

Rapid Response efforts in rifts – volcanic eruptions, dike intrusions, and large earthquakes – Tijuana EQ, EAR

Dike intrusions in particular characterized by  $M_L < 5$  EQ's – generally not considered for rapid response – dike dimensions; track magma movement; aftershocks illuminate fault/dike dimensions

Space-based geodesy (GPS, InSAR) – measure stress diffusion rates and vertical/horizontal crustal movements – determine mantle viscosity to rapid opening .

CONSTRAIN RHEOLOGY, DIMENSIONS, ASEISMIC/SEISMIC STRAIN, MAGMA-VOLATILE FLUXES



Keir et al., figure 3

