

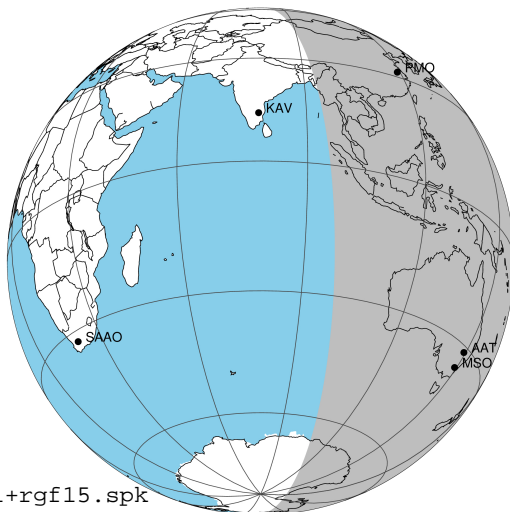
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-10-07T11:26:04.490
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4068805759987295360
 2Mass ID (if available) : 17444201-2319045

Jupiter 2043-10-07T11:26:04 K9.11 G14.45 Pgt

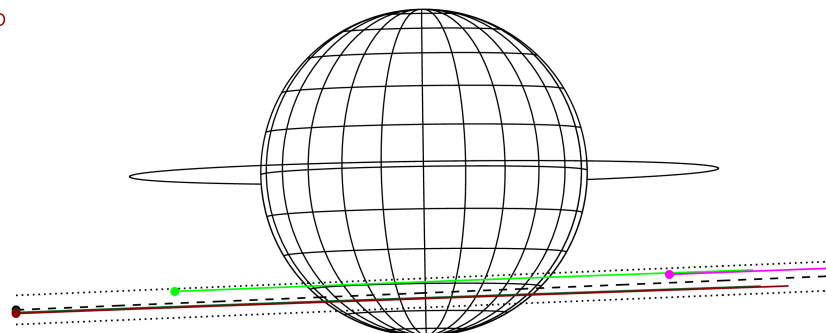
ICRS Star Coord at Epoch: 17h 44m 42.02940s -23:19:04.90382s

RUWE (>1.4 is poor) : 0.98
 K magnitude : 9.111
 G magnitude : 14.447
 RP magnitude : 13.038
 BP magnitude : 16.601
 DUPflag : 0
 Distance (au) : 5.432
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 21.85
 Sun-Target sep (deg) : 73.00
 Sun-Moon sep (deg) : 25.25
 B (ring opening deg) : -2.17
 PA of pole (deg) : 0.81
 Pole direction: RA (deg): 268.05674
 Dec (deg): 64.49731
 C/A sky separation (") : 13.382
 C/A sky separation (km) : 52722.1
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-10-07T11:26:04 K9.11 G14.45
 Pgt



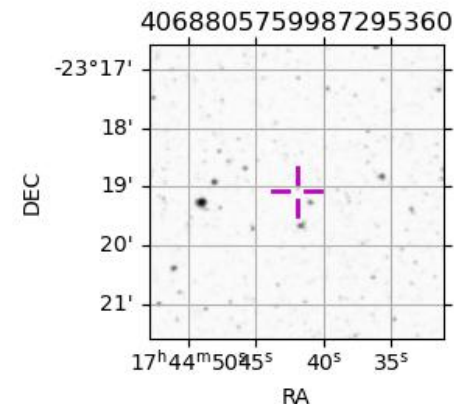
Earth
 PMO
 KAV
 AAT
 MSO



2043-10-07T11:26:04.4900 α: 17 44 42.0294 δ: -23 19 04.904 C/A ***** PA 2.38 deg v_sky +21.85 km/s D 05.43 AU
 Credit: Styled after SORA/Lucky Star

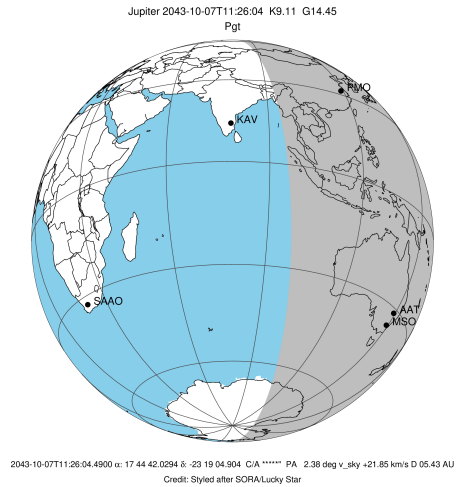
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEncode
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 07 10:47 - OCT 07 12:09	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 07 10:54 - OCT 07 12:04	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	OCT 07 10:54 - OCT 07 12:04	Pie

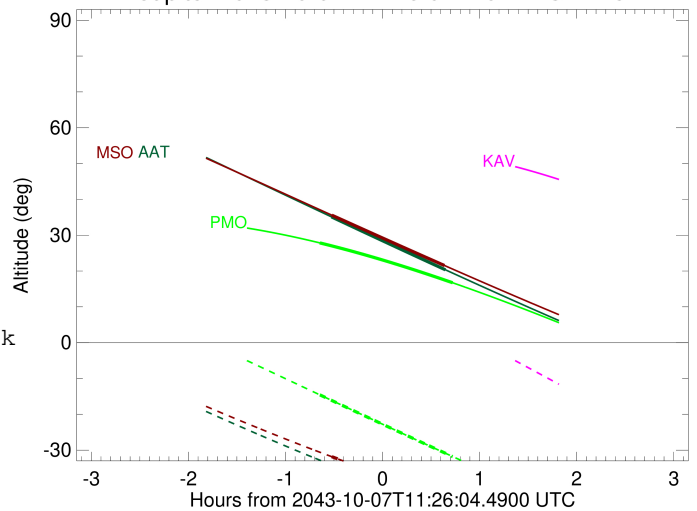


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-10-07T11:28:26.880
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : PMO
Location              : Purple Mtn Obs. Nanking
Latitude (deg)        : 32.06667
E. Longitude (deg)    : 118.82089
Altitude (km)         : 0.364
Gaia source ID        : 4068805759987295360
2Mass ID (if available) : 17444201-2319045
ICRS Star Coord at Epoch: 17h 44m 42.02940s -23:19:04.90382s
RUWE (>1.4 is poor) : 0.98
K magnitude           : 9.111
G magnitude           : 14.447
RP magnitude          : 13.038
BP magnitude          : 16.601
DUPflag              : 0
Distance (au)         : 5.432
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 21.85
Sun-Target sep (deg) : 73.00
Sun-Moon sep (deg)   : 25.95
B (ring opening deg) : -2.17
PA of pole (deg)     : 0.81
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (" ) : 12.149
C/A sky separation (km) : 47867.1
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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Jupiter 2043-10-07T11:26:04 K9.11 G14.45

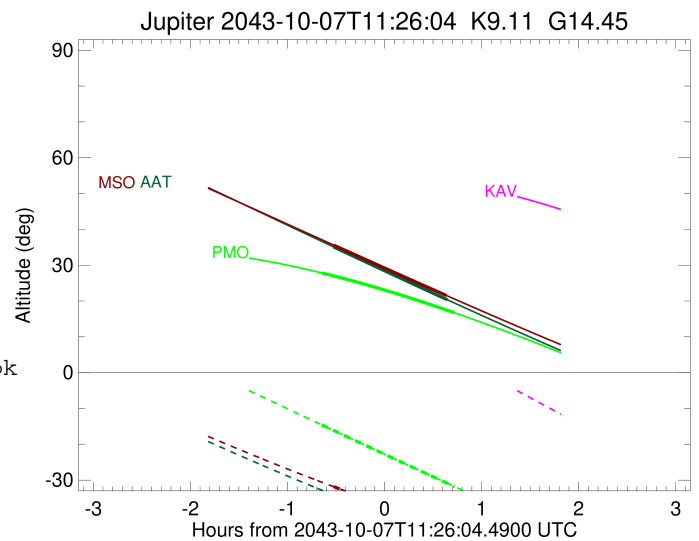
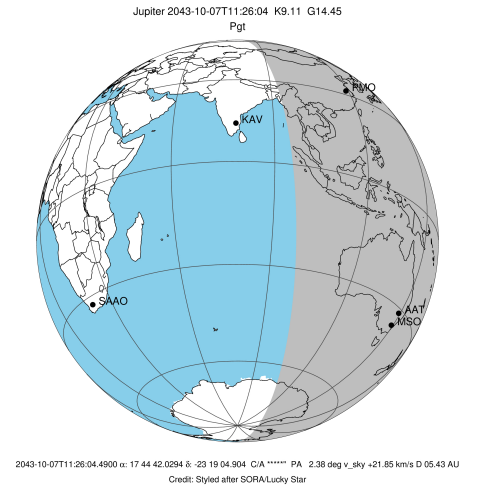


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-07T10:47:20.406	27.84	-14.56	71488.9	-43.36	-47.07
Jupiter	E	2043-10-07T12:09:26.785	16.72	-31.79	71489.2	-40.70	-44.41

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-07T11:29:47.320
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      : 4068805759987295360
2Mass ID (if available) : 17444201-2319045
ICRS Star Coord at Epoch: 17h 44m 42.02940s -23:19:04.90382s
RUWE (>1.4 is poor) : 0.98
K magnitude          : 9.111
G magnitude          : 14.447
RP magnitude         : 13.038
BP magnitude         : 16.601
DUPflag             : 0
Distance (au)       : 5.432
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 21.85
Sun-Target sep (deg) : 73.00
Sun-Moon sep (deg)  : 26.03
B (ring opening deg) : -2.17
PA of pole (deg)    : 0.81
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (" ) : 13.920
C/A sky separation (km) : 54841.3
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
    
```

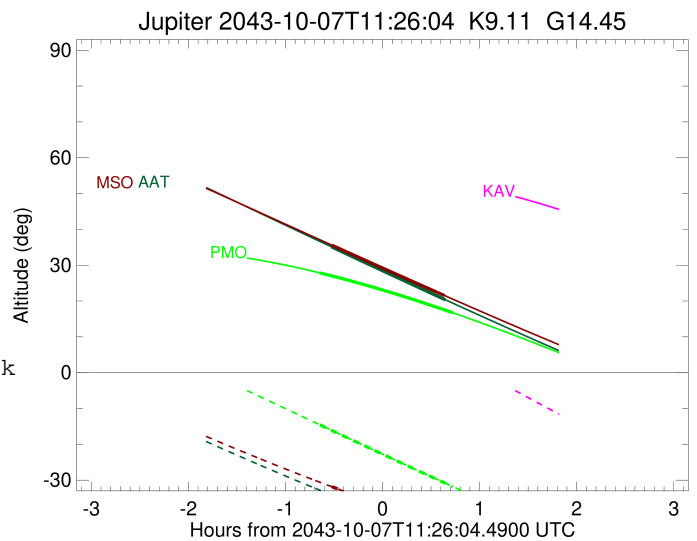
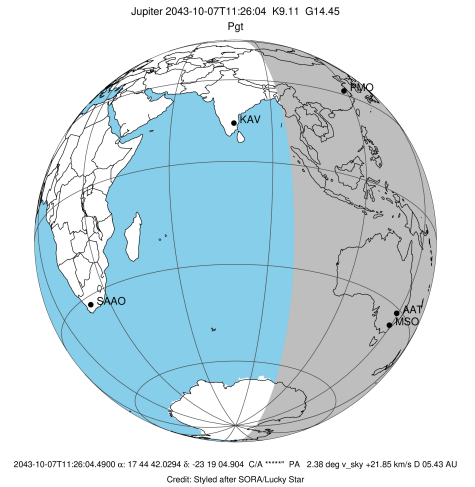


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-07T10:54:32.706	35.11	-34.09	71488.1	-51.25	-54.79
Jupiter	E	2043-10-07T12:04:55.359	20.35	-45.36	71488.3	-48.88	-52.50

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-07T11:29:37.830
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      : 4068805759987295360
2Mass ID (if available) : 17444201-2319045
ICRS Star Coord at Epoch: 17h 44m 42.02940s -23:19:04.90382s
RUWE (>1.4 is poor) : 0.98
K magnitude          : 9.111
G magnitude          : 14.447
RP magnitude         : 13.038
BP magnitude         : 16.601
DUPflag             : 0
Distance (au)       : 5.432
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 21.85
Sun-Target sep (deg) : 73.00
Sun-Moon sep (deg)  : 26.00
B (ring opening deg) : -2.17
PA of pole (deg)    : 0.81
Pole direction: RA (deg): 268.05674
Dec (deg): 64.49731
C/A sky separation (" ) : 14.016
C/A sky separation (km) : 55222.4
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	2043-10-07T10:54:45.085	35.59	-31.83	71488.0	-51.74	-55.26
Jupiter	E	2043-10-07T12:04:24.383	21.53	-42.10	71488.3	-49.34	-52.94