

2014 HG196

First observed at Cerro Tololo-DECam on 2014-04-23.
(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)	2.7186144	uncertainty	5
epoch JD	2458600.5	mean anomaly (°)	30.73128	reference	MPO 317867
perihelion date	2018-12-08.23506	mean daily motion (°/day)	0.21987830	observations used	9
perihelion JD	2458460.73506	aphelion distance (AU)	4.658	oppositions	1
argument of perihelion (°)	60.55624	period (years)	4.48	arc length (days)	1
ascending node (°)	228.48592	P-vector [x]	0.32613547	first opposition used	2014
inclination (°)	1.13645	P-vector [y]	-0.87404245	last opposition used	2014
eccentricity	0.7133128	P-vector [z]	-0.36011866	residual rms (arc-secs)	0.15
perihelion distance (AU)	0.7793919	Q-vector [x]	0.94520638	perturbbers coarse indicator	M-v
Tisserand w.r.t. Jupiter	2.9	Q-vector [y]	0.29552180	perturbbers precise indicator	003Eh
ΔV w.r.t. Earth (km/sec)	7.4	Q-vector [z]	0.13875074	first observation date used	2014-04-23.0
		absolute magnitude	26.6	last observation date used	2014-04-24.0
		phase slope	0.15	computer name	MPCW

JD of orbit computation	2457020.562449	Minimum Orbit Intersection Distances (in AU)	
perihelion JD uncertainty (days)	4.2613E-03	for orbit epoch: 2458600.5, reference: MPO317867	
argument of perihelion uncertainty (°)	3.4457E-02	Mercury	0.33153
ascending node uncertainty (°)	2.0669E-02	Venus	0.06235
inclination uncertainty (°)	6.4053E-04	Earth	0.00091
eccentricity uncertainty	0.0000E+00	Mars	0.03148
perihelion distance uncertainty (AU)	1.9254E-04	Jupiter	0.55981
		Saturn	4.45332
		Uranus	14.0004
		Neptune	25.4534

Observations

23 total observations over interval: 2014 04 23.08651 – 2014 05 01.06554
These data are available for [download](#) ([format description](#)).

Date (UT)	J2000 RA	J2000 Dec	Magn	Location	Ref
2014 04 23.08651	13 57 49.42	-14 41 17.8	22.7 V	W84 – Cerro Tololo-DECam	MPS 547822
2014 04 23.08976	13 57 49.44	-14 41 19.0		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 23.09299	13 57 49.47	-14 41 20.1		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 23.09614	13 57 49.48	-14 41 21.3		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 24.10327	13 58 15.16	-14 45 59.5	22.8 V	W84 – Cerro Tololo-DECam	MPS 547822
2014 04 24.10651	13 58 15.17	-14 46 00.5		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 24.10976	13 58 15.19	-14 46 01.5		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 24.11302	13 58 15.20	-14 46 02.4		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 24.11626	13 58 15.21	-14 46 03.5		W84 – Cerro Tololo-DECam	MPS 547822
2014 04 25.10245	13 58 38.41	-14 50 03.0	22.7 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 25.10569	13 58 38.42	-14 50 03.8	22.1 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 25.10894	13 58 38.43	-14 50 04.8	22.1 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 25.11218	13 58 38.43	-14 50 05.7	22.3 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 25.11541	13 58 38.45	-14 50 06.4	22.1 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 26.10095	13 58 59.79	-14 53 38.6	22.8 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 26.10418	13 58 59.81	-14 53 39.5	22.0 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 26.10742	13 58 59.81	-14 53 40.3	22.2 w	W84 – Cerro Tololo-DECam	MPS 1034029
2014 04 30.00789	14 00 13.46	-15 04 24.5	22.9 V	W84 – Cerro Tololo-DECam	MPEC C131
2014 04 30.04226	14 00 13.70	-15 04 31.2	23.0 V	W84 – Cerro Tololo-DECam	MPEC C131
2014 04 30.07676	14 00 13.83	-15 04 37.4	21.2 V	W84 – Cerro Tololo-DECam	MPEC C131
2014 04 30.99632	14 00 30.41	-15 06 33.3	20.8 V	W84 – Cerro Tololo-DECam	MPEC C131
2014 05 01.03068	14 00 30.66	-15 06 39.5	20.3 V	W84 – Cerro Tololo-DECam	MPEC C131
2014 05 01.06554	14 00 30.84	-15 06 45.3	20.6 V	W84 – Cerro Tololo-DECam	MPEC C131