

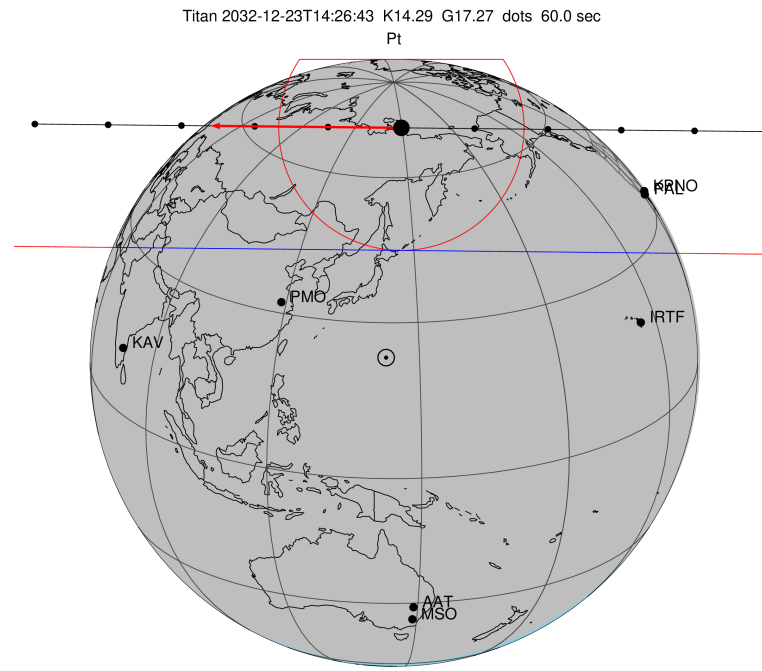
target : Titan
 target radius (km) : 2575.15
 C/A epoch : 2032-12-23T14:26:43.850
 Event type : Pt
 : Titan occs: topocentric, not geocentric
 : Not a ringed target
 Gaia source ID : 3376989470377802752
 2Mass ID (if available) : 06142518+2226541

ICRS Star Coord at Epoch: 06h 14m 25.18700s +22:26:54.11886s
 RUWE (>1.4 is poor) : 1.20
 K magnitude : 14.290
 G magnitude : 17.270
 RP magnitude : 16.307
 BP magnitude : 18.066
 DUPflag : 0
 Distance (au) : 8.025
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : -25.65
 Sun-Target sep (deg) : 178.25
 Sun-Moon sep (deg) : 74.89
 B (ring opening deg) : -26.19
 PA of pole (deg) : -5.93
 Pole direction: RA (deg): 39.48270
 Dec (deg): 83.42790
 C/A sky separation (") : 0.848
 C/A sky separation (km) : 4933.4
 NAIF SPICE kernels : RAJobs_U111+rgf16.spk

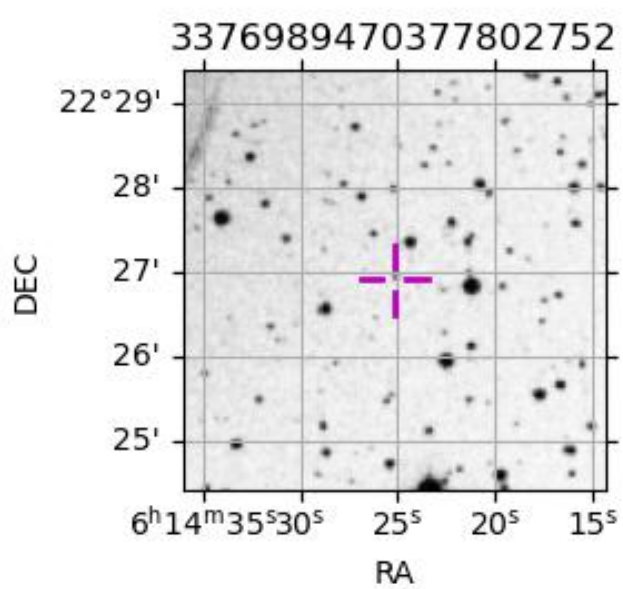
URKALLv1.spk
 naif0012.tls
 nep097.bsp
 nep101.bsp
 sat4401.bsp

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

Obs	Location	lat	Elon	Target	Observed Events Interval	OEncode
PIC	Pic du Midi	42.9	0.1			Pnn
PAL	Palomar Mt (200")	33.4	243.1	+ +	DEC 23 14:21 - DEC 23 14:24	Pie
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			Pnn
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



2032-12-23T14:26:43.8500 α: 06 14 25.1870 δ: +22 26 54.119 C/A 0.849" PA 0.59 deg v_sky -25.65 km/s D 08.02 AU
 Credit: Styled after SORA/Lucky Star



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target                : Titan
target radius (km)   : 2575.15
C/A epoch            : 2032-12-23T14:23:19.940
Event type          : Pt
: Titan occs: topocentric, not geocentric
: Not a ringed target
Observer code       : PAL
Location            : Palomar Mt (200")
Latitude (deg)      : 33.35622
E. Longitude (deg)  : 243.13601
Altitude (km)       : 1.706
Gaia source ID      : 3376989470377802752
2Mass ID (if available) : 06142518+2226541
ICRS Star Coord at Epoch: 06h 14m 25.18700s +22:26:54.11886s
RUWE (>1.4 is poor) : 1.20
K magnitude         : 14.290
G magnitude         : 17.270
RP magnitude        : 16.307
BP magnitude        : 18.066
DUPflag            : 0
Distance (au)       : 8.025
f0 (km)            : 0.00
g0 (km)            : 0.00
skyplane vel. (km/s) : -25.65
Sun-Target sep (deg) : 178.25
Sun-Moon sep (deg)  : 74.79
B (ring opening deg) : -26.19
PA of pole (deg)    : -5.93
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (" ) : 0.235
C/A sky separation (km) : 1368.6
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	2032-12-23T14:21:54.740	6.43	-5.75	2575.1	-23.07	-23.09
Titan	E	2032-12-23T14:24:45.144	5.88	-5.21	2575.1	-33.80	-33.81

