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Titolo	Geophysical data analysis : discrete inverse theory // William Menke
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ISBN	0-12-813556-5 0-12-813555-7
Descrizione fisica	1 online resource (539 pages)
Disciplina	551.01519
Soggetti	Geophysics - Measurement Oceanography - Measurement Inverse problems (Differential equations) - Numerical solutions
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes index.
Nota di contenuto	Describing inverse problems -- Some comments on probability theory -- Solution of the linear, Gaussian inverse problem, viewpoint 1 : the length method -- Solution of the linear, Gaussian inverse problem, viewpoint 2 : generalized inverses -- Solution of the linear, Gaussian inverse problem, viewpoint 3 : maximum likelihood methods -- Nonuniqueness and localized averages -- Applications of vector spaces -- Linear inverse problems and non-Gaussian statistics -- Nonlinear inverse problems -- Factor analysis -- Continuous inverse theory and tomography -- Sample inverse problems -- Applications of inverse theory to solid earth geophysics.
Sommario/riassunto	"Geophysical Data Analysis: Diverse Inverse Theory, Fourth Edition is a revised and expanded introduction to inverse theory and tomography as it is practiced by geophysicists. It demonstrates the methods needed to analyze a broad spectrum of geophysical datasets, with special attention to those methods that generate images of the earth. Data analysis can be a mathematically complex activity, but the treatment in this volume is carefully designed to emphasize those mathematical techniques that readers will find the most familiar and to systematically introduce less-familiar ones. Using problems and case studies, along

with MATLAB computer code and summaries of methods, the book provides data scientists and engineers in geophysics with the tools necessary to understand and apply mathematical techniques and inverse theory"--Publisher's website.

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