

HCP Subjects with Segmentation flags

Part 1

These are HCP (Young Adult) subjects that have an error in their FreeSurfer output that was found during Surface QC. These errors can be seen in the volume surface outlines, parcellations and/or on the surfaces in the sulcal maps and myelin maps.

The following slides show the processed data results in Connectome Workbench wb_view.

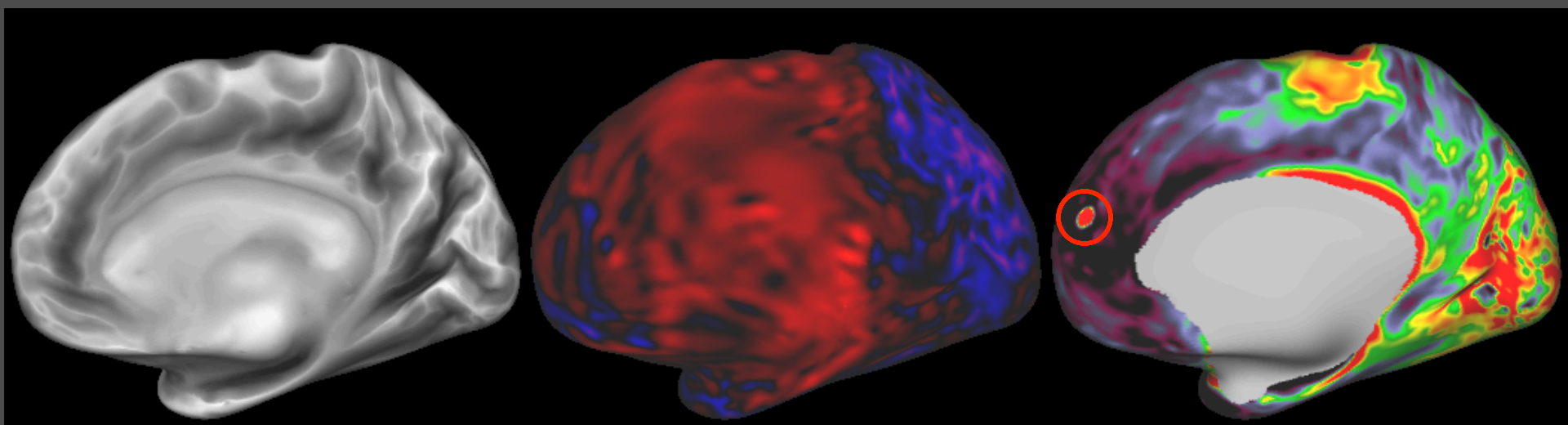
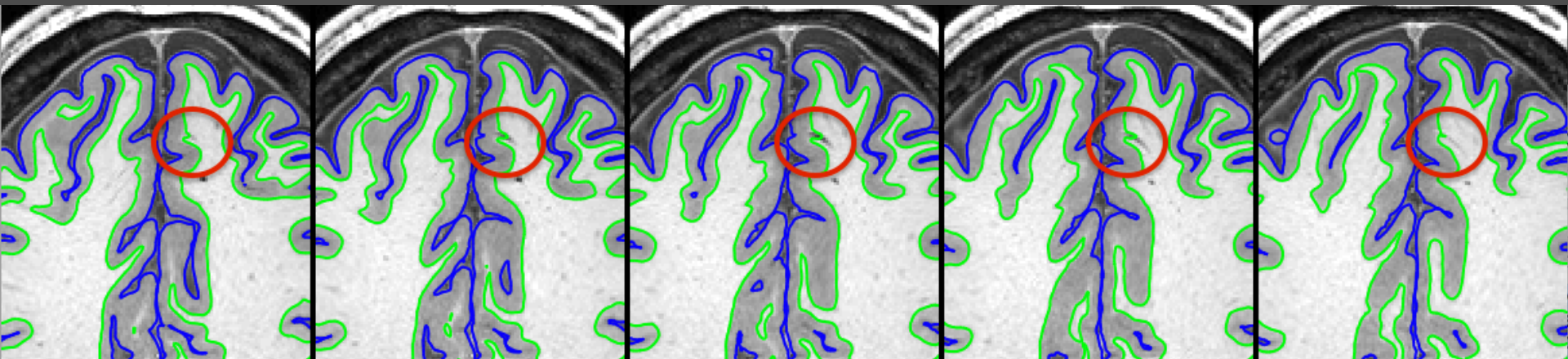
The slides showing errors in the hippocampus segmentation and parcellation are displaying the `aparc+aseg.nii.gz` parcellation file in which the hippocampus is supposed to be colored yellow.

The files for the surface maps are:

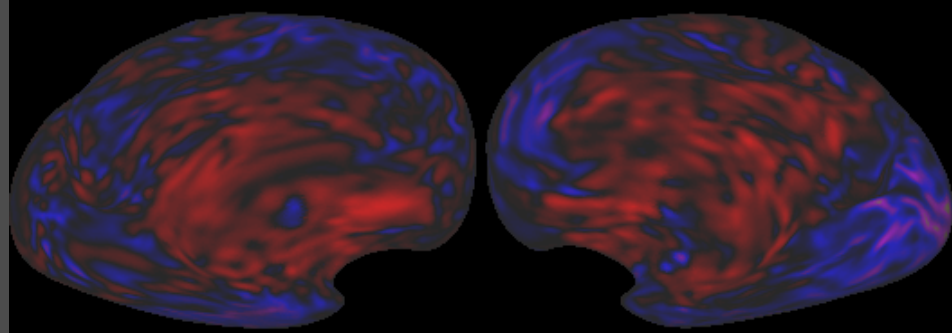
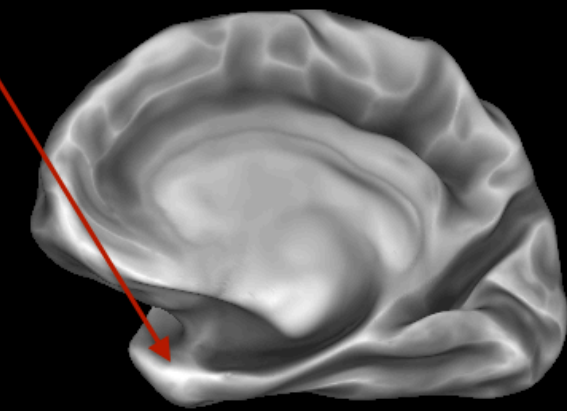
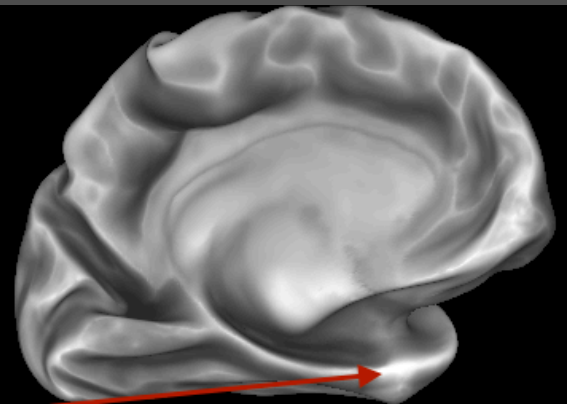
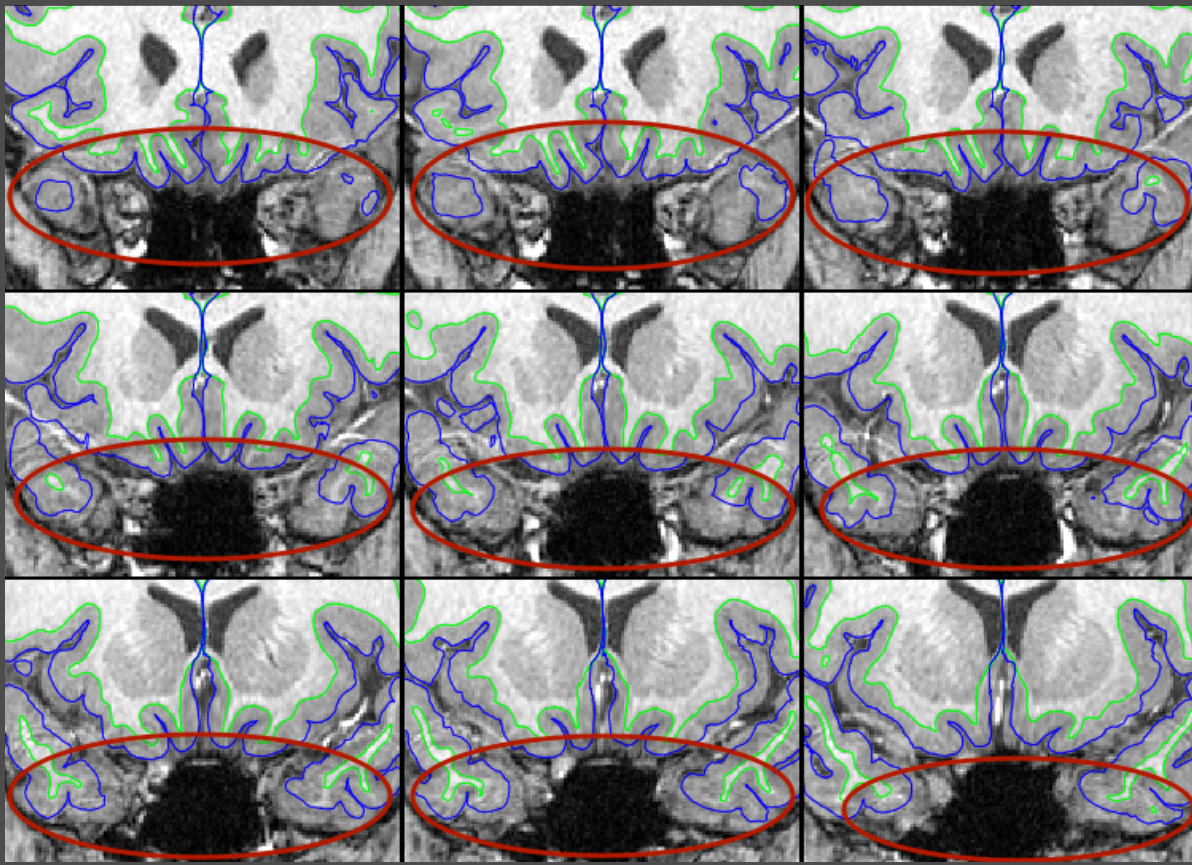
Sulcal map = {Subject}.sulc.164k_fs_LR.dscalar.nii

Areal Distortion map = {Subject}.ArealDistortion_MSMSulc.164k_fs_LR.dscalar.nii

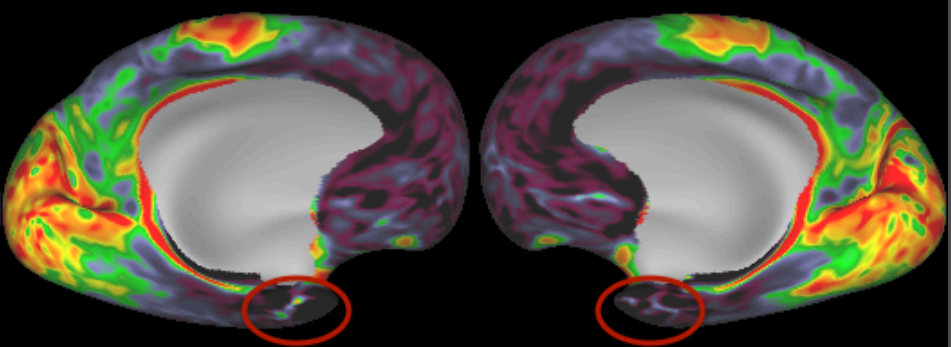
Myelin map = {Subject}.SmoothedMyelinMap_BC.164k_fs_LR.dscalar.nii



113417 - 1200 release - Temporal pole not fully captured

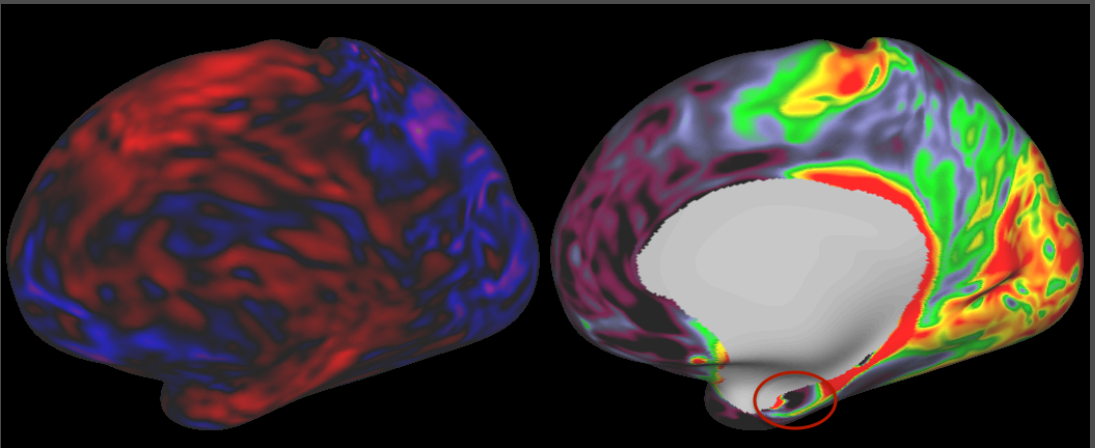
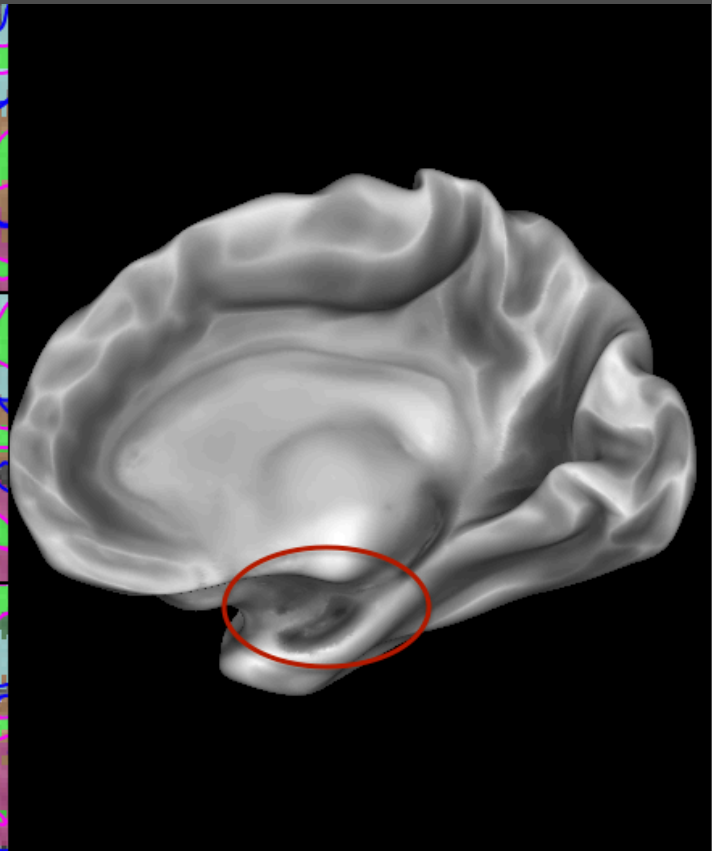
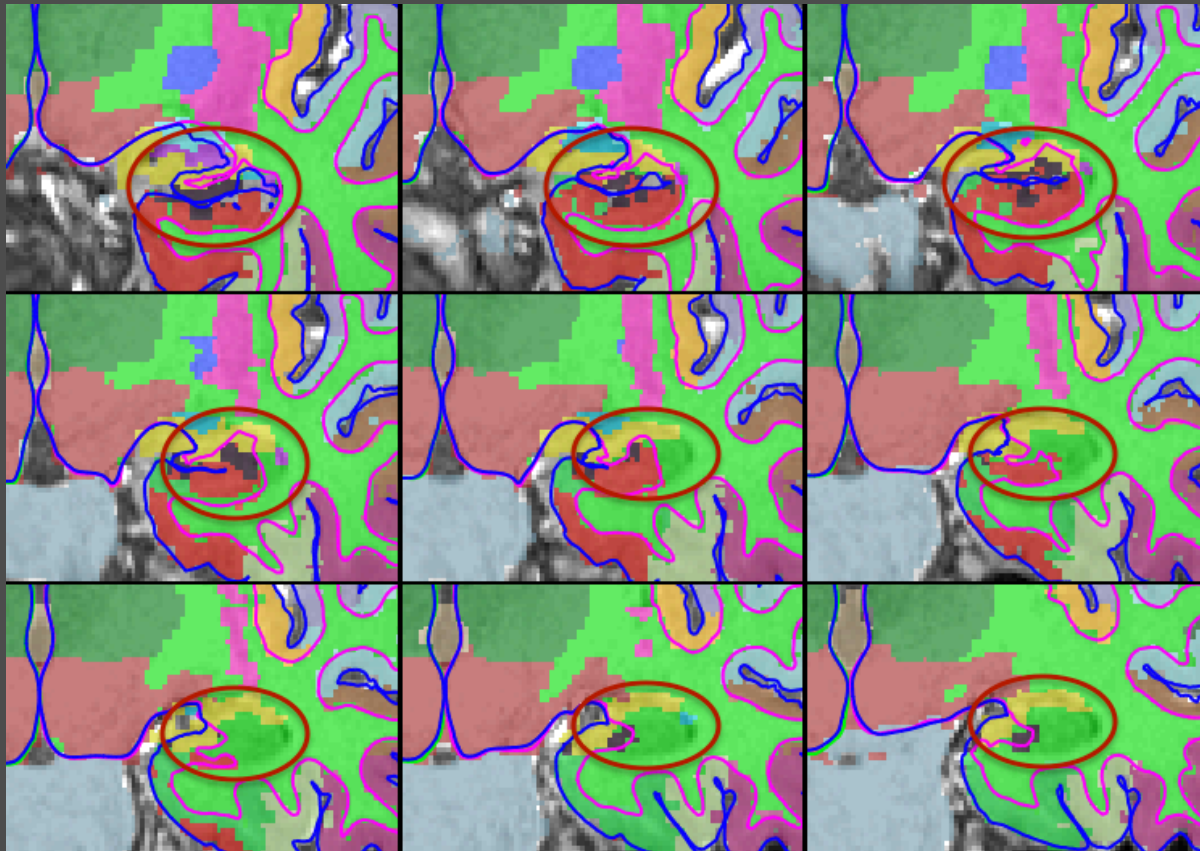


Areal Distortion map

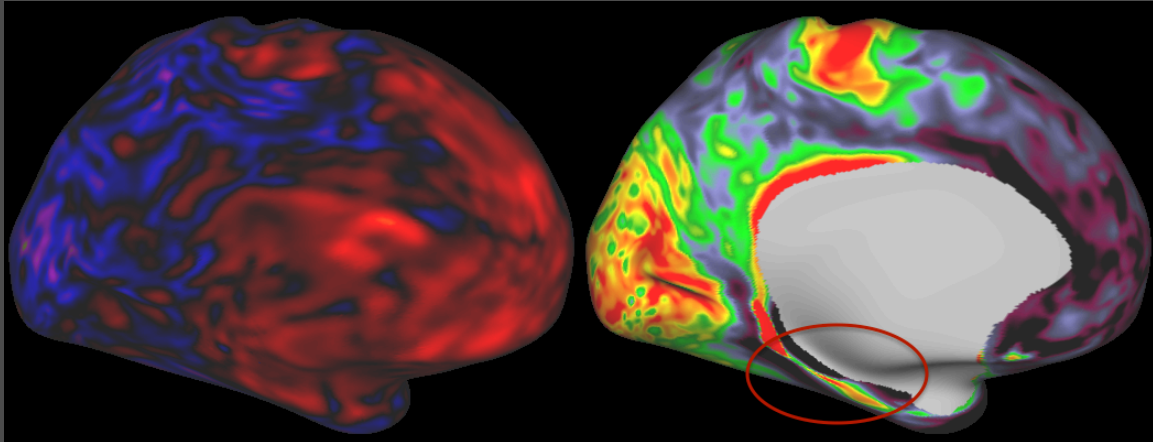
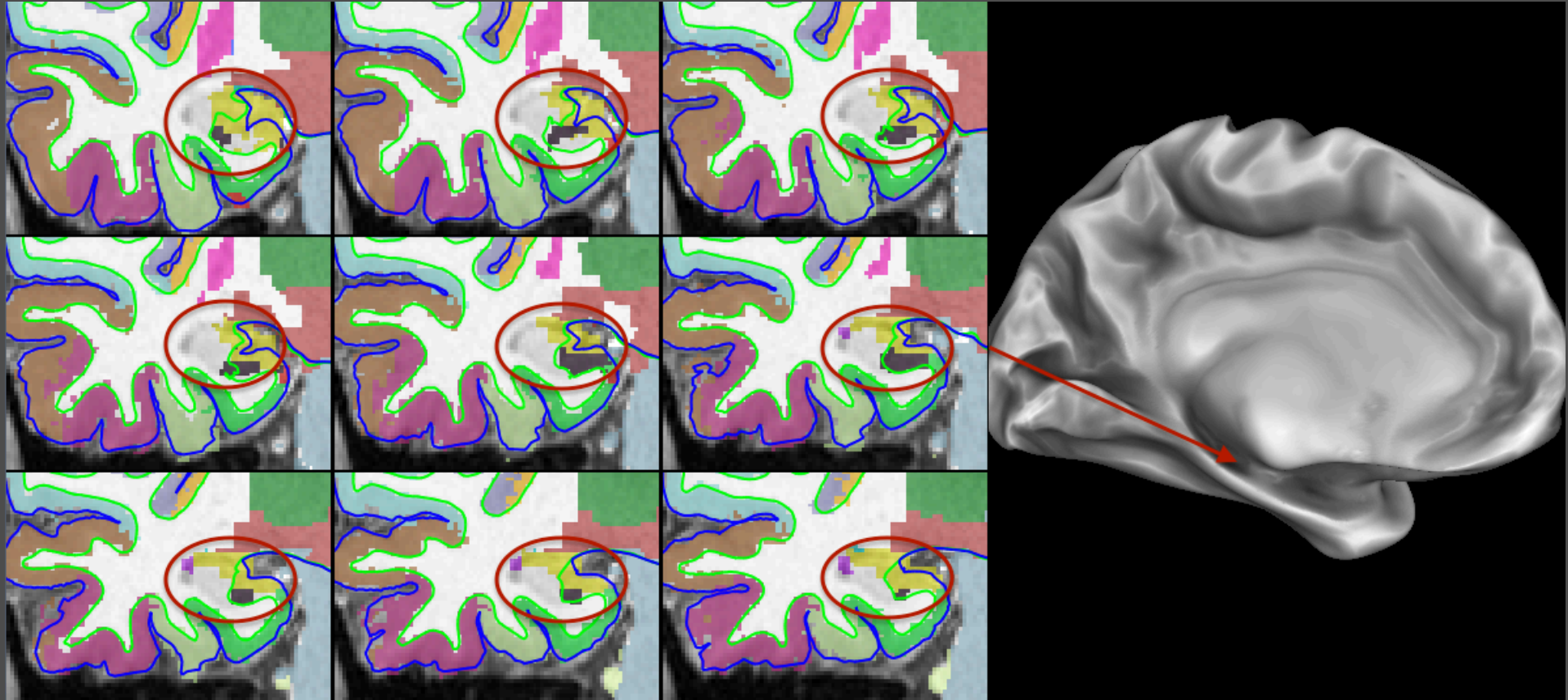


Myelin map

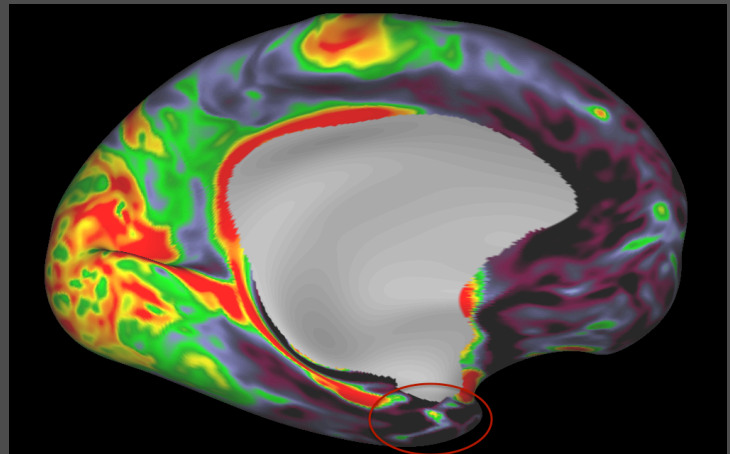
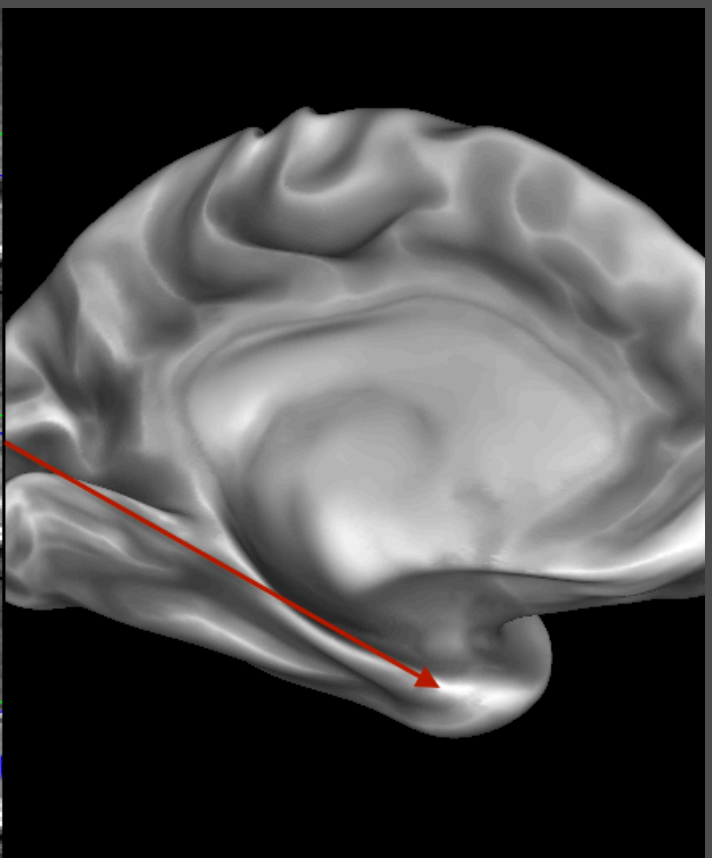
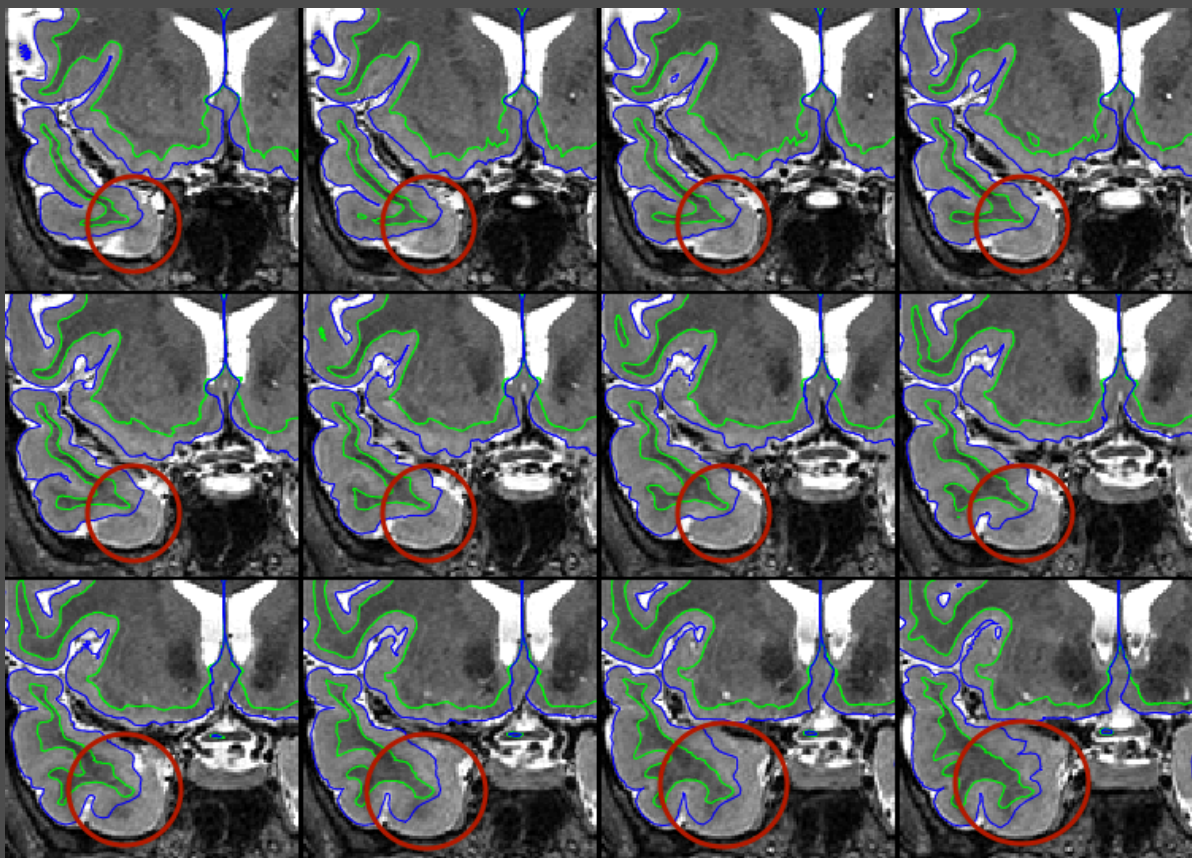
113821 - 500 release - Inaccurate hippocampal segmentation



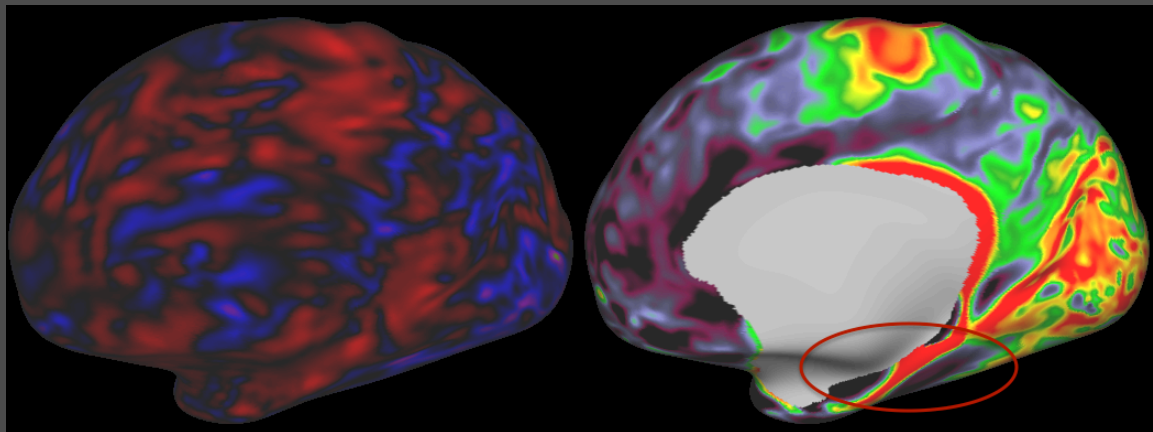
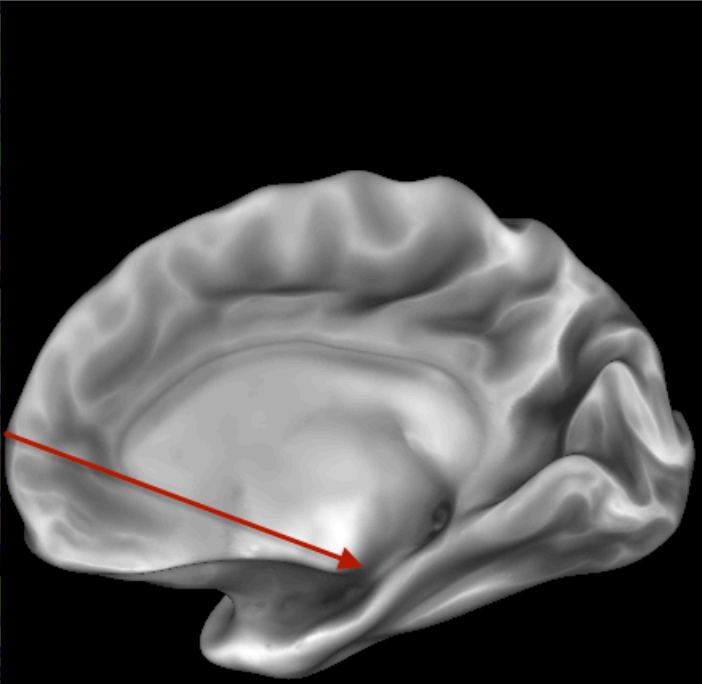
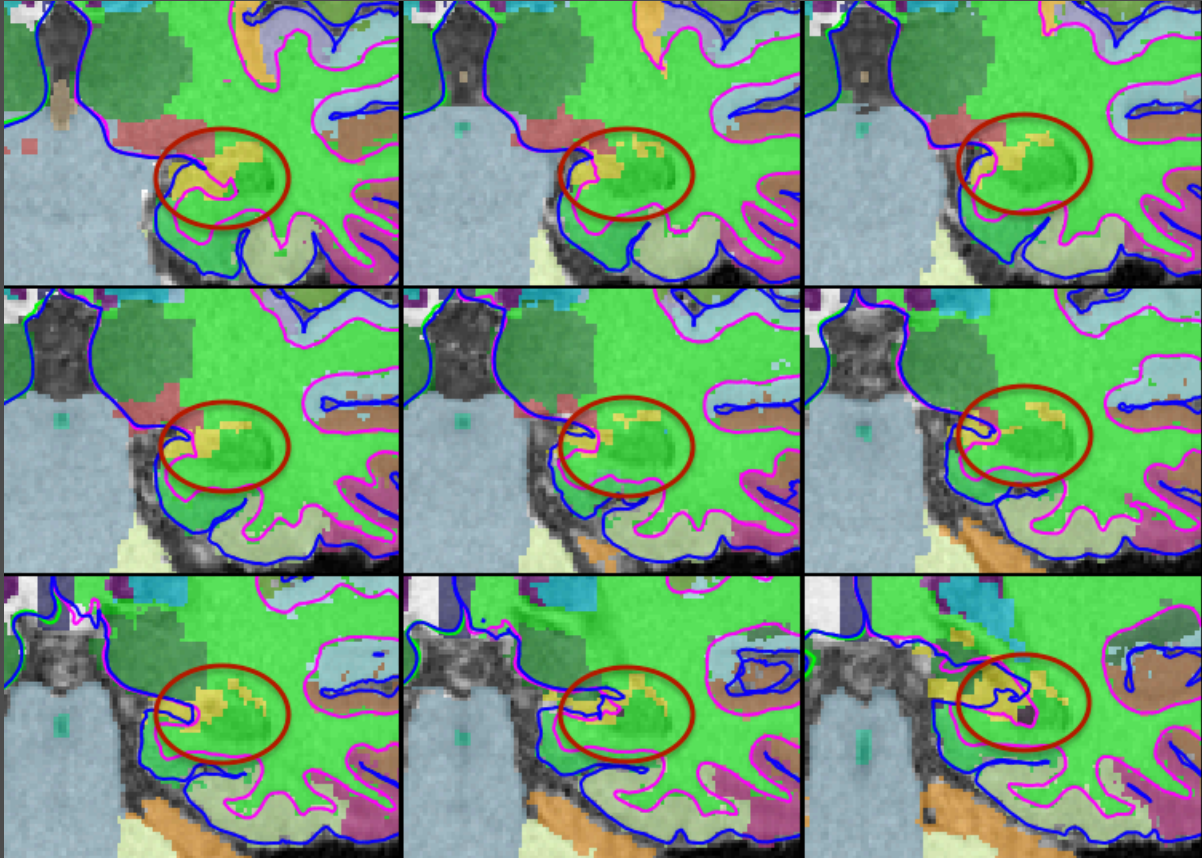
120010 - 1200 release - Inaccurate hippocampal segmentation



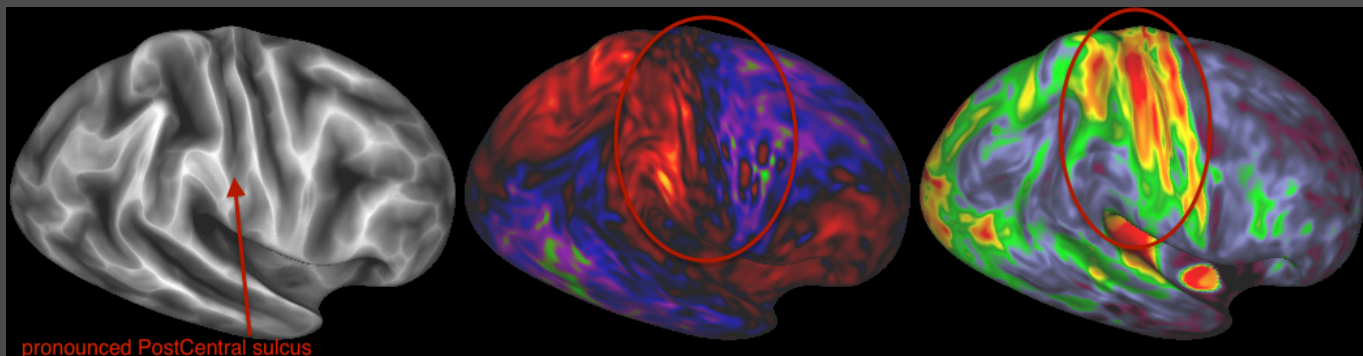
121719 - 1200 release - Temporal pole not fully captured



130518 - 1200 release - Inaccurate hippocampal segmentation



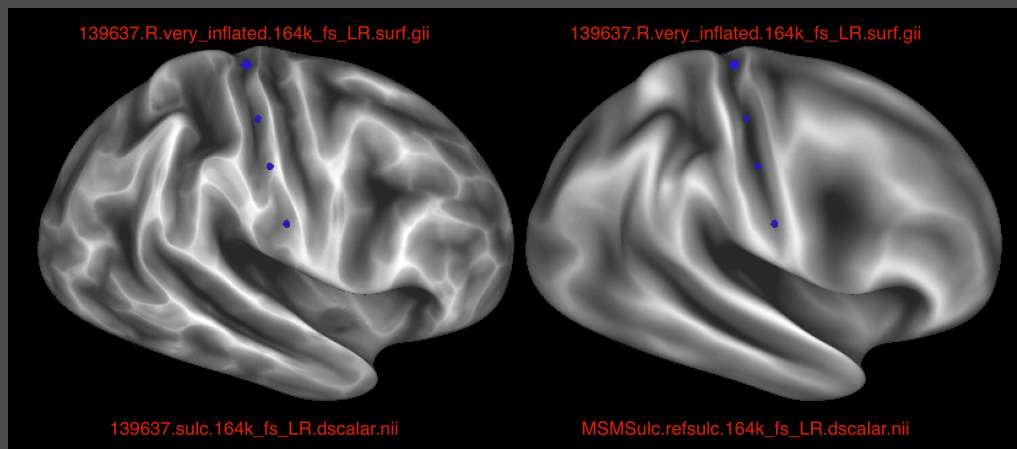
139637 - 500 release - Areal Distortion & Myelin Map problems in MSMSulc registration due to a pronounced post-central sulcus



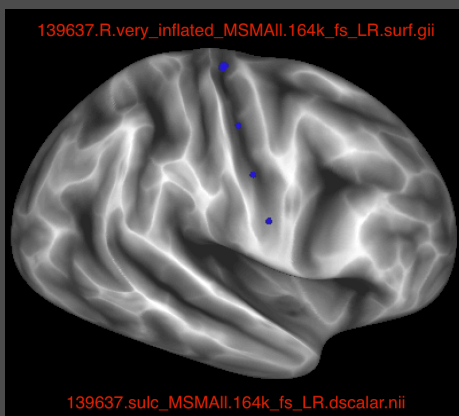
This is a subject with higher than usual Areal Distortion and an odd Myelin Map in the region of the right post-central and central sulcus ...

MSMSulc

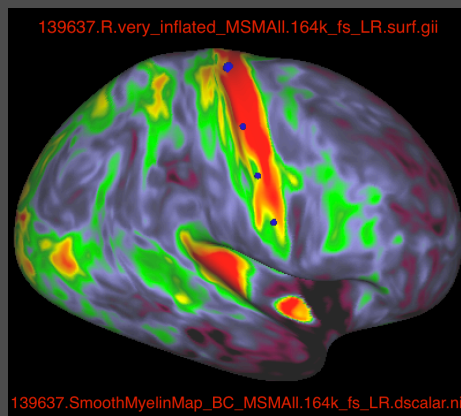
Registration target



... due to misalignment of the MSMSulc registration. Note that the anterior bank of the post-central sulcus is getting mapped to the central sulcus of the registration target by MSMSulc



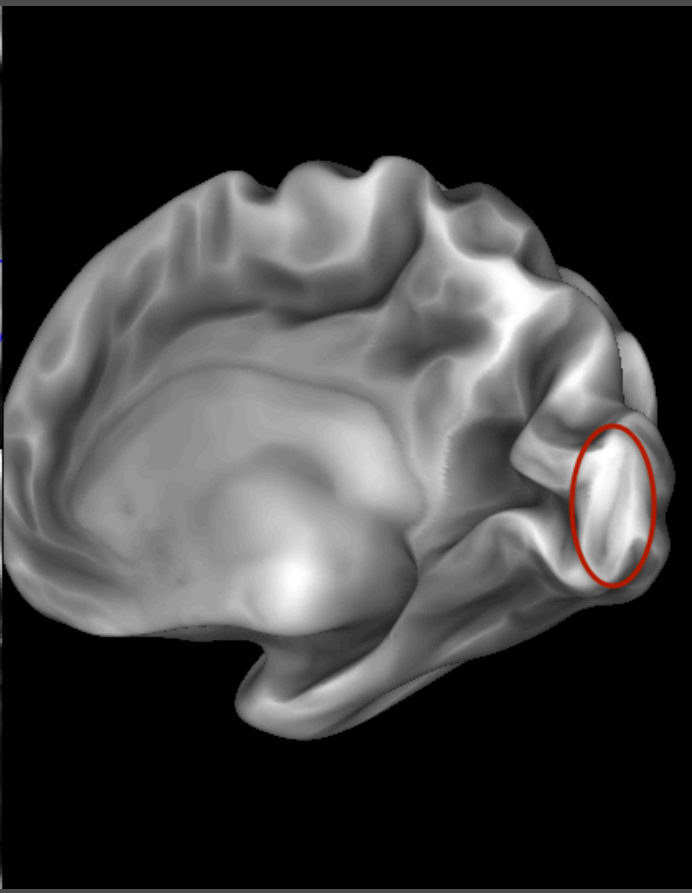
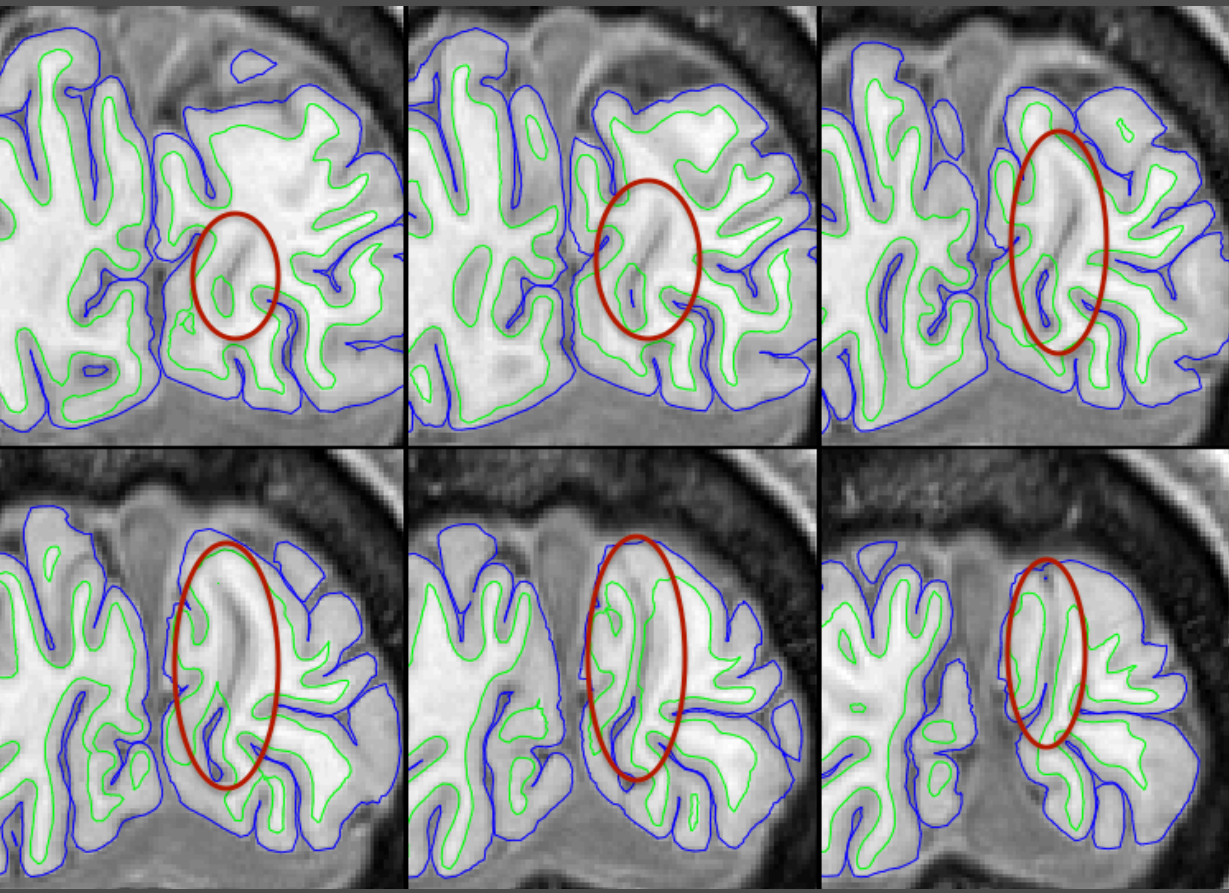
MSMAII



However, the MSMAII registration appropriately identifies the central sulcus of this subject ...

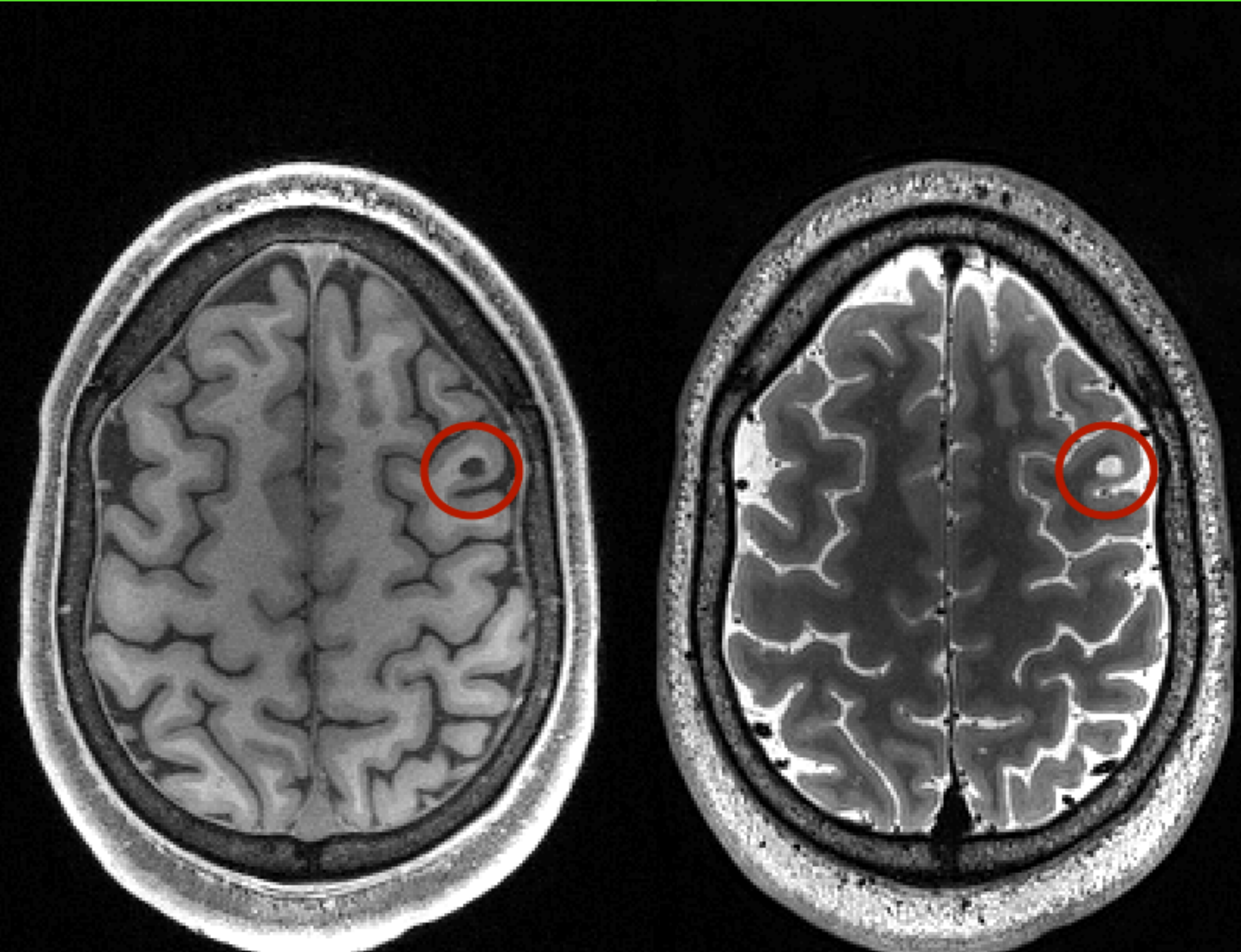
... and the region of high myelination is confined to the central sulcus.

143830 - 500 release - Occipital sulcus error

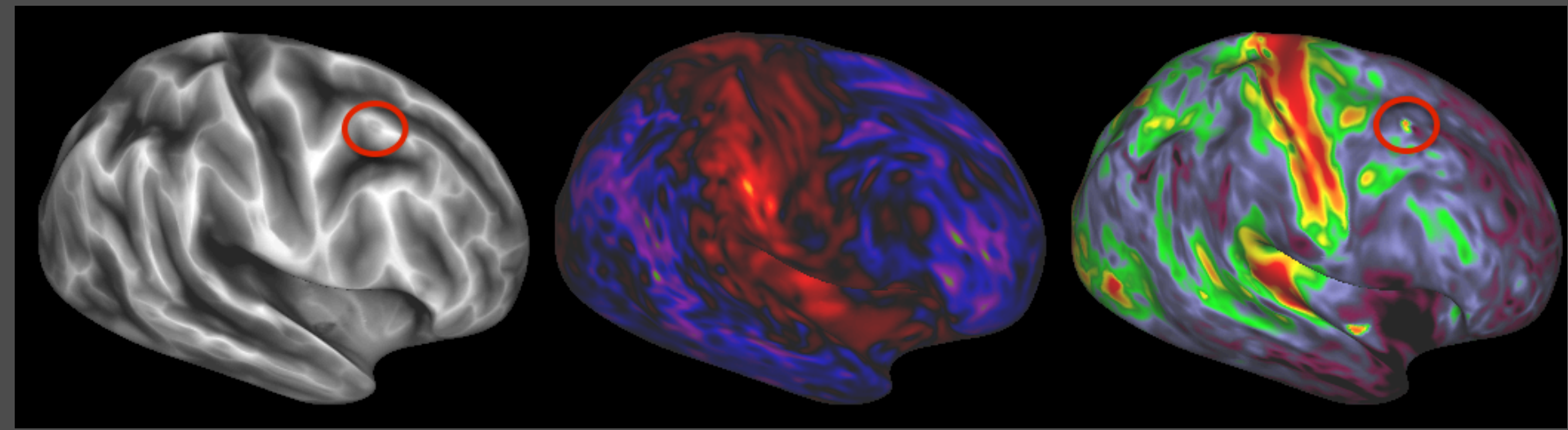
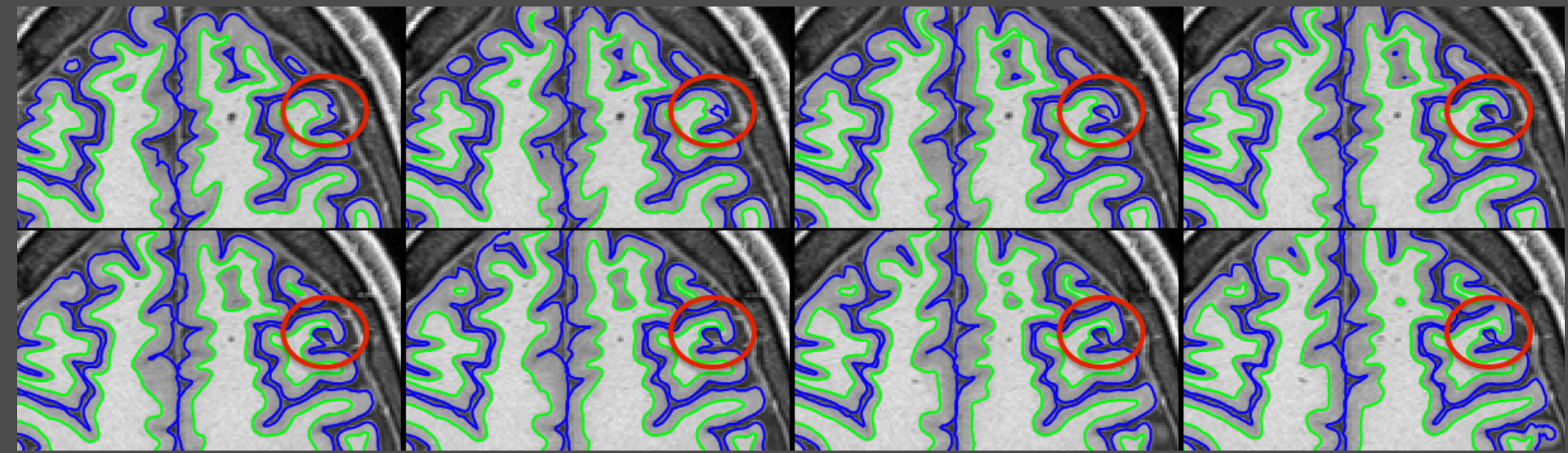


146836 - Small right dorsal benign cyst

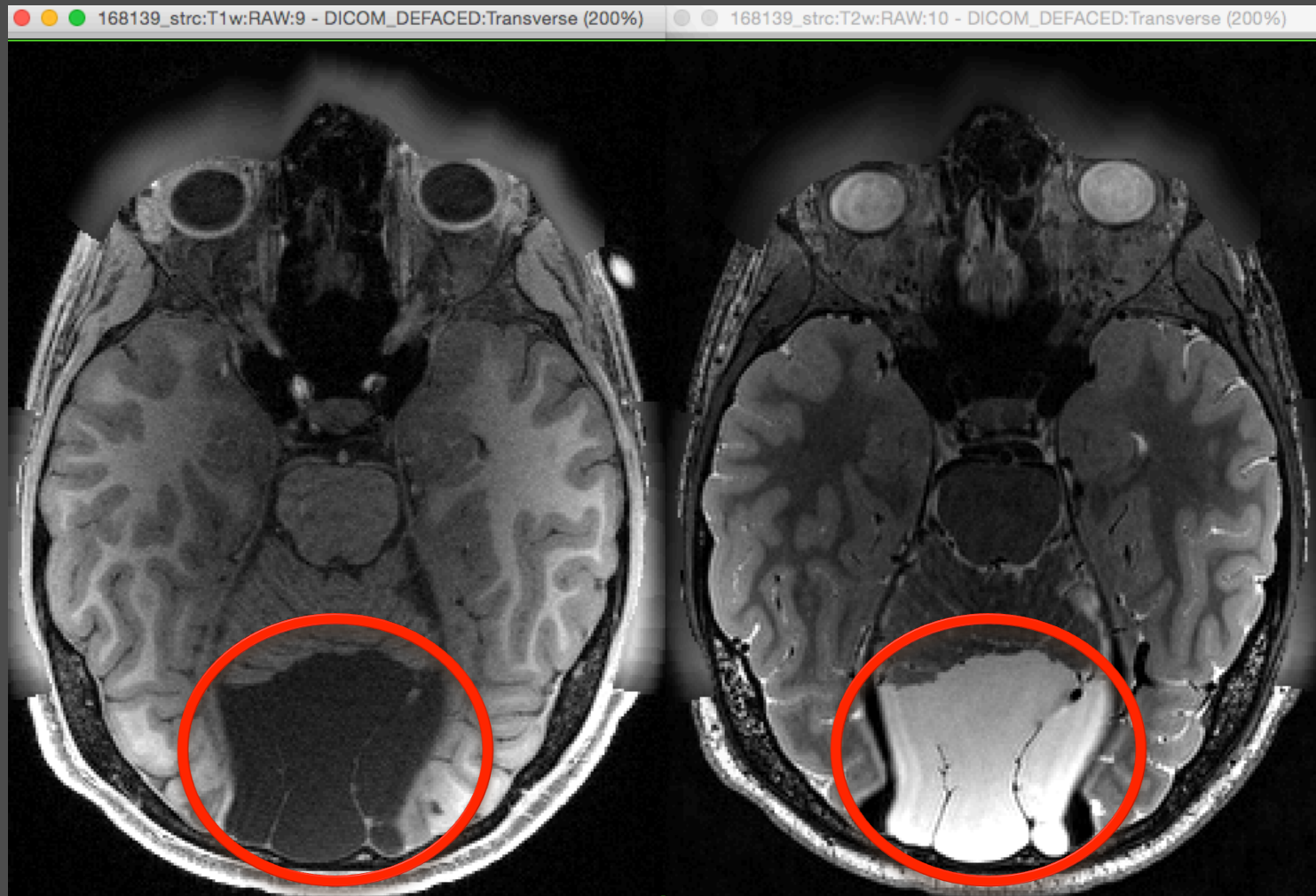
146836_strc:T1w:RAW:9 - DICOM_DEFACED:Transverse... 46836_strc:T2w:RAW:10 - DICOM_DEFACED:Transverse (200



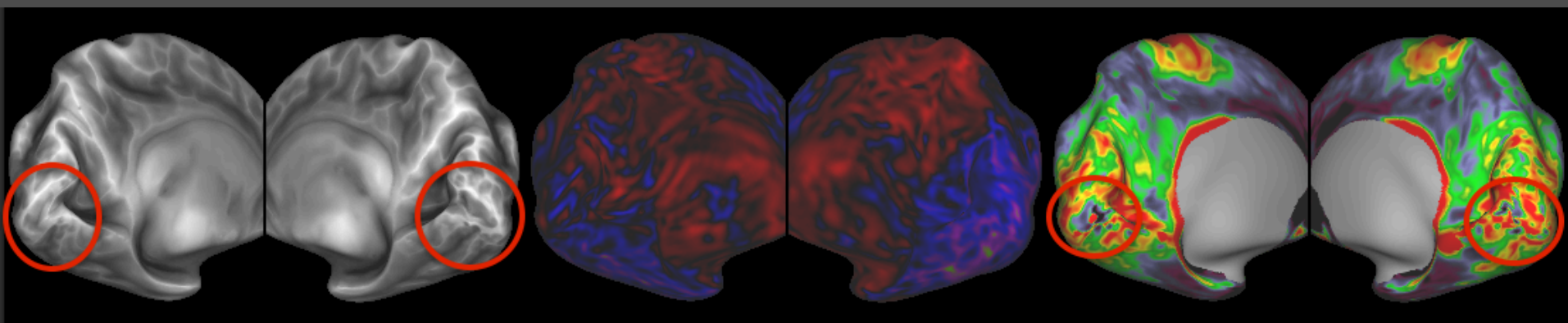
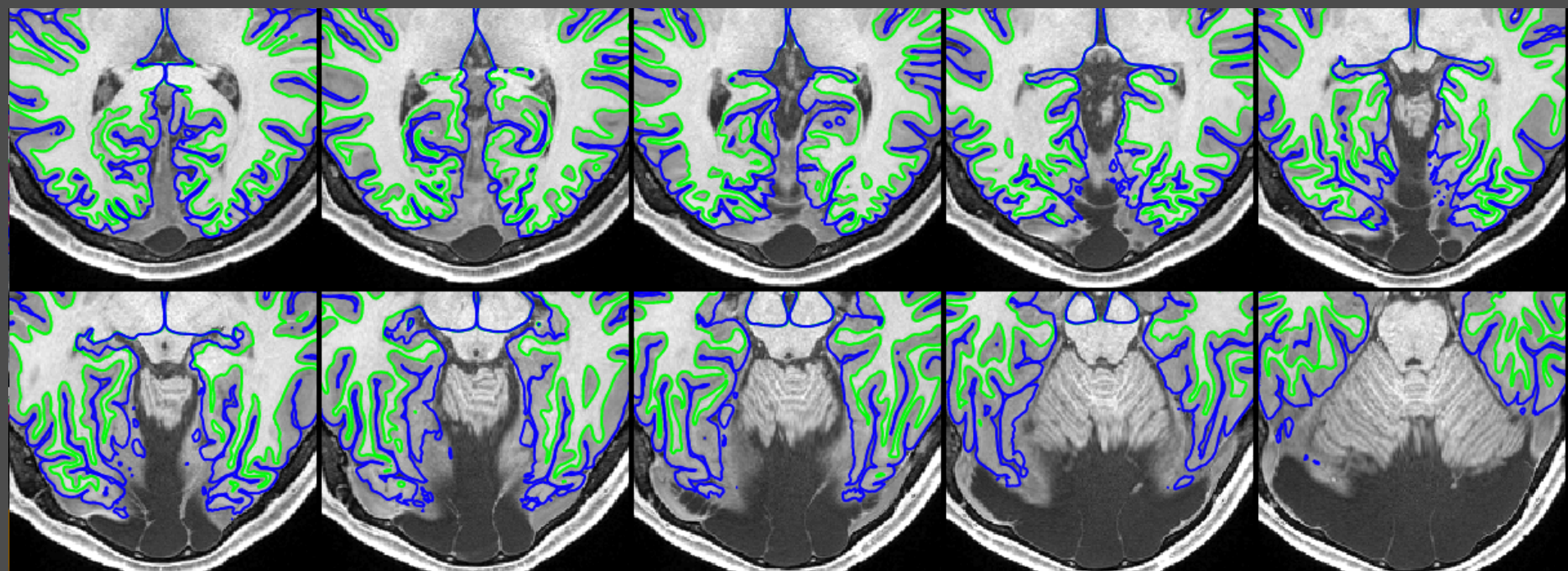
146836 - 1200 release



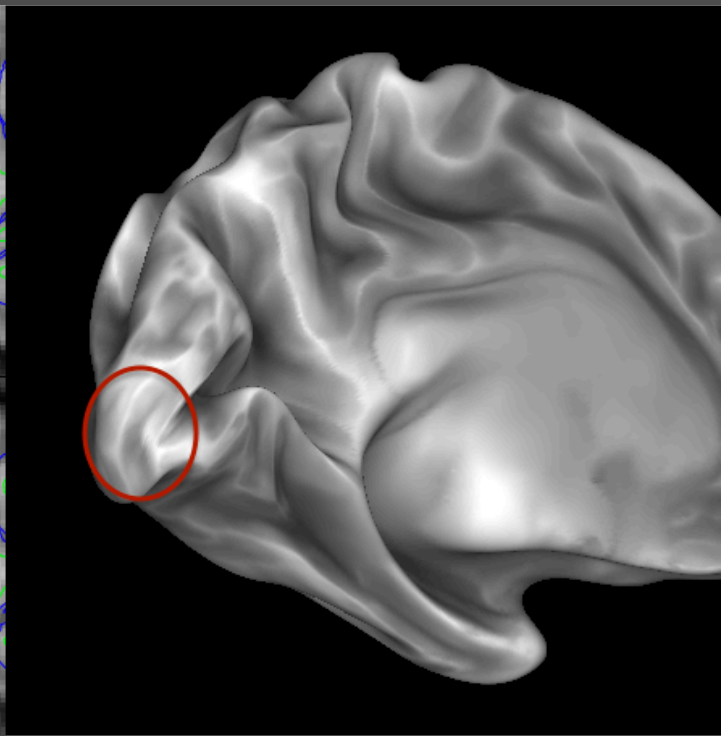
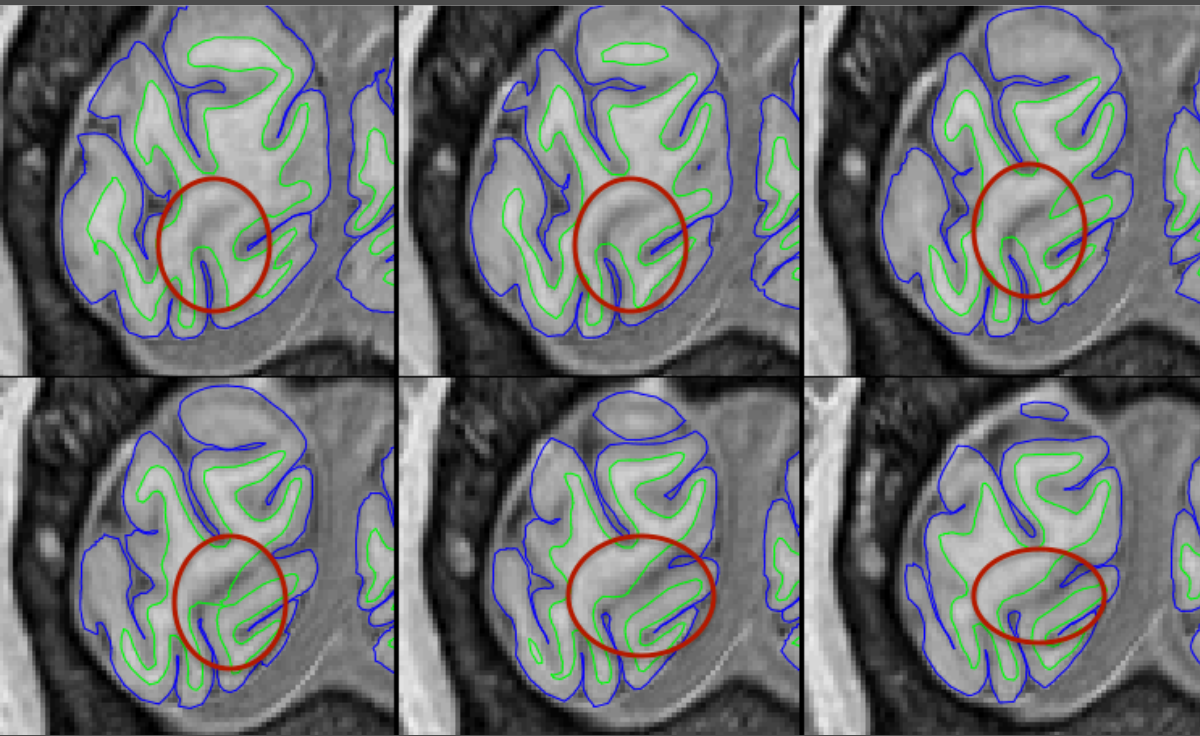
168139 - Large mega cisterna magna/arachnoid cyst



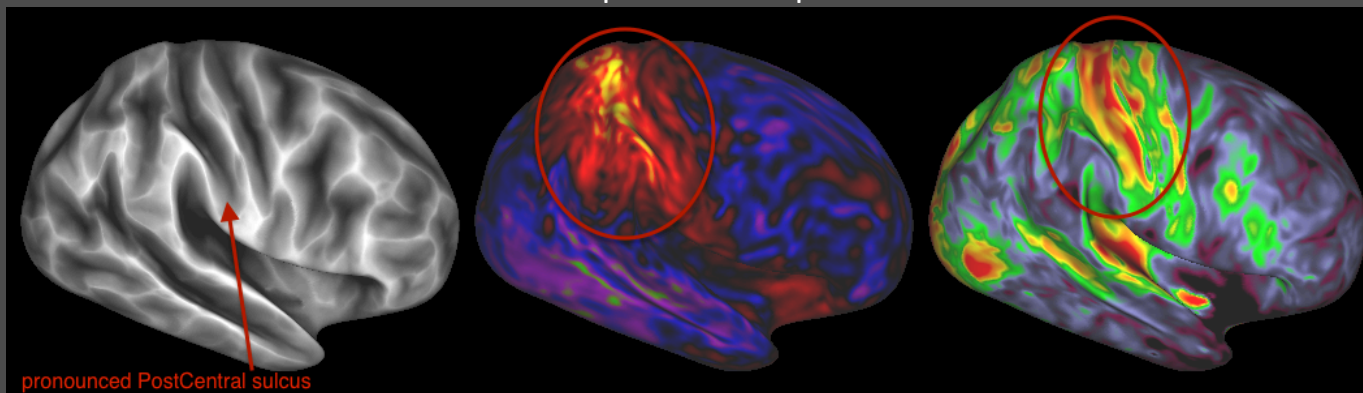
168139 - 500 release



175035 - 500 release - Occipital sulcus error



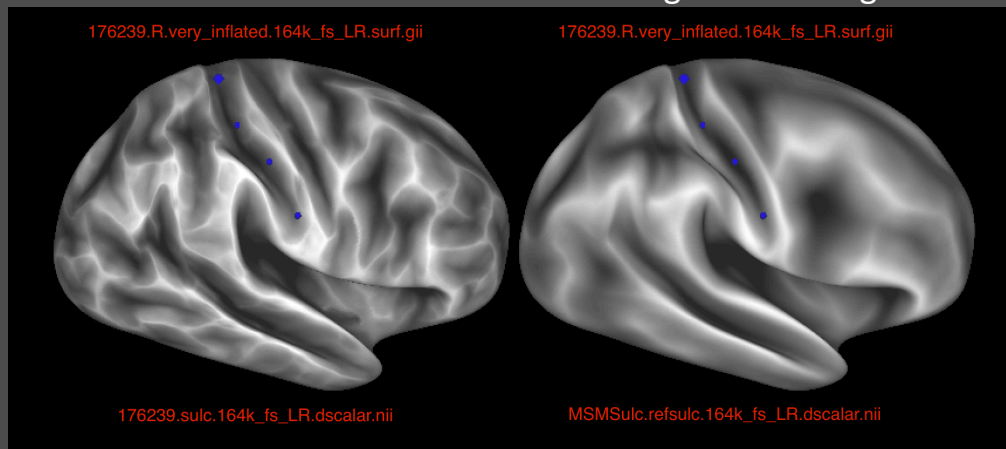
176239 - 900 release - Areal Distortion & Myelin Map problems in MSMSulc registration due to a pronounced post-central sulcus



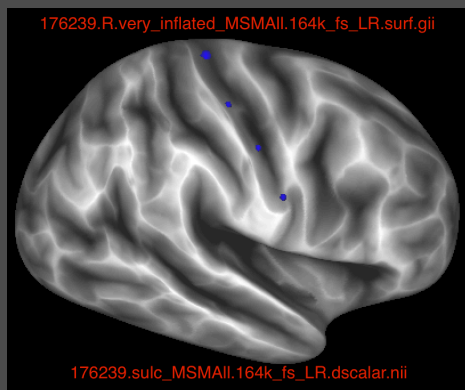
This is a subject with higher than usual Areal Distortion and an odd Myelin Map in the region of the right post-central and central sulcus ...

MSMSulc

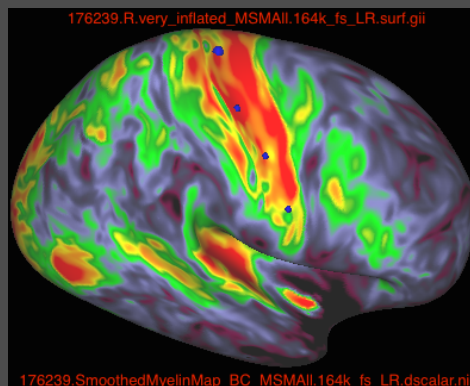
Registration target



... due to misalignment of the MSMSulc registration. Note that the anterior bank of the post-central sulcus is getting mapped to the central sulcus of the registration target by MSMSulc



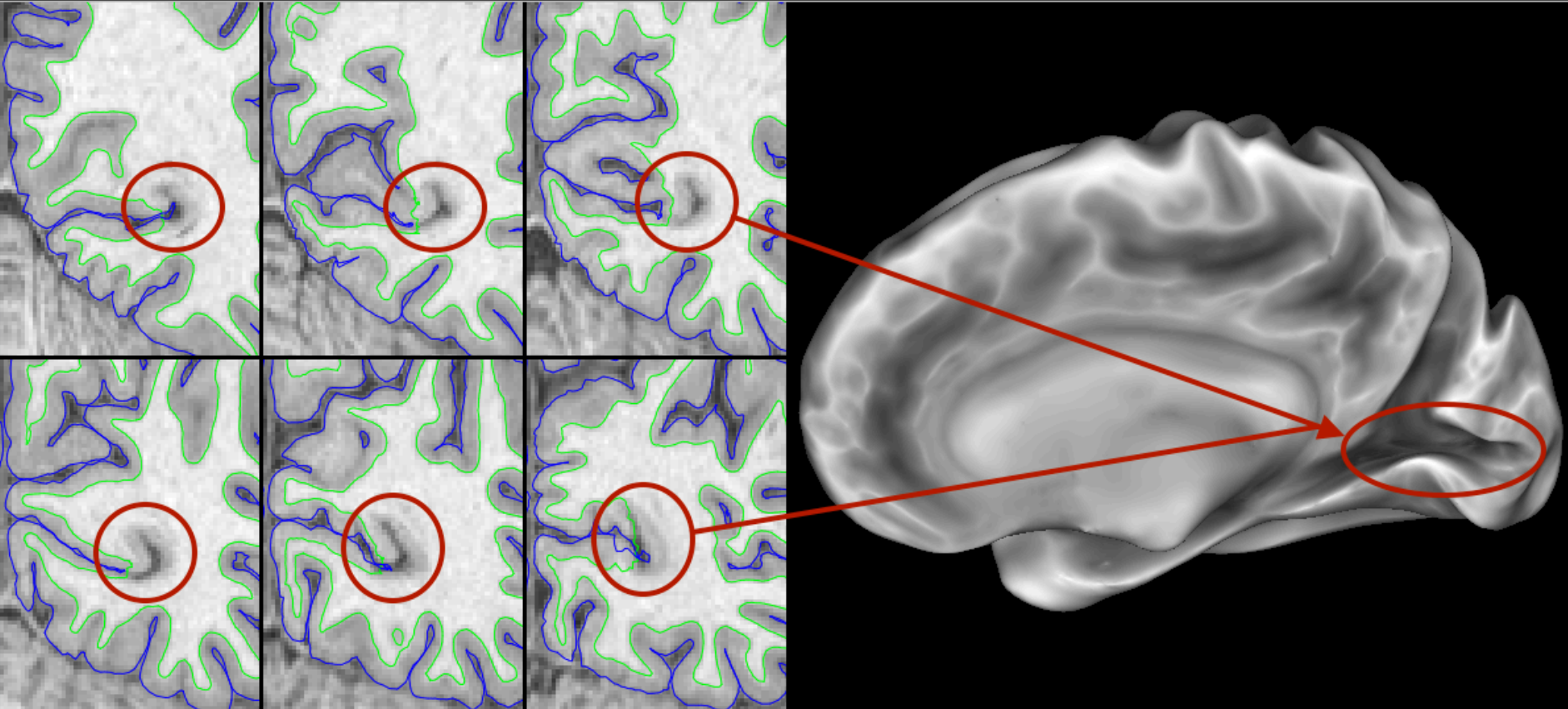
MSMAII



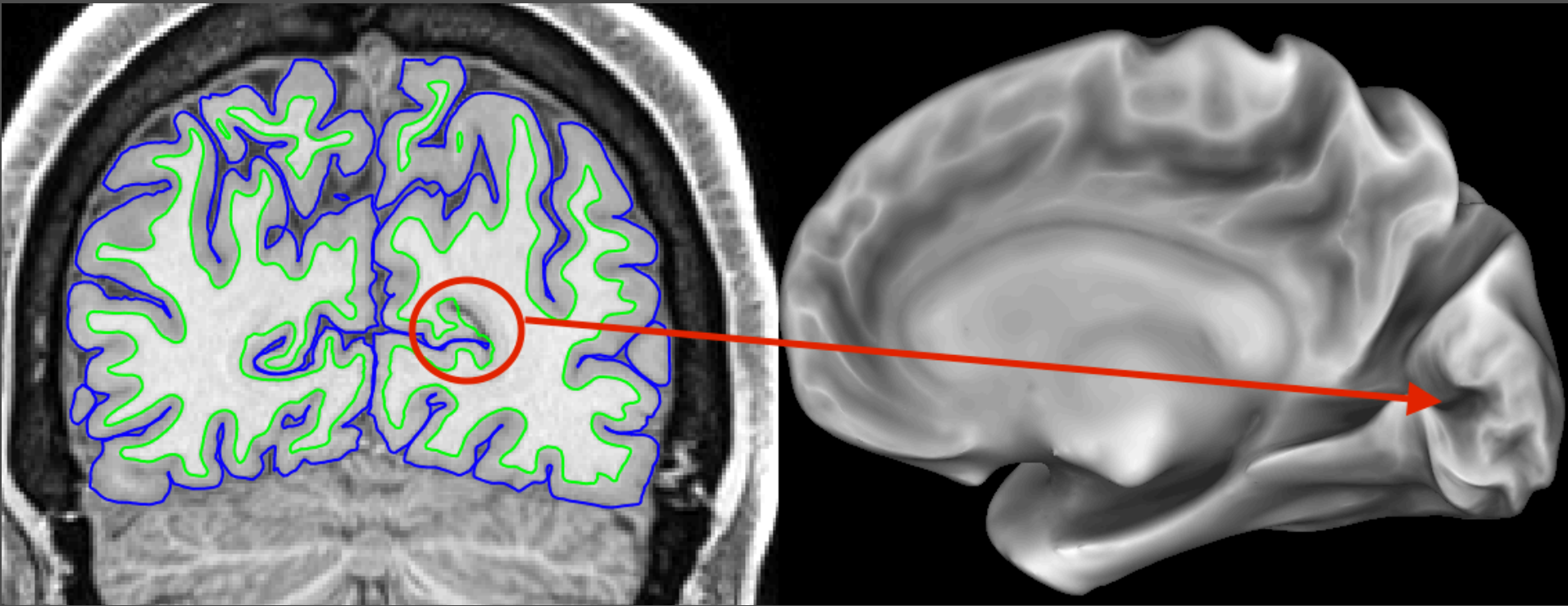
However, the MSMAII registration appropriately identifies the central sulcus of this subject ...

... and the region of high myelination is mostly confined to the central sulcus.

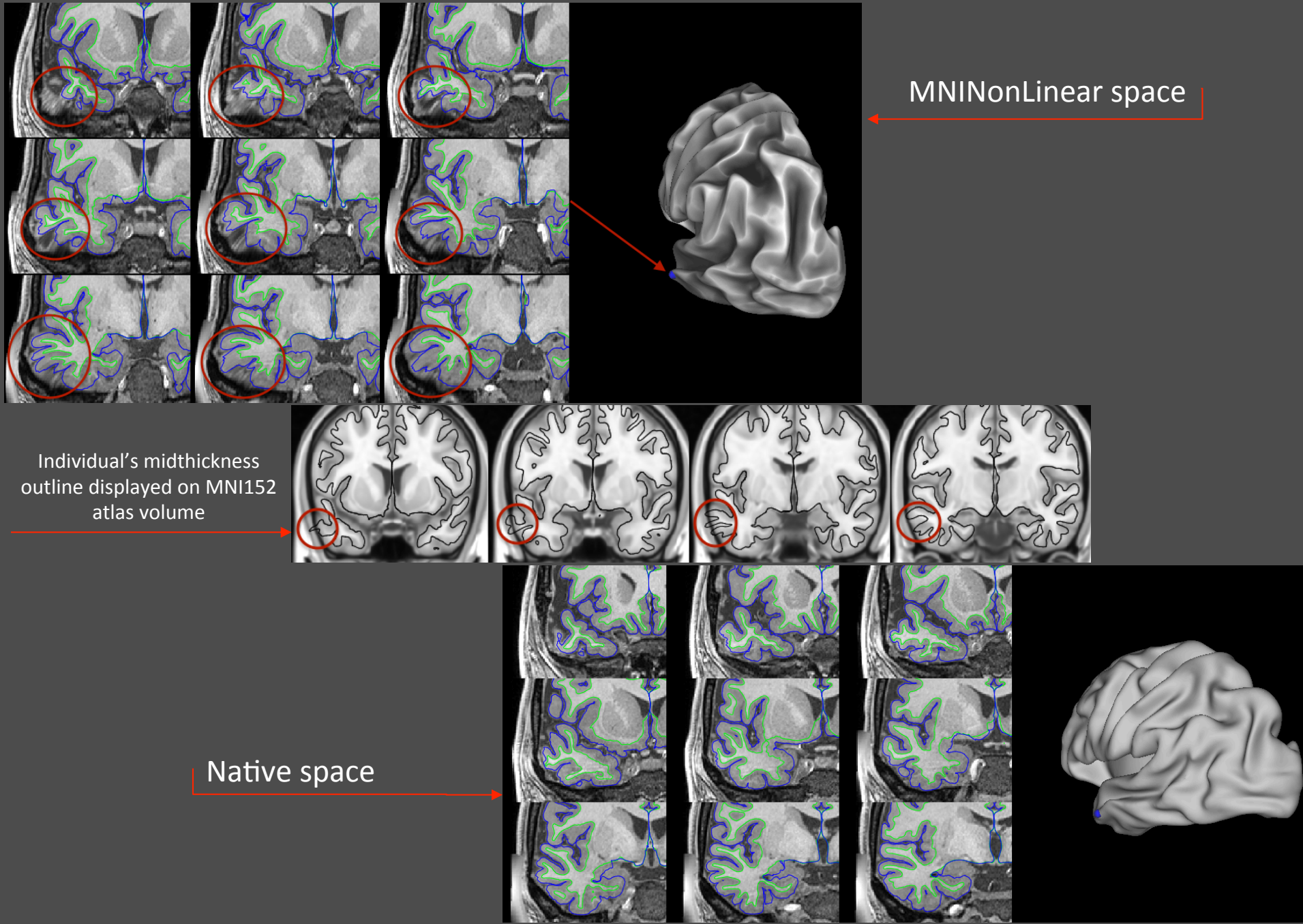
185038 - 900 release - Calcarine sulcus error



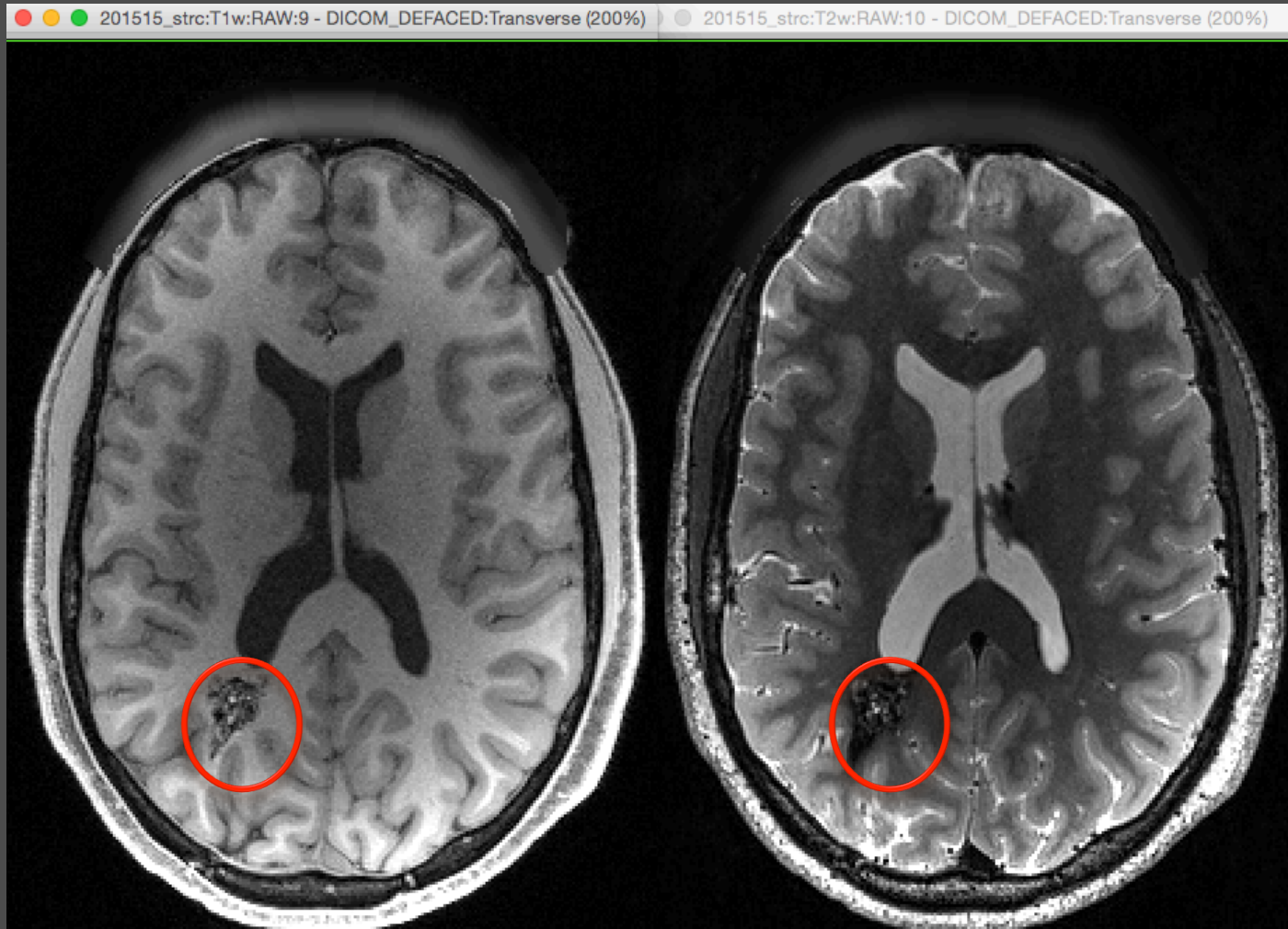
189652 - 1200 release - Calcarine sulcus error

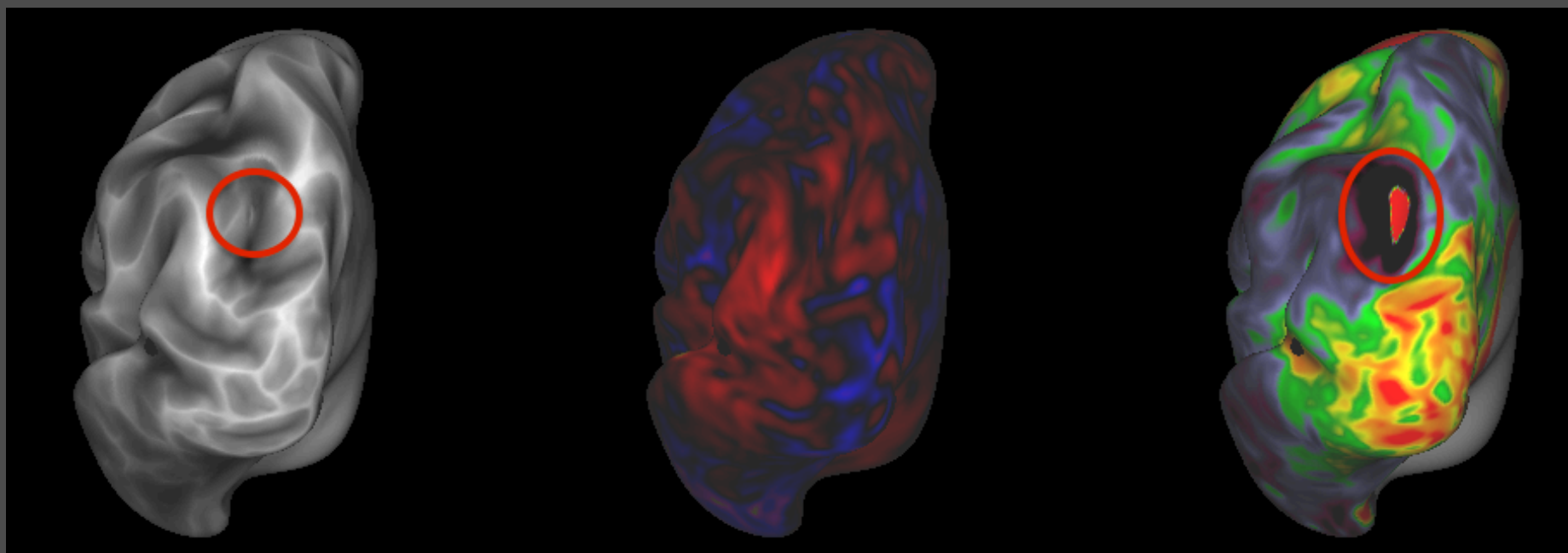
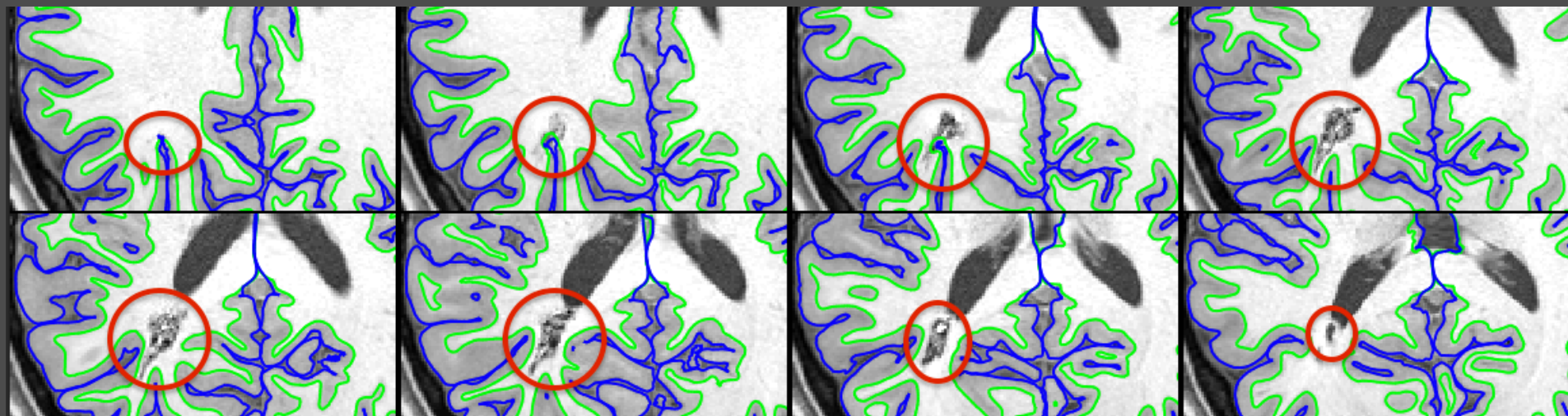


199958 - 500 release - FNIRT (nonlinear) registration error

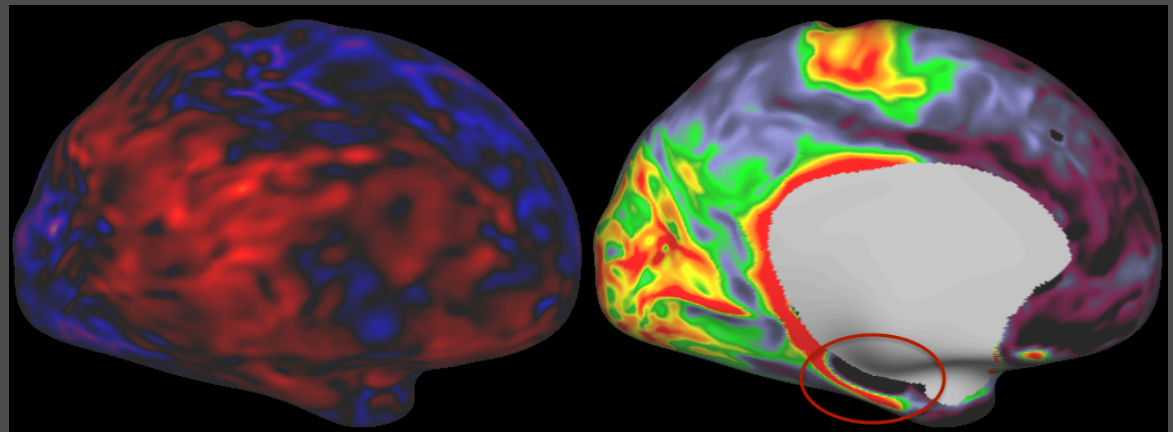
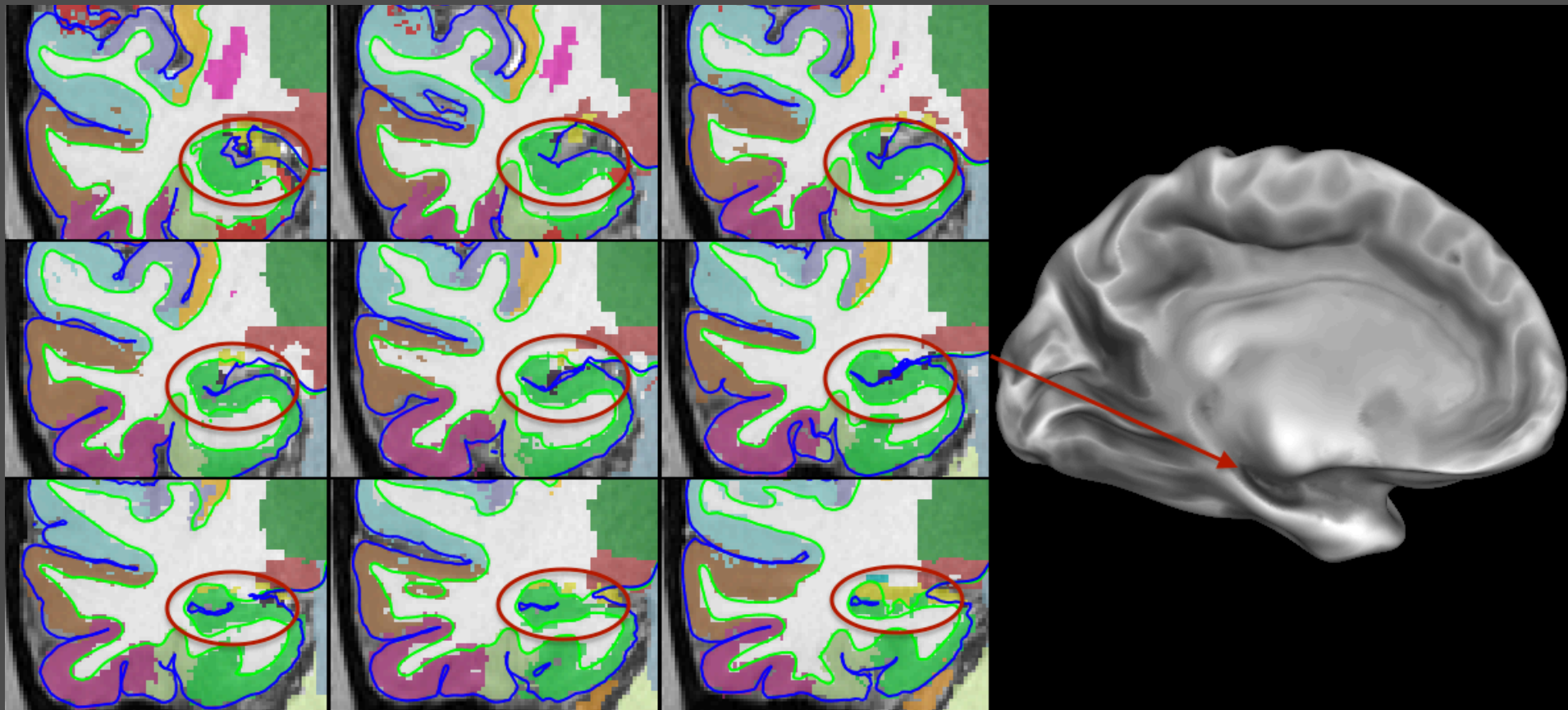


201515 - Cavernoma left occipital lobe

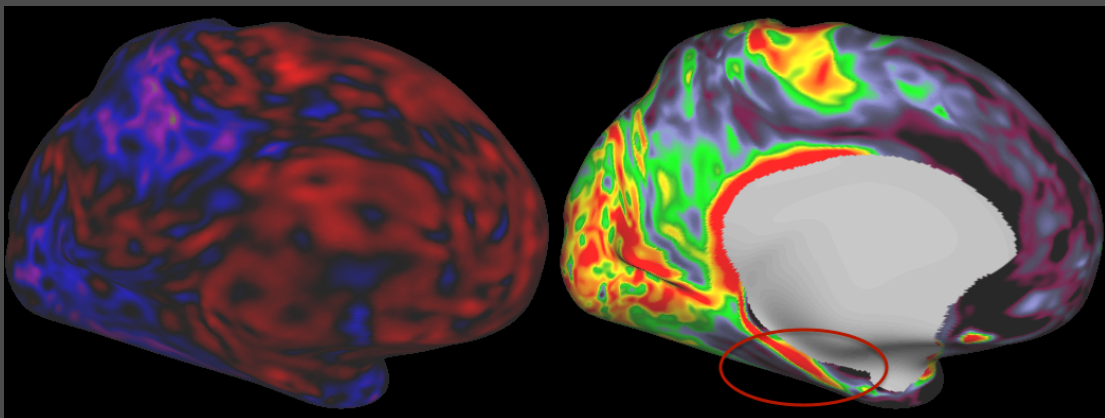
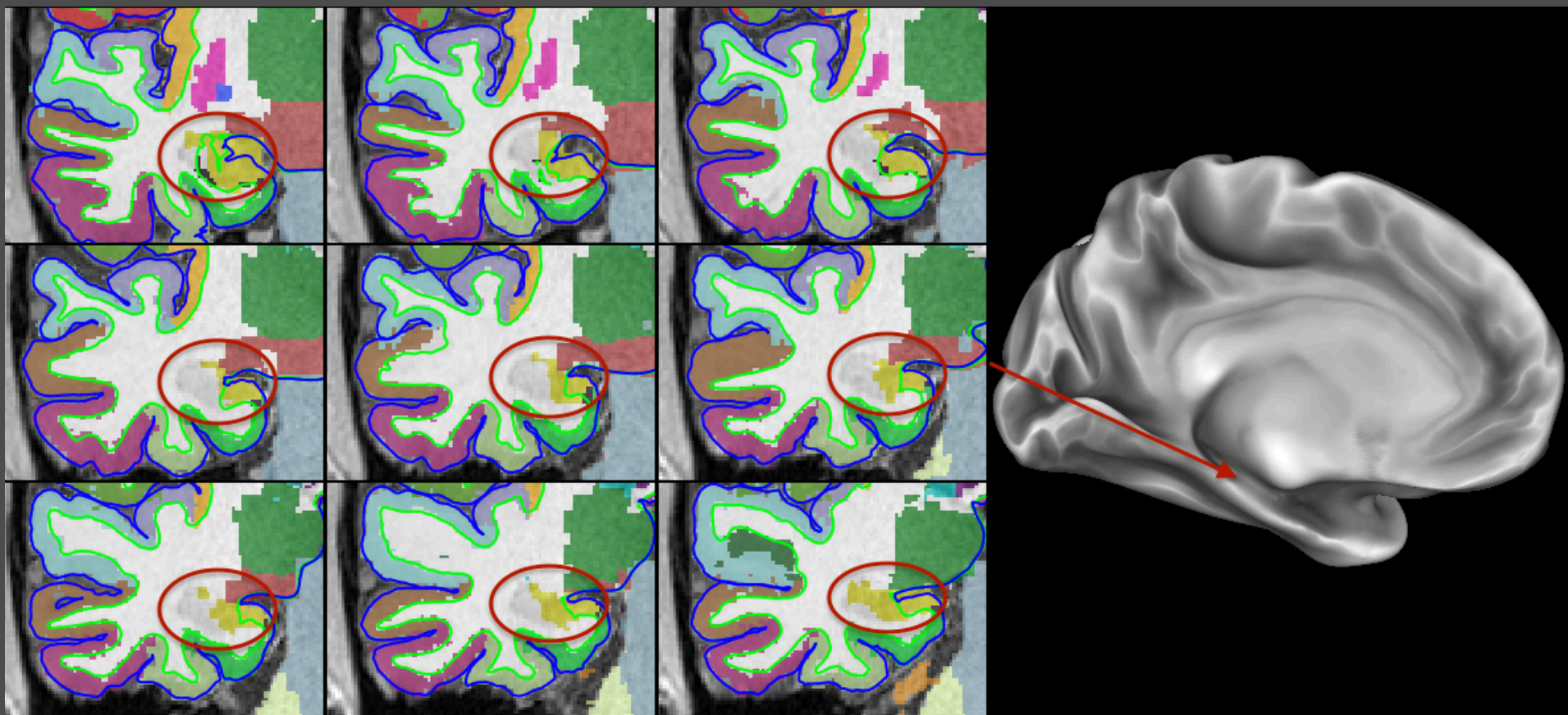




202820 - 1200 release - Inaccurate hippocampal segmentation



385046 - 1200 release - Inaccurate hippocampal segmentation



401422 - 900 release - Calcarine sulcus error

