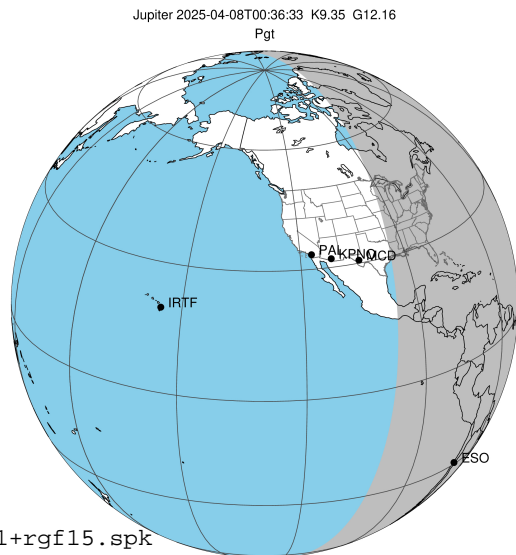


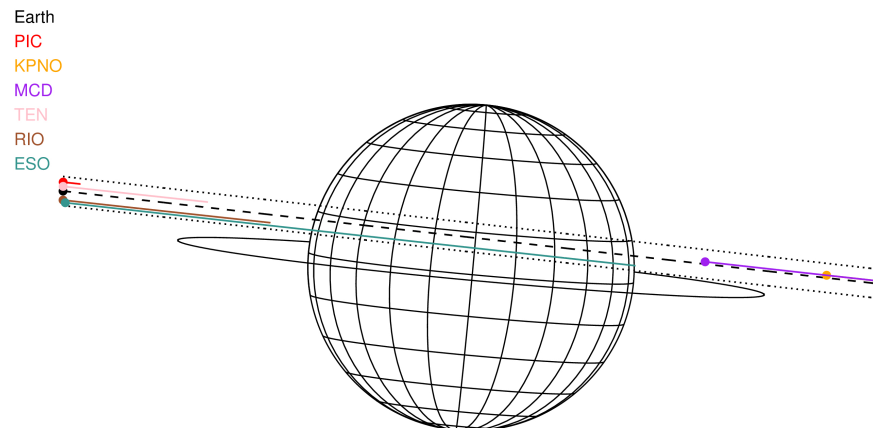
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2025-04-08T00:36:33.050
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 3418305926189992192
 2Mass ID (if available) : 05023613+2229253

Jupiter 2025-04-08T00:36:33 K9.35 G12.16 Pgt

ICRS Star Coord at Epoch: 05h 02m 36.14100s +22:29:25.18186s
 RUWE (>1.4 is poor) : 0.99
 K magnitude : 9.353
 G magnitude : 12.156
 RP magnitude : 11.314
 BP magnitude : 12.900
 DUPflag : 0
 Distance (au) : 5.564
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 28.23
 Sun-Target sep (deg) : 58.67
 Sun-Moon sep (deg) : 66.20
 B (ring opening deg) : 2.48
 PA of pole (deg) : -5.31
 Pole direction: RA (deg): 268.05779
 Dec (deg): 64.49671
 C/A sky separation (") : 3.238
 C/A sky separation (km) : 13067.9
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

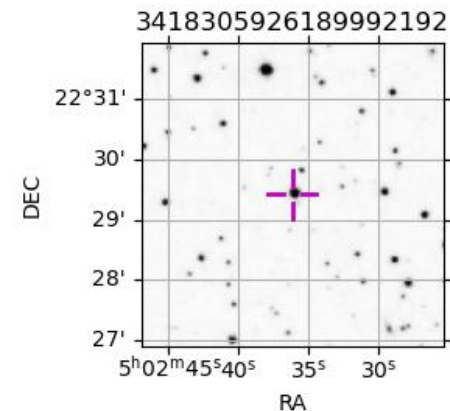


2025-04-08T00:36:33.0500 ex: 05 02 36.1410 s: +22 29 25.182 C/A 3.247" PA 173.51 deg v_sky +28.23 km/s D 05.56 AU
 Credit: Styled after SORA/Lucky Star



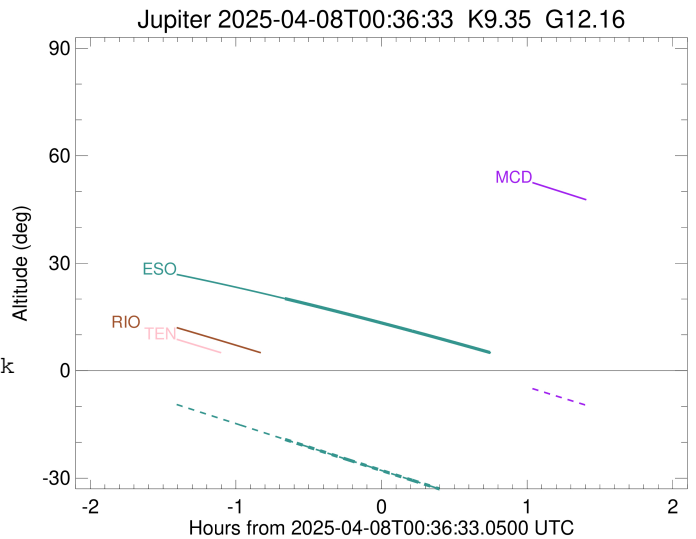
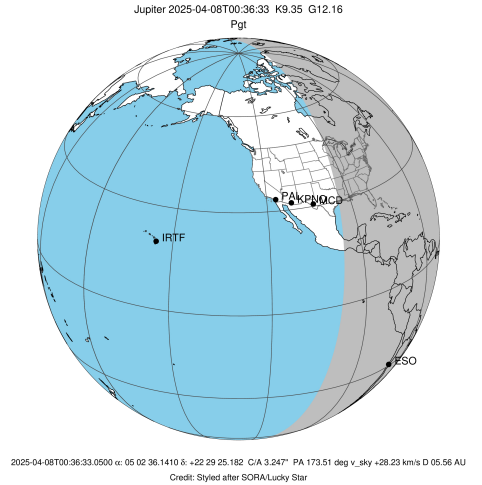
Observable events with sun below -5 deg and altitude above 5 deg

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			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			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	+ +	APR 07 23:56 - APR 08 01:21	Pie
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



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2025-04-08T00:39:05.470
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : ESO
Location             : European Southern Obs. (3.6m)
Latitude (deg)       : -29.26097
E. Longitude (deg)   : 289.26831
Altitude (km)        : 2.400
Gaia source ID       : 3418305926189992192
2Mass ID (if available) : 05023613+2229253
ICRS Star Coord at Epoch: 05h 02m 36.14100s +22:29:25.18186s
RUWE (>1.4 is poor) : 0.99
K magnitude           : 9.353
G magnitude           : 12.156
RP magnitude          : 11.314
BP magnitude          : 12.900
DUPflag              : 0
Distance (au)         : 5.564
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 28.23
Sun-Target sep (deg) : 58.67
Sun-Moon sep (deg)   : 66.16
B (ring opening deg) : 2.48
PA of pole (deg)     : -5.31
Pole direction: RA (deg): 268.05779
Dec (deg): 64.49671
C/A sky separation (") : 2.135
C/A sky separation (km) : 8616.1
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	2025-04-07T23:56:48.687	20.11	-19.20	71491.8	7.89	9.00
Jupiter	E	2025-04-08T01:21:15.462	5.06	-37.45	71491.9	5.99	6.84