

target : Uranus
 target radius (km) : 25559.00
 C/A epoch : 2036-04-29T18:23:08.200
 Event type : XRgt
 : No Uranus occs
 : Ring occs: geocentric, topocentric
 Gaia source ID : 3379585284187917696
 2Mass ID (if available) : 06490534+2320156

ICRS Star Coord at Epoch: 06h 49m 05.33773s +23:20:15.46105s

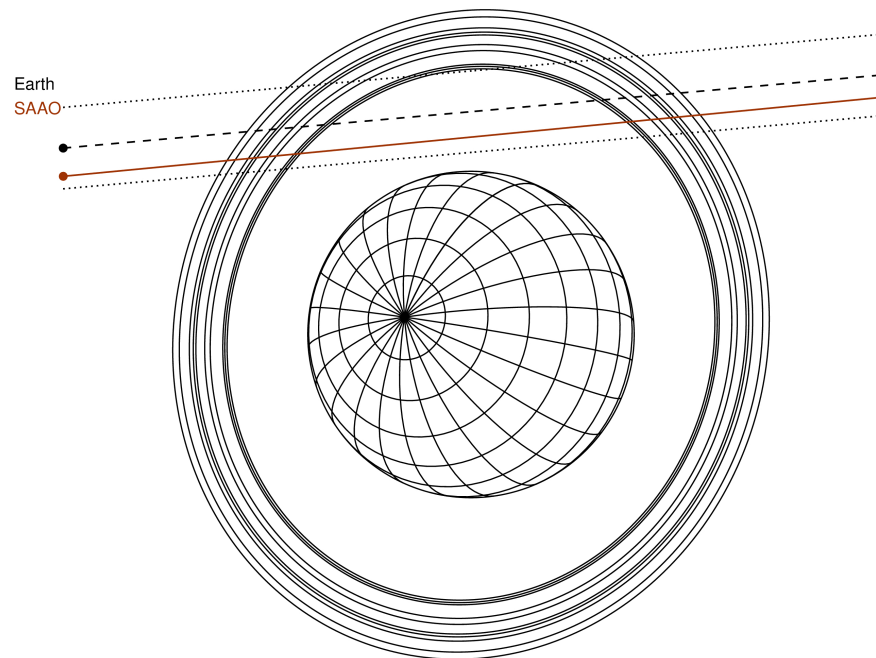
RUWE (>1.4 is poor) : 1.00
 K magnitude : 13.879
 G magnitude : 17.076
 RP magnitude : 16.073
 BP magnitude : 18.151
 DUPflag : 0
 Distance (au) : 19.262
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : 20.54
 Sun-Target sep (deg) : 61.74
 Sun-Moon sep (deg) : 18.39
 B (ring opening deg) : 65.11
 PA of pole (deg) : 75.38

#	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



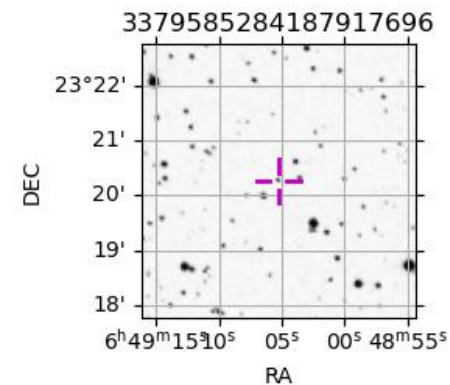
2036-04-29T18:23:08.2000 ex: 06 49 05.3377 8: +23 20 15.461 C/A 2.496° PA 185.10 deg v_sky +20.54 km/s D 19.26 AU
 Credit: Styled after SORA/Lucky Star

Uranus 2036-04-29T18:23:08 K13.88 G17.08 XRgt



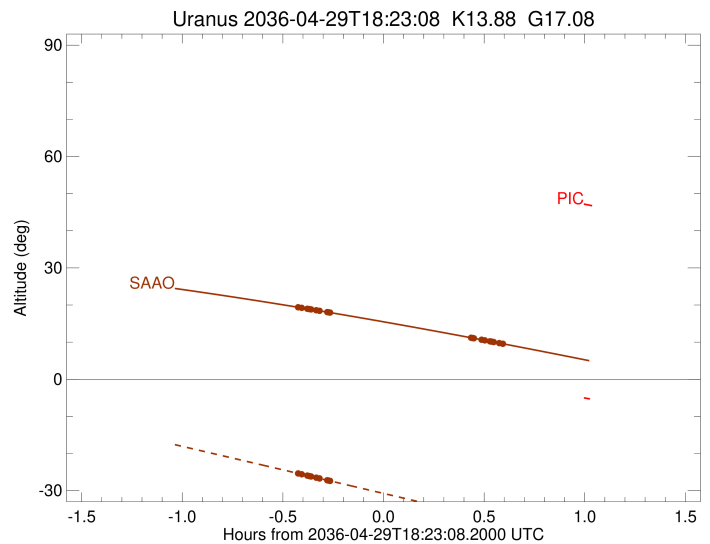
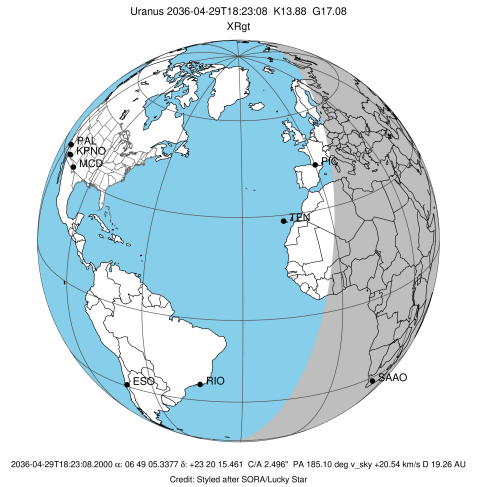
Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

Obs	Location	lat	Elon	Rings I	Planet	Rings E	Observed Events Interval	OEncode
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					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	+++++		+++++	APR 29 17:58 - APR 29 18:58	PnnRie
MSO	Mt. Stromlo Observato	-35.3	149.0					PnnRnn



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target                : Uranus
target radius (km)   : 25559.00
C/A epoch            : 2036-04-29T18:26:46.040
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      : 3379585284187917696
2Mass ID (if available) : 06490534+2320156
ICRS Star Coord at Epoch: 06h 49m 05.33773s +23:20:15.46105s
RUWE (>1.4 is poor) : 1.00
K magnitude         : 13.879
G magnitude         : 17.076
RP magnitude        : 16.073
BP magnitude        : 18.151
DUPflag            : 0
Distance (au)       : 19.262
f0 (km)            : 0.000
g0 (km)            : 0.000
skyplane vel. (km/s) : 20.54
Sun-Target sep (deg) : 61.74
Sun-Moon sep (deg)  : 18.99
B (ring opening deg) : 65.11
PA of pole (deg)    : 75.38
Pole direction: RA (deg): 257.31100
Dec (deg): -15.17500
C/A sky separation (") : 2.203
C/A sky separation (km) : 30770.6
NAIF SPICE kernels  : RAJobs_U111+rgf15.spk
URKALLvl1.spk
urall1.bsp
IAU_URANUS_for_RINGFIT.tpc
vgr2.urall1.bsp
ural61.bsp
vgr2.ural61.bsp
peph.ural60.bsp
earthstns_itrf93_040916.bsp
earth_720101_070426.bpc
earth_200101_990628_predict.bpc
pg3f0000r.bsp
pg490000r.bsp
naif0012.tls
earth_flat_IAU.spk
    
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Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
epsilon	I	2036-04-29T17:58:04.771		19.34	-25.45	50745.86	-17.48		
lambda	I	2036-04-29T17:58:46.117		19.23	-25.60	50026.71	-17.32		
delta	I	2036-04-29T18:00:26.954		18.98	-25.95	48300.35	-16.92		
gamma	I	2036-04-29T18:01:07.262		18.88	-26.09	47621.92	-16.74		
eta	I	2036-04-29T18:01:33.980		18.82	-26.19	47176.12	-16.63		
beta	I	2036-04-29T18:03:07.195		18.58	-26.52	45645.17	-16.19		
alpha	I	2036-04-29T18:04:03.966		18.44	-26.72	44733.61	-15.88		
4	I	2036-04-29T18:06:26.329		18.08	-27.22	42538.32	-15.08		
5	I	2036-04-29T18:06:41.699		18.04	-27.27	42302.57	-15.01		
6	I	2036-04-29T18:07:16.639		17.96	-27.40	41795.89	-14.78		

No planet occultations

6	E	2036-04-29T18:49:14.766		11.18	-36.27	41842.56	14.83		
5	E	2036-04-29T18:49:43.859		11.10	-36.37	42283.50	15.07		
4	E	2036-04-29T18:50:01.127		11.05	-36.43	42537.88	15.13		
alpha	E	2036-04-29T18:52:19.578		10.66	-36.92	44687.68	15.95		
beta	E	2036-04-29T18:53:20.737		10.48	-37.13	45674.45	16.26		
eta	E	2036-04-29T18:54:51.792		10.22	-37.45	47176.12	16.70		
gamma	E	2036-04-29T18:55:18.865		10.15	-37.55	47629.92	16.82		
delta	E	2036-04-29T18:55:58.511		10.03	-37.69	48300.35	17.00		
lambda	E	2036-04-29T18:57:38.865		9.75	-38.04	50026.71	17.40		
epsilon	E	2036-04-29T18:58:51.054		9.54	-38.29	51292.79	17.57		