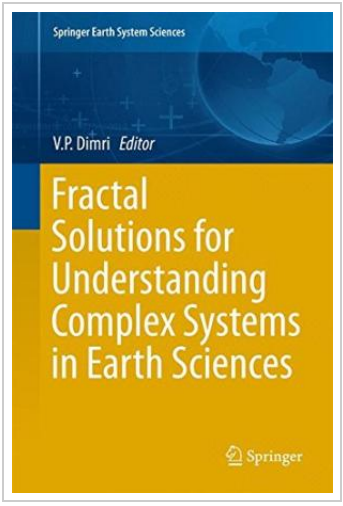

Fractal Solutions for Understanding Complex Systems in Earth Sciences (Springer Earth System Sciences)

By -

Springer. Hardcover. Condition: New. This book deals with fractals in understanding problems encountered in earth science, and their solutions. It starts with an analysis of two classes of methods (homogeneous fractals random models, and homogeneous source distributions or one point distributions) widely diffused in the geophysical community, especially for studying potential fields and their related source distributions. Subsequently, the use of fractals in potential fields is described by scaling spectral methods for estimation of curie depth. The book also presents an update of the use of the fractal concepts in geological understanding of faults and their significance in geological modelling of hydrocarbon reservoirs. Geophysical well log data provide a unique description of the subsurface lithology; here, the Detrended Fluctuation Analysis technique is presented in case studies located off the west-coast of India. Another important topic is the fractal model of continuum percolation which quantitatively reproduce the flow path geometry by applying the Poiseuilles equation. The pattern of fracture heterogeneity in reservoir scale of natural geological formations can beviewed as spatially distributed self-similar tree structures; here, the authors present simple analytical models based on the medium structural characteristics to explain the flow in natural fractures. The Fractal Differential Adjacent Segregation (F-DAS)is...

Reviews

This publication is wonderful. It normally is not going to expense too much. Its been printed in an extremely straightforward way in fact it is merely following i finished reading this publication where actually transformed me, modify the way i really believe.

-- ***Russell Adams DDS***

Merely no words to spell out. I am quite late in start reading this one, but better then never. I am happy to explain how this is actually the very best publication we have go through within my personal daily life and can be he best ebook for at any time.

-- ***Althea Christiansen***