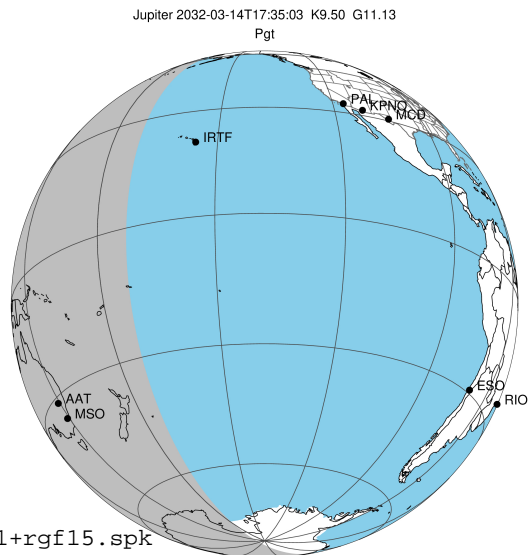


target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2032-03-14T17:35:03.260
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 6865466400452276224
 2Mass ID (if available) : 19500566-2108505

Jupiter 2032-03-14T17:35:03 K9.50 G11.13 Pgt

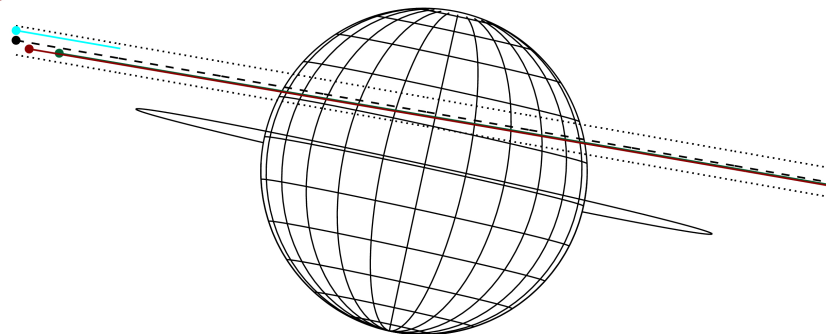
ICRS Star Coord at Epoch: 19h 50m 05.61953s -21:08:51.56577s

RUWE (>1.4 is poor) : 0.85
 K magnitude : 9.497
 G magnitude : 11.126
 RP magnitude : 10.562
 BP magnitude : 11.520
 DUPflag : 0
 Distance (au) : 5.629
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 28.98
 Sun-Target sep (deg) : 58.72
 Sun-Moon sep (deg) : 99.53
 B (ring opening deg) : -1.38
 PA of pole (deg) : -12.23
 Pole direction: RA (deg): 268.05670
 Dec (deg): 64.49654
 C/A sky separation (") : 6.337
 C/A sky separation (km) : 25872.8
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk



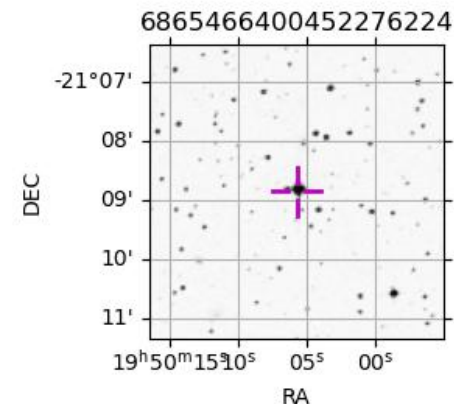
2032-03-14T17:35:03.2600 ex: 19 50 05.6195 s: -21 08 51.566 C/A 6.330" PA 170.09 deg v_sky +28.98 km/s D 05.63 AU
 Credit: Styled after SORA/Lucky Star

Earth
 IRTF
 AAT
 MSO



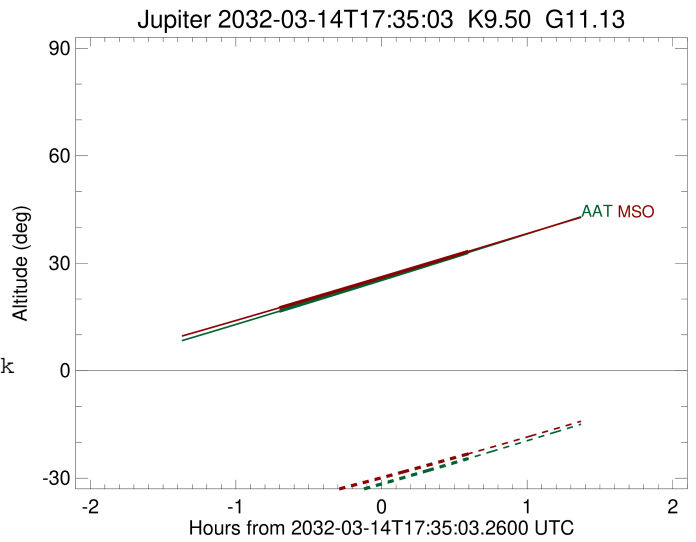
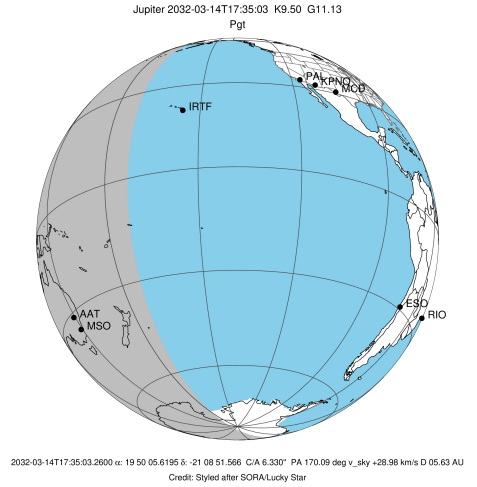
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEcode
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	+ +	MAR 14 16:52 - MAR 14 18:10	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	MAR 14 16:53 - MAR 14 18:10	Pie



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2032-03-14T17:31:47.410
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : AAT
Location              : Siding Spring (AAT)
Latitude (deg)        : -31.27703
E. Longitude (deg)    : 149.06608
Altitude (km)         : 1.164
Gaia source ID        : 6865466400452276224
2Mass ID (if available) : 19500566-2108505
ICRS Star Coord at Epoch: 19h 50m 05.61953s -21:08:51.56577s
RUWE (>1.4 is poor) : 0.85
K magnitude           : 9.497
G magnitude           : 11.126
RP magnitude          : 10.562
BP magnitude          : 11.520
DUPflag              : 0
Distance (au)         : 5.629
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 28.98
Sun-Target sep (deg) : 58.72
Sun-Moon sep (deg)   : 99.80
B (ring opening deg) : -1.38
PA of pole (deg)     : -12.23
Pole direction: RA (deg): 268.05670
Dec (deg): 64.49654
C/A sky separation (") : 5.958
C/A sky separation (km) : 24322.9
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
    
```

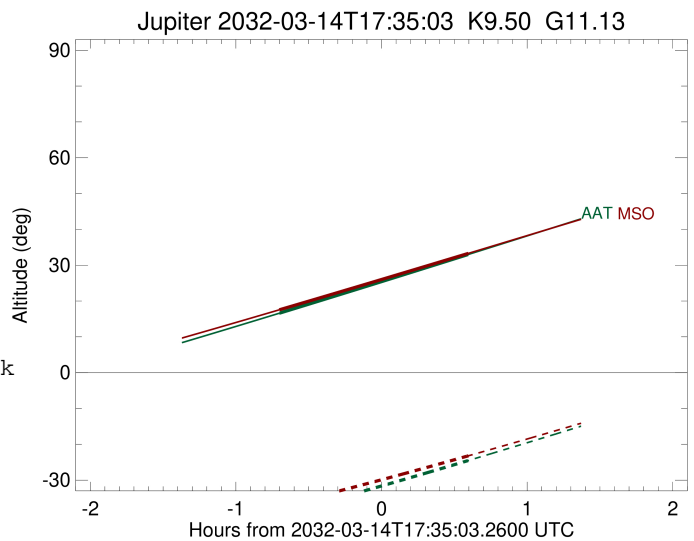
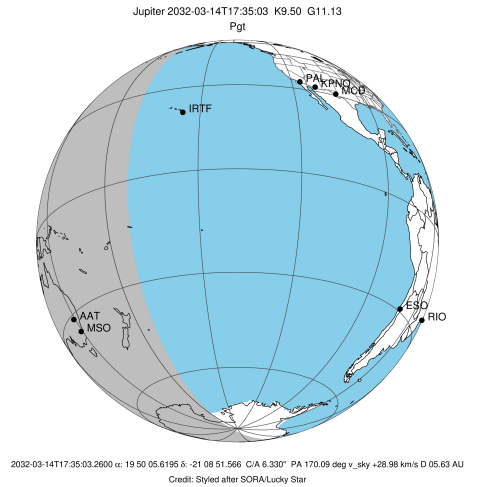


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2032-03-14T16:52:59.161	16.60	-39.48	71491.8	17.32	19.61
Jupiter	E	2032-03-14T18:10:41.678	32.97	-24.55	71491.6	22.42	25.22

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2032-03-14T17:31:53.320
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : MSO
Location              : Mt. Stromlo Observatory
Latitude (deg)       : -35.32000
E. Longitude (deg)   : 149.00833
Altitude (km)        : 0.770
Gaia source ID       : 6865466400452276224
2Mass ID (if available) : 19500566-2108505
ICRS Star Coord at Epoch: 19h 50m 05.61953s -21:08:51.56577s
RUWE (>1.4 is poor) : 0.85
K magnitude           : 9.497
G magnitude           : 11.126
RP magnitude         : 10.562
BP magnitude         : 11.520
DUPflag              : 0
Distance (au)        : 5.629
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 28.98
Sun-Target sep (deg) : 58.72
Sun-Moon sep (deg)   : 99.81
B (ring opening deg) : -1.38
PA of pole (deg)     : -12.23
Pole direction: RA (deg): 268.05670
Dec (deg): 64.49654
C/A sky separation (") : 5.857
C/A sky separation (km) : 23911.2
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	2032-03-14T16:53:00.387	17.56	-37.20	71491.8	16.98	19.23
Jupiter	E	2032-03-14T18:10:52.073	33.30	-23.20	71491.6	22.06	24.83