

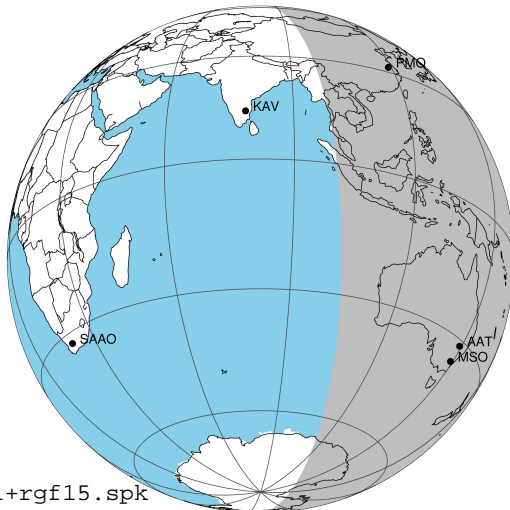
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-10-09T11:07:16.700
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4068802843798599808
 2Mass ID (if available) : 17455229-2319292

Jupiter 2043-10-09T11:07:16 K9.09 G14.61 Pgt

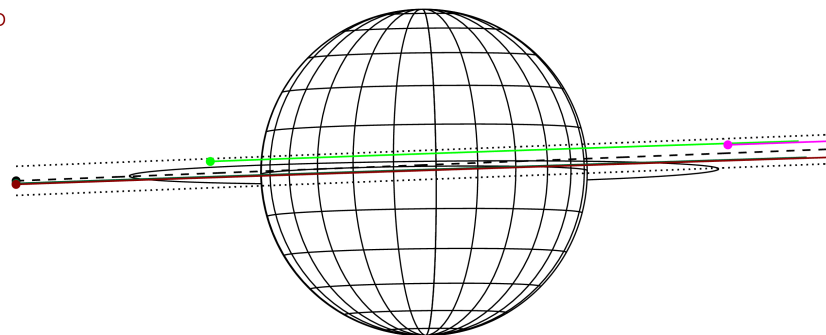
ICRS Star Coord at Epoch: 17h 45m 52.28614s -23:19:29.59991s

RUWE (>1.4 is poor) : 0.86
 K magnitude : 9.090
 G magnitude : 14.614
 RP magnitude : 13.197
 BP magnitude : 17.206
 DUPflag : 0
 Distance (au) : 5.461
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 22.70
 Sun-Target sep (deg) : 71.31
 Sun-Moon sep (deg) : 5.53
 B (ring opening deg) : -2.17
 PA of pole (deg) : 0.68
 Pole direction: RA (deg): 268.05675
 Dec (deg): 64.49731
 C/A sky separation (") : 0.833
 C/A sky separation (km) : 3299.0
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-10-09T11:07:16 K9.09 G14.61
 Pgt



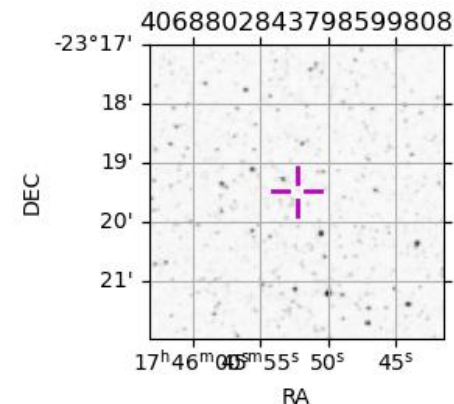
Earth
 PMO
 KAV
 AAT
 MSO



2043-10-09T11:07:16.7000 cc: 17 45 52.2861 s: -23 19 29.600 C/A 0.825° PA 182.23 deg v_sky +22.70 km/s D 05.46 AU
 Credit: Styled after SORA/Lucky Star

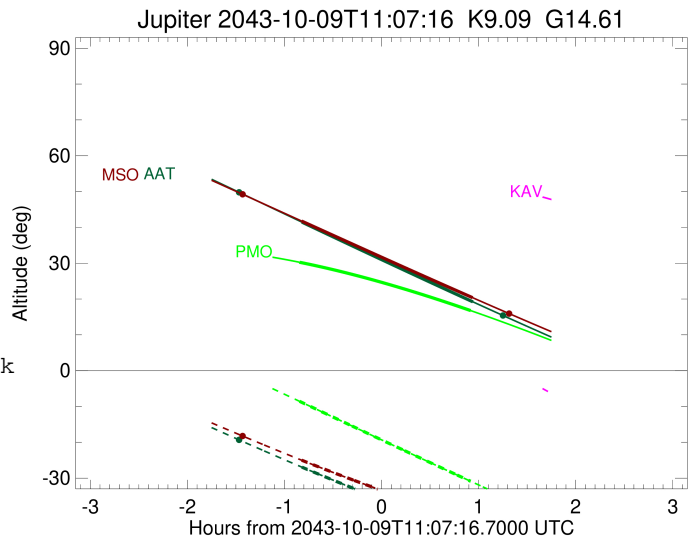
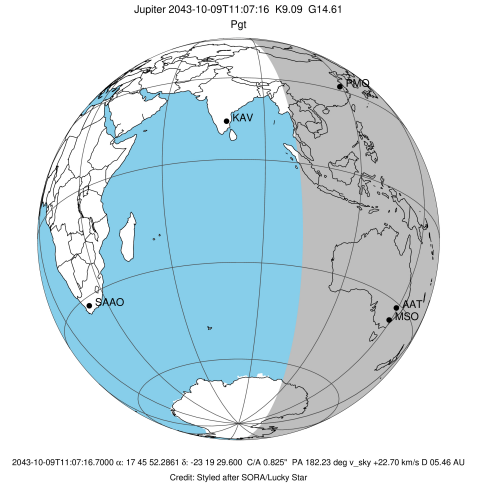
Observable events with sun below -5 deg and altitude above 5 deg

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	+ +	OCT 09 10:16 - OCT 09 12:02	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			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	+ +	OCT 09 10:18 - OCT 09 12:03	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	OCT 09 10:17 - OCT 09 12:03	Pie



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-09T11:09:34.430
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      : 4068802843798599808
2Mass ID (if available) : 17455229-2319292
ICRS Star Coord at Epoch: 17h 45m 52.28614s -23:19:29.59991s
RUWE (>1.4 is poor) : 0.86
K magnitude          : 9.090
G magnitude          : 14.614
RP magnitude         : 13.197
BP magnitude         : 17.206
DUPflag             : 0
Distance (au)       : 5.461
f0 (km)             : 0.00
g0 (km)             : 0.00
skyplane vel. (km/s) : 22.70
Sun-Target sep (deg) : 71.31
Sun-Moon sep (deg)  : 6.36
B (ring opening deg) : -2.17
PA of pole (deg)    : 0.68
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (" ) : 2.073
C/A sky separation (km) : 8209.6
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
    
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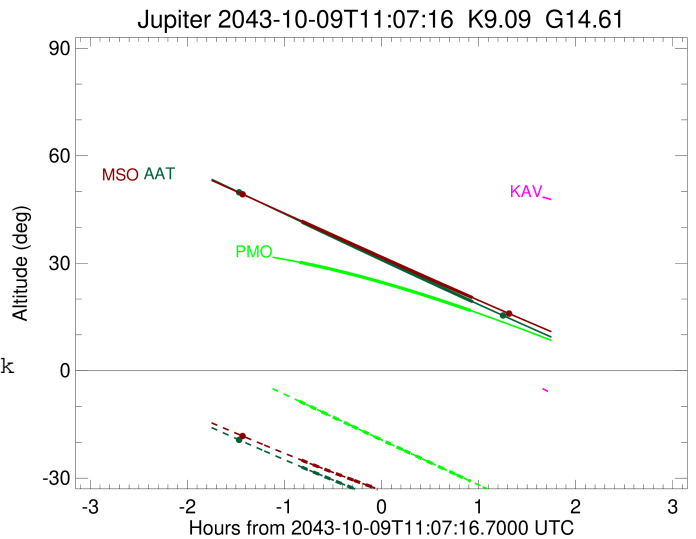
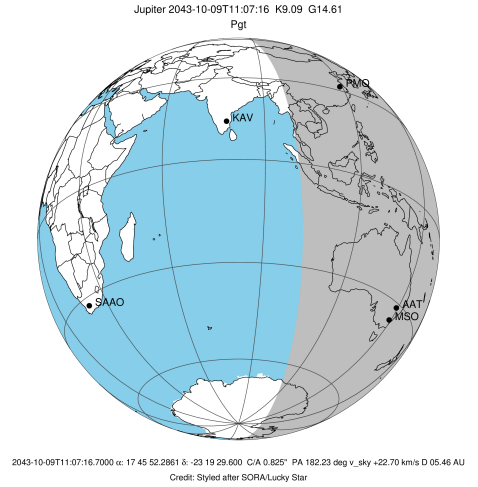


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-09T10:16:36.037	30.26	-8.55	71492.0	5.22	5.96
Jupiter	E	2043-10-09T12:02:22.658	16.77	-30.87	71491.9	7.88	8.99

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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-10-09T11:11:02.670
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        : 4068802843798599808
2Mass ID (if available) : 17455229-2319292
ICRS Star Coord at Epoch: 17h 45m 52.28614s -23:19:29.59991s
RUWE (>1.4 is poor) : 0.86
K magnitude           : 9.090
G magnitude           : 14.614
RP magnitude          : 13.197
BP magnitude          : 17.206
DUPflag              : 0
Distance (au)         : 5.461
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 22.70
Sun-Target sep (deg)  : 71.31
Sun-Moon sep (deg)    : 5.55
B (ring opening deg) : -2.17
PA of pole (deg)      : 0.68
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (" ) : 0.321
C/A sky separation (km) : 1270.6
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
    
```

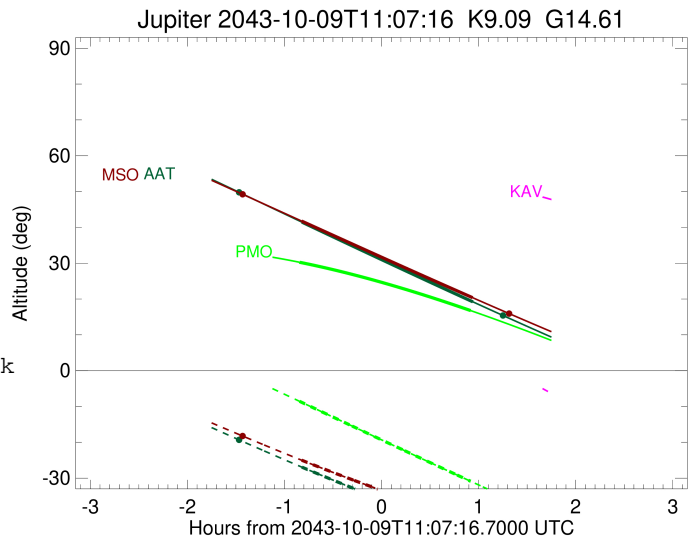
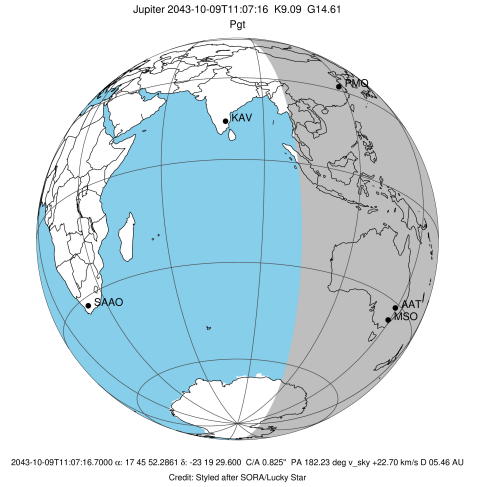


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-09T10:18:04.612	41.46	-26.93	71492.0	-0.19	-0.22
Jupiter	E	2043-10-09T12:03:46.387	19.21	-44.64	71492.0	2.18	2.50

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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-10-09T11:10:52.930
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       : 4068802843798599808
2Mass ID (if available) : 17455229-2319292
ICRS Star Coord at Epoch: 17h 45m 52.28614s -23:19:29.59991s
RUWE (>1.4 is poor) : 0.86
K magnitude           : 9.090
G magnitude           : 14.614
RP magnitude          : 13.197
BP magnitude          : 17.206
DUPflag              : 0
Distance (au)        : 5.461
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 22.70
Sun-Target sep (deg) : 71.31
Sun-Moon sep (deg)   : 5.49
B (ring opening deg) : -2.17
PA of pole (deg)     : 0.68
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation ("): 0.224
C/A sky separation (km): 885.3
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	2043-10-09T10:17:55.788	41.75	-24.99	71492.0	-0.52	-0.59
Jupiter	E	2043-10-09T12:03:36.289	20.37	-41.41	71492.0	1.89	2.16