.17113300	19	01.90	+46	42	27.1	17.5 VuEU027H21	
W6742	KC2019	10	15.16889723	16	54.95	+52	57	51.2	18.4 VuEU027H21	
W6742	KC2019	10	15.17033423	16	54.73	+52	57	51.0	18.4 VuEU027H21	
W6742	KC2019	10	15.17177123	16	54.44	+52	57	50.8	18.5 VuEU027H21	
W6742	KC2019	10	15.17320723	16	54.20	+52	57	50.8	18.5 VuEU027H21	
W6742	KC2019	10	15.17464223	16	53.92	+52	57	50.7	18.4 VuEU027H21	
W6742	KC2019	10	15.17608123	16	53.67	+52	57	50.6	18.4 VuEU027H21	
W6742	KC2019	10	15.17902623	16	53.17	+52	57	50.2	18.4 VuEU027H21	
W6777	KC2019	10	16.83095	21	30	10.06	+32	49	37.6	17.7 GVEU027130
W6777	KC2019	10	16.83344	21	30	10.77	+32	49	31.5	17.8 GVEU027130
W6777	KC2019	10	16.83592	21	30	11.47	+32	49	25.1	17.8 GVEU027130
W6777	KC2019	10	16.83841	21	30	12.18	+32	49	18.9	17.6 GVEU027130
W6777	C2019	10	17.27072521	32	18.04	+32	31	32.8	17.65oVEU027T08	
W6777	C2019	10	17.28747321	32	22.74	+32	30	50.9	17.59oVEU027T08	
W6777	C2019	10	17.29779821	32	25.61	+32	30	25.1	18.51oVEU027T08	
W6777	C2019	10	17.30341421	32	27.20	+32	30	11.0	17.64oVEU027T08	
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X9714	KC2019	10	15.18219023	37	16.26	+51	17	23.6	17.6 VuEU027H21	
X9714	KC2019	10	15.18937523	37	09.91	+51	18	32.4	17.5 VuEU027H21	
X9714	KC2019	10	15.19081123	37	08.63	+51	18	46.0	17.6 VuEU027H21	
X9714	KC2019	10	15.19224623	37	07.35	+51	18	59.6	17.6 VuEU027H21	
X9714	KC2019	10	15.19368323	37	06.09	+51	19	13.3	17.5 VuEU027H21	
Z4030	C2019	10	15.29697703	45	08.56	+15	05	12.3	15.6 VuEU027H21	
Z4030	C2019	10	15.29833903	45	08.96	+15	05	10.4	15.6 VuEU027H21	
Z4030	C2019	10	15.29970003	45	09.34	+15	05	08.6	15.6 VuEU027H21	
Z4030	C2019	10	15.30106203	45	09.72	+15	05	06.8	15.6 VuEU027H21	
Z4030	C2019	10	15.30242303	45	10.12	+15	05	04.7	15.6 VuEU027H21	
b3428	KC2019	10	15.22953400	59	28.19	-03	59	57.5	18.6 VuEU027H21	

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o3960 C2019 10 17.30011821 02 47.54 +25 21 57.6 18.14oVEU027T08
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