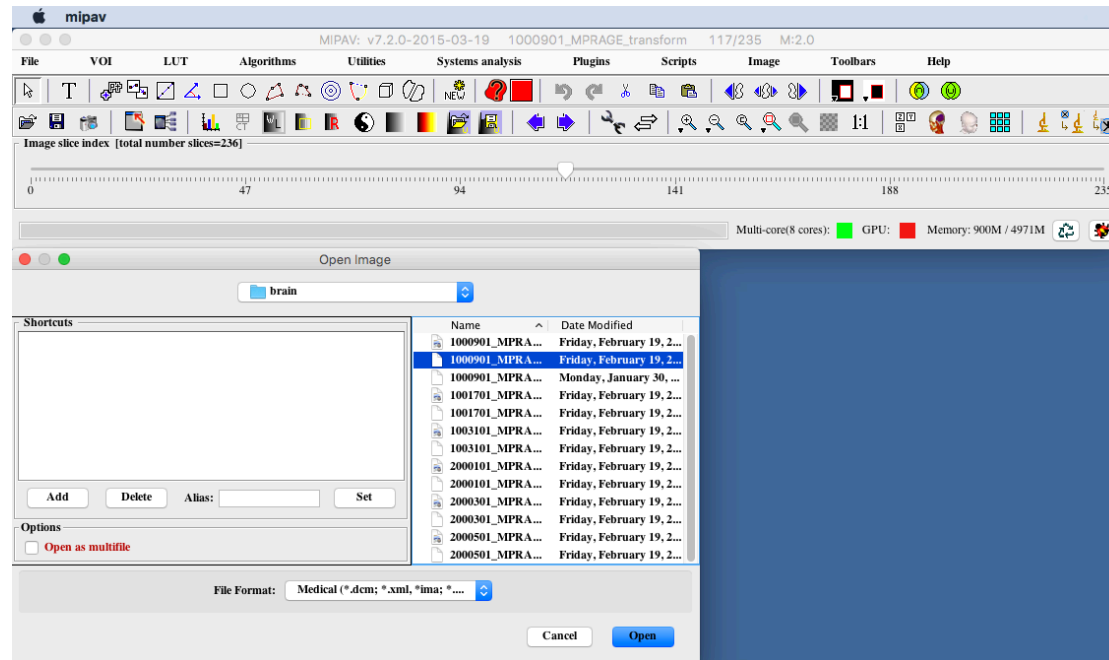# MIPAV demo

Ye Li

Medical Image Analysis

Course Instructor: Prof. Jerry Prince

Spring 2017
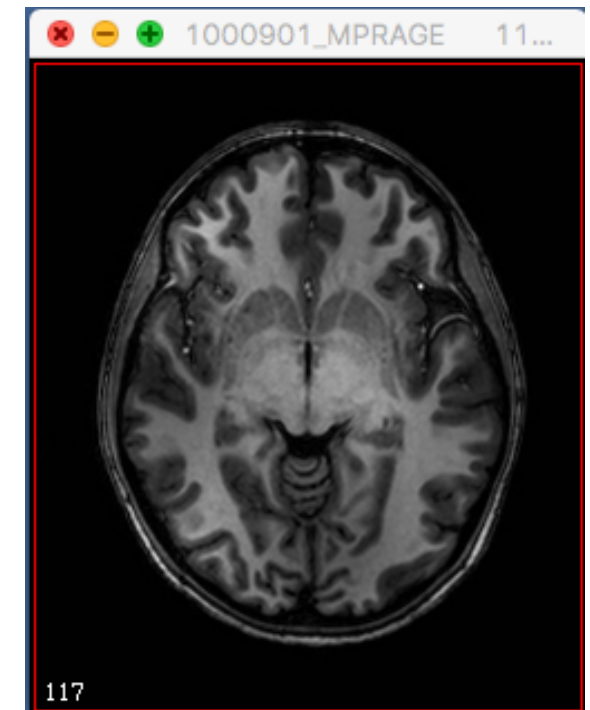
Open an image in Mipav

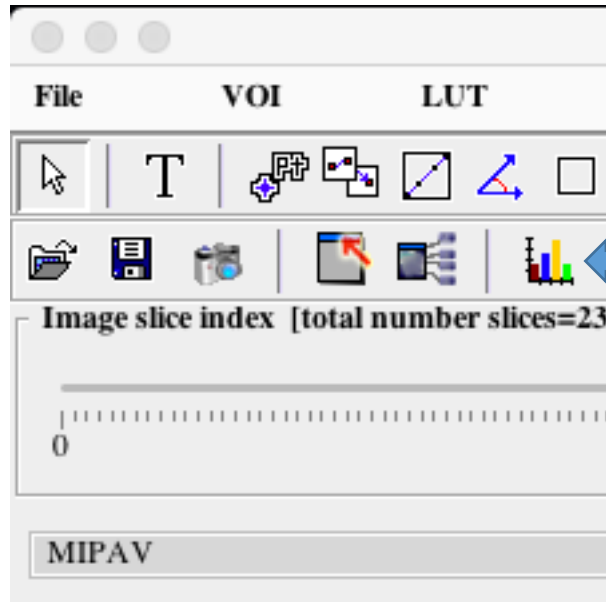- "File" -> "Open image from disk" -> Select your image to be opened

Click "Open"

Click here

View histogram

Click here

Color bar

Cou[nt]

Intensity

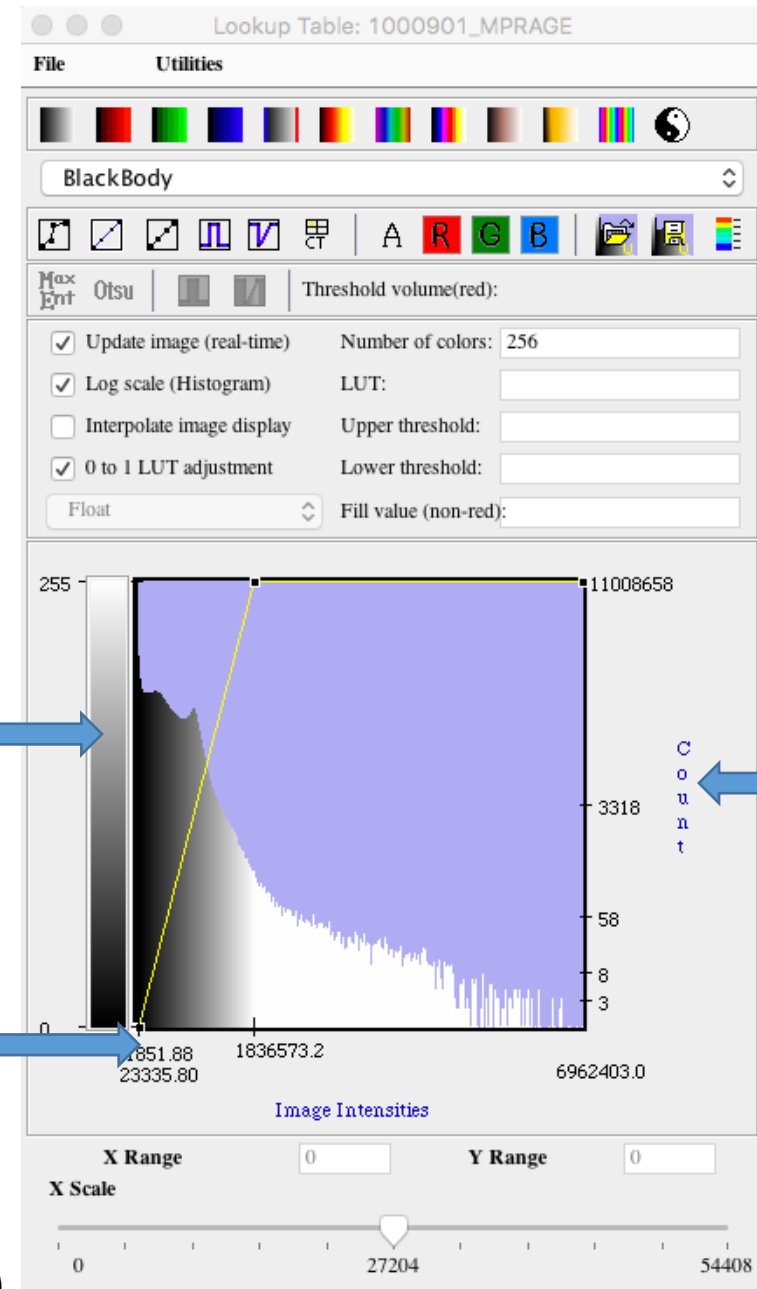To quickly change color bar, use the buttons below:

Note that one color bar is unique/equivalent to one Look-Up Table(LUT).
LUT: a pre-stored table in your computer that maps the pixel value to a color representation

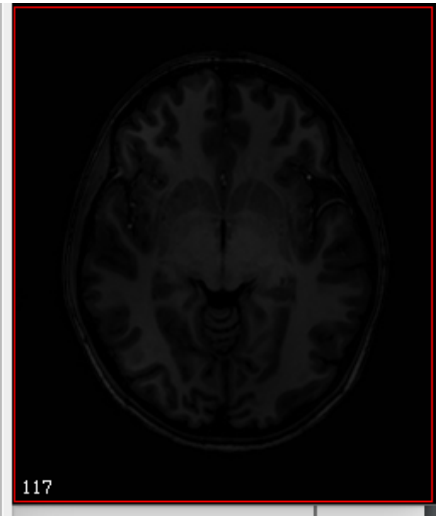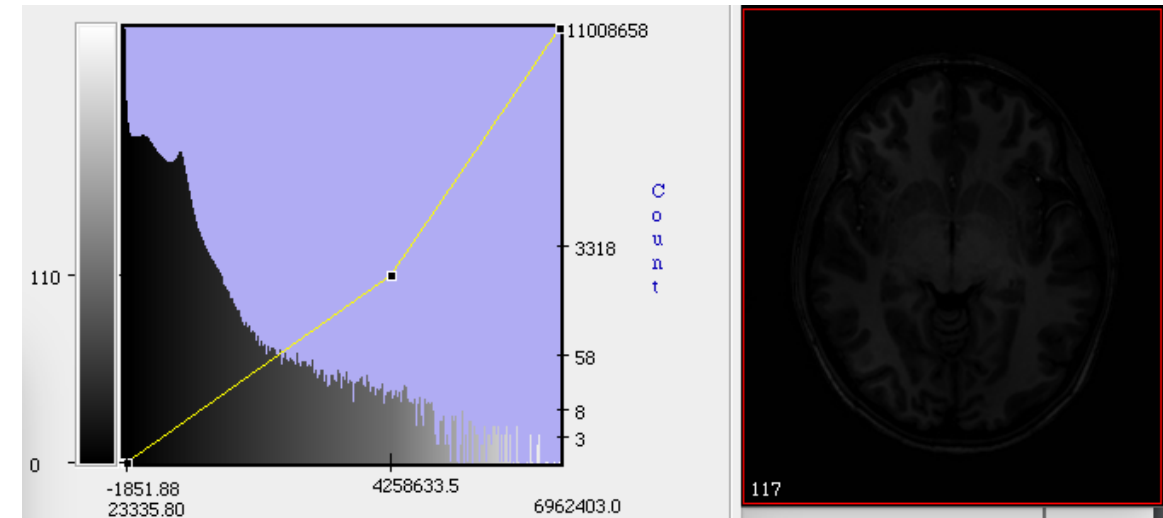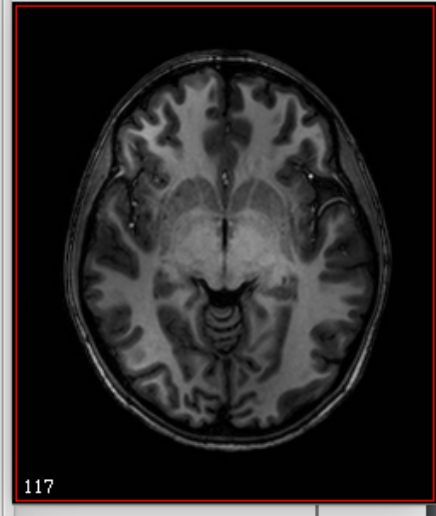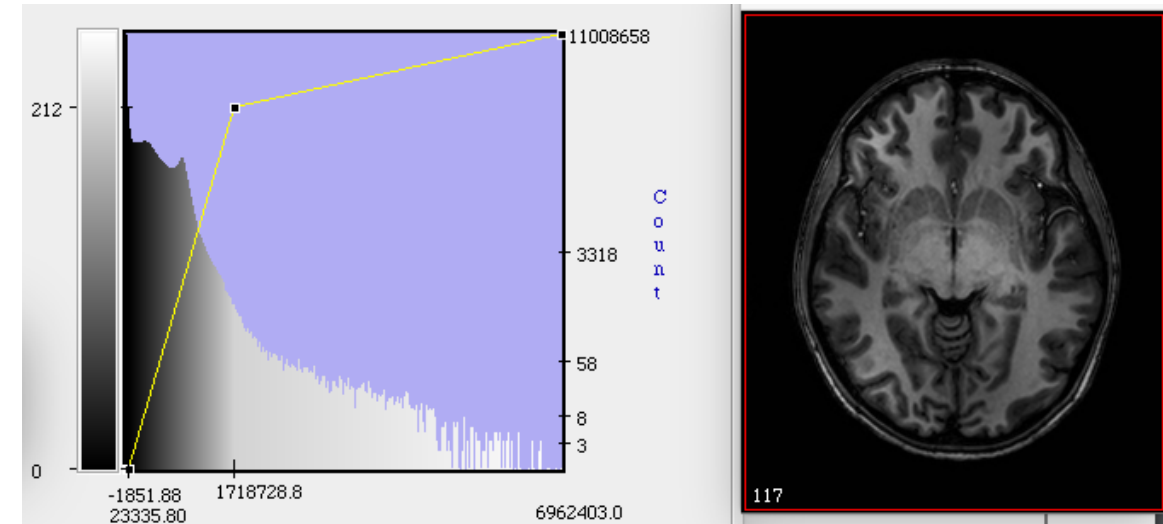# Adjust contrast

Drag this to modify transfer function
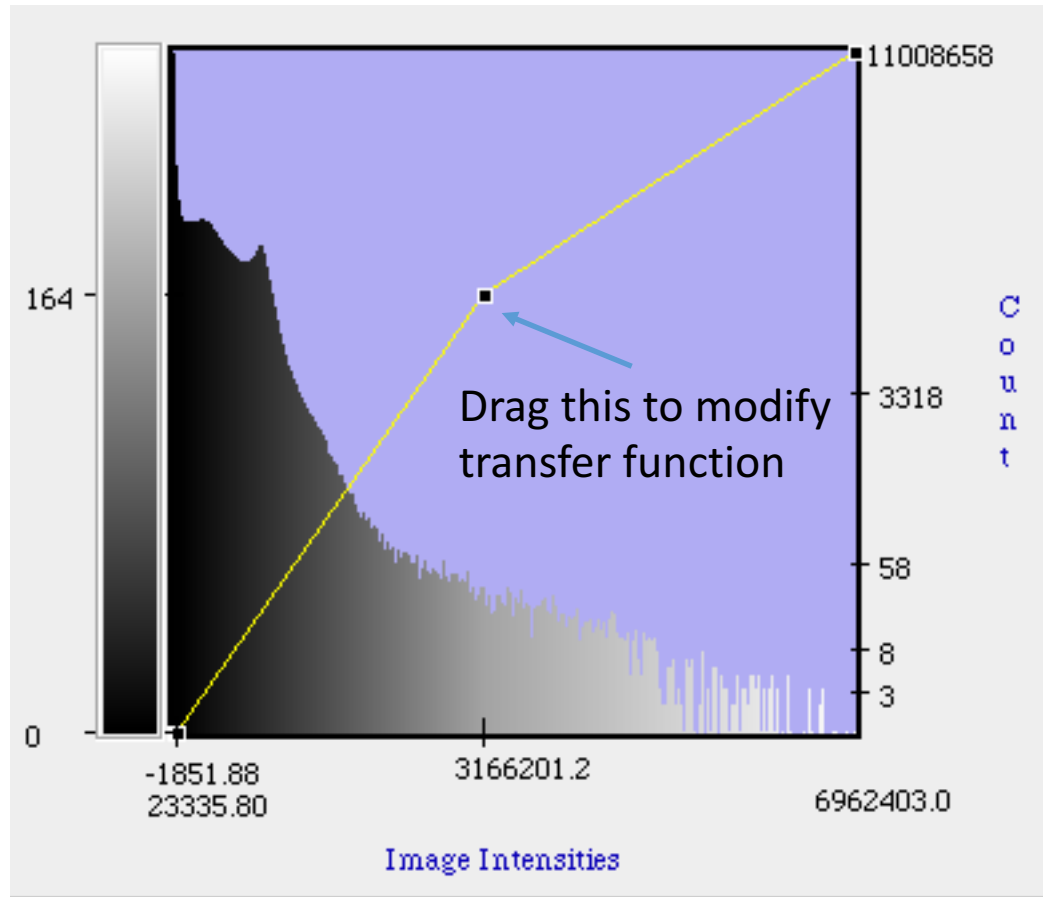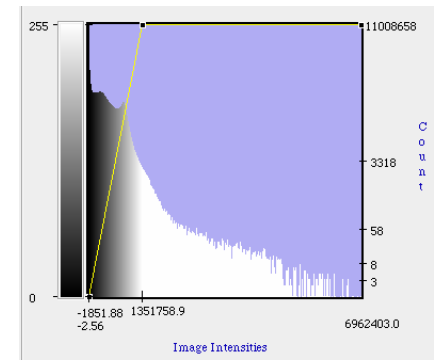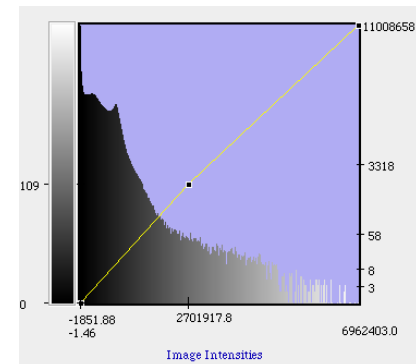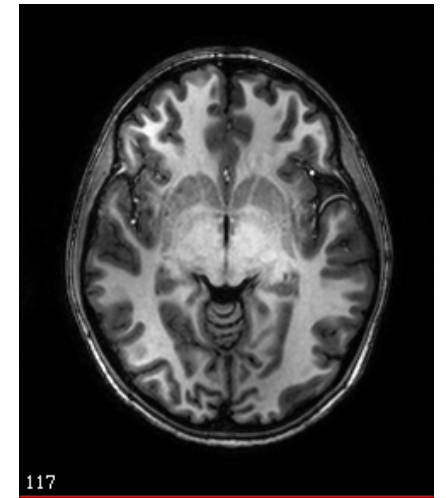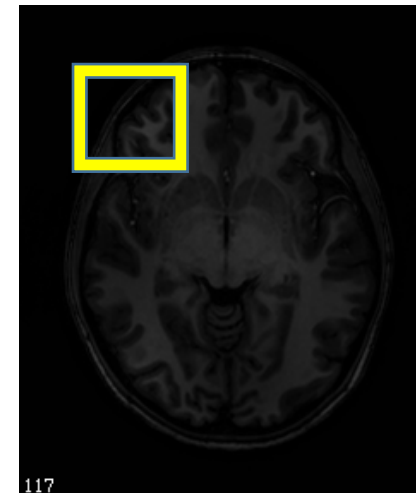
Transfer function: a function that maps an intensity value to a pixel intensity (color)

QuickLUT

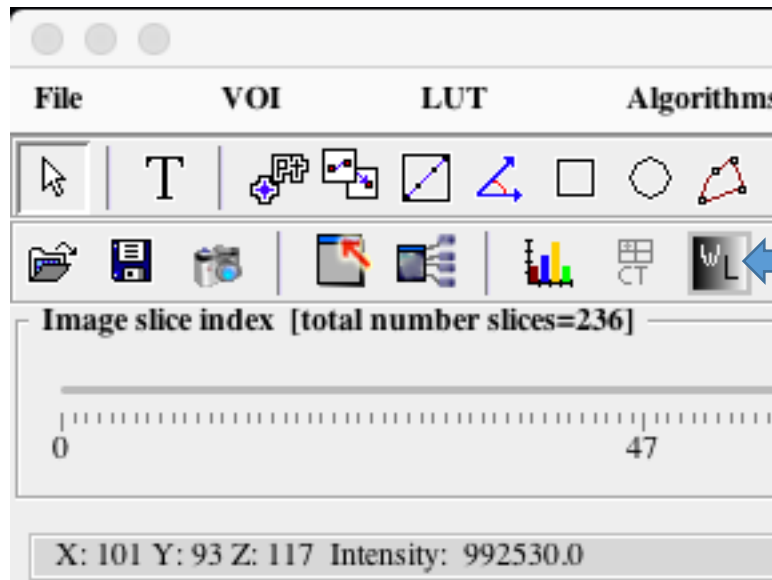- Click the button and select a region in the image; the brightness and contrast will be set automatically
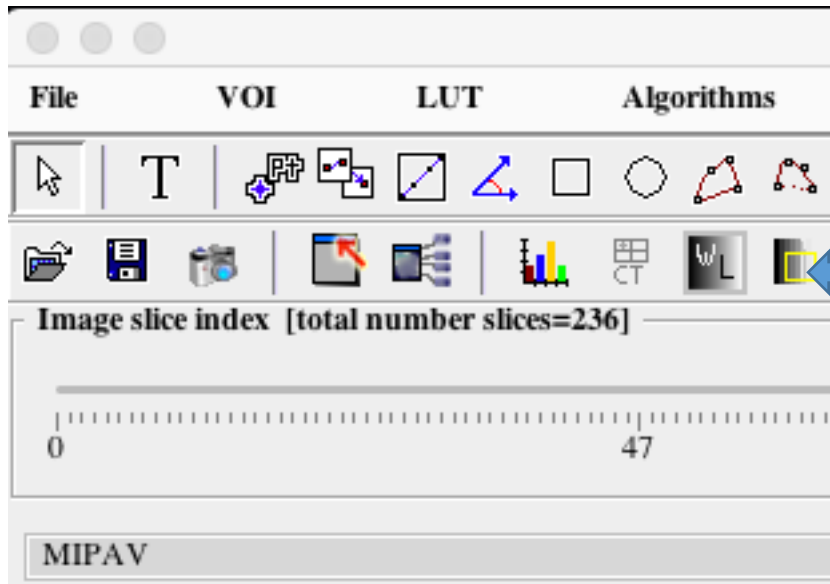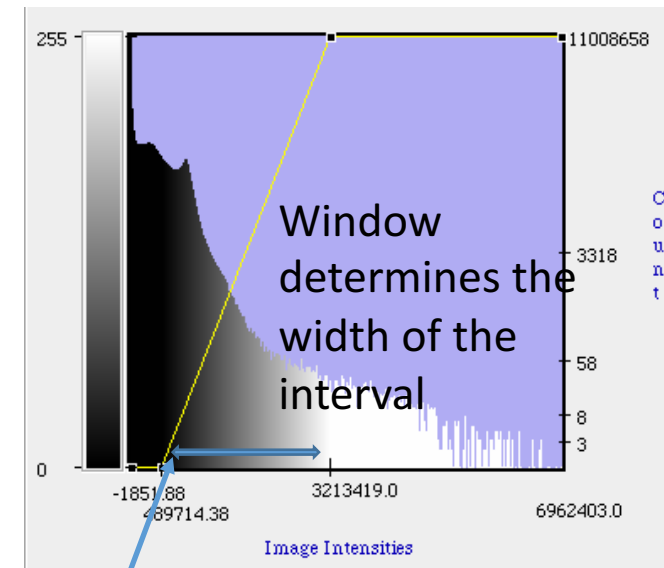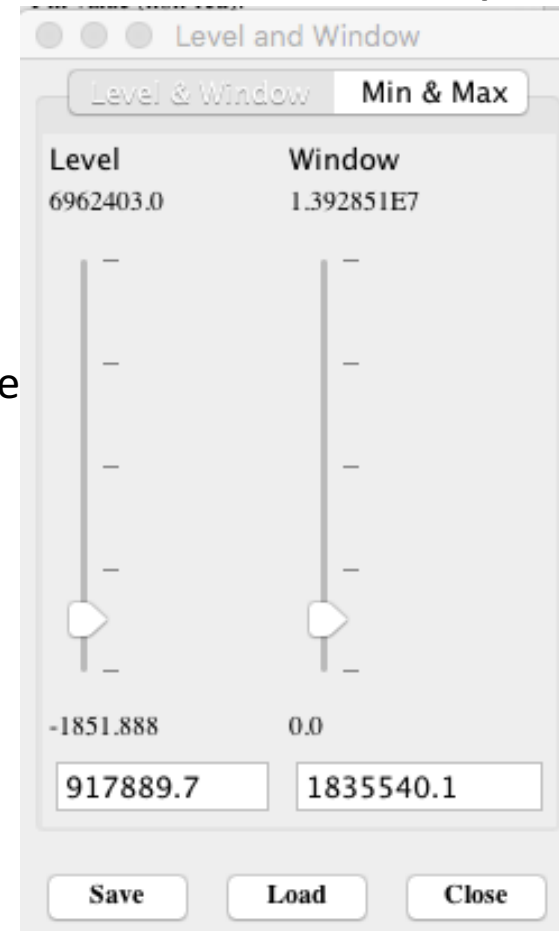

Click here

Level/Window button

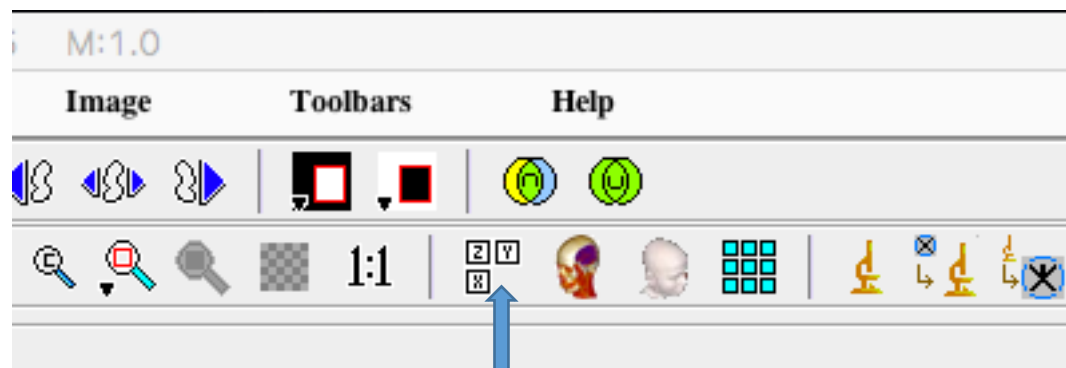- Level is responsible for brightness; window is responsible for contrast

Click here

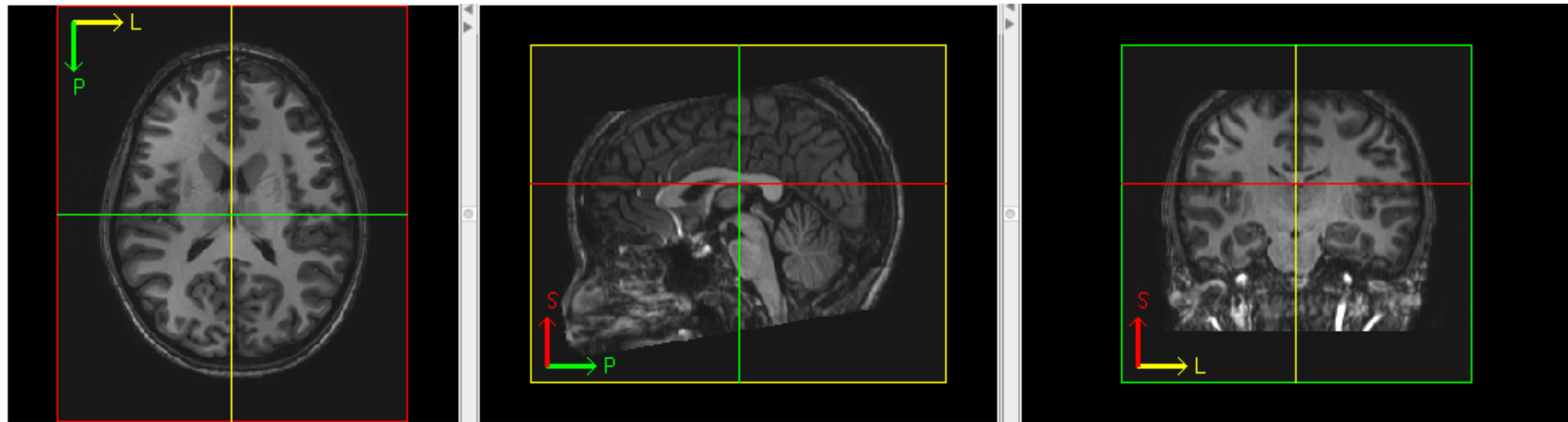Window determines the width of the interval

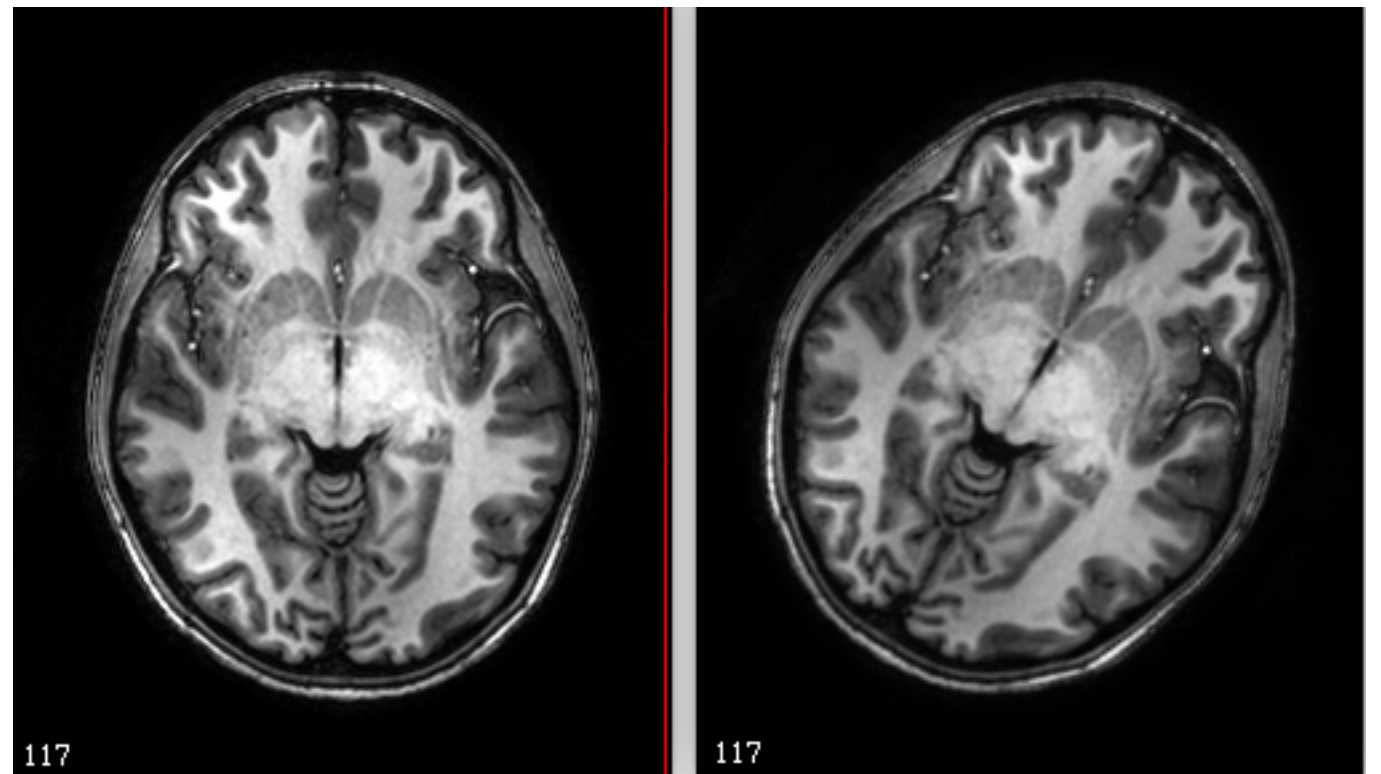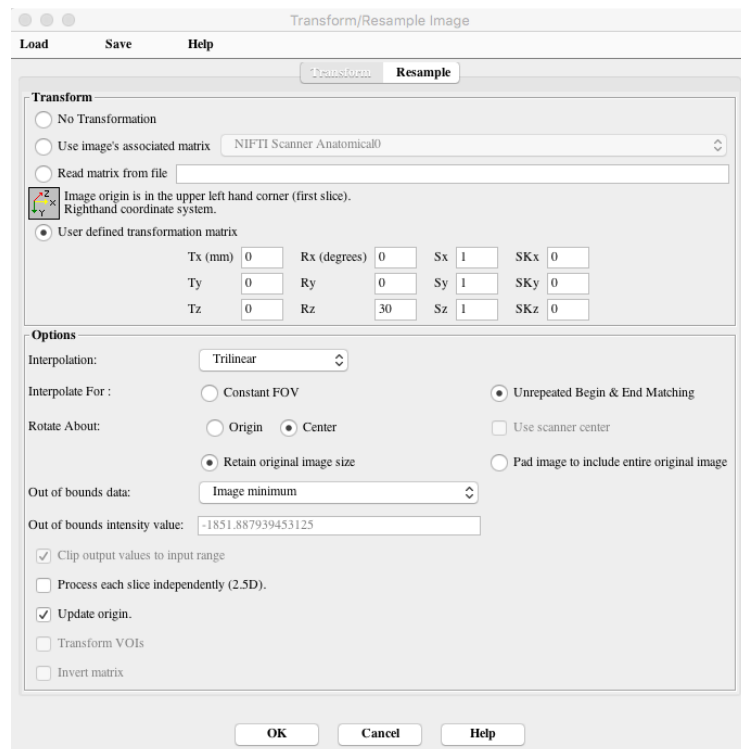Level determines the starting point of the window

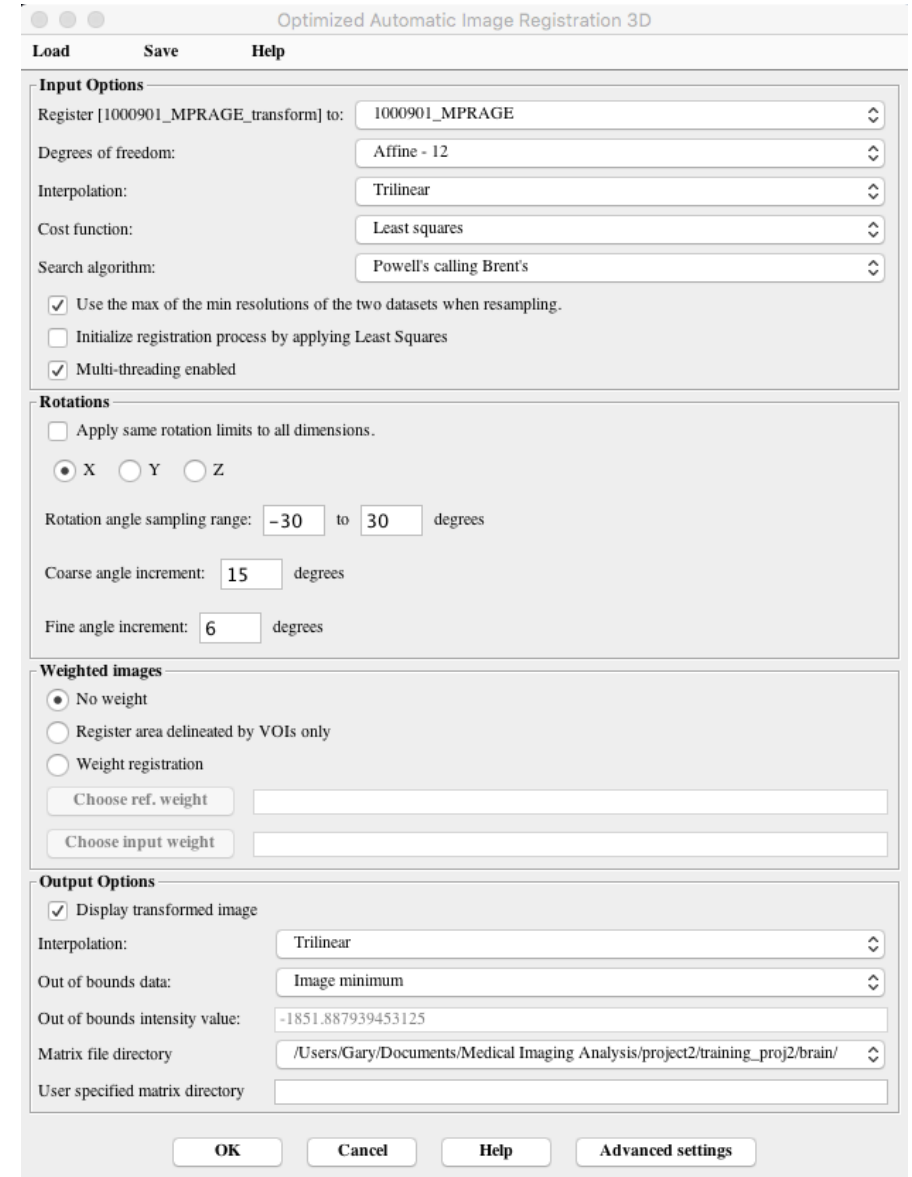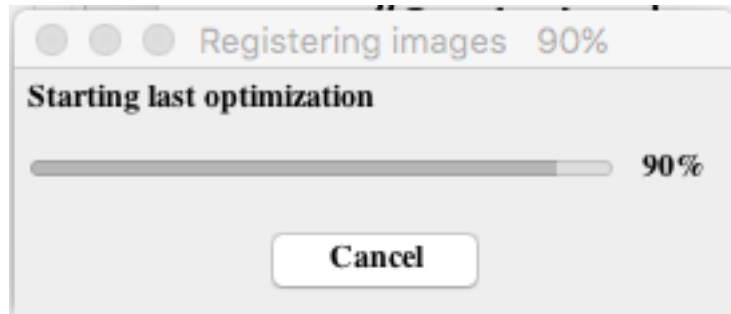# Tri-planar view

Click here

Registration (genMovingIm)

- Generate a moving image; "Algorithms" => "Transformation tools" => "Transform" => activate "User defined transformation matrix"
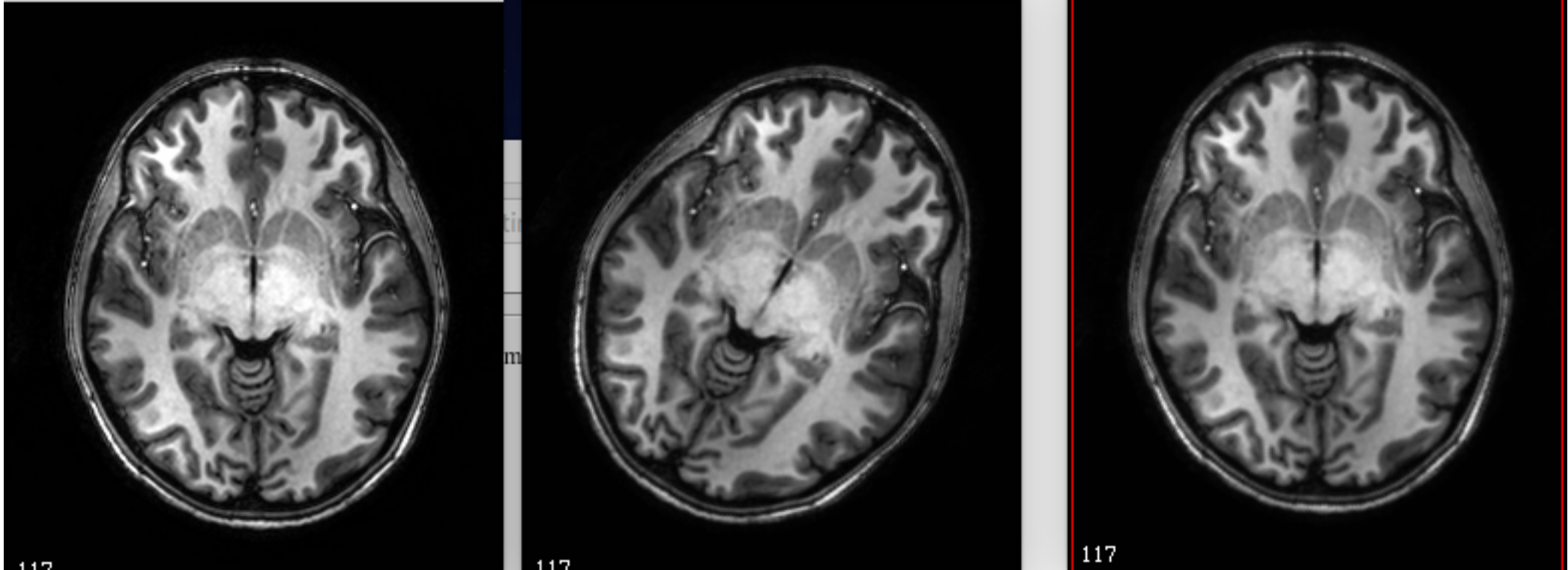
Registration (register)

- Select the "moving" image
- Go to "Algorithms" => "Registration" => "Optimized automatic registration"
- Choose "least square" for Cost function
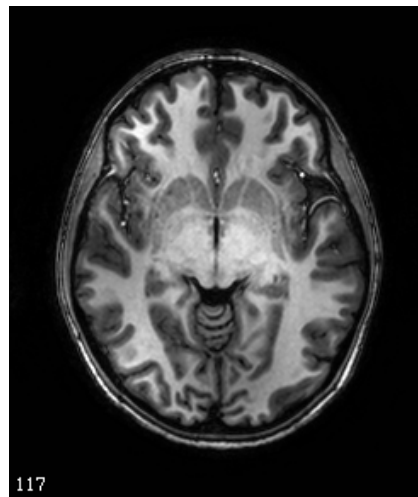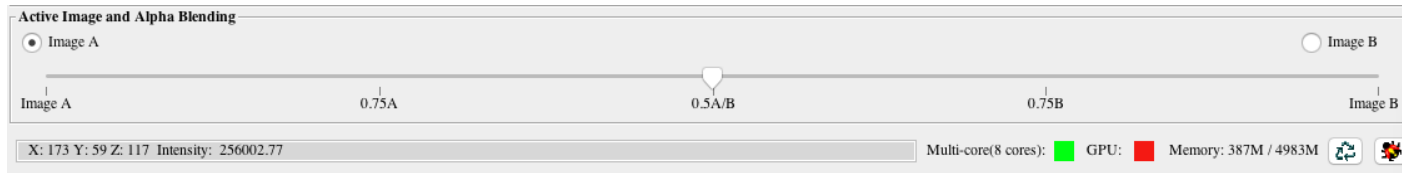
Registration result
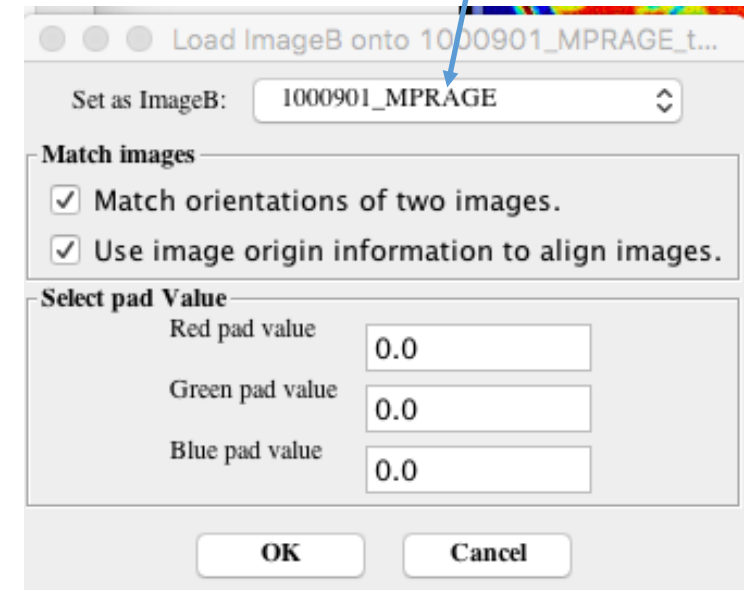

Reference image   Moving image   Registered image

Overlay volume

- Load the target/reference volume as ImageB and display it ontop of the registered volume

Reference image

Hot keys

- Holding down the right mouse button and moving the cursor over the image will adjust image brightness and contrast