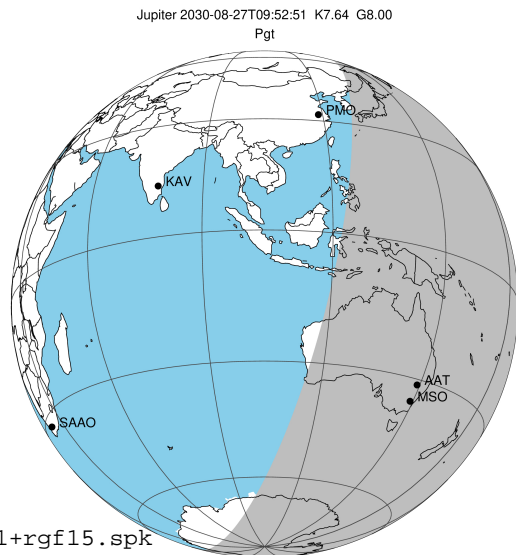


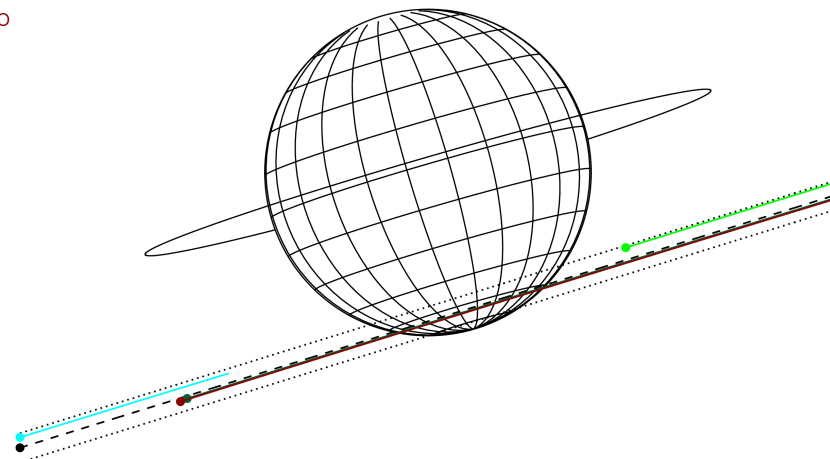
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2030-08-27T09:52:51.770
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 6305790071100008704
 2Mass ID (if available) : 15111165-1657524

Jupiter 2030-08-27T09:52:51 K7.64 G8.00 Pgt

ICRS Star Coord at Epoch: 15h 11m 11.69510s -16:57:52.88046s
 RUWE (>1.4 is poor) : 0.84
 K magnitude : 7.642
 G magnitude : 8.003
 RP magnitude : 7.866
 BP magnitude : 8.063
 DUPflag : 1
 Distance (au) : 5.519
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 19.73
 Sun-Target sep (deg) : 76.25
 Sun-Moon sep (deg) : 95.18
 B (ring opening deg) : -2.92
 PA of pole (deg) : 16.18
 Pole direction: RA (deg): 268.05717
 Dec (deg): 64.49652
 C/A sky separation (") : 15.557
 C/A sky separation (km) : 62273.5
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk



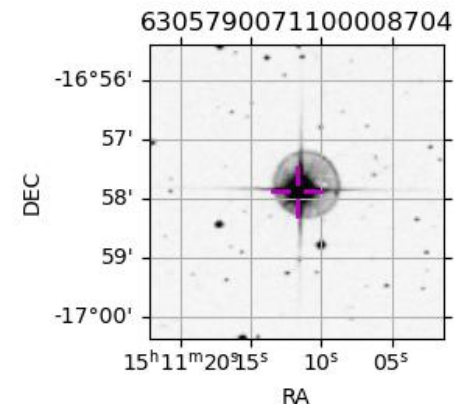
Earth
 PMO
 IRTF
 AAT
 MSO



2030-08-27T09:52:51.7700 α: 15 11 11.6951 δ: -16 57 52.880 C/A ***** PA 17.21 deg v_sky +19.73 km/s D 05.52 AU
 Credit: Styled after SORA/Lucky Star

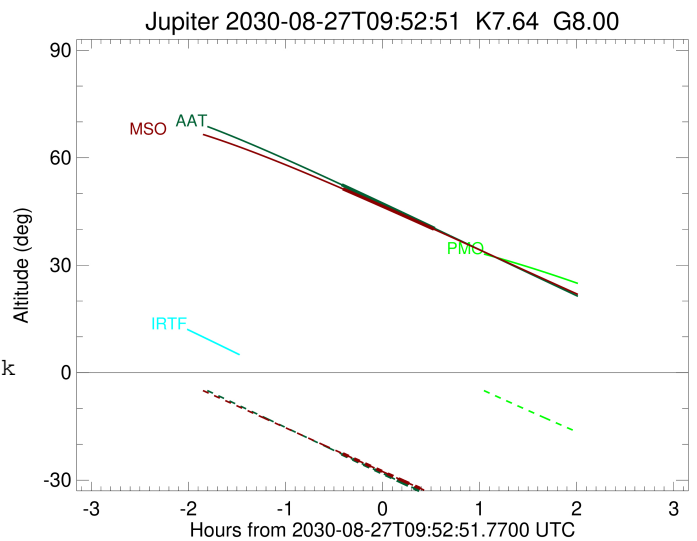
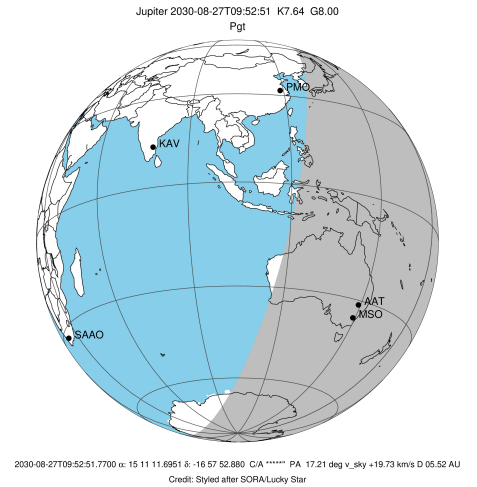
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	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	+ +	AUG 27 09:27 - AUG 27 10:25	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	AUG 27 09:28 - AUG 27 10:24	Pie



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2030-08-27T09:56:31.270
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       : 6305790071100008704
2Mass ID (if available) : 15111165-1657524
ICRS Star Coord at Epoch: 15h 11m 11.69510s -16:57:52.88046s
RUWE (>1.4 is poor) : 0.84
K magnitude          : 7.642
G magnitude          : 8.003
RP magnitude         : 7.866
BP magnitude         : 8.063
DUPflag             : 1
Distance (au)        : 5.519
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 19.73
Sun-Target sep (deg) : 76.25
Sun-Moon sep (deg)  : 95.81
B (ring opening deg) : -2.92
PA of pole (deg)    : 16.18
Pole direction: RA (deg): 268.05717
Dec (deg): 64.49652
C/A sky separation (" ) : 15.754
C/A sky separation (km) : 63065.3
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
    
```

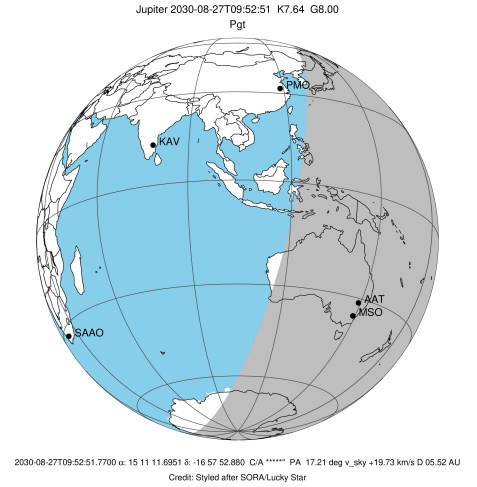


x: target alt < 5.0 deg or sun > -5.0 deg

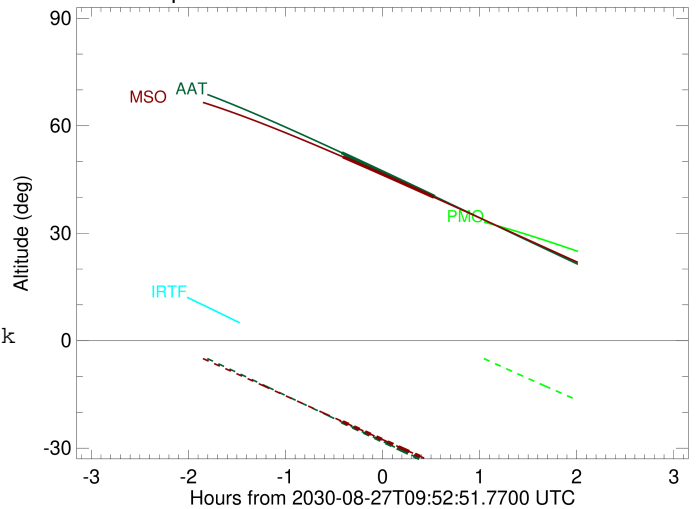
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2030-08-27T09:27:40.352	52.46	-22.72	71482.7	-62.84	-65.69
Jupiter	E	2030-08-27T10:25:18.606	40.22	-34.97	71483.1	-60.77	-63.78

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2030-08-27T09:56:28.600
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       : 6305790071100008704
2Mass ID (if available) : 15111165-1657524
ICRS Star Coord at Epoch: 15h 11m 11.69510s -16:57:52.88046s
RUWE (>1.4 is poor) : 0.84
K magnitude          : 7.642
G magnitude          : 8.003
RP magnitude         : 7.866
BP magnitude         : 8.063
DUPflag             : 1
Distance (au)        : 5.519
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 19.73
Sun-Target sep (deg) : 76.25
Sun-Moon sep (deg)   : 95.80
B (ring opening deg) : -2.92
PA of pole (deg)     : 16.18
Pole direction: RA (deg): 268.05717
Dec (deg): 64.49652
C/A sky separation (") : 15.865
C/A sky separation (km) : 63507.7
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 2030-08-27T09:52:51 K7.64 G8.00



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	2030-08-27T09:28:22.178	51.30	-22.62	71482.6	-63.60	-66.39
Jupiter	E	2030-08-27T10:24:31.748	40.06	-33.97	71483.0	-61.53	-64.48