

# Emission and Scattering behaviour of dry soils from northeast India

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## Abstract

With the database of the dielectric constants of four dry soils from Assam and one dry soil from Meghalaya, the computation of emissivity and scattering coefficient have been carried out using emissivity model and perturbation model, respectively. The database of estimated emissivity and scattering coefficient have been generated at different frequencies of X-band from 8 GHz to 10 GHz. The estimations are made at 12 different angles of incidence and for both vertical and horizontal polarization. The values of emissivity and scattering coefficient can be used for designing passive and active remote sensing sensors.