Badleys
Badley Geoscience Limited

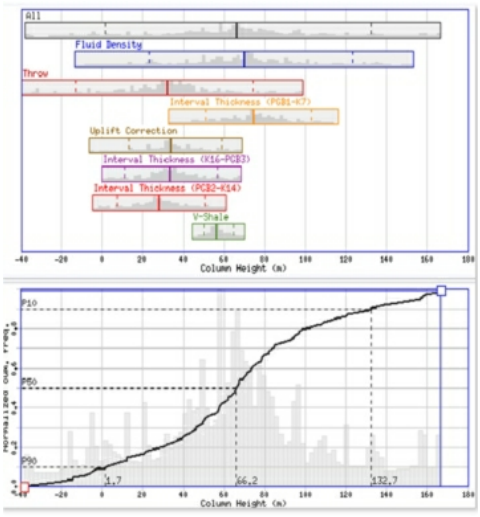
Global Experts Providing Market-Leading Software Solutions Since 1990

STRUCTURAL GEOLOGY | FAULT SEAL | GEODYNAMICS

Version T7.4 Now Available for Download

Badleys are pleased to announce the latest instalment of our flagship software T7, version 7.4. This requires a fresh install. We will be in communication with our maintained clients shortly but if you wish to receive download details now please just ask **support**.

T7.4 Headline New Feature: Fault Seal Uncertainty

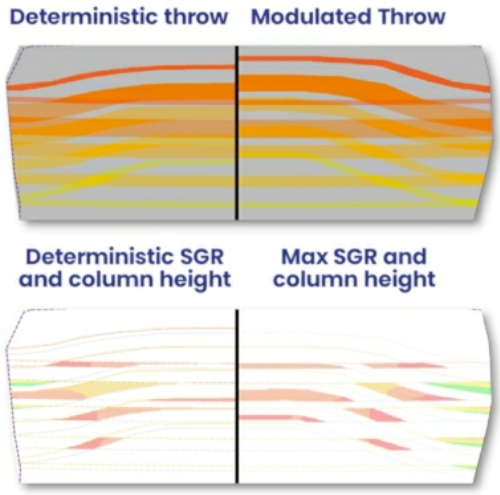


The new T7 Fault Seal Uncertainty (FSU) Tool offers geoscientists a practical, geologically consistent way to assess fault-seal risk. Using a combination of deterministic inputs (such as fault interpretation, reservoir properties, and Vshale distributions) and ranges of key uncertainties, the tool generates P90, P50, and P10 scenarios for column heights and contact depths arising from both juxtaposition and the effects of membrane seal.

Uncertainties addressed include seismic interpretation limits, interval thickness variations, reservoir quality (shale content), geohistory parameters, and unmeasured physical properties like fluid density and capillary pressure. These variables are automatically varied through Monte Carlo simulation, delivering robust probabilistic outputs that support better risk mitigation in both financial and engineering decisions.

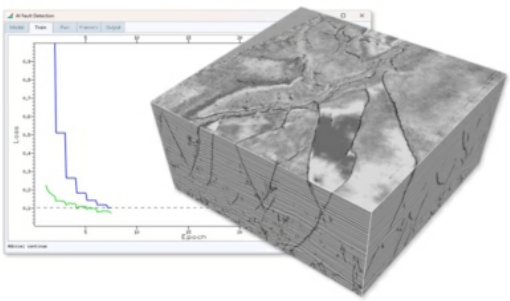
Maintaining structural consistency is key when applying stochastic variations. If throw is varied, interval thicknesses are automatically adjusted, and vice versa, with V-Shale distributions also updated to remain consistent. For multiple stacked intervals, FSU avoids compatibility issues (such as units overlapping or pinching out) by spreading thickness changes smoothly across neighbouring units and allowing only one interval to vary per simulation (e.g., alternating between intervals across runs). These rules are essential for ensuring geologically realistic outcomes, particularly in calculations like SGR, where thickness, throw, and V-Shale distribution must align correctly.

The FSU Tool also features built-in sensitivity analysis, helping users identify and rank the most influential parameters in multi-variable simulations. This capability empowers teams to focus on the drivers that matter most, enhancing both confidence and efficiency in fault-seal evaluations.

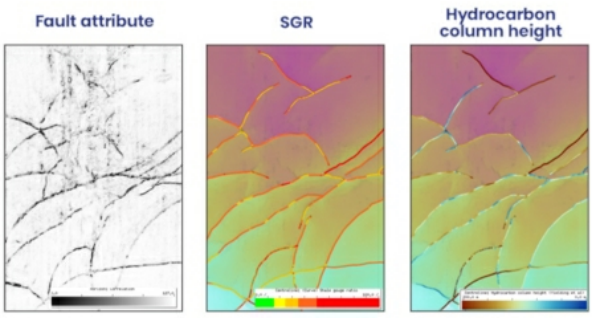


AI Fault Detection Improvements

The T7 Fault Attribute System now includes several new options for AI model training and outputs, most notably the Express Modelling strategy. Built on BGL's updated deep learning architecture, this approach is faster to train and run and reduces the need for customised workflows. While it can produce more noise than the default strategy, this is effectively managed by coding the final AI fault volume with new attributes, such as fault region size, to filter out unwanted artefacts.



Attribute Colouring for Fault Centrelines



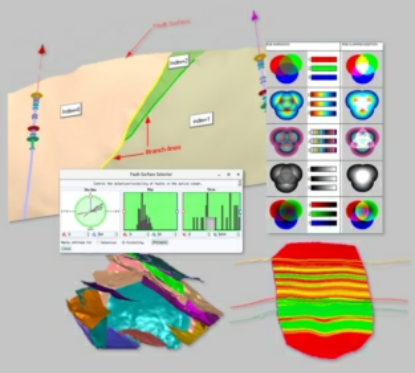
Polygon Centrelines have been updated to allow the colouring of the line to be done via the display methods. This allows the user to display any attribute (calculated within T7) along the centreline.

The main advantage of this is rapid, intuitive across-fault seal analysis that highlights potential migration pathways at a glance. The resulting maps are not only powerful for technical interpretation but also clear enough to drop straight into reports and presentations for management.

Functional & Usability Enhancements:

- Cell-Grid 2D Seismic Extraction
- Fault Element Index Attributes and Display Methods
- Auto Fault Extraction Config Files
- Seismic Probe and Volume Improvements
- New Display Method Colour Blending Control
- Fault Region of Interest Polygons
- Volume Editor Save to PNG Improvements
- Volume Editor Isometric Strike View Option
- Triangle Depth Range based on Horizon Intervals
- Volume Editor new Icon/Tools Layout
- Multi-Object Edit Random Colour Option

… plus many more



Badleys are exhibiting, presenting at and sponsoring the **7th International Conference on Fault and Top Seals** to be held from 1**5-18 September 2025** in **Bucharest**, **Romania**.

Badleys' Dave Quinn is delivering a Keynote presentation titled **"Fault Seal Uncertainty. Structure is still King"** on **Tuesday 16th at 14.20**. We look forward to a few days of great discussion with an audience of the world's leading fault seal practitioners.

Badleys are also exhibiting at the **AAPG ICE** to be held from **30th September- 3rd October 2025** in **Rio de Janeiro**. Our representatives welcome you to booth #203. Please contact us to book a demo, or just drop by to discuss all things structural geology.

Badley Geoscience Ltd - North Beck House, Spilsby, Lincolnshire - PE23 5NB - UK
www.badleys.co.uk - info@badleys.co.uk