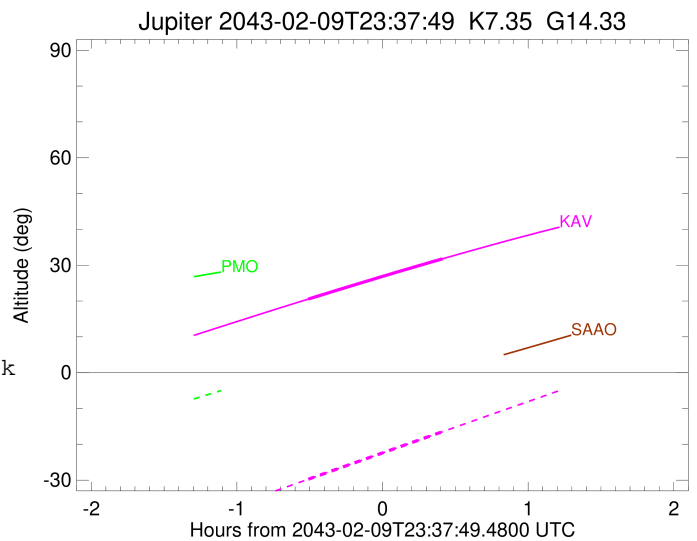
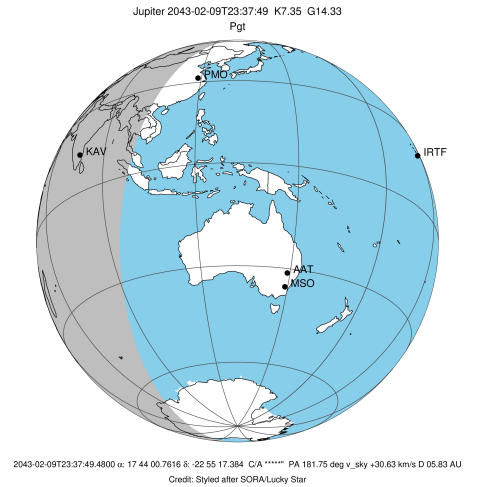




```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-09T23:34:54.350
Event type           : Pgt
: Jupiter 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       : 4116869059755941888
2Mass ID (if available) : 17440076-2255169
ICRS Star Coord at Epoch: 17h 44m 00.76156s -22:55:17.38370s
RUWE (>1.4 is poor) : 0.93
K magnitude          : 7.350
G magnitude          : 14.327
RP magnitude         : 12.691
BP magnitude         : 18.623
DUPflag             : 0
Distance (au)        : 5.827
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 30.63
Sun-Target sep (deg) : 54.20
Sun-Moon sep (deg)   : 56.47
B (ring opening deg) : -2.57
PA of pole (deg)     : 0.88
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation ("): 11.998
C/A sky separation (km): 50702.8
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	2043-02-09T23:07:16.297	20.54	-29.74	71487.7	43.96	47.67
Jupiter	E	2043-02-10T00:02:35.335	31.78	-16.47	71487.3	46.25	49.94