Special Issue

Advanced Data Analysis and Imaging Technologies for Seismic Reservoir Monitoring

Message from the Guest Editors

Seismic reservoir monitoring plays a crucial role in modern geophysical exploration. It is not only vital for oil and gas exploration, development, and production management, it also significant for understanding and predicting geological disasters, for assessing the potential of renewable resources, and for environmental monitoring. Seismic exploration methods allow for the high-precision imaging of subsurface structures and offer quantitative interpretations of reservoir parameters, such as porosity, lithology, and rock–fluid properties through various inversion algorithms. The effective analysis of seismic data using advanced data analysis, inversion, and imaging techniques has become particularly important. This Special Issue aims to collect the latest advancements and innovative methods in seismic data processing, imaging, and interpretation research, especially those technologies that can enhance the accuracy and efficiency of seismic reservoir monitoring.

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As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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