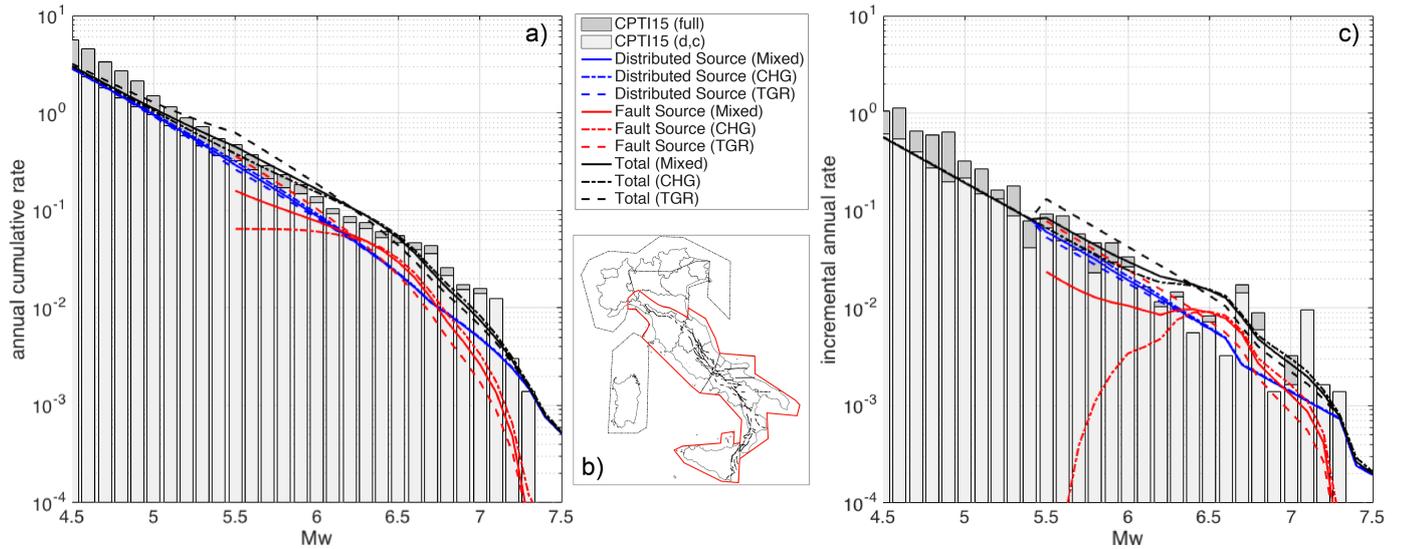
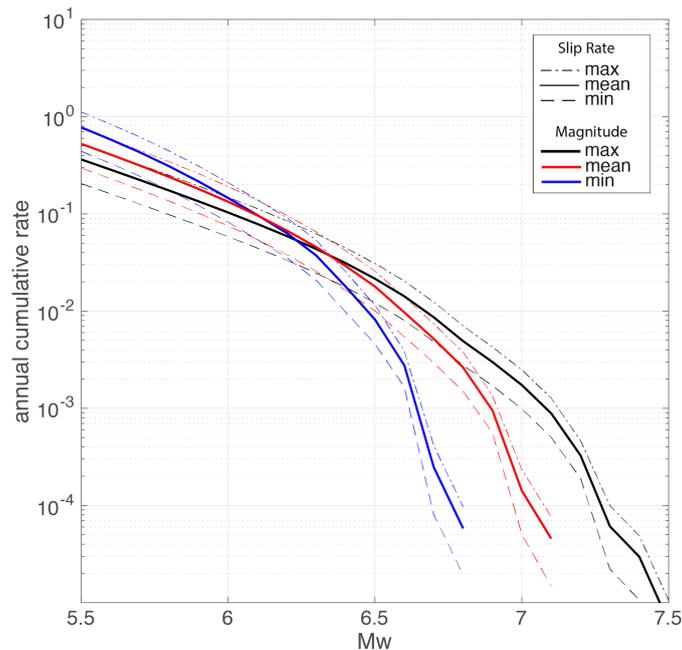


S1 Seismic hazard maps expressed in terms of Peak Ground Acceleration (PGA) and computed for a latitude/longitude grid spacing of 0.05° , for rock site conditions. The figure shows the comparison among our model (Mixed model, on the left), SHARE model (FSBG logic tree branch, in the middle) and the current Italian national seismic hazard map (MPS04, on the right). The same GMPEs (Akkar et al. 2013, Chiou et al., 2008, Faccioli et al., 2010 and Zhao et al., 2006 and Bindi et al. 2014), for all models, have been used to obtain and compare the maps.



S2 a) annual cumulative rate and c) incremental annual rate, computed for the red bounded area in b). The rates have been computed using: (i) the full CPTI15 catalogue; (ii) the declustered and complete catalogue (CPTI15 (d,c) in legend), obtained using the completeness magnitude thresholds over different periods of time given by Stucchi et al. (2011) for five large zones; (iii) the distributed sources; (iv) the fault sources, and (v) summing fault and distributed (Total).



S3 Annual cumulative rate computed for the TGR model by varying the slip rate and the magnitude. The values of minimum and maximum slip rates used to compute the rates are listed in the table 1 of the manuscript. The values of magnitude used to compute the rates are given by the computed maximum magnitude (details in the manuscript) +/- 1 standard deviation.