

OBSERVERS

PUBLIC

DATA

IAWN

2017 FB102

First observed at Pan-STARRS 1, Haleakala on 2017-03-27.

(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)	2.0216479	uncertainty	6
epoch JD	2458600.5	mean anomaly (°)	270.53273	reference	MPO 405725
perihelion date	2020-01-12.92677	mean daily motion (°/day)	0.34288270	observations used	32
perihelion JD	2458861.42677	aphelion distance (AU)	3.074	oppositions	1
argument of perihelion (°)	332.95324	period (years)	2.87	arc length (days)	6
ascending node (°)	179.68631	P-vector [x]	-0.88814475	first opposition used	2017
inclination (°)	5.62338	P-vector [y]	0.43737896	last opposition used	2017
eccentricity	0.5206438	P-vector [z]	0.14106222	residual rms (arc-secs)	0.24
perihelion distance (AU)	0.9690894	Q-vector [x]	-0.45956351	perturbers coarse indicator	M-v
Tisserand w.r.t. Jupiter	3.6	Q-vector [y]	-0.84562844	perturbers precise indicator	003Eh
ΔV w.r.t. Earth (km/sec)	6.1	Q-vector [z]	-0.27150309	first observation date used	2017-03-27.0
		absolute magnitude	26.8	last observation date used	2017-04-02.0
		phase slope	0.15	computer name	MPCLINUX

JD of orbit computation	2457847.933276
perihelion JD uncertainty (days)	1.2466E-03
argument of perihelion uncertainty (°)	4.6996E-04
ascending node uncertainty (°)	2.1521E-04
inclination uncertainty (°)	1.0776E-03
eccentricity uncertainty	1.3689E-04
perihelion distance uncertainty (AU)	3.5543E-06

Minimum Orbit Intersection Distances (in AU)
for orbit epoch: 2458200.5, reference: MPO405725

Mercury	0.608544
Venus	0.263114
Earth	0.0059001
Mars	0.137409
Jupiter	1.94153
Saturn	6.685
Uranus	16.8603
Neptune	26.8983

Observations

32 total observations over interval: 2017 03 27.55104 – 2017 04 02.50099

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

Date (UT)	J2000 RA	J2000 Dec	Magn	Location	Ref
2017 03 27.55104	13 42 55.997	+12 31 49.94	20.8 w	F51 – Pan-STARRS 1, Haleakala	MPS 782280
2017 03 27.56241	13 43 04.022	+12 31 14.83	20.7 w	F51 – Pan-STARRS 1, Haleakala	MPS 782280
2017 03 27.57379	13 43 12.092	+12 30 39.45	20.6 w	F51 – Pan-STARRS 1, Haleakala	MPS 782280
2017 03 27.58523	13 43 20.186	+12 30 03.70	20.9 w	F51 – Pan-STARRS 1, Haleakala	MPS 782280
2017 03 27.966075	13 48 25.404	+12 11 18.53	20.5 G	J04 – ESA Optical Ground Station, Tenerife	MPS 782281
2017 03 27.971043	13 48 28.656	+12 11 06.00	20.5 G	J04 – ESA Optical Ground Station, Tenerife	MPS 782281
2017 03 27.975980	13 48 31.872	+12 10 53.43	20.5 G	J04 – ESA Optical Ground Station, Tenerife	MPS 782281
2017 03 28.486922	13 54 02.988	+11 49 24.46	20.7 G	568 – Mauna Kea	MPS 782281
2017 03 28.487910	13 54 03.534	+11 49 21.99	21.2 G	568 – Mauna Kea	MPS 782281
2017 03 28.488896	13 54 04.049	+11 49 19.70	20.9 G	568 – Mauna Kea	MPS 782281
2017 03 29.04854	13 59 28.95	+11 25 57.7	20.8	104 – San Marcello Pistoiese	MPS 782281
2017 03 29.05976	13 59 34.37	+11 25 31.9	20.9	104 – San Marcello Pistoiese	MPS 782281
2017 03 29.07083	13 59 39.75	+11 25 07.3	21.0	104 – San Marcello Pistoiese	MPS 782281
2017 03 29.08683	13 59 47.69	+11 24 10.7	21.0 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 782281
2017 03 29.08994	13 59 49.20	+11 24 03.9	21.2 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 782281
2017 03 29.09304	13 59 50.71	+11 23 57.0	21.1 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 782281
2017 03 29.09616	13 59 52.23	+11 23 49.9	21.0 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 782281
2017 03 29.09926	13 59 53.78	+11 23 42.8	20.6 V	033 – Karl Schwarzschild Observatory, Tautenburg	MPS 782281
2017 03 30.573433	14 11 06.083	+10 37 06.77	21.6 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 782281
2017 03 30.575330	14 11 06.711	+10 37 03.32	21.4 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 782281
2017 03 31.462537	14 16 28.085	+10 13 08.22	22.0 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 785823
2017 03 31.463858	14 16 28.439	+10 13 06.27	21.6 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 785823
2017 03 31.465426	14 16 28.848	+10 13 03.97	21.8 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 785823
2017 04 01.50449	14 21 24.61	+09 48 05.4		291 – LPL/Spacewatch II	MPS 785823
2017 04 01.50916	14 21 25.72	+09 47 58.9	22.4 R	291 – LPL/Spacewatch II	MPS 785823
2017 04 01.51382	14 21 26.79	+09 47 52.3	22.8 R	291 – LPL/Spacewatch II	MPS 785823
2017 04 01.596000	14 21 49.420	+09 46 37.30	22.2 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 785823
2017 04 01.597977	14 21 49.830	+09 46 34.64	22.0 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 785823
2017 04 01.600100	14 21 50.284	+09 46 31.65	22.1 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 785823
2017 04 02.49362	14 25 25.06	+09 27 49.2	21.7 R	291 – LPL/Spacewatch II	MPS 785823
2017 04 02.49729	14 25 25.76	+09 27 44.7	22.7 R	291 – LPL/Spacewatch II	MPS 785823
2017 04 02.50099	14 25 26.39	+09 27 40.3		291 – LPL/Spacewatch II	MPS 785823