

# Section 1 of Electronic Supplement

to

Displacement and Geometrical Characteristics of Earthquake Surface Ruptures: Issues and Implications for Seismic Hazard Analysis and the Process of Earthquake Rupture.

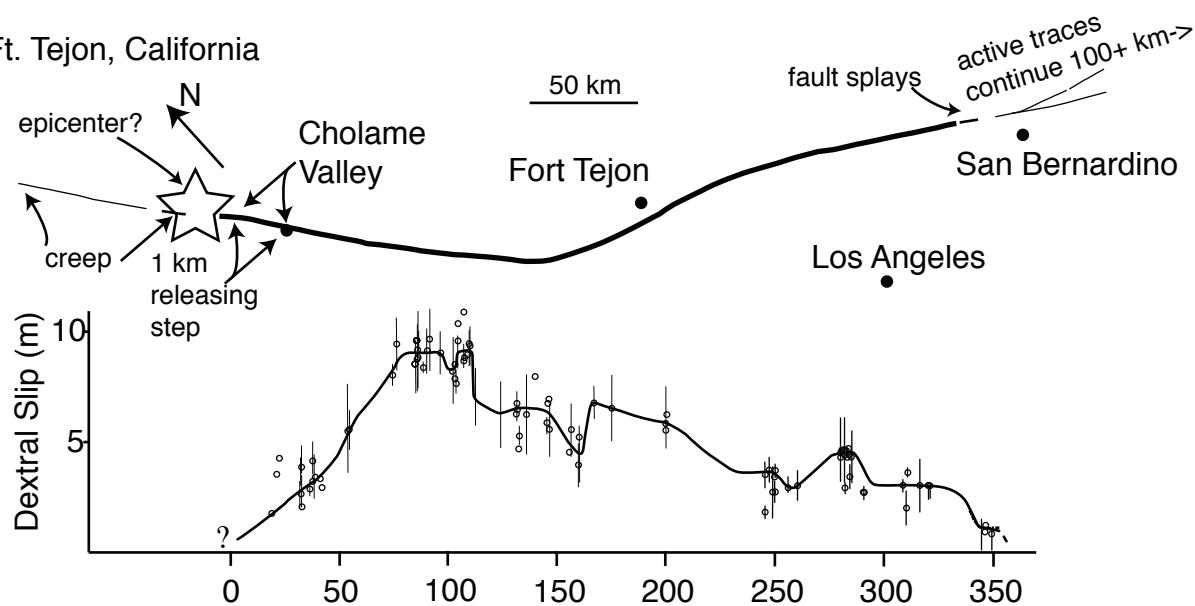
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Mail Stop 169  
University of Nevada, Reno  
Reno, Nevada 89557

## Compilation of Maps and Earthquake Slip Distributions for Earthquakes Listed in Table 1

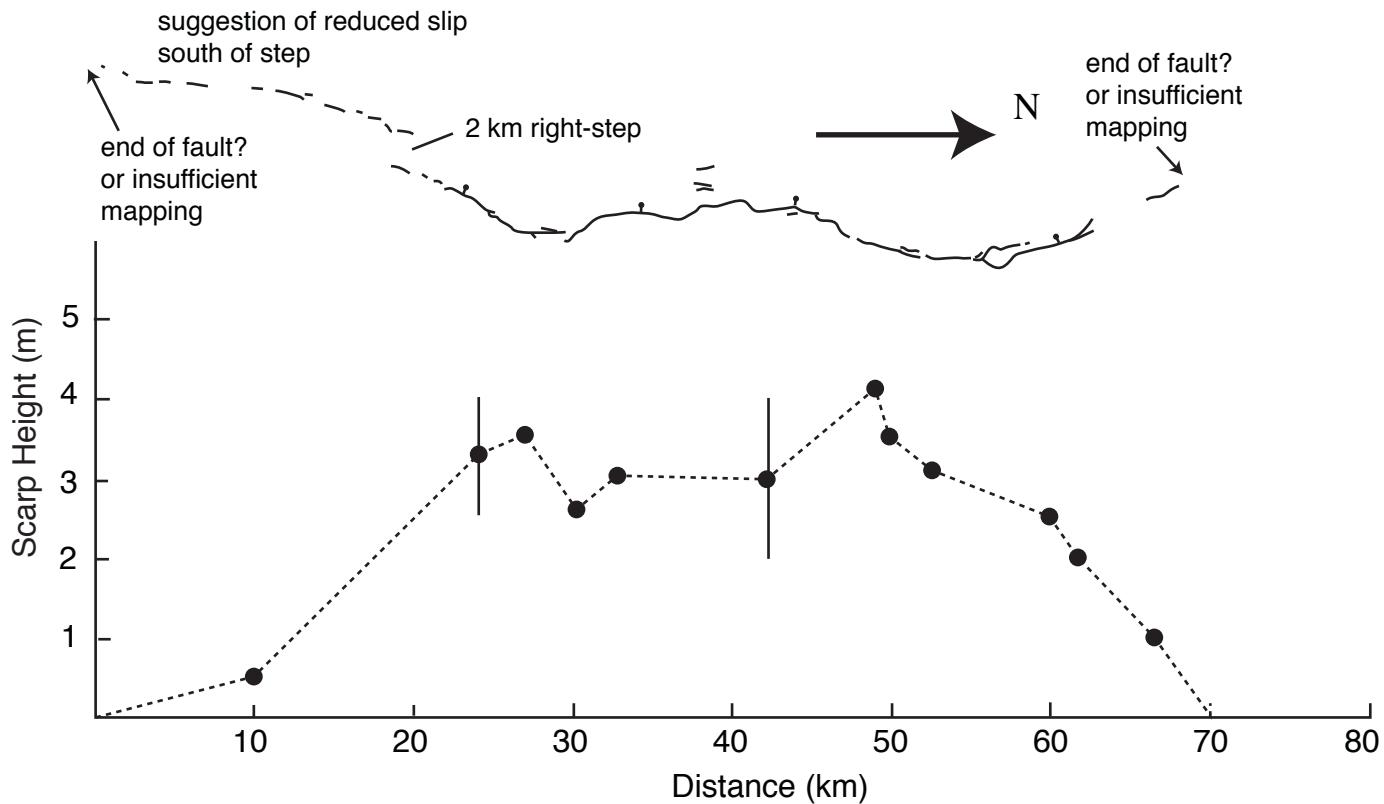
### Notes:

The maps and slip distributions here are presented and annotated in the same manner as shown and described in the captions of Figure 1a and 1b. The distance scale and map scale are set to be the same in the respective plots. The sources of information are referenced in Table 1. Fault maps and slip distributions are presented by geologists in varying formats and styles and, as well, the resolution, type of measurement (e.g. scarp height or vertical separation or slip) and density of slip measurements vary between earthquakes. The characteristics of the individual maps and slip distributions will thus differ because I have attempted to preserve the original presentation when redrafting the data. In some cases I have not explained particular symbols used in the original manuscripts and it may be necessary to refer to the original papers for explanation of particular symbols used by the authors that originally drafted the maps and slip distributions. The intent is to allow the reader to quickly assess the relative detail of the original slip distributions and observe the particular assignments of discontinuity locations and sizes used in development of various plots in the manuscript. The reader interested in presentation of the slip distributions in a systematic and singular format should refer to plots of the digitized slip curves presented in electronic supplement 2. Sources of information are referenced in Table 1.

**EVENT 1**  
Jan 9 1857 Ft. Tejon, California

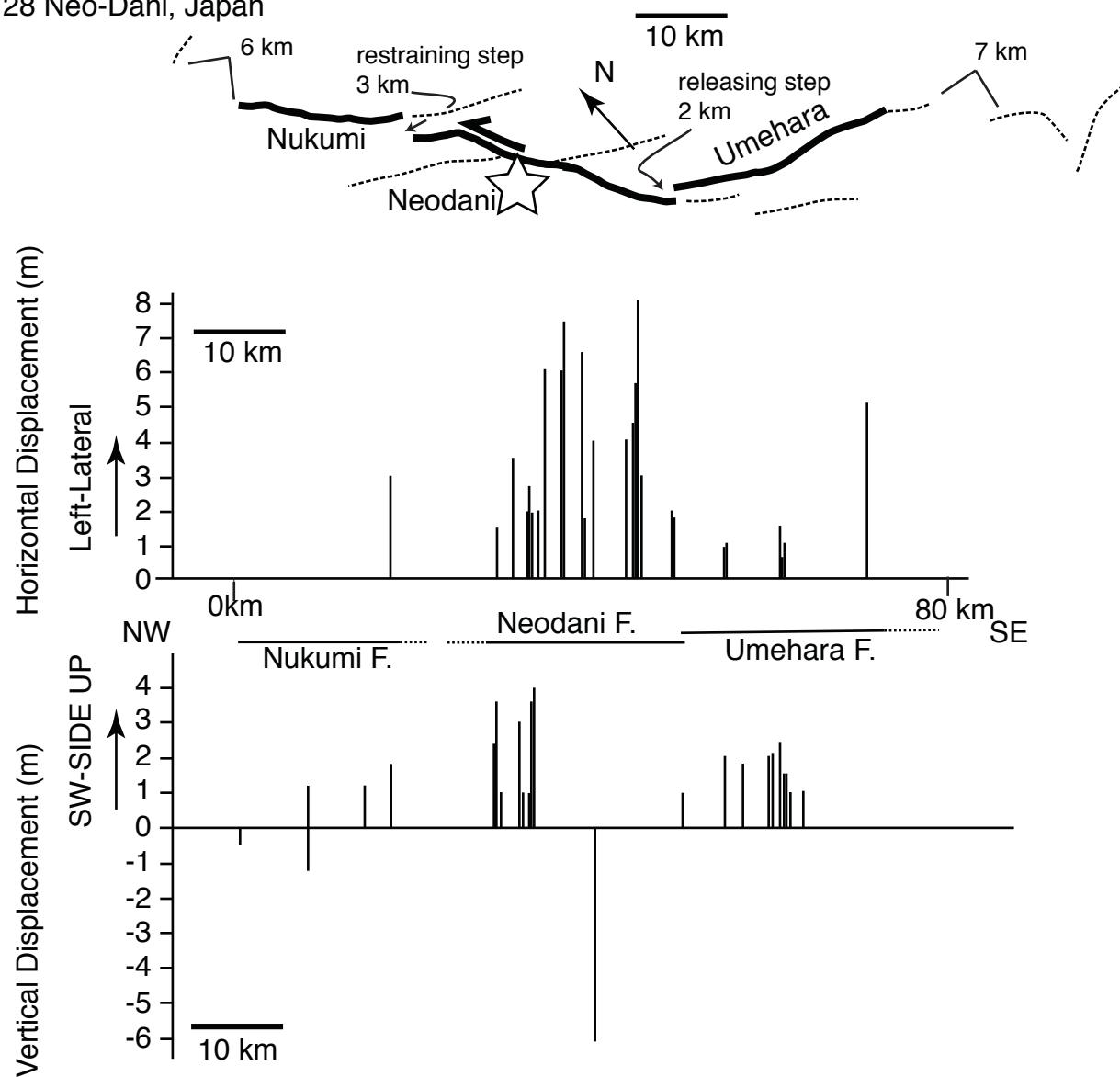


**EVENT 2**  
May 3 1887 Sonora, Mexico

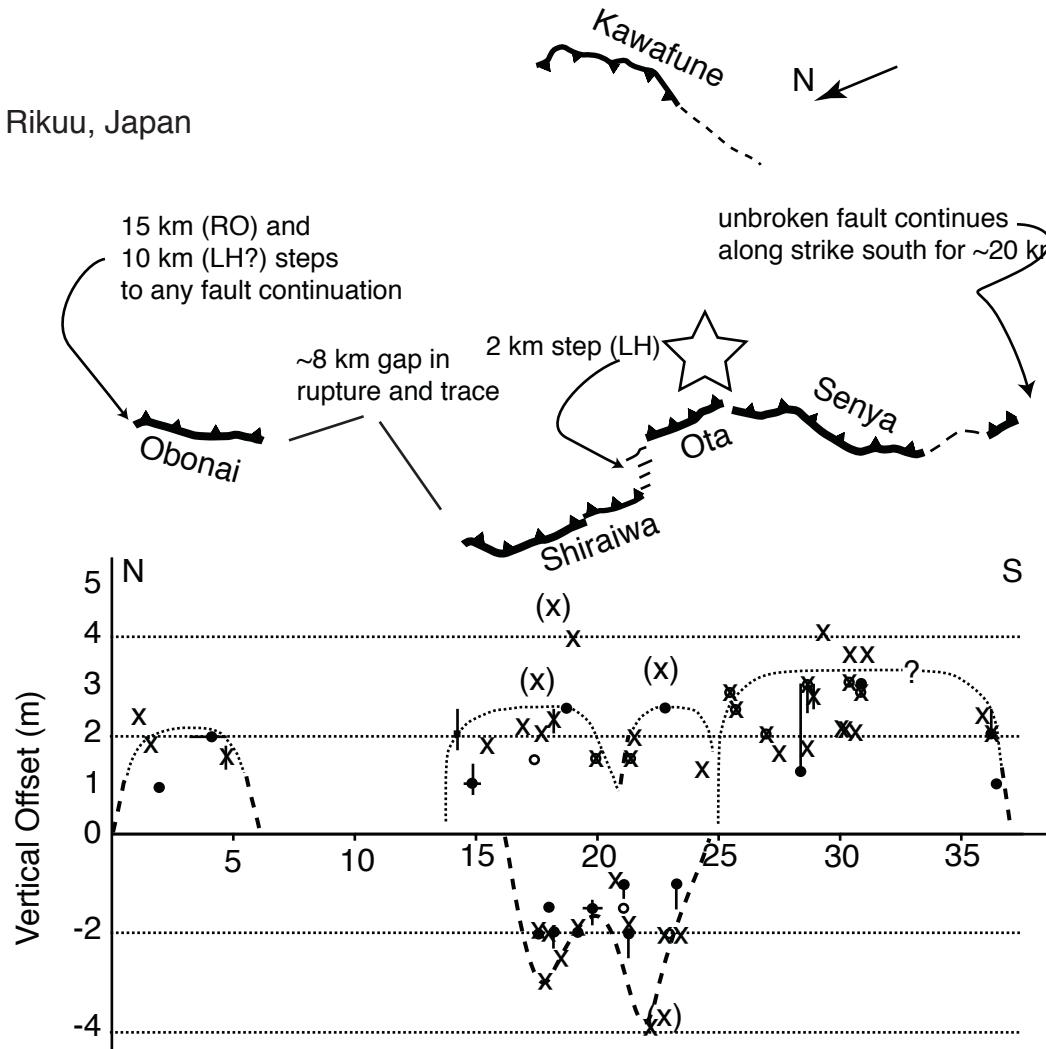


EVENT 3

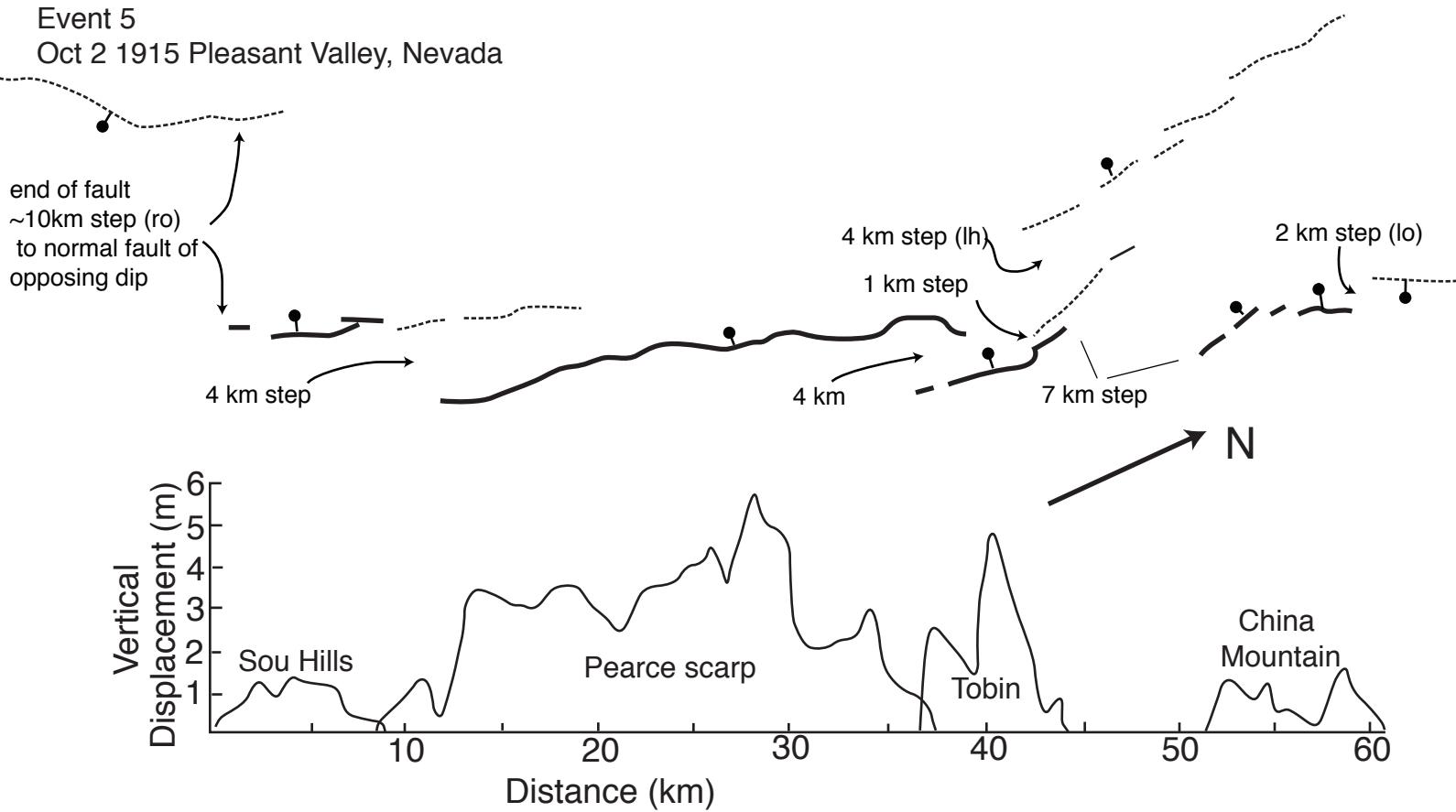
1891 Oct 28 Neo-Dani, Japan



Event 4  
Aug 31 1896 Rikuu, Japan

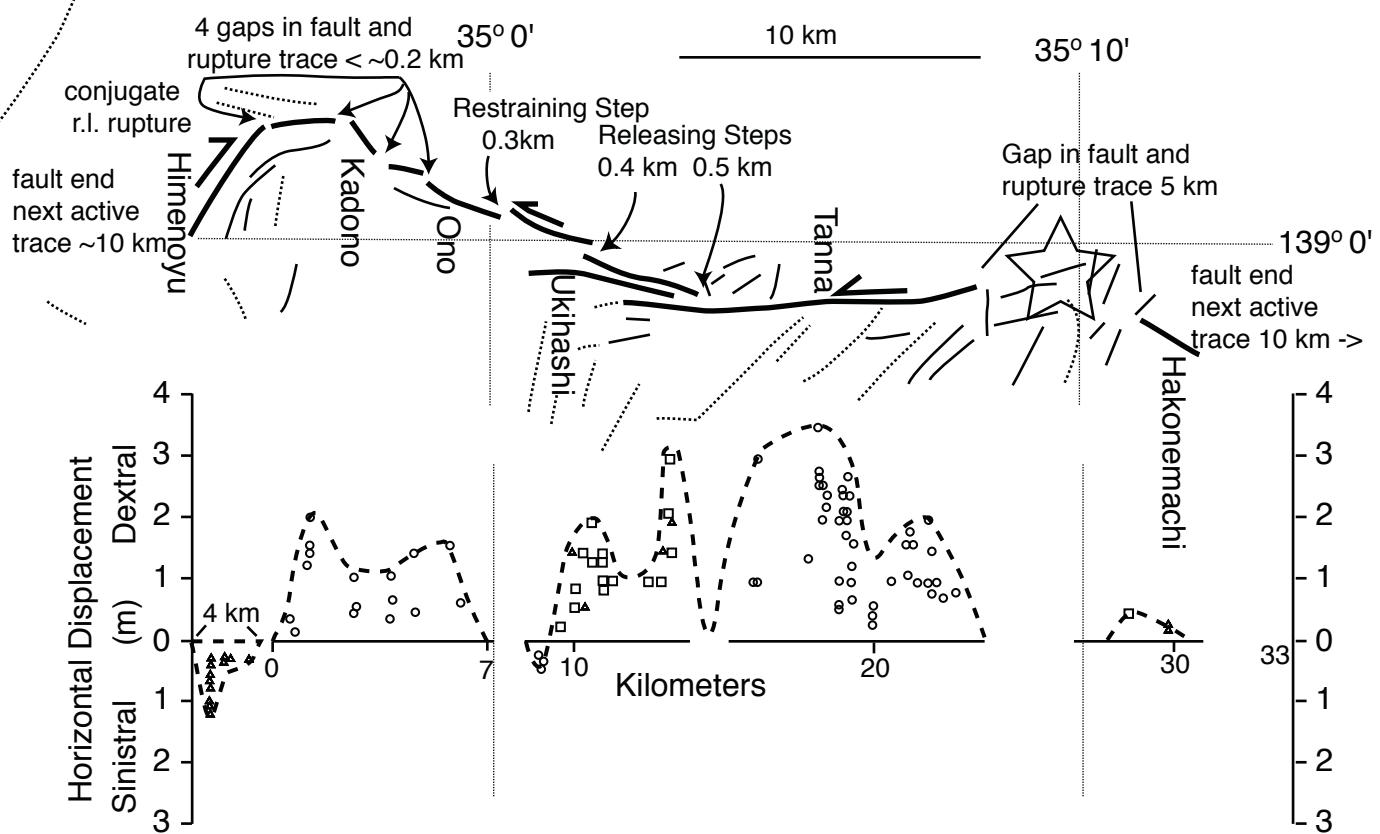


Event 5  
Oct 2 1915 Pleasant Valley, Nevada



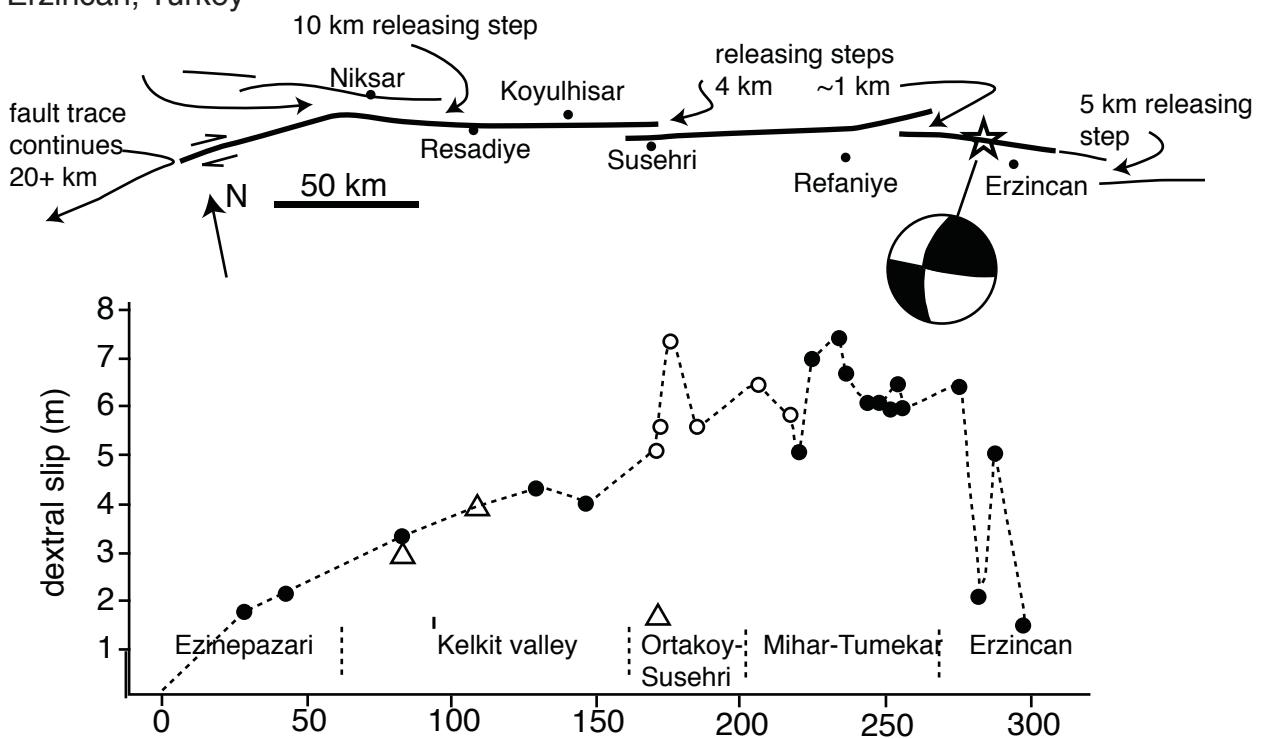
## Event 6

Nov 2 1930 Kita-Izu, Japan



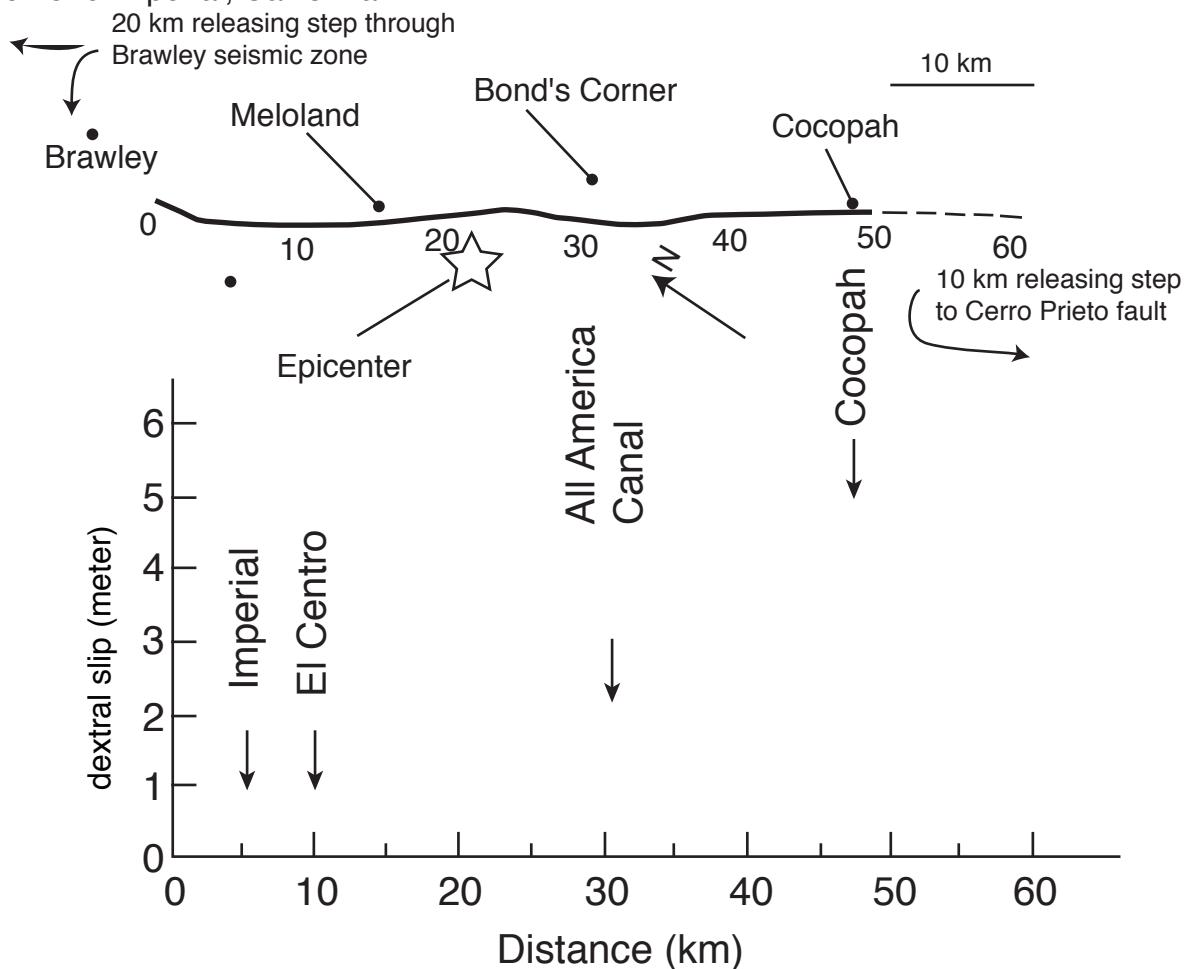
## Event 7

Dec 25 1939 Erzincan, Turkey



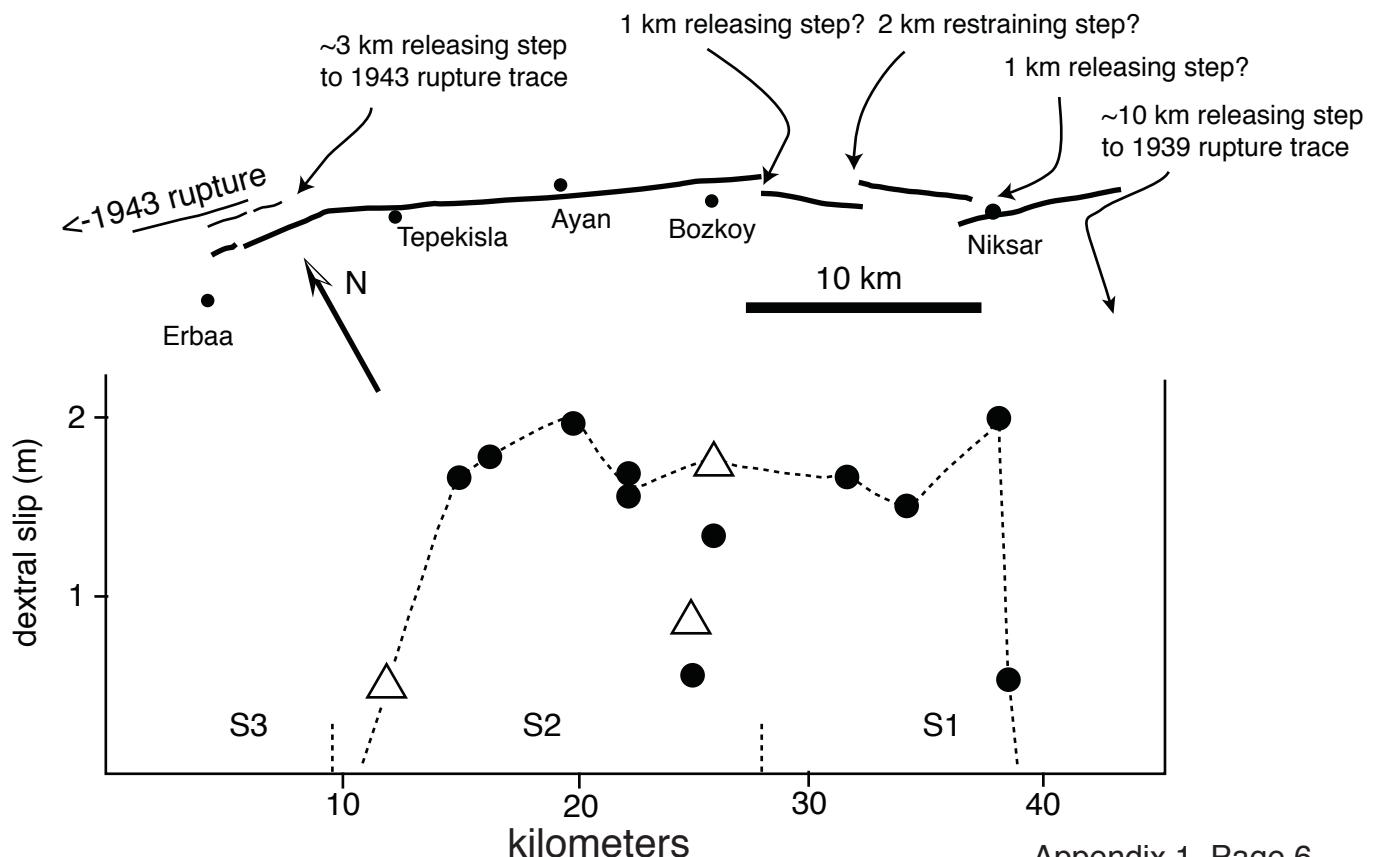
### Event 8

May 19 1940 Imperial, California

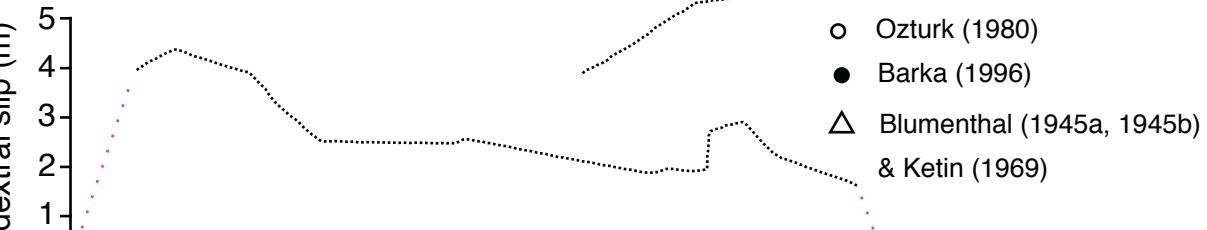
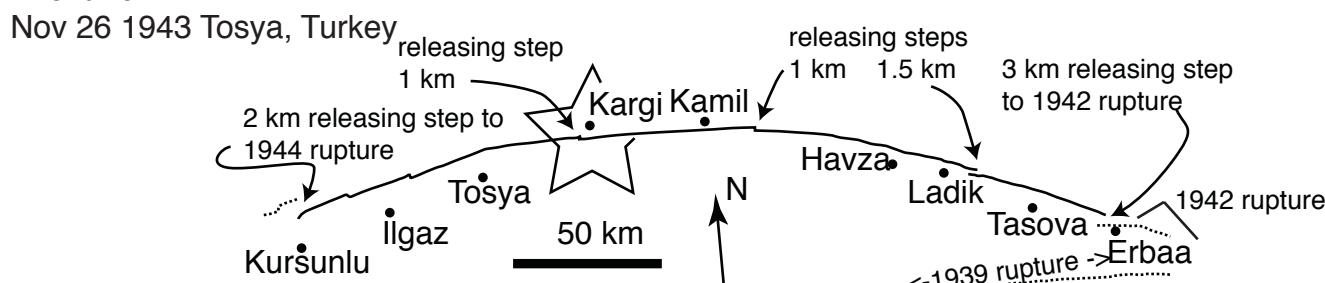


### Event 9

Dec 20 1942 Erbaa-Niksar, Turkey

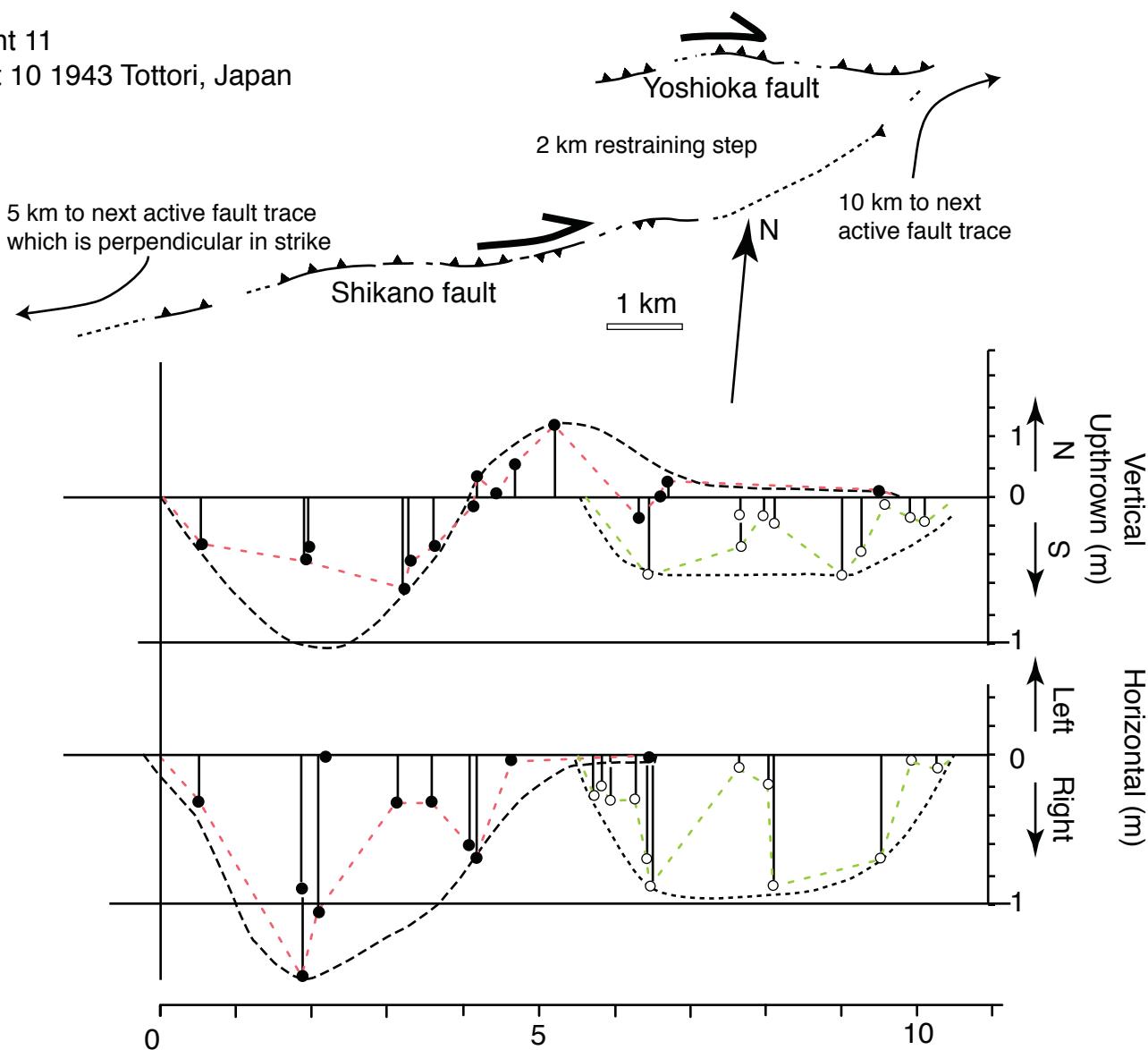


### Event 10

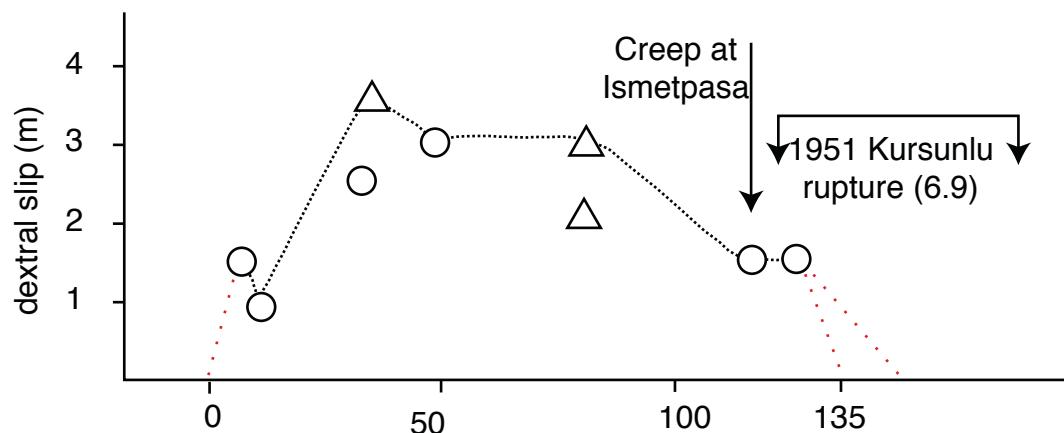
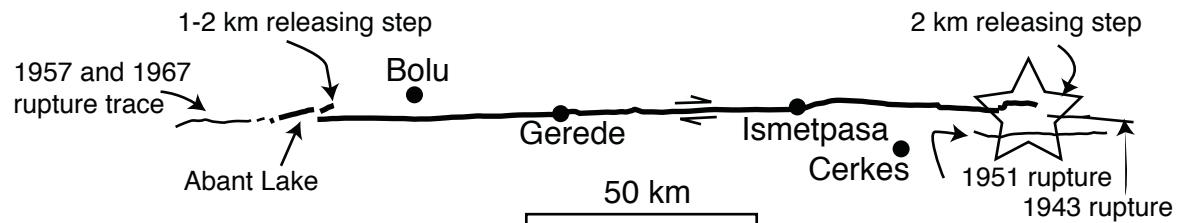


### Event 11

Sept 10 1943 Tottori, Japan

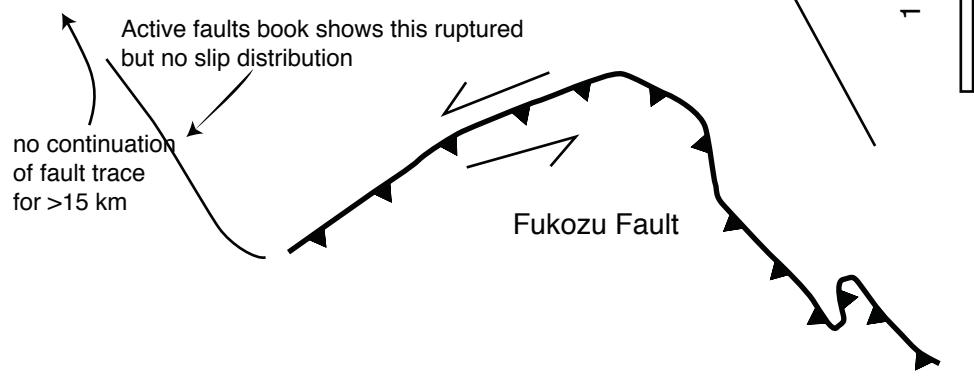
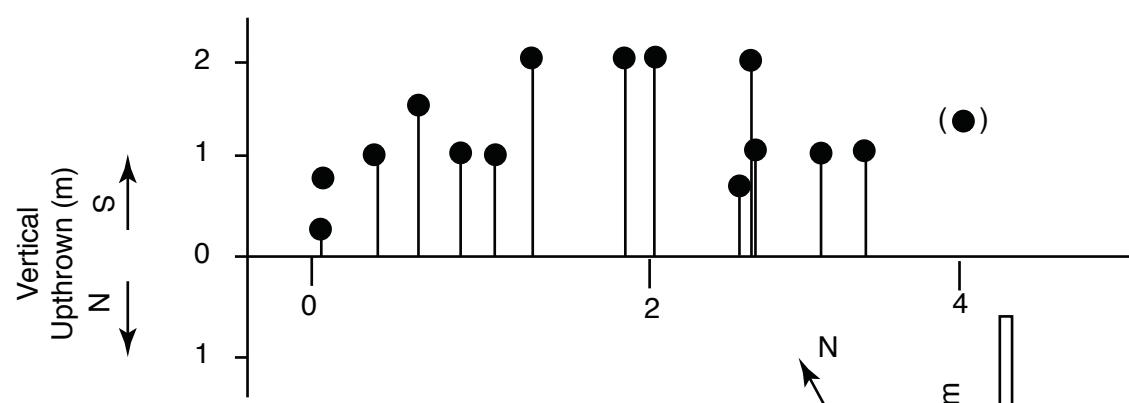
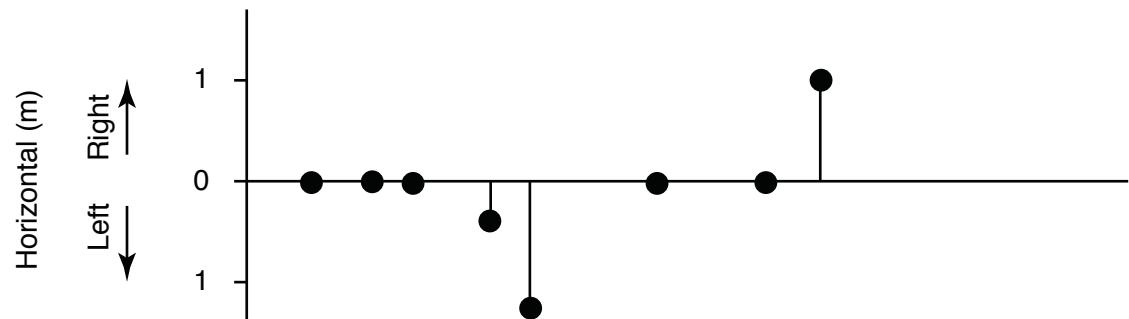


Event 12 Feb 01 1944 Gerede-Bolu, Turkey



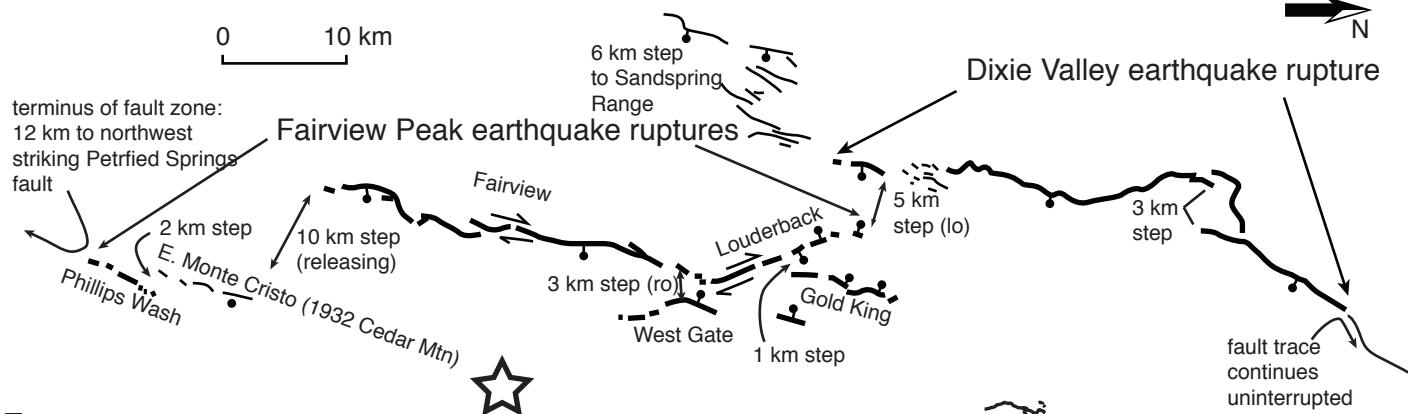
Event 13

Jan 31 1945 Mikawa, Japan

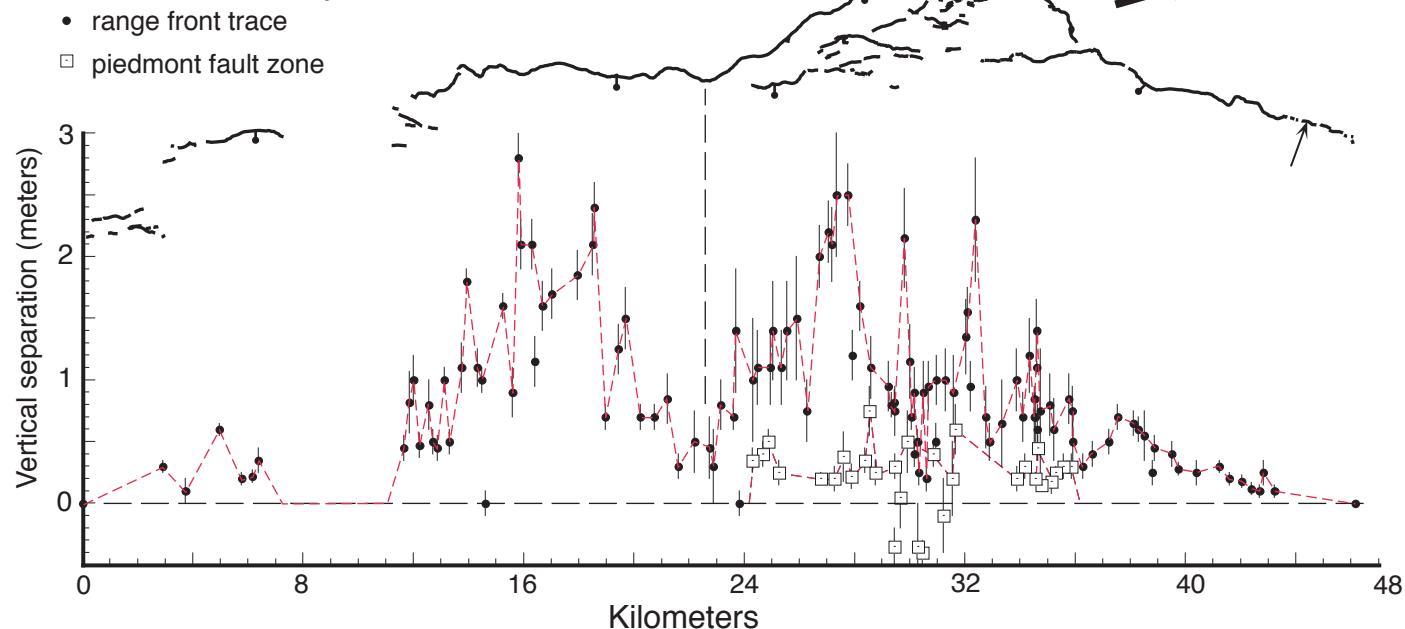


## Events 15 and 16

### Dec 16 1954 Fairview Peak and Dixie Valley - OVERVIEW

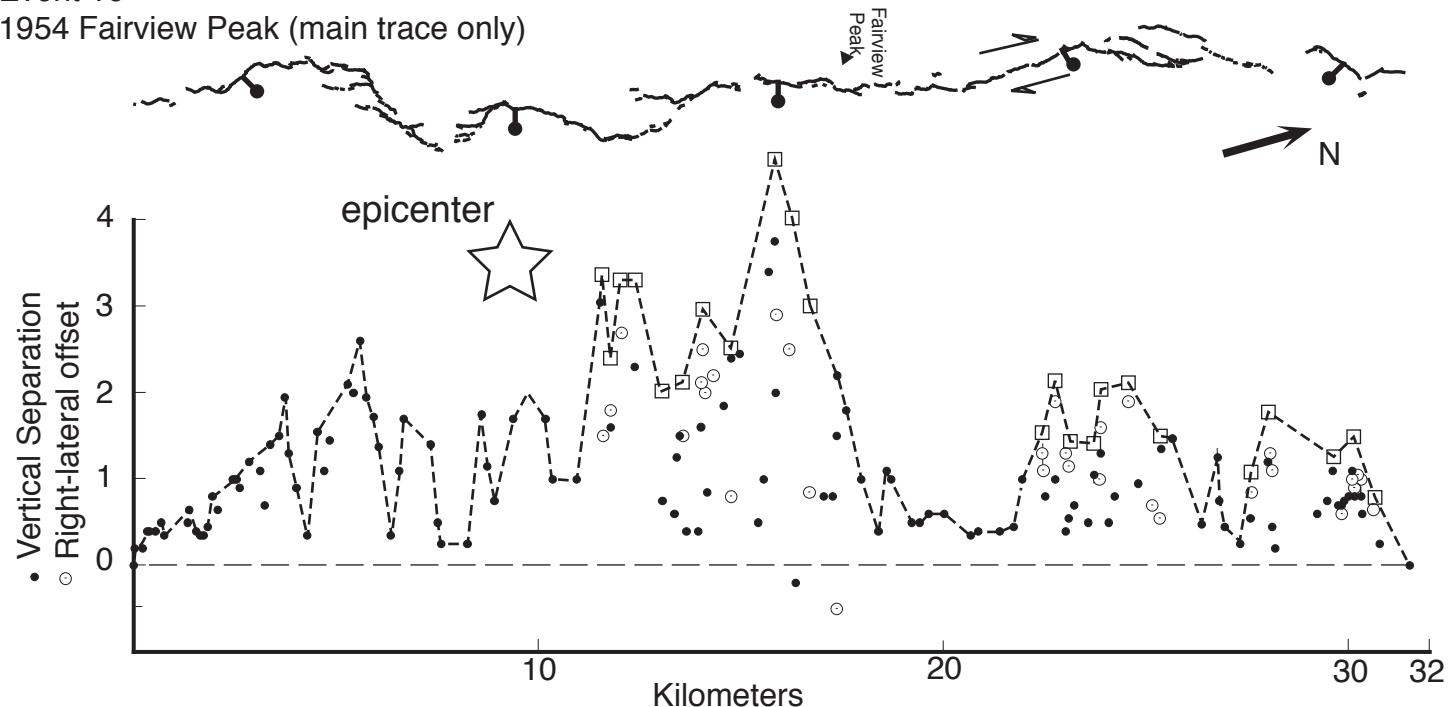


### Dec 16 1954 Dixie Valley, Nevada

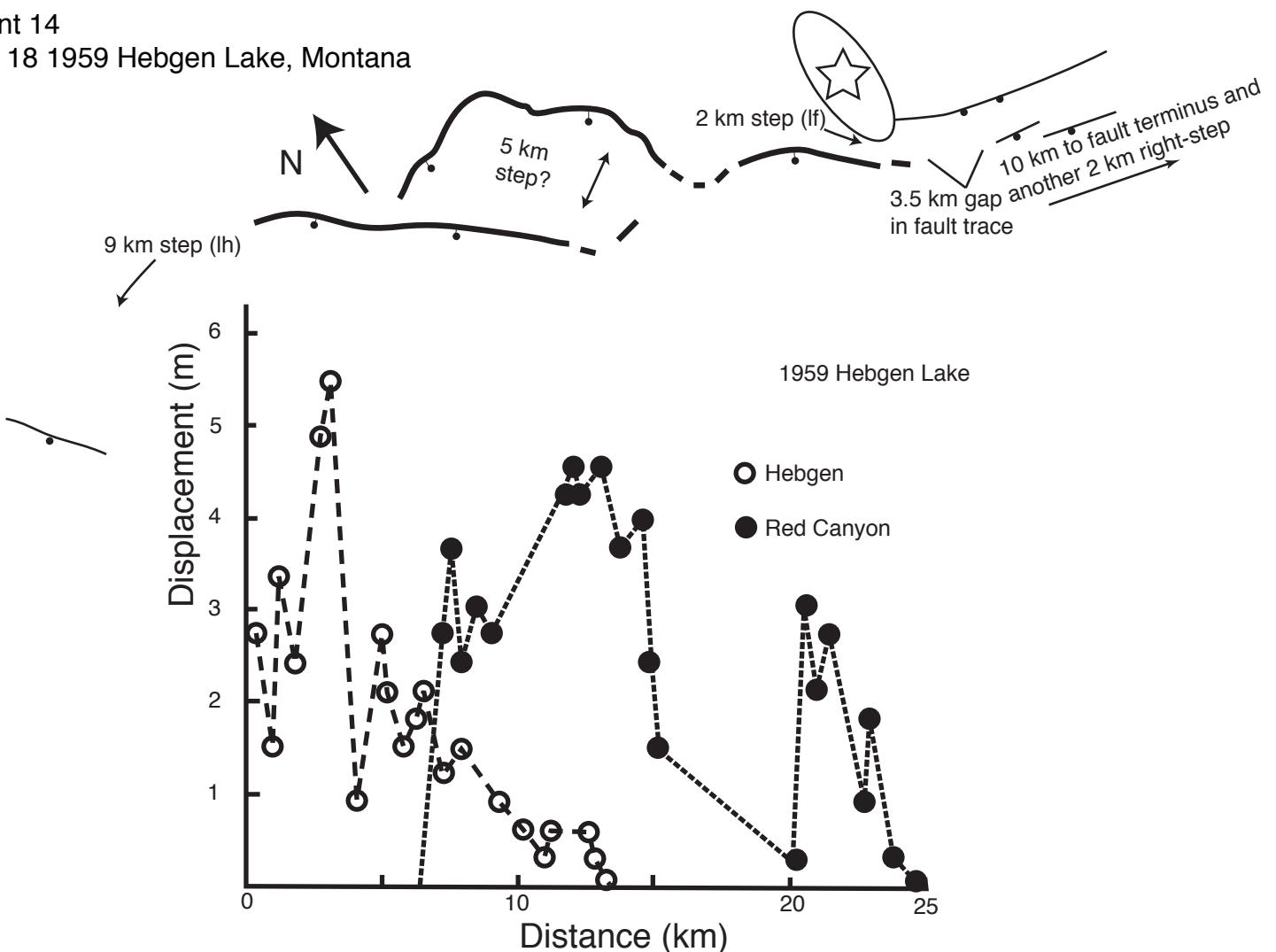


### Event 16

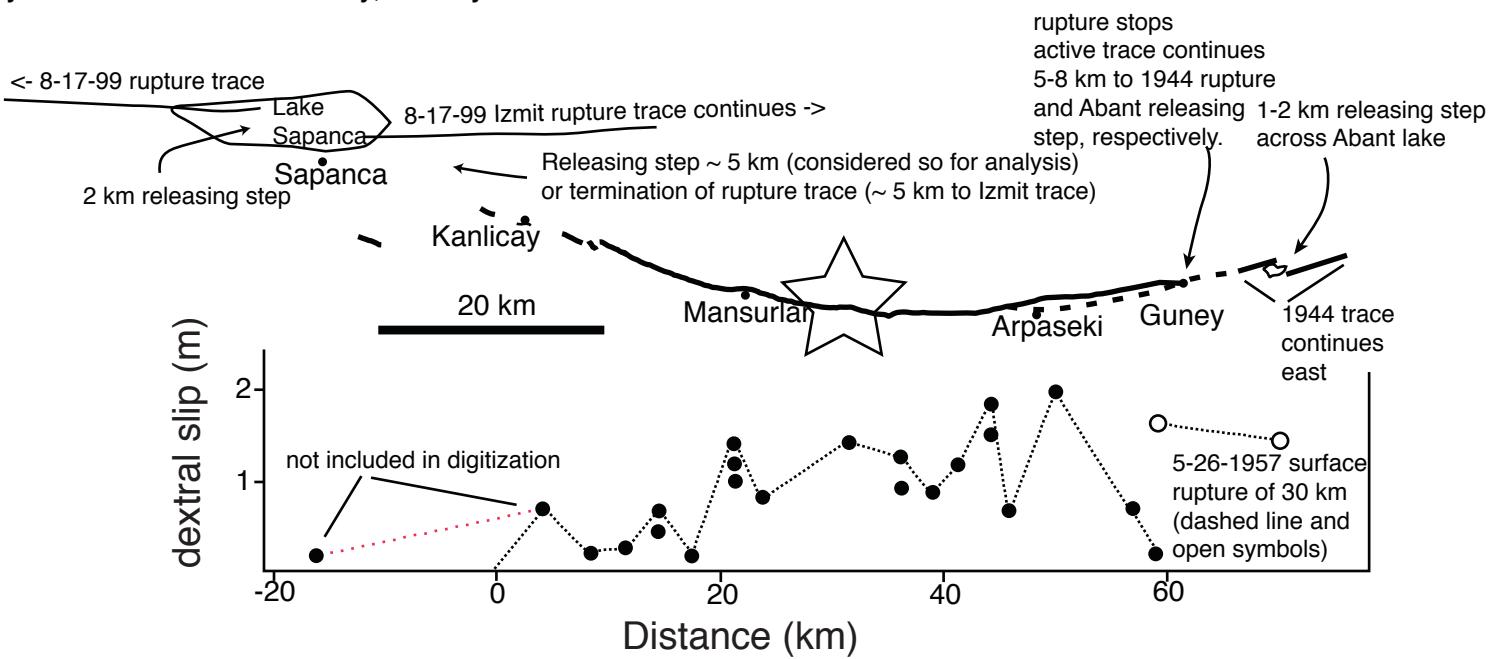
#### 1954 Fairview Peak (main trace only)



Event 14  
Aug 18 1959 Hebgen Lake, Montana

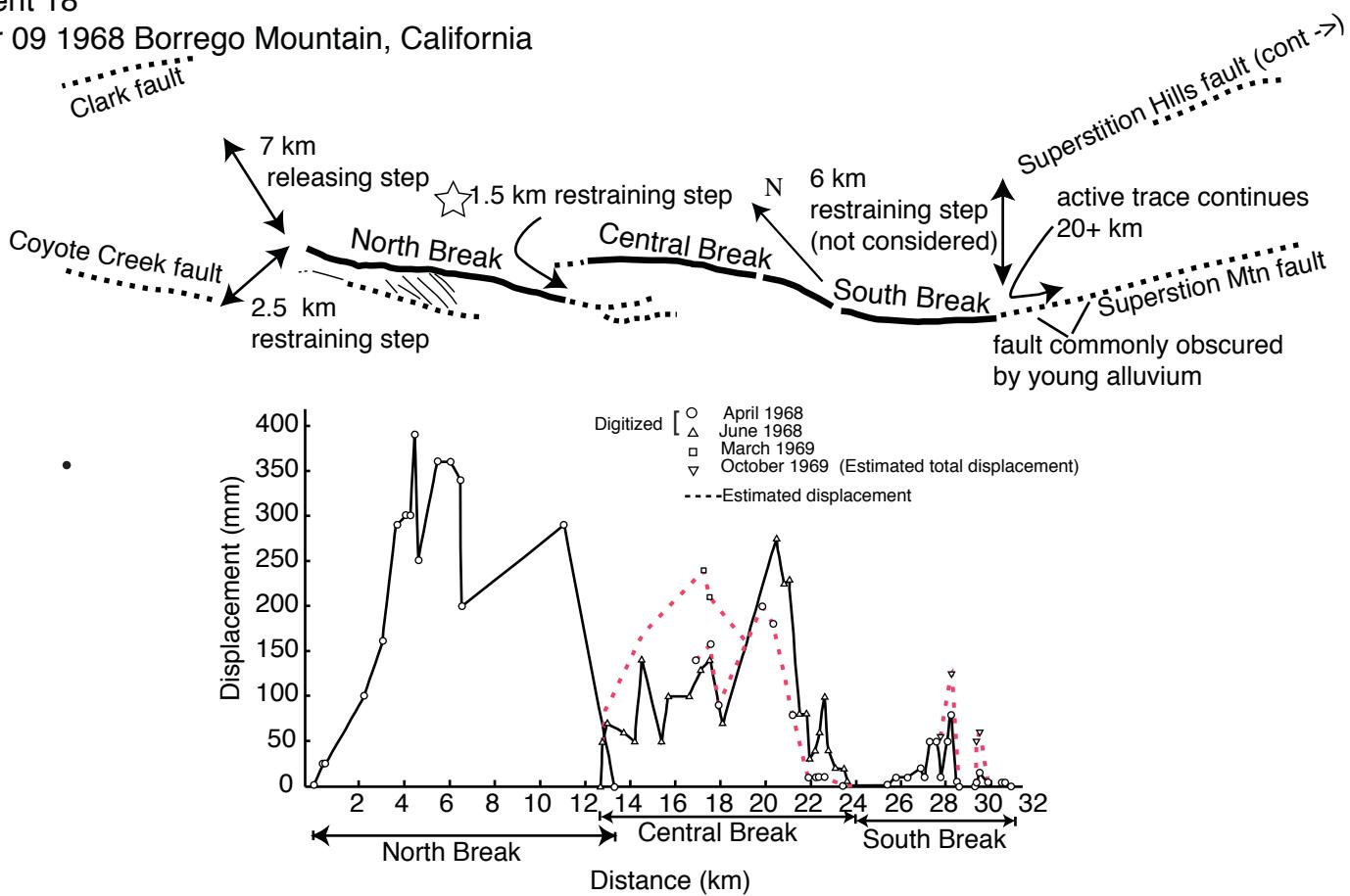


Event 17  
July 22 1967 Mudurnu Valley, Turkey



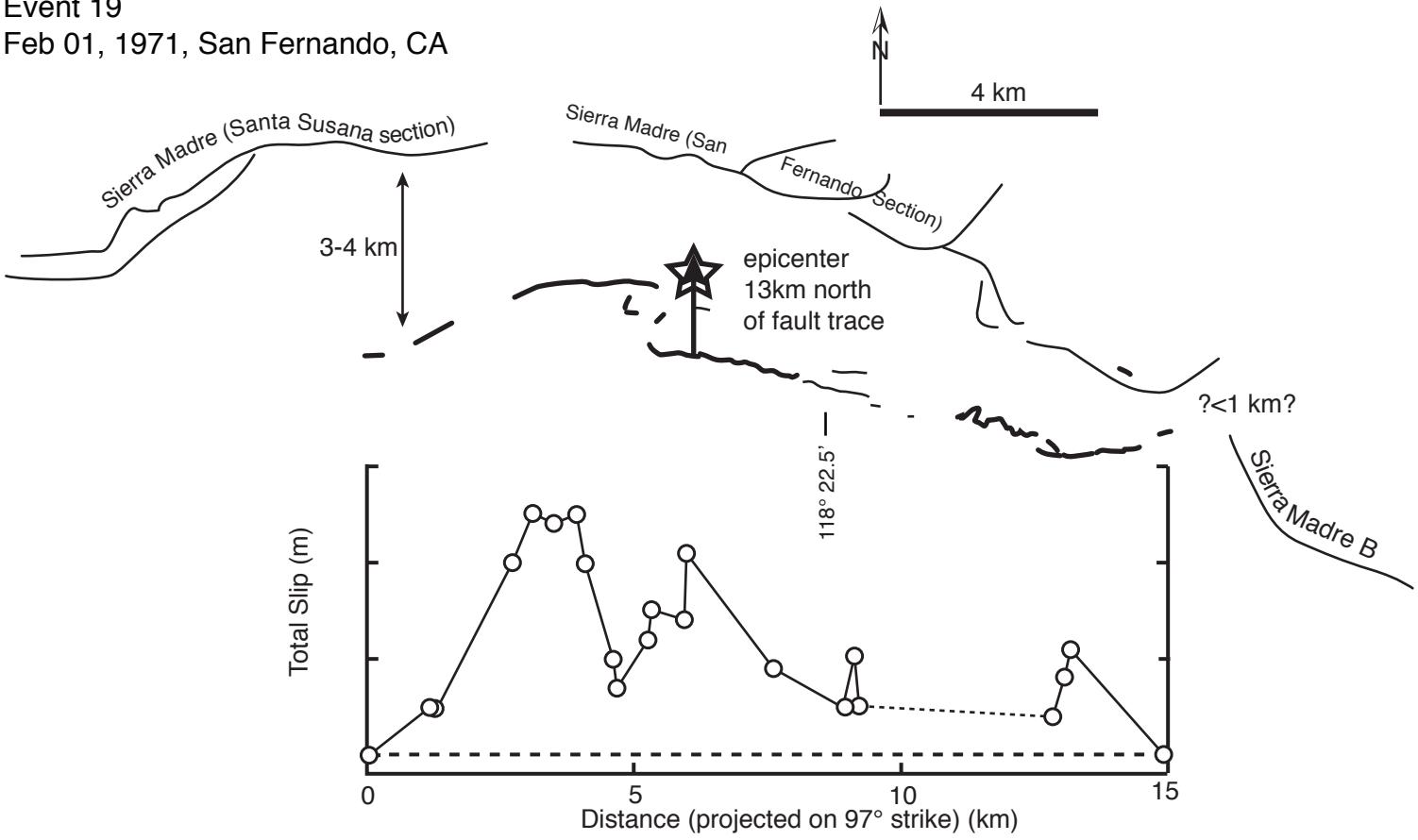
### Event 18

Apr 09 1968 Borrego Mountain, California



### Event 19

Feb 01, 1971, San Fernando, CA



Event 20

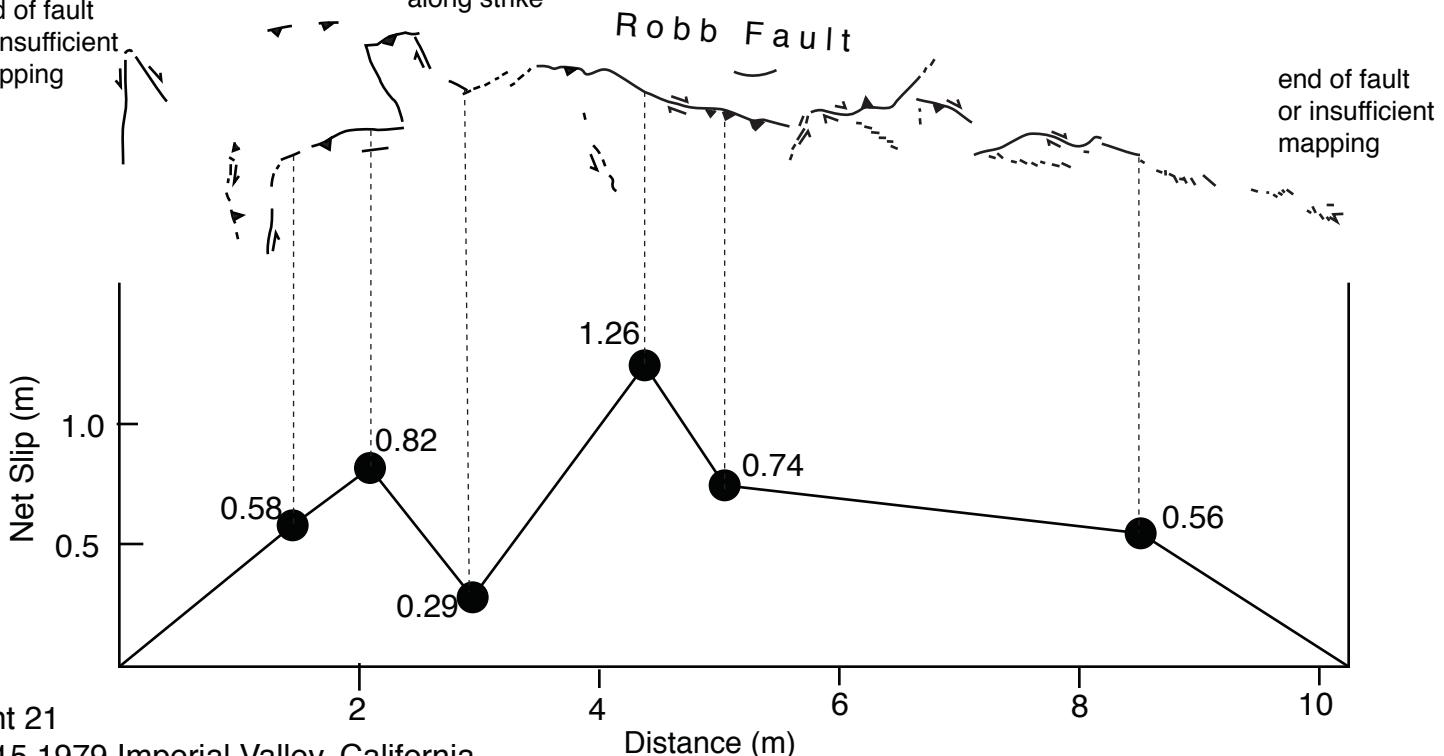
Jun 02 1979 Cadoux, Australia

end of fault  
or insufficient  
mapping

numerous <1 km discontinuities  
along strike

N

2 km



Event 21

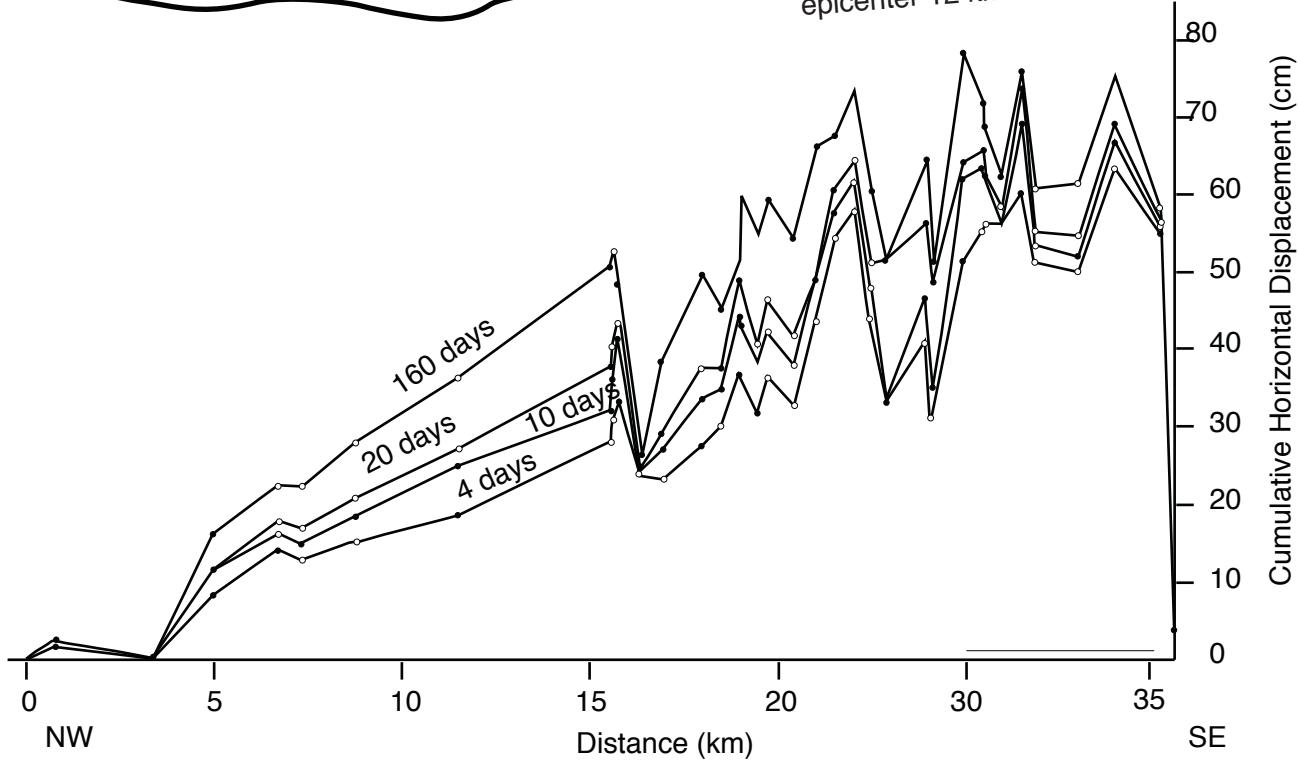
Oct 15 1979 Imperial Valley, California

20 km releasing step  
to San Andreas along  
Brawley seismic zone

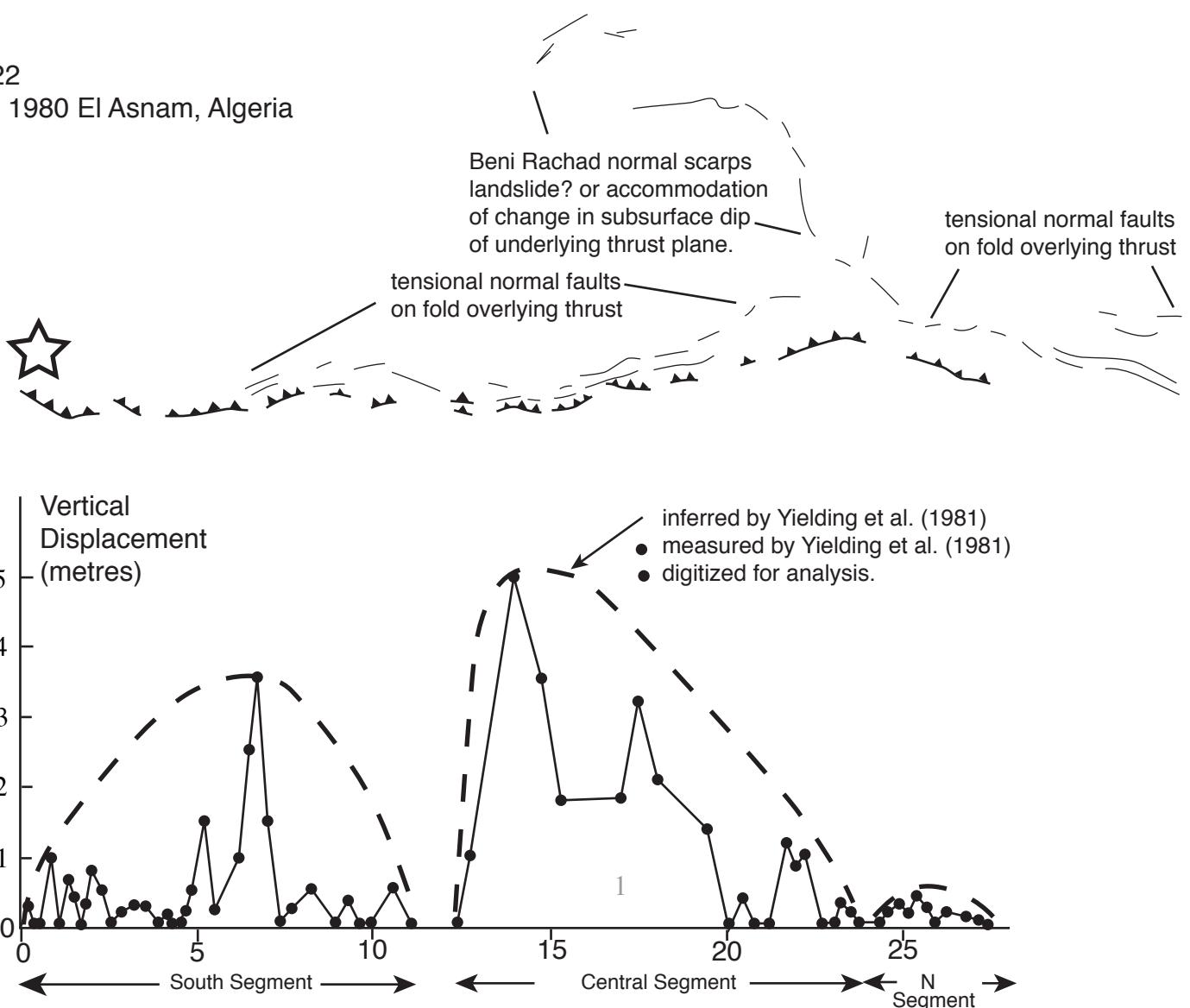
Mesquite basin

epicenter ~10 km south of end off  
surface ruptures

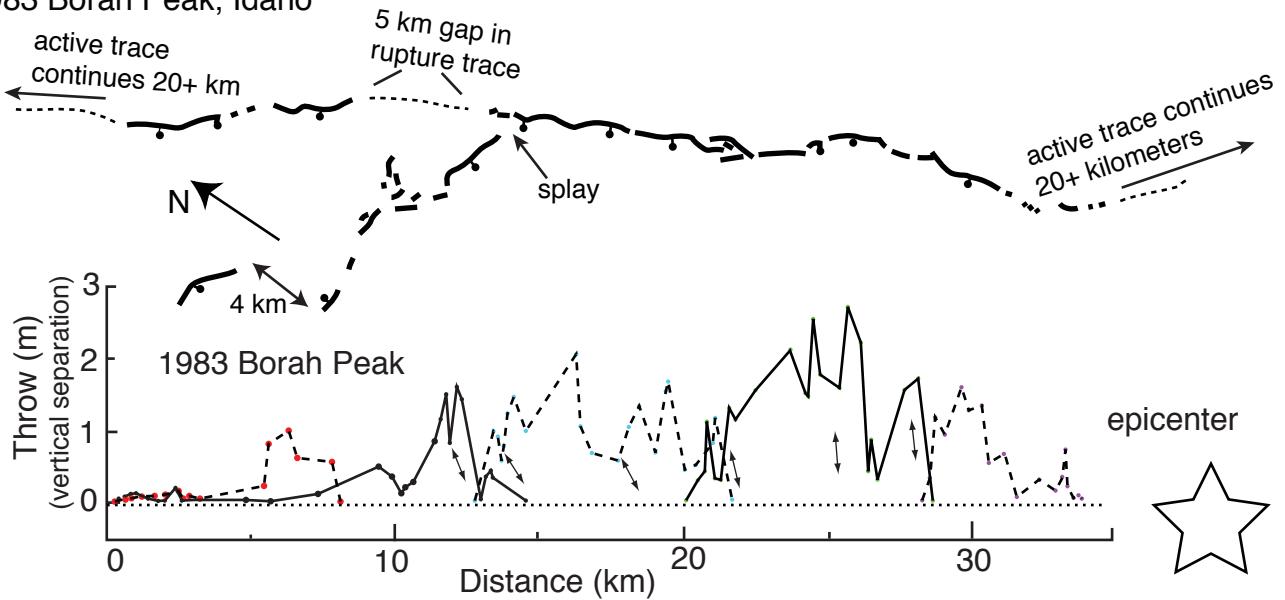
1940 Imperial rupture also  
broke this section and southward  
~30 km  
active fault trace continues >30 km  
epicenter 12 km south along strike



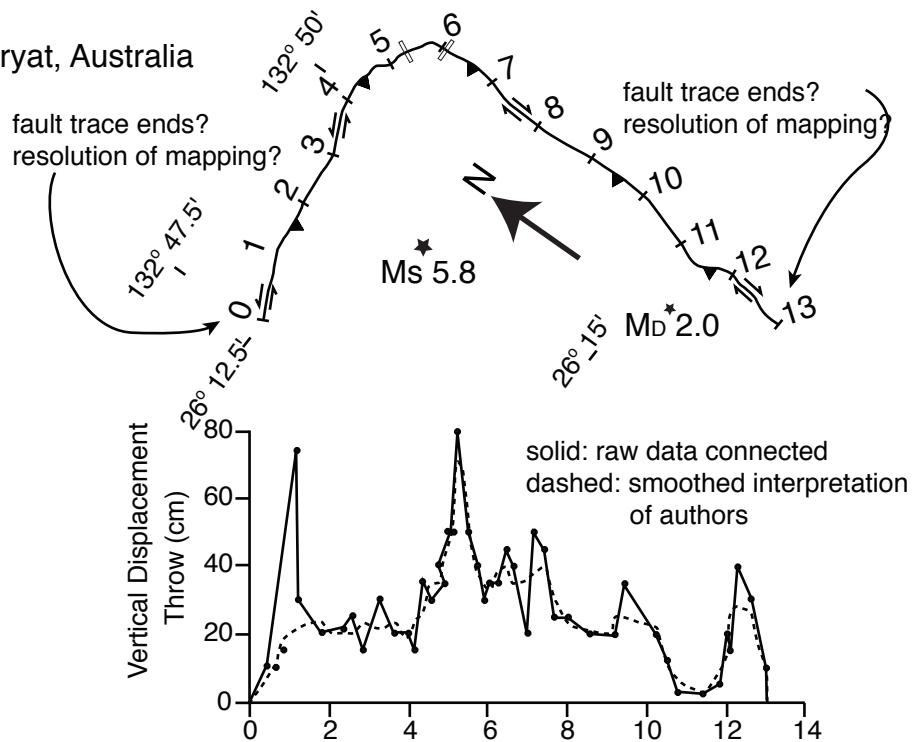
Event 22  
Oct 10, 1980 El Asnam, Algeria



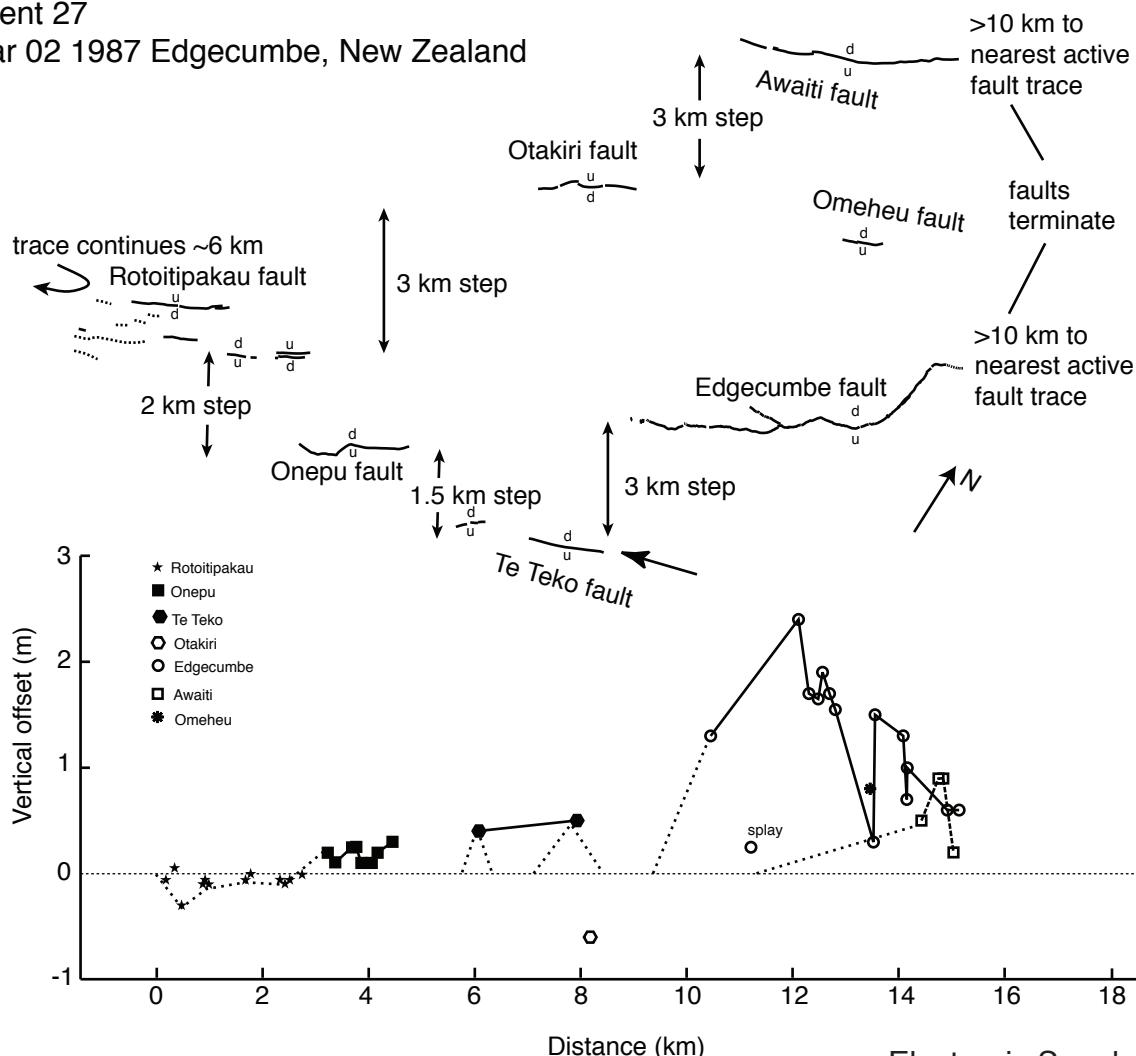
Event 24  
Oct 28 1983 Borah Peak, Idaho



Event 25  
Mar 03 1986 Marryat, Australia

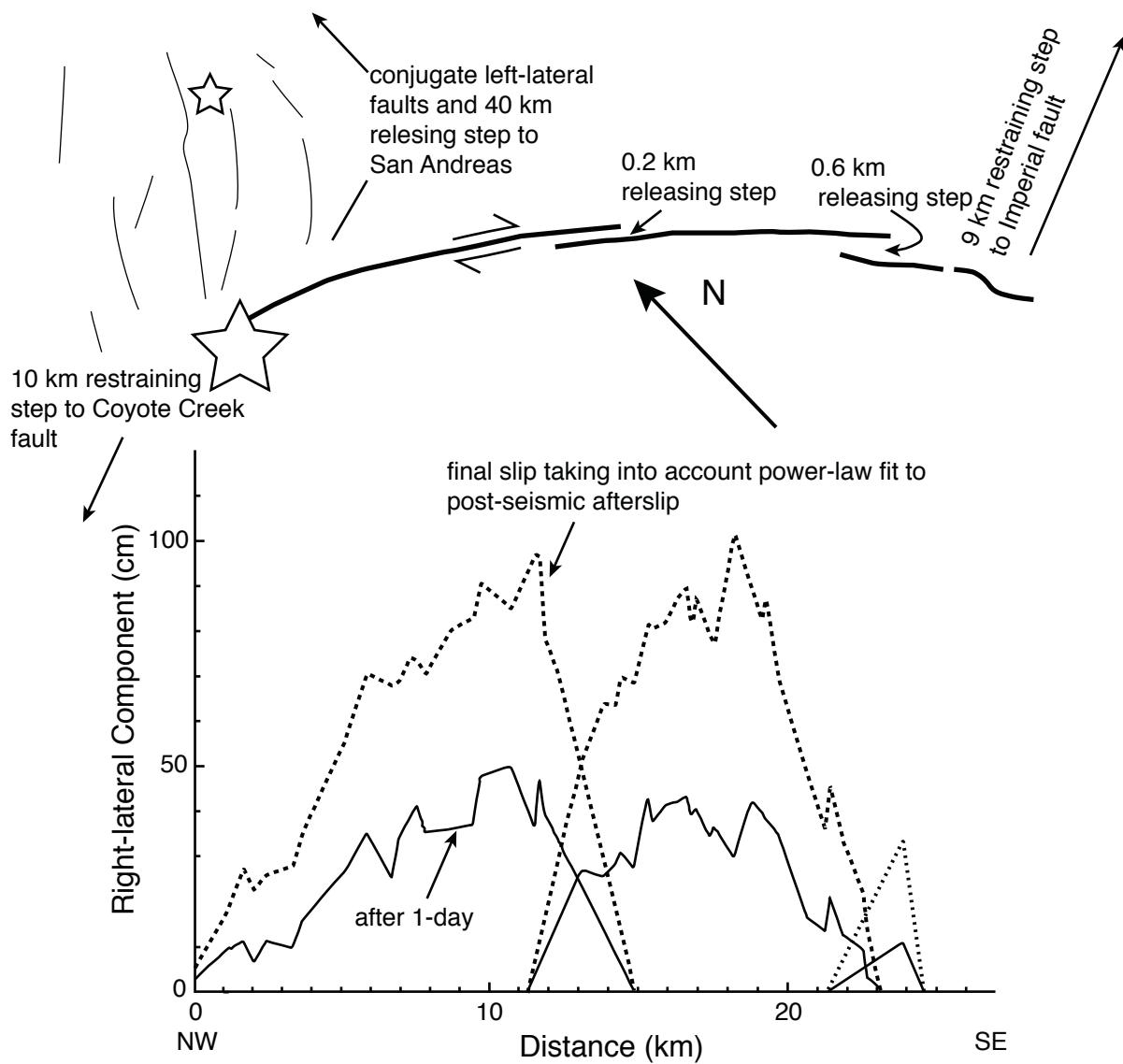


Event 27  
Mar 02 1987 Edgecumbe, New Zealand



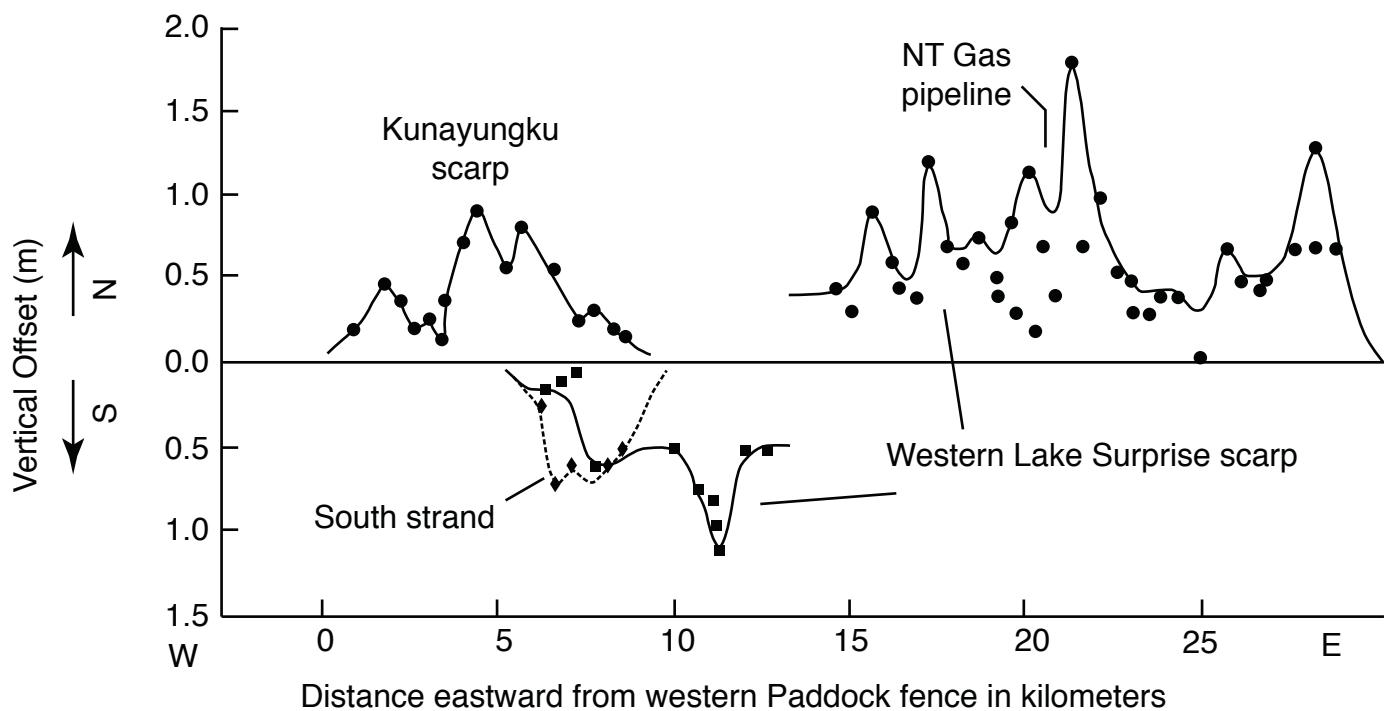
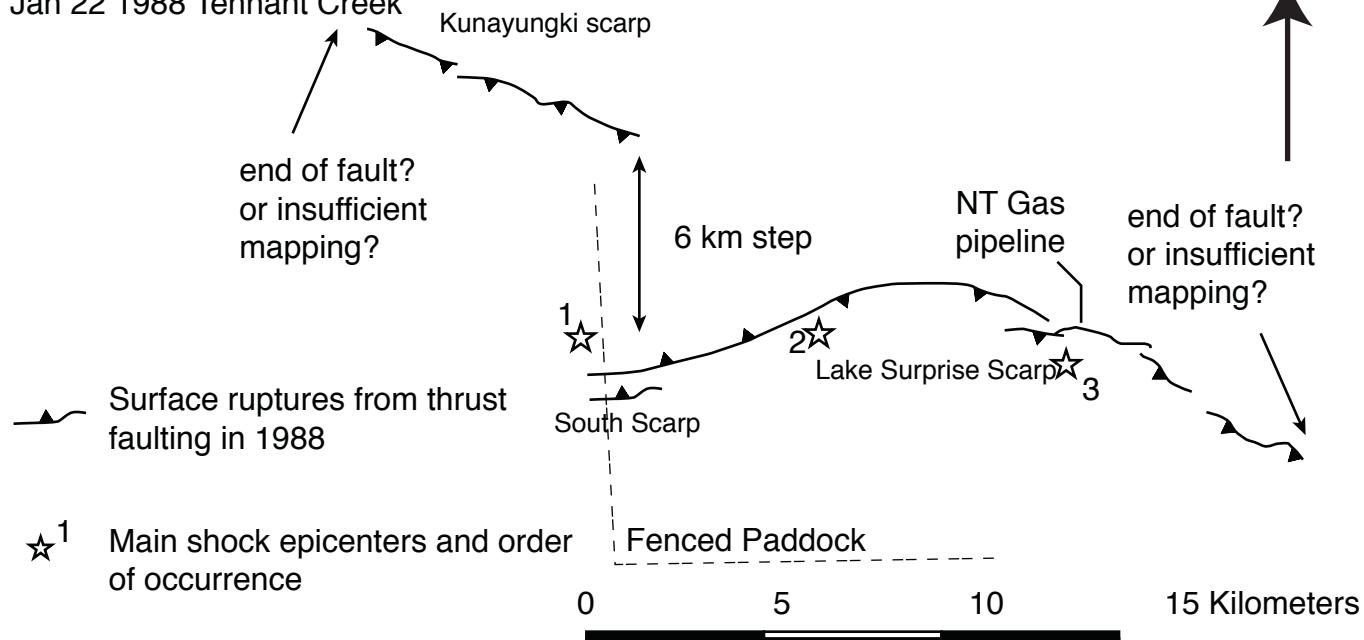
Event 26

Nov 23 1987 Superstition Hills, California



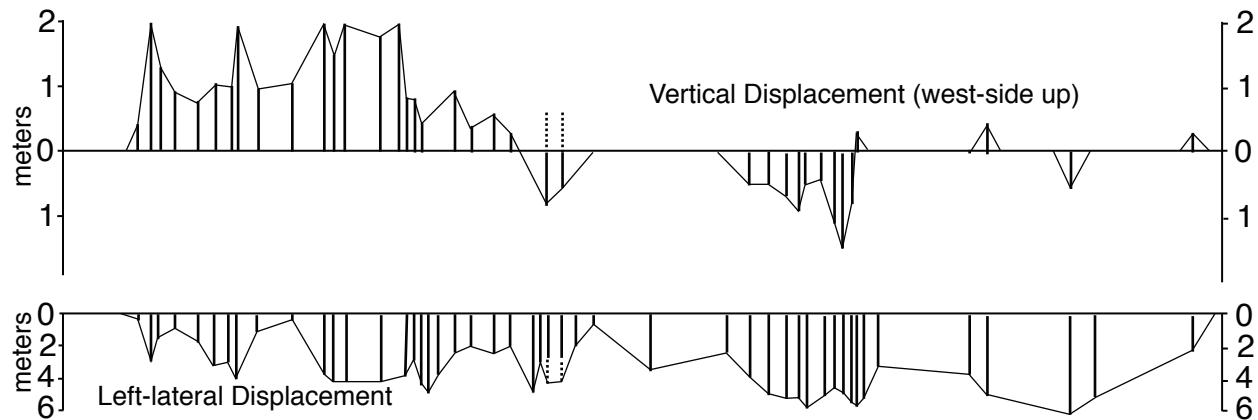
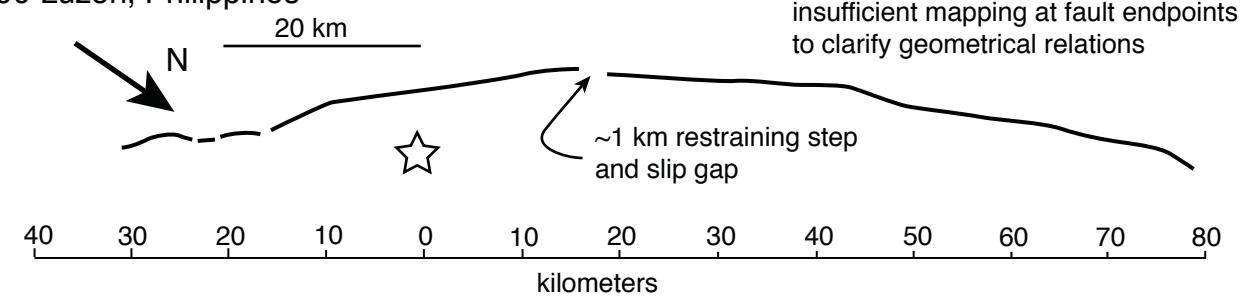
Event 28

Jan 22 1988 Tenant Creek



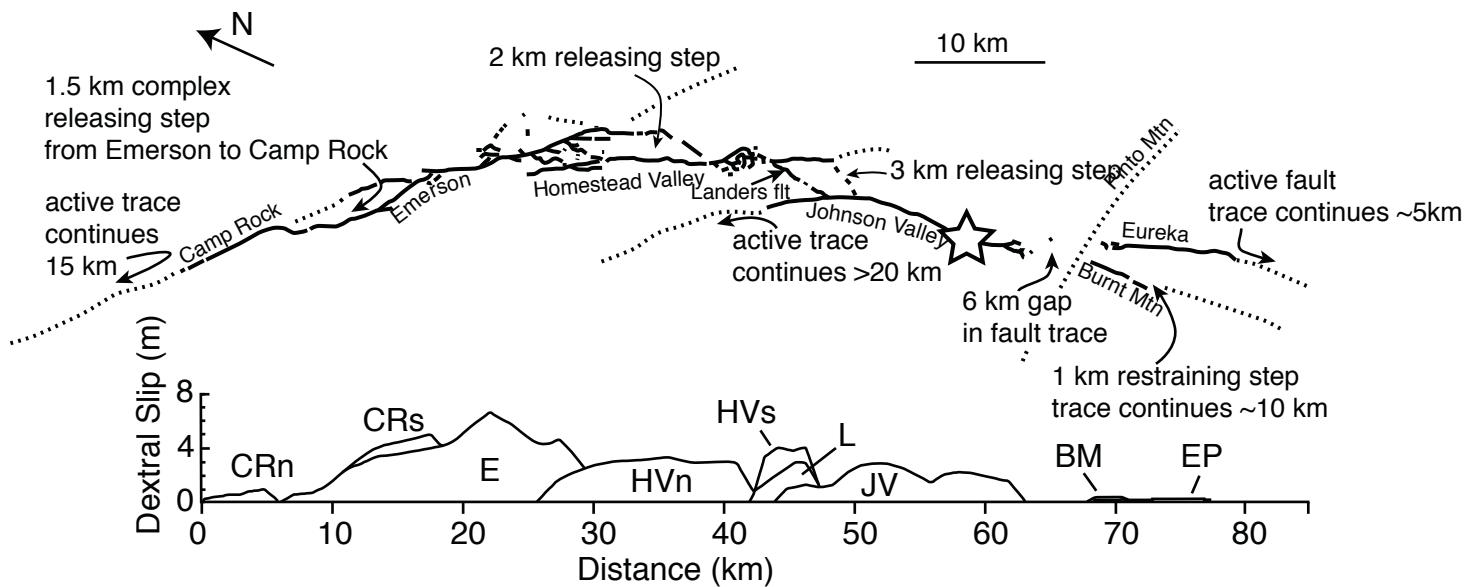
### Event 29

Jul 16 1990 Luzon, Philippines



### Event 30

Jun 28 1992 Landers, California

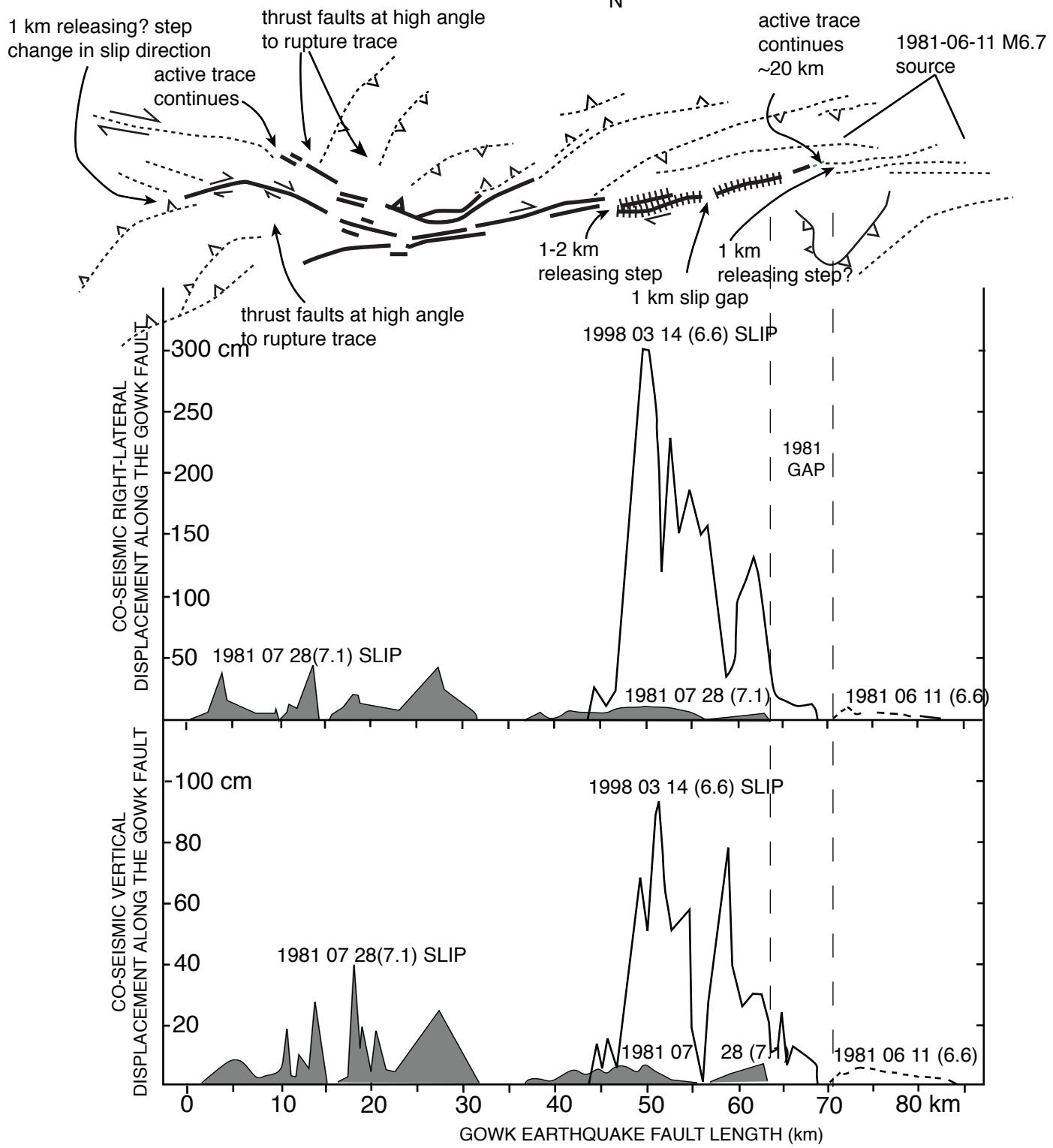


Event 31

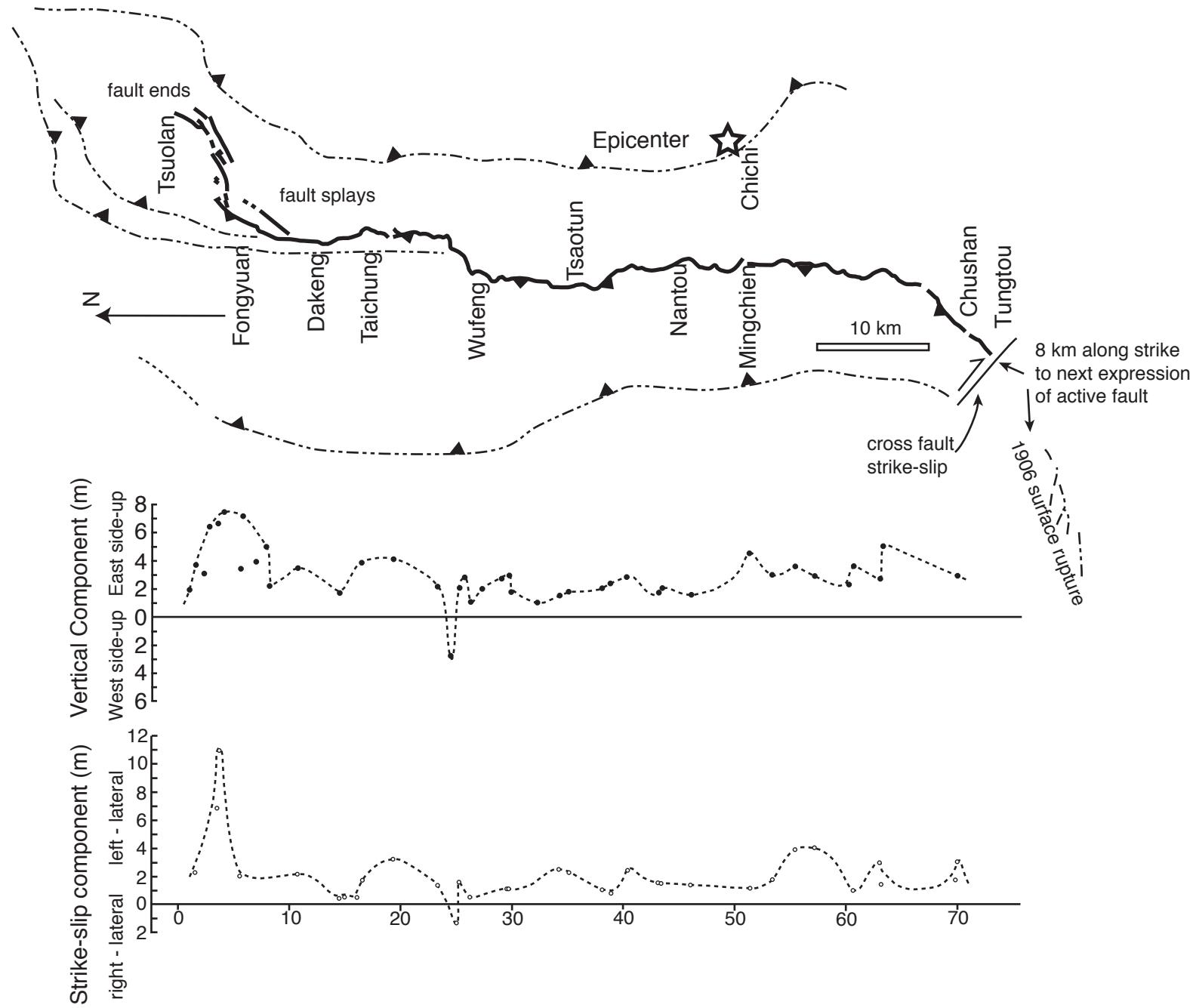
1998 March 14 Fandoqa (hachured lines) and 1981 July 29 Sirch Earthquake Fault (solid lines), Iran

Event 23

N

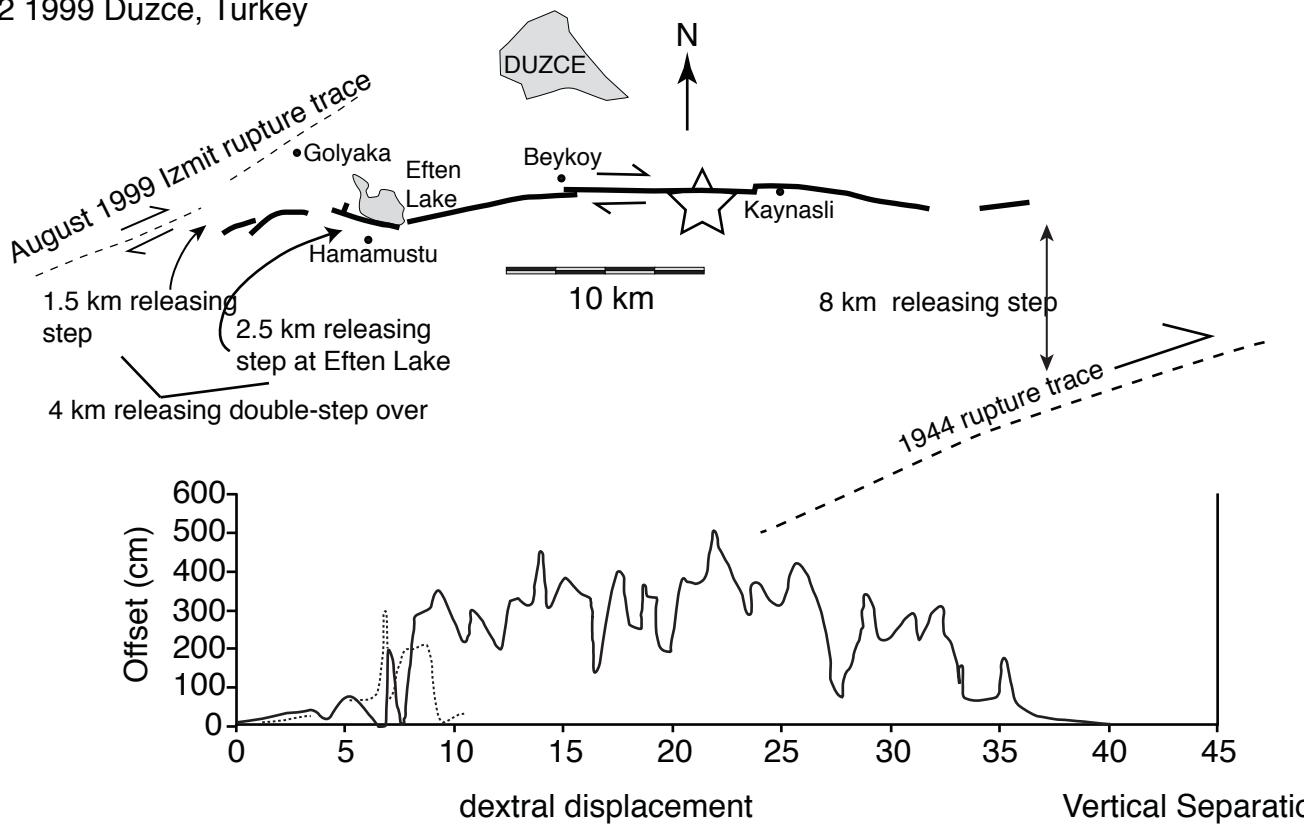


Event 32  
Sep 21 1999 Chi-Chi, Taiwan



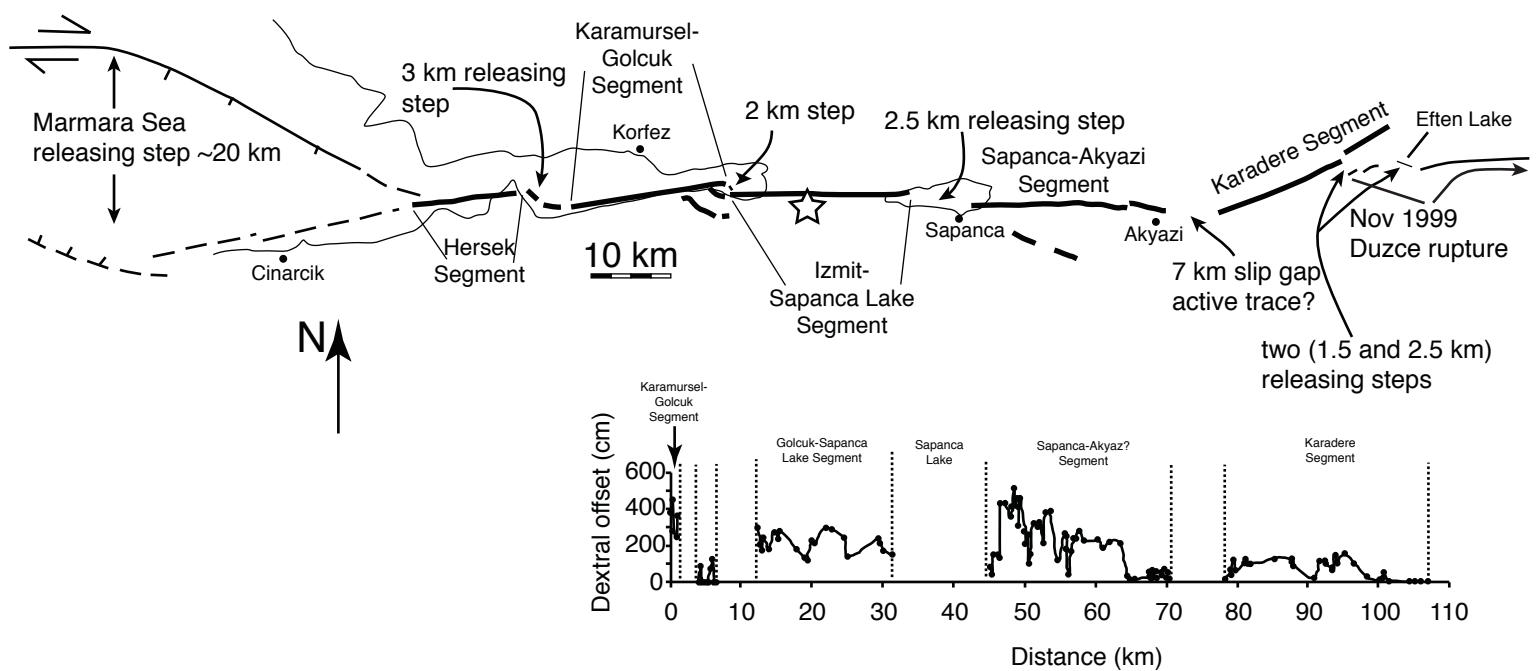
### Event 35

Nov 12 1999 Duzce, Turkey

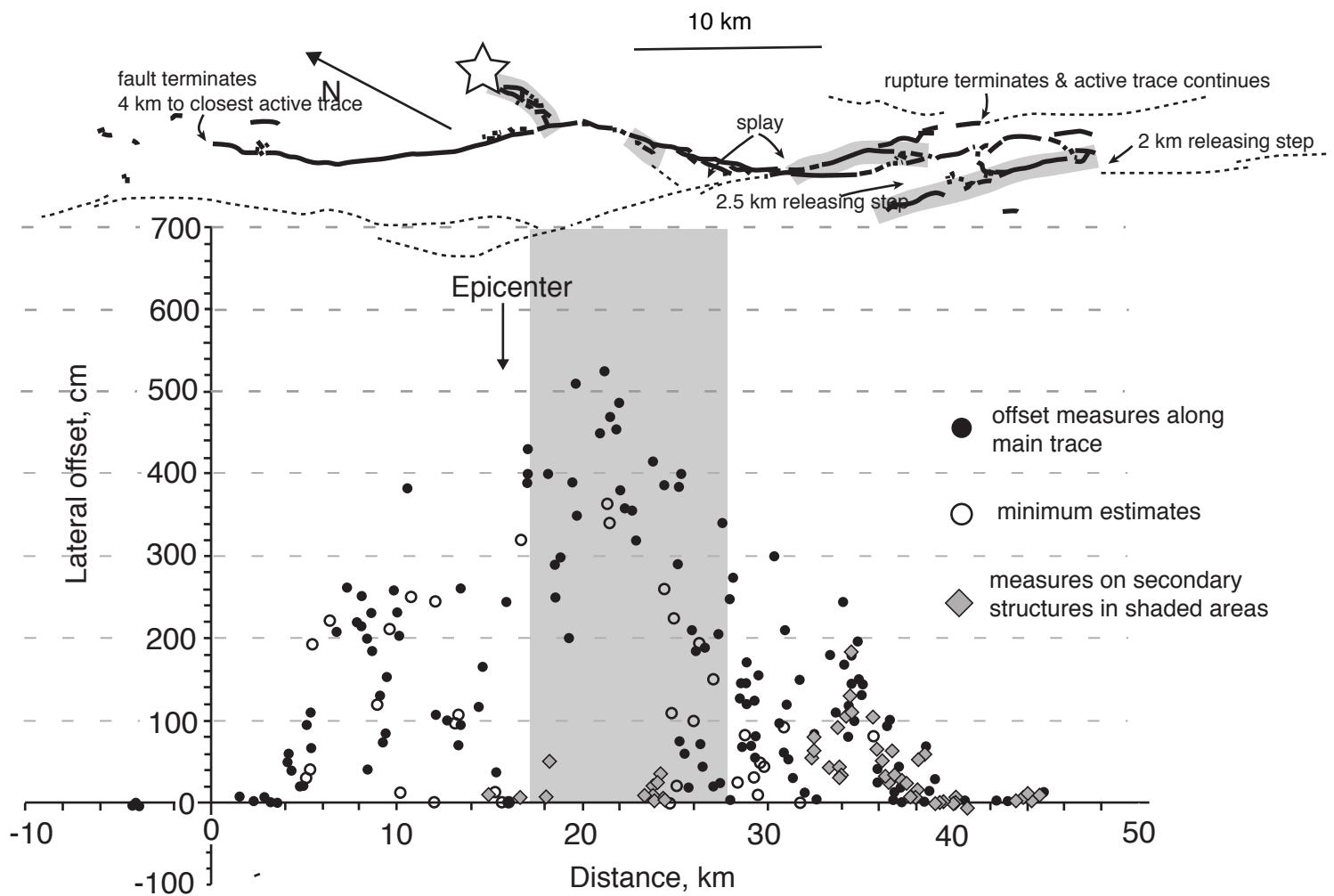


### Event 36

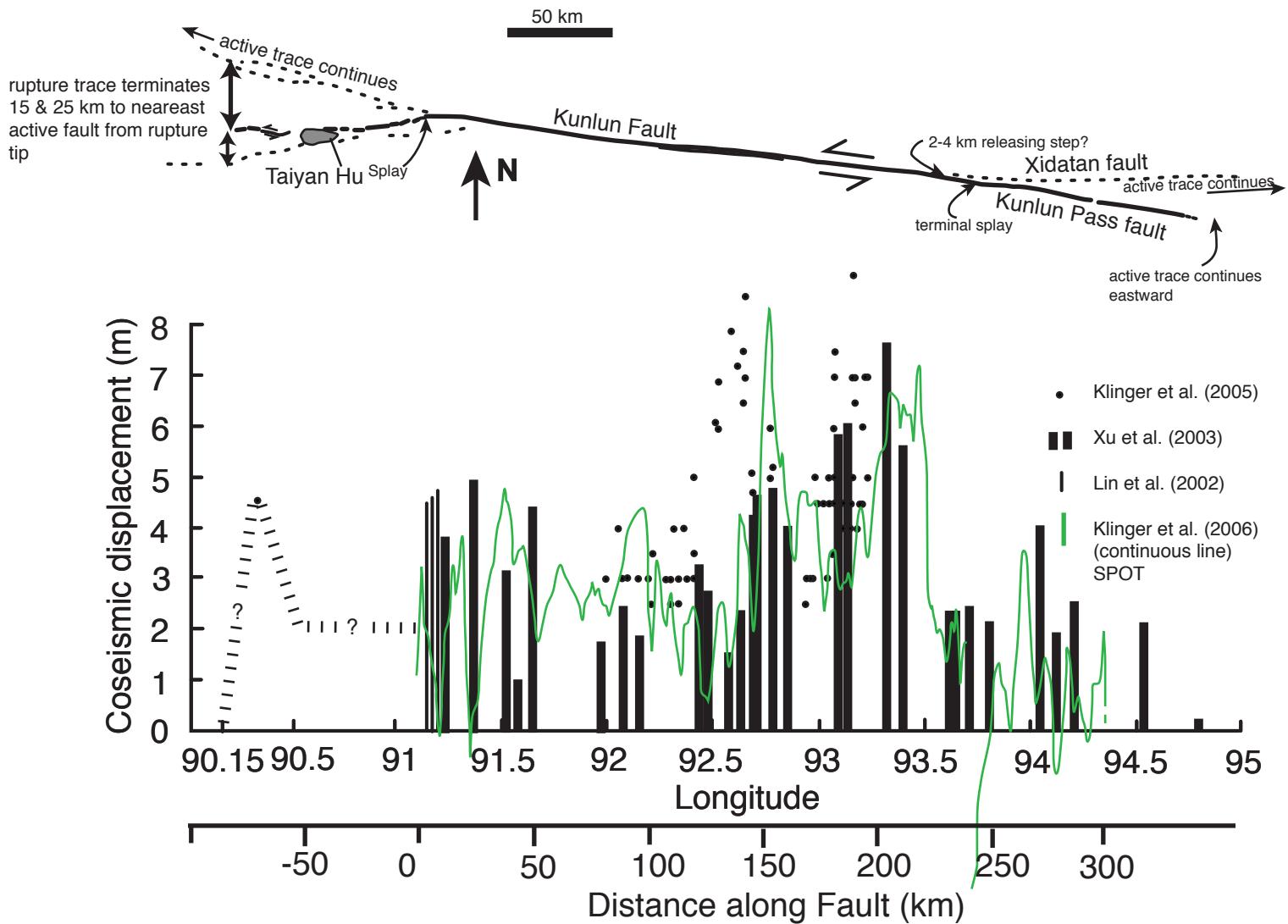
Aug 17 1999 Izmit, Turkey



Event 33  
Oct 16 1999, Hector Mine, California



Event 36 & 36a  
Nov 14, 2001 Kunlun, China



Event 37  
Nov 3 2002 Denali, Alaska

