



PARKFIELD
CAFE

2026 SCEC Parkfield 2.0 Workshop

Envisioning the future of earthquake system science in the Parkfield region through collective insight, collaboration, and community activities.

Date: June 10-11, 2026

Location: NASA Silicon Valley Event Center, Moffett Field, CA

Workshop Organizers: Bill Ellsworth (Stanford), Roland Burgmann (UC Berkeley), Cliff Thurber (UW Madison), Yihe Huang (UM Ann Arbor), Andy Barbour (USGS), Nathan Toke (Utah Valley)

SCEC Award: 26052

[View Workshop Report](#)

Ellsworth, W. L., Bürgmann, R., Thurber, C. H., Huang, Y., Barbour, A. J., & Toke, N. A. (2026). 2026 SCEC Parkfield 2.0 Workshop Report: Statewide California Earthquake Center.

Day 1:

Session 1: Introduction to Parkfield and State of Knowledge

Session 2: Geology and SAFOD Legacy

Session 3: Parkfield Earthquakes and Fault Behavior

Day 2:

Session 4: Geodesy and Earthquake Cycles

Session 5: Critical Research Needs and Opportunities.

Panelists: Tim Dawson (CGS), Kim Blisniuk (San Jose State), Elizabeth Cochran (USGS), Ahmed Elbanna (USC), Allison Faris (USGS)

Breakout Sessions (see posted breakout summaries):

1. Modernizing the Observatory: Existing Networks, and New Instrumentation
2. Operational Readiness
3. Earthquake Precursors, Nucleation and Rupture
4. Defining Parkfield 2.0
5. Parkfield Earthquakes and Interaction with 1857-Type Events
6. Earthquake Cycles



<https://bit.ly/4xZLsno>

Research Needs and Opportunities

The sequence of M 6 earthquakes, with the most recent one now 22 years ago, present a strong target for investigation of the earthquake preparation process

The SAF at Parkfield displays the full range of the fault slip spectrum: slow slip events, tremor and low frequency earthquakes, making it an accessible target for a wide range of research questions.

Parkfield plays a key but largely unknown role in the initiation of the 1857 earthquake and possibly future great earthquakes.

The San Andreas Fault Observatory at Depth (SAFOD), now instrumented with a DAS array, is opening new research possibilities for studying both earthquake sources and crustal structure.



Research Needs and Opportunities

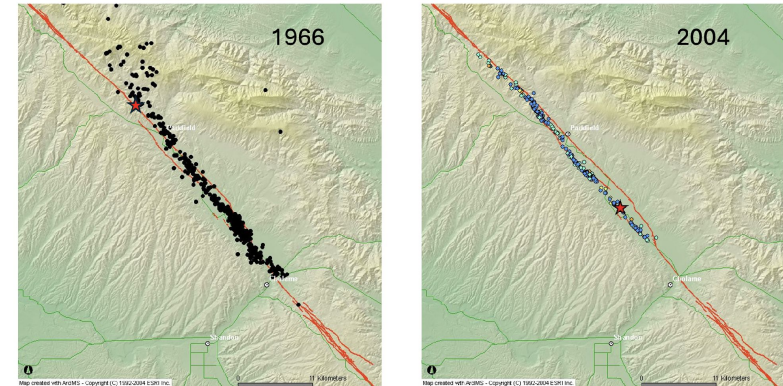
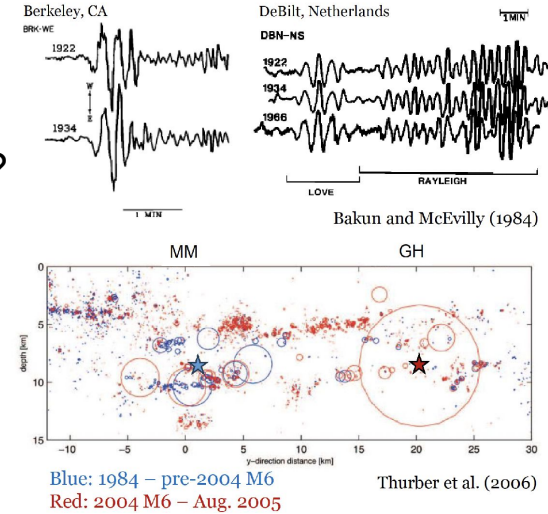
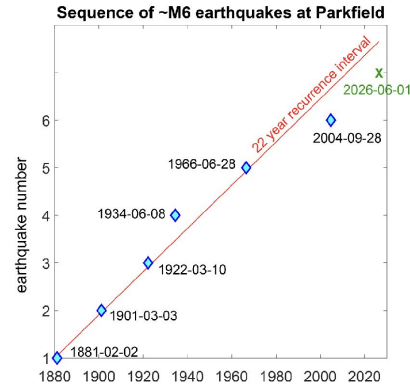
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Why Parkfield?



Similar rupture lengths and magnitudes, different epicenters and slip distributions

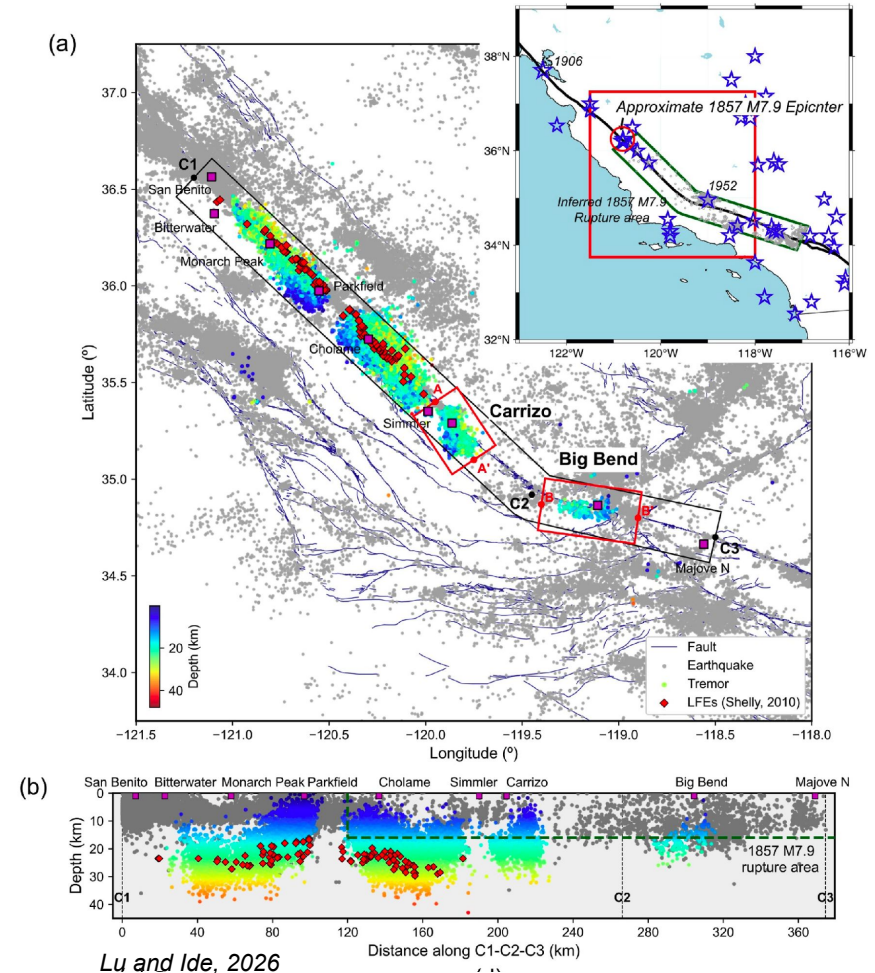
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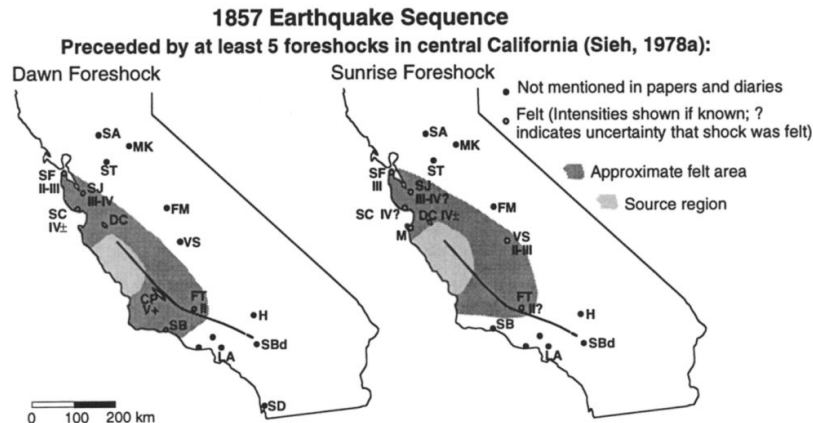
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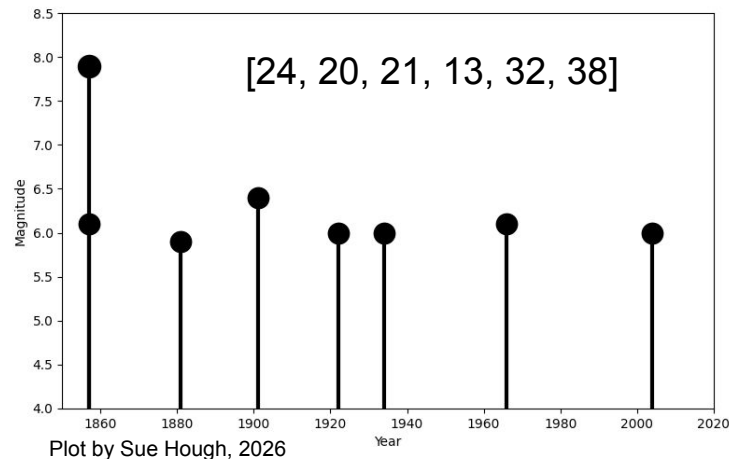
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8:24 am PST, 9 January, 1857 Fort Tejon Earthquake (Agnew and Sieh, 1978):
From R. Arrowsmith et al., 1997



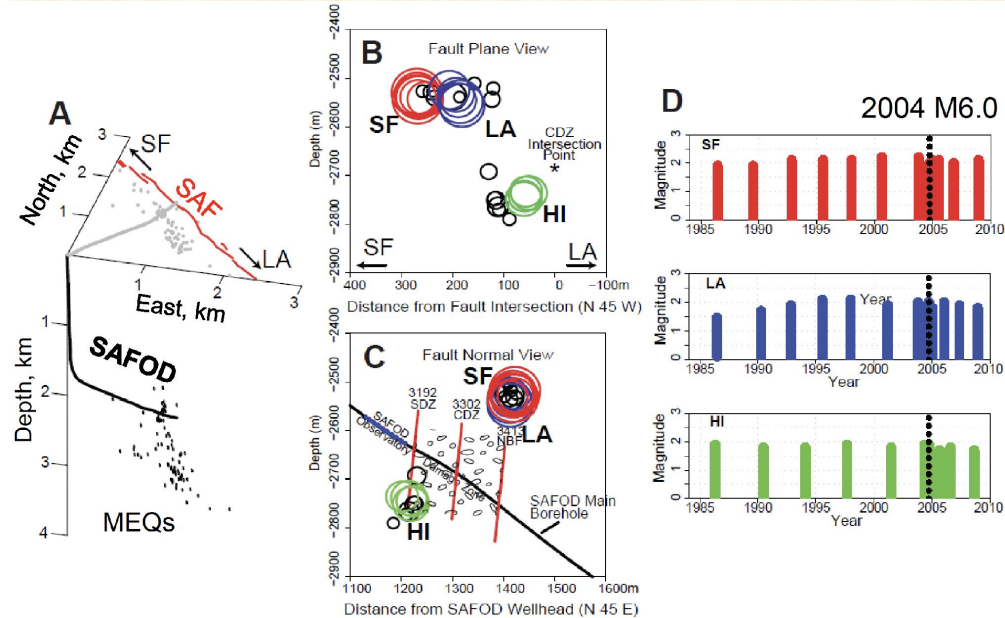
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