

Seismic structure around a forearc region of the Northeastern Japan arc.

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Japan Marine Science and Technology Center has carried out two surveys around a forearc region of Japan trench, off Sanriku and off Fukushima. We will report the seismic structure of off Sanriku and compare with that of off Fukushima (Miura et al., 1999). Features of the structure of off Sanriku are as follows. (1) A subduction angle is 12.5 degree at the distance of 130 km west from a trench axis. (2) A depth of the Moho of an arc is about 20 km. (3) P-wave velocity of the upper mantle of an arc is 8 km/s. (4) A low velocity zone (LVZ) exist on an oceanic crust. Large differences between structures of off Sanriku and off Fukushima are shown in the velocity of the upper mantle and the distribution of the low velocity zone.