Special Issue

Inversion in Thrust Belts and Their Forelands

Message from the Guest Editors

Switches in tectonic regimes at plate boundaries, from contraction to extension and vice versa, can be manifest in tectonic inversion, where pre-existing structures and deformation fabrics are reactivated. Positive inversion occurs where extension switches to contraction, the most extreme manifestations of which are collision orogenic belts. Negative inversion occurs where contraction structures extended, manifesting in rift basins developing at sites of former orogenic belts. Since these concepts were defined and applied in the 1980s, a wealth of contributions in the study of inversion processes have been published. Yet, there are still unanswered questions. This Topical Collection provides an overview of the state of the art, after more than thirty years' publication of pioneering papers. We are soliciting case studies at all scales from sedimentary basins, mountain ranges, and foothills/foreland domains whose geological evolution involved episodes of positive or negative inversion. We encourage purely structural investigations along with multidisciplinary studies that combine field evidence with subsurface data and analogue or numerical modelling.

Guest Editors

Prof. Dr. Enrico Tavarnelli

Prof. Dr. Robert W.H. Butler

Dr. Paolo Pace

Deadline for manuscript submissions

closed (31 May 2023)



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Geosciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
geosciences@mdpi.com

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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Editor-in-Chief

Dr. Alberto G. Fairén

- 1. Centro de Astrobiología, CSIC-INTA, Madrid, Spain
- 2. Department of Astronomy, Cornell University, Ithaca, NY, USA

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