

Crustal structure off Miyagi fore arc region, Japan Trench

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We have conducted a seismic experiment off Miyagi, and obtained a tentative crustal structure. Island arc crust is composed by five seismic layers: two sedimentary layers (P-wave velocity: 1.7 km/s and 2 km/s), Cretaceous layers (4 km/s), island arc upper (6 km/s) and island arc lower crust (6.7 km/s). Mantle wedge exists from 100-km landward of the trench axis to coastline, and P-wave velocity is 8 km/s.