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MPEC 2019-U30 : DAILY ORBIT UPDATE (2019 October 19)

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M.P.E.C. 2019-U30

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DAILY ORBIT UPDATE (2019 October 19)

Update to 2019-U27

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

New identification:

E # K13A02S K15E32R Weryk

New multiple-opposition orbits:

Object	H	G	Epoch	M	Peri.	Node	Incl.	e	a	Opp	C
J96T32Y	16.5	0.15	K194R	336.072	41.952	343.203	14.281	0.18735	3.17206	4	X
J98Q00Q	18.7	0.15	K194R	34.704	220.579	325.330	37.195	0.68425	1.24336	6	X
J99T84B	16.8	0.15	K194R	200.433	260.379	212.528	16.027	0.08121	2.55639	9	X
K00P05Z	17.6	0.15	K194R	333.744	242.507	100.119	3.649	0.51591	2.83259	4	X
K00R56U	16.8	0.15	K194R	8.324	1.677	310.967	21.462	0.21708	2.79252	3	X
K00SY0H	18.0	0.15	K194R	302.069	208.877	169.821	22.810	0.08598	1.93709	7	X
K00U16S	18.2	0.15	K194R	311.581	307.680	56.940	8.992	0.40916	2.44850	6	X
K01N16G	16.9	0.15	K194R	348.620	28.204	300.864	13.211	0.21373	2.69213	7	X
K01Q34C	20.1	0.15	K194R	128.357	215.379	271.640	6.236	0.18747	1.12833	4	X
K01QR1Y	17.2	0.15	K194R	330.624	246.366	112.494	4.934	0.17468	2.32590	12	X
K01R47N	18.0	0.15	K194R	293.247	6.722	4.707	20.468	0.15618	1.87655	7	X
K01TA3Z	17.6	0.15	K194R	331.297	24.400	332.337	3.681	0.35154	2.73478	4	X
K01TC6B	17.7	0.15	K194R	319.781	339.781	43.397	11.608	0.30955	2.72437	4	X
K01U74K	17.5	0.15	K194R	310.490	333.236	47.628	13.011	0.25245	2.35696	8	X
K01W15W	18.0	0.15	K194R	303.141	298.328	73.113	24.263	0.11441	1.88473	6	X
K01XN2G	18.1	0.15	K194R	226.850	159.886	261.582	18.998	0.12013	1.90740	5	X
K02A17Q	17.8	0.15	K194R	172.354	212.542	294.604	19.480	0.04902	1.90851	7	X
K02L31E	20.1	0.15	K194R	20.085	359.887	192.825	11.387	0.54206	1.99296	4	X
K02L46C	14.8	0.15	K194R	62.500	313.060	259.838	22.920	0.27138	3.13110	8	X
K02L64W	16.3	0.15	K194R	350.154	42.291	307.267	13.921	0.10562	2.55433	7	X
K02M07W	16.0	0.15	K194R	342.045	23.210	292.323	26.608	0.14734	3.17115	5	X
K02M07X	15.8	0.15	K194R	301.850	100.048	286.885	12.547	0.21243	3.14449	9	X
K02N07U	17.8	0.15	K194R	315.693	41.445	309.482	7.835	0.37383	2.26551	4	X
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K02N80N	16.0	0.15	K194R	343.067	50.875	277.377	25.921	0.21432	3.17473	6	X
K02N82D	16.6	0.15	K194R	350.455	53.798	291.918	13.785	0.12802	2.58216	6	X
K02N82O	17.2	0.15	K194R	318.559	78.530	309.635	11.823	0.28707	2.58731	6	X
K02O23O	16.1	0.15	K194R	38.129	171.062	119.079	21.227	0.22374	3.09414	8	X
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20.9 RoEU030691
20.5 RoEU030691
22.2 VuEU030H21
22.2 VuEU030H21
22.1 VuEU030H21
22.3 VuEU030H21
21.9 VuEU030H21
22.1 VuEU030H21
22.1 VuEU030H21
17.9 RqEU030160
17.9 RqEU030160
16.6 RqEU030160
21.4 RoEU030291
21.3 RoEU030291
21.2 RoEU030291
19.6 RoEU030691
19.7 RoEU030691
19.3 RoEU030691
22.0 VuEU030H21
21.8 VuEU030H21
22.1 VuEU030H21
21.4 RoEU030291
21.0 RoEU030291
oEU030291
20.2 RoEU030691
19.7 RoEU030691
20.6 RoEU030691
20.6 RoEU030691
20.6 RoEU030691
20.8 RoEU030691
oEU030691

K19T01P	KC2019	10	19.17050	23	09	41.31	-04	55	21.5	oEU030691
K19T01P	KC2019	10	19.17980	23	09	39.72	-04	55	07.5	oEU030691
K19T02A	KC2019	10	18.31872	00	18	56.24	-14	52	47.0	19.7 RoEU030691
K19T02A	KC2019	10	18.34198	00	18	37.86	-14	51	30.1	19.3 RoEU030691
K19T02F	KC2019	10	19.28460	00	22	27.70	-24	29	54.0	21.3 RoEU030291
K19T02F	KC2019	10	19.30259	00	22	24.98	-24	30	57.4	21.4 RoEU030291
K19T02F	KC2019	10	19.32068	00	22	22.34	-24	32	00.8	21.5 RoEU030291
K19T02G	KC2019	10	18.02084622	01	16.09	+30	03	07.0	21.9 VuEU030H21	
K19T02G	KC2019	10	18.02666322	01	15.83	+30	03	33.4	22.0 VuEU030H21	
K19T02G	KC2019	10	18.03441922	01	15.46	+30	04	09.1	22.2 VuEU030H21	
K19T02Q	KC2019	10	18.90580500	57	12.65	+10	47	28.3	18.9 GVEU030J95	
K19T02Q	KC2019	10	18.91208100	57	13.49	+10	49	00.2	19.3 GVEU030J95	
K19T02R	C2019	10	19.19016	23	50	43.80	-06	15	28.9	19.9 VoEU030691
K19T02R	C2019	10	19.19451	23	50	41.34	-06	15	07.1	20.6 VoEU030691
K19T02R	C2019	10	19.19885	23	50	38.88	-06	14	44.9	19.8 VoEU030691
K19T04Q	C2019	10	19.20231	02	00	59.26	+26	01	34.0	19.3 GVEU030I52
K19T04Q	C2019	10	19.20804	02	00	57.92	+26	00	55.4	20.5 GVEU030I52
K19T04Q	C2019	10	19.20828	02	00	57.86	+26	00	53.2	20.5 GVEU030I52
K19T04Q	C2019	10	19.21298	02	00	56.75	+26	00	20.9	19.7 GVEU030I52
K19T05K	.C2019	10	15.36910	02	29	09.62	+40	05	06.7	19.1 RoEU030F65
K19T05K	.C2019	10	15.36997	02	29	10.33	+40	05	24.6	19.1 RoEU030F65
K19T05K	.C2019	10	15.37085	02	29	11.04	+40	05	42.8	19.2 RoEU030F65
K19T05K	.C2019	10	15.37172	02	29	11.65	+40	05	58.7	19.2 RoEU030F65
K19T05K	.C2019	10	15.37261	02	29	12.28	+40	06	14.4	19.0 RoEU030F65
K19T05K	.C2019	10	15.37436	02	29	13.60	+40	06	48.1	19.1 RoEU030F65
K19T05K	.C2019	10	15.37524	02	29	14.24	+40	07	04.6	19.2 RoEU030F65
K19T05K	KC2019	10	18.82820207	50	58.87	+64	43	25.2	17.8 GVEU030J95	
K19T05K	KC2019	10	18.83221007	52	04.25	+64	42	07.8	19.1 GVEU030J95	
K19T05K	KC2019	10	18.83585607	53	03.65	+64	40	57.1	19.1 GVEU030J95	
K19T05K	KC2019	10	18.84405207	55	16.86	+64	38	13.2	18.6 GVEU030J95	
K19T06L	KC2019	10	18.31034	01	05	27.77	+07	52	53.5	19.4 RoEU030691
K19T06L	KC2019	10	18.33361	01	05	18.91	+07	49	45.4	19.5 RoEU030691
K19T06L	KC2019	10	18.35688	01	05	10.10	+07	46	38.0	19.3 RoEU030691
K19T06L	C2019	10	19.09759	01	00	44.07	+06	06	32.2	19.8 GVEU030I52
K19T06L	C2019	10	19.09783	01	00	43.97	+06	06	29.6	19.5 GVEU030I52
K19T06L	C2019	10	19.09807	01	00	43.88	+06	06	28.3	19.4 GVEU030I52
K19T08B	KC2019	10	18.86163206	27	12.17	+73	22	35.7	20.1 GVEU030J95	
K19T08B	KC2019	10	18.87652906	27	00.32	+73	22	36.5	19.6 GVEU030J95	
K19T08B	KC2019	10	18.89314006	26	47.14	+73	22	38.4	19.8 GVEU030J95	
K19U00C	KC2019	10	18.84057	00	38	53.83	+06	25	31.7	18.5 GVEU030D06
K19U00C	KC2019	10	18.84242	00	38	53.81	+06	25	26.8	18.8 GVEU030D06
K19U00C	KC2019	10	18.84886	00	38	53.77	+06	25	09.1	18.3 GVEU030D06
K19U00C	KC2019	10	18.85071	00	38	53.79	+06	25	04.1	18.4 GVEU030D06
01620	oC2019	09	25.24279	20	10	26.29	-04	42	18.6	14.7 GVEU030654
01620	oC2019	09	25.24680	20	10	27.27	-04	42	08.9	14.7 GVEU030654
01620	oC2019	09	25.29461	20	10	39.04	-04	40	12.8	13.6 GVEU030654
01620	oC2019	09	25.29862	20	10	40.03	-04	40	03.1	13.6 GVEU030654
01620	oC2019	09	26.14386	20	14	13.29	-04	06	50.3	14.1 GVEU030654
01620	oC2019	09	26.14787	20	14	14.23	-04	06	41.1	14.1 GVEU030654
01620	C2019	10	18.33012021	20	14.91	+04	28	35.7	15.32oVEU030T05	
01620	C2019	10	18.33333921	20	15.34	+04	28	38.5	15.24oVEU030T05	
01620	C2019	10	18.34078721	20	16.33	+04	28	44.7	15.07oVEU030T05	
01620	C2019	10	18.35236921	20	17.89	+04	28	54.4	14.98oVEU030T05	
01620	C2019	10	19.25957	21	22	25.452+04	41	26.76	17.1 wUEU030F51	
01620	C2019	10	19.26234	21	22	25.825+04	41	28.03	16.6 wUEU030F51	
01620	C2019	10	19.27166	21	22	27.056+04	41	35.67	17.1 wUEU030F51	
01620	C2019	10	19.27444	21	22	27.421+04	41	37.88	17.1 wUEU030F51	
01620	C2019	10	19.28372	21	22	28.648+04	41	45.48	16.8 wUEU030F51	
01620	C2019	10	19.28651	21	22	29.014+04	41	47.72	16.6 wUEU030F51	
01620	C2019	10	19.29580	21	22	30.241+04	41	55.31	16.1 wUEU030F51	
01620	C2019	10	19.29865	21	22	30.615+04	41	57.56	16.0 wUEU030F51	
01865	C2019	10	19.27898	20	55	49.962+01	20	22.84	19.9 wUEU030F52	
01865	C2019	10	19.29126	20	55	50.636+01	20	10.85	20.4 wUEU030F52	
01865	C2019	10	19.30349	20	55	51.326+01	19	58.71	20.1 wUEU030F52	
01865	C2019	10	19.31571	20	55	52.009+01	19	46.89	19.4 wUEU030F52	
02059	C2019	10	18.32920621	30	56.80	-06	24	41.8	16.29oVEU030T05	
02059	C2019	10	18.33288121	30	57.23	-06	24	45.6	16.24oVEU030T05	
02059	C2019	10	18.34032921	30	58.10	-06	24	53.2	16.31oVEU030T05	
02059	C2019	10	18.35096221	30	59.35	-06	25	04.3	16.26oVEU030T05	
02100	S2019	10	17.24450	21	52	08.40	-41	43	14.2	15 RLEU030C51
02100	s2019	10	17.24450	1	+ 4518.3888	- 2562.9807	- 4485.7735			EU030C51
02100	S2019	10	17.37527	21	51	43.94	-41	46	56.0	LEU030C51
02100	s2019	10	17.37527	1	+ 4509.1119	- 2538.1927	- 4509.1567			EU030C51
02100	S2019	10	17.57149	21	51	07.51	-41	52	25.5	LEU030C51
02100	s2019	10	17.57149	1	+ 4513.8009	- 2519.1233	- 4515.1610			EU030C51
02100	S2019	10	17.63695	21	50	55.42	-41	54	14.7	LEU030C51
02100	s2019	10	17.63695	1	+ 4529.3082	- 2526.1152	- 4495.6655			EU030C51
02100	S2019	10	17.83317	21	50	19.40	-41	59	38.7	LEU030C51
02100	s2019	10	17.83317	1	+ 4535.5432	- 2508.5135	- 4499.2372			EU030C51
03200	C2019	10	18.42669201	45	59.73	+50	18	48.5	16.31oVEU030T08	
03200	C2019	10	18.43682401	45	56.99	+50	18	33.8	16.23oVEU030T08	
03200	C2019	10	18.44004601	45	56.11	+50	18	29.1	16.29oVEU030T08	
03200	C2019	10	18.44595101	45	54.51	+50	18	20.7	16.30oVEU030T08	
06047	C2019	10	18.34629522	10	07.84	-11	51	59.0	18.80oVEU030T05	
06047	C2019	10	18.34950722	10	07.51	-11	51	54.0	18.66oVEU030T05	
06047	C2019	10	18.35511922	10	06.88	-11	51	45.0	18.57oVEU030T05	
06047	C2019	10	18.36669822	10	05.53	-11	51	26.1	18.10oVEU030T05	
06455	C2019	10	18.50516903	48	47.74	+44	36	37.5	17.22oVEU030T08	
06455	C2019	10	18.50832903	48	47.34	+44	36	40.4	17.23oVEU030T08	
06455	C2019	10	18.51510503	48	46.43	+44	36	46.7	17.09oVEU030T08	
06455	C2019	10	18.53170003	48	44.21	+44	37	02.1	17.82oVEU030T08	
09202	C2019	10	18.28339421	12	54.91	+37	27	28.6	18.66oVEU030T08	
09202	C2019	10	18.28896721	12	54.56	+37	27	23.8	19.04oVEU030T08	

09202	C2019	10	18.29173321	12	54.37	+37	27	21.6	19.34oVEU030T08	
09202	C2019	10	18.29495621	12	54.13	+37	27	17.8	19.14oVEU030T08	
09202	C2019	10	18.30004121	12	53.82	+37	27	12.9	19.05oVEU030T08	
09202	C2019	10	18.30096221	12	53.78	+37	27	12.4	19.36oVEU030T08	
09202	C2019	10	18.31113221	12	53.10	+37	27	03.0	19.27oVEU030T08	
16816	C2019	10	18.37727	23	58	32.696	-26	46	14.21	19.2 iUEU030F52
16816	C2019	10	18.38696	23	58	31.727	-26	46	09.55	19.0 iUEU030F52
16816	C2019	10	18.39666	23	58	30.801	-26	46	05.11	19.2 iUEU030F52
16816	C2019	10	18.40636	23	58	29.843	-26	46	00.34	19.1 iUEU030F52
18172	C2019	10	18.41015001	30	59.80	+59	58	52.5	15.59oVEU030T08	
18172	C2019	10	18.41767001	30	58.96	+59	59	13.8	15.60oVEU030T08	
18172	C2019	10	18.43097501	30	57.48	+59	59	51.8	15.64oVEU030T08	
20826	C2019	10	18.57879110	16	51.56	+42	31	08.7	16.77oVEU030T08	
20826	C2019	10	18.58201110	16	52.30	+42	31	05.1	17.94oVEU030T08	
20826	C2019	10	18.58771910	16	53.61	+42	30	58.4	16.80oVEU030T08	
20826	C2019	10	18.59756010	16	55.90	+42	30	46.7	16.85oVEU030T08	
25330	C2019	10	18.32974	23	41	05.710	-24	04	29.55	18.4 iUEU030F52
25330	C2019	10	18.34129	23	41	04.584	-24	04	25.43	18.4 iUEU030F52
25330	C2019	10	18.35287	23	41	03.460	-24	04	21.08	18.3 iUEU030F52
25330	C2019	10	18.36439	23	41	02.330	-24	04	16.64	18.2 iUEU030F52
31221	C2019	10	19.26759	22	00	24.579	+01	48	31.70	20.3 wUEU030F51
31221	C2019	10	19.27968	22	00	24.295	+01	48	32.15	20.3 wUEU030F51
31221	C2019	10	19.29177	22	00	24.015	+01	48	32.59	20.4 wUEU030F51
31221	C2019	10	19.30390	22	00	23.738	+01	48	33.05	20.5 wUEU030F51
85709	KC2019	10	07.96055223	54	59.89	-00	07	45.1	17.9 RqEU030160	
85709	KC2019	10	07.96268623	54	59.78	-00	07	47.1	17.9 RqEU030160	
85709	KC2019	10	07.96478523	54	59.58	-00	07	49.5	18.1 RqEU030160	
85709	C2019	10	18.39330823	45	48.86	-03	32	00.9	18.29oVEU030T05	
85709	C2019	10	18.39840823	45	48.63	-03	32	05.7	18.36oVEU030T05	
85709	C2019	10	18.40161023	45	48.46	-03	32	09.3	18.76oVEU030T05	
85709	C2019	10	18.41183523	45	48.00	-03	32	20.2	18.16oVEU030T05	
85839	KC2019	10	08.05058102	02	25.79	+10	40	38.0	qEU030160	
85839	KC2019	10	08.05267202	02	25.57	+10	40	36.9	18.0 RqEU030160	
85839	KC2019	10	08.05475702	02	25.43	+10	40	37.6	18.2 RqEU030160	
85839	C2019	10	18.44191701	46	24.33	+10	15	39.8	18.65oVEU030T05	
85839	C2019	10	18.44513701	46	24.06	+10	15	40.3	18.53oVEU030T05	
85839	C2019	10	18.45170101	46	23.39	+10	15	38.6	18.38oVEU030T05	
85839	C2019	10	18.46367701	46	22.25	+10	15	37.3	18.43oVEU030T05	
88959	C2019	10	18.54628003	12	56.70	+00	57	20.5	18.15oVEU030T05	
88959	C2019	10	18.54952303	12	56.09	+00	57	22.6	18.42oVEU030T05	
88959	C2019	10	18.55185003	12	55.70	+00	57	25.7	18.25oVEU030T05	
88959	C2019	10	18.55518703	12	55.07	+00	57	28.7	18.43oVEU030T05	
88959	C2019	10	18.55564403	12	55.06	+00	57	30.5	18.61oVEU030T05	
88959	C2019	10	18.56122503	12	54.01	+00	57	34.3	18.34oVEU030T05	
88959	C2019	10	18.56514603	12	53.28	+00	57	38.9	18.30oVEU030T05	
88959	C2019	10	18.57378703	12	51.69	+00	57	47.3	18.44oVEU030T05	
99248	S2019	10	16.42228	09	25	23.20	+71	03	30.7	16 RLEU030C51
99248	s2019	10	16.42228	1	-	2686.0407	+	1010.6082	+ 6216.0314	EU030C51
99248	S2019	10	16.55305	09	23	53.75	+71	02	05.8	LEU030C51
99248	s2019	10	16.55305	1	-	2665.8406	+	985.8864	+ 6228.5767	EU030C51
99248	S2019	10	16.61850	09	23	09.12	+71	01	22.3	LEU030C51
99248	s2019	10	16.61850	1	-	2685.4716	+	998.2339	+ 6218.1830	EU030C51
99248	S2019	10	16.81473	09	20	55.79	+70	59	08.7	LEU030C51
99248	s2019	10	16.81473	1	-	2685.1844	+	986.0624	+ 6220.2301	EU030C51
99248	S2019	10	16.88018	09	20	11.55	+70	58	23.4	LEU030C51
99248	s2019	10	16.88018	1	-	2704.9026	+	998.3342	+ 6209.7328	EU030C51
99248	C2019	10	18.62714509	01	09.35	+70	35	03.4	15.82oVEU030T08	
99248	C2019	10	18.62998109	01	07.44	+70	35	01.2	15.84oVEU030T08	
99248	C2019	10	18.63581009	01	03.49	+70	34	56.6	16.74oVEU030T08	
99248	C2019	10	18.63911709	01	01.27	+70	34	53.9	15.76oVEU030T08	
D7084	C2019	10	18.19590218	03	29.96	+61	50	29.7	17.00oVEU030T08	
D7084	C2019	10	18.20144918	03	33.17	+61	50	33.2	16.68oVEU030T08	
D7084	C2019	10	18.20704718	03	36.43	+61	50	36.2	16.83oVEU030T08	
D7084	C2019	10	18.21076518	03	38.64	+61	50	38.4	16.82oVEU030T08	
D7084	C2019	10	18.21310318	03	40.10	+61	50	39.8	16.75oVEU030T08	
D7084	C2019	10	18.22662618	03	48.03	+61	50	47.5	17.04oVEU030T08	
E0333	KC2019	10	08.00326200	53	58.18	+08	07	28.1	17.2 RqEU030160	
E0333	KC2019	10	08.00530100	53	57.57	+08	07	28.3	17.7 RqEU030160	
E0333	KC2019	10	08.00731900	53	56.98	+08	07	28.3	17.4 RqEU030160	
E0333	C2019	10	18.41136000	08	35.58	+08	35	13.8	18.58oVEU030T05	
E0333	C2019	10	18.41415100	08	34.95	+08	35	14.4	18.77oVEU030T05	
E0333	C2019	10	18.41976700	08	33.61	+08	35	15.0	18.59oVEU030T05	
E0333	C2019	10	18.43223800	08	30.79	+08	35	16.1	18.25oVEU030T05	
E1593	KC2019	10	08.06490502	24	07.94	+25	52	24.8	16.6 RqEU030160	
E1593	KC2019	10	08.06692802	24	07.66	+25	52	22.7	17.0 RqEU030160	
E1593	KC2019	10	08.06893102	24	07.33	+25	52	20.5	17.1 RqEU030160	
F4278	KC2019	10	08.01965701	10	45.47	+06	59	24.3	18.1 RqEU030160	
F4278	KC2019	10	08.02173601	10	45.24	+06	59	21.8	17.7 RqEU030160	
G2082	n2019	10	16.85753322	02	04.12	+71	38	38.3	15.3 RqEU030Z92	
G2082	n2019	10	16.87122622	02	31.49	+71	37	42.1	15.3 RqEU030Z92	
G2082	n2019	10	16.88575222	03	00.57	+71	36	41.1	15.6 RqEU030Z92	
G2082	C2019	10	17.81473422	35	48.84	+70	16	40.2	15.2 GVEU030Z80	
G2082	C2019	10	17.81659722	35	52.74	+70	16	28.4	15.1 GVEU030Z80	
G2082	C2019	10	17.81833322	35	56.29	+70	16	17.6	15.1 GVEU030Z80	
G2082	C2019	10	17.82006922	35	59.77	+70	16	07.1	15.3 GVEU030Z80	
G2082	C2019	10	17.82180622	36	03.25	+70	15	56.5	15.1 GVEU030Z80	
G2082	C2019	10	17.82296322	36	05.56	+70	15	49.2	15.0 GVEU030Z80	
G2082	C2019	10	17.82630822	36	12.28	+70	15	28.9	15.0 GVEU030Z80	
G2082	C2019	10	17.82758122	36	14.89	+70	15	20.7	15.2 GVEU030Z80	
G2082	C2019	10	17.82996522	36	19.65	+70	15	06.1	15.3 GVEU030Z80	
G2082	C2019	10	17.83077522	36	21.26	+70	15	01.0	15.2 GVEU030Z80	
G2082	C2019	10	17.83216422	36	24.09	+70	14	52.4	15.2 GVEU030Z80	
G2082	*C2019	10	18.80270	23	10	08.05	+68	11	40.1	14.3 VqEU030I89

G2273	KC2019	10	08.07190402	32	00.47	+37	11	10.3	17.6	RqEU030160
G2273	KC2019	10	08.07402602	32	00.32	+37	11	07.7	17.9	RqEU030160
G2273	KC2019	10	08.07616202	32	00.19	+37	11	05.6	18.0	RqEU030160
G2273	C2019	10	18.43958602	17	49.81	+33	29	40.1	18.70	oVEU030T08
G2273	C2019	10	18.44281602	17	49.48	+33	29	35.2	18.72	oVEU030T08
G2273	C2019	10	18.45014802	17	48.82	+33	29	24.3	18.38	oVEU030T08
G2273	C2019	10	18.46134402	17	47.76	+33	29	07.9	18.15	oVEU030T08
G2273	C2019	10	18.46757 02	17	47.197	+33	28	58.61	18.1	iUEU030F51
G2273	C2019	10	18.48283 02	17	45.775	+33	28	36.05	18.0	iUEU030F51
G2723	C2019	10	18.46818603	13	57.75	+34	20	28.9	17.89	oVEU030T08
G2723	C2019	10	18.47151103	13	57.56	+34	20	32.4	18.40	oVEU030T08
G2723	C2019	10	18.47717203	13	57.22	+34	20	38.8	17.91	oVEU030T08
G2723	C2019	10	18.49219603	13	56.33	+34	20	55.8	18.92	oVEU030T08
K9924	C2019	10	19.27381 20	16	04.498	+00	43	12.53	20.9	wUEU030F52
K9924	C2019	10	19.28611 20	16	04.734	+00	43	10.79	20.9	wUEU030F52
K9924	C2019	10	19.29834 20	16	04.954	+00	43	08.75	20.8	wUEU030F52
K9924	C2019	10	19.31056 20	16	05.177	+00	43	07.11	21.0	wUEU030F52
M0124	KC2019	07	12.16540917	12	19.98	+57	18	40.8	22.3	VuEU030H21
M0124	KC2019	07	12.17646017	12	19.07	+57	18	32.1	22.2	VuEU030H21
M0124	KC2019	07	12.18849317	12	18.11	+57	18	22.5	22.2	VuEU030H21
O8926	KC2019	10	15.25387201	04	04.68	+73	06	32.2	17.0	VuEU030H21
O8926	KC2019	10	15.25530901	04	04.01	+73	06	38.1	16.9	VuEU030H21
O8926	KC2019	10	15.25674201	04	03.28	+73	06	43.9	16.9	VuEU030H21
O8926	KC2019	10	15.25817901	04	02.56	+73	06	49.6	16.8	VuEU030H21
O8926	KC2019	10	15.25961501	04	01.85	+73	06	55.3	16.8	VuEU030H21
P2399	C2019	10	18.55279203	36	20.58	-08	58	06.3	18.58	oVEU030T05
P2399	C2019	10	18.55610003	36	19.86	-08	58	10.1	18.65	oVEU030T05
P2399	C2019	10	18.56168203	36	18.70	-08	58	15.9	18.79	oVEU030T05
P2399	C2019	10	18.57332603	36	16.28	-08	58	28.6	18.73	oVEU030T05
P2793	C2019	10	18.41460800	43	15.91	+07	50	18.2	16.76	oVEU030T05
P2793	C2019	10	18.41782600	43	13.82	+07	50	40.2	17.34	oVEU030T05
P2793	C2019	10	18.42443200	43	09.57	+07	51	25.6	16.76	oVEU030T05
P2793	C2019	10	18.43548400	43	02.46	+07	52	41.4	16.72	oVEU030T05
T7418	C2019	10	18.32227721	01	21.20	+01	27	05.7	17.55	oVEU030T05
T7418	C2019	10	18.32597121	01	21.78	+01	27	07.9	17.68	oVEU030T05
T7418	C2019	10	18.33195021	01	22.72	+01	27	11.2	17.95	oVEU030T05
T7418	C2019	10	18.34308721	01	24.47	+01	27	17.0	18.12	oVEU030T05
W6302	KC2019	07	21.19701920	37	55.45	+07	17	26.5	22.9	VuEU030H21
W6302	KC2019	07	21.21289320	37	53.88	+07	17	27.2	22.6	VuEU030H21
X9714	KC2019	10	07.99642700	48	21.07	+30	49	37.6	16.9	RqEU030160
X9714	KC2019	10	07.99846800	48	20.21	+30	49	57.9	17.3	RqEU030160
X9714	KC2019	10	08.00047500	48	19.37	+30	50	17.7	16.7	RqEU030160
Z4030	KC2019	10	08.10911502	59	07.82	+17	53	43.5		qEU030160
Z4030	KC2019	10	08.11117002	59	08.66	+17	53	40.7	14.9	RqEU030160
Z4030	KC2019	10	08.11323102	59	09.56	+17	53	38.2		qEU030160
Z5256	C2019	10	19.25764 21	07	32.860	+02	40	57.40	19.2	wUEU030F51
Z5256	C2019	10	19.26972 21	07	34.558	+02	40	53.48	19.2	wUEU030F51
Z5256	C2019	10	19.29386 21	07	37.968	+02	40	45.56	19.4	wUEU030F51
b3428	KC2019	10	08.01025901	07	40.18	+02	45	17.4	18.6	RqEU030160
b3428	KC2019	10	08.01233101	07	40.03	+02	45	11.1	17.2	RqEU030160
b3428	KC2019	10	08.01430201	07	39.96	+02	45	04.2	17.7	RqEU030160
b3428	C2019	10	18.41736800	55	27.58	-07	16	06.2	18.36	oVEU030T05
b3428	C2019	10	18.42074500	55	27.30	-07	16	18.8	18.42	oVEU030T05
b3428	C2019	10	18.42626000	55	26.83	-07	16	39.8	18.47	oVEU030T05
b3428	C2019	10	18.43824700	55	25.81	-07	17	24.9	19.08	oVEU030T05
c0160	C2019	10	18.32181920	54	38.33	-06	28	09.7	18.88	oVEU030T05
c0160	C2019	10	18.32551320	54	38.96	-06	28	06.7	18.88	oVEU030T05
c0160	C2019	10	18.33471720	54	40.52	-06	27	58.4	18.52	oVEU030T05
c0160	C2019	10	18.34215920	54	41.77	-06	27	52.5	18.70	oVEU030T05
f1201	C2019	10	18.36016422	43	50.70	-11	40	51.9	19.06	oVEU030T05
f1201	C2019	10	18.36388922	43	50.57	-11	40	54.1	18.82	oVEU030T05
f1201	C2019	10	18.37083822	43	50.32	-11	41	00.0	19.05	oVEU030T05
f1201	C2019	10	18.38260922	43	49.92	-11	41	09.6	18.86	oVEU030T05
i2243	KC2019	10	08.08597402	43	26.64	+23	02	28.0	17.0	RqEU030160
i2243	KC2019	10	08.08802802	43	26.53	+23	02	33.1	16.6	RqEU030160
i2243	KC2019	10	08.09010402	43	26.30	+23	02	37.9		qEU030160
j8745	KC2019	10	08.14247804	21	59.52	-03	05	04.5	17.5	RqEU030160
j8745	KC2019	10	08.14444804	22	00.05	-03	05	07.1	17.2	RqEU030160
j8745	KC2019	10	08.14668704	22	00.39	-03	05	08.8	17.3	RqEU030160
j8745	C2019	10	18.56840504	55	48.26	-04	57	53.5	17.79	oVEU030T05
j8745	C2019	10	18.57191204	55	48.92	-04	57	55.6	17.93	oVEU030T05
j8745	C2019	10	18.57716204	55	49.86	-04	57	59.0	17.92	oVEU030T05
j8745	C2019	10	18.59383204	55	52.83	-04	58	08.8	17.85	oVEU030T05
k7317	C2019	10	18.55279203	32	34.11	-08	20	36.2	15.93	oVEU030T05
k7317	C2019	10	18.55610003	32	34.12	-08	20	31.8	16.53	oVEU030T05
k7317	C2019	10	18.56168203	32	34.13	-08	20	24.6	15.78	oVEU030T05
k7317	C2019	10	18.57332603	32	34.14	-08	20	09.5	15.90	oVEU030T05
m1394	KC2019	10	08.12366803	54	40.90	+33	23	53.4	18.3	RqEU030160
m1394	KC2019	10	08.12582303	54	40.94	+33	23	53.5	18.0	RqEU030160
m1394	KC2019	10	08.12797903	54	40.97	+33	23	54.1	17.6	RqEU030160
m1985	KC2019	10	08.05775402	19	19.82	+21	34	36.5	18.1	RqEU030160
m1985	KC2019	10	08.05986602	19	19.64	+21	34	32.8	18.2	RqEU030160
n2143	C2019	10	18.34446022	17	45.09	+08	18	11.6	18.00	oVEU030T05
n2143	C2019	10	18.34767622	17	44.95	+08	18	07.3	17.82	oVEU030T05
n2143	C2019	10	18.35328322	17	44.69	+08	18	00.6	18.66	oVEU030T05
n2143	C2019	10	18.36620322	17	44.08	+08	17	44.3	18.05	oVEU030T05
q8609	C2019	10	18.57741208	52	05.80	+39	50	55.5	18.16	oVEU030T08
q8609	C2019	10	18.58062808	52	05.19	+39	50	57.4	18.16	oVEU030T08
q8609	C2019	10	18.58587708	52	04.18	+39	51	01.6	18.26	oVEU030T08
q8609	C2019	10	18.59572108	52	02.25	+39	51	08.3	18.46	oVEU030T08
r0743	KC2019	10	08.02495201	39	14.94	+25	57	56.7	18.3	RqEU030160
r0743	KC2019	10	08.02690501	39	14.75	+25	57	52.5	18.9	RqEU030160
r0743	KC2019	10	08.02886001	39	14.61	+25	57	48.4	18.1	RqEU030160

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