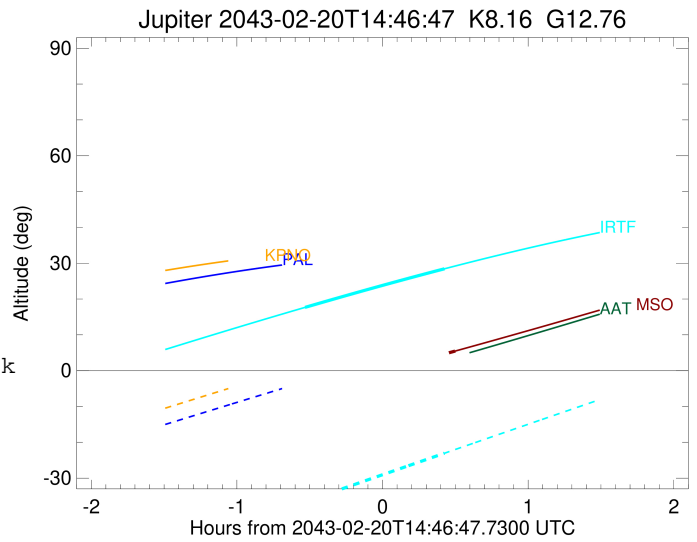
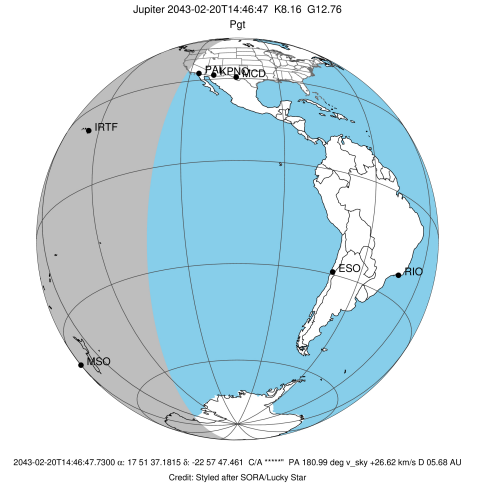




```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-20T14:43:35.680
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       : 4068712134119519872
2Mass ID (if available) : 17513718-2257471
ICRS Star Coord at Epoch: 17h 51m 37.18149s -22:57:47.46135s
RUWE (>1.4 is poor) : 0.87
K magnitude          : 8.161
G magnitude          : 12.763
RP magnitude         : 11.571
BP magnitude         : 14.271
DUPflag             : 0
Distance (au)        : 5.679
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 26.62
Sun-Target sep (deg) : 63.19
Sun-Moon sep (deg)  : 157.09
B (ring opening deg) : -2.54
PA of pole (deg)    : 0.07
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (" ) : 13.408
C/A sky separation (km) : 55222.7
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
    
```

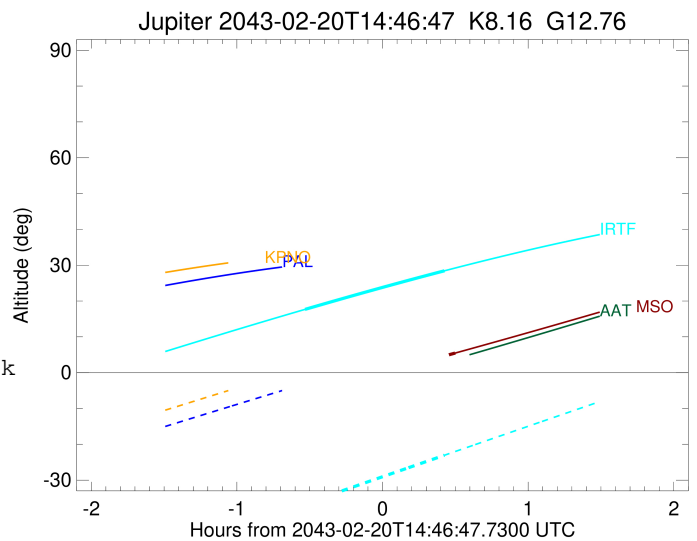
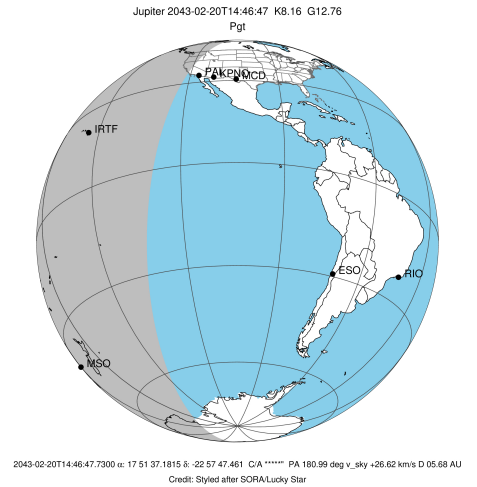


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-20T14:14:54.381	17.67	-36.56	71486.9	49.27	52.88
Jupiter	E	2043-02-20T15:12:20.491	28.44	-23.05	71486.6	51.72	55.25

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-20T14:43:34.340
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : MSO
Location              : Mt. Stromlo Observatory
Latitude (deg)        : -35.32000
E. Longitude (deg)    : 149.00833
Altitude (km)         : 0.770
Gaia source ID        : 4068712134119519872
2Mass ID (if available) : 17513718-2257471
ICRS Star Coord at Epoch: 17h 51m 37.18149s -22:57:47.46135s
RUWE (>1.4 is poor)  : 0.87
K magnitude           : 8.161
G magnitude           : 12.763
RP magnitude          : 11.571
BP magnitude          : 14.271
DUPflag              : 0
Distance (au)         : 5.679
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 26.62
Sun-Target sep (deg)  : 63.19
Sun-Moon sep (deg)    : 156.71
B (ring opening deg) : -2.54
PA of pole (deg)      : 0.07
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 11.608
C/A sky separation (km) : 47807.4
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	2043-02-20T14:10:29.039	-6.38x	-44.01	71488.3	40.70	44.42
Jupiter	E	2043-02-20T15:16:44.353	5.47	-41.97	71487.9	43.15	46.87