

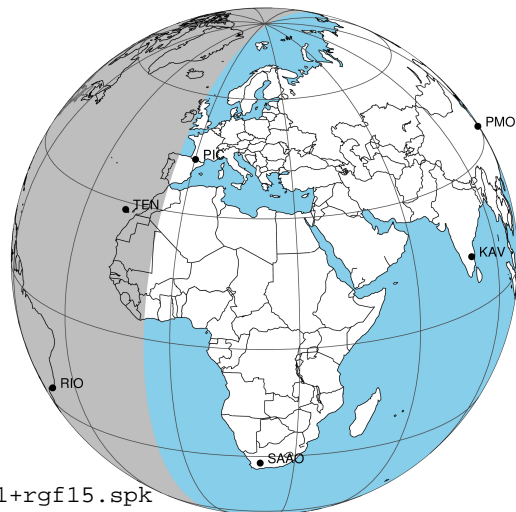
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2049-09-26T06:18:02.360
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 670685432766953088
 2Mass ID (if available) : 08051493+2030434

Jupiter 2049-09-26T06:18:02 K7.80 G8.53 Pgt

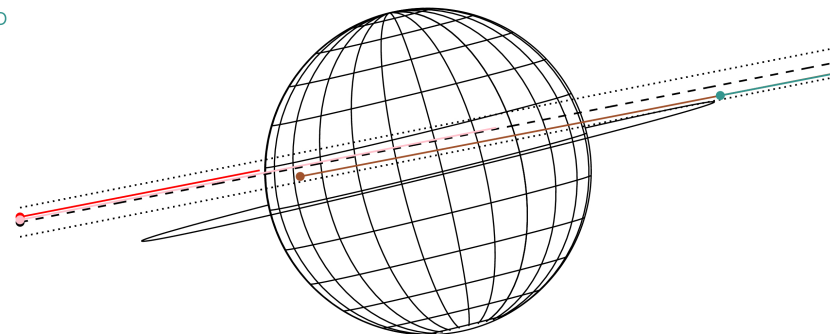
ICRS Star Coord at Epoch: 08h 05m 14.88471s +20:30:42.53994s

RUWE (>1.4 is poor) : 6.67
 K magnitude : 7.796
 G magnitude : 8.532
 RP magnitude : 8.259
 BP magnitude : 8.681
 DUPflag : 1
 Distance (au) : 5.571
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 25.42
 Sun-Target sep (deg) : 63.79
 Sun-Moon sep (deg) : 54.46
 B (ring opening deg) : 1.20
 PA of pole (deg) : 13.66
 Pole direction: RA (deg): 268.05750
 Dec (deg): 64.49716
 C/A sky separation (") : 3.102
 C/A sky separation (km) : 12532.3
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2049-09-26T06:18:02 K7.80 G8.53
 Pgt



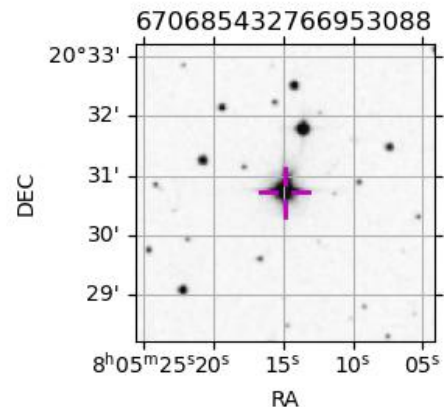
Earth
 PIC
 TEN
 RIO
 ESO



2049-09-26T06:18:02.3600 ex: 08 05 14.8847 s: +20 30 42.540 C/A 3.108" PA 191.08 deg v_sky +25.42 km/s D 05.57 AU
 Credit: Styled after SORA/Lucky Star

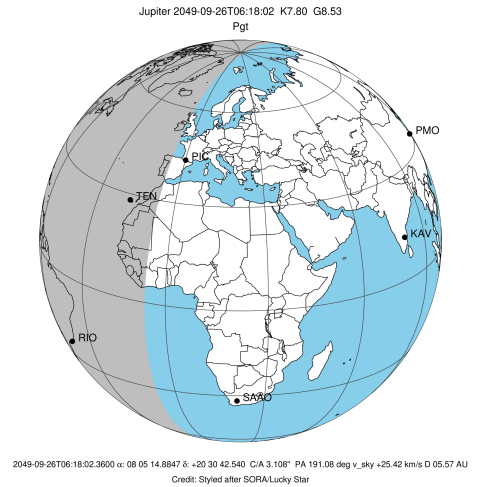
Observable events with sun below -5 deg and altitude above 5 deg

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	+	SEP 26 05:28 - SEP 26 05:28	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	+	SEP 26 07:02 - SEP 26 07:02	Pne
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

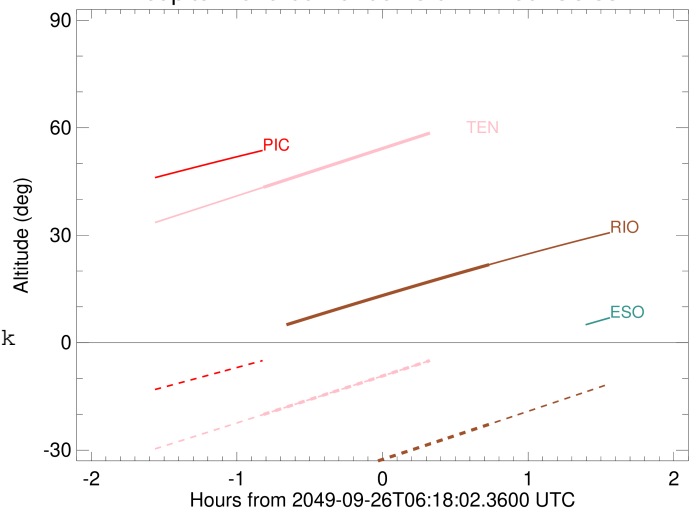


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2049-09-26T06:15:36.050
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : TEN
Location             : Teide Obs./Tenerife
Latitude (deg)       : 28.30050
E. Longitude (deg)  : 343.48909
Altitude (km)        : 2.395
Gaia source ID       : 670685432766953088
2Mass ID (if available) : 08051493+2030434
ICRS Star Coord at Epoch: 08h 05m 14.88471s +20:30:42.53994s
RUWE (>1.4 is poor) : 6.67
K magnitude           : 7.796
G magnitude           : 8.532
RP magnitude         : 8.259
BP magnitude         : 8.681
DUPflag              : 1
Distance (au)        : 5.571
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 25.42
Sun-Target sep (deg) : 63.79
Sun-Moon sep (deg)  : 55.37
B (ring opening deg) : 1.20
PA of pole (deg)    : 13.66
Pole direction: RA (deg): 268.05750
Dec (deg): 64.49716
C/A sky separation (") : 3.245
C/A sky separation (km) : 13109.8
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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Jupiter 2049-09-26T06:18:02 K7.80 G8.53

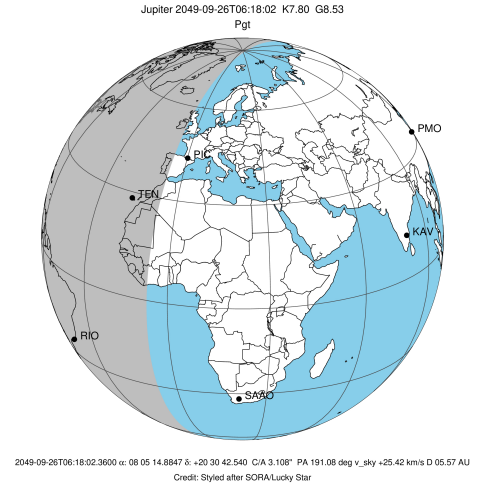


x: target alt < 5.0 deg or sun > -5.0 deg

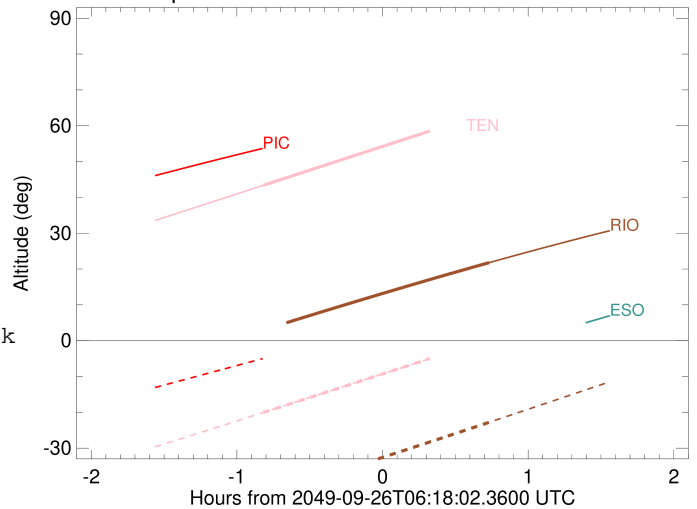
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2049-09-26T05:28:59.232	43.38	-20.04	71491.9	13.24	15.05
Jupiter	E	2049-09-26T07:02:19.771	63.91	0.46x	71492.0	7.97	9.09

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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2049-09-26T06:15:00.880
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       : 670685432766953088
2Mass ID (if available) : 08051493+2030434
ICRS Star Coord at Epoch: 08h 05m 14.88471s +20:30:42.53994s
RUWE (>1.4 is poor) : 6.67
K magnitude           : 7.796
G magnitude           : 8.532
RP magnitude         : 8.259
BP magnitude         : 8.681
DUPflag              : 1
Distance (au)        : 5.571
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 25.42
Sun-Target sep (deg) : 63.79
Sun-Moon sep (deg)   : 54.97
B (ring opening deg) : 1.20
PA of pole (deg)     : 13.66
Pole direction: RA (deg): 268.05750
Dec (deg): 64.49716
C/A sky separation (") : 2.077
C/A sky separation (km) : 8393.6
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
    
```



Jupiter 2049-09-26T06:18:02 K7.80 G8.53



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	2049-09-26T05:28:11.616	2.83x	-43.30	71491.9	9.57	10.91
Jupiter	E	2049-09-26T07:02:00.267	21.78	-22.78	71492.0	3.97	4.54