

## **Microwave Remote Sensing of Soils**

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### **ABSTRACT**

The microwave remote sensing of soils can be done by either measuring the parameters like emissivity, brightness temperature, scattering coefficient either by using passive sensors like radiometer at appropriate frequencies or using active sensors like scatterometers and radars.

Another method which can be adopted for microwave remote sensing of soils is by first measuring the dielectric constant of the soils both dry and wet with varying moisture content in the laboratory separately one can obtain the physical constituents of the soils like percent age of clay, sand and silt. Now after measuring the dielectric constant of soil and with the help of available model the emissivity, the brightness temperature the scattering coefficients can be estimated.

For microwave remote sensing of soils, the measured values and the estimated values of emissivity, brightness temperature and scattering coefficient

In this paper, the methodology of estimating the emissivity, brightness temperature and the scattering coefficient of dry and wet soil has been presented.