

## Seismic velocity structure of the island-arc/ocean transition zone beneath Miyagi Prefecture

# Aki Ito[1], Ryota Hino[2], Norihito Umino[2], Tomomi Okada[2], Ayako Nakamura[3], Yoshihiro Ito[2], Minoru Nishino[2], Junichi Nakajima[2], Yasue Soda[2], Akira Hasegawa[3], Akiko Hasemi[4], mio Shimoyama[5], Hidetoshi Miura[6], Tomotsugu Demachi[7], Narumi Takahashi[8], Ayako Nakanishi[9], Seiichi Miura[9], Shuichi Kodaira[9]

[1] RCPEVE, [2] RCPEV, Tohoku Univ., [3] RCPEV, Graduate School of Sci., Tohoku Univ., [4] Earth and Environ. Sci., Yamagata-Univ., [5] Yamagata Univ., [6] Yamagata Univ, [7] Earth and Environmental Sci., Yamagata Univ., [8] DSR, JAMSTEC, [9] FRPSD, JAMSTEC

In Aug. 1999, an offshore seismic exploration using an airgun-array was made by JAMSTEC off Miyagi, the central part of the NE Japan arc. During the experiment, we deployed seismic stations along the landward extension of the marine seismic profile. On the records obtained by the land stations, there are several prominent later arrivals, interpreted as reflections from the deeper part beneath the coastal regions. The travel times of the latest arrivals on the records can be explained reflections from the plate boundary. But our preliminary travel time analysis of the earlier arrivals gives two different structure models: One model with the Moho keeping its depth more than 30 km until about 20 km off the coast; another model with a reflector within the mantle.