Source modeling for the 2005 off-shore Miyagi prefecture earthquake (Mj7.2),Japan

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A preliminary source model composed of asperities for the 2005 off-shore Miyagi prefecture, Japan, earthquake (Mj=7.2) was estimated by the empirical Green's function method. The source parameters for two asperities located on the fault plane were determined from the comparisons of the synthesized broad-band ground motions with the observed ones at several stations. Resultantly, we pointed out the stress parameters of the asperities are very high (90MPa for Asp-1,30MPa for Asp-2) and these values are nearly equal to that (70MPa) for the expected off-shore Miyagi prefecture earthquake in the near future by Earthquake Research Committee in Japan. However, the location of the asperities is completely not consistent with the expected event.