

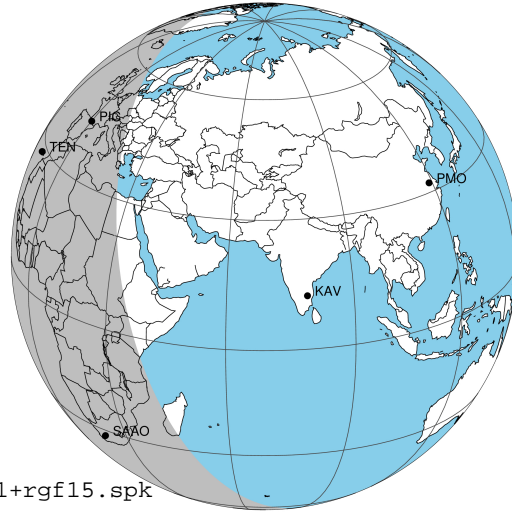
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2024-08-01T03:36:20.870
 Event type : Pt
 : Jupiter occs: topocentric, not geocentric
 : Not a ringed target
 Gaia source ID : 3412779535933155840
 2Mass ID (if available) : 04511856+2147459

Jupiter 2024-08-01T03:36:20 K7.42 G11.57 Pt

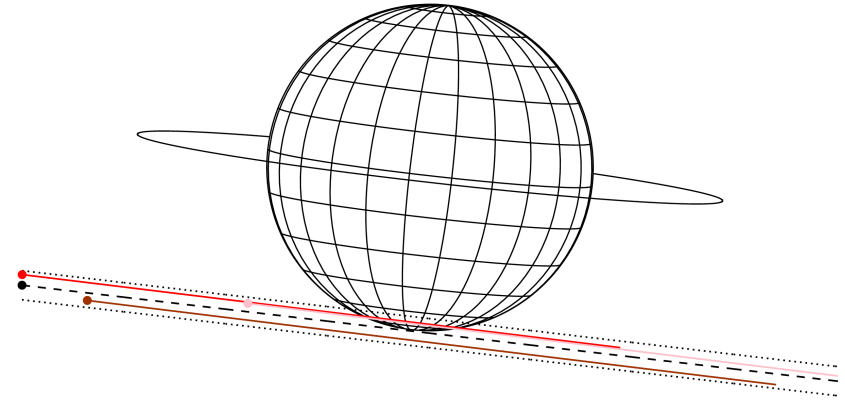
ICRS Star Coord at Epoch: 04h 51m 18.56067s +21:47:45.92430s

RUWE (>1.4 is poor) : 1.15
 K magnitude : 7.417
 G magnitude : 11.572
 RP magnitude : 10.435
 BP magnitude : 12.917
 DUPflag : 0
 Distance (au) : 5.549
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 29.89
 Sun-Target sep (deg) : 54.97
 Sun-Moon sep (deg) : 16.72
 B (ring opening deg) : 2.90
 PA of pole (deg) : -6.50
 Pole direction: RA (deg): 268.05791
 Dec (deg): 64.49674
 C/A sky separation (") : 17.915
 C/A sky separation (km) : 72104.0
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2024-08-01T03:36:20 K7.42 G11.57 Pt



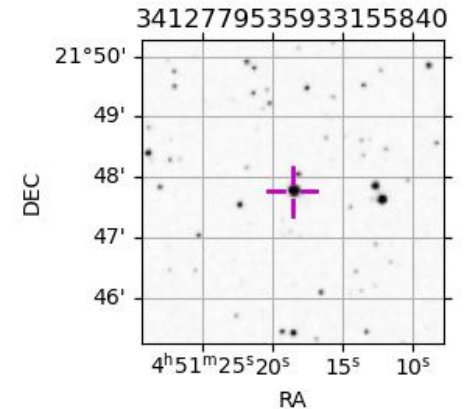
Earth
 PIC
 TEN
 SAAO



2024-08-01T03:36:20.8700 α: 04 51 18.5607 δ: +21 47 45.924 C/A ***** PA 353.29 deg v_sky +29.89 km/s D 05.55 AU
 Credit: Styled after SORA/Lucky Star

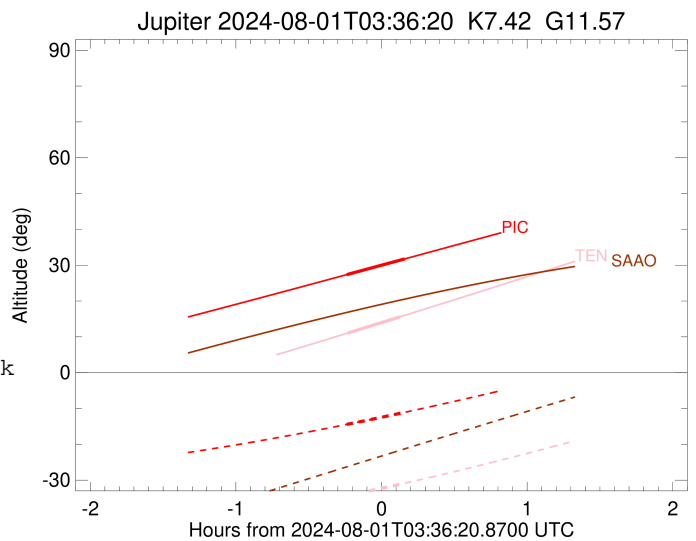
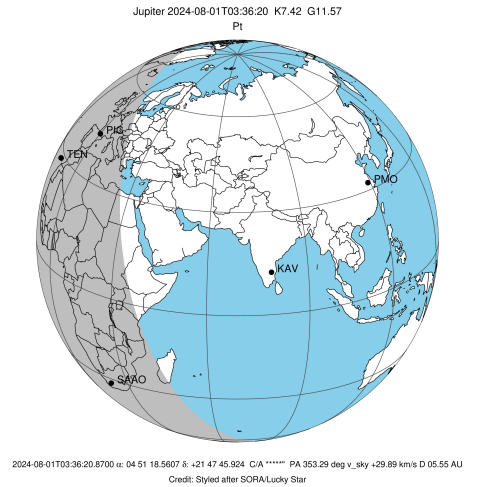
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OCode
PIC	Pic du Midi	42.9	0.1	+ +	AUG 01 03:22 - AUG 01 03:45	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	+ +	AUG 01 03:22 - AUG 01 03:43	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



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2024-08-01T03:33:58.290
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        : 3412779535933155840
2Mass ID (if available) : 04511856+2147459
ICRS Star Coord at Epoch: 04h 51m 18.56067s +21:47:45.92430s
RUWE (>1.4 is poor)  : 1.15
K magnitude           : 7.417
G magnitude           : 11.572
RP magnitude          : 10.435
BP magnitude          : 12.917
DUPflag              : 0
Distance (au)         : 5.549
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.89
Sun-Target sep (deg)  : 54.97
Sun-Moon sep (deg)    : 17.21
B (ring opening deg) : 2.90
PA of pole (deg)      : -6.50
Pole direction: RA (deg): 268.05791
Dec (deg): 64.49674
C/A sky separation (") : 16.952
C/A sky separation (km) : 68226.9
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
    
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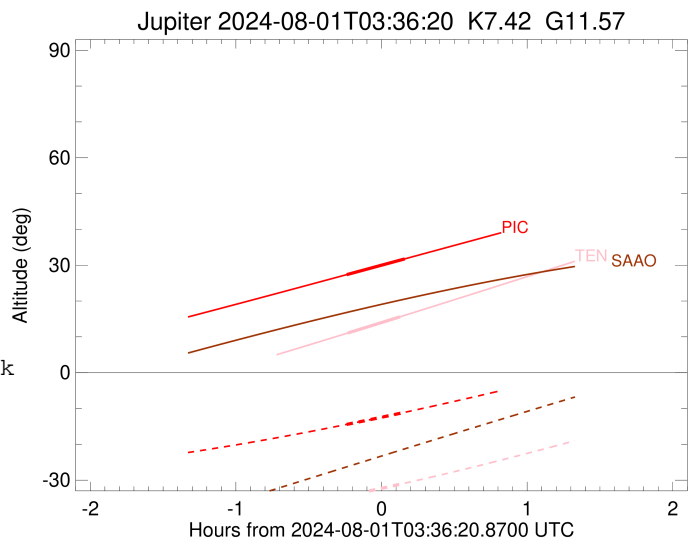
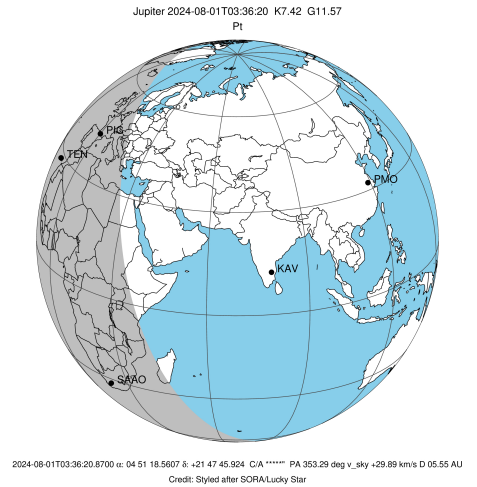


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2024-08-01T03:22:02.589	27.37	-14.43	71481.6	-71.96	-73.99
Jupiter	E	2024-08-01T03:45:54.479	31.75	-11.07	71481.5	-72.86	-74.80

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2024-08-01T03:33:12.660
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       : 3412779535933155840
2Mass ID (if available) : 04511856+2147459
ICRS Star Coord at Epoch: 04h 51m 18.56067s +21:47:45.92430s
RUWE (>1.4 is poor) : 1.15
K magnitude           : 7.417
G magnitude           : 11.572
RP magnitude          : 10.435
BP magnitude          : 12.917
DUPflag              : 0
Distance (au)        : 5.549
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 29.89
Sun-Target sep (deg) : 54.97
Sun-Moon sep (deg)   : 17.35
B (ring opening deg) : 2.90
PA of pole (deg)     : -6.50
Pole direction: RA (deg): 268.05791
Dec (deg): 64.49674
C/A sky separation (") : 17.102
C/A sky separation (km) : 68830.6
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	2024-08-01T03:22:27.562	11.07	-34.24	71481.4	-73.60	-75.46
Jupiter	E	2024-08-01T03:43:58.244	15.59	-31.15	71481.3	-74.58	-76.34