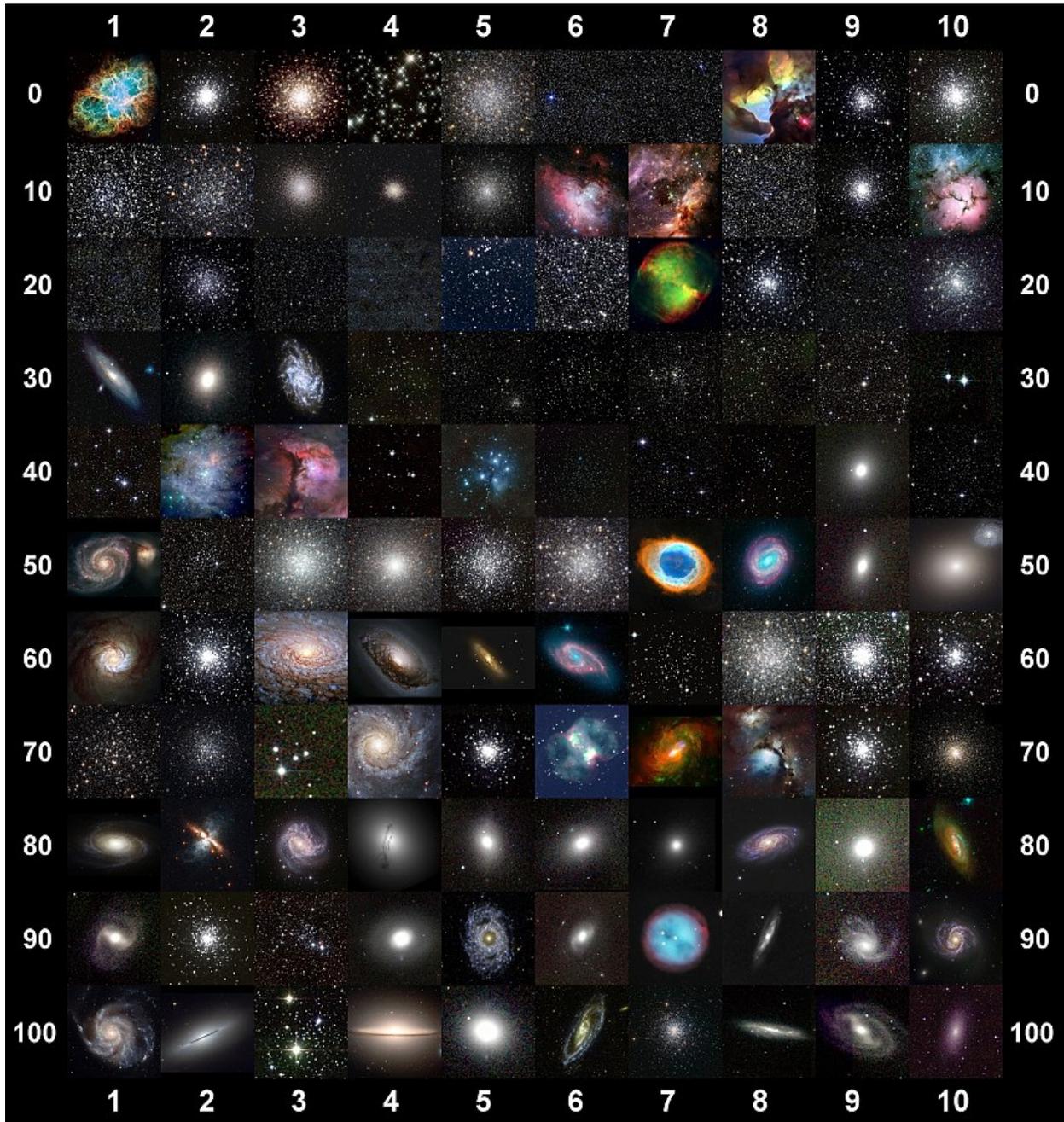


Using Stellarium to Find, Research and Image Deep-Sky Objects



The Las Cumbres Observatory (LCO) network of telescopes located at sites all around the world enable us to take images of deep-sky objects like Messier objects. Messier objects are a collection of 110 astronomical objects cataloged by the 18th Century French astronomer Charles Messier while he was searching for comets.

Here is a catalog of Messier objects.



Starting Your Research!

Go to the IASC website <http://iasc.cosmosearch.org/LCO.html> to download the necessary instruction guides:

- How to Take Images Through Our Solar Siblings
 - How to Retrieve Images From Google Drive
 - How to Retrieve Images From the LCO Portal
 - Introductory Stellarium Guide
1. Have your students select five Messier objects then determine which objects received the most votes. **(For this exercise, let's assume M1 received the most votes).**
 2. To learn more about the object that received the most votes, search the Internet.



Wikipedia (<https://www.wikipedia.org/>) is a good source for information. Read about this object and find out what type of object it is, what constellation it is located in and its distances.

Stellarium

3. Open Stellarium.

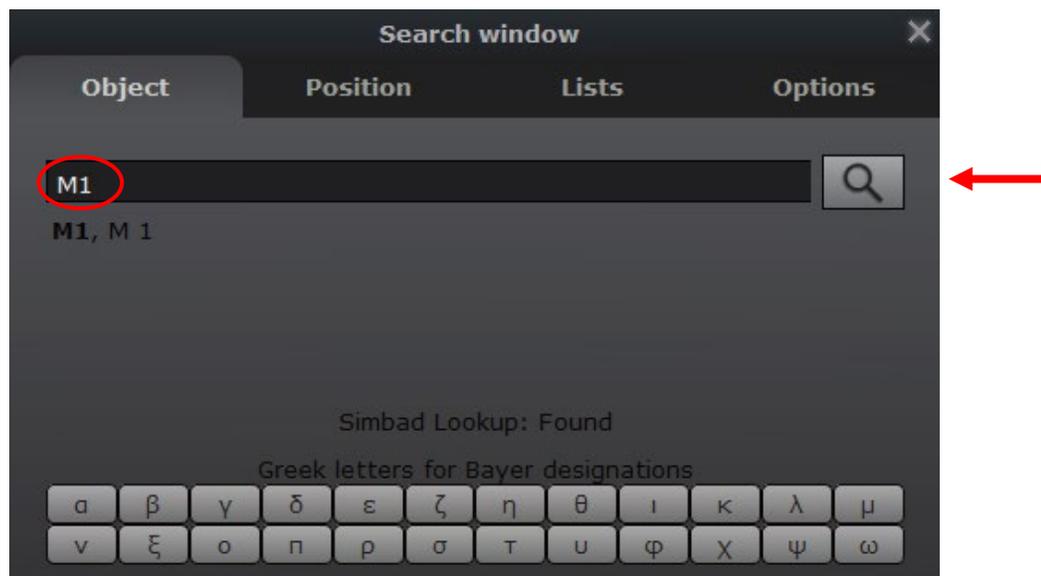
Move your mouse to the lower left corner of the screen to open the menu panels.



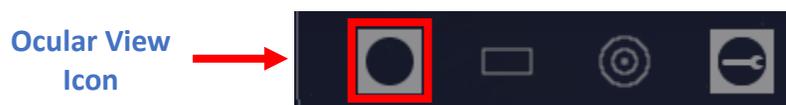
- Click on the Search window Icon.



- Type M1 in the search window as shown in the image then press Enter or click the Search button.



- Click on the Ocular view Icon located in the upper right corner menu panel (Top right corner of screen).

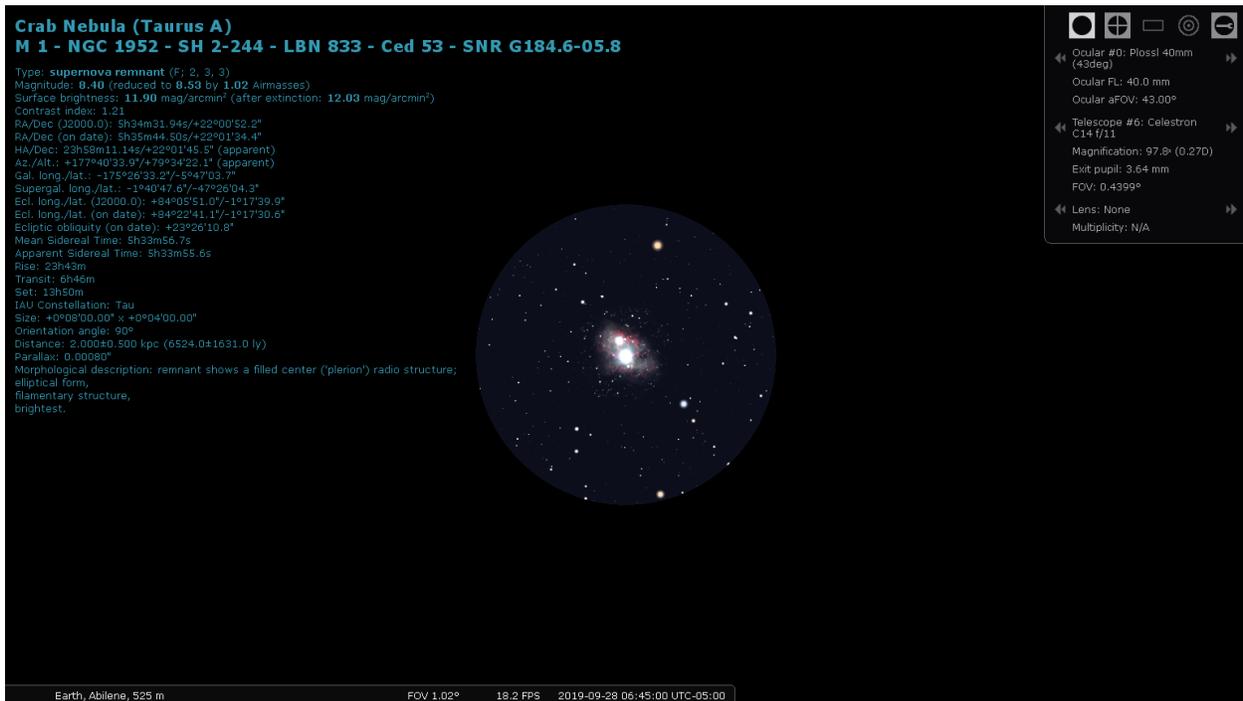


7. Click on the Center on selected object Icon.



Center on selected Object Icon

Here is an example on how it should look.



How to Take an Image

Go to the IASC website <http://iasc.cosmosearch.org/LCO.html> and request an image of the Messier object that received the most votes by following the "How to take Images through Our Solar Siblings" guide.



The screenshot shows the IASC website interface. At the top, the letters "IASC" are displayed in a large, light blue font against a starry background. Below this, the text "International Astronomical Search Collaboration" is written in a smaller, light blue font. The main content area is dark blue and contains several sections:

- Welcome to the 100 Hours for 100 Schools Project!**: A section with text explaining the project and providing contact information for IASC at iascsearch@hauix.edu.
- Our Solar Siblings**: A section with a logo and text: "Fill out the form to take your images. Take Images." A blue arrow points from this section down to the "How to Take Images" link in the "100-for-100 Instructions" section.
- Google Drive**: A section with a logo and text: "Click the Drive Link provided by email to access your images."
- LCO Login**: A section with a logo and text: "Log in to collect your images. Collect Images."
- 100-for-100 Instructions**: A section with text: "Download these files for step-by-step instructions on how to take and retrieve images." Below this text are three links: "How to Take Images Through Our Solar Siblings", "How to Retrieve Images From Google Drive", and "How to Retrieve Images From the LCO Portal".
- Additional Programs**: A section with text: "The following programs are available for use in this project."

On the right side of the page, there is a vertical navigation menu with blue arrows pointing to the following links: Home, Astrometrica, Campaigns, Volunteers, Hall of Fame, and LCO. At the bottom right, there is another vertical navigation menu with blue arrows pointing to: Home, Astrometrica, and Campaigns.

**Click here to
Take your Image**

Below is an image of M1 (Crab Nebula) from LCO and enhanced through Gimp software:



Go Discover

