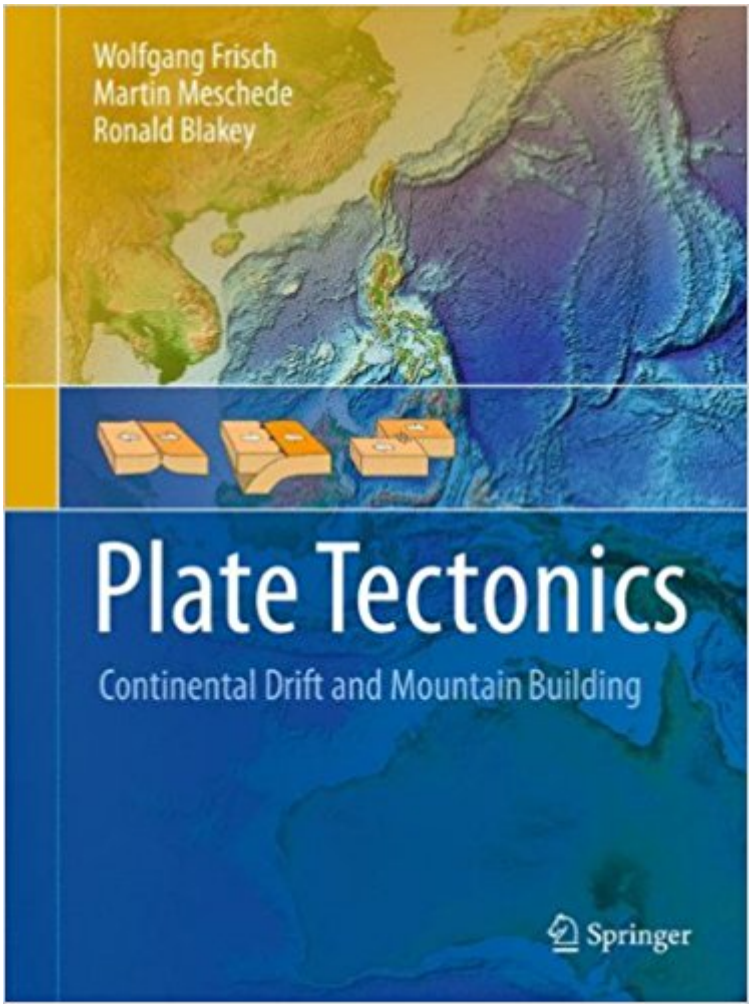
Plate Tectonics: Continental Drift And Mountain Building



Synopsis

How are mountains formed? Why are there old and young mountains? Why do the shapes of South America and Africa fit so well together? Why is the Pacific surrounded by a ring of volcanoes and earthquake prone areas while the edges of the Atlantic areÃ Â relatively peaceful?Frisch andÃ Â Meschede and Blakey answer all these questions and more through the presentation and explanation of the geo-dynamic processes upon which the theory of continental drift is based and which have lead to the concept of plate tectonics.Ã Â

Book Information

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Customer Reviews

From the reviews:Ã¢â ¬Å“The authors discuss all major aspects of the subject in chapters focusing on theory development; plate movements and geometry; continental grabens, margins, and abyssal plains; mid-ocean ridges; hot spots; subduction zones, island arcs, volcanism, and metamorphism; transform faults; terrenes; mountain building; and more. Ã¢â ¬Â¦ One of the bookÃ¢â ¬â„¢s strongest points is the many excellent, colorful maps and cross-sections that complement the text. References to the literature are well chosen. Summing Up: Recommended. Upper-division undergraduate through professional readership.Ã¢â ¬Â• (T. L. T. Grose, Choice, Vol. 49 (2), October, 2011)

Ã¢â ¬Å“Das neue Autorenteam hat ein beachtliches Kompendium zu den algemeninen [sic] und vielen speziellen Grundlagen der Plattetektonik erstellt das in insbesondere durch die didaktische Darstellung voll Ãƒ Â berzeugt. FÃƒ Â r Studierende wie Lehrende und Professionals ein

MuÃƒÅ¸.Ã¢â ¬Â• Besonders hervozuheben: Ã¢â ¬Å“Die klare konkrete Gliederung, die grafische Ausarbeitung sind exzellent, ergÃƒÂ¤nzt durch die sehr gute textliche AbfassungÃ¢â ¬Â• (Prof. Dr.Jochen Kuss, UniversitÃƒÂ¤t Bremen)Ã¢â ¬Å“FÃƒÂ r den Bachelor der Geowissenschaften die erste Wahl zur Vertiefung der ersten Vorlesungen.Ã¢â ¬Â• Besonders hervozuheben: Ã¢â ¬Å“Die Blockbilder sind sehr gut gestaltet, einfach und prÃƒÂ¤zise.Ã¢â ¬Â• (Dr. Reinhard Wolff, GZG Geologie, Georg-August-UniversitÃƒÂ¤t GÃƒÂ¶ttingen)

PLATE TECTONICS is a masterfully written book. It is an outstanding example of scientific rhetoric, the purest form of neat, clean expository writing. The paragraph structure is excellent with strong topic sentences. PLATE TECTONICS is very information-dense, but is written in a style that is easy to understand. As such, it makes an excellent text book about plate tectonics. I have found only two sentences, many pages apart, that digress from facts and are meant to be humor on what was stated in earnest (page 86: writing of a basalt flow that would cover Switzerland 1 km deep, the authors said that such an event "would be prevented by a referendum!" Is this humor about Swiss politics?). My only real criticism of PLATE TECTONICS is that I wish that many of the numerous illustrations were larger because the size of the font in the illustration is not easily read, even with my reading glasses. In sympathy for the authors and all authors of books, the cost of paper is a constraining factor so that larger illustrations would require more paper, hence a greater cost of the book. I commend the authors on the number of illustrations, the quality of the illustrations, and the usefulness of the illustrations in explaining the text. PLATE TECTONICS has forced to learn much more mineralogy than I had known, which was what was learned in general geology. The minerology, however, is very important to understanding the processes being explained in the book. Concerning the theory of plate tectonics, I am more knowledgeable than the average person on the street, but I am greatly humbled by the vast expanse of what plate tectonics involves and the depth of knowledge that geologist have attained. Plate Tectonics should be required reading for all people because we live on a very dynamic planet.

Unusually readable for a geoscience text: seems readable by the lay person.German/European orientation/familiarity comes through in choice of examples (several detailed pages on the Rhine graben vs a paragraph on the US basin and range.) But since "graben" is a german word, maybe that’s appropriate!Many geoscience texts are most useful as references; this one you could read from page 1 like a novel (with pauses for reflection!)

A very good overview for a person with some knowledge of geology, but who is not an expert in the field. The different kinds of subduction and effects on the continental crust are explained very well, plus the kinds of metamorphism associated with subducted oceanic crust. Many examples, from around the world, are used to illustrate the text.

This is the best book so far that I've read on the subject. It is up to date, well written and translated very well. The illustrations are outstanding and contribute greatly to the reader's understanding. There is no superfluous text and so it requires some concentration vs. causal reading. Hence, it's a much "bigger" book than it's 184 pages might indicate.

I love this book, it's a great size and the material is perfectly digestible. It was required for my college level plate tectonics class and it is extremely useful and informative. I recommend this book to teachers because as a student I feel it really helped me learn the subject, it's colorful and inexpensive.

Wow, I am over whelmed buy the thinness of this volume....I was expecting an usual thick & heavy textbook...but I am tackling this text as if it was an advanced college text....isn't that what it is? Anyway I am learning a lot from it on my geology self study program...would highly recommend .

I love this book and the illustrations are some of the best I've seen in eBook/eText formats. BUT, the eText has a problem around the section called "The Accretionary Wedge of the Sunda Arc". The Kindle app stops responding. I deleted and redownloaded the eText but no change. :-(I was able to page past the problem area going from the back to the front direction ok. It only seems to do this paging forward.

Great for bring folk into 21st century geological science!

My Side of the Mountain Trilogy (My Side of the Mountain / On the Far Side of the Mountain / Frightful's Mountain) Metal Deposits in Relation to Plate Tectonics (Minerals and Rocks) Plate tectonics and hydrocarbon accumulation (Education course note series) Biogeography and Plate Tectonics The Presidential Range: Its Geologic History and Plate Tectonics Plate Tectonics and Geomagnetic Reversals Earthquakes: Plate Tectonics and Earthquake Hazards (Hazardous Earth) Wallace's Line and Plate Tectonics (Oxford Biogeography Series) Caribbean gravity field and plate tectonics (Special paper - Geological Society of America ; 169) Plate Tectonics and Geomagnetic Reversals (A Series of books in geology) Earth History and Plate Tectonics: An Introduction to Historical Geology Seismology and Plate Tectonics Metal Deposits in Relation to Plate Tectonics (Minerals, Rocks and Mountains) (Volume 17) The Encyclopedia of Structural Geology and Plate Tectonics (Encyclopedia of Earth Sciences Series)