

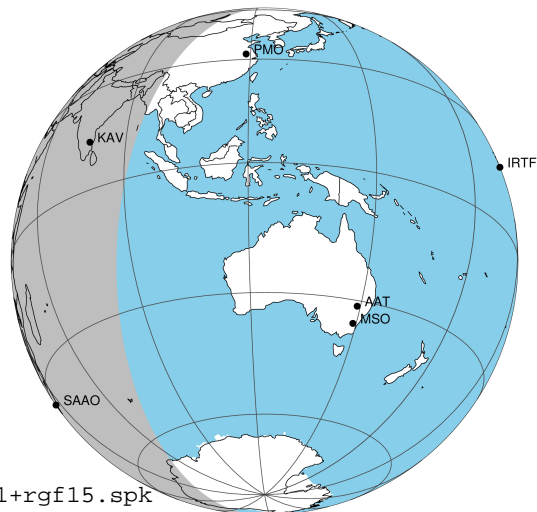
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-02-10T00:11:36.680
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4116868991036423552
 2Mass ID (if available) : 17440178-2255431

Jupiter 2043-02-10T00:11:36 K8.99 G14.99 Pgt

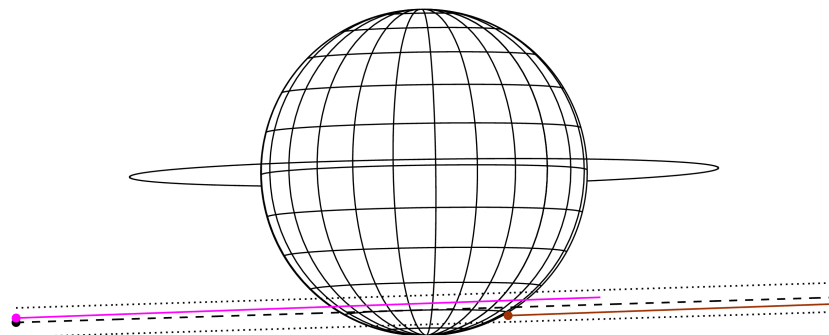
ICRS Star Coord at Epoch: 17h 44m 01.76786s -22:55:43.45701s

RUWE (>1.4 is poor) : 1.00
 K magnitude : 8.995
 G magnitude : 14.986
 RP magnitude : 13.526
 BP magnitude : 17.946
 DUPflag : 0
 Distance (au) : 5.826
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 30.63
 Sun-Target sep (deg) : 54.22
 Sun-Moon sep (deg) : 55.98
 B (ring opening deg) : -2.56
 PA of pole (deg) : 0.88
 Pole direction: RA (deg): 268.05661
 Dec (deg): 64.49732
 C/A sky separation (") : 14.243
 C/A sky separation (km) : 60185.2
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-02-10T00:11:36 K8.99 G14.99
 Pgt



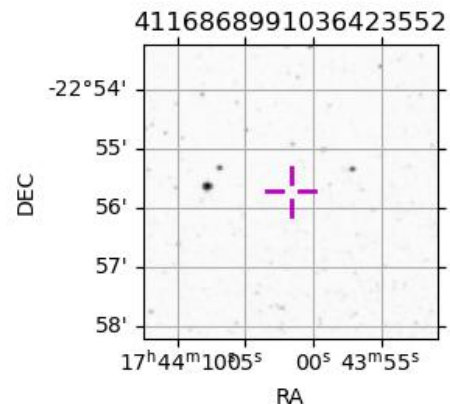
Earth
 KAV
 SAAO



2043-02-10T00:11:36.6800 α: 17 44 01.7679 δ: -22 55 43.457 C/A ***** PA 1.76 deg v_sky +30.63 km/s D 05.83 AU
 Credit: Styled after SORA/Lucky Star

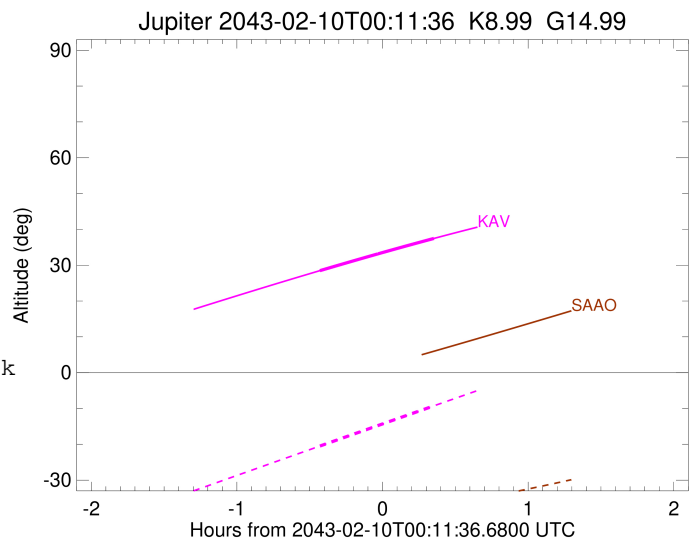
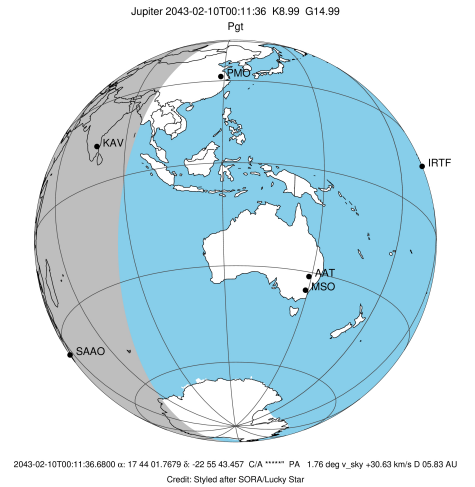
Observable events with sun below -5 deg and altitude above 5 deg

| Obs | Location | lat | Elon | Target | Observed Events Interval | OCode |
|------|-----------------------------------|-------|-------|--------|-----------------------------|-------|
| 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 | + + | FEB 09 23:45 - FEB 10 00:32 | Pie |
| 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 | | | Pnn |
| MSO | Mt. Stromlo Observatory | -35.3 | 149.0 | | | Pnn |



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-10T00:09:17.460
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        : 4116868991036423552
2Mass ID (if available) : 17440178-2255431
ICRS Star Coord at Epoch: 17h 44m 01.76786s -22:55:43.45701s
RUWE (>1.4 is poor)  : 1.00
K magnitude           : 8.995
G magnitude           : 14.986
RP magnitude          : 13.526
BP magnitude          : 17.946
DUPflag              : 0
Distance (au)         : 5.826
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 30.63
Sun-Target sep (deg)  : 54.22
Sun-Moon sep (deg)   : 56.82
B (ring opening deg) : -2.56
PA of pole (deg)     : 0.88
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 13.568
C/A sky separation (km) : 57330.8
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 | 2043-02-09T23:45:50.045 | 28.48 | -20.48 | 71486.1 | -54.38 | -57.78 |
| Jupiter | E | 2043-02-10T00:32:46.756 | 37.46 | -9.26 | 71486.4 | -52.13 | -55.64 |