

Seismic Attributes and Their Applications in Seismic Exploration

Pier Paolo G. Bruno

12 hour – 3 CFU

Introduction:

Seismic attributes are the components of the seismic data, which are obtained by measurement, computation, and other methods from the seismic data. Seismic attribute analysis can extract information from seismic data that are, otherwise, hidden or difficult to visualize and have been widely used to identify prospects, faults & fractures, and ascertain depositional environments

Short Program:

- Classification of attributes, components of the complex trace, single trace and multi-trace attributes – n. ore: 4
- Computation and analysis of seismic attributes on real seismic data examples (MATLAB & OPendTect) – n. ore: 4
- Example of machine learning applications using seismic attribute (on MATLAB) – n. ore: 4

Suggested Background:

A basic knowledge of seismic methods and of a programming language (e.g. MATLAB) is desirable but not fundamental.