

Magnetic structure of Tertiary volcanic conduits in the northern part of Ehime Prefecture, Southwest Japan

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Mt.Kabutoyama, Hyogo Prefecture, Japan, which belongs to Setouchi Volcanic Belt shows characteristic magnetic structure. The old volcanic conduit has thin shell magnetized strongly in comparison with inner content. To know the reason, magnetic survey on ground were carried at 11 sites, apparent susceptibility profiling were done at 3 sites, and rock samples were collected at 8 sites in the northern part of Shikoku district. There are similar old volcanic conduits intruded into granites. As a result, these old volcanic conduits don't show the same magnetic anomalies. But natural remanent magnetization and susceptibility of rock samples shows signs of strong magnetized shell of old conduits.