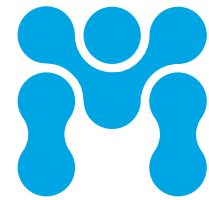
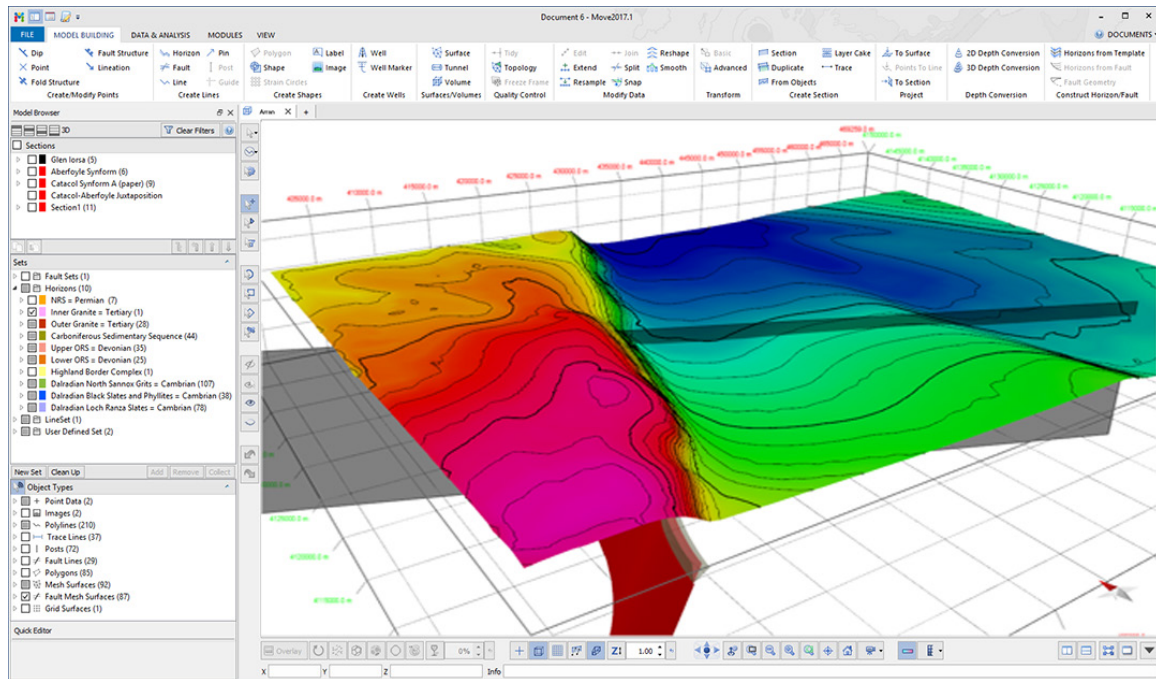


3D Kinematic Modelling



World-leading 3D forward and reverse modelling tools to help validate your model, and reduce uncertainty

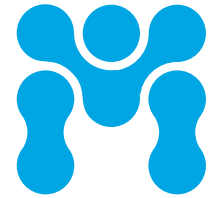


Our 3D Kinematic Modelling module uses leading edge kinematic algorithms to validate and restore 3D geological models. Complex geological structures can be restored to identify alternative scenarios in areas of high structural uncertainty. Discover the geological history of your modelled scenario to reveal unseen structures and changing geometries.

This module can be applied to any geological setting including: extensional, compressional and strike-slip basins as well as areas that have undergone inversion, thermal subsidence and salt tectonics.

Forward and reverse model through time in 3D, whilst adhering to line length, area and volume balancing principles. The module will help you construct realistic geological models, which can then be used as the basis for further analysis.

3D Kinematic Modelling



World-leading 3D forward and reverse modelling tools to help validate your model, and reduce uncertainty

Features

- Work in 3D plus geological time. Evolve models backwards and forwards through time and assess the timing of critical geological events.
- Use 3D kinematic algorithms including:
 - Jigsaw Restoration
 - Flexural Slip Unfolding
 - Simple Shear Unfolding
 - Simple Shear Move-on-Fault
 - Fault Parallel Flow Move-on-Fault
 - Trishear Move-on-Fault
- Model deformation associated with a propagating fault tip using the 3D Trishear Move-on-Fault algorithm. Parameters can be varied along-strike.
- Take into account physical compaction, isostatic and thermal subsidence effects to investigate basin architecture through time.
- Calculate strain for areas and volumes, and capture strain for further analysis. This essential output can then be used with our Fracture Modelling module.
- Calculate finite strain for areas and volumes, and capture strain for further analysis. This essential input can then be used for fracture modelling.
- Measure horizon areas and volumes in 3D models using the 3D Model Analysis tool, which allows for quick validation of 3D models. Use this to estimate reservoir volumes, sweet spots and optimise oil and mineral extraction.
- Highlight the timing and significance of critical geological events in 3D.
- Decompaction with isostasy and thermal subsidence.

New for 2018

- Depth conversion of 3D Seismic.

