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## Detailed seismic attenuation structure in the focal area of the 2008 Iwate-Miyagi Nairiku earthquake (M7.2), NE Japan

Kenta Shikasho<sup>1\*</sup>, Tomomi Okada<sup>1</sup>, Junichi Nakajima<sup>1</sup>, Erika Hayami<sup>1</sup>, Norihito Umino<sup>1</sup>, Akira Hasegawa<sup>1</sup>,

Group for the aftershock observation of the 2008 Iwate-Miyagi Nairiku Earthquake<sup>1</sup>

<sup>1</sup>RCPEV, Grad. Sch. of Sci., Tohoku Univ.

The Iwate-Miyagi Nairiku earthquake with a magnitude of 7.2 occurred in the southwestern part of Iwate Prefecture and the northwest part of Miyagi Prefecture on June 14, 2008. The earthquake occurred in the zone of concentrated deformation along of the Ou Mountain Range. After the quake, the dense temporary seismic network was deployed by the group for the aftershock observations of the 2008 Iwate-Miyagi Nairiku earthquake. From the aftershock distribution, it seemed westward dipping aftershock alignment, and the earthquake was shallow intraplate earthquake with the high-angle reverse-type focal mechanism (Okada et al., 2009). And low velocity zone was observed in the deep part of the focal area.

We examined detailed seismic attenuation structure in and around the focal area of the 2008 Iwate-Miyagi Nairiku earthquake by using the dense temporary seismic network data and the routine network data. As a result, the distinct low Q was observed in the deep part of the focal area. Location of this low Q region was corresponding with those of the low velocity zone beneath the aftershock region (Okada et al., 2009). This low Q and low velocity zone can be interpreted as the high pore fluid pressure in the deep part of the focal area. This suggests the crustal fluids may be related with the occurrence of the 2008 earthquake.