



UPCOMING OCCULTATIONS AND CAMPAIGNS

THINGS TO PUT IN THE CALENDAR

TTSO20 – 6 APRIL 2026

OW Cloud Home Events Tags Campaigns Filters Search Up

OccultWatcher Feeds AVAILABILITY

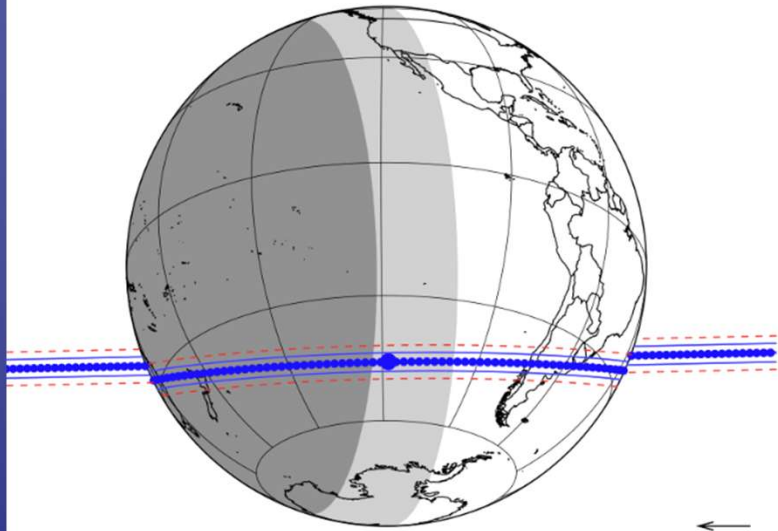
SuspectedMoons	10 May
SouthAmerica	26 May
TransTasman	31 May
ITALOccult	01 Jun
CometOcc	02 Jun
CBET Moons	15 Jun
LuckyStar	15 Jun
IBEROC	17 Jun
SlowRotators	19 Jun
ACROSS	26 Jun
AZevents	27 Jun
WWPlanetsMoons	27 Jun
CentralEurope	30 Jun
NALowMag	03 Jul
GaiaMoons	05 Jul

OCCULTWATCHER CLOUD FEEDS

A new option here is CBET Moons targeting objects that have had CBET's issued confirming binary nature.

2002KX14, GaiaDR3+pmGaiaDR3, NIMAv12
 updated: 2025-08-24 by Lucky Star

Offset: 0.0mas 0.0mas



yyyy mm dd hh:mm:ss.s	RA_star_J2000	DE_star_J2000	C/A	P/A	vel	Delta	G*	RP*	H*
2026-04-07 12:58:29.6	18 06 42.7936	-23 32 49.399	0.083	178.64	-2.84	38.4290	14.6	13.6	11.5

Date	Tue. 7 Apr. 2026 12:58:29
Star position (ICRF)	18 06 42.7936 -23 32 49.399
C/A	0.083 arcsec
P/A	178.64 °
velocity	-2.84 km/s
Geocentric distance Δ	38.4290 au
G.mag*	14.6
J.mag*	13.6
H.mag*	11.5
Magnitude drop	4.1
Uncertainty in time	173.4 sec
Uncertainty in C/A	6.6 mas
Uncertainty in projected distance	183.8 km
Probability of occultation on centrality	78.4%
Maximum duration	160.2 sec
Moon distance to the object	14.2°
Fraction of illuminated Moon	74.4 %
Solar elongation	105.8°



Prediction

Last Updated: 04/Apr/26, 02:26 UT	Computed By: OWC
Data Sources: Horizons/GaiaDR3	Orbit Date: 27 Nov 2025
Error (path widths): 0.151	Error in time: 0.5 sec
Err. Ellipse: 0.0037" x 0.0003"	Err. Ellipse PA: 92°
Err. Basis: Star+JplPeakEphemUncert	OWC Id: 3506496

Event

From: 18:27:36 UT	To: 18:42:08 UT
Combined Mag: 13.80	Max Duration: 0.4 sec
Mag Drop (V): 6.05	Mag Drop (R): 5.93
Shadow Width: 5.5 km	Moon Phase: 44% sunlit
Solar Elong.: 96°	Moon Elong.: 14°

Target Star

Name: UCAC4 352-162127	V mag: 14.60
Constellation: Sagittarius	R mag: 13.80
Diameter: ()	B mag: 15.29
RUWE: 1.00	Flags:
Gaia SourceId:	Gaia Flags:
4085447834865792896	RA [aprt]: 19 ^h 03 ^m 45 ^s .3039
RA [ICRS]: 19 ^h 02 ^m 11 ^s .7583	Dec [aprt]: -19° 44' 55".737
Dec [ICRS]: -19° 47' 09".999	

Object

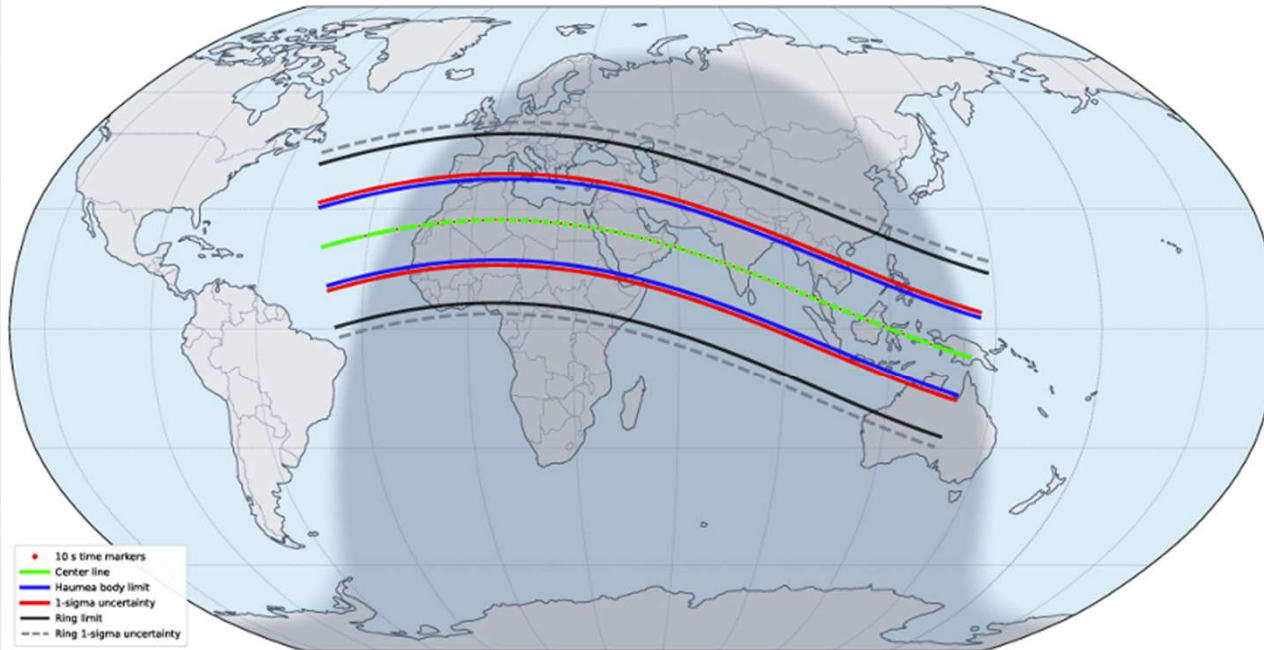
Name: (88055) Ghaf	Class: Asteroid
Diameter: 5.4 ± 0.6 km (Augmented)	Diameter (augm): 2.96 mas
Distance: 2.5137 au	Mag: 20.6 ⚠
Motion RA: 28.21 "/hr	Motion Dec: 1.67 "/hr
Moons: 0	Rings: 0

Table 1. Stellar occultation opportunities (2026-2030)

Occultation Date	Approx. Time (UT)	Star Coordinates (RA, Dec)	Mv	RUWE	Max Dur. (s)	Lun. Dist. (°)	Illum. (%)
2026 May 04	20:12 to 20:22	RA 14 40 58.5, Dec +14 40 26	14.7	6.6	66	55	91
2027 Jul 29	02:10 to 02:26	RA 14 40 58.5, Dec +14 03 13	19.4	1.0	93	134	25
2027 Jul 29	13:52 to 14:08	RA 14 42 58.4, Dec +13 55 61	15.7	1.0	92	130	20
2028 Jan 02	15:32 to 15:44	RA 14 50 48.3, Dec +12 58 38	18.3	1.0	32	5.1	68
2028 May 16	12:09 to 12:18	RA 14 47 31.3, Dec +14 02 07	18.4	1.0	32	5.0	44
2029 Jan 02	01:08 to 01:19	RA 14 54 24.3, Dec +12 38 09	19.8	1.0	65	98	98
2029 Feb 15	22:30 to 22:46	RA 14 58 35.1, Dec +12 58 25	20.2	1.0	94	128	6
2030 Jan 13	10:20 to 10:35	RA 14 58 32.3, Dec +12 46 36	20.4	1.1	81	148	67
2030 Mar 04	14:08 to 14:23	RA 14 59 01.8, Dec +12 47 09	20.2	1.1	82	121	0
2030 May 12	19:02 to 19:12	RA 14 55 13.1, Dec +13 19 42	20.1	0.9	63	58	72
2030 May 24	14:15 to 14:27	RA 14 54 25.4, Dec +13 21 11	16.4	0.9	65	114	46

Notes. “Approx. Time (UT)” indicates the time interval during which Haumea’s shadow crosses the Earth. The listed coordinates correspond to the occultation epoch (i.e., stellar positions propagated to the event date). “Max Dur. (s)” is the maximum theoretical duration at central chord, “Lun. Dist.” is the angular distance to the Moon, and “Illum.” is the lunar illuminated fraction.

UCAC4 524-056397 by 136108 Haumea on 2026 May 4 jpl130 2224 (2026-05-04 20:16 UTC)



<https://arxiv.org/pdf/2603.15049>

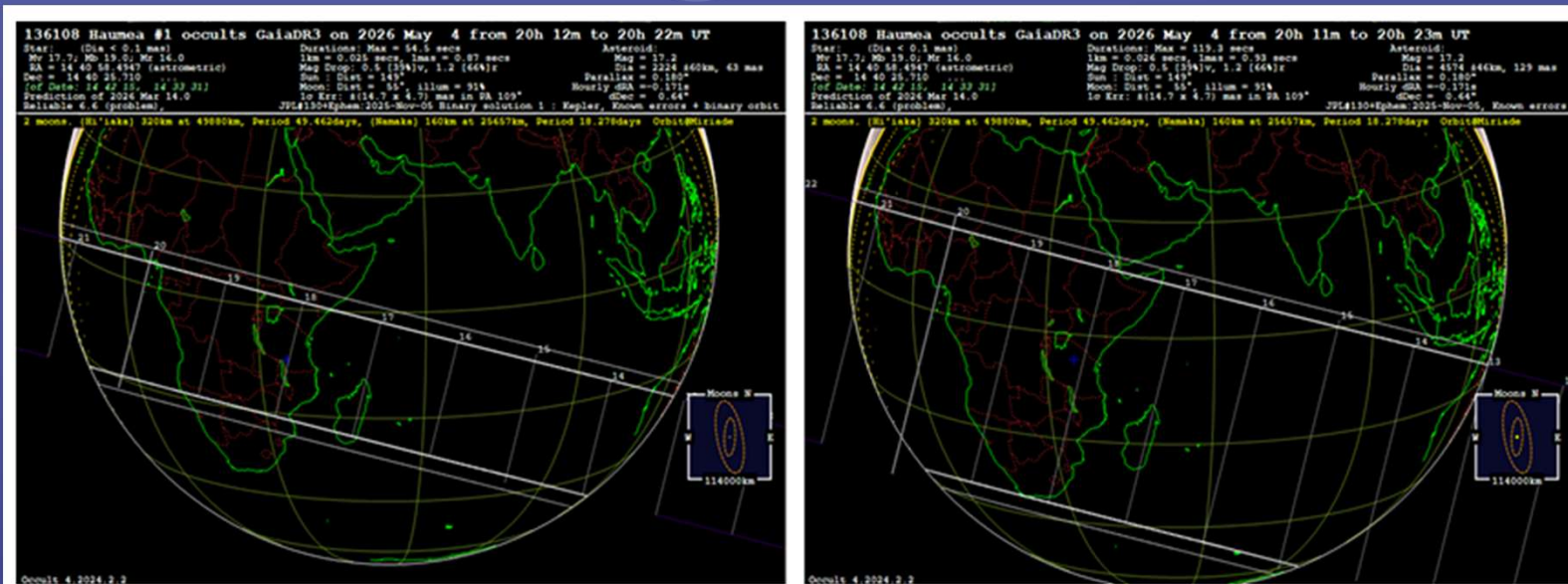
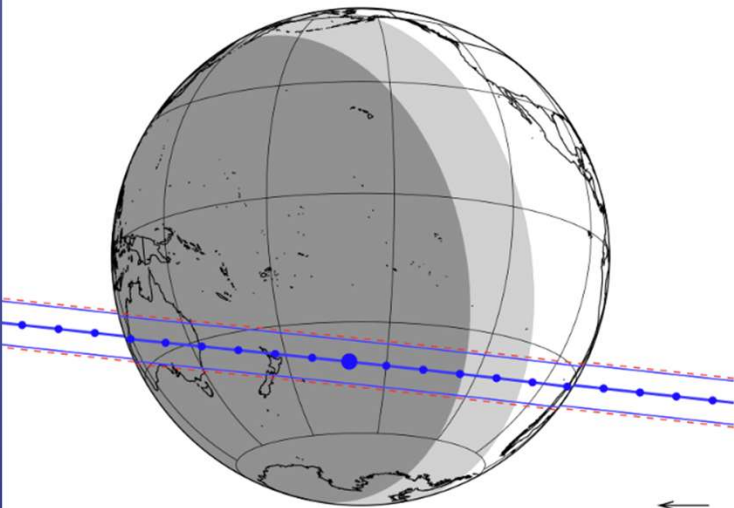


Figure 2. Occultation path to be expected for the ≈ 3.1 mag fainter companion of the primary target star in case the northern speckle solution [2] is correct thus shifting the shadow path to southern Africa. The left panel shows the ground track for the (136108) Haumea main body, the right panel for the rings. Created with Occult 4.2024.2.2 [3].

Quaoar, GaiaDR3+pmGaiaDR3, NIMAv20
 updated: 2025-08-24 by Lucky Star

Offset: 0.0mas 0.0mas



yyyy mm dd hh:mm:ss.s	RA_star_J2000	DE_star_J2000	C/A	P/A	vel	Delta	G*	RP*	H*
2026-05-16 13:43:45.9	18 49 43.4159	-14 47 55.836	0.088	186.07	-15.61	41.9229	14.5	13.6	11.6

Date	Sat. 16 May. 2026 13:43:45
Star position (ICRF)	18 49 43.4159 -14 47 55.836
C/A	0.088 arcsec
P/A	186.07 °
velocity	-15.61 km/s
Geocentric distance Δ	41.9229 au
G.mag*	14.5
J.mag*	13.6
H.mag*	11.6
Magnitude drop	4.2
Uncertainty in time	7.9 sec
Uncertainty in C/A	2.2 mas
Uncertainty in projected distance	68.1 km
Probability of occultation on centrality	100.0%
Maximum duration	71.1 sec
Moon distance to the object	128.0°
Fraction of illuminated Moon	0.3 %
Solar elongation	132.7°

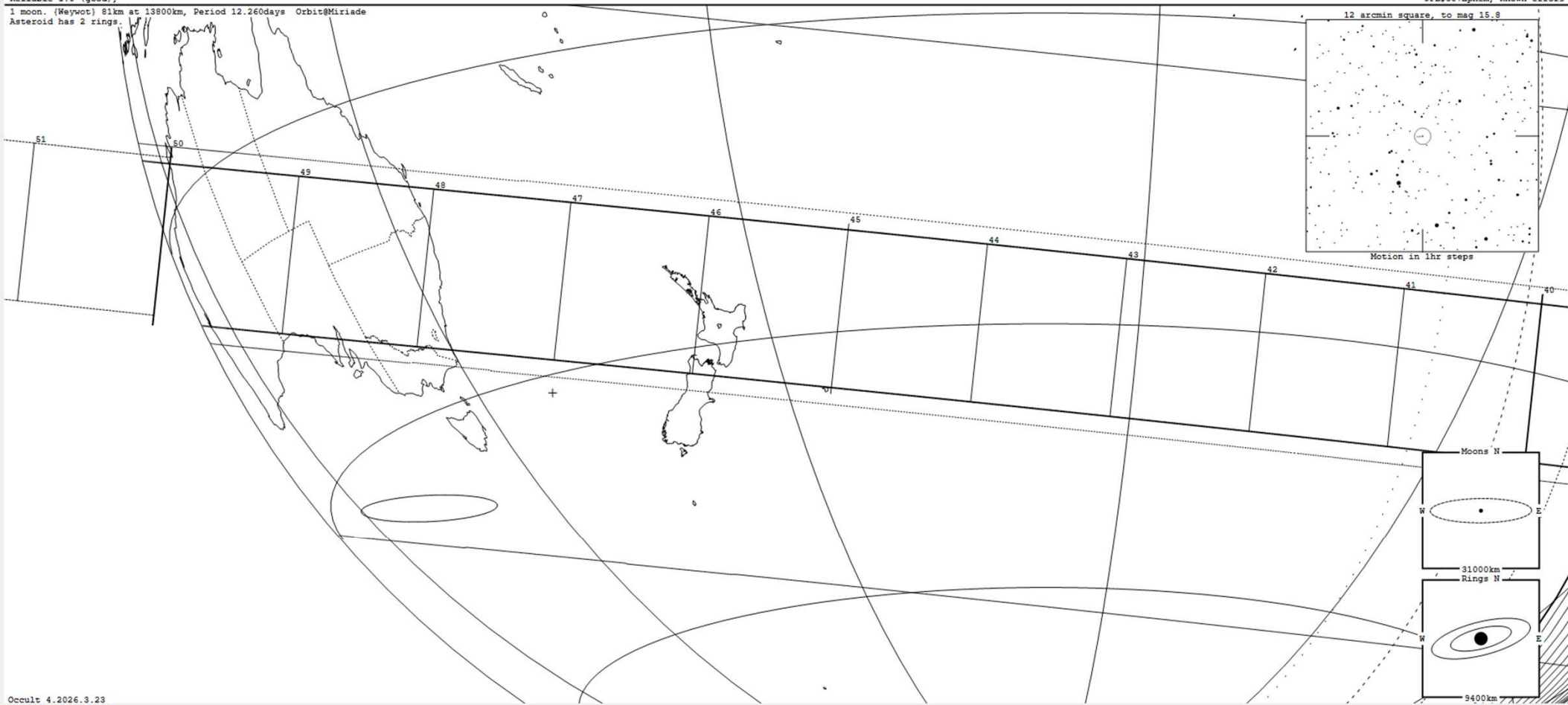
50000 Quaoar occults UCAC4 377-138486 on 2026 May 16 from 13h 36m to 13h 51m UT

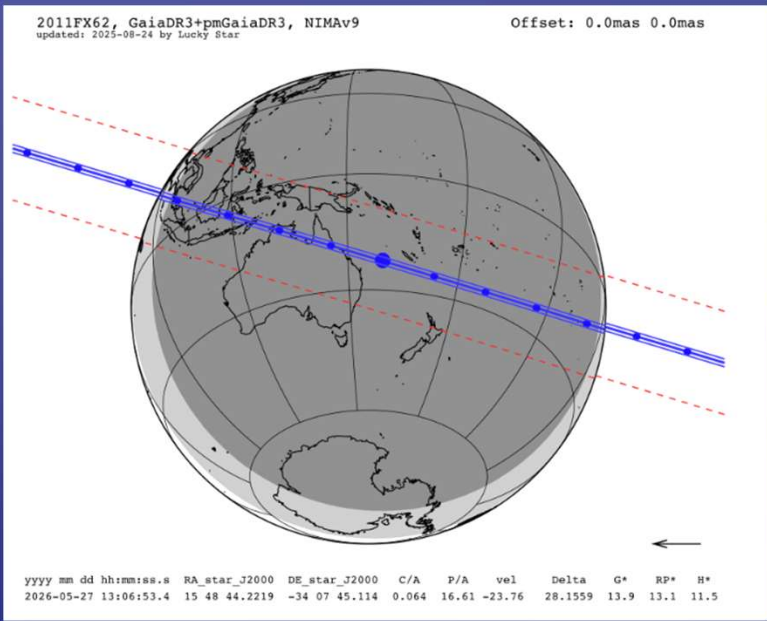
Star: (Dia < 0.1 mas)
 Vr 14.8; Mr 13.8; (MD 15.7)
 RA = 18 49 43.4159 (astrometric)
 Dec = -14 47 55.836
 [of Date: 18 51 15, -14 46 9]
 Prediction of 2026 Mar 23.0
 Reliable 1.0 (good),

Durations: Max = 69.6 secs
 1km = 0.064 secs; 1mas = 1.9 secs
 Mag Drop: 4.1 [98%]v
 Sun : Dist = 133°
 Moon: Dist = 128°, illum = 0%
 1σ Err: ±(15.3 x 3.0) mas in PA 87°

Asteroid:
 Mag = 18.8
 Dia = 1086 ±6km, 36 mas
 Parallax = 0.210"
 Hourly dRA = -0.125s
 dDec = 0.20"
 JPL#50+Ephem, Known errors

1 moon. {Weywot} 81km at 13800km, Period 12.260days Orbit@Miriade
 Asteroid has 2 rings.

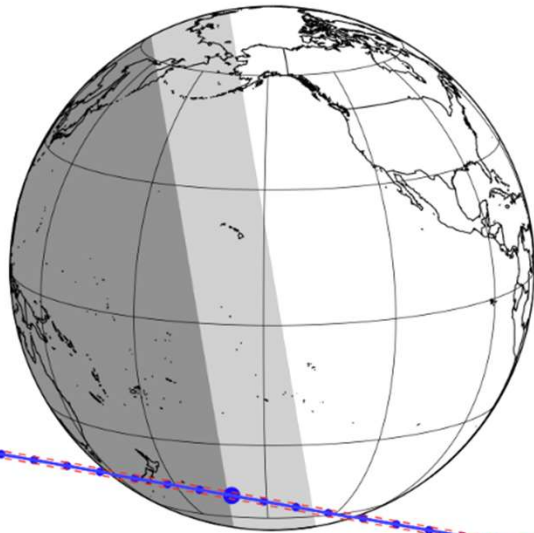




Date	Wed. 27 May. 2026 13:06:53
Star position (ICRF)	15 48 44.2219 -34 07 45.114
C/A	0.064 arcsec
P/A	16.61 °
velocity	-23.76 km/s
Geocentric distance Δ	28.1559 au
G.mag*	13.9
J.mag*	13.1
H.mag*	11.5
Magnitude drop	8.2
Uncertainty in time	94.5 sec
Uncertainty in C/A	60.1 mas
Uncertainty in projected distance	1227.9 km
Probability of occultation on centrality	6.5%
Maximum duration	8.5 sec
Moon distance to the object	39.6°
Fraction of illuminated Moon	87.0 %
Solar elongation	165.8°

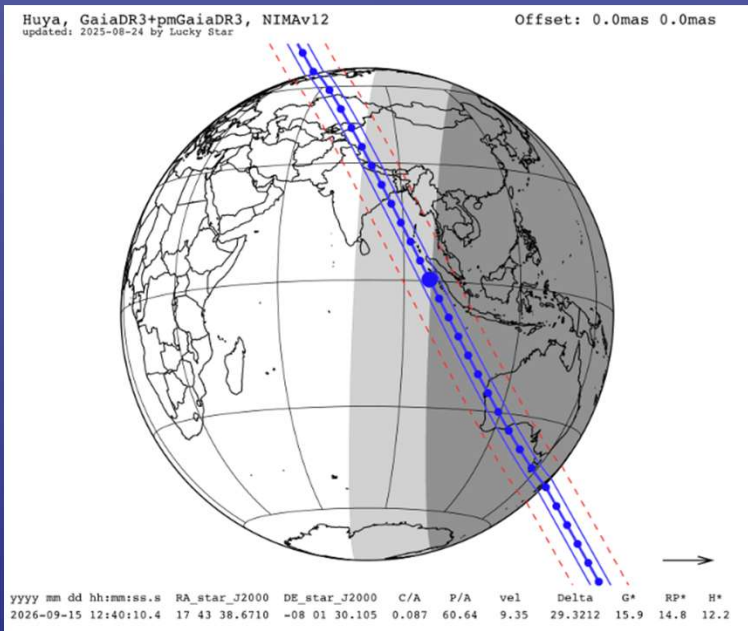
2000QE42, GaiaDR3+pmGaiaDR3, NIMAv6
 updated: 2025-08-21 by Lucky Star

Offset: 0.0mas 0.0mas



yyyy mm dd hh:mm:ss.s	RA_star_J2000	DE_star_J2000	C/A	P/A	vel	Delta	G*	RP*	H*
2026-08-29 15:43:56.8	04 22 52.8507	+12 36 53.574	1.583	190.24	13.56	4.8880	12.4	11.7	10.4

Date	Sat. 29 Aug. 2026 15:43:56
Star position (ICRF)	04 22 52.8507 +12 36 53.574
C/A	1.583 arcsec
P/A	190.24 °
velocity	13.56 km/s
Geocentric distance Δ	4.8880 au
G.mag*	12.4
J.mag*	11.7
H.mag*	10.4
Magnitude drop	6.4
Uncertainty in time	13.5 sec
Uncertainty in C/A	19.0 mas
Uncertainty in projected distance	67.3 km
Probability of occultation on centrality	18.2%
Maximum duration	2.3 sec
Moon distance to the object	73.0°
Fraction of illuminated Moon	97.6 %
Solar elongation	89.9°



Date	Tue. 15 Sep. 2026 12:40:10
Star position (ICRF)	17 43 38.6710 -08 01 30.105
C/A	0.087 arcsec
P/A	60.64 °
velocity	9.35 km/s
Geocentric distance Δ	29.3212 au
G.mag*	15.9
J.mag*	14.8
H.mag*	12.2
Magnitude drop	3.1
Uncertainty in time	45.0 sec
Uncertainty in C/A	18.8 mas
Uncertainty in projected distance	400.7 km
Probability of occultation on centrality	43.2%
Maximum duration	49.0 sec
Moon distance to the object	45.0°
Fraction of illuminated Moon	20.1 %
Solar elongation	93.3°

with this Event... Options... Redraw... Move to... Help Exit

Plot scale: .1 1 2 4 8 16 32

Double-Click on map to set site location Time centred

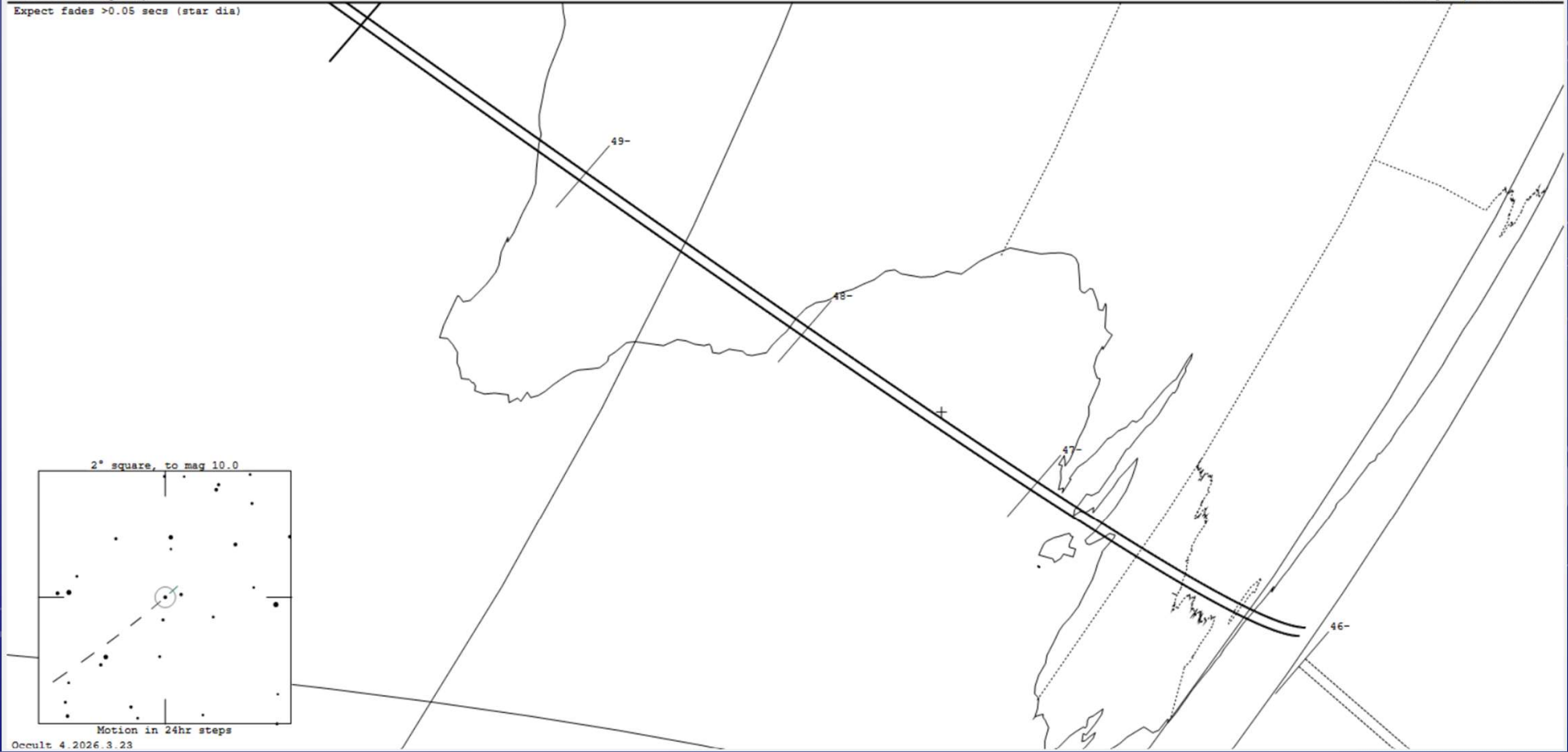
Site longitude 129.9 Latitude -34.2

Right-click for menu options don't plot never

7384 1981 TJ occults TYC 4947-00638-1 on 2026 May 13 from 16h 46m to 17h 20m UT

Star: (Dia = 0.3 mas)	Durations: Max = 2.5 secs	Asteroid:
Mv 8.6; Mr 7.9; [Mb 9.1]	1km = 0.16 secs, 1mas = 0.26 secs	Mv = 18.6; Mr = 17.7
RA = 12 26 58.2485 (astrometric)	Mag Drop: 10.0 [100%]v, 9.9 [100%]r	Dia = 15 ±2km, 9 mas
Dec = - 6 3 43.575	Sun : Dist = 136°	Parallax = 3.894"
[of Date: 12 28 21, - 6 12 38]	Moon: Dist = 179°, illum = 14%	Hourly dRA = -0.700s
Prediction of 2026 Mar 24.5	1σ Err: ±(1.1 x 0.4) mas in PA 110°	dDec = 9.01"
Reliable 1.0 (good),		JPL#57+Ephem, Known errors

Expect fades >0.05 secs (star dia)



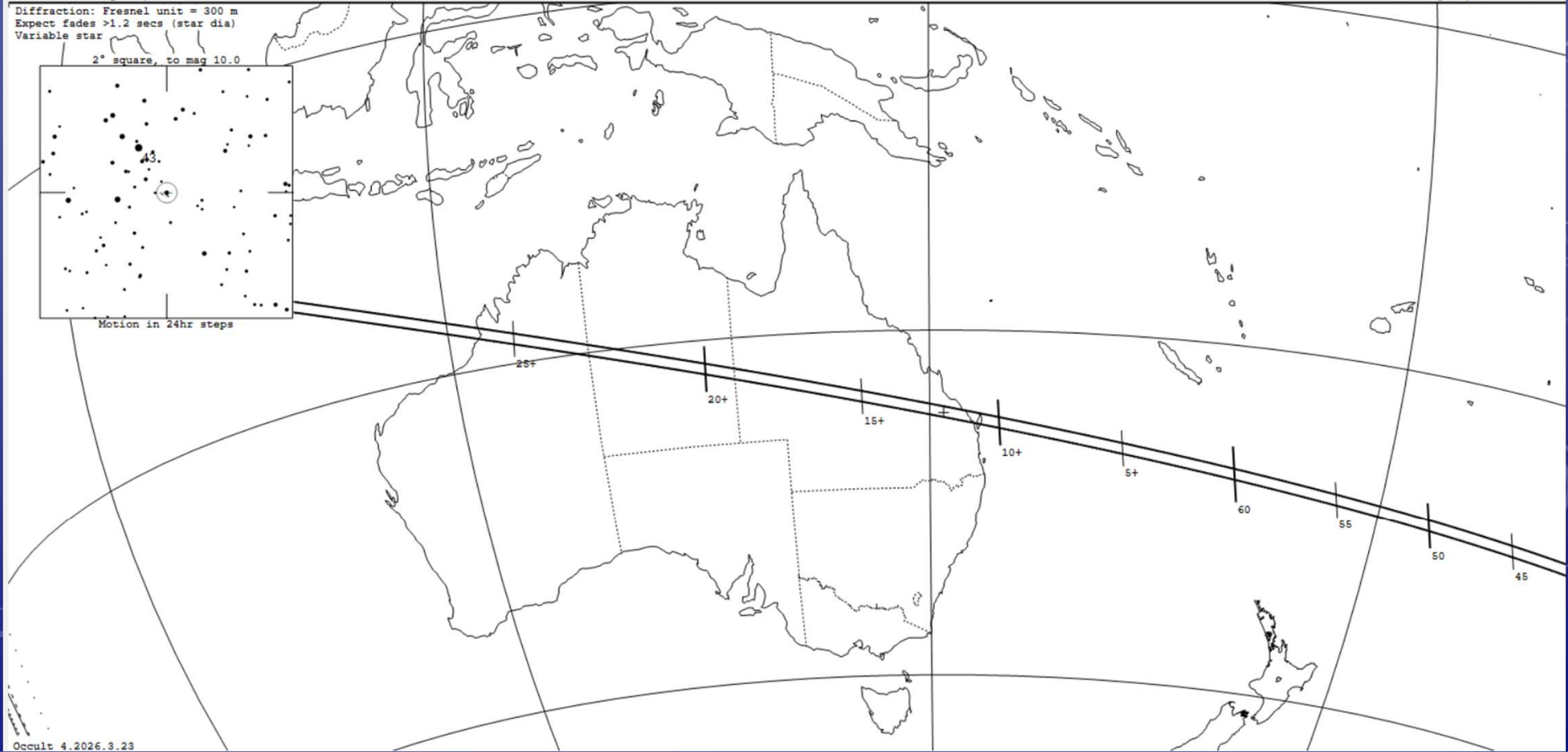
with this Event... Options... Redraw... Move to... Help X Exit

Plot scale: Double-Click on map to set site location Time centred

Site longitude 150.9 Latitude -24.7 Right-click for menu options

738 Alagasta occults HIP 94738 on 2026 May 17 from 12h 27m to 14h 30m UT

Star: (Dia = 1.7 mas) Mv 7.6; Mr 6.2; [Mb 11.4] RA = 19 16 41.8151 (astrometric) Dec = -19 18 27.985 [of Date: 19 18 16, -19 15 39] Prediction of 2026 Mar 24.5 Reliable 1.1 (good),	Durations: Max = 38.3 secs 1km = 0.61 secs, 1mas = 1.0 secs Mag Drop: 7.3 [100%]v, 7.9 [100%]r Sun : Dist = 123° Moon: Dist = 138° illum = 1% 1σ Err: ±(3.2 x 1.2) mas in PA 76°	Asteroid: (in DAMIT) Mv = 14.9; Mr = 14.1 Dia = 63 ±3km, 38 mas Parallax = 3.831" Hourly dRA = -0.261s dDec = -0.20" JPL#86+Ephem, Known errors
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10688 Haghhipour occults TYC 5532-01502-1 on 2026 Jun 17 from 10h 0m to 10h 25m UT

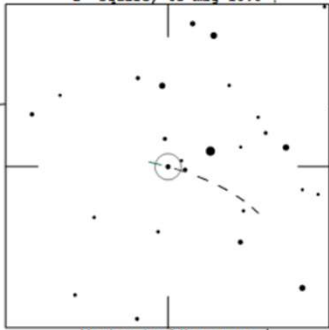
Star: (Dia = 0.3 mas)
Mv 8.3; Mr 7.6; [Mb 8.8]
RA = 12 22 0.1108 (astrometric)
Dec = -13 39 42.665
[of Date: 12 23 23, -13 48 39]
Prediction of 2026 Mar 24.5
Reliable 1.1 (good),

Durations: Max = 2.2 secs
1km = 0.13 secs, 1mas = 0.30 secs
Mag Drop: 10.8 [100%]v, 10.7 [100%]r
Sun : Dist = 104°, illum = 8%
Moon: Dist = 73°, illum = 8%
1σ Err: ±(1.5 x 0.5) mas in PA 117°

Asteroid:
Mv = 19.0; Mr = 18.3
Dia = 17 ±1km, 7 mas
Parallax = 2.662"
Hourly gRA = 0.794s
dDec = 3.19"
JPL#52+Ephem, Known errors

Expect fades >0.06 secs (star dia)

2° square, to mag 10.0



Motion in 24hr steps

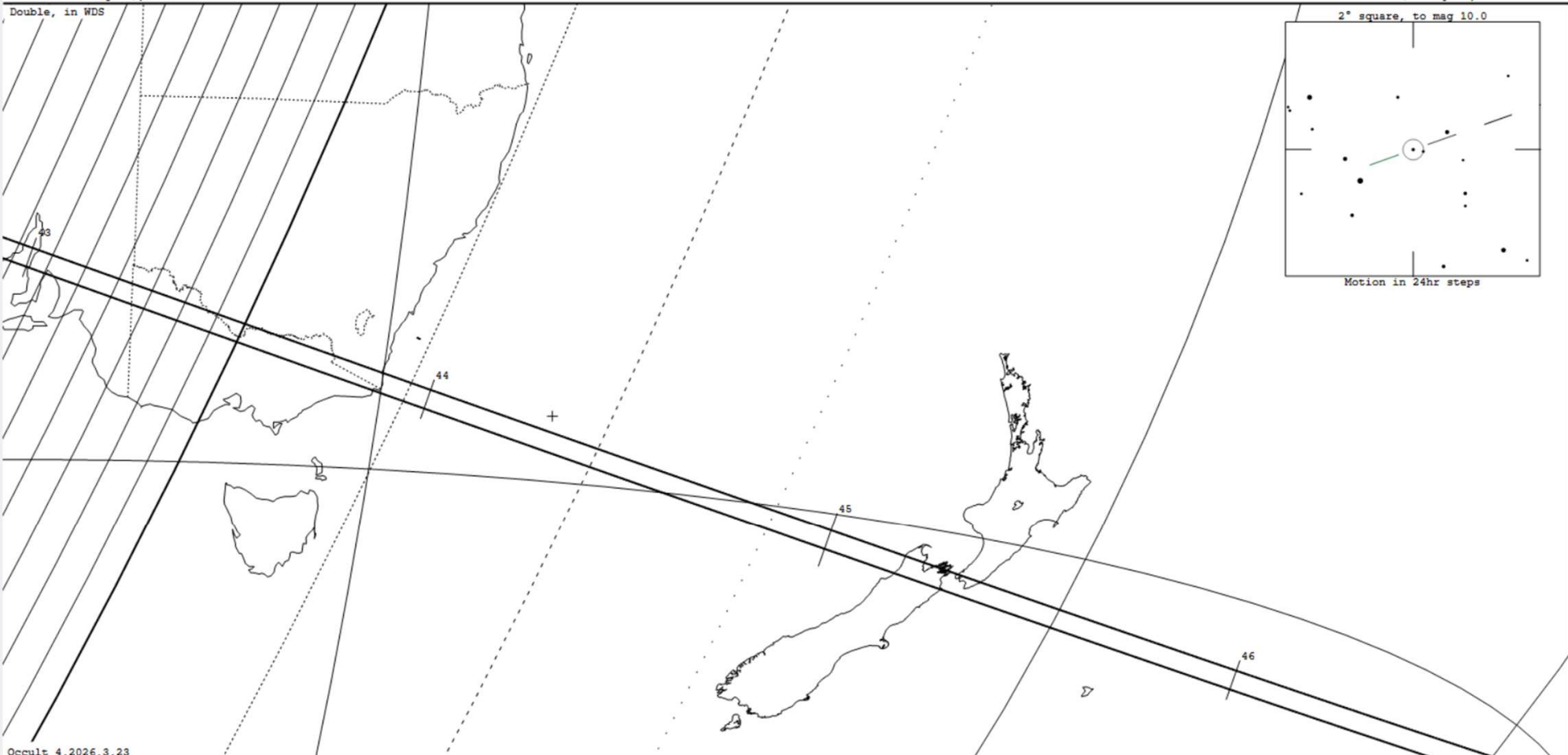


77 Frigga occults TYC 5559-01223-1 on 2026 Aug 8 from 7h 38m to 7h 47m UT

Star: (Dia = 0.1 mas)
Mv 8.9; Mr 8.6; [Mb 9.1]
RA = 13 56 47.1171 (astrometric)
Dec = -13 52 40.228
[of Date: 13 58 13, -14 0 31]
Prediction of 2026 Mar 24.5
Reliable 0.9 (good)

Durations: Max = 2.8 secs
1km = 0.045 secs, 1mas = 0.10 secs
Mag Drop: 5.5 [99%]v, 4.9 [99%]r
Sun : Dist = 76°
Moon: Dist = 137°, illum = 25%
1σ Err: ±(2.2 x 0.5) mas in PA 112°

Asteroid:
Mv = 14.4; Mr = 13.5
Dia = 61 ±3km, 27 mas
Parallax = 2.851"
Hourly dRA = 2.328s
dDec = -11.98"
JPL#119+Ephem, Known errors

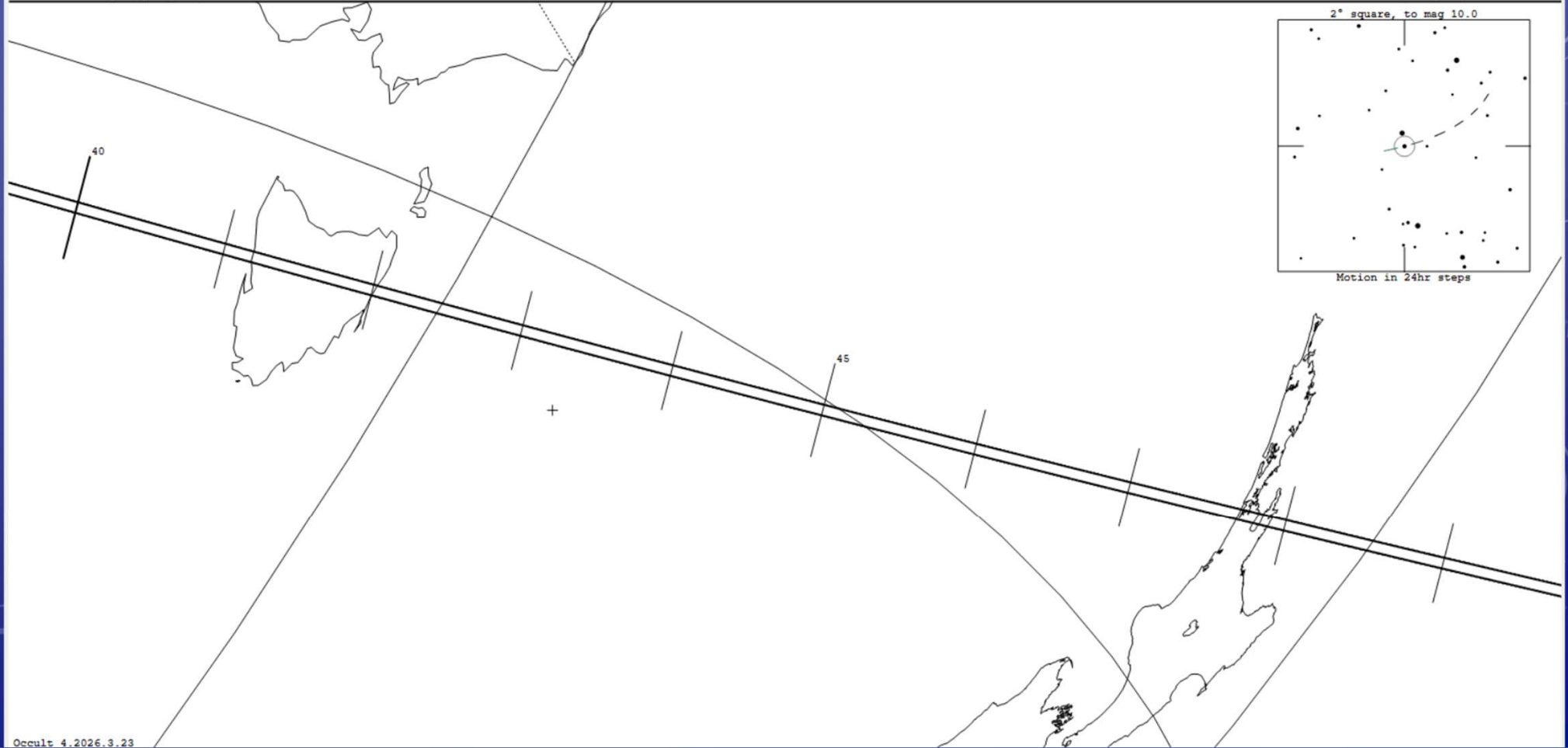


1860 Barbarossa occults HIP 102668 on 2026 Sep 25 from 13h 4m to 13h 50m UT

Star: (Dia = 0.1 mas)
Mv 7.9; Mr 7.7; [Mb 8.0]
RA = 20 48 16.9859 (astrometric)
Dec = -22 50 43.795
[of Date: 20 49 52, -22 44 46]
Prediction of 2026 Mar 24.5
Reliable 1.0 (good), DupSrc,

Durations: Max = 3.8 secs
1km = 0.23 secs, 1mas = 0.22 secs
Mag Drop: 7.2 [100%]v, 6.5 [100%]r
Sun : Dist = 126°, illum = 98%
Moon: Dist = 40°, illum = 98%
1σ Err: ±(2.6 x 0.5) mas in PA 83°

Asteroid: (in DAMIT)
Mv = 15.1; Mr = 14.3
Dia = 17 ±1km, 17 mas
Parallax = 6.451"
Hourly dRA = 1.124s
dDec = -4.05"
JPL#68+Ephem, Known errors



2137 Priscilla occults HIP 92086 on 2026 Oct 10 from 8h 40m to 8h 51m UT

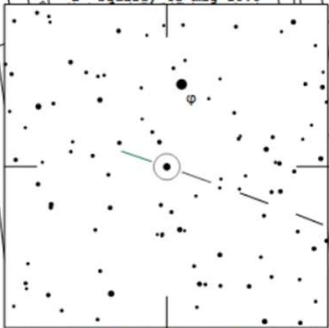
Star: (Dia = 0.7 mas)
Mv 6.4; Mr 5.7; [Mb 6.8]
RA = 18 46 3.9051 (astrometric)
Dec = -27 29 55.660
[of Date: 18 47 45, -27 29 16]
Prediction of 2026 Mar 24.5
Reliable 0.9 (good),

Durations: Max = 1.89 secs
1km = 0.054 secs, 1mas = 0.12 secs
Mag Drop: 10.8 [100%]v, 10.6 [100%]r
Sun : Dist = 83°
Moon: Dist = 87°, illum = 0%
1σ Err: ±(3.4 x 0.4) mas in PA 74°

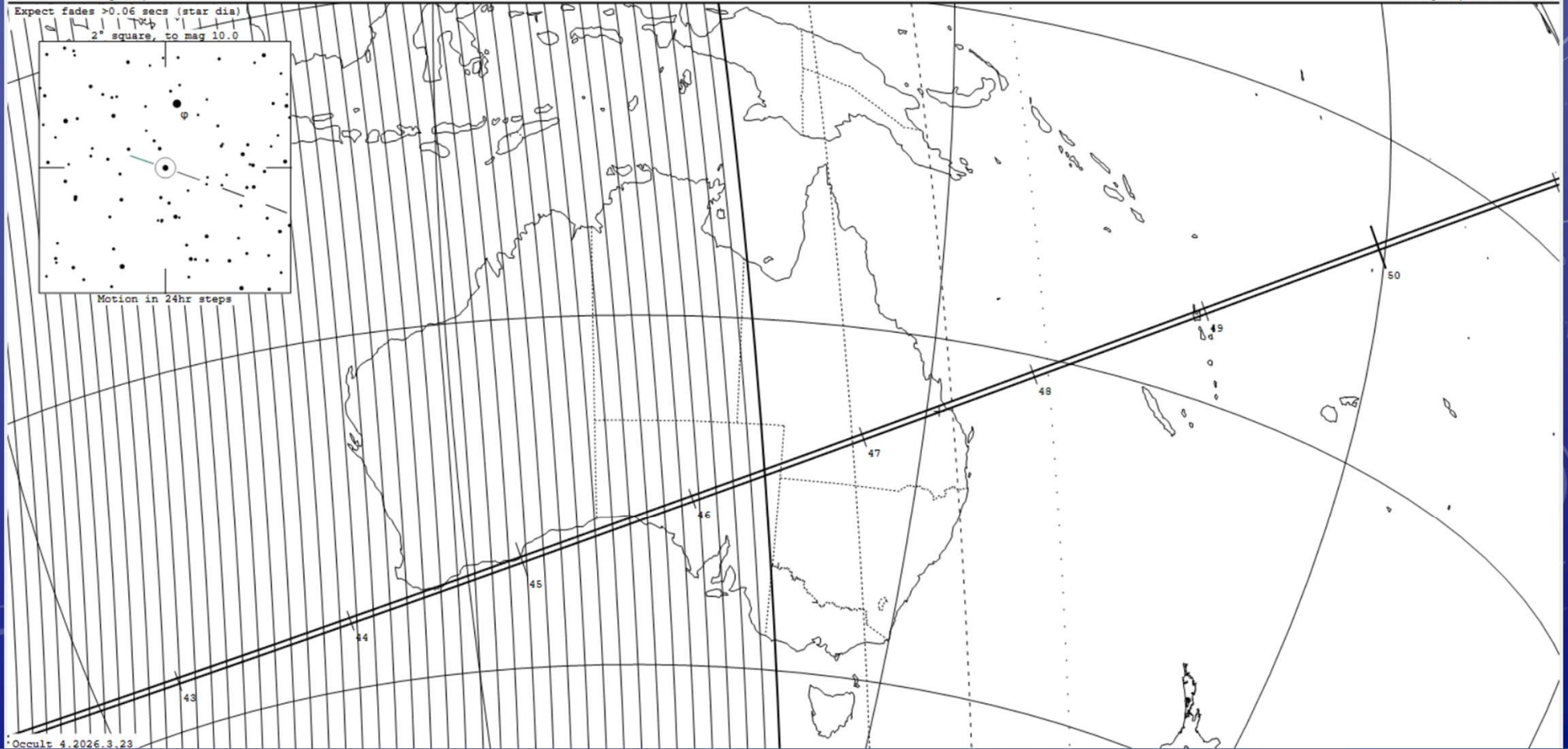
Asteroid:
Mv = 17.2; Mr = 16.4
Dia = 35 ±2km, 15 mas
Parallax = 2.670"
Hourly dRA = 2.076s
dDec = 9.74"
JPL#72+Ephem, Known errors

Expect fades >0.06 secs (star dia)

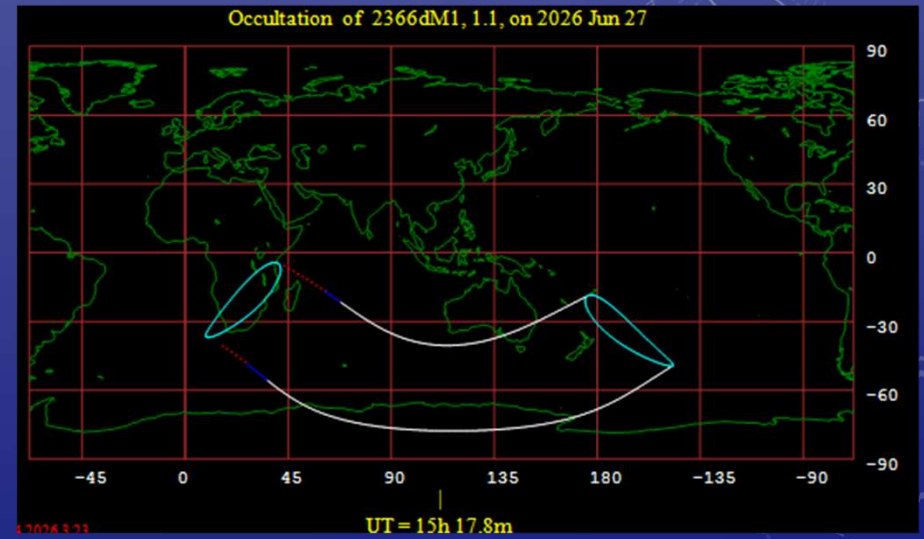
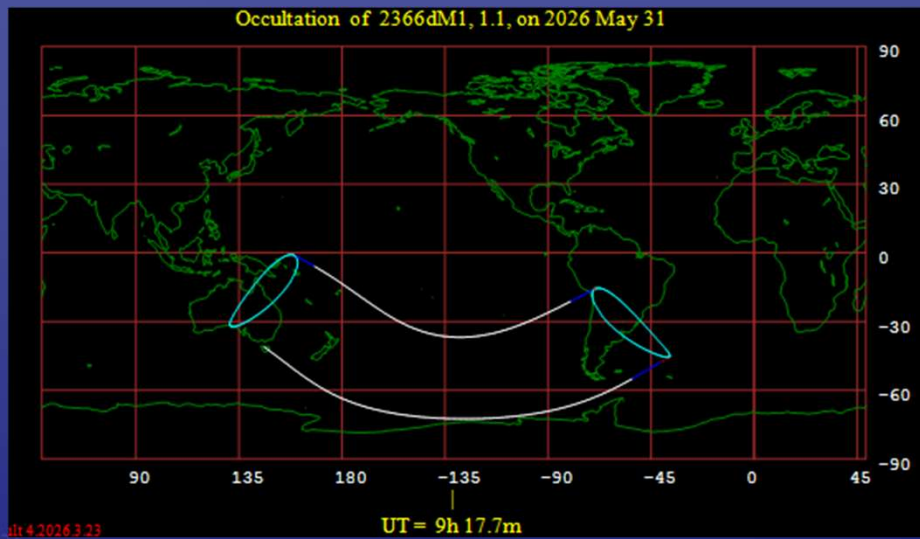
2" square, to mag 10.0



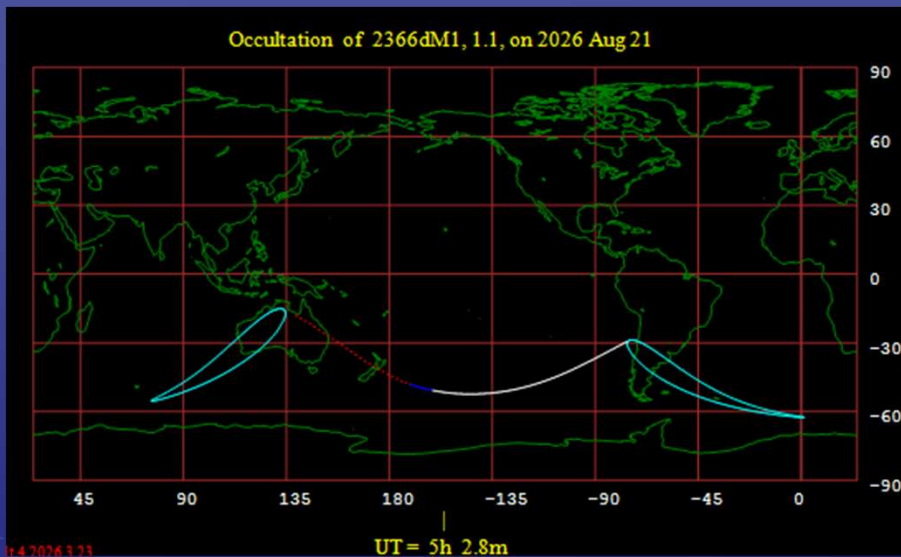
Motion in 24hr steps



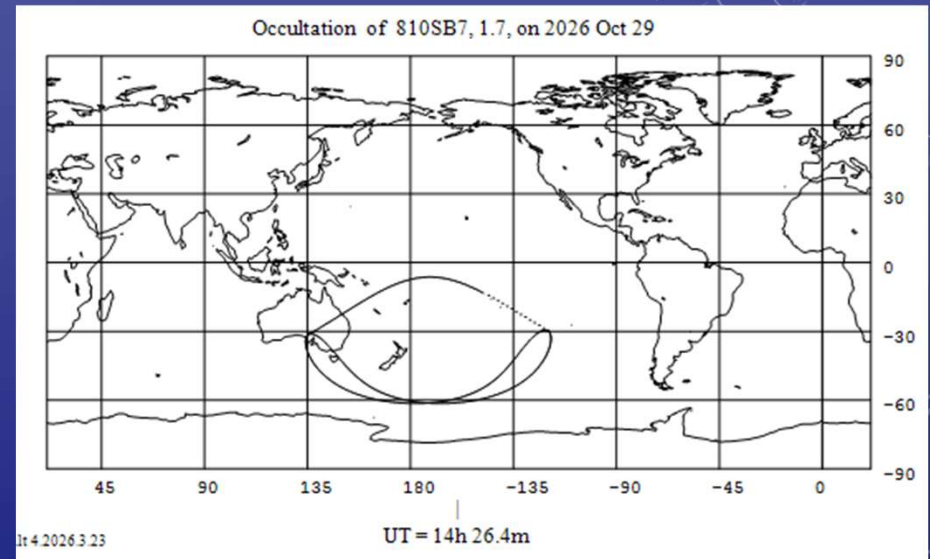
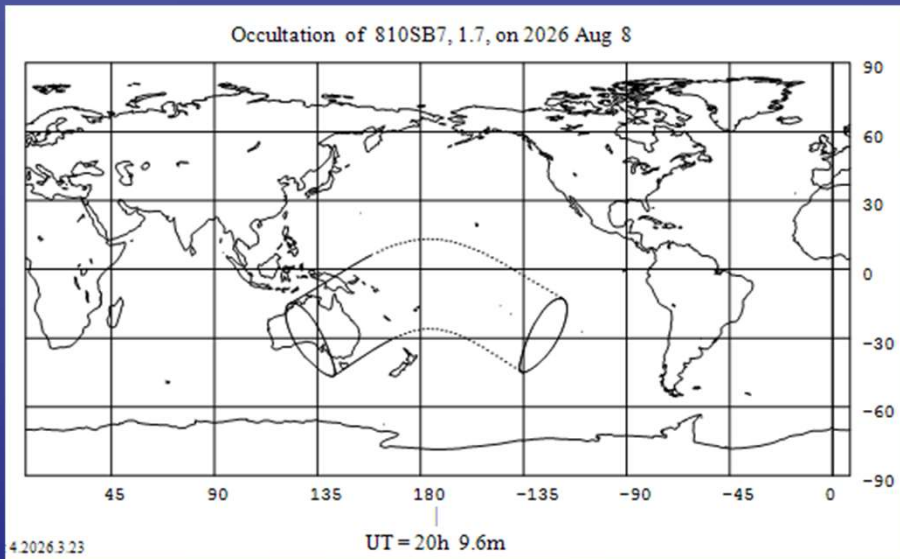
MORE OCCULTATIONS OF ANTARES



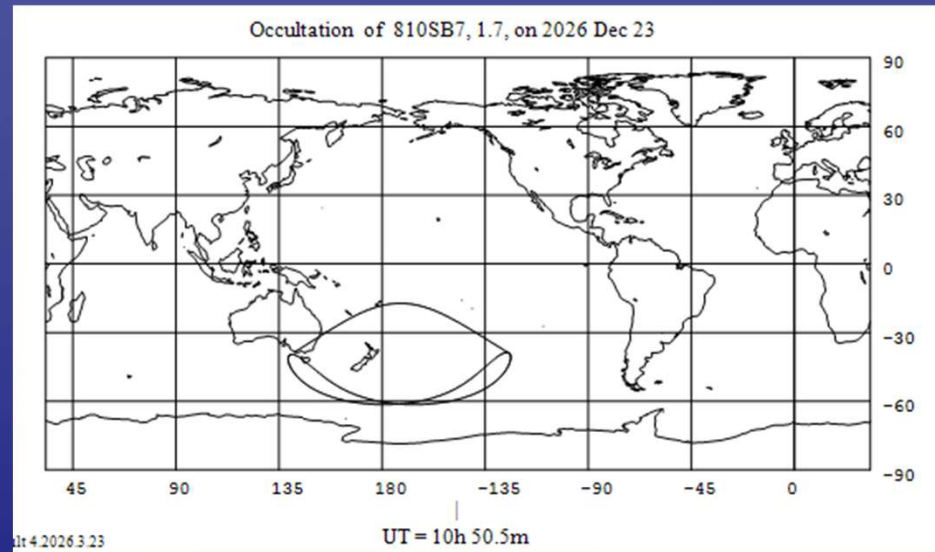
ANOTHER ANTARES OCCULTATION



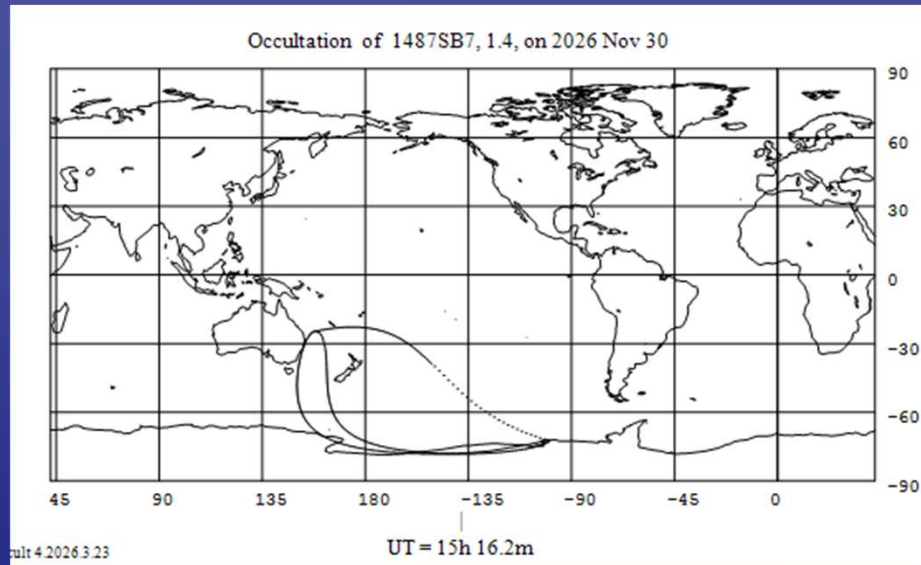
LUNAR OCCULTATIONS OF EL NATH (BETA TAURI)



ANOTHER OCCULTATION OF EL NATH



LUNAR OCCULTATION OF REGULUS



1487SB7, 1.4, on 2026 Nov 30

JOVIAN SATELLITE MUTUAL EVENTS



The screenshot shows a web browser window with the URL <https://www.imcce.fr/recherche/campagnes-observations/phemus/phemu>. The page header includes the IMCCE logo (Observatoire de Paris | PSL) and a navigation menu with links for INSTITUTE, RESEARCH, SERVICES, TEACHING, and PUBLICATIONS. A language selector is set to 'Fr'. The main content area features a sidebar with a 'Research' section containing 'Observation campaigns', 'Presentation', 'PHEMU-PHESAT 2024-2025-2026-2027 Equinox on Jupiter in 2026 and on Saturn in 2025', and 'The observer's guidebook'. The main text area has a large orange heading: 'Observational campaign of the mutual phenomena of Saturn's and Jupiter's satellites', followed by a blue sub-heading 'Presentation' and a paragraph of text.

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INSTITUTE RESEARCH SERVICES TEACHING PUBLICATIONS

Fr

Research

Observation campaigns

Presentation

PHEMU-PHESAT 2024-2025-2026-2027 Equinox on Jupiter in 2026 and on Saturn in 2025

The observer's guidebook

Observational campaign of the mutual phenomena of Saturn's and Jupiter's satellites

Presentation

Mutual phenomena occur when the Earth and the Sun pass through the common plane of the orbits of the satellites: this configuration takes place when the Sun and the Earth pass in the orbital plane of the satellites, a plane close to the equatorial plane of the planet. These phenomena therefore take place around the date of the equinox on the planet.

<https://www.imcce.fr/recherche/campagnes-observations/phemus/phemu>

PREDICTIONS FOR JOVIAN MUTUAL EVENTS

Forms for calculating ephemerides

This form enables you to compute the predictions of the natural satellites phenomena of Jupiter, Saturn and Uranus, their circumstances and visibility for a given geographic place and for a date or a period of time (limited to 365 days) between 2 January 1650 and 1 January 2142.

DOCUMENTATION

Planetary System : Jupiter

Epoch : 2026-03-29 / UTC

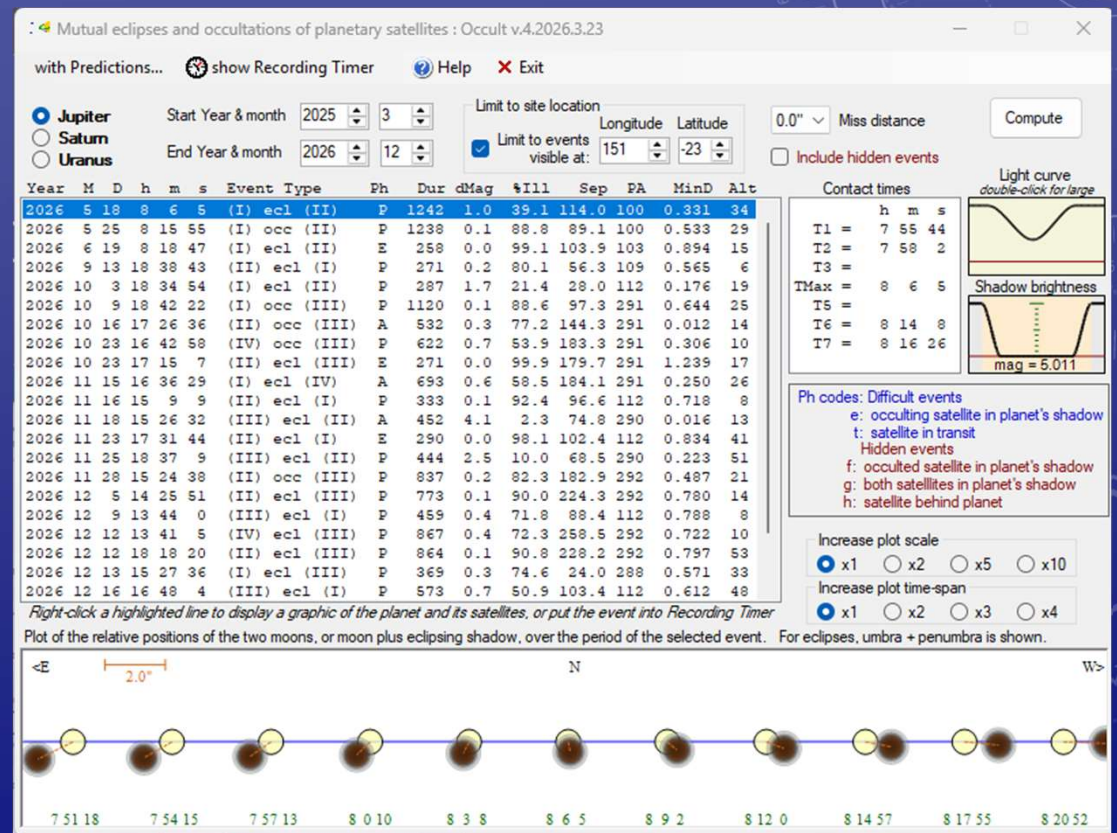
Observation Place : Q70 (Observatory Code)

Address Coordinators Observatory Code

IAU code of observatory

Options : SE-OP/LTE - LIT

COMPUTE



<https://ssp.imcce.fr/forms/satellites-events>

The background is a dark blue gradient. On the left side, there is a large, semi-circular scale with tick marks and numbers ranging from 140 to 260. The numbers are arranged in a curve, with 140 at the top and 260 at the bottom. Several circular patterns are scattered across the background, including solid lines, dashed lines, and arrows indicating clockwise or counter-clockwise rotation. The overall aesthetic is technical and scientific.

QUESTIONS