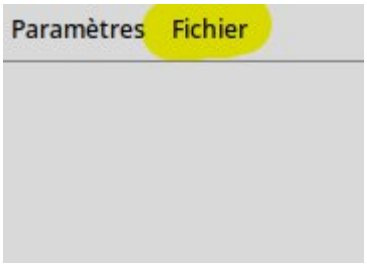
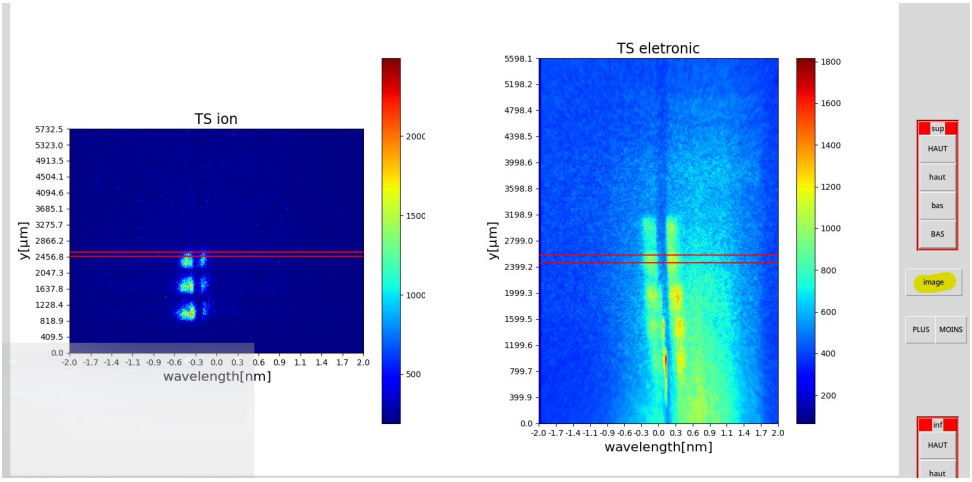
Graphical Interface

How to use it ?

First, choose the images you want to study. You have to choose two images : one for the ionic spectrum and the second for the electronic spectrum. The program does not work if only one image is selected.

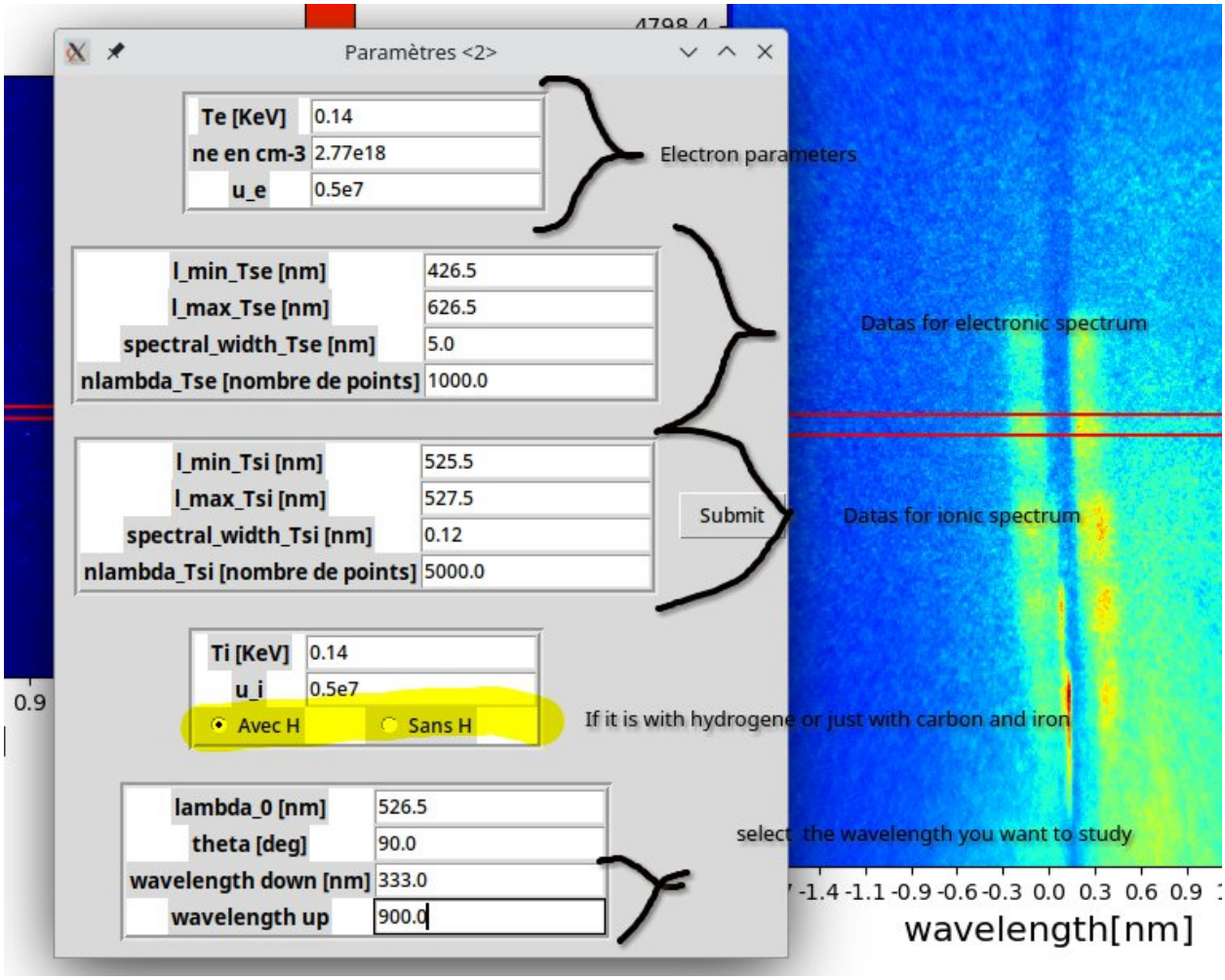


Once it's done, you can click on the button intitled « image ». This way, the images will appear. However, since you have not chose the lambda_0 yet, the wavelength goes from -2.0 to 2.0.



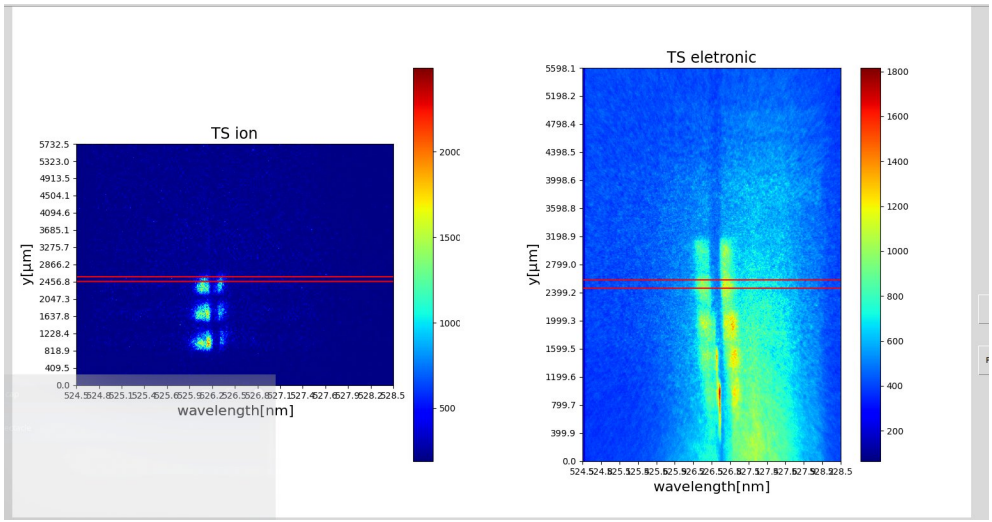
Actually, this step can be forgot : it was just to show how it is without datas entered. So then, you have to enter the datas.

You have to click on « Paramètres » and then, on « variables » to open a top level window.

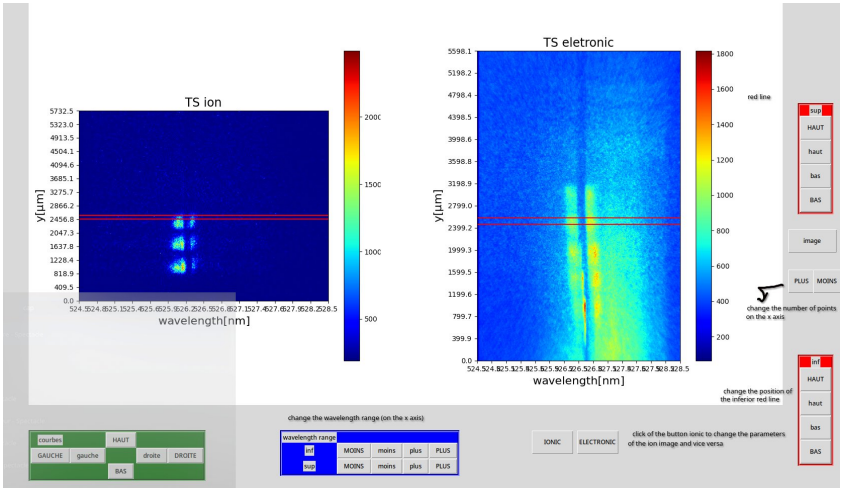


Then, you enter all your datas. What is called « nombre de points » is the number of points python will use to plot the spectrums. The wavelength up and down determined the region corresponding to the wavelength that you want. It also determines the limits of the red lines.

So then, you submit the datas and plot again the images.



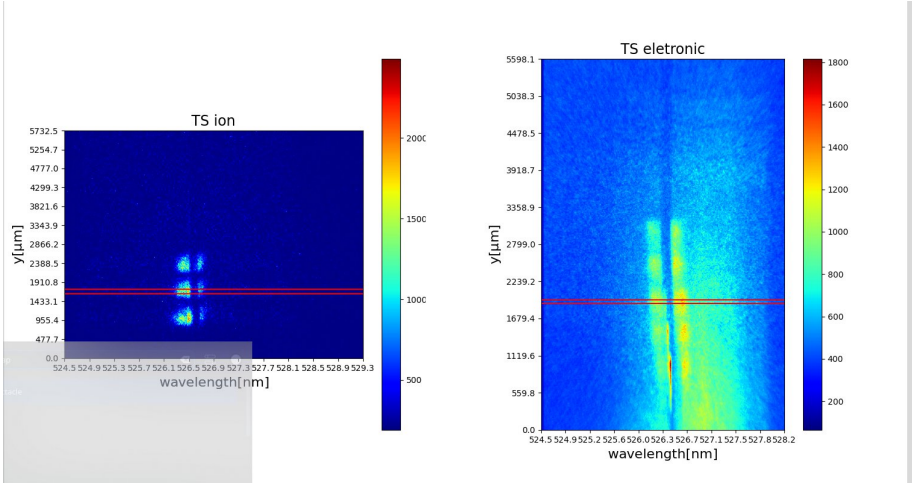
Now, you have this and the idea will be to put the line in the picture on the lambda_0 graduation. So here, on 526.5nm.

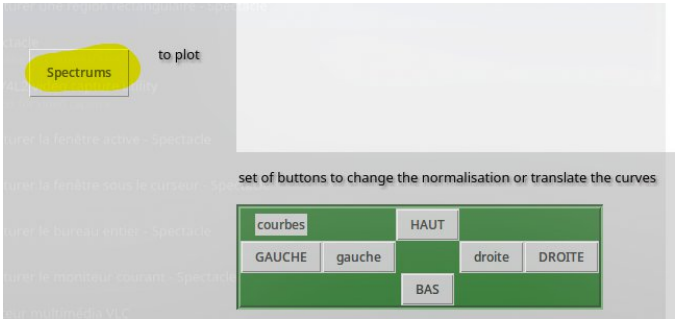


You have this set of buttons to help you do this. The red buttons control the red lines separately. You can control separately the parameters of the different images (actually, you can't control them at the same time). Also, I noted that the images for electronic spectrums generally need to be rotated before entered in the program.

So, you have to play a bit with them to adjust the images

Then you arrived at this thing for example. At this point, you can now plot the spectrums.





First, you click on « Spectrums ». It will plot, in top level windows, the two spectrums. Then, you can settle them the way you want by using the green set of buttons. « Haut » and « Bas » change the normalisation. « Gauche » and « droite », the translation. **In all the cases, when it is written in uppercase, it's for rough modifications**.