

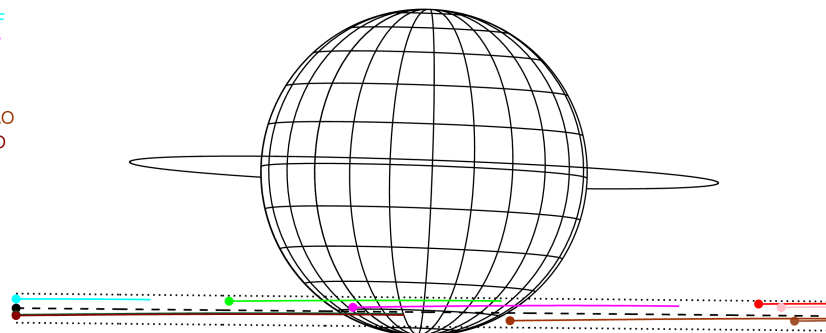
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-04-03T20:14:20.920
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4066630307511068160
 2Mass ID (if available) : 18111012-2258402

Jupiter 2043-04-03T20:14:20 K7.37 G14.83 Pgt

ICRS Star Coord at Epoch: 18h 11m 10.11821s -22:58:40.37564s
 RUWE (>1.4 is poor) : 1.08
 K magnitude : 7.373
 G magnitude : 14.826
 RP magnitude : 13.231
 BP magnitude : 19.099
 DUPflag : 0
 Distance (au) : 5.013
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : 7.63
 Sun-Target sep (deg) : 100.80
 Sun-Moon sep (deg) : 23.69
 B (ring opening deg) : -2.45
 PA of pole (deg) : -2.04
 Pole direction: RA (deg): 268.05664
 Dec (deg): 64.49732
 C/A sky separation (") : 16.823
 C/A sky separation (km) : 61170.4
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk



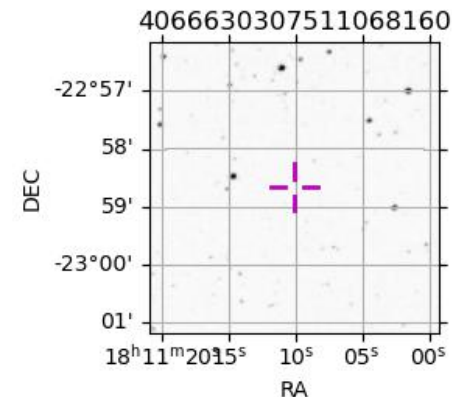
Earth
 PIC
 PMO
 TEN
 IRTF
 KAV
 RIO
 AAT
 SAAO
 MSO



2043-04-03T20:14:20.9200 α: 18 11 10.1182 δ: -22 58 40.376 C/A ***** PA 359.44 deg v_sky = 7.63 km/s D 05.01 AU
 Credit: Styled after SORA/Lucky Star

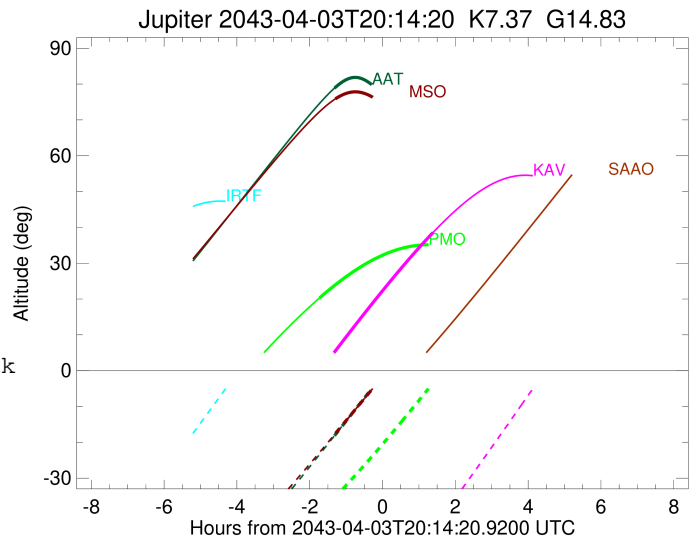
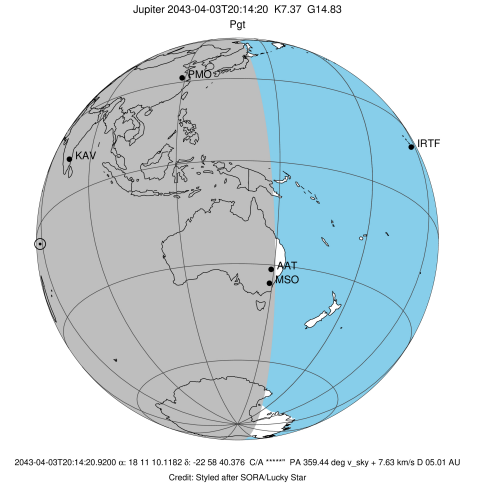
Observable events with sun below -5 deg and altitude above 5 deg

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	+	APR 03 18:30 - APR 03 18:30	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	+	APR 03 21:37 - APR 03 21:37	Pne
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	+	APR 03 18:55 - APR 03 18:55	Pin
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+	APR 03 18:57 - APR 03 18:57	Pin



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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-04-03T20:11:18.290
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       : 4066630307511068160
2Mass ID (if available) : 18111012-2258402
ICRS Star Coord at Epoch: 18h 11m 10.11821s -22:58:40.37564s
RUWE (>1.4 is poor) : 1.08
K magnitude           : 7.373
G magnitude           : 14.826
RP magnitude          : 13.231
BP magnitude          : 19.099
DUPflag              : 0
Distance (au)         : 5.013
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 7.63
Sun-Target sep (deg) : 100.80
Sun-Moon sep (deg)   : 24.28
B (ring opening deg) : -2.45
PA of pole (deg)     : -2.04
Pole direction: RA (deg): 268.05664
Dec (deg): 64.49732
C/A sky separation (") : 15.417
C/A sky separation (km) : 56058.6
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
    
```

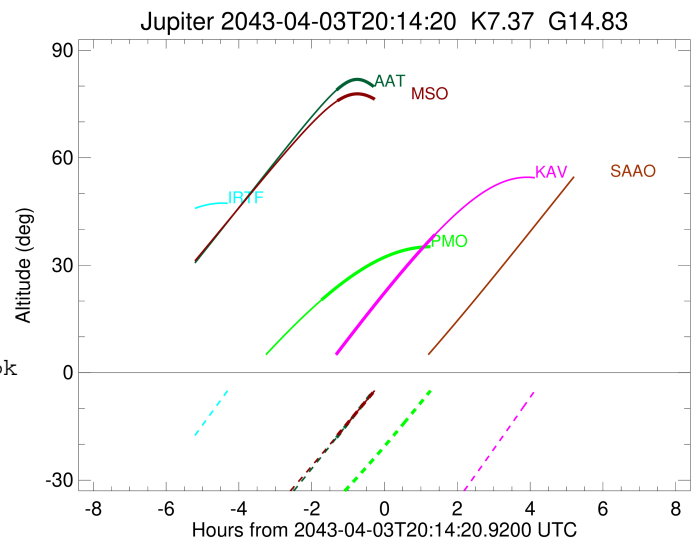
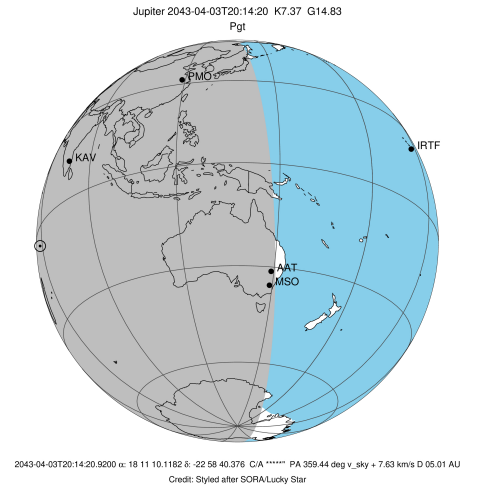


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-04-03T18:30:43.697	20.32	-39.47	71486.7	-53.65	-57.09
Jupiter	E	2043-04-03T21:53:05.880	34.86	-0.19x	71487.2	-50.00	-53.59

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target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-04-03T20:05:07.710
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      : 4066630307511068160
2Mass ID (if available) : 18111012-2258402
ICRS Star Coord at Epoch: 18h 11m 10.11821s -22:58:40.37564s
RUWE (>1.4 is poor) : 1.08
K magnitude          : 7.373
G magnitude          : 14.826
RP magnitude         : 13.231
BP magnitude         : 19.099
DUPflag             : 0
Distance (au)       : 5.014
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : 7.63
Sun-Target sep (deg) : 100.80
Sun-Moon sep (deg)  : 24.61
B (ring opening deg) : -2.45
PA of pole (deg)    : -2.04
Pole direction: RA (deg): 268.05664
Dec (deg): 64.49732
C/A sky separation (") : 16.134
C/A sky separation (km) : 58666.2
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
    
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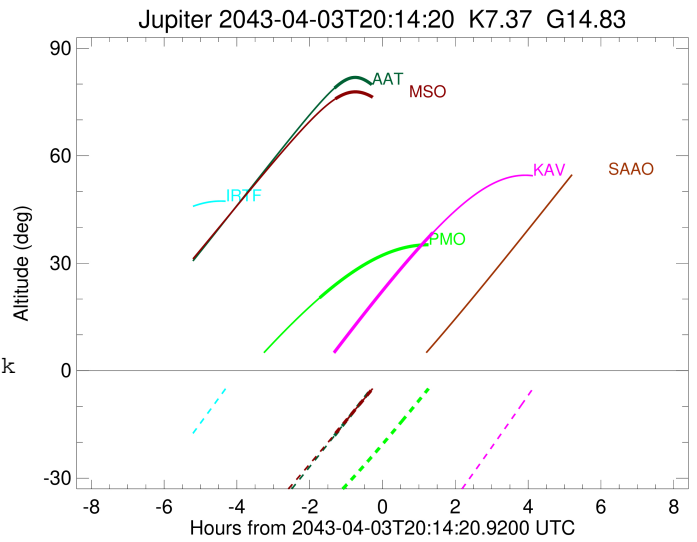
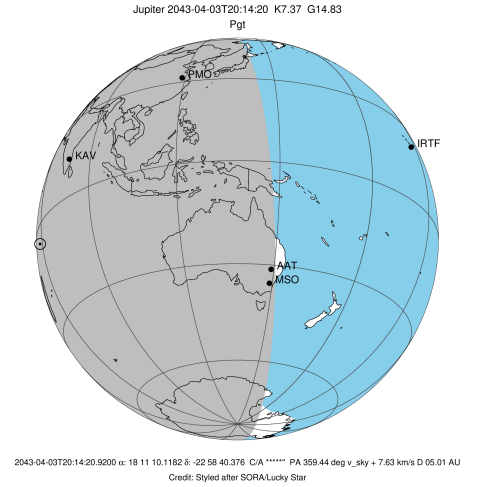


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-04-03T18:34:40.339	0.61x	-71.73	71486.1	-57.81	-61.02
Jupiter	E	2043-04-03T21:37:45.535	38.58	-44.08	71486.8	-52.59	-56.07

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-04-03T20:16:02.560
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        : 4066630307511068160
2Mass ID (if available) : 18111012-2258402
ICRS Star Coord at Epoch: 18h 11m 10.11821s -22:58:40.37564s
RUWE (>1.4 is poor) : 1.08
K magnitude           : 7.373
G magnitude           : 14.826
RP magnitude          : 13.231
BP magnitude          : 19.099
DUPflag              : 0
Distance (au)         : 5.013
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 7.63
Sun-Target sep (deg) : 100.80
Sun-Moon sep (deg)   : 23.90
B (ring opening deg) : -2.45
PA of pole (deg)     : -2.04
Pole direction: RA (deg): 268.05664
Dec (deg): 64.49732
C/A sky separation (") : 17.088
C/A sky separation (km) : 62133.7
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
    
```

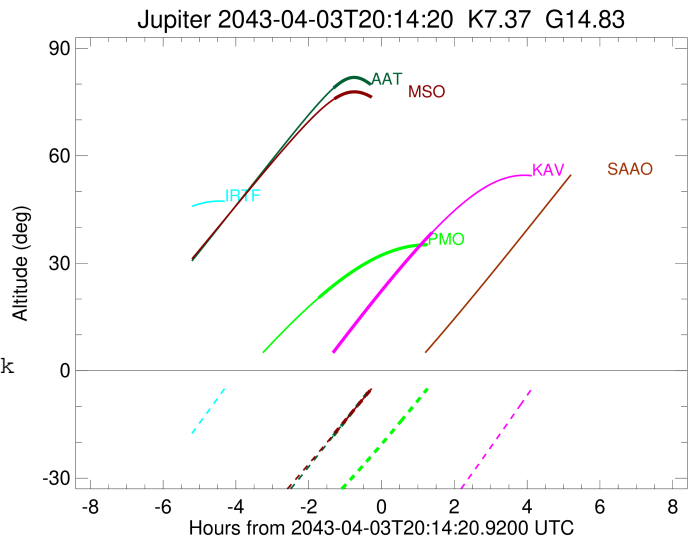
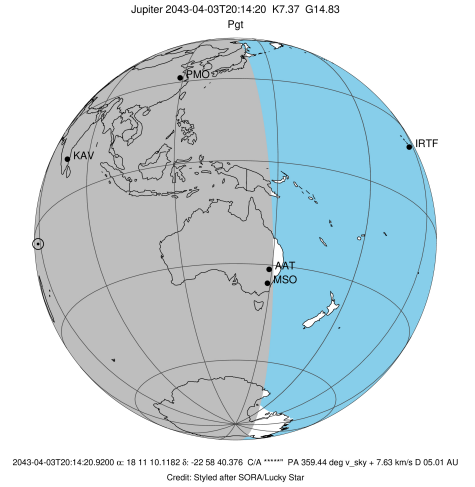


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-04-03T18:55:14.603	78.86	-18.15	71485.6	-61.66	-64.61
Jupiter	E	2043-04-03T21:36:51.639	60.50	16.04x	71485.9	-59.29	-62.40

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch             : 2043-04-03T20:15:56.130
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        : 4066630307511068160
2Mass ID (if available) : 18111012-2258402
ICRS Star Coord at Epoch: 18h 11m 10.11821s -22:58:40.37564s
RUWE (>1.4 is poor) : 1.08
K magnitude           : 7.373
G magnitude           : 14.826
RP magnitude          : 13.231
BP magnitude          : 19.099
DUPflag              : 0
Distance (au)         : 5.013
f0 (km)               : 0.00
g0 (km)               : 0.00
skyplane vel. (km/s) : 7.63
Sun-Target sep (deg) : 100.80
Sun-Moon sep (deg)   : 23.89
B (ring opening deg) : -2.45
PA of pole (deg)     : -2.04
Pole direction: RA (deg): 268.05664
Dec (deg): 64.49732
C/A sky separation (") : 17.208
C/A sky separation (km) : 62571.1
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	2043-04-03T18:57:05.307	75.91	-17.46	71485.5	-62.38	-65.27
Jupiter	E	2043-04-03T21:34:48.893	60.14	14.39x	71485.8	-59.98	-63.04