

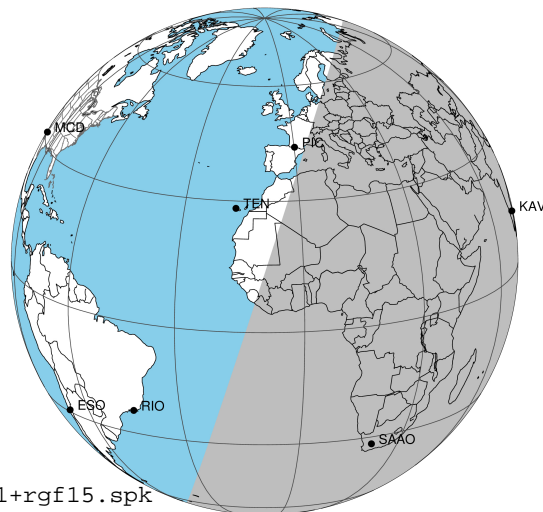
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2027-05-09T18:50:18.300
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 631014056803083904
 2Mass ID (if available) : 09214577+1628058

Jupiter 2027-05-09T18:50:18 K7.36 G9.54 Pgt

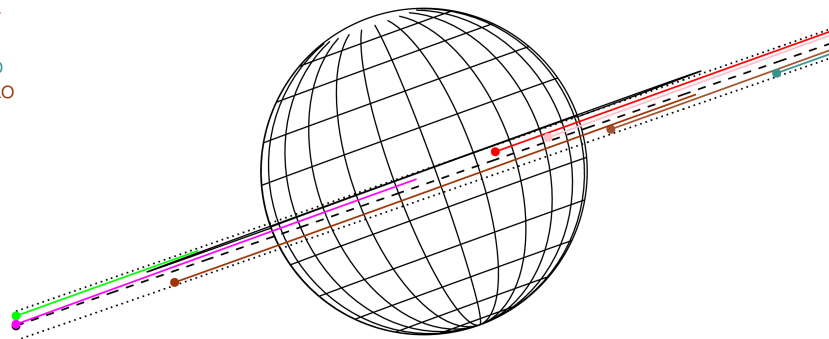
ICRS Star Coord at Epoch: 09h 21m 45.74708s +16:28:05.79201s

RUWE (>1.4 is poor) : 0.91
 K magnitude : 7.363
 G magnitude : 9.542
 RP magnitude : 8.862
 BP magnitude : 10.066
 DUPflag : 1
 Distance (au) : 5.292
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 12.55
 Sun-Target sep (deg) : 89.13
 Sun-Moon sep (deg) : 44.56
 B (ring opening deg) : -0.22
 PA of pole (deg) : 19.94
 Pole direction: RA (deg): 268.05764
 Dec (deg): 64.49665
 C/A sky separation (") : 1.391
 C/A sky separation (km) : 5339.0
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2027-05-09T18:50:18 K7.36 G9.54
 Pgt



Earth
 PIC
 PMO
 TEN
 KAV
 RIO
 ESO
 SAAO

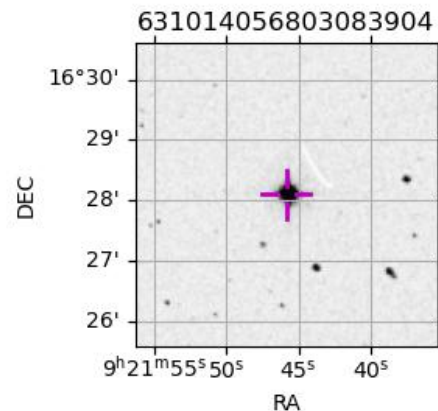


2027-05-09T18:50:18.3000 ex: 09 21 45.7471 s: +16 28 05.792 C/A 1.391" PA 19.12 deg v_sky +12.55 km/s D 05.29 AU

Credit: Styled after SORA/Lucky Star

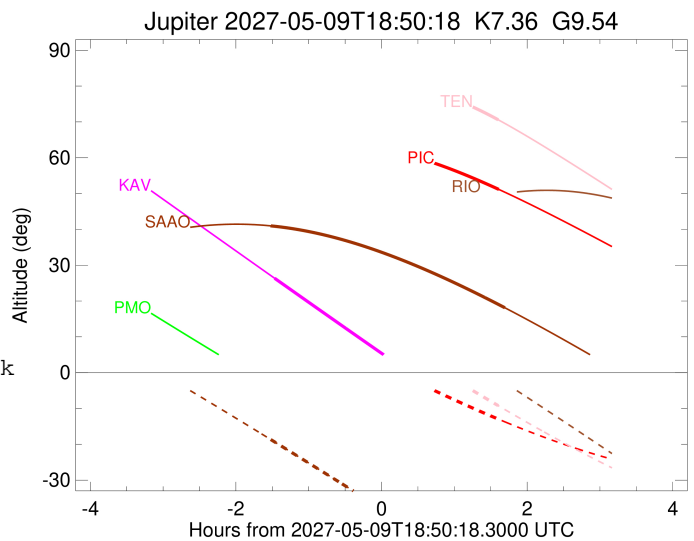
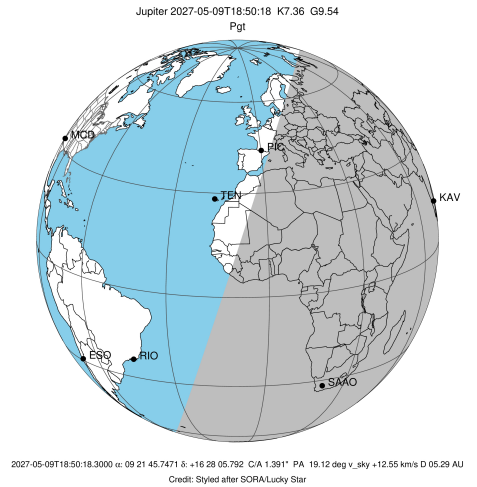
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OCode
PIC	Pic du Midi	42.9	0.1	+	MAY 09 20:27 - MAY 09 20:27	Pne
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	+	MAY 09 20:26 - MAY 09 20:26	Pne
IRTF	Mauna Kea/IRTF	19.8	204.5			Pnn
KAV	Kavalur Observatory	12.6	78.8	+	MAY 09 17:22 - MAY 09 17:22	Pin
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	+	MAY 09 17:19 - MAY 09 20:31	Pie
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2027-05-09T18:50:01.730
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      : 631014056803083904
2Mass ID (if available) : 09214577+1628058
ICRS Star Coord at Epoch: 09h 21m 45.74708s +16:28:05.79201s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 7.363
G magnitude          : 9.542
RP magnitude         : 8.862
BP magnitude         : 10.066
DUPflag             : 1
Distance (au)       : 5.292
f0 (km)             : 0.00
g0 (km)             : 0.00
skyplane vel. (km/s) : 12.55
Sun-Target sep (deg) : 89.13
Sun-Moon sep (deg)  : 45.15
B (ring opening deg) : -0.22
PA of pole (deg)    : 19.94
Pole direction: RA (deg): 268.05764
Dec (deg): 64.49665
C/A sky separation (") : 0.626
C/A sky separation (km) : 2403.0
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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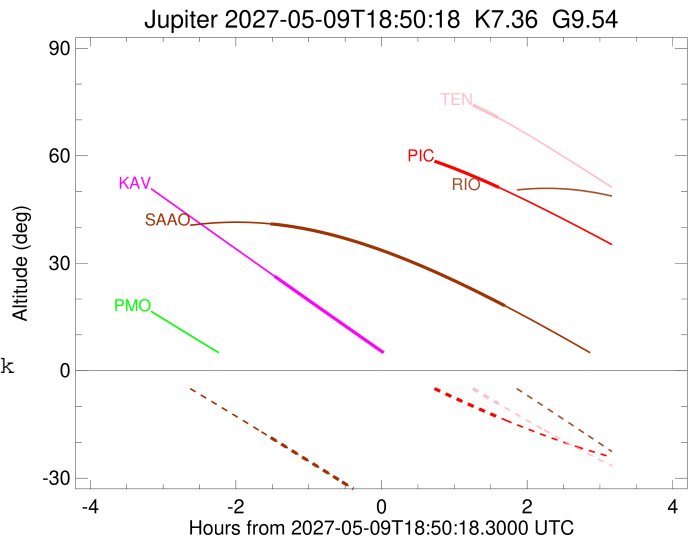
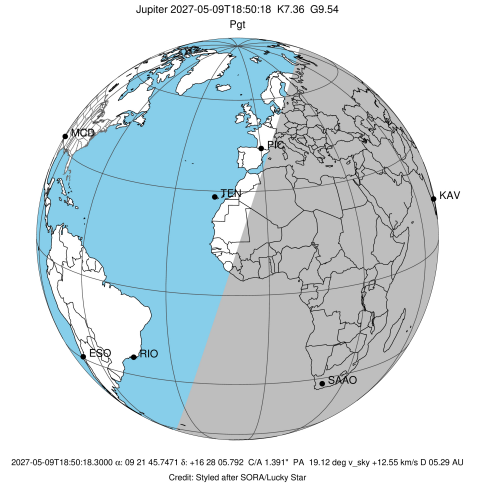


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2027-05-09T17:12:30.341	60.57	19.58x	71492.0	-1.60	-1.83
Jupiter	E	2027-05-09T20:27:00.282	51.14	-13.03	71492.0	-2.11	-2.42

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2027-05-09T18:48:50.100
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       : 631014056803083904
2Mass ID (if available) : 09214577+1628058
ICRS Star Coord at Epoch: 09h 21m 45.74708s +16:28:05.79201s
RUWE (>1.4 is poor) : 0.91
K magnitude           : 7.363
G magnitude           : 9.542
RP magnitude         : 8.862
BP magnitude         : 10.066
DUPflag              : 1
Distance (au)        : 5.292
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 12.55
Sun-Target sep (deg) : 89.13
Sun-Moon sep (deg)   : 45.12
B (ring opening deg) : -0.22
PA of pole (deg)     : 19.94
Pole direction: RA (deg): 268.05764
Dec (deg): 64.49665
C/A sky separation (") : 1.132
C/A sky separation (km) : 4346.0
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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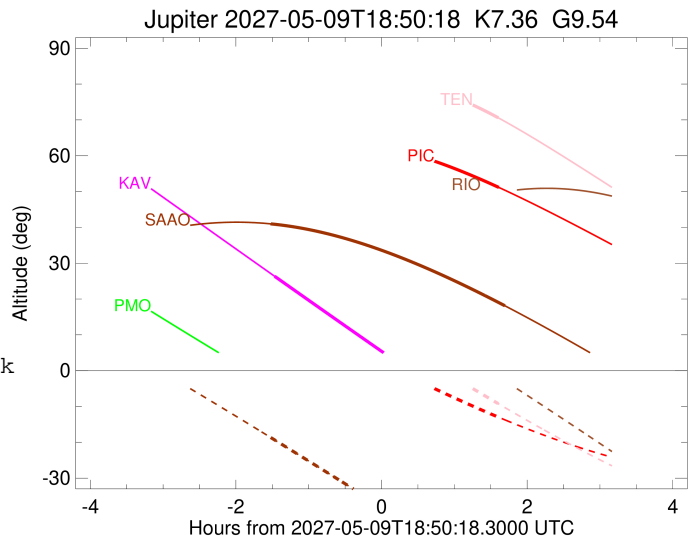
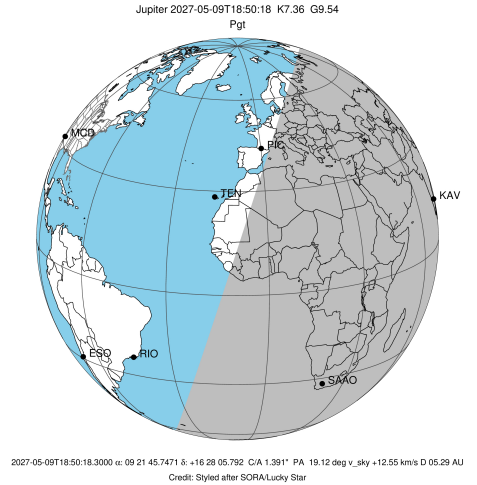


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2027-05-09T17:10:59.904	58.02	32.31x	71492.0	-3.08	-3.52
Jupiter	E	2027-05-09T20:26:26.451	70.59	-9.20	71492.0	-3.64	-4.16

```

target                : Jupiter
target radius (km)    : 71492.00
C/A epoch             : 2027-05-09T18:57:33.810
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : KAV
Location              : Kavalur Observatory
Latitude (deg)        : 12.57556
E. Longitude (deg)    : 78.83167
Altitude (km)         : 0.722
Gaia source ID        : 631014056803083904
2Mass ID (if available) : 09214577+1628058
ICRS Star Coord at Epoch: 09h 21m 45.74708s +16:28:05.79201s
RUWE (>1.4 is poor)  : 0.91
K magnitude           : 7.363
G magnitude           : 9.542
RP magnitude          : 8.862
BP magnitude          : 10.066
DUPflag              : 1
Distance (au)         : 5.292
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s)  : 12.55
Sun-Target sep (deg)  : 89.13
Sun-Moon sep (deg)    : 45.22
B (ring opening deg)  : -0.22
PA of pole (deg)      : 19.94
Pole direction: RA (deg): 268.05764
Dec (deg): 64.49665
C/A sky separation (") : 0.533
C/A sky separation (km) : 2045.9
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
    
```

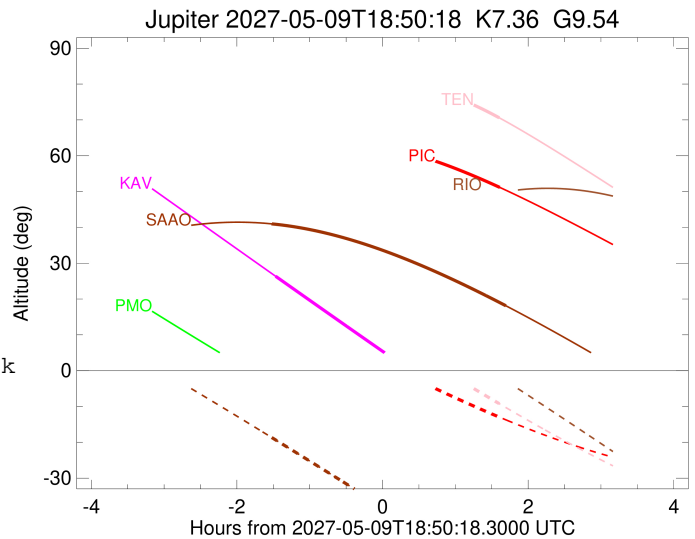
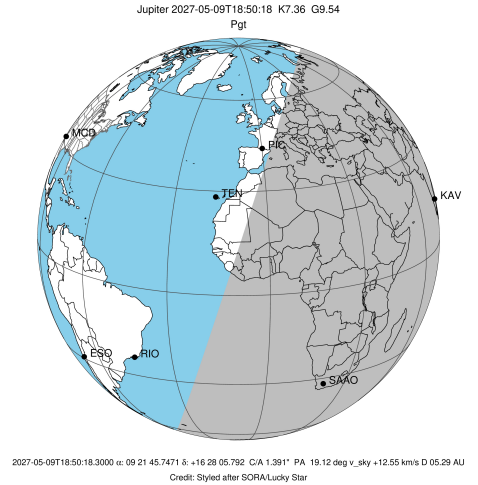


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2027-05-09T17:22:11.206	26.36	-54.28	71492.0	-1.50	-1.71
Jupiter	E	2027-05-09T20:31:22.867	-18.02x	-49.52	71492.0	-2.07	-2.37

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2027-05-09T18:55:58.240
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      : 631014056803083904
2Mass ID (if available) : 09214577+1628058
ICRS Star Coord at Epoch: 09h 21m 45.74708s +16:28:05.79201s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 7.363
G magnitude          : 9.542
RP magnitude         : 8.862
BP magnitude         : 10.066
DUPflag             : 1
Distance (au)        : 5.292
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 12.55
Sun-Target sep (deg) : 89.13
Sun-Moon sep (deg)  : 45.42
B (ring opening deg) : -0.22
PA of pole (deg)    : 19.94
Pole direction: RA (deg): 268.05764
Dec (deg): 64.49665
C/A sky separation (") : 2.272
C/A sky separation (km) : 8718.5
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	2027-05-09T17:19:01.061	40.97	-18.66	71492.0	-6.91	-7.89
Jupiter	E	2027-05-09T20:31:55.048	18.12	-58.94	71492.0	-7.06	-8.06