Section cuts drawn within the graphical user interface

Test Problem

Name:	Section cuts drawn within the graphical user interface
Description:	Draw section cuts within the graphical user interface using either 2D or 3D views.
Program:	SAP2000
Version:	14.1.0
Model ID:	na

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The process for drawing section cuts within the graphical user interface is demonstrated using a cantilevered frame system (Figure 1) which has 1m segments extending along the positive global Z axis, then X, then Y. A point load of Fx = 1kN, Fy = 10kN, and Fz = 100kN is applied to the free end. After analysis is run, section cuts are drawn to obtain section-cut forces.

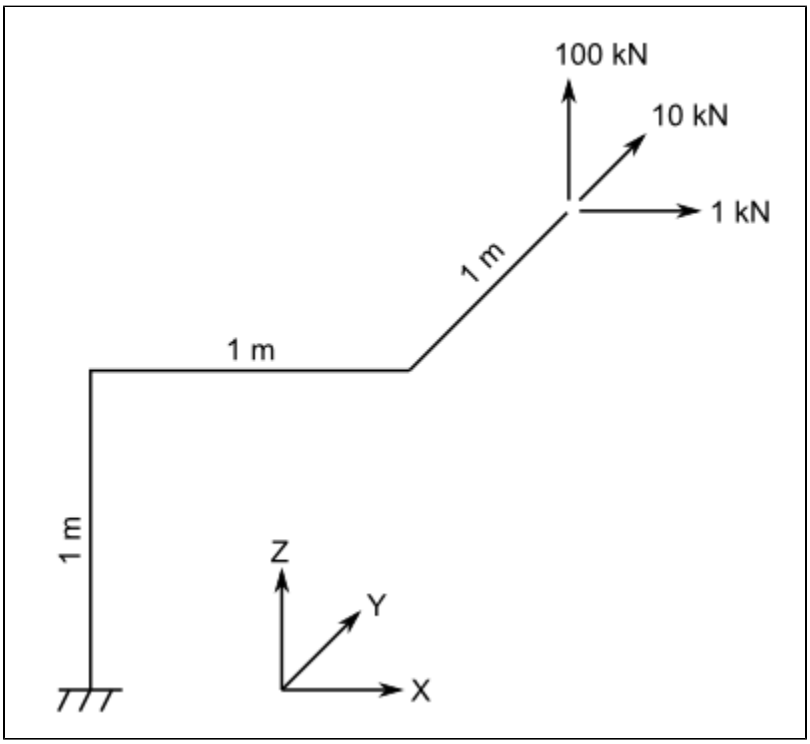


Figure 1 - Geometry and Loading of the Test Model

Section cut in 2D View

For section cuts drawn in a 2D View, the software automatically projects a quadrilateral cutting plane into the depth of the display. This depth is specified through Options > Dimensions and Tolerances > 2D View Cutting Planes +/-. Relevant parameters are shown in Figures 2 and 3:

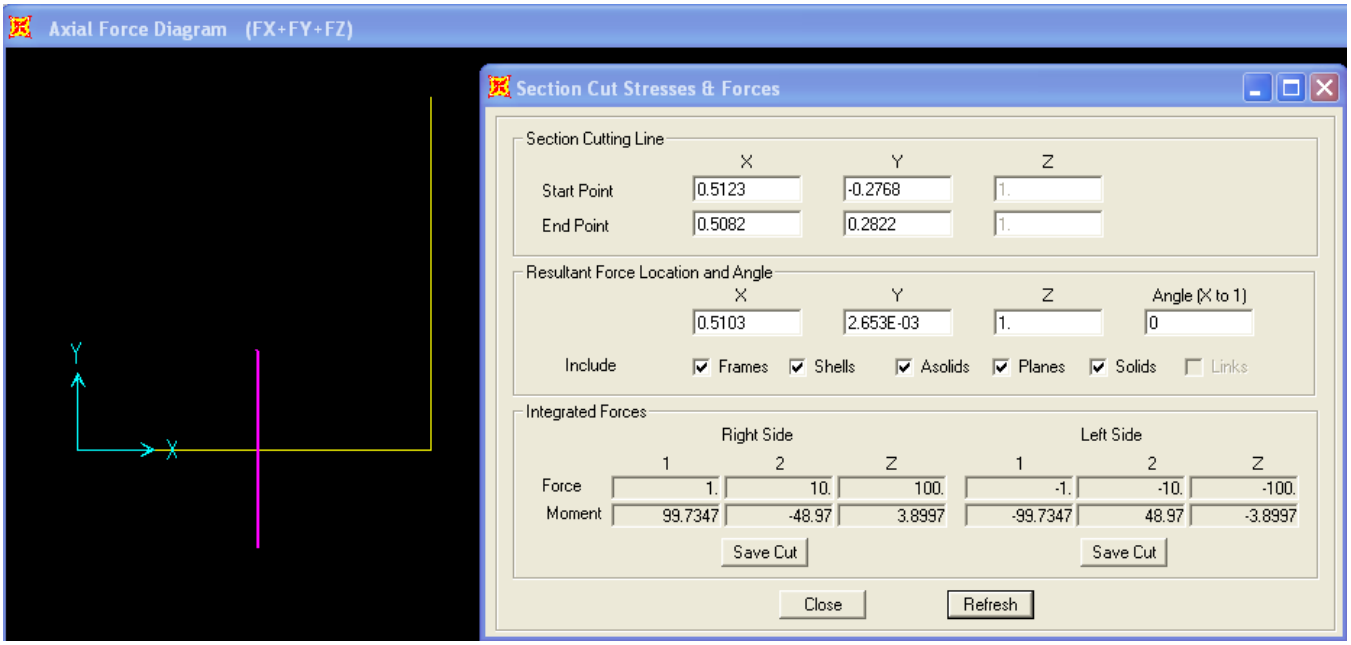


Figure 2 - Section cut in 2D View

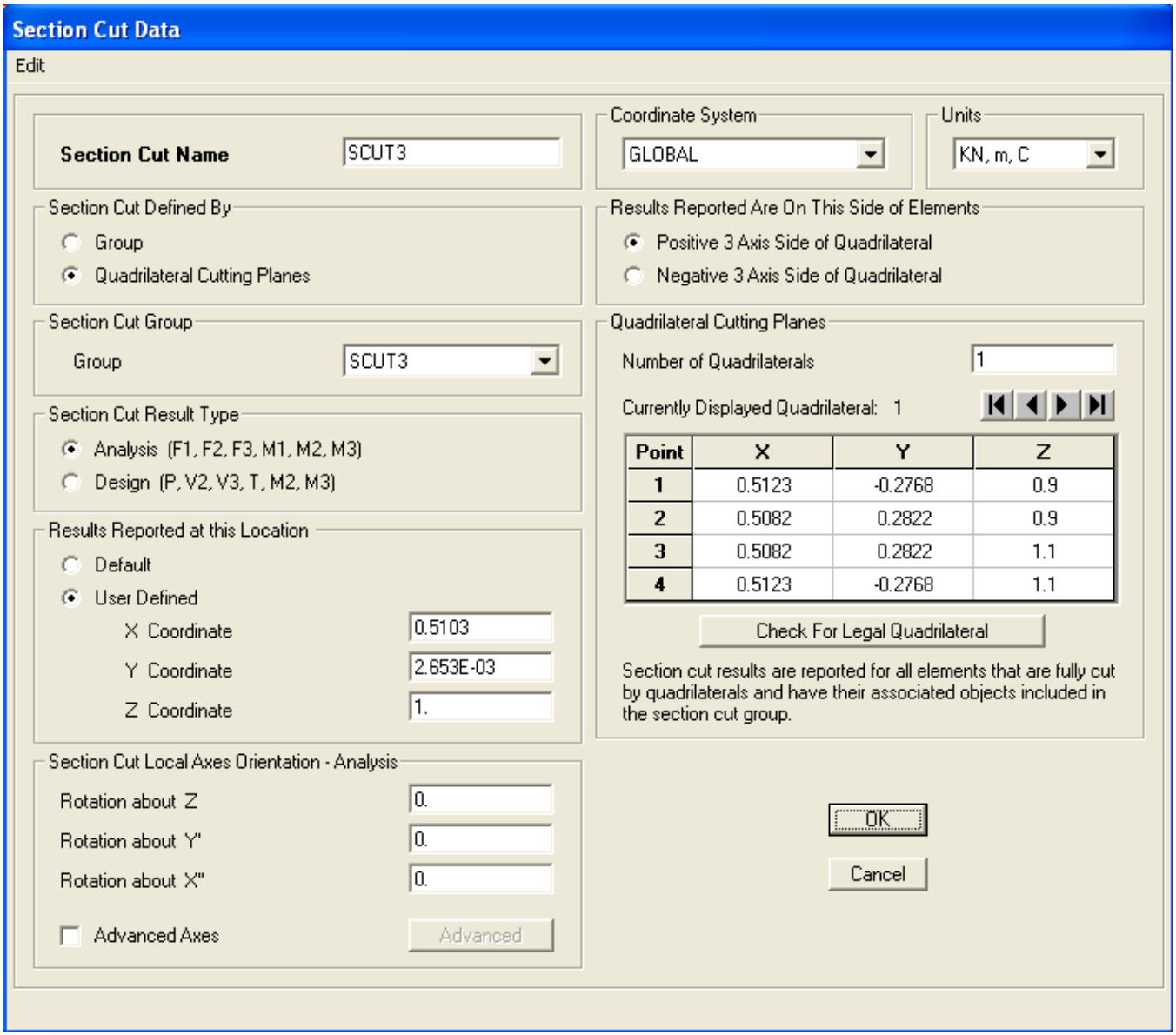


Figure 3 - Section-cut data

Attachments

- SAP2000 V14.1.0 model (zipped .SDB file)
- Section cuts defined by groups and cutting planes (.PDF)