

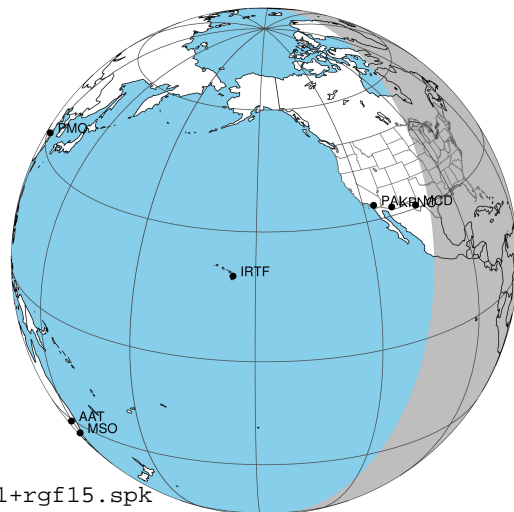
target : Jupiter  
 target radius (km) : 71492.00  
 C/A epoch : 2049-05-01T01:09:43.310  
 Event type : Pgt  
 : Jupiter occs: geocentric, topocentric  
 : Not a ringed target  
 Gaia source ID : 3427441798368243712  
 2Mass ID (if available) : 05530587+2321086

Jupiter 2049-05-01T01:09:43 K9.80 G14.59 Pgt

ICRS Star Coord at Epoch: 05h 53m 05.87785s +23:21:08.54254s

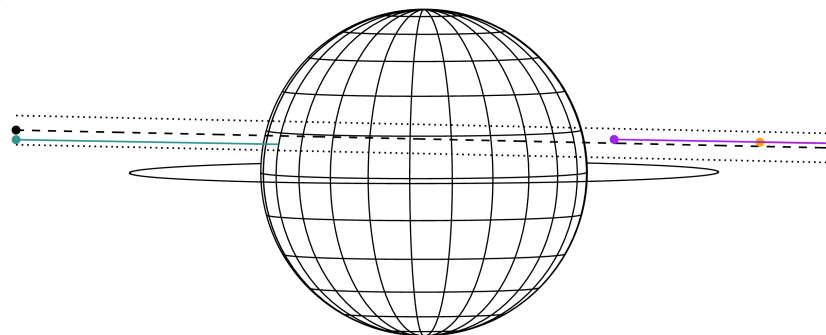
RUWE (>1.4 is poor) : 1.10  
 K magnitude : 9.800  
 G magnitude : 14.586  
 RP magnitude : 13.398  
 BP magnitude : 16.138  
 DUPflag : 0  
 Distance (au) : 5.773  
 f0 (km) : 0.00  
 g0 (km) : 0.00  
 skyplane vel. (km/s) : 32.59  
 Sun-Target sep (deg) : 47.99  
 Sun-Moon sep (deg) : 59.54  
 B (ring opening deg) : 2.15  
 PA of pole (deg) : 0.09  
 Pole direction: RA (deg): 268.05743  
 Dec (deg): 64.49719  
 C/A sky separation (") : 3.500  
 C/A sky separation (km) : 14653.0  
 NAIF SPICE kernels : RAJobs\_U111+rgf15.spk

Jupiter 2049-05-01T01:09:43 K9.80 G14.59  
 Pgt



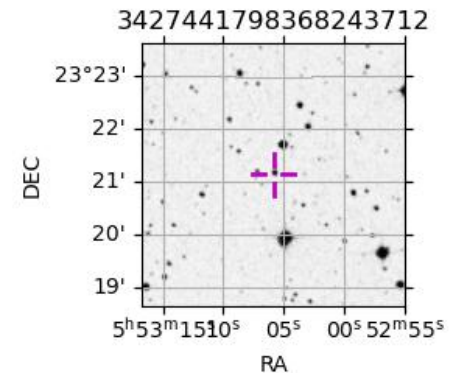
2049-05-01T01:09:43.3100 cc: 05 53 05.87785 s: +23 21 08.543 C/A 3.508" PA 178.75 deg v\_sky +32.59 km/s D 05.77 AU  
 Credit: Styled after SORA/Lucky Star

Earth  
 KPNO  
 MCD  
 ESO



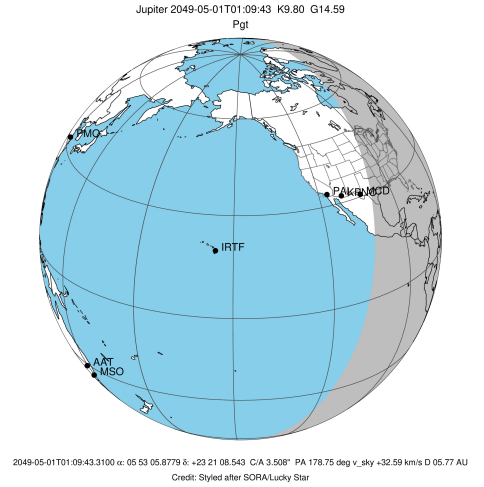
Observable events with sun below -5 deg and altitude above 5 deg

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	+	MAY 01 00:36 - MAY 01 00:36	Pin
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

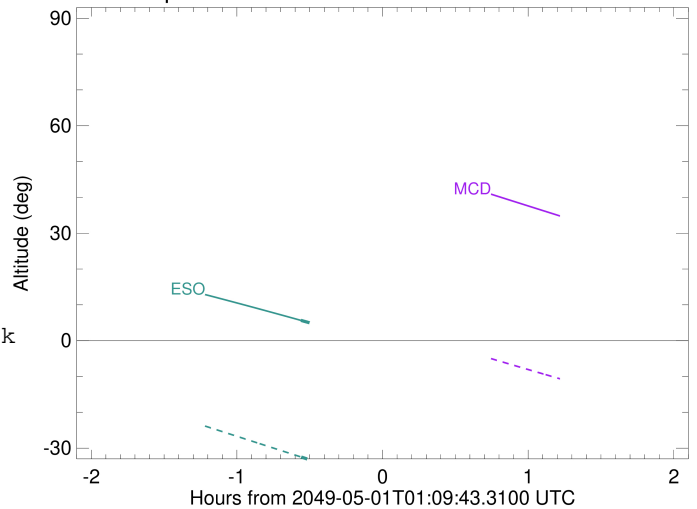


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2049-05-01T01:12:27.030
Event type            : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code         : ESO
Location              : European Southern Obs. (3.6m)
Latitude (deg)        : -29.26097
E. Longitude (deg)    : 289.26831
Altitude (km)         : 2.400
Gaia source ID        : 3427441798368243712
2Mass ID (if available) : 05530587+2321086
ICRS Star Coord at Epoch: 05h 53m 05.87785s +23:21:08.54254s
RUWE (>1.4 is poor) : 1.10
K magnitude           : 9.800
G magnitude           : 14.586
RP magnitude          : 13.398
BP magnitude          : 16.138
DUPflag              : 0
Distance (au)         : 5.773
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 32.59
Sun-Target sep (deg) : 47.99
Sun-Moon sep (deg)   : 59.95
B (ring opening deg) : 2.15
PA of pole (deg)     : 0.09
Pole direction: RA (deg): 268.05743
Dec (deg): 64.49719
C/A sky separation (") : 2.687
C/A sky separation (km) : 11250.0
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
    
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Jupiter 2049-05-01T01:09:43 K9.80 G14.59



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	2049-05-01T00:36:12.320	5.64	-32.48	71491.8	10.13	11.54
Jupiter	E	2049-05-01T01:48:36.932	-8.56x	-48.23	71491.9	7.98	9.11