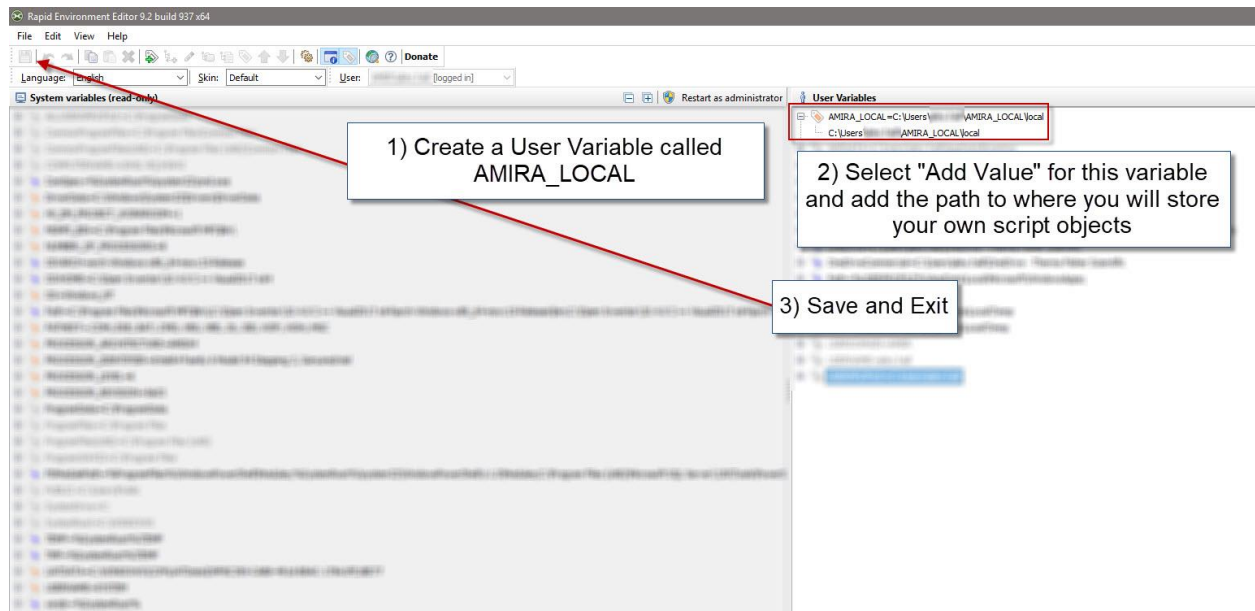


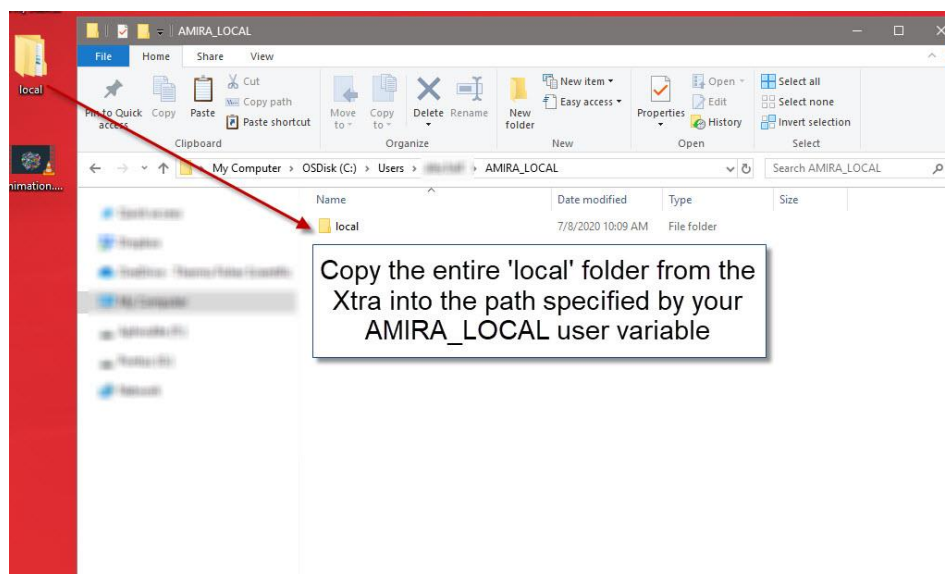
Installation and Usage of the Volume Projection Xtra

Created September 20th, 2020

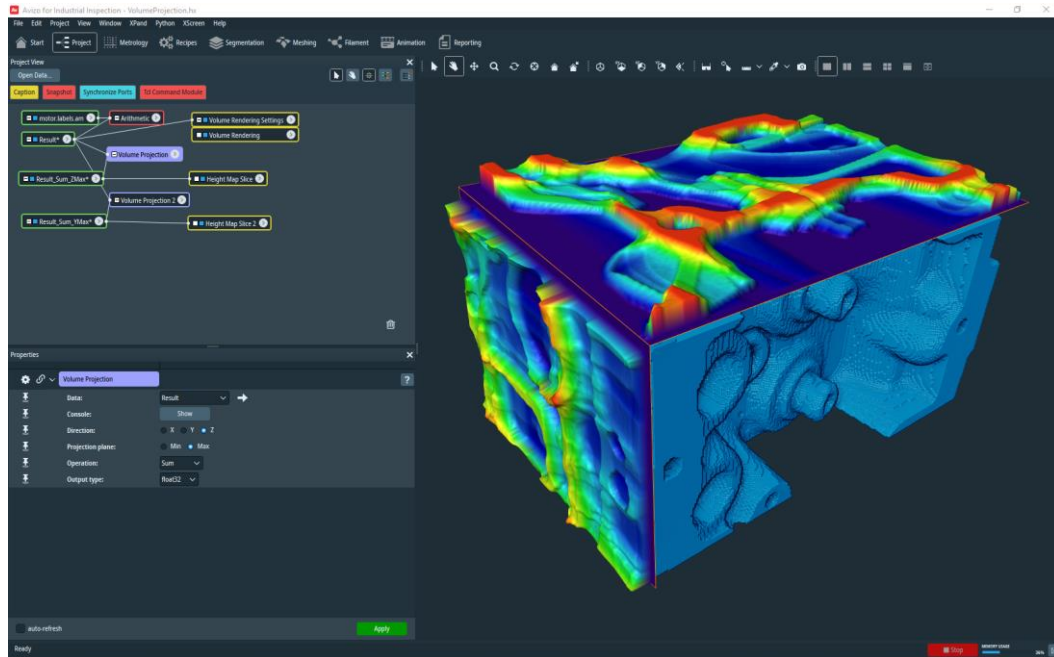
First, create a local directory to store your Xtra scripts. This avoids requiring administrator privileges needed to write to the program's installation directory. Also, this is a location found by all versions of the software, so you can more easily use this location when you update the software. It works for Amira and Avizo, despite using the variable name AMIRA_LOCAL. This screenshot uses the free software Rapid Environment Editor in a Windows environment.



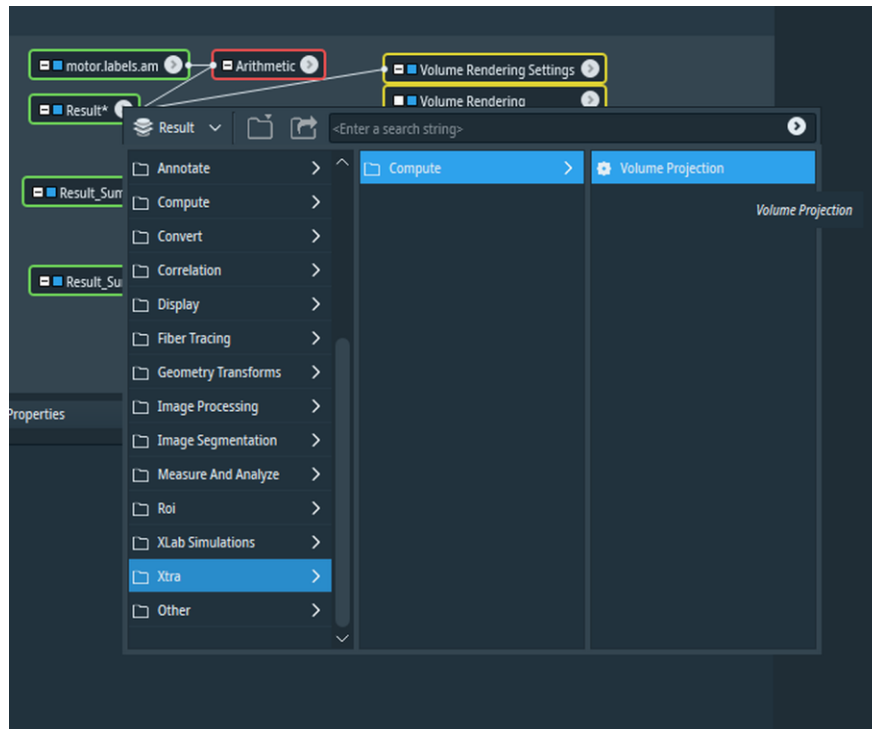
Next, extract the Xtra and copy the local folder into your AMIRA_LOCAL location.



To use this Xtra, you need a 3D scalar field or label field. You may wish to use the example included with the Xtra, as shown here. Launch Amira or Avizo, then load the VolumeProjection.hx script withing the Xtra folder



If you correctly installed the Xtra, you can locate the module within the Xtra folder. It will be listed as Volume Projection when you right click on a 3D uniform scalar field or label field in Amira or Avizo.



After connecting the Volume Projection module to the data, set parameters in the properties window:

Direction: The axis along which voxels of the volume are projected. (default Z)

Projection plane: 2D projected image will be located at the minimum or maximum coordinate of the bounding box of the input data (default Max)

Operation: Operation used to compute projection (default Sum)

Output type: Type of the output data (default float32)

Then press Apply button.

A 2D projection of the volume is create. You can use display module such as OrthoSlice or Height Map to create a visualization of the projection.