

target : Neptune
 target radius (km) : 24764.00
 C/A epoch : 2037-10-01T08:38:54.140
 Event type : XRT
 : No Neptune occs
 : Ring occs: topocentric, not geocentric
 Gaia source ID : 2572215167220190976
 2Mass ID (if available) : 01452741+0900231

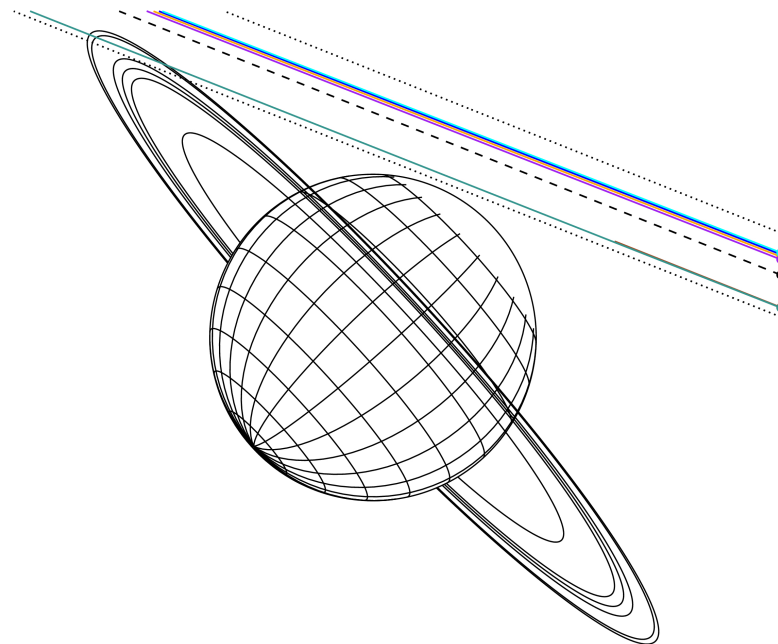
ICRS Star Coord at Epoch: 01h 45m 27.47882s +09:00:22.67251s
 RUWE (>1.4 is poor) : 1.07
 K magnitude : 11.800
 G magnitude : 13.245
 RP magnitude : 12.726
 BP magnitude : 13.596
 DUPflag : 0
 Distance (au) : 28.879
 f0 (km) : 0.000
 g0 (km) : 0.000
 skyplane vel. (km/s) : -22.68
 Sun-Target sep (deg) : 160.22
 Sun-Moon sep (deg) : 57.32
 B (ring opening deg) : -8.46
 PA of pole (deg) : -47.61



2037-10-01T08:38:54.1400 α: 01 45 27.4788 s: +09 00 22.673 C/A 1.515° PA 158.27 deg v_sky -22.68 km/s D 28.88 AU
 Credit: Styled after SORA/Lucky Star

Neptune 2037-10-01T08:38:54 K11.80 G13.24 XRT

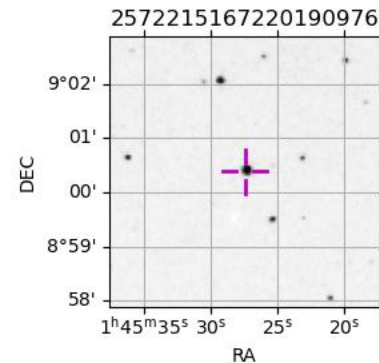
Earth
 PAL
 KPNO
 MCD
 IRTF
 RIO
 ESO



#	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

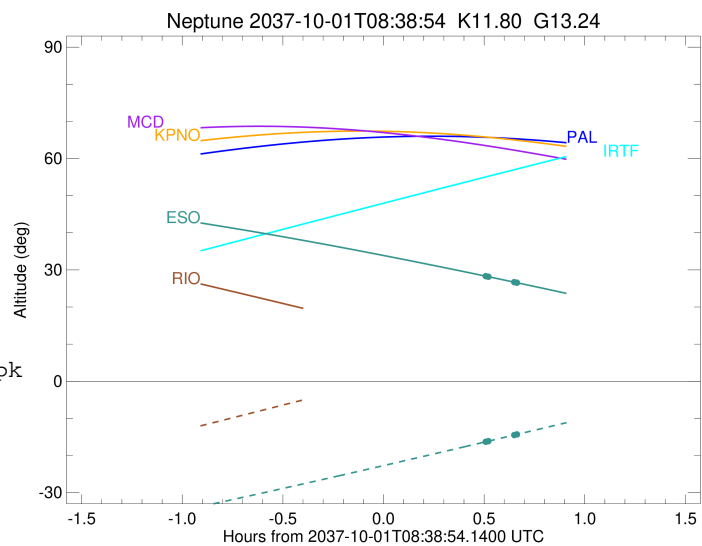
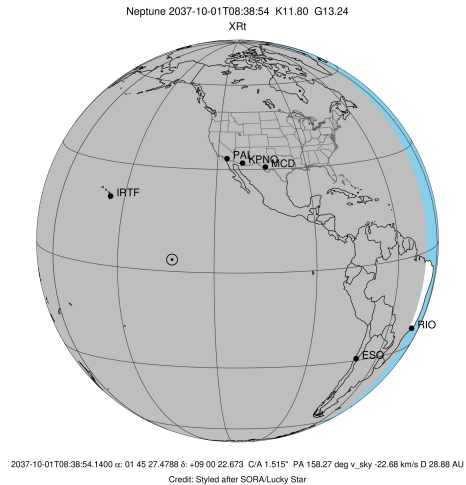
Observable events with sun below -5 deg and altitude above 5 deg unblocked by planet

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	+		+	OCT 01 09:07 - OCT 01 09:18	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



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target                : Neptune
target radius (km)   : 24764.00
C/A epoch            : 2037-10-01T08:37:24.890
Event type           : XRT
: No Neptune 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       : 2572215167220190976
2Mass ID (if available) : 01452741+0900231
ICRS Star Coord at Epoch: 01h 45m 27.47882s +09:00:22.67251s
RUWE (>1.4 is poor) : 1.07
K magnitude           : 11.800
G magnitude           : 13.245
RP magnitude          : 12.726
BP magnitude          : 13.596
DUPflag              : 0
Distance (au)         : 28.879
f0 (km)               : 0.000
g0 (km)               : 0.000
skyplane vel. (km/s) : -22.68
Sun-Target sep (deg) : 160.22
Sun-Moon sep (deg)   : 57.58
B (ring opening deg) : -8.46
PA of pole (deg)     : -47.61
Pole direction: RA (deg): 299.33374
Dec (deg): 42.95036
C/A sky separation ("): 1.284
C/A sky separation (km): 26893.8
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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Ring	I/E	UTC	b?	alt	alt-sun	radius	r-dot	lat-geo	lat-geodetic
Adams	I	2037-10-01T09:07:58.451		28.58	-16.60	62939.48	-25.76		
Galatea	I	2037-10-01T09:08:38.785		28.45	-16.46	61968.17	-22.87		

No planet occultations

Galatea	E	2037-10-01T09:17:52.466		26.70	-14.49	61953.00	22.80		
Adams	E	2037-10-01T09:18:32.857		26.57	-14.35	62933.00	25.71		