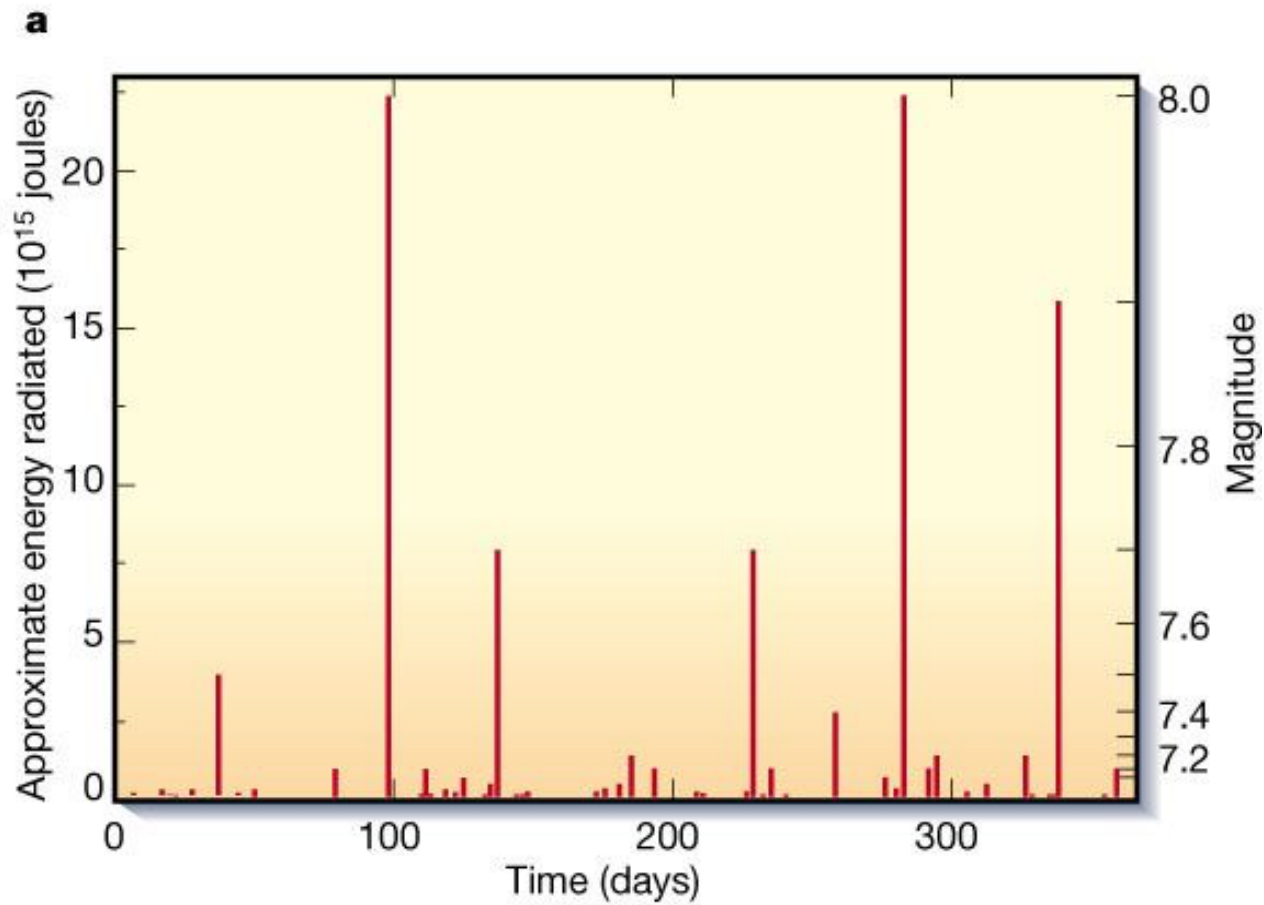
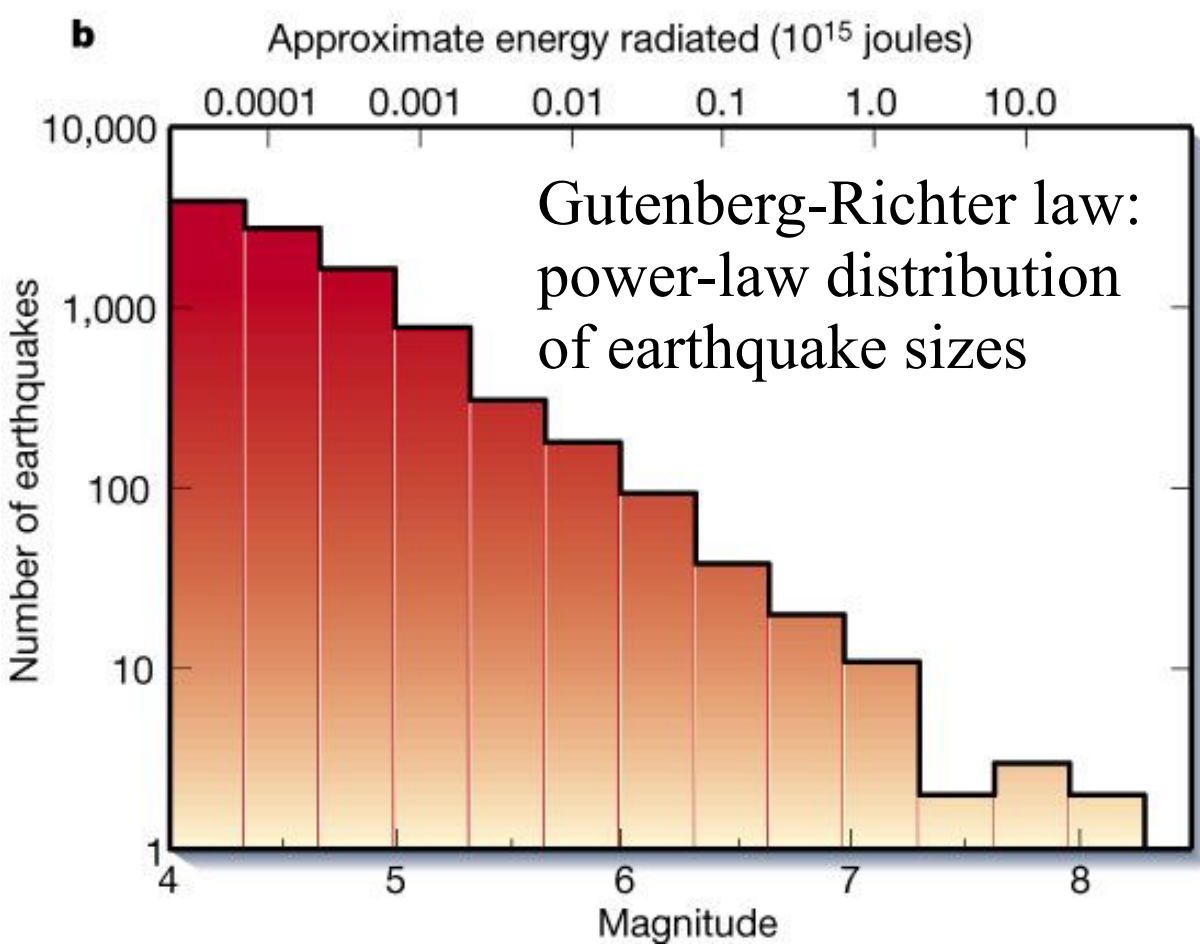


Earthquakes



"Crackling noise" refers to the behavior of systems that do not response with events of a characteristic size, but instead a broad range of sizes

see Sethna, Dahmen & Myers, Nature (2001)



Snap



Crackle



Pop

strong coupling:
dominant failure mode
associated with
weakest link

intermediate coupling:
broad distribution of
response sizes
(avalanches)

weak coupling:
each component
responds more or less
independently

earthquake magnitude is a logarithmic measure of how much energy is released: a magnitude 7 quake is 10 times more powerful than a magnitude 6 quake