

How to Make a Good Reservoir Model

Its not the software, its the design

TRACS Training Master classes

One day Master classes are designed for people who want to update or refresh on specific topics without having to spend a week out of the office. The classes are led by experts in their respective fields and provide an opportunity for learning, inspiration, conversation and networking.

Designed for:

Anyone interested in better quality reservoir models; those involved in building them, using them or managing teams who make them.

Duration:

1 Day

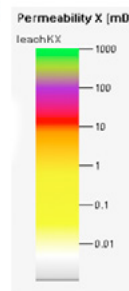
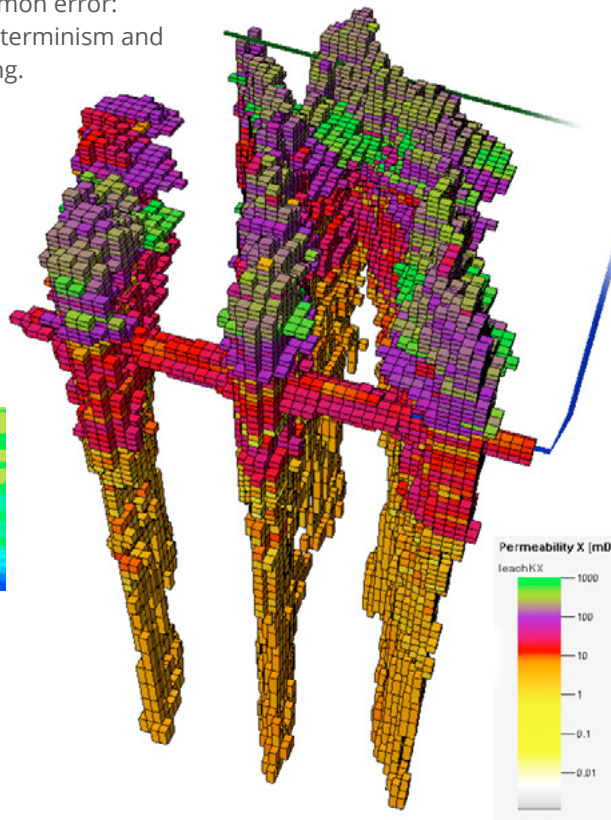
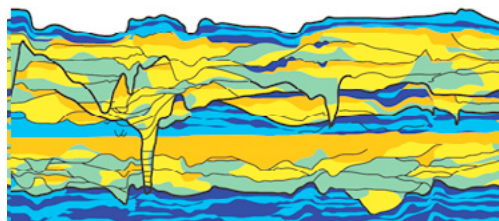
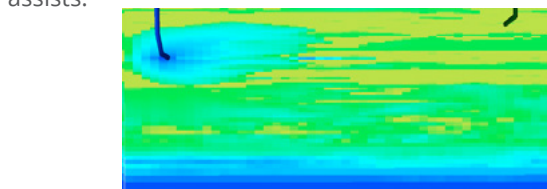
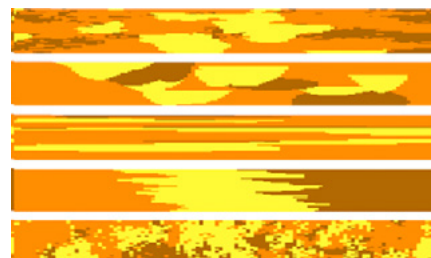
How can you tell the difference between a 'good' reservoir model and a 'bad' one?

This one day Master class is designed to draw out the common reasons for 'good' and 'bad' outcomes, under the premise that models add value only when they add clear value to business decisions.

The 'red thread' through the event will be the over-riding issue of model design and the five areas of common error: model purpose, selection of elements, use of determinism and probability, model scale and uncertainty-handling.

Advice will be given on how to review models, what questions to ask the model builders and how to determine whether the output from models can be relied upon and used to support decisions.

As a take-away the course will close with a set of questions to ask yourself and others, suitable for reference in peer reviews or assists.

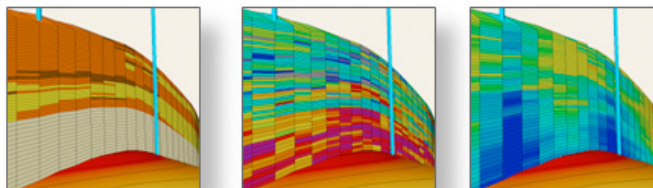


How to Make a Good Reservoir Model continued

Course Content:

Five reasons why many models fail, and how to avoid them:

1. Model Purpose
Why model at all? What do we understand by 'fit-for-purpose'?
2. Elements & Architecture
Getting the building blocks right
3. Determinism and probability
Concept-driven (intuitive) geostatistics; balancing probabilistic and deterministic tools, the importance of trends
4. Scaling
Beyond upscaling - pitching the models at the correct scale, multi-scale modelling and the REV
5. Uncertainty
Overcoming heuristics and modelling what you don't know



Course Duration:

1 day

Courses available from this series:

E&P Business in a Day
Uncertainty and Risk in Development
How to Make a Good Reservoir Model
Common Fallacies in Casing and Tubing Design
Reservoir Engineering Fundamentals
Field Development Planning
Geomechanics Integration
New Trends in Data Analysis
The Energy Transition in a Day
Carbon Capture and Storage (CCS)

Course Tutor



Mark Bentley PhD

Mark has spent most of his career working in or leading integrated study teams, initially with Shell and subsequently with AGR and TRACS where he currently designs and runs courses and directs the TRACS Training programme. His specialist fields of expertise are 3D reservoir modelling and scenario-based approaches to handling subsurface uncertainty and risk. Mark has served as a distinguished lecturer for the SPE and the EAGE, and has delivered training courses on every continent, except Antarctica. Mark is co-author of 'Reservoir Model Design', SPE and EAGE distinguished lecturer, associate professor Heriot-Watt University, Edinburgh, UK and a Fellow of the Geological Society, London