


About Stack ROI Software

1. how to run:

In matlab, run:

```
stack_roi(struct('filename', the_header_file))
```

NOTE: ~~please remember to replace the_header_file with the real header file name~~ 

2. how to define a ROI:

keybinding:

middle-click: define a new roi

left-click on center: select a roi

left-click on circle: deselect a roi

DEL/d: delete selected ROIs

pageup/down: change stack #

up/down arrow: change frame #

left/right arrow: change roi radius

right-drag on circle: change roi radius

left-drag on circle: move roi position

NOTE: when you click a button or text box, the focus is switched to that UI control so that the keybinding above won't work. You can left-click on the image to make the image to get focus back.

Button "Load": click this button to load a ROI definition file previously saved by clicking button "Save".

Button "Save": save ROI definition to a file. Usually this kind of files have extension name ".roidef".

Button "Done": close the application.

Button "Contrast...": change the contrast of images.

Button "Deselect all": deselect all ROIs. That is, instead of showing circles, showing the centers of the circles.

3. how to define a Tform

Button "set as ROI def. time": set current stack time as the time defining ROIs.

Button "set as tform time": set current stack time as the time defining the Tform.

Button "begin def. tform": begin to define tform. The program enters "defining Tform

mode".

Button "end def. tform": end defining tform. The program comes back to "defining ROI mode" from "defining Tform mode". Save the tform if the program can calculate the tform successfully. If the calculation failed, the program remains in defining tform mode.

Button "cancel def. tform": abort Tform definition. The program comes back to "defining ROI mode".

NOTE: the program has two basic modes: "defining ROI mode" and "defining Tform mode". You can tell the current mode from the window title.

Button "show ref. image": show the reference image. The reference image is the image when the last tform is defined.

Button "change Z pos": change the z pos of current selected control ROIs.

NOTE: a ROI has 3 states:

blue: not a control ROI

green: a control ROI

red: a current selected control ROI

Click the circle to change its state.

Tip: you can double-click the circle to speed up the state change.

4. work flow:

4.1 define ROI

It is straightforward. Just follow the keybinding shown in section 2.

4.2 define TForm

Define ROIs first.

Click "begin def. tform" to enter defining Tform mode.

Change the current stack time to when you want to define tform.

Select control ROIs by clicking on the circles.

Change control ROIs' xy position by dragging them to new place.

Change control ROIs' z position by first clicking the circles to make them "current and selected"(in red color). Then change current stack's z position by using up/down arrow key. Finally click "change Z pos".

When you are satisfied with the control ROIs' new position, click "end def. tform" to save it.