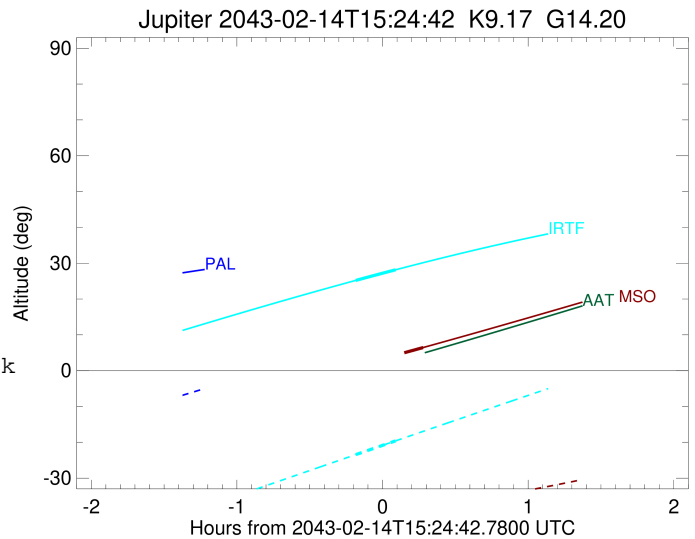
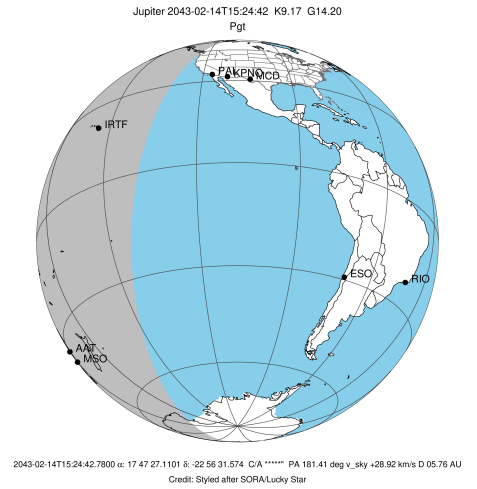



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-14T15:21:54.930
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      : 4068932135147012096
2Mass ID (if available) : 17472710-2256313
ICRS Star Coord at Epoch: 17h 47m 27.11013s -22:56:31.57429s
RUWE (>1.4 is poor) : 0.94
K magnitude          : 9.174
G magnitude          : 14.201
RP magnitude         : 12.921
BP magnitude         : 16.023
DUPflag             : 0
Distance (au)       : 5.763
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 28.92
Sun-Target sep (deg) : 58.12
Sun-Moon sep (deg)  : 120.91
B (ring opening deg) : -2.56
PA of pole (deg)    : 0.51
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 16.765
C/A sky separation (km) : 70079.2
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
    
```

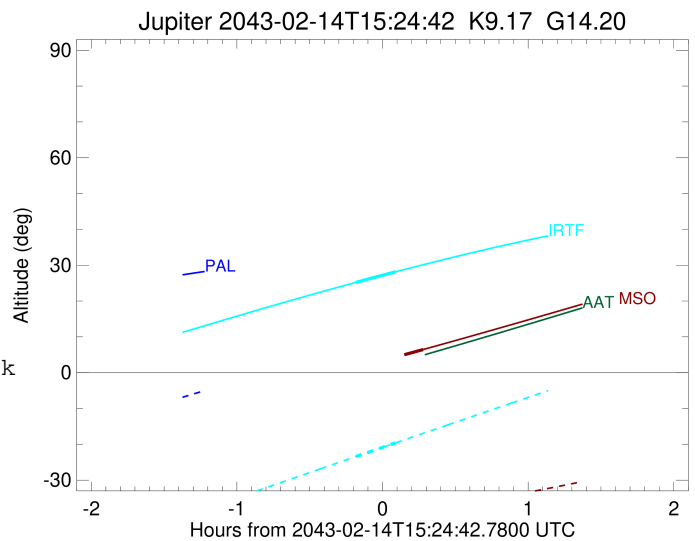
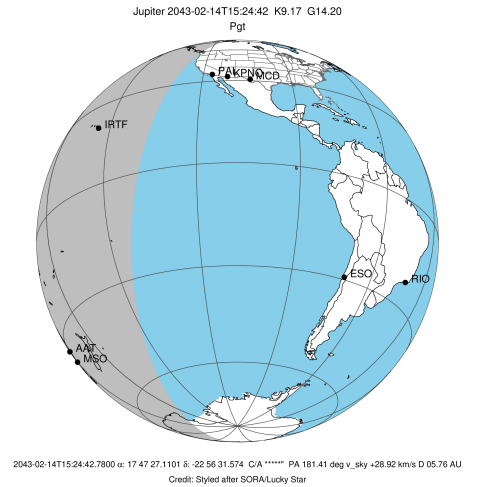


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-14T15:13:42.437	25.19	-23.43	71483.5	77.21	78.69
Jupiter	E	2043-02-14T15:30:07.649	28.16	-19.59	71483.4	79.47	80.69

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-14T15:21:39.690
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       : 4068932135147012096
2Mass ID (if available) : 17472710-2256313
ICRS Star Coord at Epoch: 17h 47m 27.11013s -22:56:31.57429s
RUWE (>1.4 is poor) : 0.94
K magnitude           : 9.174
G magnitude           : 14.201
RP magnitude         : 12.921
BP magnitude         : 16.023
DUPflag              : 0
Distance (au)        : 5.763
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 28.92
Sun-Target sep (deg) : 58.12
Sun-Moon sep (deg)   : 120.51
B (ring opening deg) : -2.56
PA of pole (deg)     : 0.51
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 14.992
C/A sky separation (km) : 62666.3
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	2043-02-14T15:01:55.137	-0.80x	-40.84	71485.3	59.97	63.04
Jupiter	E	2043-02-14T15:41:25.792	6.45	-38.05	71485.0	62.31	65.20