

OBSERVERS

DATA

IAWN

BETA

STATUS

2017 SQ2

First observed at Catalina Sky Survey on 2017-09-18.
(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.

A geocentric flyby diagram is available [here](#).

epoch	2019-04-27.0	semimajor axis (AU)	2.3823124	uncertainty	6
epoch JD	2458600.5	mean anomaly (°)	163.47143	reference	MPO 416669
perihelion date	2017-08-25.13169	mean daily motion (°/day)	0.26804380	observations used	36
perihelion JD	2457990.63169	aphelion distance (AU)	3.798	oppositions	1
argument of perihelion (°)	151.08721	period (years)	3.68	arc length (days)	13
ascending node (°)	174.36664	P-vector [x]	0.82367508	first opposition used	2017
inclination (°)	0.86654	P-vector [y]	-0.52313447	last opposition used	2017
eccentricity	0.5940769	P-vector [z]	-0.21883714	residual rms (arc-secs)	0.24
perihelion distance (AU)	0.9670357	Q-vector [x]	0.56706010	perturbbers coarse indicator	M-v
Tisserand w.r.t. Jupiter	3.3	Q-vector [y]	0.76087662	perturbbers precise indicator	003Eh
ΔV w.r.t. Earth (km/sec)	6.3	Q-vector [z]	0.31545144	first observation date used	2017-09-18.0
		absolute magnitude	25.8	last observation date used	2017-10-01.0
		phase slope	0.15	computer name	MPCLINUX

JD of orbit computation	2458028.182170
perihelion JD uncertainty (days)	9.0308E-04
argument of perihelion uncertainty (°)	1.5712E-03
ascending node uncertainty (°)	2.1094E-04
inclination uncertainty (°)	2.5756E-04
eccentricity uncertainty	2.5662E-04
perihelion distance uncertainty (AU)	1.4942E-05

Minimum Orbit Intersection Distances (in AU)
for orbit epoch: 2458600.5, reference: MPO416669

Mercury	0.55829
Venus	0.24466
Earth	0.00065
Mars	0.01982
Jupiter	1.56397
Saturn	5.45674
Uranus	14.5178
Neptune	26.466

Observations

36 total observations over interval: 2017 09 18.34652 – 2017 10 01.294389
These data are available for [download](#) ([format description](#)).

Date (UT)	J2000 RA	J2000 Dec	Magn	Location	Ref
2017 09 18.34652	02 12 32.54	+11 54 51.8	19.0 V	703 – Catalina Sky Survey	MPS 817149
2017 09 18.35206	02 12 33.02	+11 54 48.7	18.6 V	703 – Catalina Sky Survey	MPS 817149
2017 09 18.35754	02 12 33.54	+11 54 45.7	19.4 V	703 – Catalina Sky Survey	MPS 817149
2017 09 18.36293	02 12 34.01	+11 54 42.8	19.5 V	703 – Catalina Sky Survey	MPS 817149
2017 09 18.41746	02 12 38.15	+11 54 05.8	19.3 V	I52 – Steward Observatory, Mt. Lemmon Station	MPS 817149
2017 09 18.41964	02 12 38.32	+11 54 04.4	19.2 V	I52 – Steward Observatory, Mt. Lemmon Station	MPS 817149
2017 09 18.42190	02 12 38.50	+11 54 02.7	19.5 V	I52 – Steward Observatory, Mt. Lemmon Station	MPS 817149
2017 09 18.42414	02 12 38.68	+11 54 01.0	19.5 V	I52 – Steward Observatory, Mt. Lemmon Station	MPS 817149
2017 09 18.91077	02 14 28.96	+11 46 57.0	18.1 R	K61 – Rokycany Observatory	MPS 817149
2017 09 18.91245	02 14 29.13	+11 46 56.7	18.3 R	K61 – Rokycany Observatory	MPS 817149
2017 09 19.008321	02 14 48.401	+11 47 59.98	18.9 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 19.009425	02 14 48.486	+11 47 59.75	19.0 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 19.011628	02 14 48.639	+11 47 59.14	19.0 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 19.012729	02 14 48.711	+11 47 58.73	18.8 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 19.41572	02 15 31.28	+11 44 36.2	19.3 R	926 – Tenagra II Observatory, Nogales [Schwartz]	MPS 817149
2017 09 19.43521	02 15 31.60	+11 44 26.4	19.2 R	926 – Tenagra II Observatory, Nogales [Schwartz]	MPS 817149
2017 09 19.44989	02 15 31.84	+11 44 18.0	19.4 R	926 – Tenagra II Observatory, Nogales [Schwartz]	MPS 817149
2017 09 19.998702	02 16 54.461	+11 40 21.06	19.6 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 19.999808	02 16 54.491	+11 40 21.02	19.3 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 20.002007	02 16 54.564	+11 40 20.45	19.1 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 20.003108	02 16 54.597	+11 40 20.55	19.5 G	J04 – ESA Optical Ground Station, Tenerife	MPS 817149
2017 09 23.43449	02 19 56.194	+11 25 22.83	21.0 w	F51 – Pan-STARRS 1, Haleakala	MPS 819347
2017 09 23.44543	02 19 55.799	+11 25 21.70	20.9 w	F51 – Pan-STARRS 1, Haleakala	MPS 819347
2017 09 26.46005	02 20 24.56	+11 16 05.3	21.8 R	291 – LPL/Spacewatch II	MPS 819347
2017 09 26.48472	02 20 23.60	+11 15 59.4	22.3 R	291 – LPL/Spacewatch II	MPS 819347
2017 09 26.50855	02 20 22.78	+11 15 54.6	21.6 R	291 – LPL/Spacewatch II	MPS 819347
2017 09 27.59561	02 20 23.499	+11 13 32.77	21.7 w	F51 – Pan-STARRS 1, Haleakala	MPS 819347
2017 09 27.60571	02 20 23.070	+11 13 30.49	21.5 w	F51 – Pan-STARRS 1, Haleakala	MPS 819347
2017 09 27.61583	02 20 22.654	+11 13 28.12	22.0 w	F51 – Pan-STARRS 1, Haleakala	MPS 819347
2017 09 27.62603	02 20 22.239	+11 13 25.72	21.9 w	F51 – Pan-STARRS 1, Haleakala	MPS 819347
2017 09 30.42776	02 20 03.11	+11 06 27.3	21.2 R	695 – Kitt Peak	MPS 819347
2017 09 30.43347	02 20 02.84	+11 06 26.4	21.1 R	695 – Kitt Peak	MPS 819347
2017 09 30.43917	02 20 02.58	+11 06 25.4	21.2 R	695 – Kitt Peak	MPS 819347
2017 10 01.279183	02 19 54.38	+11 04 18.9	22.1 V	H21 – Astronomical Research Observatory, Westfield	MPS 819347
2017 10 01.284671	02 19 54.11	+11 04 18.3	22.2 V	H21 – Astronomical Research Observatory, Westfield	MPS 819347
2017 10 01.294389	02 19 53.70	+11 04 17.2	22.1 V	H21 – Astronomical Research Observatory, Westfield	MPS 819347