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Nota di contenuto	1. Seismic wave propagation & rock-fluid parameters -- 2. Seismic reflection principles – Basics -- 3. Seismic interpretation methods (2D) -- 4. Tectonics and seismic interpretation -- 5. Seismic stratigraphy and Seismo-tectonics in Petroleum Exploration -- 6. Direct Hydrocarbon Indicators (DHI) -- 7. Bore-hole seismic techniques -- 8. Evaluation of high resolution seismic data (3D & 4D) -- 9. Shear wave Seismic; AVO & Vp/Vs analysis -- 10. Analyzing seismic attributes --

Sommario/riassunto

This book introduces readers to the field of seismic data interpretation and evaluation, covering themes such as petroleum exploration and high resolution seismic data. It helps geoscientists and engineers who are practitioners in this area to both understand and to avoid the potential pitfalls of interpreting and evaluating such data, especially the over-reliance on sophisticated software packages and workstations alongside a lack of grasp on the elementary principles of geology and geophysics. Chapters elaborate on the necessary principles, from topics like seismic wave propagation and rock-fluid parameters to seismic modeling and inversions, explaining the need to understand geological implications. The difference between interpretation of data and its evaluation is highlighted and the author encourages imaginative, logical and practical application of knowledge. Readers will appreciate the exquisite illustrations included with the accessibly written text, which simplify the process of learning about interpretation of seismic data. This multidisciplinary, integrated and practical approach to data evaluation will prove to be a valuable tool for students and young professionals, especially those connected with oil companies.