3D Signpost - Numerical Results

Authors: Rajesh Bhaskaran and Vincent Prantil

Numerical Results

The following images demonstrate how to plot the normal stresses XX,YY,ZZ and shear stresses XY,YZ,XZ.

Right-click on **Solution >Insert>Stress>Normal** for normal stresses and **Solution >Insert>Stress>Shear** for shear stresses.

Select the post as the geometry and click **Apply**.

Change the Orientation tab to alter the stress direction. Note that the maximum normal stress occurs in the zz direction and the maximum shear stress occurs in the xz direction. This makes sense with the given loads and boundary conditions.
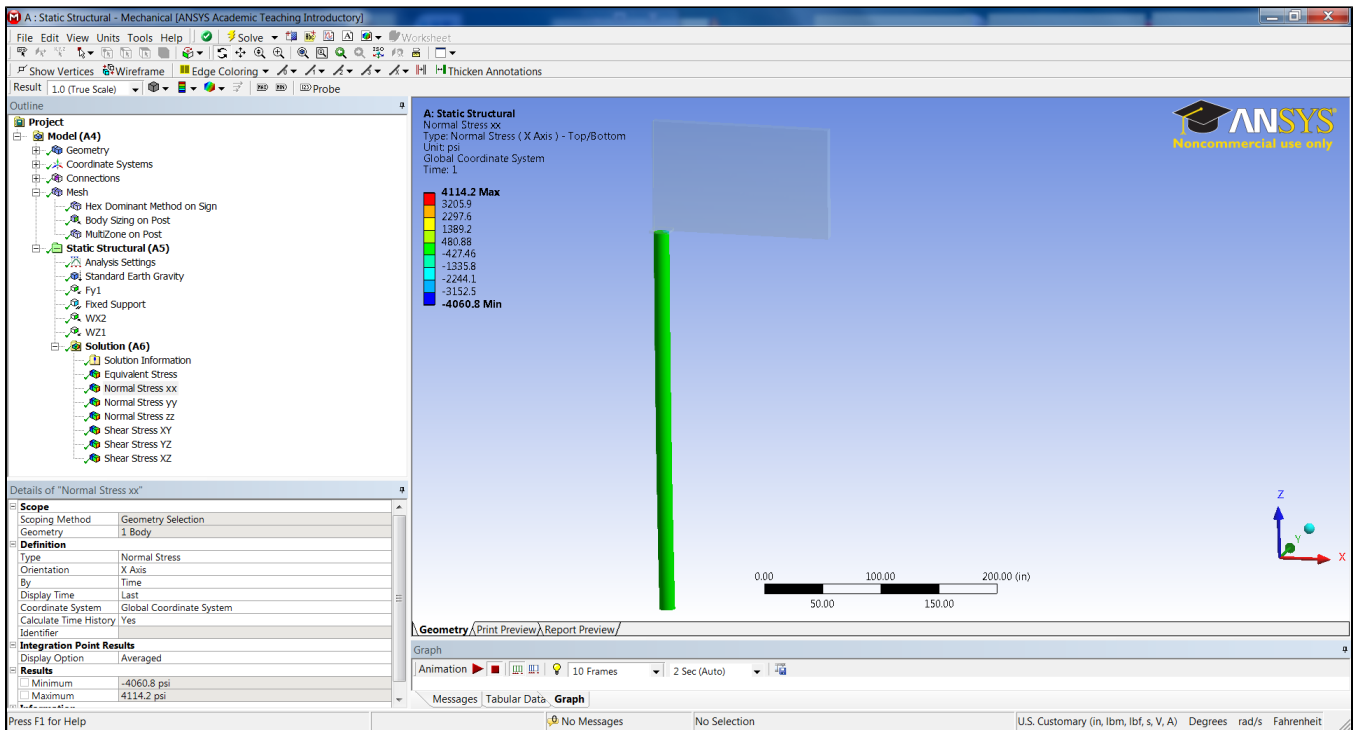
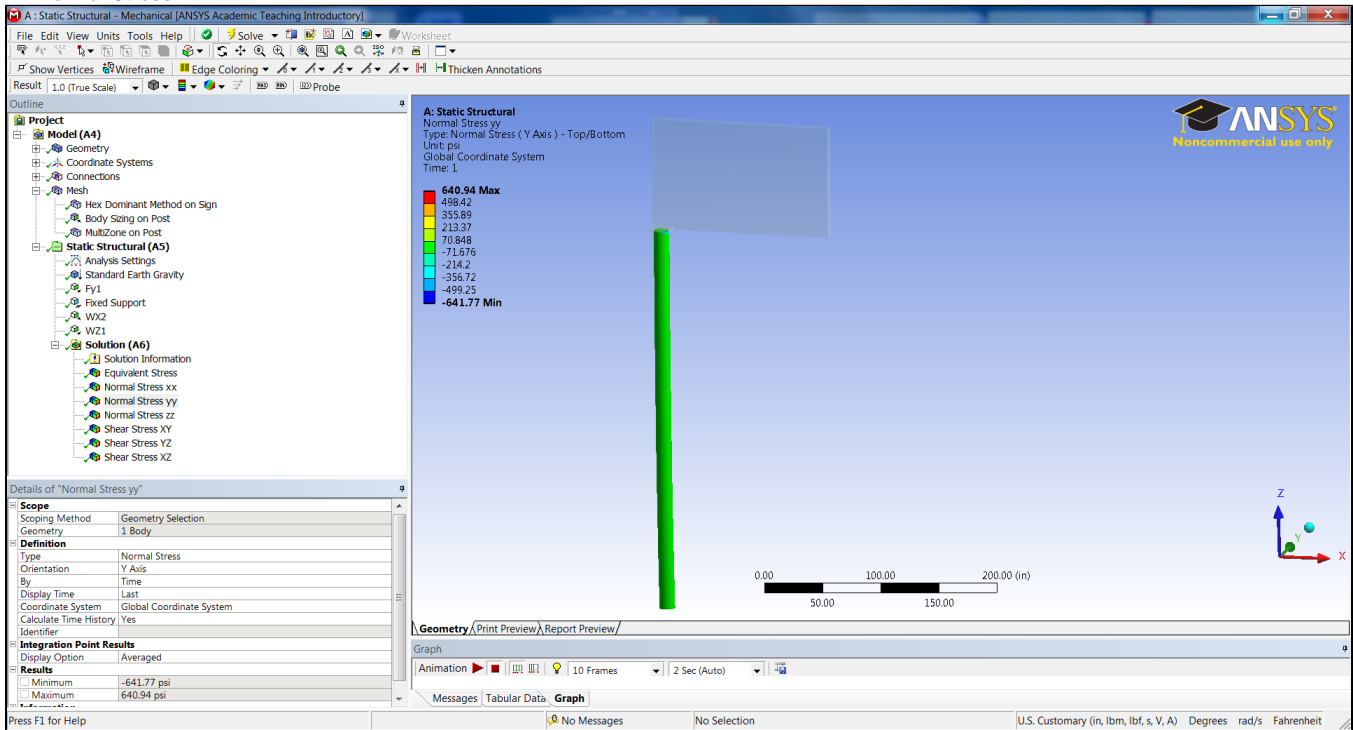Note: These results are based on a post diameter equal to 1.12 ft.
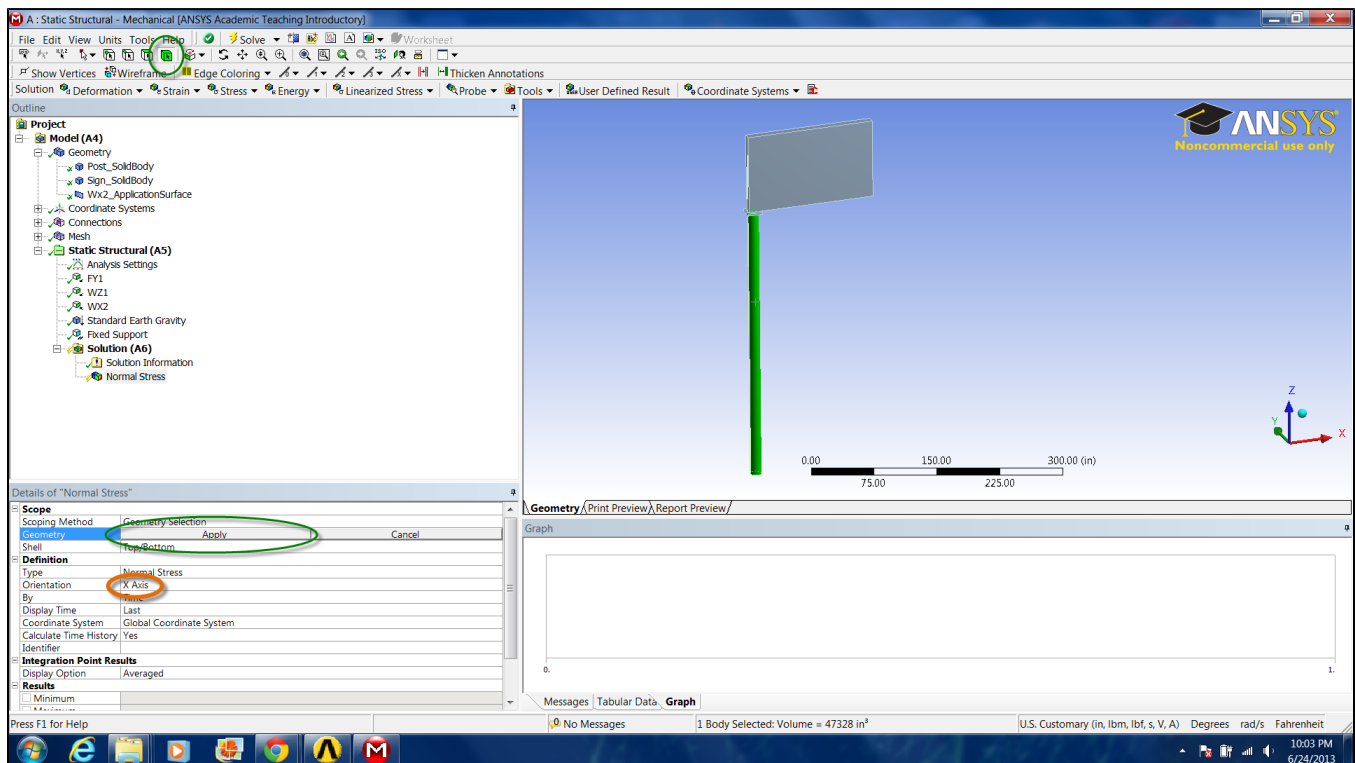
For clearer solution labels, right click the newly created **Stress Solution>Rename Based on Definition**.

Finally, click on the Solve button. Your result should be very similar to the following figures.
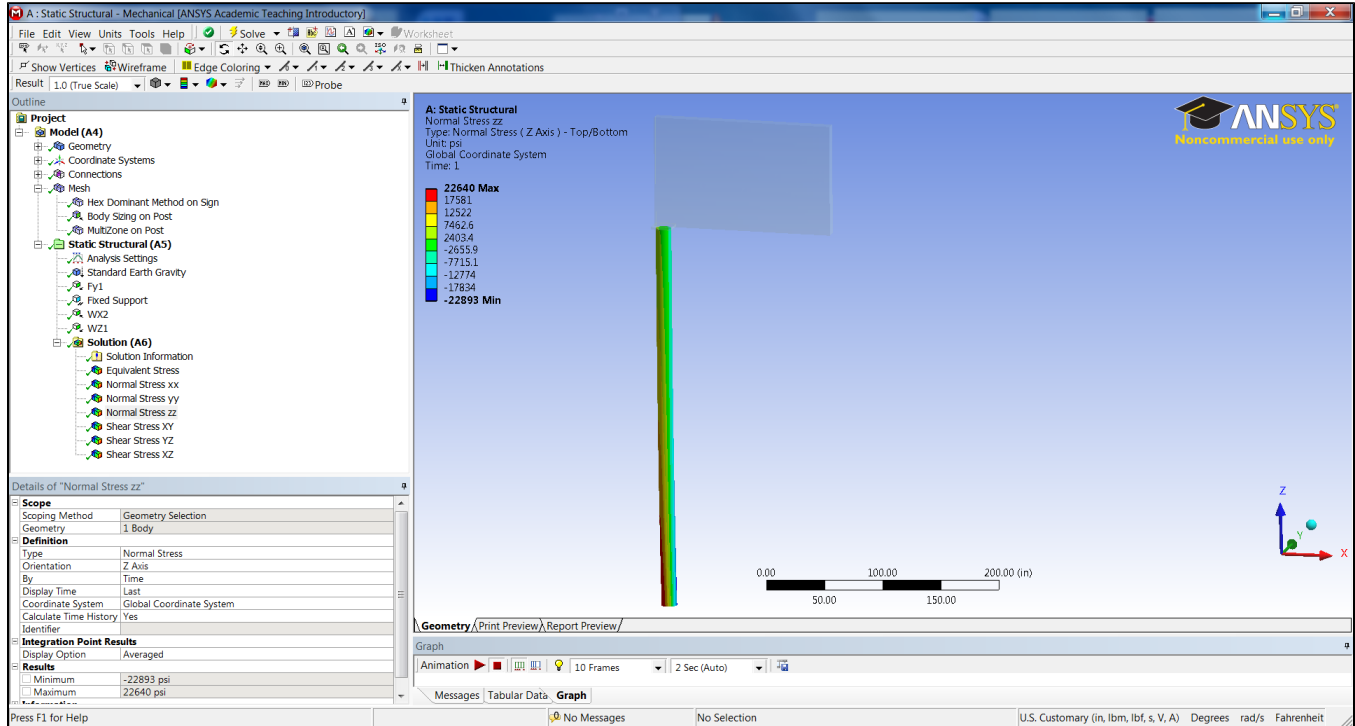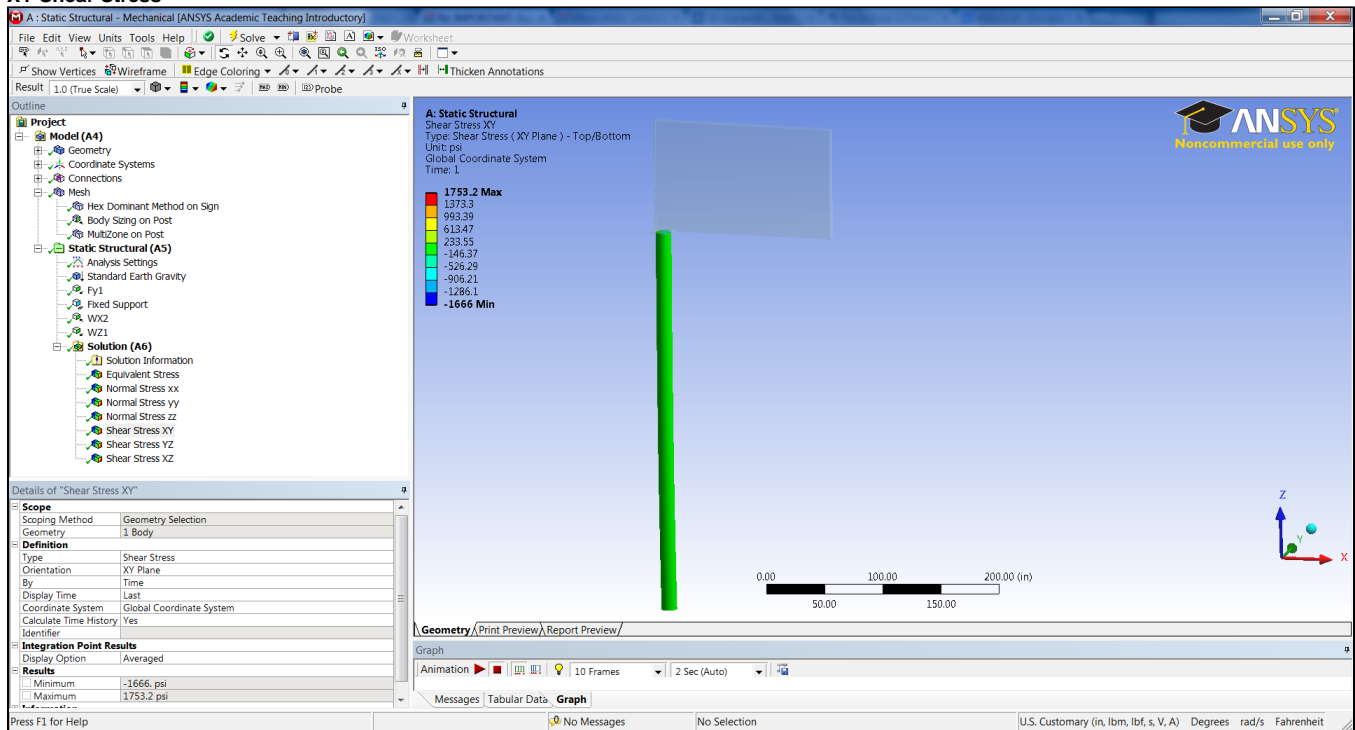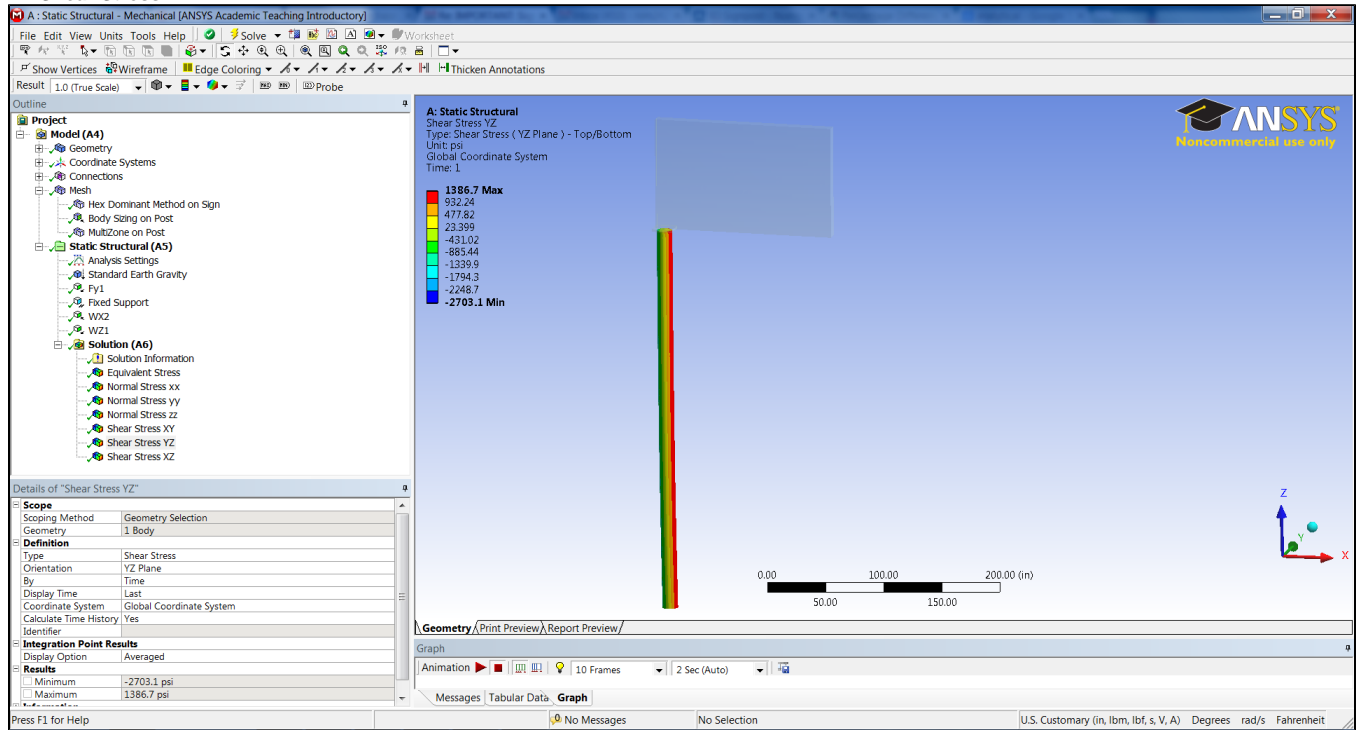
XX Normal Stress

YY Normal Stress
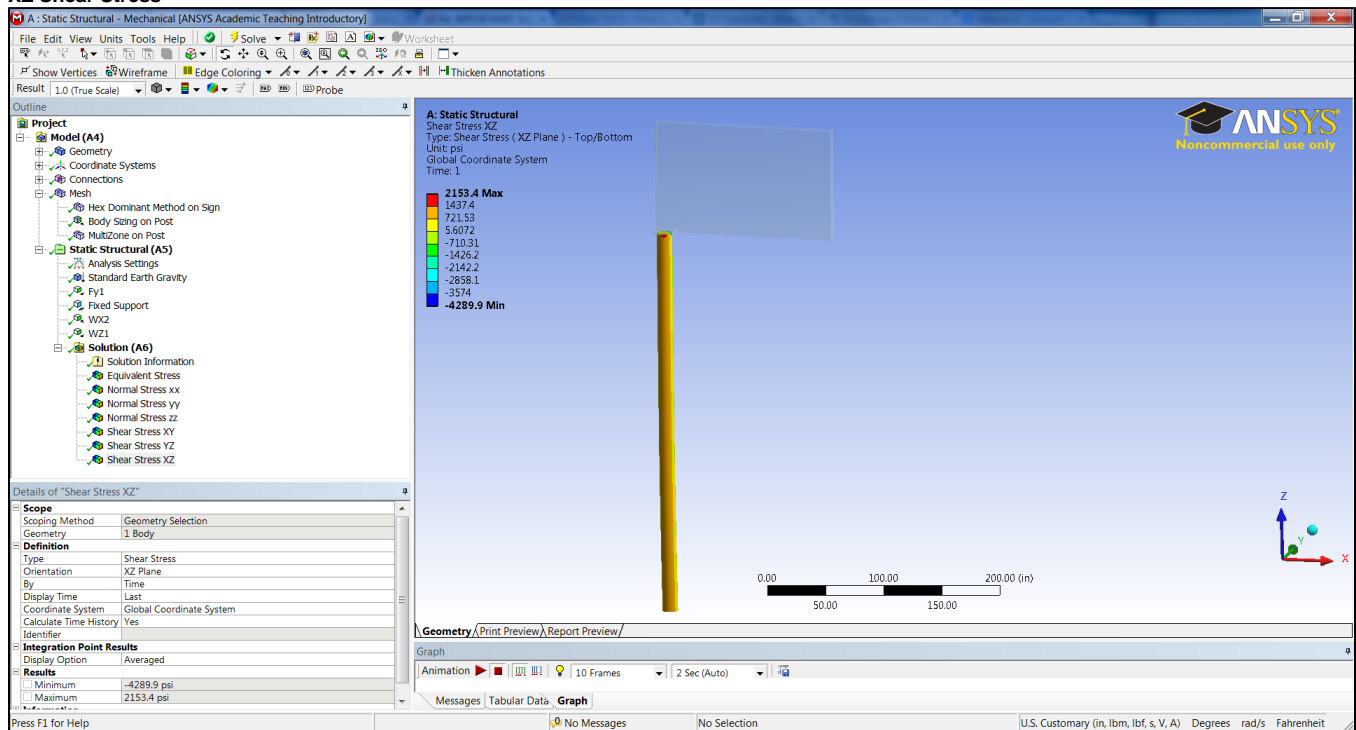
ZZ Normal Stress

XY Shear Stress

YZ Shear Stress

XZ Shear Stress

Go to Step 7: Verification & Validation

Go to all ANSYS Learning Modules