

Saving section cuts during moving-load analysis

Test Problem	
Name:	Saving section cuts during moving-load analysis
Description:	Sections cuts may be saved during moving-load analysis through this procedure.
Program:	SAP2000
Version:	14.1.0
Model ID:	na

Model description

A two-span (10m each), continuous girder with solid cross section (0.1m by 0.6m) is modeled three times using [frame](#), [shell](#), and [solid](#) objects, as shown in Figure 1. The system is subjected to a unit moving load which travels the length of the structure. Section cuts are defined through the midspan of the second span. Section-cut forces are evaluated through [influence-based moving-load analysis](#), which is run both with and without saving section cut forces.

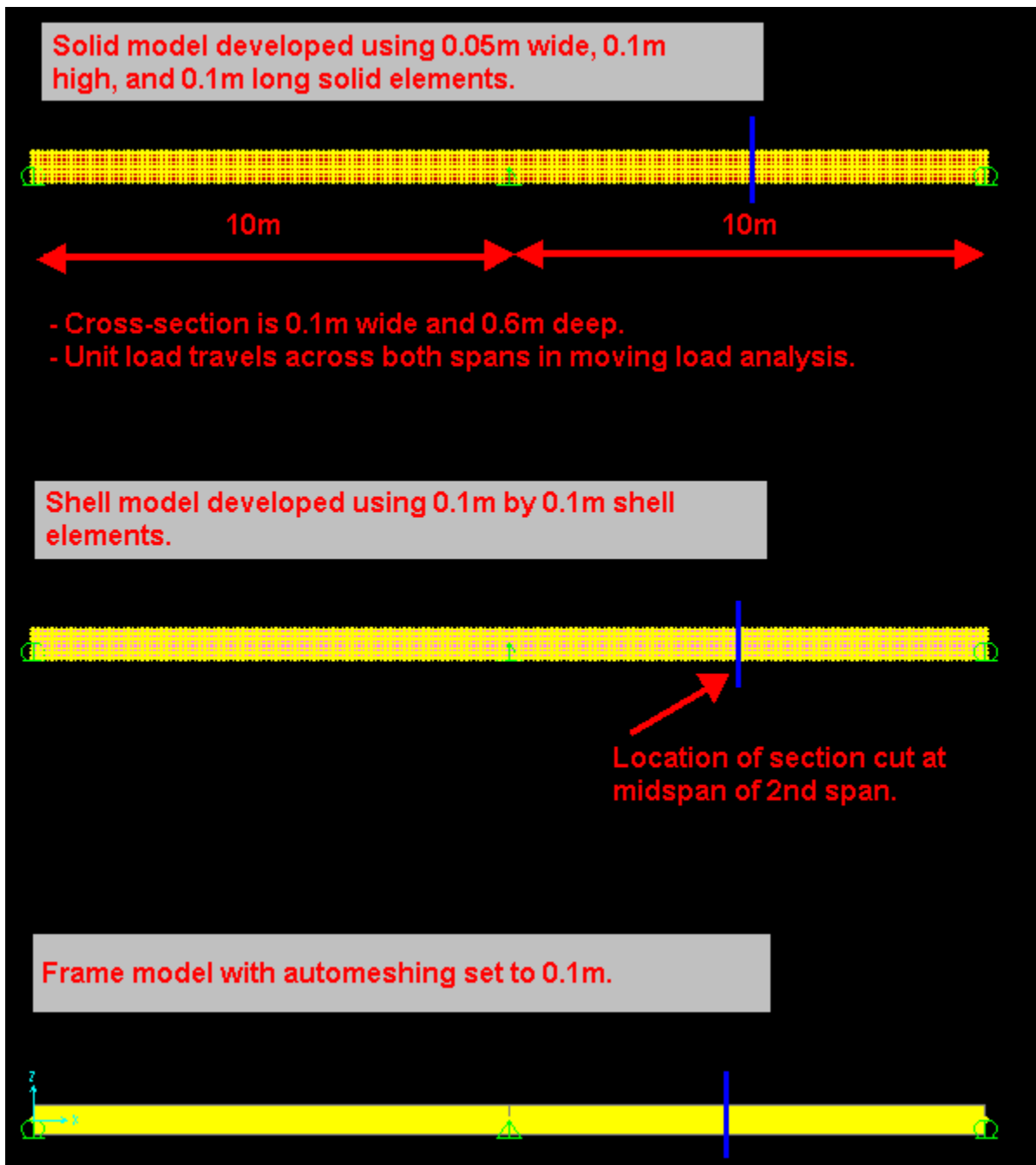


Figure 1 - Structural model

Discussion of results

To obtain section-cut forces for [solid](#) and [link](#) objects, the option to save section cuts must be selected under Moving Load Case Results Saved.

- When saving section cuts for moving load analysis analysis is requested, then the section cuts (defined prior to the analysis as well as the section cuts defined or drawn after the analysis) yield the correct values.
- When saving section cuts for moving load analysis analysis is NOT requested, section cuts for solid and link elements will produce zero results, but section cuts for frame and shell elements will produce correct results.

Attachments

- [SAP2000 V14.1.0 model](#) (zipped .SDB file)