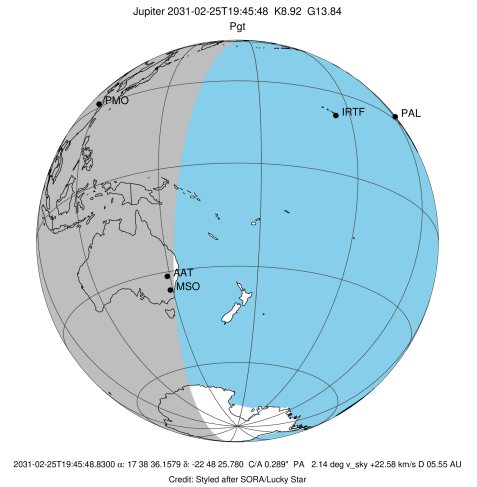
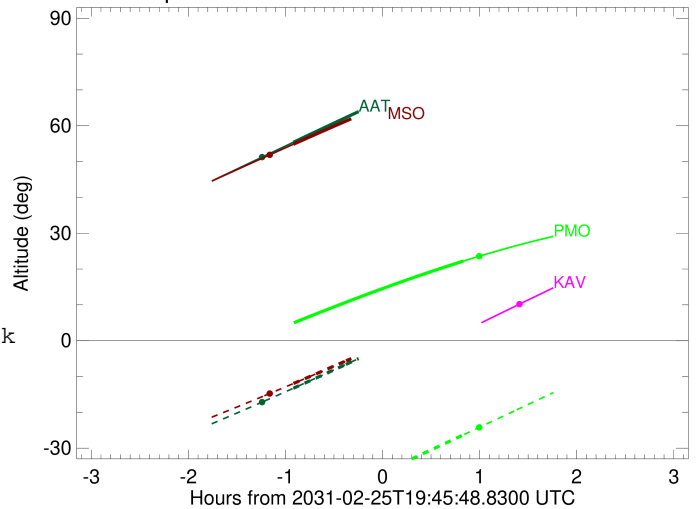



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2031-02-25T19:42:24.770
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : PMO
Location              : Purple Mtn Obs. Nanking
Latitude (deg)       : 32.06667
E. Longitude (deg)   : 118.82089
Altitude (km)        : 0.364
Gaia source ID       : 4116753537965591424
2Mass ID (if available) : 17383615-2248255
ICRS Star Coord at Epoch: 17h 38m 36.15793s -22:48:25.78025s
RUWE (>1.4 is poor) : 0.96
K magnitude           : 8.917
G magnitude           : 13.837
RP magnitude         : 12.578
BP magnitude         : 15.615
DUPflag              : 0
Distance (au)        : 5.547
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 22.58
Sun-Target sep (deg) : 71.51
Sun-Moon sep (deg)   : 123.71
B (ring opening deg) : -2.66
PA of pole (deg)     : 1.47
Pole direction: RA (deg): 268.05701
Dec (deg): 64.49651
C/A sky separation (") : 0.751
C/A sky separation (km) : 3019.9
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 2031-02-25T19:45:48 K8.92 G13.84

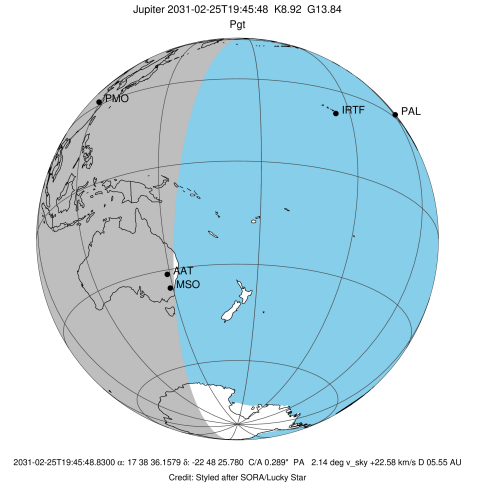


x: target alt < 5.0 deg or sun > -5.0 deg

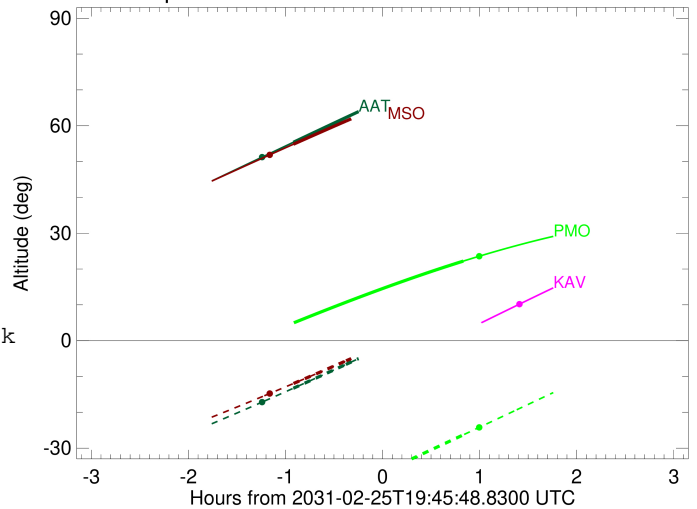
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2031-02-25T18:49:17.630	4.67x	-48.08	71492.0	1.35	1.55
Jupiter	E	2031-02-25T20:35:45.393	22.21	-26.29	71492.0	3.44	3.93

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2031-02-25T19:44:10.590
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       : 4116753537965591424
2Mass ID (if available) : 17383615-2248255
ICRS Star Coord at Epoch: 17h 38m 36.15793s -22:48:25.78025s
RUWE (>1.4 is poor) : 0.96
K magnitude           : 8.917
G magnitude           : 13.837
RP magnitude          : 12.578
BP magnitude          : 15.615
DUPflag              : 0
Distance (au)         : 5.547
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 22.58
Sun-Target sep (deg) : 71.51
Sun-Moon sep (deg)   : 124.39
B (ring opening deg) : -2.66
PA of pole (deg)     : 1.47
Pole direction: RA (deg): 268.05701
Dec (deg): 64.49651
C/A sky separation (" ) : 0.575
C/A sky separation (km) : 2311.6
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
    
```



Jupiter 2031-02-25T19:45:48 K8.92 G13.84

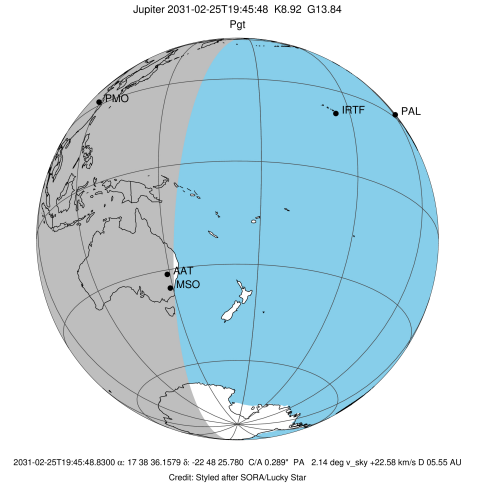


x: target alt < 5.0 deg or sun > -5.0 deg

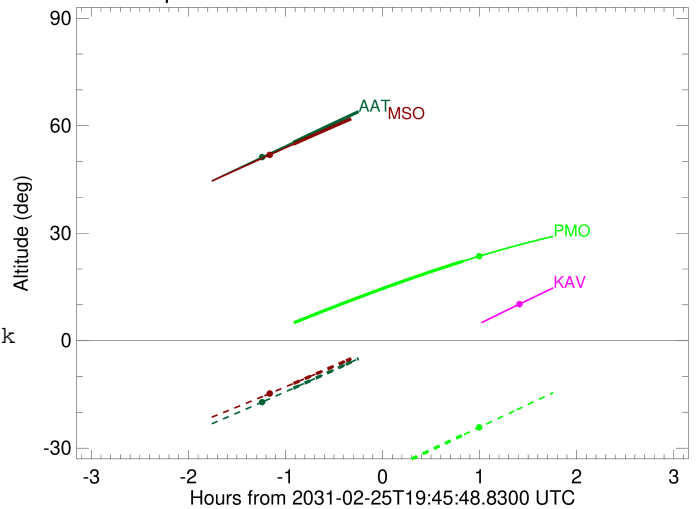
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2031-02-25T18:50:39.964	55.36	-13.29	71492.0	-2.79	-3.19
Jupiter	E	2031-02-25T20:37:49.641	77.12	9.08x	71492.0	-0.99	-1.14

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2031-02-25T19:44:15.700
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      : 4116753537965591424
2Mass ID (if available) : 17383615-2248255
ICRS Star Coord at Epoch: 17h 38m 36.15793s -22:48:25.78025s
RUWE (>1.4 is poor) : 0.96
K magnitude          : 8.917
G magnitude          : 13.837
RP magnitude         : 12.578
BP magnitude         : 15.615
DUPflag             : 0
Distance (au)        : 5.547
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 22.58
Sun-Target sep (deg) : 71.51
Sun-Moon sep (deg)   : 124.39
B (ring opening deg) : -2.66
PA of pole (deg)     : 1.47
Pole direction: RA (deg): 268.05701
Dec (deg): 64.49651
C/A sky separation (") : 0.681
C/A sky separation (km) : 2740.7
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
    
```



Jupiter 2031-02-25T19:45:48 K8.92 G13.84



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	2031-02-25T18:50:47.959	54.83	-11.95	71492.0	-3.12	-3.57
Jupiter	E	2031-02-25T20:37:51.583	74.32	9.37x	71492.0	-1.34	-1.54