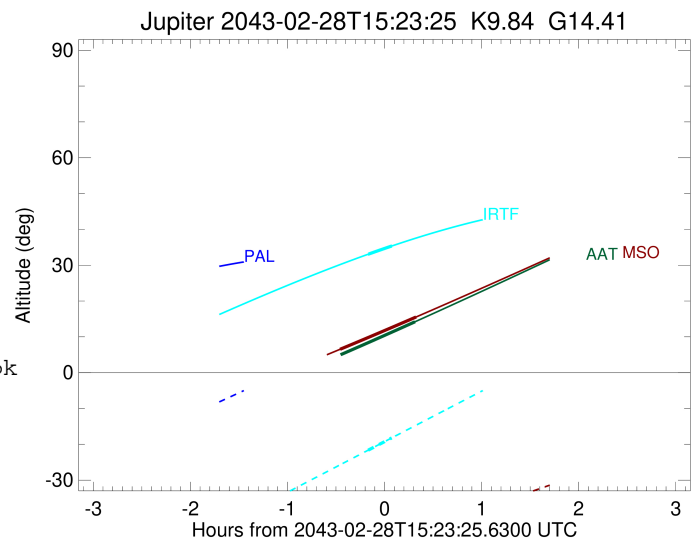
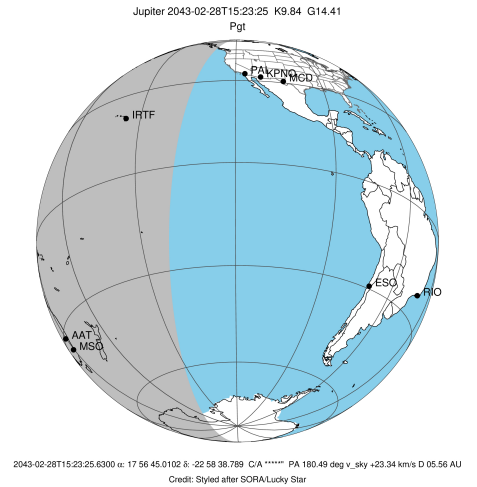



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-28T15:20:37.120
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      : 4069410422663603968
2Mass ID (if available) : 17564499-2258387
ICRS Star Coord at Epoch: 17h 56m 45.01024s -22:58:38.78878s
RUWE (>1.4 is poor) : 1.07
K magnitude          : 9.837
G magnitude          : 14.408
RP magnitude         : 13.239
BP magnitude         : 15.840
DUPflag             : 0
Distance (au)        : 5.559
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 23.34
Sun-Target sep (deg) : 70.08
Sun-Moon sep (deg)  : 57.17
B (ring opening deg) : -2.52
PA of pole (deg)    : -0.49
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 17.556
C/A sky separation (km) : 70780.8
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
    
```

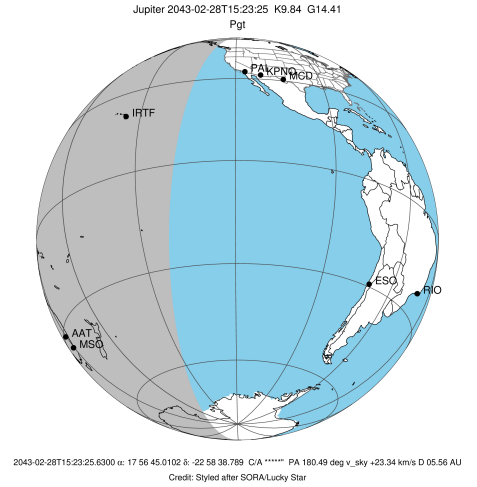


x: target alt < 5.0 deg or sun > -5.0 deg

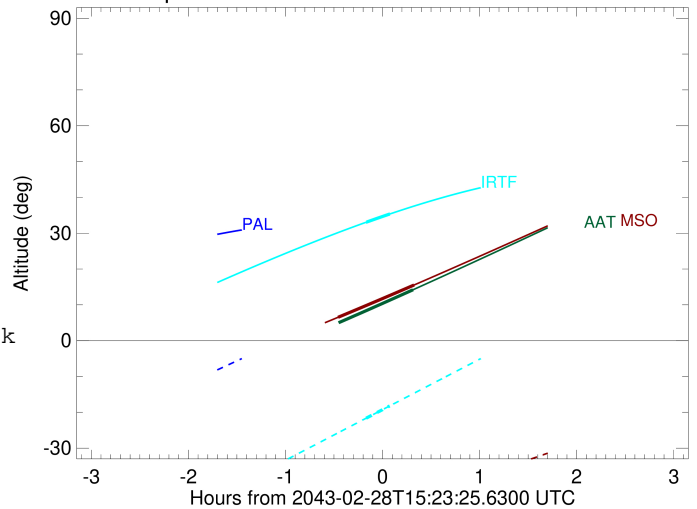
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-28T15:13:21.968	33.06	-21.63	71483.6	80.39	81.51
Jupiter	E	2043-02-28T15:27:52.459	35.35	-18.21	71483.5	82.74	83.59

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-28T15:19:14.420
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      : 4069410422663603968
2Mass ID (if available) : 17564499-2258387
ICRS Star Coord at Epoch: 17h 56m 45.01024s -22:58:38.78878s
RUWE (>1.4 is poor) : 1.07
K magnitude          : 9.837
G magnitude          : 14.408
RP magnitude         : 13.239
BP magnitude         : 15.840
DUPflag             : 0
Distance (au)       : 5.559
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 23.34
Sun-Target sep (deg) : 70.08
Sun-Moon sep (deg)  : 56.70
B (ring opening deg) : -2.52
PA of pole (deg)    : -0.49
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 15.821
C/A sky separation (km) : 63787.8
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 2043-02-28T15:23:25 K9.84 G14.41

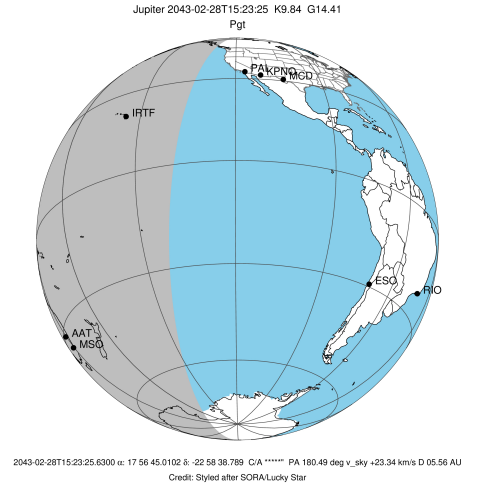


x: target alt < 5.0 deg or sun > -5.0 deg

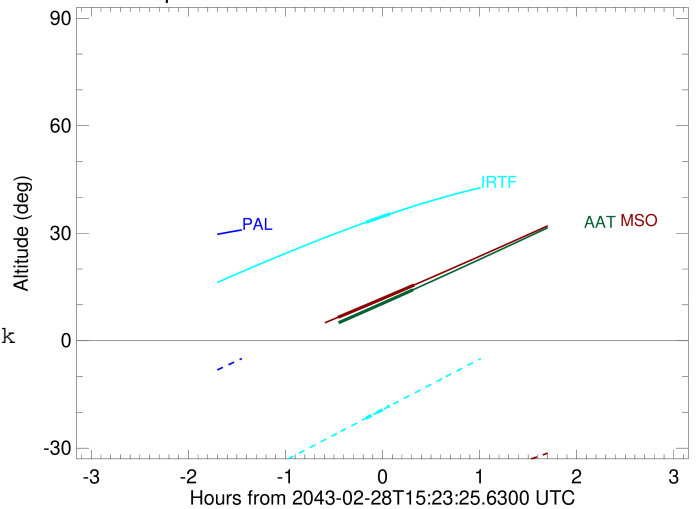
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-28T14:56:14.396	5.00x	-49.88	71485.3	61.71	64.65
Jupiter	E	2043-02-28T15:42:17.303	14.21	-45.93	71485.0	64.41	67.13

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-28T15:19:25.940
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       : 4069410422663603968
2Mass ID (if available) : 17564499-2258387
ICRS Star Coord at Epoch: 17h 56m 45.01024s -22:58:38.78878s
RUWE (>1.4 is poor) : 1.07
K magnitude           : 9.837
G magnitude           : 14.408
RP magnitude          : 13.239
BP magnitude          : 15.840
DUPflag              : 0
Distance (au)        : 5.559
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 23.34
Sun-Target sep (deg) : 70.08
Sun-Moon sep (deg)   : 56.73
B (ring opening deg) : -2.52
PA of pole (deg)     : -0.49
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 15.737
C/A sky separation (km) : 63447.8
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 2043-02-28T15:23:25 K9.84 G14.41



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	2043-02-28T14:55:57.457	6.52	-46.01	71485.4	61.13	64.11
Jupiter	E	2043-02-28T15:42:57.293	15.54	-42.42	71485.0	63.80	66.57