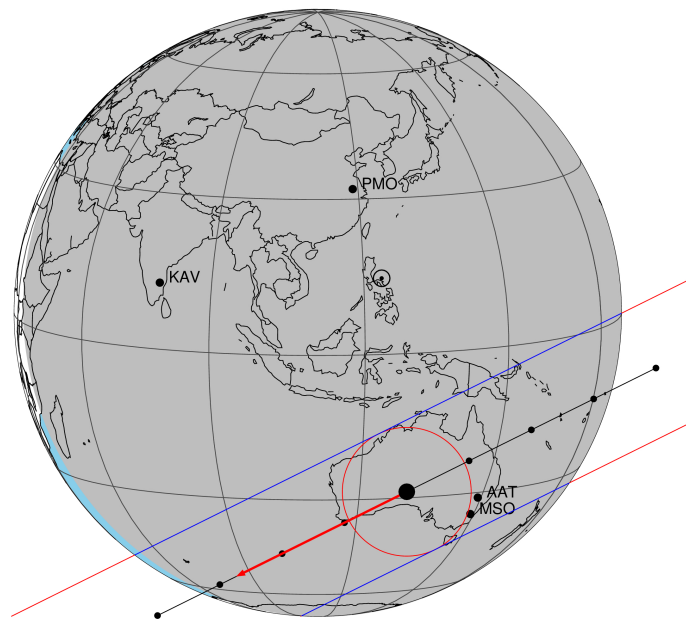


target : Triton
 target radius (km) : 1352.60
 C/A epoch : 2036-10-31T15:29:17.390
 Event type : Pt
 : Triton occs: topocentric, not geocentric
 : Not a ringed target
 Gaia source ID : 2565881494913346176
 2Mass ID (if available) : 01333660+0753332

Triton 2036-10-31T15:29:17 K14.43 G17.69 dots 60.0 sec
 Pt

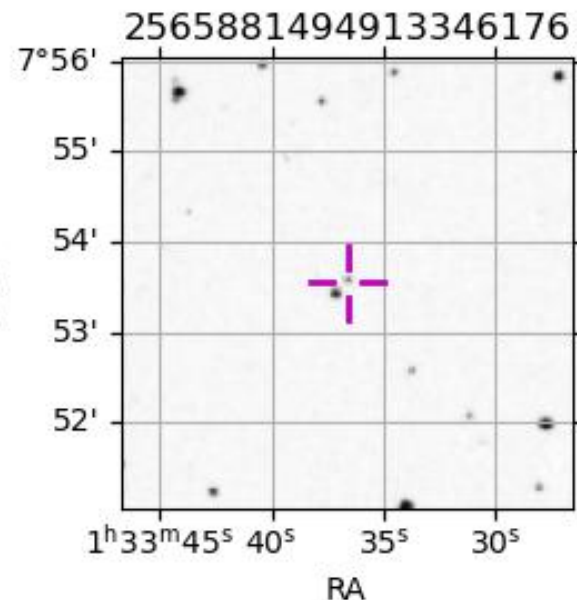
ICRS Star Coord at Epoch: 01h 33m 36.61897s +07:53:32.49827s
 RUWE (>1.4 is poor) : 0.95
 K magnitude : 14.428
 G magnitude : 17.691
 RP magnitude : 16.693
 BP magnitude : 18.745
 DUPflag : 0
 Distance (au) : 28.865
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : -24.34
 Sun-Target sep (deg) : 166.17
 Sun-Moon sep (deg) : 26.13
 B (ring opening deg) : -15.01
 PA of pole (deg) : -70.21
 Pole direction: RA (deg): 306.50880
 Dec (deg): 21.06717
 C/A sky separation (") : 0.201
 C/A sky separation (km) : 4200.2
 NAIF SPICE kernels : RAJobs_U111+rgf16.spk



2036-10-31T15:29:17.3900 α: 01 33 36.6190 δ: +07 53 32.498 C/A 0.201" PA 153.58 deg v_sky -24.35 km/s D 28.87 AU
 Credit: Styled after SORA/Lucky Star

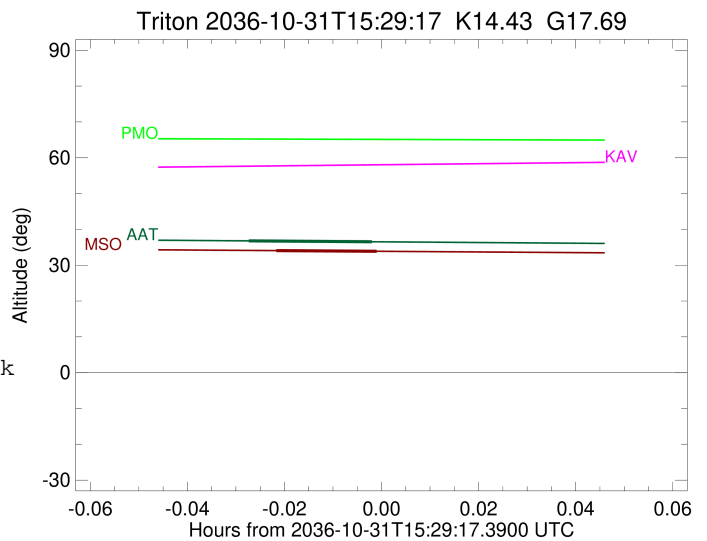
URKALLv1.spk
 naif0012.tls
 nep097.bsp
 nep101.bsp
 sat4401.bsp
 Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEncode
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			Pnn
AAT	Siding Spring (AAT)	-31.3	149.1	+ +	OCT 31 15:27 - OCT 31 15:29	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	OCT 31 15:27 - OCT 31 15:29	Pie



```

target                : Triton
target radius (km)   : 1352.60
C/A epoch            : 2036-10-31T15:28:24.560
Event type          : Pt
: Triton occs: topocentric, not geocentric
: Not a ringed target
Observer code       : AAT
Location            : Siding Spring (AAT)
Latitude (deg)      : -31.27703
E. Longitude (deg)  : 149.06608
Altitude (km)       : 1.164
Gaia source ID      : 2565881494913346176
2Mass ID (if available) : 01333660+0753332
ICRS Star Coord at Epoch: 01h 33m 36.61897s +07:53:32.49827s
RUWE (>1.4 is poor) : 0.95
K magnitude         : 14.428
G magnitude         : 17.691
RP magnitude        : 16.693
BP magnitude        : 18.745
DUPflag            : 0
Distance (au)       : 28.865
f0 (km)            : 0.00
g0 (km)            : 0.00
skyplane vel. (km/s) : -24.34
Sun-Target sep (deg) : 166.17
Sun-Moon sep (deg)  : 26.55
B (ring opening deg) : -15.01
PA of pole (deg)    : -70.21
Pole direction: RA (deg): 306.50880
Dec (deg): 21.06717
C/A sky separation (") : 0.036
C/A sky separation (km) : 748.8
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
    
```



```

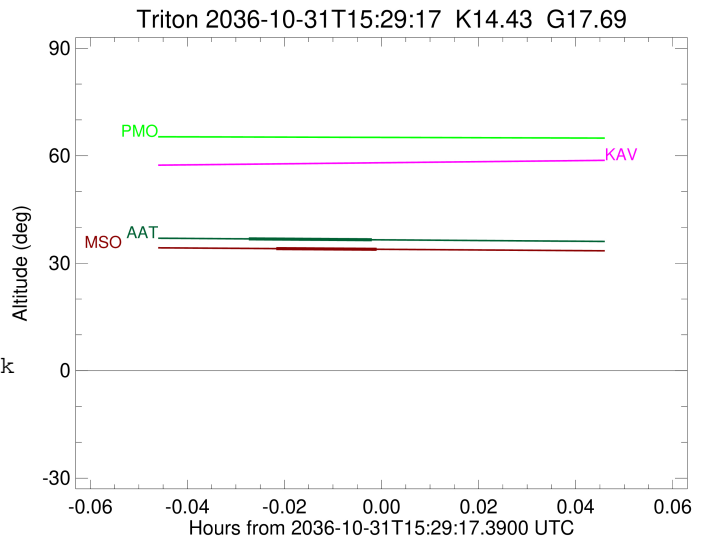
x: target alt < 5.0 deg or sun > -5.0 deg

```

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Triton	I	2036-10-31T15:27:38.849	36.79	-38.48	1352.6	10.07	10.07
Triton	E	2036-10-31T15:29:10.273	36.54	-38.31	1352.6	-70.66	-70.66

```

target                : Triton
target radius (km)   : 1352.60
C/A epoch            : 2036-10-31T15:28:36.370
Event type           : Pt
: Triton occs: topocentric, not geocentric
: Not a ringed target
Observer code        : MSO
Location             : Mt. Stromlo Observatory
Latitude (deg)       : -35.32000
E. Longitude (deg)  : 149.00833
Altitude (km)        : 0.770
Gaia source ID       : 2565881494913346176
2Mass ID (if available) : 01333660+0753332
ICRS Star Coord at Epoch: 01h 33m 36.61897s +07:53:32.49827s
RUWE (>1.4 is poor) : 0.95
K magnitude          : 14.428
G magnitude          : 17.691
RP magnitude         : 16.693
BP magnitude         : 18.745
DUPflag             : 0
Distance (au)        : 28.865
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -24.34
Sun-Target sep (deg) : 166.17
Sun-Moon sep (deg)  : 26.50
B (ring opening deg) : -15.01
PA of pole (deg)    : -70.21
Pole direction: RA (deg): 306.50880
Dec (deg): 21.06717
C/A sky separation (") : 0.047
C/A sky separation (km) : 989.4
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
Triton	I	2036-10-31T15:27:58.922	34.07	-35.01	1352.6	-2.88	-2.88
Triton	E	2036-10-31T15:29:13.821	33.88	-34.88	1352.6	-74.96	-74.96