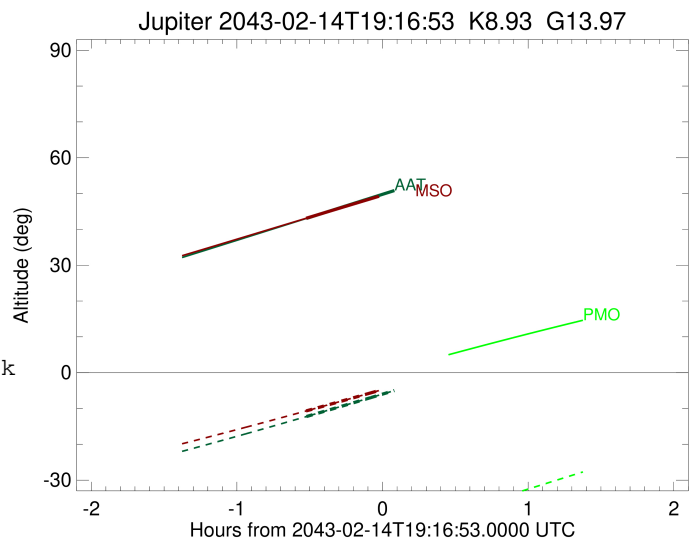
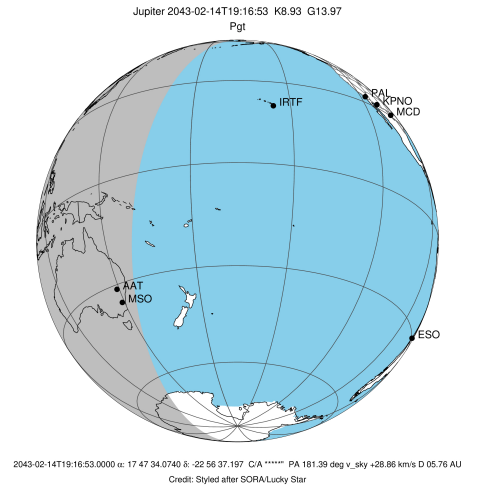



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-14T19:14:32.920
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       : 4068885508966980608
2Mass ID (if available) : 17473407-2256371
ICRS Star Coord at Epoch: 17h 47m 34.07395s -22:56:37.19682s
RUWE (>1.4 is poor) : 0.89
K magnitude           : 8.930
G magnitude           : 13.973
RP magnitude          : 12.677
BP magnitude          : 15.913
DUPflag              : 0
Distance (au)         : 5.761
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 28.86
Sun-Target sep (deg)  : 58.25
Sun-Moon sep (deg)    : 123.43
B (ring opening deg) : -2.55
PA of pole (deg)     : 0.50
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (" ) : 12.290
C/A sky separation (km) : 51350.9
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
    
```

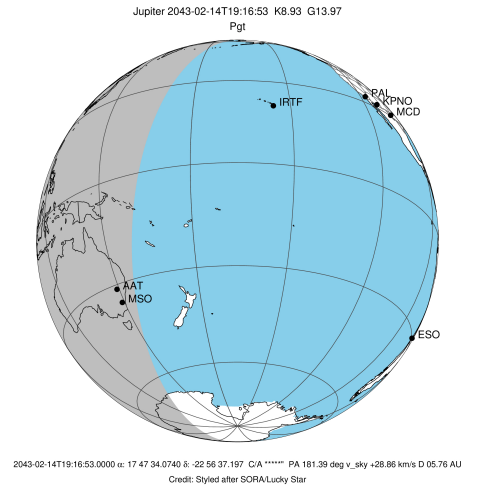


x: target alt < 5.0 deg or sun > -5.0 deg

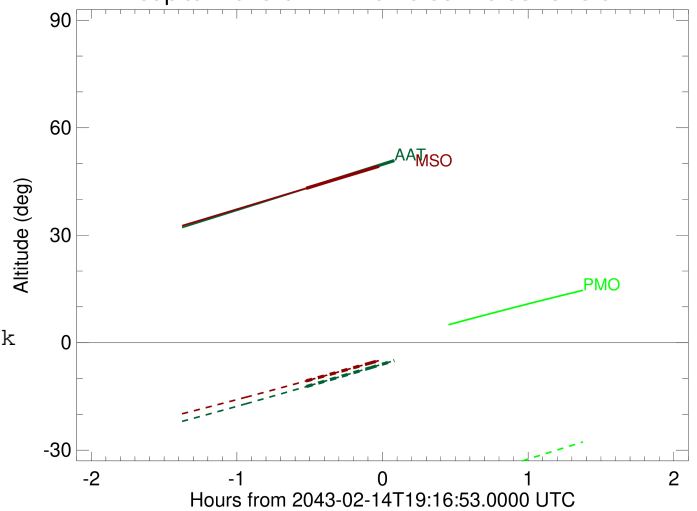
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-14T18:45:33.958	43.06	-12.24	71487.6	44.72	48.43
Jupiter	E	2043-02-14T19:43:34.637	55.50	-0.53x	71487.2	46.97	50.64

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-14T19:14:39.560
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        : 4068885508966980608
2Mass ID (if available) : 17473407-2256371
ICRS Star Coord at Epoch: 17h 47m 34.07395s -22:56:37.19682s
RUWE (>1.4 is poor) : 0.89
K magnitude           : 8.930
G magnitude           : 13.973
RP magnitude          : 12.677
BP magnitude          : 15.913
DUPflag              : 0
Distance (au)         : 5.761
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 28.86
Sun-Target sep (deg) : 58.25
Sun-Moon sep (deg)   : 123.44
B (ring opening deg) : -2.55
PA of pole (deg)     : 0.50
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (" ) : 12.191
C/A sky separation (km) : 50940.9
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
    
```



Jupiter 2043-02-14T19:16:53 K8.93 G13.97



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	2043-02-14T18:45:26.678	43.10	-10.68	71487.7	44.26	47.97
Jupiter	E	2043-02-14T19:43:55.152	55.02	0.56x	71487.3	46.49	50.17