



Interactions between Surface Processes, Tectonics and Mantle Dynamics in the Evolution of Topography

Guest Editor:

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closed (30 September 2019)

Message from the Guest Editor

Topography is the integrated result of processes that operate from the depths of the Earth up to its surface, at different time and at different spatial scales. Its "life cycle" starts with tectonics that generate topographic contrasts and set up the boundary conditions for geomorphological processes. Ruled by climate, these latter respond to the tectonic input redistributing rocks via erosion, transport, and sedimentation. These processes load and unload the underlying crust and mantle lithosphere, becoming a forcing factor of tectonics.

In different geodynamic contests, in addition to crustal and subcrustal processes, mantle convection generates a dynamic topography.

In synthesis, to investigate the Earth's topography and to discern the different components of its geometry is a task that needs many expertises.

Therefore, I would like to invite you to submit papers about your recent work on topography from local to regional scales, as a result of the interaction of exogenic and endogenic processes, acting from the surface down to the mantle. This Special Issue is an opportunity to combine different approaches in the research of topography generation and evolution.





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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 coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based 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.

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