

target : Jupiter  
target radius (km) : 71492.00  
C/A epoch : 2043-02-27T22:20:22.790  
Event type : Pgt  
: Jupiter occs: geocentric, topocentric  
: Not a ringed target  
Gaia source ID : 4069412243729726080  
2Mass ID (if available) : 17561914-2258396

Jupiter 2043-02-27T22:20:22 K7.88 G14.87 Pgt

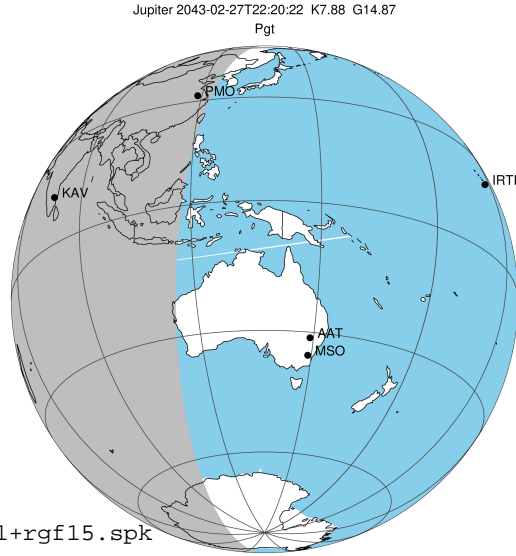
ICRS Star Coord at Epoch: 17h 56m 19.14059s -22:58:39.76904s

RUWE (>1.4 is poor) : 1.06  
K magnitude : 7.882  
G magnitude : 14.874  
RP magnitude : 13.334  
BP magnitude : 18.560  
DUPflag : 0  
Distance (au) : 5.570  
f0 (km) : 0.00  
g0 (km) : 0.00  
skyplane vel. (km/s) : 23.64  
Sun-Target sep (deg) : 69.46  
Sun-Moon sep (deg) : 65.31  
B (ring opening deg) : -2.52  
PA of pole (deg) : -0.44  
Pole direction: RA (deg): 268.05662  
Dec (deg): 64.49732  
C/A sky separation (") : 12.408  
C/A sky separation (km) : 50123.1  
NAIF SPICE kernels : RAJobs\_U111+rgf15.spk

URKALLvl.spk  
naif0012.tls  
nep097.bsp  
nep101.bsp  
sat4401.bsp

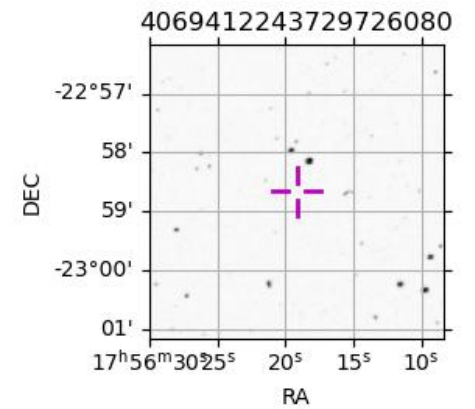
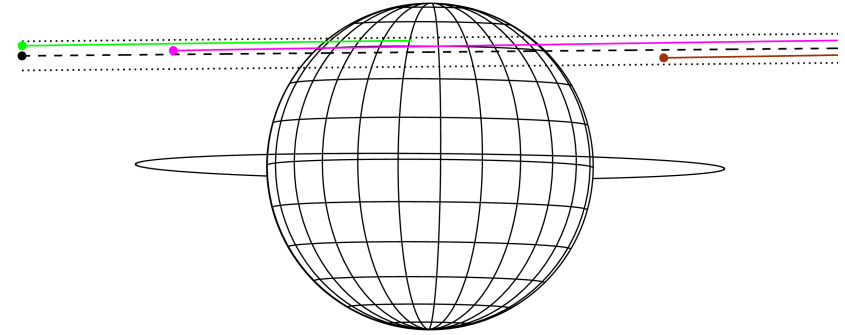
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEcode
PIC	Pic du Midi	42.9	0.1			Pnn
PAL	Palomar Mt (200")	33.4	243.1			Pnn
PMO	Purple Mtn Obs. Nanking	32.1	118.8	+	FEB 27 21:46 - FEB 27 21:46	Pin
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	+ +	FEB 27 21:41 - FEB 27 22:50	Pie
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			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



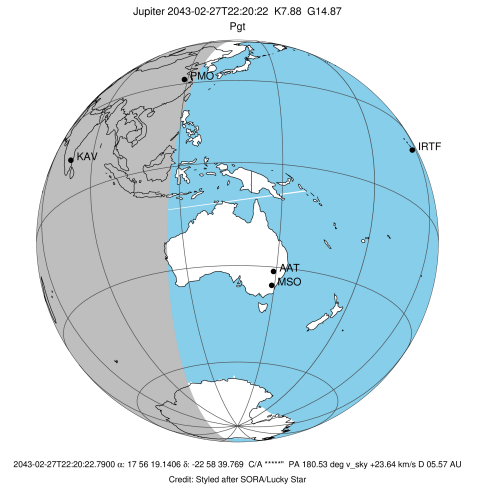
2043-02-27T22:20:22.7900 a: 17 56 19.1406 s: -22 58 39.769 C/A \*\*\*\*\* PA 180.53 deg v\_sky +23.64 km/s D 05.57 AU  
Credit: Styled after SORA/Lucky Star

Earth  
PMO  
KAV  
SAAO

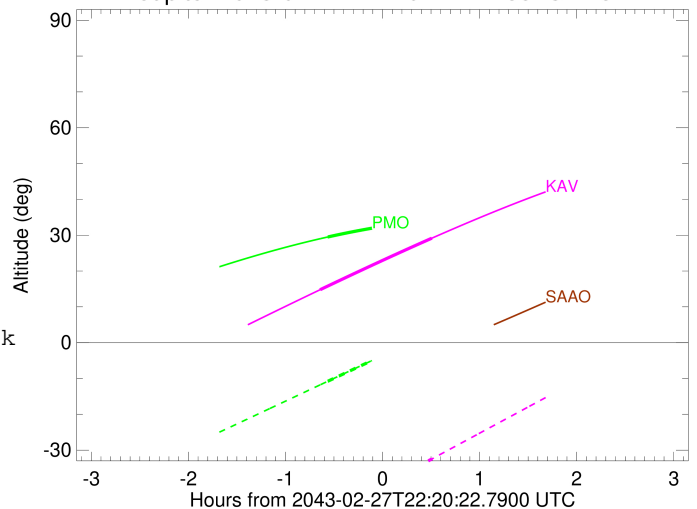


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-02-27T22:19:04.130
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : PMO
Location              : Purple Mtn Obs. Nanking
Latitude (deg)       : 32.06667
E. Longitude (deg)   : 118.82089
Altitude (km)        : 0.364
Gaia source ID       : 4069412243729726080
2Mass ID (if available) : 17561914-2258396
ICRS Star Coord at Epoch: 17h 56m 19.14059s -22:58:39.76904s
RUWE (>1.4 is poor) : 1.06
K magnitude           : 7.882
G magnitude           : 14.874
RP magnitude          : 13.334
BP magnitude          : 18.560
DUPflag              : 0
Distance (au)        : 5.570
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 23.64
Sun-Target sep (deg) : 69.46
Sun-Moon sep (deg)   : 65.66
B (ring opening deg) : -2.52
PA of pole (deg)     : -0.44
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 13.669
C/A sky separation (km) : 55218.3
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 2043-02-27T22:20:22 K7.88 G14.87

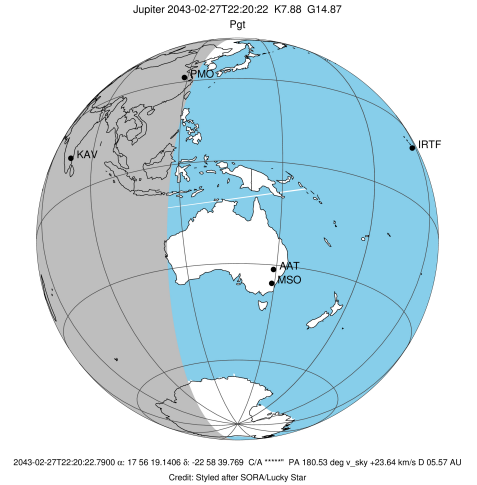


x: target alt < 5.0 deg or sun > -5.0 deg

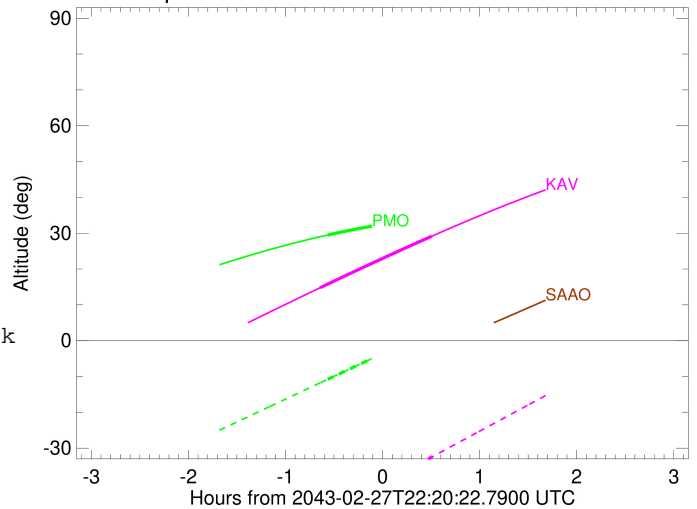
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-02-27T21:46:32.737	29.50	-10.78	71487.0	49.38	52.99
Jupiter	E	2043-02-27T22:51:37.955	34.24	2.93x	71486.7	51.57	55.10

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-27T22:16:21.550
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      : 4069412243729726080
2Mass ID (if available) : 17561914-2258396
ICRS Star Coord at Epoch: 17h 56m 19.14059s -22:58:39.76904s
RUWE (>1.4 is poor) : 1.06
K magnitude         : 7.882
G magnitude         : 14.874
RP magnitude        : 13.334
BP magnitude        : 18.560
DUPflag            : 0
Distance (au)       : 5.570
f0 (km)             : 0.00
g0 (km)             : 0.00
skyplane vel. (km/s) : 23.64
Sun-Target sep (deg) : 69.46
Sun-Moon sep (deg)  : 65.32
B (ring opening deg) : -2.52
PA of pole (deg)    : -0.44
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 13.025
C/A sky separation (km) : 52615.9
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
    
```



Jupiter 2043-02-27T22:20:22 K7.88 G14.87



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	2043-02-27T21:41:56.578	14.80	-49.29	71487.5	45.97	49.66
Jupiter	E	2043-02-27T22:50:52.837	29.16	-32.46	71487.1	48.66	52.29