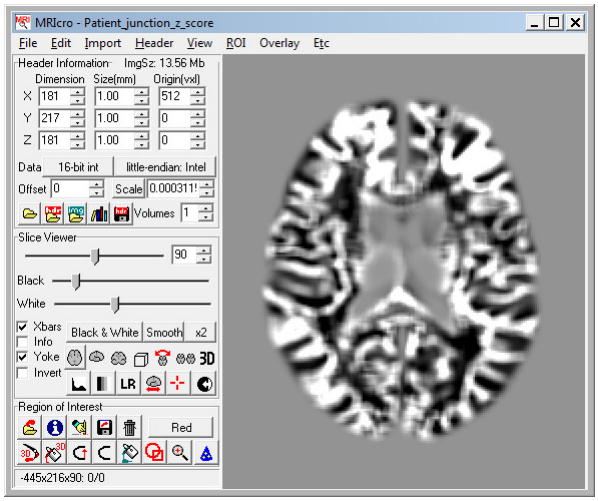
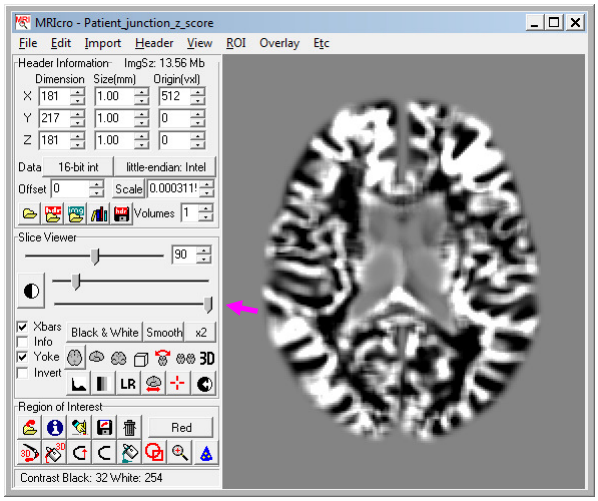
Adjusting contrasts and volume rendering in MRIcro

Adjusting contrasts of morphometric maps in MRIcro

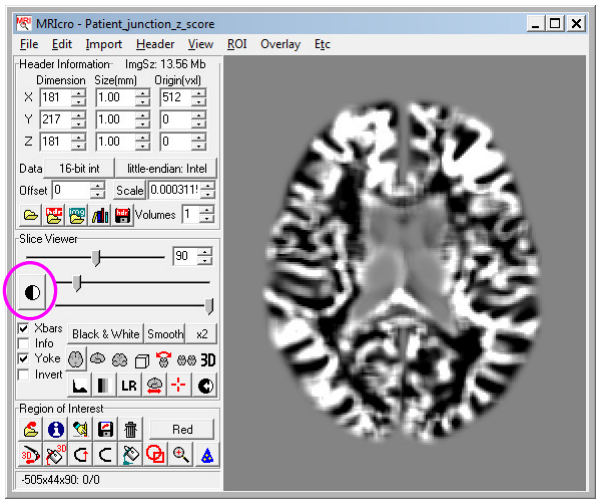
1) Load morphometric map into MRIcro
(e.g. the junction z score image as in this example)



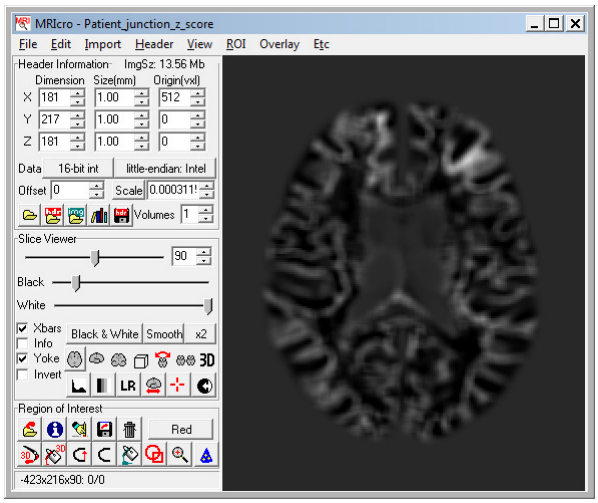
2) Drag 'white' slider to the right end



3) Press button 'Optimize contrast'

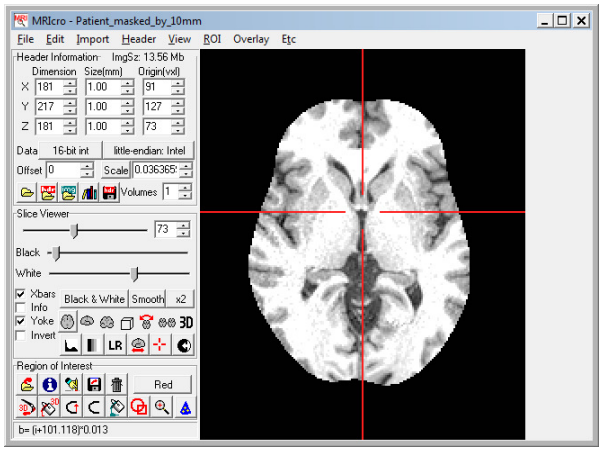


4) Contrasts are now optimal for viewing and analyzing the feature map

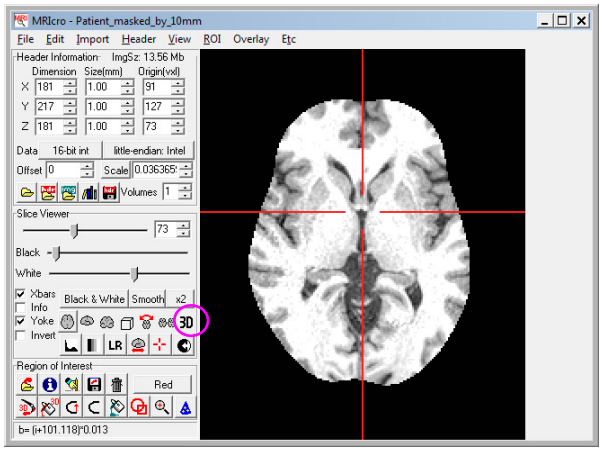


Volume rendering of curved surfaces in MRIcro

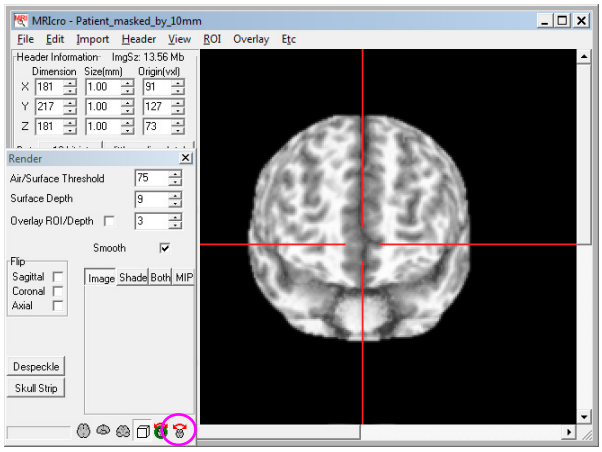
1) Load image with masked skull and outer brain regions into MRIcro (in this example a 10 mm mask was used)



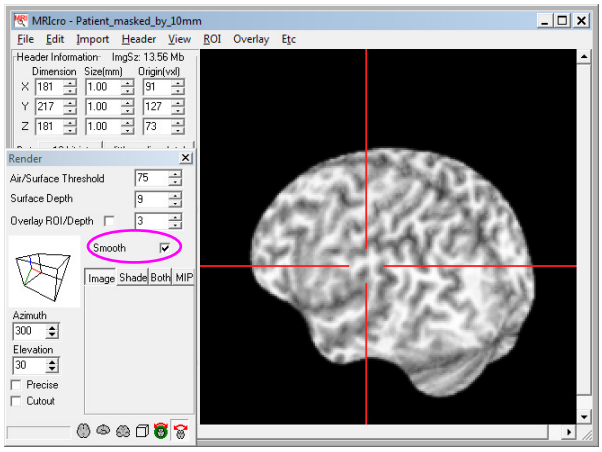
2) Select 3D view



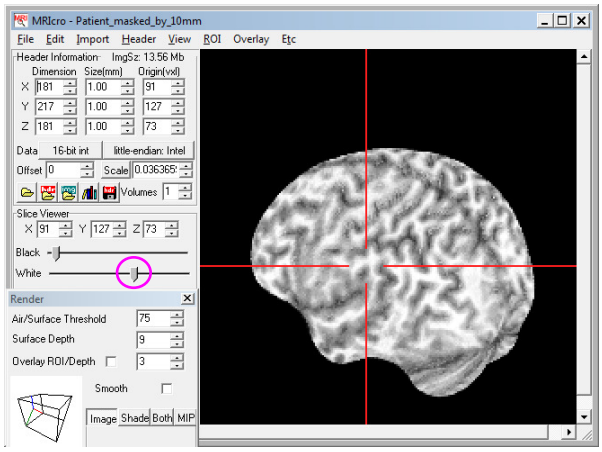
3) In the 'Render' window select 'Free rotate'



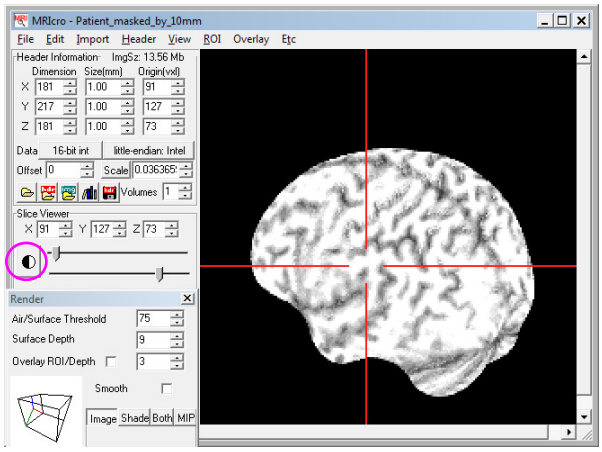
4) Deselect 'Smooth'



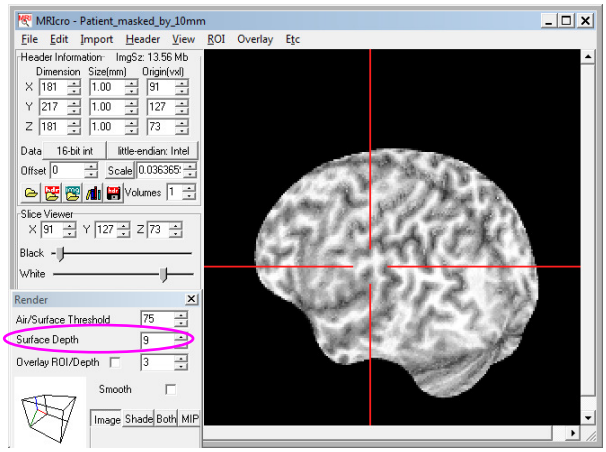
4) Drag 'white' slider somewhat to the right but not fully to the right end



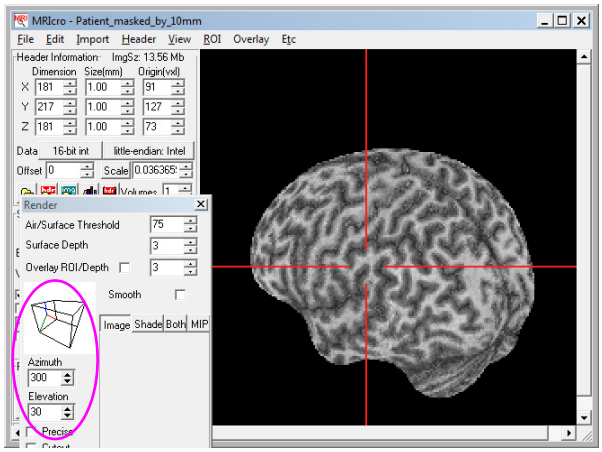
5) Press button 'Optimize contrast'



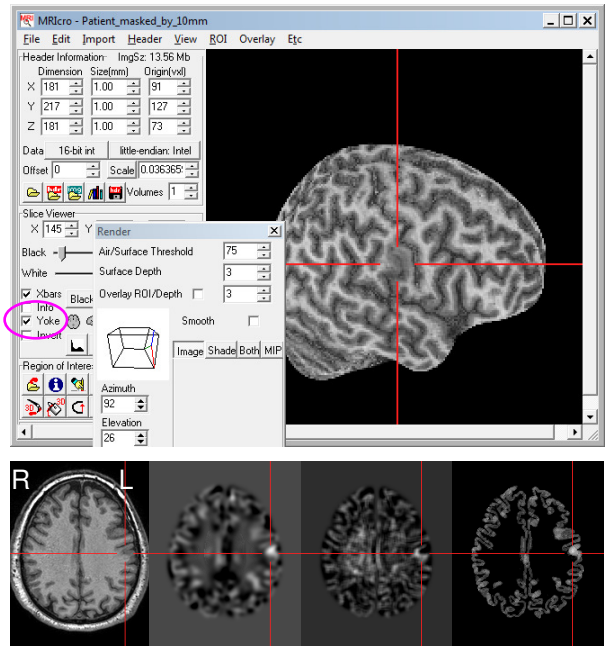
5) Set 'Surface Depth' to 2 or 3 mm



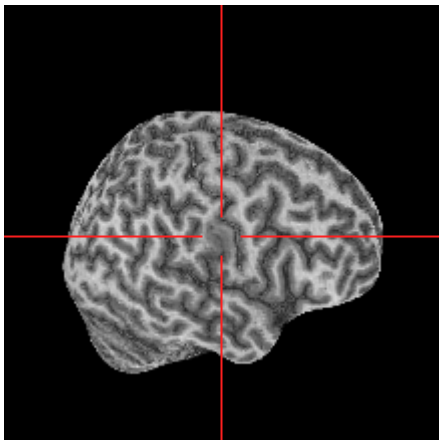
6) Rotate model to get correct viewing angle or directly select 'Azimuth' and 'Elevation'



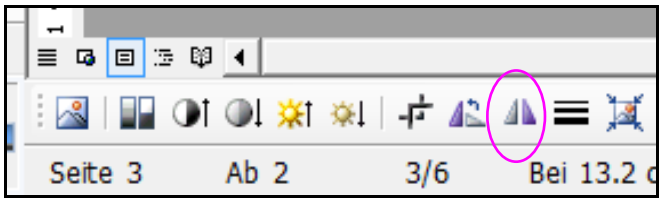
7) Set crosshairs to the lesion and set 'Yoke' flag to align the crosshairs with those in other images (for example the feature maps below)



8) Copy image by pressing 'Ctrl' + 'C', then paste into Word file by pressing 'Ctrl' + 'V'



9) Do a left-right flip with the 3D image in the Word file: This is necessary because MRIcro expects MRI data sets in neurological orientation (R=R) while the output of MAP18 is in radiological orientation (R=L).



10) Finish: It is now clearly recognizable that this lesion is located behind the left central sulcus