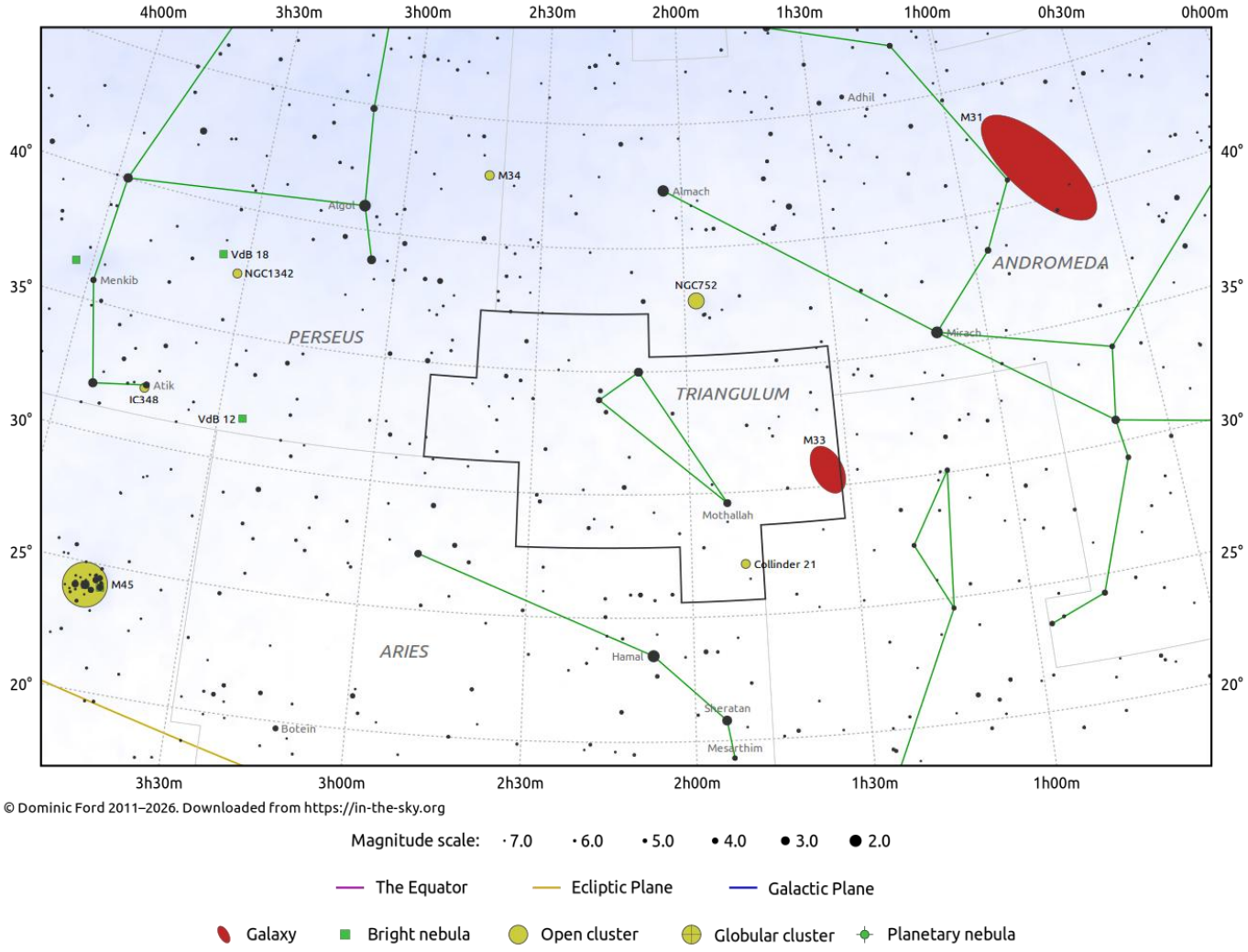
Constellation: Triangulum (Tri)

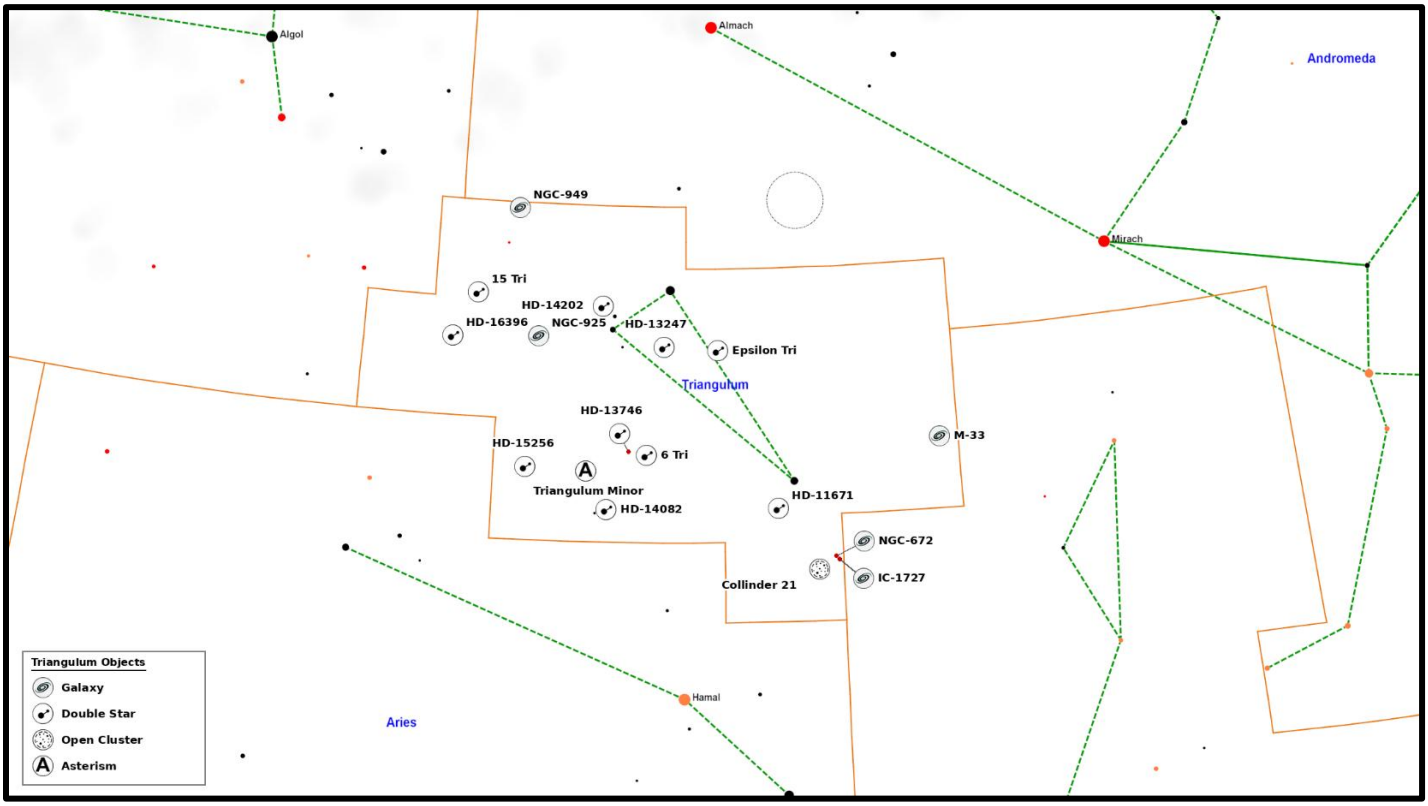
Evening Visibility: **October – November**
Opposition: October/November
Latitude Visibility: **+90° to -60°**
Online Information: | In-The-Sky.org | Constellation-guide.com |

In-The-Sky.org Constellation Map



Constellation Guide

Targets Map



Constellation Targets

NGC 672, IC 1727, M 33, Collinder 21, HD 11671, Epsilon Trianguli, HD 13247, 6 Trianguli, HD 13746, HD 14082, HD 14202, Triangulum Minus, NGC 925, HD 15256, NGC 949, 15 Trianguli, HD 16396

Mythology/Back Story

This is an ancient Greek constellation, known to Aratus and Eratosthenes in the 3rd century BC and later listed by Ptolemy in the 2nd century AD. The Greeks called it Deltoton because it resembles the capital Greek letter delta (Δ). According to Eratosthenes, Hermes placed it in the sky above the faint stars of Aries so the Ram could be found more easily, and its shape was also said to stand for the first letter of Dios, a name of Zeus, ruler of the gods. The constellation consists of three main stars (Alpha, Beta and Gamma Trianguli) forming a long, thin triangle.

Constellation Highlights

Except for a few galaxies and Messier 33 this constellation is pretty thin on deep-sky objects, as a result we have included most of the well-known multiple star systems.

- **Collinder 21** (AS) – Aka David's "D"
- **Messier 33** (G) – Large but very dim.
- **6 Trianguli** (DS) - Iota Tri, a showcase pair.

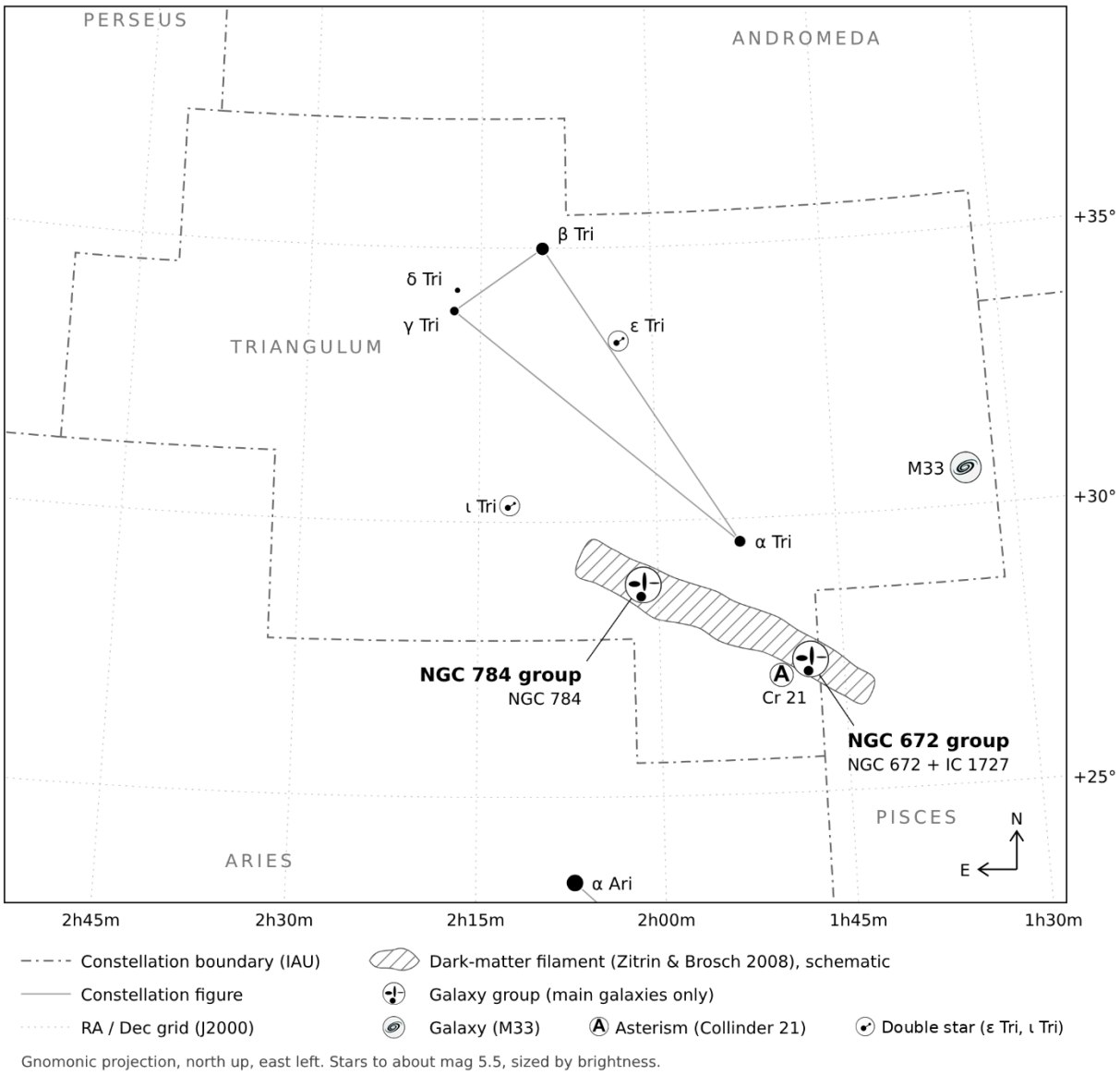
Constellation Guide

Constellation Targets Summary

Object (Type)	Links	Gear	Aliases	Stats
NGC 672 (G)	1	T	CGCG 482-16; KCPG 40B; MCG 4-5-11; PGC 6595; UGC 1256; VV 338	| Mag=11.1 | Size=5.2'x2.3' | SB=22.4 | mBortle=4 | mApt=130mm | MC=SB(s)cd |
IC 1727 (G)		T	CGCG 482-14; Holm 46B; KCPG 40A; MCG 4-5-9; PGC 6574; UGC 1249; VV 338	| Mag=11.6 | Size=6.2' | SB=24.2 | MC=SB(s)m |
Messier 33 (G)	1	B	NGC-598; CGCG 502-110; MCG +05-04-069; PGC 5818; UGC1117; Pinwheel Galaxy; Triangulum Galaxy	| Mag=5.7 | Size=71'x42' | SB=23.0 | mBortle=4 | mApt=50mm | MC=SA(s)cd |
Collinder 21 (AS)		T	Cr21; C 0147+270; Lund58; MWSC 0143; OCL371; Davids D	| Mag=8.2 | Size=9' | SB=21.6 | mBortle=6 | mApt=130mm | MC=III3p |
HD 11671 (DS)	1	T	SAO-075020; HIP 8938; ADS 1522; BD+28 319; STF183; TYC 1763-0418-1; WDS01551+2847; Σ183	**AB,C** | Mag=7.7, 9.3 | Sep=5.6" | PA=162° | mBortle=9 | mApt=50mm | Spec=F2, ? | Color=yellow-white |
Epsilon Trianguli (DS)	1, 2	T	SAO-055218; HIP 9570; 3 Tri; ε Tri; HD 12471; HR 599; ADS 1621; BD+32 369; STF201; TYC 2312-2432-1; WDS02030+3317; Σ201	**AB** | Mag=5.4, 11.4 | Sep=4.2" | PA=119° | mBortle=9 | mApt=102mm | Spec=A2V, ? | Color=white |
HD 13247 (DS)	1	T	SAO-055321; HIP 10130; ADS 1681; BD+32 390; STF219; TYC 2313-1835-1; WDS02103+3322; Σ219	**AB** | Mag=8.0, 8.9 | Sep=11.6" | PA=184° | mBortle=9 | mApt=50mm | Spec=A0, ? | Color=white |
6 Trianguli (DS)	1, 2	T	SAO-055347; HIP 10280; Iot Tri; Iota Tri; ι Tri; HD 13480; HR 642; ADS 1697; BD+29 371; STF 227; TYC 2309-1821-1; TZ Tri; WDS02124+3018; Triminus	**AB** | Mag=5.3, 6.7 | Sep=4" | PA=67° | mBortle=9 | mApt=50mm | Period=2647y | Spec=G0III+G5III, F5V | Color=yellow, yellow-white |
HD 13746 (DS)	1	T	SAO-055384; HIP-10453; ADS 1723; BD+29 376; STF232; TYC 2309-02869-1; STF 232; WDS02147+3024; Σ232	**AB** | Mag=7.8, 7.9 | Sep=6.6" | PA=66° | mBortle=9 | mApt=50mm | Spec=A0V, ? | Color=white; white |
HD 14082 (DS)	1	T	SAO-075265; HIP-10680; ADS 1752; BD+28 382; STF239; TYC 1777-1479-1; WDS02174+2845; Σ239	**AB** | Mag=7.1, 7.8 | Sep=13.8" | PA=212° | mBortle=9 | mApt=50mm | Spec=F7V, F9V | Color=yellow-white, yellow-white |
HD 14202 (DS)	1	T	SAO-055446; HIP-10774; BD+33 405; STF246; WDS02187+3429; Σ246	**AB** | Mag=7.8, 9.3 | Sep=9.8" | PA=123° | mBortle=9 | mApt=50mm | Spec=G0IV, ? | Color=white; gray |
Triangulum Minus (AS)		B	Ref Star: 10 Tri; SAO-075276 (HD 14252)	| Size=90'x60' | Stars=3 | Ref Star: 10 Tri; SAO-075276; HIP-10793

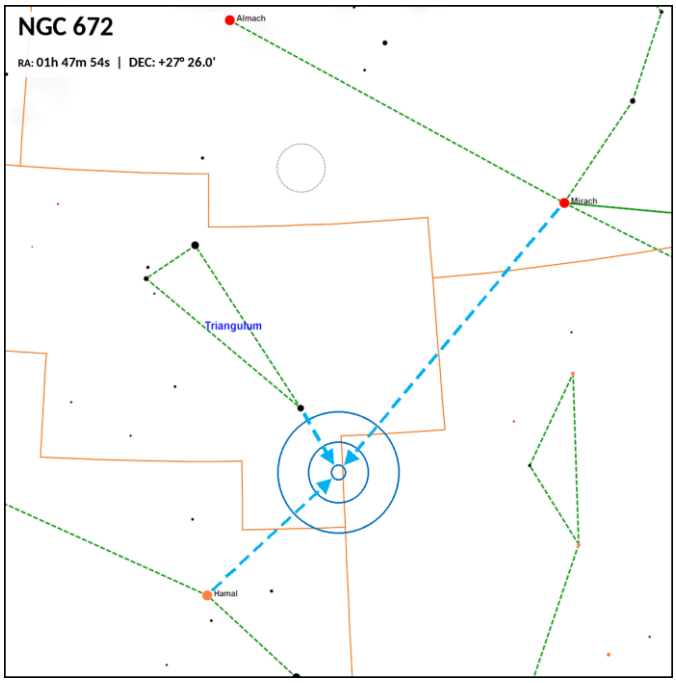
Object (Type)	Links	Gear	Aliases	Stats
NGC 925 (G)	1	T	CGCG 504-85; MCG 5-6-45; PGC 9332; UGC 1913	| Mag=10.1 | Size=10.5'x5.9' | SB=23.2 | MC=SAB(s)d |
HD 15256 (DS)	1	T	SAO-075383; HIP-11490; ADS 1868; BD+29 418; STF 269; TYC 1778-0783-1; WDS02282+2952; Σ269	**AB** | Mag=7.6, 9.0 | Sep=1.6" | PA=345° | mBortle=9 | mApt=102mm | Spec=G0, ? | Color=yellow; gray |
NGC 949 (G)		T	CGCG 523-53; Levy 99; MCG +06-06-048; PGC 9566; UGC 1983	| Mag=11.8 | Size=3.3'x2.1' | SB=22.5 | mBortle=2 | mApt=200mm | MC=Sb |
15 Trianguli (DS)	1, 2	B, T	SAO-055687; HIP-12086; 15 Tri; HD 16058; HR 750; AG+34 259; AG304; BD+34 469; NSV 866; TYC 2332-2197-1; WDS02358+3441	**AB** | Mag=5.6, 6.8 | Sep=142.6" | PA=17° | mBortle=9 | mApt=50mm | Spec=M3IIIa, ? | Color=orange; white |
HD 16396 (DS)	1	T	SAO-055748; HIP-12328; ADS 2004; BD+32 478; STF285; TYC 2328-0372-1; WDS02388+3325; Σ285, STF285	**AB** | Mag=7.5, 8.1 | Sep=1.7" | PA=162° | mBortle=9 | mApt=102mm | Spec=K2III, ? | Color=orange |

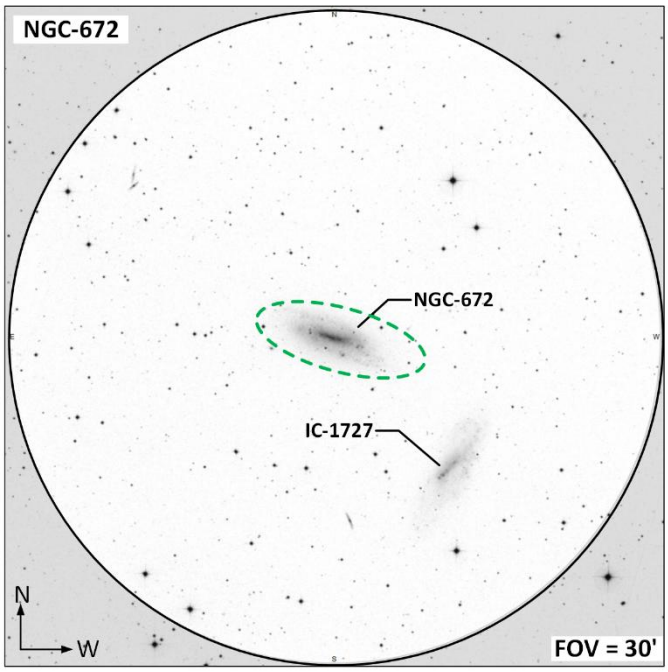
NGC-672 and NGC-784 Groups Map



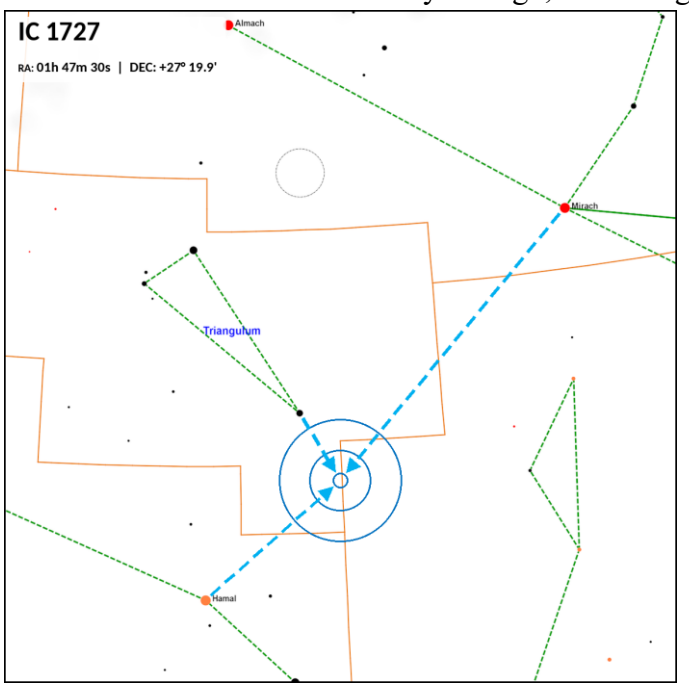
NGC 672 and IC 1727 form a tightly interacting pair and, together with about four dwarf galaxies, make up the NGC 672 group. A few degrees to the northeast, the NGC 784 group consists of NGC 784 and about seven dwarf galaxies. Although the two groups don't interact directly, their galaxies line up along a roughly 6° filament on the sky, and their positions correlate with their velocities. Zitrin & Brosch (2008) interpret this as both groups lying along the same nearby dark-matter filament.

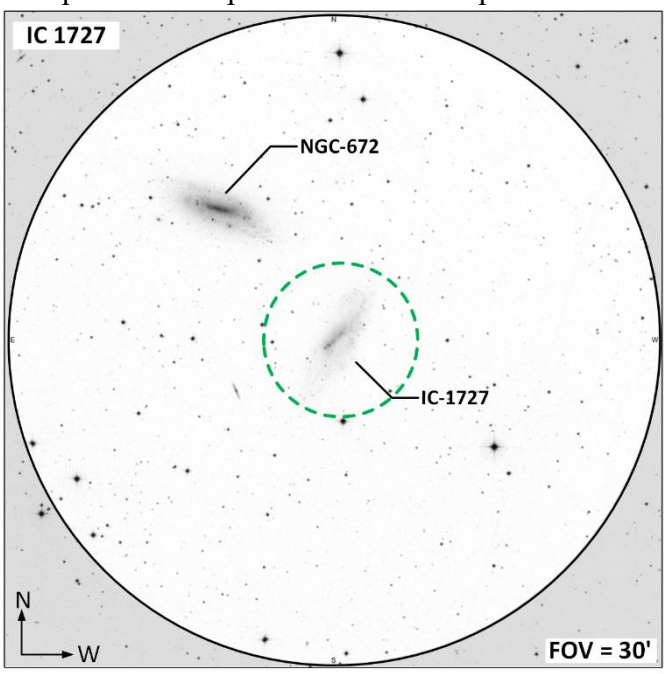
NGC 672 (G || Mag=11.1 | Size=5.2'x2.3' | SB=22.4 | mBortle=4 | mApt=130mm | MC=SB(s)cd |) This galaxy and its close companion IC 1727 visible in the same field of view are a tightly interacting pair.



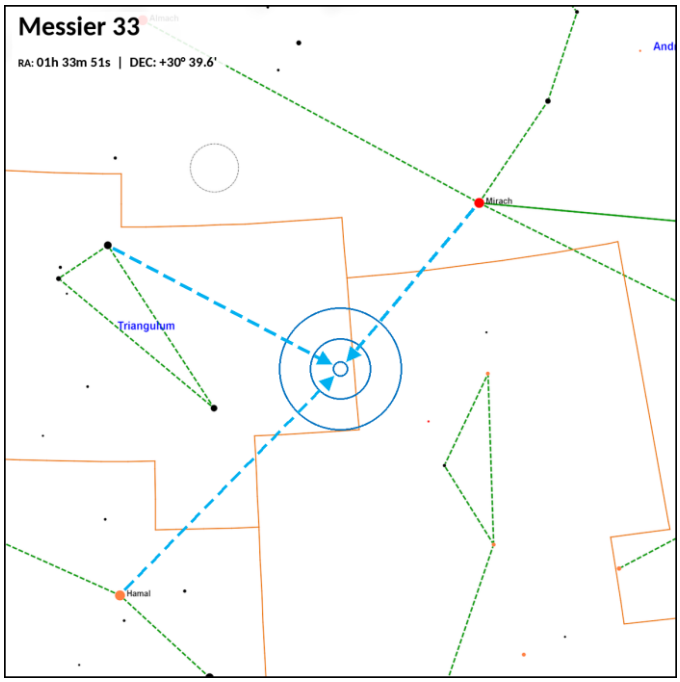


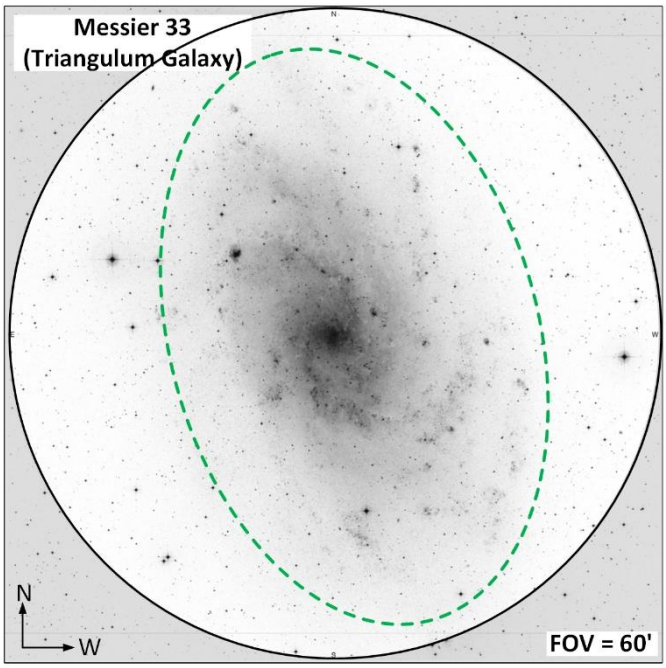
IC 1727 (G || Mag=11.6 | Size=6.2' | SB=24.2 | MC=SB(s)m |) Hubble images show that IC 1727's bright nucleus has been dragged off-center. Both NGC 672 and IC 1727 had bursts of star formation at the same times, about 20–30 and 450–750 million years ago, which suggests repeated close passes between the pair.



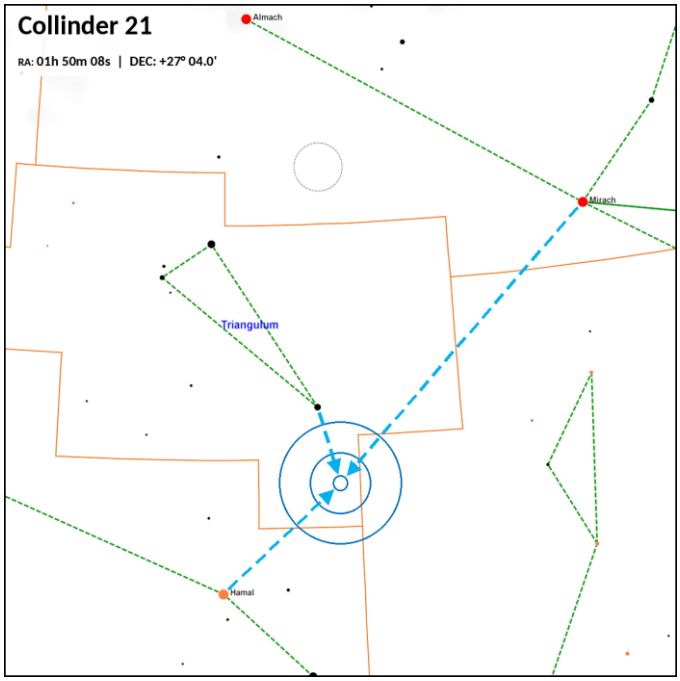


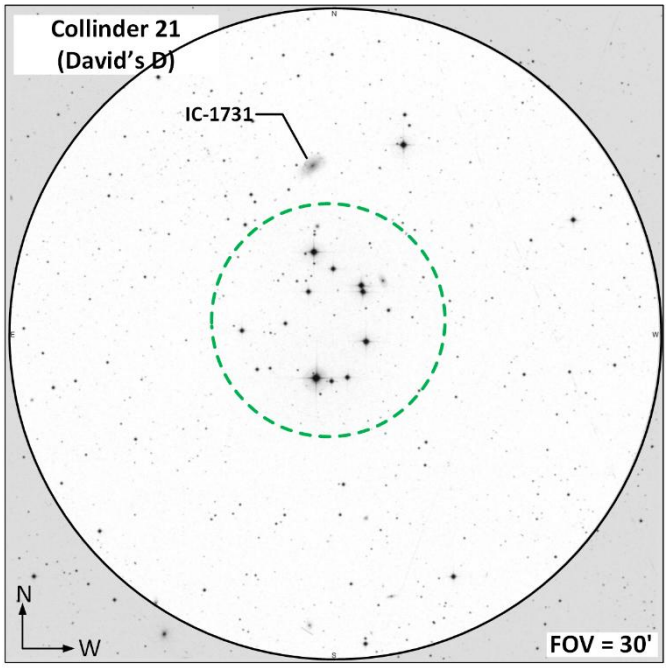
Messier 33 (G || Mag=5.7 | Size=71'x42' | SB=23.0 | mBortle=4 | mApt=50mm | MC=SA(s)cd |) The Triangulum Galaxy (NGC 598) is located about 2.7 to 2.9 million light years away and is the third largest member of the Local Group of galaxies after the Andromeda Galaxy and the Milky Way. It is suspected that M33 may be gravitationally bound to the Andromeda Galaxy. M33 contains 30 to 40 billion stars compared to 400 billion for the Milky Way and 1 trillion for Andromeda.



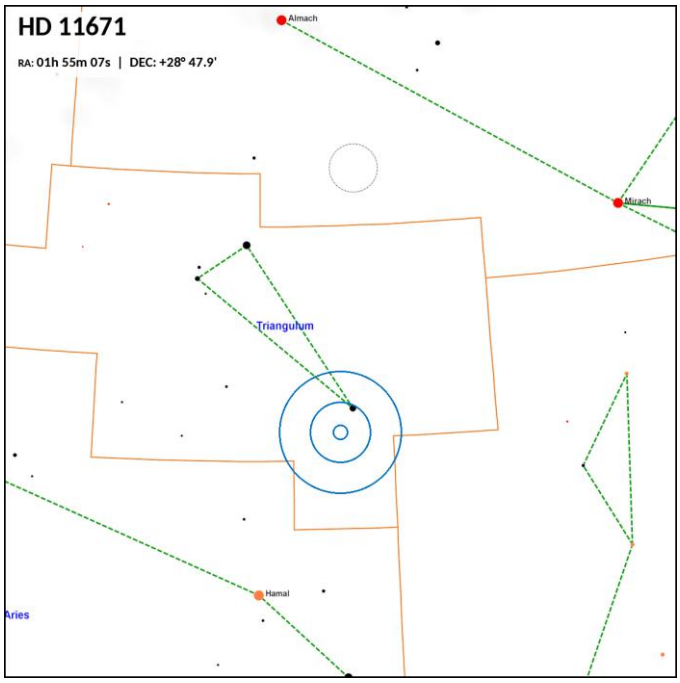


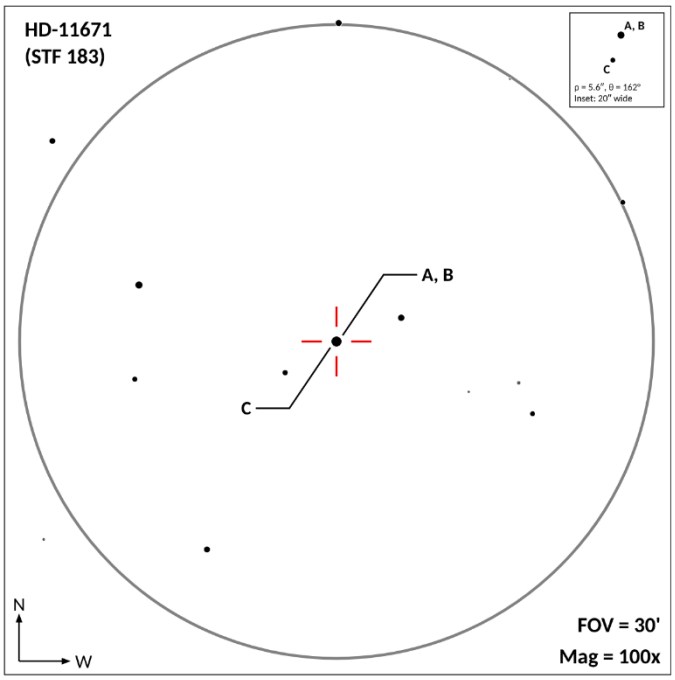
Collinder 21 (AS || Mag=8.2 | Size=9' | SB=21.6 | mBortle=6 | mApt=130mm | MC=III3p |) Also known as David's "D" this was initially classified as an open cluster, but further studies indicate it is an alignment of unrelated stars forming the shape of a "D".



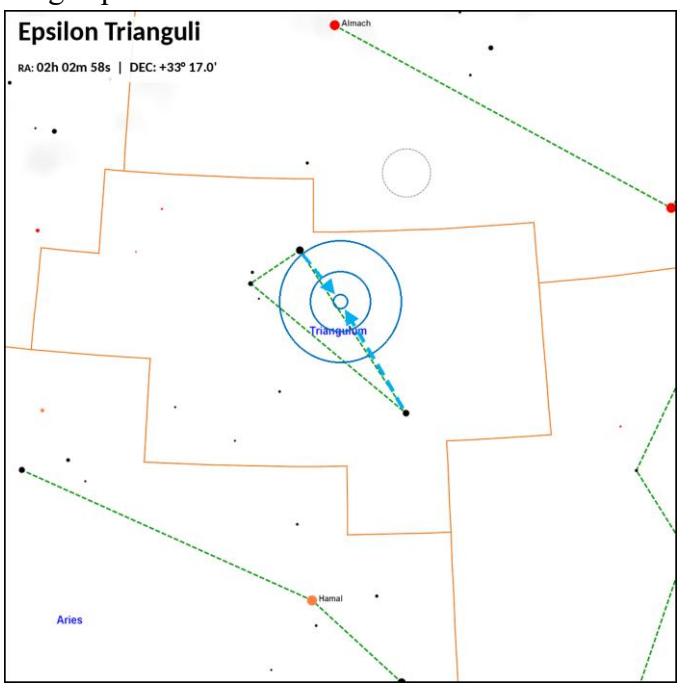


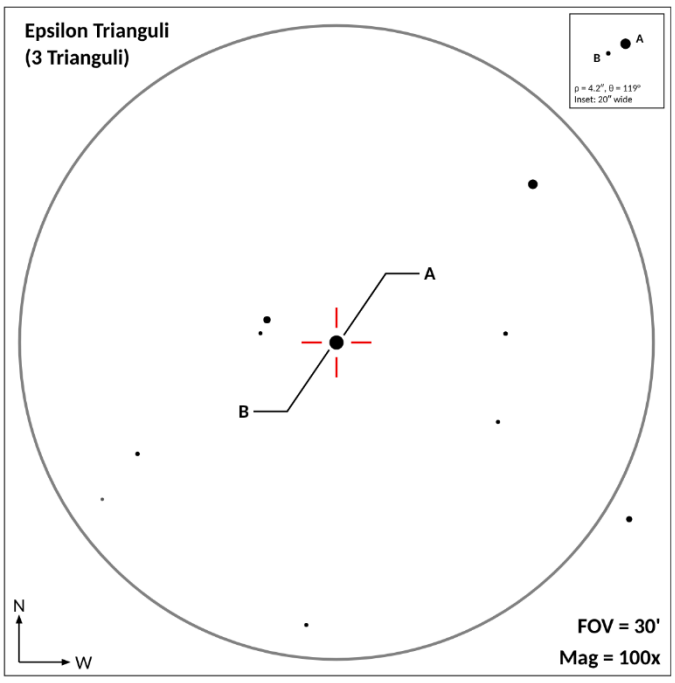
HD 11671 (DS || AB, C | Mag=7.7, 9.3 | Sep=5.6" | PA=162° | mBortle=9 | mApt=50mm | Spec=F2, ? | Color=yellow-white |) Located 541 light years away, this is a triple star system; however, the A and B components are separated by only 0.3", too close to split with typical amateur telescopes.



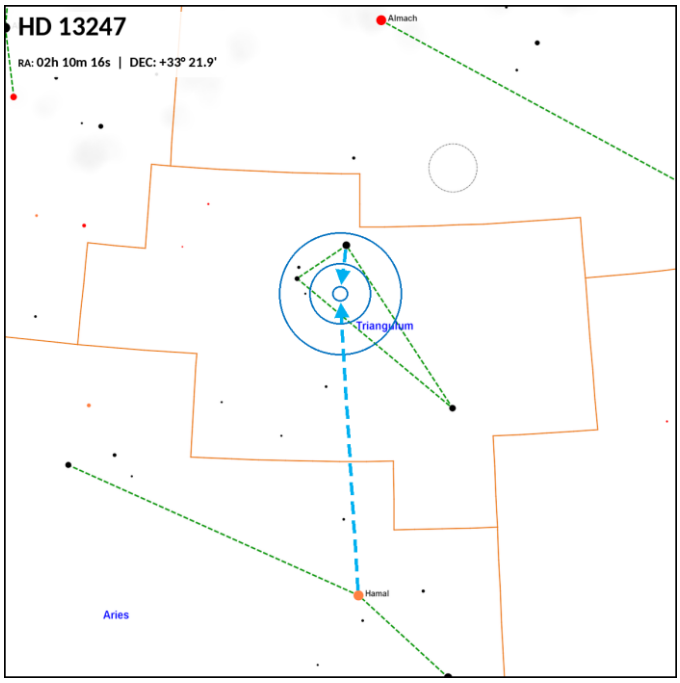


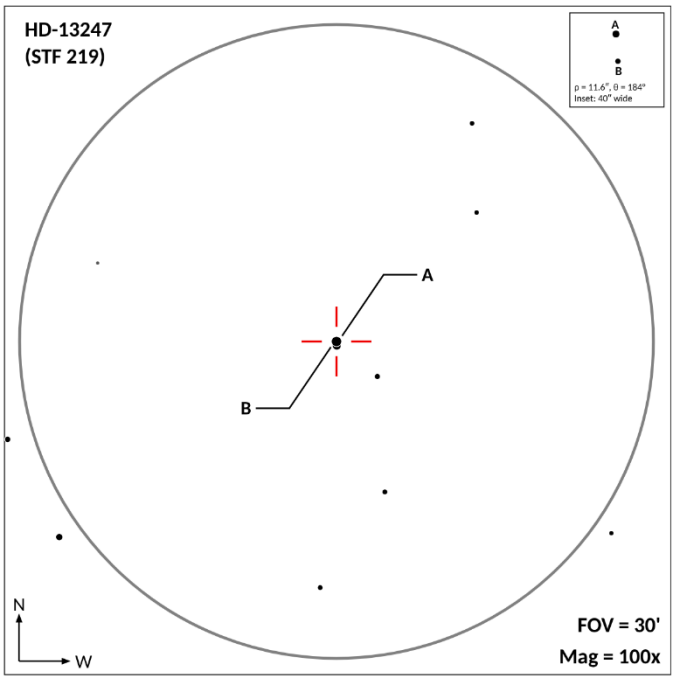
Epsilon Trianguli (DS || AB | Mag=5.4, 11.4 | Sep=4.2" | PA=119° | mBortle=9 | mApt=102mm | Spec=A2V, ? | Color=white |) Located 390 light years away. The primary is estimated to be 600 million years old. This star is a probable member of the Ursa Major Moving Group of stars, a group of stars sharing a common motion through space.



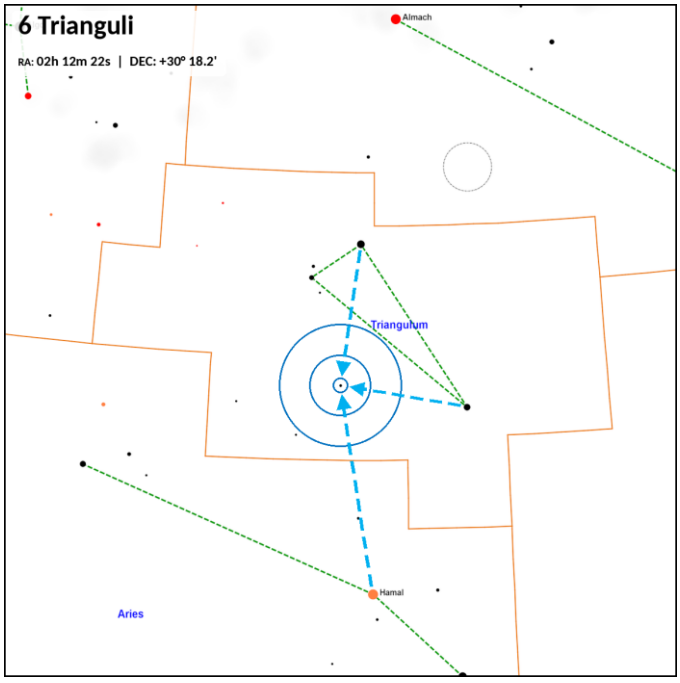


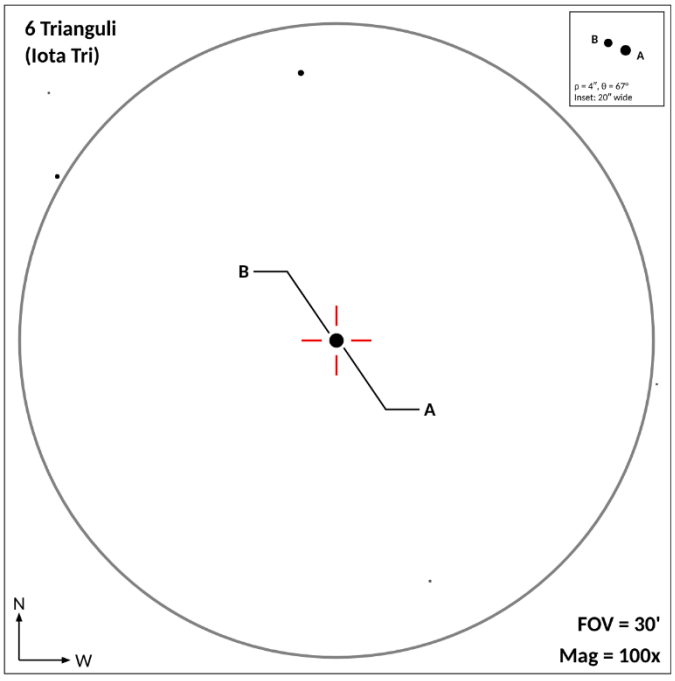
HD 13247 (DS || AB | Mag=8.0, 8.9 | Sep=11.6" | PA=184° | mBortle=9 | mApt=50mm | Spec=A0, ? | Color=white |) Located 523 light years away, the primary is a white main-sequence star about 1.8 times hotter than our Sun with a diameter of 1.5 times that of our Sun.



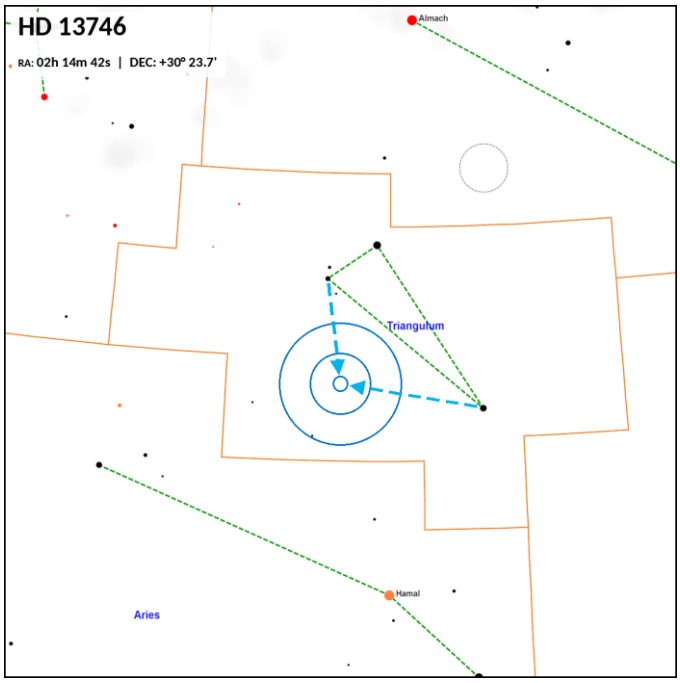


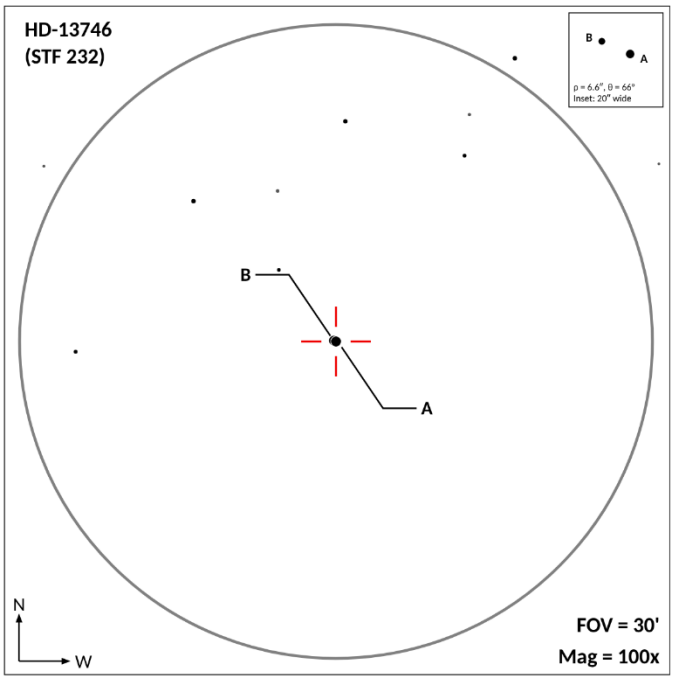
6 Trianguli (DS || AB | Mag=5.3, 6.7 | Sep=4" | PA=67° | mBortle=9 | mApt=50mm | Period=2647y | Spec=G0III+G5III, F5V | Color=yellow, yellow-white |) This is a quadruple star system with two visible components (AB) often described as yellow and blue and noted as a showcase double. Each visible component is itself a spectroscopic binary. Published estimates of the A-B orbital period vary widely, from about 2,650 to 5,170 years.



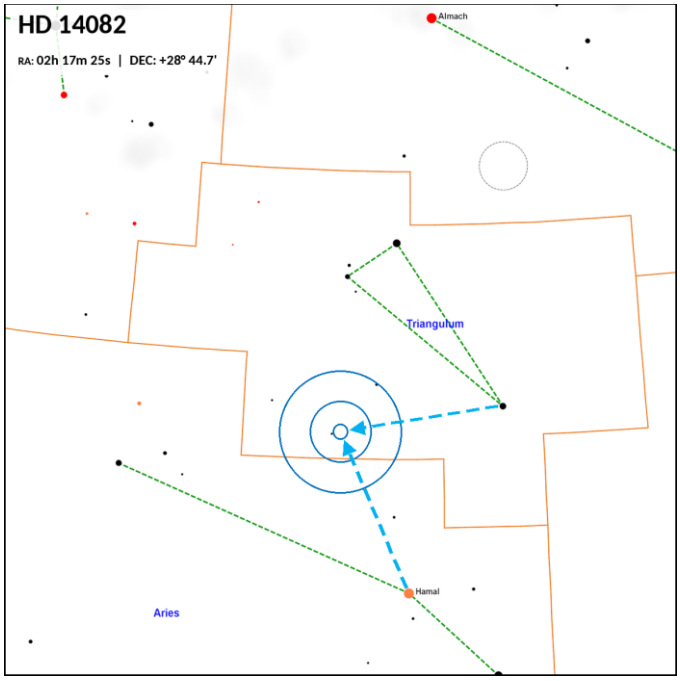


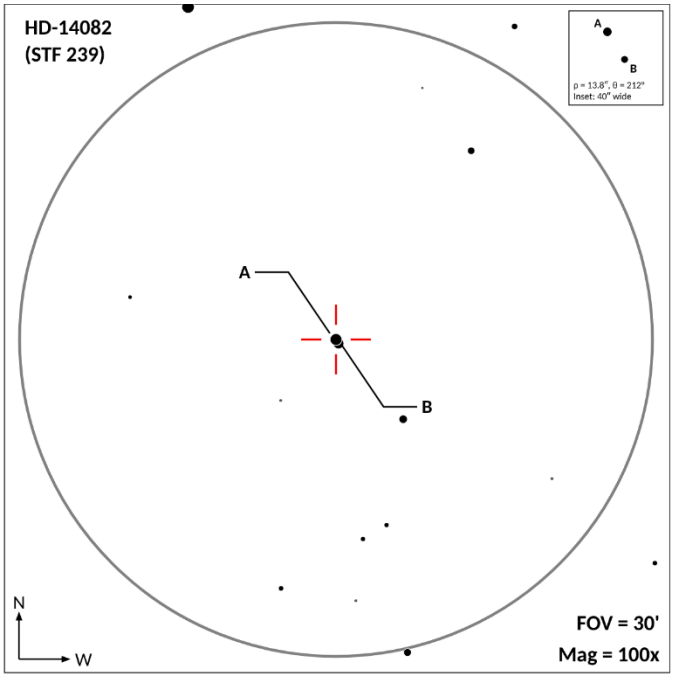
HD 13746 (DS || AB | Mag=7.8, 7.9 | Sep=6.6" | PA=66° | mBortle=9 | mApt=50mm | Spec=A0V, ? | Color=white; white |) Located 896 light years away, this pair appears as twin white stars.



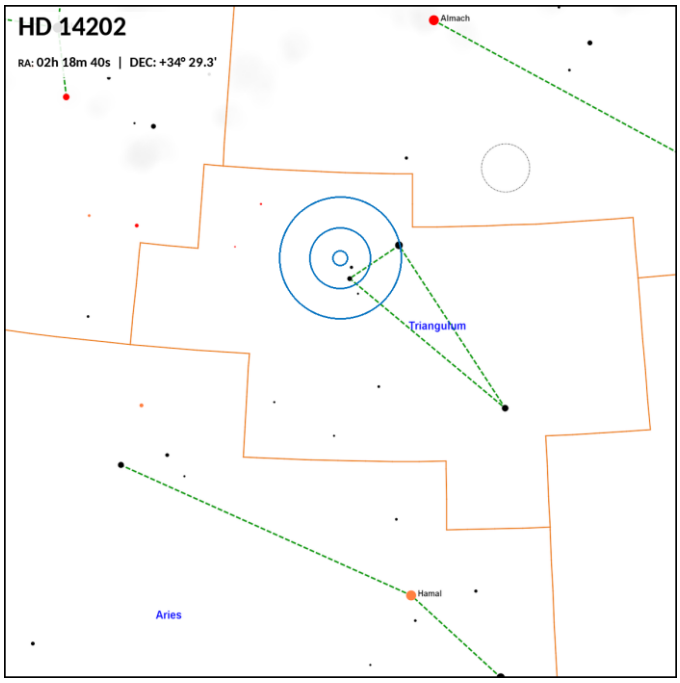


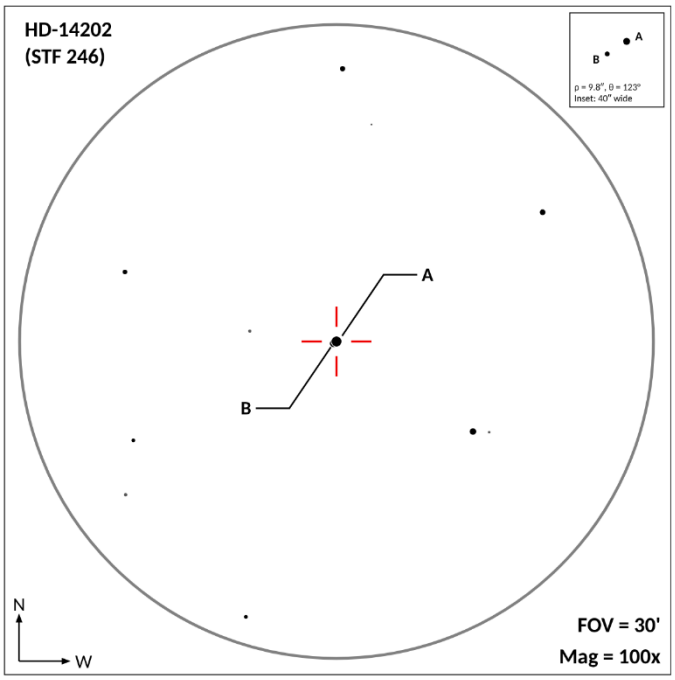
HD 14082 (DS || AB | Mag=7.1, 7.8 | Sep=13.8" | PA=212° | mBortle=9 | mApt=50mm | Spec=F7V, F9V | Color=yellow-white, yellow-white |) This binary system is reported to consist of a yellowish and light blue pair.



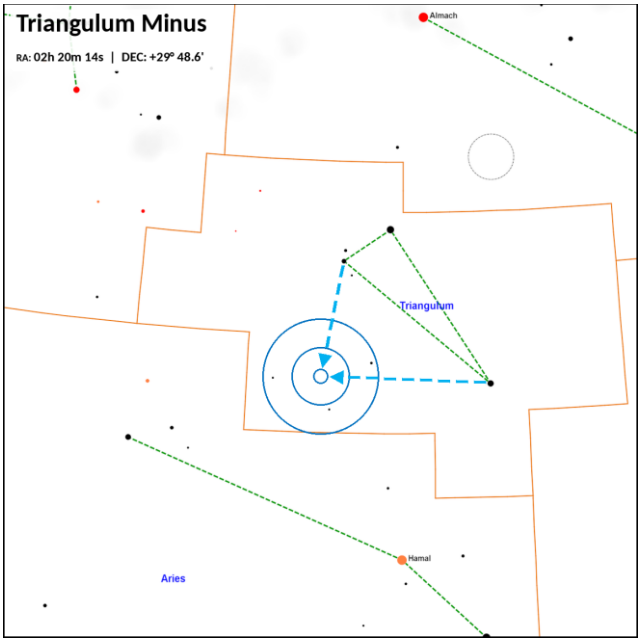


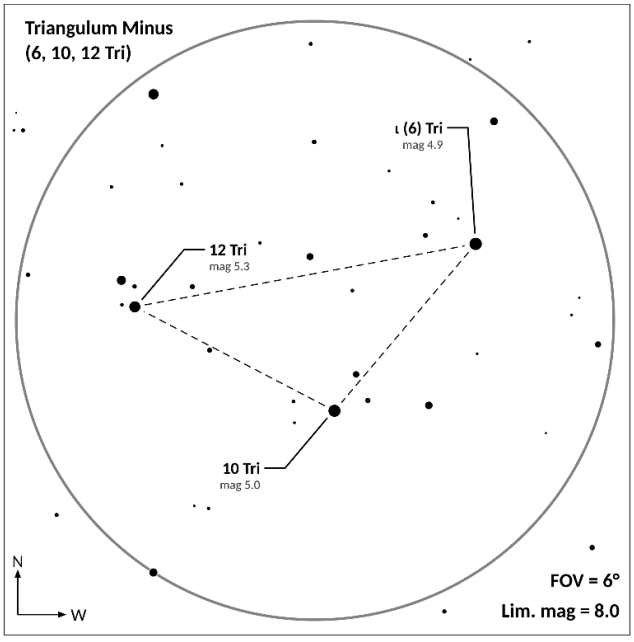
HD 14202 (DS || AB | Mag=7.8, 9.3 | Sep=9.8" | PA=123° | mBortle=9 | mApt=50mm | Spec=G0IV, ? | Color=white; gray |) Located 293 light years away, the primary is a yellow subgiant star; visually the pair is reported as white and greyish.



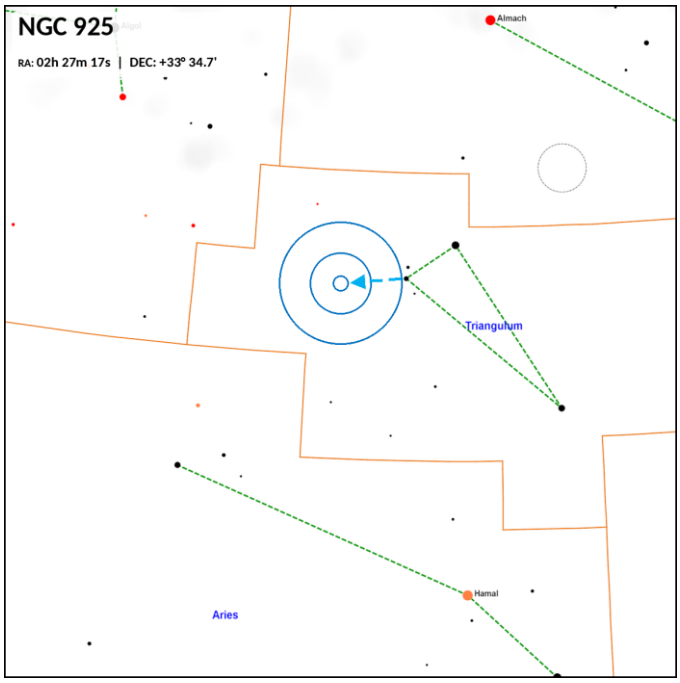


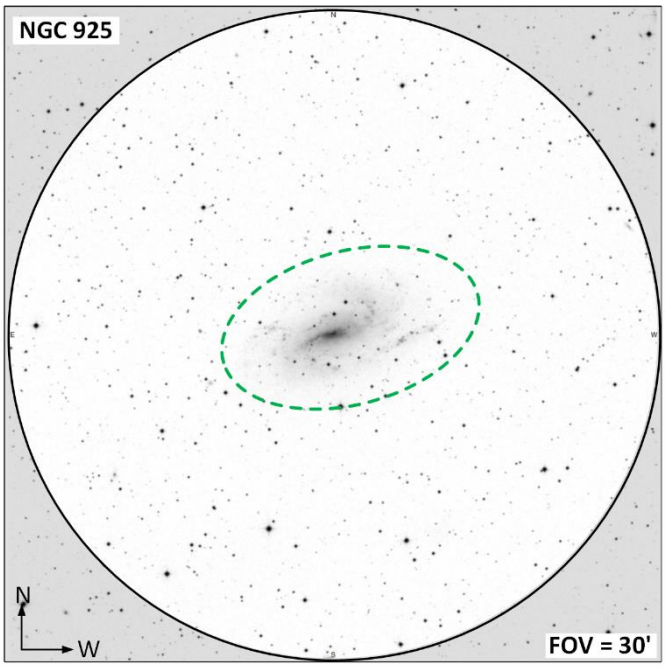
Triangulum Minus (AS || Size=90'x60' | Stars=3 | Ref Star: 10 Tri; SAO-075276; HIP-10793 |) Sometimes written as Triangulum Minor. This small triangle of the stars 6 (Iota), 10 and 12 Trianguli was created as a separate constellation by Johannes Hevelius in 1687. In the 1800s the constellation was considered unnecessary and fell out of use. When the International Astronomical Union adopted the official list of 88 constellations in 1922, Triangulum Minus was not included, and its stars remained part of Triangulum. In 2025 the IAU named Iota Trianguli "Triminus" after this former constellation.



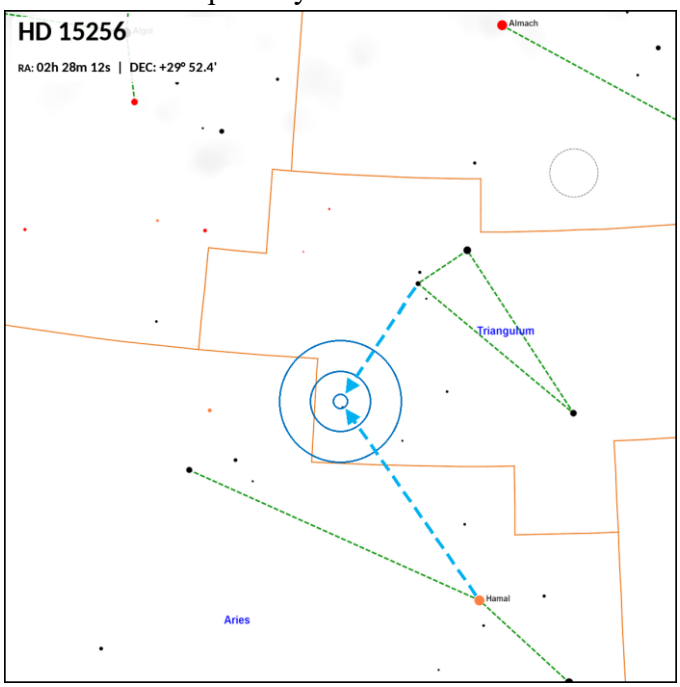


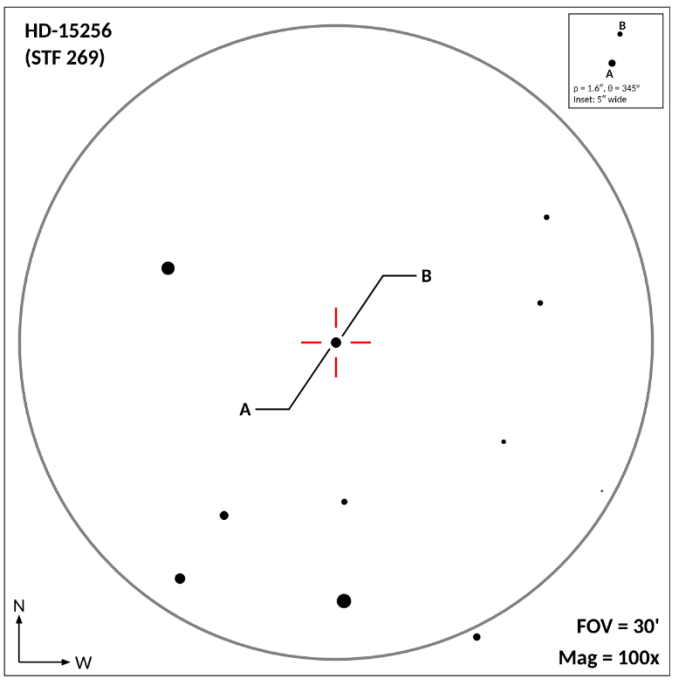
NGC 925 (G || Mag=10.1 | Size=10.5'x5.9' | SB=23.2 | MC=SAB(s)d |) A barred spiral galaxy located about 30 million light years away, with a weak central bar and loosely wound spiral arms. NGC 925 is a member of the NGC 1023 Group, a nearby gravitationally bound group of galaxies associated with NGC 1023.



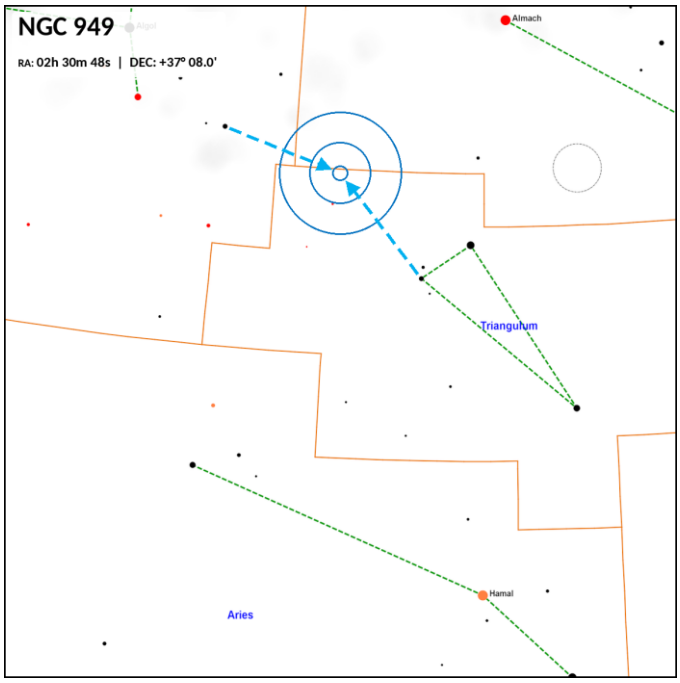


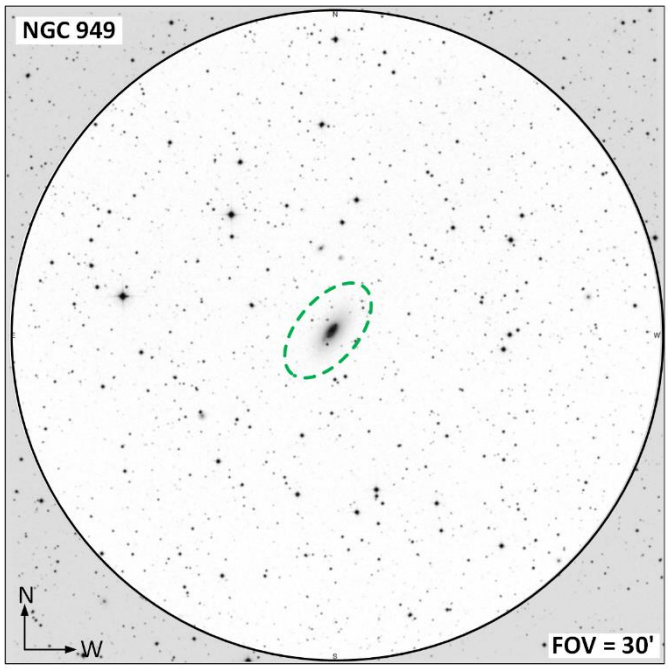
HD 15256 (DS || AB | Mag=7.6, 9.0 | Sep=1.6" | PA=345° | mBortle=9 | mAptt=102mm | Spec=G0, ? | Color=yellow; gray |) Located 625 light years away with a dim secondary star orbiting at a distance of at least 326 AU from the primary.



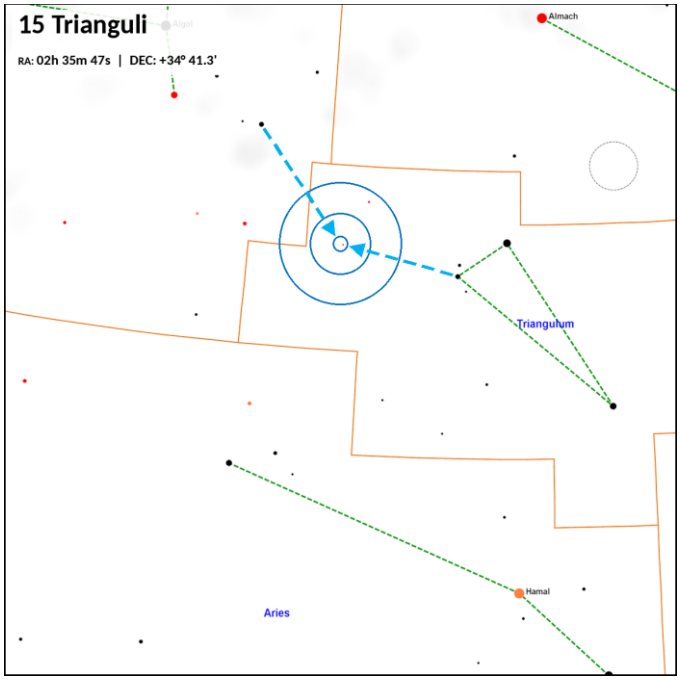


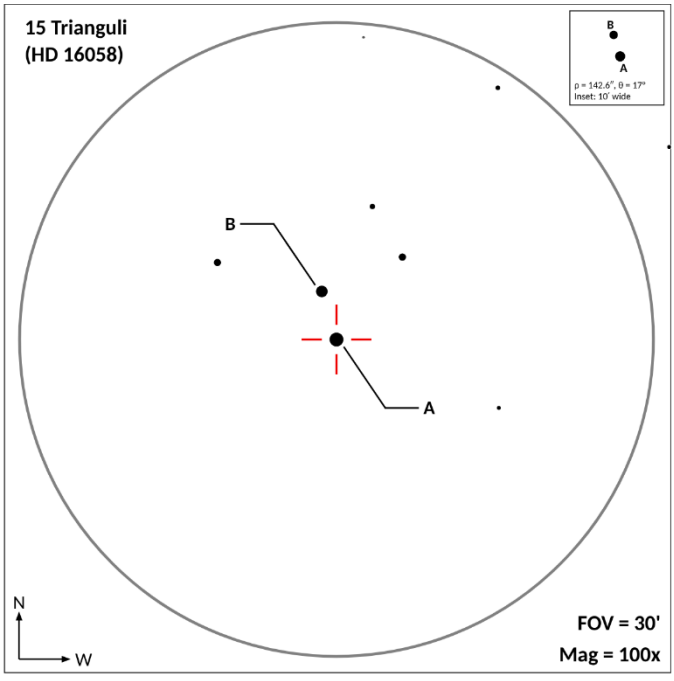
NGC 949 (G || Mag=11.8 | Size=3.3'x2.1' | SB=22.5 | mBortle=2 | mApt=200mm | MC=Sb |) NGC 949 is a member of the NGC 1023 Group, a nearby gravitationally bound group of galaxies associated with NGC 1023.





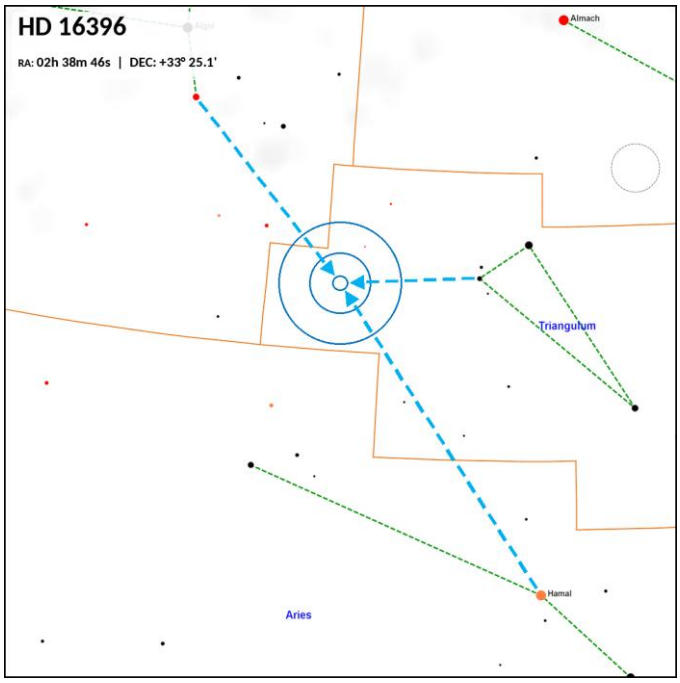
15 Trianguli (DS || AB | Mag=5.6, 6.8 | Sep=142.6" | PA=17° | mBortle=9 | mApt=50mm | Spec=M3IIIa, ? | Color=orange; white |) Located 480 light years away, this is a suspected irregular variable star with a magnitude range of about 0.1 magnitude. It is undetermined if the secondary is physically associated with the primary star.

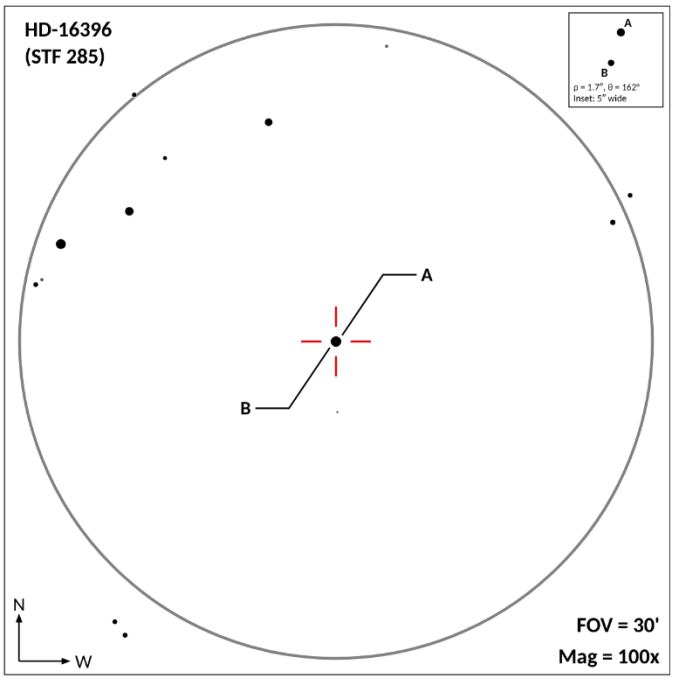




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HD 16396 (DS || AB | Mag=7.5, 8.1 | Sep=1.7" | PA=162° | mBortle=9 | mApt=102mm | Spec=K2III, ? | Color=orange |) Located 632 light years away and reported as having superb colors of pumpkin-orange and pearly white.





Observation Log: Triangulum (Tri)

Equipment Config A: _____ Config B: _____

Notes: _____

Date	Time	Config	Target	Notes

Date	Time	Config	Target	Notes

Observation Log: Triangulum (Tri)

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

References

- 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
  - 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

Applications

- SkyTools 4.1 Visual Professional
- AstroPlanner Version 2.4
- Cartes du Ciel Version 4.3
- SkySafari Pro 7
- Microsoft Office Home and Business 2021 - Word
- Microsoft Visio Professional 2021
- IrfanView Version 4.72