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Discovering Asteroids, Comets and Meteors 2025

Small Solar System objects for small telescopes

Discovering Asteroids, Comets and Meteors 2025

Small Solar System objects for small telescopes (Version 2024-11)

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Introduction

This book covers the small bodies of the Solar System, namely Asteroids, Comets and Meteors. I personally enjoy sitting in a deck chair spotting the occasional shooting star (and hoping for a fireball), or getting up at a silly hour in the morning to catch an elusive comet. The asteroids frequently drift near picturesque deep sky objects, giving opportunities for unique observations or photographs.

Asteroids have always intrigued stargazers with their peculiar characteristics and elusive nature. Near-Earth asteroids are frequently in the news due to their hazardous orbits, and have served as the plot lines of many science fiction movies and books. This book covers the hundred brightest asteroids in a given year, making them accessible targets for both observation and photography.

This book is divided into four sections.

At the beginning of the book, you'll find some tables. "The Brightest Asteroids" lists the brightest asteroids along with key details such as dates of peak brightness and their distances from Earth. "Notable Events" highlights significant events, such as when an asteroid comes within 1 degree of a planet, deep sky object, or another asteroid. There are many such events in the course of a year, so it is likely that at least some of the nights will be clear! I do not include conjunctions with the Moon as it is of course very close to us, so the parallax induced by the observer's longitude and latitude is too extreme to be captured in a book. For Lunar conjunctions, planetarium software that can adjust for your Earthly location is recommended.

Secondly, the book includes overview charts covering 50-degree sections of the sky, showing both comets and asteroids. These charts help you visualise the broader movements and locations of asteroids within constellations and celestial landmarks.

Comets are included on these charts if they are predicted to reach a magnitude of at least 12.5 and are positioned at least 27° away from the Sun.

In the overview charts, comet paths are highlighted in pink. These paths are annotated with the date, elongation, and magnitude of the comets. The elongation data also indicates whether the comet is leading (L) or trailing (T) the Sun. Comets leading the Sun are visible in the morning sky, while those trailing it are visible in the evening sky.

This is followed by twelve charts showing the location of meteor radiants through the year, with key information listed on the facing page.

Finally, each of the hundred brightest asteroids is presented with its own detailed chart. These charts depict the asteroid's track through the sky. Stars down to magnitude 10 are included to help with star-hopping and locating the asteroids. The asteroid tracks are color-coded. Asteroids brighter than magnitude 9.5 are shown with green tracks. Asteroids with a brightness between magnitude 9.5 and 11.0 are shown in blue, and any fainter asteroids are shown with red tracks.

The position of the asteroid on each day (at 00:00 UTC) are shown with solid dots, and those for zero hours on Saturdays are shown with hollow dots. The night on which the asteroid is brightest is highlighted with a dashed one-degree finder circle surrounding that point.

Structure of the Asteroid Belt

The asteroid belt is a vast region of space between the orbits of Mars and Jupiter containing millions of asteroids of diverse sizes. While the largest asteroid Ceres is nearly 1000 kilometers in diameter and qualifies as a dwarf planet, most asteroids are far smaller. Despite the vast numbers of these objects, they are separated by great distances and rarely approach one another. The total mass of the belt is only around 4% as much as the Moon.

The inner asteroid belt (2.1 to 2.5 AU from the Sun) is composed primarily of S-type (rocky) asteroids. The main belt (2.5 to 3.3 AU) has a mix of S and C-type (carbonaceous) asteroids, with C-types becoming more predominant in the outer parts. The main belt is the densest part of the asteroid belt. Beyond 3.3 AU lies the outer belt, composed of C- and D-type asteroids, with D-types more prevalent in the outer parts of this region.

Asteroids orbiting roughly 5.2 AU from the Sun share Jupiter's orbit and cluster into two groups centered on the stable L4 and L5 Lagrange points. These Trojan asteroids are predominantly D-types. The Trojan asteroids are very numerous and many are very large. The largest Trojan is 624 Hektor with a diameter of roughly 250 kilometers.

In addition to these regions, the asteroid belt is also divided by the Kirkwood Gaps, regions where asteroids are less common due to orbital resonances with Jupiter. These gaps are not visible by charting the current orbits of asteroids. Instead, the Kirkwood gaps can be detected when considering the long-term average orbits of each asteroid.

Asteroids are also grouped into collisional families, the members of which have similar orbits and spectral classes. These families are typically named after their largest member, with the smaller members believed to be fragments of that body.

Asteroid Spectral Classes

Asteroids are not just diverse in their orbits and sizes; they also vary significantly in their compositions. This diversity is categorized into different spectral classes, which are determined based on the asteroid's spectrum—essentially, the light they reflect at different wavelengths. These spectral classes indicate the composition and physical properties of asteroids.

Asteroid spectral classes are determined by analyzing the light reflected off the asteroid's surface. The minerals on an asteroid's surface absorb specific wavelengths. These absorption patterns are unique to different materials, allowing scientists to infer the asteroid's composition.

There are several spectral classification systems, but the most commonly used one is the Tholen classification, which categorizes asteroids into three broad types: C-type (carbonaceous), S-type (silicaceous), and M-type (metallic). In addition, there are subclasses that provide more detailed distinctions. The Tholen classification is based on broad-band spectra (for example, "reddish" or "blueish", asteroids), rather than by narrow absorption lines such as stellar spectra.

A more recent classification system named SMASS (Small Main-Belt Asteroid Spectroscopic Survey) looks at different spectral features, but retains the same high-level classifications as Tholen, so a C-type asteroid in Tholen is usually a C-type asteroid in SMASS.

C-type asteroids are rich in carbon and are the most common type, accounting for about 75% of known asteroids. They are similar to the Sun in composition, minus the hydrogen, helium, and other volatiles. These asteroids are very dark with low albedo, making them difficult to observe. They are primarily found in the outer regions of the asteroid belt. C-type asteroids are believed to be some of the most ancient objects in the solar system. Many C-type asteroids contain ices and hydrated minerals, making them a possible source for propellants for future explorations.

S-type asteroids are made up of silicate materials and nickel-iron. These asteroids are relatively bright with a moderate albedo, and are commonly found in the inner asteroid belt.

M-type asteroids are composed primarily of metallic nickel-iron. They are thought to be fragments of the metallic cores of differentiated asteroids. These asteroids have a high albedo and are relatively bright. M-type asteroids provide valuable information about the metal-rich interiors of planetesimals and the processes that led to their formation. In addition, for proponents of asteroid mining, these asteroids have the potential to be treasure troves of metallic ores as even smaller M-type asteroids have almost unlimited reserves of every metal we might require for the foreseeable future.

In addition to the main classes, there are several subclasses that further refine asteroid categorization. D-types are very dark and reddish, found mainly in the outer asteroid belt and beyond. They may contain organic-rich silicates, carbon, and ice. These asteroids are very common in the Trojan asteroids in Jupiter's orbit. In contrast, E-types have a high albedo and are thought to consist primarily of the mineral enstatite. They are relatively rare.

Astronomical Abbreviations

Constellations are often referred to in this work by three-letter abbreviations. When the constellation name is used in a star name, the constellation's genitive form is used. For example, Aquarius is abbreviated as Aqr, and one of its stars would be 5 Aquarii.

The following list gives the abbreviation and the full and genitive names.

And - Andromeda (Andromedae)

Ant - Antlia (Antliae)

Aps - Apus (Apodis)

Aqr - Aquarius (Aquarii)

Aql - Aquila (Aquilae)

Ara - Ara (Arae)

Ari - Aries (Arietis)

Aur - Auriga (Aurigae)

Boo - Bootes (Bootis)

Cae - Caelum (Caeli)

Cam - Camelopardalis (Camelopardalis)

Cnc - Cancer (Cancri)

CVn - Canes Venatici (Canum Venaticorum)

CMa - Canis Major (Canis Majoris)

CMi - Canis Minor (Canis Minoris)

Cap - Capricornus (Capricorni)

Car - Carina (Carinae)

Cas - Cassiopeia (Cassiopeiae)

Cen - Centaurus (Centauri)

Cep - Cepheus (Cephei)

Cet - Cetus (Ceti)

Cha - Chamaeleon (Chamaeleontis)

Cir - Circinus (Circini)

Col - Columba (Columbae)

Com - Coma Berenices (Comae Berenices)

CrA - Corona Australis (Coronae Australis)

CrB - Corona Borealis (Coronae Borealis)

Crv - Corvus (Corvi)

Crt - Crater (Crateris)

Cru - Crux (Crucis)

Cyg - Cygnus (Cygni)

Del - Delphinus (Delphini)

Dor - Dorado (Doradus)

Dra - Draco (Draconis)

Equ - Equuleus (Equulei)

Eri - Eridanus (Eridani)

For - Fornax (Fornacis)

Gem - Gemini (Geminorum)

Gru - Grus (Gruis)

Her - Hercules (Herculis)

Hor - Horologium (Horologii)

Hya - Hydra (Hydrae)

Hyi - Hydrus (Hydri)

Ind - Indus (Indi)

Lac - Lacerta (Lacertae)

Leo - Leo (Leonis)

LMi - Leo Minor (Leonis Minoris)

Lep - Lepus (Leporis)

Lib - Libra (Librae)

Lup - Lupus (Lupi)

Lyn - Lynx (Lyncis)

Lyr - Lyra (Lyrae)

Men - Mensa Mensae)

Mic - Microscopium (Microscopii)

Mon - Monoceros (Monocerotis)

Mus - Musca (Muscae)

Nor - Norma (Normae)

Oct - Octans (Octantis)

Oph - Ophiuchus (Ophiuchi)

Ori - Orion (Orionis)

Pav - Pavo (Pavonis)

Peg - Pegasus (Pegasi)

Per - Perseus (Persei)	η - eta - eta
Phe - Phoenix (Phoenicis)	θ - tet - theta
Pic - Pictor (Pictoris)	ι - iota - iota
Psc - Pisces (Piscium)	κ - kap - kappa
PsA - Piscis Austrinus (Piscis Austrini)	λ - lam - lamda, lambda
Pup - Puppis (Puppis)	μ - mu. - mu
Pyx - Pyxis (Pyxidis)	ν - nu. - nu
Ret - Reticulum (Reticuli)	ξ - ksi - xi
Sge - Sagitta (Sagittae)	\circ - omi - omicron
Sgr - Sagittarius (Sagittarii)	π - pi. - pi
Sco - Scorpius (Scorpii)	ρ - rho - rho
Scl - Sculptor (Sculptoris)	σ - sig - sigma
Sct - Scutum (Scuti)	τ - tau - tau
Ser - Serpens (Serpentis)	υ - ups - upsilon
Sex - Sextans (Sextantis)	ϕ - phi - phi
Tau - Taurus (Tauri)	χ - khi - chi
Tel - Telescopium (Telescopii)	ψ - psi - psi
Tri - Triangulum (Trianguli)	ω - ome - omega
TrA - Triangulum Austral (Trianguli Australis)	
Tuc - Tucana (Tucanae)	
UMa - Ursa Major (Ursae Majoris)	
UMi - Ursa Minor (Ursae Minoris)	
Vel - Vela (Velorum)	
Vir - Virgo (Virginis)	
Vol - Volans (Volantis)	
Vul - Vulpecula (Vulpeculae)	

Greek letters are used in Bayer designations of stars, such as Alpha Canis Majoris (Sirius). Greek letters also have standardised three-letter abbreviations as follows:

α - alf - alpha

β - bet - beta

γ - gam - gamma

δ - del - delta

ε - eps - epsilon

ζ - zet - zeta

The Brightest Asteroids of 2025

Asteroid	Mag.	Date	AU	Asteroid	Mag.	Date	AU
1) 6 Hebe	7.523	2025-Aug-26	1.02	26) 584 Semiramis	10.182	2025-Aug-27	0.89
2) 1 Ceres	7.585	2025-Oct-03	1.96	27) 532 Herculina	10.186	2025-Aug-05	2.03
3) 15 Eunomia	8.487	2025-Jan-01	1.37	28) 79 Eurynome	10.19	2025-Jan-13	1.20
4) 89 Julia	8.543	2025-Aug-11	1.14	29) 27 Euterpe	10.207	2025-Aug-14	1.55
5) 471 Papagena	8.957	2025-Nov-11	1.26	30) 349 Dembowska	10.295	2025-May-12	2.12
6) 40 Harmonia	9.094	2025-Dec-31	1.29	31) 10 Hygiea	10.319	2025-Dec-22	2.43
7) 44 Nysa	9.119	2025-Dec-31	1.14	32) 419 Aurelia	10.342	2025-May-09	1.05
8) 29 Amphitrite	9.171	2025-Feb-13	1.54	33) 71 Niobe	10.409	2025-Jun-13	1.41
9) 63 Ausonia	9.266	2025-Aug-03	1.12	34) 85 Io	10.413	2025-Oct-17	1.31
10) 7 Iris	9.376	2025-May-31	2.88	35) 39 Laetitia	10.47	2025-Dec-31	2.00
11) 2 Pallas	9.413	2025-Aug-10	2.50	36) 230 Athamantis	10.494	2025-Jul-03	1.38
12) 887 Alinda	9.484	2025-Jan-13	0.08	37) 139 Juewa	10.551	2025-Mar-21	1.32
13) 14 Irene	9.572	2025-Jan-03	1.47	38) 5 Astraea	10.592	2025-Jun-05	1.68
14) 8 Flora	9.597	2025-Mar-12	1.43	39) 20 Massalia	10.596	2025-Dec-31	1.82
15) 9 Metis	9.672	2025-May-09	1.63	40) 80 Sappho	10.601	2025-Dec-15	1.20
16) 16 Psyche	9.683	2025-Dec-08	1.68	41) 185 Eunike	10.609	2025-Aug-31	1.44
17) 12 Victoria	9.843	2025-Nov-05	1.29	42) 13 Egeria	10.619	2025-Jan-01	1.56
18) 344 Desiderata	9.914	2025-May-27	0.87	43) 444 Gyptis	10.695	2025-Sep-23	1.29
19) 433 Eros	9.939	2025-Nov-16	0.40	44) 51 Nemausa	10.7	2025-Jan-15	1.32
20) 30 Urania	9.986	2025-Aug-02	1.28	45) 52 Europa	10.716	2025-Nov-15	1.91
21) 129 Antigone	10.001	2025-Aug-06	1.51	46) 779 Nina	10.766	2025-Sep-30	1.19
22) 28 Bellona	10.02	2025-Feb-01	1.37	47) 61 Danae	10.803	2025-Sep-01	1.49
23) 3 Juno	10.024	2025-May-14	2.37	48) 82 Alkmene	10.818	2025-Dec-31	1.23
24) 68 Leto	10.042	2025-Nov-20	1.53	49) 24 Themis	10.824	2025-Feb-26	1.79
25) 18 Melpomene	10.098	2025-Mar-24	1.78	50) 22 Kalliope	10.855	2025-Sep-15	1.83

Notable Events

2025-Jan-04: At 23:45 UTC, asteroid **44 Nysa** (mag. 11.6) is within 0.638° of planet **Saturn** (mag. 1.06) [Aqr: 23h 06m 33.19s, $-08^\circ 32' 25.1''$; trailing the Sun by 59°]

2025-Jan-05: At 15:30 UTC, asteroid **679 Pax** (mag. 11.9) is within 0.584° of asteroid **887 Alinda** (mag. 10.0) [Ori: 05h 47m 36.85s, $+10^\circ 00' 01.4''$; trailing the Sun by 157°]

At 17:00 UTC, asteroid **82 Alkmene** (mag. 13.9) is within 0.814° of planet **Neptune** (mag. 7.77) [Psc: 23h 49m 41.30s, $-01^\circ 37' 41.8''$; trailing the Sun by 71°]

2025-Jan-07: At 11:30 UTC, asteroid **674 Rachele** (mag. 11.9) is within 0.439° of variable star **R Com** (mag. 14.6—7.1) [Com: 12h 04m 56.91s, $+18^\circ 22' 31.7''$; leading the Sun by 112°]

At 15:00 UTC, asteroid **887 Alinda** (mag. 9.83) is within 0.282° of open cluster **NGC 2169** (mag. 5.9) [Ori: 06h 07m 32.15s, $+14^\circ 08' 22.7''$; trailing the Sun by 162°]

2025-Jan-08: At 13:45 UTC **887 Alinda** (mag. 9.73) is within 0.082 AU of Earth [Ori: 06h 16m 47.64s, $+16^\circ 20' 43.0''$]

2025-Jan-10: At 01:00 UTC, asteroid **364 Isara** (mag. 11.8) is within 0.435° of variable star **U Gem** (mag. 14.9—8.2) [Gem: 07h 55m 55.69s, $+22^\circ 23' 25.4''$; leading the Sun by 172°]

At 21:00 UTC, asteroid **511 Davida** (mag. 11.2) is within 0.050° of lenticular galaxy **NGC 936** (mag. 11.1) [Cet: 02h 27m 46.41s, $-01^\circ 10' 36.3''$; trailing the Sun by 103°]

2025-Jan-13: At 13:45 UTC, asteroid **77 Frigga** (mag. 11.6) is within 0.994° of asteroid **887 Alinda** (mag. 9.50) [Gem: 07h 11m 27.76s, $+26^\circ 20' 33.8''$; trailing the Sun by 171°]

2025-Jan-15: At 00:45 UTC, asteroid **887 Alinda** (mag. 9.61) is within 0.415° of planetary nebula **NGC 2371/2** (mag. 11.5) [Gem: 07h 24m 26.95s, $+29^\circ 48' 52.6''$; trailing the Sun by 170°]

2025-Jan-21: At 04:15 UTC, asteroid **364 Isara** (mag. 11.8) is within 0.304° of variable star **S Gem** (mag. 14.7—8.0) [Gem: 07h 43m 35.11s, $+23^\circ 43' 37.2''$; trailing the Sun by 172°]

2025-Feb-04: At 03:00 UTC, asteroid **19 Fortuna** (mag. 11.9) is within 0.397° of carbon star **V Ari** (mag. 8.6—8.0) [Ari: 02h 14m 28.24s, $+12^\circ 34' 32.9''$; trailing the Sun by 80°]

2025-Feb-05: At 02:00 UTC, asteroid **107 Camilla** (mag. 13.5) is within 0.407° of variable star **R Psc** (mag. 14.8—7.0) [Cet: 01h 31m 16.40s, $+02^\circ 30' 23.2''$; trailing the Sun by 66°]

2025-Feb-11: At 22:30 UTC, asteroid **409 Aspasia** (mag. 11.2) is within 0.143° of elliptical galaxy **Caldwell 53** (mag. 9.1) [Sex: 10h 05m 18.52s, $-07^\circ 34' 32.3''$; leading the Sun by 157°]

2025-Feb-13: At 00:00 UTC, asteroid **165 Loreley** (mag. 13.6) is within 0.221° of globular cluster **Terzan 4** (mag. 16.0) [Sco: 17h 31m 41.41s, $-31^\circ 36' 05.2''$; leading the Sun by 60°]

2025-Feb-17: At 15:45 UTC, asteroid **516 Amherstia** (mag. 12.7) is within 0.178° of globular cluster **NGC 6453** (mag. 10.0) [Sco: 17h 50m 45.88s, $-34^\circ 46' 37.0''$; leading the Sun by 61°]

2025-Feb-18: At 16:15 UTC, asteroid **165 Loreley** (mag. 13.6) is within 0.479° of open cluster **Messier 6** (mag. 4.2) [Sco: 17h 40m 16.29s, $-31^\circ 44' 20.1''$; leading the Sun by 64°]

At 20:45 UTC, asteroid **516 Amherstia** (mag. 12.7) is within 0.020° of open cluster **Messier 7** (mag. 3.3) [Sco: 17h 53m 53.57s, $-34^\circ 50' 12.6''$; leading the Sun by 61°]

2025-Feb-21: At 18:00 UTC, asteroid **139 Juewa** (mag. 11.4) is within 0.290° of carbon star **SS Vir** (mag. 9.6—6.0) [Vir: 12h 25m 31.21s, $+00^\circ 24' 54.6''$; leading the Sun by 147°]

2025-Feb-25: At 00:00 UTC, asteroid **23 Thalia** (mag. 12.9) is within 0.351° of globular cluster **Messier 28** (mag. 6.8) [Sgr: 18h 24m 51.27s, $-25^\circ 12' 31.3''$; leading the Sun by 60°]

At 17:30 UTC, asteroid **346 Hermentaria** (mag. 11.6) is within 0.161° of lenticular galaxy **NGC 3607** (mag. 10.8) [Leo: 11h 16m 33.73s, $+17^\circ 54' 36.2''$; leading the Sun by 166°]

2025-Feb-28: At 20:15 UTC, asteroid **980 Anacostia** (mag. 13.5) is within 0.114° of globular cluster **NGC 6558** (mag. 9.26) [Sgr: 18h

10m 14.95s, -31° 39' 00.3"; leading the Sun by 68°]

2025-Mar-01: At 09:30 UTC, asteroid [230 Athamantis](#) (mag. 12.5) is within 0.354° of variable star VX Sgr (mag. 14.0—6.52) [Sgr: 18h 07m 51.98s, -21° 52' 22.2"; leading the Sun by 68°]

At 19:00 UTC, asteroid [23 Thalia](#) (mag. 12.9) is within 0.185° of globular cluster NGC 6638 (mag. 9.02) [Sgr: 18h 31m 00.06s, -25° 18' 45.4"; leading the Sun by 64°]

2025-Mar-03: At 00:30 UTC, asteroid [23 Thalia](#) (mag. 12.9) is within 0.205° of planetary nebula NGC 6644 (mag. 11.5) [Sgr: 18h 32m 32.14s, -25° 20' 18.4"; leading the Sun by 64°]

At 02:00 UTC, asteroid [980 Anacostia](#) (mag. 13.5) is within 0.214° of globular cluster NGC 6569 (mag. 8.55) [Sgr: 18h 13m 34.65s, -31° 36' 44.1"; leading the Sun by 69°]

At 07:00 UTC, asteroid [18 Melpomene](#) (mag. 10.4) is within 0.321° of barred spiral galaxy NGC 4665 (mag. 10.5) [Vir: 12h 45m 57.21s, +03° 17' 26.4"; leading the Sun by 152°]

2025-Mar-05: At 02:15 UTC, asteroid [115 Thyra](#) (mag. 13.3) is within 0.091° of globular cluster Messier 54 (mag. 7.6) [Sgr: 18h 55m 03.94s, -30° 23' 32.8"; leading the Sun by 62°]

2025-Mar-06: At 12:00 UTC, asteroid [240 Vanadis](#) (mag. 13.2) is within 0.443° of asteroid [472 Roma](#) (mag. 13.0) [Gem: 07h 22m 18.40s, +22° 49' 09.9"; trailing the Sun by 123°]

2025-Mar-09: At 19:00 UTC, asteroid [50 Virginia](#) (mag. 14.9) is within 0.427° of variable star R Sgr (mag. 12.8—6.7) [Sgr: 19h 16m 57.62s, -19° 43' 49.3"; leading the Sun by 61°]

2025-Mar-11: At 08:00 UTC, asteroid [287 Nephthys](#) (mag. 11.2) is within 0.255° of lenticular galaxy NGC 3489 (mag. 11.1) [Leo: 10h 59m 39.74s, +13° 41' 46.7"; trailing the Sun by 168°]

2025-Mar-12: At 15:30 UTC, asteroid [165 Loreley](#) (mag. 13.4) is within 0.308° of globular cluster NGC 6558 (mag. 9.26) [Sgr: 18h 10m 13.41s, -32° 04' 21.0"; leading the Sun by 79°]

2025-Mar-15: At 10:30 UTC, asteroid [165 Loreley](#) (mag. 13.4) is within 0.271° of globular

cluster NGC 6569 (mag. 8.55) [Sgr: 18h 13m 34.87s, -32° 05' 51.6"; leading the Sun by 81°]

2025-Mar-16: At 00:00 UTC, asteroid [129 Antigone](#) (mag. 11.7) is within 0.281° of planetary nebula NGC 6818 (mag. 9.3) [Sgr: 19h 44m 02.35s, -13° 52' 05.5"; leading the Sun by 60°]

2025-Mar-17: At 11:00 UTC, asteroid [36 Atalante](#) (mag. 12.9) is within 0.256° of open cluster NGC 2281 (mag. 5.4) [Aur: 06h 50m 14.19s, +41° 15' 12.1"; trailing the Sun by 102°]

2025-Mar-18: At 00:15 UTC, asteroid [116 Sirona](#) (mag. 12.7) is within 0.525° of asteroid [26 Proserpina](#) (mag. 12.9) [Tau: 05h 44m 21.34s, +26° 11' 35.6"; trailing the Sun by 89°]

2025-Mar-19: At 11:00 UTC, asteroid [71 Niobe](#) (mag. 11.3) is within 0.123° of open cluster IC 4651 (mag. 6.9) [Ara: 17h 24m 19.69s, -50° 03' 31.1"; leading the Sun by 94°]

2025-Mar-25: At 12:30 UTC, asteroid [472 Roma](#) (mag. 13.4) is within 0.435° of planet [Mars](#) (mag. 0.29) [Gem: 07h 32m 30.72s, +24° 14' 46.2"; trailing the Sun by 106°]

2025-Mar-26: At 02:00 UTC, asteroid [230 Athamantis](#) (mag. 12.2) is within 0.467° of globular cluster Palomar 8 (mag. 11.0) [Sgr: 18h 42m 01.35s, -20° 16' 32.5"; leading the Sun by 85°]

2025-Mar-28: At 15:00 UTC, asteroid [679 Pax](#) (mag. 14.0) is within 0.434° of carbon star TU Gem (mag. 8.4—7.5) [Gem: 06h 11m 29.78s, +25° 35' 12.2"; trailing the Sun by 84°]

2025-Mar-29: At 08:00 UTC, asteroid [139 Juewa](#) (mag. 10.8) is within 0.481° of asteroid [48 Doris](#) (mag. 11.6) [Vir: 11h 54m 27.78s, +00° 09' 11.1"; trailing the Sun by 170°]

At 19:00 UTC, asteroid [18 Melpomene](#) (mag. 10.1) is within 0.131° of elliptical galaxy NGC 4365 (mag. 10.5) [Vir: 12h 24m 13.40s, +07° 12' 17.5"; trailing the Sun by 169°]

2025-Mar-31: At 16:45 UTC, asteroid [172 Baucis](#) (mag. 13.3) is within 0.014° of globular cluster Messier 55 (mag. 6.3) [Sgr: 19h 40m 00.35s, -30° 58' 53.8"; leading the Sun by 79°]

2025-Apr-01: At 14:15 UTC, asteroid [165 Loreley](#) (mag. 13.2) is within 0.143° of globular

cluster Messier 69 (mag. 7.6) [Sgr: 18h 31m 25.23s, -32° 12' 24.2"; leading the Sun by 94°]

2025-Apr-05: At 03:00 UTC, asteroid **980 Anacostia** (mag. 13.1) is within 0.167° of globular cluster Messier 54 (mag. 7.6) [Sgr: 18h 55m 13.89s, -30° 38' 54.6"; leading the Sun by 93°]

At 06:45 UTC, asteroid **15 Eunomia** (mag. 10.3) is within 0.087° of open cluster NGC 2129 (mag. 6.7) [Gem: 06h 01m 03.25s, +23° 23' 11.8"; trailing the Sun by 74°]

At 18:15 UTC, planet **Mars** (mag. 0.47) is within 0.081° of variable star T Gem (mag. 15.0—8.0) [Gem: 07h 49m 12.45s, +23° 39' 22.6"; trailing the Sun by 99°]

2025-Apr-06: At 23:30 UTC, asteroid **28 Bellona** (mag. 11.5) is within 0.231° of open cluster Messier 44 (mag. 3.7) [Cnc: 08h 40m 10.58s, +19° 45' 09.2"; trailing the Sun by 110°]

2025-Apr-07: At 12:45 UTC, asteroid **116 Sirona** (mag. 12.8) is within 0.148° of carbon star TU Gem (mag. 8.4—7.5) [Gem: 06h 10m 55.41s, +26° 08' 55.5"; trailing the Sun by 74°]

2025-Apr-08: At 19:15 UTC, asteroid **92 Undina** (mag. 12.2) is within 0.108° of barred spiral galaxy Caldwell 40 (mag. 10.9) [Leo: 11h 20m 00.99s, +17° 55' 34.3"; trailing the Sun by 142°]

2025-Apr-11: At 00:45 UTC, asteroid **8 Flora** (mag. 10.2) is within 0.002° of barred spiral galaxy NGC 3628 (mag. 10.2) [Leo: 11h 20m 18.02s, +13° 35' 07.6"; trailing the Sun by 143°]

At 22:45 UTC, asteroid **26 Proserpina** (mag. 13.1) is within 0.491° of carbon star TU Gem (mag. 8.4—7.5) [Gem: 06h 11m 00.20s, +26° 29' 29.1"; trailing the Sun by 70°]

2025-Apr-15: At 11:30 UTC, asteroid **92 Undina** (mag. 12.3) is within 0.025° of lenticular galaxy NGC 3607 (mag. 10.8) [Leo: 11h 16m 53.57s, +18° 01' 26.8"; trailing the Sun by 136°]

2025-Apr-17: At 18:45 UTC, asteroid **240 Vanadis** (mag. 14.0) is within 0.201° of variable star U Gem (mag. 14.9—8.2) [Gem: 07h 54m 56.46s, +21° 48' 10.5"; trailing the Sun by 88°]

2025-Apr-18: At 06:30 UTC, asteroid **165 Loreley** (mag. 13.0) is within 0.012° of globular cluster Messier 70 (mag. 7.9) [Sgr: 18h 43m 12.24s, -32° 17' 14.0"; leading the Sun by 108°]

2025-Apr-23: At 00:30 UTC, asteroid **115 Thyra** (mag. 12.8) is within 0.462° of variable star RR Sgr (mag. 14.0—5.4) [Sgr: 19h 55m 35.07s, -28° 44' 04.2"; leading the Sun by 97°]

2025-Apr-25: At 20:30 UTC, asteroid **28 Bellona** (mag. 11.9) is within 0.236° of carbon star T Cnc (mag. 10.6—7.8) [Cnc: 08h 56m 34.94s, +19° 33' 55.8"; trailing the Sun by 95°]

2025-Apr-27: At 05:00 UTC, asteroid **77 Frigga** (mag. 13.7) is within 0.408° of variable star S Gem (mag. 14.7—8.0) [Gem: 07h 42m 39.56s, +23° 03' 03.1"; trailing the Sun by 76°]

2025-May-01: At 16:45 UTC, asteroid **247 Eukrata** (mag. 13.2) is within 0.262° of globular cluster Caldwell 25 (mag. 10.4) [Lyn: 07h 38m 47.85s, +39° 06' 28.3"; trailing the Sun by 69°]

2025-May-05: At 06:00 UTC, planet **Mars** (mag. 0.93) is within 0.347° of open cluster Messier 44 (mag. 3.7) [Cnc: 08h 40m 32.39s, +20° 18' 56.3"; trailing the Sun by 82°]

2025-May-06: At 07:45 UTC, asteroid **77 Frigga** (mag. 13.8) is within 0.375° of variable star U Gem (mag. 14.9—8.2) [Gem: 07h 55m 28.08s, +22° 21' 57.7"; trailing the Sun by 70°]

2025-May-13: At 13:15 UTC, asteroid **27 Euterpe** (mag. 12.2) is within 0.656° of asteroid **64 Angelina** (mag. 13.1) [Cap: 21h 42m 38.14s, -14° 32' 23.1"; leading the Sun by 89°]

At 20:45 UTC, asteroid **101 Helena** (mag. 11.8) is within 0.495° of globular cluster NGC 5824 (mag. 9.09) [Lup: 15h 03m 35.57s, -33° 33' 27.7"; trailing the Sun by 164°]

2025-May-17: At 13:45 UTC, asteroid **675 Ludmilla** (mag. 13.5) is within 0.172° of variable star R Cnc (mag. 11.8—6.07) [Cnc: 08h 16m 25.59s, +11° 33' 25.2"; trailing the Sun by 67°]

2025-May-19: At 06:45 UTC, asteroid **124 Alkeste** (mag. 11.6) is within 0.041° of open cluster Messier 23 (mag. 6.9) [Sgr: 17h 56m 50.32s, -18° 58' 33.2"; leading the Sun by 148°]

2025-May-21: At 08:30 UTC, asteroid **240 Vanadis** (mag. 14.5) is within 0.496° of open cluster Messier 44 (mag. 3.7) [Cnc: 08h 39m 34.47s, +19° 30' 09.8"; trailing the Sun by 67°]

2025-May-22: At 23:15 UTC, asteroid **23 Thalia** (mag. 12.1) is within 0.032° of asteroid **980**

Anacostia (mag. 12.2) [Sgr: 19h 16m 22.30s, -28° 32' 24.9"; leading the Sun by 134°]

2025-May-23: At 21:15 UTC, asteroid **674 Rachele** (mag. 12.6) is within 0.046° of barred spiral galaxy Caldwell 40 (mag. 10.9) [Leo: 11h 19m 56.31s, +18° 00' 25.5"; trailing the Sun by 100°]

2025-May-24: At 11:45 UTC, asteroid **240 Vanadis** (mag. 14.5) is within 0.194° of variable star S Cnc (mag. 10.2—8.29) [Cnc: 08h 44m 08.95s, +19° 13' 18.4"; trailing the Sun by 65°]

2025-May-26: At 21:30 UTC, asteroid **51 Nemausa** (mag. 12.6) is within 0.013° of asteroid **79 Eryname** (mag. 12.8) [Cnc: 08h 44m 00.44s, +14° 35' 05.1"; trailing the Sun by 64°]

2025-May-28: At 10:15 UTC, asteroid **409 Aspasia** (mag. 12.4) is within 0.057° of globular cluster Palomar 3 (mag. 14.2) [Sex: 10h 05m 32.26s, +00° 07' 45.4"; trailing the Sun by 86°]

2025-May-31: At 15:30 UTC, asteroid **532 Herculina** (mag. 11.0) is within 0.713° of asteroid **89 Julia** (mag. 10.4) [Cap: 21h 41m 49.97s, -19° 13' 31.6"; leading the Sun by 108°]

2025-Jun-08: At 23:00 UTC, asteroid **29 Amphitrite** (mag. 11.2) is within 0.292° of irregular galaxy Leo I (mag. 11.1) [Leo: 10h 07m 59.85s, +12° 02' 06.2"; trailing the Sun by 71°]

2025-Jun-09: At 09:45 UTC, asteroid **141 Lumen** (mag. 12.6) is within 0.915° of asteroid **532 Herculina** (mag. 10.9) [Cap: 21h 40m 44.70s, -19° 36' 27.8"; leading the Sun by 117°]

2025-Jun-13: At 11:45 UTC, asteroid **179 Klytaemnestra** (mag. 13.4) is within 0.027° of asteroid **444 Gyptis** (mag. 12.6) [Psc: 23h 28m 13.35s, +05° 29' 22.6"; leading the Sun by 87°]

At 13:45 UTC, asteroid **344 Desiderata** (mag. 10.1) is within 0.214° of globular cluster NGC 5986 (mag. 7.52) [Lup: 15h 45m 25.54s, -37° 36' 38.5"; trailing the Sun by 153°]

2025-Jun-15: At 05:15 UTC, asteroid **287 Nephthys** (mag. 12.9) is within 0.116° of spiral galaxy Messier 65 (mag. 9.3) [Leo: 11h 18m 41.66s, +12° 58' 40.0"; trailing the Sun by 81°]

2025-Jun-16: At 06:30 UTC, asteroid **287 Nephthys** (mag. 13.0) is within 0.159° of spiral

galaxy Messier 66 (mag. 8.9) [Leo: 11h 19m 55.82s, +12° 50' 18.6"; trailing the Sun by 80°]

2025-Jun-17: At 13:15 UTC, planet **Mars** (mag. 1.33) is within 0.413° of irregular galaxy Leo I (mag. 11.1) [Leo: 10h 09m 08.86s, +12° 40' 57.4"; trailing the Sun by 63°]

2025-Jun-21: At 02:30 UTC, asteroid **23 Thalia** (mag. 11.6) is within 0.219° of globular cluster Messier 54 (mag. 7.6) [Sgr: 18h 55m 24.20s, -30° 41' 34.1"; leading the Sun by 165°]

At 19:45 UTC, asteroid **61 Danae** (mag. 12.4) is within 0.351° of asteroid **747 Winchester** (mag. 12.7) [Aqr: 23h 07m 37.11s, -11° 06' 43.1"; leading the Sun by 106°]

2025-Jun-28: At 13:15 UTC, asteroid **124 Alkeste** (mag. 11.2) is within 0.422° of globular cluster NGC 6356 (mag. 8.25) [Oph: 17h 23m 31.17s, -18° 14' 05.9"; trailing the Sun by 163°]

2025-Jun-30: At 10:15 UTC, asteroid **346 Hermentaria** (mag. 13.3) is within 0.127° of spiral galaxy Messier 65 (mag. 9.3) [Leo: 11h 19m 09.80s, +13° 11' 38.7"; trailing the Sun by 67°]

At 14:15 UTC, asteroid **346 Hermentaria** (mag. 13.3) is within 0.475° of barred spiral galaxy NGC 3628 (mag. 10.2) [Leo: 11h 19m 19.50s, +13° 10' 17.2"; trailing the Sun by 67°]

2025-Jul-01: At 02:00 UTC, asteroid **415 Palatia** (mag. 14.2) is within 0.175° of variable star R Psc (mag. 14.8—7.0) [Psc: 01h 30m 48.04s, +02° 42' 40.0"; leading the Sun by 77°]

At 14:45 UTC, asteroid **346 Hermentaria** (mag. 13.3) is within 0.057° of spiral galaxy Messier 66 (mag. 8.9) [Leo: 11h 20m 19.18s, +13° 01' 56.6"; trailing the Sun by 66°]

2025-Jul-02: At 07:00 UTC, asteroid **134 Sophrosyne** (mag. 13.7) is within 0.523° of asteroid **626 Notburga** (mag. 13.3) [Psc: 00h 49m 54.28s, +06° 18' 10.7"; leading the Sun by 86°]

2025-Jul-03: At 11:15 UTC, asteroid **104 Klymene** (mag. 14.2) is within 0.174° of carbon star V Ari (mag. 8.6—8.0) [Ari: 02h 14m 45.15s, +12° 21' 49.1"; leading the Sun by 65°]

2025-Jul-04: At 02:30 UTC, asteroid **124 Alkeste** (mag. 11.4) is within 0.297° of globular

cluster Messier 9 (mag. 7.7) [Oph: 17h 19m 11.98s, -18° 13' 09.8"; trailing the Sun by 157°]

2025-Jul-05: At 09:15 UTC, asteroid [779 Nina](#) (mag. 11.9) is within 0.043° of barred spiral galaxy Caldwell 43 (mag. 10.5) [Peg: 00h 03m 26.15s, +16° 07' 18.2"; leading the Sun by 95°]

2025-Jul-06: At 09:30 UTC, planet [Neptune](#) (mag. 7.75) is within 0.973° of planet [Saturn](#) (mag. 0.93) [Psc: 00h 08m 46.81s, -00° 29' 48.7"; leading the Sun by 102°]

2025-Jul-08: At 21:15 UTC, asteroid [532 Herculina](#) (mag. 10.5) is within 0.038° of globular cluster Messier 30 (mag. 7.2) [Cap: 21h 40m 31.96s, -23° 12' 23.9"; leading the Sun by 145°]

2025-Jul-09: At 21:15 UTC, asteroid [12 Victoria](#) (mag. 11.5) is within 0.074° of barred spiral galaxy NGC 772 (mag. 11.0) [Ari: 01h 59m 25.02s, +18° 55' 50.3"; leading the Sun by 73°]

2025-Jul-15: At 09:45 UTC, asteroid [313 Chaldaea](#) (mag. 13.9) is within 0.066° of barred spiral galaxy NGC 4665 (mag. 10.5) [Vir: 12h 45m 12.02s, +03° 06' 42.8"; trailing the Sun by 76°]

2025-Jul-17: At 16:30 UTC, asteroid [130 Elektra](#) (mag. 12.4) is within 0.347° of variable star o Cet (mag. 10.1—2.0) [Cet: 02h 19m 08.88s, -03° 19' 17.6"; leading the Sun by 83°]

2025-Jul-21: At 12:00 UTC, asteroid [471 Papagena](#) (mag. 10.7) is within 0.197° of spiral galaxy Messier 77 (mag. 8.9) [Cet: 02h 42m 33.00s, +00° 13' 39.7"; leading the Sun by 80°]

2025-Jul-22: At 00:45 UTC, asteroid [654 Zelinda](#) (mag. 13.6) is within 0.110° of spiral galaxy Messier 33 (mag. 5.7) [Tri: 01h 34m 15.25s, +30° 34' 10.7"; leading the Sun by 86°]

At 08:45 UTC, asteroid [980 Anacostia](#) (mag. 11.4) is within 0.400° of planetary nebula NGC 6629 (mag. 11.5) [Sgr: 18h 24m 51.37s, -23° 33' 03.0"; trailing the Sun by 156°]

At 19:00 UTC, asteroid [68 Leto](#) (mag. 11.9) is within 0.437° of variable star U Ari (mag. 15.2—7.2) [Ari: 03h 10m 26.52s, +15° 12' 45.5"; leading the Sun by 70°]

At 23:45 UTC, asteroid [287 Nephthys](#) (mag. 13.2) is within 0.435° of asteroid [674 Rachele](#)

(mag. 13.2) [Vir: 12h 09m 40.55s, +07° 10' 29.2"; trailing the Sun by 59°]

2025-Jul-27: At 03:00 UTC, asteroid [84 Klio](#) (mag. 12.7) is within 0.126° of spiral galaxy Messier 74 (mag. 9.4) [Psc: 01h 36m 22.25s, +15° 52' 54.1"; leading the Sun by 95°]

2025-Aug-07: At 06:30 UTC, asteroid [85 Io](#) (mag. 12.0) is within 0.345° of spiral galaxy Messier 74 (mag. 9.4) [Psc: 01h 36m 30.83s, +16° 07' 34.6"; leading the Sun by 106°]

2025-Aug-08: At 03:00 UTC, asteroid [23 Thalia](#) (mag. 12.2) is within 0.218° of globular cluster NGC 6569 (mag. 8.55) [Sgr: 18h 13m 33.87s, -32° 02' 40.6"; trailing the Sun by 136°]

2025-Aug-09: At 09:15 UTC, asteroid [25 Phocaea](#) (mag. 12.6) is within 0.091° of planet [Uranus](#) (mag. 5.75) [Tau: 03h 54m 39.42s, +20° 00' 58.0"; leading the Sun by 75°]

2025-Aug-12: At 03:45 UTC, asteroid [451 Patientia](#) (mag. 12.8) is within 0.191° of globular cluster NGC 5634 (mag. 9.47) [Vir: 14h 30m 04.02s, -05° 49' 16.3"; trailing the Sun by 77°]

At 07:00 UTC, asteroid [185 Eunike](#) (mag. 11.1) is within 0.846° of asteroid [61 Danae](#) (mag. 11.3) [Aqr: 22h 55m 12.55s, -06° 34' 17.1"; leading the Sun by 156°]

2025-Aug-13: At 05:30 UTC, asteroid [516 Amherstia](#) (mag. 11.6) is within 0.174° of globular cluster Messier 55 (mag. 6.3) [Sgr: 19h 40m 31.00s, -30° 49' 55.0"; trailing the Sun by 149°]

2025-Aug-14: At 06:15 UTC, asteroid [245 Vera](#) (mag. 12.8) is within 0.478° of variable star U Ari (mag. 15.2—7.2) [Ari: 03h 11m 36.80s, +14° 20' 29.9"; leading the Sun by 91°]

2025-Aug-16: At 08:45 UTC, asteroid [32 Pomona](#) (mag. 13.3) is within 0.486° of asteroid [80 Sappho](#) (mag. 12.2) [Tau: 04h 43m 25.14s, +21° 13' 07.2"; leading the Sun by 71°]

2025-Aug-23: At 18:00 UTC, asteroid [16 Psyche](#) (mag. 11.3) is within 0.222° of open cluster NGC 1647 (mag. 6.4) [Tau: 04h 45m 56.31s, +19° 17' 20.0"; leading the Sun by 77°]

2025-Aug-26: At 00:30 UTC, asteroid [10 Hygiea](#) (mag. 12.0) is within 0.083° of asteroid [82 Alkmene](#) (mag. 13.2) [Tau: 05h 52m 43.13s, +25° 11' 14.2"; leading the Sun by 64°]

2025-Aug-29: At 17:15 UTC, asteroid [654 Zelinda](#) (mag. 12.9) is within 0.330° of open cluster Caldwell 28 (mag. 5.7) [And: 01h 59m 25.30s, $+37^\circ 36' 13.2''$; leading the Sun by 112°] At 18:45 UTC, asteroid [124 Alkeste](#) (mag. 12.5) is within 0.072° of globular cluster NGC 6342 (mag. 9.66) [Oph: 17h 21m 13.63s, $-19^\circ 30' 57.8''$; trailing the Sun by 104°]

2025-Aug-31: At 21:45 UTC, asteroid [23 Thalia](#) (mag. 12.6) is within 0.043° of globular cluster NGC 6558 (mag. 9.26) [Sgr: 18h 10m 11.01s, $-31^\circ 43' 31.3''$; trailing the Sun by 113°]

2025-Sep-01: At 16:45 UTC, asteroid [196 Philomela](#) (mag. 12.6) is within 0.213° of asteroid [80 Sappho](#) (mag. 12.1) [Tau: 05h 14m 20.37s, $+21^\circ 35' 52.6''$; leading the Sun by 79°]

2025-Sep-03: At 00:15 UTC, asteroid [980 Anacostia](#) (mag. 12.2) is within 0.386° of planetary nebula NGC 6567 (mag. 11.5) [Sgr: 18h 14m 43.60s, $-19^\circ 23' 04.4''$; trailing the Sun by 113°]

2025-Sep-07: At 01:30 UTC, asteroid [2 Pallas](#) (mag. 9.60) is within 0.043° of variable star R Del (mag. 13.8—7.6) [Del: 20h 15m 04.77s, $+09^\circ 04' 19.2''$; trailing the Sun by 135°]

2025-Sep-08: At 22:00 UTC, asteroid [40 Harmonia](#) (mag. 11.2) is within 0.043° of asteroid [42 Isis](#) (mag. 12.8) [Gem: 06h 15m 38.40s, $+21^\circ 34' 34.3''$; leading the Sun by 72°]

2025-Sep-09: At 04:00 UTC, asteroid [980 Anacostia](#) (mag. 12.3) is within 0.471° of star cloud Messier 24 (mag. 4.6) [Sgr: 18h 17m 49.98s, $-18^\circ 54' 58.4''$; trailing the Sun by 107°]

2025-Sep-11: At 18:30 UTC, asteroid [111 Ate](#) (mag. 11.9) is within 0.251° of asteroid [444 Gyptis](#) (mag. 10.9) [Psc: 23h 57m 38.39s, $+06^\circ 24' 04.8''$; leading the Sun by 165°]

2025-Sep-14: At 21:45 UTC, asteroid [375 Ursula](#) (mag. 12.2) is within 0.031° of globular cluster Messier 55 (mag. 6.3) [Sgr: 19h 40m 08.74s, $-30^\circ 58' 21.5''$; trailing the Sun by 119°]

2025-Sep-15: At 06:30 UTC, asteroid [165 Loreley](#) (mag. 13.1) is within 0.120° of globular cluster Terzan 10 (mag. 14.9) [Sgr: 18h 03m 25.36s, $-25^\circ 57' 31.8''$; trailing the Sun by 98°]

2025-Sep-21: At 21:30 UTC, asteroid [165 Loreley](#) (mag. 13.2) is within 0.355° of globular

cluster NGC 6553 (mag. 8.06) [Sgr: 18h 08m 49.39s, $-25^\circ 34' 05.7''$; trailing the Sun by 93°] At 23:00 UTC, asteroid [80 Sappho](#) (mag. 12.0) is within 0.460° of carbon star Y Tau (mag. 9.5—7.1) [Tau: 05h 45m 14.47s, $+20^\circ 15' 09.3''$; leading the Sun by 92°]

2025-Sep-25: At 05:15 UTC, asteroid [124 Alkeste](#) (mag. 12.9) is within 0.010° of globular cluster NGC 6440 (mag. 9.2) [Sgr: 17h 48m 51.63s, $-20^\circ 22' 14.3''$; trailing the Sun by 85°]

At 09:00 UTC, asteroid [124 Alkeste](#) (mag. 12.9) is within 0.359° of planetary nebula NGC 6445 (mag. 12.0) [Sgr: 17h 49m 03.57s, $-20^\circ 22' 28.5''$; trailing the Sun by 85°]

2025-Sep-27: At 20:00 UTC, asteroid [444 Gyptis](#) (mag. 10.7) is within 0.073° of variable star TX Psc (mag. 5.2—4.79) [Psc: 23h 46m 10.43s, $+03^\circ 32' 07.9''$; trailing the Sun by 172°]

2025-Sep-28: At 21:45 UTC, asteroid [259 Aletheia](#) (mag. 13.3) is within 0.023° of globular cluster NGC 6284 (mag. 8.83) [Oph: 17h 04m 27.12s, $-24^\circ 47' 17.4''$; trailing the Sun by 71°]

2025-Sep-30: At 05:00 UTC, asteroid [196 Philomela](#) (mag. 12.3) is within 0.384° of supernova remnant Messier 1 (mag. 8.4) [Tau: 05h 34m 05.40s, $+22^\circ 23' 19.6''$; leading the Sun by 102°]

2025-Oct-01: At 06:45 UTC, asteroid [221 Eos](#) (mag. 12.8) is within 0.198° of variable star R Sgr (mag. 12.8—6.7) [Sgr: 19h 16m 30.88s, $-19^\circ 30' 05.7''$; trailing the Sun by 100°]

2025-Oct-04: At 05:45 UTC, asteroid [39 Laetitia](#) (mag. 11.5) is within 0.140° of variable star R Cnc (mag. 11.8—6.07) [Cnc: 08h 16m 42.46s, $+11^\circ 51' 44.0''$; leading the Sun by 67°]

2025-Oct-05: At 20:15 UTC, asteroid [5 Astraea](#) (mag. 12.7) is within 0.210° of globular cluster NGC 6342 (mag. 9.66) [Oph: 17h 21m 01.54s, $-19^\circ 47' 43.1''$; trailing the Sun by 68°]

At 20:30 UTC, asteroid [172 Baucis](#) (mag. 12.5) is within 0.241° of globular cluster Messier 75 (mag. 8.5) [Sgr: 20h 05m 31.60s, $-21^\circ 42' 54.1''$; trailing the Sun by 106°]

2025-Oct-07: At 09:45 UTC, asteroid [165 Loreley](#) (mag. 13.3) is within 0.200° of globular cluster Messier 28 (mag. 6.8) [Sgr: 18h 24m 18.41s, $-24^\circ 40' 16.4''$; trailing the Sun by 81°]

- 2025-Oct-09:** At 09:00 UTC, asteroid [419 Aurelia](#) (mag. 12.9) is within 0.474° of globular cluster NGC 6342 (mag. 9.66) [Oph: 17h 21m 02.65s, $-20^\circ 03' 38.2''$; trailing the Sun by 64°]
- 2025-Oct-10:** At 13:45 UTC, asteroid [71 Niobe](#) (mag. 12.0) is within 0.146° of globular cluster NGC 6558 (mag. 9.26) [Sgr: 18h 10m 32.77s, $-31^\circ 53' 57.0''$; trailing the Sun by 75°]
- 2025-Oct-12:** At 07:45 UTC, asteroid [71 Niobe](#) (mag. 12.1) is within 0.181° of globular cluster NGC 6569 (mag. 8.55) [Sgr: 18h 13m 18.71s, $-31^\circ 39' 30.3''$; trailing the Sun by 74°]
- 2025-Oct-13:** At 02:45 UTC, asteroid [626 Notburga](#) (mag. 11.6) is within 0.476° of variable star R And (mag. 14.9—5.8) [And: 00h 24m 48.58s, $+39^\circ 01' 43.4''$; trailing the Sun by 146°]
- At 20:45 UTC, asteroid [419 Aurelia](#) (mag. 12.9) is within 0.068° of asteroid [5 Astraea](#) (mag. 12.7) [Oph: 17h 31m 16.05s, $-20^\circ 12' 09.4''$; trailing the Sun by 62°]
- 2025-Oct-17:** At 19:30 UTC, asteroid [165 Loreley](#) (mag. 13.4) is within 0.154° of globular cluster Messier 22 (mag. 5.1) [Sgr: 18h 36m 32.27s, $-24^\circ 03' 04.4''$; trailing the Sun by 74°]
- 2025-Oct-19:** At 04:15 UTC, asteroid [71 Niobe](#) (mag. 12.1) is within 0.388° of globular cluster NGC 6624 (mag. 7.87) [Sgr: 18h 24m 18.81s, $-30^\circ 43' 27.3''$; trailing the Sun by 69°]
- 2025-Oct-20:** At 23:45 UTC, asteroid [419 Aurelia](#) (mag. 12.9) is within 0.264° of globular cluster NGC 6440 (mag. 9.2) [Sgr: 17h 47m 44.40s, $-20^\circ 20' 46.5''$; trailing the Sun by 59°]
- At 23:45 UTC, asteroid [419 Aurelia](#) (mag. 12.9) is within 0.475° of planetary nebula NGC 6445 (mag. 12.0) [Sgr: 17h 47m 44.40s, $-20^\circ 20' 46.5''$; trailing the Sun by 59°]
- 2025-Oct-23:** At 07:15 UTC, asteroid [30 Urania](#) (mag. 11.8) is within 0.174° of asteroid [50 Virginia](#) (mag. 13.2) [Cap: 20h 38m 35.11s, $-17^\circ 16' 53.5''$; trailing the Sun by 97°]
- At 09:00 UTC, asteroid [516 Amherstia](#) (mag. 13.3) is within 0.034° of globular cluster Messier 75 (mag. 8.5) [Sgr: 20h 06m 09.51s, $-21^\circ 56' 52.3''$; trailing the Sun by 89°]
- At 20:30 UTC, asteroid [105 Artemis](#) (mag. 12.9) is within 0.956° of asteroid [61 Danae](#) (mag. 12.0) [Aqr: 22h 03m 34.07s, $-02^\circ 56' 43.4''$; trailing the Sun by 121°]
- 2025-Oct-24:** At 14:15 UTC, asteroid [11 Parthenope](#) (mag. 12.2) is within 0.398° of irregular galaxy Leo I (mag. 11.1) [Leo: 10h 08m 00.22s, $+11^\circ 55' 14.4''$; leading the Sun by 61°]
- 2025-Oct-28:** At 17:00 UTC, comet [210P/Christensen](#) (mag. 11.9) is within 0.350° of open cluster NGC 6242 (mag. 6.4) [Sco: 16h 56m 08.80s, $-39^\circ 09' 55.5''$; trailing the Sun by 44°]
- 2025-Oct-30:** At 11:30 UTC, asteroid [352 Gisela](#) (mag. 12.5) is within 0.091° of open cluster NGC 1746 (mag. 6.0) [Tau: 05h 03m 21.97s, $+23^\circ 53' 27.6''$; leading the Sun by 139°]
- 2025-Nov-01:** At 02:00 UTC, asteroid [516 Amherstia](#) (mag. 13.4) is within 0.473° of carbon star RT Cap (mag. 8.1—6.5) [Cap: 20h 16m 10.59s, $-20^\circ 52' 02.4''$; trailing the Sun by 83°]
- At 06:45 UTC, asteroid [165 Loreley](#) (mag. 13.5) is within 0.422° of globular cluster NGC 6717 (mag. 9.28) [Sgr: 18h 55m 28.70s, $-23^\circ 06' 54.1''$; trailing the Sun by 63°]
- 2025-Nov-02:** At 02:45 UTC, asteroid [185 Eunike](#) (mag. 12.0) is within 0.431° of planetary nebula Caldwell 63 (mag. 6.5) [Aqr: 22h 29m 19.24s, $-21^\circ 13' 35.4''$; trailing the Sun by 111°]
- 2025-Nov-08:** At 22:45 UTC, comet [24P/Schaumasse](#) (mag. 14.1) is within 0.208° of open cluster Messier 44 (mag. 3.7) [Cnc: 08h 40m 06.73s, $+20^\circ 11' 29.7''$; leading the Sun by 99°]
- 2025-Nov-12:** At 22:45 UTC, comet [24P/Schaumasse](#) (mag. 13.8) is within 0.297° of variable star T Cnc (mag. 10.5—7.6) [Cnc: 08h 56m 41.96s, $+20^\circ 08' 47.9''$; leading the Sun by 99°]
- 2025-Nov-14:** At 22:00 UTC, asteroid [63 Ausonia](#) (mag. 11.5) is within 0.041° of asteroid [64 Angelina](#) (mag. 13.1) [Cap: 21h 17m 44.94s, $-15^\circ 08' 10.9''$; trailing the Sun by 84°]
- 2025-Nov-18:** At 07:15 UTC, asteroid [94 Aurora](#) (mag. 12.1) is within 0.332° of open cluster Messier 36 (mag. 6.3) [Aur: 05h 36m 34.41s, $+34^\circ 27' 03.6''$; leading the Sun by 148°]
- 2025-Nov-20:** At 04:00 UTC, asteroid [50 Virginia](#) (mag. 13.5) is within 0.365° of asteroid

64 Angelina (mag. 13.1) [Cap: 21h 22m 27.20s, -15° 06' 26.2"; trailing the Sun by 80°]

At 06:30 UTC, asteroid **80 Sappho** (mag. 11.0) is within 0.265° of open cluster NGC 2169 (mag. 5.9) [Ori: 06h 07m 48.97s, +14° 10' 27.1"; leading the Sun by 144°]

At 15:30 UTC, asteroid **19 Fortuna** (mag. 12.8) is within 0.726° of asteroid **20 Massalia** (mag. 10.9) [Leo: 11h 16m 07.31s, +03° 16' 51.1"; leading the Sun by 69°]

2025-Dec-23: At 13:45 UTC, asteroid **84 Klio** (mag. 12.0) is within 0.200° of carbon star Z Psc (mag. 7.9—7.0) [Psc: 01h 16m 56.06s, +25° 43' 47.1"; trailing the Sun by 143°]

2025-Nov-27: At 06:30 UTC, asteroid **59 Elpis** (mag. 13.1) is within 0.427° of asteroid **64 Angelina** (mag. 13.2) [Cap: 21h 29m 03.97s, -13° 47' 45.5"; trailing the Sun by 75°]

2025-Nov-30: At 02:00 UTC **433 Eros** (mag. 9.98) is within 0.397 AU of Earth [And: 00h 33m 10.39s, +40° 35' 00.3"]

2025-Dec-01: At 18:15 UTC, comet **24P/Schaumasse** (mag. 12.9) is within 0.729° of barred spiral galaxy NGC 3227 (mag. 11.1) [Leo: 10h 23m 15.45s, +19° 08' 20.9"; leading the Sun by 98°]

At 22:30 UTC, comet **210P/Christensen** (mag. 11.5) is within 0.668° of asteroid **21 Lutetia** (mag. 13.0) [Vir: 14h 20m 18.66s, -11° 21' 30.7"; leading the Sun by 33°]

2025-Dec-02: At 03:15 UTC, asteroid **16 Psyche** (mag. 9.77) is within 0.358° of asteroid **32 Pomona** (mag. 11.4) [Tau: 05h 06m 09.03s, +18° 05' 54.9"; leading the Sun by 171°]

2025-Dec-05: At 04:30 UTC, asteroid **26 Proserpina** (mag. 12.8) is within 0.285° of carbon star SS Vir (mag. 9.6—6.0) [Vir: 12h 24m 51.75s, +00° 26' 10.3"; leading the Sun by 67°]

2025-Dec-07: At 10:00 UTC, asteroid **43 Ariadne** (mag. 11.0) is within 0.174° of open cluster NGC 1746 (mag. 6.0) [Tau: 05h 03m 43.66s, +23° 38' 39.0"; leading the Sun by 177°]

2025-Dec-10: At 21:45 UTC, asteroid **26 Proserpina** (mag. 12.8) is within 0.456° of spiral galaxy NGC 4517 (mag. 11.1) [Vir: 12h 32m 06.43s, -00° 18' 20.2"; leading the Sun by 71°]

2025-Dec-12: At 12:00 UTC, comet **24P/Schaumasse** (mag. 12.4) is within 0.237° of lenticular galaxy NGC 3607 (mag. 10.8) [Leo: 11h 16m 47.43s, +17° 48' 51.2"; leading the Sun by 97°]

At 14:00 UTC, asteroid **444 Gyptis** (mag. 12.4) is within 0.337° of planet **Neptune** (mag. 7.74) [Psc: 23h 58m 46.39s, -01° 57' 31.1"; trailing the Sun by 98°]

2025-Dec-13: At 03:00 UTC, comet **24P/Schaumasse** (mag. 12.4) is within 0.316° of barred spiral galaxy Caldwell 40 (mag. 10.9) [Leo: 11h 19m 55.32s, +17° 43' 11.4"; leading the Sun by 97°]

2025-Dec-14: At 14:00 UTC, asteroid **10 Hygiea** (mag. 10.5) is within 0.377° of open cluster Messier 35 (mag. 5.3) [Gem: 06h 08m 49.55s, +24° 42' 37.5"; leading the Sun by 170°]

2025-Dec-16: At 04:30 UTC, asteroid **196 Philomela** (mag. 11.1) is within 0.293° of open cluster NGC 1746 (mag. 6.0) [Tau: 05h 03m 39.88s, +24° 06' 34.0"; trailing the Sun by 172°]

2025-Dec-19: At 10:30 UTC, asteroid **40 Harmonia** (mag. 9.47) is within 0.307° of variable star R Gem (mag. 14.0—6.0) [Gem: 07h 07m 42.50s, +22° 59' 59.4"; leading the Sun by 161°]

2025-Dec-24: At 05:45 UTC, comet **24P/Schaumasse** (mag. 12.1) is within 0.885° of spiral galaxy Messier 98 (mag. 10.1) [Com: 12h 14m 31.76s, +15° 47' 20.4"; leading the Sun by 95°]

At 06:15 UTC, asteroid **796 Sarita** (mag. 13.1) is within 0.178° of planet **Saturn** (mag. 0.99) [Aqr: 23h 46m 14.94s, -03° 47' 48.9"; trailing the Sun by 83°]

At 09:45 UTC, asteroid **111 Ate** (mag. 13.3) is within 0.456° of variable star TX Psc (mag. 5.2—4.79) [Psc: 23h 45m 49.02s, +03° 55' 12.7"; trailing the Sun by 85°]

2025-Dec-25: At 23:15 UTC, comet **24P/Schaumasse** (mag. 12.1) is within 0.384° of spiral galaxy Messier 100 (mag. 9.3) [Com: 12h 22m 42.51s, +15° 27' 19.4"; leading the Sun by 94°]

2025-Dec-28: At 02:00 UTC, comet **24P/Schaumasse** (mag. 12.1) is within 0.615° of

spiral galaxy Messier 88 (mag. 9.6) [Com: 12h 32m 32.83s, +15° 02' 22.7"; leading the Sun by 94°]

At 19:00 UTC, comet [24P/Schaumasse](#) (mag. 12.1) is within 0.405° of barred spiral galaxy Messier 91 (mag. 10.2) [Com: 12h 35m 47.98s, +14° 53' 55.7"; leading the Sun by 94°]

2025-Dec-29: At 13:30 UTC, asteroid [247 Eukrate](#) (mag. 13.9) is within 0.469° of asteroid [69 Hesperia](#) (mag. 12.5) [Vir: 13h 15m 47.92s, -09° 15' 18.8"; leading the Sun by 76°]

Northern Circumpolar Sky

Dubhe

Kochab

Ursa
Minor

Polaris

Camelopardalis

Cepheus

Alderamin

Cassiopeia

Ruchbah
Cih

February 45° North

Leo
Minor

Lynx

Cancer

Algieba

Dec-01

Ras Elased Australis

Nov-23

24P/Schaumasse

Sep-12

10.8M, 32°/L

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13.1M, 99°/L

Page 28

Nov-05

Page 28

14.6M, 99°/L

Oct-26

Page 28

14.8M, 47°/L

Aug-31

Page 28

Jan-15

337 Devosá

Dec-19

414P/STEREO

13.4M, 42°/L

Sep-06

12.0M, 36°/L

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Dubhe

Merak

Castor

Pollux

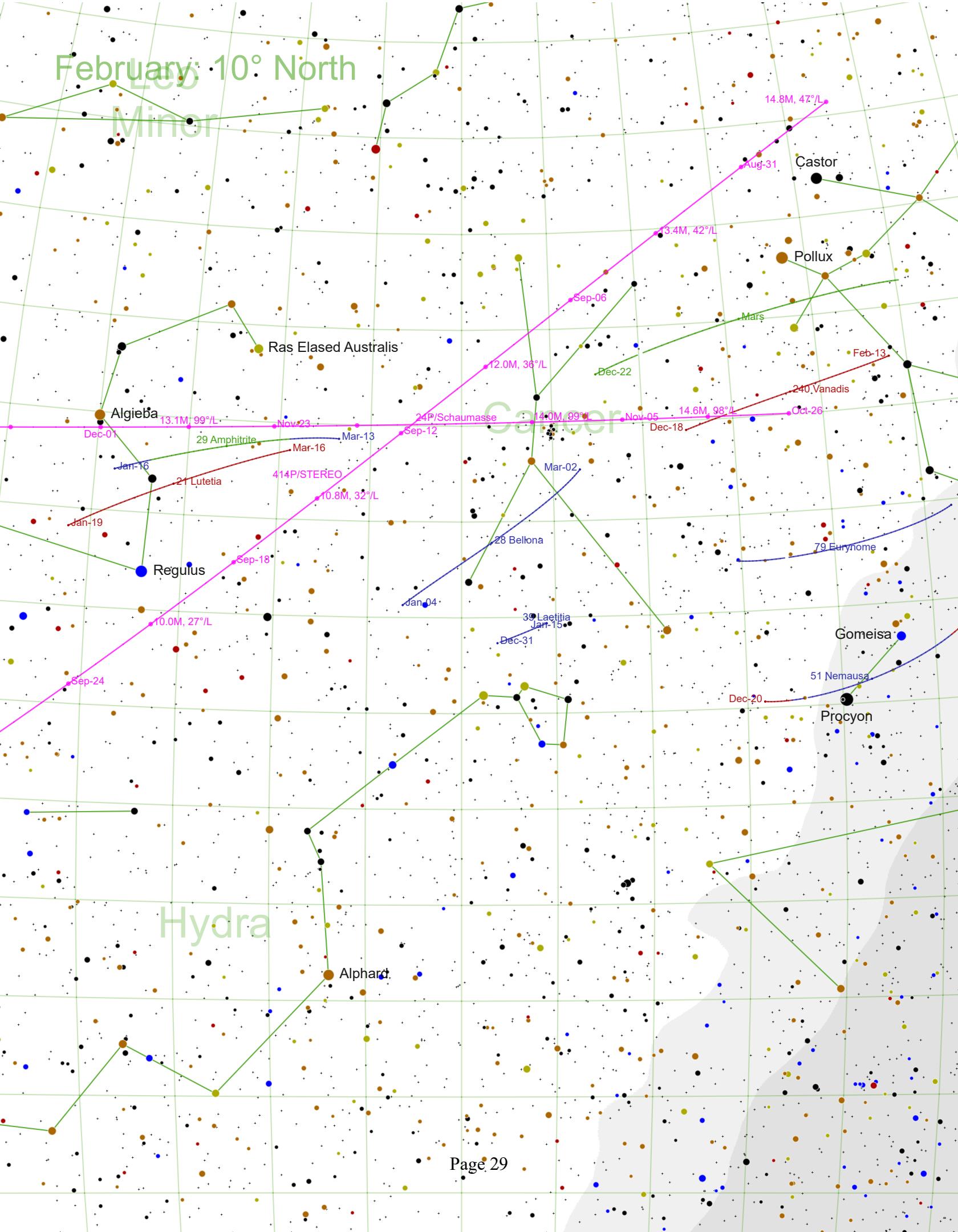
February, 10° North

Minor

Cancer

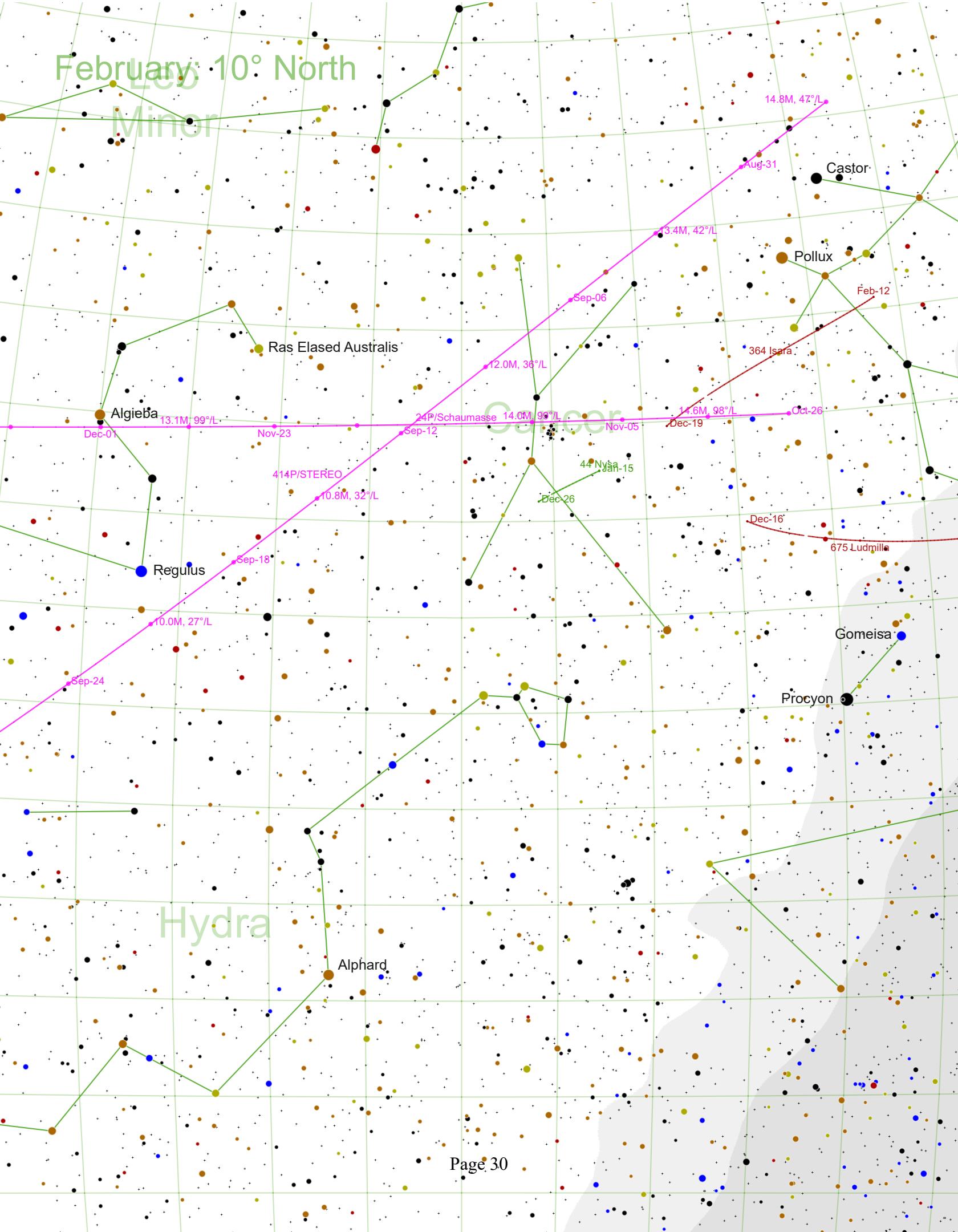
Hydra

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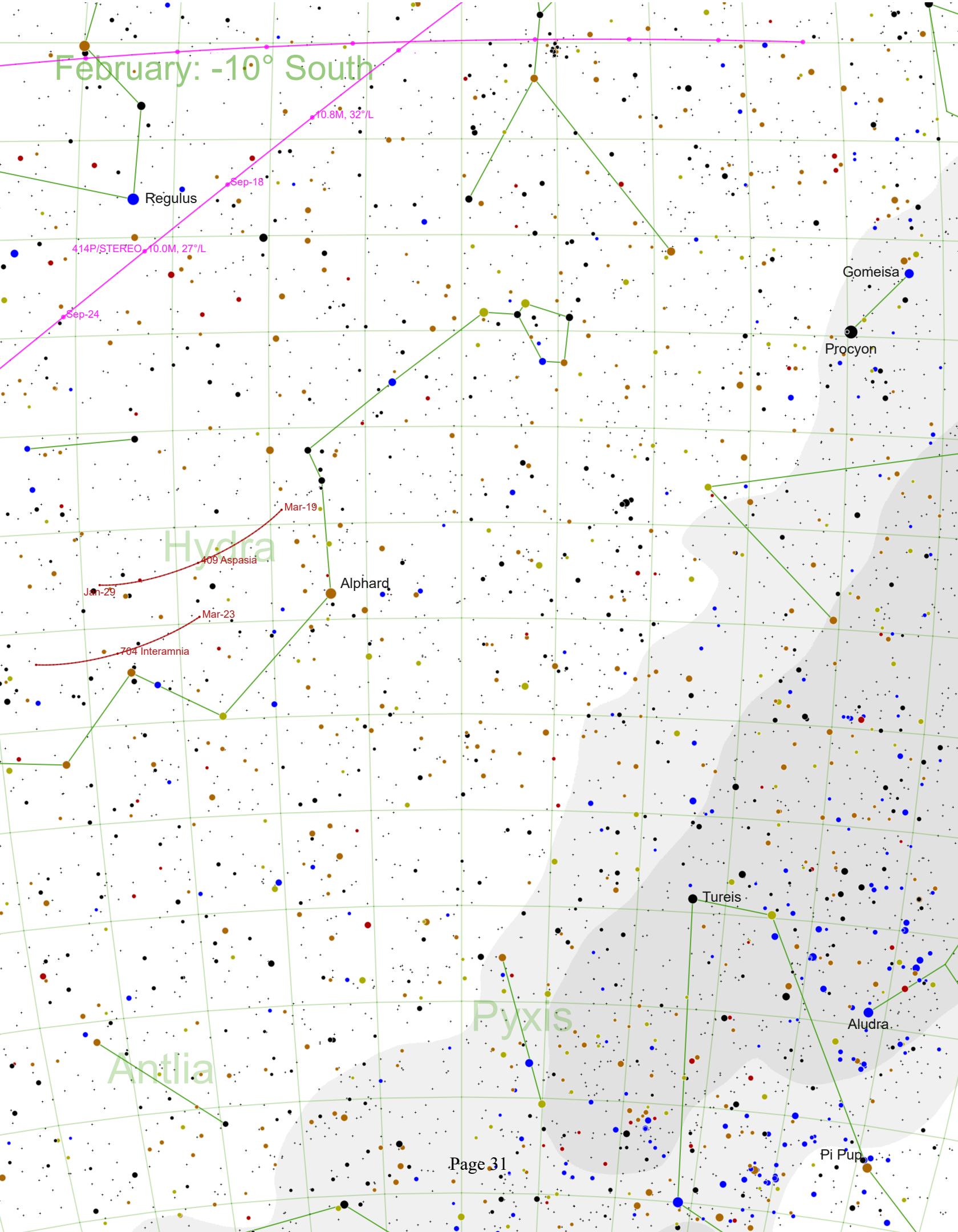


February, 10° North

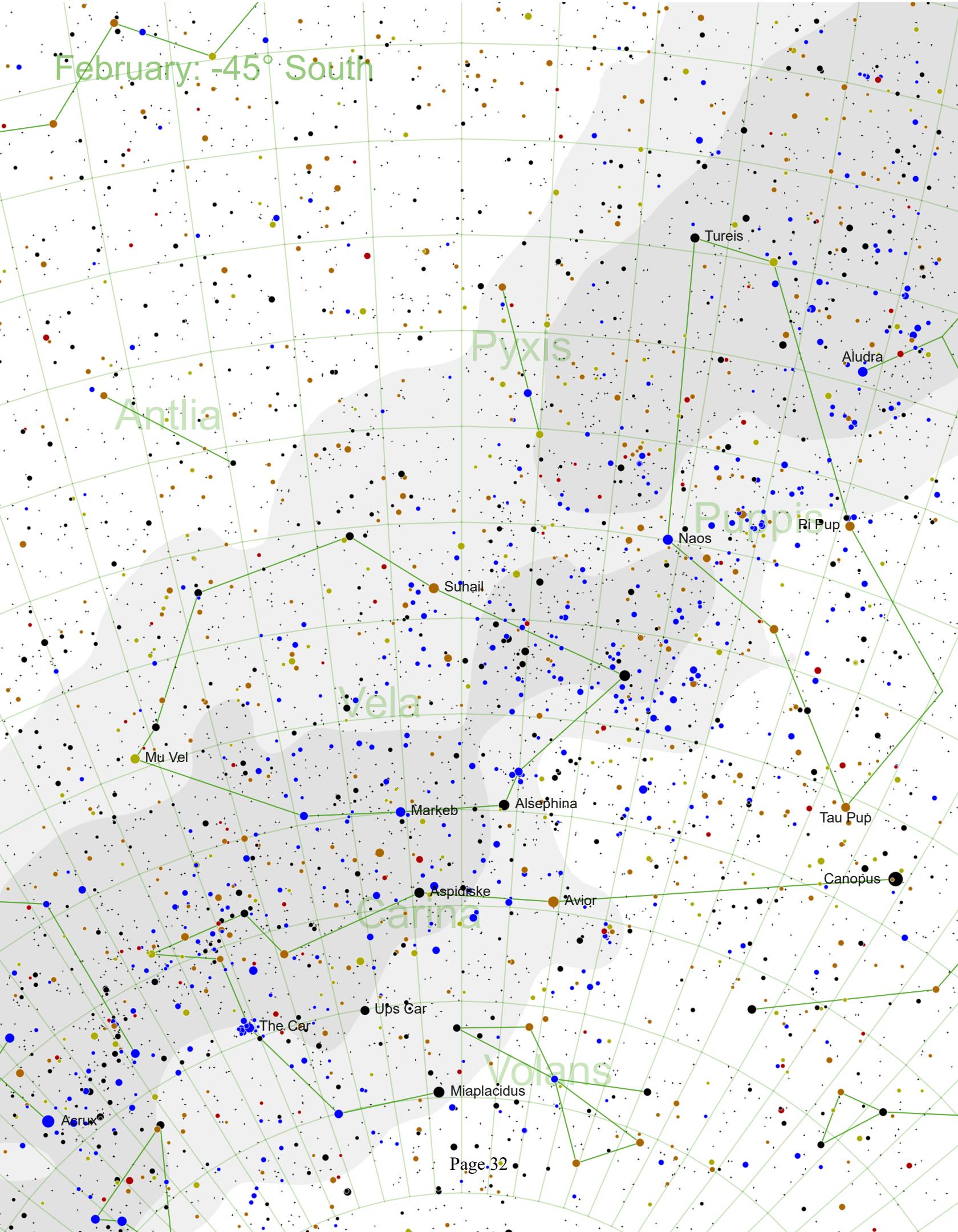
Minor



February: -10° South



February: -45° South



April: 45° North

Ursa
Major

Canes
Venatici

Coma
Berenices

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12.2M, 95°/L Dec-17

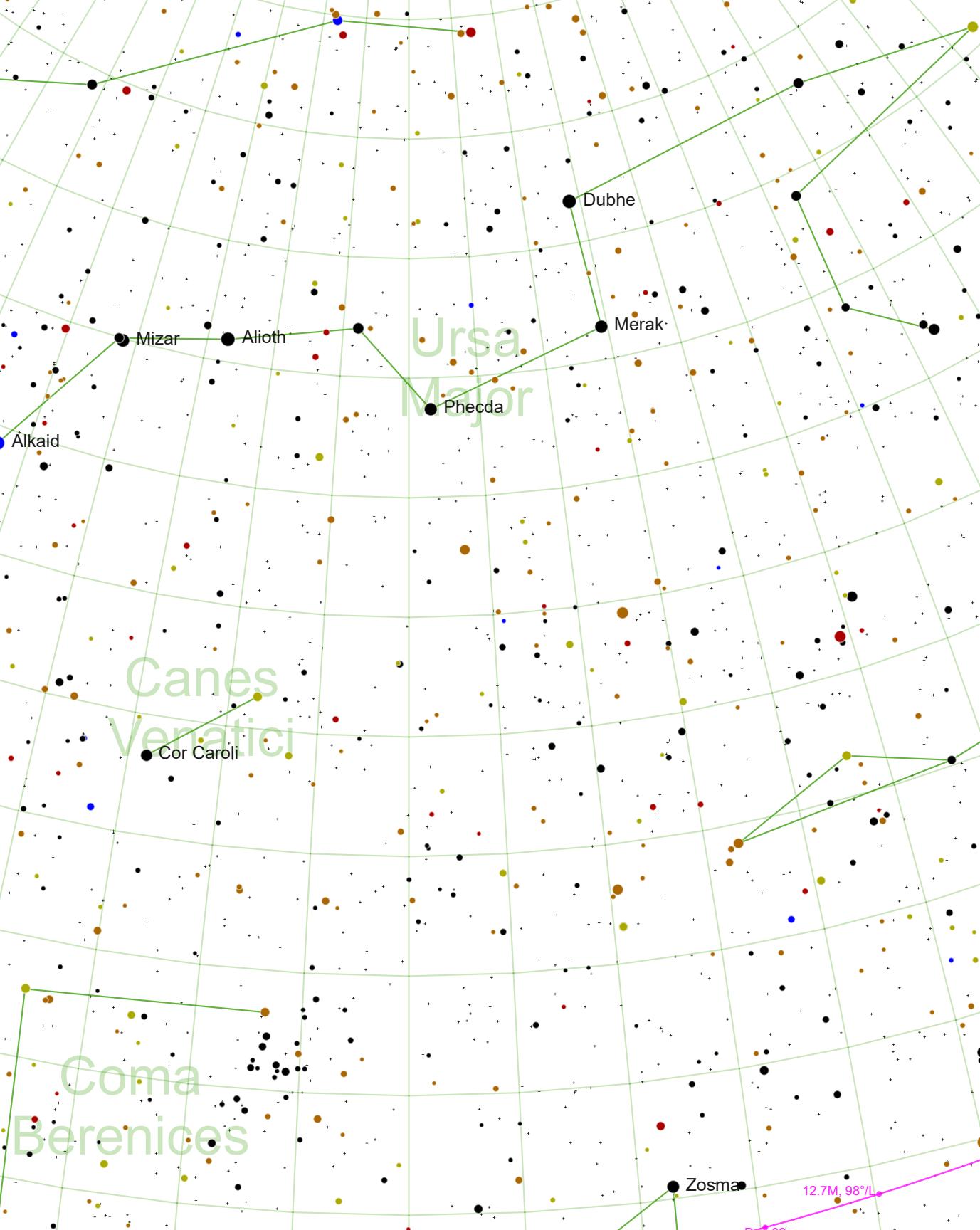
24P/Schaumasse

Dec-17

12.4M, 97°/L

Dec-09

12.7M, 98°/L

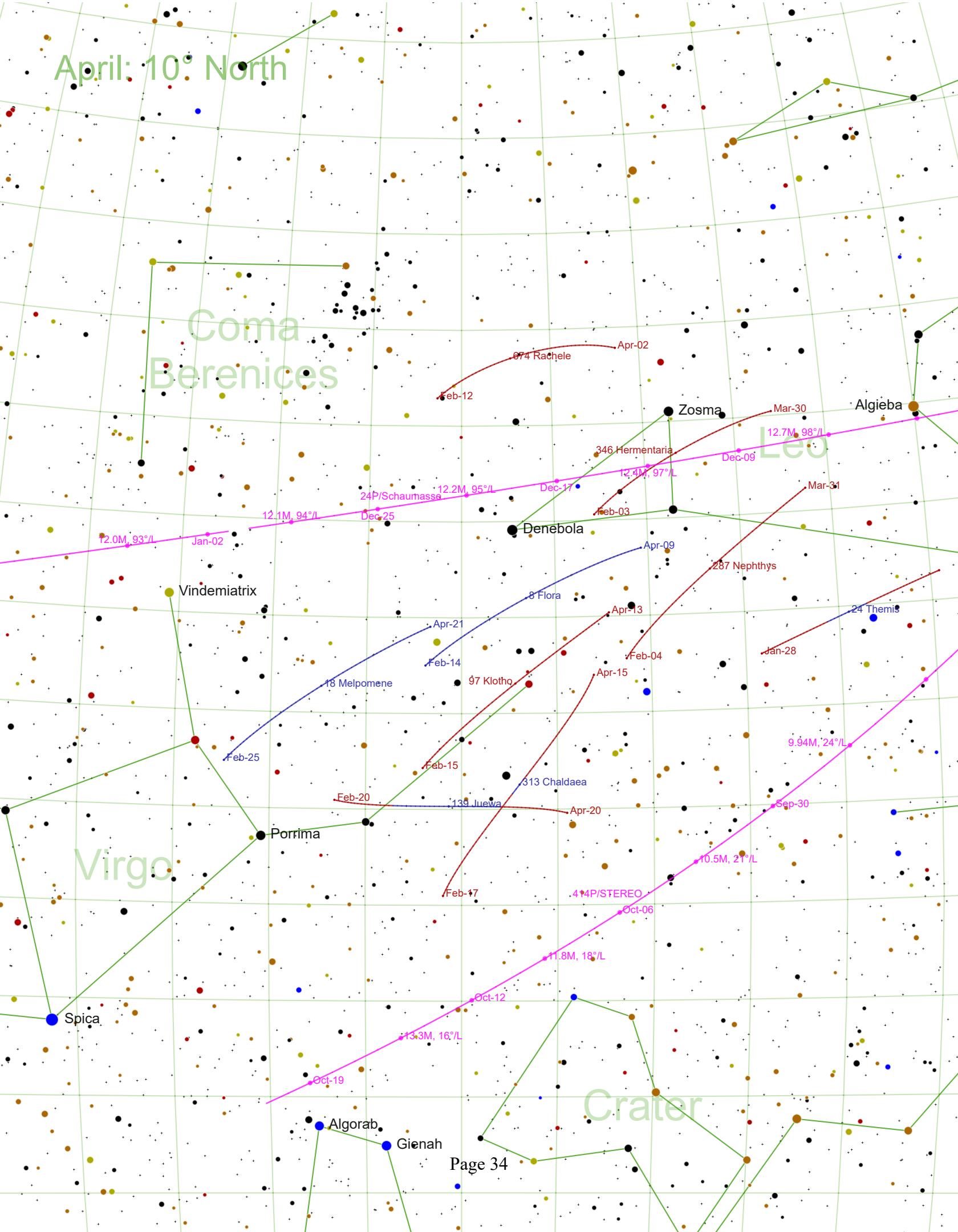


April: 10° North

Coma
Berenices

Virgo

Crater



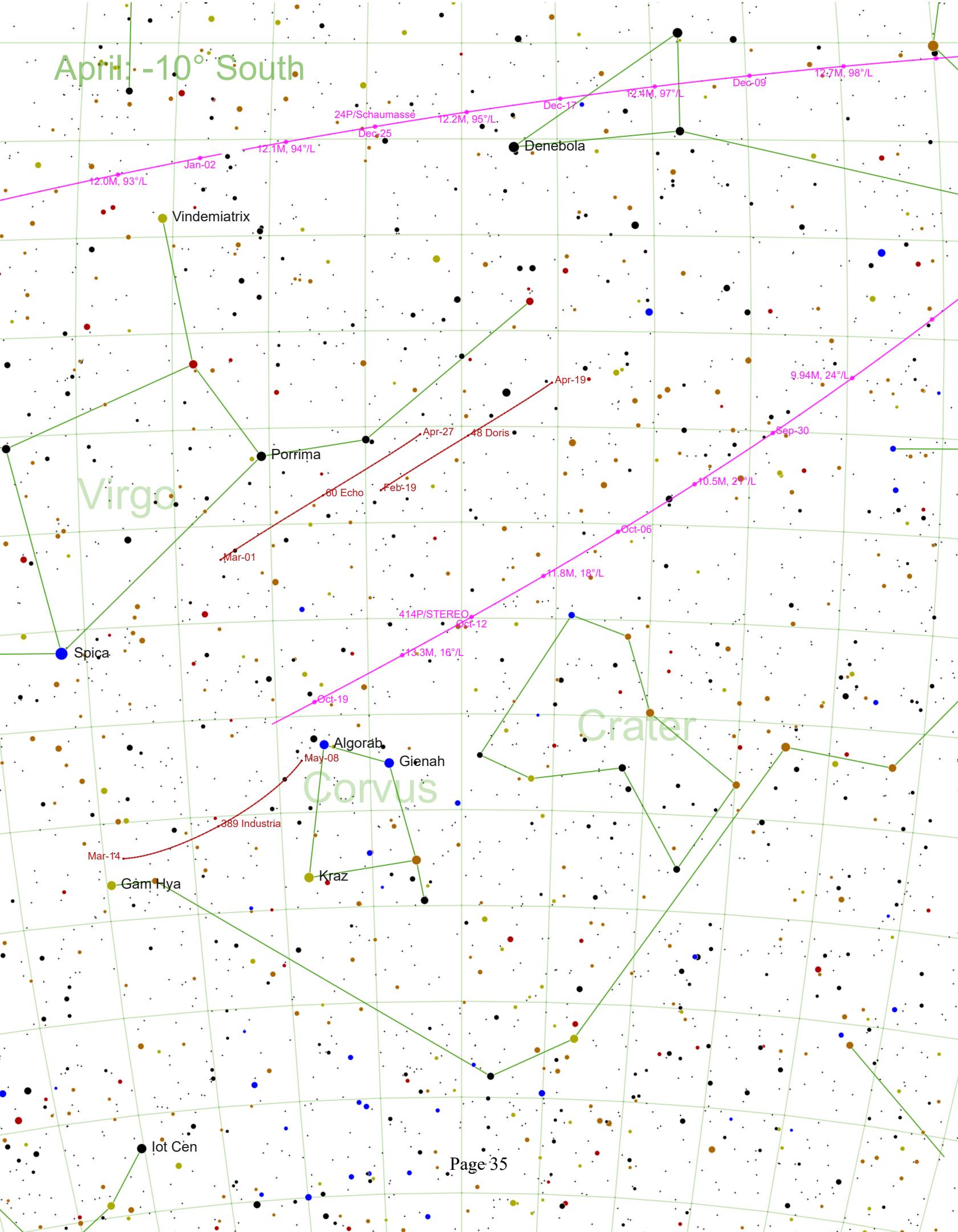
April -10° South

Virgo

Corvus

Crater

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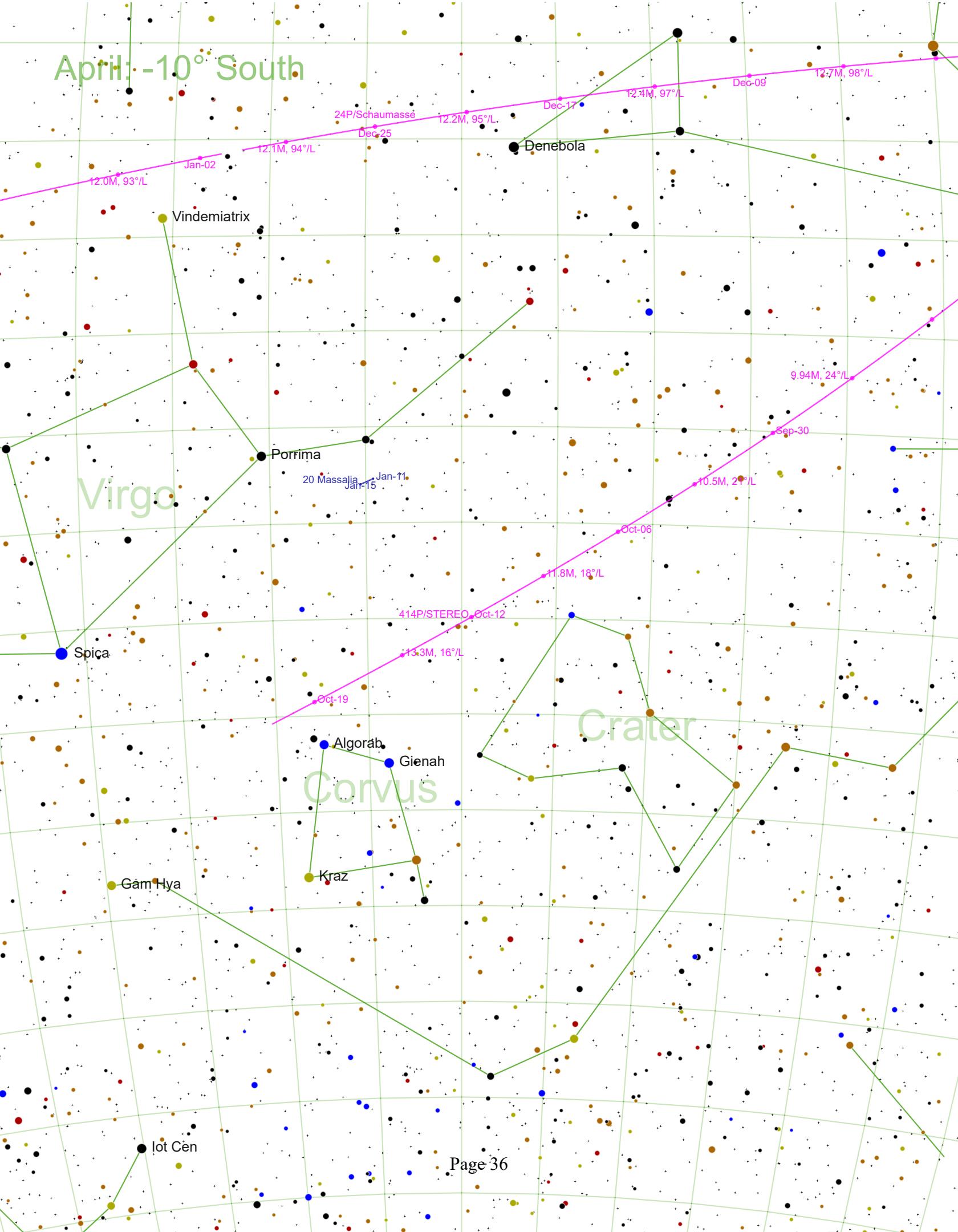
April -10° South

Virgo

Corvus

Crater

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April: -45° South

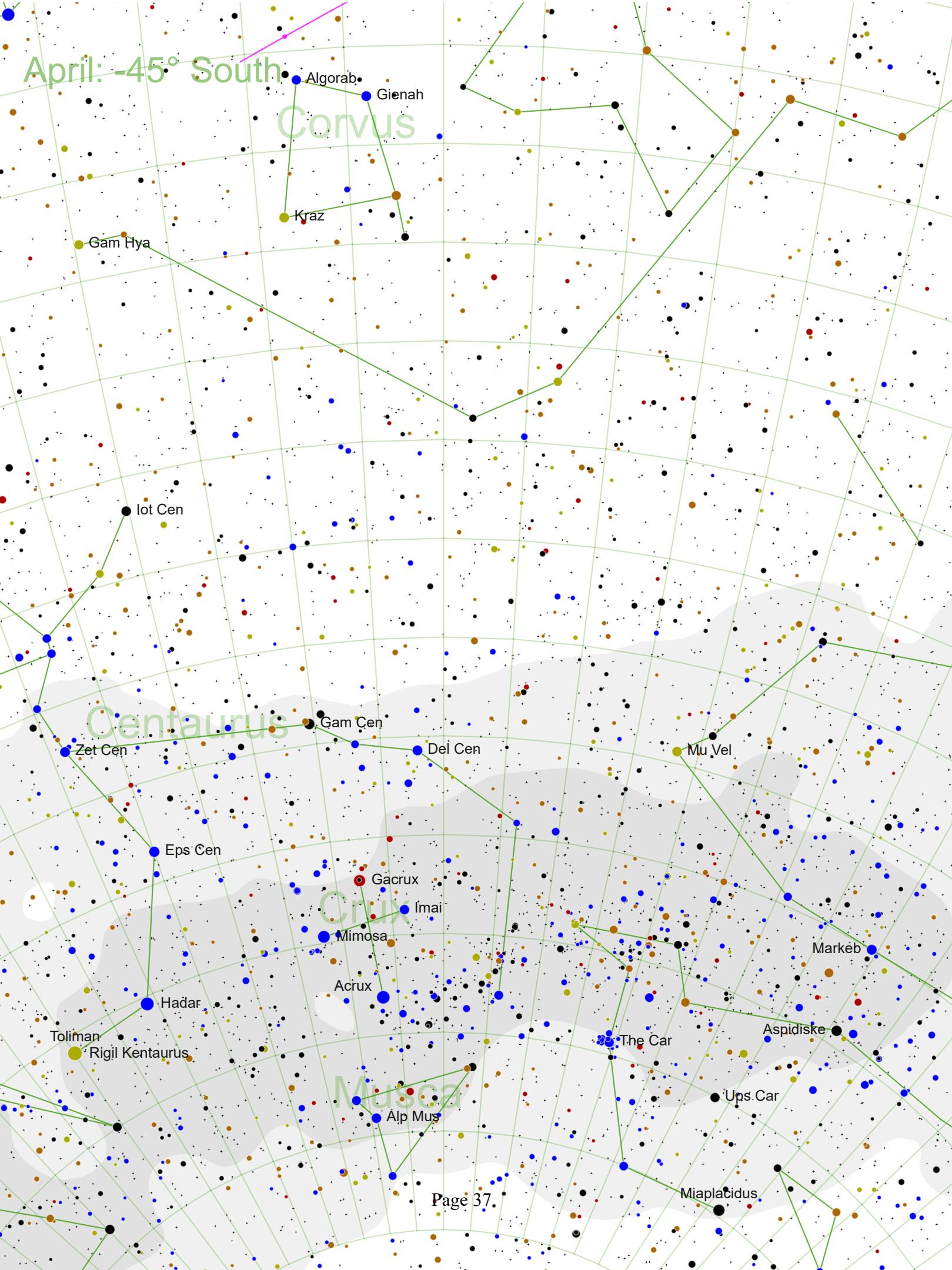
Corvus

Centaurus

Crux

Musca

Page 37.

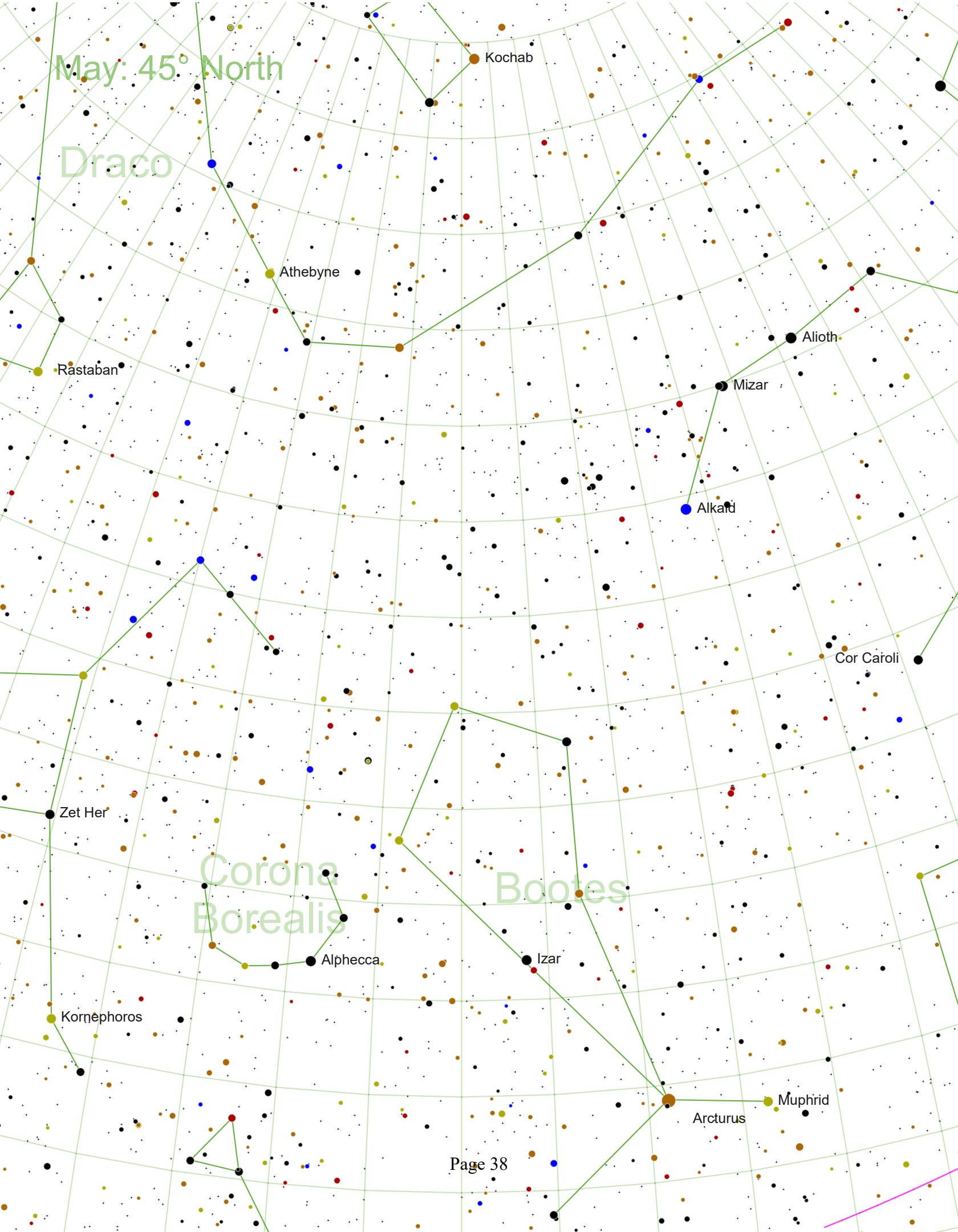


May: 45° North

Draco

Corona
Borealis

Bootes



May: 10° North

Corona
Borealis

Bootes

Serpens

Libra

Page 39

Zet Her

Alphecca

Izar

Arcturus

Muphrid

Kornephoros

354 Eleonora

May-02

Jun-09

Unukalhai

Yed Prior

451 Patientia

Apr-02

May-25

210P/Christensen

Dec-24

14.9M, 55°/L

12.9M, 43°/L

Dec-02

11.0M, 23°/L

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Spica

Zubenelgenubi

24P/Schaumasse

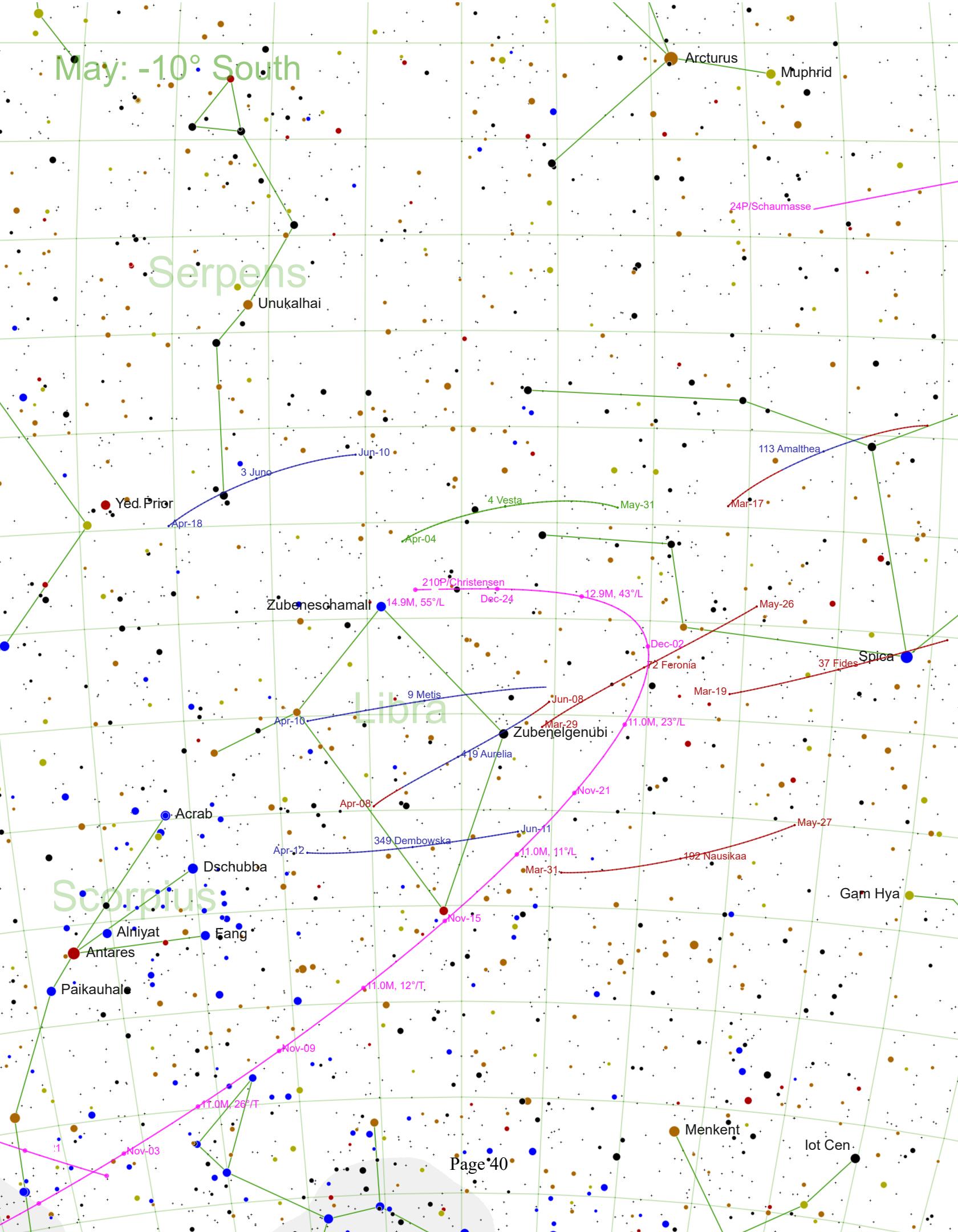
May: -10° South

Serpens

Libra

Scorpius

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May: -45° South

Scorpius

Norma

Triangulum
Australis

Centaurus

Mensa

Page 41

Acrab

Dschubba

Fang

Alhiyat

Antares

Raikauhale

210P/Christensen

Nov-09

344 Desiderata

11.0M, 26°T

11.7M, 41°T

Nov-03

9.74M, 19°L

Jun-22

Gam Lup

Bet Lup

Eta Cen

Zet Cen

Alp Lup

Gam Cen

Eps Cen

Hadar

Toliman

Rigil Kentaurus

Bet.TrA

Gam TrA

Atria

Gacrux

Mimosa

Imai

Acrux

Alp.Mus

Zubenelgenubi

11.0M, 23°L

Nov-21

11.0M, 11°L

11.0M, 12°T

Gam Hya

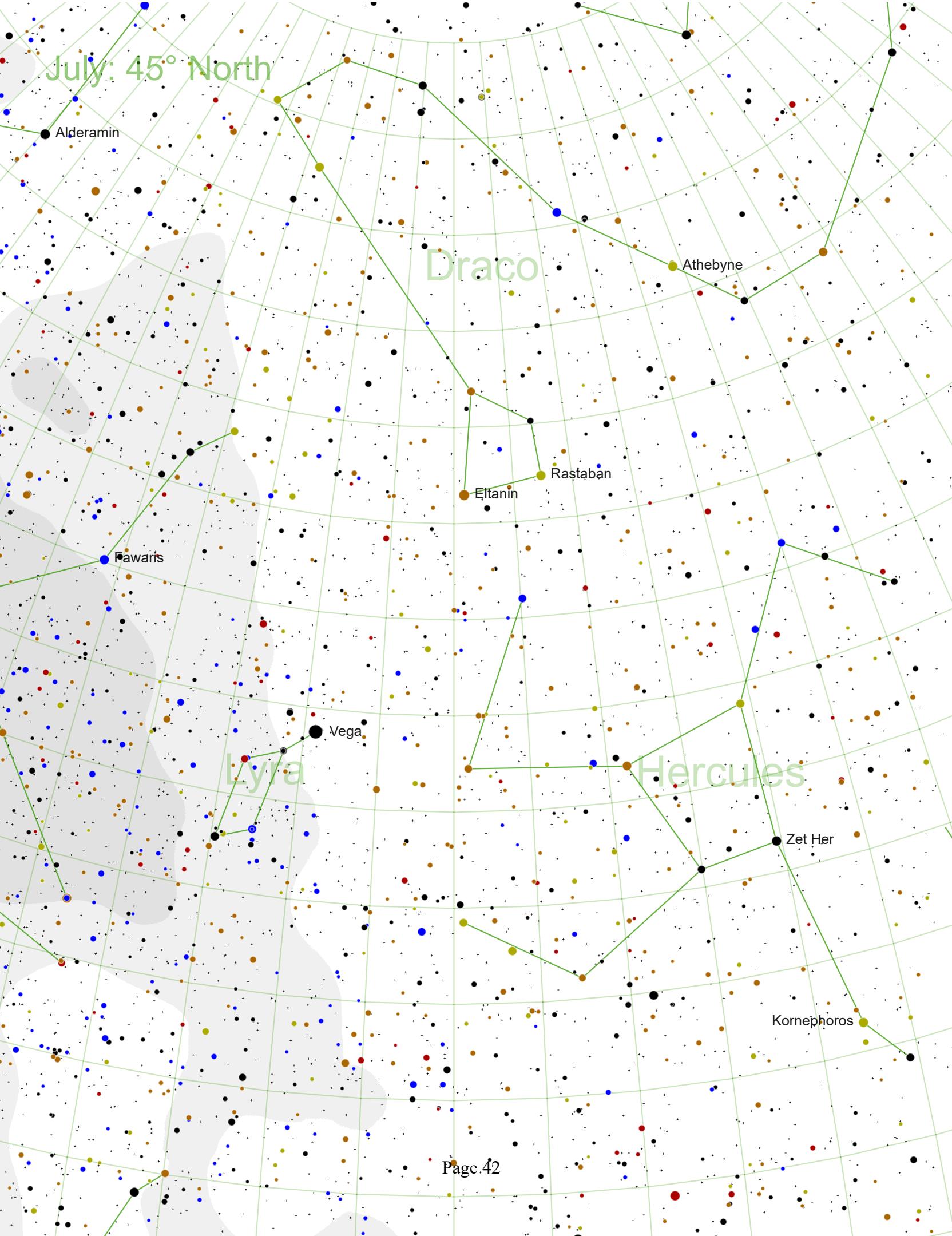
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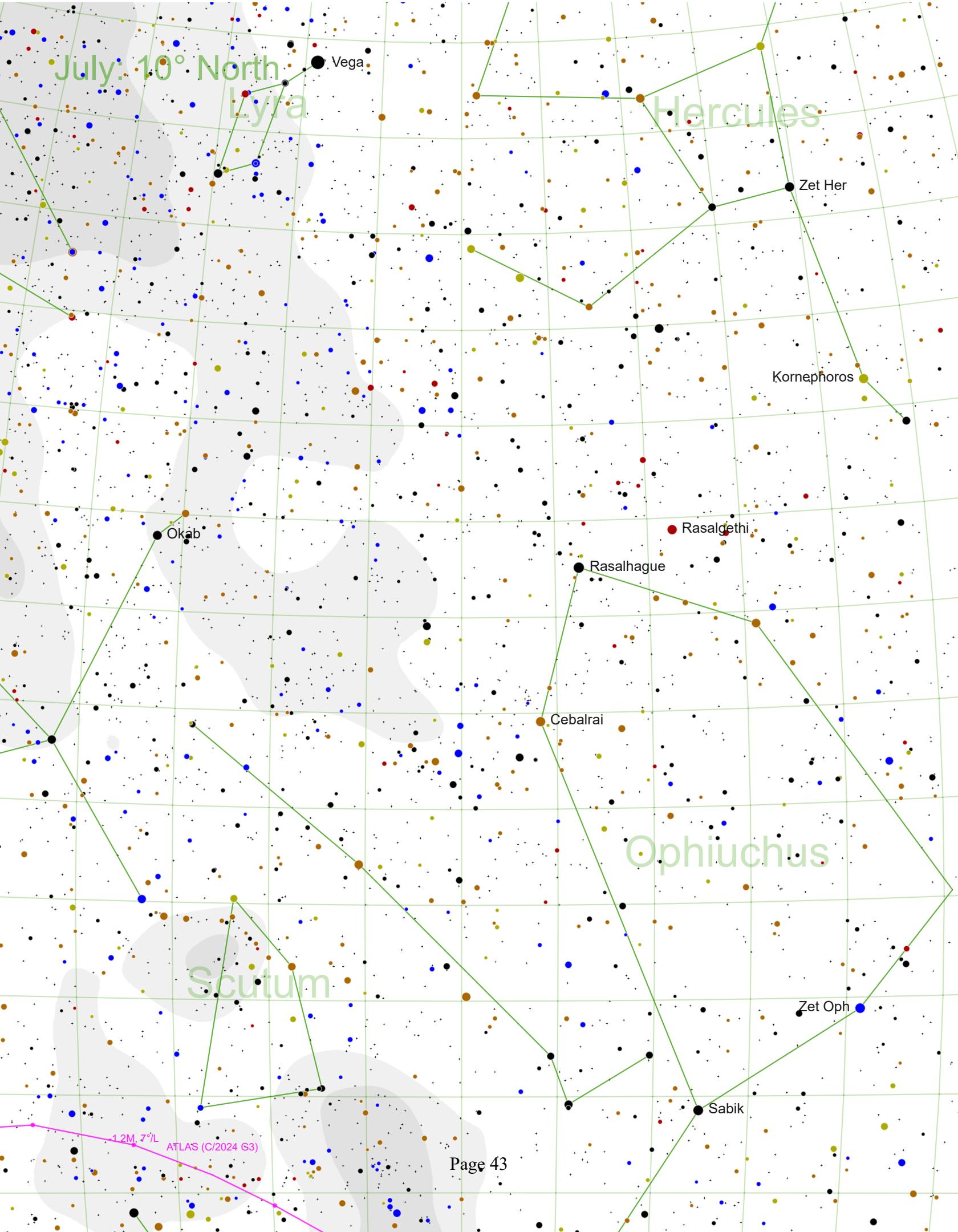
July: 45° North

Draco

Lyra

Hercules





July: 10° North
Lyra

Hercules

Scutum

Ophiuchus

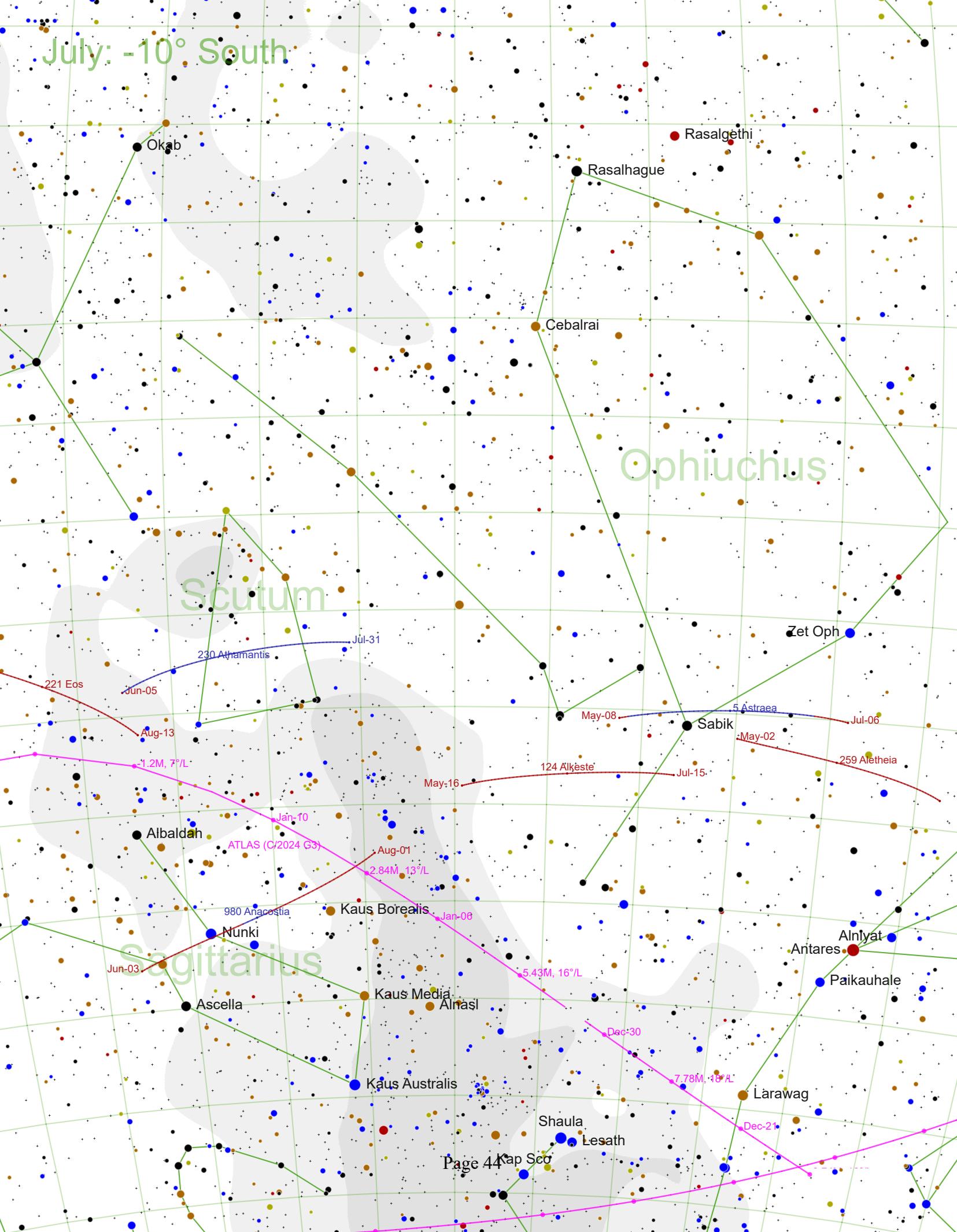
12M, 7°/L
ATLAS (C/2024 G3)

July: -10° South

Ophiuchus

Scutum

Sagittarius



July: -45° South

Sagittarius

Corona
Australis

Telescopium

Pavo

Norma

Ara

Triangulum
Australe

Peacock

1.2M, 7°L

Jan-10

2.84M, 13°L

Jan-06

5.43M, 16°L

Dec-30

ATLAS (C/2024 G3)

7.78M, 18°L

Dec-21

Nov-03

9.74M, 19°L

Jun-02

Ascella

23 Thalia

Jul-31

210P/Christensen

14.6M, 83°T

Sep-26

14.9M, 105°T

Oct-25

12.8M, 61°T

Jul-01

Bet Ara

71 Niobe

Jun-05

Peacock

Albaldah

Nunki

Kaus Borealis

Kaus Media

Alnasi

Kaus Australis

Shaula

Lesath

Kap Sco

Iot-1 Sco

Sargas

Alp Ara

Bet Ara

Atria

Toliman

Gam TrA

Bet TrA

August: 45° North
Cepheus

Lacerta

Cygnus

Vulpecula

Sagitta

Alderamin

Deneb

Sadr

Aljanah

Eawaris

August: 10° North

Cygnus

Vulpecula

Sagitta

Delphinus

Equuleus

Capricornus

Algenib

Algedi

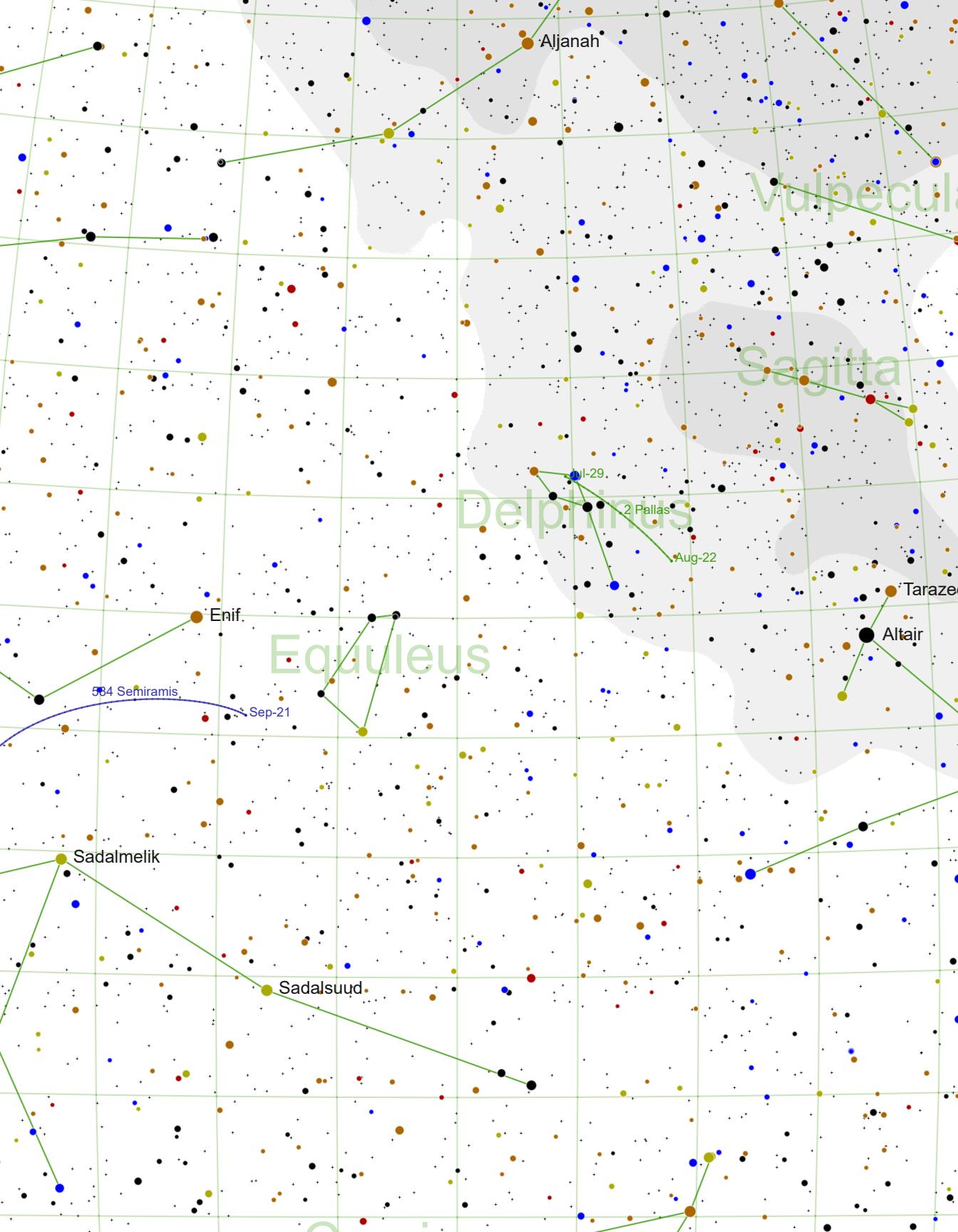
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ATLAS (C/2024 G3)

-2.3M, 5°/T

Jan-15

Jan-13



August: -10° South

Delphinus

Equuleus

Sadalmelik

89 Julie

Capricornus

Deneb Algredi

ATLAS (C/2024 G3)

0.070M; 9°/T

Microscopium

110 Lydia

Sep-20

Jul-09

Jul-04

Jan-22

Jan-18

Sep-04

Sep-02

Sep-01

Jan-15

Jan-13

2.3M, 5°/T

3.42M, 16°/T

532 Herculina

63 Ausonia

30 Urania

Sep-09

Sep-05

Aug-02

Aug-01

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

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Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

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Jul-04

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Jul-02

Jul-01

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Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

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Jul-08

Jul-07

Jul-06

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Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

Jul-07

Jul-06

Jul-05

Jul-04

Jul-03

Jul-02

Jul-01

Jul-00

Jul-09

Jul-08

August: -10° South

Delphinus

Equuleus

Sadalmelik

Sadalsuud

Deneb Algredi

Capricornus

Piscis
Austrinus

Microscopium

Enif

Tarazed

Altair

Page 49

Deneb Algredi

Capricornus

Jul-15

Jul-07

Jul-09

Jul-12

Sep-12

Sep-05

Sep-07

Jan-15

Jan-13

27 Euterpe

141 Lumen

129 Antigone

ATLAS (C/2024 G3)

0.10M, 9°/T

Jan-18

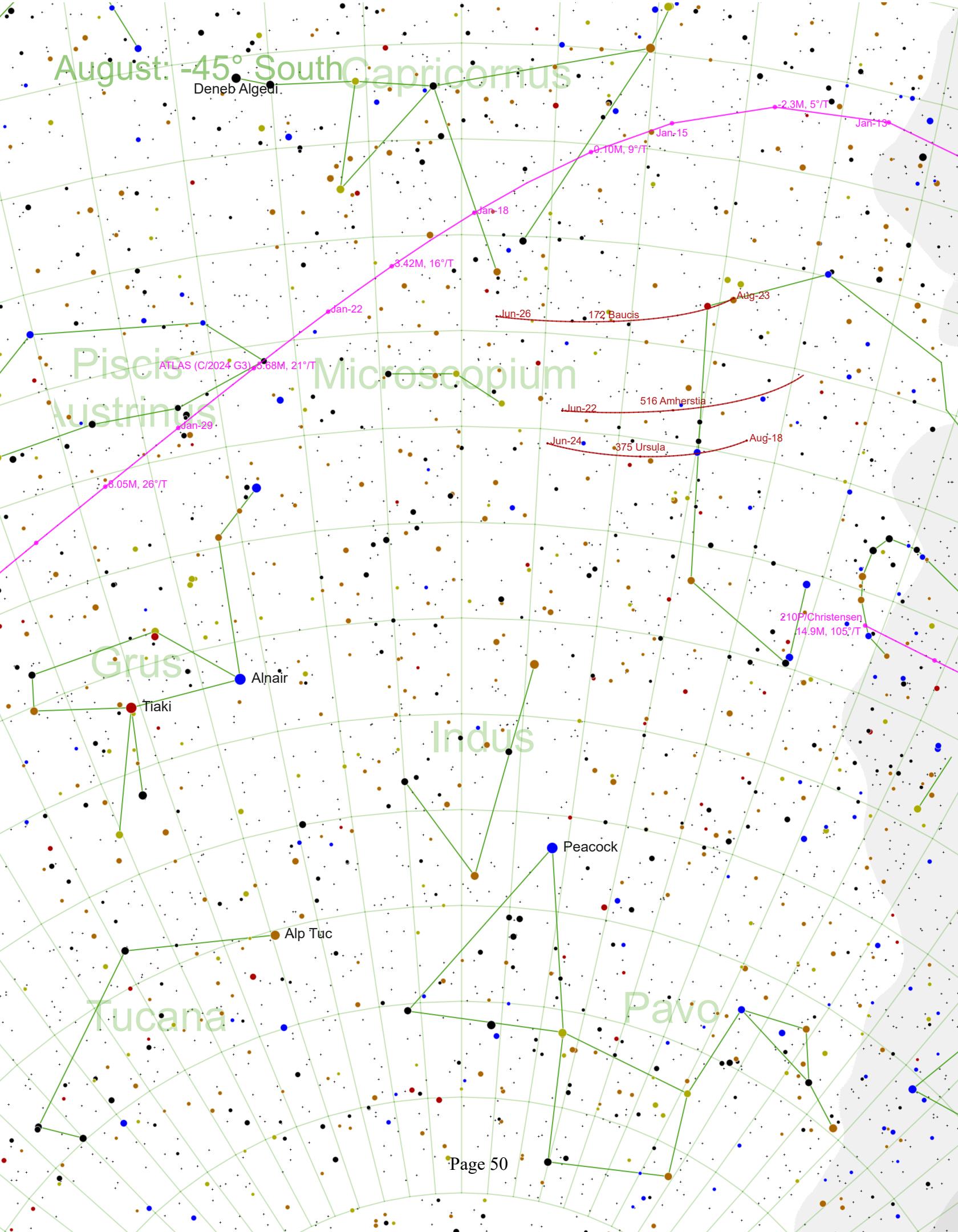
Jan-22

5.68M, 21°/T

3.42M, 16°/T

8.05M, 26°/T

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August: -45° South

Capricornus

Deneb Algabi.

Piscis
Austrinus

Microscopium

Grus

Indus

Tucana

Pavo

Page 51

ATLAS (C/2024 G3)

5.68M, 21°/T

8.05M, 26°/T

Jan-29

3.42M, 16°/T

Jan-22

0.10M, 9°/T

Jan-18

-2.3M, 5°/T

Jan-15

0.10M, 9°/T

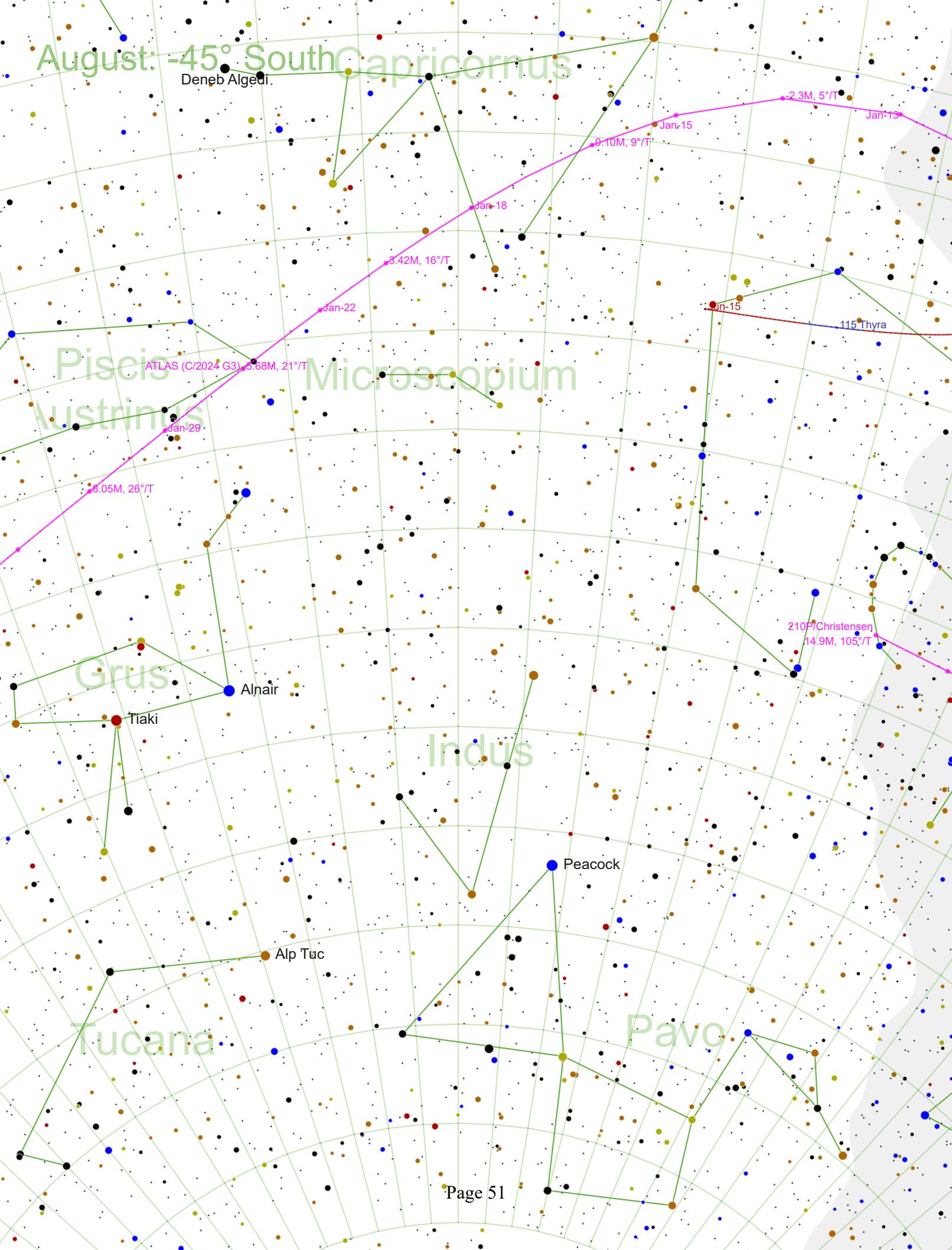
Jan-15

Jan-15

115 Thyra

210P/Christensen

14.9M, 105°/T



October: 45° North

Cepheus

Cassiopeia

Andromeda

Pegasus

Ruchbah

Cih

Caph

Schedar

Mirach

Sep-29

626 Notburga

Dec-04

Oct-20

433 Eros

Oct-24

Alpheratz

Sep-14

779 Lina

Page 52

Scheat

Markab

Matar

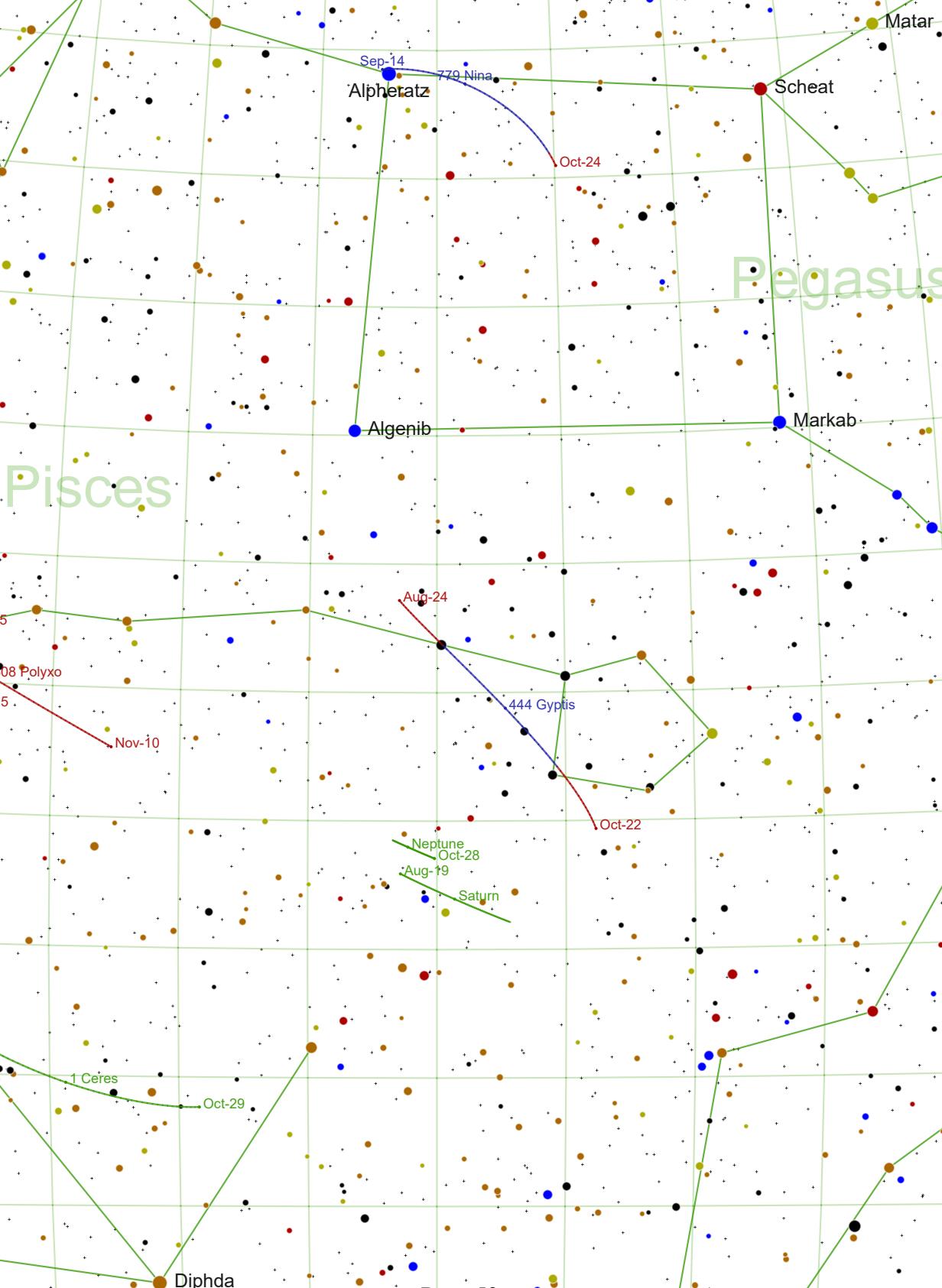
Alderamin

100

October: 10° North
Andromeda

Pisces

Pegasus

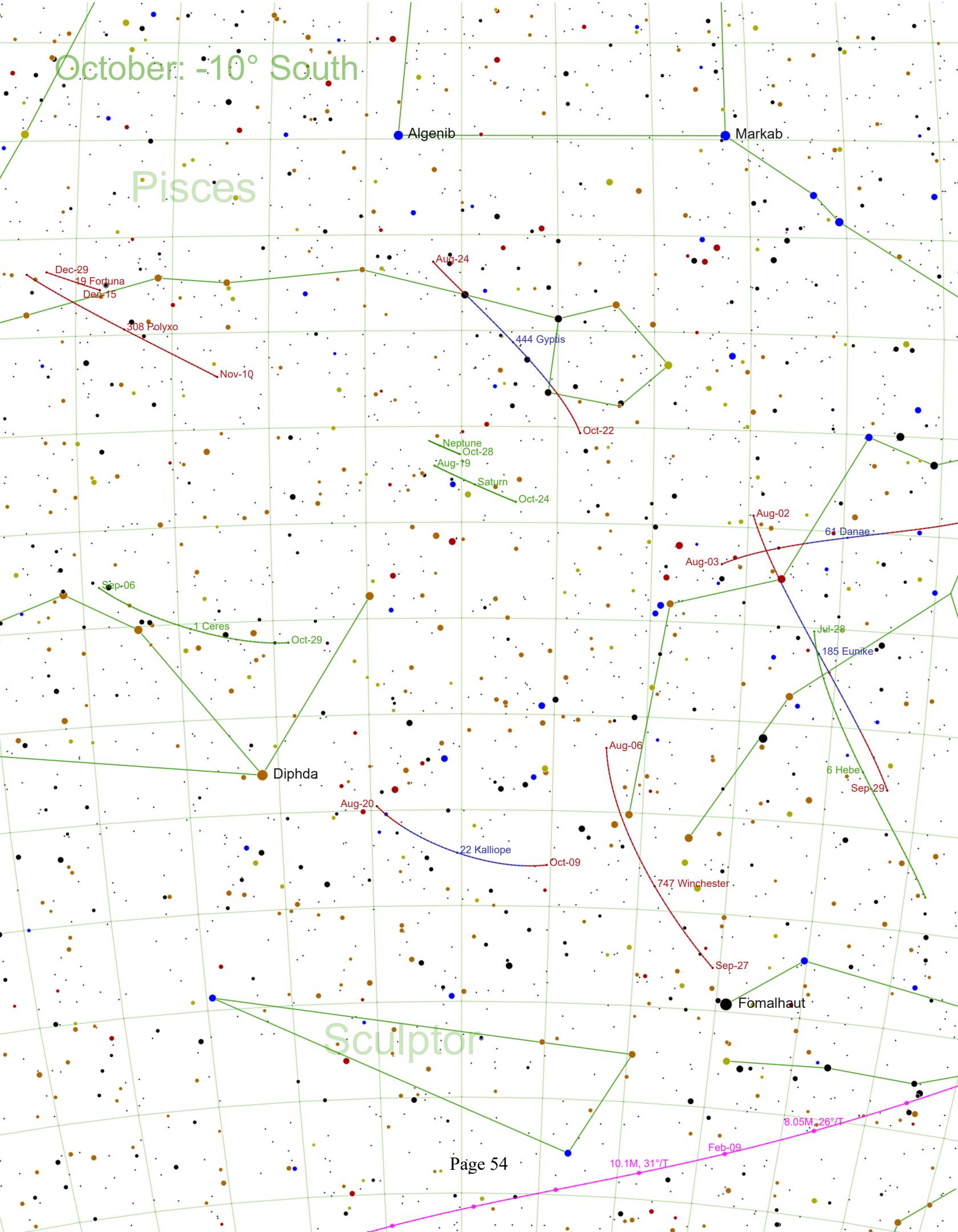


October: -10° South

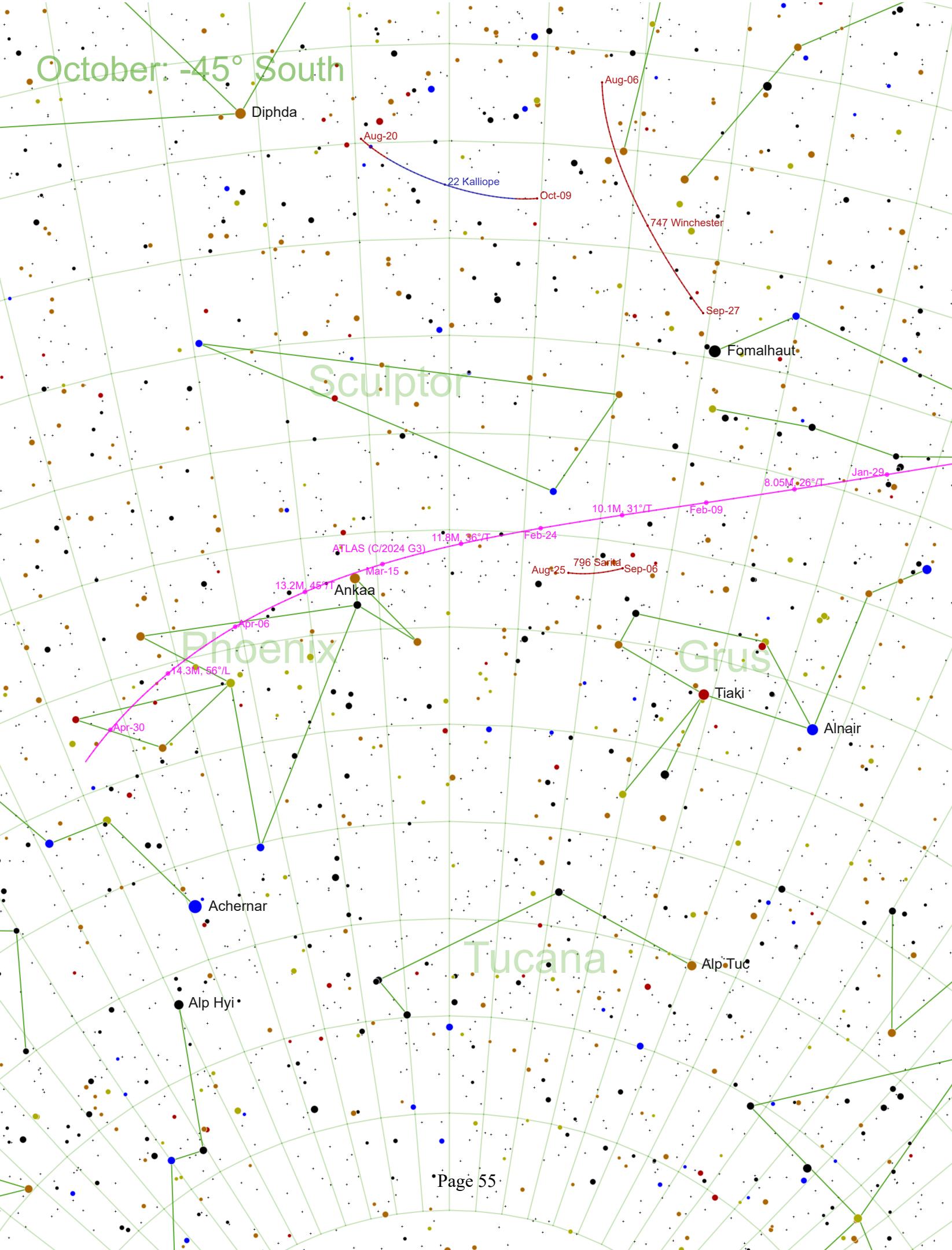
Pisces

Sculptor

Page 54



October -45° South



November: 45° North
Camelo-
pardalis

Cassiopeia

Perseus

Triangulum

Aries

Alcyone

Page 56

Caph

Cih

Ruchbah

Schedar

Gam Per

Mirfak

Algol

Almach

Mirach

433 Eros

Eps Per

Zet Per

Dec-15

13 Egeria

Dec-28

Sep-13

Sep-30

84 Klio

Nov-21

Hamal

Sheratan

November: 10° North

Triangulum

Aries

Cetus

Eridanus

Zaurak

Page 57

Zet Per

Alcyone

68 Leto

Oct-19 Uranus

Oct-14

Oct-18

Oct-23

52 Europa

Dec-16

Dec-16

245 Vera

Déc-13

471 Papagena

Dec-15

Dec-31

11 Parthenope

Menkar

Oct-09

Dec-12

Dec-04

Dec-08

Dec-18

Dec-31

Dec-01

Dec-05

Dec-09

Dec-13

Dec-17

Dec-21

Dec-25

Dec-31

Jan-04

Jan-08

Jan-12

Jan-16

12 Victoria

Sep-18

85 Io

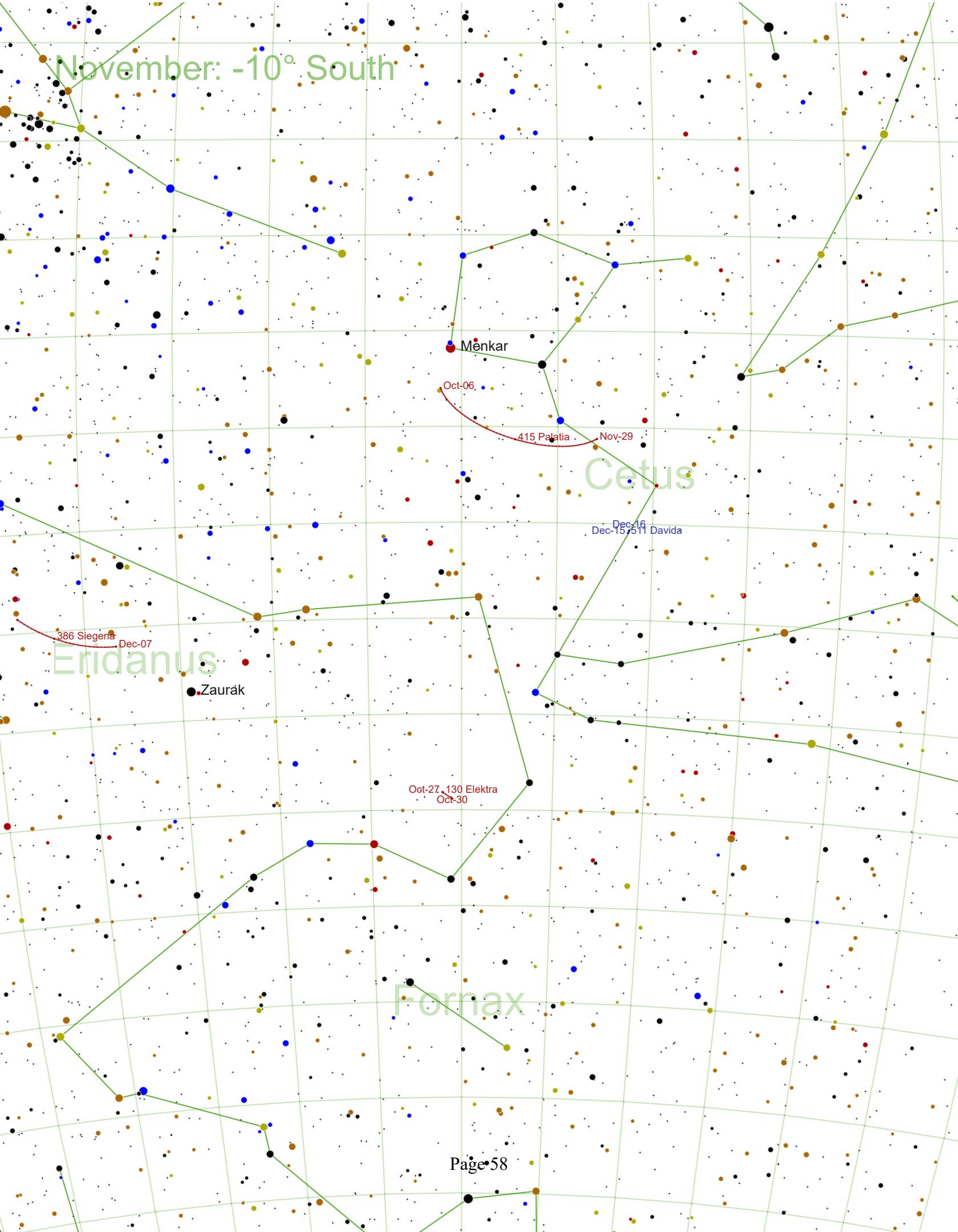
Mirach

Sheratan

Hamal

Page 57

November: -10° South



November: -45° South

Fornax

Caelum

Horologium

Dorado

Reticulum

Hydrus

Page 59

Acamar

L

ATLAS

(C/2024 G3)

Apr 30

14.3M; 56°/L

Apr 06

L

Alp Hyi.

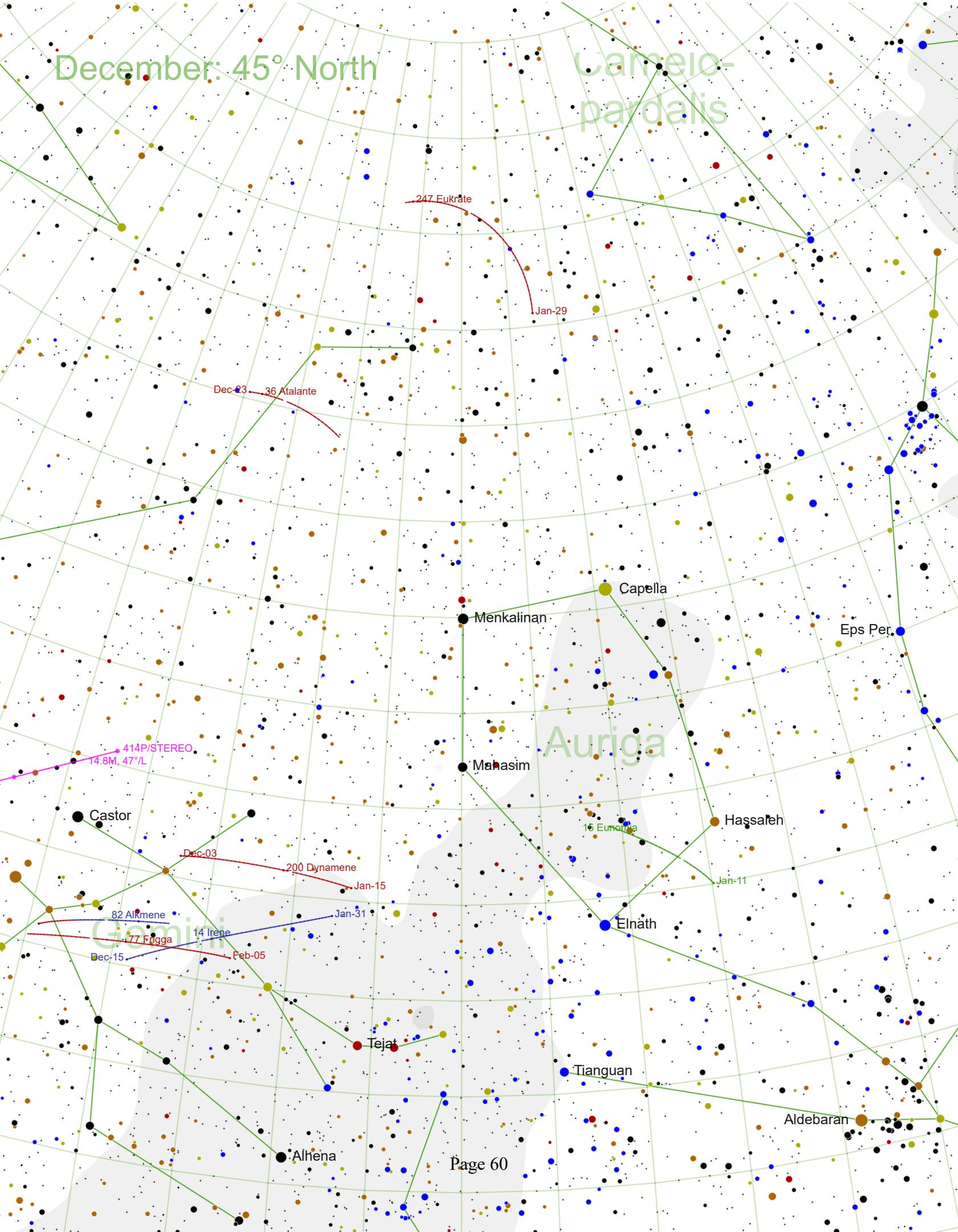
Achernar

December: 45° North

Camelopardalis

Auriga

Page 60



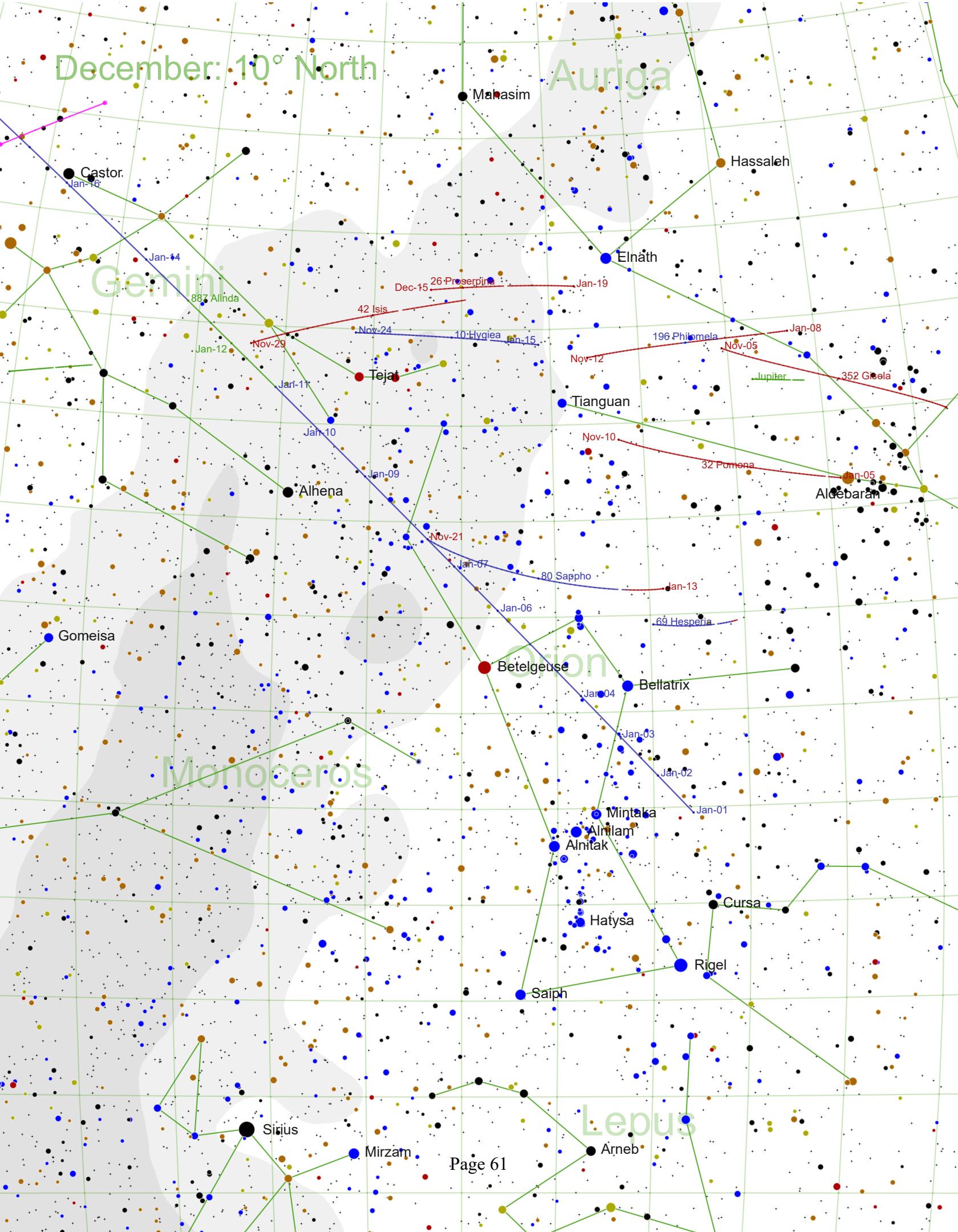
December: 10° North

Gemini

Auriga

Monoceros

Lepus



December: 10° North

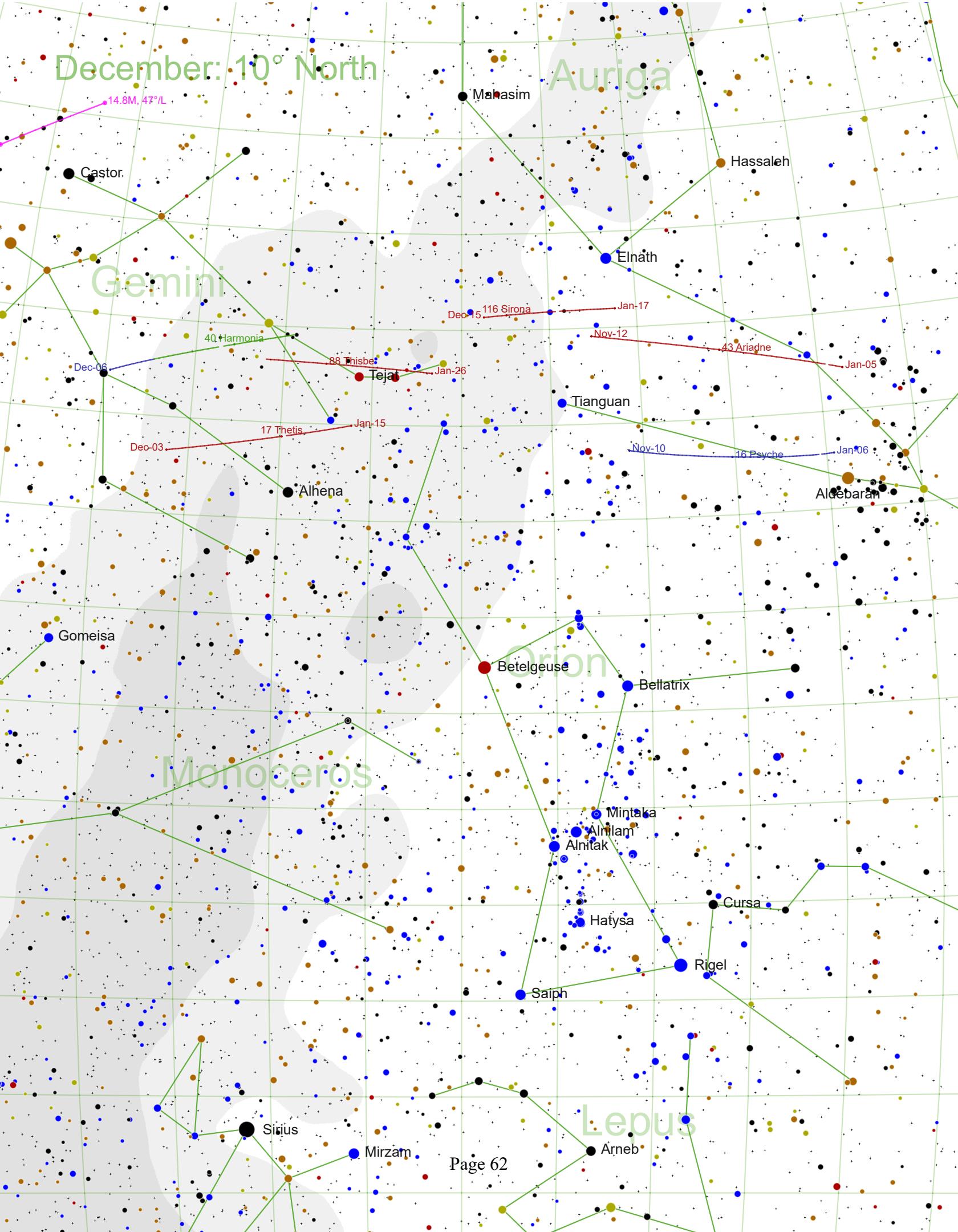
Gemini

Auriga

Monoceros

Lepus

Page 62



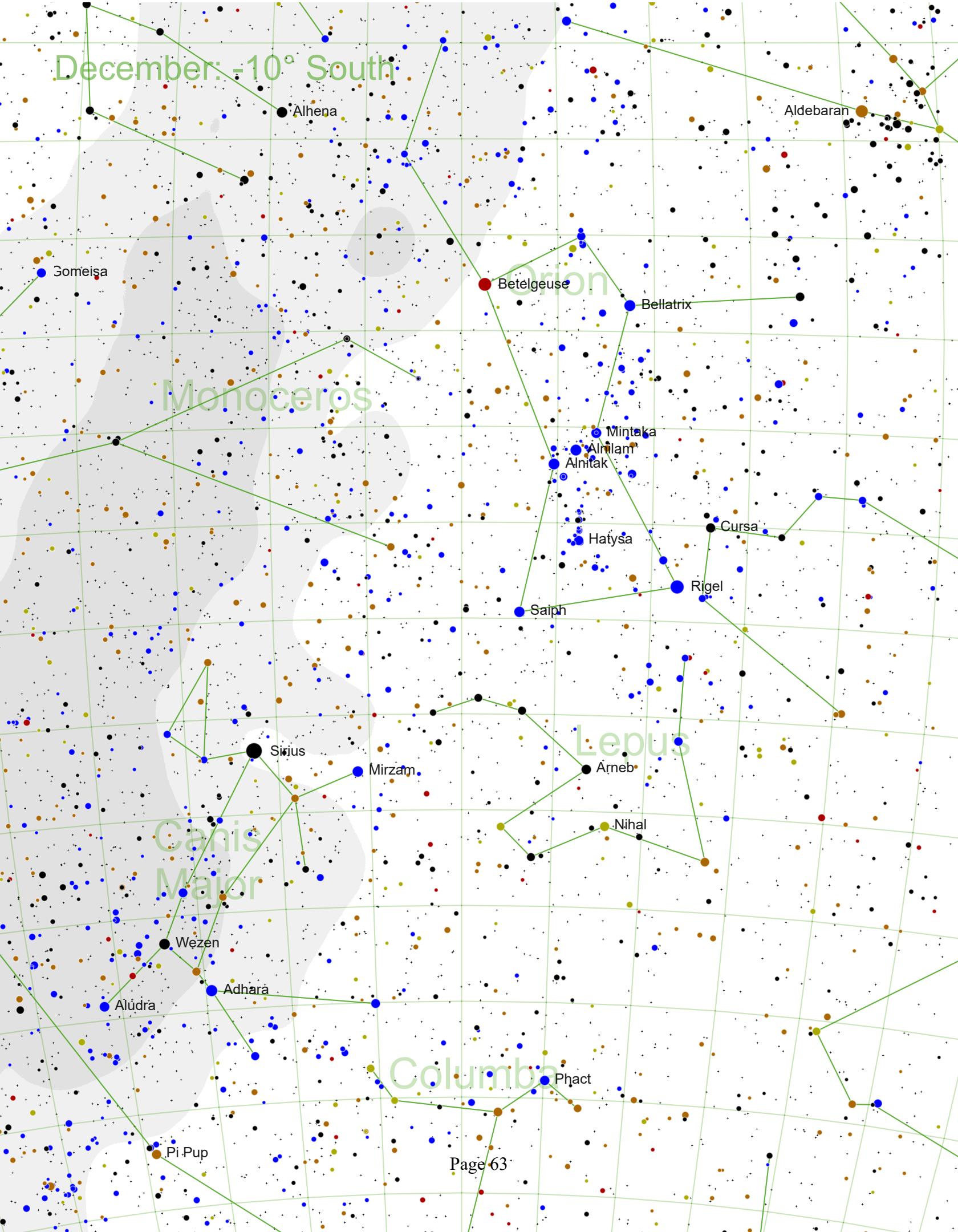
December -10° South

Monoceros

Canis
Major

Columbia

Page 63



December: -45° South

Canis
Major

Lepus

Columba

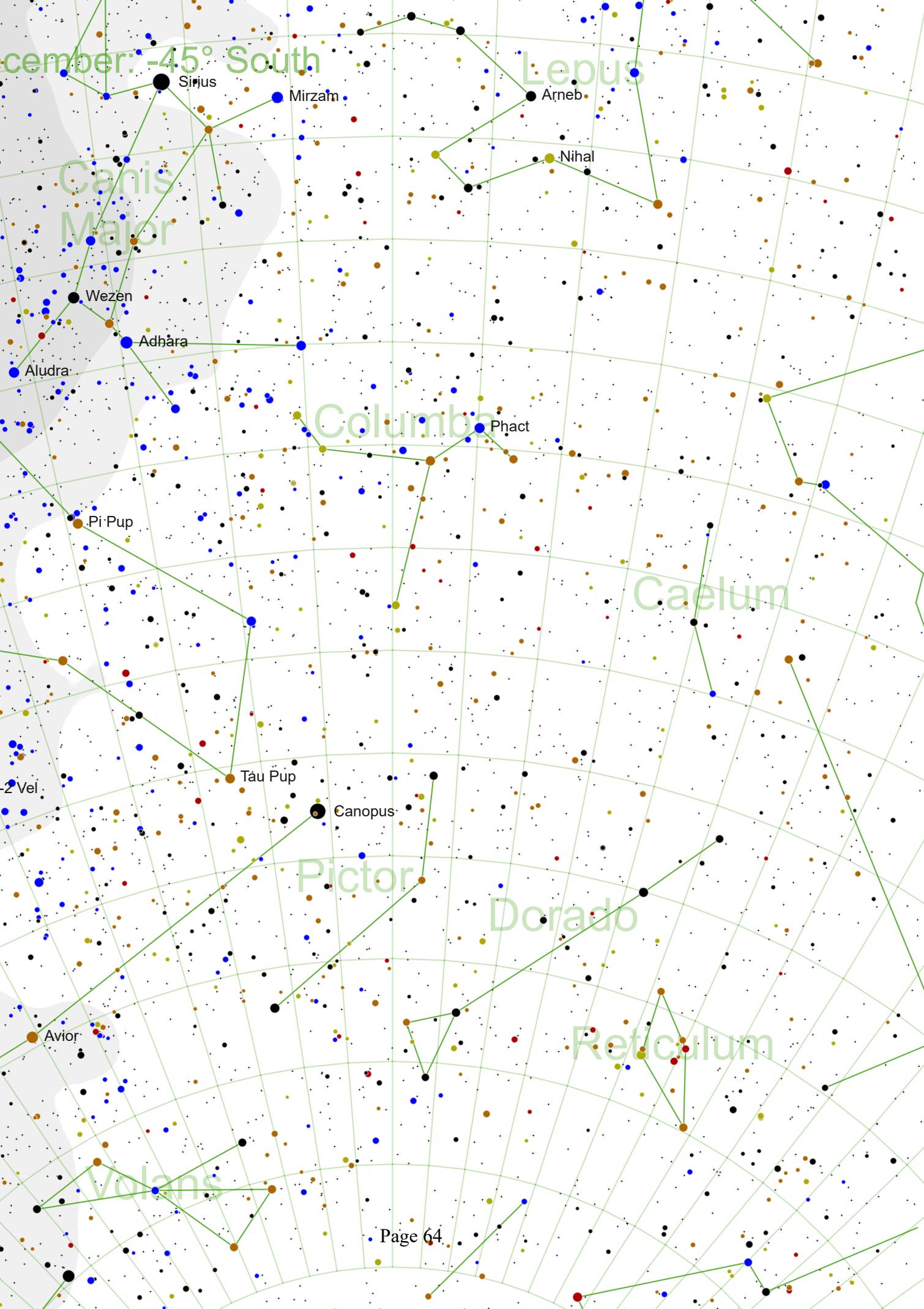
Caelum

Pictor

Dorado

Reticulum

Volans



Southern Circumpolar Sky

Hydrus

Mensa

Octans

Apus

Chameleon

Volans

Miaplacidus

Aspidiske

Ups. Car.

The Cat.

Musca

Page 65

Acrux

Gam TrA

Bet TrA

Rigil Kentaurus

Toliman

Hadar

Alp Tuc

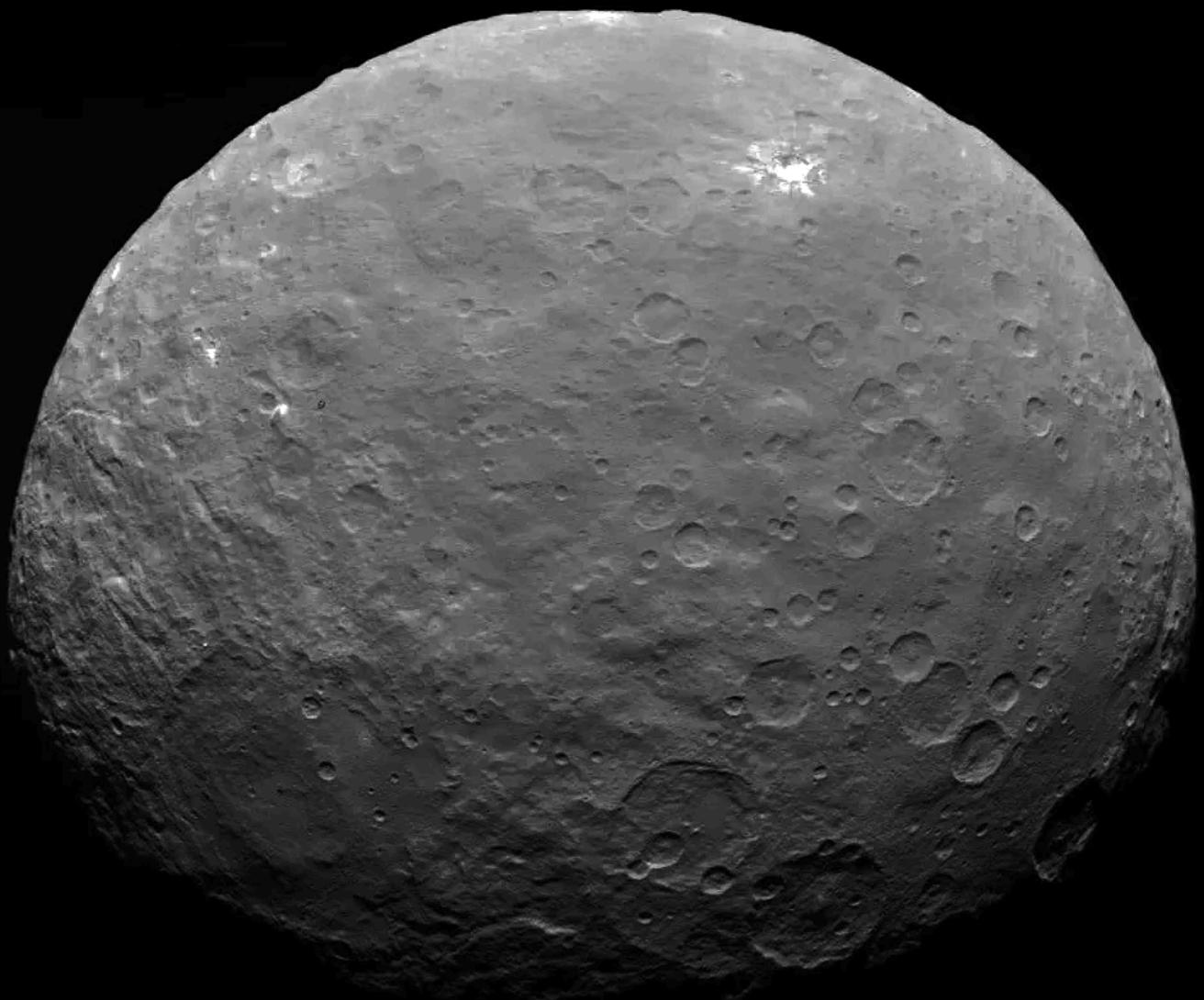
Alp Hyi

Bet Hyi

Atria

Ceres

Credit: NASA/JPL-Caltech/UCLA/MPS/DLR/IDA
The dwarf planet Ceres as imaged by the Dawn probe



Occator Crater, Ceres

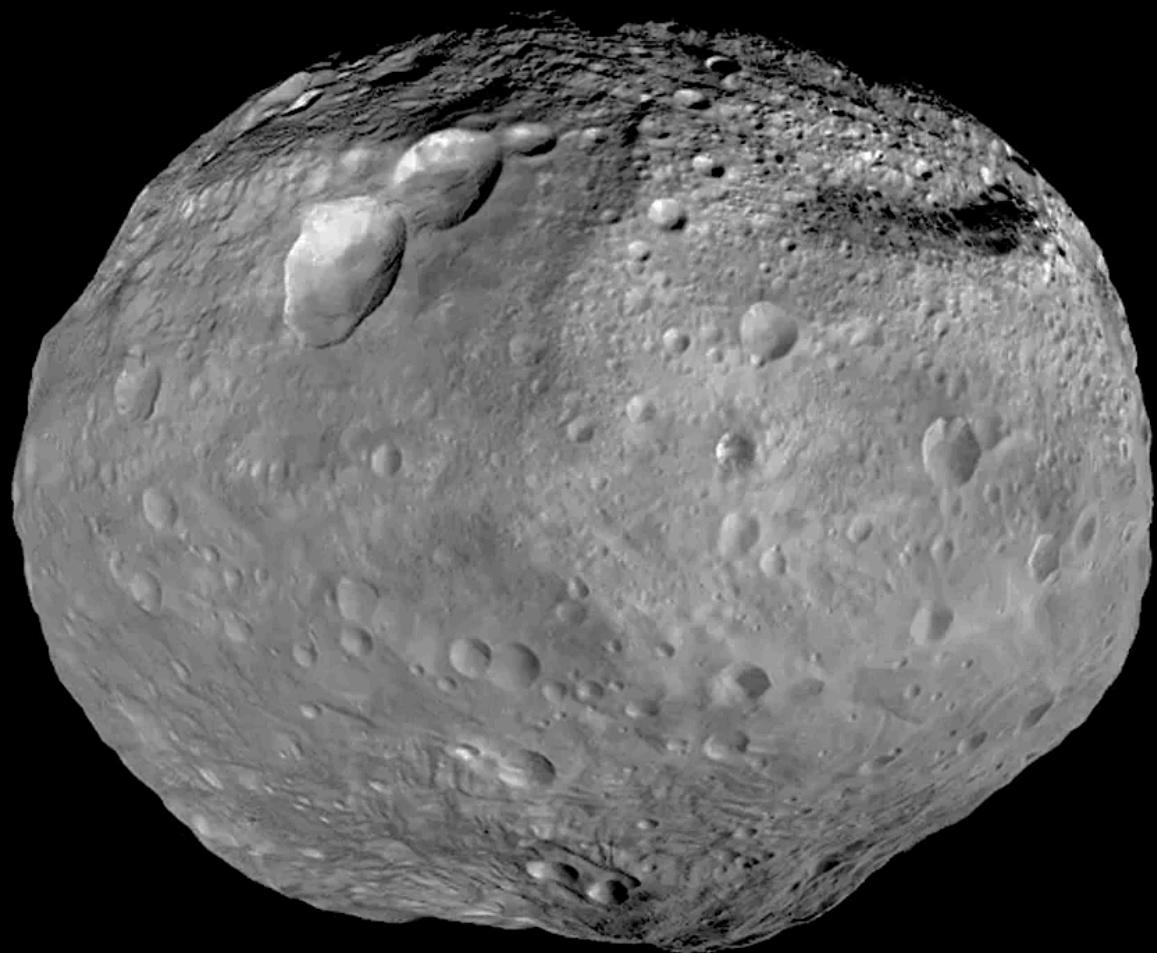
Credit: NASA/JPL-Caltech/UCLA/MPS/DLR/IDA

The white regions are salt deposits from brine vents



Vesta

Credit: NASA/JPL-Caltech/UCAL/MPS/DLR/IDA
The brightest asteroid, as imaged by the Dawn probe



Gaspra

Credit: NASA/USGS

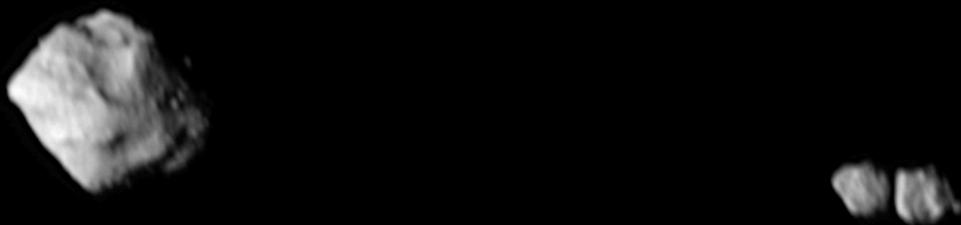
Gaspra was the first asteroid closely approached by a spacecraft, namely Galileo in 1991.



Dinkinesh and Selam

Credit: NASA/Goddard/SwRI/Johns Hopkins APL

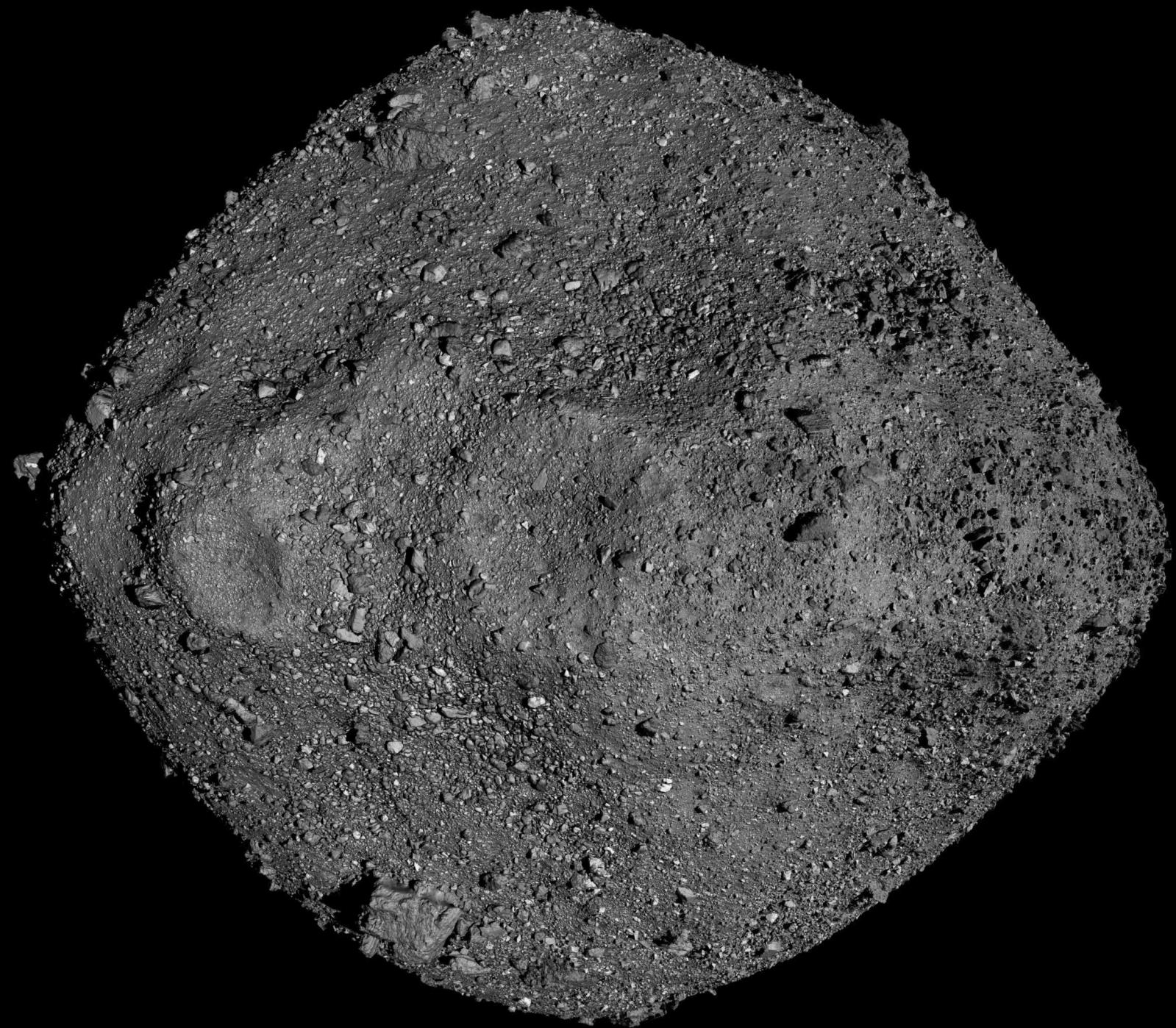
Viewed from the probe Lucy, this long-range image reveals that Dinkinesh's moon Selam is a contact binary.



Bennu

Credit: NASA/Goddard/University of Arizona

Bennu is a hazardous near-Earth asteroid. As a fast rotator, it has formed a pronounced equatorial ridge.



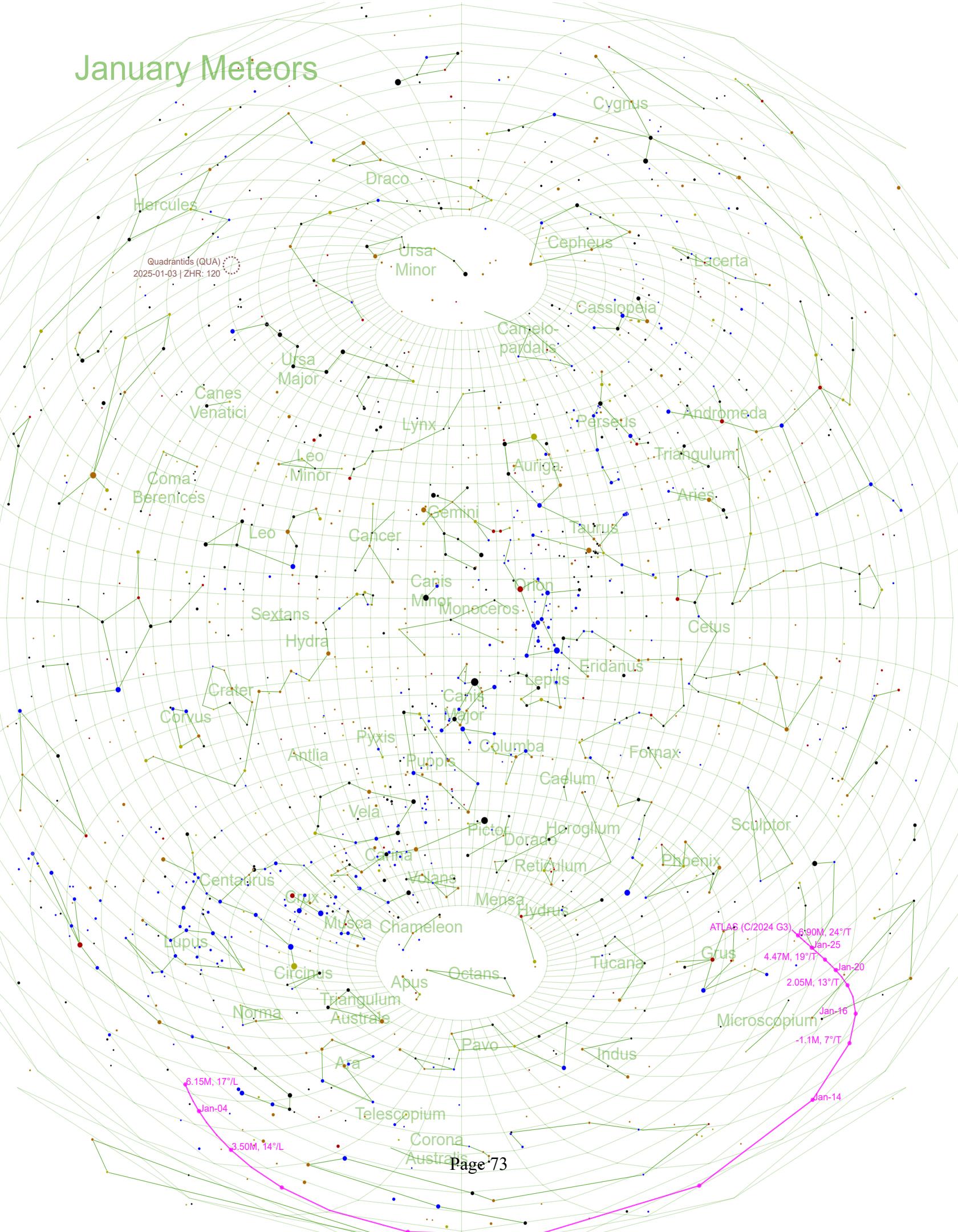
Eros

Credit: NASA/JPL/JHUAPL

Asteroid 433 Eros imaged from the NEAR probe.



January Meteors



Quadrantids (QUA)

This meteor shower is active from 2024-12-28 to 2025-01-12, peaking on 2025-01-03 during which the Moon phase is waxing crescent. The radiant lies at approximately RA 230° and DEC 50°. These very bright (including fireballs) meteors have an entry velocity of 41 kilometers per second, with a peak hourly rate of 120.

Despite the name, the radiant of the Quadrantids lies in Boötes. The peak does not have a long duration, only a few hours in comparison to other showers which typically show peak activity to up to two days. The meteor rate is only above half the maximum rate for about eight hours, implying that the meteor shower is very young, possibly no more than 500 years old.

The progenitor of the shower is not certain, but might be the very minor planet 2003 EH1, a small member of the Amor asteroid group that is 2.4 - 4 km in size. The Amors are a group of near-Earth asteroids including 70 potentially hazardous asteroids.

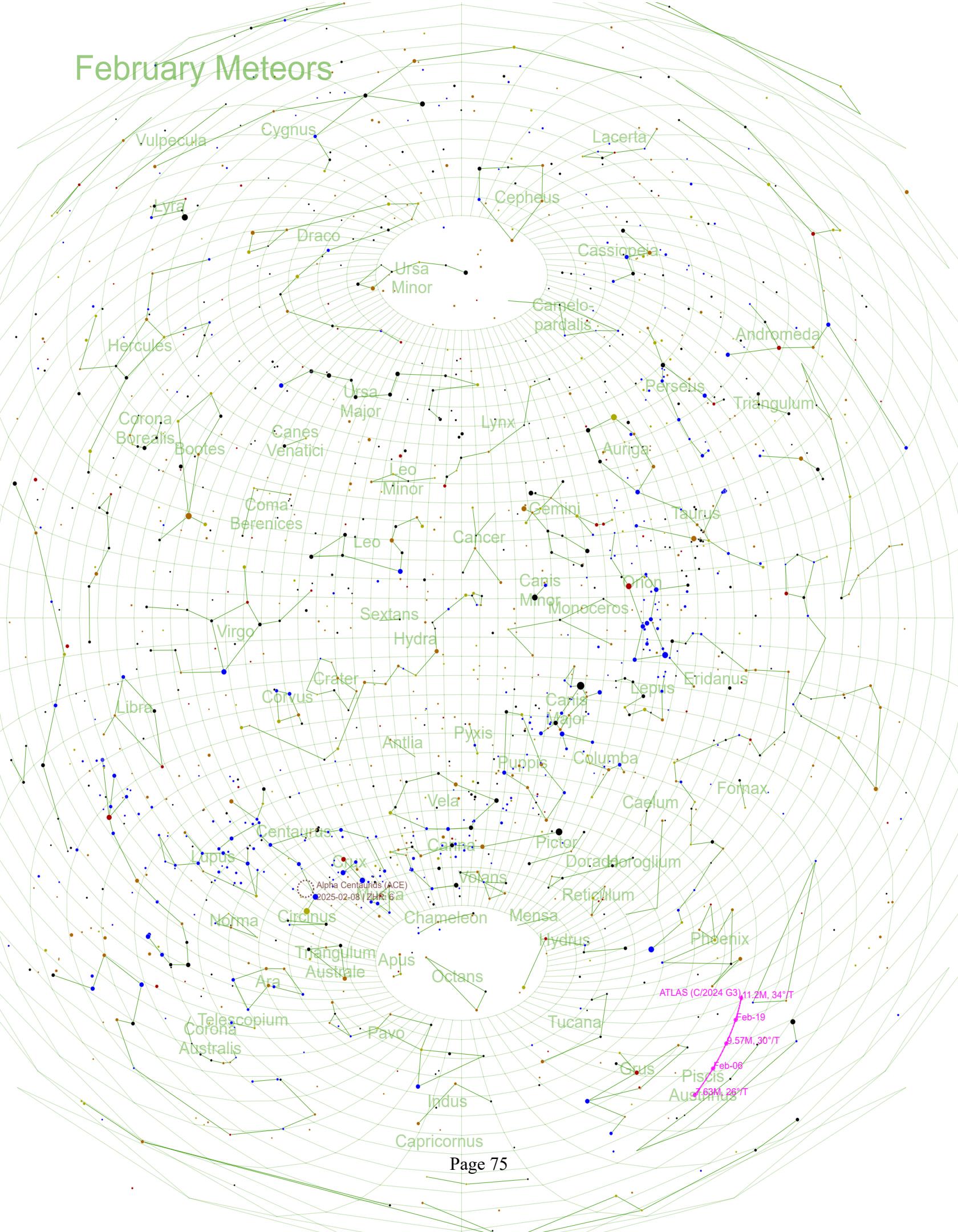
The shower is named after the defunct constellation Quadrans Muralis. The Quadrantids were independently identified as an annual meteor shower in 1839 by Adolphe Quetelet in Brussels and Edward C Herrick in Connecticut.

In the days after the peak activity, it is still possible to observe occasional bright fireballs.

Other showers

The Alpha Centaurids (ACE) are active from 2025-01-31 to 2025-02-20.

February Meteors

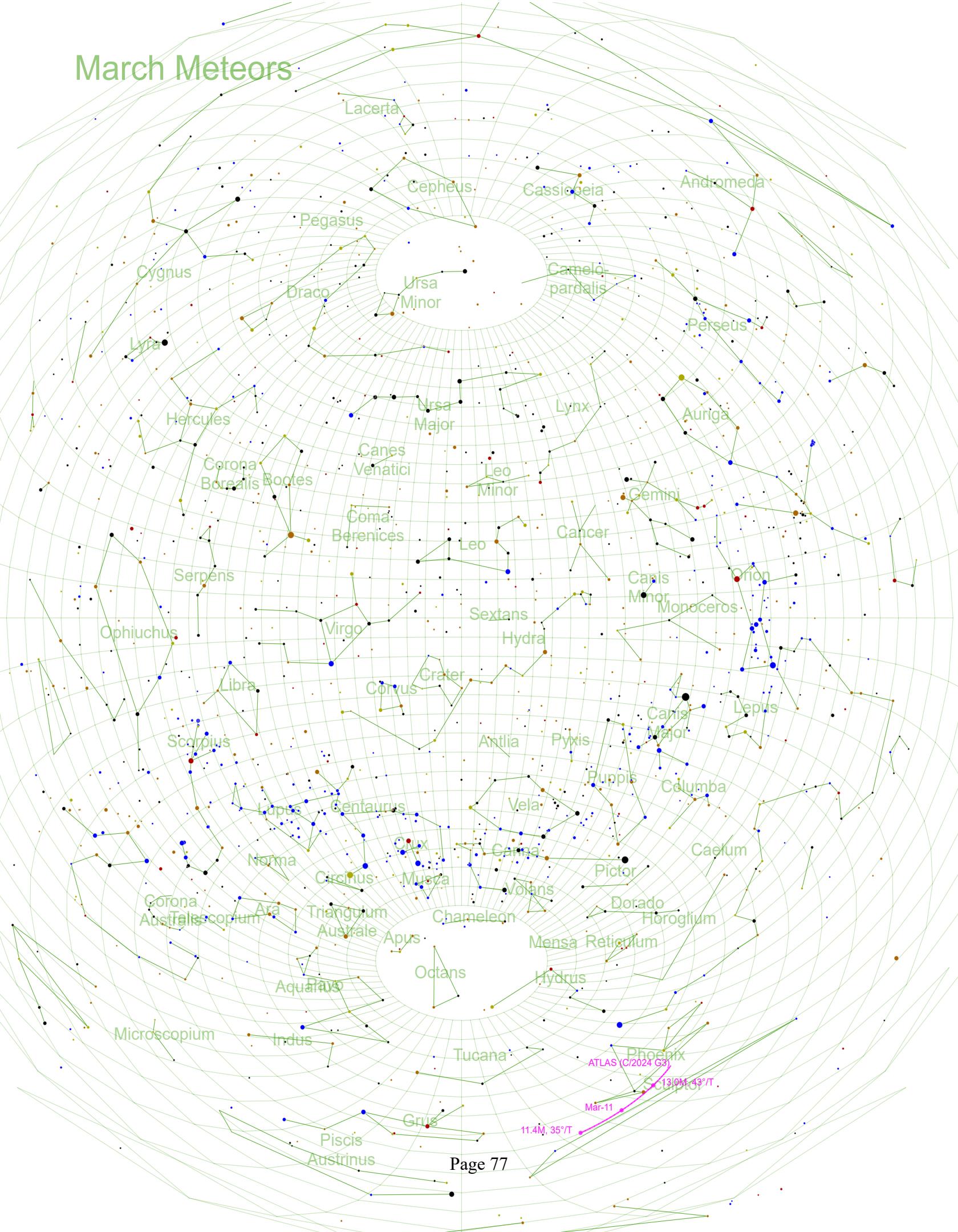


Alpha Centaurids (ACE)

This meteor shower is active from 2025-01-31 to 2025-02-20, peaking on 2025-02-08 during which the Moon phase is early waxing gibbous. The radiant lies at approximately RA 211° and DEC -58°. These very bright meteors have an entry velocity of 58 kilometers per second, with a peak hourly rate of 6.

This southerly meteor shower has been active since at least 1969, and usually has a ZHR of 3-6, but has shown bursts of up to 30.

March Meteors



No significant meteor showings peak during this month, but the following sporadic year-round meteor sources are active throughout the year:

Antihelion Source (ANT)

This meteor shower is weakly active throughout the year with no significant peak. The radiant lies opposite the Sun, shifted 15° towards sunrise. These faint meteors have an entry velocity of 30 kilometers per second, with a peak hourly rate of 4-5.

The Antihelion Source is a weak concentration of sporadic meteors in the direction opposite the Sun, shifted slightly towards sunrise due to Earth's motion through space. It is best seen at 01:00 standard local time. It is weakly active for most of the year, but is not considered to be active from late September to December as during this period activity is overwhelmingly from the Taurids. The Alpha Capricornids and Delta Aquariids also have radiants located in the region of the Antihelion Source.

Northern Apex Source

This meteor shower is weakly active throughout the year with no significant peak. They are visible pre-dawn, 15° north of the ecliptic. These bright meteors have an entry velocity of 72 kilometers per second, with a peak hourly rate of 4-5.

The Northern Apex Source is caused by cometary dust and fragments orbiting the Sun in a retrograde direction, and consequently hitting Earth's leading face. The meteors have an extremely high entry velocity and create fast, long trails when appearing further from the radiant. This source is most active in the hours before dawn.

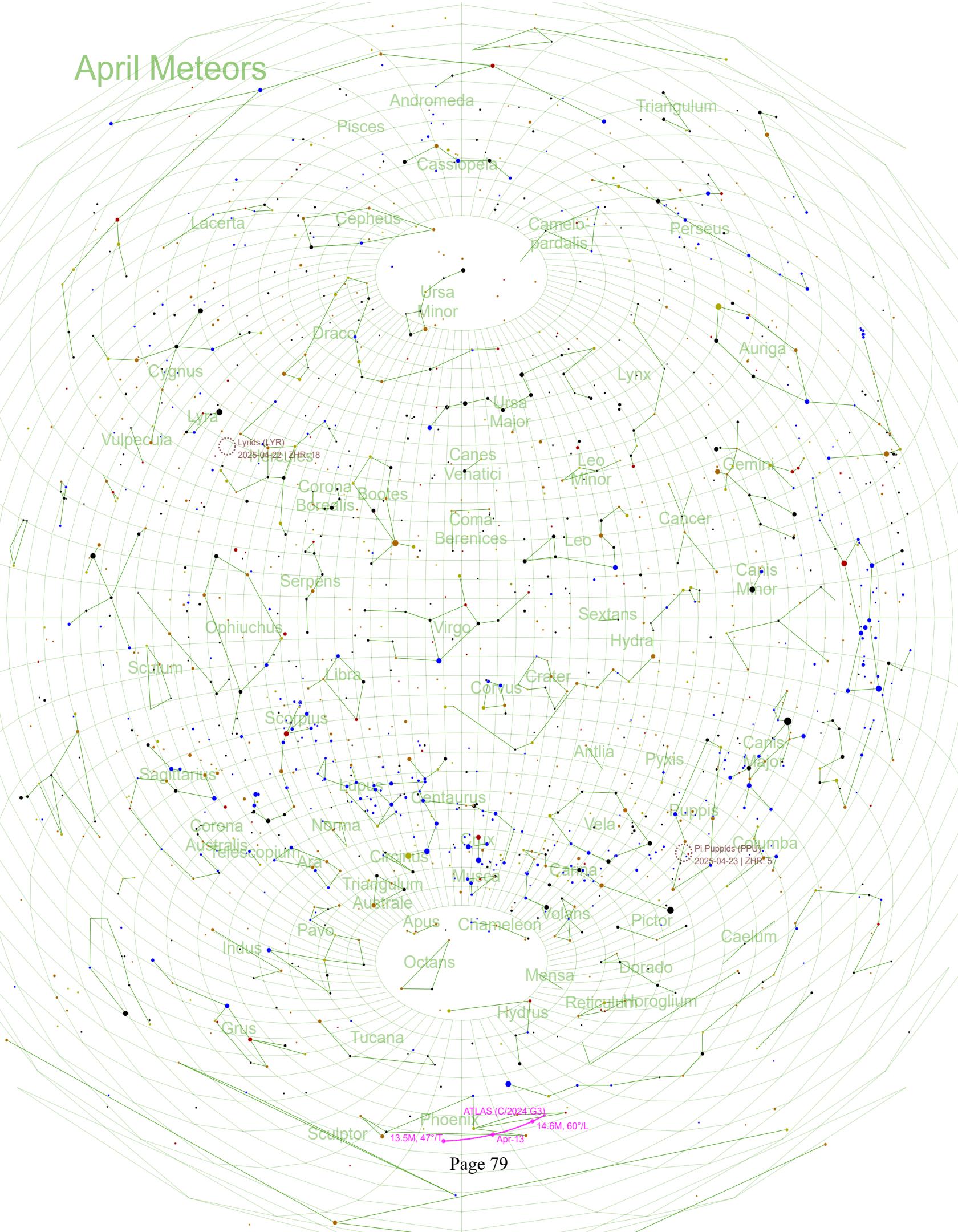
Southern Apex source

This meteor shower is weakly active throughout the year with no significant peak. They are visible pre-dawn, 15° south of the ecliptic. These bright meteors have an entry velocity of 72 kilometers per second, with a peak hourly rate of 4-5.

The Southern Apex Source is caused by cometary dust and fragments orbiting the Sun in a retrograde direction, and consequently hitting Earth's leading face. The meteors have an extremely high entry velocity and create

fast, long trails when appearing further from the radiant. This source is most active in the hours before dawn.

April Meteors



Lyrids (LYR)

This meteor shower is active from 2025-04-14 to 2025-04-30, peaking on 2025-04-22 during which the Moon phase is waning crescent. The radiant lies at approximately RA 271° and DEC 34°. These very bright meteors have an entry velocity of 49 kilometers per second, with a peak hourly rate of 18.

Also known as the April Lyrids, this shower is associated with the comet C/1861 G1 (Thatcher). This comet has only been observed in 1861 and is due to return in approximately 2283. On its return it will be reclassified as a periodic comet and will be changed from a C/ designation to a P/ designation.

Records of the Lyrids date back to 687 BCE (the earliest recorded observation of a meteor storm), and this shower is the brightest associated with a long-period comet.

Pi Puppids (PPU)

This meteor shower is active from 2025-04-15 to 2025-04-28, peaking on 2025-04-23 during which the Moon phase is waning crescent. The radiant lies at approximately RA 110° and DEC -45°. These very bright meteors have an entry velocity of 18 kilometers per second, with a peak hourly rate of 5.

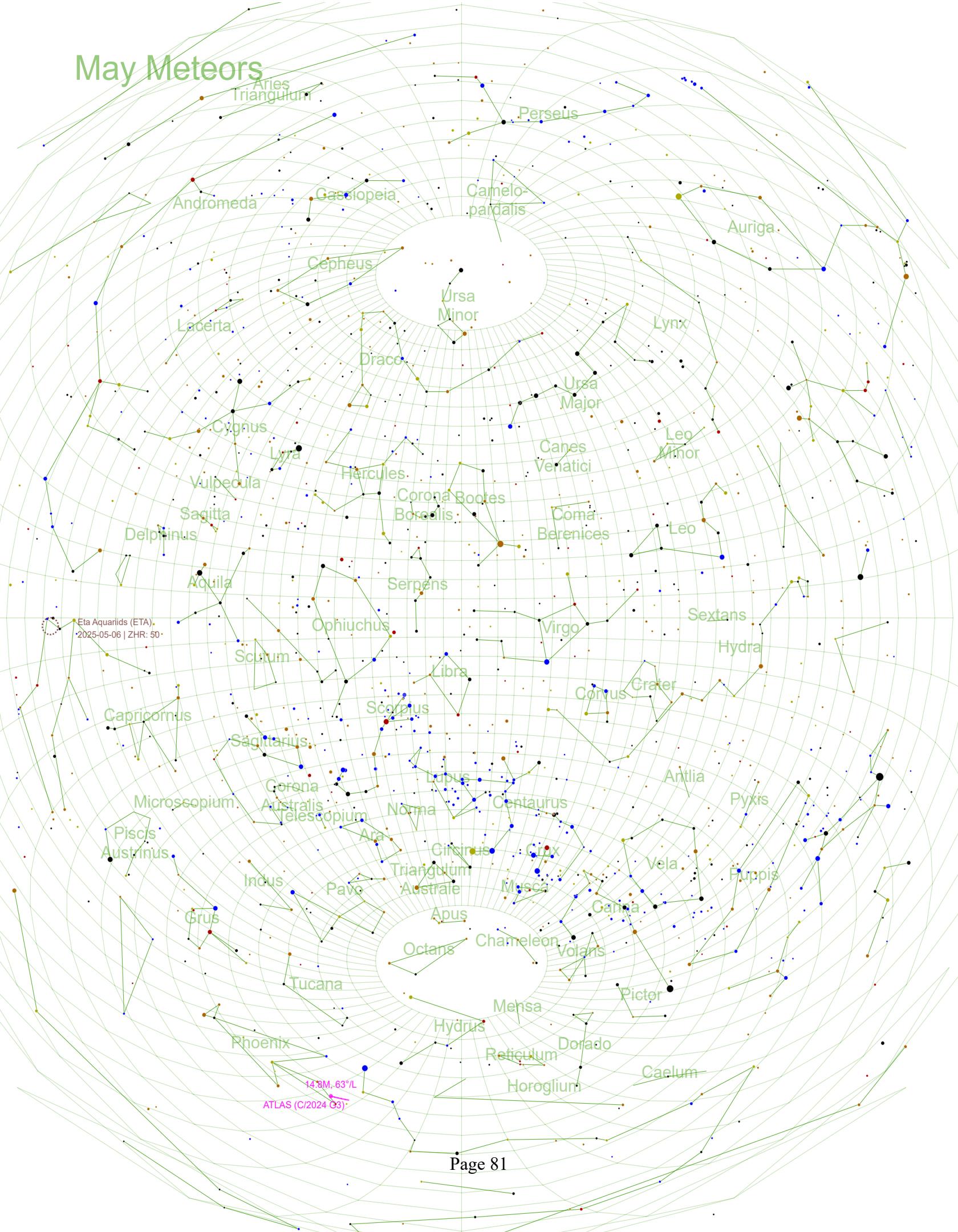
The Pi Puppids were discovered as recently as 1972. Due to the location of the radiant closer to the Sun, the shower should be observed before midnight, before the radiant sets.

This shower is associated with comet 26P/Grigg Skjellerup, and activity in this shower seems to peak in years this comet reaches perihelion. Jupiter has perturbed the comet into an orbit that no longer intersects with Earth's path, so the future of this shower is uncertain.

Other showers

The Eta Aquariids (ETA) are active from 2025-04-19 to 2025-05-28.

May Meteors

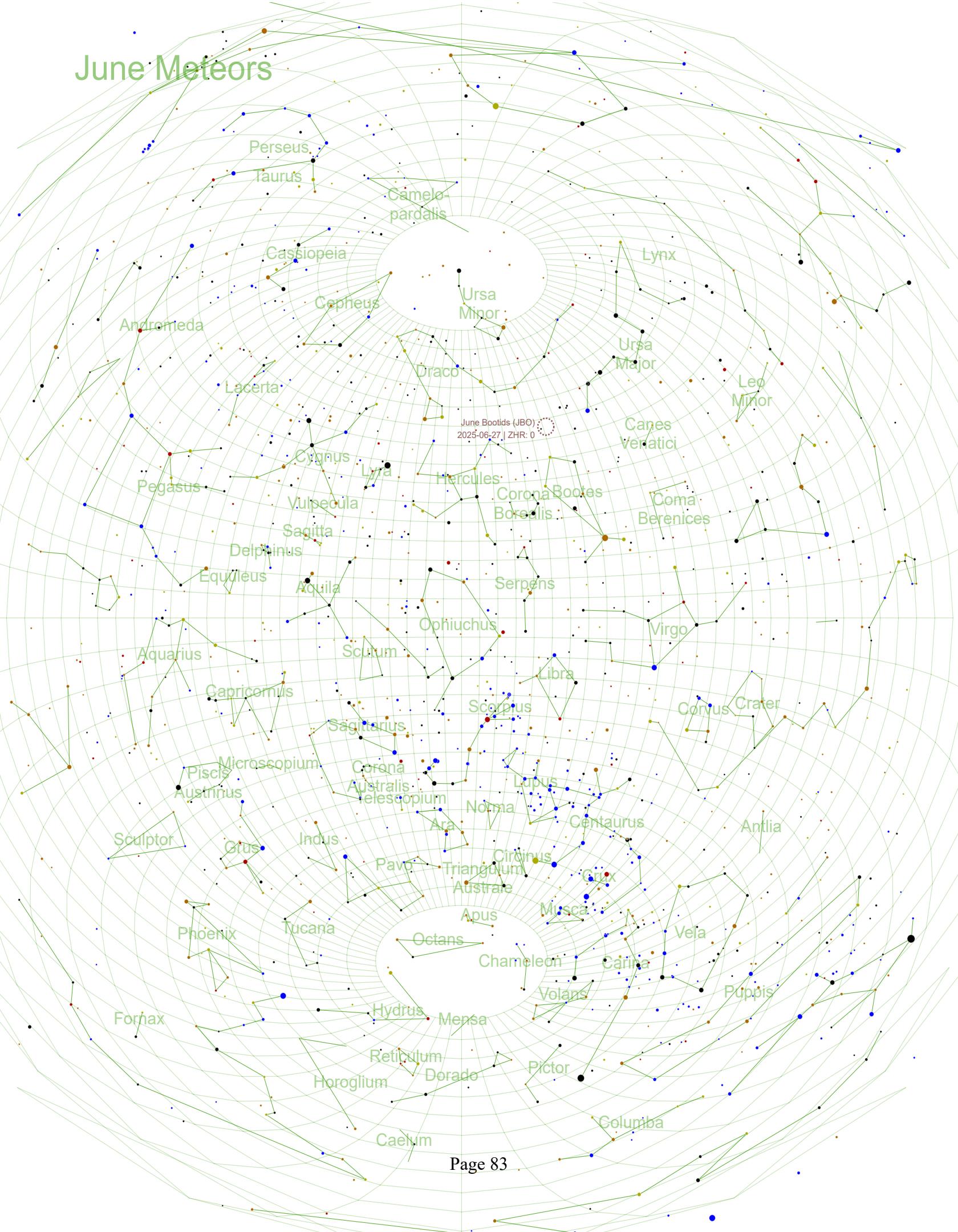


Eta Aquariids (ETA)

This meteor shower is active from 2025-04-19 to 2025-05-28, peaking on 2025-05-06 during which the Moon phase is early waxing gibbous. The radiant lies at approximately RA 338° and DEC -1°. These bright meteors have an entry velocity of 66 kilometers per second, with a peak hourly rate of 50.

Comet 1P/Halley is the parent body of two meteor showers, the Eta Aquariids and the Orionids. This is one of the best southern hemisphere showers, but the shower is observable up to about 40° north.

June Meteors

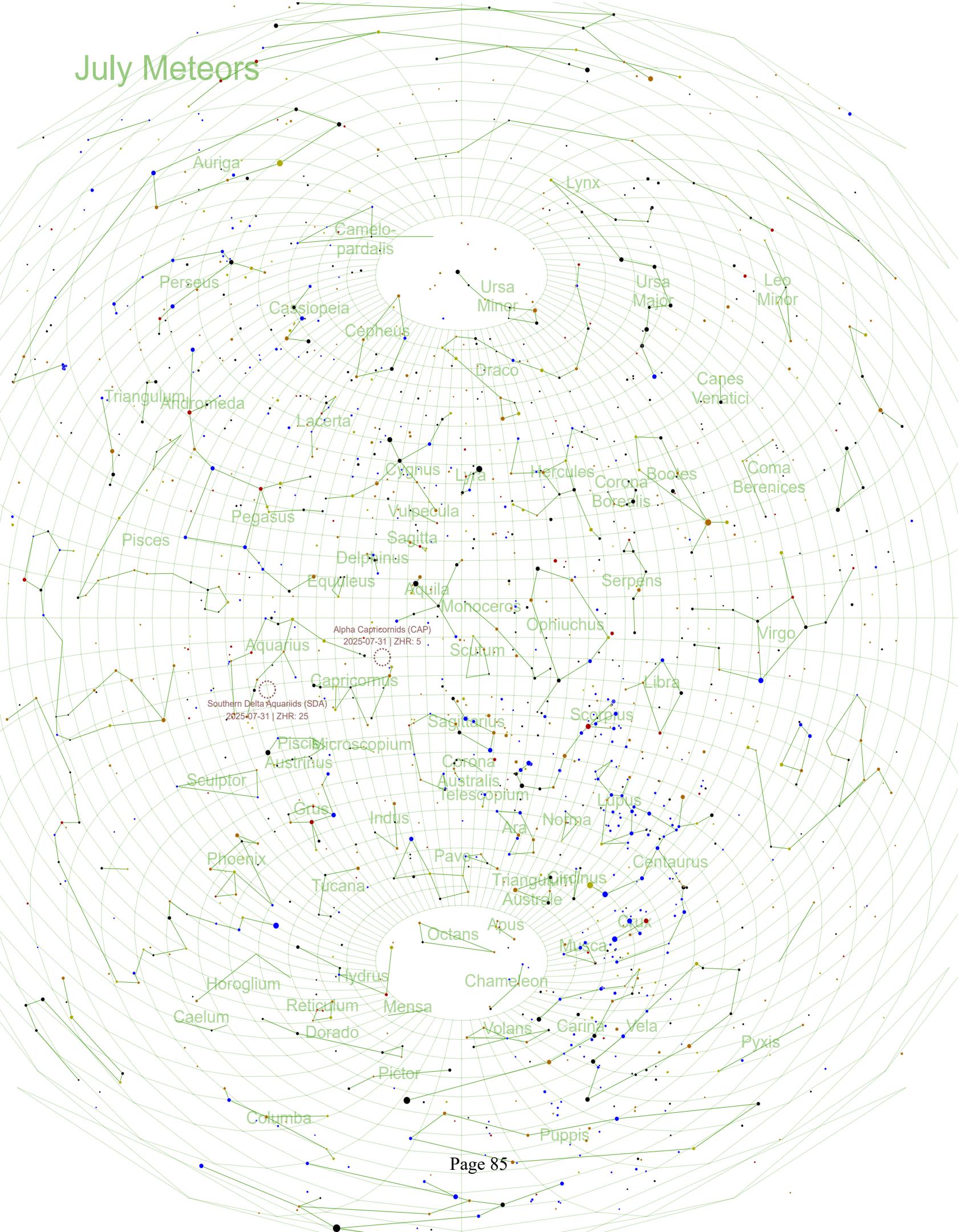


June Bootids (JBO)

This meteor shower is active from 2025-06-22 to 2025-06-02, peaking on 2025-06-27 during which the Moon phase is waxing crescent. The radiant lies at approximately RA 224° and DEC 48°. These very bright meteors have an entry velocity of 18 kilometers per second, with a peak hourly rate of 0.

This highly unpredictable shower is associated with comet 7P/Pons-Winnecke. The comet no longer crosses Earth's orbit, so any activity arises from earlier orbits. The last outburst of this shower occurred in 1998, with a ZHR of 100.

July Meteors



Southern Delta Aquariids (SDA)

This meteor shower is active from 2025-07-12 to 2025-08-23, peaking on 2025-07-31 during which the Moon phase is waxing crescent. The radiant lies at approximately RA 340° and DEC -16°. These bright meteors have an entry velocity of 41 kilometers per second, with a peak hourly rate of 25.

One of the better southern hemisphere showers. The peak last about two days; during the peak the meteors are quite bright but outside the peak they become relatively faint. This shower has shown surges in activity prior to the nominal peak date.

Comet 96P Machholz is possibly the source of this shower.

Alpha Capricornids (CAP)

This meteor shower is active from 2025-07-03 to 2025-08-15, peaking on 2025-07-31 during which the Moon phase is waxing crescent. The radiant lies at approximately RA 307° and DEC -10°. These bright meteors have an entry velocity of 23 kilometers per second, with a peak hourly rate of 5.

The Alpha Capricornid radiant is in the same area of sky as the Antihelion Source (ANT). The two sources of meteors can be distinguished by the speed of the meteors - those from the ANT are significantly faster. This shower can include fireballs.

The parent body of this shower is comet 169P/NEAT. The meteor shower is thought to have originated from a fragmentation of this comet about 4,500 years ago.

August Meteors

Aug-31

14.8M, 47°/L

414P/STEREO

No significant meteor showings peak during this month, but the following sporadic year-round meteor sources are active throughout the year:

Antihelion Source (ANT)

This meteor shower is weakly active throughout the year with no significant peak. The radiant lies opposite the Sun, shifted 15° towards sunrise. These faint meteors have an entry velocity of 30 kilometers per second, with a peak hourly rate of 4-5.

The Antihelion Source is a weak concentration of sporadic meteors in the direction opposite the Sun, shifted slightly towards sunrise due to Earth's motion through space. It is best seen at 01:00 standard local time. It is weakly active for most of the year, but is not considered to be active from late September to December as during this period activity is overwhelmingly from the Taurids. The Alpha Capricornids and Delta Aquariids also have radiants located in the region of the Antihelion Source.

Northern Apex Source

This meteor shower is weakly active throughout the year with no significant peak. They are visible pre-dawn, 15° north of the ecliptic. These bright meteors have an entry velocity of 72 kilometers per second, with a peak hourly rate of 4-5.

The Northern Apex Source is caused by cometary dust and fragments orbiting the Sun in a retrograde direction, and consequently hitting Earth's leading face. The meteors have an extremely high entry velocity and create fast, long trails when appearing further from the radiant. This source is most active in the hours before dawn.

Southern Apex source

This meteor shower is weakly active throughout the year with no significant peak. They are visible pre-dawn, 15° south of the ecliptic. These bright meteors have an entry velocity of 72 kilometers per second, with a peak hourly rate of 4-5.

The Southern Apex Source is caused by cometary dust and fragments orbiting the Sun in a retrograde direction, and consequently hitting Earth's leading face. The meteors have an extremely high entry velocity and create

fast, long trails when appearing further from the radiant. This source is most active in the hours before dawn.

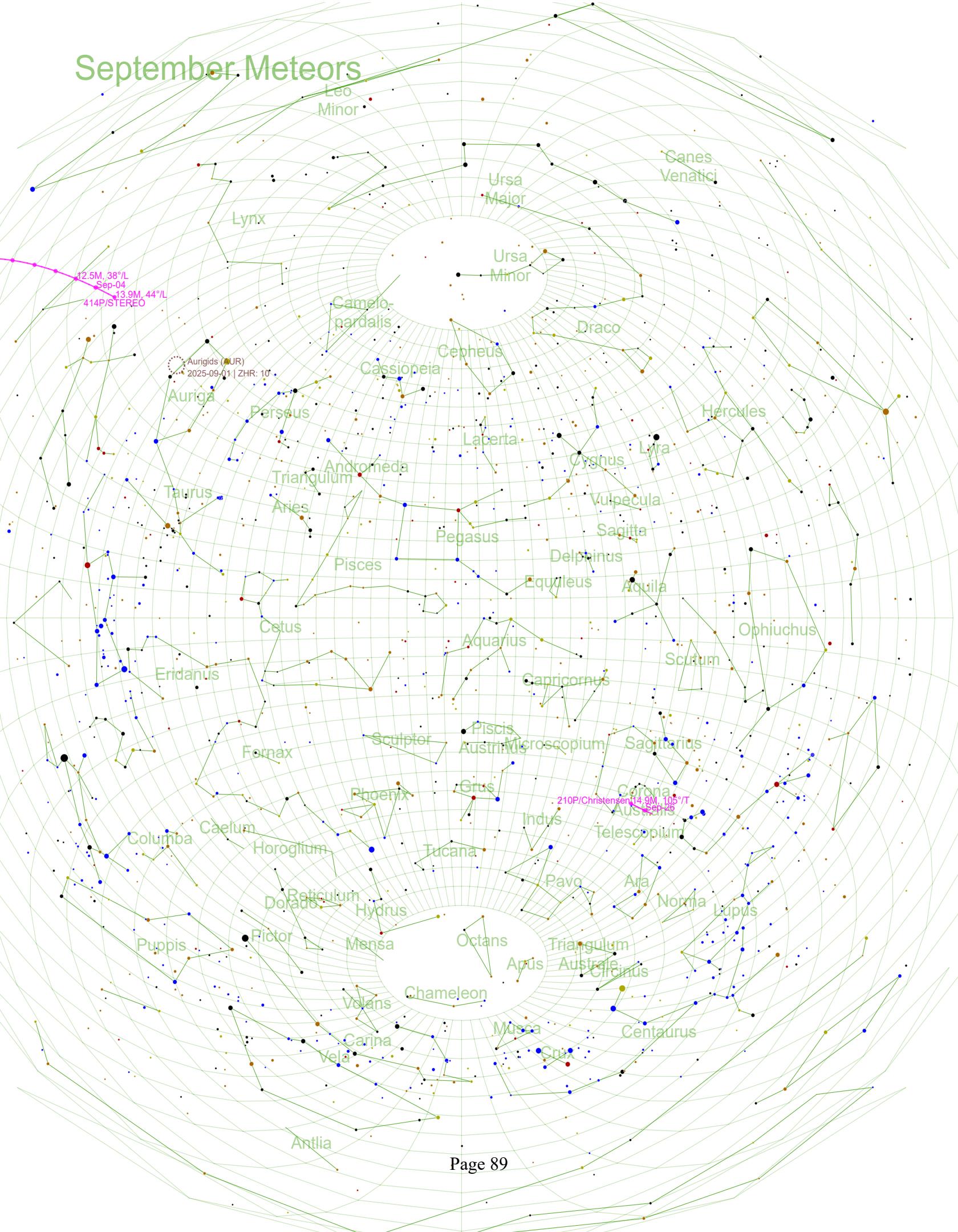
Other showers

The Southern Delta Aquariids (SDA) are active from 2025-07-12 to 2025-08-23.

The Alpha Capricornids (CAP) are active from 2025-07-03 to 2025-08-15.

The Aurigids (AUR) are active from 2025-08-28 to 2025-09-05.

September Meteors



Aurigids (AUR)

This meteor shower is active from 2025-08-28 to 2025-09-05, peaking on 2025-09-01 during which the Moon phase is early waxing gibbous. The radiant lies at approximately RA 91° and DEC 39°. These bright meteors have an entry velocity of 66 kilometers per second, with a peak hourly rate of 10.

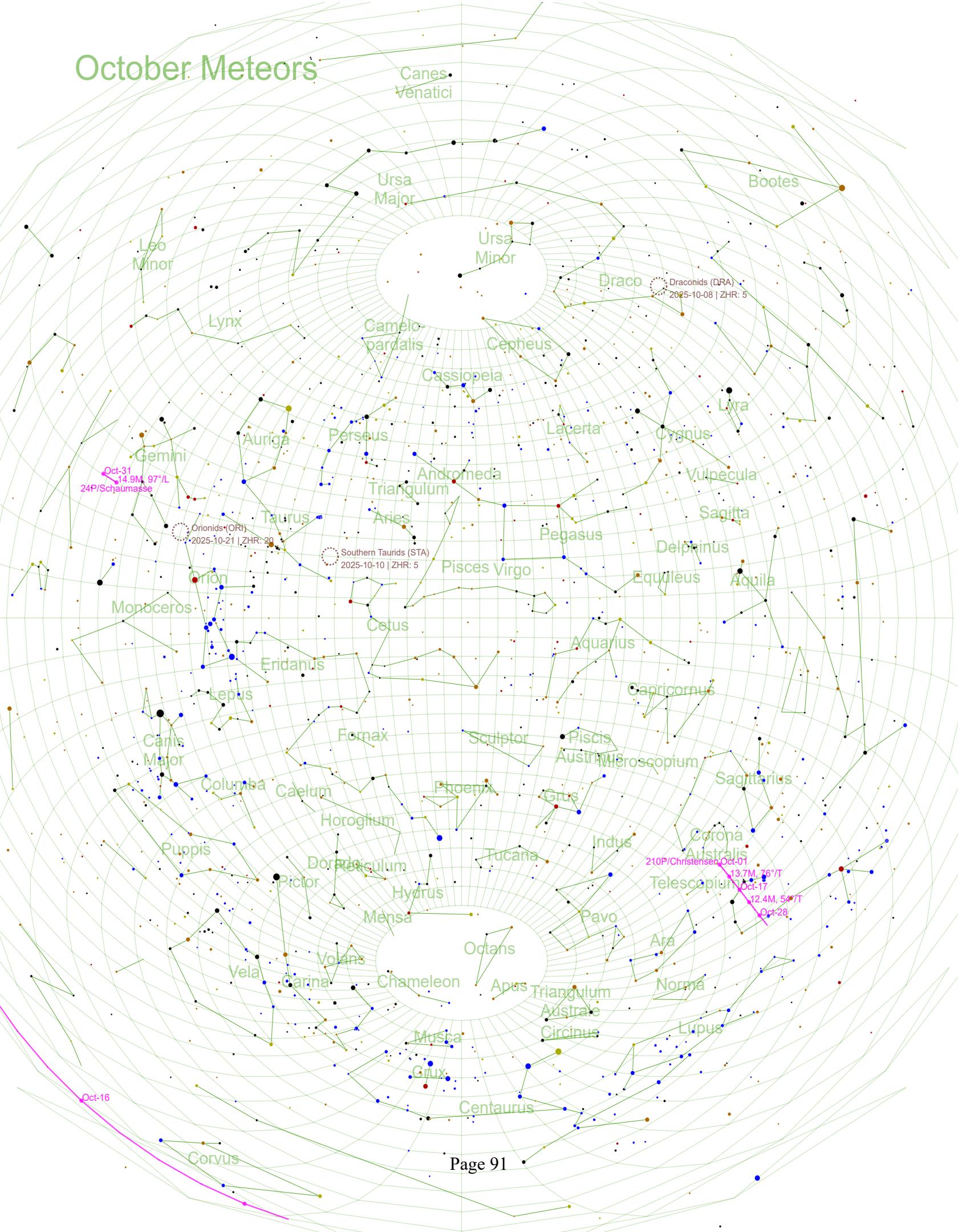
Although this sparse shower can show brief periods of significant activity, no such burst is predicted for 2025. The radiant is low in the east until well after midnight.

Comet Kiess (C/1911 N1) is the source of this shower. This comet has an orbit of around 2,000 years.

Other showers

The Southern Taurids (STA) are active from 2025-09-10 to 2025-11-20.

October Meteors



Draconids (DRA)

This meteor shower is active from 2025-10-06 to 2025-10-10, peaking on 2025-10-08 during which the Moon phase is early waning gibbous. The radiant lies at approximately RA 263° and DEC 56°. These bright meteors have an entry velocity of 21 kilometers per second, with a peak hourly rate of 5.

The parent comet is 21P/Giacobini-Zinner. This minor shower is known to produce occasional spectacular storms on good years (ZHR 500+). These remarkably slow-moving meteors coincide with a nearly full moon in 2025. It is possible activity will be elevated this year, but this is confounded by a bright Moon.

This shower was first predicted in 1915 by astronomer M Davidson from the orbit of 21P/Giacobini-Zinner. He revised the prediction in 1920, and later that year observed some activity from the predicted radiant.

In 1933 and 1946 the Draconids produced two of the most furious meteor storms of the twentieth century, with ZHR measured in the thousands.

Orionids (ORI)

This meteor shower is active from 2025-10-02 to 2025-11-07, peaking on 2025-10-21 during which the Moon phase is new moon. The radiant lies at approximately RA 95° and DEC 16°. These bright meteors have an entry velocity of 66 kilometers per second, with a peak hourly rate of 20.

Comet 1P/Halley is the parent body of two meteor showers, the Eta Aquariids and the Orionids. The Orionids are well-placed for observers in both hemispheres. The shower can show additional peaks of activity in the days around the main peak, or indeed a maximum that extends over several days. This shower was first identified by E C Herrick in 1839, and was systematically observed by A S Herschel in 1864 (the grandson of the famous William Herschel).

Southern Taurids (STA)

This meteor shower is active from 2025-09-10 to 2025-11-20, peaking on 2025-10-10 during which the Moon phase is early waning gibbous. The radiant lies at approximately RA 52° and DEC 15°. These bright meteors have an entry

velocity of 27 kilometers per second, with a peak hourly rate of 5.

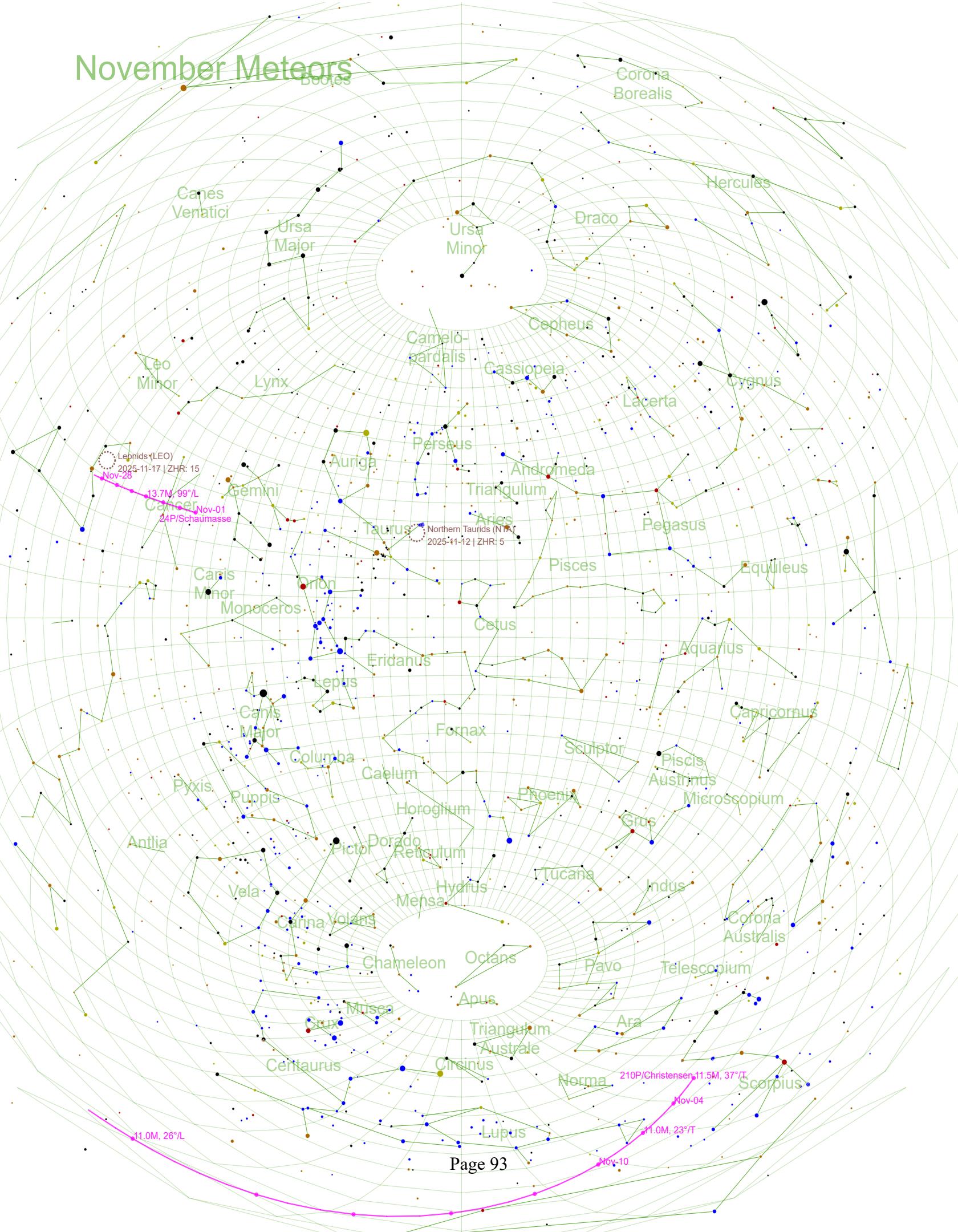
The Taurids were discovered in 1869 by G Zezioli (Northern Taurids) and by T W Backhouse (Southern Taurids), but it took decades before the Taurids were recognized as an annual shower.

The Taurids are believed to originate from the breakup of a very large comet thousands of years ago. The stream is very spread out giving a long maximum with two peaks, namely the Southern and Northern Taurids. The meteor stream contains larger bodies, leading to occasional fireballs and possibly more significant events: both the Tunguska and Chelyabinsk events have been linked to the Taurids. Taurid meteors can be colorful, with yellow, orange, blue and green streaks being observed.

Other showers

The Northern Taurids (NTA) are active from 2025-10-20 to 2025-12-10.

November Meteors



Leonids (LEO)

This meteor shower is active from 2025-11-06 to 2025-11-30, peaking on 2025-11-17 during which the Moon phase is new noon. The radiant lies at approximately RA 152° and DEC 22°. These bright meteors have an entry velocity of 71 kilometers per second, with a peak hourly rate of 15.

The parent body of this shower is 55P/Tempel-Tuttle. Every 33 years the Leonids can experience highly elevated rates. The last such outburst was in 1998 to 2002, so no elevated activity is predicted for 2025.

The Leonid storm of 1833 galvanized the field of meteor astronomy. The storm was of such scale it was widely and prominently reported, and although many initially believed it to be an atmospheric electric phenomenon, it was eventually agreed to be astronomical in nature, a hypothesis first put forward by D Olmsted. H A Newton then found historical records of similar events, and calculated a periodicity of 33.25 years, correctly predicting another large storm in 1866.

Northern Taurids (NTA)

This meteor shower is active from 2025-10-20 to 2025-12-10, peaking on 2025-11-12 during which the Moon phase is last quarter. The radiant lies at approximately RA 58° and DEC 22°.

These bright meteors have an entry velocity of 29 kilometers per second, with a peak hourly rate of 5.

See Southern Taurids (STA)

Other showers

The Orionids (ORI) are active from 2025-10-02 to 2025-11-07.

The Southern Taurids (STA) are active from 2025-09-10 to 2025-11-20.

December Meteors

Corona
Borealis

Cætes
Venatici

Leo
Minor

Cancer

Sextans

Hydra

Antlia

Pyxis

Vela

Carina

Centaurus

Scorpius

Ursa
Major

Lynx

Gemini

Canis
Minor

Monoceros

Canis
Major

Puppis

Columba

Carina

Chameleon

Norma

Ursa
Minor

Auriga

Taurus

Orion

Ophiuchus

Lepus

Eridanus

Fornax

Horologium

Dorado

Octans

Page 95

Draco

Camelo-
pardalis

Cepheus

Perseus

Andromeda

Triangulum

Aries

Pisces

Cetus

Sculptor

Phoenix

Grus

Tucana

Indus

Cassiopeia

Lacerta

Pegasus

Andromeda

Triangulum

Aries

Pisces

Cetus

Sculptor

Phoenix

Grus

Tucana

Indus

Lyra

Cygnus

Andromeda

Triangulum

Aries

Pisces

Cetus

Sculptor

Phoenix

Grus

Tucana

Indus

Corona
Australis

Telescopium

Corona
Australis

Geminids (GEM)

2025-12-14 | ZHR: 150

Dec-25

12.4M, 97°/L Dec-01

24P/Schaumasse

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Geminids (GEM)

This meteor shower is active from 2025-12-04 to 2025-12-17, peaking on 2025-12-14 during which the Moon phase is waning crescent. The radiant lies at approximately RA 112° and DEC 33°. These bright meteors have an entry velocity of 35 kilometers per second, with a peak hourly rate of 150.

Possibly the best annual shower, the Geminids peak in a moonless period in 2025. This shower features not only reasonably bright meteors and a strong maximum, but is also known for fireballs, often reported to be green.

The orbit of the shower is evolving under the influence of Jupiter, and in the long term (decades), the activity in this shower should steadily decline as the closest approach of Earth and the shower's stream becomes more distant.

The shower was first observed in 1862 by R P Greg.

Ursids (URS)

This meteor shower is active from 2025-12-17 to 2025-12-26, peaking on 2025-12-22 during which the Moon phase is waxing crescent. The radiant lies at approximately RA 217° and DEC 76°. These faint meteors have an entry velocity of 33 kilometers per second, with a peak hourly rate of 10.

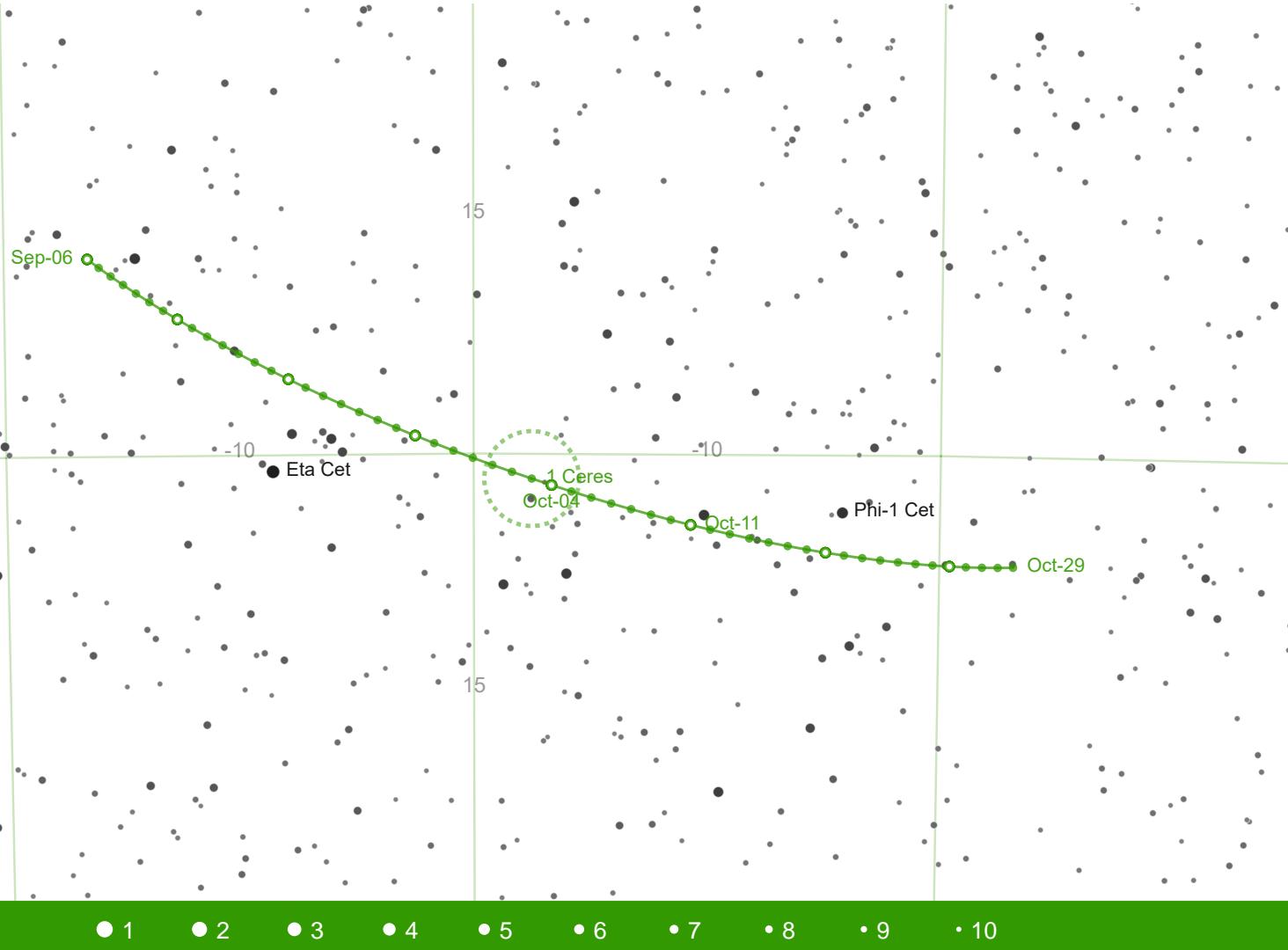
The name of this shower is ambiguous, so note the radiant lies in Ursa Minor not Ursa Major.

The parent body of this shower is 8P/Tuttle. It produced two major outbursts with ZHR up to 50 in the 20th century.

The shower was discovered by W F Denning around the start of the twentieth century. It is speculated that the Ursids are a very compact meteor stream, and significant activity is only observed within 12 hours of the maximum.

Other showers

The Northern Taurids (NTA) are active from 2025-10-20 to 2025-12-10.



1 Ceres

Rotational Period: 9.07417h

Mean radius: 469.7km

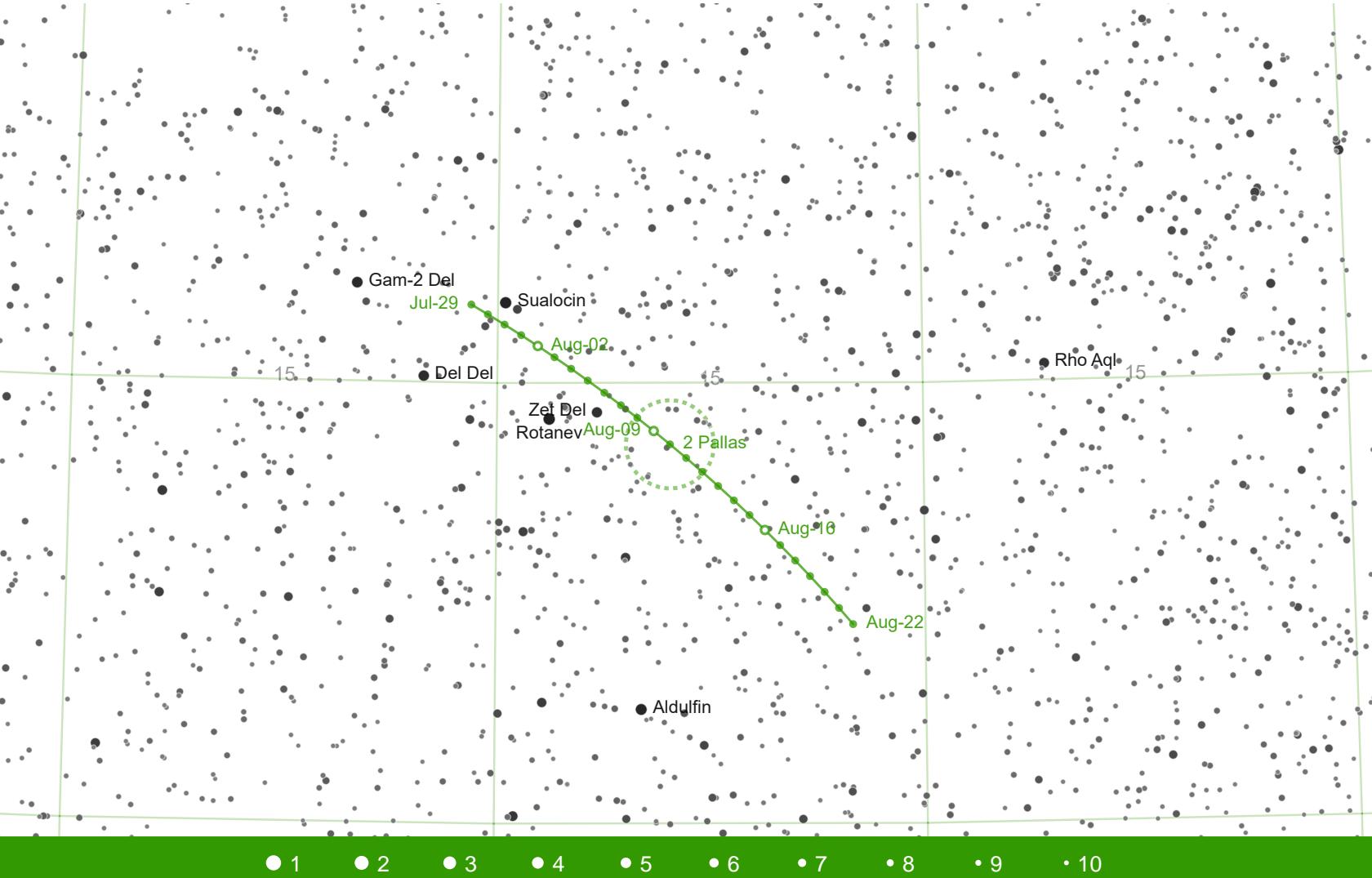
Classification: C

Albedo: 0.090

BV Color Index: 0.713

An icy body from the outer solar system, Ceres is an interloper amongst the more rocky denizens of the asteroid belt. Ceres contains more water than any other inner solar system body aside from Earth. Ceres is surprisingly active, exhibiting cryovolcanism. With subsurface liquid brine, Ceres might harbor simple life forms. Discovered by Giuseppe Piazzi on New Year's Day, 1801.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Sep-06	01 16 25.72	-07 55 25.5	7.978	2.0622
2025-Sep-11	01 13 48.25	-08 22 56.4	7.882	2.0295
2025-Sep-16	01 10 41.92	-08 50 40.1	7.788	2.0027
2025-Sep-21	01 07 10.32	-09 17 50.9	7.701	1.9823
2025-Sep-26	01 03 18.39	-09 43 38.8	7.63	1.9685
2025-Oct-01	00 59 12.03	-10 07 14.3	7.589	1.9617
2025-Oct-06	00 54 57.72	-10 27 52.7	7.593	1.9618
2025-Oct-11	00 50 42.05	-10 44 56.3	7.639	1.9688
2025-Oct-16	00 46 31.54	-10 57 54.2	7.712	1.9827
2025-Oct-21	00 42 32.76	-11 06 20.7	7.797	2.0033
2025-Oct-26	00 38 51.95	-11 09 58.9	7.887	2.0304



2 Pallas

Rotational Period: 7.813221h

Mean radius: 256.5km

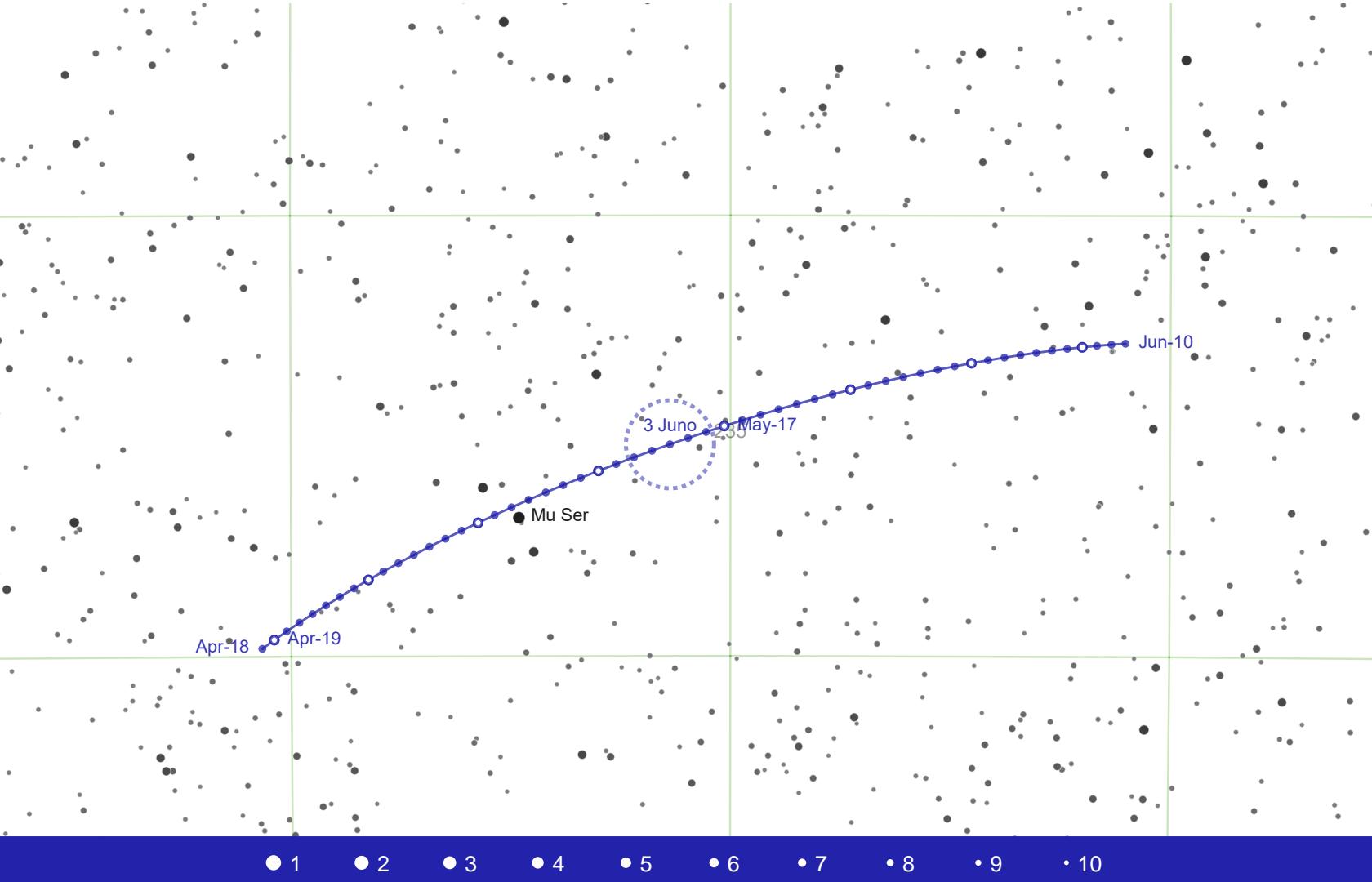
Classification: B

Albedo: 0.155

BV Color Index: 0.635

Pallas' surface consists primarily of silicate materials with little iron or water, but there may be more water within. High-resolution telescopic images suggest that Pallas has a heavily cratered surface and may feature salt deposits from brine leaching to the surface. Pallas was discovered shortly after 1 Ceres as it happened to be in conjunction with the larger asteroid.

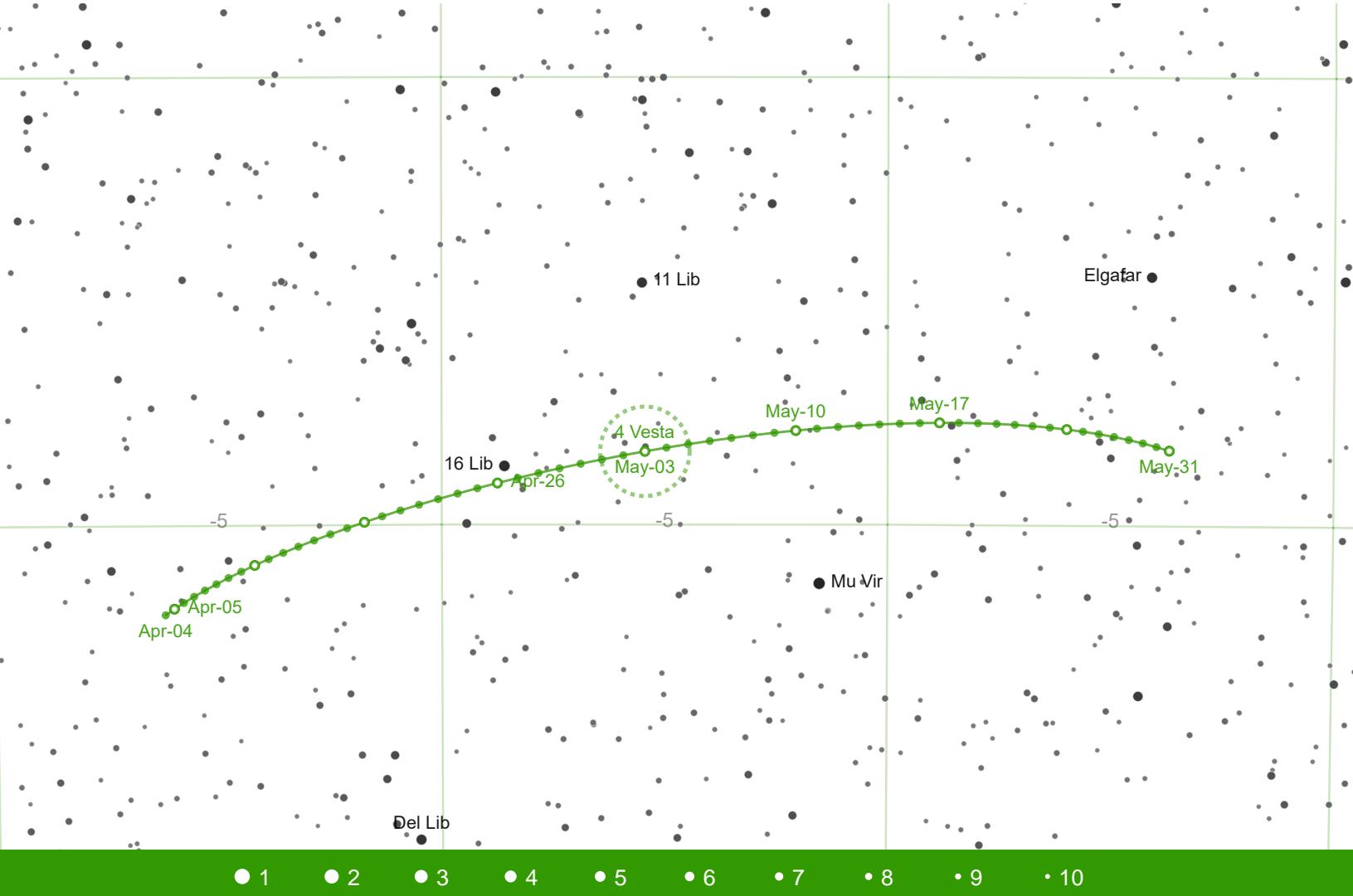
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-29	20 41 15.46	+15 53 16.6	9.462	2.5221
2025-Jul-31	20 39 40.95	+15 39 49.3	9.448	2.5162
2025-Aug-02	20 38 06.30	+15 25 24.7	9.436	2.5112
2025-Aug-04	20 36 31.85	+15 10 04.2	9.427	2.5073
2025-Aug-06	20 34 57.91	+14 53 49.7	9.42	2.5044
2025-Aug-08	20 33 24.82	+14 36 42.9	9.415	2.5025
2025-Aug-10	20 31 52.88	+14 18 46.0	9.413	2.5017
2025-Aug-12	20 30 22.40	+14 00 01.2	9.414	2.5019
2025-Aug-14	20 28 53.68	+13 40 30.9	9.417	2.5032
2025-Aug-16	20 27 27.03	+13 20 17.5	9.422	2.5055
2025-Aug-18	20 26 02.72	+12 59 23.7	9.43	2.5089
2025-Aug-20	20 24 41.07	+12 37 52.4	9.441	2.5133



3 Juno

Rotational Period: 7.21h
 Mean radius: 123.298km
 Classification: Sk
 Albedo: 0.214
 BV Color Index: 0.824
 This large rocky asteroid has a high albedo, suggesting unique surface properties. Juno is the smallest of the first four asteroids to be discovered, being discovered in 1804 by Karl Ludwig Harding.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Apr-18	16 01 19.26	-04 54 33.2	10.285	2.4703
2025-Apr-23	15 58 24.68	-04 25 13.4	10.216	2.4374
2025-Apr-28	15 55 06.51	-03 56 36.8	10.151	2.4108
2025-May-03	15 51 28.78	-03 29 15.3	10.093	2.3909
2025-May-08	15 47 36.31	-03 03 39.4	10.048	2.3779
2025-May-13	15 43 34.16	-02 40 16.7	10.026	2.3719
2025-May-18	15 39 27.51	-02 19 32.3	10.032	2.3731
2025-May-23	15 35 21.64	-02 01 48.3	10.066	2.3813
2025-May-28	15 31 21.91	-01 47 24.1	10.117	2.3965
2025-Jun-02	15 27 33.65	-01 36 33.7	10.179	2.4185
2025-Jun-07	15 24 01.51	-01 29 23.4	10.246	2.4468



4 Vesta

Rotational Period: 5.342128h

Mean radius: 262.7km

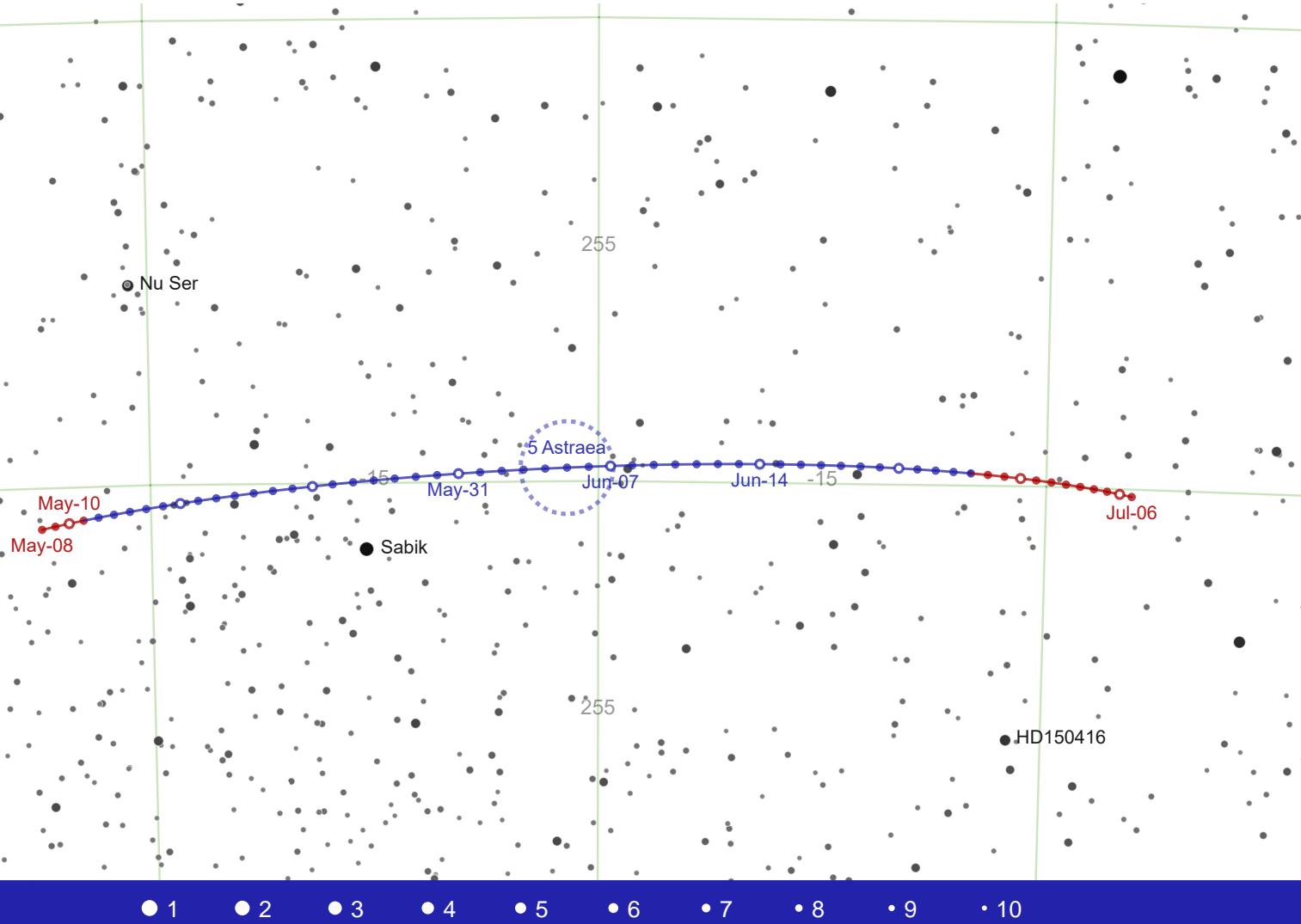
Classification: V

Albedo: 0.4228

BV Color Index: 0.782

The brightest asteroid in our sky, Vesta is believed to be the only remaining rocky protoplanet with a differentiated core. A prodigious source of smaller meteorites ejected from large ancient collisions, many pieces of this space rock have fallen to Earth.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Apr-04	15 12 25.23	-05 59 48.8	6.198	1.3007
2025-Apr-09	15 10 07.83	-05 39 17.4	6.08	1.267
2025-Apr-14	15 07 07.23	-05 18 32.1	5.964	1.2384
2025-Apr-19	15 03 28.24	-04 58 16.3	5.853	1.2153
2025-Apr-24	14 59 17.33	-04 39 17.6	5.752	1.1979
2025-Apr-29	14 54 42.89	-04 22 27.9	5.677	1.1865
2025-May-04	14 49 55.15	-04 08 39.3	5.654	1.1813
2025-May-09	14 45 04.96	-03 58 36.0	5.692	1.1821
2025-May-14	14 40 22.68	-03 52 50.9	5.767	1.1889
2025-May-19	14 35 57.90	-03 51 47.9	5.857	1.2015
2025-May-24	14 31 59.21	-03 55 42.1	5.955	1.2196
2025-May-29	14 28 34.18	-04 04 41.1	6.056	1.243



5 Astraea

Rotational Period: 16.806h

Mean radius: 53.3495km

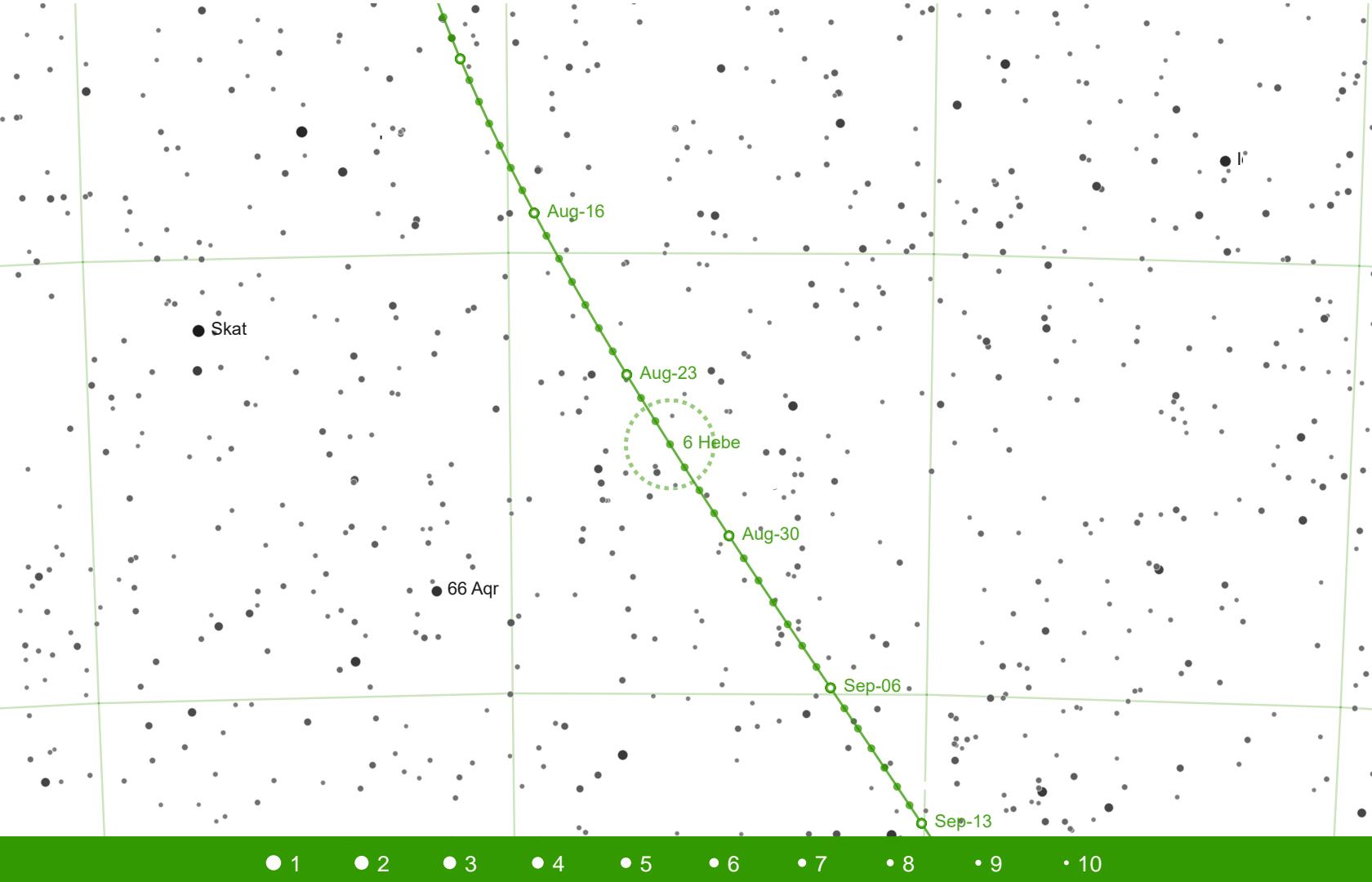
Classification: S

Albedo: 0.274

BV Color Index: 0.826

Discovered 38 years after 4 Vesta, Astraea was the first of a flood of new asteroid discoveries that led to Ceres, Pallas, Juno and Vesta ultimately losing their planetary status. However, when Astraea was discovered, it was a sensation and the discoverer, amateur astronomer Karl Ludwig Hencke, received an annual pension from the Prussian King.

Date	RA	DEC	Magnitude	Distance (AU)
2025-May-08	17 24 53.24	-15 27 11.3	11.071	1.7491
2025-May-13	17 21 39.36	-15 18 35.8	10.979	1.7238
2025-May-18	17 17 53.03	-15 10 45.9	10.884	1.7042
2025-May-23	17 13 39.56	-15 03 51.1	10.789	1.6905
2025-May-28	17 09 05.53	-14 58 02.0	10.695	1.6833
2025-Jun-02	17 04 18.78	-14 53 29.3	10.615	1.6827
2025-Jun-07	16 59 27.68	-14 50 21.8	10.596	1.6889
2025-Jun-12	16 54 40.27	-14 48 46.5	10.675	1.7019
2025-Jun-17	16 50 04.11	-14 48 49.8	10.795	1.7216
2025-Jun-22	16 45 46.11	-14 50 37.1	10.922	1.7478
2025-Jun-27	16 41 52.65	-14 54 12.9	11.048	1.7803
2025-Jul-02	16 38 29.17	-14 59 39.0	11.172	1.8188



6 Hebe

Rotational Period: 7.2745h

Mean radius: 92.59km

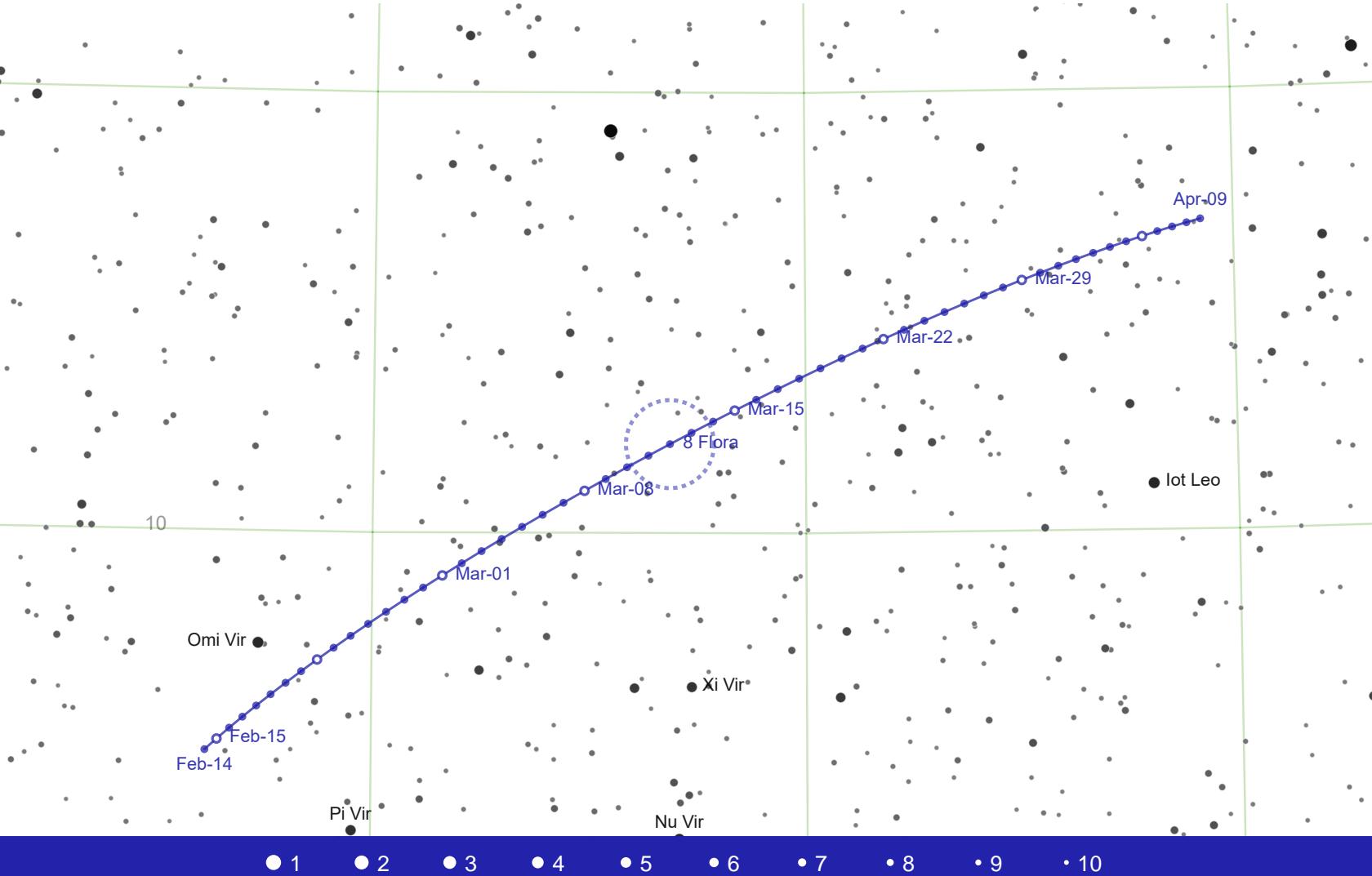
Classification: S

Albedo: 0.2679

BV Color Index: 0.822

Hebe is denser than the Moon, suggesting it is a solid body and not a loose rubble pile like many other asteroids. At favorable oppositions it is the fifth-brightest asteroid. It was discovered in 1847 by amateur astronomer Karl Ludwig Hencke, his second and last asteroid discovery.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-29	22 45 02.83	-10 22 20.8	8.275	1.1572
2025-Aug-03	22 44 08.00	-11 24 37.1	8.126	1.1215
2025-Aug-08	22 42 33.13	-12 33 11.5	7.976	1.0909
2025-Aug-13	22 40 21.30	-13 46 54.7	7.825	1.0658
2025-Aug-18	22 37 37.02	-15 04 17.1	7.678	1.0465
2025-Aug-23	22 34 26.92	-16 23 26.8	7.555	1.0331
2025-Aug-28	22 31 00.05	-17 42 14.2	7.528	1.026
2025-Sep-02	22 27 26.85	-18 58 27.1	7.603	1.0249
2025-Sep-07	22 23 58.20	-20 10 04.2	7.708	1.0299
2025-Sep-12	22 20 44.52	-21 15 24.6	7.819	1.0406
2025-Sep-17	22 17 55.54	-22 13 08.6	7.931	1.0567
2025-Sep-22	22 15 40.36	-23 02 17.6	8.045	1.078



8 Flora

Rotational Period: 12.865h

Mean radius: 73.7455km

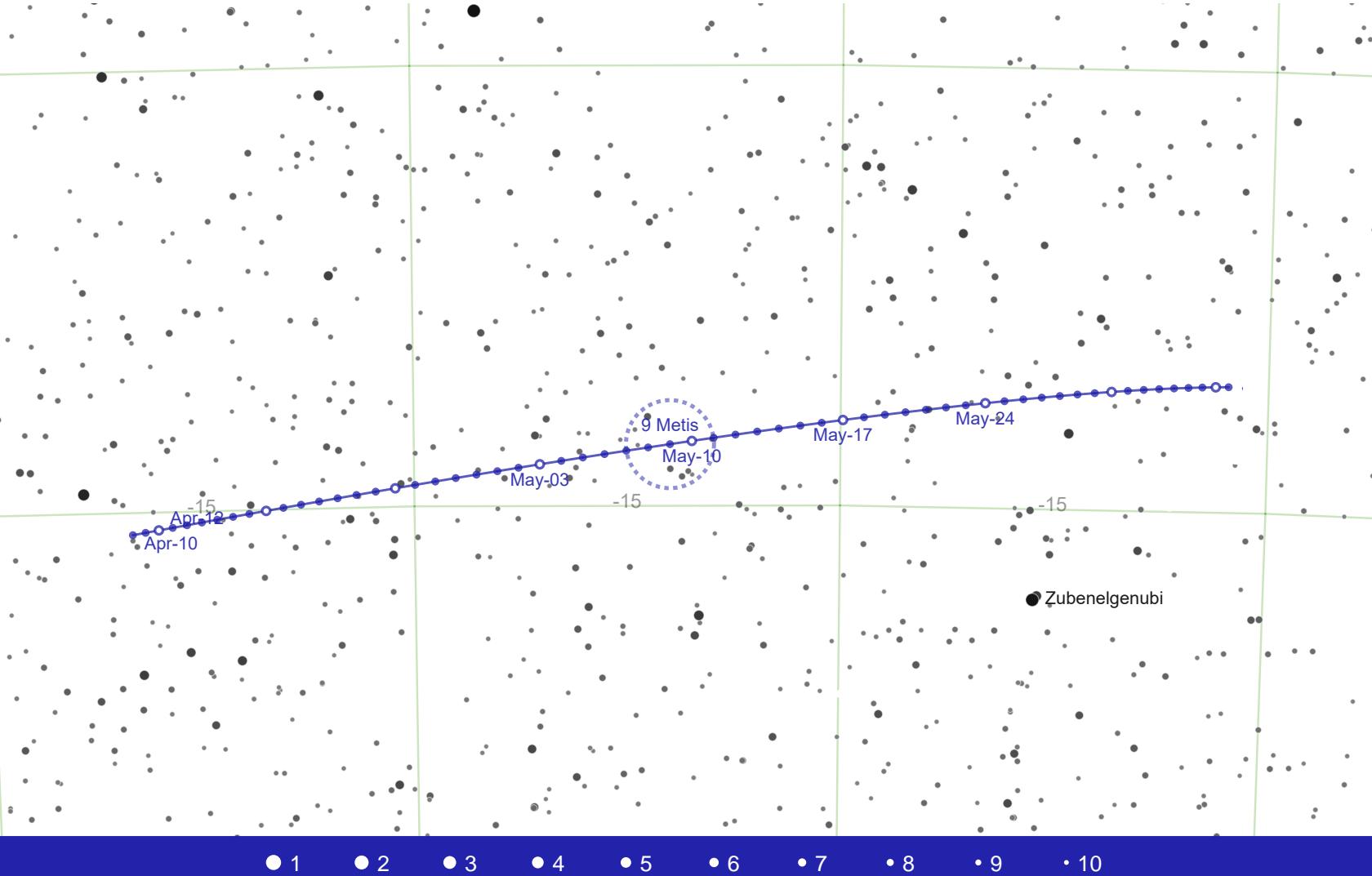
Classification: S

Albedo: 0.226

BV Color Index: 0.885

One of the innermost asteroids, Flora is the parent body of the large Flora family of asteroids. Flora was disrupted by the initial impact and contributed 20% of its mass to the new family. The next largest member is 43 Ariadne (60-95km in size). The Chicxulub impactor that ended the age of the dinosaurs is potentially a member of the Flora family.

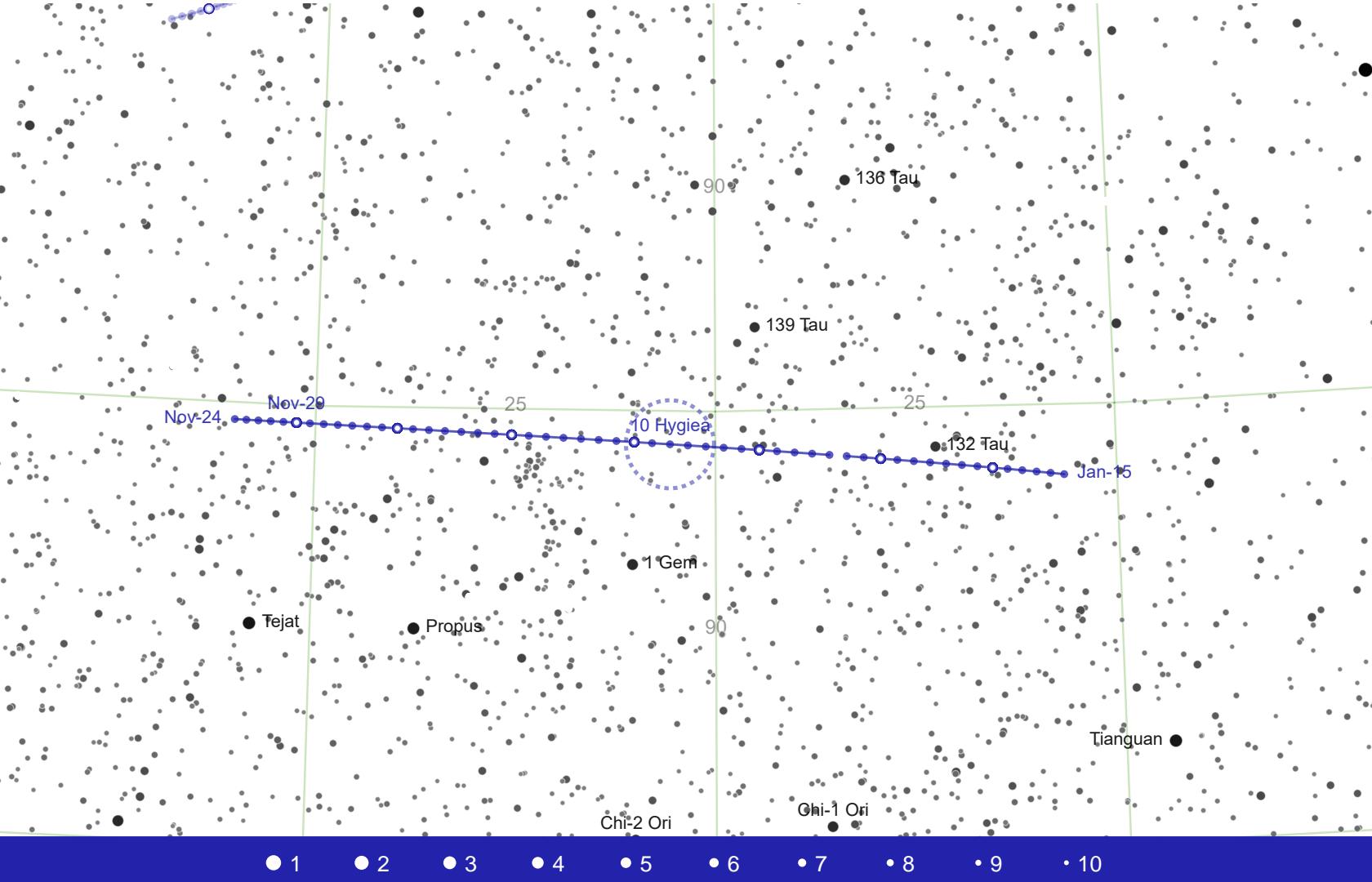
Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-14	12 07 36.01	+07 30 43.6	10.036	1.5019
2025-Feb-19	12 04 36.00	+08 08 46.2	9.938	1.4753
2025-Feb-24	12 00 57.52	+08 49 12.8	9.84	1.4545
2025-Mar-01	11 56 46.21	+09 30 57.2	9.744	1.44
2025-Mar-06	11 52 09.70	+10 12 43.0	9.656	1.4323
2025-Mar-11	11 47 16.98	+10 53 11.7	9.599	1.4314
2025-Mar-16	11 42 17.47	+11 31 10.9	9.626	1.4374
2025-Mar-21	11 37 20.65	+12 05 37.1	9.721	1.4504
2025-Mar-26	11 32 35.82	+12 35 36.5	9.836	1.47
2025-Mar-31	11 28 11.73	+13 00 26.8	9.956	1.4962
2025-Apr-05	11 24 16.14	+13 19 39.7	10.076	1.5285



9 Metis

Rotational Period: 5.079h
 Mean radius: 95.km
 Classification: S
 Albedo: 0.118
 BV Color Index: 0.858
 Metis (discovered by Andrew Graham in April 1848) is believed to be the dense core remnant of a disrupted asteroid roughly the size of Vesta. 113 Amalthea may be a fragment of the mantle of the same parent asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Apr-10	15 33 16.20	-15 15 42.0	10.349	1.7358
2025-Apr-15	15 30 00.57	-15 08 18.3	10.241	1.703
2025-Apr-20	15 26 09.74	-14 59 32.3	10.13	1.676
2025-Apr-25	15 21 48.80	-14 49 37.5	10.014	1.6551
2025-Apr-30	15 17 04.37	-14 38 52.9	9.891	1.6408
2025-May-05	15 12 04.56	-14 27 42.9	9.757	1.6332
2025-May-10	15 06 58.00	-14 16 33.7	9.676	1.6326
2025-May-15	15 01 53.20	-14 05 51.6	9.806	1.639
2025-May-20	14 56 58.32	-13 56 03.8	9.946	1.6522
2025-May-25	14 52 21.03	-13 47 37.4	10.076	1.672
2025-May-30	14 48 08.39	-13 40 59.2	10.199	1.6983
2025-Jun-04	14 44 26.33	-13 36 31.7	10.317	1.7305



10 Hygiea

Rotational Period: 13.828h

Mean radius: 203.56km

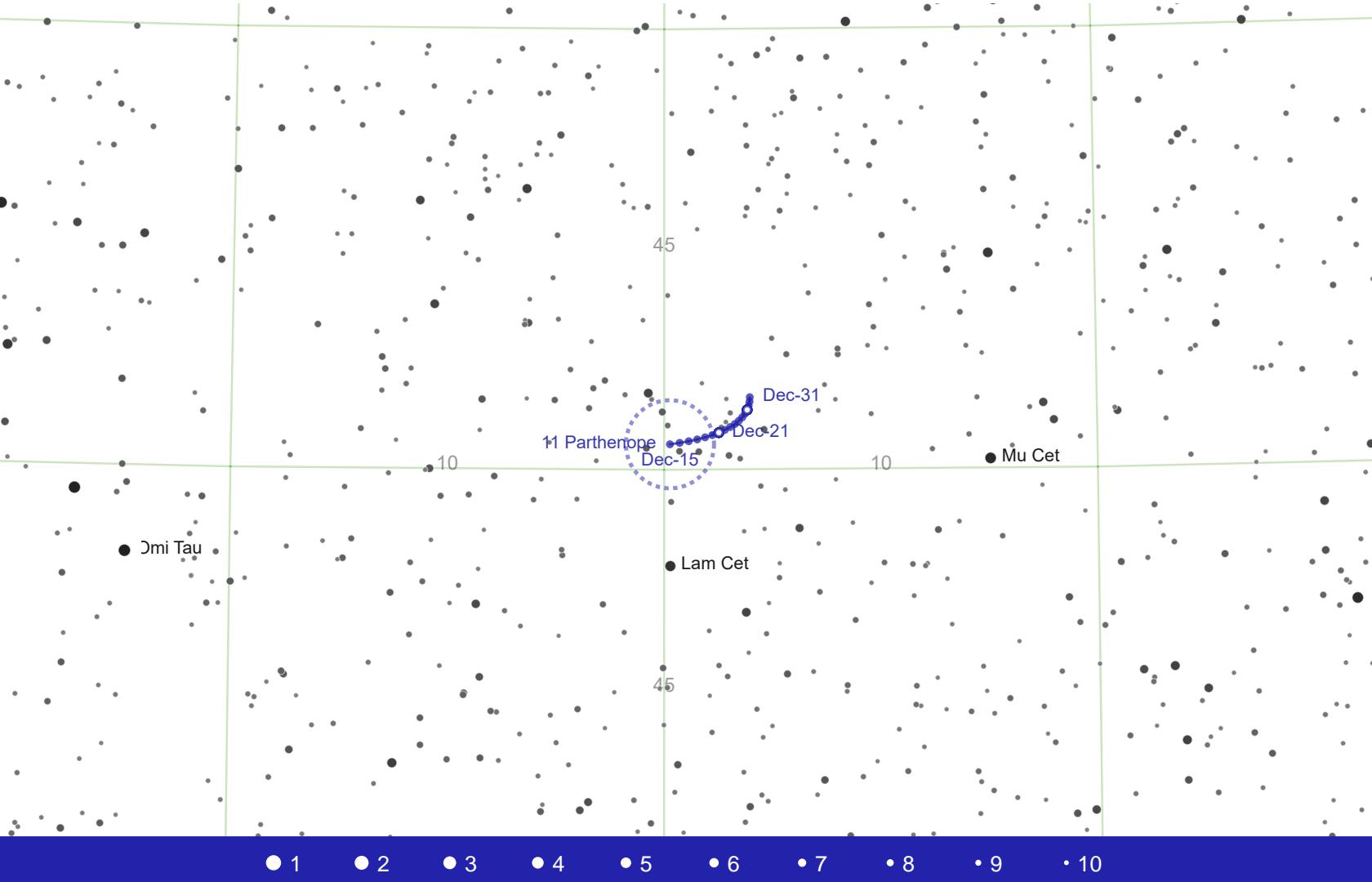
Classification: C

Albedo: 0.0717

BV Color Index: 0.696

An icy body similar in composition to Ceres, Hygiea is notably round. If this is confirmed to be due to hydrostatic equilibrium, Hygiea would be classified as the smallest dwarf planet in the solar system. However, it is more likely that the roundness is due to re-accretion after a disruptive impact, meaning Hygiea is "merely" the fourth-largest asteroid. Discovered by Annibale de Gasparis in April 1849.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-24	06 24 02.64	+24 49 03.8	10.98	2.5666
2025-Nov-29	06 20 57.23	+24 48 12.4	10.882	2.5264
2025-Dec-04	06 17 25.35	+24 46 59.4	10.781	2.4927
2025-Dec-09	06 13 31.23	+24 45 16.3	10.673	2.466
2025-Dec-14	06 09 19.76	+24 42 56.5	10.556	2.4465
2025-Dec-19	06 04 56.78	+24 39 55.2	10.417	2.4347
2025-Dec-24	06 00 28.89	+24 36 10.5	10.352	2.4306
2025-Dec-29	05 56 02.99	+24 31 43.5	10.498	2.4343
2026-Jan-03	05 51 45.74	+24 26 38.5	10.613	2.4456
2026-Jan-08	05 47 43.13	+24 21 03.0	10.715	2.4644
2026-Jan-13	05 44 00.58	+24 15 06.3	10.812	2.4902



11 Parthenope

Rotational Period: 13.7204h

Mean radius: 71.4435km

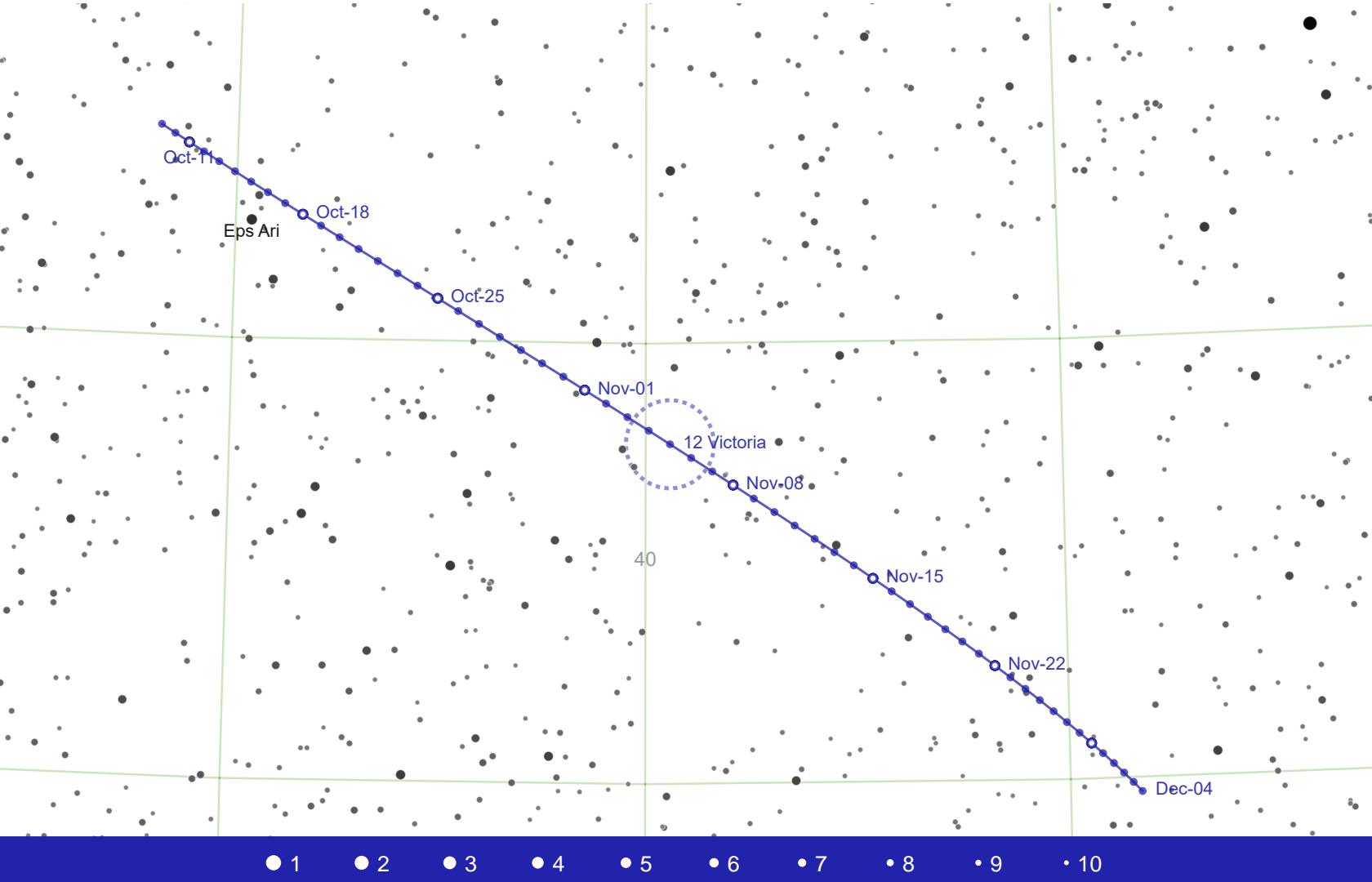
Classification: Sk

Albedo: 0.191

BV Color Index: 0.837

This bright asteroid was discovered by ace asteroid hunter Annibale de Gasparis on 11 May 1850. de Gasparis chose the name Parthenope, the siren credited with the founding of the city of Naples, at the suggestion of John Herschel.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	02 59 43.94	+10 17 22.4	10.534	1.613
2024-Dec-17	02 58 51.92	+10 19 26.9	10.585	1.6315
2024-Dec-19	02 58 06.76	+10 22 05.5	10.635	1.6508
2024-Dec-21	02 57 28.54	+10 25 17.8	10.684	1.6708
2024-Dec-23	02 56 57.30	+10 29 03.1	10.733	1.6916
2024-Dec-25	02 56 33.09	+10 33 21.1	10.781	1.713
2024-Dec-27	02 56 15.90	+10 38 10.8	10.828	1.735
2024-Dec-29	02 56 05.74	+10 43 31.5	10.875	1.7576
2024-Dec-31	02 56 02.56	+10 49 22.4	10.921	1.7808



12 Victoria

Rotational Period: 8.6599h

Mean radius: 57.5435km

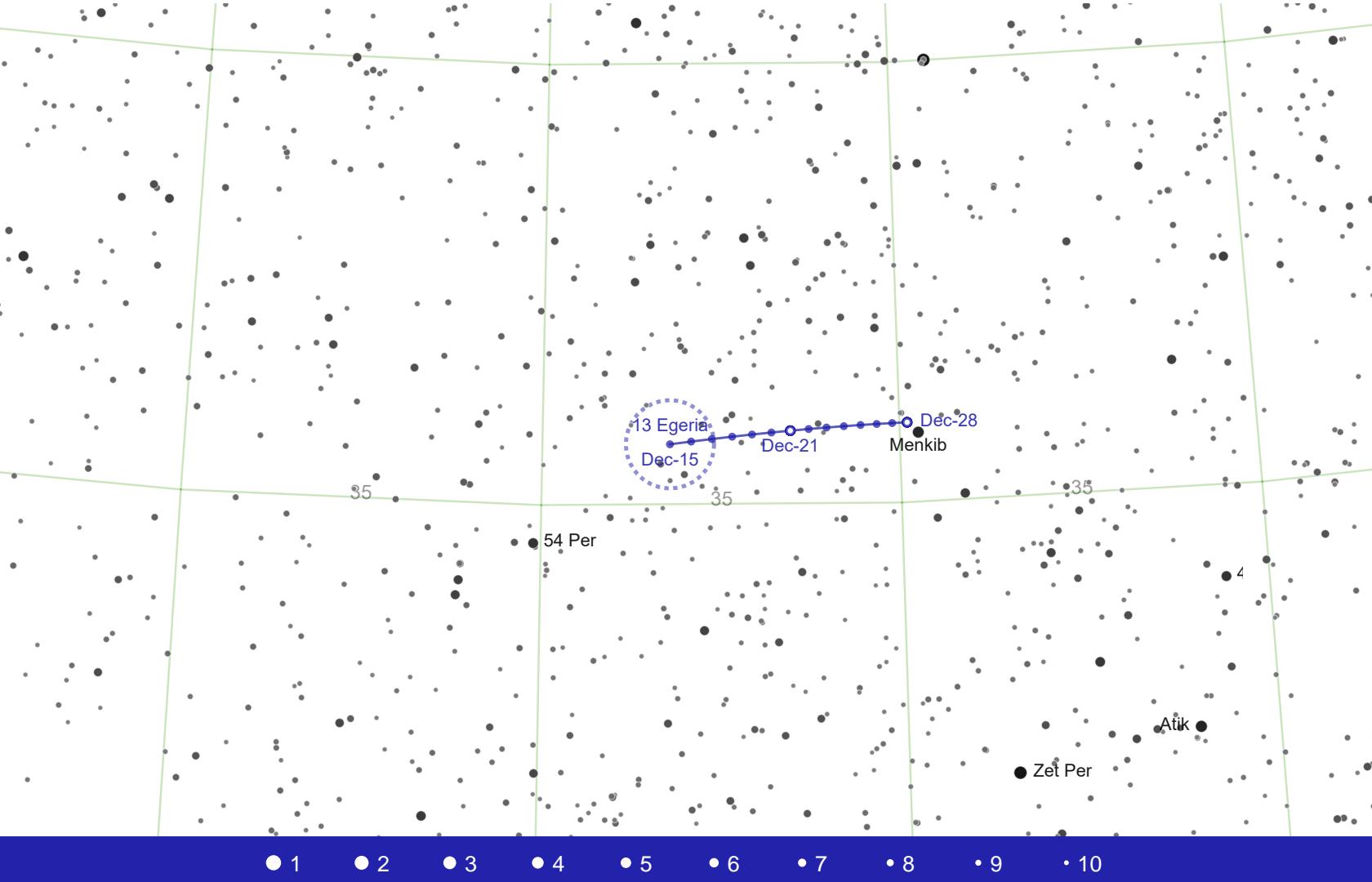
Classification: L

Albedo: 0.163

BV Color Index: 0.874

Discovered by J R Hind in 1850, the naming of this body caused great controversy. Although it was claimed to be named after the Roman god of victory, it was generally thought to be in fact named after the British queen. The name nevertheless survived the objections, and Victoria is one of only a few astronomical objects to retain the name of historical royalty.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-09	03 03 46.08	+22 23 20.0	10.397	1.3249
2025-Oct-14	03 00 06.73	+21 52 47.0	10.301	1.3068
2025-Oct-19	02 55 49.99	+21 17 29.3	10.202	1.2943
2025-Oct-24	02 51 04.80	+20 37 59.8	10.1	1.2878
2025-Oct-29	02 46 01.91	+19 55 08.3	9.991	1.2878
2025-Nov-03	02 40 52.82	+19 09 57.8	9.874	1.2945
2025-Nov-08	02 35 48.77	+18 23 39.3	9.897	1.308
2025-Nov-13	02 30 59.99	+17 37 26.9	10.079	1.3284
2025-Nov-18	02 26 35.91	+16 52 35.7	10.25	1.3556
2025-Nov-23	02 22 44.65	+16 10 17.0	10.412	1.3893
2025-Nov-28	02 19 32.43	+15 31 30.9	10.567	1.4293
2025-Dec-03	02 17 03.27	+14 57 01.9	10.717	1.475



13 Egeria

Rotational Period: 7.045h

Mean radius: 101.318km

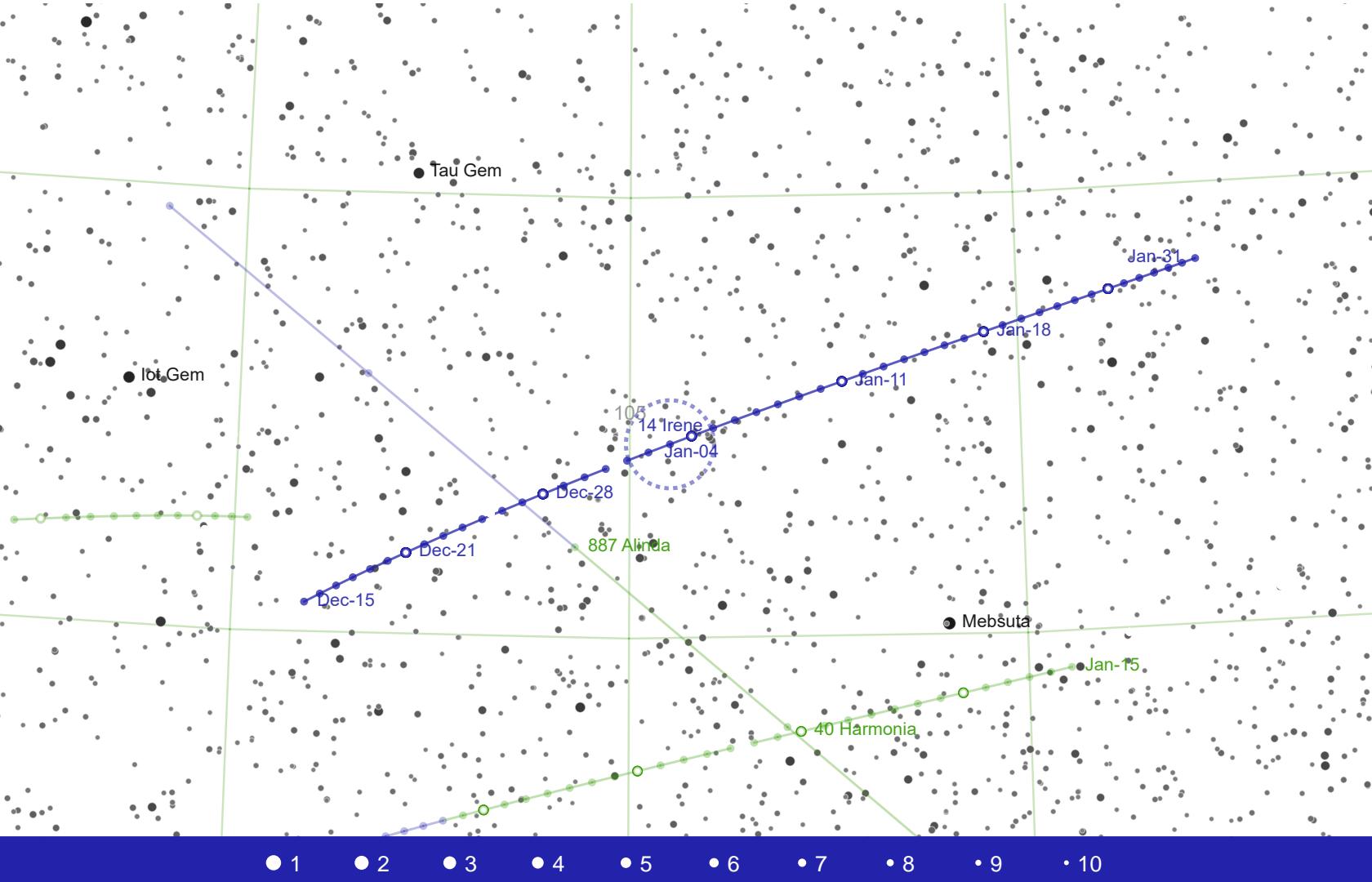
Classification: Ch

Albedo: 0.049

BV Color Index: 0.745

Named after the Roman water nymph Egeria, this asteroid is coincidentally also very water-rich, containing over 10% water by mass. Based on occultation measurements in 1992 and 2008, Egeria was determined to be relatively round in shape. High-resolution imagery by VLT/SPHERE shows a more egg-like profile.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	04 12 52.02	+35 42 12.1	10.257	1.4736
2024-Dec-17	04 10 31.40	+35 45 41.9	10.298	1.4802
2024-Dec-19	04 08 16.38	+35 48 32.2	10.339	1.4877
2024-Dec-21	04 06 07.60	+35 50 45.7	10.382	1.4963
2024-Dec-23	04 04 05.67	+35 52 25.3	10.424	1.5058
2024-Dec-25	04 02 11.15	+35 53 34.2	10.468	1.5163
2024-Dec-27	04 00 24.53	+35 54 15.7	10.511	1.5277



14 Irene

Rotational Period: 15.028h

Mean radius: 76.km

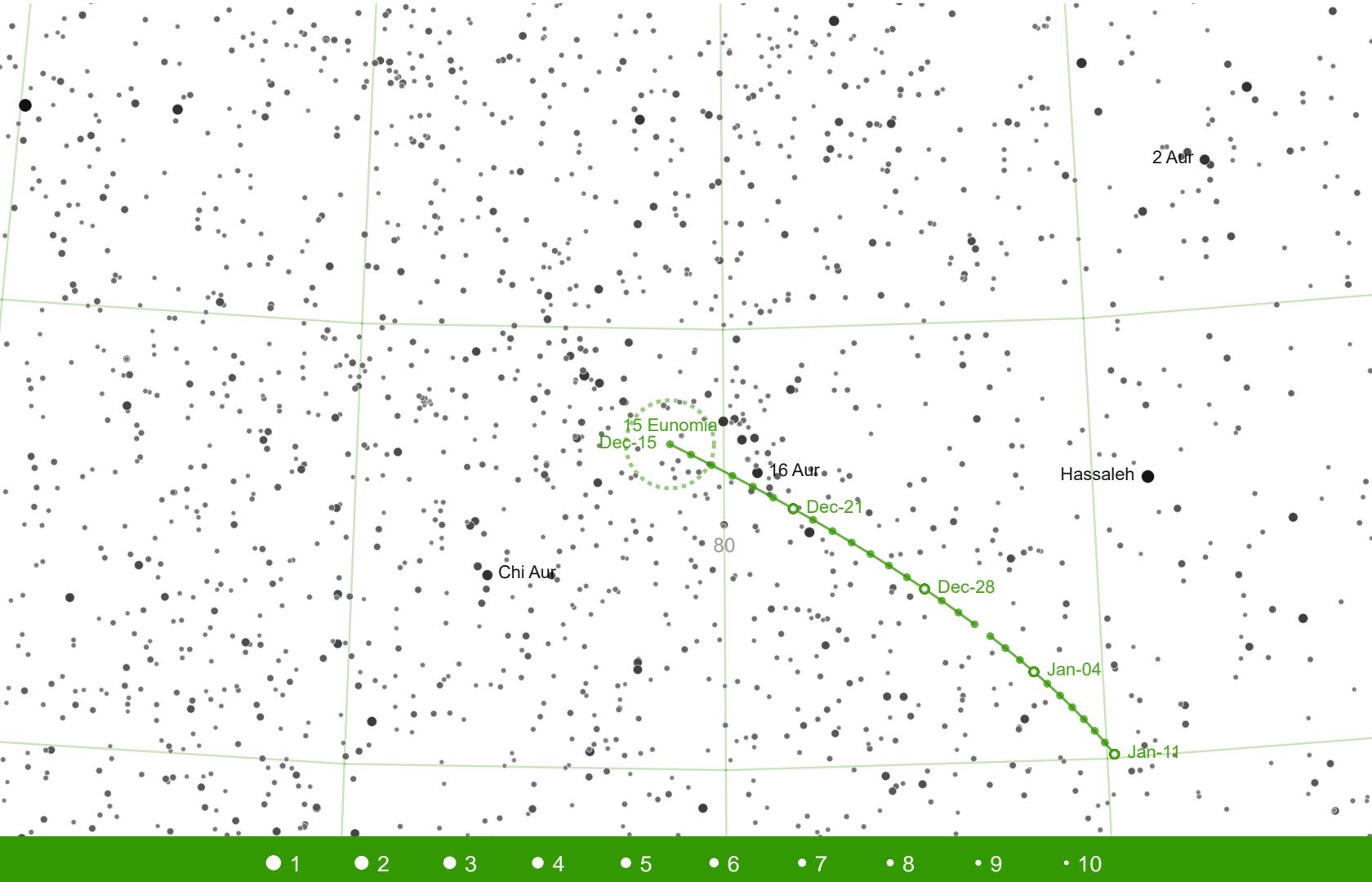
Classification: S

Albedo: 0.159

BV Color Index: 0.833

A fairly spherical stony asteroid, Irene was discovered in April 1851 by J R Hind, and is named after the personification of peace in honor of the contemporaneous Great Exhibition in London.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	07 16 20.00	+25 20 45.4	10.121	1.5619
2024-Dec-19	07 13 03.95	+25 44 21.6	10.004	1.536
2024-Dec-23	07 09 24.82	+26 08 15.4	9.882	1.5142
2024-Dec-27	07 05 26.33	+26 32 04.0	9.756	1.4969
2024-Dec-31	07 01 13.15	+26 55 24.2	9.63	1.484
2025-Jan-04	06 56 50.71	+27 17 53.3	9.572	1.4758
2025-Jan-08	06 52 25.00	+27 39 10.9	9.645	1.4722
2025-Jan-12	06 48 02.03	+27 59 00.6	9.743	1.4731
2025-Jan-16	06 43 47.58	+28 17 10.6	9.839	1.4784
2025-Jan-20	06 39 47.11	+28 33 33.6	9.93	1.488
2025-Jan-24	06 36 05.77	+28 48 06.7	10.019	1.5017
2025-Jan-28	06 32 48.22	+29 00 50.5	10.106	1.5192



15 Eunomia

Rotational Period: 6.083h

Mean radius: 115.8445km

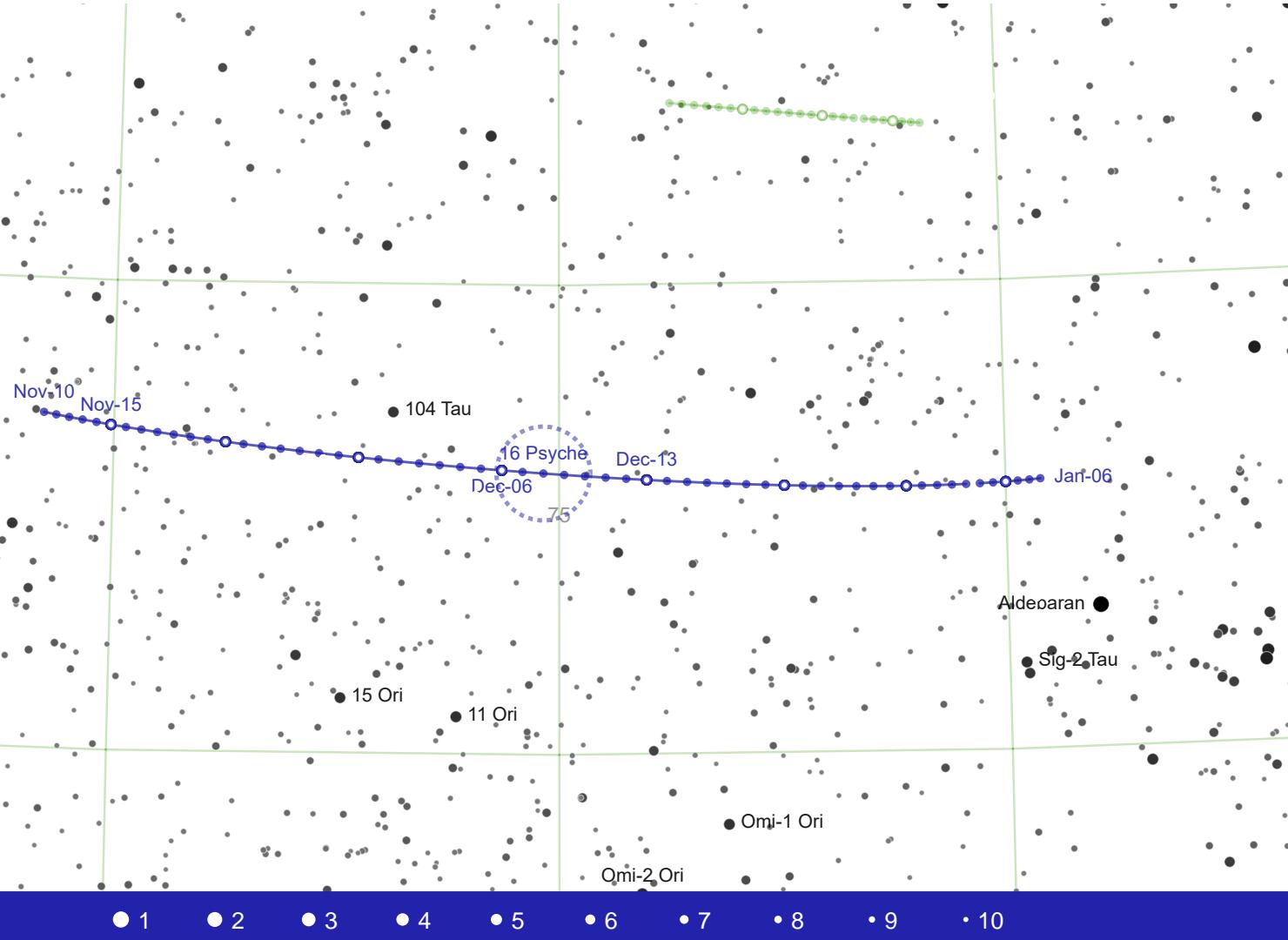
Classification: S

Albedo: 0.248

BV Color Index: 0.839

The largest stony asteroid, Eunomia appears to be partially differentiated and may have a core enriched in heavier elements. It is believed Eunomia lost most of its crust to form the large Eunomia family of asteroids. Discovered by Annibale de Gasparis in July 1851.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	05 22 55.97	+33 42 05.4	8.131	1.3038
2024-Dec-18	05 19 32.44	+33 20 26.3	8.16	1.3101
2024-Dec-21	05 16 15.83	+32 57 34.7	8.213	1.3188
2024-Dec-24	05 13 08.70	+32 33 43.2	8.281	1.33
2024-Dec-27	05 10 13.42	+32 09 05.7	8.355	1.3435
2024-Dec-30	05 07 32.10	+31 43 56.5	8.434	1.3593
2025-Jan-02	05 05 06.55	+31 18 30.2	8.513	1.3775
2025-Jan-05	05 02 58.25	+30 53 00.9	8.593	1.3978
2025-Jan-08	05 01 08.27	+30 27 41.7	8.674	1.4202
2025-Jan-11	04 59 37.28	+30 02 44.4	8.754	1.4446



16 Psyche

Rotational Period: 4.196h

Mean radius: 111.km

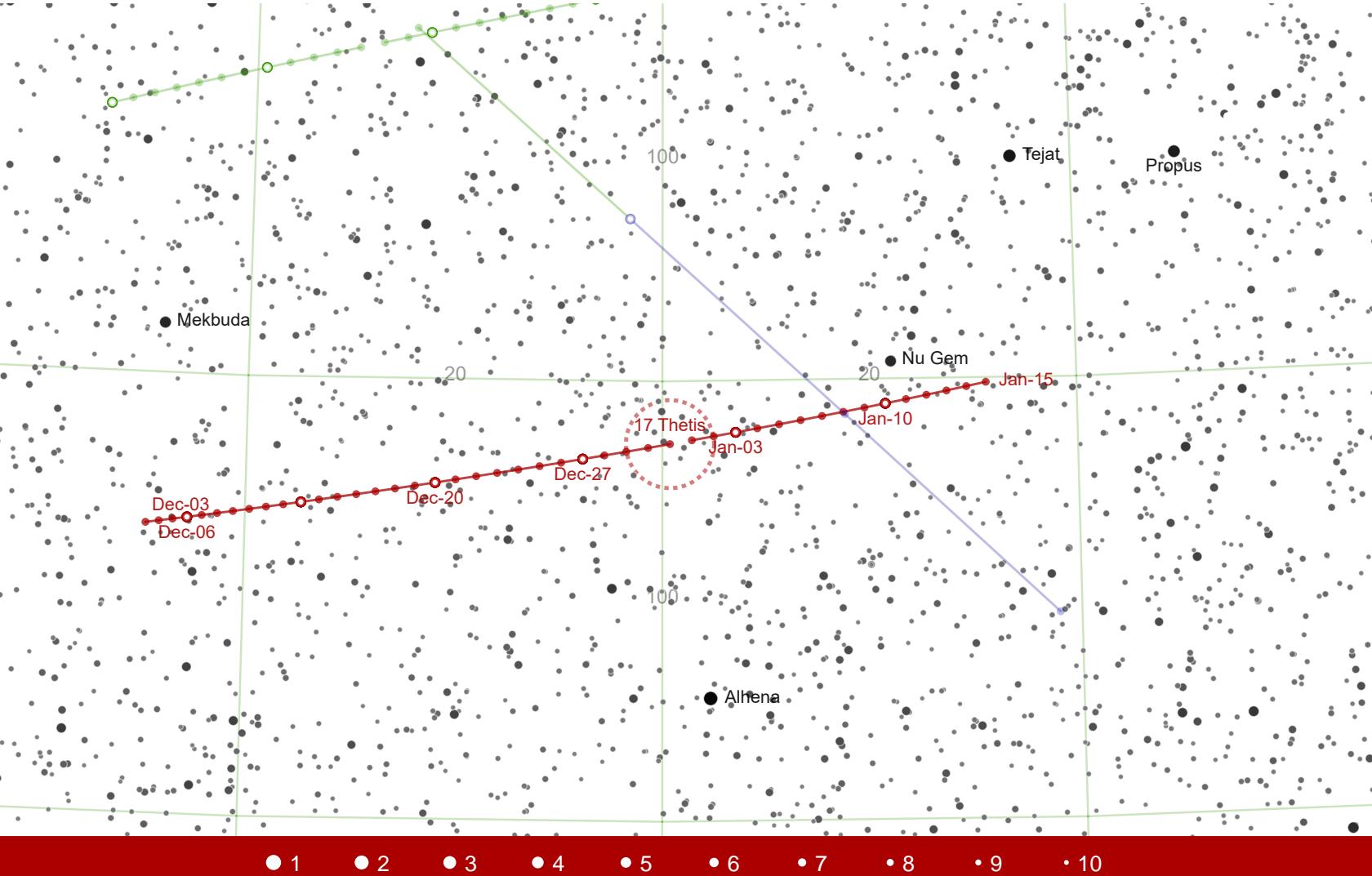
Classification: X

Albedo: 0.1203

BV Color Index: 0.729

The largest of the M-type asteroids, Psyche was once thought to be the exposed metallic core of a protoplanet, but recent estimates of its density are relatively low and suggest either a more disrupted structure or a significant amount of silicate rock. Another theory is that Psyche has undergone ferrovolcanism, with presumably dormant iron volcanoes. Discovered by Annibale de Gasparis in March 1852.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-10	05 23 09.07	+18 34 22.8	10.229	1.7602
2025-Nov-15	05 20 07.85	+18 27 32.1	10.131	1.7324
2025-Nov-20	05 16 32.61	+18 20 49.9	10.03	1.7106
2025-Nov-25	05 12 29.43	+18 14 23.3	9.925	1.6951
2025-Nov-30	05 08 05.81	+18 08 20.5	9.817	1.6865
2025-Dec-05	05 03 30.05	+18 02 50.0	9.712	1.6848
2025-Dec-10	04 58 50.65	+17 58 01.3	9.703	1.6903
2025-Dec-15	04 54 16.15	+17 54 05.7	9.825	1.7029
2025-Dec-20	04 49 55.22	+17 51 15.7	9.957	1.7226
2025-Dec-25	04 45 55.91	+17 49 42.9	10.084	1.7492
2025-Dec-30	04 42 25.09	+17 49 36.7	10.207	1.7823
2026-Jan-04	04 39 27.93	+17 51 03.3	10.326	1.8216



17 Thetis

Rotational Period: 12.27048h

Mean radius: 42.4495km

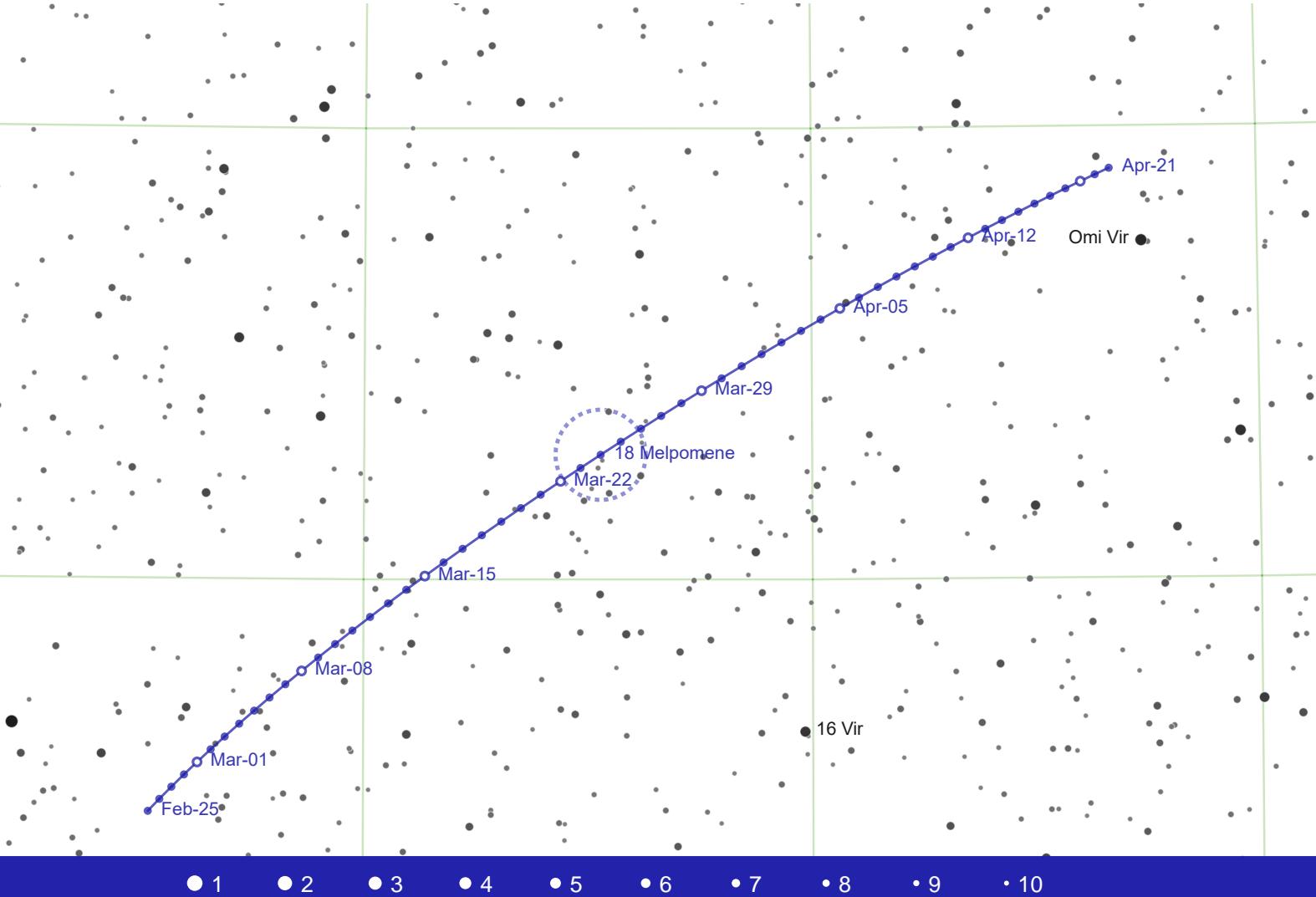
Classification: S1

Albedo: 0.193

BV Color Index: 0.829

This stony asteroid is located in the inner asteroid belt and has a spectrum indicating igneous rocks on its surface, suggesting Thetis underwent melting in its early history and should be at least partially differentiated. Discovered by R Luther in April 1852.

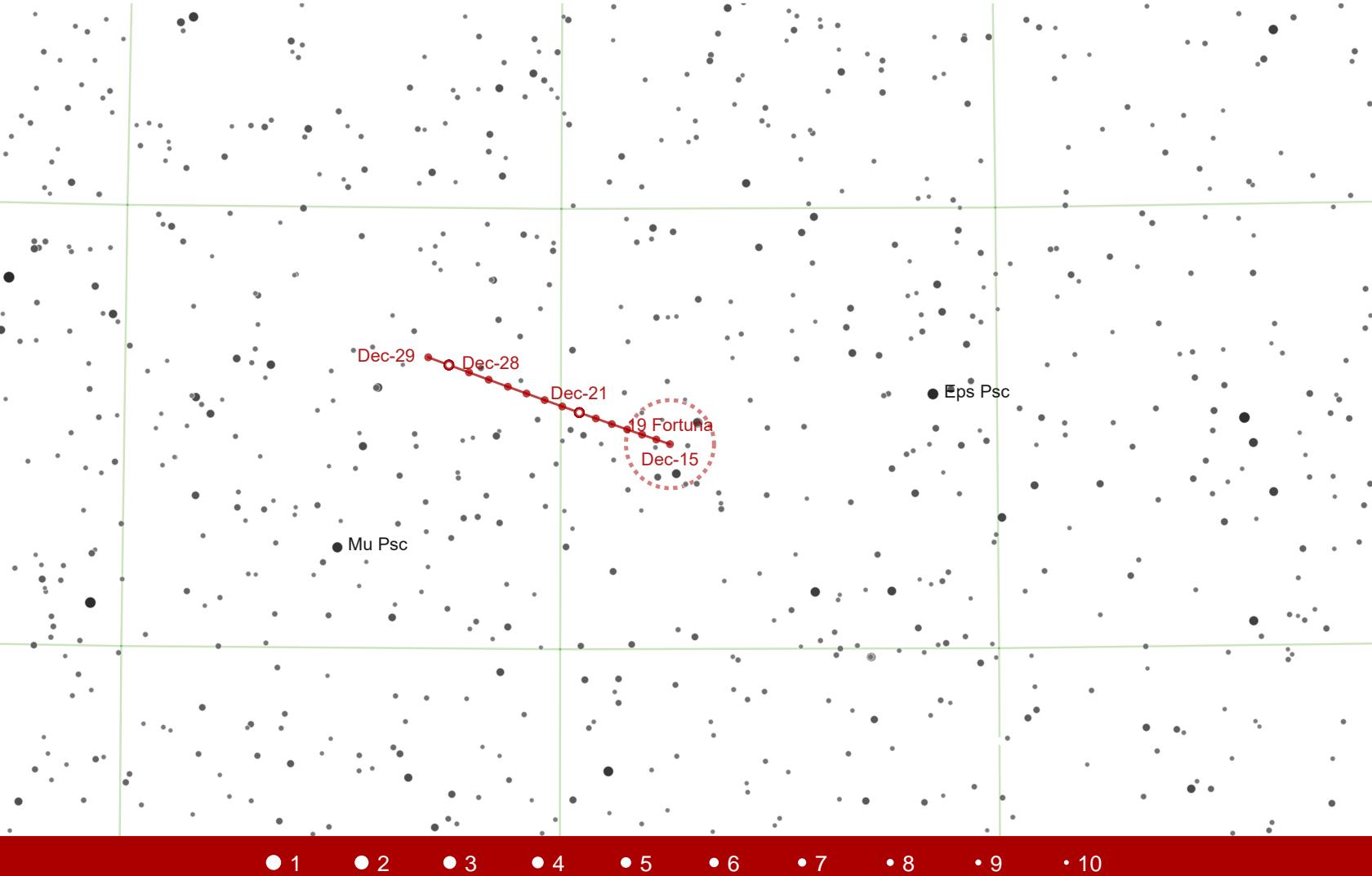
Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-03	07 04 43.64	+18 18 00.7	12.298	1.9218
2025-Dec-07	07 02 02.84	+18 23 58.0	12.206	1.891
2025-Dec-11	06 58 59.09	+18 30 56.4	12.112	1.8641
2025-Dec-15	06 55 34.63	+18 38 50.7	12.015	1.8413
2025-Dec-19	06 51 52.43	+18 47 34.2	11.914	1.8228
2025-Dec-23	06 47 56.13	+18 56 59.1	11.808	1.809
2025-Dec-27	06 43 49.89	+19 06 56.4	11.696	1.7999
2025-Dec-31	06 39 38.23	+19 17 17.3	11.616	1.7955
2026-Jan-04	06 35 25.70	+19 27 53.1	11.678	1.796
2026-Jan-08	06 31 16.76	+19 38 36.8	11.784	1.8013
2026-Jan-12	06 27 15.83	+19 49 22.3	11.885	1.8112



18 Melpomene

Rotational Period: 11.57h
 Mean radius: 69.797km
 Classification: S
 Albedo: 0.181
 BV Color Index: 0.854
 A large stony asteroid, Melpomene is named after the Greek muse of Tragedy. It was discovered by J R Hind on 24 June 1852.

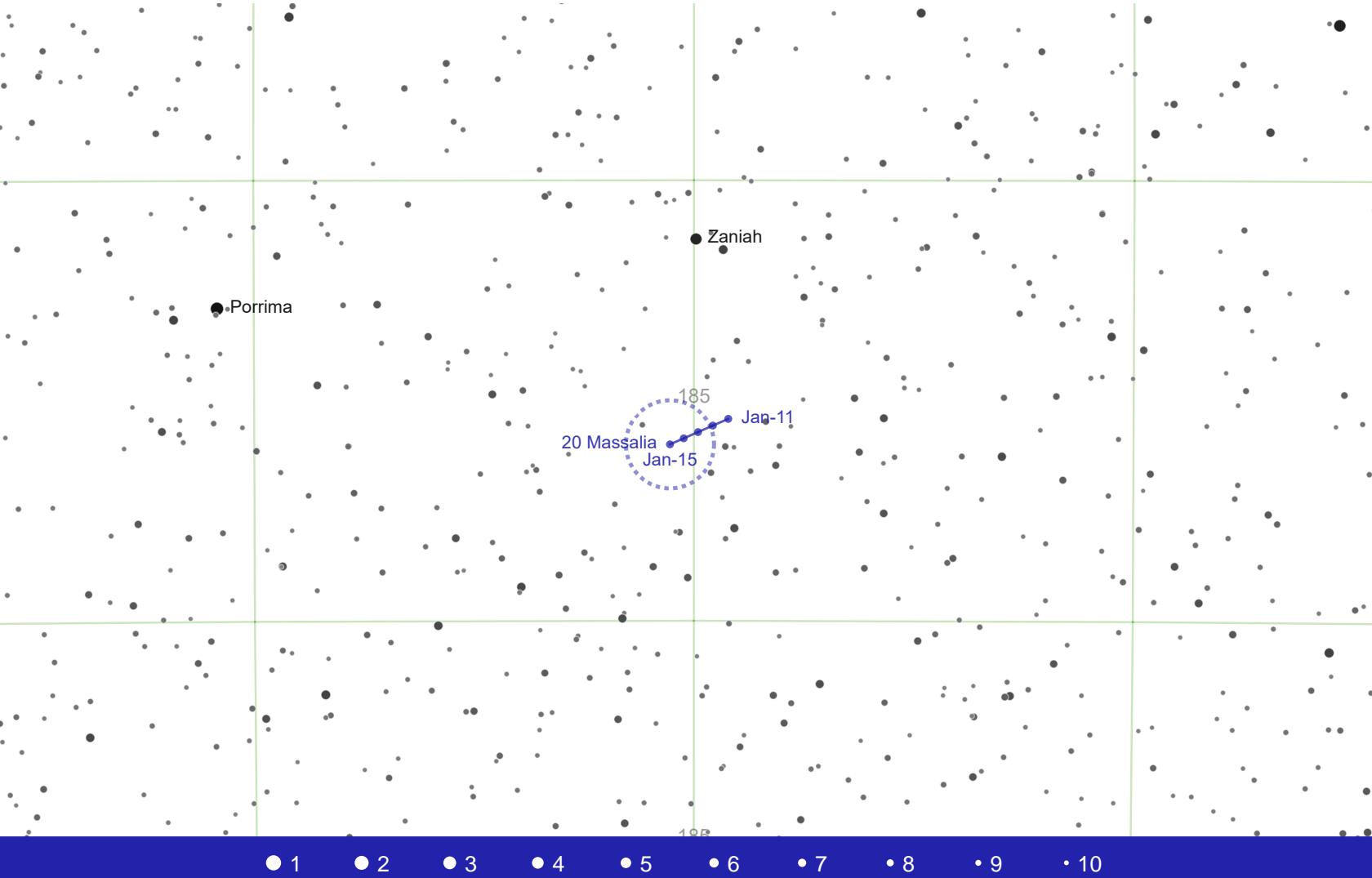
Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-25	12 49 32.04	+02 25 12.3	10.552	1.8815
2025-Mar-02	12 46 45.56	+03 06 22.8	10.456	1.8486
2025-Mar-07	12 43 27.33	+03 49 56.6	10.36	1.822
2025-Mar-12	12 39 42.15	+04 34 59.3	10.265	1.8021
2025-Mar-17	12 35 35.60	+05 20 32.6	10.174	1.7892
2025-Mar-22	12 31 14.03	+06 05 35.3	10.108	1.7835
2025-Mar-27	12 26 44.51	+06 49 04.5	10.112	1.7851
2025-Apr-01	12 22 14.72	+07 29 58.2	10.186	1.794
2025-Apr-06	12 17 52.47	+08 07 20.0	10.285	1.8102
2025-Apr-11	12 13 44.85	+08 40 26.7	10.388	1.8332
2025-Apr-16	12 09 57.88	+09 08 47.9	10.491	1.8627
2025-Apr-21	12 06 36.55	+09 32 03.6	10.593	1.8982



19 Fortuna

Rotational Period: 7.4432h
 Mean radius: 100.km
 Classification: Ch
 Albedo: 0.037
 BV Color Index: 0.719
 Discovered in 1852 by J R Hind, Fortuna is a very dark asteroid, roughly spherical, with a weathered surface rich in organic compounds including tholins.

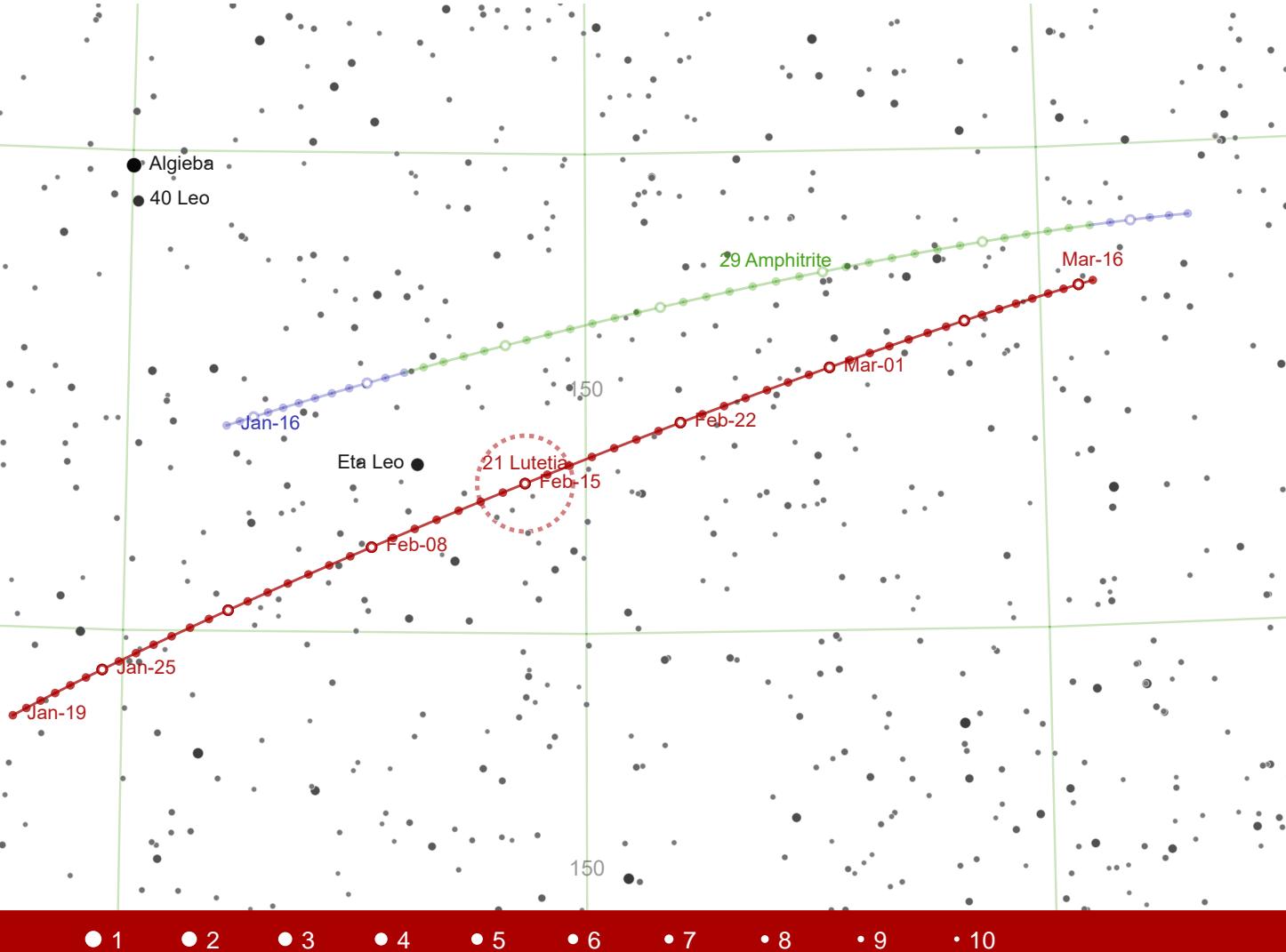
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	01 14 59.81	+07 19 50.1	11.072	1.4216
2024-Dec-17	01 16 16.56	+07 26 19.2	11.116	1.4427
2024-Dec-19	01 17 39.69	+07 33 28.5	11.16	1.4641
2024-Dec-21	01 19 09.04	+07 41 16.7	11.203	1.4859
2024-Dec-23	01 20 44.44	+07 49 42.1	11.245	1.5079
2024-Dec-25	01 22 25.74	+07 58 43.4	11.286	1.5302
2024-Dec-27	01 24 12.76	+08 08 19.2	11.327	1.5527
2024-Dec-29	01 26 05.34	+08 18 28.0	11.366	1.5755



20 Massalia

Rotational Period: 8.098h
 Mean radius: 67.84km
 Classification: S
 Albedo: 0.241
 BV Color Index: 0.854
 Named after the city of Marseille by its discoverer Annibale de Gasparis, Massalia is the first asteroid to have a non-mythological name. It is the parent body of the Massalia family, created by an impact on Massalia about 100 to 200 million years ago. The next largest member of this young family is only 7 km in diameter.

Date	RA	DEC	Magnitude	Distance (AU)
2026-Jan-11	12 18 26.41	-02 42 29.6	10.44	1.7114
2026-Jan-12	12 19 08.38	-02 47 04.9	10.425	1.701
2026-Jan-13	12 19 48.88	-02 51 30.5	10.409	1.6906
2026-Jan-14	12 20 27.87	-02 55 46.1	10.394	1.6803
2026-Jan-15	12 21 05.33	-02 59 51.6	10.378	1.67



21 Lutetia

Rotational Period: 8.1655h

Mean radius: 47.88km

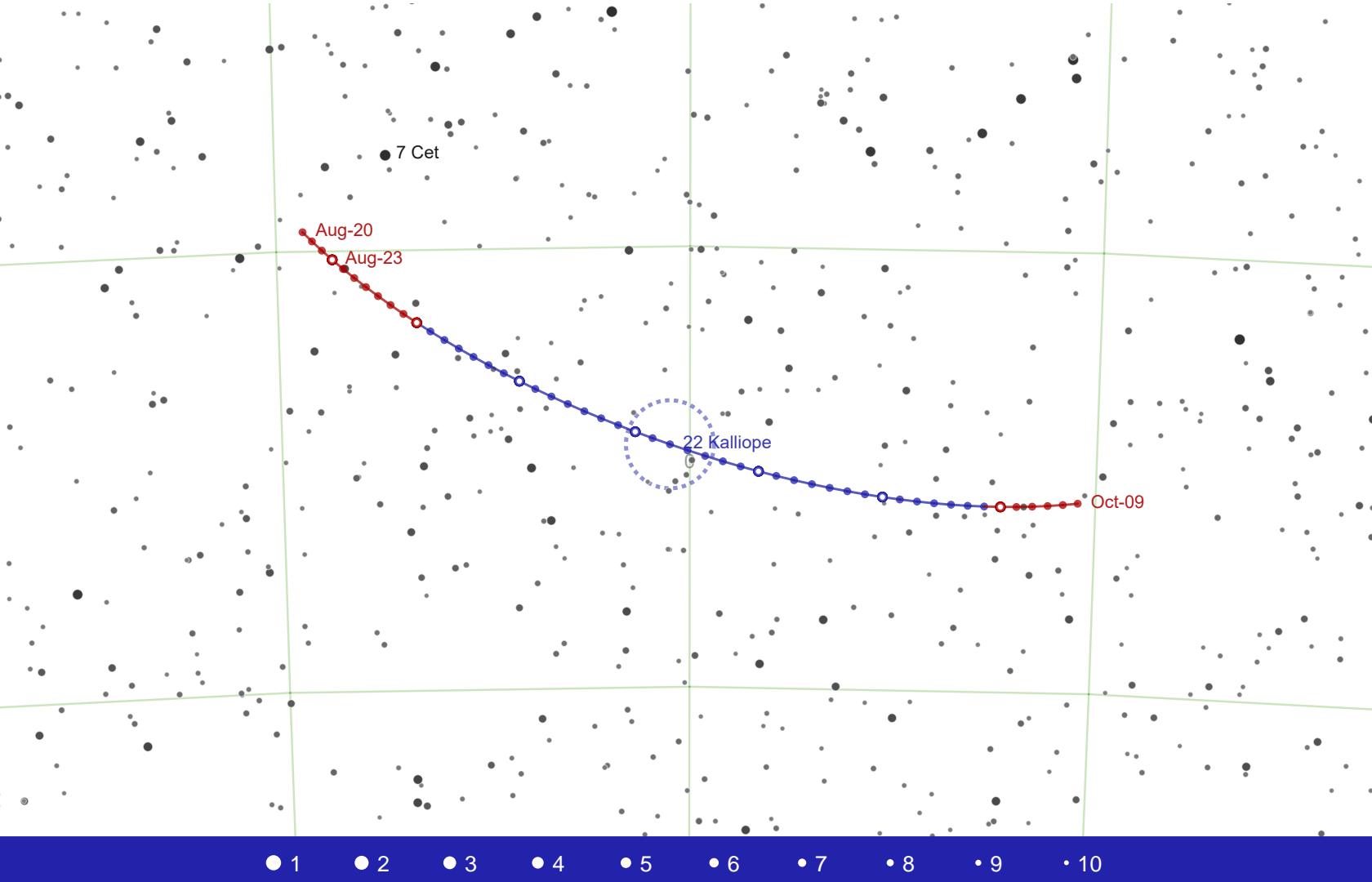
Classification: Xk

Albedo: 0.2212

BV Color Index: 0.686

Given the latin name for Paris, Lutetia was observed close-up by the Rosetta probe in 2010. It has an irregular shape and a high density suggesting that it is rich in metallic ores. Lutetia may have formed closer to Earth's orbit and been ejected by planetary interactions into the asteroid belt. Discovered by Hermann Goldschmidt in November 1852.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jan-19	10 24 39.75	+14 05 01.4	11.961	1.9591
2025-Jan-24	10 21 33.15	+14 29 42.2	11.848	1.9235
2025-Jan-29	10 17 53.91	+14 56 34.2	11.73	1.8943
2025-Feb-03	10 13 46.80	+15 24 55.4	11.606	1.8719
2025-Feb-08	10 09 18.04	+15 53 56.6	11.475	1.8566
2025-Feb-13	10 04 34.65	+16 22 48.4	11.345	1.8487
2025-Feb-18	09 59 44.14	+16 50 43.2	11.342	1.8483
2025-Feb-23	09 54 54.42	+17 16 56.5	11.472	1.8553
2025-Feb-28	09 50 13.61	+17 40 48.1	11.604	1.8697
2025-Mar-05	09 45 49.64	+18 01 43.9	11.728	1.8912
2025-Mar-10	09 41 49.49	+18 19 19.6	11.846	1.9194
2025-Mar-15	09 38 18.64	+18 33 22.0	11.959	1.9538



22 Kalliope

Rotational Period: 4.1483h

Mean radius: 83.768km

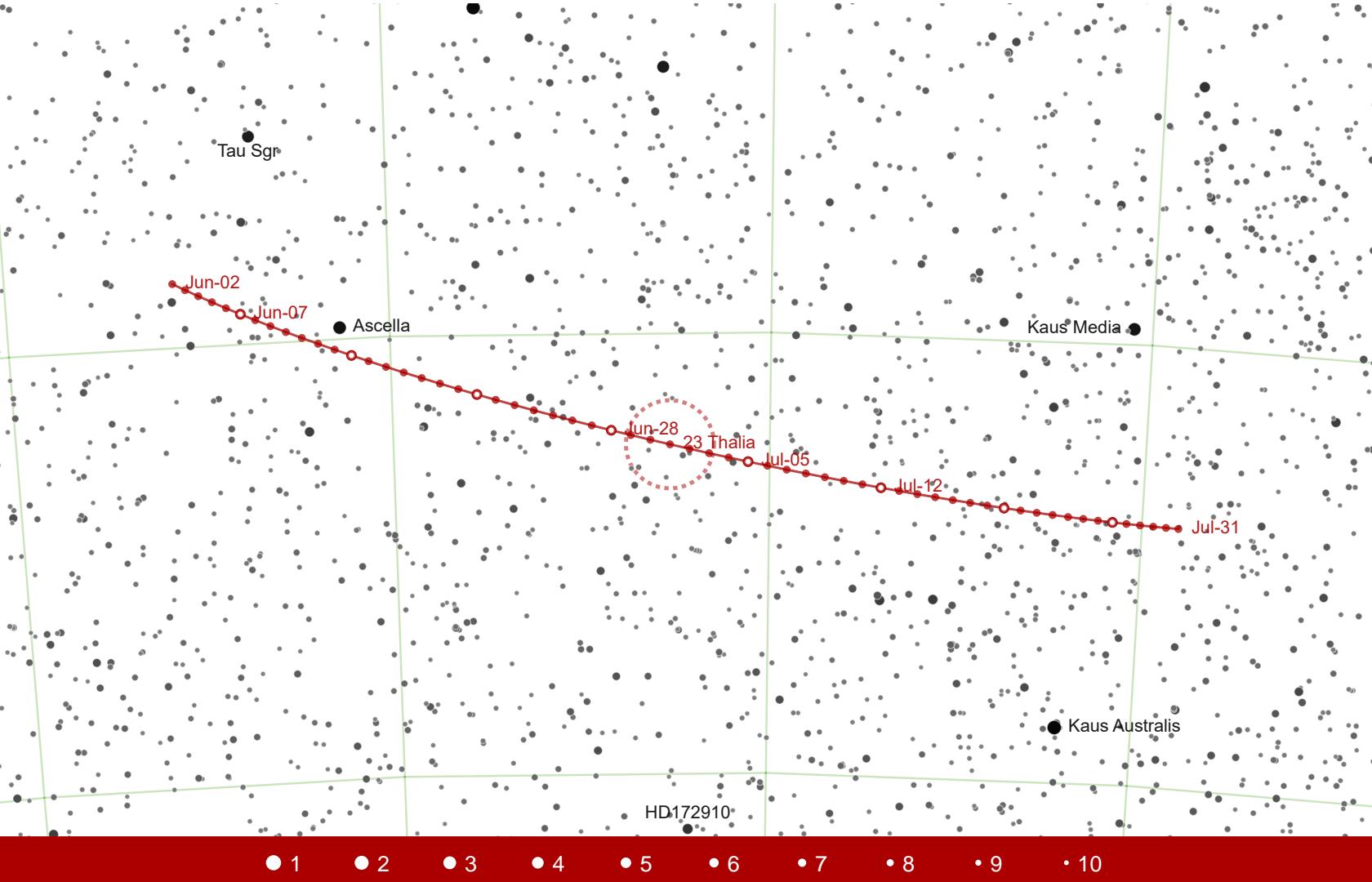
Classification: X

Albedo: 0.166

BV Color Index: 0.715

Named after the Greek muse of heroic poetry, Kalliope is orbited by a sizeable moon Linus (28 km diameter). Discovered by J R Hind in November 1852.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-20	00 18 42.27	-19 46 58.4	11.165	1.9362
2025-Aug-24	00 16 47.74	-20 12 38.3	11.096	1.9104
2025-Aug-28	00 14 32.02	-20 37 59.7	11.031	1.8881
2025-Sep-01	00 11 56.96	-21 02 32.3	10.971	1.8697
2025-Sep-05	00 09 04.88	-21 25 45.6	10.92	1.8552
2025-Sep-09	00 05 58.47	-21 47 10.5	10.882	1.8447
2025-Sep-13	00 02 40.70	-22 06 19.4	10.859	1.8383
2025-Sep-17	23 59 14.90	-22 22 46.4	10.856	1.8361
2025-Sep-21	23 55 44.84	-22 36 06.9	10.871	1.8381
2025-Sep-25	23 52 14.54	-22 46 00.2	10.902	1.8442
2025-Sep-29	23 48 48.07	-22 52 11.6	10.945	1.8545
2025-Oct-03	23 45 29.29	-22 54 31.9	10.996	1.8687



23 Thalia

Rotational Period: 12.312h

Mean radius: 53.765km

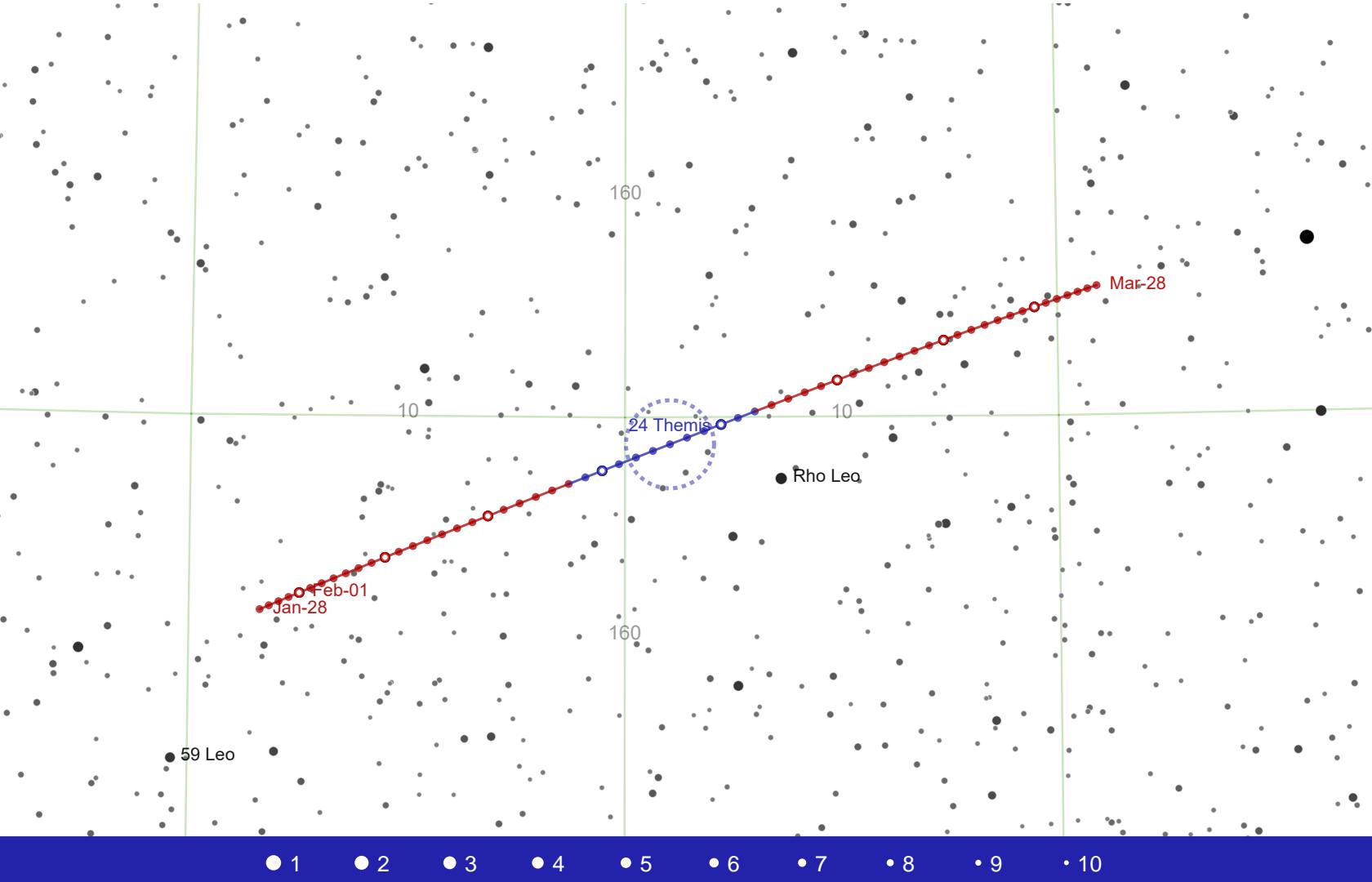
Classification: S

Albedo: 0.2536

BV Color Index: 0.859

Discovered by J R Hind in 1852, Thalia is named after the Greek muse of Comedy.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-02	19 11 14.08	-29 17 43.5	12.011	2.2009
2025-Jun-07	19 07 46.15	-29 40 39.7	11.924	2.1708
2025-Jun-12	19 03 46.56	-30 03 11.9	11.835	2.1467
2025-Jun-17	18 59 19.76	-30 24 49.9	11.746	2.129
2025-Jun-22	18 54 31.17	-30 45 04.3	11.658	2.118
2025-Jun-27	18 49 27.43	-31 03 27.8	11.582	2.114
2025-Jul-02	18 44 16.23	-31 19 37.4	11.56	2.1172
2025-Jul-07	18 39 05.50	-31 33 17.4	11.62	2.1276
2025-Jul-12	18 34 02.87	-31 44 20.0	11.719	2.145
2025-Jul-17	18 29 15.37	-31 52 44.8	11.826	2.1692
2025-Jul-22	18 24 49.49	-31 58 37.9	11.932	2.2001
2025-Jul-27	18 20 51.11	-32 02 10.3	12.037	2.2373



24 Themis

Rotational Period: 8.374h

Mean radius: 99.km

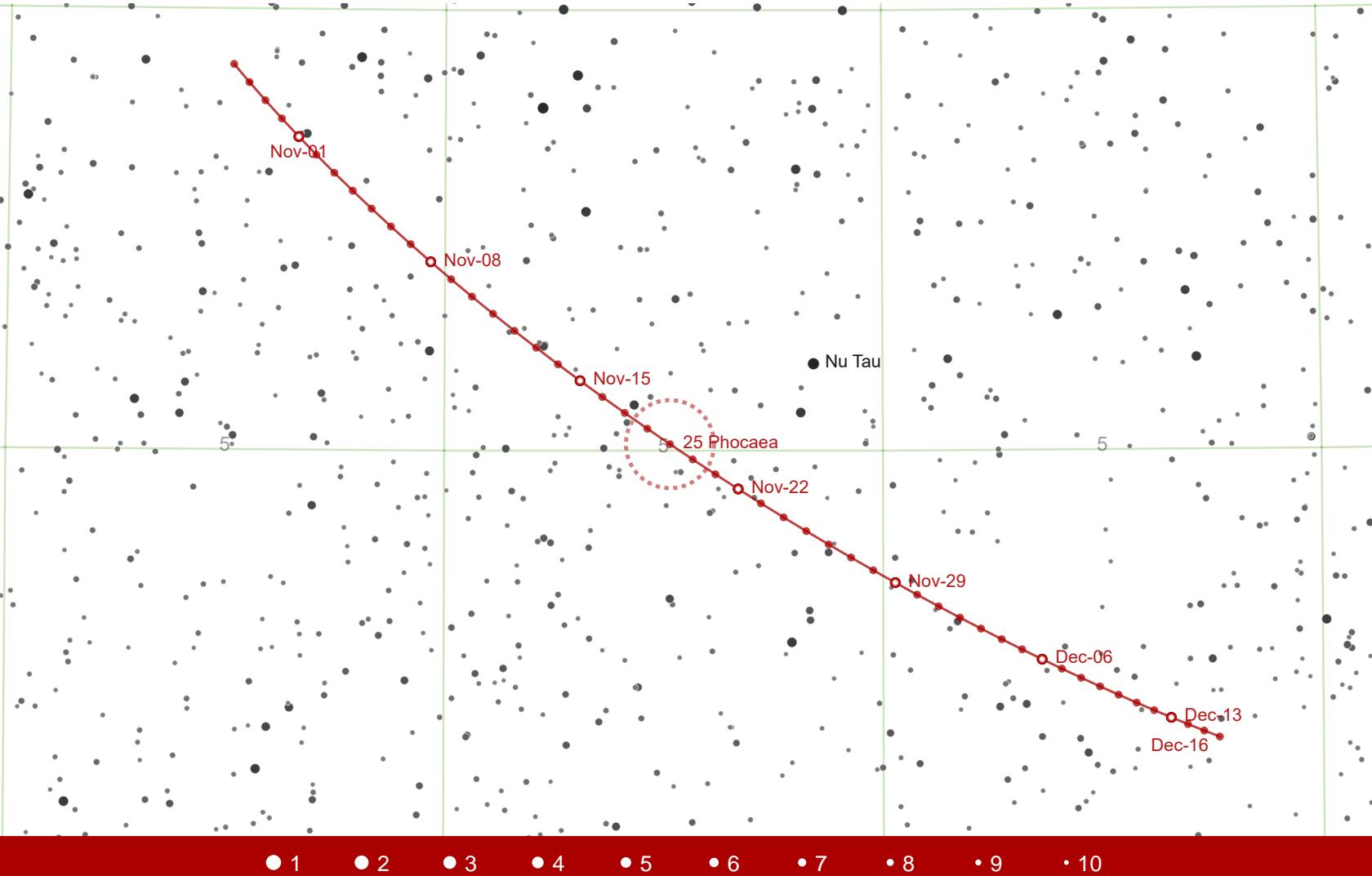
Classification: B

Albedo: 0.067

BV Color Index: 0.684

Themis is on the outer edge of the asteroid belt, and thus comes close enough to Jupiter to be measurably perturbed in its orbit by the big planet. This effect was used to calculate the Jovian mass as far back as 1875. Themis' surface appears to be covered in ice, which is not stable at Themis' orbit, suggesting the ice is actively replenished.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jan-28	10 56 43.98	+07 47 44.6	11.553	1.9135
2025-Feb-02	10 54 25.42	+08 02 33.8	11.448	1.8778
2025-Feb-07	10 51 37.20	+08 20 07.9	11.339	1.8482
2025-Feb-12	10 48 23.80	+08 39 54.9	11.226	1.825
2025-Feb-17	10 44 50.41	+09 01 19.3	11.104	1.8086
2025-Feb-22	10 41 03.07	+09 23 41.7	10.962	1.7991
2025-Feb-27	10 37 08.61	+09 46 19.1	10.845	1.7968
2025-Mar-04	10 33 14.53	+10 08 26.2	11.018	1.8016
2025-Mar-09	10 29 28.39	+10 29 19.1	11.152	1.8136
2025-Mar-14	10 25 57.00	+10 48 21.0	11.272	1.8324
2025-Mar-19	10 22 46.21	+11 05 02.5	11.385	1.8577
2025-Mar-24	10 20 01.05	+11 19 00.2	11.494	1.8892



25 Phocaea

Rotational Period: 9.9341h

Mean radius: 30.527km

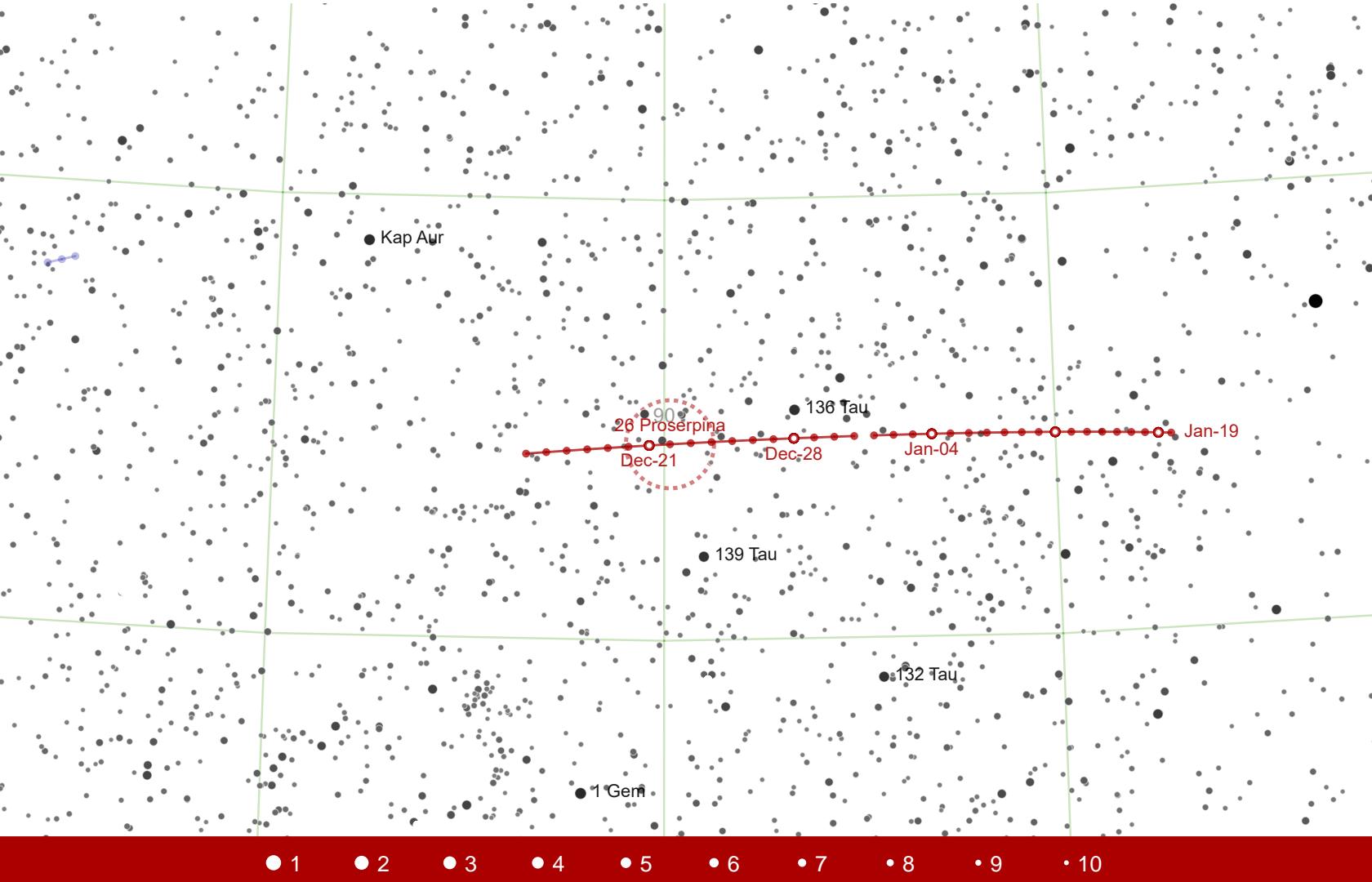
Classification: S

Albedo: 0.350

BV Color Index: 0.932

Phocaea is stony asteroid that is the parent body of the large Phocaea family. 1090 Sumida is the next largest member of this family with a diameter of 13 km. Discovered by Jean Chacornac in April 1853.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-28	04 29 44.69	+09 22 18.9	11.634	1.5952
2025-Nov-01	04 26 44.16	+08 33 14.6	11.568	1.5816
2025-Nov-05	04 23 22.36	+07 44 32.3	11.505	1.5719
2025-Nov-09	04 19 42.78	+06 56 43.4	11.448	1.5664
2025-Nov-13	04 15 49.24	+06 10 20.6	11.402	1.5653
2025-Nov-17	04 11 46.10	+05 25 58.2	11.373	1.5688
2025-Nov-21	04 07 38.14	+04 44 09.0	11.374	1.5769
2025-Nov-25	04 03 30.31	+04 05 23.1	11.408	1.5898
2025-Nov-29	03 59 27.47	+03 30 05.1	11.473	1.6072
2025-Dec-03	03 55 34.10	+02 58 33.6	11.558	1.6292
2025-Dec-07	03 51 54.09	+02 31 01.0	11.653	1.6555
2025-Dec-11	03 48 30.78	+02 07 34.6	11.753	1.686



26 Proserpina

Rotational Period: 13.11h

Mean radius: 47.4km

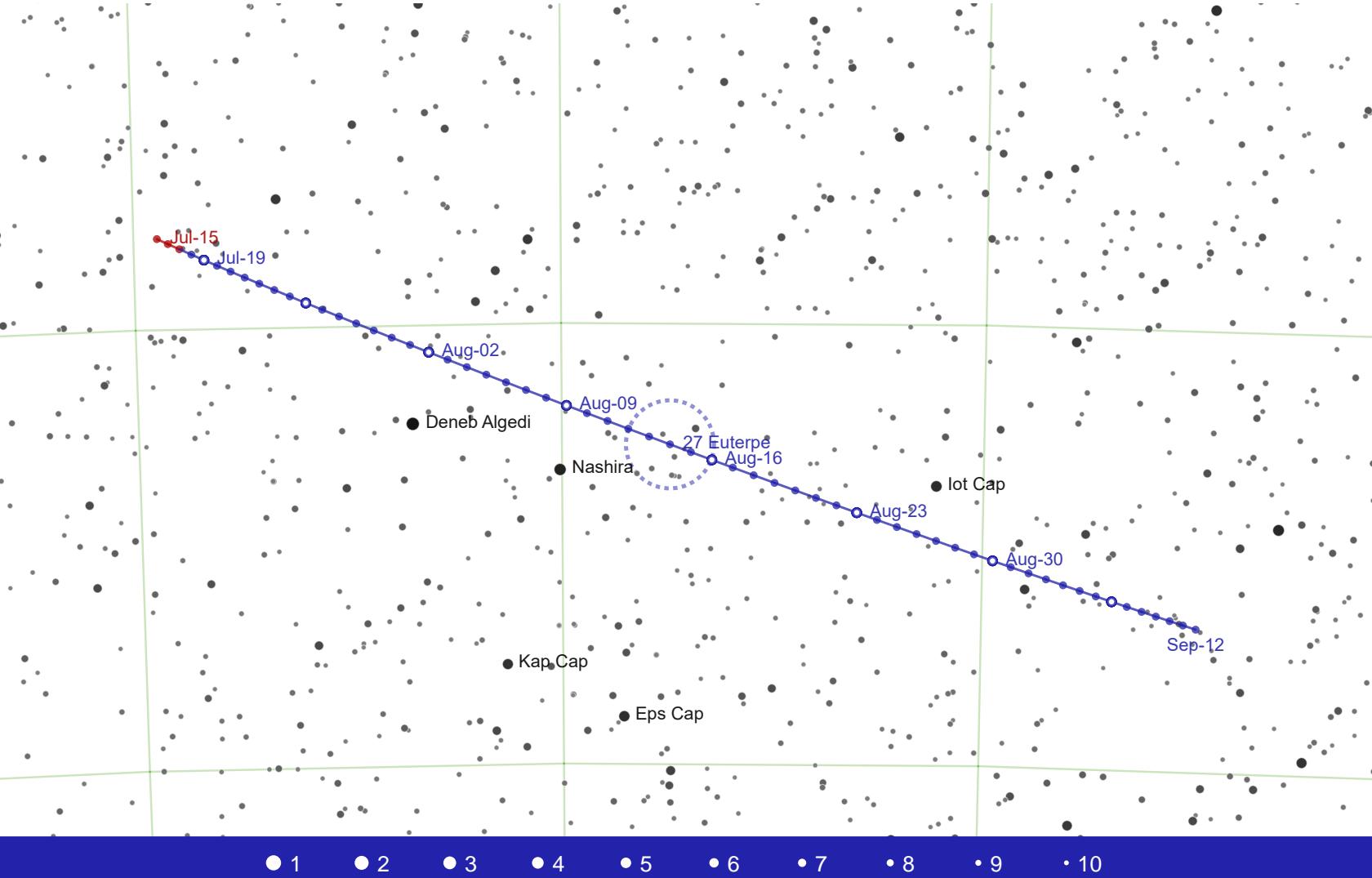
Classification: S

Albedo: 0.1966

BV Color Index: 0.891

A stony asteroid discovered in 1853 by R Luther, attempts since the 1970s to calculate Proserpina's rotational period from light curves have produced estimates ranging from 6.67 hours (2001) to 13.11 hours (2008).

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	06 07 02.90	+27 06 45.2	11.534	1.8849
2024-Dec-18	06 03 55.91	+27 10 09.5	11.453	1.879
2024-Dec-21	06 00 46.00	+27 13 00.4	11.391	1.8759
2024-Dec-24	05 57 35.13	+27 15 16.4	11.415	1.8754
2024-Dec-27	05 54 25.31	+27 16 56.9	11.488	1.8777
2024-Dec-30	05 51 18.58	+27 18 02.4	11.565	1.8826
2025-Jan-02	05 48 16.96	+27 18 34.0	11.639	1.8902
2025-Jan-05	05 45 22.36	+27 18 33.8	11.709	1.9004
2025-Jan-08	05 42 36.55	+27 18 04.6	11.778	1.9131
2025-Jan-11	05 40 01.06	+27 17 09.5	11.844	1.9283
2025-Jan-14	05 37 37.20	+27 15 52.3	11.909	1.9458
2025-Jan-17	05 35 26.09	+27 14 16.7	11.972	1.9655



27 Euterpe

Rotational Period: 10.4082h

Mean radius: 48.km

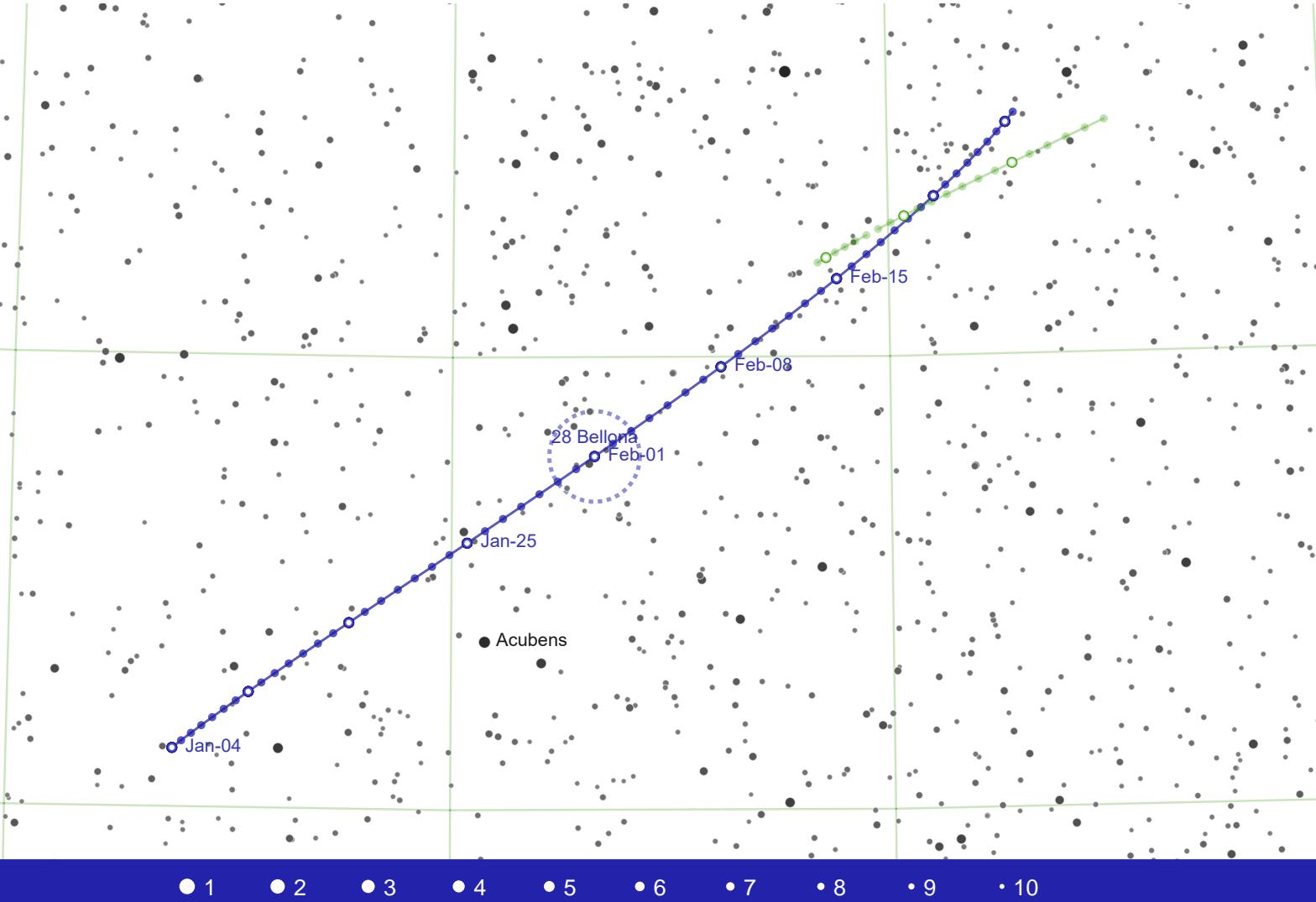
Classification: S

Albedo: 0.215

BV Color Index: 0.878

This stony asteroid was discovered in 1853 by J R Hind and is named after the Greek Muse of music. It orbits in the inner asteroid belt.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-15	21 58 53.29	-13 58 11.8	11.072	1.7042
2025-Jul-20	21 56 06.31	-14 17 24.1	10.944	1.6636
2025-Jul-25	21 52 43.42	-14 39 24.4	10.811	1.6285
2025-Jul-30	21 48 48.61	-15 03 39.9	10.673	1.5993
2025-Aug-04	21 44 27.38	-15 29 29.7	10.525	1.5765
2025-Aug-09	21 39 46.37	-15 56 09.1	10.358	1.5603
2025-Aug-14	21 34 53.04	-16 22 52.2	10.207	1.5508
2025-Aug-19	21 29 55.55	-16 48 53.5	10.352	1.5482
2025-Aug-24	21 25 02.85	-17 13 28.1	10.487	1.5523
2025-Aug-29	21 20 24.10	-17 35 54.4	10.606	1.563
2025-Sep-03	21 16 07.68	-17 55 39.4	10.719	1.5801
2025-Sep-08	21 12 20.69	-18 12 20.3	10.826	1.6032



28 Bellona

Rotational Period: 15.706h

Mean radius: 60.45km

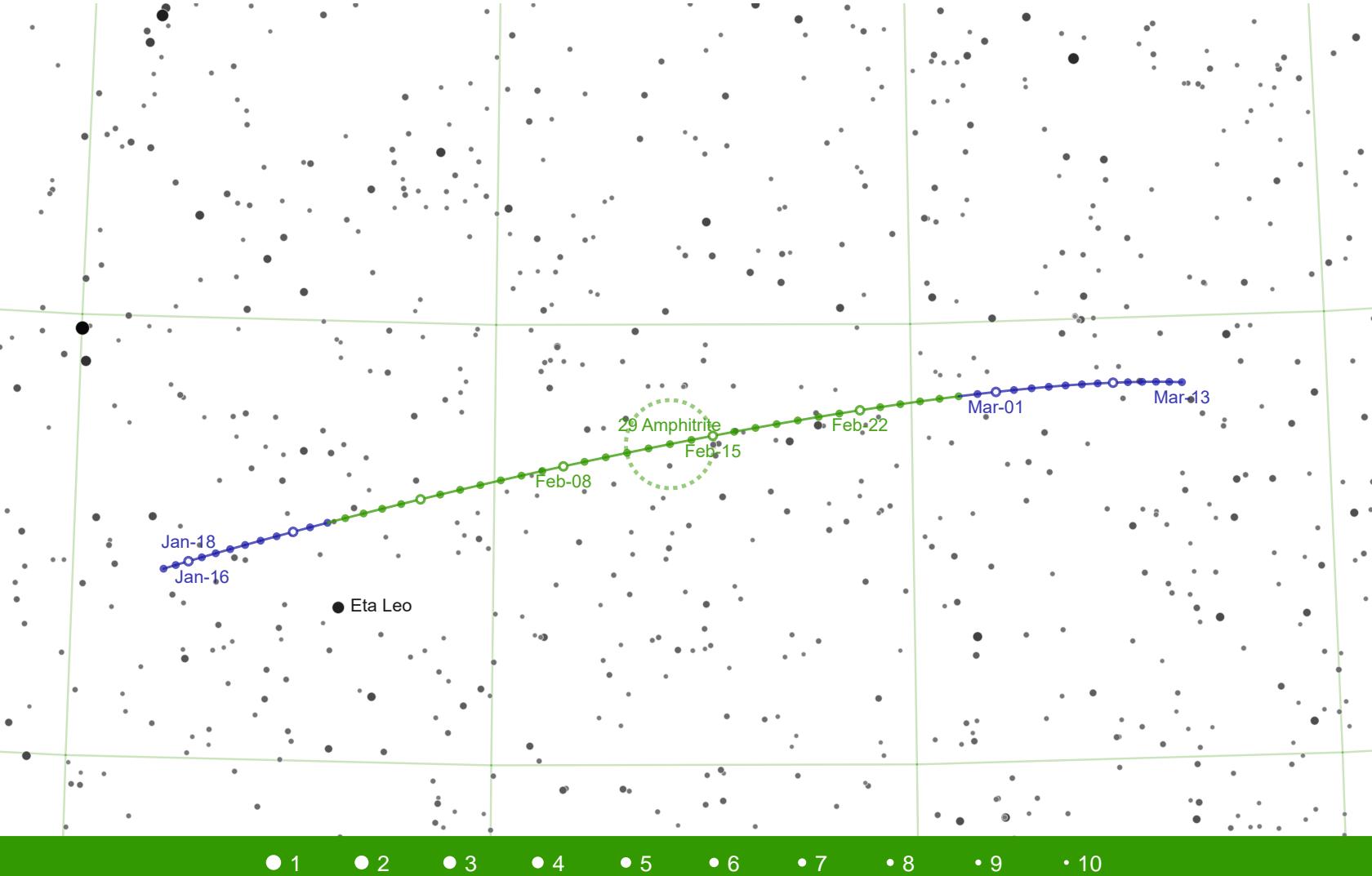
Classification: S

Albedo: 0.1763

BV Color Index: 0.845

This stony asteroid was discovered in 1854 by R Luther and was named after the Roman goddess of war, a nod to the Crimean War which had just started.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jan-04	09 12 30.91	+10 39 22.9	10.767	1.4847
2025-Jan-09	09 10 12.65	+11 05 29.5	10.64	1.4518
2025-Jan-14	09 07 18.66	+11 36 12.3	10.51	1.4246
2025-Jan-19	09 03 54.12	+12 10 59.0	10.374	1.4036
2025-Jan-24	09 00 05.63	+12 49 06.7	10.23	1.389
2025-Jan-29	08 56 01.40	+13 29 41.6	10.078	1.3811
2025-Feb-03	08 51 51.02	+14 11 41.3	10.046	1.3802
2025-Feb-08	08 47 44.66	+14 53 59.0	10.196	1.3862
2025-Feb-13	08 43 51.87	+15 35 32.5	10.343	1.399
2025-Feb-18	08 40 21.19	+16 15 27.6	10.481	1.4183
2025-Feb-23	08 37 20.17	+16 52 58.6	10.613	1.4437
2025-Feb-28	08 34 55.21	+17 27 28.2	10.741	1.475



29 Amphitrite

Rotational Period: 5.3921h

Mean radius: 94.7795km

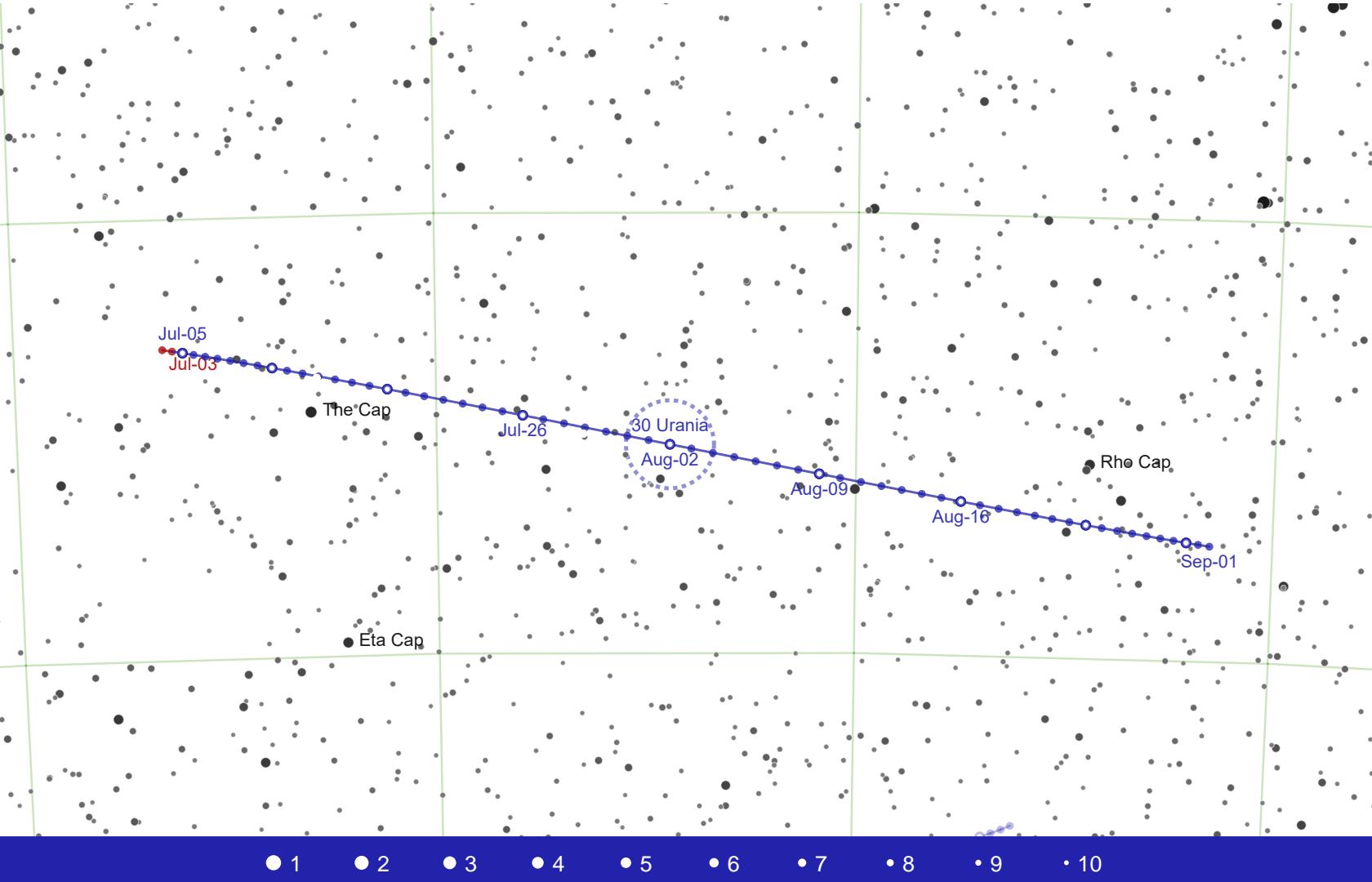
Classification: S

Albedo: 0.216

BV Color Index: 0.838

Amphitrite is the only asteroid discovery of Albert Marth, first observed from London in 1854. This large stony asteroids orbit is highly circular, so it never comes particularly close to Earth and is accordingly relatively faint despite its bulk.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jan-16	10 15 40.21	+17 08 58.7	9.751	1.6294
2025-Jan-21	10 12 31.94	+17 23 38.1	9.643	1.599
2025-Jan-26	10 08 45.35	+17 39 53.9	9.532	1.5745
2025-Jan-31	10 04 26.03	+17 57 01.3	9.418	1.5563
2025-Feb-05	09 59 41.51	+18 14 09.1	9.302	1.5449
2025-Feb-10	09 54 40.69	+18 30 26.0	9.194	1.5405
2025-Feb-15	09 49 32.98	+18 45 06.3	9.193	1.5432
2025-Feb-20	09 44 27.95	+18 57 31.2	9.31	1.5529
2025-Feb-25	09 39 35.16	+19 07 09.2	9.441	1.5696
2025-Mar-02	09 35 03.71	+19 13 36.3	9.568	1.593
2025-Mar-07	09 31 01.67	+19 16 37.6	9.692	1.6228
2025-Mar-12	09 27 35.14	+19 16 09.0	9.812	1.6584



30 Urania

Rotational Period: 13.686h

Mean radius: 46.3935km

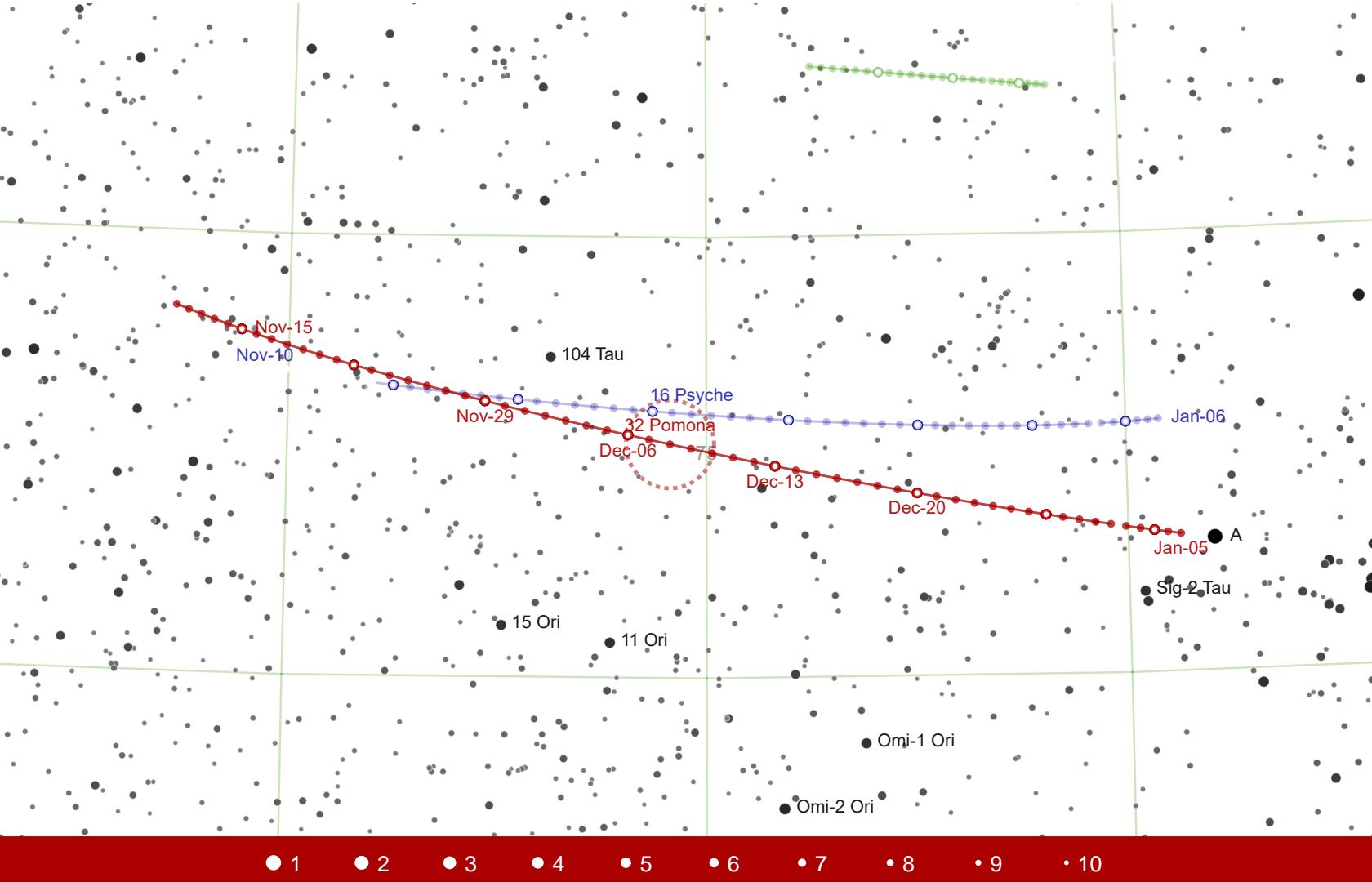
Classification: S1

Albedo: 0.192

BV Color Index: 0.873

Named after the Greek Muse of astronomy, this large stony asteroid is the last discovery of J R Hind.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-03	21 12 55.87	-16 29 10.5	11.034	1.4358
2025-Jul-08	21 10 19.63	-16 36 03.4	10.895	1.3969
2025-Jul-13	21 07 02.72	-16 45 25.4	10.751	1.3632
2025-Jul-18	21 03 09.02	-16 56 53.9	10.601	1.335
2025-Jul-23	20 58 44.05	-17 10 00.3	10.44	1.3127
2025-Jul-28	20 53 55.56	-17 24 08.5	10.259	1.2965
2025-Aug-02	20 48 53.04	-17 38 37.7	9.986	1.2867
2025-Aug-07	20 43 46.74	-17 52 48.3	10.213	1.2832
2025-Aug-12	20 38 46.96	-18 06 05.4	10.364	1.286
2025-Aug-17	20 34 03.58	-18 18 00.4	10.495	1.295
2025-Aug-22	20 29 46.09	-18 28 09.3	10.617	1.31
2025-Aug-27	20 26 03.13	-18 36 12.7	10.734	1.3305



32 Pomona

Rotational Period: 9.448h

Mean radius: 40.38km

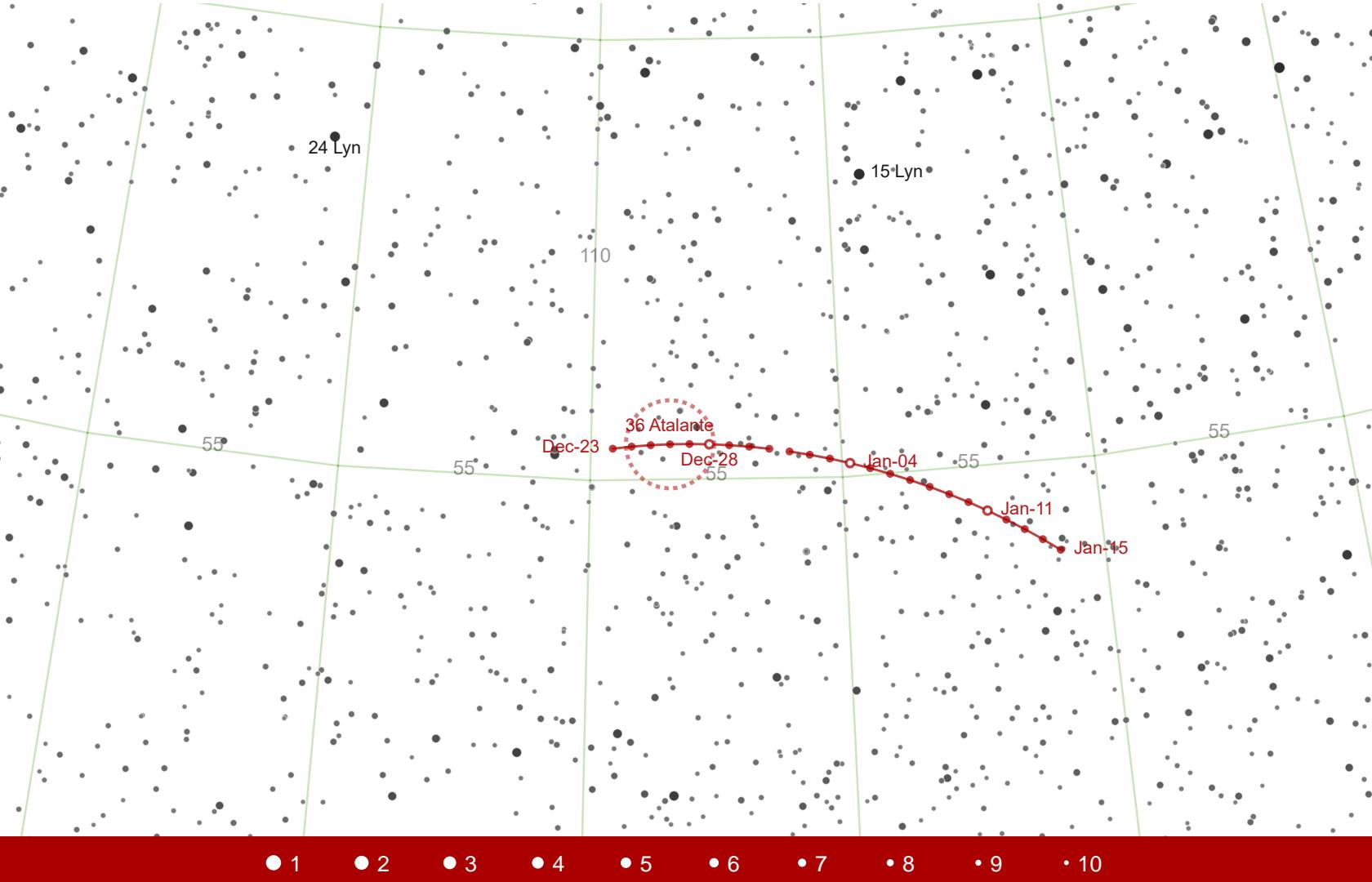
Classification: S

Albedo: 0.2564

BV Color Index: 0.857

This stony asteroid may be a contact binary or have a very irregular shape, based on results from an occultation in 2008. It was discovered in 1854 by Hermann Goldschmidt, one of his 14 asteroid discoveries. Pomona is the Roman goddess of fruit trees.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-10	05 25 26.28	+19 09 47.2	11.991	1.8322
2025-Nov-15	05 22 16.61	+18 54 00.9	11.873	1.7943
2025-Nov-20	05 18 31.31	+18 37 50.5	11.75	1.7625
2025-Nov-25	05 14 15.91	+18 21 26.8	11.624	1.7372
2025-Nov-30	05 09 37.44	+18 05 02.9	11.492	1.7188
2025-Dec-05	05 04 43.97	+17 48 53.8	11.363	1.7075
2025-Dec-10	04 59 43.94	+17 33 16.9	11.333	1.7035
2025-Dec-15	04 54 46.12	+17 18 32.3	11.439	1.7068
2025-Dec-20	04 49 59.57	+17 05 01.3	11.559	1.7174
2025-Dec-25	04 45 32.93	+16 53 04.6	11.676	1.7349
2025-Dec-30	04 41 33.77	+16 42 59.4	11.788	1.7591
2026-Jan-04	04 38 07.99	+16 34 58.8	11.896	1.7895



36 Atalante

Rotational Period: 9.93h

Mean radius: 66.421km

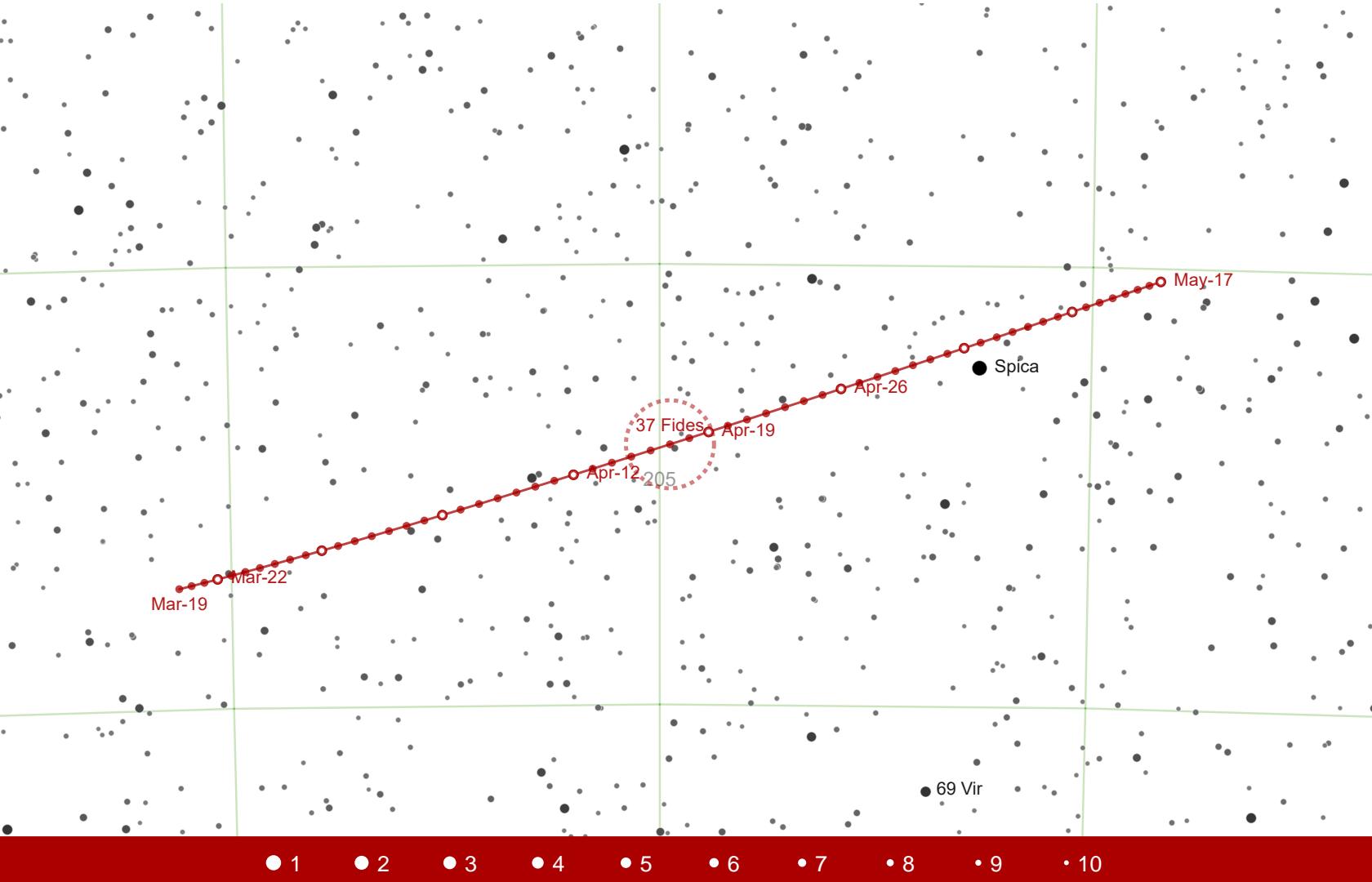
Classification: C

Albedo: 0.029

BV Color Index: 0.713

This dark asteroid was discovered in 1855 by Hermann Goldschmidt and is named after the Greek heroine Atalanta, reputed to have travelled with the argonauts. The asteroid is in a notably chaotic orbit.

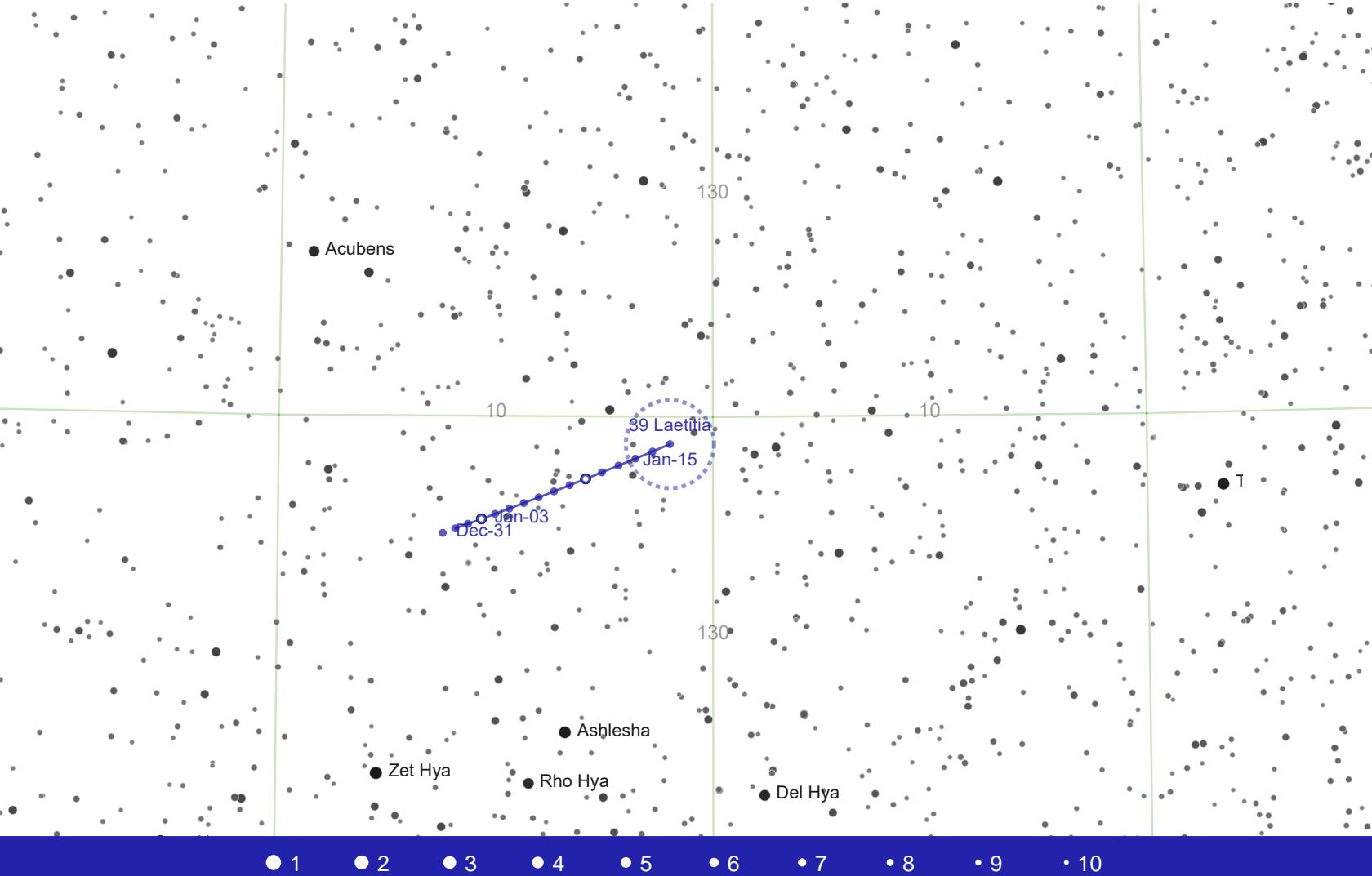
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-23	07 18 15.29	+55 21 55.0	11.431	1.1987
2024-Dec-25	07 15 13.77	+55 24 35.5	11.428	1.2
2024-Dec-27	07 12 07.11	+55 25 23.6	11.428	1.2022
2024-Dec-29	07 08 56.91	+55 24 16.8	11.431	1.2052
2024-Dec-31	07 05 44.84	+55 21 13.4	11.437	1.2091
2025-Jan-02	07 02 32.62	+55 16 13.2	11.448	1.2139
2025-Jan-04	06 59 21.92	+55 09 17.0	11.462	1.2195
2025-Jan-06	06 56 14.40	+55 00 27.0	11.48	1.2259
2025-Jan-08	06 53 11.57	+54 49 46.3	11.501	1.2332
2025-Jan-10	06 50 14.83	+54 37 19.4	11.526	1.2414
2025-Jan-12	06 47 25.41	+54 23 11.1	11.554	1.2504
2025-Jan-14	06 44 44.41	+54 07 27.1	11.585	1.2603



37 Fides

Rotational Period: 7.3335h
 Mean radius: 54.175km
 Classification: S
 Albedo: 0.1826
 BV Color Index: 0.843
 Discovered in October 1855 by Karl Luther, Fides is named after the Roman god of loyalty. Fides was the last asteroid to be allocated a planetary symbol, in this case a Latin cross.

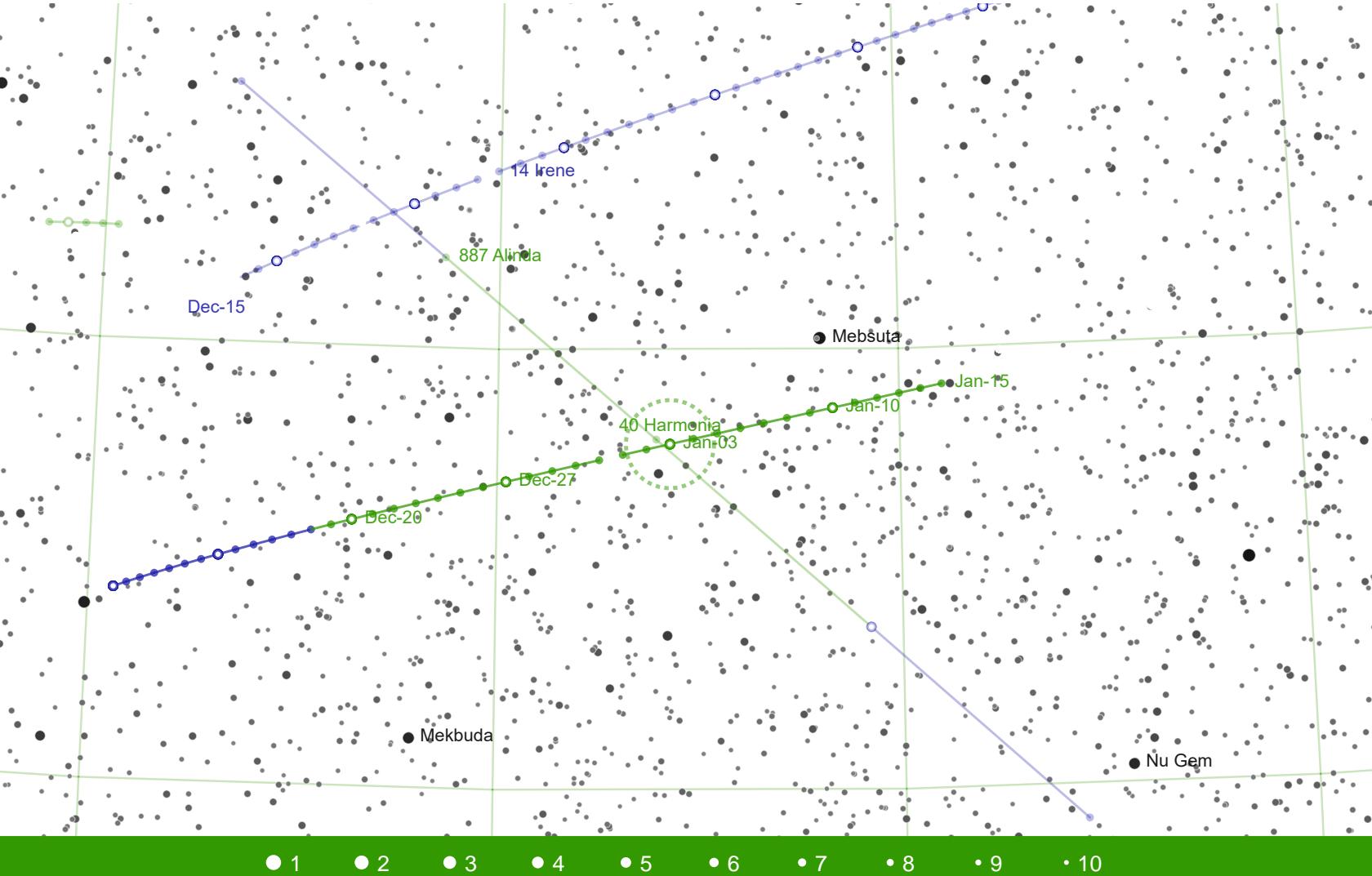
Date	RA	DEC	Magnitude	Distance (AU)
2025-Mar-19	14 02 26.68	-13 37 55.0	11.886	2.0319
2025-Mar-24	13 59 20.33	-13 27 07.3	11.797	2.0003
2025-Mar-29	13 55 45.60	-13 13 30.7	11.706	1.9747
2025-Apr-03	13 51 47.54	-12 57 23.9	11.611	1.9556
2025-Apr-08	13 47 32.37	-12 39 12.7	11.509	1.9434
2025-Apr-13	13 43 06.71	-12 19 26.7	11.393	1.9383
2025-Apr-18	13 38 37.36	-11 58 38.7	11.293	1.9404
2025-Apr-23	13 34 11.14	-11 37 24.4	11.443	1.9497
2025-Apr-28	13 29 54.83	-11 16 22.0	11.573	1.9662
2025-May-03	13 25 54.92	-10 56 11.5	11.691	1.9897
2025-May-08	13 22 16.96	-10 37 28.7	11.802	2.0199
2025-May-13	13 19 05.21	-10 20 43.5	11.91	2.0563



39 Laetitia

Rotational Period: 5.138h
 Mean radius: 89.742km
 Classification: S
 Albedo: 0.269
 BV Color Index: 0.898
 Discovered by Jean Chacornac in February 1856 and named after the Roman goddess of gaiety, this stony body may be a binary asteroid, based on light curve data.

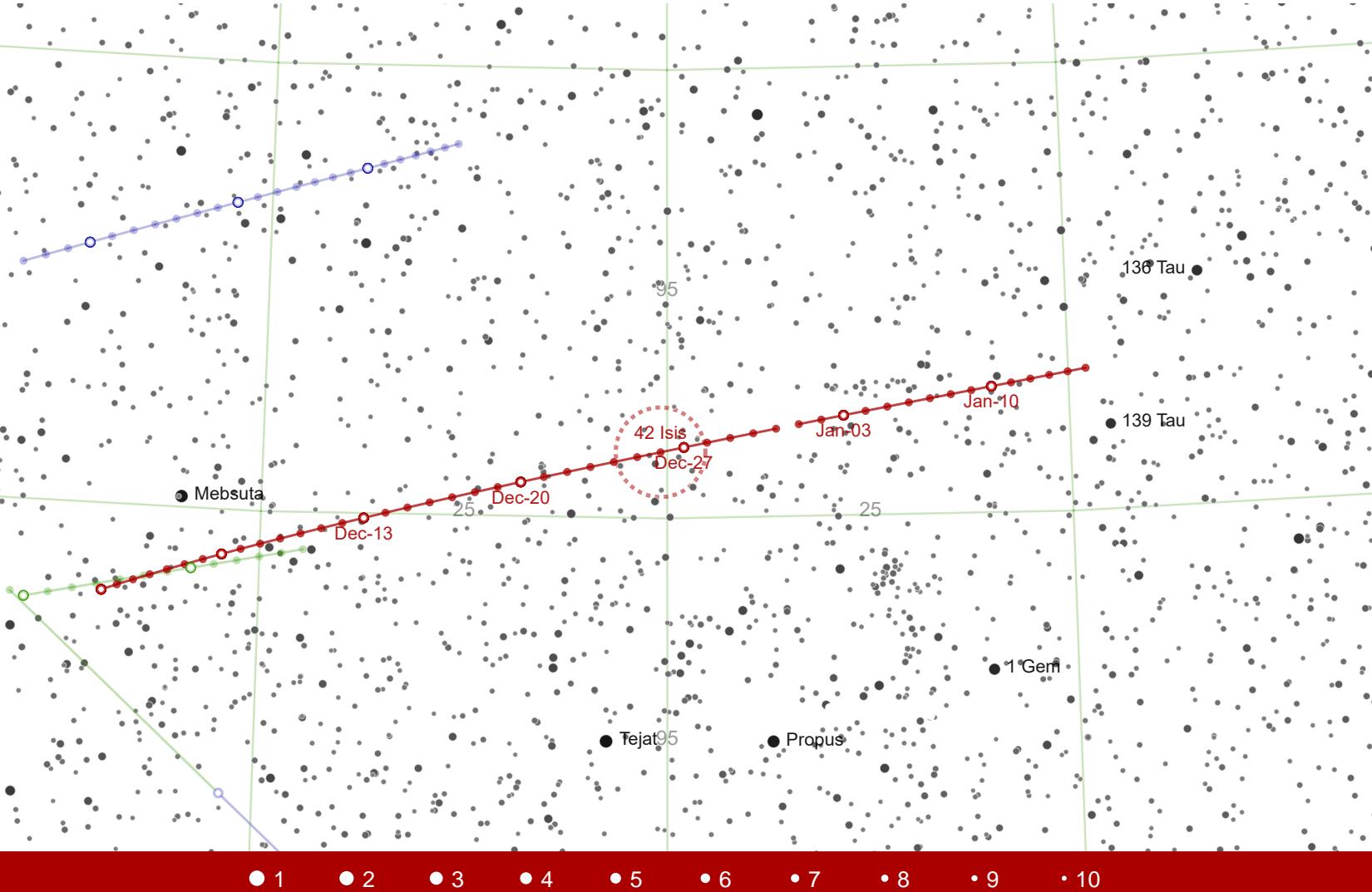
Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-31	08 52 24.74	+08 40 37.8	10.47	2.0072
2026-Jan-02	08 51 15.10	+08 46 54.0	10.431	1.9941
2026-Jan-04	08 50 00.69	+08 53 46.3	10.393	1.9819
2026-Jan-06	08 48 41.77	+09 01 13.8	10.353	1.9708
2026-Jan-08	08 47 18.59	+09 09 15.6	10.314	1.9606
2026-Jan-10	08 45 51.46	+09 17 50.7	10.274	1.9515
2026-Jan-12	08 44 20.72	+09 26 57.8	10.234	1.9434
2026-Jan-14	08 42 46.72	+09 36 35.3	10.193	1.9365



40 Harmonia

Rotational Period: 8.91h
 Mean radius: 55.6255km
 Classification: S
 Albedo: 0.220
 BV Color Index: 0.854
 While 28 Bellona marks the start of the Crimean War, Harmonia marks the happier occasion of the end of the war. Discovered by the prolific Hermann Goldschmidt in March 1856, this is a stony asteroid.

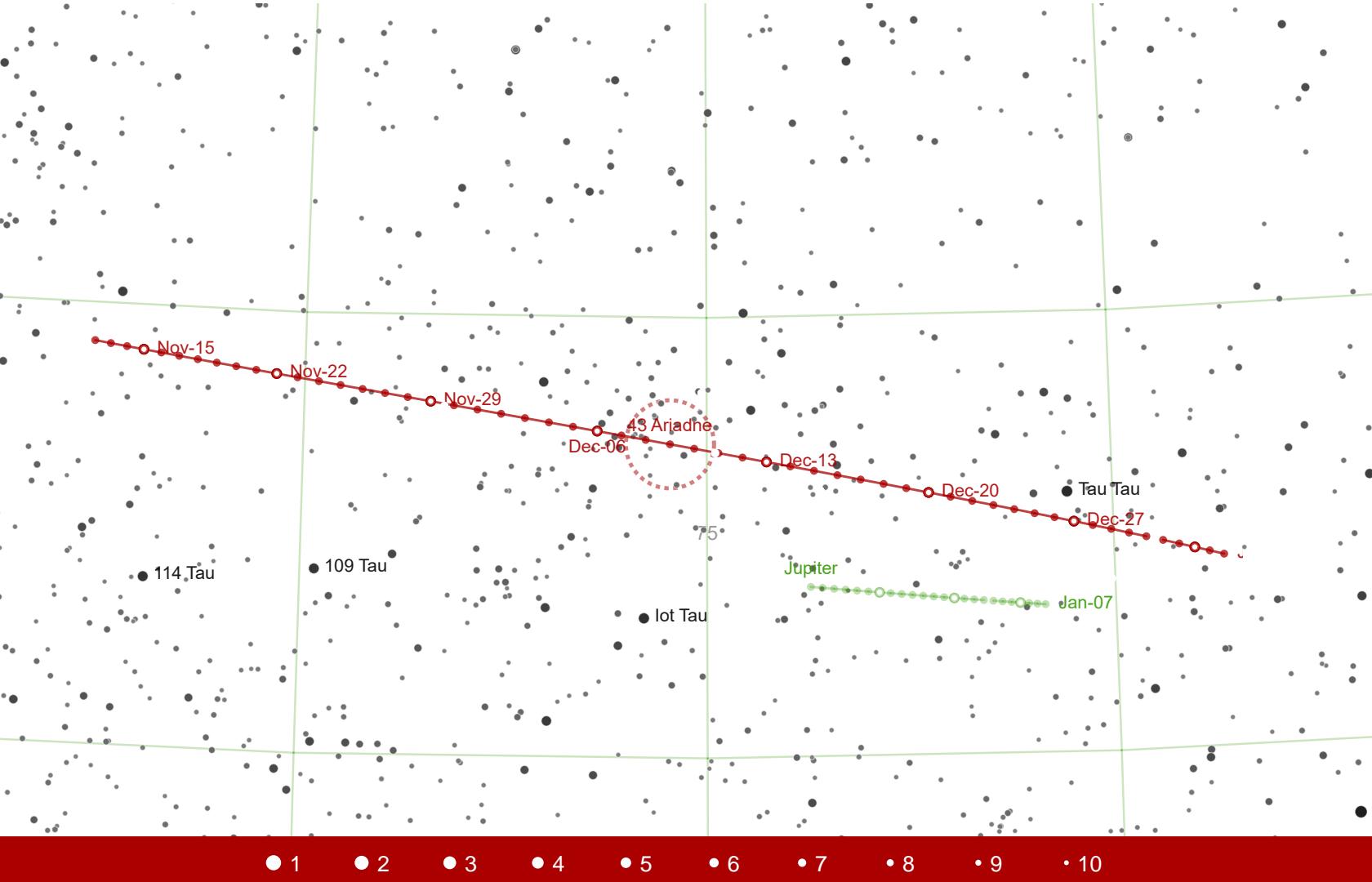
Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-06	07 18 44.30	+22 10 48.1	9.831	1.3804
2025-Dec-10	07 16 01.84	+22 24 26.7	9.729	1.3564
2025-Dec-14	07 12 48.65	+22 39 03.5	9.624	1.3359
2025-Dec-18	07 09 07.84	+22 54 22.4	9.516	1.3192
2025-Dec-22	07 05 03.58	+23 10 04.9	9.402	1.3065
2025-Dec-26	07 00 41.11	+23 25 50.8	9.279	1.2981
2025-Dec-30	06 56 06.42	+23 41 20.5	9.136	1.2941
2026-Jan-03	06 51 25.85	+23 56 15.9	8.997	1.2944
2026-Jan-07	06 46 45.75	+24 10 22.4	9.18	1.2993
2026-Jan-11	06 42 12.47	+24 23 29.0	9.328	1.3085
2026-Jan-15	06 37 52.28	+24 35 28.4	9.458	1.322



42 Isis

Rotational Period: 13.59h
 Mean radius: 55.4985km
 Classification: L
 Albedo: 0.139
 BV Color Index: 0.874
 This stony asteroid was discovered by N R Pogson in May 1856, and is either named after the egyptian goddess or after Pogson's daughter Isis Pogson, who later was one of the first women elected as a fellow of the Royal Astronomical Society.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-29	06 47 39.53	+24 03 06.7	11.868	1.812
2025-Dec-03	06 44 29.58	+24 18 35.5	11.789	1.7911
2025-Dec-07	06 40 55.57	+24 34 16.7	11.707	1.7741
2025-Dec-11	06 37 00.42	+24 49 56.0	11.622	1.7613
2025-Dec-15	06 32 47.74	+25 05 18.8	11.533	1.753
2025-Dec-19	06 28 21.87	+25 20 10.4	11.436	1.7492
2025-Dec-23	06 23 47.75	+25 34 17.8	11.327	1.7503
2025-Dec-27	06 19 10.65	+25 47 30.0	11.267	1.7562
2025-Dec-31	06 14 35.91	+25 59 38.7	11.4	1.767
2026-Jan-04	06 10 08.58	+26 10 39.4	11.532	1.7826
2026-Jan-08	06 05 53.27	+26 20 30.6	11.652	1.8029
2026-Jan-12	06 01 54.20	+26 29 13.9	11.766	1.8277



43 Ariadne

Rotational Period: 5.76218h

Mean radius: 35.67km

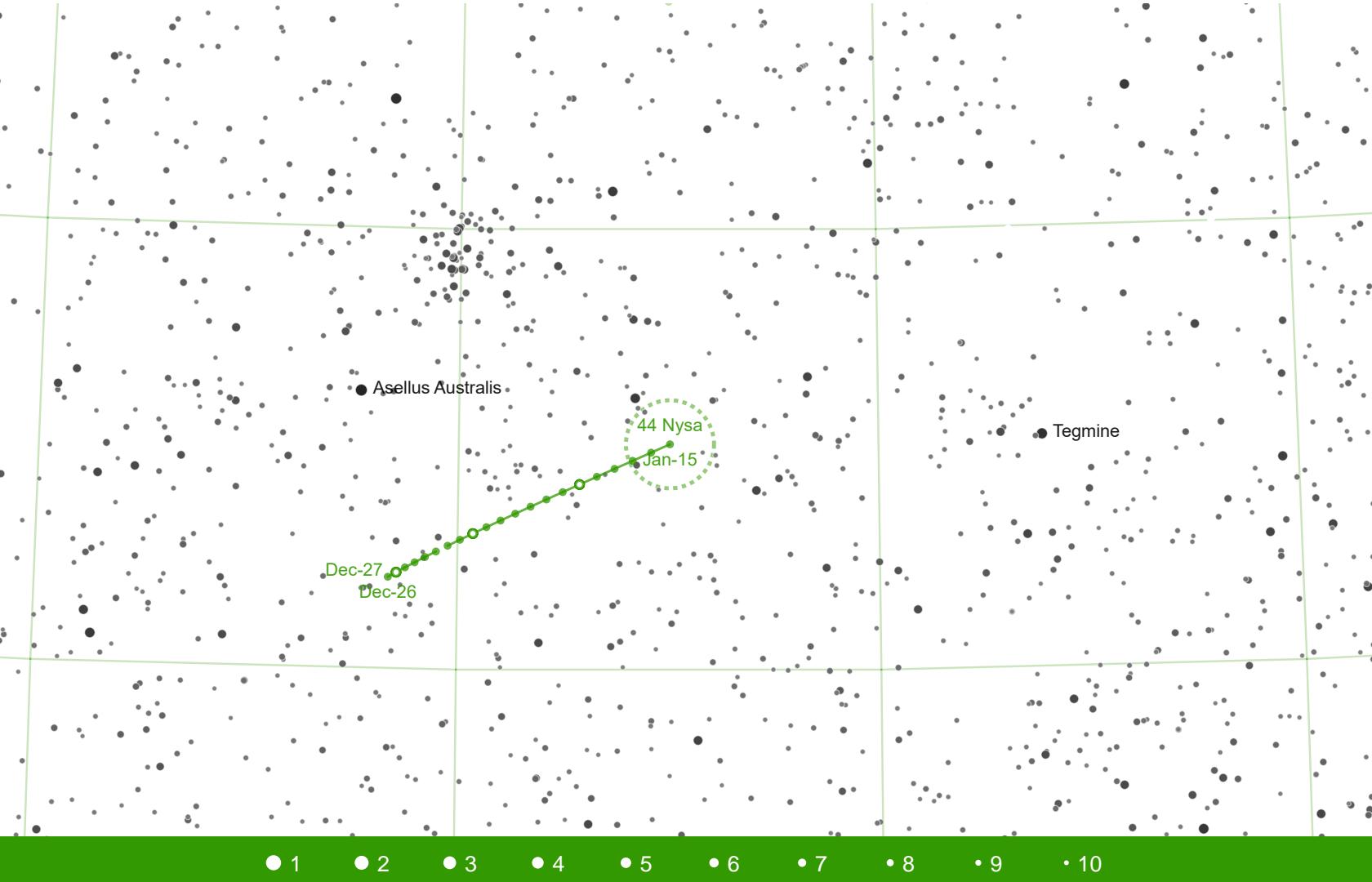
Classification: Sk

Albedo: 0.234

BV Color Index: 0.863

The second asteroid discovered by N R Pogson, Ariadne is the second-largest member of the Flora asteroid family. Discovered in 1857, this stony asteroid is named after the daughter of king Minos of Crete. The constellation Corona Borealis is her crown, tossed into the sky by her divine husband Dionysus.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-12	05 30 31.83	+24 34 57.2	11.803	1.6208
2025-Nov-17	05 26 18.22	+24 26 58.8	11.684	1.5922
2025-Nov-22	05 21 24.95	+24 17 30.2	11.559	1.5696
2025-Nov-27	05 15 59.87	+24 06 27.4	11.426	1.5536
2025-Dec-02	05 10 12.63	+23 53 51.9	11.278	1.5446
2025-Dec-07	05 04 13.76	+23 39 52.3	11.089	1.5428
2025-Dec-12	04 58 14.02	+23 24 44.5	11.151	1.5483
2025-Dec-17	04 52 24.41	+23 08 52.2	11.344	1.5611
2025-Dec-22	04 46 55.61	+22 52 44.7	11.505	1.5812
2025-Dec-27	04 41 57.09	+22 36 53.9	11.653	1.6083
2026-Jan-01	04 37 36.38	+22 21 50.4	11.792	1.6418



44 Nysa

Rotational Period: 6.422h

Mean radius: 35.32km

Classification: Xc

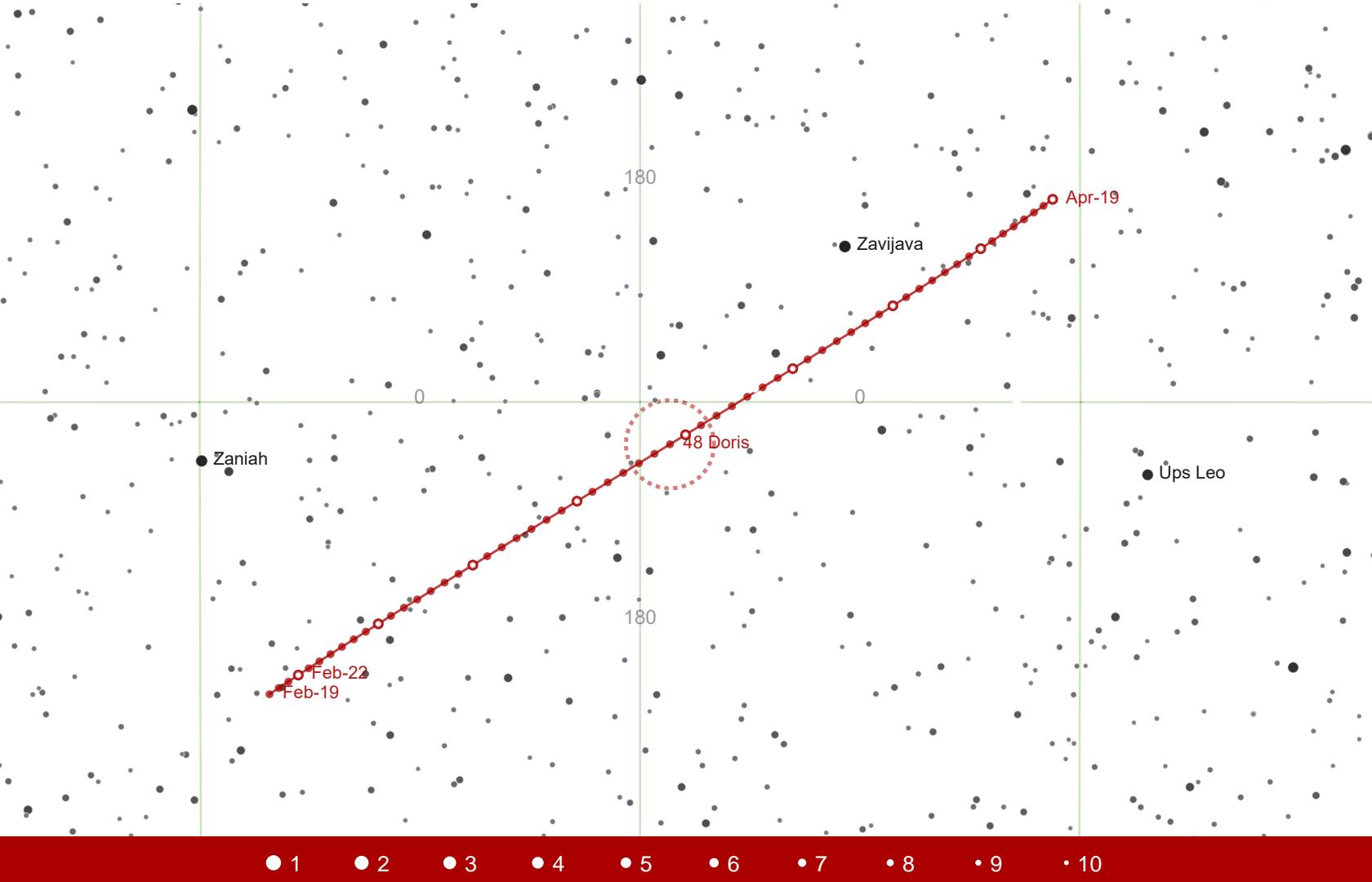
Albedo: 0.482

BV Color Index: 0.703

The largest of the E-type asteroids, Nysa is another discovery by Hermann Goldschmidt in May 1857.

E-type asteroids contain a high proportion of the mineral enstatite, and probably originate from the crust of large, differentiated asteroid. Nysa is the fabulous land where the rain-nymphs the Hyades live.

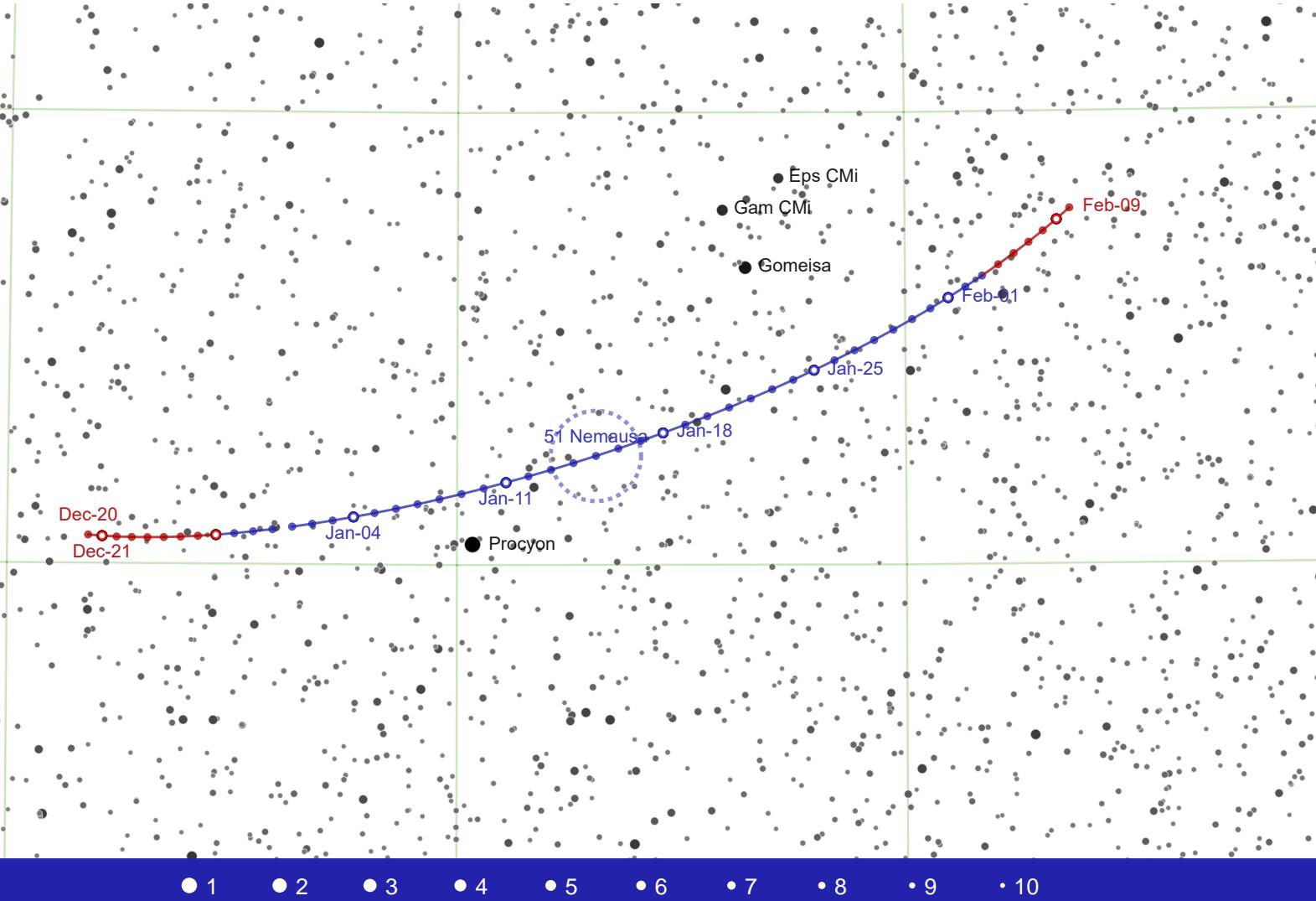
Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-26	08 43 16.05	+16 02 30.7	9.234	1.1753
2025-Dec-28	08 42 27.84	+16 09 05.7	9.188	1.1626
2025-Dec-30	08 41 31.66	+16 16 20.7	9.142	1.1507
2026-Jan-01	08 40 27.76	+16 24 14.3	9.097	1.1396
2026-Jan-03	08 39 16.46	+16 32 44.6	9.051	1.1294
2026-Jan-05	08 37 58.10	+16 41 49.5	9.006	1.12
2026-Jan-07	08 36 33.05	+16 51 26.7	8.961	1.1115
2026-Jan-09	08 35 01.78	+17 01 33.6	8.915	1.1039
2026-Jan-11	08 33 24.81	+17 12 07.3	8.87	1.0973
2026-Jan-13	08 31 42.72	+17 23 04.6	8.825	1.0916
2026-Jan-15	08 29 56.20	+17 34 21.8	8.778	1.0869



48 Doris

Rotational Period: 11.89h
 Mean radius: 108.2365km
 Classification: Ch
 Albedo: 0.065
 BV Color Index: 0.716
 Discovered on 19 September 1857 by Hermann Goldschmidt, Doris is a highly elongated C-type (carbonaceous) asteroid. 49 Pales was discovered on the same night by the same observer. Doris was the mother of the Nereids in Greek mythology who embodied the benevolent aspects of the ocean.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-19	12 16 50.77	-03 18 45.9	12.078	2.2732
2025-Feb-24	12 14 34.38	-02 56 26.3	11.982	2.2372
2025-Mar-01	12 11 53.73	-02 30 59.4	11.883	2.2074
2025-Mar-06	12 08 52.84	-02 02 53.7	11.779	2.1844
2025-Mar-11	12 05 36.51	-01 32 44.1	11.666	2.1683
2025-Mar-16	12 02 09.91	-01 01 09.0	11.535	2.1594
2025-Mar-21	11 58 38.44	-00 28 48.8	11.374	2.1579
2025-Mar-26	11 55 07.71	+00 03 33.9	11.561	2.1638
2025-Mar-31	11 51 43.45	+00 35 15.3	11.696	2.177
2025-Apr-05	11 48 31.27	+01 05 32.0	11.814	2.1974
2025-Apr-10	11 45 36.05	+01 33 46.8	11.924	2.2246
2025-Apr-15	11 43 01.70	+01 59 29.8	12.029	2.2582



51 Nemausa

Rotational Period: 7.783h

Mean radius: 69.0795km

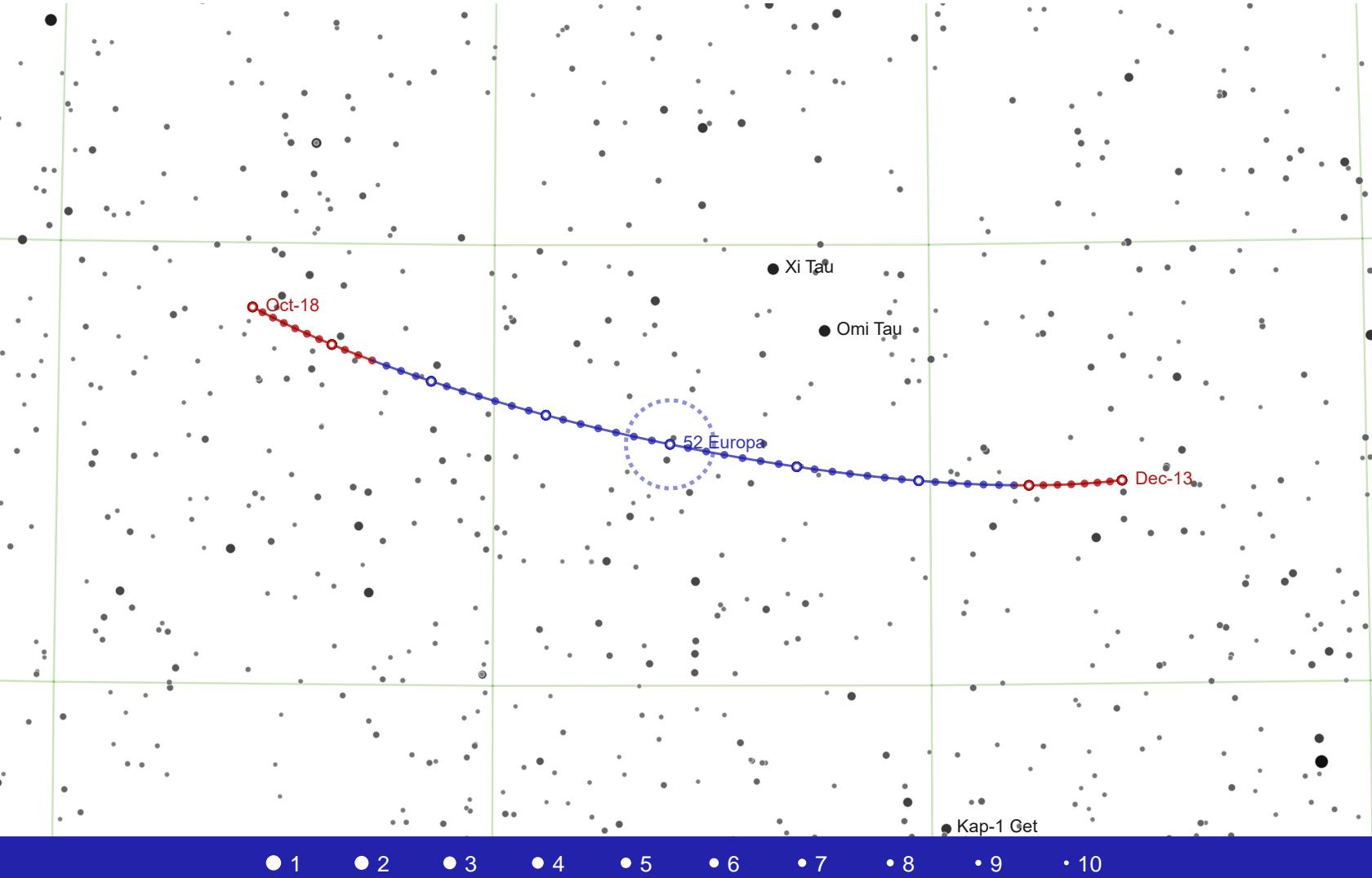
Classification: Ch

Albedo: 0.100

BV Color Index: 0.789

This asteroid is named after the Romanized name of the Celtic patron deity of Nîmes, which was this site of this C-type (carbonaceous) asteroid's first observation (by amateur astronomer Joseph Jean Pierre Laurent). The spectrum of this asteroid indicates the presence of clays.

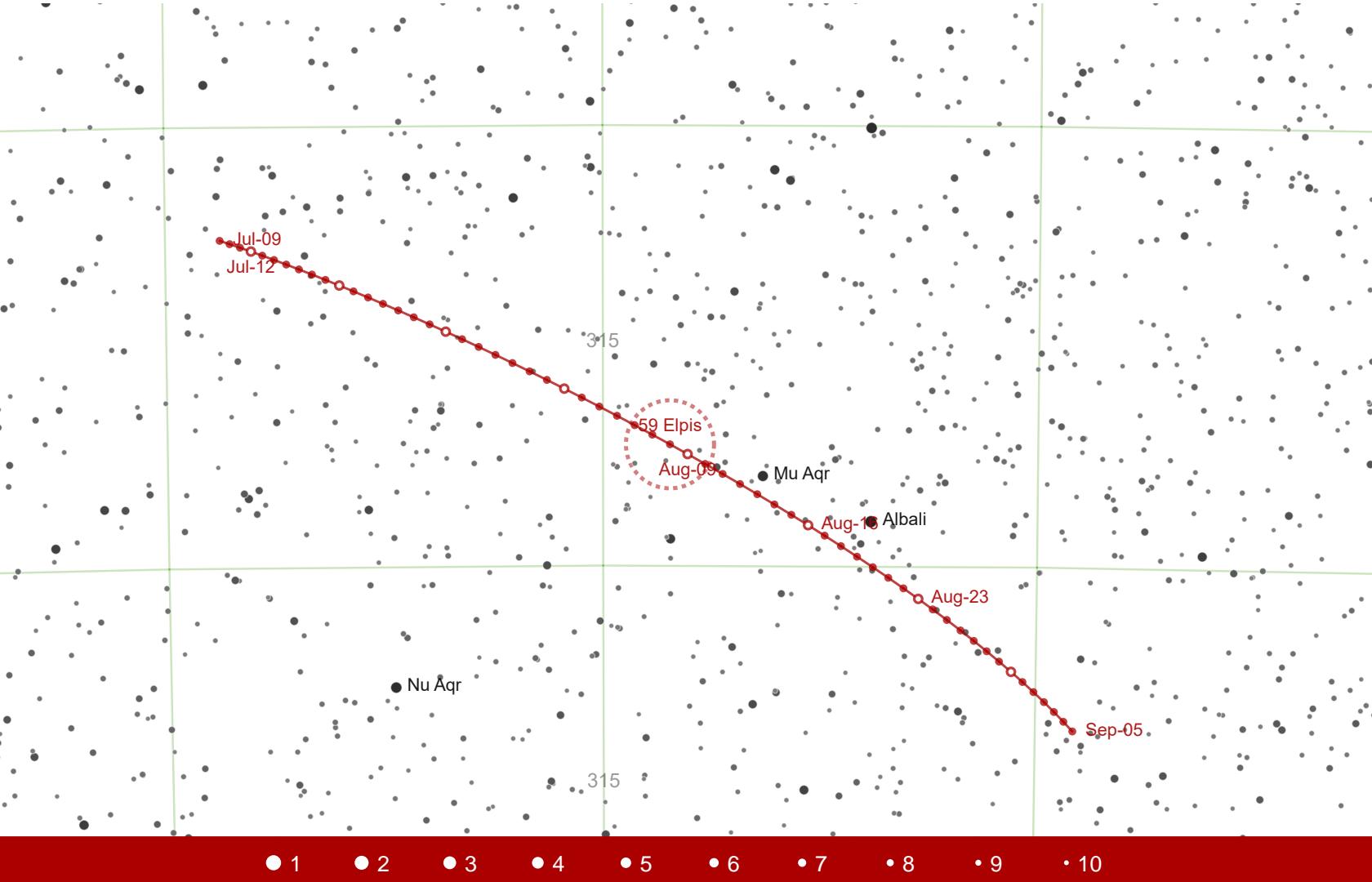
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-20	07 56 23.88	+05 18 46.8	11.221	1.4305
2024-Dec-25	07 53 02.05	+05 17 31.9	11.092	1.3977
2024-Dec-30	07 49 03.86	+05 21 47.6	10.967	1.3705
2025-Jan-04	07 44 36.28	+05 31 42.0	10.85	1.3494
2025-Jan-09	07 39 48.20	+05 47 09.3	10.754	1.3346
2025-Jan-14	07 34 49.50	+06 07 50.1	10.703	1.3264
2025-Jan-19	07 29 50.39	+06 33 15.3	10.714	1.3248
2025-Jan-24	07 25 01.27	+07 02 48.3	10.779	1.3298
2025-Jan-29	07 20 32.47	+07 35 43.8	10.874	1.3413
2025-Feb-03	07 16 33.55	+08 11 10.8	10.983	1.359
2025-Feb-08	07 13 12.45	+08 48 14.9	11.098	1.3825



52 Europa

Rotational Period: 5.6304h
 Mean radius: 151.959km
 Classification: C
 Albedo: 0.057
 BV Color Index: 0.679
 THe sixth-largest asteroid by diameter, Europa was discovered by Hermann Goldschmidt in February 1858. It is the second-largest C-type (carbonaceous) asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-18	03 51 07.31	+09 16 33.8	11.208	2.0389
2025-Oct-23	03 48 36.49	+08 58 44.9	11.104	2.0011
2025-Oct-28	03 45 35.92	+08 40 59.7	11.001	1.9693
2025-Nov-02	03 42 09.99	+08 23 45.8	10.899	1.944
2025-Nov-07	03 38 23.97	+08 07 30.9	10.805	1.9254
2025-Nov-12	03 34 23.67	+07 52 42.5	10.734	1.9137
2025-Nov-17	03 30 15.62	+07 39 49.2	10.718	1.9091
2025-Nov-22	03 26 07.05	+07 29 19.1	10.763	1.9118
2025-Nov-27	03 22 05.38	+07 21 36.2	10.84	1.9215
2025-Dec-02	03 18 17.59	+07 16 58.9	10.928	1.9382
2025-Dec-07	03 14 49.74	+07 15 38.4	11.018	1.9614
2025-Dec-12	03 11 46.86	+07 17 41.3	11.109	1.9907



59 Elpis

Rotational Period: 13.671h

Mean radius: 82.5595km

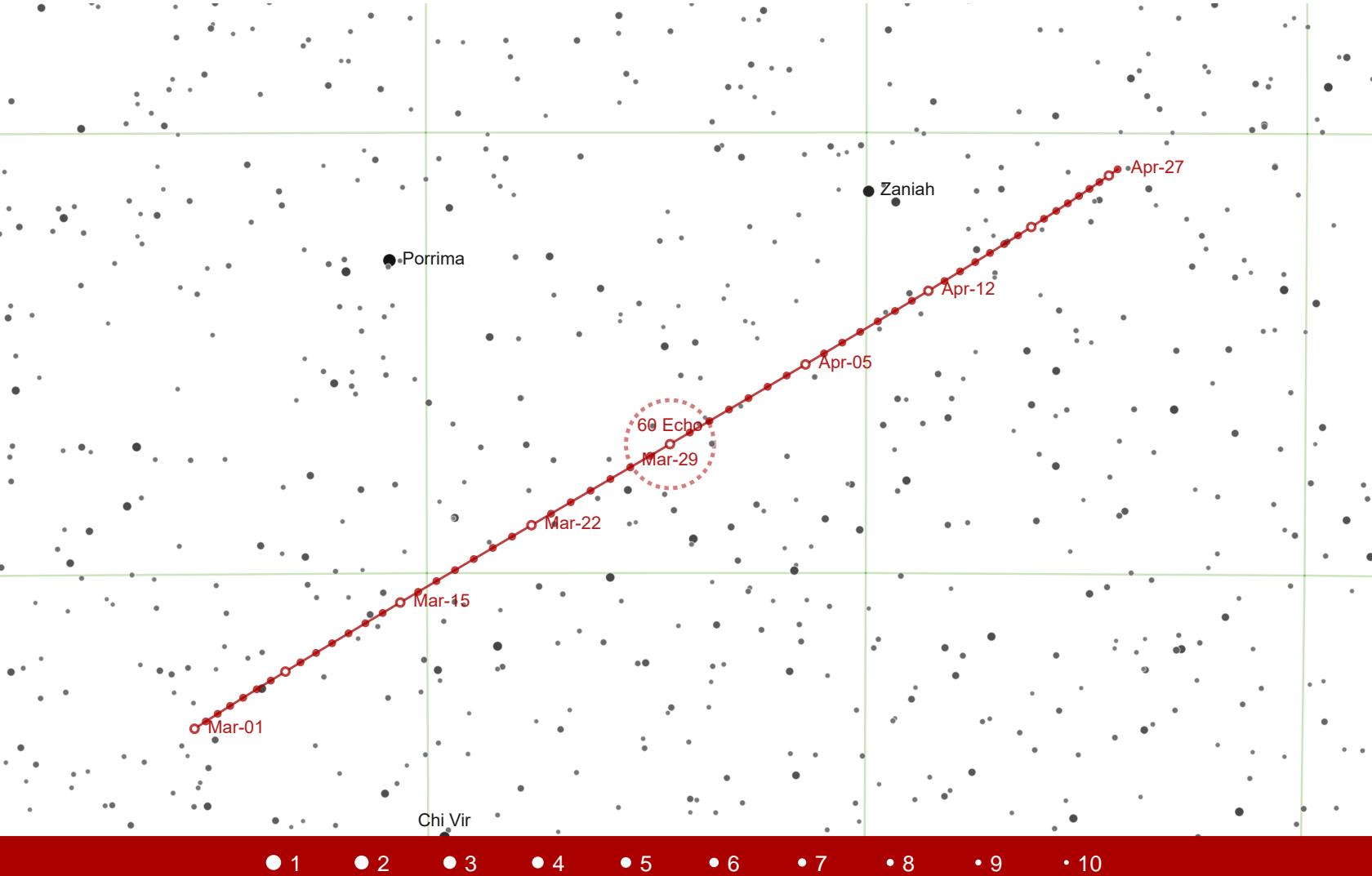
Classification: B

Albedo: 0.044

BV Color Index: 0.662

A large C-type asteroid, Elpis has the typical low albedo of its spectral class. It was discovered in September 1860 by Jean Chacornac, the last of his six discoveries.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-09	21 17 29.45	-06 17 03.0	12.099	1.6887
2025-Jul-14	21 15 00.91	-06 30 27.7	11.979	1.6511
2025-Jul-19	21 12 02.69	-06 48 16.8	11.857	1.6189
2025-Jul-24	21 08 38.86	-07 10 19.9	11.733	1.5925
2025-Jul-29	21 04 55.07	-07 36 15.5	11.612	1.5723
2025-Aug-03	21 00 58.15	-08 05 31.2	11.505	1.5586
2025-Aug-08	20 56 55.46	-08 37 27.9	11.459	1.5513
2025-Aug-13	20 52 54.54	-09 11 22.5	11.507	1.5507
2025-Aug-18	20 49 02.86	-09 46 30.3	11.599	1.5565
2025-Aug-23	20 45 27.97	-10 22 04.7	11.702	1.5688
2025-Aug-28	20 42 17.06	-10 57 18.3	11.806	1.5873
2025-Sep-02	20 39 36.21	-11 31 27.4	11.91	1.6116



60 Echo

Rotational Period: 25.208h

Mean radius: 21.609km

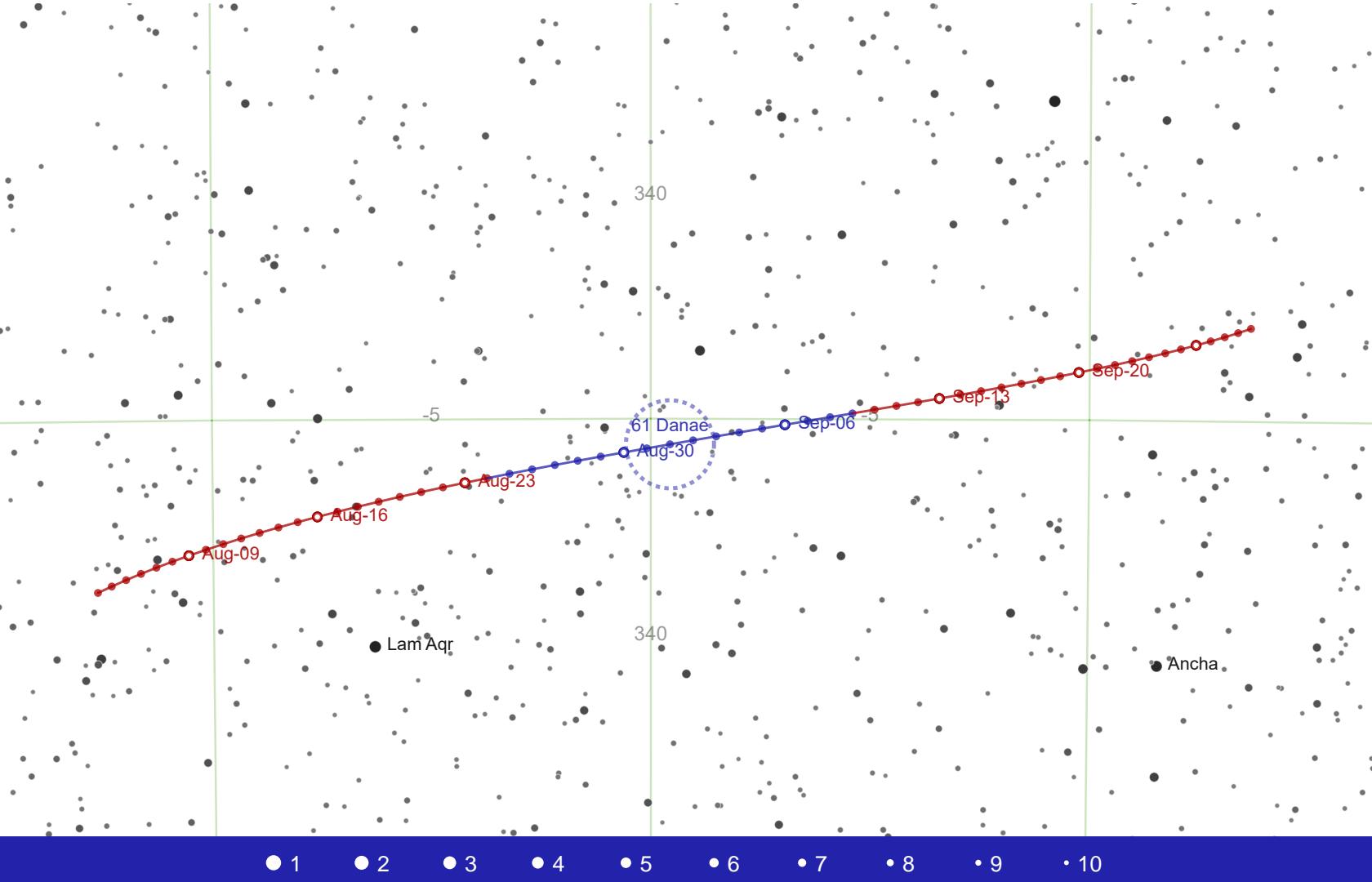
Classification: S

Albedo: 0.373

BV Color Index: 0.854

Named after a sea-nymph, Echo is the third asteroid discovered by James Ferguson of the US Naval Observatory. It is an S-type (stony, silicate) asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Mar-01	12 50 38.91	-06 45 04.7	11.698	1.3304
2025-Mar-06	12 47 47.60	-06 18 30.7	11.599	1.308
2025-Mar-11	12 44 20.28	-05 47 28.4	11.497	1.2911
2025-Mar-16	12 40 24.00	-05 12 44.8	11.393	1.2801
2025-Mar-21	12 36 06.87	-04 35 16.4	11.28	1.2754
2025-Mar-26	12 31 38.09	-03 56 09.4	11.141	1.2772
2025-Mar-31	12 27 07.64	-03 16 38.3	11.134	1.2857
2025-Apr-05	12 22 45.81	-02 38 01.3	11.329	1.3008
2025-Apr-10	12 18 41.90	-02 01 30.1	11.489	1.3225
2025-Apr-15	12 15 03.49	-01 28 03.3	11.638	1.3503
2025-Apr-20	12 11 56.57	-00 58 27.6	11.78	1.3841
2025-Apr-25	12 09 25.71	-00 33 18.2	11.919	1.4233



61 Danae

Rotational Period: 11.45h

Mean radius: 42.9685km

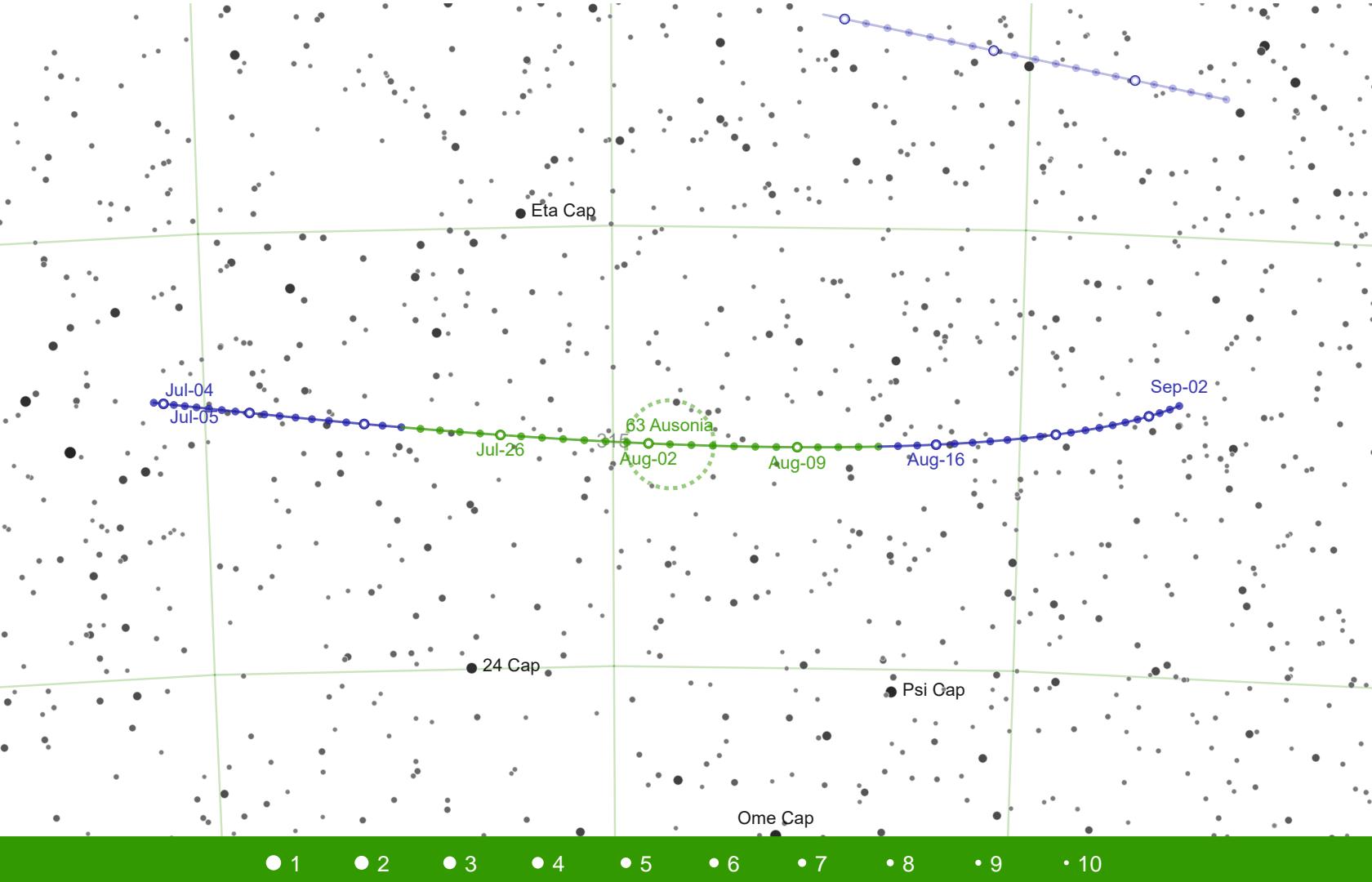
Classification: S

Albedo: 0.203

BV Color Index: 0.852

61 Danaë is the first asteroid to have a diacritical character in its name. Although discovered by Hermann Goldschmidt in September 1860, he asked fellow asteroid hunter Robert Luther to name it. Danaë was the mother of Perseus.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-03	23 05 16.92	-06 56 29.2	11.558	1.6026
2025-Aug-08	23 01 51.77	-06 35 45.4	11.437	1.5687
2025-Aug-13	22 57 51.96	-06 16 45.3	11.313	1.5404
2025-Aug-18	22 53 22.20	-05 59 22.0	11.184	1.518
2025-Aug-23	22 48 28.81	-05 43 25.3	11.048	1.5021
2025-Aug-28	22 43 19.76	-05 28 39.5	10.901	1.4928
2025-Sep-02	22 38 04.05	-05 14 46.2	10.804	1.4904
2025-Sep-07	22 32 50.87	-05 01 27.6	10.934	1.4948
2025-Sep-12	22 27 49.04	-04 48 27.3	11.078	1.506
2025-Sep-17	22 23 06.76	-04 35 30.0	11.21	1.5238
2025-Sep-22	22 18 51.65	-04 22 18.1	11.337	1.5479
2025-Sep-27	22 15 10.25	-04 08 33.0	11.459	1.5781



63 Ausonia

Rotational Period: 9.298h

Mean radius: 58.022km

Classification: Sa

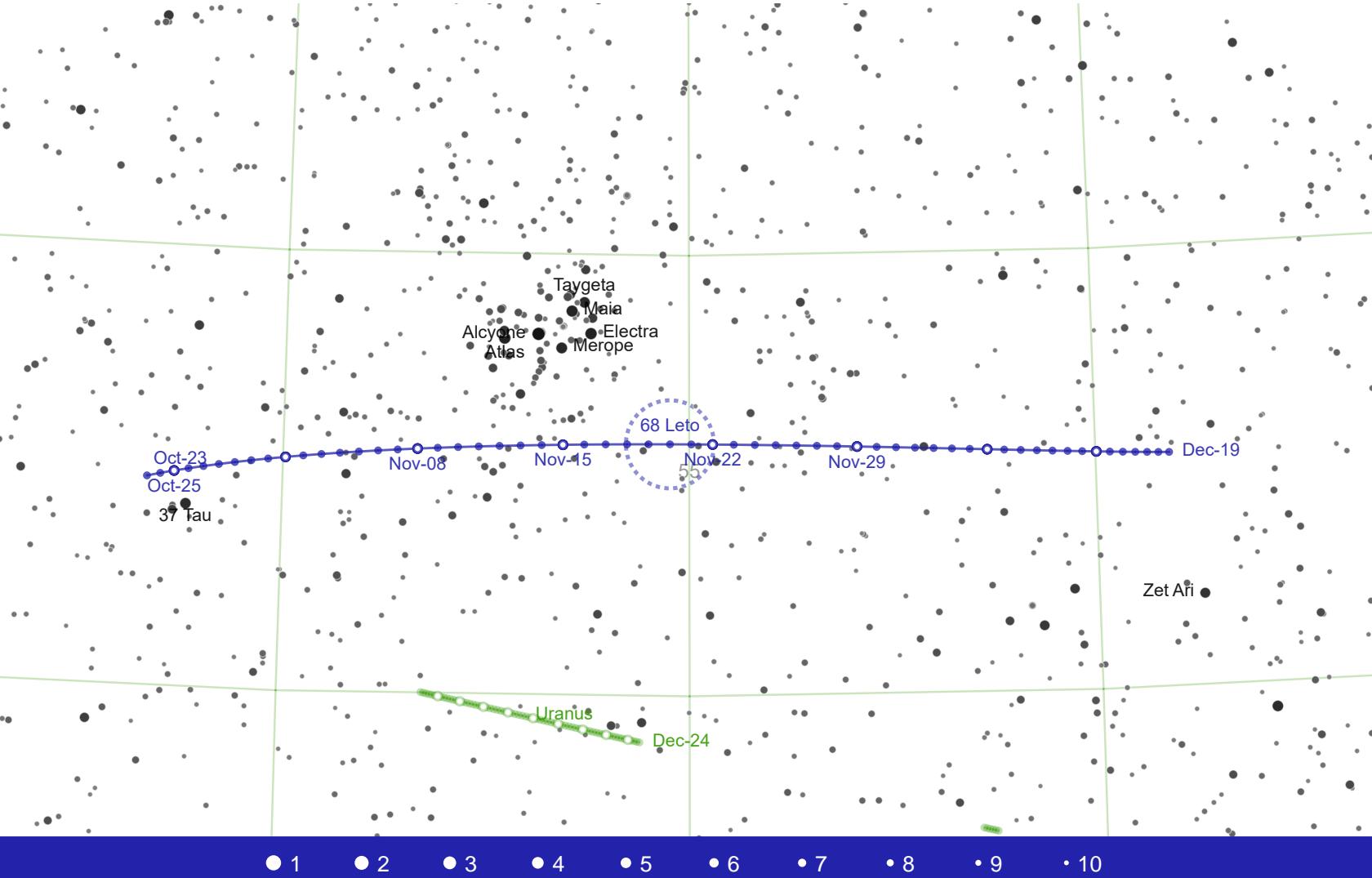
Albedo: 0.125

BV Color Index: 0.916

Ausonia is a stony member of the Vesta family, and was discovered by Annibale de Gasparis in February 1861.

Ausonia is an ancient term for the Italian peninsula. Ausonia is thought to have been ejected from Vesta in the impact that created the Rheasilvia crater on Vesta.

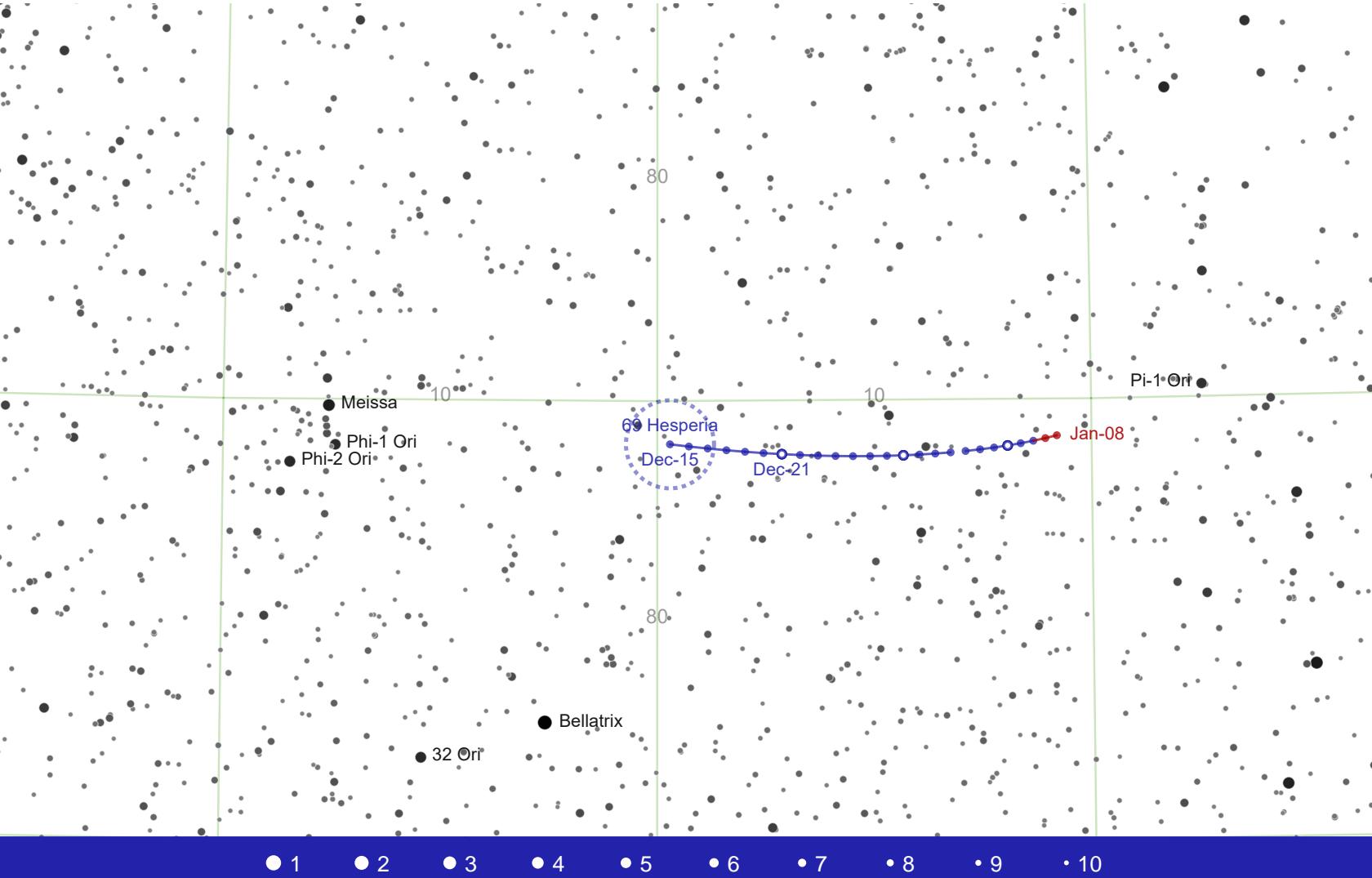
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-04	21 22 27.70	-21 53 23.3	9.905	1.1974
2025-Jul-09	21 19 46.86	-21 58 55.1	9.792	1.172
2025-Jul-14	21 16 19.70	-22 05 32.8	9.679	1.1515
2025-Jul-19	21 12 11.75	-22 12 37.2	9.564	1.1361
2025-Jul-24	21 07 30.71	-22 19 24.3	9.447	1.1262
2025-Jul-29	21 02 26.79	-22 25 06.9	9.332	1.1221
2025-Aug-03	20 57 11.87	-22 29 01.4	9.266	1.1241
2025-Aug-08	20 51 58.15	-22 30 34.2	9.357	1.1321
2025-Aug-13	20 46 57.25	-22 29 23.8	9.498	1.146
2025-Aug-18	20 42 19.78	-22 25 19.9	9.639	1.1658
2025-Aug-23	20 38 15.38	-22 18 19.2	9.777	1.1913
2025-Aug-28	20 34 52.14	-22 08 24.7	9.914	1.2221



68 Leto

Rotational Period: 14.848h
 Mean radius: 61.2545km
 Classification: S
 Albedo: 0.228
 BV Color Index: 0.845
 This S-type (silicate) asteroid was discovered by Robert Luther in April 1861.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-23	04 06 38.27	+22 22 44.9	10.743	1.5884
2025-Oct-28	04 03 07.68	+22 32 28.4	10.63	1.5646
2025-Nov-02	03 58 59.70	+22 40 15.7	10.511	1.5466
2025-Nov-07	03 54 21.34	+22 46 01.1	10.387	1.5348
2025-Nov-12	03 49 20.67	+22 49 42.7	10.252	1.5295
2025-Nov-17	03 44 07.01	+22 51 25.6	10.106	1.5312
2025-Nov-22	03 38 50.80	+22 51 23.7	10.069	1.5399
2025-Nov-27	03 33 42.73	+22 49 58.8	10.252	1.5557
2025-Dec-02	03 28 52.79	+22 47 38.3	10.43	1.5785
2025-Dec-07	03 24 29.42	+22 44 51.7	10.595	1.6081
2025-Dec-12	03 20 39.32	+22 42 08.8	10.75	1.644
2025-Dec-17	03 17 27.89	+22 39 59.3	10.899	1.6861



69 Hesperia

Rotational Period: 5.655h

Mean radius: 69.065km

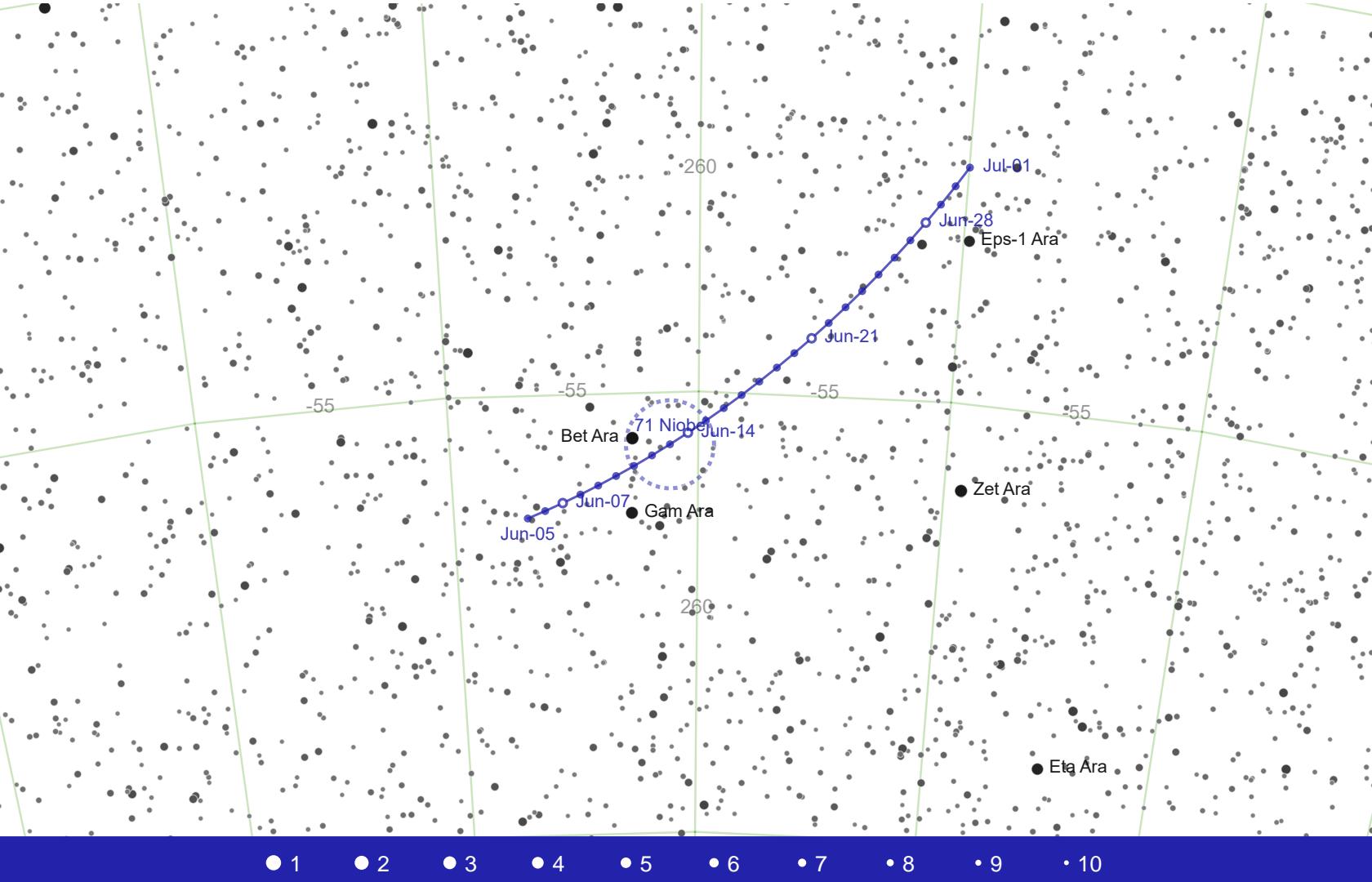
Classification: X

Albedo: 0.1402

BV Color Index: 0.674

Discovered in April 1861 by Giovanni Schiaparelli (more famous for his observations of Mars), this M-type (metallic) asteroid is named after a Greek term for the Italian peninsula.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	05 19 24.95	+09 30 36.2	10.644	1.5632
2024-Dec-17	05 17 40.78	+09 27 45.0	10.658	1.5637
2024-Dec-19	05 15 57.62	+09 25 28.2	10.679	1.5653
2024-Dec-21	05 14 16.02	+09 23 46.6	10.705	1.568
2024-Dec-23	05 12 36.52	+09 22 40.5	10.735	1.5717
2024-Dec-25	05 10 59.66	+09 22 10.2	10.767	1.5765
2024-Dec-27	05 09 25.94	+09 22 15.9	10.802	1.5823
2024-Dec-29	05 07 55.89	+09 22 57.3	10.838	1.5892
2024-Dec-31	05 06 29.97	+09 24 14.4	10.875	1.597
2025-Jan-02	05 05 08.64	+09 26 06.6	10.913	1.6058
2025-Jan-04	05 03 52.30	+09 28 33.2	10.951	1.6156
2025-Jan-06	05 02 41.34	+09 31 33.4	10.99	1.6263



71 Niobe

Rotational Period: 35.864h

Mean radius: 41.71km

Classification: Xe

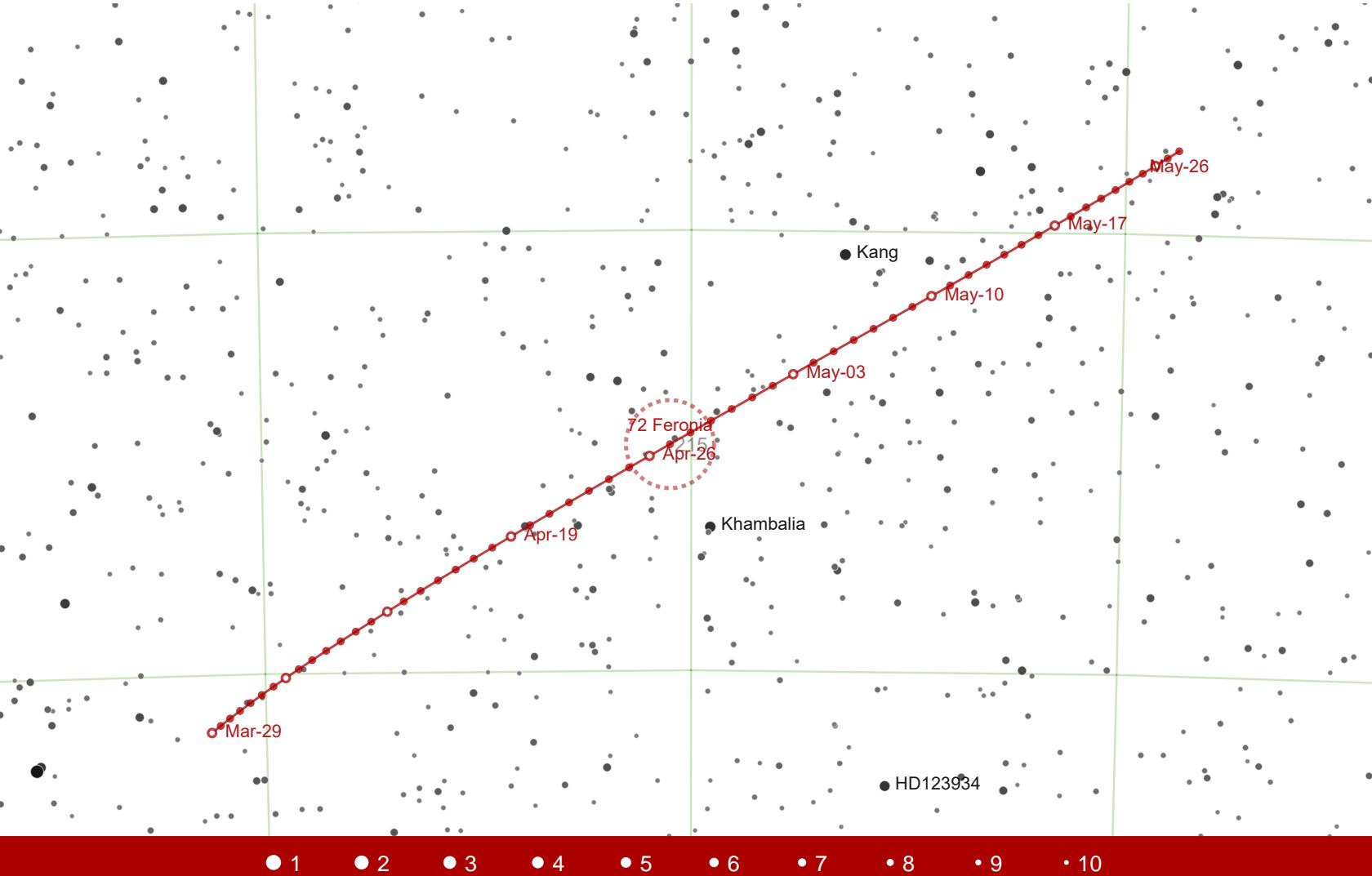
Albedo: 0.3052

BV Color Index: 0.803

This S-type (silicate) asteroid was discovered by Robert Luther in August 1861.

According to myth, Niobe was boastful of her many children and Leto (of 68 Leto fame) had all of them slain.

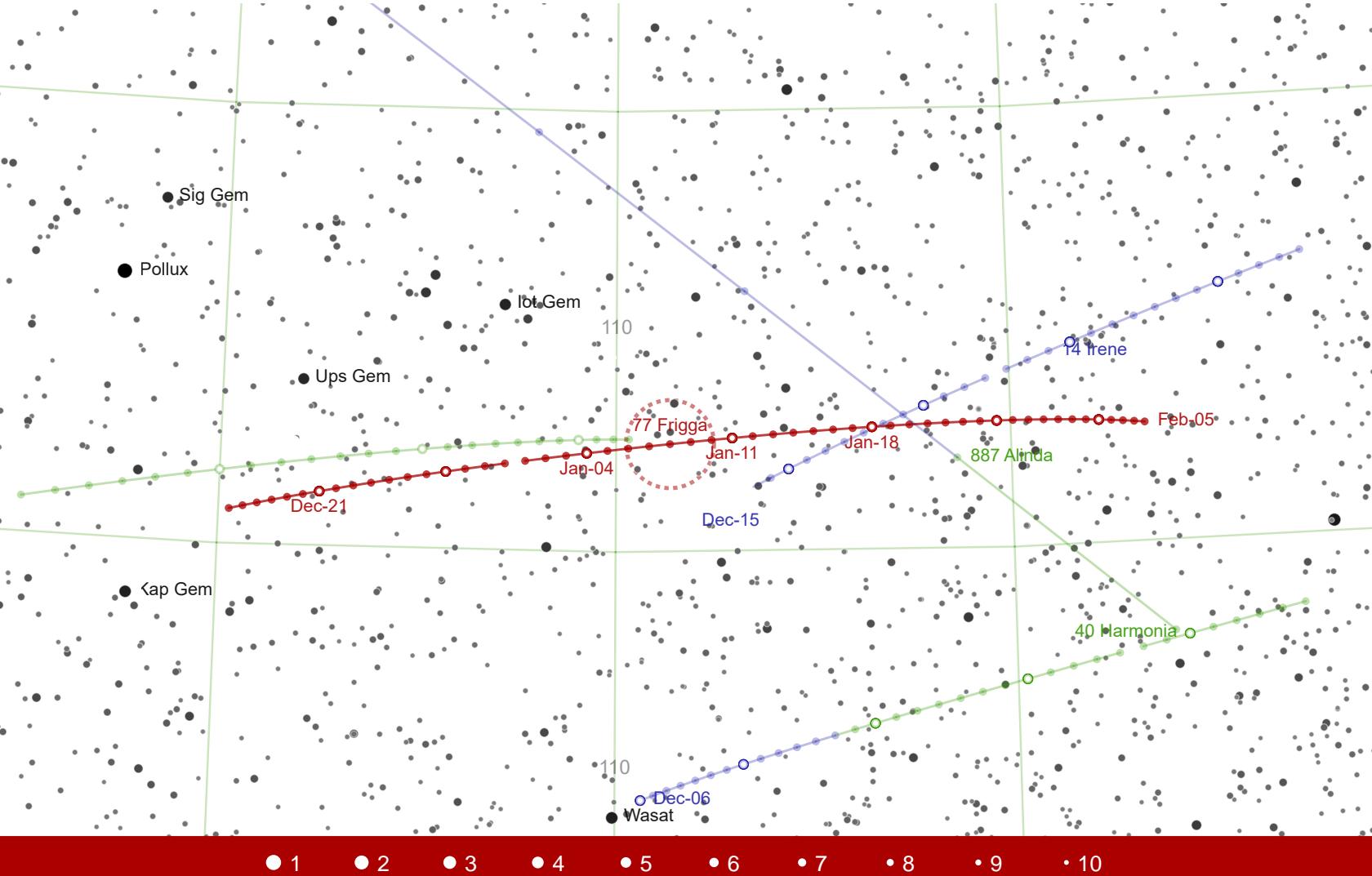
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-05	17 33 56.97	-56 24 36.7	10.435	1.4253
2025-Jun-08	17 29 34.65	-56 09 33.3	10.421	1.4213
2025-Jun-11	17 25 11.00	-55 50 43.8	10.412	1.4192
2025-Jun-14	17 20 50.16	-55 28 12.0	10.409	1.4191
2025-Jun-17	17 16 36.08	-55 02 05.3	10.412	1.4208
2025-Jun-20	17 12 32.43	-54 32 34.4	10.421	1.4245
2025-Jun-23	17 08 42.60	-53 59 53.2	10.436	1.4302
2025-Jun-26	17 05 09.62	-53 24 19.0	10.457	1.4379
2025-Jun-29	17 01 56.07	-52 46 11.8	10.484	1.4476



72 Feronia

Rotational Period: 8.097h
 Mean radius: 37.483km
 Classification: TDG
 Albedo: 0.083
 BV Color Index: 0.785
 Discovered by C H F Peters in May 1861, the dark asteroid has the unusual spectral type TDG, meaning it is very dark carbonaceous asteroid with a reddish hue.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Mar-29	14 42 34.43	-15 39 20.5	12.433	1.3993
2025-Apr-03	14 40 11.74	-15 14 09.9	12.287	1.3587
2025-Apr-08	14 37 07.72	-14 44 54.6	12.136	1.3234
2025-Apr-13	14 33 27.53	-14 11 59.6	11.978	1.2939
2025-Apr-18	14 29 17.66	-13 35 59.3	11.809	1.2705
2025-Apr-23	14 24 46.09	-12 57 39.5	11.618	1.2534
2025-Apr-28	14 20 02.24	-12 17 58.3	11.455	1.2427
2025-May-03	14 15 16.77	-11 38 04.6	11.628	1.2386
2025-May-08	14 10 40.39	-10 59 09.8	11.773	1.2409
2025-May-13	14 06 22.67	-10 22 20.2	11.902	1.2494
2025-May-18	14 02 31.87	-09 48 34.7	12.024	1.2637
2025-May-23	13 59 14.86	-09 18 43.7	12.141	1.2835



77 Frigga

Rotational Period: 9.0032h

Mean radius: 30.695km

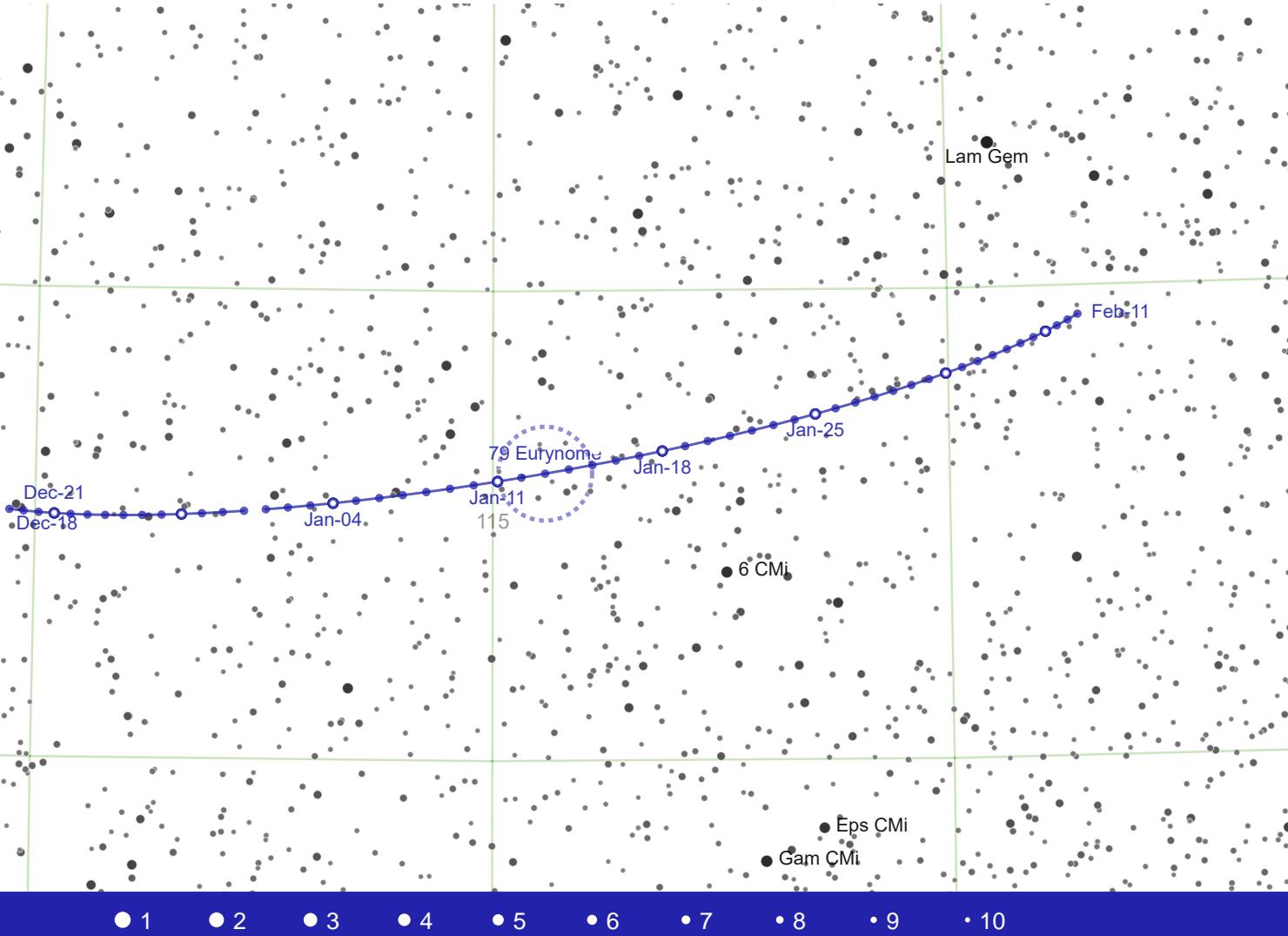
Classification: Xe

Albedo: 0.177

BV Color Index: 0.746

This metallic asteroid may contain hydrated minerals on its surface. It was discovered by C H F Peters and named of the Norse goddess Frigg, the wife of Odin. "Friday" (Frigg's Day) honors her.

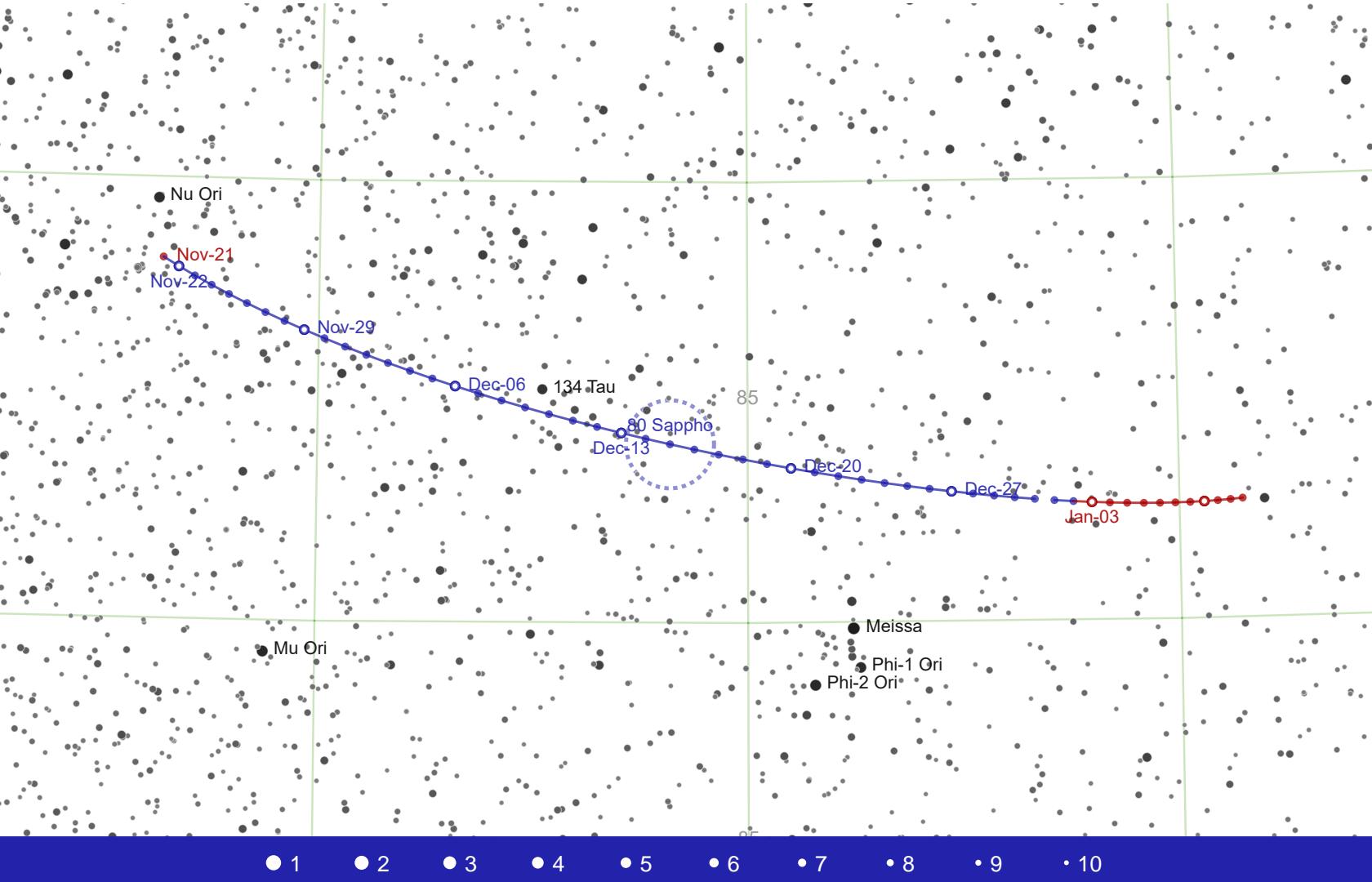
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	07 39 27.51	+25 23 47.8	12.062	1.465
2024-Dec-20	07 35 45.67	+25 35 17.9	11.945	1.442
2024-Dec-25	07 31 26.22	+25 46 44.9	11.823	1.425
2024-Dec-30	07 26 37.30	+25 57 33.6	11.695	1.4144
2025-Jan-04	07 21 29.13	+26 07 10.1	11.562	1.4107
2025-Jan-09	07 16 13.32	+26 15 05.2	11.514	1.4139
2025-Jan-14	07 11 01.57	+26 20 59.0	11.655	1.424
2025-Jan-19	07 06 04.80	+26 24 41.5	11.809	1.4409
2025-Jan-24	07 01 33.06	+26 26 12.0	11.954	1.4643
2025-Jan-29	06 57 35.26	+26 25 36.7	12.093	1.4942
2025-Feb-03	06 54 18.66	+26 23 06.6	12.228	1.5299



79 Eurynome

Rotational Period: 5.978h
 Mean radius: 31.7395km
 Classification: S
 Albedo: 0.287
 BV Color Index: 0.874
 This stony asteroid was discovered by J C Watson in September 1863. Its rotational period is quite fast at just under six hours. There are several mythological Eurynomes, the most well known possibly being the mother of the Grecian Graces (all honored with their own asteroids).

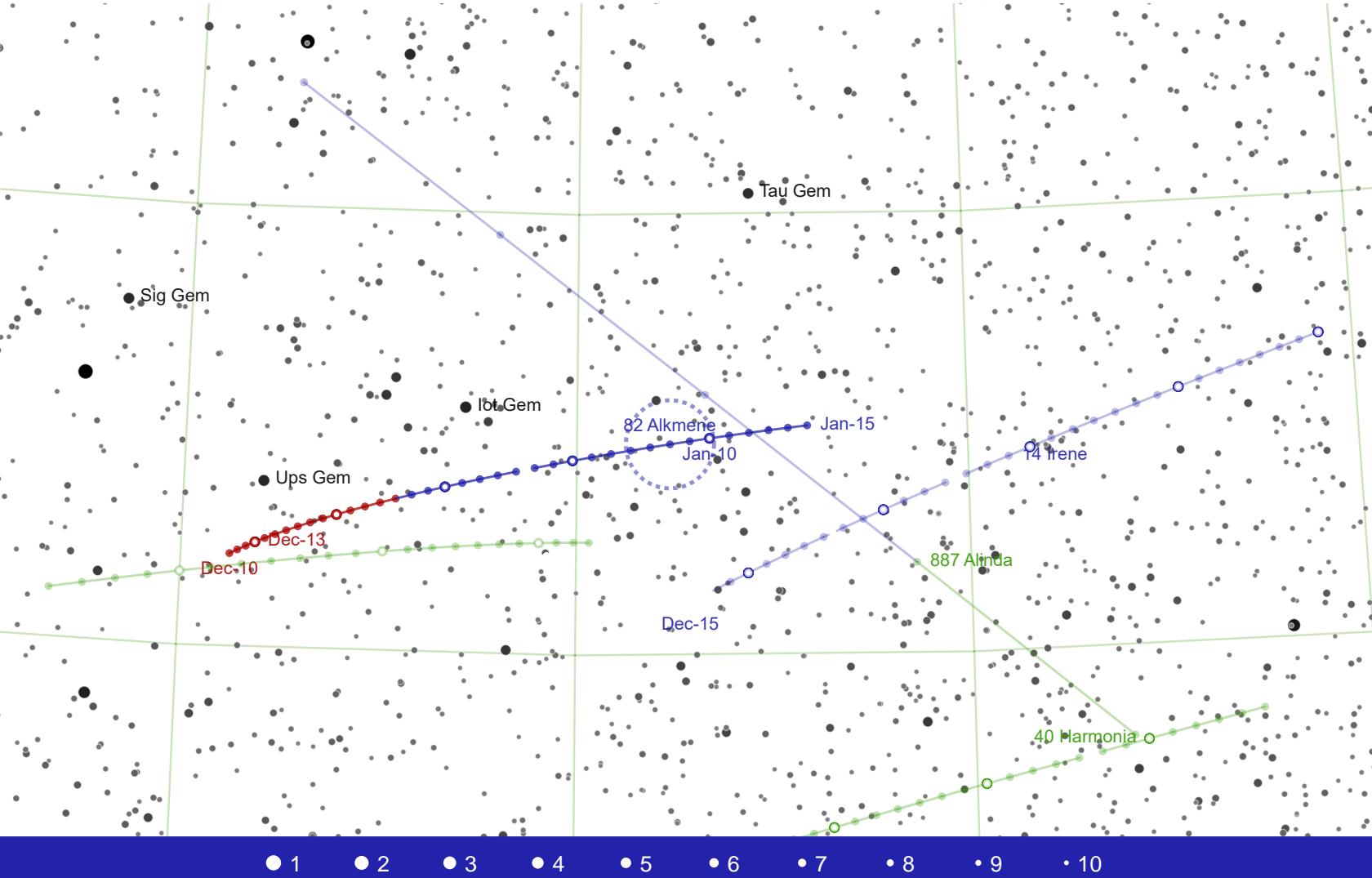
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-18	08 01 06.57	+12 37 19.6	10.639	1.2473
2024-Dec-23	07 57 41.55	+12 34 47.3	10.538	1.2268
2024-Dec-28	07 53 35.57	+12 36 07.8	10.438	1.2116
2025-Jan-02	07 48 56.95	+12 41 11.9	10.34	1.2024
2025-Jan-07	07 43 56.26	+12 49 40.4	10.25	1.1994
2025-Jan-12	07 38 45.29	+13 01 05.6	10.192	1.203
2025-Jan-17	07 33 35.83	+13 14 56.4	10.227	1.2131
2025-Jan-22	07 28 39.25	+13 30 40.9	10.345	1.2297
2025-Jan-27	07 24 06.36	+13 47 46.5	10.485	1.2528
2025-Feb-01	07 20 06.78	+14 05 40.6	10.629	1.2822
2025-Feb-06	07 16 48.30	+14 23 51.3	10.772	1.3174
2025-Feb-11	07 14 16.06	+14 41 50.4	10.913	1.358



80 Sappho

Rotational Period: 14.03h
 Mean radius: 34.2815km
 Classification: S
 Albedo: 0.206
 BV Color Index: 0.901
 A large stony asteroid discovered by N R Pogson in May 1864, Sappho bears the name of the ancient Greek poet.

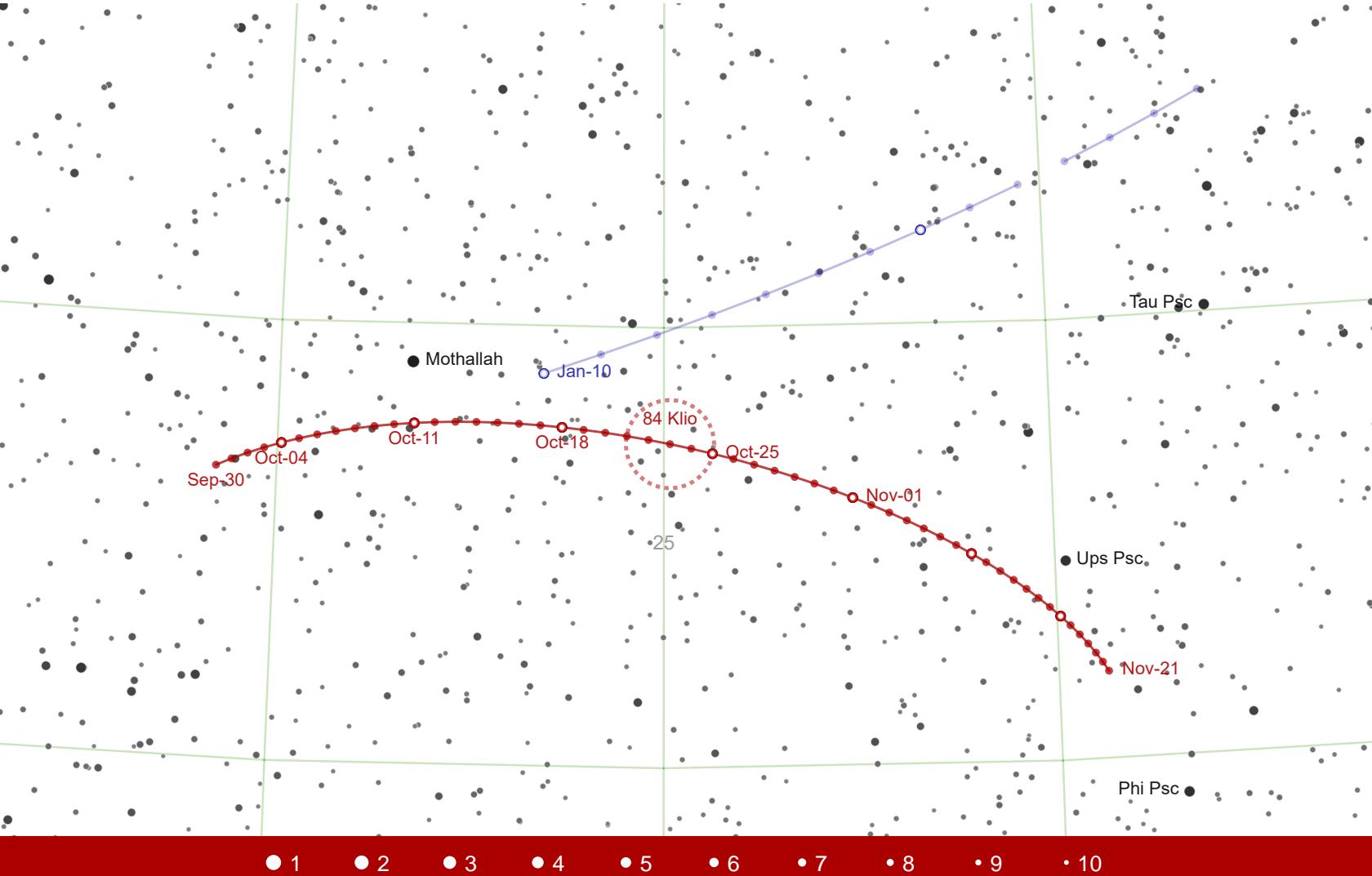
Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-21	06 07 18.43	+14 05 51.5	11.002	1.2334
2025-Nov-26	06 03 22.19	+13 35 19.1	10.9	1.2163
2025-Dec-01	05 58 45.04	+13 06 48.8	10.799	1.2048
2025-Dec-06	05 53 36.50	+12 40 49.5	10.705	1.1993
2025-Dec-11	05 48 07.15	+12 17 48.6	10.629	1.2001
2025-Dec-16	05 42 28.70	+11 58 12.7	10.602	1.2075
2025-Dec-21	05 36 53.74	+11 42 23.6	10.66	1.2215
2025-Dec-26	05 31 34.69	+11 30 35.0	10.782	1.2422
2025-Dec-31	05 26 42.59	+11 22 50.8	10.928	1.2693
2026-Jan-05	05 22 26.14	+11 19 06.0	11.08	1.3026
2026-Jan-10	05 18 51.65	+11 19 10.1	11.233	1.3415



82 Alkmene

Rotational Period: 12.999h
 Mean radius: 28.8105km
 Classification: Sq
 Albedo: 0.167
 BV Color Index: 0.814
 Alkmene potentially has a satellite, based on anomalies in its light curve. This stony body was discovered by Robert Luther in November 1864.

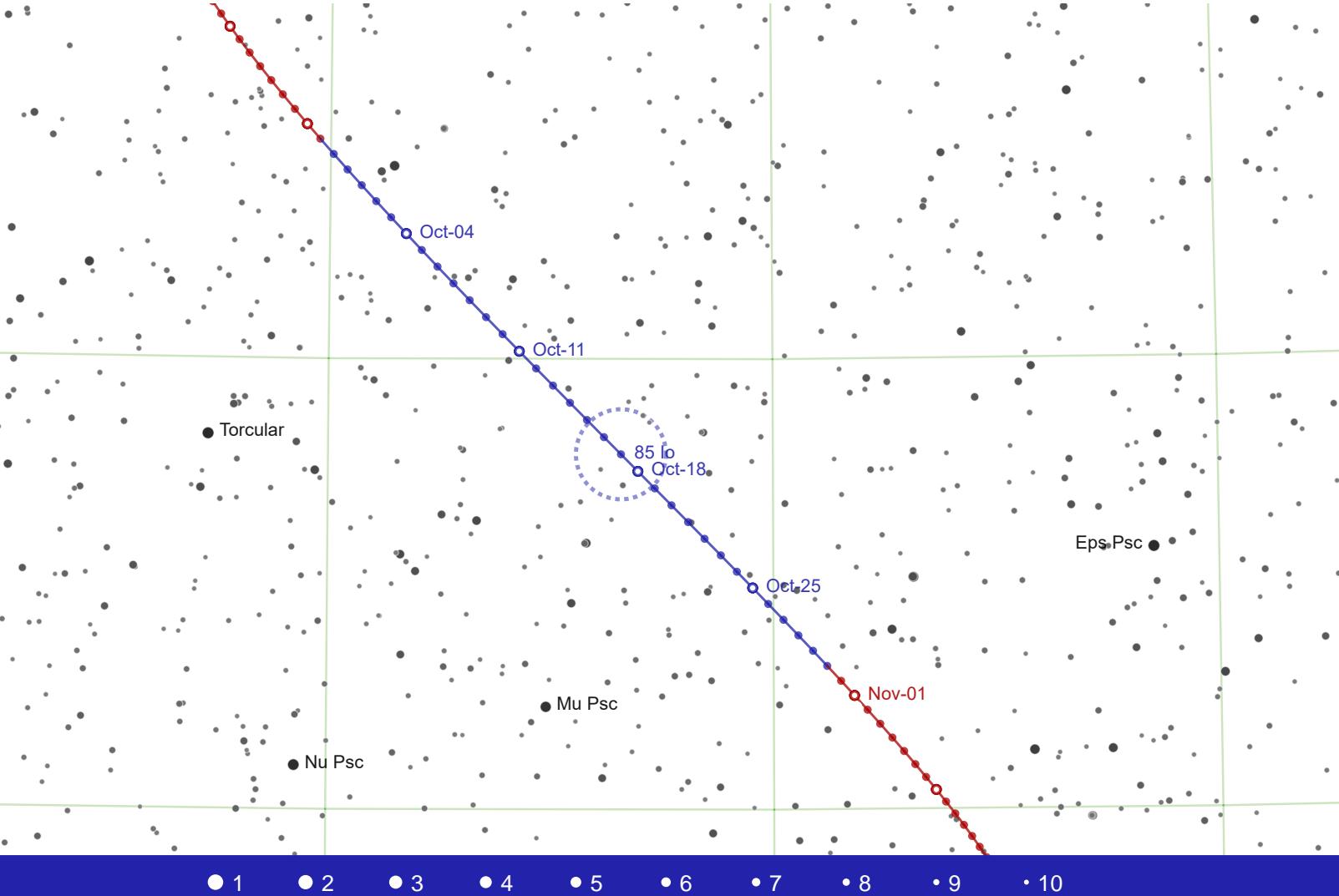
Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-10	07 37 30.92	+26 03 20.2	11.389	1.3576
2025-Dec-13	07 36 15.32	+26 11 44.4	11.309	1.3346
2025-Dec-16	07 34 41.74	+26 20 29.0	11.229	1.3133
2025-Dec-19	07 32 51.01	+26 29 26.9	11.149	1.2941
2025-Dec-22	07 30 44.33	+26 38 29.7	11.067	1.277
2025-Dec-25	07 28 23.24	+26 47 28.3	10.985	1.262
2025-Dec-28	07 25 49.59	+26 56 13.6	10.902	1.2492
2025-Dec-31	07 23 05.51	+27 04 36.1	10.818	1.2387
2026-Jan-03	07 20 13.27	+27 12 27.3	10.737	1.2306
2026-Jan-06	07 17 15.27	+27 19 39.4	10.672	1.2247
2026-Jan-09	07 14 14.05	+27 26 05.6	10.663	1.2212
2026-Jan-12	07 11 12.33	+27 31 40.2	10.71	1.2201



84 Klio

Rotational Period: 23.562h
 Mean radius: 39.58km
 Classification: Ch
 Albedo: 0.0527
 BV Color Index: 0.733
 Named after Clio, the Muse of history, Klio was discovered by Robert Luther in August 1865. "Clio" had previously been proposed as the name for 12 Victoria. Klio is relatively dim for its size as its surface is particularly dark.

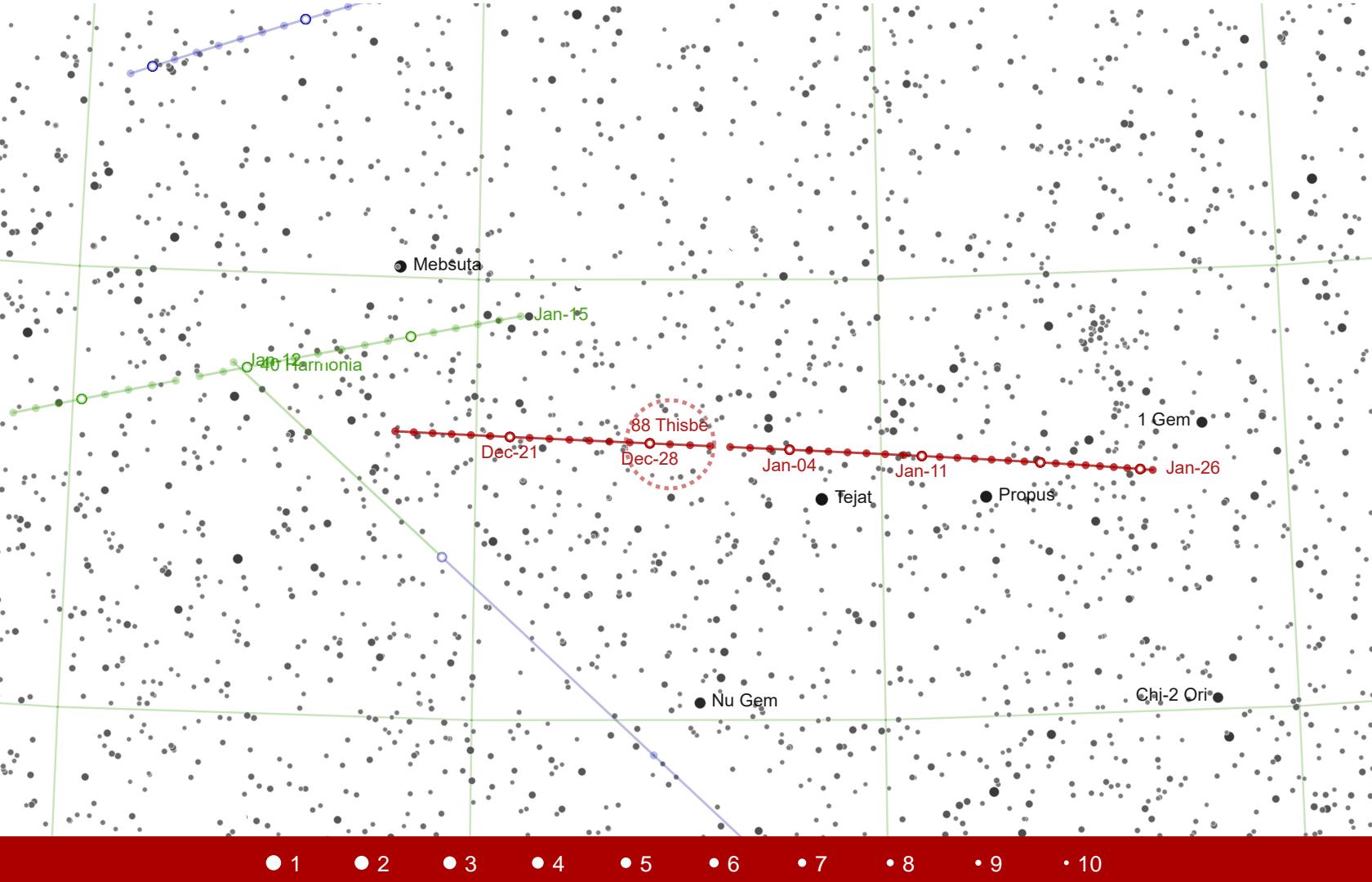
Date	RA	DEC	Magnitude	Distance (AU)
2025-Sep-30	02 03 06.59	+28 19 15.0	11.607	0.9789
2025-Oct-05	01 58 52.85	+28 39 46.2	11.512	0.9662
2025-Oct-10	01 53 59.17	+28 51 34.4	11.425	0.9582
2025-Oct-15	01 48 37.48	+28 54 23.4	11.353	0.9553
2025-Oct-20	01 43 02.15	+28 48 22.5	11.308	0.9577
2025-Oct-25	01 37 29.20	+28 34 14.1	11.306	0.9656
2025-Oct-30	01 32 14.45	+28 13 11.3	11.358	0.9793
2025-Nov-04	01 27 31.72	+27 46 47.8	11.458	0.9985
2025-Nov-09	01 23 31.64	+27 16 45.4	11.587	1.0232
2025-Nov-14	01 20 21.84	+26 44 44.6	11.731	1.0533
2025-Nov-19	01 18 07.64	+26 12 23.7	11.883	1.0883



85 Io

Rotational Period: 6.875h
 Mean radius: 77.395km
 Classification: B
 Albedo: 0.0666
 BV Color Index: 0.668
 A large carbonaceous asteroid, Io was discovered by C H F Peters in September 1865. Io has the shortest designation of any minor planet. A retrograde rotator, Io shares the orbital elements of the Eunomia asteroid family but is not a member.

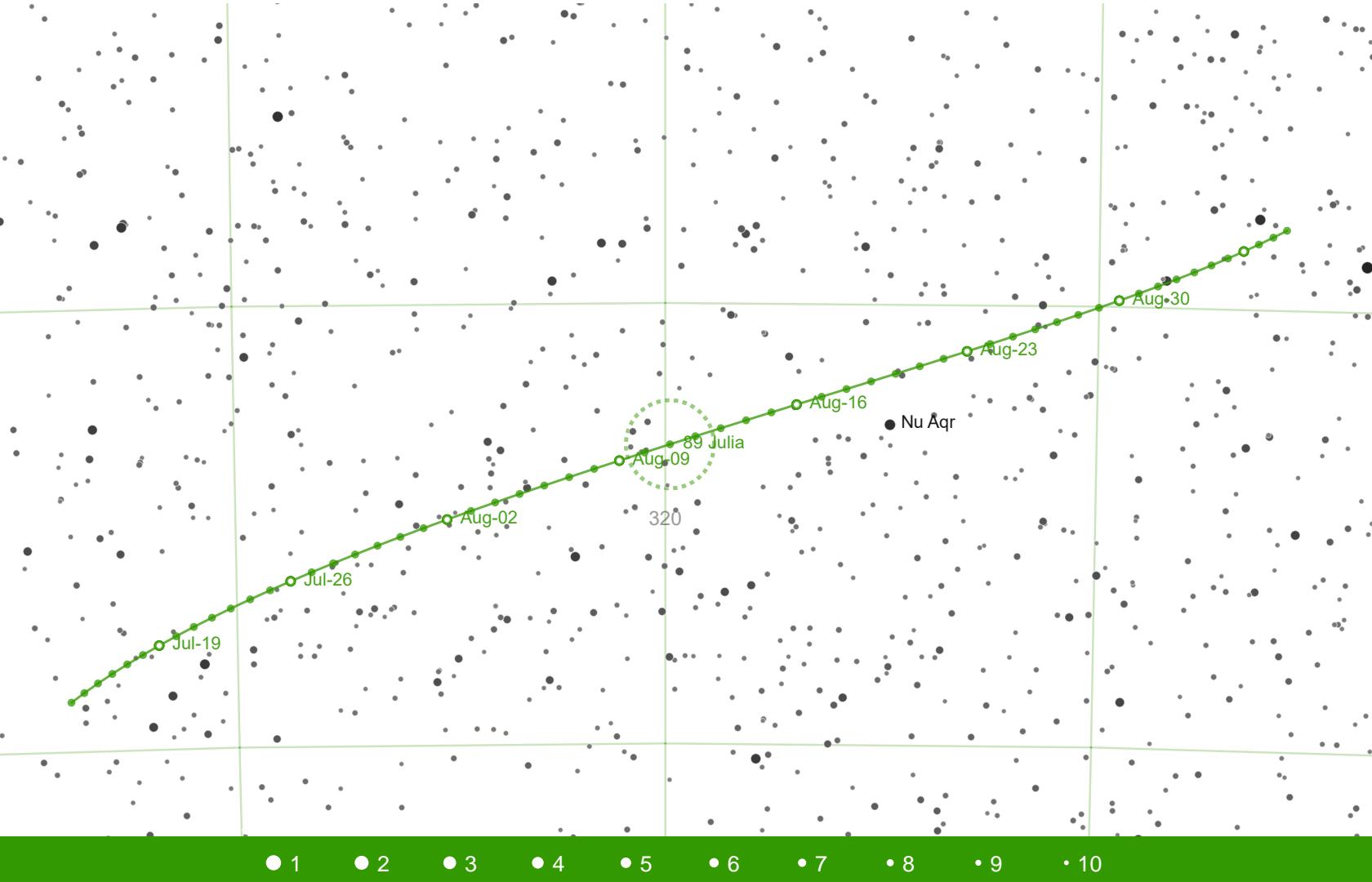
Date	RA	DEC	Magnitude	Distance (AU)
2025-Sep-18	01 45 28.53	+13 56 40.0	11.232	1.3656
2025-Sep-23	01 43 15.95	+13 13 51.5	11.122	1.3431
2025-Sep-28	01 40 28.99	+12 26 04.4	11.008	1.326
2025-Oct-03	01 37 14.30	+11 34 11.0	10.89	1.3148
2025-Oct-08	01 33 39.64	+10 39 16.9	10.761	1.3098
2025-Oct-13	01 29 53.28	+09 42 36.0	10.608	1.3114
2025-Oct-18	01 26 04.03	+08 45 30.7	10.497	1.3197
2025-Oct-23	01 22 21.17	+07 49 29.3	10.739	1.3347
2025-Oct-28	01 18 53.63	+06 55 57.9	10.923	1.3565
2025-Nov-02	01 15 49.17	+06 06 11.9	11.089	1.3848
2025-Nov-07	01 13 13.87	+05 21 10.3	11.245	1.4193
2025-Nov-12	01 11 12.04	+04 41 35.3	11.395	1.4595



88 Thisbe

Rotational Period: 6.042h
 Mean radius: 116.km
 Classification: B
 Albedo: 0.0671
 BV Color Index: 0.681
 One of the largest asteroids, Thisbe is a B-type (blue) asteroid, an uncommon type of carbonaceous asteroid. It is named after the doomed lover of Pyramus from Ovid's Metamorphoses. Discovered by Christian Peters in June 1866.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	06 43 59.92	+23 15 39.2	11.843	2.1373
2024-Dec-19	06 40 15.44	+23 14 05.8	11.752	2.1273
2024-Dec-23	06 36 22.41	+23 12 16.7	11.649	2.1221
2024-Dec-27	06 32 24.62	+23 10 08.7	11.514	2.1217
2024-Dec-31	06 28 26.11	+23 07 40.3	11.549	2.1263
2025-Jan-04	06 24 31.04	+23 04 51.1	11.689	2.1358
2025-Jan-08	06 20 43.43	+23 01 42.1	11.803	2.1503
2025-Jan-12	06 17 06.95	+22 58 15.4	11.905	2.1695
2025-Jan-16	06 13 44.75	+22 54 34.5	12.002	2.1932
2025-Jan-20	06 10 39.56	+22 50 43.6	12.094	2.2214
2025-Jan-24	06 07 53.77	+22 46 47.3	12.183	2.2537



89 Julia

Rotational Period: 11.387h

Mean radius: 72.7415km

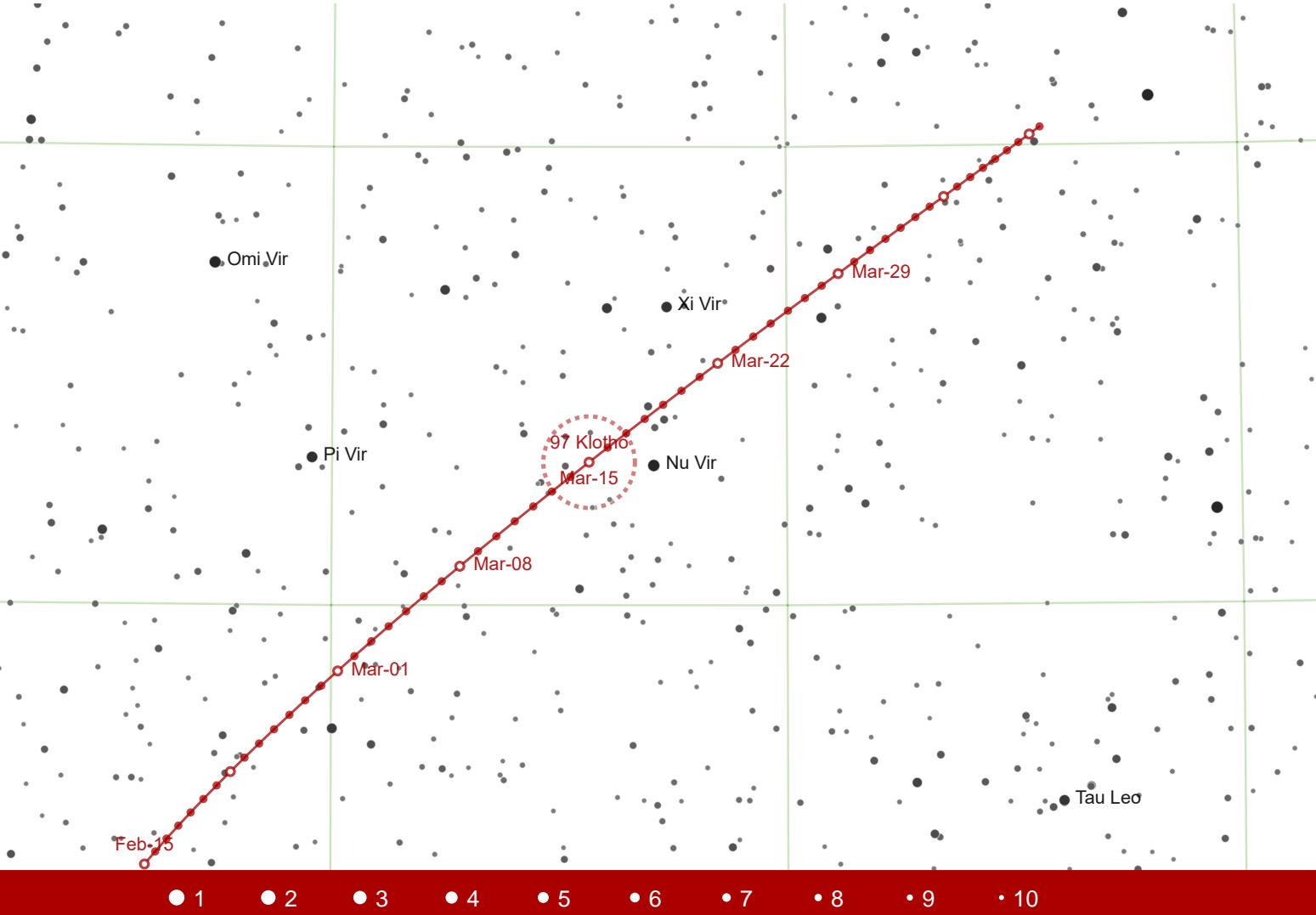
Classification: K

Albedo: 0.189

BV Color Index: 0.859

Discovered by E Stephan in August 1866. It is a stony (S-type) asteroids and is the parent body of the Julia asteroid family. Julia is named after the Corsican saint.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-13	21 47 50.28	-14 26 49.3	9.431	1.2733
2025-Jul-18	21 44 26.01	-13 55 37.5	9.283	1.2368
2025-Jul-23	21 40 16.83	-13 25 17.0	9.13	1.2055
2025-Jul-28	21 35 28.36	-12 55 43.4	8.973	1.1799
2025-Aug-02	21 30 08.74	-12 26 49.8	8.807	1.1602
2025-Aug-07	21 24 27.79	-11 58 31.0	8.635	1.1467
2025-Aug-12	21 18 36.43	-11 30 45.5	8.547	1.1395
2025-Aug-17	21 12 46.09	-11 03 35.4	8.67	1.1386
2025-Aug-22	21 07 08.66	-10 37 02.3	8.811	1.144
2025-Aug-27	21 01 55.87	-10 11 05.0	8.945	1.1556
2025-Sep-01	20 57 17.98	-09 45 40.0	9.073	1.173
2025-Sep-06	20 53 22.94	-09 20 44.1	9.199	1.1958



97 Klo tho

Rotational Period: 35.15h

Mean radius: 50.3585km

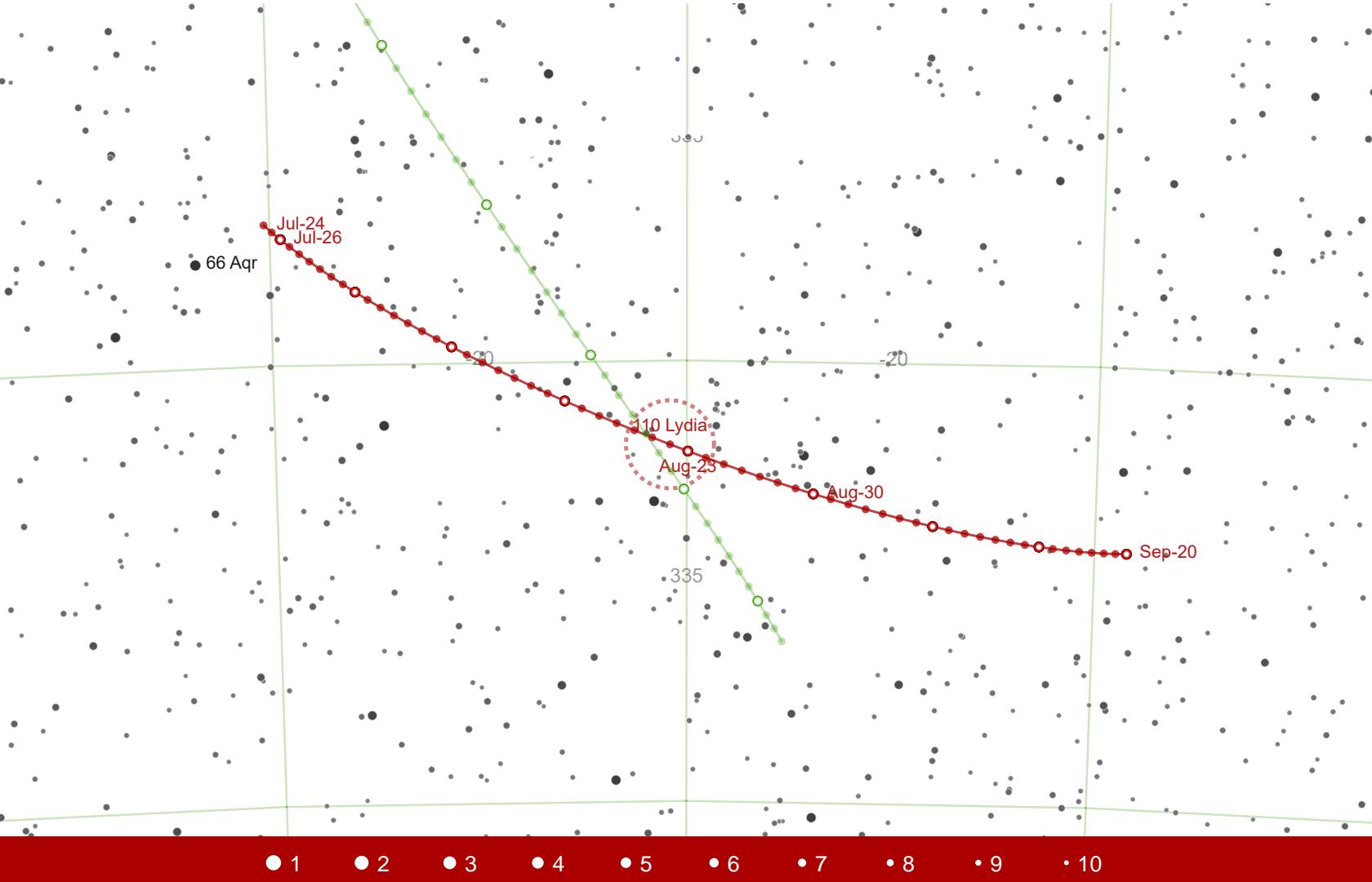
Classification: M

Albedo: 0.128

BV Color Index: 0.716

The last of Ernst Tempel's five asteroid discoveries, Klo tho is named after one of the three Greek Fates. This M-type asteroid was discovered in February 1868. Despite being classified as M-type, the asteroid does not appear to be composed of nickel-iron.

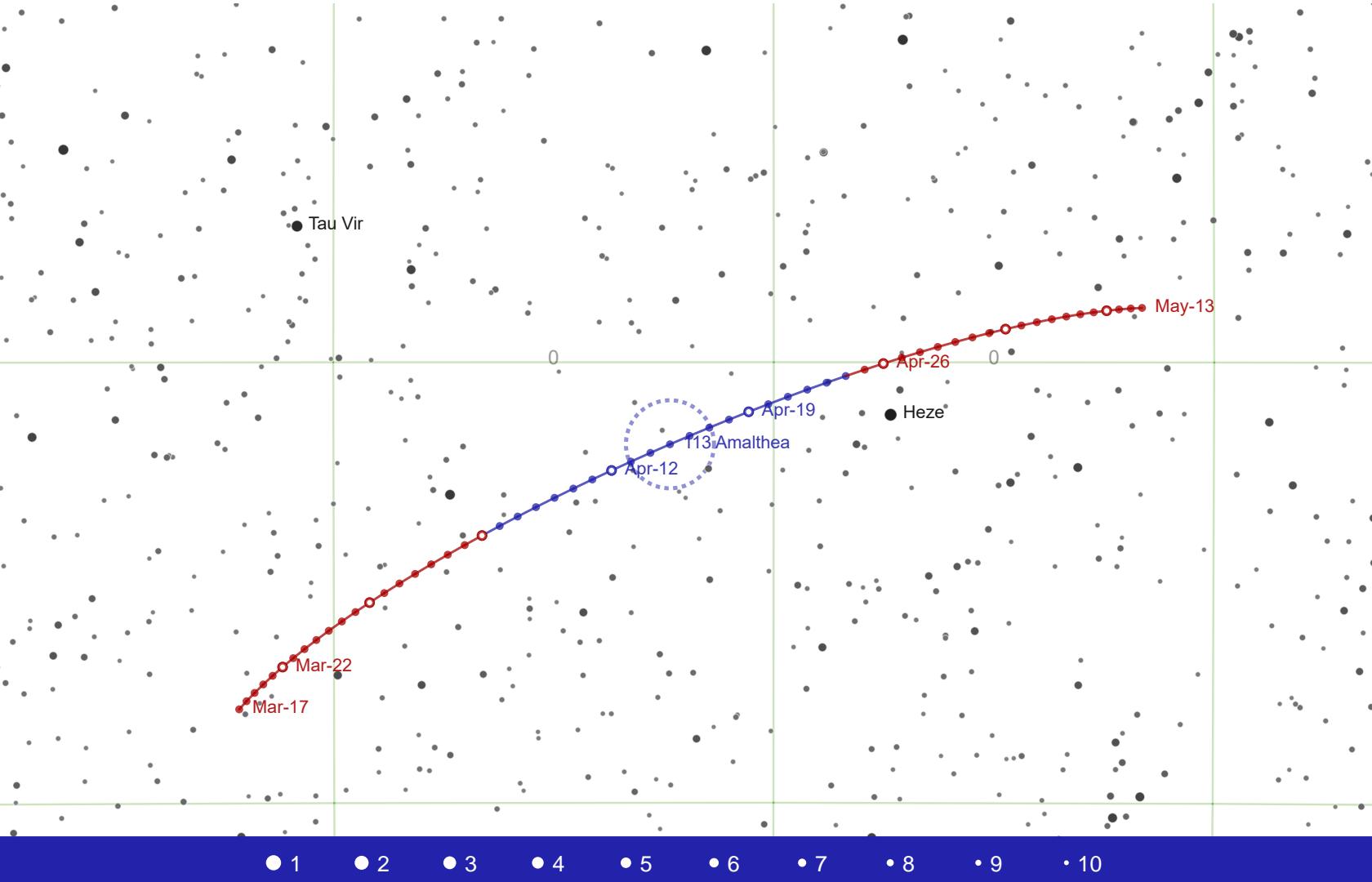
Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-15	12 08 06.24	+02 09 48.2	11.88	1.7445
2025-Feb-20	12 05 32.68	+02 52 35.7	11.787	1.7216
2025-Feb-25	12 02 28.37	+03 38 31.3	11.692	1.7047
2025-Mar-02	11 58 58.47	+04 26 38.8	11.594	1.6944
2025-Mar-07	11 55 09.56	+05 15 51.5	11.491	1.6911
2025-Mar-12	11 51 08.96	+06 04 59.1	11.392	1.6949
2025-Mar-17	11 47 04.09	+06 52 54.3	11.392	1.706
2025-Mar-22	11 43 02.32	+07 38 34.2	11.53	1.7243
2025-Mar-27	11 39 10.82	+08 21 01.9	11.681	1.7497
2025-Apr-01	11 35 36.40	+08 59 28.3	11.825	1.7821
2025-Apr-06	11 32 25.05	+09 33 15.7	11.964	1.821
2025-Apr-11	11 29 41.29	+10 02 01.5	12.097	1.8659



110 Lydia

Rotational Period: 10.927h
 Mean radius: 43.045km
 Classification: X
 Albedo: 0.1808
 BV Color Index: 0.705
 Possibly an M-type nickel-iron asteroid, Lydia was discovered in April 1870 by Alphonse Borrelly.

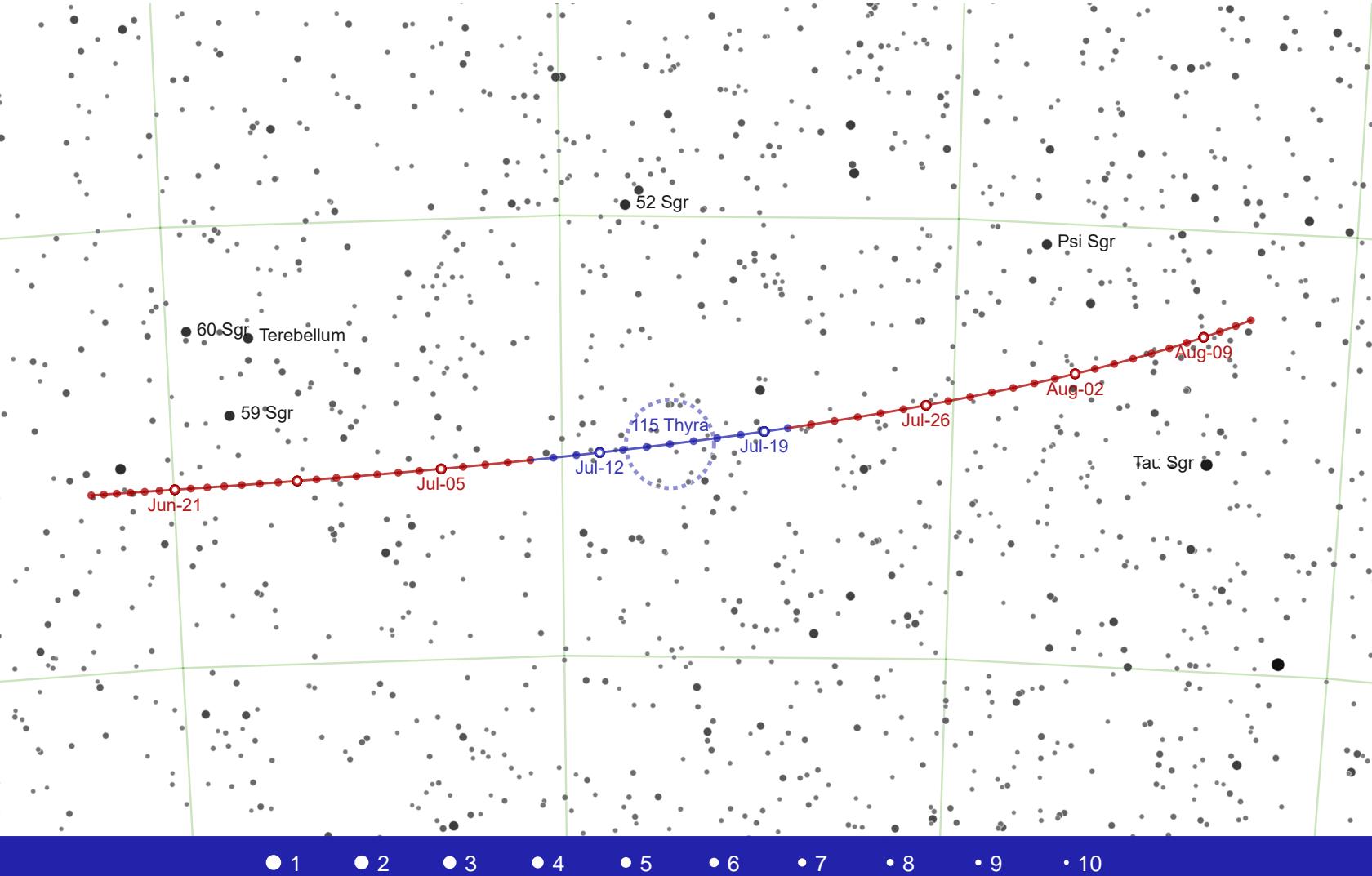
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-24	22 40 15.92	-18 24 02.4	11.676	1.6229
2025-Jul-29	22 38 06.99	-18 49 31.6	11.569	1.5908
2025-Aug-03	22 35 21.84	-19 16 29.1	11.462	1.564
2025-Aug-08	22 32 04.53	-19 44 04.7	11.357	1.543
2025-Aug-13	22 28 20.23	-20 11 25.7	11.256	1.528
2025-Aug-18	22 24 15.13	-20 37 37.9	11.174	1.5193
2025-Aug-23	22 19 56.79	-21 01 45.8	11.143	1.517
2025-Aug-28	22 15 33.94	-21 22 56.0	11.187	1.5212
2025-Sep-02	22 11 15.66	-21 40 24.1	11.274	1.5319
2025-Sep-07	22 07 10.55	-21 53 38.4	11.376	1.5489
2025-Sep-12	22 03 26.20	-22 02 20.4	11.482	1.572
2025-Sep-17	22 00 09.20	-22 06 21.1	11.589	1.6007



113 Amalthea

Rotational Period: 9.95h
 Mean radius: 25.0685km
 Classification: S
 Albedo: 0.224
 BV Color Index: 0.925
 A stony S-type asteroid with high albedo, both Amalthea and 9 Metis are believed to originate from the crust of a much larger asteroid that was disrupted around a billion years ago. Amalthea was discovered by Robert Luther in March 1871.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Mar-17	14 04 18.54	-03 56 00.5	11.427	1.2814
2025-Mar-22	14 02 19.59	-03 27 19.5	11.313	1.2498
2025-Mar-27	13 59 37.61	-02 56 22.9	11.201	1.2233
2025-Apr-01	13 56 17.61	-02 24 05.4	11.092	1.2024
2025-Apr-06	13 52 26.91	-01 51 32.6	10.989	1.1873
2025-Apr-11	13 48 14.28	-01 19 52.7	10.909	1.1784
2025-Apr-16	13 43 49.19	-00 50 11.8	10.887	1.1756
2025-Apr-21	13 39 21.54	-00 23 32.7	10.941	1.179
2025-Apr-26	13 35 01.43	-00 00 53.3	11.032	1.1885
2025-May-01	13 30 58.78	+00 16 56.4	11.134	1.2039
2025-May-06	13 27 22.53	+00 29 20.3	11.242	1.225
2025-May-11	13 24 19.51	+00 36 01.0	11.351	1.2512



● 1 ● 2 ● 3 ● 4 ● 5 ● 6 ● 7 ● 8 ● 9 ● 10

115 Thyra

Rotational Period: 7.241h

Mean radius: 39.915km

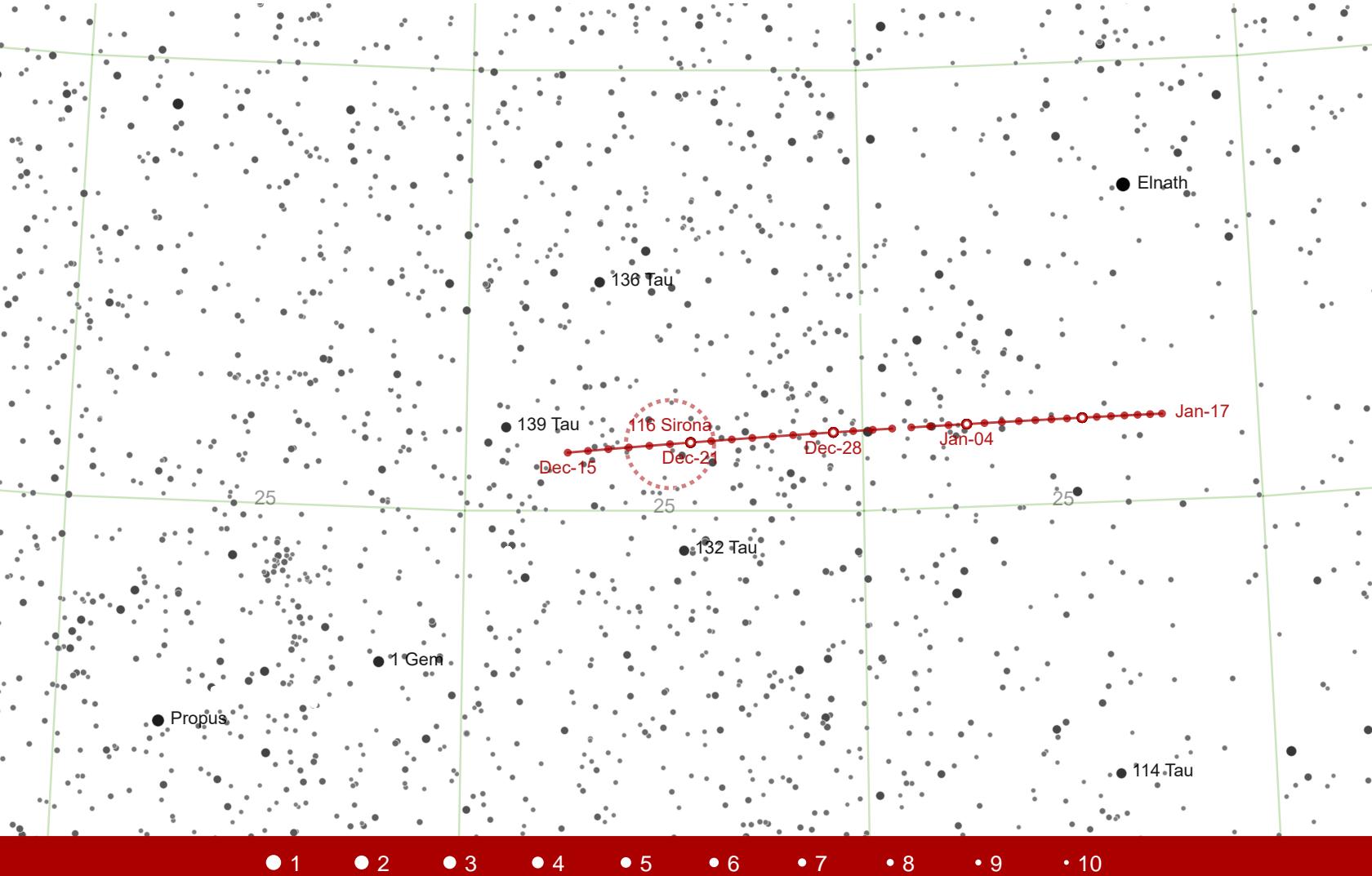
Classification: S

Albedo: 0.2747

BV Color Index: 0.851

This S-type (stony) asteroid was discovered in August 1871 by J C Watson, and named after the wife of the Danish king Gorm the Old. She was named "Denmark's Adornment" and was laid to rest in an enormous burial mound. Her famous son Harald Bluetooth gives his name to the bluetooth wireless specification.

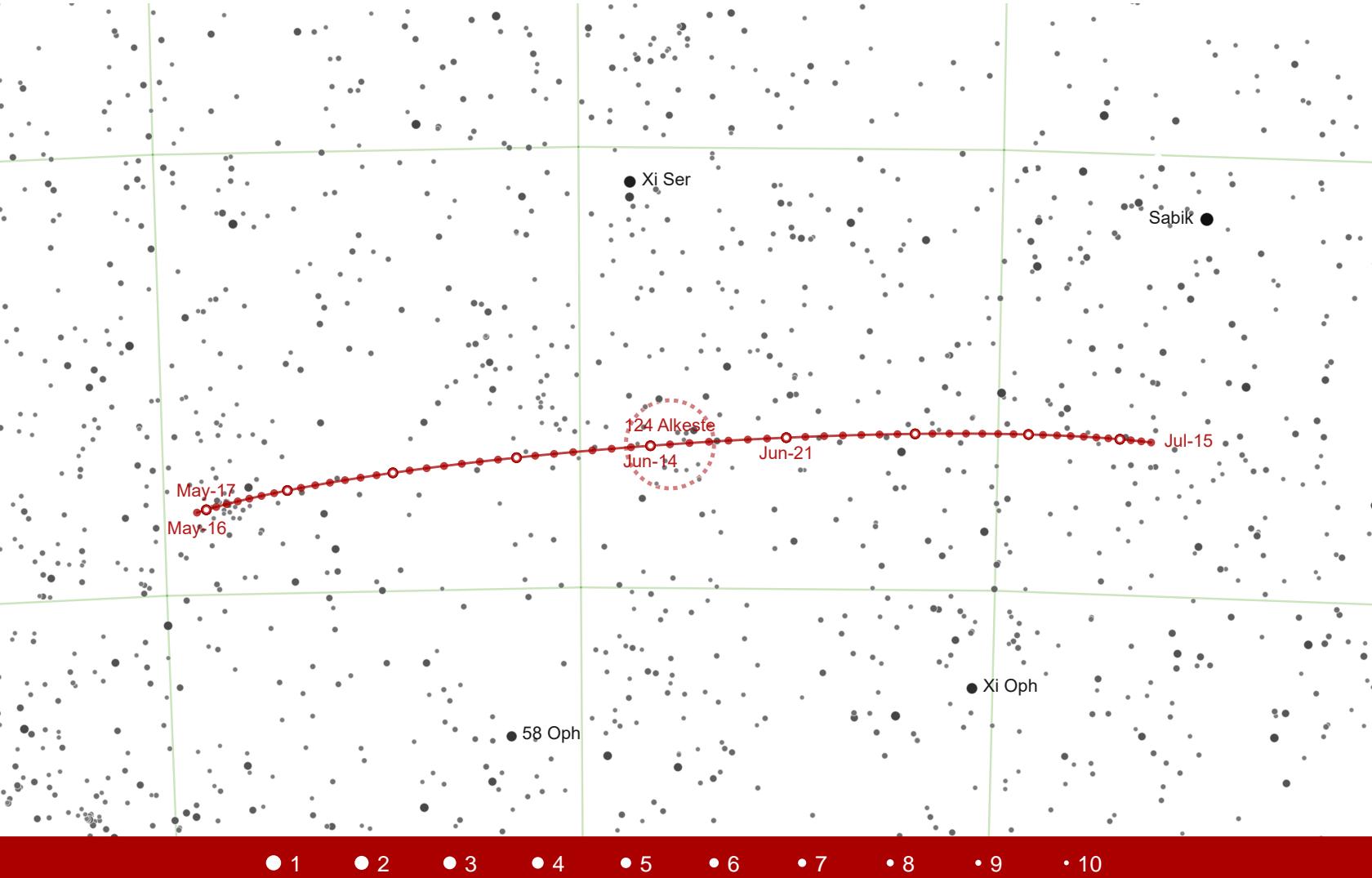
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-15	20 04 14.34	-27 59 13.7	11.703	1.6446
2025-Jun-20	20 00 43.35	-27 58 44.2	11.566	1.6019
2025-Jun-25	19 56 29.08	-27 57 36.1	11.424	1.5647
2025-Jun-30	19 51 36.60	-27 55 16.7	11.278	1.5334
2025-Jul-05	19 46 13.04	-27 51 13.6	11.128	1.5084
2025-Jul-10	19 40 26.96	-27 44 59.4	10.982	1.4899
2025-Jul-15	19 34 27.93	-27 36 14.3	10.911	1.4781
2025-Jul-20	19 28 26.26	-27 24 47.5	10.983	1.473
2025-Jul-25	19 22 32.93	-27 10 37.2	11.092	1.4746
2025-Jul-30	19 16 58.97	-26 53 50.7	11.203	1.4827
2025-Aug-04	19 11 54.22	-26 34 44.5	11.31	1.4971
2025-Aug-09	19 07 26.58	-26 13 41.7	11.415	1.5172



116 Sirona

Rotational Period: 12.028h
 Mean radius: 35.85km
 Classification: Sk
 Albedo: 0.256
 BV Color Index: 0.873
 Named after the Celtic goddess of healing, Sirona was discovered by C H F Peters in September 1871.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	05 54 52.36	+25 40 29.4	11.209	1.6178
2024-Dec-18	05 51 47.81	+25 44 19.3	11.104	1.6114
2024-Dec-21	05 48 40.99	+25 47 42.1	11.094	1.6075
2024-Dec-24	05 45 34.08	+25 50 36.9	11.182	1.6062
2024-Dec-27	05 42 29.33	+25 53 03.5	11.267	1.6075
2024-Dec-30	05 39 29.00	+25 55 02.7	11.345	1.6113
2025-Jan-02	05 36 35.31	+25 56 36.0	11.418	1.6177
2025-Jan-05	05 33 50.35	+25 57 45.8	11.488	1.6265
2025-Jan-08	05 31 16.01	+25 58 34.9	11.555	1.6376
2025-Jan-11	05 28 53.91	+25 59 06.6	11.621	1.6511
2025-Jan-14	05 26 45.39	+25 59 24.3	11.686	1.6666
2025-Jan-17	05 24 51.57	+25 59 31.7	11.749	1.6843



124 Alkeste

Rotational Period: 9.906h

Mean radius: 44.324km

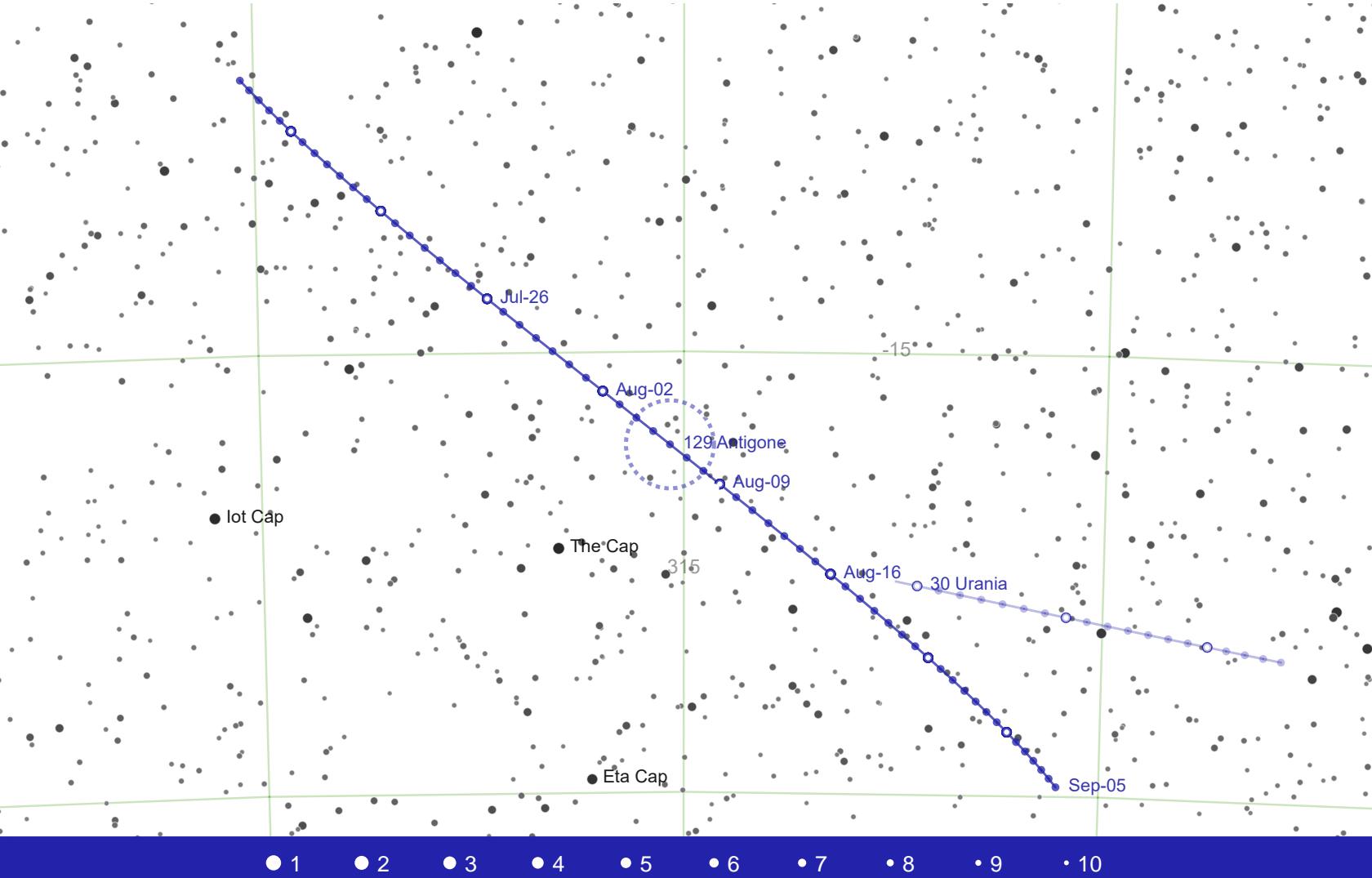
Classification: S

Albedo: 0.128

BV Color Index: 0.844

This S-type asteroid was discovered by C H F Peters in August 1872. It is named after the titular character of Euripides' tragedy.

Date	RA	DEC	Magnitude	Distance (AU)
2025-May-16	17 58 25.51	-19 04 08.7	11.7	1.5252
2025-May-21	17 55 53.51	-18 55 42.3	11.587	1.4927
2025-May-26	17 52 42.83	-18 47 46.0	11.471	1.4655
2025-May-31	17 48 58.78	-18 40 25.5	11.352	1.4439
2025-Jun-05	17 44 48.48	-18 33 45.4	11.23	1.4283
2025-Jun-10	17 40 19.99	-18 27 50.2	11.106	1.419
2025-Jun-15	17 35 41.92	-18 22 44.9	11.023	1.4159
2025-Jun-20	17 31 03.18	-18 18 36.3	11.094	1.4193
2025-Jun-25	17 26 32.93	-18 15 32.6	11.22	1.429
2025-Jun-30	17 22 20.35	-18 13 41.8	11.346	1.445
2025-Jul-05	17 18 33.55	-18 13 10.1	11.469	1.467
2025-Jul-10	17 15 18.94	-18 14 01.7	11.588	1.4946



129 Antigone

Rotational Period: 4.9572h

Mean radius: 56.5km

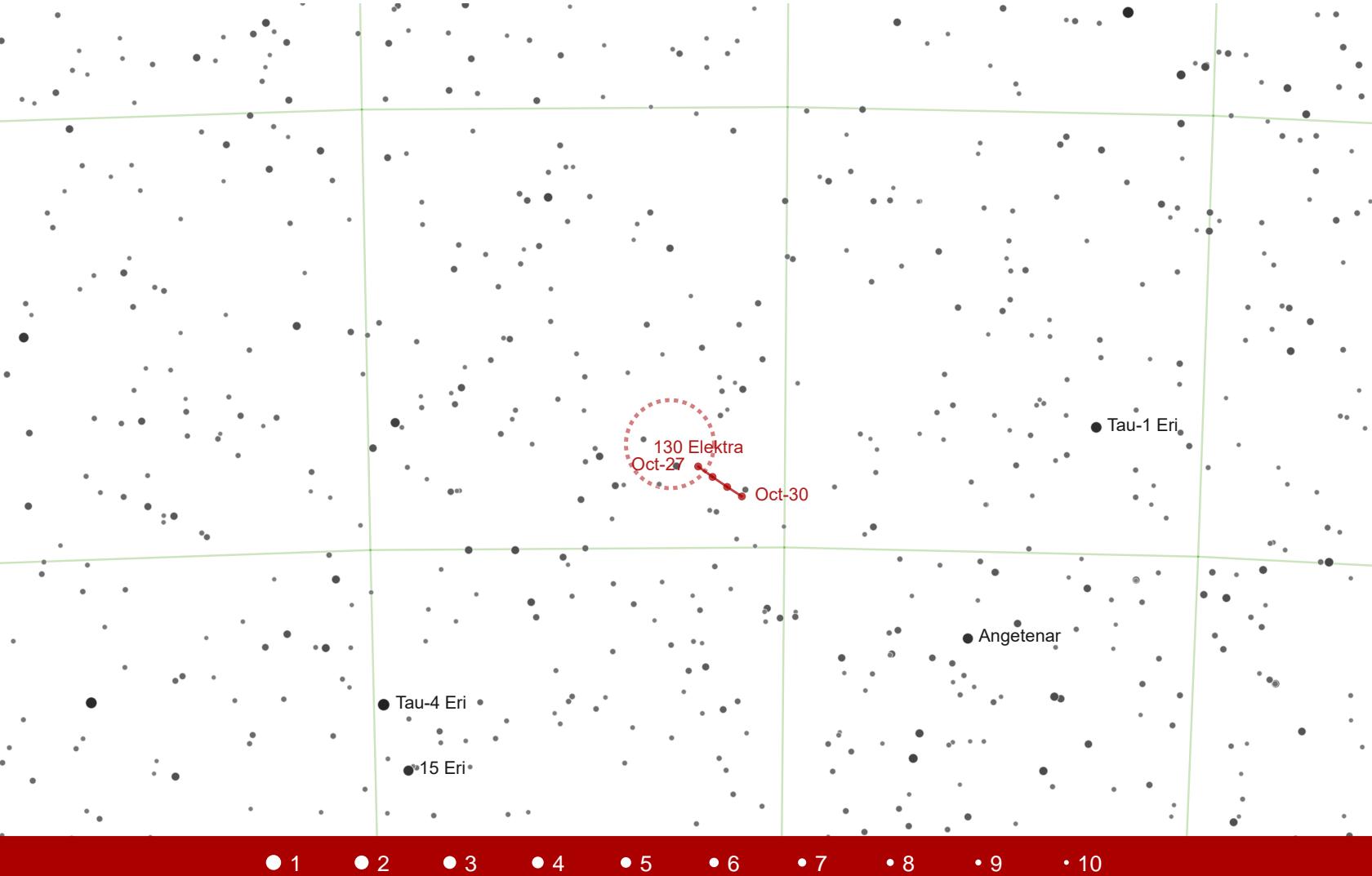
Classification: X

Albedo: 0.151

BV Color Index: 0.717

This large asteroid appears to be almost entirely composed of nickel-iron. Discovered by C H F Peters in February 1873, it is named after the princess of Thebes from Greek mythology.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-07	21 20 35.93	-11 52 28.5	10.557	1.5599
2025-Jul-12	21 18 16.46	-12 27 41.1	10.473	1.5372
2025-Jul-17	21 15 25.43	-13 06 34.1	10.389	1.52
2025-Jul-22	21 12 07.47	-13 48 28.4	10.304	1.5086
2025-Jul-27	21 08 28.75	-14 32 34.0	10.215	1.5035
2025-Aug-01	21 04 36.74	-15 17 52.2	10.113	1.5049
2025-Aug-06	21 00 39.50	-16 03 22.1	10.001	1.5129
2025-Aug-11	20 56 45.01	-16 48 05.5	10.179	1.5276
2025-Aug-16	20 53 00.88	-17 31 10.4	10.323	1.549
2025-Aug-21	20 49 34.39	-18 11 51.0	10.455	1.5768
2025-Aug-26	20 46 32.40	-18 49 28.4	10.582	1.6109
2025-Aug-31	20 44 00.65	-19 23 33.0	10.706	1.6509



130 Elektra

Rotational Period: 5.225h

Mean radius: 90.326km

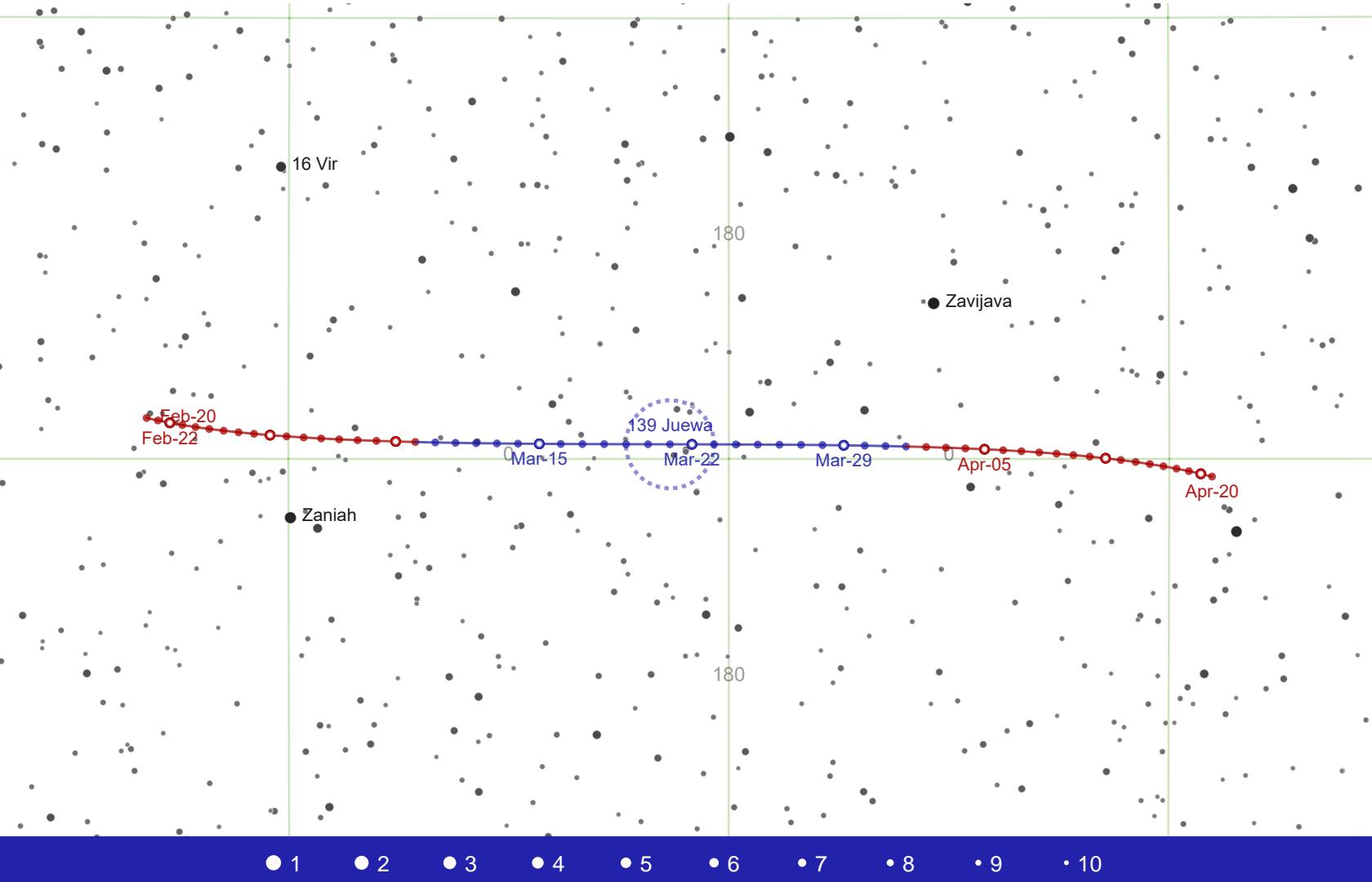
Classification: Ch

Albedo: 0.086

BV Color Index: 0.753

Another H F Peters discovery (in February 1873), Electra is an uncommon G-type asteroid similar to Ceres. Remarkably it has three small moons, all of which are currently unnamed. It orbits in the outer asteroid belt.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-27	03 04 10.32	-19 05 08.6	11.249	1.6015
2025-Oct-28	03 03 28.72	-19 12 15.0	11.249	1.602
2025-Oct-29	03 02 46.51	-19 19 01.3	11.25	1.6028
2025-Oct-30	03 02 03.77	-19 25 27.3	11.252	1.6038



139 Juewa

Rotational Period: 20.991h

Mean radius: 75.558km

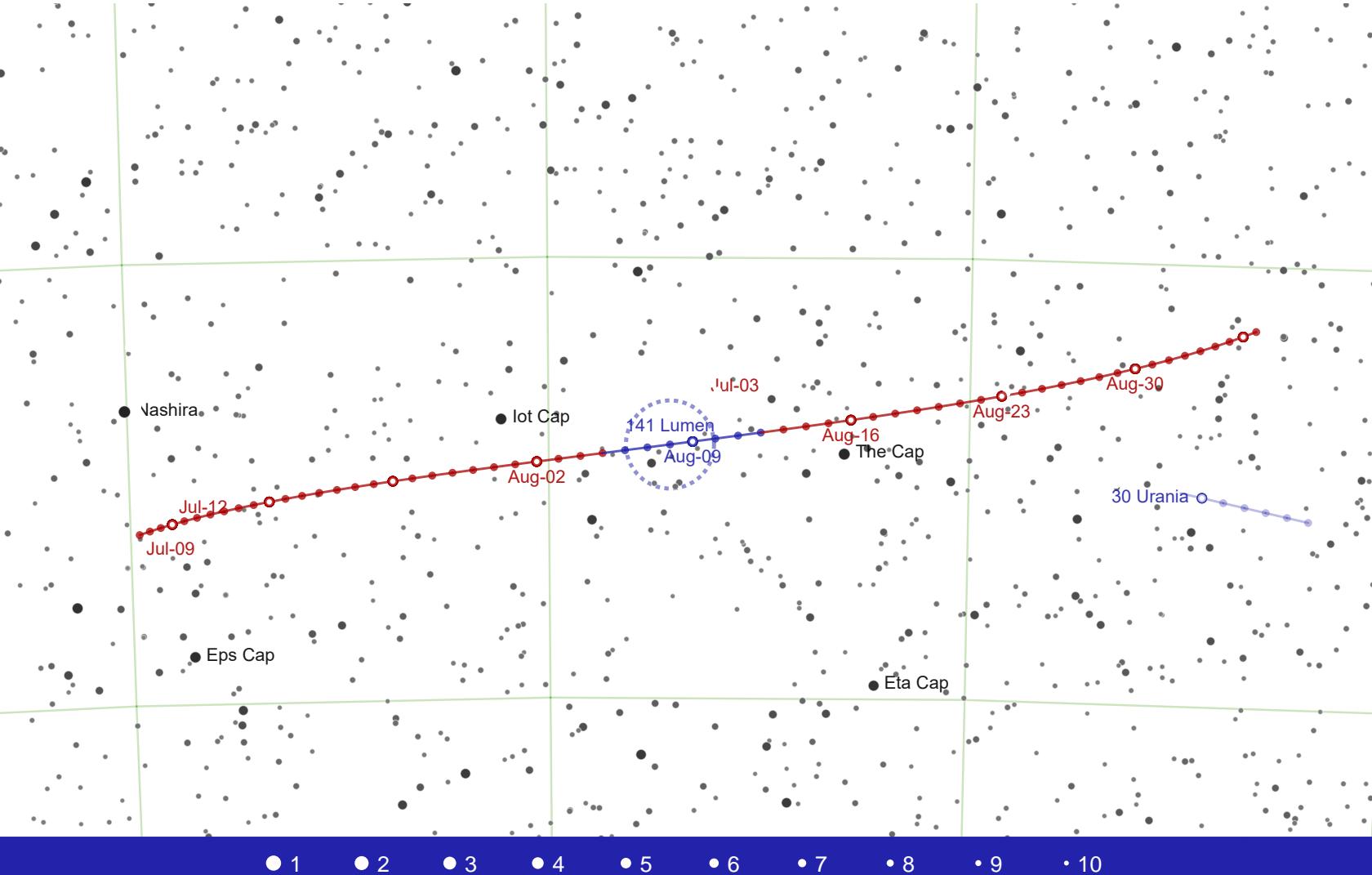
Classification: X

Albedo: 0.052

BV Color Index: 0.693

The first asteroid discovered from China, by C Watson in October 1874. It was named by the prominent politician Yixin (aka Prince Gong) as Juewa (Star of China's Fortune).

Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-20	12 26 26.10	+00 27 48.7	11.458	1.4295
2025-Feb-25	12 23 35.49	+00 20 21.8	11.331	1.3966
2025-Mar-02	12 20 04.85	+00 15 19.5	11.201	1.3692
2025-Mar-07	12 16 00.01	+00 12 16.6	11.064	1.3478
2025-Mar-12	12 11 28.49	+00 10 42.7	10.919	1.3327
2025-Mar-17	12 06 38.84	+00 10 06.6	10.749	1.3241
2025-Mar-22	12 01 40.42	+00 09 55.6	10.582	1.3221
2025-Mar-27	11 56 43.20	+00 09 34.7	10.809	1.3268
2025-Apr-01	11 51 57.38	+00 08 26.6	10.973	1.3381
2025-Apr-06	11 47 32.59	+00 05 55.4	11.119	1.3559
2025-Apr-11	11 43 36.81	+00 01 32.7	11.257	1.3797
2025-Apr-16	11 40 16.02	-00 05 02.0	11.389	1.4091



● 1 ● 2 ● 3 ● 4 ● 5 ● 6 ● 7 ● 8 ● 9 ● 10

141 Lumen

Rotational Period: 19.87h

Mean radius: 58.958km

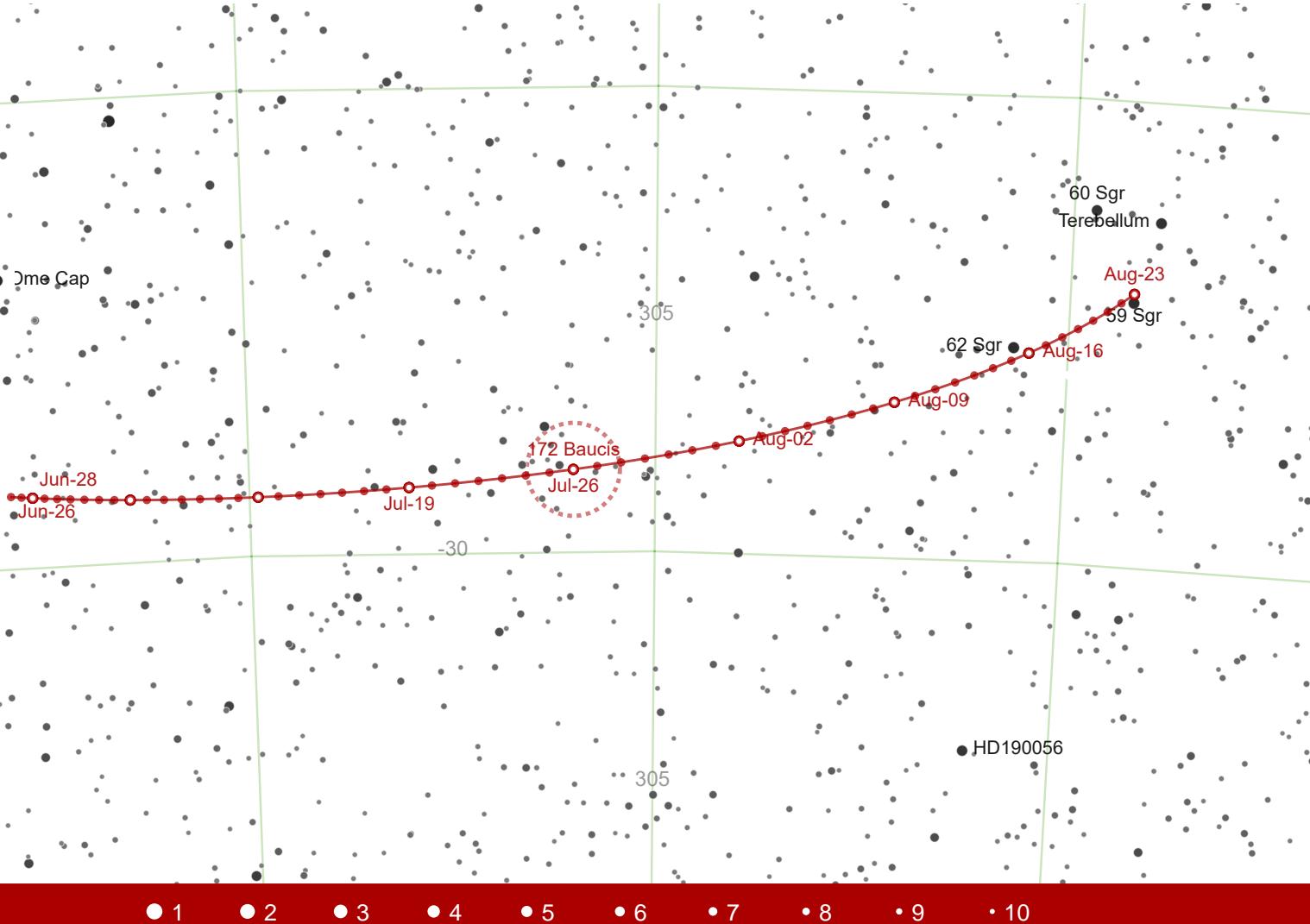
Classification: Ch

Albedo: 0.067

BV Color Index: 0n.a.

This Carbonaceous asteroid was discovered by the brothers Paul and Prosper Henry in January 1875. It is named after the book by Camille Flammarion.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-09	21 39 33.67	-18 03 43.1	11.909	1.4608
2025-Jul-14	21 36 47.93	-17 53 14.8	11.764	1.4185
2025-Jul-19	21 33 20.03	-17 43 45.1	11.615	1.3814
2025-Jul-24	21 29 13.72	-17 34 54.6	11.459	1.3499
2025-Jul-29	21 24 35.03	-17 26 18.1	11.294	1.3244
2025-Aug-03	21 19 32.00	-17 17 28.4	11.109	1.305
2025-Aug-08	21 14 13.93	-17 08 00.6	10.881	1.2921
2025-Aug-13	21 08 50.80	-16 57 34.9	11.031	1.2855
2025-Aug-18	21 03 32.93	-16 45 57.1	11.175	1.2854
2025-Aug-23	20 58 30.94	-16 32 56.0	11.3	1.2915
2025-Aug-28	20 53 55.06	-16 18 23.2	11.416	1.3037
2025-Sep-02	20 49 54.03	-16 02 15.3	11.528	1.3216



172 Baucis

Rotational Period: 27.417h

Mean radius: 31.215km

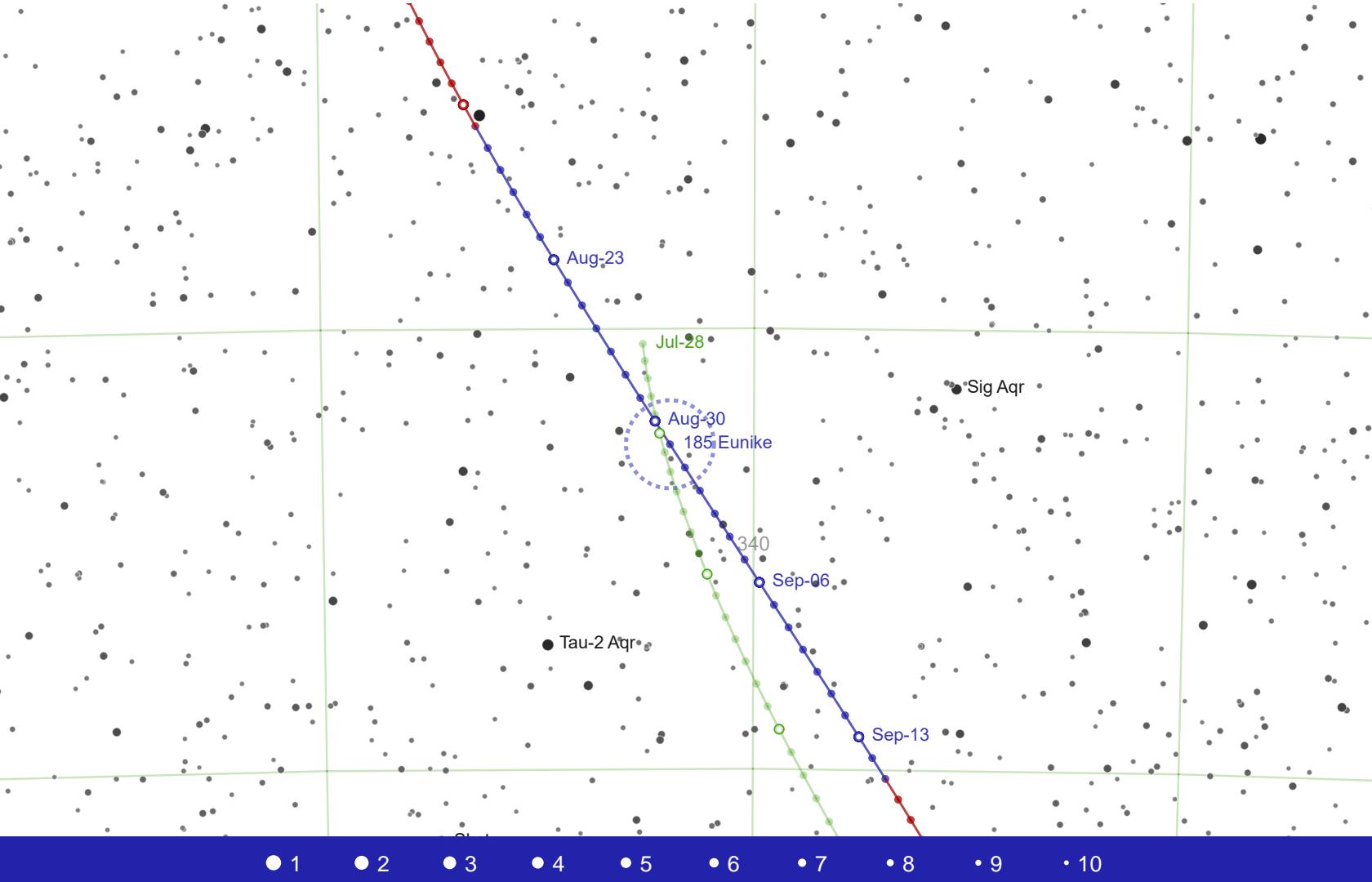
Classification: L

Albedo: 0.1382

BV Color Index: 0.890

Discovered by Alphonse Borrelly in February 1877, it is named after a character from the Greek legend of Baucis and Philemon, who were rewarded for their hospitality by Zeus and Hermes. In the SMASS classification system it is a rare L-type (deeply reddish in the visible spectrum), while in the Tholen system it is an S-type asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-26	20 51 44.29	-29 14 36.8	11.734	1.2427
2025-Jul-01	20 48 49.41	-29 18 15.4	11.6	1.2103
2025-Jul-06	20 45 03.78	-29 21 01.5	11.464	1.1829
2025-Jul-11	20 40 33.32	-29 22 05.1	11.329	1.1607
2025-Jul-16	20 35 25.90	-29 20 38.0	11.2	1.144
2025-Jul-21	20 29 51.38	-29 15 56.8	11.091	1.1331
2025-Jul-26	20 24 01.96	-29 07 24.8	11.048	1.1281
2025-Jul-31	20 18 11.54	-28 54 37.8	11.098	1.1293
2025-Aug-05	20 12 33.92	-28 37 29.3	11.2	1.1364
2025-Aug-10	20 07 21.52	-28 16 10.5	11.318	1.1493
2025-Aug-15	20 02 44.78	-27 51 05.7	11.44	1.1677
2025-Aug-20	19 58 52.16	-27 22 46.1	11.564	1.1915



185 Eunike

Rotational Period: 21.797h

Mean radius: 80.232km

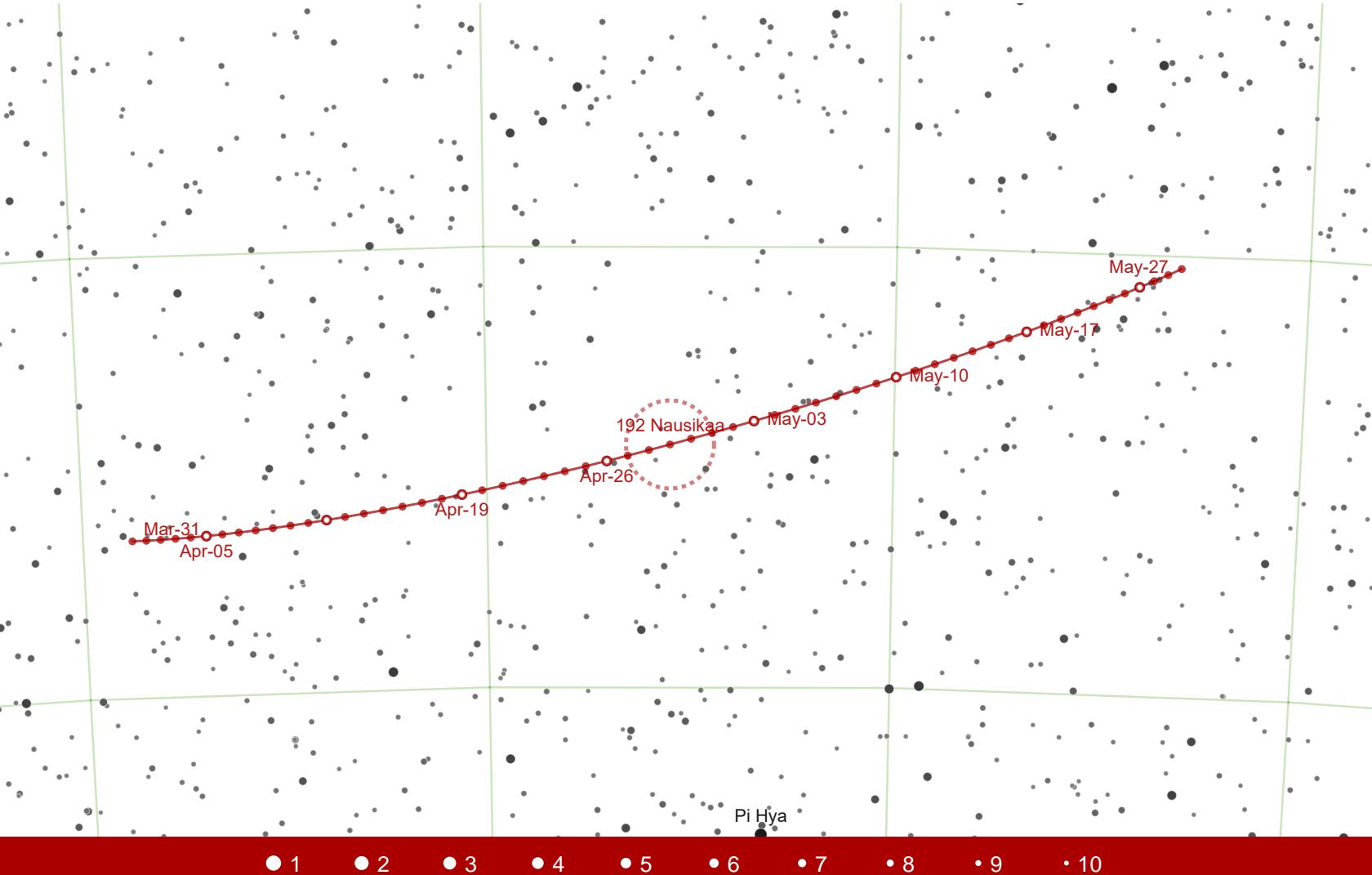
Classification: C

Albedo: 0.062

BV Color Index: 0.668

Discovered by the prolific C H F Peters in March 1878 it is named after the nymph Eunike. The name means "happy victory" and commemorates the treaty of San Stefano, which created the state of Bulgaria.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-04	22 58 24.30	-04 46 04.9	11.371	1.5622
2025-Aug-09	22 56 38.81	-05 49 28.1	11.239	1.5266
2025-Aug-14	22 54 22.89	-06 58 24.8	11.103	1.497
2025-Aug-19	22 51 40.12	-08 11 57.8	10.961	1.4737
2025-Aug-24	22 48 35.57	-09 28 51.4	10.809	1.457
2025-Aug-29	22 45 15.87	-10 47 33.0	10.648	1.4474
2025-Sep-03	22 41 48.52	-12 06 22.2	10.658	1.4448
2025-Sep-08	22 38 21.36	-13 23 39.2	10.804	1.4493
2025-Sep-13	22 35 02.02	-14 37 51.8	10.94	1.4607
2025-Sep-18	22 31 57.97	-15 47 37.5	11.067	1.4788
2025-Sep-23	22 29 16.47	-16 51 45.7	11.189	1.5033



192 Nausikaa

Rotational Period: 13.625h

Mean radius: 49.388km

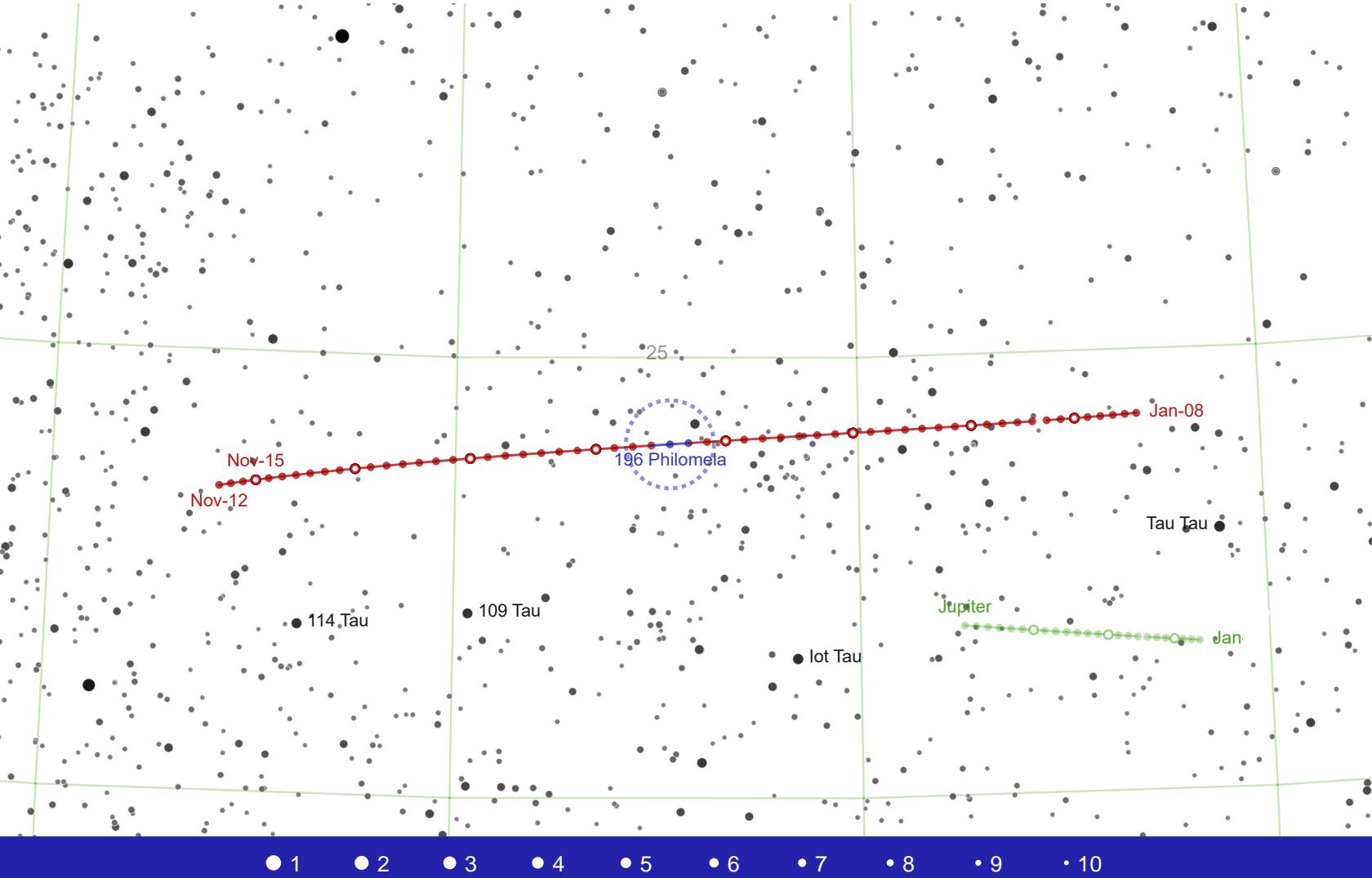
Classification: S1

Albedo: 0.327

BV Color Index: 0.927

The S-type asteroid was discovered in February 1879 by Johann Palisa. It is named after a princess mentioned in Homer's Odyssey, but perhaps it is also the home world of the violent Nausicaans of the Star Trek universe?

Date	RA	DEC	Magnitude	Distance (AU)
2025-Mar-31	14 37 32.80	-23 13 26.7	11.936	2.0604
2025-Apr-05	14 33 53.14	-23 11 57.5	11.813	2.0181
2025-Apr-10	14 29 43.08	-23 06 50.9	11.687	1.982
2025-Apr-15	14 25 07.83	-22 58 06.3	11.557	1.9523
2025-Apr-20	14 20 13.52	-22 45 49.3	11.43	1.9294
2025-Apr-25	14 15 07.20	-22 30 13.8	11.322	1.9136
2025-Apr-30	14 09 56.79	-22 11 44.0	11.289	1.9051
2025-May-05	14 04 50.66	-21 50 54.4	11.353	1.9038
2025-May-10	13 59 56.66	-21 28 25.6	11.454	1.9095
2025-May-15	13 55 21.75	-21 05 00.4	11.562	1.9222
2025-May-20	13 51 11.87	-20 41 22.5	11.67	1.9413
2025-May-25	13 47 32.03	-20 18 15.3	11.774	1.9666



196 Philomela

Rotational Period: 8.334h

Mean radius: 72.313km

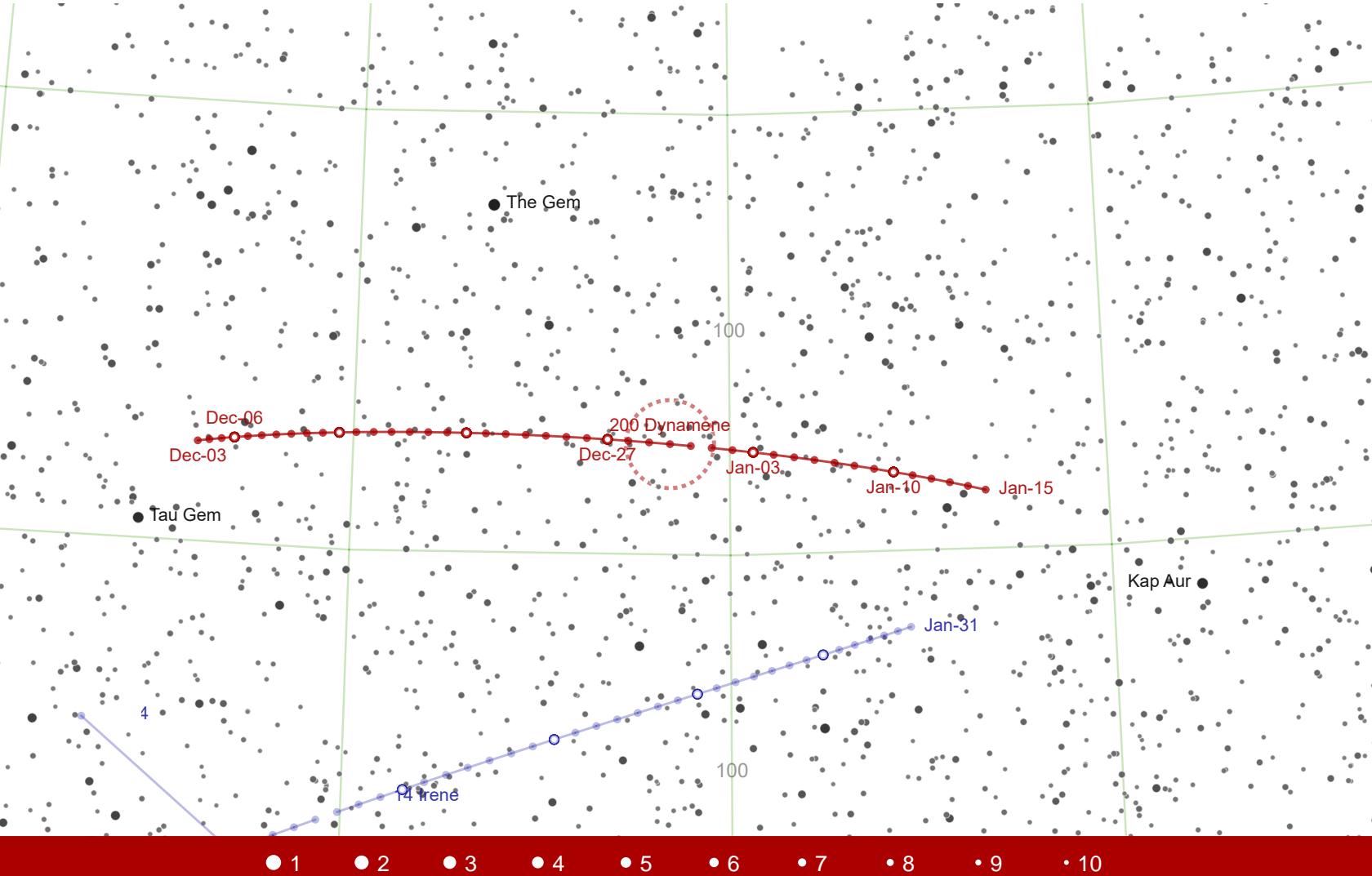
Classification: S

Albedo: 0.342

BV Color Index: 0.852

This S-type asteroid was discovered by C H F Peters in May 1879. Philomela was transformed into a nightingale in Greek myth.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-12	05 31 40.68	+23 28 24.4	11.669	2.2838
2025-Nov-17	05 28 34.30	+23 35 41.7	11.57	2.2478
2025-Nov-22	05 24 58.40	+23 42 34.3	11.466	2.2182
2025-Nov-27	05 20 57.84	+23 48 54.0	11.357	2.1954
2025-Dec-02	05 16 38.57	+23 54 34.1	11.238	2.1797
2025-Dec-07	05 12 07.15	+23 59 29.8	11.097	2.1714
2025-Dec-12	05 07 30.43	+24 03 39.2	11.028	2.1707
2025-Dec-17	05 02 55.68	+24 07 04.6	11.188	2.1776
2025-Dec-22	04 58 30.38	+24 09 52.1	11.315	2.1921
2025-Dec-27	04 54 21.68	+24 12 11.0	11.429	2.2138
2026-Jan-01	04 50 35.83	+24 14 12.7	11.536	2.2426
2026-Jan-06	04 47 17.78	+24 16 09.4	11.639	2.2779



200 Dynamene

Rotational Period: 37.394h

Mean radius: 64.1505km

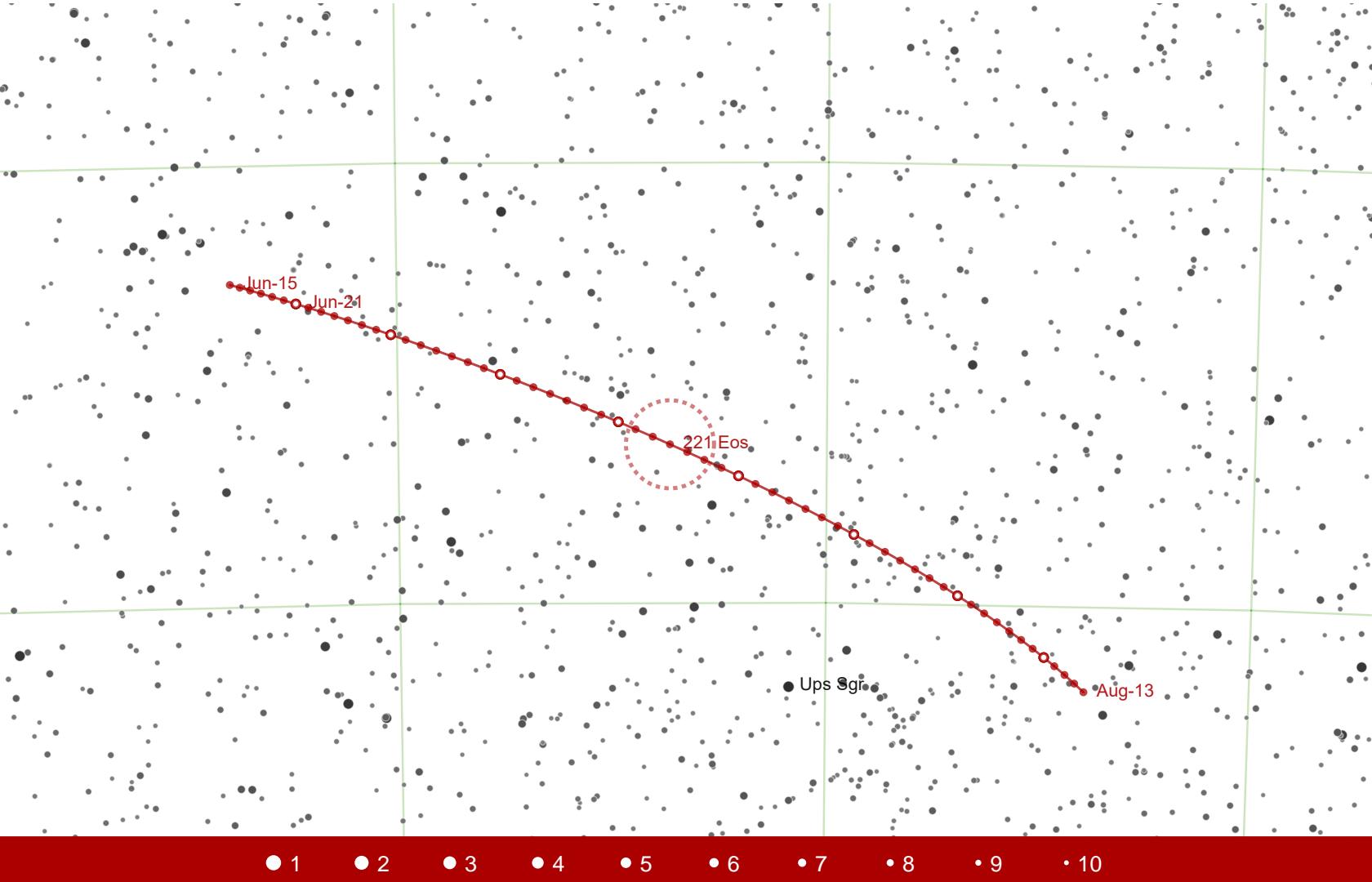
Classification: Ch

Albedo: 0.053

BV Color Index: 0.727

C H F Peters discovered this asteroid in July 1879. It is named after one of the Nereids (sea nymphs). An occultation in 2006 indicates this asteroid is about 130 kilometers in diameter.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-03	07 08 14.46	+31 09 25.8	12.175	1.565
2025-Dec-07	07 05 35.87	+31 14 08.8	12.088	1.5423
2025-Dec-11	07 02 28.54	+31 17 59.5	12.0	1.5232
2025-Dec-15	06 58 55.61	+31 20 40.3	11.912	1.5079
2025-Dec-19	06 55 01.27	+31 21 54.0	11.823	1.4967
2025-Dec-23	06 50 50.62	+31 21 25.4	11.737	1.4897
2025-Dec-27	06 46 29.47	+31 19 03.1	11.665	1.4872
2025-Dec-31	06 42 03.98	+31 14 40.1	11.636	1.4891
2026-Jan-04	06 37 40.25	+31 08 15.4	11.68	1.4954
2026-Jan-08	06 33 24.05	+30 59 52.6	11.769	1.5062
2026-Jan-12	06 29 20.89	+30 49 40.0	11.872	1.5213



221 Eos

Rotational Period: 10.443h

Mean radius: 47.7345km

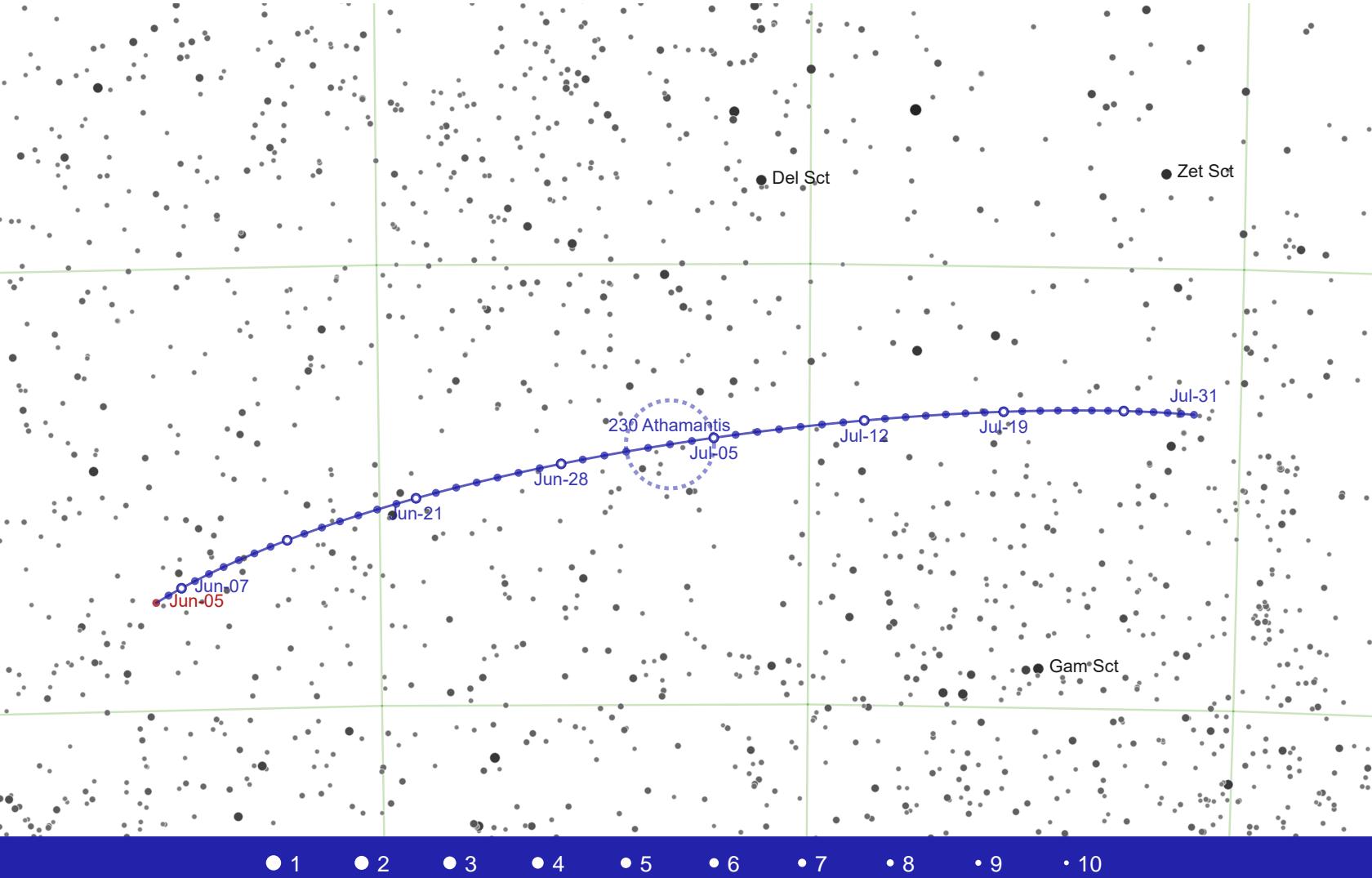
Classification: K

Albedo: 0.166

BV Color Index: 0.768

Named after the Greek goddess of the dawn, this asteroid was discovered by Johann Palisa in January 1882. It is a K-type asteroid in the SMASS classification system, a spectral subtype developed for Eos and the members of the Eos asteroid family.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-15	19 47 42.23	-11 21 02.6	12.121	1.8987
2025-Jun-20	19 45 13.14	-11 32 09.1	12.011	1.8616
2025-Jun-25	19 42 15.51	-11 46 30.1	11.899	1.8302
2025-Jun-30	19 38 53.62	-12 03 58.9	11.786	1.8047
2025-Jul-05	19 35 12.88	-12 24 21.5	11.676	1.7856
2025-Jul-10	19 31 19.34	-12 47 18.2	11.58	1.773
2025-Jul-15	19 27 19.40	-13 12 26.3	11.537	1.767
2025-Jul-20	19 23 19.76	-13 39 20.5	11.581	1.7677
2025-Jul-25	19 19 27.48	-14 07 33.9	11.669	1.7752
2025-Jul-30	19 15 49.75	-14 36 36.8	11.77	1.7892
2025-Aug-04	19 12 33.02	-15 06 00.0	11.872	1.8095
2025-Aug-09	19 09 42.68	-15 35 17.1	11.973	1.8358



● 1 ● 2 ● 3 ● 4 ● 5 ● 6 ● 7 ● 8 ● 9 ● 10

230 Athamantis

Rotational Period: 24.0055h

Mean radius: 55.666km

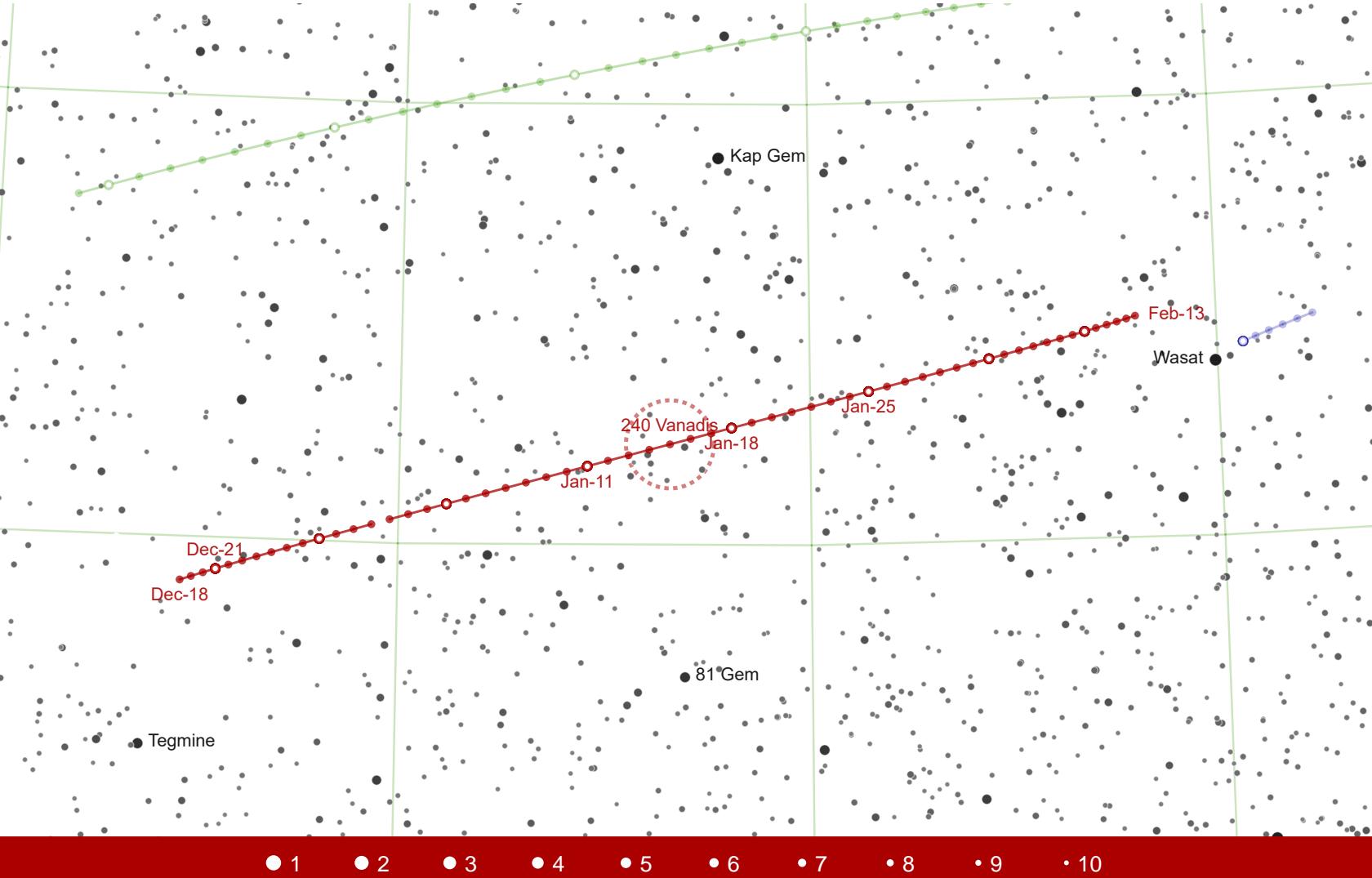
Classification: S1

Albedo: 0.164

BV Color Index: 0.871

Athamantis, also known as Helle, fell to her death while being carried over a sea by a flying golden ram. The sea subsequently became known as Hellespont (now known as the Dardanelles). This asteroid was discovered in September 1882 by K de Ball, his only asteroid discovery.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-05	19 10 29.37	-13 47 11.5	11.014	1.502
2025-Jun-10	19 07 18.24	-13 23 45.3	10.902	1.468
2025-Jun-15	19 03 30.80	-13 02 09.0	10.791	1.4393
2025-Jun-20	18 59 12.30	-12 42 37.3	10.683	1.4165
2025-Jun-25	18 54 29.51	-12 25 25.2	10.584	1.3996
2025-Jun-30	18 49 31.00	-12 10 44.6	10.512	1.3891
2025-Jul-05	18 44 26.35	-11 58 42.7	10.496	1.385
2025-Jul-10	18 39 25.13	-11 49 23.2	10.543	1.3873
2025-Jul-15	18 34 36.44	-11 42 47.0	10.622	1.3958
2025-Jul-20	18 30 08.72	-11 38 52.4	10.714	1.4104
2025-Jul-25	18 26 09.79	-11 37 34.1	10.81	1.4308
2025-Jul-30	18 22 46.48	-11 38 41.1	10.908	1.4566



240 Vanadis

Rotational Period: 10.565h

Mean radius: 43.964km

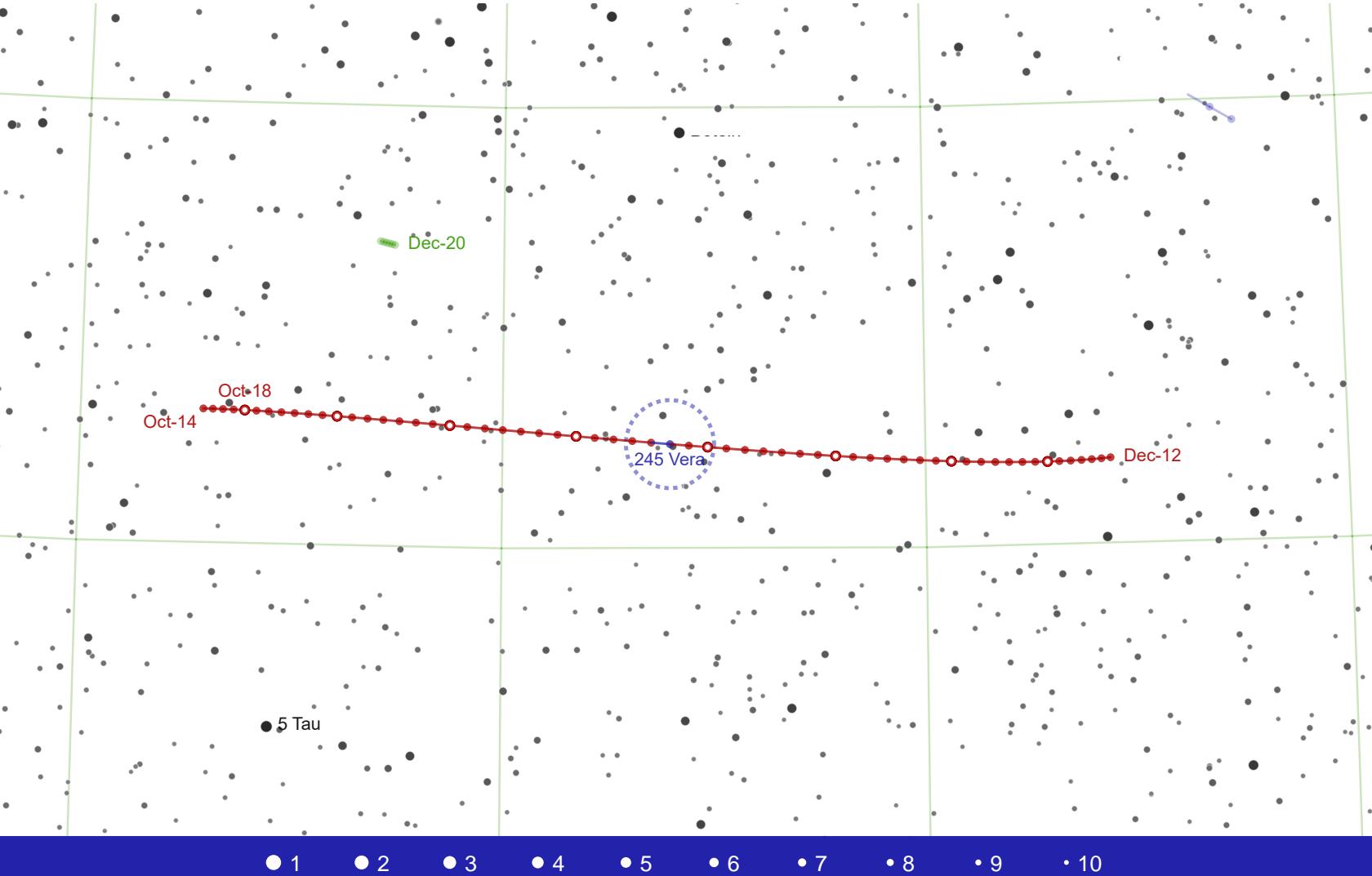
Classification: C

Albedo: 0.031

BV Color Index: 0.705

This C-type asteroid was discovered by Alphonse Borrelly in August 1884. Vanadis is an alternate name for the Norse goddess Freya.

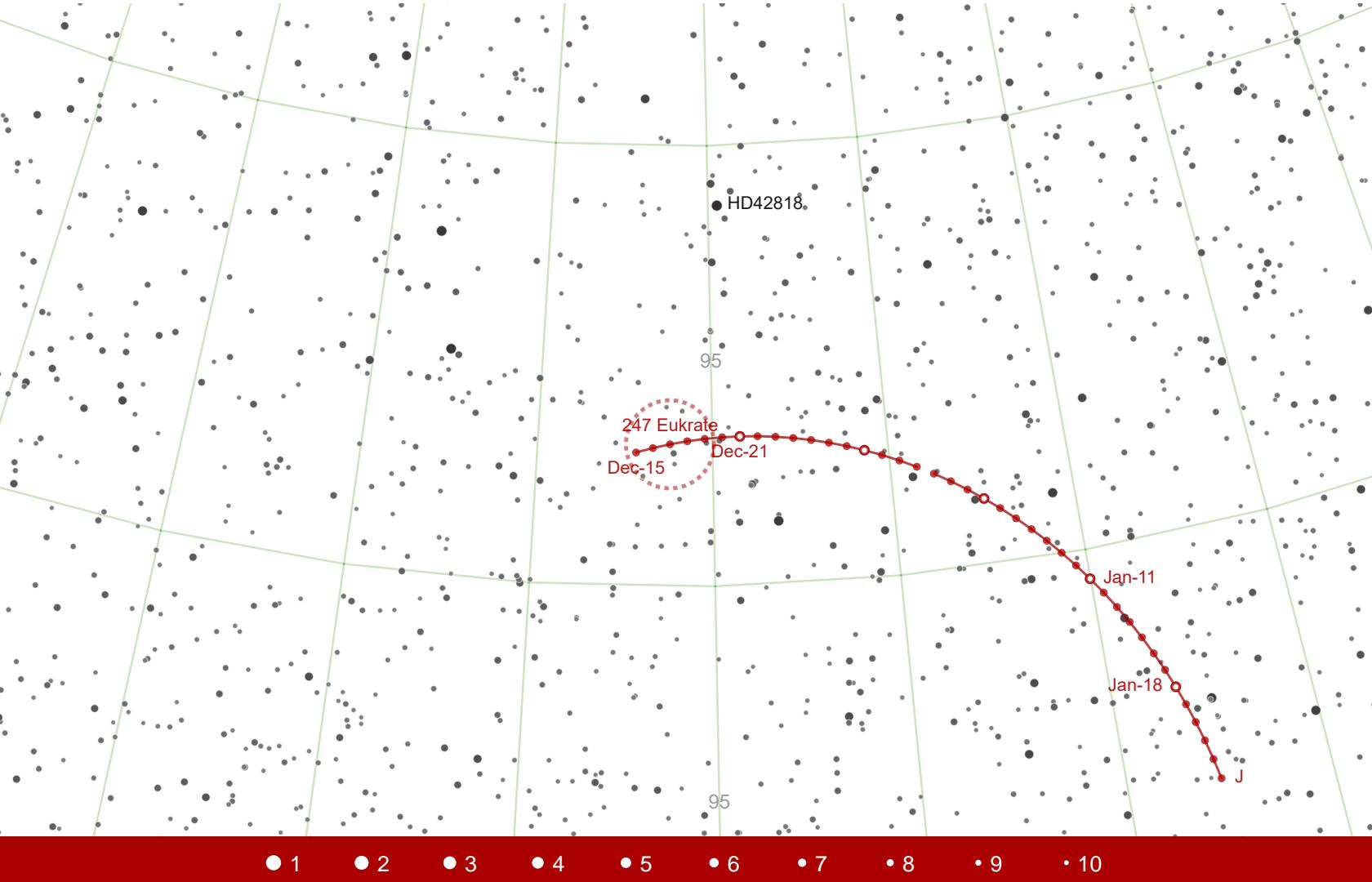
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-18	08 10 28.29	+19 31 11.3	12.424	1.3653
2024-Dec-23	08 07 29.33	+19 45 28.5	12.312	1.3425
2024-Dec-28	08 03 48.01	+20 01 55.0	12.196	1.3252
2025-Jan-02	07 59 31.48	+20 19 56.4	12.076	1.3139
2025-Jan-07	07 54 49.12	+20 38 51.9	11.943	1.3091
2025-Jan-12	07 49 51.76	+20 57 58.6	11.781	1.311
2025-Jan-17	07 44 50.56	+21 16 37.4	11.752	1.3196
2025-Jan-22	07 39 56.62	+21 34 15.5	11.977	1.335
2025-Jan-27	07 35 20.80	+21 50 26.1	12.156	1.3571
2025-Feb-01	07 31 13.15	+22 04 49.6	12.321	1.3857
2025-Feb-06	07 27 42.11	+22 17 13.1	12.476	1.4204
2025-Feb-11	07 24 53.68	+22 27 31.3	12.626	1.4609



245 Vera

Rotational Period: 14.38h
 Mean radius: 37.9745km
 Classification: S
 Albedo: 0.228
 BV Color Index: 0.841
 This stony S-type asteroid was discovered by N R Pogson in February 1885 in Madras.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-14	03 34 10.72	+16 31 33.0	11.765	1.6032
2025-Oct-19	03 31 39.68	+16 30 56.4	11.652	1.5729
2025-Oct-24	03 28 31.91	+16 28 54.5	11.535	1.5482
2025-Oct-29	03 24 53.03	+16 25 39.8	11.414	1.5295
2025-Nov-03	03 20 50.11	+16 21 28.3	11.284	1.5171
2025-Nov-08	03 16 31.16	+16 16 38.2	11.137	1.5114
2025-Nov-13	03 12 04.64	+16 11 30.3	10.999	1.5124
2025-Nov-18	03 07 39.64	+16 06 30.5	11.176	1.5204
2025-Nov-23	03 03 25.51	+16 02 07.6	11.335	1.5352
2025-Nov-28	02 59 31.03	+15 58 50.5	11.478	1.5567
2025-Dec-03	02 56 03.67	+15 57 05.0	11.613	1.5846
2025-Dec-08	02 53 09.12	+15 57 11.4	11.742	1.6185



247 Eukrate

Rotational Period: 12.093h

Mean radius: 65.4675km

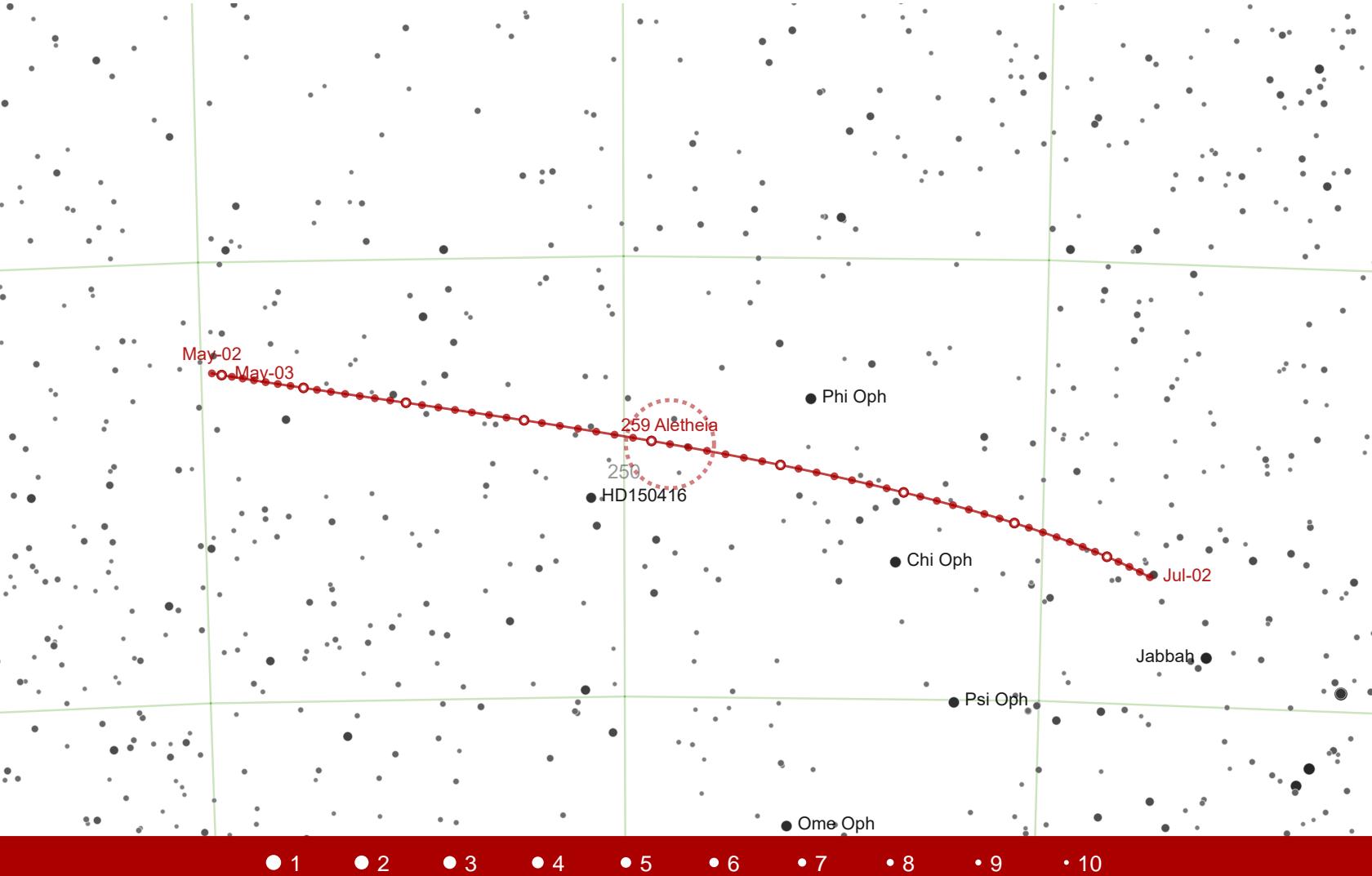
Classification: Xc

Albedo: 0.064

BV Color Index: 0.691

This large and dark C-type asteroid was discovered by Robert Luther in March 1885. It is named after a Nereid.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	06 28 43.73	+66 31 15.0	11.401	1.3151
2024-Dec-19	06 20 53.23	+66 40 28.4	11.399	1.3165
2024-Dec-23	06 12 46.17	+66 40 23.9	11.407	1.3207
2024-Dec-27	06 04 42.47	+66 30 56.1	11.423	1.3277
2024-Dec-31	05 57 01.83	+66 12 20.1	11.449	1.3377
2025-Jan-04	05 50 01.84	+65 45 11.0	11.482	1.3505
2025-Jan-08	05 43 56.27	+65 10 20.9	11.524	1.3662
2025-Jan-12	05 38 54.03	+64 28 52.0	11.572	1.3846
2025-Jan-16	05 34 59.47	+63 41 49.3	11.627	1.4058
2025-Jan-20	05 32 13.55	+62 50 15.8	11.687	1.4296



259 Aletheia

Rotational Period: 8.143h

Mean radius: 87.159km

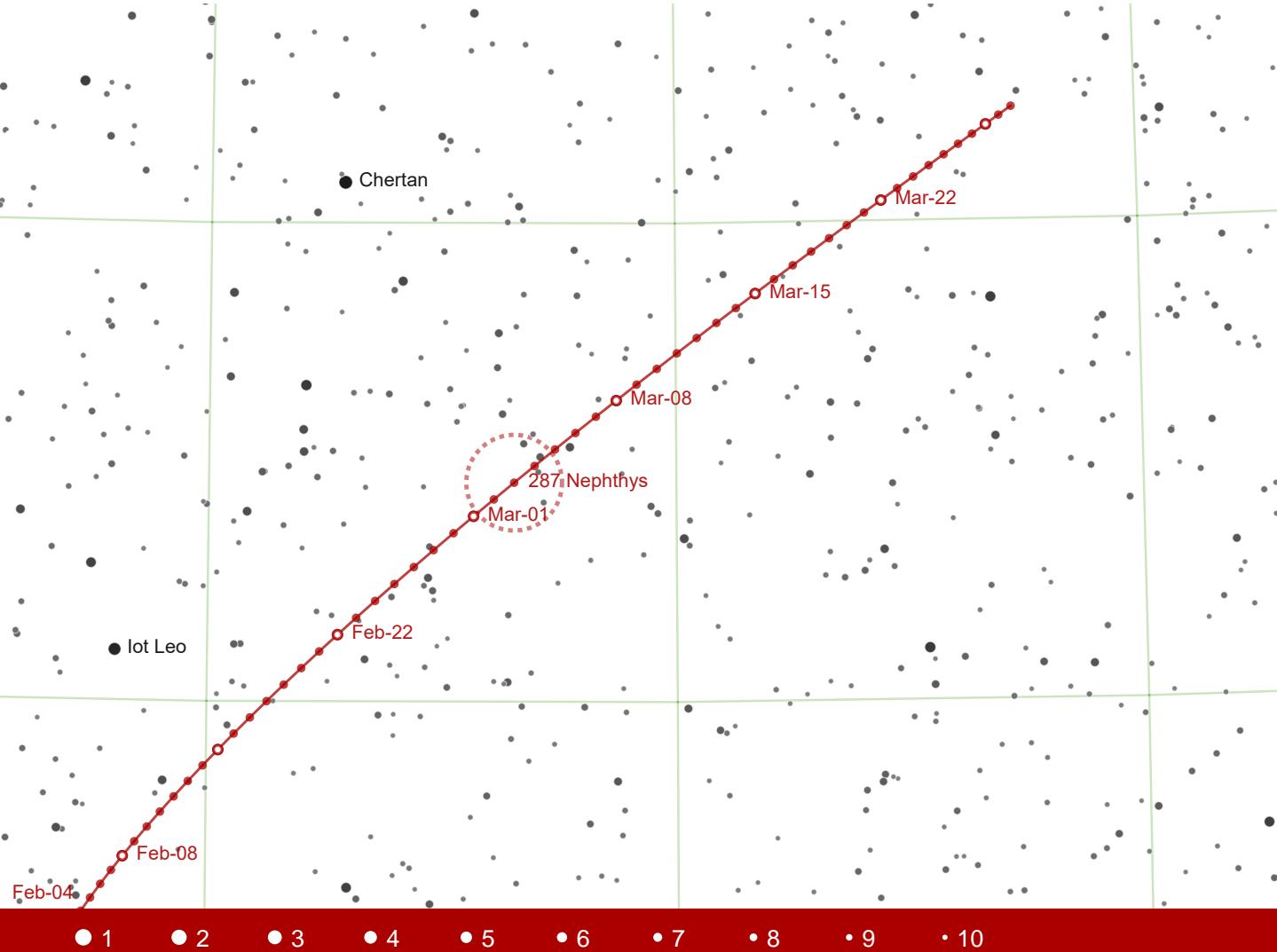
Classification: X

Albedo: 0.043

BV Color Index: 0.698

One of the largest asteroids in the main asteroid belt, Aletheia was discovered by Christian Peters in June 1886. Aletheia was one of the many daughters of Zeus.

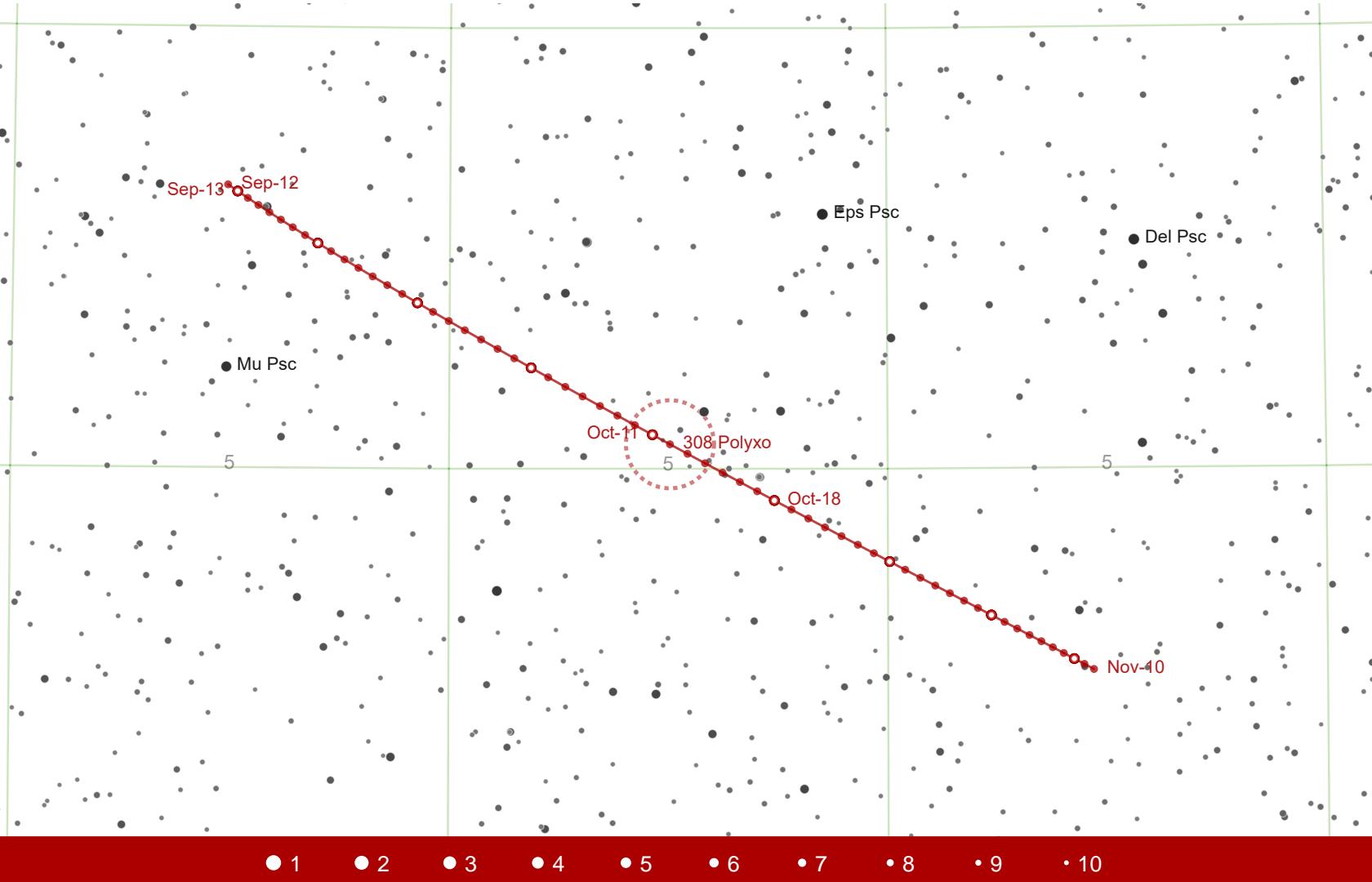
Date	RA	DEC	Magnitude	Distance (AU)
2025-May-02	16 59 29.09	-16 15 38.0	12.092	1.8398
2025-May-07	16 56 57.13	-16 22 32.3	11.983	1.8039
2025-May-12	16 53 52.58	-16 30 08.5	11.871	1.7736
2025-May-17	16 50 19.72	-16 38 28.6	11.755	1.7493
2025-May-22	16 46 23.75	-16 47 33.9	11.635	1.7313
2025-May-27	16 42 11.00	-16 57 25.9	11.514	1.7199
2025-Jun-01	16 37 49.00	-17 08 06.9	11.434	1.7152
2025-Jun-06	16 33 25.74	-17 19 38.2	11.503	1.7173
2025-Jun-11	16 29 08.92	-17 32 00.5	11.621	1.726
2025-Jun-16	16 25 05.65	-17 45 14.6	11.738	1.7413
2025-Jun-21	16 21 22.41	-17 59 22.2	11.852	1.7629
2025-Jun-26	16 18 05.13	-18 14 26.2	11.961	1.7906



287 Nephthys

Rotational Period: 7.605h
 Mean radius: 29.8075km
 Classification: S
 Albedo: 0.238
 BV Color Index: 0.873
 Discovered by C H F Peters in August 1889, Nephthys is a large stony asteroid. Nephthys was the ancient Egyptian goddess. As the sister of Isis, she played a significant role in funerary rites. She was also the goddess of beer.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-04	11 25 12.66	+07 47 25.9	11.758	1.4879
2025-Feb-09	11 22 59.19	+08 31 29.3	11.635	1.4533
2025-Feb-14	11 20 08.00	+09 19 32.6	11.509	1.4244
2025-Feb-19	11 16 43.55	+10 10 36.4	11.381	1.4018
2025-Feb-24	11 12 51.82	+11 03 28.5	11.252	1.3858
2025-Mar-01	11 08 40.55	+11 56 45.2	11.142	1.3767
2025-Mar-06	11 04 18.99	+12 48 56.3	11.144	1.3745
2025-Mar-11	10 59 56.98	+13 38 35.3	11.249	1.3792
2025-Mar-16	10 55 43.97	+14 24 28.6	11.368	1.3907
2025-Mar-21	10 51 48.67	+15 05 36.2	11.487	1.4086
2025-Mar-26	10 48 18.98	+15 41 12.2	11.603	1.4325
2025-Mar-31	10 45 21.75	+16 10 44.4	11.718	1.4621



308 Polyxo

Rotational Period: 12.031h

Mean radius: 64.289km

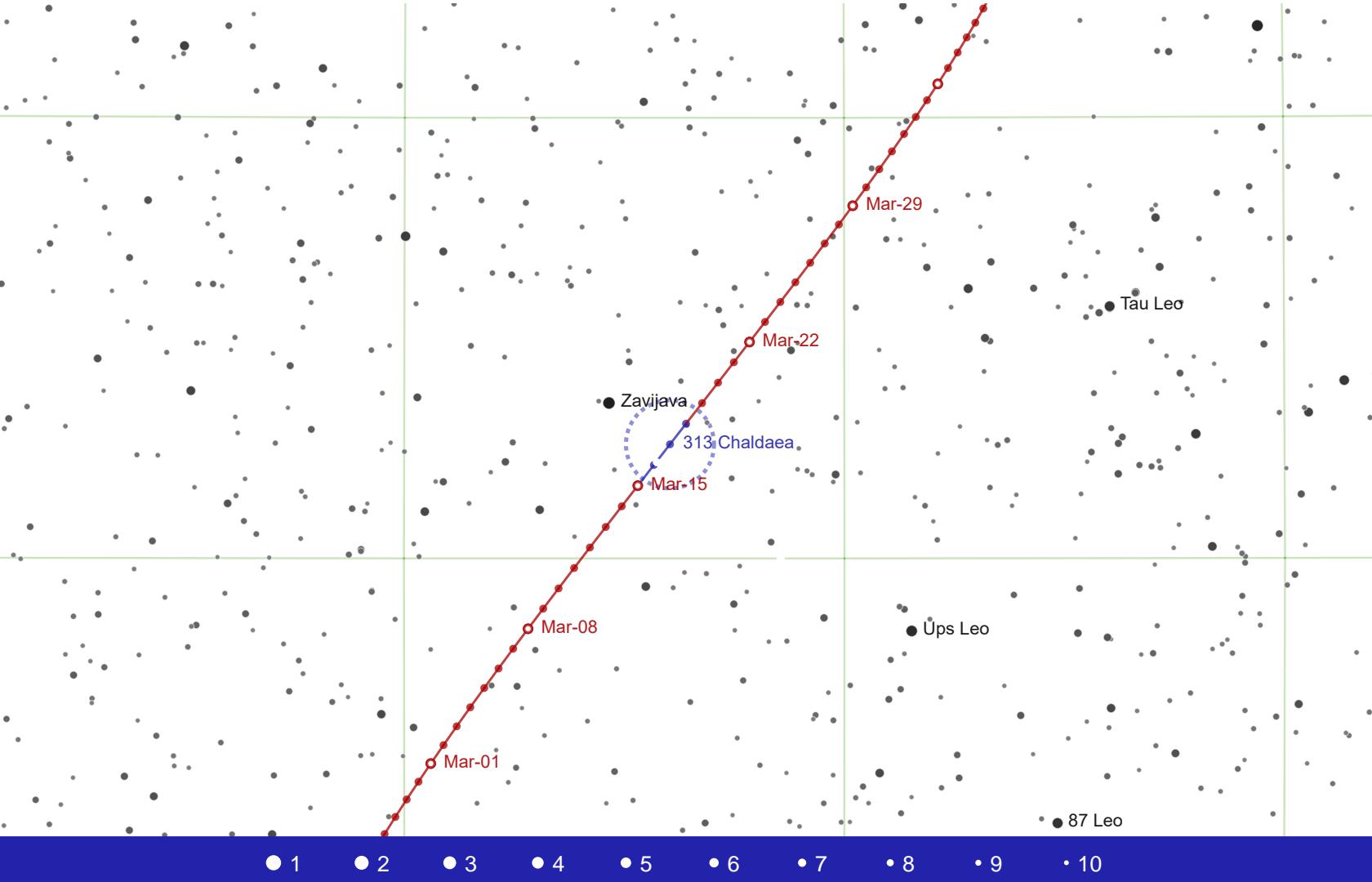
Classification: T

Albedo: 0.047

BV Color Index: 0.783

A rare T-type asteroid, Polyxo is named after an Oceanid from Greek mythology. Discovered in March 1891 by A Borrelly, Polyxo shares spectral similarities to the Tagish Lake meteorite that fell to Earth in January 18, 2000. Analysis of fragments of this meteorite show a primitive constitution, consisting of granules unmodified since the formation of the Solar System.

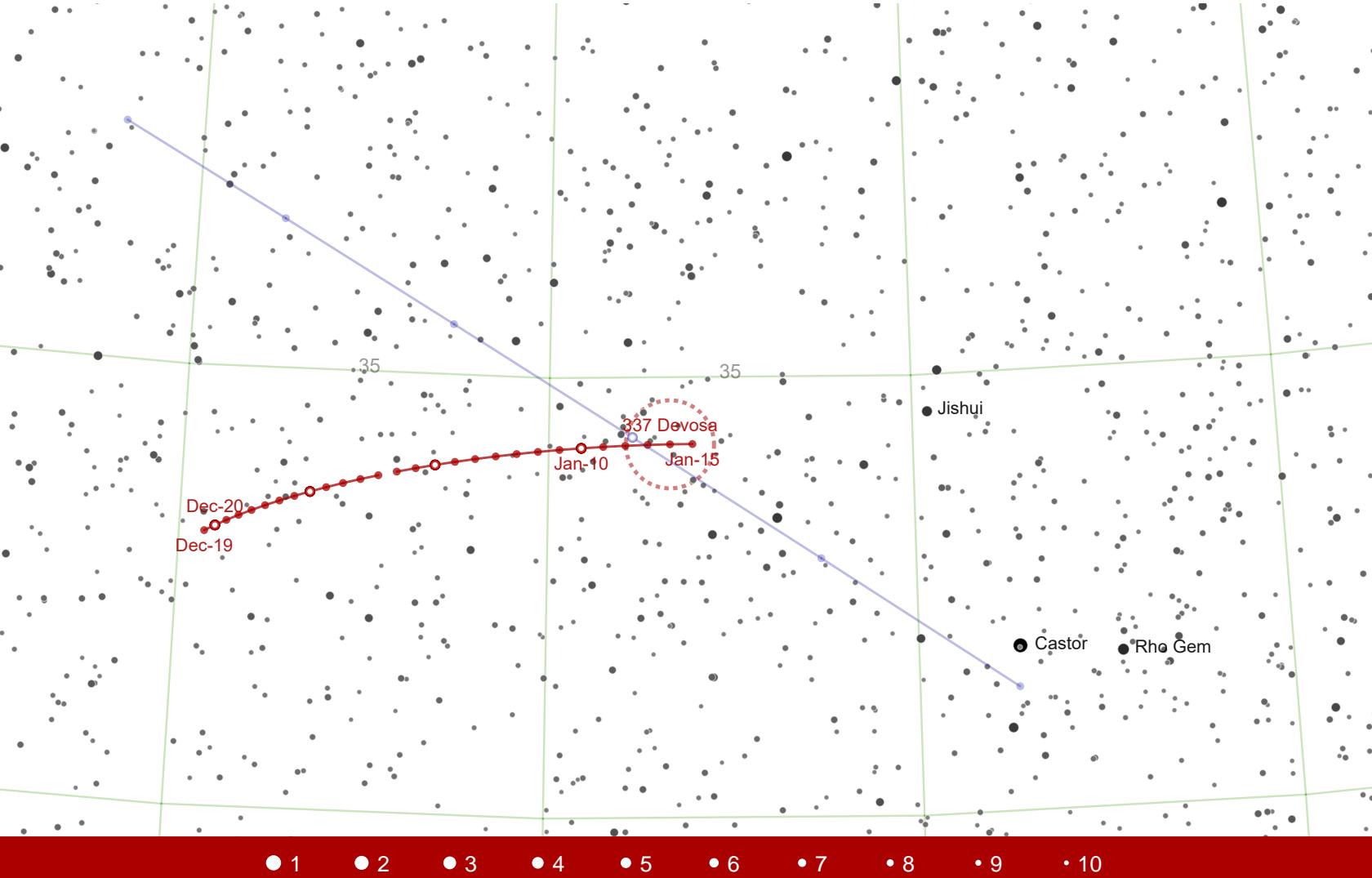
Date	RA	DEC	Magnitude	Distance (AU)
2025-Sep-12	01 30 11.19	+08 12 31.9	12.38	1.8354
2025-Sep-17	01 27 45.09	+07 48 49.8	12.28	1.8034
2025-Sep-22	01 24 49.28	+07 22 05.0	12.176	1.7771
2025-Sep-27	01 21 28.33	+06 52 49.0	12.068	1.7571
2025-Oct-02	01 17 48.00	+06 21 41.8	11.953	1.7436
2025-Oct-07	01 13 54.78	+05 49 28.1	11.824	1.7371
2025-Oct-12	01 09 55.46	+05 16 55.2	11.713	1.7375
2025-Oct-17	01 05 57.04	+04 44 52.5	11.857	1.7449
2025-Oct-22	01 02 06.83	+04 14 11.6	11.994	1.7595
2025-Oct-27	00 58 31.87	+03 45 41.9	12.118	1.781
2025-Nov-01	00 55 18.39	+03 20 05.9	12.235	1.8091
2025-Nov-06	00 52 31.37	+02 57 56.6	12.348	1.8434



313 Chaldaea

Rotational Period: 8.392h
 Mean radius: 35.5915km
 Classification: C
 Albedo: 0.044
 BV Color Index: 0.715
 Discovered by Johann Palisa in August 1891, this asteroid is named after the Chaldeans who first imagined the art of astrology, according to the ancients.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-17	12 03 51.34	-04 30 24.6	11.808	1.1046
2025-Feb-22	12 02 12.48	-03 40 52.8	11.677	1.08
2025-Feb-27	11 59 52.95	-02 44 08.6	11.543	1.0605
2025-Mar-04	11 56 59.41	-01 41 22.4	11.402	1.0467
2025-Mar-09	11 53 40.72	-00 34 11.4	11.251	1.0389
2025-Mar-14	11 50 06.81	+00 35 32.0	11.07	1.0373
2025-Mar-19	11 46 27.91	+01 45 48.8	11.001	1.0421
2025-Mar-24	11 42 54.43	+02 54 39.1	11.246	1.0531
2025-Mar-29	11 39 36.52	+04 00 08.1	11.438	1.0705
2025-Apr-03	11 36 43.63	+05 00 33.6	11.614	1.0938
2025-Apr-08	11 34 23.43	+05 54 36.2	11.781	1.1228
2025-Apr-13	11 32 41.11	+06 41 26.1	11.941	1.1571



337 Devosa

Rotational Period: 4.653h

Mean radius: 32.2745km

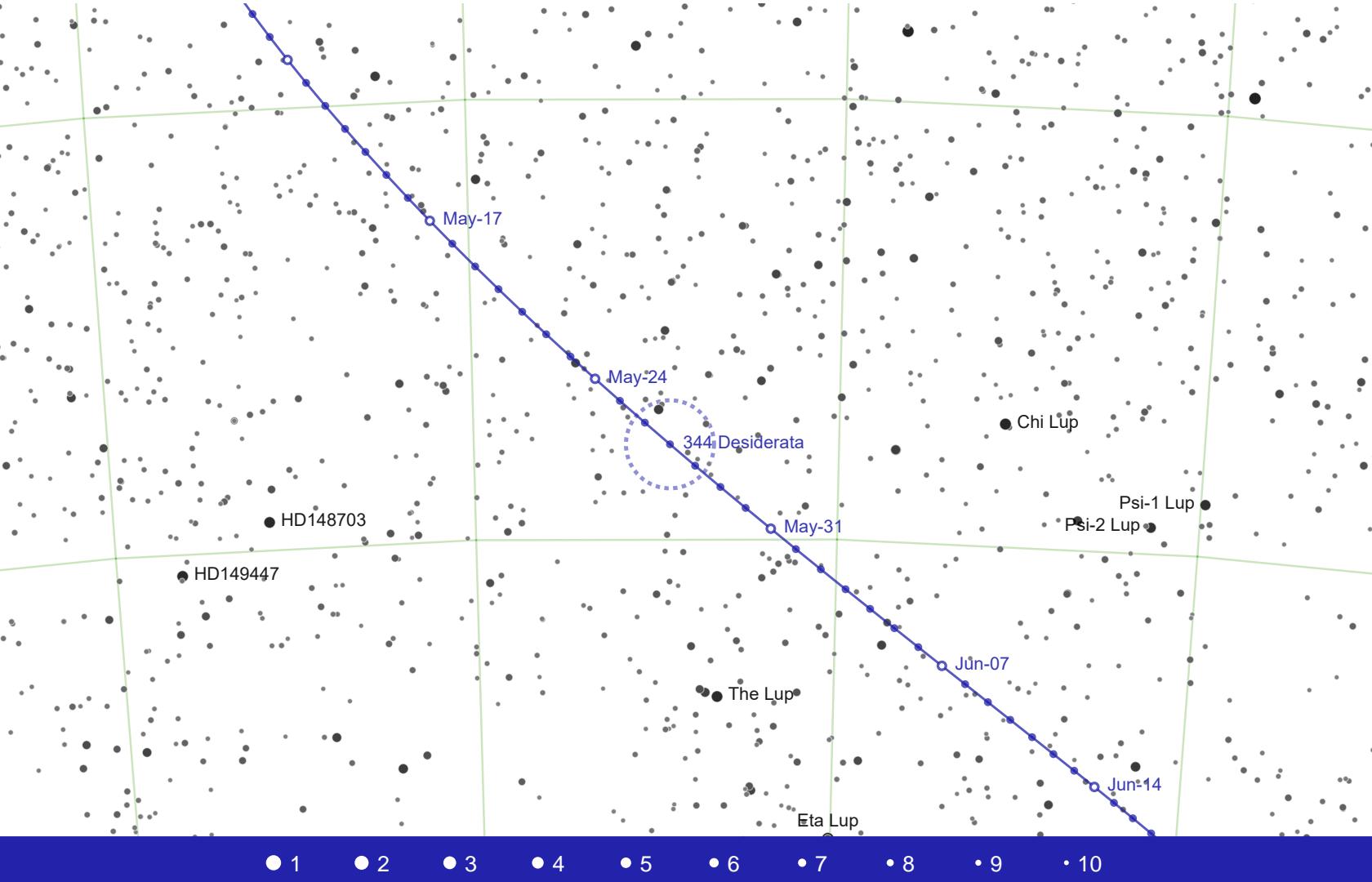
Classification: X

Albedo: 0.135

BV Color Index: 0.731

Discovered by Auguste Charlois in September 1892, this X-type asteroid appears to be composed on a mix of iron and silicate minerals.

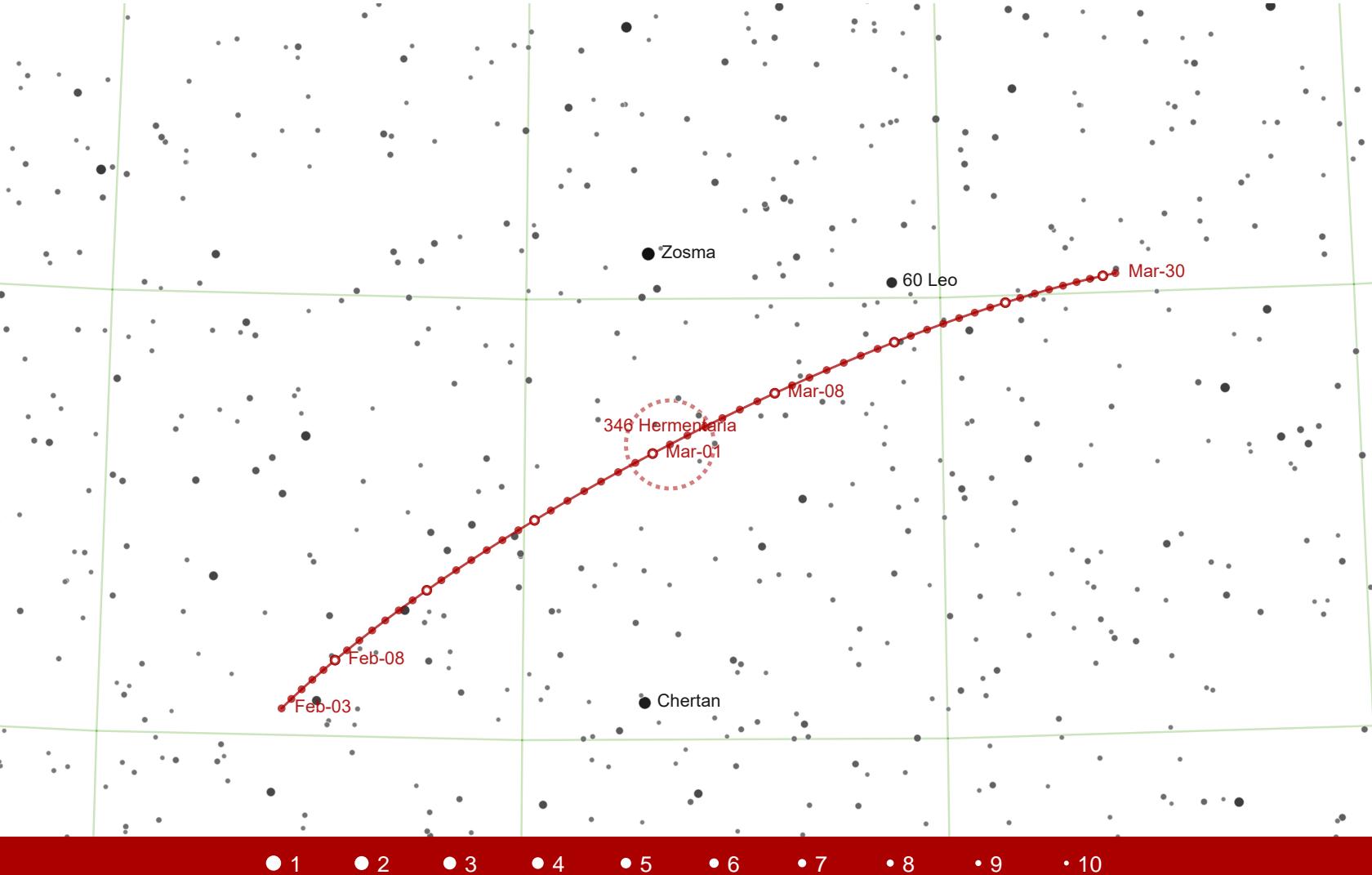
Date	RA	DEC	Magnitude	Distance (AU)
2025-Dec-19	08 18 36.67	+33 07 24.9	11.721	1.1727
2025-Dec-22	08 16 47.75	+33 19 09.3	11.649	1.1566
2025-Dec-25	08 14 37.16	+33 30 27.3	11.577	1.1424
2025-Dec-28	08 12 06.42	+33 41 02.8	11.507	1.13
2025-Dec-31	08 09 17.43	+33 50 39.7	11.439	1.1197
2026-Jan-03	08 06 12.41	+33 59 02.5	11.374	1.1114
2026-Jan-06	08 02 53.85	+34 05 56.7	11.316	1.1053
2026-Jan-09	07 59 24.55	+34 11 09.5	11.269	1.1013
2026-Jan-12	07 55 47.66	+34 14 29.4	11.239	1.0995
2026-Jan-15	07 52 06.63	+34 15 47.1	11.233	1.1



344 Desiderata

Rotational Period: 10.747h
 Mean radius: 62.0905km
 Classification: C
 Albedo: 0.067
 BV Color Index: 0.725
 Discovered hgy Auguste Charlois in November 1892, Desiderata is large carbonaceous asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-May-06	16 32 27.09	-28 24 05.7	10.456	0.971
2025-May-10	16 29 11.49	-29 28 33.4	10.318	0.9453
2025-May-14	16 25 18.71	-30 33 23.2	10.185	0.9232
2025-May-18	16 20 52.03	-31 37 46.2	10.064	0.9047
2025-May-22	16 15 56.23	-32 40 49.9	9.969	0.8899
2025-May-26	16 10 37.78	-33 41 41.0	9.919	0.8789
2025-May-30	16 05 05.04	-34 39 31.6	9.921	0.8718
2025-Jun-03	15 59 27.61	-35 33 43.1	9.964	0.8683
2025-Jun-07	15 53 55.33	-36 23 48.5	10.029	0.8685
2025-Jun-11	15 48 37.80	-37 09 32.9	10.107	0.8721
2025-Jun-15	15 43 43.95	-37 50 53.6	10.19	0.879



346 Hermentaria

Rotational Period: 28.523h

Mean radius: 43.2235km

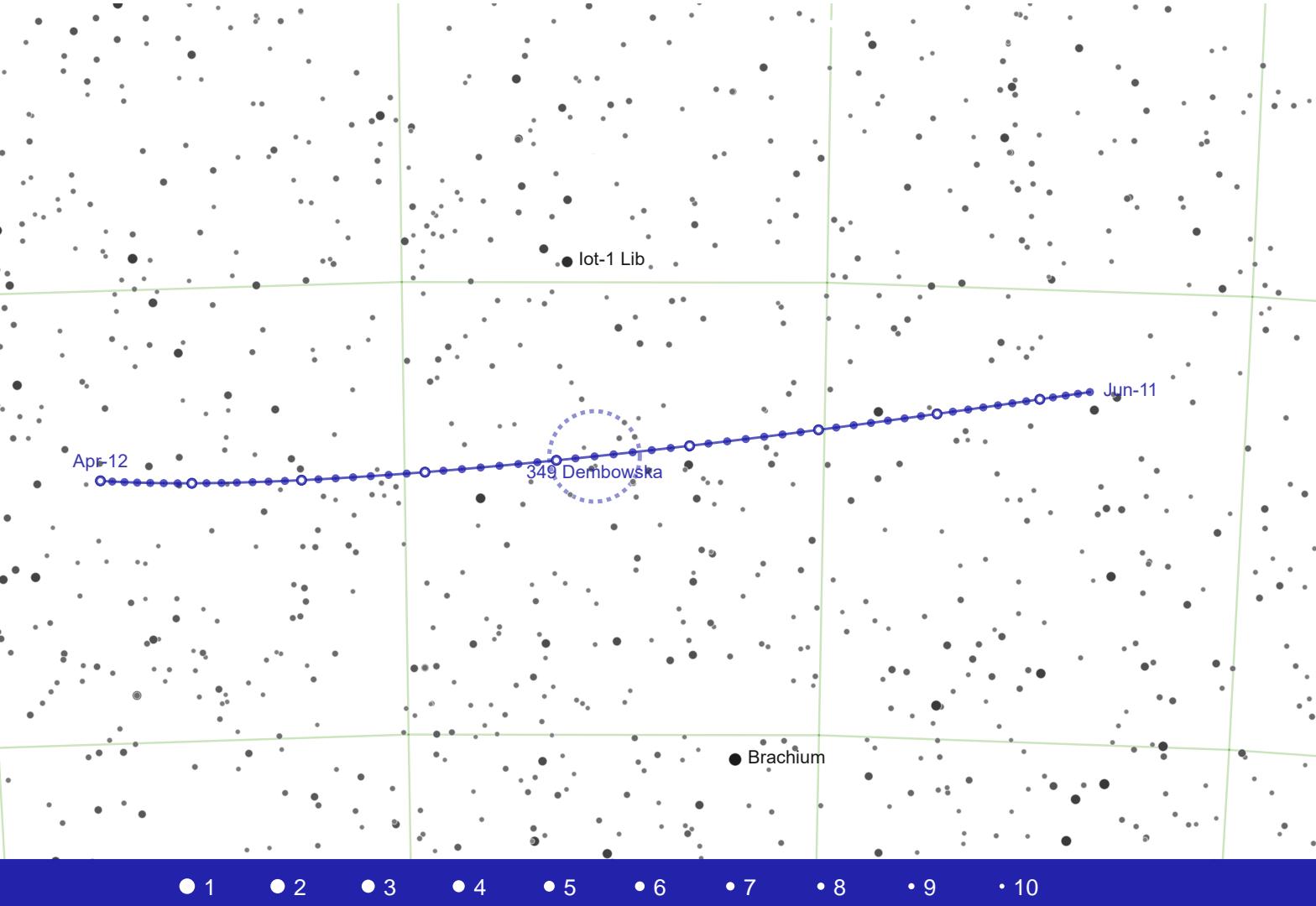
Classification: S

Albedo: 0.332

BV Color Index: 0.843

Discovered in Auguste Charlois in October 1892, Hermentaria is an S-type stony asteroid. Some features of its spectrum indicate it was partially melted at some point in its past.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-03	11 31 20.06	+15 18 55.3	12.063	2.1174
2025-Feb-08	11 28 51.81	+15 52 31.8	11.972	2.0854
2025-Feb-13	11 25 53.66	+16 27 12.4	11.881	2.0597
2025-Feb-18	11 22 29.42	+17 02 08.3	11.793	2.0406
2025-Feb-23	11 18 43.83	+17 36 27.3	11.717	2.0284
2025-Feb-28	11 14 42.70	+18 09 15.1	11.668	2.0235
2025-Mar-05	11 10 32.77	+18 39 38.2	11.674	2.0258
2025-Mar-10	11 06 21.26	+19 06 49.2	11.733	2.0355
2025-Mar-15	11 02 15.09	+19 30 11.7	11.819	2.0523
2025-Mar-20	10 58 20.69	+19 49 19.3	11.915	2.0758
2025-Mar-25	10 54 43.98	+20 03 54.2	12.014	2.106
2025-Mar-30	10 51 30.23	+20 13 46.8	12.113	2.1422



349 Dembowska

Rotational Period: 4.701h

Mean radius: 69.885km

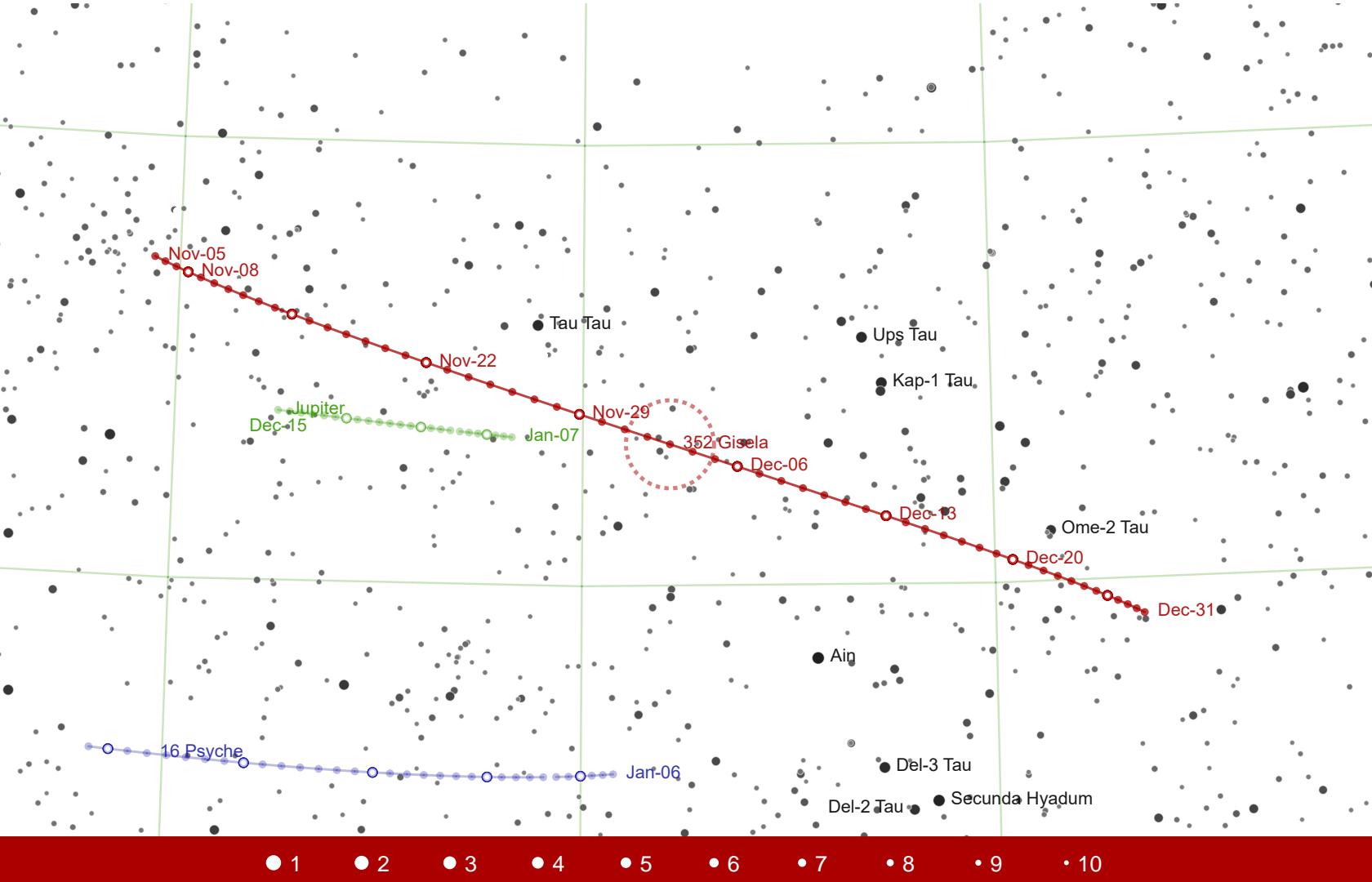
Classification: R

Albedo: 0.384

BV Color Index: 0.945

Having an unusually high albedo (amongst large asteroids, only 4 Vesta has a higher albedo), Dembowska was discovered by Auguste Charlois in December 1892. With the presence of olivine and pyroxene, this asteroid may be partially differentiated.

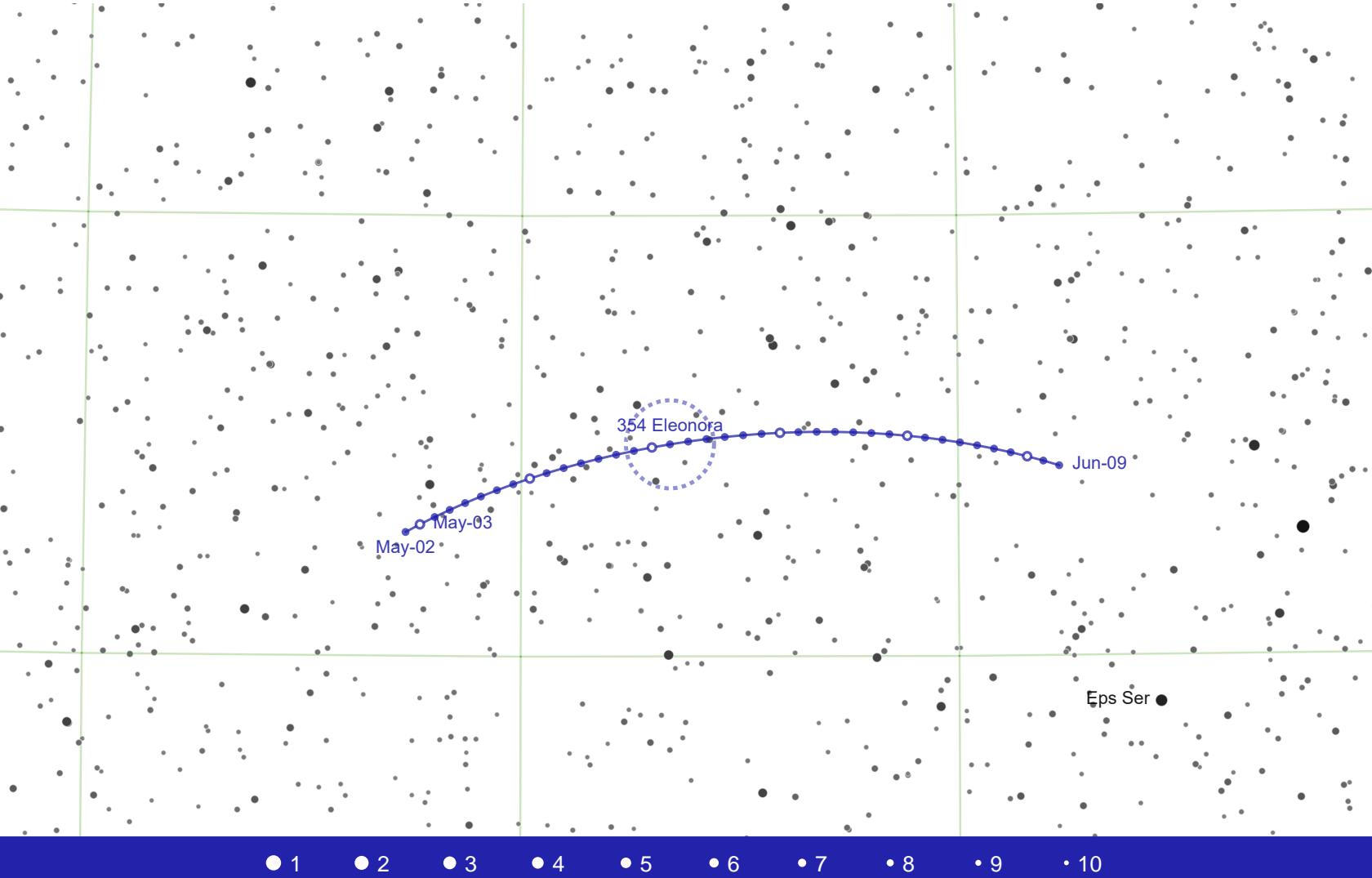
Date	RA	DEC	Magnitude	Distance (AU)
2025-Apr-12	15 34 30.38	-22 06 25.5	10.809	2.2687
2025-Apr-17	15 31 29.61	-22 09 28.6	10.723	2.2279
2025-Apr-22	15 28 00.33	-22 10 35.3	10.635	2.1932
2025-Apr-27	15 24 06.62	-22 09 44.5	10.546	2.165
2025-May-02	15 19 53.80	-22 07 00.1	10.455	2.1436
2025-May-07	15 15 28.17	-22 02 31.3	10.361	2.1292
2025-May-12	15 10 56.29	-21 56 30.8	10.295	2.1219
2025-May-17	15 06 24.75	-21 49 15.0	10.351	2.1218
2025-May-22	15 02 00.03	-21 41 04.2	10.434	2.1289
2025-May-27	14 57 48.49	-21 32 22.4	10.515	2.1429
2025-Jun-01	14 53 56.14	-21 23 36.9	10.594	2.1636
2025-Jun-06	14 50 28.09	-21 15 14.4	10.672	2.1907



352 Gisela

Rotational Period: 7.49h
 Mean radius: 13.372km
 Classification: S1
 Albedo: 0.195
 BV Color Index: 0.904
 A member of the Flora collisional family, this asteroid was discovered in January 1893 by Max Wolf.

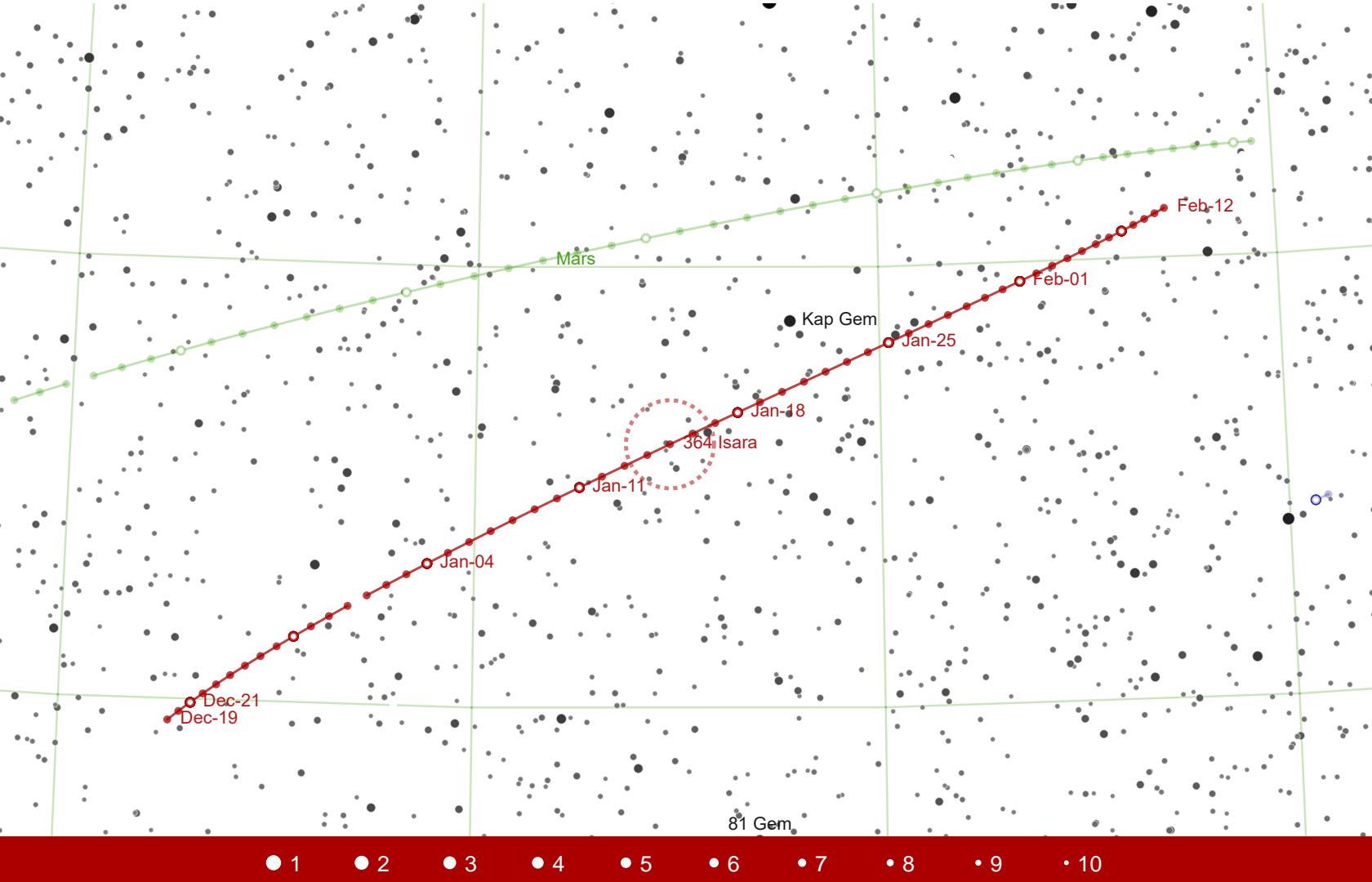
Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-05	05 01 15.28	+23 37 42.5	12.42	0.9902
2025-Nov-10	04 58 16.83	+23 20 51.9	12.283	0.9682
2025-Nov-15	04 54 23.66	+23 01 36.4	12.142	0.9511
2025-Nov-20	04 49 44.97	+22 40 06.9	11.995	0.9392
2025-Nov-25	04 44 33.42	+22 16 45.1	11.836	0.9331
2025-Nov-30	04 39 04.03	+21 52 03.9	11.641	0.9329
2025-Dec-05	04 33 32.60	+21 26 45.4	11.628	0.9388
2025-Dec-10	04 28 14.03	+21 01 38.3	11.87	0.9507
2025-Dec-15	04 23 22.01	+20 37 34.7	12.068	0.9687
2025-Dec-20	04 19 08.76	+20 15 26.5	12.25	0.9924
2025-Dec-25	04 15 44.00	+19 55 57.9	12.424	1.0217
2025-Dec-30	04 13 14.29	+19 39 41.4	12.591	1.056



354 Eleonora

Rotational Period: 4.277h
 Mean radius: 74.485km
 Classification: S1
 Albedo: 0.201
 BV Color Index: 0.949
 Eleonora was discovered by Auguste Charlois in January 1893. It is a stony S-type asteroid whose spectrum shows a strong presence of olivine, an igneous rock, indicating partial melting.

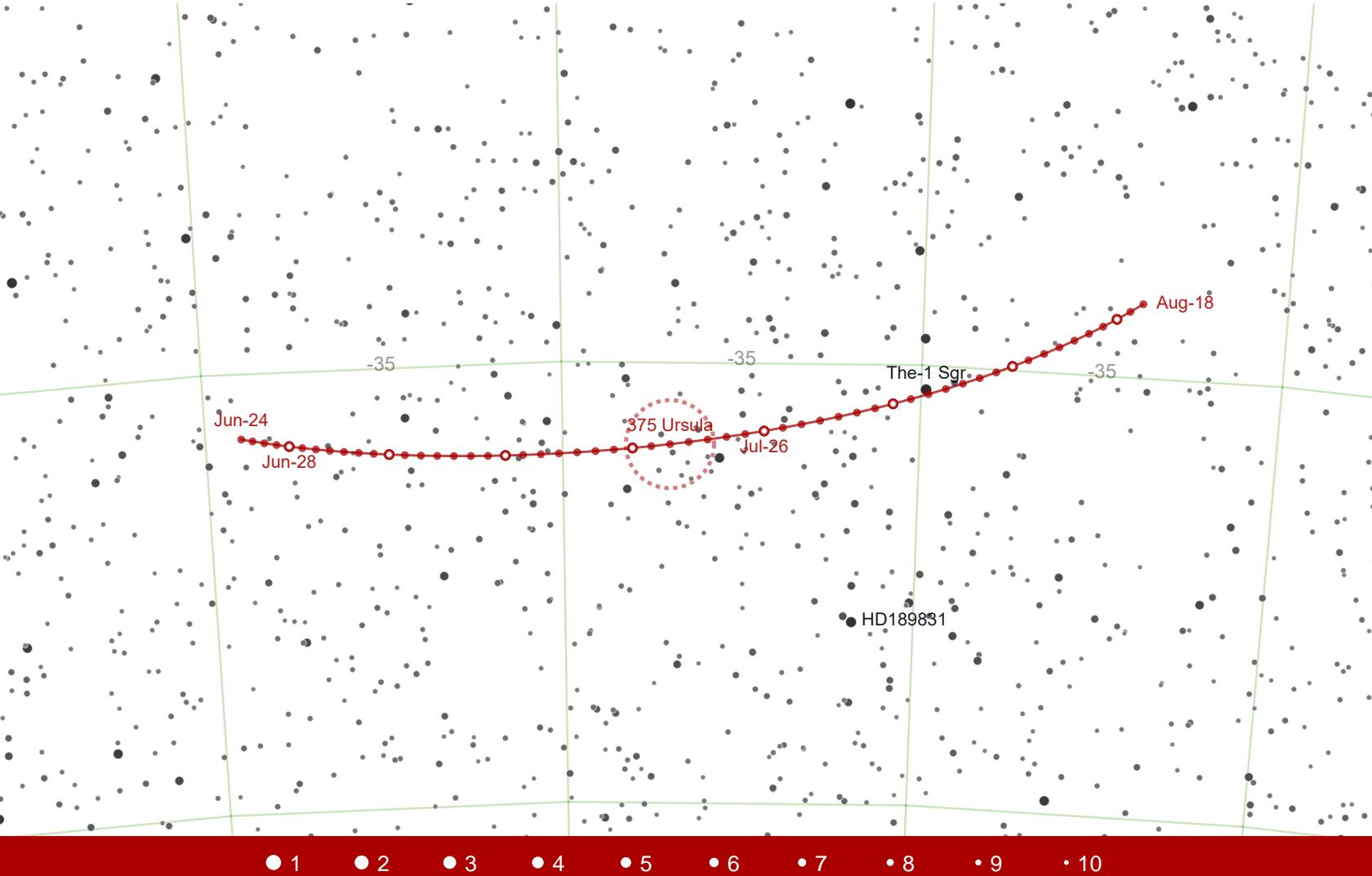
Date	RA	DEC	Magnitude	Distance (AU)
2025-May-02	16 25 16.61	+06 24 28.3	10.226	1.857
2025-May-06	16 22 33.61	+06 44 23.4	10.195	1.8452
2025-May-10	16 19 36.44	+07 01 16.0	10.171	1.8371
2025-May-14	16 16 28.09	+07 14 48.2	10.155	1.8327
2025-May-18	16 13 11.73	+07 24 44.6	10.15	1.8321
2025-May-22	16 09 50.69	+07 30 52.9	10.156	1.8353
2025-May-26	16 06 28.48	+07 33 04.0	10.174	1.8424
2025-May-30	16 03 08.77	+07 31 12.8	10.201	1.8534
2025-Jun-03	15 59 55.13	+07 25 20.1	10.238	1.8681
2025-Jun-07	15 56 50.80	+07 15 32.3	10.282	1.8866



364 Isara

Rotational Period: 9.156h
 Mean radius: 12.9505km
 Classification: S
 Albedo: 0.300
 BV Color Index: 0.912
 Another member of the Flora collisional family, this stony asteroid was discovered by Auguste Charlois in March 1893. It is named after the Isère river which flows through Grenoble.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-19	08 14 40.43	+19 46 10.7	12.449	1.076
2024-Dec-24	08 11 42.70	+20 17 55.2	12.318	1.0537
2024-Dec-29	08 07 52.23	+20 52 49.5	12.183	1.0365
2025-Jan-03	08 03 17.03	+21 29 53.6	12.043	1.025
2025-Jan-08	07 58 08.33	+22 07 55.1	11.89	1.0195
2025-Jan-13	07 52 39.47	+22 45 37.5	11.712	1.0203
2025-Jan-18	07 47 04.52	+23 21 50.6	11.749	1.0275
2025-Jan-23	07 41 37.91	+23 55 34.6	11.967	1.0411
2025-Jan-28	07 36 33.85	+24 26 03.1	12.157	1.061
2025-Feb-02	07 32 05.34	+24 52 44.5	12.334	1.0868
2025-Feb-07	07 28 22.93	+25 15 23.5	12.504	1.1183
2025-Feb-12	07 25 33.66	+25 33 59.2	12.667	1.155



375 Ursula

Rotational Period: 16.899h

Mean radius: 108.km

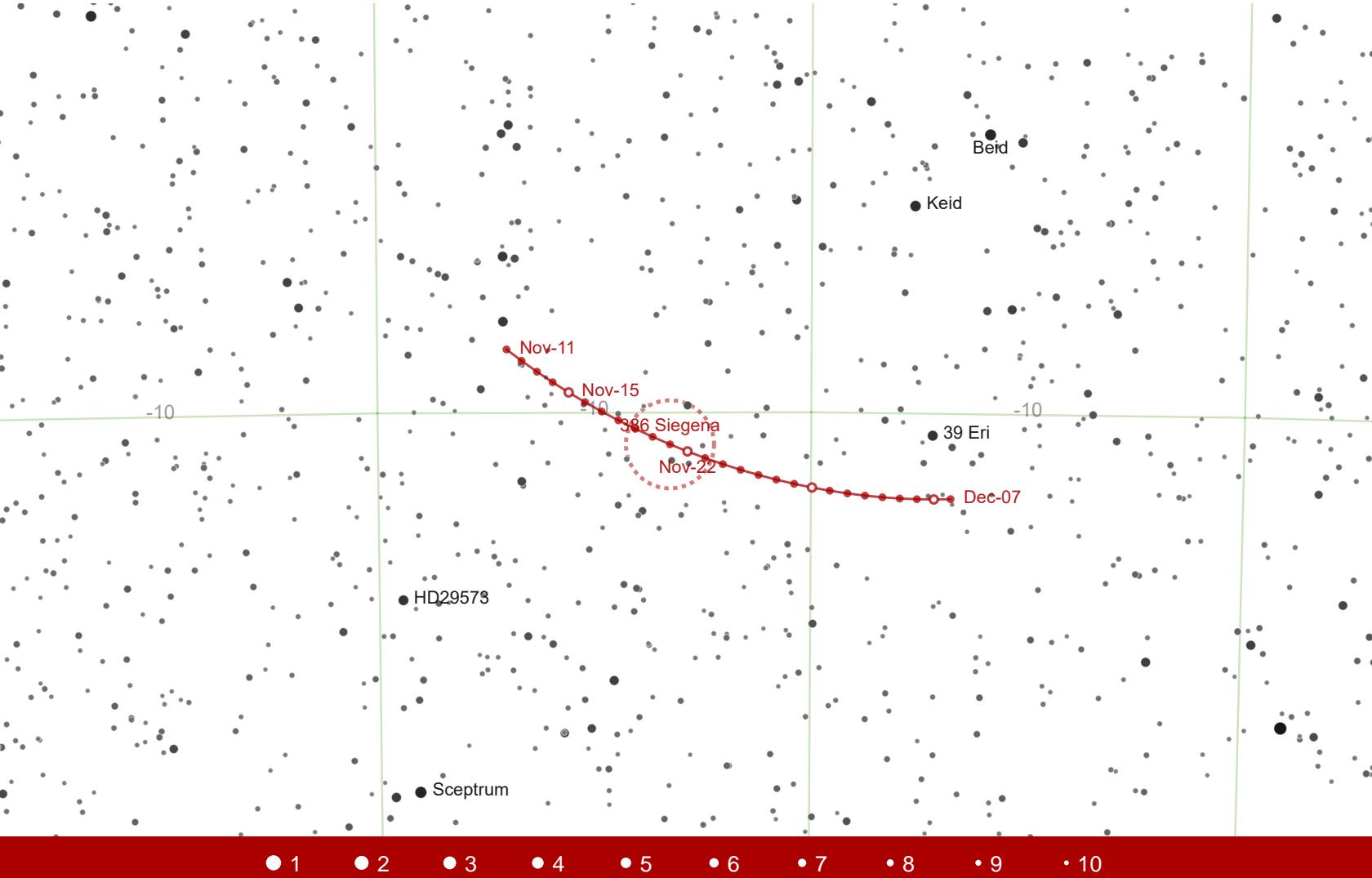
Classification: Xc

Albedo: 0.037

BV Color Index: 0.683

This very large asteroid lurks in the outer asteroid belt and is the parent body of the Ursula collisional family. It is another discovery of Auguste Charlois (in September 1893).

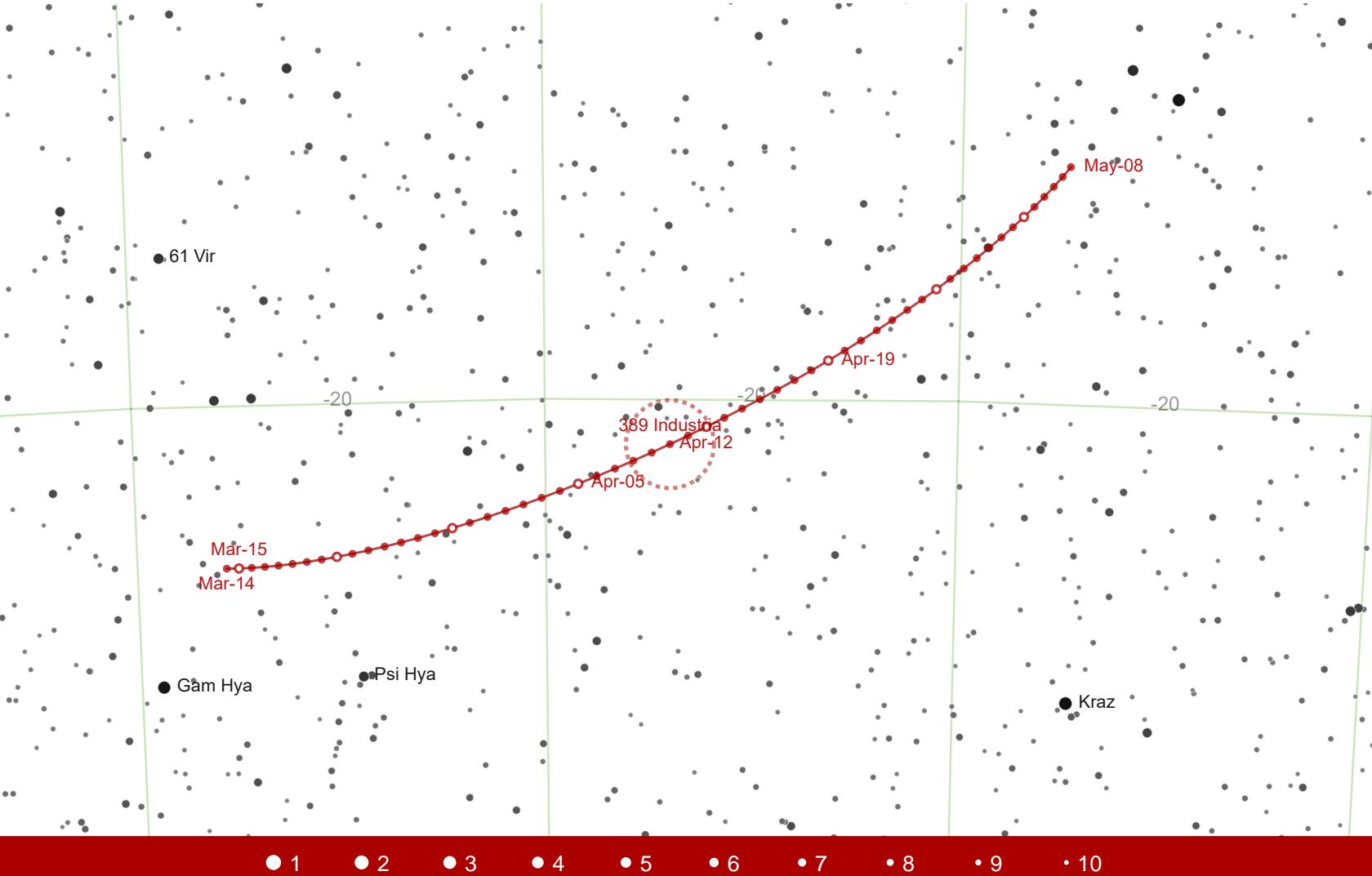
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-24	20 37 58.75	-35 44 46.6	11.804	1.9365
2025-Jun-29	20 34 35.59	-35 52 57.0	11.718	1.9041
2025-Jul-04	20 30 36.41	-35 59 08.8	11.636	1.8775
2025-Jul-09	20 26 06.89	-36 02 40.5	11.56	1.8569
2025-Jul-14	20 21 13.83	-36 02 55.9	11.498	1.8425
2025-Jul-19	20 16 04.92	-35 59 24.9	11.461	1.8345
2025-Jul-24	20 10 48.90	-35 51 45.3	11.458	1.8332
2025-Jul-29	20 05 35.35	-35 39 44.4	11.491	1.8385
2025-Aug-03	20 00 33.76	-35 23 22.3	11.548	1.8503
2025-Aug-08	19 55 52.64	-35 02 51.5	11.619	1.8686
2025-Aug-13	19 51 39.10	-34 38 33.9	11.697	1.8929
2025-Aug-18	19 47 58.94	-34 10 56.9	11.779	1.923



386 Siegena

Rotational Period: 9.763h
 Mean radius: 82.505km
 Classification: C
 Albedo: 0.0692
 BV Color Index: 0.723
 Discovered in March 1894 by Max Wolf, 386 Siegena is a very large C-type asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Nov-11	04 34 02.41	-09 17 10.9	11.487	1.5793
2025-Nov-14	04 31 55.28	-09 39 41.0	11.468	1.5752
2025-Nov-17	04 29 40.31	-09 59 40.8	11.456	1.5731
2025-Nov-20	04 27 19.18	-10 16 58.7	11.45	1.5731
2025-Nov-23	04 24 53.70	-10 31 24.9	11.451	1.5752
2025-Nov-26	04 22 25.76	-10 42 52.2	11.46	1.5794
2025-Nov-29	04 19 57.27	-10 51 15.5	11.476	1.5857
2025-Dec-02	04 17 30.08	-10 56 32.7	11.499	1.594
2025-Dec-05	04 15 05.97	-10 58 43.7	11.528	1.6044



389 Industria

Rotational Period: 8.4973h

Mean radius: 37.189km

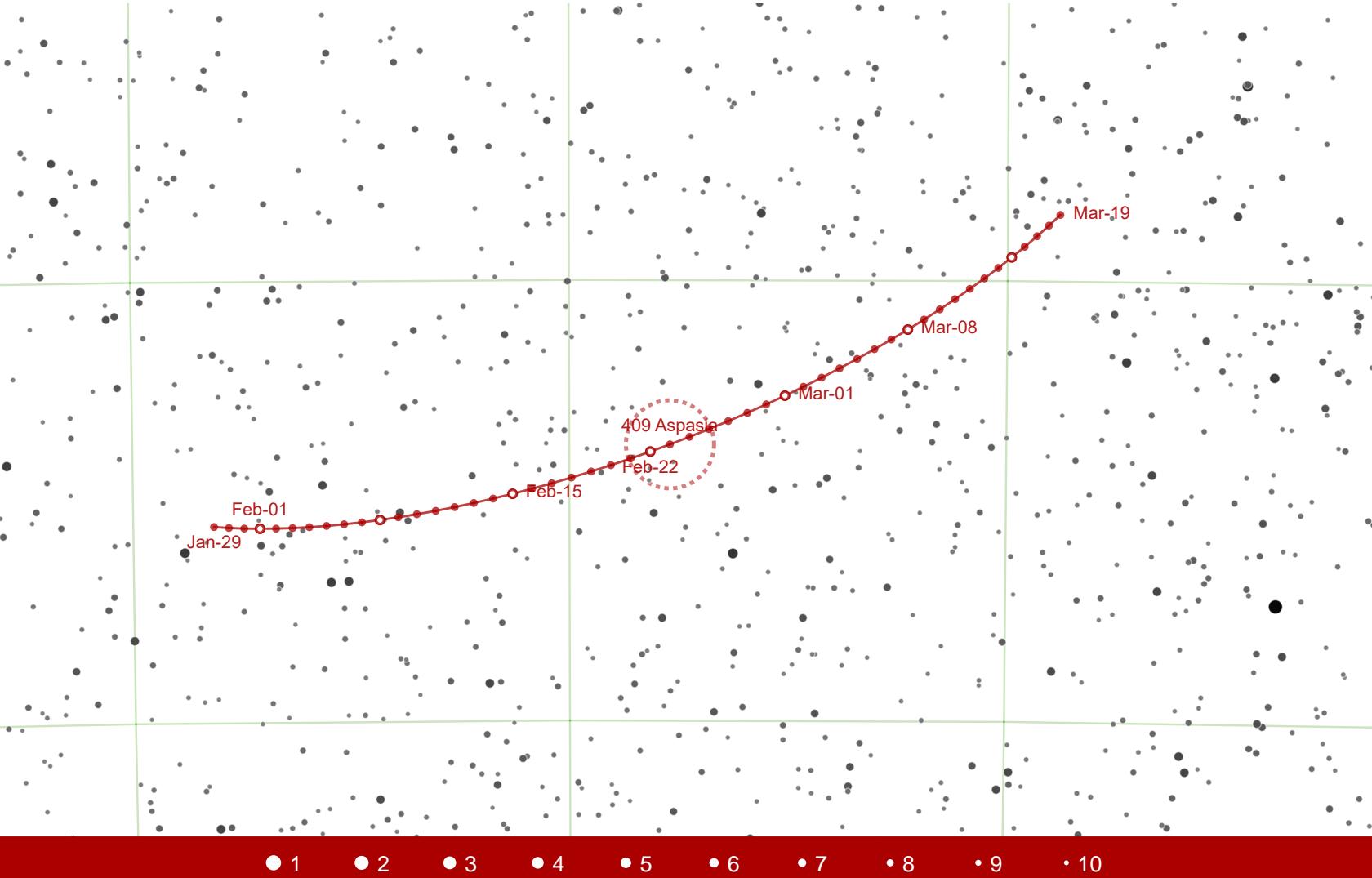
Classification: S

Albedo: 0.225

BV Color Index: 0.855

Another discovery by Auguste Charlois on the Nice observatory, Industria is a stony asteroid from the central asteroid belt. It is not part of any collisional family.

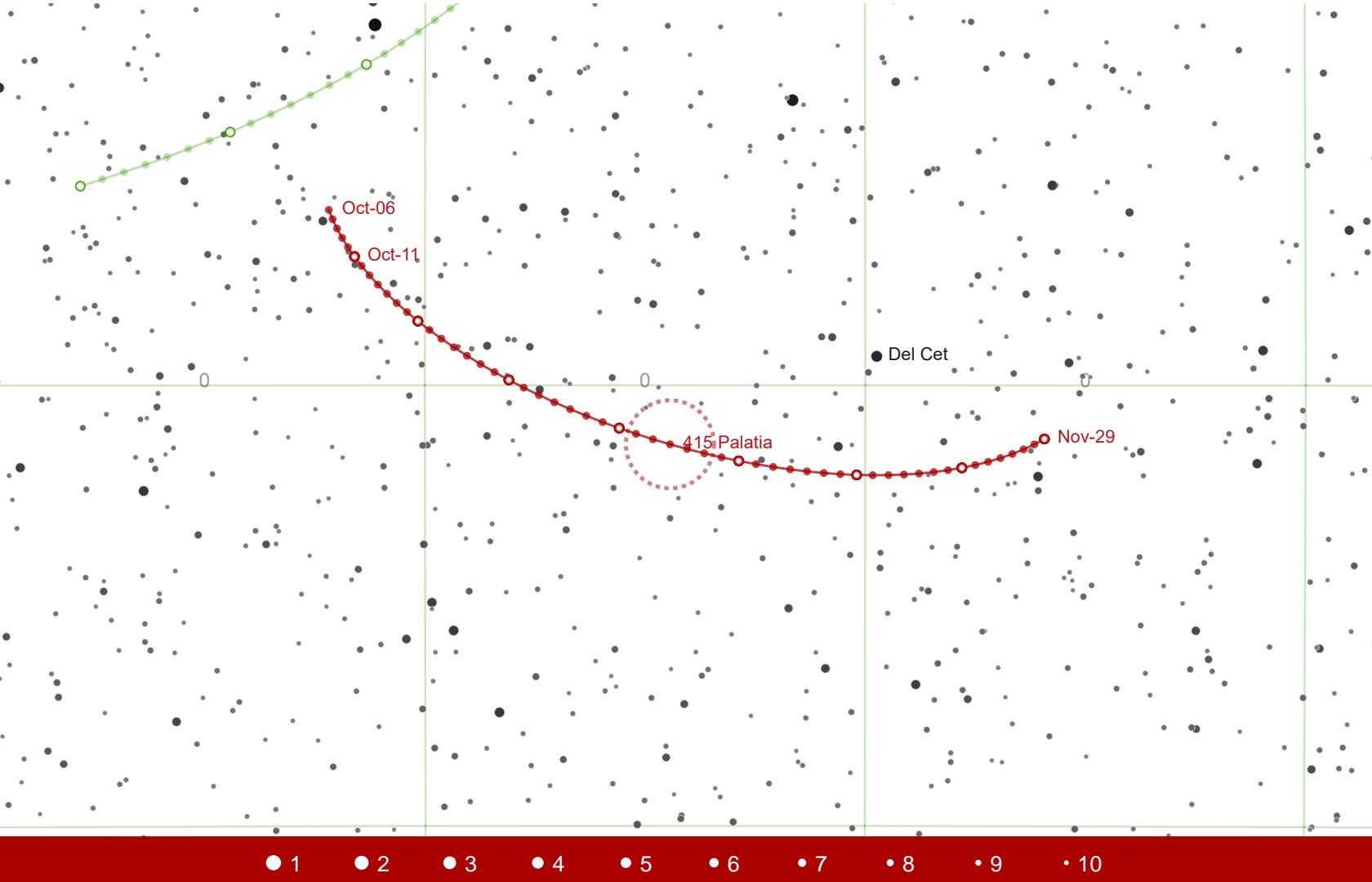
Date	RA	DEC	Magnitude	Distance (AU)
2025-Mar-14	13 15 37.64	-21 51 01.1	11.663	1.5511
2025-Mar-19	13 12 24.62	-21 49 12.5	11.553	1.5198
2025-Mar-24	13 08 41.13	-21 41 16.4	11.445	1.4941
2025-Mar-29	13 04 33.96	-21 27 15.2	11.343	1.4742
2025-Apr-03	13 00 11.60	-21 07 27.8	11.255	1.4607
2025-Apr-08	12 55 43.54	-20 42 31.1	11.201	1.4536
2025-Apr-13	12 51 19.16	-20 13 14.0	11.201	1.4529
2025-Apr-18	12 47 07.32	-19 40 34.4	11.256	1.4587
2025-Apr-23	12 43 16.15	-19 05 37.2	11.344	1.4708
2025-Apr-28	12 39 52.90	-18 29 32.6	11.445	1.4891
2025-May-03	12 37 03.73	-17 53 33.1	11.552	1.5132
2025-May-08	12 34 52.95	-17 18 45.2	11.662	1.5427



409 Aspasia

Rotational Period: 9.022h
 Mean radius: 85.506km
 Classification: Xc
 Albedo: 0.054
 BV Color Index: 0.719
 Aspasia is another discovery of the prolific Auguste Charlois, in December 1895. It is intermediate between X and C spectral types.

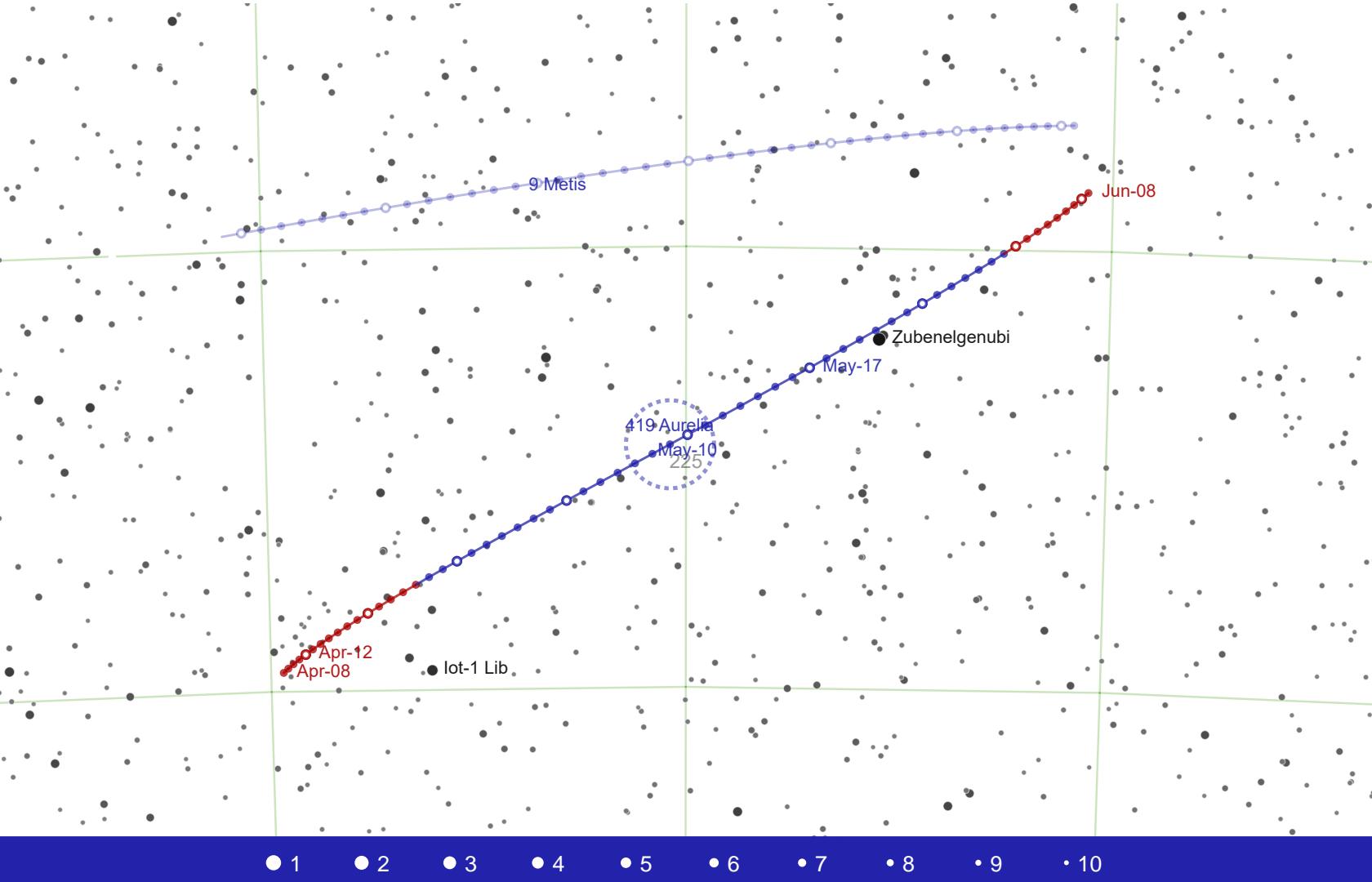
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jan-29	10 16 17.16	-07 46 35.5	11.483	1.6857
2025-Feb-02	10 13 26.58	-07 48 05.9	11.406	1.6588
2025-Feb-06	10 10 19.47	-07 45 35.5	11.333	1.6358
2025-Feb-10	10 06 59.19	-07 39 05.7	11.266	1.6167
2025-Feb-14	10 03 29.41	-07 28 42.0	11.209	1.6017
2025-Feb-18	09 59 54.07	-07 14 34.3	11.167	1.5908
2025-Feb-22	09 56 17.40	-06 56 57.1	11.146	1.5843
2025-Feb-26	09 52 43.81	-06 36 10.8	11.148	1.582
2025-Mar-02	09 49 17.81	-06 12 41.0	11.172	1.584
2025-Mar-06	09 46 03.74	-05 46 58.5	11.212	1.5903
2025-Mar-10	09 43 05.43	-05 19 36.4	11.263	1.6006
2025-Mar-14	09 40 26.04	-04 51 07.1	11.321	1.6148



415 Palatia

Rotational Period: 20.73h
 Mean radius: 41.78km
 Classification: DP
 Albedo: 0.063
 BV Color Index: 0.714
 Discovered by Max Wolf in February 1896, this asteroid appears to have high levels of the enstatite mineral.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-06	03 04 22.06	+01 59 24.2	12.175	1.1389
2025-Oct-11	03 03 11.80	+01 27 36.5	12.037	1.1066
2025-Oct-16	03 01 16.66	+00 56 01.9	11.903	1.079
2025-Oct-21	02 58 40.74	+00 25 51.2	11.778	1.0566
2025-Oct-26	02 55 30.77	-00 01 37.2	11.672	1.0396
2025-Oct-31	02 51 55.61	-00 25 05.8	11.602	1.0282
2025-Nov-05	02 48 05.53	-00 43 25.1	11.583	1.0225
2025-Nov-10	02 44 11.24	-00 55 39.0	11.617	1.0224
2025-Nov-15	02 40 23.59	-01 01 02.9	11.688	1.0279
2025-Nov-20	02 36 53.64	-00 59 04.8	11.78	1.0389
2025-Nov-25	02 33 51.67	-00 49 31.7	11.883	1.0551



419 Aurelia

Rotational Period: 16.784h

Mean radius: 74.3505km

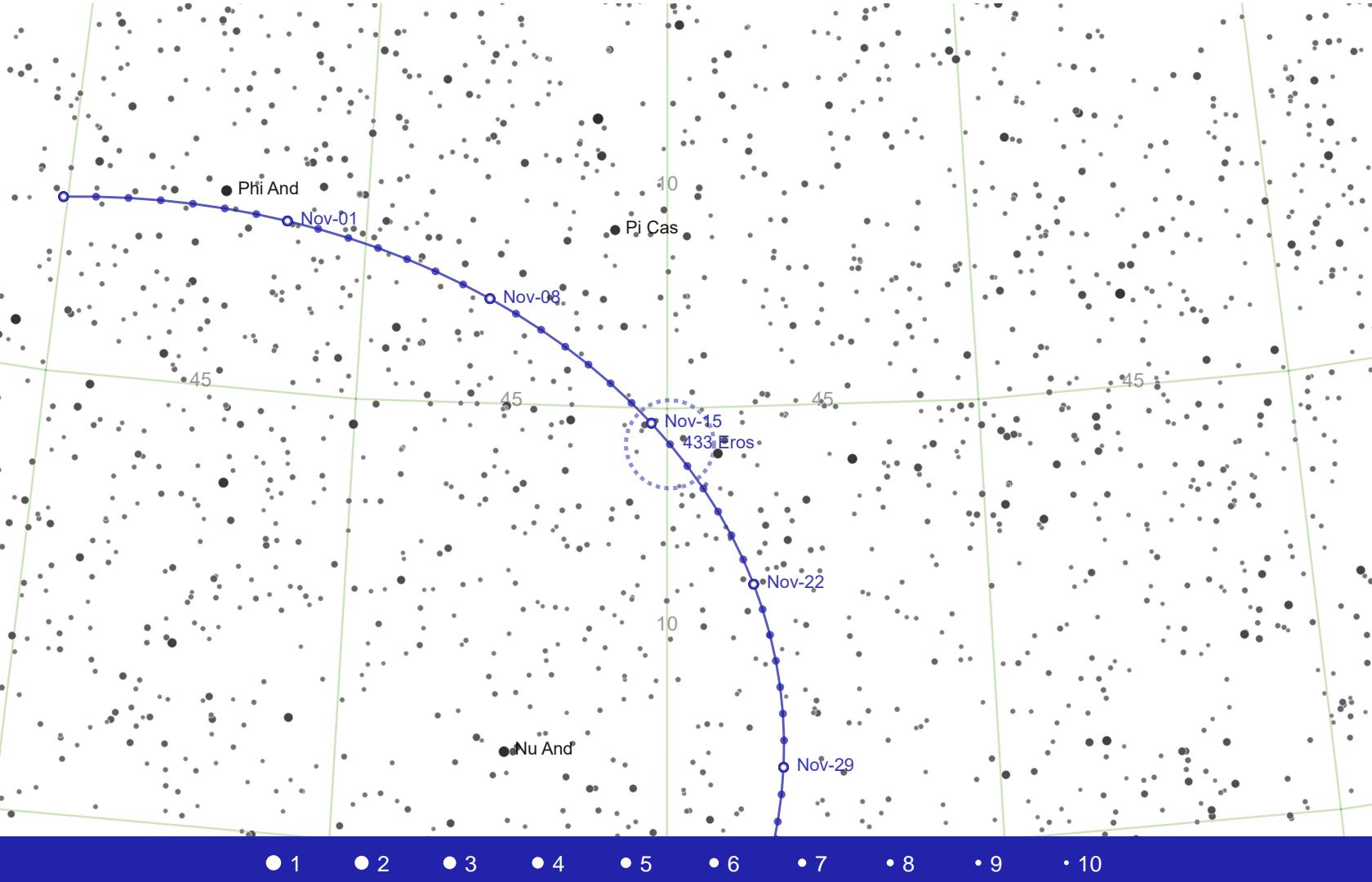
Classification: F

Albedo: 0.034

BV Color Index: 0.641

This less common F-type carbonaceous asteroid was discovered by Max Wolf in September 1896. F-types are deficient in spectral absorption features indicative of hydrated minerals.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Apr-08	15 19 23.68	-19 47 11.3	11.522	1.2299
2025-Apr-13	15 17 57.81	-19 31 44.2	11.361	1.1879
2025-Apr-18	15 15 47.66	-19 12 19.2	11.195	1.1508
2025-Apr-23	15 12 57.13	-18 49 06.0	11.022	1.1189
2025-Apr-28	15 09 32.27	-18 22 25.6	10.839	1.0925
2025-May-03	15 05 41.71	-17 52 53.8	10.635	1.072
2025-May-08	15 01 35.81	-17 21 18.7	10.351	1.0573
2025-May-13	14 57 25.43	-16 48 35.7	10.53	1.0486
2025-May-18	14 53 21.43	-16 15 45.7	10.68	1.0457
2025-May-23	14 49 34.35	-15 43 53.3	10.809	1.0485
2025-May-28	14 46 14.20	-15 14 03.9	10.929	1.0567
2025-Jun-02	14 43 29.93	-14 47 18.1	11.046	1.0702



433 Eros

Rotational Period: 5.27h

Mean radius: 8.42km

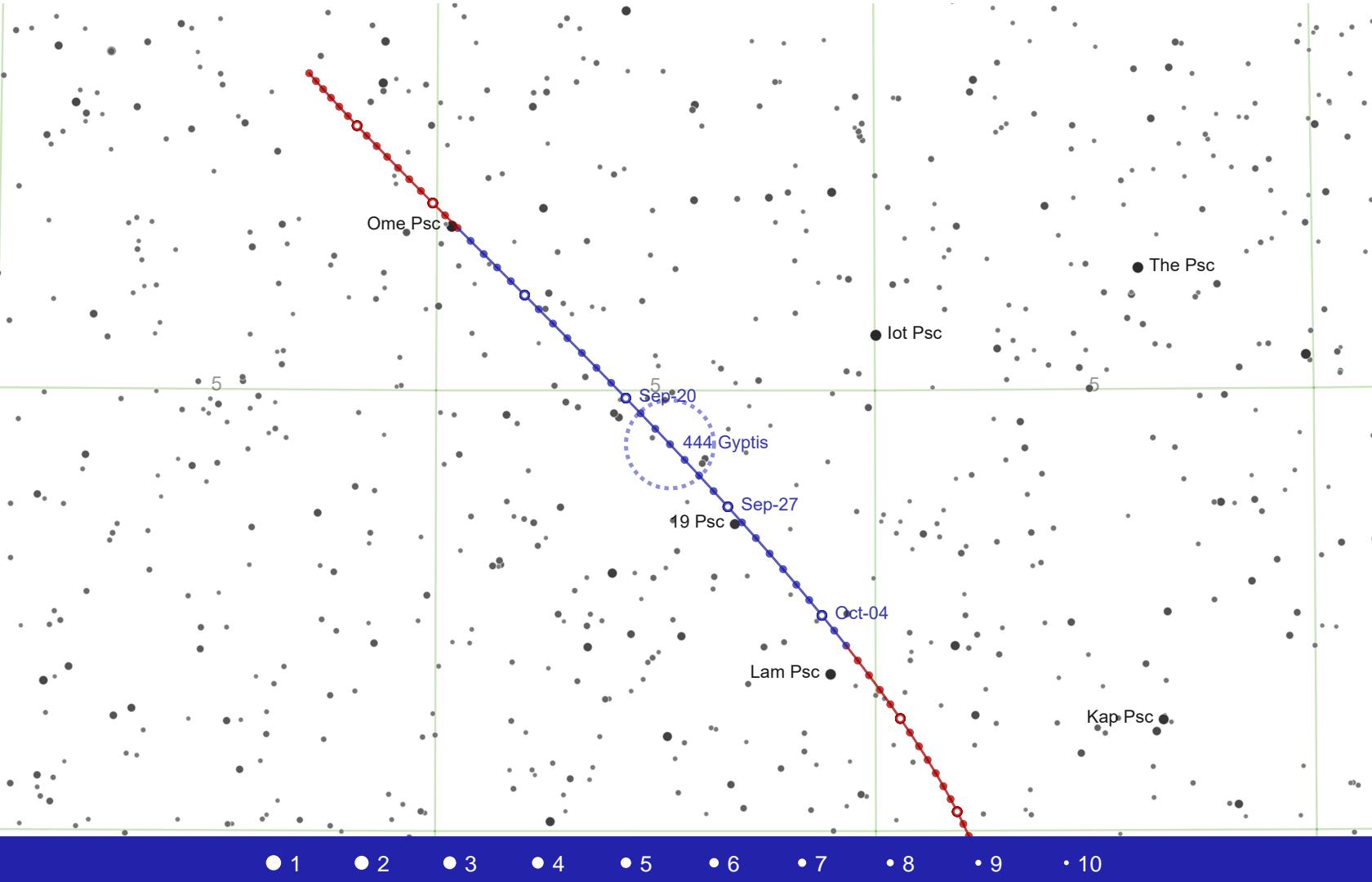
Classification: S

Albedo: 0.250

BV Color Index: 0.921

After only 1034 Ganymed, Eros is the second largest near-Earth asteroid. It was the first asteroid to be studied by an orbiting probe (NEAR Shoemaker). It was discovered by C G Witt in August 1898. It was the first asteroid to be given a male name, in this case the Greek god of love.

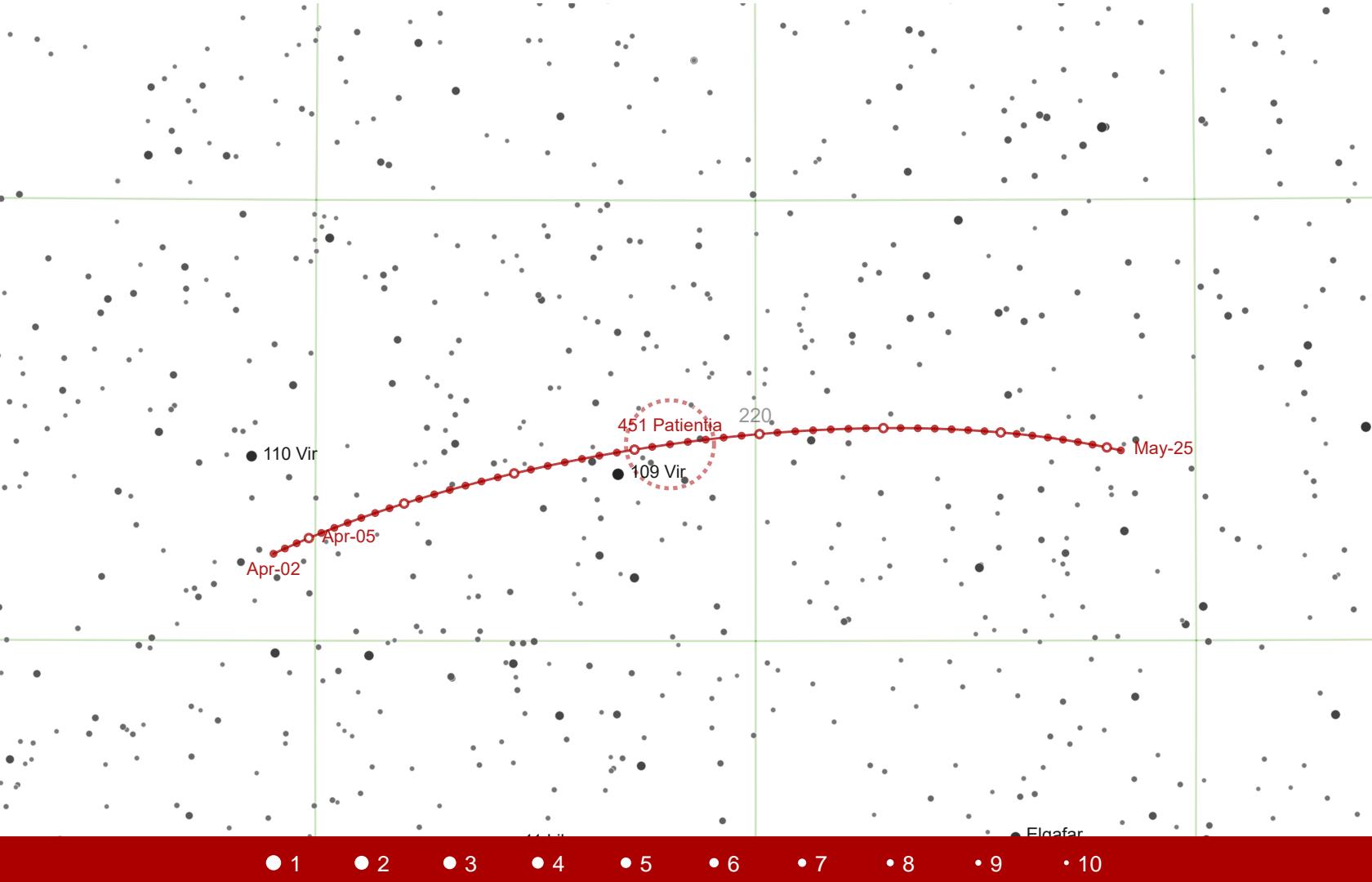
Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-25	01 20 16.26	+46 58 25.6	10.156	0.4505
2025-Oct-29	01 11 39.48	+47 03 27.6	10.083	0.4381
2025-Nov-02	01 03 12.57	+46 53 43.5	10.026	0.4275
2025-Nov-06	00 55 17.43	+46 29 44.9	9.984	0.4188
2025-Nov-10	00 48 13.52	+45 52 36.3	9.956	0.4117
2025-Nov-14	00 42 17.48	+45 03 51.4	9.942	0.4063
2025-Nov-18	00 37 42.54	+44 05 32.9	9.939	0.4023
2025-Nov-22	00 34 37.47	+43 00 01.2	9.947	0.3996
2025-Nov-26	00 33 06.38	+41 49 37.9	9.962	0.3981
2025-Nov-30	00 33 09.35	+40 36 32.6	9.984	0.3977
2025-Dec-04	00 34 43.27	+39 22 31.5	10.011	0.3981



444 Gyptis

Rotational Period: 6.214h
 Mean radius: 79.6655km
 Classification: C
 Albedo: 0.051
 BV Color Index: 0.676
 This main-belt asteroid was discovered by J Coggia in March 1899. Its spectrum indicates the presence of hydrated minerals. An occultation in 2007 suggests a cross-section of 179 x 150 km.

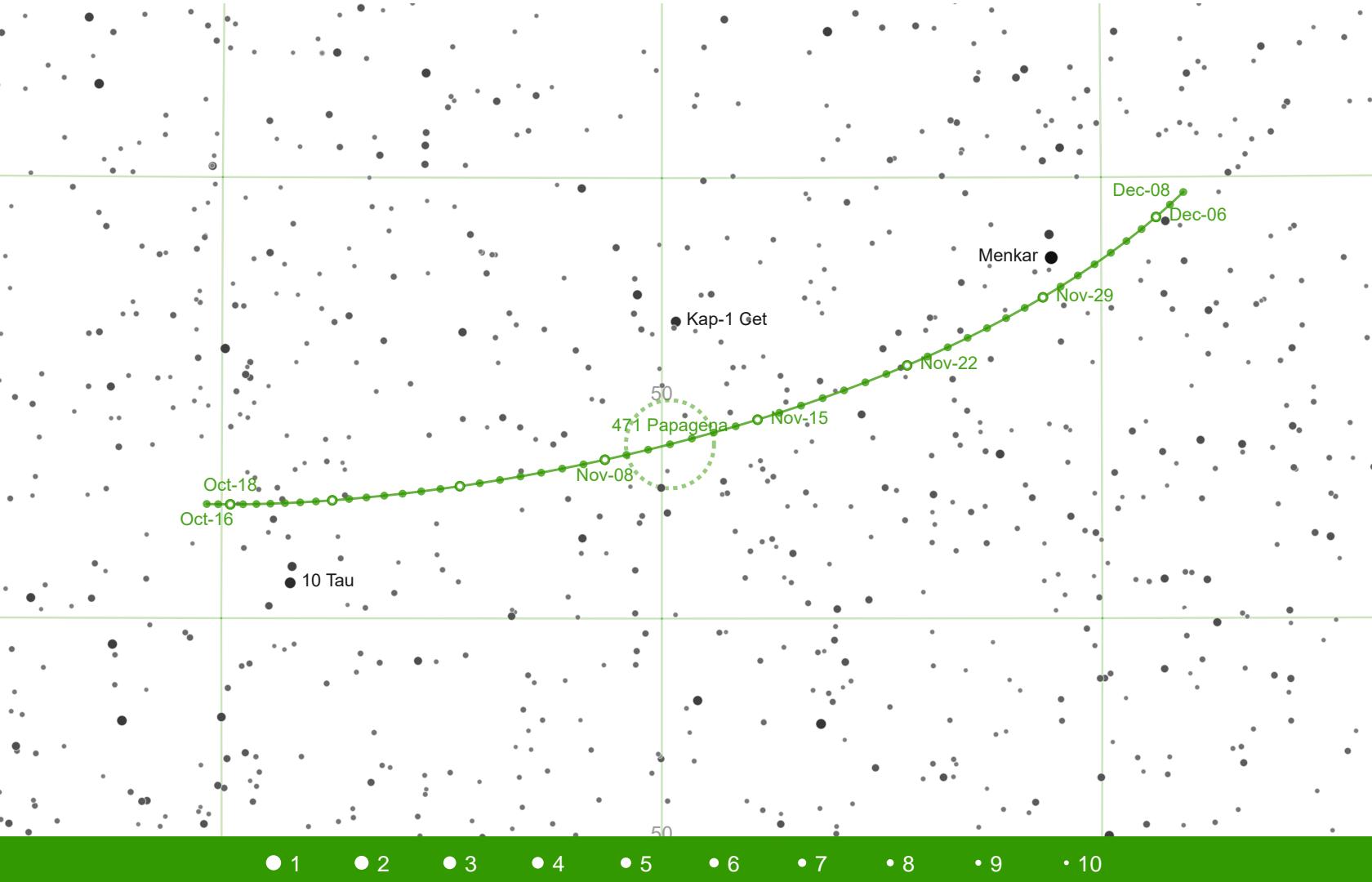
Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-24	00 05 53.74	+08 35 27.7	11.355	1.3858
2025-Aug-29	00 04 06.20	+08 06 30.0	11.24	1.3562
2025-Sep-03	00 01 47.48	+07 31 22.7	11.123	1.3318
2025-Sep-08	23 59 02.87	+06 50 39.2	11.005	1.3131
2025-Sep-13	23 55 58.56	+06 05 05.1	10.884	1.3002
2025-Sep-18	23 52 41.67	+05 15 39.2	10.763	1.2935
2025-Sep-23	23 49 20.54	+04 23 35.8	10.695	1.2932
2025-Sep-28	23 46 04.05	+03 30 21.2	10.781	1.2994
2025-Oct-03	23 43 00.77	+02 37 23.6	10.913	1.3121
2025-Oct-08	23 40 18.20	+01 46 05.7	11.045	1.3311
2025-Oct-13	23 38 02.49	+00 57 39.2	11.174	1.3561
2025-Oct-18	23 36 18.73	+00 13 06.2	11.301	1.3869



451 Patientia

Rotational Period: 9.727h
 Mean radius: 126.95km
 Classification: CU
 Albedo: 0.085
 BV Color Index: 0.666
 Patientia is possibly the 15th largest asteroid by diameter (the ranking is uncertain as the dimensions of many asteroid are unclear). It was discovered by Auguste Charlois in December 1899.

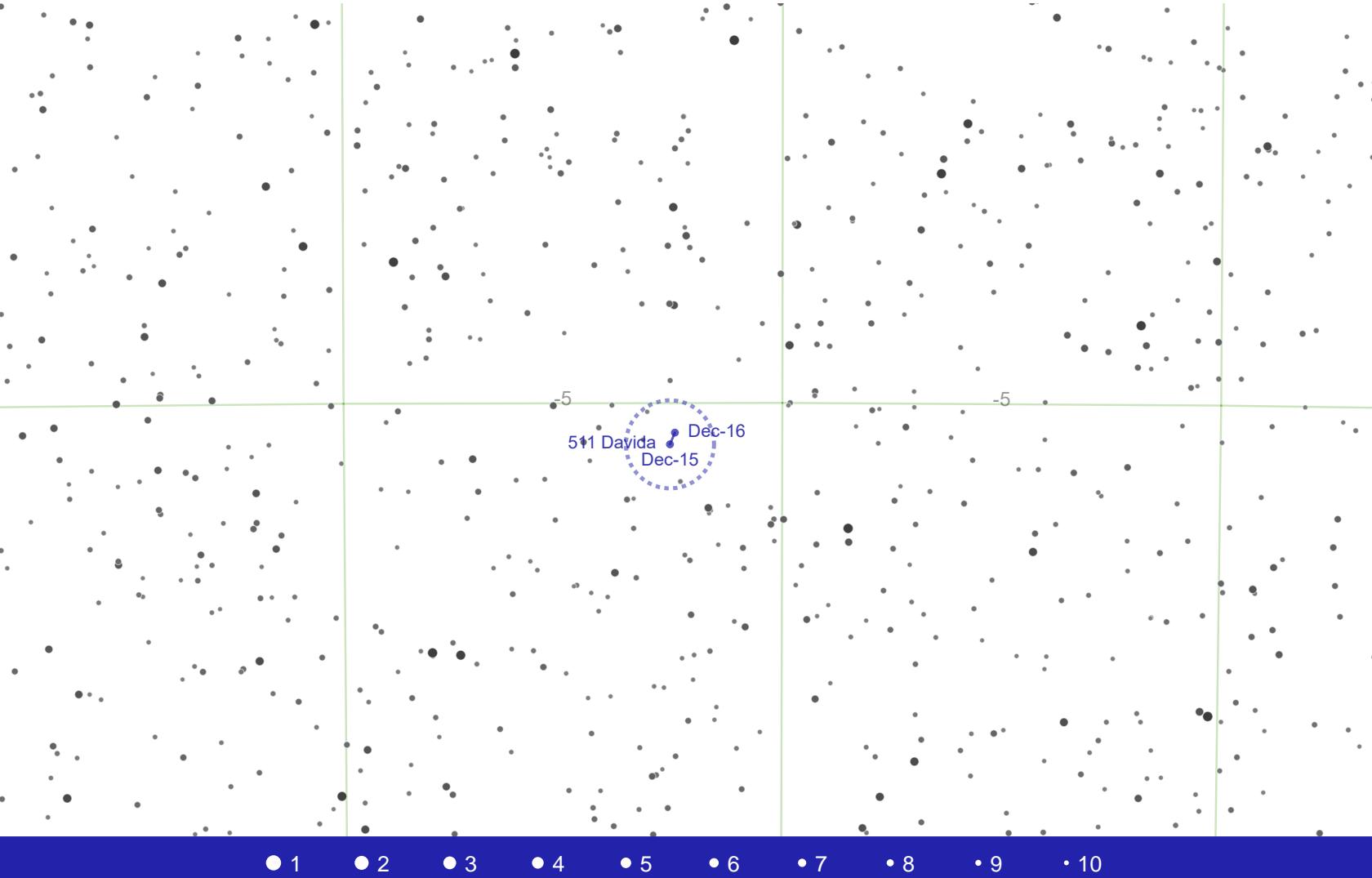
Date	RA	DEC	Magnitude	Distance (AU)
2025-Apr-02	15 01 53.55	+00 59 06.6	11.88	2.3651
2025-Apr-07	14 59 07.98	+01 16 49.7	11.804	2.3335
2025-Apr-12	14 55 57.89	+01 33 29.9	11.732	2.308
2025-Apr-17	14 52 27.14	+01 48 37.0	11.667	2.289
2025-Apr-22	14 48 40.13	+02 01 41.5	11.617	2.2766
2025-Apr-27	14 44 41.94	+02 12 14.5	11.592	2.2712
2025-May-02	14 40 38.23	+02 19 49.0	11.6	2.2728
2025-May-07	14 36 34.97	+02 24 03.9	11.637	2.2814
2025-May-12	14 32 37.73	+02 24 46.0	11.696	2.2968
2025-May-17	14 28 51.62	+02 21 47.9	11.767	2.3188
2025-May-22	14 25 21.21	+02 15 07.0	11.843	2.3471



471 Papagena

Rotational Period: 7.113h
 Mean radius: 74.064km
 Classification: S
 Albedo: 0.164
 BV Color Index: 0.828
 Discovered in June 1901 by Max Wolf, Papagena is named after a character in the opera The Magic Flute. Every five years it has a favorable opposition with Earth with a brightness better than magnitude 10.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Oct-16	03 40 40.14	+01 17 37.4	9.313	1.3355
2025-Oct-21	03 37 46.72	+01 17 56.6	9.219	1.3094
2025-Oct-26	03 34 12.29	+01 21 14.9	9.13	1.2886
2025-Oct-31	03 30 03.55	+01 28 12.1	9.052	1.2734
2025-Nov-05	03 25 28.80	+01 39 20.2	8.99	1.2643
2025-Nov-10	03 20 37.32	+01 55 00.7	8.959	1.2614
2025-Nov-15	03 15 39.13	+02 15 27.7	8.969	1.2648
2025-Nov-20	03 10 45.05	+02 40 48.1	9.02	1.2747
2025-Nov-25	03 06 05.90	+03 10 57.7	9.098	1.2909
2025-Nov-30	03 01 51.51	+03 45 40.9	9.192	1.3134
2025-Dec-05	02 58 09.85	+04 24 32.6	9.294	1.3417



511 Davida

Rotational Period: 5.1297h

Mean radius: 135.1635km

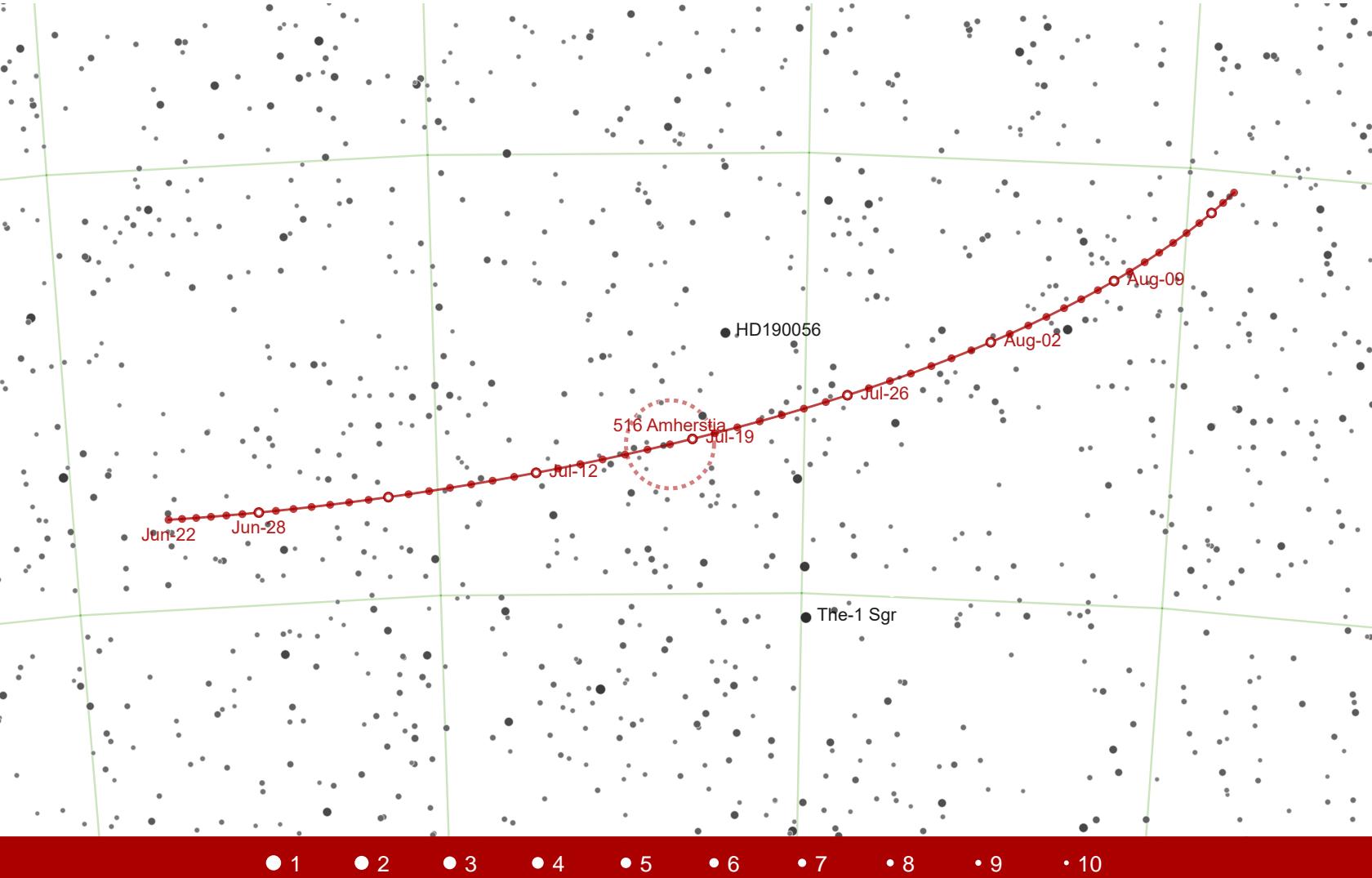
Classification: C

Albedo: 0.076

BV Color Index: 0.717

An enormous asteroid, Davida is perhaps the 5th most massive known. It was discovered by R S Dugan in May 1903. Lightcurve studies and high-resolution imagery show this asteroid is potato-shaped and cannot qualify as a dwarf planet.

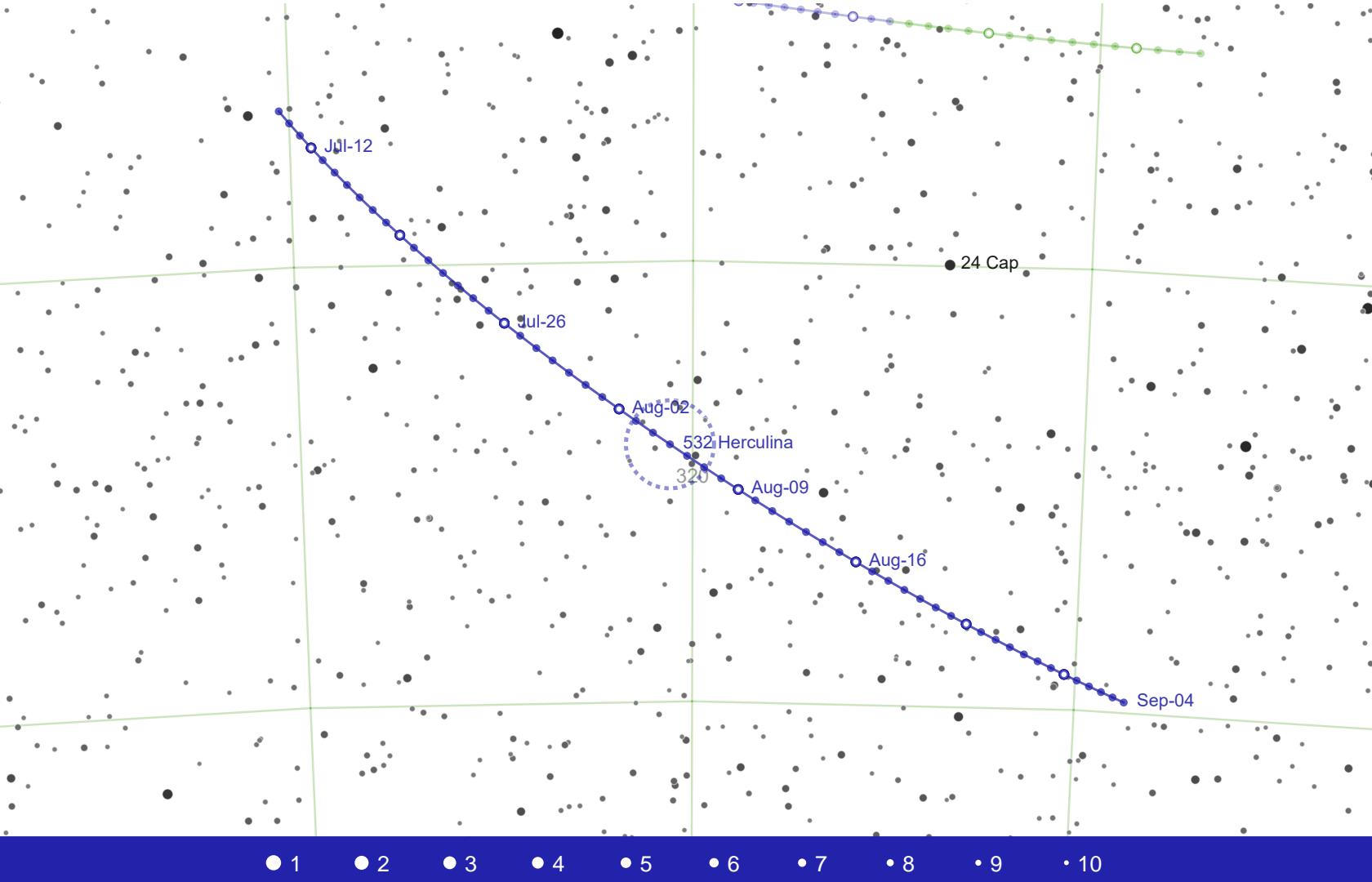
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	02 25 07.39	-05 28 18.1	10.863	1.9388
2024-Dec-16	02 24 53.92	-05 20 19.4	10.879	1.9474



516 Amherstia

Rotational Period: 7.4842h
 Mean radius: 32.572km
 Classification: X
 Albedo: 0.202
 BV Color Index: 0.736
 Discovered by R S Dugan in September 1903, this M-type (metallic) asteroid has a spectrum suggesting an iron-nickel composition.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-22	20 34 46.64	-33 59 32.5	11.442	1.2657
2025-Jun-27	20 30 43.58	-33 58 45.4	11.354	1.2508
2025-Jul-02	20 25 53.96	-33 55 25.5	11.269	1.2409
2025-Jul-07	20 20 27.63	-33 48 44.0	11.19	1.2364
2025-Jul-12	20 14 35.96	-33 38 03.5	11.125	1.2377
2025-Jul-17	20 08 31.24	-33 23 00.8	11.091	1.245
2025-Jul-22	20 02 26.32	-33 03 27.8	11.116	1.2584
2025-Jul-27	19 56 34.34	-32 39 30.6	11.204	1.278
2025-Aug-01	19 51 07.59	-32 11 30.9	11.332	1.3038
2025-Aug-06	19 46 16.07	-31 40 03.8	11.474	1.3356
2025-Aug-11	19 42 07.03	-31 05 51.6	11.621	1.3731
2025-Aug-16	19 38 45.17	-30 29 38.0	11.768	1.416



532 Herculina

Rotational Period: 9.405h

Mean radius: 83.8955km

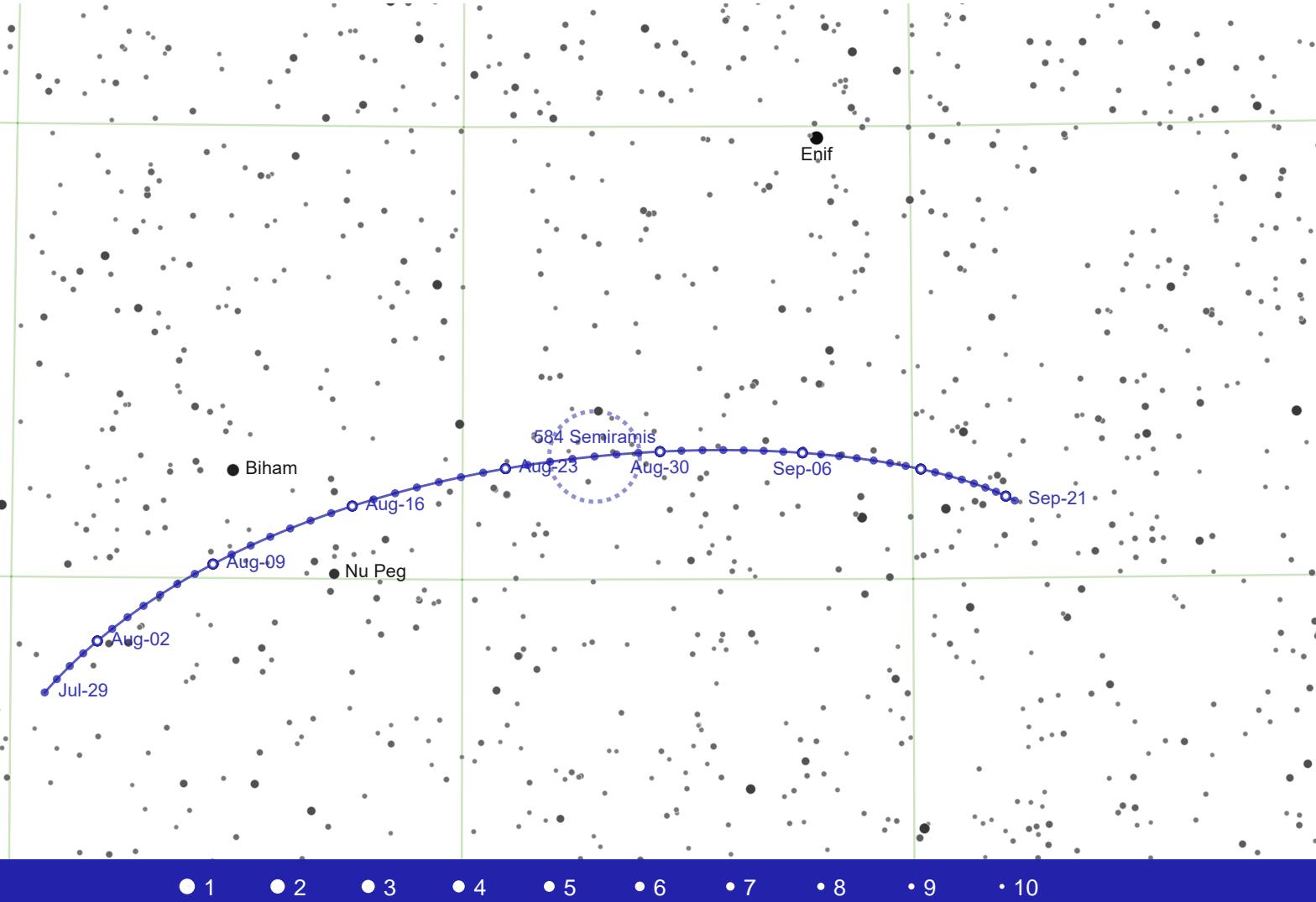
Classification: S

Albedo: 0.285

BV Color Index: 0.857

Appropriately named, Herculina is one of the largest asteroids, possibly ranking in the top ten by mass. It is a stony asteroid. It was thought to have a moon, but Hubble observations failed to confirm this. Discovered by Max Wolf in April 1904.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-09	21 40 28.67	-23 13 21.9	10.514	2.0984
2025-Jul-14	21 37 48.86	-23 56 17.0	10.438	2.0723
2025-Jul-19	21 34 39.13	-24 40 09.3	10.364	2.0523
2025-Jul-24	21 31 03.12	-25 24 09.9	10.292	2.0387
2025-Jul-29	21 27 05.82	-26 07 25.0	10.23	2.0318
2025-Aug-03	21 22 53.36	-26 49 00.5	10.19	2.032
2025-Aug-08	21 18 32.35	-27 28 07.3	10.197	2.0393
2025-Aug-13	21 14 09.61	-28 04 03.7	10.255	2.0536
2025-Aug-18	21 09 51.97	-28 36 16.2	10.34	2.0748
2025-Aug-23	21 05 46.35	-29 04 19.0	10.434	2.1029
2025-Aug-28	21 01 59.40	-29 27 55.2	10.531	2.1374
2025-Sep-02	20 58 36.91	-29 46 58.9	10.628	2.1781



584 Semiramis

Rotational Period: 5.068h

Mean radius: 27.005km

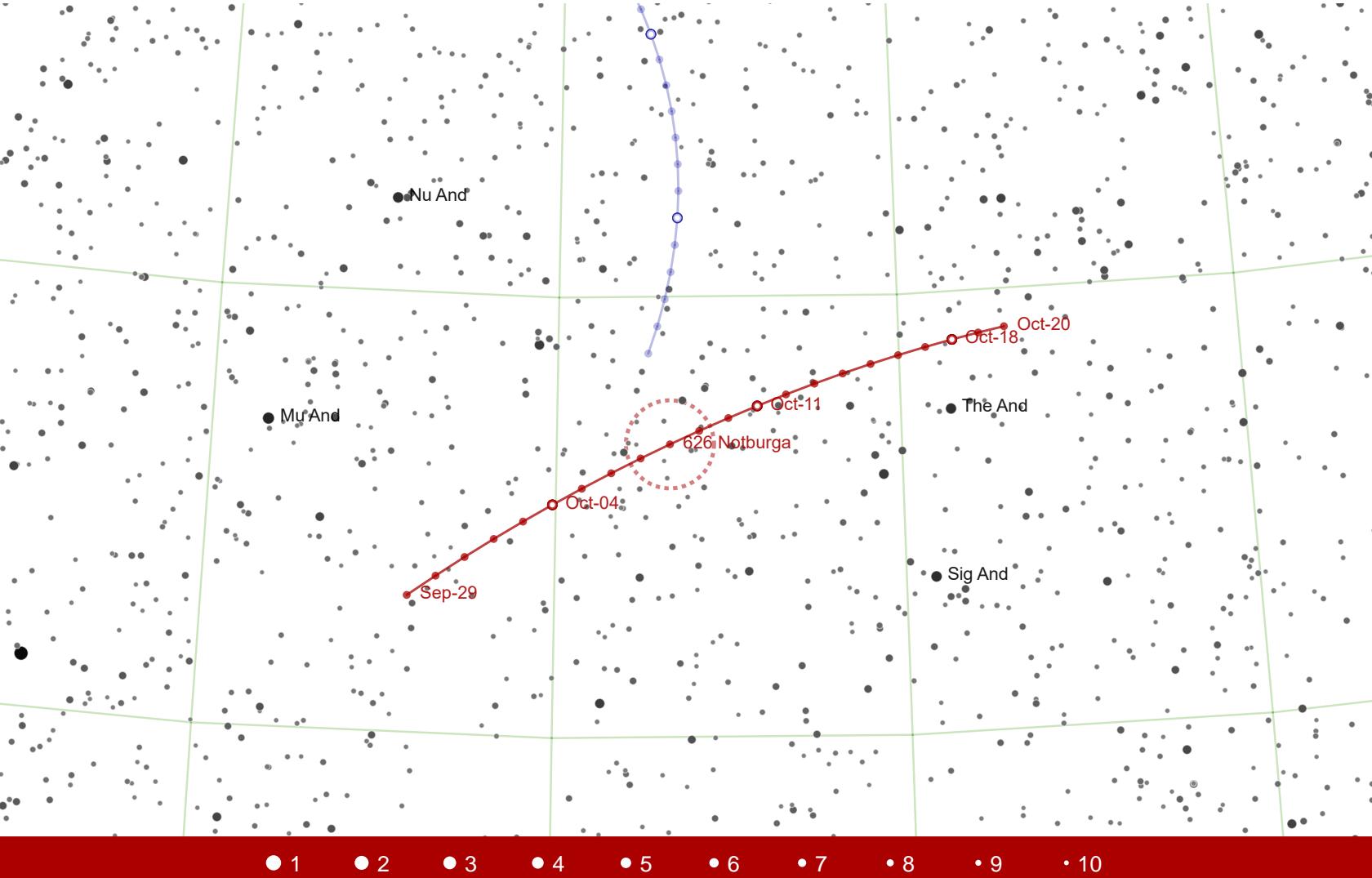
Classification: S1

Albedo: 0.1987

BV Color Index: 0.916

This stony asteroid was discovered in January 1906 by August Kopff.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jul-29	22 18 28.20	+03 43 31.1	10.748	1.0042
2025-Aug-03	22 15 30.37	+04 26 02.1	10.61	0.9733
2025-Aug-08	22 11 51.64	+05 02 53.7	10.48	0.947
2025-Aug-13	22 07 38.55	+05 33 27.3	10.361	0.9255
2025-Aug-18	22 02 59.56	+05 57 09.9	10.264	0.909
2025-Aug-23	21 58 05.50	+06 13 42.0	10.2	0.8978
2025-Aug-28	21 53 09.32	+06 23 08.3	10.182	0.8918
2025-Sep-02	21 48 24.55	+06 25 56.4	10.208	0.891
2025-Sep-07	21 44 03.86	+06 22 51.5	10.266	0.8954
2025-Sep-12	21 40 18.16	+06 14 49.5	10.345	0.9046
2025-Sep-17	21 37 16.59	+06 02 53.5	10.437	0.9184



626 Notburga

Rotational Period: 19.353h

Mean radius: 36.618km

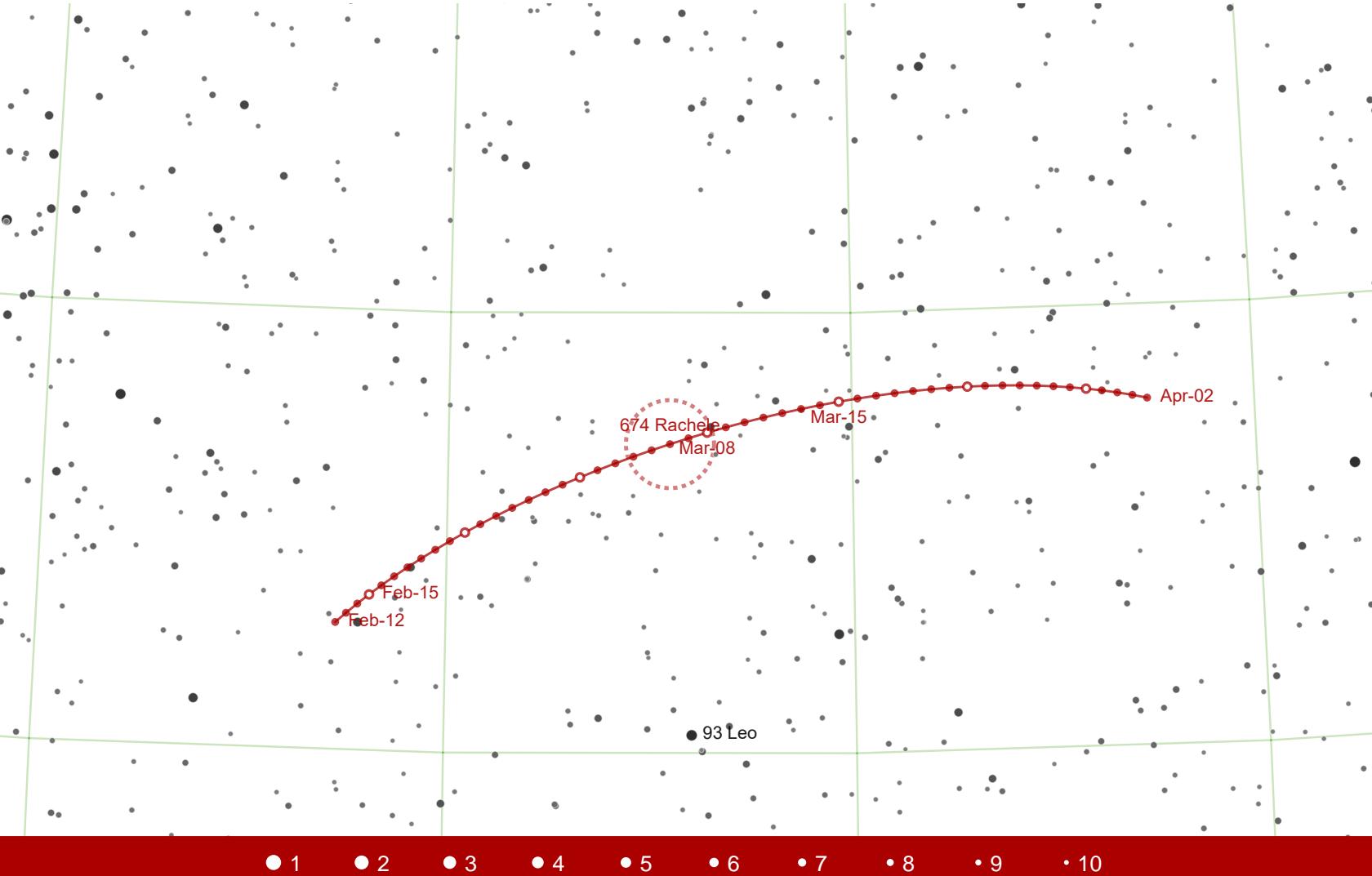
Classification: Xc

Albedo: 0.032

BV Color Index: 0.705

This asteroid was discovered in February 1907 by August Kopff.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Sep-29	00 48 19.83	+36 34 37.7	11.668	1.0469
2025-Oct-01	00 45 07.70	+37 01 50.3	11.649	1.0431
2025-Oct-03	00 41 50.96	+37 27 01.2	11.634	1.0402
2025-Oct-05	00 38 30.76	+37 50 06.8	11.623	1.0382
2025-Oct-07	00 35 08.31	+38 11 04.5	11.616	1.037
2025-Oct-09	00 31 44.86	+38 29 52.5	11.614	1.0367
2025-Oct-11	00 28 21.67	+38 46 30.1	11.615	1.0373
2025-Oct-13	00 25 00.05	+39 00 57.6	11.62	1.0387
2025-Oct-15	00 21 41.33	+39 13 16.6	11.63	1.0409
2025-Oct-17	00 18 26.83	+39 23 30.1	11.643	1.044
2025-Oct-19	00 15 17.85	+39 31 42.1	11.66	1.0479



674 Rachelle

Rotational Period: 30.982h

Mean radius: 48.0855km

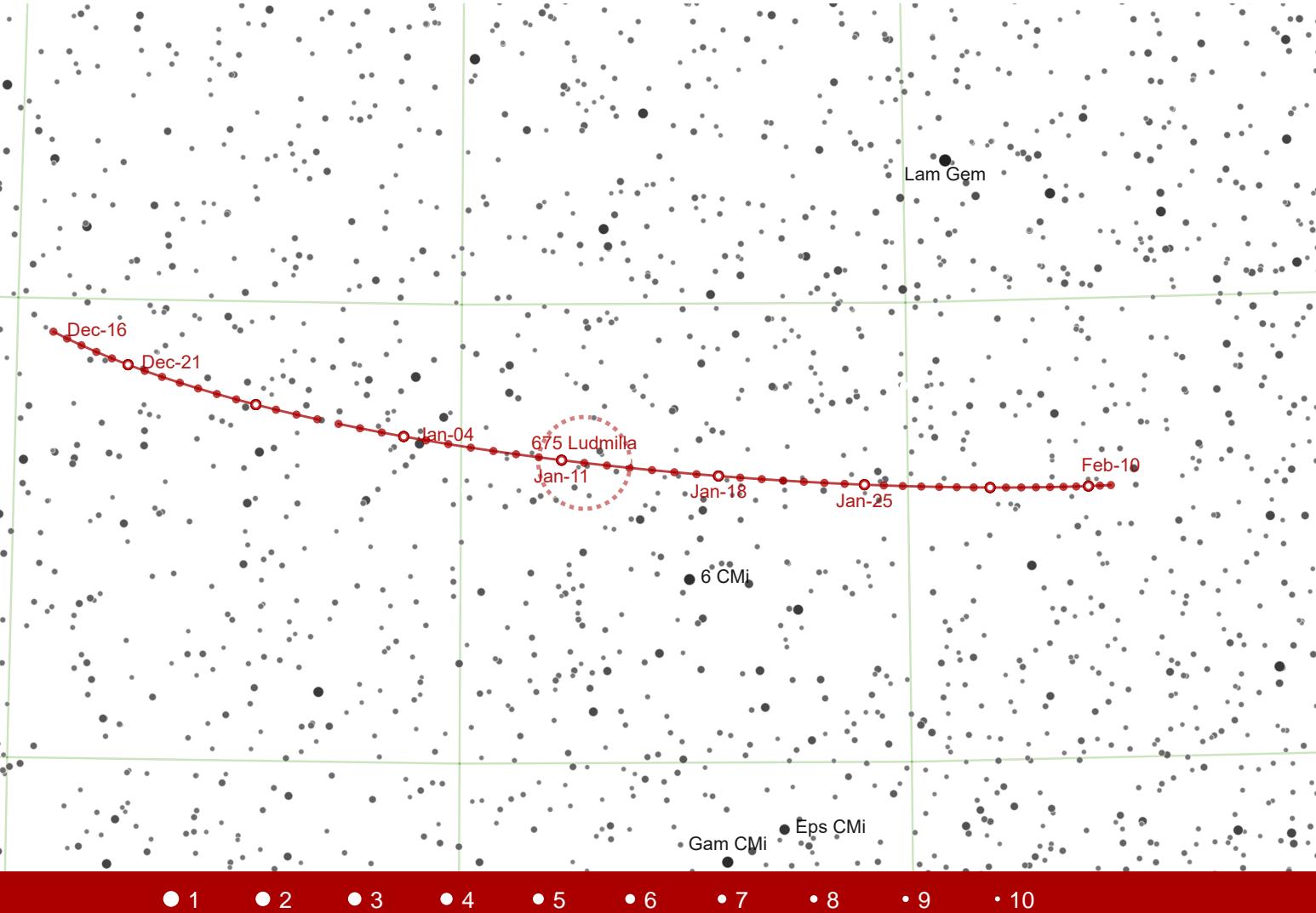
Classification: S

Albedo: 0.206

BV Color Index: 0.840

This stony asteroid was discovered by Wilhelm Lorentz in October 1908. The orbit was calculated by Emilio Bianchi who named the asteroid after his wife.

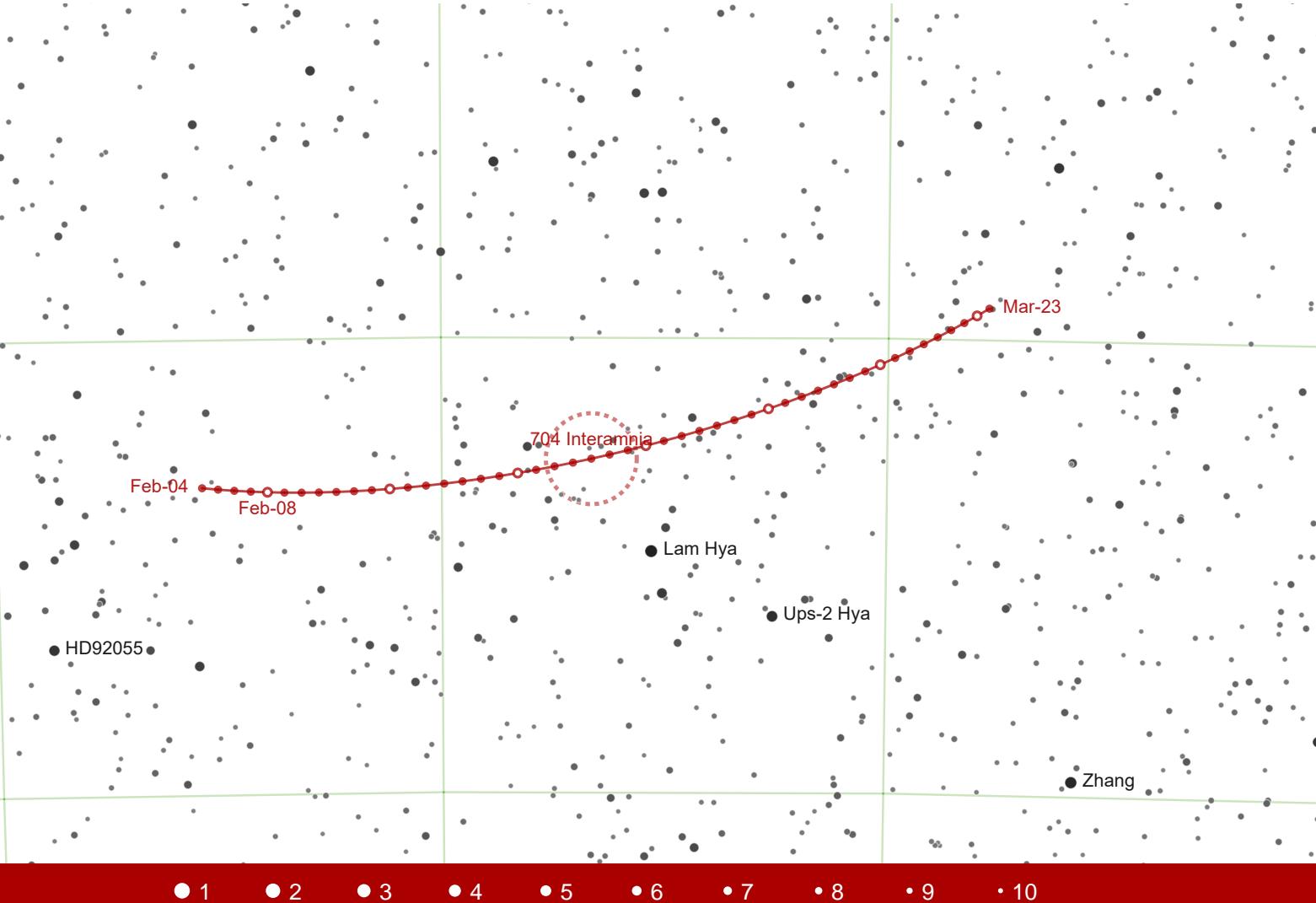
Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-12	12 05 22.03	+21 27 12.7	11.438	1.7069
2025-Feb-16	12 03 09.39	+21 52 57.4	11.378	1.6907
2025-Feb-20	12 00 33.05	+22 17 59.2	11.323	1.6782
2025-Feb-24	11 57 35.57	+22 41 43.2	11.276	1.6696
2025-Feb-28	11 54 20.16	+23 03 33.6	11.239	1.6651
2025-Mar-04	11 50 50.74	+23 22 55.5	11.219	1.6647
2025-Mar-08	11 47 11.73	+23 39 17.8	11.219	1.6685
2025-Mar-12	11 43 27.66	+23 52 16.1	11.241	1.6765
2025-Mar-16	11 39 43.02	+24 01 32.3	11.284	1.6887
2025-Mar-20	11 36 02.18	+24 06 54.1	11.343	1.7049
2025-Mar-24	11 32 29.34	+24 08 14.4	11.414	1.7253
2025-Mar-28	11 29 08.45	+24 05 31.1	11.492	1.7495



675 Ludmilla

Rotational Period: 7.717h
 Mean radius: 38.km
 Classification: S
 Albedo: 0n.a.
 BV Color Index: 0.847
 This asteroid was discovered by Joel Metcalf in August 1908. It is named after the titular character of Mikhsail Glinka's opera Ruslan and Lyudmila.

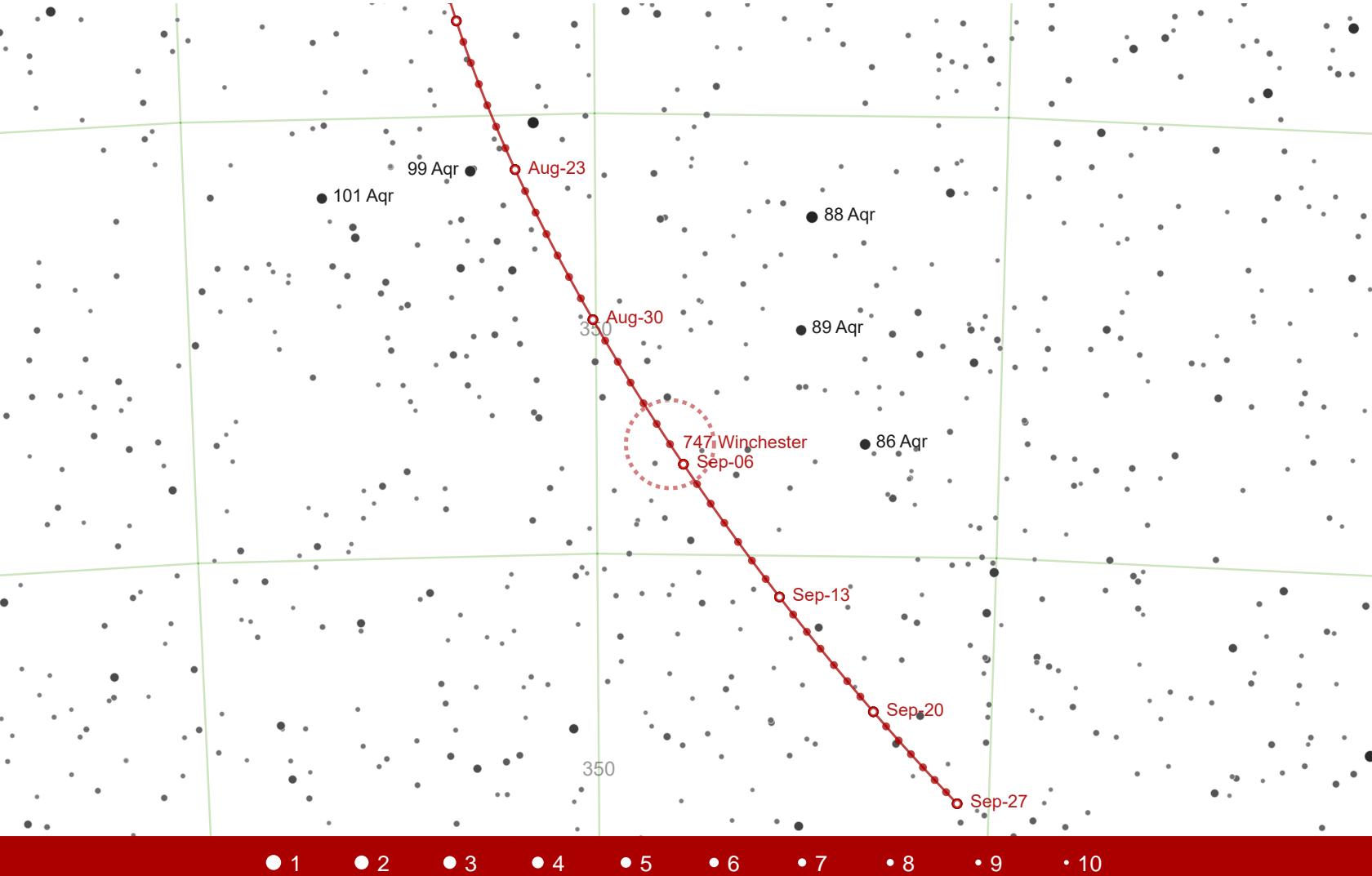
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-16	07 58 23.08	+14 38 16.6	11.634	1.4659
2024-Dec-21	07 54 59.56	+14 17 50.2	11.529	1.4422
2024-Dec-26	07 50 58.56	+13 59 47.6	11.423	1.4242
2024-Dec-31	07 46 27.24	+13 44 13.3	11.318	1.4123
2025-Jan-05	07 41 34.65	+13 31 07.2	11.217	1.4071
2025-Jan-10	07 36 31.12	+13 20 24.9	11.142	1.4086
2025-Jan-15	07 31 27.14	+13 11 59.0	11.155	1.4171
2025-Jan-20	07 26 32.74	+13 05 41.7	11.263	1.4324
2025-Jan-25	07 21 57.44	+13 01 23.4	11.401	1.4545
2025-Jan-30	07 17 49.93	+12 58 51.8	11.543	1.4832
2025-Feb-04	07 14 17.56	+12 57 51.4	11.684	1.518
2025-Feb-09	07 11 25.70	+12 58 04.5	11.822	1.5587



704 Interamnia

Rotational Period: 8.727h
 Mean radius: 153.1565km
 Classification: B
 Albedo: 0.078
 BV Color Index: 0.645
 Only Ceres, Vesta, Pallas and Hygiea are larger than Interamnia. It is thought that Interamnia may be an oblate spheroid, fulfilling one of the criteria for a dwarf planet. It appears to be an icy body and its spectrum indicates the presence of hydrated minerals. Discovered in October 1910 in Teramo, Italy. Discovered by Vincenzo Cerulli in October 1910.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Feb-04	10 30 45.80	-11 37 52.3	11.812	2.542
2025-Feb-08	10 27 49.59	-11 41 07.4	11.75	2.5207
2025-Feb-12	10 24 43.92	-11 41 26.1	11.693	2.5036
2025-Feb-16	10 21 31.29	-11 38 50.7	11.642	2.4909
2025-Feb-20	10 18 14.34	-11 33 26.0	11.603	2.4826
2025-Feb-24	10 14 55.89	-11 25 19.6	11.58	2.4788
2025-Feb-28	10 11 38.87	-11 14 42.9	11.577	2.4797
2025-Mar-04	10 08 26.30	-11 01 50.6	11.595	2.4853
2025-Mar-08	10 05 21.03	-10 47 00.6	11.631	2.4954
2025-Mar-12	10 02 25.61	-10 30 32.4	11.682	2.51
2025-Mar-16	09 59 42.26	-10 12 45.4	11.742	2.5289
2025-Mar-20	09 57 12.91	-09 53 59.0	11.809	2.552



747 Winchester

Rotational Period: 9.4146h

Mean radius: 85.855km

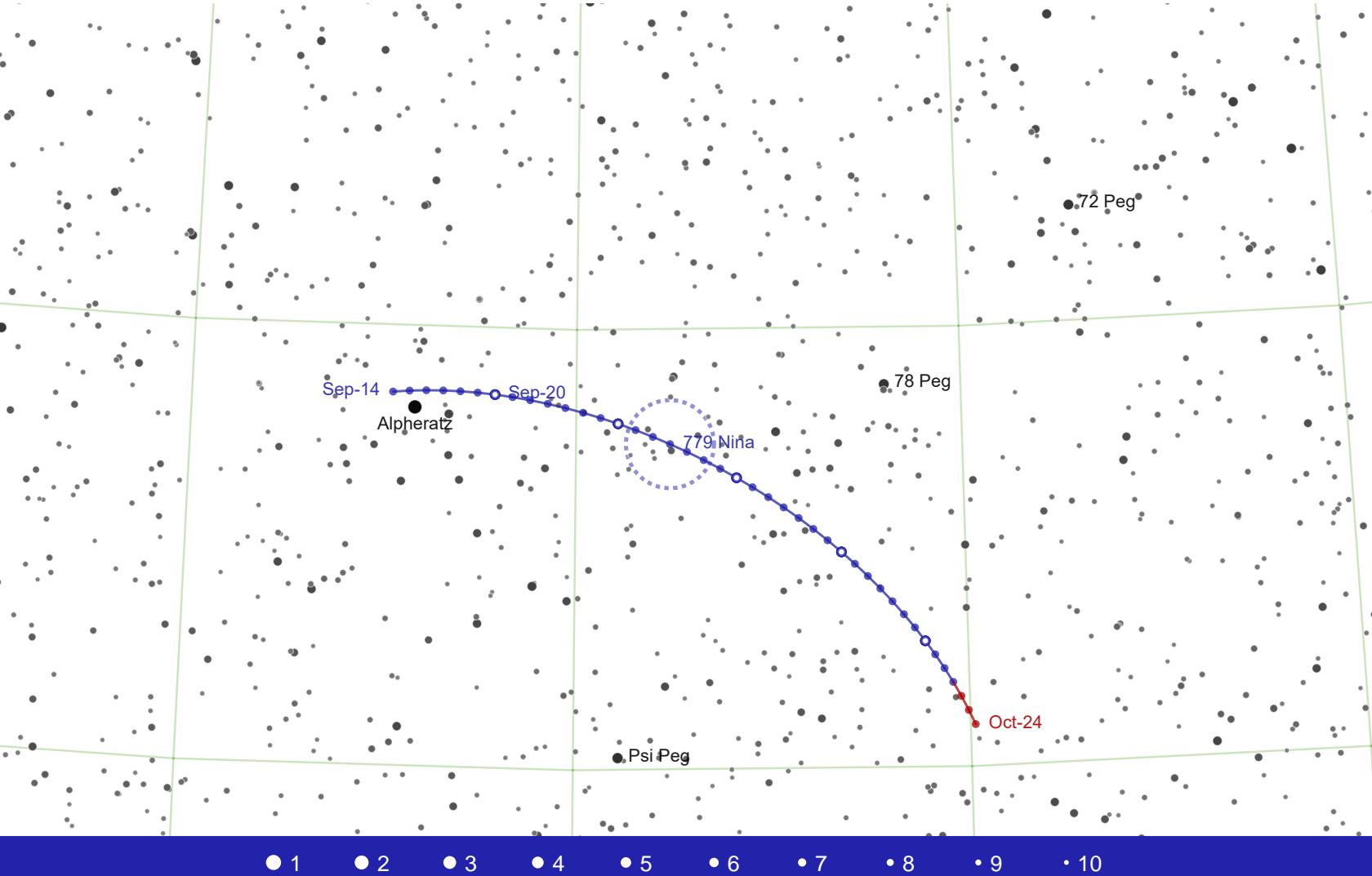
Classification: C

Albedo: 0.0503

BV Color Index: 0.713

Discovered by Joel Metcalf in March 1913, this asteroid is named after Winchester, Massachusetts.

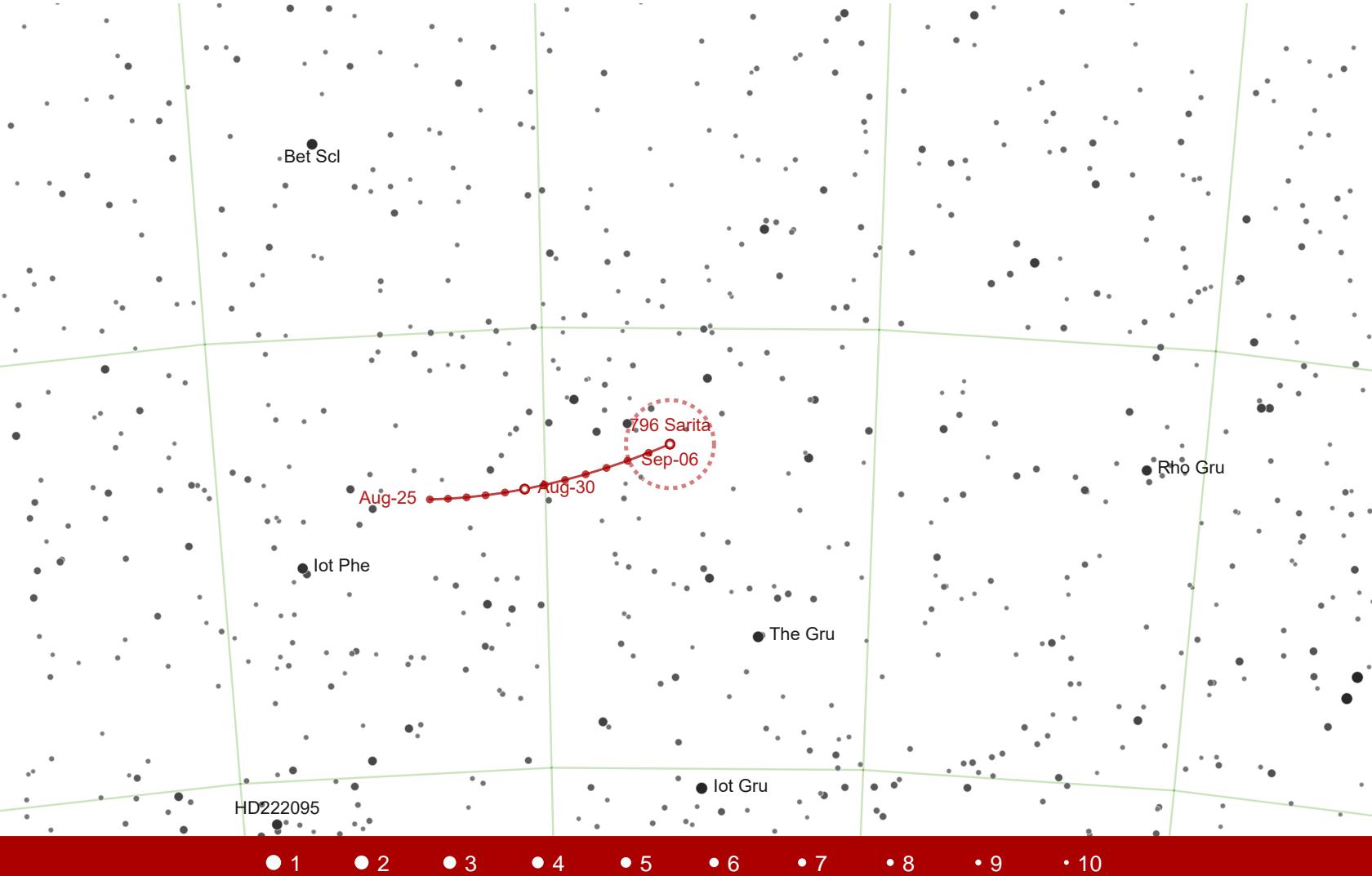
Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-07	23 28 25.04	-16 53 13.2	11.622	1.4959
2025-Aug-12	23 27 39.32	-17 59 58.0	11.484	1.4528
2025-Aug-17	23 26 17.02	-19 10 21.1	11.351	1.4152
2025-Aug-22	23 24 19.74	-20 23 07.2	11.227	1.3836
2025-Aug-27	23 21 50.97	-21 36 42.2	11.125	1.3582
2025-Sep-01	23 18 56.01	-22 49 20.3	11.059	1.3391
2025-Sep-06	23 15 41.55	-23 59 14.3	11.039	1.3264
2025-Sep-11	23 12 15.23	-25 04 42.3	11.061	1.32
2025-Sep-16	23 08 45.43	-26 04 12.2	11.11	1.3196
2025-Sep-21	23 05 21.44	-26 56 22.4	11.174	1.3252
2025-Sep-26	23 02 12.97	-27 40 10.1	11.247	1.3362



779 Nina

Rotational Period: 11.186h
 Mean radius: 40.286km
 Classification: X
 Albedo: 0.157
 BV Color Index: 0n.a.
 A large background main-belt asteroid, Nina was discovered by Grigory Neujmin in January 1914. It is named after the discoverer's sister, a mathematician. The asteroid may be metallic.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Sep-14	00 09 32.62	+29 15 28.1	10.883	1.2087
2025-Sep-18	00 06 02.52	+29 16 52.9	10.836	1.2009
2025-Sep-22	00 02 24.27	+29 11 41.6	10.799	1.1963
2025-Sep-26	23 58 43.99	+29 00 06.0	10.775	1.1951
2025-Sep-30	23 55 07.90	+28 42 29.4	10.766	1.1972
2025-Oct-04	23 51 41.92	+28 19 25.5	10.775	1.2028
2025-Oct-08	23 48 31.39	+27 51 35.2	10.802	1.2119
2025-Oct-12	23 45 40.86	+27 19 43.9	10.845	1.2244
2025-Oct-16	23 43 14.26	+26 44 40.5	10.903	1.2403
2025-Oct-20	23 41 14.95	+26 07 18.2	10.973	1.2597
2025-Oct-24	23 39 45.49	+25 28 31.7	11.052	1.2824



796 Sarita

Rotational Period: 8.1755h

Mean radius: 21.79km

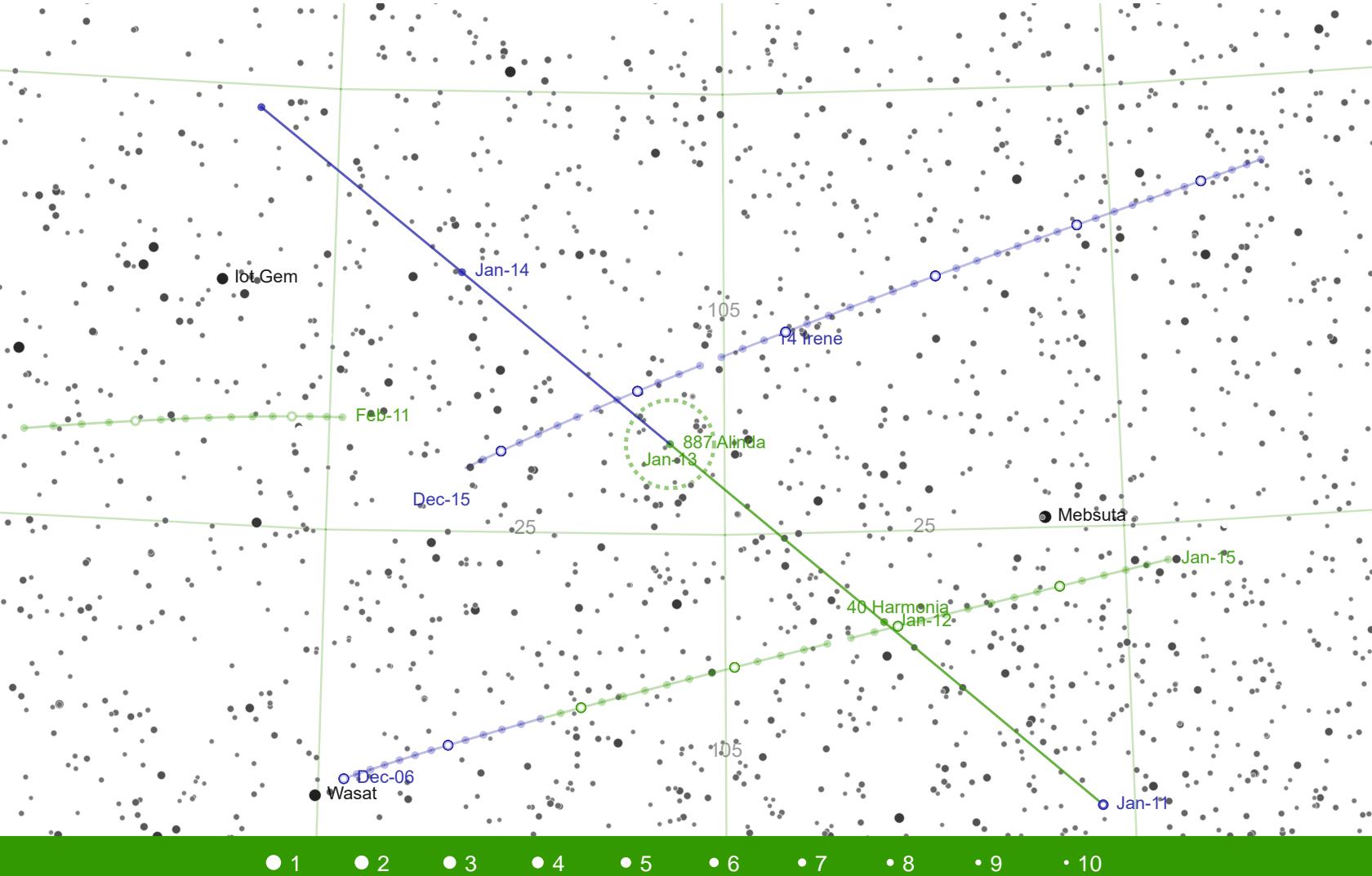
Classification: X

Albedo: 0.209

BV Color Index: 0.715

Sarita was discovered by Karl Reinmuth in October 1914. It appears to be a large metallic asteroid.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-25	23 27 03.30	-41 54 38.4	11.489	0.939
2025-Aug-27	23 24 48.69	-41 54 12.5	11.471	0.9342
2025-Aug-29	23 22 27.81	-41 51 46.8	11.456	0.9301
2025-Aug-31	23 20 01.75	-41 47 15.6	11.444	0.9267
2025-Sep-02	23 17 31.65	-41 40 34.2	11.435	0.9239
2025-Sep-04	23 14 58.70	-41 31 38.8	11.43	0.9219
2025-Sep-06	23 12 24.09	-41 20 26.9	11.428	0.9206



887 Alinda

Rotational Period: 28.41h

Mean radius: 2.1km

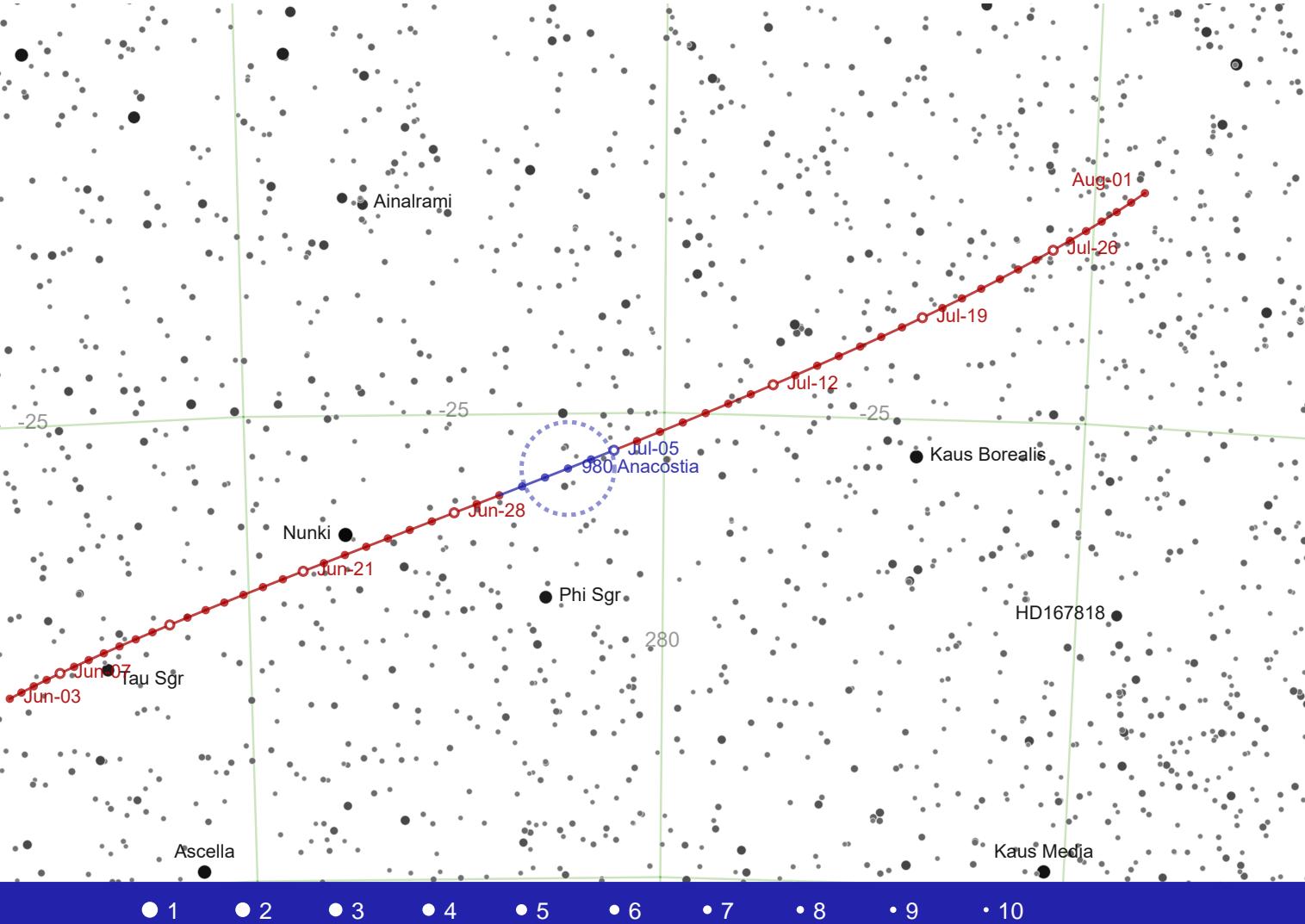
Classification: S

Albedo: 0.310

BV Color Index: 0.832

This tiny asteroid (2.1 km radius) makes extremely close passes to Earth in the course of its highly eccentric orbit. Despite its tiny size it is the parent body of the small asteroids in the Alinda group. Alinda was discovered by Max Wolf in January 1918.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Jan-11	06 41 34.38	+21 50 38.7	9.527	0.0831
2025-Jan-12	06 52 06.60	+23 59 19.6	9.485	0.0841
2025-Jan-13	07 02 45.27	+26 01 58.3	9.484	0.0853
2025-Jan-14	07 13 26.68	+27 57 38.4	9.529	0.0868
2025-Jan-15	07 24 07.00	+29 45 37.9	9.614	0.0886



980 Anacostia

Rotational Period: 20.117h

Mean radius: 37.3395km

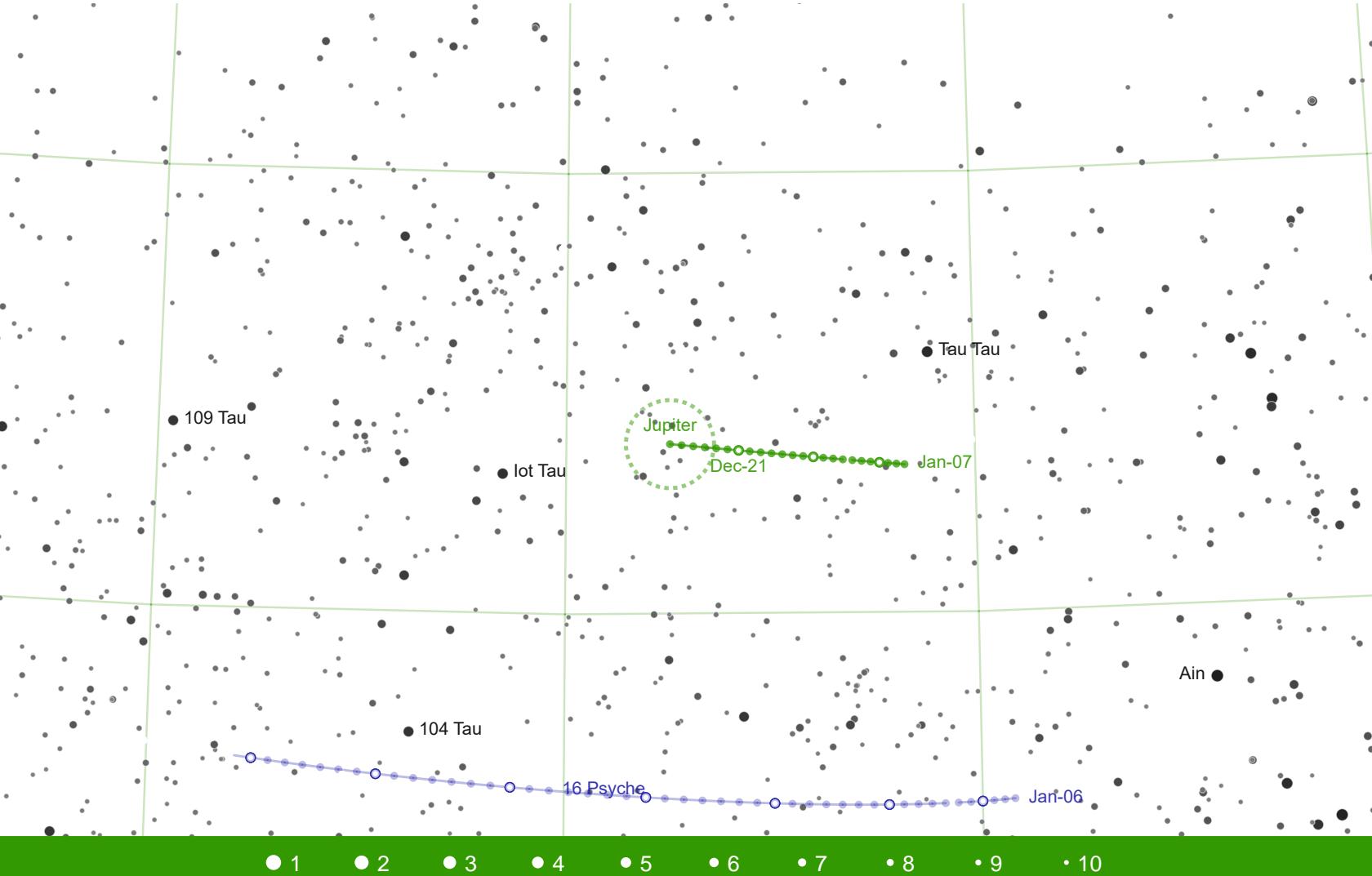
Classification: L

Albedo: 0.229

BV Color Index: 0.915

Named after the Anacostia river, this asteroid was discovered by George Henry Peters in November 1921.

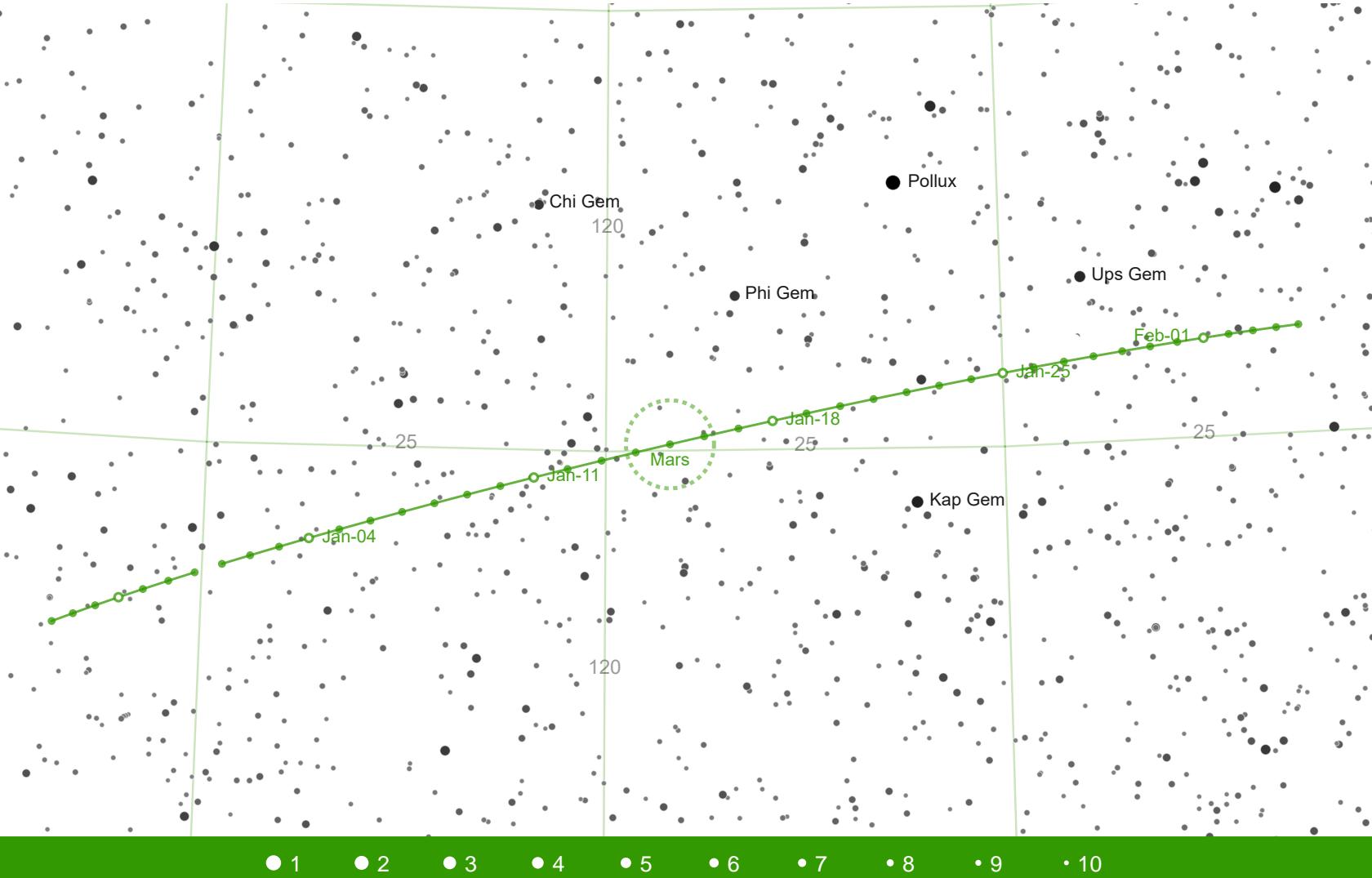
Date	RA	DEC	Magnitude	Distance (AU)
2025-Jun-03	19 11 47.04	-27 55 33.5	11.91	1.6602
2025-Jun-08	19 08 34.80	-27 37 02.6	11.765	1.6161
2025-Jun-13	19 04 42.54	-27 16 52.7	11.613	1.5777
2025-Jun-18	19 00 15.12	-26 54 50.2	11.454	1.5451
2025-Jun-23	18 55 18.91	-26 30 45.3	11.283	1.5188
2025-Jun-28	18 50 02.24	-26 04 34.1	11.095	1.4991
2025-Jul-03	18 44 34.97	-25 36 19.9	10.954	1.4861
2025-Jul-08	18 39 07.36	-25 06 14.7	11.088	1.4798
2025-Jul-13	18 33 49.38	-24 34 39.2	11.229	1.4803
2025-Jul-18	18 28 50.29	-24 02 00.4	11.355	1.4872
2025-Jul-23	18 24 18.64	-23 28 49.3	11.474	1.5004
2025-Jul-28	18 20 22.09	-22 55 37.4	11.588	1.5195



Jupiter

The largest planet, Jupiter's orbit is include for reference to nearby asteroids.

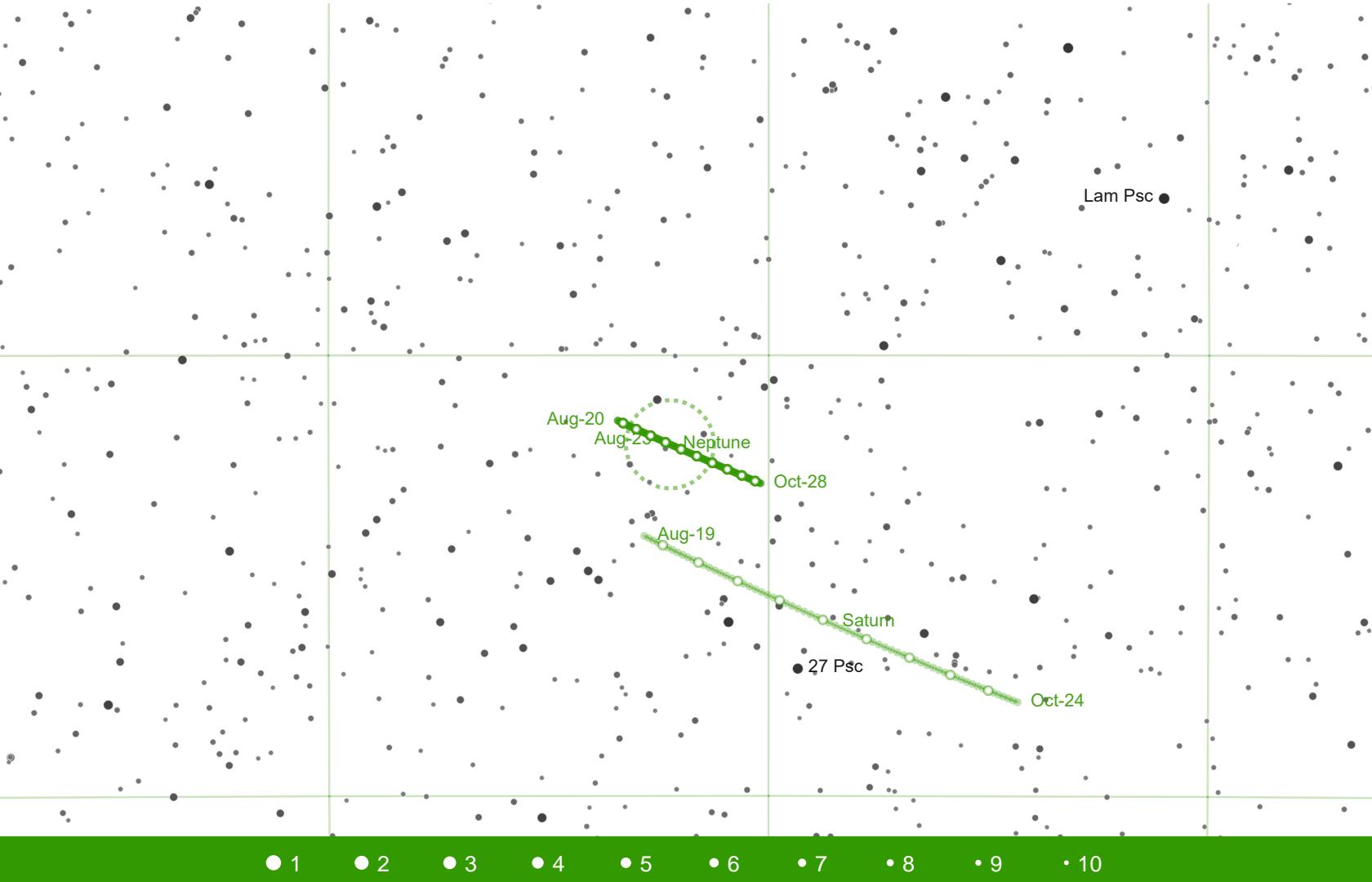
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	04 54 55.63	+21 56 13.9	-2.802	4.101
2024-Dec-17	04 53 47.34	+21 54 45.8	-2.797	4.107
2024-Dec-19	04 52 40.05	+21 53 18.2	-2.792	4.1143
2024-Dec-21	04 51 33.99	+21 51 51.3	-2.786	4.1228
2024-Dec-23	04 50 29.34	+21 50 25.7	-2.779	4.1325
2024-Dec-25	04 49 26.29	+21 49 01.8	-2.772	4.1434
2024-Dec-27	04 48 25.04	+21 47 39.9	-2.763	4.1555
2024-Dec-29	04 47 25.76	+21 46 20.4	-2.754	4.1687
2024-Dec-31	04 46 28.64	+21 45 03.9	-2.744	4.1831
2025-Jan-02	04 45 33.84	+21 43 50.7	-2.733	4.1986
2025-Jan-04	04 44 41.52	+21 42 41.2	-2.722	4.2152
2025-Jan-06	04 43 51.83	+21 41 35.8	-2.71	4.2329



Mars

The most Earth-like planet, Mars' orbit is included for reference to nearby asteroids.

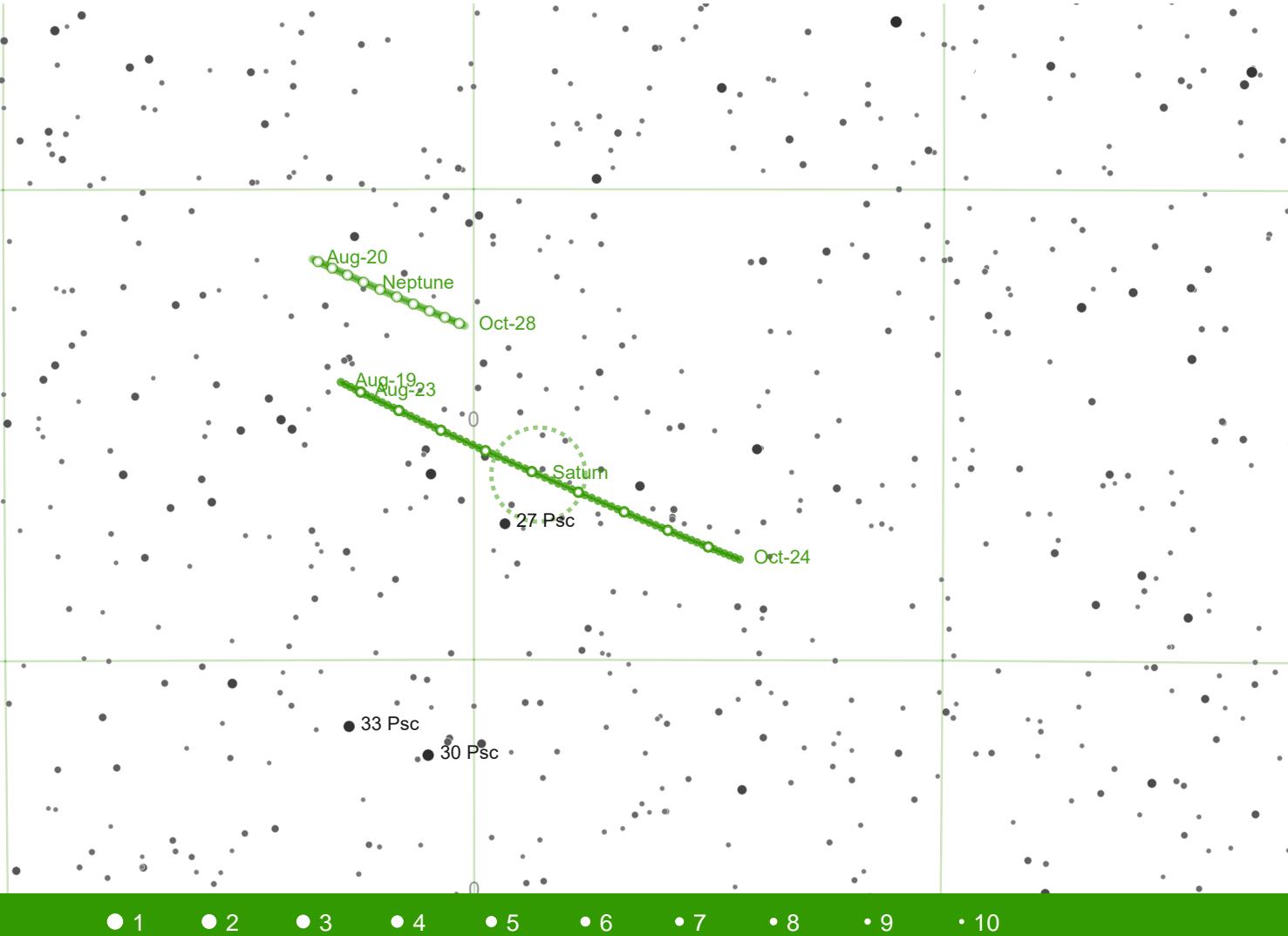
Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-25	08 27 16.29	+22 53 09.0	-1.102	0.6785
2024-Dec-29	08 22 51.15	+23 18 00.1	-1.211	0.6649
2025-Jan-02	08 17 37.11	+23 44 01.8	-1.265	0.6544
2025-Jan-06	08 11 41.92	+24 10 16.4	-1.308	0.647
2025-Jan-10	08 05 15.75	+24 35 43.5	-1.347	0.643
2025-Jan-14	07 58 30.31	+24 59 26.5	-1.421	0.6425
2025-Jan-18	07 51 38.14	+25 20 38.1	-1.397	0.6456
2025-Jan-22	07 44 52.33	+25 38 42.7	-1.313	0.6522
2025-Jan-26	07 38 25.84	+25 53 17.9	-1.249	0.6623
2025-Jan-30	07 32 30.64	+26 04 15.1	-1.168	0.6758
2025-Feb-03	07 27 16.90	+26 11 38.0	-1.078	0.6926



Neptune

One of the ice giants of the solar system, Neptune's orbit is included for reference to nearby asteroids.

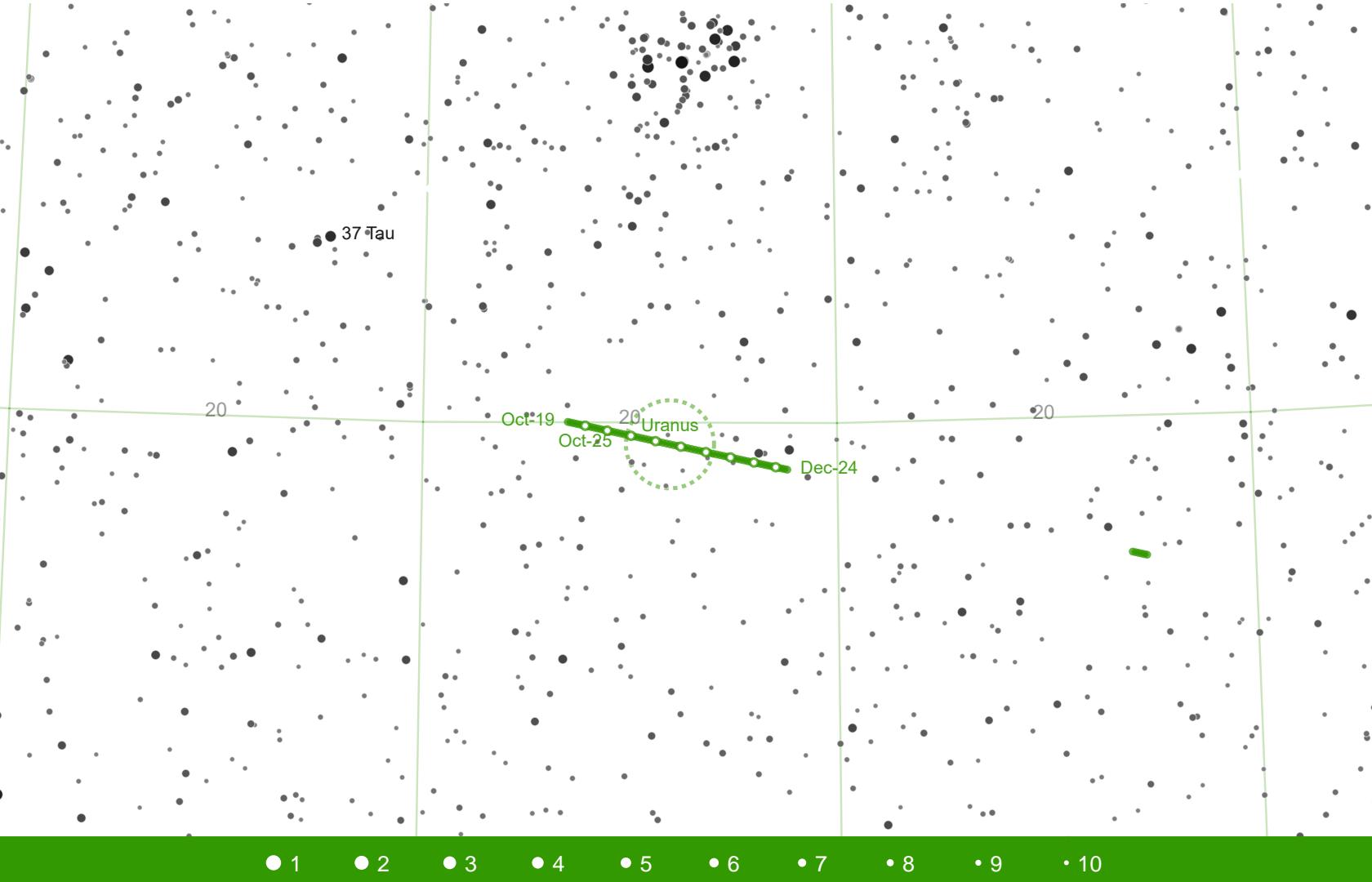
Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-20	00 06 51.54	-00 44 28.9	7.693	29.0479
2025-Aug-26	00 06 21.94	-00 47 53.8	7.689	28.996
2025-Sep-01	00 05 50.04	-00 51 32.1	7.686	28.9534
2025-Sep-07	00 05 16.29	-00 55 20.5	7.684	28.9207
2025-Sep-13	00 04 41.14	-00 59 16.2	7.682	28.8982
2025-Sep-19	00 04 05.03	-01 03 16.2	7.681	28.8862
2025-Sep-25	00 03 28.48	-01 07 17.2	7.681	28.8849
2025-Oct-01	00 02 52.02	-01 11 15.4	7.682	28.8946
2025-Oct-07	00 02 16.17	-01 15 07.7	7.683	28.9149
2025-Oct-13	00 01 41.43	-01 18 50.8	7.685	28.9458
2025-Oct-19	00 01 08.27	-01 22 21.7	7.688	28.9869
2025-Oct-25	00 00 37.20	-01 25 37.2	7.692	29.0379



Saturn

The famous ringed planet, Saturn's orbit is included for reference to nearby asteroids.

Date	RA	DEC	Magnitude	Distance (AU)
2025-Aug-19	00 05 39.20	-02 02 57.9	0.71	8.7101
2025-Aug-25	00 04 22.08	-02 12 32.1	0.682	8.6579
2025-Aug-31	00 02 56.56	-02 22 51.0	0.656	8.6151
2025-Sep-06	00 01 24.27	-02 33 43.0	0.632	8.5824
2025-Sep-12	23 59 46.87	-02 44 56.4	0.61	8.5601
2025-Sep-18	23 58 06.08	-02 56 19.5	0.59	8.5485
2025-Sep-24	23 56 23.86	-03 07 39.3	0.59	8.5479
2025-Sep-30	23 54 42.23	-03 18 41.9	0.614	8.5583
2025-Oct-06	23 53 03.24	-03 29 14.5	0.64	8.5796
2025-Oct-12	23 51 28.75	-03 39 05.5	0.667	8.6114
2025-Oct-18	23 50 00.50	-03 48 04.1	0.696	8.6535
2025-Oct-24	23 48 40.30	-03 55 59.7	0.727	8.7054



Uranus

One of the ice giants of the solar system, Uranus' orbit is included for reference to nearby asteroids.

Date	RA	DEC	Magnitude	Distance (AU)
2024-Dec-15	03 25 54.81	+18 28 05.0	5.649	18.6924
2025-Oct-19	03 53 00.36	+20 01 11.7	5.637	18.6775
2025-Oct-25	03 52 09.89	+19 58 40.2	5.631	18.6239
2025-Oct-31	03 51 15.21	+19 55 55.3	5.626	18.58
2025-Nov-06	03 50 17.18	+19 52 59.3	5.622	18.5463
2025-Nov-12	03 49 16.68	+19 49 54.9	5.619	18.5233
2025-Nov-18	03 48 14.60	+19 46 44.5	5.618	18.5112
2025-Nov-24	03 47 11.96	+19 43 31.3	5.617	18.5104
2025-Nov-30	03 46 09.80	+19 40 18.7	5.619	18.5209
2025-Dec-06	03 45 09.13	+19 37 09.8	5.621	18.5424
2025-Dec-12	03 44 10.85	+19 34 07.6	5.625	18.5748
2025-Dec-18	03 43 15.89	+19 31 15.2	5.63	18.6177

Comet 414P/STEREO in 2025

Date	Mag.	RA	DEC	Elongation	Constellation
2025-Aug-04	19.9	04h 05m 29.31s	+44° 36' 57.2"	65° L	Per
2025-Aug-19	16.8	06h 12m 58.45s	+42° 04' 02.4"	55° L	Aur
2025-Aug-27	15.1	07h 21m 00.27s	+36° 33' 59.0"	48° L	Aur
2025-Sep-04	13.2	08h 21m 13.65s	+28° 42' 21.1"	41° L	Cnc
2025-Sep-08	12.3	08h 48m 09.48s	+24° 14' 32.2"	37° L	Cnc
2025-Sep-11	11.6	09h 07m 11.32s	+20° 46' 59.1"	35° L	Cnc
2025-Sep-13	11.2	09h 19m 24.98s	+18° 27' 19.0"	33° L	Cnc
2025-Sep-15	10.8	09h 31m 20.38s	+16° 07' 40.2"	32° L	Leo
2025-Sep-16	10.7	09h 37m 12.23s	+14° 58' 07.0"	31° L	Leo
2025-Sep-17	10.5	09h 43m 00.68s	+13° 48' 52.6"	30° L	Leo
2025-Sep-18	10.4	09h 48m 46.08s	+12° 40' 02.5"	29° L	Leo
2025-Sep-19	10.2	09h 54m 28.77s	+11° 31' 42.3"	29° L	Leo
2025-Sep-20	10.1	10h 00m 09.03s	+10° 23' 57.2"	28° L	Leo
2025-Sep-21	10.0	10h 05m 47.14s	+09° 16' 52.1"	27° L	Leo
2025-Sep-22	10.0	10h 11m 23.34s	+08° 10' 31.9"	27° L	Leo
2025-Sep-23	9.95	10h 16m 57.81s	+07° 05' 01.2"	26° L	Leo
2025-Sep-24	9.91	10h 22m 30.72s	+06° 00' 24.3"	25° L	Sex
2025-Sep-25	9.90	10h 28m 02.18s	+04° 56' 45.4"	25° L	Sex
2025-Sep-26	9.91	10h 33m 32.28s	+03° 54' 08.3"	24° L	Sex
2025-Sep-27	9.94	10h 39m 01.05s	+02° 52' 36.5"	24° L	Sex
2025-Sep-28	10.0	10h 44m 28.51s	+01° 52' 13.3"	23° L	Sex
2025-Sep-29	10.0	10h 49m 54.65s	+00° 53' 01.6"	23° L	Sex
2025-Sep-30	10.1	10h 55m 19.40s	-00° 04' 56.1"	22° L	Leo
2025-Oct-01	10.2	11h 00m 42.70s	-01° 01' 37.5"	21° L	Leo
2025-Oct-02	10.4	11h 06m 04.46s	-01° 57' 00.9"	21° L	Leo
2025-Oct-03	10.5	11h 11m 24.57s	-02° 51' 05.0"	21° L	Leo
2025-Oct-04	10.7	11h 16m 42.94s	-03° 43' 48.5"	20° L	Leo

2025-Oct-05	10.9	11h 21m 59.44s	-04° 35' 10.9"	20° L	Leo
2025-Oct-06	11.1	11h 27m 13.95s	-05° 25' 11.8"	19° L	Leo
2025-Oct-08	11.5	11h 37m 36.56s	-07° 01' 09.4"	18° L	Crt
2025-Oct-10	12.0	11h 47m 49.94s	-08° 31' 44.8"	18° L	Crt
2025-Oct-13	12.8	12h 02m 51.10s	-10° 37' 50.0"	17° L	Vir
2025-Oct-16	13.6	12h 17m 27.94s	-12° 32' 41.9"	16° L	Crv
2025-Oct-20	14.6	12h 36m 17.30s	-14° 49' 39.3"	15° L	Crv
2025-Oct-28	16.7	13h 11m 37.23s	-18° 35' 00.6"	14° L	Vir
2025-Nov-05	18.6	13h 43m 58.68s	-21° 27' 22.2"	14° L	Vir

Comet ATLAS (C/2024 G3) in 2025

Date	Mag.	RA	DEC	Elongation	Constellation
2024-Dec-15	9.74	16h 30m 36.65s	-37° 51' 46.0"	19° L	Sco
2024-Dec-16	9.60	16h 33m 35.54s	-37° 35' 10.0"	19° L	Sco
2024-Dec-17	9.45	16h 36m 38.19s	-37° 17' 47.2"	19° L	Sco
2024-Dec-18	9.29	16h 39m 44.86s	-36° 59' 34.1"	19° L	Sco
2024-Dec-19	9.13	16h 42m 55.81s	-36° 40' 26.6"	19° L	Sco
2024-Dec-20	8.96	16h 46m 11.34s	-36° 20' 20.6"	19° L	Sco
2024-Dec-21	8.78	16h 49m 31.80s	-35° 59' 11.1"	19° L	Sco
2024-Dec-22	8.60	16h 52m 57.56s	-35° 36' 52.8"	19° L	Sco
2024-Dec-23	8.41	16h 56m 29.04s	-35° 13' 19.9"	19° L	Sco
2024-Dec-24	8.21	17h 00m 06.71s	-34° 48' 25.8"	19° L	Sco
2024-Dec-25	8.00	17h 03m 51.12s	-34° 22' 03.1"	18° L	Sco
2024-Dec-26	7.78	17h 07m 42.87s	-33° 54' 03.7"	18° L	Sco
2024-Dec-27	7.55	17h 11m 42.67s	-33° 24' 18.2"	18° L	Sco
2024-Dec-28	7.30	17h 15m 51.35s	-32° 52' 36.2"	18° L	Sco
2024-Dec-29	7.04	17h 20m 09.85s	-32° 18' 45.8"	18° L	Sco
2024-Dec-30	6.76	17h 24m 39.29s	-31° 42' 33.5"	18° L	Sco
2024-Dec-31	6.46	17h 29m 21.02s	-31° 03' 43.9"	17° L	Sco
2025-Jan-01	6.15	17h 34m 16.66s	-30° 21' 59.3"	17° L	Sco
2025-Jan-02	5.80	17h 39m 28.17s	-29° 36' 59.1"	17° L	Oph
2025-Jan-03	5.43	17h 44m 58.02s	-28° 48' 19.7"	16° L	Sgr
2025-Jan-04	5.02	17h 50m 49.34s	-27° 55' 33.7"	16° L	Sgr
2025-Jan-05	4.57	17h 57m 06.14s	-26° 58' 09.5"	15° L	Sgr
2025-Jan-06	4.07	18h 03m 53.82s	-25° 55' 30.4"	14° L	Sgr
2025-Jan-07	3.50	18h 11m 19.76s	-24° 46' 55.8"	14° L	Sgr
2025-Jan-08	2.84	18h 19m 34.50s	-23° 31' 42.3"	13° L	Sgr
2025-Jan-09	2.08	18h 28m 53.83s	-22° 09' 12.7"	11° L	Sgr
2025-Jan-10	1.16	18h 39m 42.68s	-20° 39' 21.3"	10° L	Sgr

2025-Jan-11	0.05	18h 52m 42.67s	-19° 03' 59.8"	9° L	Sgr
2025-Jan-12	-1.2	19h 09m 03.52s	-17° 31' 49.8"	7° L	Sgr
2025-Jan-13	-2.4	19h 30m 05.66s	-16° 32' 31.0"	5° L	Sgr
2025-Jan-14	-2.3	19h 54m 03.03s	-16° 56' 44.6"	5° T	Sgr
2025-Jan-15	-1.1	20h 15m 12.76s	-18° 32' 48.8"	7° T	Cap
2025-Jan-16	0.10	20h 32m 01.47s	-20° 26' 29.1"	9° T	Cap
2025-Jan-17	1.17	20h 45m 39.82s	-22° 14' 20.8"	11° T	Cap
2025-Jan-18	2.05	20h 57m 09.61s	-23° 51' 21.0"	13° T	Cap
2025-Jan-19	2.79	21h 07m 08.97s	-25° 17' 29.9"	15° T	Cap
2025-Jan-20	3.42	21h 16m 01.46s	-26° 33' 57.3"	16° T	Cap
2025-Jan-21	3.98	21h 24m 02.43s	-27° 42' 01.0"	18° T	Mic
2025-Jan-22	4.47	21h 31m 22.33s	-28° 42' 51.6"	19° T	PsA
2025-Jan-23	4.91	21h 38m 08.66s	-29° 37' 29.5"	20° T	PsA
2025-Jan-24	5.31	21h 44m 26.98s	-30° 26' 45.6"	21° T	PsA
2025-Jan-25	5.68	21h 50m 21.50s	-31° 11' 22.3"	21° T	PsA
2025-Jan-26	6.02	21h 55m 55.54s	-31° 51' 55.3"	22° T	PsA
2025-Jan-27	6.33	22h 01m 11.75s	-32° 28' 54.6"	23° T	PsA
2025-Jan-28	6.62	22h 06m 12.29s	-33° 02' 45.7"	24° T	PsA
2025-Jan-29	6.9	22h 10m 58.94s	-33° 33' 50.3"	24° T	PsA
2025-Jan-30	7.15	22h 15m 33.18s	-34° 02' 27.0"	25° T	PsA
2025-Jan-31	7.40	22h 19m 56.27s	-34° 28' 52.0"	25° T	PsA
2025-Feb-01	7.63	22h 24m 09.29s	-34° 53' 19.1"	26° T	PsA
2025-Feb-02	7.84	22h 28m 13.17s	-35° 16' 00.4"	26° T	PsA
2025-Feb-03	8.05	22h 32m 08.70s	-35° 37' 06.7"	26° T	PsA
2025-Feb-04	8.25	22h 35m 56.61s	-35° 56' 47.0"	27° T	PsA
2025-Feb-05	8.44	22h 39m 37.50s	-36° 15' 09.8"	27° T	PsA
2025-Feb-06	8.62	22h 43m 11.93s	-36° 32' 22.2"	28° T	Gru
2025-Feb-07	8.8	22h 46m 40.40s	-36° 48' 30.8"	28° T	Gru
2025-Feb-08	8.96	22h 50m 03.33s	-37° 03' 41.1"	28° T	Gru

2025-Feb-09	9.12	22h 53m 21.13s	-37° 17' 58.5"	29° T	Gru
2025-Feb-10	9.28	22h 56m 34.16s	-37° 31' 27.5"	29° T	Gru
2025-Feb-11	9.43	22h 59m 42.73s	-37° 44' 12.3"	29° T	Gru
2025-Feb-12	9.57	23h 02m 47.15s	-37° 56' 16.7"	30° T	Gru
2025-Feb-13	9.71	23h 05m 47.68s	-38° 07' 44.0"	30° T	Gru
2025-Feb-14	9.85	23h 08m 44.56s	-38° 18' 37.3"	30° T	Gru
2025-Feb-15	9.98	23h 11m 38.03s	-38° 28' 59.5"	30° T	Gru
2025-Feb-16	10.1	23h 14m 28.29s	-38° 38' 53.1"	31° T	Gru
2025-Feb-17	10.2	23h 17m 15.52s	-38° 48' 20.6"	31° T	Gru
2025-Feb-18	10.3	23h 19m 59.90s	-38° 57' 24.0"	31° T	Gru
2025-Feb-19	10.4	23h 22m 41.60s	-39° 06' 05.4"	32° T	Gru
2025-Feb-20	10.5	23h 25m 20.76s	-39° 14' 26.6"	32° T	Gru
2025-Feb-21	10.6	23h 27m 57.52s	-39° 22' 29.4"	32° T	Phe
2025-Feb-22	10.7	23h 30m 32.01s	-39° 30' 15.2"	33° T	Phe
2025-Feb-23	10.9	23h 33m 04.35s	-39° 37' 45.7"	33° T	Phe
2025-Feb-24	11.0	23h 35m 34.64s	-39° 45' 02.0"	33° T	Phe
2025-Feb-26	11.2	23h 40m 29.50s	-39° 58' 57.7"	34° T	Phe
2025-Feb-28	11.3	23h 45m 17.32s	-40° 12' 11.4"	34° T	Phe
2025-Mar-02	11.5	23h 49m 58.74s	-40° 24' 51.3"	35° T	Phe
2025-Mar-04	11.7	23h 54m 34.30s	-40° 37' 04.4"	36° T	Phe
2025-Mar-06	11.9	23h 59m 04.50s	-40° 48' 56.9"	36° T	Phe
2025-Mar-08	12.0	00h 03m 29.77s	-41° 00' 34.1"	37° T	Phe
2025-Mar-11	12.2	00h 09m 59.33s	-41° 17' 41.1"	38° T	Phe
2025-Mar-14	12.4	00h 16m 19.94s	-41° 34' 37.6"	39° T	Phe
2025-Mar-17	12.6	00h 22m 32.67s	-41° 51' 35.5"	41° T	Phe
2025-Mar-20	12.8	00h 28m 38.43s	-42° 08' 45.0"	42° T	Phe
2025-Mar-23	13.0	00h 34m 38.03s	-42° 26' 15.6"	43° T	Phe
2025-Mar-27	13.2	00h 42m 29.05s	-42° 50' 24.1"	45° T	Phe
2025-Mar-31	13.5	00h 50m 11.57s	-43° 15' 43.7"	47° T	Phe

2025-Apr-04	13.7	00h 57m 46.54s	-43° 42' 29.9"	49° T	Phe
2025-Apr-08	13.8	01h 05m 14.79s	-44° 10' 54.5"	51° L	Phe
2025-Apr-12	14.0	01h 12m 37.15s	-44° 41' 07.0"	53° L	Phe
2025-Apr-20	14.4	01h 27m 07.18s	-45° 47' 29.8"	57° L	Phe
2025-Apr-28	14.7	01h 41m 21.47s	-47° 02' 42.4"	61° L	Phe
2025-May-06	14.9	01h 55m 22.38s	-48° 27' 35.5"	66° L	Eri
2025-May-14	15.2	02h 09m 11.55s	-50° 02' 28.3"	70° L	Eri
2025-May-22	15.4	02h 22m 50.84s	-51° 47' 25.9"	74° L	Eri
2025-May-30	15.7	02h 36m 20.77s	-53° 42' 26.5"	79° L	Hor
2025-Jun-07	15.9	02h 49m 39.92s	-55° 47' 00.6"	83° L	Hor
2025-Jun-15	16.1	03h 02m 47.22s	-58° 00' 12.0"	87° L	Hor
2025-Jun-23	16.3	03h 15m 41.01s	-60° 20' 57.2"	90° L	Ret
2025-Jul-01	16.5	03h 28m 16.78s	-62° 47' 59.3"	93° L	Ret
2025-Jul-09	16.7	03h 40m 28.03s	-65° 19' 34.6"	96° L	Ret
2025-Jul-17	16.9	03h 52m 07.09s	-67° 53' 55.6"	98° L	Hyi
2025-Jul-25	17.1	04h 03m 01.31s	-70° 29' 21.4"	100° L	Hyi
2025-Aug-09	17.4	04h 20m 04.02s	-75° 17' 20.2"	101° L	Men
2025-Aug-24	17.8	04h 28m 07.41s	-79° 51' 14.7"	100° L	Men
2025-Sep-08	18.1	04h 10m 13.72s	-83° 57' 54.9"	97° L	Men
2025-Sep-23	18.4	02h 08m 43.50s	-86° 55' 58.1"	92° L	Oct
2025-Oct-08	18.8	22h 13m 34.81s	-86° 20' 31.5"	87° T	Oct
2025-Oct-23	19.1	21h 07m 36.61s	-83° 39' 00.2"	80° T	Oct
2025-Nov-07	19.4	21h 02m 12.29s	-80° 51' 49.0"	74° T	Oct
2025-Nov-22	19.6	21h 13m 18.68s	-78° 16' 50.6"	68° T	Oct
2025-Dec-07	19.9	21h 30m 36.89s	-75° 56' 59.3"	63° T	Oct

Comet 210P/Christensen in 2025

Date	Mag.	RA	DEC	Elongation	Constellation
2025-Jun-16	19.9	21h 55m 16.17s	-20° 06' 29.0"	120° L	Cap
2025-Jul-01	19.2	21h 57m 17.28s	-21° 38' 00.9"	134° L	Cap
2025-Jul-16	18.4	21h 51m 39.56s	-24° 19' 03.9"	149° L	Cap
2025-Jul-31	17.6	21h 34m 41.16s	-28° 22' 58.4"	164° L	PsA
2025-Aug-15	16.8	21h 02m 28.52s	-33° 30' 14.6"	159° T	Mic
2025-Aug-23	16.3	20h 38m 40.63s	-36° 14' 08.6"	148° T	Mic
2025-Aug-31	15.9	20h 11m 27.37s	-38° 35' 20.9"	135° T	Sgr
2025-Sep-08	15.5	19h 42m 48.70s	-40° 20' 08.8"	123° T	Sgr
2025-Sep-16	15.1	19h 14m 54.92s	-41° 24' 38.4"	110° T	CrA
2025-Sep-24	14.6	18h 49m 20.62s	-41° 54' 02.4"	98° T	CrA
2025-Oct-02	14.2	18h 26m 20.49s	-41° 58' 08.3"	86° T	CrA
2025-Oct-10	13.6	18h 04m 26.98s	-41° 44' 23.8"	75° T	CrA
2025-Oct-14	13.3	17h 53m 00.13s	-41° 30' 48.1"	69° T	Sco
2025-Oct-18	12.9	17h 40m 30.32s	-41° 10' 48.4"	63° T	Sco
2025-Oct-21	12.6	17h 30m 01.36s	-40° 49' 36.7"	58° T	Sco
2025-Oct-24	12.3	17h 18m 12.52s	-40° 20' 30.2"	53° T	Sco
2025-Oct-27	12.0	17h 04m 42.52s	-39° 39' 56.6"	47° T	Sco
2025-Oct-30	11.7	16h 49m 13.14s	-38° 43' 04.1"	41° T	Sco
2025-Nov-01	11.5	16h 37m 42.27s	-37° 53' 06.5"	37° T	Sco
2025-Nov-03	11.0	16h 25m 15.68s	-36° 51' 13.6"	33° T	Sco
2025-Nov-04	11.0	16h 18m 43.33s	-36° 15' 13.9"	31° T	Sco
2025-Nov-05	11.0	16h 11m 59.99s	-35° 35' 36.2"	28° T	Sco
2025-Nov-06	11.0	16h 05m 07.43s	-34° 52' 11.9"	26° T	Lup
2025-Nov-07	11.0	15h 58m 07.82s	-34° 04' 56.4"	23° T	Lup
2025-Nov-08	11.0	15h 51m 03.71s	-33° 13' 49.4"	21° T	Lup
2025-Nov-09	11.0	15h 43m 57.95s	-32° 18' 56.3"	18° T	Lup
2025-Nov-10	11.0	15h 36m 53.68s	-31° 20' 28.5"	16° T	Lup

2025-Nov-11	11.0	15h 29m 54.19s	-30° 18' 44.1"	14° T	Lup
2025-Nov-12	11.0	15h 23m 02.86s	-29° 14' 07.3"	12° T	Lib
2025-Nov-13	11.0	15h 16m 23.00s	-28° 07' 08.7"	10° T	Lib
2025-Nov-14	11.0	15h 09m 57.83s	-26° 58' 23.7"	8° L	Lib
2025-Nov-15	11.0	15h 03m 50.27s	-25° 48' 31.5"	8° L	Lib
2025-Nov-16	11.0	14h 58m 02.93s	-24° 38' 13.8"	8° L	Lib
2025-Nov-17	11.0	14h 52m 38.04s	-23° 28' 12.6"	9° L	Lib
2025-Nov-18	11.0	14h 47m 37.34s	-22° 19' 08.9"	11° L	Lib
2025-Nov-19	11.0	14h 43m 02.13s	-21° 11' 40.7"	12° L	Lib
2025-Nov-20	11.0	14h 38m 53.24s	-20° 06' 22.0"	14° L	Lib
2025-Nov-21	11.0	14h 35m 11.03s	-19° 03' 42.0"	16° L	Lib
2025-Nov-22	11.0	14h 31m 55.46s	-18° 04' 04.0"	18° L	Lib
2025-Nov-23	11.0	14h 29m 06.12s	-17° 07' 45.7"	20° L	Lib
2025-Nov-24	11.0	14h 26m 42.27s	-16° 14' 59.2"	22° L	Lib
2025-Nov-25	11.0	14h 24m 42.93s	-15° 25' 51.3"	23° L	Lib
2025-Nov-26	11.0	14h 23m 06.89s	-14° 40' 24.1"	25° L	Lib
2025-Nov-27	11.0	14h 21m 52.81s	-13° 58' 35.7"	26° L	Lib
2025-Nov-28	11.1	14h 20m 59.24s	-13° 20' 21.1"	28° L	Vir
2025-Nov-30	11.3	14h 20m 07.60s	-12° 14' 00.1"	30° L	Vir
2025-Dec-02	11.5	14h 20m 19.89s	-11° 19' 59.7"	33° L	Vir
2025-Dec-04	11.7	14h 21m 24.63s	-10° 36' 44.5"	35° L	Vir
2025-Dec-06	12.0	14h 23m 11.41s	-10° 02' 37.3"	37° L	Lib
2025-Dec-09	12.3	14h 26m 50.98s	-09° 25' 15.8"	39° L	Lib
2025-Dec-12	12.7	14h 31m 20.19s	-09° 00' 34.8"	41° L	Lib
2025-Dec-15	13.0	14h 36m 20.36s	-08° 45' 00.7"	43° L	Lib
2025-Dec-19	13.5	14h 43m 25.76s	-08° 33' 49.7"	46° L	Lib
2025-Dec-23	13.9	14h 50m 40.29s	-08° 29' 28.5"	48° L	Lib
2025-Dec-27	14.3	14h 57m 49.93s	-08° 28' 53.3"	51° L	Lib
2026-Jan-04	15.0	15h 11m 22.70s	-08° 31' 38.5"	55° L	Lib

2026-Jan-12	15.6	15h 23m 25.42s	-08° 32' 45.8"	61° L	Lib
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Comet 24P/Schaumasse in 2025

Date	Mag.	RA	DEC	Elongation	Constellation
2025-Jul-22	19.9	03h 54m 06.85s	+13° 26' 10.5"	60° L	Tau
2025-Aug-06	19.3	04h 22m 23.77s	+14° 57' 27.9"	67° L	Tau
2025-Aug-21	18.6	04h 52m 42.04s	+16° 18' 38.6"	74° L	Tau
2025-Sep-05	17.9	05h 25m 28.17s	+17° 29' 04.3"	80° L	Tau
2025-Sep-20	17.1	06h 01m 24.26s	+18° 28' 36.2"	86° L	Ori
2025-Oct-05	16.2	06h 41m 29.70s	+19° 16' 58.4"	91° L	Gem
2025-Oct-13	15.7	07h 05m 04.95s	+19° 37' 52.6"	94° L	Gem
2025-Oct-21	15.2	07h 30m 33.27s	+19° 54' 43.3"	96° L	Gem
2025-Oct-29	14.7	07h 58m 12.00s	+20° 06' 35.7"	97° L	Gem
2025-Nov-06	14.3	08h 28m 19.82s	+20° 11' 47.0"	98° L	Cnc
2025-Nov-14	13.8	09h 01m 10.59s	+20° 07' 36.2"	99° L	Cnc
2025-Nov-18	13.6	09h 18m 37.58s	+20° 01' 00.8"	99° L	Cnc
2025-Nov-22	13.3	09h 36m 43.70s	+19° 50' 50.8"	99° L	Leo
2025-Nov-26	13.1	09h 55m 25.85s	+19° 36' 39.5"	99° L	Leo
2025-Nov-30	12.9	10h 14m 39.38s	+19° 18' 02.2"	98° L	Leo
2025-Dec-03	12.8	10h 29m 21.42s	+19° 00' 57.6"	98° L	Leo
2025-Dec-06	12.7	10h 44m 14.35s	+18° 41' 07.7"	98° L	Leo
2025-Dec-09	12.6	10h 59m 14.34s	+18° 18' 32.7"	97° L	Leo
2025-Dec-12	12.4	11h 14m 17.04s	+17° 53' 18.4"	97° L	Leo
2025-Dec-15	12.3	11h 29m 17.87s	+17° 25' 35.0"	96° L	Leo
2025-Dec-18	12.3	11h 44m 12.16s	+16° 55' 36.4"	96° L	Leo
2025-Dec-21	12.2	11h 58m 55.39s	+16° 23' 39.8"	95° L	Com
2025-Dec-24	12.1	12h 13m 23.24s	+15° 50' 04.9"	95° L	Com
2025-Dec-27	12.1	12h 27m 31.81s	+15° 15' 12.9"	94° L	Com
2025-Dec-30	12.0	12h 41m 17.71s	+14° 39' 25.6"	94° L	Com
2026-Jan-02	12.0	12h 54m 38.08s	+14° 03' 05.4"	94° L	Com
2026-Jan-05	12.0	13h 07m 30.54s	+13° 26' 35.5"	93° L	Vir

2026-Jan-08	12.0	13h 19m 53.08s	+12° 50' 19.1"	93° L	Vir
2026-Jan-11	12.0	13h 31m 44.03s	+12° 14' 37.8"	93° L	Vir
2026-Jan-14	12.0	13h 43m 02.12s	+11° 39' 50.8"	93° L	Boo

Acknowledgements

This book would not be possible without the prior work of many others, so I would like to offer my thanks here to a number of my main resources. Sadly there are other resources that I have used over the years to which I also owe thanks but which have become part of the furniture of my mind and have thus been overlooked on the following list.

Wikipedia is a phenomenal resource and more trustworthy than many think - but double-checking is always advisable, both for Wikipedia and any other online resource!

https://en.wikipedia.org/wiki/Main_Page

In contrast to my previous books, the charts in this book are based on the ATHYG-Database star catalog prepared by David Nash (astronexus) from the Tycho and Gaia catalogs. ATHYG covers such a volume of stars that I am now able to generate "Milky Way contours" from the relative densities of fainter stars.

<https://github.com/bronson/ATHYG-Database>

Asteroid and comet data is extracted from the NASA Horizons service.

<https://ssd.jpl.nasa.gov/api/horizons.api>

A great resource for meteor shower predictions is the Meteor Shower Calendar from the International Meteor Organization:

<https://www.imo.net/>

The Apache Software Foundation and the Apache FOP contributors provided the PDF and SVG rendering software required for this book. They said FOP 0.96 was dead, but 20 years later it is still going strong. Version 2.9 and counting!

<https://xmlgraphics.apache.org/fop/>

The World Wide Web Consortium developed the XSL FO and SVG standards used by Apache FOP. In this modern age of the shifting sands of "living standards", I want to give a shout-out to good old-fashioned standards hammered out by a committee and running to hundreds of pages.

The work that went into creating these standards opened up technical publishing technology to the world.

<https://www.w3.org/TR/xsl/>

<https://www.w3.org/TR/SVG2/>

The cover image shows the second largest (and by far the brightest) asteroid, Vesta. The image was taken by the Dawn spacecraft. (NASA/JPL-Caltech/UCLA/MPS/DLR/IDA).

This book received constructive input from the members of Stargazer's Lounge and Cloudy Nights, which brought about many improvements, such as the annual highlights section.

Linda Clarke contributed many hours of patient editing, diagram adjustment, and data normalization that made this book possible.

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