ADAPTIVE SPECTRAL SLOPE FOR FREQUENCY DHI

Seismic spectral decomposition is a proven tool for reservoir characterization, but standard methods often struggle with noise, tuning effects, and varied data quality.

To solve this, we at **DPPL** developed an innovative workflow for **Seismic Dispersion Analysis (SDA)** that transforms how we predict frequency-based Direct Hydrocarbon Indicators (DHIs) for prospect de-risking.

We have taken this technology to the next level. Our latest advanced workflow now dynamically tracks **peak amplitude**, **dominant frequency**/**mean frequency** during prediction.

- **Adaptive & Data-Dependent:** Automatically adjusts to your specific data set to accurately capture dispersion and attenuation anomalies linked to hydrocarbon saturation.
- **Noise & Artifact Reduction:** Integrates advanced measures to eliminate noise, reduce tuning effects, and balance frequency spectrums.
- **Versatile Application:** Designed to handle a wider variety of data sets and complex reservoir conditions.

Built entirely in **Python**, this new software module has been successfully calibrated and validated using multiple reservoir data.

Are you interested to uncover the hidden potential in your seismic data and significantly de-risk your next prospect?

Reach out to us at **info@dlbarg.com** to discuss how we can collaborate.

#Geophysics #Seismic Spectral Decomposition #Reservoir Characterization #Oil And Gas #Exploration #Python In Geoscience #Data Analytics #De-Risking