



Integration of Methods in Applied Geophysics

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Message from the Guest Editors

Dear Colleagues,

Interpretation in geophysics is commonly done using a single geophysical dataset to obtain an image of a single geophysical parameter. In principle, only an effective integration of the different information can provide an unambiguous and self-constrained interpretative model. In this way, the effectiveness of individual geophysical methods can be enhanced to jointly determine the buried structures by their multiple physical properties. The formalization of this inverse problem therefore requires a joint representation and parametrization of the different media properties in the model. In practice, the question of how to correctly manage multiple data sets invokes the search for well-defined a priori relationships between them. This is an extraordinary and challenging problem due to the high range of variability of chemical and physical conditions within the Earth.

This Special Issue invites researchers in applied geophysics to provide contributions on: (1) innovative theoretical developments for the formalization of the joint inverse problem of different geophysical parameters; and (2) case studies of integrated geophysics in different fields of application.





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Message from the Editor-in-Chief

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