

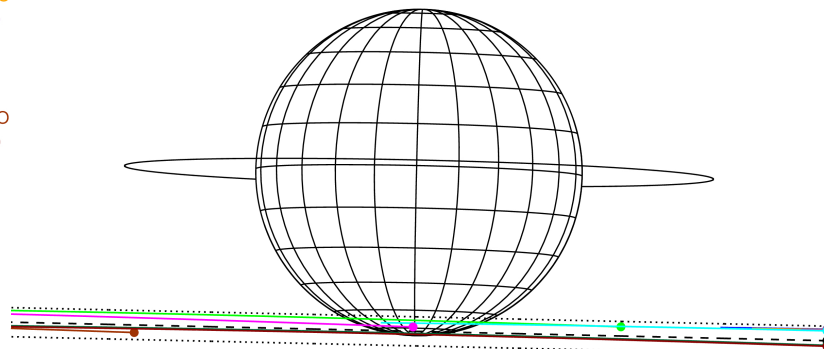
target : Jupiter
 target radius (km) : 71492.00
 C/A epoch : 2043-05-26T15:10:26.970
 Event type : Pgt
 : Jupiter occs: geocentric, topocentric
 : Not a ringed target
 Gaia source ID : 4069212240006145664
 2Mass ID (if available) : 18042309-2302519

Jupiter 2043-05-26T15:10:26 K9.83 G13.92 Pgt

ICRS Star Coord at Epoch: 18h 04m 23.10152s -23°02'51.96994s
 RUWE (>1.4 is poor) : 1.04
 K magnitude : 9.831
 G magnitude : 13.916
 RP magnitude : 12.824
 BP magnitude : 15.163
 DUPflag : 0
 Distance (au) : 4.348
 f0 (km) : 0.00
 g0 (km) : 0.00
 skyplane vel. (km/s) : -13.33
 Sun-Target sep (deg) : 153.68
 Sun-Moon sep (deg) : 6.20
 B (ring opening deg) : -2.42
 PA of pole (deg) : -1.31
 Pole direction: RA (deg): 268.05667
 Dec (deg): 64.49732
 C/A sky separation (") : 22.073
 C/A sky separation (km) : 69604.7
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk



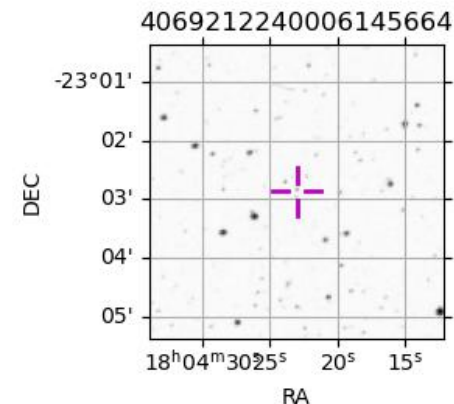
Earth
 PAL
 PMO
 KPNO
 MCD
 IRTF
 KAV
 AAT
 SAAO
 MSO



2043-05-26T15:10:26.9700 a: 18 04 23.1015 s: -23 02 51.970 C/A ***** PA 358.70 deg v_sky -13.33 km/s D 04.35 AU
 Credit: Styled after SORA/Lucky Star

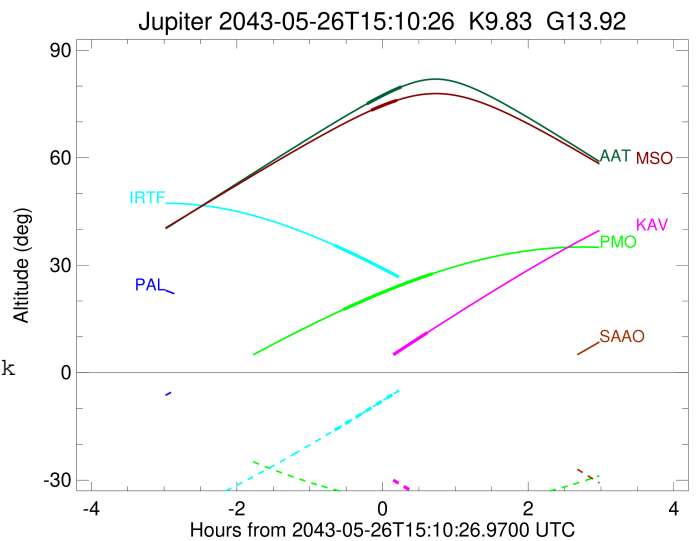
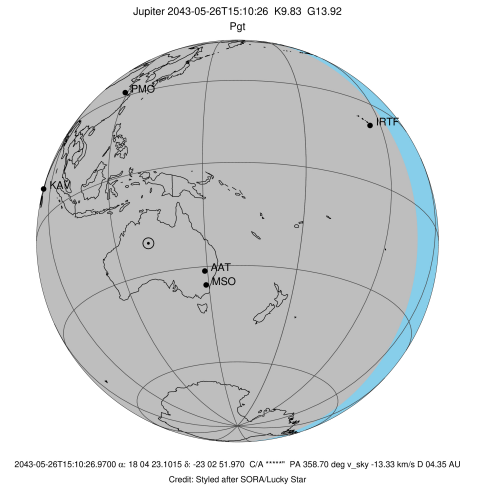
Observable events with sun below -5 deg and altitude above 5 deg

Obs	Location	lat	Elon	Target	Observed Events Interval	OEcode
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	+ +	MAY 26 14:38 - MAY 26 15:51	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	+	MAY 26 14:31 - MAY 26 14:31	Pin
KAV	Kavalur Observatory	12.6	78.8	+	MAY 26 15:47 - MAY 26 15:47	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	+ +	MAY 26 14:57 - MAY 26 15:26	Pie
SAAO	So. Afr. Astro. Obs. (Sutherland)	-32.4	20.8			Pnn
MSO	Mt. Stromlo Observatory	-35.3	149.0	+ +	MAY 26 15:01 - MAY 26 15:22	Pie



```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-05-26T15:15:10.660
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      : 4069212240006145664
2Mass ID (if available) : 18042309-2302519
ICRS Star Coord at Epoch: 18h 04m 23.10152s -23:02:51.96994s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 9.831
G magnitude          : 13.916
RP magnitude         : 12.824
BP magnitude         : 15.163
DUPflag             : 0
Distance (au)       : 4.348
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -13.33
Sun-Target sep (deg) : 153.68
Sun-Moon sep (deg)  : 7.07
B (ring opening deg) : -2.42
PA of pole (deg)    : -1.31
Pole direction: RA (deg): 268.05667
Dec (deg): 64.49732
C/A sky separation (" ) : 20.547
C/A sky separation (km) : 64792.9
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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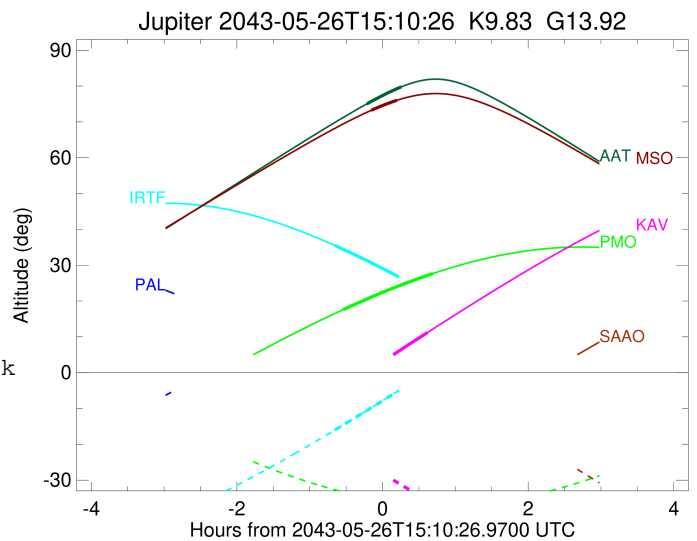
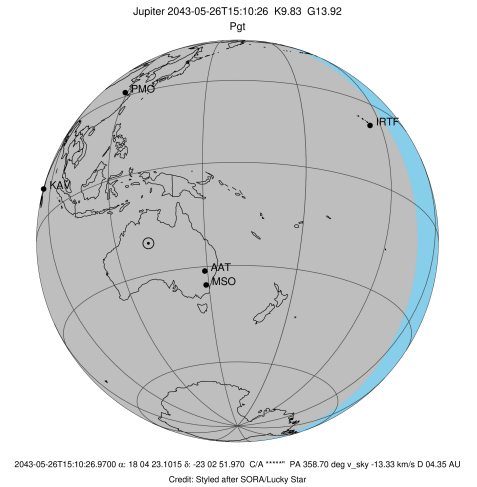


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-05-26T14:38:15.644	17.63	-33.29	71485.3	-65.31	-67.96
Jupiter	E	2043-05-26T15:51:58.039	27.67	-36.87	71485.4	-64.57	-67.28

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-05-26T15:04:26.700
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      : 4069212240006145664
2Mass ID (if available) : 18042309-2302519
ICRS Star Coord at Epoch: 18h 04m 23.10152s -23:02:51.96994s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 9.831
G magnitude          : 13.916
RP magnitude         : 12.824
BP magnitude         : 15.163
DUPflag             : 0
Distance (au)       : 4.348
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -13.33
Sun-Target sep (deg) : 153.68
Sun-Moon sep (deg)  : 6.46
B (ring opening deg) : -2.42
PA of pole (deg)    : -1.31
Pole direction: RA (deg): 268.05667
Dec (deg): 64.49732
C/A sky separation (" ) : 20.937
C/A sky separation (km) : 66021.5
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
    
```

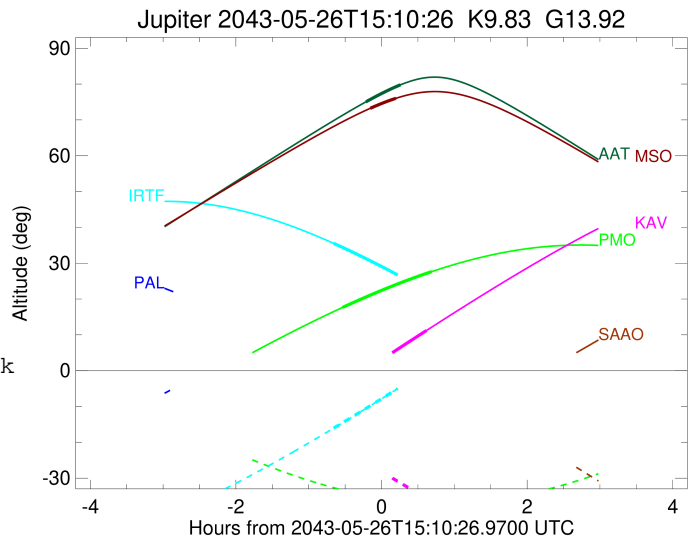
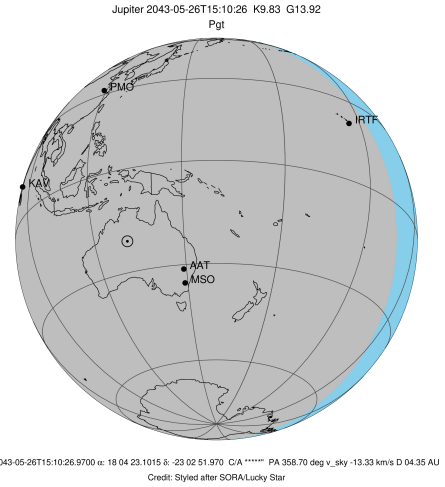


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-05-26T14:31:04.323	35.52	-16.04	71485.2	-66.84	-69.35
Jupiter	E	2043-05-26T15:37:55.074	24.13	-1.97x	71485.1	-67.90	-70.32

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-05-26T15:19:06.860
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      : 4069212240006145664
2Mass ID (if available) : 18042309-2302519
ICRS Star Coord at Epoch: 18h 04m 23.10152s -23:02:51.96994s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 9.831
G magnitude          : 13.916
RP magnitude         : 12.824
BP magnitude         : 15.163
DUPflag             : 0
Distance (au)       : 4.348
f0 (km)              : 0.00
g0 (km)              : 0.00
skyplane vel. (km/s) : -13.33
Sun-Target sep (deg) : 153.68
Sun-Moon sep (deg)  : 6.87
B (ring opening deg) : -2.42
PA of pole (deg)    : -1.31
Pole direction: RA (deg): 268.05667
Dec (deg): 64.49732
C/A sky separation (" ) : 21.472
C/A sky separation (km) : 67710.5
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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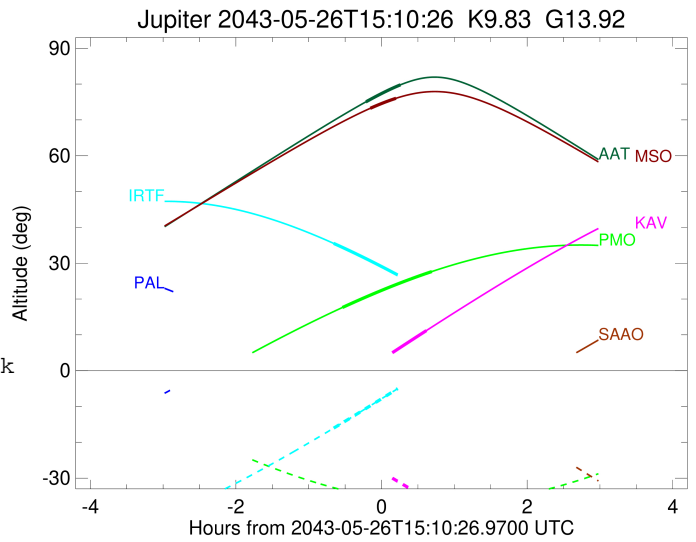
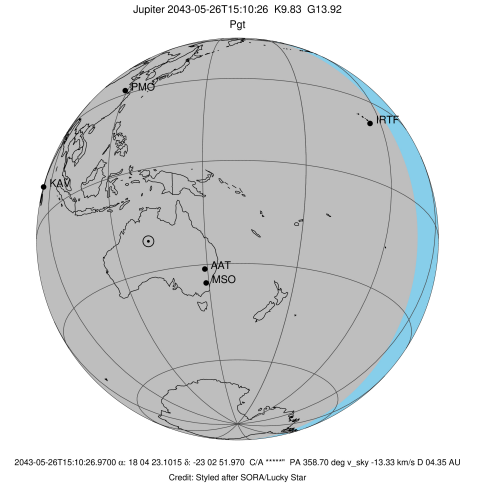


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-05-26T14:50:36.788	-1.42x	-24.04	71484.7	-71.88	-73.92
Jupiter	E	2043-05-26T15:47:29.096	11.20	-35.56	71484.8	-70.44	-72.62

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-05-26T15:11:51.200
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      : 4069212240006145664
2Mass ID (if available) : 18042309-2302519
ICRS Star Coord at Epoch: 18h 04m 23.10152s -23:02:51.96994s
RUWE (>1.4 is poor) : 1.04
K magnitude         : 9.831
G magnitude         : 13.916
RP magnitude        : 12.824
BP magnitude        : 15.163
DUPflag            : 0
Distance (au)       : 4.348
f0 (km)             : 0.00
g0 (km)             : 0.00
skyplane vel. (km/s) : -13.33
Sun-Target sep (deg) : 153.68
Sun-Moon sep (deg)  : 6.26
B (ring opening deg) : -2.42
PA of pole (deg)    : -1.31
Pole direction: RA (deg): 268.05667
Dec (deg): 64.49732
C/A sky separation (") : 22.359
C/A sky separation (km) : 70507.4
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
    
```

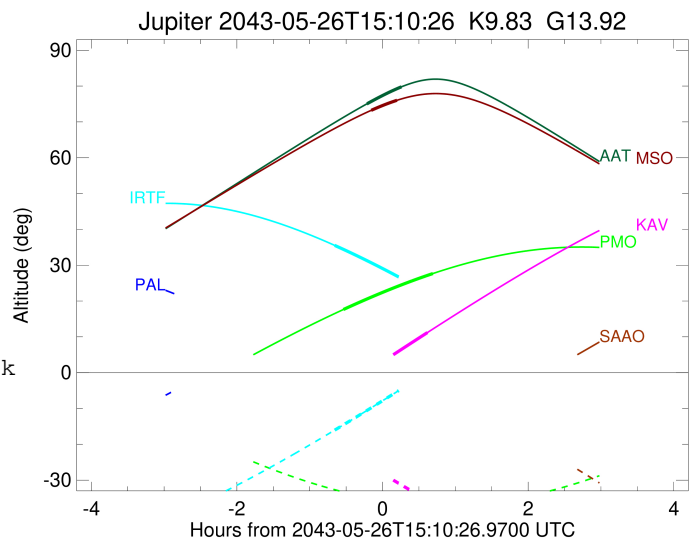
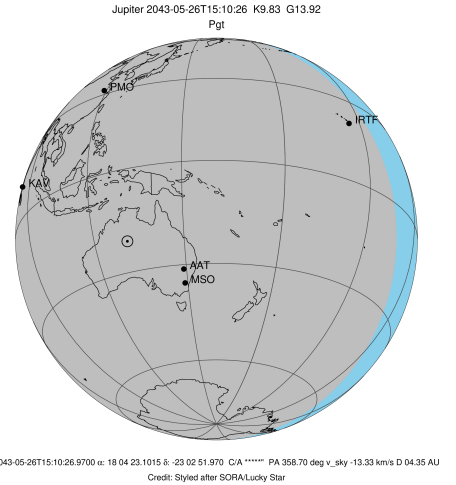


x: target alt < 5.0 deg or sun > -5.0 deg

Target	I/E	UTC	alt	alt-sun	radius	lat-geo	lat-geodetic
Jupiter	I	2043-05-26T14:57:34.642	75.03	-73.87	71484.2	-80.30	-81.43
Jupiter	E	2043-05-26T15:26:07.338	79.79	-68.48	71484.2	-80.17	-81.32

```

target                : Jupiter
target radius (km)   : 71492.00
C/A epoch            : 2043-05-26T15:11:48.940
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      : 4069212240006145664
2Mass ID (if available) : 18042309-2302519
ICRS Star Coord at Epoch: 18h 04m 23.10152s -23:02:51.96994s
RUWE (>1.4 is poor) : 1.04
K magnitude          : 9.831
G magnitude          : 13.916
RP magnitude         : 12.824
BP magnitude         : 15.163
DUPflag             : 0
Distance (au)       : 4.348
f0 (km)             : 0.00
g0 (km)             : 0.00
skyplane vel. (km/s) : -13.33
Sun-Target sep (deg) : 153.68
Sun-Moon sep (deg)  : 6.20
B (ring opening deg) : -2.42
PA of pole (deg)    : -1.31
Pole direction: RA (deg): 268.05667
Dec (deg): 64.49732
C/A sky separation (") : 22.499
C/A sky separation (km) : 70948.2
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	2043-05-26T15:01:12.733	73.23	-70.79	71484.1	-82.65	-83.51
Jupiter	E	2043-05-26T15:22:24.941	76.03	-67.35	71484.1	-82.53	-83.40