

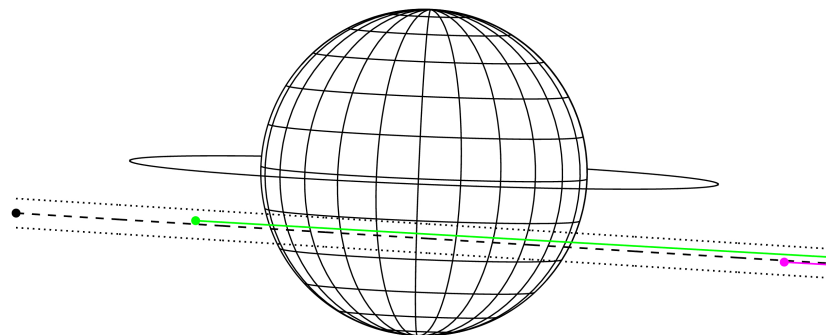
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2037-04-23T11:49:15.800
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 3404148958067873024
 2Mass ID (if available) : 05305633+2305395

Jupiter 2037-04-23T11:49:15 K9.80 G13.34 Pgt

ICRS Star Coord at Epoch: 05h 30m 56.34129s +23:05:39.57231s
 RUWE (>1.4 is poor) : 1.10
 K magnitude : 9.799
 G magnitude : 13.343
 RP magnitude : 12.365
 BP magnitude : 14.330
 DUPflag : 0
 Distance (au) : 5.723
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 31.78
 Sun-Target sep (deg) : 50.17
 Sun-Moon sep (deg) : 44.48
 B (ring opening deg) : 2.31
 PA of pole (deg) : -2.29
 Pole direction: RA (deg): 268.05629
 Dec (deg): 64.49688
 C/A sky separation (") : 6.933
 C/A sky separation (km) : 28777.1
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk
 URKALLv1.spk
 naif0012.tls
 nep097.bsp
 nep101.bsp
 sat4401.bsp



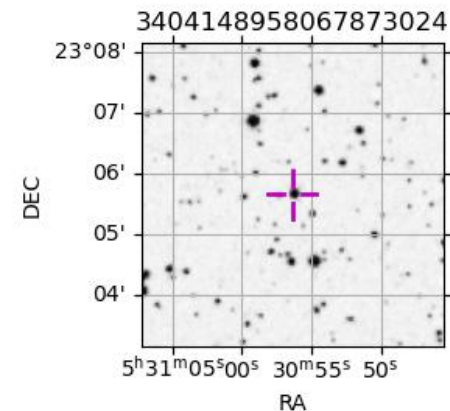
Earth
 PMO
 KAV



2037-04-23T11:49:15.8000 ex: 05 30 56.3413 s: +23 05 39.572 C/A 6.925" PA 356.46 deg v_sky +31.78 km/s D 05.72 AU
 Credit: Styled after SORA/Lucky Star

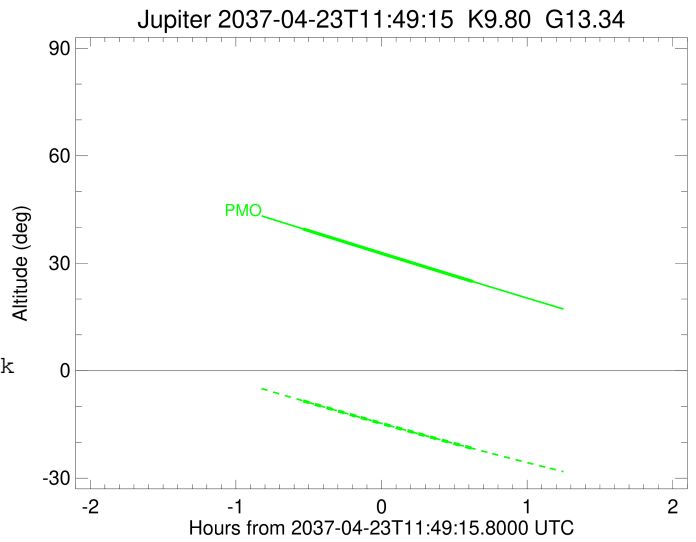
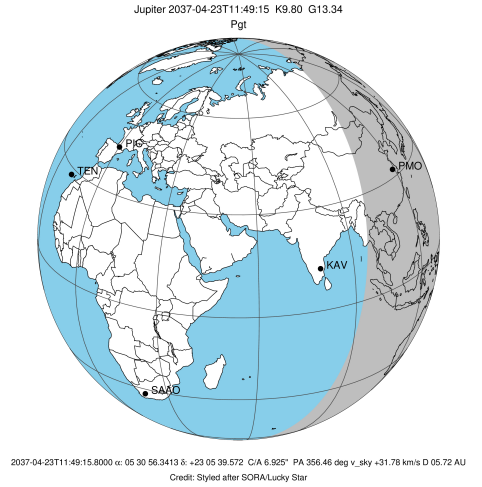
Observable events with sun below -5 deg and altitude above 5 deg

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	+ +	APR 23 11:16 - APR 23 12:26	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			Pnn
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2037-04-23T11:51:57.860
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       : 3404148958067873024
2Mass ID (if available) : 05305633+2305395
ICRS Star Coord at Epoch: 05h 30m 56.34129s +23:05:39.57231s
RUWE (>1.4 is poor) : 1.10
K magnitude           : 9.799
G magnitude           : 13.343
RP magnitude          : 12.365
BP magnitude          : 14.330
DUPflag              : 0
Distance (au)        : 5.723
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 31.78
Sun-Target sep (deg) : 50.17
Sun-Moon sep (deg)   : 44.30
B (ring opening deg) : 2.31
PA of pole (deg)     : -2.29
Pole direction: RA (deg): 268.05629
Dec (deg): 64.49688
C/A sky separation (") : 6.469
C/A sky separation (km) : 26853.1
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
    
```



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	2037-04-23T11:16:59.320	39.56	-8.43	71491.1	-21.02	-23.70
Jupiter	E	2037-04-23T12:26:52.164	24.89	-21.72	71490.9	-23.04	-25.90