

A method for elimination of disturbances caused by leakage currents in a telluric line

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A b s t r a c t: The long-duration recording of telluric currents may be disturbed by leakage currents to ground from the wires connecting the potential-measuring electrodes with the measuring amplifier. In this report we present a new method to eliminate these disturbances. It is based on the diversion of the leakage currents away from the potential-measuring electrode. We describe a simple device which we call a separator. It is installed near the potential-measuring electrode. The main advantage of the separator is that the earthing electrode allows to ground leakage currents that appear in the telluric line. The results of testing of this device are presented.

Key words: telluric line, magnetotelluric method

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