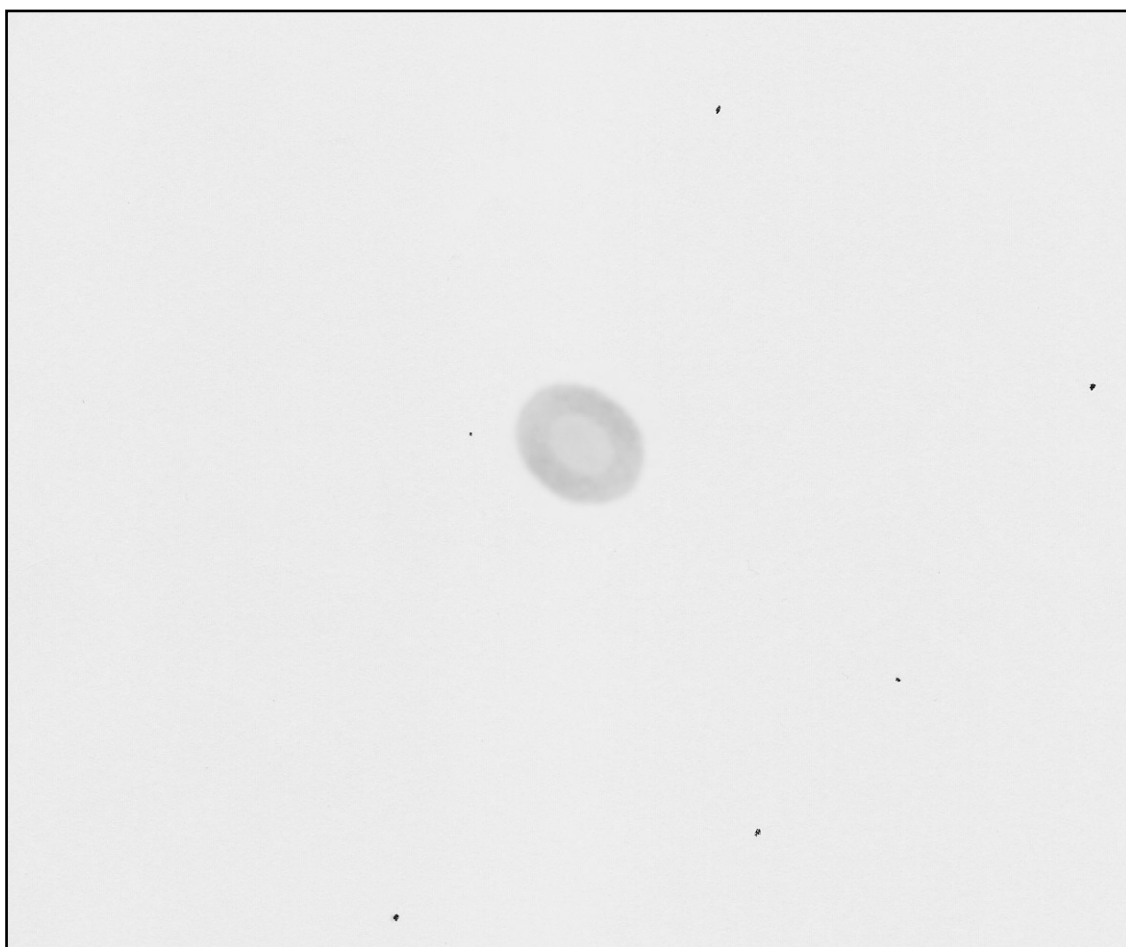


Massimo Zecchin

The Brightest Planetary Nebulae Observing Atlas

White version



This atlas is aimed to illustrate the appearance of various planetary nebulae visible in small telescopes (between 8 and 15 cm of aperture) from suburban locations, providing a description and the related observational, physical and location data. Both the considered range of aperture and quality of the sky are common to many amateur observers, who are forced to deal with a gradual increase in light pollution. However, the surface brightness of several of these objects is so high that they can be easily observed from suburb locations, and in some cases even from city centers. In more isolated areas, with a limit visual magnitude of at least +5, small telescopes are able to show relatively weak planetary nebulae.

Most of the observations have been performed with a good achromatic refractor of 120 mm of aperture and 1000 mm of focal length, which in the case of nebulae of small angular extent can be used profitably at magnifications in the order of 250x. Occasionally, or in the case of older observations, a 127/1250 Schmidt-Cassegrain telescope, a 114/1000 Newtonian, a 102/500 refractor and a 20x80 binoculars have been used.

The sketches were executed with pencil on white paper, and then scanned and processed with an image editor program, with which a slight blur to the nebula has been usually applied in order to make the look even more realistic.

Objects data were taken from 'The NGC/IC Project' (<http://www.ngcicproject.org/>) and 'PNebulae' (<http://www.pnebulae.altervista.org/index.html>), while the used star maps are from 'Taki's 8.5 Magnitude Star Atlas' (http://www.geocities.jp/toshimi_taki/index.htm). The adopted seeing scale is that of Antoniadi modified (1-excellent, 6-very poor). The objects are arranged according to their right ascension.

I hope that this collection may be useful for your observations.

Good vision and clear skies,

Massimo Zecchin

Cittadella
(Italy)

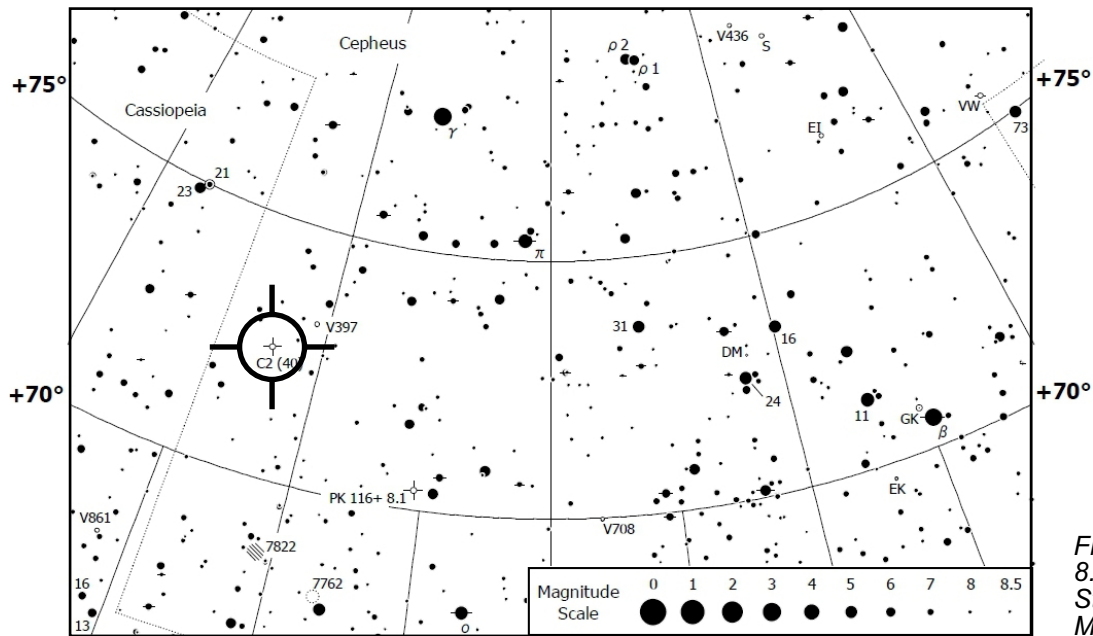
ACKNOWLEDGMENTS

I thank Diego Barucco and SilviaElena for their precious suggestions

List of the objects

NGC/IC	Con.	RA	Dec	Mag	Common name
NGC 40	Cep	00h 13m 00.9s	+72° 31' 20"	12.3	Bow Tie Nebula
NGC 246	Cet	00h 47m 03.2s	-11° 52' 20"	10.9	Skull Nebula
NGC 650-1 (M76)	Per	01h 42m 18.1s	+51° 34' 16"	10.1	Little Dumbbell Nebula
IC 351	Per	03h 47m 32.95s	+35° 02' 48.3"	12.0	
IC 2003	Per	03h 56m 22.01s	+33° 52' 30.4"	11.5	
NGC 1514	Tau	04h 09m 17.0s	+30° 46' 33.3"	10.9	Crystal Ball Nebula
NGC 1535	Eri	04h 14m 15.78s	-12° 44' 21.6"	9.6	Cleopatra's Eye
IC 418	Lep	05h 27m 28.19s	-12° 41' 50.4"	9.3	Spirograph Nebula
NGC 2022	Ori	05h 42m 06.1s	+09° 05' 10"	11.6	
IC 2149	Aur	05h 56m 23.85s	+46° 06' 17.2"	10.7	Red Sword Nebula
IC 2165	CMa	06h 21m 42.67s	-12° 59' 14.0"	10.6	
NGC 2392	Gem	07h 29m 10.8s	+20° 54' 42"	9.1	Eskimo Nebula
NGC 2438	Pup	07h 41m 50.4s	-14° 44' 09"	10.8	
NGC 3242	Hya	10h 24m 46.2s	-18° 38' 34"	7.7	Ghost of Jupiter
NGC 3587 (M97)	UMa	11h 14m 47.71s	+55° 01' 07.7"	9.9	Owl Nebula
IC 4593	Her	16h 11m 44.53s	+12° 04' 17.2"	10.7	White Eyed Pea
NGC 6210	Her	16h 44m 29.4s	+23° 48' 00"	8.8	Turtle Nebula
NGC 6543	Dra	17h 58m 33.37s	+66° 37' 59.1"	8.1	Cat's Eye Nebula
NGC 6572	Oph	18h 12m 06.37s	+06° 51' 13"	8.1	Blue Racquetball
NGC 6720 (M57)	Lyr	18h 53m 35.09s	+33° 01' 44.5"	8.8	Ring Nebula
NGC 6781	Aql	19h 18m 28.3s	+06° 32' 23"	11.4	Snowglobe Nebula
NGC 6804	Aql	19h 31m 35.43s	+09° 13' 30.6"	12.0	
NGC 6818	Sgr	19h 43m 57.76s	-14° 09' 11.4"	9.3	Little Gem Nebula
NGC 6826	Cyg	19h 44m 48.17s	+50° 31' 30.4"	8.8	Blinking Nebula
NGC 6853 (M27)	Vul	19h 59m 36.33s	+22° 43' 16.0"	7.4	Dumbbell Nebula
NGC 6884	Cyg	20h 10m 23.65s	+46° 27' 39.6"	10.9	
NGC 6891	Del	20h 15m 08.85s	+12° 42' 15.2"	10.5	
NGC 6905	Del	20h 22m 23.02s	+20° 06' 16.4"	11.1	Blue Flash Nebula
NGC 7008	Cyg	21h 00m 32.8s	+54° 32' 35"	10.7	Fetus Nebula
NGC 7009	Aqr	21h 04m 10.7s	-11° 21' 49"	8.0	Saturn Nebula
NGC 7026	Cyg	21h 06m 18.55s	+47° 51' 08.0"	10.9	Cheeseburger Nebula
NGC 7027	Cyg	21h 07m 01.69s	+42° 14' 10.1"	8.5	Magic Carpet Nebula
NGC 7048	Cyg	21h 14m 14.1s	+46° 17' 28"	12.1	Disk Ghost
NGC 7293	Aqr	22h 29m 38.35s	-20° 50' 13.2"	7.3	Helix Nebula
NGC 7662	And	23h 25m 53.93s	+42° 32' 06.1"	8.3	Blue Snowball

NGC 40 - Bow Tie Nebula



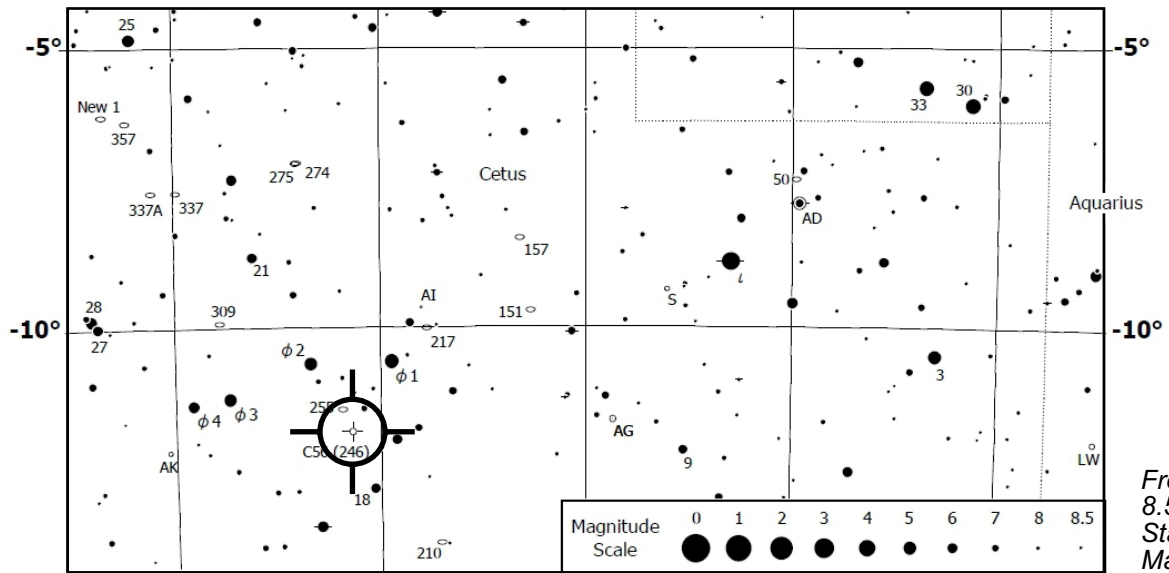
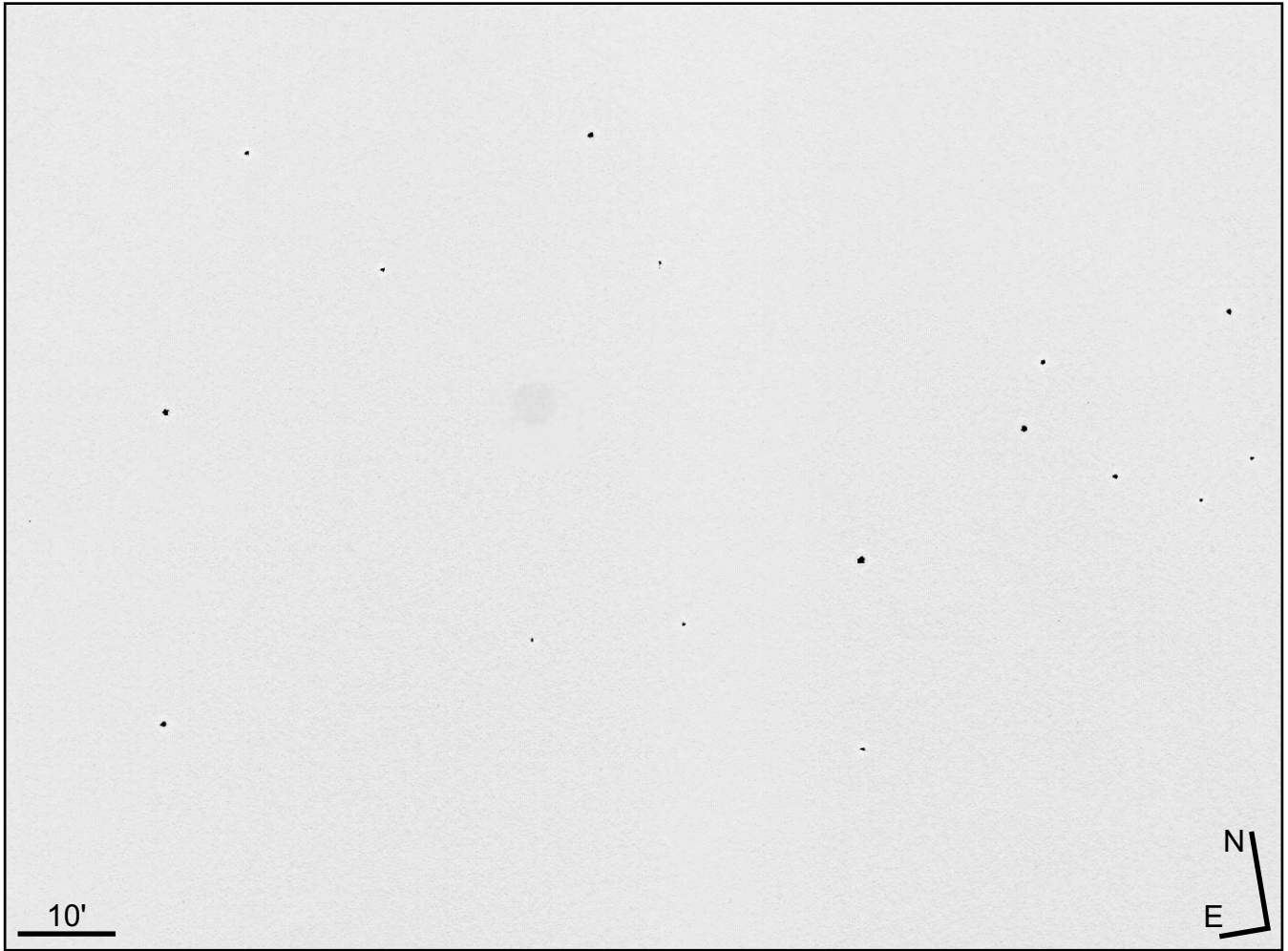
From Taki's
8.5 Magnitude
Star Atlas -
Map 2

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 5-6/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: December 10, 2010

Object data
RA: 00h 13m 00.9s
Dec: +72° 31' 20"
Const.: Cepheus
Mag: 12.3
Size: 38"x35"
CS: 11.6 mag

Notes: Rounded shape and undefined border. The brightness is slightly higher in the central area. The central star is well visible, although it is a little disturbed by the nebulosity.

NGC 246 - Skull Nebula

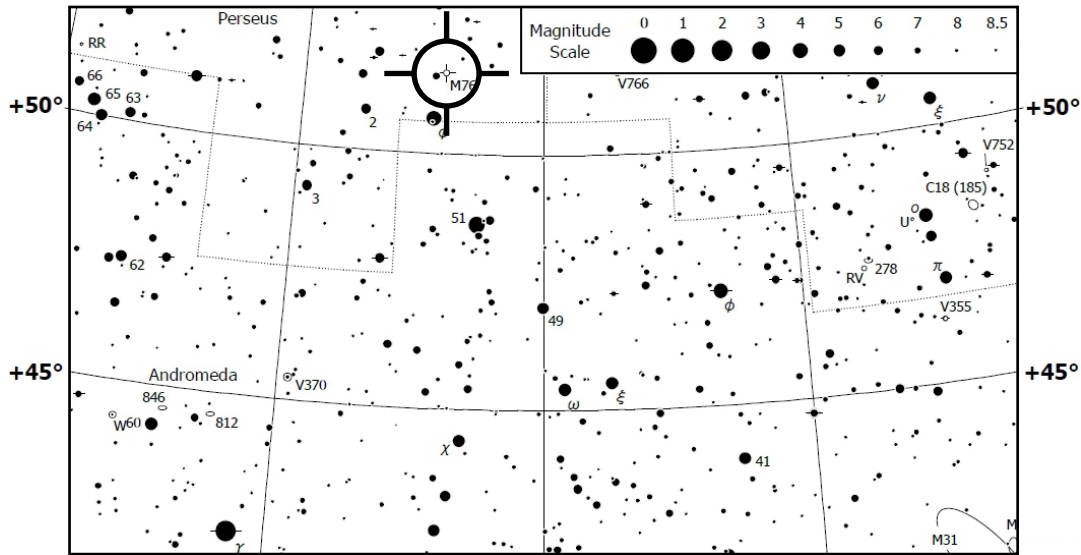
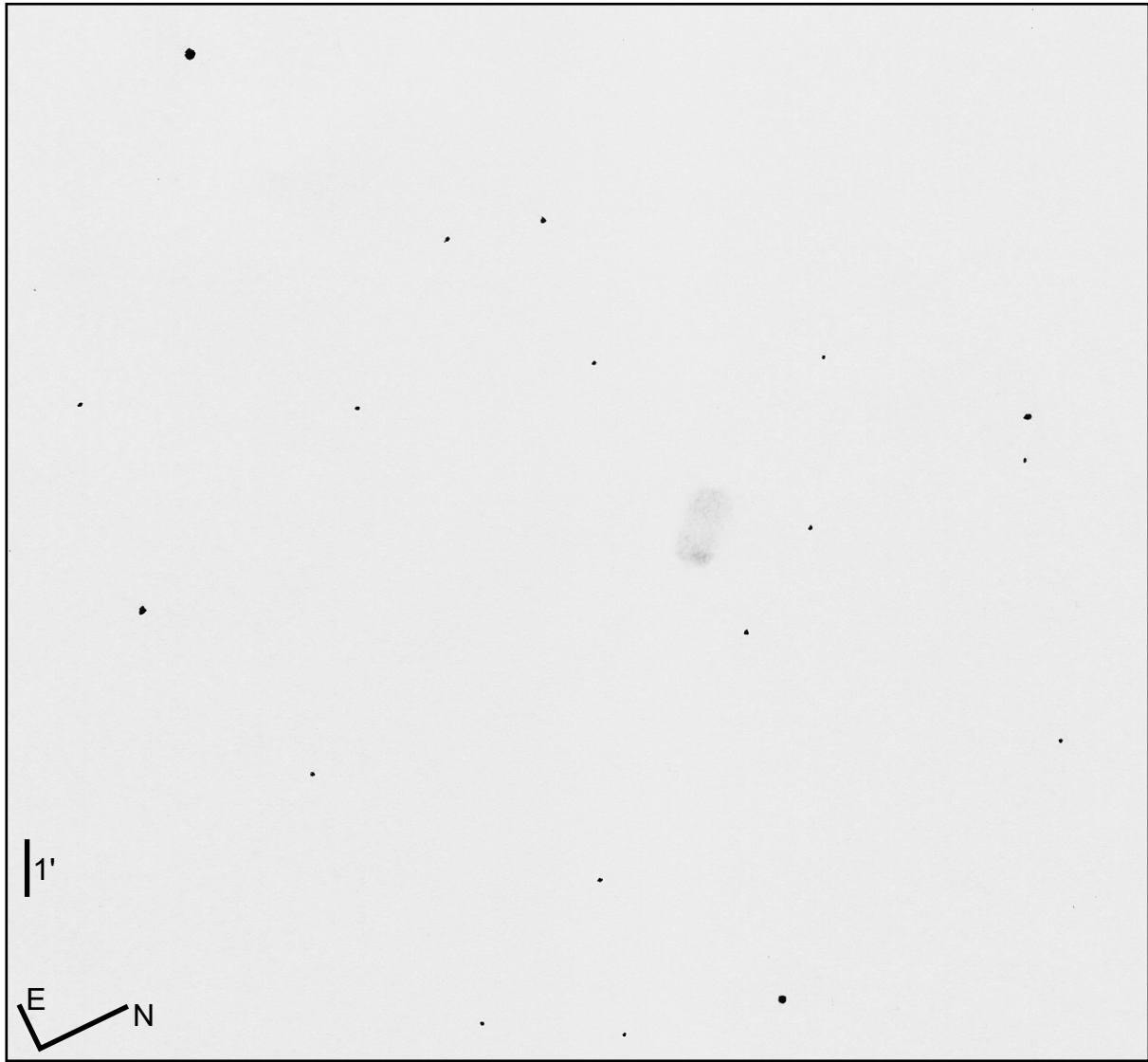


Instrument type: Binoculars
 Aperture: 80 mm
 Focal length: -
 Eyepiece: -
 Magnification: 20x
 Filter: -
 Seeing: 3-4/6
 Visual magnitude: ca. 6.5
 Location: Monte Tomba (TV) - Italy
 Date: August 31, 1989

Object data
 RA: 00h 47m 03.2s
 Dec: -11° 52' 20"
 Const.: Cetus
 Mag: 10.9
 Size: 4.6'x4.1'
 CS: 12.0 mag

Notes: The nebula is relatively faint and shows a rounded shape with uniform brightness and sharp border.

NGC 650-1 (M 76) - Little Dumbbell Nebula

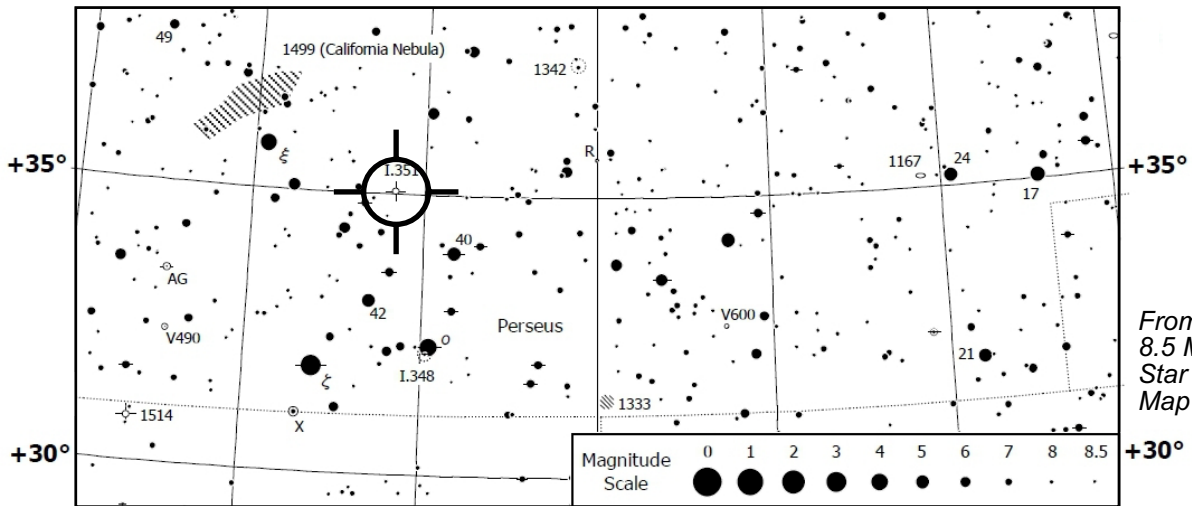


From Taki's
8.5 Magnitude
Star Atlas -
Map 36

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Flat Field 8 mm
Magnification: 125x
Filter: O-III
Seeing: 3/6
Visual magnitude: 4 - 4.5
Location: Cittadella (PD) - Italy
Date: December 30, 2010

Object data
RA: 01h 42m 18.1s
Dec: +51° 34' 16"
Const.: Perseus
Mag: 10.1
Size: 2.7'x1.8'
CS: 17.5 mag

Notes: Rectangular shape elongated NE-SW, and relatively low brightness. It is present a brighter condensation near the SW border. The nebula is more evident with the O-III filter, which shows also a slight decrease in brightness between the two lobes.

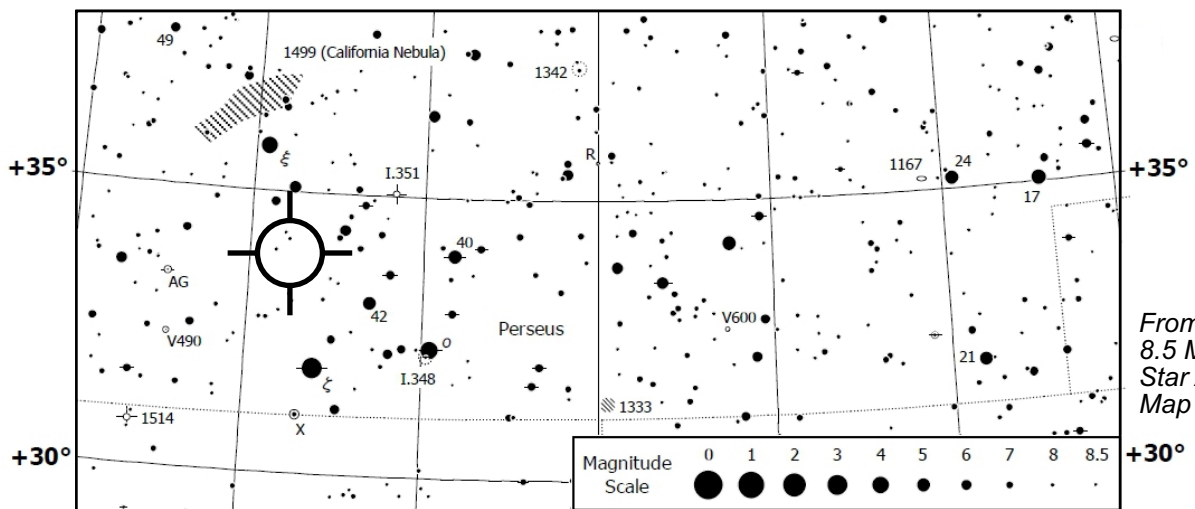


*From Taki's
8.5 Magnitude
Star Atlas -
Map 58*

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: 4.5
Location: Cittadella (PD) - Italy
Date: January 3, 2011

Object data
RA: 03h 47m 32.95s
Dec: +35° 02' 48.3"
Const.: Perseus
Mag: 12.0
Size: 8"x6"
CS: 15.8 mag

Notes: The nebula appears as a fuzzy star and may be easily confused with the stars in the field. Details are not recognizable.



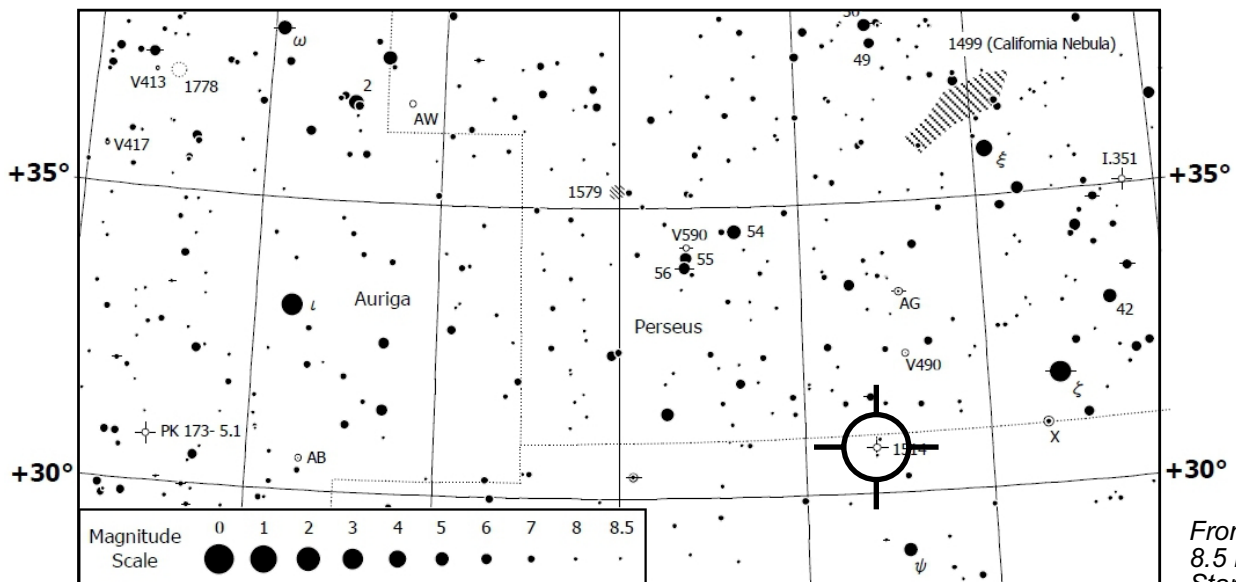
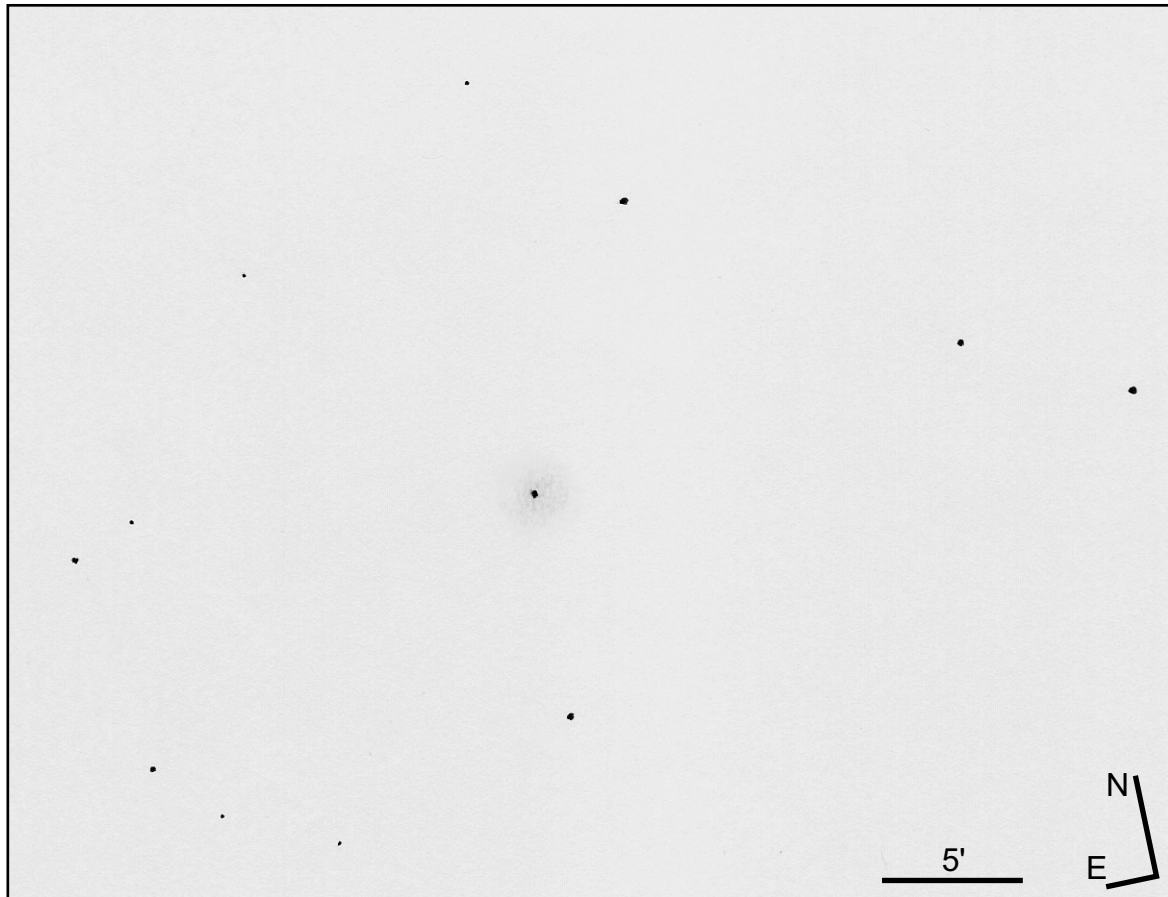
*From Taki's
8.5 Magnitude
Star Atlas -
Map 58*

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3/6
Visual magnitude: 4 - 4.5
Location: Cittadella (PD) - Italy
Date: December 30, 2010

Object data
RA: 03h 56m 22.01s
Dec: +33° 52' 30.4"
Const.: Perseus
Mag: 11.5
Size: 7"x6"
CS: 15.0 mag

*Notes: The nebula appears
as a tiny round spot slightly
condensed in the center. It
looks almost stellar.*

NGC 1514 - Crystal Ball Nebula



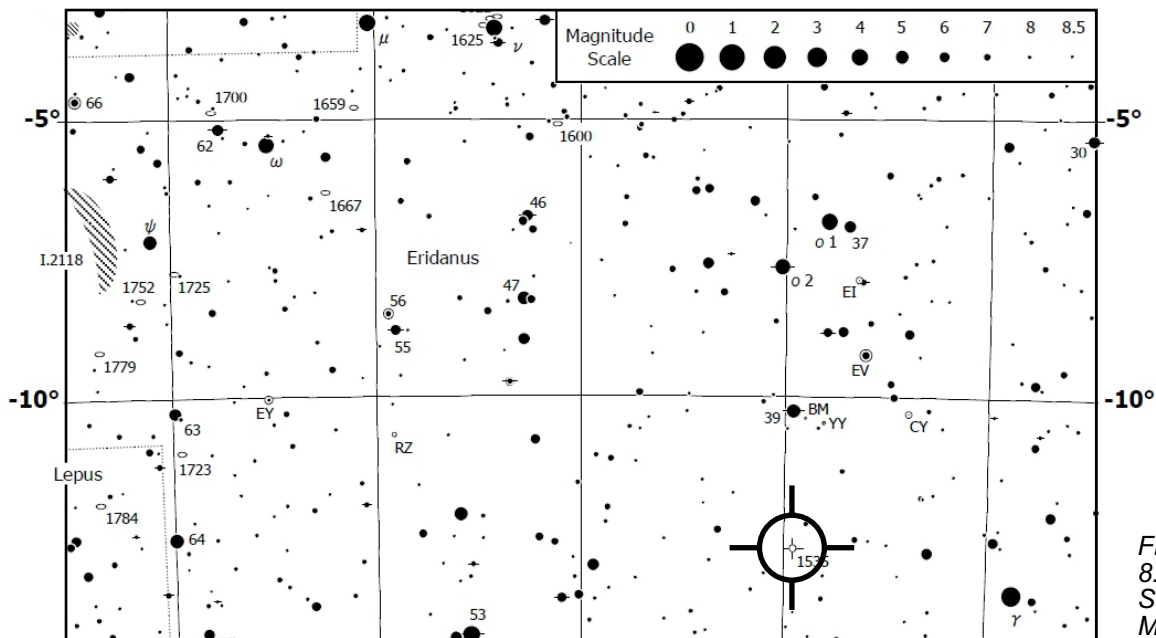
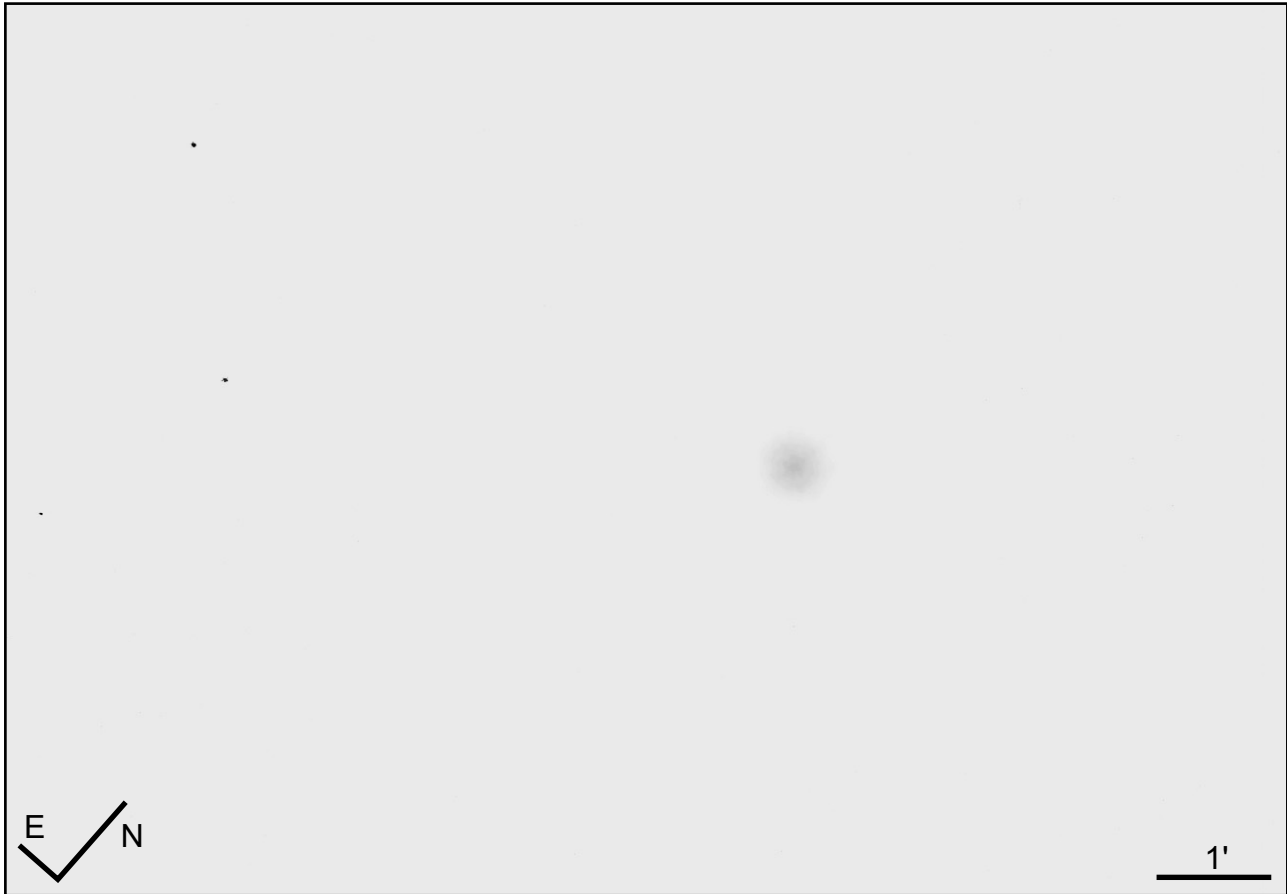
From Taki's
8.5 Magnitude
Star Atlas -
Map 57

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Flat Field 16 mm
Magnification: 62.5x
Filter: O-III
Seeing: 3-4/6
Visual magnitude: 4.5
Location: Cittadella (PD) - Italy
Date: January 3, 2011

Object data
RA: 04h 09m 17.00s
Dec: +30° 46' 33.3"
Const.: Taurus
Mag: 10.9
Size: 2.3'x2.0'
CS: 9.4 mag

Notes: The nebula is visible with the O-III filter only, and its shape is rounded. The brightness of the central star overlooks that of the nebulosity. It is barely recognizable a decrease in brightness of the NE zone.

NGC 1535 - Cleopatra's Eye



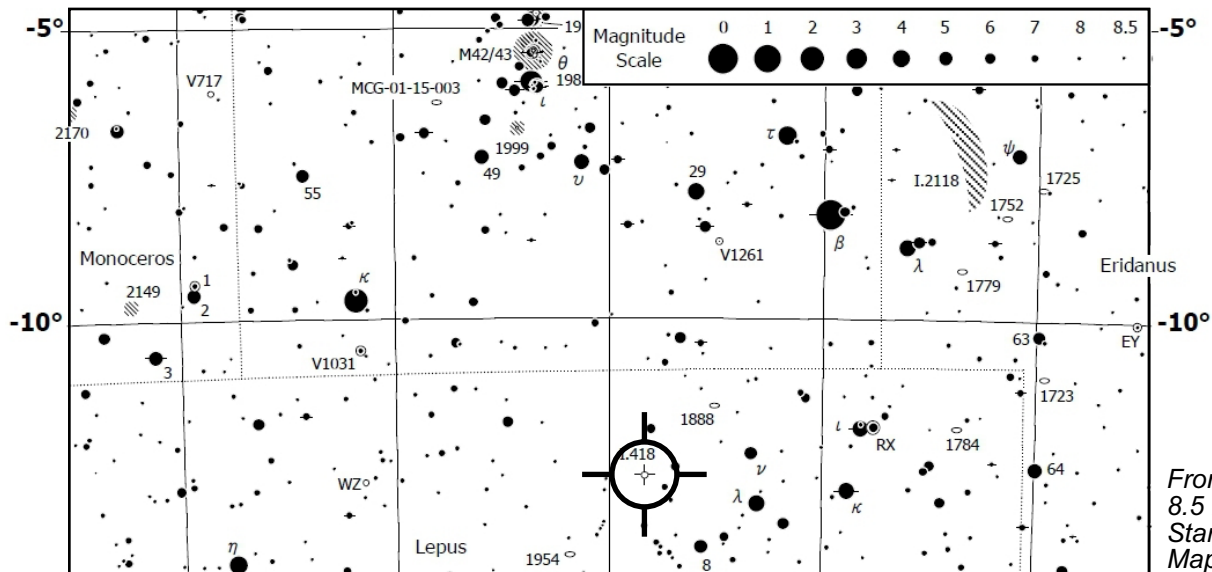
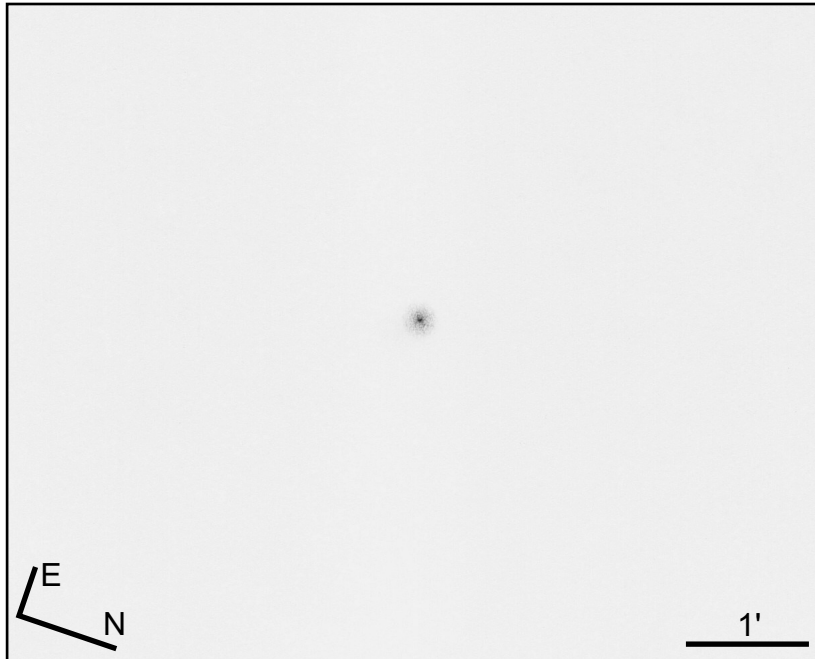
From Taki's
8.5 Magnitude
Star Atlas -
Map 81

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 2/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: December 23, 2011

Object data
RA: 04h 14m 15.78s
Dec: -12° 44' 21.6"
Const.: Eridanus
Mag: 9.6
Size: 48"x42"
CS: 12.1 mag

Notes: Round and relatively bright. The brightness increases toward the center, without a marked central peak. The border is a little fuzzy.

IC 418 - Spirograph Nebula



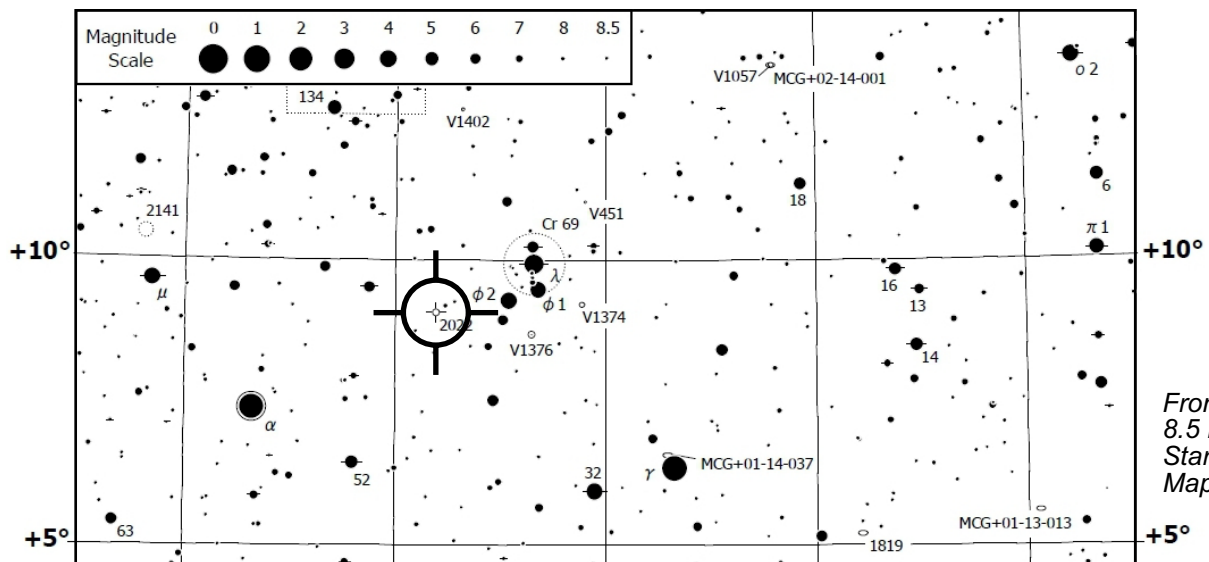
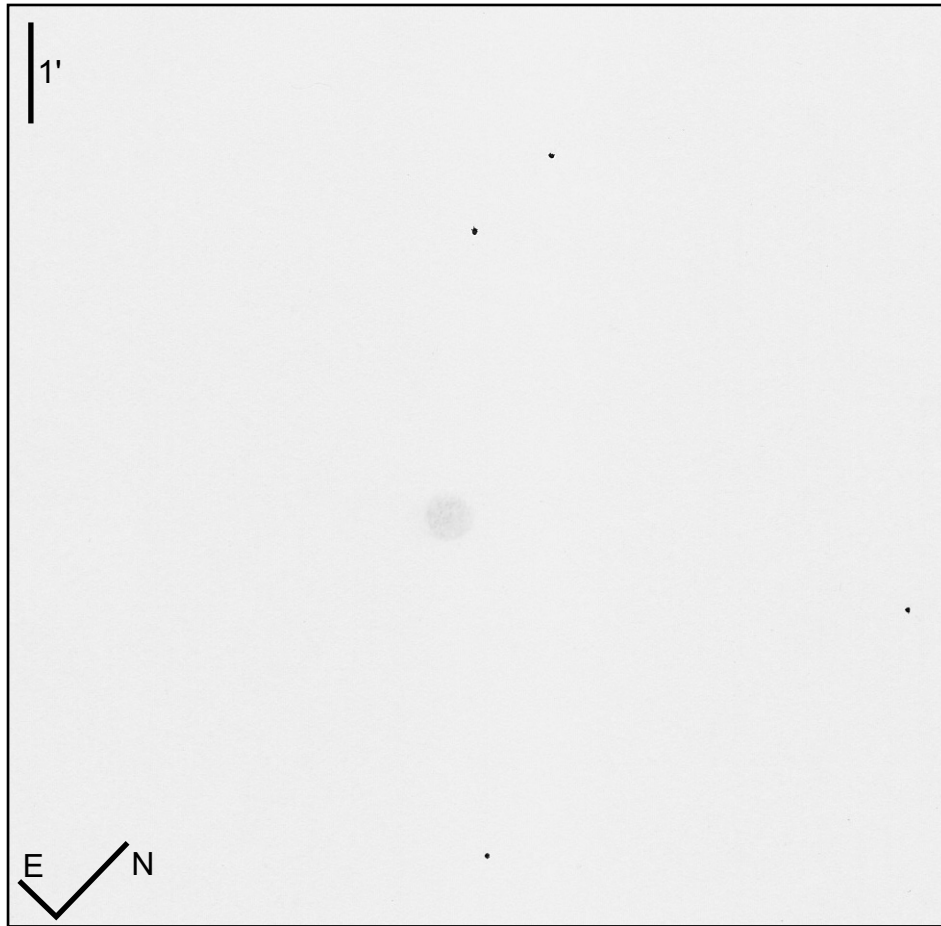
From Taki's
8.5 Magnitude
Star Atlas -
Map 80

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: ca. 4
Location: Cittadella (PD) - Italy
Date: March 5, 2011

Object data
RA: 05h 27m 28.19s
Dec: -12° 41' 50.4"
Const.: Lepus
Mag: 9.3
Size: 14"x11"
CS: 10.2 mag

Notes: The nebula is well visible and bright despite the light pollution of this area of the sky. The shape is rounded, with uncertain WNW-ESE gentle elongation. Undefined border. The centre is brighter and condensed probably due to the central star.

NGC 2022



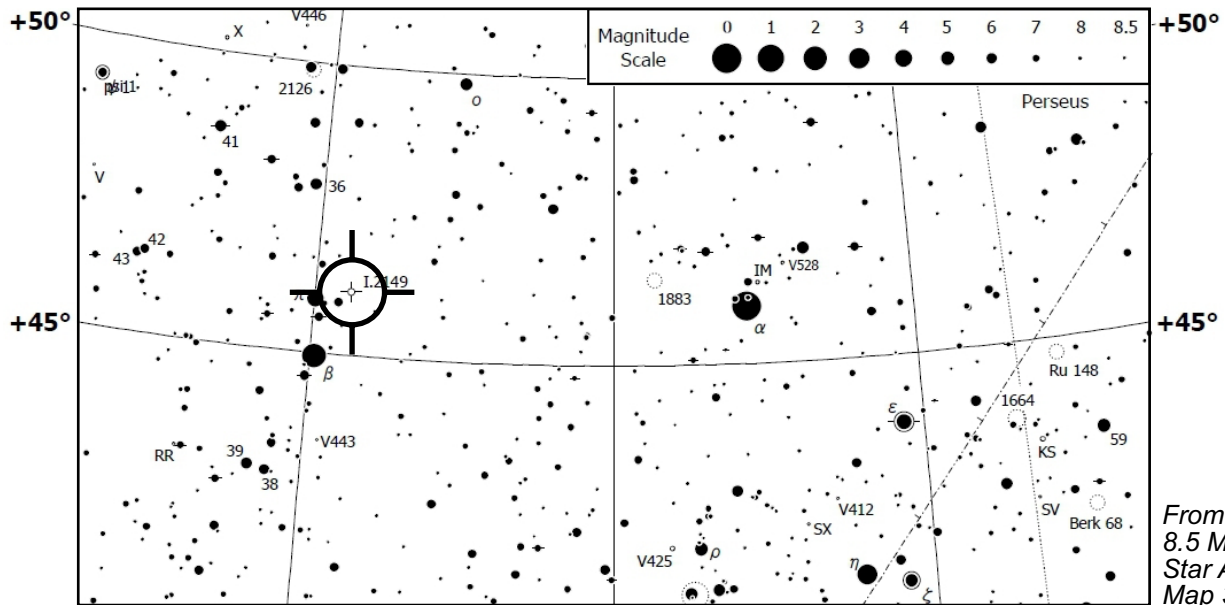
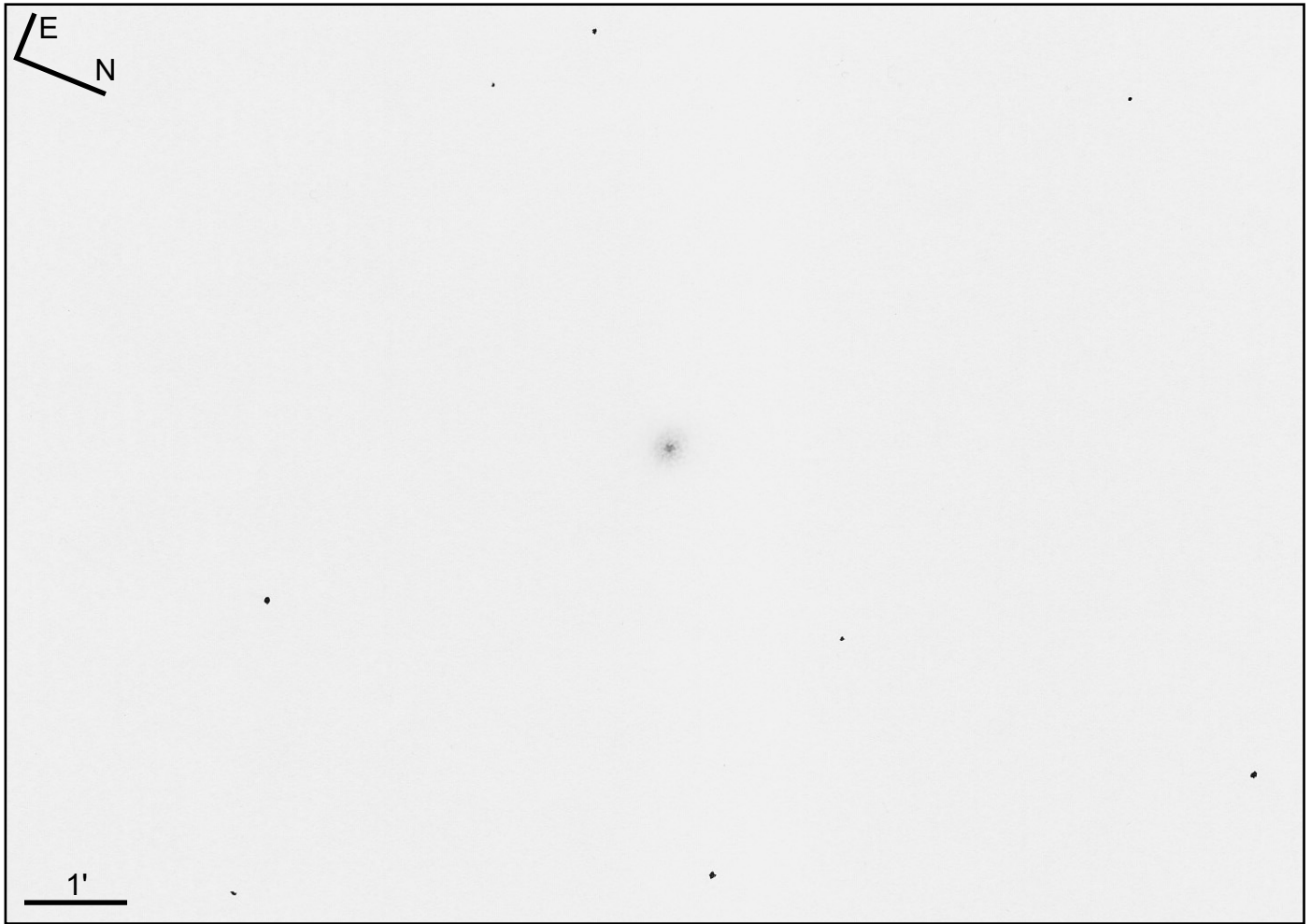
*From Taki's
8.5 Magnitude
Star Atlas -
Map 80*

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: 4.5
Location: Cittadella (PD) - Italy
Date: January 3, 2011

Object data
RA: 05h 42m 06.1s
Dec: +09° 05' 10"
Const.: Orion
Mag: 11.6
Size: 28"x27"
CS: 15.9 mag

Notes: The nebula is relatively faint but visible without filters. It appears as a little disc with uniform brightness. Nice image.

IC 2149 - Red Sword Nebula



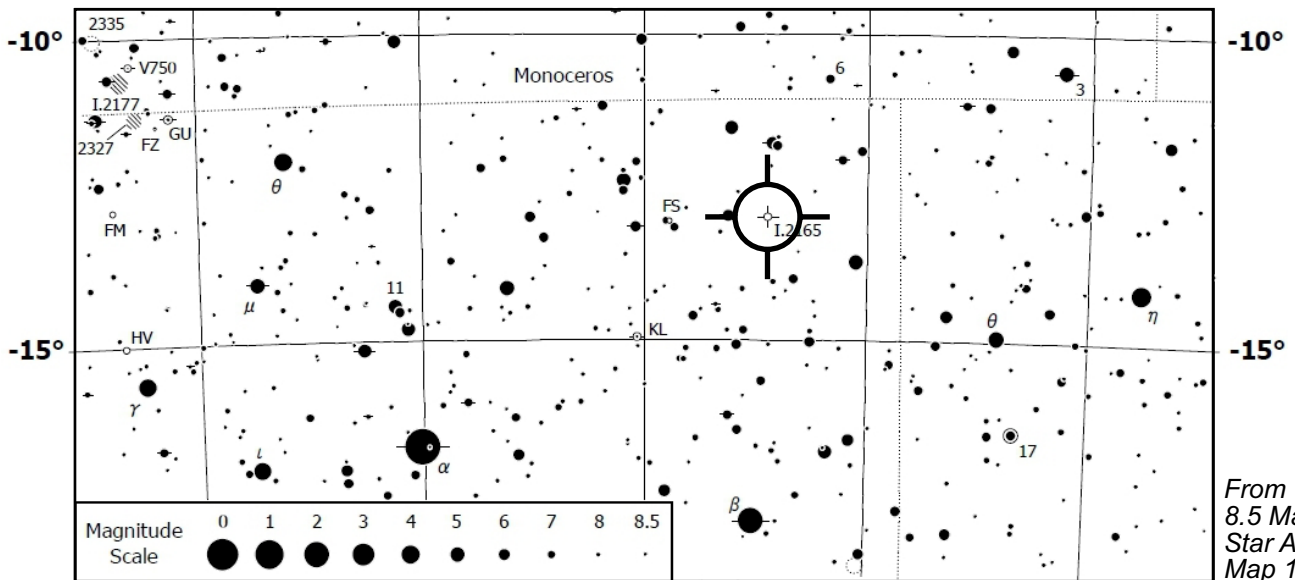
From Taki's
8.5 Magnitude
Star Atlas -
Map 32

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 4-5/6
Visual magnitude: ca. 4
Location: Cittadella (PD) - Italy
Date: February 5, 2011

Object data
RA: 05h 56m 23.85s
Dec: +46° 06' 17.2"
Const.: Auriga
Mag: 10.7
Size: 15"x10"
CS: 11.6 mag

Notes: *Relatively bright nebula with an undefined border and a marked central condensation, which probably corresponds to the central star. A vague E-W elongation is recognizable.*

IC 2165

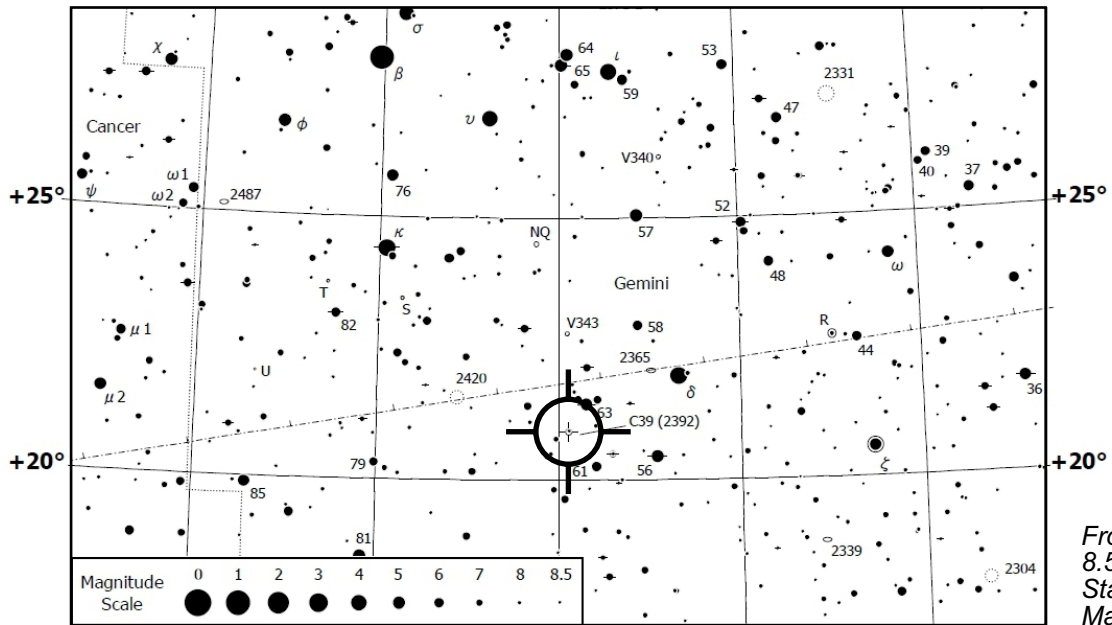
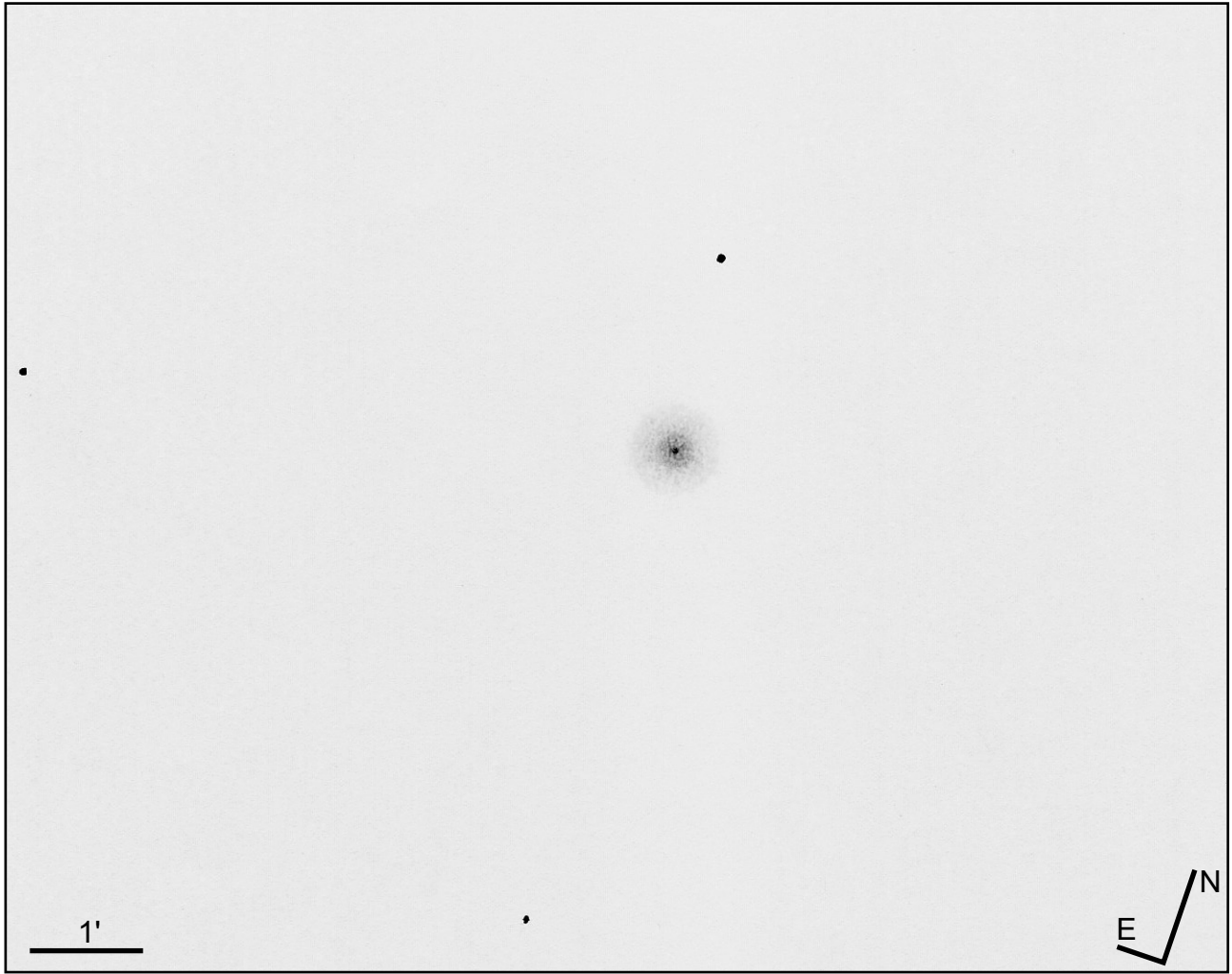


Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: ca. 4
Location: Cittadella (PD) - Italy
Date: March 5, 2011

Object data
RA: 06h 21m 42.67s
Dec: -12° 59' 14.0"
Const.: Canis Major
Mag: 10.6
Size: 9"x7"
CS: 17.9 mag

Notes: The nebula has the appearance of a fuzzy star. It reveals its non-stellar nature only at high magnifications.

NGC 2392 - Eskimo Nebula

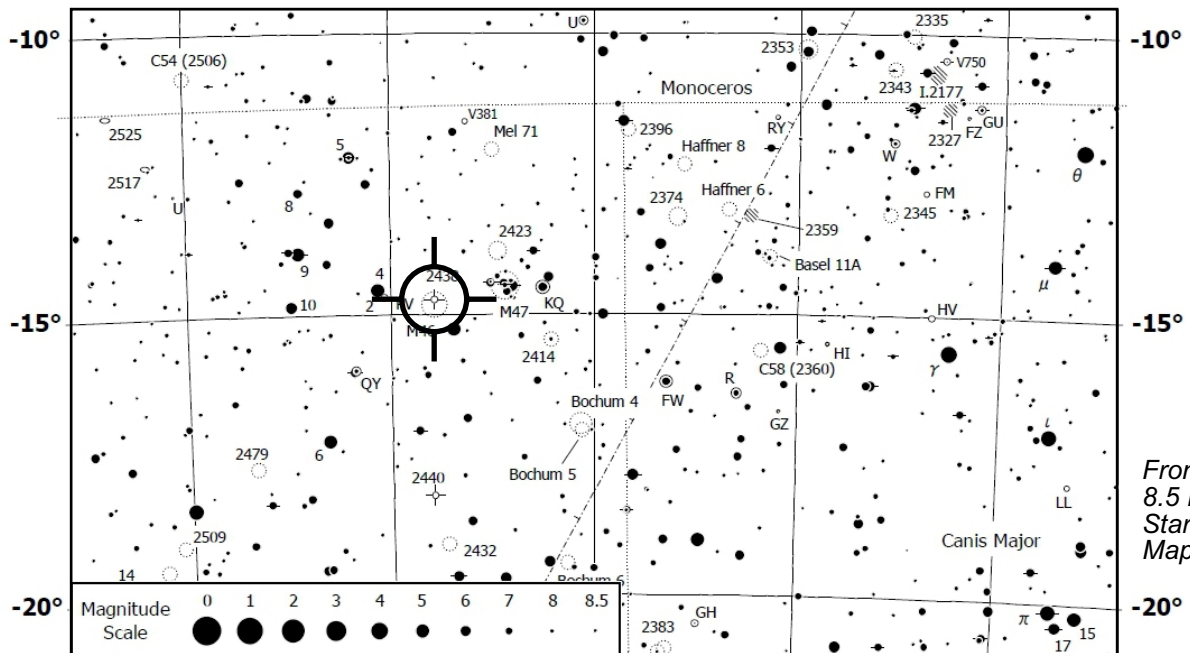
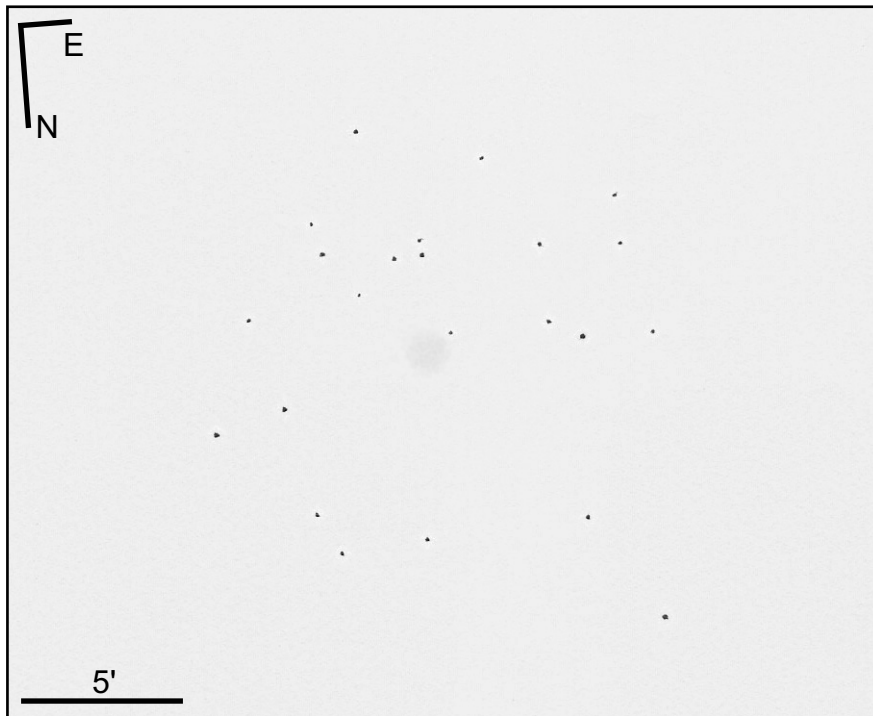


Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: 4.5
Location: Cittadella (PD) - Italy
Date: January 3, 2011

Object data
RA: 07h 29m 10.8s
Dec: +20° 54' 42"
Const.: Gemini
Mag: 9.1
Size: 47"x43"
CS: 10.5 mag

Notes: Bright and rounded nebula. The central area is brighter but does not show an abrupt border. The central star is well visible and a little disturbed by the nebulosity.

NGC 2438

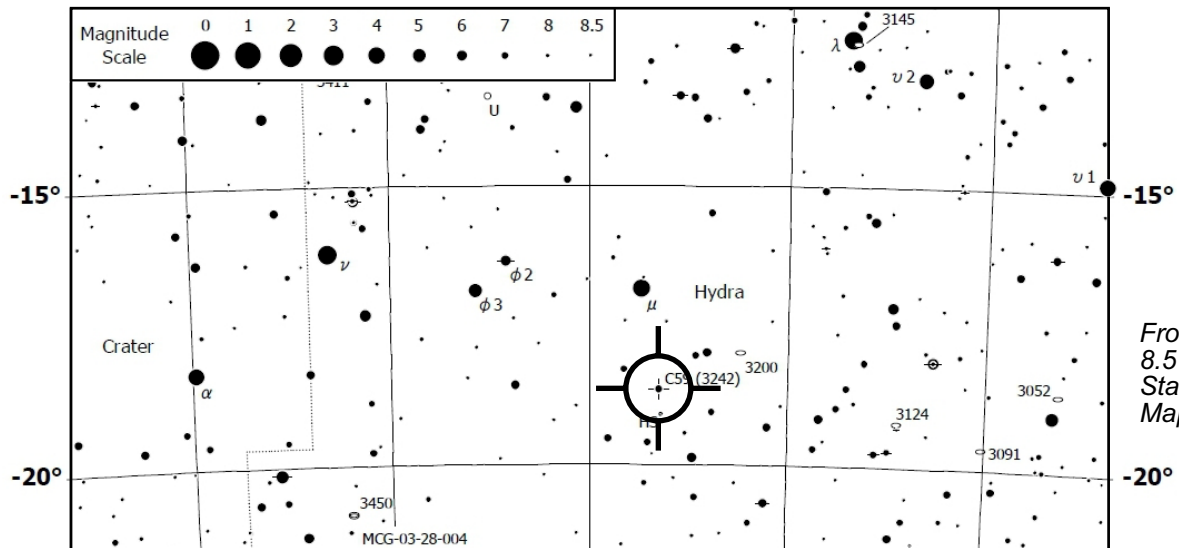
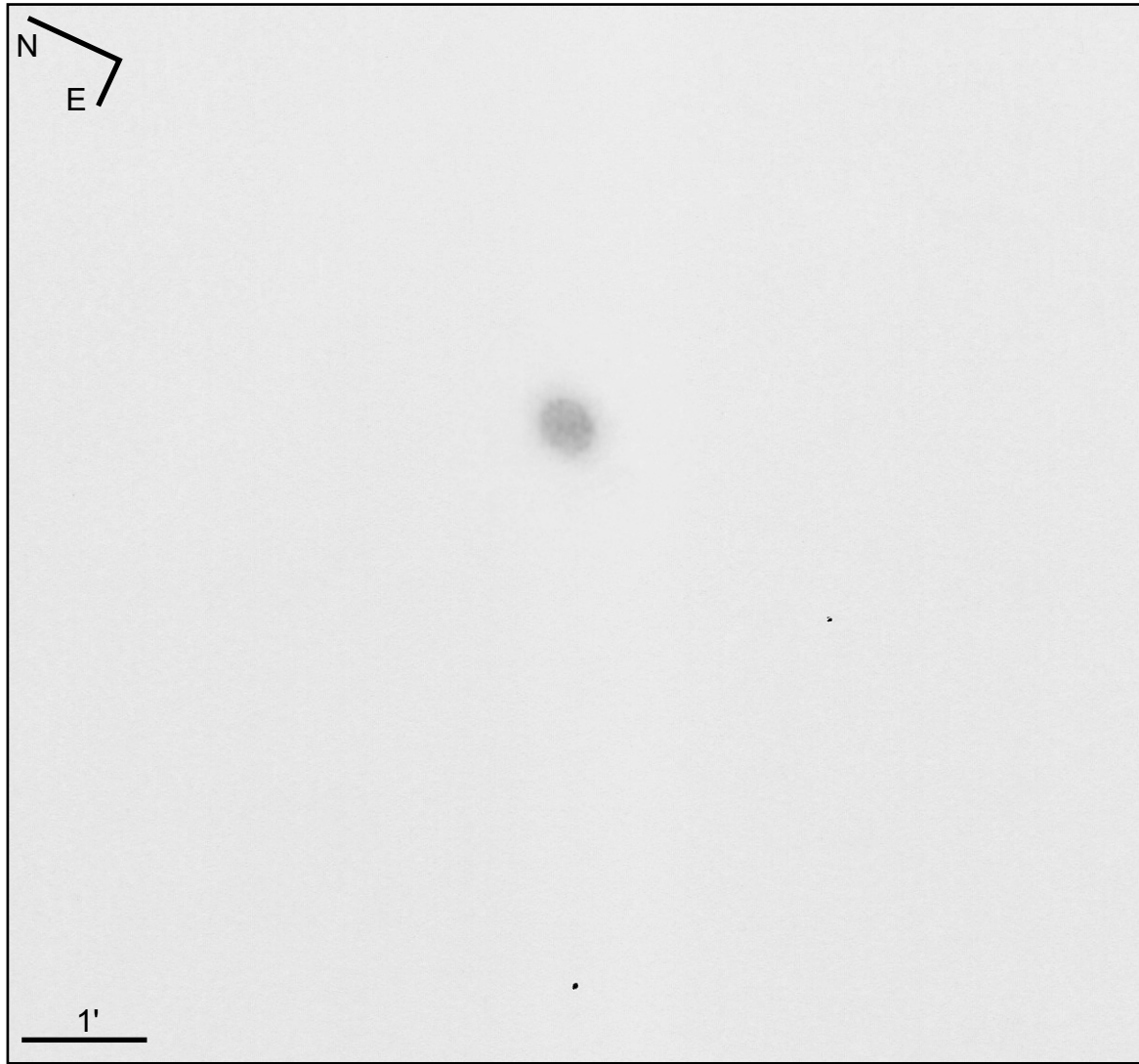


Instrument type: Newtonian (Tanzutsu)
 Aperture: 114 mm
 Focal length: 1000 mm
 Eyepiece: Ortho 12.5 mm
 Magnification: 80x
 Filter: no
 Seeing: 3/6
 Visual magnitude: ca. 5.5
 Location: Cittadella (PD) - Italy
 Date: February 13, 1988

Object data
 RA: 07h 41m 50.4s
 Dec: -14° 44' 09"
 Const.: Puppis
 Mag: 10.8
 Size: 73"x68"
 CS: 17.0 mag

Notes: Relatively faint nebula, which is visible without problem with averted vision. Rounded shape and uniform brightness. The image is nice because of the numerous stars of the M 46 cluster.

NGC 3242 - Ghost of Jupiter

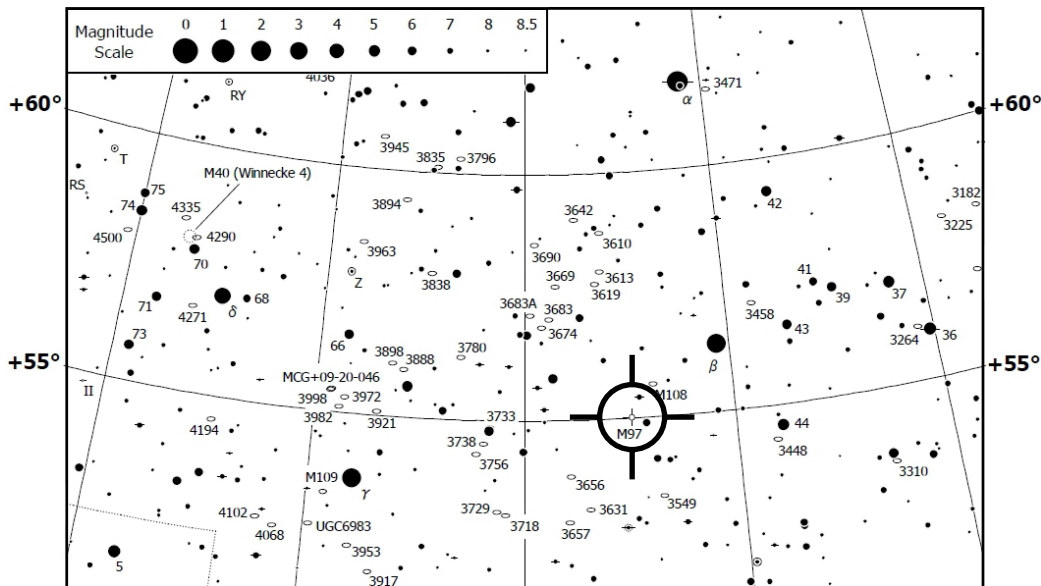
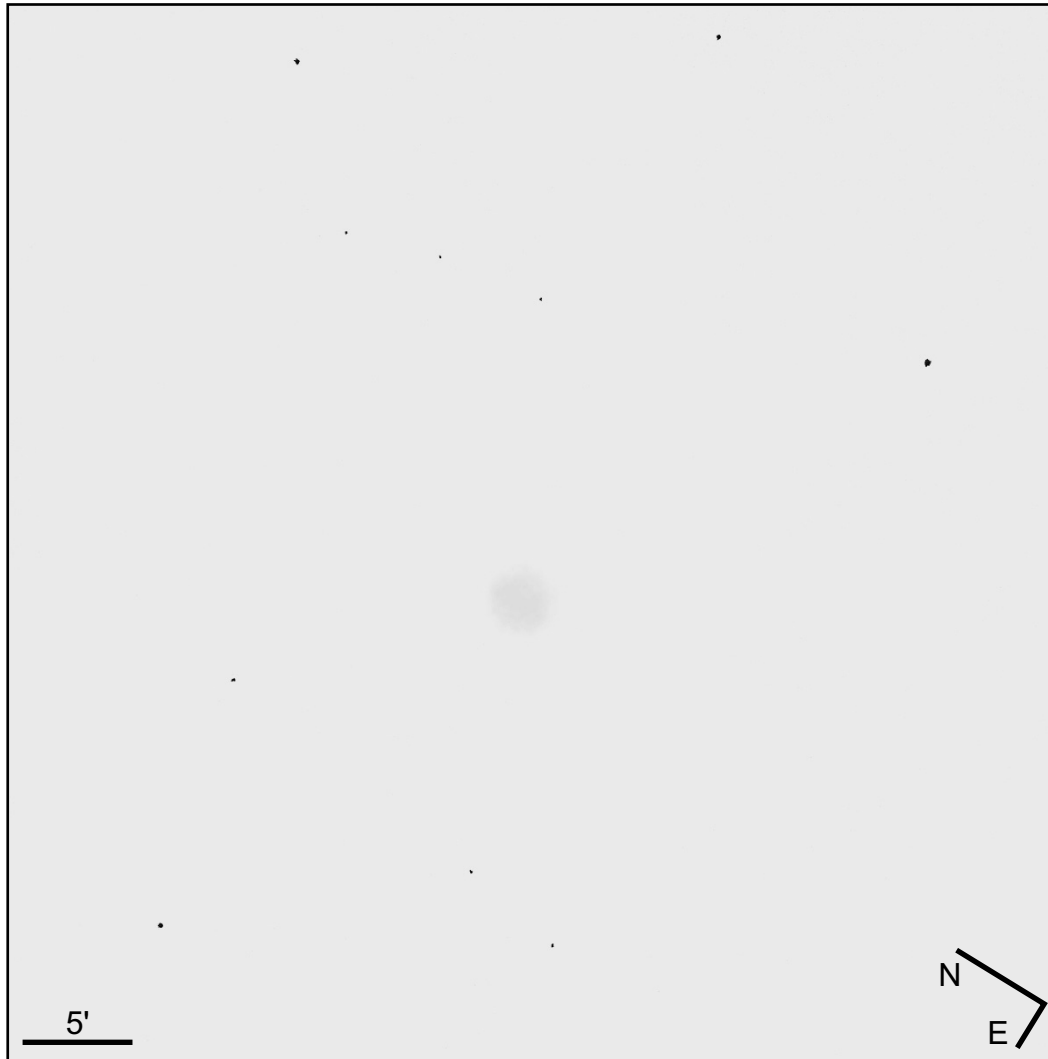


Instrument type: Refractor
 Aperture: 120 mm
 Focal length: 1000 mm
 Eyepiece: Or. 12.5 + barlow 3x
 Magnification: 240x
 Filter: no
 Seeing: 2/6
 Visual magnitude: ca. 4
 Location: Cittadella (PD) - Italy
 Date: May 6, 2011

Object data
 RA: 10h 24m 46.2s
 Dec: -18° 38' 34"
 Const.: Hydra
 Mag: 7.7
 Size: 45"x36"
 CS: 12.3 mag

Notes: *The nebula is bright despite its low elevation and the light pollution of this area of the sky. It shows a relatively uniform oval area elongated NW-SE, surrounded by a less defined and fainter halo.*

NGC 3587 (M 97) - Owl Nebula



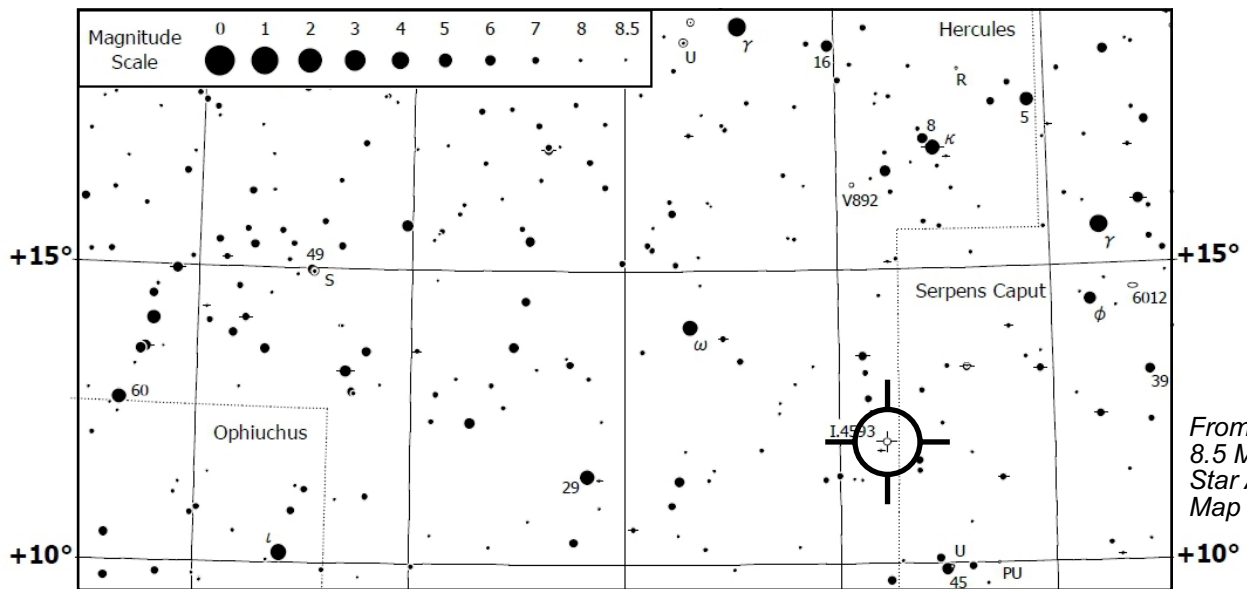
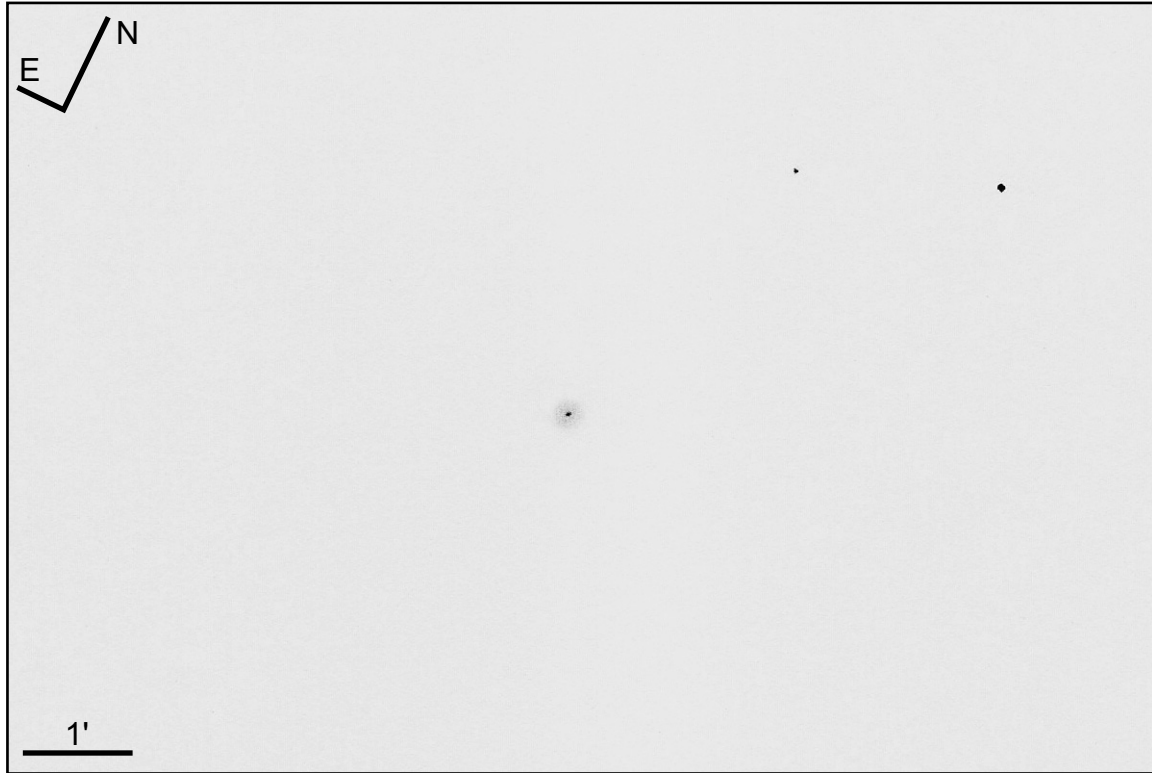
From Taki's
8.5 Magnitude
Star Atlas -
Map 42

Instrument type: Refractor
Aperture: 102 mm
Focal length: 500 mm
Eyepiece: Flat Field 8 mm
Magnification: 62.5x
Filter: O-III
Seeing: 3-4/6
Visual magnitude: ca. 4.0
Location: Cittadella (PD) - Italy
Date: March 10, 2012

Object data
RA: 11h 14m 47.71s
Dec: +55° 01' 07.7"
Const.: Ursa Major
Mag: 9.9
Size: 3.4'x3.3'
CS: 16.0 mag

Notes: The nebula is well visible with averted vision and O-III filter. It shows a rounded shape and uniform brightness. The border is undefined.

IC 4593 - White Eyed Pea

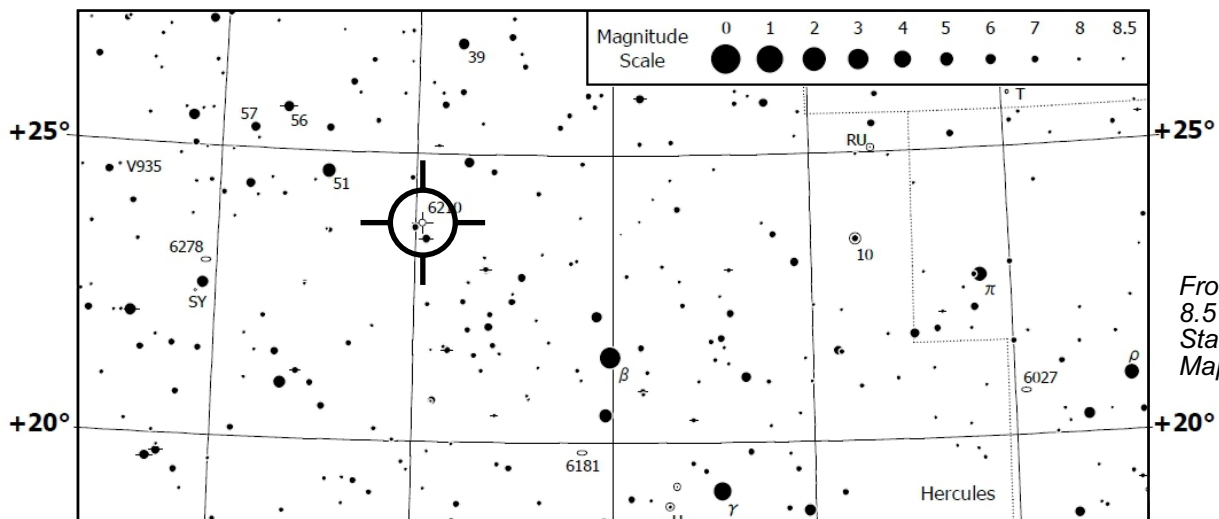
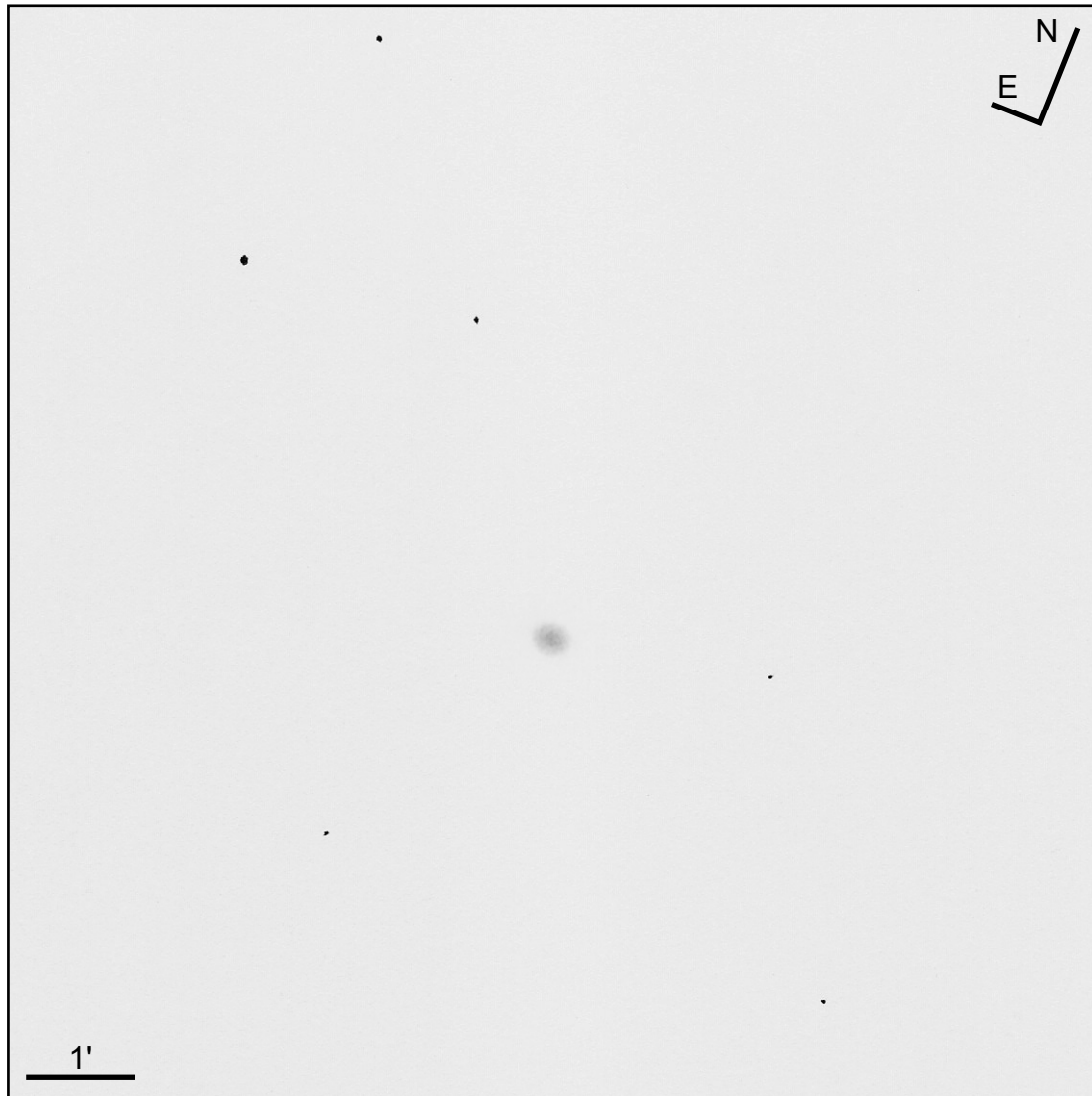


Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: June 26, 2011

Object data
RA: 16h 11m 44.53s
Dec: +12° 04' 17.2"
Const.: Hercules
Mag: 10.7
Size: 12"x10"
CS: 11.2 mag

Notes: The nebula has the appearance of a faint rounded halo surrounding the central star, which disturbs the observation. The border is undefined.

NGC 6210 - Turtle Nebula



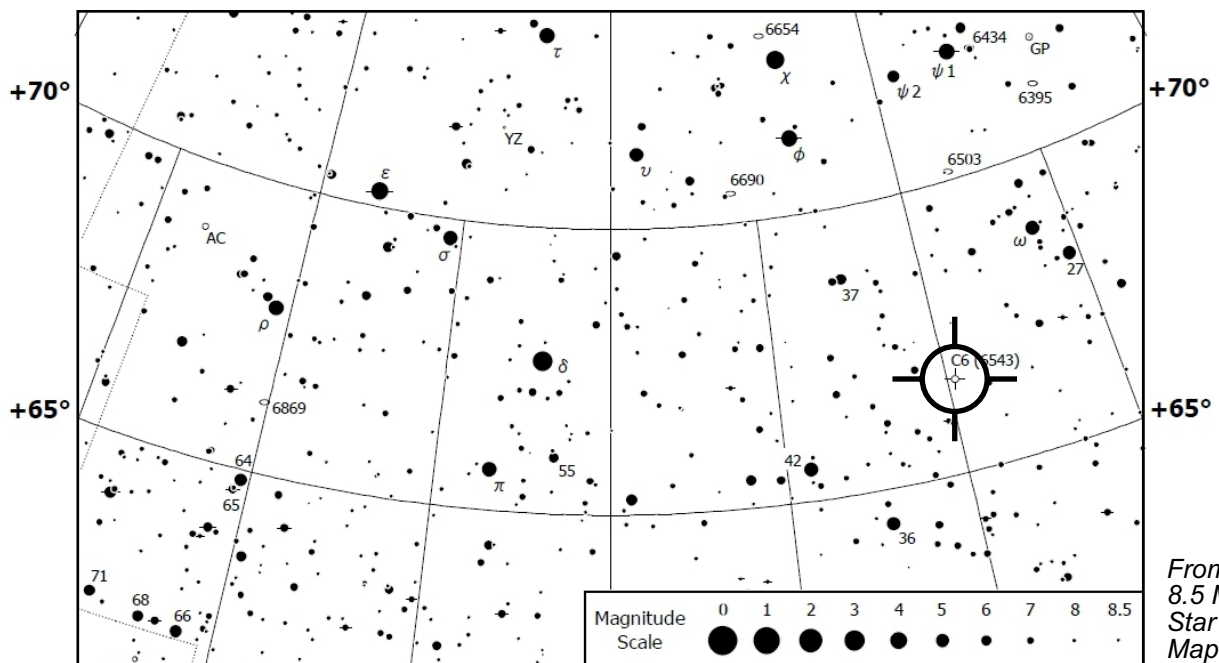
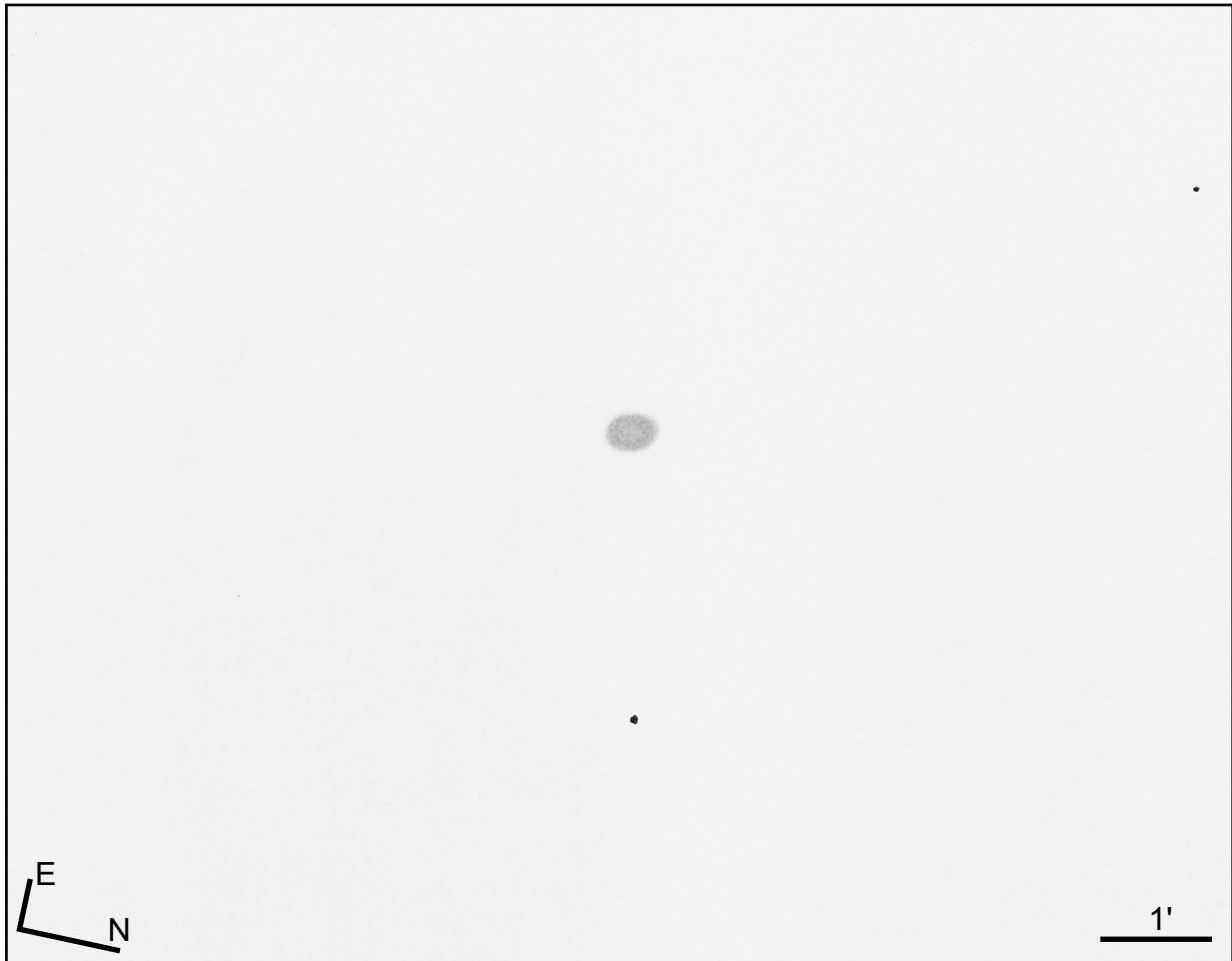
From Taki's
8.5 Magnitude
Star Atlas -
Map 45

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: June 26, 2011

Object data
RA: 16h 44m 29.4s
Dec: +23° 48' 00"
Const.: Hercules
Mag: 8.8
Size: 20"x13"
CS: 12.9 mag

Notes: Bright nebula showing a slightly oval shape elongated E-W and a fuzzy border. The brightness increases slightly at the center.

NGC 6543 - Cat's Eye Nebula



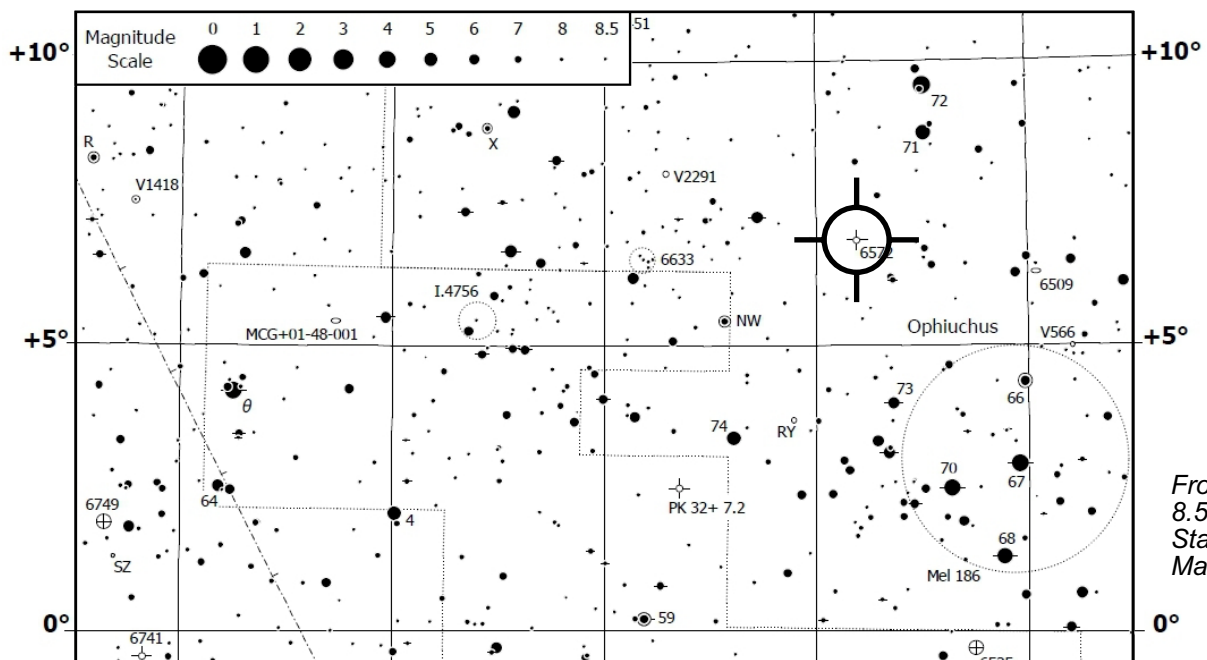
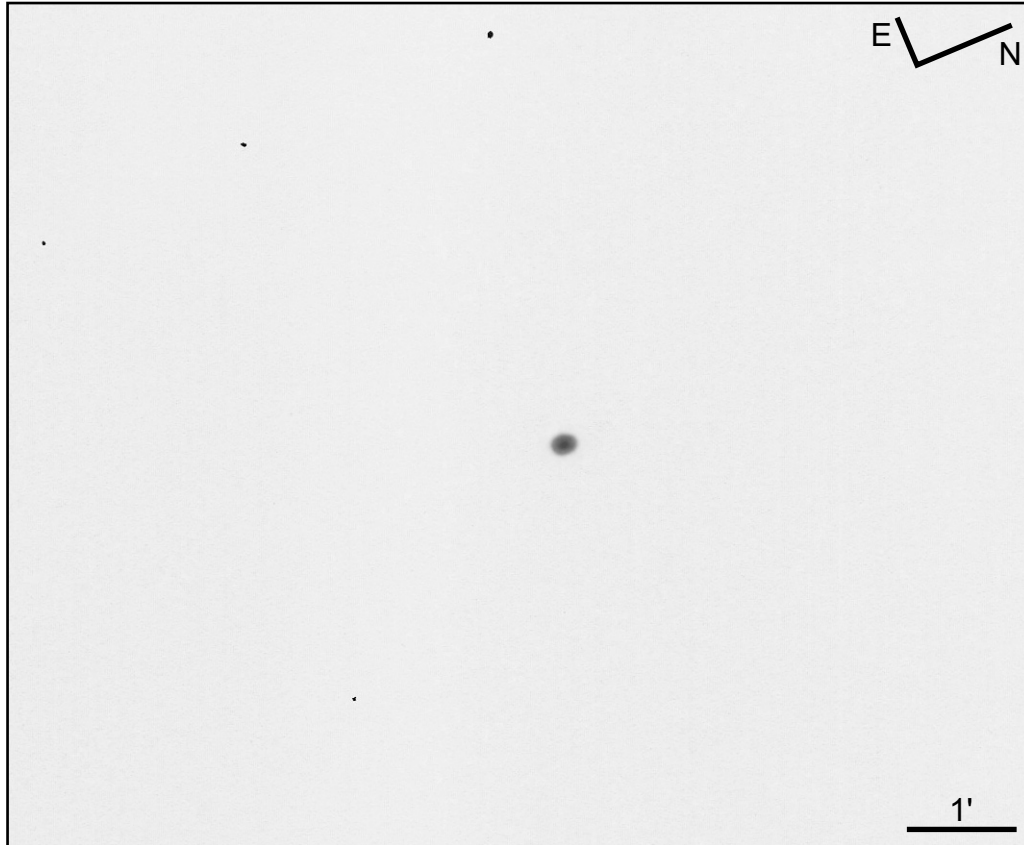
From Taki's
8.5 Magnitude
Star Atlas -
Map 4

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: O-III
Seeing: 4-5/6
Visual magnitude: ca. 4
Location: Cittadella (PD) - Italy
Date: August 28, 2010

Object data
RA: 17h 58m 33.37s
Dec: +66° 37' 59.1"
Const.: Draco
Mag: 8.1
Size: 23"x17"
CS: 11.1 mag

Notes: Oval shape elongated NE-SW, and high brightness. The border is sharp and shows an undefined irregularity with the O-III filter. A decrease in brightness is barely visible in the central area.

NGC 6572 - Blue Racquetball



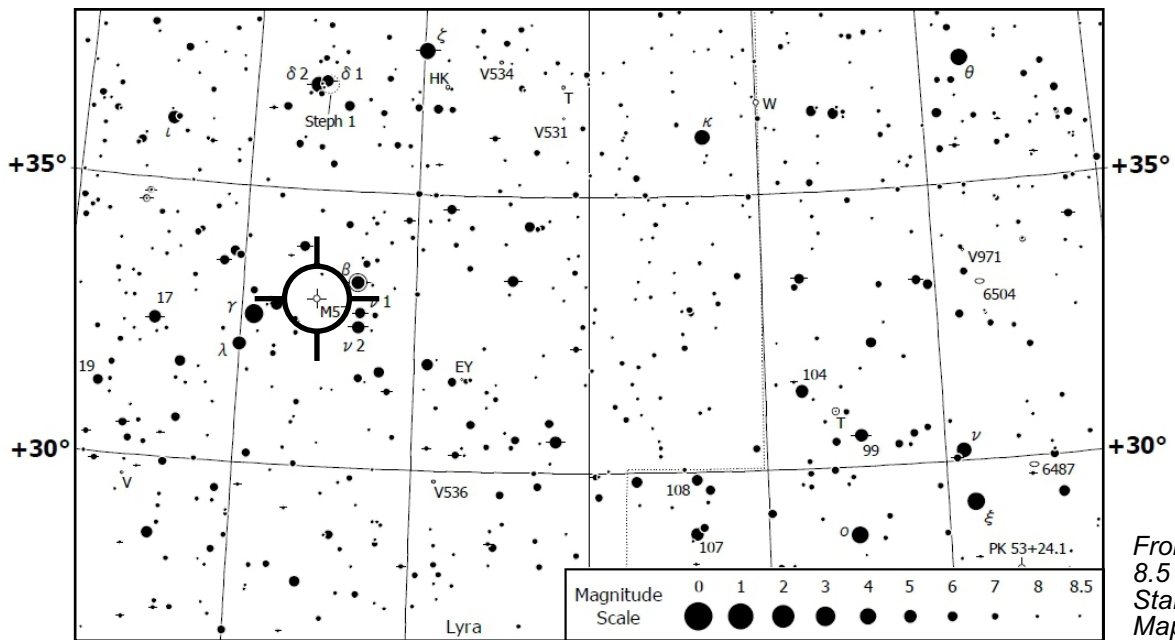
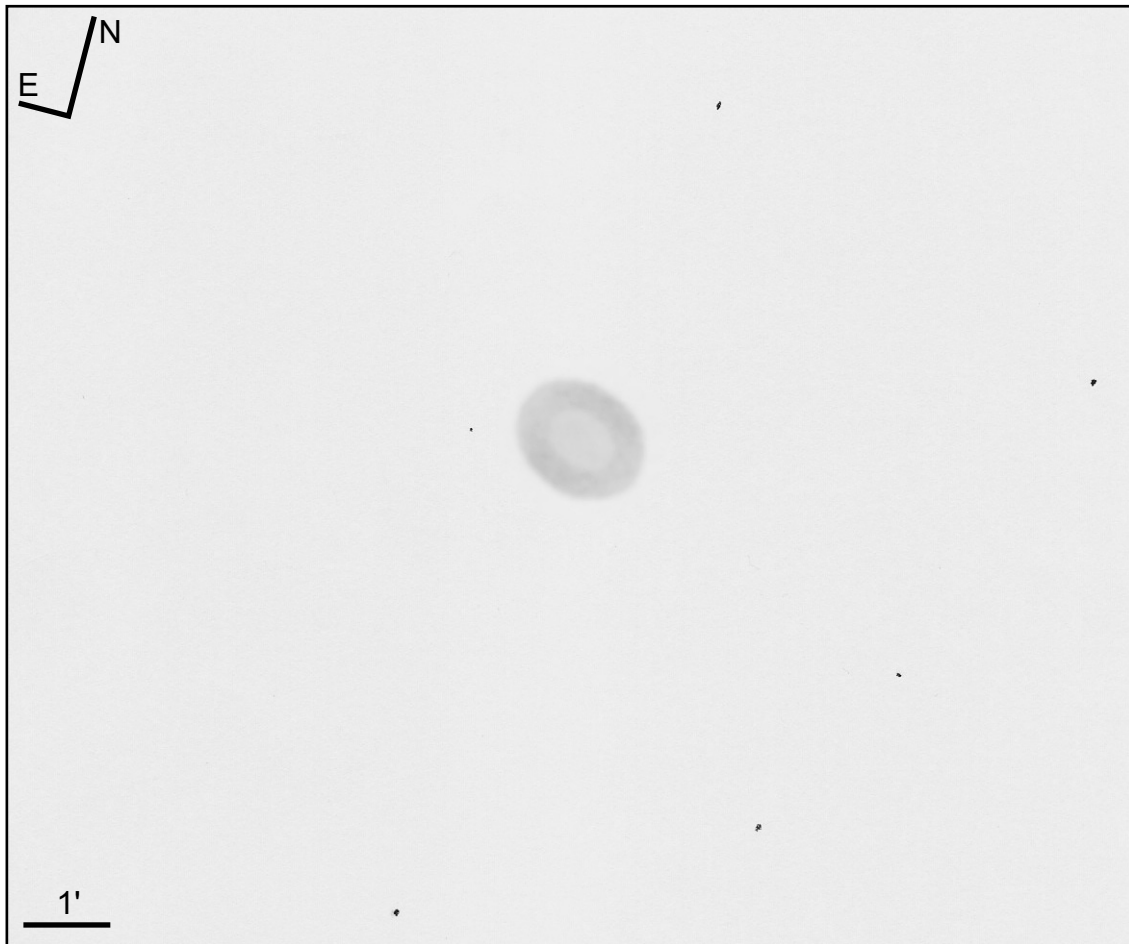
*From Taki's
8.5 Magnitude
Star Atlas -
Map 67*

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 2-3/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: June 27, 2011

Object data
RA: 18h 12m 06.37s
Dec: +06° 51' 13"
Const.: Ophiuchus
Mag: 8.1
Size: 16"x13"
CS: 13.1 mag

Notes: The nebula shows a very high surface brightness and a pale blue colour. The shape is slightly oval, elongated N-S. The center is slightly condensed.

NGC 6720 (M 57) - Ring Nebula



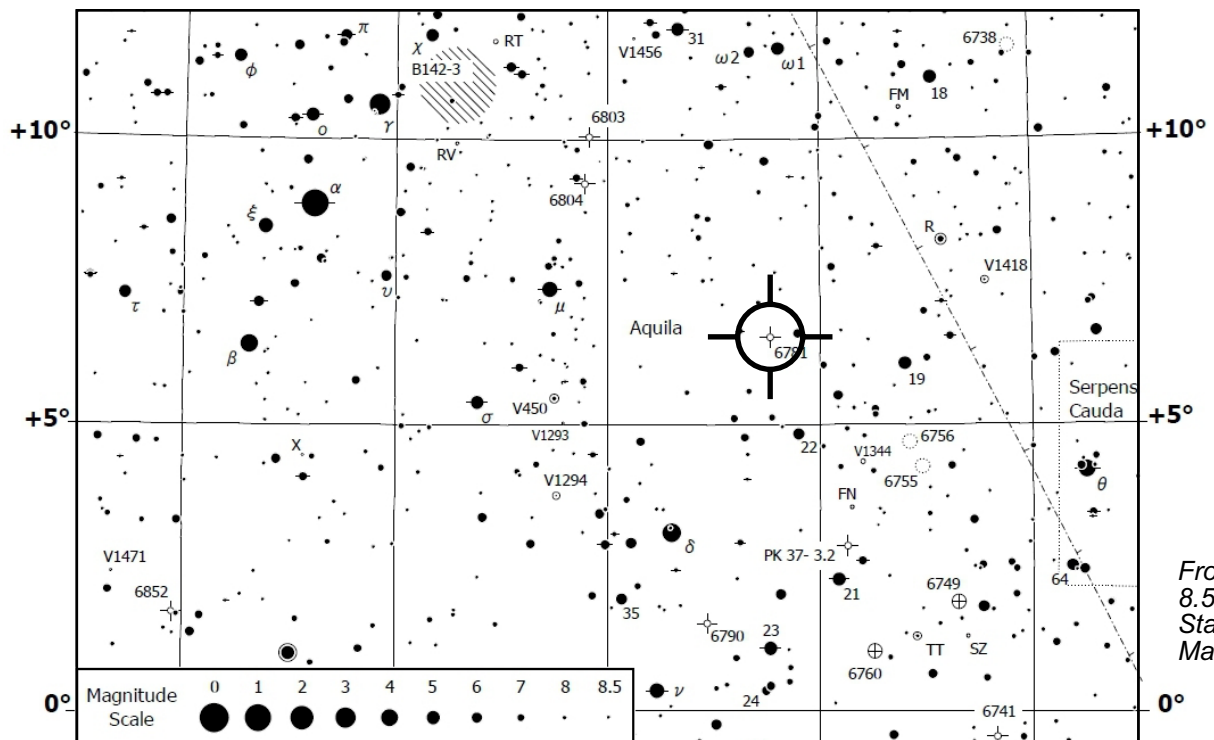
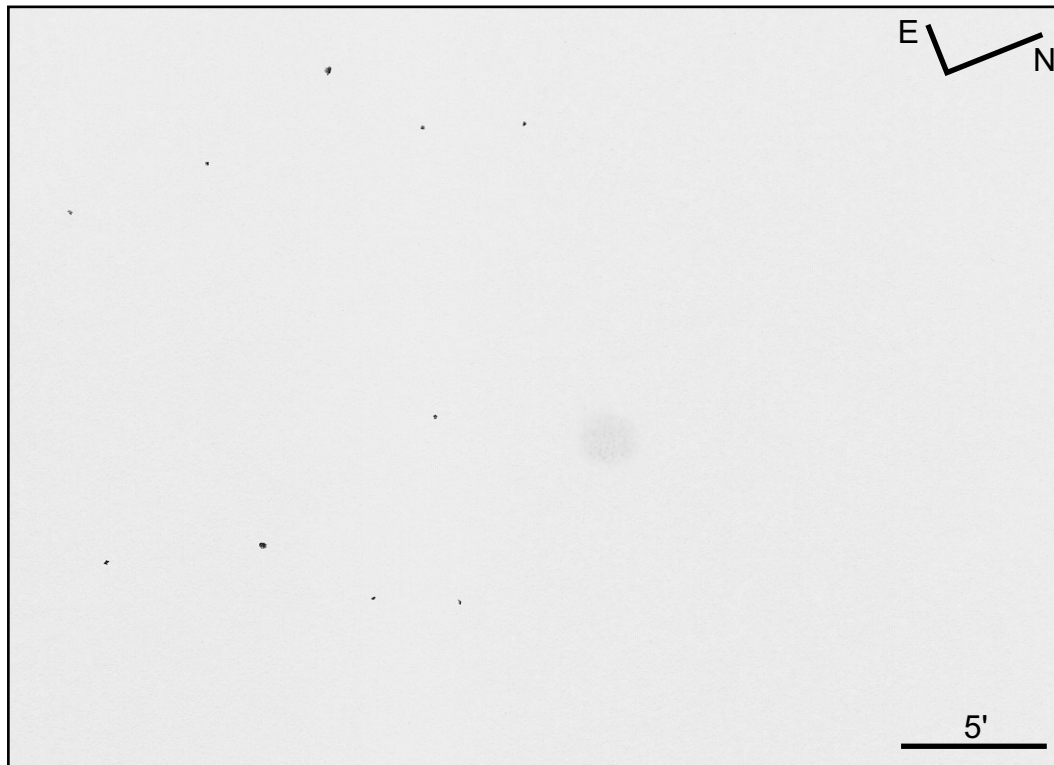
From Taki's
8.5 Magnitude
Star Atlas -
Map 43

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Edge On Planet. 5 mm
Magnification: 200x
Filter: no
Seeing: 3-4/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: July 15, 2010

Object data
RA: 18h 53m 35.09s
Dec: +33° 01' 44.5"
Const.: Lyra
Mag: 8.8
Size: 86"x62"
CS: 15.3 mag

Notes: Evident oval shape elongated NE-SW, and sharp border. The central area is distinguishable from the ring, which is slightly brighter along the long axis.

NGC 6781 - Snowglobe Nebula



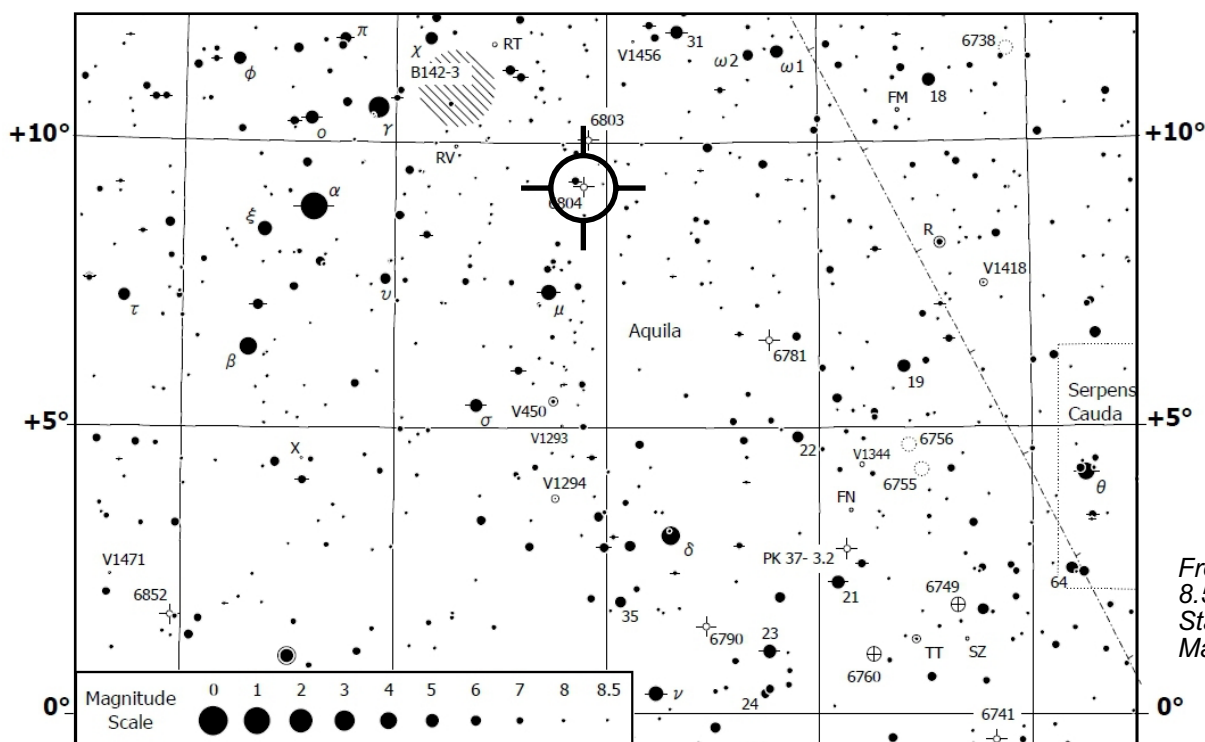
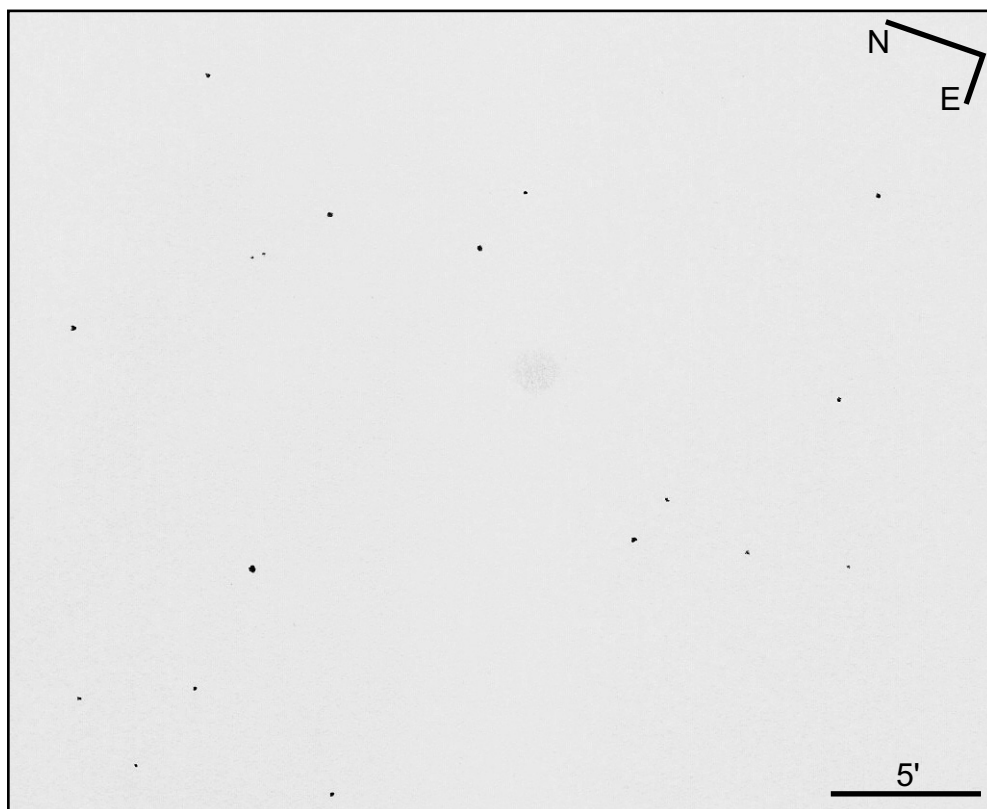
From Taki's
8.5 Magnitude
Star Atlas -
Map 66

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Flat Field 16 mm
Magnification: 62.5x
Filter: O-III
Seeing: 3/6
Visual magnitude: ca. 4.3
Location: Cittadella (PD) - Italy
Date: August 17, 2011

Object data
RA: 19h 18m 28.3s
Dec: +06° 32' 23"
Const.: Aquila
Mag: 11.4
Size: 1.9'x1.8'
CS: 15.0 mag

Notes: The nebula is faint and well visible with the O-III filter only. It is rounded and devoid of details. The border is relatively definite.

NGC 6804



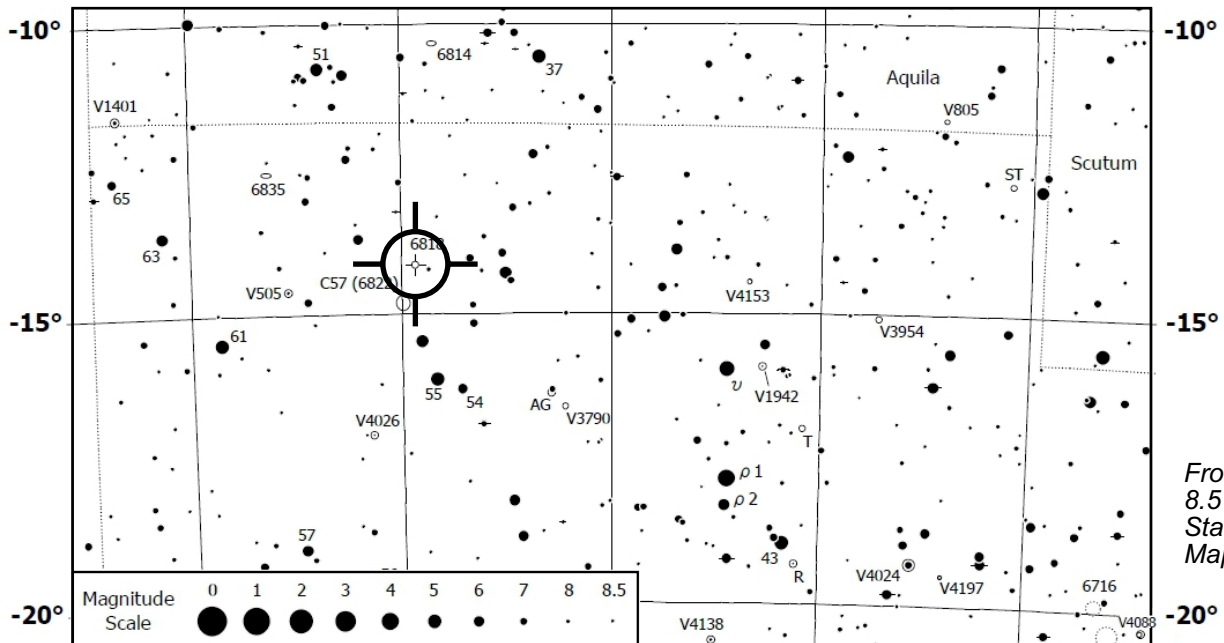
From Taki's
8.5 Magnitude
Star Atlas -
Map 66

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Flat Field 16 mm
Magnification: 62.5x
Filter: O-III
Seeing: 3/6
Visual magnitude: ca. 4.3
Location: Cittadella (PD) - Italy
Date: August 17, 2011

Object data
RA: 19h 31m 35.43s
Dec: +09° 13' 30.6"
Const.: Aquila
Mag: 12.0
Size: 62"x49"
CS: 14.3 mag

Notes: The nebula is distinguishable with the O-III filter but is visible with uncertainty without filter. It has a rounded shape with an indistinct border. It is uncertain an increase of brightness toward the center.

NGC 6818 - Little Gem Nebula



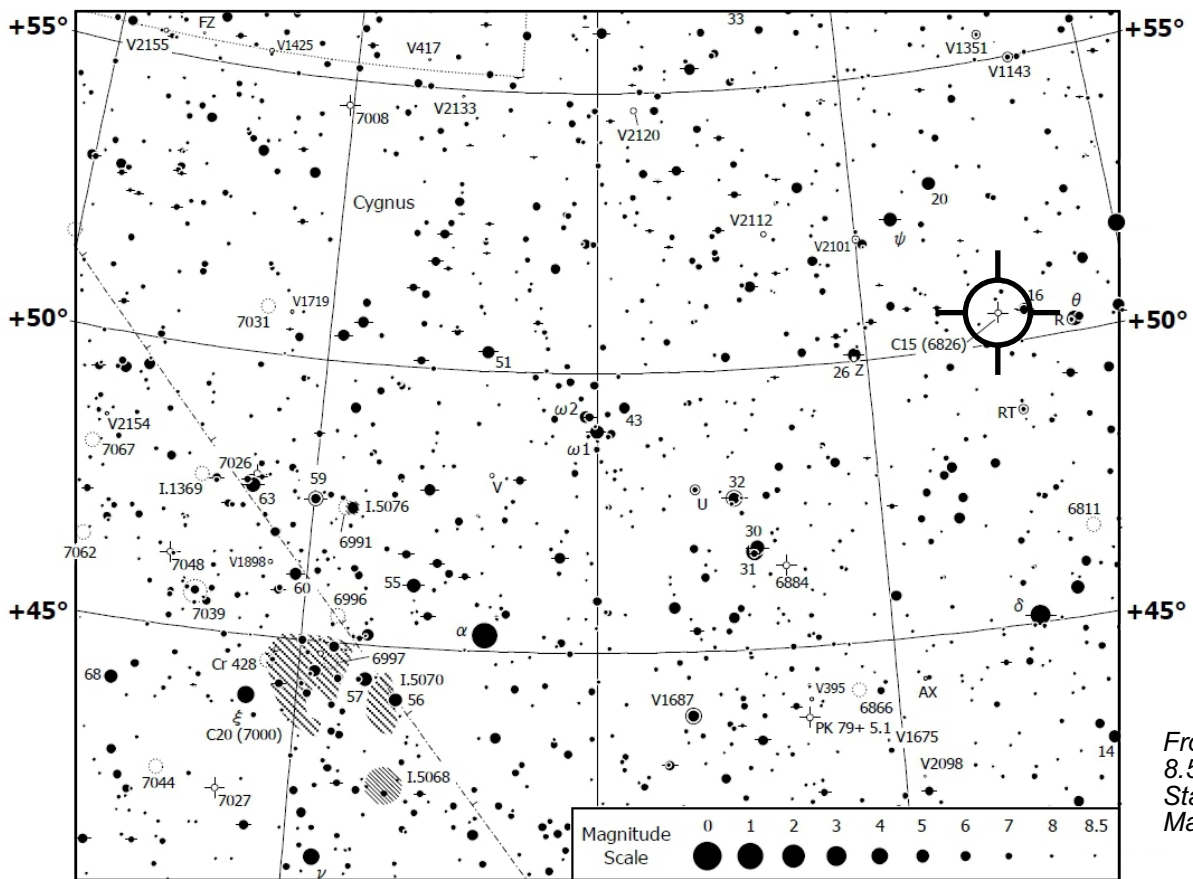
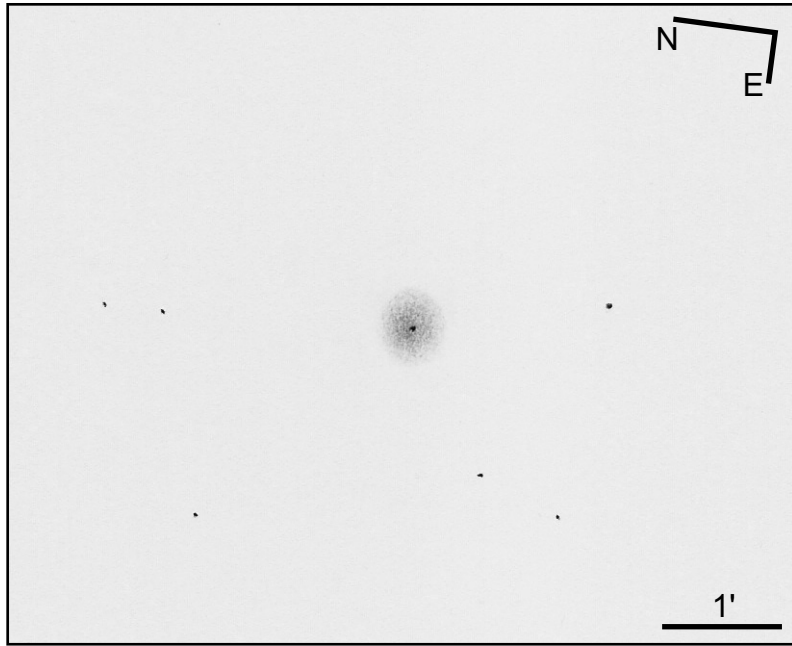
From Taki's
8.5 Magnitude
Star Atlas -
Map 90

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 4-5/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: August 27, 2011

Object data
RA: 19h 43m 57.76s
Dec: -14° 09' 11.4"
Const.: Sagittarius
Mag: 9.3
Size: 22"x15"
CS: 16 mag

Notes: The nebula is bright and rounded, resembling a small planet like Uranus. The border is well defined. Details are not recognizable with certainty.

NGC 6826 - Blinking Nebula



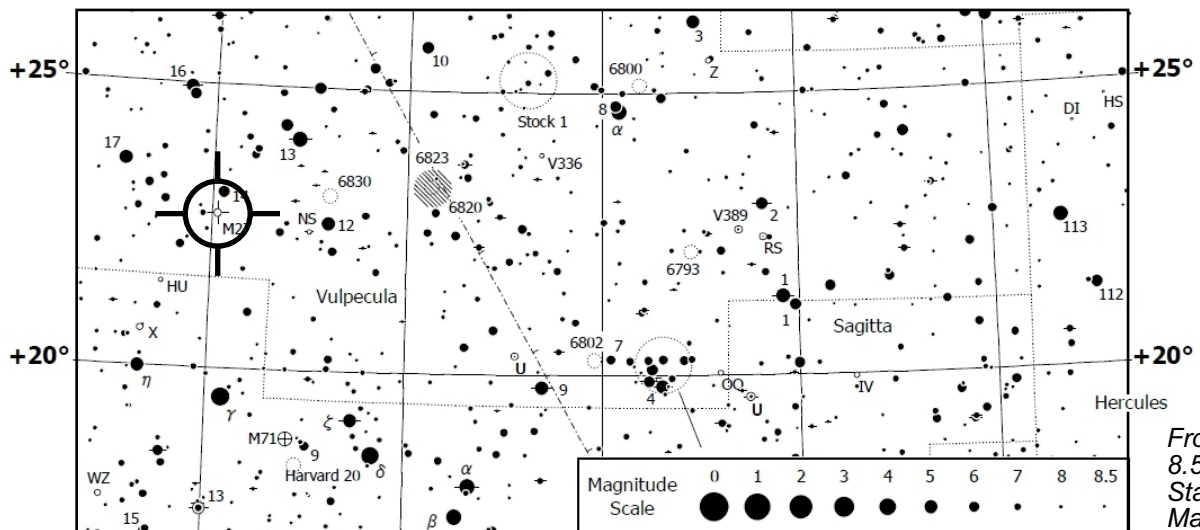
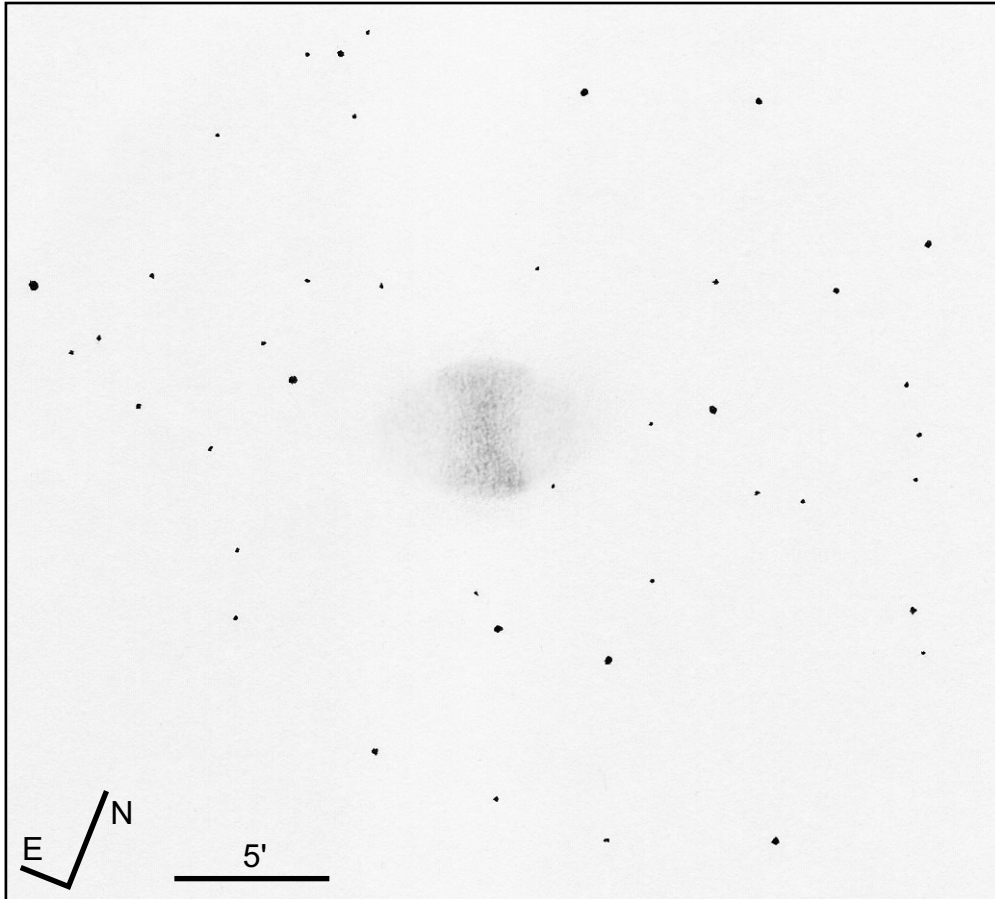
From Taki's
8.5 Magnitude
Star Atlas -
Map 17

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: August 7, 2010

Object data
RA: 19h 44m 48.17s
Dec: +50° 31' 30.4"
Const.: Cygnus
Mag: 8.8
Size: 27"x24"
CS: 10.4 mag

Notes: Oval shape elongated E-W,
and very high brightness, which
increases in the central part. The
central star is well visible. The
blinking effect is visible at low
magnifications only.

NGC 6853 (M 27) - Dumbbell Nebula



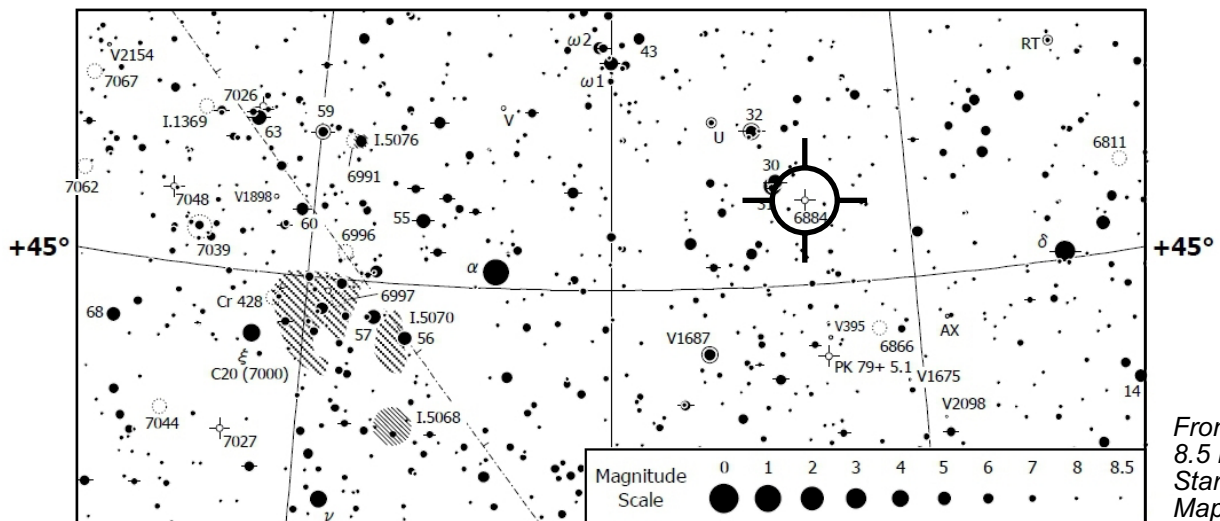
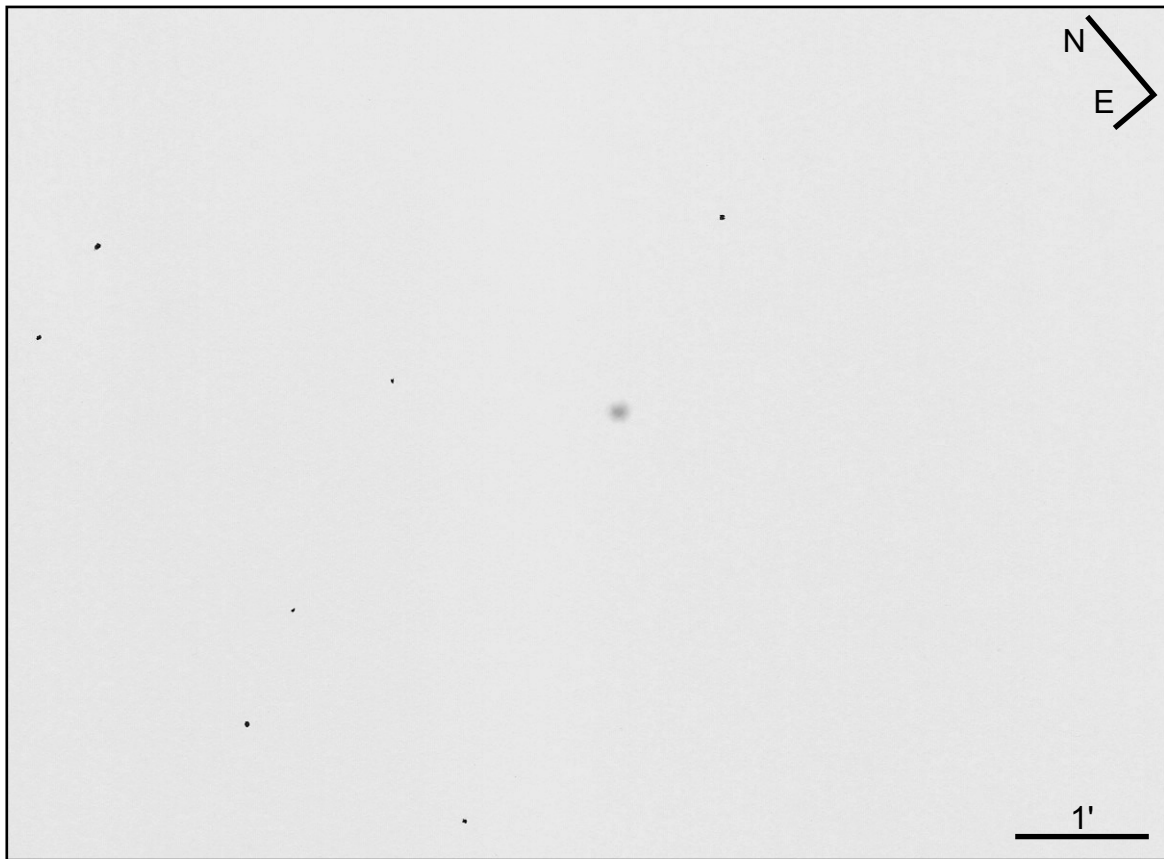
From Taki's
8.5 Magnitude
Star Atlas -
Map 42

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Flat Field 16 mm
Magnification: 62.5x
Filter: O-III
Seeing: 2-3/6
Visual magnitude: ca. 5.5
Location: Cittadella (PD) - Italy
Date: September 10, 2010

Object data
RA: 19h 59m 36.33s
Dec: +22° 43' 16.0"
Const.: Vulpecula
Mag: 7.4
Size: 8.0'x5.7'
CS: 13.9 mag

Notes: *Impressive image. General hourglass shape. The brighter area is placed near the SW corner. The two lateral handles, elongated NW-SE, are faint and visible with the O-III filter and averted vision only.*

NGC 6884



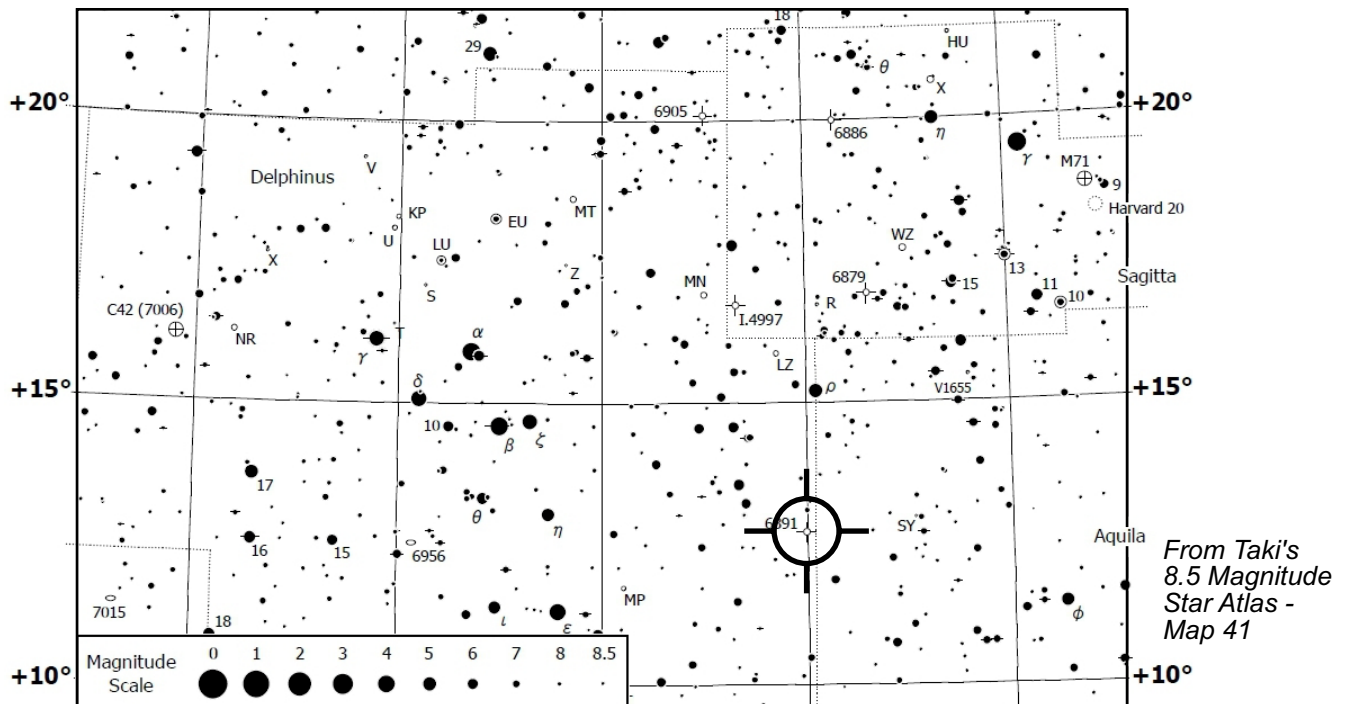
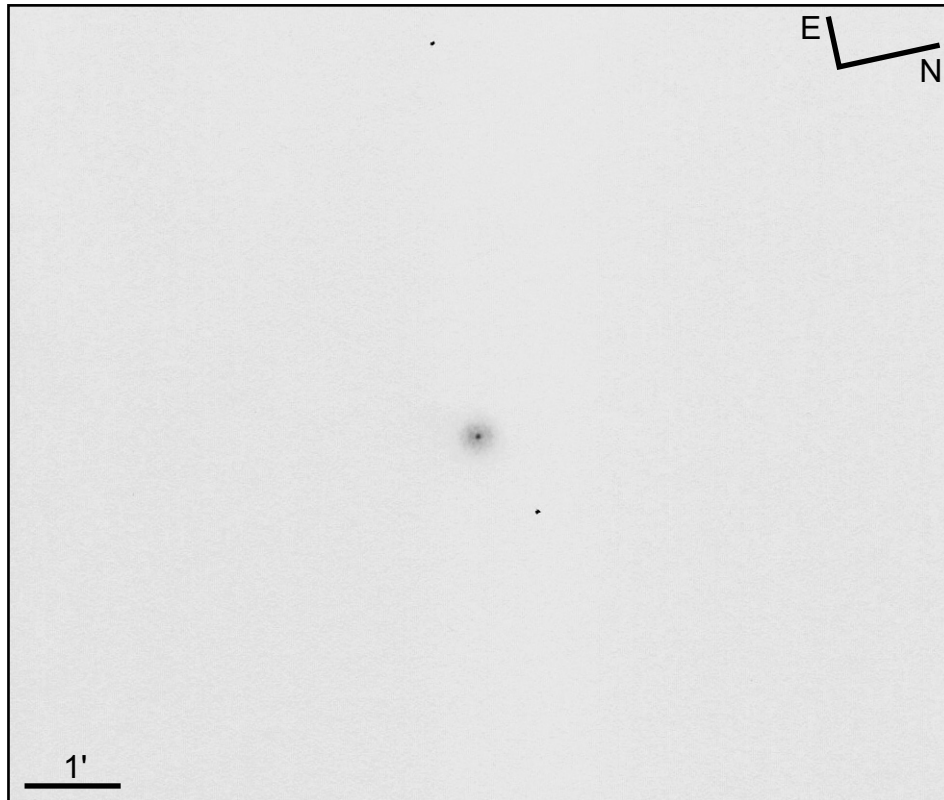
From Taki's
8.5 Magnitude
Star Atlas -
Map 17

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: July 4, 2011

Object data
RA: 20h 10m 23.65s
Dec: +46° 27' 39.6"
Const.: Cygnus
Mag: 10.9
Size: 5.6"x5.0"
CS: 15.7 mag

Notes: Small but well distinguishable nebula that shows a rounded shape and is slightly condensed. The border is fuzzy.

NGC 6891

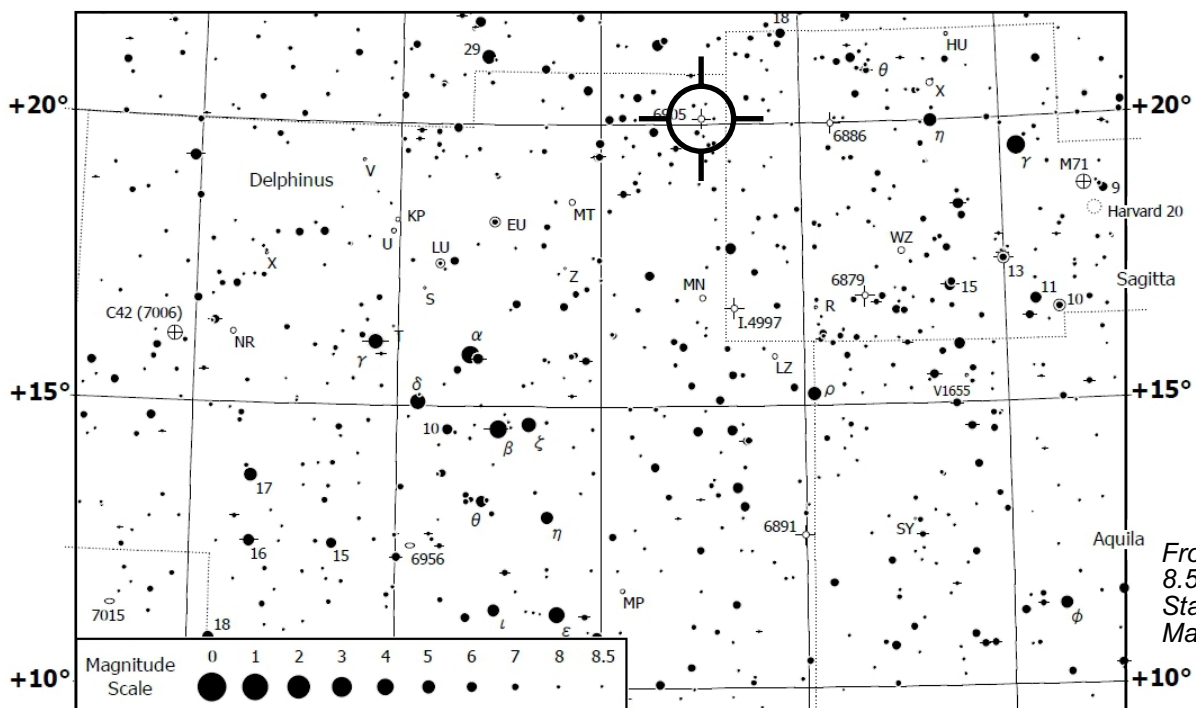


Instrument type: Refractor
 Aperture: 120 mm
 Focal length: 1000 mm
 Eyepiece: Planetary HR 4 mm
 Magnification: 250x
 Filter: no
 Seeing: 3/6
 Visual magnitude: ca. 4.3
 Location: Cittadella (PD) - Italy
 Date: August 17, 2011

Object data
 RA: 20h 15m 08.85s
 Dec: +12° 42' 15.2"
 Const.: Delphinus
 Mag: 10.5
 Size: 10"
 CS: 11.1 mag

Notes: *Bright and rounded nebula showing a fuzzy border. It shows a central condensation of stellar appearance.*

NGC 6905 - Blue Flash Nebula

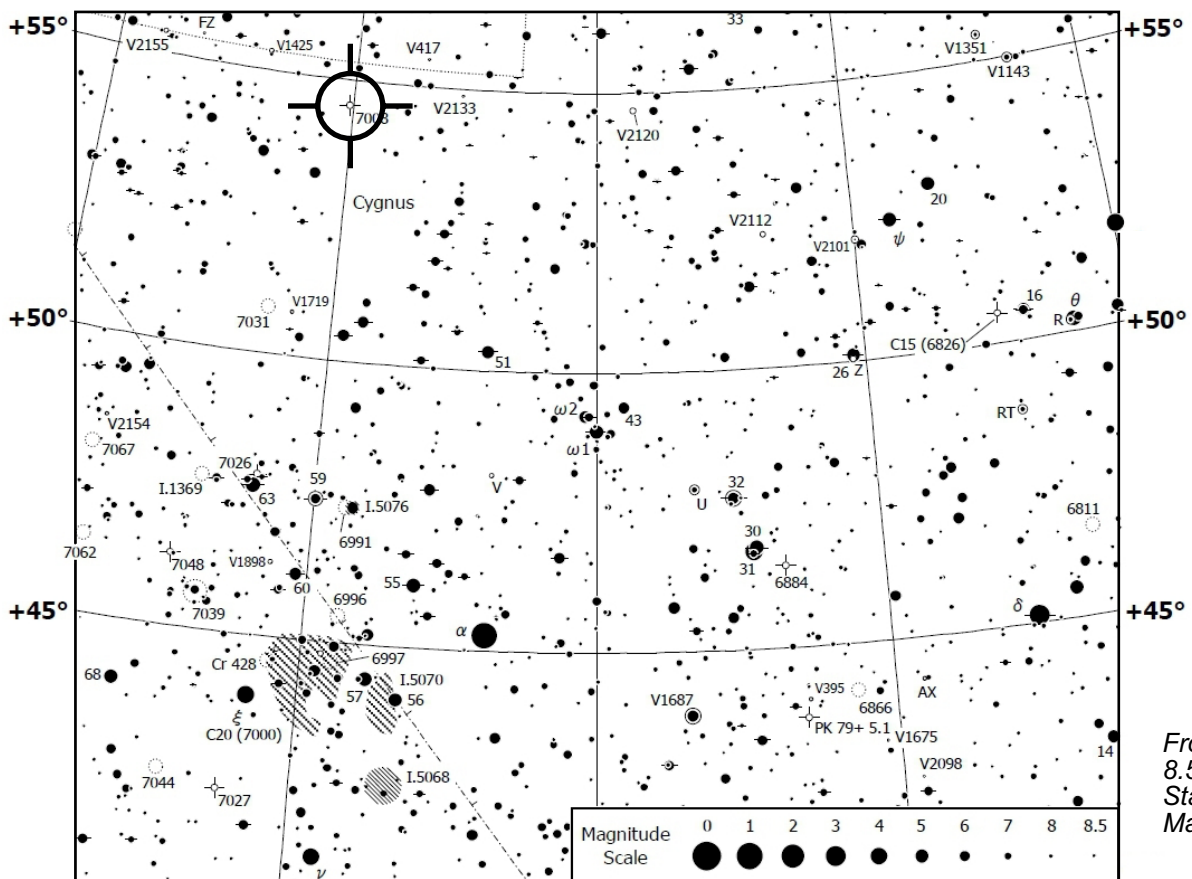
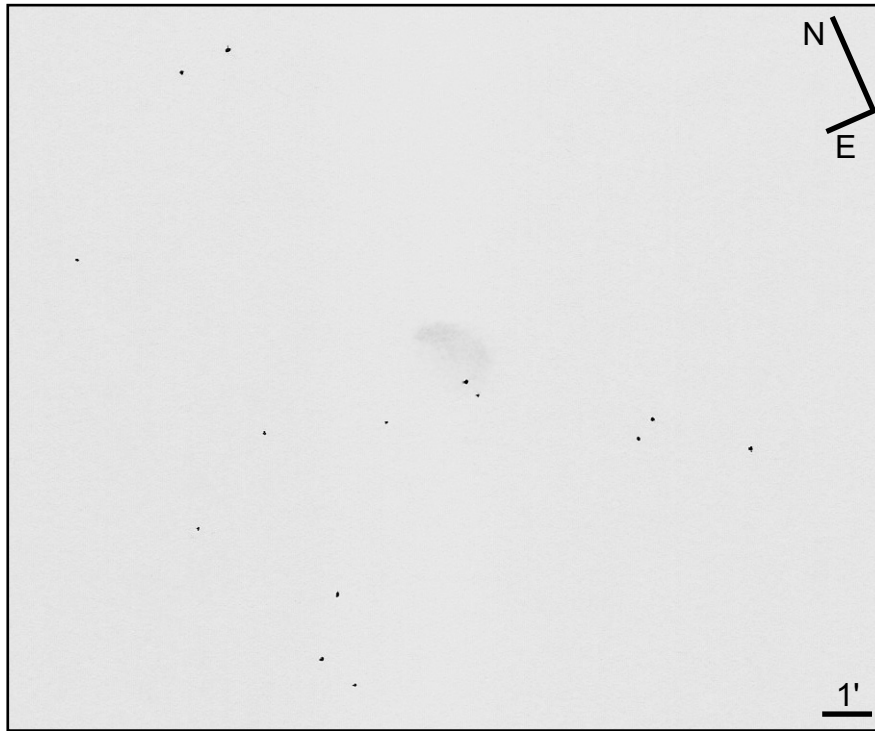


Instrument type: Refractor
 Aperture: 120 mm
 Focal length: 1000 mm
 Eyepiece: Planetary HR 4 mm
 Magnification: 250x
 Filter: no
 Seeing: 3/6
 Visual magnitude: ca. 5
 Location: Cittadella (PD) - Italy
 Date: July 4, 2011

Object data
 RA: 20h 22m 23.02s
 Dec: +20° 06' 16.4"
 Const.: Delphinus
 Mag: 11.1
 Size: 42"x35"
 CS: 14.0 mag

Notes: *The nebula is well visible without filters, and shows uniform brightness and a relatively distinct border. It is barely recognizable an overall oval shape elongated N-S.*

NGC 7008 - Fetus Nebula

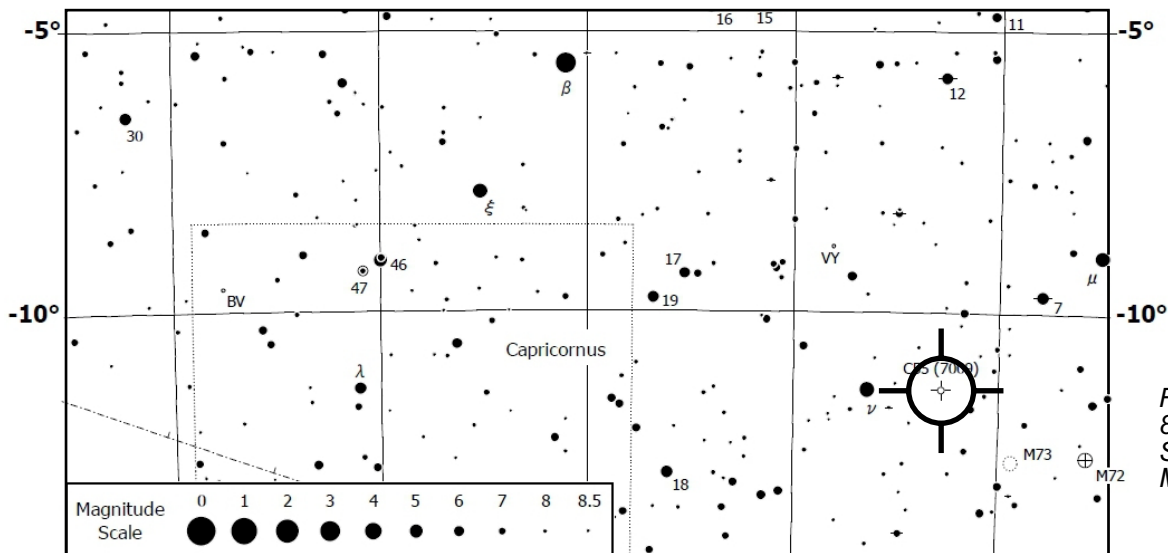
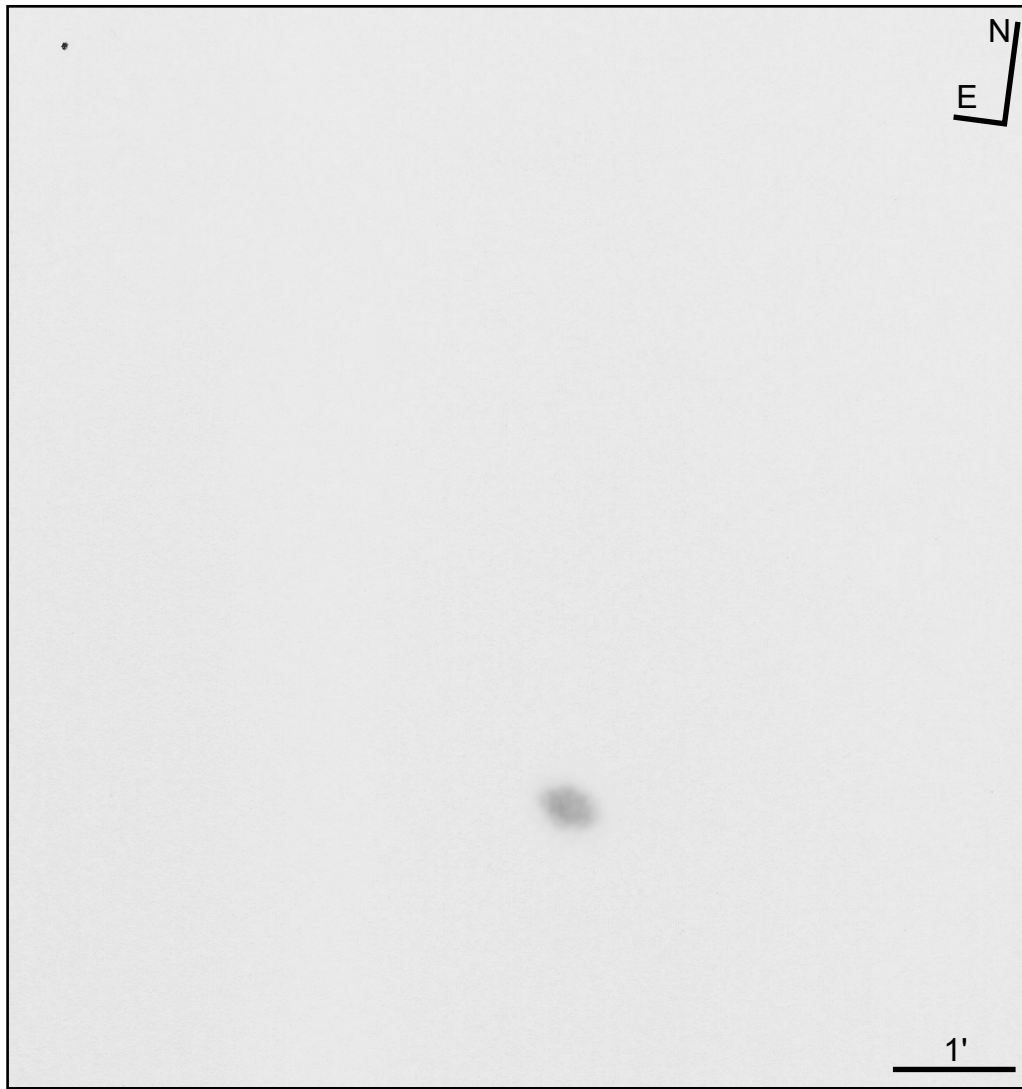


Instrument type: Refractor
 Aperture: 120 mm
 Focal length: 1000 mm
 Eyepiece: Flat Field 8 mm
 Magnification: 125x
 Filter: O-III
 Seeing: 2-3/6
 Visual magnitude: ca. 5
 Location: Cittadella (PD) - Italy
 Date: June 27, 2011

Object data
 RA: 21h 00m 32.8s
 Dec: +54° 32' 35"
 Const.: Cygnus
 Mag: 10.7
 Size: 98"x75"
 CS: 13.2 mag

Notes: Interesting nebula showing an asymmetrical curved shape. The northern part is brighter, sharper and bends toward the east. The southern border is more undefined.

NGC 7009 - Saturn Nebula



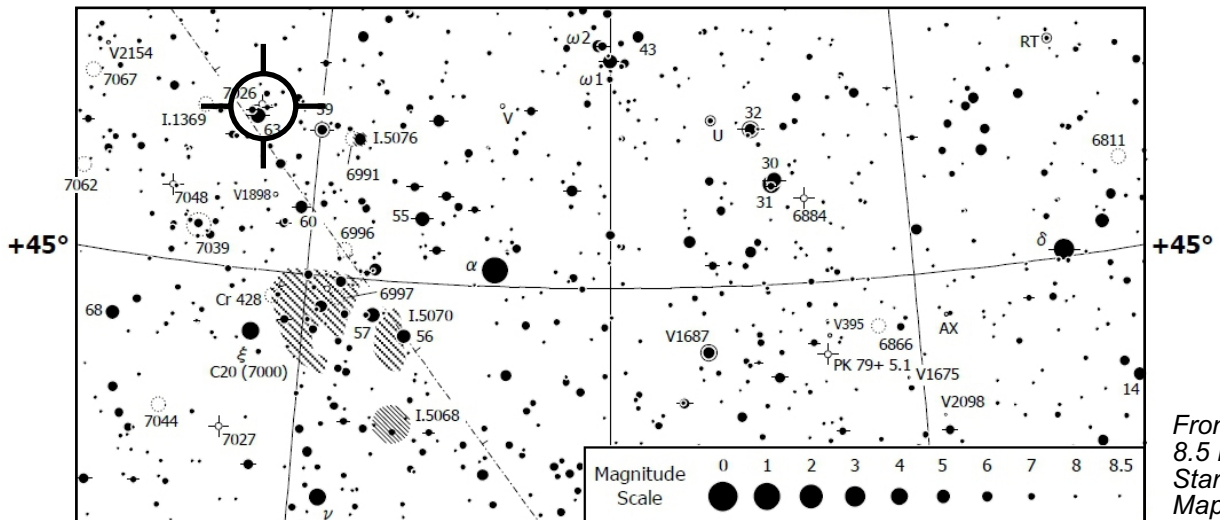
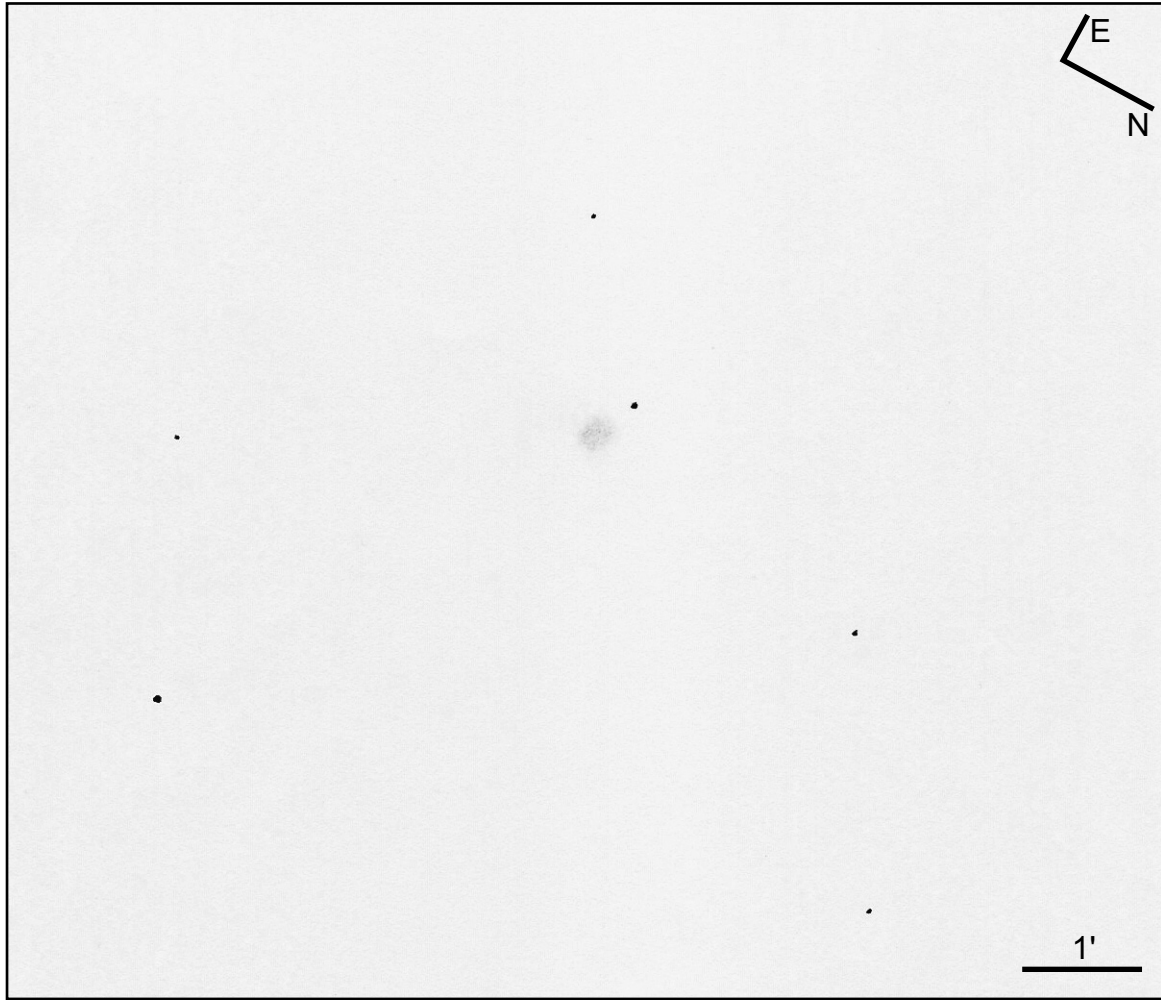
From Taki's
8.5 Magnitude
Star Atlas -
Map 64

Instrument type: Schmidt-Cassegrain
Aperture: 127 mm
Focal length: 1250 mm
Eyepiece: Edge On Planetary 5 mm
Magnification: 250x
Filter: no
Seeing: 3/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: August 19, 2011

Object data
RA: 21h 04m 10.7s
Dec: -11° 21' 49"
Const.: Aquarius
Mag: 8.0
Size: 44"x23"
CS: 12.8 mag

Notes: It is easily visible the elongation of the nebula and an angularity at the two extremes. The brightness is high and uniform, and the border is a little fuzzy.

NGC 7026 - Cheeseburger Nebula



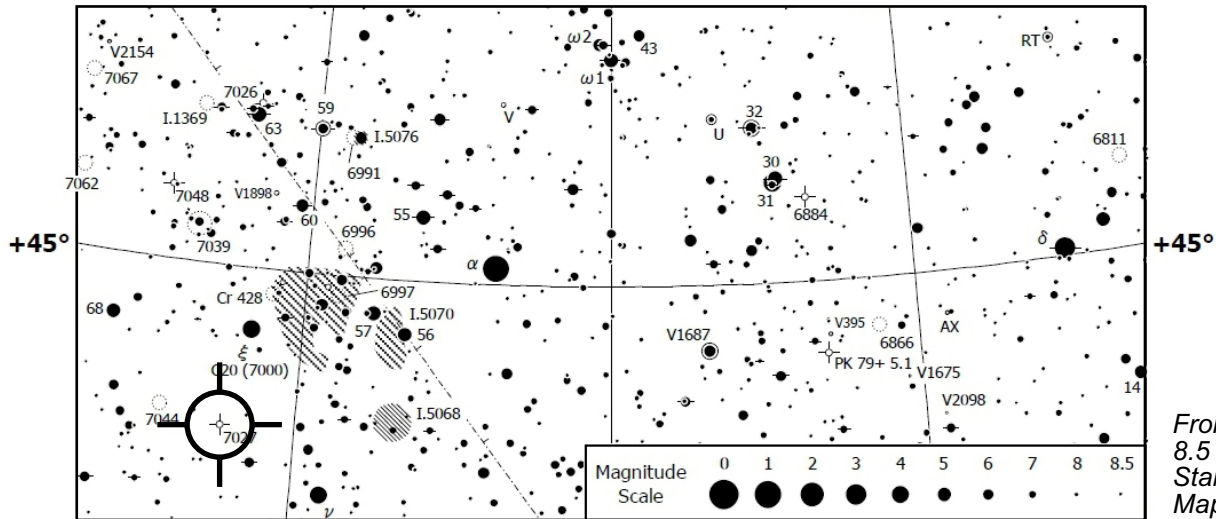
From Taki's
8.5 Magnitude
Star Atlas -
Map 17

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 5-6/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: December 10, 2010

Object data
RA: 21h 06m 18.55s
Dec: +47° 51' 08.0"
Const.: Cygnus
Mag: 10.9
Size: 27"x11"
CS: 14.5 mag

Notes: The nebula is well visible. A vague rectangular shape slightly elongated E-W is recognizable. The N-S extensions of the nebula are not clearly visible.

NGC 7027 - Magic Carpet Nebula



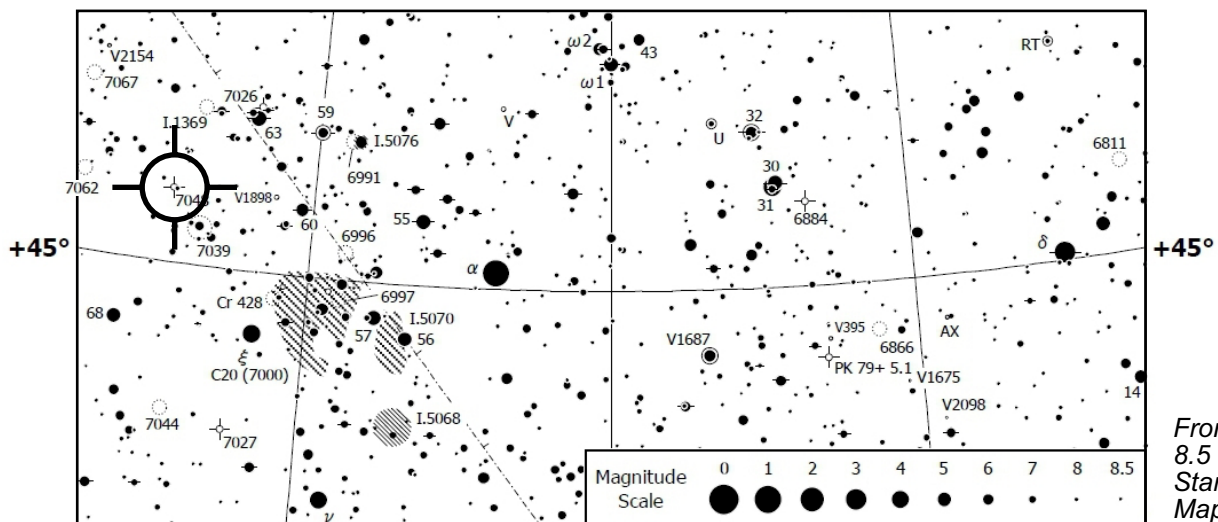
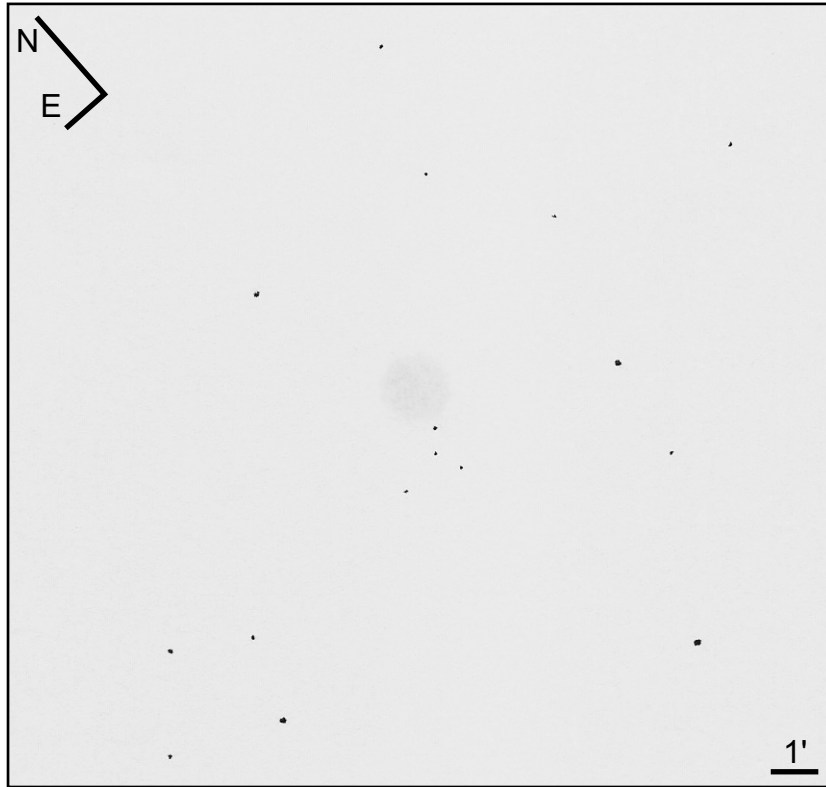
From Taki's
8.5 Magnitude
Star Atlas -
Map 17

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3-4/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: August 7, 2010

Object data
RA: 21h 07m 01.69s
Dec: +42° 14' 10.1"
Const.: Cygnus
Mag: 8.5
Size: 18"x10"
CS: 16.3 mag

Notes: The nebula shows a parallelogram shape, with very sharp northern and western borders, whereas the other two are undefined. The area close to the western apex is very bright and shows an almost stellar appearance.

NGC 7048 - Disk Ghost



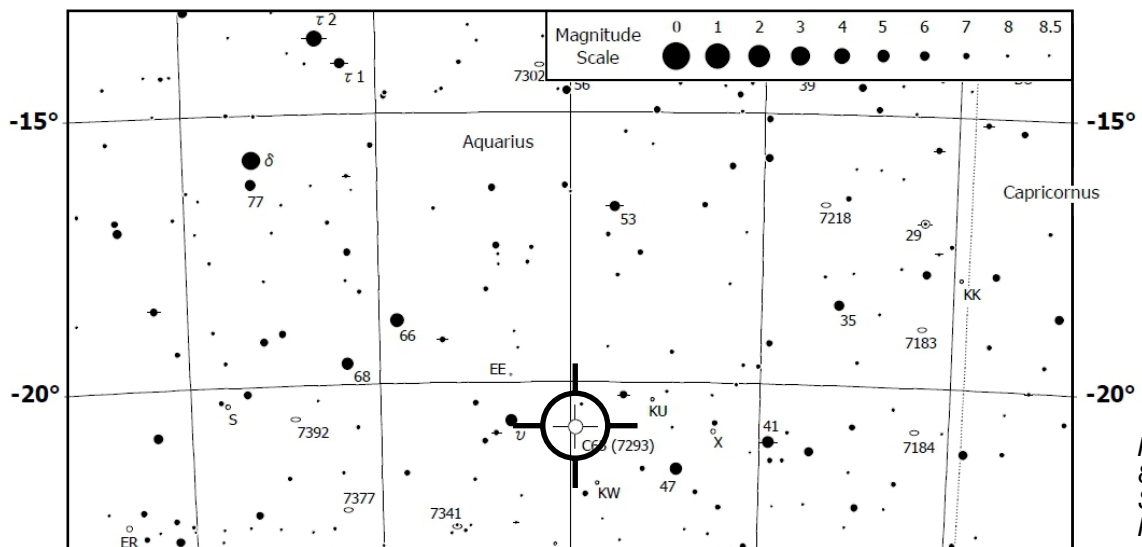
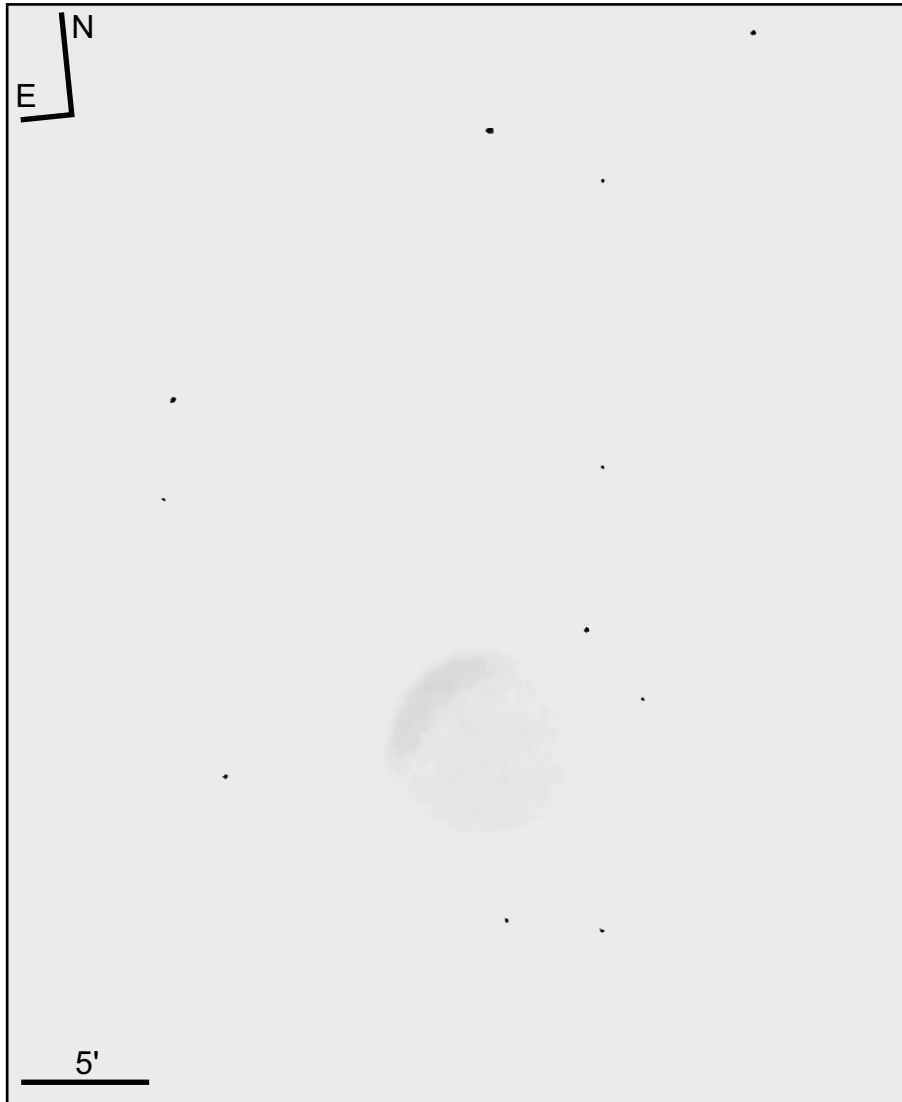
From Taki's
8.5 Magnitude
Star Atlas -
Map 17

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Flat Field 8 mm
Magnification: 125x
Filter: O-III
Seeing: 3/6
Visual magnitude: ca. 5
Location: Cittadella (PD) - Italy
Date: July 4, 2011

Object data
RA: 21h 14m 14.1s
Dec: +46° 17' 28"
Const.: Cygnus
Mag: 12.1
Size: 1.02'
CS: 19.1 mag

Notes: Faint nebula, visible with the O-III filter only. It shows a rounded shape and uniform brightness.

NGC 7293 - Helix Nebula



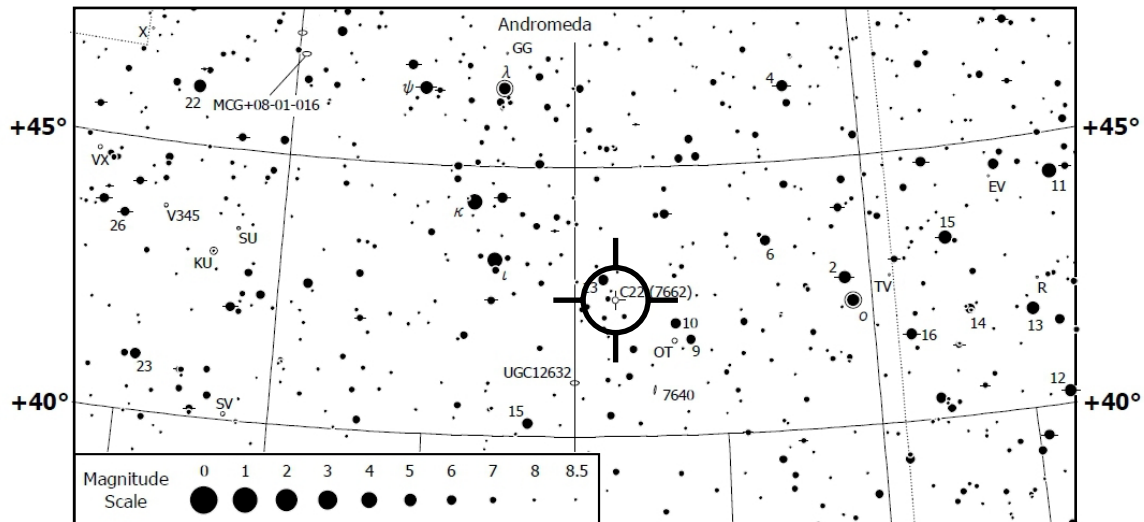
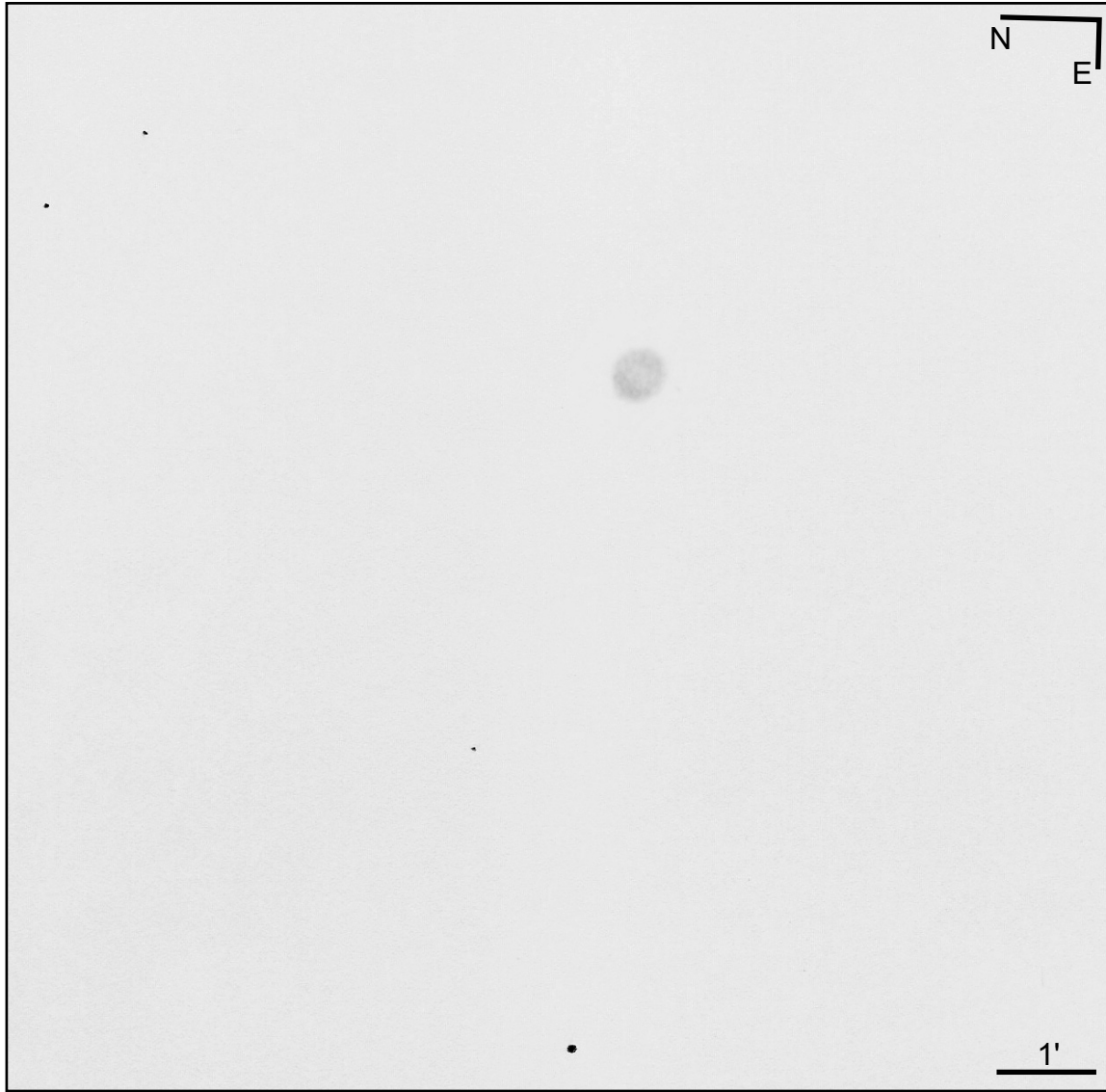
From Taki's
8.5 Magnitude
Star Atlas -
Map 87

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: SWA 20 mm
Magnification: 50x
Filter: O-III
Seeing: 2-3/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: September 30, 2011

Object data
RA: 22h 29m 38.35s
Dec: -20° 50' 13.2"
Const.: Aquarius
Mag: 7.3
Size: 17.57'
CS: 13.5 mag

Notes: Large but very faint due to significant light pollution in this part of the sky. Rounded shape and very confused border. A darker central area is not clearly recognizable. The O-III filter highlights an arc to the NE, which is part of the ring structure.

NGC 7662 - Blue Snowball



From Taki's
8.5 Magnitude
Star Atlas -
Map 14

Instrument type: Refractor
Aperture: 120 mm
Focal length: 1000 mm
Eyepiece: Planetary HR 4 mm
Magnification: 250x
Filter: no
Seeing: 3/6
Visual magnitude: ca. 4.5
Location: Cittadella (PD) - Italy
Date: November 25, 2011

Object data
RA: 23h 25m 53.93s
Dec: +42° 32' 06.1"
Const.: Andromeda
Mag: 8.3
Size: 32"x28"
CS: 13.2 mag

Notes: Very bright and barely elongated NE-SW. The border is relatively defined. A decrease in brightness in the center gives a ring appearance to the nebula. It is recognizable a vague increase in brightness on the eastern side.