Structural geology and palinspastic reconstruction of the highly extended Death Valley terrain.

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We seek a motivated and broadly trained structural geologist for a position as Research Assistant in a four-year, multi-institutional, multidisciplinary project funded by the Integrated Earth Systems Program of NSF. M.S degree in-hand is preferred but exceptional candidates with B.S. only will be considered. Starting May or August, 2016

Tasks include:

(1) Fieldwork to improve understanding of late Cenozoic basins and drainage systems, their development, and dismemberment (geological mapping, sedimentology and stratigraphy, geomorphology, volcanic correlation). The area is rugged and steep: good physical condition is required.

(2) Creation of step-wise 3D tectonic reconstructions over the past ~12 Ma, using industry software 3D Move (Midland Valley). Reconstruction geometries will be input to combined geodynamic - hydrologic models being constructed by others.

(3) Dating and correlation of volcanic rocks within stratigraphic sections of interest: $^{40}\text{Ar}/^{39}\text{Ar}$ geochronology of volcanic strata, detrital grain methods, tephrochronology, possibly $^{36}\text{Cl}$ exposure dating.

(4) Communication and collaboration with geologists, geodynamicists, hydrologists and biologists.
The successful applicant will be co-advised by Gary Axen and Fred Phillips at New Mexico Tech.