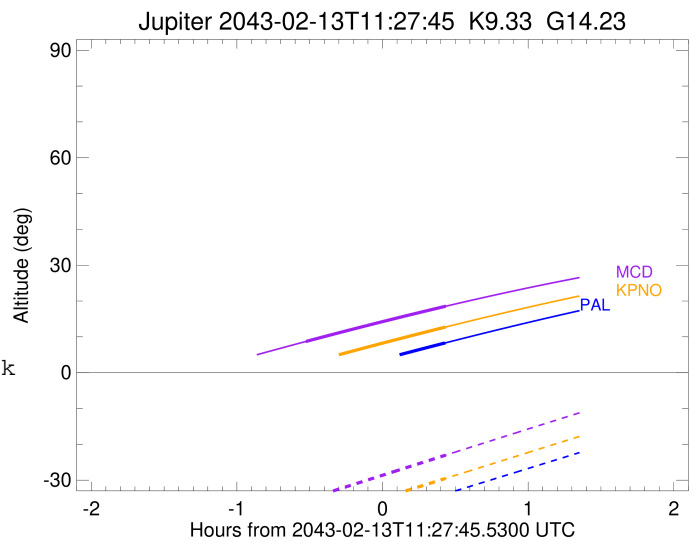
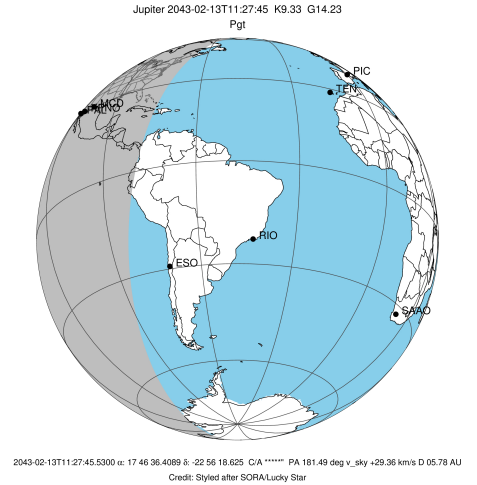



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-13T11:24:43.890
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : PAL
Location              : Palomar Mt (200")
Latitude (deg)        : 33.35622
E. Longitude (deg)    : 243.13601
Altitude (km)         : 1.706
Gaia source ID        : 4068842215679796736
2Mass ID (if available) : 17463642-2256181
ICRS Star Coord at Epoch: 17h 46m 36.40890s -22:56:18.62519s
RUWE (>1.4 is poor) : 1.02
K magnitude           : 9.327
G magnitude           : 14.233
RP magnitude          : 12.953
BP magnitude          : 15.980
DUPflag              : 0
Distance (au)         : 5.779
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.36
Sun-Target sep (deg)  : 57.13
Sun-Moon sep (deg)    : 104.32
B (ring opening deg) : -2.56
PA of pole (deg)      : 0.61
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 12.047
C/A sky separation (km) : 50497.9
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
    
```

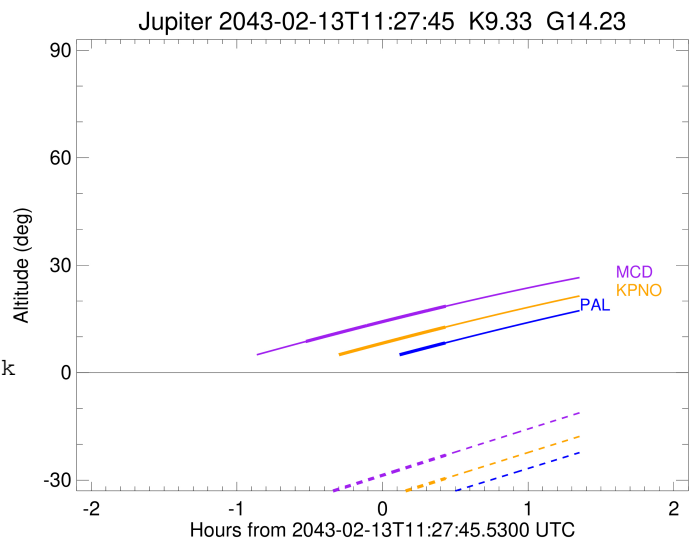
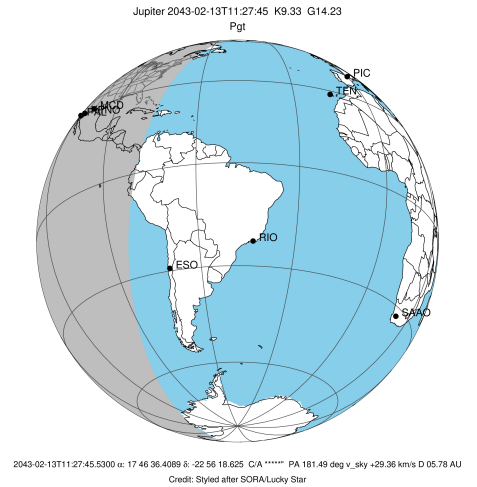


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-13T10:55:54.077	-2.14x	-45.72	71487.7	43.71	47.42
Jupiter	E	2043-02-13T11:53:36.987	8.30	-33.87	71487.4	46.05	49.73

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-13T11:24:47.960
Event type            : Pgt
                      : Jupiter occs: geocentric, topocentric
                      : Not a ringed target
Observer code         : KPNO
Location              : Kitt Peak Natl Obs
Latitude (deg)        : 31.96333
E. Longitude (deg)    : 248.40000
Altitude (km)         : 2.120
Gaia source ID        : 4068842215679796736
2Mass ID (if available) : 17463642-2256181
ICRS Star Coord at Epoch: 17h 46m 36.40890s -22:56:18.62519s
RUWE (>1.4 is poor)  : 1.02
K magnitude           : 9.327
G magnitude           : 14.233
RP magnitude          : 12.953
BP magnitude          : 15.980
DUPflag              : 0
Distance (au)         : 5.779
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.36
Sun-Target sep (deg)  : 57.13
Sun-Moon sep (deg)   : 104.40
B (ring opening deg) : -2.56
PA of pole (deg)     : 0.61
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 12.065
C/A sky separation (km) : 50571.3
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
    
```

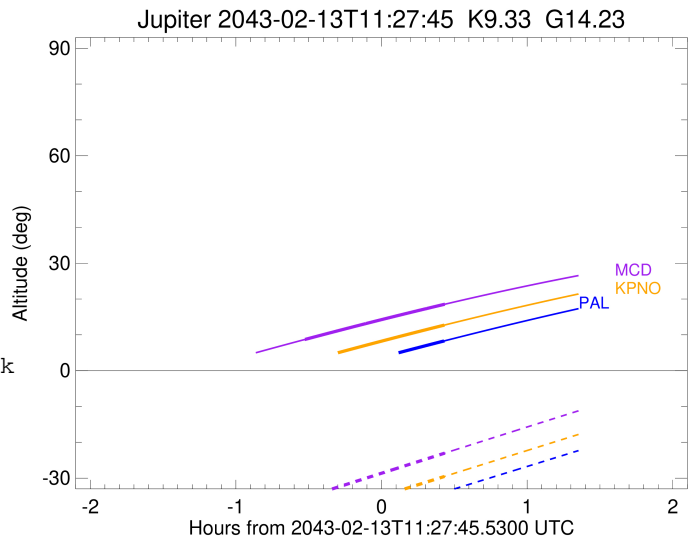
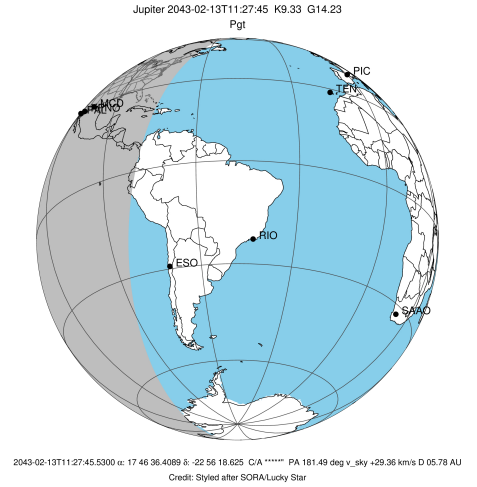


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-13T10:55:58.462	2.45x	-41.71	71487.7	43.80	47.51
Jupiter	E	2043-02-13T11:53:40.675	12.72	-29.53	71487.4	46.12	49.81

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-13T11:24:58.210
Event type          : Pgt
                    : Jupiter occs: geocentric, topocentric
                    : Not a ringed target
Observer code       : MCD
Location            : McDonald Obs. 2.7m
Latitude (deg)      : 30.67158
E. Longitude (deg)  : 255.97844
Altitude (km)       : 2.075
Gaia source ID      : 4068842215679796736
2Mass ID (if available) : 17463642-2256181
ICRS Star Coord at Epoch: 17h 46m 36.40890s -22:56:18.62519s
RUWE (>1.4 is poor) : 1.02
K magnitude          : 9.327
G magnitude          : 14.233
RP magnitude         : 12.953
BP magnitude         : 15.980
DUPflag             : 0
Distance (au)       : 5.779
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 29.36
Sun-Target sep (deg) : 57.13
Sun-Moon sep (deg)  : 104.51
B (ring opening deg) : -2.56
PA of pole (deg)    : 0.61
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation ("): 12.101
C/A sky separation (km): 50725.1
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	2043-02-13T10:56:10.958	8.70	-35.43	71487.7	43.98	47.69
Jupiter	E	2043-02-13T11:53:48.519	18.54	-23.02	71487.3	46.28	49.96