

Lab - Useful Mesh Operations in SCIRun

- 1) Register Mesh and Segmentation
- 2) Generate Surfaces
- 3) Generate Hexahedral Meshes
- 4) Clip Meshes

Call BioMesh3D

- `cd SCIRun/bin/FEMesher/`
- `(python) BuildMesh.py -id Path_to_Seg/
model_config.py`
- `(python) BuildMesh.py -s l:8 Path_to_Seg/
model_config.py`

Register Mesh and Segmentation

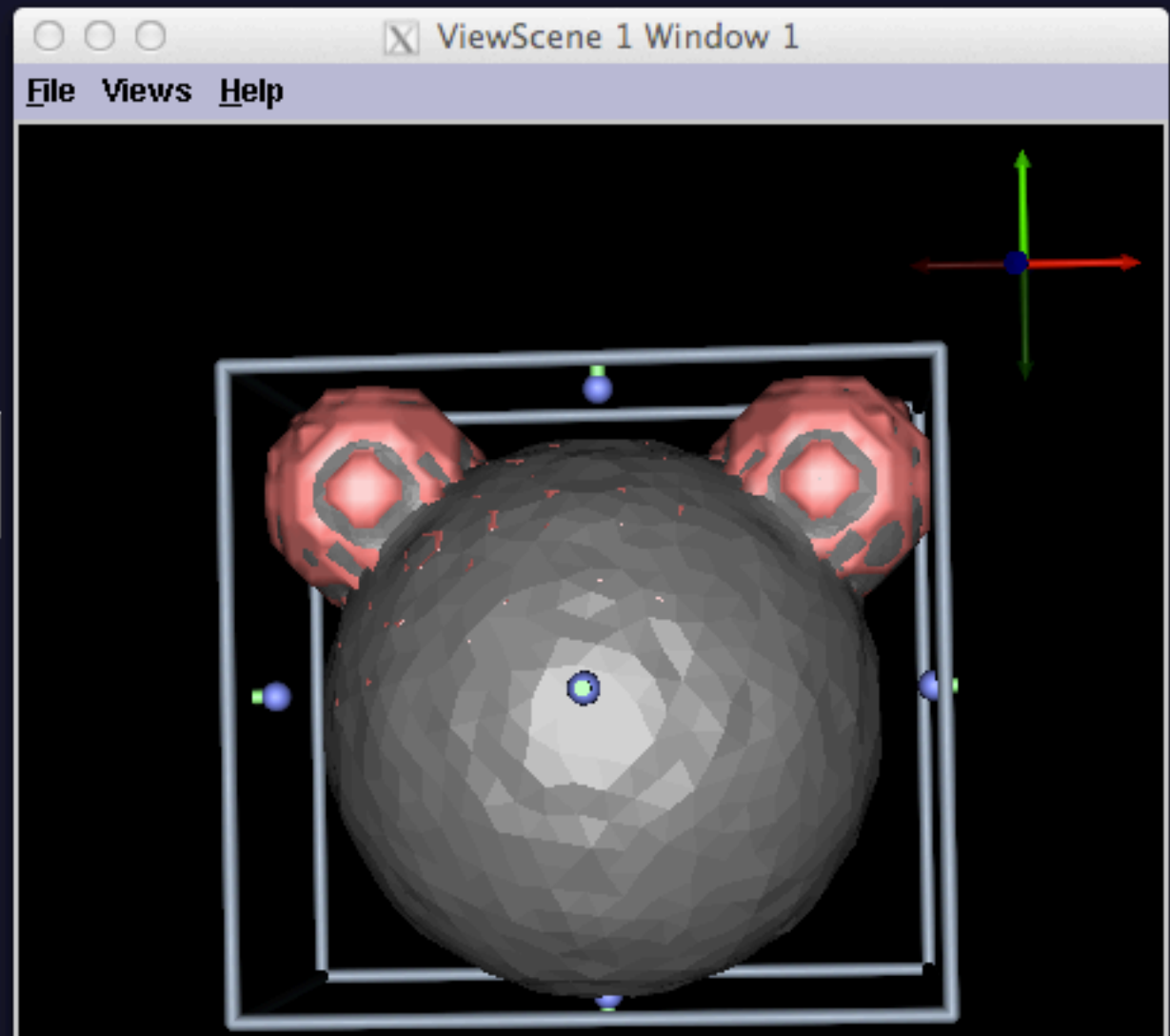
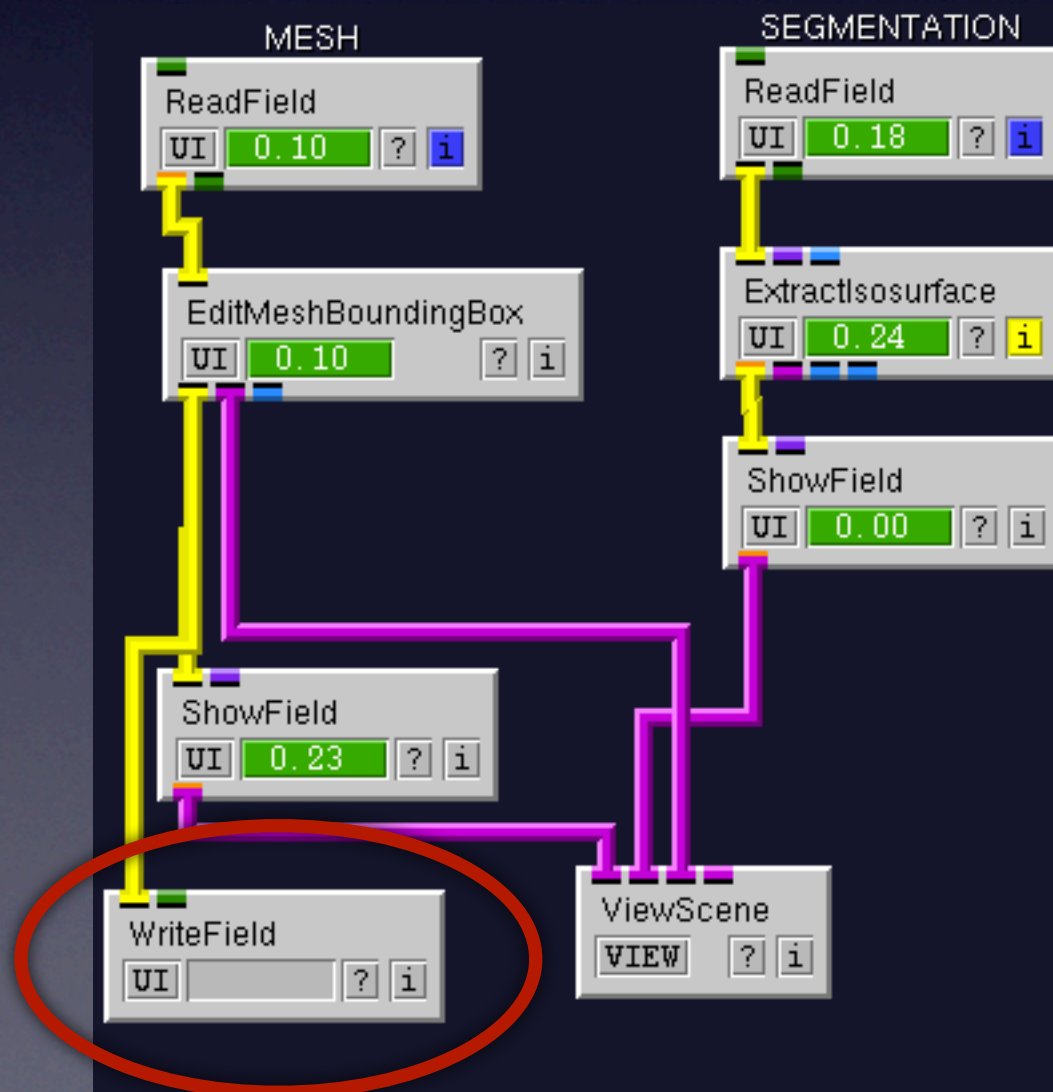
Load in with ReadField (left):

output/junctions/particle-union.tets-labeled_transformed.fld

Load in with ReadField (right):

mickey.nrrd

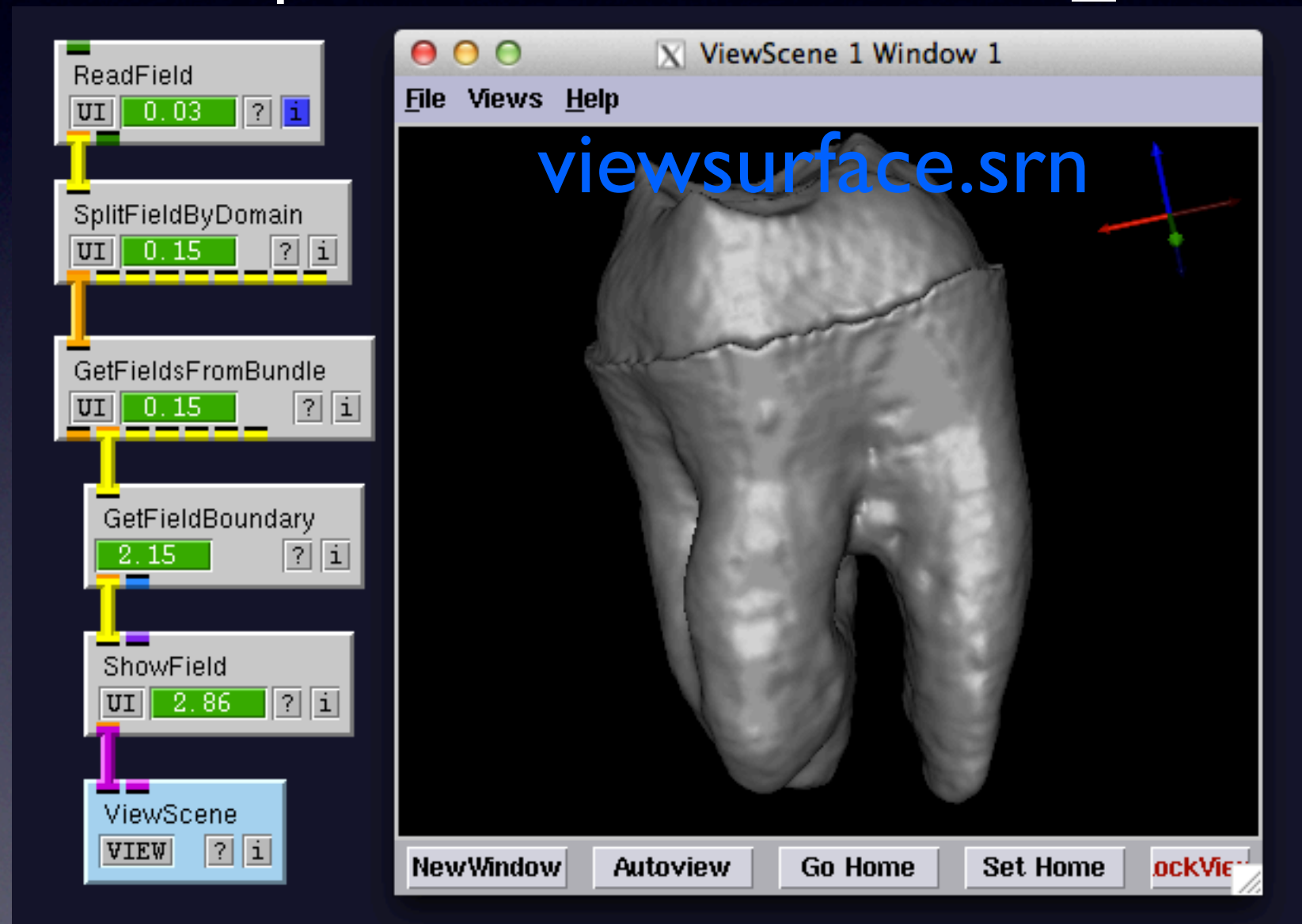
register_seg_and_mesh.srn



Generate Surfaces

Load in with ReadField:

output/junctions/particle-union.tets-labeled_transformed.fld



Generate Hexahedral Meshes

SEGMENTATION

Load in with ReadField:
mickey.nrrd

ReadField
UI 0.18 ? i

ClipFieldByFunction
UI 0.15 ? i

ReportFieldInfo
UI 0.07 ? i

GetFieldBoundary
0.02 ? i

FairMesh
UI 0.06 ? i

ShowField
UI 0.09 ? i

ShowField
UI 0.01 ? i

ReportFieldInfo
UI 0.00 ? i

ViewScene
VIEW ? i

ViewScene 1 Window 1

File Views Help

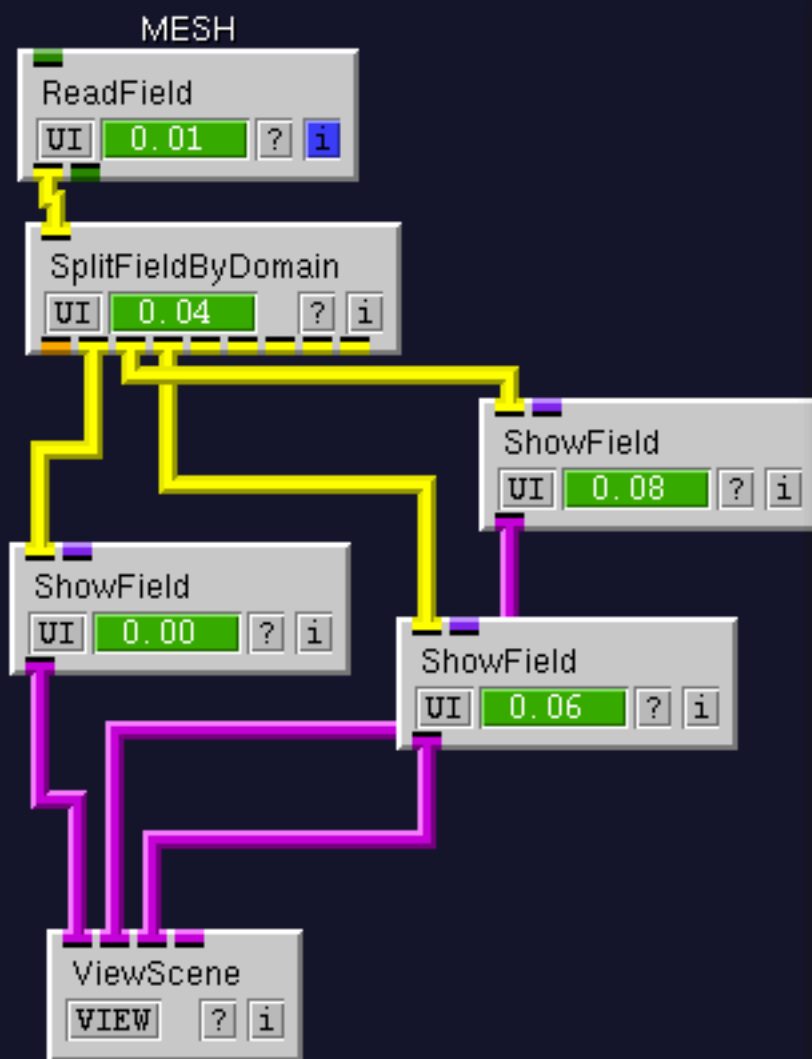
NewWindow Autoview Go Home Set Home LockView Configure

generate_hex_mesh.srn

Clip Meshes

Load in with ReadField:

output/junctions/particle-union.tets-labeled_transformed.fld



clip_mesh.srn

