



TECTONOPHYSICS

The International Journal of Integrated Solid Earth Sciences

AUTHOR INFORMATION PACK

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DESCRIPTION

The prime focus of *Tectonophysics* will be high-impact original research and reviews in the fields of **kinematics**, **structure**, **composition**, and **dynamics** of the **solid earth** at all scales. *Tectonophysics* particularly encourages [submission](#) of papers based on the integration of a multitude of geophysical, geological, geochemical, geodynamic, and geotectonic methods with focus on:

- Kinematics and deformation of the lithosphere based on space geodesy (e.g. GPS, InSAR), neotectonic studies, tectonic geomorphology, and geochronology;
- Structure, composition, and thermal state of the crust and mantle and their evolution in various time scales based on geophysical and geochemical studies;
- Structural geology, folding, faulting, fracturing, analysis of stress and strain, and rock mechanics;
- Orogenesis, tectonism, thermochronology, surficial processes, land-climate interactions, and Lithospheric-asthenospheric interactions;
- Active tectonics, seismology, mechanisms of earthquakes and volcanism, geological hazards and their societal impacts;
- Rheology and numerical modelling of geodynamic processes;
- Laboratory measurements of physical and chemical parameters of crustal and mantle rocks, and their application to geophysics and petrology;
- Innovative development, including testing, of new methods in geophysics and geodynamics.

Tectonophysics welcomes contributions of three types:

- Regular papers.
- Fast track papers for short, innovative rapid communication, which will usually be reviewed within three weeks after submission. More information about this paper type can be found within the [Guide for Authors](#).
- Comprehensive invited review articles which provide an overview of significant subjects.

Abstracts of maximum 300 words describing the objectives of the research, and the rationale and methods (if relevant), should be included for all article types: regular, fast-track and invited review.

In addition Special Issues devoted to a single topic, and edited by an authority in that field, are also published.

AUDIENCE

Geophysicists, structural geologists.

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To find out more, please visit the Preparation section below.

INTRODUCTION

The prime focus of Tectonophysics will remain on high-impact original research and reviews in the fields of kinematics, structure, composition, and dynamics of the solid Earth at all scales. To better represent the changes we face today, Tectonophysics particularly encourages submission of papers based on the integration of a multitude of geophysical, geological, geochemical, geodynamic, and geotectonic methods with focus on:

- Kinematics and deformation of the lithosphere based on space geodesy (e.g. GPS, InSAR), neotectonic studies, tectonic geomorphology, and geochronology;
- Structure, composition, and thermal state of the crust and mantle and their evolution in various time scales based on geophysical and geochemical studies;
- Structural geology, folding, faulting, fracturing, analysis of stress and strain, and rock mechanics;
- Orogenesis, tectonism, thermochronology, surficial processes, land-climate interactions, and lithospheric-asthenospheric interactions;
- Active tectonics, seismology, mechanisms of earthquakes and volcanism, geological hazards and their societal impacts;
- Rheology and numerical modelling of geodynamic processes;
- Laboratory measurements of physical and chemical parameters of crustal and mantle rocks, and their application to geophysics and petrology;
- Innovative development, including testing, of new methods in geophysics and geodynamics.

Within this space, we are particularly keen to advance Tectonophysics' role in delivering scientific solutions to the pressing issues of our time, namely in reducing our vulnerability to the 'solid-earth' natural hazards and in resource development applications. With growing demand for access to Earth's resources and urgent needs to seek new solutions for dealing with harmful waste, we have enormous benefits to be gained from better a understanding of the physics of this extraordinary dynamic planet.

Types of Paper

Tectonophysics welcomes contributions of three types:

- Regular papers
- Fast Track papers are short, innovative, rapid communications, which will usually complete review within three weeks after submission. Fast track papers are limited to five manuscript pages (maximum 3000 words) and six small figures or equivalent. The editors will decide whether Fast Track submissions are indeed sufficiently innovative for such handling and in case of doubt communicate accordingly with the author.
- Comprehensive invited review articles which provide an overview of significant subjects

The first two types are relatively new to Tectonophysics. Fast track papers will facilitate publication of discoveries in new and dynamic areas, and review papers will help readers to quickly grasp the new development in an important field.

Abstracts, not to be confused with Graphical Abstracts, should be included for all article types: regular, review and fast-track. They provide a short and concise (maximum 300 words) description of the objectives of the research, and the rationale and methods (if relevant). An abstract should focus on presenting the key results and may end with short comments on the wider relevance and implications of the finding(s). It should not be regarded as a summary of the content of the paper and should stand alone. References should be avoided, but if essential, they must be cited with author(s) and year(s). Similarly, non-standard or uncommon abbreviations should be avoided, but if essential, they must be defined at their first mention in the abstract itself.

In addition, Tectonophysics will continue to publish special issues, a distinctive feature of our journal which offers a unique tool to focus in detail on all aspects of a specific subject matter. Special issues should be compiled with a clear objective to provide a coherent and complete set of papers thus adding real value to Tectonophysics. They should be guest-edited by leading researchers in the relevant field and all contributions subjected to the same vigorous review process as applied to the regular papers.

BEFORE YOU BEGIN

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