Delphinus (Del)

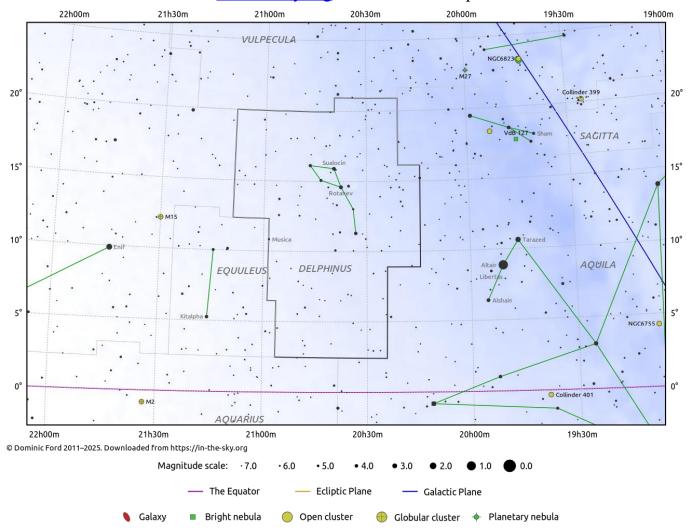
Evening Visibility: July - September

Online Information: **Delphinus**

More Online Information: <u>Gamma Del</u>, <u>Theta Del</u>, HD-198269, STAR-27, <u>NGC-6934</u>, <u>NGC-</u>

7006, NGC-6905,

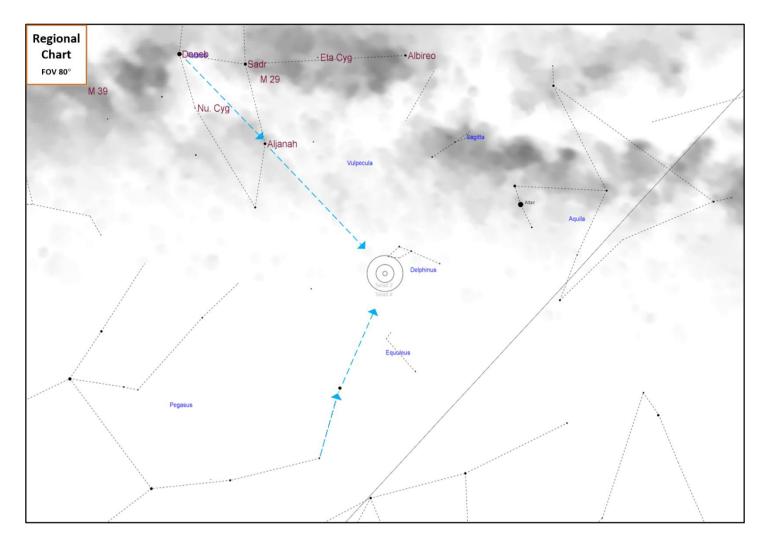
In-The-Sky.org Constellation Map



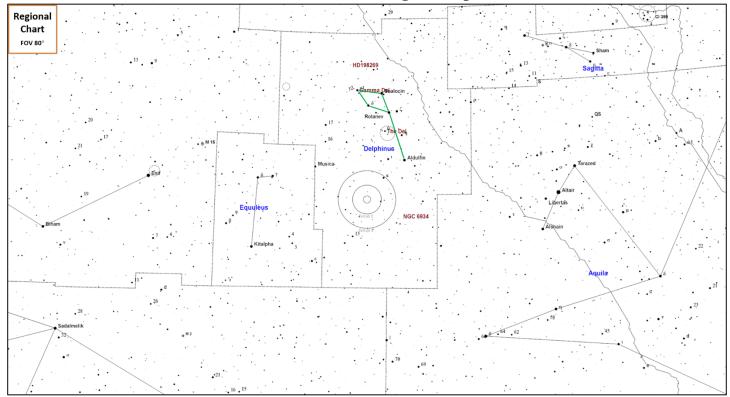
Delphinus is a small dim constellation. This constellation name is Latin for dolphin and is one of the smallest constellations in the sky. In Greek mythology the constellation represents the dolphin sent by Poseidon to find Amphitrite so he could marry her.

Constellation Highlights

• STAR 27 (AS) – Toadstool star patern.



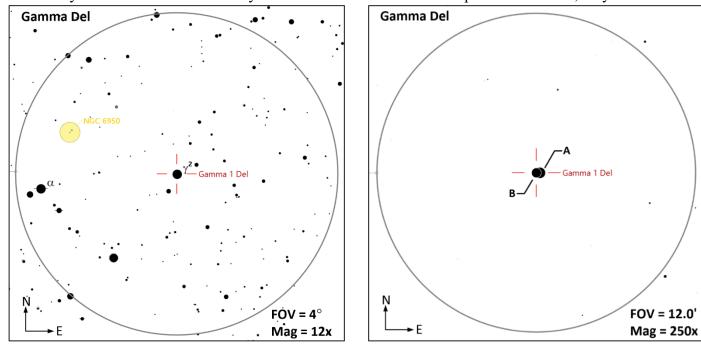
Constellation Targets Map



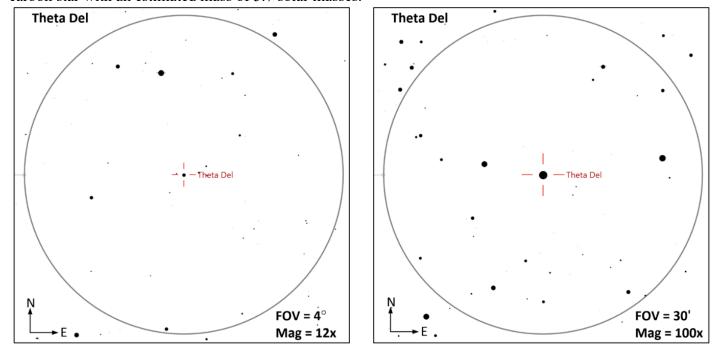
Objects Summary

Object (Type)	Ref	Aliases	Stats
Gamma Del (DS)	<u>1</u> , <u>2</u>	SAO-106475, HIP 102531, 12 Del, HR 7947, HD 197963, STF 2727, ADS 14279,SACDBL10059	AB Mag = 4.4, 5.0 Sep = 8.8" PS = 266°
Theta Del (CS)	1	SAO-106342, HIP 101882, 8 Del, HR 7892, HD 196725,	Mag = 5.7
HD 198269 (CS)		SAO-106342, HIP 101882, 8 Del, HD196725, HR 7892,BD+12 4411	Mag = 8.2
STAR 27 (AS)		The Toadstool, Dolphin's Diamonds	Size = 15' Ref Star HD201117, SAO- 106848
NGC 6934 (GC)	<u>1</u>	C 47	Mag = 8.9 Size = 5.9' SB = 21.4
NGC 7006 (GC)	<u>1</u>	C 42	Mag = 10.6 Size = 2.8' SB = 21.5
Blue Flash (PN)	<u>1</u>	NGC-6905, ARO 75	Mag = 10.9 Size = 1.2' SB = 21.8

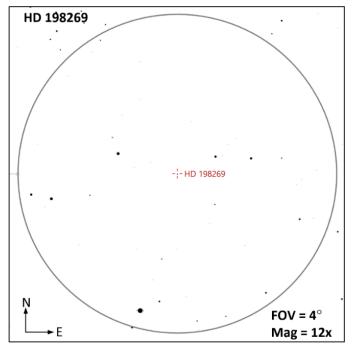
Gamma Del (DS | **AB** | Mag = 4.4, 5.0 | Sep = 8.8" | PS = 266° |) – Easily located within the constellation this double star will require a higher magnification than most binoculars will supply to separate the components. This star system is located about 115 ly from our sun and has an orbital period of about 3,250 years.

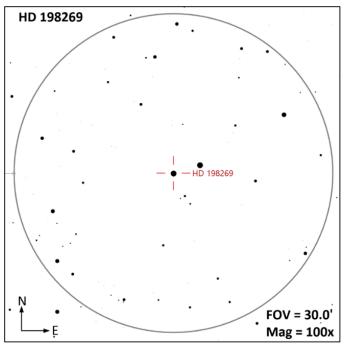


Theta Del (CS \mid M = 5.7 \mid) – This carbon star is located about 2,050 ly from our sun. This is a super-metal-rich carbon star with an estimated mass of 5.7 solar masses.

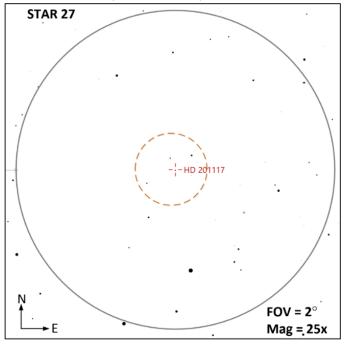


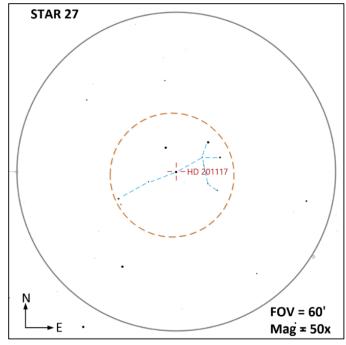
HD 198269 (CS | M=58.2 |) – A carbon star located 1,173 ly from our sun that has an energy output about 56 times that of our sun.



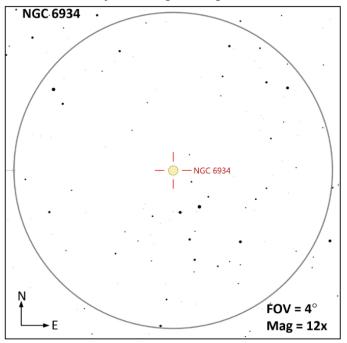


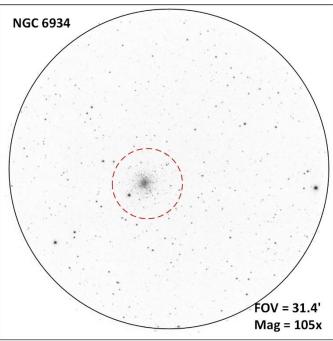
STAR 27 (AS, | Size = 15' |) – This asterism is composed of about 15 stars forming a Toadstool shape. The Star HD 201117 (SAO-106848) is located about in the middle of the toadstool.



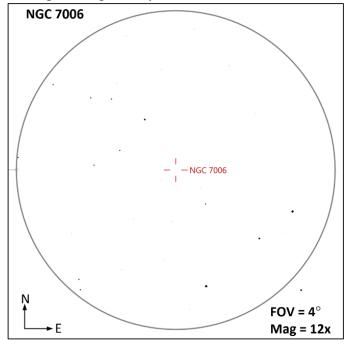


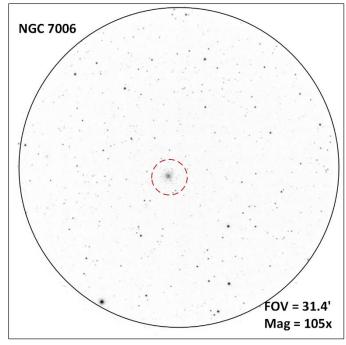
NGC 6934 (GC | Mag = 8.9 | Size = 5.9' | SB = 21.4 |) – This globular cluster is 52,000 ly from our sun and is expected to be 15 billion year old ball of hundreds of thousands of stars with a combined mass of 295,000 solar masses. This object is large enough that is should be identifiable in most binoculars.



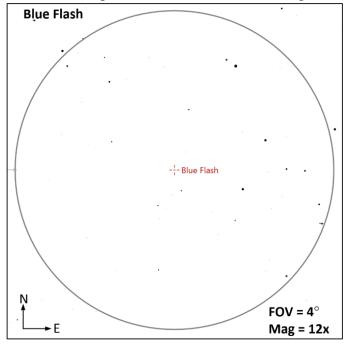


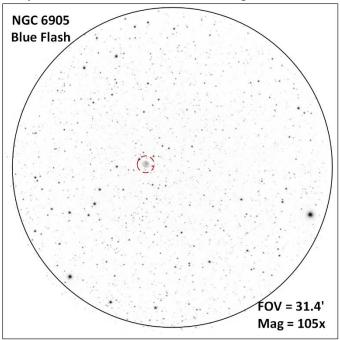
NGC 7006 (GC | Mag = 10.6 | Size = 2.8' | SB = 21.5 |) – The second Globular Cluster in Delphinus lies 135,000 ly from the sun. This is a small compact globular cluster and may appear as a fuzzy star in smaller telescopes and probably not visible in most binoculars.





Blue Flash (PN | Mag = 10.9 | Size = 1.2' | SB = 21.8 |) – This planetary nebula will probably appear as a fuzzy star in a telescope. The central star is 14.0 magnitude, so may not be visible in smaller telescopes.





References, Resources and Tools used to create this document

The resources listed below were utilize to generate this document.

References

- Books
 - Objects in the Heavens: Peter Birren
 - o Touring the Universe through Binoculars: Philip Harrington
 - o <u>The Deep Sky</u>: Philip Harrington
 - o Double and Multiple Stars and How to Observe Them: James Mullaney
 - o **Sky Spot** Books
 - Bright Telescopic Objects: Brent Watson
 - Select Double Stars: Brent Watson
 - Overlooked Objects: Bret Watson
- Asterisms
 - o Astronomical League: <u>Asterisms observing program</u> List
 - o Asterisms: Demeiza Ramakers
 - o Pattern Asterisms: John Chiravalle
- Saguaro Astronomy Club
 - Asterisms List
 - o 110 Best of the NGC
 - o Red Stars List
- Online
 - o Wikipedia
 - o The Garden Astronomer: <u>Double, Multiple, and Special Star Observations List</u>
 - o Sky & Telescope: Colored Double Stars, Real and Imagined
 - o In-The-Sky.org
 - o Constellation-guide.com

Applications

- SkyTools 4.1 Visual Professional
- AstroPlanner Version 2.4
- <u>Cartes du Ciel</u> Version 4.3
- Sky Safari Pro 7
- Microsoft Office Home and business 2021 Word
- Microsoft Visio Professional 2010
- IrfanView Version 4.72