

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2037-05-14T15:24:41.010
 Event type : PgtRgt
 : Uranus occs: geocentric, topocentric
 : Ring occs: geocentric, topocentric
 Gaia source ID : 3368277150694368128
 2Mass ID (if available) : 07102185+2252542

Uranus 2037-05-14T15:24:41 K14.97 G16.45 PgtRgt

ICRS Star Coord at Epoch: 07h 10m 21.86317s +22:52:54.23485s

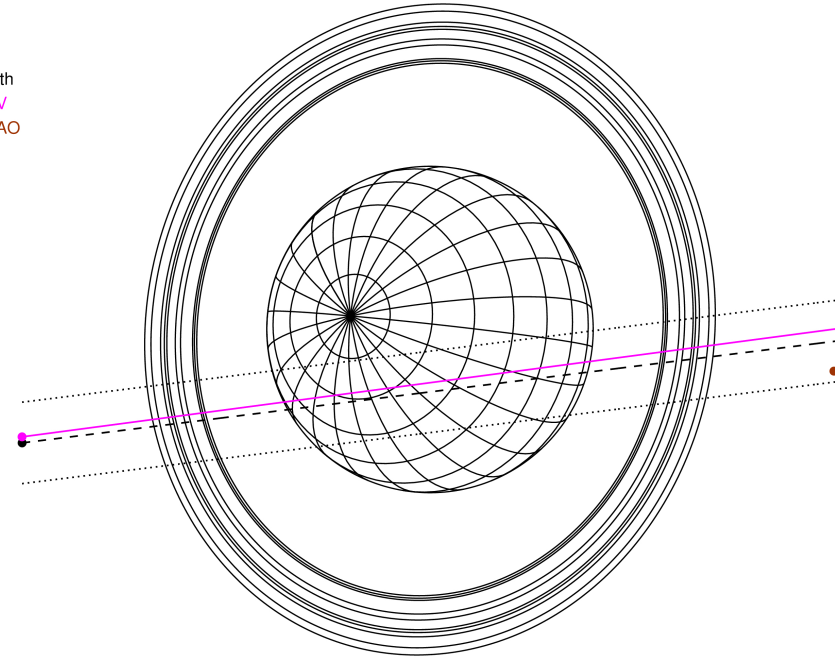
RUWE (>1.4 is poor) : 1.01
 K magnitude : 14.973
 G magnitude : 16.447
 RP magnitude : 15.951
 BP magnitude : 16.779
 DUPflag : 0
 Distance (au) : 19.341
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 24.60
 Sun-Target sep (deg) : 52.51
 Sun-Moon sep (deg) : 59.85
 B (ring opening deg) : 60.42
 PA of pole (deg) : 80.33

Uranus 2037-05-14T15:24:41 K14.97 G16.45
 PgtRgt



2037-05-14T15:24:41.0100 α: 07 10 21.8632 δ: +22 52 54.235 C/A 0.683° PA 7.13 deg v_sky +24.60 km/s D 19.34 AU
 Credit: Styled after SORA/Lucky Star

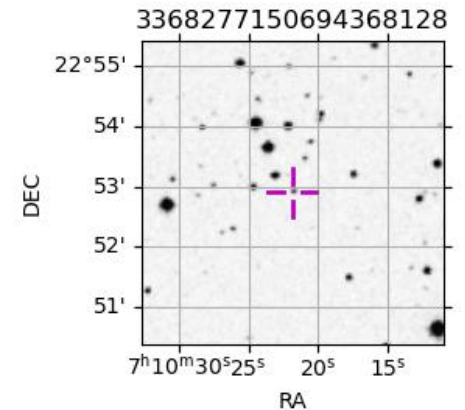
Earth
 KAV
 SAAO



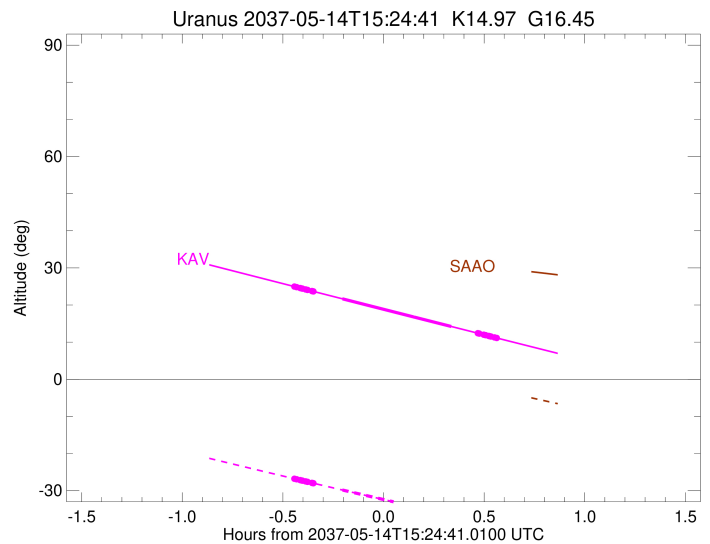
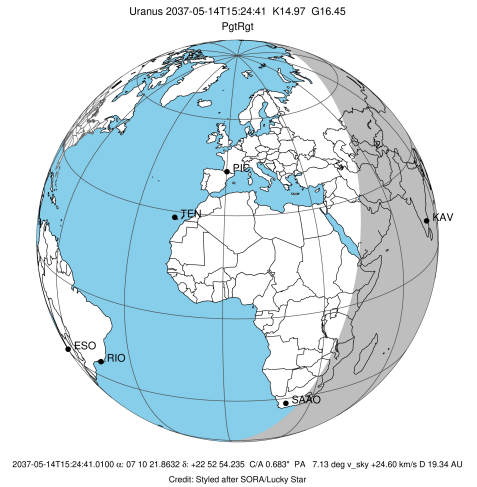
#	a(km)	ring
1	41837.2	6
2	42235.0	5
3	42571.2	4
4	44718.5	alpha
5	45661.1	beta
6	47176.1	eta
7	47626.3	gamma
8	48300.3	delta
9	50026.7	lambda
10	51149.4	epsilon

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	+++++	+ +	+++++	MAY 14 14:58 - MAY 14 15:58	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 : 2037-05-14T15:28:43.220
 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 : 3368277150694368128
 2Mass ID (if available) : 07102185+2252542
 ICRS Star Coord at Epoch: 07h 10m 21.86317s +22:52:54.23485s
 RUWE (>1.4 is poor) : 1.01
 K magnitude : 14.973
 G magnitude : 16.447
 RP magnitude : 15.951
 BP magnitude : 16.779
 DUPflag : 0
 Distance (au) : 19.341
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 24.60
 Sun-Target sep (deg) : 52.51
 Sun-Moon sep (deg) : 60.54
 B (ring opening deg) : 60.42
 PA of pole (deg) : 80.33
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 0.589
 C/A sky separation (km) : 8261.5
 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	2037-05-14T14:58:00.930		24.99	-26.78	51331.42	-27.39		
lambda	I	2037-05-14T14:58:48.523		24.81	-26.95	50026.71	-27.40		
delta	I	2037-05-14T14:59:51.549		24.57	-27.17	48300.35	-27.38		
gamma	I	2037-05-14T15:00:16.240		24.47	-27.26	47624.49	-27.37		
eta	I	2037-05-14T15:00:32.627		24.41	-27.32	47176.12	-27.36		
beta	I	2037-05-14T15:01:28.599		24.20	-27.52	45644.76	-27.33		
alpha	I	2037-05-14T15:02:03.169		24.06	-27.64	44702.11	-27.31		
4	I	2037-05-14T15:03:19.861		23.77	-27.91	42615.07	-27.26		
5	I	2037-05-14T15:03:36.349		23.71	-27.97	42161.48	-27.25		
6	I	2037-05-14T15:03:49.322		23.66	-28.01	41827.66	-27.26		
Uranus	I	2037-05-14T15:12:28.118		21.66	-29.84	25269.41		23.44	24.42
Uranus	E	2037-05-14T15:44:50.347		14.23	-36.49	25117.58		-29.56	-30.71
6	E	2037-05-14T15:52:47.489		12.41	-38.06	41862.27	27.38		
5	E	2037-05-14T15:53:04.270		12.35	-38.12	42290.20	27.37		
4	E	2037-05-14T15:53:12.568		12.32	-38.14	42526.37	27.39		
alpha	E	2037-05-14T15:54:33.643		12.01	-38.41	44744.69	27.44		
beta	E	2037-05-14T15:55:07.436		11.88	-38.52	45672.22	27.46		
eta	E	2037-05-14T15:56:02.109		11.67	-38.70	47176.12	27.49		
gamma	E	2037-05-14T15:56:18.602		11.61	-38.75	47629.66	27.50		
delta	E	2037-05-14T15:56:42.980		11.52	-38.83	48300.35	27.52		
lambda	E	2037-05-14T15:57:45.679		11.28	-39.03	50026.71	27.55		
epsilon	E	2037-05-14T15:58:15.781		11.16	-39.13	50856.22	27.54		