DEPARTMENT OF GEOSCIENCES and GEOLOGICAL and PETROLEUM ENGINEERING Geophysical Subsurface Imaging

Seismic Data Interpretation and Processing

- Subsurface structural mapping and reservoir characterization
- 3D seismic digital data processing and visualization

Layered Structure Detection in the Earth's Crust and Mantle

- Imaging crustal and mantle layering utilizing wave conversions
- Crustal composition and evolution

Several Research Topics

- Passive seismic investigations for the formation mechanisms of intracratonic basins
- Mantle anisotropic structure and dynamics using shear wave splitting measurements
 http://ds.iris.edu/ds/products/sws-db-mst/

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Funding

- National Science Foundation
- American Chemical Society
- Statoil



Keywords

Splitting Database, US

Seismic Refraction Acquisition in Western Desert, Egypt

• #Seismic Interpretation, #Digital Signal Processing #Seismic Anisotropy, #Geophysics

Recognitions

- Faculty advisor for student competition teams. <u>http://news.mst.edu/2015/03/missouri-st-software-design-team-wins-competition</u>
- S&T outstanding teaching award, 2008
- S&T Academy of Mines and Metallurgy senior faculty award, 2016



CEC Research

Seismic Monitorina

System Installation,

Botswana

Major fault

Subsurface Imaging

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