

2018 SD2

First observed at ATLAS-HKO, Haleakala on 2018-09-21.

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

Orbit

Orbit type: Aten

Near-Earth Object

Interactive Orbit Sketch

Note: WebGL enabled browser required.

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

epoch	2019-04-27.0	semimajor axis (AU)	0.9302529	<a href="#">uncertainty</a>	6
epoch JD	2458600.5	mean anomaly (°)	105.88519	reference	MPO 458774
perihelion date	2019-01-20.60979	mean daily motion (°/day)	1.09850560	observations used	14
perihelion JD	2458504.10979	aphelion distance (AU)	1.034	oppositions	1
argument of perihelion (°)	138.02461	period (years)	0.9	arc length (days)	2
ascending node (°)	1.81044	P-vector [x]	-0.76414717	first opposition used	2018
inclination (°)	3.67656	P-vector [y]	0.57344549	last opposition used	2018
eccentricity	0.1113860	P-vector [z]	0.29536313	residual rms (arc-secs)	0.46
perihelion distance (AU)	0.8266358	Q-vector [x]	-0.64503876	<a href="#">perturbbers coarse indicator</a>	M-v
Tisserand w.r.t. Jupiter	6.4	Q-vector [y]	-0.68076538	<a href="#">perturbbers precise indicator</a>	003Eh
ΔV w.r.t. Earth (km/sec)	5.2	Q-vector [z]	-0.34710733	first observation date used	2018-09-21.0
		absolute magnitude	28.6	last observation date used	2018-09-23.0
		phase slope	0.15	computer name	MPCW

JD of orbit computation	2458391.375847
perihelion JD uncertainty (days)	5.4081E-03
argument of perihelion uncertainty (°)	3.2947E-02
ascending node uncertainty (°)	3.3656E-02
inclination uncertainty (°)	5.0186E-04
eccentricity uncertainty	3.7925E-05
perihelion distance uncertainty (AU)	5.1950E-05

Minimum Orbit Intersection Distances (in AU)  
for orbit epoch: 2458600.5, reference: MPO458774

Mercury	0.45189
Venus	0.10836
Earth	0.00108
Mars	0.35001
Jupiter	3.94932
Saturn	8.23355
Uranus	17.3955
Neptune	28.8993

Observations

14 total observations over interval: 2018 09 21.57642 – 2018 09 23.49918

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

Date (UT)	J2000 RA	J2000 Dec	Magn	<a href="#">Location</a>	<a href="#">Ref</a>
2018 09 21.57642	02 24 13.71	+09 12 28.7	18.8 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.57832	02 24 12.99	+09 12 14.8	19.0 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.58657	02 24 10.00	+09 11 20.7	18.8 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.59710	02 24 06.12	+09 10 07.7	19.0 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.59914	02 24 05.41	+09 09 53.9	19.1 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.60764	02 24 02.45	+09 08 54.8	19.0 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.60984	02 24 01.67	+09 08 39.9	18.9 o	T05 – ATLAS-HKO, Haleakala	MPS 919371
2018 09 21.97020	02 26 06.18	+08 15 49.1	18.7 R	K88 – GINOP-KHK, Piszkesteto	MPS 919371
2018 09 21.97366	02 26 05.48	+08 15 22.6	18.2 R	K88 – GINOP-KHK, Piszkesteto	MPS 919371
2018 09 21.97799	02 26 04.61	+08 14 49.3	18.5 R	K88 – GINOP-KHK, Piszkesteto	MPS 919371
2018 09 23.47665	02 33 54.24	+02 38 01.9	17.7 o	T08 – ATLAS-MLO, Mauna Loa	MPS 919371
2018 09 23.48282	02 33 51.49	+02 35 28.9	17.9 o	T08 – ATLAS-MLO, Mauna Loa	MPS 919371
2018 09 23.49101	02 33 47.82	+02 32 05.1	17.3 o	T08 – ATLAS-MLO, Mauna Loa	MPS 919371
2018 09 23.49918	02 33 43.96	+02 28 39.9	17.8 o	T08 – ATLAS-MLO, Mauna Loa	MPS 919371