Examination of applicability of soil moisture monitoring by resistivity method in Shirasu plateau

Tomijiro Kubota[1]; Keisuke Inoue[1]; Hiroomi Nakazato[2]; Mutsuo Takeuchi[1]

[1] NIRE; [2] NARO(NIRE)

The soil moisture monitoring by the resistivity method detects the physical quantity of the soil moisture content etc. by using the relation that the electrical specific resistance of the ground reflects the influence in soil moisture, the porosity, and the electric conductivity of soil water. Many attempts of the electrical resistivity methods have been performed to understand the movement of soil moisture and the tracer indirectly by monitoring the ratio of resistance so far. However, there are only a few cases that have analyzed soil moisture content by the result of the electrical resistivity methods in situ condition up to now. Then, the ratio resistance change rate is pursued by the resistivity method in this research for the underground water. And, it considers it together with the result of the soil moisture observation separately done.