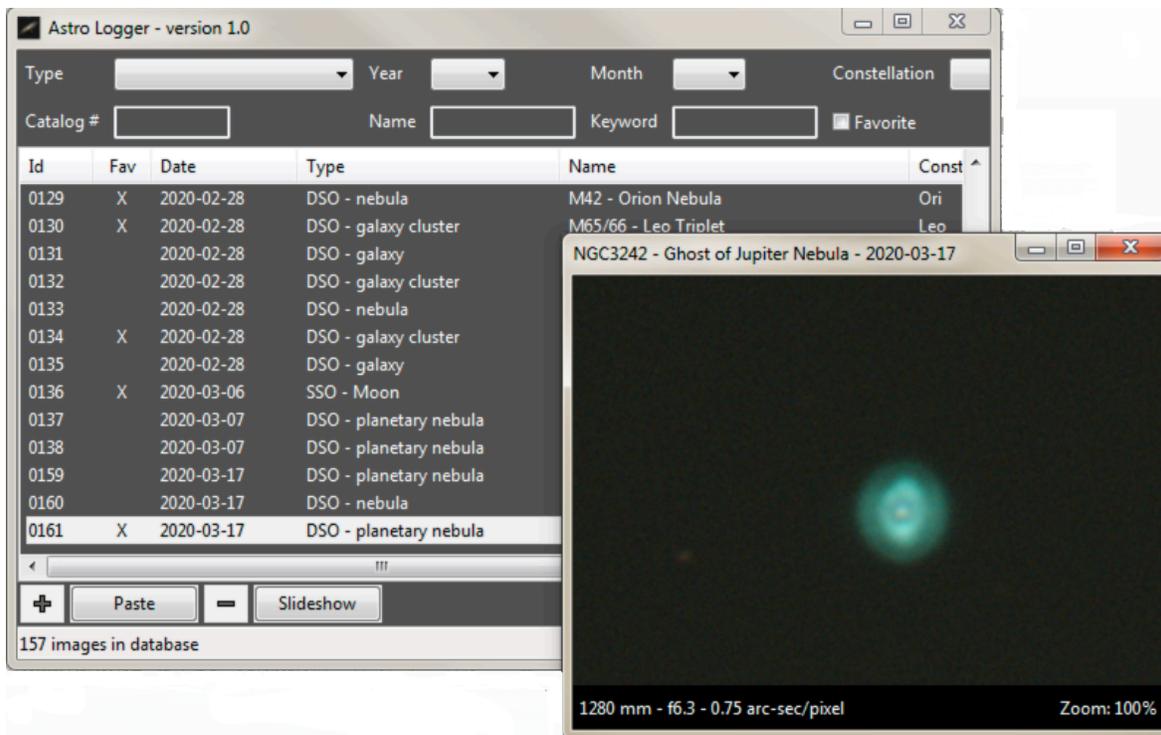


AstroLogger

Version 1.0

Introduction

AstroLogger (AL) was created in order to help organize all your astro photos. After about a year of doing EAA with SharpCap, I had tons of images spread across a hundred deeply nested folders and I had no idea where they were or what I had. **AL** solved this problem and now I can easily find and view all my images.



AL allows you to easily store your images including important information about how they were captured and processed. You can categorize your images and search for them based on all sorts of criteria. When displayed, important information such as the focal length and image scale are overlaid on the image. Its search function also allows you to see what is visible in a certain constellation, or at a particular time of year based on what you have viewed and stored in the past.

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Installation

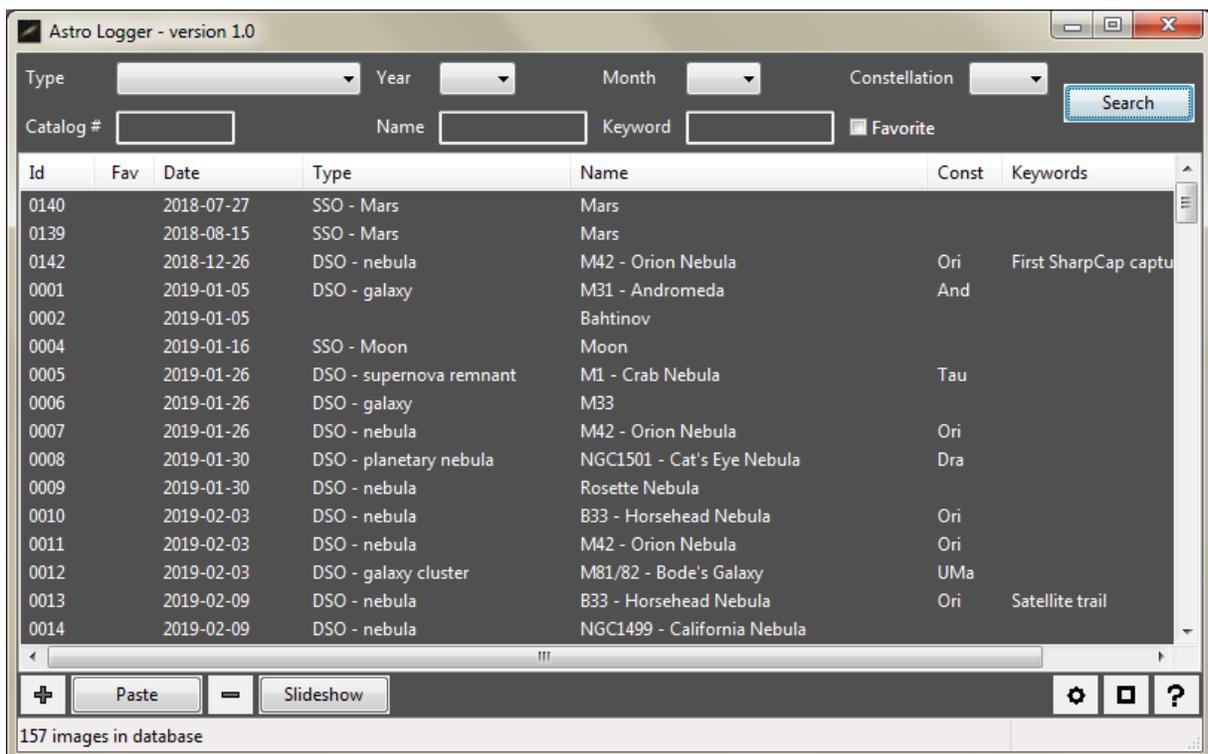
There is no installation required. Simply drag and drop the **AL** folder to a convenient place (such as your Desktop) and run the `AstroLogger.exe` program file. You may wish to create a shortcut to this file in your Task Bar for easy access.

The application is a Windows program and it has been tested on Windows 7 and 10. In addition to the program file, there is a configuration file, `AstroLogger.ini`, that may contain various settings. You should not need to edit this file directly but its contents are described in the [Appendix](#).

The main screen

The main screen is composed of three different sections:

1. **The Filter Controls** - This area allows you to choose what will be listed in the **Image List**. You can make your selections to specify the object type, the year, the month, the constellation, the catalog number, the common name, a keyword or whether it is one of your favorites. After making your selections, press the **Search** button. Note that your choices will be ANDed together in order to determine what to display in the list.



2. The **Image List** displays all the images that match the criteria specified in the **Filter Control** section.
 - a. You can sort the list by clicking on any of the column headers.

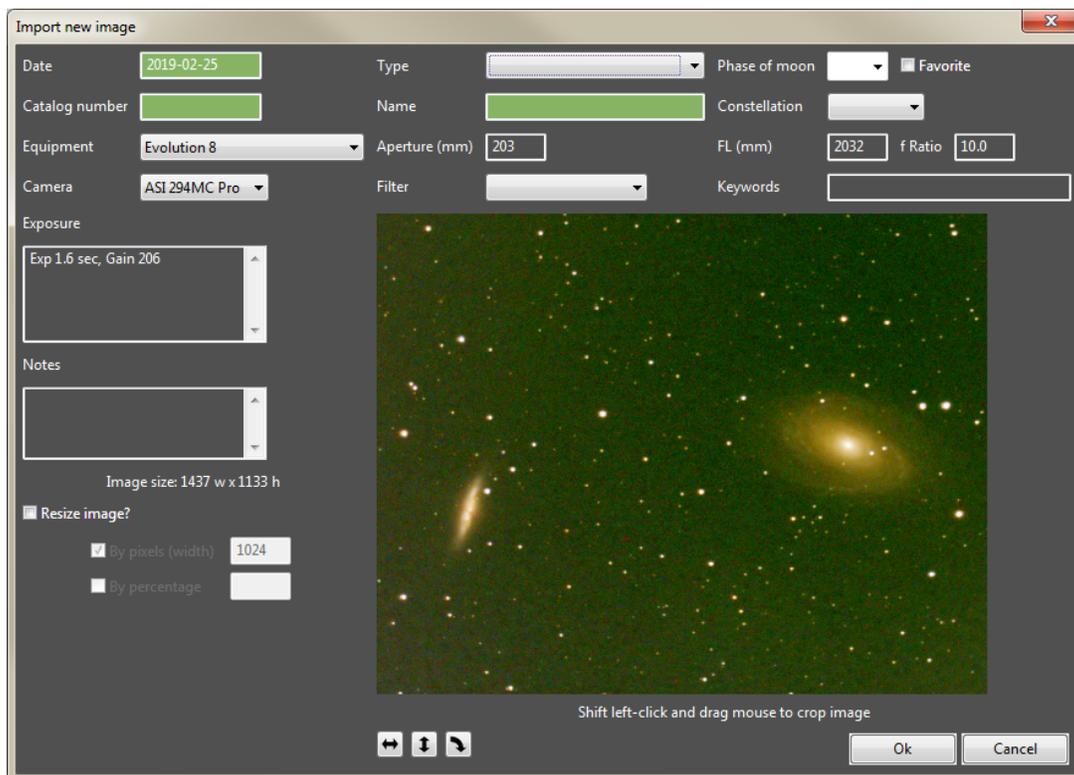
- b. You can add a new image simply by dragging and dropping it anywhere on the list. As a shortcut: If you drag and drop an image with the **SHIFT** key pressed, then the data from the last added image will be pre-filled into the **Import new image** form.
 - c. Double-click an image to display it
 - d. **Shift** double-click to display and edit an image's data.
3. The **Button Area** has buttons for the following:
- a. **Add** a new image. This will allow you to browse for an image file to add. In addition, images can be added simply by dragging and dropping them onto the main **Image List**.
 - b. **Paste** - create a new image from the image data in the **clipboard**.
 - c. **Remove** the selected image
 - d. **Slideshow** - show a slideshow including all the currently listed images.
 - e. **Preferences** - see below
 - f. **About** the program
 - g. **User's manual**

Adding an image

An image can be simply dragged and dropped onto the main list on the main screen. Or you can press the **+** button and browse to a file. All common file formats are supported.

NOTE: FITS files are currently NOT supported.

Import new image window



Once a file is dropped or selected, the **Import new image** window appears. There are many fields that you can fill in but only the highlighted fields are required.

- The date will be pulled from the image file itself. Double-click to change it if needed.
- You must provide a **date** and either a **catalog number** OR a **name**.
- When you choose from the **Equipment** list, the **Aperture**, **FL** and **f Ratio** fields will be filled in automatically but you are free to override those values if needed.
- If you double-click the **Name** field, the program will use the value in the **Catalog number** field and will automatically fill in the **Name** and **Constellation** based on other images that you have stored.
- As a shortcut, the **Equipment**, **Camera**, **Filter** and **Exposure** information will be remembered and auto-filled in for the next image that you want to add.

- If you are using **SharpCap**, **AL** will read the `.CameraSettings.txt` file that is created in the folder with the image. And it will automatically pull out the colorspace, exposure and gain values and prefill that data into the **Exposure** field.
- The image is displayed and it can be **cropped** by **Shift left-clicking while dragging** the mouse. The image can also be rotated and flipped by pressing the appropriate buttons.
- The **Image dimensions** are displayed and you can **resize** the image using either **pixels** or a **percentage** value.

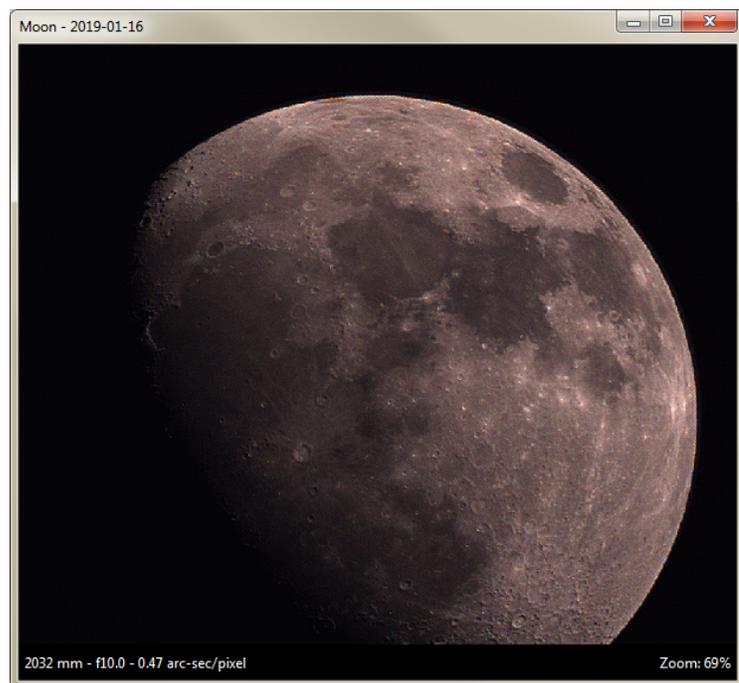
When you have made your entries and framed/cropped the image, press the **Ok** button. The new image will be added to the list and will be given the next image **Id** number.

Image display

Double click on a image to display it. A resizable window will appear. The image catalog number, name and date are displayed in the title bar. The focal length, f ratio and image scale are displayed in the lower left (assuming you have provided that information).

You can zoom the image by scrolling the mouse wheel or by pressing the **+** and **-** keys. You can pan the image around by left-clicking and moving the mouse.

Double-click on the image to set the zoom back to 100%.



If you right-click on an image, you

- **Export the image.** You will be prompted to specify a folder and the image will be copied out into it.
- Lookup the object on **Wikipedia**. In this case, the catalog numbers and name will be used as search terms.
- View the image in the application that is configured for image viewing on your system.

Slideshow

You can view a slideshow of all the currently listed images by pressing the **Slideshow** button. The images will appear in succession with a viewing delay that is user-configurable (See [Preferences](#)). At any time, you can **pause** the slideshow by pressing the **space** button. Repress the space button to continue.

Note that the slideshow may display images of widely varying sizes so you may need to zoom and pan a bit for each frame. Remember that you can pause it and zoom in and out as needed.

Preferences

The **Preferences** section allows you specify what choices you have in the various lists. Access this section by pressing the small gear icon in the lower right corner of the main screen. There are a few tabs.

General

The **General** tab allows you to specify how to categorize objects. By default, objects are categorized as DSO or SSO with sub-types under each. You are free to change this to whatever scheme suits your needs. Press the **+** and **-** buttons to add and remove choices, respectively. Double-click on a choice to edit it.

The **Slideshow interval** (in seconds) can also be specified.

Gear

The **Gear** tab allows you to setup your **Telescopes**, **Cameras** and **Filters**. For each, press the **+** and **-** buttons to add and remove choices, respectively. Double-click on a choice to edit it.

For each **Telescope**, provide a name and an optional **aperture** (in mm), a **focal length** (in mm) and an **f ratio**. Note that each **Telescope** entry represents not just the OTA but the entire setup with additional gear like a barlow or focal reducer. So, for example, you may have the following **Telescopes** configured:

```
Evolution 8 (f10)
Evolution 8 + 0.63 FR (f6.3)
Evolution 8 + Hyperstar (f2)
Evolution 8 + 2x barlow (f20)
```

NOTE: If you provide the scope's **focal length** and the camera's **pixel size**, then the image scale can be automatically calculated and displayed.

For each **Camera**, provide a **Name** and optional data about the **resolution**, **sensor size** and **pixel size**.

Each filter is simply referred to by name without any additional information.

Appendices

Troubleshooting

Q: Why do I get an error message about a dll file missing when trying to start the application?

A: As with all Windows programs, this program requires various helper .dll files. The necessary ones should be included in the installation folder. However, if you receive a message when trying to start the application about a dll file that is missing, please let me know and I will fix the omission.

Q: The program will sometimes start momentarily, then just disappear?

A: Yes, this is a known bug that I have seen on Windows 10. Just restart and it always starts after a 2nd or 3rd try. I am not sure what is causing it but I am working on it.

Q: Where are my images stored?

A: Don't worry about having your images locked up in some proprietary database that you may not want to use a year from now. Each image is actually stored as a separate png file in the `Images` folder inside the application's folder. Each image filename is the **Id** number that was assigned to the image when it was added. This **Id** number is displayed in the first column of the list on the main window.

The configuration file

`AstroLogger.ini` is the configuration file that lives in the same folder as the program file. It is a standard Windows .ini file with [SECTIONS] in square brackets and individual NAME=VALUE settings in each section. Comments lines begin with a semicolon symbol.

```
[GENERAL]
; the folder containing the data (without a trailing \)
;DataFolder=C:\Users\Administrator\Desktop\AstroLogger
```

Version history

1.0 - Initial release

To do

1. Handle FITS files.
2. Export images with user-selectable dimensions.