

## The relation between changes in resistivity and groundwater level at Aburatsubo

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A resistivity variometer of very high sensitivity has been in operation at the Aburatsubo Geophysical Observatory about 60 km south of Tokyo since 1968. The variometer records annual and tidal variations. Resistivity reaches its maximum in April and minimum in October with an amplitude of  $10e-2$ . To clear the cause of annual change, we are carrying out continuous observations of ground water level from May, 1999. A good corelation was observed between changes in resistivity and ground water level. However, since the resistivity of groundwater(68ohm-m) in the observation well is higher than that of surface layer(27ohm-m), it is rather contradictory that the ground resistivity decreases when groundwater level rises. It is necessary to consider other mechanisms.