

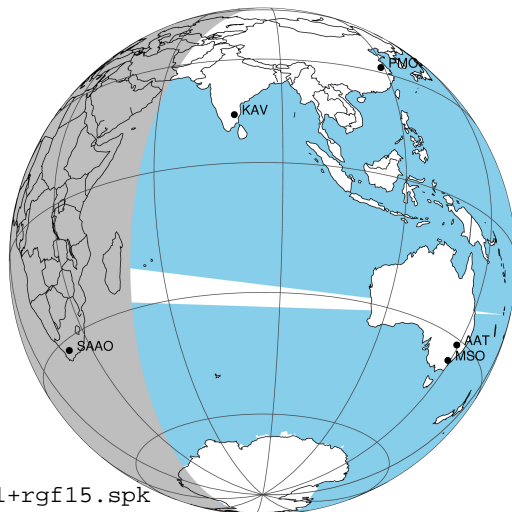
target : Jupiter  
 target radius (km) : 71492.00  
 C/A epoch : 2043-02-15T02:28:43.280  
 Event type : Pgt  
 : Jupiter occs: geocentric, topocentric  
 : Not a ringed target  
 Gaia source ID : 4068885405887869440  
 2Mass ID (if available) : 17474700-2256569

Jupiter 2043-02-15T02:28:43 K8.01 G13.75 Pgt

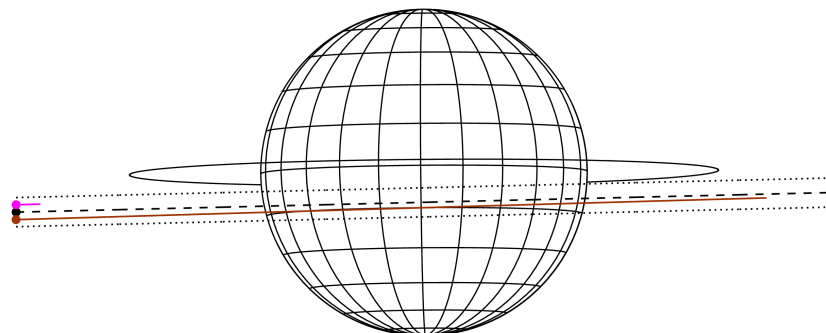
ICRS Star Coord at Epoch: 17h 47m 46.97866s -22:56:57.32285s

RUWE (>1.4 is poor) : 0.93  
 K magnitude : 8.005  
 G magnitude : 13.751  
 RP magnitude : 12.293  
 BP magnitude : 16.622  
 DUPflag : 0  
 Distance (au) : 5.757  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 28.75  
 Sun-Target sep (deg) : 58.51  
 Sun-Moon sep (deg) : 127.34  
 B (ring opening deg) : -2.55  
 PA of pole (deg) : 0.48  
 Pole direction: RA (deg): 268.05662  
 Dec (deg): 64.49732  
 C/A sky separation (") : 3.129  
 C/A sky separation (km) : 13064.6  
 NAIF SPICE kernels : RAJobs\_U111+rgf15.spk

Jupiter 2043-02-15T02:28:43 K8.01 G13.75  
 Pgt



Earth  
 KAV  
 SAAO

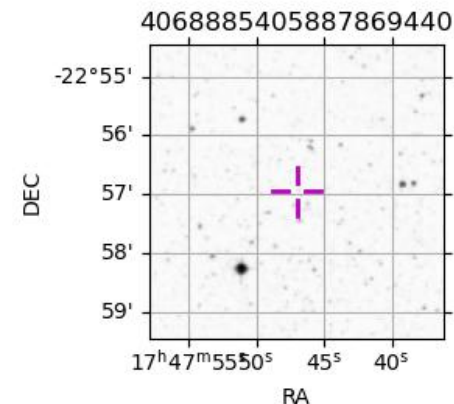


2043-02-15T02:28:43.2800 a: 17 47 46.9787 & -22 56 57.323 C/A 3.138" PA 1.38 deg v\_sky +28.75 km/s D 05.76 AU

Credit: Styled after SORA/Lucky Star

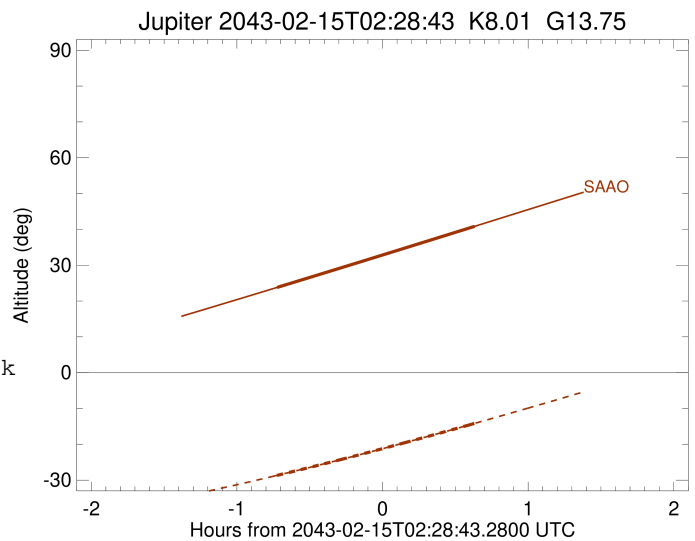
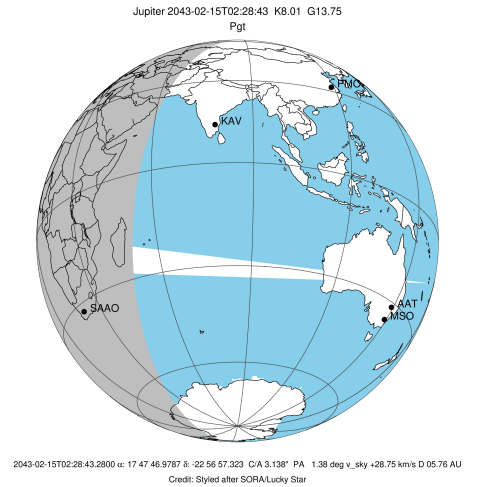
Observable events with sun below -5 deg and altitude above 5 deg

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			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			Pnn
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8	+ +	FEB 15 01:45 - FEB 15 03:06	Pie
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-02-15T02:25:57.110
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       : 4068885405887869440
2Mass ID (if available) : 17474700-2256569
ICRS Star Coord at Epoch: 17h 47m 46.97866s -22:56:57.32285s
RUWE (>1.4 is poor) : 0.93
K magnitude          : 8.005
G magnitude           : 13.751
RP magnitude         : 12.293
BP magnitude         : 16.622
DUPflag             : 0
Distance (au)        : 5.757
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 28.75
Sun-Target sep (deg) : 58.51
Sun-Moon sep (deg)   : 127.30
B (ring opening deg) : -2.55
PA of pole (deg)     : 0.48
Pole direction: RA (deg): 268.05662
Dec (deg): 64.49732
C/A sky separation (") : 3.690
C/A sky separation (km) : 15407.8
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
    
```



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	2043-02-15T01:45:18.612	23.80	-28.66	71491.5	-13.63	-15.49
Jupiter	E	2043-02-15T03:06:42.097	40.85	-14.16	71491.7	-11.26	-12.82