

OBSERVERS

DATA

IAWN

BETA

STATUS

2017 VC14

First observed at Mt. Lemmon Survey on 2017-11-15.

(Discoverer will be defined when the object is numbered. See [this note](#) on how discoverers are determined.)

Orbit

Orbit type: Apollo

Near-Earth Object

One opposition object seen prior.

Interactive Orbit Sketch

Note: WebGL enabled browser required.

epoch	2019-04-27.0	semimajor axis (AU)	2.0491164	uncertainty	5
epoch JD	2458600.5	mean anomaly (°)	165.42688	reference	MPO 425725
perihelion date	2017-12-20.67465	mean daily motion (°/day)	0.33601130	observations used	43
perihelion JD	2458108.17465	aphelion distance (AU)	3.210	oppositions	1
argument of perihelion (°)	225.05204	period (years)	2.93	arc length (days)	3
ascending node (°)	234.70778	P-vector [x]	-0.16898846	first opposition used	2017
inclination (°)	2.45433	P-vector [y]	0.91591504	last opposition used	2017
eccentricity	0.5663461	P-vector [z]	0.36406393	residual rms (arc-secs)	0.64
perihelion distance (AU)	0.8886074	Q-vector [x]	-0.98499807	perturbbers coarse indicator	M-v
Tisserand w.r.t. Jupiter	3.6	Q-vector [y]	-0.14383965	perturbbers precise indicator	003Eh
ΔV w.r.t. Earth (km/sec)	6.3	Q-vector [z]	-0.09533601	first observation date used	2017-11-15.0
		absolute magnitude	28.4	last observation date used	2017-11-18.0
		phase slope	0.15	computer name	MPCW

JD of orbit computation	2458077.986473
perihelion JD uncertainty (days)	3.6777E-04
argument of perihelion uncertainty (°)	9.2511E-05
ascending node uncertainty (°)	8.4888E-06
inclination uncertainty (°)	7.8987E-05
eccentricity uncertainty	2.4354E-05
perihelion distance uncertainty (AU)	2.4456E-06

Minimum Orbit Intersection Distances (in AU)
for orbit epoch: 2458600.5, reference: MP0425725

Mercury	0.58012
Venus	0.17419
Earth	0.00081
Mars	0.05796
Jupiter	1.99355
Saturn	6.85248
Uranus	15.945
Neptune	26.9708

Observations

44 total observations over interval: 2017 11 15.24643 – 2017 11 18.39483

These data are available for [download](#) ([format description](#)).

Date (UT)	J2000 RA	J2000 Dec	Magn	Location	Ref
2017 11 15.24643	02 06 42.07	+18 36 37.7	20.5 G	G96 – Mt. Lemmon Survey	MPS 835838
2017 11 15.25164	02 06 45.75	+18 36 43.2	20.4 G	G96 – Mt. Lemmon Survey	MPS 835838
2017 11 15.25687	02 06 49.44	+18 36 48.5	20.3 G	G96 – Mt. Lemmon Survey	MPS 835838
2017 11 15.26206	02 06 53.15	+18 36 53.5	20.6 G	G96 – Mt. Lemmon Survey	MPS 835838
2017 11 15.29798	02 07 19.21	+18 37 24.8		I52 – Steward Observatory, Mt. Lemmon Station	MPS 835838
2017 11 15.29874	02 07 19.74	+18 37 25.3	20.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 835838
2017 11 15.30064	02 07 21.16	+18 37 26.5	20.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 835838
2017 11 15.303812	02 07 21.98	+18 37 13.5	20.0 G	H01 – Magdalena Ridge Observatory, Socorro	MPS 835839
2017 11 15.307479	02 07 24.73	+18 37 16.2	19.6 G	H01 – Magdalena Ridge Observatory, Socorro	MPS 835839
2017 11 15.316856	02 07 31.84	+18 37 22.4	20.1 G	H01 – Magdalena Ridge Observatory, Socorro	MPS 835839
2017 11 15.325697	02 07 38.64	+18 37 28.1	19.8 G	H01 – Magdalena Ridge Observatory, Socorro	MPS 835839
2017 11 15.878076	02 18 56.817	+18 49 10.14	20.4 G	J04 – ESA Optical Ground Station, Tenerife	MPS 835839
2017 11 15.881340	02 19 00.966	+18 49 16.82	19.9 G	J04 – ESA Optical Ground Station, Tenerife	MPS 835839
2017 11 15.884594	02 19 05.068	+18 49 22.85	19.8 G	J04 – ESA Optical Ground Station, Tenerife	MPS 835839
2017 11 15.95227	02 20 21.28	+18 48 43.1	19.9 V	I93 – St Pardon de Conques	MPS 835839
2017 11 15.95606	02 20 26.34	+18 48 48.4	19.8 V	I93 – St Pardon de Conques	MPS 835839
2017 11 15.95985	02 20 31.46	+18 48 53.0	19.6 V	I93 – St Pardon de Conques	MPS 835839
2017 11 16.00570	02 21 30.60	+18 49 21.8		204 – Schiaparelli Observatory	MPS 835839
2017 11 16.01629	02 21 45.89	+18 49 30.6	19.8 G	204 – Schiaparelli Observatory	MPS 835839
2017 11 16.02616	02 22 00.35	+18 49 38.6		204 – Schiaparelli Observatory	MPS 835839
2017 11 16.143015	02 26 08.19	+18 53 40.7	19.7 G	V03 – Big Water	MPS 835839
2017 11 16.152428	02 26 23.99	+18 54 00.9	20.0 G	V03 – Big Water	MPS 835839
2017 11 16.158139	02 26 33.52	+18 54 12.8	19.9 G	V03 – Big Water	MPS 835839
2017 11 16.23661	02 28 48.14	+18 57 33.9	19.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 835839
2017 11 16.23685	02 28 48.59	+18 57 34.3	19.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 835839
2017 11 16.23709	02 28 49.00	+18 57 34.5	19.7 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 835839
2017 11 16.23734	02 28 49.41	+18 57 35.0	19.4 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 835839
2017 11 16.28151	02 30 08.76	+18 58 51.7	19.6 R	926 – Tenagra II Observatory, Nogales	MPS 835839
2017 11 16.28322	02 30 11.91	+18 58 54.0	19.5 R	926 – Tenagra II Observatory, Nogales	MPS 835839
2017 11 16.28494	02 30 15.06	+18 58 56.8	20.1 R	926 – Tenagra II Observatory, Nogales	MPS 835839
2017 11 16.87953	03 00 57.42	+19 06 54.0	18.3 R	160 – Castelmartini	MPS 835839
2017 11 16.88112	03 01 03.92	+19 06 54.2	18.1 R	160 – Castelmartini	MPS 835839
2017 11 16.88268	03 01 10.23	+19 06 55.5	18.2 R	160 – Castelmartini	MPS 835839
2017 11 17.017709	03 11 35.55	+19 04 02.0	18.6 G	J95 – Great Shefford	MPS 835839
2017 11 17.020145	03 11 47.89	+19 03 58.5	18.1 G	J95 – Great Shefford	MPS 835839
2017 11 17.022205	03 11 58.39	+19 03 55.5	18.5 G	J95 – Great Shefford	MPS 835839
2017 11 17.024206	03 12 08.65	+19 03 52.7	18.3 G	J95 – Great Shefford	MPS 835839
2017 11 18.39103	09 41 29.61	-03 14 35.1	19.0 R	926 – Tenagra II Observatory, Nogales	MPS 839491
2017 11 18.39212	09 41 49.20	-03 16 19.1	18.7 R	926 – Tenagra II Observatory, Nogales	MPS 839491
2017 11 18.39265	09 41 58.93	-03 17 10.2	18.5 R	926 – Tenagra II Observatory, Nogales	MPS 839491
2017 11 18.39319	09 42 08.67	-03 18 01.8	18.2 R	926 – Tenagra II Observatory, Nogales	MPS 839491
2017 11 18.39375	09 42 18.60	-03 18 54.0	18.8 R	926 – Tenagra II Observatory, Nogales	MPS 839491
2017 11 18.39429	09 42 28.29	-03 19 45.3	18.4 R	926 – Tenagra II Observatory, Nogales	MPS 839491
2017 11 18.39483	09 42 38.16	-03 20 37.6	18.9 R	926 – Tenagra II Observatory, Nogales	MPS 839491