

# Understanding Faults

## Detecting, Dating, and Modeling

Edited by **David Tanner and Christian Brandes**

*An integrated resource that describes how faults are detected, what fault models predict, and current theories of fault development*

- Presents cutting-edge information relating to fault analysis, including mechanical, geometrical and numerical models, and theory and methodologies
- Includes models of 3D fault growth and calculations of fault sealing capabilities
- Describes with which methods faults can be detected, and techniques for dating fault activity
- Uses worldwide case studies throughout the book to illustrate the key concepts

*Understanding Faults: Detecting, Dating, and Modeling* offers a single resource for analyzing faults for a variety of applications, from hazard detection and earthquake processes, to geophysical exploration. The book presents the latest research, including fault dating using new mineral growth, fault reactivation, and fault modeling, and helps bridge the gap between geologists and geophysicists working across fault-related disciplines. Using diagrams, formulae, and worldwide case studies to illustrate concepts, *Understanding Faults* provides geoscientists and industry experts in oil and gas with a valuable reference for detecting, modeling, analyzing, and dating faults.

**David Colin Tanner** is a researcher at the Leibniz Institute for Applied Geophysics, where his research focuses on 3D structural modeling of seismic and retro-deformation. He has also been a lecturer at Jacobs University and University of Gottingen, as well as a researcher at GFZ Potsdam, among others. He has chaired multiple sessions on faults at the EGU conference in Vienna.

**Christian Brandes** is a researcher and lecturer at the Institute of Geology at the Leibniz University Hannover. His research interests include evolution of sedimentary basins, paleoseismology, intraplate tectonics, geodynamics of island-arcs, and evolution of fold-and-thrust belts. He lectures on tectonics, modeling, Earth history, mapping, and regional geology.

Geophysics



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ISBN 978-0-12-815985-9



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