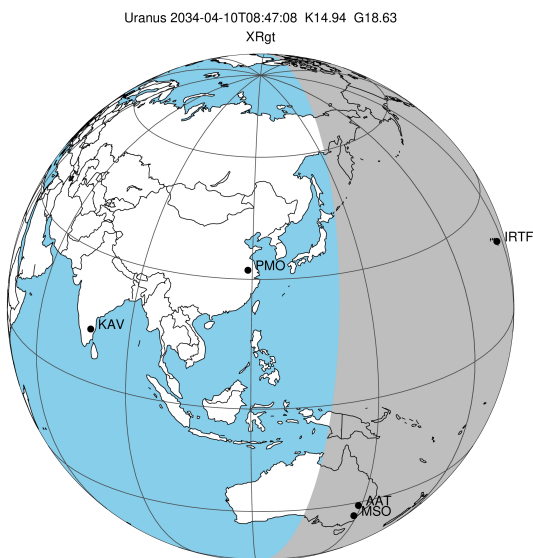


target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2034-04-10T08:47:08.500
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Gaia source ID : 3425401482744601344
 2Mass ID (if available) : 06083695+2341377

ICRS Star Coord at Epoch: 06h 08m 36.96098s +23:41:37.62243s

RUWE (>1.4 is poor) : 0.92
 K magnitude : 14.942
 G magnitude : 18.628
 RP magnitude : 17.618
 BP magnitude : 19.701
 DUPflag : 0
 Distance (au) : 19.222
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 15.63
 Sun-Target sep (deg) : 71.89
 Sun-Moon sep (deg) : 174.46
 B (ring opening deg) : 73.63
 PA of pole (deg) : 61.33

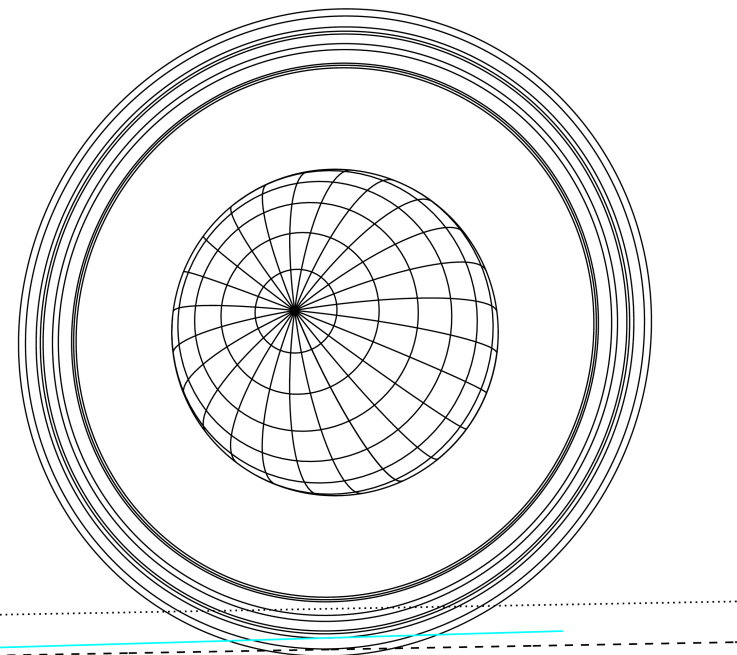
#	a(km)	ring
1	41837.2	6
2	42235.0	5
3	42571.2	4
4	44718.5	alpha
5	45661.1	beta
6	47176.1	eta
7	47626.3	gamma
8	48300.3	delta
9	50026.7	lambda
10	51149.4	epsilon



2034-04-10T08:47:08.5000 α: 06 08 36.9610 δ: +23 41 37.622 C/A 3.552" PA 1.03 deg v_sky +15.63 km/s D 19.22 AU
 Credit: Styled after SORA/Lucky Star

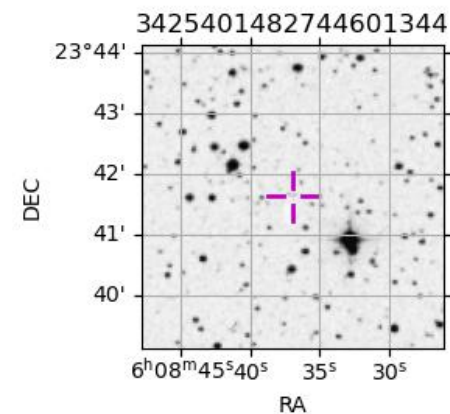
Uranus 2034-04-10T08:47:08 K14.94 G18.63 XRgt

IRTF

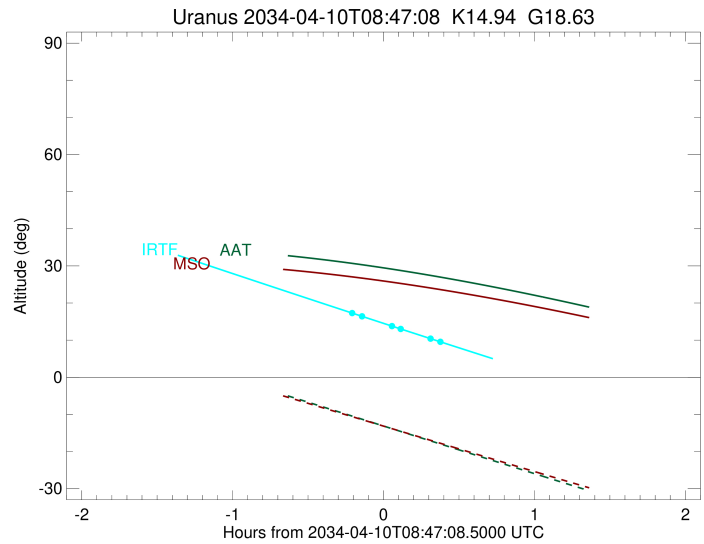
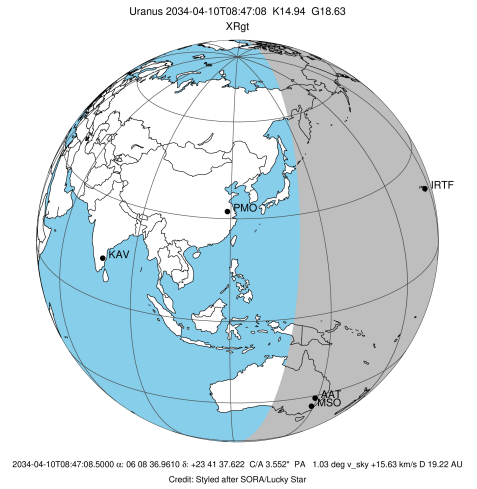


Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

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					PnnRnn
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	+++		+++	APR 10 08:35 - APR 10 09:09	PnnRie
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 : 2034-04-10T08:54:02.800
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Observer code : IRTF
 Location : Mauna Kea/IRTF
 Latitude (deg) : 19.82622
 E. Longitude (deg) : 204.52800
 Altitude (km) : 4.168
 Gaia source ID : 3425401482744601344
 2Mass ID (if available) : 06083695+2341377
 ICRS Star Coord at Epoch: 06h 08m 36.96098s +23:41:37.62243s
 RUWE (>1.4 is poor) : 0.92
 K magnitude : 14.942
 G magnitude : 18.628
 RP magnitude : 17.618
 BP magnitude : 19.701
 DUPflag : 0
 Distance (au) : 19.222
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 15.63
 Sun-Target sep (deg) : 71.89
 Sun-Moon sep (deg) : 174.68
 B (ring opening deg) : 73.63
 PA of pole (deg) : 61.33
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 3.427
 C/A sky separation (km) : 47779.2
 NAIF SPICE kernels : RAJobs_U111+rgf15.spk
 URKALLvl.spk
 ura111.bsp
 IAU_URANUS_for_RINGFIT.tpc
 vgr2.ura111.bsp
 ura161.bsp
 vgr2.ura161.bsp
 peph.ura160.bsp
 earthstns_itr93_040916.bsp
 earth_720101_070426.bpc
 earth_200101_990628_predict.bpc
 pg3f0000r.bsp
 pg490000r.bsp
 naif0012.tls
 earth_flat_IAU.spk



b: ring blocked by planet x: target alt < 5.0 deg or sun > -5.0 deg

Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2034-04-10T08:35:37.783		17.08	-51.66	50869.01	-5.13		
lambda	I	2034-04-10T08:38:39.958		16.40	-52.17	50026.71	-4.19		
delta	I	2034-04-10T08:51:02.469		13.66	-54.17	48300.41	-0.39		

No planet occultations

delta	E	2034-04-10T08:53:26.304		13.14	-54.54	48300.41	0.39		
lambda	E	2034-04-10T09:05:47.210		10.42	-56.35	50026.71	4.21		
epsilon	E	2034-04-10T09:09:34.049		9.59	-56.87	51104.24	5.16		