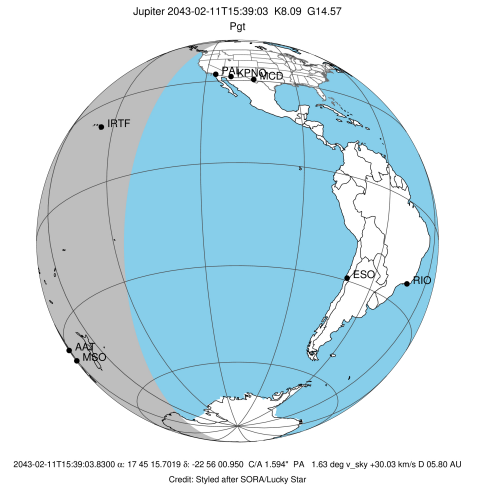
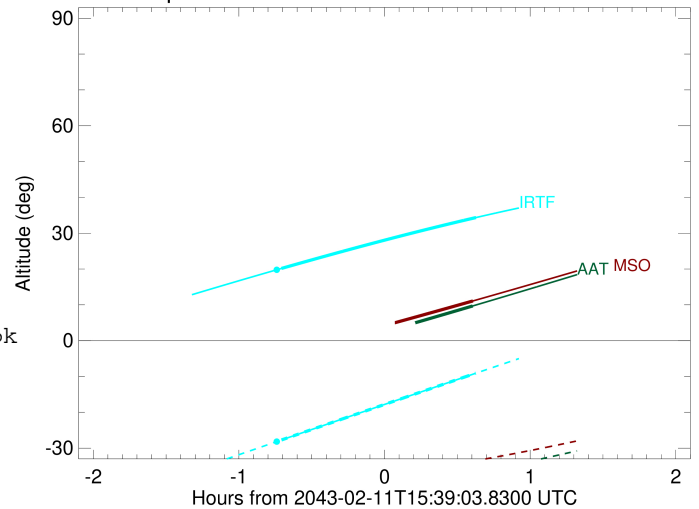



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-11T15:36:36.000
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       : 4068850981807825408
2Mass ID (if available) : 17451570-2256008
ICRS Star Coord at Epoch: 17h 45m 15.70193s -22:56:00.94973s
RUWE (>1.4 is poor) : 1.11
K magnitude           : 8.088
G magnitude           : 14.566
RP magnitude         : 13.037
BP magnitude         : 18.089
DUPflag              : 0
Distance (au)        : 5.804
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 30.03
Sun-Target sep (deg) : 55.60
Sun-Moon sep (deg)   : 79.32
B (ring opening deg) : -2.56
PA of pole (deg)     : 0.75
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 0.757
C/A sky separation (km) : 3186.4
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
    
```



Jupiter 2043-02-11T15:39:03 K8.09 G14.57

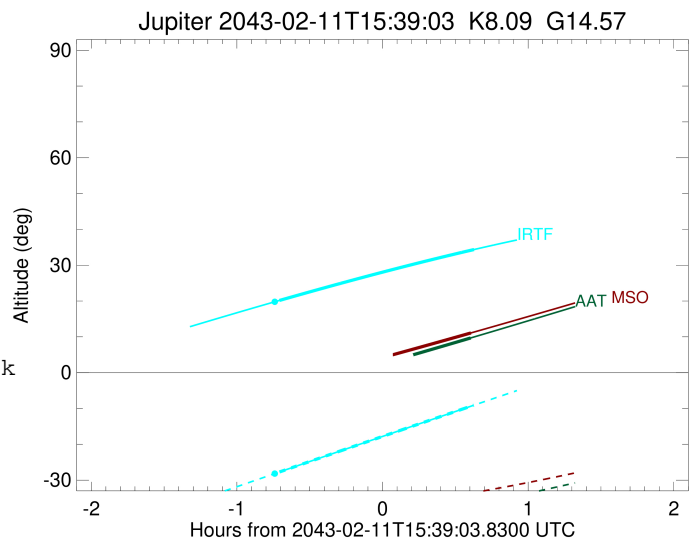
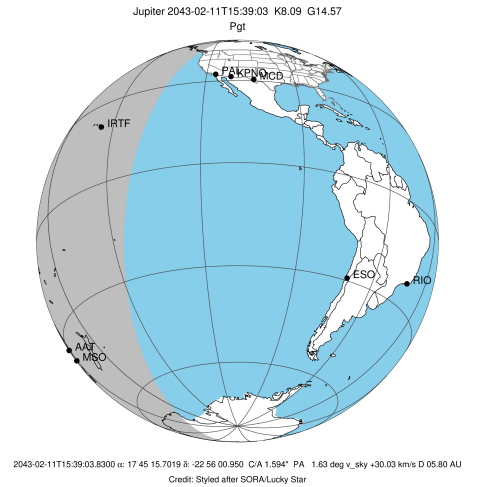


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-11T14:56:36.920	20.16	-27.72	71492.0	-3.70	-4.23
Jupiter	E	2043-02-11T16:16:40.581	34.35	-9.09	71492.0	-1.44	-1.65

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-11T15:36:10.770
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : AAT
Location              : Siding Spring (AAT)
Latitude (deg)        : -31.27703
E. Longitude (deg)    : 149.06608
Altitude (km)         : 1.164
Gaia source ID        : 4068850981807825408
2Mass ID (if available) : 17451570-2256008
ICRS Star Coord at Epoch: 17h 45m 15.70193s -22:56:00.94973s
RUWE (>1.4 is poor) : 1.11
K magnitude           : 8.088
G magnitude           : 14.566
RP magnitude          : 13.037
BP magnitude          : 18.089
DUPflag              : 0
Distance (au)         : 5.804
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 30.03
Sun-Target sep (deg) : 55.60
Sun-Moon sep (deg)   : 78.93
B (ring opening deg) : -2.56
PA of pole (deg)     : 0.75
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 2.442
C/A sky separation (km) : 10278.6
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
    
```

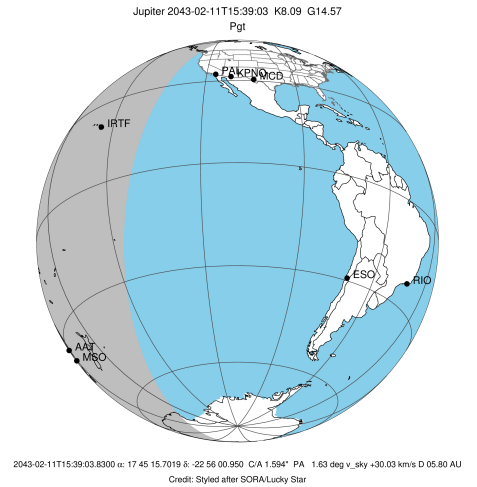


x: target alt < 5.0 deg or sun > -5.0 deg

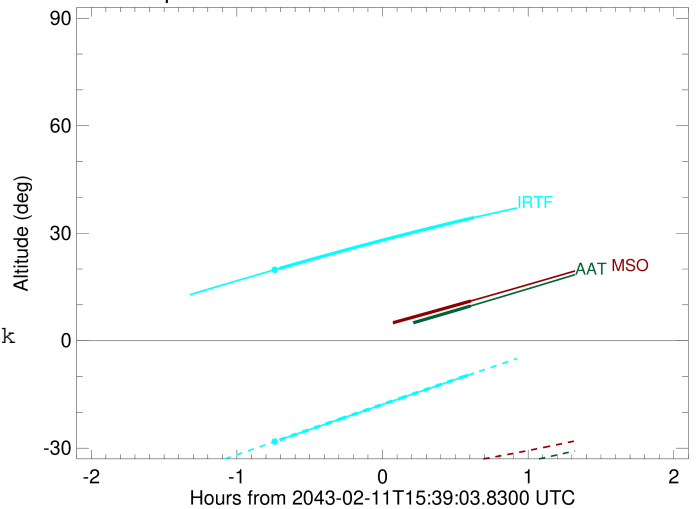
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-11T14:57:04.805	-5.41x	-44.00	71491.8	-9.41	-10.73
Jupiter	E	2043-02-11T16:15:22.805	9.68	-36.88	71491.9	-7.09	-8.09

```

target                : Jupiter
target radius (km)    : 71492.00
C/A epoch             : 2043-02-11T15:36:19.030
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        : 4068850981807825408
2Mass ID (if available) : 17451570-2256008
ICRS Star Coord at Epoch: 17h 45m 15.70193s -22:56:00.94973s
RUWE (>1.4 is poor) : 1.11
K magnitude           : 8.088
G magnitude           : 14.566
RP magnitude          : 13.037
BP magnitude          : 18.089
DUPflag              : 0
Distance (au)         : 5.804
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 30.03
Sun-Target sep (deg) : 55.60
Sun-Moon sep (deg)   : 78.95
B (ring opening deg) : -2.56
PA of pole (deg)     : 0.75
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 2.518
C/A sky separation (km) : 10598.0
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 2043-02-11T15:39:03 K8.09 G14.57



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	2043-02-11T14:57:14.217	-3.34x	-40.07	71491.8	-9.66	-11.01
Jupiter	E	2043-02-11T16:15:29.687	11.09	-33.61	71491.9	-7.36	-8.40