

How to use 'register'

by Yiming Xiao

A bit introduction

The software is part of the 'minc tool kit', which was developed at the Montreal Neurological Institute for 3D medical image processing. 'register' is used to find the spatial correspondence of two images by landmark picking and registration.

How to install the minc tool on Mac OS

Download the .dmg file from:

http://packages.bic.mni.mcgill.ca/minc-toolkit/MacOSX/minc-toolkit-1.9.11-20160202-Darwin-10.11-x86_64.dmg

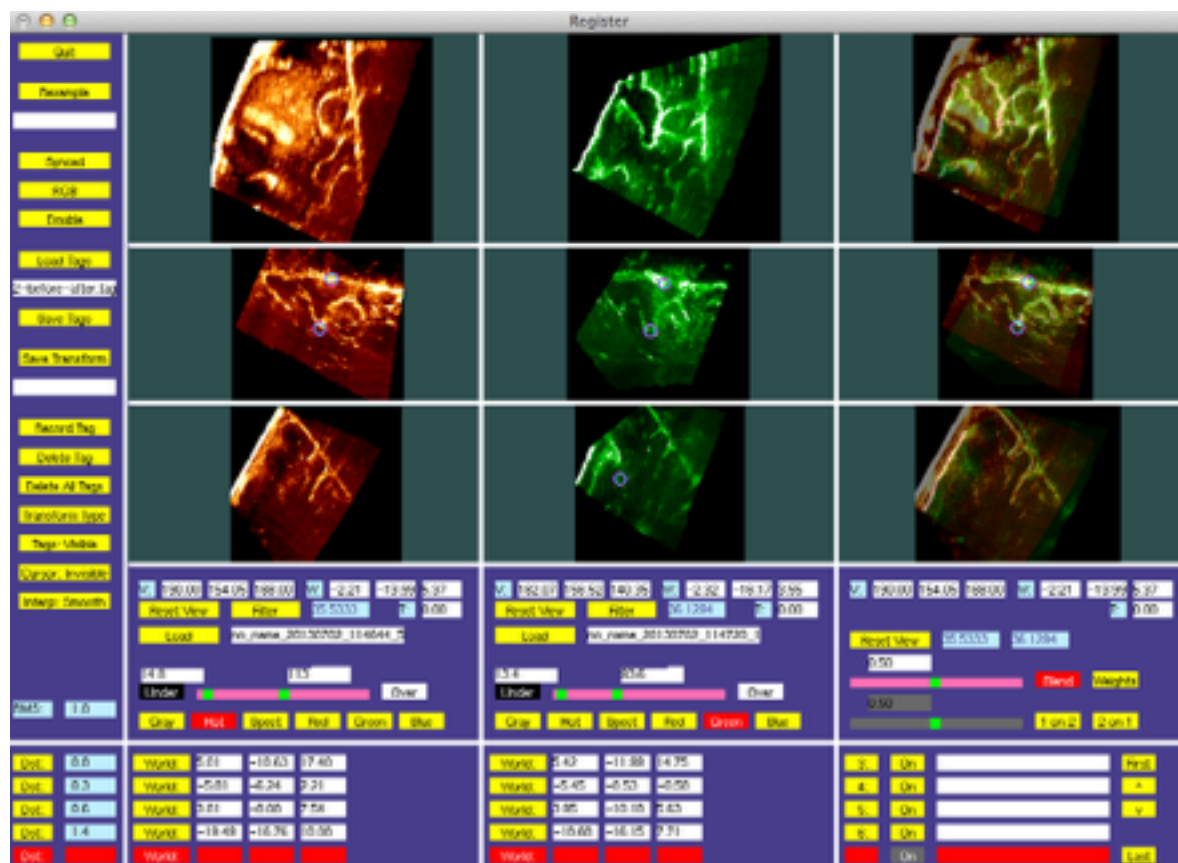
The install procedure is the same as other MAC OS applications

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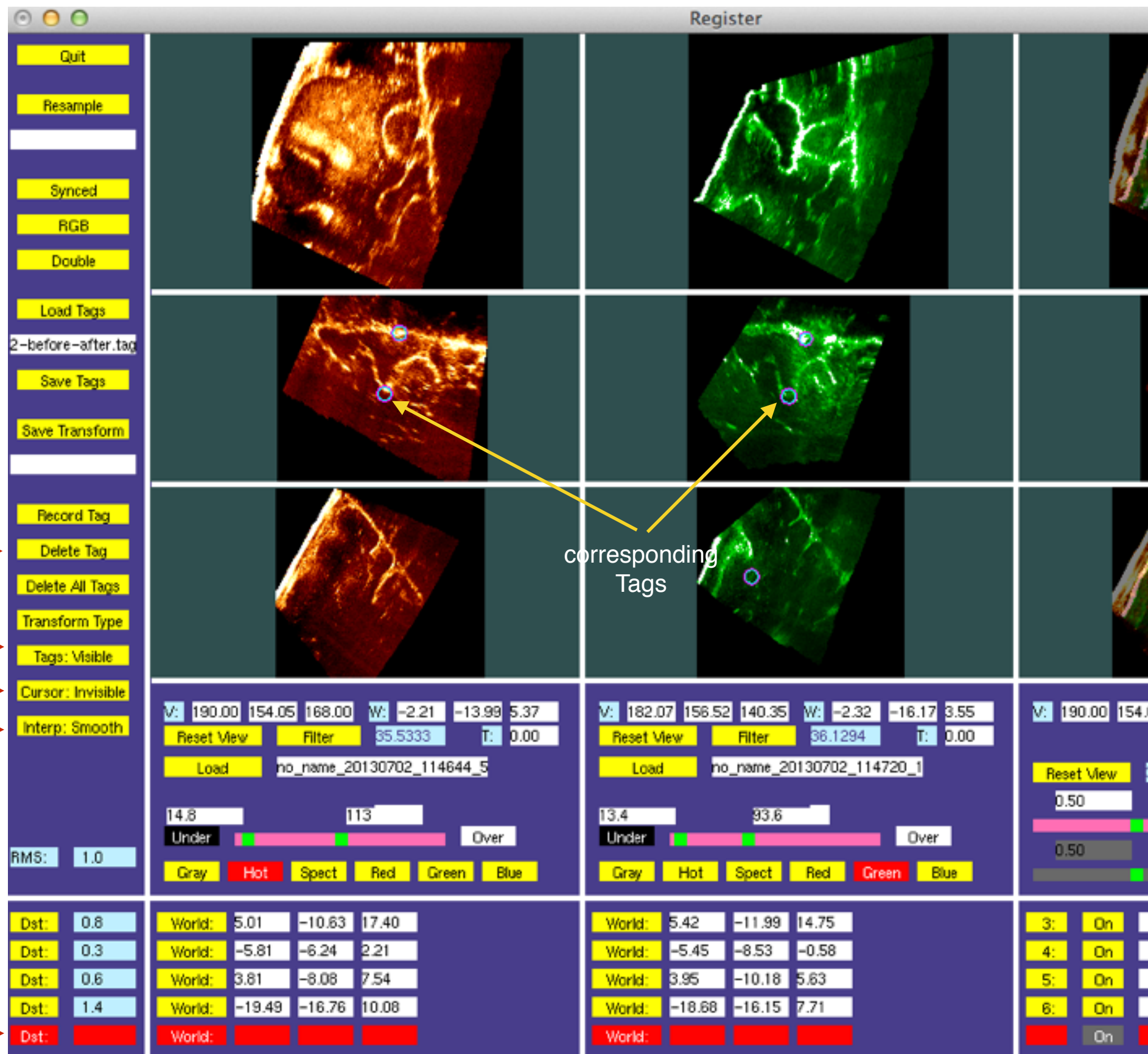
Opening the software

1. Open an terminal
2. Go to the directory that holds the images: `cd Documents/Cases/Case1/MINC`
3. Type in: `source /opt/minc-itk4/minc-toolkit-config.sh`
4. Then type in: `register image1.mnc image2.mnc`



It looks like this.

- Three columns of images;
- When good landmark pairs are picked, the third column shows two images well registered;
- The image in the second column (**image2.mnc**) will be registered to the image in the first column (**image1.mnc**).
- The landmarks are saved in a text file with .tag extension



This for closing the software

Let the first 2 windows move in sync

2. Click this to load the tags

1. Type in the tag file name

5. When you are done, save the results by clicking this

3. select the corresponding landmarks in the first two windows

4. Record the tag after selection

Select the tag pair (will show in red) and delete the selection

Toggle tags visibility

Toggle cross-hair cursor visibility

Makes images look smoother

RMS error of all landmark pairs after landmark-based registration

Individual landmark registration error

Landmark entries activated

corresponding Tags