

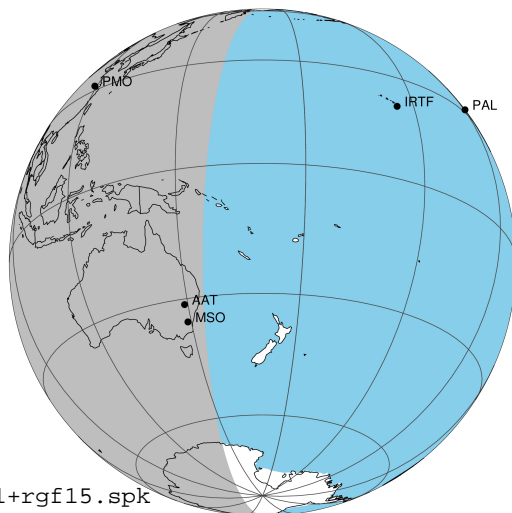
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-03-07T19:40:56.560
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4069436883970712960
 2Mass ID (if available) : 18005021-2259260

Jupiter 2043-03-07T19:40:56 K9.65 G12.93 Pgt

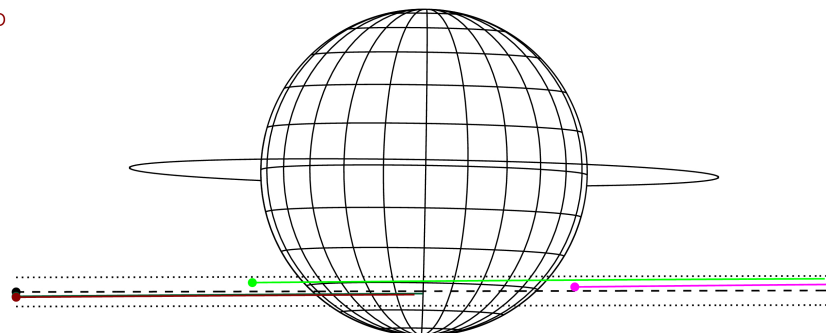
ICRS Star Coord at Epoch: 18h 00m 50.21390s -22:59:26.00948s

RUWE (>1.4 is poor) : 0.84
 K magnitude : 9.654
 G magnitude : 12.929
 RP magnitude : 11.993
 BP magnitude : 13.822
 DUPflag : 0
 Distance (au) : 5.448
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 20.23
 Sun-Target sep (deg) : 76.33
 Sun-Moon sep (deg) : 30.55
 B (ring opening deg) : -2.50
 PA of pole (deg) : -0.93
 Pole direction: RA (deg): 268.05663
 Dec (deg): 64.49732
 C/A sky separation (") : 13.162
 C/A sky separation (km) : 52003.5
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk

Jupiter 2043-03-07T19:40:56 K9.65 G12.93
 Pgt



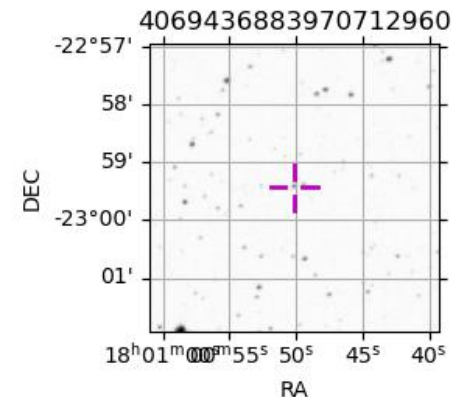
Earth
 PMO
 KAV
 AAT
 MSO



2043-03-07T19:40:56.5600 α: 18 00 50.2139 δ: -22 59 26.009 C/A ***** PA 0.10 deg v_sky +20.23 km/s D 05.45 AU
 Credit: Styled after SORA/Lucky Star

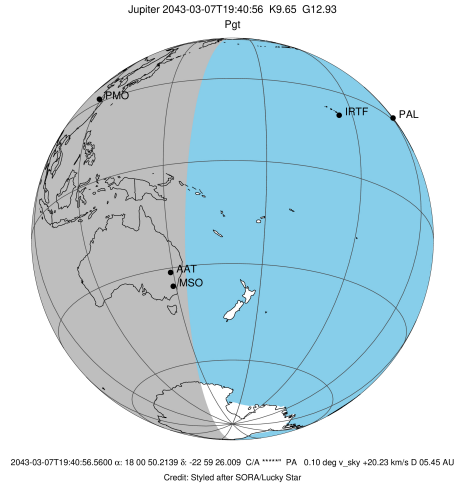
Observable events with sun below -5 deg and altitude above 5 deg

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	+ +	MAR 07 18:53 - MAR 07 20:22	Pie
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	+	MAR 07 18:59 - MAR 07 18:59	Pin
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+	MAR 07 18:59 - MAR 07 18:59	Pin

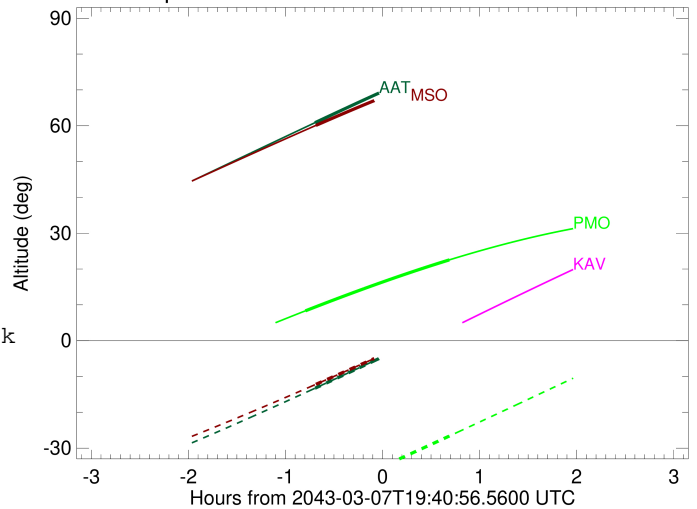


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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-03-07T19:37:40.090
Event type          : Pgt
: Jupiter occs: geocentric, topocentric
: Not a ringed target
Observer code       : PMO
Location           : Purple Mtn Obs. Nanking
Latitude (deg)     : 32.06667
E. Longitude (deg) : 118.82089
Altitude (km)      : 0.364
Gaia source ID     : 4069436883970712960
2Mass ID (if available) : 18005021-2259260
ICRS Star Coord at Epoch: 18h 00m 50.21390s -22:59:26.00948s
RUWE (>1.4 is poor) : 0.84
K magnitude         : 9.654
G magnitude         : 12.929
RP magnitude        : 11.993
BP magnitude        : 13.822
DUPflag            : 0
Distance (au)      : 5.448
f0 (km)            : 0.00
g0 (km)            : 0.00
skyplane vel. (km/s) : 20.23
Sun-Target sep (deg) : 76.33
Sun-Moon sep (deg)  : 31.32
B (ring opening deg) : -2.50
PA of pole (deg)    : -0.93
Pole direction: RA (deg): 268.05663
Dec (deg): 64.49732
C/A sky separation (") : 12.047
C/A sky separation (km) : 47597.5
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 2043-03-07T19:40:56 K9.65 G12.93

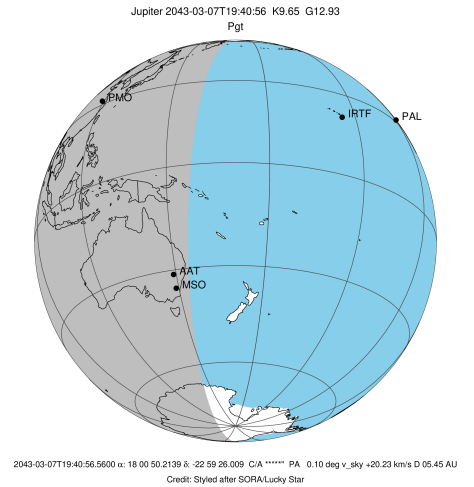


x: target alt < 5.0 deg or sun > -5.0 deg

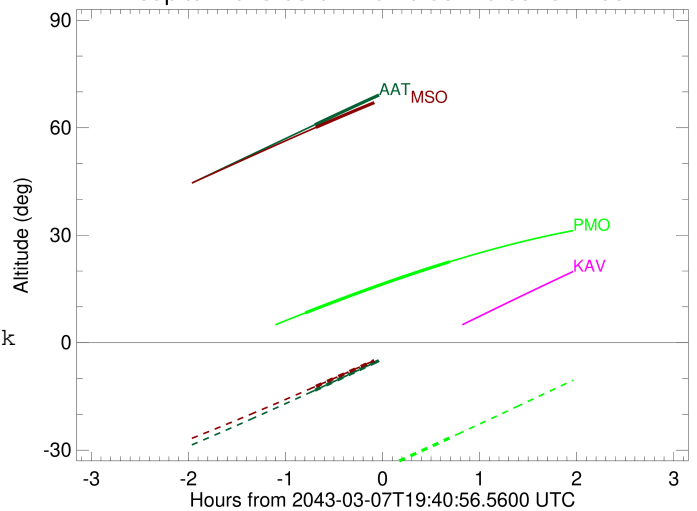
Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-03-07T18:53:17.429	8.33	-44.44	71488.0	-43.10	-46.81
Jupiter	E	2043-03-07T20:22:12.735	22.54	-26.63	71488.4	-40.35	-44.06

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-03-07T19:39:24.900
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      : 4069436883970712960
2Mass ID (if available) : 18005021-2259260
ICRS Star Coord at Epoch: 18h 00m 50.21390s -22:59:26.00948s
RUWE (>1.4 is poor) : 0.84
K magnitude          : 9.654
G magnitude          : 12.929
RP magnitude         : 11.993
BP magnitude         : 13.822
DUPflag             : 0
Distance (au)       : 5.448
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 20.23
Sun-Target sep (deg) : 76.33
Sun-Moon sep (deg)  : 31.24
B (ring opening deg) : -2.50
PA of pole (deg)    : -0.93
Pole direction: RA (deg): 268.05663
Dec (deg): 64.49732
C/A sky separation (" ) : 13.426
C/A sky separation (km) : 53046.3
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 2043-03-07T19:40:56 K9.65 G12.93

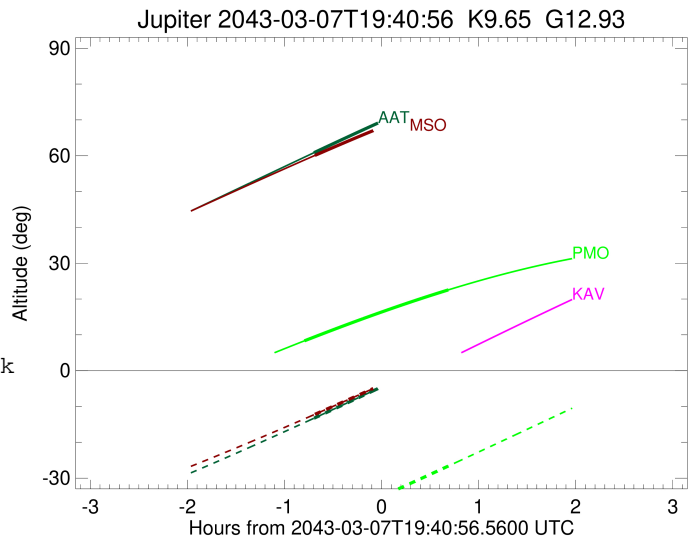
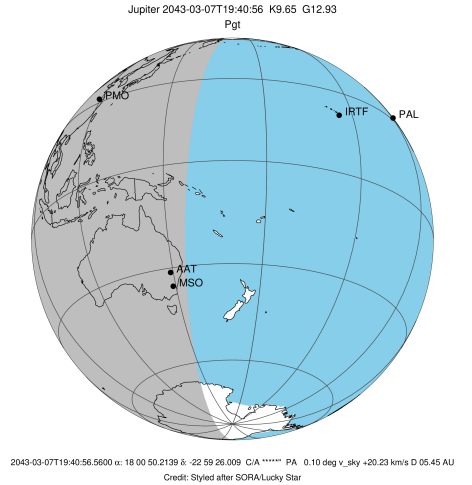


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-03-07T18:59:15.755	60.85	-13.27	71487.1	-49.07	-52.69
Jupiter	E	2043-03-07T20:19:38.799	77.00	3.69x	71487.5	-46.69	-50.37

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-03-07T19:39:28.870
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       : 4069436883970712960
2Mass ID (if available) : 18005021-2259260
ICRS Star Coord at Epoch: 18h 00m 50.21390s -22:59:26.00948s
RUWE (>1.4 is poor) : 0.84
K magnitude           : 9.654
G magnitude           : 12.929
RP magnitude          : 11.993
BP magnitude          : 13.822
DUPflag              : 0
Distance (au)        : 5.448
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 20.23
Sun-Target sep (deg) : 76.33
Sun-Moon sep (deg)   : 31.21
B (ring opening deg) : -2.50
PA of pole (deg)     : -0.93
Pole direction: RA (deg): 268.05663
Dec (deg): 64.49732
C/A sky separation (") : 13.536
C/A sky separation (km) : 53481.4
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	2043-03-07T18:59:46.009	60.08	-12.18	71487.0	-49.58	-53.18
Jupiter	E	2043-03-07T20:19:16.243	74.22	3.82x	71487.4	-47.22	-50.88