

Mantle heterogeneity beneath an ultra-slow spreading ridge: a preliminary result of "Kaiko" dive to Atlantis Bank, SWIR

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Heterogeneity of the uppermost mantle was investigated on the slope of Atlantis Bank along the Atlantis II FZ of SWIR by submersible "Kaiko". Lherzolite is exposed on an interval of 4500 to 5000 m below the sea level, and harzburgite is exposed upslope, on an interval of 3700 to 3000 m. This kind of heterogeneity has been reported from ophiolites such as Oman. This was possibly formed during primary MORB generation beneath SWIR, an ultra slow spreading ridge.