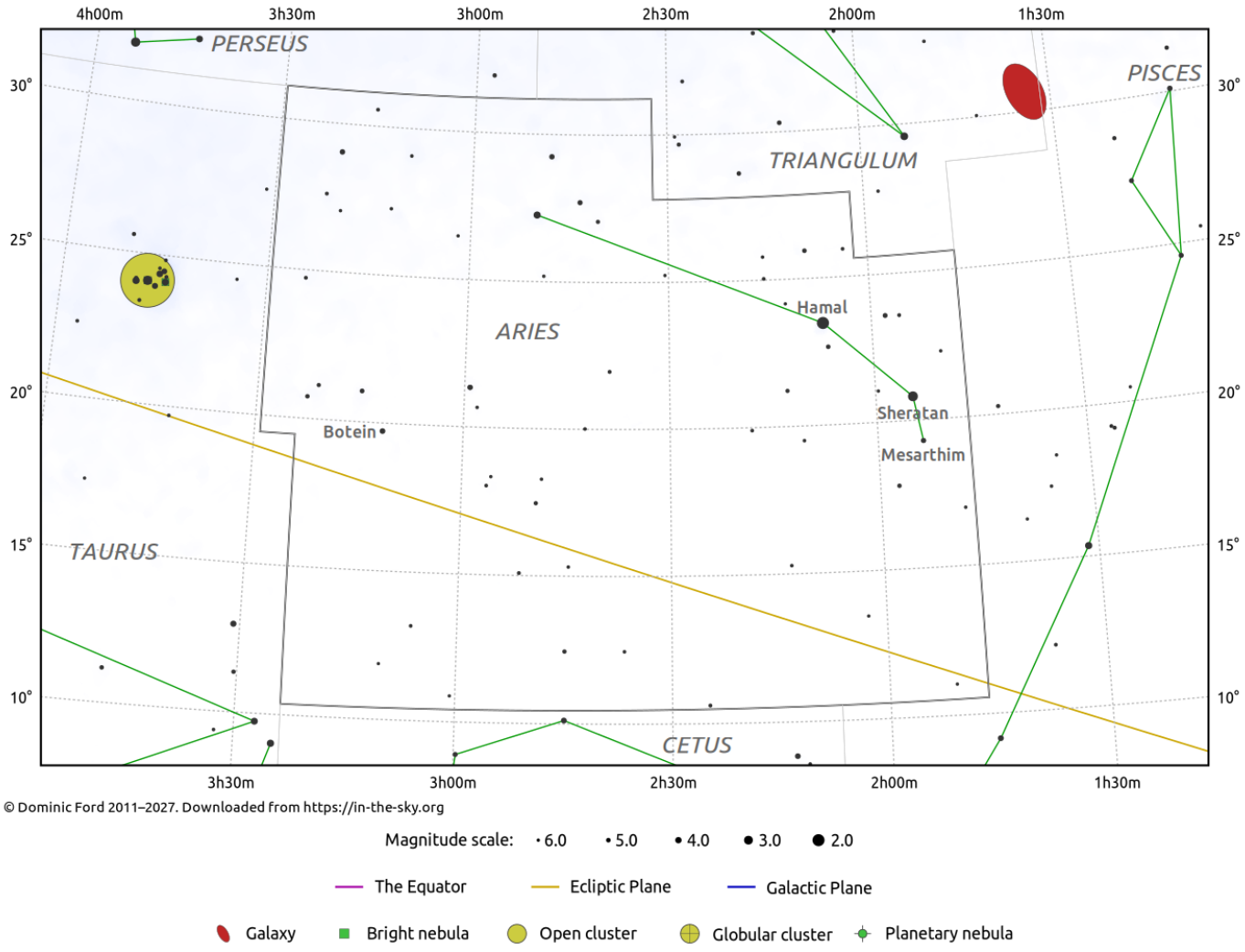
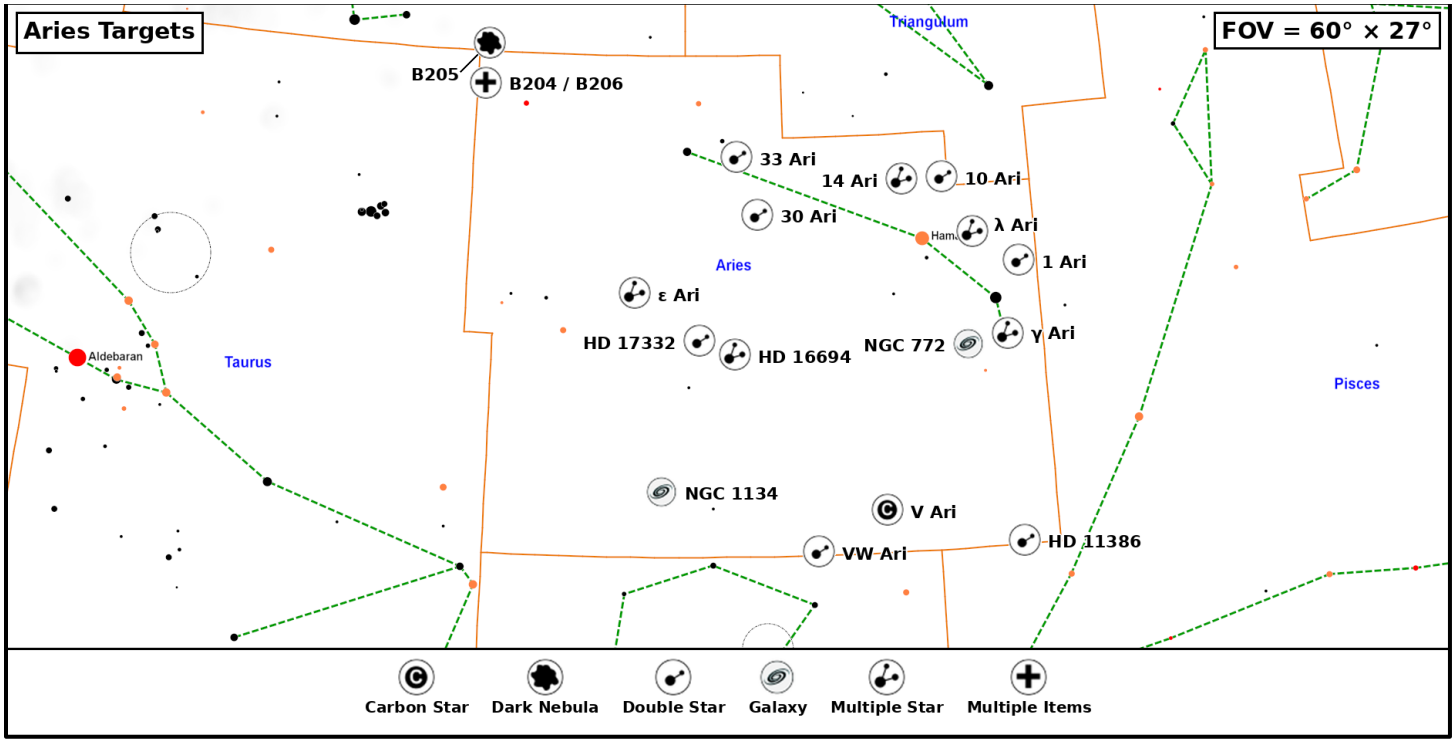
Constellation: Aries (Ari)

Evening Visibility: **October – December**
Opposition: **November**
Latitude Visibility: **+90° to -60°**
Online Information: | In-The-Sky.org | Constellation-guide.com |

In-The-Sky.org Constellation Map





Constellation Targets

1 Arietis, HD 11386, Gamma Arietis, Lambda Arietis, NGC 772, 10 Arietis, 14 Arietis, V Arietis, VW Arietis, 30 Arietis, 33 Arietis, HD 16694, HD 17332, NGC 1134, Epsilon Arietis, Barnard 204, Barnard 205, Barnard 206

Mythology/Back Story

Aries is Latin for "the ram." In Greek mythology it is the winged ram with the golden fleece, sent by the cloud nymph Nephele to rescue her children Phrixus and Helle from a plot to have Phrixus sacrificed. Helle slipped from its back and fell into the strait later named the Hellespont (the Dardanelles), but Phrixus reached Colchis, where the fleece was later taken by Jason and the Argonauts. In one version of the myth the ram shed its golden fleece before flying into the sky, which was said to explain why the constellation's stars are so faint. The constellation is older than the Greeks: around 1000 BCE Babylonian astronomers knew these stars as "the Hired Man," a farm laborer, before they became a ram. Aries is one of the 48 constellations cataloged by Ptolemy in the 2nd century CE. It ranks 39th in size; its brightest stars, Hamal (from the Arabic for "lamb"), Sheratan and Mesarthim, form the crooked line of the ram's head. Aries is also the radiant of the Daytime Arietids, one of the strongest meteor showers of the year, but it peaks in June in daylight. Lying well away from the Milky Way, Aries has no star clusters or Messier objects, but offers faint galaxies and some fine double stars.

Constellation Guide

Constellation Highlights

The highlights in Aries are its double and multiple stars, along with one bright galaxy. Each of these targets appears on several well-known observing lists.

- **Gamma Arietis** (MS-3) – The Ram's Eyes, a showcase white pair.
- **NGC 772** (G) – The Fiddlehead Galaxy, the brightest galaxy here.
- **Lambda Arietis** (MS-4) – Yellow and blue showcase pair, wide enough for binoculars.
- **Epsilon Arietis** (MS-3) – Close matched pair, a test of resolving power.

Constellation Targets Summary List

Object (Type)	Links	Gear	Aliases	Stats
1 Arietis (DS)	1, 2	T	SAO-074966; HIP-8544; HR 530; HD 11154; 1 Ari; Σ-174; STF 174; ADS 1457; WDS01501+2217; BD+21 243	**AB** | Mag=6.3 / 7.2 | Sep=2.9" | PA=164° | mBortle=9 | mApt=50mm | RecMag=80x | Spec=G3III / A3IV | Color=yellow / blue |
HD 11386 (DS)	1	T	SAO-092669; HIP-8708; Σ-178; STF 178; WDS01520+1049; BD +10 255; ADS 1487	**AB** | Mag=8.2 / 8.2 | Sep=3" | PA=205° | mBortle=9 | mApt=50mm | RecMag=80x | Spec=F1V | Color=yellow-white |
Gamma Arietis (MS-3)	1, 2	B, T	SAO-092681; SAO-092680; HIP-8832; Mesarthim; HR 546; HR 545; HD 11502; HD 11503; The First Star in Aries; Gamma Ari; γ Ari; Gam Ari; γ Arietis; Gamma Arietis; 5 Ari; Σ-180; STF 180; ADS 1507; BD+18 243; WDS01535+1918	**AB** | Mag=4.5 / 4.6 | Sep=7.3" | PA=1° | mBortle=9 | mApt=50mm | RecMag=30x | Magnitude Range= 4.6 to 4.7 | Period=2.6d | Spec=A1pSi / B9V | Color=white / blue-white | **AC** | Mag=4.5 / 8.6 | Sep=214.9" | PA=81° | mBortle=9 | mApt=50mm | RecMag=10x | Magnitude Range= 4.6 to 4.7 | Period=2.6d | Spec=A1pSi / K | Color=white / orange |
Lambda Arietis (MS-4)	1, 2	B, T	SAO-075051; HIP-9153; lam Ari; HR 569; HD 11973; Lambda Ari; λ Ari; λ Arietis; Lambda Arietis; 9 Ari; 9 Arietis; H512; ADS 1563; BD+22 288; WDS01579+2336; CCDM 01580+2336	**AB** | Mag=4.8 / 6.7 | Sep=37.3" | PA=47° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F0IV / F7V | Color=yellow / blue | **AC** | Mag=4.8 / 9.7 | Sep=190.4" | PA=76° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F0IV / K | Color=yellow / orange | **AD** | Mag=4.8 / 9.9 | Sep=272.3" | PA=85° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F0IV | Color=yellow |
NGC 772 (G)	1	T	NGC-772; Fiddlehead Galaxy; UGC 1466; MCG +03-06-011; Levy-58; PGC 7525; Arp 78; CGCG 461-018; IRAS 01565+1845	| Mag=10.3 | Size=7'x5' | SB=22.8 | mBortle=4 | mApt=150mm | MC=SA(s)b |
10 Arietis (DS)	1, 2	T	SAO-075114; HIP-9621; HR 605; HD 12558; 10 Ari; Σ-208; STF 208; ADS 1631; BD+25 341; WDS02037+2556	**AB** | Mag=5.8 / 7.9 | Sep=1.5" | PA=347° | mApt=180mm | RecMag=160x | Period=325y | Spec=F8IV | Color=yellow-white |
14 Arietis (MS-3)	1, 2	B, T	SAO-075171; HIP-10053; HR 623; HD 13174; 14 Ari; H669;	**AB** | Mag=5.0 / 8.0 | Sep=93.1" | PA=35° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F2III | Color=yellow-white |

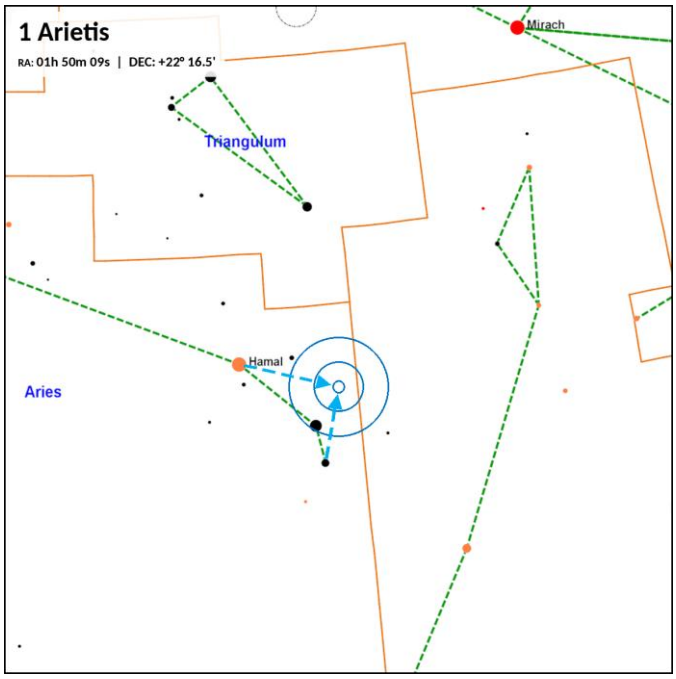
Object (Type)	Links	Gear	Aliases	Stats
			BD+25 355; WDS02094+2556; FK5 1089	**AC** | Mag=5.0 / 8.0 | Sep=106.2" | PA=279° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F2III | Color=yellow-white |
V Arietis (CS, VS)		T	SAO-092853; HIP-10472; HD 13826; V Ari; BD +11 305	| Magnitude Range= 8.2 to 8.9 | Period=56d | Spec=R8(Sh),C5p,5(KM) | BV=+2.15 | Color=orange-red |
VW Arietis (DS)	1	B, T	SAO-092952; HIP-11390; HD 15165; OΣΣ27; WDS02268+1034; STTA27; BD +09 321	**AB** | Mag=6.7 / 8.3 | Sep=73.8" | PA=31° | mBortle=9 | mApt=50mm | RecMag=10x | Magnitude Range= 6.6 to 6.8 | Period=0.2d | Spec=A3 | Color=white |
30 Arietis (DS)	1, 2	B, T	SAO-075471; HIP-12189; HR 765; HD 16246; 30 Ari; ADS 1982; BD+24 376; STFA5; ΣI5; WDS02370+2439; Meade270; CCDM 02370+2439	**AB** | Mag=6.5 / 7.0 | Sep=38" | PA=275° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F5V / F7V | Color=yellow-white / yellow-white |
33 Arietis (DS)	1, 2	B, T	SAO-075510; HIP-12489; HR 782; HD 16628; 33 Ari; Σ-289; STF 289; ADS 2033; BD+26 443; WDS02407+2704	**AB** | Mag=5.3 / 9.6 | Sep=28.6" | PA=1° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=A3V | Color=white |
HD 16694 (MS-3)	1	B, T	SAO-093052; HIP-12518; HD 16694; Σ-291; STF 291; WDS02411+1848; BD +18 337; ADS 2042	**AB** | Mag=7.7 / 7.5 | Sep=3.4" | PA=118° | mBortle=9 | mApt=50mm | RecMag=70x | Spec=B9.5V / A0V | Color=blue-white / white | **AC** | Mag=7.7 / 9.5 | Sep=65.5" | PA=242° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=B9.5V / A8V | Color=blue-white / white |
HD 17332 (DS)	1	T	SAO-093105; HIP-13027; Σ-305; STF 305; WDS02475+1922; BD +18 347; ADS 2122	**AB** | Mag=7.5 / 8.3 | Sep=3.6" | PA=307° | mBortle=9 | mApt=50mm | RecMag=70x | Period=531.5y | Spec=G0V | Color=yellow |
NGC 1134 (G)	1	T	NGC-1134; Levy 340; UGC 2365; MCG +02-08-027; PGC 10928; Arp 200; LEDA 10928; CGCG 440-027; IRAS 02509+1248; 2MASX J02534134+1300508; UZC J025341.2+130053; BWE 0250+1248	| Mag=12.1 | Size=3.2'x1.3' | SB=22.3 | mBortle=1 | mApt=200mm | MC=Sb |
Epsilon Arietis (MS-3)	1, 2	B, T	SAO-075673; HIP-13914; HR 887; HD 18519; ε Ari; Eps Ari; Epsilon Ari; ε Arietis; Epsilon Arietis; 48 Ari; 48 Arietis; Σ-333; STF 333; ADS 2257; BD+20 484; WDS02592+2120	**AB** | Mag=5.2 / 5.6 | Sep=1.3" | PA=211° | mBortle=9 | mApt=102mm | RecMag=180x | Period=710y | Spec=A2Vs / A2Vs | Color=white / white | **AC** | Mag=5.2 / 12.7 | Sep=145.6" | PA=192° | mBortle=4 | mApt=150mm | RecMag=10x | Spec=A2Vs | Color=white |
Barnard 204 (DN)		T	B-204; LDN 1455	| Size=14' | mBortle=4 | mApt=50mm | Opacity=5 |
Barnard 205 (DN)		T	B-205; LDN 1450	| Size=15' | mBortle=4 | mApt=50mm | Opacity=5 |

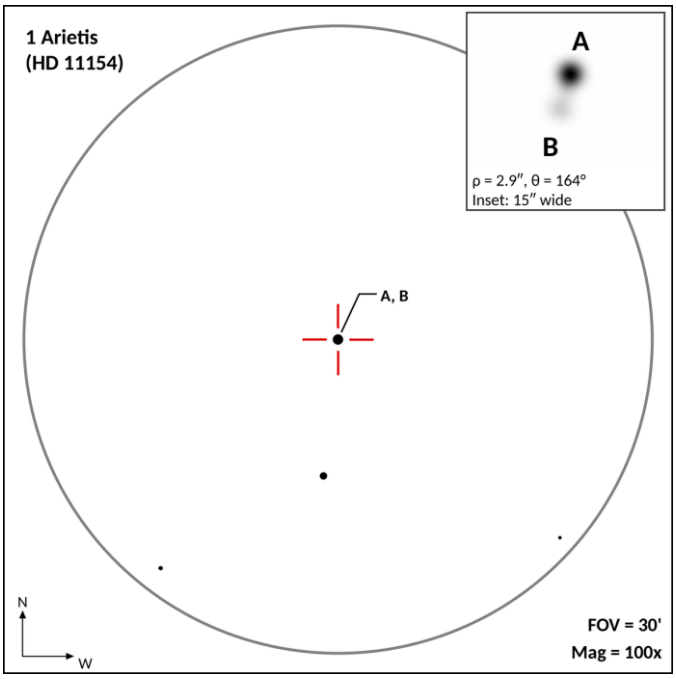
Object (Type)	Links	Gear	Aliases	Stats
Barnard 206 (DN)		T	B-206; LDN 1450	| Size=5' | mBortle=4 | mApt=50mm | Opacity=5 |

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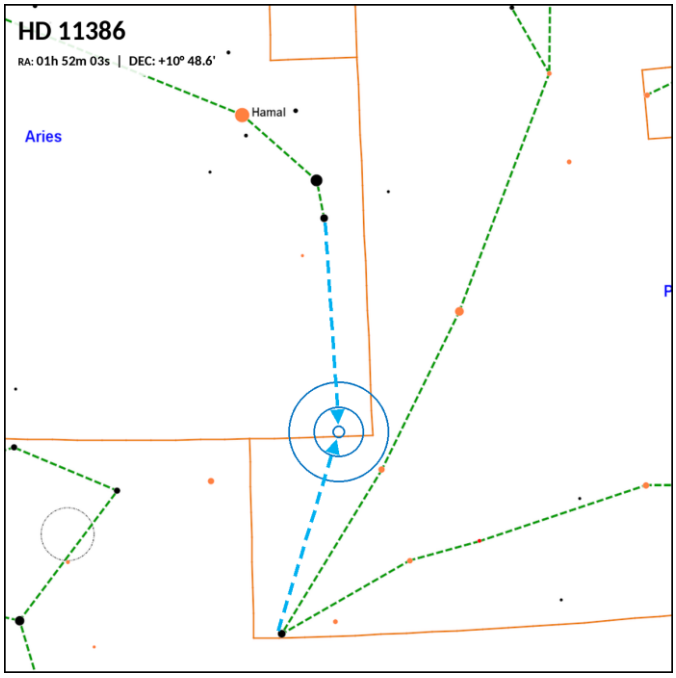
Constellation Guide

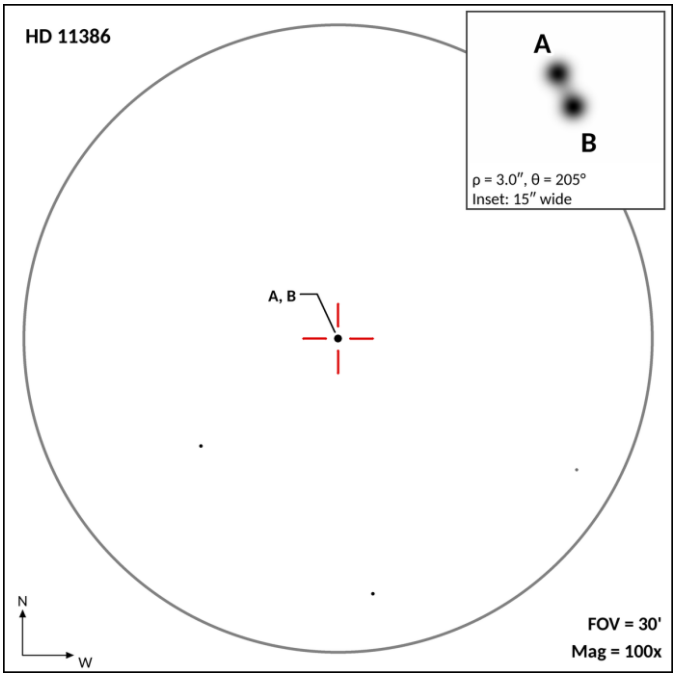
1 Arietis (DS || **AB** | Mag=6.3 / 7.2 | Sep=2.9" | PA=164° | mBortle=9 | mApt=50mm | RecMag=80x | Spec=G3III / A3IV | Color=yellow / blue |) Located 590 light years away, the primary is an evolved giant star and its companion a less evolved A-type subgiant.



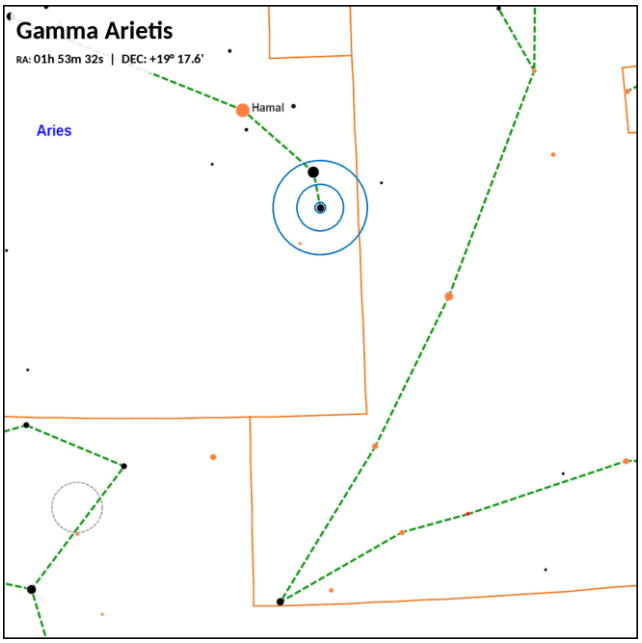


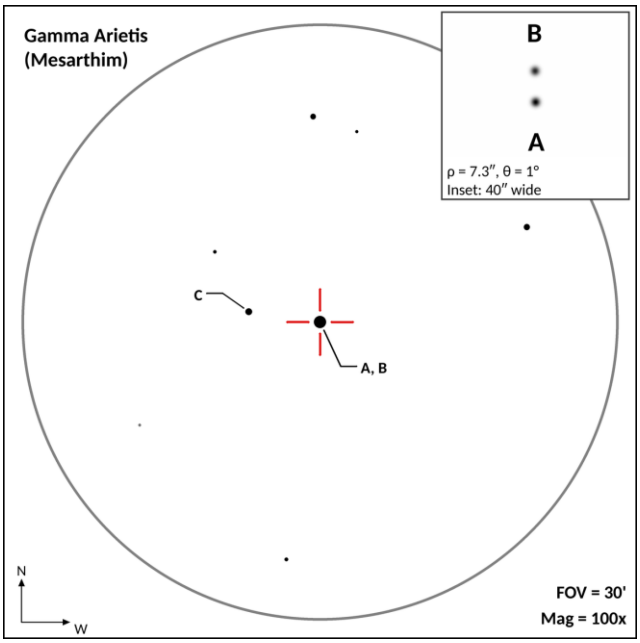
HD 11386 (DS || **AB** | Mag=8.2 / 8.2 | Sep=3" | PA=205° | mBortle=9 | mApt=50mm | RecMag=80x | Spec=F1V | Color=yellow-white |) Located 410 light years away. The primary is a metallic-line (Am) star, a yellow-white star whose spectrum shows unusually strong lines of metals, and shines with about 7 times the Sun's luminosity. The nature of the pair has not been determined.



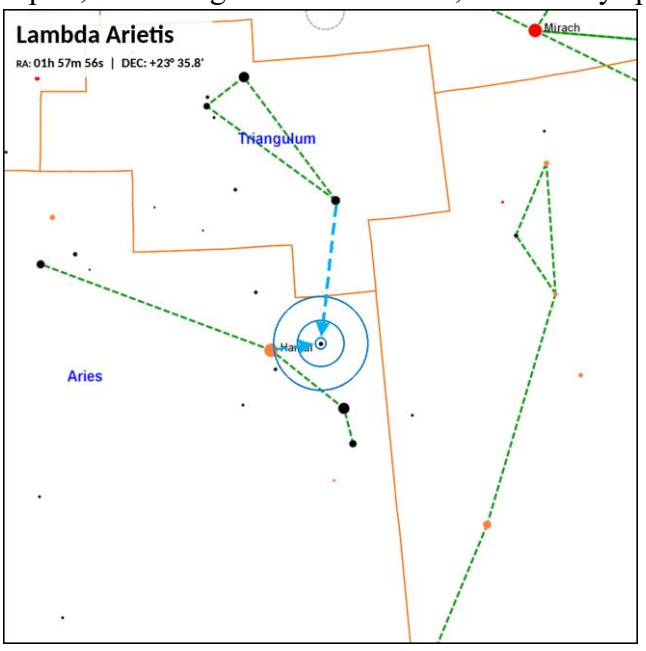


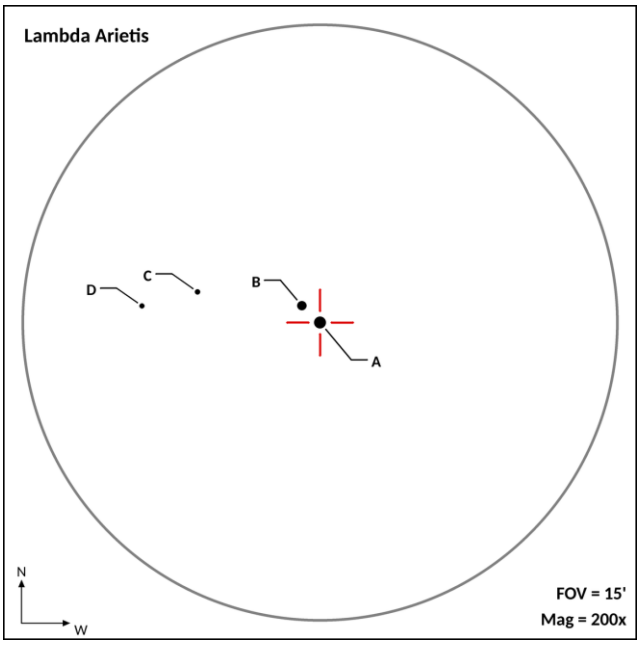
Gamma Arietis (MS-3 || **AB** | Mag=4.5 / 4.6 | Sep=7.3" | PA=1° | mBortle=9 | mApt=50mm | RecMag=30x | Magnitude Range= 4.6 to 4.7 | Period=2.6d | Spec=A1pSi / B9V | Color=white / blue-white || **AC** | Mag=4.5 / 8.6 | Sep=214.9" | PA=81° | mBortle=9 | mApt=50mm | RecMag=10x | Magnitude Range= 4.6 to 4.7 | Period=2.6d | Spec=A1pSi / K | Color=white / orange |) Known as the Ram's Eyes, this showcase pair of identical brilliant white stars (Haas) is physical, though no orbit is determined; estimates exceed 5,000 years.



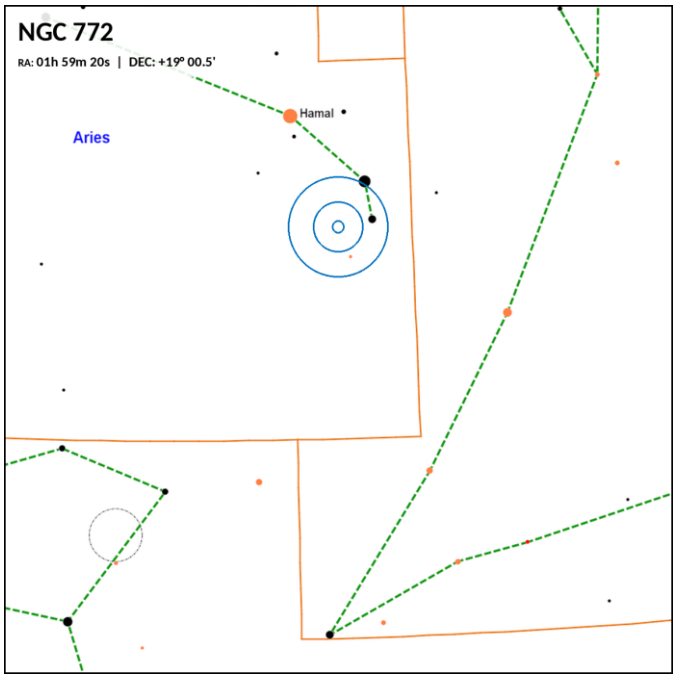


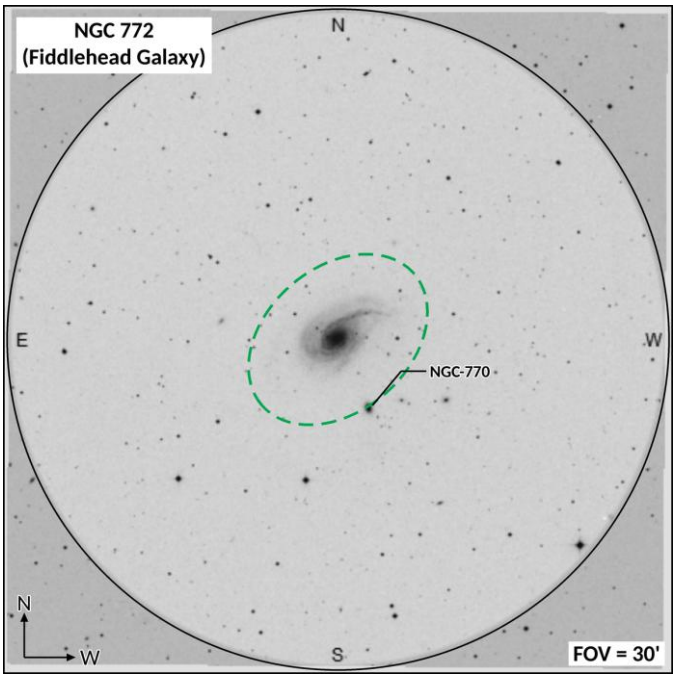
Lambda Arietis (MS-4 || **AB** | Mag=4.8 / 6.7 | Sep=37.3" | PA=47° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F0IV / F7V | Color=yellow / blue || **AC** | Mag=4.8 / 9.7 | Sep=190.4" | PA=76° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F0IV / K | Color=yellow / orange || **AD** | Mag=4.8 / 9.9 | Sep=272.3" | PA=85° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F0IV | Color=yellow |) The AB pair is about 1,600 AU apart; a challenge in 7x binoculars, it is readily split at 10x.



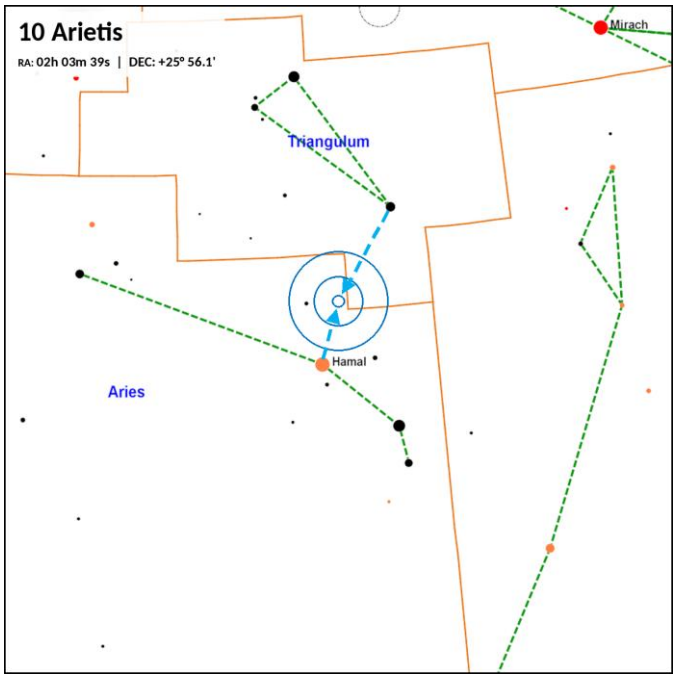


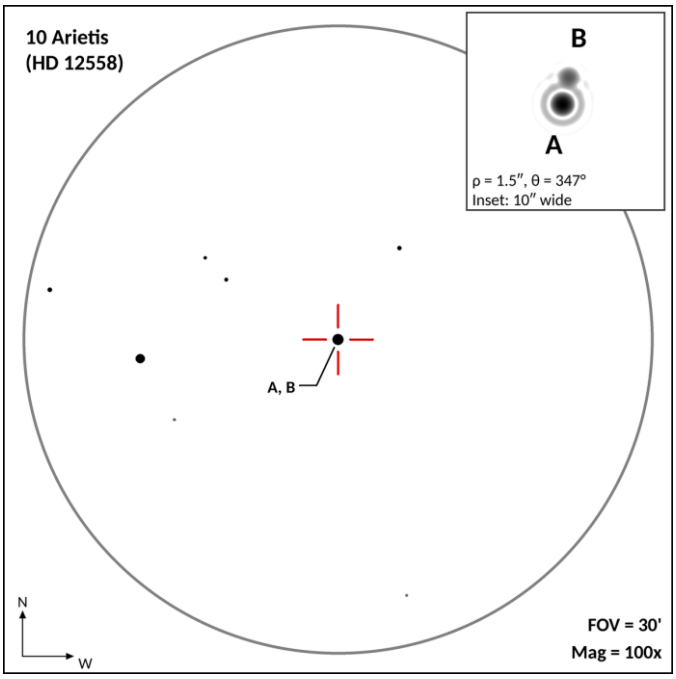
NGC 772 (G || Mag=10.3 | Size=7'x5' | SB=22.8 | mBortle=4 | mApt=150mm | MC=SA(s)b |) The Fiddlehead Galaxy is a large unbarred spiral 110 million light years away and about 200,000 light years across, larger than the Milky Way. Tidal pull from its satellites, including the dwarf elliptical NGC 770 in the same field of view, has drawn out one dominant spiral arm.



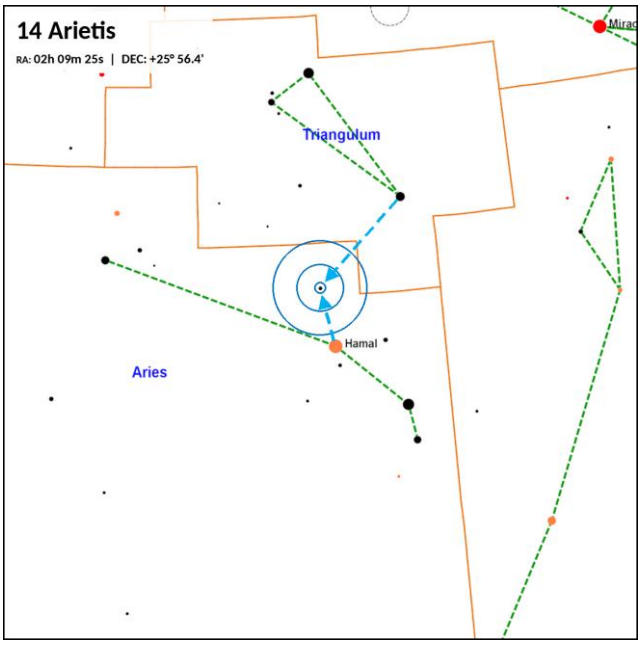


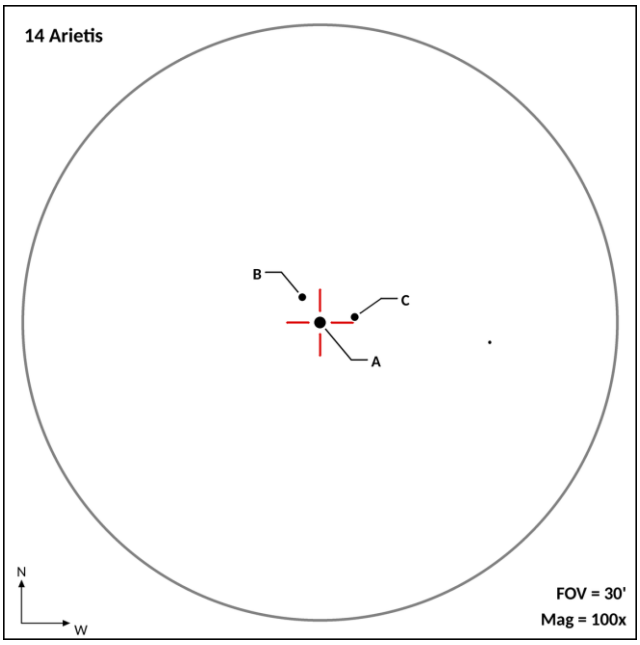
10 Arietis (DS || **AB** | Mag=5.8 / 7.9 | Sep=1.5" | PA=347° | mApt=180mm | RecMag=160x | Period=325y | Spec=F8IV | Color=yellow-white |) Located 160 light years away, the primary is an aging yellow-white subgiant with a main-sequence companion. The close separation and two-magnitude difference make this a difficult split for small telescopes.



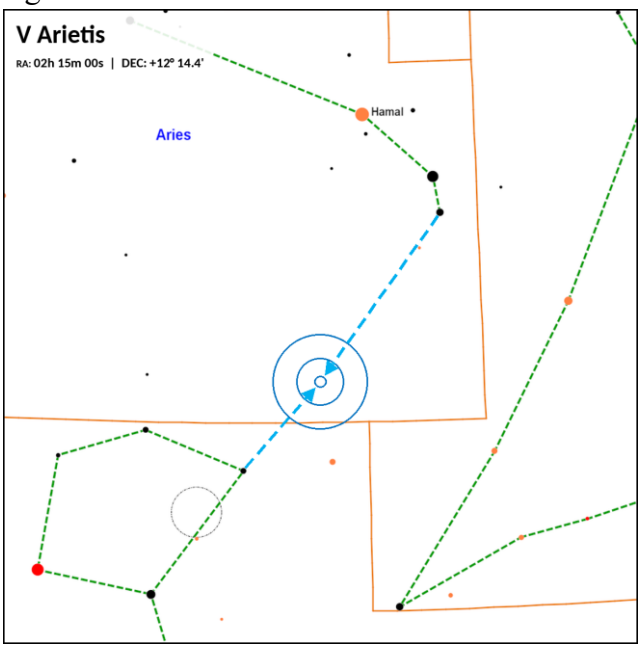


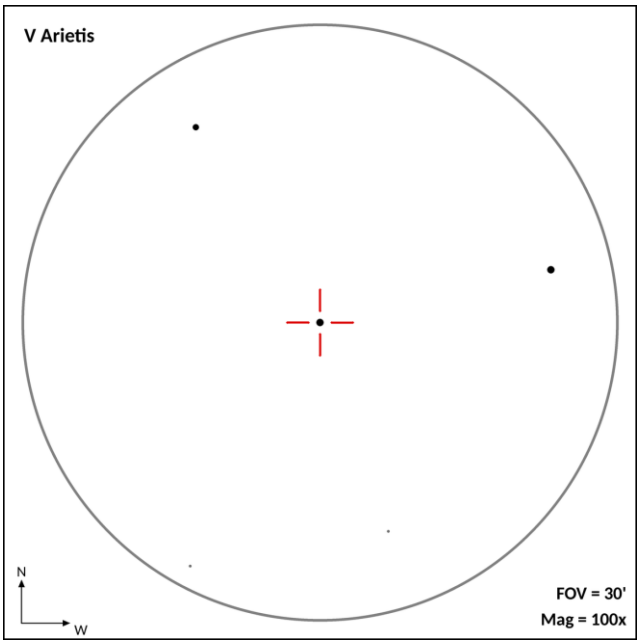
14 Arietis (MS-3 || **AB** | Mag=5.0 / 8.0 | Sep=93.1" | PA=35° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F2III | Color=yellow-white || **AC** | Mag=5.0 / 8.0 | Sep=106.2" | PA=279° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F2III | Color=yellow-white |) Located 290 light years away, the primary is a giant with a radius about 5.7 times that of our Sun's, spinning so fast that its equator bulges 24% wider than its poles. It shines with about 68 times that of our Sun's luminosity.



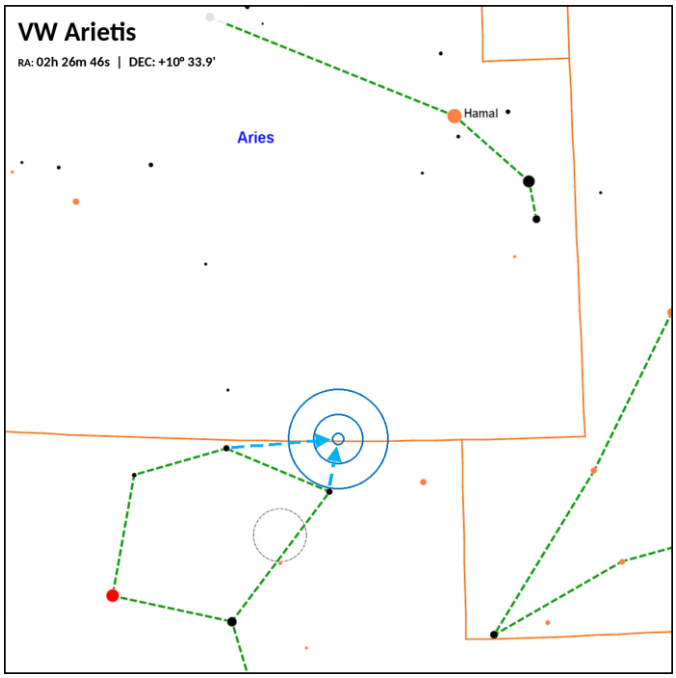


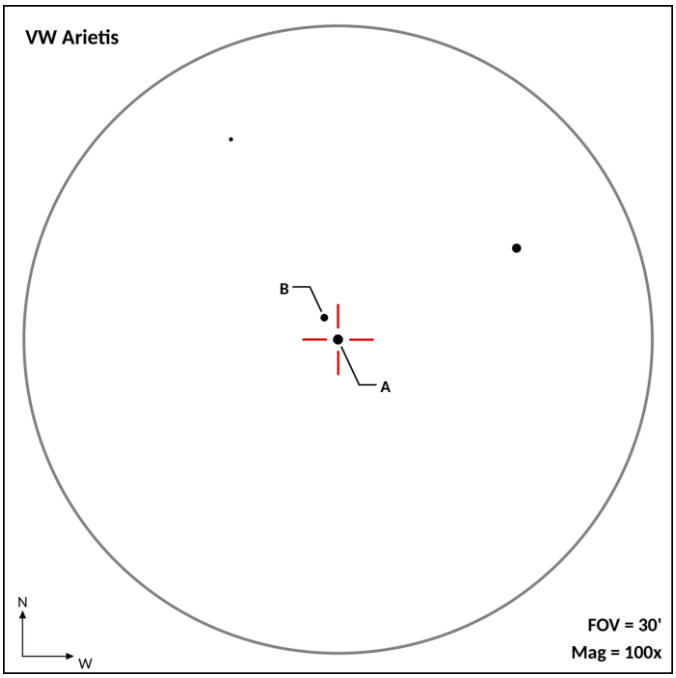
V Arietis (CS, VS || Magnitude Range= 8.2 to 8.9 | Period=56d | Spec=R8(Sh),C5p,5(KM) | BV=+2.15 | Color=orange-red |) Located 3,800 light years away. This is a CH star, a rare type of carbon star from the older population of the galactic halo, and a semi-regular variable of type SRb. BV=+2.15 indicating a color of Orange-Red.



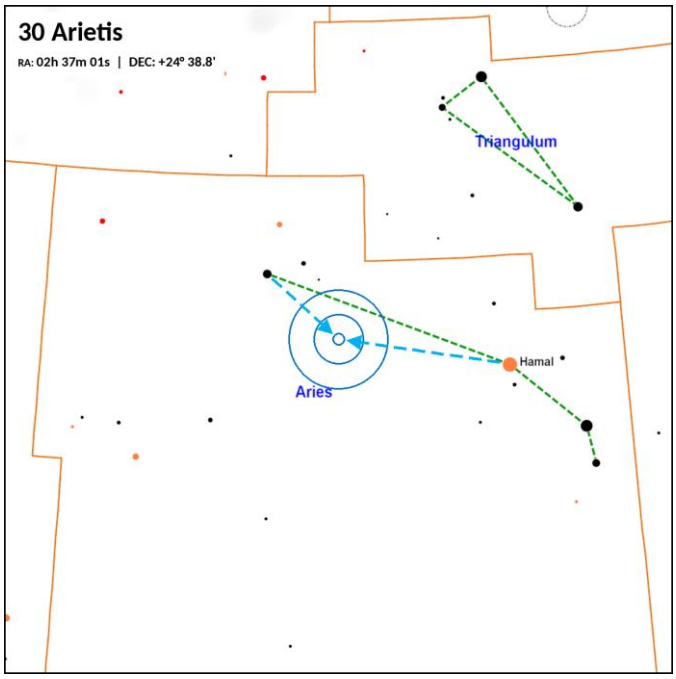


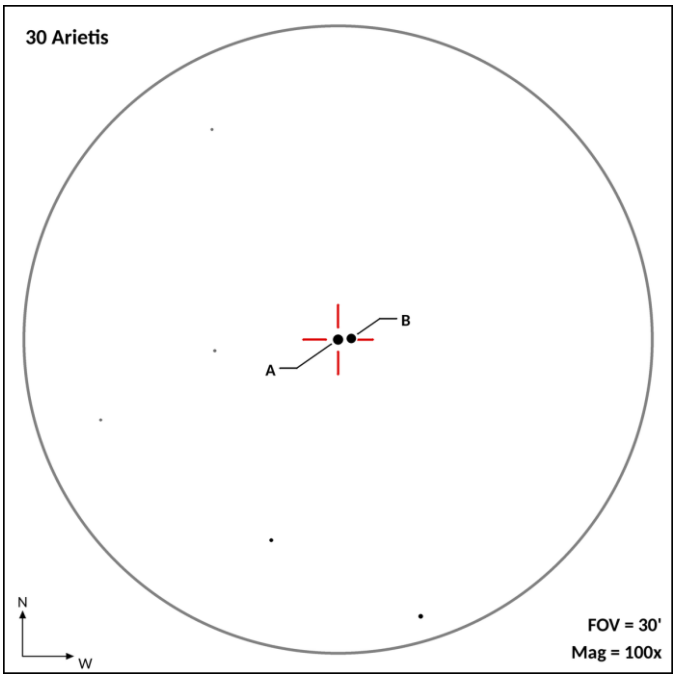
VW Arietis (DS || **AB** | Mag=6.7 / 8.3 | Sep=73.8" | PA=31° | mBortle=9 | mApt=50mm | RecMag=10x | Magnitude Range= 6.6 to 6.8 | Period=0.2d | Spec=A3 | Color=white |) Located 430 light years away. The primary is a Delta Scuti variable, a subgiant that pulsates every 3.9 hours, changing in brightness by only about 0.1 magnitude, too little to notice by eye.



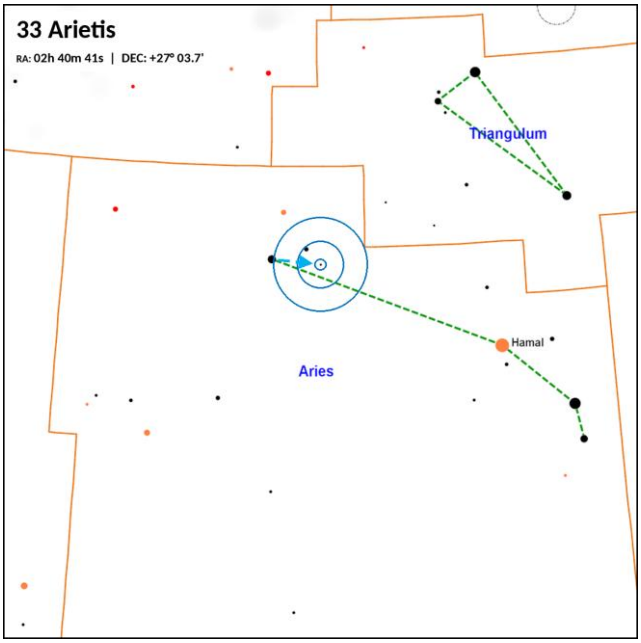


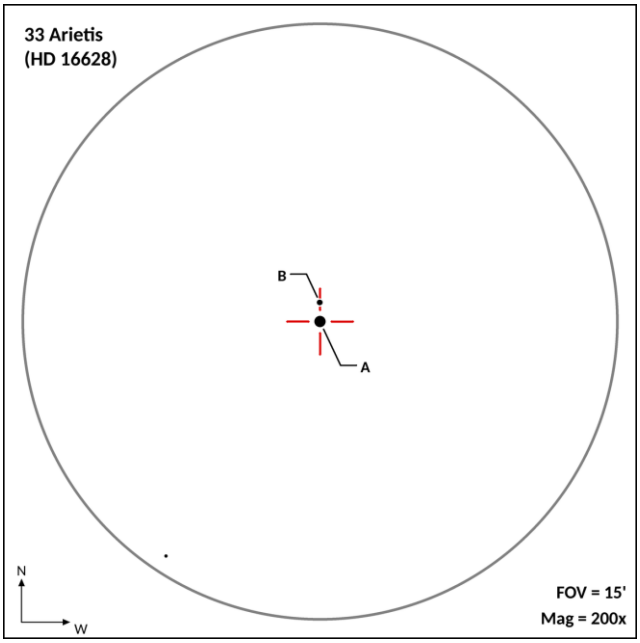
30 Arietis (DS || **AB** | Mag=6.5 / 7.0 | Sep=38" | PA=275° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=F5V / F7V | Color=yellow-white / yellow-white |) Located 150 light years away, this is a system of five stars: each visible component is itself a close binary, and the B star has a further companion. The AB pair is about 1,700 AU apart and almost certainly bound, with an estimated period of 34,000 years.



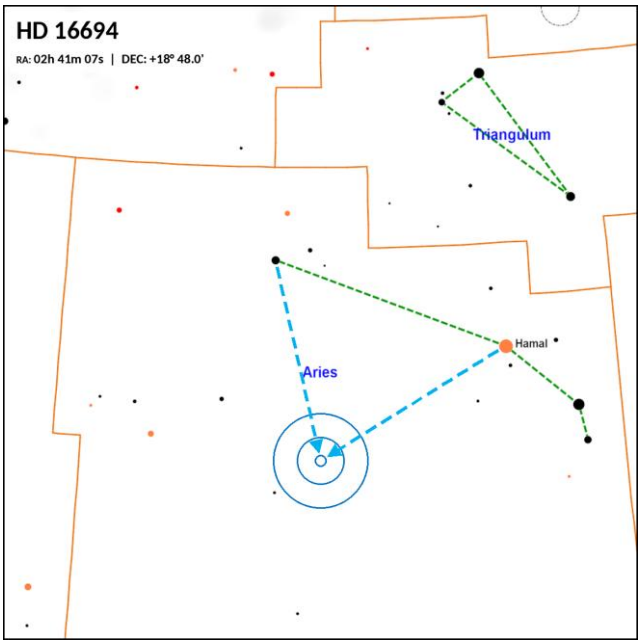


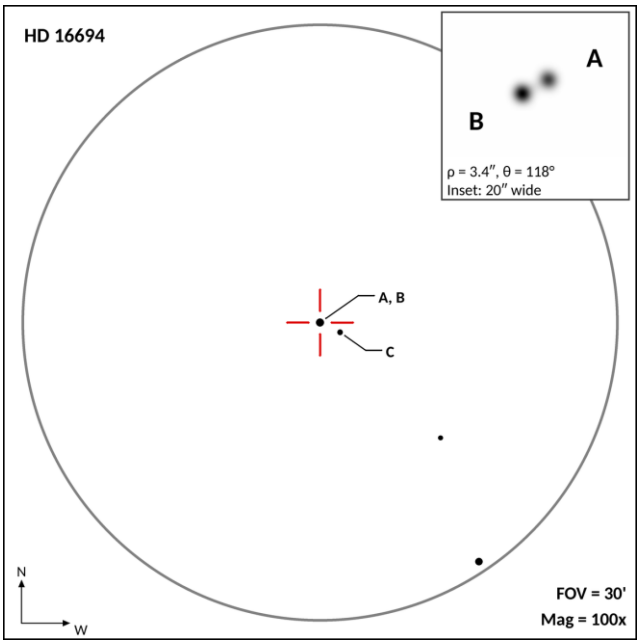
33 Arietis (DS || **AB** | Mag=5.3 / 9.6 | Sep=28.6" | PA=1° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=A3V | Color=white |) Located 230 light years away, the primary is surrounded by a disk of circumstellar dust extending out to about 42 AU.



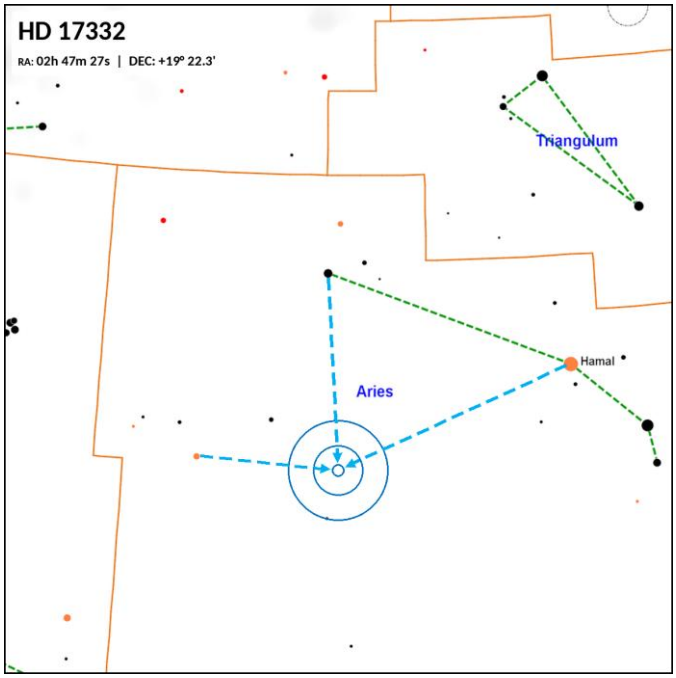


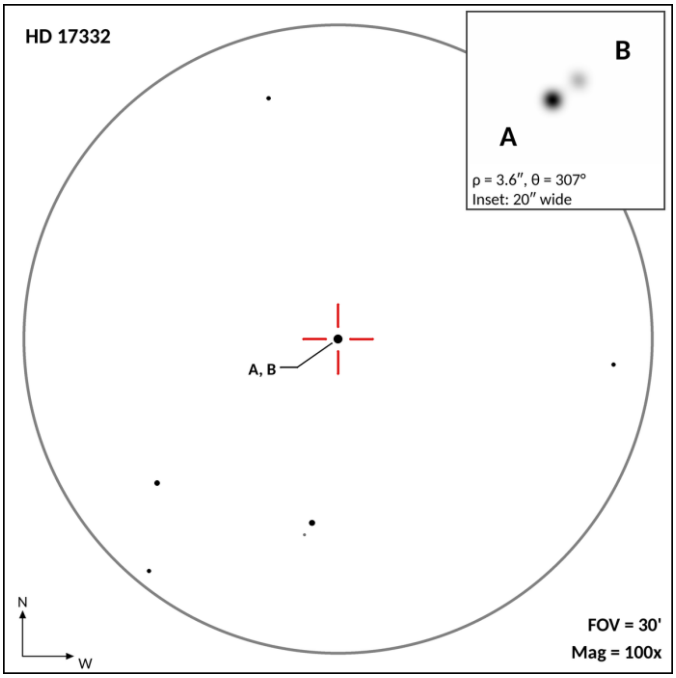
HD 16694 (MS-3 || **AB** | Mag=7.7 / 7.5 | Sep=3.4" | PA=118° | mBortle=9 | mApt=50mm | RecMag=70x | Spec=B9.5V / A0V | Color=blue-white / white || **AC** | Mag=7.7 / 9.5 | Sep=65.5" | PA=242° | mBortle=9 | mApt=50mm | RecMag=10x | Spec=B9.5V / A8V | Color=blue-white / white |) Located 890 light years away. Whether the AB pair, at least 930 AU apart, is physically bound is not known. The primary is a blue-white main-sequence star with about 70 times that of our Sun's luminosity and a diameter about 3 times that of our Sun's.



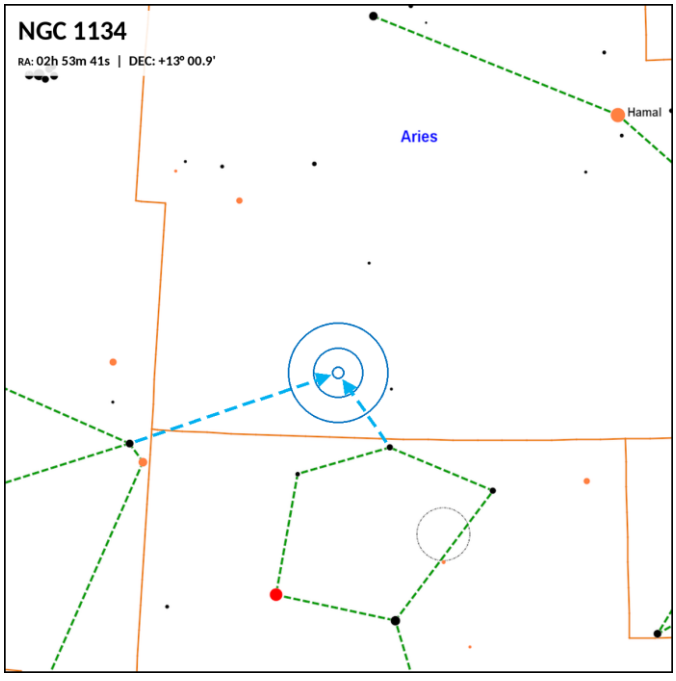


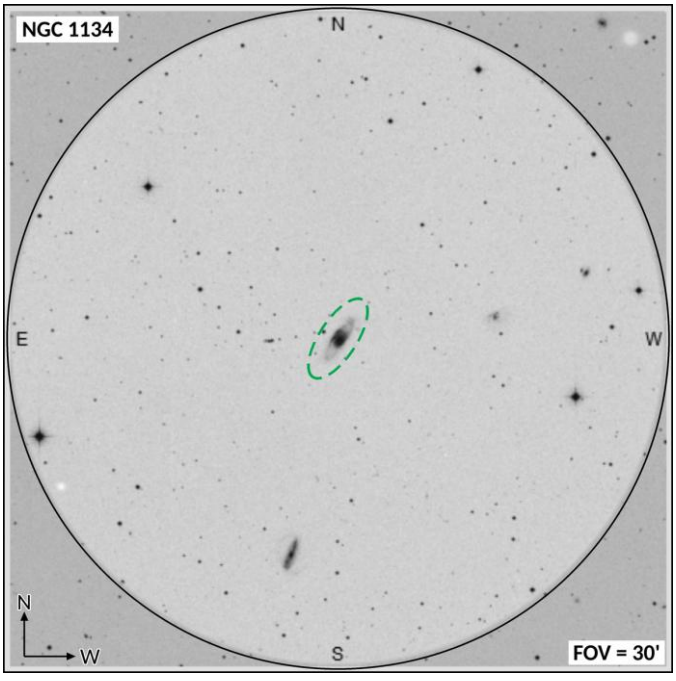
HD 17332 (DS || **AB** | Mag=7.5 / 8.3 | Sep=3.6" | PA=307° | mBortle=9 | mApt=50mm | RecMag=70x | Period=531.5y | Spec=G0V | Color=yellow |) Located 110 light years away. This nearby pair of Sun-like stars follows a highly elongated orbit; the two stars will next pass closest to each other around 2293.



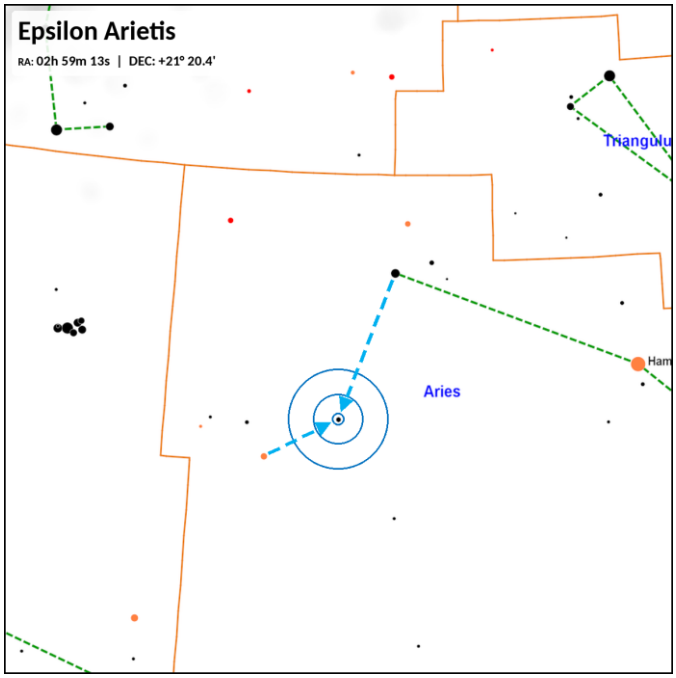


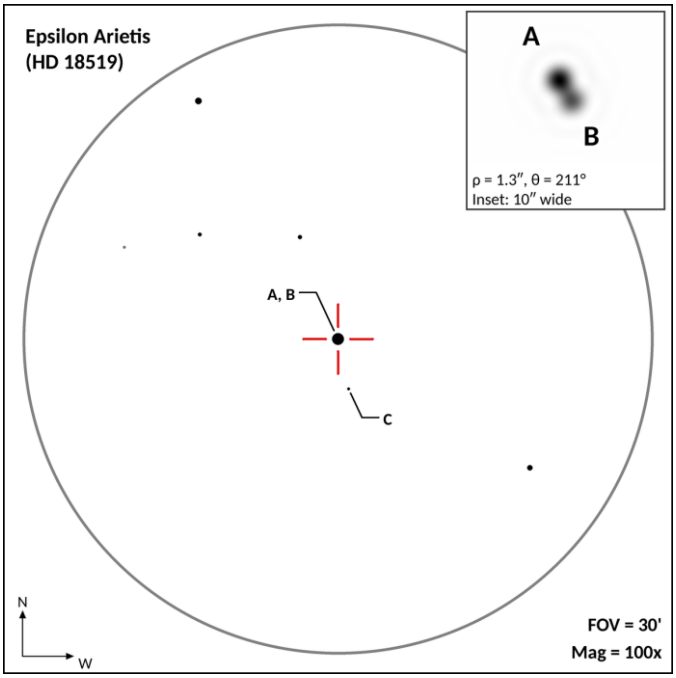
NGC 1134 (G || Mag=12.1 | Size=3.2'x1.3' | SB=22.3 | mBortle=1 | mApt=200mm | MC=Sb |) A highly inclined spiral galaxy roughly 120 to 160 million light years away, discovered by William Herschel in 1784 and listed in Arp's Atlas of Peculiar Galaxies (Arp 200). Its low surface brightness calls for dark skies and a medium to large telescope.



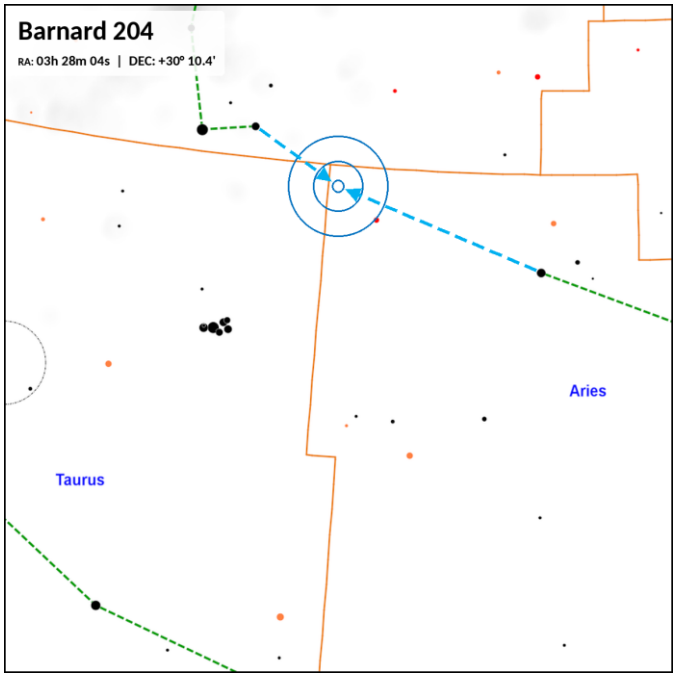


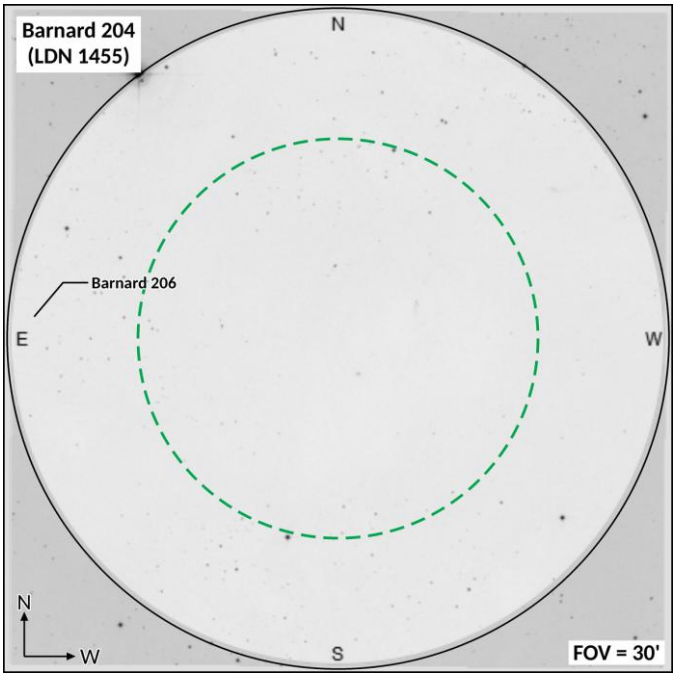
Epsilon Arietis (MS-3 || **AB** | Mag=5.2 / 5.6 | Sep=1.3" | PA=211° | mBortle=9 | mApt=102mm | RecMag=180x | Period=710y | Spec=A2Vs / A2Vs | Color=white / white || **AC** | Mag=5.2 / 12.7 | Sep=145.6" | PA=192° | mBortle=4 | mApt=150mm | RecMag=10x | Spec=A2Vs | Color=white |) Located 330 to 360 light years away, this close pair of nearly identical white stars is a fine test of a telescope's resolving power.



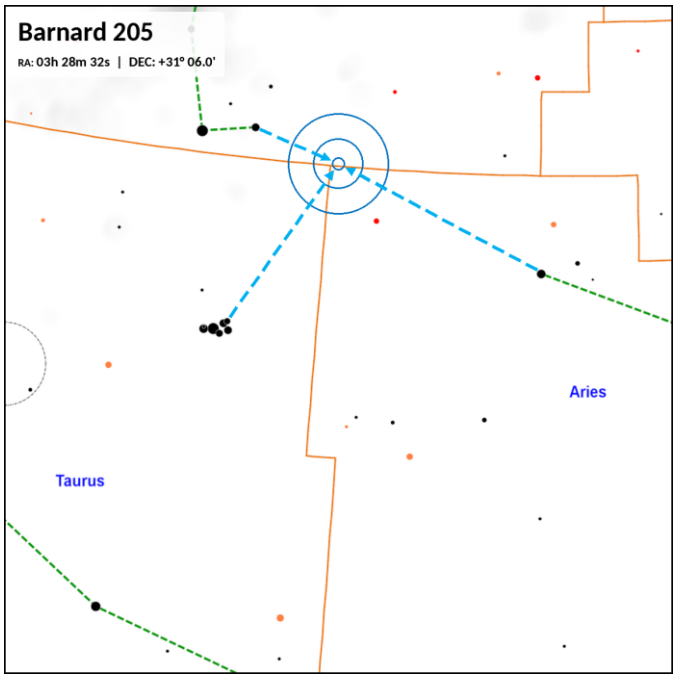


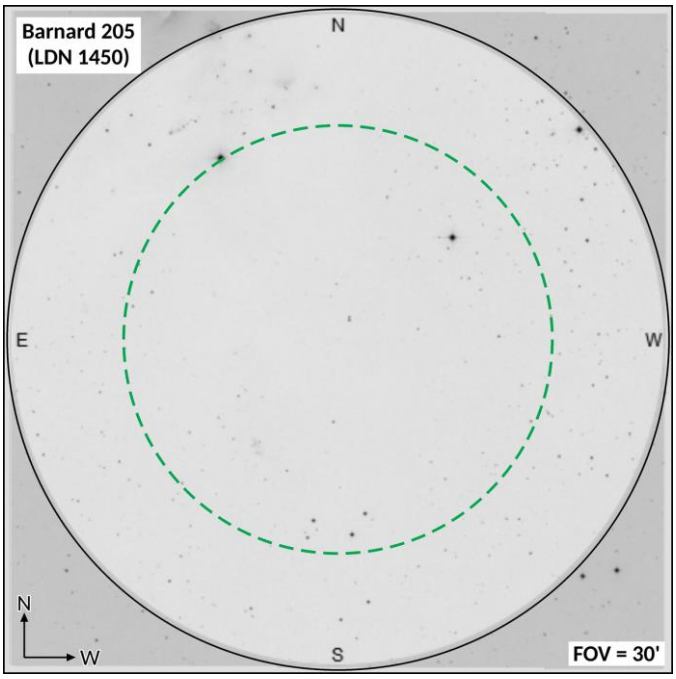
Barnard 204 (DN || Size=14' | mBortle=4 | mApt=50mm | Opacity=5 |) Located 1,000 light years away. Also LDN 1455, this cloud lies at the western end of the Perseus Molecular Cloud complex and is an active star-forming region: young protostars inside it drive outflows of molecular gas.



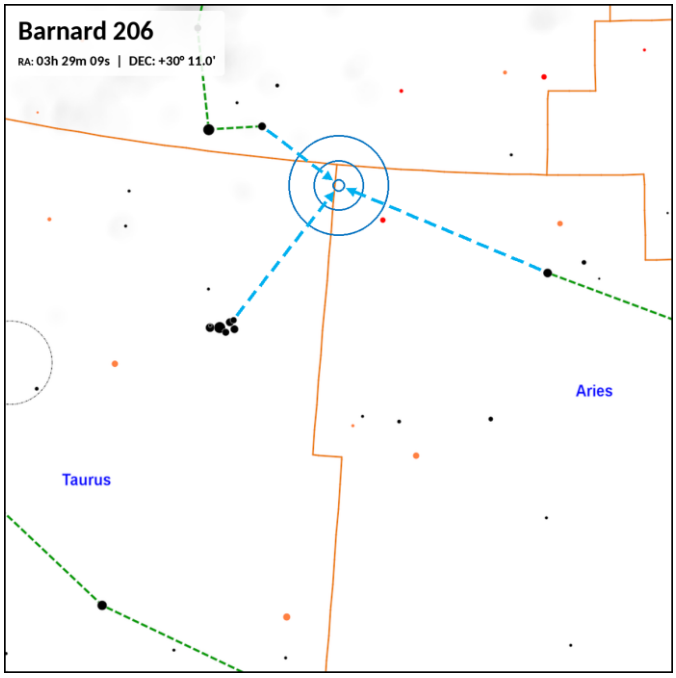


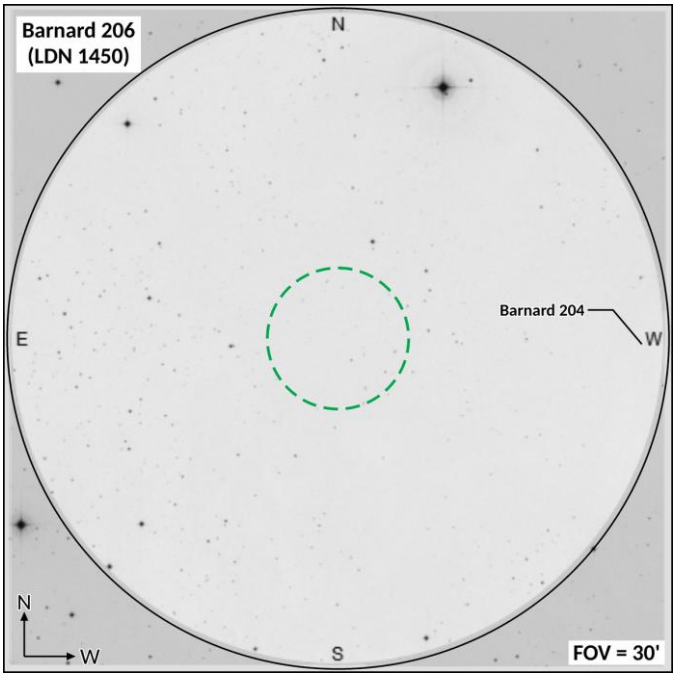
Barnard 205 (DN || Size=15' | mBortle=4 | mApt=50mm | Opacity=5 |) Located 1,000 light years away. Part of LDN 1450 at the western end of the Perseus Molecular Cloud complex. Information on this dark nebula is limited.





Barnard 206 (DN || Size=5' | mBortle=4 | mApt=50mm | Opacity=5 |) Located 1,000 light years away. Lynds cataloged it under LDN 1450 with Barnard 205, though it lies nearly a degree south of that cloud, only 14' east of Barnard 204. Information on this dark nebula is limited.





Blank

Observation Log: Aries (Ari)

Equipment Config A: _____ Config B: _____

Notes: _____

Date	Time	Config	Target	Notes

Date	Time	Config	Target	Notes

Observation Log: Aries (Ari)

Equipment Config A: _____ Config B: _____

Notes: _____

Date	Time	Config	Target	Notes

Date	Time	Config	Target	Notes

Constellation Guide

References, Resources and Tools used to create this document

- Books
  - Objects in the Heavens: Peter Birren
  - Touring the Universe through Binoculars: Philip Harrington
  - The Deep Sky: Philip Harrington
  - Double and Multiple Stars and How to Observe Them: James Mullaney
  - Celestial Portraits: Tom Polakis
  - Star Clusters: Brent Archinal, Steve Hynes
  - Double Stars for Small Telescopes: Sissy Haas
  - Observer's Handbook: Royal Astronomical Society of Canada
  - Sky Spot Books
    - Bright Telescopic Objects: Brent Watson
    - Select Double Stars: Brent Watson
    - Overlooked Objects: Brent Watson
- Asterisms
  - Astronomical League: Asterisms Observing Program list
  - Asterisms: Demelza Ramakers
  - Pattern Asterisms: John Chiravalle
  - Milwaukee Astronomical Society: Binocular Asterisms
  - Deep-Sky.co.uk: Observing Asterisms (David Ratledge)
- Saguaro Astronomy Club
  - Asterisms List | 110 Best of the NGC | Red Stars List
- Online
  - Wikipedia
  - The Garden Astronomer: Double, Multiple, and Special Star Observations List
  - Sky & Telescope: Colored Double Stars, Real and Imagined
  - In-The-Sky.org
  - Constellation-guide.com
  - Claude AI – Some Stats for targets
  - Aladin Lite – Source for a number of deep-sky images
  - Stelle Doppie – Double and multiple star data
  - SIMBAD – Spectral types and parallaxes

Applications

- AstroPlanner Version 2.4
- Cartes du Ciel Version 4.3
- SkySafari Pro 7
- Microsoft Office Home and Business 2021 - Word