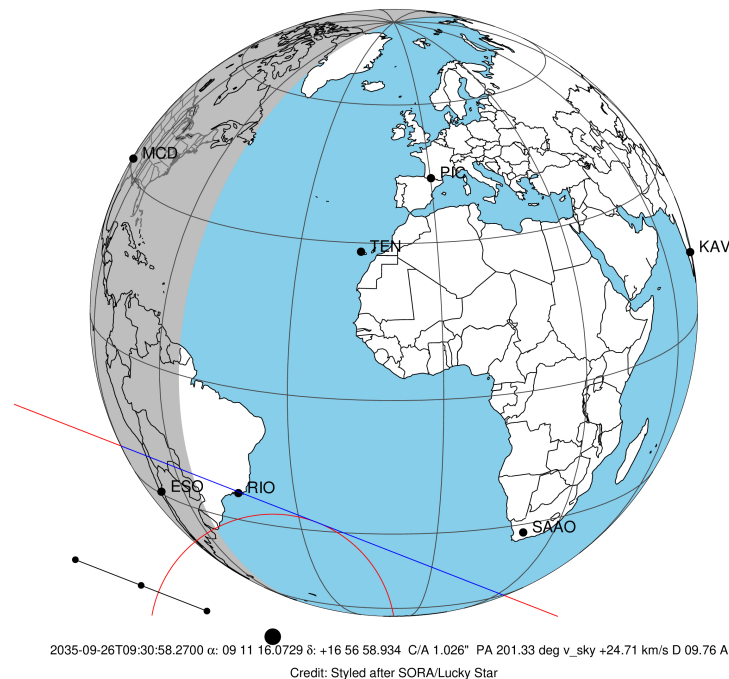


target : Titan  
 target radius (km) : 2575.15  
 C/A epoch : 2035-09-26T09:30:58.270  
 Event type : Pt  
 : Titan occs: topocentric, not geocentric  
 : Not a ringed target  
 Gaia source ID : 607985919630670720  
 2Mass ID (if available) : 09111610+1656594

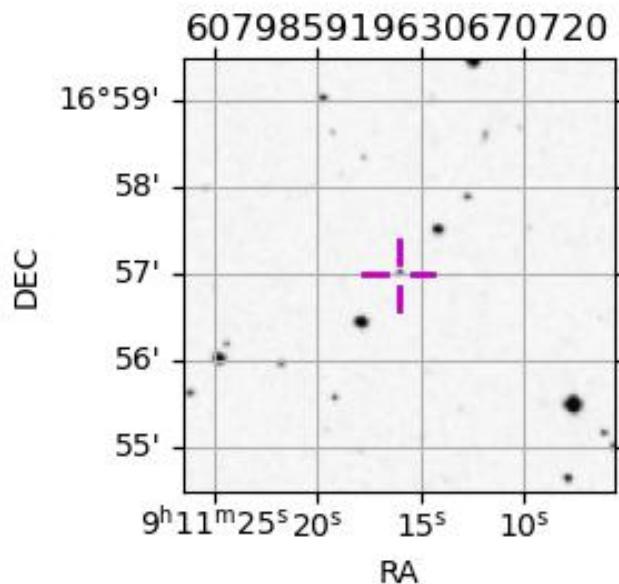
ICRS Star Coord at Epoch: 09h 11m 16.07292s +16:56:58.93429s  
 RUWE (>1.4 is poor) : 0.98  
 K magnitude : 14.025  
 G magnitude : 17.306  
 RP magnitude : 16.244  
 BP magnitude : 18.444  
 DUPflag : 0  
 Distance (au) : 9.758  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 24.72  
 Sun-Target sep (deg) : 47.51  
 Sun-Moon sep (deg) : 19.31  
 B (ring opening deg) : -15.89  
 PA of pole (deg) : -6.76  
 Pole direction: RA (deg): 39.48270  
 Dec (deg): 83.42790  
 C/A sky separation (") : 1.028  
 C/A sky separation (km) : 7277.8  
 NAIF SPICE kernels : RAJobs\_U111+rgf16.spk

Titan 2035-09-26T09:30:58 K14.03 G17.31 dots 60.0 sec  
 Pt



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 |        |                             | Pnn    |
| 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 | + +    | SEP 26 09:27 - SEP 26 09:29 | Pie    |
| 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    |



target : Titan  
 target radius (km) : 2575.15  
 C/A epoch : 2035-09-26T09:28:48.690  
 Event type : Pt  
 : Titan occs: topocentric, not geocentric  
 : Not a ringed target  
 Observer code : ESO  
 Location : European Southern Obs. (3.6m)  
 Latitude (deg) : -29.26097  
 E. Longitude (deg) : 289.26831  
 Altitude (km) : 2.400  
 Gaia source ID : 607985919630670720  
 2Mass ID (if available) : 09111610+1656594  
 ICRS Star Coord at Epoch: 09h 11m 16.07292s +16:56:58.93429s  
 RUWE (>1.4 is poor) : 0.98  
 K magnitude : 14.025  
 G magnitude : 17.306  
 RP magnitude : 16.244  
 BP magnitude : 18.444  
 DUPflag : 0  
 Distance (au) : 9.758  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 24.72  
 Sun-Target sep (deg) : 47.51  
 Sun-Moon sep (deg) : 18.75  
 B (ring opening deg) : -15.89  
 PA of pole (deg) : -6.76  
 Pole direction: RA (deg): 39.48270  
 Dec (deg): 83.42790  
 C/A sky separation (") : 0.284  
 C/A sky separation (km) : 2010.9  
 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

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   | 2035-09-26T09:27:43.023 | 14.54 | -13.87  | 2575.2 | 22.37   | 22.38        |
| Titan  | E   | 2035-09-26T09:29:54.353 | 14.96 | -13.40  | 2575.1 | 70.96   | 70.97        |

