

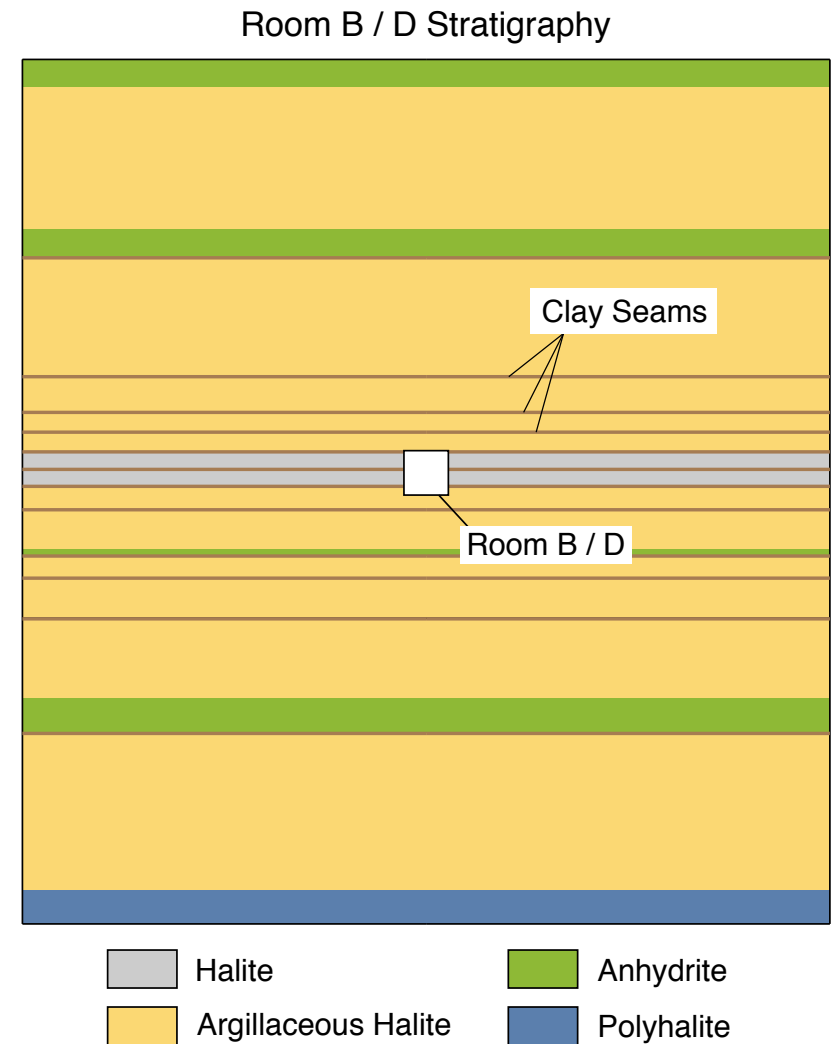
Update on Simulations of WIPP Room D Closure

Benjamin Reedlunn

Sandia National Laboratories

Ben's Work Plan

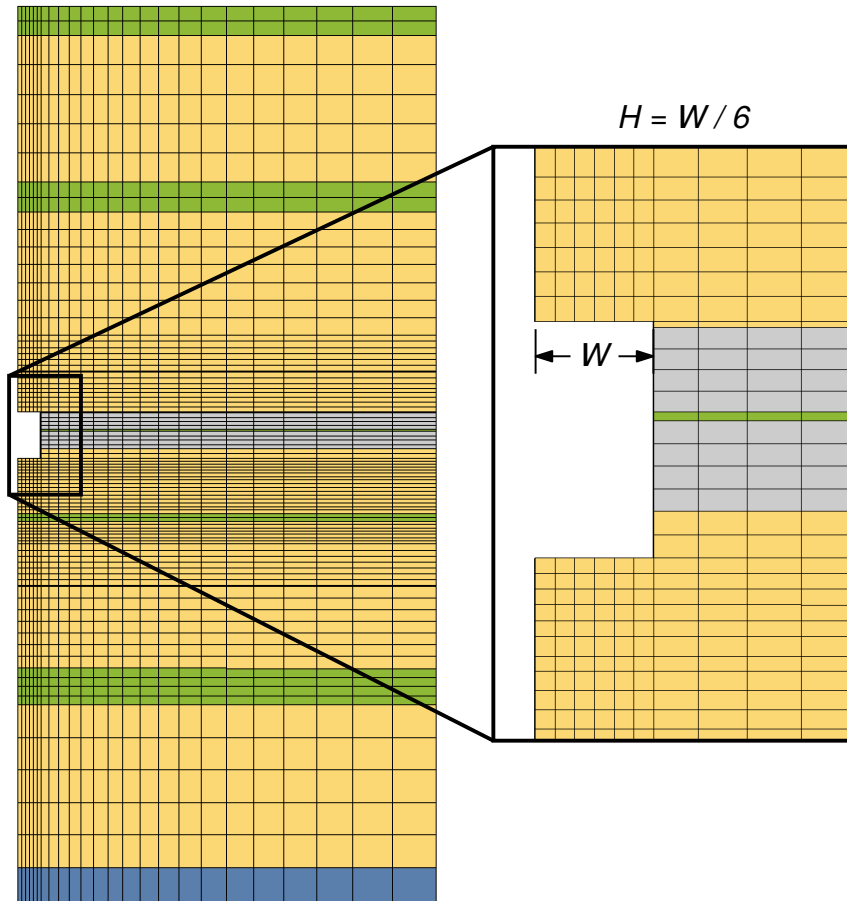
- Verify the M-D model calibration
 - Recalibrate?
- Room D sensitivity studies
 - Mesh convergence
 - Simulation boundaries
 - Clay seams
 - Stratigraphy changes
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- Room B



Initial Meshes

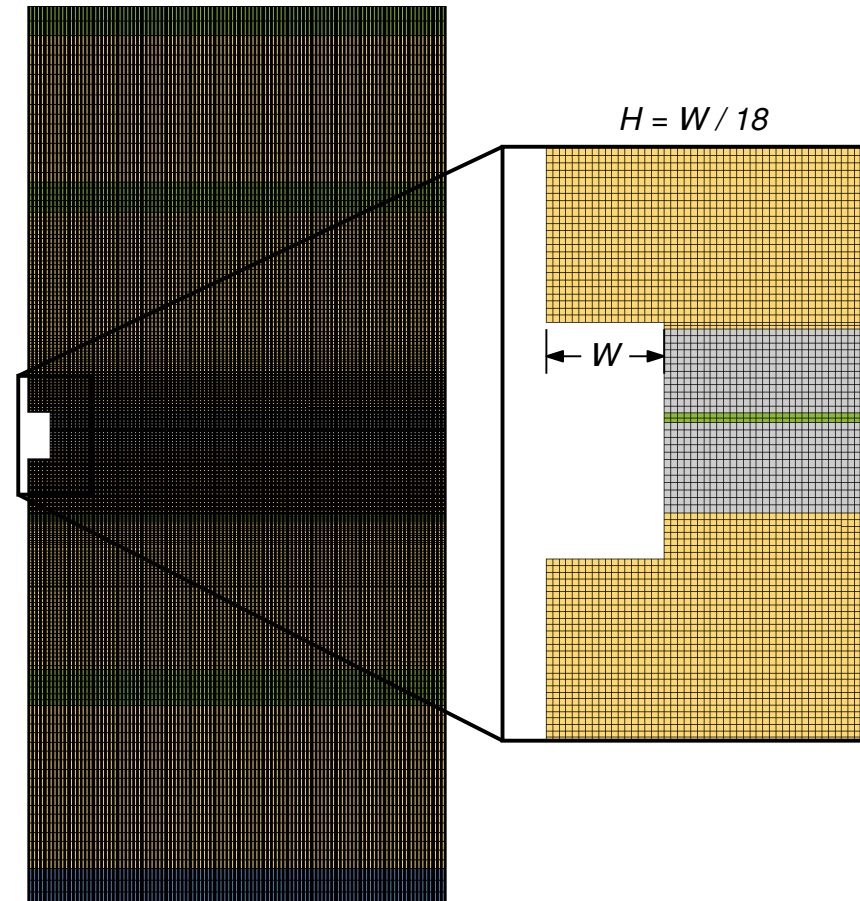
Coarsest Mesh

2184 Elements

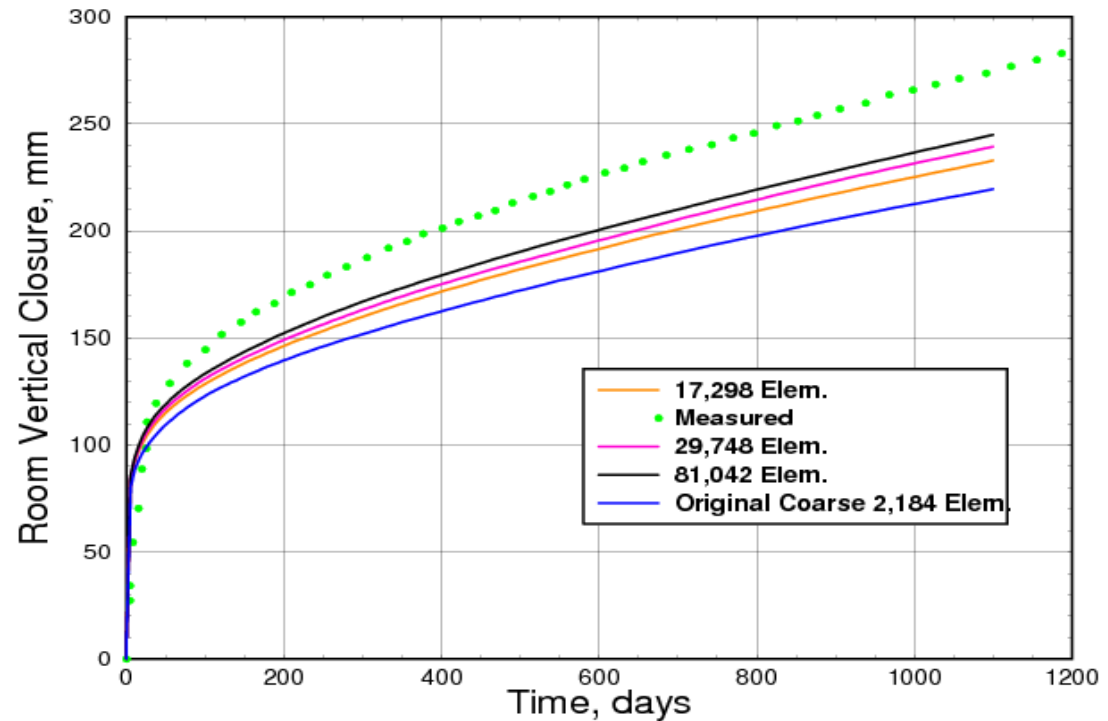
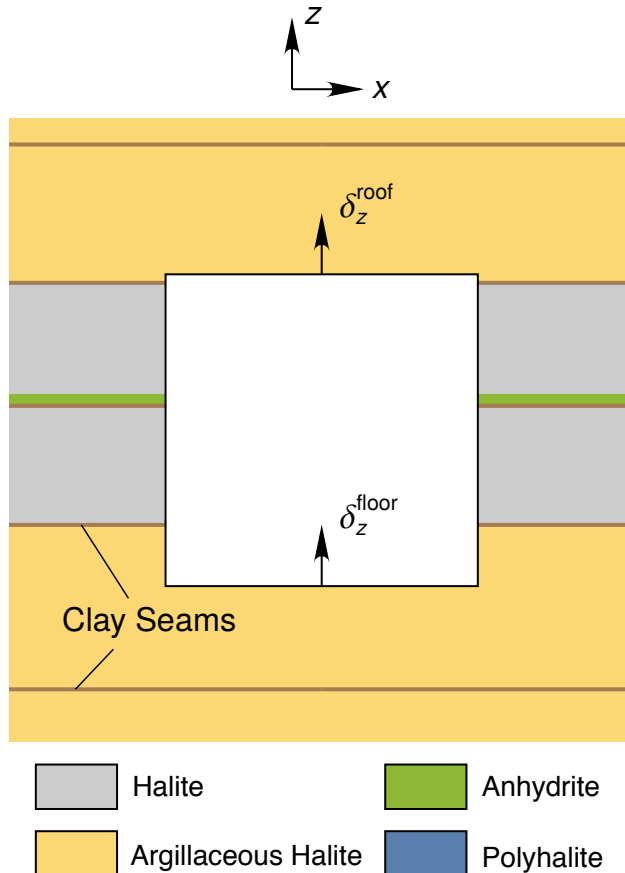


Finest Mesh

81042 Elements



Initial Mesh Convergence Study

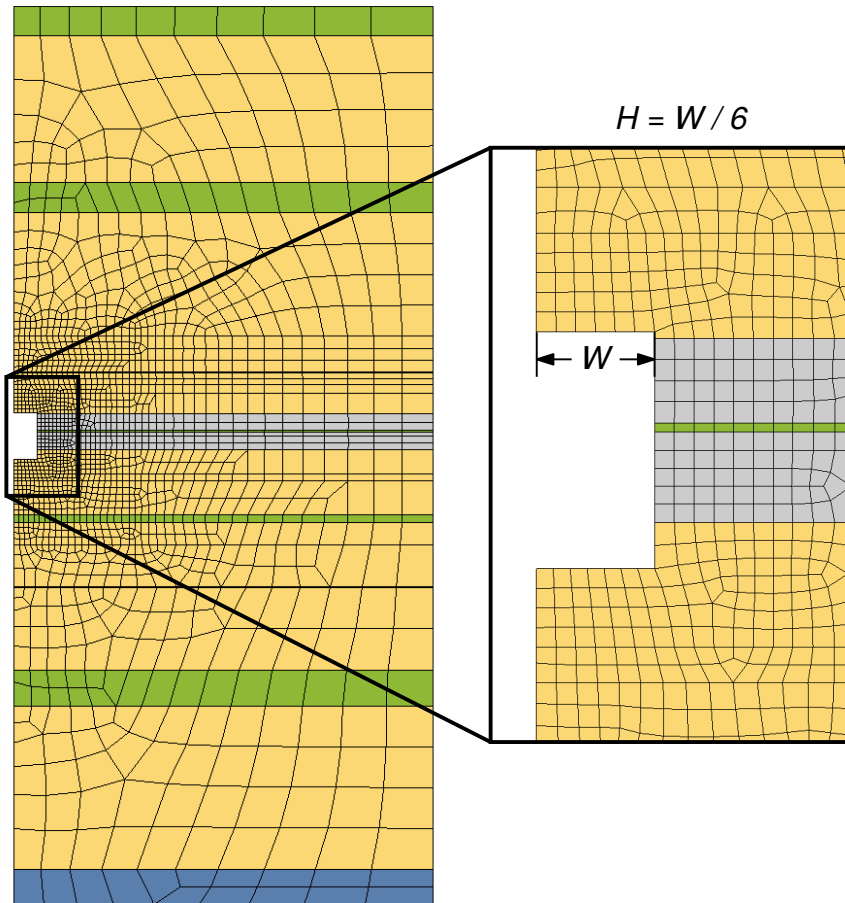


Arguello, J., Summary of FY15 Results of Benchmark Modeling Activities, SAND2015-6273, 2015

New Meshes

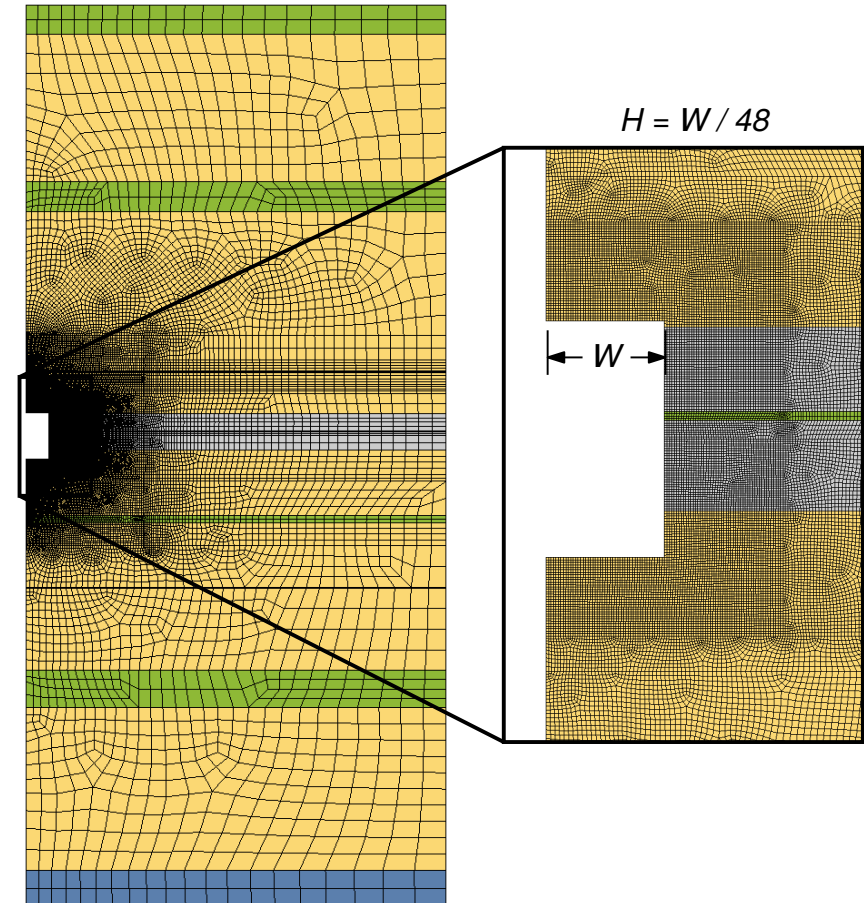
Coarsest Mesh

1859 Elements

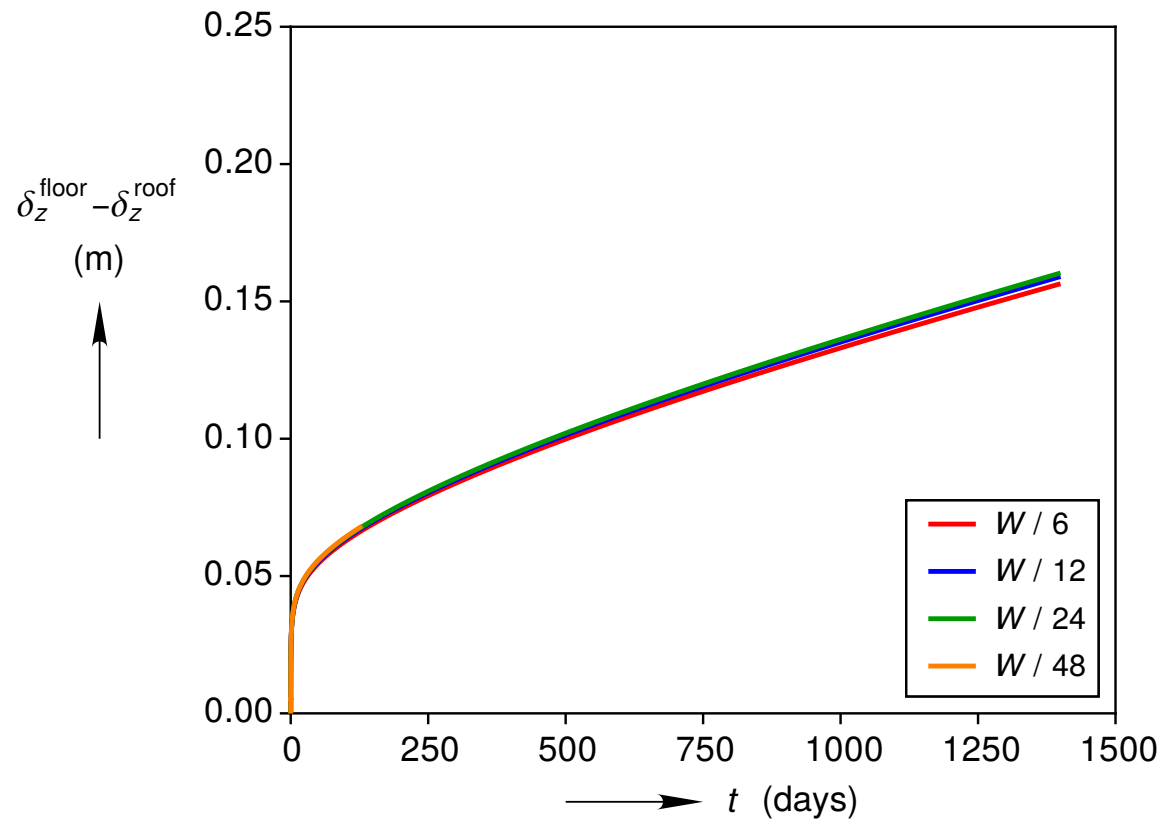
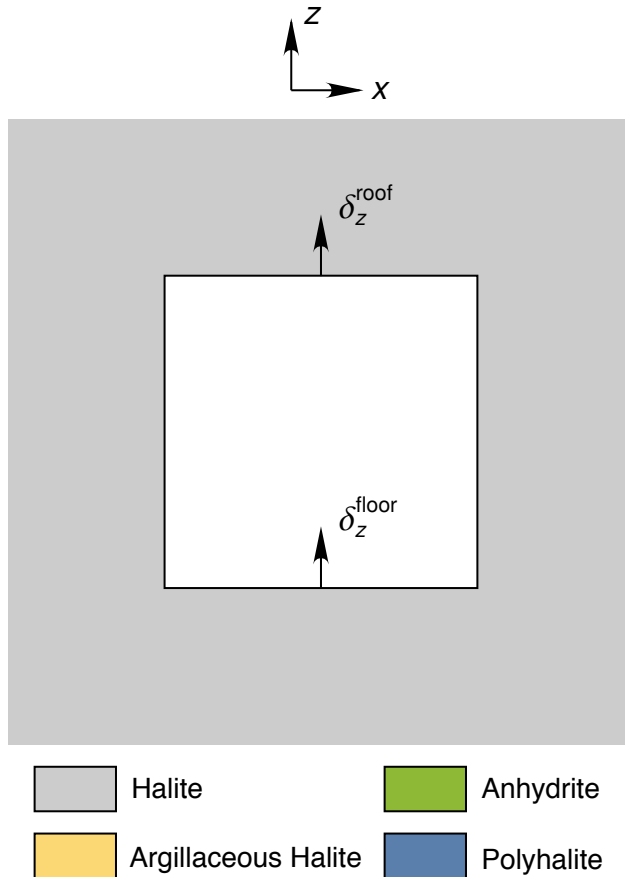


Finest Mesh

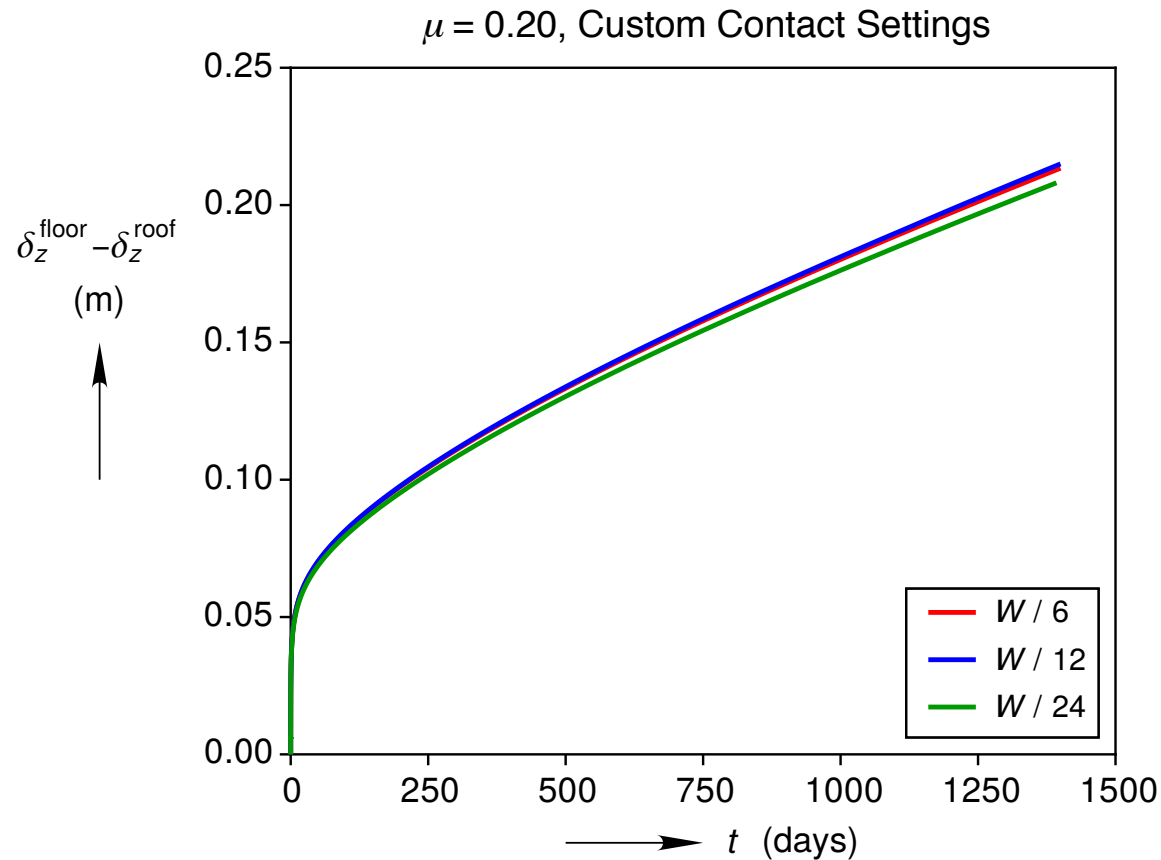
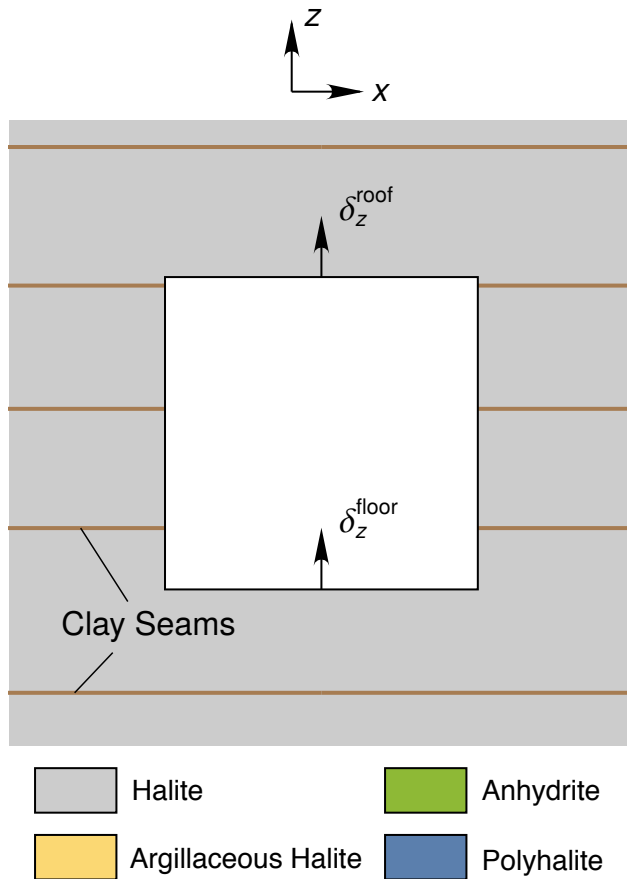
68608 Elements



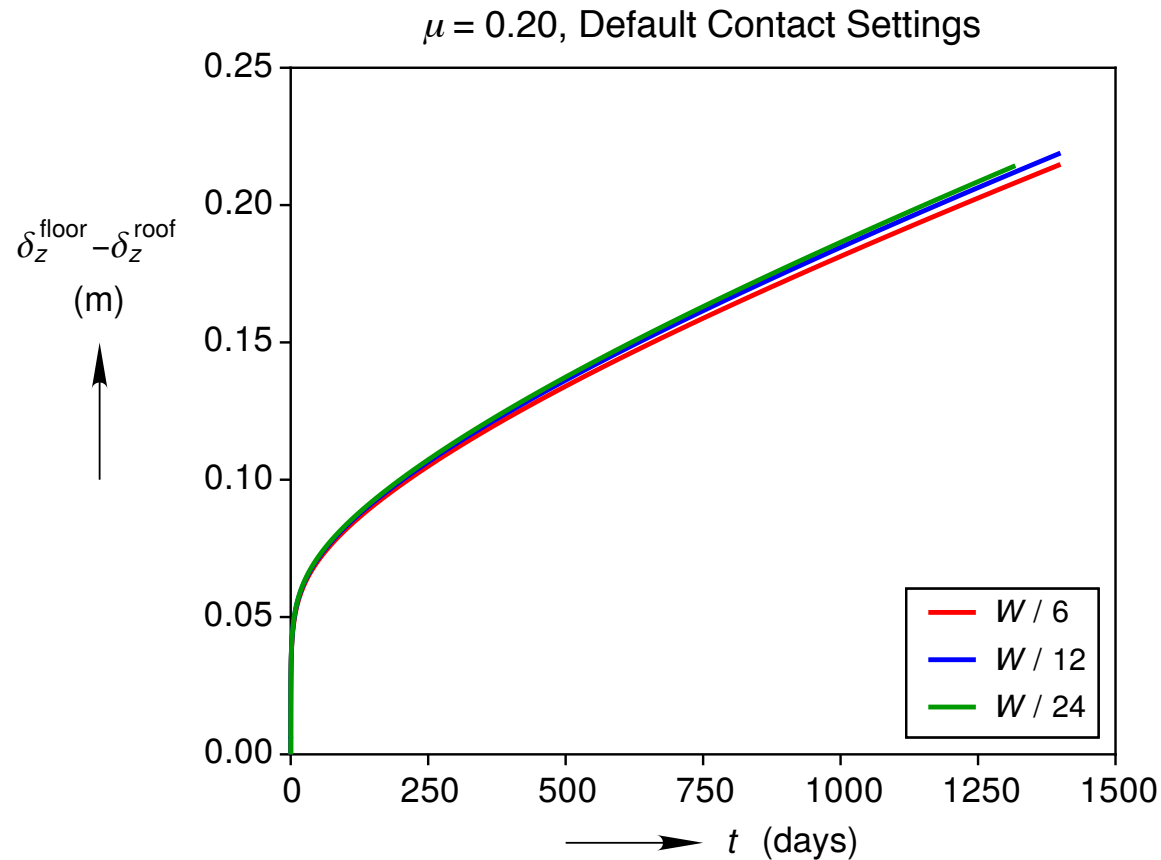
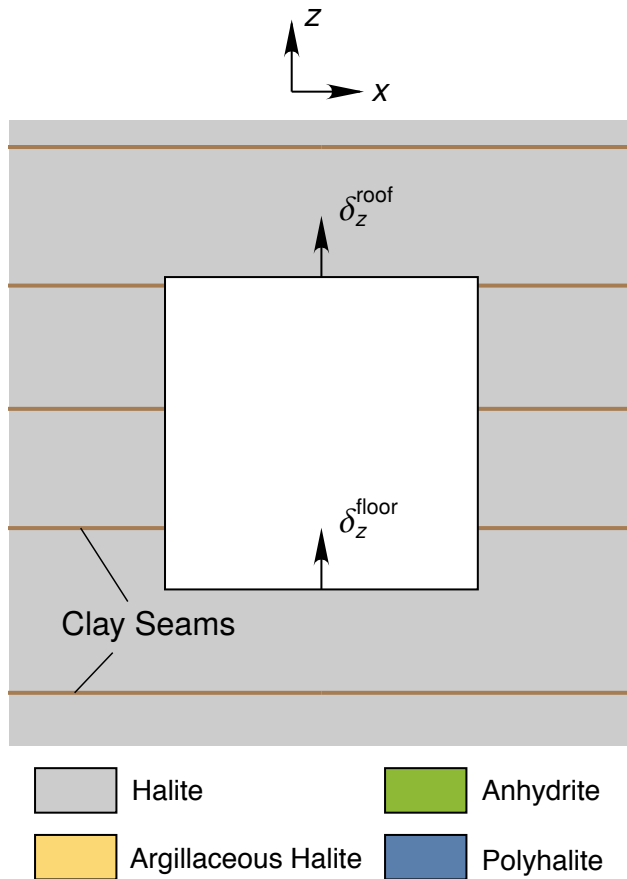
Vertical Closure Mesh Convergence



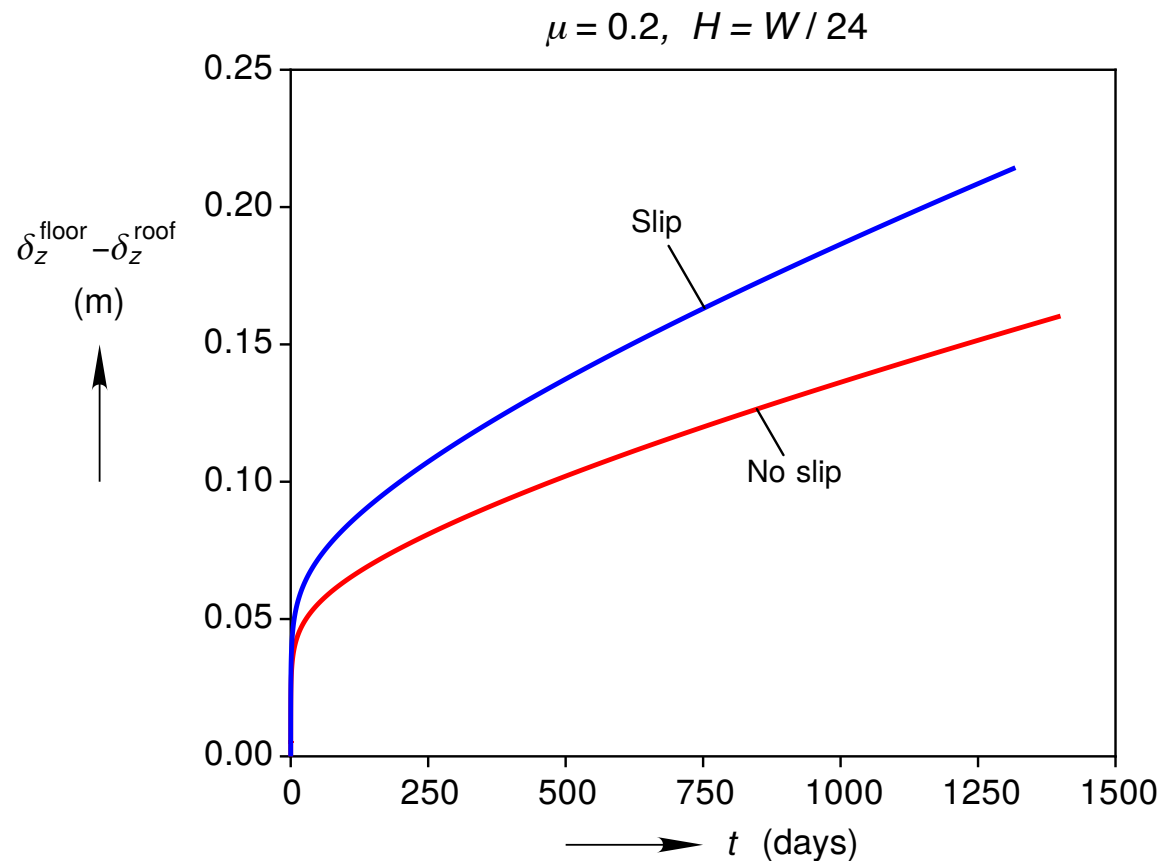
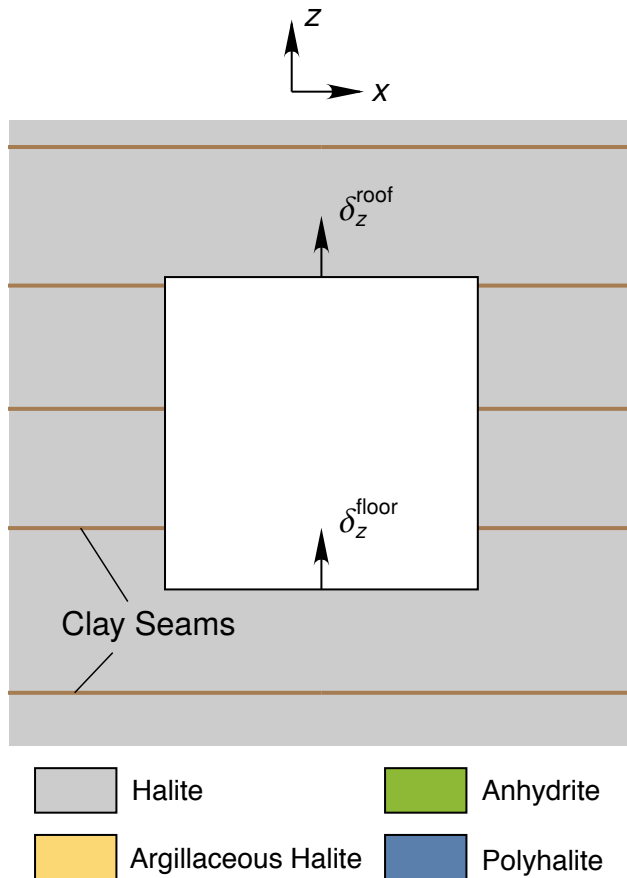
Vertical Closure: Clay Seam Slip Lines



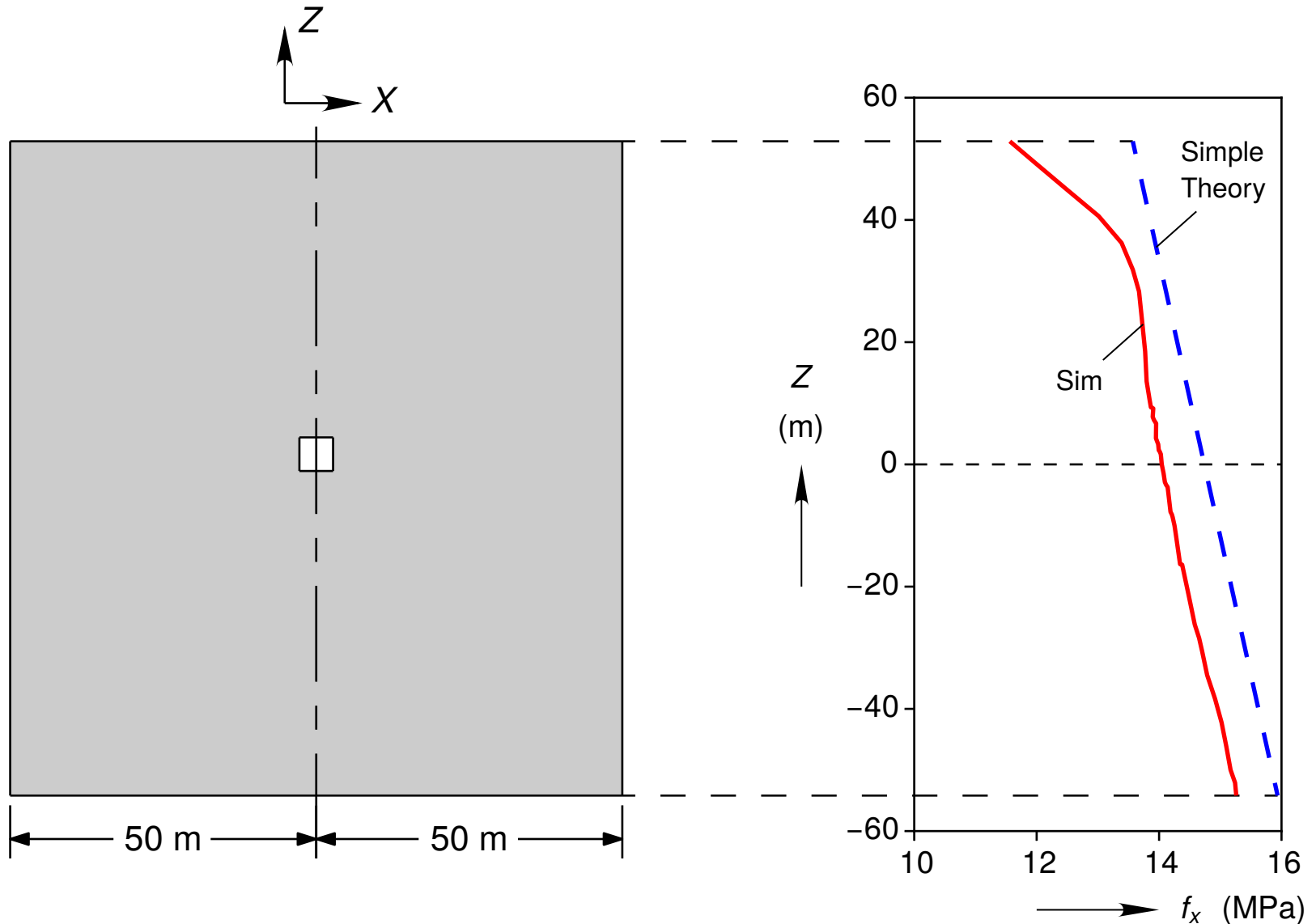
Vertical Closure: Clay Seam Slip Lines



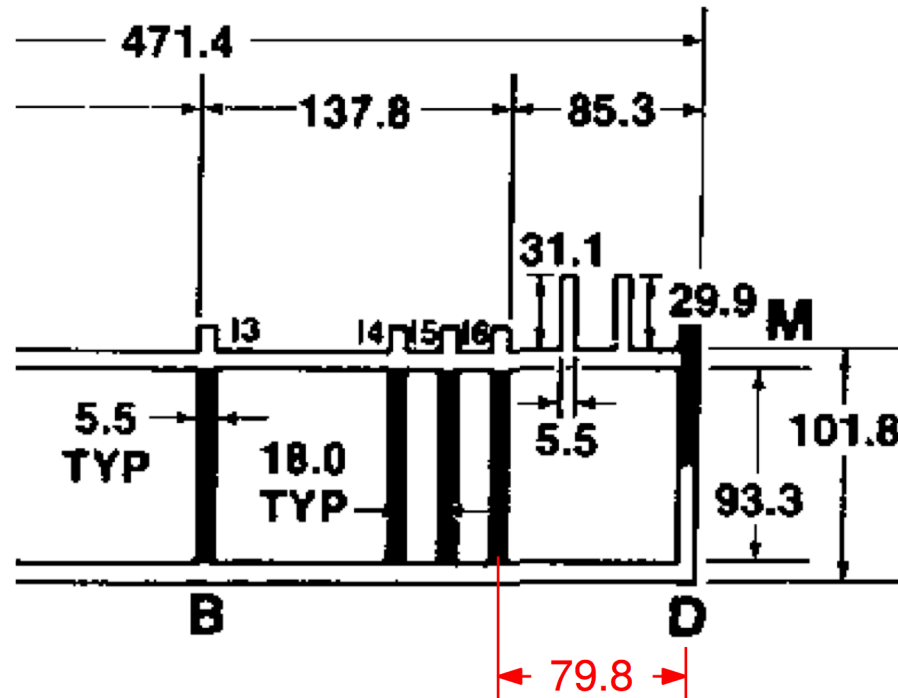
Vertical Closure: Clay Seam Slip Lines



Right Simulation Boundary Traction



Room Spacing



Munson, D., Fossum, A., Senseny, P., Advances in Resolution of Discrepancies Between Predicted and Measured In Situ WIPP Room Closures, SAND88-2948, 1988 (Modified)

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