

Design for Borehole Electromagnetic Observatory in and around Seismogenic Zone

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Stress field and pore pressure have strong effects to earthquake occurrence. Fluid flow is influenced by pore pressure, so that we try to monitor fluid flow in and around the seismogenic zone. We consider that two electromagnetic phenomena are important to obtain information of fluid flow; electrokinetic effect and electrical conductivity variation. In this study, we discuss a design for electromagnetic observation system to monitor the fluid flow in and around the seismogenic zone.