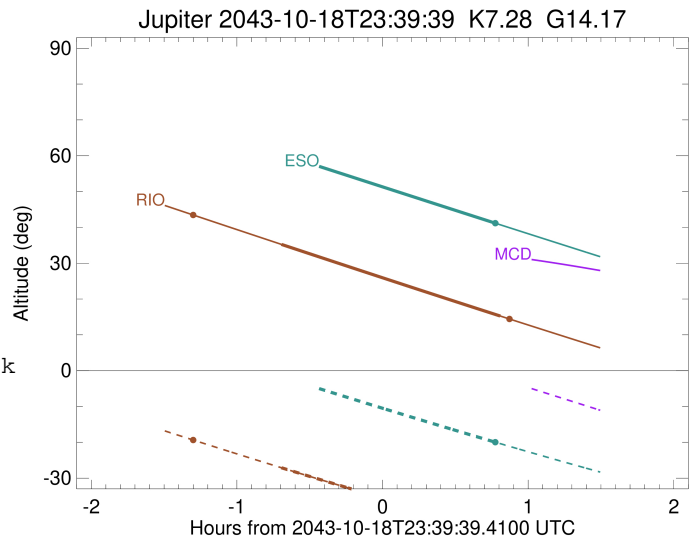
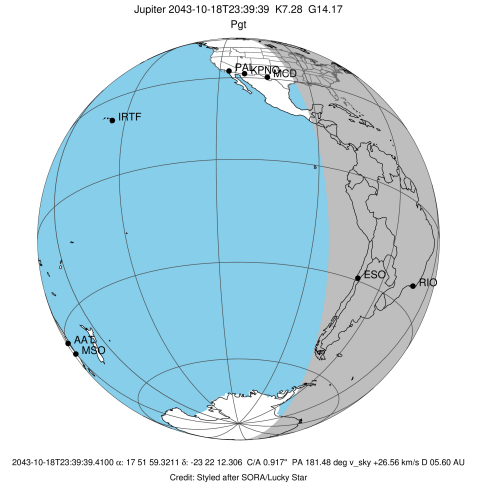




```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-18T23:43:10.700
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      : 4068637367310925568
2Mass ID (if available) : 17515934-2322122
ICRS Star Coord at Epoch: 17h 51m 59.32112s -23:22:12.30635s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 7.277
G magnitude          : 14.175
RP magnitude         : 12.589
BP magnitude         : 18.340
DUPflag             : 0
Distance (au)        : 5.595
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 26.56
Sun-Target sep (deg) : 63.29
Sun-Moon sep (deg)   : 124.30
B (ring opening deg) : -2.13
PA of pole (deg)     : 0.03
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation ("): 0.581
C/A sky separation (km): 2356.3
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
    
```

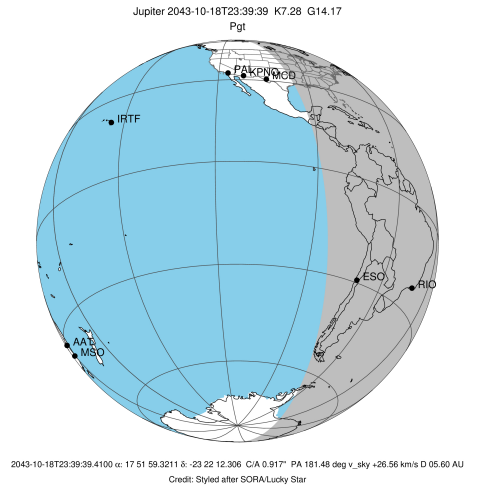


x: target alt < 5.0 deg or sun > -5.0 deg

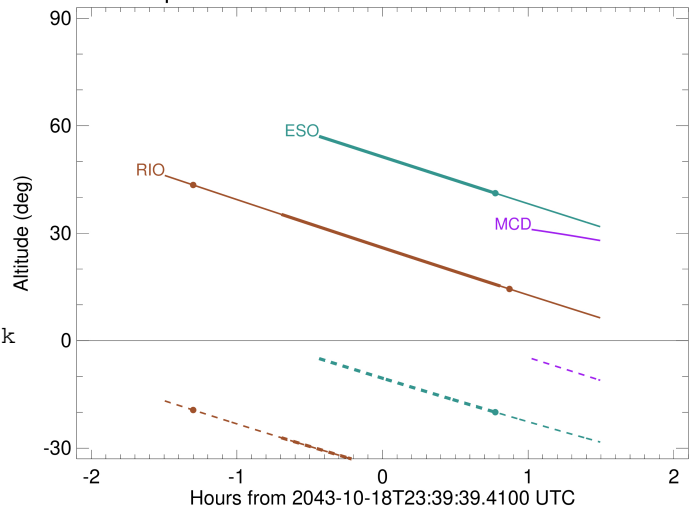
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-18T22:58:01.887	35.24	-27.10	71492.0	0.76	0.87
Jupiter	E	2043-10-19T00:28:09.887	15.25	-44.48	71492.0	2.98	3.41

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-18T23:42:05.120
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       : 4068637367310925568
2Mass ID (if available) : 17515934-2322122
ICRS Star Coord at Epoch: 17h 51m 59.32112s -23:22:12.30635s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 7.277
G magnitude           : 14.175
RP magnitude         : 12.589
BP magnitude         : 18.340
DUPflag             : 0
Distance (au)        : 5.595
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 26.56
Sun-Target sep (deg) : 63.29
Sun-Moon sep (deg)  : 124.43
B (ring opening deg) : -2.13
PA of pole (deg)    : 0.03
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (" ) : 0.639
C/A sky separation (km) : 2592.4
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 2043-10-18T23:39:39 K7.28 G14.17



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	2043-10-18T22:56:41.809	60.71	-1.42x	71492.0	0.83	0.94
Jupiter	E	2043-10-19T00:27:21.254	40.90	-20.20	71492.0	3.27	3.74