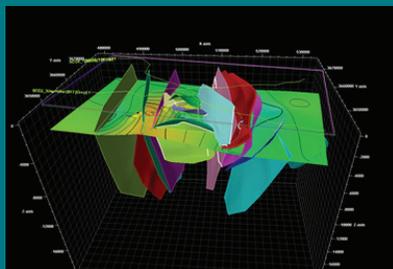


Petroleum Geoscience

Providing advanced solutions to complex energy problems



ESRI-SC has a rich history of working with the petroleum industry through its industrial partners program. The partnership has provided the industry with basin analysis research and skilled employees through the university graduate program.



The Earth Sciences and Resources Institute (ESRI-SC) was created in 1973 to conduct applied research and service in petroleum exploration, environmental geosciences, engineering and computer applications. ESRI-SC has state-of-the-art expertise and facilities allowing our data to seamlessly be integrated into company existing databases. ESRI-SC is well placed to meet the nation's ongoing urgent need to identify and access reliable, clean, efficient, and affordable energy sources. ESRI-SC's state-of-the-art capabilities can be leveraged to expand into additional exploratory initiatives, similar to the current effort to evaluate the efficacy of CO₂ sequestration to mitigate anthropogenic climate change.

Capabilities

- Depositional geological setting interpretation
- Hydrocarbon migration path identification
- Prioritization of potential exploration and production areas within a geologic basin
- Reservoir characterization
- Seismic stratigraphy
- Integrated sequence stratigraphy
- System track concepts
- Tectonic and structural control on basins development
- Hydrocarbon maturation history
- Source rock analysis
- Geologic and geophysical modeling

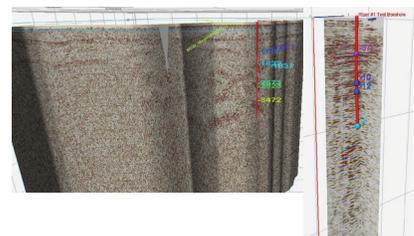
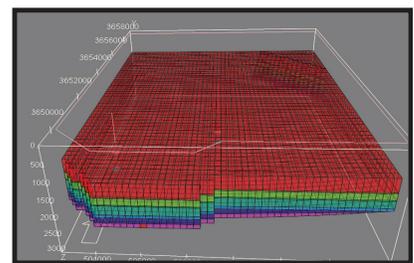
<http://www.esri.sc.edu/>
info@esri.sc.edu

3D Visualization

A rear-projection flat wall display is available for depth collaborative analysis by teams of researchers as well as presentations of data to large groups. Several tracking devices can be used to interact with the projected 3-D images.

GIS Database Design

ESRI-SC's geographic information system (GIS) is used for managing large spatially-oriented databases and modeling diverse geographic data. ESRI-SC uses ArcGIS, MapObjects, ArcIMS, and MOIMS for modeling and analysis, for development of GIS databases and development of Web-based GIS applications in its petroleum-related projects.



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