



Aftershock parameter dependence on local physical properties.

Olga Zakharova and Sebastian Hainzl
GFZ, Potsdam, Germany (olgaza@gfz-potsdam.de)

Earthquake triggering is one of the important aspects for seismic hazard assessment. In the present work, we focus on the aftershock productivity, which can be represented by aftershock sequences parameters α and K , and its dependence on some physical properties. In particular, we are interested in correlations of the aftershock sequences parameters to the tectonic regime, mainshock slip distributions and seismic coupling. We analyze these quantities on global and local scales, using three different data sets: the global USGS PDE, Maule earthquake aftershocks (Chile, subduction zone) and the regional California (US, mainly transform fault) catalogs. We will present an analysis of the local dependence of aftershock productivity parameters α and K on b-value, seismic coupling and slip.