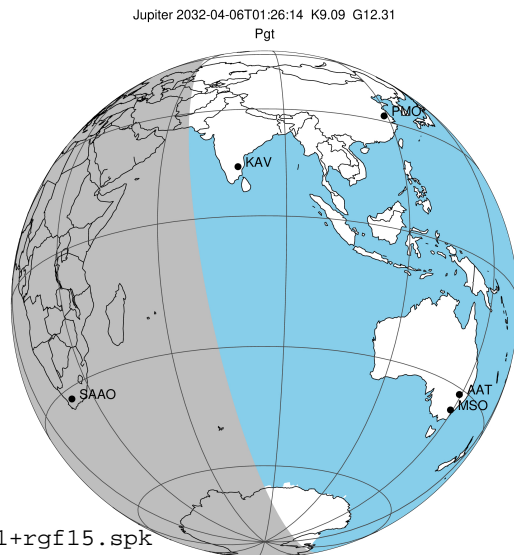


target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2032-04-06T01:26:14.480
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 6866163971859291776
 2Mass ID (if available) : 20040342-2033110

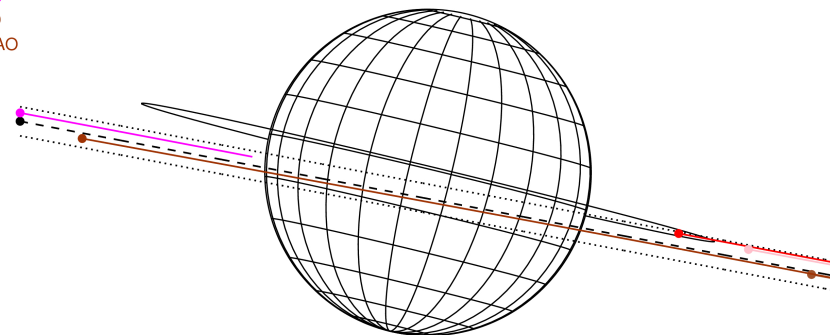
Jupiter 2032-04-06T01:26:14 K9.09 G12.31 Pgt

ICRS Star Coord at Epoch: 20h 04m 03.42230s -20:33:11.39144s
 RUWE (>1.4 is poor) : 1.05
 K magnitude : 9.088
 G magnitude : 12.306
 RP magnitude : 11.382
 BP magnitude : 13.190
 DUPflag : 0
 Distance (au) : 5.298
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 19.93
 Sun-Target sep (deg) : 77.52
 Sun-Moon sep (deg) : 23.26
 B (ring opening deg) : -1.23
 PA of pole (deg) : -13.55
 Pole direction: RA (deg): 268.05669
 Dec (deg): 64.49654
 C/A sky separation (") : 2.938
 C/A sky separation (km) : 11288.3
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk



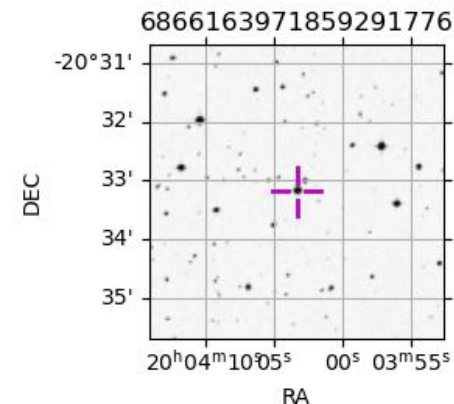
2032-04-06T01:26:14.4800 ex: 20 04 03.4223 s: -20 33 11.391 C/A 2.945" PA 349.25 deg v_sky +19.93 km/s D 05.30 AU
 Credit: Styled after SORA/Lucky Star

Earth
 PIC
 TEN
 KAV
 RIO
 SAAO



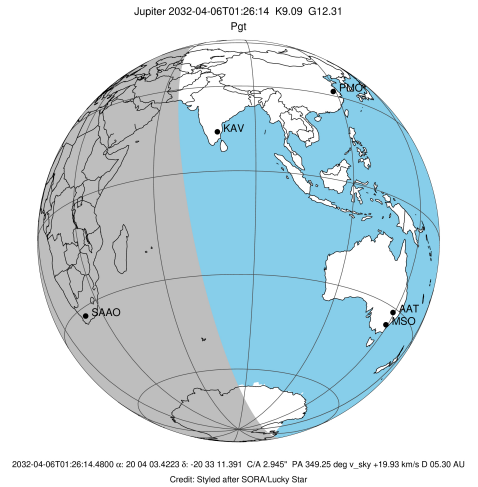
Observable events with sun below -5 deg and altitude above 5 deg

| Obs | Location | lat | Elon | Target | Observed Events Interval | OEncode |
|------|-----------------------------------|-------|-------|--------|-----------------------------|---------|
| PIC | Pic du Midi | 42.9 | 0.1 | | | Pnn |
| PAL | Palomar Mt (200") | 33.4 | 243.1 | | | Pnn |
| PMO | Purple Mtn Obs. Nanking | 32.1 | 118.8 | | | Pnn |
| KPNO | Kitt Peak Natl Obs | 32.0 | 248.4 | | | Pnn |
| MCD | McDonald Obs. 2.7m | 30.7 | 256.0 | | | Pnn |
| TEN | Teide Obs./Tenerife | 28.3 | 343.5 | | | Pnn |
| IRTF | Mauna Kea/IRTF | 19.8 | 204.5 | | | Pnn |
| KAV | Kavalur Observatory | 12.6 | 78.8 | | | Pnn |
| RIO | Rio de Janeiro | -22.9 | 316.8 | | | Pnn |
| ESO | European Southern Obs. (3.6m) | -29.3 | 289.3 | | | Pnn |
| AAT | Siding Spring (AAT) | -31.3 | 149.1 | | | Pnn |
| SAAO | So. Afr. Astro. Obs. (Sutherland) | -32.4 | 20.8 | + + | APR 06 00:22 - APR 06 02:21 | Pie |
| MSO | Mt. Stromlo Observatory | -35.3 | 149.0 | | | Pnn |

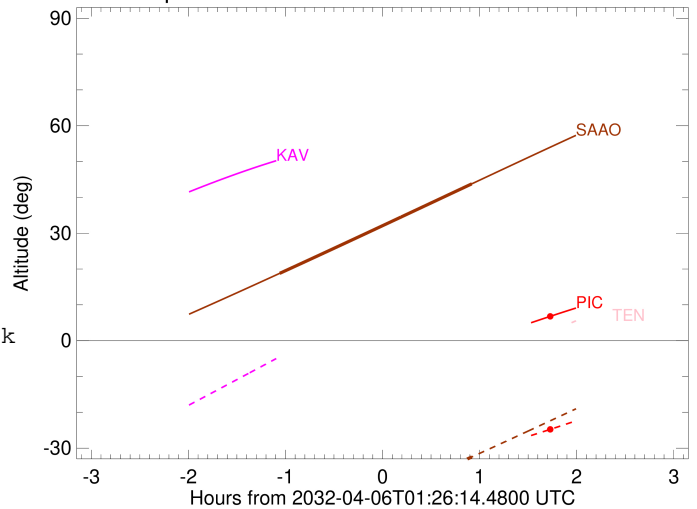


```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2032-04-06T01:21:53.310
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      : 6866163971859291776
2Mass ID (if available) : 20040342-2033110
ICRS Star Coord at Epoch: 20h 04m 03.42230s -20:33:11.39144s
RUWE (>1.4 is poor) : 1.05
K magnitude          : 9.088
G magnitude          : 12.306
RP magnitude         : 11.382
BP magnitude         : 13.190
DUPflag             : 0
Distance (au)        : 5.298
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 19.93
Sun-Target sep (deg) : 77.52
Sun-Moon sep (deg)  : 24.24
B (ring opening deg) : -1.23
PA of pole (deg)    : -13.55
Pole direction: RA (deg): 268.05669
Dec (deg): 64.49654
C/A sky separation (") : 3.308
C/A sky separation (km) : 12712.6
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
    
```



Jupiter 2032-04-06T01:26:14 K9.09 G12.31



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 | 2032-04-06T00:22:41.651 | 18.79 | -54.82 | 71491.9 | -13.35 | -15.17 |
| Jupiter | E | 2032-04-06T02:21:24.453 | 43.77 | -32.46 | 71492.0 | -7.22 | -8.25 |