1. Record Nr. UNINA9911006966103321

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Titolo	High-resolution seismic exploration / / Qing-Zhong Li ; Wei Liu, managing editor ; Jeff Mestayer and Timothy Baker, volume editors ; Hua-Wei Zhou, translation team leader
Pubbl/distr/stampa	: SEG (Society of Exploration Geophysicists)
ISBN	1-56080-350-9 1-5231-1611-0
Disciplina	622/.1592
Soggetti	Seismic prospecting
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Basic concepts of resolution and signal-to-noise ratio -- Subsurface attenuation of high-frequency signals and the empirical Vp-Q relation -- Recording range of seismometers for high-frequency signals -- The characteristics of high-frequency noise and methods to reduce it in field acquisition -- Static corrections and normal moveout -- The importance of proper deconvolution -- Dip-moveout correction, migration and trace interpolation -- Ways to improve signal-to-noise ratio -- Interpretation of high-resolution seismic profiles -- Challenges and improvements in impedance -- Additional seismic invrsion methods -- Processing principles and reference flow for high-resolution seismic data -- Future perspectives -- Progress and prospects of high-resolution sesimic exploration in the new century -- Summary cards.
Sommario/riassunto	Capitalizing on knowledge learned over decades and combining underlying theory with practical cases, this book presents a systematic analysis of the issues involved in high-resolution seismic exploration. Translated from the original Chinese edition published in 1993 by Petroleum Industry Press and now updated to reflect contemporary developments, the book is adept at clarifying the objectives and approaches toward better precision in seismic prospecting. It provides innovative views on fundamental concepts including: perspective resolution and perspective S/N; the empirical relationship between

compressional velocity (Vp) and absorption coefficient (Q); constructing basin absorption models; understanding sand layer tracking; improving dynamic and static corrections of near-surface effects as well as deconvolution; achieving maximum effective bandwidth of seismic data; and regressive seismic impedance inversion. It is an excellent reference for those involved in seismic prospecting research, data processing, and geologic interpretation, and it is recommended for geoscientists and engineers as well as professors and graduate students.--