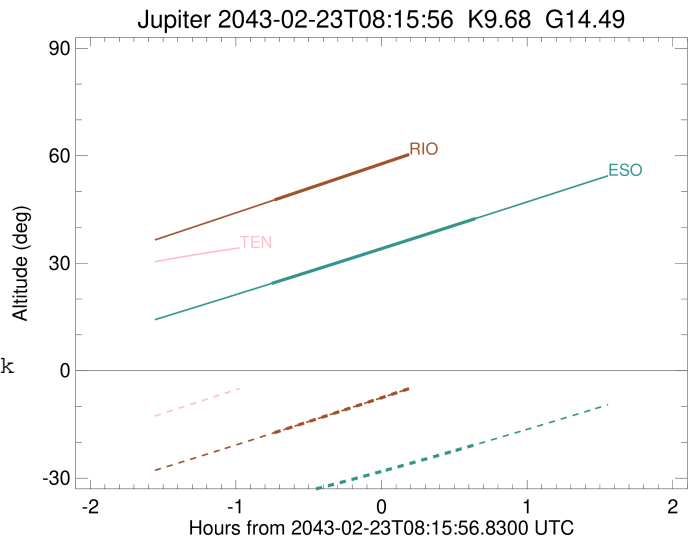
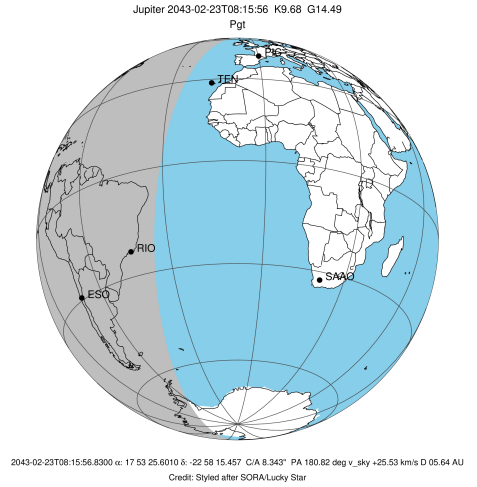




```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-23T08:13:37.350
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       : 4070151188632165248
2Mass ID (if available) : 17532560-2258153
ICRS Star Coord at Epoch: 17h 53m 25.60097s -22:58:15.45670s
RUWE (>1.4 is poor) : 1.03
K magnitude           : 9.682
G magnitude           : 14.494
RP magnitude          : 13.274
BP magnitude          : 16.138
DUPflag              : 0
Distance (au)        : 5.639
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 25.53
Sun-Target sep (deg) : 65.52
Sun-Moon sep (deg)   : 122.07
B (ring opening deg) : -2.53
PA of pole (deg)     : -0.13
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 8.245
C/A sky separation (km) : 33717.6
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
    
```

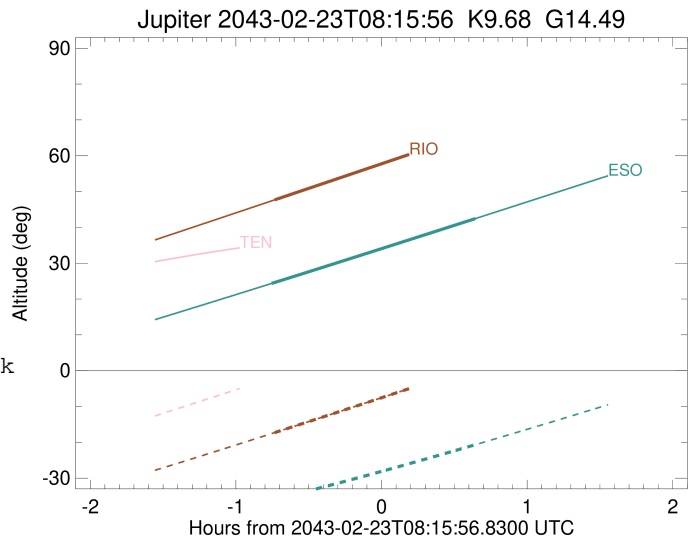
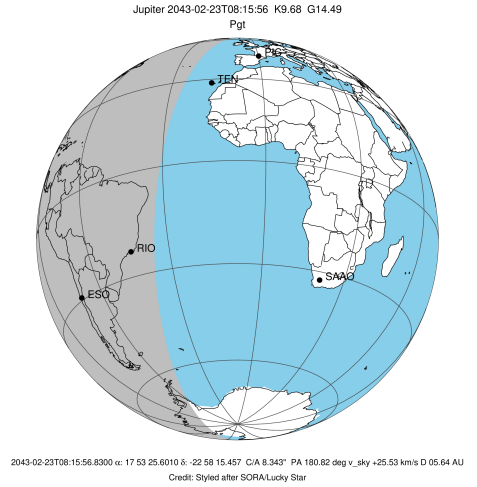


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-23T07:31:56.187	47.68	-17.29	71490.2	26.91	30.08
Jupiter	E	2043-02-23T08:55:24.480	66.80	1.33x	71489.9	29.26	32.58

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-23T08:12:35.160
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      : 4070151188632165248
2Mass ID (if available) : 17532560-2258153
ICRS Star Coord at Epoch: 17h 53m 25.60097s -22:58:15.45670s
RUWE (>1.4 is poor) : 1.03
K magnitude          : 9.682
G magnitude          : 14.494
RP magnitude         : 13.274
BP magnitude         : 16.138
DUPflag             : 0
Distance (au)       : 5.639
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 25.53
Sun-Target sep (deg) : 65.52
Sun-Moon sep (deg)  : 121.95
B (ring opening deg) : -2.53
PA of pole (deg)    : -0.13
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (" ) : 7.880
C/A sky separation (km) : 32226.8
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	2043-02-23T07:30:41.266	24.35	-36.13	71490.4	25.48	28.55
Jupiter	E	2043-02-23T08:54:37.126	42.45	-20.66	71490.1	28.02	31.27