

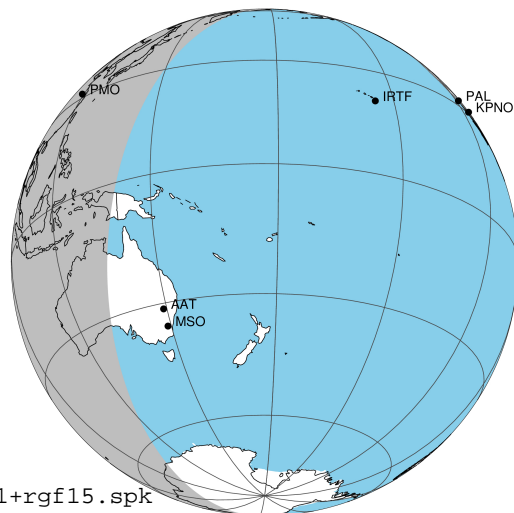
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-02-06T20:49:09.480
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4116924722546887680
 2Mass ID (if available) : 17413752-2254169

Jupiter 2043-02-06T20:49:09 K9.28 G14.05 Pgt

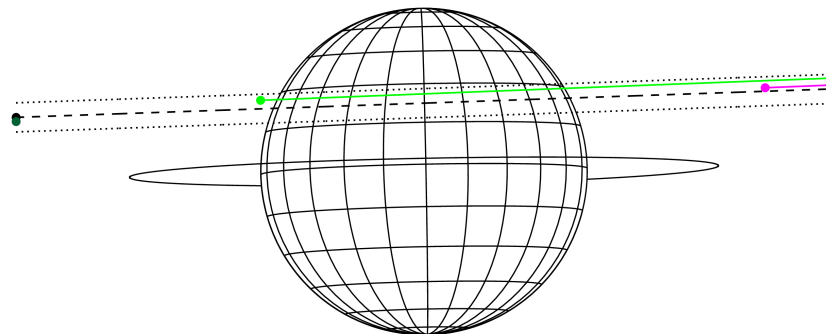
ICRS Star Coord at Epoch: 17h 41m 37.49746s -22:54:16.92358s

RUWE (>1.4 is poor) : 0.98
 K magnitude : 9.280
 G magnitude : 14.051
 RP magnitude : 12.839
 BP magnitude : 15.675
 DUPflag : 0
 Distance (au) : 5.867
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 31.72
 Sun-Target sep (deg) : 51.59
 Sun-Moon sep (deg) : 15.27
 B (ring opening deg) : -2.57
 PA of pole (deg) : 1.14
 Pole direction: RA (deg): 268.05661
 Dec (deg): 64.49732
 C/A sky separation (") : 7.032
 C/A sky separation (km) : 29921.5
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-02-06T20:49:09 K9.28 G14.05
 Pgt



Earth
 PMO
 KAV
 AAT

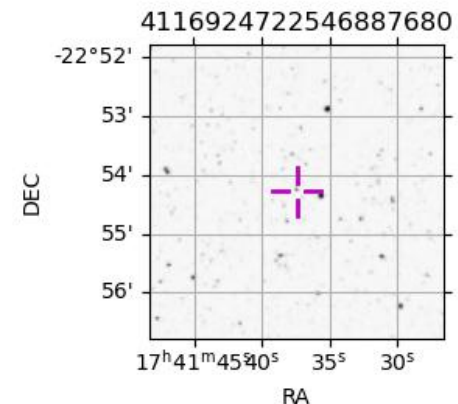


2043-02-06T20:49:09.4800 cc: 17 41 37.4975 s: -22 54 16.924 C/A 7.023" PA 182.00 deg v_sky +31.72 km/s D 05.87 AU

Credit: Styled after SORA/Lucky Star

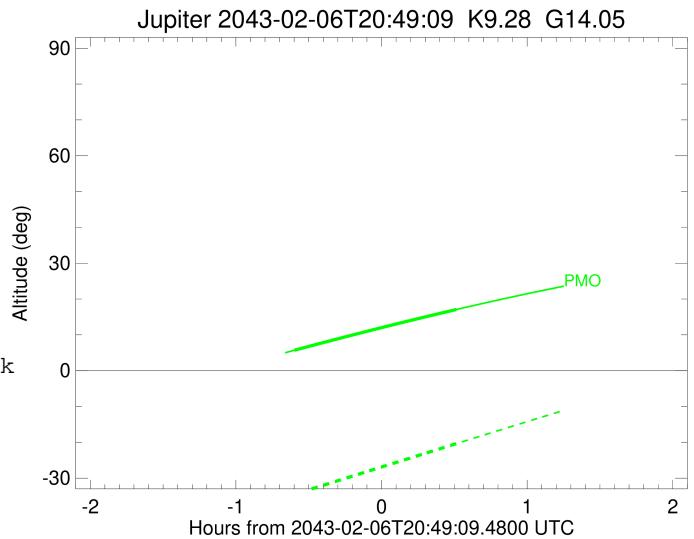
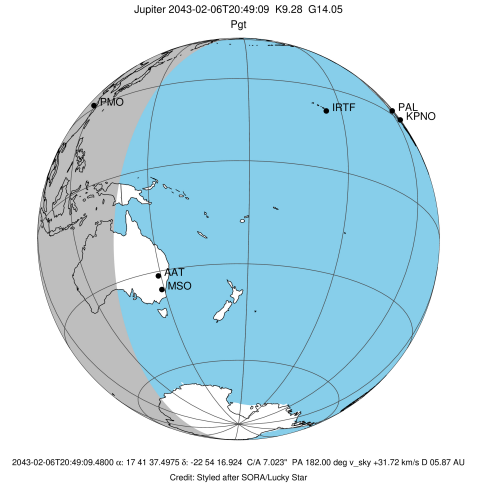
Observable events with sun below -5 deg and altitude above 5 deg

| 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 | + + | FEB 06 20:13 - FEB 06 21:19 | Pie |
| 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 | | | Pnn |
| MSO | Mt. Stromlo Observatory | -35.3 | 149.0 | | | Pnn |



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-06T20:46:35.160
Event type          : Pgt
                    : Jupiter occs: geocentric, topocentric
                    : Not a ringed target
Observer code       : PMO
Location            : Purple Mtn Obs. Nanking
Latitude (deg)      : 32.06667
E. Longitude (deg)  : 118.82089
Altitude (km)       : 0.364
Gaia source ID      : 4116924722546887680
2Mass ID (if available) : 17413752-2254169
ICRS Star Coord at Epoch: 17h 41m 37.49746s -22:54:16.92358s
RUWE (>1.4 is poor) : 0.98
K magnitude          : 9.280
G magnitude          : 14.051
RP magnitude         : 12.839
BP magnitude         : 15.675
DUPflag             : 0
Distance (au)       : 5.867
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 31.72
Sun-Target sep (deg) : 51.59
Sun-Moon sep (deg)  : 16.16
B (ring opening deg) : -2.57
PA of pole (deg)    : 1.14
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 7.985
C/A sky separation (km) : 33976.2
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 | 2043-02-06T20:13:21.463 | 5.71 | -34.49 | 71490.1 | 27.23 | 30.43 |
| Jupiter | E | 2043-02-06T21:19:52.605 | 17.05 | -20.39 | 71489.8 | 29.44 | 32.77 |