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Century-long average time intervals between earthquake ruptures of the San Andreas fault in the Carrizo Plain, California

In a new *Geology* paper first authored by Sinan Akciz of UC Irvine, but also with Lisa Grant-Ludwig, Ramon Arrowsmith, and Olaf Zielke, we present the results from paleoseismic investigations along the south-central San Andreas Fault. The new results show that earthquakes along the southern San Andreas Fault were more frequent than previously thought (closer to a century or less as opposed to 140 years or longer). What we cannot say definitively is how big they were except they were between M6.5 (surface rupture threshold) and a great event (M7.9)

Here are some pictures from balloons at the site:

<http://arrowsmith.blog.asu.edu/2010/02/12/balloon-aerial-photography-update/>

You can freely download the paper here:

<http://geology.geoscienceworld.org/cgi/content/full/38/9/787?ijkey=L.v/ED2rYsRcw&keytype=ref&siteid=gsgeology>

Their key figure is this one:

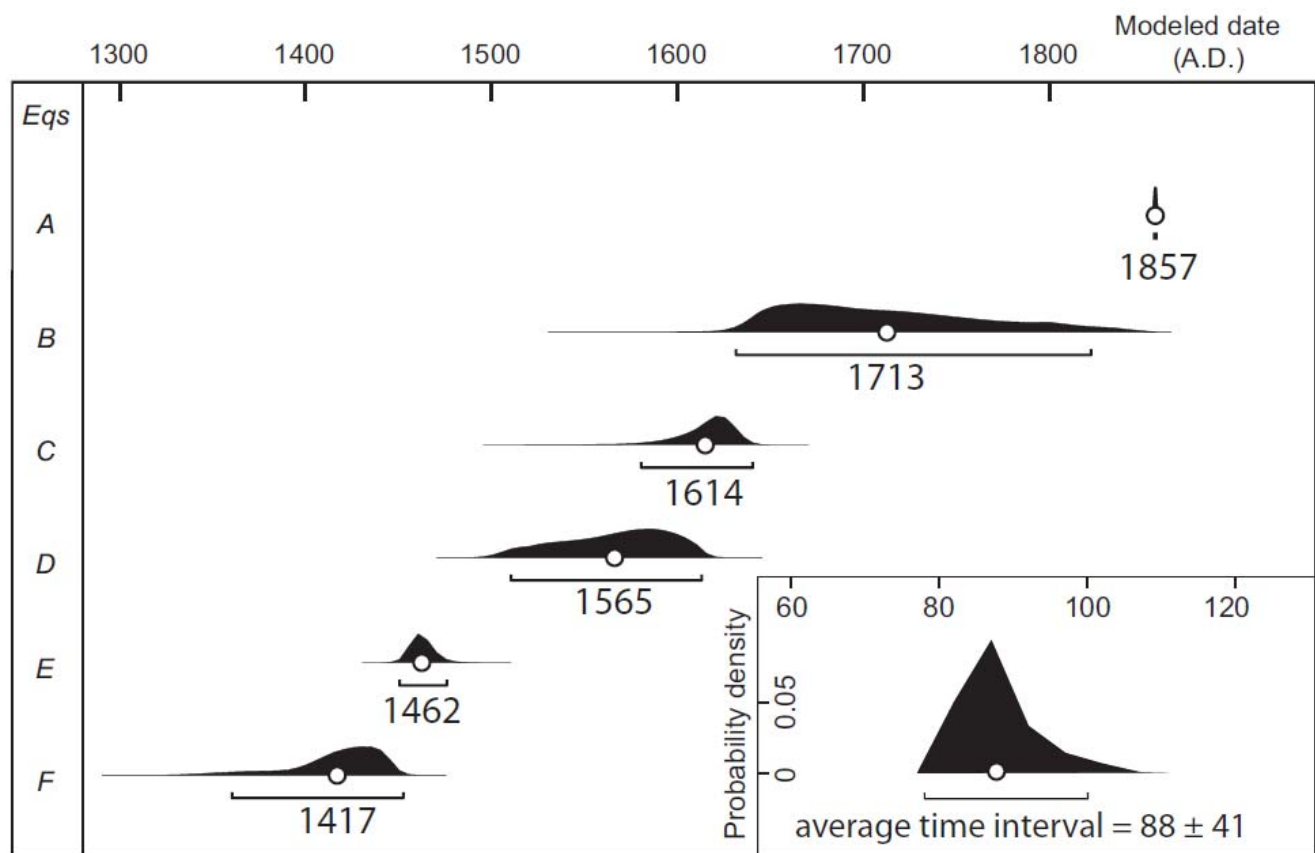


Figure 3. Probability density functions for earthquake (Eqs) ages at Bidart Fan site calculated by OxCal (Ramsey, 2005). Lines below each distribution show limit of 95.4 percent confidence ranges for these earthquakes. Numbers below lines indicate median age. Inset shows probability density function of average time intervals between earthquakes that occurred in Carrizo Plain between ca. A.D. 1360 and 1857, as well as mean and standard error, which only account for dating uncertainties.

Here is a related older post about a recent publication:

http://www.opentopography.org/index.php/news/detail/opentopography_enables_detailed_analysis_of_san_andreas_fault_new_results

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