

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:51:44.770
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Gaia source ID : 673809763777415552
 2Mass ID (if available) : 07512952+2131370

ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s

RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 141.94
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67

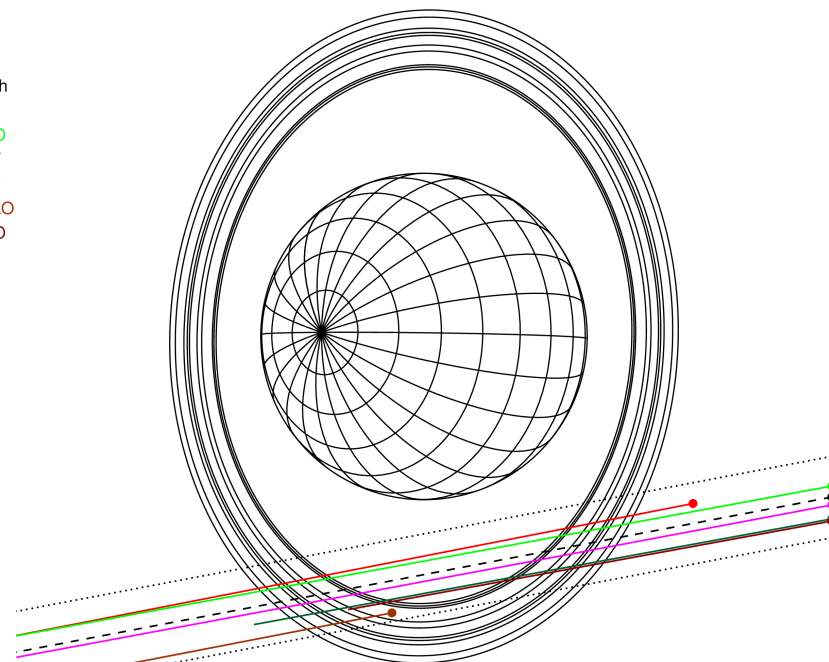
#	a(km)	ring
1	41837.2	6
2	42235.0	5
3	42571.2	4
4	44718.5	alpha
5	45661.1	beta
6	47176.1	eta
7	47626.3	gamma
8	48300.3	delta
9	50026.7	lambda
10	51149.4	epsilon



2039-01-26T17:51:44.7700 α: 07 51 29.52800 δ: +21 31 36.890 C/A 2.850° PA 10.76 deg v_sky -22.80 km/s D 17.67 AU
 Credit: Styled after SORA/Lucky Star

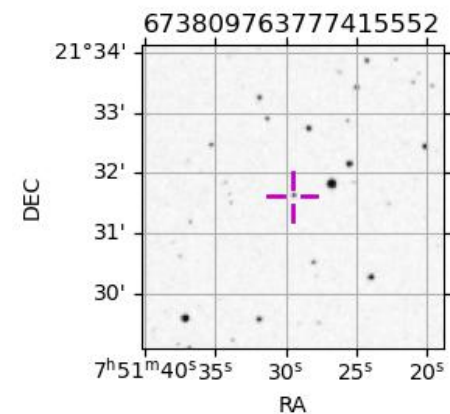
Uranus 2039-01-26T17:51:44 K14.77 G17.57 XRgt

Earth
 PIC
 PMO
 KAV
 AAT
 SAAO
 MSO

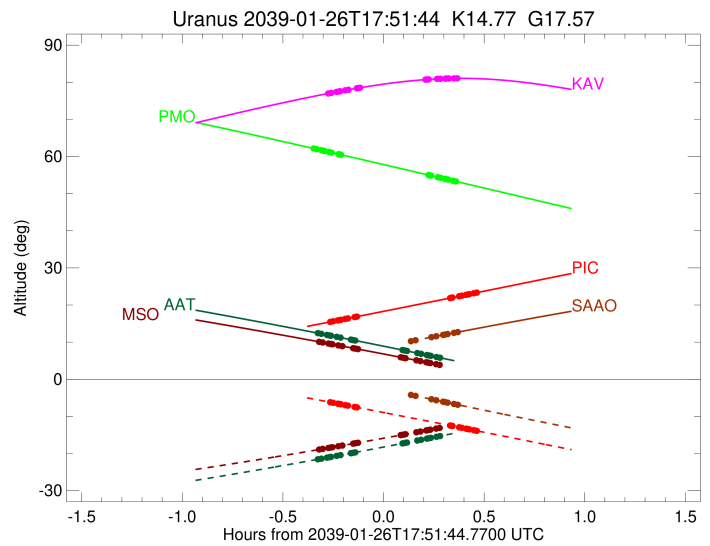
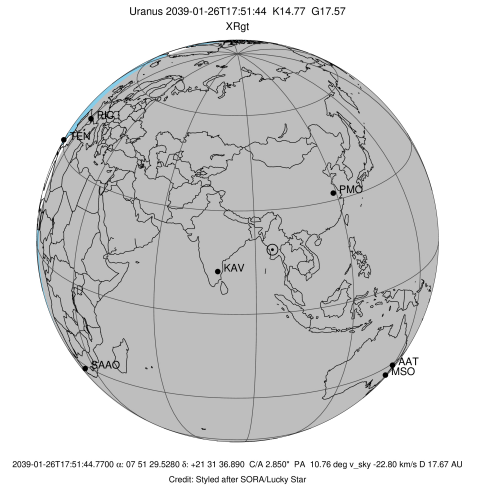


Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

Obs	Location	lat	Elon	Rings I	Planet	Rings E	Observed Events Interval	OEcode
PIC	Pic du Midi	42.9	0.1	+++++		+++++	JAN 26 17:35 - JAN 26 18:19	PnnRie
PAL	Palomar Mt (200")	33.4	243.1					PnnRnn
PMO	Purple Mtn Obs. Nanki	32.1	118.8	+++++		+++++	JAN 26 17:30 - JAN 26 18:13	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	+++++		+++++	JAN 26 17:35 - JAN 26 18:14	PnnRie
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	+++++		+++++	JAN 26 17:31 - JAN 26 18:08	PnnRie
SAAO	So. Afr. Astro. Obs.	-32.4	20.8			+++++	JAN 26 18:06 - JAN 26 18:14	PnnRne
MSO	Mt. Stromlo Observato	-35.3	149.0	+++++		++++	JAN 26 17:32 - JAN 26 18:01	PnnRie



target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:55:29.570
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Observer code : PIC
 Location : Pic du Midi
 Latitude (deg) : 42.93656
 E. Longitude (deg) : 0.14231
 Altitude (km) : 2.890
 Gaia source ID : 673809763777415552
 2Mass ID (if available) : 07512952+2131370
 ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s
 RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 142.71
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 2.633
 C/A sky separation (km) : 33755.6
 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_itrfr93_040916.bsp
 earth_720101_070426.bpc
 earth_200101_990628_predict.bpc
 pg3f0000r.bsp
 pg490000r.bsp
 naif0012.tls
 earth_flat_IAU.spk

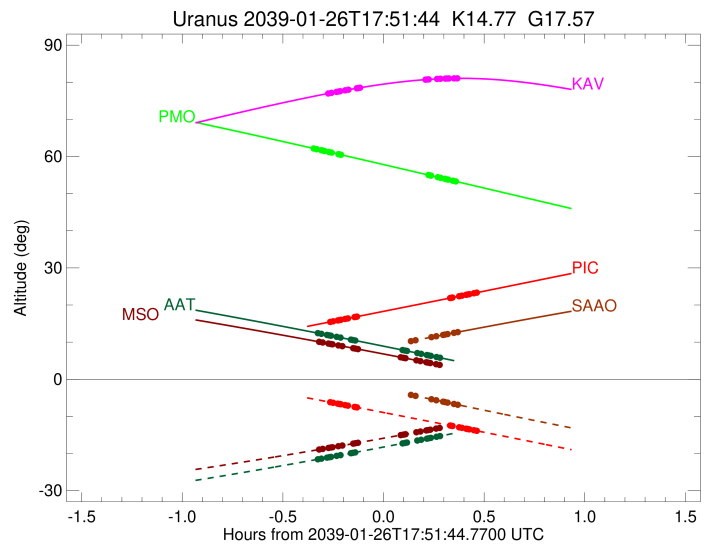
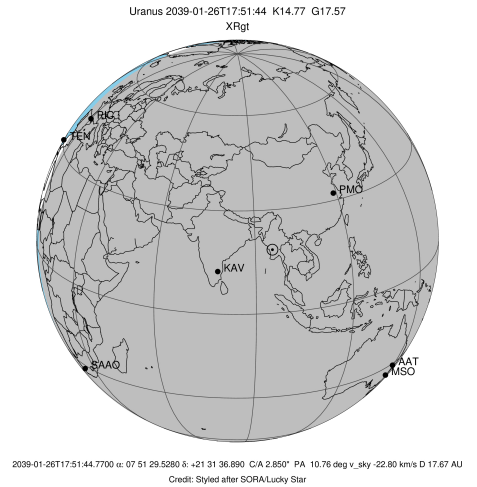


Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2039-01-26T17:35:44.120		15.43	-6.17	51329.54	-21.81		
lambda	I	2039-01-26T17:36:44.860		15.61	-6.34	50026.71	-21.22		
delta	I	2039-01-26T17:38:07.528		15.86	-6.58	48300.35	-20.54		
gamma	I	2039-01-26T17:38:40.325		15.95	-6.67	47631.56	-20.24		
eta	I	2039-01-26T17:39:02.937		16.02	-6.74	47176.12	-20.04		
beta	I	2039-01-26T17:40:19.957		16.25	-6.96	45663.98	-19.29		
alpha	I	2039-01-26T17:41:08.949		16.40	-7.10	44724.03	-18.77		
4	I	2039-01-26T17:43:07.062		16.75	-7.45	42602.35	-17.35		
5	I	2039-01-26T17:43:25.274		16.80	-7.50	42287.90	-17.16		
6	I	2039-01-26T17:43:50.294		16.88	-7.57	41835.65	-16.82		

No planet occultations

6	E	2039-01-26T18:11:36.879		21.88	-12.46	41876.84	16.85		
5	E	2039-01-26T18:12:03.863		21.97	-12.54	42308.44	17.19		
4	E	2039-01-26T18:12:17.373		22.01	-12.58	42548.50	17.38		
alpha	E	2039-01-26T18:14:18.784		22.37	-12.94	44752.43	18.81		
beta	E	2039-01-26T18:15:07.345		22.52	-13.09	45681.23	19.34		
eta	E	2039-01-26T18:16:23.146		22.75	-13.31	47176.12	20.08		
gamma	E	2039-01-26T18:16:45.471		22.82	-13.38	47626.83	20.29		
delta	E	2039-01-26T18:17:18.422		22.92	-13.48	48300.35	20.59		
lambda	E	2039-01-26T18:18:40.880		23.17	-13.72	50026.71	21.27		
epsilon	E	2039-01-26T18:19:48.666		23.37	-13.93	51486.42	21.87		

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:49:56.990
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Observer code : PMO
 Location : Purple Mtn Obs. Nanking
 Latitude (deg) : 32.06667
 E. Longitude (deg) : 118.82089
 Altitude (km) : 0.364
 Gaia source ID : 673809763777415552
 2Mass ID (if available) : 07512952+2131370
 ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s
 RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 142.09
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 2.699
 C/A sky separation (km) : 34597.9
 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

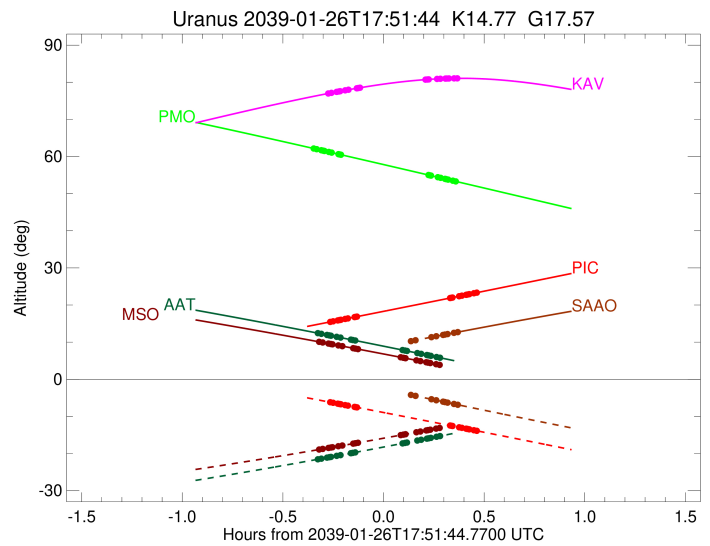
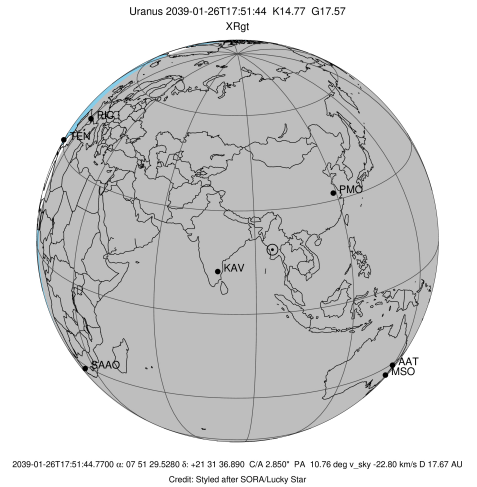


Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2039-01-26T17:30:48.435		62.19	-68.76	51340.43	-21.69		
lambda	I	2039-01-26T17:31:50.097		61.98	-68.58	50026.71	-21.05		
delta	I	2039-01-26T17:33:13.556		61.69	-68.34	48300.35	-20.31		
gamma	I	2039-01-26T17:33:46.749		61.58	-68.24	47631.57	-19.99		
eta	I	2039-01-26T17:34:09.665		61.50	-68.17	47176.12	-19.76		
beta	I	2039-01-26T17:35:27.893		61.23	-67.94	45664.69	-18.94		
alpha	I	2039-01-26T17:36:17.869		61.06	-67.79	44725.28	-18.37		
4	I	2039-01-26T17:38:19.326		60.64	-67.42	42600.96	-16.79		
5	I	2039-01-26T17:38:37.954		60.57	-67.36	42290.39	-16.58		
6	I	2039-01-26T17:39:03.906		60.48	-67.29	41837.49	-16.20		

No planet occultations

6	E	2039-01-26T18:05:10.442		55.02	-62.32	41876.43	16.18		
5	E	2039-01-26T18:05:38.489		54.92	-62.23	42309.22	16.56		
4	E	2039-01-26T18:05:52.538		54.87	-62.18	42549.46	16.77		
alpha	E	2039-01-26T18:07:57.613		54.43	-61.77	44752.42	18.34		
beta	E	2039-01-26T18:08:47.342		54.26	-61.61	45681.23	18.92		
eta	E	2039-01-26T18:10:04.663		53.99	-61.35	47176.12	19.73		
gamma	E	2039-01-26T18:10:27.383		53.91	-61.27	47626.92	19.96		
delta	E	2039-01-26T18:11:00.865		53.79	-61.16	48300.35	20.27		
lambda	E	2039-01-26T18:12:24.471		53.49	-60.89	50026.71	21.01		
epsilon	E	2039-01-26T18:13:33.160		53.25	-60.66	51489.28	21.65		

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:52:08.100
 Event type : XRgt
 : No Uranus occs
 : 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 : 673809763777415552
 2Mass ID (if available) : 07512952+2131370
 ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s
 RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 142.58
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 2.942
 C/A sky separation (km) : 37711.9
 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

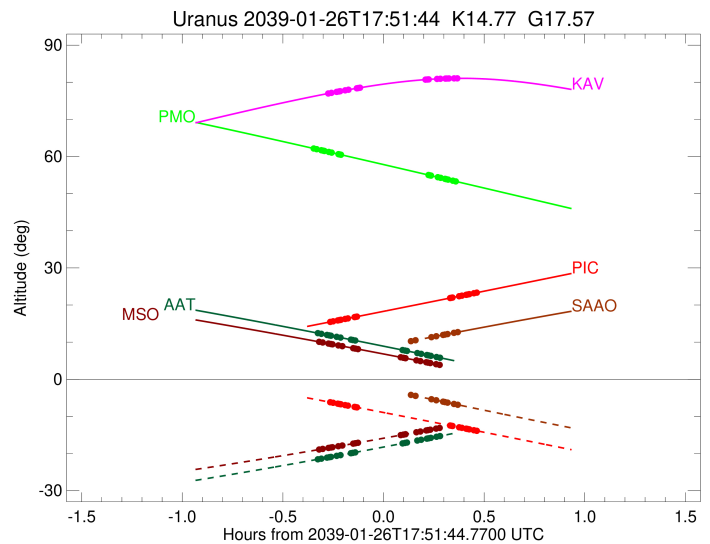
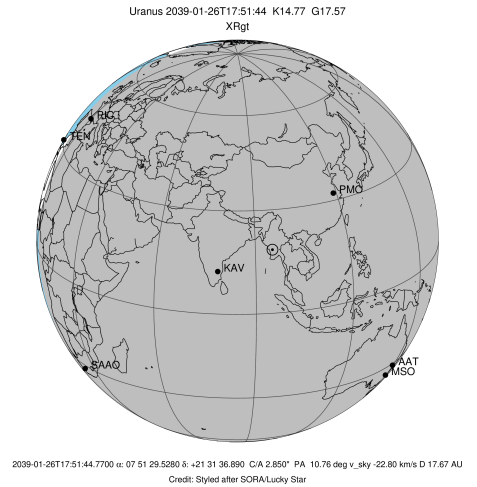


Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2039-01-26T17:35:05.595		76.96	-69.34	51370.07	-19.97		
lambda	I	2039-01-26T17:36:14.503		77.16	-69.60	50026.71	-19.15		
delta	I	2039-01-26T17:37:46.974		77.42	-69.95	48300.35	-18.17		
gamma	I	2039-01-26T17:38:24.224		77.52	-70.10	47631.57	-17.74		
eta	I	2039-01-26T17:38:50.125		77.60	-70.19	47176.12	-17.43		
beta	I	2039-01-26T17:40:19.720		77.84	-70.54	45666.90	-16.30		
alpha	I	2039-01-26T17:41:18.337		78.00	-70.76	44729.22	-15.50		
4	I	2039-01-26T17:43:47.646		78.39	-71.32	42595.77	-13.18		
5	I	2039-01-26T17:44:10.621		78.45	-71.41	42298.30	-12.85		
6	I	2039-01-26T17:44:44.670		78.53	-71.54	41843.99	-12.25		

No planet occultations

6	E	2039-01-26T18:04:16.764		80.72	-75.89	41873.34	12.25		
5	E	2039-01-26T18:04:53.159		80.76	-76.02	42312.98	12.85		
4	E	2039-01-26T18:05:11.516		80.78	-76.09	42555.55	13.18		
alpha	E	2039-01-26T18:07:44.154		80.91	-76.63	44752.07	15.50		
beta	E	2039-01-26T18:08:42.476		80.95	-76.84	45681.11	16.31		
eta	E	2039-01-26T18:10:11.022		81.00	-77.15	47176.12	17.43		
gamma	E	2039-01-26T18:10:36.689		81.01	-77.24	47627.47	17.74		
delta	E	2039-01-26T18:11:14.166		81.03	-77.38	48300.35	18.17		
lambda	E	2039-01-26T18:12:46.627		81.06	-77.70	50026.71	19.16		
epsilon	E	2039-01-26T18:14:02.459		81.07	-77.96	51507.76	19.98		

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:47:53.670
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Observer code : AAT
 Location : Siding Spring (AAT)
 Latitude (deg) : -31.27703
 E. Longitude (deg) : 149.06608
 Altitude (km) : 1.164
 Gaia source ID : 673809763777415552
 2Mass ID (if available) : 07512952+2131370
 ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s
 RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 141.43
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 3.088
 C/A sky separation (km) : 39587.8
 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_itrfr93_040916.bsp
 earth_720101_070426.bpc
 earth_200101_990628_predict.bpc
 pg3f0000r.bsp
 pg490000r.bsp
 naif0012.tls
 earth_flat_IAU.spk

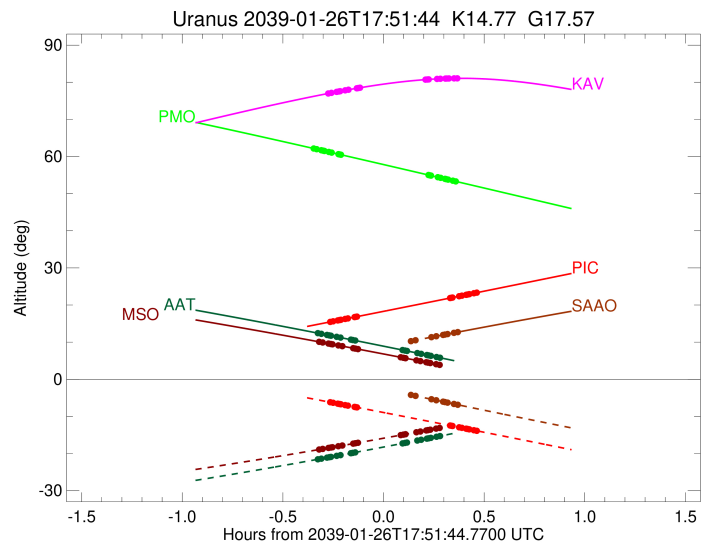
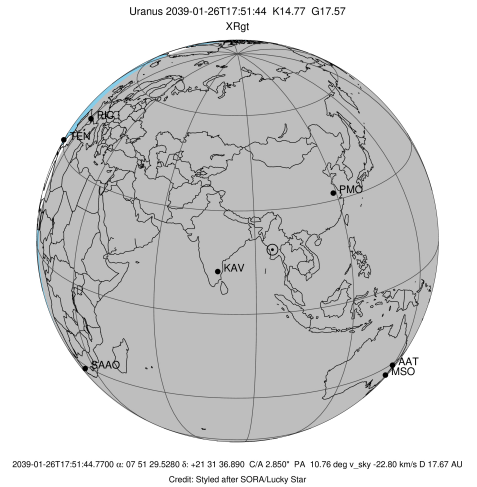


Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2039-01-26T17:31:58.009		12.46	-21.59	51389.94	-18.51		
lambda	I	2039-01-26T17:33:13.853		12.24	-21.39	50026.71	-17.57		
delta	I	2039-01-26T17:34:55.436		11.94	-21.11	48300.35	-16.40		
gamma	I	2039-01-26T17:35:36.865		11.82	-20.99	47631.54	-15.88		
eta	I	2039-01-26T17:36:05.874		11.73	-20.91	47176.12	-15.51		
beta	I	2039-01-26T17:37:47.697		11.43	-20.63	45668.47	-14.13		
alpha	I	2039-01-26T17:38:56.099		11.23	-20.44	44732.05	-13.12		
4	I	2039-01-26T17:42:01.368		10.67	-19.92	42591.24	-10.03		
5	I	2039-01-26T17:42:30.958		10.58	-19.84	42303.75	-9.55		
6	I	2039-01-26T17:43:18.209		10.44	-19.70	41849.35	-8.66		

No planet occultations

6	E	2039-01-26T17:57:27.108		7.87	-17.27	41870.30	8.65		
5	E	2039-01-26T17:58:16.970		7.71	-17.13	42314.63	9.54		
4	E	2039-01-26T17:58:41.905		7.64	-17.05	42560.28	10.02		
alpha	E	2039-01-26T18:01:50.753		7.05	-16.50	44751.55	13.10		
beta	E	2039-01-26T18:02:58.990		6.84	-16.30	45680.88	14.11		
eta	E	2039-01-26T18:04:39.948		6.53	-16.00	47176.12	15.48		
gamma	E	2039-01-26T18:05:08.781		6.44	-15.92	47627.81	15.85		
delta	E	2039-01-26T18:05:50.534		6.31	-15.79	48300.35	16.36		
lambda	E	2039-01-26T18:07:32.349		5.99	-15.49	50026.71	17.53		
epsilon	E	2039-01-26T18:08:55.328		5.74	-15.25	51517.42	18.47		

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:54:30.790
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Observer code : SAAO
 Location : So. Afr. Astro. Obs. (Sutherland)
 Latitude (deg) : -32.37953
 E. Longitude (deg) : 20.81070
 Altitude (km) : 1.768
 Gaia source ID : 673809763777415552
 2Mass ID (if available) : 07512952+2131370
 ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s
 RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 142.57
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 3.240
 C/A sky separation (km) : 41528.3
 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

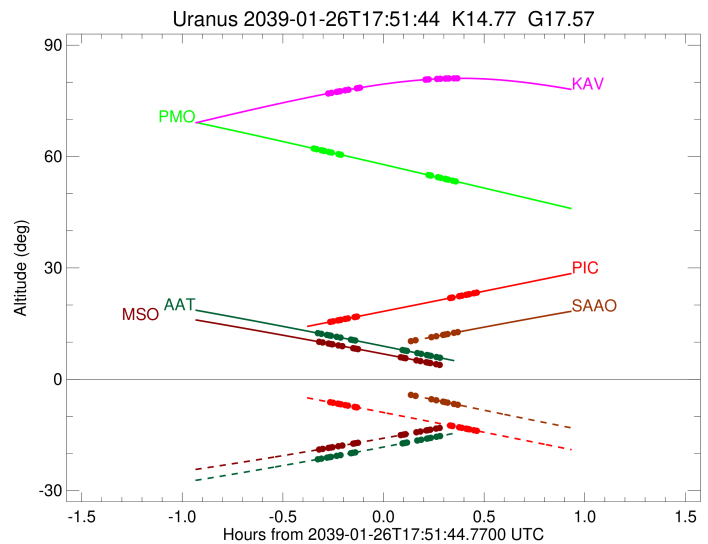
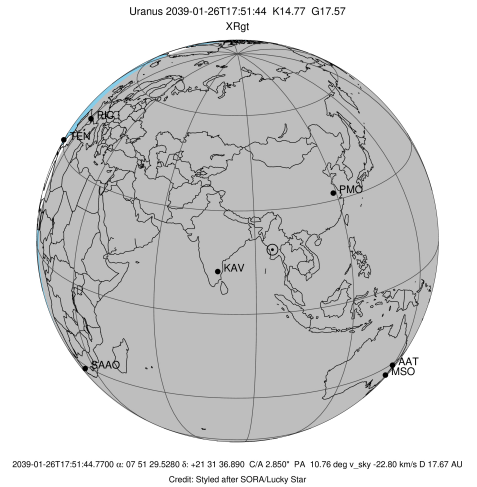


Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2039-01-26T17:40:19.235		6.74	-0.42x	51407.75	-17.00		
lambda	I	2039-01-26T17:41:43.571		7.00	-0.69x	50026.71	-15.88		
delta	I	2039-01-26T17:43:37.332		7.34	-1.06x	48300.35	-14.44		
gamma	I	2039-01-26T17:44:24.696		7.48	-1.22x	47631.47	-13.80		
eta	I	2039-01-26T17:44:58.274		7.59	-1.32x	47176.12	-13.32		
beta	I	2039-01-26T17:46:59.625		7.95	-1.72x	45670.15	-11.51		
alpha	I	2039-01-26T17:48:25.830		8.21	-2.00x	44735.21	-10.10		
4	I	2039-01-26T17:53:12.293		9.07	-2.92x	42583.81	-4.83		
5	I	2039-01-26T17:54:17.496		9.26	-3.13x	42310.64	-3.60		

No planet occultations

5	E	2039-01-26T18:00:13.518		10.32	-4.27x	42314.91	3.60		
4	E	2039-01-26T18:01:13.965		10.49	-4.46x	42568.90	4.84		
alpha	E	2039-01-26T18:06:03.461		11.34	-5.38	44750.38	10.12		
beta	E	2039-01-26T18:07:29.304		11.59	-5.66	45680.36	11.52		
eta	E	2039-01-26T18:09:29.412		11.94	-6.04	47176.12	13.34		
gamma	E	2039-01-26T18:10:02.704		12.04	-6.14	47628.26	13.82		
delta	E	2039-01-26T18:10:50.222		12.17	-6.29	48300.35	14.47		
lambda	E	2039-01-26T18:12:43.775		12.50	-6.65	50026.71	15.91		
epsilon	E	2039-01-26T18:14:15.097		12.76	-6.93	51528.89	17.04		

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2039-01-26T17:48:00.200
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Observer code : MSO
 Location : Mt. Stromlo Observatory
 Latitude (deg) : -35.32000
 E. Longitude (deg) : 149.00833
 Altitude (km) : 0.770
 Gaia source ID : 673809763777415552
 2Mass ID (if available) : 07512952+2131370
 ICRS Star Coord at Epoch: 07h 51m 29.52800s +21:31:36.88968s
 RUWE (>1.4 is poor) : 0.98
 K magnitude : 14.774
 G magnitude : 17.565
 RP magnitude : 16.745
 BP magnitude : 18.314
 DUPflag : 0
 Distance (au) : 17.674
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.80
 Sun-Target sep (deg) : 169.68
 Sun-Moon sep (deg) : 141.43
 B (ring opening deg) : 51.09
 PA of pole (deg) : 87.67
 Pole direction: RA (deg): 257.31100
 Dec (deg): -15.17500
 C/A sky separation (") : 3.115
 C/A sky separation (km) : 39933.7
 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	2039-01-26T17:32:20.522		10.12	-18.96	51393.41	-18.26		
lambda	I	2039-01-26T17:33:37.710		9.90	-18.76	50026.71	-17.29		
delta	I	2039-01-26T17:35:21.133		9.61	-18.49	48300.35	-16.07		
gamma	I	2039-01-26T17:36:03.436		9.50	-18.38	47631.53	-15.54		
eta	I	2039-01-26T17:36:33.106		9.41	-18.31	47176.12	-15.15		
beta	I	2039-01-26T17:38:17.642		9.12	-18.03	45668.77	-13.71		
alpha	I	2039-01-26T17:39:28.348		8.92	-17.85	44732.60	-12.65		
4	I	2039-01-26T17:42:43.399		8.37	-17.33	42590.23	-9.34		
5	I	2039-01-26T17:43:15.085		8.28	-17.25	42304.81	-8.82		
6	I	2039-01-26T17:44:06.883		8.13	-17.11	41850.55	-7.83		

No planet occultations

6	E	2039-01-26T17:56:54.515		5.92	-15.04	41869.49	7.82		
5	E	2039-01-26T17:57:48.956		5.76	-14.89	42314.87	8.81		
4	E	2039-01-26T17:58:15.980		5.68	-14.82	42561.38	9.33		
alpha	E	2039-01-26T18:01:34.590		5.10	-14.27	44751.40	12.63		
beta	E	2039-01-26T18:02:45.129		4.89x	-14.07	45680.82	13.69		
eta	E	2039-01-26T18:04:28.789		4.58x	-13.79	47176.12	15.13		
gamma	E	2039-01-26T18:04:58.281		4.50x	-13.70	47627.88	15.51		
delta	E	2039-01-26T18:05:40.903		4.37x	-13.58	48300.35	16.04		
lambda	E	2039-01-26T18:07:24.548		4.06x	-13.29	50026.71	17.25		
epsilon	E	2039-01-26T18:08:48.872		3.81x	-13.06	51519.30	18.21		