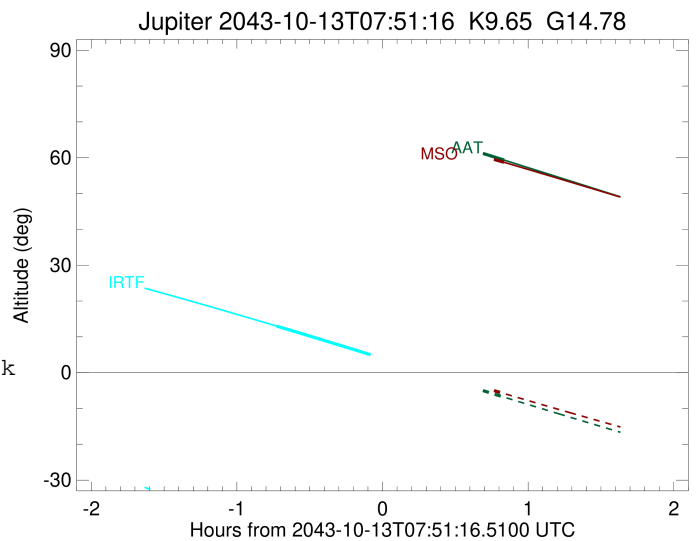
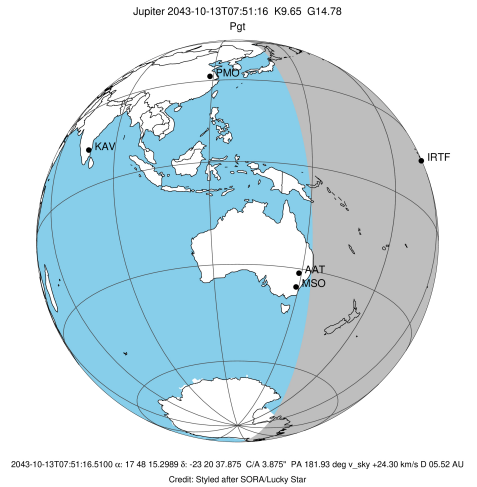



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-13T07:55:19.820
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       : 4068768101721817472
2Mass ID (if available) : 17481531-2320377
ICRS Star Coord at Epoch: 17h 48m 15.29891s -23:20:37.87468s
RUWE (>1.4 is poor) : 1.01
K magnitude           : 9.649
G magnitude           : 14.781
RP magnitude          : 13.466
BP magnitude          : 16.631
DUPflag              : 0
Distance (au)        : 5.517
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 24.30
Sun-Target sep (deg) : 68.04
Sun-Moon sep (deg)   : 44.92
B (ring opening deg) : -2.16
PA of pole (deg)     : 0.43
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (") : 4.549
C/A sky separation (km) : 18199.3
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
    
```

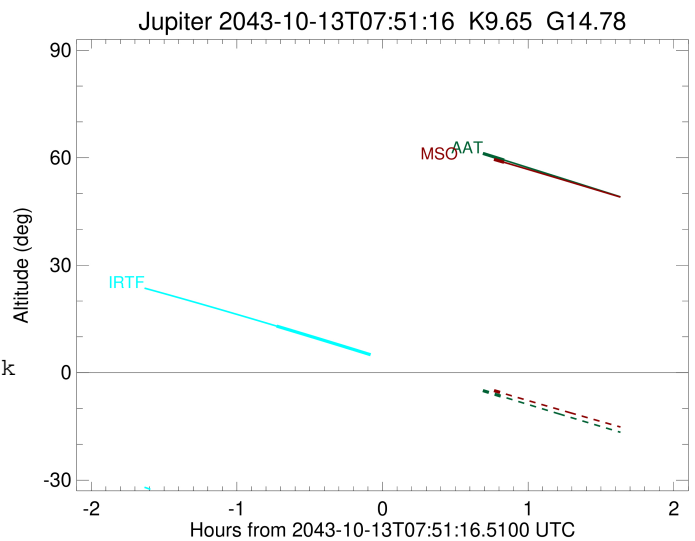
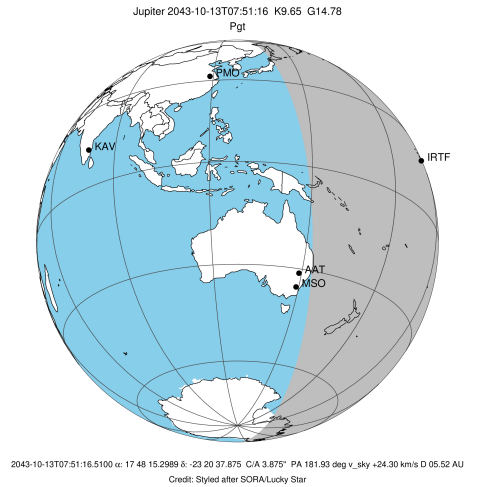


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-13T07:07:37.057	13.00	-44.73	71491.6	13.62	15.48
Jupiter	E	2043-10-13T08:42:50.217	-7.11x	-66.16	71491.5	15.83	17.95

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-13T07:52:40.430
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       : 4068768101721817472
2Mass ID (if available) : 17481531-2320377
ICRS Star Coord at Epoch: 17h 48m 15.29891s -23:20:37.87468s
RUWE (>1.4 is poor) : 1.01
K magnitude           : 9.649
G magnitude           : 14.781
RP magnitude         : 13.466
BP magnitude         : 16.631
DUPflag              : 0
Distance (au)        : 5.517
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 24.30
Sun-Target sep (deg) : 68.04
Sun-Moon sep (deg)   : 45.87
B (ring opening deg) : -2.16
PA of pole (deg)     : 0.43
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (") : 3.646
C/A sky separation (km) : 14587.9
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
    
```

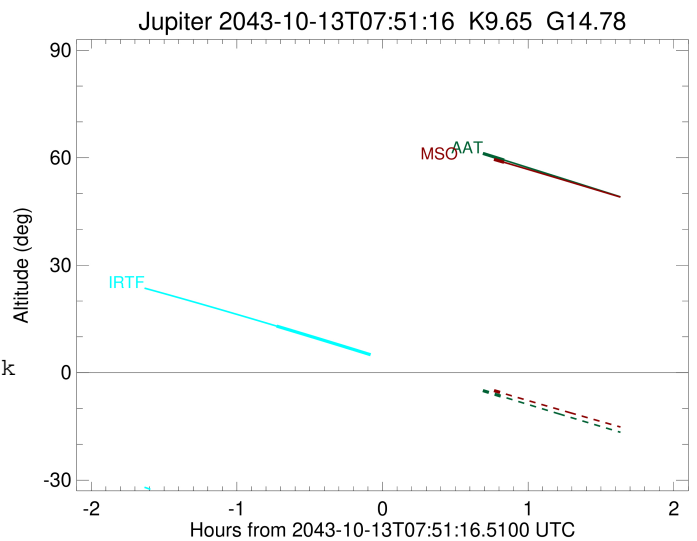
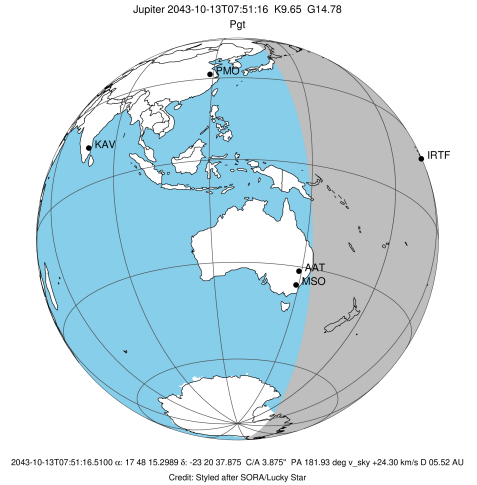


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-13T07:03:52.848	78.82	13.84x	71491.8	10.34	11.78
Jupiter	E	2043-10-13T08:41:22.387	59.34	-6.82	71491.7	13.11	14.91

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-13T07:52:36.920
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       : 4068768101721817472
2Mass ID (if available) : 17481531-2320377
ICRS Star Coord at Epoch: 17h 48m 15.29891s -23:20:37.87468s
RUWE (>1.4 is poor) : 1.01
K magnitude           : 9.649
G magnitude           : 14.781
RP magnitude         : 13.466
BP magnitude         : 16.631
DUPflag              : 0
Distance (au)        : 5.517
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 24.30
Sun-Target sep (deg) : 68.04
Sun-Moon sep (deg)   : 45.87
B (ring opening deg) : -2.16
PA of pole (deg)     : 0.43
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (" ) : 3.537
C/A sky separation (km) : 14151.4
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	2043-10-13T07:03:47.731	75.86	13.92x	71491.8	9.98	11.37
Jupiter	E	2043-10-13T08:41:20.660	58.72	-5.82	71491.7	12.76	14.51