Record Nr. UNINA9910808934703321 Fuzzy logic in geology / / edited by Robert V. Demicco and George J. **Titolo** Pubbl/distr/stampa Amsterdam; ; Boston, : Elsevier Academic Press, c2004 **ISBN** 1-281-02052-4 9786611020521 0-08-052189-4 Edizione [1st ed.] Descrizione fisica 1 online resource (374 p.) Altri autori (Persone) DemiccoRobert V KlirGeorge J. <1932-> Disciplina 550/.1/511313 Geology - Mathematics Soggetti Fuzzy logic Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover; Fuzzy Logic in Geology; Copyright Page; Contents; Contributors; Foreword; Preface; Glossary of Symbols; Chapter 1. Introduction; Chapter 2. Fuzzy Logic: A Specialized Tutorial; Chapter 3. Fuzzy Logic and Earth Science: An Overview; Chapter 4. Fuzzy Logic in Geological Sciences: A Literature Review; Chapter 5. Applications of Fuzzy Logic to Stratigraphic Modeling; Chapter 6. Fuzzy Logic in Hydrology and Water Resources; Chapter 7. Formal Concept Analysis in

Geology; Chapter 8. Fuzzy Logic and Earthquake Research; Chapter 9. Fuzzy Transform: Application to the Reef Growth Problem Chapter 10. Ancient Sea Level EstimationAcknowledgments; Index; Color Plates Section

Sommario/riassunto

What is fuzzy logic?--a system of concepts and methods for exploring modes of reasoning that are approximate rather than exact. While the engineering community has appreciated the advances in understanding using fuzzy logic for quite some time, fuzzy logic's impact in nonengineering disciplines is only now being recognized. The authors of Fuzzy Logic in Geology attend to this growing interest in the subject and introduce the use of fuzzy set theory in a style geoscientists can understand. This is followed by individual chapters on topics relevant

to earth scientists: sediment modeling,