

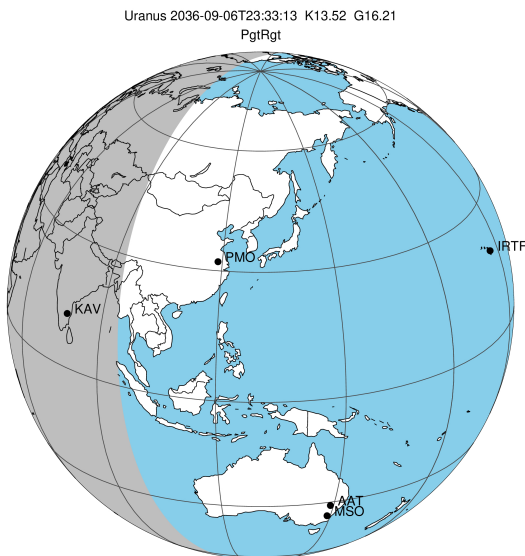
target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2036-09-06T23:33:13.040
 Event type : PgtRgt
 : Uranus occs: geocentric, topocentric
 : Ring occs: geocentric, topocentric
 Gaia source ID : 869229435715312640
 2Mass ID (if available) : 07184261+2236090

ICRS Star Coord at Epoch: 07h 18m 42.62584s +22:36:08.83615s

RUWE (>1.4 is poor) : 1.00
 K magnitude : 13.516
 G magnitude : 16.214
 RP magnitude : 15.381
 BP magnitude : 16.954
 DUPflag : 0
 Distance (au) : 19.324
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 22.98
 Sun-Target sep (deg) : 56.33
 Sun-Moon sep (deg) : 110.34
 B (ring opening deg) : 58.56
 PA of pole (deg) : 82.11

a(km) ring

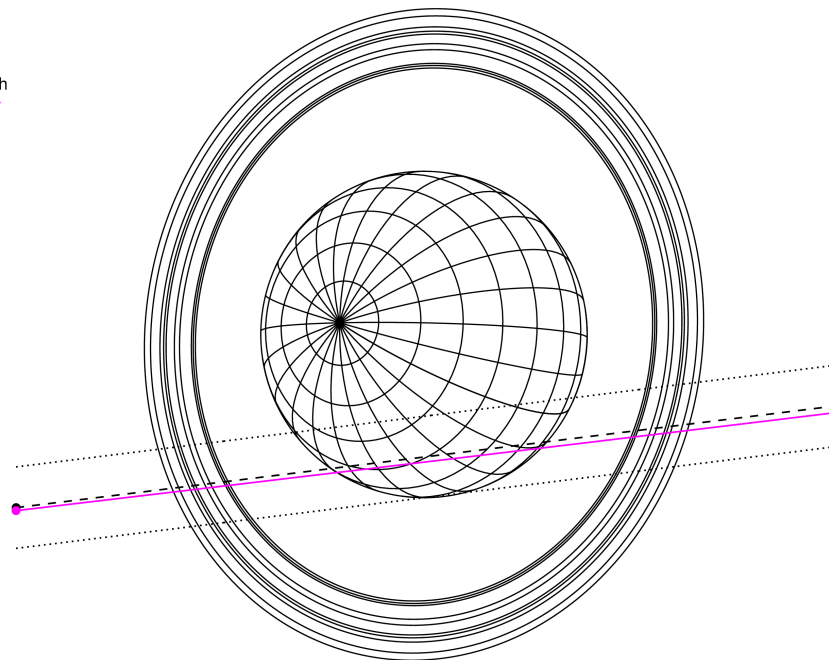
- 1 41837.2 6
- 2 42235.0 5
- 3 42571.2 4
- 4 44718.5 alpha
- 5 45661.1 beta
- 6 47176.1 eta
- 7 47626.3 gamma
- 8 48300.3 delta
- 9 50026.7 lambda
- 10 51149.4 epsilon



2036-09-06T23:33:13.0400 α: 07 18 42.6258 δ: +22 36 08.836 C/A 1.354" PA 7.07 deg v_sky +22.98 km/s D 19.32 AU
 Credit: Styled after SORA/Lucky Star

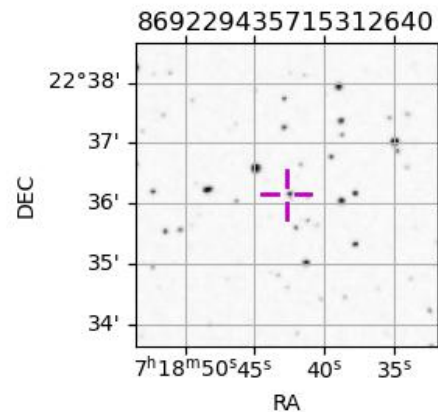
Uranus 2036-09-06T23:33:13 K13.52 G16.21 PgtRgt

Earth
 KAV

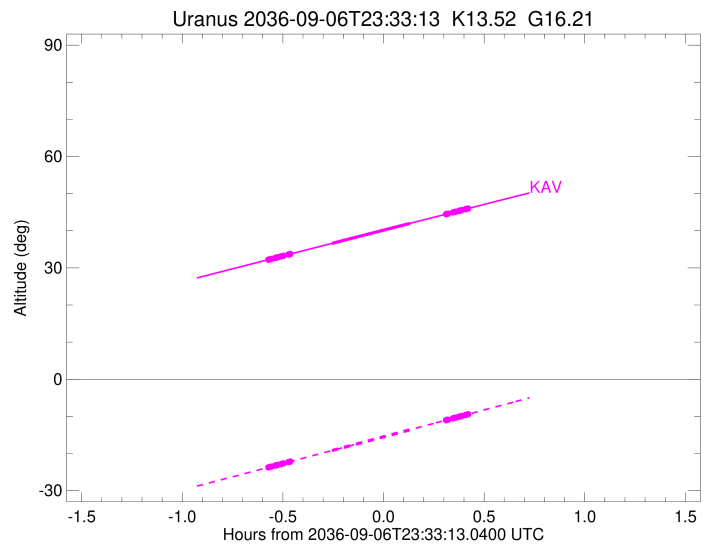
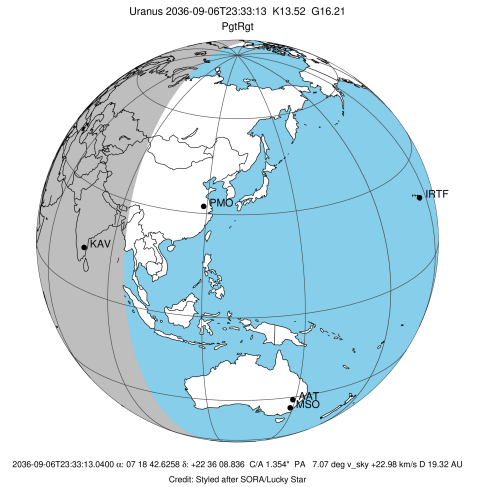


Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

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					PnnRnn
KAV	Kavalur Observatory	12.6	78.8	+++++	+ +	+++++	SEP 06 22:58 - SEP 06 23:58	PieRie
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 : 2036-09-06T23:29:37.430
 Event type : PgtRgt
 : Uranus occs: geocentric, topocentric
 : Ring occs: geocentric, topocentric
 Observer code : KAV
 Location : Kavalur Observatory
 Latitude (deg) : 12.57556
 E. Longitude (deg) : 78.83167
 Altitude (km) : 0.722
 Gaia source ID : 869229435715312640
 2Mass ID (if available) : 07184261+2236090
 ICRS Star Coord at Epoch: 07h 18m 42.62584s +22:36:08.83615s
 RUWE (>1.4 is poor) : 1.00
 K magnitude : 13.516
 G magnitude : 16.214
 RP magnitude : 15.381
 BP magnitude : 16.954
 DUPflag : 0
 Distance (au) : 19.324
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 22.98
 Sun-Target sep (deg) : 56.33
 Sun-Moon sep (deg) : 111.13
 B (ring opening deg) : 58.56
 PA of pole (deg) : 82.11
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 1.416
 C/A sky separation (km) : 19849.1
 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



Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2036-09-06T22:58:45.874		32.19	-23.76	51376.68	-24.26		
lambda	I	2036-09-06T22:59:41.505		32.41	-23.54	50026.71	-24.20		
delta	I	2036-09-06T23:00:53.079		32.68	-23.26	48300.35	-24.03		
gamma	I	2036-09-06T23:01:20.959		32.79	-23.15	47631.29	-23.96		
eta	I	2036-09-06T23:01:39.976		32.86	-23.07	47176.12	-23.91		
beta	I	2036-09-06T23:02:43.046		33.11	-22.82	45672.88	-23.73		
alpha	I	2036-09-06T23:03:23.101		33.26	-22.66	44723.71	-23.60		
4	I	2036-09-06T23:04:53.888		33.61	-22.30	42605.31	-23.32		
5	I	2036-09-06T23:05:11.873		33.68	-22.23	42196.03	-23.22		
6	I	2036-09-06T23:05:27.832		33.74	-22.16	41817.49	-23.19		
Uranus	I	2036-09-06T23:17:53.049		36.62	-19.19	25486.36		12.32	12.88
Uranus	E	2036-09-06T23:41:08.235		42.00	-13.60	25285.31		-24.62	-25.64
6	E	2036-09-06T23:51:52.452		44.48	-11.02	41879.58	23.11		
5	E	2036-09-06T23:52:06.989		44.53	-10.96	42197.58	23.13		
4	E	2036-09-06T23:52:23.177		44.60	-10.89	42577.05	23.22		
alpha	E	2036-09-06T23:53:53.954		44.95	-10.53	44688.54	23.50		
beta	E	2036-09-06T23:54:35.589		45.11	-10.36	45666.78	23.63		
eta	E	2036-09-06T23:55:39.275		45.35	-10.10	47176.12	23.80		
gamma	E	2036-09-06T23:55:58.086		45.42	-10.03	47624.33	23.85		
delta	E	2036-09-06T23:56:26.386		45.53	-9.91	48300.35	23.92		
lambda	E	2036-09-06T23:57:38.297		45.81	-9.62	50026.71	24.09		
epsilon	E	2036-09-06T23:58:08.234		45.92	-9.50	50748.83	24.14		