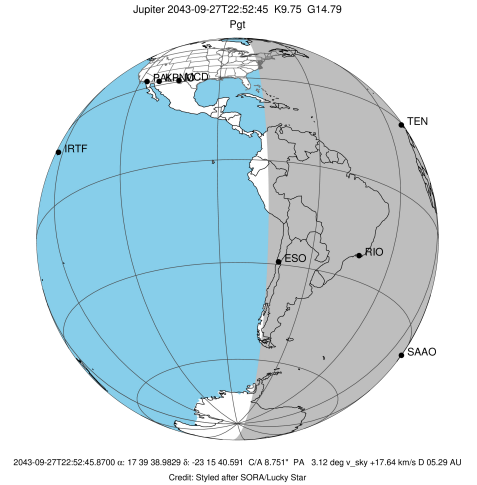
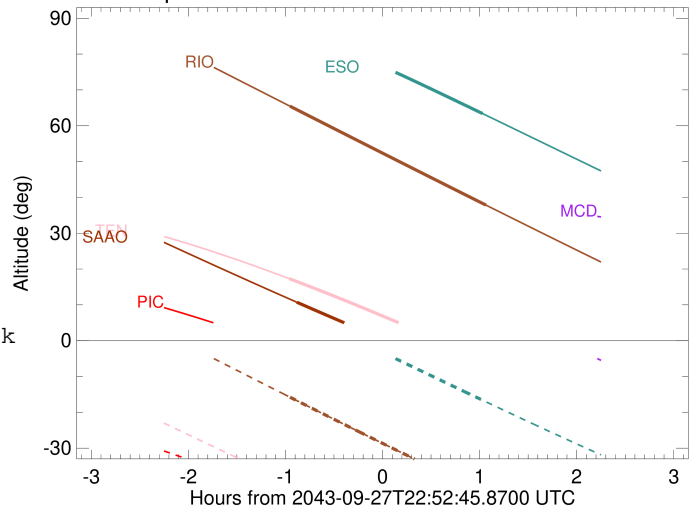



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-09-27T22:57:18.920
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : TEN
Location             : Teide Obs./Tenerife
Latitude (deg)       : 28.30050
E. Longitude (deg)  : 343.48909
Altitude (km)        : 2.395
Gaia source ID       : 4116517005500914944
2Mass ID (if available) : 17393900-2315402
ICRS Star Coord at Epoch: 17h 39m 38.98287s -23:15:40.59091s
RUWE (>1.4 is poor) : 1.04
K magnitude           : 9.752
G magnitude           : 14.787
RP magnitude         : 13.482
BP magnitude         : 16.678
DUPflag              : 0
Distance (au)        : 5.290
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 17.64
Sun-Target sep (deg) : 81.21
Sun-Moon sep (deg)  : 142.56
B (ring opening deg) : -2.21
PA of pole (deg)    : 1.35
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (" ) : 7.748
C/A sky separation (km) : 29725.5
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
    
```



Jupiter 2043-09-27T22:52:45 K9.75 G14.79

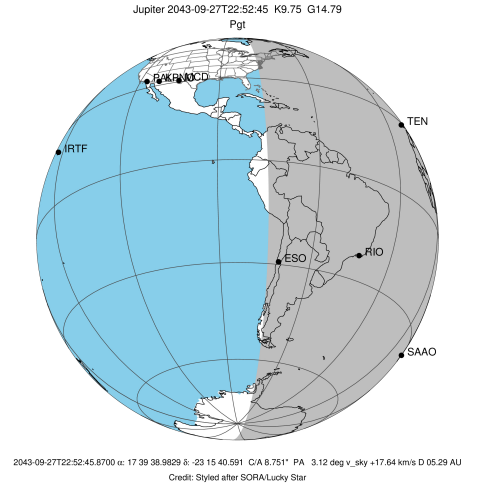


x: target alt < 5.0 deg or sun > -5.0 deg

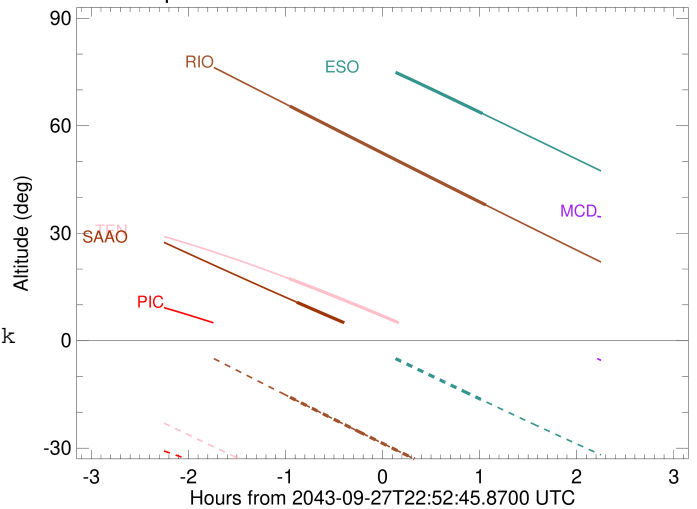
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-09-27T21:55:10.112	17.30	-39.36	71490.7	-25.88	-28.97
Jupiter	E	2043-09-27T23:59:01.781	-6.14x	-60.37	71491.0	-23.29	-26.17

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-09-27T22:56:18.940
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : RIO
Location             : Rio de Janeiro
Latitude (deg)       : -22.89506
E. Longitude (deg)   : 316.77708
Altitude (km)        : 0.033
Gaia source ID       : 4116517005500914944
2Mass ID (if available) : 17393900-2315402
ICRS Star Coord at Epoch: 17h 39m 38.98287s -23:15:40.59091s
RUWE (>1.4 is poor) : 1.04
K magnitude           : 9.752
G magnitude           : 14.787
RP magnitude          : 13.482
BP magnitude          : 16.678
DUPflag              : 0
Distance (au)        : 5.290
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 17.64
Sun-Target sep (deg) : 81.21
Sun-Moon sep (deg)   : 143.03
B (ring opening deg) : -2.21
PA of pole (deg)     : 1.35
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation ("): 8.831
C/A sky separation (km): 33883.0
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 2043-09-27T22:52:45 K9.75 G14.79

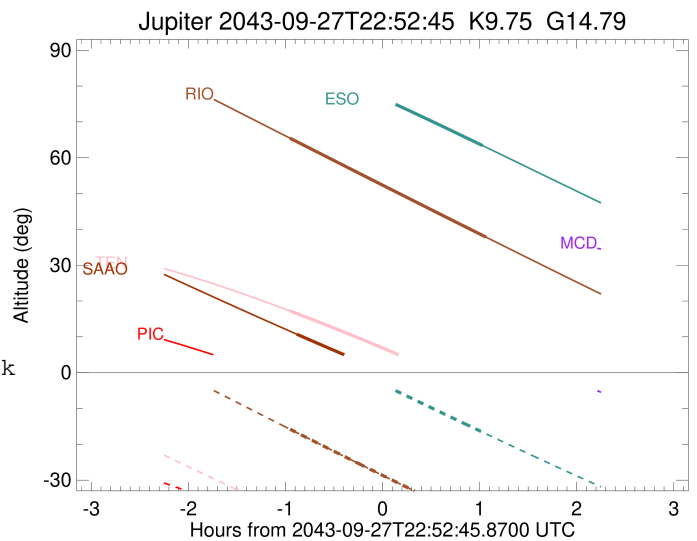
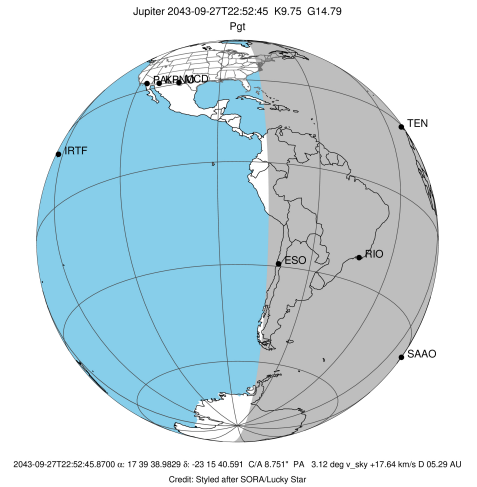


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-09-27T21:55:37.693	65.44	-15.79	71490.4	-29.77	-33.13
Jupiter	E	2043-09-27T23:56:40.581	37.85	-42.45	71490.6	-26.89	-30.06

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-09-27T22:54:01.210
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : ESO
Location             : European Southern Obs. (3.6m)
Latitude (deg)       : -29.26097
E. Longitude (deg)   : 289.26831
Altitude (km)        : 2.400
Gaia source ID       : 4116517005500914944
2Mass ID (if available) : 17393900-2315402
ICRS Star Coord at Epoch: 17h 39m 38.98287s -23:15:40.59091s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 9.752
G magnitude          : 14.787
RP magnitude         : 13.482
BP magnitude         : 16.678
DUPflag             : 0
Distance (au)        : 5.290
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 17.64
Sun-Target sep (deg) : 81.21
Sun-Moon sep (deg)   : 143.43
B (ring opening deg) : -2.21
PA of pole (deg)     : 1.35
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation ("): 8.910
C/A sky separation (km): 34184.7
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
    
```

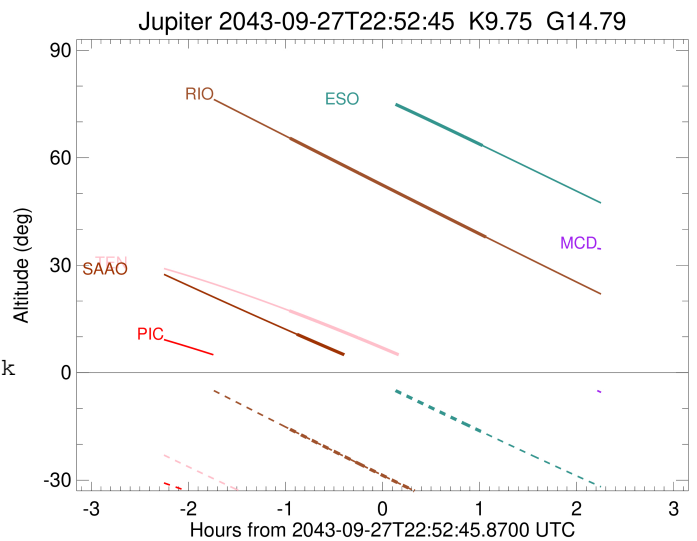
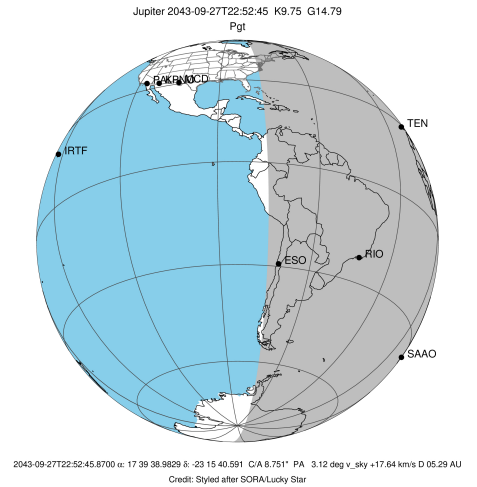


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-09-27T21:53:19.833	84.06	9.72x	71490.3	-30.31	-33.70
Jupiter	E	2043-09-27T23:54:33.234	63.39	-16.60	71490.6	-26.92	-30.09

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-09-27T22:57:31.140
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : SAAO
Location              : So. Afr. Astro. Obs. (Sutherland)
Latitude (deg)        : -32.37953
E. Longitude (deg)    : 20.81070
Altitude (km)         : 1.768
Gaia source ID        : 4116517005500914944
2Mass ID (if available) : 17393900-2315402
ICRS Star Coord at Epoch: 17h 39m 38.98287s -23:15:40.59091s
RUWE (>1.4 is poor)  : 1.04
K magnitude           : 9.752
G magnitude           : 14.787
RP magnitude          : 13.482
BP magnitude          : 16.678
DUPflag              : 0
Distance (au)         : 5.290
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s)  : 17.64
Sun-Target sep (deg)  : 81.21
Sun-Moon sep (deg)    : 142.35
B (ring opening deg)  : -2.21
PA of pole (deg)      : 1.35
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (") : 9.643
C/A sky separation (km) : 36998.9
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	2043-09-27T21:59:53.061	10.72	-55.31	71490.1	-32.40	-35.89
Jupiter	E	2043-09-27T23:54:47.299	-10.67x	-50.13	71490.3	-29.87	-33.23