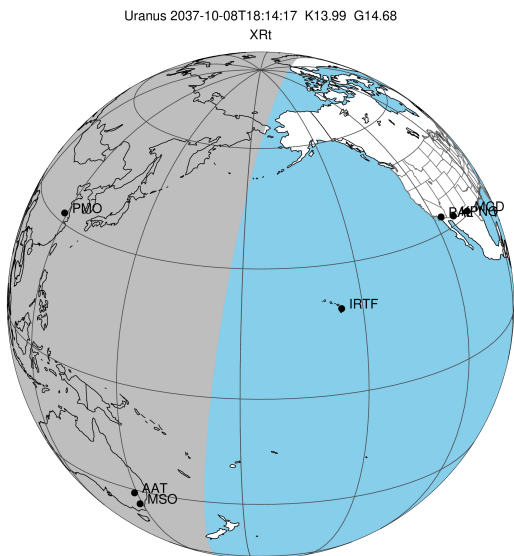


target : Uranus  
 target radius (km) : 25559.00  
 C/A epoch : 2037-10-08T18:14:17.740  
 Event type : XRT  
 : No Uranus occs  
 : Ring occs: topocentric, not geocentric  
 Gaia source ID : 673282066914606080  
 2Mass ID (if available) : 07413616+2150550

ICRS Star Coord at Epoch: 07h 41m 36.17518s +21:50:54.93671s

RUWE (>1.4 is poor) : 1.17  
 K magnitude : 13.989  
 G magnitude : 14.678  
 RP magnitude : 14.433  
 BP magnitude : 14.823  
 DUPflag : 0  
 Distance (au) : 18.835  
 f0 (km) : 0.000  
 g0 (km) : 0.000  
 skyplane vel. (km/s) : 10.74  
 Sun-Target sep (deg) : 81.83  
 Sun-Moon sep (deg) : 76.87  
 B (ring opening deg) : 53.37  
 PA of pole (deg) : 86.18

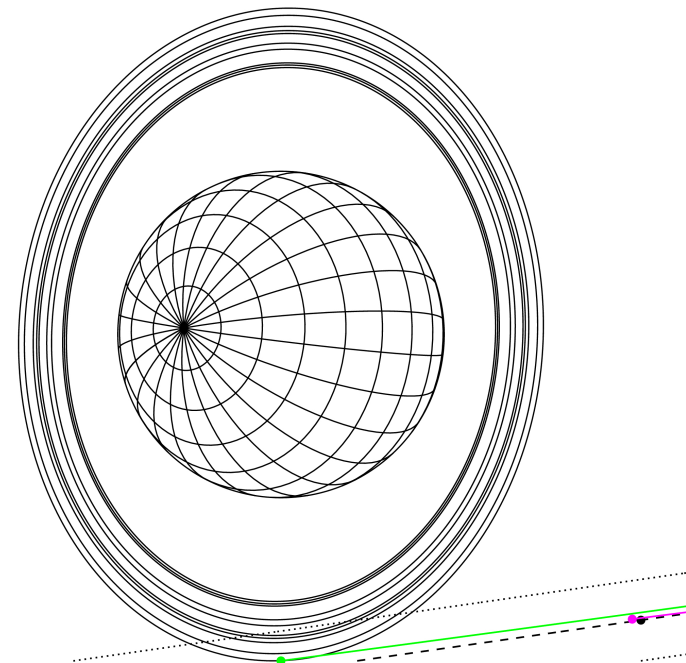
#	a(km)	ring
1	41837.2	6
2	42235.0	5
3	42571.2	4
4	44718.5	alpha
5	45661.1	beta
6	47176.1	eta
7	47626.3	gamma
8	48300.3	delta
9	50026.7	lambda
10	51149.4	epsilon



2037-10-08T18:14:17.7400 α: 07 41 36.1752 δ: +21 50 54.937 C/A 3.827" PA 8.17 deg v\_sky +10.74 km/s D 18.83 AU  
 Credit: Styled after SORA/Lucky Star

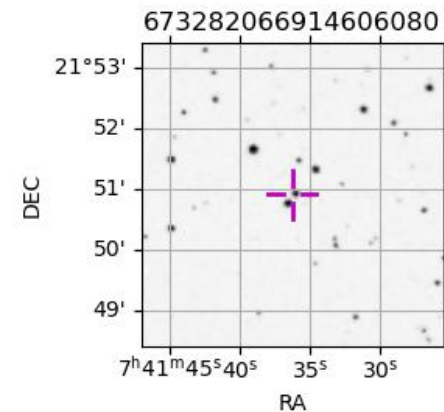
Earth  
 PMO  
 KAV

Uranus 2037-10-08T18:14:17 K13.99 G14.68 XRT



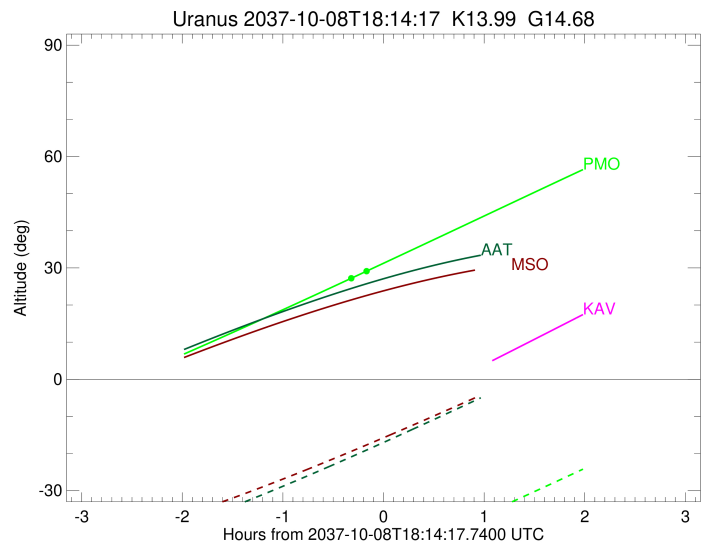
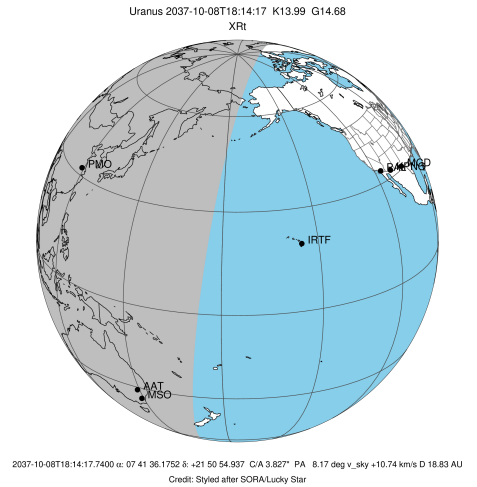
Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

Obs	Location	lat	Elon	Rings I	Planet	Rings E	Observed Events Interval	OEcode
PIC	Pic du Midi	42.9	0.1					PnnRnn
PAL	Palomar Mt (200")	33.4	243.1					PnnRnn
PMO	Purple Mtn Obs. Nanki	32.1	118.8	+			OCT 08 17:52 - OCT 08 18:07	PnnRie
KPNO	Kitt Peak Natl Obs	32.0	248.4					PnnRnn
MCD	McDonald Obs. 2.7m	30.7	256.0					PnnRnn
TEN	Teide Obs./Tenerife	28.3	343.5					PnnRnn
IRTF	Mauna Kea/IRTF	19.8	204.5					PnnRnn
KAV	Kavalur Observatory	12.6	78.8					PnnRnn
RIO	Rio de Janeiro	-22.9	316.8					PnnRnn
ESO	European Southern Obs	-29.3	289.3					PnnRnn
AAT	Siding Spring (AAT)	-31.3	149.1					PnnRnn
SAAO	So. Afr. Astro. Obs.	-32.4	20.8					PnnRnn
MSO	Mt. Stromlo Observato	-35.3	149.0					PnnRnn



```

target                : Uranus
target radius (km)   : 25559.00
C/A epoch            : 2037-10-08T18:05:13.060
Event type          : XRt
                    : No Uranus occs
                    : Ring occs: topocentric, not geocentric
Observer code       : PMO
Location            : Purple Mtn Obs. Nanking
Latitude (deg)      : 32.06667
E. Longitude (deg)  : 118.82089
Altitude (km)       : 0.364
Gaia source ID      : 673282066914606080
2Mass ID (if available) : 07413616+2150550
ICRS Star Coord at Epoch: 07h 41m 36.17518s +21:50:54.93671s
RUWE (>1.4 is poor) : 1.17
K magnitude          : 13.989
G magnitude          : 14.678
RP magnitude         : 14.433
BP magnitude         : 14.823
DUPflag             : 0
Distance (au)       : 18.835
f0 (km)             : 0.000
g0 (km)             : 0.000
skyplane vel. (km/s) : 10.74
Sun-Target sep (deg) : 81.83
Sun-Moon sep (deg)  : 77.56
B (ring opening deg) : 53.37
PA of pole (deg)    : 86.18
Pole direction: RA (deg): 257.31100
Dec (deg): -15.17500
C/A sky separation (") : 3.709
C/A sky separation (km) : 50669.6
NAIF SPICE kernels  : RAJobs_U111+rgf15.spk
URKALLvl1.spk
urall1.bsp
IAU_URANUS_for_RINGFIT.tpc
vgr2.urall1.bsp
ural61.bsp
vgr2.ural61.bsp
peph.ural60.bsp
earthstns_itrf93_040916.bsp
earth_720101_070426.bpc
earth_200101_990628_predict.bpc
pg3f0000r.bsp
pg490000r.bsp
naif0012.tls
earth_flat_IAU.spk
  
```



Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2037-10-08T17:52:51.739		26.74	-51.88	51316.44	-1.46		

No planet occultations

epsilon	E	2037-10-08T18:07:18.679		29.78	-49.33	51400.30	1.47		
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