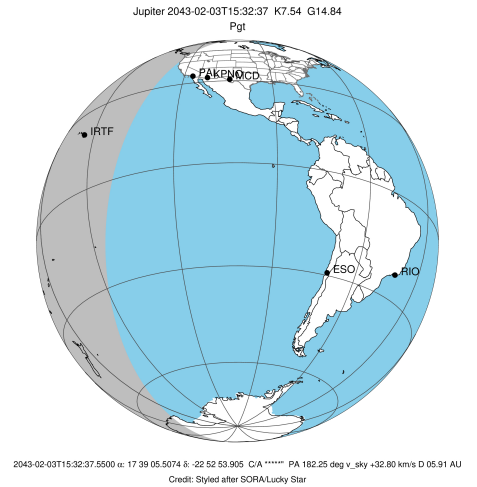
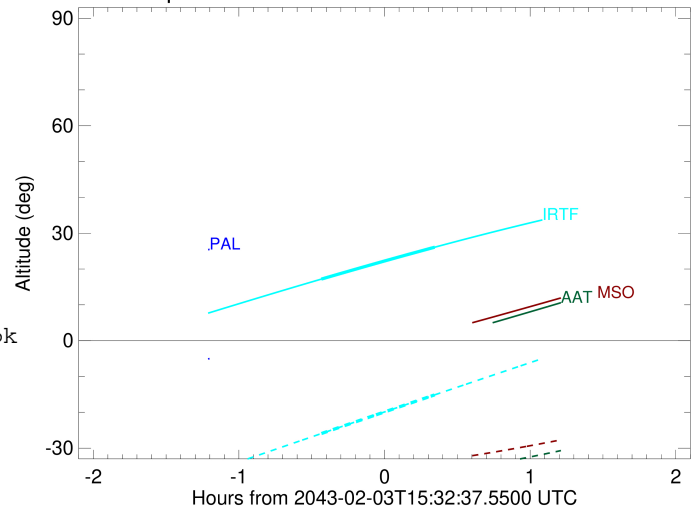



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-03T15:29:57.040
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : IRTF
Location             : Mauna Kea/IRTF
Latitude (deg)       : 19.82622
E. Longitude (deg)   : 204.52800
Altitude (km)        : 4.168
Gaia source ID       : 4116748525780511232
2Mass ID (if available) : 17390551-2252538
ICRS Star Coord at Epoch: 17h 39m 05.50739s -22:52:53.90525s
RUWE (>1.4 is poor) : 0.99
K magnitude           : 7.545
G magnitude           : 14.842
RP magnitude         : 13.220
BP magnitude         : 18.853
DUPflag              : 0
Distance (au)        : 5.908
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 32.80
Sun-Target sep (deg) : 48.91
Sun-Moon sep (deg)   : 25.07
B (ring opening deg) : -2.58
PA of pole (deg)     : 1.41
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 12.871
C/A sky separation (km) : 55145.6
NAIF SPICE kernels   : RAJobs_U111+rgf15.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
uranus_ringframes_rfrench20220627_v1.tf
neptune_ringframes_rfrench20220702a_v1.tf
earth_flat_IAU.spk
    
```



Jupiter 2043-02-03T15:32:37 K7.54 G14.84



x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-03T15:06:40.155	17.20	-25.91	71486.8	49.31	52.92
Jupiter	E	2043-02-03T15:53:15.794	26.07	-15.14	71486.4	51.50	55.03