

BRK

BERKELEY (BRK), CALIFORNIA

Established by the University of California in 1887

37° 52'4 North 122° 15'6 West Elevation 81 meters

Foundation material is Jurassic/Cretaceous Franciscan Sandstone

Dates of Operation	Type of Instrument	T ₀ sec	T ₈ sec	Component	Magnification
Apr 1887-1910	Ewing, 3 Component	5.0		NS, EW, Z	
	Ewing Duplex	5.0		Horizontal	all azimuths
	Gray-Milne Duplex			"	
15 Jun 06-10 Nov 10	Omori Tromometers	2.0		NS, EW	
30 Oct 10-Sep 61	Bosch-Omori 100kg	15.0		NS, EW, Z	80 max
	Wiechert 80kg	6.0		Z	80 max
28 Aug 30-01 Feb 65	Wilip-Galitzin	12.0	12.0	NS, EW, Z	1000 at T ₀ 600 at T ₀
	Wood-Anderson**	1.0		NS, EW	3000 max
28 Aug 30-Jul 62	Benioff 100kg	1.0	0.4	Z	30,000 at T ₀
19 Oct 33-Sep 62	Sprengnether, DH	2.0	2.0	Z	
Jan 47-Mar 47	Slichter	1.0		Z	
Jan 48 to 1950	Slichter	1.0		EW	
Mar 48 to 1950	#Benioff 100kg	1.0	0.2	Z	25,000 at T ₀
01 May 59 to date	Benioff 100kg	1.0	8.0	Z	Variable
21 Jun 47 to date	100x torsion	0.8		NS, EW	100 max
Jan 68 to date	4x torsion	0.8		NS, EW	4 max
19 Jan 62 to date	Press-Ewing	30.0	90.0	NS, EW, Z	
01 May 59-29 Aug 62	Press-Ewing	15.0	30.0	Z	1,000 at T ₀
Aug 64 to date	*Press-Ewing***	30.0	Broadband	N45°W, N45°E, Z	
19 Jun 64 to date					
Mar 64-30 Mar 71	Press-Ewing ULP****	45.0	300.	N45°E	700 at T ₀

Recorded at Berkeley on Develocorder.

* Recorded at Berkeley on magnetic tape.

** Changed in 1954 to T = 0.8 sec, Mag 2,800 max. Moved to BKS Jul 62.

*** Before 02 Aug 65 NS, EW, Z.

**** Before 22 Apr 68 EW

LLA

LLANADA (LLA), CALIFORNIA

Established by the University of California in 1961
on the Charles McCullough Ranch

36° 37!0 North 120° 56!6 West Elevation 475 meters

Foundation material is Quaternary Alluvium overlying Sandstone

<u>Dates of Operation</u>	<u>Type of Instrument</u>	<u>T_o sec</u>	<u>T_g sec</u>	<u>Component</u>	<u>Magnification</u>
08Sep61 to date	#Benioff 14.7kg	1.0	0.2	Z	75,000 at T _o

MHC

LICK OBSERVATORY, MOUNT HAMILTON (MHC), CALIFORNIA

Established by the University of California in 1887

37° 20!5 North 121° 38!5 West Elevation 1282 meters

Foundation material is Jurassic-Cretaceous Franciscan
Graywacke and Greenstone

<u>Dates of Operation</u>	<u>Type of Instrument</u>	<u>T_o sec</u>	<u>T_g sec</u>	<u>Component</u>	<u>Magnification</u>
24Apr1887-23Mar11	Ewing 3 Component	5.0		NS, EW, Z	
24Apr1887-23Mar11	Ewing Duplex	5.0		Hor all Azimuths	
23Mar11-30Sep30	Wiechert Hor 160kg	4 to 8**		NS, EW	80 max
23Mar11-30Sep30	Wiechert Vert 80kg	4 to 8**		Z	80 max
08Apr28 to date	Wood-Anderson***	1.0		SN, EW	3,000 max
12Feb48-Jun63	Benioff 100kg	1.0	0.4	Z	100,000 at T _o
May62 to date	#*Benioff 14.7kg	1.0	0.2	Z	85,000 at T _o
08Nov67 to date	*Willmore	3.0	0.2	N45°E	

** During this period the free period was not constant. For precise information refer to the Bulletin of the Seismographic Station.

*** Changed in 1954 to T_o=0.8 sec, Magnification 2,800 max.

MIN

MT. LASSEN, MINERAL (MIN), CALIFORNIA

Established by the University of California in 1939
in cooperation with the Lassen Volcanic National Park

40°20.7'North 121°36.3'West Elevation 1495 meters

Foundation material is Pliocene Volcanic Debris

<u>Dates of Operation</u>	<u>Type of Instrument</u>	<u>T_o sec</u>	<u>T_g sec</u>	<u>Component</u>	<u>Magnification</u>
02Jan39 to date	Wood-Anderson	0.8		EW	2,800 max
Mar47 to date	Wood-Anderson	0.8		SN	2,800 max
06Feb48 to date	Benioff 100kg	1.0	0.4	Z	60,000 at T _o
08Oct68-30Jun71	#Benioff 14.7kg	1.0	0.5	Z	90,000 at T _o

Wieder

bosch

10/17/1922	5-40--0.	36.83	121.42	D
11/ 4/1922	3-19--0.	40.83	124.17	D
11/ 7/1922	15- 0-0.0	40.83	124.17	D
12/ 4/1922	16-57--0.	39.00	122.92	D
12/ 7/1922	-0--0--0.	37.75	122.50	D
12/29/1922	11--0--0.	35.67	120.67	D
12/29/1922	12-11- 0.0	35.67	120.67	D
1/11/1923	4-29--0.	41.50	120.17	D
1/15/1923	22- 0--0.	38.83	123.00	D
1/18/1923	4--0--0.	40.42	120.67	D
1/21/1923	23-15--0.	36.83	121.42	D
1/22/1923	9- 4-18.	40.50	124.50	C 7.2 71
2/ 3/1923	10--0--0.	40.25	124.17	D
2/ 4/1923	11-30--0.	40.25	124.17	D
2/ 8/1923	12--0--0.	40.25	124.17	D
2/ 9/1923	11-15--0.	40.83	124.17	D
3/28/1923	22-13--0.	40.83	124.17	D
4/ 1/1923	4-19--0.	38.42	122.75	D
4/15/1923	7-15--0.	39.25	121.00	D
4/29/1923	2-31-29.	41.00	125.00	C 5.0
5/ 4/1923	22-45--0.	35.25	120.67	D
5/ 8/1923	5- 2--0.	35.75	120.33	D
6/16/1923	20-40--0.	35.67	120.67	D
6/25/1923	13-21--0.	35.25	120.67	D
8/25/1923	11-21--0.	36.58	121.67	D
9/ 2/1923	6-23--0.	37.42	122.17	D
9/ 3/1923	12-14--0.	40.83	124.17	D
9/ 6/1923	12--0--0.	38.42	122.75	D
9/17/1923	9-26--0.	40.83	124.17	D
9/19/1923	22-54--0.	37.00	121.83	D
10/24/1923	14-30--0.	39.00	122.92	D
10/27/1923	18-47- 0.0	39.00	122.92	D
11/ 8/1923	20-39--0.	38.42	122.75	D
12/ 4/1923	20-50--0.	39.42	121.08	D
1/ 4/1924	21-40--0.	36.67	121.67	D
1/ 9/1924	10-21--0.	40.83	124.17	D
2/ 9/1924	11-40--0.	37.33	121.92	D
2/ 9/1924	11-33--0.	36.58	121.67	D
3/ 9/1924	11-33--0.	36.58	121.67	D
4/ 3/1924	23-54--0.	37.33	121.67	D

F III HOLLISTER.
 F III EUREKA. ORIGIN PROBABLY AT SEA.
 F III AT EUREKA.
 F III LAKEPORT.
 F SAN FRANCISCO. NIGHT. QUESTIONABLE.
 F III PASO ROBLES.
 F III PASO ROBLES.
 F NORTHEASTERN CALIFORNIA. CENTER PROBABLY IN LAKE COUNTY, OREGON. REPORTED FROM CEDARVILLE, ALTURAS (WHERE PLASTER WAS DISLODGED), AND SUSANVILLE.
 F CLOVERDALE.
 F III SUSANVILLE. MAY REFER TO LAKE COUNTY, OREGON QUAKE OF 1/11/23.
 F HOLLISTER.
 F IX SUBMARINE, OFF CAPE MENDOCINO. VIII-IX AT UPPER MATTOLE, PETROLIA, DYERVILLE, AND PEPPERWOOD. VI-VIII AT FERDALE, VI-VI AT WILLOWS, RED SCOTIA, LOLETA, FORTUNA, AND ALTON. VI-VII AT EUREKA.
 BLUFF, AND ORLAND.
 F UPPER MATTOLE. AFTERSHOCK OF 1/22.
 F UPPER MATTOLE. AFTERSHOCK OF 1/22.
 F UPPER MATTOLE. AFTERSHOCK OF 1/22.
 F II EUREKA. AFTERSHOCK OF 1/22.
 F III EUREKA. AFTERSHOCK OF 1/22.
 F II SANTA ROSA.
 F NEVADA CITY.
 AT SEA, WEST OF CAPE MENDOCINO. NOT REPORTED FELT.
 F V SAN LUIS OBISPO. 2 SHOCKS, SECOND II.
 F II CHOLAME.
 F IV PASO ROBLES. DURATION 15-20 SECONDS.
 F II SAN LUIS OBISPO.
 F V SPRECKELS, DURATION 30 SECONDS. III+ AT SALINAS. FELT ON MONTEREY PENINSULA.
 F III STANFORD UNIVERSITY.
 F IV EUREKA.
 F III SANTA ROSA.
 F IV EUREKA.
 F VI CORRALITOS, GOODS KNOCKED FROM SHELVES AS FRAME BUILDING JERKED AND SWAYED. FELT AT SAN FRANCISCO AND OAKLAND ON NW, AND NEARLY AS FAR SE AS SAN BENITO. NOT FELT EAST OF MT. HAMILTON RANGE ON MONTEREY PENINSULA.
 F II LAKEPORT.
 F IV AT LAKEPORT.
 F III SANTA ROSA.
 F IV CAMPTONVILLE, DURATION 60 SECONDS. AT QUINCY AT 21-05, DURATION 10 SECONDS.
 F III SALINAS.
 F IV EUREKA.
 I SANTA CLARA.
 F V SPRECKELS. III AT SALINAS. FELT AT SANTA CLARA. ORIGIN NEAR LOMA PRIETA, IN SAN ANDREAS FAULT REGION.
 F CALAVERAS VALLEY. ORIGIN NOT FAR FROM MT.

4/ 4/1924	1-55--0.	37.75	119.58	D
4/11/1924	6-12--0.	37.67	122.08	D
4/15/1924	21-11--0.	37.33	121.67	D
4/22/1924	10- 8--0.	37.33	121.83	D
4/30/1924	7-56--0.	37.83	122.25	D
5/26/1924	11- 5--0.	36.67	121.67	D
6/ 6/1924	19- 2--0.	37.33	121.67	D
6/20/1924	4--0--0.	40.83	124.17	D
6/20/1924	4-30--0.	40.25	124.17	D
6/20/1924	13-20--0.	40.25	124.17	D
7/ 1/1924	23-55--0.	37.33	121.67	D
7/ 6/1924	17-48--0.	38.42	122.75	D
7/18/1924	3-26--0.	40.83	124.17	D
9/ 1/1924	20-16--0.	38.42	122.75	D
9/ 7/1924	13-30--0.	40.83	124.17	D
11/13/1924	6-23--0.	37.17	122.00	D
12/28/1924	4-21--0.	36.67	121.67	D
12/30/1924	7-27--0.	37.42	122.17	D
12/30/1924	7-50--0.	36.67	121.67	D
1/26/1925	5-46--0.	40.83	124.17	D
2/10/1925	9- 5--0.	37.50	122.33	D
3/ 1/1925	2-50--0.	40.83	124.17	D
3/ 3/1925	11-55--0.	40.83	124.17	D
3/24/1925	18- 1--0.	36.67	121.67	D
3/31/1925	5-47--0.	39.33	120.33	D
3/31/1925	6- 5--0.	39.33	120.33	D
5/19/1925	13- 4--0.	38.42	122.75	D
6/ 4/1925	17- 2-52.	41.50	125.00	C 6.0
6/29/1925	15-20--0.	35.25	120.67	D
7/19/1925	19-24--0.	37.25	122.00	D
7/26/1925	23-50--0.	40.83	124.17	D
8/21/1925	11-14--0.	38.00	118.50	D

HAMILTON. V-VI AT LOS GATOS AND SAN JOSE. IV AT HAYWARD. III AT SAN FRANCISCO (3 SHOCKS), AND SALINAS. ALSO FELT AT WRIGHT'S AND STOCKTON.
 F II YOSEMITE VALLEY.
 F II HAYWARD.
 F SANTA CLARA AND MT. HAMILTON.
 F III SAN JOSE. ORIGIN ABOUT 7 MILES NW OF MT. HAMILTON.
 F BERKELEY. RATTLED WINDOWS.
 F II SALINAS.
 F IV ORIGIN ABOUT 4 MILES FROM MT. HAMILTON. II IN SAN FRANCISCO.
 F II EUREKA.
 F UPPER MATTOLE. POSSIBLE SAME AS ABOVE.
 F UPPER MATTOLE.
 F IV SAN JOSE. MAY BE MISDATED REPORT OF SHOCK OF APRIL 3.
 F II SANTA ROSA.
 F IV EUREKA.
 F III SANTA ROSA.
 F III EUREKA.
 F IV SANTA CRUZ MOUNTAINS. N OF SANTA CRUZ. FELT FROM BERKELEY TO SALINAS. FELT IN LOS GATOS.
 F VI SALINAS. ORIGIN POSSIBLY ON SAN ANDREAS FAULT NEAR SAN JUAN. HIGHEST INTENSITY IN SALINAS, CONSIDERABLE MINOR DAMAGE TO PLASTERING. FELT FROM KING CITY TO PALO ALTO, AND W OF MT. HAMILTON RANGE.
 F IV SAN FRANCISCO PENINSULA. STRONGEST BETWEEN PALO ALTO AND REDWOOD CITY. FELT FROM SAN FRANCISCO TO MORGAN HILL. FELT AT HAYWARD.
 F III SALINAS.
 F II EUREKA.
 F V CRYSTAL SPRINGS LAKE. IV AT HAYWARD. FELT IN SAN FRANCISCO AND OAKLAND.
 F IV EUREKA. REPORTED AT 2-55 AT UPPER MATTOLE.
 F III EUREKA. FELT AT UPPER MATTOLE.
 F II SALINAS.
 F VI NEAR TROY, BETWEEN EMIGRANT GAP AND DONNER LAKE. 10 OR 11 OTHER SHOCKS UNTIL 7-50, INCLUDING THE ONE FOLLOWING.
 F V NEAR LAKEVIEW OR EDEN.
 F II SANTA ROSA.
 F AT SEA, OFF CAPE MENDOCINO. NOT REPORTED.
 FFLY.
 F III SAN LUIS OBISPO.
 F V NEAR EVERGREEN. ORIGINATED AT DEPTH OF 20 MILES. FELT FROM SANTA ROSA TO SALINAS, BUT NEVER ATTAINED INTENSITY MUCH GREATER THAN III. HIGHEST INTENSITY IN LOS GATOS-SARATOGA REGION, 10 MILES SW OF EPICENTER.
 F III EUREKA AND WASHINGTON.
 F VI CALIFORNIA-NEVADA BOUNDARY SW OF MINA, NEVADA. VI AT MINA AND CANDELARIA, NEVADA. 2 AFTERSHOCKS FELT AT MINA, 4 AT LITTLE SUMMIT, NEVADA. III AT BODIE AND MONO LAKE, CALIFORNIA.