

## Filling a Channel

### *Objective*

This test problem is intended to test the void collapse model in Truchas.

### *Definition*

A column of rectangular cells is 70% filled with liquid. The remainder is filled with void. An inlet is at one end of the column which injects liquid (into the region already containing fluid) at a fixed velocity into the column. The problem should steadily fill all the cells with liquid, and complete when the final cell is completely full.

### *Metrics*

Metrics are to be the time at which the calculation ends (this will be due to a projection iteration failure), and the amount of void remaining in the column at that time.

### *Truchas Model*

The Truchas model is the same as the definition for this problem.

### *Results*

To be added.

### *Critique*

To be added.

### *References*

None needed for this simple problem.