



Data from Theodolite Measurements of Creep Rates on San Francisco Bay Region Faults, California: 1979–2001

By Jon S. Galehouse¹

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**U.S. DEPARTMENT OF THE INTERIOR
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¹ Department of Geosciences, San Francisco State University, San Francisco, CA 94132.
Present address: P.O. Box 140, Twain, CA 95984.

INTRODUCTION

My purpose is to make our creep data on San Francisco Bay region active faults available to the scientific research community. My student research assistants and I measured creep (aseismic slip) rates on these faults from 1979 until my retirement from the project in 2001. These data are further described in my final technical report as principal investigator, which summarizes results from 22 September 1979 through 28 February 2001 (Galehouse, 2001). We made over 2600 creep measurements, about one-third in the ten years prior to the Loma Prieta earthquake (LPEQ) and two-thirds in the 11.4 years following it. The measurements are continuing to be made by members of the Geosciences Department at San Francisco State University (SFSU) under the direction of Karen Grove and John Caskey. A complete analysis of our results obtained on the Hayward fault is presented in Lienkaemper, Galehouse and Simpson (2001). A formal report based on the entire San Francisco Bay region data set is in preparation.

METHODS

Amount of slip was determined by noting changes in angles between sets of measurements taken across a fault at different times. This triangulation method uses a theodolite to measure the angle formed by three fixed points to the nearest tenth of a second of arc (Galehouse and others, 1982). For the first 14 years of measurements, the angle was measured 12 times each measurement day. Since then, we have been measuring it eight times each day. The amount of slip between measurement days can be calculated trigonometrically using the change in average angle. The precision of the measurement method is such that we can detect with confidence any movement more than 1-2 mm between successive measurement days.

We have regular measurement sites at 29 localities on active faults, plus data from five sites that had to be abandoned. These site locations are shown as triangles and site numbers on the accompanying map (Figure 1) and identified by name in Tables 1 and 2A and in the data sheets. In addition to the sites in the San Francisco Bay region, we have one measurement site on the San Andreas fault in the Point Arena area and two on the Maacama fault in Willits and east of Ukiah. We typically have measured most sites with a history of creep about once every two months and most sites without any creep history about every three months.

In addition to our eleven regular sites on the Hayward fault, we have established 20 additional sites (shown by dots in Figure 1 and by name in Table 2B and in the data sheets) with J. Lienkaemper of the USGS. We began measuring each of these additional sites annually in July - August 1994.

DATA

Table 1 shows the least squares average rate of movement at each site determined using linear regression and the simple average determined by dividing the total net right-lateral displacement by the total time measured. All measurement sites span a fault width of 57-267 m, except Sites 8 and 20 that span a greater width because of site considerations. This fault width spanned is noted in Table 2 and represents the distance from the theodolite on one side of a fault (IS) to a target on the other side (ES). Table 2 also shows any changes in lengths during measurement history. Data sheets for each site follow Table 2. Each data sheet is identified in the upper left by site number and name and Hayward fault sites are ordered from northwest to southeast using kilometer distances along the fault measured from Point Pinole (P, in Figure 1) using the grid in Lienkaemper (1992). These data are also available for downloading in the Excel format to facilitate analysis of the data at <http://geopubs.wr.usgs.gov/open-file/of02-225/> (SFBayRegion.xls and HaywardFault.xls). They are also available as tab delimited raw data. The data include all regular measurement sites, SF-1 through SF-34 and the 20 SFSU and USGS afterslip sites on the Hayward fault.

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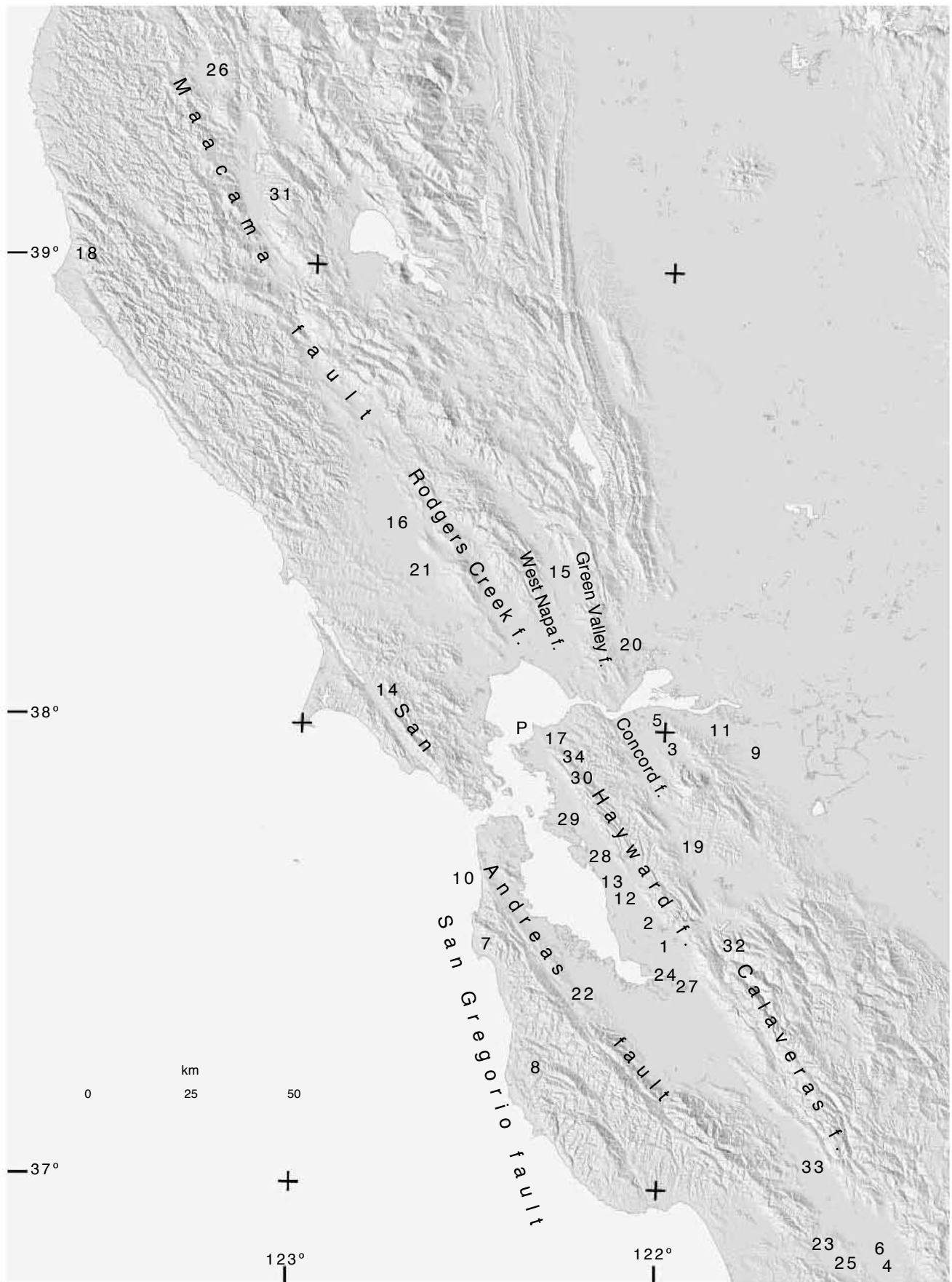


Figure 1. Locations of alinement arrays. Regular arrays shown as triangles, afterslip arrays on Hayward Fault shown as dots. P, Point Pinole.

Table 1. Average Rates of Right-Lateral Movement

Fault	WG99 Segment Code	Site #	Site	Least Squares Average (mm/yr)	Simple† Average (mm/yr)	Years Measrd	Pre-LPEQ*:		
							Least Squares Average (mm/yr)	Simple† Average (mm/yr)	Years Measrd
San Andreas	NCS	18	Alder Creek	0.5	0.6	19.6	0.9	0.9	8.0
"	NCS	14	Point Reyes	0.2	0.1	15.9	0.4	0.4	4.7
"	PN	10	Duhallow Way	-0.3	-0.2	20.8	-0.3	-0.2	9.5
"	PN	22	Roberta Drive	0.3	0.7	11.1	—	0.0	12.7
"	SCZ	23	Cannon Road	0.1	0.2	8.2	—		
"	SCZ	25	Mission Vineyard Rd	10.4	11.2	10.6	—	6.7	~20
Hayward	NH	17	Contra Costa College	4.9	4.6	20.4	4.7	4.2	9.0
"	NH	34	Thors Bay Road	4.3	4.5	11.3	—		
"	NH	30	Florida Ave	1.4	1.5	8.3	—		
"	NH	29	LaSalle Ave	3.8	4.2	7.9	—		
"	SH	28	Encina Way	3.0	3.8	11.4	—		
"	SH	13	Rose Street	5.0	4.8	20.5	4.9	4.6	9.3
"	SH	12	D Street	4.4	4.5	20.5	4.9	4.9	9.3
"	SH	2	Appian Way	5.2	5.4	21.3	4.7	4.6	9.9
"	SH	1	Rockett Drive	4.8	5.0	21.3	5.5	4.5	9.9
"	SH	24	Camellia Drive	3.9	3.2	11.0	—	9.5	~20
"	SH	27	Parkmeadow Drive	5.7	4.8	8.9	—	8.2	~14
Rodgers Creek	RC	16	Nielson Road	0.4	-0.9	5.4	—		
"	RC	21	Roberts Road	1.6	1.0	14.2	—		
Calaveras	NC	19	Corey Place	1.6	1.7 (3.9)	20.2 (8.3)	0.2	0.3	8.6
"	NC	32	Welch Creek Road	3.6	3.5	4.0	—		
"	CC	33	Coyote Ranch	13.9	14.3	4.0	16.6	17.2	20.0
"	SC	6	Wright Road	9.0	9.9	21.3	12.2	12.1	9.8
"	SC	4	Seventh Street	6.4	6.6	21.4	6.4	6.8	9.9
Green Valley	SGV	20	Red Top Road	4.2	4.2	16.7	4.3	4.2	5.1
Concord	CON	5	Salvio Street	2.7	2.8	21.3	2.5	3.2	9.9
"	CON	3	Ashbury Drive	3.6	3.8	21.3	3.3	3.8	9.9
Maacama	—	26	W. Commercial Ave	6.5	6.6	9.3	—		
"	—	31	Sanford Ranch Road	4.4	4.5	7.8	—		
Seal Cove	SGN	7	West Point Ave	-0.1	-0.1	21.0	0.2	0.4	9.7
San Gregorio	SGN	8	Pescadero Road	0.8	0.4	18.5	-0.8	-0.9	7.2
West Napa	—	15	Linda Vista Ave	0.1	0.0	18.5	—		
"Antioch"	—	11	Worrell Road	-0.1	-0.3	19.8	—		
"	—	9	Deer Valley Road	1.7	1.2	7.6	—		

*LPEQ - M7, Loma Prieta earthquake, October 17, 1989

†Simple Average, (cumulative movement)/(years measured)

Table 2. IS to ES Distance* History, SFSU Measurements, 22 Sep. 1979 to 28 Feb. 2001

A. Regular SFSU Sites

Site #	Site Name	IS-ES Distance (m) (Active† underlined)	First Measurement	Last Measurement	Abandoned
1	Rockett Drive	<u>180.0</u>	22-Sep-79	30-Dec-00	
2	Appian Way	145.6	23-Sep-79	9-Jun-81	
		148.3	6-Aug-81	15-Jan-93	
		<u>125.2</u>	15-Jan-93	30-Dec-00	
3	Ashbury Drive	143.0	28-Sep-79	6-Oct-85	
		<u>130.0</u>	23-Mar-86	11-Feb-01	
4	Seventh Street	<u>89.7</u>	29-Sep-79	25-Feb-01	
5	Salvio Street	<u>57.1</u>	30-Sep-79	11-Feb-01	
6	Wright Road	51.7	21-Oct-79	11-Feb-95	
		<u>103.4</u>	12-Nov-94	25-Feb-01	
7	West Point Ave	176.9	9-Nov-79	2-Apr-81	
		167.7	8-Jul-81	27-Jan-90	
		<u>266.6</u>	25-Mar-90	18-Nov-00	
8	Pescadero Road	452.0	20-May-82	6-Feb-93	
		<u>455.0</u>	12-Sep-93	18-Nov-00	
9	Deer Valley Road	226.2	21-Nov-82	1-Jul-90	X
10	Duhallow Way	173.9	23-Mar-80	3-Nov-89	
		207.5	15-Nov-89	29-May-94	
		<u>205.8</u>	6-Aug-94	13-Jan-01	
11	Worrell Road	103.9	4-May-80	15-Mar-97	
		103.8	5-Jul-97	27-Feb-00	X
12	D Street	136.2	23-Jun-80	13-Jul-97	
		<u>112.4</u>	12-Jun-99	6-Jan-01	
13	Rose Street	84.5	24-Jun-80	11-Jul-92	
		<u>153.9</u>	24-Sep-92	6-Jan-01	
14	Point Reyes	<u>70.6</u>	4-Feb-85	13-Jan-01	
15	Linda Vista Ave	128.0	26-Jul-80	15-Aug-81	
		131.6	9-Nov-81	21-Jul-84	
		131.0	9-Dec-84	10-Jul-93	
		130.9	25-Sep-93	16-Jan-99	X
16	Nielson Road	209.1	17-Aug-80	20-Jan-86	X
17	Contra Costa College	75.7	10-Aug-80	4-Mar-90	
		<u>106.8</u>	4-Mar-90	21-Jan-01	
18	Alder Creek	<u>267.4</u>	9-Jan-81	5-Aug-00	
19	Corey Place	<u>111.1</u>	23-Nov-80	10-Feb-01	
20	Red Top Road	335.8	15-Jun-84	28-Feb-99	
		352.9	12-Mar-00	15-Oct-00	
		<u>355.4</u>	10-Dec-00	11-Feb-01	
21	Roberts Road	199.6	20-Sep-86	23-Jan-93	
		<u>198.7</u>	17-Apr-93	26-Nov-00	
22	Roberta Drive	<u>91.2</u>	4-Nov-89	26-Nov-00	
23	Cannon Road	88.0	18-Nov-89	13-Apr-96	
		88.1	20-Jul-96	14-Feb-98	X
24	Camellia Drive	<u>88.6</u>	11-Feb-90	10-Feb-01	
25	Mission Vineyard Rd	135.0	21-Jul-90	25-Apr-91	

		<u>134.2</u>	13-Jul-91	25-Feb-01
26	W. Commercial Ave	105.1	14-Nov-91	8-May-94
		<u>126.1</u>	9-Jul-94	24-Feb-01
27	Parkmeadow Drive	<u>157.4</u>	5-Apr-92	10-Feb-01
28	Encina Way	105.4	10-Sep-89	23-Dec-95
		<u>122.3</u>	6-Apr-96	20-Jan-01
29	LaSalle Ave	182.5	10-Feb-93	16-Jan-00
		<u>183.2</u>	9-Jul-00	20-Jan-01
30	Florida Ave	78.8	12-Aug-92	10-Feb-93
		73.6	10-Feb-93	27-Apr-97
		<u>125.3</u>	16-Aug-97	12-Nov-00
31	Sanford Ranch Road	263.2	22-May-93	10-Oct-99
		<u>262.3</u>	11-Dec-99	24-Feb-01
32	Welch Creek Road	<u>164.1</u>	24-Jan-97	27-Jan-01
33	Coyote Ranch	<u>99.2</u>	3-May-68	27-Jan-01
34	Thors Bay Road	<u>120.0</u>	30-Sep-89	21-Jan-01

B. SFSU-USGS Afterslip Arrays on Hayward Fault, Measured Annually

Distance from Pt. Pinole (km)	Site Name	IS-ES Distance (m) (Active† underlined)	First measurement	Last measurement
8.37	Olive	<u>149.0</u>	30-Sep-89	12-Nov-00
17.82	Cal Stadium	<u>165.5</u>	27-Jun-93	29-Oct-00
20.84	Temescal	148.0	12-Feb-94	22-Aug-95
		<u>153.9</u>	27-Sep-98	12-Nov-00
25.98	Lincoln	92.8	1-Aug-94	7-Sep-98
		<u>110.4</u>	11-Sep-99	12-Nov-00
27.81	39th	<u>131.9</u>	13-Aug-92	11-Nov-00
30.68	73rd	<u>89.8</u>	22-May-93	28-Oct-00
36.55	Chabot Park	<u>231.2</u>	22-May-93	28-Oct-00
38.28	Fairmont	<u>166.6</u>	17-Aug-97	28-Oct-00
41.11	167th	<u>90.9</u>	14-Aug-92	28-Oct-00
45.64	Palisade	102.8	11-Oct-89	20-Aug-96
		<u>177.5</u>	22-Oct-92	21-Oct-00
47.72	Sepulchre	87.9	3-Aug-94	19-Aug-96
		<u>106.9</u>	18-Aug-97	21-Oct-00
50.15	Woodland	<u>72.7</u>	12-Nov-92	21-Oct-00
52.60	Chimes	<u>120.3</u>	4-Aug-94	11-Nov-00
59.09	Gilbert	<u>89.3</u>	19-Nov-92	4-Nov-00
62.64	Hancock	<u>88.5</u>	17-Aug-94	4-Nov-00
63.10	Union	<u>168.1</u>	7-Jan-93	4-Nov-00
65.29	Pine	<u>98.0</u>	8-Jan-93	11-Nov-00
67.02	S. Grimmer	<u>129.5</u>	9-Jun-93	11-Nov-00
67.21	Onondaga	<u>72.9</u>	17-Aug-94	11-Nov-00
68.45	Mission	<u>168.9</u>	10-Mar-93	11-Nov-00

*IS-ES distance, length of fault crossing line from instrument station (IS) to target on end station (ES).

†Active, i.e., the line currently being monitored

SF-01 Rockett Drive in Fremont Hayward Fault 62.25 km

movement (mm)	std. dev.	# of years	year	date	mm/yr- simple average	Pre-LPEQ, least squares average (mm/yr)	Post-LPEQ, least squares average (mm/yr)	Post-LPEQ, simple average (mm/yr)
0.0	2.9	0.000	1979.726	22-Sep-79				
-7.0	1.3	0.192	1979.918	1-Dec-79				
-3.2	4.5	0.383	1980.109	9-Feb-80				
1.1	4.3	0.498	1980.224	22-Mar-80				
3.7	1.4	0.777	1980.503	2-Jul-80				
3.7	1.4	0.982	1980.708	15-Sep-80	3.8	8.0		
3.4	2.9	1.072	1980.798	18-Oct-80	3.2	7.4		
2.5	2.4	1.269	1980.995	29-Dec-80	2.0	6.1		
4.5	1.5	1.403	1981.129	16-Feb-81	3.2	5.9		
5.0	1.6	1.455	1981.181	7-Mar-81	3.4	5.8		
6.8	1.6	1.712	1981.438	9-Jun-81	4.0	5.8		
4.4	2.0	1.858	1981.584	1-Aug-81	2.4	5.1		
6.2	1.3	2.203	1981.929	5-Dec-81	2.8	4.7		
7.3	0.9	2.356	1982.082	30-Jan-82	3.1	4.5		
8.3	3.4	2.471	1982.197	13-Mar-82	3.4	4.4		
9.6	1.1	2.712	1982.438	9-Jun-82	3.5	4.4		
9.2	1.5	2.841	1982.567	26-Jul-82	3.2	4.3		
8.5	1.9	2.918	1982.644	23-Aug-82	2.9	4.1		
10.4	1.1	3.321	1983.047	17-Jan-83	3.1	4.0		
21.0	1.1	3.660	1983.386	21-May-83	5.7	4.8		
19.0	1.0	3.690	1983.416	1-Jun-83	5.1	5.1		
20.0	0.7	3.718	1983.444	11-Jun-83	5.4	5.3		
19.3	1.1	3.871	1983.597	6-Aug-83	5.0	5.5		
20.4	1.9	4.121	1983.847	5-Nov-83	5.0	5.6		
22.2	1.3	4.370	1984.096	4-Feb-84	5.1	5.6		
23.9	0.7	4.624	1984.350	7-May-84	5.2	5.7		
23.5	0.3	4.714	1984.440	9-Jun-84	5.0	5.7		
22.9	1.3	4.867	1984.593	4-Aug-84	4.7	5.7		
23.3	1.0	5.039	1984.765	6-Oct-84	4.6	5.7		
24.0	0.8	5.192	1984.918	1-Dec-84	4.6	5.6		
26.9	0.4	5.367	1985.093	3-Feb-85	5.0	5.6		
25.5	0.2	5.600	1985.326	29-Apr-85	4.6	5.6		
26.3	0.3	5.732	1985.458	16-Jun-85	4.6	5.5		
26.0	0.2	6.082	1985.808	22-Oct-85	4.3	5.4		
29.0	0.2	6.225	1985.951	13-Dec-85	4.7	5.4		
37.0	1.6	6.458	1986.184	8-Mar-86	5.7	5.5		
39.0	0.6	6.521	1986.247	31-Mar-86	6.0	5.7		
37.8	0.5	6.696	1986.422	3-Jun-86	5.6	5.8		
38.5	0.5	6.806	1986.532	13-Jul-86	5.7	5.8		
34.5	1.0	6.956	1986.682	6-Sep-86	5.0	5.8		
34.7	1.7	7.090	1986.816	25-Oct-86	4.9	5.8		
34.0	1.9	7.225	1986.951	13-Dec-86	4.7	5.7		
38.1	1.3	7.512	1987.238	28-Mar-87	5.1	5.7		
38.9	1.8	7.630	1987.356	10-May-87	5.1	5.7		
40.3	1.7	7.800	1987.526	11-Jul-87	5.2	5.7		

35.3	1.8	8.126	1987.852	7-Nov-87	4.3	5.6		
39.8	0.8	8.340	1988.066	24-Jan-88	4.8	5.5		
40.5	0.6	8.566	1988.292	16-Apr-88	4.7	5.5		
48.6	1.2	8.684	1988.410	29-May-88	5.6	5.5		
47.8	1.0	8.719	1988.445	11-Jun-88	5.5	5.6		
47.8	2.5	8.872	1988.598	6-Aug-88	5.4	5.6		
45.4	2.1	9.083	1988.809	22-Oct-88	5.0	5.6		
45.2	2.3	9.219	1988.945	11-Dec-88	4.9	5.6		
47.9	1.5	9.392	1989.118	12-Feb-89	5.1	5.5		
48.6	0.3	9.523	1989.249	1-Apr-89	5.1	5.5		
47.4	1.2	9.715	1989.441	10-Jun-89	4.9	5.5		
44.7	0.9	9.869	1989.595	5-Aug-89	4.5	5.5		
46.8	1.0	10.082	1989.808	22-Oct-89	4.6			
47.6	0.9	10.271	1989.997	30-Dec-89	4.6			
47.8	1.2	10.386	1990.112	10-Feb-90	4.6			
51.1	1.0	10.501	1990.227	24-Mar-90	4.9			
53.3	1.3	10.616	1990.342	5-May-90	5.0			
53.4	1.7	10.770	1990.496	30-Jun-90	5.0			
51.2	1.5	10.852	1990.578	30-Jul-90	4.7			
51.8	1.5	10.975	1990.701	13-Sep-90	4.7			
49.8	1.8	11.079	1990.805	21-Oct-90	4.5	4.8	3.0	
50.7	1.5	11.323	1991.049	18-Jan-91	4.5	3.4	3.1	
50.7	1.8	11.463	1991.189	10-Mar-91	4.4	2.5	2.8	
50.2	1.9	11.633	1991.359	11-May-91	4.3	1.8	2.2	
53.2	0.8	11.825	1991.551	20-Jul-91	4.5	2.1	3.7	
49.9	0.6	11.942	1991.668	1-Sep-91	4.2	1.5	1.7	
53.2	0.6	12.132	1991.858	9-Nov-91	4.4	1.6	3.1	
54.3	1.8	12.320	1992.046	17-Jan-92	4.4	1.9	3.4	
55.9	1.4	12.514	1992.240	28-Mar-92	4.5	2.2	3.7	
55.8	1.5	12.689	1992.415	31-May-92	4.4	2.4	3.5	
55.0	2.3	12.842	1992.568	26-Jul-92	4.3	2.4	3.0	
50.3	0.9	13.014	1992.740	27-Sep-92	3.9	1.9	1.2	
48.4	0.9	13.165	1992.891	21-Nov-92	3.7	1.3	0.5	
52.1	1.8	13.315	1993.041	15-Jan-93	3.9	1.2	1.6	
53.2	0.8	13.452	1993.178	6-Mar-93	4.0	1.1	1.9	
65.1	1.1	13.625	1993.351	8-May-93	4.8	1.9	5.2	
63.8	0.9	13.836	1993.562	24-Jul-93	4.6	2.4	4.5	
59.3	0.9	14.027	1993.753	2-Oct-93	4.2	2.4	3.2	
60.3	0.7	14.219	1993.945	11-Dec-93	4.2	2.5	3.3	
63.8	0.8	14.395	1994.121	13-Feb-94	4.4	2.8	3.9	
63.4	0.9	14.548	1994.274	10-Apr-94	4.4	2.9	3.7	
69.9	0.5	14.718	1994.444	11-Jun-94	4.7	3.3	5.0	
69.8	1.3	14.866	1994.592	4-Aug-94	4.7	3.5	4.8	
68.4	0.8	15.044	1994.770	8-Oct-94	4.5	3.7	4.4	
70.3	1.9	15.236	1994.962	17-Dec-94	4.6	3.8	4.6	
69.6	1.0	15.427	1995.153	25-Feb-95	4.5	3.9	4.3	
73.4	1.1	15.600	1995.326	29-Apr-95	4.7	4.1	4.8	
72.3	1.1	15.756	1995.482	25-Jun-95	4.6	4.2	4.5	
71.9	0.8	15.921	1995.647	24-Aug-95	4.5	4.2	4.3	

70.5	3.4	16.082	1995.808	22-Oct-95	4.4	4.2	4.0
71.4	1.2	16.233	1995.959	16-Dec-95	4.4	4.2	4.0
76.4	1.3	16.405	1996.131	17-Feb-96	4.7	4.3	4.7
80.5	3.5	16.635	1996.361	11-May-96	4.8	4.4	5.1
74.8	3.0	16.807	1996.533	13-Jul-96	4.5	4.4	4.2
72.9	0.3	16.913	1996.639	21-Aug-96	4.3	4.4	3.8
75.2	1.1	17.075	1996.801	19-Oct-96	4.4	4.4	4.1
75.8	0.9	17.228	1996.954	14-Dec-96	4.4	4.4	4.1
79.5	0.9	17.381	1997.107	8-Feb-97	4.6	4.4	4.5
78.8	0.8	17.592	1997.318	26-Apr-97	4.5	4.4	4.3
86.7	1.5	17.745	1997.471	21-Jun-97	4.9	4.5	5.2
84.2	0.3	17.918	1997.644	23-Aug-97	4.7	4.6	4.8
83.3	1.6	18.071	1997.797	18-Oct-97	4.6	4.6	4.6
87.7	2.0	18.263	1997.989	27-Dec-97	4.8	4.7	5.0
90.5	0.9	18.419	1998.145	22-Feb-98	4.9	4.8	5.2
91.1	1.7	18.589	1998.315	25-Apr-98	4.9	4.8	5.2
90.0	0.9	18.726	1998.452	14-Jun-98	4.8	4.9	5.0
91.1	0.4	18.956	1998.682	6-Sep-98	4.8	4.9	5.0
88.7	0.5	19.164	1998.890	21-Nov-98	4.6	4.9	4.6
94.5	0.3	19.356	1999.082	30-Jan-99	4.9	5.0	5.1
96.9	1.2	19.493	1999.219	21-Mar-99	5.0	5.0	5.3
95.9	2.2	19.663	1999.389	22-May-99	4.9	5.1	5.1
92.2	0.7	19.836	1999.562	24-Jul-99	4.6	5.1	4.7
91.2	1.2	19.973	1999.699	12-Sep-99	4.6	5.1	4.5
92.4	0.8	20.162	1999.888	20-Nov-99	4.6	5.0	4.5
94.4	0.8	20.334	2000.060	22-Jan-00	4.6	5.0	4.6
107.1	0.6	20.506	2000.232	25-Mar-00	5.2	5.1	5.8
107.2	0.6	20.662	2000.388	21-May-00	5.2	5.2	5.7
108.2	1.7	20.851	2000.577	29-Jul-00	5.2	5.3	5.7
106.2	2.4	21.080	2000.806	21-Oct-00	5.0	5.3	5.4
107.0	1.2	21.271	2000.997	30-Dec-00	5.0	5.4	5.4

SF-02 Appian Way in Union City Hayward Fault 55.65 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.7	0.000	1979.729	23-Sep-79	
-2.0	3.0	0.131	1979.860	10-Nov-79	
-4.4	1.5	0.421	1980.150	24-Feb-80	
-4.7	1.9	0.555	1980.284	13-Apr-80	
2.2	2.5	0.807	1980.536	14-Jul-80	
2.7	2.2	0.990	1980.719	19-Sep-80	2.7
3.7	2.5	1.203	1980.932	6-Dec-80	3.1
5.0	2.9	1.307	1981.036	13-Jan-81	3.8
2.8	0.9	1.452	1981.181	7-Mar-81	1.9
5.2	1.5	1.709	1981.438	9-Jun-81	3.0
5.9	0.6	1.868	1981.597	6-Aug-81	3.2
9.9	1.2	2.200	1981.929	5-Dec-81	4.5
9.9	1.4	2.353	1982.082	30-Jan-82	4.2
10.8	1.0	2.468	1982.197	13-Mar-82	4.4
10.8	0.7	2.709	1982.438	9-Jun-82	4.0
12.3	0.7	2.838	1982.567	26-Jul-82	4.3
12.0	1.0	2.915	1982.644	23-Aug-82	4.1
16.4	1.2	3.181	1982.910	28-Nov-82	5.2
16.6	0.9	3.318	1983.047	17-Jan-83	5.0
14.7	1.5	3.657	1983.386	21-May-83	4.0
16.1	0.7	3.715	1983.444	11-Jun-83	4.3
17.6	1.1	3.868	1983.597	6-Aug-83	4.5
19.1	1.4	4.118	1983.847	5-Nov-83	4.6
18.5	1.4	4.369	1984.098	5-Feb-84	4.2
20.5	1.0	4.621	1984.350	7-May-84	4.4
22.4	0.4	4.711	1984.440	9-Jun-84	4.8
22.7	1.8	4.864	1984.593	4-Aug-84	4.7
22.4	0.3	5.036	1984.765	6-Oct-84	4.4
23.4	0.4	5.189	1984.918	1-Dec-84	4.5
22.7	0.8	5.364	1985.093	3-Feb-85	4.2
25.3	0.6	5.597	1985.326	29-Apr-85	4.5
26.7	0.8	5.770	1985.499	1-Jul-85	4.6
28.7	0.1	5.994	1985.723	21-Sep-85	4.8
28.3	0.8	6.222	1985.951	13-Dec-85	4.5
30.3	0.3	6.457	1986.186	9-Mar-86	4.7
30.1	0.5	6.518	1986.247	31-Mar-86	4.6
29.4	0.8	6.592	1986.321	27-Apr-86	4.5
32.8	1.6	6.693	1986.422	3-Jun-86	4.9
31.0	1.0	6.803	1986.532	13-Jul-86	4.6
28.4	1.1	6.953	1986.682	6-Sep-86	4.1
30.4	1.7	7.087	1986.816	25-Oct-86	4.3
29.9	1.1	7.222	1986.951	13-Dec-86	4.1
34.2	1.9	7.509	1987.238	28-Mar-87	4.6
36.0	2.3	7.627	1987.356	10-May-87	4.7
32.2	1.0	7.797	1987.526	11-Jul-87	4.1

33.2	1.5	8.123	1987.852	7-Nov-87	4.1
35.9	1.1	8.337	1988.066	24-Jan-88	4.3
36.2	1.0	8.563	1988.292	16-Apr-88	4.2
37.4	1.0	8.681	1988.410	29-May-88	4.3
36.0	1.2	8.716	1988.445	11-Jun-88	4.1
37.9	1.4	8.869	1988.598	6-Aug-88	4.3
37.0	0.7	9.080	1988.809	22-Oct-88	4.1
36.6	1.0	9.216	1988.945	11-Dec-88	4.0
42.8	1.0	9.389	1989.118	12-Feb-89	4.6
45.3	1.6	9.520	1989.249	1-Apr-89	4.8
46.6	0.6	9.712	1989.441	10-Jun-89	4.8
45.3	1.2	9.866	1989.595	5-Aug-89	4.6
44.7	0.6	10.079	1989.808	22-Oct-89	4.4
45.9	1.3	10.268	1989.997	30-Dec-89	4.5
46.3	0.9	10.383	1990.112	10-Feb-90	4.5
47.0	0.4	10.498	1990.227	24-Mar-90	4.5
51.9	1.2	10.613	1990.342	5-May-90	4.9
50.1	1.0	10.767	1990.496	30-Jun-90	4.7
49.4	1.2	10.846	1990.575	29-Jul-90	4.6
47.9	1.2	10.972	1990.701	13-Sep-90	4.4
50.0	1.4	11.076	1990.805	21-Oct-90	4.5
45.9	1.6	11.320	1991.049	18-Jan-91	4.1
48.8	0.4	11.512	1991.241	29-Mar-91	4.2
51.9	1.0	11.630	1991.359	11-May-91	4.5
51.3	1.1	11.939	1991.668	1-Sep-91	4.3
53.5	1.4	12.129	1991.858	9-Nov-91	4.4
52.8	1.0	12.317	1992.046	17-Jan-92	4.3
59.1	1.2	12.511	1992.240	28-Mar-92	4.7
59.6	0.6	12.686	1992.415	31-May-92	4.7
60.4	1.2	12.839	1992.568	26-Jul-92	4.7
58.2	1.6	13.011	1992.740	27-Sep-92	4.5
61.0	1.4	13.162	1992.891	21-Nov-92	4.6
61.6	1.6	13.312	1993.041	15-Jan-93	4.6
61.7	1.2	13.449	1993.178	6-Mar-93	4.6
60.7	1.9	13.622	1993.351	8-May-93	4.5
62.5	1.5	13.709	1993.438	9-Jun-93	4.6
64.1	0.9	13.909	1993.638	21-Aug-93	4.6
65.6	1.3	14.044	1993.773	9-Oct-93	4.7
66.9	4.7	14.233	1993.962	17-Dec-93	4.7
71.5	1.4	14.430	1994.159	27-Feb-94	5.0
71.3	1.3	14.583	1994.312	24-Apr-94	4.9
74.1	3.8	14.813	1994.542	17-Jul-94	5.0
73.2	2.9	15.079	1994.808	22-Oct-94	4.9
73.2	3.6	15.348	1995.007	28-Jan-95	4.8
76.2	1.6	15.539	1995.268	8-Apr-95	4.9
77.4	1.4	15.731	1995.460	17-Jun-95	4.9
77.7	4.6	15.918	1995.647	24-Aug-95	4.9
79.1	1.6	16.096	1995.825	28-Oct-95	4.9
82.1	1.6	16.249	1995.978	23-Dec-95	5.1

79.8	1.7	16.386	1996.115	11-Feb-96	4.9
81.1	1.0	16.424	1996.153	25-Feb-96	4.9
80.0	0.9	16.536	1996.265	6-Apr-96	4.8
84.9	3.5	16.766	1996.495	29-Jun-96	5.1
83.3	0.5	16.910	1996.639	21-Aug-96	4.9
85.7	1.4	17.091	1996.820	22-Oct-96	5.0
88.0	1.4	17.244	1996.973	21-Dec-96	5.1
86.0	1.4	17.400	1997.129	16-Feb-97	4.9
87.6	0.8	17.589	1997.318	26-Apr-97	5.0
90.1	0.4	17.742	1997.471	21-Jun-97	5.1
91.4	0.7	17.915	1997.644	23-Aug-97	5.1
91.3	0.7	18.126	1997.855	8-Nov-97	5.0
95.6	1.1	18.298	1998.027	10-Jan-98	5.2
89.7	2.3	18.471	1998.200	14-Mar-98	4.9
93.7	1.4	18.759	1998.488	27-Jun-98	5.0
96.1	4.1	18.953	1998.682	6-Sep-98	5.1
99.6	0.9	19.126	1998.855	8-Nov-98	5.2
99.5	0.9	19.413	1999.142	21-Feb-99	5.1
101.5	0.5	19.586	1999.315	25-Apr-99	5.2
100.1	1.1	19.718	1999.447	12-Jun-99	5.1
102.9	0.6	19.929	1999.658	28-Aug-99	5.2
98.8	1.4	20.101	1999.830	30-Oct-99	4.9
105.7	0.8	20.312	2000.041	15-Jan-00	5.2
105.8	1.5	20.484	2000.213	18-Mar-00	5.2
107.4	1.3	20.675	2000.404	27-May-00	5.2
107.5	0.6	20.850	2000.579	30-Jul-00	5.2
112.4	1.6	21.099	2000.828	29-Oct-00	5.3
115.5	0.9	21.268	2000.997	30-Dec-00	5.4

SF-03 Ashbury Drive in Concord Concord Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.7	0.000	1979.742	28-Sep-79	
3.3	1.2	0.042	1979.784	13-Oct-79	
9.8	0.8	0.173	1979.915	30-Nov-79	
11.0	1.2	0.283	1980.025	9-Jan-80	
10.1	1.5	0.332	1980.074	27-Jan-80	
10.5	1.6	0.351	1980.093	3-Feb-80	
9.4	1.4	0.774	1980.516	7-Jul-80	
10.7	1.2	0.963	1980.705	14-Sep-80	11.1
11.7	1.4	1.116	1980.858	9-Nov-80	10.5
13.4	2.3	1.250	1980.992	28-Dec-80	10.7
12.7	0.6	1.365	1981.107	8-Feb-81	9.3
10.6	0.7	1.631	1981.373	16-May-81	6.5
10.7	0.5	1.710	1981.452	14-Jun-81	6.3
14.6	1.2	1.863	1981.605	9-Aug-81	7.8
12.7	1.2	2.305	1982.047	17-Jan-82	5.5
13.7	1.9	2.496	1982.238	28-Mar-82	5.5
13.1	0.5	2.707	1982.449	13-Jun-82	4.8
14.6	1.0	2.822	1982.564	25-Jul-82	5.2
10.3	1.3	2.976	1982.718	19-Sep-82	3.5
10.5	0.9	3.053	1982.795	17-Oct-82	3.4
14.6	2.1	3.206	1982.948	12-Dec-82	4.6
14.4	1.2	3.417	1983.159	27-Feb-83	4.2
14.2	1.3	3.647	1983.389	22-May-83	3.9
13.9	1.4	3.858	1983.600	7-Aug-83	3.6
14.5	1.1	4.028	1983.770	8-Oct-83	3.6
15.5	1.3	4.184	1983.926	4-Dec-83	3.7
15.1	1.3	4.318	1984.060	22-Jan-84	3.5
14.1	2.3	4.490	1984.232	25-Mar-84	3.1
17.0	0.7	4.720	1984.462	17-Jun-84	3.6
21.6	2.1	4.911	1984.653	26-Aug-84	4.4
21.1	1.9	4.949	1984.691	9-Sep-84	4.3
23.5	0.7	5.045	1984.787	14-Oct-84	4.7
24.2	0.6	5.141	1984.883	18-Nov-84	4.7
23.3	0.4	5.318	1985.060	22-Jan-85	4.4
20.4	0.7	5.466	1985.208	17-Mar-85	3.7
22.4	0.1	5.677	1985.419	2-Jun-85	3.9
23.0	0.8	5.792	1985.534	14-Jul-85	4.0
25.7	0.3	6.022	1985.764	6-Oct-85	4.3
25.7	0.8	6.483	1986.225	23-Mar-86	4.0
25.4	1.4	6.713	1986.455	15-Jun-86	3.8
27.9	0.7	6.847	1986.589	3-Aug-86	4.1
23.7	1.5	7.077	1986.819	26-Oct-86	3.3
27.1	0.8	7.346	1987.088	1-Feb-87	3.7
27.1	0.5	7.710	1987.452	14-Jun-87	3.5
26.7	0.9	7.902	1987.644	23-Aug-87	3.4
27.3	0.4	8.170	1987.912	29-Nov-87	3.3

35.2	1.2	8.400	1988.142	21-Feb-88	4.2
35.3	0.9	8.477	1988.219	20-Mar-88	4.2
36.1	1.4	8.572	1988.314	24-Apr-88	4.2
37.0	0.9	8.783	1988.525	10-Jul-88	4.2
37.0	0.6	8.955	1988.697	11-Sep-88	4.1
39.3	0.5	9.184	1988.926	4-Dec-88	4.3
40.2	0.7	9.337	1989.079	29-Jan-89	4.3
42.0	1.4	9.529	1989.271	9-Apr-89	4.4
42.0	1.6	9.776	1989.518	8-Jul-89	4.3
37.8	1.0	9.894	1989.636	20-Aug-89	3.8
42.8	1.4	10.162	1989.904	26-Nov-89	4.2
44.2	0.6	10.354	1990.096	4-Feb-90	4.3
44.4	1.1	10.450	1990.192	11-Mar-90	4.2
45.5	0.6	10.524	1990.266	7-Apr-90	4.3
44.5	0.6	10.603	1990.345	6-May-90	4.2
45.3	1.0	10.737	1990.479	24-Jun-90	4.2
42.7	1.2	10.891	1990.633	19-Aug-90	3.9
41.3	0.4	11.025	1990.767	7-Oct-90	3.7
41.9	0.4	11.198	1990.940	9-Dec-90	3.7
44.3	0.6	11.370	1991.112	10-Feb-91	3.9
44.8	0.9	11.524	1991.266	7-Apr-91	3.9
43.7	0.9	11.735	1991.477	23-Jun-91	3.7
43.1	1.1	11.869	1991.611	11-Aug-91	3.6
44.0	0.6	12.003	1991.745	29-Sep-91	3.7
46.4	1.0	12.233	1991.975	22-Dec-91	3.8
48.0	0.6	12.444	1992.186	8-Mar-92	3.9
49.0	1.7	12.597	1992.339	3-May-92	3.9
48.3	0.7	12.788	1992.530	12-Jul-92	3.8
43.6	2.0	13.037	1992.779	11-Oct-92	3.3
47.6	2.1	13.285	1993.027	10-Jan-93	3.6
53.8	2.6	13.439	1993.181	7-Mar-93	4.0
55.6	1.1	13.631	1993.373	16-May-93	4.1
53.1	2.4	13.880	1993.622	15-Aug-93	3.8
50.8	0.6	14.033	1993.775	10-Oct-93	3.6
56.9	1.2	14.222	1993.964	18-Dec-93	4.0
56.4	1.9	14.455	1994.197	13-Mar-94	3.9
59.4	0.8	14.628	1994.370	15-May-94	4.1
56.9	1.4	14.820	1994.562	24-Jul-94	3.8
53.0	0.6	15.009	1994.751	1-Oct-94	3.5
59.0	0.5	15.200	1994.942	10-Dec-94	3.9
61.9	0.9	15.357	1995.099	5-Feb-95	4.0
61.5	2.0	15.433	1995.175	5-Mar-95	4.0
60.9	1.7	15.721	1995.463	18-Jun-95	3.9
60.4	1.3	15.951	1995.693	10-Sep-95	3.8
62.7	1.2	16.294	1996.036	13-Jan-96	3.8
63.9	1.7	16.507	1996.249	31-Mar-96	3.9
63.5	2.0	16.736	1996.478	23-Jun-96	3.8
61.8	0.2	16.908	1996.650	25-Aug-96	3.7
61.9	1.0	17.080	1996.822	27-Oct-96	3.6

71.6	0.9	17.214	1996.956	15-Dec-96	4.2
72.7	1.4	17.288	1997.030	11-Jan-97	4.2
74.2	1.4	17.463	1997.205	16-Mar-97	4.2
72.9	0.5	17.636	1997.378	18-May-97	4.1
70.4	0.7	17.770	1997.512	6-Jul-97	4.0
69.6	0.7	18.000	1997.742	28-Sep-97	3.9
72.2	0.7	18.173	1997.915	30-Nov-97	4.0
72.5	0.7	18.307	1998.049	18-Jan-98	4.0
73.3	0.2	18.461	1998.203	15-Mar-98	4.0
76.1	1.4	18.691	1998.433	7-Jun-98	4.1
77.2	0.5	18.844	1998.586	2-Aug-98	4.1
72.7	0.5	19.074	1998.816	25-Oct-98	3.8
74.5	0.7	19.228	1998.970	20-Dec-98	3.9
76.6	1.6	19.362	1999.104	7-Feb-99	4.0
77.6	1.7	19.516	1999.258	4-Apr-99	4.0
76.0	0.8	19.688	1999.430	6-Jun-99	3.9
73.9	1.8	19.861	1999.603	8-Aug-99	3.7
71.6	1.8	20.072	1999.814	24-Oct-99	3.6
74.1	0.9	20.225	1999.967	19-Dec-99	3.7
77.1	1.7	20.416	2000.158	27-Feb-00	3.8
79.6	1.2	20.569	2000.311	23-Apr-00	3.9
80.0	1.1	20.742	2000.484	25-Jun-00	3.9
77.2	0.9	20.914	2000.656	27-Aug-00	3.7
76.6	1.5	21.048	2000.790	15-Oct-00	3.6
78.9	1.3	21.201	2000.943	10-Dec-00	3.7
81.9	1.3	21.373	2001.115	11-Feb-01	3.8

SF-04 Seventh Street in Hollister Calaveras Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	2.1	0.000	1979.745	29-Sep-79	
-0.8	1.0	0.077	1979.822	27-Oct-79	
-2.2	0.8	0.296	1980.041	15-Jan-80	
4.2	1.0	0.422	1980.167	1-Mar-80	
3.3	0.6	0.441	1980.186	8-Mar-80	
2.9	0.6	0.594	1980.339	3-May-80	
3.7	0.9	0.728	1980.473	21-Jun-80	5.1
5.2	1.2	1.302	1981.047	17-Jan-81	4.0
14.7	0.7	1.723	1981.468	20-Jun-81	8.5
23.0	0.8	1.896	1981.641	22-Aug-81	12.1
21.7	0.6	2.203	1981.948	12-Dec-81	9.9
20.1	0.5	2.567	1982.312	24-Apr-82	7.8
18.0	0.3	2.836	1982.581	31-Jul-82	6.3
28.9	1.0	2.970	1982.715	18-Sep-82	9.7
27.6	0.5	3.162	1982.907	27-Nov-82	8.7
29.3	0.3	3.411	1983.156	26-Feb-83	8.6
34.3	0.5	3.608	1983.353	9-May-83	9.5
33.6	0.5	3.702	1983.447	12-Jun-83	9.1
32.7	0.5	3.841	1983.586	2-Aug-83	8.5
32.4	0.2	4.063	1983.808	22-Oct-83	8.0
30.0	0.6	4.332	1984.077	28-Jan-84	6.9
30.0	0.6	4.572	1984.317	25-Apr-84	6.6
37.4	0.7	4.676	1984.421	2-Jun-84	8.0
41.4	0.4	4.774	1984.519	8-Jul-84	8.7
40.6	0.3	4.864	1984.609	10-Aug-84	8.3
39.7	0.4	5.023	1984.768	7-Oct-84	7.9
39.6	0.5	5.192	1984.937	8-Dec-84	7.6
38.3	0.8	5.326	1985.071	26-Jan-85	7.2
43.9	0.3	5.518	1985.263	6-Apr-85	8.0
44.7	0.9	5.748	1985.493	29-Jun-85	7.8
44.8	0.5	6.000	1985.745	29-Sep-85	7.5
43.3	0.3	6.189	1985.934	7-Dec-85	7.0
47.8	0.5	6.334	1986.079	29-Jan-86	7.5
47.9	0.8	6.381	1986.126	15-Feb-86	7.5
48.3	0.6	6.592	1986.337	3-May-86	7.3
47.4	0.4	6.682	1986.427	5-Jun-86	7.1
49.3	0.7	6.860	1986.605	9-Aug-86	7.2
49.2	0.6	7.033	1986.778	11-Oct-86	7.0
49.1	1.2	7.187	1986.932	6-Dec-86	6.8
47.7	0.8	7.417	1987.162	28-Feb-87	6.4
47.1	1.0	7.669	1987.414	31-May-87	6.1
48.4	0.6	7.877	1987.622	15-Aug-87	6.1
49.4	0.4	8.145	1987.890	21-Nov-87	6.1
49.6	0.4	8.337	1988.082	30-Jan-88	5.9
55.5	0.4	8.416	1988.161	28-Feb-88	6.6
56.8	0.4	8.586	1988.331	30-Apr-88	6.6

57.5	0.7	8.709	1988.454	14-Jun-88	6.6
57.0	0.6	8.777	1988.522	9-Jul-88	6.5
63.6	1.1	9.009	1988.754	2-Oct-88	7.1
64.9	1.0	9.178	1988.923	3-Dec-88	7.1
63.4	0.7	9.370	1989.115	11-Feb-89	6.8
64.4	1.1	9.523	1989.268	8-Apr-89	6.8
66.0	0.8	9.715	1989.460	17-Jun-89	6.8
67.5	1.1	9.888	1989.633	19-Aug-89	6.8
81.1	0.8	10.060	1989.805	21-Oct-89	8.1
78.6	0.3	10.118	1989.863	11-Nov-89	7.8
80.8	0.6	10.195	1989.940	9-Dec-89	7.9
81.5	0.6	10.291	1990.036	13-Jan-90	7.9
79.9	0.2	10.406	1990.151	24-Feb-90	7.7
80.6	0.4	10.540	1990.285	14-Apr-90	7.6
81.4	0.8	10.636	1990.381	19-May-90	7.7
81.7	0.6	10.773	1990.518	8-Jul-90	7.6
82.2	0.7	10.869	1990.614	12-Aug-90	7.6
83.7	0.5	10.984	1990.729	23-Sep-90	7.6
84.4	0.2	11.096	1990.841	3-Nov-90	7.6
84.4	0.9	11.326	1991.071	26-Jan-91	7.5
84.8	0.7	11.518	1991.263	6-Apr-91	7.4
85.9	0.7	11.748	1991.493	29-Jun-91	7.3
86.8	0.4	11.940	1991.685	7-Sep-91	7.3
89.4	1.0	12.132	1991.877	16-Nov-91	7.4
89.1	1.3	12.310	1992.055	20-Jan-92	7.2
88.7	0.9	12.534	1992.279	11-Apr-92	7.1
91.7	0.5	12.725	1992.470	20-Jun-92	7.2
89.9	1.9	12.881	1992.626	16-Aug-92	7.0
92.9	1.0	13.053	1992.798	18-Oct-92	7.1
92.8	1.3	13.225	1992.970	20-Dec-92	7.0
92.9	0.8	13.299	1993.044	16-Jan-93	7.0
93.0	1.9	13.452	1993.197	13-Mar-93	6.9
93.6	1.5	13.608	1993.353	9-May-93	6.9
94.0	0.7	13.817	1993.562	24-Jul-93	6.8
95.6	1.7	13.913	1993.658	28-Aug-93	6.9
96.8	1.4	14.085	1993.830	30-Oct-93	6.9
95.9	0.4	14.296	1994.041	15-Jan-94	6.7
94.8	1.6	14.488	1994.233	26-Mar-94	6.5
95.7	0.4	14.680	1994.425	4-Jun-94	6.5
96.1	0.2	14.858	1994.603	8-Aug-94	6.5
101.3	0.9	15.121	1994.866	12-Nov-94	6.7
99.2	0.3	15.315	1995.060	22-Jan-95	6.5
98.4	1.4	15.562	1995.307	22-Apr-95	6.3
98.6	0.9	15.584	1995.329	30-Apr-95	6.3
104.8	0.4	15.792	1995.537	15-Jul-95	6.6
106.9	0.7	16.025	1995.770	8-Oct-95	6.7
115.1	0.4	16.252	1995.997	30-Dec-95	7.1
113.3	1.4	16.444	1996.189	9-Mar-96	6.9
113.8	2.7	16.580	1996.325	28-Apr-96	6.9

112.8	1.0	16.654	1996.399	25-May-96	6.8
113.4	0.9	16.826	1996.571	27-Jul-96	6.7
111.7	0.7	16.998	1996.743	28-Sep-96	6.6
111.6	0.6	17.132	1996.877	16-Nov-96	6.5
113.9	0.3	17.304	1997.049	18-Jan-97	6.6
113.2	0.7	17.477	1997.222	22-Mar-97	6.5
112.3	1.1	17.611	1997.356	10-May-97	6.4
112.8	0.6	17.784	1997.529	12-Jul-97	6.3
124.1	0.9	17.978	1997.723	21-Sep-97	6.9
124.6	0.7	18.167	1997.912	29-Nov-97	6.9
124.7	1.1	18.340	1998.085	31-Jan-98	6.8
124.5	0.9	18.496	1998.241	29-Mar-98	6.7
123.0	1.1	18.666	1998.411	30-May-98	6.6
122.4	1.4	18.819	1998.564	25-Jul-98	6.5
124.6	0.4	18.877	1998.622	15-Aug-98	6.6
127.2	0.9	19.088	1998.833	31-Oct-98	6.7
128.0	0.5	19.280	1999.025	9-Jan-99	6.6
127.1	0.8	19.436	1999.181	7-Mar-99	6.5
126.7	1.1	19.606	1999.351	8-May-99	6.5
127.3	0.2	19.778	1999.523	10-Jul-99	6.4
127.2	0.6	19.989	1999.734	25-Sep-99	6.4
127.3	0.3	20.162	1999.907	27-Nov-99	6.3
139.1	0.3	20.353	2000.098	5-Feb-00	6.8
140.1	0.6	20.525	2000.270	8-Apr-00	6.8
138.9	0.1	20.698	2000.443	10-Jun-00	6.7
138.8	0.2	20.889	2000.634	19-Aug-00	6.6
141.1	0.2	21.042	2000.787	14-Oct-00	6.7
141.6	0.3	21.214	2000.959	16-Dec-00	6.7
141.9	1.5	21.408	2001.153	25-Feb-01	6.6

SF-05 Salvio Street in Concord Concord Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.5	0.000	1979.748	30-Sep-79	
8.8	1.8	0.173	1979.921	2-Dec-79	
8.5	1.3	0.307	1980.055	20-Jan-80	
10.0	0.9	0.326	1980.074	27-Jan-80	
8.8	1.9	0.345	1980.093	3-Feb-80	
9.2	0.6	0.785	1980.533	13-Jul-80	
8.7	0.6	0.957	1980.705	14-Sep-80	9.1
8.3	0.5	1.110	1980.858	9-Nov-80	7.5
8.6	1.4	1.301	1981.049	18-Jan-81	6.6
9.8	0.5	1.359	1981.107	8-Feb-81	7.2
9.2	0.5	1.704	1981.452	14-Jun-81	5.4
9.3	0.3	1.857	1981.605	9-Aug-81	5.0
9.6	0.6	2.184	1981.932	6-Dec-81	4.4
11.9	1.0	2.490	1982.238	28-Mar-82	4.8
12.2	1.4	2.701	1982.449	13-Jun-82	4.5
11.9	0.6	2.816	1982.564	25-Jul-82	4.2
12.3	0.5	2.970	1982.718	19-Sep-82	4.1
10.6	0.7	3.047	1982.795	17-Oct-82	3.5
11.6	0.7	3.200	1982.948	12-Dec-82	3.6
13.0	0.4	3.411	1983.159	27-Feb-83	3.8
12.4	0.4	3.641	1983.389	22-May-83	3.4
12.1	0.7	3.794	1983.542	17-Jul-83	3.2
11.5	0.7	4.005	1983.753	2-Oct-83	2.9
11.1	0.6	4.178	1983.926	4-Dec-83	2.7
12.3	1.2	4.331	1984.079	29-Jan-84	2.8
12.7	1.3	4.484	1984.232	25-Mar-84	2.8
13.5	1.4	4.714	1984.462	17-Jun-84	2.9
20.0	0.7	4.905	1984.653	26-Aug-84	4.1
20.0	1.6	4.943	1984.691	9-Sep-84	4.0
20.1	0.3	5.039	1984.787	14-Oct-84	4.0
20.8	0.3	5.135	1984.883	18-Nov-84	4.0
21.2	0.3	5.307	1985.055	20-Jan-85	4.0
21.2	0.3	5.460	1985.208	17-Mar-85	3.9
20.4	0.6	5.671	1985.419	2-Jun-85	3.6
20.8	0.2	5.786	1985.534	14-Jul-85	3.6
19.5	0.9	6.016	1985.764	6-Oct-85	3.2
20.0	0.7	6.323	1986.071	26-Jan-86	3.2
22.0	0.4	6.477	1986.225	23-Mar-86	3.4
20.8	0.6	6.707	1986.455	15-Jun-86	3.1
22.0	1.0	6.841	1986.589	3-Aug-86	3.2
20.3	0.4	7.071	1986.819	26-Oct-86	2.9
20.6	0.3	7.340	1987.088	1-Feb-87	2.8
22.4	1.2	7.531	1987.279	12-Apr-87	3.0
21.9	1.0	7.704	1987.452	14-Jun-87	2.8
21.0	0.8	7.896	1987.644	23-Aug-87	2.7
21.3	1.1	8.164	1987.912	29-Nov-87	2.6

29.0	0.8	8.394	1988.142	21-Feb-88	3.5
28.8	0.5	8.471	1988.219	20-Mar-88	3.4
29.2	0.9	8.566	1988.314	24-Apr-88	3.4
30.3	0.6	8.777	1988.525	10-Jul-88	3.5
29.7	0.9	8.949	1988.697	11-Sep-88	3.3
28.9	0.5	9.121	1988.869	13-Nov-88	3.2
28.3	0.4	9.331	1989.079	29-Jan-89	3.0
31.0	0.2	9.523	1989.271	9-Apr-89	3.3
31.5	1.2	9.715	1989.463	18-Jun-89	3.2
31.9	0.6	9.888	1989.636	20-Aug-89	3.2
33.0	1.3	10.156	1989.904	26-Nov-89	3.2
33.8	0.8	10.348	1990.096	4-Feb-90	3.3
34.5	1.0	10.444	1990.192	11-Mar-90	3.3
35.0	0.3	10.518	1990.266	7-Apr-90	3.3
35.9	0.3	10.578	1990.326	29-Apr-90	3.4
35.2	0.9	10.731	1990.479	24-Jun-90	3.3
33.9	1.6	10.885	1990.633	19-Aug-90	3.1
35.0	0.9	11.019	1990.767	7-Oct-90	3.2
33.3	0.5	11.192	1990.940	9-Dec-90	3.0
34.2	1.1	11.364	1991.112	10-Feb-91	3.0
35.8	0.9	11.518	1991.266	7-Apr-91	3.1
36.1	1.1	11.729	1991.477	23-Jun-91	3.1
35.8	1.3	11.863	1991.611	11-Aug-91	3.0
35.2	0.7	11.997	1991.745	29-Sep-91	2.9
36.7	0.1	12.227	1991.975	22-Dec-91	3.0
35.9	0.3	12.438	1992.186	8-Mar-92	2.9
38.1	0.9	12.591	1992.339	3-May-92	3.0
38.1	0.3	12.782	1992.530	12-Jul-92	3.0
35.2	1.3	13.031	1992.779	11-Oct-92	2.7
35.3	1.0	13.184	1992.932	6-Dec-92	2.7
41.4	1.5	13.433	1993.181	7-Mar-93	3.1
45.5	0.8	13.625	1993.373	16-May-93	3.3
44.7	0.8	13.874	1993.622	15-Aug-93	3.2
45.3	0.6	14.027	1993.775	10-Oct-93	3.2
45.2	1.3	14.216	1993.964	18-Dec-93	3.2
45.9	2.4	14.449	1994.197	13-Mar-94	3.2
47.0	1.1	14.622	1994.370	15-May-94	3.2
45.1	1.3	14.814	1994.562	24-Jul-94	3.0
45.5	5.4	15.003	1994.751	1-Oct-94	3.0
45.5	1.0	15.194	1994.942	10-Dec-94	3.0
47.7	1.8	15.351	1995.099	5-Feb-95	3.1
47.5	0.9	15.427	1995.175	5-Mar-95	3.1
46.6	0.5	15.715	1995.463	18-Jun-95	3.0
46.1	1.1	15.945	1995.693	10-Sep-95	2.9
45.7	1.0	16.156	1995.904	26-Nov-95	2.8
45.9	2.3	16.288	1996.036	13-Jan-96	2.8
47.5	2.6	16.501	1996.249	31-Mar-96	2.9
47.3	2.4	16.730	1996.478	23-Jun-96	2.8
46.8	1.5	16.902	1996.650	25-Aug-96	2.8

46.1	1.3	17.074	1996.822	27-Oct-96	2.7
54.3	1.0	17.208	1996.956	15-Dec-96	3.2
55.3	1.0	17.457	1997.205	16-Mar-97	3.2
54.3	0.3	17.630	1997.378	18-May-97	3.1
55.3	0.5	17.764	1997.512	6-Jul-97	3.1
54.8	0.6	17.994	1997.742	28-Sep-97	3.0
55.4	0.8	18.167	1997.915	30-Nov-97	3.0
56.0	0.4	18.301	1998.049	18-Jan-98	3.1
55.7	0.2	18.455	1998.203	15-Mar-98	3.0
57.8	0.6	18.685	1998.433	7-Jun-98	3.1
58.0	0.6	18.838	1998.586	2-Aug-98	3.1
56.8	0.9	19.068	1998.816	25-Oct-98	3.0
55.4	0.7	19.222	1998.970	20-Dec-98	2.9
57.2	0.2	19.392	1999.140	20-Feb-99	3.0
57.6	0.3	19.510	1999.258	4-Apr-99	3.0
58.2	0.7	19.682	1999.430	6-Jun-99	3.0
58.0	1.4	19.855	1999.603	8-Aug-99	2.9
56.5	2.4	20.036	1999.814	24-Oct-99	2.8
57.3	2.8	20.189	1999.967	19-Dec-99	2.8
57.6	2.4	20.410	2000.158	27-Feb-00	2.8
58.2	1.6	20.563	2000.311	23-Apr-00	2.8
58.4	1.8	20.736	2000.484	25-Jun-00	2.8
56.7	0.8	20.908	2000.656	27-Aug-00	2.7
57.7	1.8	21.042	2000.790	15-Oct-00	2.7
58.8	0.9	21.195	2000.943	10-Dec-00	2.8
59.4	1.2	21.367	2001.115	11-Feb-01	2.8

SF-06 Wright Road near Hollister Calaveras Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.5	0.000	1979.805	21-Oct-79	
-0.1	0.4	0.255	1980.060	22-Jan-80	
4.3	0.6	0.362	1980.167	1-Mar-80	
3.7	0.9	0.381	1980.186	8-Mar-80	
4.8	1.1	0.534	1980.339	3-May-80	
8.0	1.6	0.668	1980.473	21-Jun-80	12.0
19.3	1.2	1.242	1981.047	17-Jan-81	15.5
20.3	0.5	1.663	1981.468	20-Jun-81	12.2
30.7	0.5	1.836	1981.641	22-Aug-81	16.7
31.6	0.6	2.143	1981.948	12-Dec-81	14.7
31.7	0.1	2.507	1982.312	24-Apr-82	12.6
38.8	0.3	2.776	1982.581	31-Jul-82	14.0
45.2	0.5	3.102	1982.907	27-Nov-82	14.6
45.8	0.6	3.351	1983.156	26-Feb-83	13.7
51.5	0.2	3.548	1983.353	9-May-83	14.5
51.9	0.1	3.642	1983.447	12-Jun-83	14.3
52.8	0.2	3.781	1983.586	2-Aug-83	14.0
53.9	0.5	4.003	1983.808	22-Oct-83	13.5
58.2	0.4	4.272	1984.077	28-Jan-84	13.6
59.2	0.4	4.512	1984.317	25-Apr-84	13.1
59.6	0.5	4.616	1984.421	2-Jun-84	12.9
70.0	0.7	4.673	1984.478	23-Jun-84	15.0
66.3	0.3	4.714	1984.519	8-Jul-84	14.1
72.5	0.4	4.804	1984.609	10-Aug-84	15.1
72.2	0.4	4.963	1984.768	7-Oct-84	14.5
72.6	0.7	5.132	1984.937	8-Dec-84	14.1
72.0	0.6	5.266	1985.071	26-Jan-85	13.7
76.2	0.8	5.458	1985.263	6-Apr-85	14.0
83.4	0.3	5.688	1985.493	29-Jun-85	14.7
86.8	0.4	5.940	1985.745	29-Sep-85	14.6
86.4	0.1	6.129	1985.934	7-Dec-85	14.1
86.9	0.7	6.274	1986.079	29-Jan-86	13.9
87.1	0.8	6.321	1986.126	15-Feb-86	13.8
86.7	0.4	6.532	1986.337	3-May-86	13.3
87.7	0.5	6.622	1986.427	5-Jun-86	13.2
86.7	0.7	6.800	1986.605	9-Aug-86	12.8
87.3	0.4	6.973	1986.778	11-Oct-86	12.5
88.3	0.9	7.127	1986.932	6-Dec-86	12.4
94.2	0.8	7.357	1987.162	28-Feb-87	12.8
94.5	1.2	7.609	1987.414	31-May-87	12.4
99.7	0.8	7.724	1987.529	12-Jul-87	12.9
100.8	0.6	7.817	1987.622	15-Aug-87	12.9
100.2	1.0	8.085	1987.890	21-Nov-87	12.4
103.9	0.3	8.277	1988.082	30-Jan-88	12.6
104.4	0.7	8.356	1988.161	28-Feb-88	12.5
103.6	0.4	8.526	1988.331	30-Apr-88	12.2

105.1	0.6	8.649	1988.454	14-Jun-88	12.2
104.2	0.6	8.717	1988.522	9-Jul-88	12.0
111.8	0.2	8.949	1988.754	2-Oct-88	12.5
116.0	0.4	9.118	1988.923	3-Dec-88	12.7
116.2	0.6	9.310	1989.115	11-Feb-89	12.5
116.4	0.6	9.463	1989.268	8-Apr-89	12.3
115.9	0.4	9.655	1989.460	17-Jun-89	12.0
119.2	0.2	9.828	1989.633	19-Aug-89	12.1
131.4	0.1	10.000	1989.805	21-Oct-89	13.1
132.1	0.6	10.058	1989.863	11-Nov-89	13.1
132.0	0.4	10.135	1989.940	9-Dec-89	13.0
131.8	0.4	10.231	1990.036	13-Jan-90	12.9
132.5	0.4	10.346	1990.151	24-Feb-90	12.8
131.4	0.4	10.480	1990.285	14-Apr-90	12.5
131.7	0.3	10.576	1990.381	19-May-90	12.5
132.9	0.3	10.713	1990.518	8-Jul-90	12.4
132.5	0.5	10.809	1990.614	12-Aug-90	12.3
133.1	0.3	10.924	1990.729	23-Sep-90	12.2
133.6	0.3	11.036	1990.841	3-Nov-90	12.1
132.9	0.5	11.266	1991.071	26-Jan-91	11.8
132.9	0.2	11.458	1991.263	6-Apr-91	11.6
133.1	0.4	11.631	1991.436	8-Jun-91	11.4
132.2	0.6	11.880	1991.685	7-Sep-91	11.1
133.0	0.5	12.072	1991.877	16-Nov-91	11.0
132.9	0.4	12.250	1992.055	20-Jan-92	10.8
131.3	0.6	12.474	1992.279	11-Apr-92	10.5
132.6	0.5	12.665	1992.470	20-Jun-92	10.5
132.4	2.0	12.821	1992.626	16-Aug-92	10.3
132.4	0.2	12.993	1992.798	18-Oct-92	10.2
130.7	0.6	13.165	1992.970	20-Dec-92	9.9
131.1	0.9	13.239	1993.044	16-Jan-93	9.9
132.9	1.3	13.392	1993.197	13-Mar-93	9.9
131.3	1.3	13.548	1993.353	9-May-93	9.7
131.2	0.7	13.757	1993.562	24-Jul-93	9.5
140.1	0.8	13.853	1993.658	28-Aug-93	10.1
140.3	1.6	14.025	1993.830	30-Oct-93	10.0
141.2	1.1	14.236	1994.041	15-Jan-94	9.9
141.9	0.6	14.428	1994.233	26-Mar-94	9.8
144.0	0.5	14.620	1994.425	4-Jun-94	9.8
147.3	1.4	14.798	1994.603	8-Aug-94	10.0
149.3	1.0	15.061	1994.866	12-Nov-94	9.9
147.5	0.9	15.255	1995.060	22-Jan-95	9.7
149.1	1.0	15.310	1995.115	11-Feb-95	9.7
150.9	1.6	15.502	1995.307	22-Apr-95	9.7
148.2	0.6	15.524	1995.329	30-Apr-95	9.5
156.0	0.8	15.732	1995.537	15-Jul-95	9.9
160.2	1.3	15.965	1995.770	8-Oct-95	10.0
162.8	0.8	16.192	1995.997	30-Dec-95	10.1
166.5	2.6	16.384	1996.189	9-Mar-96	10.2

163.8	0.7	16.520	1996.325	28-Apr-96	9.9
165.8	3.7	16.594	1996.399	25-May-96	10.0
166.4	0.8	16.766	1996.571	27-Jul-96	9.9
167.5	1.0	16.938	1996.743	28-Sep-96	9.9
172.6	0.7	17.072	1996.877	16-Nov-96	10.1
172.8	1.5	17.244	1997.049	18-Jan-97	10.0
175.0	1.0	17.417	1997.222	22-Mar-97	10.0
174.1	0.4	17.551	1997.356	10-May-97	9.9
175.7	1.2	17.724	1997.529	12-Jul-97	9.9
185.4	0.6	17.918	1997.723	21-Sep-97	10.3
186.0	0.3	18.107	1997.912	29-Nov-97	10.3
185.0	0.7	18.280	1998.085	31-Jan-98	10.1
187.3	0.7	18.436	1998.241	29-Mar-98	10.2
187.4	0.7	18.606	1998.411	30-May-98	10.1
187.2	0.7	18.759	1998.564	25-Jul-98	10.0
186.8	0.6	18.817	1998.622	15-Aug-98	9.9
195.7	0.4	19.028	1998.833	31-Oct-98	10.3
196.7	1.0	19.220	1999.025	9-Jan-99	10.2
198.2	1.4	19.376	1999.181	7-Mar-99	10.2
197.1	0.8	19.546	1999.351	8-May-99	10.1
197.3	0.6	19.718	1999.523	10-Jul-99	10.0
196.9	0.9	19.929	1999.734	25-Sep-99	9.9
202.2	0.7	20.102	1999.907	27-Nov-99	10.1
203.4	0.7	20.293	2000.098	5-Feb-00	10.0
209.1	0.6	20.465	2000.270	8-Apr-00	10.2
208.0	0.8	20.638	2000.443	10-Jun-00	10.1
205.3	0.8	20.829	2000.634	19-Aug-00	9.9
207.2	1.3	20.982	2000.787	14-Oct-00	9.9
206.9	1.0	21.154	2000.959	16-Dec-00	9.8
211.1	0.4	21.348	2001.153	25-Feb-01	9.9

SF-07 West Point Ave in Princeton San Gregorio (Seal Cove) Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	3.4	0.000	1979.858	9-Nov-79	
-3.9	1.8	0.290	1980.148	23-Feb-80	
-3.0	1.8	0.500	1980.358	10-May-80	
-0.3	1.5	0.729	1980.587	2-Aug-80	
1.6	1.1	0.869	1980.727	22-Sep-80	1.8
-0.3	2.8	1.038	1980.896	23-Nov-80	-0.3
2.1	1.2	1.200	1981.058	20-Jan-81	1.8
6.0	0.5	1.394	1981.252	2-Apr-81	4.3
6.0	1.7	1.660	1981.518	8-Jul-81	3.6
6.7	0.9	1.745	1981.603	8-Aug-81	3.8
4.8	1.4	1.975	1981.833	31-Oct-81	2.4
8.5	0.6	2.216	1982.074	27-Jan-82	3.8
7.9	0.8	2.526	1982.384	20-May-82	3.1
6.8	0.8	2.712	1982.570	27-Jul-82	2.5
5.1	1.2	3.087	1982.945	11-Dec-82	1.7
5.3	0.9	3.416	1983.274	10-Apr-83	1.6
3.8	1.6	3.597	1983.455	15-Jun-83	1.1
1.3	0.8	3.739	1983.597	6-Aug-83	0.3
4.6	1.1	3.912	1983.770	8-Oct-83	1.2
3.5	1.7	4.221	1984.079	29-Jan-84	0.8
4.4	1.1	4.538	1984.396	24-May-84	1.0
2.3	1.2	4.639	1984.497	30-Jun-84	0.5
2.9	1.1	4.964	1984.822	27-Oct-84	0.6
5.3	0.3	5.257	1985.115	11-Feb-85	1.0
2.7	0.2	5.487	1985.345	6-May-85	0.5
5.8	0.1	5.602	1985.460	17-Jun-85	1.0
6.8	0.9	5.731	1985.589	3-Aug-85	1.2
3.0	1.1	6.098	1985.956	15-Dec-85	0.5
3.2	0.7	6.249	1986.107	8-Feb-86	0.5
1.5	0.4	6.421	1986.279	12-Apr-86	0.2
4.1	1.3	6.589	1986.447	12-Jun-86	0.6
4.4	0.8	6.901	1986.759	4-Oct-86	0.6
3.9	1.1	7.227	1987.085	31-Jan-87	0.5
6.3	1.2	7.419	1987.277	11-Apr-87	0.8
3.0	1.3	7.783	1987.641	22-Aug-87	0.4
3.0	2.0	8.013	1987.871	14-Nov-87	0.4
4.9	1.1	8.262	1988.120	13-Feb-88	0.6
3.7	1.0	8.533	1988.391	22-May-88	0.4
2.3	1.4	8.893	1988.751	1-Oct-88	0.3
4.3	1.0	9.106	1988.964	18-Dec-88	0.5
4.2	1.7	9.679	1989.537	15-Jul-89	0.4
2.2	1.3	9.967	1989.825	28-Oct-89	0.2
5.9	1.1	10.216	1990.074	27-Jan-90	0.6
5.9	2.1	10.372	1990.230	25-Mar-90	0.6
0.3	0.8	10.580	1990.438	9-Jun-90	0.0
1.2	1.7	10.791	1990.649	25-Aug-90	0.1

-5.7	3.6	11.002	1990.860	10-Nov-90	-0.5
4.2	2.1	11.293	1991.151	24-Feb-91	0.4
9.4	3.5	11.424	1991.282	13-Apr-91	0.8
5.1	2.1	11.600	1991.458	16-Jun-91	0.4
1.2	1.6	11.791	1991.649	25-Aug-91	0.1
0.0	1.9	11.846	1991.704	14-Sep-91	0.0
-0.3	1.9	12.076	1991.934	7-Dec-91	0.0
7.5	0.9	12.347	1992.205	15-Mar-92	0.6
2.7	2.3	12.653	1992.511	5-Jul-92	0.2
-9.3	1.7	12.956	1992.814	24-Oct-92	-0.7
3.9	1.3	13.243	1993.101	6-Feb-93	0.3
2.2	1.8	13.610	1993.468	20-Jun-93	0.2
-5.2	1.7	13.841	1993.699	12-Sep-93	-0.4
4.3	1.3	14.241	1994.099	5-Feb-94	0.3
3.8	2.1	14.509	1994.367	14-May-94	0.3
-1.0	1.0	14.750	1994.608	10-Aug-94	-0.1
1.7	1.4	15.112	1994.970	20-Dec-94	0.1
3.3	1.2	15.375	1995.233	26-Mar-95	0.2
-2.8	3.2	15.621	1995.479	24-Jun-95	-0.2
-2.8	2.1	15.947	1995.805	21-Oct-95	-0.2
6.2	1.3	16.199	1996.057	21-Jan-96	0.4
4.1	1.5	16.484	1996.342	4-May-96	0.2
2.5	3.1	16.735	1996.593	4-Aug-96	0.1
3.1	0.5	17.038	1996.896	23-Nov-96	0.2
5.0	0.4	17.287	1997.145	22-Feb-97	0.3
1.0	1.5	17.537	1997.395	24-May-97	0.1
-0.7	0.8	17.824	1997.682	6-Sep-97	0.0
3.9	1.8	18.076	1997.934	7-Dec-97	0.2
3.7	2.8	18.361	1998.219	21-Mar-98	0.2
3.9	2.7	18.591	1998.449	13-Jun-98	0.2
6.6	2.8	18.843	1998.701	13-Sep-98	0.4
6.4	3.3	19.191	1999.049	18-Jan-99	0.3
5.4	0.6	19.416	1999.274	10-Apr-99	0.3
0.8	2.2	19.668	1999.526	11-Jul-99	0.0
-4.0	3.6	19.915	1999.773	9-Oct-99	-0.2
5.3	1.5	20.164	2000.022	8-Jan-00	0.3
0.7	0.9	20.415	2000.273	9-Apr-00	0.0
2.3	1.1	20.683	2000.541	16-Jul-00	0.1
-1.1	1.2	21.025	2000.883	18-Nov-00	-0.1

SF-08 Pescadero Road near Pescadero San Gregorio Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	0.7	0.000	1982.384	20-May-82	
-4.3	1.0	0.186	1982.570	27-Jul-82	
5.0	1.0	0.561	1982.945	11-Dec-82	
4.4	4.2	1.684	1984.068	25-Jan-84	2.6
4.4	2.9	2.012	1984.396	24-May-84	2.2
0.0	2.2	2.113	1984.497	30-Jun-84	0.0
14.6	2.2	2.668	1985.052	19-Jan-85	5.5
-8.4	1.5	2.901	1985.285	14-Apr-85	-2.9
2.4	0.8	3.052	1985.436	8-Jun-85	0.8
7.6	4.0	3.205	1985.589	3-Aug-85	2.4
0.9	2.2	3.572	1985.956	15-Dec-85	0.3
7.6	2.0	3.723	1986.107	8-Feb-86	2.0
4.8	2.5	4.063	1986.447	12-Jun-86	1.2
4.8	1.0	4.701	1987.085	31-Jan-87	1.0
9.4	1.2	4.893	1987.277	11-Apr-87	1.9
-5.5	4.2	5.257	1987.641	22-Aug-87	-1.0
-3.5	2.6	5.487	1987.871	14-Nov-87	-0.6
0.6	1.9	5.736	1988.120	13-Feb-88	0.1
-1.6	2.3	6.007	1988.391	22-May-88	-0.3
-3.6	2.0	6.367	1988.751	1-Oct-88	-0.6
-4.6	4.3	6.580	1988.964	18-Dec-88	-0.7
-6.5	3.8	7.153	1989.537	15-Jul-89	-0.9
-2.1	1.8	7.441	1989.825	28-Oct-89	-0.3
2.7	2.2	7.690	1990.074	27-Jan-90	0.4
-0.9	4.6	7.824	1990.208	17-Mar-90	-0.1
0.0	2.0	8.054	1990.438	9-Jun-90	0.0
-5.0	1.3	8.265	1990.649	25-Aug-90	-0.6
-0.2	1.2	8.476	1990.860	10-Nov-90	0.0
-4.2	2.7	8.767	1991.151	24-Feb-91	-0.5
-2.7	3.6	8.898	1991.282	13-Apr-91	-0.3
2.3	2.6	9.074	1991.458	16-Jun-91	0.3
4.6	3.1	9.265	1991.649	25-Aug-91	0.5
5.0	3.7	9.320	1991.704	14-Sep-91	0.5
6.9	3.4	9.550	1991.934	7-Dec-91	0.7
10.2	3.5	9.936	1992.320	26-Apr-92	1.0
10.9	5.4	10.127	1992.511	5-Jul-92	1.1
3.1	3.9	10.430	1992.814	24-Oct-92	0.3
6.4	1.5	10.717	1993.101	6-Feb-93	0.6
6.4	2.4	11.315	1993.699	12-Sep-93	0.6
3.1	1.2	11.715	1994.099	5-Feb-94	0.3
7.8	1.6	11.983	1994.367	14-May-94	0.7
9.9	1.5	12.224	1994.608	10-Aug-94	0.8
6.3	1.2	12.586	1994.970	20-Dec-94	0.5
14.2	1.3	12.849	1995.233	26-Mar-95	1.1
12.2	1.3	13.095	1995.479	24-Jun-95	0.9
12.6	2.1	13.421	1995.805	21-Oct-95	0.9

11.0	1.8	13.673	1996.057	21-Jan-96	0.8
12.7	1.5	13.958	1996.342	4-May-96	0.9
15.4	1.6	14.209	1996.593	4-Aug-96	1.1
10.9	1.0	14.512	1996.896	23-Nov-96	0.7
10.0	1.2	14.761	1997.145	22-Feb-97	0.7
16.9	2.6	15.011	1997.395	24-May-97	1.1
14.0	3.4	15.298	1997.682	6-Sep-97	0.9
10.4	2.4	15.550	1997.934	7-Dec-97	0.7
12.5	0.6	15.835	1998.219	21-Mar-98	0.8
15.6	0.7	16.065	1998.449	13-Jun-98	1.0
20.8	2.3	16.317	1998.701	13-Sep-98	1.3
14.7	1.9	16.665	1999.049	18-Jan-99	0.9
17.5	1.5	16.890	1999.274	10-Apr-99	1.0
12.1	2.8	17.142	1999.526	11-Jul-99	0.7
14.2	1.6	17.389	1999.773	9-Oct-99	0.8
7.6	1.1	17.638	2000.022	8-Jan-00	0.4
8.3	2.4	17.889	2000.273	9-Apr-00	0.5
8.2	1.0	18.157	2000.541	16-Jul-00	0.5
7.7	0.9	18.499	2000.883	18-Nov-00	0.4

SF-09 Deer Valley Road near Antioch "Antioch" Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	3.2	0.000	1982.890	21-Nov-82	
-7.6	3.1	0.439	1983.329	30-Apr-83	
-0.2	4.4	0.548	1983.438	9-Jun-83	
-5.2	3.8	0.683	1983.573	28-Jul-83	
-5.4	1.8	0.959	1983.849	6-Nov-83	-5.6
-5.5	2.7	1.173	1984.063	23-Jan-84	-4.7
1.9	5.6	1.473	1984.363	12-May-84	1.3
1.7	1.9	1.569	1984.459	16-Jun-84	1.1
2.3	1.4	1.840	1984.730	23-Sep-84	1.2
1.7	1.5	1.990	1984.880	17-Nov-84	0.9
3.3	0.7	2.222	1985.112	10-Feb-85	1.5
6.5	1.1	2.452	1985.342	5-May-85	2.7
5.2	1.2	2.606	1985.496	30-Jun-85	2.0
4.2	2.4	2.702	1985.592	4-Aug-85	1.6
4.2	2.3	2.973	1985.863	11-Nov-85	1.4
1.3	6.7	3.198	1986.088	1-Feb-86	0.4
-0.8	2.6	3.392	1986.282	13-Apr-86	-0.2
0.2	1.5	3.554	1986.444	11-Jun-86	0.1
4.2	5.4	3.910	1986.800	19-Oct-86	1.1
1.8	2.3	4.252	1987.142	21-Feb-87	0.4
4.4	5.6	4.655	1987.545	18-Jul-87	0.9
7.8	4.8	4.926	1987.816	25-Oct-87	1.6
7.6	2.5	5.211	1988.101	6-Feb-88	1.5
8.6	4.0	5.539	1988.429	5-Jun-88	1.6
9.6	2.8	5.823	1988.713	17-Sep-88	1.6
10.7	3.9	6.072	1988.962	17-Dec-88	1.8
6.3	3.5	6.324	1989.214	19-Mar-89	1.0
9.9	4.5	6.631	1989.521	9-Jul-89	1.5
3.3	2.7	6.877	1989.767	7-Oct-89	0.5
11.5	4.2	7.159	1990.049	18-Jan-90	1.6
10.3	3.3	7.263	1990.153	25-Feb-90	1.4
4.6	1.8	7.436	1990.326	29-Apr-90	0.6
8.8	2.4	7.609	1990.499	1-Jul-90	1.2

SF-10 Duhallow Way in South San Francisco San Andreas Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.5	0.000	1980.227	23-Mar-80	
0.5	1.4	0.273	1980.500	1-Jul-80	
2.2	2.1	0.505	1980.732	24-Sep-80	
1.4	2.0	0.571	1980.798	18-Oct-80	
1.3	1.0	0.664	1980.891	21-Nov-80	
3.1	1.2	0.768	1980.995	29-Dec-80	
1.8	0.8	0.828	1981.055	20-Jan-81	
2.9	0.4	0.981	1981.208	17-Mar-81	
2.2	0.7	1.061	1981.288	15-Apr-81	2.1
1.6	1.0	1.299	1981.526	11-Jul-81	1.2
1.7	1.2	1.376	1981.603	8-Aug-81	1.2
2.7	1.6	1.606	1981.833	31-Oct-81	1.7
2.7	1.0	1.743	1981.970	20-Dec-81	1.5
1.5	0.9	1.863	1982.090	2-Feb-82	0.8
2.4	1.9	1.992	1982.219	21-Mar-82	1.2
0.8	1.3	2.261	1982.488	27-Jun-82	0.4
-0.3	1.2	2.411	1982.638	21-Aug-82	-0.1
2.1	0.7	2.617	1982.844	4-Nov-82	0.8
1.0	1.9	2.814	1983.041	15-Jan-83	0.4
1.7	0.5	3.110	1983.337	3-May-83	0.5
-0.5	3.0	3.294	1983.521	9-Jul-83	-0.2
-1.3	1.6	3.526	1983.753	2-Oct-83	-0.4
-1.4	0.8	3.825	1984.052	19-Jan-84	-0.4
-1.6	2.2	3.983	1984.210	17-Mar-84	-0.4
-0.7	1.2	4.101	1984.328	29-Apr-84	-0.2
-0.5	1.2	4.196	1984.423	3-Jun-84	-0.1
-1.3	1.6	4.421	1984.648	24-Aug-84	-0.3
-0.5	0.4	4.598	1984.825	28-Oct-84	-0.1
-0.8	0.6	4.713	1984.940	9-Dec-84	-0.2
-1.0	0.6	4.825	1985.052	19-Jan-85	-0.2
-0.8	0.6	5.039	1985.266	7-Apr-85	-0.2
0.6	1.0	5.231	1985.458	16-Jun-85	0.1
1.6	0.6	5.362	1985.589	3-Aug-85	0.3
0.3	0.4	5.554	1985.781	12-Oct-85	0.1
-1.4	0.6	5.841	1986.068	25-Jan-86	-0.2
0.2	0.3	5.959	1986.186	9-Mar-86	0.0
-0.8	0.8	6.222	1986.449	13-Jun-86	-0.1
-0.4	1.4	6.343	1986.570	27-Jul-86	-0.1
-1.3	1.0	6.587	1986.814	24-Oct-86	-0.2
-2.4	1.3	6.743	1986.970	20-Dec-86	-0.4
-0.4	0.4	6.954	1987.181	7-Mar-87	-0.1
-1.7	1.0	7.294	1987.521	9-Jul-87	-0.2
-0.6	1.2	7.376	1987.603	8-Aug-87	-0.1
-1.1	0.9	7.568	1987.795	17-Oct-87	-0.1
-3.2	0.5	7.858	1988.085	31-Jan-88	-0.4
-0.8	0.8	8.084	1988.311	23-Apr-88	-0.1

0.3	0.8	8.268	1988.495	29-Jun-88	0.0
-0.3	1.2	8.467	1988.694	10-Sep-88	0.0
0.6	1.0	8.639	1988.866	12-Nov-88	0.1
-1.3	1.1	8.869	1989.096	4-Feb-89	-0.1
-2.2	0.8	8.935	1989.162	28-Feb-89	-0.2
-0.4	1.2	9.118	1989.345	6-May-89	0.0
-0.7	1.7	9.313	1989.540	16-Jul-89	-0.1
-0.2	0.8	9.387	1989.614	12-Aug-89	0.0
-1.6	2.1	9.546	1989.773	9-Oct-89	-0.2
-4.7	1.9	9.573	1989.800	19-Oct-89	-0.5
-3.5	0.9	9.584	1989.811	23-Oct-89	-0.4
-2.0	1.2	9.614	1989.841	3-Nov-89	-0.2
-2.0	0.9	9.647	1989.874	15-Nov-89	-0.2
0.0	1.2	9.820	1990.047	17-Jan-90	0.0
0.6	0.9	9.921	1990.148	23-Feb-90	0.1
-1.5	0.8	9.998	1990.225	23-Mar-90	-0.2
1.4	1.0	10.113	1990.340	4-May-90	0.1
-0.2	0.6	10.255	1990.482	25-Jun-90	0.0
-0.3	1.0	10.346	1990.573	28-Jul-90	0.0
0.3	1.5	10.455	1990.682	6-Sep-90	0.0
0.0	1.0	10.570	1990.797	18-Oct-90	0.0
0.6	1.6	10.825	1991.052	19-Jan-91	0.1
0.6	1.1	11.017	1991.244	30-Mar-91	0.1
0.9	0.9	11.170	1991.397	25-May-91	0.1
1.4	1.6	11.305	1991.532	13-Jul-91	0.1
2.4	1.9	11.573	1991.800	19-Oct-91	0.2
0.9	1.2	11.746	1991.973	21-Dec-91	0.1
1.3	1.5	11.956	1992.183	7-Mar-92	0.1
1.4	0.7	12.150	1992.377	17-May-92	0.1
0.9	1.5	12.339	1992.566	25-Jul-92	0.1
0.3	0.9	12.511	1992.738	26-Sep-92	0.0
0.5	1.0	12.683	1992.910	28-Nov-92	0.0
-3.0	1.8	12.894	1993.121	13-Feb-93	-0.2
-1.1	0.9	13.200	1993.427	5-Jun-93	-0.1
-1.9	0.9	13.488	1993.715	18-Sep-93	-0.1
-2.2	0.8	13.836	1994.063	23-Jan-94	-0.2
-1.2	1.2	13.968	1994.195	12-Mar-94	-0.1
-0.6	1.4	14.181	1994.408	29-May-94	0.0
-0.8	0.9	14.370	1994.597	6-Aug-94	-0.1
-4.9	1.0	14.674	1994.901	25-Nov-94	-0.3
-5.4	1.3	14.891	1995.118	12-Feb-95	-0.4
-2.3	1.0	15.173	1995.400	26-May-95	-0.2
-2.5	1.8	15.518	1995.745	29-Sep-95	-0.2
-1.9	0.9	15.792	1996.019	7-Jan-96	-0.1
-4.6	1.1	15.981	1996.208	16-Mar-96	-0.3
-4.2	0.6	16.287	1996.514	6-Jul-96	-0.3
-4.2	0.5	16.497	1996.724	21-Sep-96	-0.3
-3.8	1.6	16.707	1996.934	7-Dec-96	-0.2
-3.4	0.9	16.976	1997.203	15-Mar-97	-0.2

-4.2	0.8	17.283	1997.510	5-Jul-97	-0.2
-3.4	1.1	17.551	1997.778	11-Oct-97	-0.2
-4.7	0.6	17.839	1998.066	24-Jan-98	-0.3
-4.7	0.5	18.069	1998.296	18-Apr-98	-0.3
-4.6	0.6	18.357	1998.584	1-Aug-98	-0.3
-6.5	0.9	18.740	1998.967	19-Dec-98	-0.3
-3.5	0.4	18.970	1999.197	13-Mar-99	-0.2
-3.5	0.6	19.222	1999.449	13-Jun-99	-0.2
-4.5	1.7	19.565	1999.792	16-Oct-99	-0.2
-3.5	0.9	19.798	2000.025	9-Jan-00	-0.2
-3.4	1.1	20.142	2000.369	14-May-00	-0.2
-4.8	1.2	20.254	2000.481	24-Jun-00	-0.2
-1.4	1.4	20.522	2000.749	30-Sep-00	-0.1
-3.2	1.1	20.809	2001.036	13-Jan-01	-0.2

SF-11 Worrell Road in Antioch "Antioch" Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.0	0.000	1980.342	4-May-80	
-0.8	1.3	0.150	1980.492	28-Jun-80	
-2.5	1.7	0.379	1980.721	20-Sep-80	
-2.8	1.4	0.475	1980.817	25-Oct-80	
-2.3	1.2	0.551	1980.893	22-Nov-80	
-1.9	1.4	0.655	1980.997	30-Dec-80	
-2.9	1.0	0.762	1981.104	7-Feb-81	
-2.8	0.7	1.031	1981.373	16-May-81	-2.7
-3.0	0.4	1.211	1981.553	21-Jul-81	-2.5
-3.4	0.7	1.398	1981.740	27-Sep-81	-2.4
-3.4	1.0	1.707	1982.049	18-Jan-82	-2.0
-3.2	0.9	1.965	1982.307	22-Apr-82	-1.6
-3.4	0.7	2.113	1982.455	15-Jun-82	-1.6
-4.9	1.6	2.321	1982.663	30-Aug-82	-2.1
-1.7	1.3	2.685	1983.027	10-Jan-83	-0.6
-3.0	0.9	2.987	1983.329	30-Apr-83	-1.0
-4.0	1.4	3.096	1983.438	9-Jun-83	-1.3
-4.4	2.4	3.231	1983.573	28-Jul-83	-1.4
-7.3	1.3	3.507	1983.849	6-Nov-83	-2.1
-3.7	1.3	3.721	1984.063	23-Jan-84	-1.0
-5.0	0.4	4.021	1984.363	12-May-84	-1.2
-5.0	0.8	4.117	1984.459	16-Jun-84	-1.2
-8.9	0.7	4.388	1984.730	23-Sep-84	-2.0
-6.3	0.8	4.538	1984.880	17-Nov-84	-1.4
-7.2	0.5	4.770	1985.112	10-Feb-85	-1.5
-4.8	0.2	5.000	1985.342	5-May-85	-1.0
-6.0	0.3	5.154	1985.496	30-Jun-85	-1.2
-8.5	0.4	5.250	1985.592	4-Aug-85	-1.6
-7.8	0.4	5.521	1985.863	11-Nov-85	-1.4
-4.2	0.5	5.746	1986.088	1-Feb-86	-0.7
-2.4	1.1	5.940	1986.282	13-Apr-86	-0.4
-3.4	1.3	6.102	1986.444	11-Jun-86	-0.6
-9.0	1.2	6.458	1986.800	19-Oct-86	-1.4
-6.3	0.3	6.918	1987.260	5-Apr-87	-0.9
-7.9	1.7	7.203	1987.545	18-Jul-87	-1.1
-8.5	0.9	7.474	1987.816	25-Oct-87	-1.1
-3.5	0.3	7.759	1988.101	6-Feb-88	-0.5
-6.1	1.0	8.087	1988.429	5-Jun-88	-0.8
-8.0	1.4	8.371	1988.713	17-Sep-88	-1.0
-6.6	0.5	8.620	1988.962	17-Dec-88	-0.8
-3.8	1.3	8.872	1989.214	19-Mar-89	-0.4
-6.8	2.3	9.179	1989.521	9-Jul-89	-0.7
-6.7	1.7	9.425	1989.767	7-Oct-89	-0.7
-5.2	1.6	9.636	1989.978	23-Dec-89	-0.5
-6.3	0.6	9.811	1990.153	25-Feb-90	-0.6
-6.3	0.8	10.003	1990.345	6-May-90	-0.6

-7.3	0.2	10.157	1990.499	1-Jul-90	-0.7
-5.9	0.4	10.406	1990.748	30-Sep-90	-0.6
-6.9	1.5	10.537	1990.879	17-Nov-90	-0.7
-6.7	0.5	10.790	1991.132	17-Feb-91	-0.6
-5.0	0.3	11.036	1991.378	18-May-91	-0.5
-7.2	0.8	11.228	1991.570	27-Jul-91	-0.6
-6.6	0.9	11.420	1991.762	5-Oct-91	-0.6
-5.3	0.6	11.611	1991.953	14-Dec-91	-0.5
-1.0	0.8	11.825	1992.167	1-Mar-92	-0.1
-2.8	1.4	12.013	1992.355	9-May-92	-0.2
-4.4	1.5	12.204	1992.546	18-Jul-92	-0.4
-6.1	1.2	12.360	1992.702	13-Sep-92	-0.5
-5.6	1.8	12.491	1992.833	31-Oct-92	-0.4
-0.7	2.0	12.740	1993.082	30-Jan-93	-0.1
-0.8	1.7	12.970	1993.312	24-Apr-93	-0.1
-6.5	0.8	13.318	1993.660	29-Aug-93	-0.5
-7.4	1.1	13.833	1994.175	5-Mar-94	-0.5
-7.0	0.5	14.044	1994.386	21-May-94	-0.5
-6.5	3.2	14.313	1994.655	27-Aug-94	-0.5
-5.6	1.0	14.562	1994.904	26-Nov-94	-0.4
-2.8	0.8	14.754	1995.096	4-Feb-95	-0.2
-3.3	2.0	15.102	1995.444	11-Jun-95	-0.2
-4.4	2.1	15.444	1995.786	14-Oct-95	-0.3
-4.7	3.3	15.674	1996.016	6-Jan-96	-0.3
-5.3	1.5	16.076	1996.418	1-Jun-96	-0.3
-6.2	1.1	16.344	1996.686	7-Sep-96	-0.4
-3.5	1.1	16.592	1996.934	7-Dec-96	-0.2
-4.5	1.4	16.861	1997.203	15-Mar-97	-0.3
-4.5	0.8	17.168	1997.510	5-Jul-97	-0.3
-6.2	1.5	17.436	1997.778	11-Oct-97	-0.4
-3.6	0.6	17.724	1998.066	24-Jan-98	-0.2
-3.7	1.4	17.954	1998.296	18-Apr-98	-0.2
-3.2	0.9	18.242	1998.584	1-Aug-98	-0.2
-4.6	2.3	18.668	1998.970	20-Dec-98	-0.2
-2.8	0.9	18.970	1999.312	24-Apr-99	-0.1
-6.4	1.9	19.239	1999.581	31-Jul-99	-0.3
-3.6	2.0	19.526	1999.868	13-Nov-99	-0.2
-5.3	1.5	19.816	2000.158	27-Feb-00	-0.3

SF-12 D Street in Hayward Hayward Fault 44.56 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	0.9	0.000	1980.478	23-Jun-80	
0.5	1.0	0.115	1980.593	4-Aug-80	
0.2	1.8	0.235	1980.713	17-Sep-80	
-0.3	0.8	0.383	1980.861	10-Nov-80	
0.0	1.0	0.538	1981.016	6-Jan-81	
1.8	0.6	0.667	1981.145	22-Feb-81	
1.8	0.9	0.736	1981.214	19-Mar-81	
4.6	0.8	1.023	1981.501	2-Jul-81	4.5
4.0	0.8	1.108	1981.586	2-Aug-81	3.6
5.3	1.3	1.358	1981.836	1-Nov-81	3.9
6.5	0.6	1.541	1982.019	7-Jan-82	4.2
6.3	0.5	1.697	1982.175	5-Mar-82	3.7
7.4	0.3	1.938	1982.416	1-Jun-82	3.8
8.7	1.2	2.100	1982.578	30-Jul-82	4.1
9.1	1.0	2.180	1982.658	28-Aug-82	4.2
9.1	0.3	2.355	1982.833	31-Oct-82	3.9
9.7	0.5	2.544	1983.022	8-Jan-83	3.8
11.0	0.4	2.793	1983.271	9-Apr-83	3.9
13.3	1.7	2.938	1983.416	1-Jun-83	4.5
11.9	0.4	2.966	1983.444	11-Jun-83	4.0
13.7	1.9	3.114	1983.592	4-Aug-83	4.4
16.4	1.7	3.237	1983.715	18-Sep-83	5.1
14.3	0.7	3.333	1983.811	23-Oct-83	4.3
12.8	0.9	3.618	1984.096	4-Feb-84	3.5
16.3	0.8	3.773	1984.251	1-Apr-84	4.3
16.5	0.4	3.959	1984.437	8-Jun-84	4.2
18.5	1.1	4.172	1984.650	25-Aug-84	4.4
20.3	0.7	4.328	1984.806	21-Oct-84	4.7
19.8	0.7	4.544	1985.022	8-Jan-85	4.4
20.9	0.4	4.673	1985.151	24-Feb-85	4.5
22.6	0.7	4.845	1985.323	28-Apr-85	4.7
25.2	0.4	4.960	1985.438	9-Jun-85	5.1
25.5	0.6	5.226	1985.704	14-Sep-85	4.9
25.6	1.4	5.495	1985.973	21-Dec-85	4.7
27.2	1.2	5.744	1986.222	22-Mar-86	4.7
27.9	0.8	5.821	1986.299	19-Apr-86	4.8
25.6	0.7	5.947	1986.425	4-Jun-86	4.3
28.7	1.2	6.089	1986.567	26-Jul-86	4.7
29.6	1.4	6.245	1986.723	21-Sep-86	4.7
29.7	0.8	6.380	1986.858	9-Nov-86	4.7
30.1	0.8	6.549	1987.027	10-Jan-87	4.6
31.3	0.8	6.763	1987.241	29-Mar-87	4.6
32.0	1.8	6.952	1987.430	6-Jun-87	4.6
33.2	0.4	7.127	1987.605	9-Aug-87	4.7
33.5	1.6	7.319	1987.797	18-Oct-87	4.6
33.3	1.2	7.585	1988.063	23-Jan-88	4.4

34.8	0.6	7.738	1988.216	19-Mar-88	4.5
38.1	1.3	7.894	1988.372	15-May-88	4.8
38.5	0.6	8.085	1988.563	24-Jun-88	4.8
40.6	1.4	8.197	1988.675	3-Sep-88	5.0
38.5	0.7	8.372	1988.850	6-Nov-88	4.6
38.8	0.7	8.580	1989.058	21-Jan-89	4.5
42.0	0.9	8.848	1989.326	29-Apr-89	4.7
44.0	1.5	9.095	1989.573	28-Jul-89	4.8
45.1	0.6	9.270	1989.748	30-Sep-89	4.9
44.5	0.8	9.369	1989.847	5-Nov-89	4.7
43.8	0.5	9.541	1990.019	7-Jan-90	4.6
45.0	1.1	9.659	1990.137	19-Feb-90	4.7
45.3	1.1	9.804	1990.282	13-Apr-90	4.6
45.6	1.1	9.919	1990.397	25-May-90	4.6
46.6	0.9	10.034	1990.512	6-Jul-90	4.6
45.7	1.7	10.133	1990.611	11-Aug-90	4.5
45.5	1.3	10.281	1990.759	4-Oct-90	4.4
44.1	0.8	10.440	1990.918	1-Dec-90	4.2
46.7	0.7	10.651	1991.129	16-Feb-91	4.4
46.8	1.1	10.760	1991.238	28-Mar-91	4.3
47.3	0.4	10.862	1991.340	4-May-91	4.4
47.8	0.9	11.056	1991.534	14-Jul-91	4.3
49.5	1.1	11.245	1991.723	21-Sep-91	4.4
49.5	1.0	11.418	1991.896	23-Nov-91	4.3
50.4	0.6	11.590	1992.068	25-Jan-92	4.3
54.4	0.4	11.782	1992.260	4-Apr-92	4.6
53.1	0.9	11.858	1992.336	2-May-92	4.5
54.7	1.1	12.049	1992.527	11-Jul-92	4.5
54.4	1.8	12.221	1992.699	12-Sep-92	4.5
52.8	0.6	12.394	1992.872	14-Nov-92	4.3
53.3	1.0	12.588	1993.066	24-Jan-93	4.2
56.5	1.7	12.738	1993.216	20-Mar-93	4.4
59.1	2.2	13.103	1993.581	31-Jul-93	4.5
57.4	1.2	13.390	1993.868	13-Nov-93	4.3
58.7	0.8	13.582	1994.060	22-Jan-94	4.3
61.1	1.1	13.774	1994.252	2-Apr-94	4.4
60.5	1.0	13.985	1994.463	18-Jun-94	4.3
61.7	0.7	14.111	1994.589	3-Aug-94	4.4
63.0	0.7	14.330	1994.808	22-Oct-94	4.4
64.2	1.7	14.599	1995.077	28-Jan-95	4.4
67.0	0.5	14.790	1995.268	8-Apr-95	4.5
66.9	0.8	14.982	1995.460	17-Jun-95	4.5
66.9	0.5	15.166	1995.644	23-Aug-95	4.4
67.0	0.8	15.347	1995.825	28-Oct-95	4.4
68.1	1.7	15.538	1996.016	6-Jan-96	4.4
69.0	2.2	15.730	1996.208	16-Mar-96	4.4
70.8	1.5	15.940	1996.418	1-Jun-96	4.4
70.6	1.7	16.161	1996.639	21-Aug-96	4.4
71.5	0.8	16.342	1996.820	26-Oct-96	4.4

69.8	0.9	16.495	1996.973	21-Dec-96	4.2
73.3	0.4	16.651	1997.129	16-Feb-97	4.4
73.9	0.8	16.919	1997.397	25-May-97	4.4
76.2	1.2	17.054	1997.532	13-Jul-97	4.5
84.7	0.3	18.969	1999.447	12-Jun-99	4.5
85.0	0.8	19.180	1999.658	28-Aug-99	4.4
82.9	0.8	19.352	1999.830	30-Oct-99	4.3
82.8	1.4	19.563	2000.041	15-Jan-00	4.2
83.5	1.0	19.735	2000.213	18-Mar-00	4.2
88.0	1.5	19.926	2000.404	27-May-00	4.4
85.2	2.2	20.101	2000.579	30-Jul-00	4.2
88.1	0.5	20.347	2000.825	28-Oct-00	4.3
91.4	0.8	20.538	2001.016	6-Jan-01	4.5

SF-13 Rose Street in Hayward Hayward Fault 43.22 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.2	0.000	1980.481	24-Jun-80	
-1.5	1.1	0.112	1980.593	4-Aug-80	
-0.9	1.2	0.284	1980.765	6-Oct-80	
-2.3	1.6	0.380	1980.861	10-Nov-80	
0.2	1.1	0.535	1981.016	6-Jan-81	
2.7	0.4	0.733	1981.214	19-Mar-81	
3.5	0.5	1.020	1981.501	2-Jul-81	3.4
2.6	0.8	1.105	1981.586	2-Aug-81	2.4
5.4	0.8	1.355	1981.836	1-Nov-81	4.0
12.6	0.6	1.538	1982.019	7-Jan-82	8.2
9.6	0.2	1.694	1982.175	5-Mar-82	5.7
11.9	1.6	1.738	1982.219	21-Mar-82	6.8
10.3	0.9	1.935	1982.416	1-Jun-82	5.3
9.4	0.6	2.097	1982.578	30-Jul-82	4.5
9.2	0.5	2.177	1982.658	28-Aug-82	4.2
7.2	0.6	2.352	1982.833	31-Oct-82	3.1
9.9	1.2	2.541	1983.022	8-Jan-83	3.9
13.5	0.6	2.790	1983.271	9-Apr-83	4.8
14.6	1.1	2.933	1983.414	31-May-83	5.0
12.2	0.6	2.963	1983.444	11-Jun-83	4.1
14.2	3.1	3.111	1983.592	4-Aug-83	4.6
13.4	1.3	3.234	1983.715	18-Sep-83	4.1
13.4	1.7	3.330	1983.811	23-Oct-83	4.0
15.4	0.4	3.585	1984.066	24-Jan-84	4.3
19.3	0.9	3.768	1984.249	31-Mar-84	5.1
19.9	0.5	3.956	1984.437	8-Jun-84	5.0
19.2	1.0	4.169	1984.650	25-Aug-84	4.6
18.0	1.0	4.325	1984.806	21-Oct-84	4.2
20.8	0.8	4.541	1985.022	8-Jan-85	4.6
22.3	0.6	4.670	1985.151	24-Feb-85	4.8
23.5	0.4	4.842	1985.323	28-Apr-85	4.9
24.4	1.6	4.957	1985.438	9-Jun-85	4.9
22.0	1.2	5.223	1985.704	14-Sep-85	4.2
23.9	1.3	5.492	1985.973	21-Dec-85	4.4
34.9	0.8	5.741	1986.222	22-Mar-86	6.1
34.3	1.2	5.818	1986.299	19-Apr-86	5.9
33.0	0.1	5.944	1986.425	4-Jun-86	5.6
30.8	0.3	6.086	1986.567	26-Jul-86	5.1
30.2	1.4	6.242	1986.723	21-Sep-86	4.8
31.0	0.8	6.377	1986.858	9-Nov-86	4.9
30.0	1.3	6.546	1987.027	10-Jan-87	4.6
35.5	1.6	6.760	1987.241	29-Mar-87	5.3
36.5	0.9	6.949	1987.430	6-Jun-87	5.3
34.7	1.4	7.124	1987.605	9-Aug-87	4.9
34.9	1.5	7.316	1987.797	18-Oct-87	4.8
34.8	1.3	7.582	1988.063	23-Jan-88	4.6

34.5	1.2	7.735	1988.216	19-Mar-88	4.5
32.9	1.3	7.891	1988.372	15-May-88	4.2
35.8	1.7	8.082	1988.563	24-Jul-88	4.4
37.9	1.7	8.194	1988.675	3-Sep-88	4.6
38.4	1.3	8.369	1988.850	6-Nov-88	4.6
39.5	1.1	8.577	1989.058	21-Jan-89	4.6
44.9	1.4	8.845	1989.326	29-Apr-89	5.1
42.7	1.4	9.092	1989.573	28-Jul-89	4.7
42.8	0.9	9.267	1989.748	30-Sep-89	4.6
44.9	0.8	9.366	1989.847	5-Nov-89	4.8
43.6	0.4	9.538	1990.019	7-Jan-90	4.6
46.3	0.8	9.656	1990.137	19-Feb-90	4.8
47.1	0.5	9.801	1990.282	13-Apr-90	4.8
44.0	1.1	9.916	1990.397	25-May-90	4.4
43.5	0.3	10.031	1990.512	6-Jul-90	4.3
43.5	0.6	10.130	1990.611	11-Aug-90	4.3
44.9	1.6	10.278	1990.759	4-Oct-90	4.4
46.3	0.8	10.437	1990.918	1-Dec-90	4.4
46.8	0.5	10.648	1991.129	16-Feb-91	4.4
48.8	0.7	10.757	1991.238	28-Mar-91	4.5
50.3	0.8	10.859	1991.340	4-May-91	4.6
54.6	0.6	11.053	1991.534	14-Jul-91	4.9
54.7	1.0	11.242	1991.723	21-Sep-91	4.9
57.0	0.6	11.415	1991.896	23-Nov-91	5.0
60.0	0.5	11.587	1992.068	25-Jan-92	5.2
61.5	0.8	11.779	1992.260	4-Apr-92	5.2
61.4	0.4	11.855	1992.336	2-May-92	5.2
59.3	0.7	12.046	1992.527	11-Jul-92	4.9
59.3	1.9	12.251	1992.732	24-Sep-92	4.8
59.6	1.7	12.391	1992.872	14-Nov-92	4.8
62.1	1.2	12.585	1993.066	24-Jan-93	4.9
65.0	2.1	12.735	1993.216	20-Mar-93	5.1
65.9	1.8	12.949	1993.430	6-Jun-93	5.1
67.6	0.4	13.198	1993.679	5-Sep-93	5.1
62.1	2.7	13.371	1993.852	7-Nov-93	4.6
65.1	1.0	13.563	1994.044	16-Jan-94	4.8
65.6	1.5	13.755	1994.236	27-Mar-94	4.8
72.3	0.9	13.982	1994.463	18-Jun-94	5.2
67.1	0.7	14.108	1994.589	3-Aug-94	4.8
67.3	0.9	14.327	1994.808	22-Oct-94	4.7
76.0	0.9	14.596	1995.077	28-Jan-95	5.2
74.1	1.6	14.787	1995.268	8-Apr-95	5.0
73.4	1.1	14.979	1995.460	17-Jun-95	4.9
72.8	0.7	15.163	1995.644	23-Aug-95	4.8
75.7	2.2	15.344	1995.825	28-Oct-95	4.9
76.0	2.1	15.497	1995.978	23-Dec-95	4.9
75.0	0.9	15.634	1996.115	11-Feb-96	4.8
75.8	0.7	15.784	1996.265	6-Apr-96	4.8
78.8	1.5	16.014	1996.495	29-Jun-96	4.9

80.5	1.1	16.153	1996.634	19-Aug-96	5.0
78.1	0.7	16.339	1996.820	26-Oct-96	4.8
82.8	1.0	16.549	1997.030	11-Jan-97	5.0
79.0	2.2	16.760	1997.241	29-Mar-97	4.7
83.7	0.7	16.916	1997.397	25-May-97	4.9
82.9	0.9	17.051	1997.532	13-Jul-97	4.9
86.1	0.9	17.152	1997.633	19-Aug-97	5.0
82.9	0.9	17.355	1997.836	1-Nov-97	4.8
88.5	0.8	17.546	1998.027	10-Jan-98	5.0
85.7	0.8	17.719	1998.200	14-Mar-98	4.8
87.9	0.6	17.933	1998.414	31-May-98	4.9
88.6	0.8	18.218	1998.699	12-Sep-98	4.9
91.3	0.4	18.374	1998.855	8-Nov-98	5.0
92.3	0.7	18.582	1999.063	23-Jan-99	5.0
96.0	1.3	18.719	1999.200	14-Mar-99	5.1
94.1	1.2	18.892	1999.373	16-May-99	5.0
92.9	1.8	19.177	1999.658	28-Aug-99	4.8
92.3	0.6	19.349	1999.830	30-Oct-99	4.8
98.9	0.4	19.560	2000.041	15-Jan-00	5.1
98.2	0.5	19.770	2000.251	1-Apr-00	5.0
99.0	0.8	19.981	2000.462	17-Jun-00	5.0
99.1	1.1	20.136	2000.617	13-Aug-00	4.9
103.1	1.1	20.344	2000.825	28-Oct-00	5.1
98.3	1.2	20.535	2001.016	6-Jan-01	4.8

SF-14 Point Reyes at PR National Seashore Headquarters San Andreas Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.1	0.000	1985.096	4-Feb-85	
0.1	0.8	0.211	1985.307	22-Apr-85	
0.3	0.5	0.364	1985.460	17-Jun-85	
0.6	0.1	0.479	1985.575	29-Jul-85	
0.3	0.0	0.731	1985.827	29-Oct-85	
1.3	0.3	1.005	1986.101	6-Feb-86	1.3
-0.1	0.5	1.255	1986.351	8-May-86	-0.1
1.2	0.4	1.353	1986.449	13-Jun-86	0.9
1.1	0.6	1.474	1986.570	27-Jul-86	0.7
-0.4	0.3	1.701	1986.797	18-Oct-86	-0.2
0.6	0.6	2.085	1987.181	7-Mar-87	0.3
0.9	0.6	2.372	1987.468	20-Jun-87	0.4
1.3	0.8	2.507	1987.603	8-Aug-87	0.5
0.5	1.5	2.699	1987.795	17-Oct-87	0.2
1.5	0.8	2.989	1988.085	31-Jan-88	0.5
1.0	0.9	3.215	1988.311	23-Apr-88	0.3
1.1	0.4	3.464	1988.560	23-Jul-88	0.3
1.3	1.1	3.598	1988.694	10-Sep-88	0.4
1.3	0.7	3.770	1988.866	12-Nov-88	0.3
1.4	0.5	4.000	1989.096	4-Feb-89	0.3
1.9	1.4	4.057	1989.153	25-Feb-89	0.5
2.5	0.8	4.249	1989.345	6-May-89	0.6
1.3	0.7	4.444	1989.540	16-Jul-89	0.3
3.2	0.6	4.518	1989.614	12-Aug-89	0.7
2.0	0.8	4.655	1989.751	1-Oct-89	0.4
2.6	0.7	4.726	1989.822	27-Oct-89	0.5
2.7	0.8	4.931	1990.027	10-Jan-90	0.5
2.7	0.7	5.115	1990.211	18-Mar-90	0.5
4.3	0.8	5.225	1990.321	27-Apr-90	0.8
3.5	0.7	5.405	1990.501	2-Jul-90	0.6
2.5	1.6	5.534	1990.630	18-Aug-90	0.5
3.5	1.0	5.649	1990.745	29-Sep-90	0.6
3.7	1.0	5.786	1990.882	18-Nov-90	0.6
3.5	1.0	6.014	1991.110	9-Feb-91	0.6
3.6	0.8	6.205	1991.301	20-Apr-91	0.6
3.1	0.2	6.378	1991.474	22-Jun-91	0.5
3.7	0.7	6.531	1991.627	17-Aug-91	0.6
5.4	1.5	6.723	1991.819	26-Oct-91	0.8
5.2	0.5	6.953	1992.049	18-Jan-92	0.7
5.6	0.6	7.221	1992.317	25-Apr-92	0.8
5.6	1.2	7.412	1992.508	4-Jul-92	0.8
3.6	0.2	7.661	1992.757	3-Oct-92	0.5
2.6	0.3	7.967	1993.063	23-Jan-93	0.3
4.5	0.7	8.389	1993.485	26-Jun-93	0.5
4.5	0.3	8.600	1993.696	11-Sep-93	0.5
3.3	0.9	8.986	1994.082	30-Jan-94	0.4

5.7	0.4	9.194	1994.290	16-Apr-94	0.6
6.3	0.5	9.427	1994.523	10-Jul-94	0.7
5.9	0.3	9.805	1994.901	25-Nov-94	0.6
4.7	0.3	10.022	1995.118	12-Feb-95	0.5
4.3	1.0	10.304	1995.400	26-May-95	0.4
4.0	0.7	10.594	1995.690	9-Sep-95	0.4
3.8	0.4	10.805	1995.901	25-Nov-95	0.4
3.9	1.1	10.997	1996.093	3-Feb-96	0.4
4.0	1.0	11.284	1996.380	18-May-96	0.4
3.0	3.0	11.418	1996.514	6-Jul-96	0.3
3.0	1.0	11.628	1996.724	21-Sep-96	0.3
4.7	0.8	11.838	1996.934	7-Dec-96	0.4
6.5	0.8	12.068	1997.164	1-Mar-97	0.5
3.9	0.4	12.320	1997.416	1-Jun-97	0.3
3.3	1.0	12.625	1997.721	20-Sep-97	0.3
3.6	0.3	12.896	1997.992	28-Dec-97	0.3
3.2	1.5	13.296	1998.392	23-May-98	0.2
2.3	1.3	13.545	1998.641	22-Aug-98	0.2
3.4	0.9	13.833	1998.929	5-Dec-98	0.2
3.0	0.8	14.066	1999.162	28-Feb-99	0.2
1.6	0.5	14.236	1999.332	1-May-99	0.1
2.6	0.4	14.542	1999.638	21-Aug-99	0.2
3.3	0.4	14.852	1999.948	12-Dec-99	0.2
3.3	1.2	15.155	2000.251	1-Apr-00	0.2
2.4	1.2	15.385	2000.481	24-Jun-00	0.2
1.9	1.8	15.653	2000.749	30-Sep-00	0.1
0.9	2.0	15.940	2001.036	13-Jan-01	0.1

SF-15 Linda Vista Ave in Napa West Napa Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	2.4	0.000	1980.568	26-Jul-80	
2.1	1.3	0.268	1980.836	1-Nov-80	
-3.9	1.2	0.446	1981.014	5-Jan-81	
-5.1	0.8	0.670	1981.238	28-Mar-81	
2.3	0.6	0.966	1981.534	14-Jul-81	2.4
4.3	0.9	1.054	1981.622	15-Aug-81	4.1
4.3	0.4	1.290	1981.858	9-Nov-81	3.3
-2.0	0.4	1.503	1982.071	26-Jan-82	-1.3
-1.8	1.5	1.769	1982.337	3-May-82	-1.0
3.7	0.8	1.944	1982.512	6-Jul-82	1.9
8.4	0.8	2.092	1982.660	29-Aug-82	4.0
-1.4	2.1	2.320	1982.888	20-Nov-82	-0.6
-2.2	2.2	2.500	1983.068	25-Jan-83	-0.9
-2.3	1.2	2.764	1983.332	1-May-83	-0.8
0.2	3.4	2.940	1983.532	13-Jul-83	0.1
-3.0	1.1	3.481	1984.049	18-Jan-84	-0.9
-5.0	0.7	3.798	1984.366	13-May-84	-1.3
-1.8	1.2	3.987	1984.555	21-Jul-84	-0.5
-1.8	1.6	4.372	1984.940	9-Dec-84	-0.4
-1.5	1.5	4.564	1985.132	17-Feb-85	-0.3
-4.1	1.9	4.794	1985.362	12-May-85	-0.9
4.5	0.9	4.969	1985.537	15-Jul-85	0.9
2.9	0.5	5.254	1985.822	27-Oct-85	0.6
0.7	0.5	5.487	1986.055	20-Jan-86	0.1
-0.2	1.0	5.673	1986.241	29-Mar-86	0.0
0.9	0.5	6.172	1986.740	27-Sep-86	0.1
-3.8	1.4	6.344	1986.912	29-Nov-86	-0.6
-3.4	1.2	6.577	1987.145	22-Feb-87	-0.5
-3.1	1.1	6.747	1987.315	25-Apr-87	-0.5
-1.1	1.2	6.920	1987.488	27-Jun-87	-0.2
0.2	1.3	7.081	1987.649	25-Aug-87	0.0
-3.0	2.0	7.459	1988.027	10-Jan-88	-0.4
-2.1	0.7	7.727	1988.295	17-Apr-88	-0.3
-0.3	1.9	7.880	1988.448	12-Jun-88	0.0
5.5	1.2	8.090	1988.658	28-Aug-88	0.7
9.4	0.6	8.243	1988.811	23-Oct-88	1.1
-0.5	1.4	8.424	1988.992	28-Dec-88	-0.1
1.5	1.4	8.627	1989.195	12-Mar-89	0.2
-1.8	0.7	8.854	1989.422	3-Jun-89	-0.2
3.3	1.5	8.988	1989.556	22-Jul-89	0.4
5.7	0.5	9.218	1989.786	14-Oct-89	0.6
0.1	0.8	9.353	1989.921	2-Dec-89	0.0
-1.0	1.4	9.473	1990.041	15-Jan-90	-0.1
-1.3	0.7	9.643	1990.211	18-Mar-90	-0.1
0.0	0.9	9.755	1990.323	28-Apr-90	0.0
-0.1	0.6	9.890	1990.458	16-Jun-90	0.0

5.0	1.0	10.024	1990.592	4-Aug-90	0.5
2.8	1.0	10.407	1990.975	22-Dec-90	0.3
3.6	0.6	10.640	1991.208	17-Mar-91	0.3
3.6	0.9	10.810	1991.378	18-May-91	0.3
2.9	4.1	11.002	1991.570	27-Jul-91	0.3
8.5	3.9	11.194	1991.762	5-Oct-91	0.8
7.7	1.3	11.385	1991.953	14-Dec-91	0.7
6.0	1.8	11.599	1992.167	1-Mar-92	0.5
4.3	0.4	11.787	1992.355	9-May-92	0.4
18.4	2.0	11.978	1992.546	18-Jul-92	1.5
27.3	2.6	12.093	1992.661	29-Aug-92	2.3
20.4	1.3	12.284	1992.852	7-Nov-92	1.7
12.2	3.3	12.536	1993.104	7-Feb-93	1.0
6.0	0.5	12.955	1993.523	10-Jul-93	0.5
6.0	1.2	13.166	1993.734	25-Sep-93	0.5
-2.6	0.5	13.607	1994.175	5-Mar-94	-0.2
-3.1	0.6	13.818	1994.386	21-May-94	-0.2
4.3	1.3	14.087	1994.655	27-Aug-94	0.3
2.9	1.1	14.224	1994.792	16-Oct-94	0.2
-0.1	1.8	14.405	1994.973	21-Dec-94	0.0
-1.4	2.7	14.605	1995.173	4-Mar-95	-0.1
-2.4	0.9	14.876	1995.444	11-Jun-95	-0.2
-3.9	0.7	15.295	1995.863	11-Nov-95	-0.3
-4.2	1.4	15.525	1996.093	3-Feb-96	-0.3
-7.5	1.6	15.812	1996.380	18-May-96	-0.5
-6.4	0.7	16.022	1996.590	3-Aug-96	-0.4
-5.9	1.1	16.290	1996.858	9-Nov-96	-0.4
-7.2	1.4	16.596	1997.164	1-Mar-97	-0.4
-3.0	1.0	16.848	1997.416	1-Jun-97	-0.2
13.5	1.3	17.153	1997.721	20-Sep-97	0.8
5.9	0.7	17.443	1998.011	4-Jan-98	0.3
-1.1	1.1	17.766	1998.334	2-May-98	-0.1
2.6	0.7	18.207	1998.775	10-Oct-98	0.1
0.5	1.2	18.476	1999.044	16-Jan-99	0.0

SF-16 Nielson Road in Santa Rosa Rodgers Creek Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	2.7	0.000	1980.628	17-Aug-80	
2.3	0.9	0.208	1980.836	1-Nov-80	
-5.1	2.6	0.386	1981.014	5-Jan-81	
-1.9	1.5	0.610	1981.238	28-Mar-81	
4.1	1.6	0.906	1981.534	14-Jul-81	
4.2	1.1	0.994	1981.622	15-Aug-81	
1.9	0.8	1.191	1981.819	26-Oct-81	1.6
0.8	2.1	1.443	1982.071	26-Jan-82	0.6
0.1	1.8	1.709	1982.337	3-May-82	0.1
4.4	0.5	1.884	1982.512	6-Jul-82	2.3
0.6	1.0	2.032	1982.660	29-Aug-82	0.3
3.5	3.7	2.260	1982.888	20-Nov-82	1.5
0.9	2.1	2.440	1983.068	25-Jan-83	0.4
4.0	2.7	2.704	1983.332	1-May-83	1.5
5.3	3.7	2.904	1983.532	13-Jul-83	1.8
3.3	3.1	3.145	1983.773	9-Oct-83	1.0
5.1	1.3	3.738	1984.366	13-May-84	1.4
6.6	0.8	3.927	1984.555	21-Jul-84	1.7
-4.5	1.3	4.216	1984.844	4-Nov-84	-1.1
0.6	1.4	4.504	1985.132	17-Feb-85	0.1
7.0	0.9	4.734	1985.362	12-May-85	1.5
7.4	5.2	4.909	1985.537	15-Jul-85	1.5
-5.1	1.5	5.427	1986.055	20-Jan-86	-0.9

SF-17 Contra Costa College in San Pablo Hayward Fault 4.49 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
1.0	0.8	0.000	1980.609	10-Aug-80	
2.0	1.1	0.287	1980.896	23-Nov-80	
1.2	1.8	0.440	1981.049	18-Jan-81	
3.4	0.7	0.975	1981.584	1-Aug-81	3.5
-5.6	0.5	1.323	1981.932	6-Dec-81	-4.2
-7.8	0.4	1.438	1982.047	17-Jan-82	-5.4
-6.8	0.4	1.706	1982.315	25-Apr-82	-4.0
-1.0	0.5	1.851	1982.460	17-Jun-82	-0.5
1.9	0.1	1.975	1982.584	1-Aug-82	1.0
-0.1	0.4	2.416	1983.025	9-Jan-83	0.0
4.1	0.7	2.780	1983.389	22-May-83	1.5
11.7	1.2	2.933	1983.542	17-Jul-83	4.0
12.0	0.5	2.991	1983.600	7-Aug-83	4.0
9.4	0.6	3.336	1983.945	11-Dec-83	2.8
6.2	0.8	3.451	1984.060	22-Jan-84	1.8
15.5	1.1	3.642	1984.251	1-Apr-84	4.3
23.0	0.7	3.948	1984.557	22-Jul-84	5.8
20.3	0.4	4.216	1984.825	28-Oct-84	4.8
15.1	0.1	4.465	1985.074	27-Jan-85	3.4
20.9	0.2	4.657	1985.266	7-Apr-85	4.5
24.6	0.1	4.829	1985.438	9-Jun-85	5.1
22.2	0.2	5.021	1985.630	18-Aug-85	4.4
22.5	0.5	5.232	1985.841	3-Nov-85	4.3
16.5	0.7	5.481	1986.090	2-Feb-86	3.0
18.8	0.7	5.654	1986.263	6-Apr-86	3.3
26.8	0.7	5.846	1986.455	15-Jun-86	4.6
28.1	0.9	6.057	1986.666	31-Aug-86	4.6
27.1	0.1	6.172	1986.781	12-Oct-86	4.4
24.5	0.7	6.459	1987.068	25-Jan-87	3.8
25.9	0.9	6.555	1987.164	1-Mar-87	3.9
29.6	0.8	6.862	1987.471	21-Jun-87	4.3
29.7	0.6	7.054	1987.663	30-Aug-87	4.2
27.1	0.8	7.301	1987.910	28-Nov-87	3.7
25.1	0.5	7.495	1988.104	7-Feb-88	3.4
29.4	0.4	7.705	1988.314	24-Apr-88	3.8
32.6	0.6	7.916	1988.525	10-Jul-88	4.1
34.1	1.1	8.107	1988.716	18-Sep-88	4.2
33.2	1.0	8.317	1988.926	4-Dec-88	4.0
32.5	1.0	8.470	1989.079	29-Jan-89	3.8
33.4	0.9	8.662	1989.271	9-Apr-89	3.9
36.6	0.5	8.854	1989.463	18-Jun-89	4.1
38.0	0.8	8.988	1989.597	6-Aug-89	4.2
40.5	0.5	9.257	1989.866	12-Nov-89	4.4
38.8	0.5	9.449	1990.058	21-Jan-90	4.1
37.7	0.3	9.564	1990.173	4-Mar-90	3.9
38.8	0.6	9.698	1990.307	22-Apr-90	4.1

39.4	0.6	9.832	1990.441	10-Jun-90	4.0
40.9	0.8	9.966	1990.575	29-Jul-90	4.1
42.3	0.4	10.101	1990.710	16-Sep-90	4.2
42.6	0.9	10.216	1990.825	28-Oct-90	4.2
43.5	0.3	10.465	1991.074	27-Jan-91	4.2
38.7	0.7	10.638	1991.247	31-Mar-91	3.6
39.1	1.2	10.753	1991.362	12-May-91	3.6
41.1	0.7	10.999	1991.608	10-Aug-91	3.7
41.5	1.8	11.175	1991.784	13-Oct-91	3.7
41.6	1.3	11.328	1991.937	8-Dec-91	3.7
42.5	0.9	11.462	1992.071	26-Jan-92	3.7
43.0	1.0	11.634	1992.243	29-Mar-92	3.7
47.7	1.0	11.825	1992.434	7-Jun-92	4.0
46.8	0.9	12.093	1992.702	13-Sep-92	3.9
45.9	0.9	12.246	1992.855	8-Nov-92	3.7
44.9	0.8	12.418	1993.027	10-Jan-93	3.6
45.6	0.9	12.591	1993.200	14-Mar-93	3.6
49.4	0.8	12.821	1993.430	6-Jun-93	3.9
53.8	1.1	13.070	1993.679	5-Sep-93	4.1
54.4	1.0	13.243	1993.852	7-Nov-93	4.1
55.7	1.0	13.435	1994.044	16-Jan-94	4.2
55.0	1.4	13.627	1994.236	27-Mar-94	4.0
62.1	0.5	13.857	1994.466	19-Jun-94	4.5
61.4	0.6	13.969	1994.578	30-Jul-94	4.4
64.4	0.4	14.183	1994.792	16-Oct-94	4.5
58.5	1.2	14.364	1994.973	21-Dec-94	4.1
59.3	0.9	14.566	1995.175	5-Mar-95	4.1
61.6	1.1	14.854	1995.463	18-Jun-95	4.1
69.1	0.1	15.027	1995.636	20-Aug-95	4.6
70.3	2.4	15.257	1995.866	12-Nov-95	4.6
71.3	0.5	15.331	1995.940	9-Dec-95	4.7
64.2	1.6	15.506	1996.115	11-Feb-96	4.1
65.8	1.2	15.697	1996.306	21-Apr-96	4.2
71.0	1.6	15.869	1996.478	23-Jun-96	4.5
74.2	0.7	16.022	1996.631	18-Aug-96	4.6
76.9	0.5	16.213	1996.822	27-Oct-96	4.7
74.0	0.7	16.347	1996.956	15-Dec-96	4.5
73.8	0.6	16.520	1997.129	16-Feb-97	4.5
81.5	0.9	16.712	1997.321	27-Apr-97	4.9
85.6	1.5	16.846	1997.455	15-Jun-97	5.1
85.3	0.9	17.018	1997.627	17-Aug-97	5.0
85.2	2.0	17.210	1997.819	26-Oct-97	5.0
78.9	0.4	17.364	1997.973	21-Dec-97	4.5
77.7	0.5	17.517	1998.126	15-Feb-98	4.4
77.9	0.6	17.651	1998.260	5-Apr-98	4.4
78.2	0.7	17.843	1998.452	14-Jun-98	4.4
83.2	1.4	18.054	1998.663	30-Aug-98	4.6
86.8	1.3	18.207	1998.816	25-Oct-98	4.8
80.8	0.4	18.323	1998.932	6-Dec-98	4.4

82.0	0.8	18.495	1999.104	7-Feb-99	4.4
81.8	1.9	18.649	1999.258	4-Apr-99	4.4
85.8	1.4	18.821	1999.430	6-Jun-99	4.6
92.3	1.7	19.051	1999.660	29-Aug-99	4.8
92.6	1.7	19.281	1999.890	21-Nov-99	4.8
92.7	0.5	19.435	2000.044	16-Jan-00	4.8
89.7	1.5	19.626	2000.235	26-Mar-00	4.6
92.8	0.7	19.875	2000.484	25-Jun-00	4.7
94.9	1.7	20.008	2000.617	13-Aug-00	4.7
94.7	0.6	20.219	2000.828	29-Oct-00	4.7
94.0	0.6	20.449	2001.058	21-Jan-01	4.6

SF-18 Alder Creek near Point Arena San Andreas Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.4	0.000	1981.025	9-Jan-81	
1.3	3.3	1.013	1982.038	14-Jan-82	1.3
2.6	4.1	2.112	1983.137	19-Feb-83	1.2
3.5	4.2	3.013	1984.038	14-Jan-84	1.2
4.3	1.5	4.005	1985.030	11-Jan-85	1.1
6.4	0.9	5.022	1986.047	17-Jan-86	1.3
5.2	0.9	6.022	1987.047	17-Jan-87	0.9
6.7	0.9	7.019	1988.044	16-Jan-88	1.0
7.4	1.9	8.013	1989.038	14-Jan-89	0.9
7.8	1.5	9.057	1990.082	30-Jan-90	0.9
10.8	1.3	10.008	1991.033	12-Jan-91	1.1
12.2	1.7	11.060	1992.085	31-Jan-92	1.1
11.3	3.2	12.005	1993.030	11-Jan-93	0.9
6.4	2.0	12.970	1993.995	29-Dec-93	0.5
8.4	2.4	13.967	1994.992	28-Dec-94	0.6
9.6	2.6	15.434	1996.459	16-Jun-96	0.6
9.5	1.6	16.561	1997.586	2-Aug-97	0.6
10.1	1.4	17.578	1998.603	8-Aug-98	0.6
11.7	1.7	18.575	1999.600	7-Aug-99	0.6
11.5	1.2	19.571	2000.596	5-Aug-00	0.6

SF-19 Corey Place in San Ramon Calaveras Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average	mm/yr-simple average after 1992.852
0.0	1.2	0.000	1980.896	23-Nov-80		
-0.6	0.8	0.137	1981.033	12-Jan-81		
-0.5	0.8	0.156	1981.052	19-Jan-81		
-0.4	0.6	0.381	1981.277	11-Apr-81		
0.6	0.3	0.657	1981.553	21-Jul-81		
0.5	0.6	0.729	1981.625	16-Aug-81	0.7	
0.3	0.8	1.156	1982.052	19-Jan-82	0.3	
0.8	0.7	1.419	1982.315	25-Apr-82	0.6	
0.9	1.0	1.564	1982.460	17-Jun-82	0.6	
2.6	1.0	1.688	1982.584	1-Aug-82	1.5	
3.0	1.1	1.742	1982.638	21-Aug-82	1.7	
2.2	0.1	2.129	1983.025	9-Jan-83	1.0	
2.4	0.5	2.490	1983.386	21-May-83	1.0	
3.5	0.7	2.559	1983.455	15-Jun-83	1.4	
4.6	1.5	2.652	1983.548	19-Jul-83	1.7	
3.3	0.8	2.704	1983.600	7-Aug-83	1.2	
3.2	0.9	3.156	1984.052	19-Jan-84	1.0	
3.5	0.9	3.432	1984.328	29-Apr-84	1.0	
4.0	0.5	3.527	1984.423	3-Jun-84	1.1	
1.6	0.8	3.752	1984.648	24-Aug-84	0.4	
3.8	0.9	3.888	1984.784	13-Oct-84	1.0	
4.4	0.5	4.238	1985.134	18-Feb-85	1.0	
4.8	0.8	4.468	1985.364	13-May-85	1.1	
6.3	0.6	4.603	1985.499	1-Jul-85	1.4	
5.5	0.1	4.679	1985.575	29-Jul-85	1.2	
4.4	0.4	4.885	1985.781	12-Oct-85	0.9	
2.2	0.2	5.172	1986.068	25-Jan-86	0.4	
2.8	0.7	5.367	1986.263	6-Apr-86	0.5	
2.0	0.7	5.885	1986.781	12-Oct-86	0.3	
2.6	1.2	6.172	1987.068	25-Jan-87	0.4	
1.4	0.6	6.364	1987.260	5-Apr-87	0.2	
4.3	0.3	6.638	1987.534	14-Jul-87	0.6	
1.1	1.0	7.014	1987.910	28-Nov-87	0.2	
2.7	0.8	7.208	1988.104	7-Feb-88	0.4	
3.9	1.4	7.437	1988.333	1-May-88	0.5	
1.5	0.4	7.601	1988.497	30-Jun-88	0.2	
0.2	0.8	7.932	1988.828	29-Oct-88	0.0	
1.1	0.9	8.181	1989.077	28-Jan-89	0.1	
3.0	0.5	8.394	1989.290	16-Apr-89	0.4	
2.3	0.5	8.622	1989.518	8-Jul-89	0.3	
2.0	1.2	8.970	1989.866	12-Nov-89	0.2	
1.2	1.0	9.162	1990.058	21-Jan-90	0.1	
2.7	0.4	9.312	1990.208	17-Mar-90	0.3	
3.0	1.0	9.370	1990.266	7-Apr-90	0.3	

3.3	0.9	9.463	1990.359	11-May-90	0.3	
2.3	1.3	9.660	1990.556	22-Jul-90	0.2	
3.1	1.3	9.819	1990.715	18-Sep-90	0.3	
0.1	0.6	9.983	1990.879	17-Nov-90	0.0	
4.8	1.0	10.236	1991.132	17-Feb-91	0.5	
4.5	0.7	10.400	1991.296	18-Apr-91	0.4	
3.2	0.9	10.559	1991.455	15-Jun-91	0.3	
3.2	0.6	10.657	1991.553	21-Jul-91	0.3	
3.2	0.6	10.846	1991.742	28-Sep-91	0.3	
3.0	0.6	11.003	1991.899	24-Nov-91	0.3	
4.3	0.8	11.156	1992.052	19-Jan-92	0.4	
5.7	1.3	11.424	1992.320	26-Apr-92	0.5	
1.1	2.0	11.765	1992.661	29-Aug-92	0.1	
2.7	0.5	11.956	1992.852	7-Nov-92	0.2	
6.7	1.0	12.208	1993.104	7-Feb-93	0.5	
8.1	1.1	12.764	1993.660	29-Aug-93	0.6	
9.4	1.2	13.030	1993.926	4-Dec-93	0.7	6.2
9.7	0.6	13.282	1994.178	6-Mar-94	0.7	5.3
12.7	0.8	13.433	1994.329	30-Apr-94	0.9	6.8
11.5	0.6	13.699	1994.595	5-Aug-94	0.8	5.0
11.5	1.7	14.008	1994.904	26-Nov-94	0.8	4.3
17.5	0.9	14.200	1995.096	4-Feb-95	1.2	6.6
16.6	0.7	14.488	1995.384	20-May-95	1.1	5.5
17.7	0.3	14.759	1995.655	27-Aug-95	1.2	5.4
17.5	0.9	14.970	1995.866	12-Nov-95	1.2	4.9
20.1	1.0	15.120	1996.016	6-Jan-96	1.3	5.5
19.8	0.8	15.312	1996.208	16-Mar-96	1.3	5.1
20.1	2.9	15.522	1996.418	1-Jun-96	1.3	4.7
20.3	0.9	15.754	1996.650	25-Aug-96	1.3	4.6
21.3	0.4	16.003	1996.899	24-Nov-96	1.3	4.6
22.0	0.6	16.134	1997.030	11-Jan-97	1.4	4.6
20.9	0.8	16.345	1997.241	29-Mar-97	1.3	4.1
22.2	0.3	16.501	1997.397	25-May-97	1.3	4.3
21.6	0.9	16.652	1997.548	19-Jul-97	1.3	4.0
22.7	1.2	16.805	1997.701	13-Sep-97	1.4	4.1
24.4	0.9	16.997	1997.893	22-Nov-97	1.4	4.3
23.9	1.0	17.249	1998.145	22-Feb-98	1.4	4.0
25.8	0.8	17.400	1998.296	18-Apr-98	1.5	4.2
23.9	1.4	17.688	1998.584	1-Aug-98	1.4	3.7
24.6	0.6	17.860	1998.756	3-Oct-98	1.4	3.7
24.4	0.5	18.036	1998.932	6-Dec-98	1.4	3.6
27.9	0.4	18.244	1999.140	20-Feb-99	1.5	4.0
31.0	0.2	18.416	1999.312	24-Apr-99	1.7	4.4
31.7	1.1	18.551	1999.447	12-Jun-99	1.7	4.4
31.2	1.7	18.742	1999.638	21-Aug-99	1.7	4.2
31.8	0.5	18.899	1999.795	17-Oct-99	1.7	4.2
32.6	0.5	19.052	1999.948	12-Dec-99	1.7	4.2
31.9	1.1	19.205	2000.101	6-Feb-00	1.7	4.0
32.5	0.6	19.413	2000.309	22-Apr-00	1.7	4.0

33.1	1.3	19.566	2000.462	17-Jun-00	1.7	4.0
32.9	1.1	19.721	2000.617	13-Aug-00	1.7	3.9
34.3	1.0	20.044	2000.940	9-Dec-00	1.7	3.9
34.9	0.4	20.216	2001.112	10-Feb-01	1.7	3.9

SF-20 Red Top Road in Cordelia Green Valley Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.8	0.000	1984.456	15-Jun-84	
4.7	2.2	0.347	1984.803	20-Oct-84	
8.1	1.1	0.618	1985.074	27-Jan-85	
3.9	2.0	0.829	1985.285	14-Apr-85	
5.4	1.1	0.980	1985.436	8-Jun-85	5.5
9.4	2.2	1.174	1985.630	18-Aug-85	8.0
9.4	0.3	1.385	1985.841	3-Nov-85	6.8
4.9	0.8	1.634	1986.090	2-Feb-86	3.0
19.0	2.7	2.130	1986.586	2-Aug-86	8.9
22.5	6.7	2.210	1986.666	31-Aug-86	10.2
20.2	2.1	2.284	1986.740	27-Sep-86	8.8
19.5	3.5	2.456	1986.912	29-Nov-86	7.9
14.0	2.0	2.708	1987.164	1-Mar-87	5.2
20.0	3.4	3.015	1987.471	21-Jun-87	6.6
17.9	1.1	3.207	1987.663	30-Aug-87	5.6
17.3	1.5	3.571	1988.027	10-Jan-88	4.8
18.9	2.4	3.839	1988.295	17-Apr-88	4.9
22.0	2.7	3.992	1988.448	12-Jun-88	5.5
30.9	1.5	4.372	1988.828	29-Oct-88	7.1
20.4	2.8	4.621	1989.077	28-Jan-89	4.4
20.2	1.0	4.834	1989.290	16-Apr-89	4.2
21.7	2.0	5.141	1989.597	6-Aug-89	4.2
28.2	2.2	5.465	1989.921	2-Dec-89	5.2
34.5	1.8	5.590	1990.041	15-Jan-90	6.2
33.2	1.2	5.733	1990.189	10-Mar-90	5.8
36.8	2.8	5.851	1990.307	22-Apr-90	6.3
37.8	2.3	5.985	1990.441	10-Jun-90	6.3
41.0	2.8	6.174	1990.630	18-Aug-90	6.6
42.8	1.4	6.289	1990.745	29-Sep-90	6.8
42.2	2.7	6.426	1990.882	18-Nov-90	6.6
37.3	4.7	6.654	1991.110	9-Feb-91	5.6
37.6	1.4	6.791	1991.247	31-Mar-91	5.5
42.0	3.2	6.999	1991.455	15-Jun-91	6.0
37.6	1.5	7.152	1991.608	10-Aug-91	5.3
44.1	5.6	7.328	1991.784	13-Oct-91	6.0
37.4	1.9	7.481	1991.937	8-Dec-91	5.0
38.9	2.2	7.615	1992.071	26-Jan-92	5.1
41.5	2.0	7.787	1992.243	29-Mar-92	5.3
42.2	2.5	7.978	1992.434	7-Jun-92	5.3
40.9	3.6	8.148	1992.604	8-Aug-92	5.0
44.8	1.3	8.377	1992.833	31-Oct-92	5.3
43.0	2.9	8.626	1993.082	30-Jan-93	5.0
42.8	2.9	8.856	1993.312	24-Apr-93	4.8
47.0	3.7	9.067	1993.523	10-Jul-93	5.2
53.9	1.3	9.278	1993.734	25-Sep-93	5.8
51.8	2.0	9.470	1993.926	4-Dec-93	5.5

52.3	3.4	9.722	1994.178	6-Mar-94	5.4
58.4	2.4	9.873	1994.329	30-Apr-94	5.9
56.2	2.0	10.139	1994.595	5-Aug-94	5.5
56.5	12.3	10.295	1994.751	1-Oct-94	5.5
53.6	1.4	10.486	1994.942	10-Dec-94	5.1
49.3	2.1	10.643	1995.099	5-Feb-95	4.6
52.4	1.0	10.717	1995.173	4-Mar-95	4.9
52.3	2.8	10.928	1995.384	20-May-95	4.8
55.5	3.8	11.199	1995.655	27-Aug-95	5.0
57.1	1.4	11.407	1995.863	11-Nov-95	5.0
52.6	1.1	11.580	1996.036	13-Jan-96	4.5
49.8	3.5	11.793	1996.249	31-Mar-96	4.2
54.4	2.7	11.981	1996.437	8-Jun-96	4.5
58.9	1.4	12.230	1996.686	7-Sep-96	4.8
54.7	3.4	12.443	1996.899	24-Nov-96	4.4
58.1	1.2	12.654	1997.110	9-Feb-97	4.6
58.6	4.5	12.922	1997.378	18-May-97	4.5
62.7	2.3	13.092	1997.548	19-Jul-97	4.8
62.5	0.7	13.245	1997.701	13-Sep-97	4.7
60.4	1.9	13.536	1997.992	28-Dec-97	4.5
63.3	0.8	13.747	1998.203	15-Mar-98	4.6
67.9	2.8	13.977	1998.433	7-Jun-98	4.9
66.1	2.9	14.130	1998.586	2-Aug-98	4.7
63.0	3.8	14.300	1998.756	3-Oct-98	4.4
64.1	1.3	14.476	1998.932	6-Dec-98	4.4
74.6	2.8	14.706	1999.162	28-Feb-99	5.1
79.8	3.9	15.741	2000.197	12-Mar-00	5.1
84.9	1.0	15.967	2000.423	3-Jun-00	5.3
70.5	2.9	16.200	2000.656	27-Aug-00	4.4
66.9	2.5	16.334	2000.790	15-Oct-00	4.1
67.5	1.4	16.487	2000.943	10-Dec-00	4.1
69.6	2.1	16.659	2001.115	11-Feb-01	4.2

SF-21 Roberts Road near Penngrove Rodgers Creek Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	4.1	0.000	1986.721	20-Sep-86	
-4.7	2.3	0.424	1987.145	22-Feb-87	
-2.0	1.1	0.594	1987.315	25-Apr-87	
-8.5	4.5	0.767	1987.488	27-Jun-87	
-2.0	1.8	0.928	1987.649	25-Aug-87	-2.2
-6.5	1.8	1.306	1988.027	10-Jan-88	-5.0
-3.2	2.3	1.612	1988.333	1-May-88	-2.0
-0.2	2.1	1.839	1988.560	23-Jul-88	-0.1
4.7	3.7	2.271	1988.992	28-Dec-88	2.1
-0.2	4.0	2.474	1989.195	12-Mar-89	-0.1
-1.8	1.9	2.701	1989.422	3-Jun-89	-0.7
-0.3	2.5	2.835	1989.556	22-Jul-89	-0.1
1.8	1.4	3.065	1989.786	14-Oct-89	0.6
3.3	1.6	3.241	1989.962	17-Dec-89	1.0
0.5	1.5	3.411	1990.132	17-Feb-90	0.1
-2.6	0.8	3.602	1990.323	28-Apr-90	-0.7
-3.0	0.8	3.737	1990.458	16-Jun-90	-0.8
5.2	0.9	3.871	1990.592	4-Aug-90	1.3
7.0	0.8	4.043	1990.764	6-Oct-90	1.7
10.1	1.0	4.123	1990.844	4-Nov-90	2.4
5.4	1.7	4.254	1990.975	22-Dec-90	1.3
6.2	0.8	4.446	1991.167	2-Mar-91	1.4
-0.2	0.7	4.580	1991.301	20-Apr-91	0.0
2.2	1.1	4.753	1991.474	22-Jun-91	0.5
8.8	1.6	4.906	1991.627	17-Aug-91	1.8
12.5	2.1	5.098	1991.819	26-Oct-91	2.5
10.5	0.8	5.328	1992.049	18-Jan-92	2.0
2.3	2.0	5.596	1992.317	25-Apr-92	0.4
5.3	2.0	5.787	1992.508	4-Jul-92	0.9
10.0	2.0	6.036	1992.757	3-Oct-92	1.7
4.0	2.2	6.342	1993.063	23-Jan-93	0.6
4.0	1.8	6.572	1993.293	17-Apr-93	0.6
8.7	1.5	6.764	1993.485	26-Jun-93	1.3
20.2	1.1	6.975	1993.696	11-Sep-93	2.9
12.1	2.0	7.361	1994.082	30-Jan-94	1.6
6.1	2.6	7.569	1994.290	16-Apr-94	0.8
7.6	2.1	7.802	1994.523	10-Jul-94	1.0
15.5	3.0	8.071	1994.792	16-Oct-94	1.9
10.1	2.7	8.252	1994.973	21-Dec-94	1.2
5.4	1.0	8.452	1995.173	4-Mar-95	0.6
9.7	0.8	8.663	1995.384	20-May-95	1.1
17.5	1.7	9.180	1995.901	25-Nov-95	1.9
18.9	5.4	9.372	1996.093	3-Feb-96	2.0
13.4	2.3	9.659	1996.380	18-May-96	1.4
20.8	2.2	9.869	1996.590	3-Aug-96	2.1
15.8	1.8	10.137	1996.858	9-Nov-96	1.6

16.6	5.8	10.389	1997.110	9-Feb-97	1.6
17.2	2.3	10.616	1997.337	3-May-97	1.6
15.3	1.7	11.000	1997.721	20-Sep-97	1.4
15.6	1.8	11.290	1998.011	4-Jan-98	1.4
18.3	1.5	11.613	1998.334	2-May-98	1.6
12.4	1.3	12.054	1998.775	10-Oct-98	1.0
16.3	1.0	12.323	1999.044	16-Jan-99	1.3
16.4	3.8	12.534	1999.255	3-Apr-99	1.3
12.4	0.8	12.764	1999.485	26-Jun-99	1.0
14.6	3.9	13.071	1999.792	16-Oct-99	1.1
14.5	3.3	13.304	2000.025	9-Jan-00	1.0
15.0	1.1	13.590	2000.311	23-Apr-00	1.1
17.2	3.5	13.894	2000.615	12-Aug-00	1.2
14.4	4.2	14.183	2000.904	26-Nov-00	1.0

SF-22 Roberta Drive in Woodside San Andreas Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.1	0.000	1989.844	4-Nov-89	
1.3	1.8	0.035	1989.879	17-Nov-89	
1.2	0.8	0.115	1989.959	16-Dec-89	
2.1	0.9	0.211	1990.055	20-Jan-90	
0.9	1.8	0.249	1990.093	3-Feb-90	
3.2	0.3	0.326	1990.170	3-Mar-90	
4.0	0.6	0.444	1990.288	15-Apr-90	
4.0	0.5	0.457	1990.301	20-Apr-90	
2.3	2.5	0.561	1990.405	28-May-90	
3.7	0.8	0.638	1990.482	25-Jun-90	
1.4	0.5	0.729	1990.573	28-Jul-90	
1.5	1.4	0.838	1990.682	6-Sep-90	
0.0	1.8	0.953	1990.797	18-Oct-90	0.0
-1.3	1.4	1.208	1991.052	19-Jan-91	-1.1
0.3	1.7	1.400	1991.244	30-Mar-91	0.2
3.5	2.2	1.553	1991.397	25-May-91	2.3
4.6	1.6	1.649	1991.493	29-Jun-91	2.8
4.2	0.9	1.822	1991.666	31-Aug-91	2.3
3.1	2.4	1.956	1991.800	19-Oct-91	1.6
3.3	1.0	2.129	1991.973	21-Dec-91	1.6
3.0	2.1	2.339	1992.183	7-Mar-92	1.3
5.3	1.6	2.533	1992.377	17-May-92	2.1
6.5	1.6	2.722	1992.566	25-Jul-92	2.4
4.0	0.9	2.894	1992.738	26-Sep-92	1.4
3.3	1.4	3.066	1992.910	28-Nov-92	1.1
2.8	1.0	3.277	1993.121	13-Feb-93	0.9
2.4	0.5	3.583	1993.427	5-Jun-93	0.7
1.4	0.8	3.871	1993.715	18-Sep-93	0.4
2.7	0.4	4.219	1994.063	23-Jan-94	0.6
3.5	1.1	4.351	1994.195	12-Mar-94	0.8
5.3	0.6	4.564	1994.408	29-May-94	1.2
7.1	0.8	4.753	1994.597	6-Aug-94	1.5
3.7	0.4	4.983	1994.827	29-Oct-94	0.7
3.9	0.7	5.194	1995.038	14-Jan-95	0.8
2.6	0.9	5.348	1995.192	11-Mar-95	0.5
3.1	1.0	5.578	1995.422	3-Jun-95	0.6
6.9	1.6	5.926	1995.770	8-Oct-95	1.2
6.9	1.1	5.942	1995.786	14-Oct-95	1.2
4.6	1.6	6.175	1996.019	7-Jan-96	0.7
3.3	2.7	6.440	1996.284	13-Apr-96	0.5
5.3	1.3	6.708	1996.552	20-Jul-96	0.8
3.4	0.3	6.995	1996.839	2-Nov-96	0.5
2.2	0.3	7.282	1997.126	15-Feb-97	0.3
5.2	0.2	7.496	1997.340	4-May-97	0.7
4.4	0.5	7.764	1997.608	10-Aug-97	0.6
3.1	0.5	8.011	1997.855	8-Nov-97	0.4

2.0	0.4	8.318	1998.162	28-Feb-98	0.2
4.1	1.1	8.548	1998.392	23-May-98	0.5
4.3	0.5	8.797	1998.641	22-Aug-98	0.5
5.6	0.8	9.123	1998.967	19-Dec-98	0.6
4.5	1.3	9.353	1999.197	13-Mar-99	0.5
5.3	0.6	9.605	1999.449	13-Jun-99	0.6
4.9	0.3	9.951	1999.795	17-Oct-99	0.5
6.0	0.6	10.216	2000.060	22-Jan-00	0.6
6.0	0.4	10.525	2000.369	14-May-00	0.6
6.2	1.1	10.771	2000.615	12-Aug-00	0.6
7.2	0.9	11.060	2000.904	26-Nov-00	0.7

SF-23 Cannon Road near San Juan Bautista San Andreas Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	0.6	0.000	1989.882	18-Nov-89	
-0.1	0.5	0.077	1989.959	16-Dec-89	
1.0	1.3	0.173	1990.055	20-Jan-90	
-0.5	1.1	0.288	1990.170	3-Mar-90	
0.8	0.5	0.406	1990.288	15-Apr-90	
0.5	0.6	0.523	1990.405	28-May-90	
-0.4	0.8	0.671	1990.553	21-Jul-90	
0.4	0.5	0.786	1990.668	1-Sep-90	
2.0	1.3	0.902	1990.784	13-Oct-90	
0.6	1.1	1.055	1990.937	8-Dec-90	0.6
1.8	1.1	1.304	1991.186	9-Mar-91	1.4
0.8	0.7	1.433	1991.315	25-Apr-91	0.6
-2.3	0.7	1.614	1991.496	30-Jun-91	-1.4
-0.9	0.8	1.784	1991.666	31-Aug-91	-0.5
0.3	0.8	1.899	1991.781	12-Oct-91	0.2
1.5	1.1	2.074	1991.956	15-Dec-91	0.7
1.1	0.3	2.339	1992.221	21-Mar-92	0.5
1.5	0.5	2.492	1992.374	16-May-92	0.6
0.9	1.0	2.667	1992.549	19-Jul-92	0.3
-1.4	1.2	2.837	1992.719	19-Sep-92	-0.5
-2.6	0.6	3.047	1992.929	5-Dec-92	-0.9
0.5	0.6	3.258	1993.140	20-Feb-93	0.2
0.5	1.8	3.450	1993.332	1-May-93	0.1
1.0	0.6	3.584	1993.466	19-Jun-93	0.3
-0.3	0.4	3.795	1993.677	4-Sep-93	-0.1
-2.9	0.9	4.008	1993.890	21-Nov-93	-0.7
0.8	0.7	4.274	1994.156	26-Feb-94	0.2
0.8	2.4	4.428	1994.310	23-Apr-94	0.2
-5.0	1.1	4.658	1994.540	16-Jul-94	-1.1
-2.0	0.4	4.945	1994.827	29-Oct-94	-0.4
-1.6	0.1	5.156	1995.038	14-Jan-95	-0.3
-0.6	1.0	5.310	1995.192	11-Mar-95	-0.1
0.7	0.8	5.540	1995.422	3-Jun-95	0.1
-2.6	1.5	5.828	1995.710	16-Sep-95	-0.4
-3.8	0.7	6.000	1995.882	18-Nov-95	-0.6
2.2	1.7	6.402	1996.284	13-Apr-96	0.3
2.2	2.3	6.670	1996.552	20-Jul-96	0.3
0.7	0.5	6.957	1996.839	2-Nov-96	0.1
3.7	1.1	7.244	1997.126	15-Feb-97	0.5
2.4	0.4	7.458	1997.340	4-May-97	0.3
2.4	0.6	7.726	1997.608	10-Aug-97	0.3
2.4	0.4	7.992	1997.874	15-Nov-97	0.3
1.6	0.5	8.241	1998.123	14-Feb-98	0.2

SF-24 Camellia Drive in Fremont Hayward Fault 66.29 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average	mm/yr-simple average after 1996.131
0.0	0.6	0.000	1990.115	11-Feb-90		
0.5	0.7	0.134	1990.249	1-Apr-90		
-0.4	1.0	0.263	1990.378	18-May-90		
-0.3	0.8	0.362	1990.477	23-Jun-90		
-1.0	0.7	0.463	1990.578	30-Jul-90		
-1.2	0.6	0.595	1990.710	16-Sep-90		
-0.2	0.5	0.710	1990.825	28-Oct-90		
0.2	0.7	0.959	1991.074	27-Jan-91	0.2	
-0.9	0.8	1.126	1991.241	29-Mar-91	-0.8	
0.0	0.5	1.181	1991.296	18-Apr-91	0.0	
-1.6	0.3	1.244	1991.359	11-May-91	-1.3	
-0.8	0.3	1.436	1991.551	20-Jul-91	-0.6	
-2.7	0.5	1.627	1991.742	28-Sep-91	-1.7	
-1.7	0.5	1.784	1991.899	24-Nov-91	-1.0	
-1.5	1.4	1.937	1992.052	19-Jan-92	-0.8	
-0.9	0.7	2.147	1992.262	5-Apr-92	-0.4	
-1.5	0.9	2.317	1992.432	6-Jun-92	-0.6	
-4.0	1.4	2.489	1992.604	8-Aug-92	-1.6	
-2.1	1.3	2.661	1992.776	10-Oct-92	-0.8	
-2.6	1.1	2.808	1992.923	3-Dec-92	-0.9	
-2.4	1.1	3.008	1993.123	14-Feb-93	-0.8	
-1.8	2.2	3.159	1993.274	10-Apr-93	-0.6	
-3.9	0.8	3.255	1993.370	15-May-93	-1.2	
-3.7	2.0	3.523	1993.638	21-Aug-93	-1.1	
-3.4	1.3	3.658	1993.773	9-Oct-93	-0.9	
-2.1	0.8	3.847	1993.962	17-Dec-93	-0.5	
-2.4	0.7	4.044	1994.159	27-Feb-94	-0.6	
-3.0	1.4	4.197	1994.312	24-Apr-94	-0.7	
-2.8	0.8	4.427	1994.542	17-Jul-94	-0.6	
-1.2	0.7	4.655	1994.770	8-Oct-94	-0.3	
-1.5	0.6	4.847	1994.962	17-Dec-94	-0.3	
-1.5	0.8	5.038	1995.153	25-Feb-95	-0.3	
1.9	0.5	5.211	1995.326	29-Apr-95	0.4	
-0.8	1.0	5.367	1995.482	25-Jun-95	-0.1	
1.0	0.5	5.537	1995.652	26-Aug-95	0.2	
2.4	0.5	5.575	1995.690	9-Sep-95	0.4	
4.1	1.4	5.693	1995.808	22-Oct-95	0.7	
3.3	0.3	5.844	1995.959	16-Dec-95	0.6	
21.3	2.2	6.016	1996.131	17-Feb-96	3.5	
24.5	1.2	6.038	1996.153	25-Feb-96	4.1	
23.3	4.0	6.076	1996.191	10-Mar-96	3.8	
23.4	1.3	6.246	1996.361	11-May-96	3.7	
24.7	2.9	6.418	1996.533	13-Jul-96	3.8	
23.3	1.9	6.527	1996.642	22-Aug-96	3.6	

24.4	1.1	6.686	1996.801	19-Oct-96	3.6	
24.1	0.3	6.839	1996.954	14-Dec-96	3.5	
23.5	1.0	6.992	1997.107	8-Feb-97	3.4	2.3
24.2	0.6	7.164	1997.279	12-Apr-97	3.4	2.5
23.7	1.0	7.340	1997.455	15-Jun-97	3.2	1.8
25.0	0.7	7.532	1997.647	24-Aug-97	3.3	2.4
23.8	0.8	7.682	1997.797	18-Oct-97	3.1	1.5
24.6	1.1	7.874	1997.989	27-Dec-97	3.1	1.8
23.4	1.2	8.047	1998.162	28-Feb-98	2.9	1.0
24.0	0.9	8.200	1998.315	25-Apr-98	2.9	1.2
23.5	1.2	8.373	1998.488	27-Jun-98	2.8	0.9
26.3	2.8	8.570	1998.685	7-Sep-98	3.1	2.0
25.5	0.5	8.775	1998.890	21-Nov-98	2.9	1.5
25.0	1.1	8.967	1999.082	30-Jan-99	2.8	1.3
26.1	0.9	9.104	1999.219	21-Mar-99	2.9	1.6
26.5	1.3	9.274	1999.389	22-May-99	2.9	1.6
28.0	0.5	9.581	1999.696	11-Sep-99	2.9	1.9
31.3	1.5	9.734	1999.849	6-Nov-99	3.2	2.7
31.2	0.4	9.964	2000.079	29-Jan-00	3.1	2.5
30.3	0.7	10.117	2000.232	25-Mar-00	3.0	2.2
31.4	1.7	10.273	2000.388	21-May-00	3.1	2.4
32.1	0.6	10.462	2000.577	29-Jul-00	3.1	2.4
33.8	0.8	10.691	2000.806	21-Oct-00	3.2	2.7
35.2	0.6	10.825	2000.940	9-Dec-00	3.3	2.9
35.2	0.3	10.997	2001.112	10-Feb-01	3.2	2.8

SF-25 Mission Vineyard Road near San Juan Bautista San Andreas Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	0.4	0.000	1990.553	21-Jul-90	
5.6	1.1	0.115	1990.668	1-Sep-90	
6.4	2.4	0.231	1990.784	13-Oct-90	
9.0	1.9	0.384	1990.937	8-Dec-90	
9.8	1.5	0.633	1991.186	9-Mar-91	
11.8	1.1	0.762	1991.315	25-Apr-91	
14.6	0.9	0.979	1991.532	13-Jul-91	14.9
27.3	1.4	1.228	1991.781	12-Oct-91	22.2
20.3	0.5	1.403	1991.956	15-Dec-91	14.5
22.2	0.6	1.668	1992.221	21-Mar-92	13.3
29.1	1.3	1.821	1992.374	16-May-92	16.0
35.3	1.3	1.996	1992.549	19-Jul-92	17.7
31.3	2.1	2.166	1992.719	19-Sep-92	14.5
31.8	2.7	2.376	1992.929	5-Dec-92	13.4
36.1	2.8	2.587	1993.140	20-Feb-93	14.0
44.0	3.2	2.779	1993.332	1-May-93	15.8
48.7	1.3	2.913	1993.466	19-Jun-93	16.7
50.2	1.1	3.124	1993.677	4-Sep-93	16.1
49.0	0.6	3.337	1993.890	21-Nov-93	14.7
51.8	2.7	3.603	1994.156	26-Feb-94	14.4
52.2	3.9	3.757	1994.310	23-Apr-94	13.9
60.9	1.9	3.987	1994.540	16-Jul-94	15.3
57.4	2.8	4.313	1994.866	12-Nov-94	13.3
58.3	0.5	4.562	1995.115	11-Feb-95	12.8
62.8	1.1	4.754	1995.307	22-Apr-95	13.2
64.8	0.8	4.776	1995.329	30-Apr-95	13.6
68.2	0.7	4.984	1995.537	15-Jul-95	13.7
73.7	1.4	5.157	1995.710	16-Sep-95	14.3
71.5	1.1	5.329	1995.882	18-Nov-95	13.4
71.5	1.9	5.444	1995.997	30-Dec-95	13.1
71.4	3.3	5.636	1996.189	9-Mar-96	12.7
71.6	4.0	5.772	1996.325	28-Apr-96	12.4
79.7	1.8	5.846	1996.399	25-May-96	13.6
78.5	0.9	6.018	1996.571	27-Jul-96	13.0
79.2	1.0	6.190	1996.743	28-Sep-96	12.8
77.8	1.9	6.324	1996.877	16-Nov-96	12.3
76.2	0.8	6.496	1997.049	18-Jan-97	11.7
80.2	1.9	6.669	1997.222	22-Mar-97	12.0
78.9	0.4	6.803	1997.356	10-May-97	11.6
81.8	0.9	6.976	1997.529	12-Jul-97	11.7
88.3	1.1	7.170	1997.723	21-Sep-97	12.3
84.5	2.6	7.321	1997.874	15-Nov-97	11.5
81.6	1.1	7.532	1998.085	31-Jan-98	10.8
83.9	0.6	7.688	1998.241	29-Mar-98	10.9
83.6	1.2	7.858	1998.411	30-May-98	10.6
82.3	0.3	8.011	1998.564	25-Jul-98	10.3

87.2	0.7	8.069	1998.622	15-Aug-98	10.8
92.7	1.1	8.280	1998.833	31-Oct-98	11.2
96.0	0.6	8.472	1999.025	9-Jan-99	11.3
96.1	0.8	8.628	1999.181	7-Mar-99	11.1
98.3	1.1	8.798	1999.351	8-May-99	11.2
107.8	1.3	8.970	1999.523	10-Jul-99	12.0
106.2	2.4	9.181	1999.734	25-Sep-99	11.6
106.1	3.3	9.354	1999.907	27-Nov-99	11.3
109.4	1.4	9.545	2000.098	5-Feb-00	11.5
108.6	2.1	9.717	2000.270	8-Apr-00	11.2
111.4	3.5	9.890	2000.443	10-Jun-00	11.3
116.1	1.3	10.081	2000.634	19-Aug-00	11.5
118.9	2.6	10.234	2000.787	14-Oct-00	11.6
118.1	1.3	10.406	2000.959	16-Dec-00	11.3
118.3	1.6	10.600	2001.153	25-Feb-01	11.2

SF-26 West Commercial Ave in Willits Maacama Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.3	0.000	1991.871	14-Nov-91	
3.5	1.3	0.430	1992.301	19-Apr-92	
6.3	1.4	0.580	1992.451	13-Jun-92	
3.8	1.1	0.793	1992.664	30-Aug-92	
6.0	2.2	0.976	1992.847	5-Nov-92	6.1
7.7	3.1	1.184	1993.055	20-Jan-93	6.5
7.9	2.0	1.518	1993.389	22-May-93	5.2
8.1	2.7	1.748	1993.619	14-Aug-93	4.6
7.8	3.0	1.940	1993.811	23-Oct-93	4.0
11.3	1.1	2.151	1994.022	8-Jan-94	5.3
16.7	2.1	2.343	1994.214	19-Mar-94	7.1
18.8	1.7	2.480	1994.351	8-May-94	7.6
19.8	0.8	2.650	1994.521	9-Jul-94	7.5
20.8	1.5	2.822	1994.693	10-Sep-94	7.4
24.3	1.3	3.014	1994.885	19-Nov-94	8.1
26.5	1.0	3.187	1995.058	21-Jan-95	8.3
27.6	1.6	3.359	1995.230	25-Mar-95	8.2
25.4	1.1	3.570	1995.441	10-Jun-95	7.1
26.5	2.4	3.743	1995.614	12-Aug-95	7.1
25.4	1.0	3.956	1995.827	29-Oct-95	6.4
29.4	2.6	4.184	1996.055	20-Jan-96	7.0
30.0	4.4	4.375	1996.246	30-Mar-96	6.9
30.2	4.1	4.585	1996.456	15-Jun-96	6.6
29.2	1.0	4.796	1996.667	31-Aug-96	6.1
32.0	2.1	4.971	1996.842	3-Nov-96	6.4
40.2	1.4	5.217	1997.088	1-Feb-97	7.7
37.9	0.7	5.389	1997.260	5-Apr-97	7.0
39.9	1.2	5.581	1997.452	14-Jun-97	7.1
37.6	0.4	5.734	1997.605	9-Aug-97	6.6
39.8	1.2	5.945	1997.816	25-Oct-97	6.7
44.2	2.1	6.099	1997.970	20-Dec-97	7.2
45.5	0.9	6.310	1998.181	7-Mar-98	7.2
45.6	1.1	6.482	1998.353	9-May-98	7.0
43.5	0.4	6.655	1998.526	11-Jul-98	6.5
44.2	1.2	6.847	1998.718	19-Sep-98	6.5
46.1	0.9	7.022	1998.893	22-Nov-98	6.6
49.2	2.0	7.195	1999.066	24-Jan-99	6.8
50.9	1.0	7.345	1999.216	20-Mar-99	6.9
50.9	1.0	7.499	1999.370	15-May-99	6.8
48.7	3.3	7.693	1999.564	25-Jul-99	6.3
48.8	3.4	7.904	1999.775	10-Oct-99	6.2
50.9	1.4	8.074	1999.945	11-Dec-99	6.3
53.5	2.7	8.323	2000.194	11-Mar-00	6.4
54.0	2.8	8.495	2000.366	13-May-00	6.4
56.5	1.4	8.880	2000.751	1-Oct-00	6.4
57.8	3.0	9.050	2000.921	2-Dec-00	6.4
61.2	2.2	9.280	2001.151	24-Feb-01	6.6

SF-27 Parkmeadow Drive in Fremont Hayward Fault 66.67 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average	mm/yr-simple average after 1996.131
0.0	1.3	0.000	1992.262	5-Apr-92		
0.8	0.9	0.170	1992.432	6-Jun-92		
-5.0	1.0	0.514	1992.776	10-Oct-92		
-4.6	2.1	0.661	1992.923	3-Dec-92		
-0.9	2.3	0.861	1993.123	14-Feb-93		
0.1	1.9	1.034	1993.296	18-Apr-93	0.1	
0.9	0.8	1.108	1993.370	15-May-93	0.8	
-3.2	0.9	1.376	1993.638	21-Aug-93	-2.3	
-3.6	1.5	1.606	1993.868	13-Nov-93	-2.2	
-1.0	1.6	1.798	1994.060	22-Jan-94	-0.6	
0.2	1.0	1.990	1994.252	2-Apr-94	0.1	
0.3	1.7	2.204	1994.466	19-Jun-94	0.1	
-1.7	1.8	2.330	1994.592	4-Aug-94	-0.7	
1.1	0.8	2.508	1994.770	8-Oct-94	0.4	
3.3	3.2	2.700	1994.962	17-Dec-94	1.2	
1.8	1.5	2.891	1995.153	25-Feb-95	0.6	
7.3	1.8	3.064	1995.326	29-Apr-95	2.4	
4.4	0.7	3.220	1995.482	25-Jun-95	1.4	
4.2	0.8	3.390	1995.652	26-Aug-95	1.2	
4.6	2.9	3.546	1995.808	22-Oct-95	1.3	
6.8	0.8	3.697	1995.959	16-Dec-95	1.8	
23.4	3.4	3.869	1996.131	17-Feb-96	6.0	
26.4	3.8	3.888	1996.150	24-Feb-96	6.8	
23.6	3.8	3.929	1996.191	10-Mar-96	6.0	
23.0	1.0	4.099	1996.361	11-May-96	5.6	
25.7	4.2	4.271	1996.533	13-Jul-96	6.0	
21.5	1.9	4.380	1996.642	22-Aug-96	4.9	
23.0	1.7	4.539	1996.801	19-Oct-96	5.1	
25.6	1.1	4.692	1996.954	14-Dec-96	5.5	
25.8	2.3	4.845	1997.107	8-Feb-97	5.3	2.5
25.2	2.0	5.017	1997.279	12-Apr-97	5.0	1.6
24.9	1.3	5.193	1997.455	15-Jun-97	4.8	1.1
24.0	1.3	5.385	1997.647	24-Aug-97	4.5	0.4
25.7	1.0	5.535	1997.797	18-Oct-97	4.6	1.4
27.0	1.8	5.727	1997.989	27-Dec-97	4.7	1.9
27.8	0.4	5.900	1998.162	28-Feb-98	4.7	2.2
26.5	1.4	6.053	1998.315	25-Apr-98	4.4	1.4
28.3	1.1	6.226	1998.488	27-Jun-98	4.5	2.1
26.7	1.2	6.423	1998.685	7-Sep-98	4.2	1.3
27.8	1.0	6.628	1998.890	21-Nov-98	4.2	1.6
32.2	0.3	6.820	1999.082	30-Jan-99	4.7	3.0
32.8	1.1	6.957	1999.219	21-Mar-99	4.7	3.0
33.3	1.2	7.127	1999.389	22-May-99	4.7	3.0
31.1	3.8	7.300	1999.562	24-Jul-99	4.3	2.2

30.6	1.8	7.434	1999.696	11-Sep-99	4.1	2.0
32.8	3.8	7.587	1999.849	6-Nov-99	4.3	2.5
35.1	3.7	7.817	2000.079	29-Jan-00	4.5	3.0
34.3	1.8	7.970	2000.232	25-Mar-00	4.3	2.7
38.3	2.3	8.126	2000.388	21-May-00	4.7	3.5
39.3	1.9	8.315	2000.577	29-Jul-00	4.7	3.6
42.8	3.0	8.544	2000.806	21-Oct-00	5.0	4.1
45.2	4.5	8.678	2000.940	9-Dec-00	5.2	4.5
42.9	3.3	8.850	2001.112	10-Feb-01	4.8	3.9

SF-28 Encina Way in Oakland Hayward Fault 33.39 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	0.6	0.000	1989.693	10-Sep-89	
10.7	1.1	2.927	1992.620	14-Aug-92	3.7
19.5	0.5	3.365	1993.058	21-Jan-93	5.8
18.2	3.2	3.581	1993.274	10-Apr-93	5.1
25.0	1.9	3.948	1993.641	22-Aug-93	6.3
24.9	0.9	4.099	1993.792	16-Oct-93	6.1
25.9	1.3	4.332	1994.025	9-Jan-94	6.0
25.4	2.7	4.523	1994.216	20-Mar-94	5.6
28.5	1.2	4.734	1994.427	5-Jun-94	6.0
27.4	1.1	4.888	1994.581	31-Jul-94	5.6
27.0	0.5	5.096	1994.789	15-Oct-94	5.3
28.0	2.3	5.271	1994.964	18-Dec-94	5.3
28.2	0.7	5.463	1995.156	26-Feb-95	5.2
29.2	0.4	5.671	1995.364	13-May-95	5.1
27.7	1.7	5.847	1995.540	16-Jul-95	4.7
30.6	0.6	5.948	1995.641	22-Aug-95	5.1
24.7	0.8	6.192	1995.885	19-Nov-95	4.0
30.6	1.0	6.285	1995.978	23-Dec-95	4.9
32.0	0.7	6.572	1996.265	6-Apr-96	4.9
31.1	3.0	6.802	1996.495	29-Jun-96	4.6
32.1	1.5	6.944	1996.637	20-Aug-96	4.6
31.1	2.2	7.110	1996.803	20-Oct-96	4.4
31.5	1.3	7.244	1996.937	8-Dec-96	4.3
32.0	0.3	7.397	1997.090	2-Feb-97	4.3
33.4	1.5	7.608	1997.301	20-Apr-97	4.4
31.0	0.6	7.743	1997.436	8-Jun-97	4.0
30.6	0.8	7.937	1997.630	18-Aug-97	3.9
27.5	2.8	8.143	1997.836	1-Nov-97	3.4
33.0	0.6	8.433	1998.126	15-Feb-98	3.9
35.7	0.7	8.567	1998.260	5-Apr-98	4.2
35.7	0.7	8.721	1998.414	31-May-98	4.1
33.4	0.7	8.986	1998.679	5-Sep-98	3.7
39.2	0.8	9.162	1998.855	8-Nov-98	4.3
39.3	0.6	9.370	1999.063	23-Jan-99	4.2
41.9	0.5	9.507	1999.200	14-Mar-99	4.4
41.6	1.0	9.775	1999.468	20-Jun-99	4.3
39.6	1.7	9.986	1999.679	5-Sep-99	4.0
36.3	0.5	10.195	1999.888	20-Nov-99	3.6
39.9	1.9	10.408	2000.101	6-Feb-00	3.8
41.6	1.5	10.616	2000.309	22-Apr-00	3.9
41.7	1.2	10.829	2000.522	9-Jul-00	3.9
41.7	1.3	11.017	2000.710	16-Sep-00	3.8
41.8	0.8	11.173	2000.866	12-Nov-00	3.7
43.0	0.8	11.362	2001.055	20-Jan-01	3.8

SF-29 LaSalle Ave in Oakland Hayward Fault 23.92 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.5	0.000	1993.112	10-Feb-93	
3.8	1.3	0.184	1993.296	18-Apr-93	
3.1	1.3	0.529	1993.641	22-Aug-93	
1.3	1.2	0.680	1993.792	16-Oct-93	
5.8	1.8	0.913	1994.025	9-Jan-94	
5.8	2.6	1.104	1994.216	20-Mar-94	5.3
6.1	3.4	1.315	1994.427	5-Jun-94	4.6
8.6	1.7	1.469	1994.581	31-Jul-94	5.9
9.2	1.6	1.677	1994.789	15-Oct-94	5.5
9.9	1.3	1.852	1994.964	18-Dec-94	5.3
7.8	2.1	2.044	1995.156	26-Feb-95	3.8
9.9	1.0	2.252	1995.364	13-May-95	4.4
10.6	1.8	2.428	1995.540	16-Jul-95	4.4
11.2	0.6	2.524	1995.636	20-Aug-95	4.4
10.4	9.0	2.773	1995.885	19-Nov-95	3.8
12.1	1.6	2.828	1995.940	9-Dec-95	4.3
12.3	1.9	3.000	1996.112	10-Feb-96	4.1
14.2	0.8	3.194	1996.306	21-Apr-96	4.4
14.6	2.5	3.325	1996.437	8-Jun-96	4.4
14.6	0.7	3.519	1996.631	18-Aug-96	4.2
19.0	0.9	3.691	1996.803	20-Oct-96	5.1
14.4	1.4	3.825	1996.937	8-Dec-96	3.8
17.5	1.0	3.978	1997.090	2-Feb-97	4.4
16.0	1.2	4.189	1997.301	20-Apr-97	3.8
16.5	2.2	4.324	1997.436	8-Jun-97	3.8
18.0	0.7	4.515	1997.627	17-Aug-97	4.0
20.5	0.5	4.707	1997.819	26-Oct-97	4.4
21.1	1.9	4.861	1997.973	21-Dec-97	4.3
20.3	1.1	5.088	1998.200	14-Mar-98	4.0
22.6	1.5	5.302	1998.414	31-May-98	4.3
20.7	0.6	5.551	1998.663	30-Aug-98	3.7
22.8	1.7	5.683	1998.795	17-Oct-98	4.0
23.4	1.1	5.855	1998.967	19-Dec-98	4.0
23.3	0.9	6.030	1999.142	21-Feb-99	3.9
25.0	0.6	6.203	1999.315	25-Apr-99	4.0
25.2	1.4	6.356	1999.468	20-Jun-99	4.0
23.3	0.8	6.548	1999.660	29-Aug-99	3.6
25.6	1.2	6.778	1999.890	21-Nov-99	3.8
27.9	0.8	6.932	2000.044	16-Jan-00	4.0
29.8	1.3	7.410	2000.522	9-Jul-00	4.0
28.4	1.7	7.598	2000.710	16-Sep-00	3.7
33.8	0.9	7.754	2000.866	12-Nov-00	4.4
33.0	1.2	7.943	2001.055	20-Jan-01	4.2

SF-30 Florida Ave in Berkeley Hayward Fault 14.05 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average	mm/yr-simple average after 1997.625
0.0	0.3	0.000	1992.615	12-Aug-92		
-1.4	1.2	0.497	1993.112	10-Feb-93		
-1.9	1.5	0.689	1993.304	21-Apr-93		
0.1	1.0	0.966	1993.581	31-Jul-93	0.1	
-1.5	1.6	1.138	1993.753	2-Oct-93	-1.3	
-1.1	0.6	1.330	1993.945	11-Dec-93	-0.8	
-0.8	0.7	1.506	1994.121	13-Feb-94	-0.5	
0.2	0.4	1.659	1994.274	10-Apr-94	0.1	
-1.1	0.5	1.829	1994.444	11-Jun-94	-0.6	
-1.0	0.3	1.966	1994.581	31-Jul-94	-0.5	
-1.6	0.6	2.174	1994.789	15-Oct-94	-0.7	
0.9	0.4	2.349	1994.964	18-Dec-94	0.4	
1.0	0.6	2.541	1995.156	26-Feb-95	0.4	
1.2	0.7	2.749	1995.364	13-May-95	0.4	
-0.1	0.7	2.925	1995.540	16-Jul-95	0.0	
0.8	0.2	3.018	1995.633	19-Aug-95	0.3	
-0.5	0.5	3.270	1995.885	19-Nov-95	-0.2	
0.3	0.4	3.325	1995.940	9-Dec-95	0.1	
0.7	2.0	3.497	1996.112	10-Feb-96	0.2	
1.7	1.3	3.691	1996.306	21-Apr-96	0.5	
1.9	1.6	3.822	1996.437	8-Jun-96	0.5	
0.0	0.8	4.013	1996.628	17-Aug-96	0.0	
1.4	0.5	4.188	1996.803	20-Oct-96	0.3	
1.5	0.5	4.322	1996.937	8-Dec-96	0.3	
2.2	0.3	4.475	1997.090	2-Feb-97	0.5	
3.1	0.8	4.706	1997.321	27-Apr-97	0.7	
3.1	0.9	5.010	1997.625	16-Aug-97	0.6	
5.4	1.0	6.045	1998.660	29-Aug-98	0.9	2.2
8.0	1.0	7.062	1999.677	4-Sep-99	1.1	2.4
12.1	2.8	8.251	2000.866	12-Nov-00	1.5	2.8

SF-31 Sanford Ranch Road near Ukiah Maacama Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.8	0.000	1993.389	22-May-93	
-1.3	1.3	0.230	1993.619	14-Aug-93	
1.1	1.4	0.422	1993.811	23-Oct-93	
2.3	3.6	0.825	1994.214	19-Mar-94	
1.9	1.4	0.962	1994.351	8-May-94	2.0
8.4	3.4	1.132	1994.521	9-Jul-94	7.4
8.0	7.4	1.304	1994.693	10-Sep-94	6.1
8.8	3.1	1.496	1994.885	19-Nov-94	5.9
12.2	2.1	1.669	1995.058	21-Jan-95	7.3
11.5	2.0	1.841	1995.230	25-Mar-95	6.2
14.4	2.1	2.052	1995.441	10-Jun-95	7.0
8.4	0.9	2.225	1995.614	12-Aug-95	3.8
8.8	2.8	2.438	1995.827	29-Oct-95	3.6
13.4	1.2	2.666	1996.055	20-Jan-96	5.0
9.3	9.6	2.857	1996.246	30-Mar-96	3.3
9.4	4.0	3.067	1996.456	15-Jun-96	3.1
10.1	1.5	3.278	1996.667	31-Aug-96	3.1
13.5	2.2	3.453	1996.842	3-Nov-96	3.9
16.7	1.0	3.699	1997.088	1-Feb-97	4.5
13.0	2.7	3.871	1997.260	5-Apr-97	3.4
13.8	2.4	4.063	1997.452	14-Jun-97	3.4
17.7	4.6	4.216	1997.605	9-Aug-97	4.2
18.0	0.9	4.427	1997.816	25-Oct-97	4.1
20.5	3.2	4.581	1997.970	20-Dec-97	4.5
24.0	4.0	4.792	1998.181	7-Mar-98	5.0
23.4	2.9	4.964	1998.353	9-May-98	4.7
22.3	2.6	5.137	1998.526	11-Jul-98	4.3
20.5	3.4	5.329	1998.718	19-Sep-98	3.8
25.3	2.1	5.504	1998.893	22-Nov-98	4.6
23.0	2.2	5.677	1999.066	24-Jan-99	4.1
25.4	2.3	5.827	1999.216	20-Mar-99	4.4
23.5	2.3	5.981	1999.370	15-May-99	3.9
25.1	3.5	6.175	1999.564	25-Jul-99	4.1
24.6	2.9	6.386	1999.775	10-Oct-99	3.9
25.3	5.2	6.556	1999.945	11-Dec-99	3.9
26.1	3.8	6.805	2000.194	11-Mar-00	3.8
34.2	3.7	6.977	2000.366	13-May-00	4.9
33.4	1.6	7.149	2000.538	15-Jul-00	4.7
38.4	1.8	7.362	2000.751	1-Oct-00	5.2
38.7	4.8	7.532	2000.921	2-Dec-00	5.1
35.0	4.3	7.762	2001.151	24-Feb-01	4.5

SF-32 Welch Creek Road in Sunol Valley Calaveras Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	0.8	0.000	1997.066	24-Jan-97	
-1.0	1.9	0.159	1997.225	23-Mar-97	
4.1	1.6	0.348	1997.414	31-May-97	
6.8	0.5	0.523	1997.589	3-Aug-97	
3.4	1.4	0.696	1997.762	5-Oct-97	
3.4	1.7	0.866	1997.932	6-Dec-97	3.9
-1.4	1.3	1.156	1998.222	22-Mar-98	-1.2
2.7	2.7	1.419	1998.485	26-Jun-98	1.9
6.6	1.1	1.671	1998.737	26-Sep-98	3.9
8.9	1.3	1.846	1998.912	29-Nov-98	4.8
5.0	0.7	2.074	1999.140	20-Feb-99	2.4
7.5	0.7	2.227	1999.293	17-Apr-99	3.4
8.9	0.8	2.400	1999.466	19-Jun-99	3.7
13.5	0.7	2.745	1999.811	23-Oct-99	4.9
12.7	2.8	2.898	1999.964	18-Dec-99	4.4
10.4	1.0	3.090	2000.156	26-Feb-00	3.4
7.4	2.1	3.262	2000.328	29-Apr-00	2.3
14.9	0.3	3.453	2000.519	8-Jul-00	4.3
14.8	1.9	3.666	2000.732	24-Sep-00	4.0
14.1	1.3	3.836	2000.902	25-Nov-00	3.7
13.9	1.1	4.008	2001.074	27-Jan-01	3.5

SF-33 Coyote Ranch near Coyote Lake Calaveras Fault

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average	mm/yr simple average after LPEQ	USGS DATA
0.0	0.0	0.000	1968.339	3-May-68			x
1.7	0.0	1.031	1969.370	15-May-69	1.6		x
12.8	0.0	2.239	1970.578	30-Jul-70	5.7		x
31.2	0.0	4.205	1972.544	17-Jul-72	7.4		x
31.2	1.2	4.232	1972.571	27-Jul-72	7.4		x
33.8	0.4	4.998	1973.337	3-May-73	6.8		x
102.2	0.0	11.258	1979.597	6-Aug-79	9.1		x
106.5	0.0	11.286	1979.625	16-Aug-79	9.4		x
107.5	0.0	11.299	1979.638	21-Aug-79	9.5		x
113.3	0.0	11.327	1979.666	31-Aug-79	10.0		x
240.1	0.4	16.207	1984.546	18-Jul-84	14.8		x
302.3	0.4	18.165	1986.504	3-Jul-86	16.6		x
344.6	1.1	20.022	1988.361	11-May-88	17.2		x
474.3	1.2	28.727	1997.066	24-Jan-97	16.5		
475.7	0.6	28.886	1997.225	23-Mar-97	16.5		
484.4	0.6	29.075	1997.414	31-May-97	16.7		
494.1	0.7	29.250	1997.589	3-Aug-97	16.9		
488.3	1.3	29.423	1997.762	5-Oct-97	16.6		
486.3	0.3	29.593	1997.932	6-Dec-97	16.4	13.9	
486.0	0.9	29.883	1998.222	22-Mar-98	16.3	10.1	
505.2	0.4	30.146	1998.485	26-Jun-98	16.8	21.8	
501.6	0.8	30.398	1998.737	26-Sep-98	16.5	16.3	
500.7	0.6	30.573	1998.912	29-Nov-98	16.4	14.3	
501.8	0.3	30.762	1999.101	6-Feb-99	16.3	13.5	
504.4	0.7	30.954	1999.293	17-Apr-99	16.3	13.5	
509.0	1.1	31.127	1999.466	19-Jun-99	16.4	14.5	
516.2	1.4	31.302	1999.641	22-Aug-99	16.5	16.3	
520.6	1.1	31.472	1999.811	23-Oct-99	16.5	16.9	
514.0	0.5	31.625	1999.964	18-Dec-99	16.3	13.7	
516.8	0.6	31.817	2000.156	26-Feb-00	16.2	13.8	
521.3	0.9	31.989	2000.328	29-Apr-00	16.3	14.1	
528.9	0.6	32.180	2000.519	8-Jul-00	16.4	15.5	
534.1	0.2	32.393	2000.732	24-Sep-00	16.5	16.0	
527.2	0.5	32.563	2000.902	25-Nov-00	16.2	13.8	
531.7	0.8	32.735	2001.074	27-Jan-01	16.2	14.3	

SF-34 Thors Bay Road in El Cerrito Hayward Fault 10.83 km

movement (mm)	std. dev.	# of years	year	date	mm/yr-simple average
0.0	1.0	0.000	1989.748	30-Sep-89	
14.5	1.0	2.867	1992.615	12-Aug-92	5.1
21.3	1.0	3.304	1993.052	19-Jan-93	6.4
23.7	1.0	4.830	1994.578	30-Jul-94	4.9
29.0	0.4	5.885	1995.633	19-Aug-95	4.9
32.9	0.9	6.880	1996.628	17-Aug-96	4.8
35.7	2.1	7.688	1997.436	8-Jun-97	4.6
37.3	0.5	7.877	1997.625	16-Aug-97	4.7
37.6	1.1	8.071	1997.819	26-Oct-97	4.7
40.4	1.1	8.225	1997.973	21-Dec-97	4.9
40.2	0.7	8.378	1998.126	15-Feb-98	4.8
40.4	0.7	8.512	1998.260	5-Apr-98	4.7
42.2	0.3	8.704	1998.452	14-Jun-98	4.8
41.0	0.4	8.912	1998.660	29-Aug-98	4.6
39.7	0.6	9.047	1998.795	17-Oct-98	4.4
45.4	0.4	9.181	1998.929	5-Dec-98	4.9
45.5	1.0	9.394	1999.142	21-Feb-99	4.8
45.8	1.5	9.567	1999.315	25-Apr-99	4.8
45.3	0.1	9.720	1999.468	20-Jun-99	4.7
45.9	0.6	9.929	1999.677	4-Sep-99	4.6
44.5	0.4	10.120	1999.868	13-Nov-99	4.4
47.2	1.6	10.296	2000.044	16-Jan-00	4.6
48.0	0.5	10.487	2000.235	26-Mar-00	4.6
49.6	1.1	10.656	2000.404	27-May-00	4.7
45.6	0.6	10.831	2000.579	30-Jul-00	4.2
48.9	0.8	11.080	2000.828	29-Oct-00	4.4
51.3	2.0	11.310	2001.058	21-Jan-01	4.5

Hayward Fault USGS-SFSU Afterslip Site
08.37 km-Olive Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	0.0	0.000	1989.748	30-Sep-89	
14.3	0.8	2.867	1992.615	12-Aug-92	5.0
26.9	0.9	4.830	1994.578	30-Jul-94	5.6
31.1	1.5	5.885	1995.633	19-Aug-95	5.3
34.1	0.6	6.880	1996.628	17-Aug-96	5.0
40.7	0.8	7.877	1997.625	16-Aug-97	5.2
42.6	1.2	8.912	1998.660	29-Aug-98	4.8
50.3	0.6	9.929	1999.677	4-Sep-99	5.1
57.4	1.0	11.118	2000.866	12-Nov-00	5.2

Hayward Fault USGS-SFSU Afterslip Site
17.82 km-Cal Stadium

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0		0.000	1966.912	29-Nov-66	
101.5		21.503	1988.415	31-May-88	4.7
120.4		25.755	1992.667	31-Aug-92	4.7
124.0	1.4	26.576	1993.488	27-Jun-93	4.7
141.1	0.6	30.521	1997.433	7-Jun-97	4.6
148.4	1.0	31.748	1998.660	29-Aug-98	4.7
153.8	0.4	32.746	1999.658	28-Aug-99	4.7
158.9	1.1	33.916	2000.828	29-Oct-00	4.7

Hayward Fault USGS-SFSU Afterslip Site
20.84 km-Temescal

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0		0.000	1974.258	4-Apr-74	
74.8	1.2	19.860	1994.118	12-Feb-94	3.8
74.9	0.3	20.326	1994.584	1-Aug-94	3.7
80.3	0.4	21.383	1995.641	22-Aug-95	3.8
92.1	1.1	24.482	1998.740	27-Sep-98	3.8
97.5	1.4	25.438	1999.696	11-Sep-99	3.8
102.8	0.8	26.608	2000.866	12-Nov-00	3.9

Hayward Fault USGS-SFSU Afterslip Site
 25.98 km-Lincoln Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average	mm/yr. simple average, after 1988.358
0.0		0.000	1970.290	16-Apr-70		
72.0		18.068	1988.358	10-May-88	4.0	
82.9		22.330	1992.620	14-Aug-92	3.7	2.6
90.7	1.9	24.294	1994.584	1-Aug-94	3.7	3.0
93.6	2.5	25.351	1995.641	22-Aug-95	3.7	3.0
98.5	1.4	26.347	1996.637	20-Aug-96	3.7	3.2
101.2	0.5	27.340	1997.630	18-Aug-97	3.7	3.1
103.5	3.1	28.395	1998.685	7-Sep-98	3.6	3.1
107.1	0.7	29.406	1999.696	11-Sep-99	3.6	3.1
110.5	0.7	30.576	2000.866	12-Nov-00	3.6	3.1

Hayward Fault USGS-SFSU Afterslip Site
 27.81 km-39th Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average	mm/yr. simple average, after 1988.358
			1974.274	10-Apr-74		
201.0		14.084	1988.358	10-May-88	14.3	
207.6	0.9	18.343	1992.617	13-Aug-92	11.3	1.5
224.2	2.4	19.701	1993.975	22-Dec-93	11.4	4.1
217.1	3.2	20.310	1994.584	1-Aug-94	10.7	2.6
227.0	0.6	21.362	1995.636	20-Aug-95	10.6	3.6
229.0	1.9	22.357	1996.631	18-Aug-96	10.2	3.4
233.6	2.9	23.353	1997.627	17-Aug-97	10.0	3.5
238.9	1.1	24.389	1998.663	30-Aug-98	9.8	3.7
242.4	0.3	25.386	1999.660	29-Aug-99	9.5	3.7
247.4	2.1	26.589	2000.863	11-Nov-00	9.3	3.7

Hayward Fault USGS-SFSU Afterslip Site
30.68 km-73rd Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	0.7	0.000	1993.389	22-May-93	
4.1	0.7	1.195	1994.584	1-Aug-94	3.4
5.5	1.0	2.247	1995.636	20-Aug-95	2.4
7.6	2.1	3.242	1996.631	18-Aug-96	2.3
11.8	0.7	4.238	1997.627	17-Aug-97	2.8
12.2	0.2	5.310	1998.699	12-Sep-98	2.3
17.5	1.0	6.271	1999.660	29-Aug-99	2.8
21.3	0.3	7.436	2000.825	28-Oct-00	2.9

Hayward Fault USGS-SFSU Afterslip Site
36.55 km-Chabot Park

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	2.0	0.000	1993.389	22-May-93	
5.2	1.0	1.197	1994.586	02-Aug-94	4.3
12.7	2.7	2.255	1995.644	23-Aug-95	5.6
18.3	0.7	3.245	1996.634	19-Aug-96	5.6
23.0	1.9	4.244	1997.633	19-Aug-97	5.4
28.7	1.0	5.290	1998.679	05-Sep-98	5.4
37.9	1.1	6.290	1999.679	05-Sep-99	6.0
37.3	1.4	7.436	2000.825	28-Oct-00	5.0

Hayward Fault USGS-SFSU Afterslip Site
38.28 km-Fairmont Dr.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	1.2	0.000	1997.627	17-Aug-97	
2.0	0.8	1.036	1998.663	30-Aug-98	1.9
7.6	2.0	2.033	1999.660	29-Aug-99	3.7
12.7	2.0	3.198	2000.825	28-Oct-00	4.0

Hayward Fault USGS-SFSU Afterslip Site
41.11 km-167th Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	1.3	0.000	1992.620	14-Aug-92	
18.2	1.7	1.966	1994.586	2-Aug-94	9.3
22.9	0.6	3.016	1995.636	20-Aug-95	7.6
26.3	0.7	4.011	1996.631	18-Aug-96	6.6
30.5	0.4	5.007	1997.627	17-Aug-97	6.1
36.1	0.6	6.043	1998.663	30-Aug-98	6.0
40.6	0.9	7.040	1999.660	29-Aug-99	5.8
44.9	1.1	8.205	2000.825	28-Oct-00	5.5

Hayward Fault USGS-SFSU Afterslip Site
45.64 km-Palisade Dr.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0		0.000	1977.074	27-Jan-77	
73.1		15.735	1992.809	22-Oct-92	4.6
78.5	2.5	20.556	1997.630	18-Aug-97	3.8
86.2	3.0	21.589	1998.663	30-Aug-98	4.0
92.3	2.1	22.603	1999.677	4-Sep-99	4.1
100.0	2.1	23.732	2000.806	21-Oct-00	4.2

Hayward Fault USGS-SFSU Afterslip Site
47.72 km-Holy Sepulchre Cemetery

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	1.0	0.000	1994.589	3-Aug-94	
9.2	1.2	1.052	1995.641	22-Aug-95	8.7
15.7	3.2	2.045	1996.634	19-Aug-96	7.7
22.5	1.0	3.041	1997.630	18-Aug-97	7.4
28.3	0.6	4.090	1998.679	5-Sep-98	6.9
34.8	1.0	5.088	1999.677	4-Sep-99	6.8
41.5	1.4	6.217	2000.806	21-Oct-00	6.7

Hayward Fault USGS-SFSU Afterslip Site
50.15 km-Woodland Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0		0.000	1970.074	27-Jan-70	
104.6	2.6	22.792	1992.866	12-Nov-92	4.6
119.0	0.8	27.562	1997.636	20-Aug-97	4.3
125.0	1.0	28.605	1998.679	5-Sep-98	4.4
129.2	0.4	29.603	1999.677	4-Sep-99	4.4
141.1	2.7	30.732	2000.806	21-Oct-00	4.6

Hayward Fault USGS-SFSU Afterslip Site
52.60 km-Chapel of the Chimes Cemetery

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	1.3	0.000	1994.592	4-Aug-94	
5.9	2.1	1.052	1995.644	23-Aug-95	5.6
7.2	1.0	2.042	1996.634	19-Aug-96	3.5
14.6	0.9	3.041	1997.633	19-Aug-97	4.8
20.8	0.9	4.104	1998.696	11-Sep-98	5.1
26.1	0.9	5.104	1999.696	11-Sep-99	5.1
34.5	1.3	6.271	2000.863	11-Nov-00	5.5

Hayward Fault USGS-SFSU Afterslip Site
 59.09 km-Gilbert Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	0.5	0.000	1983.759	4-Oct-83	
17.4		4.277	1988.036	13-Jan-88	4.1
28.7		4.809	1988.568	26-Jul-88	6.0
28.7		5.088	1988.847	5-Nov-88	5.6
27.5		8.869	1992.628	17-Aug-92	3.1
30.6	0.9	9.126	1992.885	19-Nov-92	3.4
42.7	0.8	10.833	1994.592	4-Aug-94	3.9
54.3	0.4	11.885	1995.644	23-Aug-95	4.6
58.9	0.7	12.886	1996.645	23-Aug-96	4.6
77.4	0.4	13.885	1997.644	23-Aug-97	5.6
67.4	1.1	14.920	1998.679	5-Sep-98	4.5
76.2	0.5	15.920	1999.679	5-Sep-99	4.8
86.6	0.3	17.085	2000.844	4-Nov-00	5.1

Hayward Fault USGS-SFSU Afterslip Site
 62.64 km-Hancock Ave.

movement (mm)	std. dev.	# of years	year	date	mm/yr simple average	mm/yr simple average after 1994.627
0.0		0.000	1982.041	15-Jan-82		
61.6	1.8	12.586	1994.627	17-Aug-94	4.9	
73.0	1.7	14.604	1996.645	23-Aug-96	5.0	5.4
81.7	0.7	15.603	1997.644	23-Aug-97	5.2	6.4
83.8	0.4	16.641	1998.682	6-Sep-98	5.0	5.5
88.1	0.9	17.638	1999.679	5-Sep-99	5.0	5.2
98.1	0.7	18.803	2000.844	4-Nov-00	5.2	5.9

Hayward Fault USGS-SFSU Afterslip Site
63.10 km-Union St.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0	2.3	0.000	1993.019	7-Jan-93	
4.8	0.5	0.869	1993.888	20-Nov-93	5.5
9.4	2.0	1.573	1994.592	4-Aug-94	6.0
16.7	1.1	2.628	1995.647	24-Aug-95	6.4
20.7	0.9	3.131	1996.150	24-Feb-96	6.6
20.4	1.9	3.191	1996.210	17-Mar-96	6.4
20.3	2.2	3.629	1996.648	24-Aug-96	5.6
36.6	0.6	4.628	1997.647	24-Aug-97	7.9
42.5	1.7	5.663	1998.682	6-Sep-98	7.5
43.4	1.0	6.660	1999.679	5-Sep-99	6.5
52.8	0.8	7.825	2000.844	4-Nov-00	6.7

Hayward Fault USGS-SFSU Afterslip Site
65.29 km-Pine St.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average	mm/yr simple average, after 1996.150
0.0		0.000	1989.216	20-Mar-89		
19.0	0.7	3.806	1993.022	8-Jan-93	5.0	
19.2	0.8	4.672	1993.888	20-Nov-93	4.1	
20.6	0.9	5.376	1994.592	4-Aug-94	3.8	
25.4	0.4	6.436	1995.652	26-Aug-95	3.9	
39.1	0.8	6.934	1996.150	24-Feb-96	5.6	
40.9	2.0	6.975	1996.191	10-Mar-96	5.9	
41.9	0.3	7.426	1996.642	22-Aug-96	5.6	
44.9	0.5	8.431	1997.647	24-Aug-97	5.3	3.9
45.1	1.2	9.466	1998.682	6-Sep-98	4.8	2.4
49.4	0.5	10.480	1999.696	11-Sep-99	4.7	2.9
58.6	0.8	11.647	2000.863	11-Nov-00	5.0	4.1

Hayward Fault USGS-SFSU Afterslip Site
 67.02 km-South Grimmer Blvd.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average
0.0		0.000	1982.460	17-Jun-82	
77.7	3.6	10.978	1993.438	9-Jun-93	7.1
76.2	2.6	12.167	1994.627	17-Aug-94	6.3
103.4	1.0	13.690	1996.150	24-Feb-96	7.6
105.8	1.1	13.750	1996.210	17-Mar-96	7.7
104.1	3.5	14.188	1996.648	24-Aug-96	7.3
106.7	1.1	15.187	1997.647	24-Aug-97	7.0
106.8	0.8	16.225	1998.685	7-Sep-98	6.6
109.7	3.4	17.239	1999.699	12-Sep-99	6.4
117.8	3.0	18.403	2000.863	11-Nov-00	6.4

Hayward Fault USGS-SFSU Afterslip Site
 67.21 km-Onondaga Dr.

movement (mm)	std. dev.	# of years	year	date	mm/yr. simple average	mm/yr. simple average, after 1994.627
0.0		0.000	1982.400	26-May-82		
41.5	0.9	12.227	1994.627	17-Aug-94	3.4	
39.9	2.3	14.245	1996.645	23-Aug-96	2.8	-0.8
42.1	0.5	15.244	1997.644	23-Aug-97	2.8	0.2
41.2	0.6	16.285	1998.685	7-Sep-98	2.5	-0.1
41.2	0.6	17.299	1999.699	12-Sep-99	2.4	-0.1
41.7	1.5	18.463	2000.863	11-Nov-00	2.3	0.0

Hayward Fault USGS-SFSU Afterslip Site

68.45 km-Mission Blvd

mm/yr. simple average	std. dev.	# of years	year	date	mm/yr. simple average
0.0	1.6	0.000	1993.189	10-Mar-93	
-0.5	1.2	1.400	1994.589	3-Aug-94	-0.4
-3.6	2.4	2.458	1995.647	24-Aug-95	-1.5
4.2	1.0	2.961	1996.150	24-Feb-96	1.4
3.5	1.1	3.021	1996.210	17-Mar-96	1.2
4.0	1.0	3.459	1996.648	24-Aug-96	1.2
6.3	0.6	4.455	1997.644	23-Aug-97	1.4
12.3	1.6	5.493	1998.682	6-Sep-98	2.2
17.3	1.0	6.510	1999.699	12-Sep-99	2.7
22.7	1.8	7.674	2000.863	11-Nov-00	3.0