

target : Neptune  
 target radius (km) : 24764.00  
 C/A epoch : 2025-10-04T15:32:01.630  
 Event type : XRT  
 : No Neptune occs  
 : Ring occs: topocentric, not geocentric  
 Gaia source ID : 2449617559139854464  
 2Mass ID (if available) : 00023008-0113351

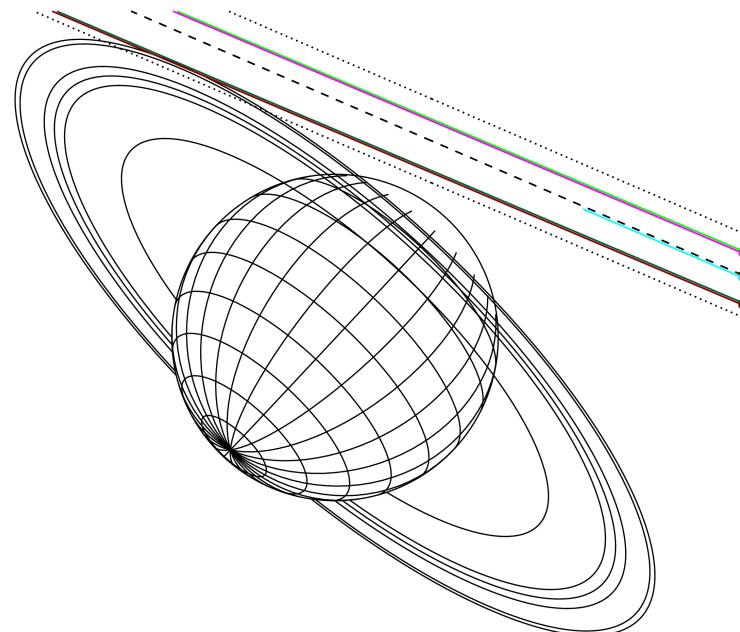
ICRS Star Coord at Epoch: 00h 02m 30.07871s -01:13:36.05551s  
 RUWE (>1.4 is poor) : 1.06  
 K magnitude : 13.512  
 G magnitude : 16.387  
 RP magnitude : 15.482  
 BP magnitude : 17.230  
 DUPflag : 0  
 Distance (au) : 28.906  
 f0 (km) : 0.000  
 g0 (km) : 0.000  
 skyplane vel. (km/s) : -23.63  
 Sun-Target sep (deg) : 168.69  
 Sun-Moon sep (deg) : 22.69  
 B (ring opening deg) : -19.80  
 PA of pole (deg) : -42.93



2025-10-04T15:32:01.6300 at: 00 02 30.0787 s: -01 13 36.0556 C/A 1.583° PA 156.65 deg v\_sky -23.63 km/s D 28.91 AU  
 Credit: Styled after SORA/Lucky Star

Neptune 2025-10-04T15:32:01 K13.51 G16.39 XRT

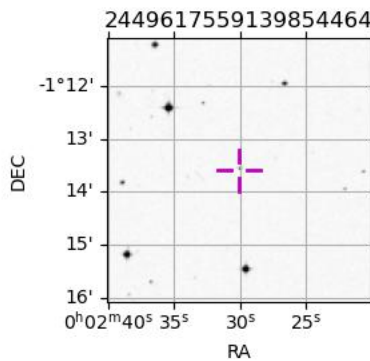
Earth  
 PMO  
 IRTF  
 KAV  
 AAT  
 MSO



#	a(km)	ring
1	42000.0	Galle
2	53200.0	LeVerrier
3	55200.0	Lassell
4	57200.0	Arago
5	61953.0	Galatea
6	62933.0	Adams

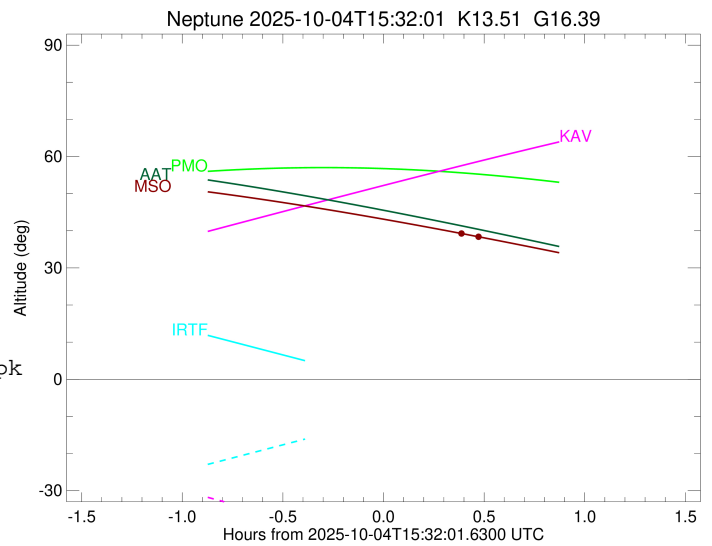
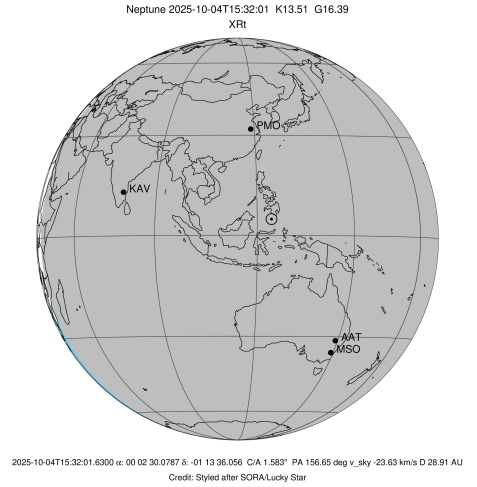
Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

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					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					PnnRnn
MSO	Mt. Stromlo Observato	-35.3	149.0	+			OCT 04 15:51 - OCT 04 16:03	PnnRie



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target                : Neptune
target radius (km)   : 24764.00
C/A epoch             : 2025-10-04T15:31:13.780
Event type            : XRT
: No Neptune occs
: Ring occs: topocentric, not geocentric
Observer code         : MSO
Location              : Mt. Stromlo Observatory
Latitude (deg)        : -35.32000
E. Longitude (deg)    : 149.00833
Altitude (km)         : 0.770
Gaia source ID        : 2449617559139854464
2Mass ID (if available) : 00023008-0113351
ICRS Star Coord at Epoch: 00h 02m 30.07871s -01:13:36.05551s
RUWE (>1.4 is poor)  : 1.06
K magnitude           : 13.512
G magnitude           : 16.387
RP magnitude          : 15.482
BP magnitude          : 17.230
DUPflag              : 0
Distance (au)         : 28.906
f0 (km)               : 0.000
g0 (km)               : 0.000
skyplane vel. (km/s) : -23.63
Sun-Target sep (deg)  : 168.69
Sun-Moon sep (deg)    : 23.16
B (ring opening deg) : -19.80
PA of pole (deg)      : -42.93
Pole direction: RA (deg): 299.33374
Dec (deg): 42.95036
C/A sky separation (") : 1.371
C/A sky separation (km) : 28742.2
NAIF SPICE kernels    : RAJobs_U111+rgf16.spk
URKALLv1.spk
nep097.bsp
nep101.bsp
sat4401.bsp
de440.bsp
earth_720101_070426.bpc
earthstns_itr93_040916.bsp
earth_200101_990628_predict.bpc
pck00010.tpc
pck.urall11.tpc.Neptune
naif0012.tls
IAU_NEPTUNE_for_RINGFIT.tpc.BECAREFUL
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
Adams	I	2025-10-04T15:51:08.027		39.97	-41.46	63225.79	-7.14		

No planet occultations

Adams	E	2025-10-04T16:03:36.087		37.82	-39.73	63002.16	6.59		
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