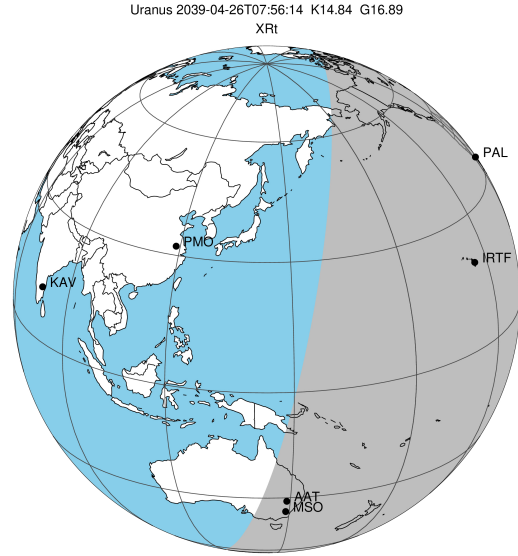


target : Uranus  
 target radius (km) : 25559.00  
 C/A epoch : 2039-04-26T07:56:14.400  
 Event type : XRT  
 : No Uranus occs  
 : Ring occs: topocentric, not geocentric  
 Gaia source ID : 674731257599288704  
 2Mass ID (if available) : 07453753+2145191

ICRS Star Coord at Epoch: 07h 45m 37.53284s +21:45:18.85197s

RUWE (>1.4 is poor) : 1.10  
 K magnitude : 14.839  
 G magnitude : 16.890  
 RP magnitude : 16.226  
 BP magnitude : 17.434  
 DUPflag : 0  
 Distance (au) : 18.796  
 f0 (km) : 0.000  
 g0 (km) : 0.000  
 skyplane vel. (km/s) : 12.21  
 Sun-Target sep (deg) : 78.98  
 Sun-Moon sep (deg) : 47.02  
 B (ring opening deg) : 52.44  
 PA of pole (deg) : 86.76

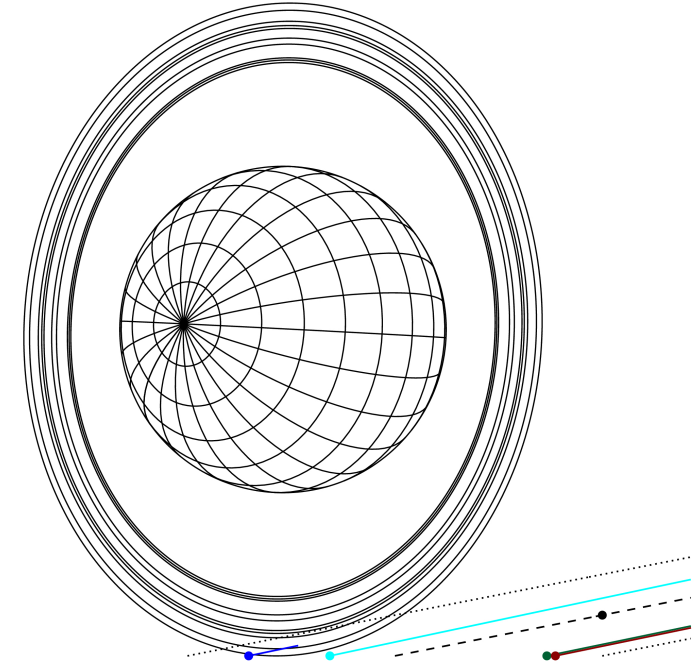
#	a(km)	ring
1	41837.2	6
2	42235.0	5
3	42571.2	4
4	44718.5	alpha
5	45661.1	beta
6	47176.1	eta
7	47626.3	gamma
8	48300.3	delta
9	50026.7	lambda
10	51149.4	epsilon



2039-04-26T07:56:14.4000 cc: 07 45 37.5328 s : +21 45 18.852 C/A 3.915° PA 11.11 deg v\_sky +12.21 km/s D 18.80 AU  
 Credit: Styled after SORA/Lucky Star

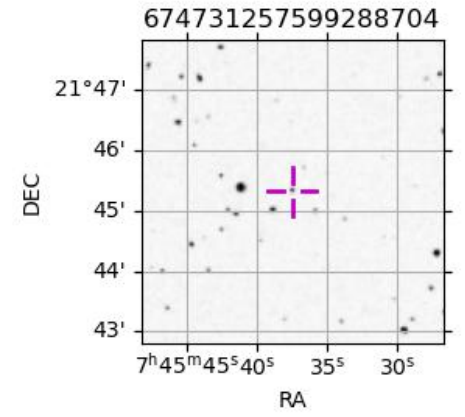
Earth  
 PAL  
 IRTF  
 AAT  
 MSO

Uranus 2039-04-26T07:56:14 K14.84 G16.89 XRT

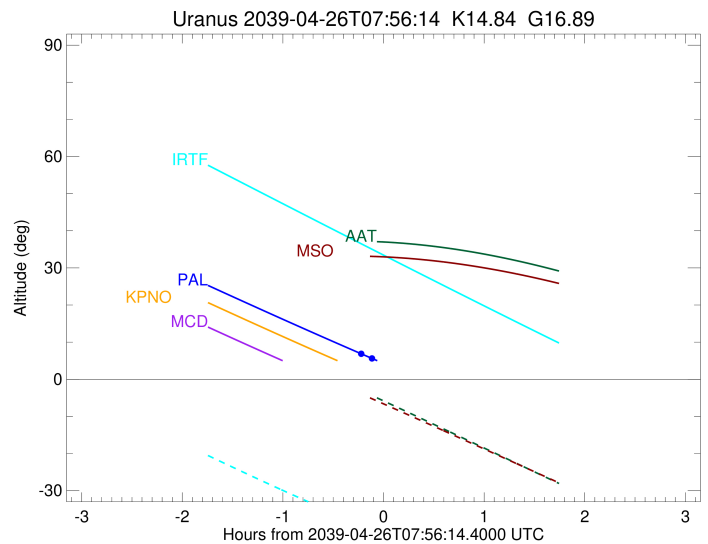
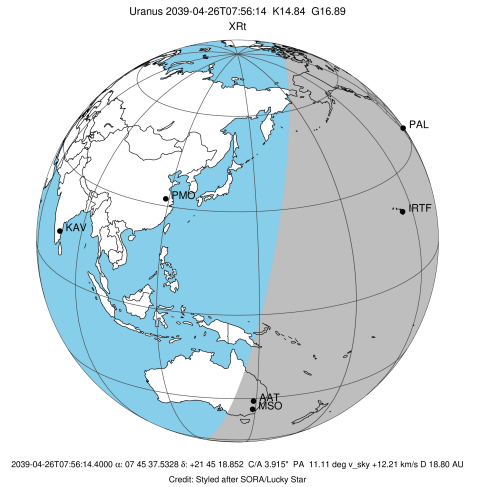


Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

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	++			APR 26 07:43 - APR 26 07:49	PnnRin
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					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 : 2039-04-26T08:02:56.830  
 Event type : XRt  
 : No Uranus occs  
 : Ring occs: topocentric, not geocentric  
 Observer code : PAL  
 Location : Palomar Mt (200")  
 Latitude (deg) : 33.35622  
 E. Longitude (deg) : 243.13601  
 Altitude (km) : 1.706  
 Gaia source ID : 674731257599288704  
 2Mass ID (if available) : 07453753+2145191  
 ICRS Star Coord at Epoch: 07h 45m 37.53284s +21:45:18.85197s  
 RUWE (>1.4 is poor) : 1.10  
 K magnitude : 14.839  
 G magnitude : 16.890  
 RP magnitude : 16.226  
 BP magnitude : 17.434  
 DUPflag : 0  
 Distance (au) : 18.796  
 f0 (km) : 0.000  
 g0 (km) : 0.000  
 skyplane vel. (km/s) : 12.21  
 Sun-Target sep (deg) : 78.98  
 Sun-Moon sep (deg) : 47.52  
 B (ring opening deg) : 52.44  
 PA of pole (deg) : 86.76  
 Pole direction: RA (deg): 257.31100  
 Dec (deg): -15.17500  
 C/A sky separation (") : 3.591  
 C/A sky separation (km) : 48958.0  
 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\_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	2039-04-26T07:43:57.101		6.67	-43.32	50947.14	-3.61		
lambda	I	2039-04-26T07:49:28.899		5.59	-43.31	50026.71	-2.02		

No planet occultations

lambda	E	2039-04-26T08:03:50.485	2.83x	-43.10	50026.71	2.03			
epsilon	E	2039-04-26T08:10:11.711	1.61x	-42.93	51130.83	3.63			