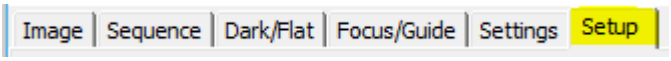
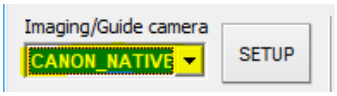
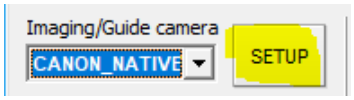
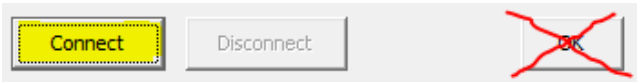
AstroArt – Camera connection and image Capture

Cheat sheet

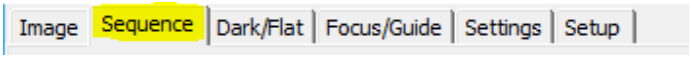
1) **Connect all USB leads to camera, guide camera, computer etc.**
2) **Turn on DSLR and set to Manual (M on your camera wheel)**
3) **Make sure camera is in Manual mode and single shutter release – NOT REMOTE SHUTTER**
4) **Open AstroArt and select camera control** 
5) **Select the "Setup Tab"** 

6) **Select camera type – CANNON NATIVE** 

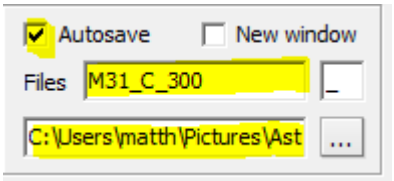
7) **The select "SETUP" button** 

8) **Check setting and press "CONNECT"** 

Camera should now be connected. To start imaging:

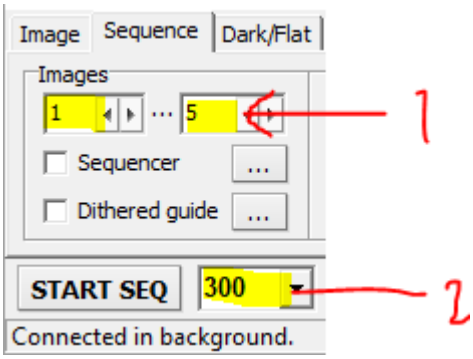
1) **Select the "sequence" tab** 

2) **Check the file save location, entre file name, and check autosave is selected**



NOTE; WHEN CENTRING AND FOCUSING ON TARGET, UN-TICK "AUTOSAVE" TO STOP IMAGES BEING SAVED – YOU DON'T WANT THESE IMAGES. ONLY SAVE IMAGES YOU WANT.

3) **(1) Set the number of exposures you want and then (2) set the exposure in seconds**

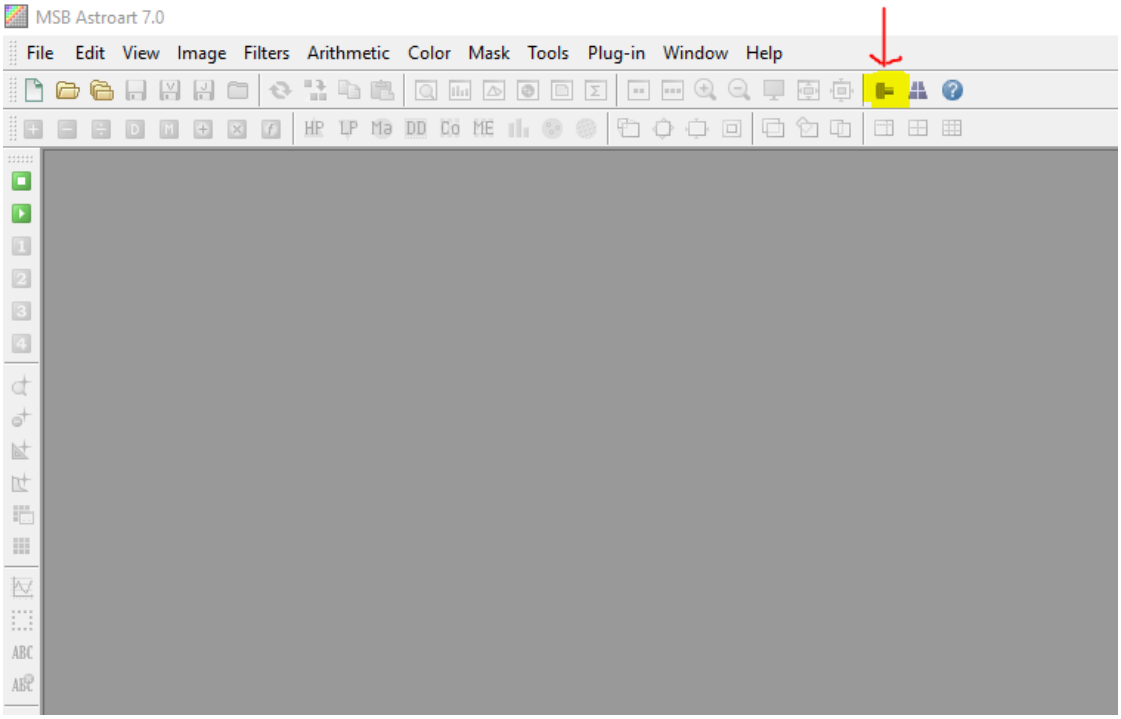


4) **The press "START SEQ" button to take the images.**

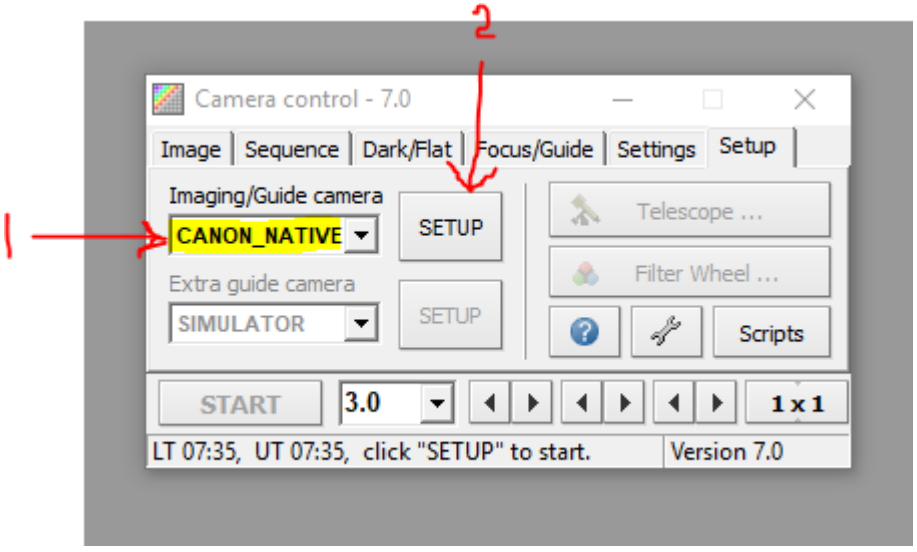
AstroArt – Camera connection and image Capture

Connection procedures (example for cannon DSLR):

1) **Open camera control**
   Camera control is available in the tool bar

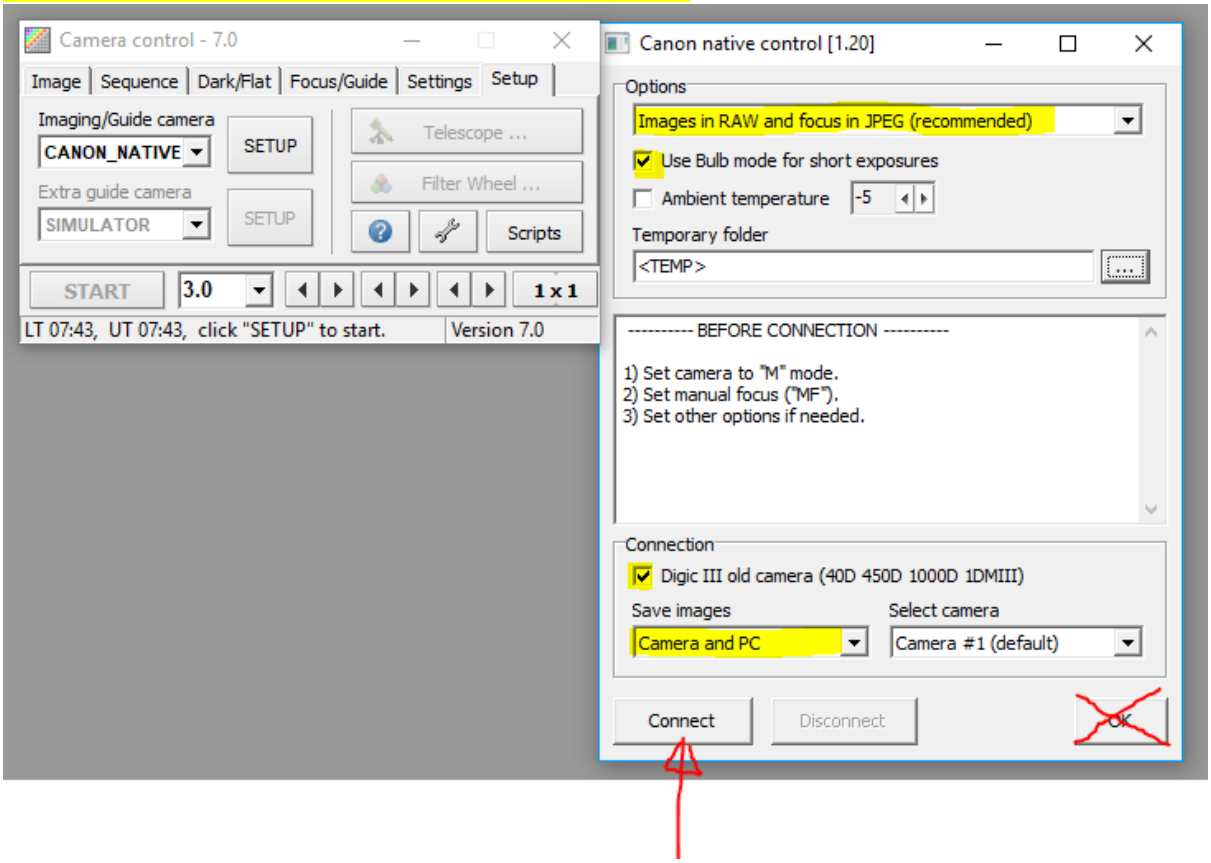


2) **In the 'camera control' dialogue box, select "CANON NATIVE" from the drop down menu, then press "SETUP"**
   If you have connected previously then the 'canon native' may already be selected for you



3) **Next, the 'setup' dialogue box opens, check the setting and press "CONNECT"**
Check all the settings highlighted in yellow are the same as below and then press "connect", NOT the 'OK' button

BEFORE CONNECTING TO YOUR CAMERA MAKE SURE:
- **YOUR CAMERA IS SET TO MANUAL**
- **DO NOT HAVE REMOTE SHUTTER RELEASE SELECTED**



Your camera should now have successfully connected…. If not, try the following:
- **Is the camera set to "manual"?**
- **Is the USB lead connected?**
- **Is the camera turned on?**
- **Is their sufficient battery power left in the battery to open and release shutter?**

If using PHD or other guide software, the next step is to point at your object and start your guiding program. If using PHD, refer to the PHD Guiding notes.

The next steps before image capture are:

- **Point your telescope at the chosen object**
- **Centre and focus the object**
- **Calibrate and start guiding**

Once this is complete, you can move to image capture.

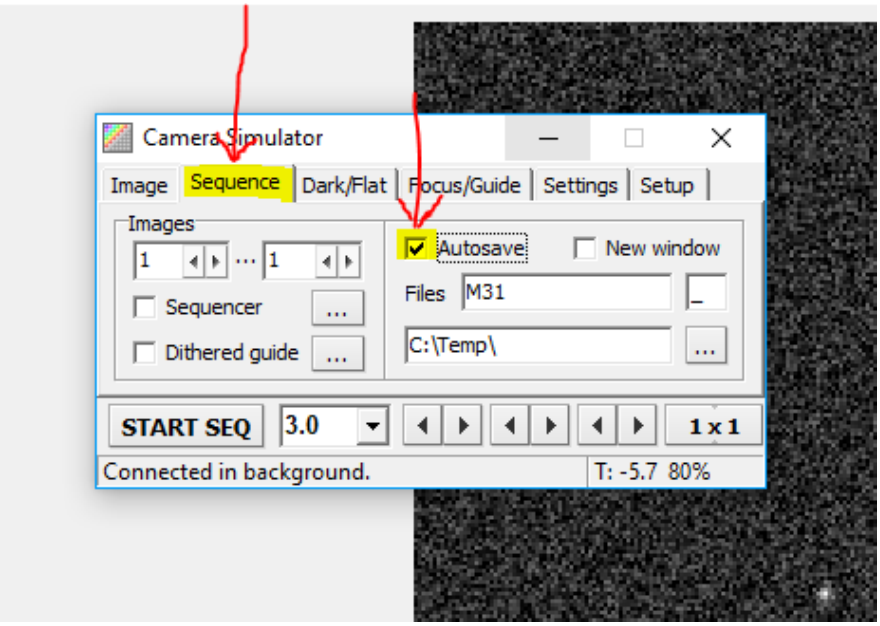
Image capture:

Once you have your camera connected, it is time to starts capturing images.

For the purposes of these instructions, we will assume you know how to point your scope at the target you intend to images and achieve pin point focus. Guiding is dealt with separately to these instructions.

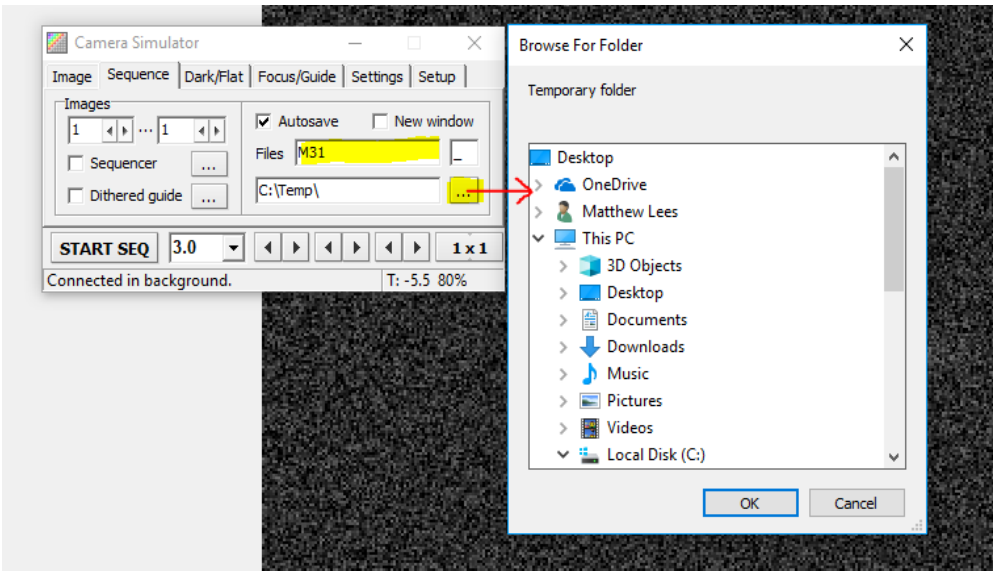
Initial capture setup:

Once you have centred and focused your object, the next step prior to capturing your first image is to tell AstroArt where to save the image. You will want to open the "SEQUENCE" tab and select "AUTOSAVE"

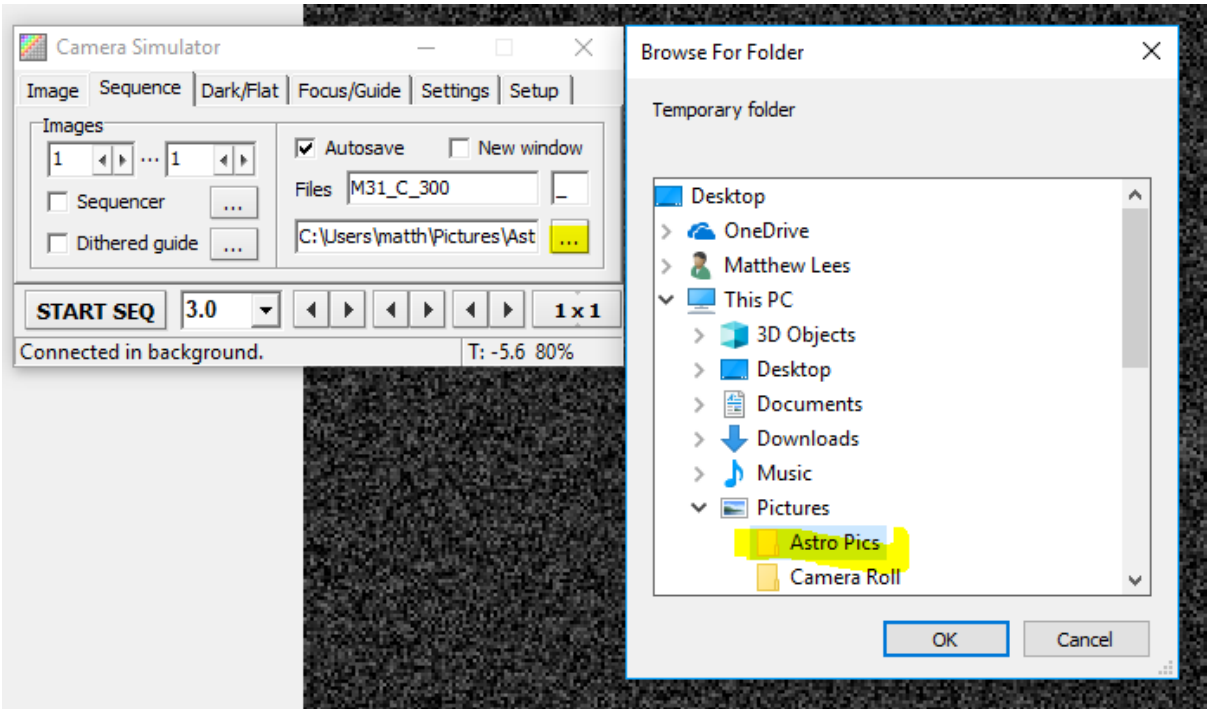


At this point it is helpful to ensure the "new window" option is not selected as this will lead each image being opened in a new window which is rather annoying.

Next, you need to tell AstroArt what you are imaging and where to save it. You will do this by replacing the standard text in the "files" text box with the name of the object you are imaging and then selecting the location where to save it



The below is an example location for your images, the address for this is C:\Users\matth\Pictures\Astro Pics

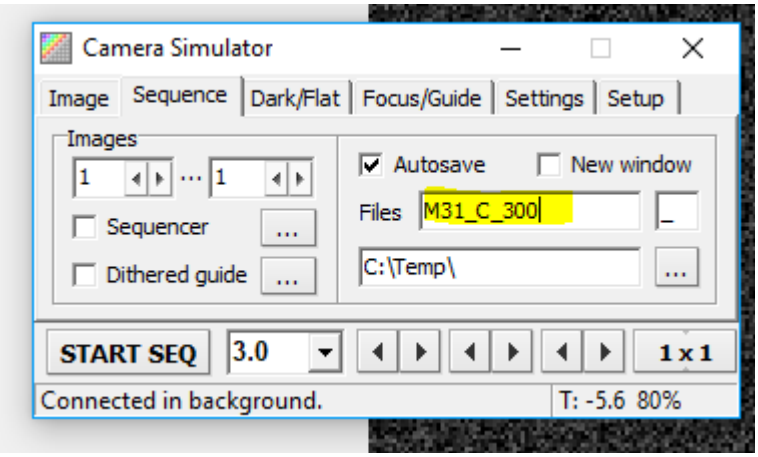


It is helpful to use a logical file name format for your image which tells you later what the image was of and how long the exposure was for. Below is an example of the format you might use:

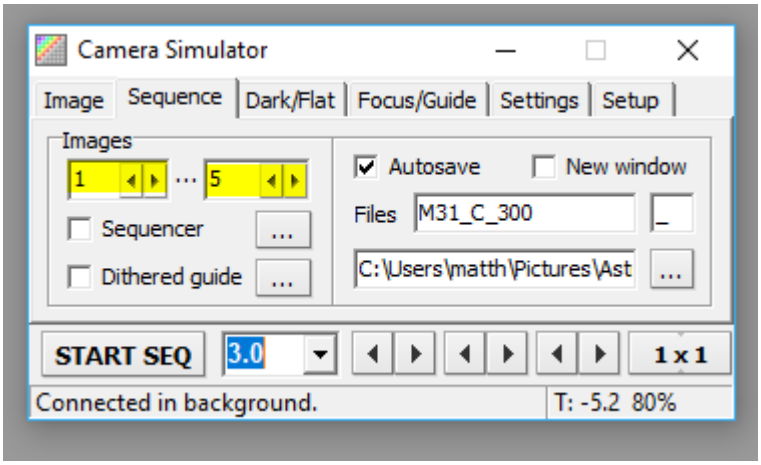
M31_C_300

***note; AstroArt will place a sequential number after your file name so final name in this case will be*: M31_C_300_001**

When we look at the files later this will tell use that we are capturing Messier 31_in colour_for 300 seconds.



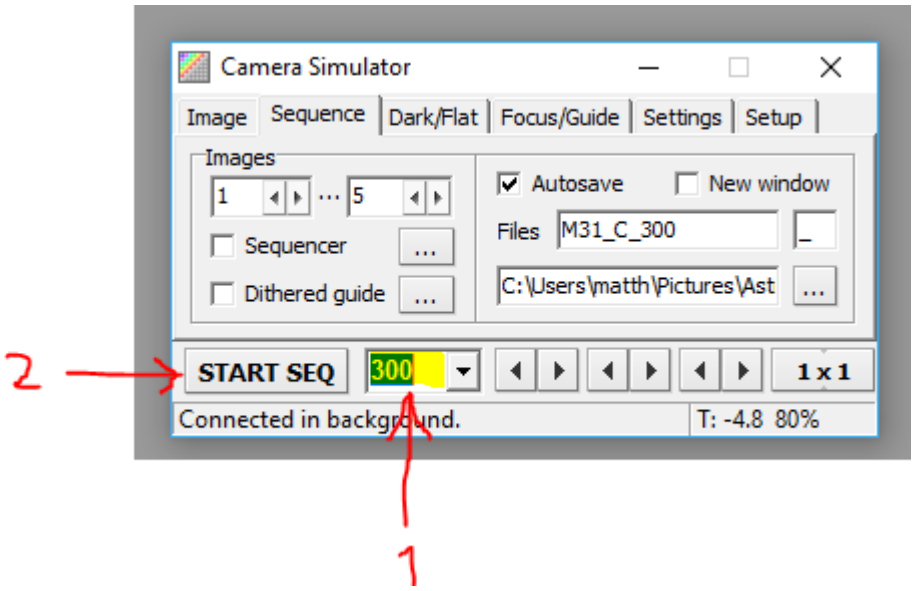
Now we need to tell AstroArt how many frames we need and what are sequence is. We do this by changing the number below "images" in the sequence tab:



In the example above, we have set a sequence between 1 – 5. If we came back later and decided to add more images to this sequence, we would change the sequence to between say 6 – 10 to ensure we didn't overwrite the existing images

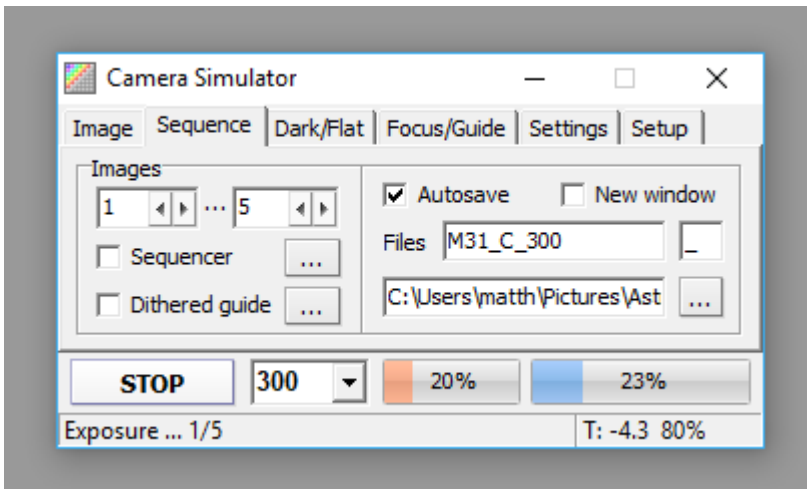
Note; AstroArt will warn you if you are about to overwrite existing images. Use this warning to go back and check the sequence settings and file name are correct.

Finally, we need to tell AstroArt the length of each exposure. We decided this earlier in the final name as '300' seconds (5 minutes). So, we need to put this into the exposure box as seconds:



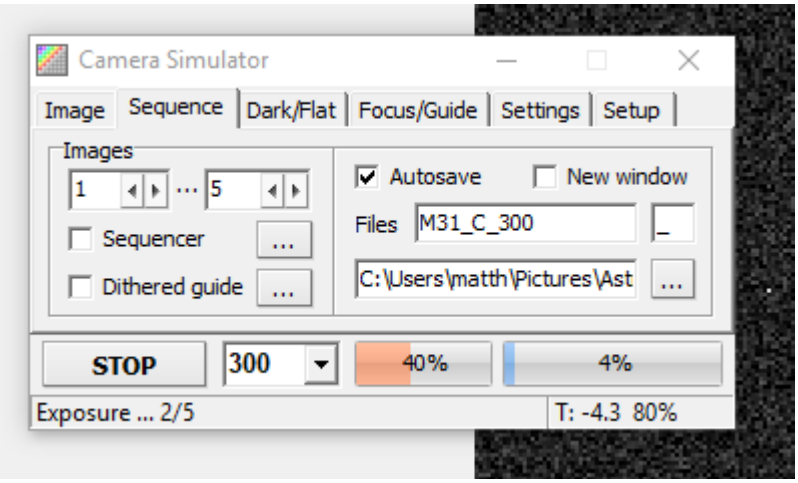
Now we can press "START SEQ" button to start the sequence.

Once the sequence has started, the sequence dialogue box will look like this:



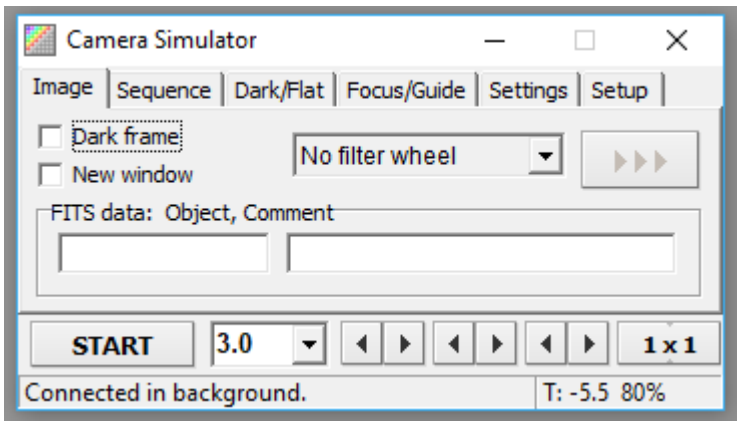
We can see from the dialogue box that we are capturing 1/5 (1 of 5) images. The green percentage bar represents the percentage of the sequence complete and the blue bar represents the percentage of the current exposure complete. Later on in the sequence it might look like this:

Later:

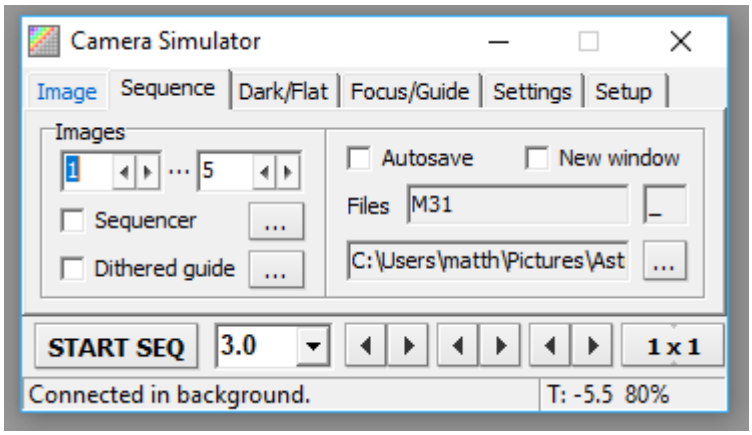

Camera Simulator
Image
Sequence
Dark/Flat
Focus/Guide
Settings
Setup
Images
1
5
Sequencer
Dithered guide
Autosave
New window
Files
M31_C_300
C:\Users\matth\Pictures\Ast
STOP
300
40%
4%
Exposure ... 2/5
T: -4.3 80%

Camera Control tabs

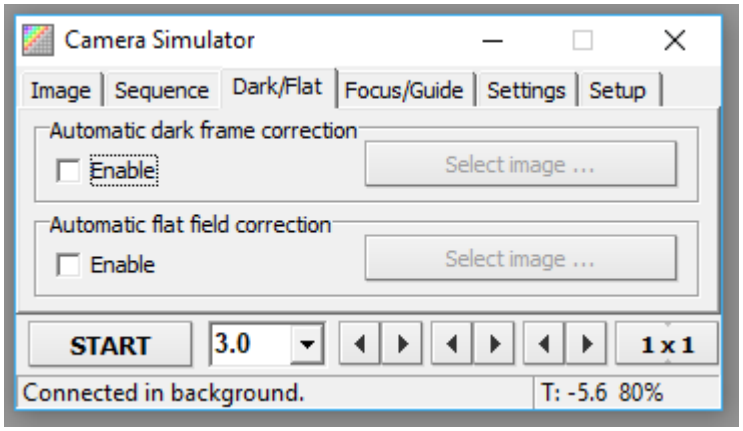
Image Tab



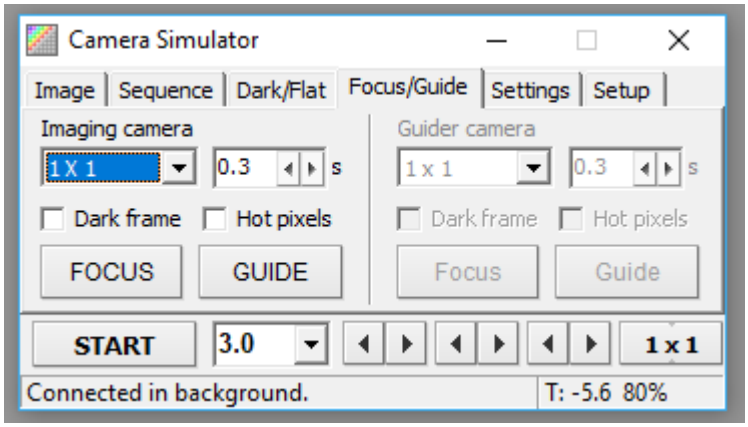
Sequence Tab



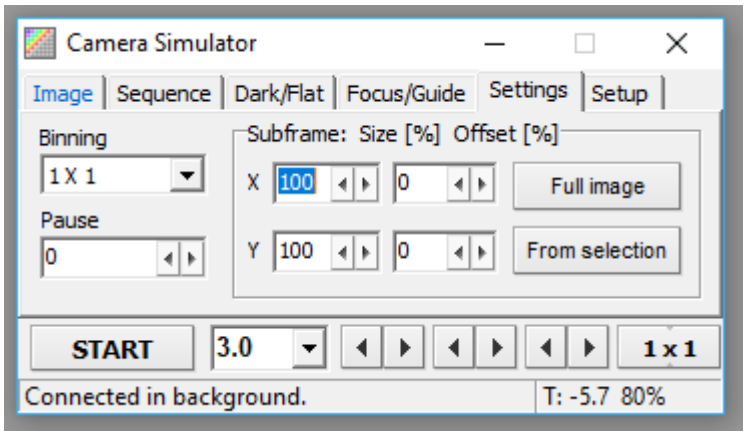
Dark/Flat Tab



Focus/Guide Tab



Settings Tab



Setup Tab