

Remote-observation and characterization of H₂O-containing rocks in the deep crust

Mineo Kumazawa[1], Naotaka Shigeta[2], Hiroshi Matsumoto[3]

[1] Tono, JNC, [2] JNC, TGC, [3] Tono Geoscience Center, JNC

We discuss the method of remote observation of chemically active H₂O molecules expected to exist in the deep crust. To optimize the electromagnetic sounding approach for this target, we have to understand the nature of strong dielectric dispersion of the relevant materials more in detail and also how such physical properties are observed by propagation of electromagnetic field in heterogeneous crust. We propose several directions of approaches in theoretical and experimental subjects and also in observation.