

target : Jupiter  
 target radius (km) : 71492.00  
 C/A epoch : 2046-05-14T15:06:49.090  
 Event type : Pgt  
 : Jupiter occs: geocentric, topocentric  
 : Not a ringed target  
 Gaia source ID : 2547529653708976384  
 2Mass ID (if available) : 00321466+0215065

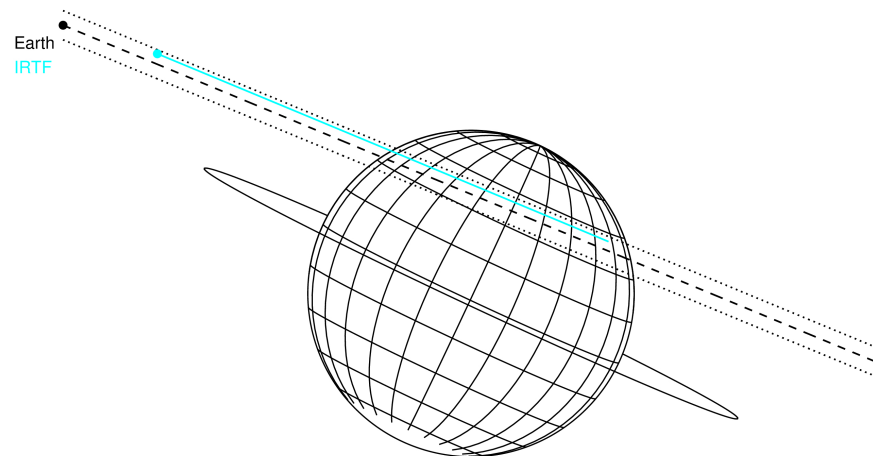
Jupiter 2046-05-14T15:06:49 K9.23 G10.64 Pgt

ICRS Star Coord at Epoch: 00h 32m 14.76718s +02:15:05.31389s

RUWE (>1.4 is poor) : 2.11  
 K magnitude : 9.230  
 G magnitude : 10.640  
 RP magnitude : 10.155  
 BP magnitude : 10.956  
 DUPflag : 0  
 Distance (au) : 5.624  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 34.64  
 Sun-Target sep (deg) : 45.08  
 Sun-Moon sep (deg) : 150.56  
 B (ring opening deg) : 2.25  
 PA of pole (deg) : -25.11  
 Pole direction: RA (deg): 268.05710  
 Dec (deg): 64.49722  
 C/A sky separation (") : 9.856  
 C/A sky separation (km) : 40200.6  
 NAIF SPICE kernels : RAJobs\_U111+rgf15.spk

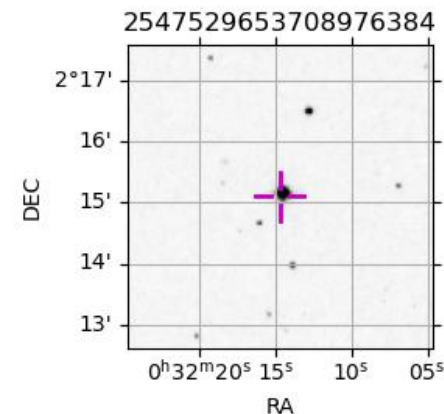


2046-05-14T15:06:49.0900 ex: 00 32 14.7672 8: +02 15 05.314 C/A 9.861" PA 157.51 deg v\_sky +34.64 km/s D 05.62 AU  
 Credit: Styled after SORA/Lucky Star



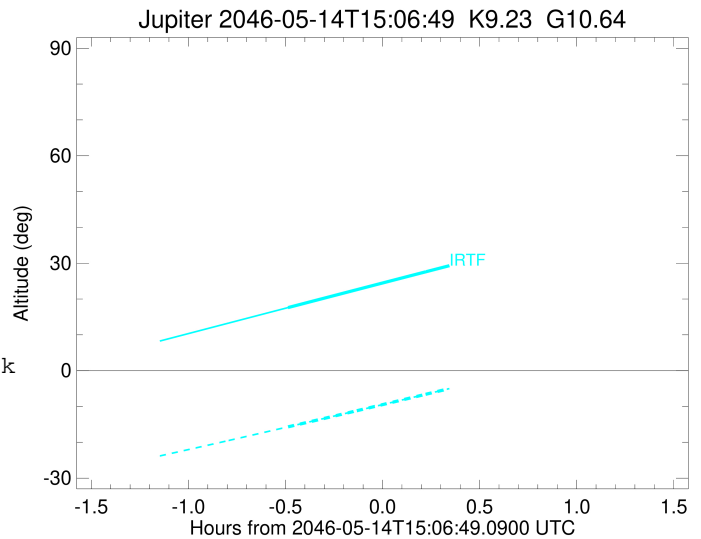
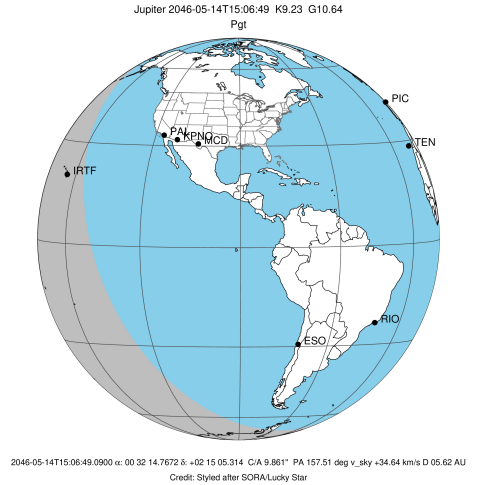
Observable events with sun below -5 deg and altitude above 5 deg

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	+	MAY 14 14:37 - MAY 14 14:37	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			Pnn
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0			Pnn



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2046-05-14T15:04:49.090
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      : 2547529653708976384
2Mass ID (if available) : 00321466+0215065
ICRS Star Coord at Epoch: 00h 32m 14.76718s +02:15:05.31389s
RUWE (>1.4 is poor) : 2.11
K magnitude          : 9.230
G magnitude          : 10.640
RP magnitude         : 10.155
BP magnitude         : 10.956
DUPflag             : 0
Distance (au)        : 5.624
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 34.64
Sun-Target sep (deg) : 45.08
Sun-Moon sep (deg)   : 150.13
B (ring opening deg) : 2.25
PA of pole (deg)     : -25.11
Pole direction: RA (deg): 268.05710
Dec (deg): 64.49722
C/A sky separation ("): 10.830
C/A sky separation (km): 44171.2
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	2046-05-14T14:37:39.674	17.62	-15.68	71489.6	35.64	39.26
Jupiter	E	2046-05-14T15:32:00.861	30.36	-4.01x	71489.1	40.58	44.29