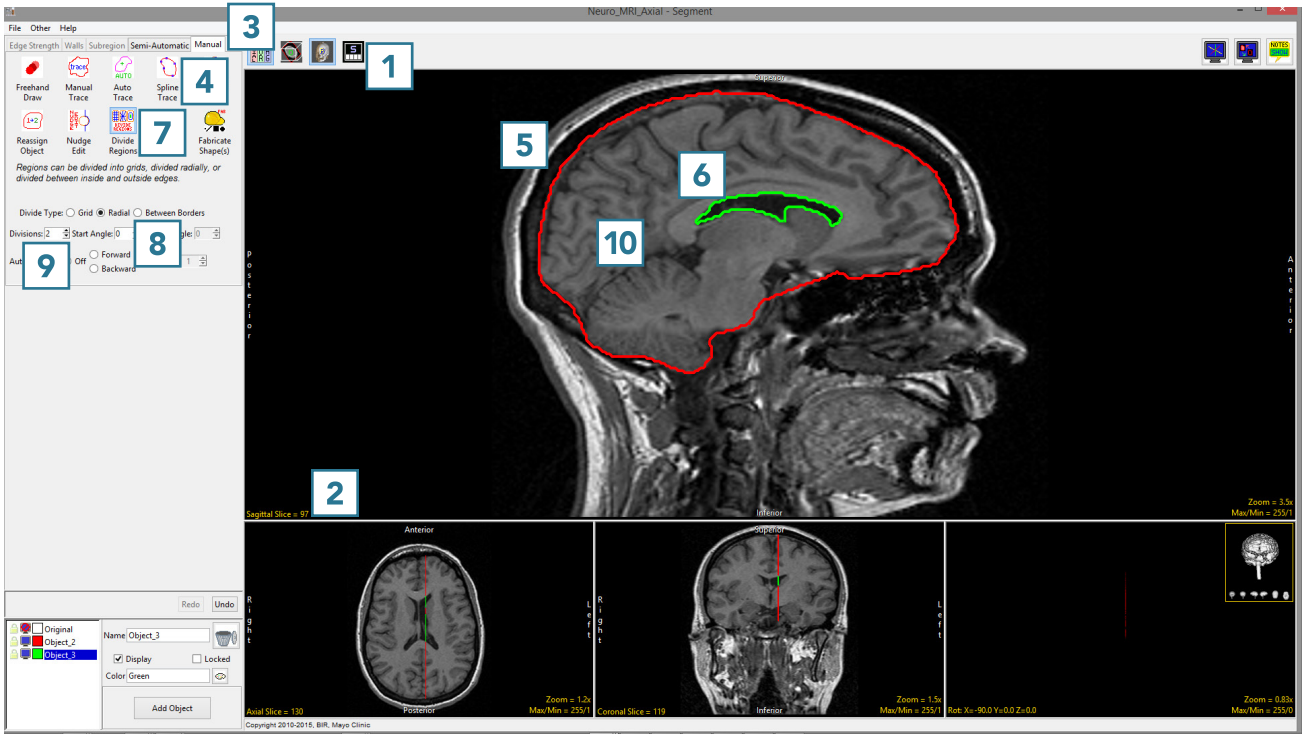
Dividing Regions Between Borders

The Divide Regions Between Borders division type allows users to create a concentric set of objects. The tool will divide the area between an inner and outer border into the number of regions specified by the user, which is acheived by interpolating new borders between the inner and outer border.

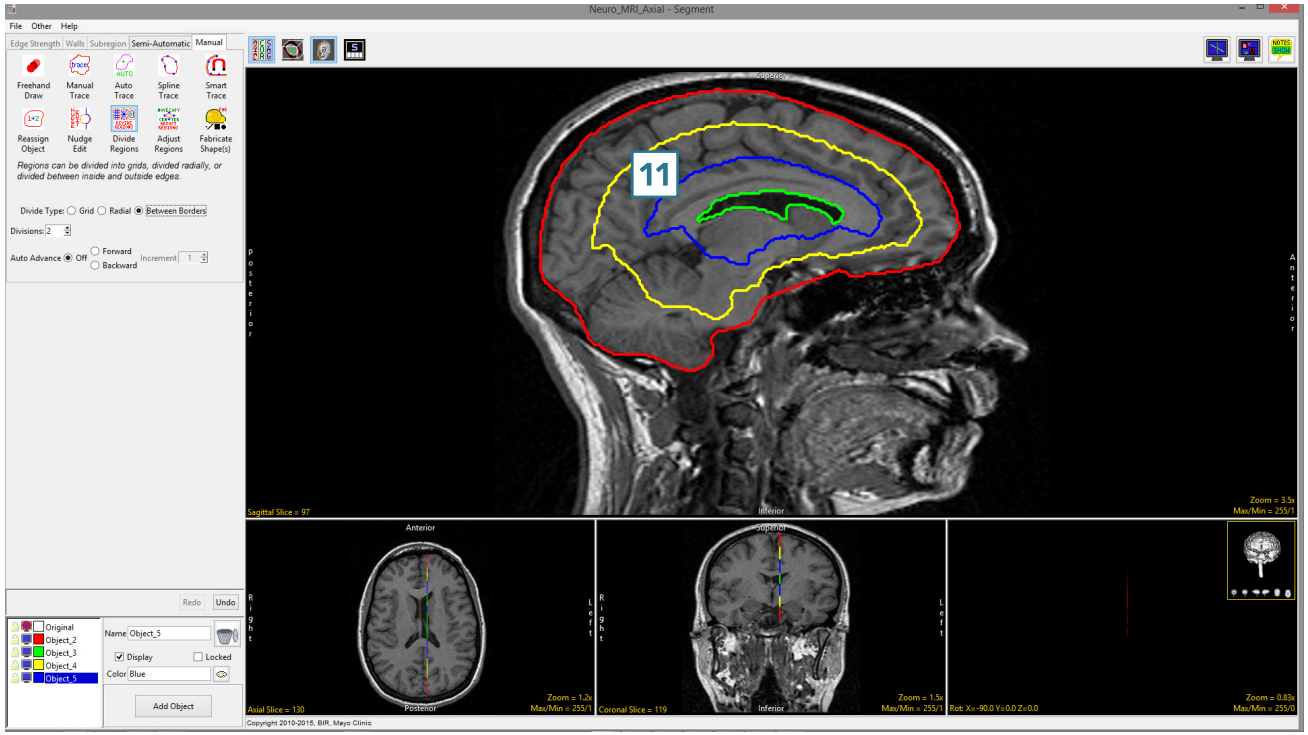
30. Dividing Regions Between Borders – Interpolating Between Objects

- Select MRI_3D_Head and open Segment.
- Set the primary display to Sagittal 1 and use Slice 2 to move to sagittal slice 96.
- Select Manual 3 and choose Spline. 4
- Use the Spline tool to define a region of interest around the brain. 5
- Add a new object and define a region of interest around the ventricles. 6
- Select the Divide Regions tool 7 and set the Divide Type to Between Borders. 8
- Set the Divisions to 2. 9
- Click anywhere in the brain between the red brain border and the green ventricle border. 10

Download the MRI_3D_Head data set to follow along http://analyzedirect.com/data/



- 2 new regions will be interpolated between the brain and ventricles. 11

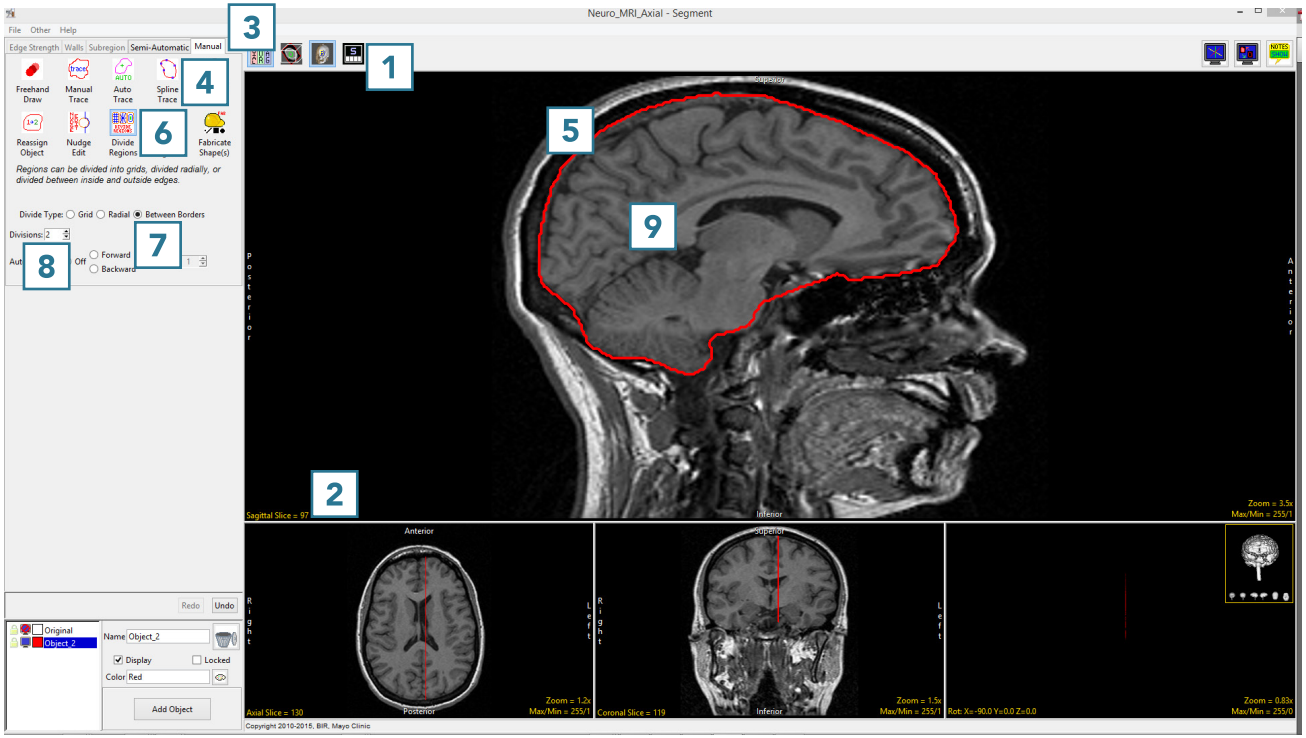


31. Dividing Regions Between Borders – Interpolating Within an Object

If there is no inner border defined when using the Divide Objects Between Border division type, the tool will calculate the center of the object and use this as an interpolation point, creating new interior object borders from the outer border.

- Select MRI_3D_Head and open Segment.
- Set the primary display to Sagittal 1 and use Slice 2 to move to sagittal slice 96.
- Select Manual 3 and choose Spline. 4
- Use the Spline tool to define a region of interest around the brain. 5
- Select the Divide regions tool 6 and set the Divide Type to Between Borders. 7
- Set the Divisions to 2. 8 Click anywhere in the brain. 9

Download the MRI_3D_Head data set to follow along http://analyzedirect.com/data/



- The tool will detect that there is no interior border and return a Border Divide Error. Click OK 10 to enable the tool to use the center of the outside border as an interpolation point to substitute the interior border.
- The object will be subdivided into regions interpolated from the outer border and the new regions will look like smaller versions of the outer border. 11