

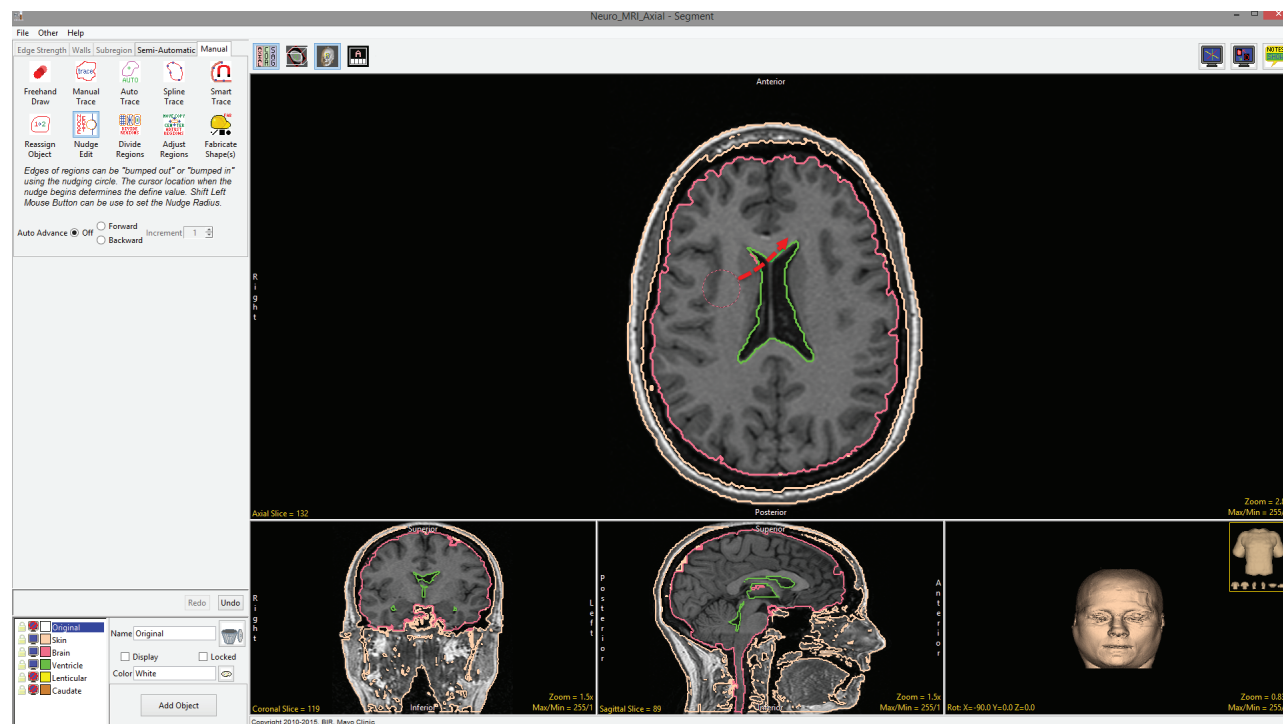
Nudge Edit

Nudge Edit enables users to manually edit borders of defined regions. The tool allows object borders to be pushed inwards or outwards using an adjustable circular cursor. The size of the cursor can be adjusted using the middle mouse button. When Nudge Edit is selected the cursor mode will update to the Nudge Edit tool when an image is clicked on. Available options include:

Auto Advance: This option automatically moves users to a new slice as defined by the auto advance options, once the current edit is

defined. Note the auto advance will occur after the user releases the left mouse button and the edit is applied to the current slice. The auto advance option is a productivity tool allowing users to move through the image data without having to move the cursor from the current orientation window that regions are being defined on. The following options are available.

- **Off:** Off is the default option for auto advance. When off is selected auto advance is disabled.
- **Forward:** Specifies that auto advance will move forward through the image data (slice number increases).
- **Backwards:** Specifies that auto advance will move backwards through the image data (slice number decreases).
- **Increment:** Specifies the number of slices the auto advance will move forward or backwards.



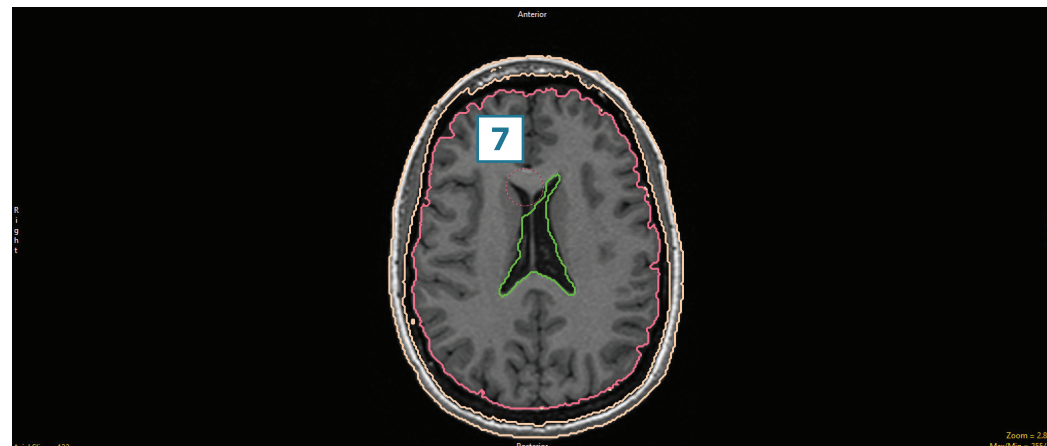
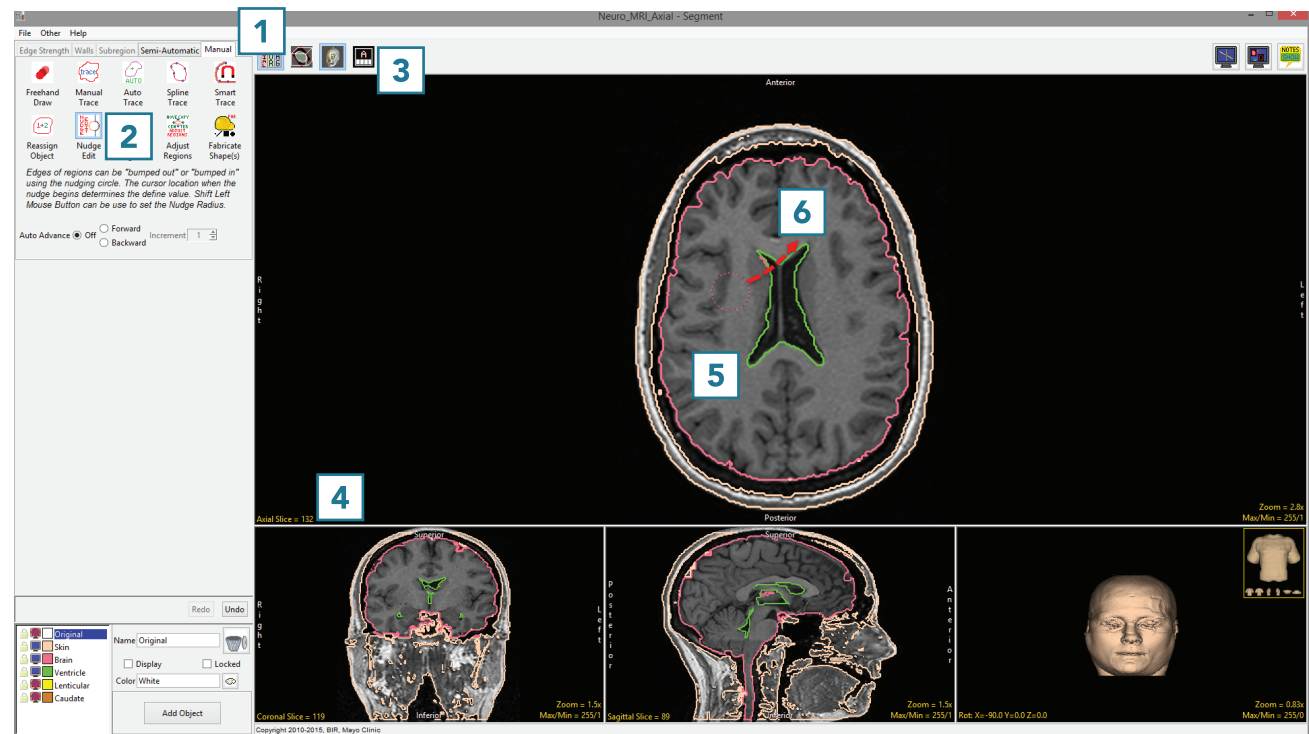
Editing Object Borders using Nudge Edit

To follow along, download the data set MRI_3D_Head from analyzedirect.com/data and load into Analyze using Input/Output.

- Select the data set and open Segment.
- Select File > Load Object Maps and load MRI_3D_Head.obj.
- Select Manual, [1] then choose Nudge Edit [2].
- Set the primary display to Axial [3] and move to Axial slice 132 [4].
- To edit the border of the Brain and Ventricle objects click in the brain. The circular nudge tool cursor will appear [5].

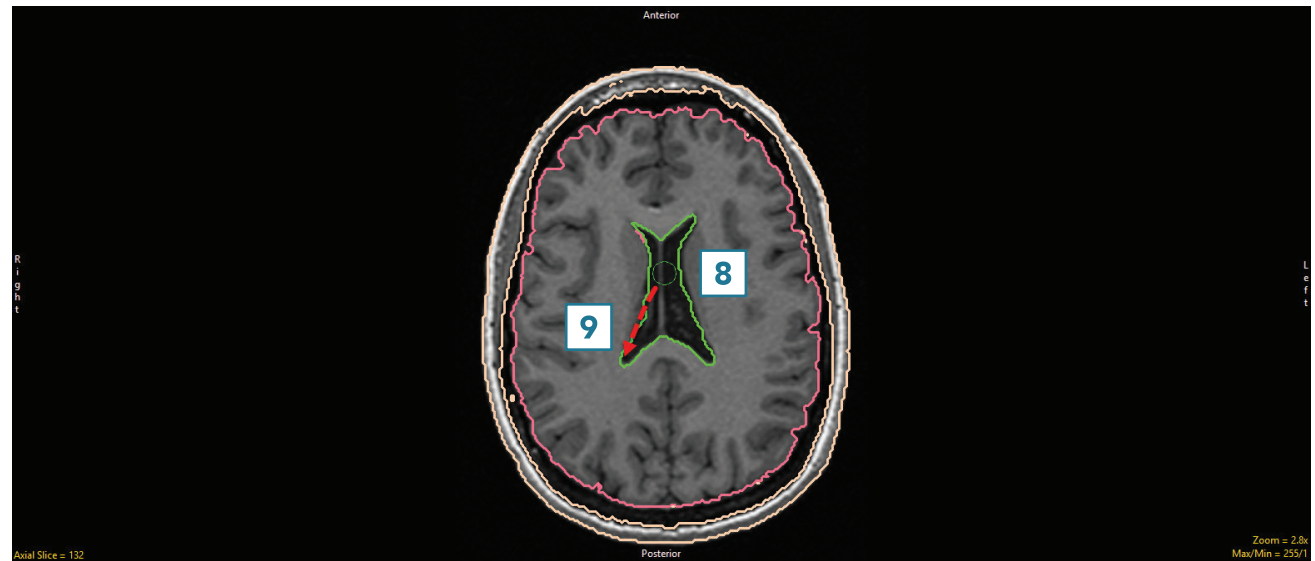
Note the color of the cursor will match the object being nudged.

- Move the cursor to edit the border [6].
- The borders of the Brain and Ventricle objects will be updated as the cursor moves through [7].

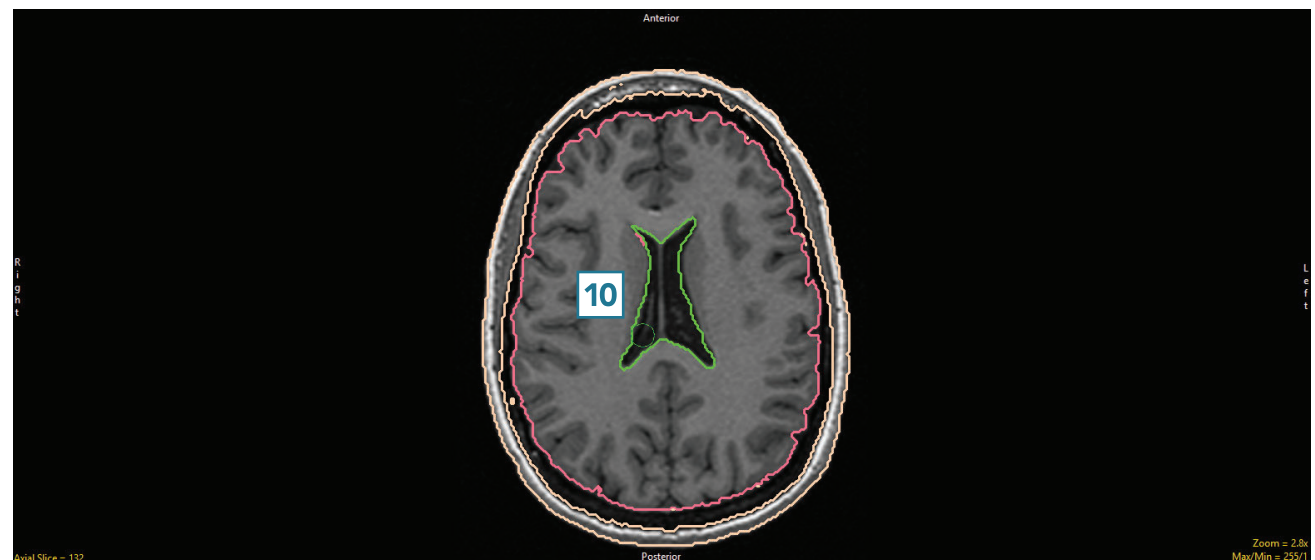


Editing Object Borders using Nudge Edit (continued)

- Click Undo.
- Using the middle mouse button, change the size of the cursor to 5, then click in the Ventricle object [8]. Push the border of the Ventricle object out to edit the object boundary [9].



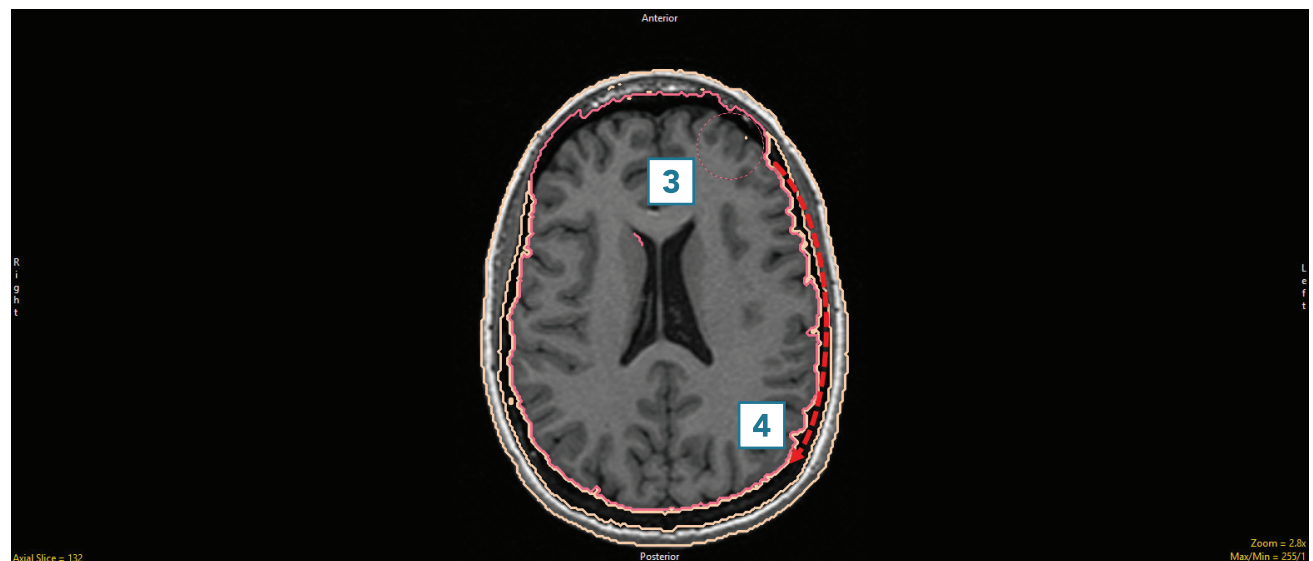
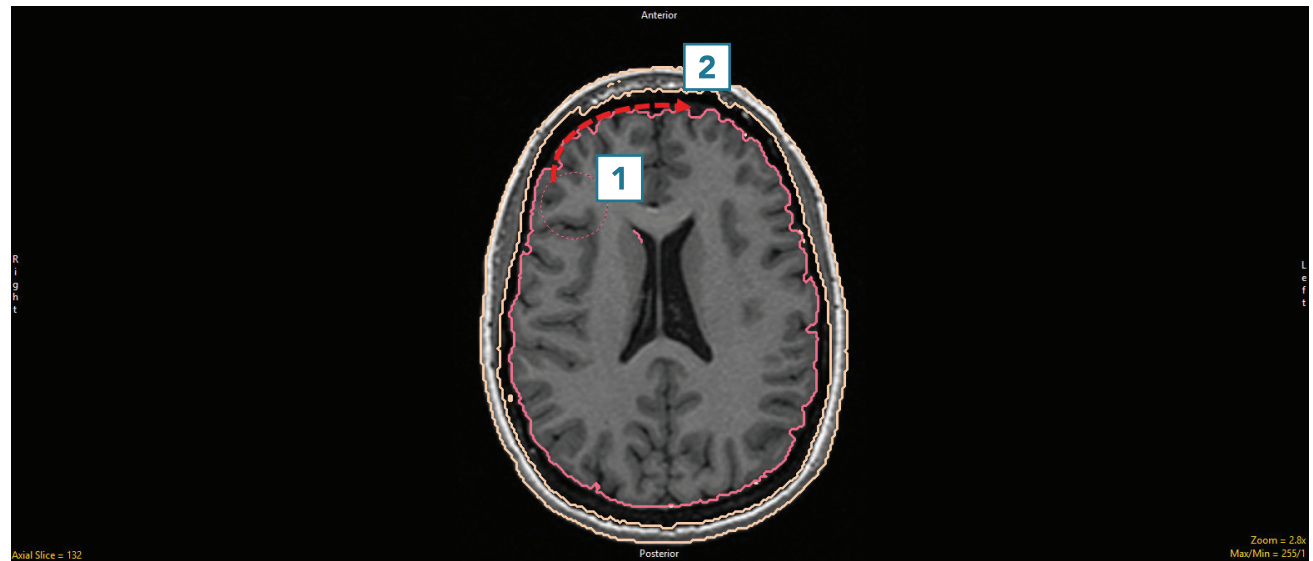
- The borders of the Brain and Ventricle objects will be updated as the cursor moves through [10].



Using the Nudge Edit Tool with Locked Objects

The Nudge Edit Tool can also be used in conjunction with locked objects. When measuring the intracranial area on a certain slice, after reassigning the Ventricle object on this slice to the Brain object using Reassign Object, the Skin object can be locked and the brain object pushed out using the Nudge tool to the border of the skin object.

- Use Reassign Object to reassign the Ventricle object on Axial slice 132 to the Brain object.
- Lock the Skin object.
- Select the Nudge Edit tool.
- Click in the Brain [1] and move the Nudge Edit tool into the intracranial space [2] between the Brain and Skin objects.
- Note that the Brain object will be pushed into the intracranial space but not into the locked skin object [3].
- Continue moving the Nudge tool through the intracranial space [4].



Using the Nudge Edit Tool with Locked Objects (continued)

- Note that if the cursor moves past the Skin object into the Original object, voxels in the Original object can still be added to the Brain object using the Nudge Edit tool. To prevent this, lock the Original object as well.
- Continue moving through the intracranial space [5] to complete the edit [6].

