

2014 HN197

First observed at Cerro Tololo-DECam on 2014-04-24.

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

Orbit

Orbit type: Apollo

Potentially Hazardous Asteroid

One opposition object seen prior.

Interactive Orbit Sketch

Note: WebGL enabled browser required.

epoch	2019-04-27.0	semimajor axis (AU)	1.6344627	<u>uncertainty</u>	5
epoch JD	2458600.5	mean anomaly (°)	285.71481	reference	MPO 317871
perihelion date	2019-10-01.49288	mean daily motion (°/day)	0.47167330	observations used	10
perihelion JD	2458757.99288	aphelion distance (AU)	2.343	oppositions	1
argument of perihelion (°)	153.34391	period (years)	2.09	arc length (days)	1
ascending node (°)	256.74921	P-vector [x]	0.64011864	first opposition used	2014
inclination (°)	4.62685	P-vector [y]	0.68970168	last opposition used	2014
eccentricity	0.4335129	P-vector [z]	0.33846672	residual rms (arc-secs)	0.07
perihelion distance (AU)	0.9259021	Q-vector [x]	-0.76425322	<u>perturbers coarse indicator</u>	M-v
Tisserand w.r.t. Jupiter	4.2	Q-vector [y]	0.61666731	<u>perturbers precise indicator</u>	003Eh
ΔV w.r.t. Earth (km/sec)	5.6	Q-vector [z]	0.18878148	first observation date used	2014-04-24.0
		absolute magnitude	21.1	last observation date used	2014-04-25.0
		phase slope	0.15	computer name	MPCW

JD of orbit computation	2457020.597896
perihelion JD uncertainty (days)	5.0937E-02
argument of perihelion uncertainty (°)	8.3765E-03
ascending node uncertainty (°)	7.2944E-03
inclination uncertainty (°)	6.5087E-04
eccentricity uncertainty	0.0000E+00
perihelion distance uncertainty (AU)	2.0687E-05

Minimum Orbit Intersection Distances (in AU)  
for orbit epoch: 2458200.5, reference: MPO317871

Mercury	0.61047
Venus	0.208715
Earth	0.0126748
Mars	0.138687
Jupiter	3.05201
Saturn	7.50899
Uranus	16.0825
Neptune	27.9201

Observations

10 total observations over interval: 2014 04 24.11948 – 2014 04 25.13161

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

Date (UT)	J2000 RA	J2000 Dec	Magn	<u>Location</u>	<u>Ref</u>
2014 04 24.11948	13 57 13.57	-18 02 27.2	23.6 V	W84 – Cerro Tololo-DECam	MPS 547824
2014 04 24.12273	13 57 13.28	-18 02 25.4		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 24.12602	13 57 12.98	-18 02 23.5		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 24.12919	13 57 12.69	-18 02 21.7		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 24.13243	13 57 12.41	-18 02 19.9		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 25.11863	13 55 46.41	-17 53 02.8	23.7 V	W84 – Cerro Tololo-DECam	MPS 547824
2014 04 25.12186	13 55 46.11	-17 53 00.8		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 25.12514	13 55 45.82	-17 52 59.0		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 25.12838	13 55 45.54	-17 52 57.3		W84 – Cerro Tololo-DECam	MPS 547824
2014 04 25.13161	13 55 45.24	-17 52 55.4		W84 – Cerro Tololo-DECam	MPS 547824