

Constellation Guide

Scorpius (Sco)

Evening Visibility: **May – July**

Opposition: **May/June**

Latitude Visibility: **+40° to -90°**

Online Information: | In-The-Sky.org | Constellation Guide.com |

Constellation Targets

[Xi Scorpii](#), [Graffias](#), [IC-4592](#), [Jabbah](#), B-40, [M-80](#), IC-4601, [Al Niyat](#), [Antares](#), [Cr-302](#), [M-4](#), [NGC-6144](#), [NGC-6072](#), [NGC-6124](#), [NGC-6139](#), [NGC-6153](#), NGC-6192, SU Scorpii, False Comet, [NGC-6231](#), CR-316, [NGC-6242](#), TR-24, [NGC-6256](#), NGC-6259, [NGC-6281](#), [NGC-6302](#), NGC-6322, [NGC-6334](#), [NGC-6357](#), TR-25, [Shaula](#), [NGC-6380](#), [NGC-6383](#), TR-27, [NGC-6388](#), TR-28, [NGC-6400](#), [M-6](#), TR-29, NGC-6416, [NGC-6441](#), NGC-6451, [NGC-6453](#), B-283, [M-7](#), TR-30, [NGC-6496](#)

Mythology/Back Story

The Scorpius constellation is one of the constellations that actually look like object it is named after it is easy to make out the head, body and tail of the scorpion. The constellation is one of the oldest known and dates back to about 5,000 years ago when the Sumerians called it GIR-TAB “the scorpion”. This constellation is chock-full of open clusters and so is an excellent target for binoculars and small telescopes. This constellation contains four messier objects.

Gould Belt

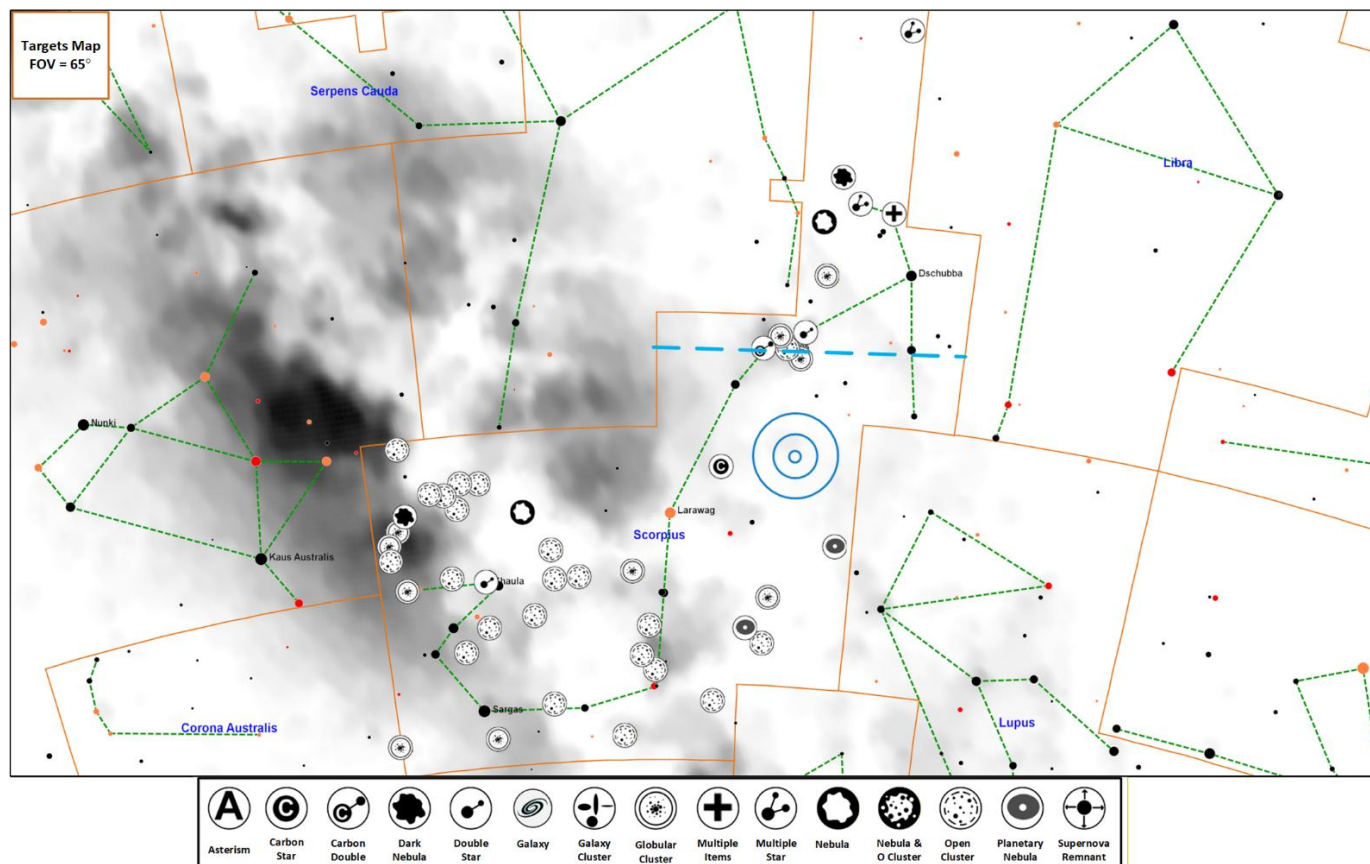
The Gould Belt is a local ring of stars in the Milky Way tilted away from the galactic plane by 16-20 degrees and contains many of the nearest star-forming regions of the local [Orion Arm](#) (our sun is a member). The belt contains many bright young stars about 30 to 50 million years old spanning multiple constellations. A recent theory suggest that the Gould Belt formed about 30 million years ago when a blob of [dark matter](#) collided with the [molecular cloud](#) in our region.

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Constellation Highlights

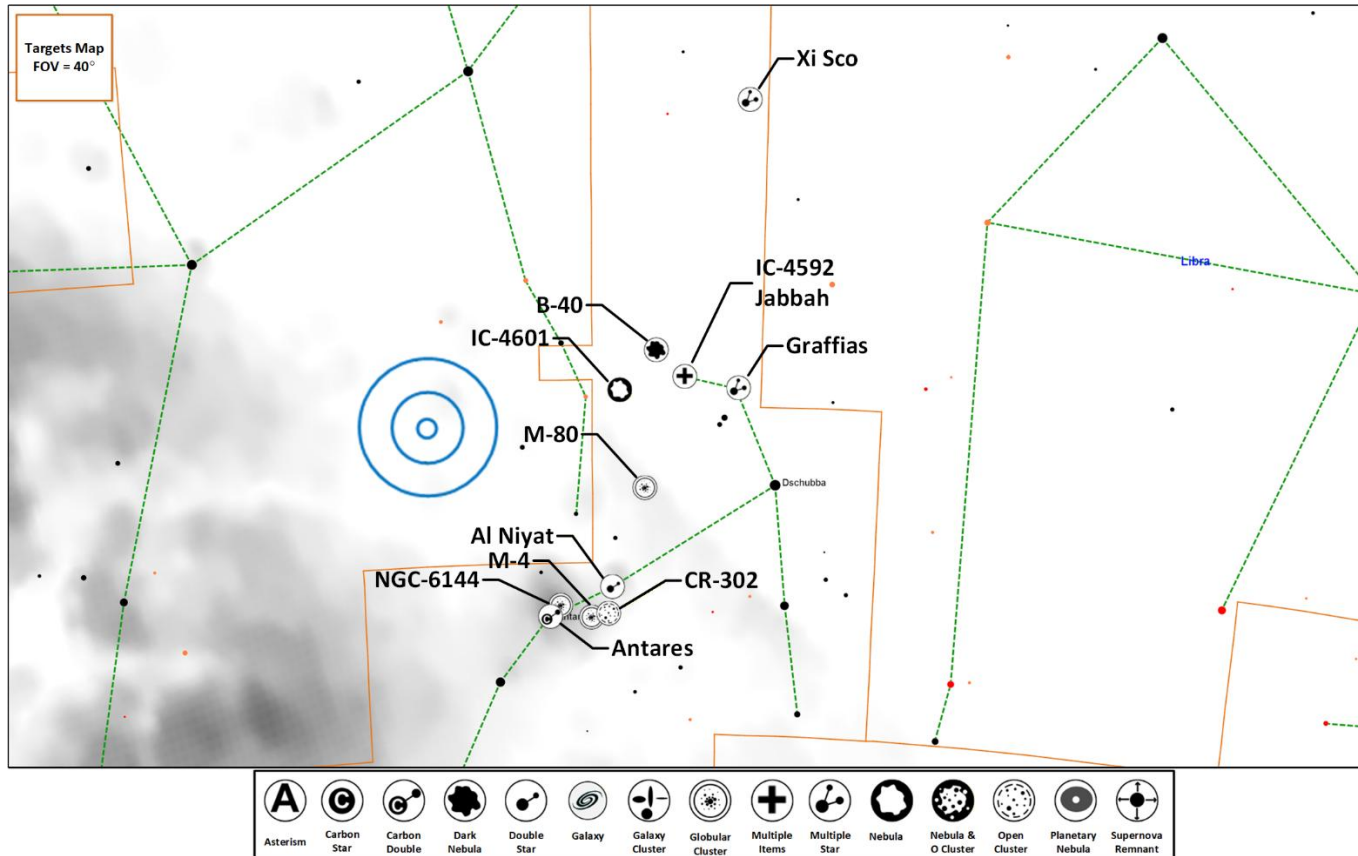
This constellation has over 40 targets identified, most are open and globular clusters. It is packed with objects so we will break it up into two sections, Objects above Antares and objects below it.

• Jabbah (MS-4) – Nice blue/gold pair. • Messier 4 (GC) – An exceptional Globular Cluster	• Messier 80 (GC) – One of the densest globulars in the Milky Way • Messier 6 (OC) – The Butterfly Cluster, a neat asterism and open cluster.
• False Comet (AS) – Great binocular target	• Messier 7 (OC) – The Ptolemy Cluster. Naked eye in dark skies.



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Antares and Objects Above



Antares and Objects Above

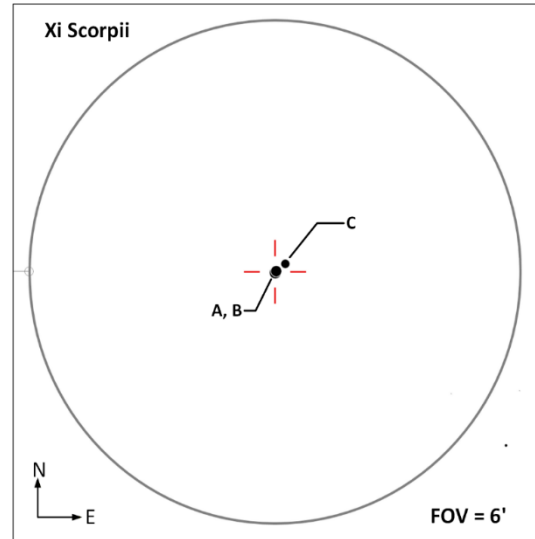
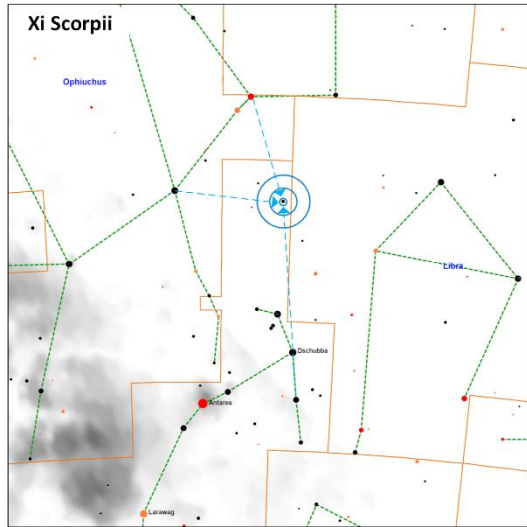
Object (Type)	Links	Gear	Aliases	Stats
Xi Sco (MS-3)	1 , 2	T	SAO-159665, HIP 78727, HR 5978, HD 144069, STF 1998, ADS 9909, ξ Sco	AB M=4.8, 4.9 Sep=1.1" PA=17° Color=Yellow-White, Yellow-White Spec=F5IV, F5IV AC M=4.8, 7.3 Sep=8.0" PA=42° Color=Yellow-White, Yellow Spec=F5IV, G1V BC M=4.9, 7.3 Sep=7.1" PA=45° Color= Yellow-White, Yellow Spec=F5IV, G1V

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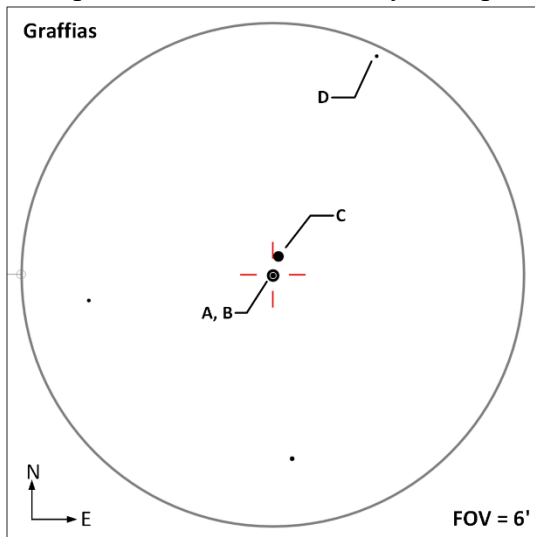
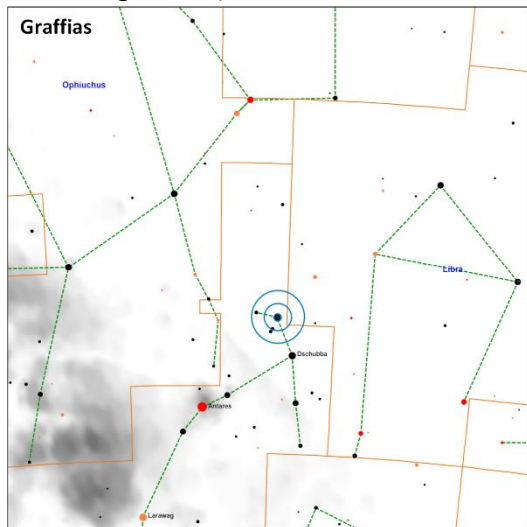
Object (Type)	Links	Gear	Aliases	Stats
Graffias (MS-4)	1 , 2	B, T	SAO-159682, HIP 78820, Beta Sco, 8 Sco, HR 5984, HD 144217, ADS 9913, Graffias	AB M=2.6, 10.6 Sep= 0.4'' PA= 229° Color=Blue-White Spec=B0.5V AC M=2.6, 4.5 Sep=13.7'' PA=19° Color=Blue-White, Blue-White Spec=B0.5V, B2V AD M=2.6, 7.5 Sep= 520'' PA=30.4° Color= Blue-White, Blue-White Spec=B0.5V, B9V
IC-4592 (RN)	1	B	LBN 1113, Blue Horsehead Nebula	Mag = 3.9 Size = 150x60' SB = 22.4
Jabbah (MS-4)	1 , 2	B, T	SAO-159764, HIP 79374, 14 Sco, HR 6027, HD 145502, ADS 9951, Nu Sco	AB M=4.3, 5.3 Sep=1.4'' PA=126° Color=Blue-White Spec=B2IV AC M=4.4, 6.6 Sep=41.4'' PA=336° Color=Blue-White Spec=B2IV CD M=6.6, 7.2 Sep=2.4'' PA=49° Color = Blue-White Spec= B8, 9V
Barnard 40 (DN)		B, T	B-40, LDN 1721	Size=25'x25'
Messier 80 (GC)	1	T	M-80, NGC-6093, Mel 142, EQ 1614-228, C1614-228	Mag = 7.3 Size = 10'' SB = 20.9 MC=II
IC-4601 (EN)		B, T		Mag= 10.0 Size= 20'x10' SB=24.4
Al Niyat (DS)	1 , 2	B, T	SAO-184336, HIP 80112, Sigma Scorpii, 20 Sco, HR 6084, HD 147165, CoD -25 11485, ADS 10009, H 4, WDS 16212-2536, σ Sco, Alniyat	AB M=2.9, 8.4 Sep=20.5'' PA=269° Color=Blue-White, Blue-White Spec= B0III, B8V
Antares (CS, DS)	1 , 2	B, T	SAO-184415, HIP 80763, 21 Sco, HR 6134, HD 148478, ADS 10074, α Sco	Mag = 0.6 to 1.6 Per=1,000 to 2,300 day AB M = 0.96, 5.4 Sep=2.7'' PA=277° Period=2,670y Color=Red Spec=M1
Collinder 302 (OC)	1	B	Cr302, Lund702, OCL1011, Antares Cluster, C 162-261	Mag = 1.0 Size = 8.3° SB = 23.1 MC=III3p
Messier 4 (GC)	1	B, T	M-4, NGC 6121, Mel 144, EQ 1620-264, C1620-264, ESO 517-SC1, Spider Globular Cluster	Mag = 5.6 Size = 26' SB = 21.3 MC=IX
NGC-6144 (GC)	1	T	Mel 147, EQ 1624-259, C1624-259	Mag = 9.6 Size = 1.8' SB = 19.5 MC=XI

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Xi Sco (MS-3 | **AB** | M=4.8, 4.9 | Sep=1.1" | PA=17° | Color=Yellow-White, Yellow-White | Spec=F5IV, F5IV || **AC** | M=4.8, 7.3 | Sep=8.0" | PA=42° | Color=Yellow-White, Yellow | Spec=F5IV, G1V || **BC** | M=4.9, 7.3 | Sep=7.1" | PA=45° | Color= Yellow-White, Yellow | Spec=F5IV, G1V |) – Wikipedia indicates this is a quintuple (5) star system yet information on only three components (ABC) are included in the [Stelle Dopper](#) website. Wikipedia indicates this system is grouped into two groups in the image below it is clear the AB&C components are group close together while the D&E components are grouped together considerably distant from the first group (on the scale of arc minutes). This should be an interesting system for both high power telescopes and binoculars since a high-power telescope may be able to resolve all five components while binoculars can show the two groupings.

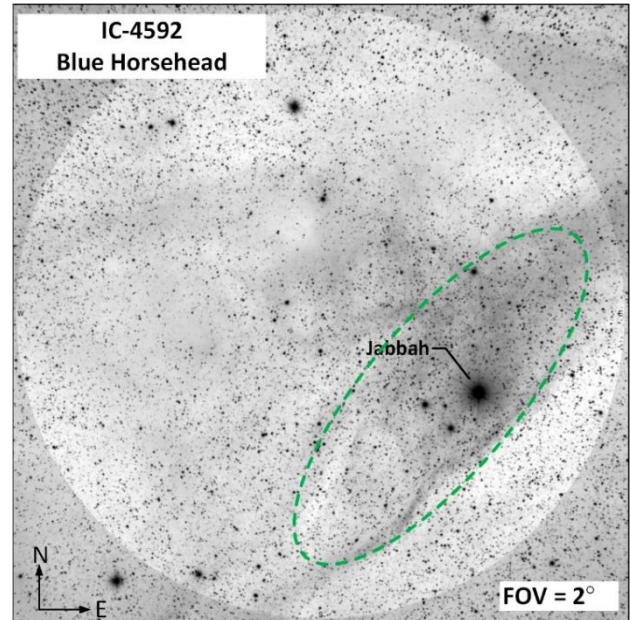
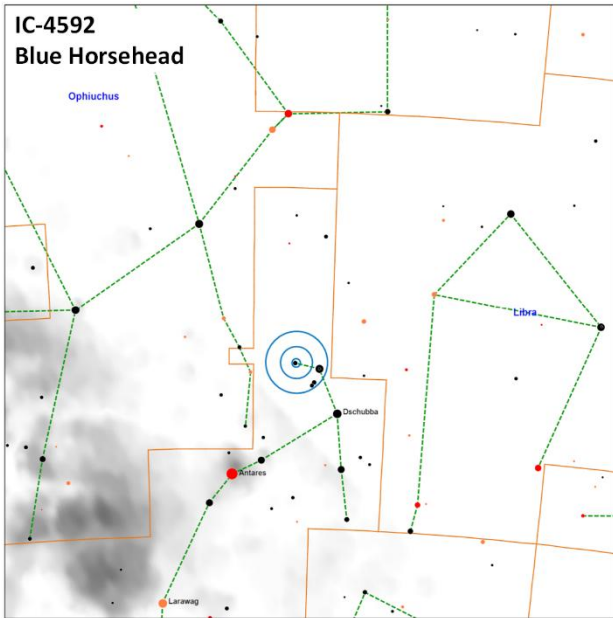


Graffias (MS-4 | **AB** | M=2.6, 10.6 | Sep= 0.4" | PA= 229° | Color=Blue-White | Spec=B0.5V || **AC** | M=2.6, 4.5 | Sep=13.7" | PA=19° | Color=Blue-White, Blue-White | Spec=B0.5V, B2V || **AD** | M=2.6, 7.5 | Sep= 520" | PA=30.4° | Color= Blue-White, Blue-White | Spec=B0.5V, B9V |) – Beta Scorpii is the second brightest star in the constellation and easily located in the head of the scorpion. Another interesting multiple star system (with four visible components) for both binoculars and high-power telescope views. This is actually sextuple system.

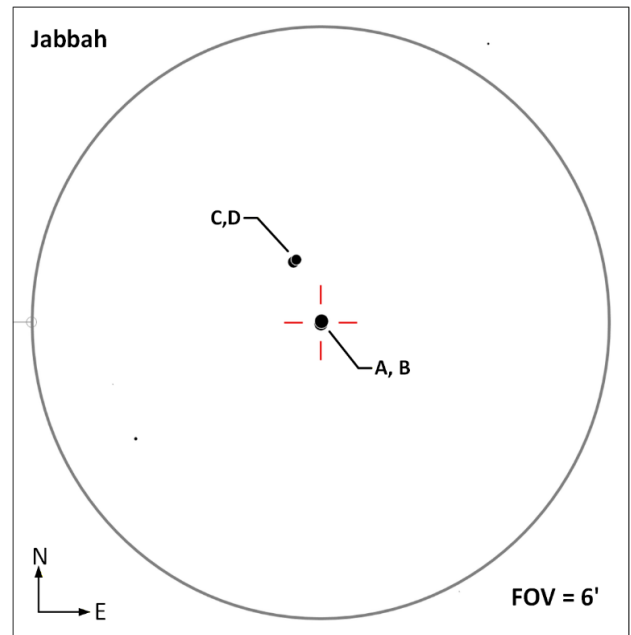
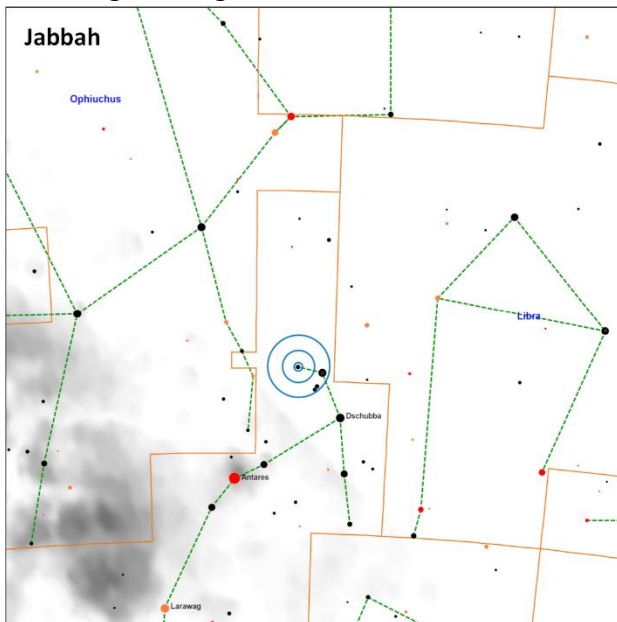


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IC-4592 (RN | Mag = 3.9 | Size = 150x60' | SB = 22.4 |) – A dim reflection nebula known as the Blue Horsehead Nebula is centered around Jabbah, so even though this is a very dim object it is worth seeing if you can see this. Use low power and possibly a broadband pollution filter to see if you can make out any traces of this nebula.

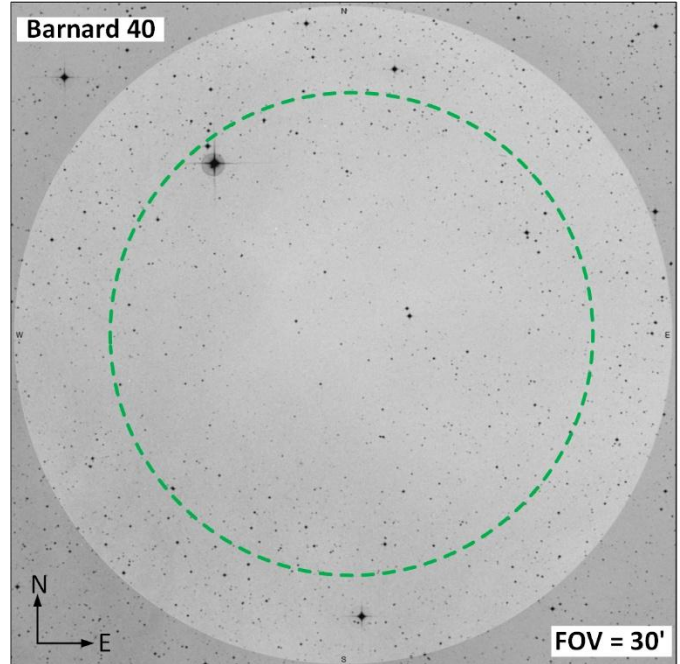
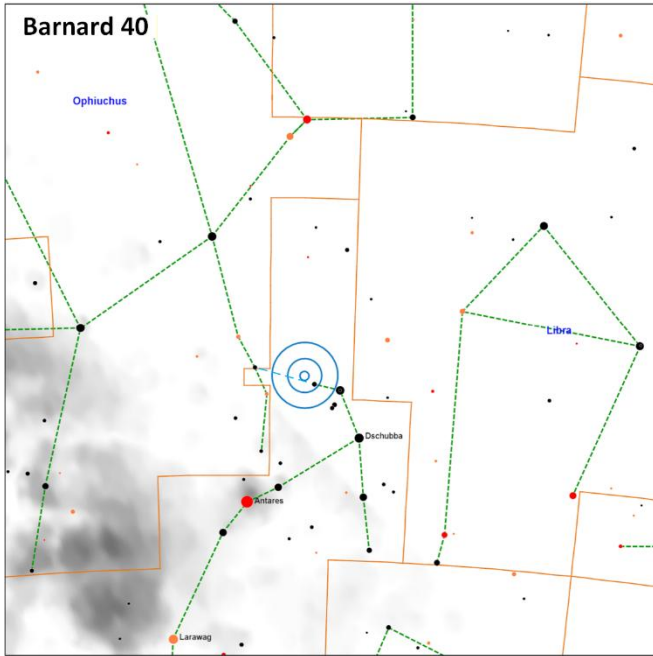


Jabbah (MS-4 | **AB** | M=4.3, 5.3 | Sep=1.4'' | PA=126° | Color=Blue-White | Spec=B2IV || **AC** | M=4.4, 6.6 | Sep=41.4'' | PA=336° | Color=Blue-White | Spec=B2IV || **CD** | M=6.6, 7.2 | Sep=2.4'' | PA=49° | Color = Blue-White | Spec= B8, 9V |) – Nu Scorpii is located just above the head of the scorpion, so should be easy to locate. It is suspected to be a septuple (7) star system, but only four components may be visible. Similar to Xi Sco, this should be a good target for both binoculars and telescopes.

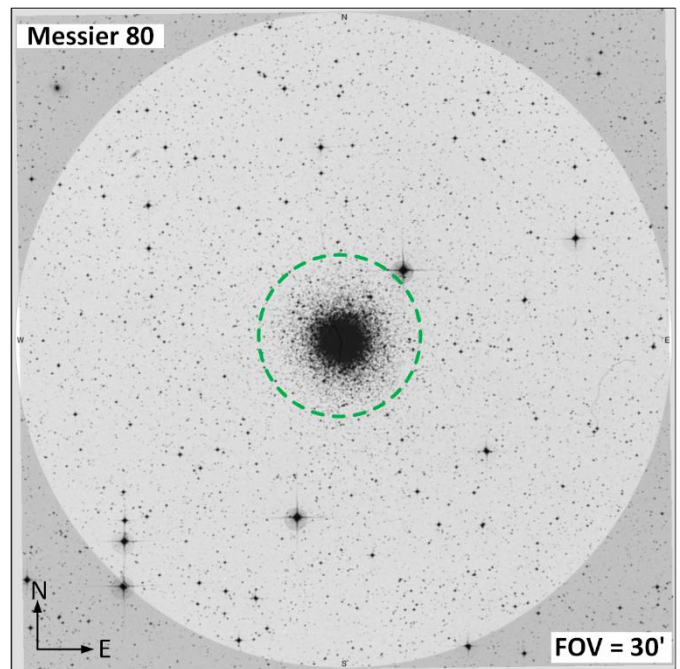
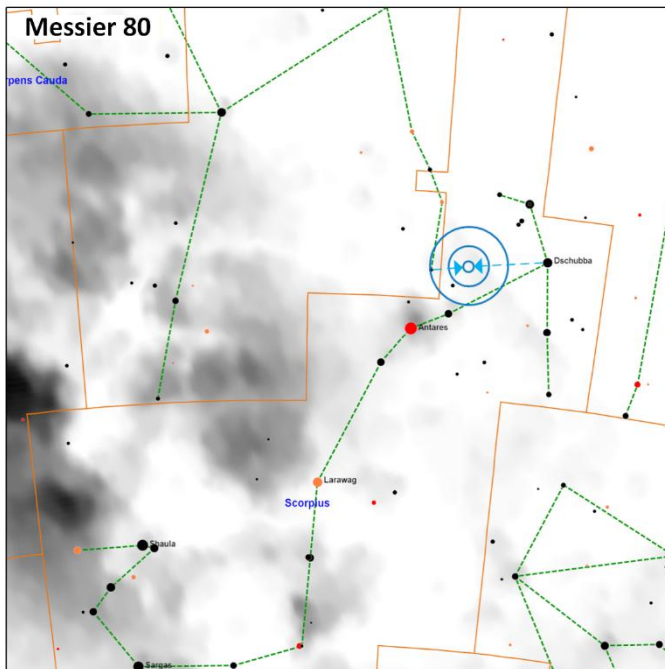


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Barnard 40 (DN | Size=25'x25' |) – Located 522 light years away and with a physical diameter of 4 light years this dark nebula is located in the Blue Horsehead Nebula (IC-4592) area.

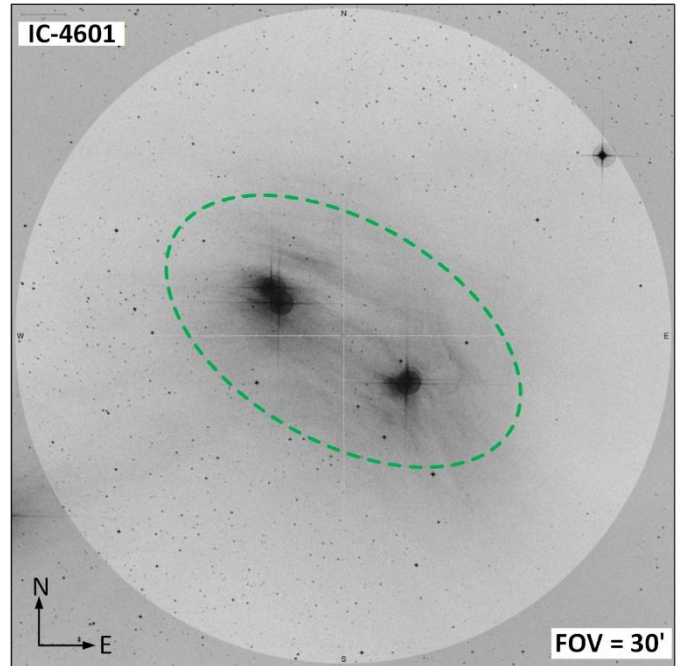
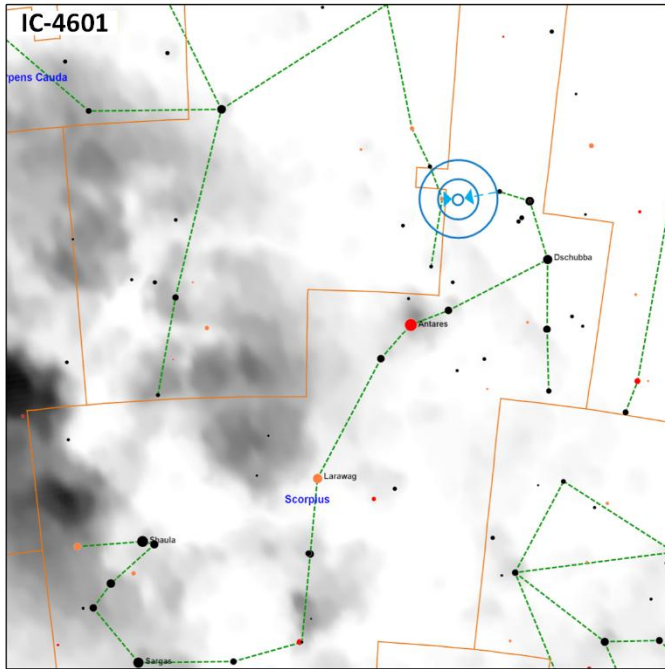


Messier 80 (GC | Mag = 7.3 | Size = 10'' | SB = 20.9 | MC=II |) – Located on the edge of CR-302. This globular cluster is 32,600 light years from earth and is one of the densest Globulars in the Milky Way containing over 300,000 stars in an area of 95 light years in diameter.

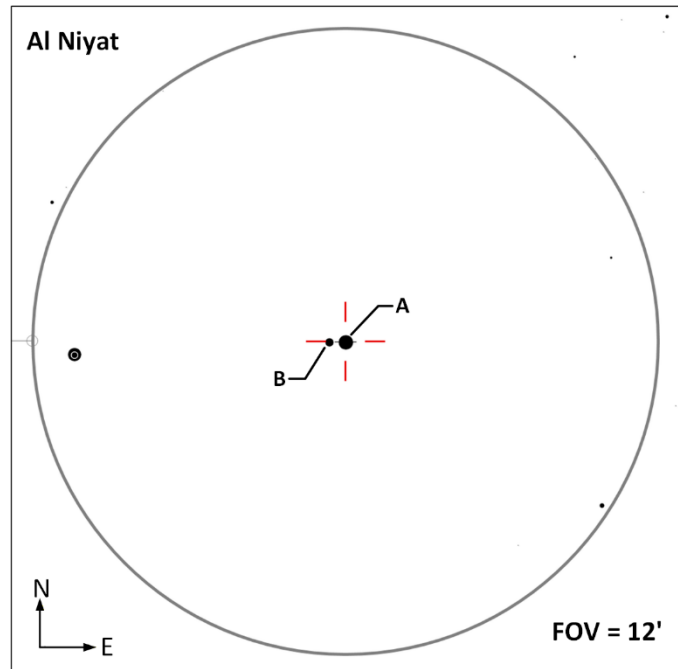
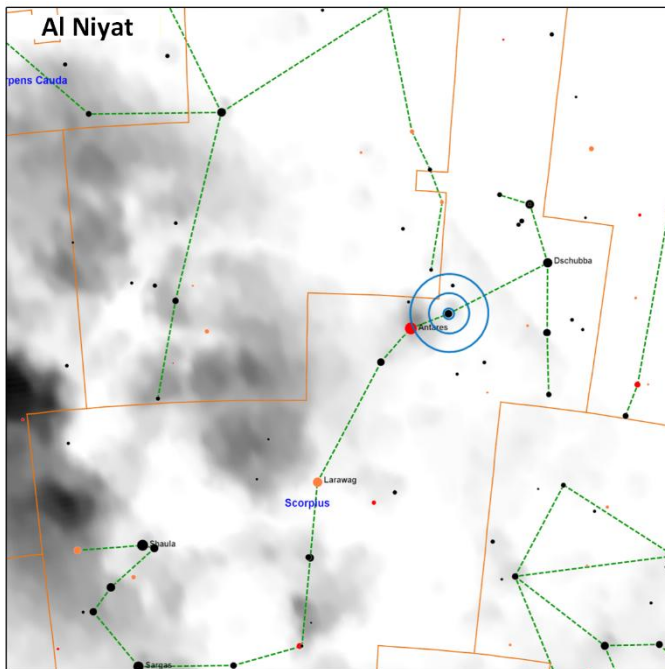


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IC-4601 (EN | Mag= 10.0 | Size= 20'x10' | SB=24.4 |) – Located 522 light years away with a physical diameter of 3 light years.

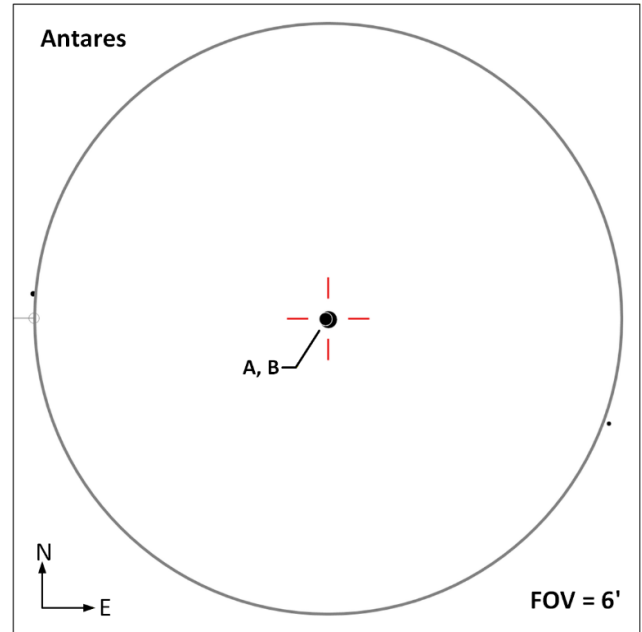
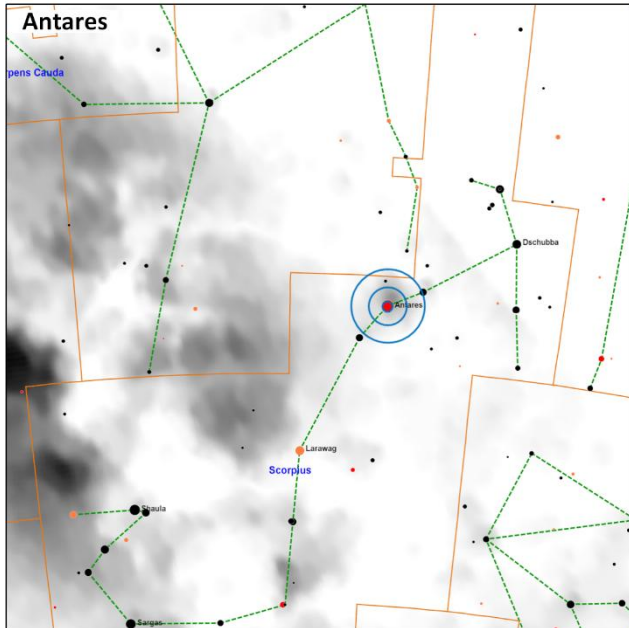


Al Niyat (DS | M=2.9, 8.4 | Sep=20.5" | PA=269° | Color=Blue-White, Blue-White | Spec= B0III, B8V |) – Located 600 light years away, and a member of the [Gould Belt](#) (See constellation introduction), a sub group of the [Scorpius-Centaurus association](#) of stars and

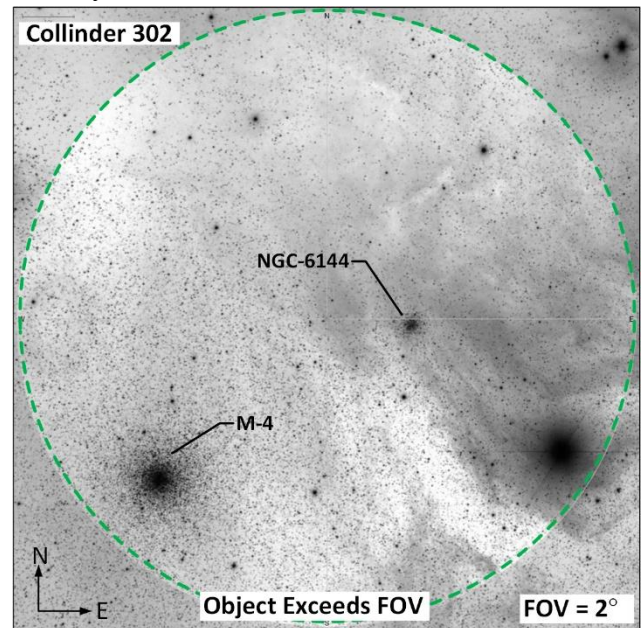
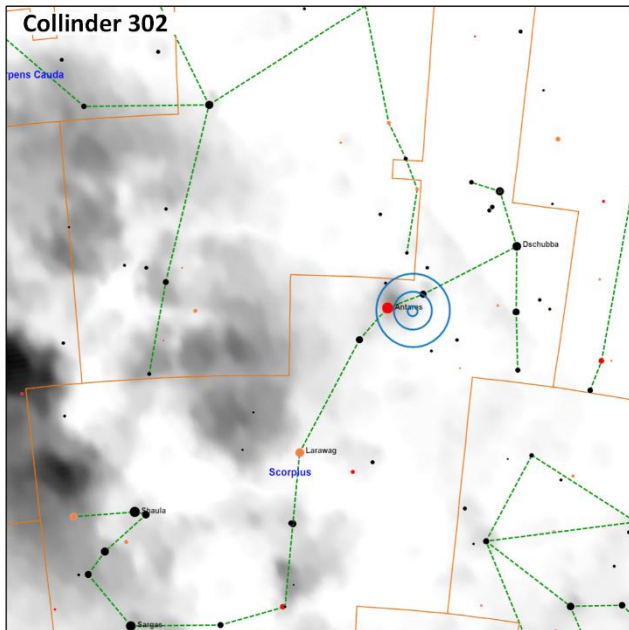


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Antares (CS, DS | Mag = 0.6 to 1.6 | Per=1,000 to 2,300 day || **AB** | M = 0.96, 5.4 | Sep=2.7" | PA=277° | Period=2,670y | Color=Red | Spec=M1 |) – Alpha Scorpii is the brightest star in the Scorpius constellation. This is a red supergiant about 500 light years from earth and has a radius of 3.4 AU, about 400 times that of the earth. Antares has a much dimmer blue star companion measuring at 5.4 magnitude with a separation of 2.7, so it is easily lost in Antares glare in small telescopes.

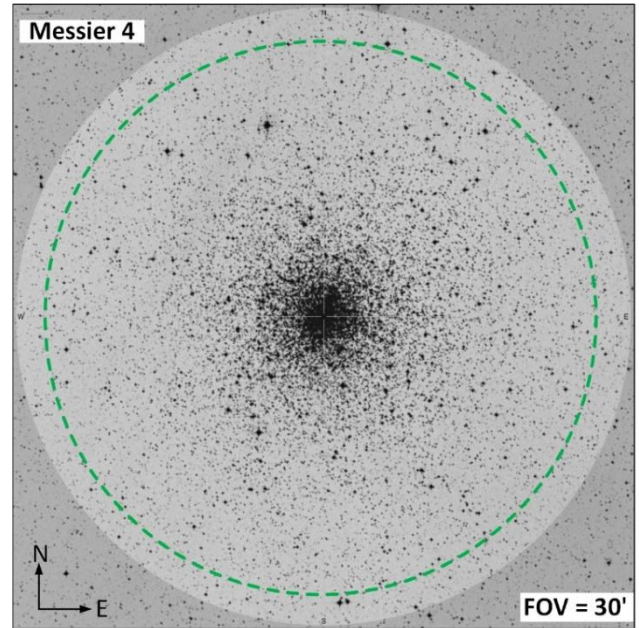
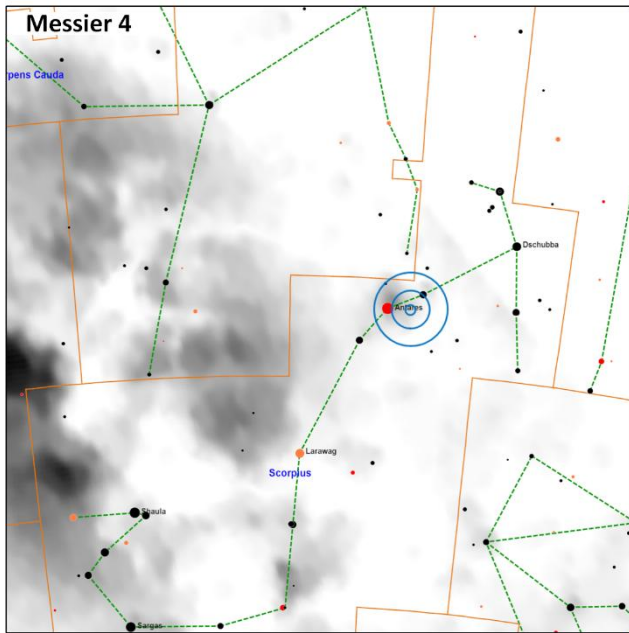


Collinder-302 (OC | Mag = 1.0 | Size = 8.3° | SB = 23.1 | MC=III3p |) – This is classified as an open cluster but really should be considered a large region that contains a number of objects worth looking at in binoculars. Included in this region, and highlighted in this guide below include Antares (CS, DS), NGC-6144 (GC), M-4(GC) and just at the edge M-80 (GC). An interesting patch of sky!

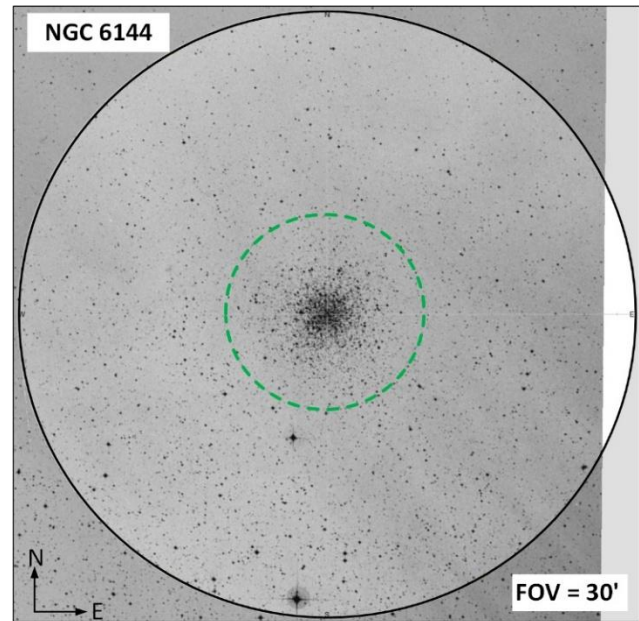
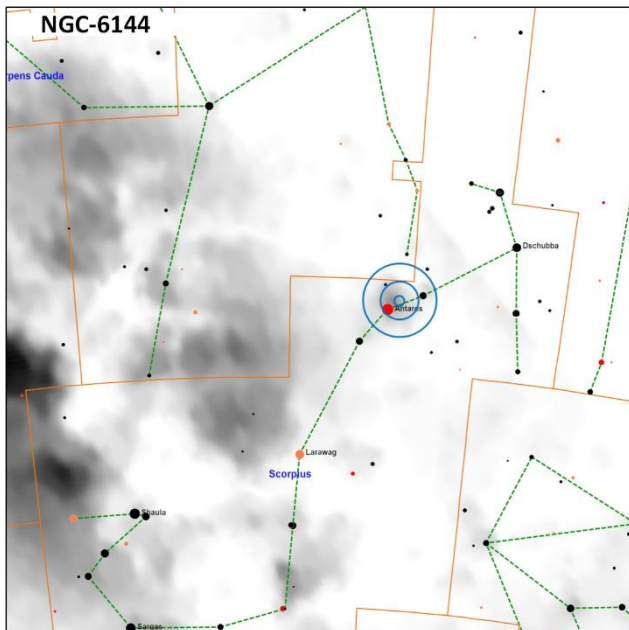


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Messier 4 (GC | Mag = 5.6 | Size = 26' | SB = 21.3 | MC=IX |) – One of the closest and brightest globular clusters in the sky it is positioned only 1.3° west of Antares so it is also easily located. M4 is estimated to be 7,200 ly from earth with an estimated age of 12.2 billion years. This was the only globular cluster Messier was able to resolve stars in and is an excellent target for small telescopes and binoculars.

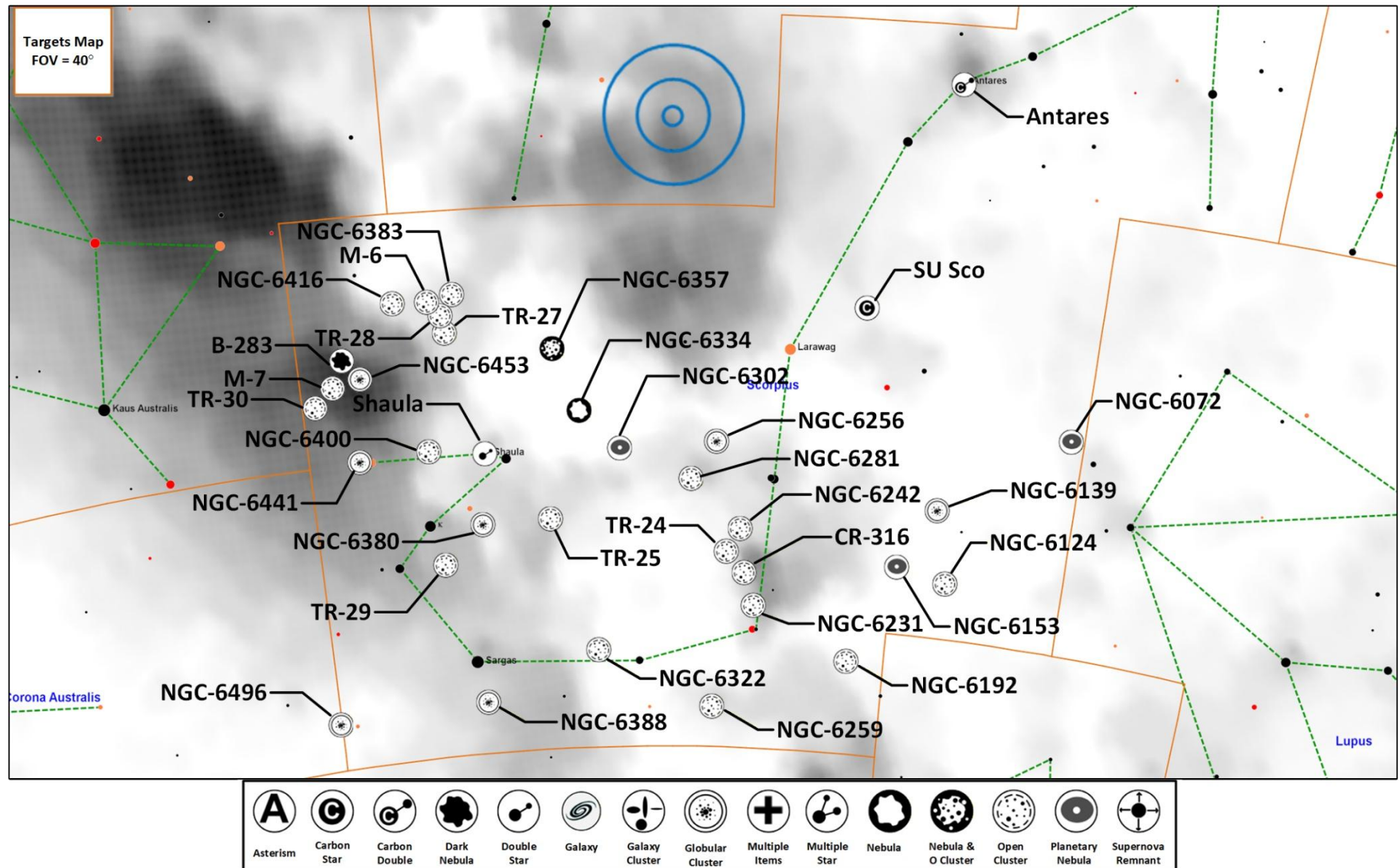


NGC-6144 (GC | Mag = 9.6 | Size = 1.8' | SB = 19.5 | MC=XI |) – Located 1° north-east of M-4 this cluster has a very low core density for a globular cluster and may appear more like an open cluster. NGC 6144 is 33,000 light years from earth. It is interesting to contrast NGC-6144 to M-80, one of the densest globular clusters known. Interestingly this object does not appear to be in the Sky Safari Pro application (2026-06-18).



Constellation Guide

Objects Below Antares



Constellation Guide

Objects Below Antares

Object (Type)	Links	Gear	Aliases	Stats
NGC-6072 (PN)	1	T	Sa 2-134, ARO 500, My 93, PK 342+10.1, PN G342.1+10.8, ESO 389-15, VV 77, SCM 107	Mag=11.3 Size=1.2" SB=20.3
NGC-6124 (OC)	1	B, T	Caldwell 75, C-75, Collinder 301, Cr 301, Lund 701, Mel 145, OCl 990, Raab 111, C1622-405	Mag = 5.8 Size = 29' SB = 21.7 MC=I3r
NGC-6139 (GC)	1	T	EQ 1624-387, C1624-387, ESO 331-SC4	Mag=9.1 Size=8.2' SB=22.3 MC=II
NGC-6153 (PN)	1	T	Wray 16-225, ARO 501, He 2-167, RCW 112, Sa 2-148, PK 341+05.1, PN G341.8+05.4, ESO 331-6, VV 81	M=10.6 Size=0.5"x0.3" SB=17.2
NGC-6192 (OC)		T	Collinder 309, Cr 309, Lund 715, Mel 149, OCl 988, Raab 113, vdB-H1 194, C1636-432	M=8.5 Size=9.0" SB=21.9 MC=I2r
SU Scorpii (CS)		B, T	SAO-207911, CoD -32 11900	Mag Range: 8.0 to 9.4 Period=414 days BV=3.36 Spec=C5.5
False Comet (AS)	1	B		Size=1.5°
NGC-6231 (OC)	1	B, T	C-76, Baby Scorpion Cluster, Table of Scorpius, Melotte 153, Caldwell 76, Collinder 315, Cr-315, Lund 729, Mel 153, OCl 997, Mrk 31, vdB-Ha 201	Mag = 2.6 Size = 15.0' SB = 17.1 MC=I3p
Collinder 316 (OC)		B	Cr316, Lund731, OCl 998, C 1652-407, vdB-Ha 203, C1652-407	Mag = 3.4 Size = 105' SB = 22.1 MC=I2m
NGC-6242 (OC)	1	T	Cr 317, Collinder 317, Lund 732, Mel 155, OCl 1001, Raab 115, vdB -Ha 204, C1654-394	Mag = 6.4 Size = 9' SB = 19.8 MC=I3m
Trumpler 24 (OC)		B	Tr 24, Collinder 318, Cr-318, Ha 12, OCl 999.0, C1653-405, OVOC1210	Mag=8.6 Size=60' SB=26.1 MC=IV2p n
NGC-6256 (GC)	1	T	ESO 391-SC6, vdB-Ha 208, Lund 1104, EQ 1656-370, C1656-370, GCL 49.1	M=11.3 Size=7' SB=24.2 MC=??
NGC-6259 (OC)		B, T	Collinder 322, Cr-322, Lund 737, Mel 158, OCl 996, Raab 117, vdB-Ha f209, C1657-446	M=8.0 Size=14' SB=22.4 MC=II2r
NGC-6281 (OC)	1	T	Cr 324, Mel 161, Lund 739, OCL 1003, Moth Wing Cluster, Collinder 324, Raab 118, vdB-Ha 213, C1701-378	Mag = 5.4 Size = 5.4' SB = 18.5 MC=II2p
NGC-6302 (PN)	1	T	Calwell 69, Bug Nebula, Butterfly Nebula, C-69, Wray 16-259, SH 2-6, ARO 502, Gum 60	Mag=9.6 Size = 0.8" SB=17.7

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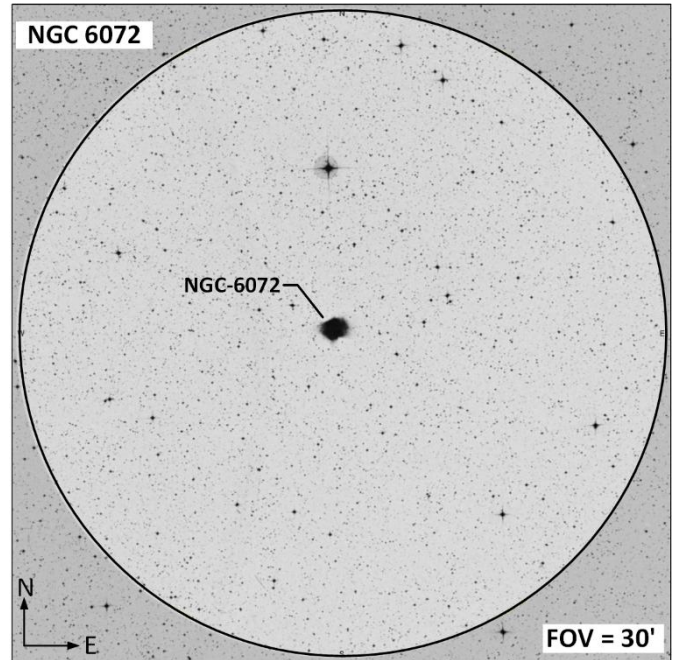
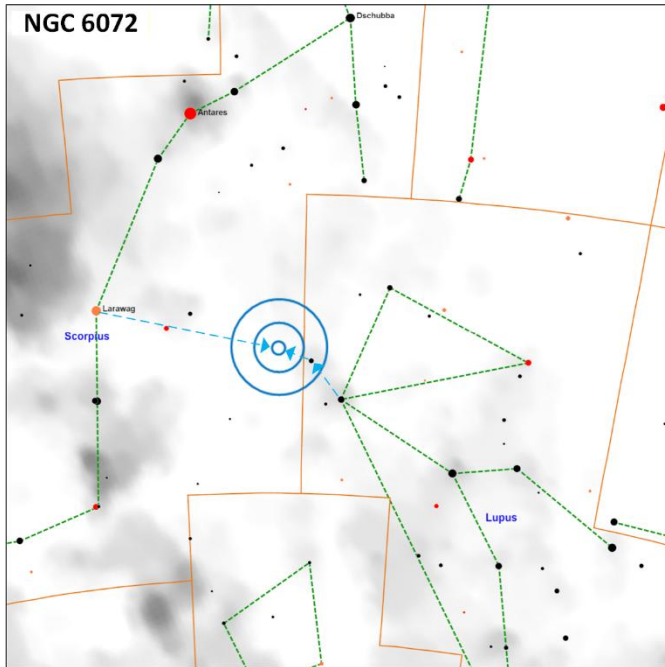
Object (Type)	Links	Gear	Aliases	Stats
NGC-6322 (OC)		T	Cr 326, Lund 743, OCL1000, Collinder 326, vdB-Ha 220, C1714-429	Mag = 6.0 Size = 10' SB = 19.6 MC=I3m
NGC-6334 (EN)	1	B, T	Gum 61, Gum 62, Gum 63, Gum 64, RCW 127, ESO 392-EN 009, Sharpless 8, Cat's Paw Nebula, Bear Claw Nebula	Mag=10.0 Size=40'x30' SB=26.3
NGC-6357 (EN, OC)	1	B, T	EN: Sharpless 11, RCW 131, Gum 66, War and Peace Nebula, Lobster Nebula, Madokami OC: Pismis 24, Lund 748, BH 227, MGC 1, MGC Pis 24 Core, MGC 17, MGC Core C SW, MWSC2589, OCL1016, APOC10594, vdB-Ha 227, Pi24	EN: Mag=10.0 Size=50' x 40' SB=26.9 OC: Mag= 9.6 Size=2.0' SB=19.7 MC=III2p n
Trumpler 25 (OC)		T	Tr25, Collinder 329, Cr 329, Ha 14, Lund 747, OCL 1007, vdB-Ha 225, C1721-389	Mag=11.7 Size=8.0' SB=24.8 MC=II 1 m
Shaula (DS)	1,2	B, T	SAO-208954, HIP 85927, 35 Sco, HR 6527, HD 158926, Lambda Sco, λ Sco	AC M = 1.6, 9.2 Sep=94.4" PA=330°
NGC-6380 (GC)	1	T	GCl 68, Tonantzintla 1, Ton 1, Pismis 25Pi 25, vdB-Ha 233, C1731-390, Dun 538	Mag=11.5 Size3.6' SB=22.7
NGC-6383 (OC)	1	B, T	VdB-Ha232, BH 232, h 3687, h 3689, NGC-6374, Collinder 334, Cr 334, Collinder 335, Cr 335, OCL 1022, OCL 1026, Lund 759, C1729-325, Mrk 33, OCL 1025.0, C1731-325	Mag=5.5 Size=20' SB= 20.6 MC=II3m n
Trumpler 27 (OC)	1	T	Tr27, Collinder 336, Cr 336, OCL 1021, vdB-Ha 237, ESO 393-9, C1733-335, C1732-334	Mag=6.7 Size=7.0' SB= MC=III3m
NGC-6388 (GC)	1	T	vdB-Ha 234, Mel 174, EQ 1732-447, C1732-447	Mag=6.8 Size=10.4' SB=20.5
Trumpler 28 (OC)		T	Tr28, Collinder 337, Cr 337, Lund 762, OCL 1029, vdB-Ha 238, C1733-324	Mag=6.0 Size=7.7' SB=18.9 MC=III2m n
NGC-6400 (OC)	1	T	Mel 177, Raab 121, Collinder 342, Cr 342, OCL 1030, vdB-Ha 241, Lund 767, C1736-369, C1737-369	Mag=8.8 Size=12.0' SB=22.8 MC=II2m
Butterfly Cluster (OC)	1	B, T	Messier 6, M6, NGC-6405, Collinder 341, Cr 341, Lund 769, Mel 178, OCL 1030, Raab 122, vdB-Ha 242, OCL 1030.0, C1736-321	Mag=4.2 D=33' SB=20.4 MC=II3r
Trumpler 29 (OC)		T	Collinder 343, Cr 343, Ha 17, Lund 768, OCL 1009, OCL 1009.0, C1738-400	Mag=7.5 D=12.0' SB=21.5 MC=III2m

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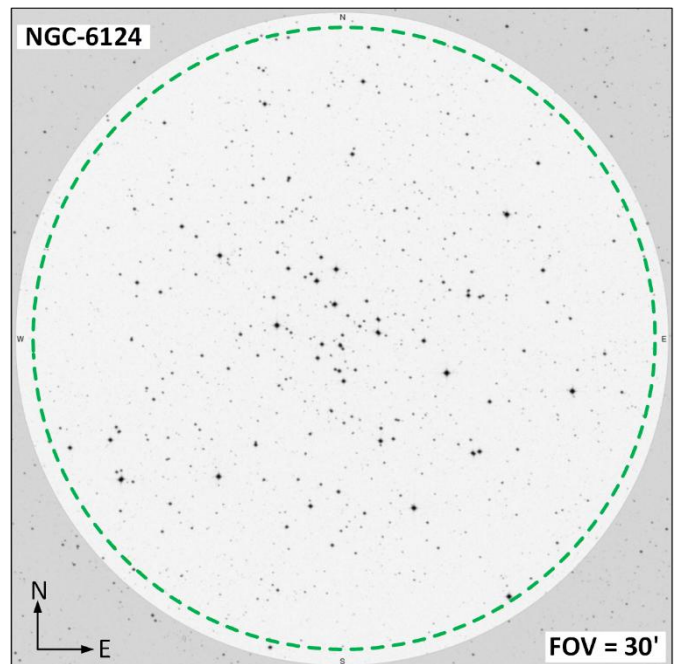
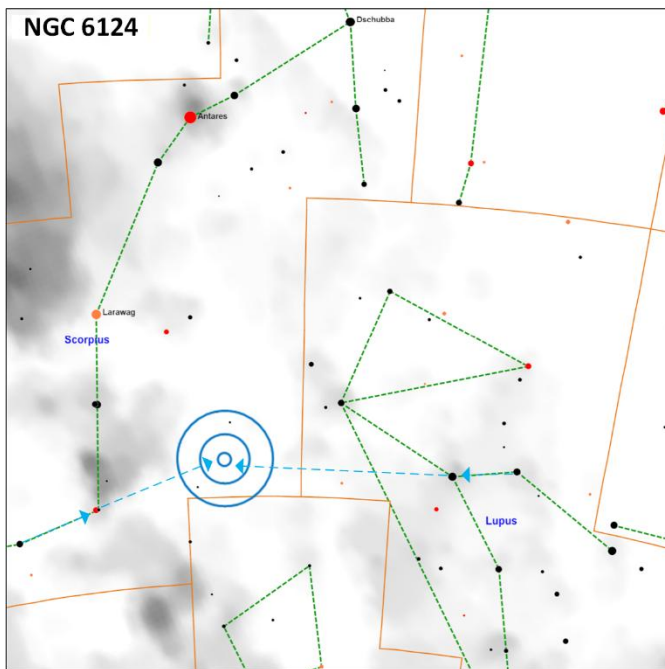
Object (Type)	Links	Gear	Aliases	Stats
NGC-6416 (OC)		B, T	Collinder 344, Cr 344, Lund 771, OCl 1031, OCl 1031.0, C1741-323	Mag = 5.7 Size = 15' SB = 20.2 MC=III2m
NGC-6441 (GC)	1	T	GCl 78, HD 161968, Mel 180, vdB-Ha 248. JaFu 2, C1746-370, Silver Nugget Cluster	Mag=7.2 Size=9.6' SB=20.7 MC=III
NGC-6451 (OC)		T	Collinder 352, Cr 352, Lun 783, Mel 181, OCl 1035, Raab 123, vdB-Ha 250, C1747-302	Mag=8.2 Size=8.0' SB=21.1 MC=I2r n
NGC-6453 (GC)	1	T	vdB-Ha 251, EQQ 1748-346, C1748-346, ESO 393-SC, 036, GC 5878, h 3707	Mag=10.2 Size=7.6' SB=23.2 MC=IV
Barnard 283 (DN)		B, T	B 283, HMSTG 356-4	Size=40' x 8'
Messier 7 (OC)	1	B, T	NGC 6475, Collinder 354, Cr 354, Lund 791, Mel 183, OCl 1028, Raab 125, OCl 1028.0, C1750-348, Ptolemy's Cluster, Scorpion's Tail	Mag = 3.3 Size = 80' SB = 21.4 Stars=80+ MC=I3r
Trumpler 30 (OC)		T	Tr 30, Cr 355, Collinder 355, Ha 18, Lund 792, OCl 1025, C1753-353	M=8.8 Size=20' SB=23.9 Stars= 20+ MC=IV1p
NGC-6496 (GC)	1	T	Mel 185, E! 175-442, C1755-442, ESO 279-SC13	M=8.6 Size=5.6' SB=21.0 MC=XII

Constellation Guide

NGC-6072 (PN | Mag=11.3 | Size=1.2" | SB=20.3 |) – Located 8,154 light years away with a physical diameter of 3 light years. Visible in dark skies with apertures of 6" or more. Use an OIII filter for easier identification.

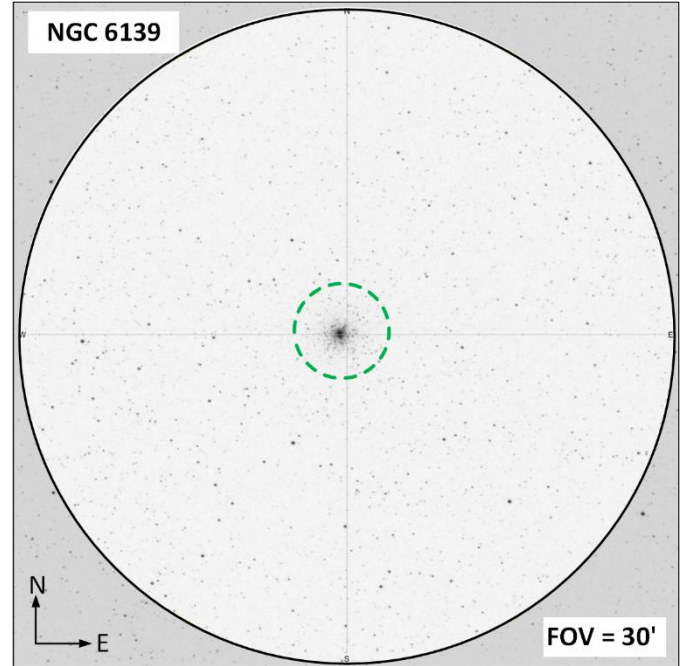
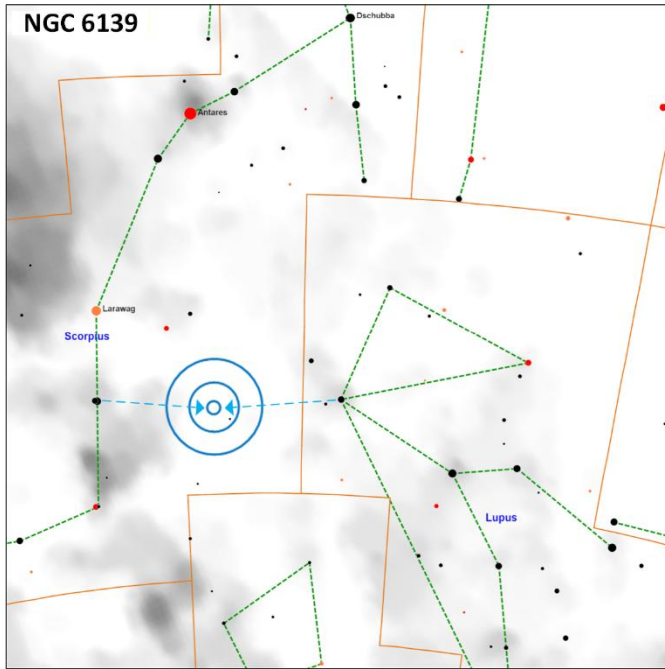


NGC-6124 (OC | Mag = 5.8 | Size = 29' | SB = 21.7 | MC=I3r) – Caldwell 75 is a large, rich open cluster located in the open space between Scorpion and Lupus. Located about 1,700 ly from earth and covers about the size of the moon in our sky.

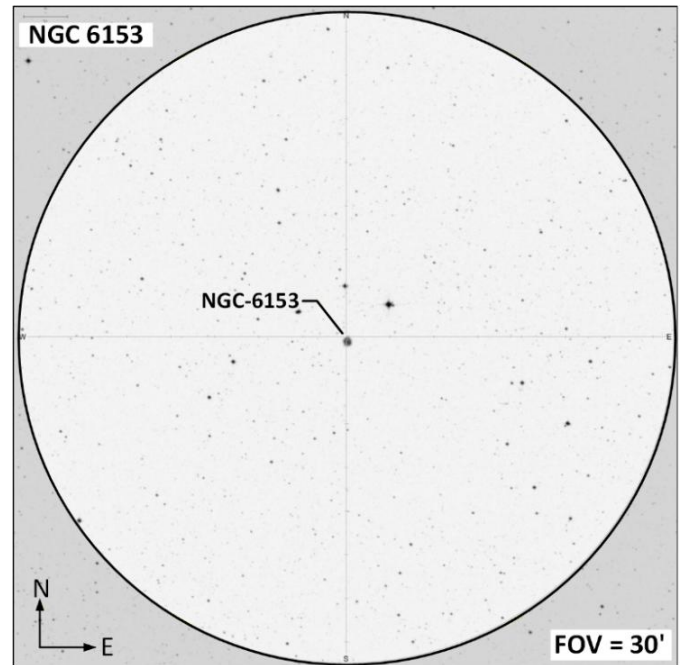
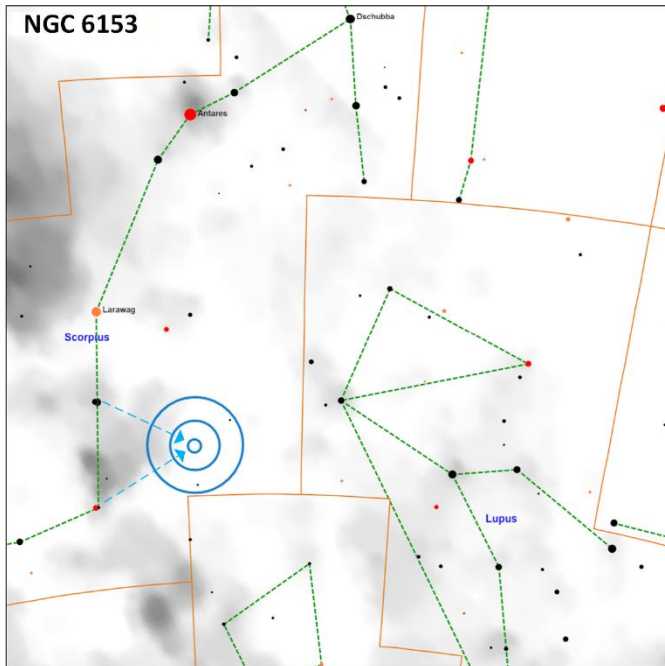


Constellation Guide

NGC-6139 (GC | Mag=9.1 | Size=8.2' | SB=22.3 | MC=II |) – Located 33,000 light years away with a physical diameter of 79 light years this globular cluster is visibly small and may require a telescope with an aperture of 12" or more to view the core.

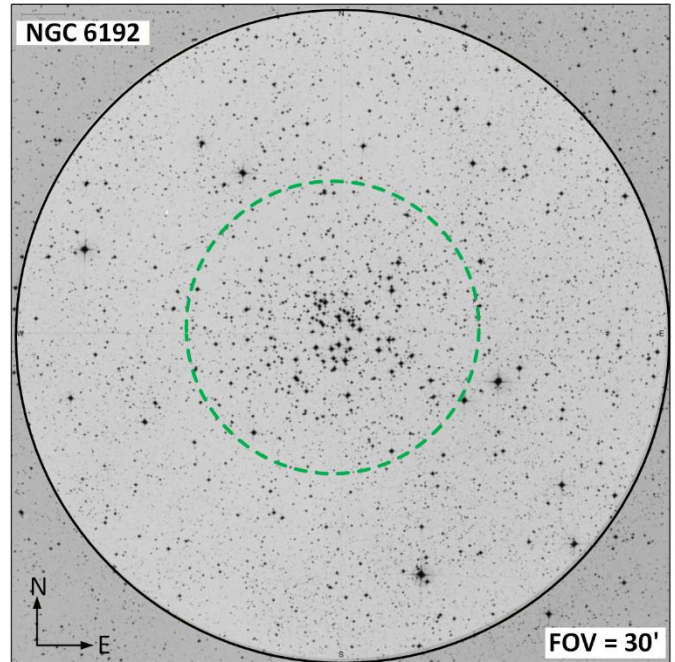
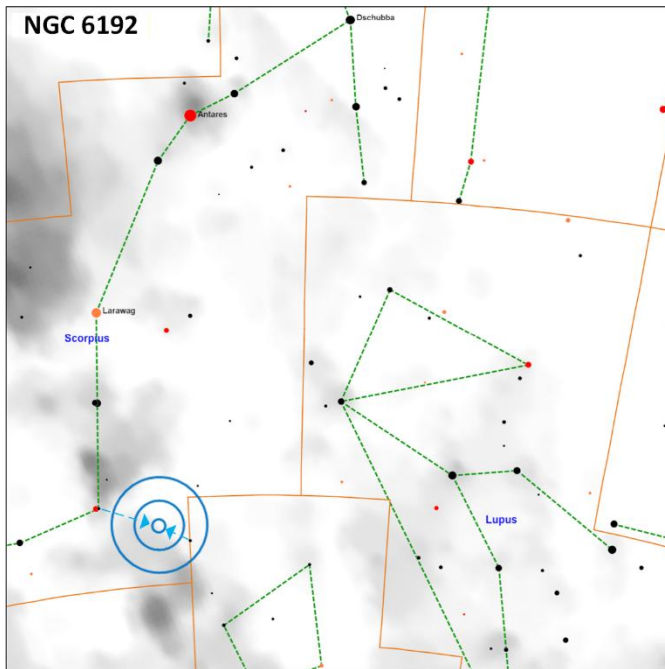


NGC-6153 (PN | M=10.6 | Size=0.5"x0.3" | SB=17.2 |) – Located 5,650 light years away with a physical diameter of 1 light year, this planetary nebula requires a telescope with an aperture of at least 80mm to identify (under ideal conditions). This can be difficult to identify due to the rich star field it is embedded in. Use a OIII filter to help dim background stars.

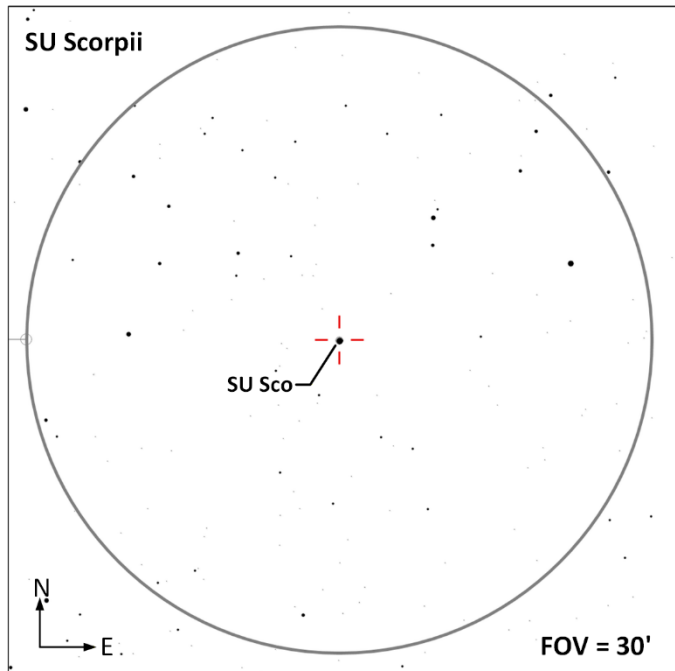
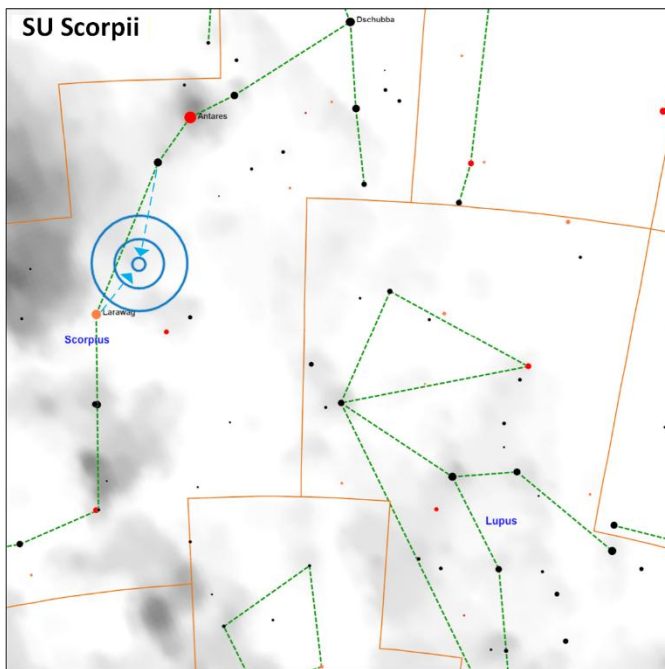


Constellation Guide

NGC-6192 (OC | M=8.5 | Size=9.0" | SB=21.9 | MC=I2r |) – Located 5,046 light years away with a physical diameter of 13 light years. This cluster is classified as a detached strong concentration (I) with a medium range in brightness (2) and a rich (r) field.

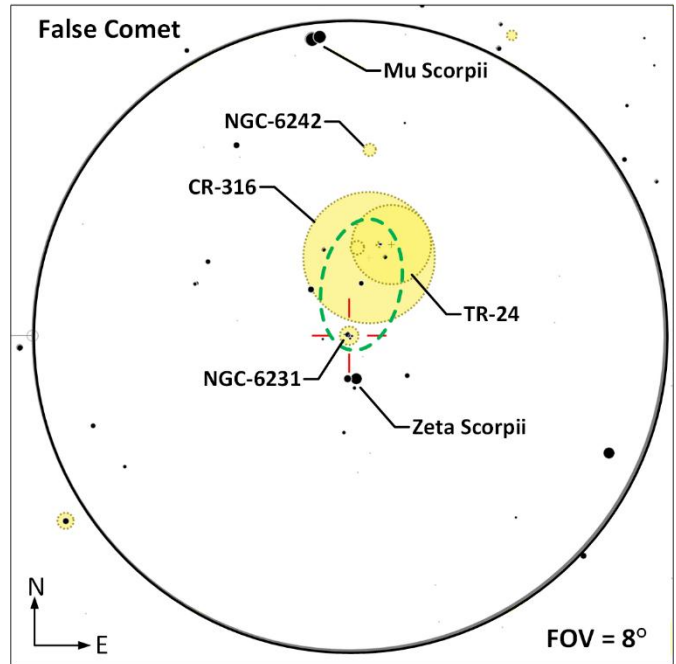
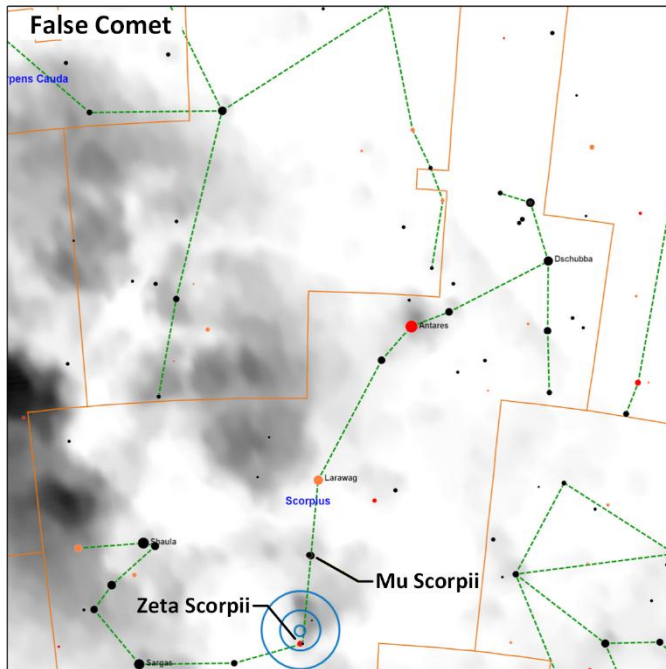


SU Scorpii (CS | Mag Range: 8.0 to 9.4 | Period=414 days | BV=3.36 | Spec=C5.5 |) – There is a wide range of BV values provided based on source being used. BV values include +4.42 and +3.36.

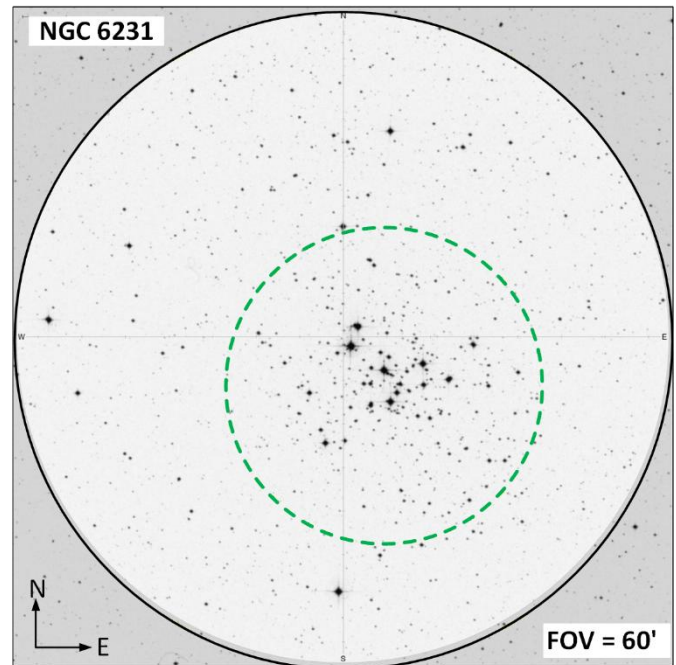
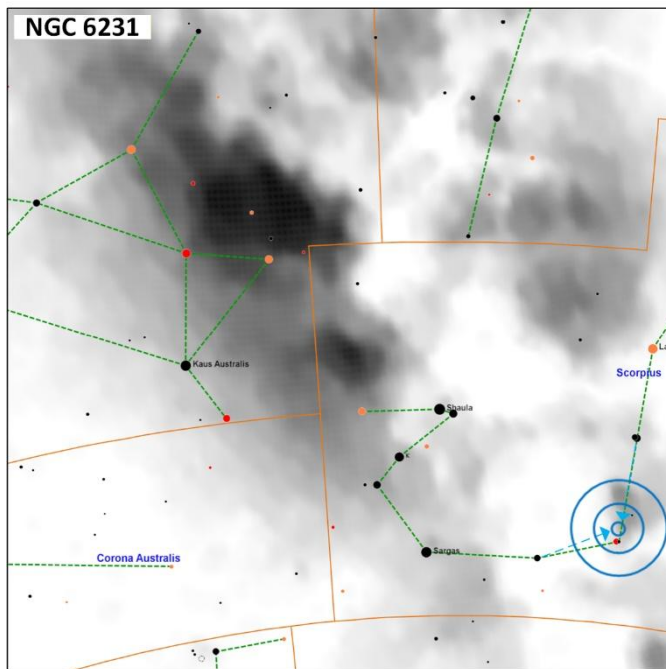


Constellation Guide

False Comet (AS | Size= 1.5° |) – a wide collection of stars from [Scorpius OB1 region](#) running northward from Zeta Scorpii and NGC 6231 roughly halfway toward Mu Scorpii. The tail is formed by two clusters, Collinder 316 and Trumpler 24. Trumpler 24 is surrounded by the emission nebula IC 4628, also known as the Prawn Nebula, where the tail appears to fan out. An interesting Binocular target!

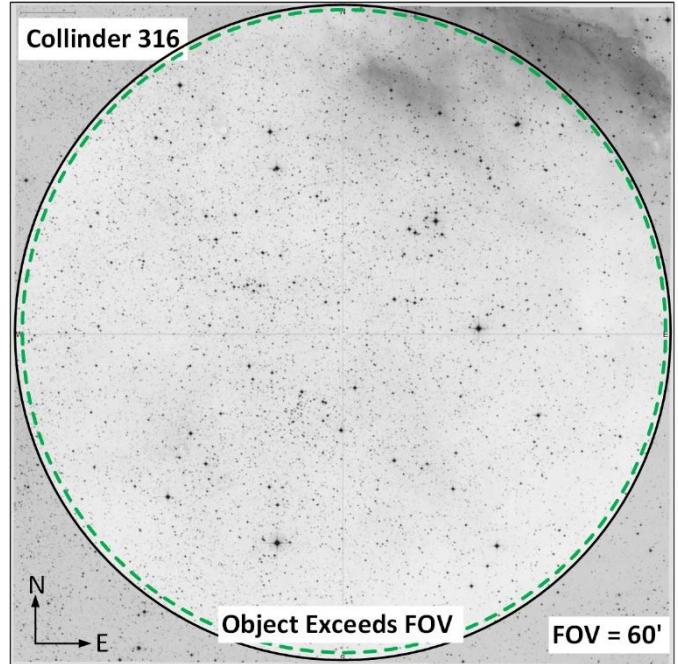
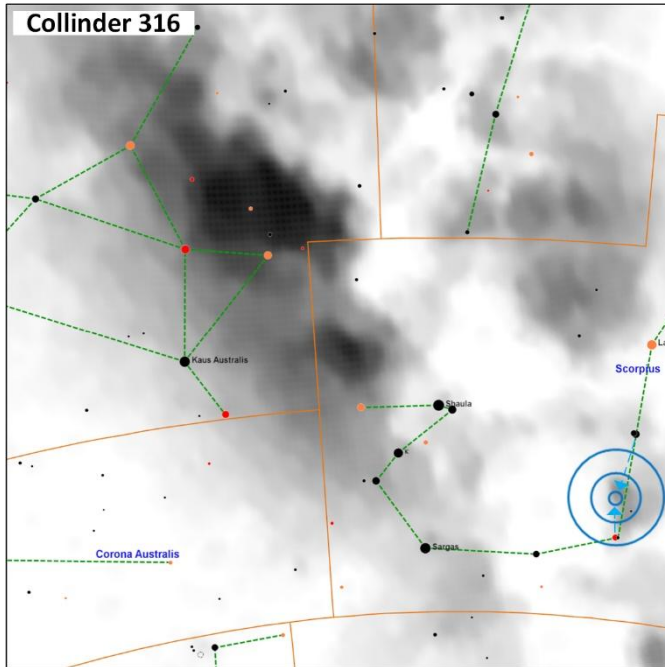


NGC-6231 (OC | Mag = 2.6 | Size = $15.0'$ | SB = 17.1 | MC=I3p |) – The Baby Scorpion Cluster (Caldwell 76) is located $1/2^\circ$ and is estimated to be a young cluster about 3.2 million years old. This rich cluster is located 4,100 ly from earth.

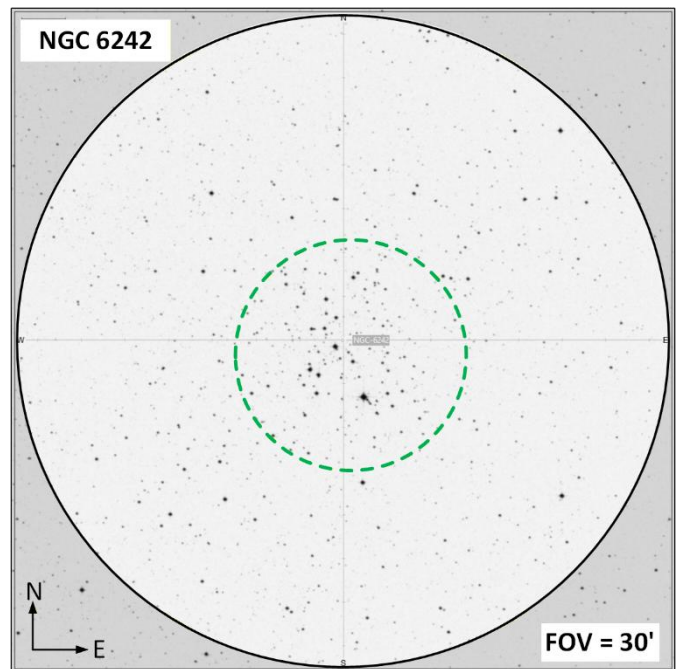
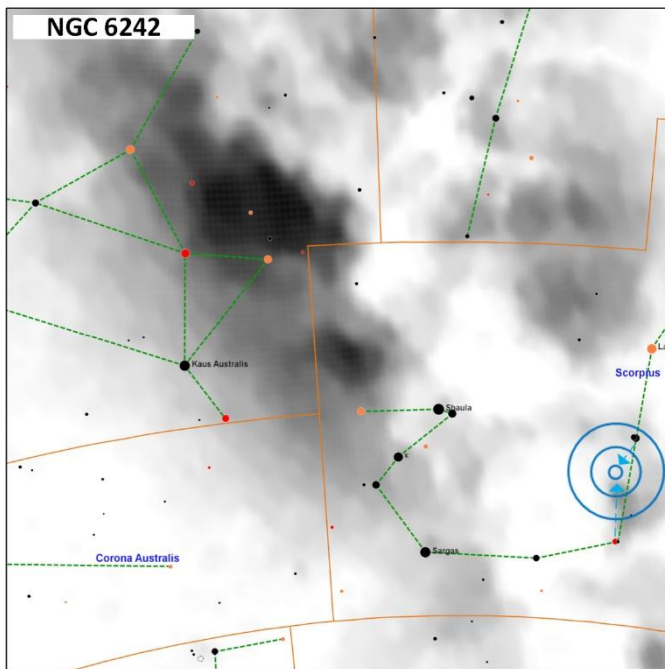


Constellation Guide

Collinder-316 (OC | Mag = 3.4 | Size = 105' | SB = 22.1 | MC=I2m |) – A loose open cluster approximately 3,300 ly from earth.

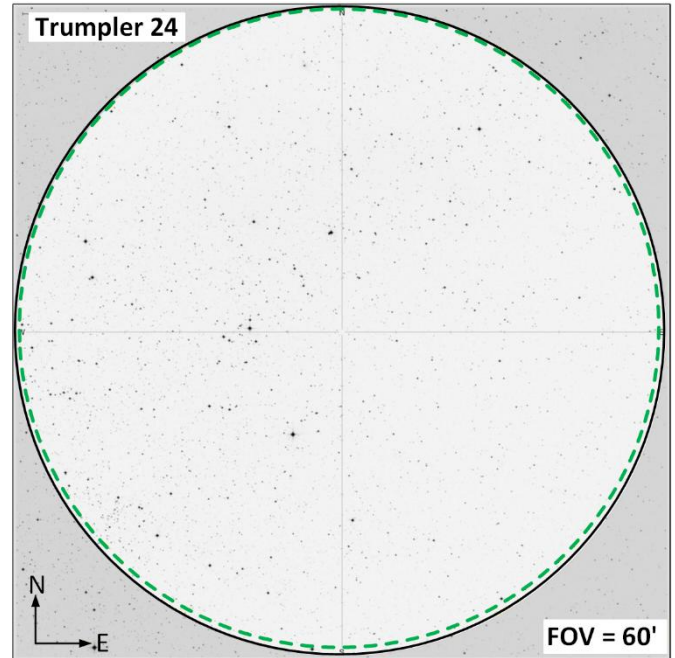
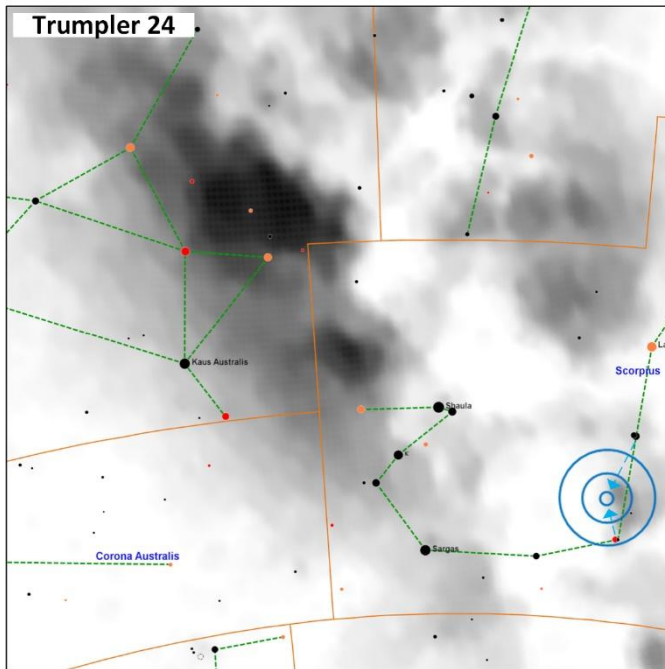


NGC-6242 (OC | Mag = 6.4 | Size = 9' | SB = 19.8 | MC=I3m |) – An open cluster located 1.5° south-southeast of Mu Scorpii. This open cluster is about 4,300 light years from earth and is estimated to be 77.6 million years old.

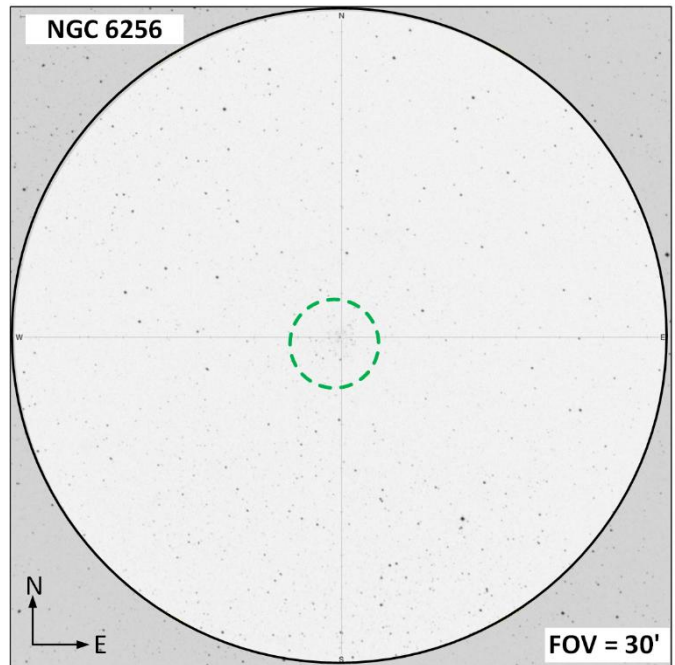
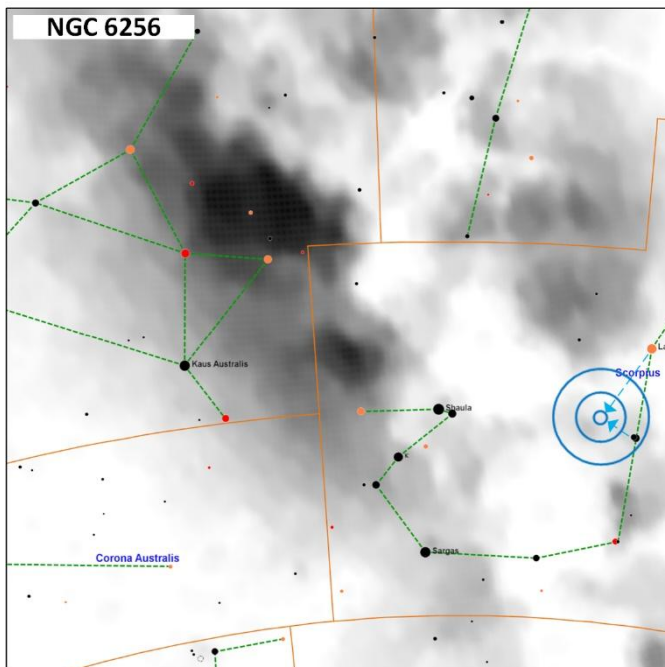


Constellation Guide

Trumpler 24 (OC | Mag=8.6 | Size=60" | SB=26.1 | MC=IV2p n |) –Located 3,700 light years away, this open cluster is classified a Concentration of Not detached (IV), Brightness of medium range in brightness (2) and Richness of poor (p). This open cluster will likely be difficult to distinguish from the background.

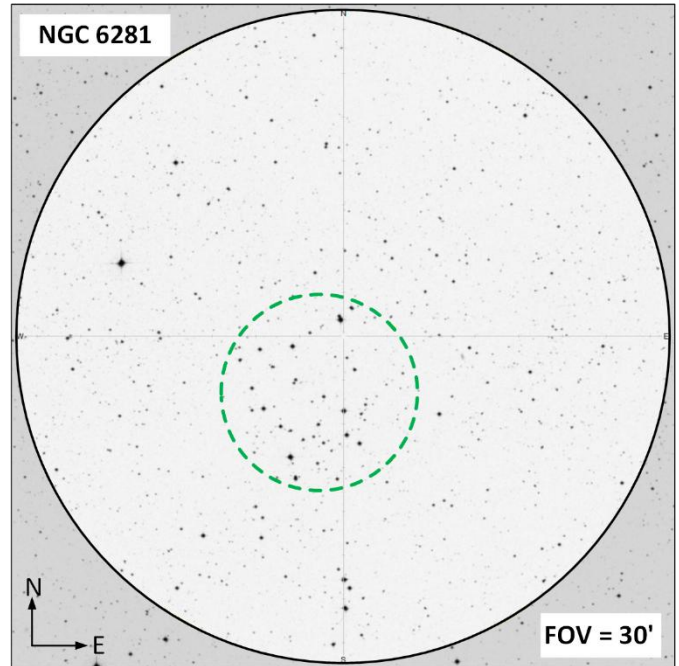
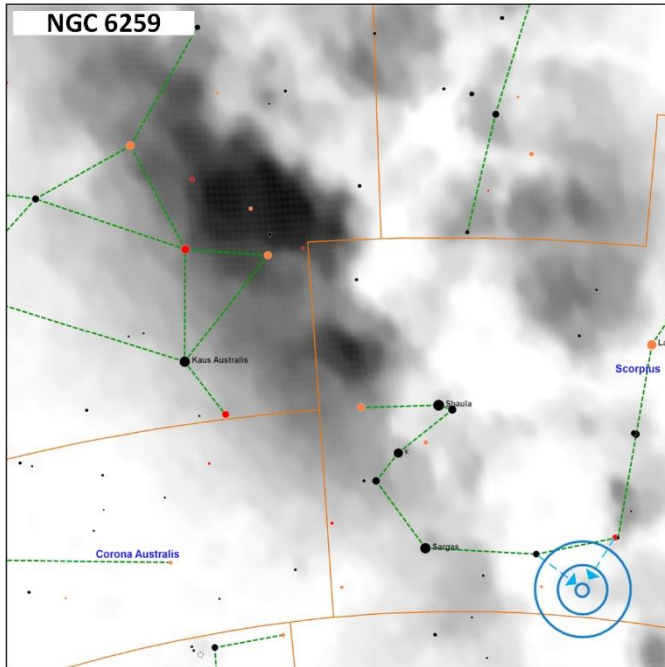


NGC-6256 (GC | M=11.3 | Size=7' | SB=24.2 | MC=?? |) –Located 22,000 light years away with an estimated age of 13 billion years this dim object is described as “very faint, very large, very gradually bright in the middle, well resolved clearly consisting of star”. Unable to find a morphological classification for this object.

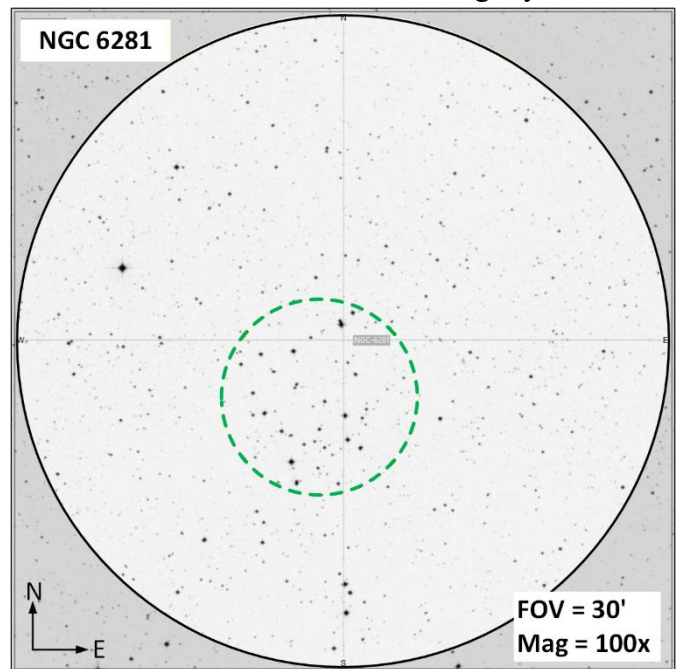
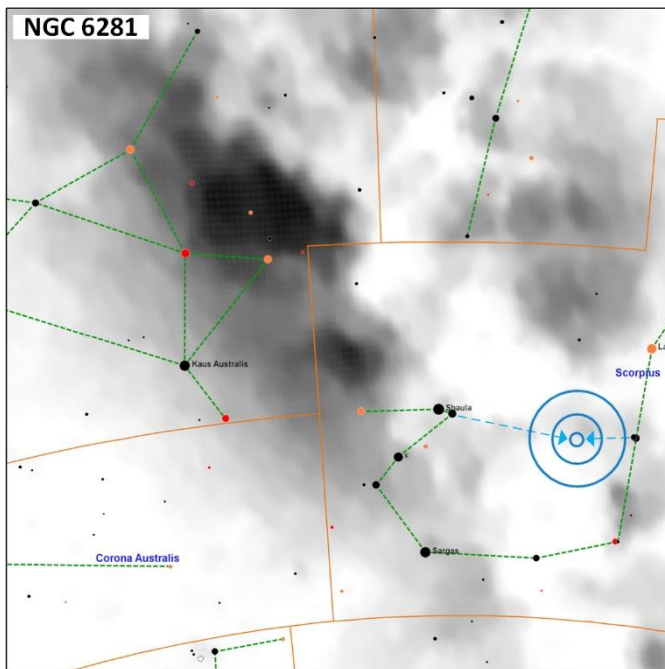


Constellation Guide

NGC-6259 (OC | M=8.0 | Size=14' | SB=22.4 | MC=II2r |) – Located 3,363 light years away with a physical diameter of 41 light years, this is a rich open cluster but in a rich field of background stars.

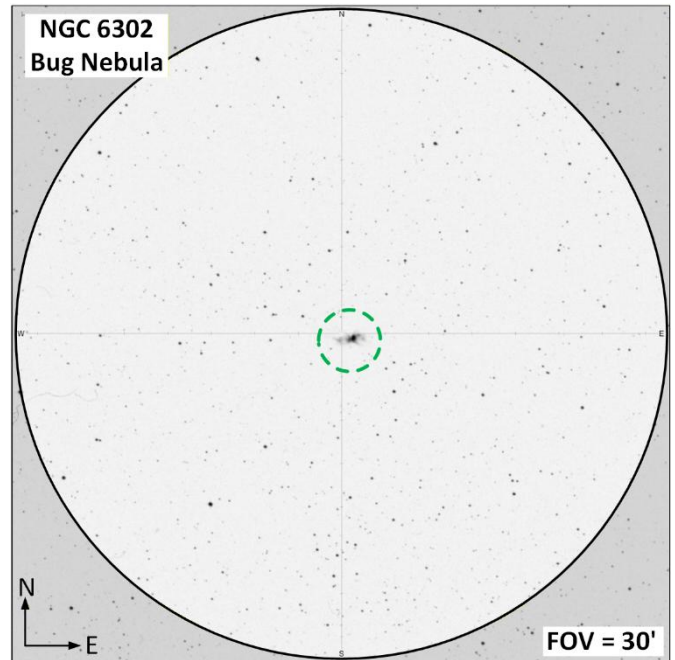
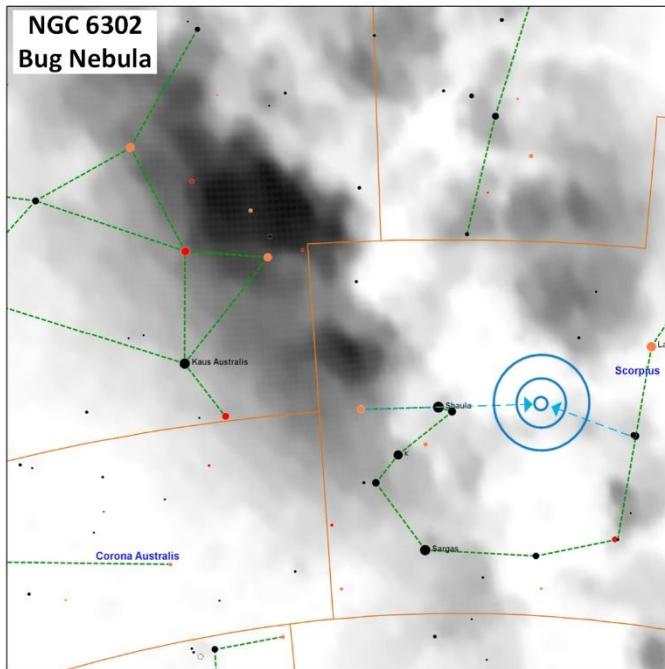


NGC-6281 (OC | Mag = 5.4 | Size = 5.4' | SB = 18.5 | MC=II2p |) – The Moth Wing Cluster a fairly rich an open cluster of about 50 stars located 1,600 light years from earth with a diameter of about 4 light years.

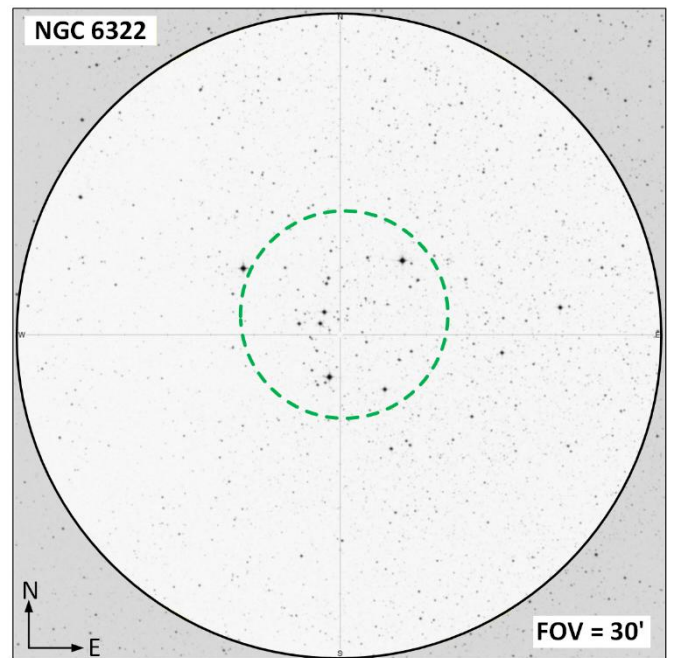
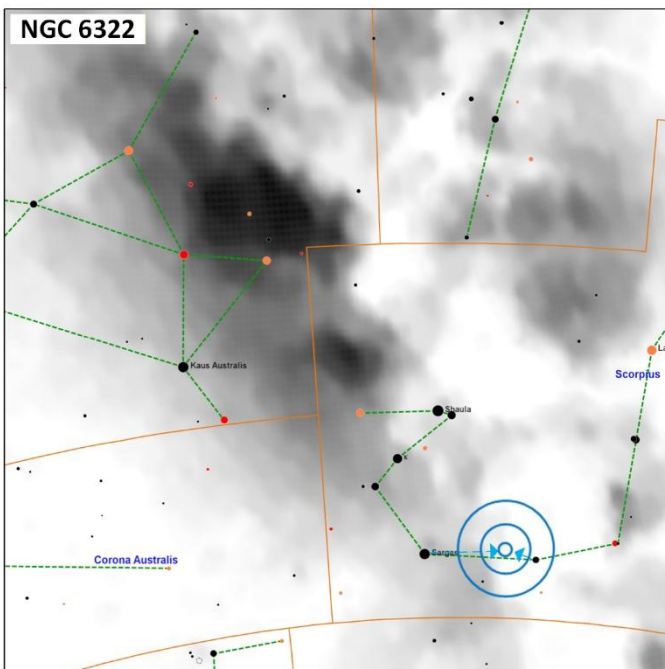


Constellation Guide

NGC-6302 (PN | Mag=9.6 | Size = 0.8" | SB=17.7 |) – A [bipolar nebula](#), a planetary nebula with two lobes on either side of a central star. About 15% of planetary nebula are of this type. It is suspected that this structure is caused by the presence of a binary central star with a period of a few days to a few years disrupting the outflow of material from the central star causes this shape. NGC-6320 is located 3,400 light years from our Sun.

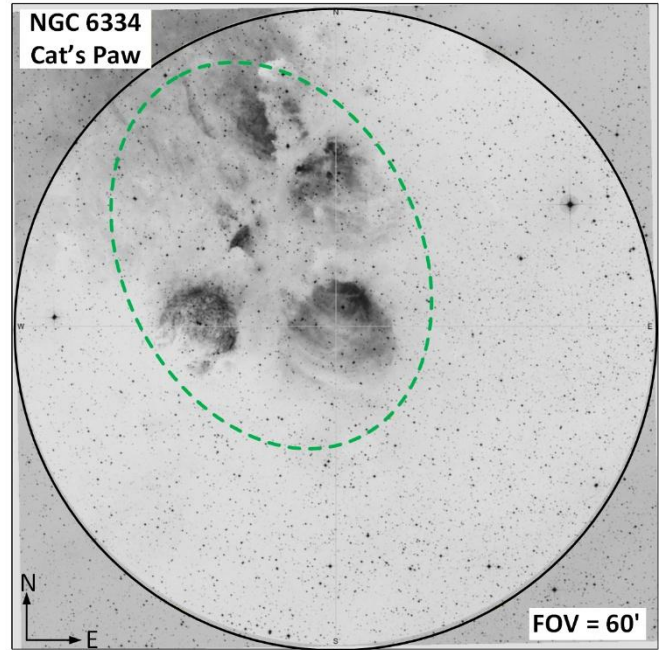
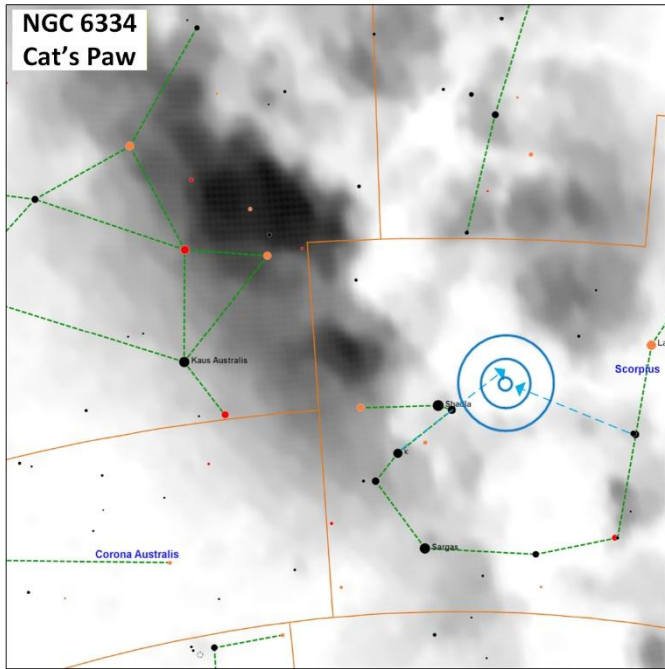


NGC-6322 (OC | Mag = 6.0 | Size = 10' | SB = 19.6 | MC=13m |) – A fairly small open cluster of stars located about 3,300 light years from earth. Located just over 1° east of Eta Scorpii.

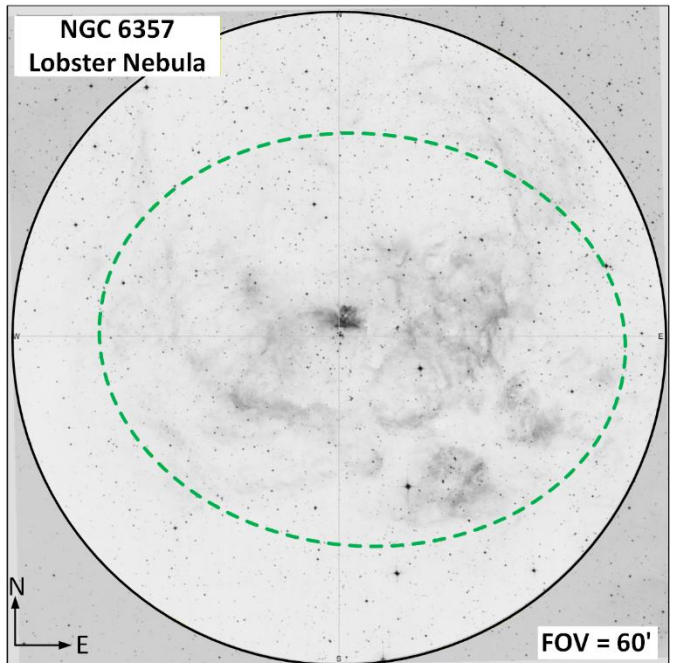
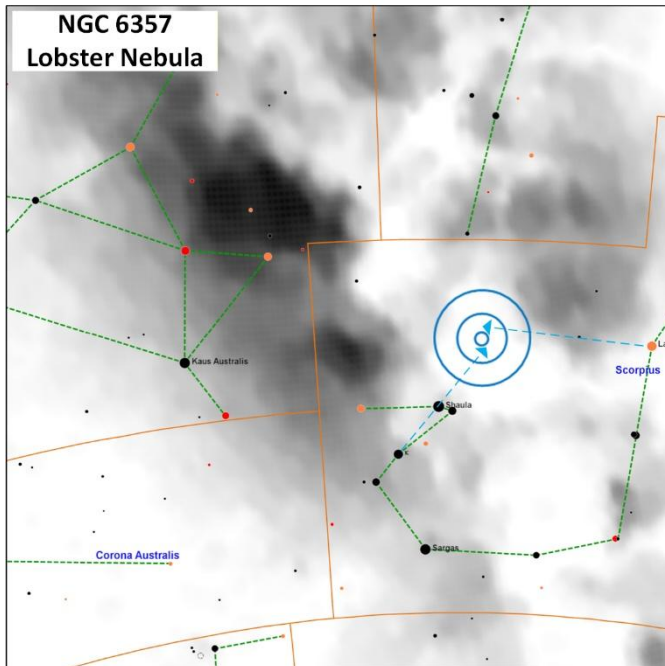


Constellation Guide

NGC-6334 (EN | Mag = 10.0 | Size = 40'x30' | SB=26.3) – The Cat's Paw Nebula spans an area larger than the moon and is a structure located in the [Carina-Sagittarius Arm](#) of the Milky Way. The Cat's Paw is connected to the Lobster Nebula (NGC-6357) via a filamentary structure forming a single complex.

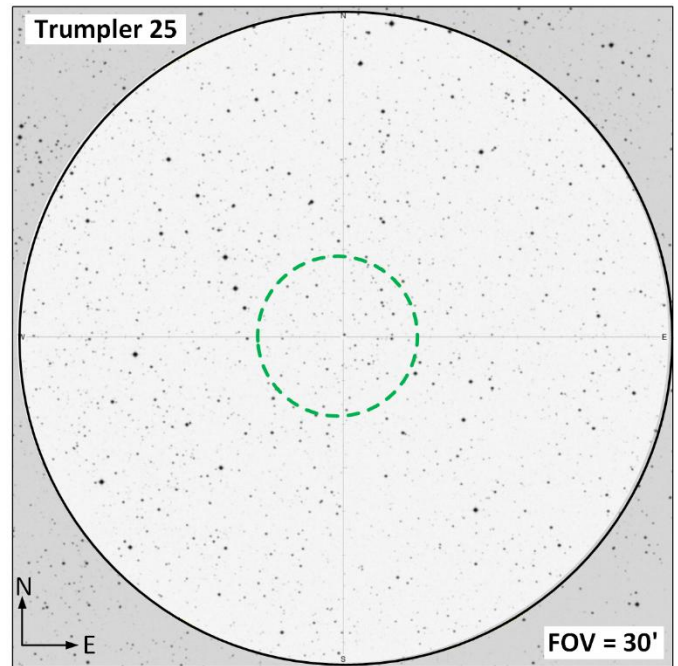
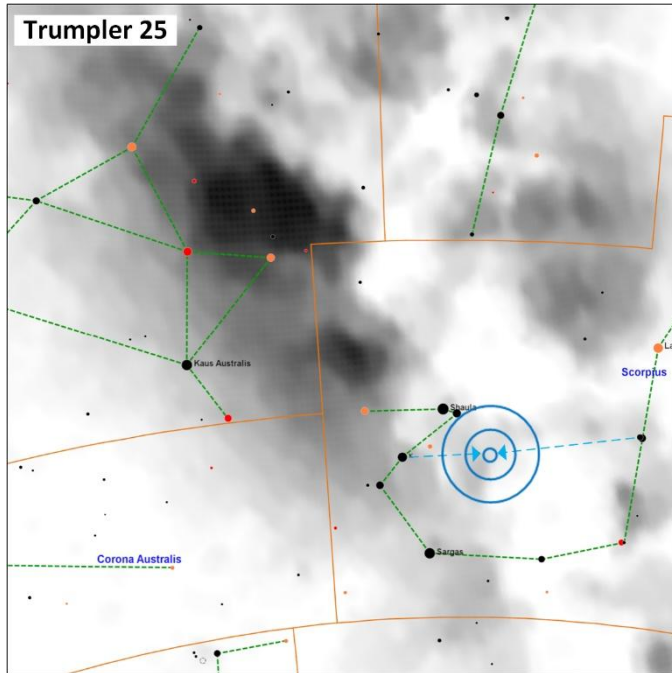


NGC-6357 (EN, OC | Mag = 10.0 | Size = 50'x40' | SB = 26.9 || OC | Mag=9.6 | Size=2.0' | SB=19.7 | MC=III2p n) – The Lobster Nebula is associated with the Cat's Paw Nebula and contains the open cluster Pismis 24, a poor cluster containing a number of massive stars and is one of the most prominent sites of massive star formation in our area of the Milky Way.

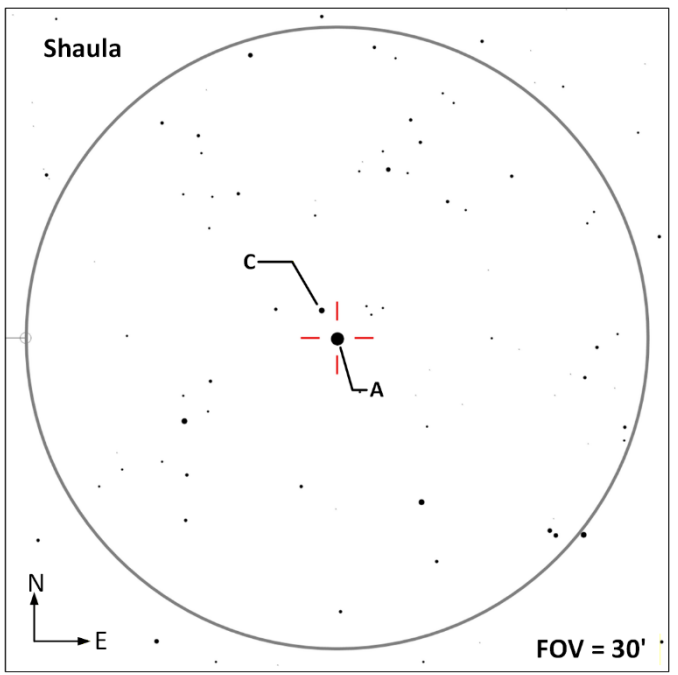
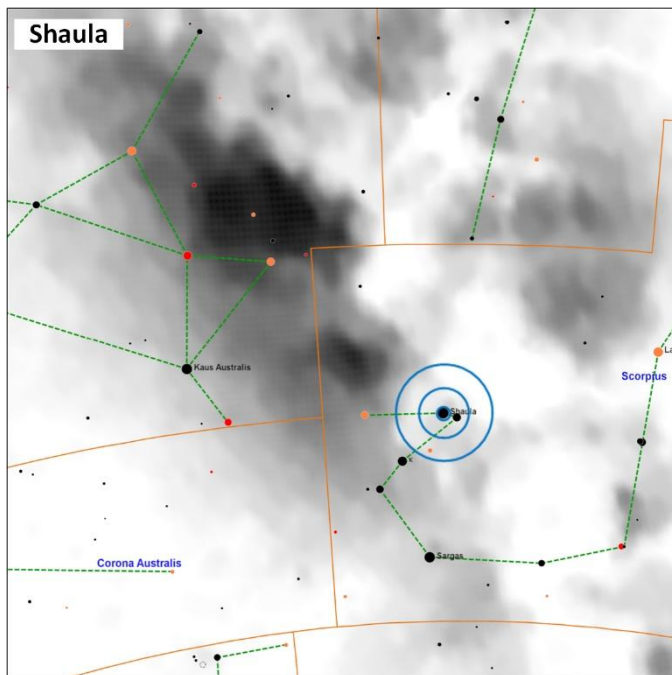


Constellation Guide

Trumpler 25 (OC | Mag = 11.7 | Size = 8.0'' | SB = 24.8 | MC=II 1 m |) – A dim open cluster located 5,930 light years away with a physical diameter of 14 light years. This is classified as a detached cluster with little central concentration (II) with most of the stars having similar brightness (1) containing 50 to 100 stars(m).

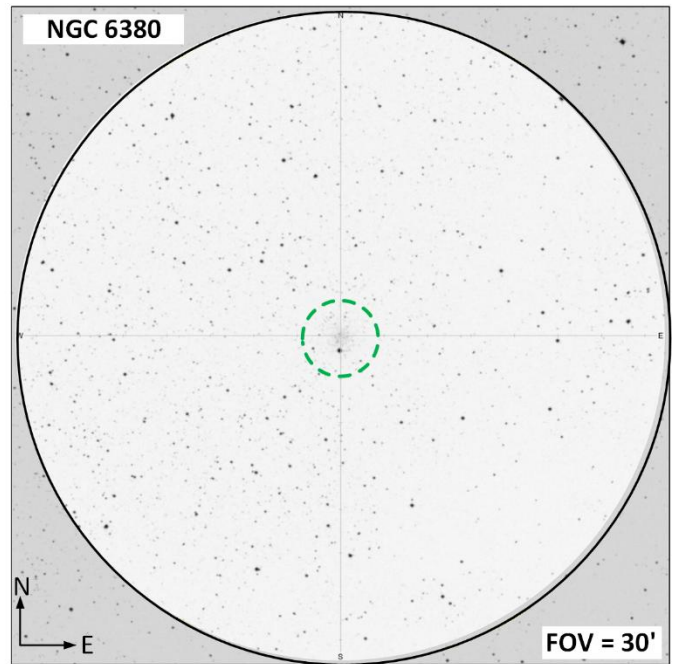
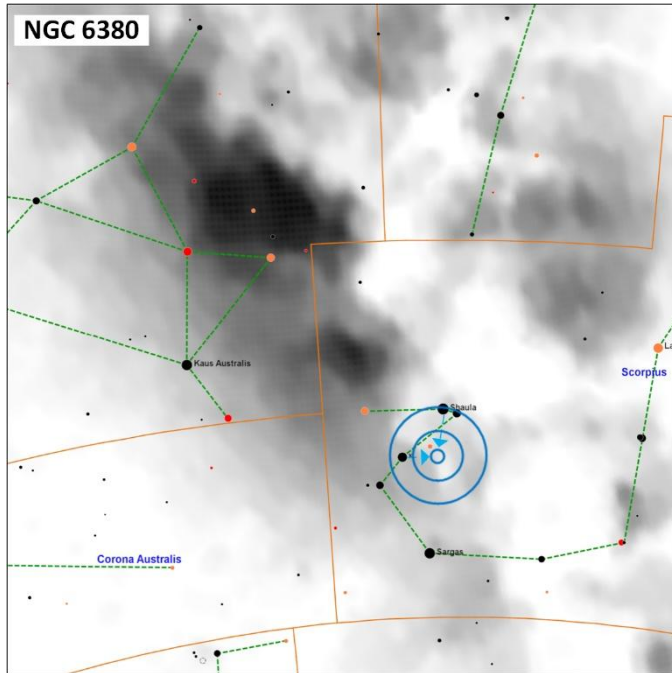


Shaula (DS | AC | M = 1.6, 9.2 | Sep=94.4'' | PA=330° |) – Lambda Scorpii, the second brightest star in the constellation (not following Bayer destination rules). This is a triple star system, but the B component is extremely dim at 14.9 magnitude so probably will not be visible. The system is about 570 light years from earth.

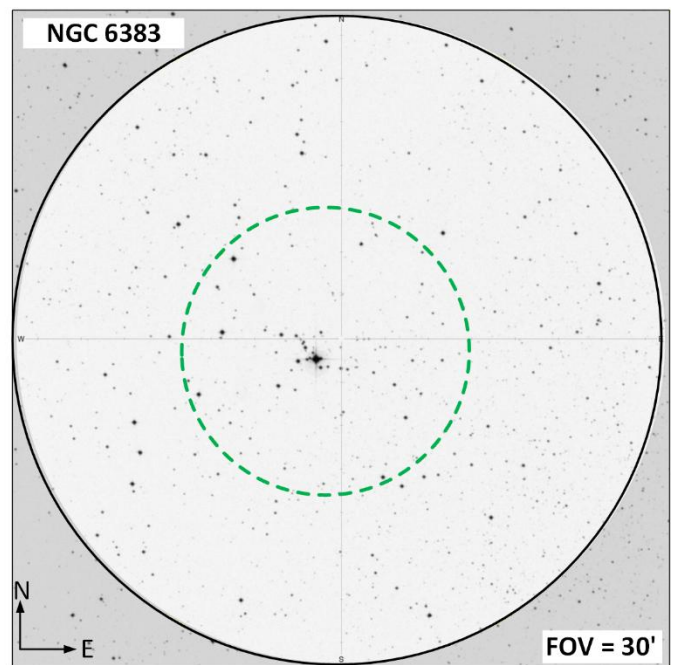
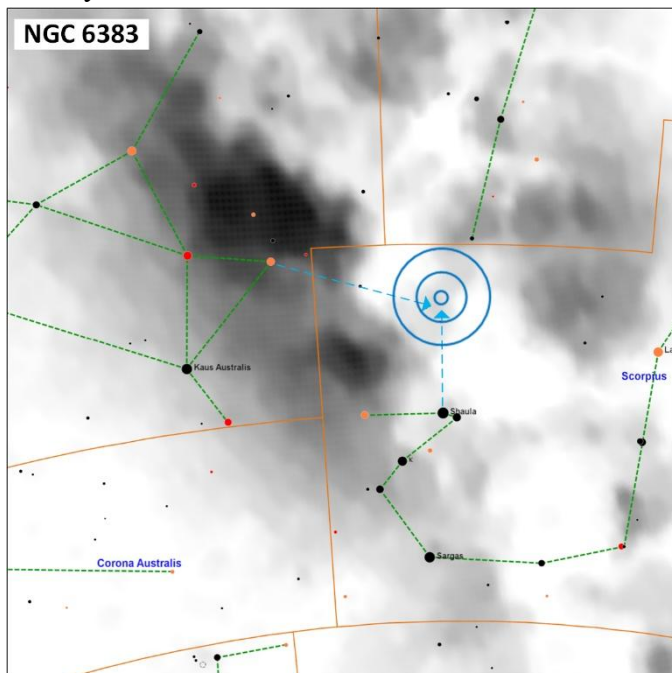


Constellation Guide

NGC-6380 (GC | Mag=11.5 | Size3.6' | SB=22.7 |) – Located 36,000 light years away with a physical diameter of 37 light years, this globular cluster was originally classified as an open cluster but has now been recognized as a globular cluster.

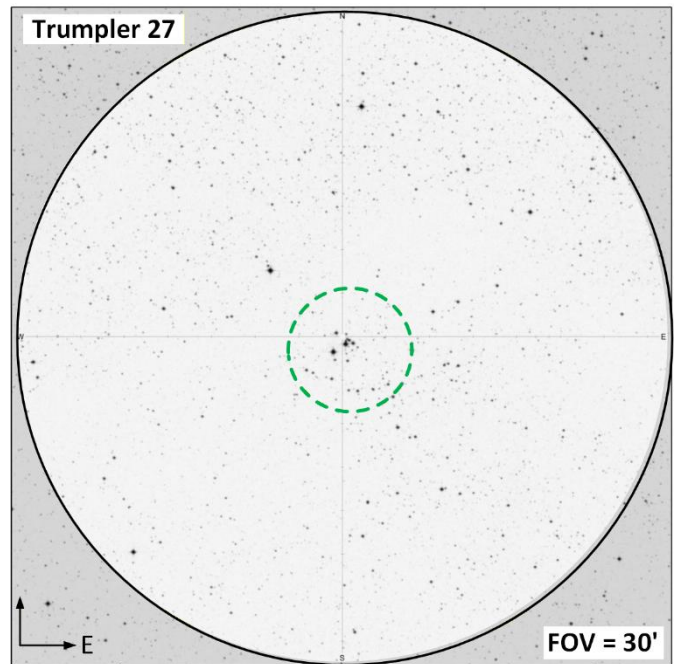
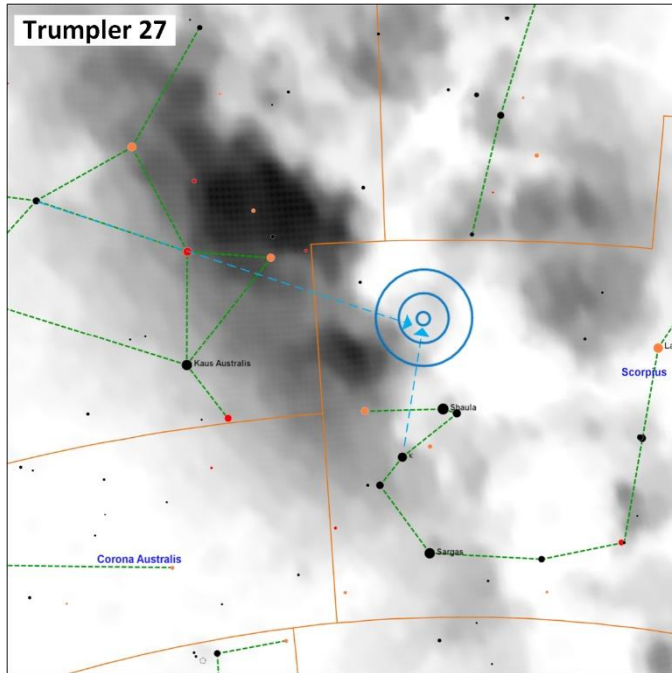


NGC-6383 (OC | Mag=5.5 | Size=20' | SB= 20.6 | MC=II3m n |) – Also identified as NGC-6374 due to a clerical error. Located 3,540 light years away with 254 identified members and an estimated age of 4 to 20 million years old.

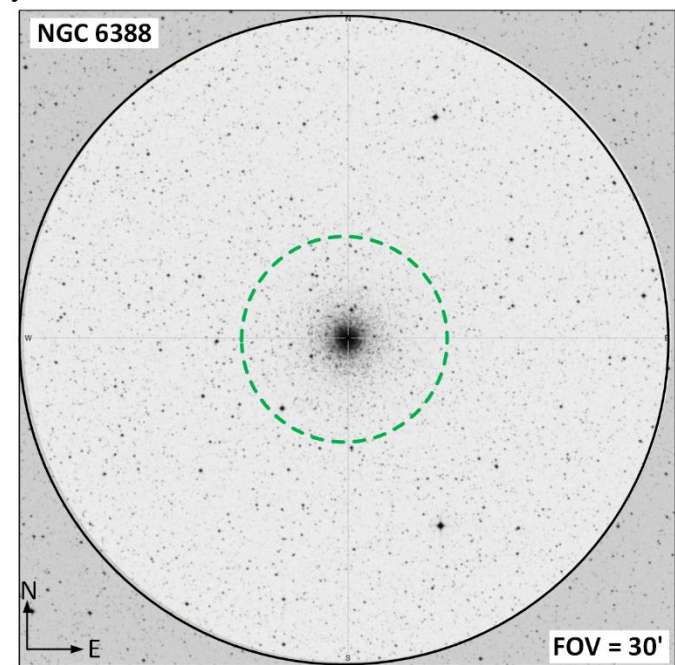
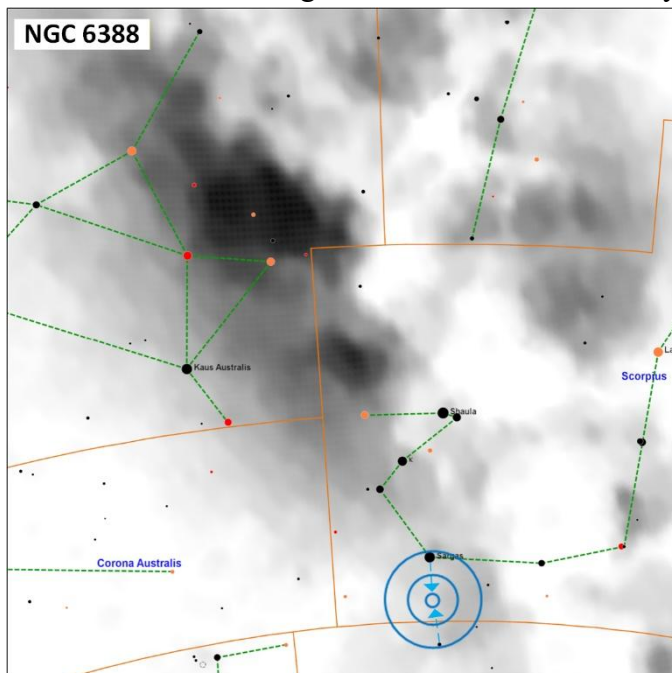


Constellation Guide

Trumpler 27 (OC | Mag=6.7 | Size=7.0' | SB= | MC=III3m |) – This was classified as an open cluster when first cataloged by Trumpler, but more recent observations in 2012 could not confirm whether the stars are part of a cluster or just a number of stars in close alignment.

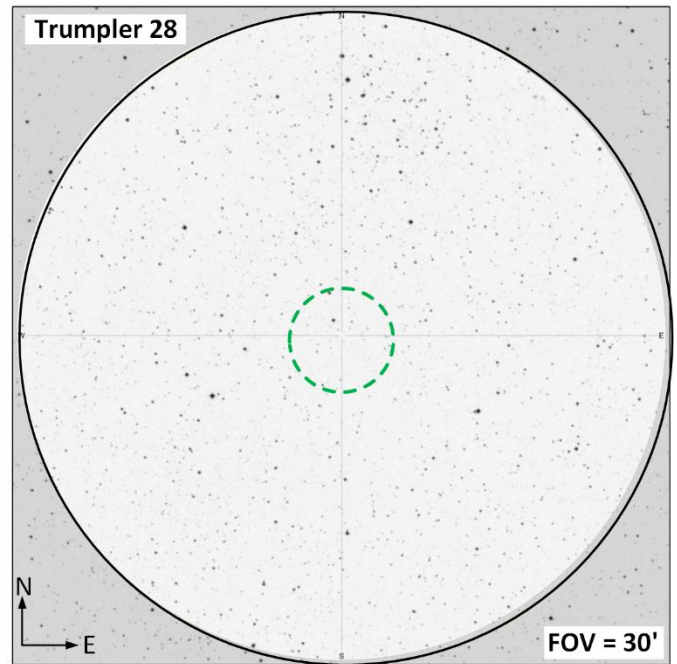
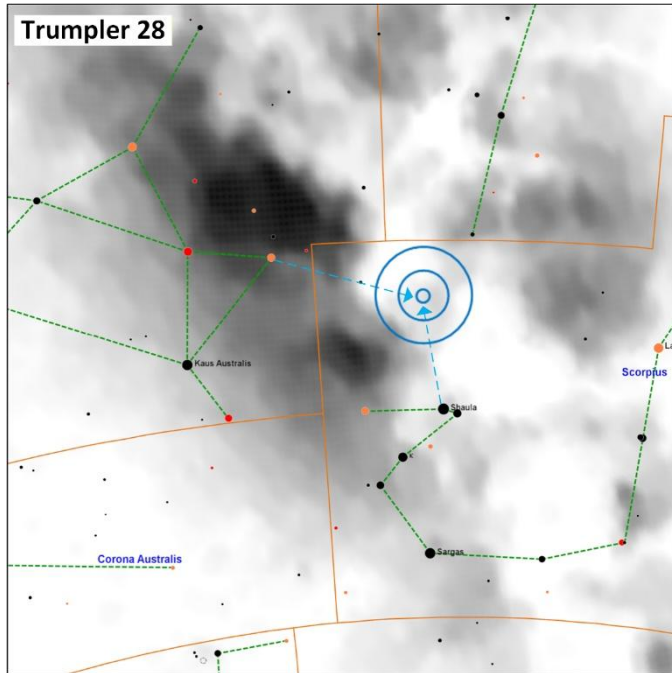


NGC-6388 (GC | Mag=6.8 | Size=10.4' | SB=20.5 |) – This globular cluster is located 35,600 light years from earth and is estimated to be 11.5 billion years old. It has an estimated mass of 2.2 billion solar masses making it one of the most massive globular clusters in the Milky Way.

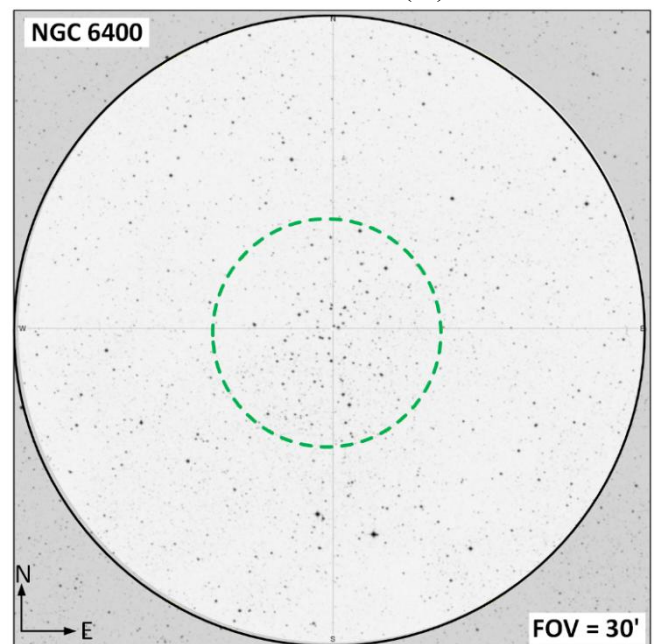
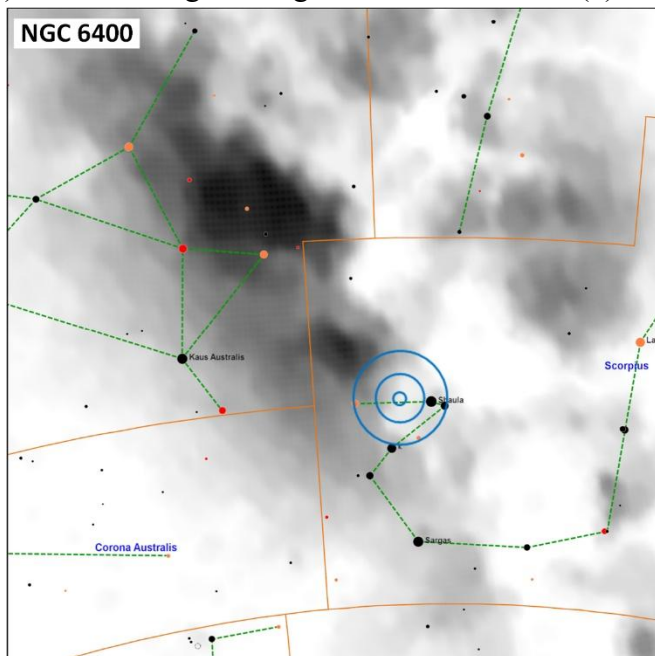


Constellation Guide

Trumpler 28 (OC | Mag=6.0 | Size=7.7' | SB=18.9 | MC=III2m n |) –Located 4,380 light years away with a physical diameter of 6 light years, this is classified as a detached cluster with no noticeable concentration (III), medium range of brightness between stars (2), a medium rich cluster with 50-100 stars(m).

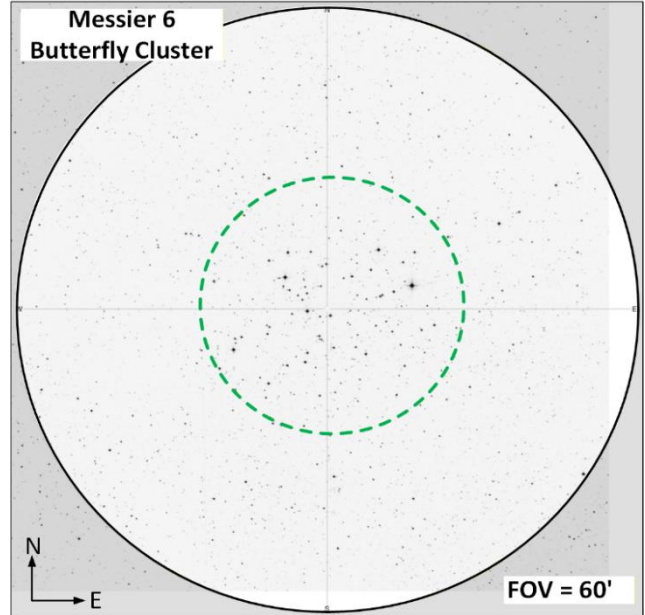
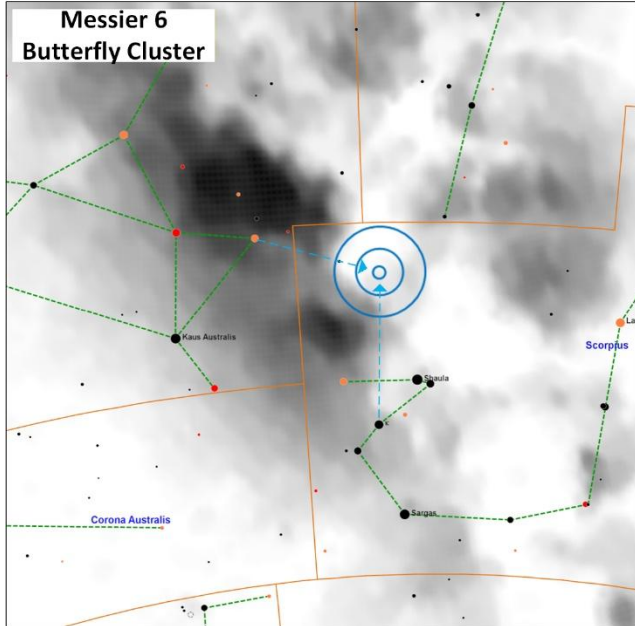


NGC-6400 (OC | Mag=8.8 | Size=12.0' | SB=22.8 | MC=II2m |) –Located 3,100 light years away with a physical diameter of 11 light years this open cluster is classified as detached with little central concentration (II), medium range of brightness between stars (2), medium rich cluster with 50-100 stars (m).

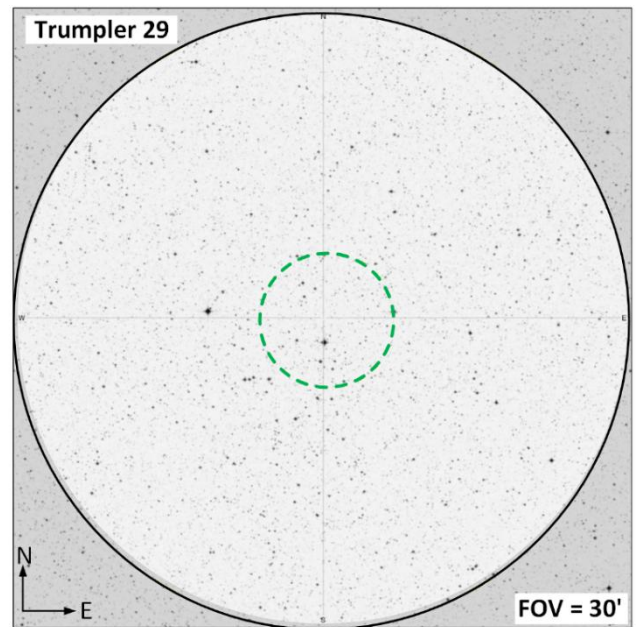
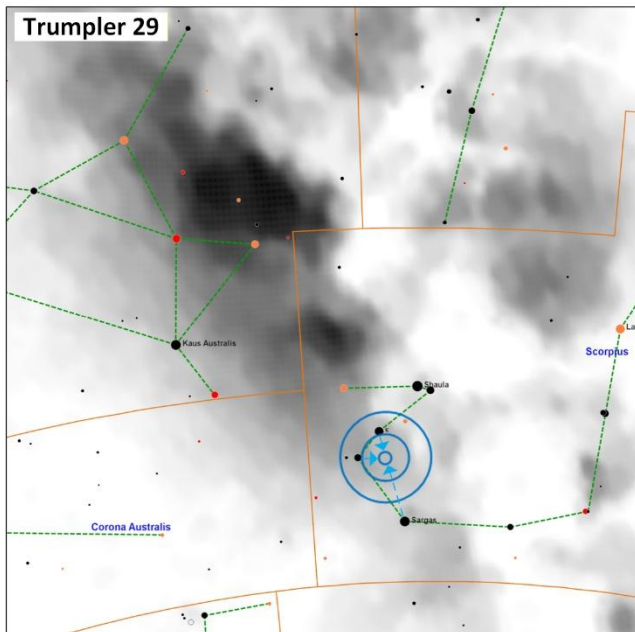


Constellation Guide

Butterfly Cluster (OC | Mag=4.2 | D=33' | SB=20.4 | MC=II3r |) – For some this large open cluster has a shape like a butterfly. It is suspected that the astronomer Ptolemy may have observed this open cluster in the 2nd century. It is estimated to be located 1,600 light years away with a diameter of 12 light years. Estimated age of this cluster is 94 million years old. Approximately 120 stars ranging down to magnitude 15 have been identified.

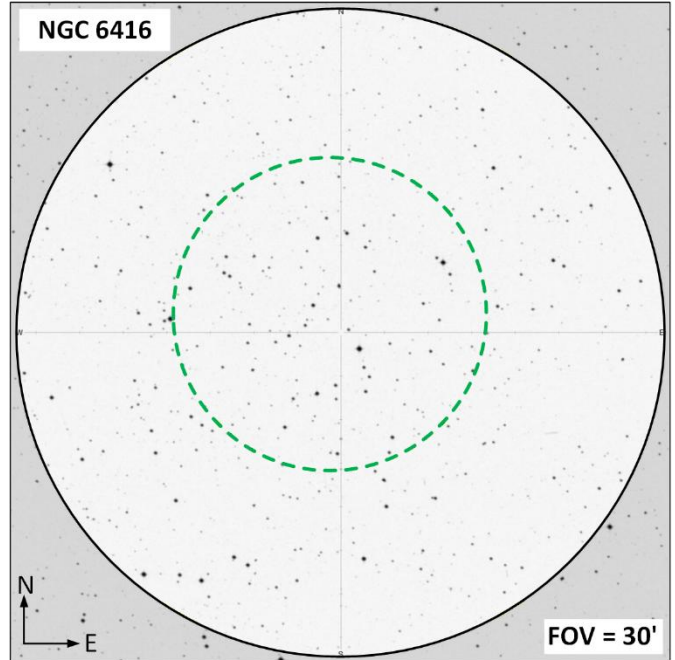
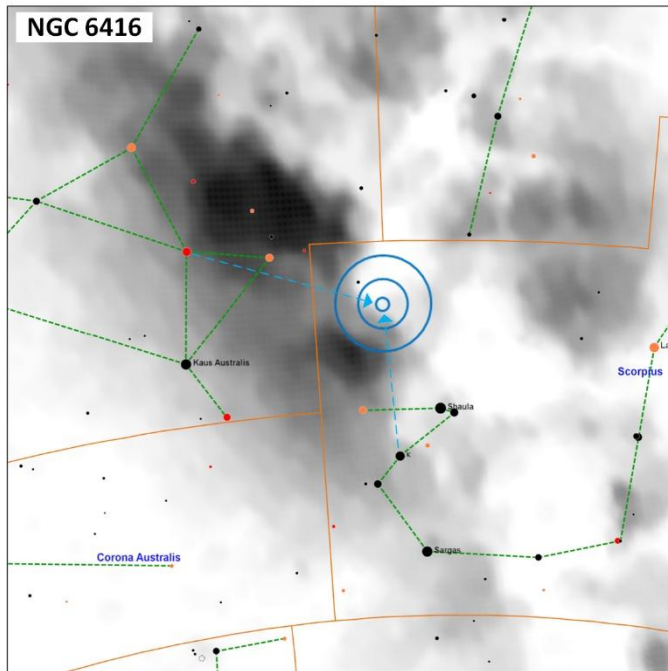


Trumpler 29 (OC | Mag=7.5 | D=12.0' | SB=21.5 | MC=III2m |) – Located 2,479 light years away with a physical diameter of 9 light years. Morphological classification is III-Detached cluster with no noticeable concentration 2-Medium rand of brightness between the stars of the cluster, m-Medium rich cluster with 50-100 stars.

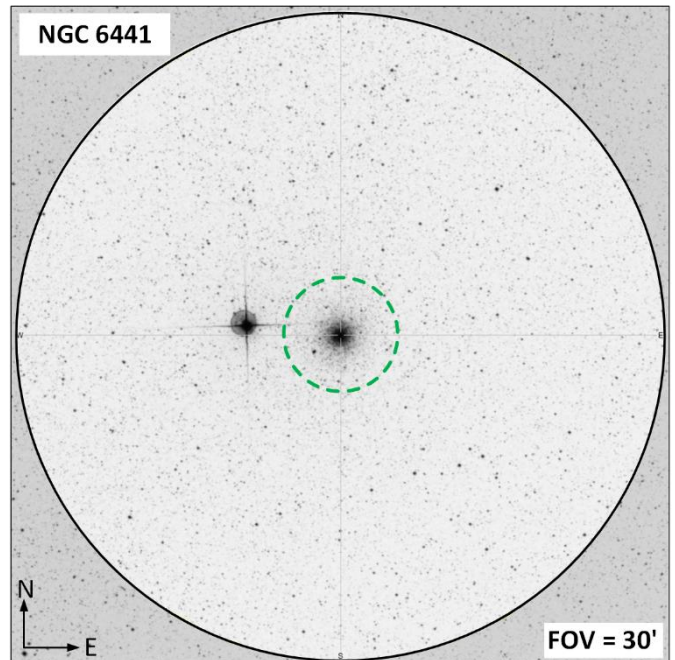
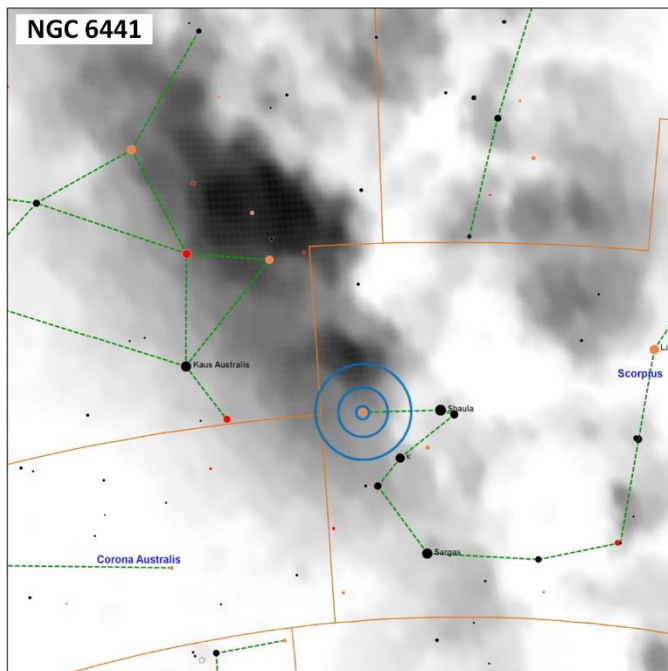


Constellation Guide

NGC-6416 (OC | Mag = 5.7 | Size = 15' | SB = 20.2 | MC=III2m |) – Located 2,417 light years away with a physical diameter of 10 light years this open cluster is classified as Detached with no noticeable concentration (III), Medium range of brightness between stars (2), Medium rich cluster with 50-100 stars (m).

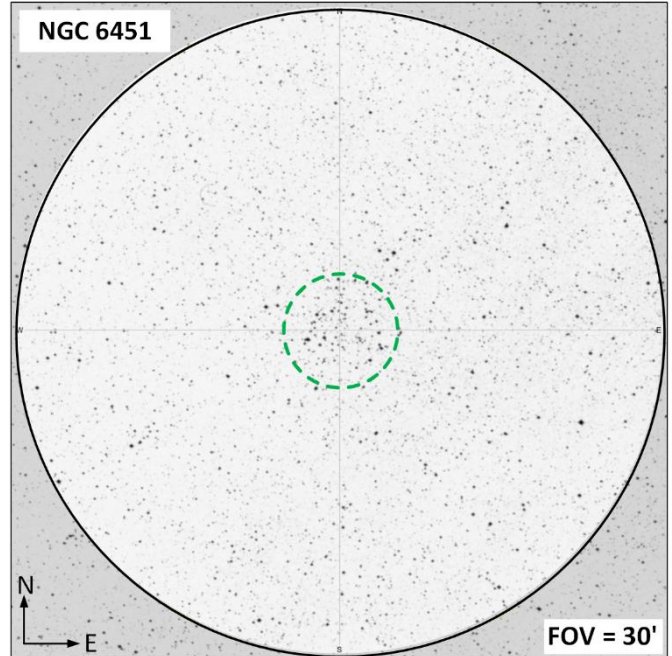
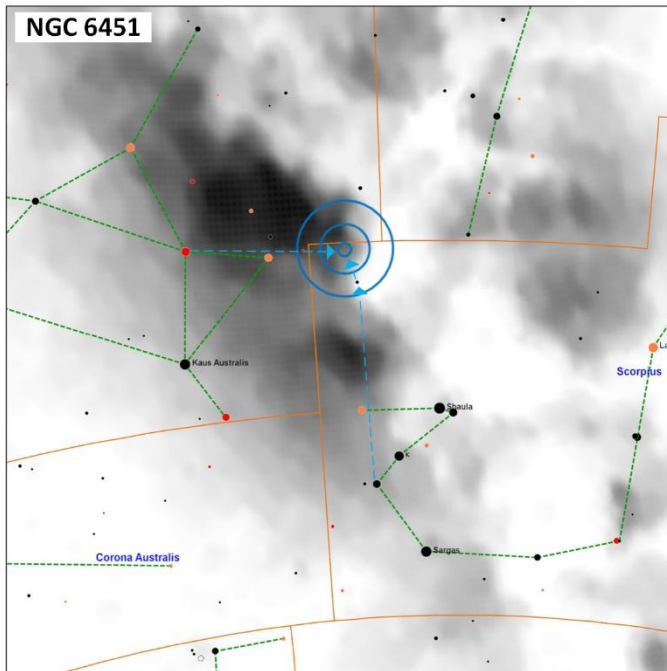


NGC-6441 (GC | Mag=7.2 | Size=9.6' | SB=20.7 | MC=III |) – Located 42,000 light years away, the Silver Nugget Cluster is one of the most massive and luminous globular cluster in the Milky Way and is estimated to have a mass of 1.6 million solar masses. It is suspected this GC may contain an intermediate-mass black hole with a mass up to 13,200 solar masses.

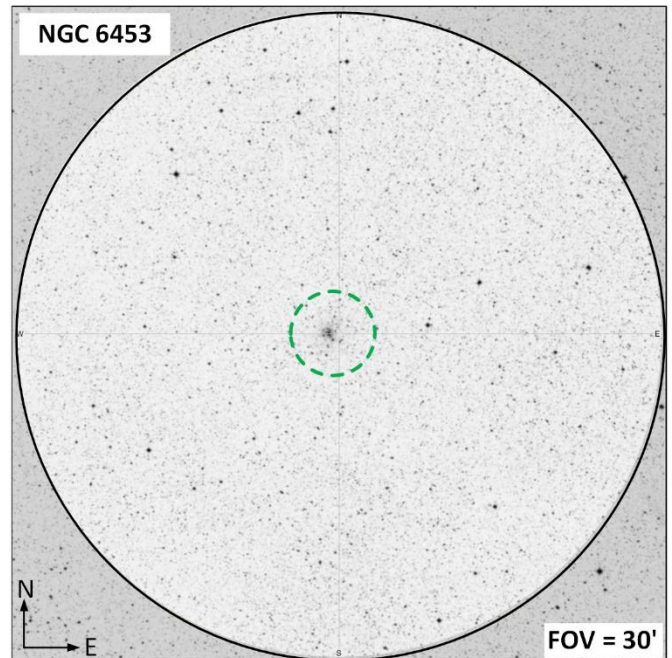
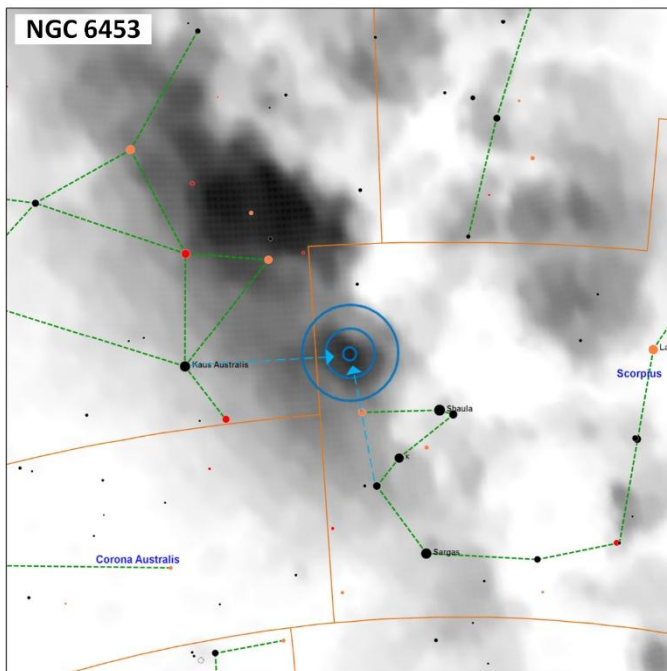


Constellation Guide

NGC-6451 (OC | Mag=8.2 | Size=8.0' | SB=21.1 | MC=I2r n) –Located 6,784 light years away with a physical diameter of 14 light years. Classified as Detached cluster with strong central concentration (I), Medium range of brightness between stars (2), Rich cluster with over 100 stars (r), traces of nebulosity (n).

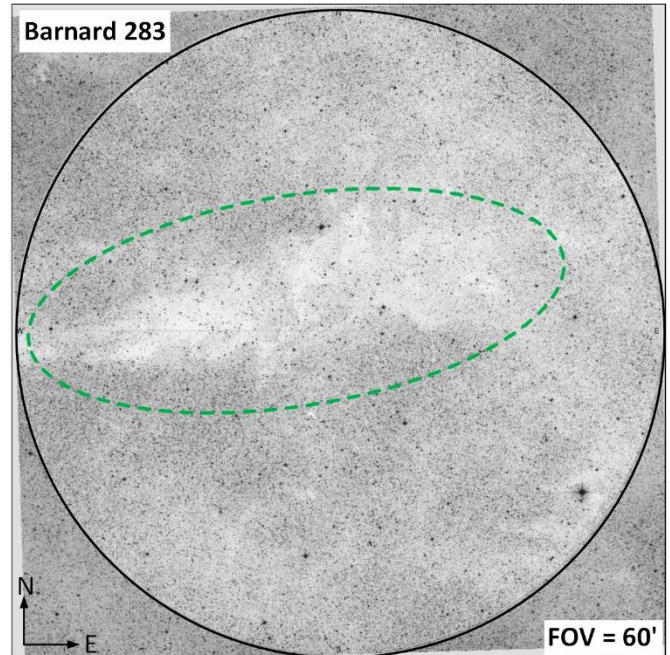
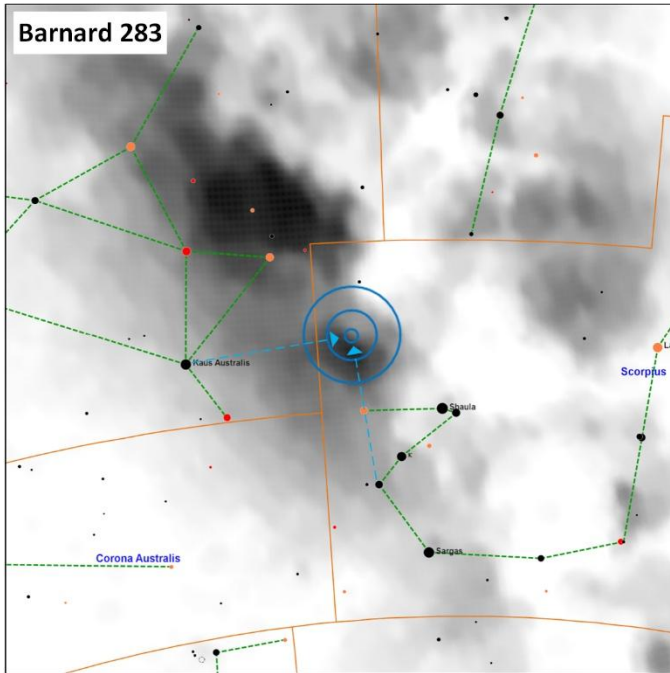


NGC-6453 (GC | Mag=10.2 | Size=7.6' | SB=23.2 | MC=IV) –Located 37,000 light years away this cluster is about 3,260 light years from the [Galactic Center](#) resulting in difficult viewing due to intervening clouds of cosmic dust.

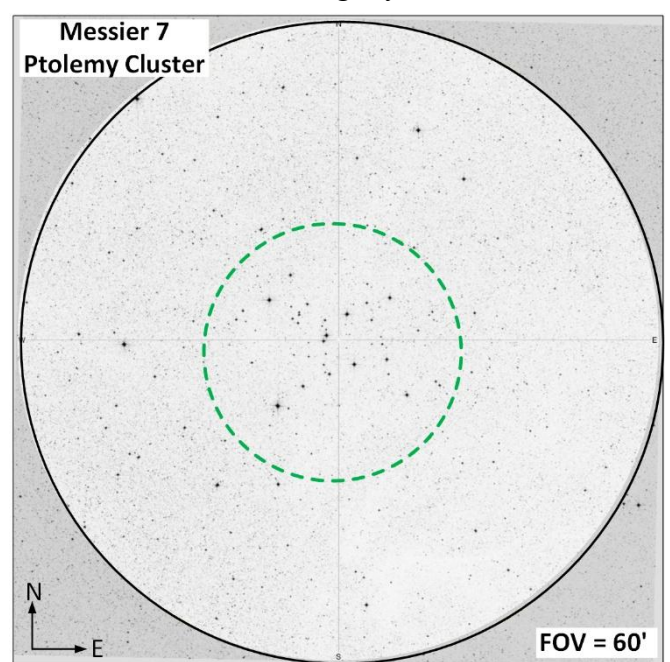
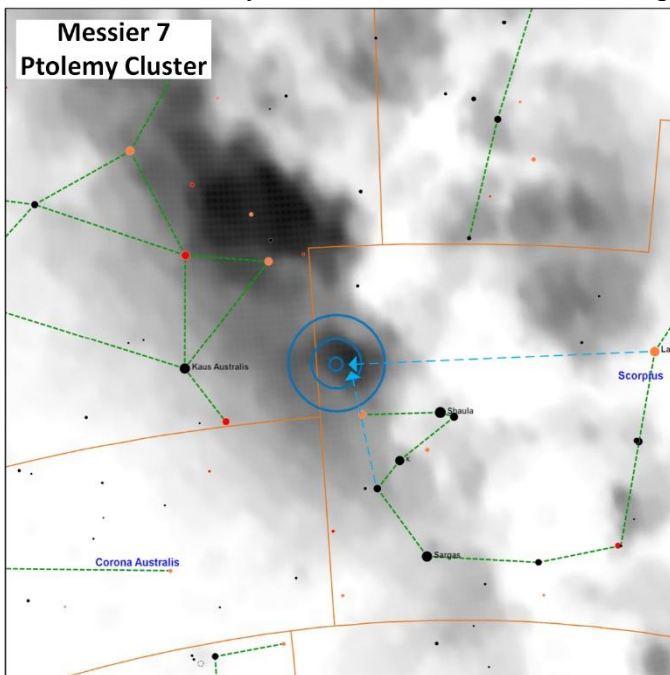


Constellation Guide

Barnard 283 (DN | Size=40' x 8' |) –A dark nebula measuring 40' x 8'.

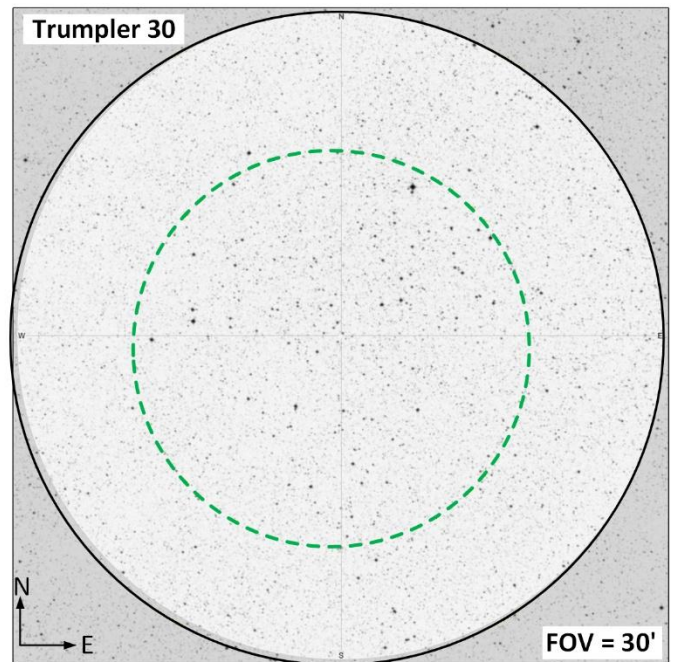
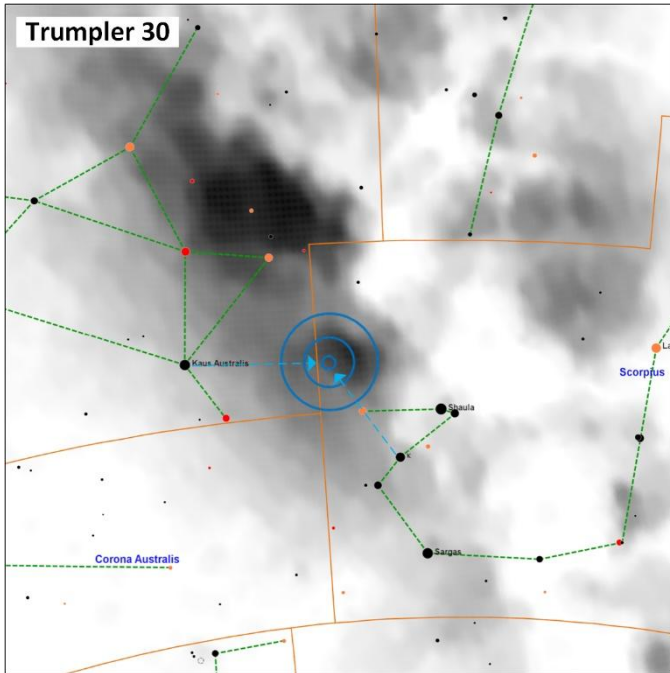


Messier 7 (OC | Mag = 3.3 | Size = 80' | SB = 21.4 | Stars=80+ | MC=I3r |) – The Ptolemy Cluster has been known since antiquity and is a large open cluster containing about 80 stars in a 1.2° field. The age of the cluster is about 200 million years and is estimated to have a physical diameter of 18 to 25 light years.

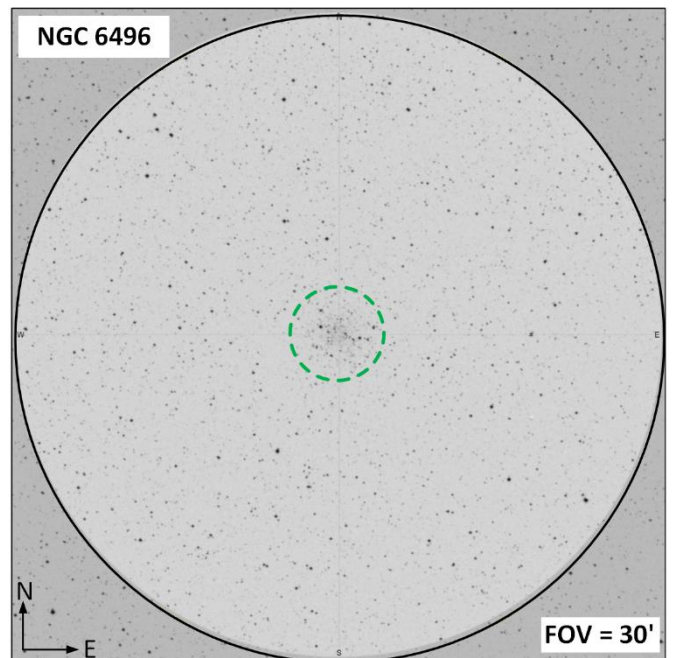
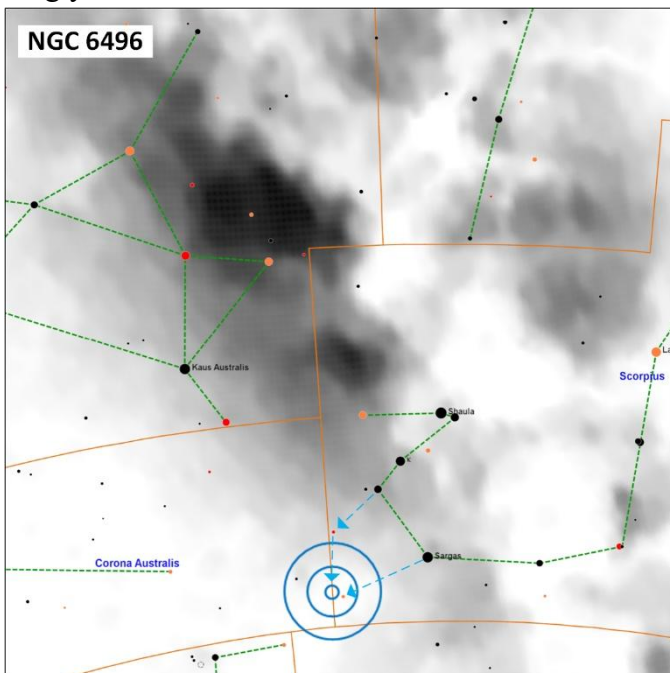


Constellation Guide

Trumpler 30 (OC | M=8.8 | Size=20' | SB=23.9 | Stars= 20+ | MC=IV1p |) –This is a supposed star cluster discovered by E.E. Barnard and is located 3,262 light years away with a physical diameter of 7 light years. This dim open cluster is located on the edge of Messier 7.



NGC-6496 (GC | M=8.6 | Size=5.6' | SB=21.0 | MC=XII |) –Located 37,000 light years away with a physical diameter of 60 light years, this globular cluster is suspected as being a halo cluster orbiting our galaxy with a strongly inclined orbit.



Constellation Guide
Observation Log: Scorpius (Sco)

Equipment Config A: _____ Config B: _____

Notes: _____

Date	Time	Config	Target	Notes

Date	Time	Config	Target	Notes

Constellation Guide
Observation Log: Scorpius (Sco)

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

The resources listed below were utilized to generate 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: Bret Archinal, Steve Hynes
 - [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: Demeiza Ramakers
 - [Pattern Asterisms](#): John Chiravalle
 - Milwaukee Astronomical Society: [Binocular Asterisms](#)
 - Deep-Sky.co.uk: [Observing Asterisms](#) (David Ratlege)
- [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](#)

Applications

- [SkyTools](#) 4.1 Visual Professional
- [AstroPlanner](#) Version 2.4
- [Cartes du Ciel](#) Version 4.3
- [Sky Safari](#) Pro 7
- Microsoft Office Home and business 2021 - Word
- Microsoft Visio Professional 2021
- [IrfanView](#) Version 4.72