



Earthquake Processes: Physical Modelling, Numerical Simulation and Data Analysis Part I

By -

Birkhauser. Paperback. Book Condition: New. Paperback. 264 pages. Dimensions: 9.4in. x 6.5in. x 0.7in. In the last decade of the 20th century, there has been great progress in the physics of earthquake generation; that is, the introduction of laboratory-based fault constitutive laws as a basic equation governing earthquake rupture, quantitative description of tectonic loading driven by plate motion, and a microscopic approach to study fault zone processes. The fault constitutive law plays the role of an interface between microscopic processes in fault zones and macroscopic processes of a fault system, and the plate motion connects diverse crustal activities with mantle dynamics. An ambitious challenge for us is to develop realistic computer simulation models for the complete earthquake process on the basis of microphysics in fault zones and macro-dynamics in the crust-mantle system. Recent advances in high performance computer technology and numerical simulation methodology are bringing this vision within reach. The book consists of two parts and presents a cross-section of cutting-edge research in the field of computational earthquake physics. Part I includes works on microphysics of rupture and fault constitutive laws, and dynamic rupture, wave propagation and strong ground motion. Part II covers earthquake cycles, crustal deformation, plate dynamics, and seismicity...



READ ONLINE

Reviews

This is the greatest pdf i actually have go through right up until now. It is actually packed with knowledge and wisdom I found out this book from my dad and i advised this publication to find out.

-- **Arely Rath**

I actually started reading this pdf. It can be rally exciting throgh reading period of time. Your lifestyle span is going to be enhance as soon as you total reading this ebook.

-- **Nya Bechtelar**