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Physical approach of seismic electromagnetic signals (SEMS)

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Numerous seismic electromagnetic signals (SEMS) have been reported independently and even been applied to short-term prediction of earthquakes, still SEMS are on great debates. The main concerns include the physical generation mechanism of SEMS. Thus, the study on physics of SEMS is important for understanding SEMS phenomena and strengthening the applications of SEMS. As a potential physical approach, we present an integrated working scheme, which take into account the interaction among observation, methodology and physical model. The main approach includes the following key problems: how to perform a reliable and appropriate observation; how to reveal weak SEMS signals from noisy background; how to develop physical models based on theoretical analyses and/or laboratory experiments for SEMS.
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