



Finderscope view of the area around M101.

Messier's smallest and dimmest discoveries

Some observers think that observing the smallest and dimmest Messiers is beyond their capabilities. That is not necessarily the case.

Messier catalogued four planetary nebulae with two of them being relatively small. His most famous planetary, M57 or "The Ring Nebula," is also one of the sky's showpieces. Its dimensions are about 1' x 2' and it glows brighter than 10th magnitude, making it relatively easy to see. His other small planetary nebula is "The Little Dumbbell," or M 76. Its published size, which varies according to the source, has been reported as being anywhere from 1' x 1' to 1' x 5'. M57 and M76 may be the smallest Messiers, but they still are over twice the size as Jupiter's apparent diameter.

Three candidates vie for dimmest Messier. Many references cite the aforementioned M76 as being the faintest with a 12.1 integrated magnitude, while others place it at 10.1. Two galaxies, M91 and M98, fall in this neighborhood possessing integrated magnitudes of 10.2 and 10.1, respectively. However, M98 appears slightly dimmer than M91 because it has a lower surface brightness. In any case, all three of these objects still are bright enough to be picked up with a six inch or larger aperture telescope.

Messier	Dimensions (minutes)	Integrated Magnitude	Surface Brightness (mag./min.2)
M57	1.2 x 2.5	9.7	10.6
M76	1.1 x 4.8	12.1	13.6
M91	5.4 x 4.4	10.2	13.4
M98	9.5 x 3.2	10.1	13.5

Messier's most southerly deep sky objects

Some of Messier's objects pose a problem simply because they never rise high enough above the southern horizon to permit clear viewing, relatively free from atmospheric distortion. Search for these on nights with good transparency and from a site that has a dark southern sky, relatively free of light pollution. Then wait until they approach the meridian for the clearest and sharpest views.

Lying at a declination of 30° south, the large, bright spiral galaxy M83 never rises very high in many areas of the continental United States. With its light spread over a relatively large area, it may

blend with the background hazy sky glow, making it nearly invisible.

Follow these five steps to center the faint, round glow of M83 in your finderscope:

1. Locate the constellation Corvus and the bright star Spica.
2. Extend a line eastward through Corvus' two southernmost stars.
3. That line intersects a star of similar brightness, Gamma Hydrae.
4. Draw a line south from Spica through Gamma. It intersects Iota Centauri.
5. From the half way point between Gamma and Iota, extend another line eastward whose length is 1/4 the distance between Gamma and Iota. It intersects M83.

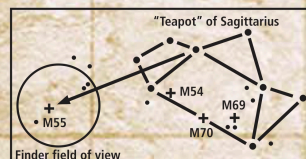


Table: Most southerly objects

Messier	Declination	Type	Integrated Magnitude	Diameter (minutes)
M6	-32°	Open Cluster	4.2	15
M7	-35°	Open Cluster	3.3	80
M54	-30°	Globular Cluster	7.7	9
M55	-31°	Globular Cluster	7	19
M62	-30°	Globular Cluster	6.6	14
M69	-32°	Globular Cluster	7.7	7
M70	-32°	Globular Cluster	8.1	8
M83	-30°	Galaxy	7.6	10



Astronomical League National Office
9201 Ward Parkway, Suite 100
Kansas City, MO 64114
leagueoffice@astroleague.org




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