ESS 511A: Geophysical Continuum Mechanics Highlight Report #1

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In last class, we begin with discussion of what information Mohr's circle is giving us about the failure and all possible relation between normal and shear stress. We talked about its circular and symmetrical property. Then going back to the three governing equations, we tried (and skipped) to derive a mathematical representation of Mohr's circle. We also had a three dimensional representation of Mohr's circle in a Cartesian Space, which later could be projected into normal-shear stress plane. At last, the coefficient of friction defined by the ratio of shear and normal stress, is briefly introduced.