

OBSERVERS

DATA

IAWN

BETA

STATUS

2018 FA4

First observed at Mt. Lemmon Survey on 2018-03-21.

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

Orbit

Orbit type: Apollo

Near-Earth Object

Interactive Orbit Sketch

Note: WebGL enabled browser required.

| | | | | | |
|----------------------------|------------------|---------------------------|-------------|---|--------------|
| epoch | 2019-04-27.0 | semimajor axis (AU) | 2.5606402 | uncertainty | 6 |
| epoch JD | 2458600.5 | mean anomaly (°) | 104.94801 | reference | MPO 446985 |
| perihelion date | 2018-02-14.69196 | mean daily motion (°/day) | 0.24053650 | observations used | 35 |
| perihelion JD | 2458164.19196 | aphelion distance (AU) | 4.182 | oppositions | 1 |
| argument of perihelion (°) | 139.76151 | period (years) | 4.1 | arc length (days) | 26 |
| ascending node (°) | 356.19615 | P-vector [x] | -0.71994142 | first opposition used | 2018 |
| inclination (°) | 13.09976 | P-vector [y] | 0.56419761 | last opposition used | 2018 |
| eccentricity | 0.6329951 | P-vector [z] | 0.40418488 | residual rms (arc-secs) | 0.26 |
| perihelion distance (AU) | 0.9397675 | Q-vector [x] | -0.69387194 | perturbbers coarse indicator | M-v |
| Tisserand w.r.t. Jupiter | 3.1 | Q-vector [y] | -0.57250351 | perturbbers precise indicator | 003Eh |
| ΔV w.r.t. Earth (km/sec) | 7.7 | Q-vector [z] | -0.43678536 | first observation date used | 2018-03-18.0 |
| | | absolute magnitude | 25.4 | last observation date used | 2018-04-13.0 |
| | | phase slope | 0.15 | computer name | MPCLINUX |

| | |
|--|----------------|
| JD of orbit computation | 2458223.960007 |
| perihelion JD uncertainty (days) | 1.5900E-03 |
| argument of perihelion uncertainty (°) | 3.7052E-04 |
| ascending node uncertainty (°) | 1.1014E-04 |
| inclination uncertainty (°) | 1.9763E-03 |
| eccentricity uncertainty | 1.4065E-04 |
| perihelion distance uncertainty (AU) | 4.7262E-06 |

Minimum Orbit Intersection Distances (in AU)
for orbit epoch: 2458600.5, reference: MPO446985

| | |
|---------|---------|
| Mercury | 0.59629 |
| Venus | 0.23121 |
| Earth | 0.02696 |
| Mars | 0.26899 |
| Jupiter | 1.03119 |
| Saturn | 5.75903 |
| Uranus | 15.6726 |
| Neptune | 25.8901 |

Observations

35 total observations over interval: 2018 03 18.36412 – 2018 04 13.446476

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

| Date (UT) | J2000 RA | J2000 Dec | Magn | Location | Ref |
|-------------------|--------------|--------------|---------|--|---------------------|
| 2018 03 18.36412 | 10 59 43.193 | +02 39 25.57 | | F51 – Pan-STARRS 1, Haleakala | MPS 876238 |
| 2018 03 18.37659 | 10 59 49.110 | +02 34 15.62 | 19.6 w | F51 – Pan-STARRS 1, Haleakala | MPS 876238 |
| 2018 03 18.38880 | 10 59 54.892 | +02 29 12.82 | 19.8 w | F51 – Pan-STARRS 1, Haleakala | MPS 876238 |
| 2018 03 21.27524 | 11 19 32.19 | -12 01 40.7 | 19.8 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 21.28040 | 11 19 33.49 | -12 02 46.9 | 20.3 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 21.28559 | 11 19 34.78 | -12 03 52.8 | 20.4 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 21.29076 | 11 19 36.09 | -12 04 58.9 | 19.7 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 21.317363 | 11 19 42.35 | -12 10 40.8 | 19.8 G | H01 – Magdalena Ridge Observatory, Socorro | MPS 876238 |
| 2018 03 21.324261 | 11 19 44.11 | -12 12 08.1 | 20.2 G | H01 – Magdalena Ridge Observatory, Socorro | MPS 876238 |
| 2018 03 21.330876 | 11 19 45.79 | -12 13 31.7 | 19.9 G | H01 – Magdalena Ridge Observatory, Socorro | MPS 876238 |
| 2018 03 21.341230 | 11 19 48.43 | -12 15 42.5 | 20.0 G | H01 – Magdalena Ridge Observatory, Socorro | MPS 876238 |
| 2018 03 21.36677 | 11 19 55.43 | -12 21 00.5 | | 691 – Steward Observatory, Kitt Peak-Spacewatch | MPS 876238 |
| 2018 03 21.38760 | 11 20 00.79 | -12 25 20.1 | | 691 – Steward Observatory, Kitt Peak-Spacewatch | MPS 876238 |
| 2018 03 21.40836 | 11 20 06.15 | -12 29 37.4 | | 691 – Steward Observatory, Kitt Peak-Spacewatch | MPS 876238 |
| 2018 03 21.96062 | 11 22 47.25 | -14 18 31.5 | 20.8 V | 033 – Karl Schwarzschild Observatory, Tautenburg | MPS 876238 |
| 2018 03 21.96218 | 11 22 47.64 | -14 18 49.7 | 20.6 V | 033 – Karl Schwarzschild Observatory, Tautenburg | MPS 876238 |
| 2018 03 21.96373 | 11 22 48.01 | -14 19 06.6 | 20.6 V | 033 – Karl Schwarzschild Observatory, Tautenburg | MPS 876238 |
| 2018 03 22.10460 | 11 23 29.38 | -14 42 14.4 | 20.8 V | 807 – Cerro Tololo Observatory, La Serena | MPS 876238 |
| 2018 03 22.10746 | 11 23 30.01 | -14 42 45.6 | 20.8 V | 807 – Cerro Tololo Observatory, La Serena | MPS 876238 |
| 2018 03 22.11033 | 11 23 30.64 | -14 43 16.6 | 20.7 V | 807 – Cerro Tololo Observatory, La Serena | MPS 876238 |
| 2018 03 22.202035 | 11 23 52.48 | -15 01 53.6 | 20.3 V | H21 – Astronomical Research Observatory, Westfield | MPS 876238 |
| 2018 03 22.207166 | 11 23 53.57 | -15 02 48.1 | 20.3 V | H21 – Astronomical Research Observatory, Westfield | MPS 876238 |
| 2018 03 22.22964 | 11 24 01.29 | -15 06 33.3 | 20.7 G | I52 – Steward Observatory, Mt. Lemmon Station | MPS 876238 |
| 2018 03 22.23060 | 11 24 01.50 | -15 06 43.7 | 19.9 G | I52 – Steward Observatory, Mt. Lemmon Station | MPS 876238 |
| 2018 03 22.23157 | 11 24 01.71 | -15 06 54.1 | 19.9 G | I52 – Steward Observatory, Mt. Lemmon Station | MPS 876238 |
| 2018 03 22.23253 | 11 24 01.90 | -15 07 03.7 | 20.8 G | I52 – Steward Observatory, Mt. Lemmon Station | MPS 876238 |
| 2018 03 22.25995 | 11 24 07.74 | -15 11 52.3 | 20.6 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 22.26512 | 11 24 08.79 | -15 12 45.5 | 20.4 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 22.27030 | 11 24 09.92 | -15 13 40.4 | 20.6 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 22.27547 | 11 24 10.98 | -15 14 34.6 | 20.6 G | G96 – Mt. Lemmon Survey | MPS 876238 |
| 2018 03 26.25791 | 11 37 00.17 | -23 17 17.9 | 21.4 G | 807 – Cerro Tololo Observatory, La Serena | MPS 878940 |
| 2018 03 26.26108 | 11 37 00.54 | -23 17 33.6 | 21.4 G | 807 – Cerro Tololo Observatory, La Serena | MPS 878940 |
| 2018 03 26.26469 | 11 37 00.97 | -23 17 51.4 | 21.2 G | 807 – Cerro Tololo Observatory, La Serena | MPS 878940 |
| 2018 03 30.428877 | 11 45 19.322 | -27 35 23.03 | 21.89 G | T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m) | MPS 879392 |
| 2018 04 13.446476 | 12 00 46.754 | -32 10 37.84 | 24.02 G | T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m) | MPS 882275 |