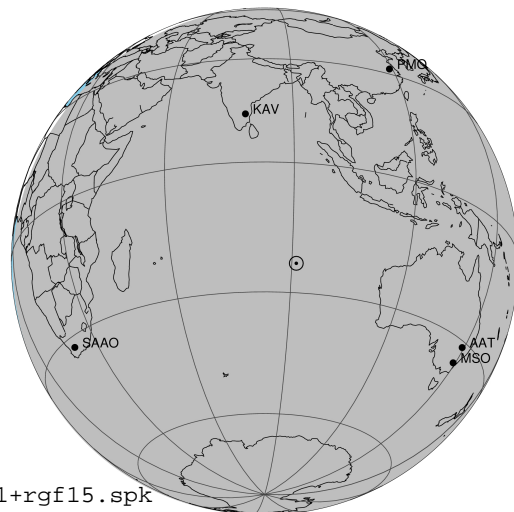


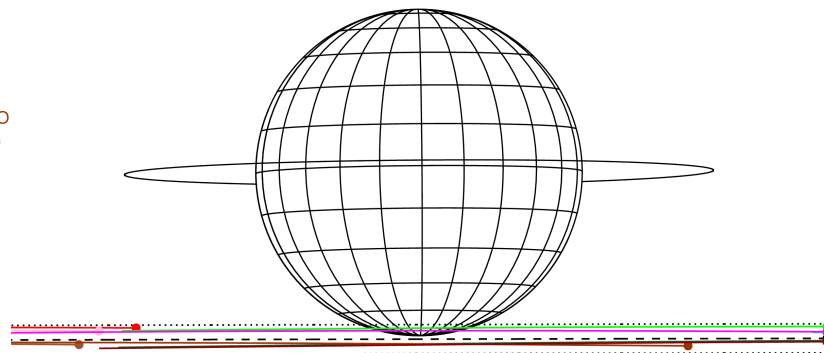
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-06-26T17:58:27.790
 Event type : Pt
 : Jupiter occs: topocentric, not geocentric
 : Not a ringed target
 Gaia source ID : 4068879637779780736
 2Mass ID (if available) : 17480418-2305054

Jupiter 2043-06-26T17:58:27 K7.77 G11.78 Pt

ICRS Star Coord at Epoch: 17h 48m 04.19360s -23°05'05.43395s
 RUWE (>1.4 is poor) : 0.75
 K magnitude : 7.768
 G magnitude : 11.785
 RP magnitude : 10.702
 BP magnitude : 13.006
 DUPflag : 0
 Distance (au) : 4.254
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : -16.20
 Sun-Target sep (deg) : 172.80
 Sun-Moon sep (deg) : 55.48
 B (ring opening deg) : -2.41
 PA of pole (deg) : 0.45
 Pole direction: RA (deg): 268.05669
 Dec (deg): 64.49732
 C/A sky separation (") : 23.662
 C/A sky separation (km) : 73009.6
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk



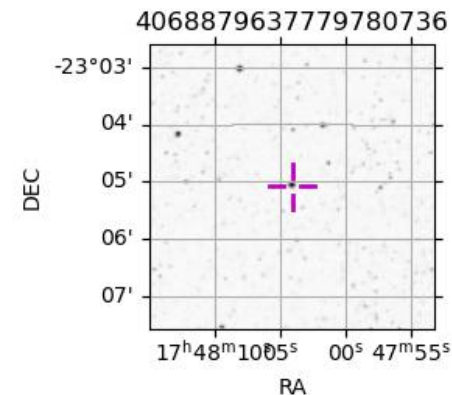
Earth
 PIC
 PMO
 TEN
 IRTF
 KAV
 RIO
 AAT
 SAAO
 MSO



2043-06-26T17:58:27.7900 α: 17 48 04.1936 δ: -23 05 05.434 C/A ***** PA 0.11 deg v_sky -16.20 km/s D 04.25 AU
 Credit: Styled after SORA/Lucky Star

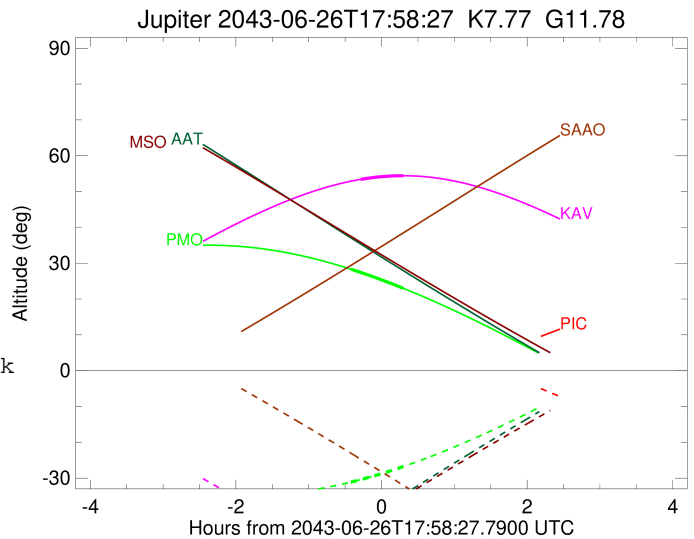
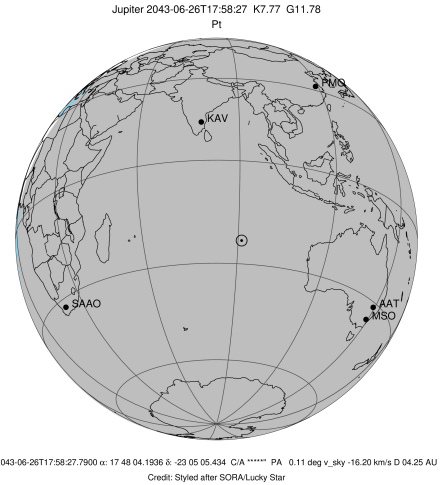
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	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	+ +	JUN 26 17:33 - JUN 26 18:16	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	+ +	JUN 26 17:41 - JUN 26 18:16	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



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-06-26T17:54:54.450
Event type           : Pt
: Jupiter occs: topocentric, not geocentric
: 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       : 4068879637779780736
2Mass ID (if available) : 17480418-2305054
ICRS Star Coord at Epoch: 17h 48m 04.19360s -23:05:05.43395s
RUWE (>1.4 is poor) : 0.75
K magnitude           : 7.768
G magnitude           : 11.785
RP magnitude         : 10.702
BP magnitude         : 13.006
DUPflag              : 0
Distance (au)        : 4.254
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -16.20
Sun-Target sep (deg) : 172.80
Sun-Moon sep (deg)   : 55.59
B (ring opening deg) : -2.41
PA of pole (deg)     : 0.45
Pole direction: RA (deg): 268.05669
Dec (deg): 64.49732
C/A sky separation ("): 22.096
C/A sky separation (km): 68175.6
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
    
```

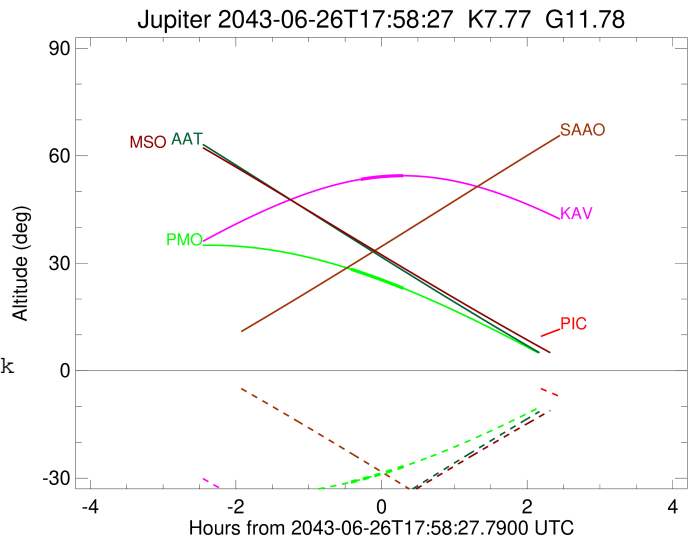
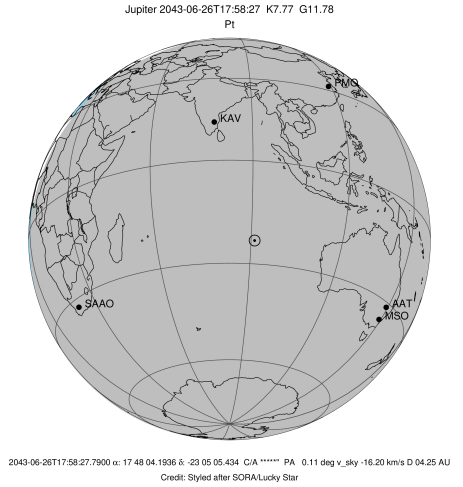


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-06-26T17:33:15.620	28.32	-31.09	71484.7	-72.39	-74.37
Jupiter	E	2043-06-26T18:16:35.070	22.97	-26.75	71484.7	-72.33	-74.32

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-06-26T17:58:59.280
Event type           : Pt
: Jupiter occs: topocentric, not geocentric
: 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       : 4068879637779780736
2Mass ID (if available) : 17480418-2305054
ICRS Star Coord at Epoch: 17h 48m 04.19360s -23:05:05.43395s
RUWE (>1.4 is poor) : 0.75
K magnitude           : 7.768
G magnitude           : 11.785
RP magnitude          : 10.702
BP magnitude          : 13.006
DUPflag              : 0
Distance (au)        : 4.254
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : -16.20
Sun-Target sep (deg) : 172.80
Sun-Moon sep (deg)   : 56.19
B (ring opening deg) : -2.41
PA of pole (deg)     : 0.45
Pole direction: RA (deg): 268.05669
Dec (deg): 64.49732
C/A sky separation ("): 22.461
C/A sky separation (km): 69303.3
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	2043-06-26T17:41:28.395	53.41	-50.69	71484.5	-76.01	-77.61
Jupiter	E	2043-06-26T18:16:30.055	54.41	-53.37	71484.5	-75.26	-76.95