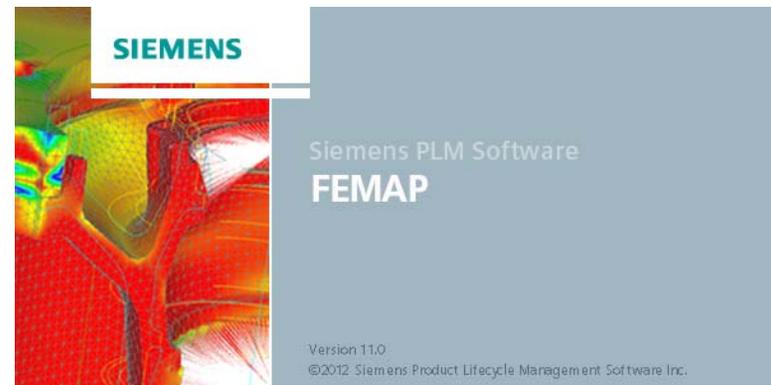


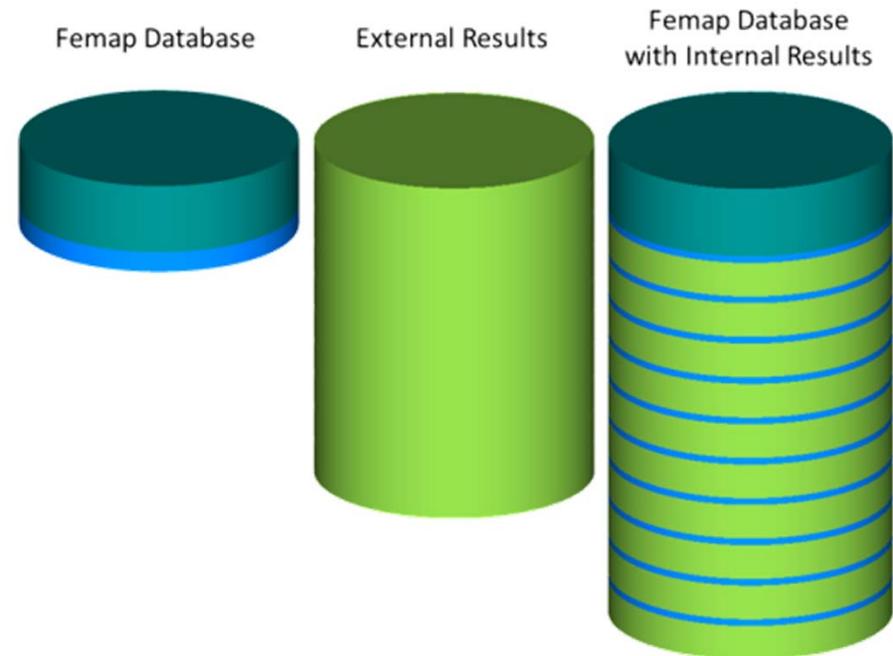
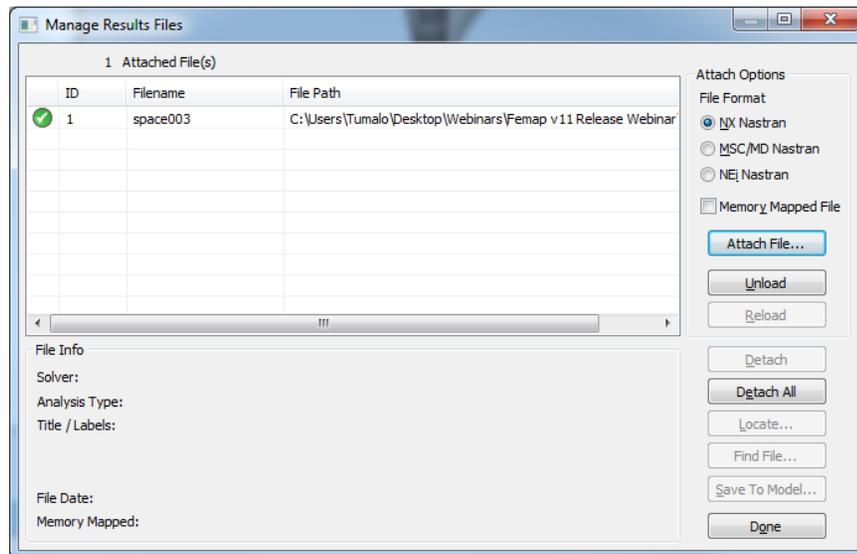
Femap v11 New Features

- Attach to external results files
 - Significantly increases efficiency for results access
- Graphics performance improvements
 - Support for vertex buffer objects
- Create geometry from mesh
 - Easy to update and remesh legacy FE models
- External superelement support
 - Support for external superelement creation and assembly
- Streamlined XY plotting
 - Extended graphics and plotting capabilities
- NX Nastran integration
 - Solid composite element
 - Solid bolt preloads
- Mesh splitting



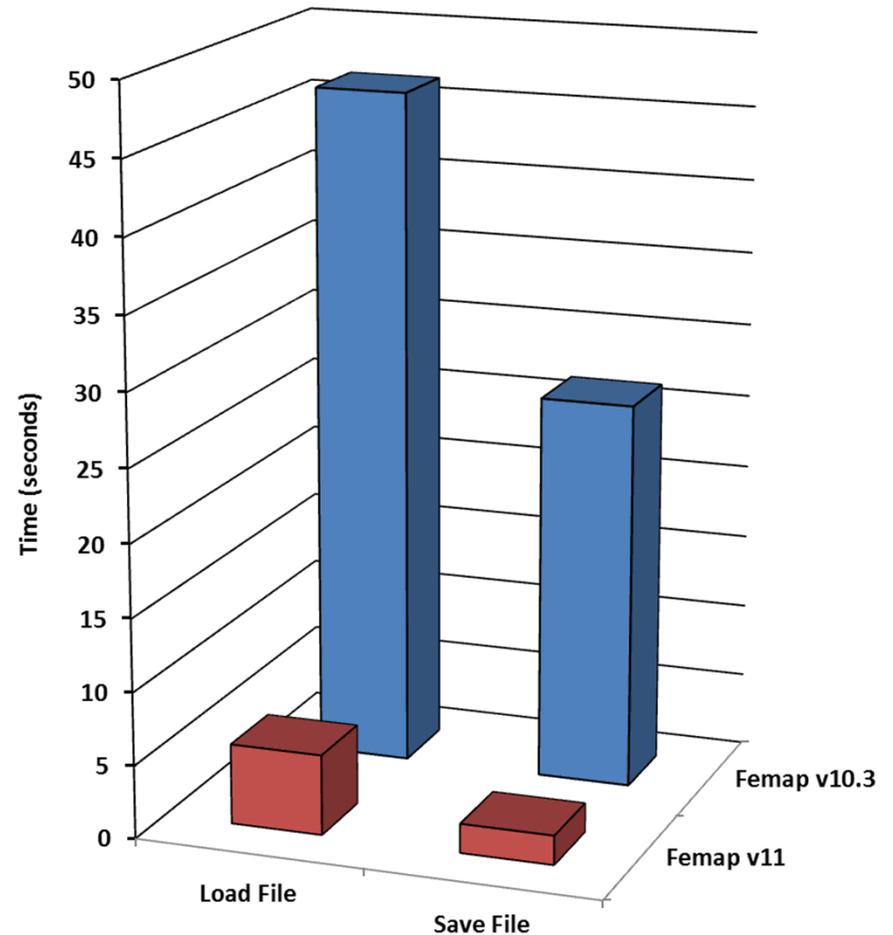
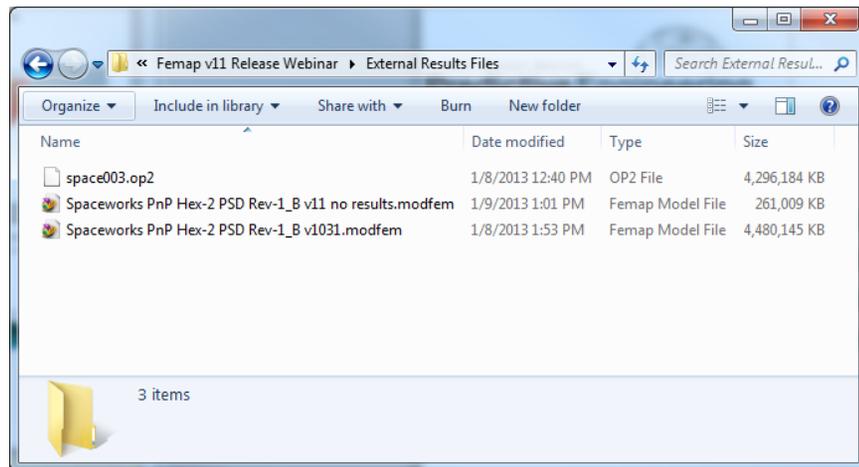
Attaching to Results vs. Importing Results

- Femap .modfem database size minimized.
- Postprocessing functionality does not change.
- Nastran .op2 and FNO output supported
- ABAQUS .odb, Nastran .xdb, ANSYS .rst soon.



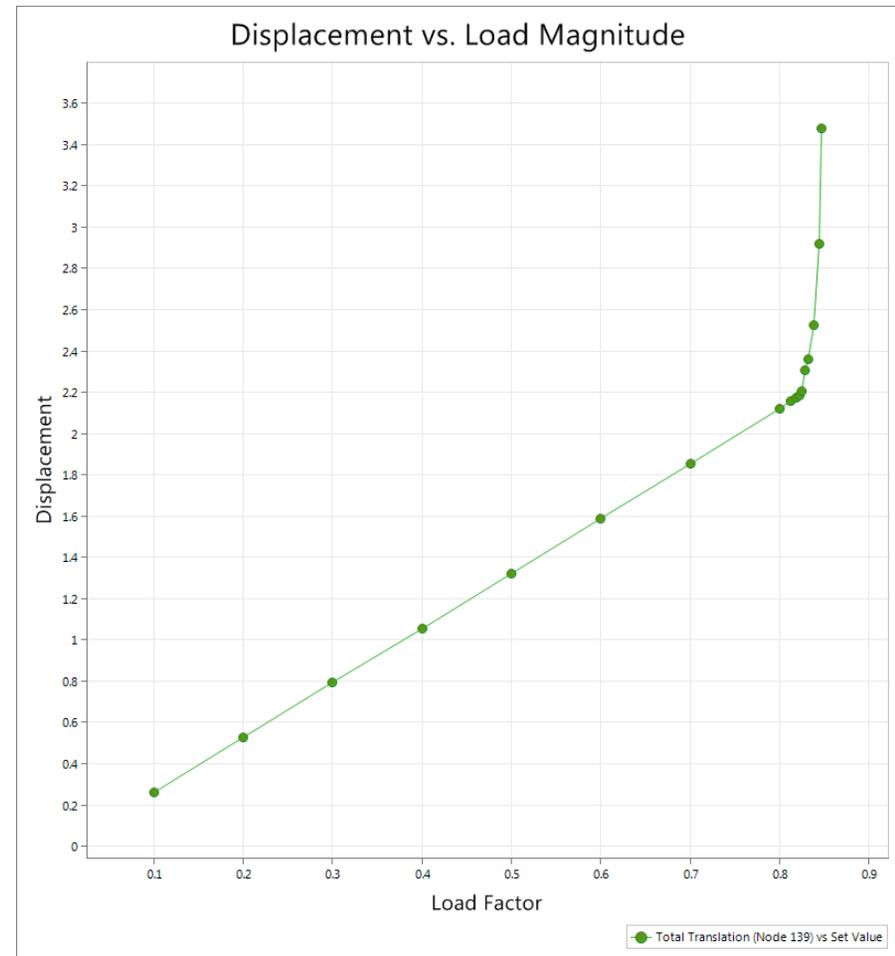
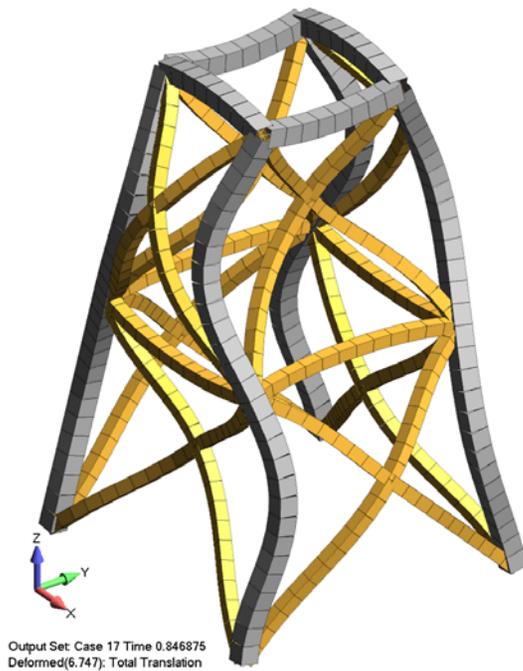
Attaching to Results vs. Importing Results

- Greater efficiency with faster data access.
- Attach time is greater than 6x faster than import time.
- Greater efficiency with reduced memory usage.
- Quick access to “Envelope Results”



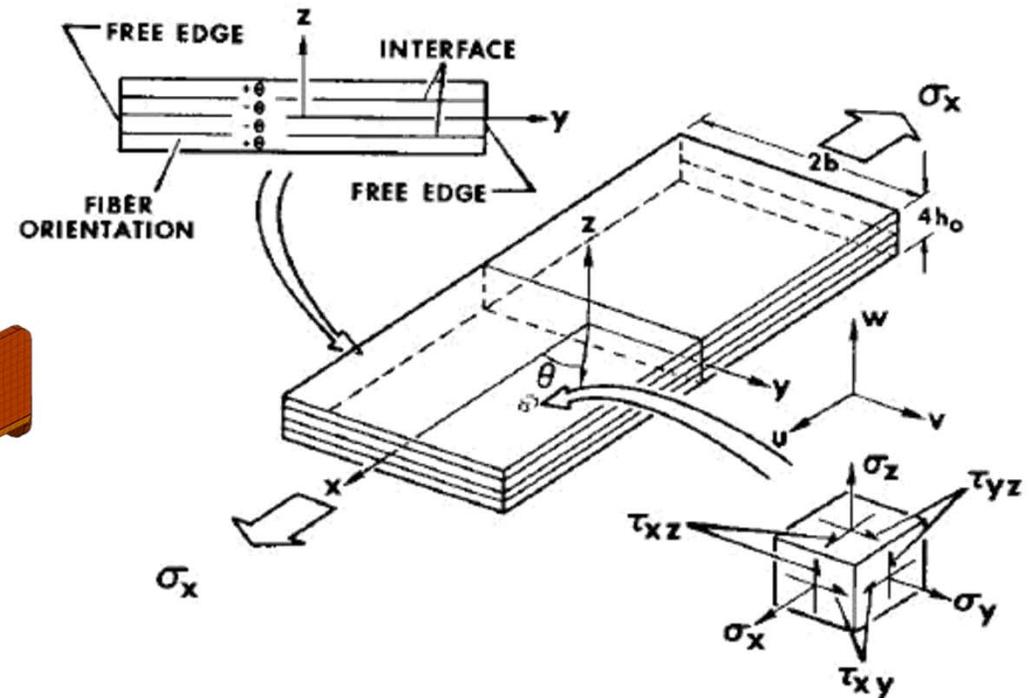
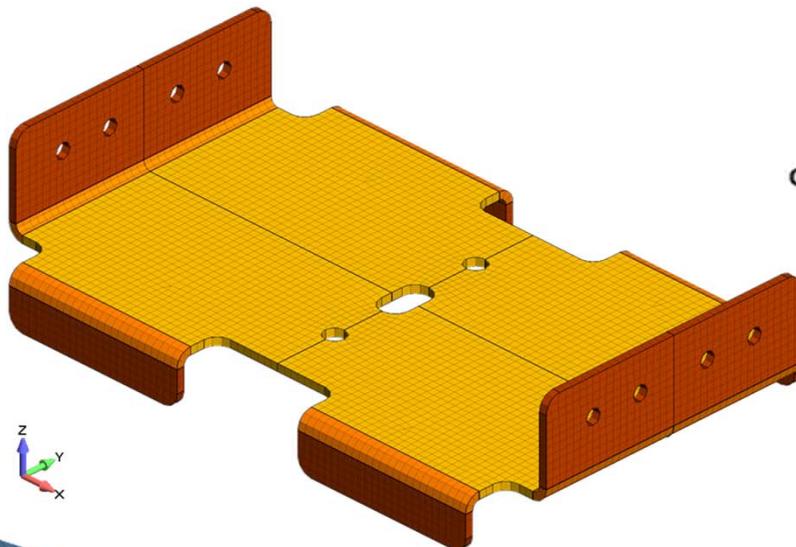
Streamlined XY Plotting

- Enhanced graphics
- Unlimited number of curves
- Plots can be saved to database (like a FBD)



NX Nastran Integration: Solid Composites

- Ply layup modeled with solid brick elements (hexas and pentas)
- 1 to n plies per element
- Ply thickness is relative
- Ply failure theories:
 - Tsai-Wu, Hill, Maximum Stress, Hoffman, LaRC02
- Interlaminar failure theories:
 - Shear and Normal



Mesh Edge Splitting

- Easy mesh splitting by selecting two nodes on and element edge.
- Split propagates through the model maintaining a contiguous mesh.
- Define limit split regions to control mesh splitting.
- Splits hex, plate and beam elements.

