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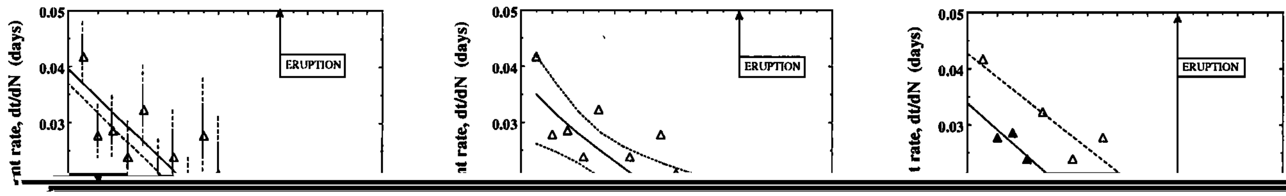
increase exponentially with the length of the crack [*Main et al.*, 1993]. Extrapolating laboratory results to large-scale failure, the bulk rock strain ε due to a *population* of fractures is expected to

$$d\varepsilon/dt = (d\varepsilon/dt)_0\, e^{\lambda(t-t_0)}\, e^{\alpha(\varepsilon-\varepsilon_0)} \qquad (2)$$

where $(d\varepsilon/dt)_0$ is the bulk strain rate at time, t_0, λ is an empirical

(1) the rate of fracture growth is accelerating, and (2) fracturing is occurring at shorter distances from the monitoring equipment, thereby increasing the proportion of small events (e.g. in a

is the increase in seismicity due to accelerated fracture growth, and so the effect of a changing source position must be filtered out.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dome [*Jackson et al.*, this issue] suggests an eruption about

measurement (SSAM) analyses with the Materials Failure

Considered together, eruption windows from different

Mount Pinatubo, in *Fire and Mud: Eruptions and Lahars of*