

## **New statistics of earthquake-fault dip angles**

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The dip angle is one of the fault parameters that most affects seismic hazard analysis because it not only influences the inference of other fault parameters (e.g. down-dip width, earthquake magnitude) but also, and most importantly, controls the fault-to-site distance values in ground motion estimates made through the use of ground motion prediction equations and physics-based simulations. We present the results of a global survey of earthquake fault dip angles and analyze their distribution for various faulting categories. These distributions can effectively be used as priors for characterizing poorly known, or totally unknown, seismogenic faults in seismic hazard analysis.