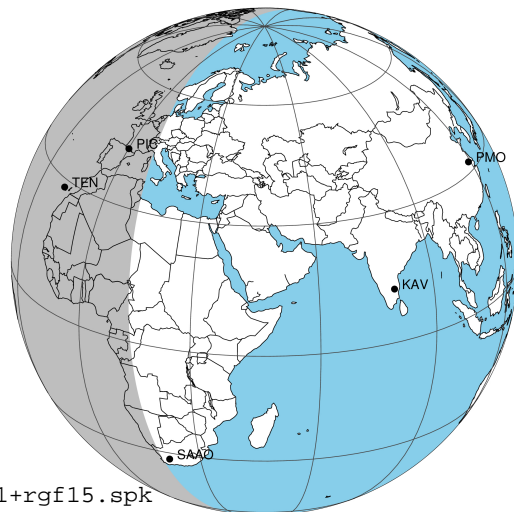


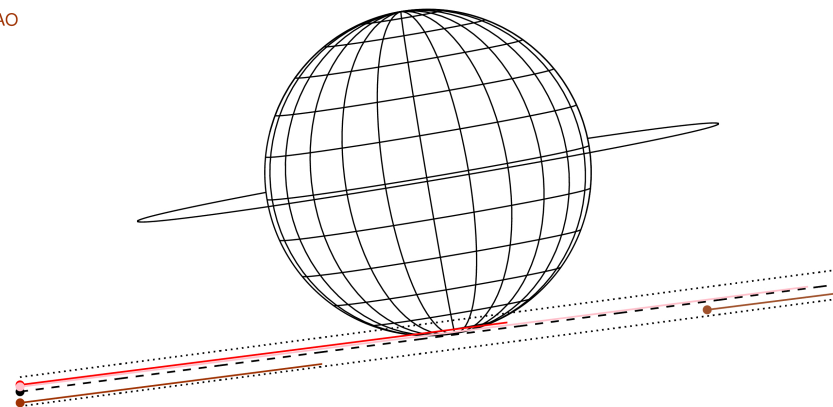
target : Jupiter  
 target radius (km) : 71492.00  
 C/A epoch : 2025-09-10T04:57:39.190  
 Event type : Pt  
 : Jupiter occs: topocentric, not geocentric  
 : Not a ringed target  
 Gaia source ID : 866155269923632512  
 2Mass ID (if available) : 07224217+2203136

Jupiter 2025-09-10T04:57:39 K9.76 G10.23 Pt

ICRS Star Coord at Epoch: 07h 22m 42.17890s +22:03:13.62777s  
 RUWE (>1.4 is poor) : 1.47  
 K magnitude : 9.761  
 G magnitude : 10.231  
 RP magnitude : 10.048  
 BP magnitude : 10.329  
 DUPflag : 0  
 Distance (au) : 5.628  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 28.00  
 Sun-Target sep (deg) : 58.30  
 Sun-Moon sep (deg) : 88.66  
 B (ring opening deg) : 1.69  
 PA of pole (deg) : 9.54  
 Pole direction: RA (deg): 268.05774  
 Dec (deg): 64.49670  
 C/A sky separation (") : 17.625  
 C/A sky separation (km) : 71948.8  
 NAIF SPICE kernels : RAJobs\_U111+rgf15.spk



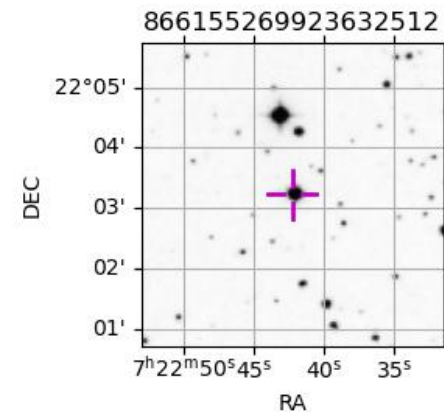
Earth  
 PIC  
 TEN  
 RIO  
 SAAO



2025-09-10T04:57:39.1900 a: 07 22 42.1789 & +22 03 13.628 C/A \*\*\*\*\* PA 7.48 deg v\_sky +28.00 km/s D 05.63 AU  
 Credit: Styled after SORA/Lucky Star

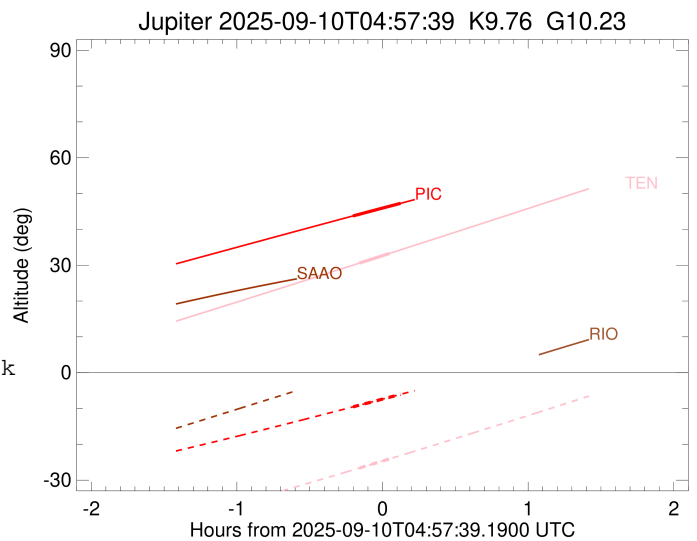
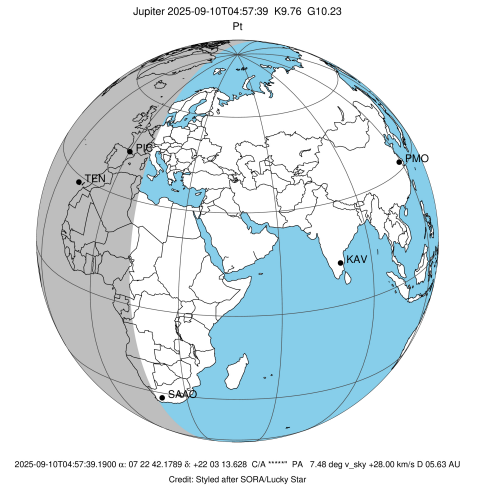
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OCode
PIC	Pic du Midi	42.9	0.1	+ +	SEP 10 04:45 - SEP 10 05:05	Pie
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	+ +	SEP 10 04:48 - SEP 10 05:00	Pie
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



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2025-09-10T04:55:17.830
Event type          : Pt
                    : Jupiter occs: topocentric, not geocentric
                    : Not a ringed target
Observer code       : PIC
Location           : Pic du Midi
Latitude (deg)     : 42.93656
E. Longitude (deg) : 0.14231
Altitude (km)     : 2.890
Gaia source ID     : 866155269923632512
2Mass ID (if available) : 07224217+2203136
ICRS Star Coord at Epoch: 07h 22m 42.17890s +22:03:13.62777s
RUWE (>1.4 is poor) : 1.47
K magnitude        : 9.761
G magnitude        : 10.231
RP magnitude       : 10.048
BP magnitude       : 10.329
DUPflag           : 0
Distance (au)     : 5.629
f0 (km)           : 0.00
g0 (km)           : 0.00
skyplane vel. (km/s) : 28.00
Sun-Target sep (deg) : 58.30
Sun-Moon sep (deg) : 89.37
B (ring opening deg) : 1.69
PA of pole (deg)   : 9.54
Pole direction: RA (deg): 268.05774
Dec (deg): 64.49670
C/A sky separation (") : 17.051
C/A sky separation (km) : 69605.0
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
    
```

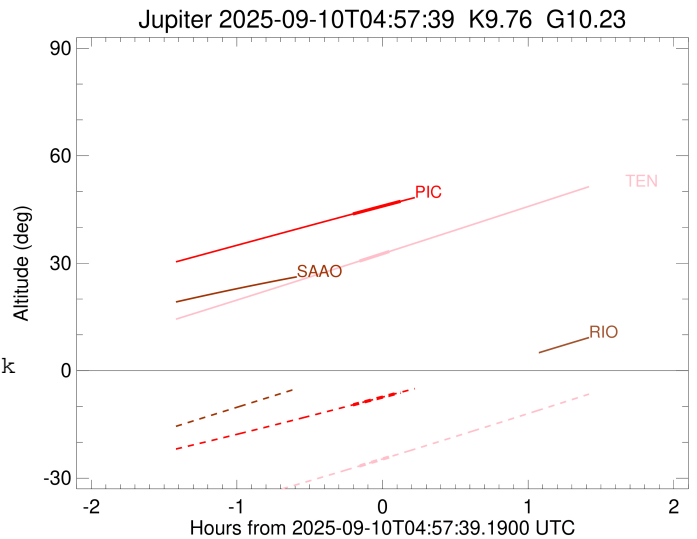
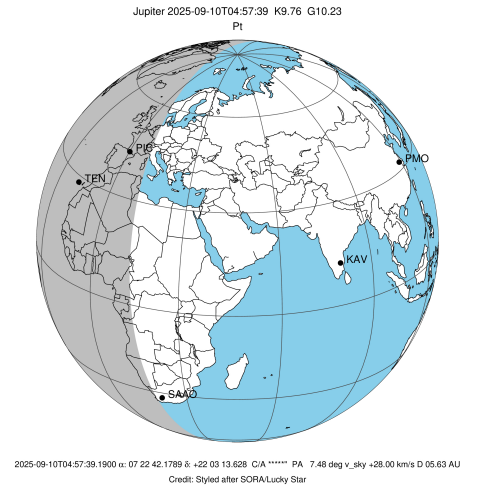


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2025-09-10T04:45:30.563	43.75	-9.54	71488.4	-74.54	-76.30
Jupiter	E	2025-09-10T05:05:05.358	47.27	-6.05	71488.3	-78.88	-80.17

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2025-09-10T04:54:20.310
Event type            : Pt
: Jupiter occs: topocentric, not geocentric
: Not a ringed target
Observer code         : TEN
Location              : Teide Obs./Tenerife
Latitude (deg)        : 28.30050
E. Longitude (deg)    : 343.48909
Altitude (km)         : 2.395
Gaia source ID        : 866155269923632512
2Mass ID (if available) : 07224217+2203136
ICRS Star Coord at Epoch: 07h 22m 42.17890s +22:03:13.62777s
RUWE (>1.4 is poor) : 1.47
K magnitude           : 9.761
G magnitude           : 10.231
RP magnitude          : 10.048
BP magnitude          : 10.329
DUPflag              : 0
Distance (au)         : 5.629
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 28.00
Sun-Target sep (deg)  : 58.30
Sun-Moon sep (deg)    : 89.19
B (ring opening deg) : 1.69
PA of pole (deg)      : 9.54
Pole direction: RA (deg): 268.05774
Dec (deg): 64.49670
C/A sky separation (") : 17.334
C/A sky separation (km) : 70759.4
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	2025-09-10T04:48:14.110	30.60	-26.60	71488.2	-79.38	-80.62
Jupiter	E	2025-09-10T05:00:26.653	33.26	-24.09	71488.2	-83.87	-84.59