

target : Titan  
 target radius (km) : 2575.15  
 C/A epoch : 2046-04-28T04:14:21.220  
 Event type : Pt  
 : Titan occs: topocentric, not geocentric  
 : Not a ringed target  
 Gaia source ID : 4120818986512612608  
 2Mass ID (if available) : 17252414-2138369

ICRS Star Coord at Epoch: 17h 25m 24.13582s -21:38:37.04267s  
 RUWE (>1.4 is poor) : 0.99  
 K magnitude : 14.948  
 G magnitude : 17.783  
 RP magnitude : 16.873  
 BP magnitude : 18.675  
 DUPflag : 0  
 Distance (au) : 9.287  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : -13.93  
 Sun-Target sep (deg) : 135.44  
 Sun-Moon sep (deg) : 47.65  
 B (ring opening deg) : 26.46  
 PA of pole (deg) : 4.89  
 Pole direction: RA (deg): 39.48270  
 Dec (deg): 83.42790  
 C/A sky separation (") : 0.685  
 C/A sky separation (km) : 4612.9  
 NAIF SPICE kernels : RAJobs\_U111+rgf16.spk

Titan 2046-04-28T04:14:21 K14.95 G17.78 dots 60.0 sec  
 Pt

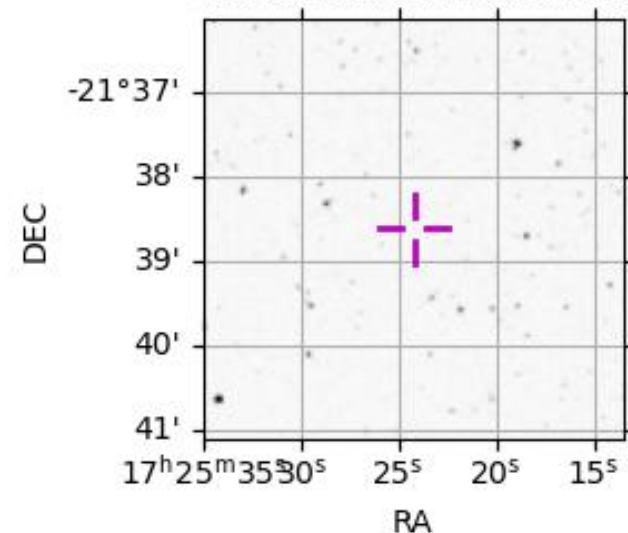


2046-04-28T04:14:21.2200 cc: 17 25 24.1358 s: -21 38 37.043 C/A 0.687" PA 193.70 deg v\_sky -13.93 km/s D 09.29 AU  
 Credit: Styled after SORA/Lucky Star

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

Obs	Location	lat	Elon	Target	Observed Events Interval	OCode
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	+ +	APR 28 04:17 - APR 28 04:20	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

4120818986512612608



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target                : Titan
target radius (km)   : 2575.15
C/A epoch            : 2046-04-28T04:18:58.020
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       : 4120818986512612608
2Mass ID (if available) : 17252414-2138369
ICRS Star Coord at Epoch: 17h 25m 24.13582s -21:38:37.04267s
RUWE (>1.4 is poor) : 0.99
K magnitude          : 14.948
G magnitude          : 17.783
RP magnitude         : 16.873
BP magnitude         : 18.675
DUPflag             : 0
Distance (au)        : 9.287
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -13.93
Sun-Target sep (deg) : 135.44
Sun-Moon sep (deg)  : 48.52
B (ring opening deg) : 26.46
PA of pole (deg)    : 4.89
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.302
C/A sky separation (km) : 2037.2
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	2046-04-28T04:17:06.644	42.67	-74.16	2575.1	51.11	51.12
Titan	E	2046-04-28T04:20:49.386	43.48	-74.43	2575.1	38.60	38.62

