

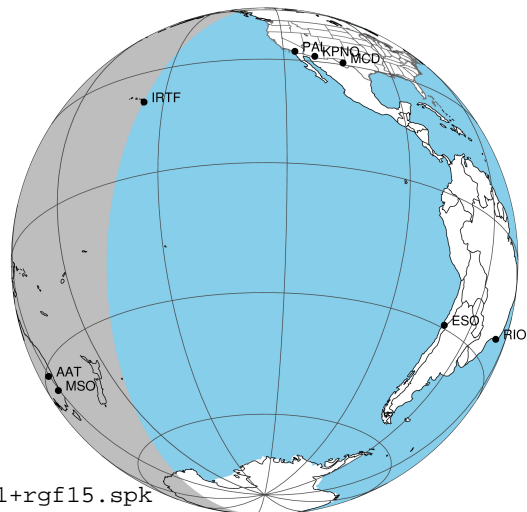
target : Jupiter  
 target radius (km) : 71492.00  
 C/A epoch : 2043-02-06T16:57:28.720  
 Event type : Pgt  
 : Jupiter occs: geocentric, topocentric  
 : Not a ringed target  
 Gaia source ID : 4116924786865697664  
 2Mass ID (if available) : 17412999-2254215

Jupiter 2043-02-06T16:57:28 K8.79 G14.85 Pgt

ICRS Star Coord at Epoch: 17h 41m 29.97524s -22:54:21.87255s

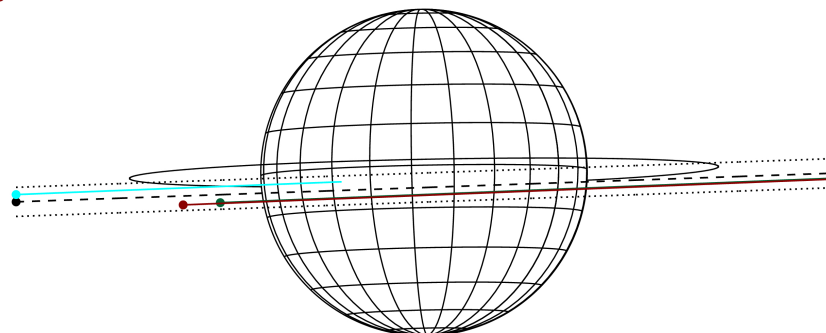
RUWE (>1.4 is poor) : 0.91  
 K magnitude : 8.786  
 G magnitude : 14.846  
 RP magnitude : 13.347  
 BP magnitude : 17.906  
 DUPflag : 0  
 Distance (au) : 5.869  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 31.78  
 Sun-Target sep (deg) : 51.45  
 Sun-Moon sep (deg) : 13.39  
 B (ring opening deg) : -2.57  
 PA of pole (deg) : 1.16  
 Pole direction: RA (deg): 268.05661  
 Dec (deg): 64.49732  
 C/A sky separation (") : 1.546  
 C/A sky separation (km) : 6583.0  
 NAIF SPICE kernels : RAJobs\_U111+rgf15.spk

Jupiter 2043-02-06T16:57:28 K8.79 G14.85  
 Pgt



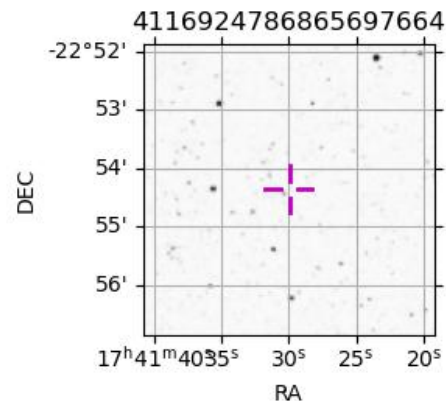
2043-02-06T16:57:28.7200 a: 17 41 29.9752 s: -22 54 21.873 C/A 1.556" PA 2.01 deg v\_sky +31.78 km/s D 05.87 AU  
 Credit: Styled after SORA/Lucky Star

Earth  
 IRTF  
 AAT  
 MSO



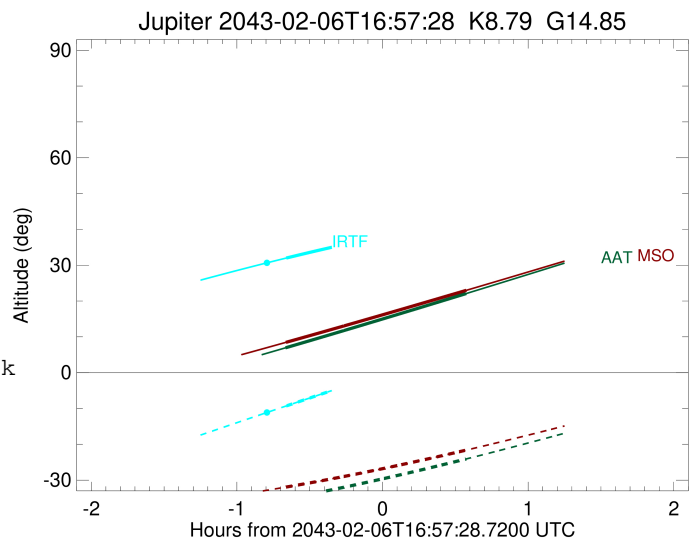
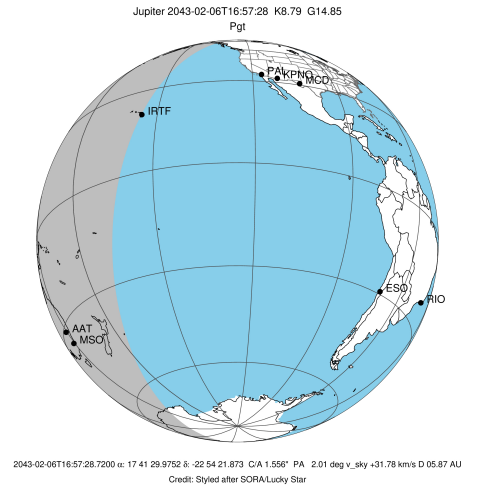
Observable events with sun below -5 deg and altitude above 5 deg

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	+	FEB 06 16:17 - FEB 06 16:17	Pin
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	+ +	FEB 06 16:17 - FEB 06 17:31	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	FEB 06 16:17 - FEB 06 17:32	Pie



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-06T16:55:48.410
Event type           : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code        : IRTF
Location             : Mauna Kea/IRTF
Latitude (deg)       : 19.82622
E. Longitude (deg)   : 204.52800
Altitude (km)        : 4.168
Gaia source ID       : 4116924786865697664
2Mass ID (if available) : 17412999-2254215
ICRS Star Coord at Epoch: 17h 41m 29.97524s -22:54:21.87255s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 8.786
G magnitude          : 14.846
RP magnitude         : 13.347
BP magnitude         : 17.906
DUPflag             : 0
Distance (au)        : 5.869
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 31.78
Sun-Target sep (deg) : 51.45
Sun-Moon sep (deg)   : 14.17
B (ring opening deg) : -2.57
PA of pole (deg)     : 1.16
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 0.631
C/A sky separation (km) : 2688.0
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
    
```

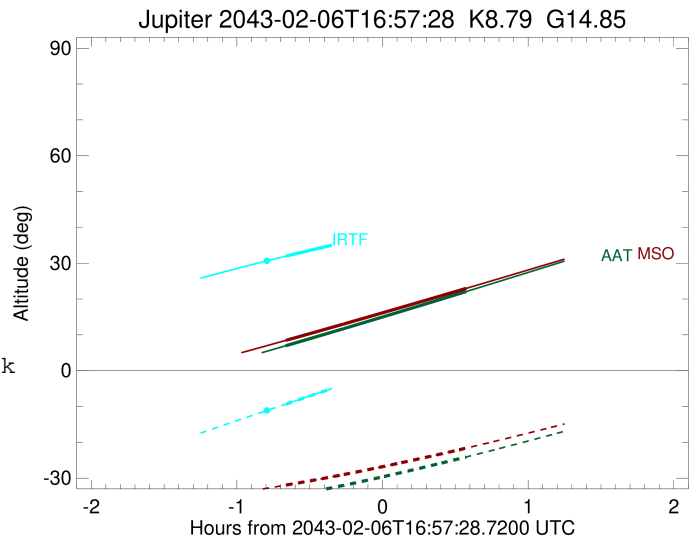
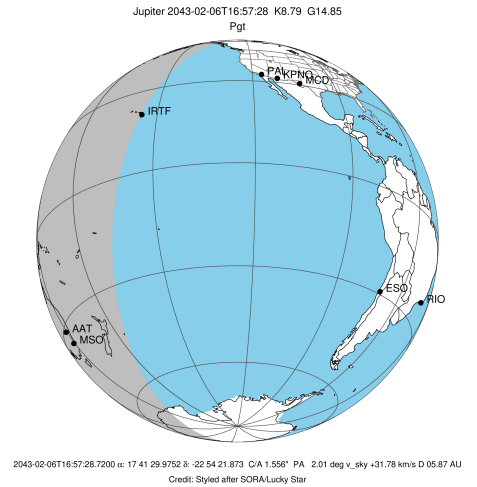


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-06T16:17:55.445	32.01	-9.27	71492.0	-3.21	-3.67
Jupiter	E	2043-02-06T17:33:44.896	42.57	7.86x	71492.0	-1.14	-1.31

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-06T16:54:41.660
Event type          : Pgt
                    : Jupiter occs: geocentric, topocentric
                    : Not a ringed target
Observer code       : AAT
Location            : Siding Spring (AAT)
Latitude (deg)      : -31.27703
E. Longitude (deg)  : 149.06608
Altitude (km)       : 1.164
Gaia source ID      : 4116924786865697664
2Mass ID (if available) : 17412999-2254215
ICRS Star Coord at Epoch: 17h 41m 29.97524s -22:54:21.87255s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 8.786
G magnitude          : 14.846
RP magnitude         : 13.347
BP magnitude         : 17.906
DUPflag             : 0
Distance (au)       : 5.869
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 31.78
Sun-Target sep (deg) : 51.45
Sun-Moon sep (deg)  : 13.98
B (ring opening deg) : -2.57
PA of pole (deg)    : 1.16
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 2.268
C/A sky separation (km) : 9652.6
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
    
```

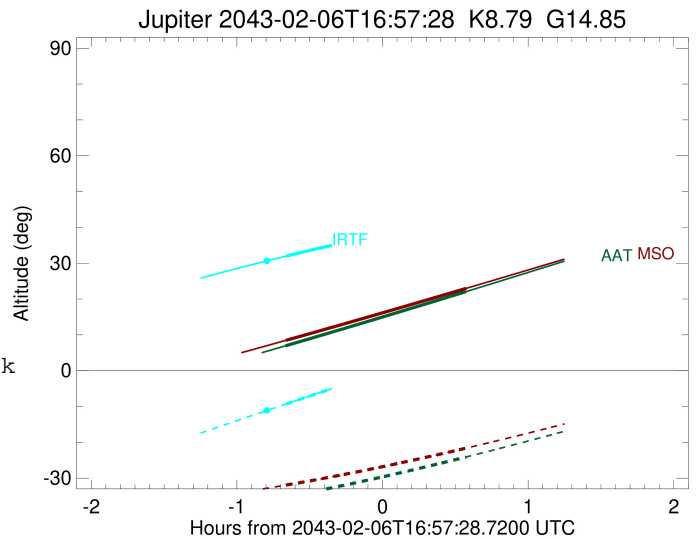
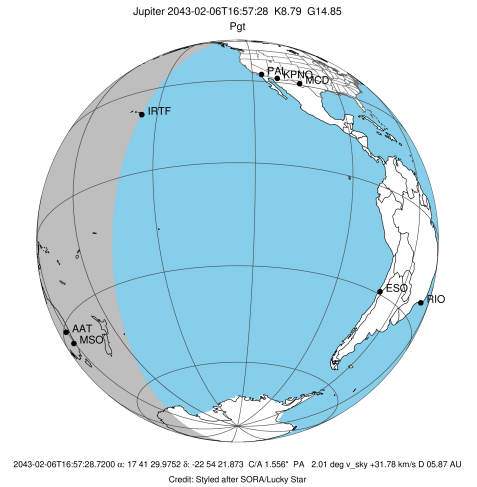


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-06T16:17:33.844	6.95	-35.21	71491.8	-8.88	-10.13
Jupiter	E	2043-02-06T17:31:54.744	22.07	-24.09	71491.9	-6.62	-7.56

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-06T16:54:49.720
Event type          : Pgt
                    : Jupiter occs: geocentric, topocentric
                    : Not a ringed target
Observer code       : MSO
Location            : Mt. Stromlo Observatory
Latitude (deg)      : -35.32000
E. Longitude (deg)  : 149.00833
Altitude (km)       : 0.770
Gaia source ID      : 4116924786865697664
2Mass ID (if available) : 17412999-2254215
ICRS Star Coord at Epoch: 17h 41m 29.97524s -22:54:21.87255s
RUWE (>1.4 is poor) : 0.91
K magnitude          : 8.786
G magnitude          : 14.846
RP magnitude         : 13.347
BP magnitude         : 17.906
DUPflag             : 0
Distance (au)       : 5.869
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 31.78
Sun-Target sep (deg) : 51.45
Sun-Moon sep (deg)   : 13.93
B (ring opening deg) : -2.57
PA of pole (deg)     : 1.16
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (") : 2.348
C/A sky separation (km) : 9996.5
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	2043-02-06T16:17:43.364	8.47	-31.93	71491.8	-9.15	-10.43
Jupiter	E	2043-02-06T17:32:01.124	22.98	-21.61	71491.9	-6.91	-7.89