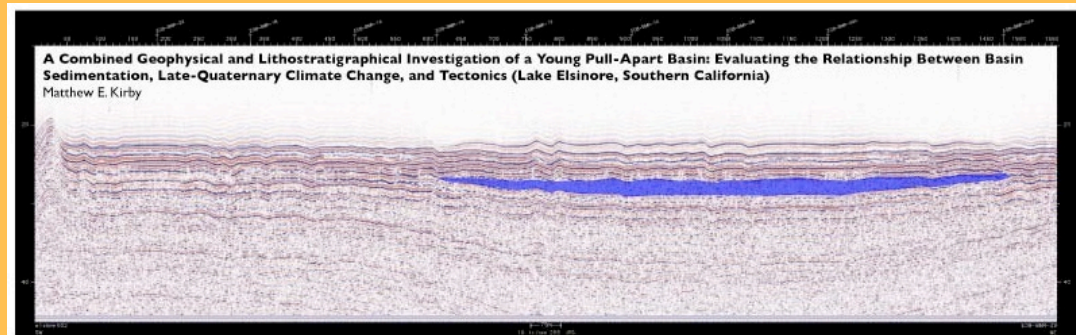
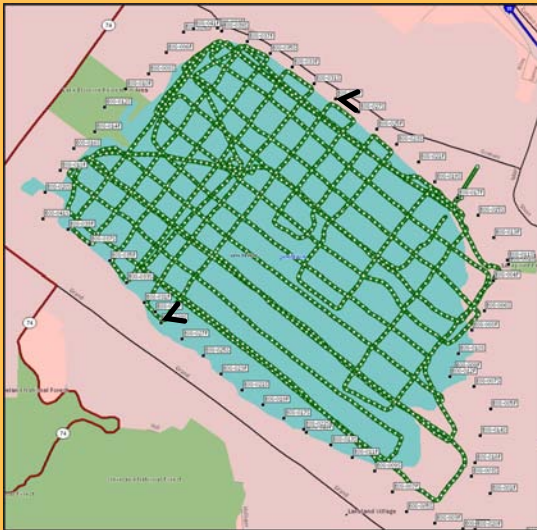


A Combined Geophysical and Lithostratigraphical Investigation of a Young Pull-Apart Basin: Evaluating the Relationship Between Basin Sedimentation, Late-Quaternary Climate Change, and Tectonics (Lake Elsinore, Southern California)
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Example of seismic reflection line 29 crossing the lake from north to south. Highlighted wedge indicates late-Holocene low stand.

The goals for the first year were achieved with success. We acquired a full suite of seismic reflection data from Lake Elsinore. From December 8 to December 10, 2009, we collected over 75km of combined chirp and boomer seismic reflection data with the help of Dr. Chris Scholz and Mr. Pete Cattaneo from Syracuse University. Cal-State Fullerton MSc student, Ms. Brittany Pyke, traveled to Syracuse University for one week in spring 2009 to work with Chris and Pete on processing the data. She will travel to SU again this fall for another processing and interpretations trip. Initial results will be presented this spring at AGU. The figure above shows initial boomer data across line 29 (see arrows). The depth of image is about 13m and the length about 2.5 km. The blue highlighted area shows the extent of the proposed late-Holocene lowstand. The upper stratal terminations of this lowstand sequence are truncated, which indicates an erosional surface during the proposed lake level regression.

