



ISGS Earth Systems Visualization Laboratory: A Collaborative 3-D Visualization Resource at the University of Illinois

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Earth Systems Visualization Laboratory

- advanced data imaging and analysis tools, customized for earth science research, within a collaborative workspace environment



ESVL Facilities

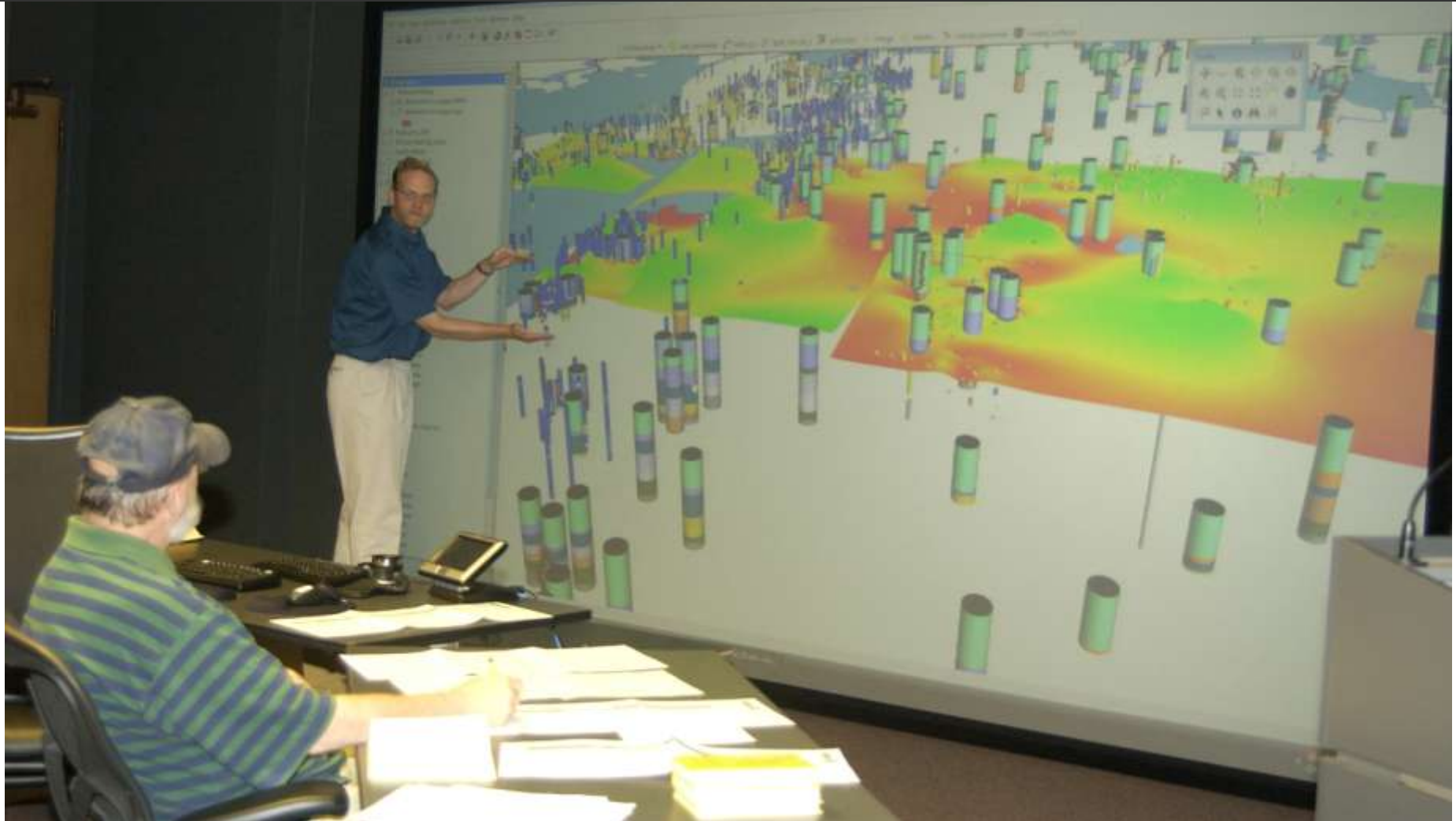
- Custom 2-room suite on 4th floor, Natural Resources Building
- 14'x8' back projected screen
- High-resolution projector
- Active stereo capabilities
- Flexible configuration
- Multiple visualization computers with 18Tb data storage
- Large viewing room accommodates up to 20 people
- High resolution video camera for internet meetings



Flexible Meeting Space

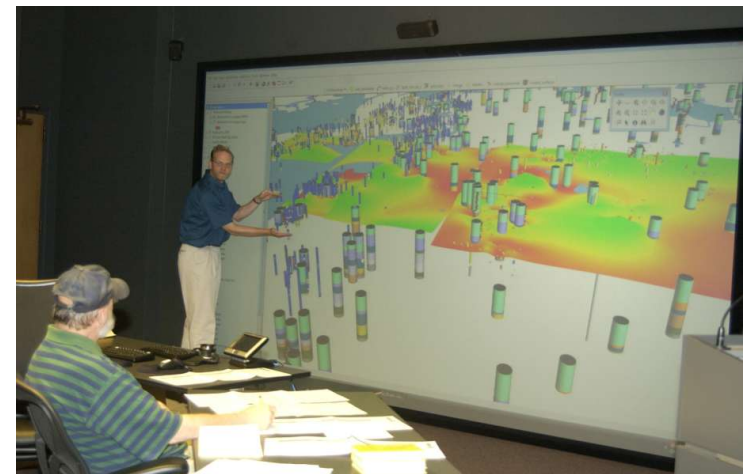
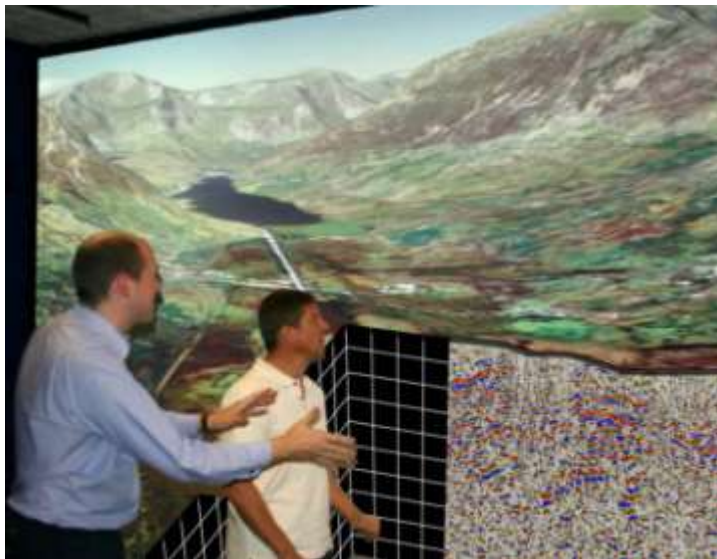


Interactive Working Environment



Collaborative Opportunities

- Project team meetings
- Internet-based meetings
- Outreach workshops
- Visualization-focused presentations
- Education and training





Current Commercial Software

❑ GeoVisionary

❑ ArcGIS

❑ GSI3D

❑ Petrel

❑ ParaView

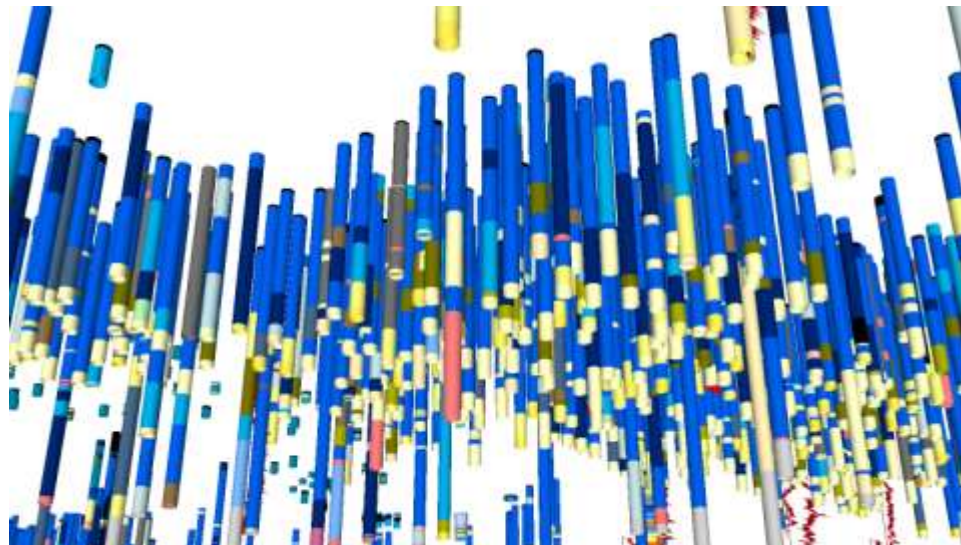
❑ Surfer

❑ Rockworks

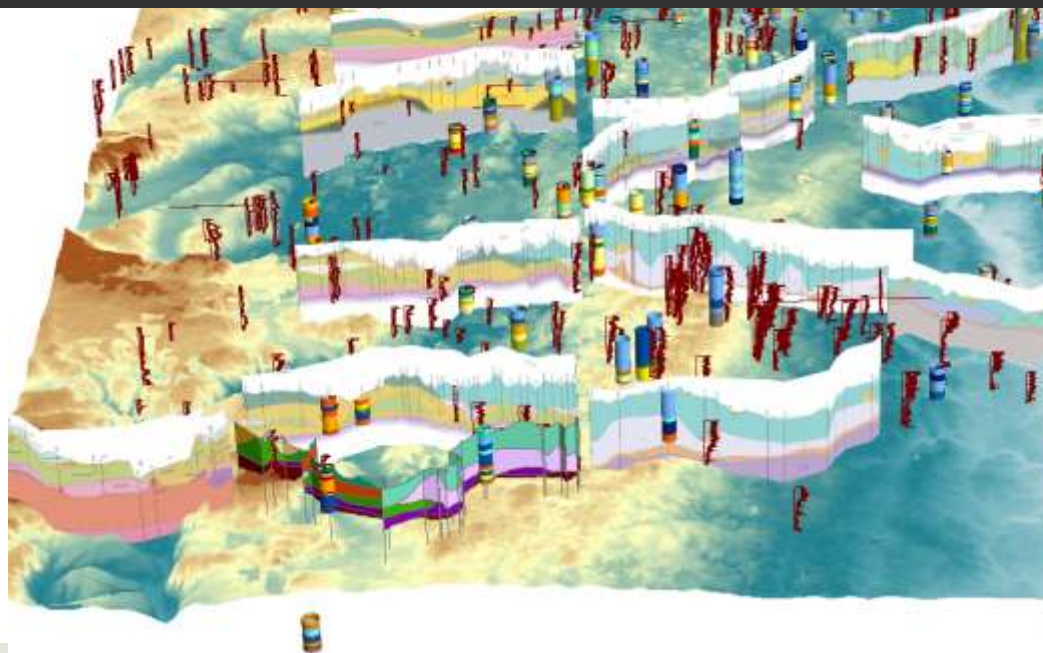
❑ Mathematica

❑ Map Illustrator

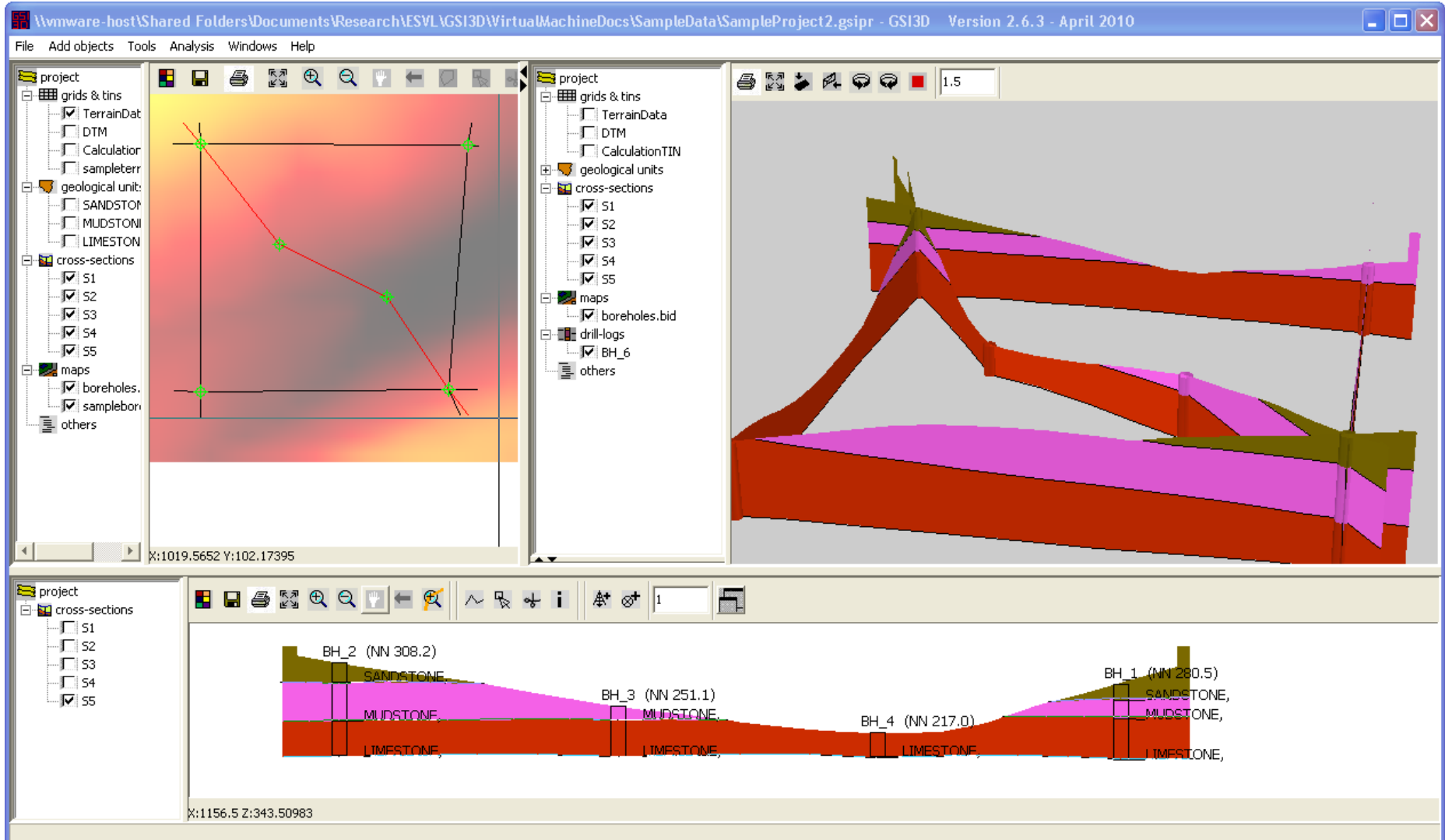
❑ Adobe CS4



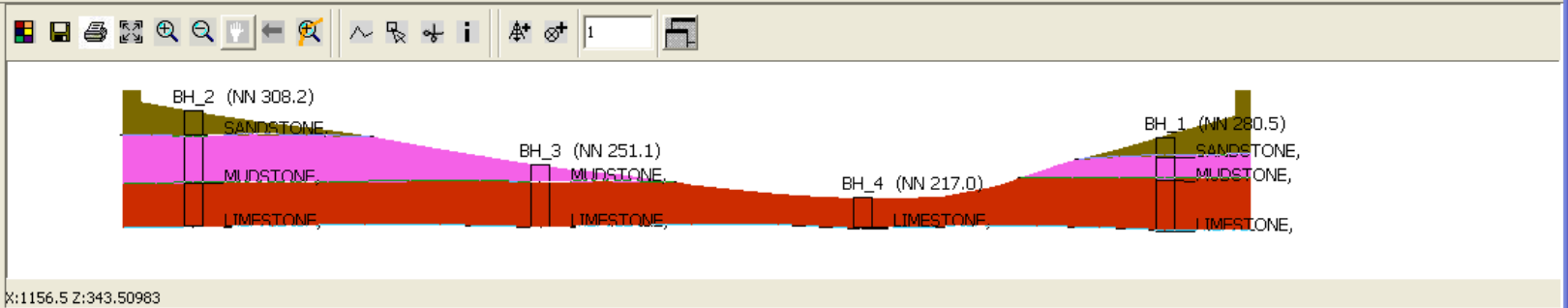
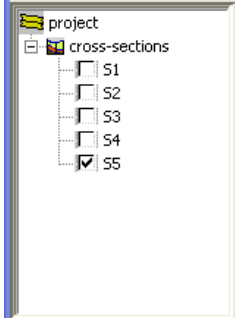
GeoVisionary & ArcScene



GSI3D



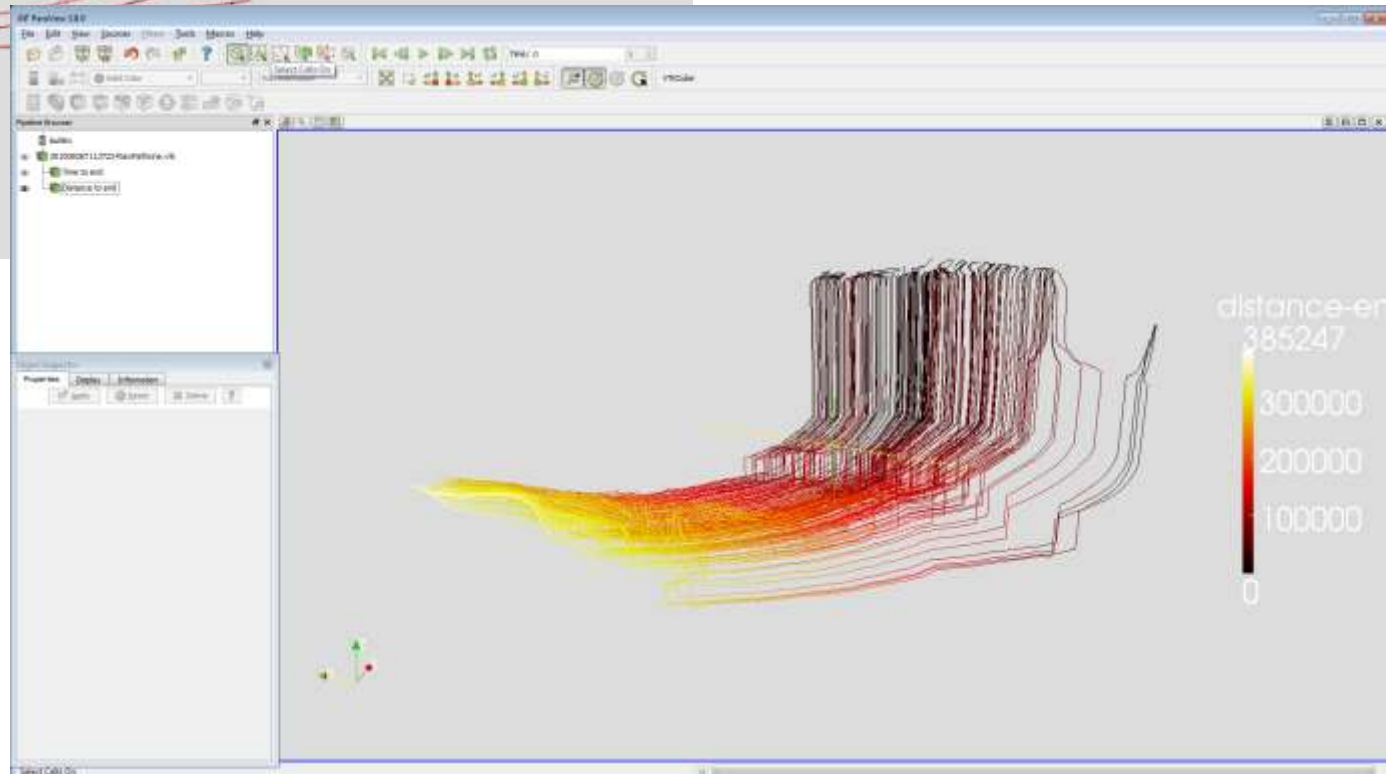
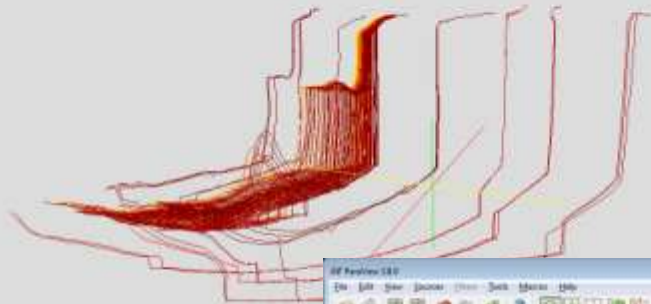
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Custom Lab Applications

- ArcScene, ArcMap tools for 3-D geologic mapping support
- MFV (MODFLOW Viewer): visualization and analysis of flow paths from MODFLOW/MODPATH
- RVA (Reservoir Visualization and Analysis): advanced visualization, data analysis and data mining for unconventional oil and gas resources

MFV: MODFLOW Viewer



ISGS Earth Systems Visualization Laboratory

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□ **ISGS Lab Associates**

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- Jason Thomason
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- Yu Feng Lin, Illinois State Water Survey
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- Bruce Napier, British Geological Survey
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□ **Corporate Affiliates**

