

OBSERVERSDATAIAWN BETASTATUS

2018 RY1

First observed at Mt. Lemmon Survey on 2018-09-07.  
(Discoverer will be defined when the object is numbered. See [this note](#) on how discoverers are determined.)

Orbit

Orbit type: Aten

Near-Earth Object

One opposition object seen prior.

Interactive Orbit Sketch

Note: WebGL enabled browser required.

epoch	2019-04-27.0	semimajor axis (AU)	0.8223944	<a href="#">uncertainty</a>	6
epoch JD	2458600.5	mean anomaly (°)	119.95878	reference	MPO 477908
perihelion date	2019-01-26.22873	mean daily motion (°/day)	1.32155010	observations used	75
perihelion JD	2458509.72873	aphelion distance (AU)	1.101	oppositions	1
argument of perihelion (°)	325.02435	period (years)	0.75	arc length (days)	49
ascending node (°)	199.77077	P-vector [x]	-0.96495394	first opposition used	2018
inclination (°)	1.16648	P-vector [y]	0.24516868	last opposition used	2018
eccentricity	0.3388841	P-vector [z]	0.09357462	residual rms (arc-secs)	0.31
perihelion distance (AU)	0.5436980	Q-vector [x]	-0.26232894	<a href="#">perturbbers coarse indicator</a>	M-v
Tisserand w.r.t. Jupiter	7.1	Q-vector [y]	-0.89185343	<a href="#">perturbbers precise indicator</a>	003Eh
ΔV w.r.t. Earth (km/sec)	8.0	Q-vector [z]	-0.36848472	first observation date used	2018-08-14.0
		absolute magnitude	24.4	last observation date used	2018-10-02.0
		phase slope	0.15	computer name	MPCLINUX

JD of orbit computation	2458394.235108
perihelion JD uncertainty (days)	6.8144E-03
argument of perihelion uncertainty (°)	5.3048E-03
ascending node uncertainty (°)	4.1778E-03
inclination uncertainty (°)	4.2752E-04
eccentricity uncertainty	1.0448E-04
perihelion distance uncertainty (AU)	1.1262E-04

Minimum Orbit Intersection Distances (in AU)  
for orbit epoch: 2458600.5, reference: E2019-003

Mercury	0.15362
Venus	0.01005
Earth	0.00077
Mars	0.28598
Jupiter	3.86793
Saturn	8.31552
Uranus	17.6931
Neptune	28.8197

Observations

76 total observations over interval: 2018 08 14.475979 – 2018 10 02.05921

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

Date (UT)	J2000 RA	J2000 Dec	Magn	<a href="#">Location</a>	<a href="#">Ref</a>
2018 08 14.475979	00 17 58.281	+15 36 29.43	20.5 G	F51 – Pan-STARRS 1, Haleakala	MPS 1012794
2018 08 14.497888	00 17 45.386	+15 35 22.37	20.6 G	F51 – Pan-STARRS 1, Haleakala	MPS 1012794
2018 08 21.487722	23 09 25.459	+08 09 05.86	20.1 G	F51 – Pan-STARRS 1, Haleakala	MPS 1012794
2018 08 21.501230	23 09 16.690	+08 08 06.11	19.9 G	F51 – Pan-STARRS 1, Haleakala	MPS 1012795
2018 08 21.514716	23 09 08.010	+08 07 07.37	20.1 G	F51 – Pan-STARRS 1, Haleakala	MPS 1012795
2018 09 07.13874	20 57 04.67	-09 26 42.3	20.7 G	G96 – Mt. Lemmon Survey	MPS 915319
2018 09 07.14431	20 57 02.80	-09 26 56.3	20.8 G	G96 – Mt. Lemmon Survey	MPS 915319
2018 09 07.14988	20 57 01.01	-09 27 10.4	20.6 G	G96 – Mt. Lemmon Survey	MPS 915319
2018 09 07.15545	20 56 59.05	-09 27 24.6	20.6 G	G96 – Mt. Lemmon Survey	MPS 915319
2018 09 07.21800	20 56 38.19	-09 30 03.6	20.6 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 07.21924	20 56 37.83	-09 30 06.6	20.1 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 07.22049	20 56 37.37	-09 30 09.6	20.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 07.22174	20 56 36.95	-09 30 12.9	20.0 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 07.43515	20 55 32.58	-09 37 25.9	20.7 G	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 07.43692	20 55 32.03	-09 37 30.0	20.8 G	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 07.43870	20 55 31.44	-09 37 34.3	20.9 G	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 07.44048	20 55 30.86	-09 37 39.1	20.9 G	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 07.91172	20 53 13.11	-09 58 28.0	20.6 G	J04 – ESA Optical Ground Station, Tenerife	MPS 915319
2018 09 07.91618	20 53 11.68	-09 58 38.9	20.8 G	J04 – ESA Optical Ground Station, Tenerife	MPS 915319
2018 09 07.92065	20 53 10.22	-09 58 49.7	20.7 G	J04 – ESA Optical Ground Station, Tenerife	MPS 915319
2018 09 08.13730	20 52 08.95	-10 07 30.7	19.6 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 08.13855	20 52 08.72	-10 07 32.5	20.4 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 08.13981	20 52 08.20	-10 07 36.9	20.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 08.780995	20 49 08.62	-10 32 38.6	21.2 G	L01 – Visnjan Observatory, Tican	MPS 915319
2018 09 08.787073	20 49 06.87	-10 32 53.4	21.0 G	L01 – Visnjan Observatory, Tican	MPS 915319
2018 09 08.88859	20 48 37.22	-10 36 45.0	21 G	204 – Schiaparelli Observatory	MPS 915319
2018 09 08.90658	20 48 31.91	-10 37 25.6		204 – Schiaparelli Observatory	MPS 915319
2018 09 09.16572	20 47 24.23	-10 46 52.6		291 – LPL/Spacewatch II	MPS 915319
2018 09 09.17053	20 47 22.83	-10 47 03.1		291 – LPL/Spacewatch II	MPS 915319
2018 09 09.17537	20 47 21.39	-10 47 14.4		291 – LPL/Spacewatch II	MPS 915319
2018 09 09.313594	20 46 44.404	-10 52 06.58	21.26 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 915319
2018 09 09.314285	20 46 44.190	-10 52 08.31	20.99 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 915319
2018 09 09.315347	20 46 43.888	-10 52 10.56	20.94 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 915319
2018 09 10.17023	20 43 05.87	-11 22 50.8	21.6 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 10.17189	20 43 05.49	-11 22 54.1	21.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 10.17356	20 43 04.99	-11 22 57.9	21.3 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 10.17522	20 43 04.52	-11 23 02.1	21.2 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 11.16838	20 39 07.51	-11 56 16.2	22.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 11.17005	20 39 07.09	-11 56 19.8	21.7 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 11.17337	20 39 06.19	-11 56 26.8	21.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 11.19963	20 38 59.53	-11 57 16.7	21.7 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 11.20208	20 38 58.95	-11 57 22.0	21.5 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 11.20454	20 38 58.27	-11 57 26.5	21.4 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 11.39725	20 38 14.98	-12 02 08.4	21.4 R	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 11.40055	20 38 14.16	-12 02 14.5	19.9 R	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 11.40362	20 38 13.37	-12 02 20.3	20.2 R	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 11.40621	20 38 12.73	-12 02 25.4	20.3 R	474 – Mount John Observatory, Lake Tekapo	MPS 915319
2018 09 12.12238	20 35 36.85	-12 26 11.2	22.2 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 12.12689	20 35 35.77	-12 26 19.8	21.7 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 12.13140	20 35 34.69	-12 26 27.3		291 – LPL/Spacewatch II	MPS 915319
2018 09 12.17557	20 35 24.06	-12 27 50.1	21.6 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 12.18056	20 35 22.91	-12 27 59.0	21.1 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 12.18306	20 35 22.32	-12 28 03.7	20.8 G	I52 – Steward Observatory, Mt. Lemmon Station	MPS 915319
2018 09 13.26668	20 31 38.84	-12 59 38.8		291 – LPL/Spacewatch II	MPS 915319
2018 09 13.27191	20 31 37.72	-12 59 47.9		291 – LPL/Spacewatch II	MPS 915319
2018 09 14.19987	20 28 44.31	-13 25 07.9	21.4 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 14.20429	20 28 43.35	-13 25 15.5	21.7 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 14.20872	20 28 42.46	-13 25 21.5	21.3 R	291 – LPL/Spacewatch II	MPS 915319
2018 09 14.34736	20 28 19.12	-13 27 38.8	21.6 G	474 – Mount John Observatory, Lake Tekapo	MPS 915320
2018 09 14.35088	20 28 18.46	-13 27 44.2	21.4 G	474 – Mount John Observatory, Lake Tekapo	MPS 915320
2018 09 14.35440	20 28 17.77	-13 27 50.0	21.6 G	474 – Mount John Observatory, Lake Tekapo	MPS 915320
2018 09 15.15092	20 25 59.08	-13 49 30.4	21.6 R	291 – LPL/Spacewatch II	MPS 919359
2018 09 15.15765	20 25 57.77	-13 49 40.0	21.2 R	291 – LPL/Spacewatch II	MPS 919359
2018 09 15.16439	20 25 56.45	-13 49 50.5	21.3 R	291 – LPL/Spacewatch II	MPS 919359
2018 09 15.256463	20 25 41.884	-13 51 56.06	21.81 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 919359
2018 09 15.260059	20 25 41.190	-13 52 01.47	21.92 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 919359
2018 09 15.261597	20 25 40.896	-13 52 03.80	21.73 G	T12 – Mauna Kea-UH/Tholen NEO Follow-Up (2.24-m)	MPS 919359
2018 09 28.09911	20 04 51.43	-17 26 57.9	22.6 R	695 – Kitt Peak	MPS 919352
2018 09 28.11051	20 04 50.72	-17 27 05.8	22.9 R	695 – Kitt Peak	MPS 919352
2018 09 28.12192	20 04 50.04	-17 27 12.9	22.4 R	695 – Kitt Peak	MPS 919352
2018 09 30.16305	20 03 32.41	-17 48 03.7	22.6 R	695 – Kitt Peak	MPS 919352
2018 09 30.17418	20 03 31.87	-17 48 09.8	22.6 R	695 – Kitt Peak	MPS 919352
2018 09 30.18530	20 03 31.35	-17 48 15.9	22.3 R	695 – Kitt Peak	MPS 919352
2018 10 02.02919	20 02 42.99	-18 04 15.8	23.0 G	807 – Cerro Tololo Observatory, La Serena	MPS 919352
2018 10 02.04421	20 02 42.39	-18 04 23.2	23.1 G	807 – Cerro Tololo Observatory, La Serena	MPS 919352
2018 10 02.05921	20 02 41.82	-18 04 31.1	23.0 G	807 – Cerro Tololo Observatory, La Serena	MPS 919352