

**The integration of stress, strain, and seismogenic fault data: towards more robust estimates of the earthquake potential in Italy and its surroundings.**

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The large networks and datasets over the past two decades (GPS/Geodetic, *in situ* stress, seismic catalogues, seismogenic sources) describe independent aspects of the seismic cycle. They help constraining the rate of loading/unloading of the faults listed in the DISS (Database of Individual Seismogenic Sources) of INGV. We use the geodetic strain rate to compute the Coulomb Failure Function on the fault planes of the DISS, *i.e.* the rate at which the regional stress is transferred to each fault; as its sign can be positive or negative, the Coulomb Failure Function rate should ultimately indicate the rate at which every fault for which sufficient geodetic data are available is loading or unloading elastic energy. Our results may ultimately contribute to the assessment of time-dependent seismic hazard in Italy, thus complementing the time-independent approach used for conventional seismic hazard maps.