

Adjust Regions

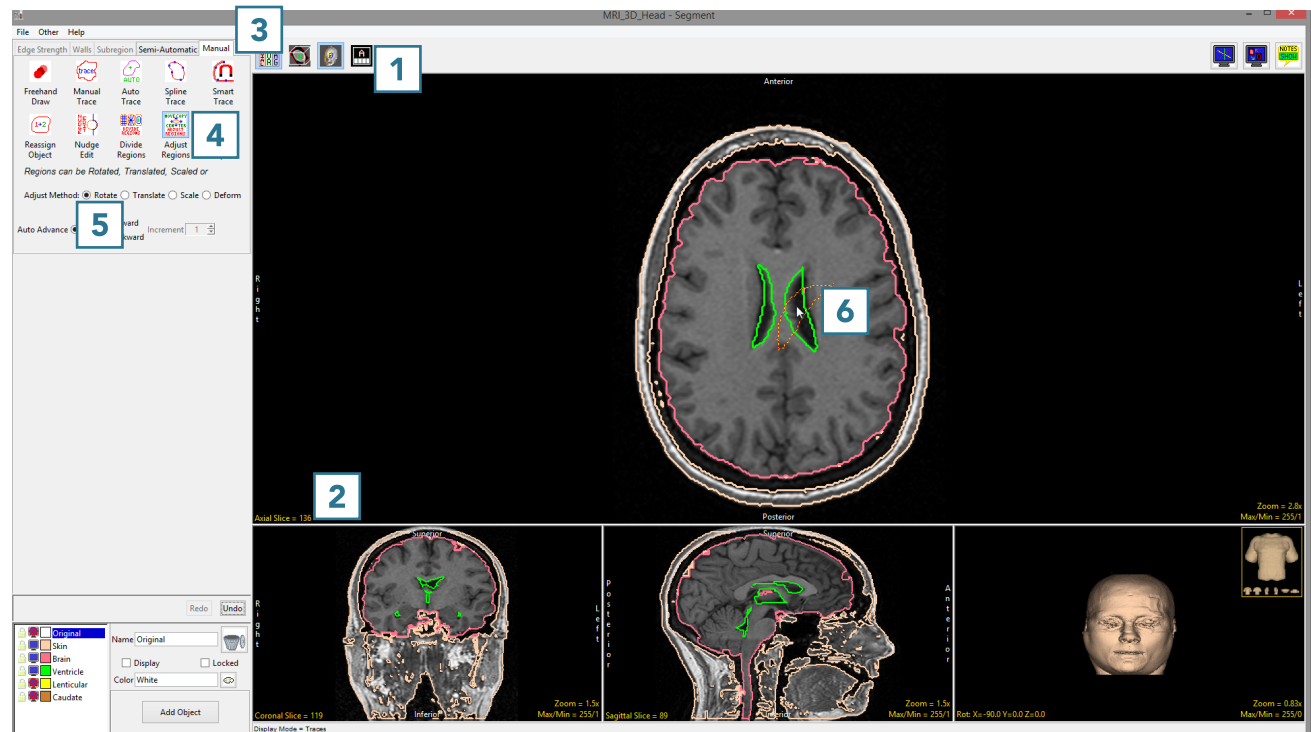
The Adjust Regions tool allows users to interactively manipulate regions. Users can rotate, translate, scale and deform objects.

Table 7.3: Adjust Regions

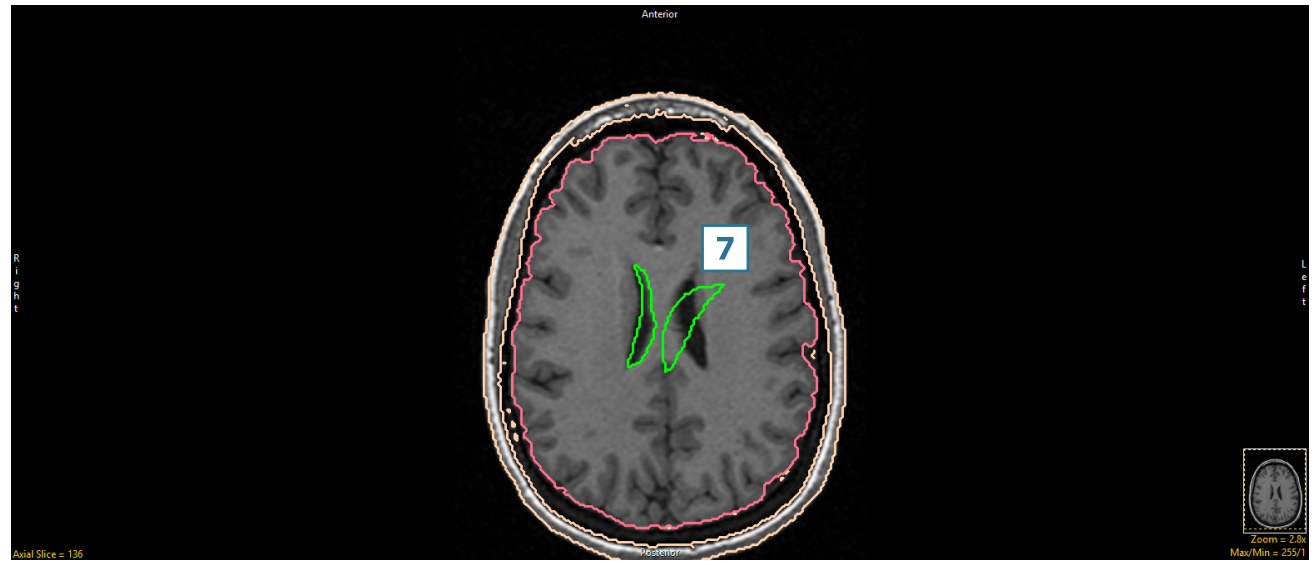
Adjust Method	Function
Rotate	Rotates selected region clockwise or counterclockwise.
Translate	Translates selected region to a new location. Users can drag the region or a copy of the region to a new location. Objects can also be recentered around the brightest pixel in the object.
Scale	Increases or decreases the size of the region in the horizontal and/or vertical direction.
Deform	Deforms the selected object.

- Select MRI_3D_Head and open Segment.
- Select File > Load Object Maps and load MRI_3D_Head.obj.
- Set the primary display to Axial
 - 1
and move to Axial slice 136.
 - 2
- Select Manual
 - 3
and choose Adjust Regions.
 - 4
- Set the Adjust Method to Rotate.
 - 5
- Click in an object to select it and move the mouse up or down to rotate the object.
 - 6

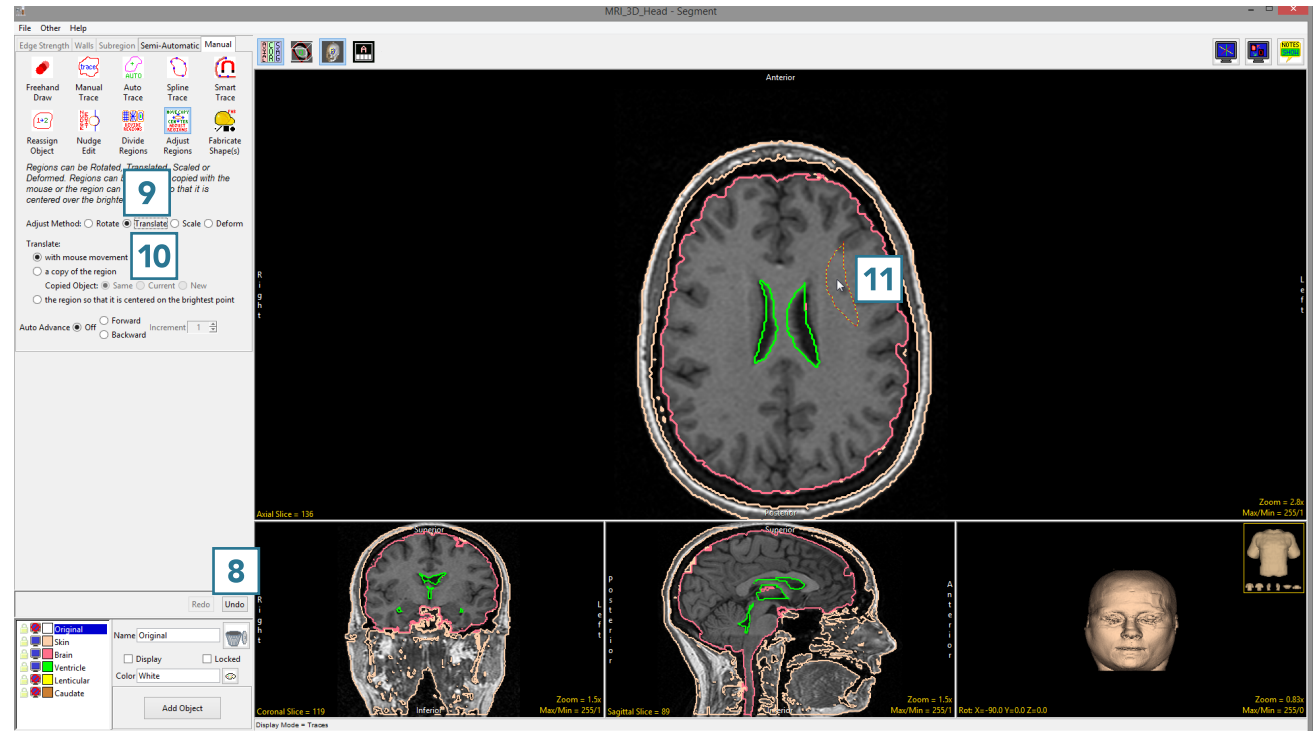
 Download the MRI_3D_Head data set to follow along
<http://analyzedirect.com/data/>



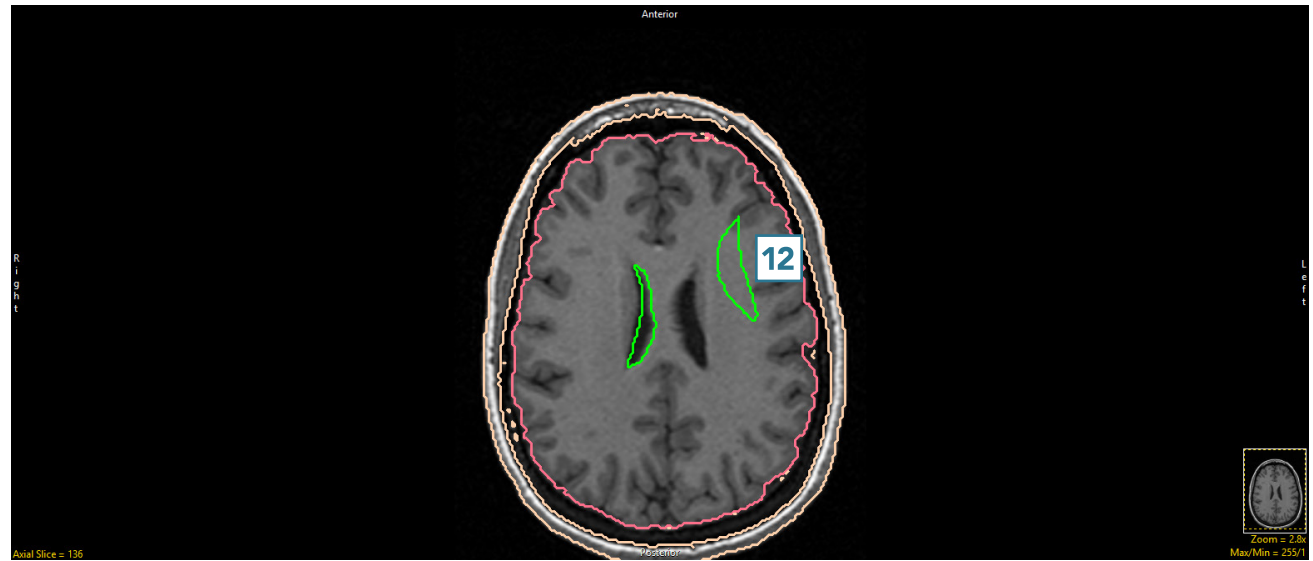
- Release the mouse button to end the rotation and commit the rotation to the object. **7**



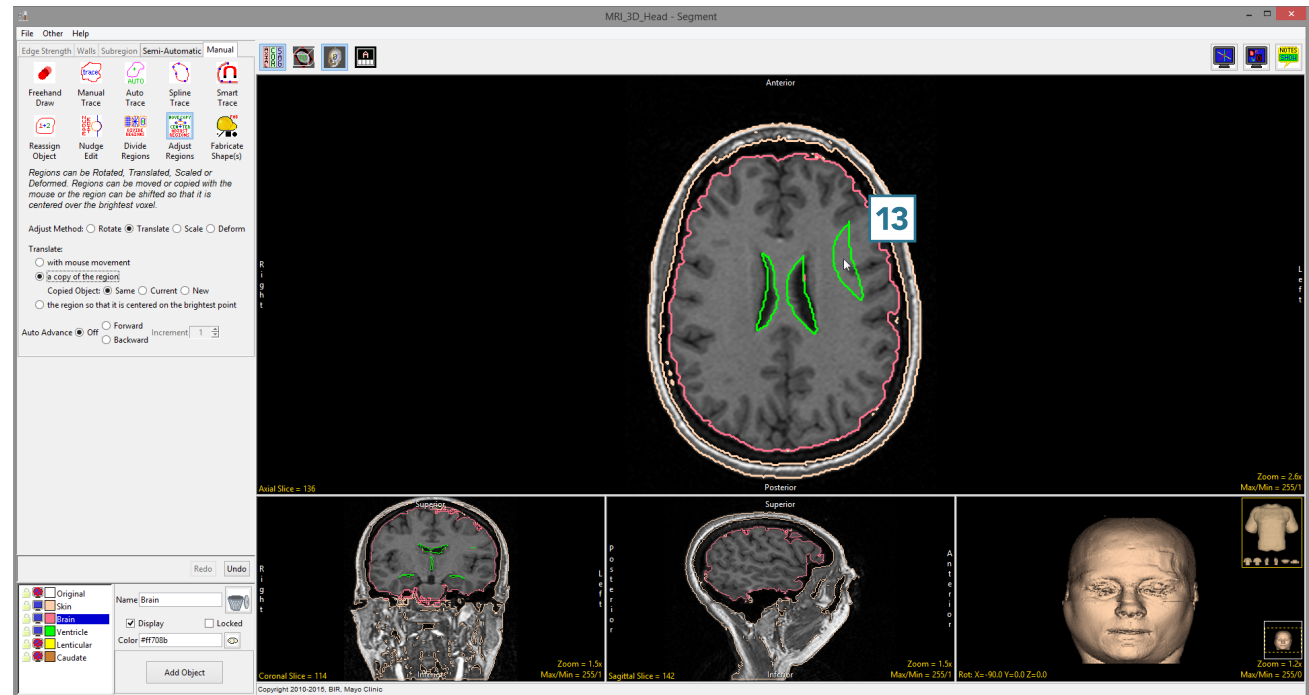
- Click Undo **8** and set the Adjust Method to Translate. **9**
- With the Translate option set to with mouse movement, **10** click in an object and drag to a new location. **11**



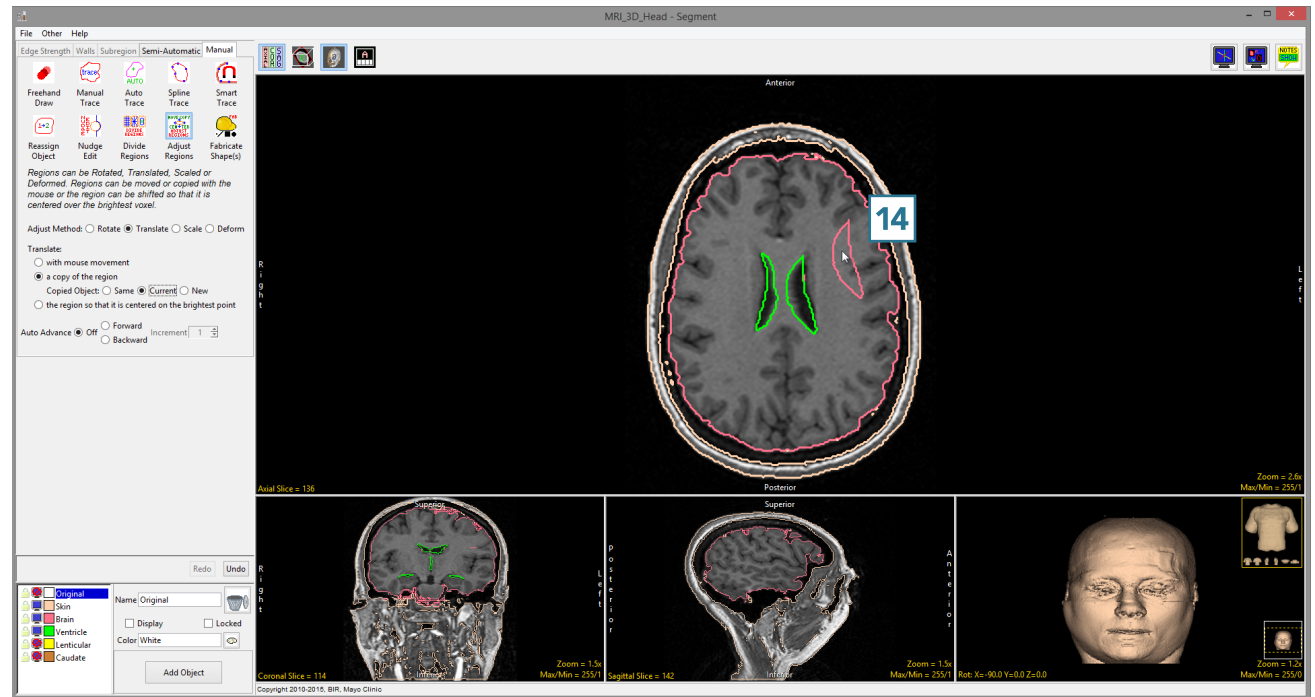
- Release the mouse button to end the translation. The object will be moved to the new location. **12**



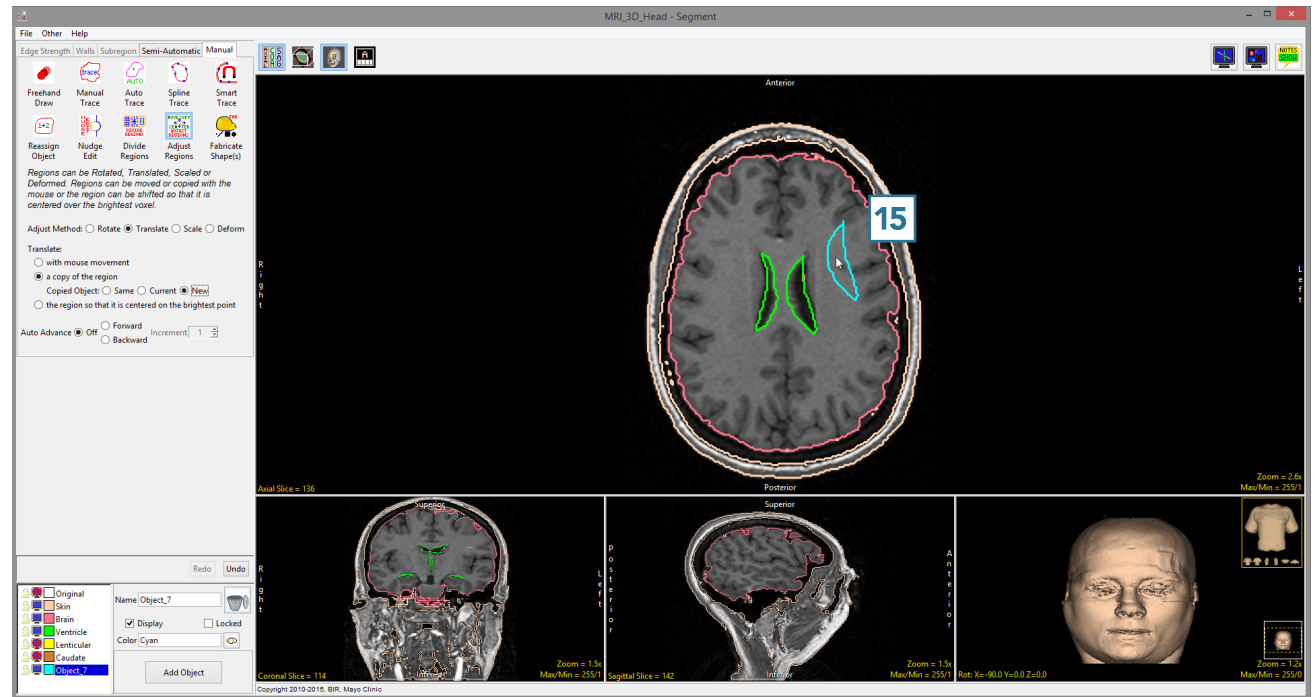
- Setting the Translate option to 'a copy of the region' will allow you to make a copy of the selected object and move to a new location.
- Setting Copied Object to Same assigns voxels in the new region to the same object as the parent region. **13**



- Setting Copied Object to Current assigns voxels in the new region to the object currently selected in the Object Control window. **14**

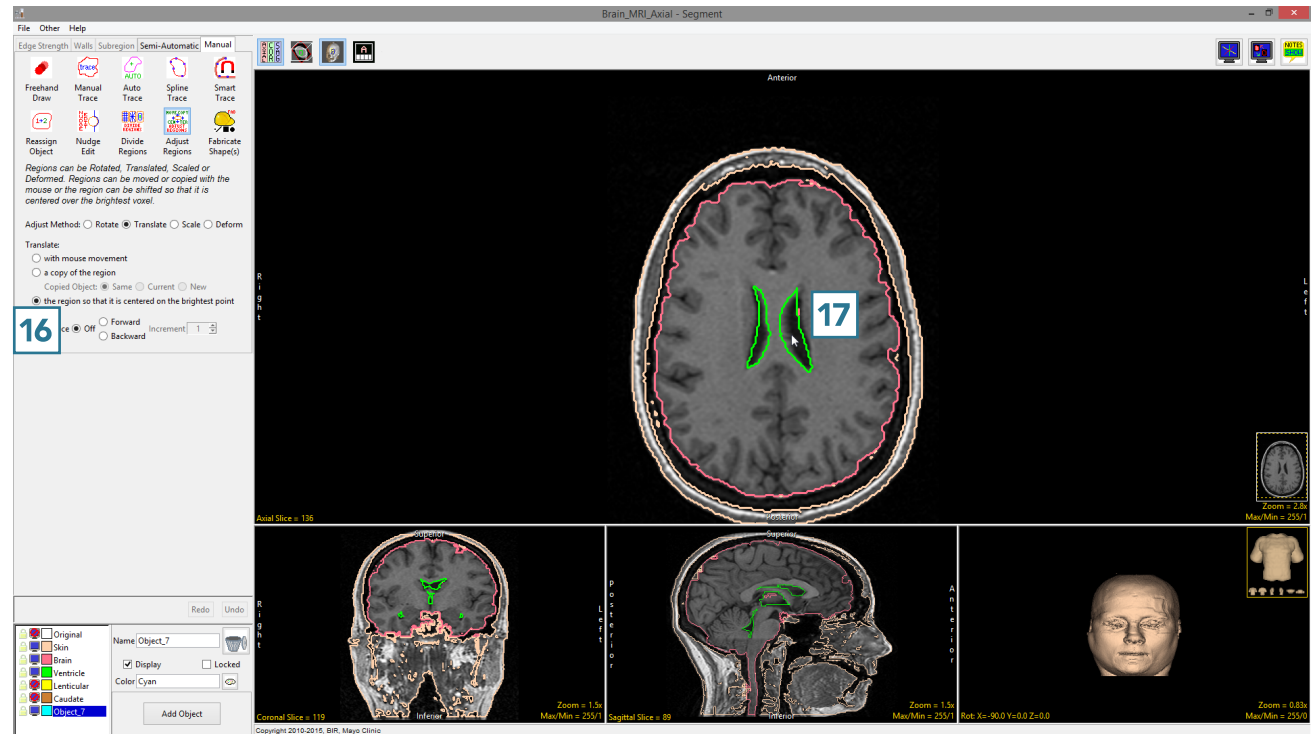


- Setting Copied Object to New assigns voxels in the new region to a new object. **15**

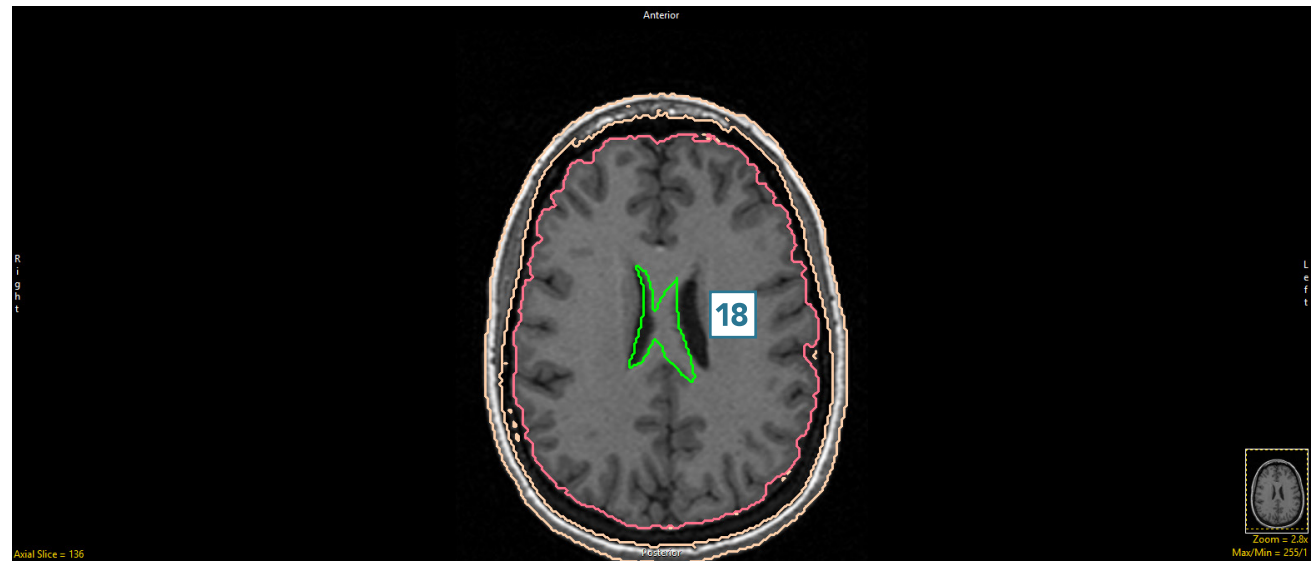


The Translate Adjust Method also allows users to Translate the region so that it is centered on the brightest point. With this option, the tool calculates the brightest pixel in the object and sets that as the center of the object, translating the object appropriately.

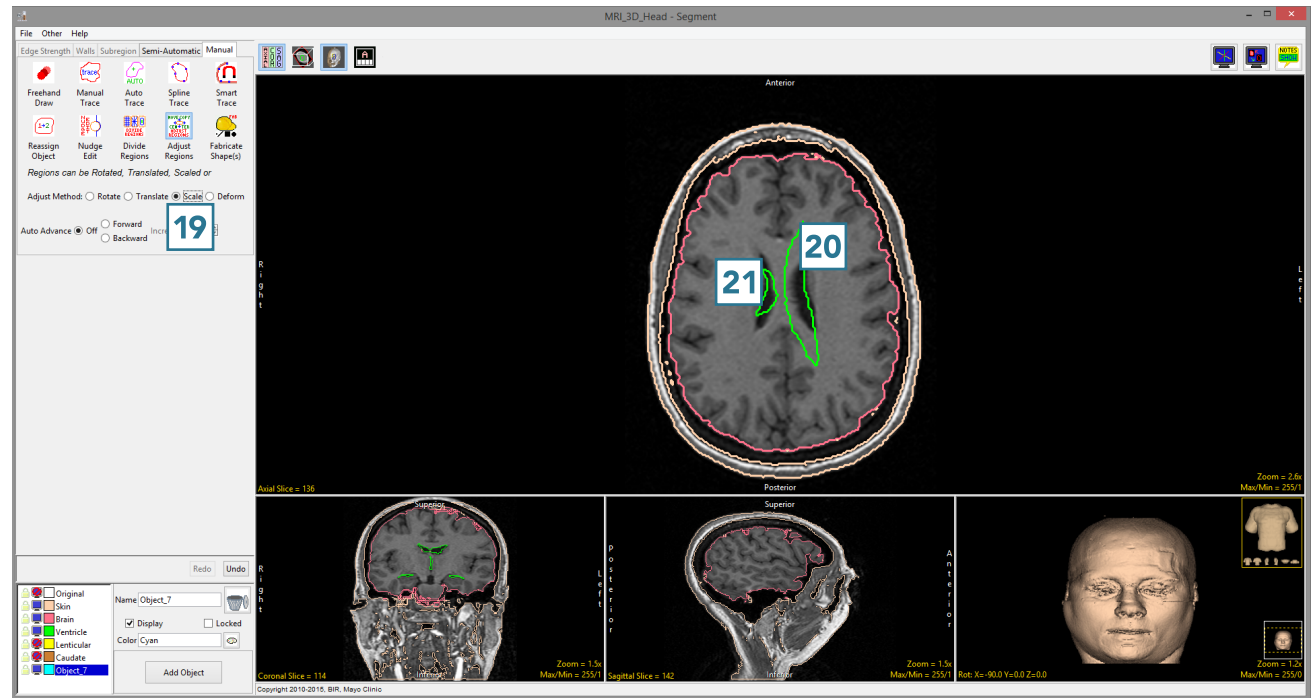
- Set the Translate method to the region so that it is centered on the brightest point. **16**
- Click in an object. **17**



- The region will instantly be recentered around the brightest point in the object. **18**



- Click Undo.
- Set the Adjust Method to Scale. **19**
- Click in an object and move your mouse to increase the scale of the selected object. **20**
- Moving the mouse up and down adjusts the scale in the vertical direction. Moving the mouse left and right adjusts the scale in the horizontal direction. Moving the mouse diagonally adjusts the scale of the object while preserving the shape. Release the button to commit the scale manipulation to the object.
- Click in an object and then move your mouse to decrease the scale of the selected object. **21**
- Release the button to commit the scale manipulation to the object.



- Undo the previous manipulations.
- Set the Adjust Method to Deform. [22]
- Click in an object and move your mouse to experiment w [23] the deformations available. [23]
In this example the user is deforming the border of the brain object.
- Releasing the mouse button will apply the deformation to the object.

