

OBSERVERS

PUBLIC

DATA

IAWN

## 2014 HN198

First observed at Cerro Tololo-DECam on 2014-04-28.

(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)	1.7773265	<u>uncertainty</u>	4
epoch JD	2458600.5	mean anomaly (°)	63.94801	reference	MPO 317873
perihelion date	2018-11-24.26455	mean daily motion (°/day)	0.41596140	observations used	8
perihelion JD	2458446.76455	aphelion distance (AU)	2.650	oppositions	1
argument of perihelion (°)	216.23284	period (years)	2.37	arc length (days)	1
ascending node (°)	291.16570	P-vector [x]	-0.84189416	first opposition used	2014
inclination (°)	2.54708	P-vector [y]	0.50497410	last opposition used	2014
eccentricity	0.4911936	P-vector [z]	0.19030340	residual rms (arc-secs)	0.08
perihelion distance (AU)	0.9043150	Q-vector [x]	-0.53804903	<u>perturbers coarse indicator</u>	M-v
Tisserand w.r.t. Jupiter	3.9	Q-vector [y]	-0.75839952	<u>perturbers precise indicator</u>	003Eh
ΔV w.r.t. Earth (km/sec)	5.9	Q-vector [z]	-0.36787689	first observation date used	2014-04-28.0
		absolute magnitude	25.8	last observation date used	2014-04-29.0
		phase slope	0.15	computer name	MPCW

JD of orbit computation	2457020.635862
perihelion JD uncertainty (days)	7.5843E-03
argument of perihelion uncertainty (°)	4.3082E-03
ascending node uncertainty (°)	3.8458E-03
inclination uncertainty (°)	8.0266E-05
eccentricity uncertainty	4.2765E-06
perihelion distance uncertainty (AU)	5.8870E-06

Minimum Orbit Intersection Distances (in AU)  
for orbit epoch: 2458200.5, reference: MPO317873

Mercury	0.552136
Venus	0.196718
Earth	0.0036453
Mars	0.027774
Jupiter	2.37027
Saturn	7.13509
Uranus	17.1283
Neptune	27.3342

## Observations

8 total observations over interval: 2014 04 28.04912 – 2014 04 29.03658

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

Date (UT)	J2000 RA	J2000 Dec	Magn	<u>Location</u>	<u>Ref</u>
2014 04 28.04912	13 51 45.67	-31 21 12.1	23.0 V	W84 – Cerro Tololo-DECam	MPS 547825
2014 04 28.05242	13 51 45.95	-31 21 04.6		W84 – Cerro Tololo-DECam	MPS 547825
2014 04 28.05572	13 51 46.22	-31 20 56.8		W84 – Cerro Tololo-DECam	MPS 547825
2014 04 29.02373	13 53 19.44	-30 43 26.9	22.9 V	W84 – Cerro Tololo-DECam	MPS 547825
2014 04 29.02697	13 53 19.69	-30 43 19.9		W84 – Cerro Tololo-DECam	MPS 547825
2014 04 29.03022	13 53 19.95	-30 43 13.1		W84 – Cerro Tololo-DECam	MPS 547825
2014 04 29.03340	13 53 20.20	-30 43 06.1		W84 – Cerro Tololo-DECam	MPS 547825
2014 04 29.03658	13 53 20.44	-30 42 59.5		W84 – Cerro Tololo-DECam	MPS 547825