

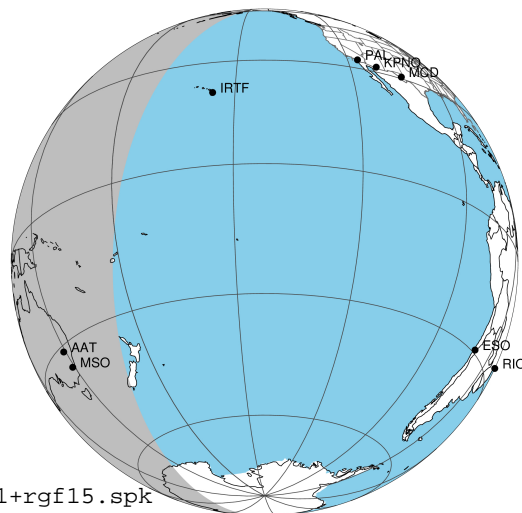
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-02-08T18:02:08.640
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4116880668993823616
 2Mass ID (if available) : 17430454-2255039

Jupiter 2043-02-08T18:02:08 K8.13 G14.75 Pgt

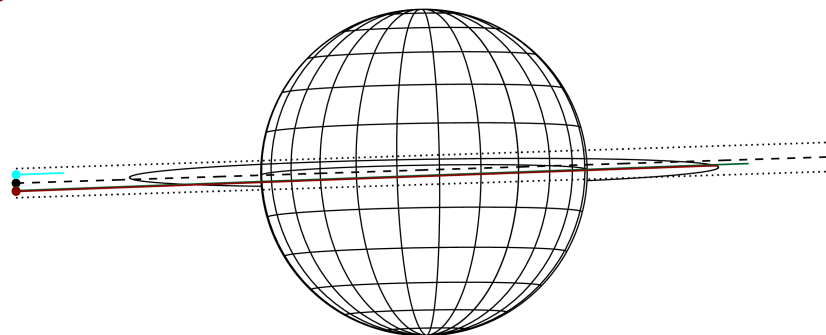
ICRS Star Coord at Epoch: 17h 43m 04.54103s -22:55:04.08127s

RUWE (>1.4 is poor) : 1.39
 K magnitude : 8.128
 G magnitude : 14.755
 RP magnitude : 13.146
 BP magnitude : 17.918
 DUPflag : 0
 Distance (au) : 5.843
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 31.07
 Sun-Target sep (deg) : 53.16
 Sun-Moon sep (deg) : 39.11
 B (ring opening deg) : -2.57
 PA of pole (deg) : 0.99
 Pole direction: RA (deg): 268.05661
 Dec (deg): 64.49732
 C/A sky separation (") : 0.259
 C/A sky separation (km) : 1096.7
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-02-08T18:02:08 K8.13 G14.75
 Pgt



Earth
 IRTF
 AAT
 MSO

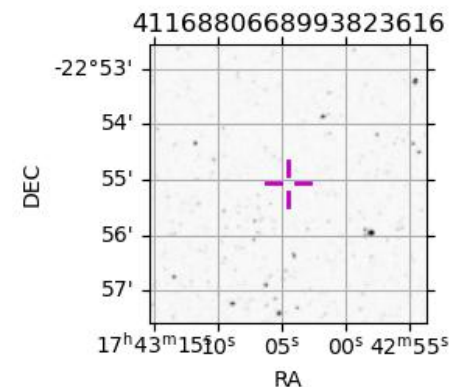


2043-02-08T18:02:08.6400 cc: 17 43 04.5410 s: -22 55 04.081 C/A 0.249° PA 181.83 deg v_sky +31.07 km/s D 05.84 AU

Credit: Styled after SORA/Lucky Star

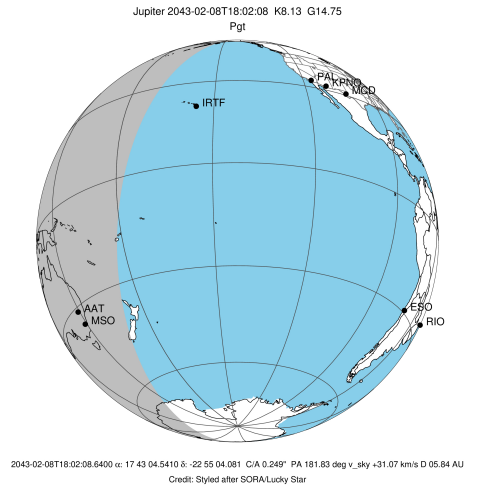
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEncode
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			Pnn
ESO	European Southern Obs. (3.6m)	-29.3	289.3			Pnn
AAT	Siding Spring (AAT)	-31.3	149.1	+ +	FEB 08 17:20 - FEB 08 18:38	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	FEB 08 17:21 - FEB 08 18:38	Pie

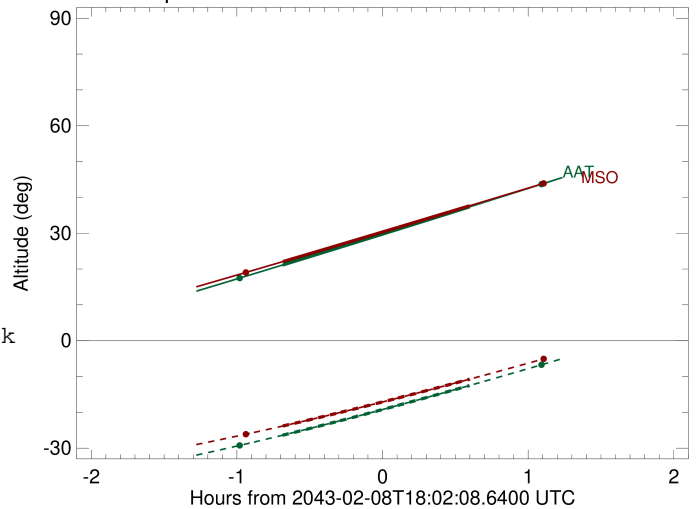


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-08T17:59:27.250
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : AAT
Location              : Siding Spring (AAT)
Latitude (deg)        : -31.27703
E. Longitude (deg)    : 149.06608
Altitude (km)         : 1.164
Gaia source ID        : 4116880668993823616
2Mass ID (if available) : 17430454-2255039
ICRS Star Coord at Epoch: 17h 43m 04.54103s -22:55:04.08127s
RUWE (>1.4 is poor) : 1.39
K magnitude           : 8.128
G magnitude           : 14.755
RP magnitude          : 13.146
BP magnitude          : 17.918
DUPflag              : 0
Distance (au)         : 5.843
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 31.07
Sun-Target sep (deg)  : 53.16
Sun-Moon sep (deg)    : 39.96
B (ring opening deg) : -2.57
PA of pole (deg)      : 0.99
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation (" ) : 0.308
C/A sky separation (km) : 1304.6
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
    
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Jupiter 2043-02-08T18:02:08 K8.13 G14.75

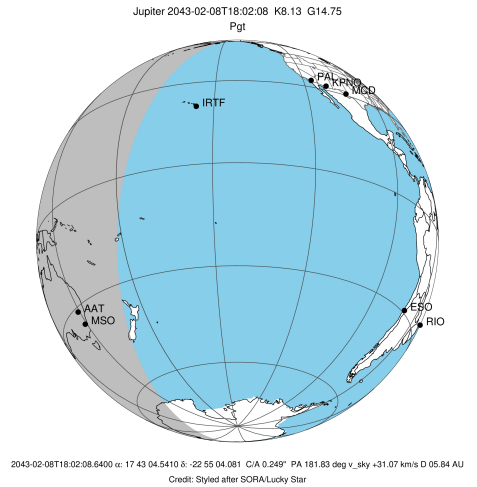


x: target alt < 5.0 deg or sun > -5.0 deg

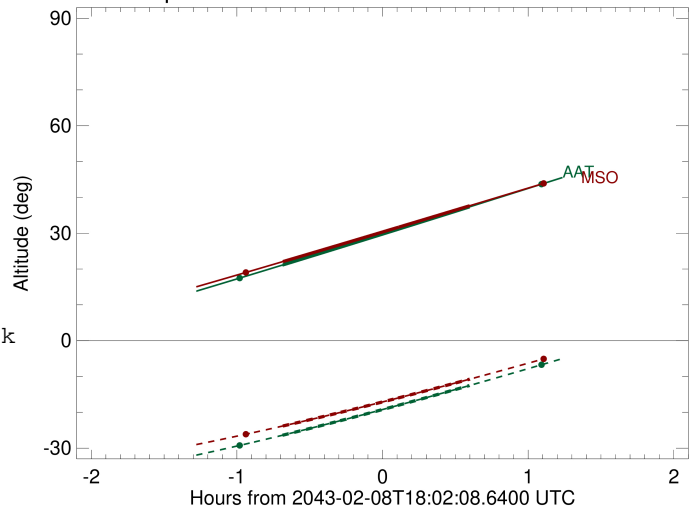
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-08T17:20:59.146	21.12	-26.39	71492.0	-2.19	-2.50
Jupiter	E	2043-02-08T18:38:00.886	37.35	-12.52	71492.0	0.08	0.10

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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-08T17:59:35.000
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       : 4116880668993823616
2Mass ID (if available) : 17430454-2255039
ICRS Star Coord at Epoch: 17h 43m 04.54103s -22:55:04.08127s
RUWE (>1.4 is poor) : 1.39
K magnitude           : 8.128
G magnitude           : 14.755
RP magnitude         : 13.146
BP magnitude         : 17.918
DUPflag              : 0
Distance (au)        : 5.843
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 31.07
Sun-Target sep (deg) : 53.16
Sun-Moon sep (deg)   : 39.93
B (ring opening deg) : -2.57
PA of pole (deg)     : 0.99
Pole direction: RA (deg): 268.05661
Dec (deg): 64.49732
C/A sky separation ("): 0.396
C/A sky separation (km): 1678.7
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 2043-02-08T18:02:08 K8.13 G14.75



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	2043-02-08T17:21:07.519	22.08	-23.81	71492.0	-2.48	-2.83
Jupiter	E	2043-02-08T18:38:07.795	37.67	-10.74	71492.0	-0.23	-0.26