

OBSERVERS

PUBLIC

DATA

IAWN

## 2015 KA158

First observed at Cerro Tololo-DECam on 2015-05-22.

(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)	2.0635073	<a href="#">uncertainty</a>	9
epoch JD	2458600.5	mean anomaly (°)	135.73956	reference	MPO 340600
perihelion date	2018-03-14.76370	mean daily motion (°/day)	0.33250240	observations used	9
perihelion JD	2458192.26370	aphelion distance (AU)	3.224	oppositions	1
argument of perihelion (°)	281.56075	period (years)	2.96	arc length (days)	2
ascending node (°)	250.98803	P-vector [x]	-0.99065710	first opposition used	2015
inclination (°)	2.52388	P-vector [y]	0.13585803	last opposition used	2015
eccentricity	0.5623498	P-vector [z]	0.01187898	residual rms (arc-secs)	0.08
perihelion distance (AU)	0.9030945	Q-vector [x]	-0.12986588	<a href="#">perturbers coarse indicator</a>	M-v
Tisserand w.r.t. Jupiter	3.6	Q-vector [y]	-0.91318681	<a href="#">perturbers precise indicator</a>	003Eh
ΔV w.r.t. Earth (km/sec)	6.3	Q-vector [z]	-0.38629613	first observation date used	2015-05-22.0
		absolute magnitude	26.8	last observation date used	2015-05-24.0
		phase slope	0.15	computer name	MPCW

JD of orbit computation	2457178.605685
perihelion JD uncertainty (days)	9.8771E-02
argument of perihelion uncertainty (°)	4.1566E-01
ascending node uncertainty (°)	6.3910E-02
inclination uncertainty (°)	2.6697E-02
eccentricity uncertainty	6.5493E-03
perihelion distance uncertainty (AU)	3.7345E-03

Minimum Orbit Intersection Distances (in AU)  
for orbit epoch: 2458200.5, reference: MPO340600

Mercury	0.515297
Venus	0.201068
Earth	0.0246681
Mars	0.0249778
Jupiter	1.75613
Saturn	6.3795
Uranus	16.853
Neptune	26.6959

## Observations

9 total observations over interval: 2015 05 22.18953 – 2015 05 24.11452

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

Date (UT)	J2000 RA	J2000 Dec	Magn	<a href="#">Location</a>	<a href="#">Ref</a>
2015 05 22.18953	15 17 16.88	-22 20 25.4		W84 – Cerro Tololo-DECam	MPS 609991
2015 05 22.19269	15 17 17.40	-22 20 21.6	23.7 V	W84 – Cerro Tololo-DECam	MPS 609991
2015 05 22.19592	15 17 17.91	-22 20 18.0		W84 – Cerro Tololo-DECam	MPS 609991
2015 05 22.19915	15 17 18.43	-22 20 14.4		W84 – Cerro Tololo-DECam	MPS 609991
2015 05 22.20239	15 17 18.94	-22 20 10.9		W84 – Cerro Tololo-DECam	MPS 609991
2015 05 24.10178	15 22 39.91	-21 48 17.8	23.6 V	W84 – Cerro Tololo-DECam	MPS 609991
2015 05 24.10497	15 22 40.34	-21 48 15.0		W84 – Cerro Tololo-DECam	MPS 609991
2015 05 24.11132	15 22 41.18	-21 48 09.3		W84 – Cerro Tololo-DECam	MPS 609991
2015 05 24.11452	15 22 41.62	-21 48 06.4		W84 – Cerro Tololo-DECam	MPS 609991