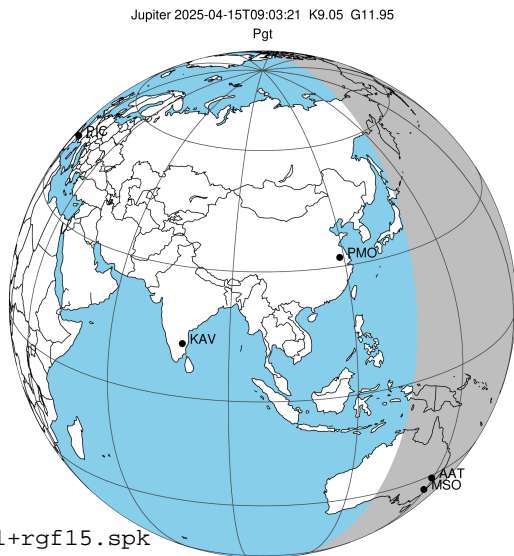


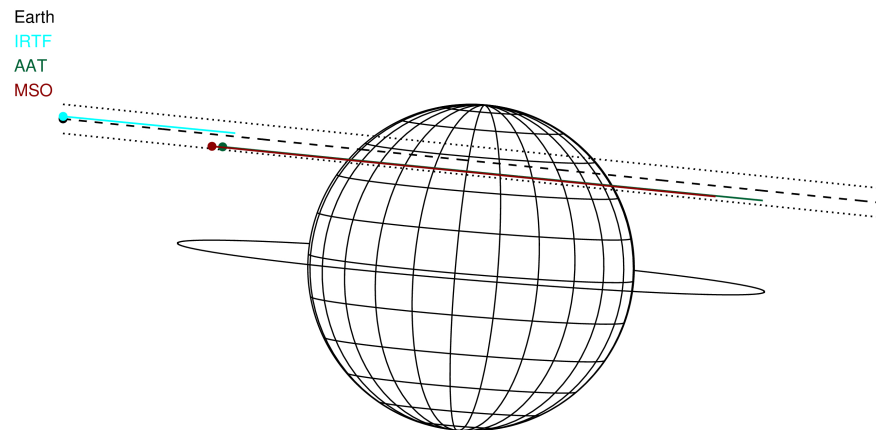
target : Jupiter  
 target radius (km) : 71492.00  
 C/A epoch : 2025-04-15T09:03:21.630  
 Event type : Pgt  
 : Jupiter occs: geocentric, topocentric  
 : Not a ringed target  
 Gaia source ID : 3415355416798854400  
 2Mass ID (if available) : 05080657+2237486

Jupiter 2025-04-15T09:03:21 K9.05 G11.95 Pgt

ICRS Star Coord at Epoch: 05h 08m 06.57183s +22:37:48.31661s  
 RUWE (>1.4 is poor) : 1.04  
 K magnitude : 9.047  
 G magnitude : 11.951  
 RP magnitude : 11.098  
 BP magnitude : 12.716  
 DUPflag : 0  
 Distance (au) : 5.663  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 30.77  
 Sun-Target sep (deg) : 52.74  
 Sun-Moon sep (deg) : 152.54  
 B (ring opening deg) : 2.45  
 PA of pole (deg) : -4.73  
 Pole direction: RA (deg): 268.05779  
 Dec (deg): 64.49671  
 C/A sky separation (") : 11.327  
 C/A sky separation (km) : 46519.9  
 NAIF SPICE kernels : RAJobs\_U111+rgf15.spk

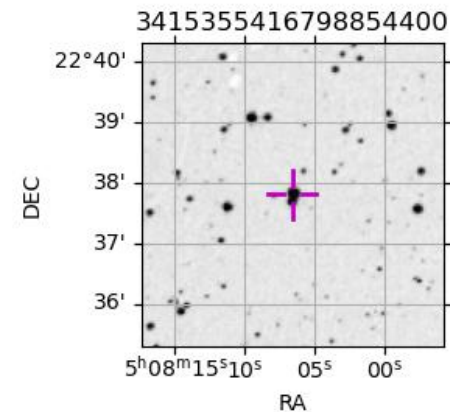


2025-04-15T09:03:21.6300 α: 05 08 06.5718 δ: +22 37 48.317 C/A \*\*\*\*\* PA 174.14 deg v\_sky +30.77 km/s D 05.66 AU  
 Credit: Styled after SORA/Lucky Star



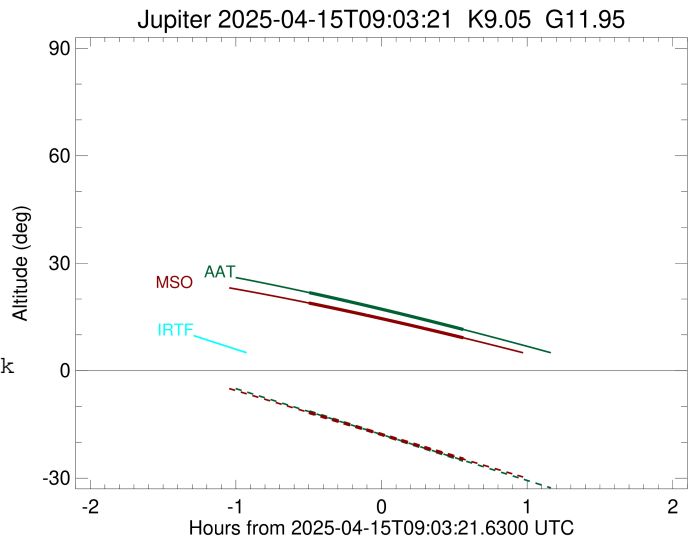
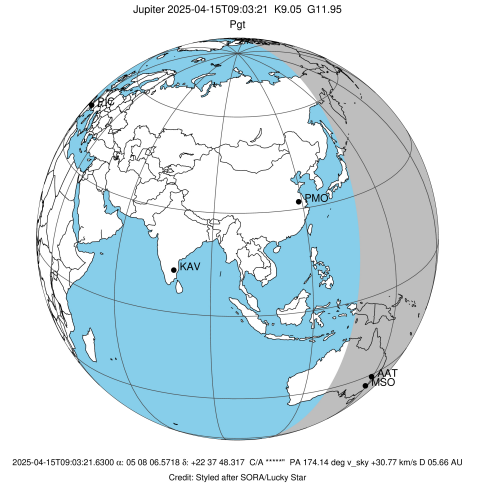
Observable events with sun below -5 deg and altitude above 5 deg

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			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	+ +	APR 15 08:33 - APR 15 09:37	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	APR 15 08:33 - APR 15 09:37	Pie



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2025-04-15T09:05:21.990
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        : 3415355416798854400
2Mass ID (if available) : 05080657+2237486
ICRS Star Coord at Epoch: 05h 08m 06.57183s +22:37:48.31661s
RUWE (>1.4 is poor) : 1.04
K magnitude           : 9.047
G magnitude           : 11.951
RP magnitude          : 11.098
BP magnitude          : 12.716
DUPflag               : 0
Distance (au)         : 5.663
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 30.77
Sun-Target sep (deg) : 52.74
Sun-Moon sep (deg)   : 153.24
B (ring opening deg) : 2.45
PA of pole (deg)     : -4.73
Pole direction: RA (deg): 268.05779
Dec (deg): 64.49671
C/A sky separation ("): 10.172
C/A sky separation (km): 41775.6
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
    
```

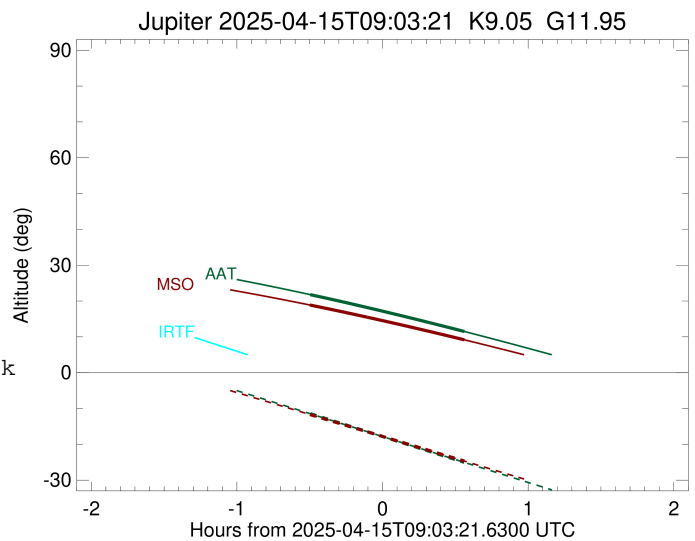
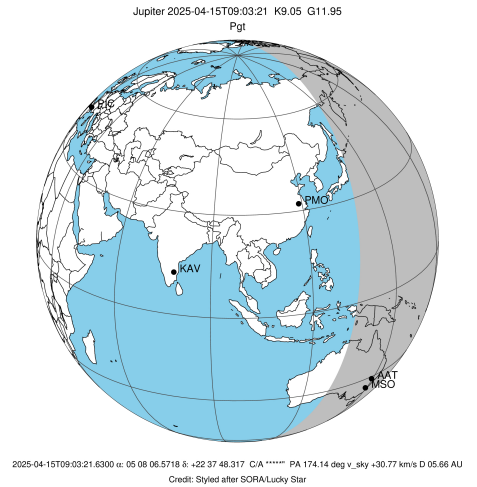


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2025-04-15T08:33:39.672	21.77	-11.46	71489.1	36.69	40.33
Jupiter	E	2025-04-15T09:37:01.198	11.51	-25.02	71489.3	34.79	38.38

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2025-04-15T09:05:14.860
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       : 3415355416798854400
2Mass ID (if available) : 05080657+2237486
ICRS Star Coord at Epoch: 05h 08m 06.57183s +22:37:48.31661s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 9.047
G magnitude          : 11.951
RP magnitude         : 11.098
BP magnitude         : 12.716
DUPflag             : 0
Distance (au)        : 5.663
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 30.77
Sun-Target sep (deg) : 52.74
Sun-Moon sep (deg)   : 153.20
B (ring opening deg) : 2.45
PA of pole (deg)     : -4.73
Pole direction: RA (deg): 268.05779
Dec (deg): 64.49671
C/A sky separation (") : 10.107
C/A sky separation (km) : 41507.5
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	2025-04-15T08:33:26.971	18.88	-11.68	71489.1	36.43	40.07
Jupiter	E	2025-04-15T09:36:59.743	9.18	-24.67	71489.4	34.52	38.10