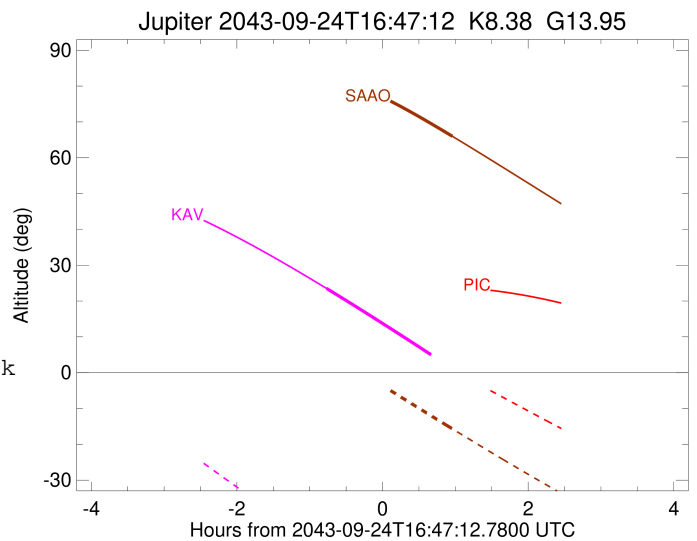
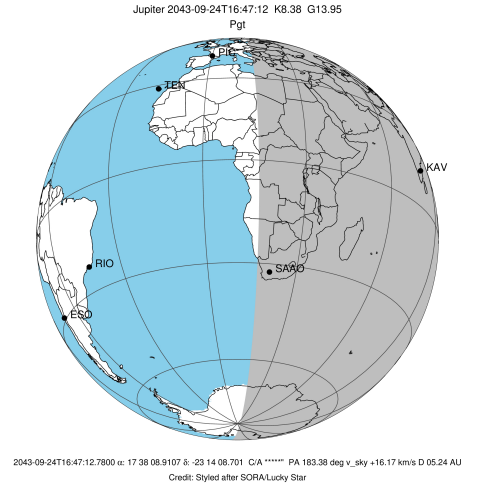



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-09-24T16:53:39.670
Event type          : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code       : KAV
Location            : Kavalur Observatory
Latitude (deg)      : 12.57556
E. Longitude (deg)  : 78.83167
Altitude (km)       : 0.722
Gaia source ID      : 4116526630641426944
2Mass ID (if available) : 17380891-2314087
ICRS Star Coord at Epoch: 17h 38m 08.91066s -23:14:08.70077s
RUWE (>1.4 is poor) : 0.88
K magnitude          : 8.375
G magnitude          : 13.952
RP magnitude         : 12.562
BP magnitude         : 16.330
DUPflag             : 0
Distance (au)        : 5.241
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 16.17
Sun-Target sep (deg) : 84.05
Sun-Moon sep (deg)   : 171.15
B (ring opening deg) : -2.22
PA of pole (deg)     : 1.52
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (") : 13.361
C/A sky separation (km) : 50784.1
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
    
```

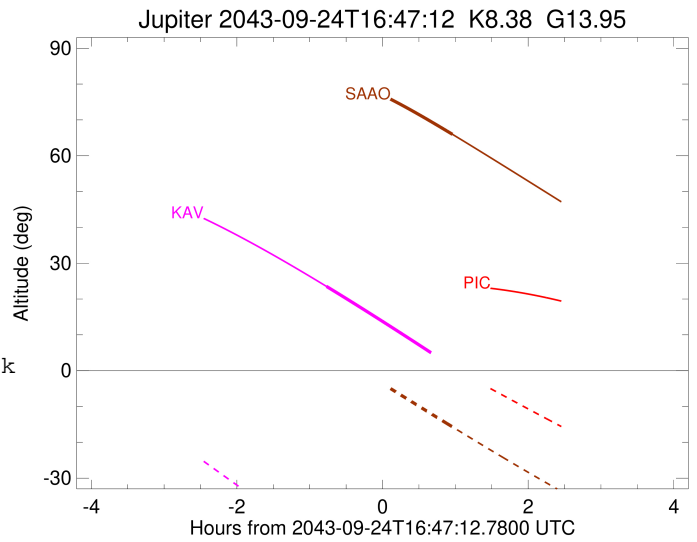
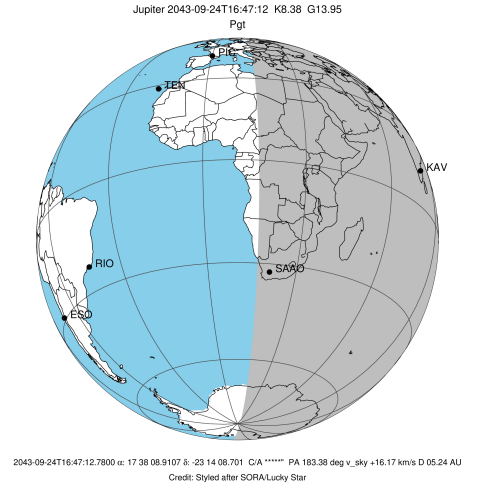


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-09-24T16:01:04.056	23.51	-49.67	71488.8	43.89	47.61
Jupiter	E	2043-09-24T17:45:52.043	0.86x	-72.72	71488.5	46.48	50.16

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-09-24T16:48:22.270
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       : 4116526630641426944
2Mass ID (if available) : 17380891-2314087
ICRS Star Coord at Epoch: 17h 38m 08.91066s -23:14:08.70077s
RUWE (>1.4 is poor) : 0.88
K magnitude           : 8.375
G magnitude           : 13.952
RP magnitude         : 12.562
BP magnitude         : 16.330
DUPflag              : 0
Distance (au)        : 5.241
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 16.17
Sun-Target sep (deg) : 84.05
Sun-Moon sep (deg)   : 170.39
B (ring opening deg) : -2.22
PA of pole (deg)     : 1.52
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (") : 12.472
C/A sky separation (km) : 47403.6
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	2043-09-24T15:51:44.907	80.66	8.12x	71489.3	39.59	43.30
Jupiter	E	2043-09-24T17:44:51.737	65.96	-15.69	71488.8	43.26	46.97