

target : Titan  
 target radius (km) : 2575.15  
 C/A epoch : 2032-08-27T04:49:10.260  
 Event type : Pgt  
 : Titan occs: geocentric, topocentric  
 : Not a ringed target  
 Gaia source ID : 3376843029171591552  
 2Mass ID (if available) : 06184467+2221343

ICRS Star Coord at Epoch: 06h 18m 44.67705s +22:21:34.31713s  
 RUWE (>1.4 is poor) : 1.22  
 K magnitude : 14.618  
 G magnitude : 18.133  
 RP magnitude : 17.078  
 BP magnitude : 19.091  
 DUPflag : 0  
 Distance (au) : 9.489  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 29.26  
 Sun-Target sep (deg) : 59.70  
 Sun-Moon sep (deg) : 37.73  
 B (ring opening deg) : -26.00  
 PA of pole (deg) : -6.00  
 Pole direction: RA (deg): 39.48270  
 Dec (deg): 83.42790  
 C/A sky separation (") : 0.313  
 C/A sky separation (km) : 2156.1  
 NAIF SPICE kernels : RAJobs\_U111+rgf16.spk

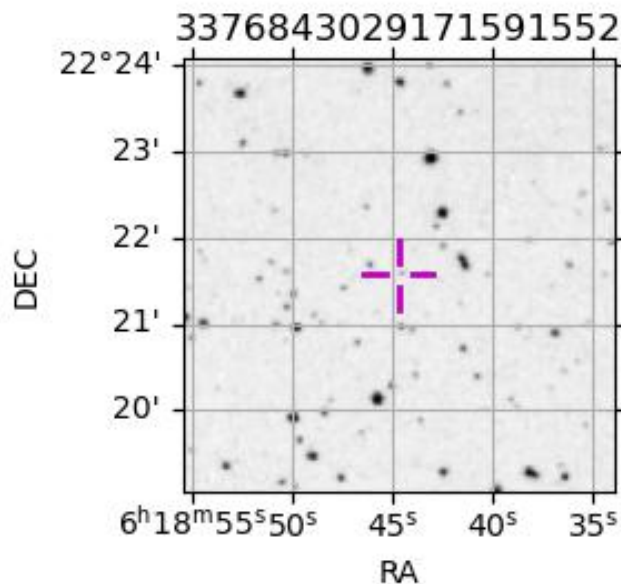
Titan 2032-08-27T04:49:10 K14.62 G18.13 dots 60.0 sec  
 Pgt



2032-08-27T04:49:10.2600 α: 06 18 44.6771 δ: +22 21 34.317 C/A 0.313" PA 358.38 deg v\_sky +29.27 km/s D 09.49 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	+ +	AUG 27 04:45 - AUG 27 04:48	Pie
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	+ +	AUG 27 04:44 - AUG 27 04:47	Pie
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



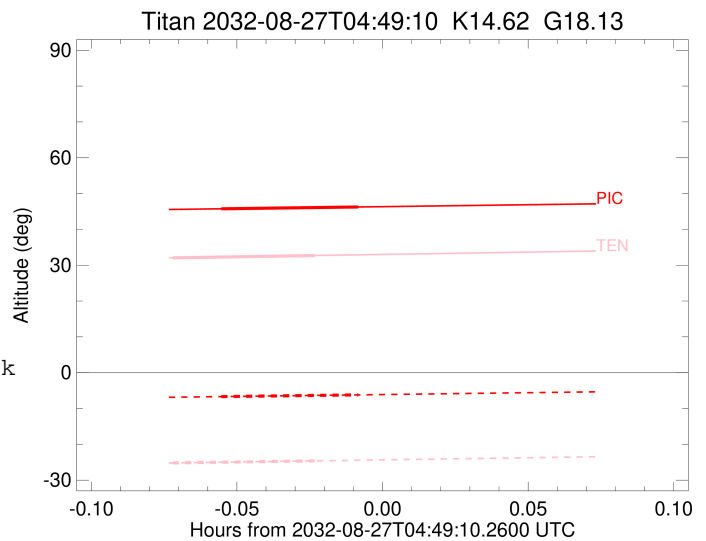
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target                : Titan
target radius (km)   : 2575.15
C/A epoch             : 2032-08-27T04:47:15.360
Event type            : Pgt
: Titan occs: geocentric, topocentric
: Not a ringed target
Observer code         : PIC
Location              : Pic du Midi
Latitude (deg)        : 42.93656
E. Longitude (deg)    : 0.14231
Altitude (km)         : 2.890
Gaia source ID        : 3376843029171591552
2Mass ID (if available) : 06184467+2221343
ICRS Star Coord at Epoch: 06h 18m 44.67705s +22:21:34.31713s
RUWE (>1.4 is poor)  : 1.22
K magnitude           : 14.618
G magnitude           : 18.133
RP magnitude          : 17.078
BP magnitude          : 19.091
DUPflag              : 0
Distance (au)         : 9.489
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.26
Sun-Target sep (deg)  : 59.70
Sun-Moon sep (deg)    : 37.76
B (ring opening deg)  : -26.00
PA of pole (deg)      : -6.00
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.105
C/A sky separation (km) : 720.0
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

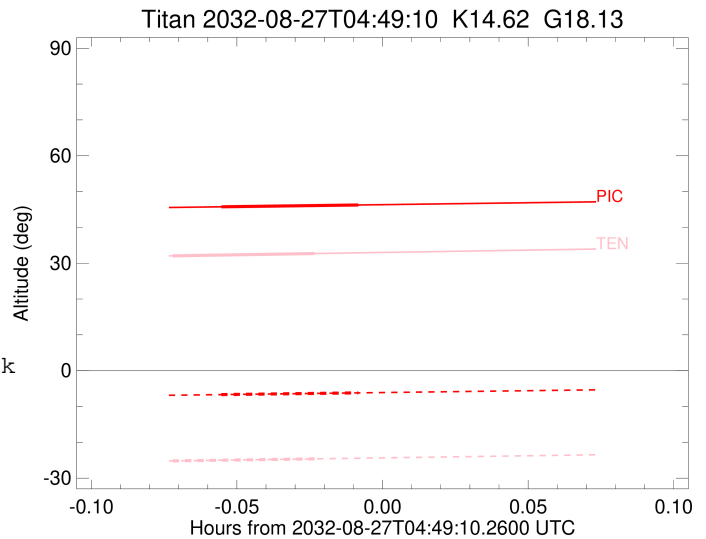
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Titan	I	2032-08-27T04:45:50.225	45.73	-6.69	2575.1	10.81	10.81
Titan	E	2032-08-27T04:48:40.512	46.24	-6.20	2575.1	18.28	18.29



```

target                : Titan
target radius (km)   : 2575.15
C/A epoch             : 2032-08-27T04:46:19.010
Event type            : Pgt
: Titan occs: geocentric, topocentric
: Not a ringed target
Observer code         : TEN
Location              : Teide Obs./Tenerife
Latitude (deg)       : 28.30050
E. Longitude (deg)   : 343.48909
Altitude (km)        : 2.395
Gaia source ID       : 3376843029171591552
2Mass ID (if available) : 06184467+2221343
ICRS Star Coord at Epoch: 06h 18m 44.67705s +22:21:34.31713s
RUWE (>1.4 is poor) : 1.22
K magnitude           : 14.618
G magnitude           : 18.133
RP magnitude          : 17.078
BP magnitude          : 19.091
DUPflag              : 0
Distance (au)        : 9.489
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 29.26
Sun-Target sep (deg) : 59.70
Sun-Moon sep (deg)   : 37.46
B (ring opening deg) : -26.00
PA of pole (deg)     : -6.00
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.027
C/A sky separation (km) : 184.8
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
Titan	I	2032-08-27T04:44:50.729	32.05	-25.19	2575.1	-7.38	-7.38
Titan	E	2032-08-27T04:47:47.299	32.69	-24.61	2575.2	-0.00	-0.00