

target : Titan
 target radius (km) : 2575.15
 C/A epoch : 2040-07-26T07:18:48.050
 Event type : Pt
 : Titan occs: topocentric, not geocentric
 : Not a ringed target
 Gaia source ID : 3696436733987034880
 2Mass ID (if available) : 12281262-0029233

ICRS Star Coord at Epoch: 12h 28m 12.55386s -00:29:23.50667s
 RUWE (>1.4 is poor) : 0.99
 K magnitude : 11.030
 G magnitude : 12.679
 RP magnitude : 12.119
 BP magnitude : 13.077
 DUPflag : 0
 Distance (au) : 10.027
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 27.36
 Sun-Target sep (deg) : 63.33
 Sun-Moon sep (deg) : 148.07
 B (ring opening deg) : 6.03
 PA of pole (deg) : -3.54
 Pole direction: RA (deg): 39.48270
 Dec (deg): 83.42790
 C/A sky separation (") : 0.786
 C/A sky separation (km) : 5718.1
 NAIF SPICE kernels : RAJobs_U111+rgf16.spk

URKALLv1.spk
 naif0012.tls
 nep097.bsp
 nep101.bsp
 sat4401.bsp

Observable events with sun below -5 deg and altitude above 5 deg

| Obs | Location | lat | Elon | Target | Observed Events Interval | OEcode |
|------|-----------------------------------|-------|-------|--------|-----------------------------|--------|
| PIC | Pic du Midi | 42.9 | 0.1 | | | Pnn |
| PAL | Palomar Mt (200") | 33.4 | 243.1 | | | Pnn |
| PMO | Purple Mtn Obs. Nanking | 32.1 | 118.8 | | | Pnn |
| KPNO | Kitt Peak Natl Obs | 32.0 | 248.4 | | | Pnn |
| MCD | McDonald Obs. 2.7m | 30.7 | 256.0 | | | Pnn |
| TEN | Teide Obs./Tenerife | 28.3 | 343.5 | | | Pnn |
| IRTF | Mauna Kea/IRTF | 19.8 | 204.5 | + + | JUL 26 07:20 - JUL 26 07:22 | Pie |
| KAV | Kavalur Observatory | 12.6 | 78.8 | | | Pnn |
| RIO | Rio de Janeiro | -22.9 | 316.8 | | | Pnn |
| ESO | European Southern Obs. (3.6m) | -29.3 | 289.3 | | | Pnn |
| AAT | Siding Spring (AAT) | -31.3 | 149.1 | | | Pnn |
| SAAO | So. Afr. Astro. Obs. (Sutherland) | -32.4 | 20.8 | | | Pnn |
| MSO | Mt. Stromlo Observatory | -35.3 | 149.0 | | | Pnn |

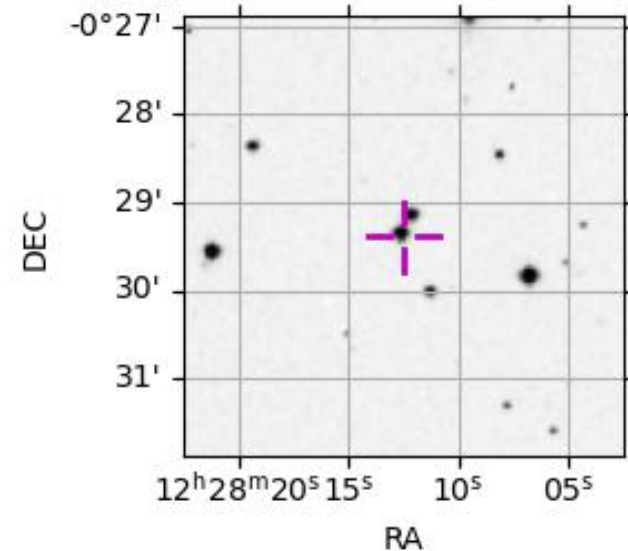
Titan 2040-07-26T07:18:48 K11.03 G12.68 dots 60.0 sec
 Pt



2040-07-26T07:18:48.0500 cc: 12 28 12.5539 s -00 29 23.507 C/A 0.786" PA 21.25 deg v_sky +27.36 km/s D 10.03 AU

Credit: Styled after SORA/Lucky Star

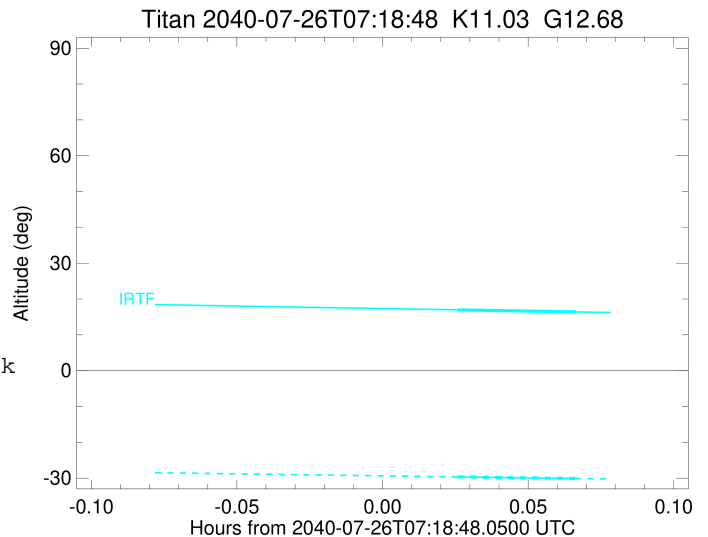
3696436733987034880



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target                : Titan
target radius (km)   : 2575.15
C/A epoch             : 2040-07-26T07:21:33.960
Event type            : Pt
: Titan occs: topocentric, not geocentric
: Not a ringed target
Observer code         : IRTF
Location              : Mauna Kea/IRTF
Latitude (deg)       : 19.82622
E. Longitude (deg)   : 204.52800
Altitude (km)        : 4.168
Gaia source ID       : 3696436733987034880
2Mass ID (if available) : 12281262-0029233
ICRS Star Coord at Epoch: 12h 28m 12.55386s -00:29:23.50667s
RUWE (>1.4 is poor) : 0.99
K magnitude           : 11.030
G magnitude           : 12.679
RP magnitude          : 12.119
BP magnitude          : 13.077
DUPflag              : 0
Distance (au)         : 10.027
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 27.36
Sun-Target sep (deg) : 63.33
Sun-Moon sep (deg)   : 148.75
B (ring opening deg) : 6.03
PA of pole (deg)     : -3.54
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.223
C/A sky separation (km) : 1623.8
NAIF SPICE kernels   : RAJobs_U111+rgf16.spk
URKALLv1.spk
naif0012.tls
nep097.bsp
nep101.bsp
sat4401.bsp
de440.bsp
earth_720101_070426.bpc
jup365.bsp
urall6.bsp
IAU_SATURN_for_RINGFIT.tpc
pck00010.tpc
earth_200101_990628_predict.bpc
IAU_NEPTUNE_for_RINGFIT.tpc.BECAREFUL
uranus_ringframes_rfrench20220627_v1.tf
neptune_ringframes_rfrench20220702a_v1.tf
earth_flat_IAU.spk

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x: target alt < 5.0 deg or sun > -5.0 deg

| Target | I/E | UTC | alt | alt-sun | radius | lat-geo | lat-geodetic |
|--------|-----|-------------------------|-------|---------|--------|---------|--------------|
| Titan | I | 2040-07-26T07:20:20.568 | 16.97 | -29.65 | 2575.2 | -63.34 | -63.35 |
| Titan | E | 2040-07-26T07:22:47.342 | 16.40 | -30.11 | 2575.2 | -14.13 | -14.13 |