

NSA SERVICES: IMAGE ANALYSIS

VOLUME RENDERING

In addition to whole brain or hemisphere reconstructions, segmentation of structures or cell populations within the brain can be performed to render even more informative volumes or surface maps. These renderings can be viewed as part of the whole specimen (striatum rendering within the whole brain volume, for example). This can be especially useful for visualizing and comparing lesions.

The images below (from top to bottom in the left column) show a surface map rendering of a pig brain, a surface map rendering of the white matter of the same pig brain, and finally a combination of the two renderings. The opacity of the whole brain was adjusted to view the white matter rendering inside.

Images to the right depict claustrum tracings in a mandrill brain (abbreviated tracings set) along with the reconstructed surface map below. In the bottom right image, the reconstructed claustrum can be seen within the transparent mandrill brain surface map.

