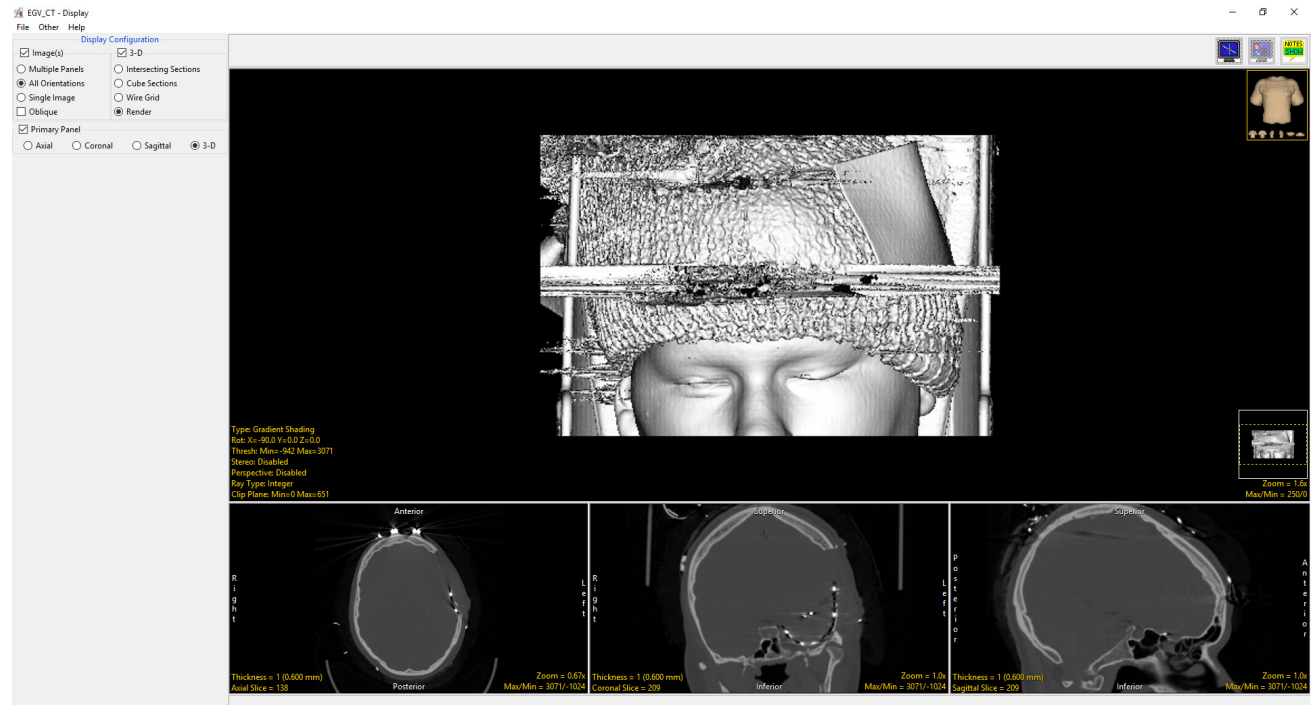


Render

The Render option enables a 3D volume rendering in the 3D display window. Display uses ray casting algorithms to rapidly generate volume rendered displays of two classes; Transmission displays (Projections) and Reflections displays (Surface).

Transmission displays (Projections):

Models the image voxels as light emitters and do not involve explicit surface detection. A display pixel's value is computed as a function of the ray passing through the entire volume.



Reflection displays (Surface): Models the image voxels as light reflectors and require the detection of surfaces within the volume. The basic reflection algorithms consider the first voxel encountered by the ray which is within the threshold parameters to be the surface voxels to be rendered. The algorithms differ in how the detected surface voxels are rendered on the screen.

By default, a voxel gradient shaded rendering is shown, with controls for threshold selection and rotation angle. Clicking and dragging the rendering with the middle mouse button controls the rotation angle.