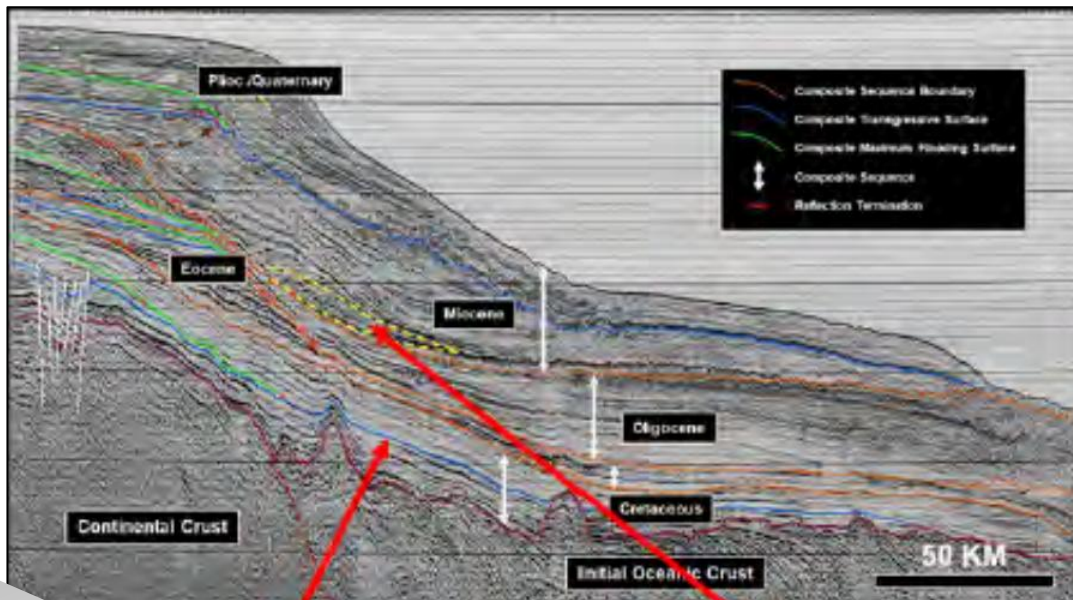


## Sequence Stratigraphy - Advanced Applications

Advanced applications in sequence stratigraphy provides a methodology to recognize, interpret, and map the key play elements of the petroleum system (source rock, reservoir, seal, and trap). This workshop presents a methodology to predict the presence, distribution, and quality of play elements and to perform pre-drill estimates for exploration, appraisal and well development. During the exploration stage, the workflow focuses on identifying play elements on seismic lines and integrating well information. The exploration, appraisal, and production stages in the course place emphasis on play element distribution and trapping styles from shelf to deep-water settings. Primary goals for the production stage include describing reservoir connectivity and continuity as well as identifying flow baffles and barriers.



Source  
mapping

Deep-water  
Stratigraphic trap  
mapping

## Sequence Stratigraphy - Advanced Applications

### COURSE CONTENT

- Review application of sequence stratigraphy in subsurface data
- Examine sequence stratigraphy in different tectonic settings
- Application of sequence stratigraphy at exploration scale
- Definition of hydrocarbon plays and prospect mapping
- Presence and risk of play elements
- Fairway mapping of reservoirs and net-to-gross predictions
- Application of sequence stratigraphy and production scale
- High-resolution reservoir mapping and production strategies

### LEARNING OUTCOMES

- Apply concepts of facies, facies stacking and shoreline trajectory to define parasequences, surfaces and systems tracts
- Create tectono-stratigraphic interpretations
- Utilize the sequence stratigraphic method to identify and map play elements in different depositional environments and tectonic settings
- Employ method and concepts in sequence stratigraphy to define hydrocarbon plays and prospects
- Conduct high-resolution reservoir mapping
- Map reservoir architectures across depositional settings
- Predict presence of play elements, assess associated risks and quality across different depositional settings
- Estimate net-to-gross and reservoir connectivity
- Map reservoir flow units at production scale