2018 RF5

First observed at Mt. Lemmon Survey on 2018-09-12.
(Discoverer will be defined when the object is numbered. See this note on how discoverers are determined.)

Orbit

Orbit type: Amor
Near-Earth Object

Interactive Orbit Sketch Note: WebGL enabled browser required.

epoch	2019-04-27.0	semimajor axis (AU)	2.3949004	uncertainty	5
epoch JD	2458600.5	mean anomaly (°)	65.55554	reference	E2019-R30
perihelion date	2018-08-23.48888	mean daily motion (°/day)	0.26593340	observations used	52
perihelion JD	2458353.98889	aphelion distance (AU)	3.789	oppositions	1
argument of perihelion (°)	345.24799	period (years)	3.71	arc length (days)	9
ascending node (°)	339.94598	P-vector [x]	0.82113024	first opposition used	2018
inclination (°)	1.75952	P-vector [y]	-0.52048535	last opposition used	2018
eccentricity	0.5822276	P-vector [z]	-0.23417969	residual rms (arc-secs)	0.29
perihelion distance (AU)	1.0005232	Q-vector [x]	0.57064374	perturbers coarse indicator	M-v
Tisserand w.r.t. Jupiter	3.3	Q-vector [y]	0.74113055	perturbers precise indicator	003Eh
ΔV w.r.t. Earth (km/sec)	6.3	Q-vector [z]	0.35368239	first observation date used	2018-09-10.0
		absolute magnitude	27.4	last observation date used	2018-09-19.0
		phase slope	0.15	computer name	MPCLINUX

JD of orbit computation	2458389.414110
perihelion JD uncertainty (days)	2.6642E-04
argument of perihelion uncertainty (°)	4.0690E-04
ascending node uncertainty (°)	3.3032E-04
inclination uncertainty (°)	2.9797E-04
eccentricity uncertainty	1.4306E-04
perihelion distance uncertainty (AU)	1.5471E-06

Minimum Orbit Intersection Distances (in AU)
for orbit epoch: 2458600.5, reference: MPO461092

Mercury	0.58931
Venus	0.27535
Earth	0.00107
Mars	0.03807
Jupiter	1.55802
Saturn	5.45115
Uranus	14.5164
Neptune	26.4628

Observations

52 total observations over interval: 2018 09 10.09301 – 2018 09 19.299119
These data are available for download (format description).

Date (UT)	J2000 RA	J2000 Dec	Magn	Location	Ref
2018 09 10.09301	21 34 36.52	-04 01 12.0		W84 – Cerro Tololo-DECam	MPEC R30
2018 09 12.23986	22 59 09.22	+05 03 56.6	20.2 G	G96 – Mt. Lemmon Survey	MPS 915331
2018 09 12.24552	22 59 18.88	+05 05 02.3	20.4 G	G96 – Mt. Lemmon Survey	MPS 915331
2018 09 12.25116	22 59 28.58	+05 06 08.2	20.6 G	G96 – Mt. Lemmon Survey	MPS 915331
2018 09 12.25682	22 59 38.32	+05 07 14.7	20.2 G	G96 – Mt. Lemmon Survey	MPS 915331
2018 09 12.36614	23 02 42.45	+05 27 59.2	19.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 12.36711	23 02 44.09	+05 28 09.7	19.5 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 12.36807	23 02 45.72	+05 28 20.6		I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 12.36904	23 02 47.34	+05 28 31.4		I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 12.884215	23 17 17.31	+06 57 00.3	19.8 R	L01 – Visnjan Observatory, Tican	MPS 915331
2018 09 12.887158	23 17 21.65	+06 57 29.5	19.7 R	L01 – Visnjan Observatory, Tican	MPS 915331
2018 09 12.91481	23 18 02.35	+07 01 33.8	19.4 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 915331
2018 09 12.91941	23 18 09.10	+07 02 18.4	20.9 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 915331
2018 09 12.92056	23 18 10.81	+07 02 29.8	20.9 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 915331
2018 09 12.92169	23 18 12.46	+07 02 39.8	21.0 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 915331
2018 09 12.92285	23 18 14.17	+07 02 51.1	20.3 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 915331
2018 09 12.92399	23 18 15.86	+07 03 02.1	20.1 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 915331
2018 09 12.97652	23 19 35.10	+07 11 18.0	20.3 G	J95 – Great Shefford	MPS 915331
2018 09 12.97981	23 19 39.94	+07 11 49.4	20.2 G	J95 – Great Shefford	MPS 915331
2018 09 12.98395	23 19 45.86	+07 12 27.5	20.1 G	J95 – Great Shefford	MPS 915331
2018 09 13.31196	23 27 43.22	+08 02 40.4	20.7 R	926 – Tenagra II Observatory, Nogales	MPS 915331
2018 09 13.31640	23 27 49.00	+08 03 18.0	21.2 R	926 – Tenagra II Observatory, Nogales	MPS 915331
2018 09 13.32082	23 27 54.79	+08 03 55.6	20.8 R	926 – Tenagra II Observatory, Nogales	MPS 915331
2018 09 13.46655	23 31 03.33	+08 23 44.8	19.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 13.46775	23 31 04.91	+08 23 54.1	20.0 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 13.46895	23 31 06.43	+08 24 04.2	21.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915331
2018 09 15.24263	00 04 01.14	+11 31 57.0	20.9 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 919362
2018 09 15.24596	00 04 03.89	+11 32 13.4	21.4 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 919362
2018 09 15.24929	00 04 06.58	+11 32 30.2	20.7 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 919362
2018 09 15.25262	00 04 09.35	+11 32 46.7	21.0 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 919362
2018 09 15.33014	00 05 12.09	+11 39 07.4	20.8 R	291 – LPL/Spacewatch II	MPS 919362
2018 09 15.33258	00 05 14.03	+11 39 19.3	21.1 R	291 – LPL/Spacewatch II	MPS 919362
2018 09 15.33503	00 05 15.98	+11 39 30.9	21.4 R	291 – LPL/Spacewatch II	MPS 919362
2018 09 15.491052	00 07 27.305	+11 52 22.66	21.17 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 919362
2018 09 15.491598	00 07 27.721	+11 52 25.10	21.69 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 919362
2018 09 16.31093	00 18 08.30	+12 47 52.1	21.5 R	291 – LPL/Spacewatch II	MPS 919362
2018 09 16.31660	00 18 11.91	+12 48 13.6	20.9 R	291 – LPL/Spacewatch II	MPS 919362
2018 09 16.32231	00 18 15.57	+12 48 34.4	20.8 R	291 – LPL/Spacewatch II	MPS 919362
2018 09 16.39924	00 19 04.20	+12 53 10.1	21.5 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 16.40310	00 19 06.63	+12 53 23.7	21.4 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 16.40693	00 19 09.05	+12 53 37.3	21.4 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 16.41077	00 19 11.47	+12 53 50.5	21.5 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 17.25701	00 28 23.42	+13 39 34.3	20.8 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 17.26413	00 28 27.19	+13 39 55.9	21.6 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 17.27126	00 28 30.94	+13 40 17.4	21.5 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 18.38884	00 38 14.42	+14 27 54.6	22.0 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 18.39486	00 38 16.94	+14 28 07.9	21.9 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 18.40085	00 38 19.45	+14 28 20.8	22.2 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 18.40684	00 38 21.98	+14 28 33.6	21.7 G	V06 – Catalina Sky Survey-Kuiper	MPS 919362
2018 09 19.269570	00 44 45.33	+14 57 28.9	22.5 V	H21 – Astronomical Research Observatory, Westfield	MPS 919355
2018 09 19.283524	00 44 50.31	+14 57 55.3	22.1 V	H21 – Astronomical Research Observatory, Westfield	MPS 919355
2018 09 19.299119	00 44 55.86	+14 58 23.1	22.2 V	H21 – Astronomical Research Observatory, Westfield	MPS 919355