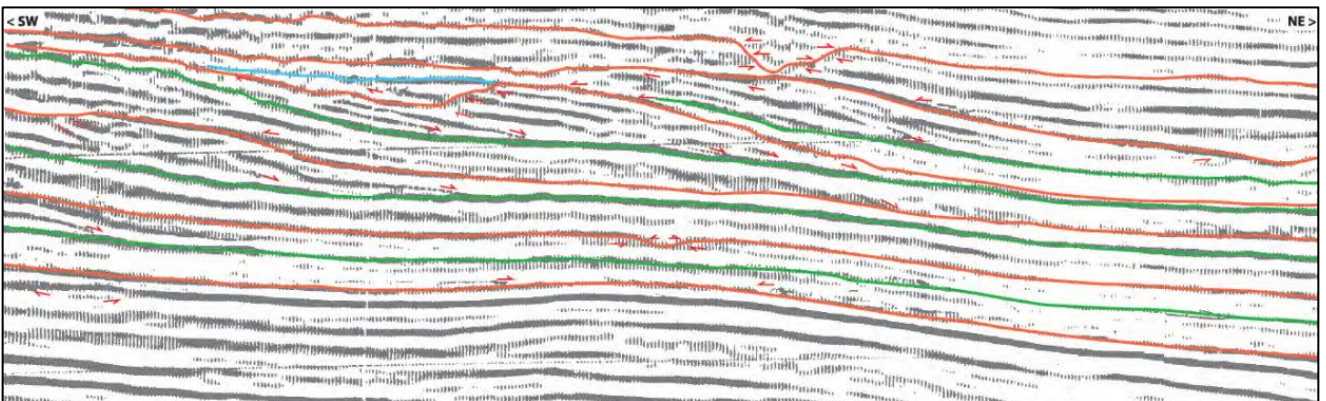


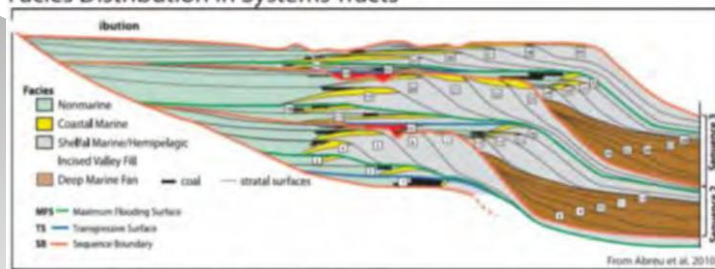
Basic sequence stratigraphic methods – cores, logs & seismic

The sequence stratigraphic method was developed to support geoscientists with the geologic interpretation of subsurface data. This method is utilized to predict the presence of petroleum play elements and to assess their quality before drilling. Sequence stratigraphy is applied to core, outcrop, well logs as well as 2-D and 3-D seismic data across all depositional environments.

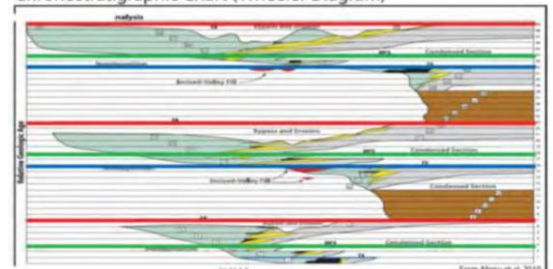
This course reviews basic definitions and terminology of surfaces and systems tracts and introduces the sequence stratigraphic hierarchy. Training exercises and datasets are thoroughly discussed, and participants later interpret subsurface data in terrestrial, shallow marine, and deep-marine depositional settings within a sequence stratigraphic framework. Based on the sequence stratigraphic method, the recognition and mapping of play elements from exploration to production scales is emphasized in this course.



Facies Distribution in Systems Tracts



Chronostratigraphic Chart (Wheeler Diagram)



Basic sequence stratigraphic methods – cores, logs & seismic

COURSE CONTENT

- Lithostratigraphy vs. chronostratigraphy interpretations
- Fundamentals of sequence stratigraphy
- Well-log interpretation, correlation, and mapping
- Seismic response of key stratigraphic surfaces
- Seismic reflection termination mapping
- seismic facies analyses
- Hydrocarbon play element mapping
- Criteria and mapping strategies for play elements in non-marine, shallow-marine, and deep-marine depositional settings

LEARNING OUTCOMES

- Explain sequence stratigraphic concepts
- Define sequence stratigraphic terminology
- Interpret facies and facies stacking patterns
- Implement the concept of facies, facies stacking and shoreline trajectory to identify parasequences, systems tracts & stratigraphic surfaces.
- Differentiate the main controls on depositional sequences
- Interpret core, outcrop, well-logs, and seismic lines
- Apply the sequence stratigraphic method across depositional environments
- Recognize and map hydrocarbon play elements across depositional settings