

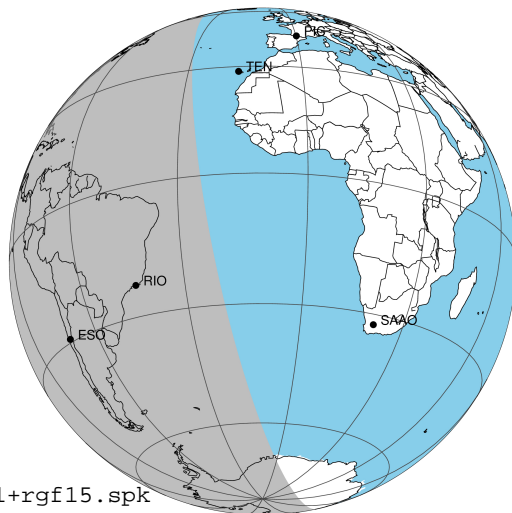
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2032-04-08T07:39:52.510
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 6865982616861550464
 2Mass ID (if available) : 20051289-2030196

Jupiter 2032-04-08T07:39:52 K7.90 G11.72 Pgt

ICRS Star Coord at Epoch: 20h 05m 12.88854s -20:30:20.02379s

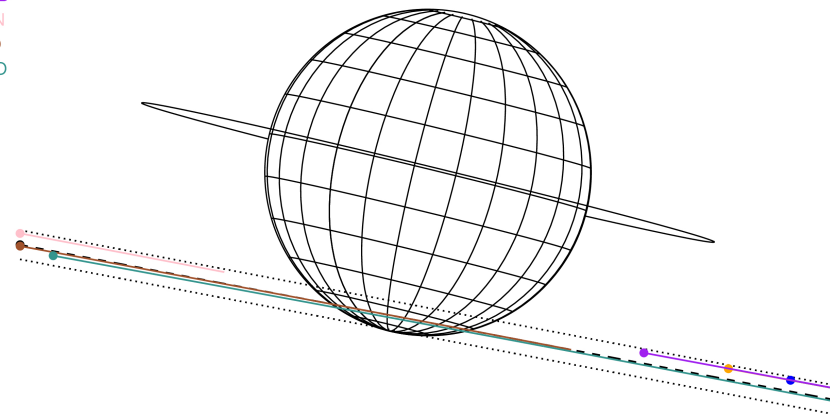
RUWE (>1.4 is poor) : 1.19
 K magnitude : 7.898
 G magnitude : 11.716
 RP magnitude : 10.648
 BP magnitude : 12.891
 DUPflag : 0
 Distance (au) : 5.263
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 18.94
 Sun-Target sep (deg) : 79.46
 Sun-Moon sep (deg) : 55.51
 B (ring opening deg) : -1.21
 PA of pole (deg) : -13.66
 Pole direction: RA (deg): 268.05669
 Dec (deg): 64.49654
 C/A sky separation (") : 16.902
 C/A sky separation (km) : 64513.9
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2032-04-08T07:39:52 K7.90 G11.72
 Pgt



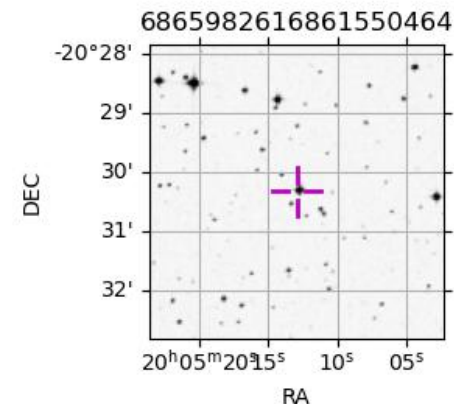
2032-04-08T07:39:52.5100 a: 20 05 12.8885 s: -20 30 20.024 C/A ***** PA 349.22 deg v_sky +18.94 km/s D 05.26 AU
 Credit: Styled after SORA/Lucky Star

Earth
 PAL
 KPNO
 MCD
 TEN
 RIO
 ESO



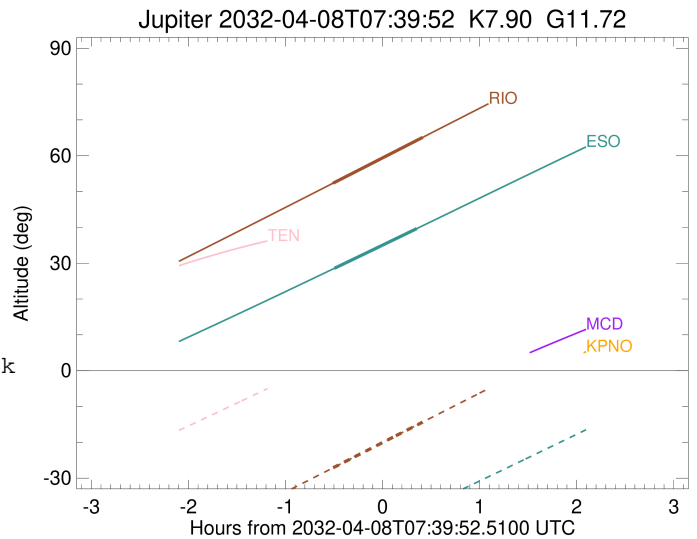
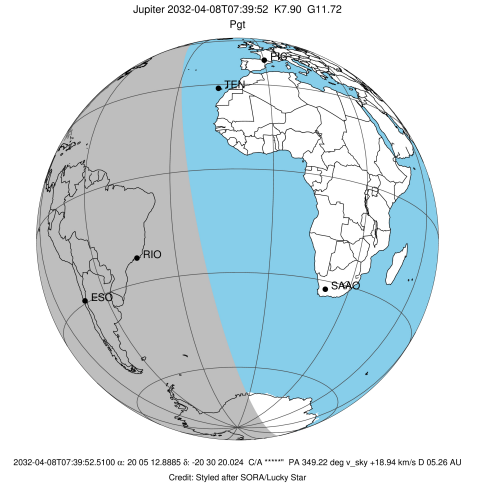
Observable events with sun below -5 deg and altitude above 5 deg

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			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	+ +	APR 08 07:09 - APR 08 08:04	Pie
ESO	European Southern Obs. (3.6m)	-29.3	289.3	+ +	APR 08 07:10 - APR 08 08:01	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



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2032-04-08T07:37:00.150
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        : 6865982616861550464
2Mass ID (if available) : 20051289-2030196
ICRS Star Coord at Epoch: 20h 05m 12.88854s -20:30:20.02379s
RUWE (>1.4 is poor) : 1.19
K magnitude           : 7.898
G magnitude           : 11.716
RP magnitude          : 10.648
BP magnitude          : 12.891
DUPflag               : 0
Distance (au)         : 5.263
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 18.94
Sun-Target sep (deg) : 79.46
Sun-Moon sep (deg)   : 56.50
B (ring opening deg) : -1.21
PA of pole (deg)     : -13.66
Pole direction: RA (deg): 268.05669
Dec (deg): 64.49654
C/A sky separation (" ) : 16.896
C/A sky separation (km) : 64489.3
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
    
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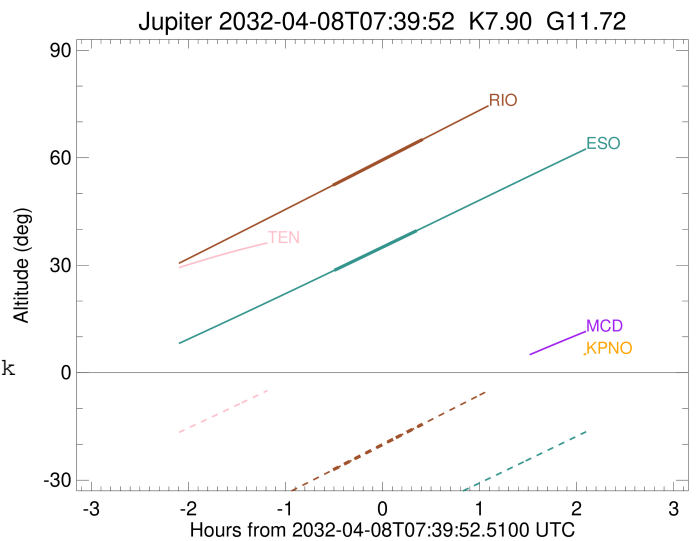
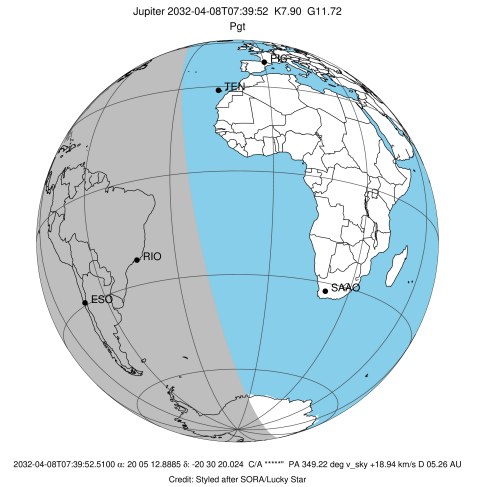


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2032-04-08T07:09:22.152	52.34	-27.10	71490.3	-67.35	-69.82
Jupiter	E	2032-04-08T08:04:41.270	65.11	-14.36	71490.4	-61.52	-64.47

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2032-04-08T07:35:34.650
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        : 6865982616861550464
2Mass ID (if available) : 20051289-2030196
ICRS Star Coord at Epoch: 20h 05m 12.88854s -20:30:20.02379s
RUWE (>1.4 is poor) : 1.19
K magnitude           : 7.898
G magnitude           : 11.716
RP magnitude          : 10.648
BP magnitude          : 12.891
DUPflag              : 0
Distance (au)         : 5.263
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 18.94
Sun-Target sep (deg) : 79.46
Sun-Moon sep (deg)   : 56.43
B (ring opening deg) : -1.21
PA of pole (deg)     : -13.66
Pole direction: RA (deg): 268.05669
Dec (deg): 64.49654
C/A sky separation (") : 17.168
C/A sky separation (km) : 65527.9
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
    
```



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	2032-04-08T07:10:11.308	28.58	-49.52	71490.2	-69.56	-71.83
Jupiter	E	2032-04-08T08:01:01.710	39.65	-39.09	71490.4	-63.29	-66.11