1. Record Nr. UNINA9910271044603321 Autore Cemen Ibrahim Titolo Active global seismology: neotectonics and earthquake potential of the eastern Mediterranean region / / Ibrahim Cemen, Yucel Yilmaz Pubbl/distr/stampa Washington, [District of Columbia]:,: American Geophysical Union,, 2017 ©2017 **ISBN** 1-118-94501-8 1-118-94500-X 1-118-94499-2 Descrizione fisica 1 online resource (308 pages): illustrations, tables, maps Collana Geophysical Monograph Series;; 225 Disciplina 551.8091822 Soggetti Geology, Structural - Mediterranean Region Earthquake zones - Mediterranean Region Mediterranean Region Anatolien Griechenland Mittelmeerraum Agais Levante Turkei Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Neotectonics and earthquake potential of the eastern Mediterranean region / Ibrahim Cemen and Yucel Ylmaz -- Part I. Morphotectonic characteristics of neotectonics in Anatolia and its surroundings. Morphotectonic development of Anatolia and the surrounding regions / Yucel Ylmaz -- Diversion of river courses across major strike-slip faults and keirogens / A.M. Celal Sengor -- Part II. Neotectonics of the Aegean-western Anatolian region. Effect of slab-tear on crustal structure in southwestern Anatolia: insight from gravity data modeling / Rezene Mahatsente, Suleyman Alemdar, and Ibrahim Cemen --

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Sommario/riassunto

"Neotectonics involves the study of the motions and deformations of the Earth's crust that are current or recent in geologic time. The Mediterranean region is one of the most important regions for neotectonics and related natural hazards. This volume focuses on the neotectonics of the Eastern Mediterranean region, which has experienced many major extensive earthquakes, including the devastating Izmit, Turkey earthquake on August 17, 1999. The event lasted for 37 seconds, killing around 17,000 people, injuring 44,000 people, and leaving approximately half a million people homeless. Since then, several North American, European, and Turkish research groups have studied the neotectonics and earthquake potential of the region using different geological and geophysical methods, including GPS studies, geodesy, and passive source seismology. Some results from their studies were presented in major North American and European geological meetings. This volume highlights the work involving the Eastern Mediterranean region, which has one of the world's longest and best studied active strike-slip (horizontal motion) faults: the east-west trending North Anatolian fault zone, which is very similar to the San Andreas fault in California. This volume features discussions of: widespread applications in measuring plate motion that have strong implications in predicting natural disasters like earthquakes, both on a regional and a global scale; recent motions, particularly those produced by earthquakes, that provide insights on the physics of earthquake recurrence, the growth of mountains, orogenic movements, and seismic hazards; and unique methodical approaches in collecting tectonophysical data, including field, seismic, experimental, computer-based, and theoretical approaches. Active Global Seismology is a valuable resource for geoscientists, particularly in the field of tectonophysics, geophysics, geodynamics, seismology, structural geology" --