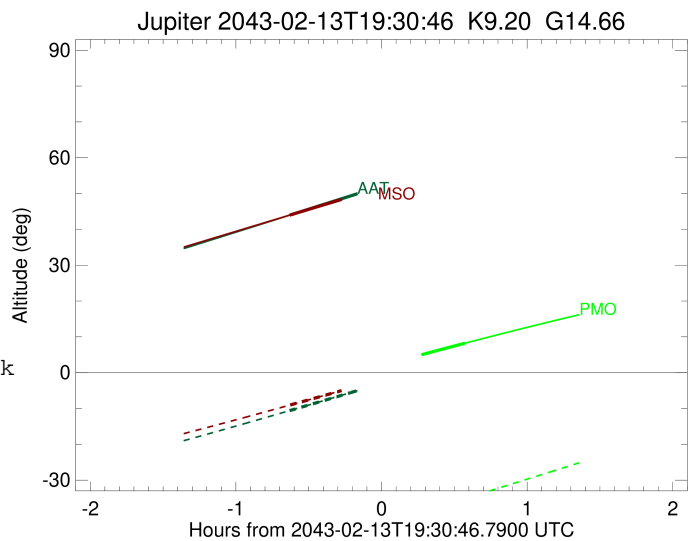
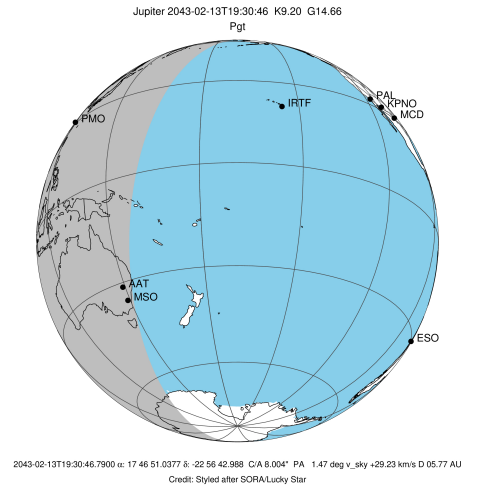



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-13T19:27:52.560
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      : 4068839333854052352
2Mass ID (if available) : 17465103-2256424
ICRS Star Coord at Epoch: 17h 46m 51.03771s -22:56:42.98803s
RUWE (>1.4 is poor) : 0.98
K magnitude          : 9.203
G magnitude          : 14.663
RP magnitude         : 13.267
BP magnitude         : 17.020
DUPflag             : 0
Distance (au)       : 5.775
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 29.23
Sun-Target sep (deg) : 57.42
Sun-Moon sep (deg)  : 108.96
B (ring opening deg) : -2.55
PA of pole (deg)    : 0.58
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (" ) : 7.132
C/A sky separation (km) : 29869.5
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
    
```

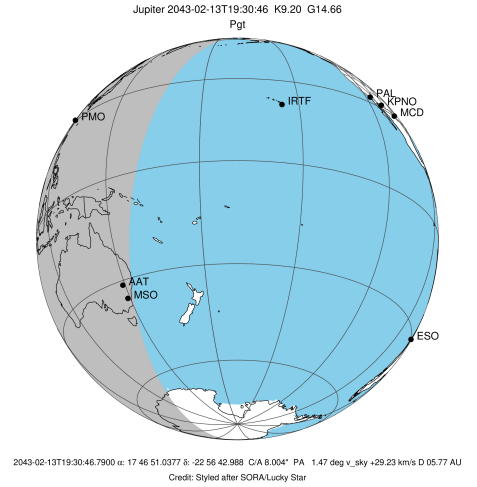


x: target alt < 5.0 deg or sun > -5.0 deg

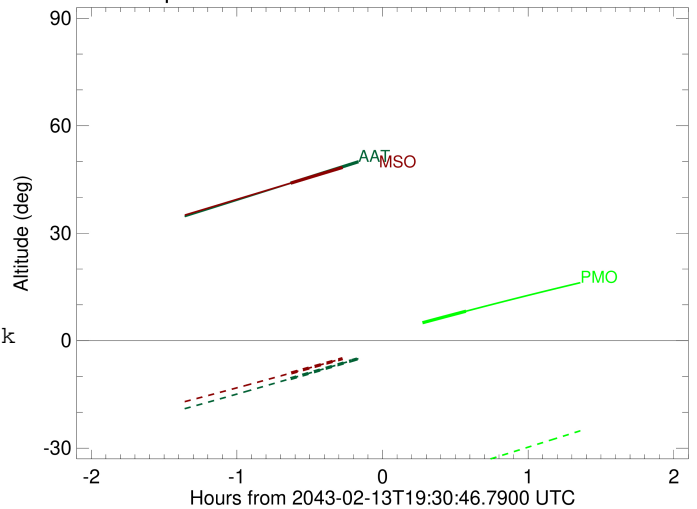
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-13T18:50:45.137	-5.68x	-50.55	71490.3	-25.86	-28.96
Jupiter	E	2043-02-13T20:05:05.514	8.21	-35.16	71490.6	-23.49	-26.39

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-13T19:28:46.690
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        : 4068839333854052352
2Mass ID (if available) : 17465103-2256424
ICRS Star Coord at Epoch: 17h 46m 51.03771s -22:56:42.98803s
RUWE (>1.4 is poor) : 0.98
K magnitude           : 9.203
G magnitude           : 14.663
RP magnitude          : 13.267
BP magnitude          : 17.020
DUPflag              : 0
Distance (au)         : 5.775
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.23
Sun-Target sep (deg)  : 57.42
Sun-Moon sep (deg)    : 109.73
B (ring opening deg) : -2.55
PA of pole (deg)      : 0.58
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 8.361
C/A sky separation (km) : 35018.7
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 2043-02-13T19:30:46 K9.20 G14.66

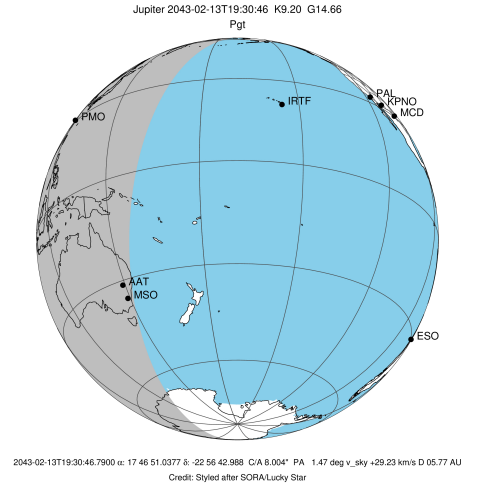


x: target alt < 5.0 deg or sun > -5.0 deg

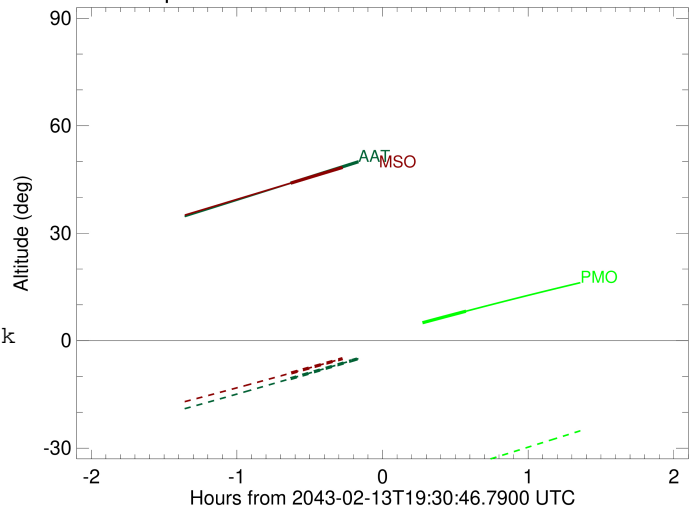
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-13T18:52:55.721	43.95	-10.59	71489.7	-30.43	-33.82
Jupiter	E	2043-02-13T20:04:41.602	59.32	4.02x	71490.0	-28.21	-31.47

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-13T19:28:52.430
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        : 4068839333854052352
2Mass ID (if available) : 17465103-2256424
ICRS Star Coord at Epoch: 17h 46m 51.03771s -22:56:42.98803s
RUWE (>1.4 is poor) : 0.98
K magnitude           : 9.203
G magnitude           : 14.663
RP magnitude          : 13.267
BP magnitude          : 17.020
DUPflag              : 0
Distance (au)         : 5.775
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.23
Sun-Target sep (deg)  : 57.42
Sun-Moon sep (deg)    : 109.74
B (ring opening deg)  : -2.55
PA of pole (deg)      : 0.58
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 8.460
C/A sky separation (km) : 35431.9
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 2043-02-13T19:30:46 K9.20 G14.66



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	2043-02-13T18:53:10.434	44.02	-9.02	71489.7	-30.79	-34.21
Jupiter	E	2043-02-13T20:04:38.213	58.53	4.86x	71490.0	-28.60	-31.88