



# Spotlight – Fill and Spill

## Performing fill and spill analysis

Use Permedia Viewers to perform fill and spill analysis on depth maps:

1. Open the depth map in Map Viewer.  
(To do this, in the main window, under Maps, double-click the map you want to analyze.)  
  
Tip: For better viewing, from the Scene menu, choose Set Shaded Relief as Background.
2. From the Tools menu, choose Workflows and Fill-Spill Analysis.
3. In the Fill-Spill Analysis window, select Single Point and Auto run.
4. On the Properties tab, select Maximum Column Height and enter the maximum column height in meters. This stops the simulation when the seal is breached.
5. Click points on the map. Each time you click, the results are updated.

Results are color coded depending on the Output variable. For Accumulation State, green regions are accumulations, red are pathways, and yellow are spill points, while dark green points are leaks.

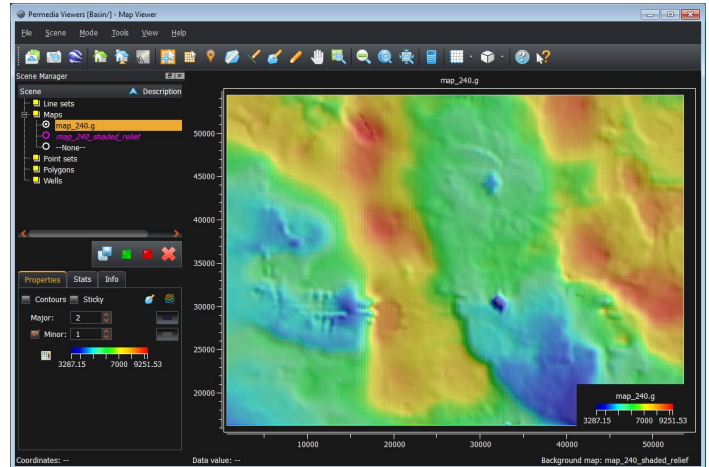
Note: The algorithm used is the same as that used in Permedia Migration (as opposed to ray tracing).

## Other things to try

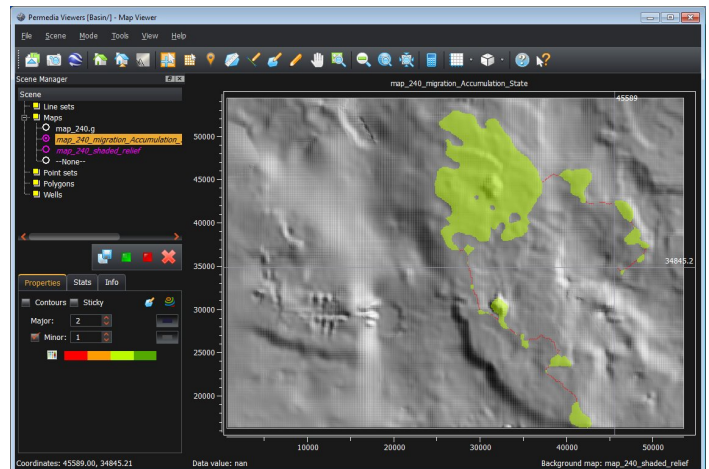
Fill-Spill Analysis includes additional options for constraining the analysis:

- specify source points using a source map or create multiple source points based on depth constraints
- set a barrier map (e.g., faults) to divert flow
- set a depth uncertainty and run multiple realizations to risk the charging of key closures

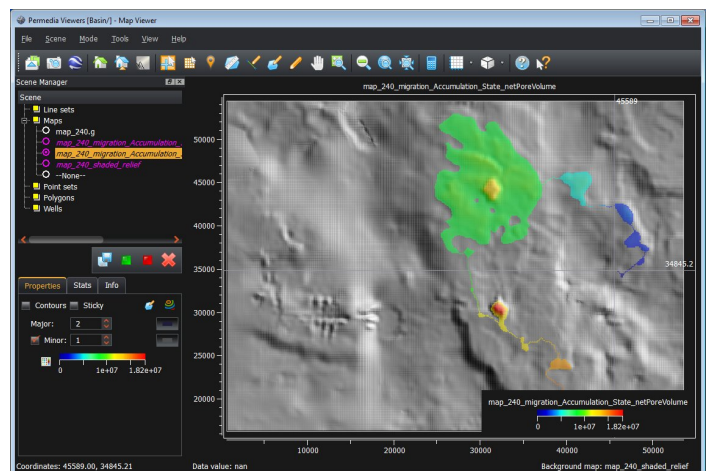
Using the Workflows>Trap Volume/Area Analysis option, isolate the largest accumulations and generate a category volume report to quantify the accumulation volumes.



Depth map



Simulation results



Pore volumes of the ten largest accumulations