

Synthesized fractal view of size frequency, spatial distribution and displacement distribution of fault populations.

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We have a synthesized fractal view of size frequency, spatial distribution and displacement distribution of fault populations which are determined only by two parameters; ratio between elastic strain energy density and dissipative energy density, and total input energy density normalized by dissipative energy density ratio.

Any empirical laws of seismicity statistics and any models on them become complete only after we know the nature of the fractal backbone of fault population, because the former is a fractal snapshot going on the latter evolving.