



```

target                : Titan
target radius (km)   : 2575.15
C/A epoch             : 2047-08-27T14:26:08.960
Event type            : Pgt
: Titan occs: geocentric, topocentric
: Not a ringed target
Observer code         : KAV
Location              : Kavalur Observatory
Latitude (deg)        : 12.57556
E. Longitude (deg)    : 78.83167
Altitude (km)         : 0.722
Gaia source ID        : 4068973955290833152
2Mass ID (if available) : 17484000-2228388
ICRS Star Coord at Epoch: 17h 48m 40.01176s -22:28:39.24125s
RUWE (>1.4 is poor)  : 0.93
K magnitude           : 8.829
G magnitude           : 14.389
RP magnitude          : 13.012
BP magnitude          : 16.650
DUPflag              : 0
Distance (au)         : 9.600
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s)  : 3.23
Sun-Target sep (deg)  : 113.76
Sun-Moon sep (deg)    : 31.34
B (ring opening deg)  : 26.81
PA of pole (deg)      : 5.44
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.076
C/A sky separation (km) : 526.9
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

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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	2047-08-27T14:13:11.139	55.02	-18.62	2575.0	-61.26	-61.27
Titan	E	2047-08-27T14:39:08.099	54.44	-24.70	2575.0	60.38	60.40

