

Anisotropy of electrical conductivity in the upper mantle beneath ultra fast spreading ridge at East Pacific Rise

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Around the spreading centre at 17 degree S in East Pacific Rise , seismic anisotropy has already been reported (Wolfe et al., 1998). In the same area, we have studied on anisotropy in the upper mantle using electrical conductivity. Anisotropy in the upper mantle is dominated by preferred orientation of olivine that is the major component of the upper mantle. That is, finding anisotropy in the upper mantle leads to reveal movement of mantle flow. Result of this research is in harmony with that of Wolfe et al.(1998). In addition, vertical anisotropy, that represents mantle upwelling around the ridge crest, was also found. This is important since the seismic study conducted so far could not delineate the vertical anisotropy.

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