SAND2007-6485P

Advanced FEHM Application: Flow and Transport in Fractures

Sandia/INER/EEL Workshop

Taiwan Institute of Nuclear Energy Research
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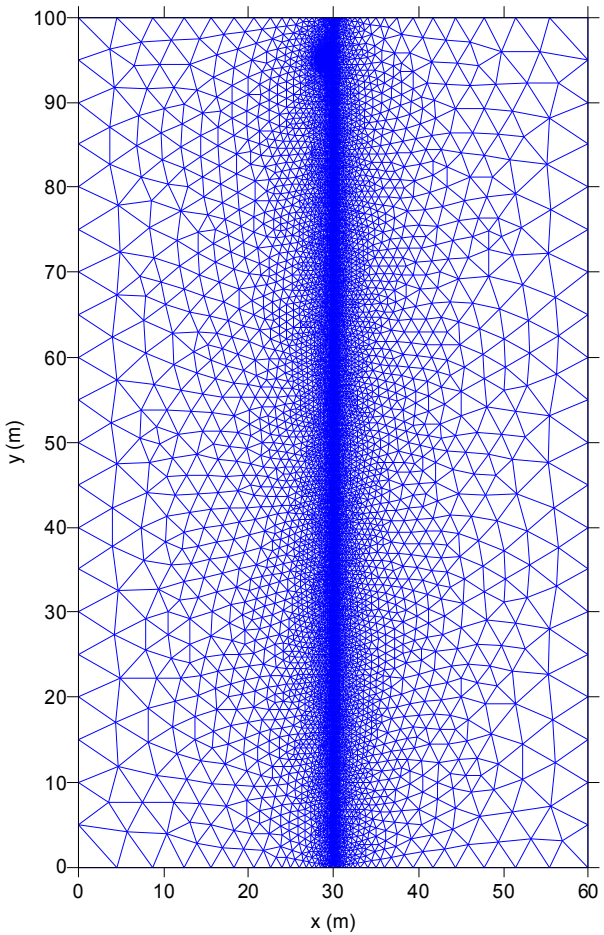
Sandia is a multiprogram laboratory operated by Sandia Corporation, a Lockheed Martin Company, for the United States Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.

Objectives

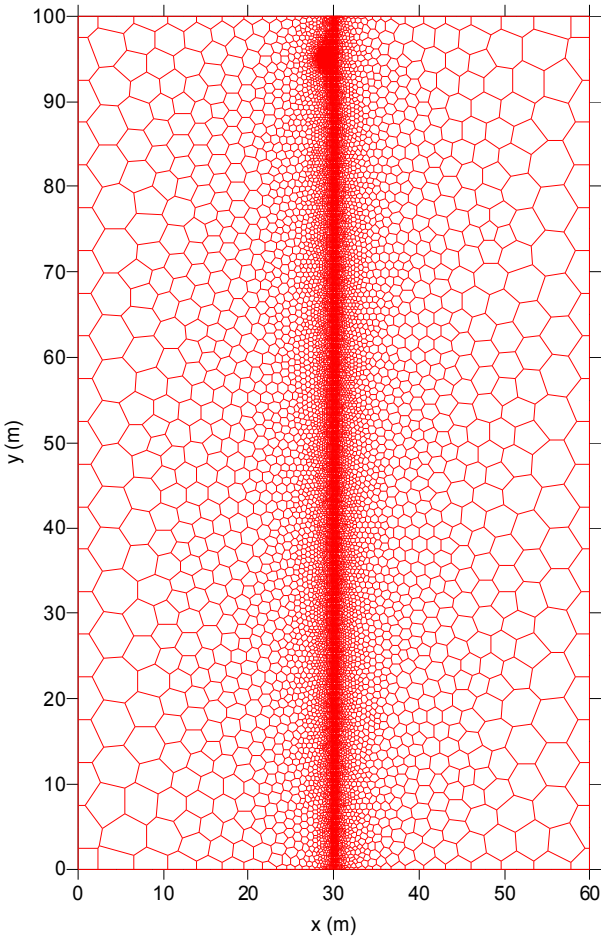
- Develop advanced application of FEHM code for flow and transport in fractures
- Implement model that is relevant to INER conceptual model of repository design and performance assessment modeling
- Develop 2-D grids that conform to disposal concept and simple fracture system
- Simulate groundwater flow through model domain
- Simulate radionuclide transport, including advection, diffusion, and decay

Grid Development

Finite Element Grid



Voronoi Mesh



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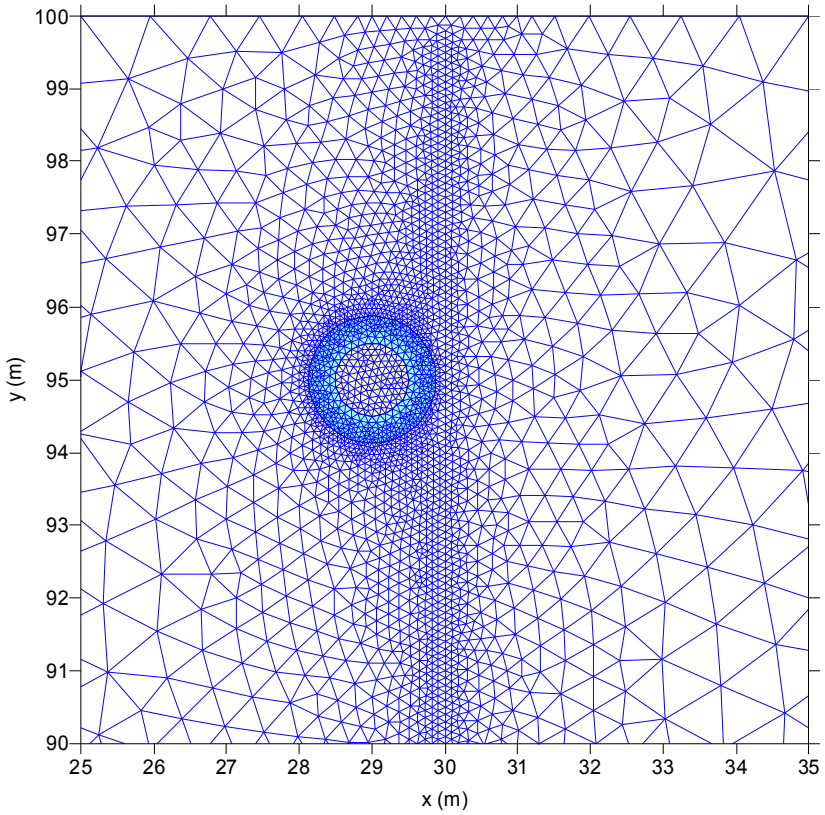

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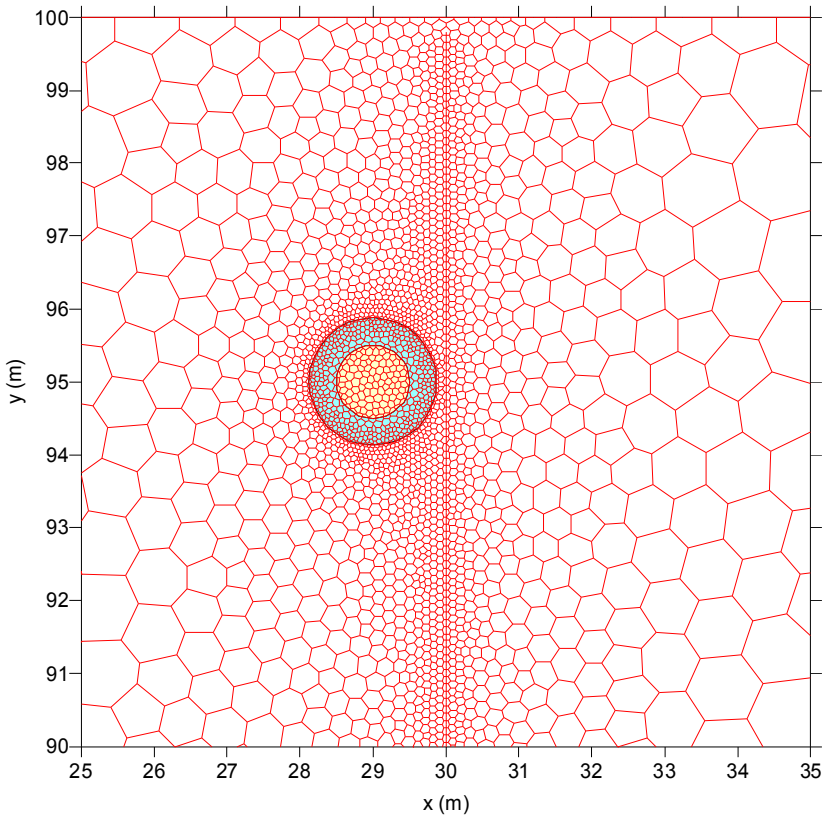

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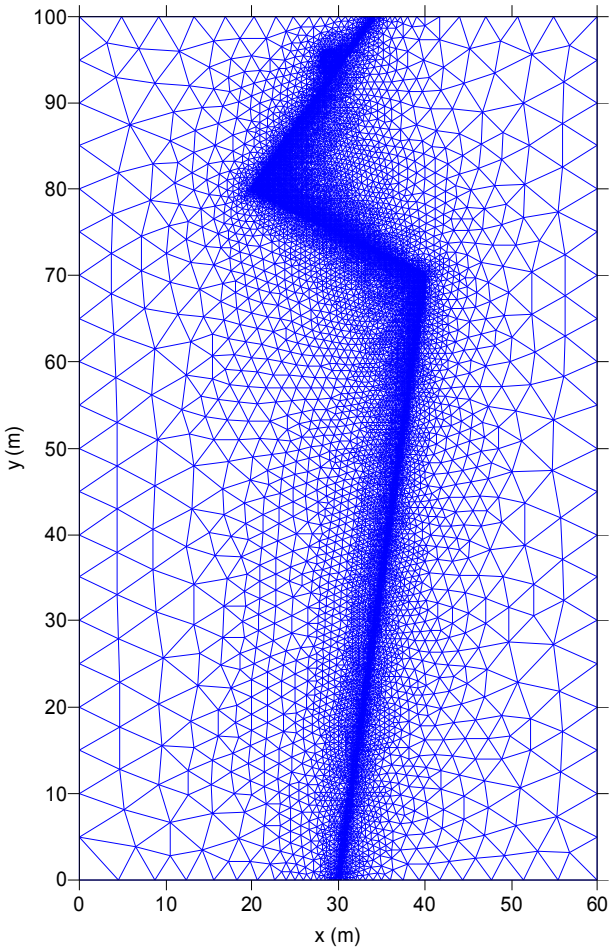

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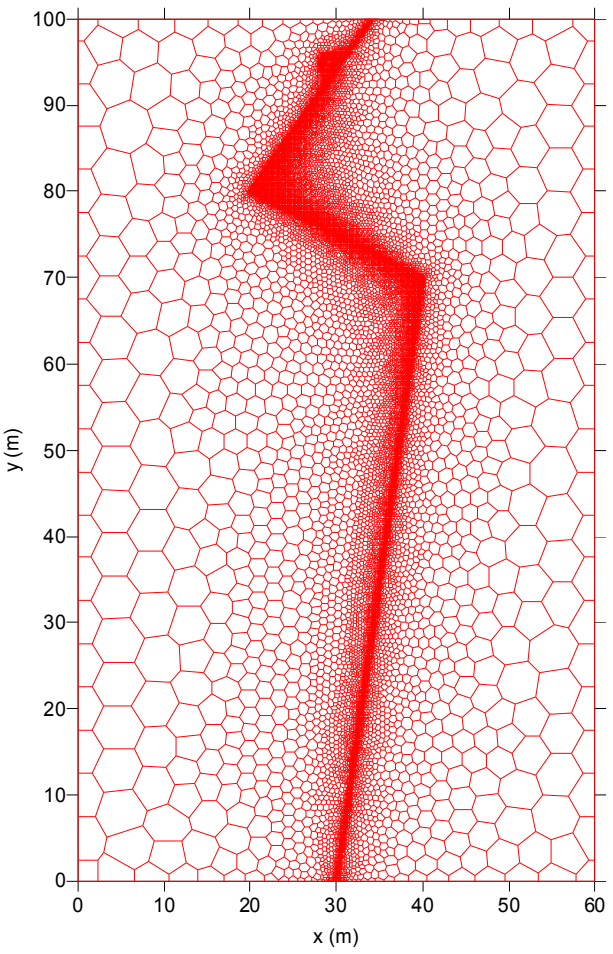

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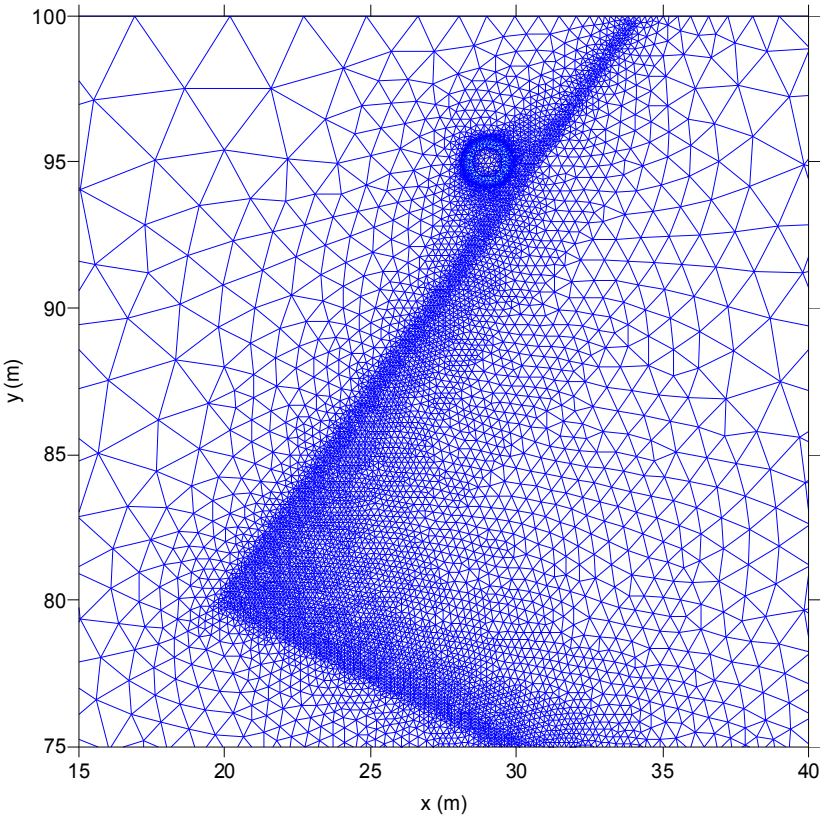

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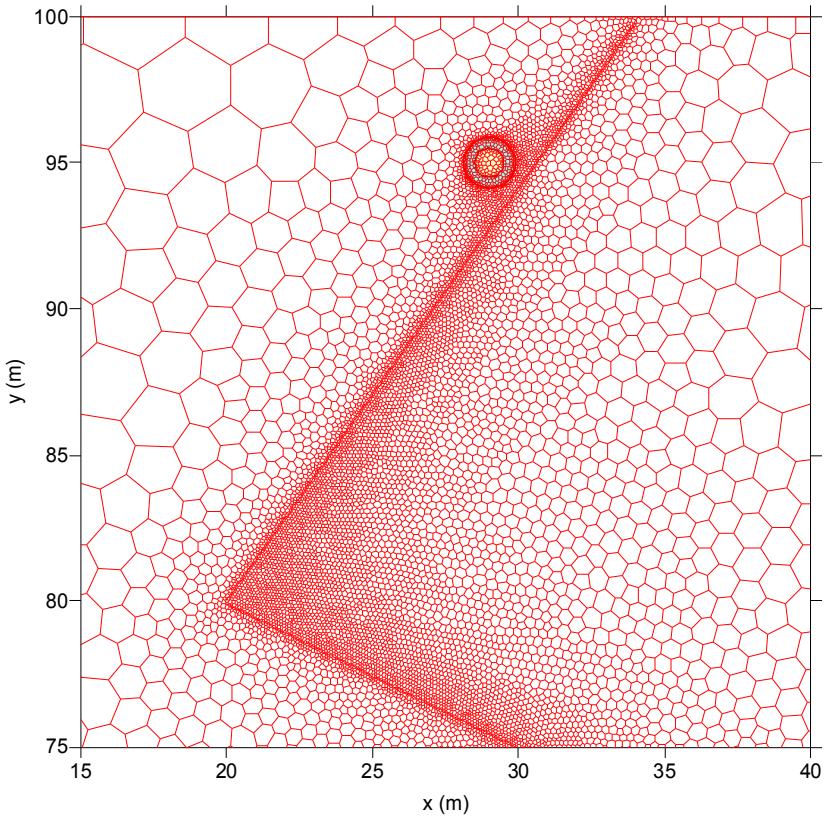

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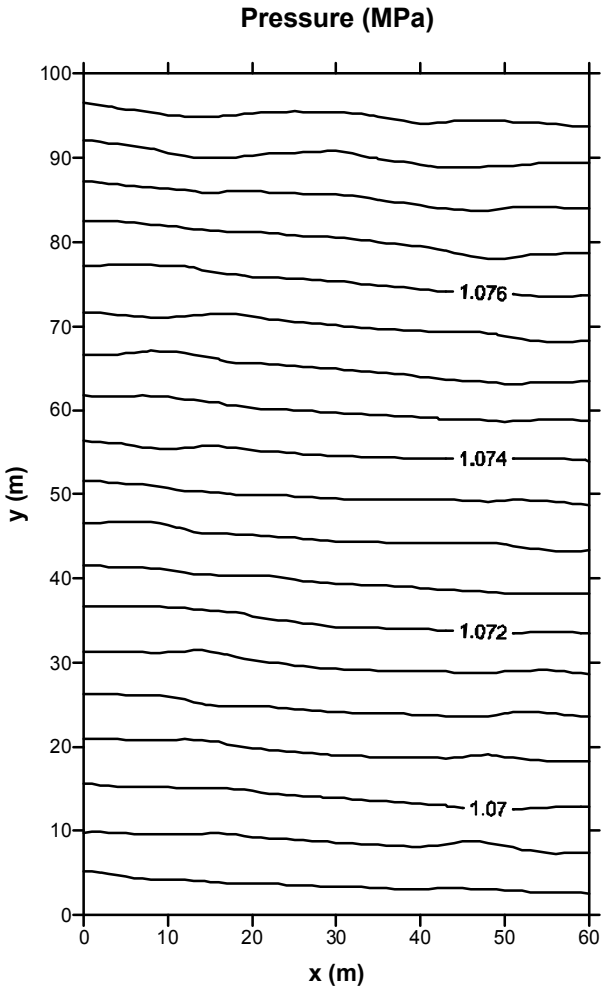
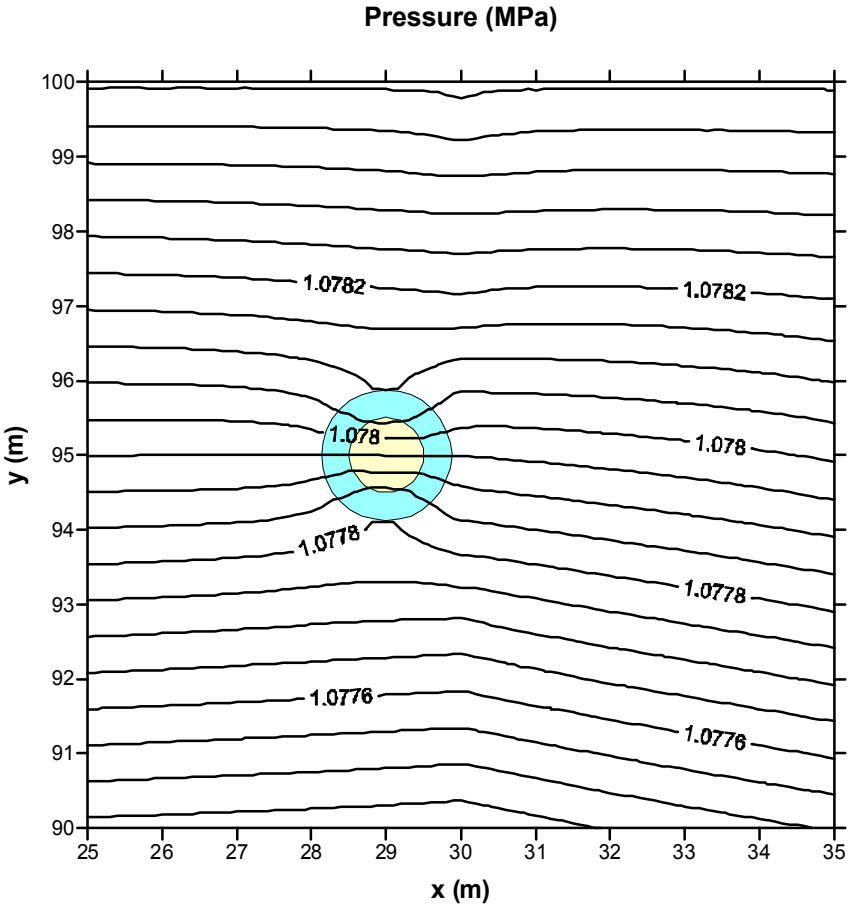
Flow Simulation





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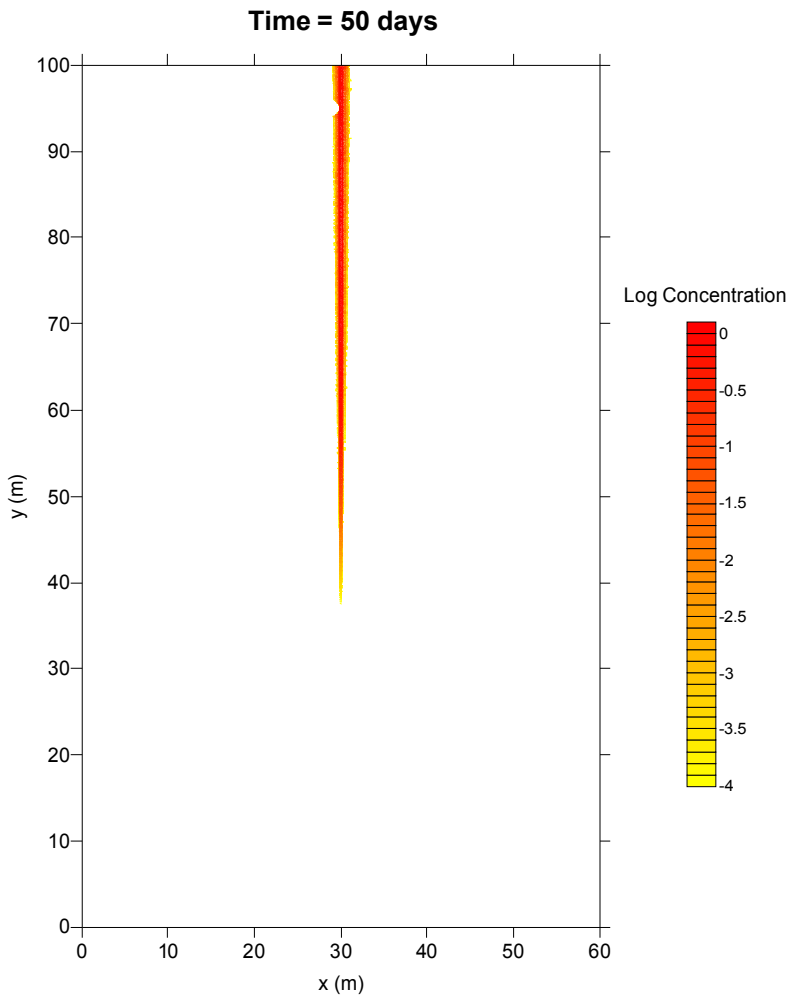
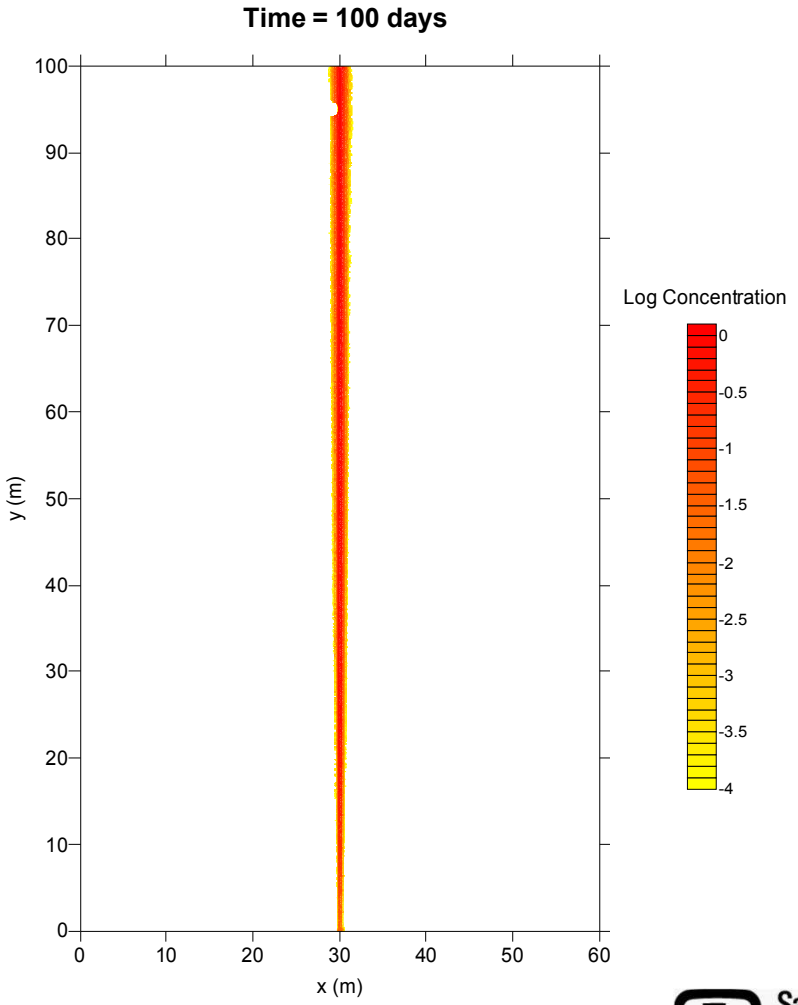
Transport Simulation





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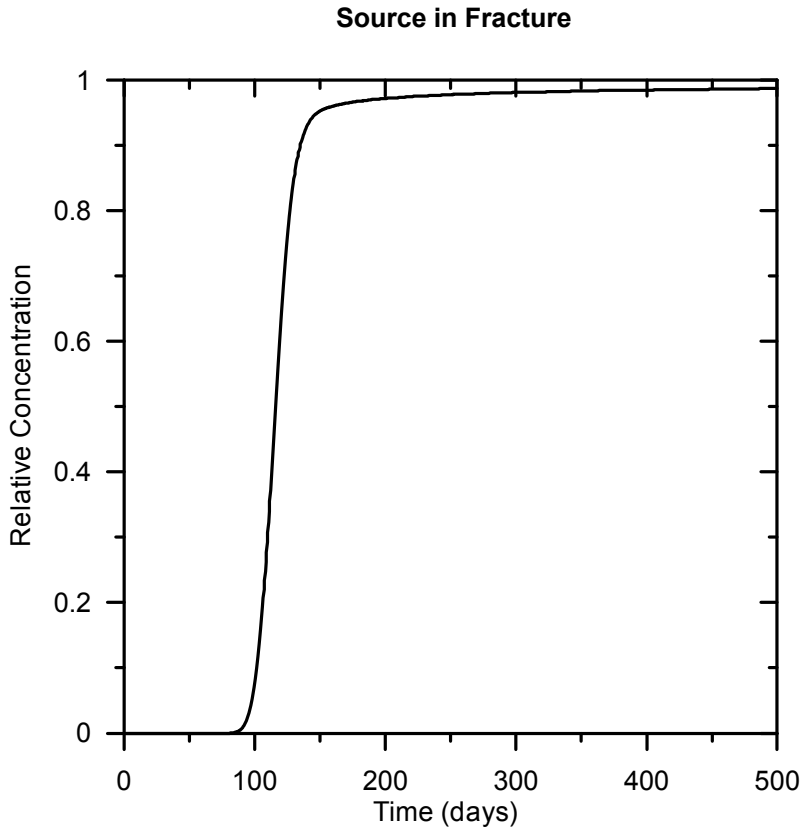

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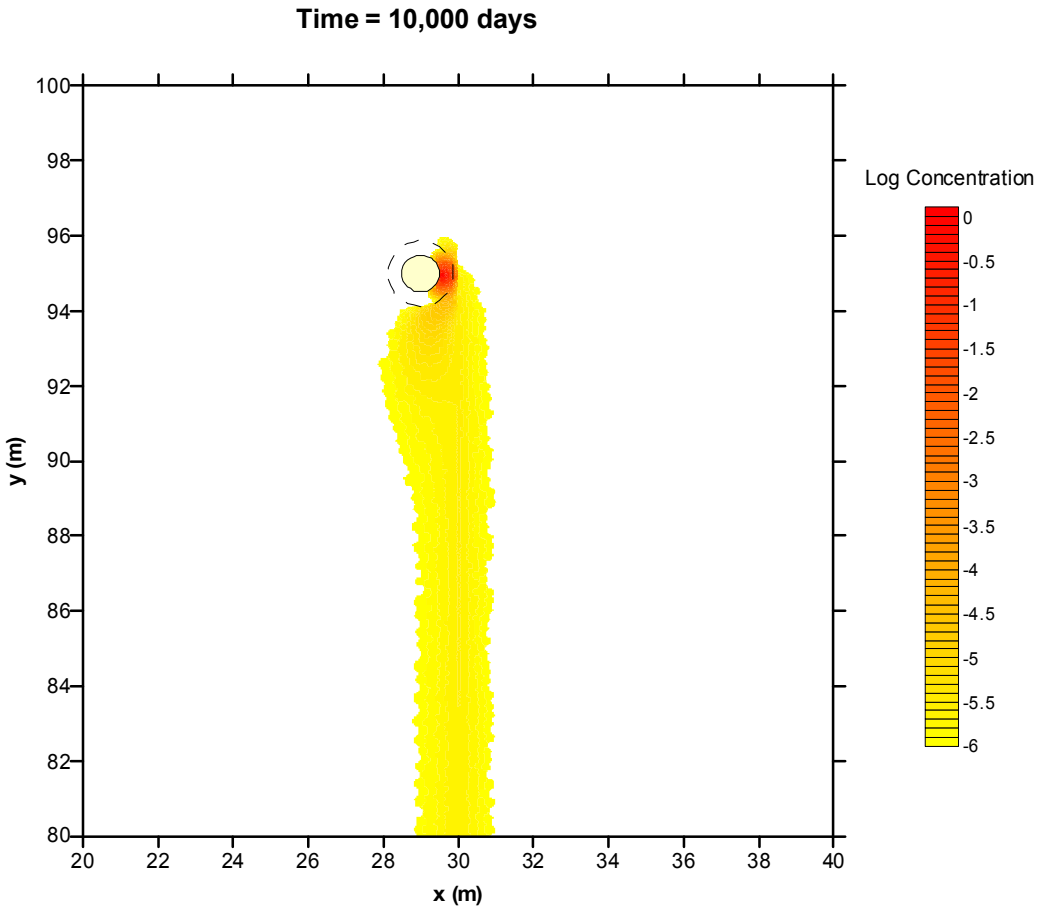

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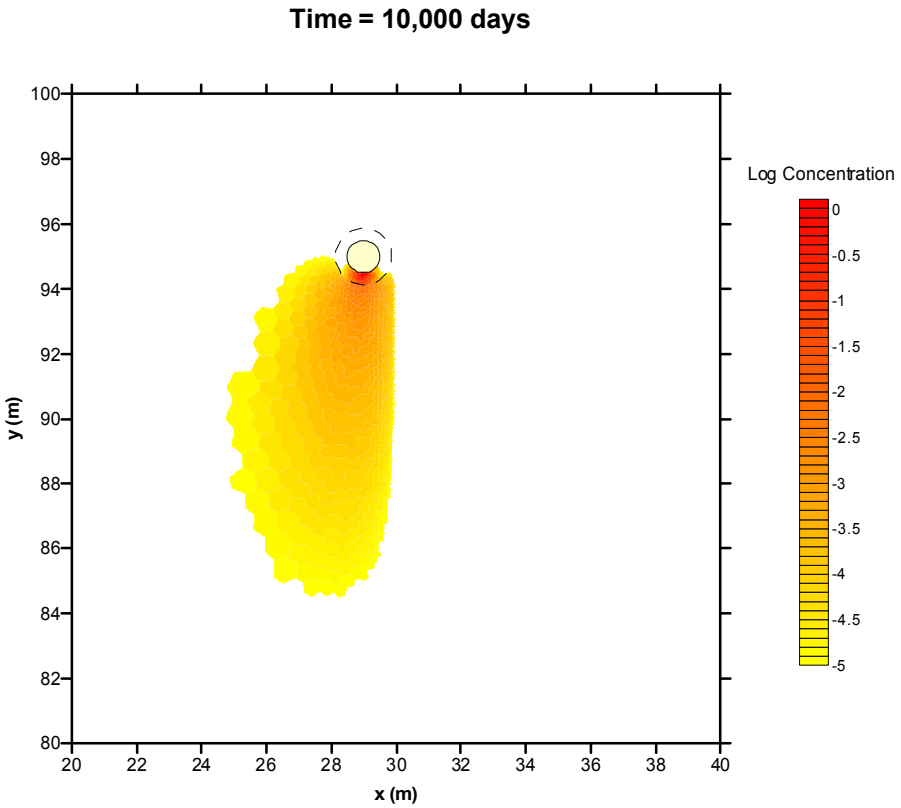

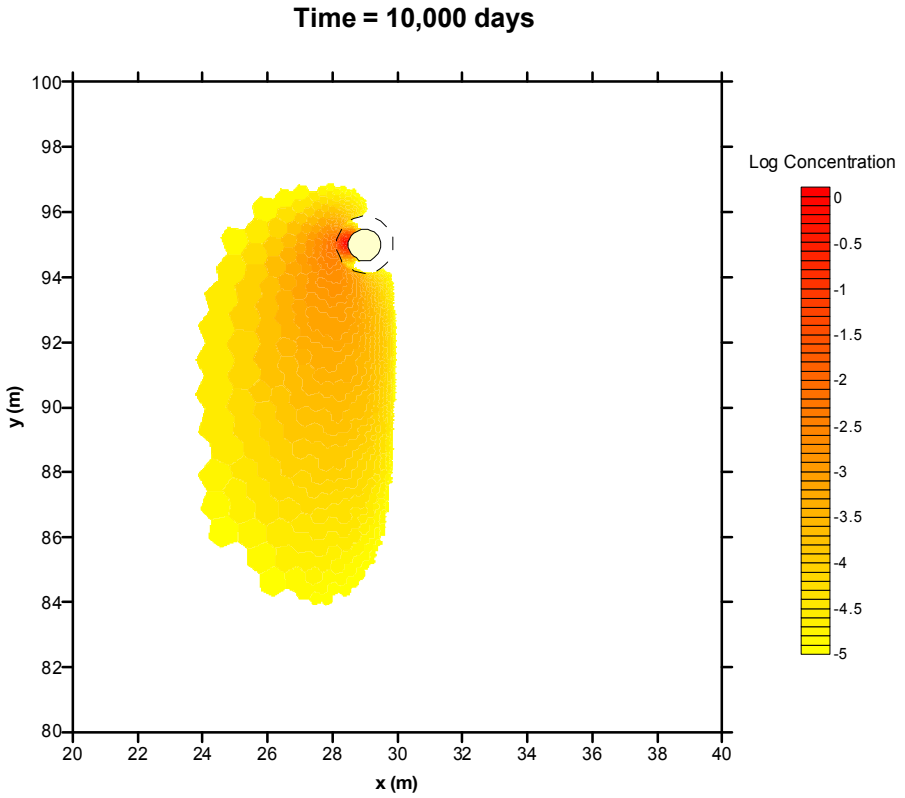

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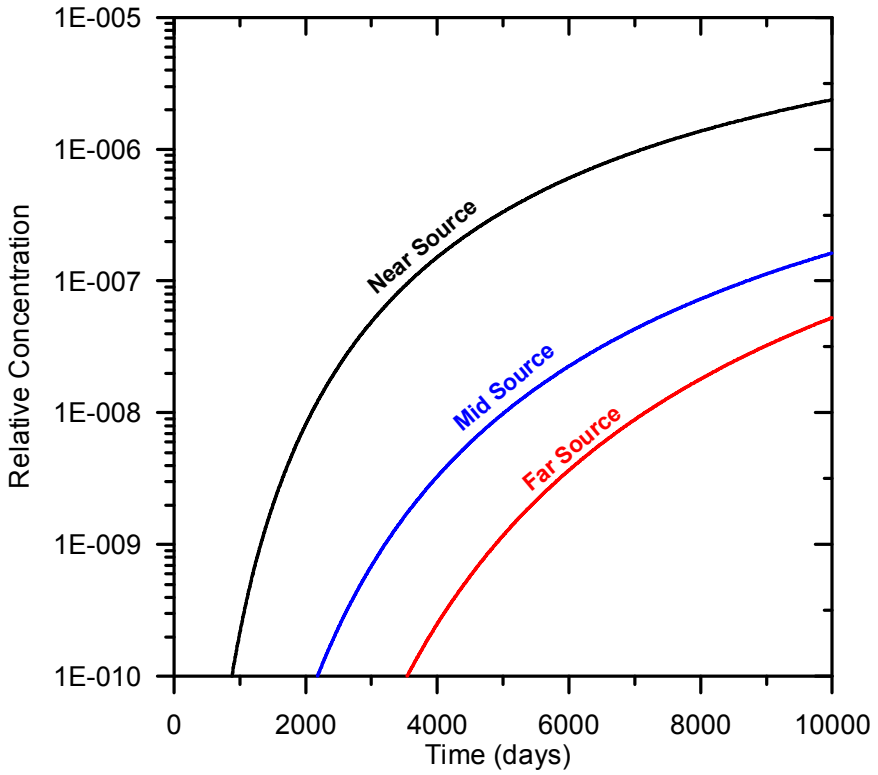

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