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Strong-Motion Accelerograms of the Southern California
Earthquake of July 8, 1986: A Quick Look

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D. Johnson, E. Etheredge, R. Forshee, J. Switzer, and R. Maley

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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards and stratigraphic nomenclature. Any use of trade names is for descriptive purposes only and does not imply endorsement by the U.S. Geological Survey.

**STRONG-MOTION ACCELEROGRAMS OF THE SOUTHERN CALIFORNIA
EARTHQUAKE OF JULY 8, 1986: A QUICK LOOK**

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A magnitude 6 ($M_L = 5.9$; CIT, $m_b = M_S = 6.0$, NEIS) earthquake located 15 km north-northwest of Palm Springs, California, triggered numerous elements of the U.S. Geological Survey's strong-motion accelerograph network in southern California. Table 1 summarizes the peak accelerations from the six nearest recording sites located between 6 and 45 km of the epicenter. The maximum horizontal accelerations were 0.61 g at White Water Trout Farm and 0.68 g at North Palm Springs. The North Palm Springs instrument also recorded a vertical acceleration of 0.78 g just a few tenths of a second after triggering. The epicentral distances to the individual stations were calculated using an epicenter of 33.95°N and 116.61°W (CIT). Figure 1 shows the six station locations and the epicenter, and Figure 2 presents copies of the six earthquake records.

These records, of course, are only a small subset of the entire set of strong-motion data that will ultimately be available for this earthquake.

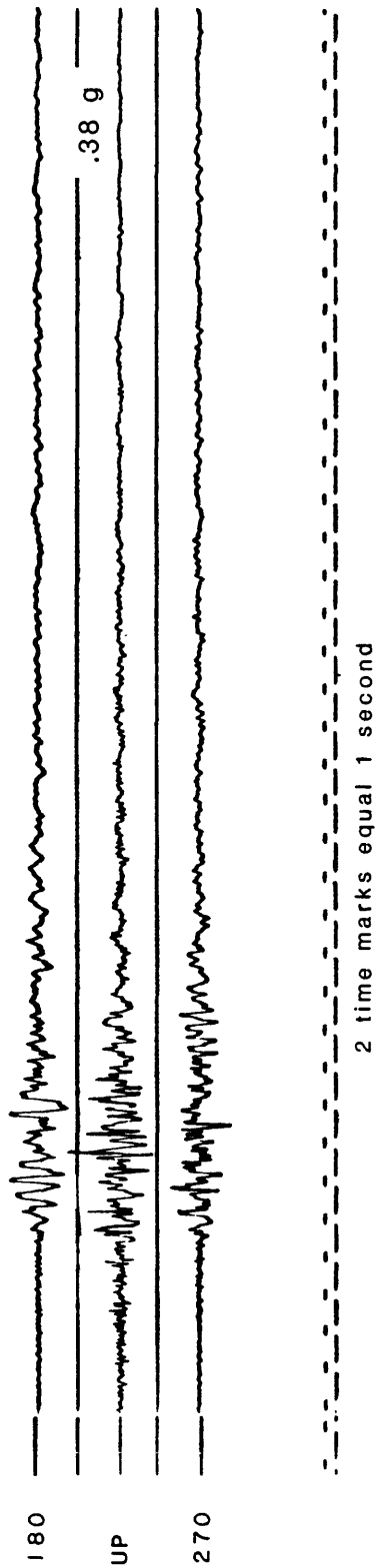
TABLE I
PRELIMINARY ACCELERATIONS FROM THE NEAREST
STRONG-MOTION STATIONS

<u>Station</u>	<u>Coordinates</u>	<u>Direction</u>	<u>Acceleration</u> (g)	<u>Epicentral</u> <u>Distance</u> (km)
Cabazon	33.92 N	270°	.21	17
	116.78 W	Up	.38	
		180°	.22	
Indio	33.75 N	315°	.11	45
	116.21 W	Up	.09	
		225°	.06	
Fun Valley	33.93 N	135°	.13	20
	116.39 W	Up	.10	
		045°	.12	
Morongo Valley	34.05 N	090°	.22	10
	116.58 W	Up	.35	
		360°	.22	
North Palm Springs	33.92 N	300°	.68	8
	116.54 W	Up	.78	
		210°	.46	
Whitewater Trout Farm	33.99 N	270°	.61	6
	116.66 W	Up	.38	
		180°	.49	

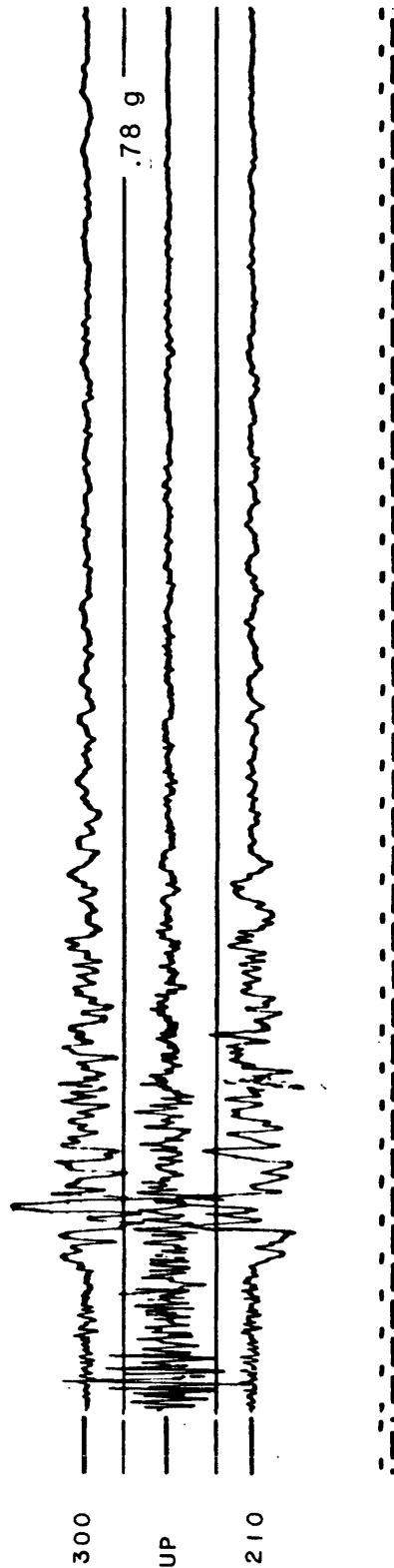
Strong-motion records.

Figure 2.

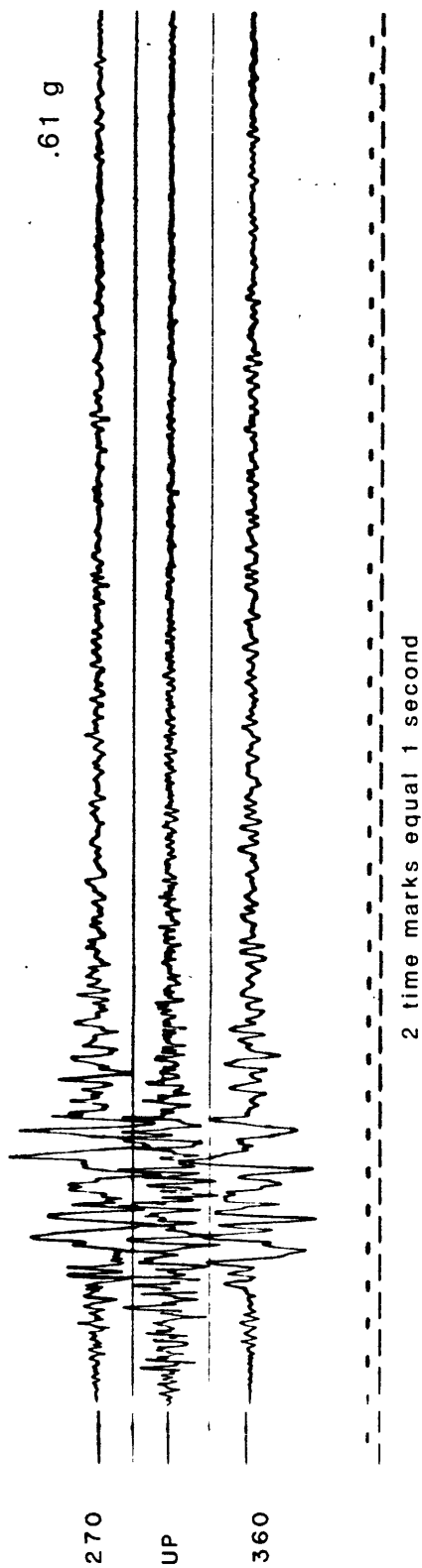
CABAZON



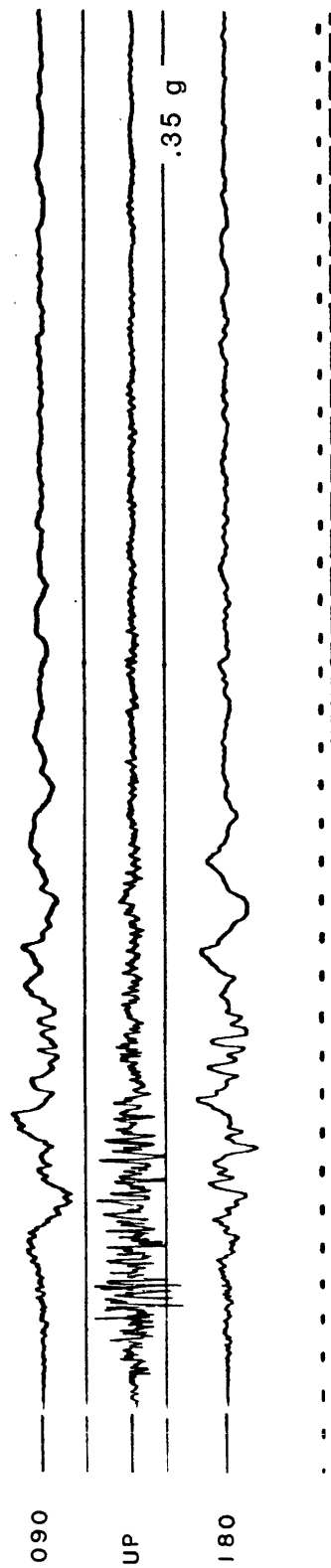
NORTH PALM SPRINGS



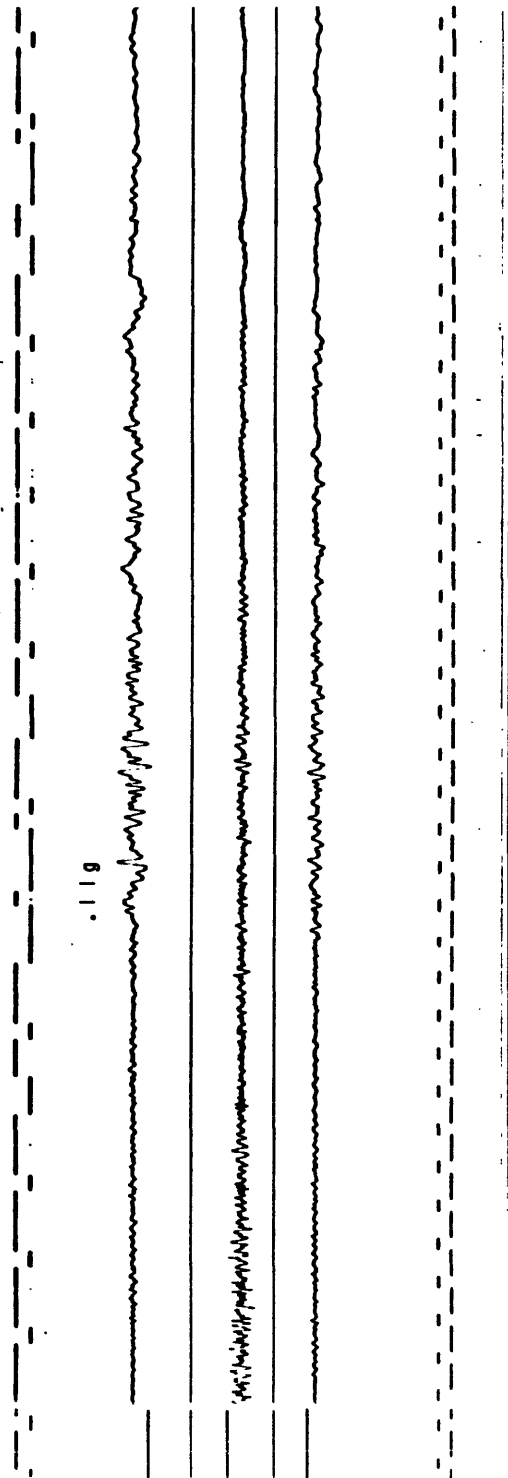
WHITEWATER TROUT FARM



MORONGO VALLEY



INDIO



FUN VALLEY

