Record Nr. UNINA9910791978603321 Autore Macdougall J. D. <1944-> Titolo Why geology matters [[electronic resource]]: decoding the past, anticipating the future / / Doug Macdougall Berkeley, : University of California Press, c2011 Pubbl/distr/stampa **ISBN** 1-283-27799-9 9786613277992 0-520-94892-0 Descrizione fisica 1 online resource (305 p.) RB 10123 Classificazione Disciplina 551.7 Soggetti Historical geology Geology 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 Frontmatter -- Contents -- Illustrations -- Preface --Acknowledgments -- Chapter One. Set in Stone -- Chapter Two. Building Our Planet -- Chapter Three. Close Encounters -- Chapter Four. The First Two Billion Years -- Chapter Five. Wandering Plates --Chapter Six. Shaky Foundations -- Chapter Seven. Mountains, Life, and the Big Chill -- Chapter Eight. Cold Times -- Chapter Nine. The Great Warming -- Chapter Ten. Reading LIPs -- Chapter Eleven. Restless Giants -- Chapter Twelve. Swimming, Crawling, and Flying toward the Present -- Chapter Thirteen, Why Geology Matters -- Bibliography and Further Reading -- Index Sommario/riassunto Volcanic dust, climate change, tsunamis, earthquakes-geoscience explores phenomena that profoundly affect our lives. But more than that, as Doug Macdougall makes clear, the science also provides important clues to the future of the planet. In an entertaining and

accessibly written narrative, Macdougall gives an overview of Earth's astonishing history based on information extracted from rocks, ice cores, and other natural archives. He explores such questions as: What is the risk of an asteroid striking Earth? Why does the temperature of the ocean millions of years ago matter today? How are efforts to predict earthquakes progressing? Macdougall also explains the legacy of

greenhouse gases from Earth's past and shows how that legacy shapes our understanding of today's human-caused climate change. We find that geoscience in fact illuminates many of today's most pressing issues-the availability of energy, access to fresh water, sustainable agriculture, maintaining biodiversity-and we discover how, by applying new technologies and ideas, we can use it to prepare for the future.