BinoSky - best bets for stargazing with binoculars

[Up to the Light and Matter Astronomy Page | About BinoSky]

Contents by Region of Sky

	Winter (1-7 hrs RA)	**Spring** (7-13 hrs RA)	**Summer** (13-19 hrs RA)	**Fall** (19-1 hrs RA)
Far North (beyond 30 N)	*Perseus* Alpha Persei assoc. ★ Double Cluster ★ *Andromeda* Andromeda Galaxy			*Cygnus* M39 open cl.
Near North (0-30 N)	*Gemini* M35 open cl. *Taurus* Pleiades ★ Hyades	*Cancer* Beehive Cluster ★ *Coma Berenices* Coma Cluster ★		
Near South (0-30 S)	*Canis Major* M41 open cl. *Monoceros* NGC2232 open cl. *Orion* Orion Nebula NGC1981 open cl.	*Puppis* M47 open cluster	*Sagittarius* NGC6530 & Lagoon Neb. M22 globular cl. M25 open cl.	
Far South (beyond 30 S)		*Carina* IC2602 open cl. ★ NGC3114 open cl. NGC3532 open cl. NGC2516 open cl. *Crux* NGC4755 open cl. *Puppis* NGC2451 open cl. *Vela* IC2391 open cl. ★	*Centaurus* Omega Cen. globular cl. ★ *Scorpius* Butterfly Cluster M7 open cluster. ★ NGC6231 open cluster.	*Tucana* Lesser Magellanic Cloud ★ 47 Tucanae globular cl. ★

AdChoices ▷

Nomadic Raman Microscope
Multi-wavelength (532, 785, 1064nm) NIR Raman up to 1700nm
www.bayspec.com

Binoculars / night vision
binoculars, german army binoculars army night vision, Hensoldt,Steiner
www.army-store24.de

Cannocchiale Gigante20x80
Made in Italy, inox, con gettoniera Vendita, Noleggio
www.vellardi.com

Chat Per Single
Trova il Partner Affine a Te Con la Nostra Chat Per Single!
www.chat.ElianaMonti.it

Università on line
5 Facoltà, 12 Indirizzi di Studio e Sedi in tutta Italia. Chiedi info!
www.uniecampus.it/universita

Alphabetical Index

IC2391 (an open cluster in Vela)
IC2602 (an open cluster in Carina)
Lagoon Nebula (M8 in Sagittarius)
Lesser Magellanic Cloud
M6 (the Butterfly Cluster, an open cluster in Scorpius)
M7 (Ptolemy's Cluster, an open cluster in Scorpius)
M8 (the Lagoon Nebula in Sagittarius)
M31 (the Andromeda Galaxy)
M35 (an open cluster in Gemini)
M39 (an open cluster in Cygnus)
M41 (open cluster in Canis Major)
M42 (the Orion Nebula, an emission nebula in Orion)
M44 (the Beehive Cluster, an open cluster in Cancer)
M45 (the Pleiades, an open cluster in Taurus)
M47 (an open cluster in Puppis)
NGC104 (47 Tucanae, a globular cluster in Tucana)
NGC869 (part of the Double Cluster in Perseus)
NGC884 (part of the Double Cluster in Perseus)
NGC1981 (an open cluster in Orion)
NGC2232 (an open cluster in Monoceros)
NGC2451 (an open cluster in Puppis)
NGC2516 (an open cluster in Carina)
NGC3114 (an open cluster in Carina)
NGC3532 (an open cluster in Carina)
NGC4755 (an open cluster in Crux)
NGC5139 (Omega Centauri, a globular cluster)
NGC6231 (an open cluster in Scorpius)
NGC6530 (an open cluster in Sagittarius)
Omega Centauri, a globular cluster (NGC5139)
Orion Nebula (an emission nebula in Orion)
M43 (a northern extension of the Orion Nebula)
Pleiades (M45, an open cluster in Taurus)
Ptolemy's Cluster (M7, an open cluster in Scorpius)
Small Magellanic Cloud

Index by Constellation

Andromeda
Andromeda Galaxy (M31)
Cancer
Beehive Cluster (M44, an open cluster)
Canis Major
M41 (open cluster)
Carina
IC2602 (an open cluster)
NGC2516 (an open cluster)
NGC3532 (an open cluster)
NGC3114 (an open cluster)
Centaurus
Omega Centauri, a globular cluster (NGC5139)
Coma Berenices
Coma cluster (an open cluster)
Crux
NGC4755 (an open cluster)
Cygnus
M39 (an open cluster in Cygnus)
Gemini
M35 (an open cluster in Gemini)
Monoceros
NGC2232 (an open cluster)

Orion
Orion Nebula (M42, an emission nebula)
M43 (a northern extension of the Orion Nebula)
NGC1981 (an open cluster)
Perseus
Alpha Persei association
Double Cluster (NGC869 and 884 open clusters)
Puppis
M47 (an open cluster)
NGC2451 (an open cluster)
Scorpius
M6 (the Butterfly Cluster, an open cluster in Scorpius)
M7 (Ptolemy's Cluster, an open cluster in Scorpius)
NGC6231 open cluster in Scorpius.
Taurus
Pleiades (M45, an open cluster)
Hyades (an open cluster)
Tucana
Lesser Magellanic Cloud
47 Tucanae (NGC104, a globular cluster)
Vela
IC2391 (an open cluster)

About BinoSky

Purpose
Observing the sky through binoculars can be very rewarding if you know what's worth looking at, how to find it, and how to interpret what you see when you do find it. BinoSky is meant to help observers with unexceptional skills living in light-polluted areas to find objects that are enjoyable to look at. This is avowedly a greatest-hits list, not an exhaustive guide for the fanatical.

An especially troublesome issue for binocular observers is that an object can appear so different from the telescopic photos found in books that one may be unable to identify it. This problem is compounded because the published photos are hardly ever labeled as to their field of view, and the different lengths of the exposures make it impossible to compare brightnesses on a consistent basis. I have attempted to cure this problem by providing images from the Digitized Sky Survey for almost every object listed. These are all reproduced here at a consistent scale of 132 pixels per degree, which means that the magnification is about the same as your binoculars if you view the screen from 10 inches (250 mm). (If you really want to reproduce it exactly, use a distance in inches given by 7560/dpi/magnification.) I am confident that the starfields look very much like what you will actually see. Nebulous objects, on the other hand, tend to be look dimmer through binoculars than the DSS images would suggest, especially from light-polluted locations.

Choice of Objects
My focus is on deep-sky objects. For planetary observing, see my Planet Finder applet, and an applet by Gary Nugent that shows the current view of the Jovian moons from earth. For absolute beginners, the moon is of course the easiest and most gratifying target -- try a half-moon, since the shadows bring out more detail. Variable-star observing is an excellent use of binoculars, but I have not included any information here about variables, since they are amply covered on the web by the AAVSO.

There are many deep-sky objects that can be found easily with binoculars, but simply look like dots of light. These are not my cup of tea, and I have not included them. (For those who like that kind of thing, the Astronomical League has observing lists at various levels of difficulty, and will send you a pin and a certificate if you observe 50 Messier objects.) I have restricted myself to objects that clearly show some structure through binoculars when viewed under light-polluted skies. This ends up including essentially all deep-sky objects down to fourth magnitude, and none dimmer than about 5.5. I have omitted a few bright objects, such as the Jewel Box, that are better suited to higher magnifications, and also a few, e.g. the Christmas Tree Cluster, whose integrated brightness is misleadingly high because it is contributed almost entirely by a single star.

In the northern-hemisphere sky, I suspect that the main category of object I have missed is stellar associations, since they don't make it into the same catalogs. Please let me know if I have missed something beautiful along the lines of the Alpha Persei association, although I am not really interested in cataloging tons of pretty asterisms -- happening on asterisms by

chance is sometimes half the fun of binocular observing!

I would be grateful for any comments from southern-hemisphere observers on my choice of objects in the southern sky, which I have based entirely on secondhand information. Although I have aimed to cover the whole sky, I have been somewhat more conservative as to what southern objects to include, both because I cannot check them against reality with my own eyes, and because standards are just plain higher down in the More Scenic Half of the sky.

Data Table
Hartmut Frommert of SEDS has compiled a data table for the objects included in Binosky. Thanks, Hartmut!

Other Web Sites on Binocular Astronomy
The Netscape Open Directory (DMOZ) project lists several other binocular astronomy sites.

[Top of page | Up to the Light and Matter Astronomy Page]

(c) Copyright 1998 Benjamin Crowell. All right reserved.
Photos from the Digitized Sky Survey, stdatu.stsci.edu/dss/dss_form.html
Sky maps created by Your Sky, www.fourmilab.com