

Exercise 56 : ITK Registration

The ITK Registration module functions the same as the Analyze 3-D Registration modules with the exception of ITK function specific parameters. The exercise will provide an overview of the module.

1. Load the **Register_MRI_Base.avw** data set from the **\$_\BIR\images\TutorialData** directory.
2. Next open the **Load As** module (**File > Load As**). Navigate to and select the **Register_MRI_Match.avw** data set from the **\$_\BIR\images\TutorialData** directory. Select the **Resize** tab and check the **Force Cubic** option. Click **Load**.
3. Select the **Register_MRI_Base.avw** data set. Then, while holding down the **<Ctrl>** key, select the **Register_MRI_Match.avw** data set (resulting in both being selected).
4. Open the **ITK Registration** module (**ITK > Registration**).
5. Open the **Blend** window (**Generate > Blend**) and set the Blend Option to **Red-Green** (figure 1).
6. Press the **Register** PowerBar button or choose **Generate > Register**.
7. After registration is complete, evaluate the registration by moving the crosshair in any of the panes to navigate through the image data.
8. If you are satisfied with the registration, save a copy of the transformed match volume (Register_MRI_Match), choose **File > Save Transformed**. The transformed volume can be saved to disk or to the Analyze workspace.
9. If you are unsatisfied with the registration, reset by selecting the Reset Matrix button in the **Manual Registration** tool (**Tools > Manual Registration**). Adjusting the Match position manually and the ITK Registration Parameters (**Generate > Parameters**) (figure 2). For more information about the ITK Registration Parameters, please refer to the ITK Users Guide (www.itk.org/ItkSoftwareGuide.pdf).
10. Close the ITK Registration module.

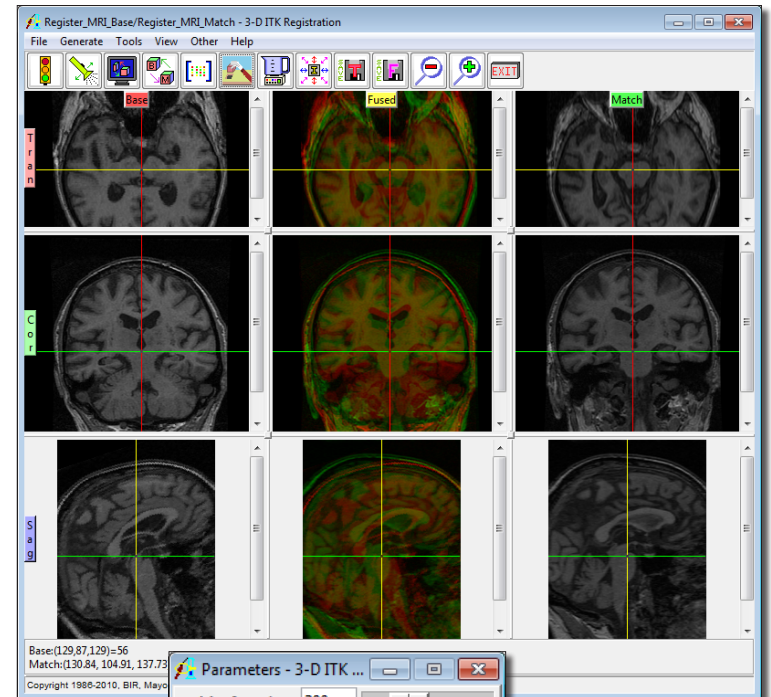


Figure 1

Figure 2