

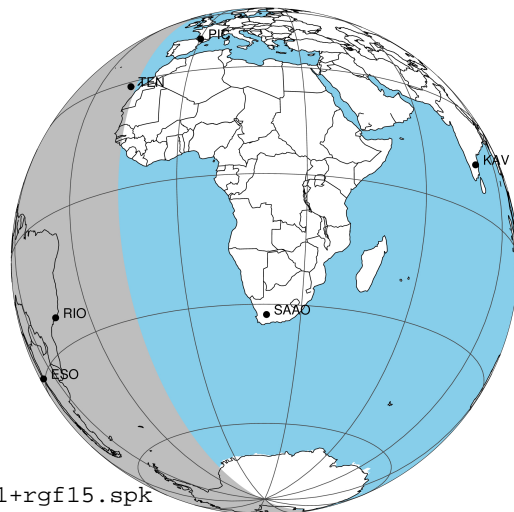
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2044-03-17T07:07:08.540
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 6866371023641606528
 2Mass ID (if available) : 20075398-2024162

Jupiter 2044-03-17T07:07:08 K6.66 G10.11 Pgt

ICRS Star Coord at Epoch: 20h 07m 53.97056s -20:24:16.48902s

RUWE (>1.4 is poor) : 0.97
 K magnitude : 6.658
 G magnitude : 10.110
 RP magnitude : 9.130
 BP magnitude : 11.110
 DUPflag : 0
 Distance (au) : 5.644
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 29.78
 Sun-Target sep (deg) : 56.97
 Sun-Moon sep (deg) : 81.73
 B (ring opening deg) : -1.16
 PA of pole (deg) : -13.90
 Pole direction: RA (deg): 268.05683
 Dec (deg): 64.49729
 C/A sky separation (") : 9.598
 C/A sky separation (km) : 39290.0
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

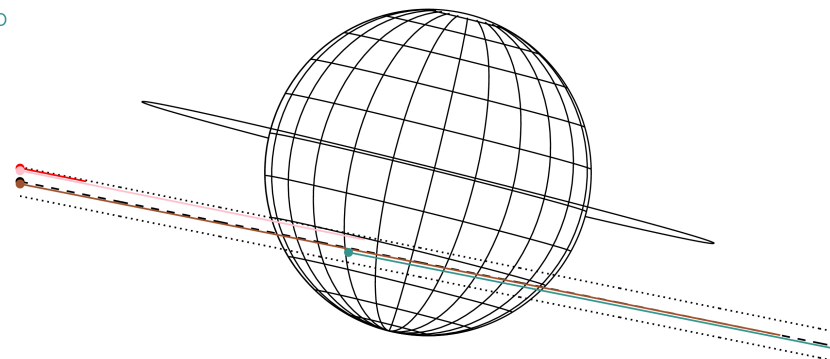
Jupiter 2044-03-17T07:07:08 K6.66 G10.11
 Pgt



2044-03-17T07:07:08.5400 ex: -20 24 16.489 C/A 9.604" PA 348.57 deg v_sky +29.78 km/s D 05.64 AU

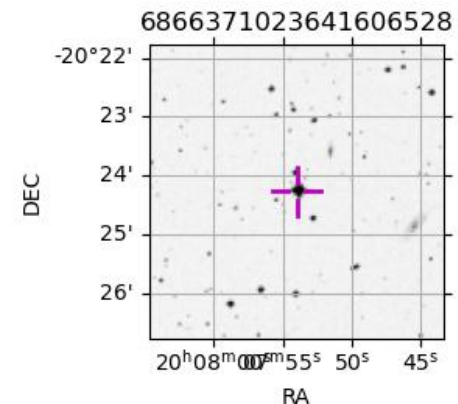
Credit: Styled after SORA/Lucky Star

Earth
 PIC
 TEN
 RIO
 ESO



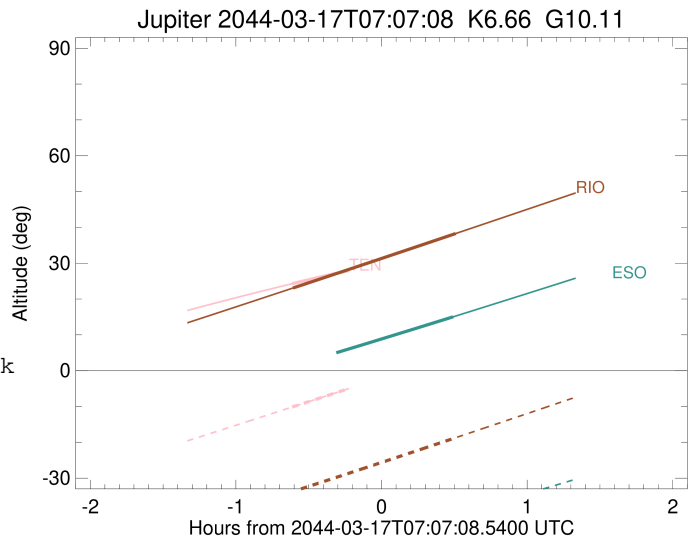
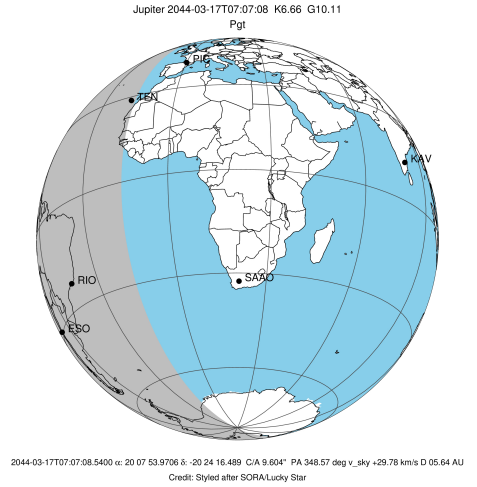
Observable events with sun below -5 deg and altitude above 5 deg

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	+	MAR 17 06:30 - MAR 17 06:30	Pin
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	+	MAR 17 06:30 - MAR 17 07:37	Pie
ESO	European Southern Obs. (3.6m)	-29.3	289.3	+	MAR 17 07:36 - MAR 17 07:36	Pne
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             : 2044-03-17T07:05:47.260
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: 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        : 6866371023641606528
2Mass ID (if available) : 20075398-2024162
ICRS Star Coord at Epoch: 20h 07m 53.97056s -20:24:16.48902s
RUWE (>1.4 is poor) : 0.97
K magnitude           : 6.658
G magnitude           : 10.110
RP magnitude          : 9.130
BP magnitude          : 11.110
DUPflag              : 0
Distance (au)         : 5.644
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 29.78
Sun-Target sep (deg)  : 56.97
Sun-Moon sep (deg)    : 82.14
B (ring opening deg) : -1.16
PA of pole (deg)     : -13.90
Pole direction: RA (deg): 268.05683
Dec (deg): 64.49729
C/A sky separation (") : 8.384
C/A sky separation (km) : 34321.4
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
    
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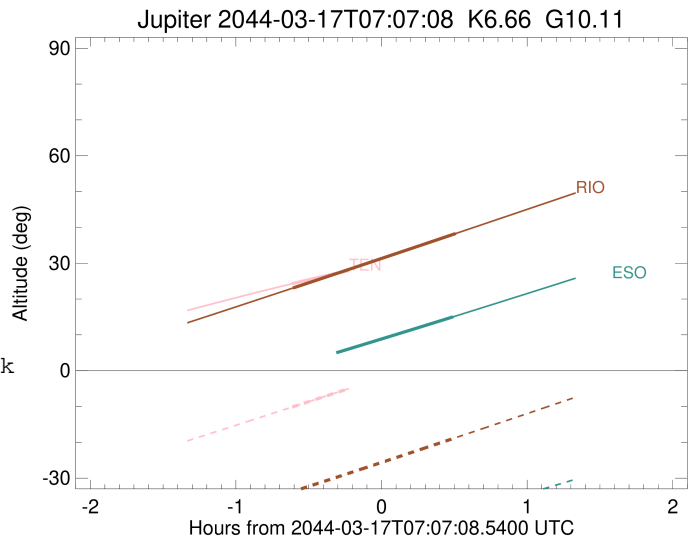
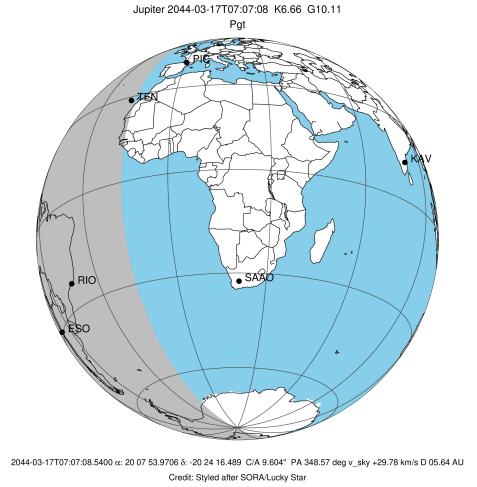


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2044-03-17T06:30:19.228	24.27	-10.15	71491.5	-31.22	-34.66
Jupiter	E	2044-03-17T07:41:18.499	34.43	5.50x	71491.6	-26.20	-29.32

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2044-03-17T07:04:08.870
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : RIO
Location              : Rio de Janeiro
Latitude (deg)       : -22.89506
E. Longitude (deg)   : 316.77708
Altitude (km)        : 0.033
Gaia source ID       : 6866371023641606528
2Mass ID (if available) : 20075398-2024162
ICRS Star Coord at Epoch: 20h 07m 53.97056s -20:24:16.48902s
RUWE (>1.4 is poor) : 0.97
K magnitude           : 6.658
G magnitude           : 10.110
RP magnitude          : 9.130
BP magnitude          : 11.110
DUPflag              : 0
Distance (au)        : 5.644
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 29.78
Sun-Target sep (deg) : 56.97
Sun-Moon sep (deg)   : 82.09
B (ring opening deg) : -1.16
PA of pole (deg)     : -13.90
Pole direction: RA (deg): 268.05683
Dec (deg): 64.49729
C/A sky separation (") : 9.678
C/A sky separation (km) : 39620.1
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
    
```

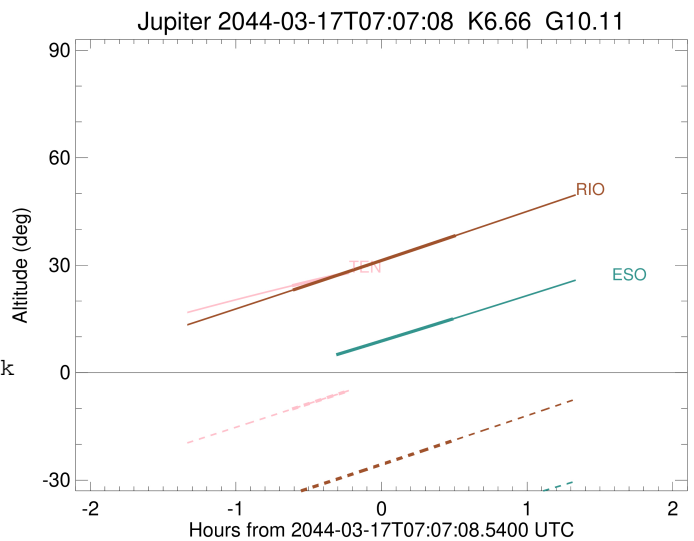
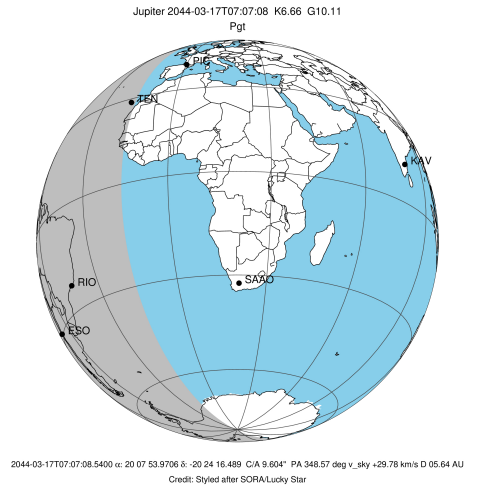


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2044-03-17T06:30:38.989	23.06	-33.73	71491.4	-36.32	-39.96
Jupiter	E	2044-03-17T07:37:43.026	38.28	-18.71	71491.5	-31.01	-34.44

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2044-03-17T07:03:51.770
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      : 6866371023641606528
2Mass ID (if available) : 20075398-2024162
ICRS Star Coord at Epoch: 20h 07m 53.97056s -20:24:16.48902s
RUWE (>1.4 is poor) : 0.97
K magnitude         : 6.658
G magnitude         : 10.110
RP magnitude        : 9.130
BP magnitude        : 11.110
DUPflag            : 0
Distance (au)       : 5.644
f0 (km)             : 0.00
g0 (km)             : 0.00
skyplane vel. (km/s) : 29.78
Sun-Target sep (deg) : 56.97
Sun-Moon sep (deg)  : 81.74
B (ring opening deg) : -1.16
PA of pole (deg)    : -13.90
Pole direction: RA (deg): 268.05683
Dec (deg): 64.49729
C/A sky separation (" ) : 10.034
C/A sky separation (km) : 41075.3
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	2044-03-17T06:31:08.223	1.46x	-51.50	71491.3	-37.82	-41.49
Jupiter	E	2044-03-17T07:36:39.681	15.03	-40.27	71491.5	-32.33	-35.82