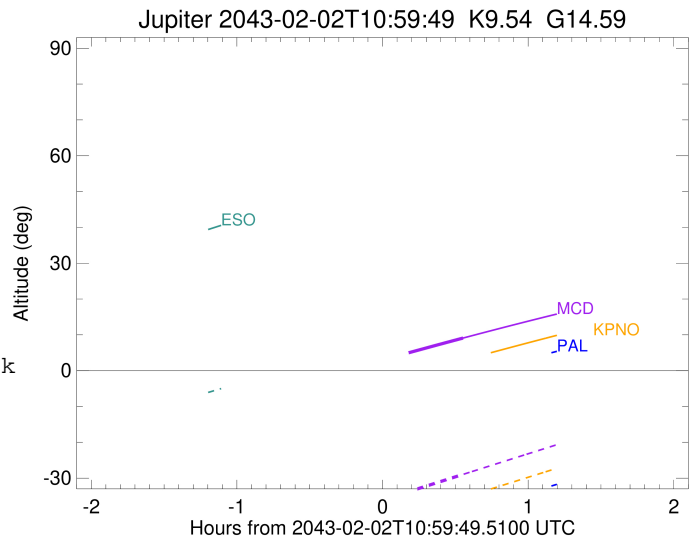
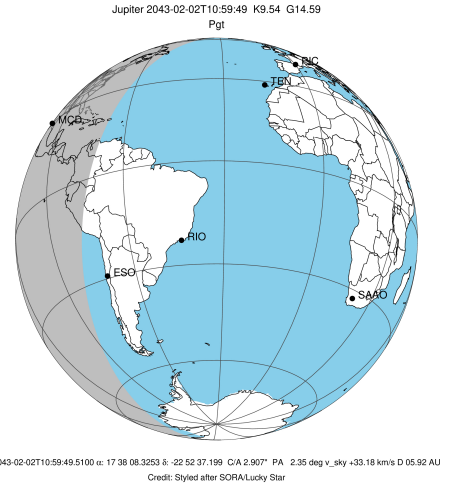




```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-02T10:57:09.130
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : MCD
Location              : McDonald Obs. 2.7m
Latitude (deg)        : 30.67158
E. Longitude (deg)    : 255.97844
Altitude (km)         : 2.075
Gaia source ID        : 4116729623551632384
2Mass ID (if available) : 17380832-2252369
ICRS Star Coord at Epoch: 17h 38m 08.32528s -22:52:37.19901s
RUWE (>1.4 is poor) : 1.06
K magnitude           : 9.541
G magnitude           : 14.590
RP magnitude          : 13.317
BP magnitude          : 16.408
DUPflag              : 0
Distance (au)         : 5.922
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 33.18
Sun-Target sep (deg)  : 47.92
Sun-Moon sep (deg)   : 38.67
B (ring opening deg) : -2.58
PA of pole (deg)     : 1.52
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (" ) : 2.098
C/A sky separation (km) : 9011.7
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
    
```



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	2043-02-02T10:21:26.540	-4.45x	-44.35	71491.8	-8.33	-9.51
Jupiter	E	2043-02-02T11:32:56.224	9.09	-28.97	71491.9	-6.14	-7.02