

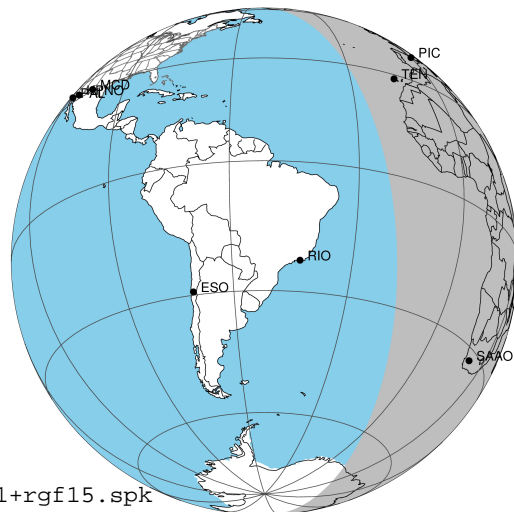
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-10-24T19:14:08.900
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4069367305527401728
 2Mass ID (if available) : 17560645-2323253

Jupiter 2043-10-24T19:14:08 K8.64 G13.93 Pgt

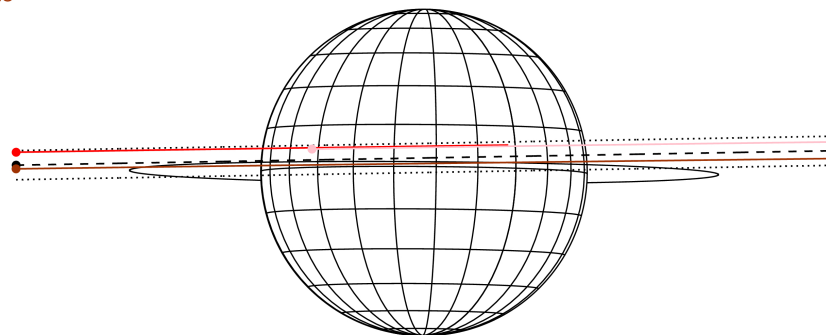
ICRS Star Coord at Epoch: 17h 56m 06.45676s -23:23:25.40408s

RUWE (>1.4 is poor) : 0.94
 K magnitude : 8.644
 G magnitude : 13.925
 RP magnitude : 12.639
 BP magnitude : 15.808
 DUPflag : 0
 Distance (au) : 5.673
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 28.79
 Sun-Target sep (deg) : 58.45
 Sun-Moon sep (deg) : 151.94
 B (ring opening deg) : -2.11
 PA of pole (deg) : -0.42
 Pole direction: RA (deg): 268.05675
 Dec (deg): 64.49731
 C/A sky separation (") : 1.548
 C/A sky separation (km) : 6370.1
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-10-24T19:14:08 K8.64 G13.93
 Pgt



Earth
 PIC
 TEN
 SAAO

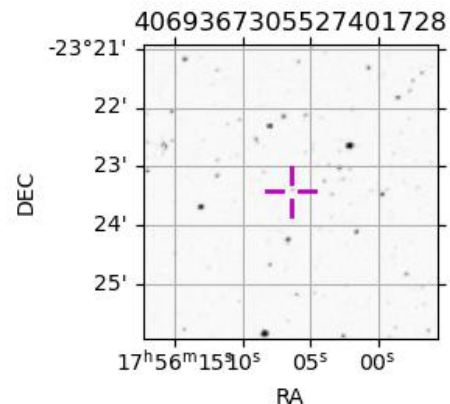


2043-10-24T19:14:08.9000 cc: 17 56 06.4568 s: -23 23 25.404 C/A 1.540" PA 181.02 deg v_sky +28.79 km/s D 05.67 AU

Credit: Styled after SORA/Lucky Star

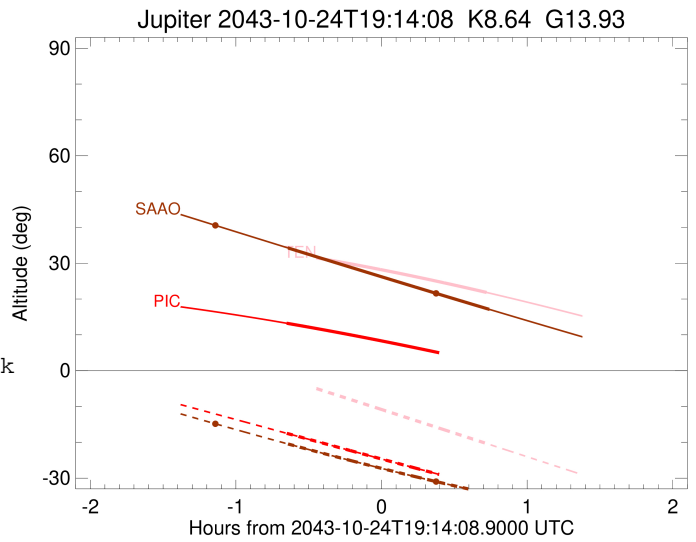
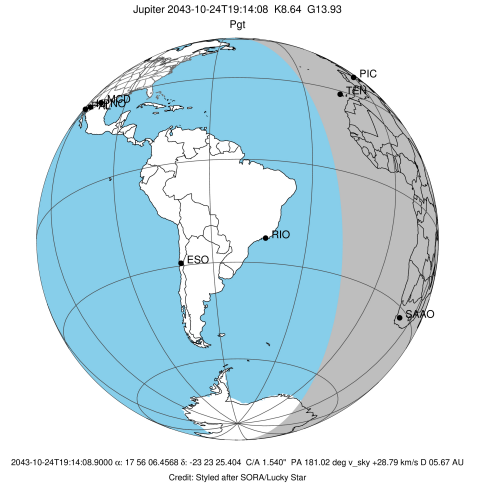
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEcode
PIC	Pic du Midi	42.9	0.1	+	OCT 24 18:35 - OCT 24 18:35	Pin
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	+	OCT 24 19:57 - OCT 24 19:57	Pne
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	+	OCT 24 18:35 - OCT 24 19:58	Pie
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-10-24T19:16:17.240
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: 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        : 4069367305527401728
2Mass ID (if available) : 17560645-2323253
ICRS Star Coord at Epoch: 17h 56m 06.45676s -23:23:25.40408s
RUWE (>1.4 is poor) : 0.94
K magnitude           : 8.644
G magnitude           : 13.925
RP magnitude          : 12.639
BP magnitude          : 15.808
DUPflag              : 0
Distance (au)         : 5.673
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 28.79
Sun-Target sep (deg)  : 58.45
Sun-Moon sep (deg)    : 151.62
B (ring opening deg) : -2.11
PA of pole (deg)      : -0.42
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (") : 2.798
C/A sky separation (km) : 11514.3
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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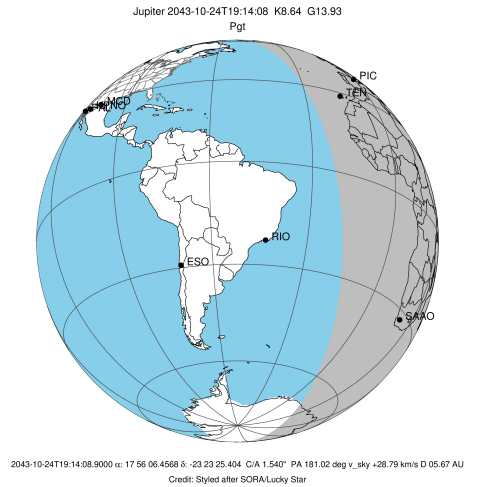


x: target alt < 5.0 deg or sun > -5.0 deg

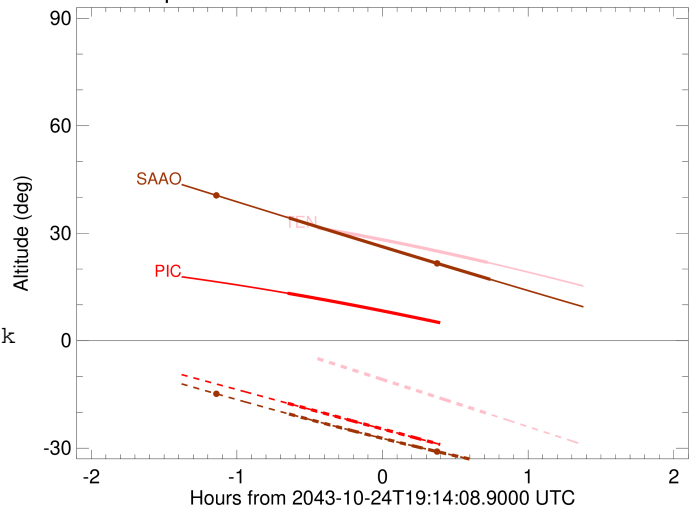
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-24T18:35:05.712	13.23	-17.49	71491.9	8.03	9.16
Jupiter	E	2043-10-24T19:57:23.477	2.13x	-32.45	71491.8	10.46	11.92

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-24T19:16:02.680
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       : 4069367305527401728
2Mass ID (if available) : 17560645-2323253
ICRS Star Coord at Epoch: 17h 56m 06.45676s -23:23:25.40408s
RUWE (>1.4 is poor) : 0.94
K magnitude           : 8.644
G magnitude           : 13.925
RP magnitude         : 12.639
BP magnitude         : 15.808
DUPflag              : 0
Distance (au)        : 5.673
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 28.79
Sun-Target sep (deg) : 58.45
Sun-Moon sep (deg)   : 151.82
B (ring opening deg) : -2.11
PA of pole (deg)     : -0.42
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation (") : 2.668
C/A sky separation (km) : 10979.3
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
    
```



Jupiter 2043-10-24T19:14:08 K8.64 G13.93

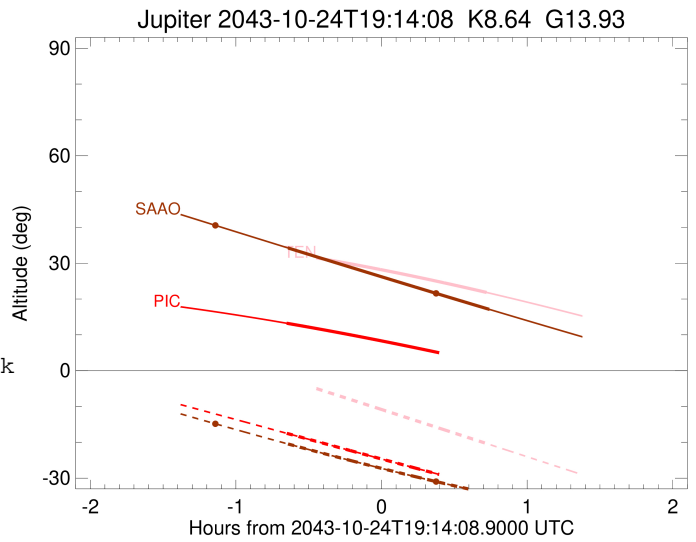
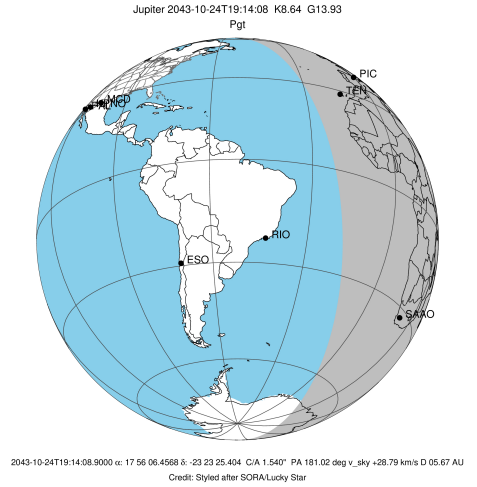


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-10-24T18:34:37.528	32.88	-2.25x	71491.9	7.56	8.63
Jupiter	E	2043-10-24T19:57:22.940	21.84	-20.33	71491.8	10.05	11.45

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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-10-24T19:17:10.370
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : SAAO
Location             : So. Afr. Astro. Obs. (Sutherland)
Latitude (deg)       : -32.37953
E. Longitude (deg)   : 20.81070
Altitude (km)        : 1.768
Gaia source ID       : 4069367305527401728
2Mass ID (if available) : 17560645-2323253
ICRS Star Coord at Epoch: 17h 56m 06.45676s -23:23:25.40408s
RUWE (>1.4 is poor) : 0.94
K magnitude          : 8.644
G magnitude          : 13.925
RP magnitude         : 12.639
BP magnitude         : 15.808
DUPflag             : 0
Distance (au)        : 5.673
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 28.79
Sun-Target sep (deg) : 58.45
Sun-Moon sep (deg)   : 151.40
B (ring opening deg) : -2.11
PA of pole (deg)     : -0.42
Pole direction: RA (deg): 268.05675
Dec (deg): 64.49731
C/A sky separation ("): 0.954
C/A sky separation (km): 3927.2
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	2043-10-24T18:35:37.447	34.25	-20.46	71492.0	2.01	2.29
Jupiter	E	2043-10-24T19:58:36.268	17.10	-34.30	71492.0	4.27	4.88