


```

target                : Titan
target radius (km)   : 2575.15
C/A epoch             : 2047-03-24T05:24:10.200
Event type           : Pgt
: Titan occs: geocentric, topocentric
: Not a ringed target
Observer code        : RIO
Location             : Rio de Janeiro
Latitude (deg)       : -22.89506
E. Longitude (deg)   : 316.77708
Altitude (km)        : 0.033
Gaia source ID       : 4090523627234663040
2Mass ID (if available) : 18154651-2219365
ICRS Star Coord at Epoch: 18h 15m 46.50460s -22:19:36.59188s
RUWE (>1.4 is poor) : 1.81
K magnitude           : 11.046
G magnitude           : 15.051
RP magnitude          : 13.831
BP magnitude          : 15.981
DUPflag              : 0
Distance (au)         : 10.005
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 6.58
Sun-Target sep (deg) : 89.20
Sun-Moon sep (deg)   : 65.08
B (ring opening deg) : 26.04
PA of pole (deg)     : 5.95
Pole direction: RA (deg): 39.48270
Dec (deg): 83.42790
C/A sky separation (") : 0.200
C/A sky separation (km) : 1450.6
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	2047-03-24T05:18:37.282	38.08	-49.97	2575.1	-35.56	-35.58
Titan	E	2047-03-24T05:29:44.076	40.60	-47.67	2575.1	-25.16	-25.17

