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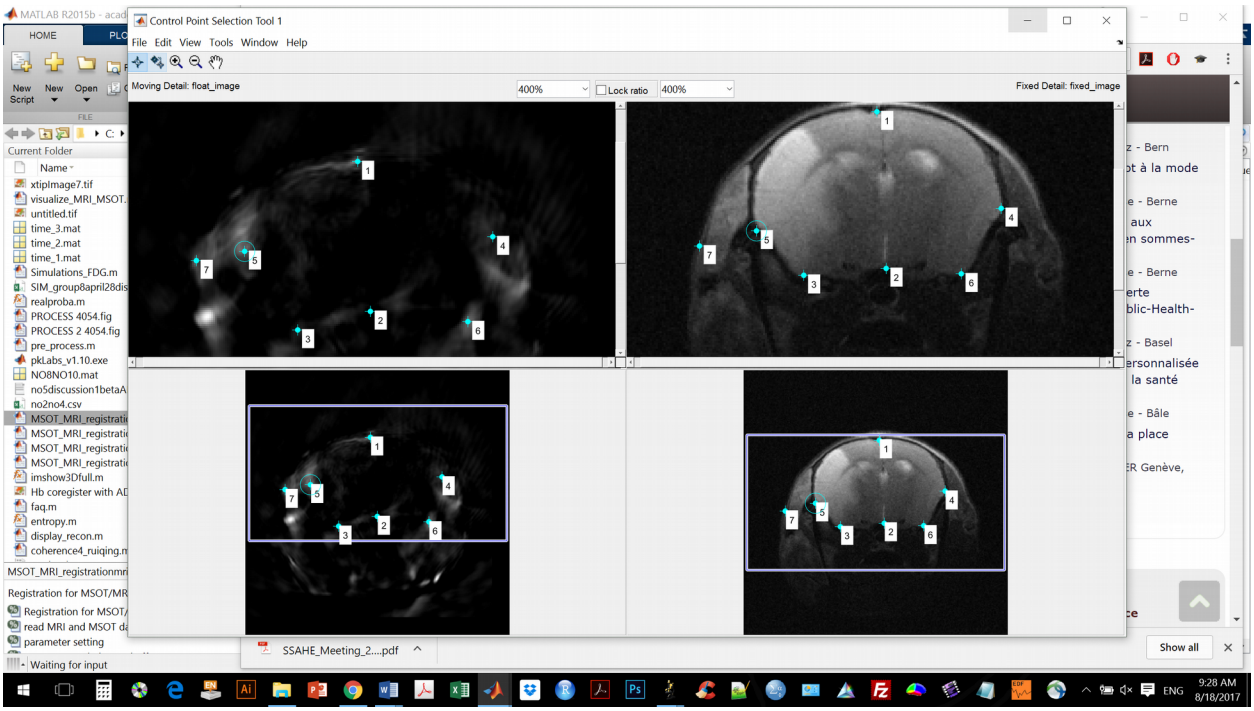
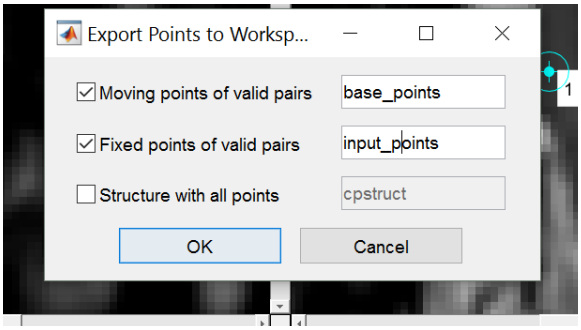
MATLAB MRI-MSOT landmark-based Coregistration method

1. Click on MSOT_MRI registration.m
2. In the pop-up window choose the MRI image in the input folder, in the next pop-up window chose the MSOT background stack image in the input folder
3. In the matlab command window will apear a line “select which slice you want to do transform”
4. Write 1 or other numbers accordingly.
   One line will apear in the commend window
   “transforming location identified\n”
5. In the pop-up control point selection window click and select landmarks on the left and right panel for coregistration.
6. Click on File, chose “export points to work space” and write base_points & input_points in the blank.
   In the commend window two lines will appear
   “base_points & input_points saved?
   Variables have been created in the base workspace.”
7. Variables have been created in the base workspace. Two folders will be created automatically “reference MRI” and “reference MSOT”
8. Will be a line ask “Do you want to apply the same transform to a new MSOT dataset? Y/N [Y]” answer Y if want and N if not.
   If answer Y: a pop-up window will open for choosing the dataset image. The same transformation used for background will be applied to the image selected.
   Afterward another line will appear in the commend window asking for
   “ Name the new transformed MSOT data.”
   The final result are separate folders with the transformed images (for example the Hb or the HbO2 images).

After the coregistration, imageJ or other software could be used for overlaying images or merging channels etc


Control Point Selection Tool 1
File Edit View Tools Window Help
Moving Detail: float_image
Lock ratio
Fixed Detail: fixed_image
SSAHE_Meeting_2....pdf
Show all
Waiting for input


Export Points to Worksp...
Moving points of valid pairs
base_points
Fixed points of valid pairs
input_points
Structure with all points
cpstruct
OK
Cancel