

Use of self-potential (SP) method to understand the groundwater flow system in the basin

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The self-potential method (SP method) is one of the geophysical explorations technique originally used to explore the mineral deposit for mining purposes. Recently, this technique has been applied to understand the geothermal fluid flow in the volcanic area. In those studies is shown the SP by the groundwater flow. The SP created by the groundwater flow is mainly caused by the streaming potential (Ishido and Mizutani, 1981). In this study, we have conducted the SP measurement in the Eino-o basin, Shiranui town, Kumamoto, Kyusyu, Japan. This area conducted the multi-hydrological survey to understand groundwater flow systems. As a result, the observed SP show the hydrological characteristics in this area.