Sequestration Pilot Site in the Texas Gulf Coast, USA

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TOUGH2 SIMULATION

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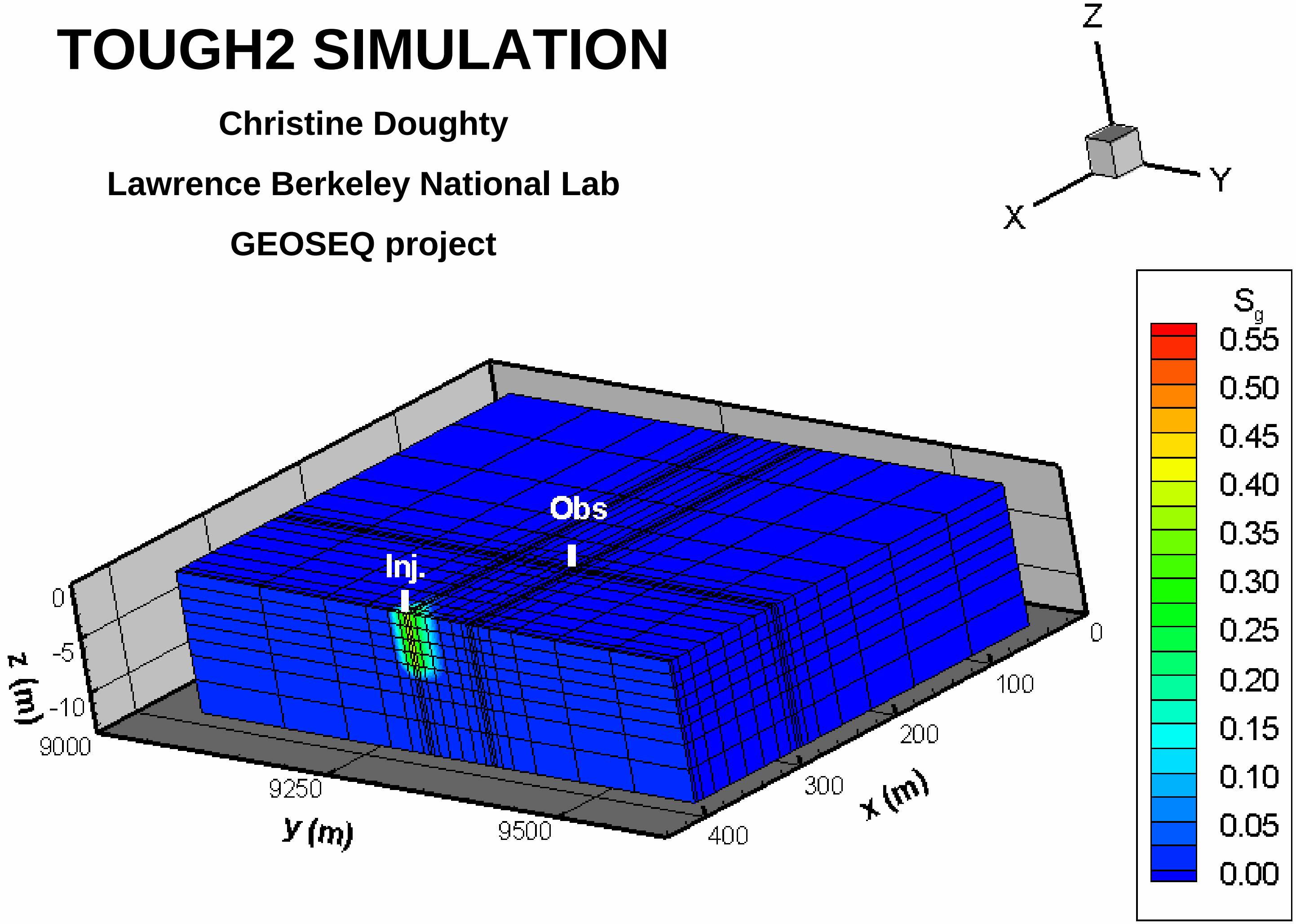
GEOSEQ project



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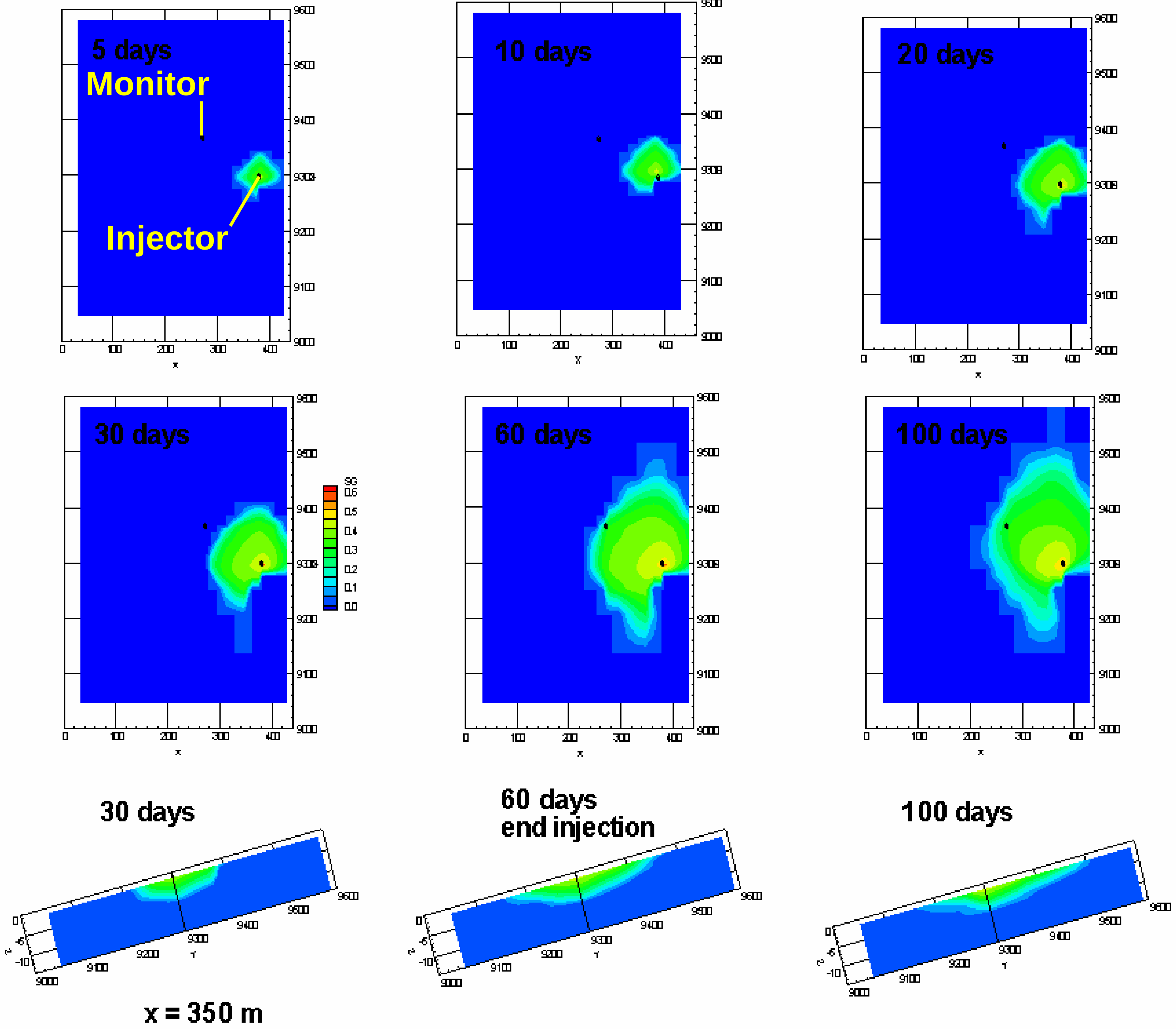
TOUGH2 Model



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PERMITTING

- **Permit from Texas Commission on Environmental Quality**
  - **Class 5 Permit (experimental injection)**
  - **Additional report**

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MONITORING

- Baseline, during injection, postinjection
  - Pressure, temperature
  - Wireline logs
  - Fluid and gas sampling at monitor and injector
  - Geophysics – crosswell seismic, 4-D VSP, surface tilt, passive seismic
  - Water supply wells
  - Ambient CO_2 at well head
  - Any additional areas of risk identified

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EARLY SUCCESS

- Demonstrate that CO_2 can be injected into a brine formation without adverse health, safety, or environmental effects
- Determine the subsurface distribution of injected CO_2
- Demonstrate validity of conceptual models
- Develop experience necessary for success of large-scale CO_2 injection experiments

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