

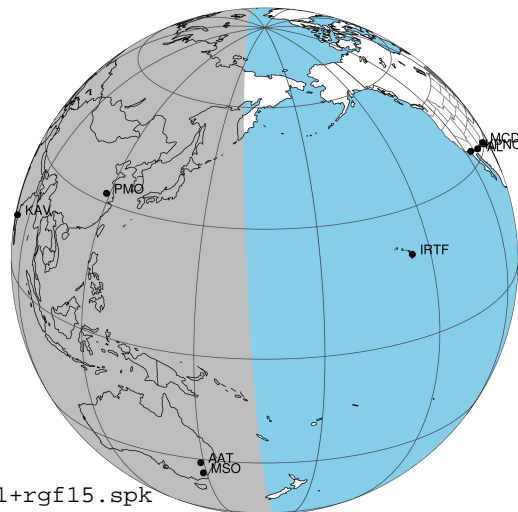
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2036-09-12T19:02:27.590
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 3404439946400149120
 2Mass ID (if available) : 05344092+2241461

Jupiter 2036-09-12T19:02:27 K9.71 G11.07 Pgt

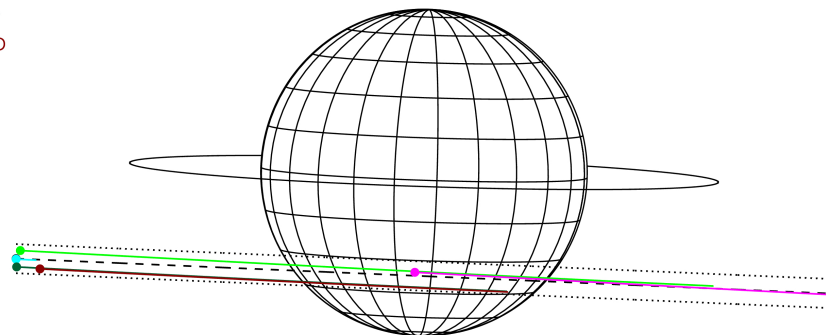
ICRS Star Coord at Epoch: 05h 34m 40.95402s +22:41:45.81064s

RUWE (>1.4 is poor) : 1.05
 K magnitude : 9.705
 G magnitude : 11.073
 RP magnitude : 10.590
 BP magnitude : 11.387
 DUPflag : 0
 Distance (au) : 5.034
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 14.69
 Sun-Target sep (deg) : 85.93
 Sun-Moon sep (deg) : 12.85
 B (ring opening deg) : 2.74
 PA of pole (deg) : -1.89
 Pole direction: RA (deg): 268.05634
 Dec (deg): 64.49686
 C/A sky separation (") : 12.425
 C/A sky separation (km) : 45361.8
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2036-09-12T19:02:27 K9.71 G11.07
 Pgt



Earth
 PMO
 IRTF
 KAV
 AAT
 MSO

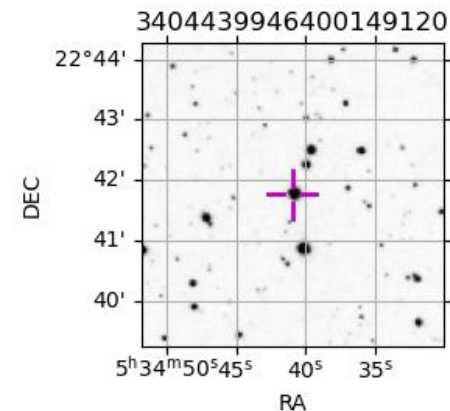


2036-09-12T19:02:27.5900 α: 05 34 40.9540 δ: +22 41 45.811 C/A ***** PA 357.55 deg v_sky +14.69 km/s D 05.03 AU

Credit: Styled after SORA/Lucky Star

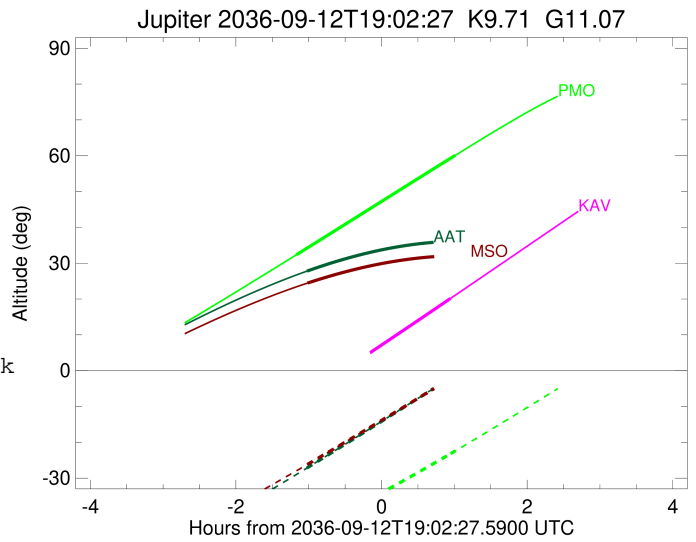
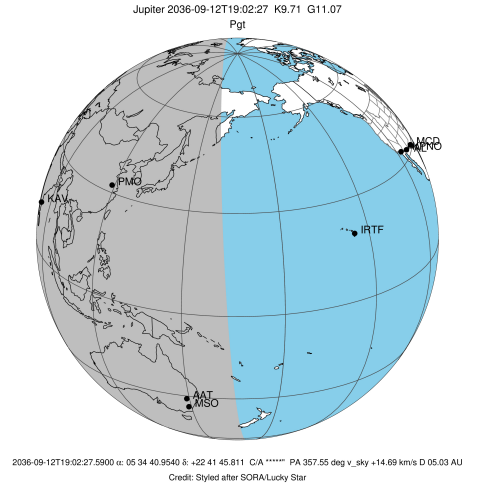
Observable events with sun below -5 deg and altitude above 5 deg

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	+ +	SEP 12 17:52 - SEP 12 20:03	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	+	SEP 12 19:59 - SEP 12 19:59	Pne
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	+	SEP 12 18:01 - SEP 12 18:01	Pin
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+	SEP 12 18:01 - SEP 12 18:01	Pin



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2036-09-12T18:57:30.420
Event type          : Pgt
                    : Jupiter occs: geocentric, topocentric
                    : 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      : 3404439946400149120
2Mass ID (if available) : 05344092+2241461
ICRS Star Coord at Epoch: 05h 34m 40.95402s +22:41:45.81064s
RUWE (>1.4 is poor) : 1.05
K magnitude          : 9.705
G magnitude          : 11.073
RP magnitude         : 10.590
BP magnitude         : 11.387
DUPflag             : 0
Distance (au)       : 5.034
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 14.69
Sun-Target sep (deg) : 85.93
Sun-Moon sep (deg)  : 12.56
B (ring opening deg) : 2.74
PA of pole (deg)    : -1.89
Pole direction: RA (deg): 268.05634
Dec (deg): 64.49686
C/A sky separation (") : 11.909
C/A sky separation (km) : 43481.0
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
    
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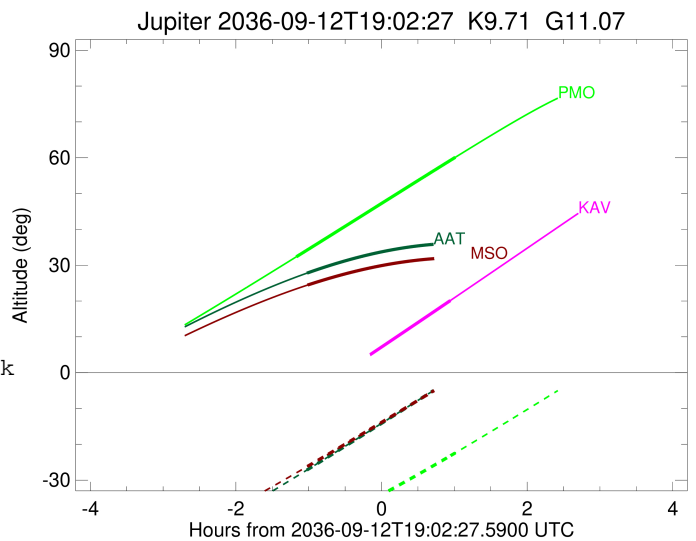
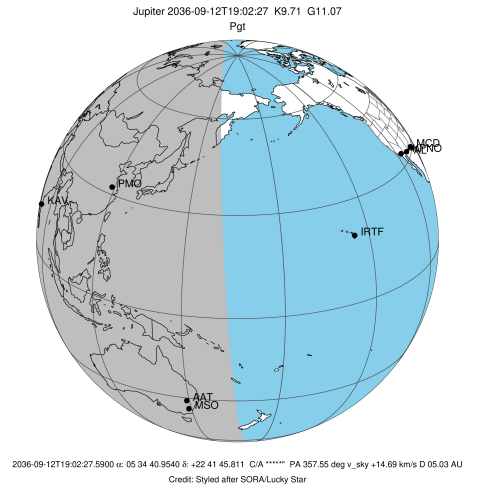


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2036-09-12T17:52:13.628	32.34	-45.59	71488.4	-36.31	-39.95
Jupiter	E	2036-09-12T20:03:17.455	60.11	-22.39	71488.0	-38.41	-42.09

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2036-09-12T18:54:51.810
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: 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        : 3404439946400149120
2Mass ID (if available) : 05344092+2241461
ICRS Star Coord at Epoch: 05h 34m 40.95402s +22:41:45.81064s
RUWE (>1.4 is poor) : 1.05
K magnitude           : 9.705
G magnitude           : 11.073
RP magnitude          : 10.590
BP magnitude          : 11.387
DUPflag              : 0
Distance (au)         : 5.034
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 14.69
Sun-Target sep (deg)  : 85.93
Sun-Moon sep (deg)   : 12.09
B (ring opening deg) : 2.74
PA of pole (deg)     : -1.89
Pole direction: RA (deg): 268.05634
Dec (deg): 64.49686
C/A sky separation (") : 12.019
C/A sky separation (km) : 43879.8
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
    
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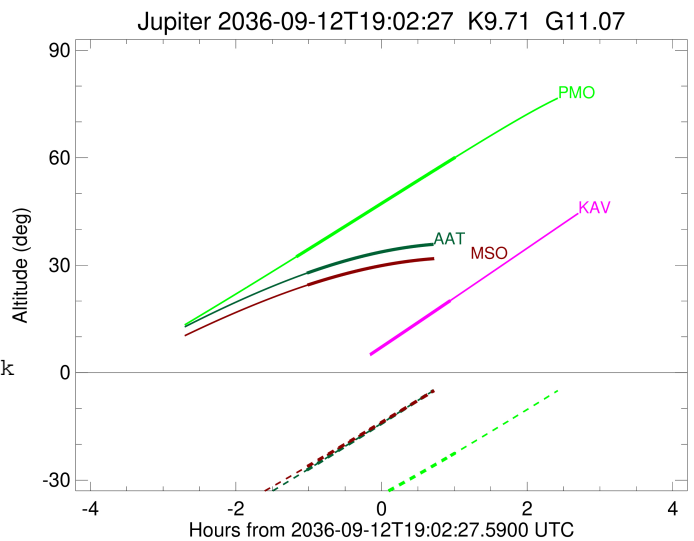
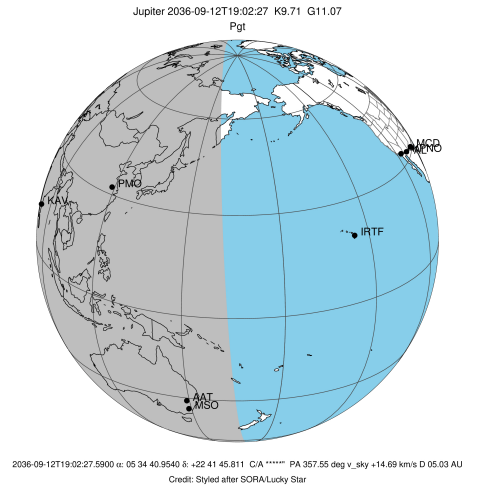


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2036-09-12T17:51:11.990	-8.83x	-69.64	71488.4	-36.59	-40.23
Jupiter	E	2036-09-12T19:59:11.301	20.13	-64.63	71487.9	-39.06	-42.76

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2036-09-12T19:00:06.290
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        : 3404439946400149120
2Mass ID (if available) : 05344092+2241461
ICRS Star Coord at Epoch: 05h 34m 40.95402s +22:41:45.81064s
RUWE (>1.4 is poor) : 1.05
K magnitude           : 9.705
G magnitude           : 11.073
RP magnitude          : 10.590
BP magnitude          : 11.387
DUPflag              : 0
Distance (au)         : 5.034
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 14.69
Sun-Target sep (deg)  : 85.93
Sun-Moon sep (deg)   : 12.50
B (ring opening deg) : 2.74
PA of pole (deg)     : -1.89
Pole direction: RA (deg): 268.05634
Dec (deg): 64.49686
C/A sky separation (") : 13.788
C/A sky separation (km) : 50337.9
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
    
```

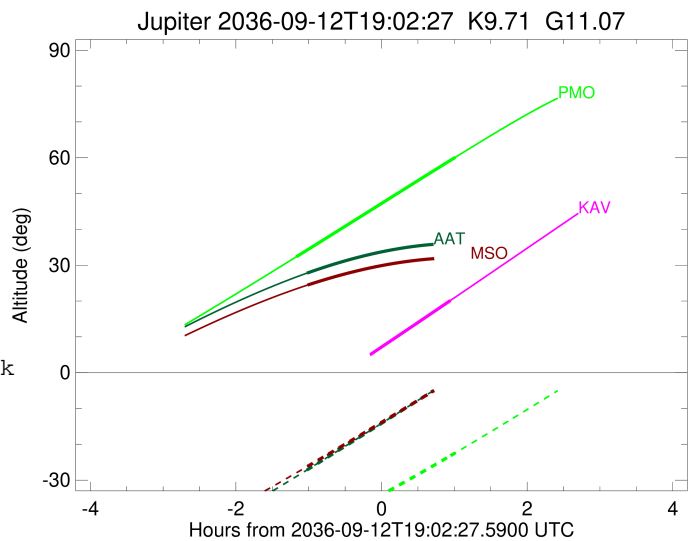
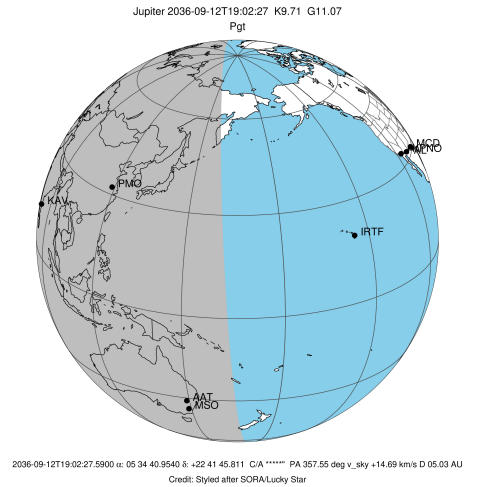


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2036-09-12T18:01:04.018	27.79	-27.16	71487.1	-43.82	-47.53
Jupiter	E	2036-09-12T19:59:22.146	36.10	-1.98x	71486.8	-45.43	-49.12

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2036-09-12T19:00:11.090
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        : 3404439946400149120
2Mass ID (if available) : 05344092+2241461
ICRS Star Coord at Epoch: 05h 34m 40.95402s +22:41:45.81064s
RUWE (>1.4 is poor) : 1.05
K magnitude           : 9.705
G magnitude           : 11.073
RP magnitude          : 10.590
BP magnitude          : 11.387
DUPflag              : 0
Distance (au)         : 5.034
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 14.69
Sun-Target sep (deg)  : 85.93
Sun-Moon sep (deg)    : 12.48
B (ring opening deg) : 2.74
PA of pole (deg)      : -1.89
Pole direction: RA (deg): 268.05634
Dec (deg): 64.49686
C/A sky separation (") : 13.858
C/A sky separation (km) : 50594.9
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	2036-09-12T18:01:30.799	24.45	-26.15	71487.0	-44.12	-47.83
Jupiter	E	2036-09-12T19:59:04.427	32.07	-2.30x	71486.7	-45.71	-49.40