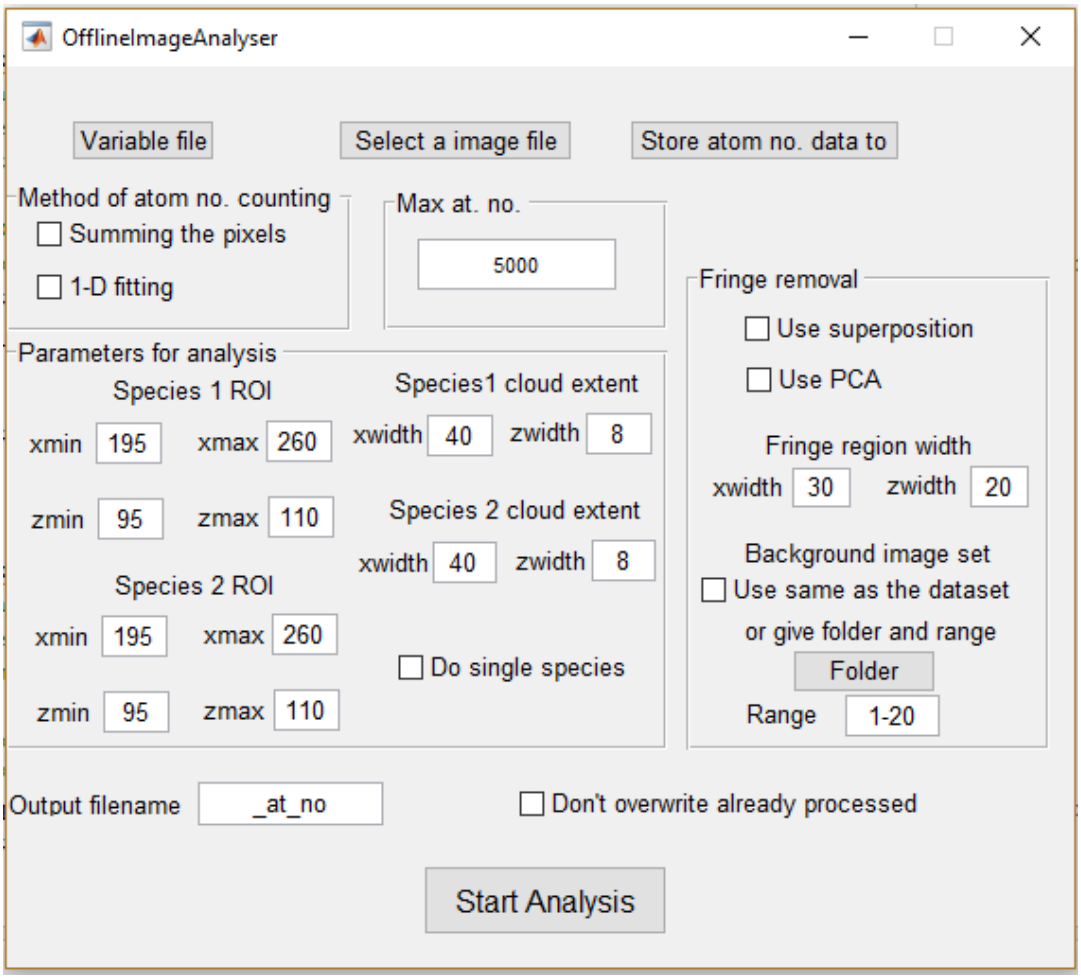
1. Open up a Matlab terminal and navigate to the folder with all of the image analysis files. Type `OfflineImageAnalyser` in the command window and press “enter”. This will open the GUI as shown below.



2. Make sure you have entered the relevant parameters in `ImageAnalyser` GUI and configuration file editor before analysing images in `OfflineImageAnalyser`.
3. Select the File containing file number and corresponding variables. This is usually the measure file from Dexter.
4. Select any one image file in the image folder.
5. Select a folder for to store the processed data.
6. Method of atom no. counting. Select the method you want to use to find the atom number.
7. Max atom no. will help in disregarding unphysical value. The program will output zero if the calculated atom no. is greater than Max atom no. This can happen when fitting to an image which has no atoms in it.
8. Parameters for analysis:
    - Species 1 ROI specifies region of interest for species 1. Same for species 2.
    - Also provide the extent of the cloud for the pixel summing algorithm for both species.
9. Fringe Removal

- Select the method for fringe removal
- If not using fringe removal, leave the checkboxes unclicked.
- If using fringe removal, you will need to specify the width of region which you want to include for the fringe removal algorithm, using xwidth and zwidth.
- Also, you will need to select the set of background images. Checking use same as dataset uses all the images from the variable file. Alternatively, you can provide a range of file numbers. For this you will need to select the folder which contains these files.
- Output file name. The name of the output file will be variable file name + the name entered here. The file with ‘FR’ included in the name is the processed atom no. after fringe removal.
- If Don’t overwrite already processed check box is checked, the program won’t analyse the files which are already analysed. Might be useful if you want to use this program while taking data.

NOTE: In the output file ignore the first two rows. These will have zero for all entries.