Se-015

3-D seismic velocity structure in the focal area of the 1999 Kocaeli, Turkey, Earthquake

Ayako Nakamura[1], Akira Hasegawa[1], Akihiko Ito[2], Balamir Ucer[3], Serif Baris[3], Ahmet Isikara[3]

[1] RCPEV, Graduate School of Sci., Tohoku Univ., [2] Utsunomiya Univ., [3] Kandilli Observatory and Earthquake Research Institute, Bogazici University

We determined a detailed 3-D P wave velocity structure of the crust in the focal area of the 1999 Mw7.4 Kocaeli, Turkey, Earthquake. The mainshock occurred in a low velocity anomaly. We found a high velocity area to the east of Sapanca lake, where aftershock distribution and surface rupture don't coincide with each other.