

Slicer Prostate Workflow

Nicole Wake

Department of Radiology

NYU School of Medicine

nicole.wake@med.nyu.edu

Learning Objective

Segment prostate images using the Slicer Prostate Extension

Audience: End-users

1. Download the SlicerProstate Extension

<https://github.com/SlicerProstate/SlicerProstate>

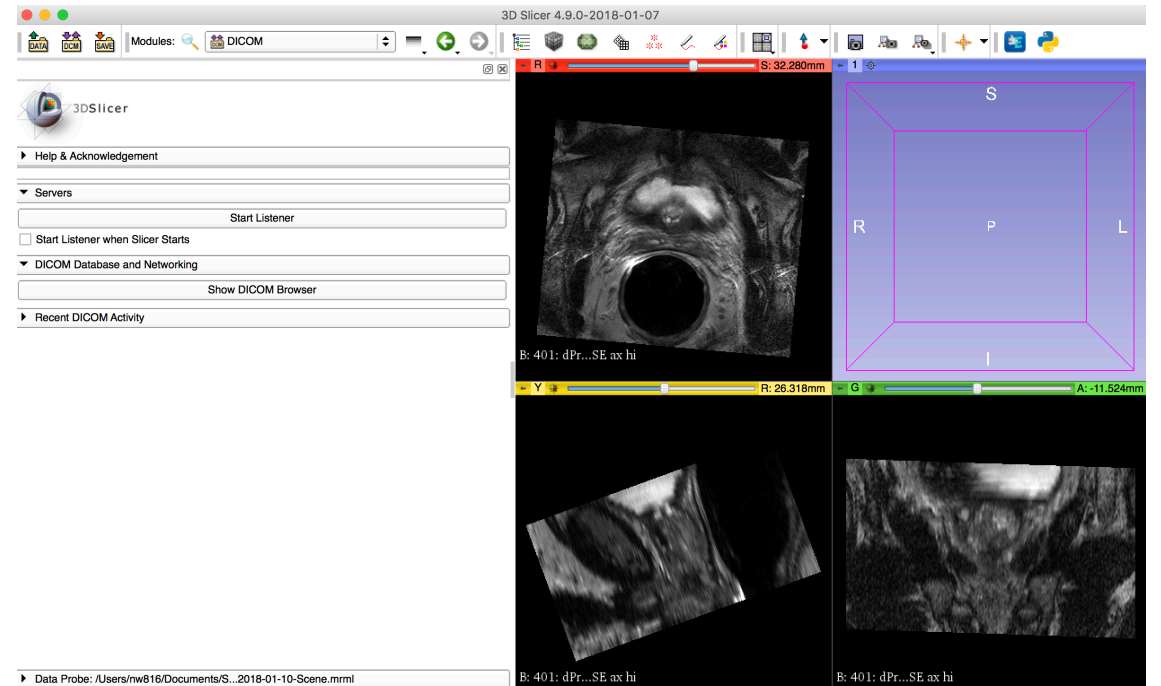
2. Download the Publicly Available Dataset

<http://www.insight-journal.org/midas/collection/view/178>

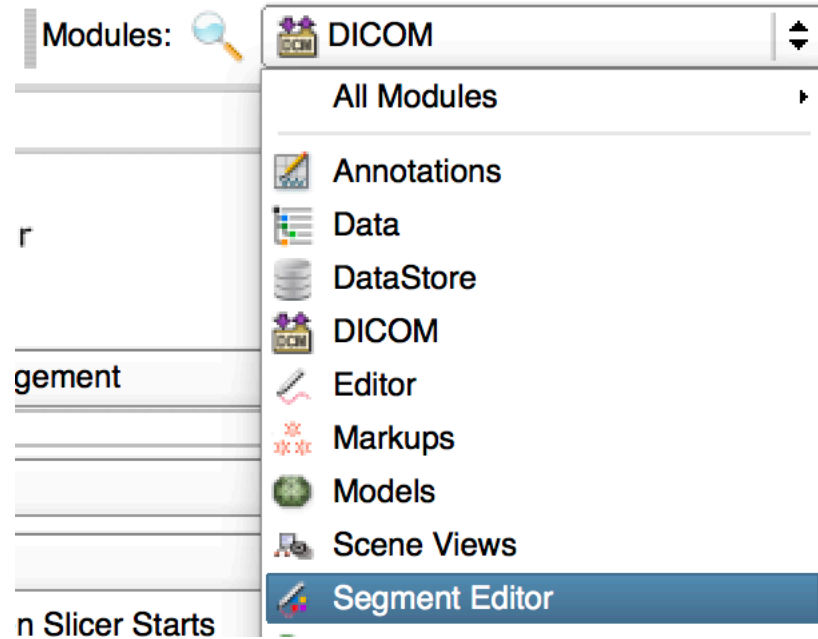
3. Load DICOM images in 3D Slicer by clicking the DICOM button, clicking import, and selecting the appropriate DICOM folder



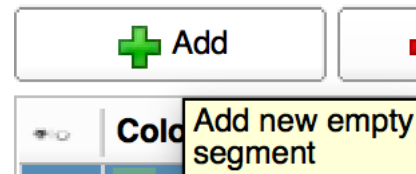
DICOM images should load and appear in all three planes on the right hand side of the user interface



4. Switch Module to “Segment Editor”



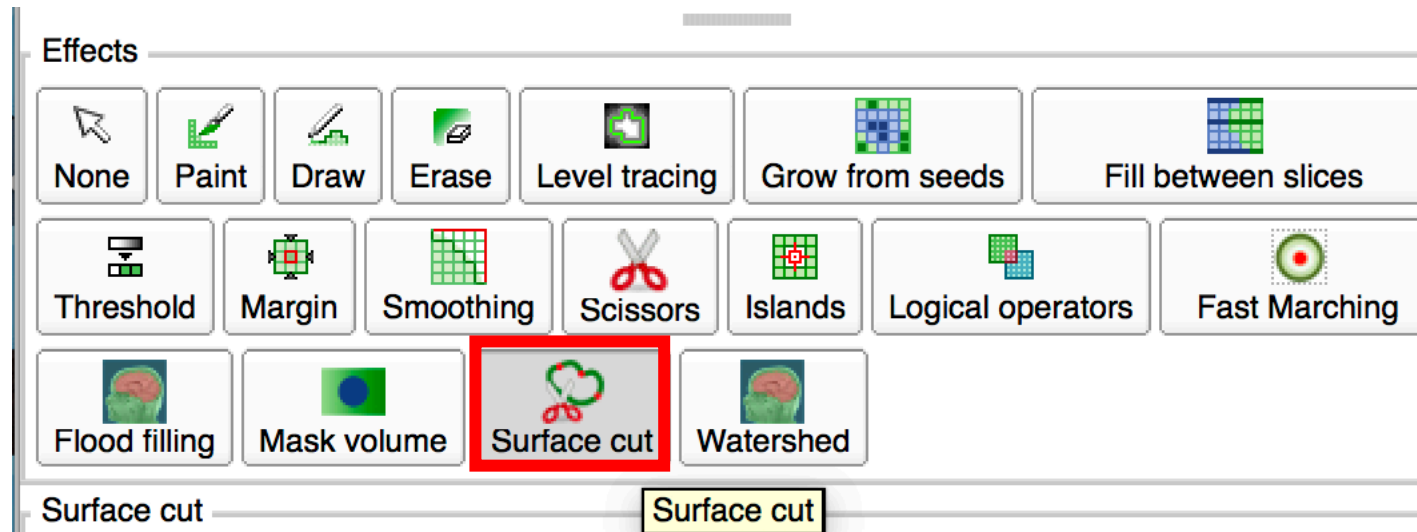
5. Click “Add” to add a new region of interest



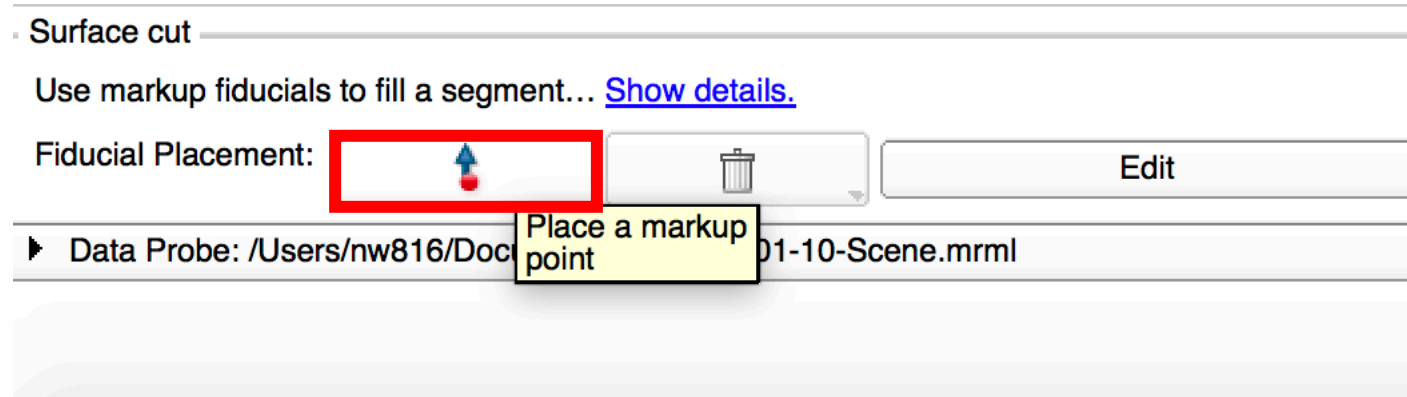
6. Double click to change label name to “Prostate”



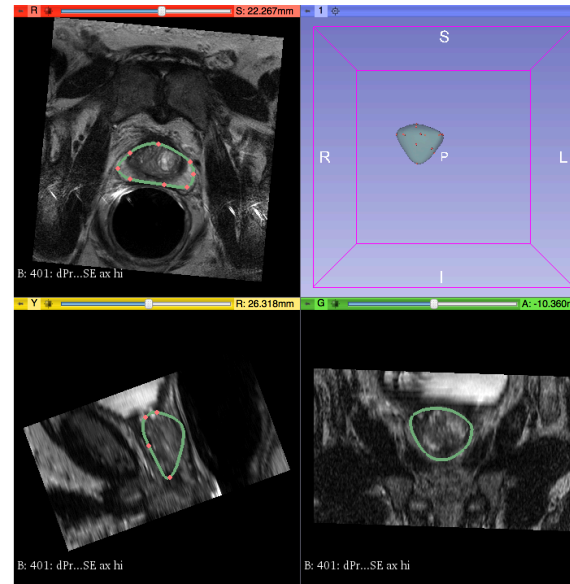
7. Click the “Surface Cut” button under the Effects tab on the bottom left of the screen



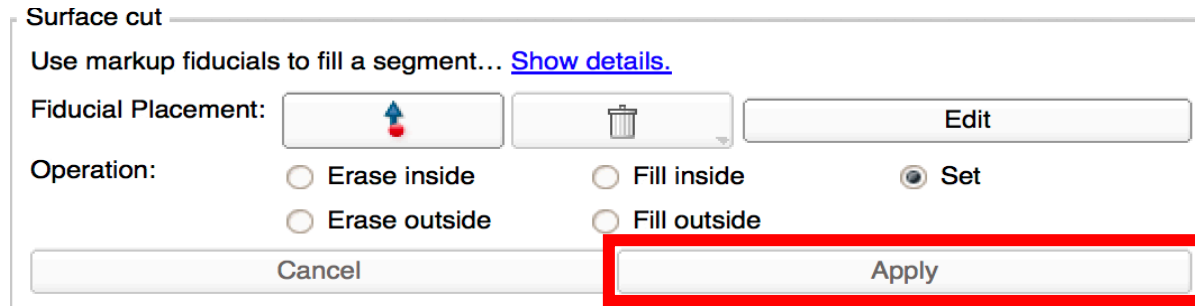
8. Click the fiducial placement button located in the surface cut menu



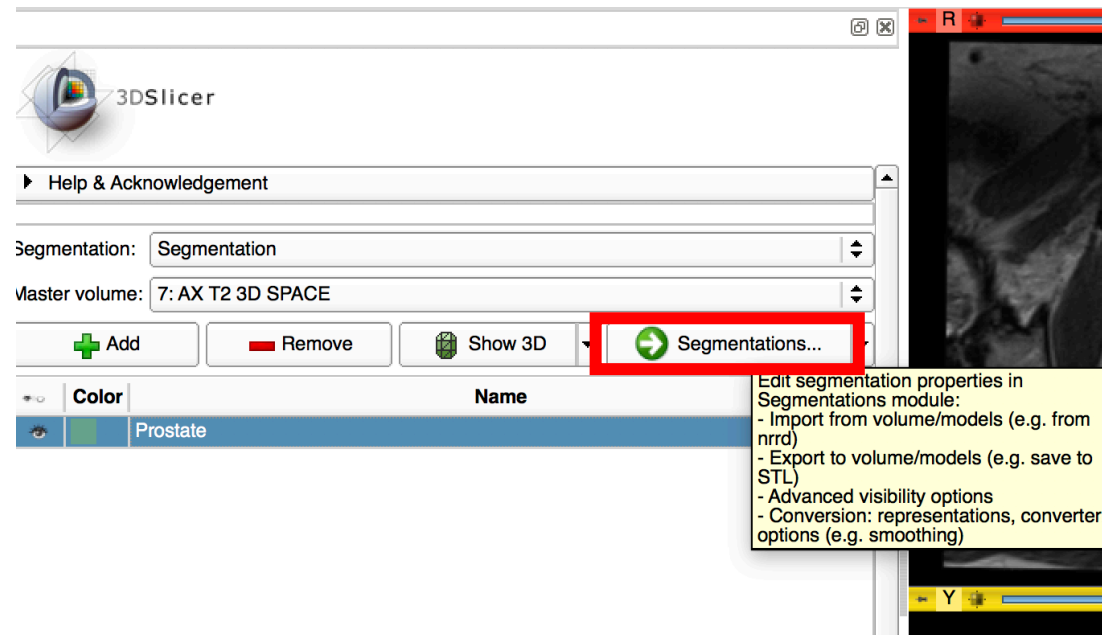
9. Mark edges of prostate in all 3 planes until it is appropriately segmented



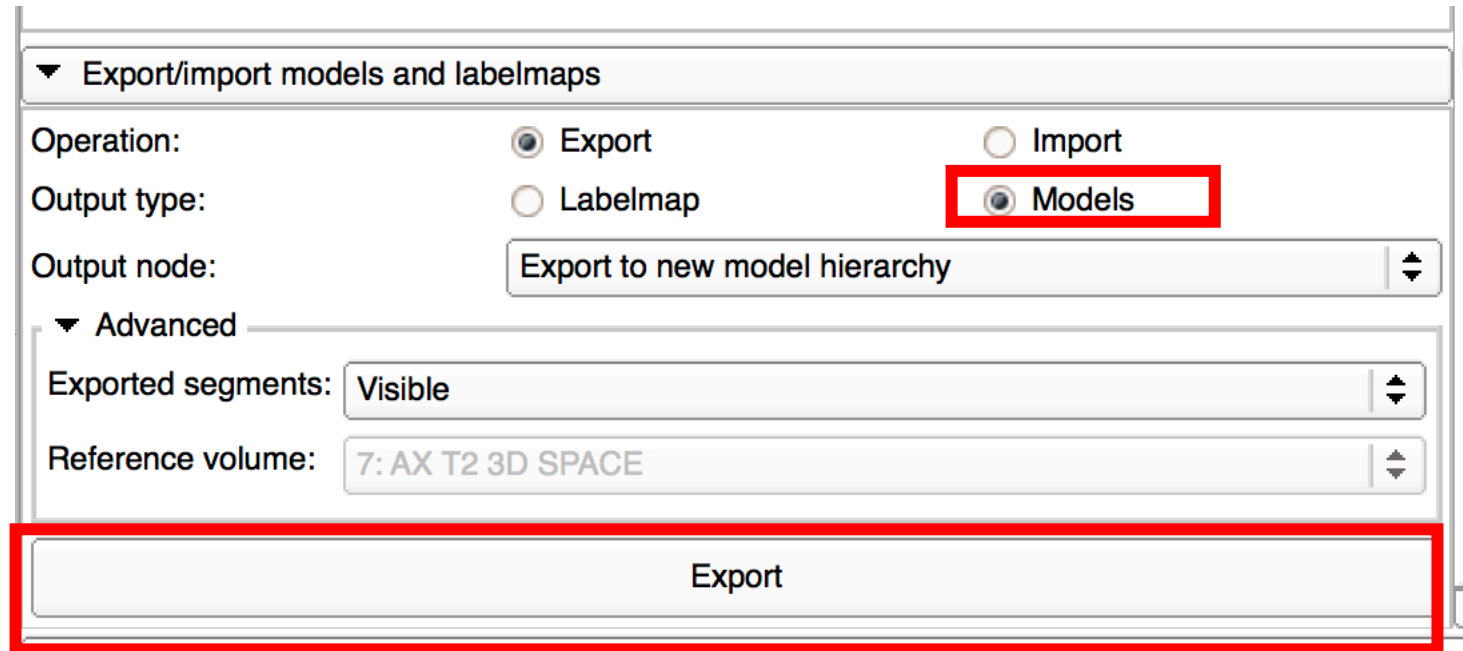
10. Click “Apply” to apply segmentation



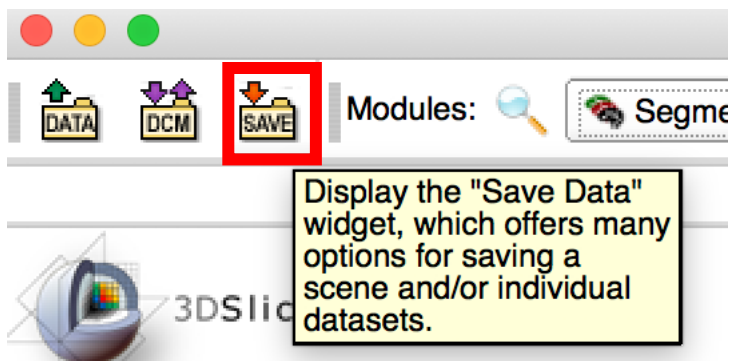
11. To Export model, click “Segmentations”



12. Make sure “Models” is selected and click Export button



12. Click “Save” on the top left hand side of menu



13. Scroll down to prostate.vtk and save in preferred format

