

Appendix 6. Tabulated Observations and Photographs of Surface Faulting and Ground Deformation Produced by the M_w 6.0 South Napa Earthquake of August 24, 2014—Trace E

Introduction

The following pages contain maps and tables of descriptions, slip measurements, and photographs of surface faulting and ground deformation features obtained in the field at observation stations located along Trace E. Station locations are shown as circles in figure 6.1 and labeled by the Station ID number. To aid in locating a specific observation station, IDs increase numerically from south to north. Where multiple observations occur at the exact same locality, IDs are shown as a range (for example, 200–202 identifies stations 200, 201, and 202 all at the same location). Where stations are too closely spaced to be individually labeled in the figures, a single label is used for a group of stations, with the IDs or groups of IDs listed in a vertical column and the label leader pointing to the approximate midpoint of the group of closely spaced stations. Mappable fault rupture and surface deformation features are symbolized on the included maps as described in appendix 1.

Observations and (or) photographs collected at each station are tabulated by Station ID. Where stations occur at the same locality, earlier observations are listed first. Photographs taken at an observation station, if any, follow the station attribute information; high resolution images can be downloaded by clicking on the associated links. Station and photograph attributes are described in detail in appendix 1.

Trace E

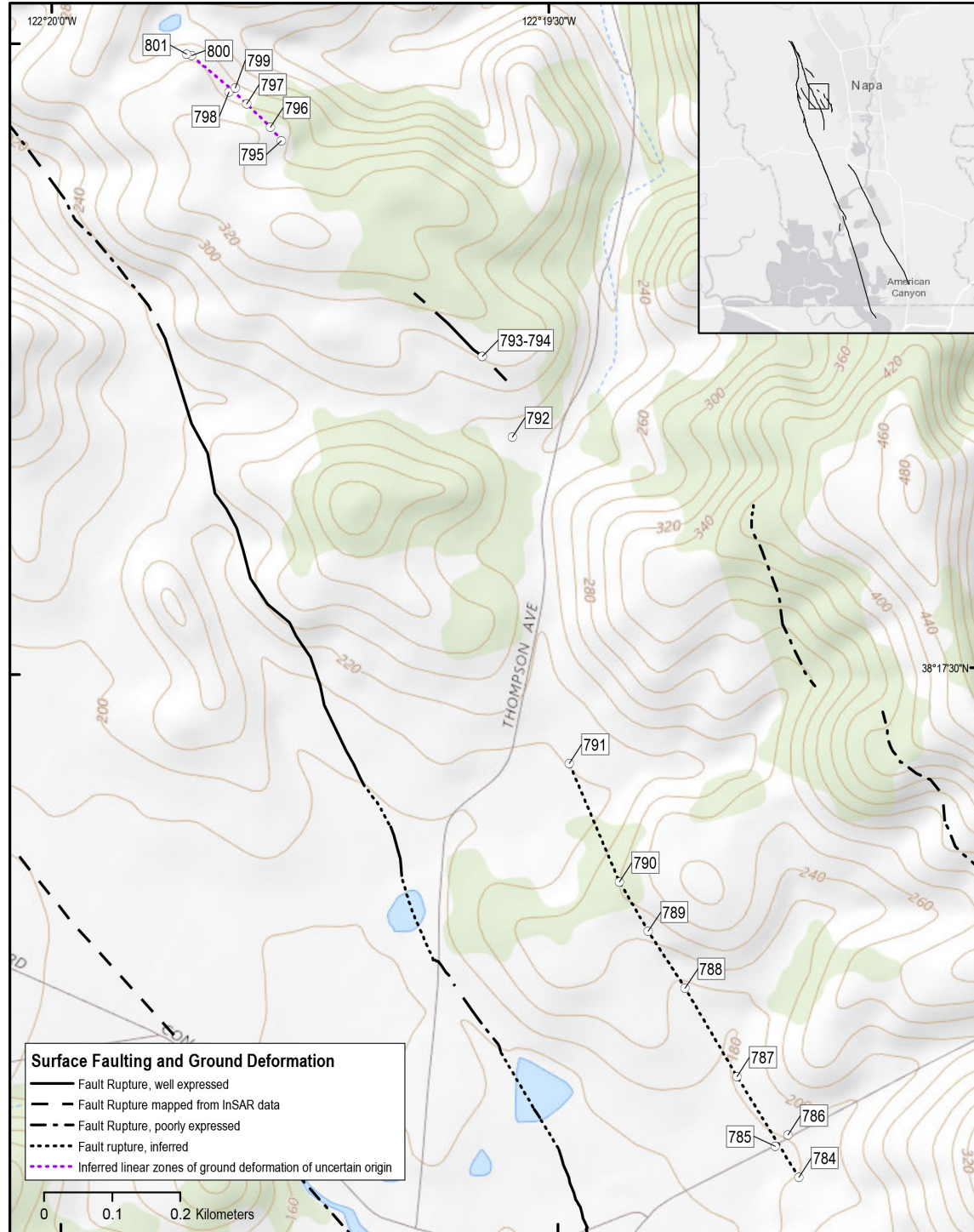


Figure 6.1. Rupture map showing locations of observation stations 784–801 along Trace E of the West Napa Fault System, California, from 230 m northeast of intersection of Old Sonoma Road and Congress Valley Road 1.9 km northwest to northern terminus of Trace E. Inset shows location of fig. 6.1 relative to full extent of rupture. Shaded relief base from U.S. Geological Survey National Map <https://viewer.nationalmap.gov/advanced-viewer/>.

Station ID: 784				Observer: Hecker		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:12		38.28495	122.32095	Soil		Tectonic
Description						
A short, wide (~2 cm) crack between vine rows.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
2*						

Station ID: 785				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:12	38.28536	122.32134	Pavement	Tectonic
Description				
West end of distributed zone of fractures crossing Old Sonoma Road.				

Station ID: 786				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:12	38.28551	122.32113	Pavement	Tectonic
Description				
East end of distributed zone of road-spanning fractures crossing Old Sonoma.				
Photographer	Camera Coordinates		Photograph Date	
Hecker			2014:09:12 17:25:48	

High Resolution Photograph



Station ID: 787			Observer: Prentice/Hecker/Sickler	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:27	38.28629	122.32197	Soil	Tectonic
Description				
Cracks east of winery parking area.				
Photographer	Camera Coordinates		Photograph Date	
Prentice			2014:08:27 15:38:42	

High Resolution Photograph



Station ID: 788				Observer: Prentice/Hecker/Sickler		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:08:27		38.28746	122.32283	Soil		Tectonic
Description						
Left-stepping en echelon cracks near reservoir in vineyard, small left-lateral.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
LL						
Photographer		Camera Coordinates		Photograph Date		
Prentice				2014:08:27 15:45:03		

High Resolution Photograph



Station ID: 788		Observer: Prentice/Hecker/Sickler
Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 15:46:06

[High Resolution Photograph](#)



Station ID: 789				Observer: Prentice/Hecker/Sickler		
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:08:27		38.28822	122.32344	Soil	Tectonic	
Description						
Left-stepping en echelon cracks across vineyard road north of reservoir.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
RL						

Station ID: 789		Observer: Prentice/Hecker/Sickler
Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 15:51:40

[High Resolution Photograph](#)



Station ID: 790				Observer: Prentice/Hecker/Sickler		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:08:27		38.28887	122.32392	Soil		Tectonic
Description						
Cracks across vineyard road, right-lateral estimate about 5 cm.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
	5*	RL				
Photographer		Camera Coordinates		Photograph Date		
Prentice				2014:08:27 15:56:42		

[High Resolution Photograph](#)



Station ID: 790		Observer: Prentice/Hecker/Sickler
Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 15:59:00

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 15:59:16

[High Resolution Photograph](#)



Station ID: 790		Observer: Prentice/Hecker/Sickler
Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 16:00:37

[High Resolution Photograph](#)



Station ID: 791				Observer: Prentice/Hecker/Sickler		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:08:27		38.29044	122.32475	Soil		Tectonic
Description						
Cracks across vineyard road, small right-lateral.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
RL						

Station ID: 791		Observer: Prentice/Hecker/Sickler
Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 16:08:54

[High Resolution Photograph](#)

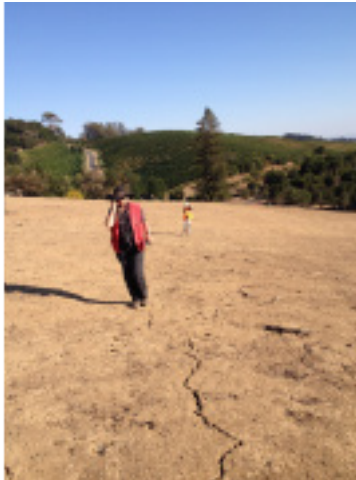


Station ID: 792		Observer: Prentice/Hecker/Sickler		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:27	38.29476	122.32566	Soil	Uncertain
Description				
Small cracks in goat pasture.				

Station ID: 793				Observer: Prentice/Hecker/Sickler		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:08:27		38.29583	122.32615	Soil		Tectonic
Description						
Right-lateral cracks up hill.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
RL						

Station ID: 793		Observer: Prentice/Hecker/Sickler
Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 17:20:31

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Prentice		2014:08:27 17:23:49

[High Resolution Photograph](#)



Station ID: 794				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:27	38.29583	122.32615	Soil	Tectonic
Photographer	Camera Coordinates		Photograph Date	
Hecker			2014:08:27 18:09:11	

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Hecker	38.29607	122.32662	2014:08:27 18:11:45

[High Resolution Photograph](#)



Station ID: 795						Observer: Hecker
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:12		38.29869	122.32950	Soil		Uncertain
Description						
1-2 meter-wide zone of extensional cracks (~						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
312			<1 *			
Photographer		Camera Coordinates		Photograph Date		
Hecker				2014:09:12 14:43:11		

High Resolution Photograph



Station ID: 796					Observer: Hecker	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:12		38.29888	122.32968	Soil	Uncertain	
Description						
Trend 290, continues northward into shrubs and trees associated with drainage.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
290						

Station ID: 797					Observer: Hecker	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:12		38.29919	122.33008	Soil	Uncertain	
Description						
Very short (~0.5 m) isolated crack in dirt with ~2 mm opening. Trend 297.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
297			0.2*			
Photographer		Camera Coordinates		Photograph Date		
Hecker				2014:09:12 15:22:55		

High Resolution Photograph



Station ID: 798					Observer: Hecker	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:12		38.29934	122.33037	Soil	Uncertain	
Description						
Short (~1.5 m) crack through row of vines, ~2 mm opening. Trend 297. Fracture zone is intermittent at best.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
297		0.2*				

Station ID: 799					Observer: Hecker	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:12		38.29940	122.33027	Soil	Uncertain	
Description						
Short (~3 m) length of open cracks through vineyard at base of hillslope (break in slope). Trend 268, fracture zone is intermittent at best.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
268						

Station ID: 800					Observer: Hecker	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:12		38.29983	122.33100	Soil	Uncertain	
Description						
Few, meter-long zone of cracks (with a few mm wide openings) crossing open hillside, trend 297. South end of ~10-m-long crack upslope.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
297						
Photographer		Camera Coordinates		Photograph Date		
Hecker				2014:09:12 16:12:07		

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Hecker		2014:09:12 16:18:33

[High Resolution Photograph](#)



Station ID: 801				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:12	38.29985	122.33108	Soil	Uncertain
Description				
North end of ~10-m-long crack upslope.				