

GEOPHYSICAL MONOGRAPH SERIES

Compressional Tectonics

Plate Convergence to Mountain Building

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Major mountain belts on Earth, such as the Alps, Himalayas, and Appalachians, have been built by compressional tectonic processes during continent-continent and arc-continent collisions. Understanding their formation and evolution is important because of the hazards associated with convergent and collisional plate boundaries, and because these mountain belts contain resources such as precious metals, rare earth elements, oil, gas, and coal.

Compressional Tectonics: Plate Convergence to Mountain Building reviews our present-day knowledge of the tectonic evolution of the Alpine-Himalayan and Appalachian belts.

Volume highlights include:

- Overview of terminology relating to compressional and contractional tectonics
- Discussion of subduction zone dynamics
- Debates over the timing of the collision and convergence of particular subduction and suture zones
- Examples of the different stages in the development of orogenic belts

This book is one of a set of three in the collection *Tectonic Processes: A Global View*.

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