

2015 XP

First observed at Catalina Sky Survey on 2015-12-02.

(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	2018-03-23.0	semimajor axis (AU)	1.8840124	<a href="#">uncertainty</a>	6
epoch JD	2458200.5	mean anomaly (°)	312.49538	reference	MPO 358514
perihelion date	2018-07-25.64007	mean daily motion (°/day)	0.38113450	observations used	62
perihelion JD	2458325.14007	aphelion distance (AU)	2.812	oppositions	1
argument of perihelion (°)	24.69757	period (years)	2.59	arc length (days)	3
ascending node (°)	71.68949	P-vector [x]	-0.10980974	first opposition used	2015
inclination (°)	4.87471	P-vector [y]	0.89722824	last opposition used	2015
eccentricity	0.4927714	P-vector [z]	0.42769533	residual rms (arc-secs)	0.35
perihelion distance (AU)	0.9556251	Q-vector [x]	-0.99067322	<a href="#">perturbbers_coarse_indicator</a>	M-v
Tisserand w.r.t. Jupiter	3.8	Q-vector [y]	-0.13372208	<a href="#">perturbbers_precise_indicator</a>	003Eh
ΔV w.r.t. Earth (km/sec)	5.9	Q-vector [z]	0.02617205	first observation date used	2015-12-02.0
		absolute magnitude	25.8	last observation date used	2015-12-05.0
		phase slope	0.15	computer name	MPCALB

JD of orbit computation	2457362.060956
perihelion JD uncertainty (days)	2.3572E-04
argument of perihelion uncertainty (°)	6.5060E-04
ascending node uncertainty (°)	2.0625E-05
inclination uncertainty (°)	8.9269E-04
eccentricity uncertainty	1.0358E-04
perihelion distance uncertainty (AU)	5.7465E-06

Minimum Orbit Intersection Distances (in AU)  
for orbit epoch: 2458200.5, reference: MPO358514

Mercury	0.64493
Venus	0.236658
Earth	0.0005369
Mars	0.0765494
Jupiter	2.40057
Saturn	7.25684
Uranus	16.1884
Neptune	27.3492

Observations

62 total observations over interval: 2015 12 02.17815 – 2015 12 05.10672

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

Date (UT)	J2000 RA	J2000 Dec	Magn	<a href="#">Location</a>	<a href="#">Ref</a>
2015 12 02.17815	01 02 29.03	-11 42 43.9	18.9 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.18415	01 02 22.26	-11 42 34.8	19.5 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.19023	01 02 15.41	-11 42 28.5	18.5 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.19625	01 02 08.58	-11 42 19.2	19.1 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.254006	01 01 01.73	-11 41 03.2	18.5 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.263408	01 00 51.12	-11 40 47.8	19.1 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.271567	01 00 41.98	-11 40 34.1	19.3 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.276967	01 00 35.90	-11 40 24.8	18.8 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.27929	01 00 34.21	-11 40 13.4	18.4 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.28007	01 00 33.31	-11 40 11.8	18.8 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.28086	01 00 32.39	-11 40 11.3	18.4 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.28162	01 00 31.47	-11 40 10.4	18.5 V	703 – Catalina Sky Survey	MPS 653696
2015 12 02.282715	01 00 29.46	-11 40 14.9	19.0 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.289634	01 00 21.69	-11 40 03.2	18.7 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.296734	01 00 13.80	-11 39 50.3	19.2 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.305358	01 00 04.23	-11 39 34.9	18.5 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 02.45574	00 57 48.92	-11 26 37.6	18.6 R	Q62 – iTelescope Observatory, Siding Spring	MPS 653696
2015 12 02.45720	00 57 47.01	-11 26 35.0	18.3 R	Q62 – iTelescope Observatory, Siding Spring	MPS 653696
2015 12 02.45896	00 57 44.71	-11 26 31.9	18.0 R	Q62 – iTelescope Observatory, Siding Spring	MPS 653696
2015 12 02.73184	00 52 41.06	-11 30 36.6	17.8 R	K51 – Osservatorio del Celado, Castello Tesino	MPS 653696
2015 12 02.73273	00 52 39.74	-11 30 35.2	17.8 R	K51 – Osservatorio del Celado, Castello Tesino	MPS 653696
2015 12 02.73363	00 52 38.41	-11 30 33.8	17.8 R	K51 – Osservatorio del Celado, Castello Tesino	MPS 653696
2015 12 02.749162	00 52 17.64	-11 30 04.9	18.2	B04 – OAVdA, Saint-Barthelemy	MPS 653696
2015 12 02.765144	00 51 53.87	-11 29 39.3	18.4	B04 – OAVdA, Saint-Barthelemy	MPS 653696
2015 12 02.770728	00 51 45.46	-11 29 29.9	17.8	B04 – OAVdA, Saint-Barthelemy	MPS 653696
2015 12 02.77534	00 51 37.79	-11 29 23.0		204 – Schiaparelli Observatory	MPS 653696
2015 12 02.778867	00 51 33.14	-11 29 16.1	18.0	B04 – OAVdA, Saint-Barthelemy	MPS 653696
2015 12 02.77918	00 51 31.97	-11 29 16.4	18.1 R	204 – Schiaparelli Observatory	MPS 653696
2015 12 02.78301	00 51 26.09	-11 29 09.5		204 – Schiaparelli Observatory	MPS 653696
2015 12 02.80933	00 50 45.50	-11 28 21.0		204 – Schiaparelli Observatory	MPS 653696
2015 12 02.81547	00 50 35.92	-11 28 09.1		204 – Schiaparelli Observatory	MPS 653696
2015 12 02.82162	00 50 26.29	-11 27 57.0	17.7 R	204 – Schiaparelli Observatory	MPS 653696
2015 12 03.049559	00 44 56.93	-11 18 53.8	19.3 V	H21 – Astronomical Research Observatory, Westfield	MPS 653696
2015 12 03.051249	00 44 53.83	-11 18 49.9	19.2 V	H21 – Astronomical Research Observatory, Westfield	MPS 653696
2015 12 03.052939	00 44 50.71	-11 18 46.0	18.6 V	H21 – Astronomical Research Observatory, Westfield	MPS 653696
2015 12 03.054629	00 44 47.61	-11 18 42.1	18.6 V	H21 – Astronomical Research Observatory, Westfield	MPS 653696
2015 12 03.056318	00 44 44.49	-11 18 38.2	18.9 V	H21 – Astronomical Research Observatory, Westfield	MPS 653696
2015 12 03.058008	00 44 41.37	-11 18 34.2	19.0 V	H21 – Astronomical Research Observatory, Westfield	MPS 657467
2015 12 03.059698	00 44 38.24	-11 18 29.9	19.5 V	H21 – Astronomical Research Observatory, Westfield	MPS 657467
2015 12 03.061388	00 44 35.10	-11 18 26.0	19.4 V	H21 – Astronomical Research Observatory, Westfield	MPS 657467
2015 12 03.063078	00 44 31.99	-11 18 21.9	18.8 V	H21 – Astronomical Research Observatory, Westfield	MPS 657467
2015 12 03.064390	00 44 42.87	-11 17 23.8	18.9 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 03.064659	00 44 29.04	-11 18 18.2	18.7 V	H21 – Astronomical Research Observatory, Westfield	MPS 657467
2015 12 03.067285	00 44 37.49	-11 17 17.5	18.2 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 03.079369	00 44 14.95	-11 16 50.5	18.8 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 03.085573	00 44 03.24	-11 16 36.1	19.3 V	H01 – Magdalena Ridge Observatory, Socorro	MPS 653696
2015 12 03.11822	00 43 03.37	-11 14 52.5	18.2 R	926 – Tenagra II Observatory, Nogales	MPS 653696
2015 12 03.11986	00 43 00.18	-11 14 48.3	18.3 R	926 – Tenagra II Observatory, Nogales	MPS 653696
2015 12 03.12150	00 42 56.96	-11 14 44.1	18.5 R	926 – Tenagra II Observatory, Nogales	MPS 653696
2015 12 03.16021	00 41 40.12	-11 13 09.2	18.1 V	G96 – Mt. Lemmon Survey	MPS 653696
2015 12 03.16059	00 41 39.35	-11 13 08.1	18.2 V	G96 – Mt. Lemmon Survey	MPS 653696
2015 12 03.16097	00 41 38.59	-11 13 07.0	18.3 V	G96 – Mt. Lemmon Survey	MPS 653696
2015 12 03.16135	00 41 37.81	-11 13 06.0	18.4 V	G96 – Mt. Lemmon Survey	MPS 653696
2015 12 03.52409	00 29 13.82	-10 53 15.8	18.3 V	900 – Moriyama	MPS 653696
2015 12 03.52953	00 28 59.71	-10 52 50.7	18.3 V	900 – Moriyama	MPS 653696
2015 12 04.13902	23 57 40.52	-09 51 22.6	17.6 R	926 – Tenagra II Observatory, Nogales	MPS 653696
2015 12 04.14053	23 57 33.53	-09 51 08.7	17.6 R	926 – Tenagra II Observatory, Nogales	MPS 653696
2015 12 04.14205	23 57 26.62	-09 50 55.1	17.8 R	926 – Tenagra II Observatory, Nogales	MPS 653696
2015 12 05.07203	22 02 20.25	-04 39 18.4	17.3 R	926 – Tenagra II Observatory, Nogales	MPS 657467
2015 12 05.10451	21 55 10.73	-04 17 31.6	18.6 R	926 – Tenagra II Observatory, Nogales	MPS 657467
2015 12 05.10562	21 54 55.91	-04 16 46.1	18.0 R	926 – Tenagra II Observatory, Nogales	MPS 657467
2015 12 05.10672	21 54 41.06	-04 16 00.4	17.6 R	926 – Tenagra II Observatory, Nogales	MPS 657467

