RokDoc
Rock Physics

Industry leading rock physics, 2D modeling and well to seismic tie solution delivering easy to use solutions for both generalist and expert quantitative interpretation practitioners. Seamlessly combine core, log and seismic data into predictive models that can be used to characterize the seismic response in both conventional and unconventional settings, reducing interpretation cycle times and enhancing the accuracy and robustness of subsurface interpretations. Rapid model construction and assessment delivers better than ever understanding of subsurface uncertainty.

Benefits

Intuitive
Improve accuracy of interpretation

- Single easy to use platform
- Comprehensive library of rock physics functionality for all play types
- Cross-discipline workflows for exploration through to production

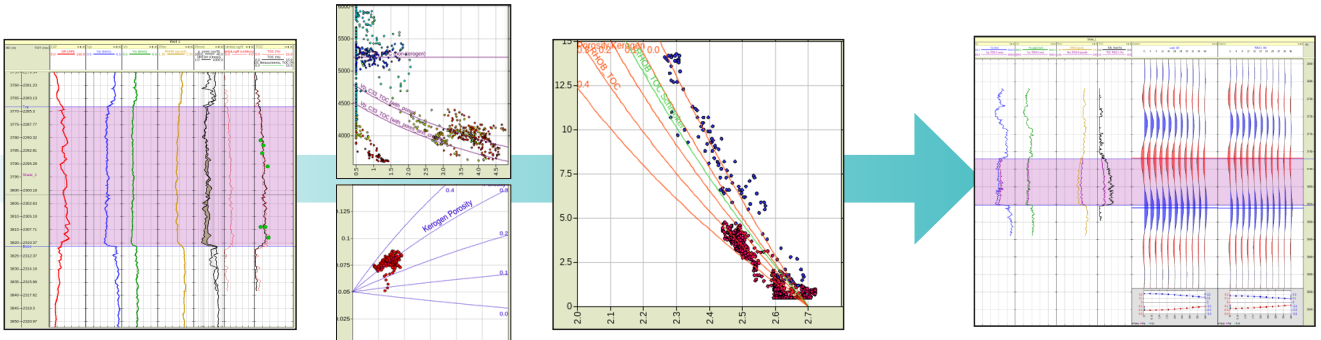
Reliable
Explore and capture uncertainty

- QC and calibrate core, log, VSP and seismic data
- Integrate multiple data types and capture uncertainties
- Quickly and easily evaluate 'what-if' scenarios to understand influences affecting seismic signatures

Fast
Efficient and effective solutions

- Recipe based workflows embedded in easy to use GUIs
- Automated QC procedures
- Establish and deploy play based interpretation strategies

Rock Physics Solutions



Calibrate predictive models

Rich suite of rock physics models

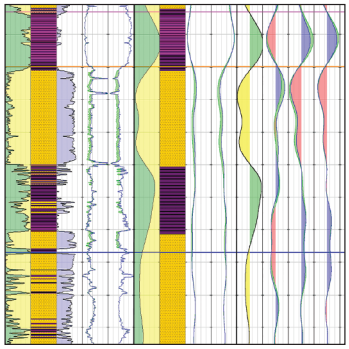
Easily and quickly create synthetics

Rock Physics Module Add-ons

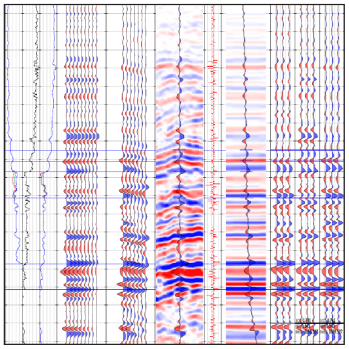
RokDoc Platform	Rock Physics Module	**Anisotropy** — Build 1D and 2D synthetic seismic models to explore the impact of anisotropy on the seismic response. Key features include; Thomsen parameter estimation, VTI/HTI and orthorhombic model building, anisotropy database, plane wave analysis and blocky modeling.
		Attrimod — Multi-scenario, multi-2D synthetic seismic modeling package for rapid generation of hundreds of geologically plausible models. Key features include: multi-2D modeling and attribute sections, lithology and fluid substitution workflows, ray synthetics including Q and spherical divergence corrections.
		Advanced WellTie — Wavelet analysis and estimation functionality for improved handling of low frequencies in broadband, nodal and onshore seismic datasets. Key functionality includes: Roy White multi-taper method, Parametric constant phase and Bayesian multi-well multi-stack estimation with broadband priors.
		VSP — Specialist analysis tools for offset, walkaway, walk-around and multi-component VSP datasets. Key functionality includes: common processing routines through to corridor stack, shear splitting / hodogram analysis and rose diagrams for fracture characterization.

Technical Features

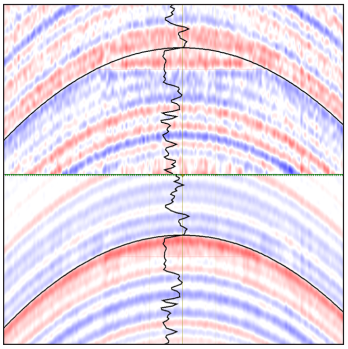
- Direct connectivity to Petrel* and other 3rd party software using Open Spirit connector
- Batch loading of core, well and seismic datasets
- Rich QC and editing via log and cross-plotter functionality
- Single, matrix and user defined cross-plotting with well viewer interactivity
- Comprehensive log prediction function for elastic log data
- Extensive library of rock physics models for conventional and unconventional resources
- Absolute and relative rock physics workflows for inversion feasibility
- Extensive log upscaling including filtering, Backus averaging and facies based upscaling
- Log blocking for synthetic seismic calculation
- Blocky modeling for quick look AVO analysis
- Comprehensive post/pre-stack synthetic seismic modeling, including Fatti, Modified Shuey, Zoeppritz, full wavefield, ray parameter etc.
- Wavelet estimation using statistical and Roy White methods
- Wavelet analysis, editing and averaging
- Comprehensive well-tie functionality for vertical and deviated well bores
- Sophisticated conceptual and quantitative 2D seismic forward modeling
- Full integration with Pressure Prediction and Reservoir Characterization modules



Outputs of log analysis, upscaling and inversion feasibility workflow



Pre and post-stack seismic well-tie and QC in a deviated well



2D conceptual seismic modeling investigating litho-fluid effects

Supported Data Types

- Raw well logs
- Composite, processed well logs
- Interpreted well logs
- Image Logs (surface sets, DITF)
- Discrete value sets
- Checkshot data
- Directional surveys
- Formation tops / markers
- Core data (PoroPerm, Elastic)
- SCAL (Capcurves)
- Litho / chronostratigraphy schemes
- Mud logs
- Pressure data (MDT, RFT etc)
- Integrity data (FIT, LOT etc)
- Drilling event data
- Breakouts
- VSP (zero offset/walk-around)
- Post-stack seismic
- Pre-stack seismic
- Horizons
- Corner Point Grids (CPG's)
- Polygons

Data Import Formats

- LAS
- DLIS
- ASCII
- XLS
- JPEG
- TIFF
- SEG-Y (REG/IRREG)
- ECLIPSE.EGRID
- ECLIPSE.GRDCL
- SGRID
- WVL
- WAV
- WAVE
- Import from secondary project
- Import from external project
- Petrel* Interconnector
- OpenSpirit

Visit www.ikonscience.com or email info@ikonscience.com to discover more and request a demo.

System Requirements

RokDoc is supported on the following operating systems:
64bit Windows: Windows 7, Windows 10
64bit Linux: RHEL 6, RHEL7

Processor / hard disk requirement:
Preferred: dual quad core processor / SSD
Minimum: quad core processor / fast rotational speed HDD

System Memory (RAM) requirement:
Preferred: 64GB
Minimum: 8GB (16GB practical minimum for RokDoc 3D / ChronoSeis)

Graphics card requirement:
Preferred: NVIDIA Quadro K5200 (desktop) / NVIDIA Quadro K5100M (laptop)
Minimum: NVIDIA Quadro K4200 (desktop) / NVIDIA Quadro K3100M (laptop)

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*Mark of SLB