Geophysical Research Abstracts
Vol. 14, EGU2012-14393, 2012
EGU General Assembly 2012

Strong Ground Motion Data from the October 23 and November 9, 2011 Van, Turkey Earthquakes

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An earthquake of Mw = 7.2 on 23 October 2011 occured in the Van region of Eastern Turkey at 10:41 GMT. The epicenter of the earthquake is reported by the Kandilli Observatory and Earthquake Research Institute (KOERI) as 38.7578°N-43.3602°E. This earthquake have caused 604 life losses and around 1 billion USD damage mainly due to total collapse of about 200 residential buildings and other lesser damaged buildings. Shortly after this earthquake, the November 9, 2011 earthquake (ML = 5.6) took place at 19:23 GMT in the Edremit subprovince. KOERI reported the epicenter as 38.4295°N -43.2342°E. 40 people have died after the second damaging earthquake. After the first earthquake by the end of October, the Strong Motion Data Base of Turkey provides data from 22 stations, most of them at large distances beyond 100 km. After the second earthquake, six stations of KOERI and three statios of National Strong Motion network provides strong motion data. We have complemented this strong motion data base through conversion of broad-band seismographic data. We have also simulated strong ground motion in the epicentral area of these two earthquakes. A comparative analysis using ground motion prediction equations is also included.