

Appendix 13. Tabulated Observations and Photographs of Ground Deformation Produced by the M_w 6.0 South Napa Earthquake of August 24, 2014—Fractures Associated with UAVSAR Lineaments

Introduction

The following pages contain maps and tables of descriptions, slip measurements, and photographs of ground deformation features obtained in the field at observation stations along UAVSAR lineaments located in regions L, O, R, and U. Station locations are shown as circles in figure 13.1 through 13.4 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.

Region L

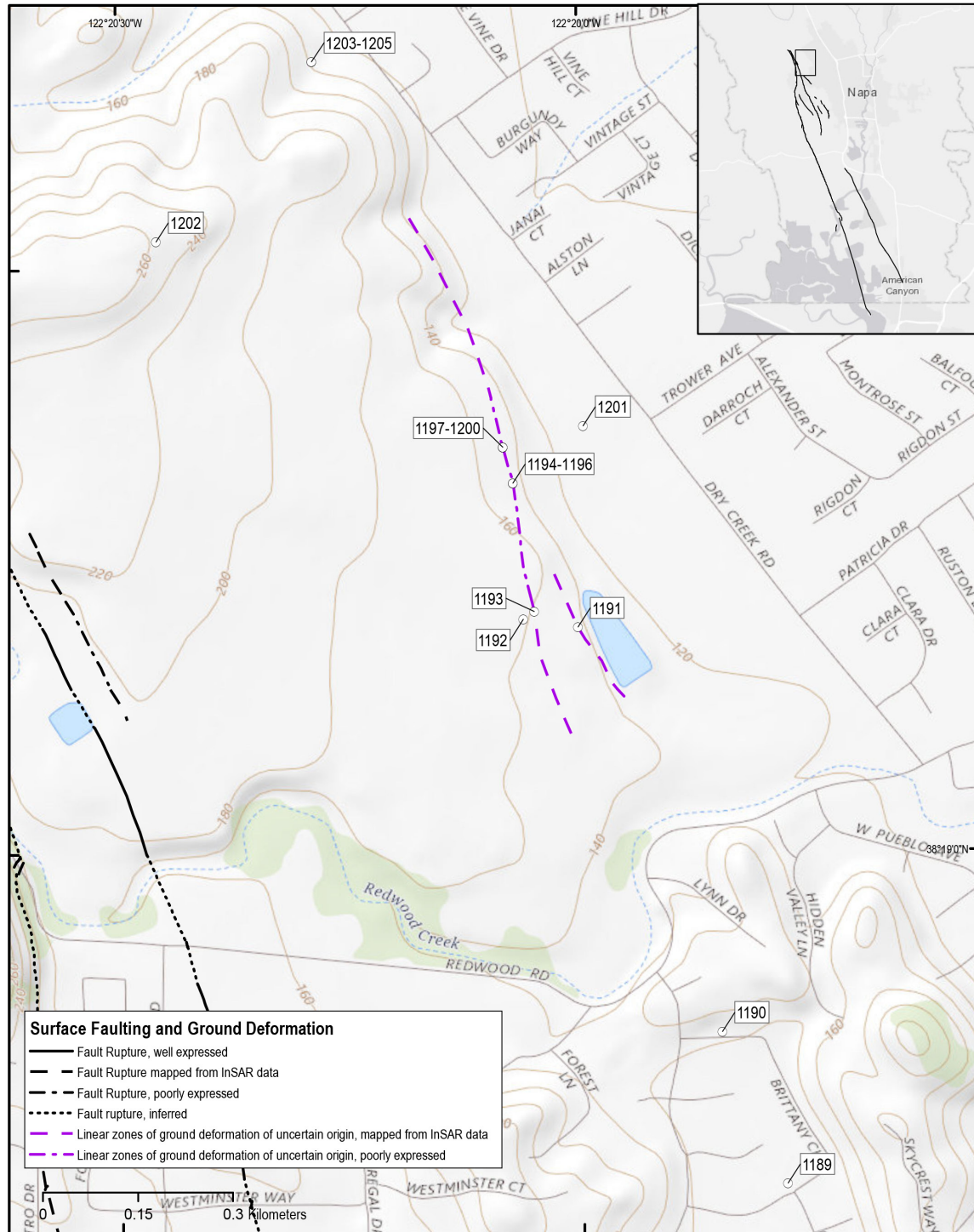


Figure 13.1. Ground deformation map showing locations of observation stations 1189–1205 in Region L of the West Napa Fault System, California, from Brittany Circle 1.8 km north to Alston Park. Inset shows location of fig. 13.1 relative to full extent of rupture. Shaded relief base from U.S. Geological Survey National Map <https://viewer.nationalmap.gov/advanced-viewer/>.

Station ID: 1189				Observer: Seitz
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.31191	122.32966	Curb/Sidewalk	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.31191	122.32964	2014:09:16 11:32:28	

High Resolution Photograph



Station ID: 1190				Observer: Seitz
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.31408	122.33082	Curb/Sidewalk	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.31408	122.33081	2014:09:16 11:07:53	

High Resolution Photograph



Station ID: 1190	Observer: Seitz
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Photographer	Camera Coordinates		Photograph Date
Seitz	38.31393	122.33096	2014:09:16 11:12:56

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Seitz	38.31396	122.33098	2014:09:16 11:13:19

[High Resolution Photograph](#)



Station ID: 1191					Observer: Schwartz	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:11		38.31987	122.33338	Soil	Uncertain	
Description						
Four linear cracks with primarily left stepping, en echelon traces. General trend 293. Can only trace for 8 m north.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
293		RL				
Photographer		Camera Coordinates			Photograph Date	
Schwartz					2014:09:11	

High Resolution Photograph



Photographer		Camera Coordinates		Photograph Date	
Schwartz				2014:09:11	

High Resolution Photograph



Station ID: 1192				Observer: Schwartz		
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:11		38.31999	122.33437	Soil	Uncertain	
Description						
Crack almost perpendicular to road and can be traced to north into natural ground. Cannot trace completely across road, may actually tie into cracks that are parallel to road. May be shaking related. Orientation of cracks is 173.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
173						
Photographer		Camera Coordinates			Photograph Date	
Schwartz					2014:09:11	

High Resolution Photograph



Station ID: 1193				Observer: Schwartz		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:11		38.32010	122.33417	Soil		Uncertain
Description						
Two short left stepping cracks in compacted road surface. Cannot clearly trace into native dirt and cannot extend across road into vineyard to south. Orientation of individual cracks is 272.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
272						
Photographer		Camera Coordinates			Photograph Date	
Schwartz					2014:09:11	

High Resolution Photograph



Station ID: 1194			Observer: Morelan/Trexler	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:24	38.32193	122.33454	Soil	Uncertain
Description				
Site name: alston_1 - Measurement: None - Measurement azimuth: None - Feature azimuth: None - Displacement sense: opening; halfway up scarp.				
Photographer	Camera Coordinates		Photograph Date	
Morelan			2014:08:24 17:32:13	

High Resolution Photograph



Station ID: 1195				Observer: Dawson
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:24	38.32193	122.33454	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Dawson	38.32190	122.33446	2014:08:24 19:49:56	

High Resolution Photograph



Station ID: 1196				Observer: Seitz/Rubin		
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:08:25		38.32193	122.33454	Soil	Uncertain	
Description						
Location of reported rupture.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
<0.1*						

Station ID: 1196		Observer: Seitz/Rubin	
Photographer	Camera Coordinates		Photograph Date
Seitz	38.32196	122.33453	2014:08:25 10:58:13

[High Resolution Photograph](#)



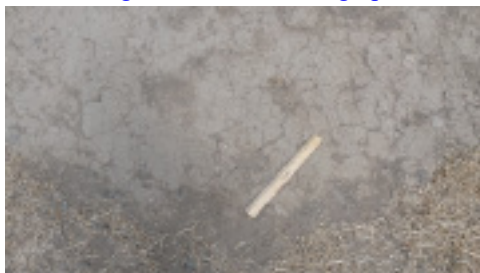
Photographer	Camera Coordinates		Photograph Date
Seitz	38.32191	122.33456	2014:08:25 10:58:33

[High Resolution Photograph](#)



Station ID: 1196		Observer: Seitz/Rubin	
Photographer	Camera Coordinates		Photograph Date
Rubin	38.32187	122.33440	2014:08:25 10:58:46

[High Resolution Photograph](#)



Station ID: 1197		Observer: Morelan/Trexler		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:24	38.32244	122.33472	Soil	Uncertain

Description

Displacement sense: opening; halfway up scarp.

Photographer	Camera Coordinates	Photograph Date
Morelan		2014:08:24 17:35:04

[High Resolution Photograph](#)



Station ID: 1198					Observer: Schwartz	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:08:24		38.32244	122.33472	Soil	Uncertain	
Description						
Extension cracks < 1 cm.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
<1 *						
Photographer		Camera Coordinates		Photograph Date		
Schwartz				2014:08:24 19:50:21		

High Resolution Photograph



Station ID: 1199				Observer: Dawson
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:24	38.32244	122.33472	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Dawson	38.32235	122.33479	2014:08:24 19:52:11	

High Resolution Photograph



Station ID: 1200				Observer: Seitz/Rubin
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:25	38.32244	122.33472	Soil	Uncertain
Description				
Crack in trail. 2-3 mm open. Orientation nearly orthogonal to slope. Near transition between boulder and clayey material in trail cut.				
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.32238	122.33475	2014:08:25 10:50:39	

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date	
Seitz	38.32241	122.33472	2014:08:25 10:50:43	

[High Resolution Photograph](#)



Station ID: 1200		Observer: Seitz/Rubin	
Photographer	Camera Coordinates		Photograph Date
Seitz	38.32243	122.33472	2014:08:25 10:50:58

[High Resolution Photograph](#)



Station ID: 1201						Observer: Hudnut
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:08:28		38.32274	122.33327	Pavement	Uncertain	
Description						
Alston park: asphalt pathway just ~30 m southwest of entrance gate and sign/kiosk; small tent, ~						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
320						

Station ID: 1202				Observer: Ponti		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:01		38.32541	122.34096	Soil		Uncertain
Description						
Hairline fracture across dirt road, can be extended to the north west and south east a few meters into the soil. Trend 113.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
113						
Photographer		Camera Coordinates		Photograph Date		
Ponti		38.32543	122.34096	2014:09:01 15:40:25		
High Resolution Photograph						

[High Resolution Photograph](#)



Station ID: 1203				Observer: Seitz/Rubin
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:27	38.32796	122.33813	Pavement	Uncertain
Description				
Minor tenting across driveway along pre-existing cracks. Do not extend into soil. No lateral offset. Other similar features along this driveway.				
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.32769	122.33701	2014:08:27 09:41:33	

High Resolution Photograph



Photographer	Camera Coordinates		Photograph Date	
Seitz	38.32795	122.33813	2014:08:27 09:41:45	

High Resolution Photograph



Station ID: 1204				Observer: Hudnut
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:28	38.32796	122.33813	Pavement	Uncertain
Description				
Uplifted/fractured pavement.				
Photographer	Camera Coordinates		Photograph Date	
Hudnut	38.32808	122.33794	2014:08:28 12:24:10	

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date	
Hudnut	38.32801	122.33812	2014:08:28 12:24:24	

[High Resolution Photograph](#)



Station ID: 1204	Observer: Hudnut
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Photographer	Camera Coordinates		Photograph Date
Hudnut	38.32801	122.33813	2014:08:28 12:26:21

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Hudnut	38.32799	122.33813	2014:08:28 12:27:17

[High Resolution Photograph](#)



Station ID: 1204	Observer: Hudnut
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Photographer	Camera Coordinates		Photograph Date
Hudnut	38.32796	122.33811	2014:08:28 12:27:27

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Hudnut	38.32801	122.33808	2014:08:28 12:27:44

[High Resolution Photograph](#)



Station ID: 1204	Observer: Hudnut
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Photographer	Camera Coordinates	Photograph Date
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Hudnut	38.32804	122.33808	2014:08:28 12:27:54
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[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
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Hudnut	38.32789	122.33820	2014:08:28 12:28:27
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[High Resolution Photograph](#)



Station ID: 1205						Observer: Ponti
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:01		38.32796	122.33813	Pavement		Uncertain
Description						
Compressive fracture in pavement at Alston Park. Strike trend 310. Does not extend into soil.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
310						
Photographer		Camera Coordinates		Photograph Date		
Ponti		38.32795	122.33813	2014:09:01 15:31:12		

[High Resolution Photograph](#)



Region O

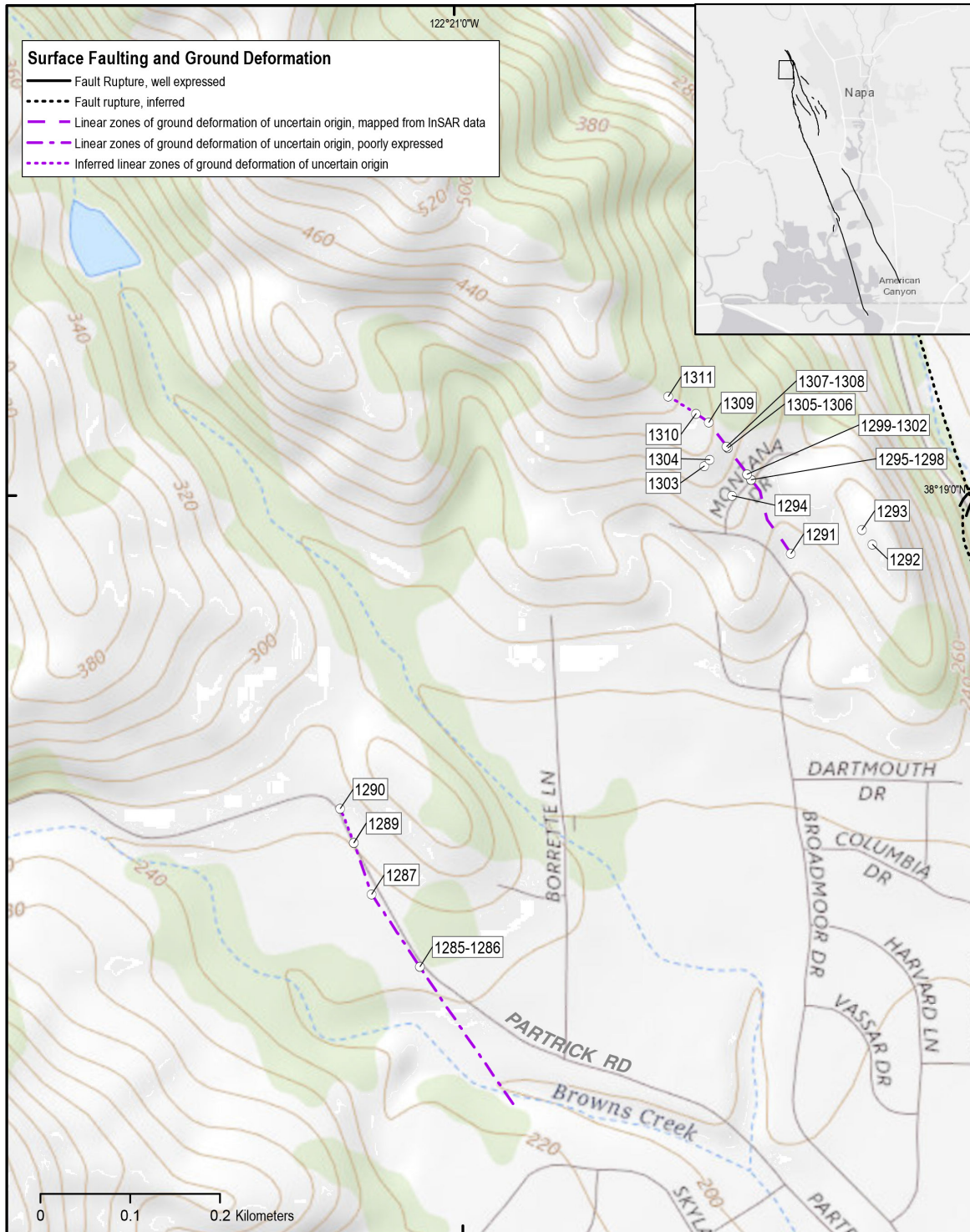


Figure 13.2. Ground deformation map showing locations of observation stations 1285–1311 in Region O of the West Napa Fault System, California, from Partrick Road 600 m northeast to Broadmoor Drive. Inset shows location of fig. 13.2 relative to full extent of rupture. Shaded relief base from U.S. Geological Survey National Map <https://viewer.nationalmap.gov/advanced-viewer/>.

Station ID: 1285				Observer: Lancaster
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:26	38.31191	122.35053	Pavement	Uncertain
Description				
Fractures in pavement and soil appear to be mostly horizontal. Zone of separation up to 25 ft. Eastern most cracking along roadway. Mostly horizontal separation.				
Photographer	Camera Coordinates		Photograph Date	
Lancaster	38.31231	122.35084	2014:08:26 15:29:56	

High Resolution Photograph



Station ID: 1286				Observer: Seitz		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:03		38.31191	122.35053	Pavement		Uncertain
Description						
Zone of cracks across asphalt seem to be related to slumping into adjacent drainage ditch. Quite extensive, about 50 m long, parallel to the roadway and it seems to be related to weak pavement. Direction roughly N45W.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
315						
Photographer		Camera Coordinates			Photograph Date	
Seitz		38.31179	122.35069	2014:09:03 14:05:43		

High Resolution Photograph



Photographer	Camera Coordinates			Photograph Date		
Seitz	38.31176	122.35065		2014:09:03	14:05:52	

High Resolution Photograph



Station ID: 1287				Observer: Lancaster
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:26	38.31264	122.35114	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Lancaster	38.31322	122.35146	2014:08:26 15:22:00	

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date	
Lancaster	38.31255	122.35120	2014:08:26 15:22:03	

[High Resolution Photograph](#)



Station ID: 1287	Observer: Lancaster
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Photographer	Camera Coordinates	Photograph Date
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Lancaster	38.31273	122.35117	2014:08:26 15:37:31
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[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
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Lancaster	38.31273	122.35117	2014:08:26 15:38:27
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[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
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Lancaster	38.31273	122.35117	2014:08:26 15:39:16
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[High Resolution Photograph](#)



Station ID: 1287		Observer: Lancaster	
Photographer	Camera Coordinates		Photograph Date
Lancaster	38.31273	122.35117	2014:08:26 15:39:22
High Resolution Photograph			



Station ID: 1288			Observer: Lancaster	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:26	38.31316	122.35136	Pavement	Uncertain
Description				
Deformation on Partrick Rd. Cracks show predominantly horizontal separation.				
Photographer	Camera Coordinates		Photograph Date	
Lancaster	38.31317	122.35135	2014:08:26 15:00:47	
High Resolution Photograph				



Station ID: 1288		Observer: Lancaster	
Photographer	Camera Coordinates		Photograph Date
Lancaster	38.31317	122.35135	2014:08:26 15:00:50

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Lancaster	38.31322	122.35146	2014:08:26 15:02:20

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Lancaster	38.31322	122.35146	2014:08:26 15:02:39

[High Resolution Photograph](#)



Station ID: 1289				Observer: Seitz
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:10:03	38.31316	122.35136	Pavement	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.31330	122.35131	2014:10:03 16:37:31	

High Resolution Photograph



Station ID: 1290				Observer: Lancaster
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:26	38.31350	122.35153	Pavement	Uncertain
Description				
Western most extent of cracking in roadway.				

Station ID: 1291				Observer: Seitz
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:03	38.31603	122.34576	Curb/Sidewalk	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.31603	122.34575	2014:09:03 14:27:22	

[High Resolution Photograph](#)



Station ID: 1292			Observer: Haydon/Wiegers	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:26	38.31612	122.34472	Soil	Uncertain
Description				
Crack leading toward house.				
Photographer	Camera Coordinates		Photograph Date	
Haydon/Wiegers	38.31611	122.34471	2014:08:26 12:48:05	

[High Resolution Photograph](#)



Station ID: 1293			Observer: Haydon/Wiegers	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:26	38.31626	122.34485	Pavement	Uncertain
Description				
Broken pavement (6 month old pavement) on west side of house.				
Photographer	Camera Coordinates		Photograph Date	
Haydon/Wiegers	38.31626	122.34484	2014:08:26 13:06:20	
High Resolution Photograph				



Station ID: 1294				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31662	122.34651	Pavement	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	
High Resolution Photograph				



Station ID: 1295				Observer: Seitz/Rubin		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:08:27		38.31678	122.34626	Pavement		Uncertain
Description						
Open crack across street 3.5 cm. Extends across soil and beneath house into backyard. Foundation damaged. No lateral displacement observed. Crack along crest of local ridgeline, possibly gravity related.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
3.5*						
Photographer		Camera Coordinates		Photograph Date		
Seitz		38.31676	122.34624	2014:08:27 10:12:47		

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Seitz	38.31683	122.34628	2014:08:27 10:13:12

[High Resolution Photograph](#)



Station ID: 1296				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:28	38.31678	122.34626	Pavement	Uncertain
Description				
Cracks on bedrock fault.				

Station ID: 1297				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31678	122.34626	Pavement	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

High Resolution Photograph



Station ID: 1298				Observer: Brossy		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:11:12		38.31678	122.34626	Pavement		Uncertain
Description						
Cracking in the street that extended across the whole paved section and into the soil adjacent, projecting under the house along ~335 degrees. No cracking or deformation of the property to the south was apparent.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
335						
Photographer		Camera Coordinates			Photograph Date	
Brossy					2014:11:12 10:47:00	

High Resolution Photograph



Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 10:49:07

High Resolution Photograph



Station ID: 1299			Observer: Seitz/Rubin	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:27	38.31683	122.34631	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.31689	122.34631	2014:08:27 10:13:22	

High Resolution Photograph



Station ID: 1300			Observer: Wells	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31683	122.34631	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

High Resolution Photograph



Station ID: 1300		Observer: Wells
Photographer	Camera Coordinates	Photograph Date
Wells		2014:08:30

[High Resolution Photograph](#)



Station ID: 1301		Observer: Seitz		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:03	38.31683	122.34631	Soil	Uncertain
Photographer	Camera Coordinates	Photograph Date		
Seitz	38.31679	122.34634	2014:09:03 14:49:18	

[High Resolution Photograph](#)



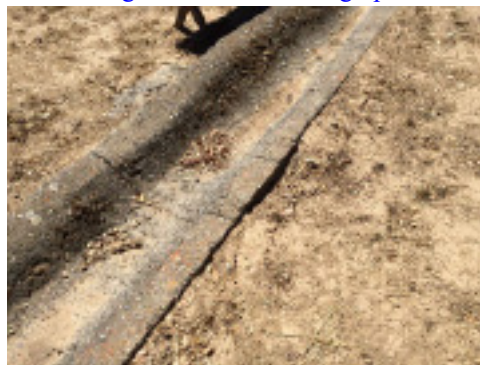
Station ID: 1302				Observer: Brossy
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:11:12	38.31683	122.34631	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Brossy			2014:11:12 10:48:58	

[High Resolution Photograph](#)



Station ID: 1303				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31691	122.34686	Curb/Sidewalk	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

[High Resolution Photograph](#)



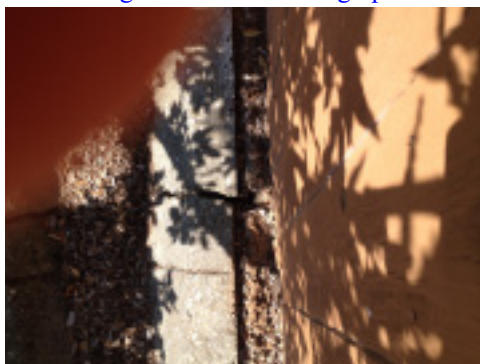
Station ID: 1304				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31698	122.34679	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

High Resolution Photograph



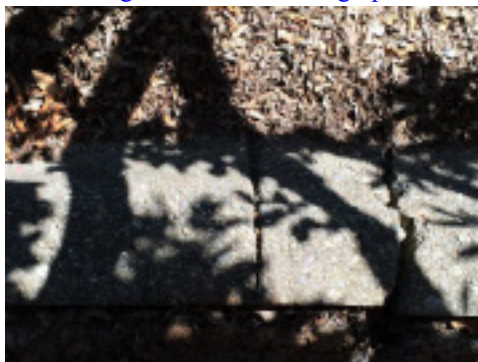
Station ID: 1305				Observer: Seitz/Rubin		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:08:27		38.31710	122.34656	Soil		Uncertain
Description						
On trend with cracks in street and through house. Crack open 2 cm in dirt, not continuous to tank access road. Opening in downslope direction. Right-lateral offset ~ 2 cm in v-ditch up slope of house. Possibly gravity related.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
	2*	RL	2*			
Photographer		Camera Coordinates		Photograph Date		
Seitz		38.31711	122.34661	2014:08:27 10:34:26		

High Resolution Photograph



Station ID: 1306				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31710	122.34656	Curb/Sidewalk	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

[High Resolution Photograph](#)



Station ID: 1307				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31711	122.34657	Soil	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

[High Resolution Photograph](#)



Station ID: 1308				Observer: Brossy		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:11:12		38.31711	122.34657	Soil		Uncertain
Description						
Observed two co-linear cracks in soil about 2 m apart with ~1-2.5 cm of separation. These trended ~325 degrees and did not have any apparent lateral or vertical displacement. One of the panels of the fence had also pulled apart by about 1.5 inches.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
325		1-2.5*				
Photographer		Camera Coordinates		Photograph Date		
Brossy				2014:11:12 11:38:54		

High Resolution Photograph



Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:39:03

High Resolution Photograph



Station ID: 1308		Observer: Brossy
Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:39:22

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:39:31

[High Resolution Photograph](#)



Station ID: 1308		Observer: Brossy
Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:39:48

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:40:36

[High Resolution Photograph](#)



Station ID: 1308		Observer: Brossy
Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:40:53

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Brossy		2014:11:12 11:41:07

[High Resolution Photograph](#)



Station ID: 1309				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31736	122.34680	Pavement	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

High Resolution Photograph



Station ID: 1310				Observer: Seitz/Rubin
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:27	38.31744	122.34696	Pavement	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Seitz	38.31744	122.34695	2014:08:27 10:46:22	

High Resolution Photograph



Station ID: 1311				Observer: Wells
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:30	38.31762	122.34731	Pavement	Uncertain
Photographer	Camera Coordinates		Photograph Date	
Wells			2014:08:30	

High Resolution Photograph



Region R

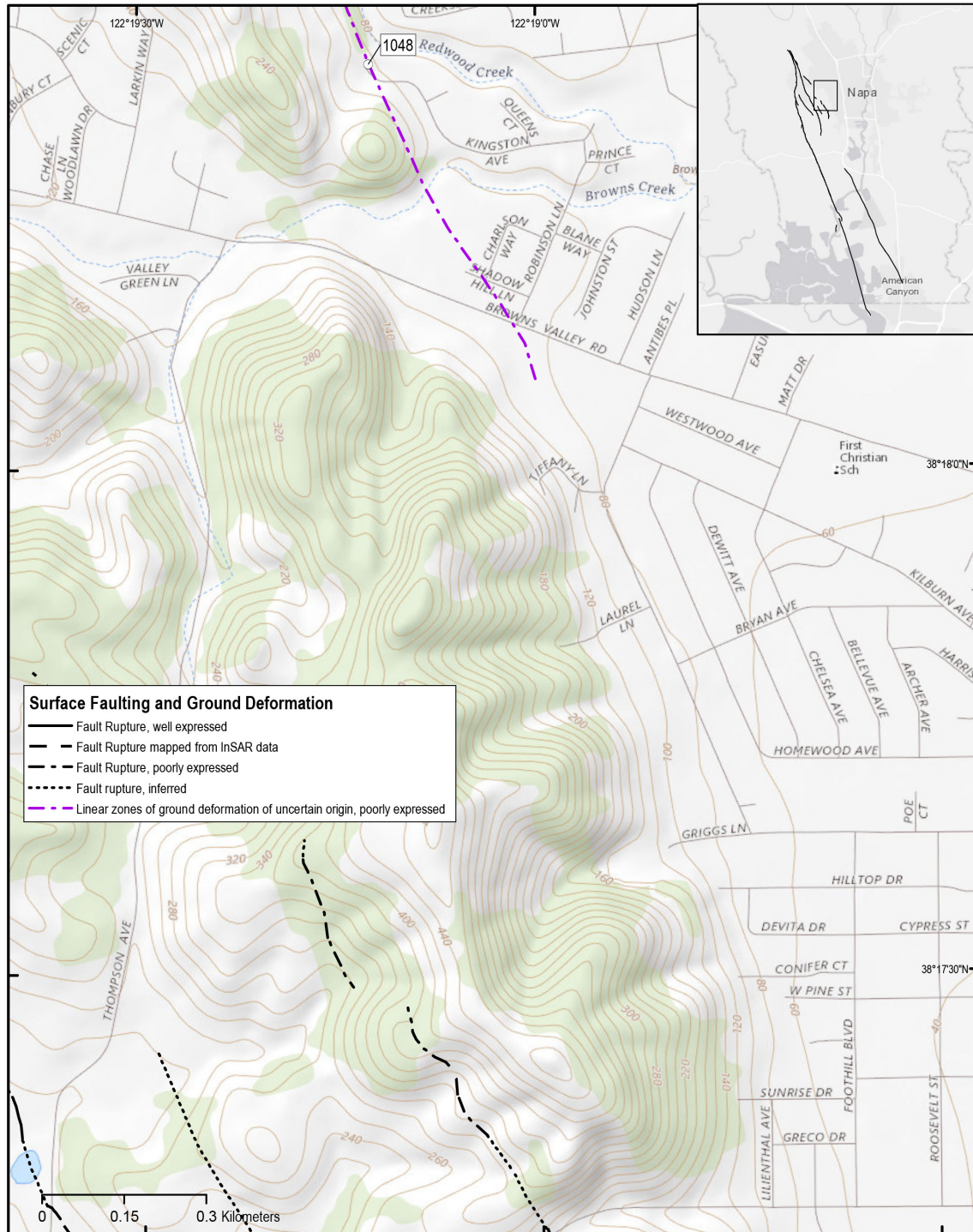


Figure 13.3. Ground deformation map showing location of observation station 1048 in Region R of the West Napa Fault System, California, from intersection of Old Sonoma Road and Lilienthal Avenue 2.2 km north to Kingston Avenue. Inset shows location of fig. 13.3 relative to full extent of rupture. Shaded relief base from U.S. Geological Survey National Map <https://viewer.nationalmap.gov/advanced-viewer/>.

Station ID: 1048					Observer: Hudnut	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:08:30		38.30668	122.32017	Pavement	Uncertain	
Description						
West up northwest along fault scarp; found ~1-2 mm right-lateral across cul de sac in asphalt at end of Kingston Ave.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
	~0.1-0.2*	RL				W

Region U

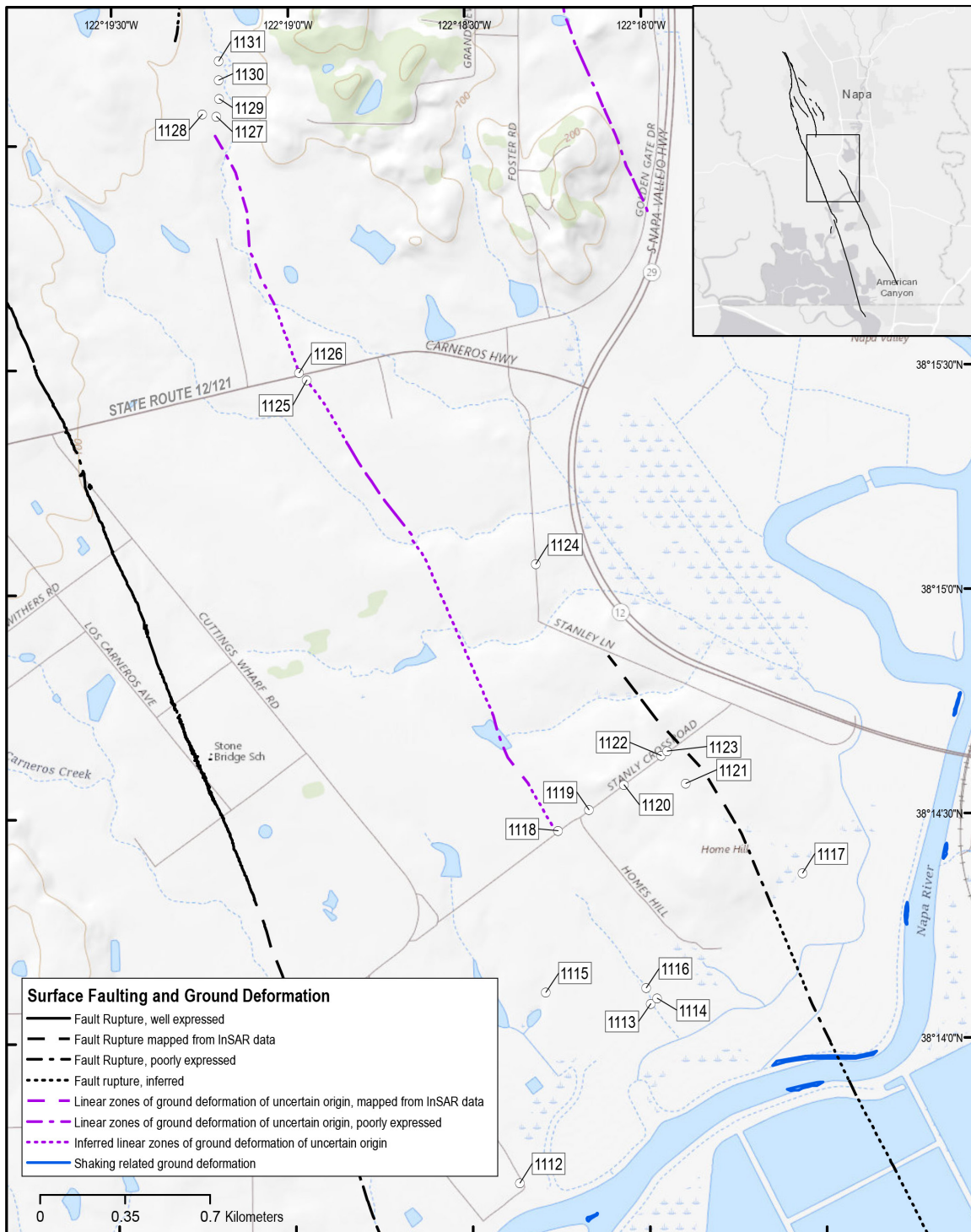


Figure 13.4. Ground deformation map showing locations of observation stations 1112–1131 in Region U of the West Napa Fault System, California, from Cuttings Wharf 4.8 km north to State Route 12. Inset shows location of fig. 13.4 relative to full extent of rupture. Shaded relief base from U.S. Geological Survey National Map <https://viewer.nationalmap.gov/advanced-viewer/>.

Station ID: 1112					Observer: Lancaster	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:08:24		38.22807	122.30614	Soil	Uncertain	
Description						
Linear cracks trending 330. Apparent tensional features with no apparent lateral offset.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
330						

Station ID: 1113				Observer: Hitchcock/Lutz	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:16	38.23469	122.29991	Soil	Uncertain	
Description					
Fresh cracks in dirt road, both parallel and normal to the road alignment.					
Photographer		Camera Coordinates		Photograph Date	
Hitchcock/Lutz				2014:09:16 14:01:17	

High Resolution Photograph



Station ID: 1113		Observer: Hitchcock/Lutz
Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 14:01:49

[High Resolution Photograph](#)



Station ID: 1114		Observer: Hitchcock/Lutz		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.23489	122.29960	Soil	Uncertain

Description

Fresh cracks in dirt road, both parallel and normal to the road alignment.

Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:58:40

[High Resolution Photograph](#)



Station ID: 1114		Observer: Hitchcock/Lutz
Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:59:17

[High Resolution Photograph](#)



Station ID: 1115		Observer: Hitchcock/Lutz		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.23514	122.30484	Soil	Uncertain

Description

Fresh cracks, some in left-stepping en echelon pattern. No detectable displacement.

Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 14:10:43

[High Resolution Photograph](#)



Station ID: 1115		Observer: Hitchcock/Lutz
Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 14:11:29

[High Resolution Photograph](#)



Station ID: 1116				Observer: Hitchcock/Lutz		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:16		38.23528	122.30010	Soil		Uncertain
Description						
Possibly right-lateral offset of tire track 0.5 inches. Cracks are fresh, distinguishable from desiccation cracking, and continuous up to about 10 ft in length.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
	1.3*	RL				

Station ID: 1116		Observer: Hitchcock/Lutz
Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 14:04:57

[High Resolution Photograph](#)



Station ID: 1117		Observer: Hitchcock/Lutz		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.23950	122.29271	Soil	Uncertain

Description

Fissures along southeast edge of road embankment. Likely fresh based on absence of infilling or vegetation growth.

Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:49:12

[High Resolution Photograph](#)



Station ID: 1117		Observer: Hitchcock/Lutz
Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:49:51

[High Resolution Photograph](#)



Station ID: 1118		Observer: Hitchcock/Lutz		
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.24114	122.30420	Pavement	Uncertain

Description

Fresh hairline crack in asphalt, oriented roughly normal to road alignment.

Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:40:46

[High Resolution Photograph](#)



Station ID: 1119			Observer: Hitchcock/Lutz	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.24190	122.30274	Pavement	Uncertain
Description				
Fresh hairline crack in asphalt, oriented roughly normal to road alignment.				
Photographer	Camera Coordinates		Photograph Date	
Hitchcock/Lutz			2014:09:16 13:36:49	

[High Resolution Photograph](#)



Station ID: 1120			Observer: Hitchcock/Lutz	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.24283	122.30108	Pavement	Uncertain
Description				
0.03 ft gap around blow off valve vault. Fresh crack in asphalt with no displacement, oriented roughly normal to road alignment. Possible hilltop fracturing.				
Photographer	Camera Coordinates		Photograph Date	
Hitchcock/Lutz			2014:09:16 13:10:07	

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:10:29

[High Resolution Photograph](#)



Station ID: 1121				Observer: Pratt
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:10	38.24286	122.29817	Soil	Uncertain
Description				
Surface cracking possibly from expansive soil/utility.				
Photographer	Camera Coordinates		Photograph Date	
Pratt			2014:09:10	

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Pratt		2014:09:10

[High Resolution Photograph](#)



Station ID: 1121	Observer: Pratt
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Photographer	Camera Coordinates	Photograph Date
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Pratt

2014:09:10

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
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Pratt

2014:09:10

[High Resolution Photograph](#)



Station ID: 1122			Observer: Hitchcock/Lutz	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.24389	122.29932	Pavement	Uncertain
Description				
Fresh hairline crack in asphalt, oriented roughly subparallel to road alignment.				
Photographer	Camera Coordinates		Photograph Date	
Hitchcock/Lutz			2014:09:16 13:43:37	

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Hitchcock/Lutz		2014:09:16 13:44:09

[High Resolution Photograph](#)



Station ID: 1123			Observer: Hitchcock/Lutz	
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:16	38.24406	122.29903	Pavement	Uncertain
Description				
Fresh hairline crack in asphalt, oriented roughly subparallel to road alignment.				
Photographer	Camera Coordinates		Photograph Date	
Hitchcock/Lutz			2014:09:16 13:46:48	

[High Resolution Photograph](#)



Station ID: 1124				Observer: Hudnut
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:08:28	38.25104	122.30517	Pavement	Uncertain
Description				
Fracture in pavement. All cracks are parallel to road; no indication of displacement at all.				
Photographer	Camera Coordinates		Photograph Date	
Hudnut			2014:08:28 18:11:05	

[High Resolution Photograph](#)



Photographer	Camera Coordinates	Photograph Date
Hudnut		2014:08:28 18:11:28

[High Resolution Photograph](#)



Station ID: 1124		Observer: Hudnut
Photographer	Camera Coordinates	Photograph Date
Hudnut		2014:08:28 18:12:14

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Hudnut	38.25105	122.30519	2014:08:28 18:12:47

[High Resolution Photograph](#)



Station ID: 1124	Observer: Hudnut
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Photographer	Camera Coordinates		Photograph Date
Hudnut	38.25104	122.30513	2014:08:28 18:12:59

[High Resolution Photograph](#)



Photographer	Camera Coordinates		Photograph Date
Hudnut	38.25085	122.30501	2014:08:28 18:14:06

[High Resolution Photograph](#)



Station ID: 1124		Observer: Hudnut	
Photographer	Camera Coordinates		Photograph Date
Hudnut	38.25063	122.30501	2014:08:28 18:14:30

[High Resolution Photograph](#)



Station ID: 1125				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:03	38.25794	122.31591	Soil	Uncertain
Description				
Short alignment of extensional cracks on south hillslope embankment (transverse to slope) --didn't continue on upper or lower surfaces. Cracks in roadway don't appear to be fresh. No apparent offset of highway lines.				

Station ID: 1126				Observer: DeLong
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:11	38.25820	122.31626	Pavement	Uncertain
Description				
Tiny crack from pavement through dirt. No offset. No other apparent surface rupture in this area.				
Photographer	Camera Coordinates		Photograph Date	
DeLong	38.25820	122.31625	2014:09:11	
High Resolution Photograph				
				

Station ID: 1127				Observer: Hecker/Pickering		
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin	
2014:09:03		38.26773	122.32008	Soil	Uncertain	
Description						
Minor extensional cracks. Vaguely left-stepping across road, oblique to creek, ~5-10 m from creek. Trend ~314 (Small fractures that do not appear aligned to. previous fractures).						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
314						
Photographer		Camera Coordinates		Photograph Date		
Hecker		38.26776	122.32020	2014:09:03 15:42:45		

High Resolution Photograph



Station ID: 1128				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:03	38.26782	122.32073	Soil	Uncertain
Description				
Small extensional north-south trending crack, several meters long, crossing dirt road.				

Station ID: 1129				Observer: Hecker
Observation Date	Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:03	38.26840	122.31993	Soil	Uncertain
Description				
North-south cracks along roadside - runs between newly planted trees beneath thin irrigation hose. Possibly related to buried water line?				

Station ID: 1130				Observer: Hecker/Pickering		
Observation Date		Latitude	Longitude	Offset Feature		Inferred Origin
2014:09:03		38.26909	122.31995	Soil		Uncertain
Description						
2 m long extensional crack crosses into dirt road with 339 trend; can't trace into field about 10 m west of creek.						
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical	Upthrown Side
339						

Station ID: 1131				Observer: Hecker	
Observation Date		Latitude	Longitude	Offset Feature	Inferred Origin
2014:09:03		38.26980	122.31995	Soil	Uncertain
Description					
Grid-like (polygonal) pattern of open cracks down dirt road with suggestion of 1- 2mm right-lateral in places. Can't trace into vines (recently plowed) to west or into roadside to east.					
Fault Azimuth	Strike Slip	Strike-slip Sense	Extension	Compression	Vertical Upthrown Side
	0.1-0.2*	RL			
Photographer		Camera Coordinates		Photograph Date	
Hecker		38.26971	122.31973	2014:09:03	16:09:48

High Resolution Photograph

