

target : Uranus  
 target radius (km) : 25559.00  
 C/A epoch : 2036-01-26T06:52:19.320  
 Event type : XRT  
 : No Uranus occs  
 : Ring occs: topocentric, not geocentric  
 Gaia source ID : 3379576208919788672  
 2Mass ID (if available) : 06503449+2319246

ICRS Star Coord at Epoch: 06h 50m 34.50759s +23:19:24.52071s

RUWE (>1.4 is poor) : 1.08  
 K magnitude : 14.599  
 G magnitude : 17.920  
 RP magnitude : 16.861  
 BP magnitude : 19.061  
 DUPflag : 0  
 Distance (au) : 17.917  
 f0 (km) : 0.000  
 g0 (km) : 0.000  
 skyplane vel. (km/s) : -20.83  
 Sun-Target sep (deg) : 156.21  
 Sun-Moon sep (deg) : 175.93  
 B (ring opening deg) : 64.78  
 PA of pole (deg) : 75.74

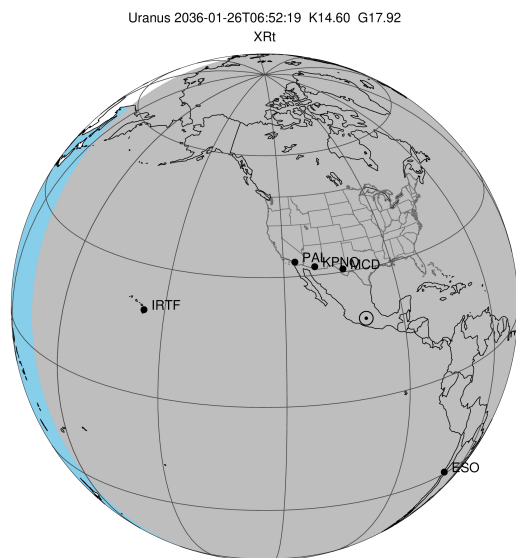
# a(km) ring

- 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

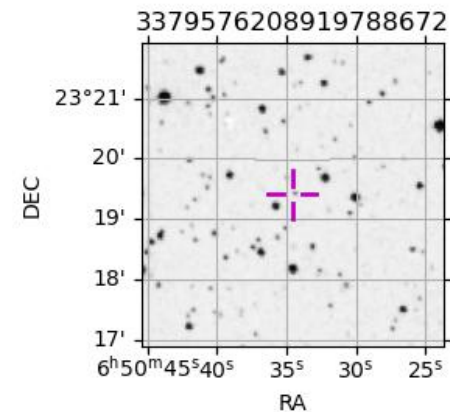
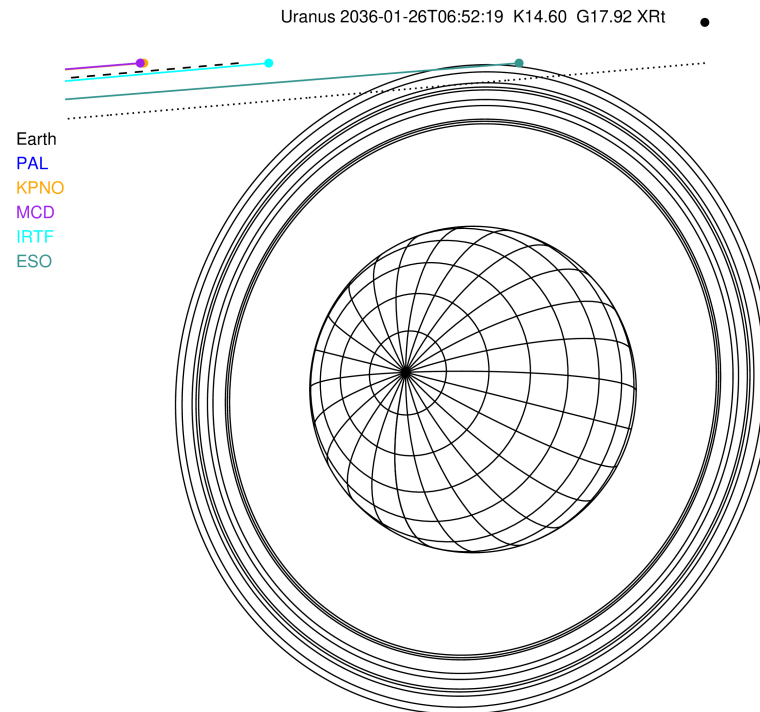
Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

Obs Location lat Elon Rings I Planet Rings E Observed Events Interval OEcode

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						PnnRnn
RIO	Rio de Janeiro	-22.9	316.8						PnnRnn
ESO	European Southern Obs	-29.3	289.3	+			+	JAN 26 06:43 - JAN 26 06:48	PnnRie
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

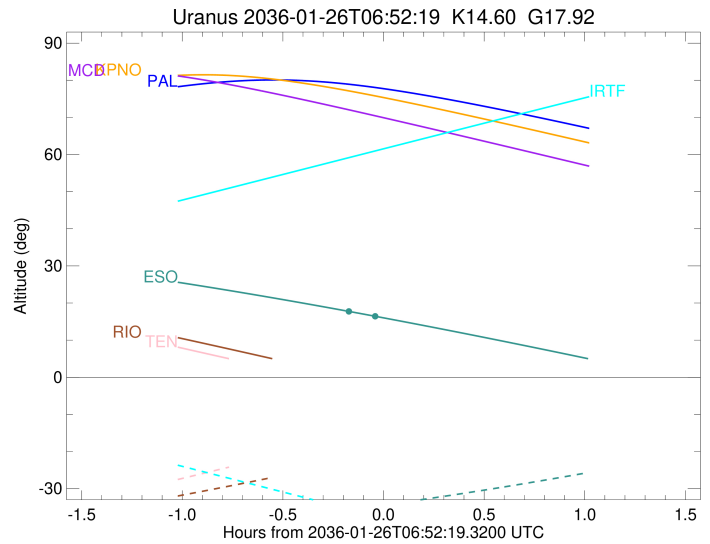
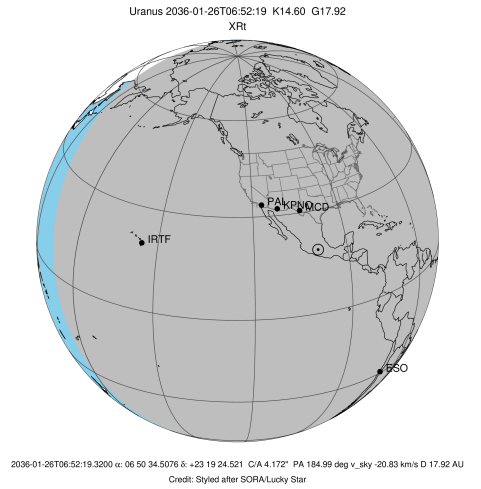


2036-01-26T06:52:19.3200 ra: 06 50 34.5076 s: +23 19 24.521 C/A 4.172° PA 184.99 deg v\_sky -20.83 km/s D 17.92 AU  
 Credit: Styled after SORA/Lucky Star



```

target                : Uranus
target radius (km)   : 25559.00
C/A epoch            : 2036-01-26T06:48:10.450
Event type          : XRt
: No Uranus occs
: Ring occs: topocentric, not geocentric
Observer code       : ESO
Location            : European Southern Obs. (3.6m)
Latitude (deg)      : -29.26097
E. Longitude (deg)  : 289.26831
Altitude (km)       : 2.400
Gaia source ID      : 3379576208919788672
2Mass ID (if available) : 06503449+2319246
ICRS Star Coord at Epoch: 06h 50m 34.50759s +23:19:24.52071s
RUWE (>1.4 is poor) : 1.08
K magnitude         : 14.599
G magnitude         : 17.920
RP magnitude        : 16.861
BP magnitude        : 19.061
DUPflag            : 0
Distance (au)       : 17.917
f0 (km)            : 0.000
g0 (km)            : 0.000
skyplane vel. (km/s) : -20.83
Sun-Target sep (deg) : 156.21
Sun-Moon sep (deg)  : 175.29
B (ring opening deg) : 64.78
PA of pole (deg)    : 75.74
Pole direction: RA (deg): 257.31100
Dec (deg): -15.17500
C/A sky separation (") : 3.877
C/A sky separation (km) : 50376.4
NAIF SPICE kernels  : RAJobs_U111+rgf15.spk
URKALLvl.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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b: ring blocked by planet  x: target alt < 5.0 deg or sun > -5.0 deg
Ring      I/E      UTC      b? alt alt-sun radius r-dot lat-geo lat-geodetic
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epsilon   I 2036-01-26T06:43:33.180  17.49 -35.44 50980.96 -1.66
  
```

No planet occultations

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epsilon   E 2036-01-26T06:48:49.970  16.60 -34.82 51034.37 1.65
  
```