STATE OF CALIFORNIA—THE RESOURCES AGENCY PETE WILSON, Governor

DEPARTMENT OF CONSERVATION
DIVISION OF MINES AND GEOLOGY
OFFICE OF STRONG MOTION STUDIES
630 BERCUT DRIVE
SACRAMENTO, CA 95814-0189
(PHONE 916—322-3105)

Plots To Accompany Tapes:
LOMAPRIETA89-IB1, -IB2, -IB3 (Phase 1 data)
LOMAPRIETA89-IIB1, -IIB2, -IIIB (Phases 2 & 3 data)

Processed Strong-Motion Data from the Loma Prieta Earthquake of 17 October 1989

Building Records

California Strong Motion Instrumentation Program (CSMIP)

Report No. OSMS 91-07

The attached plots for the records from the 30 buildings are excerpted from the forthcoming CSMIP report on the processed strong-motion data from the 1989 Loma Prieta earthquake.

The plots for these buildings are arranged as follows:

No.	Building Name	No. of Channels
1.	Watsonville - 4-story Commercial Bldg.	13
2.	Hollister - 1-story Warehouse & Reference Free Field	16
3.	Gilroy - 2-story Hist. Commercial Bldg.	6
4.	San Jose - 3-story Office Bldg. & Reference Free Field	13
5.	Saratoga - 1-story School Gym	9
6.	San Jose - 10-story Residential Bldg.	13
7.	San Jose - 10-story Commercial Bldg.	11
8.	San Jose - 13-story Goverment Office Bldg.	22
9.	Palo Alto - 2-story Office Bldg.	7
10.	Redwood City - 3-story School Office Bldg.	6
11.	Belmont - 2-story Office Bldg.	7
12.	San Bruno - 9-story Goverment Office Bldg.	16
13.	San Bruno - 6-story Office Bldg.	13
14.	South San Francisco - 4-story Hospital	11
15.	San Francisco - 6-story School Bldg.	13
16.	San Francisco - 18-story Commercial Bldg.	13
17.	San Francisco - 47-story Office Bldg.	18
18.	Milpitas - 2-story Industrial Bldg.	13
19.	Hayward - 6-story Office Bldg.	13
20.	Hayward - 13-story School Office Bldg.	13
21.	Hayward - 4-story School Bldg.	16
22.	Oakland - 24-story Residential Bldg.	13
23.	Oakland - 2-story Office Bldg.	10
24.	Piedmont - 3-story School Bldg. & Reference Free Field	14
25.	Berkeley - 2-story Hospital	12
26.	Richmond - 3-story Goverment Office Bldg. & Reference Free Field	16
27.	Richmond - 3-story Office Bldg.	12
28.	Walnut Creek - 10-story Commercial Bldg.	16
29.	Pleasant Hill - 3-story Commercial Bldg.	12
30.	Concord - 8-story Residential Bldg.	13

The set of plots for each building is identified by the above building number at the upper corner of each page. For each building, four sets of plots are presented in the following order:

1. Phase 1 (Vol. 1) data: uncorrected accelerations. Acceleration for the first 30 seconds is plotted with a common amplitude scaling factor for all channels. Eight channels are plotted on one page. The full processed length is 30 seconds for most buildings. The plots for the data beyond 30 seconds are also included for long duration records. For buildings with a reference free-field, the difference of recorder starting times is given on the plot of the reference free-field record.

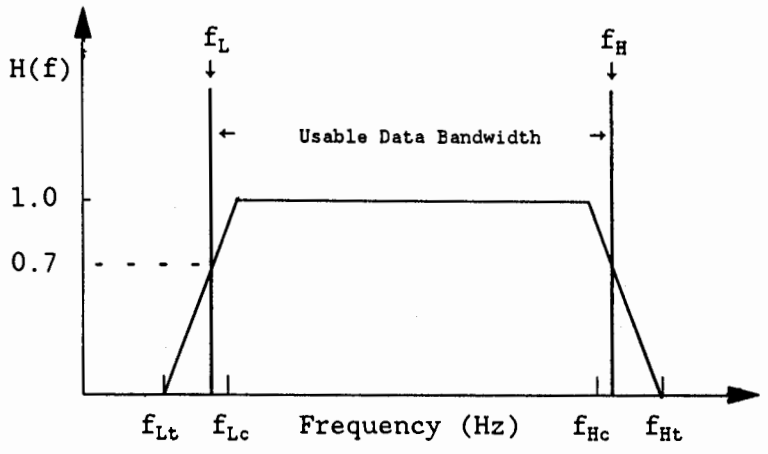
2. Phase 2 (Vol. 2) data: instrument and baseline-corrected acceleration, velocity and displacement. The data for the first 30 seconds are plotted with equal scaling for all channels unless otherwise specified. Three channels are plotted on each page. The plots for the data beyond 30 seconds are also included in the case of long duration records. The usable frequency bandwidth of the Phase 2 data, as determined during processing, is indicated on the plots.

3. Phase 3 (Vol. 3) data: response spectra. The pseudo-velocity spectra (PSV), the pseudo-acceleration spectra (PSA), the displacement spectra (SD) for 0%, 2%, 5%, 10%, and 20% dampings are presented on a tripartite logarithmic plot for each channel. The spectra are plotted for periods within the usable data bandwidth.

4. Phase 3 (Vol. 3) data: response spectra. The absolute acceleration spectra (SA) for 0%, 2%, 5%, 10% and 20% dampings are plotted against period with linear-linear scaling.

DEFINITION OF USABLE DATA BANDWIDTH

The filter bands for each record are indicated on the plots for the Phase 2 and Phase 3 data. In standard processing, the digitized data are processed and filtered using Ormsby filters. The data are first low-pass filtered using a high-frequency filter with a corner frequency of 23 Hz and a roll-off termination frequency of 25 Hz. Then the data are high-pass filtered using a low-frequency filter with a corner frequency of 0.07 Hz and a roll-off termination of 0.05 Hz. Therefore, the Phase 2 data is the result of the digitized data being filtered by the bandpass filter H(f) with ramps as shown in the figure:



The Usable Data Bandwidth is defined as the band between frequencies f_H and f_L, where f_H and f_L are the -3 dB points on the high-frequency and low-frequency ramps, respectively. The value of H(f) is approximately equal to 0.7 for -3 dB (see Notes). The user should only use these data for analyses within this bandwidth.

Notes:

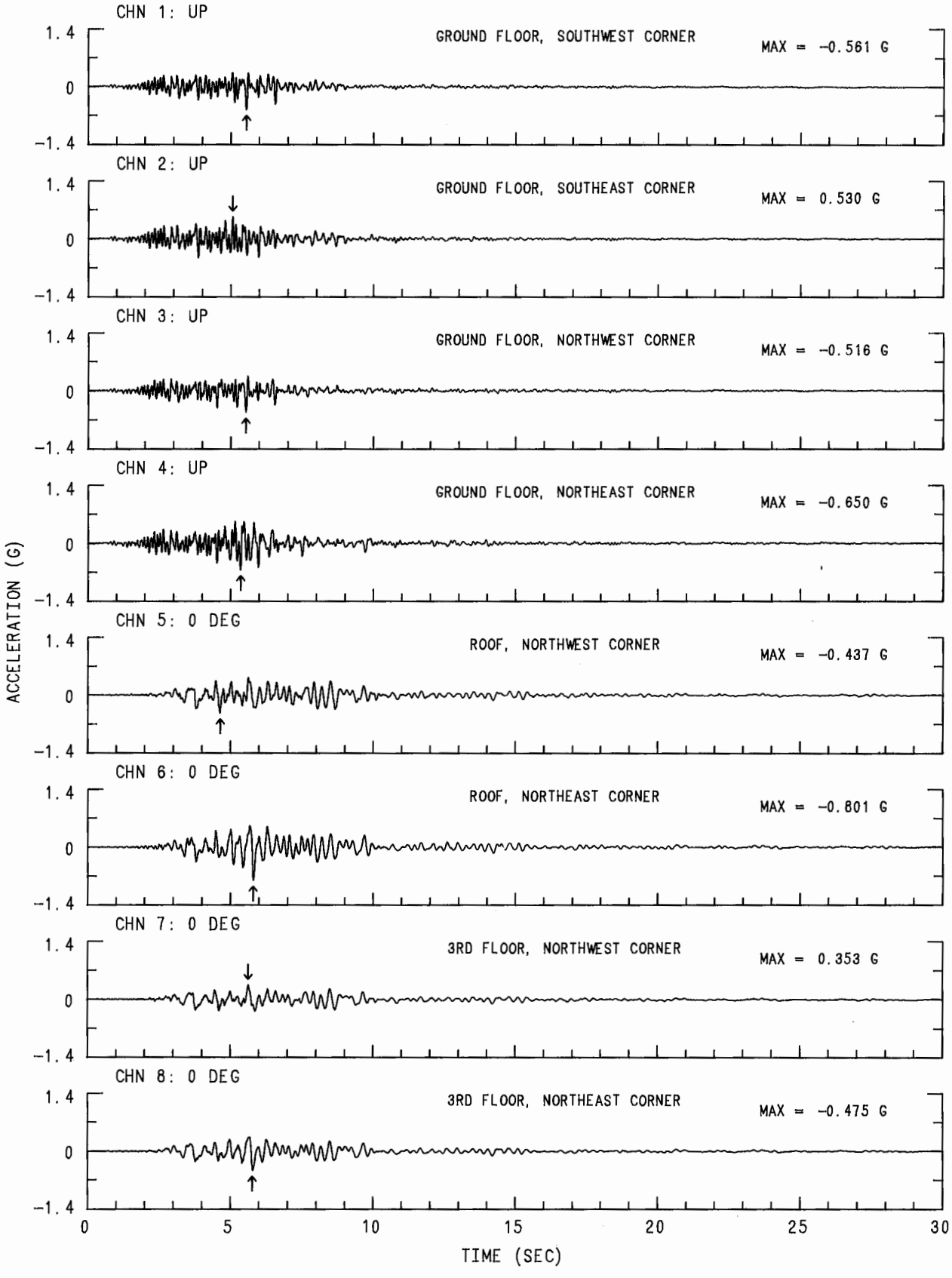
1) The values of f_H and f_L can be calculated from the corner frequencies (f_{Hc}, f_{Lc}) and the roll-off termination frequencies (f_{Ht}, f_{Lt}) used in the processing by using the formulas $f_H = f_{Hc} + 0.3 * (f_{Ht} - f_{Hc})$ and $f_L = f_{Lc} - 0.3 * (f_{Lc} - f_{Lt})$. For example, the Usable Data Bandwidth for data bandpass-filtered with ramps at 0.30 to 0.60 Hz and 23.0 to 25.0 Hz is 0.51 Hz to 23.6 Hz (0.042 to 2.0 seconds period).

2) It is common in signal processing to plot 20 $\log_{10}[H(f)]$ versus frequency, and express the ordinate value in decibels (abbreviated dB). Accordingly, 0 dB corresponds to a value of H(f) equal to 1; 20 dB is equivalent to H(f) = 10, and -20 dB corresponds to H(f) = 0.1. Thus, at the -3 dB frequency point, the amplitude of the transfer function, H(f) is reduced to 0.7, while the power transmitted by the filter, $H^2(f)$, is reduced to 0.5.

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WATSONVILLE – 4–STORY COMMERCIAL BLDG.: CSMIP S/N 459

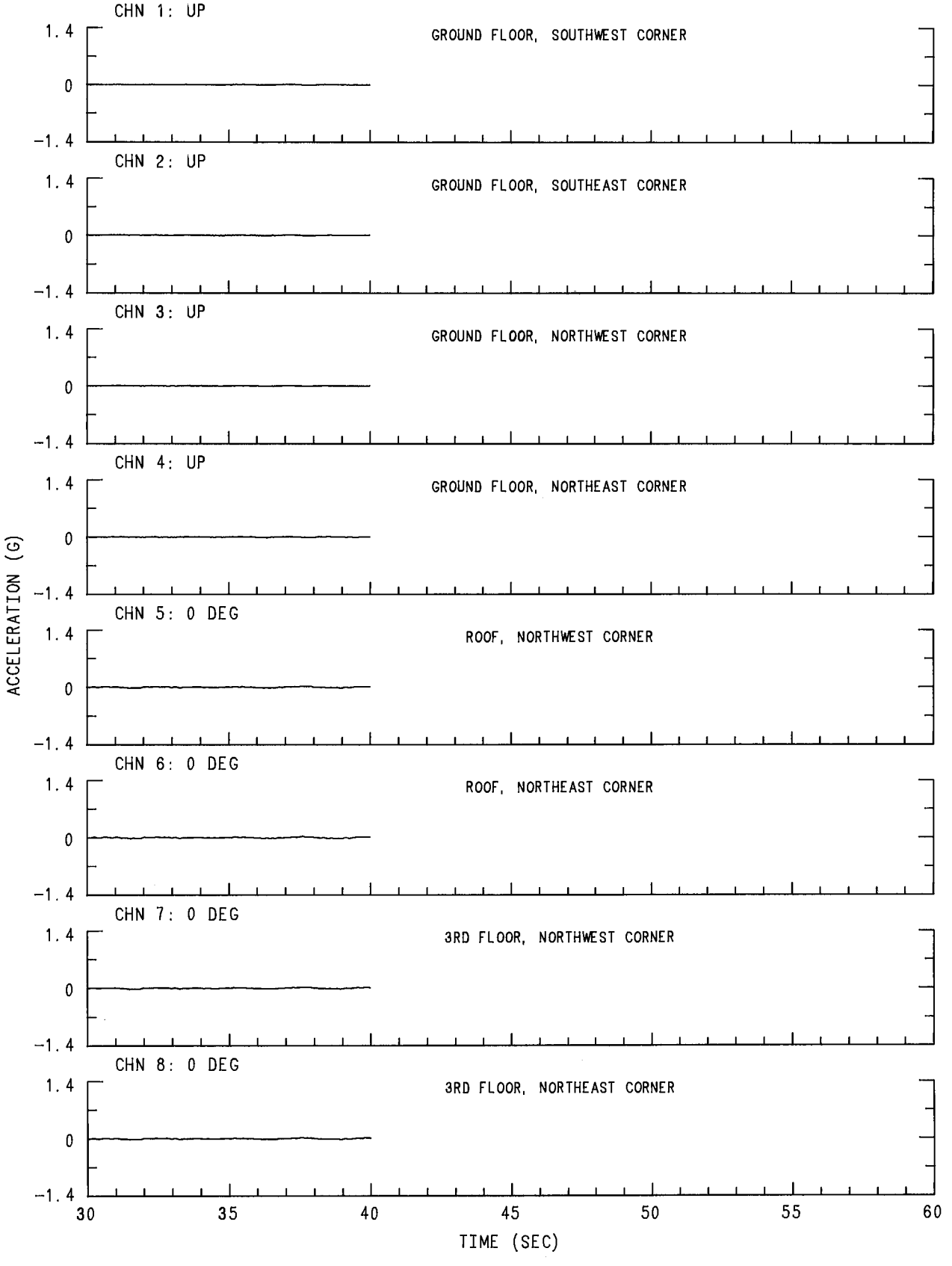
PHASE 1 ACCELERATION. RECORD ID: 47459–C0215–89291.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

PHASE 1 ACCELERATION. RECORD ID: 47459-C0215-89291.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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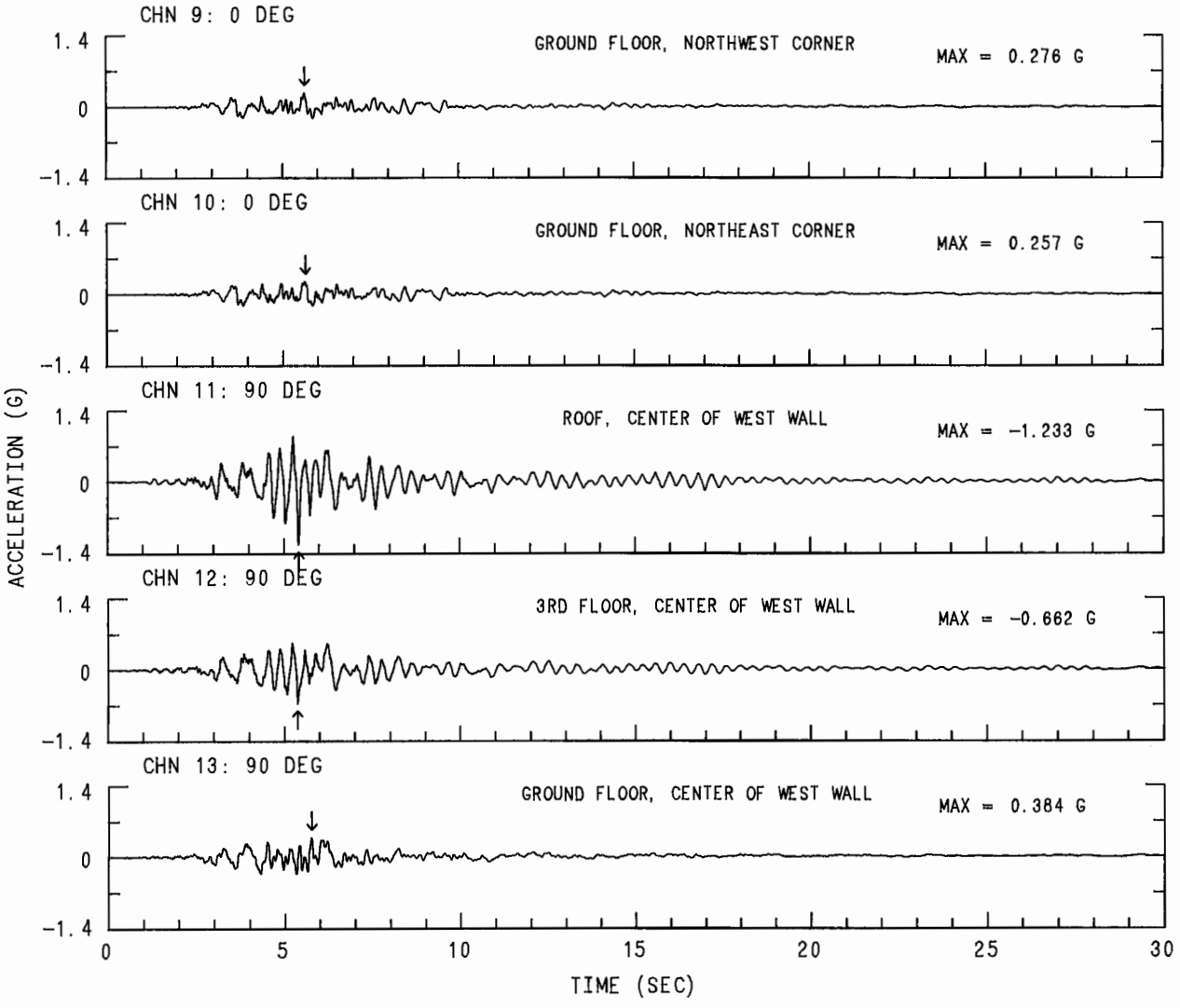
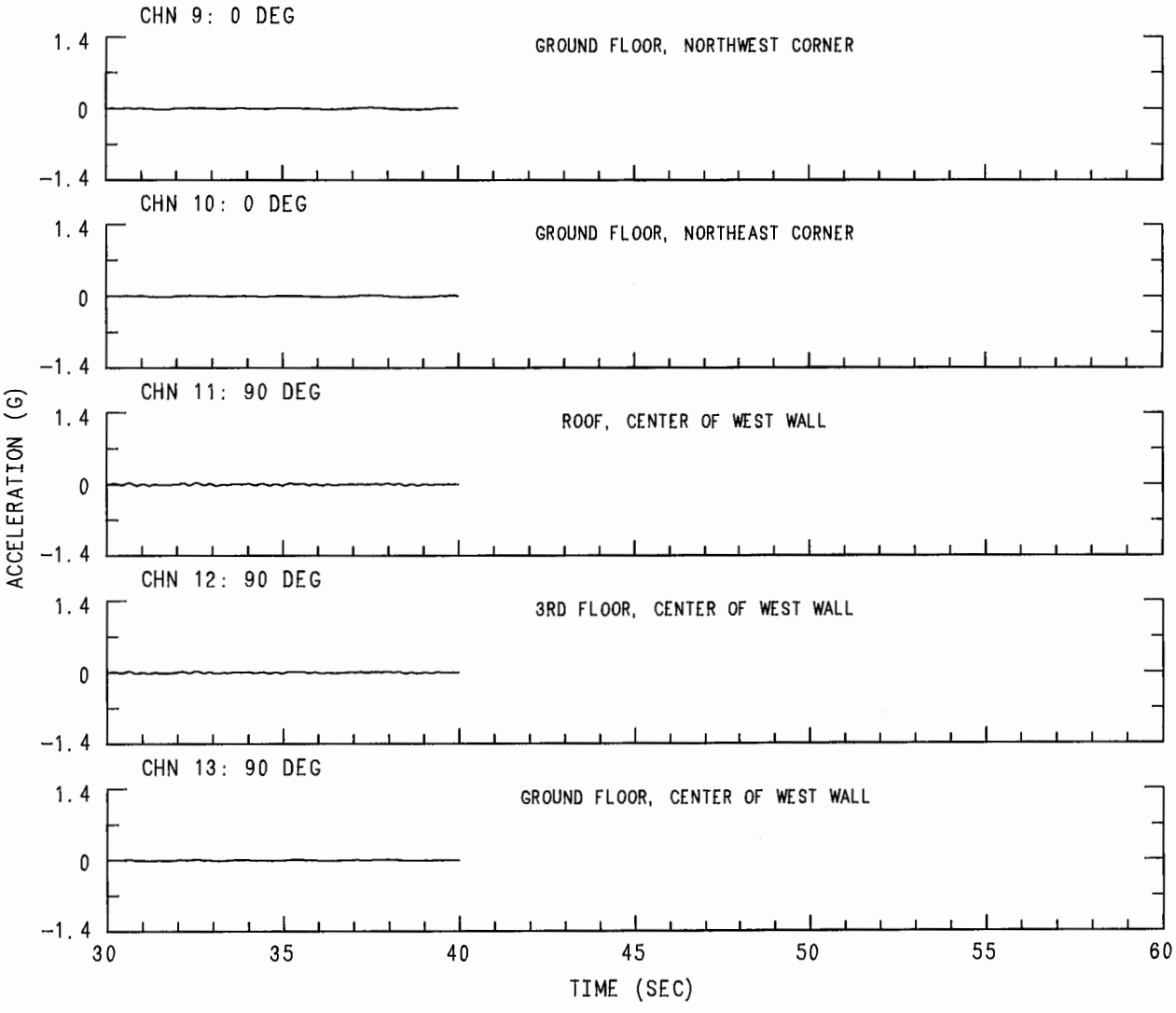
PHASE 1 ACCELERATION. RECORD ID: 47459-C0215-89291.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

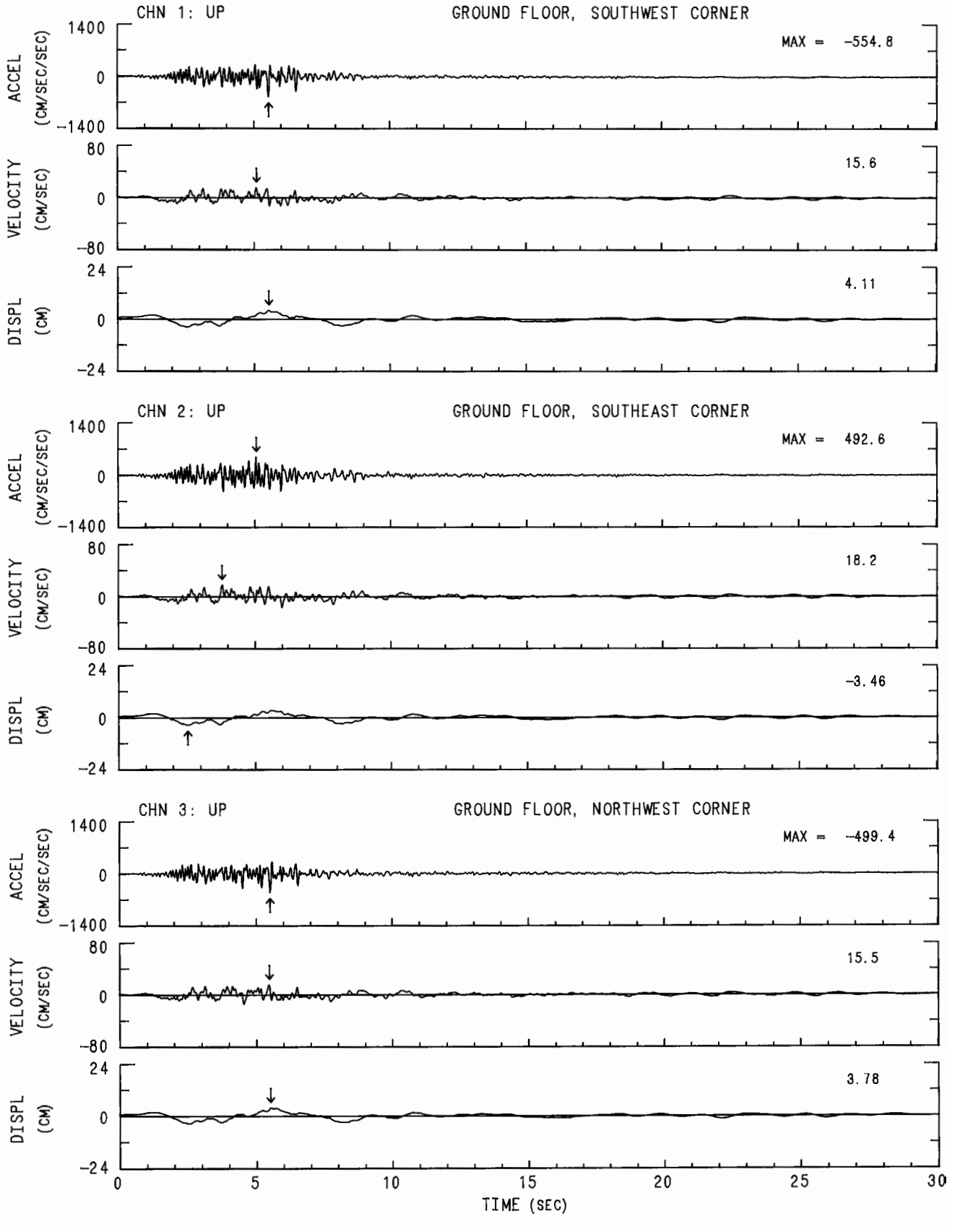
WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

PHASE 1 ACCELERATION. RECORD ID: 47459-C0215-89291.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE – 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 47459-C0215-89291.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE – 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
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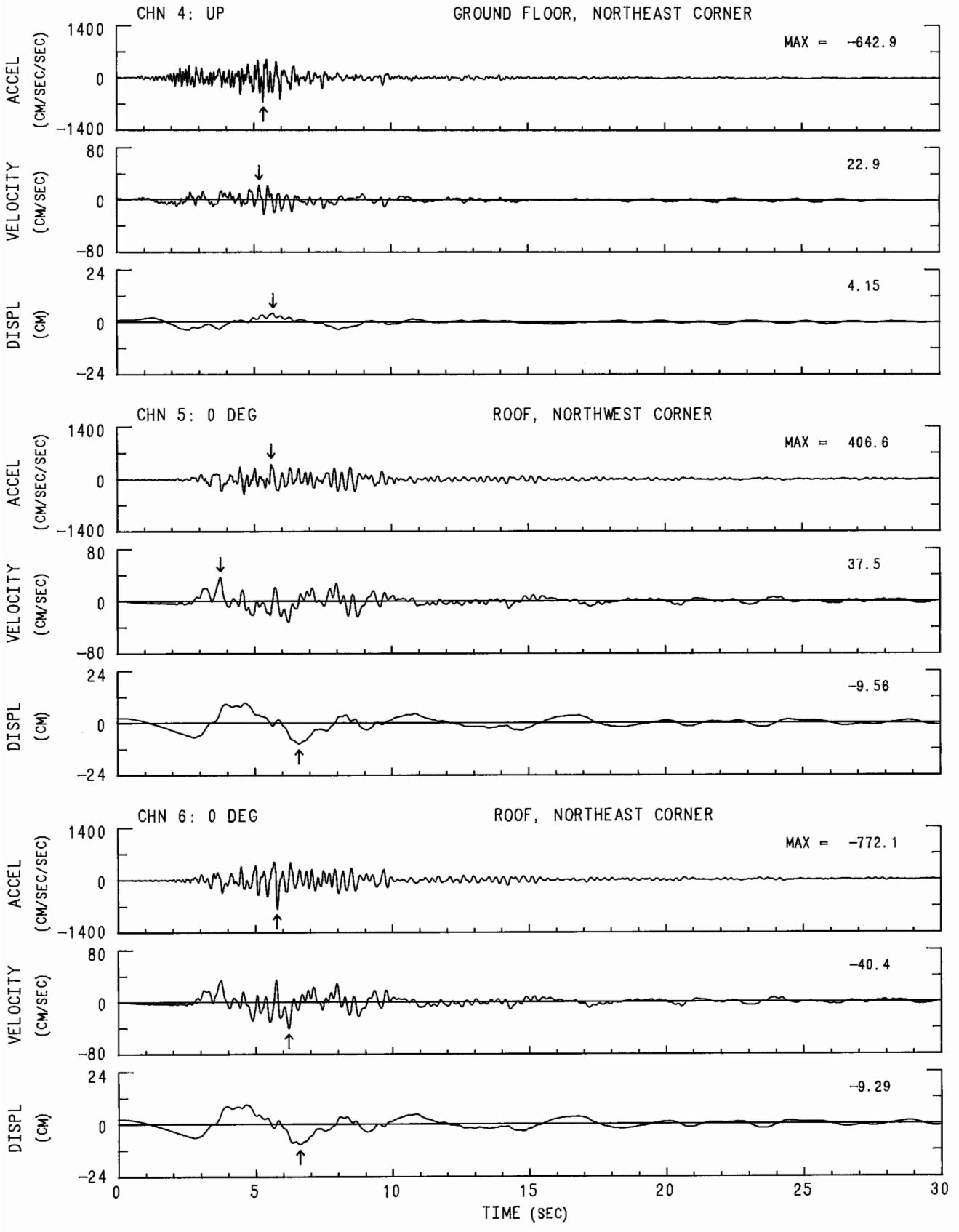

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE – 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

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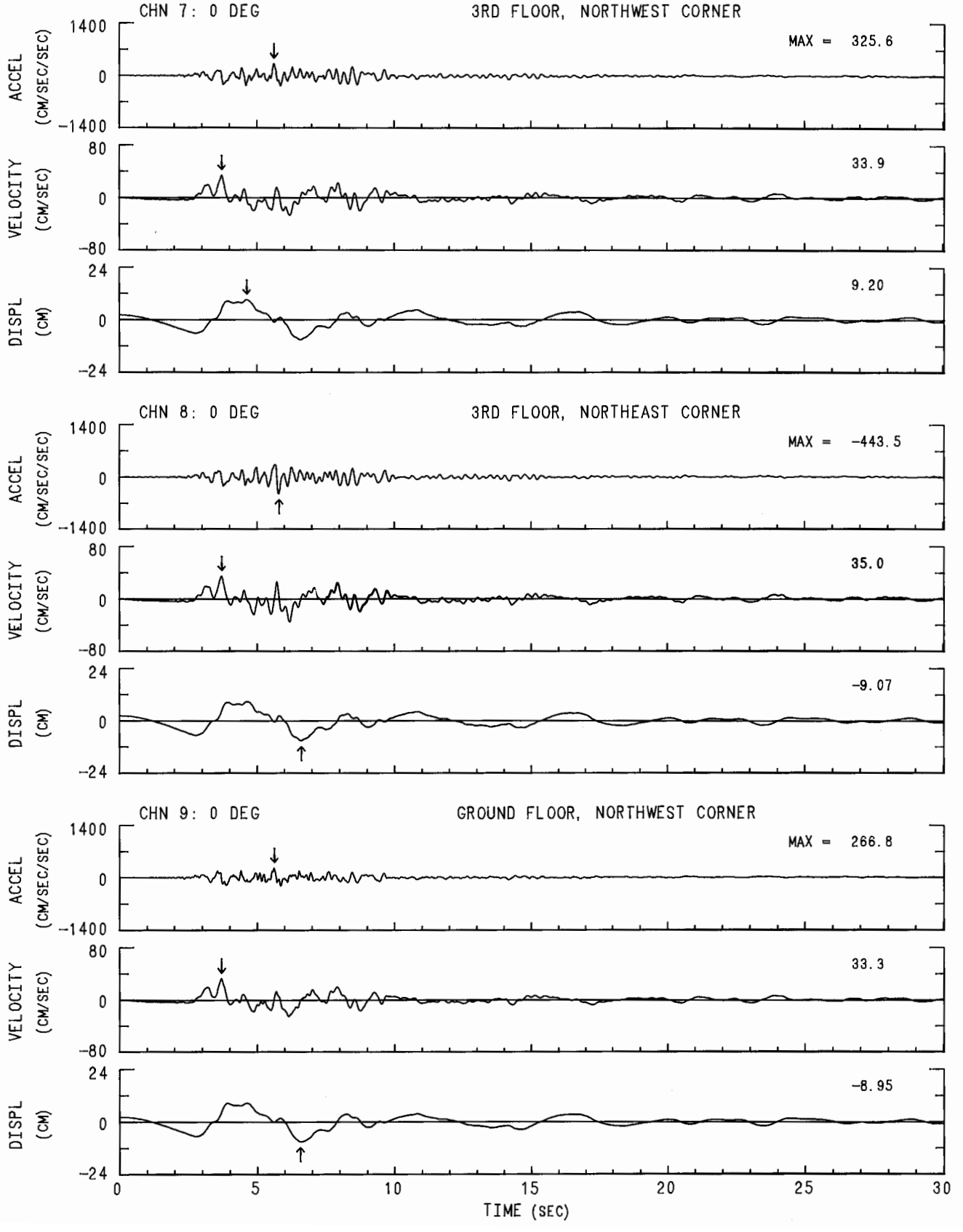

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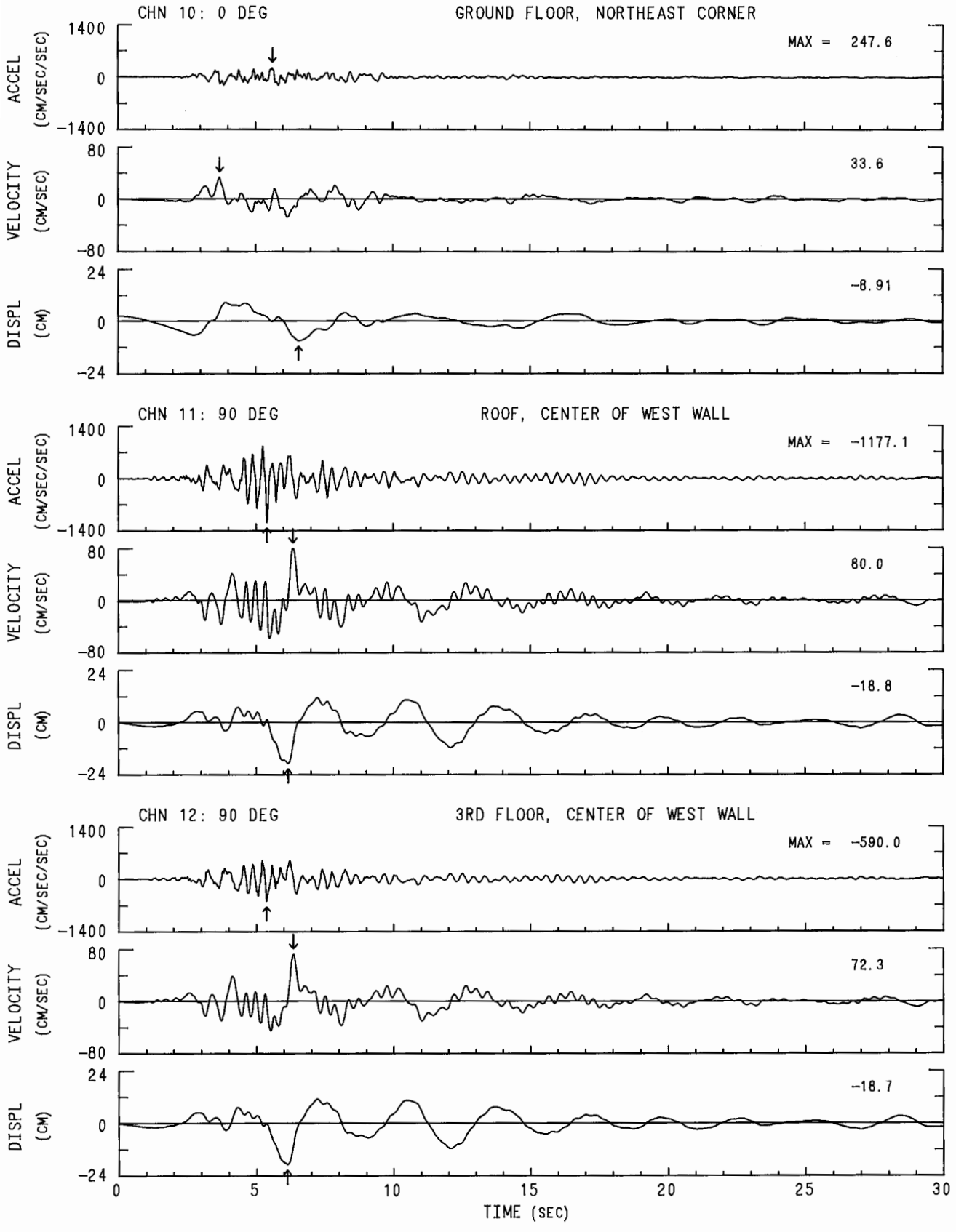
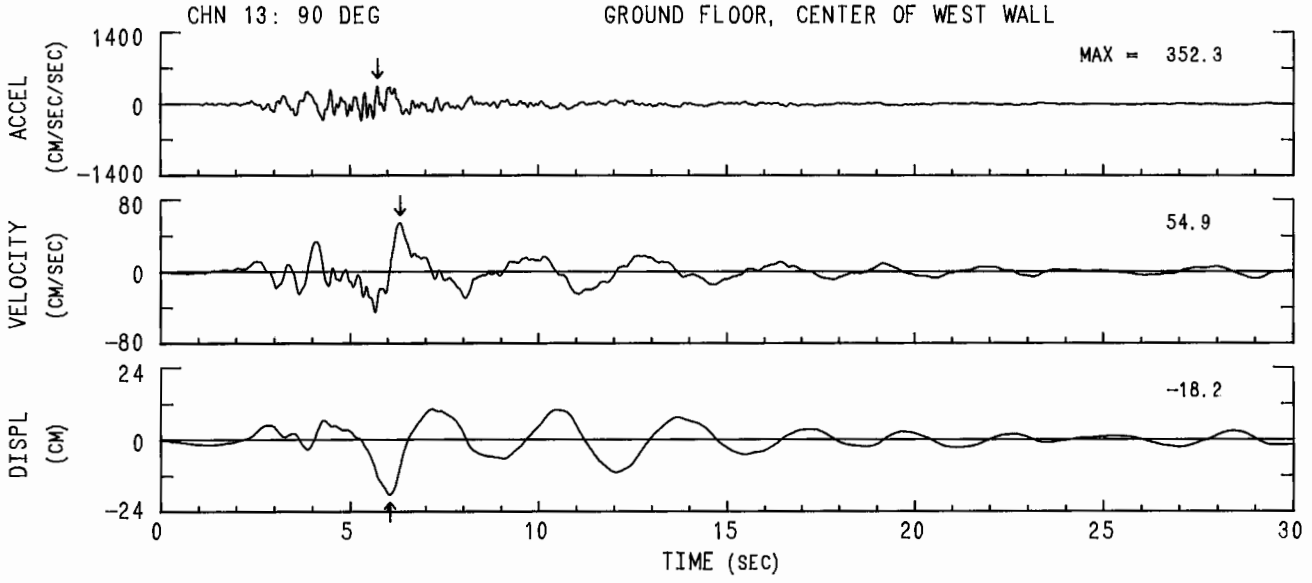


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 47459-C0215-89291.01



WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

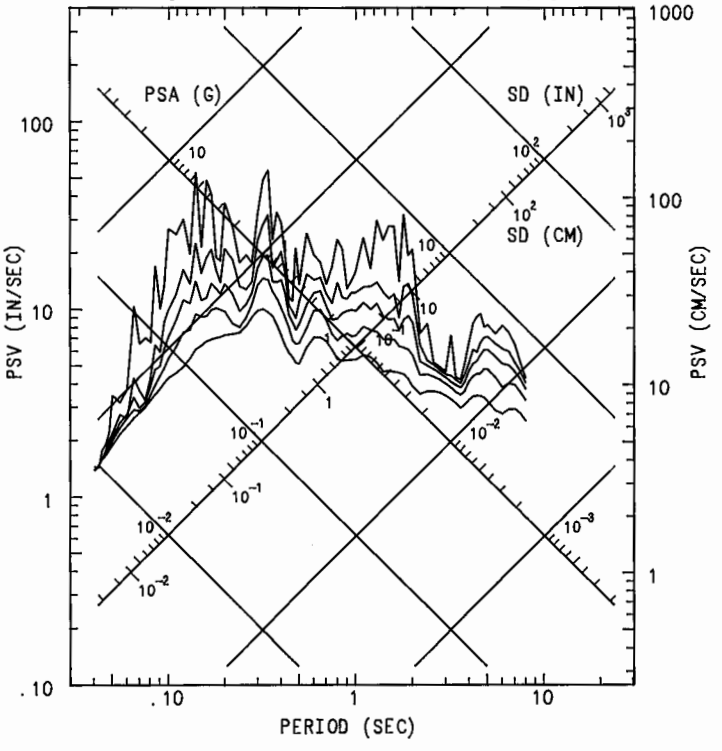
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

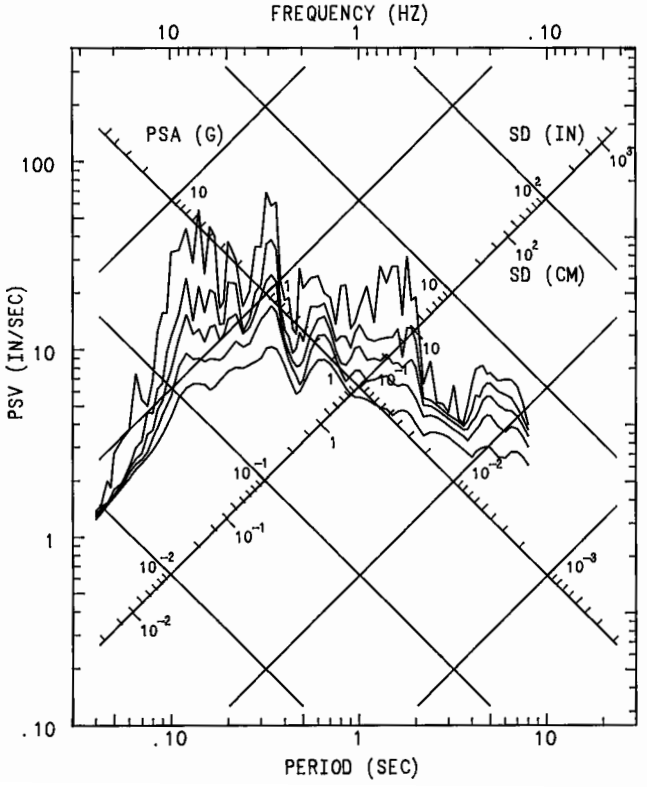
RECORD ID: 47459-C0215-89291.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

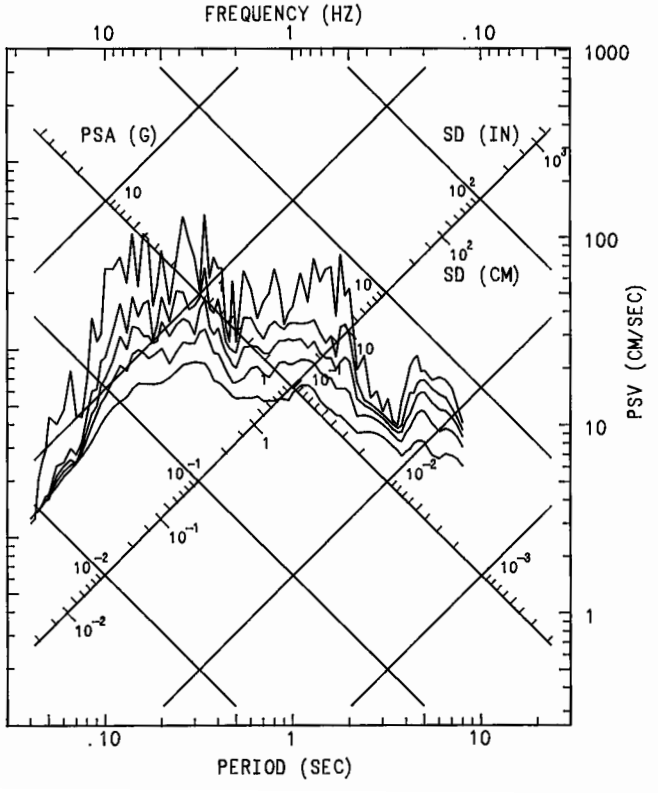
CHN 1: UP
GROUND FLOOR, SOUTHWEST CORNER



CHN 2: UP
GROUND FLOOR, SOUTHEAST CORNER



CHN 3: UP
GROUND FLOOR, NORTHWEST CORNER



WATSONVILLE - 4-STORY COMMERCIAL BLDG. : CSMIP S/N 459

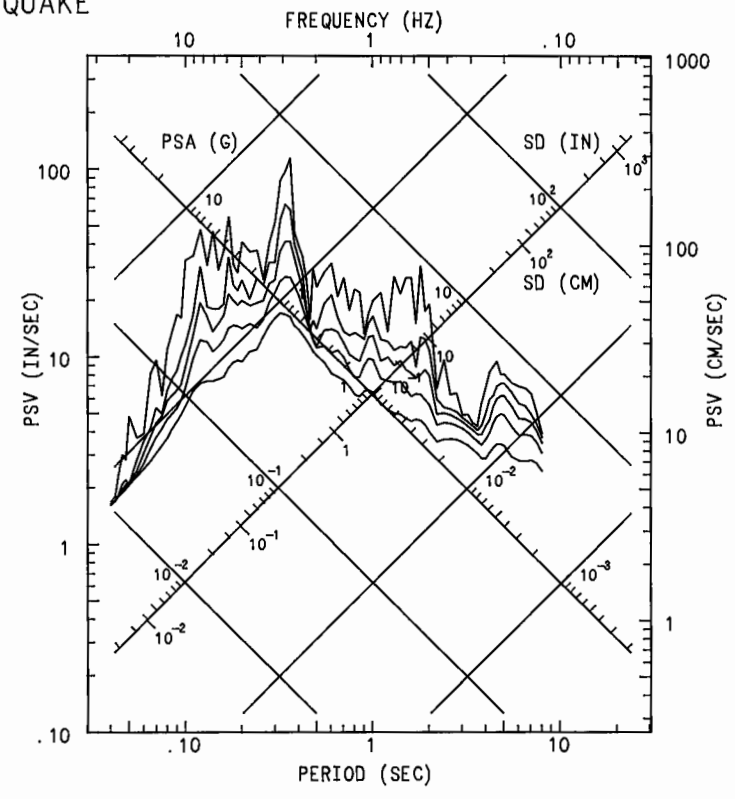
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

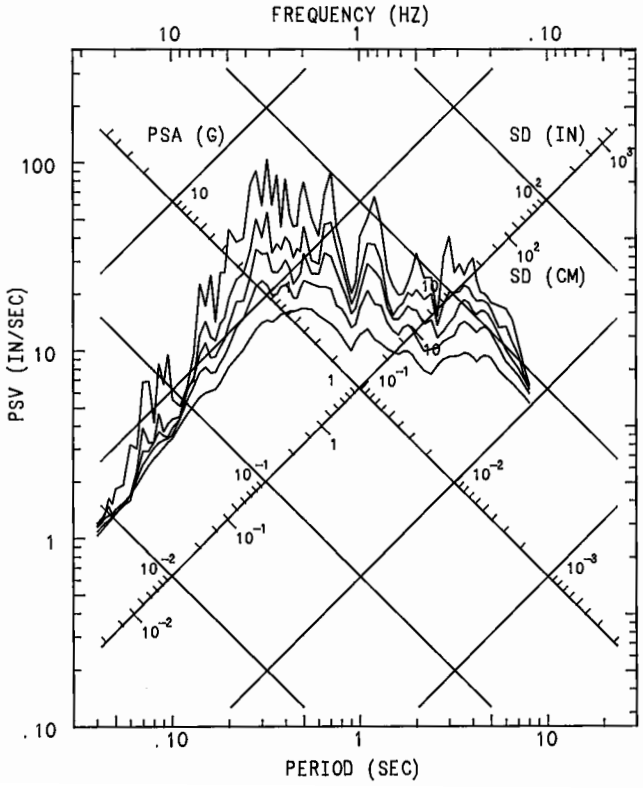
RECORD ID: 47459-C0215-89291.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

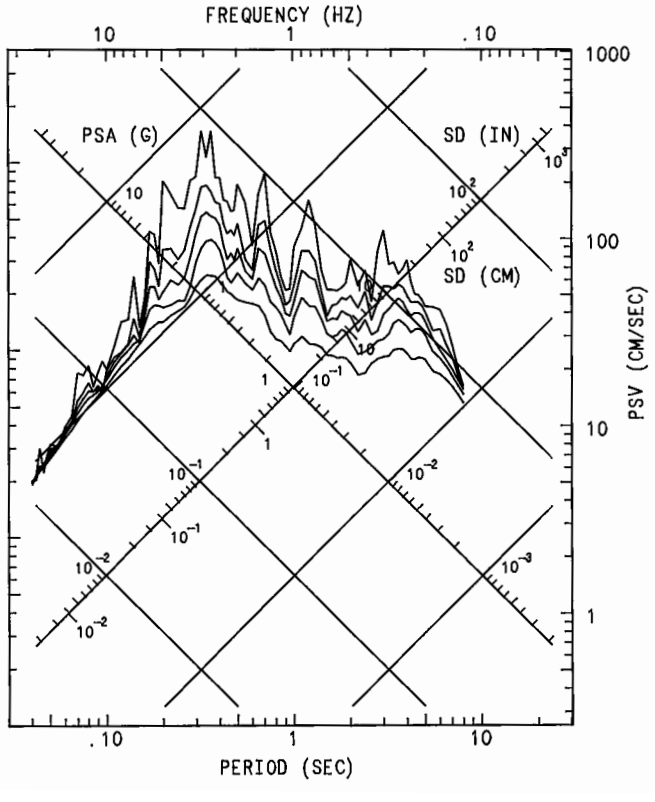
CHN 4: UP
GROUND FLOOR, NORTHEAST CORNER



CHN 5: 0 DEG
ROOF, NORTHWEST CORNER



CHN 6: 0 DEG
ROOF, NORTHEAST CORNER



WATSONVILLE – 4-STORY COMMERCIAL BLDG. : CSMIP S/N 459

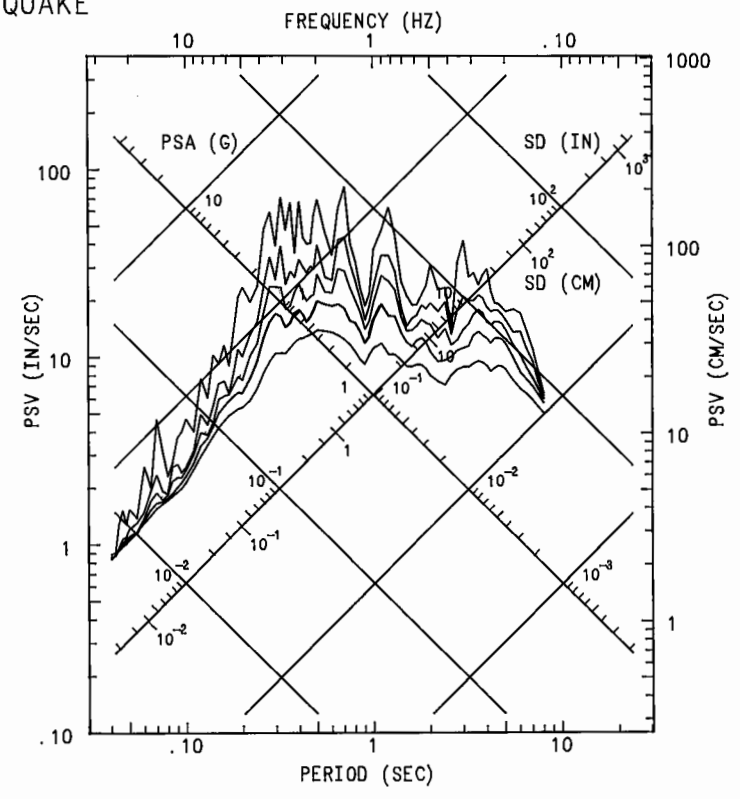
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

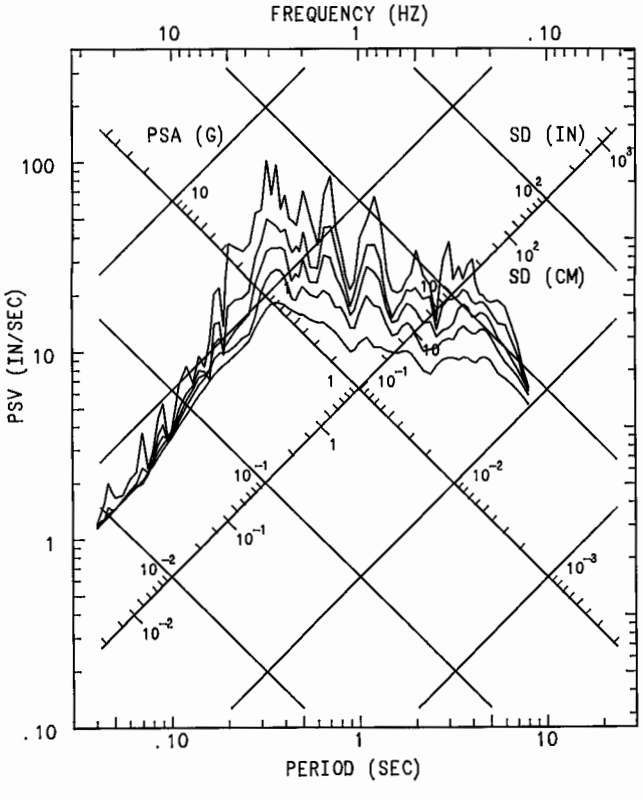
RECORD ID: 47459-C0215-89291.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

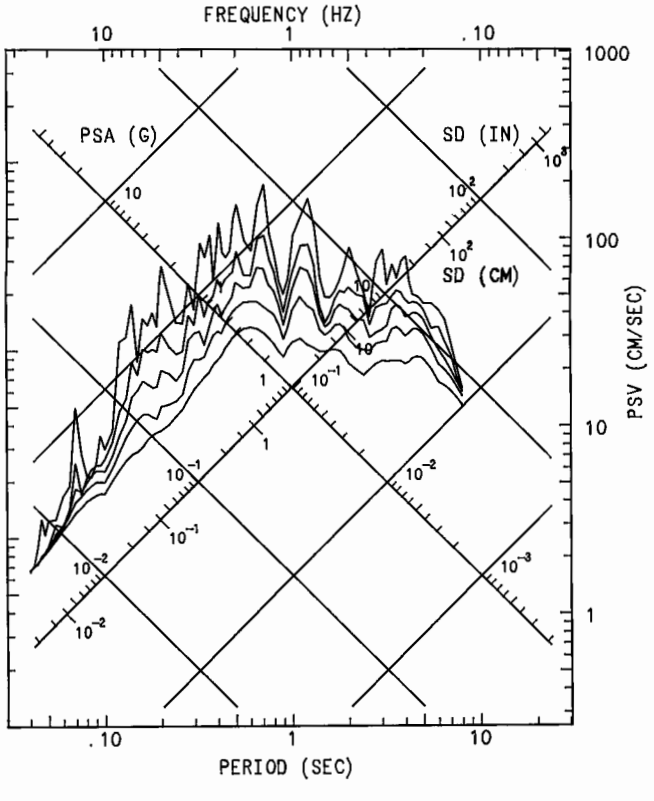
CHN 7: 0 DEG
3RD FLOOR, NORTHWEST CORNER



CHN 8: 0 DEG
3RD FLOOR, NORTHEAST CORNER



CHN 9: 0 DEG
GROUND FLOOR, NORTHWEST CORNER



WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

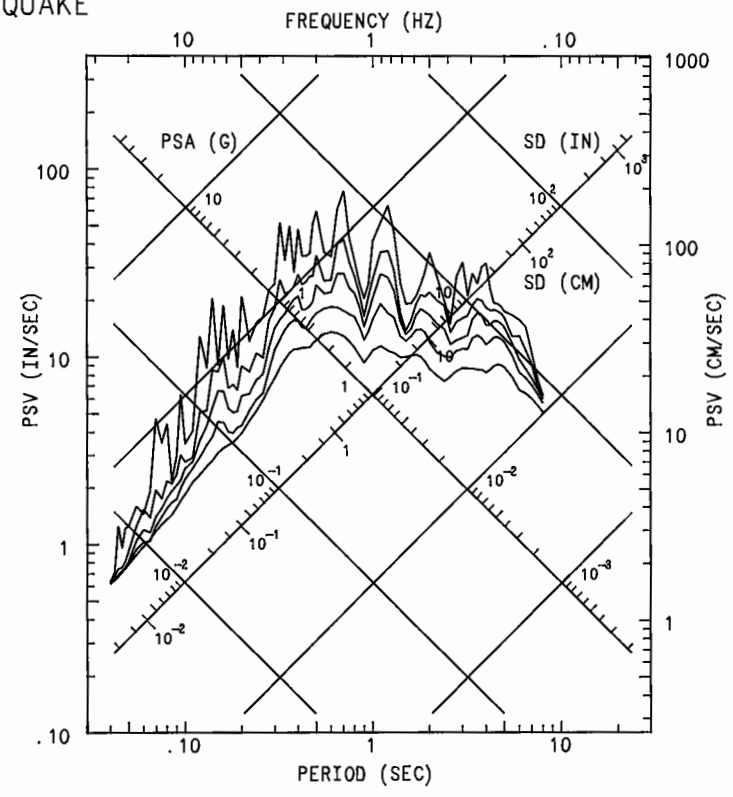
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

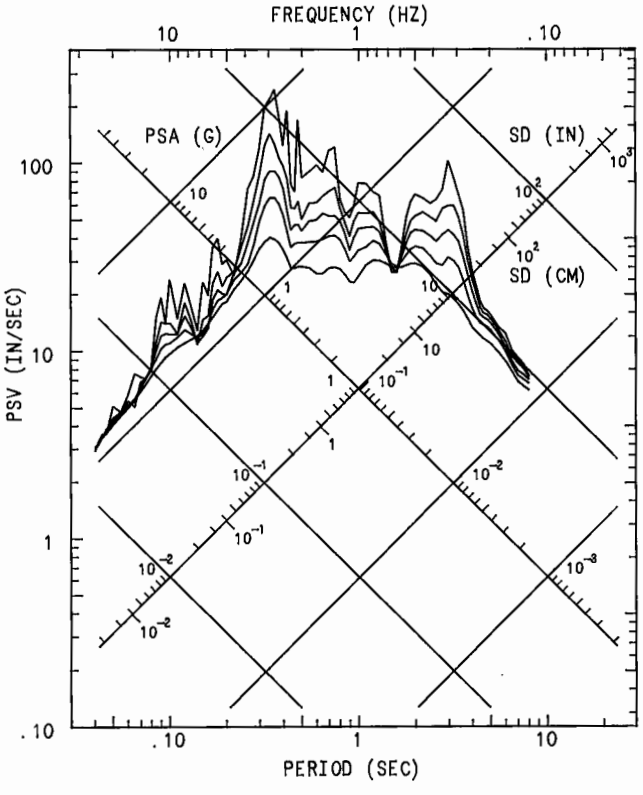
RECORD ID: 47459-C0215-89291.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

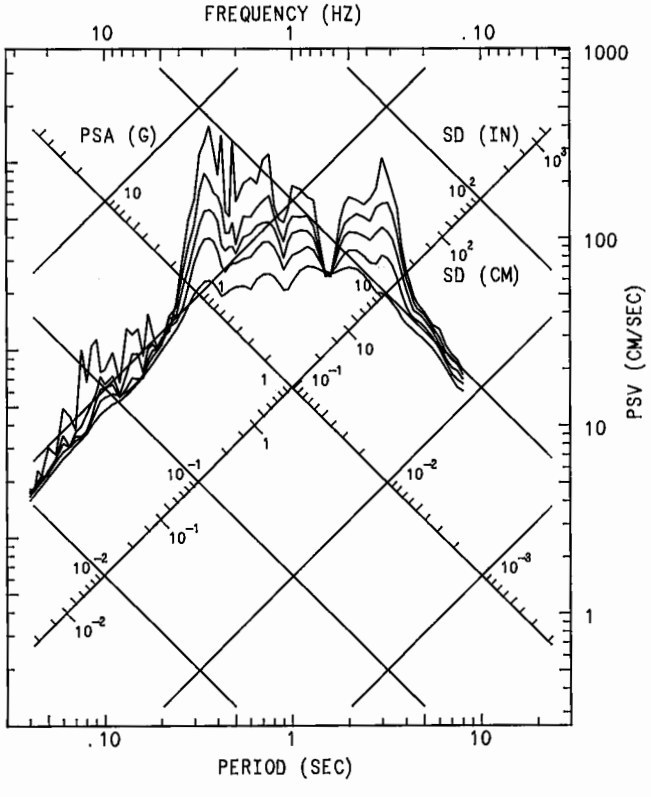
CHN 10: 0 DEG
GROUND FLOOR, NORTHEAST CORNER



CHN 11: 90 DEG
ROOF, CENTER OF WEST WALL



CHN 12: 90 DEG
3RD FLOOR, CENTER OF WEST WALL



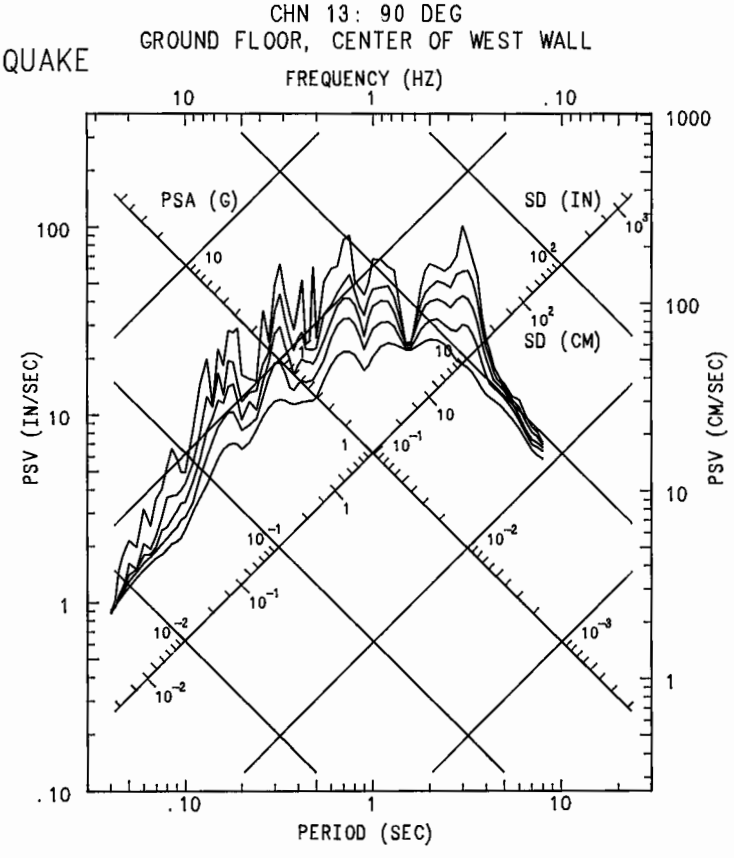
WATSONVILLE – 4–STORY COMMERCIAL BLDG.: CSMIP S/N 459

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

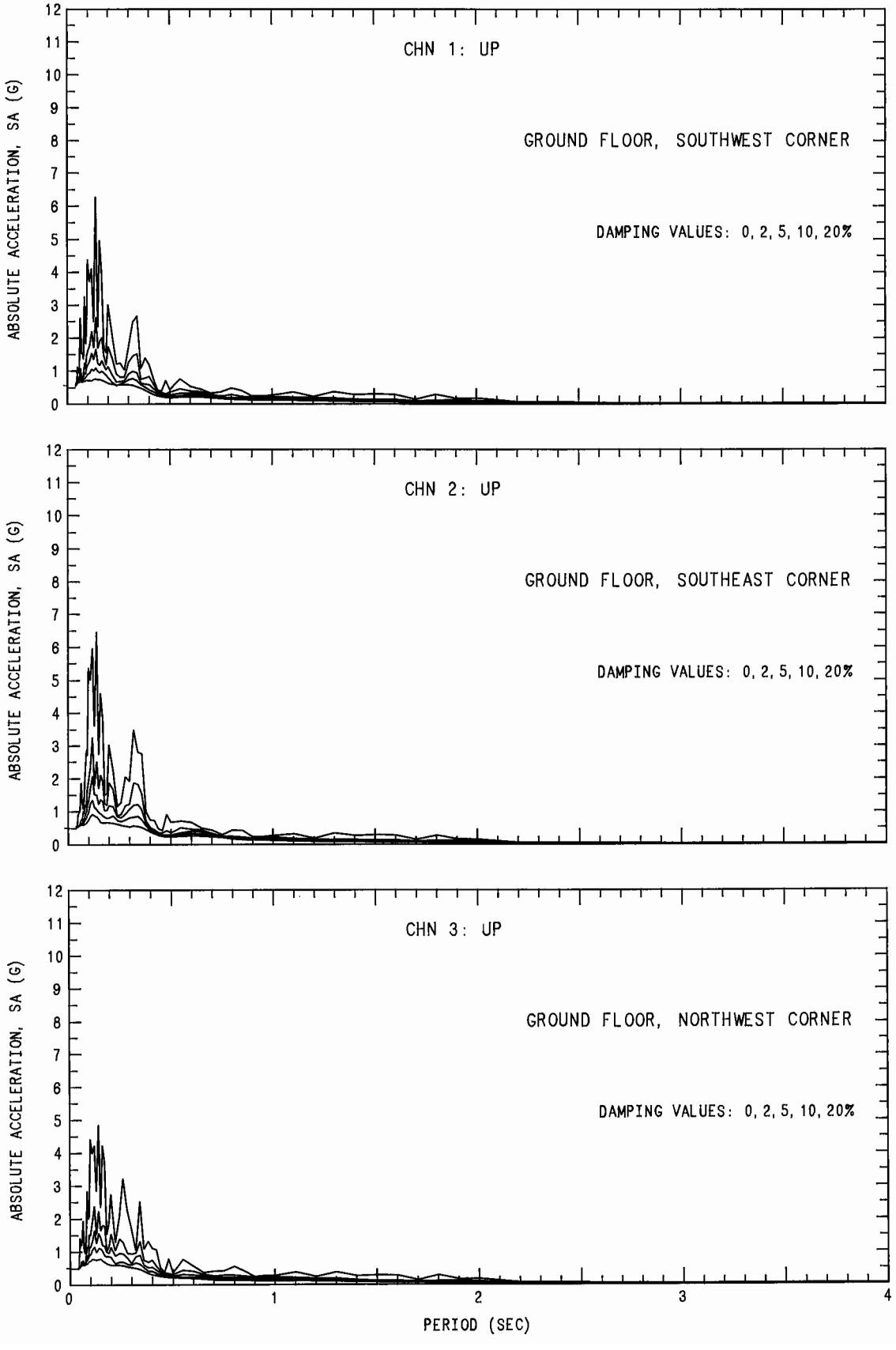
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

RECORD ID: 47459-C0215-89291.01

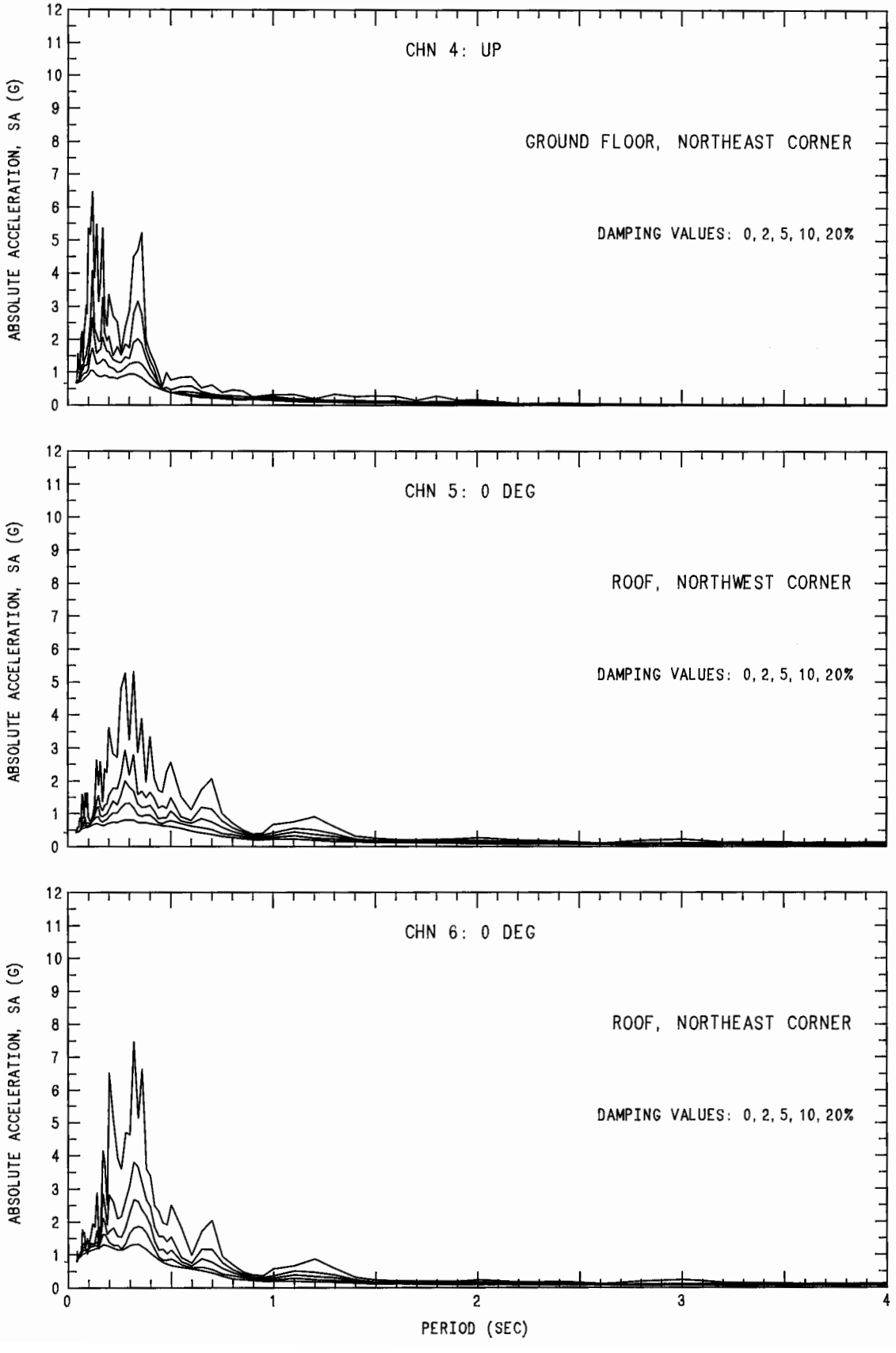
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



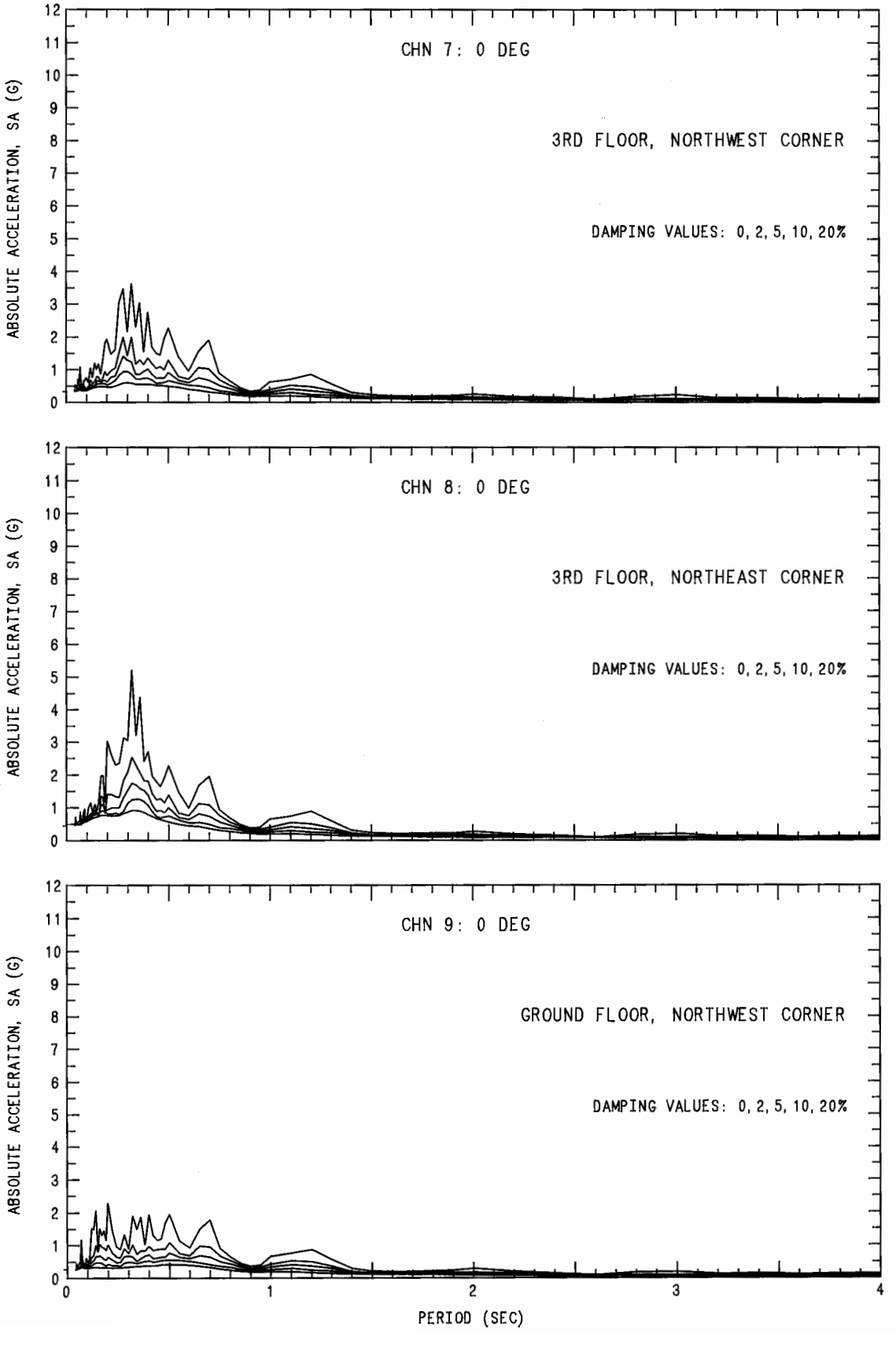
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE - 4-STORY COMMERCIAL BLDG. : CSMIP S/N 459
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47459-C0215-89291.01
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



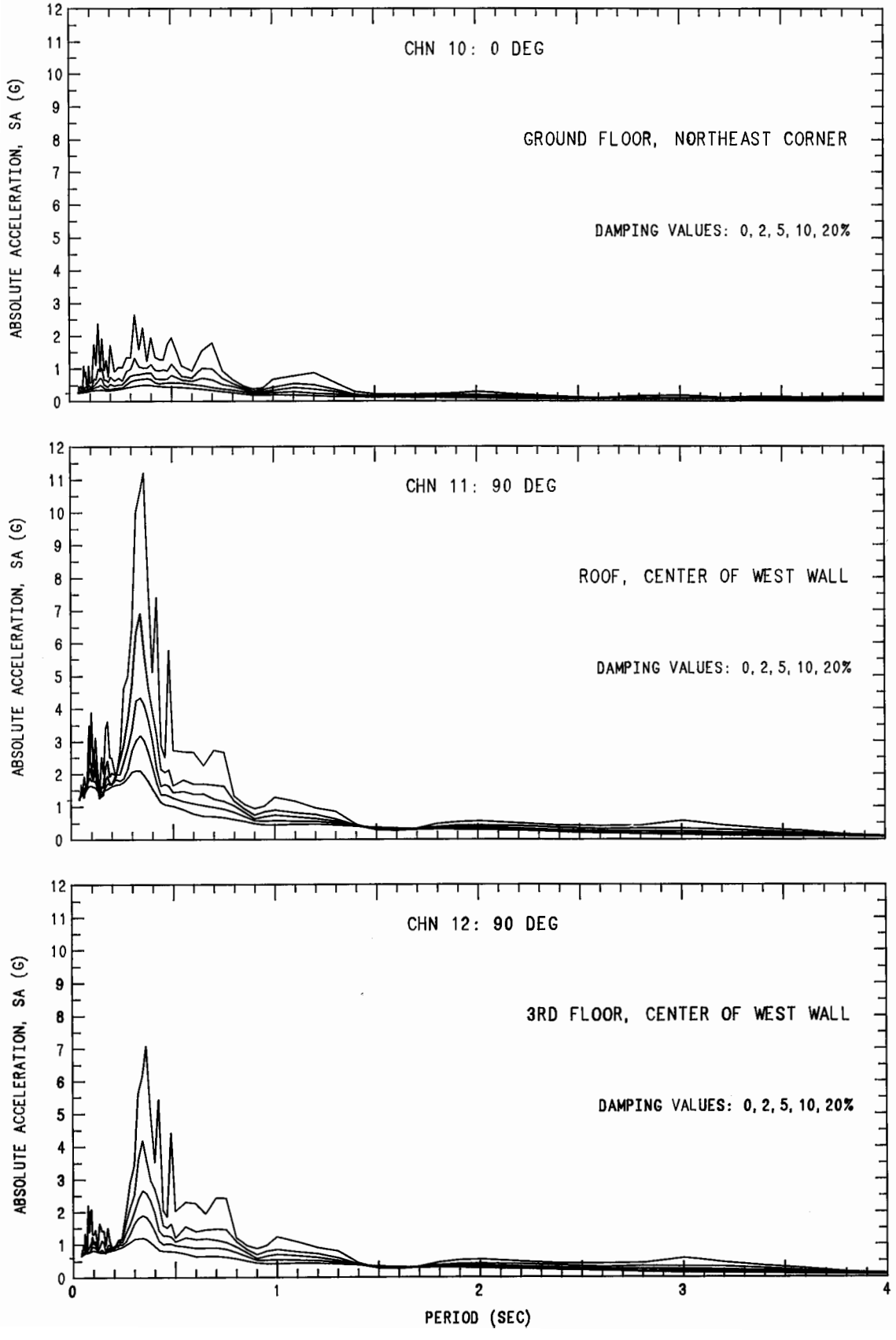
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47459-C0215-89291.01
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47459-C0215-89291.01
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE – 4–STORY COMMERCIAL BLDG.: CSMIP S/N 459
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47459–C0215–89291.01
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WATSONVILLE - 4-STORY COMMERCIAL BLDG.: CSMIP S/N 459

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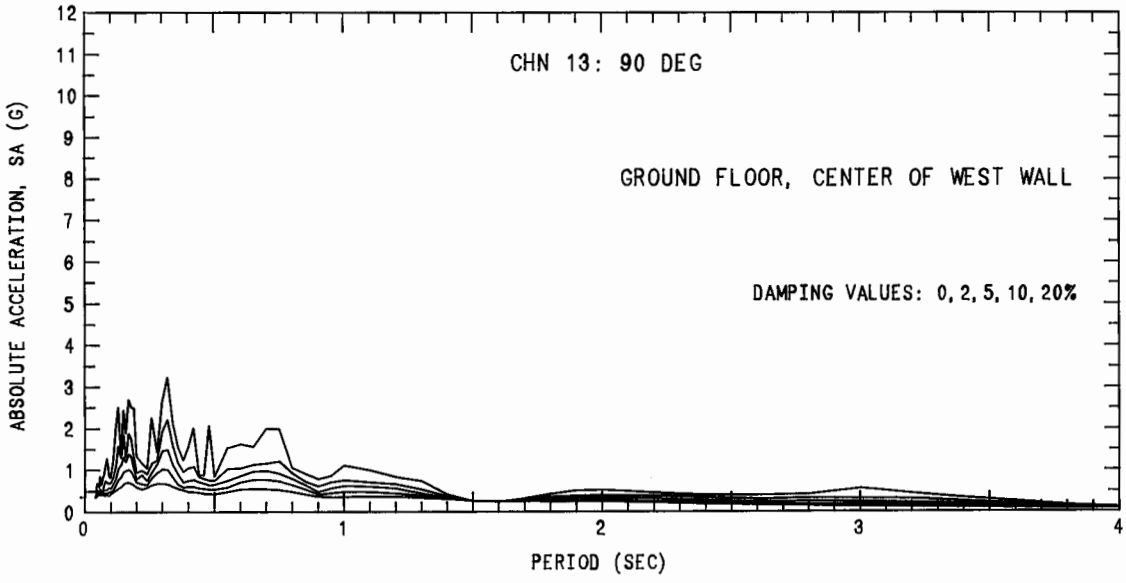
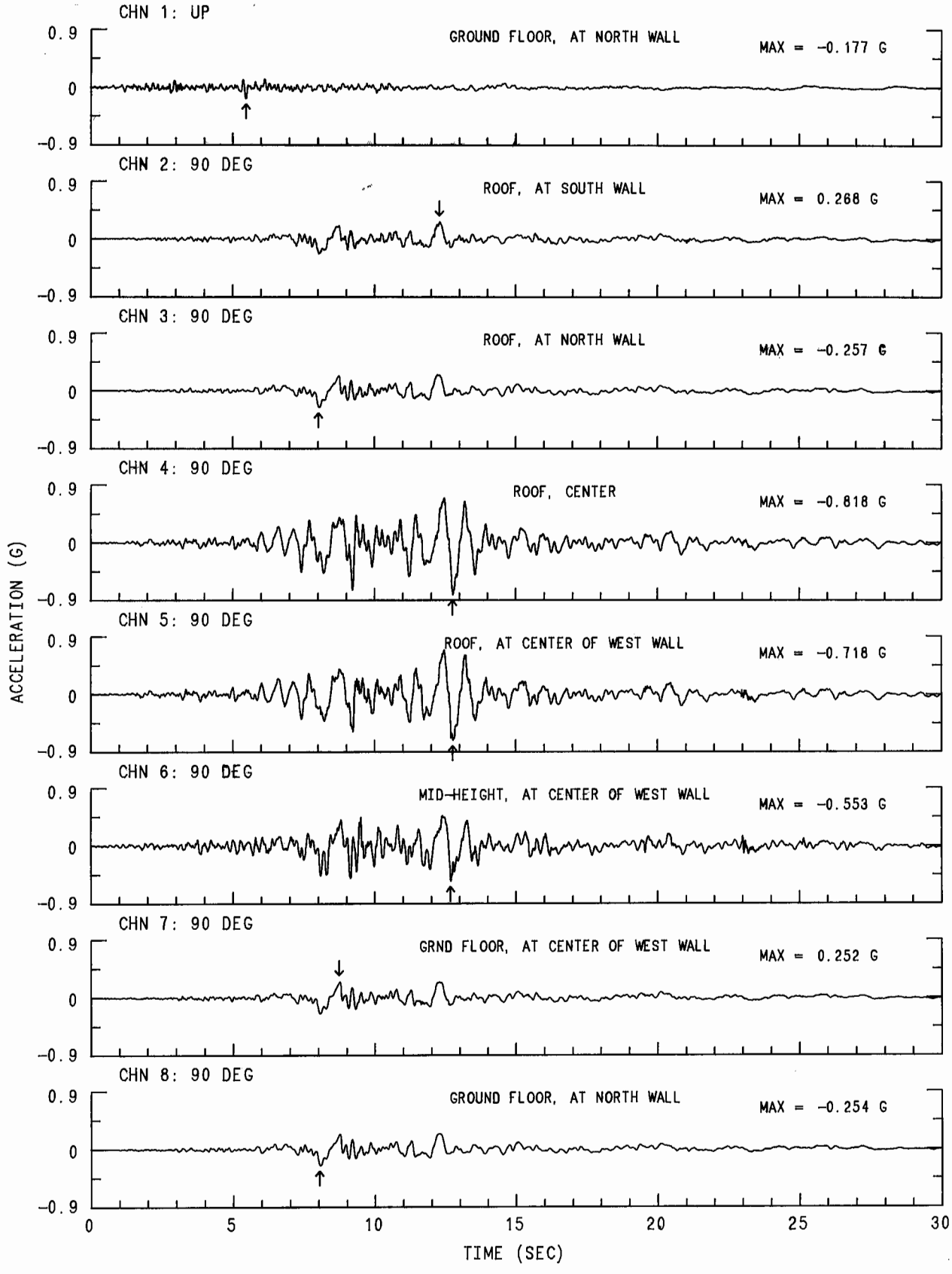


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

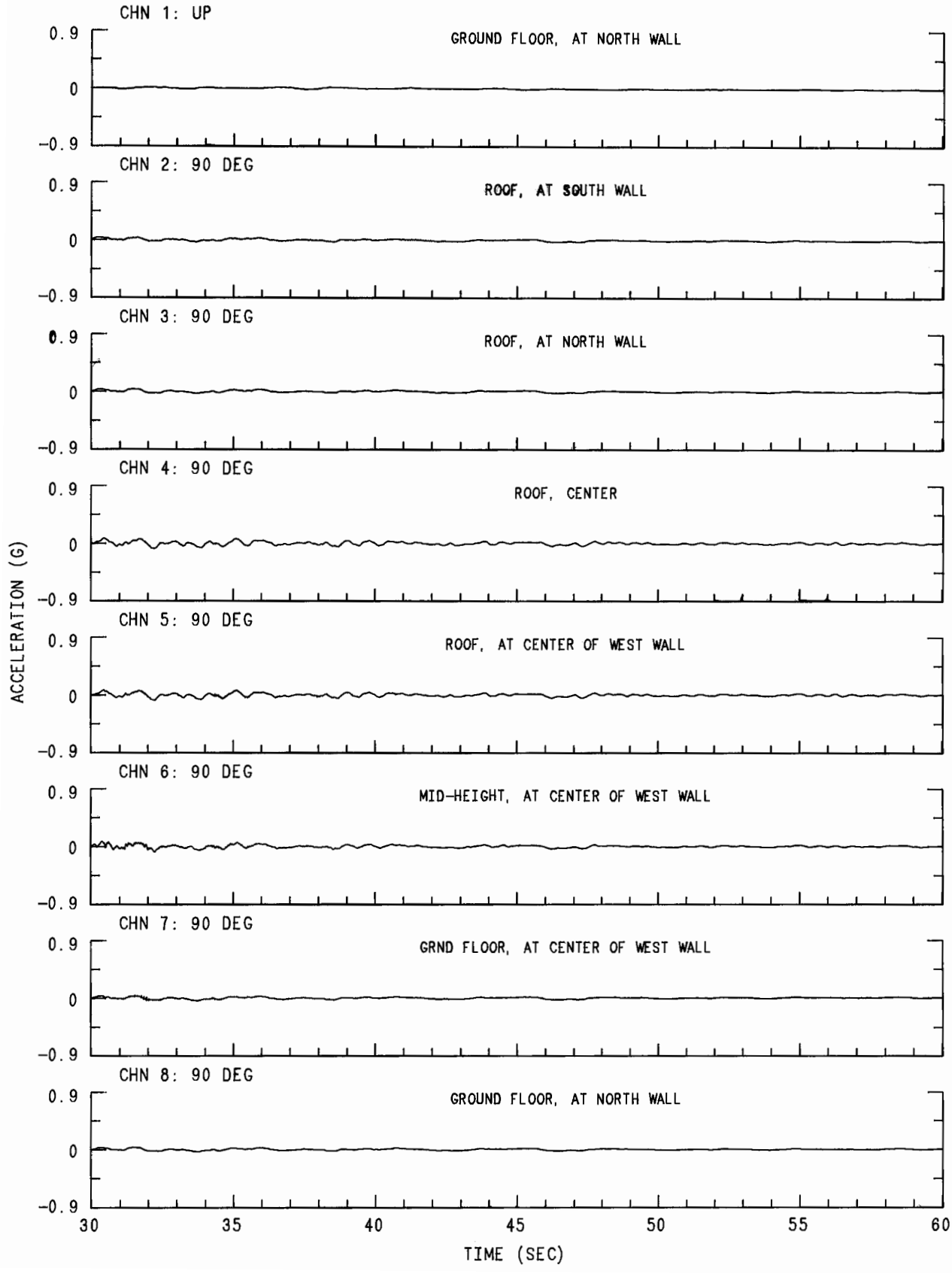
PHASE 1 ACCELERATION. RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

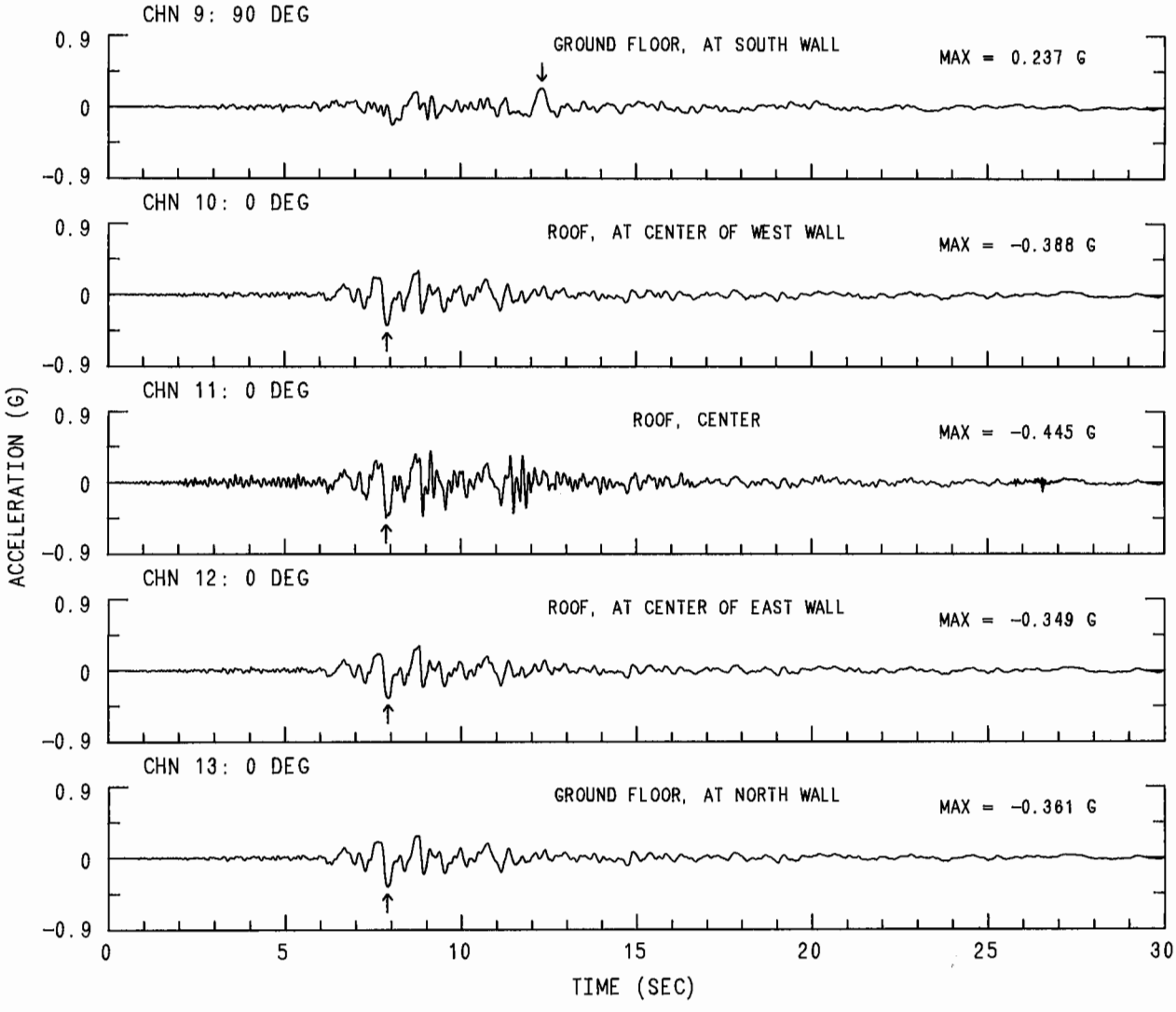
PHASE 1 ACCELERATION. RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

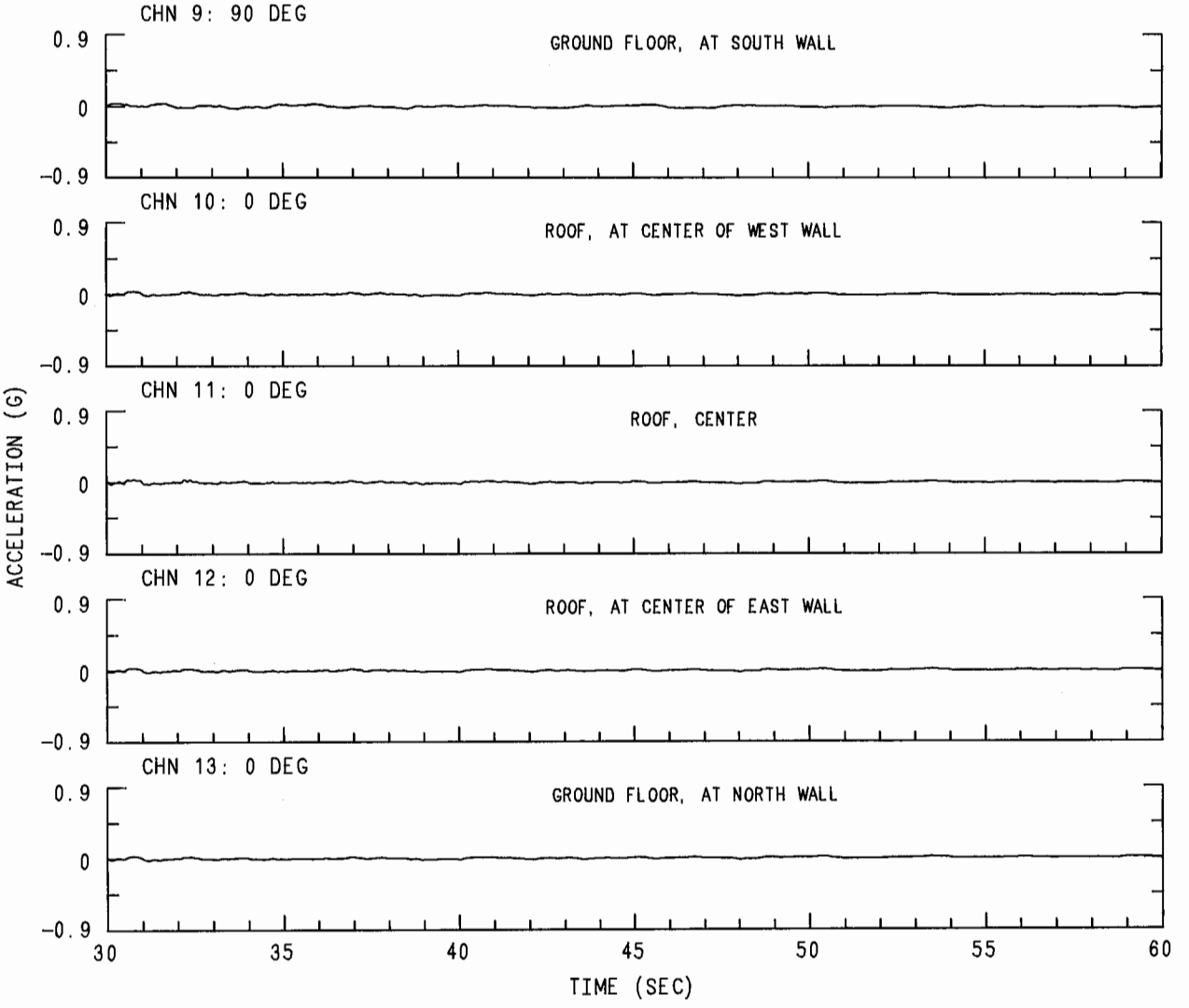
PHASE 1 ACCELERATION. RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

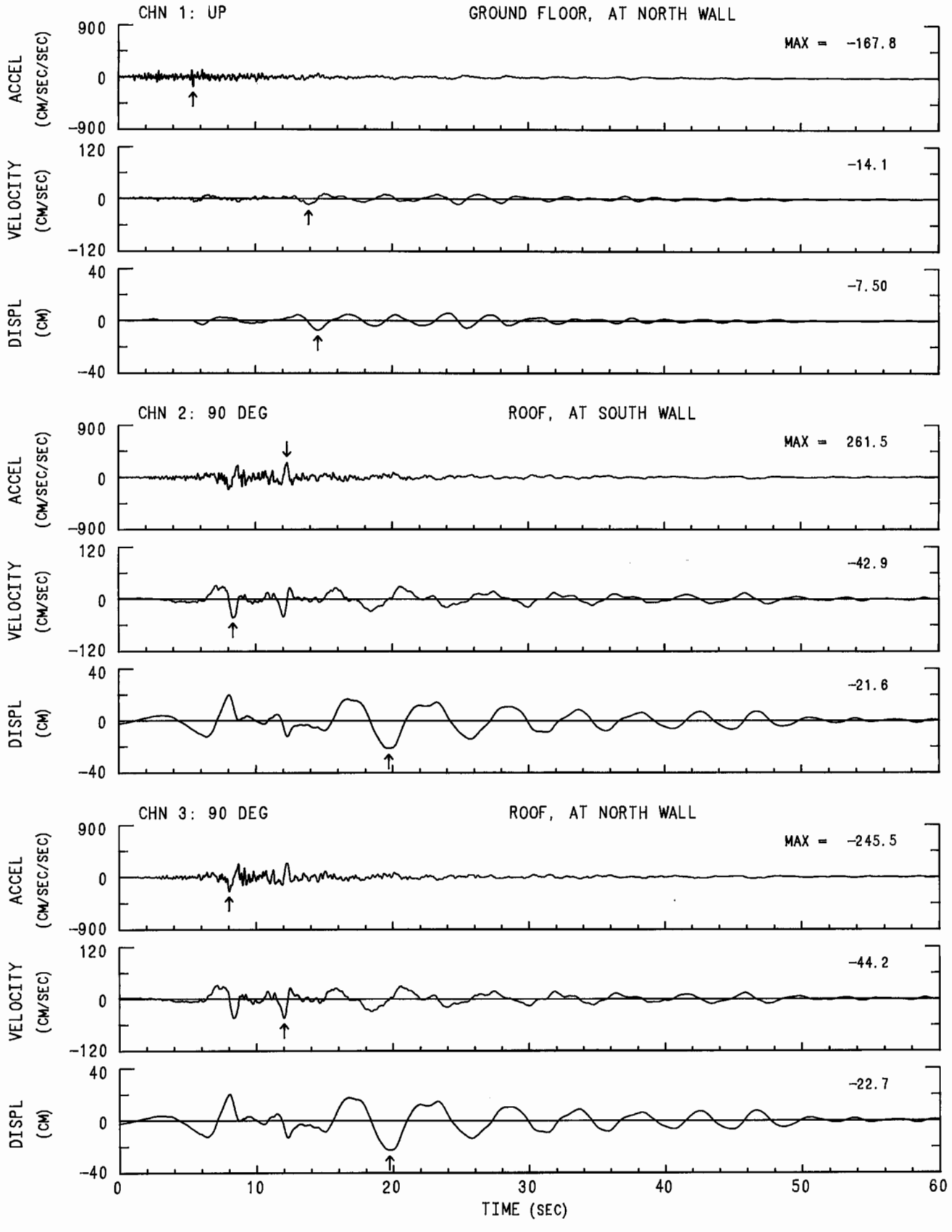
PHASE 1 ACCELERATION. RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

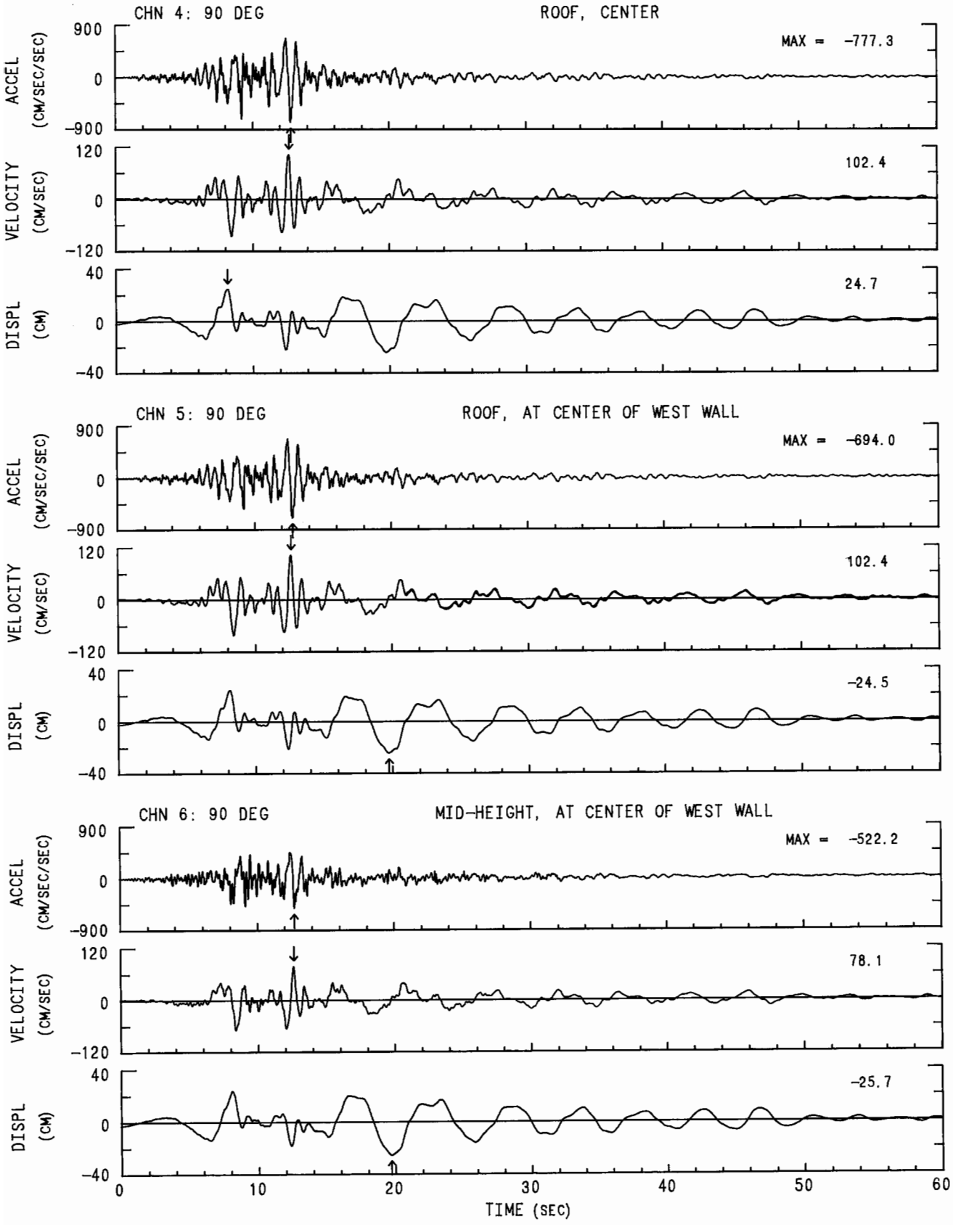
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

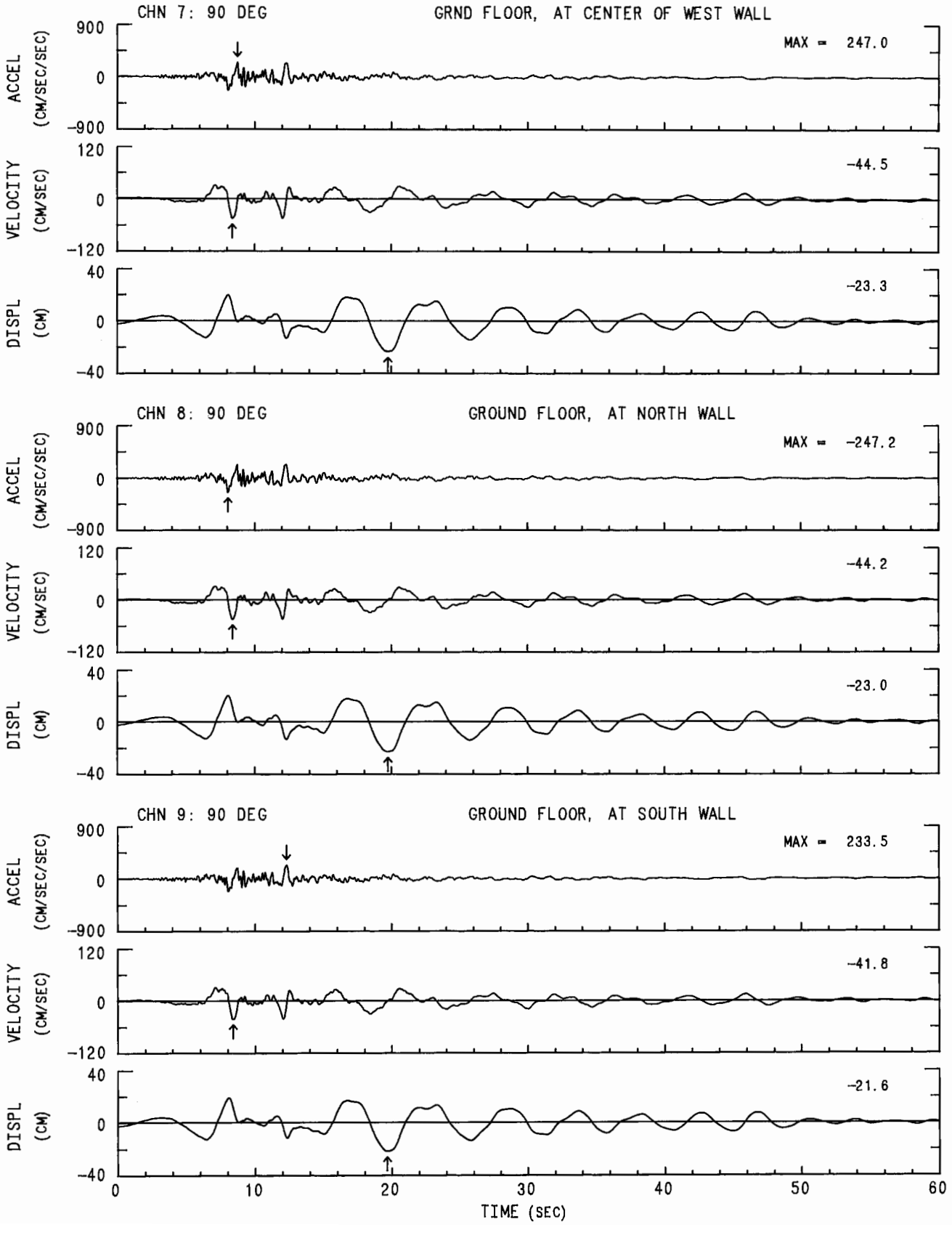
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

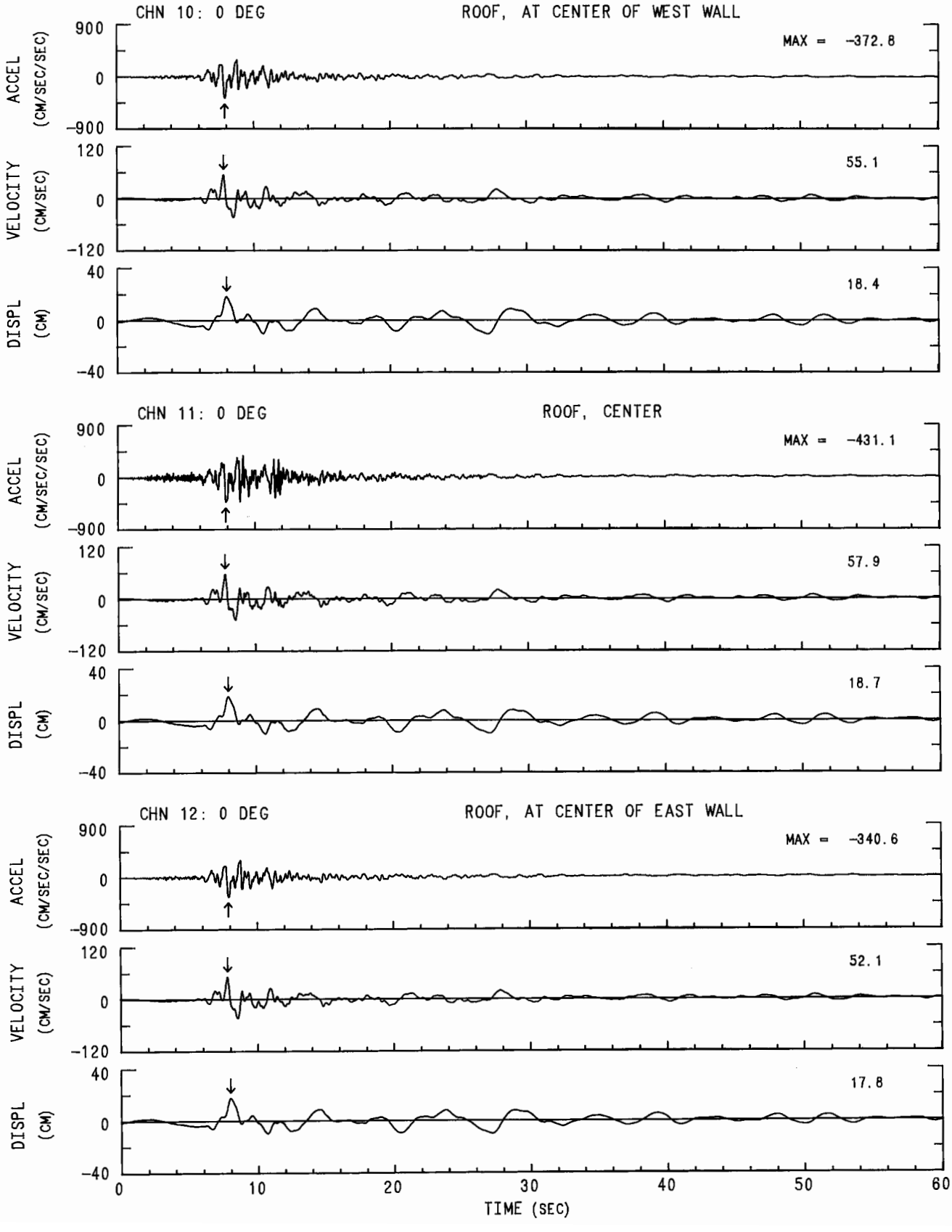
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

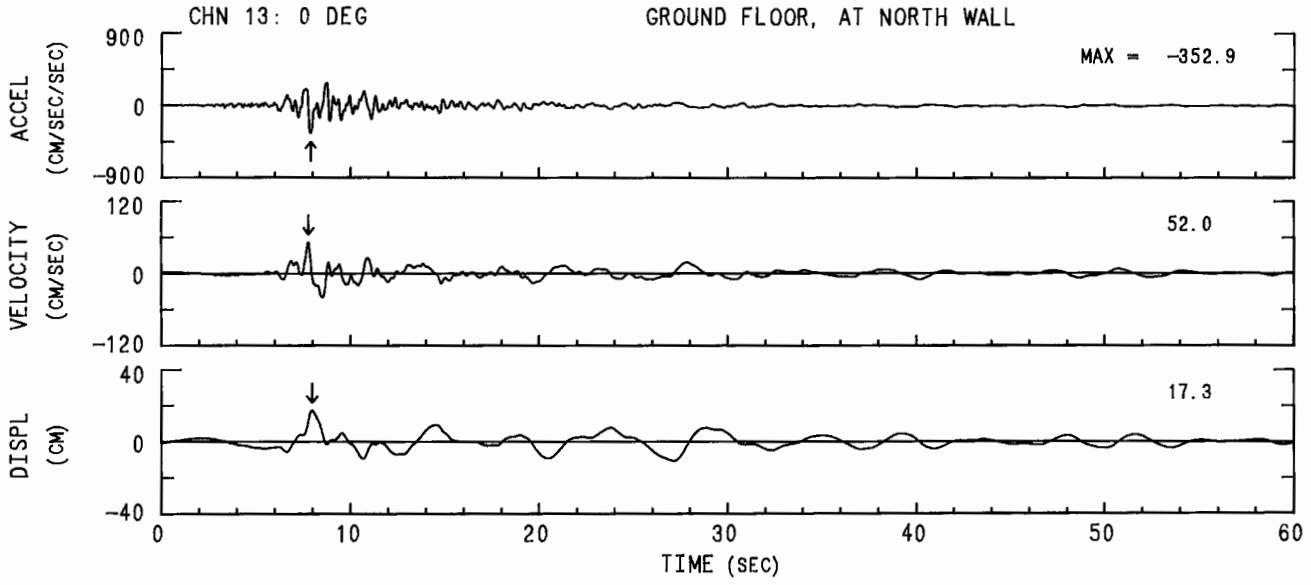
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 47391-C0182-90009.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 47391-C0182-90009.03



HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

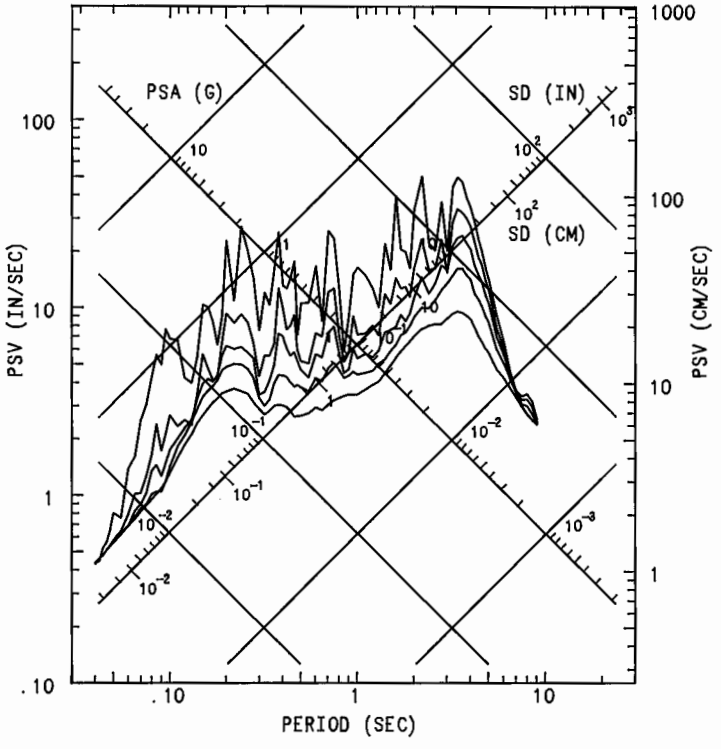
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

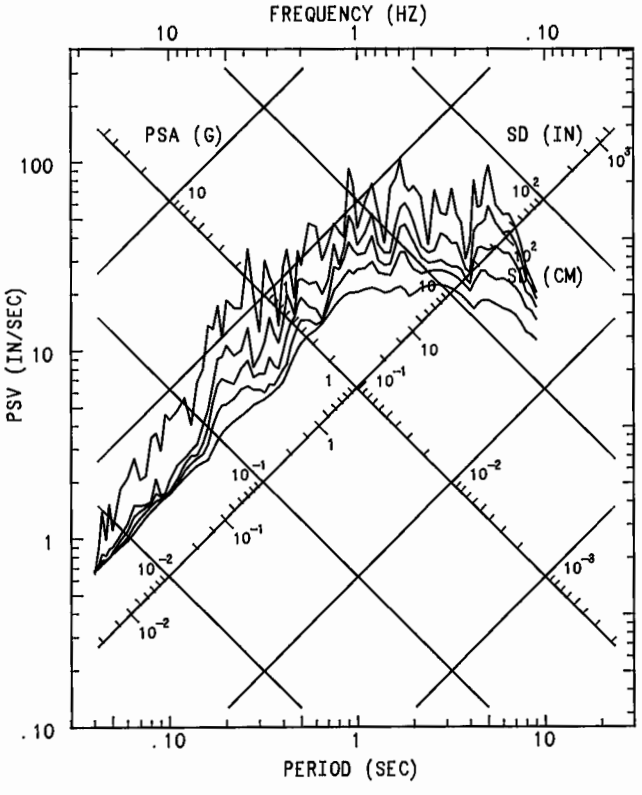
RECORD ID: 47391-C0182-90009.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

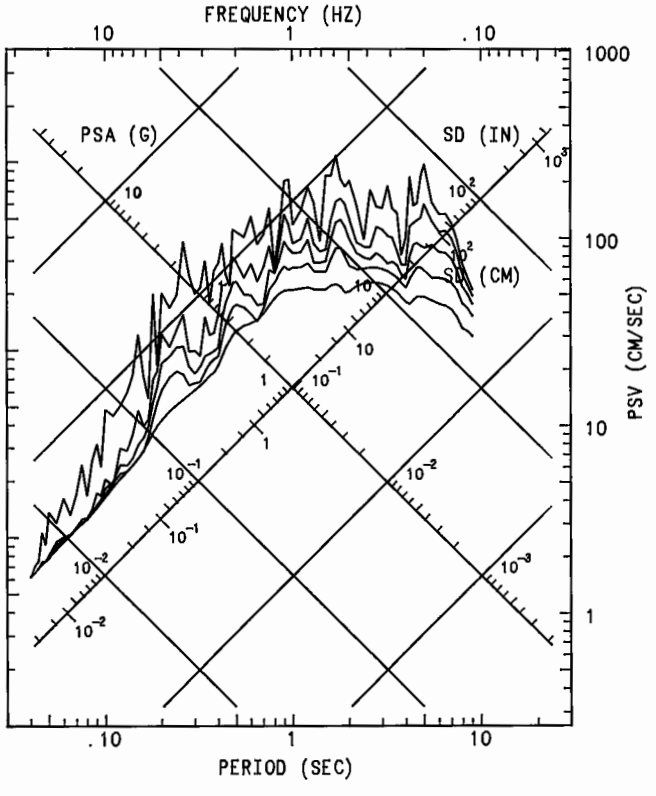
CHN 1: UP
GROUND FLOOR, AT NORTH WALL



CHN 2: 90 DEG
ROOF, AT SOUTH WALL



CHN 3: 90 DEG
ROOF, AT NORTH WALL



HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

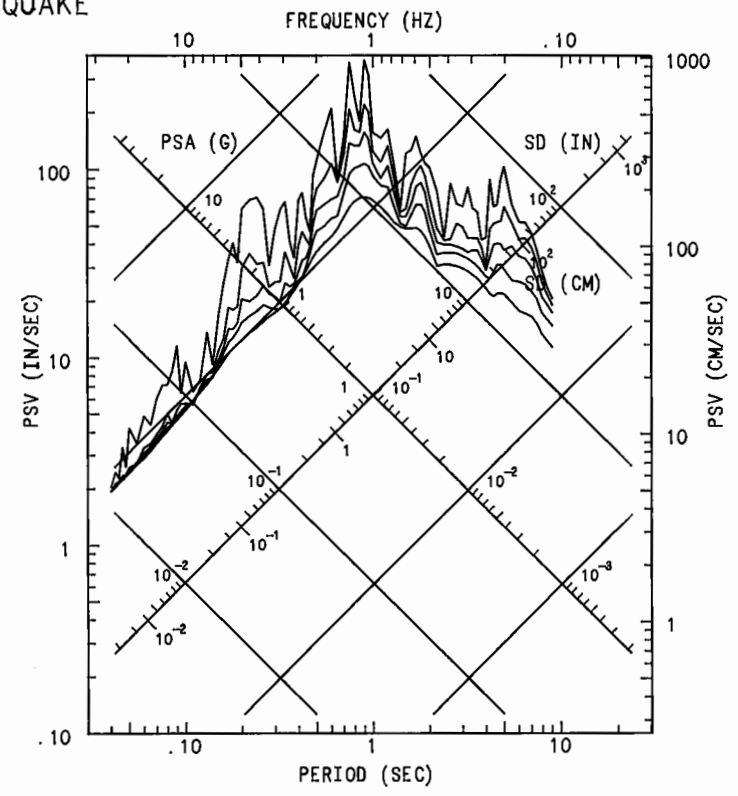
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

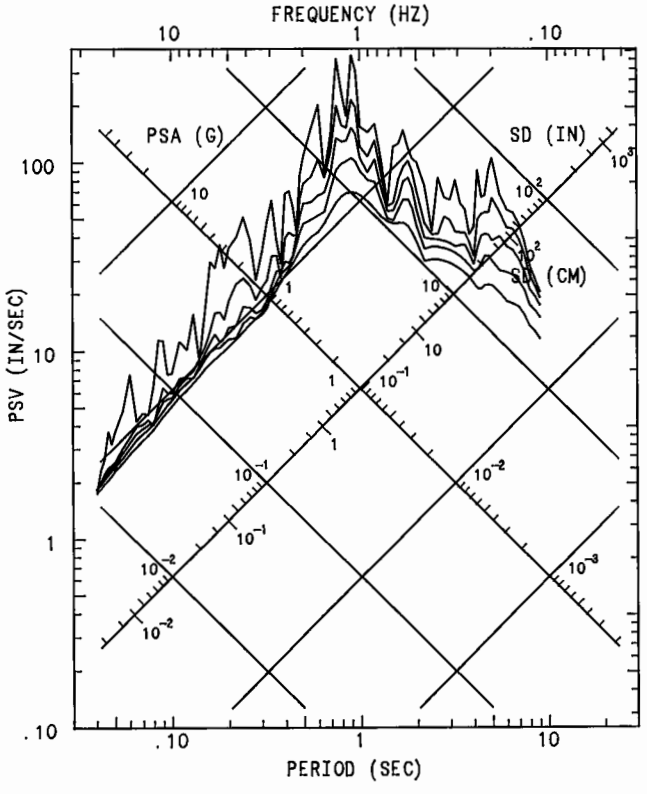
RECORD ID: 47391-C0182-90009.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

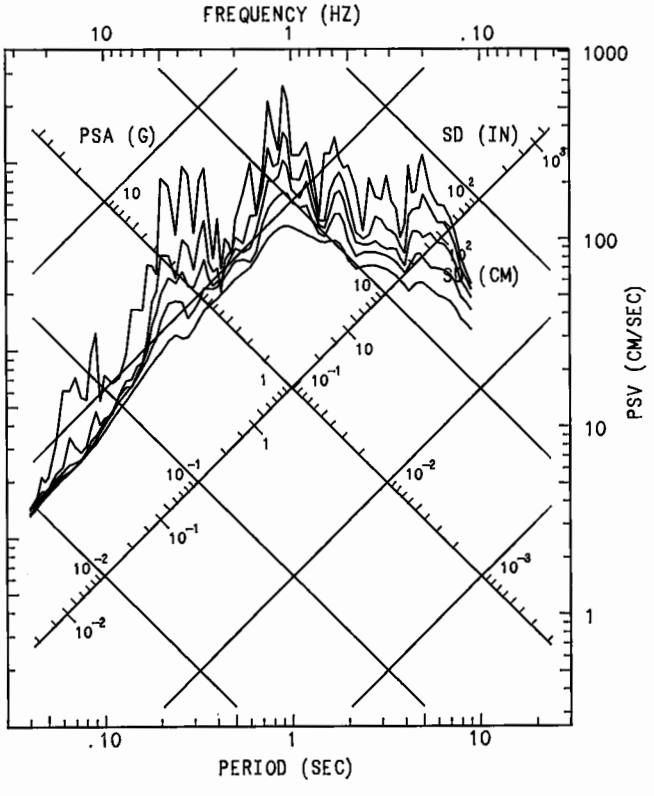
CHN 4: 90 DEG
ROOF, CENTER



CHN 5: 90 DEG
ROOF, AT CENTER OF WEST WALL



CHN 6: 90 DEG
MID-HEIGHT, AT CENTER OF WEST WALL



HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

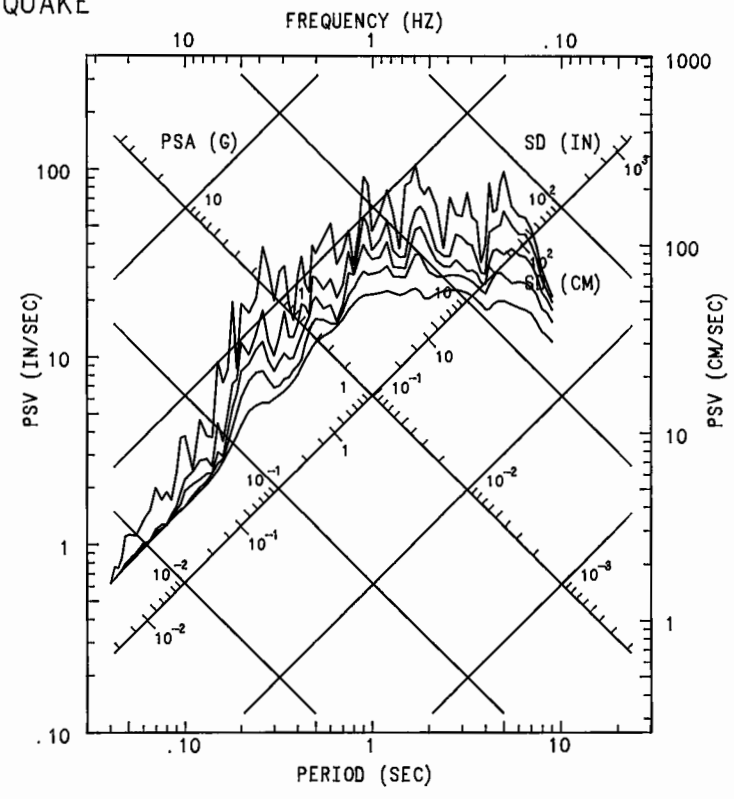
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

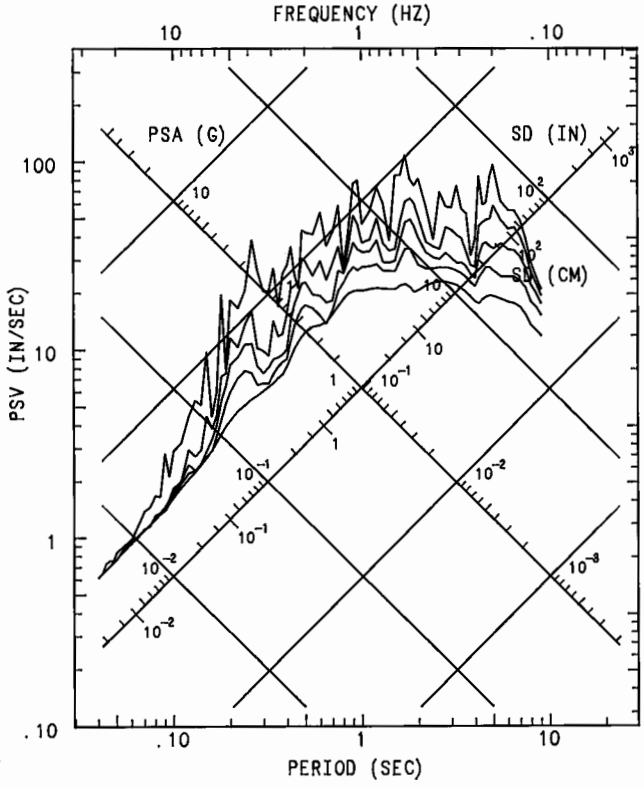
RECORD ID: 47391-C0182-90009.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

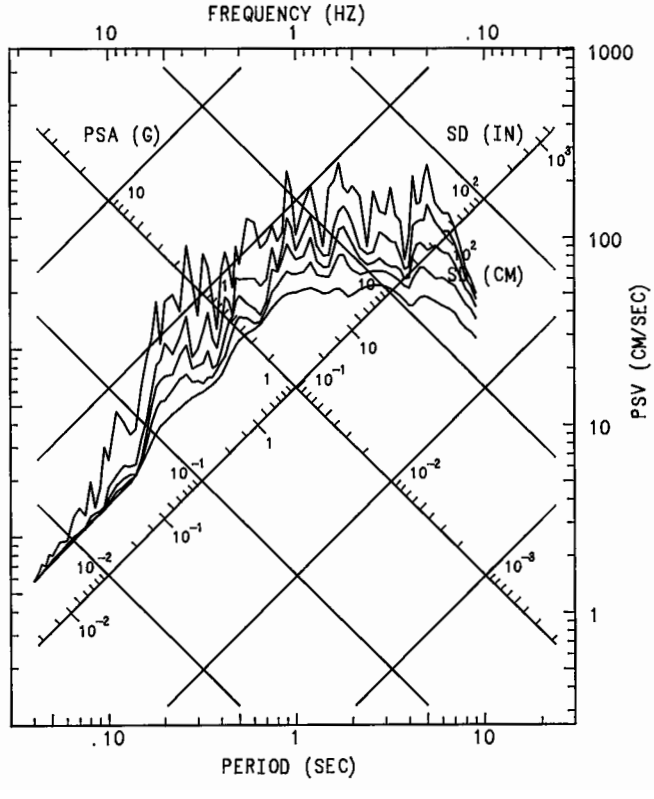
CHN 7: 90 DEG
GRND FLOOR, AT CENTER OF WEST WALL



CHN 8: 90 DEG
GROUND FLOOR, AT NORTH WALL



CHN 9: 90 DEG
GROUND FLOOR, AT SOUTH WALL



HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

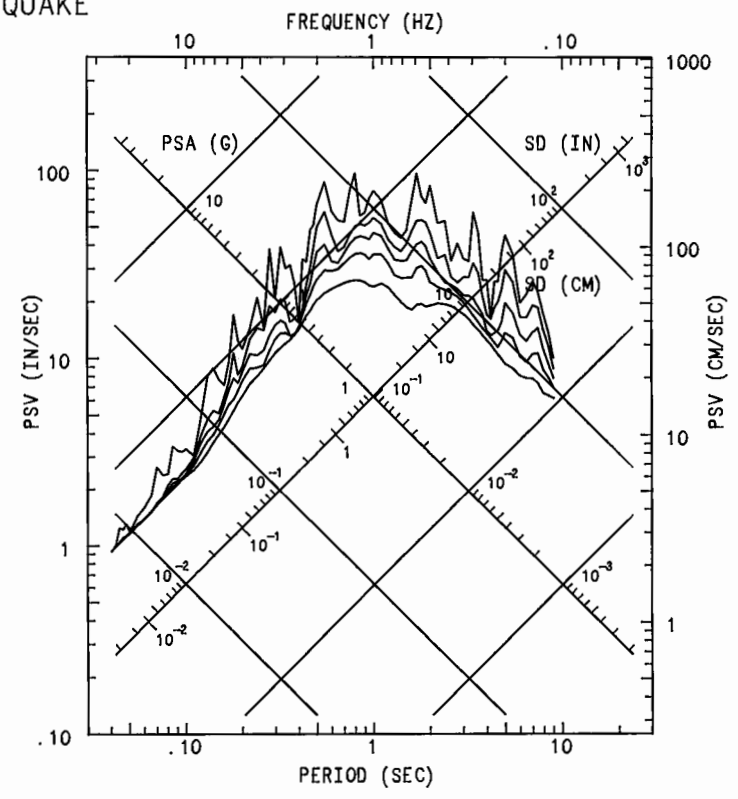
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

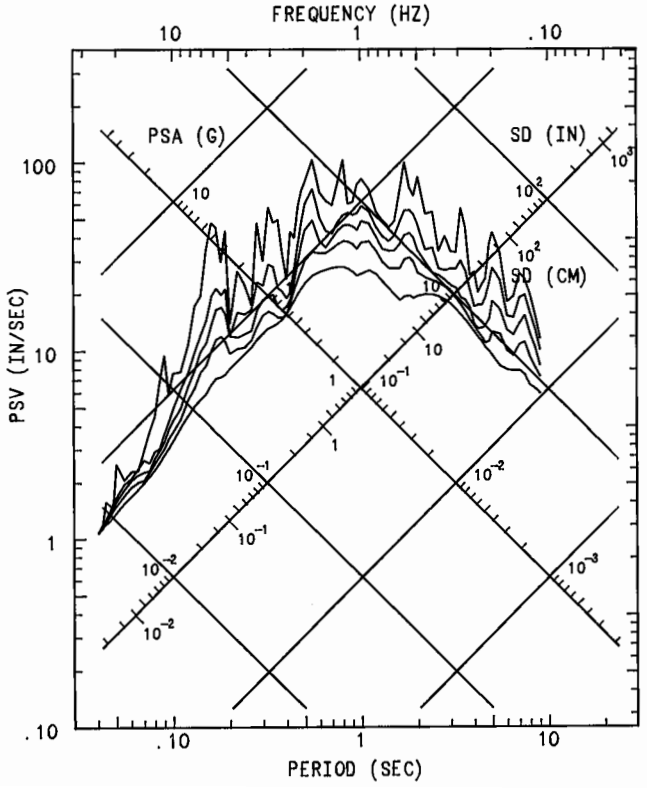
RECORD ID: 47391-C0182-90009.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

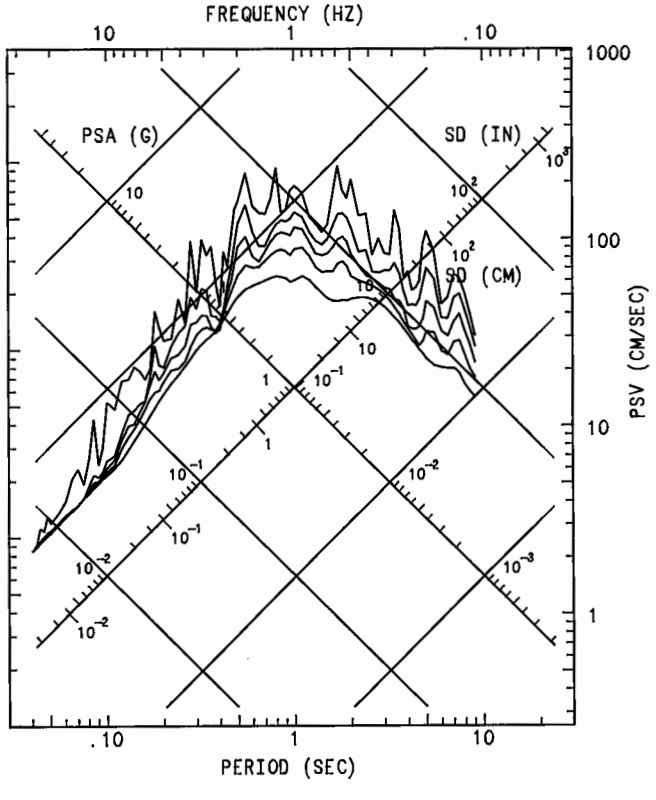
CHN 10: 0 DEG
ROOF, AT CENTER OF WEST WALL



CHN 11: 0 DEG
ROOF, CENTER



CHN 12: 0 DEG
ROOF, AT CENTER OF EAST WALL



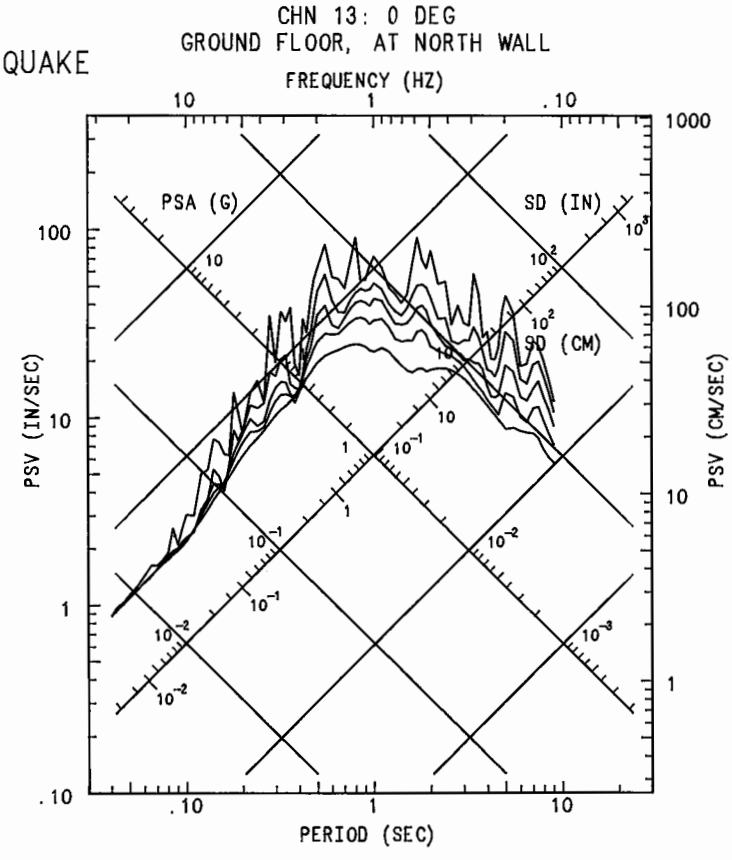
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

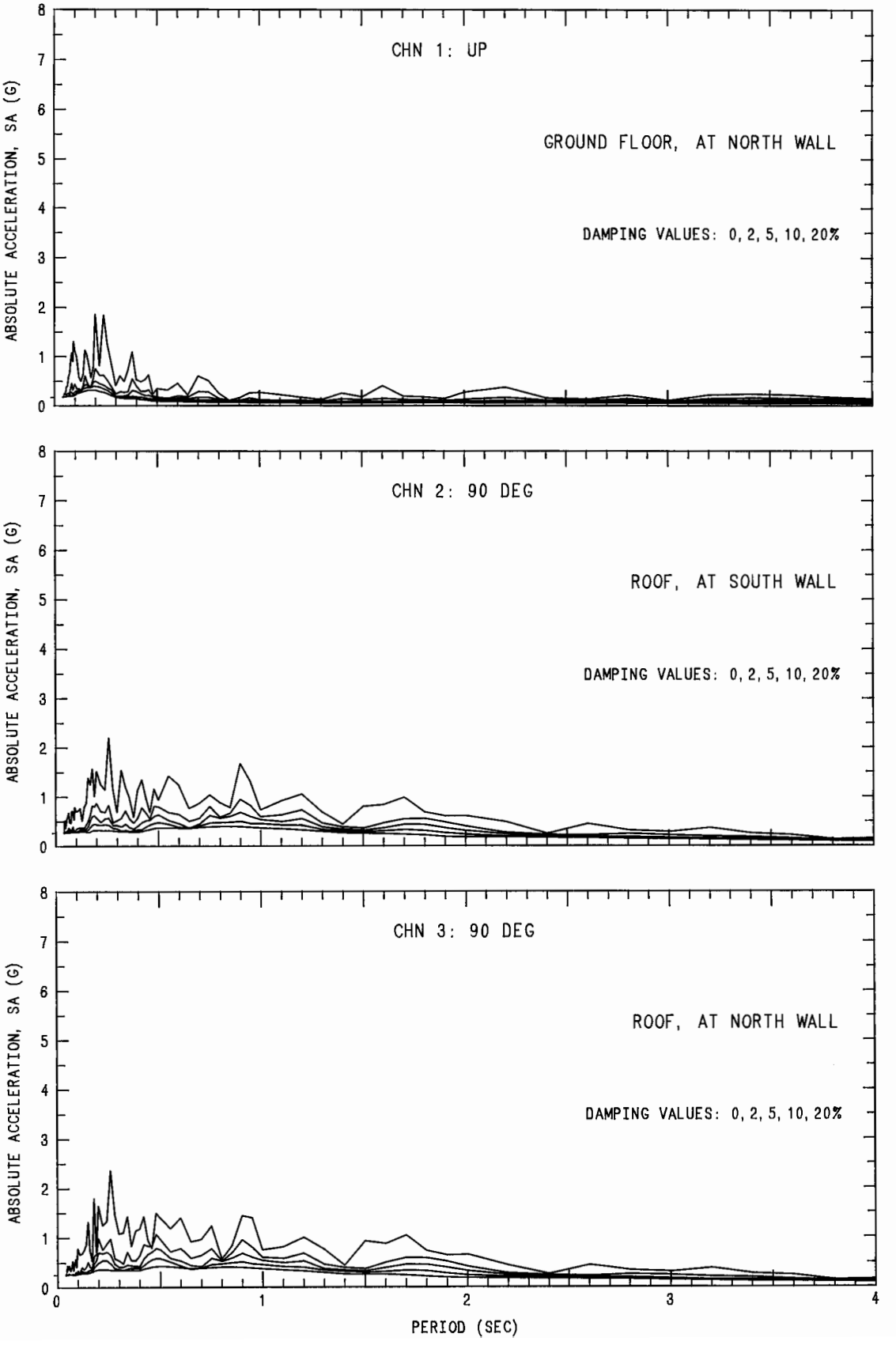
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

RECORD ID: 47391-C0182-90009.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

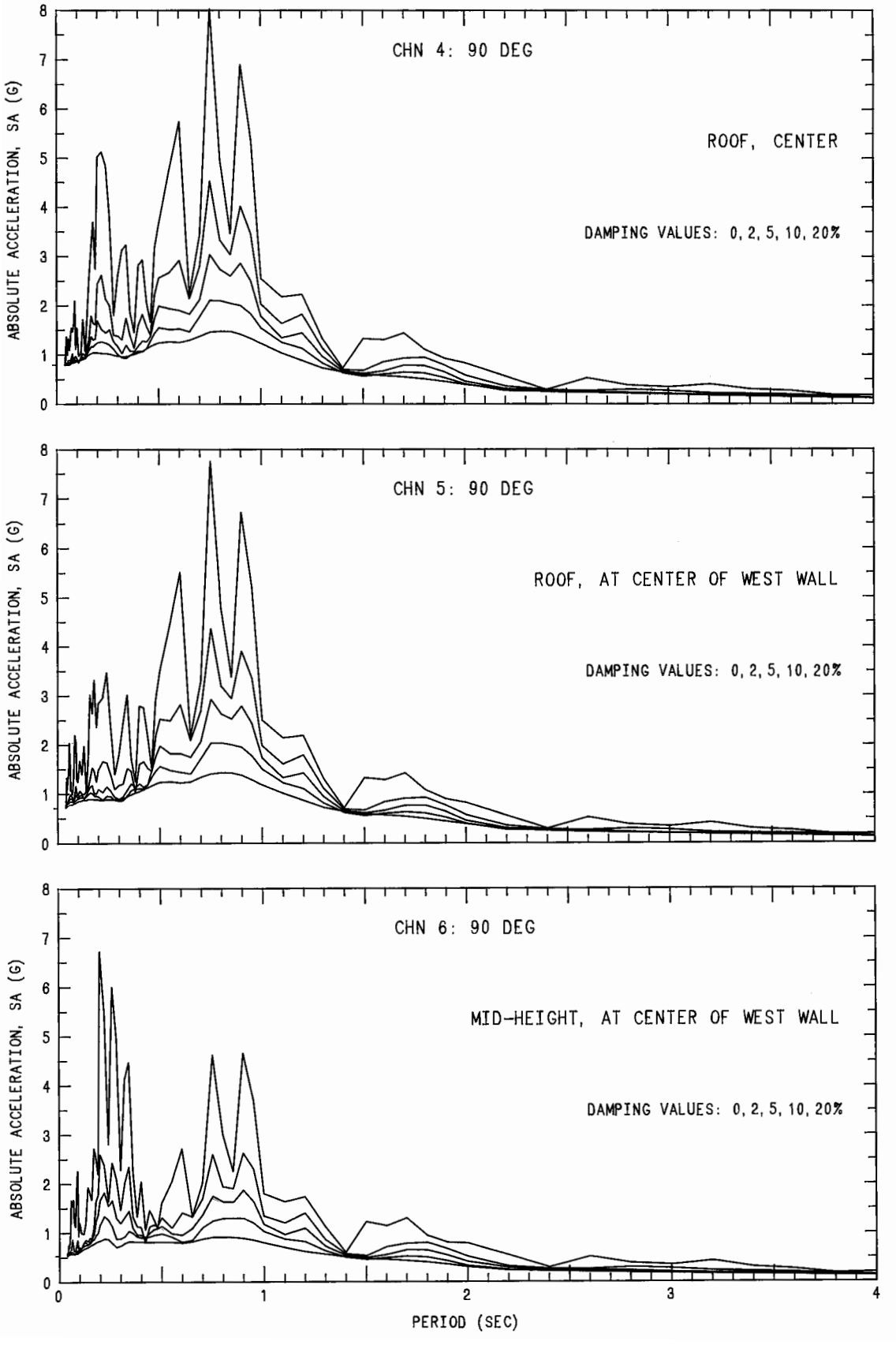


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47391-C0182-90009.03
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



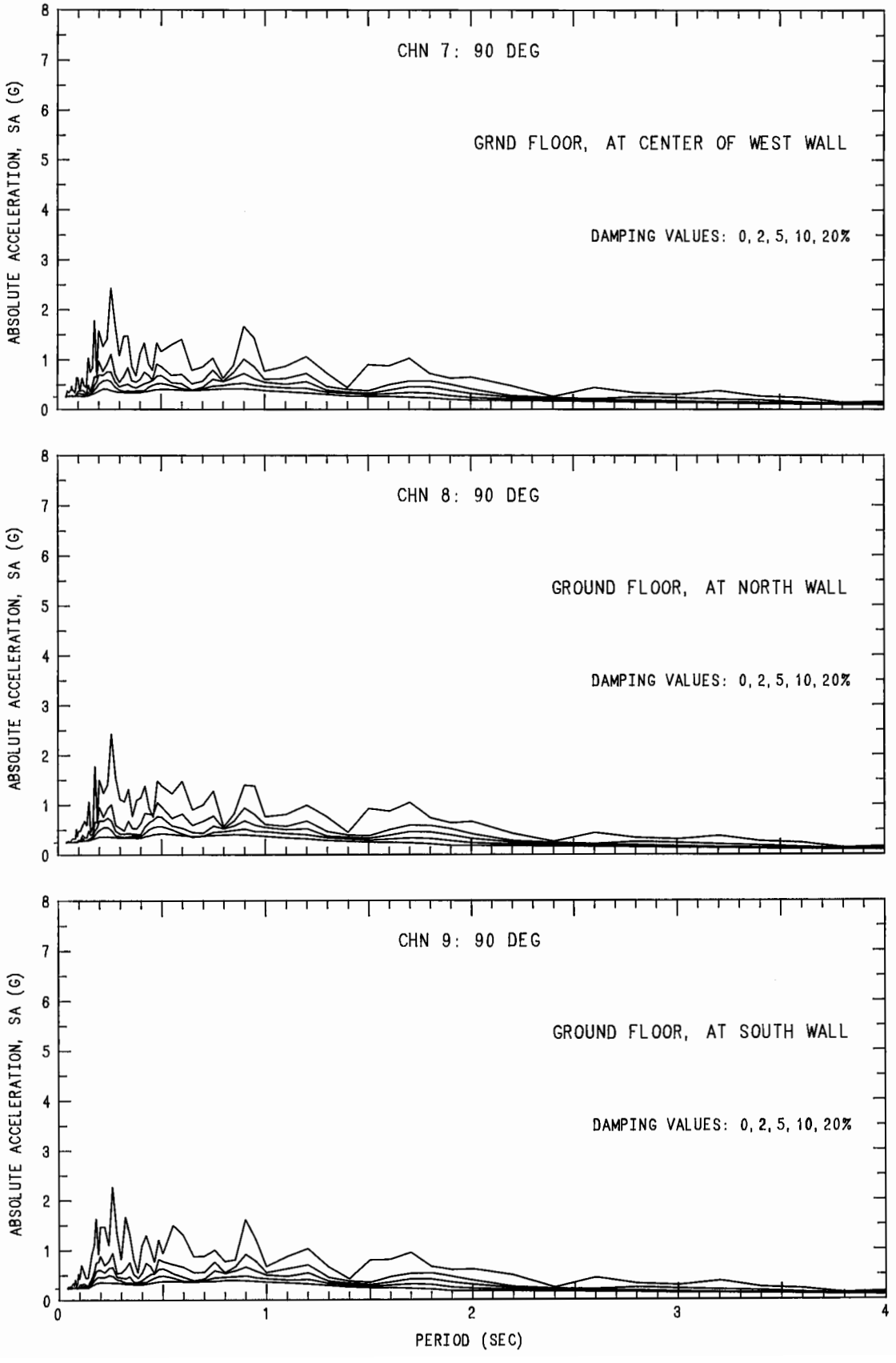
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47391-C0182-90009.03
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



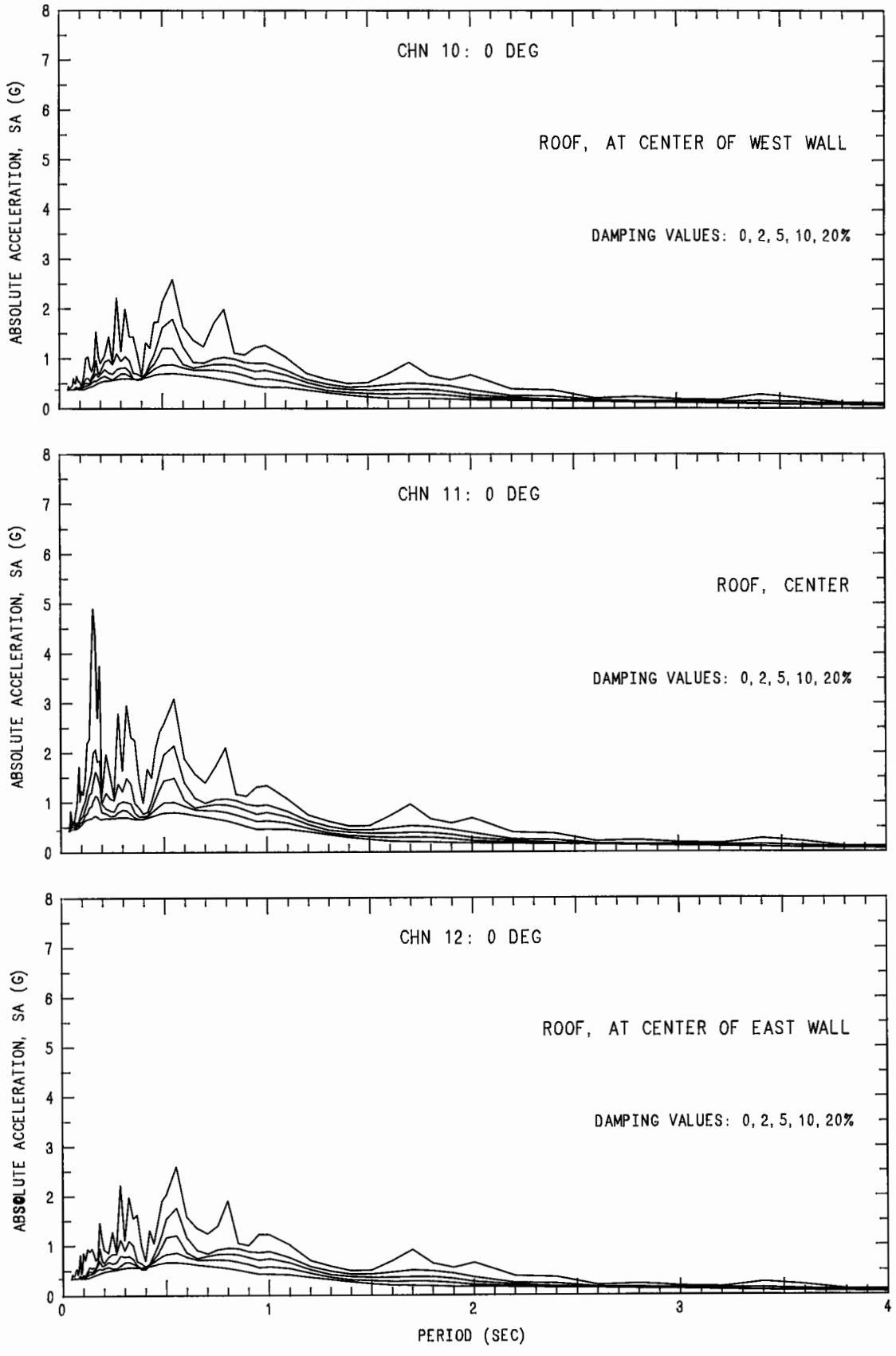
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47391-C0182-90009.03
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



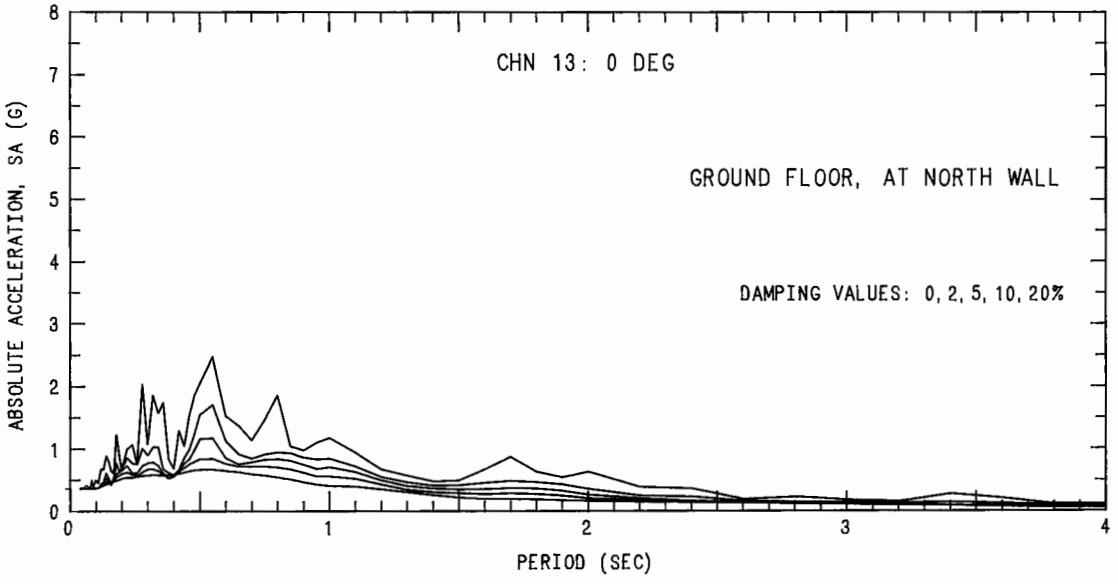
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47391-C0182-90009.03
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - 1-STORY WAREHOUSE: CSMIP S/N 391

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47391-C0182-90009.03
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

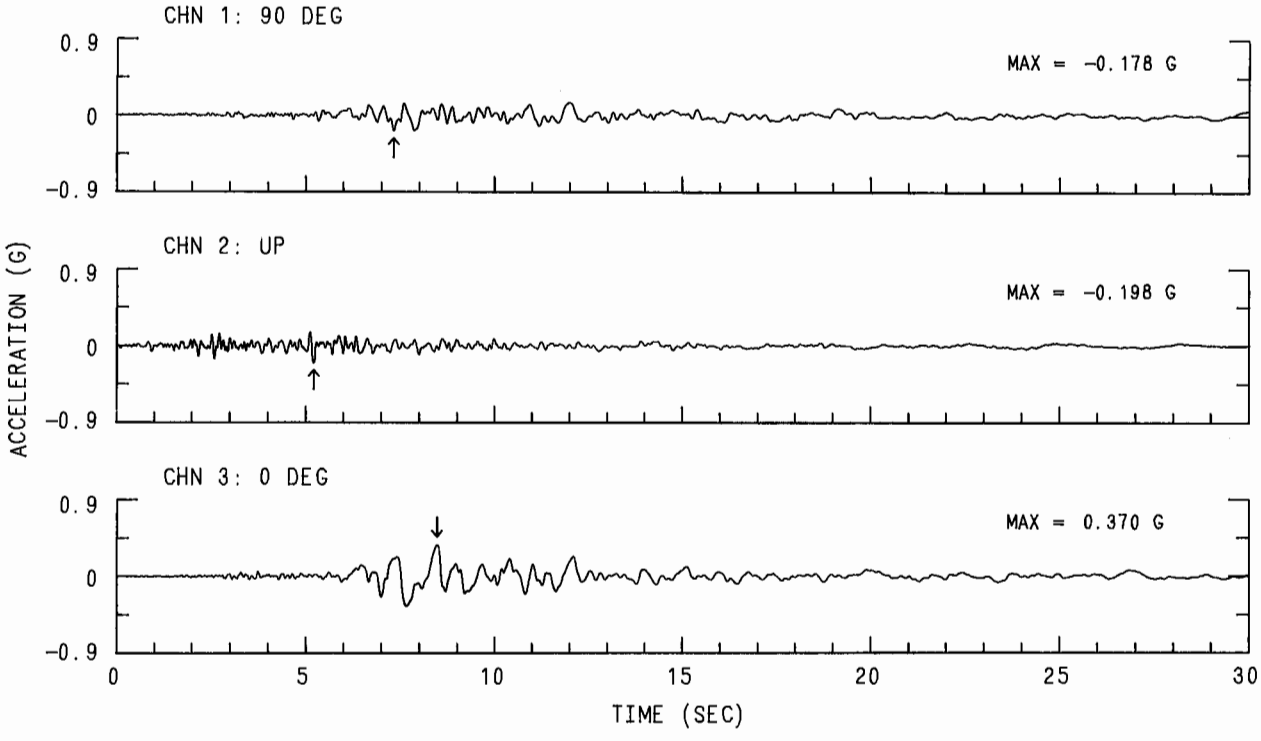
HOLLISTER - SOUTH STREET AND PINE DRIVE: CSMIP S/N 524

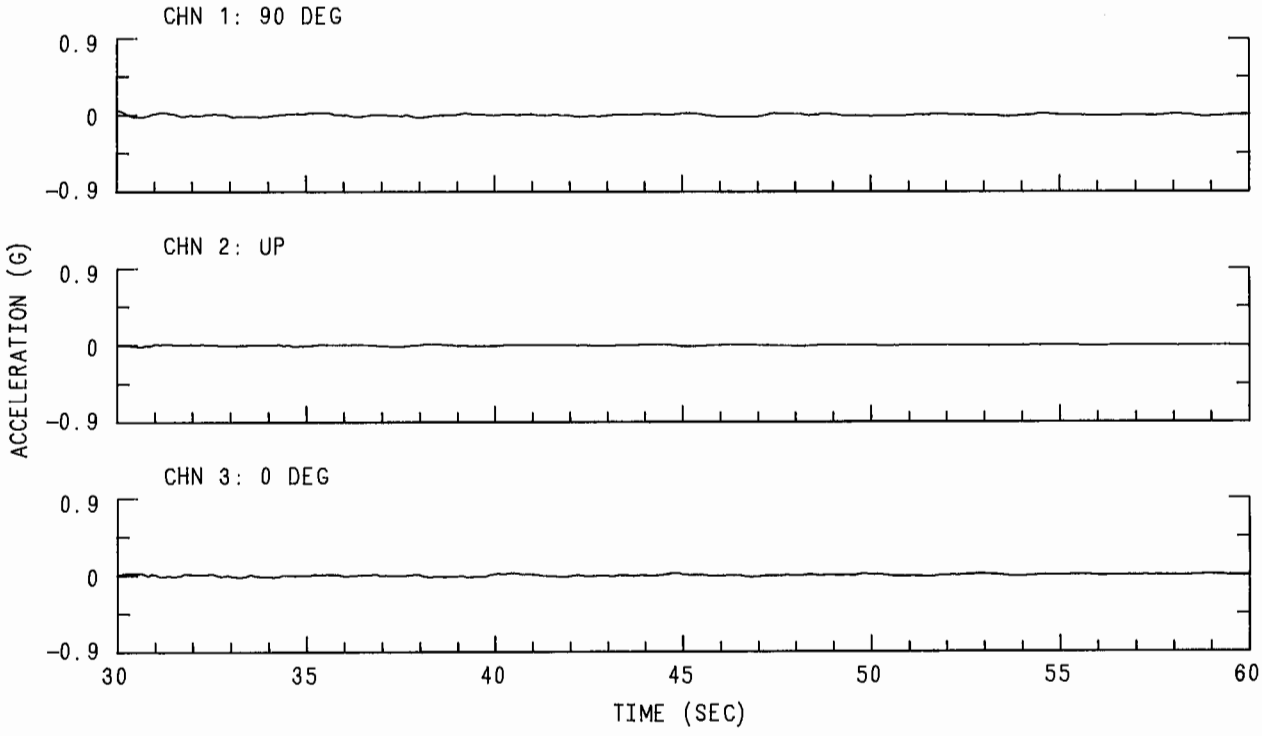
PHASE 1 ACCELERATION

RECORD ID: 47524-S1585-89291.02

(The FF channel orientation of 90° and 0° are the same as the structure channel orientations of 115° and 25°, respectively)

(The FF record started about 0.3 second later than the structure)

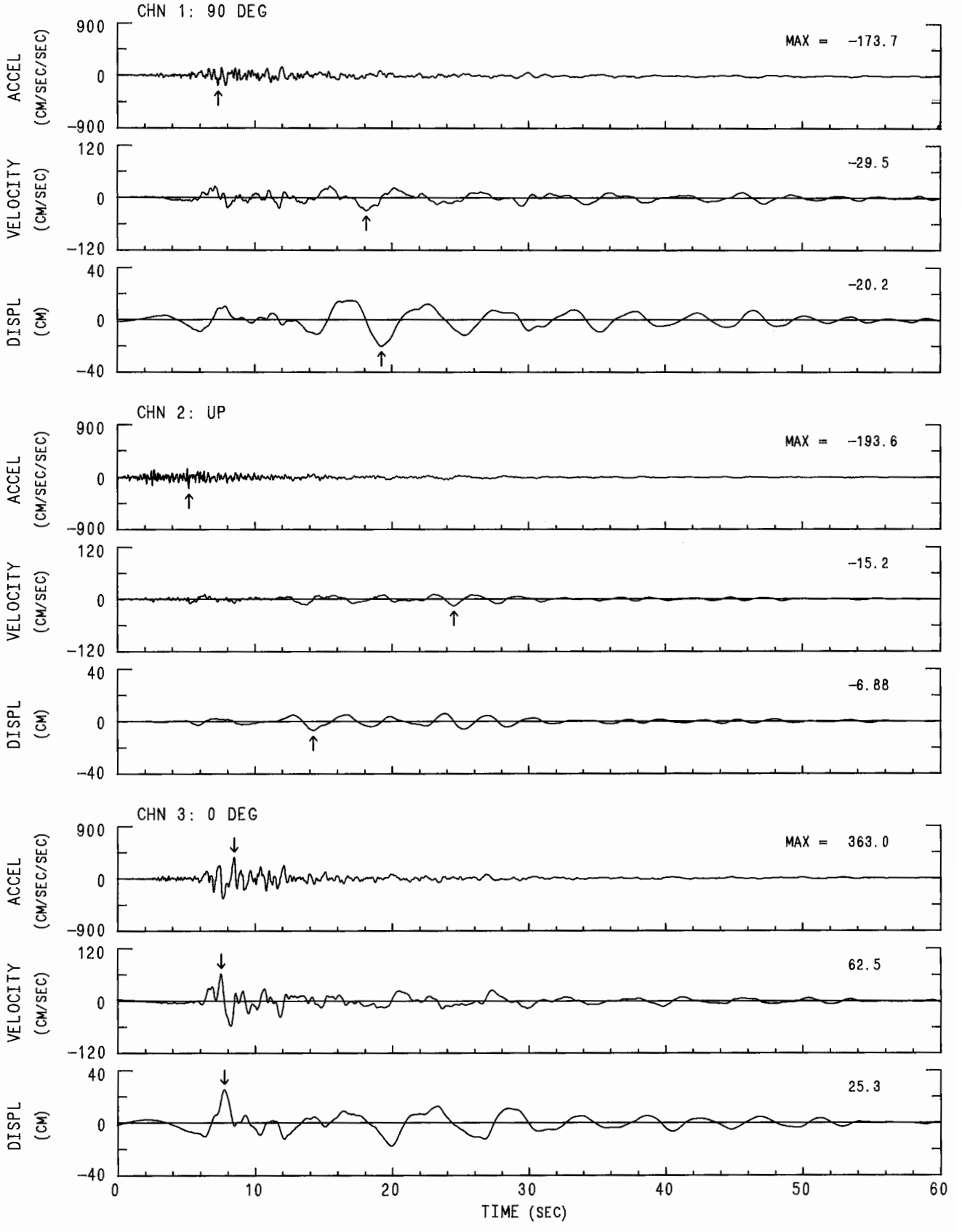




SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - SOUTH STREET AND PINE DRIVE: CSMIP S/N 524

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 47524-S1585-89291.02



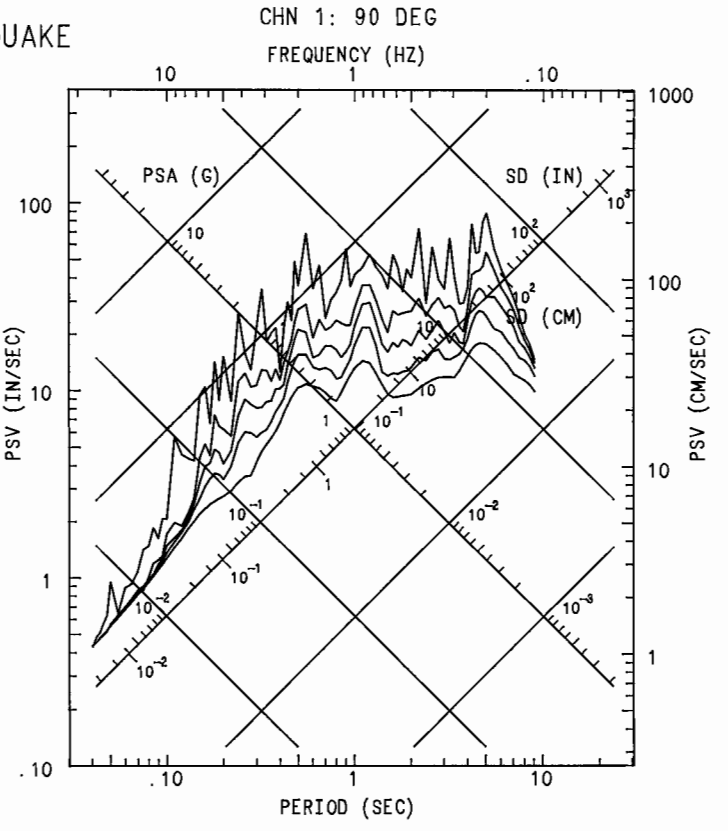
HOLLISTER – SOUTH STREET AND PINE DRIVE: CSMIP S/N 524

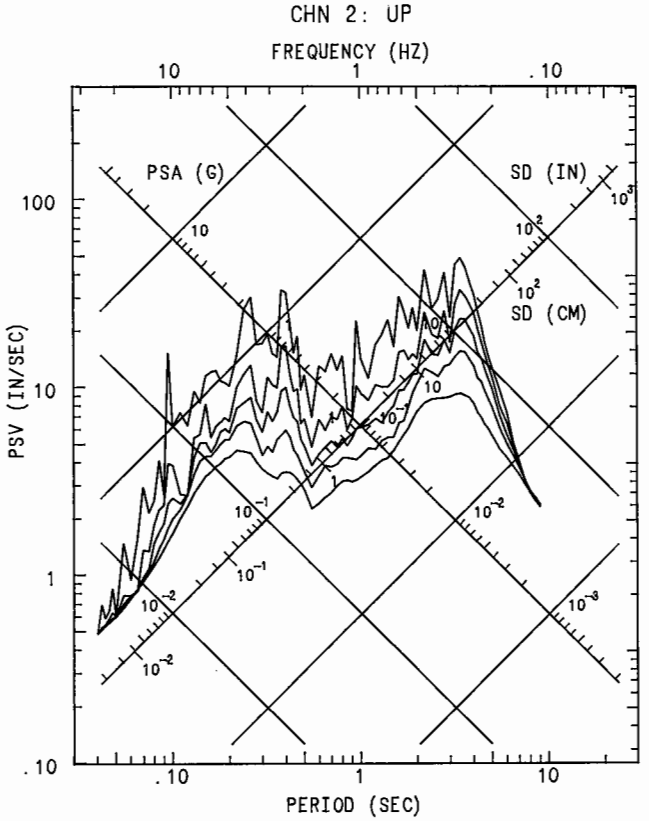
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

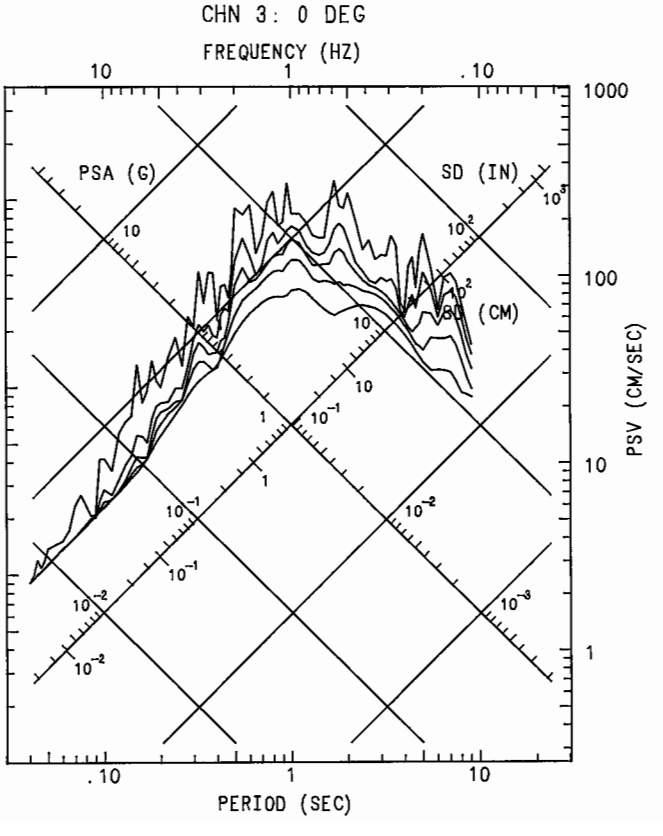
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

RECORD ID: 47524-S1585-89291.02

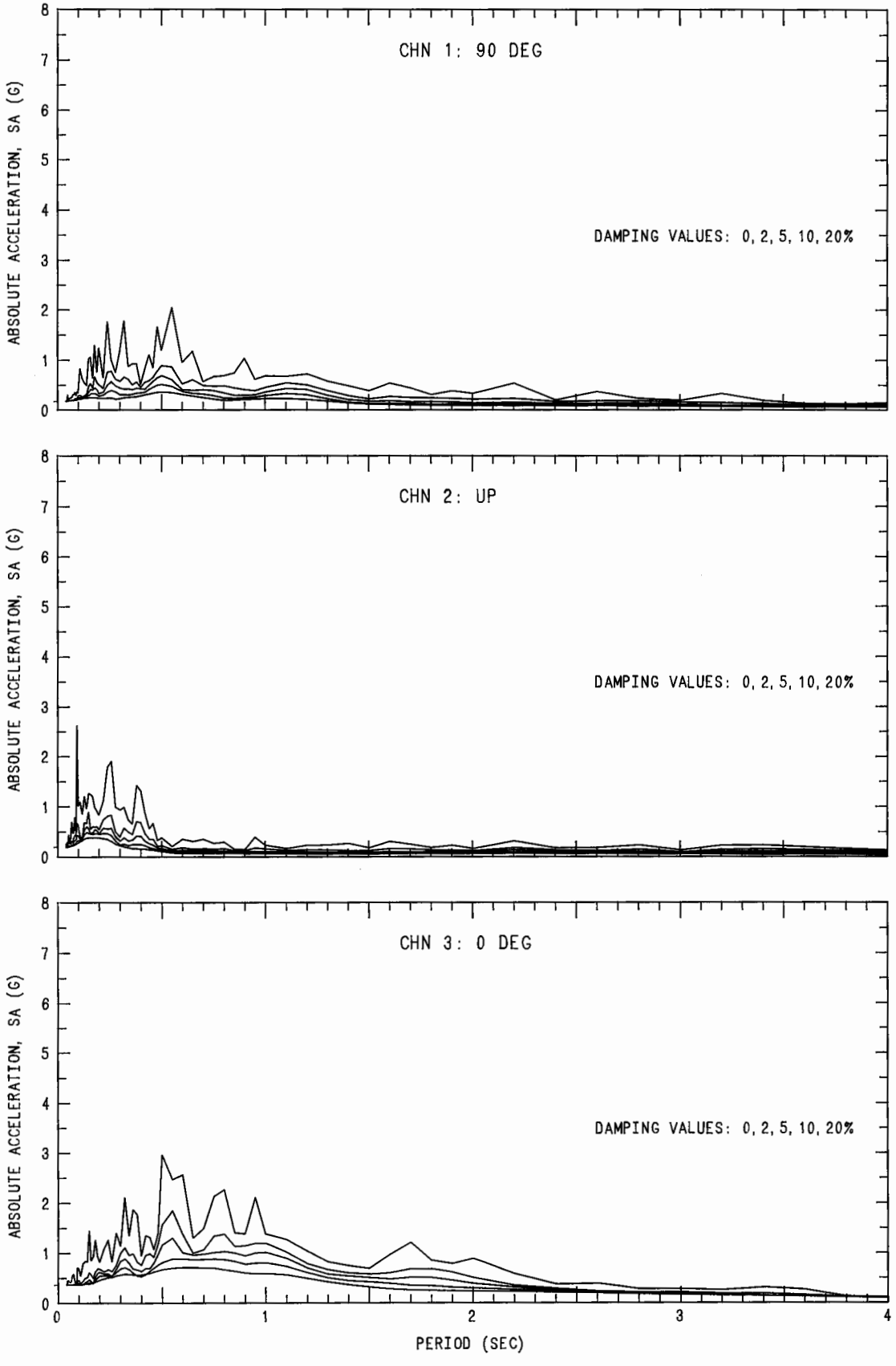
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%







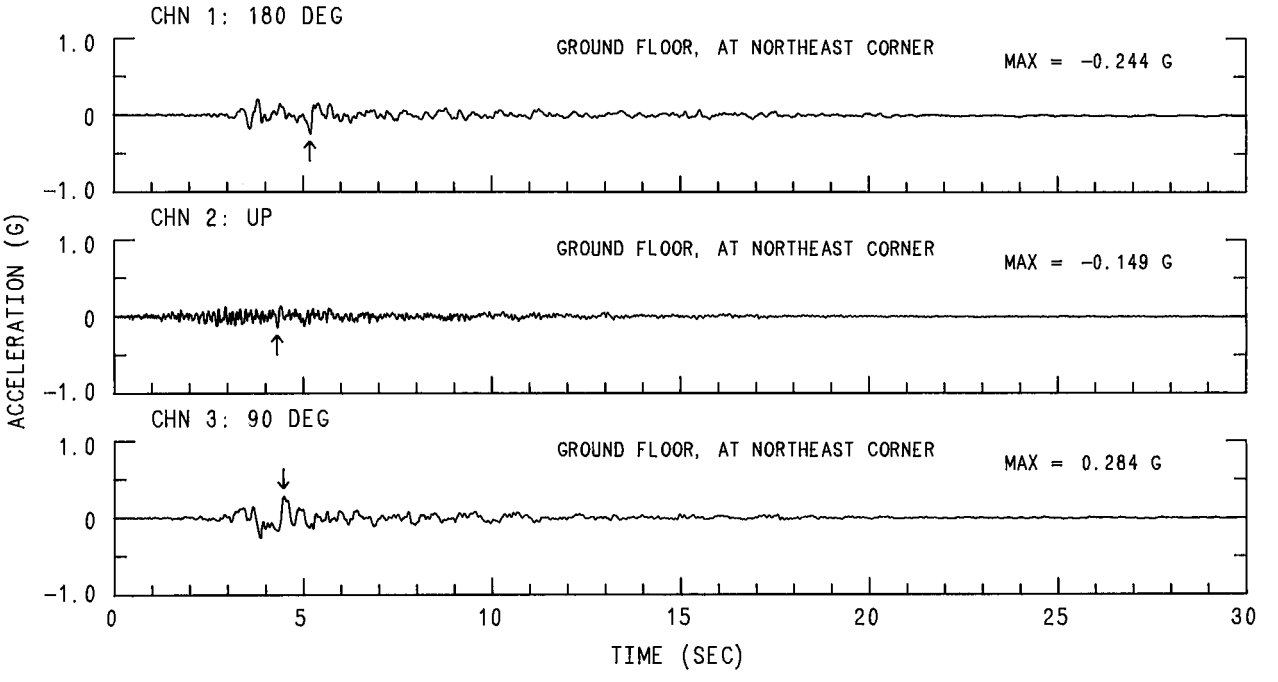
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HOLLISTER - SOUTH STREET AND PINE DRIVE: CSMIP S/N 524
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 47524-S1585-89291.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

GILROY – 2-STORY HIST COMMERCIAL BLDG.: CSMIP S/N 476

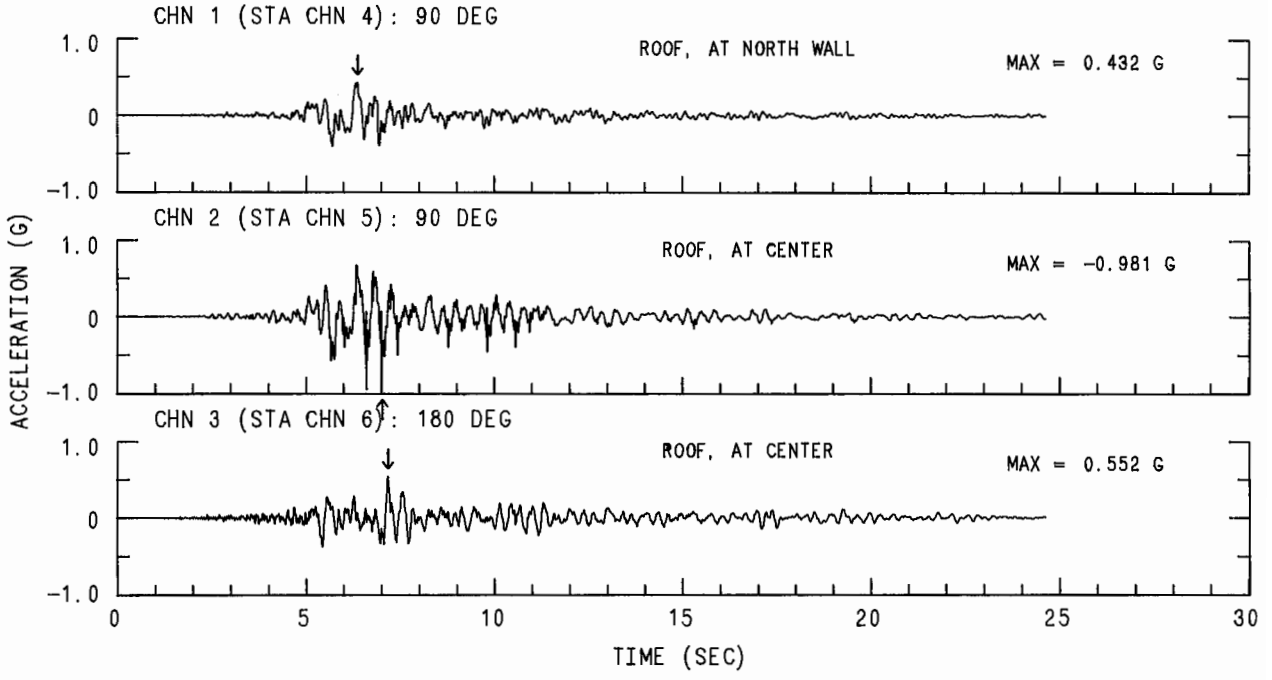
PHASE 1 ACCELERATION. RECORD ID: 57476-S4814-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

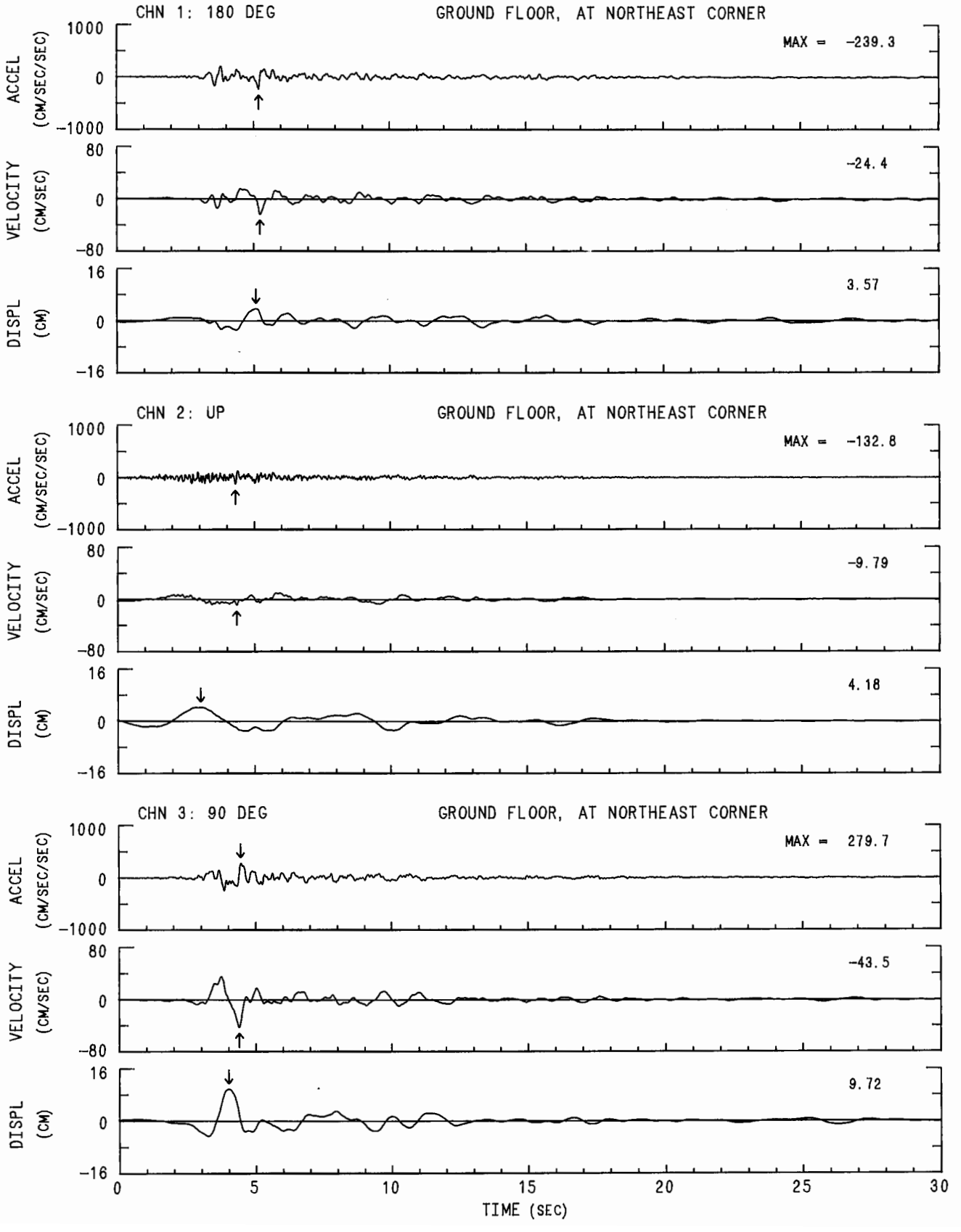
GILROY – 2-STORY HIST COMMERCIAL BLDG.: CSMIP S/N 476

PHASE 1 ACCELERATION. RECORD ID: 57476-D0266-89292.01



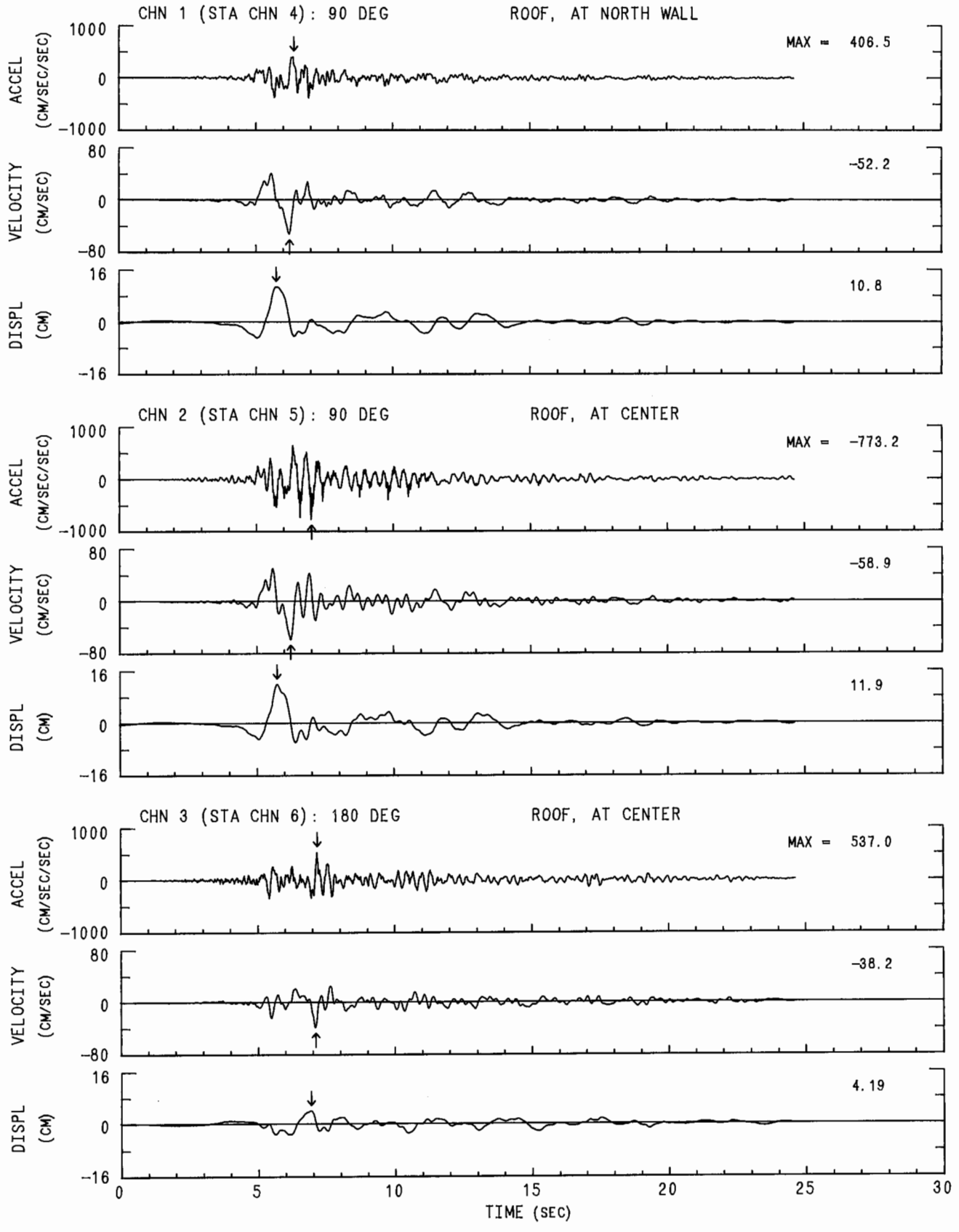
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
GILROY – 2-STORY HIST COMMERCIAL BLDG.: CSMIP S/N 476

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57476-S4814-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
GILROY - 2-STORY HIST COMMERCIAL BLDG.: CSMIP S/N 476

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57476-D0266-89292.01



GILROY - 2-STORY HIST COMMERCIAL BLDG. : CSMIP S/N 476

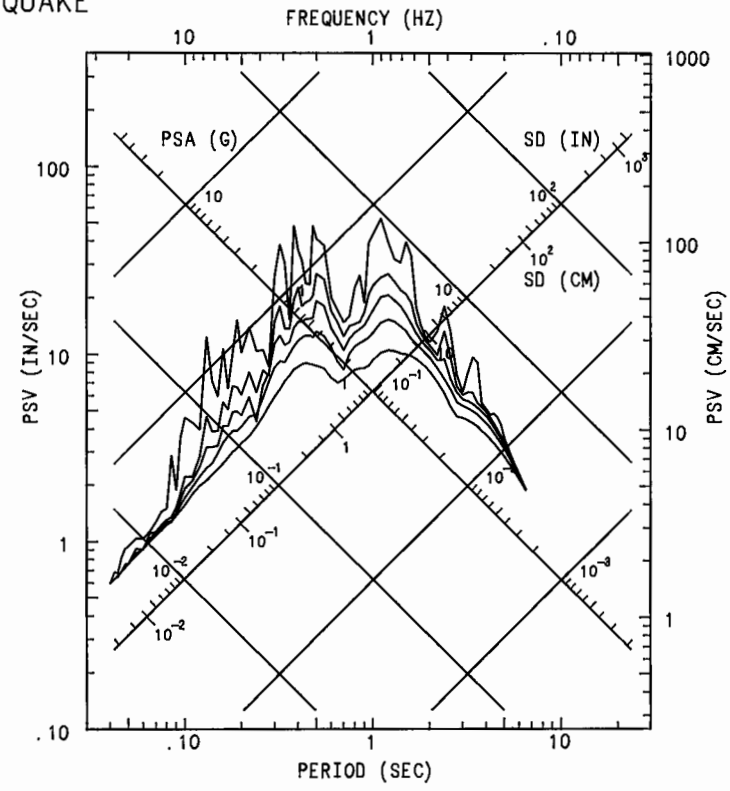
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

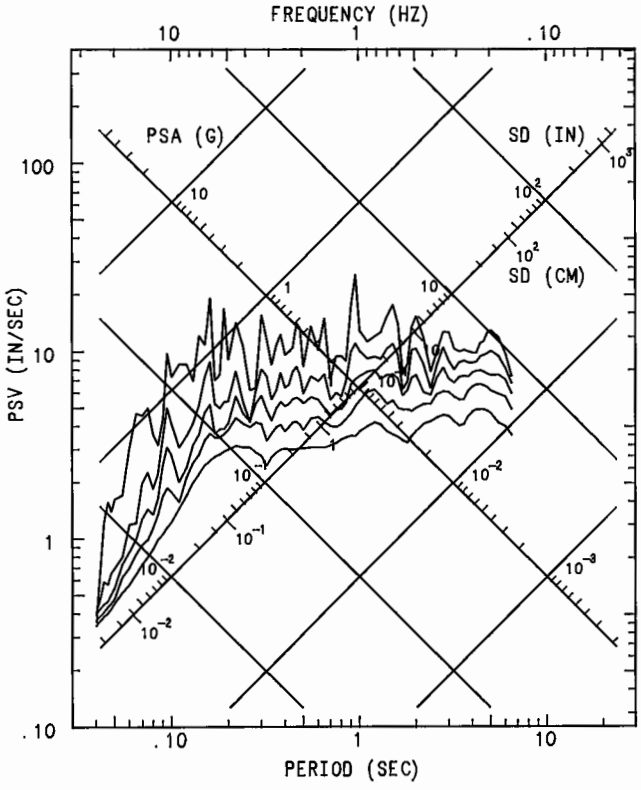
RECORD ID: 57476-S4814-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

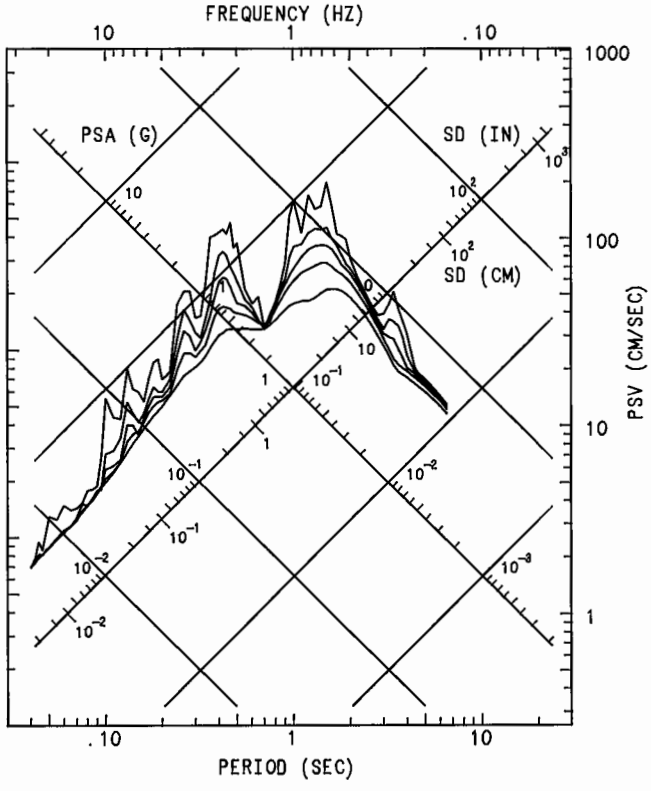
CHN 1: 180 DEG
GROUND FLOOR, AT NORTHEAST CORNER



CHN 2: UP
GROUND FLOOR, AT NORTHEAST CORNER



CHN 3: 90 DEG
GROUND FLOOR, AT NORTHEAST CORNER



GILROY – 2-STORY HIST COMMERCIAL BLDG. : CSMIP S/N 476

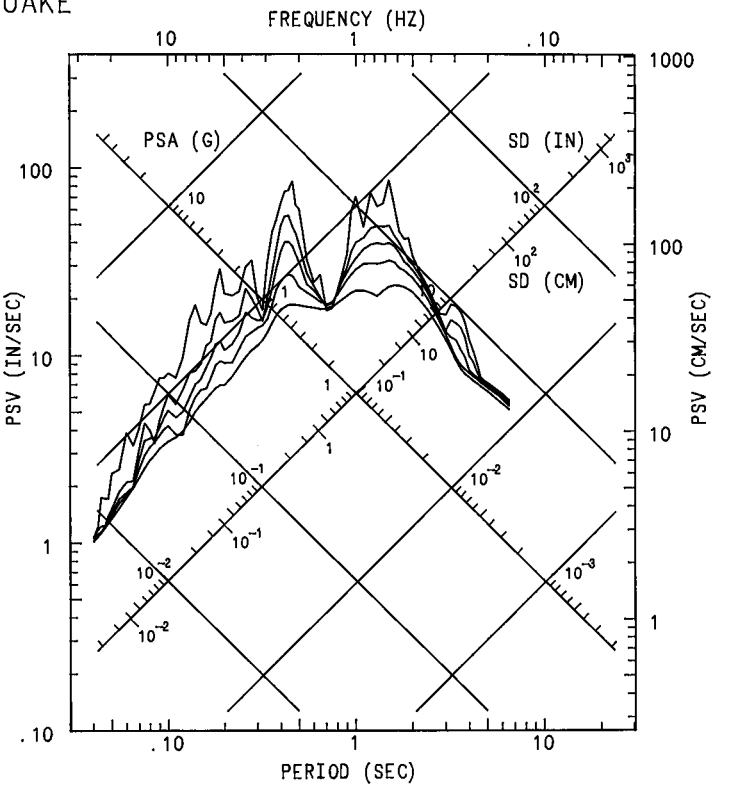
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

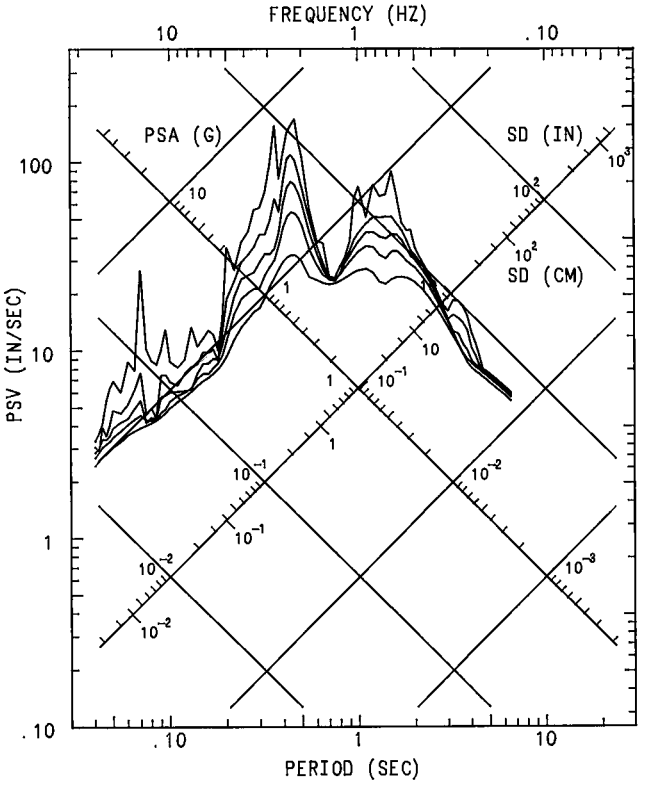
RECORD ID: 57476-D0266-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

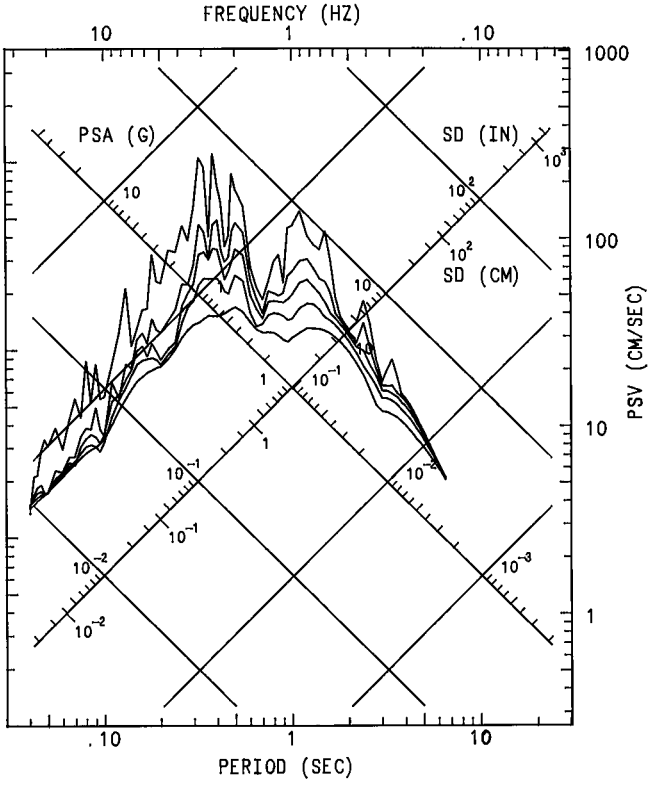
CHN 1 (STA CHN 4): 90 DEG
ROOF, AT NORTH WALL



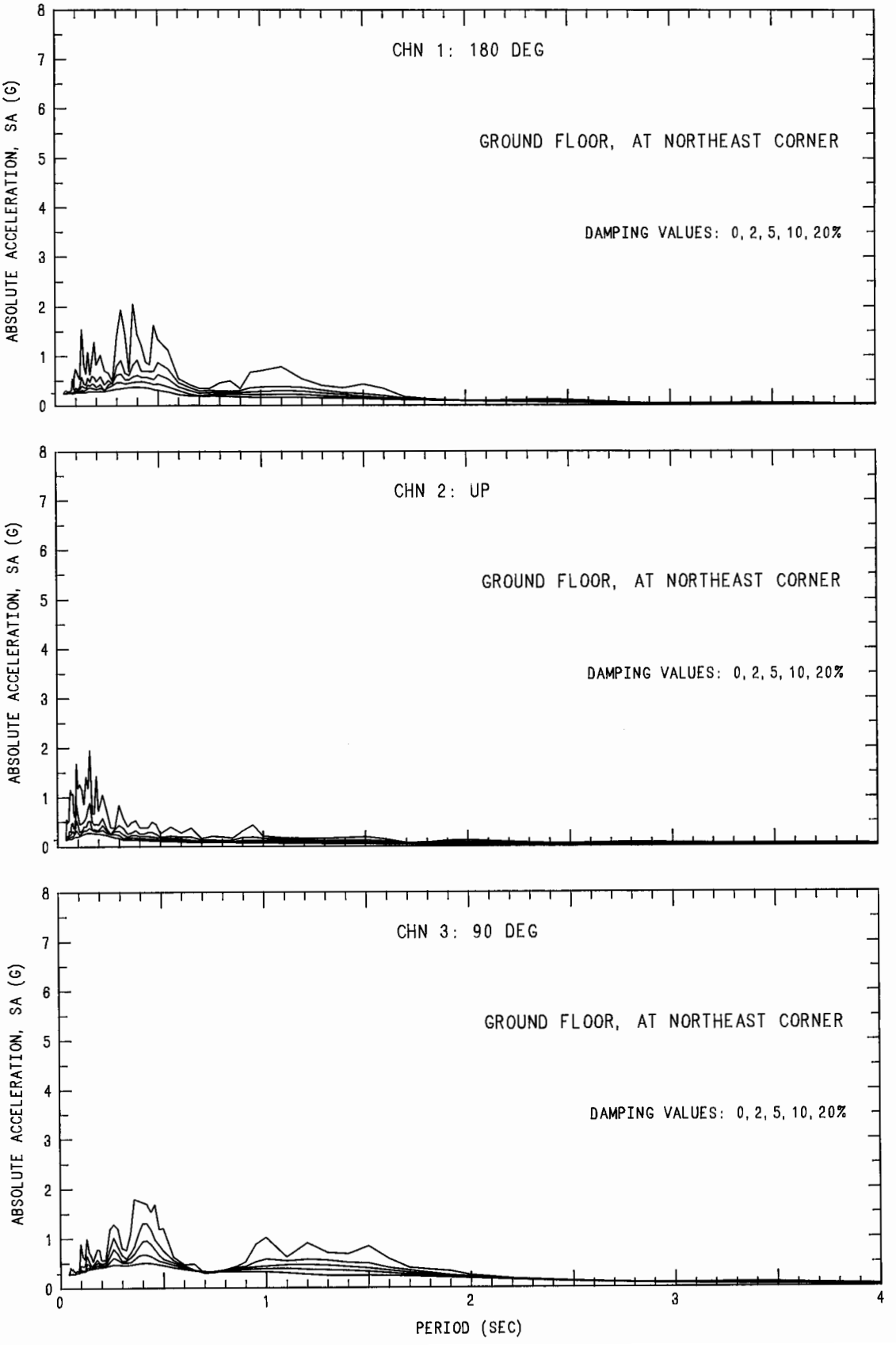
CHN 2 (STA CHN 5): 90 DEG
ROOF, AT CENTER



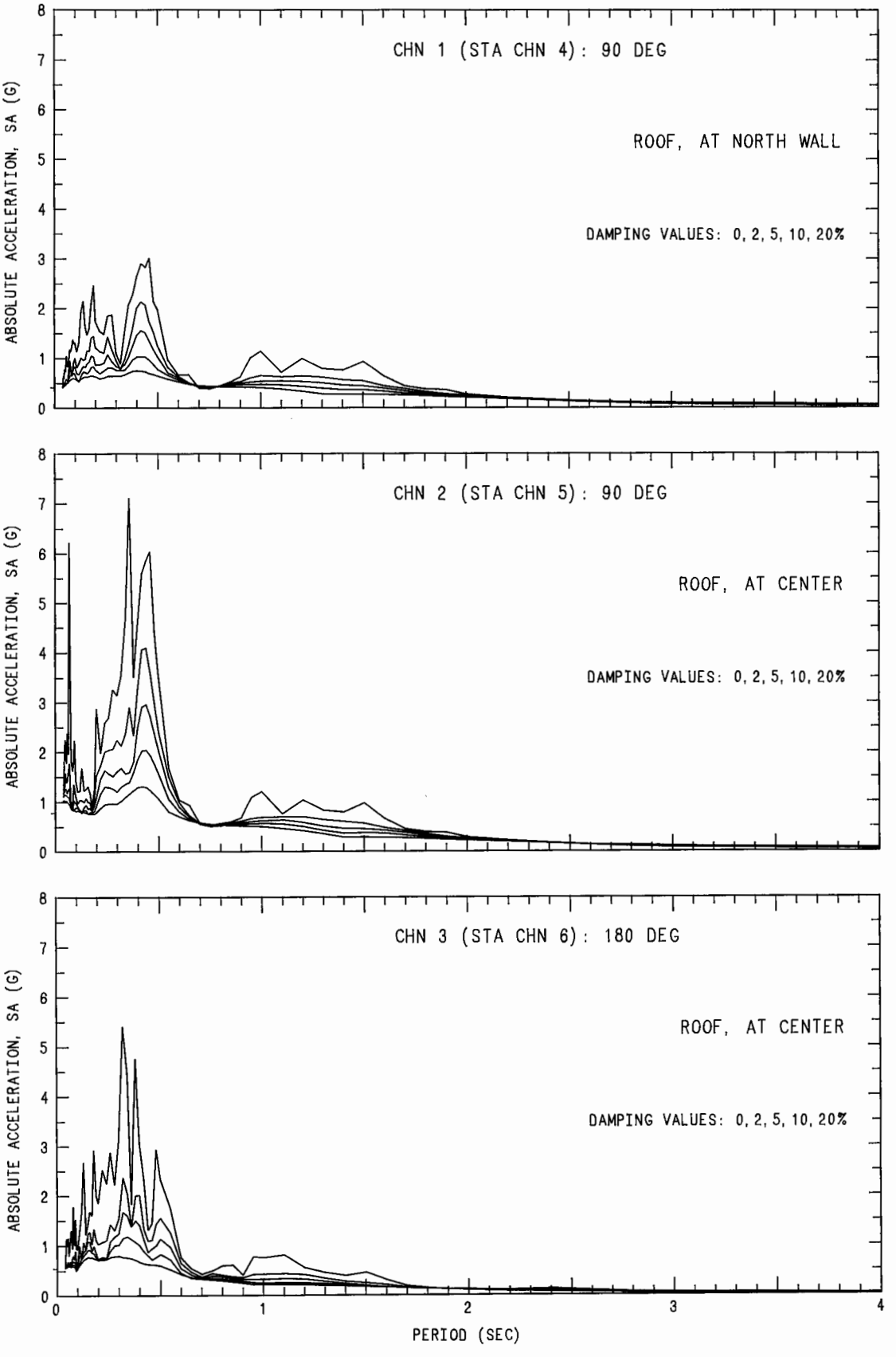
CHN 3 (STA CHN 6): 180 DEG
ROOF, AT CENTER



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
GILROY – 2–STORY HIST COMMERCIAL BLDG. : CSMIP S/N 476
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57476–S4814–89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



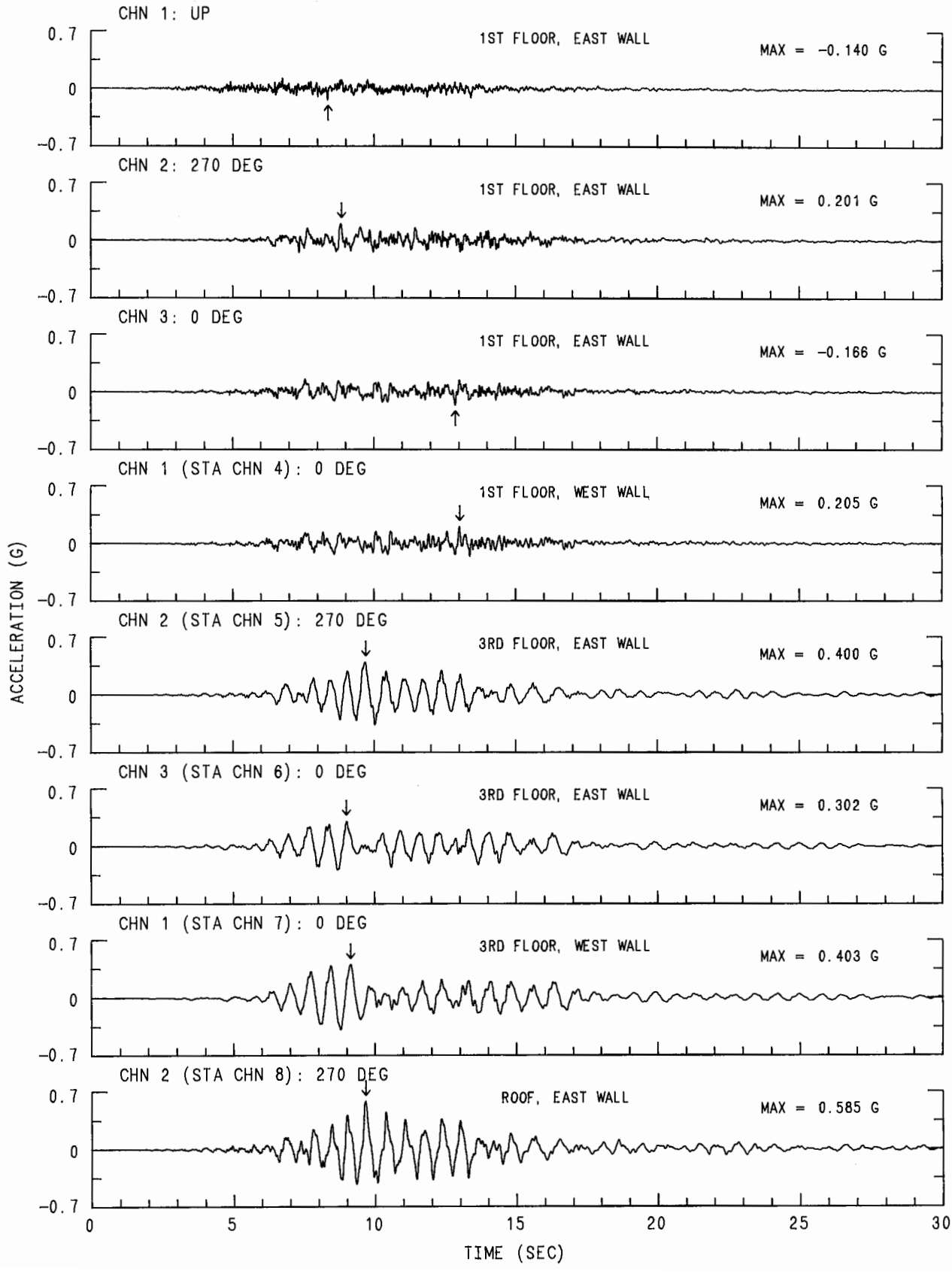
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
GILROY - 2-STORY HIST COMMERCIAL BLDG. : CSMIP S/N 476
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57476-D0266-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 3-STORY OFFICE BLDG. . CSMIP S/N 562

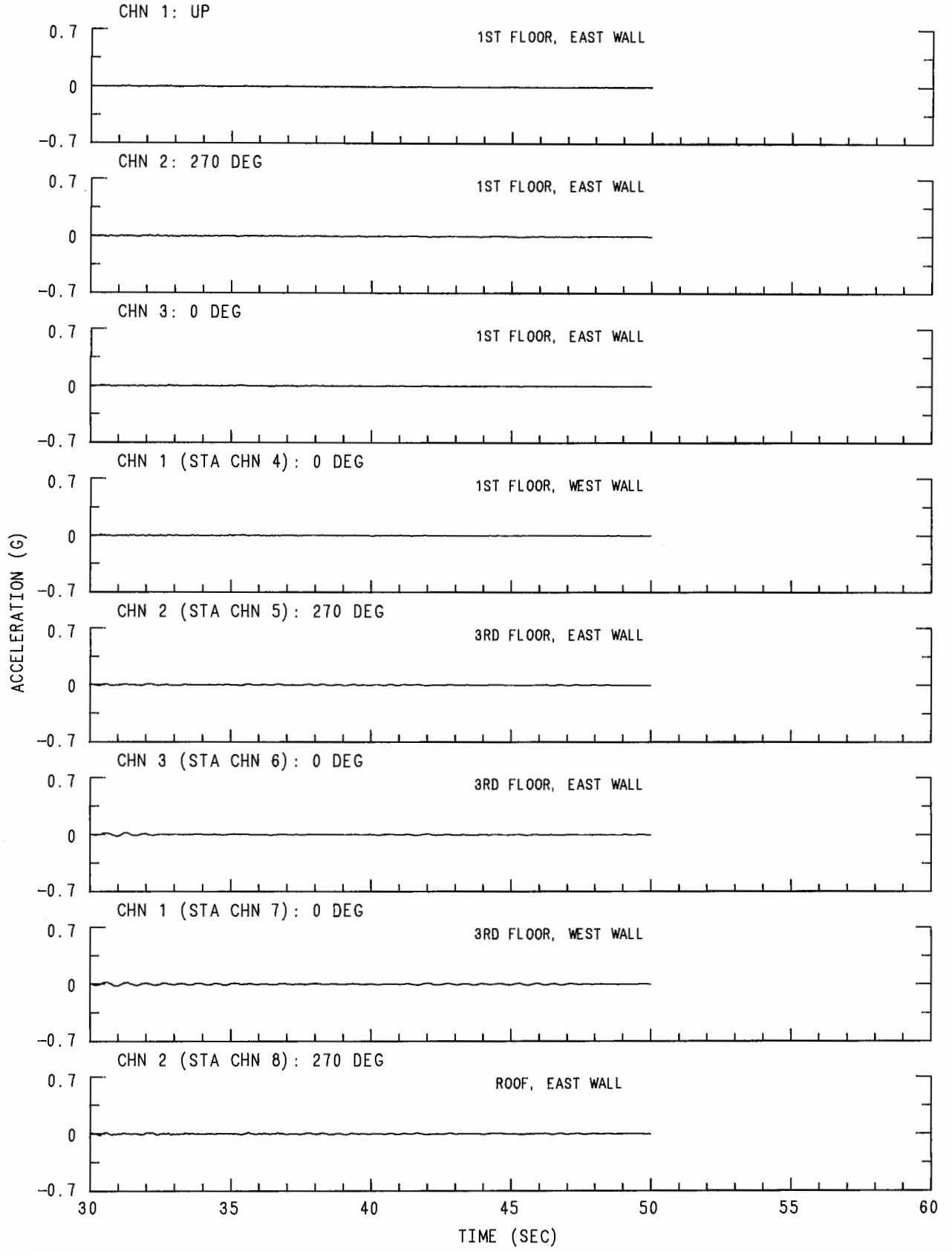
PHASE 1 ACCELERATION. RECORD ID: 57562-D0312-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

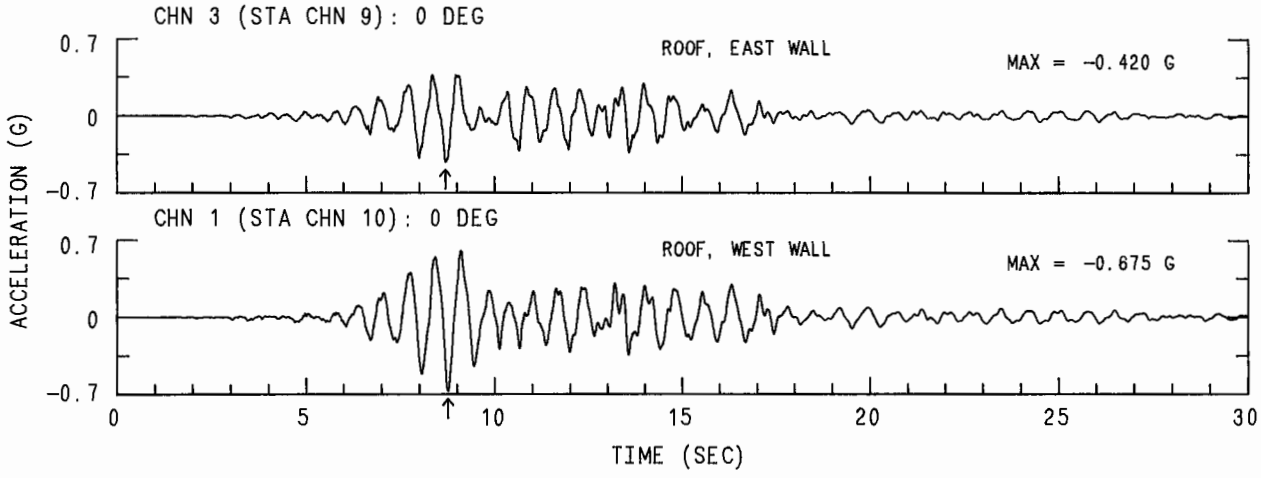
PHASE 1 ACCELERATION. RECORD ID: 57562-D0312-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

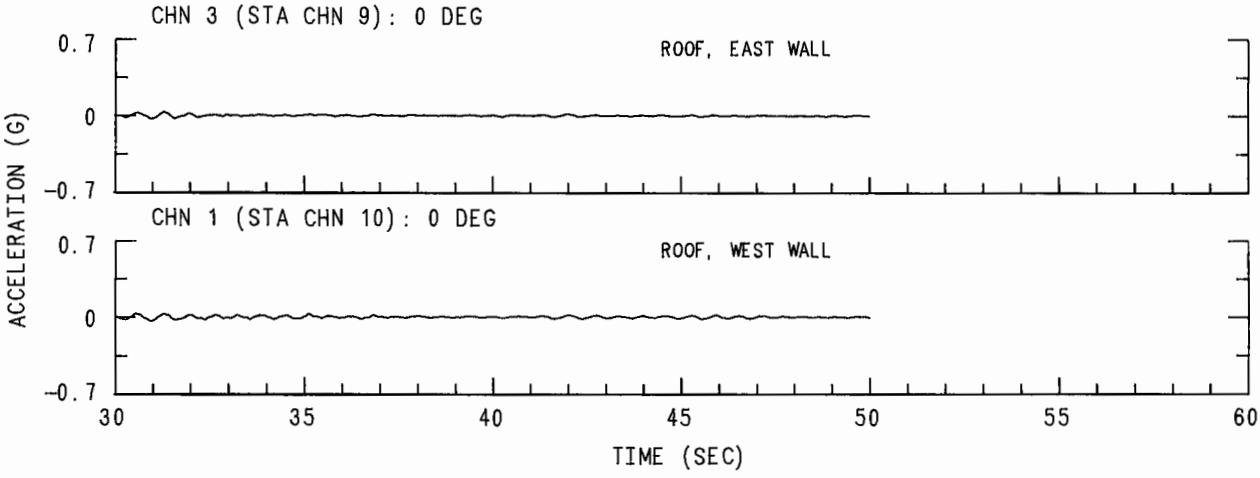
PHASE 1 ACCELERATION. RECORD ID: 57562-D0314-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

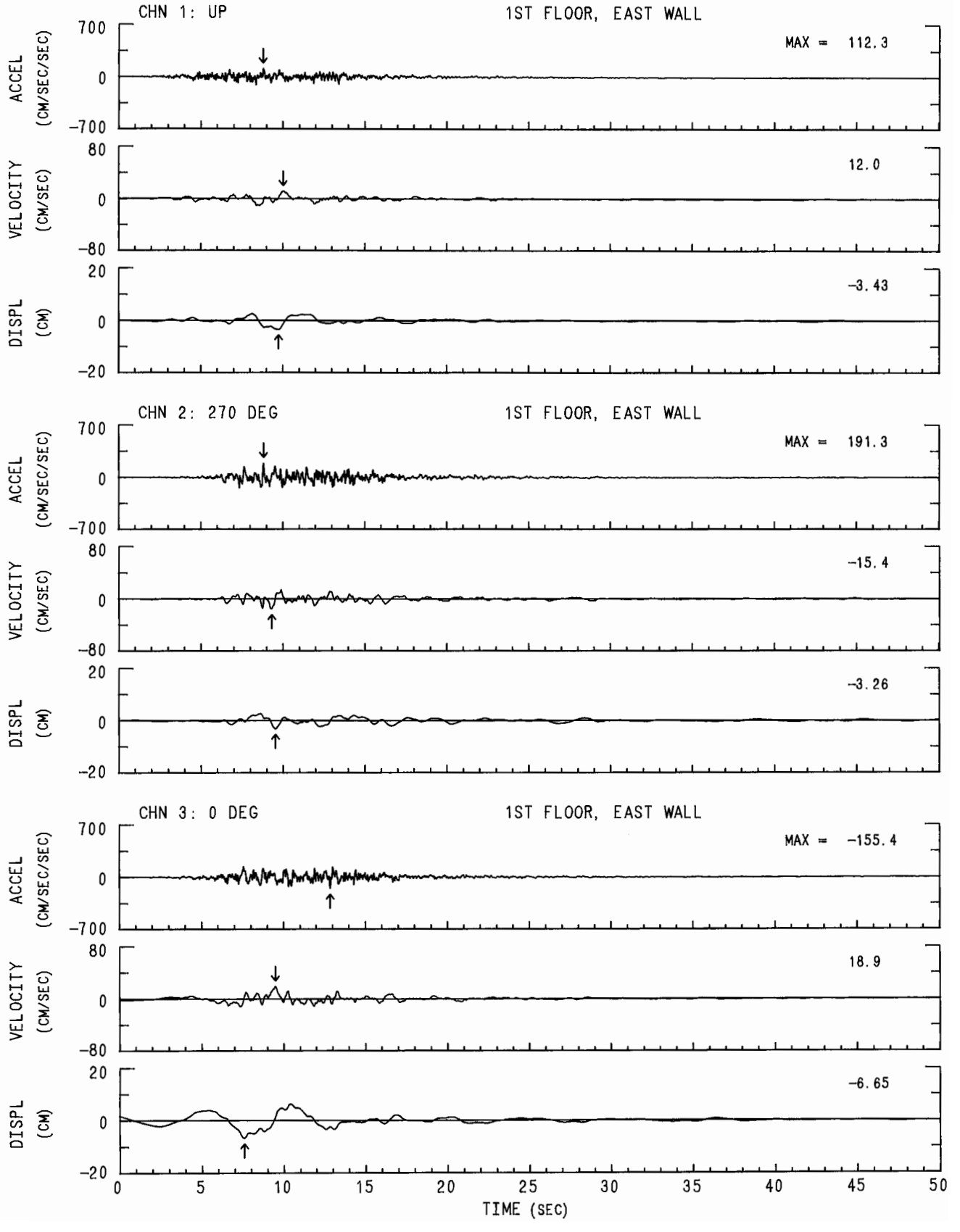
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

PHASE 1 ACCELERATION. RECORD ID: 57562-D0314-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

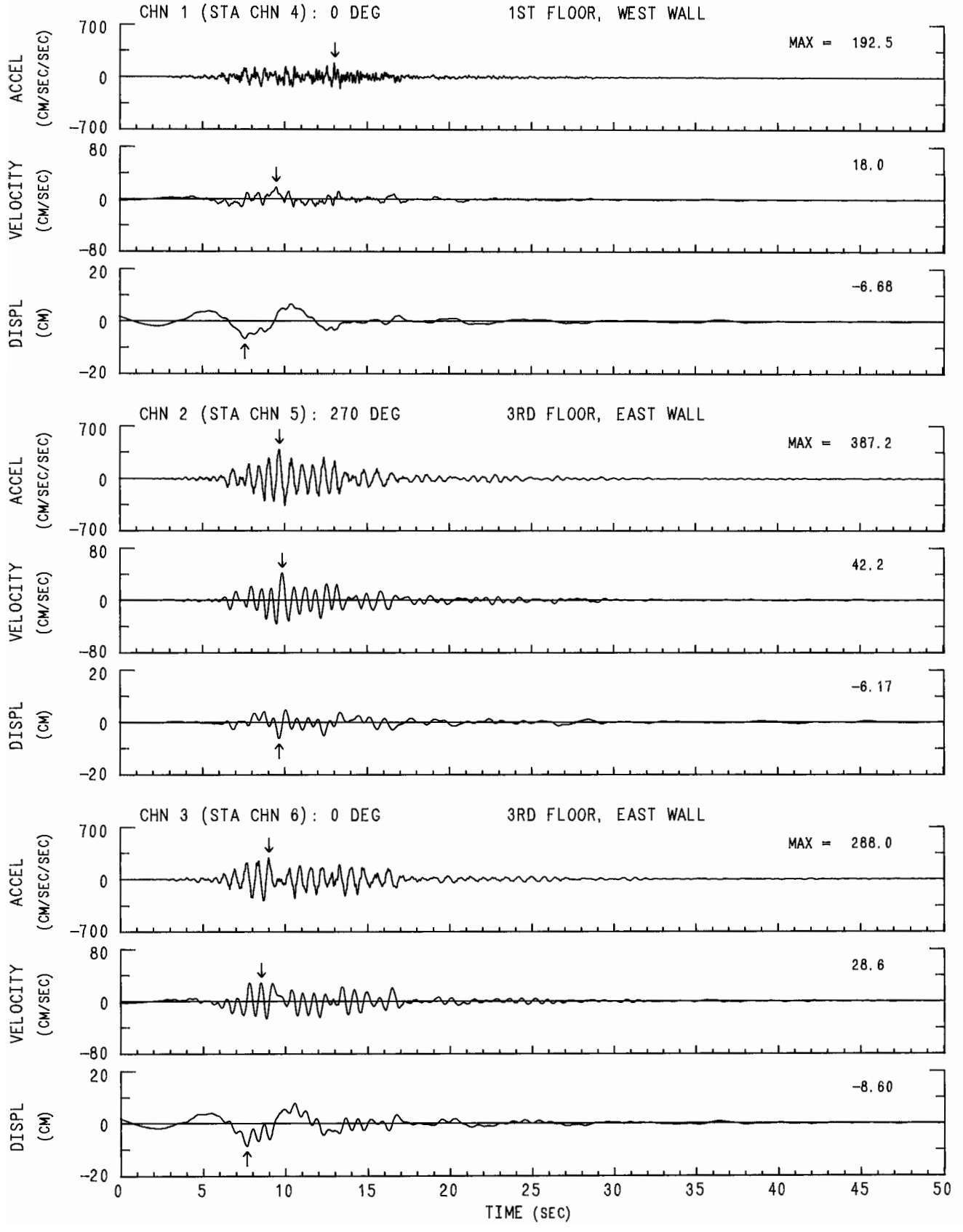
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 57562-D0312-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

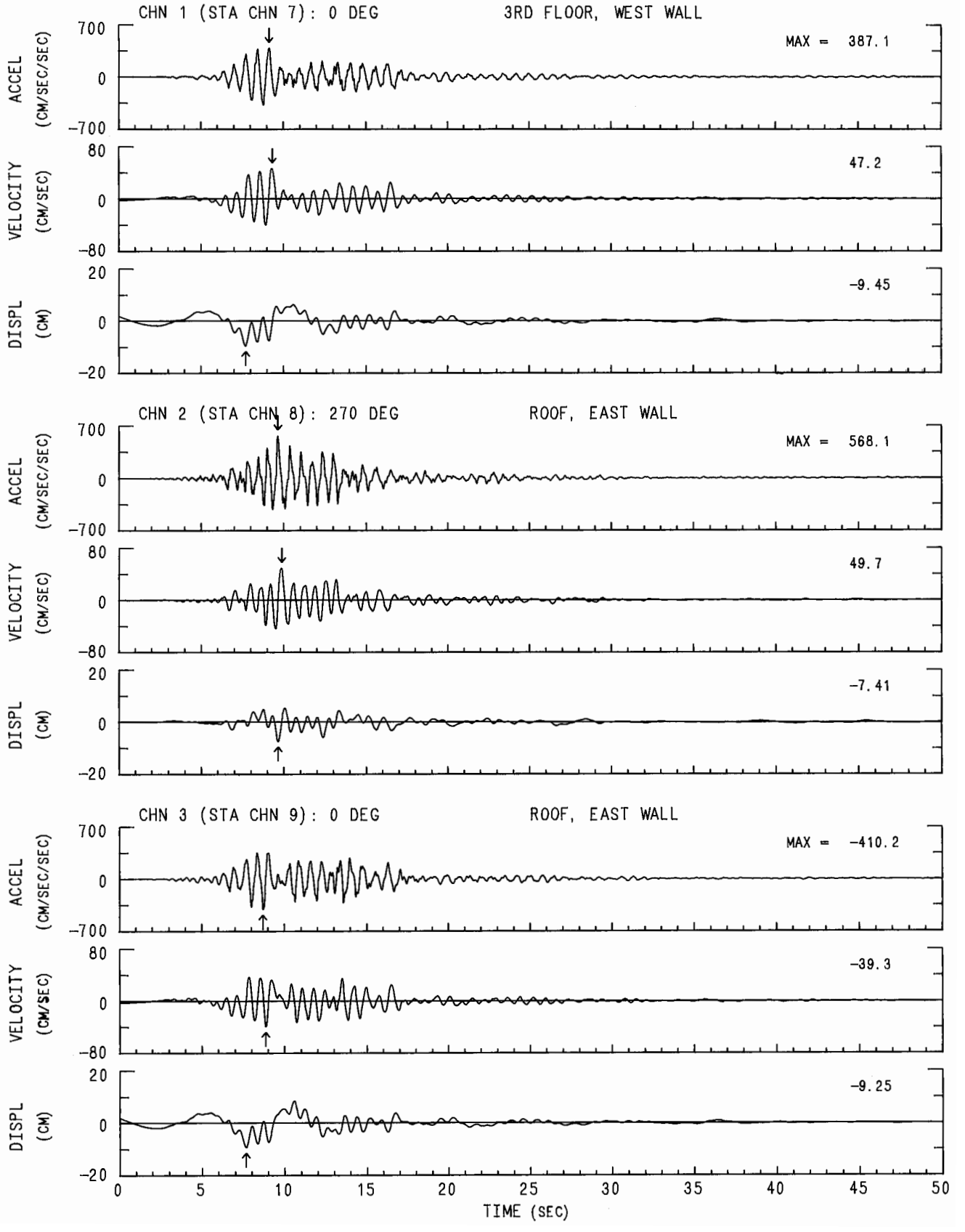
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 57562-D0313-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

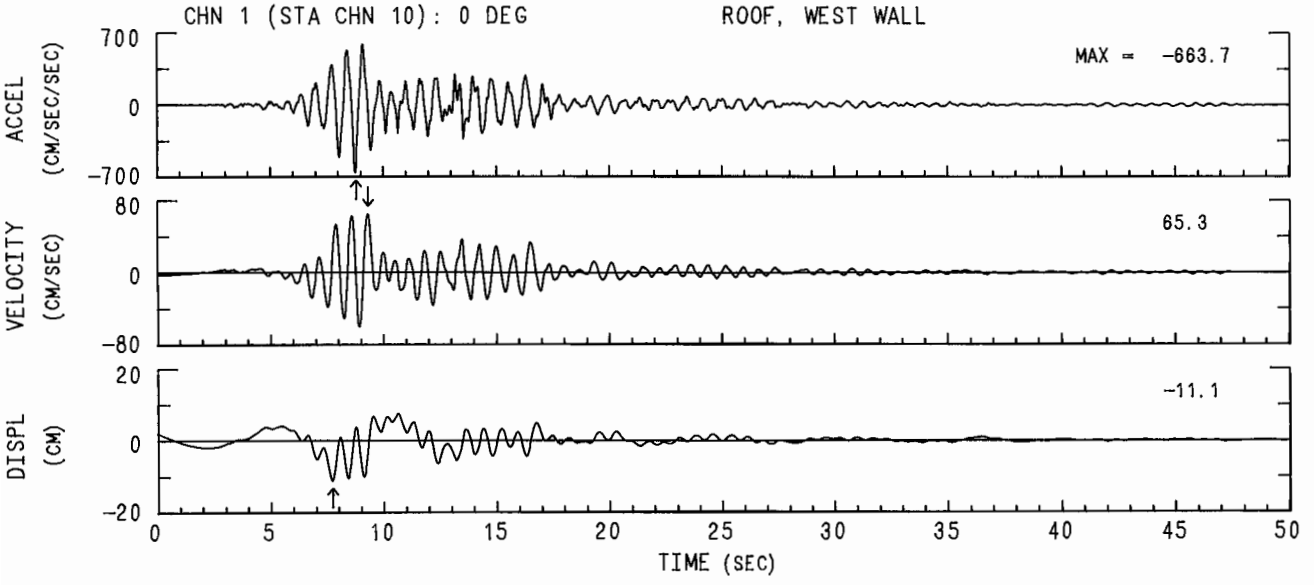
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 57562-D0314-89293.05



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 57562-D0315-89293.05



SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

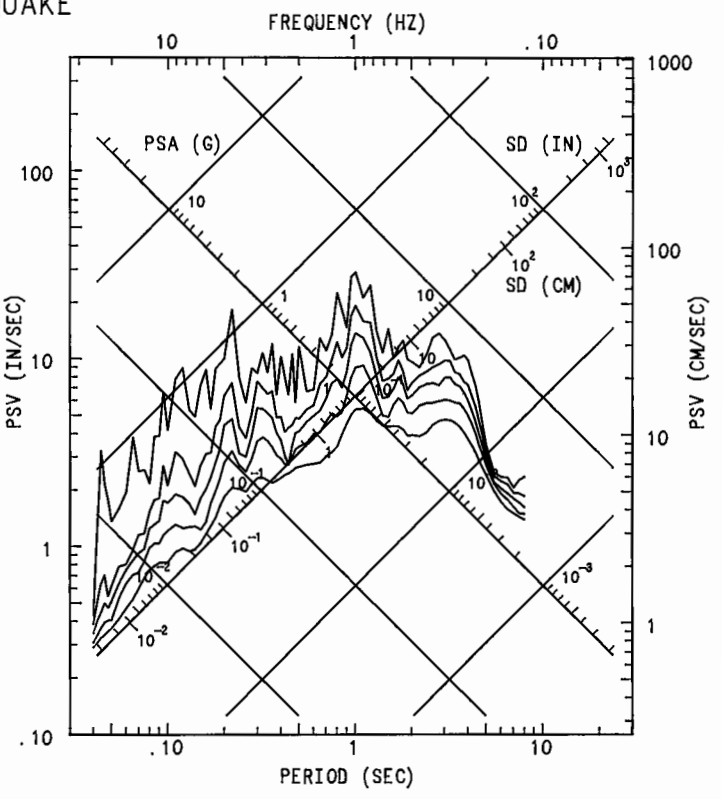
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

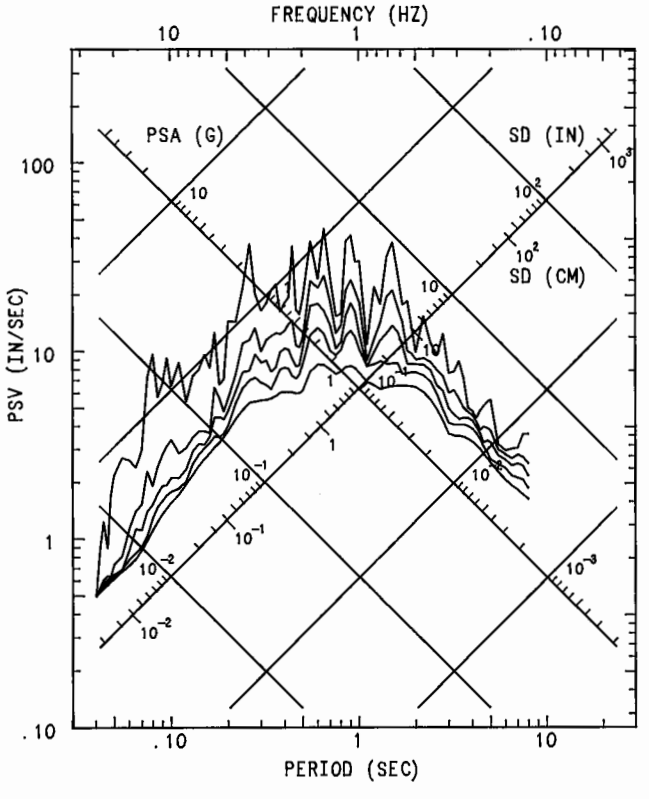
RECORD ID: 57562-D0312-89293.05

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

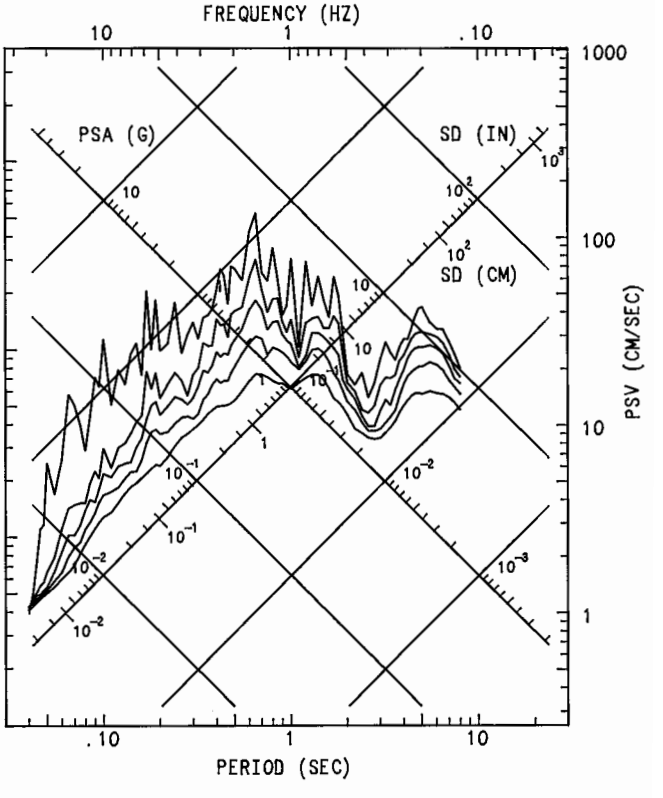
CHN 1: UP
1ST FLOOR, EAST WALL



CHN 2: 270 DEG
1ST FLOOR, EAST WALL



CHN 3: 0 DEG
1ST FLOOR, EAST WALL



SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

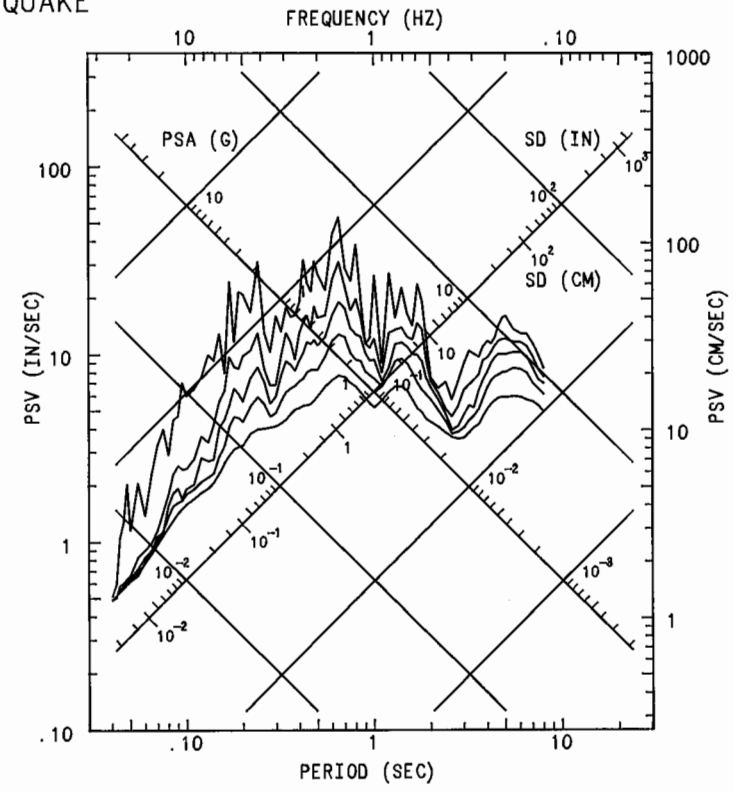
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

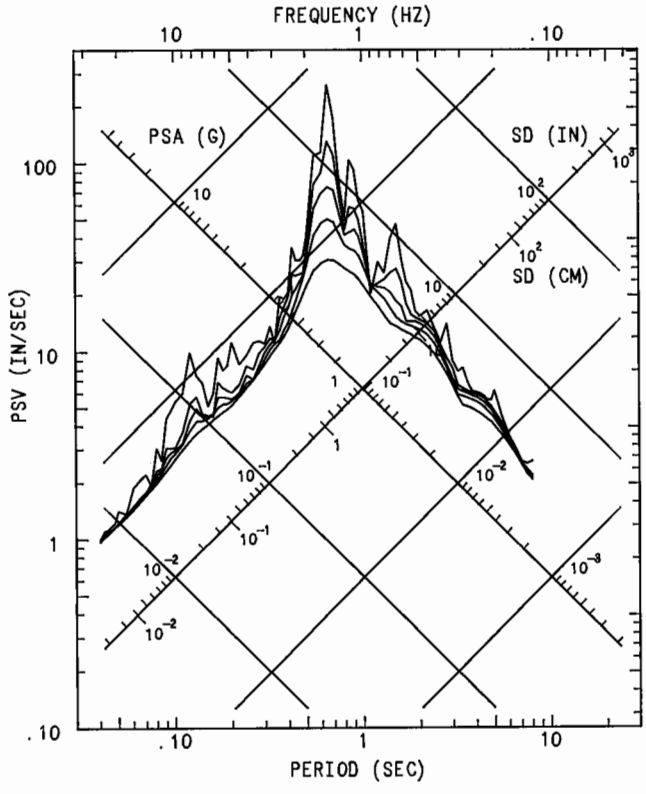
RECORD ID: 57562-D0313-89293.05

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

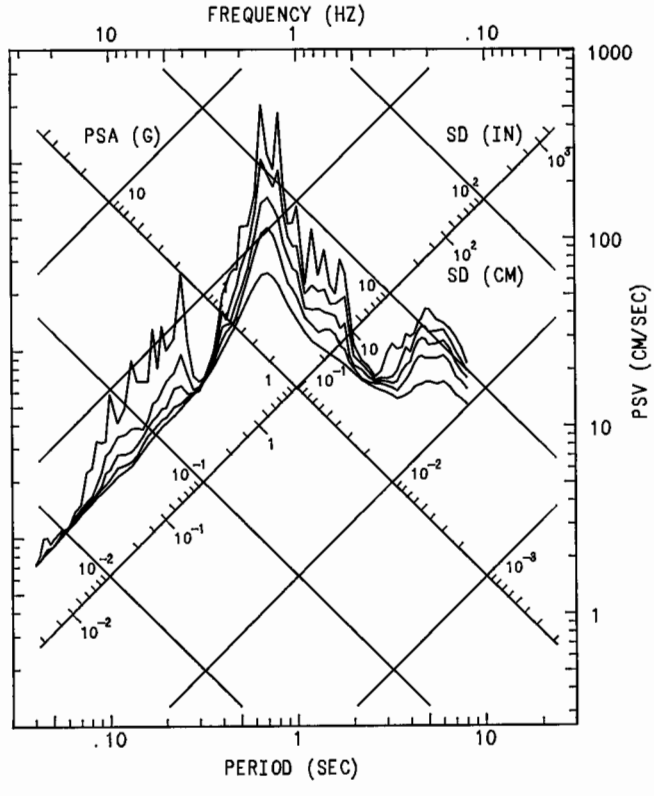
CHN 1 (STA CHN 4): 0 DEG
1ST FLOOR, WEST WALL



CHN 2 (STA CHN 5): 270 DEG
3RD FLOOR, EAST WALL



CHN 3 (STA CHN 6): 0 DEG
3RD FLOOR, EAST WALL



SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

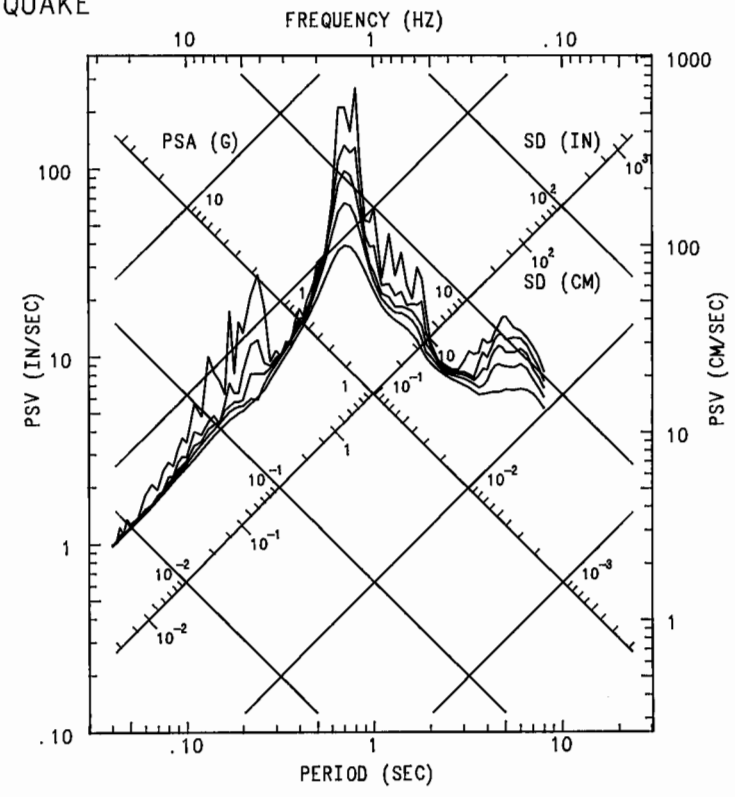
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

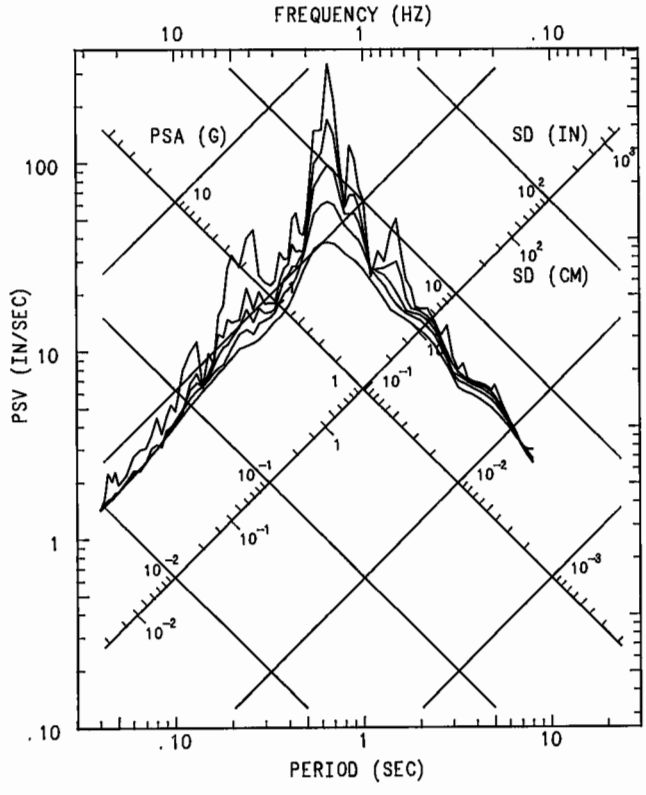
RECORD ID: 57562-D0314-89293.05

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

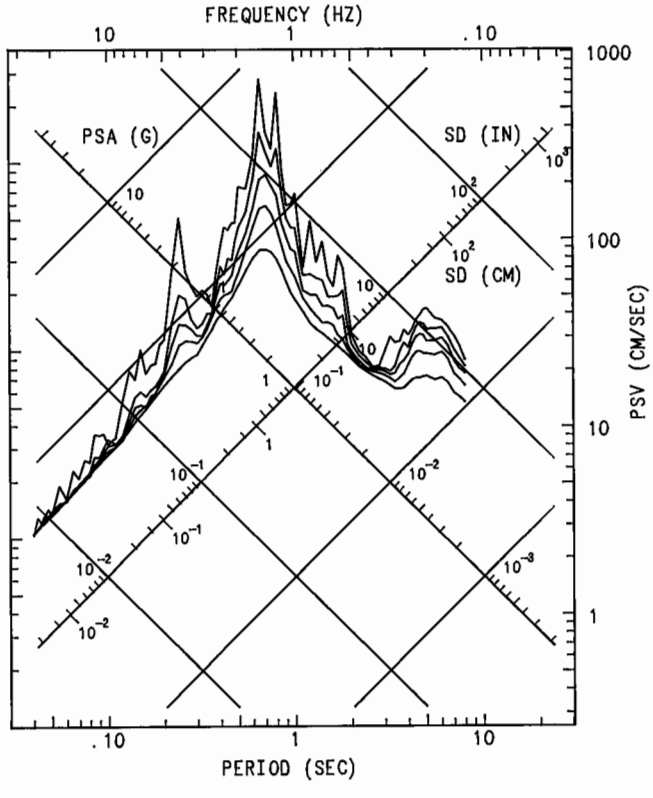
CHN 1 (STA CHN 7): 0 DEG
3RD FLOOR, WEST WALL



CHN 2 (STA CHN 8): 270 DEG
ROOF, EAST WALL



CHN 3 (STA CHN 9): 0 DEG
ROOF, EAST WALL



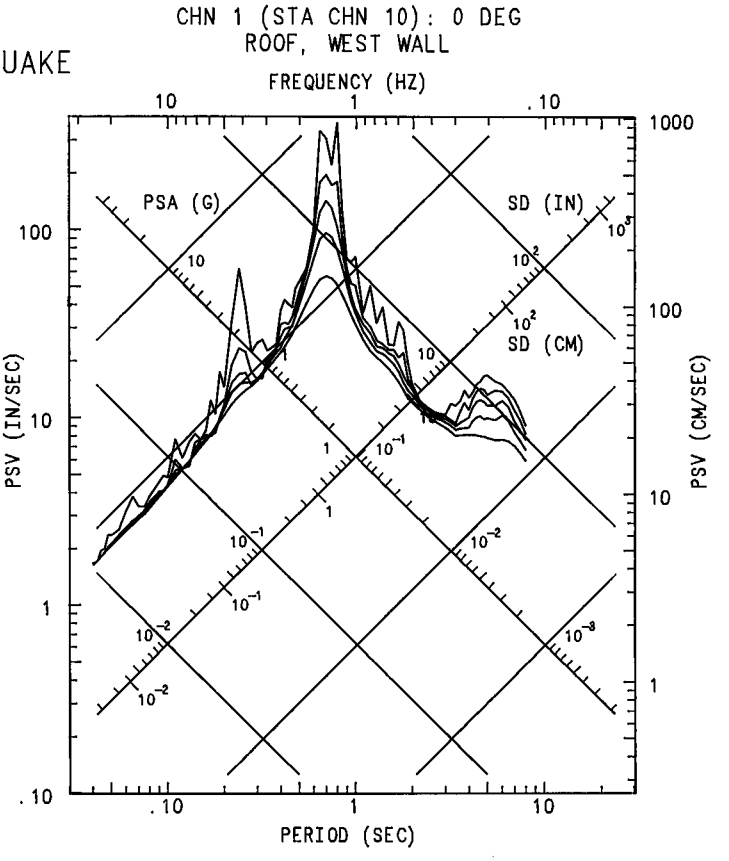
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

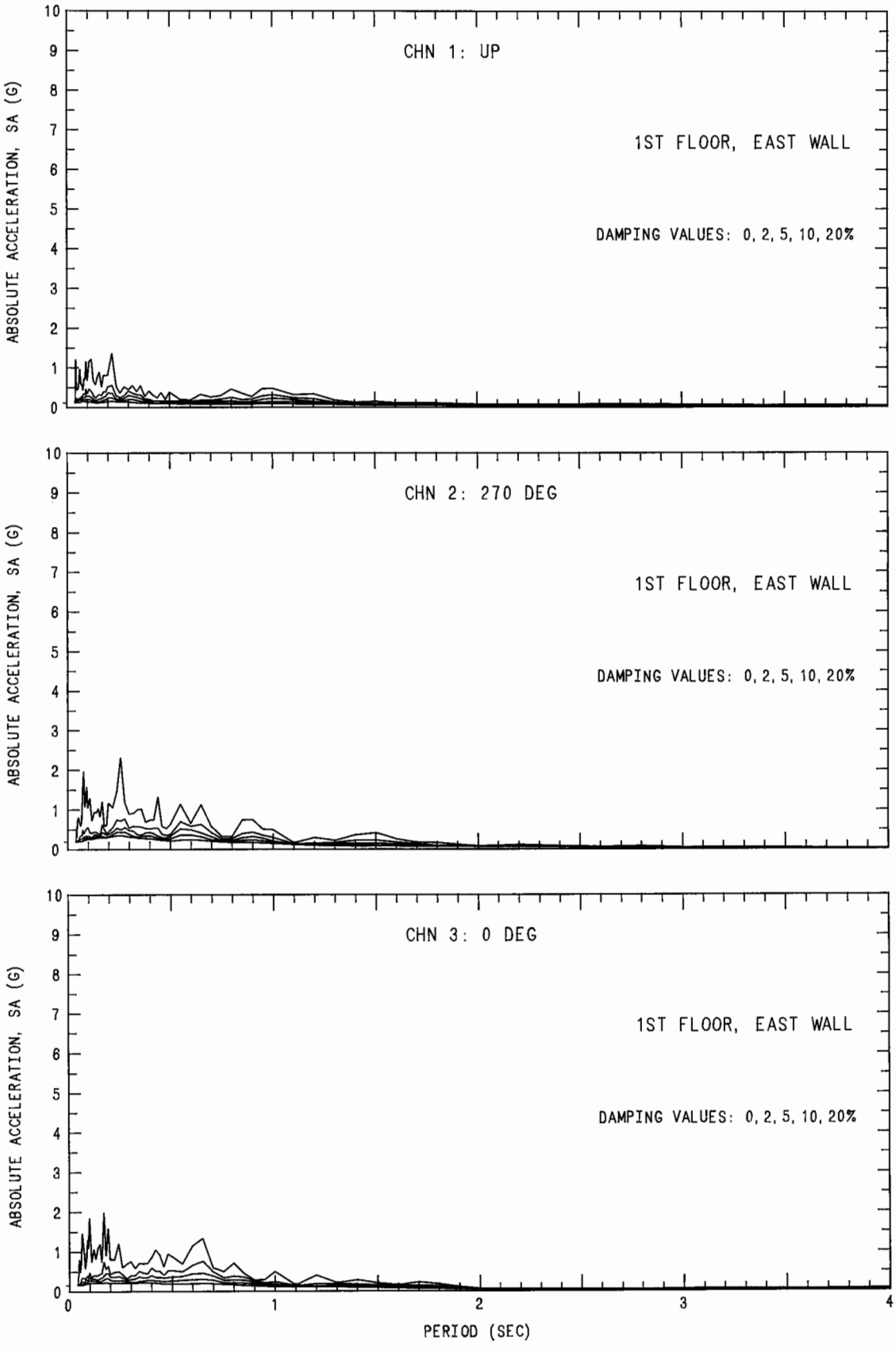
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

RECORD ID: 57562-D0315-89293.05

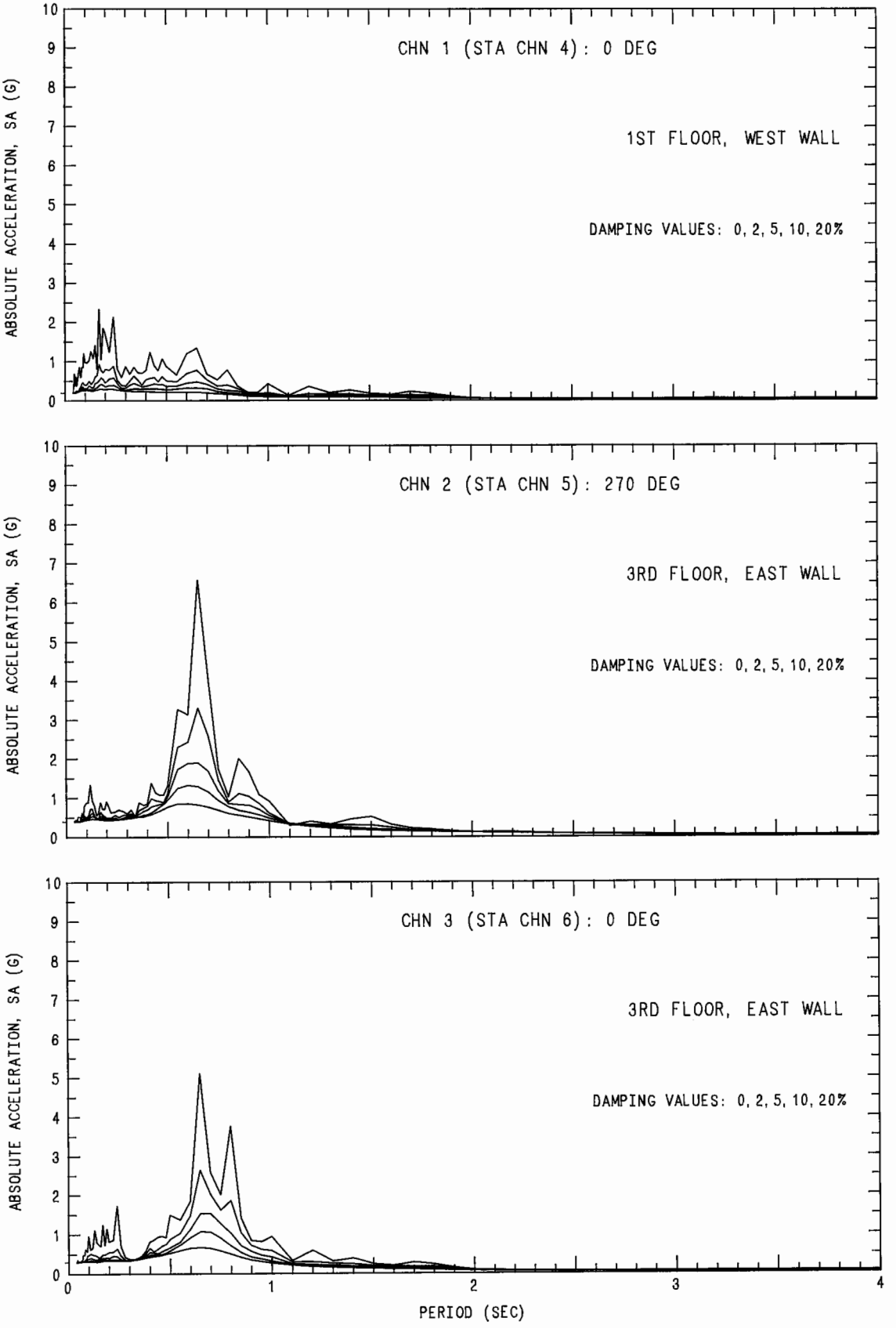
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



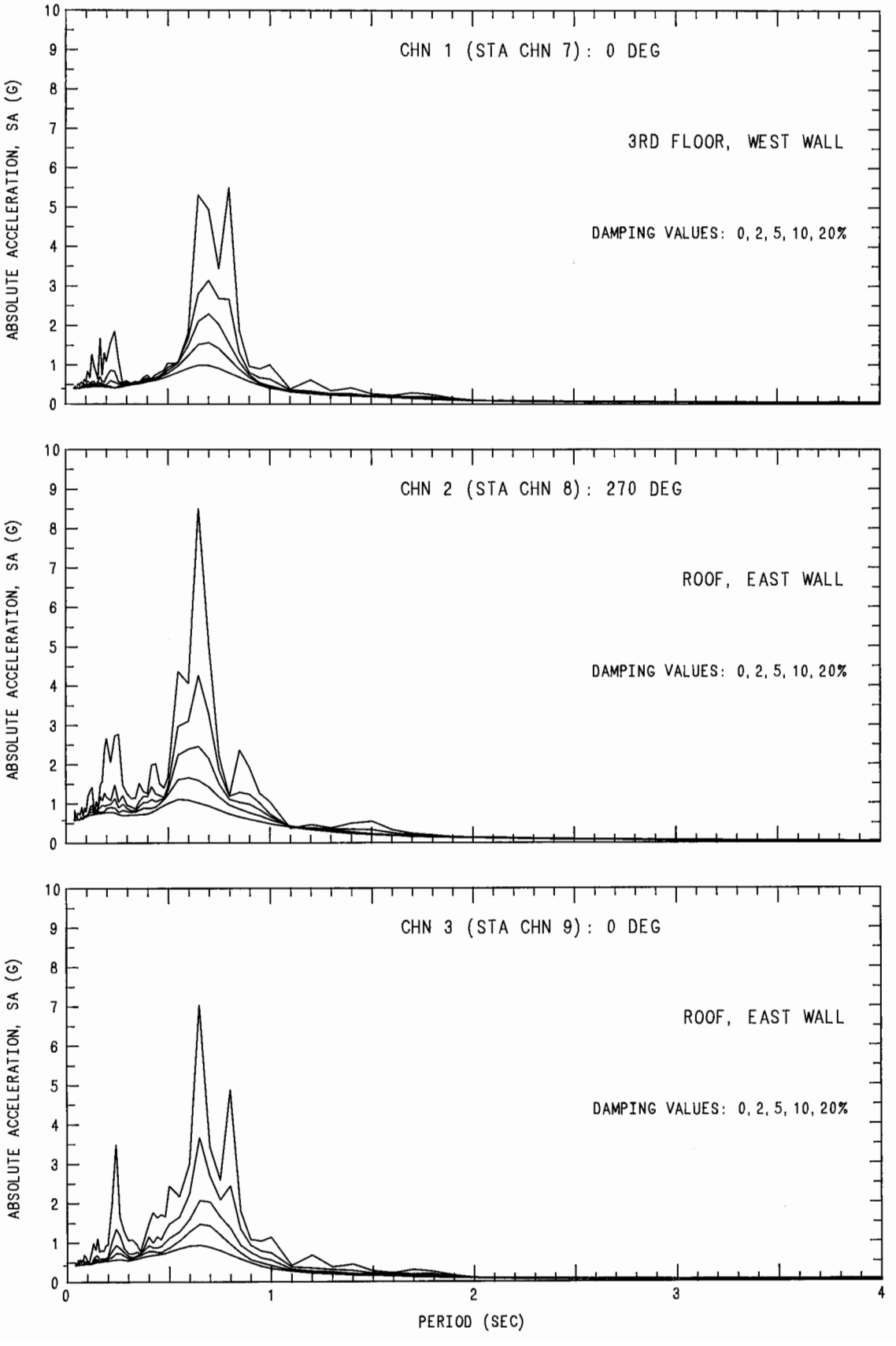
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57562-D0312-89293.05
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



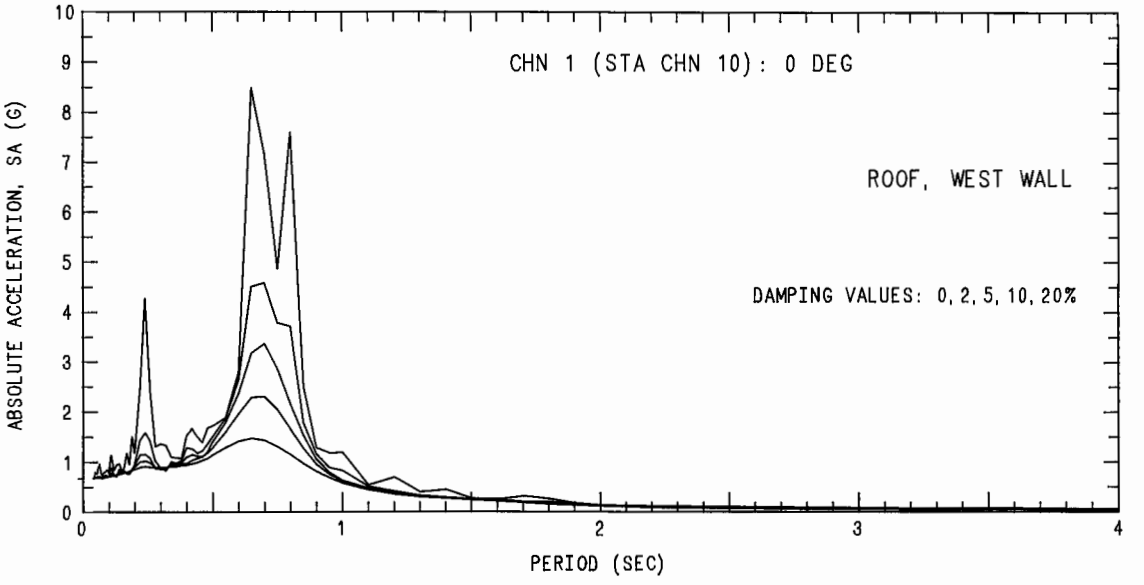
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57562-D0313-89293.05
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57562-D0314-89293.05
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 3-STORY OFFICE BLDG.: CSMIP S/N 562
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57562-D0315-89293.05
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

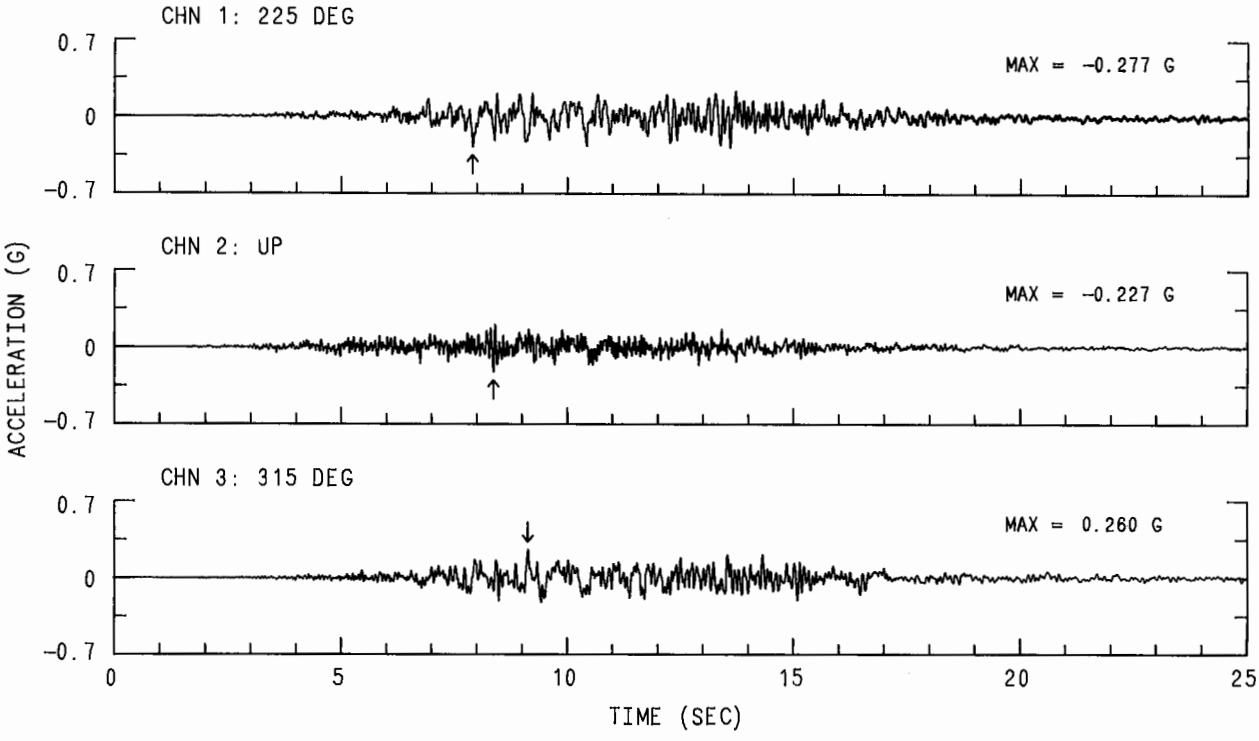
SAN JOSE - SANTA TERESA HILLS: CSMIP S/N 563

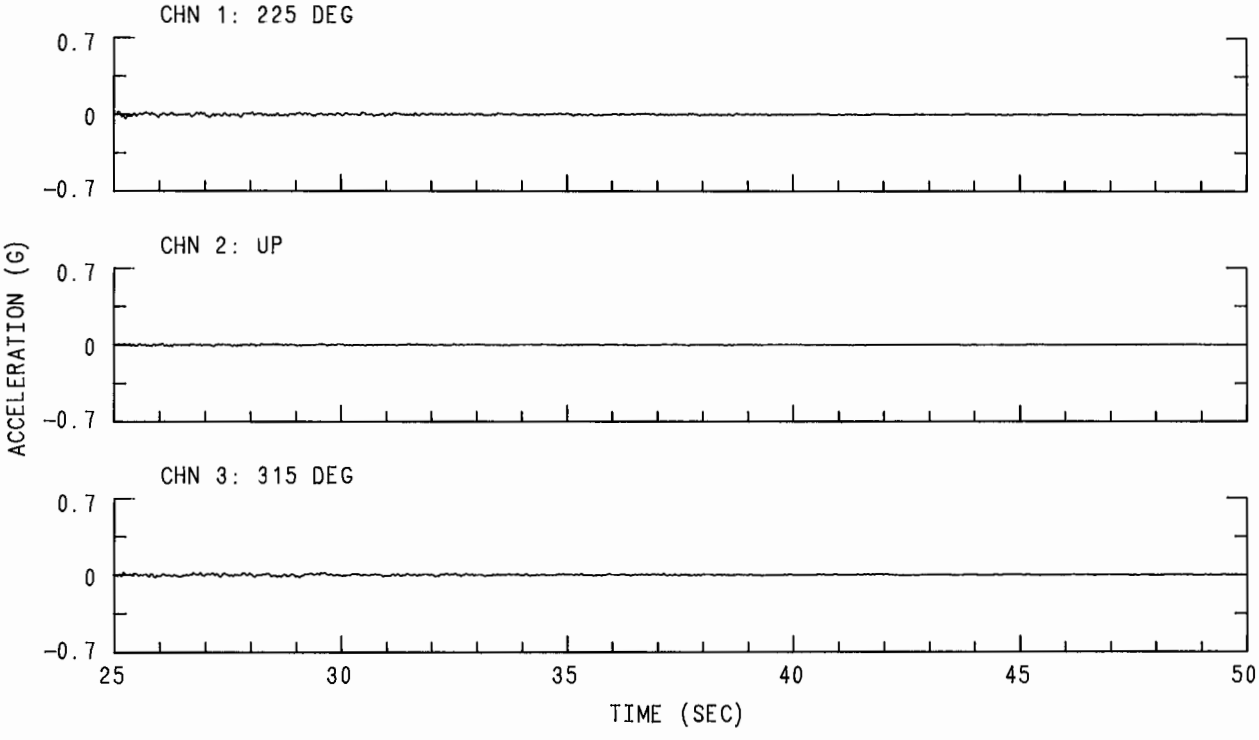
PHASE 1 ACCELERATION

RECORD ID: 57563-D0356-89293.01

(The FF channel orientation of 225° and 315° are the same as the structure channel orientations of 180° and 270°, respectively)

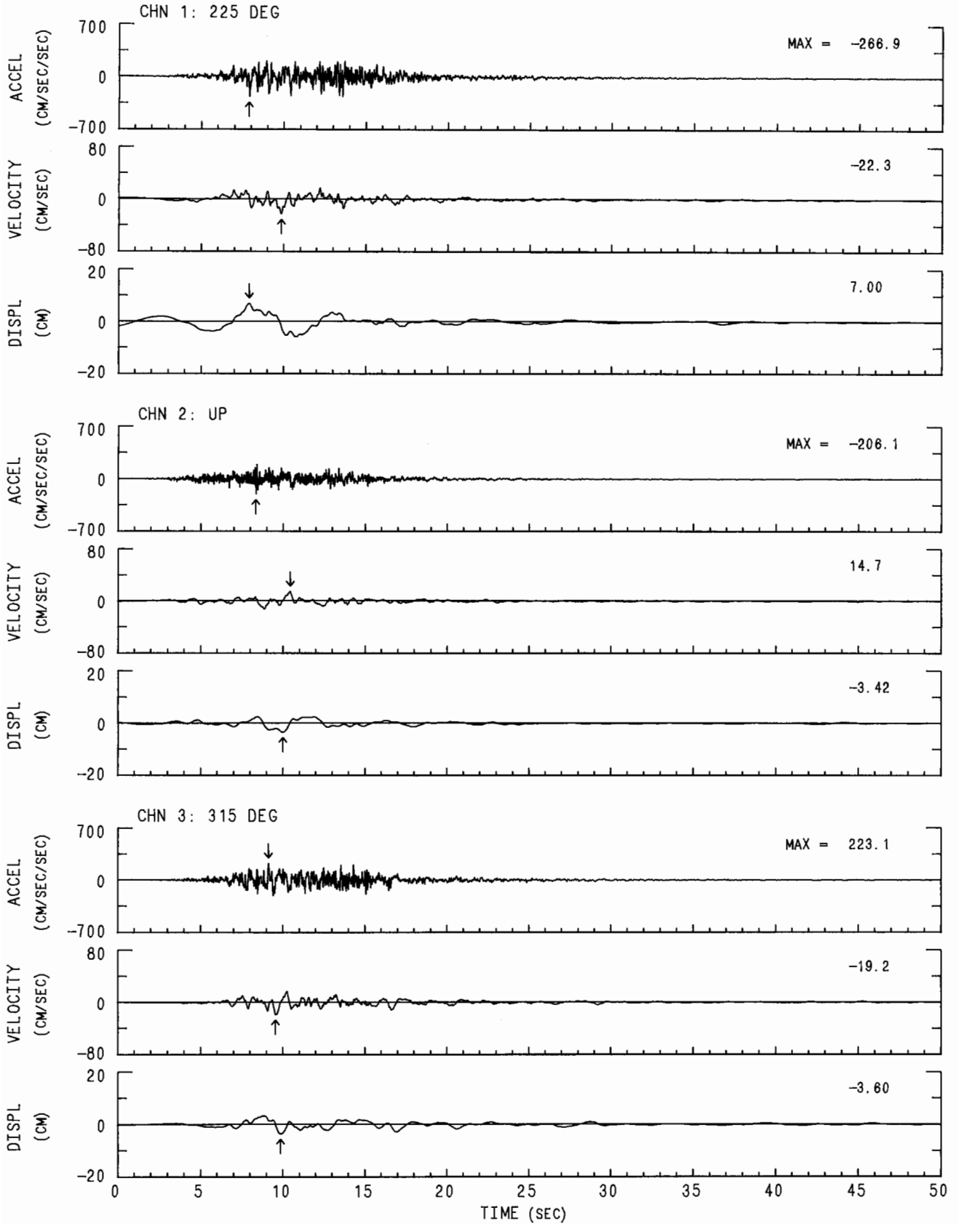
(The FF record started about 0.3 second earlier than the structure)





SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - SANTA TERESA HILLS: CSMIP S/N 563

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 57563-D0356-89293.01



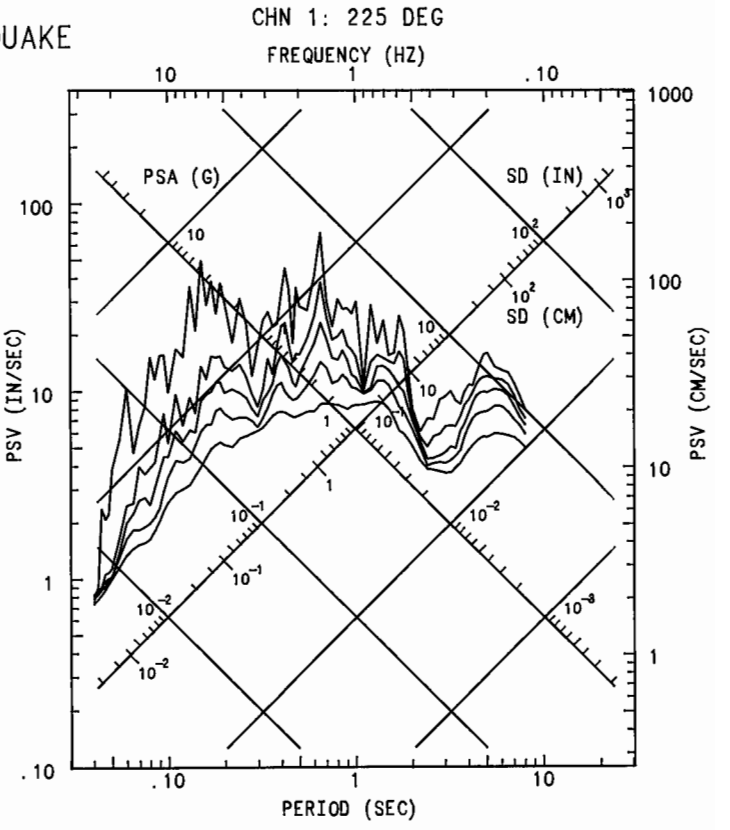
SAN JOSE - SANTA TERESA HILLS: CSMIP S/N 563

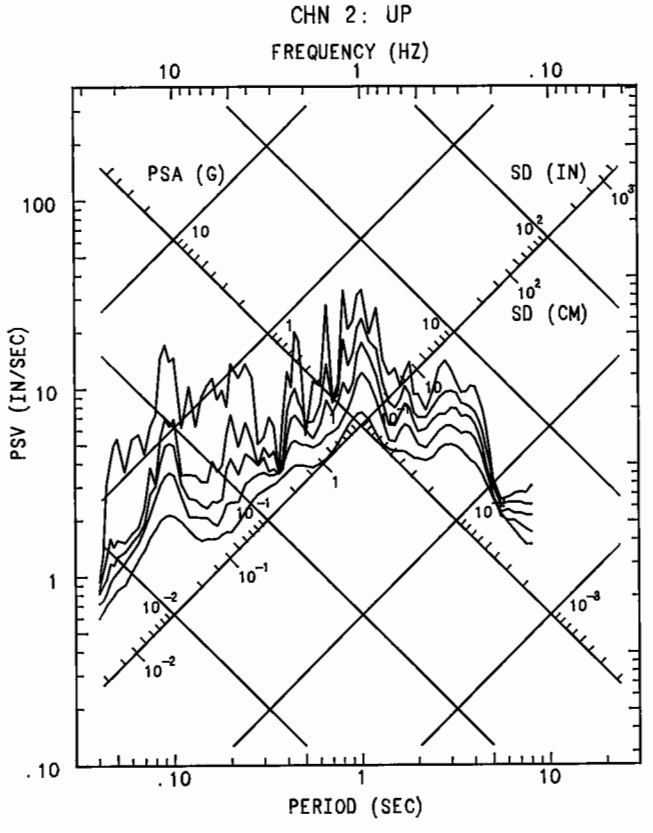
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

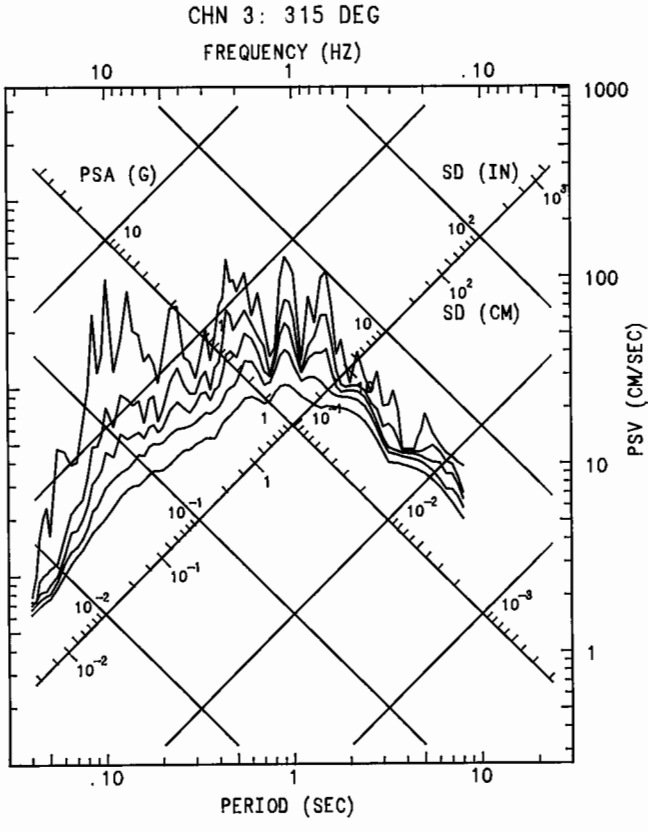
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

RECORD ID: 57563-D0356-89293.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

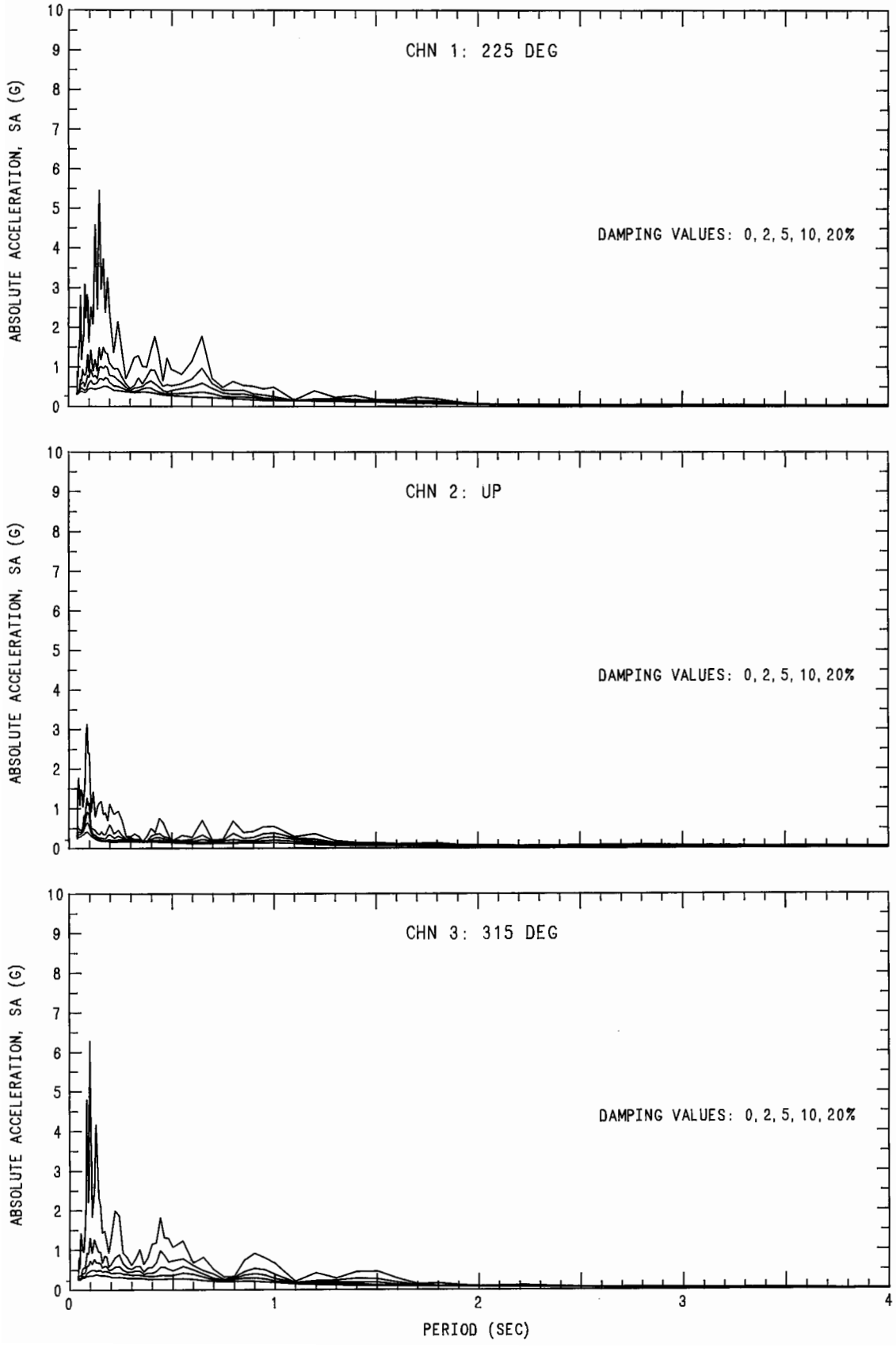






SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - SANTA TERESA HILLS: CSMIP S/N 563

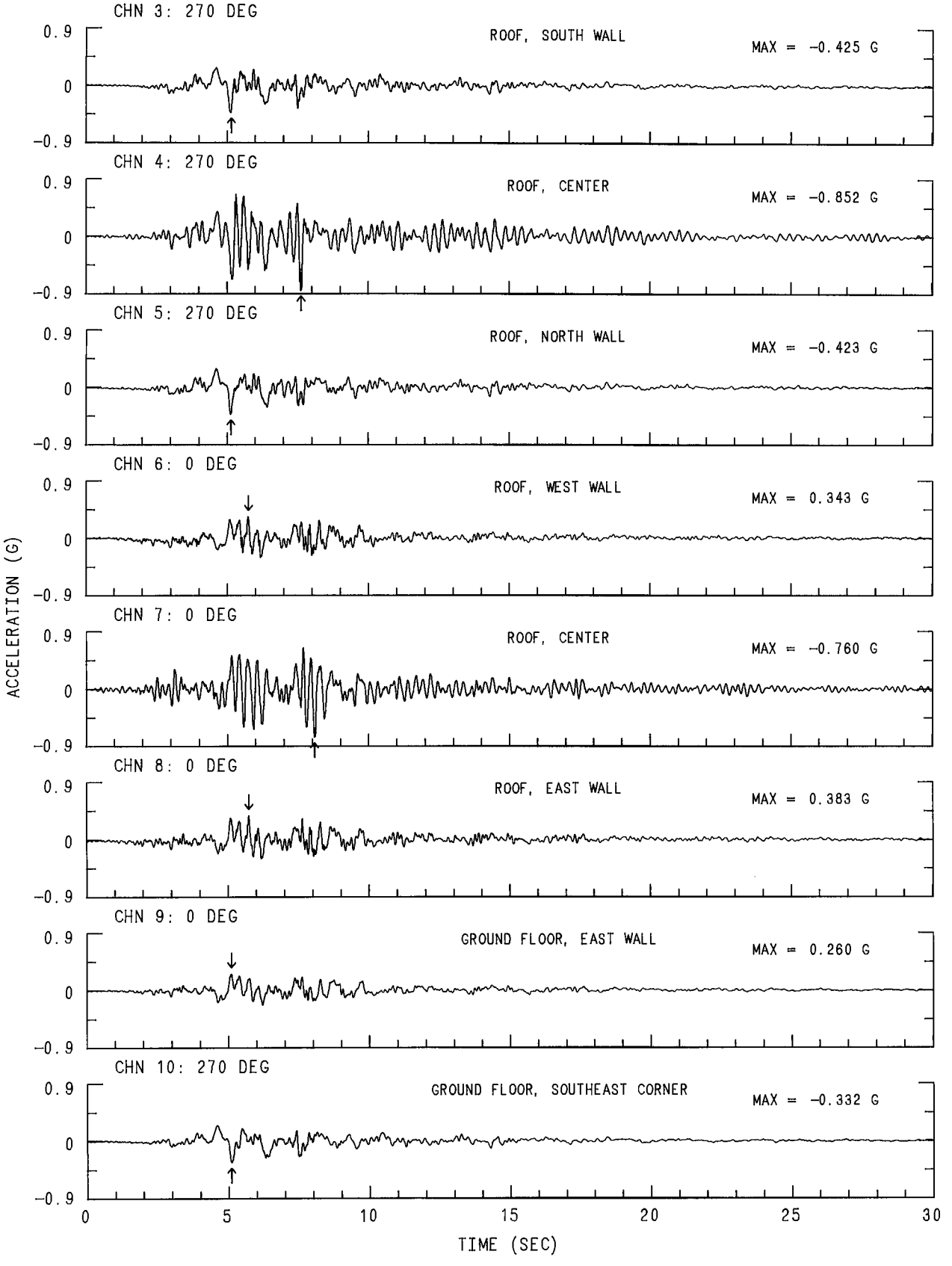
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57563-D0356-89293.01
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SARATOGA - 1-STORY SCHOOL GYM: CSMIP S/N 235

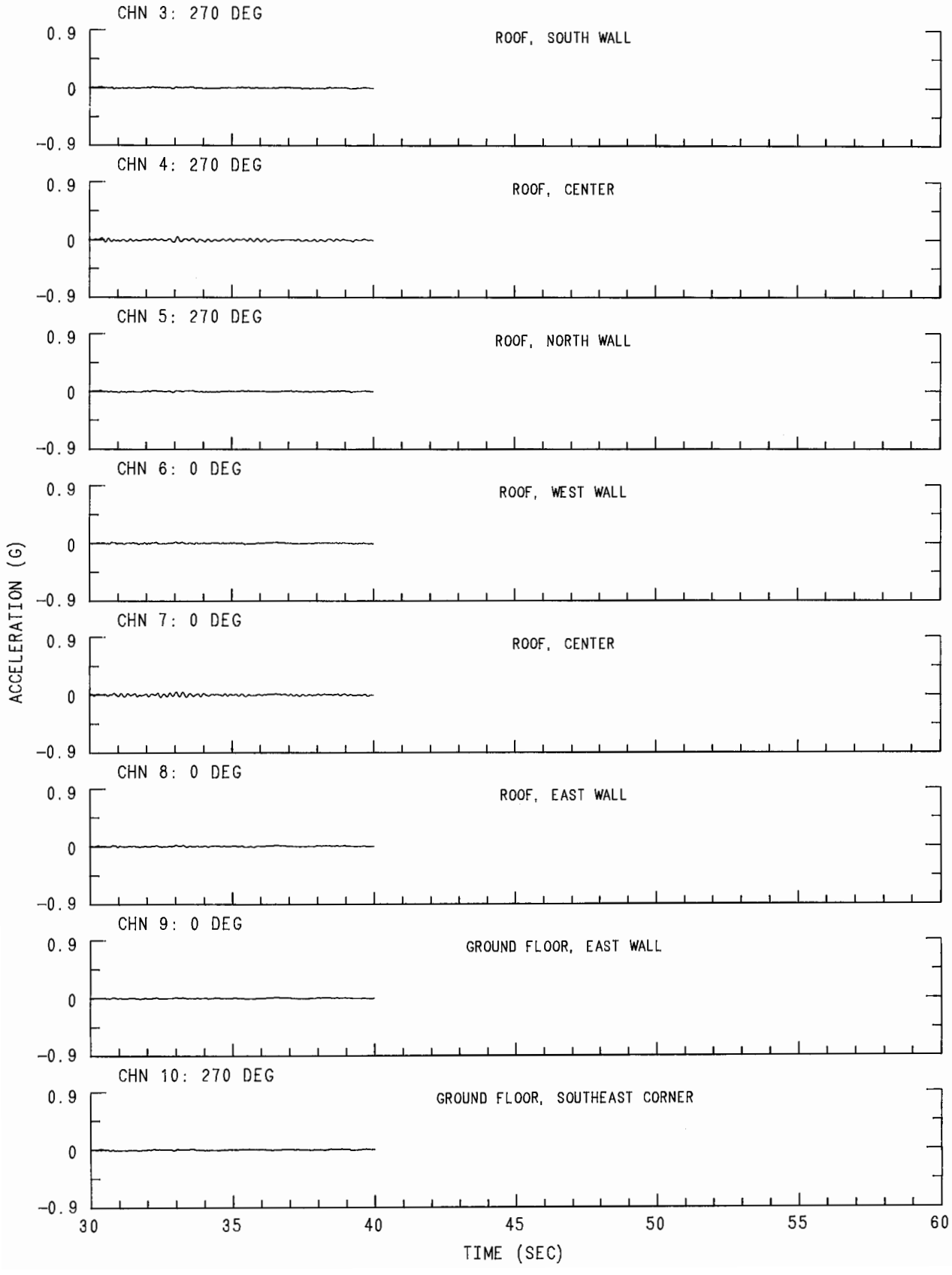
PHASE 1 ACCELERATION. RECORD ID: 58235-C0184-89292.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

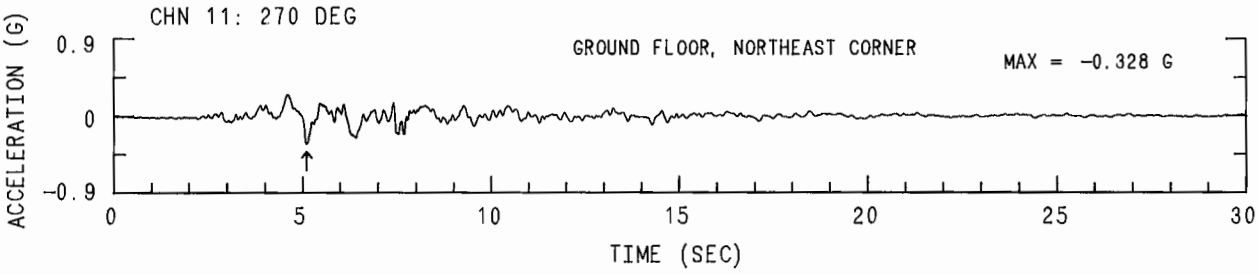
PHASE 1 ACCELERATION. RECORD ID: 58235-C0184-89292.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SARATOGA – 1–STORY SCHOOL GYM: CSMIP S/N 235

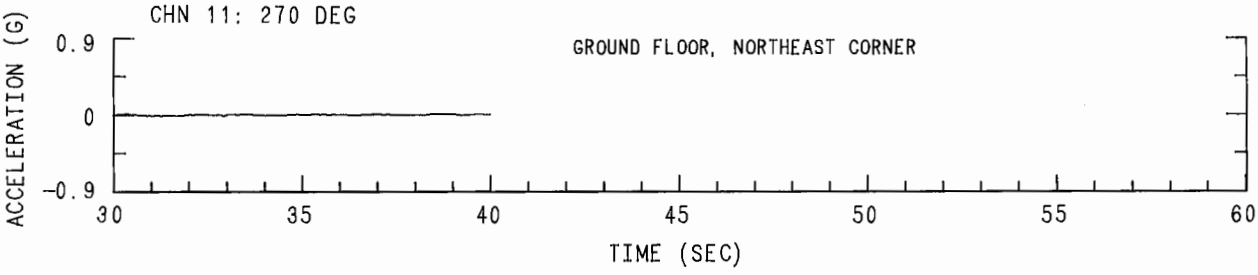
PHASE 1 ACCELERATION. RECORD ID: 58235–C0184–89292.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

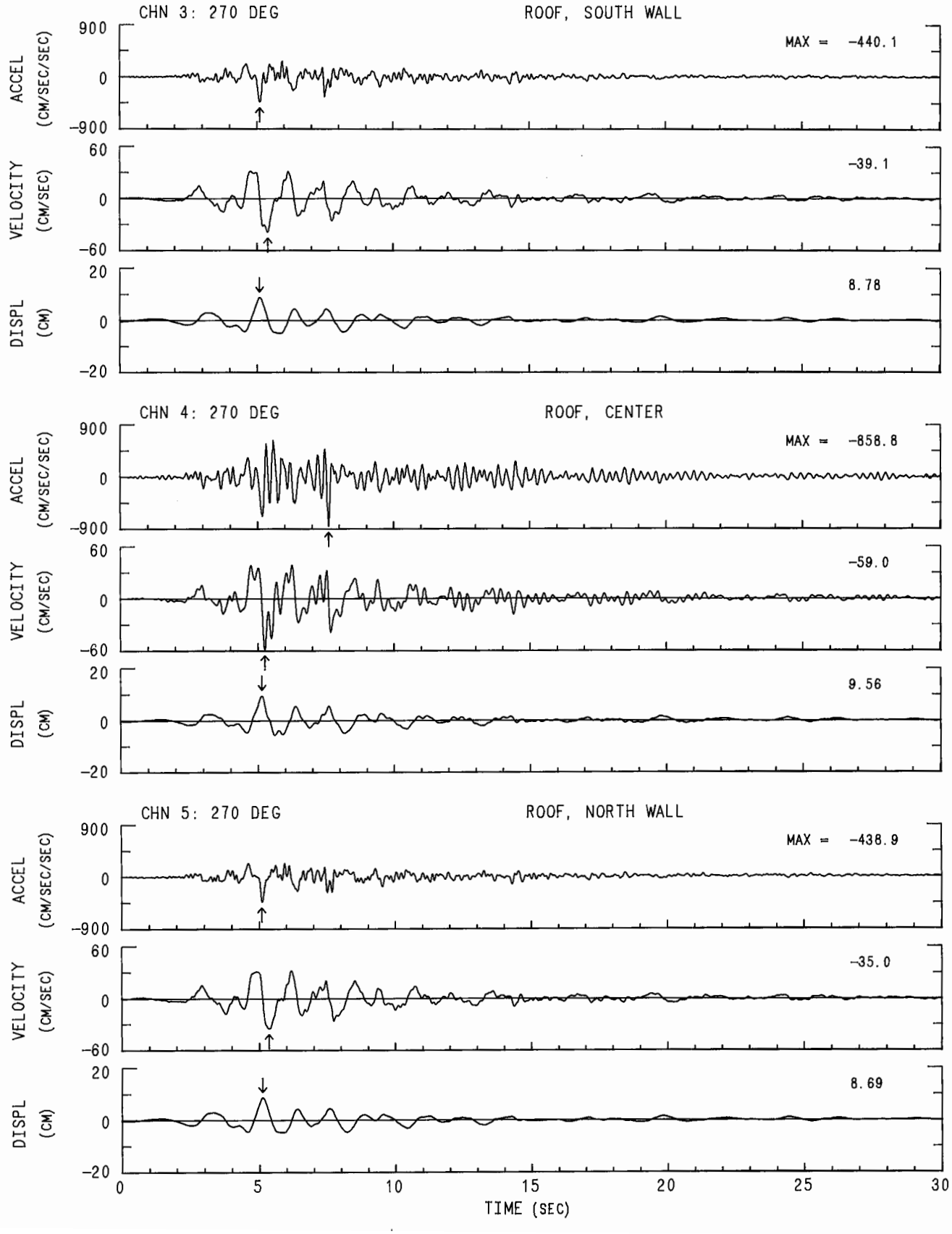
SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

PHASE 1 ACCELERATION. RECORD ID: 58235-C0184-89292.04



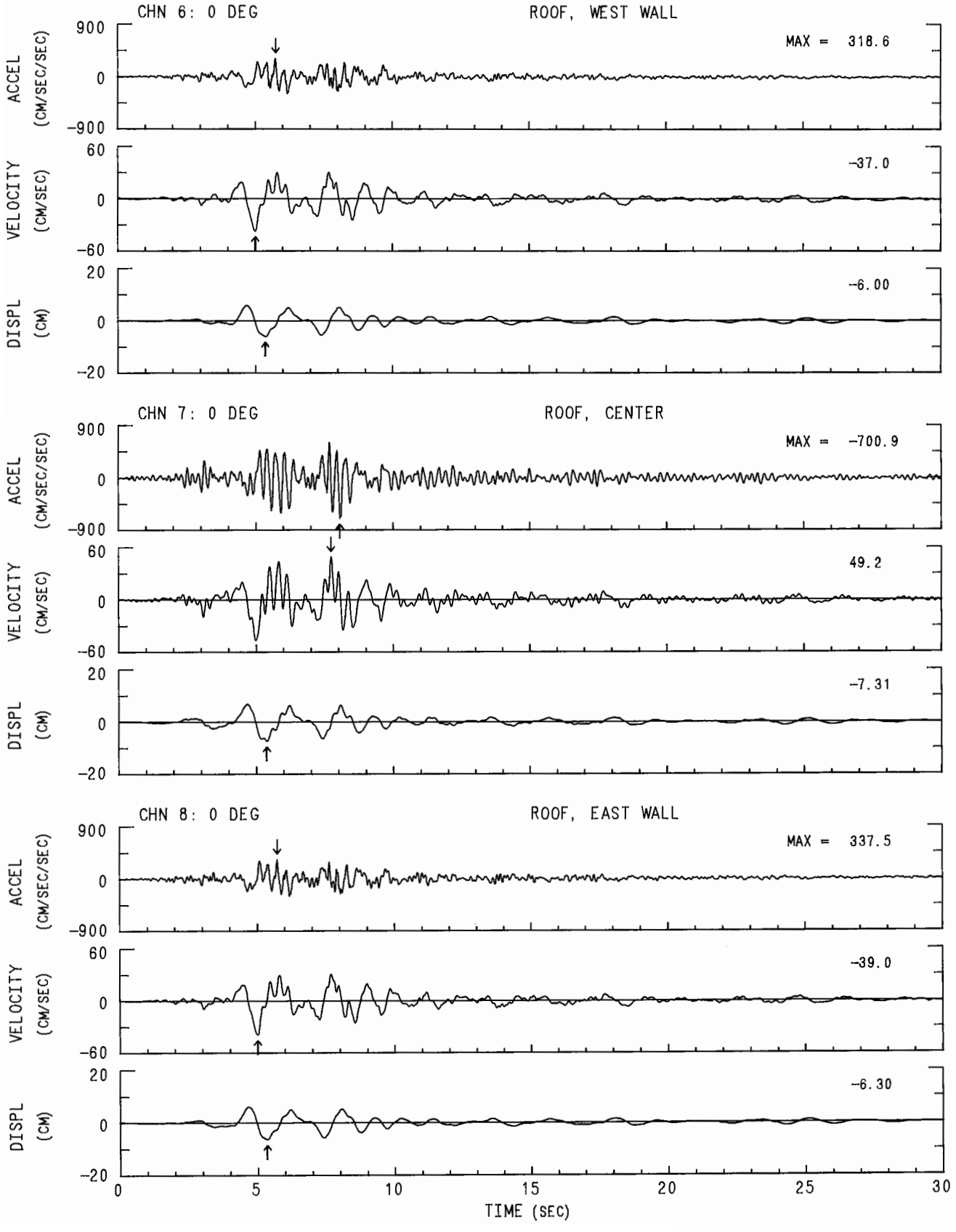
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ (0.04 TO 2.35 SEC) RECORD ID: 58235-C0184-89292.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SARATOGA – 1–STORY SCHOOL GYM: CSMIP S/N 235

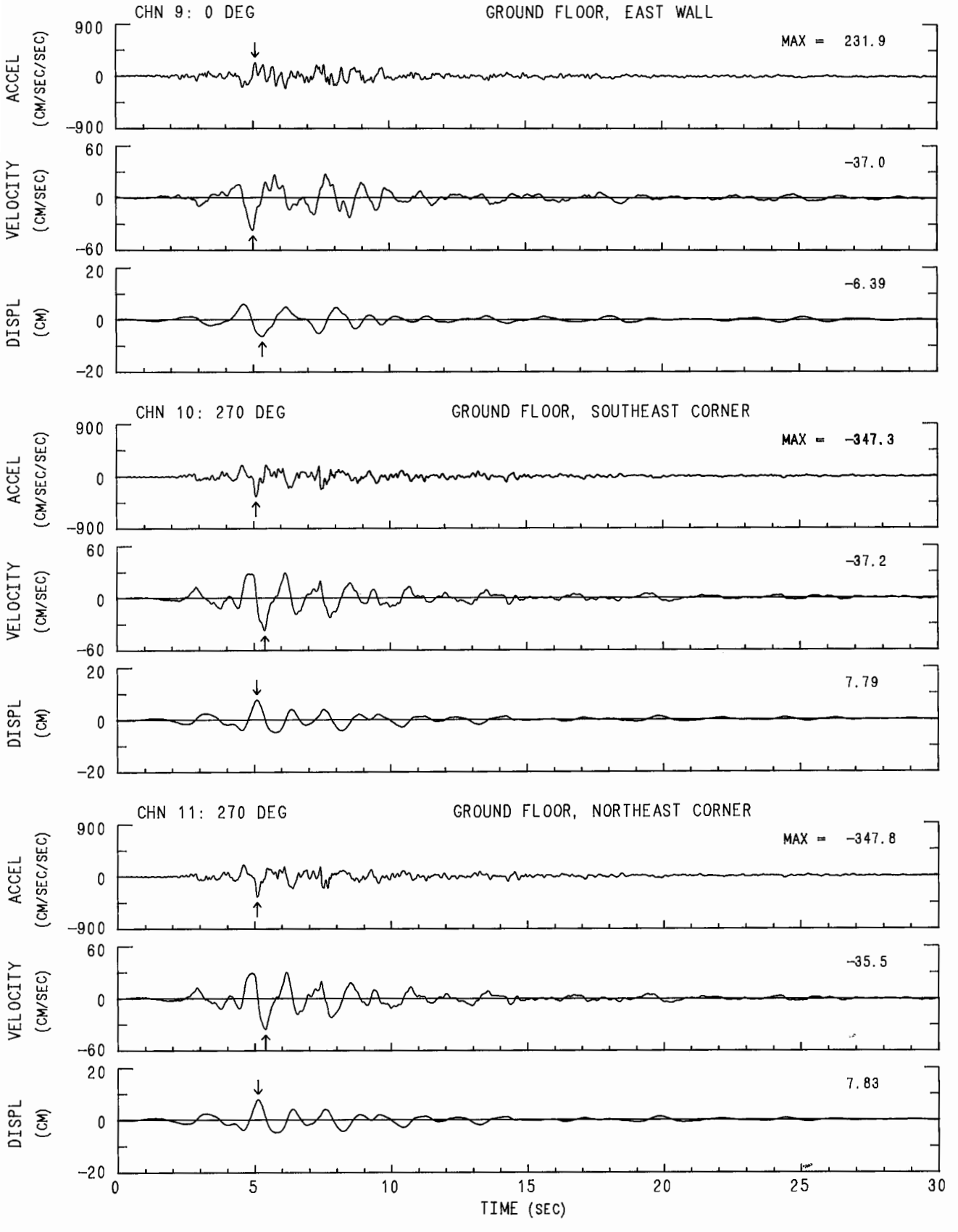
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ (0.04 TO 2.35 SEC) RECORD ID: 58235–C0184–89292.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SARATOGA - 1-STORY SCHOOL GYM: CSMIP S/N 235

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ (0.04 TO 2.35 SEC) RECORD ID: 58235-C0184-89292.04



SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

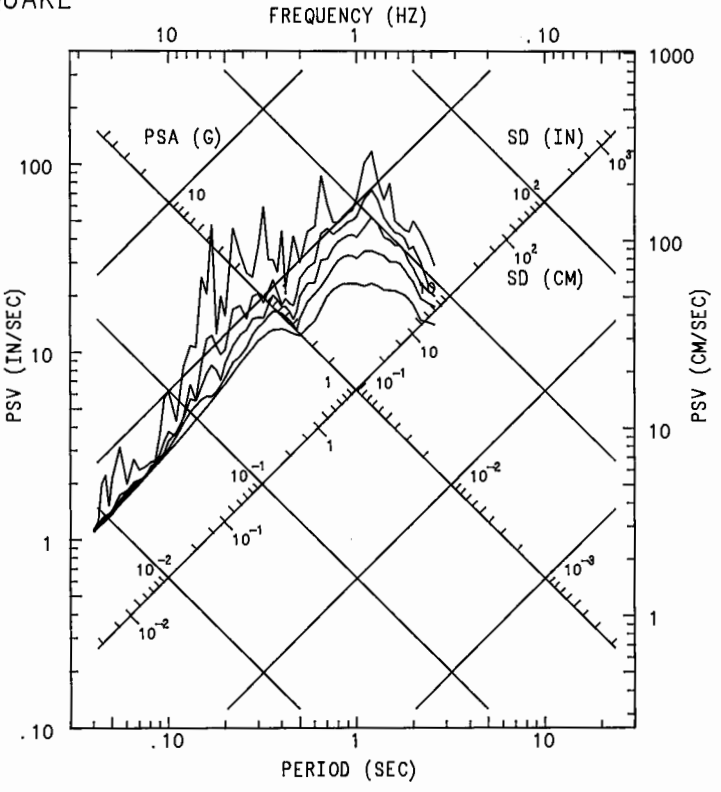
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ
(0.04 TO 2.35 SEC)

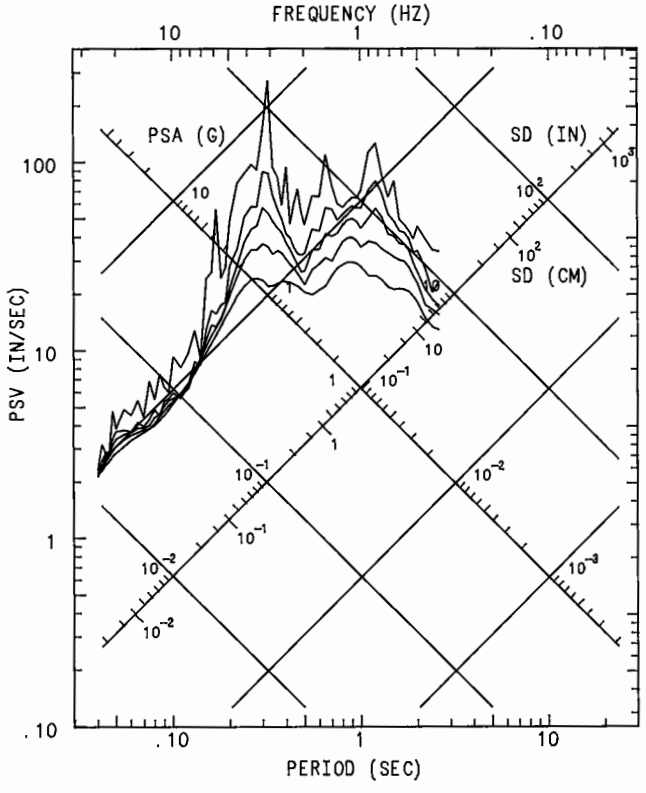
RECORD ID: 58235-C0184-89292.04

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

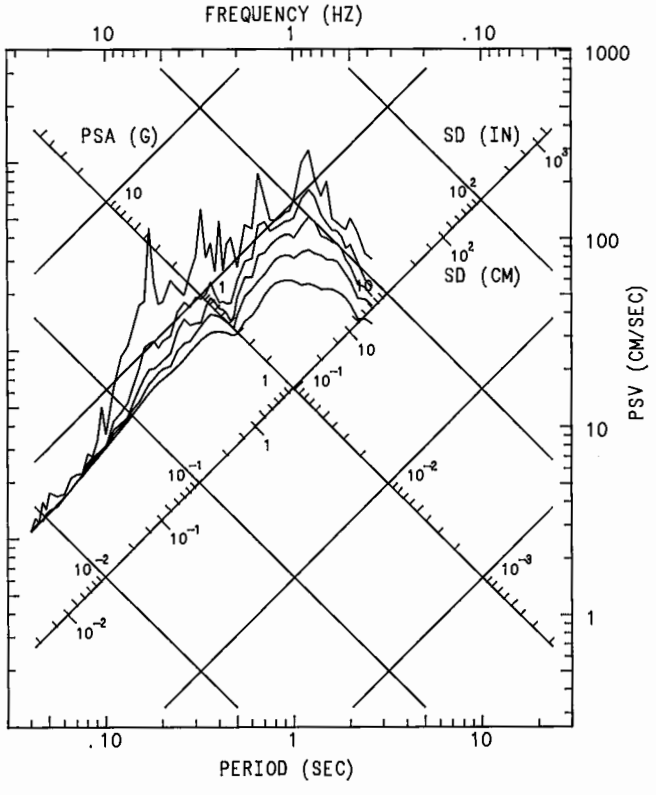
CHN 3: 270 DEG
ROOF, SOUTH WALL



CHN 4: 270 DEG
ROOF, CENTER



CHN 5: 270 DEG
ROOF, NORTH WALL



SARATOGA - 1-STORY SCHOOL GYM: CSMIP S/N 235

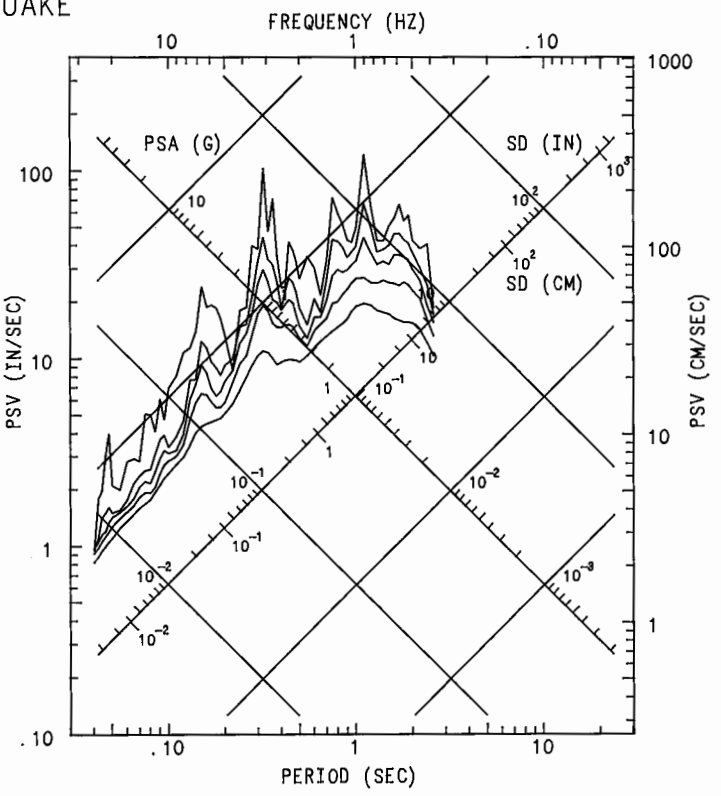
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ
(0.04 TO 2.35 SEC)

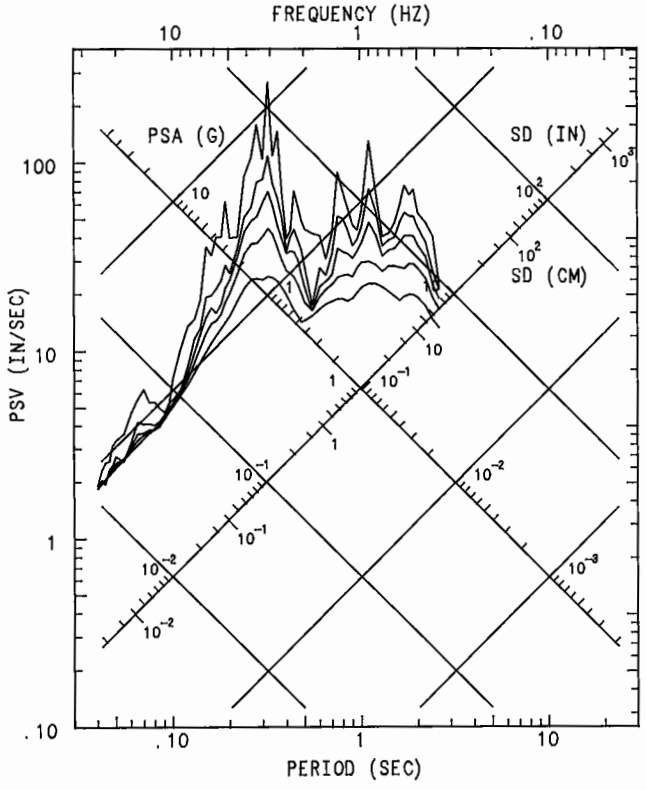
RECORD ID: 58235-C0184-89292.04

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

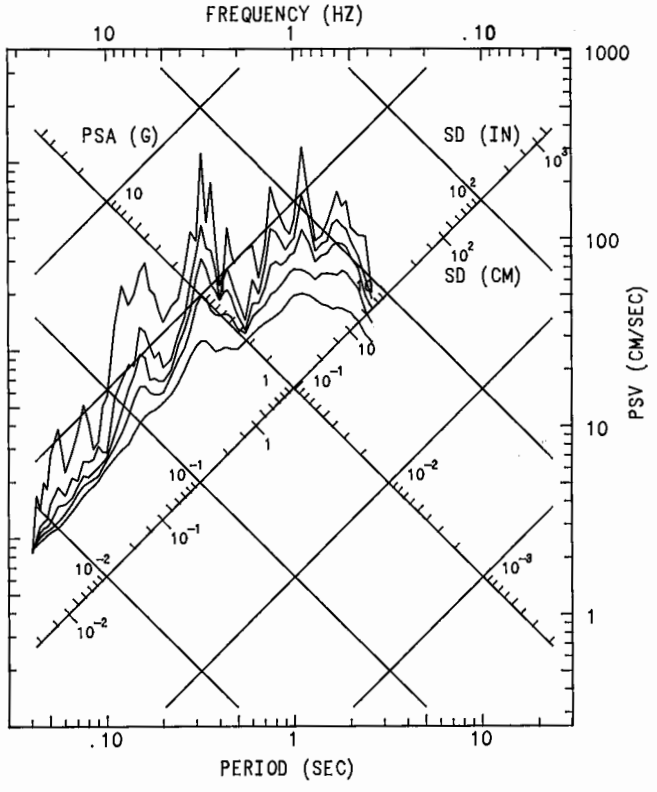
CHN 6: 0 DEG
ROOF, WEST WALL



CHN 7: 0 DEG
ROOF, CENTER



CHN 8: 0 DEG
ROOF, EAST WALL



SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

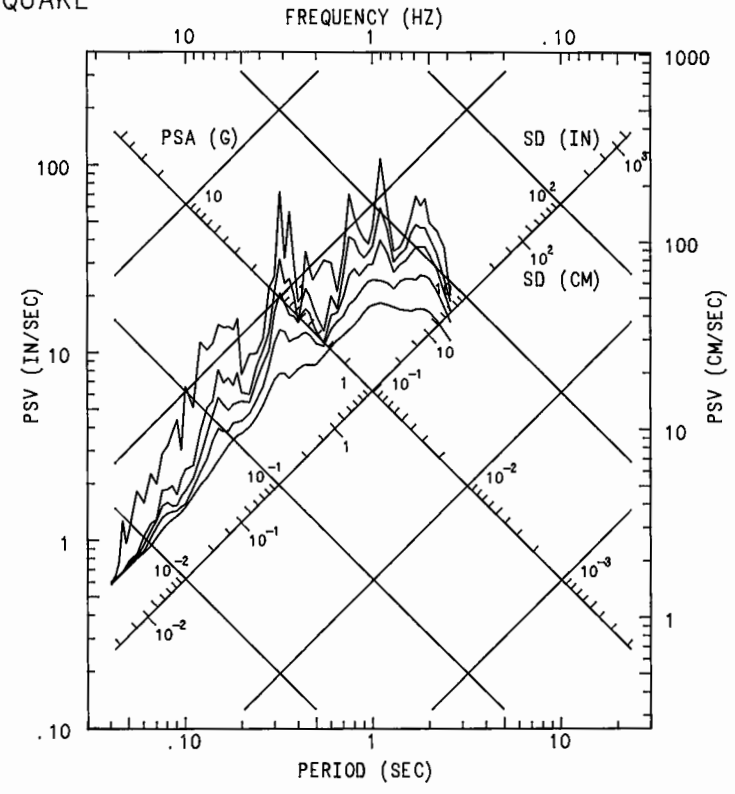
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ
(0.04 TO 2.35 SEC)

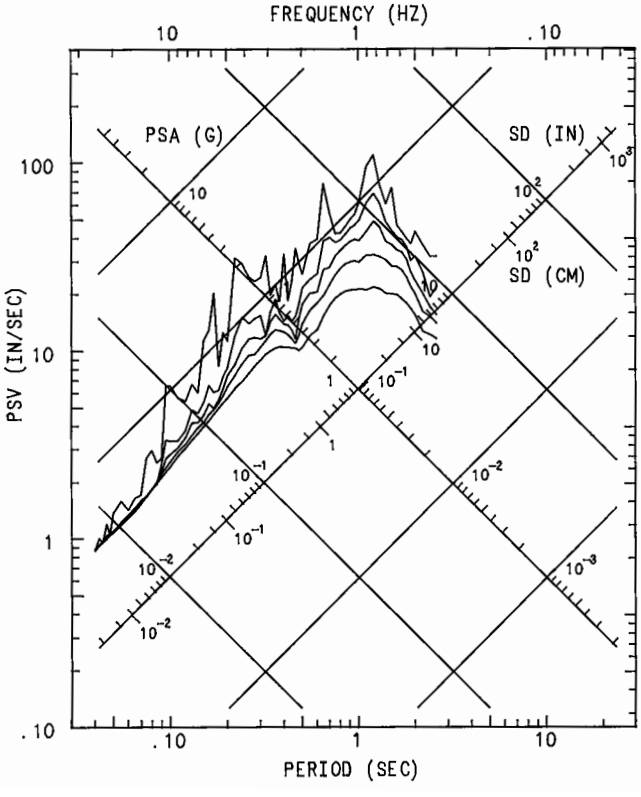
RECORD ID: 58235-C0184-89292.04

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

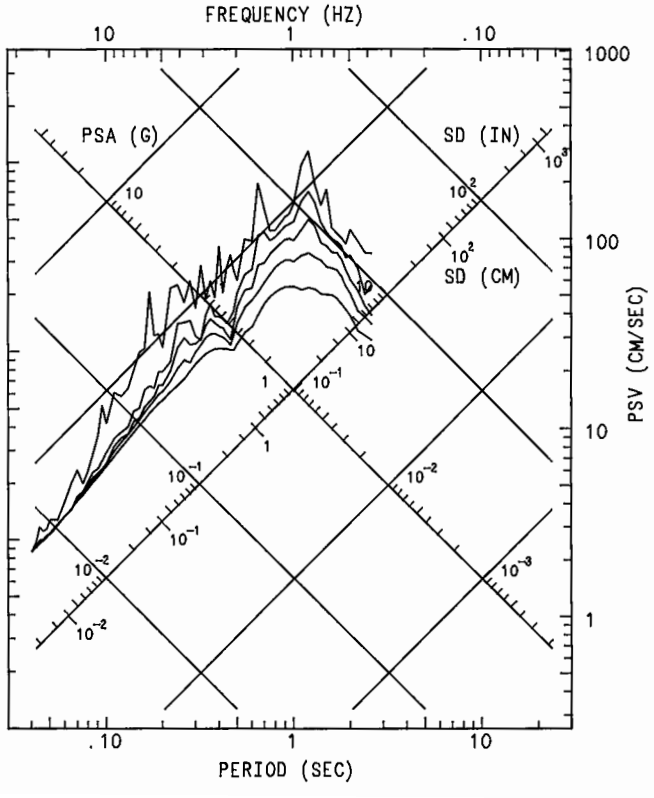
CHN 9: 0 DEG
GROUND FLOOR, EAST WALL



CHN 10: 270 DEG
GROUND FLOOR, SOUTHEAST CORNER

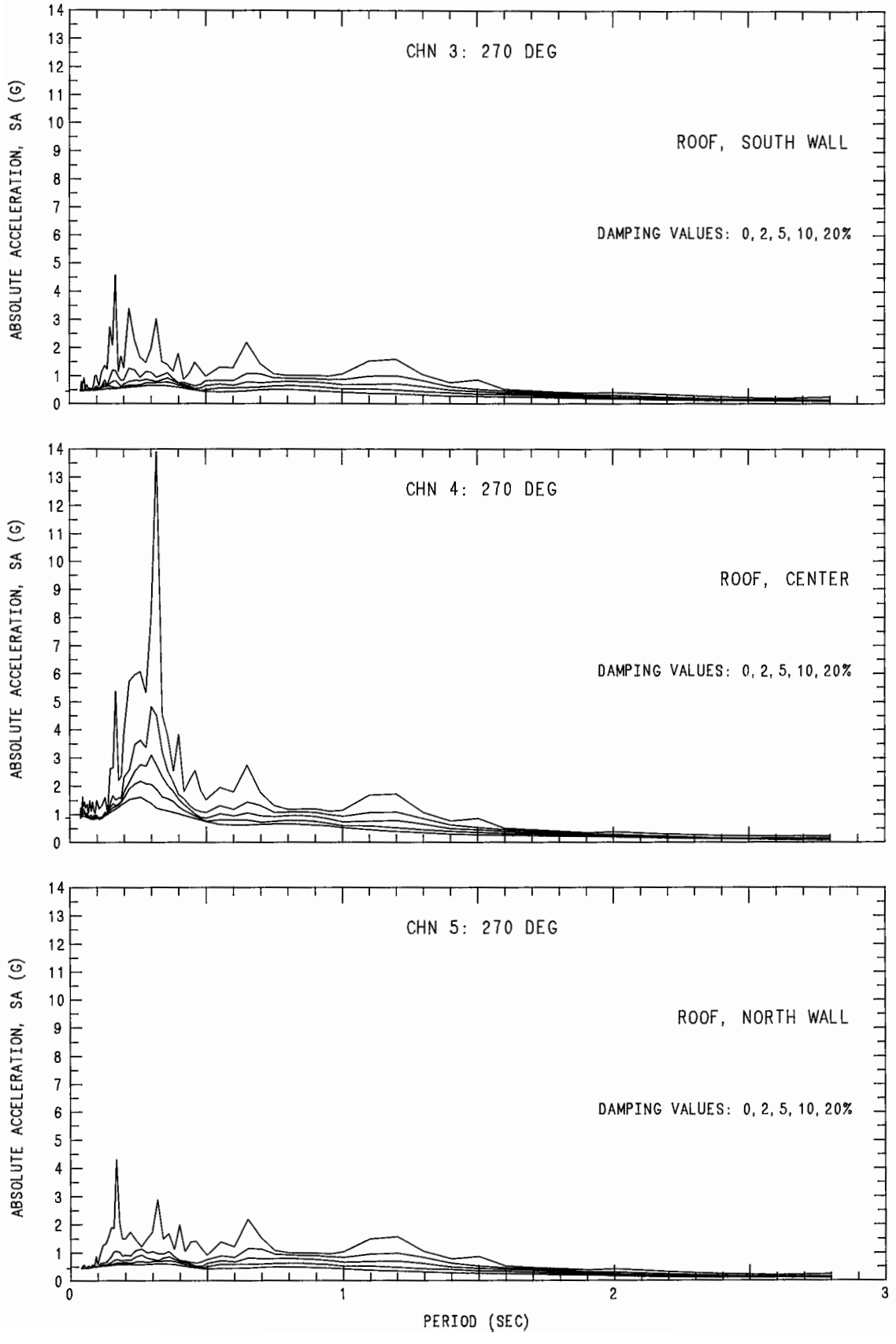


CHN 11: 270 DEG
GROUND FLOOR, NORTHEAST CORNER



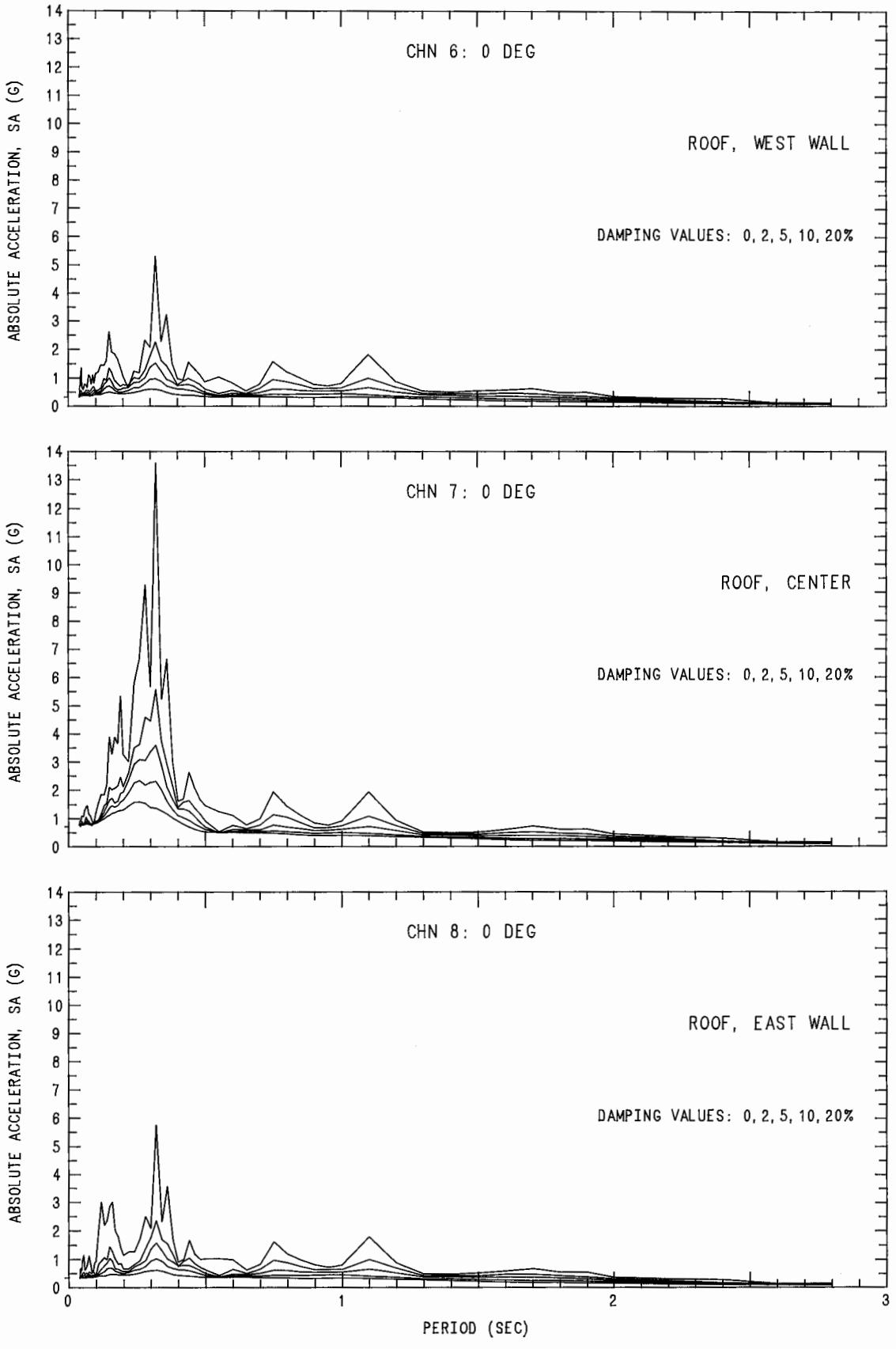
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58235-C0184-89292.04
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ (0.04 TO 2.35 SEC)



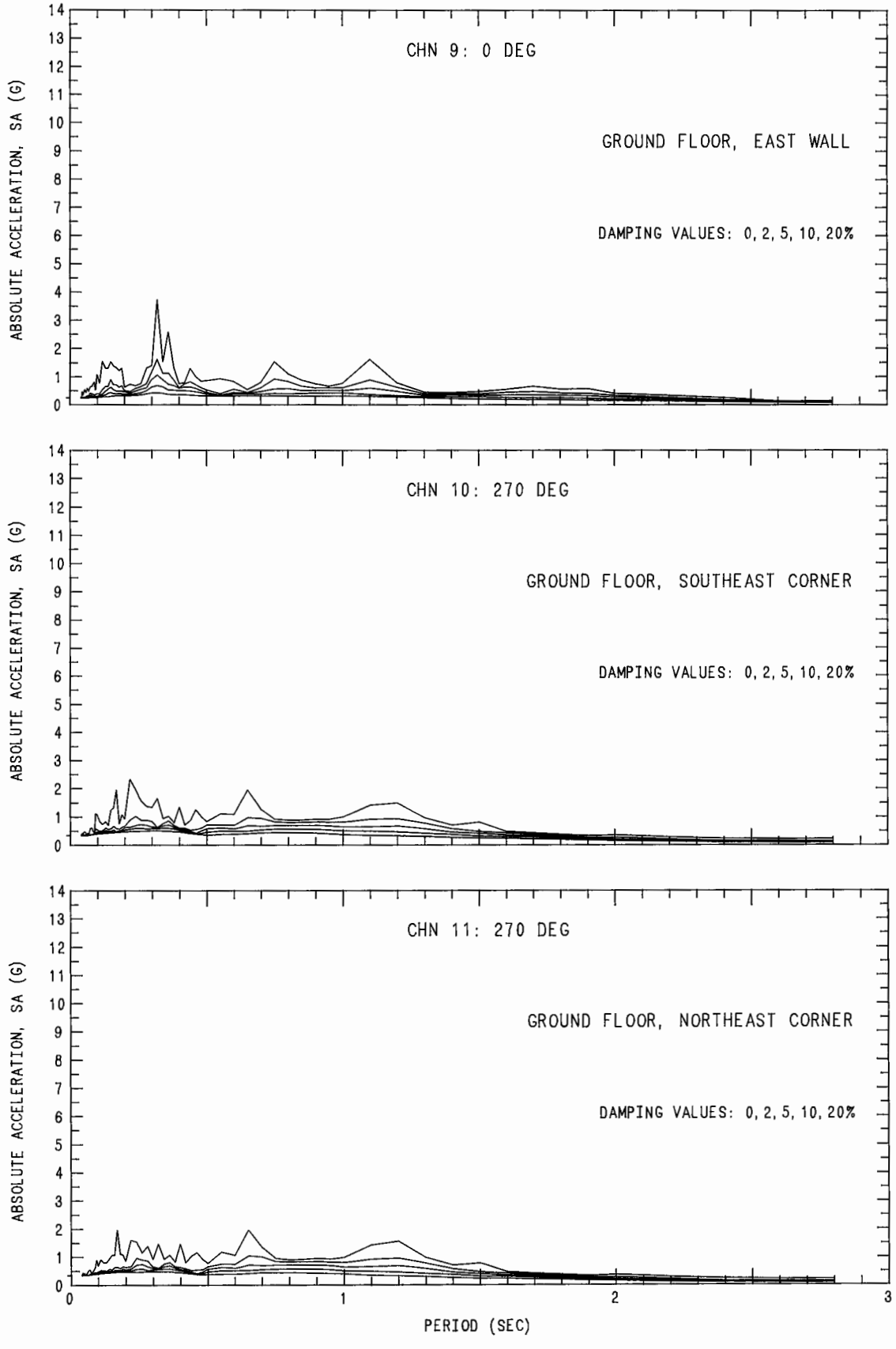
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58235-C0184-89292.04
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ (0.04 TO 2.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SARATOGA – 1-STORY SCHOOL GYM: CSMIP S/N 235

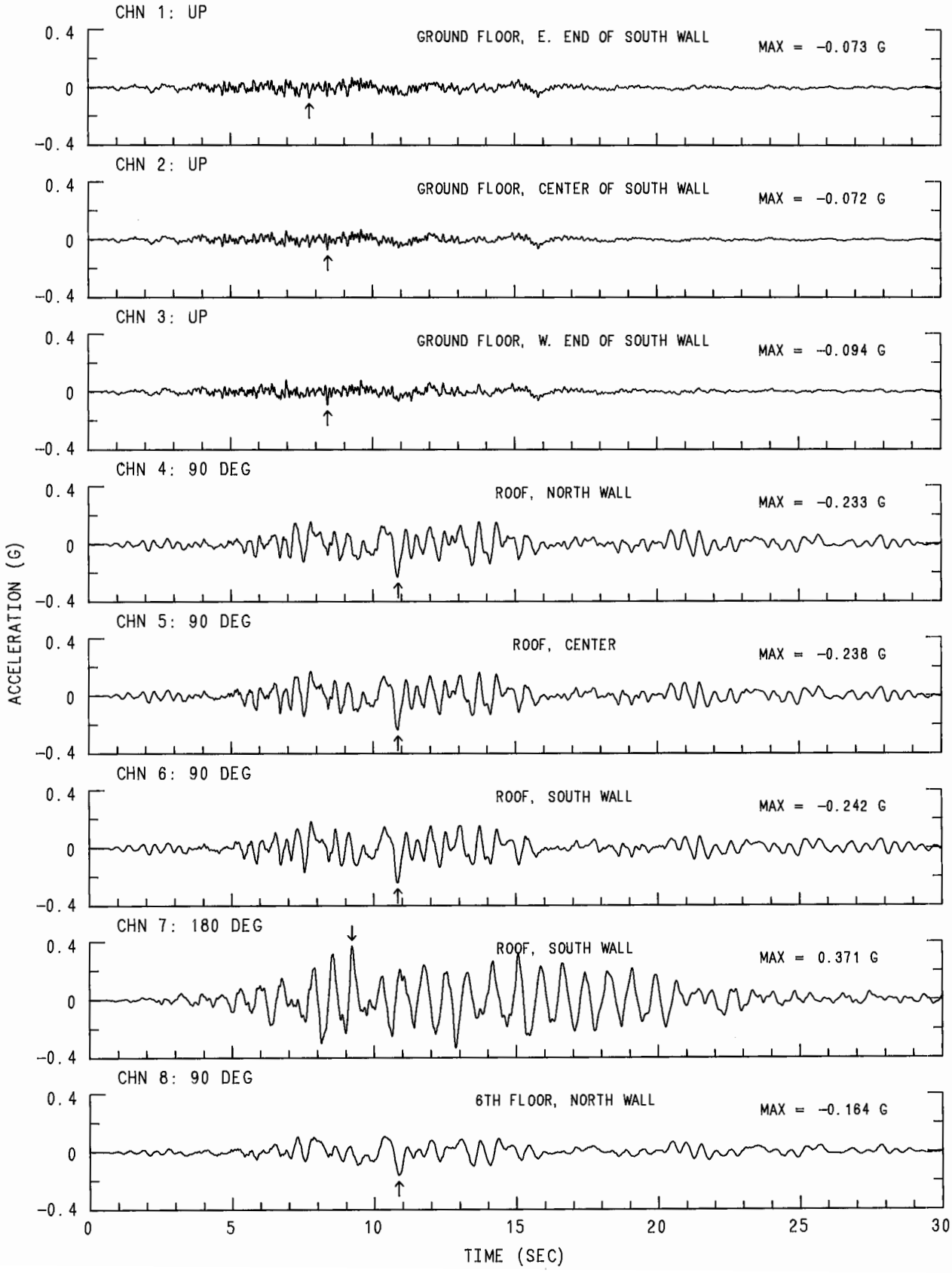
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58235-C0184-89292.04
USABLE DATA BANDWIDTH: 0.42 TO 23.6 HZ (0.04 TO 2.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

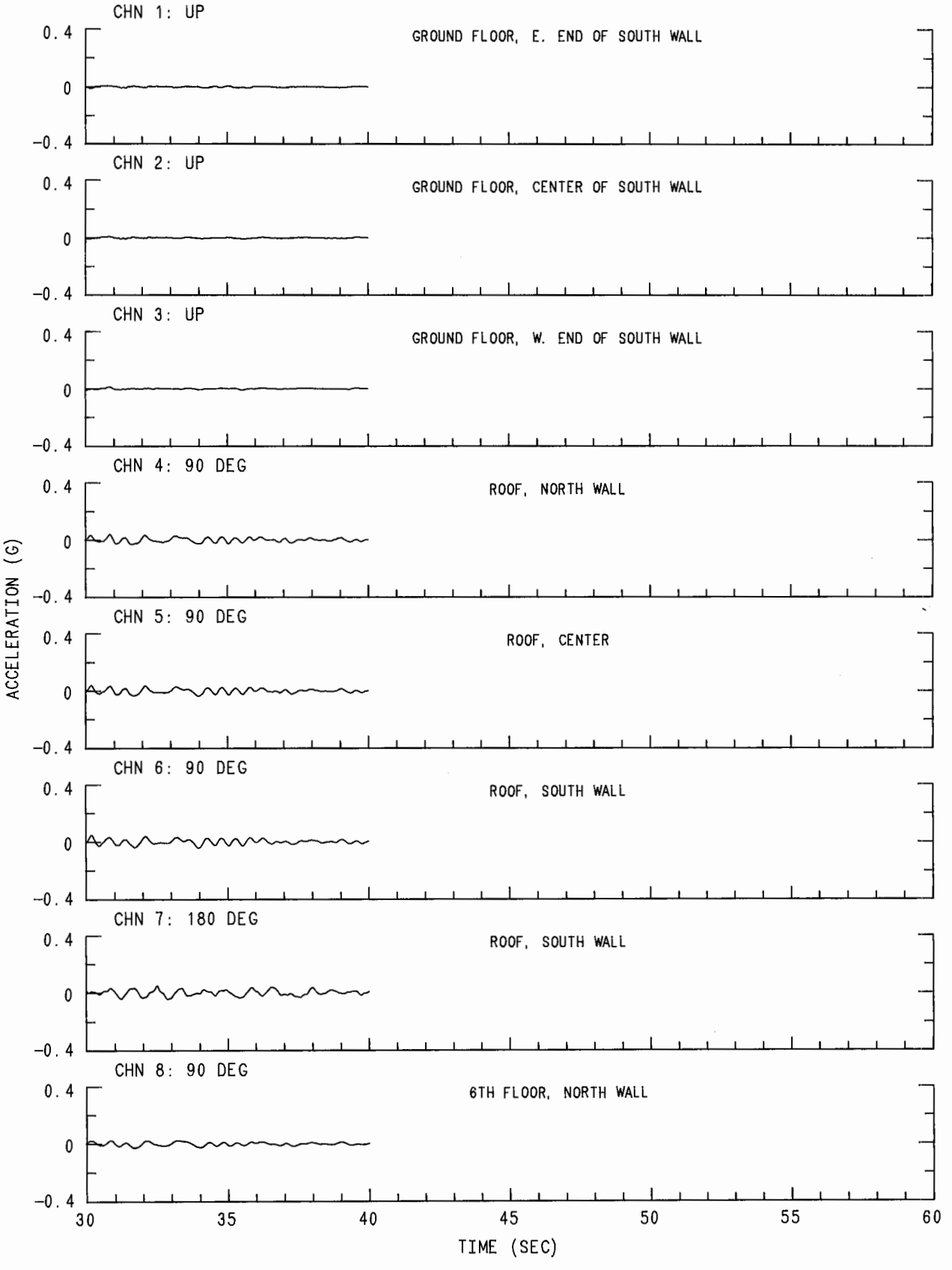
PHASE 1 ACCELERATION. RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

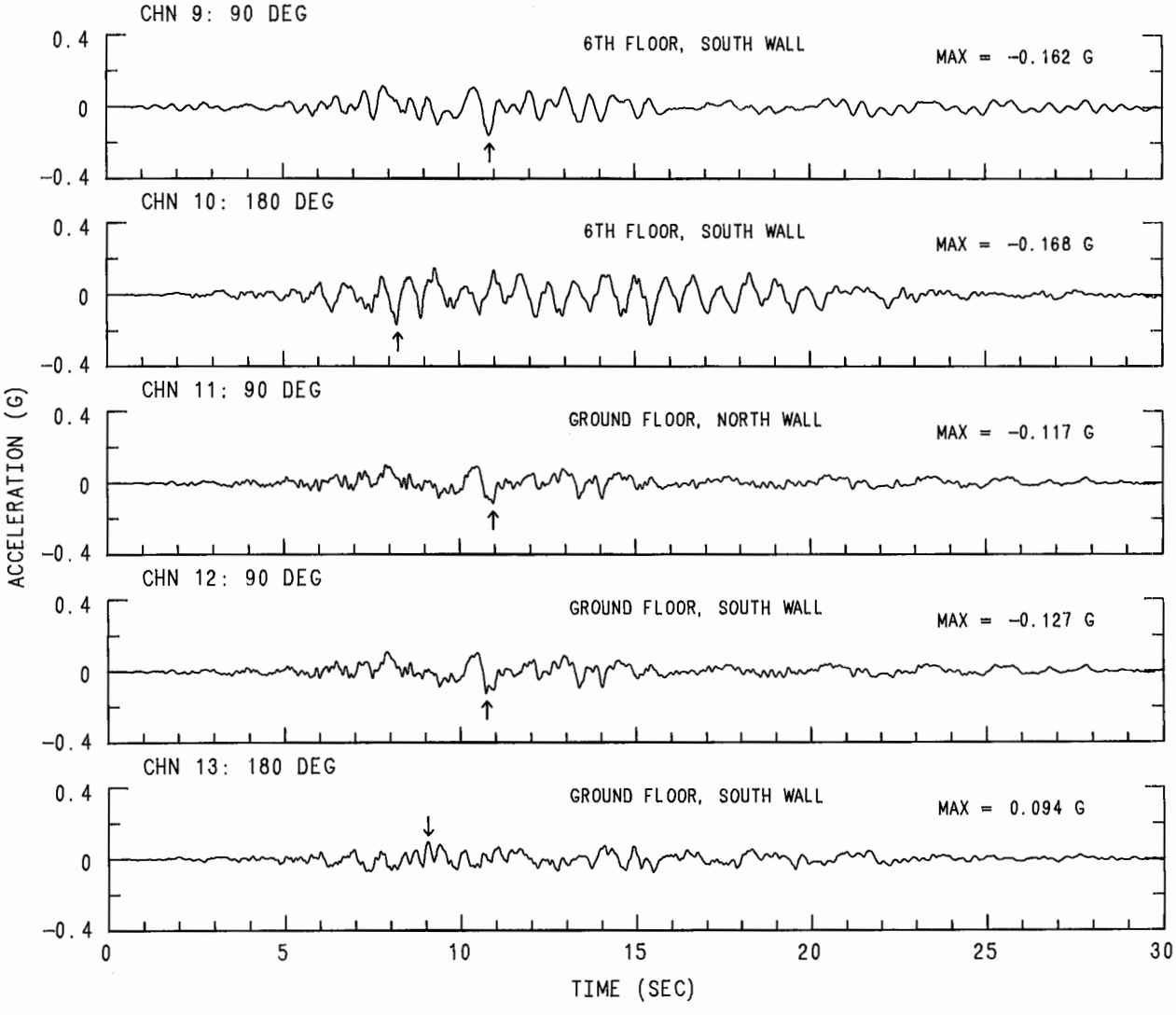
PHASE 1 ACCELERATION. RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

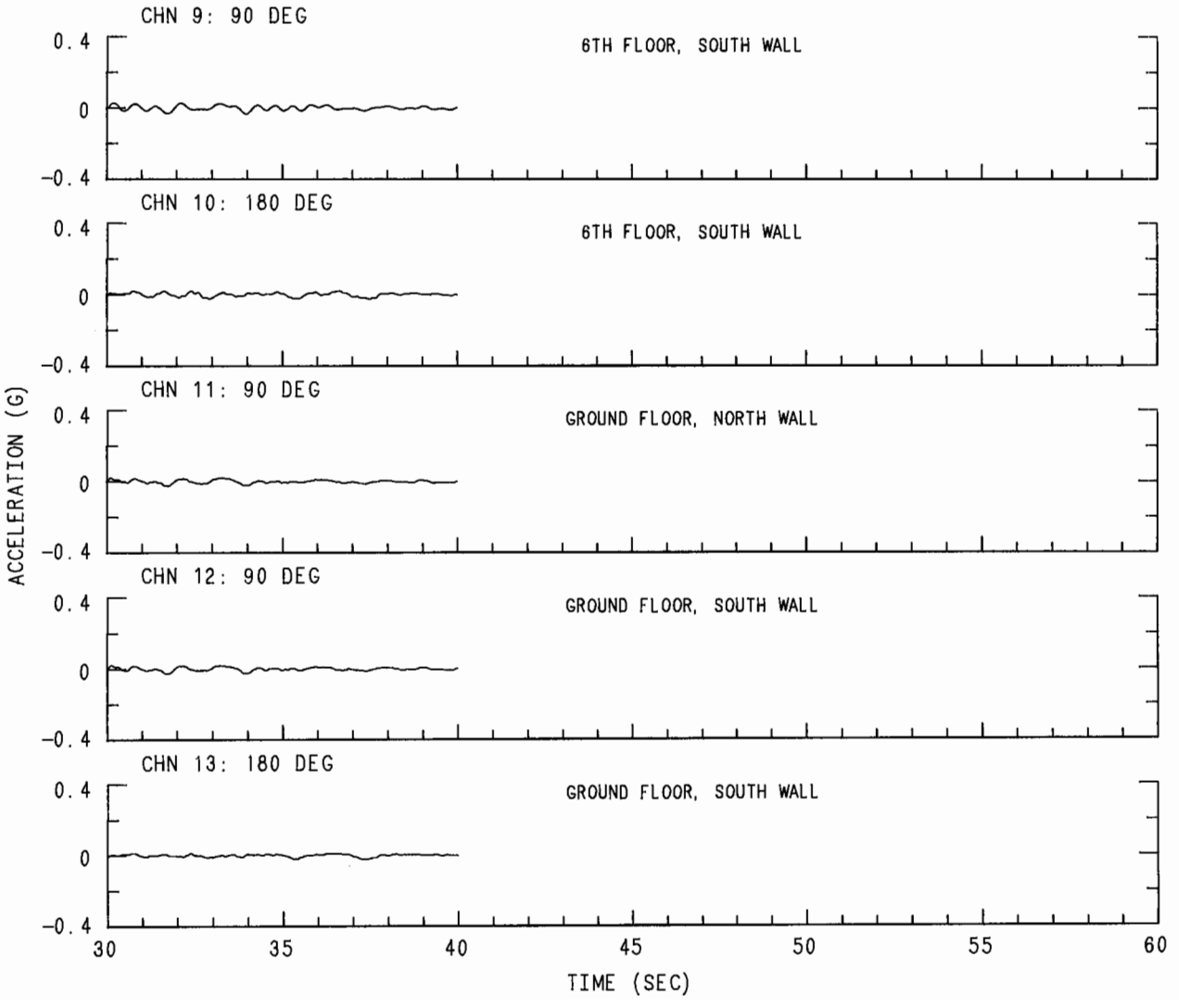
PHASE 1 ACCELERATION. RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

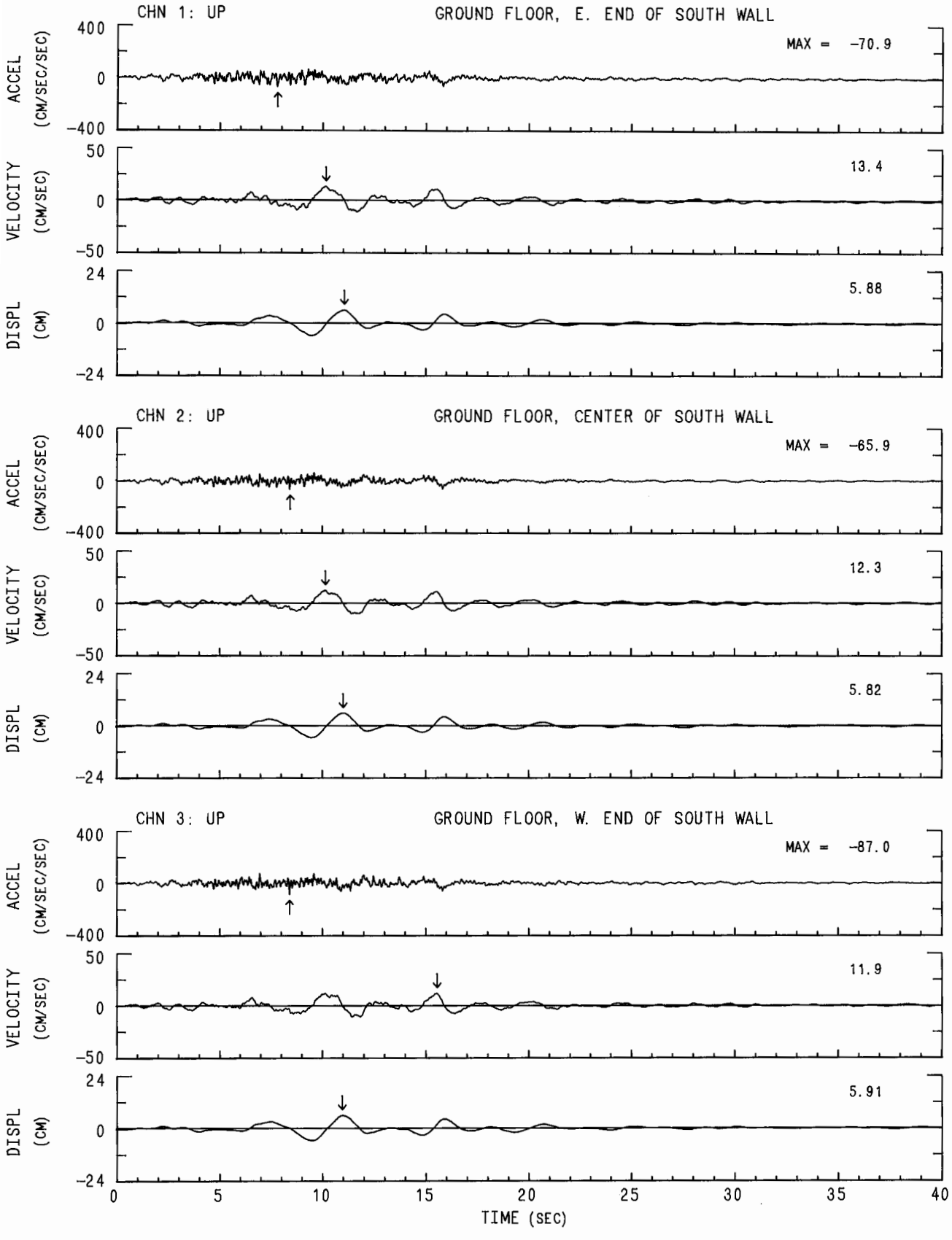
PHASE 1 ACCELERATION. RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

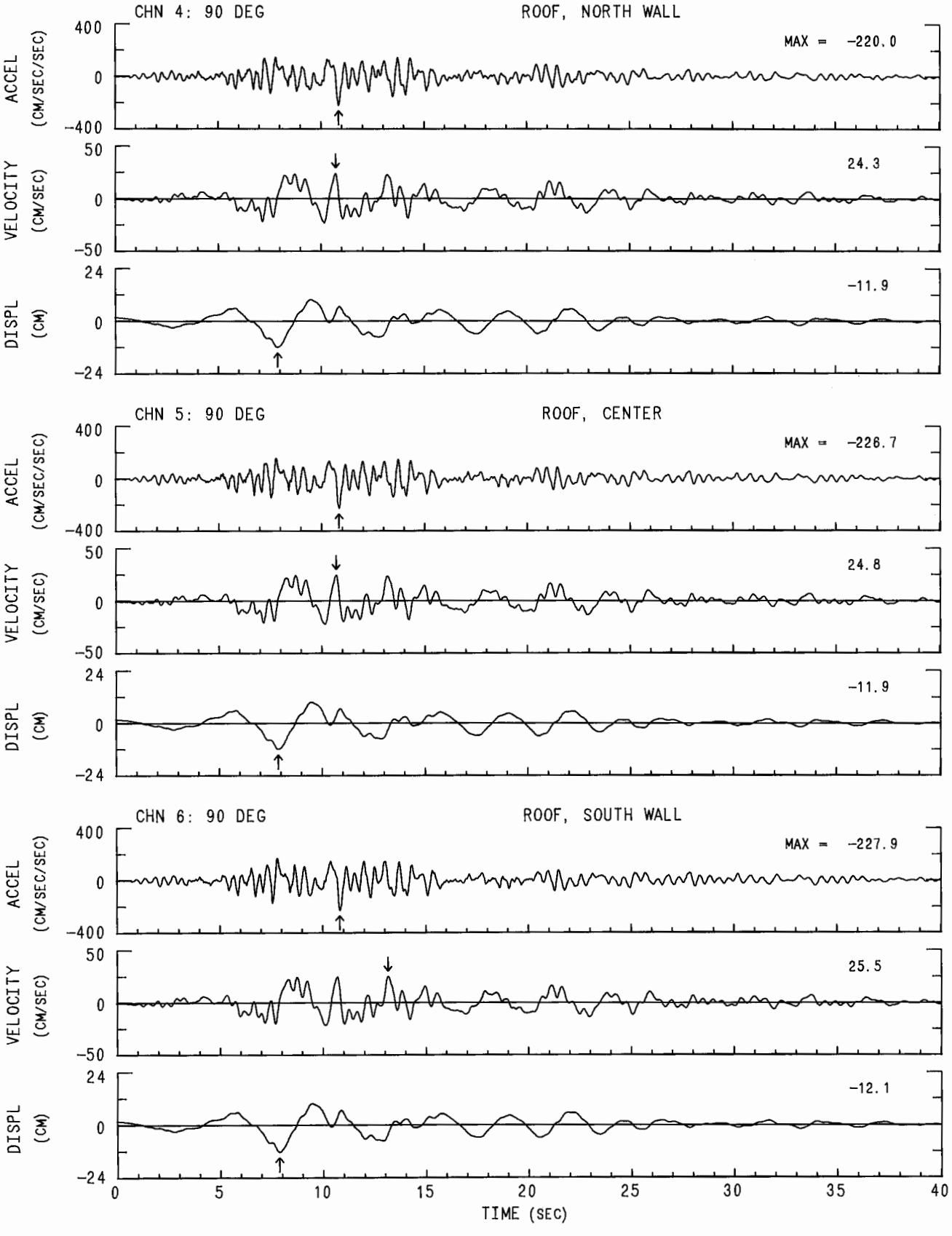
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

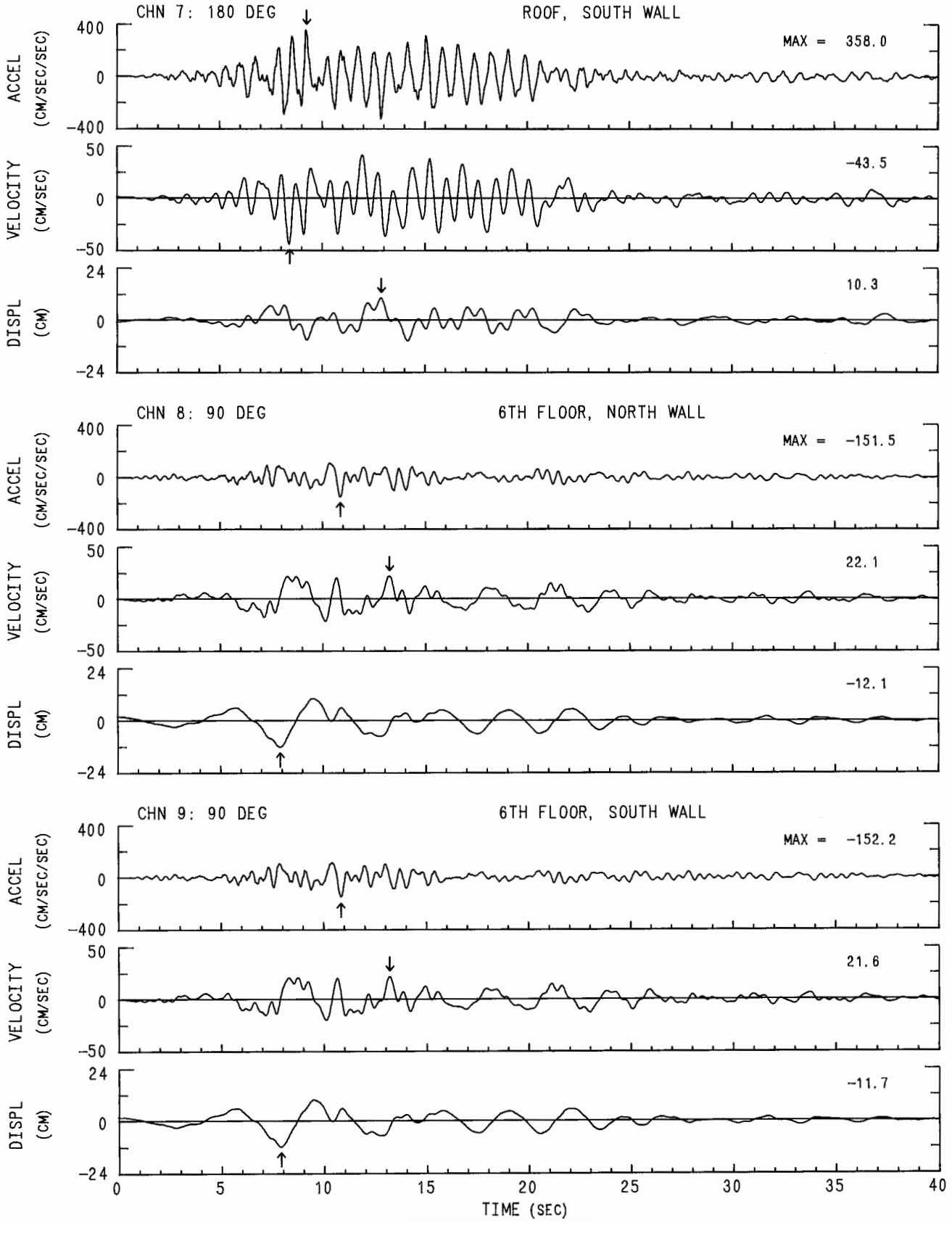
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

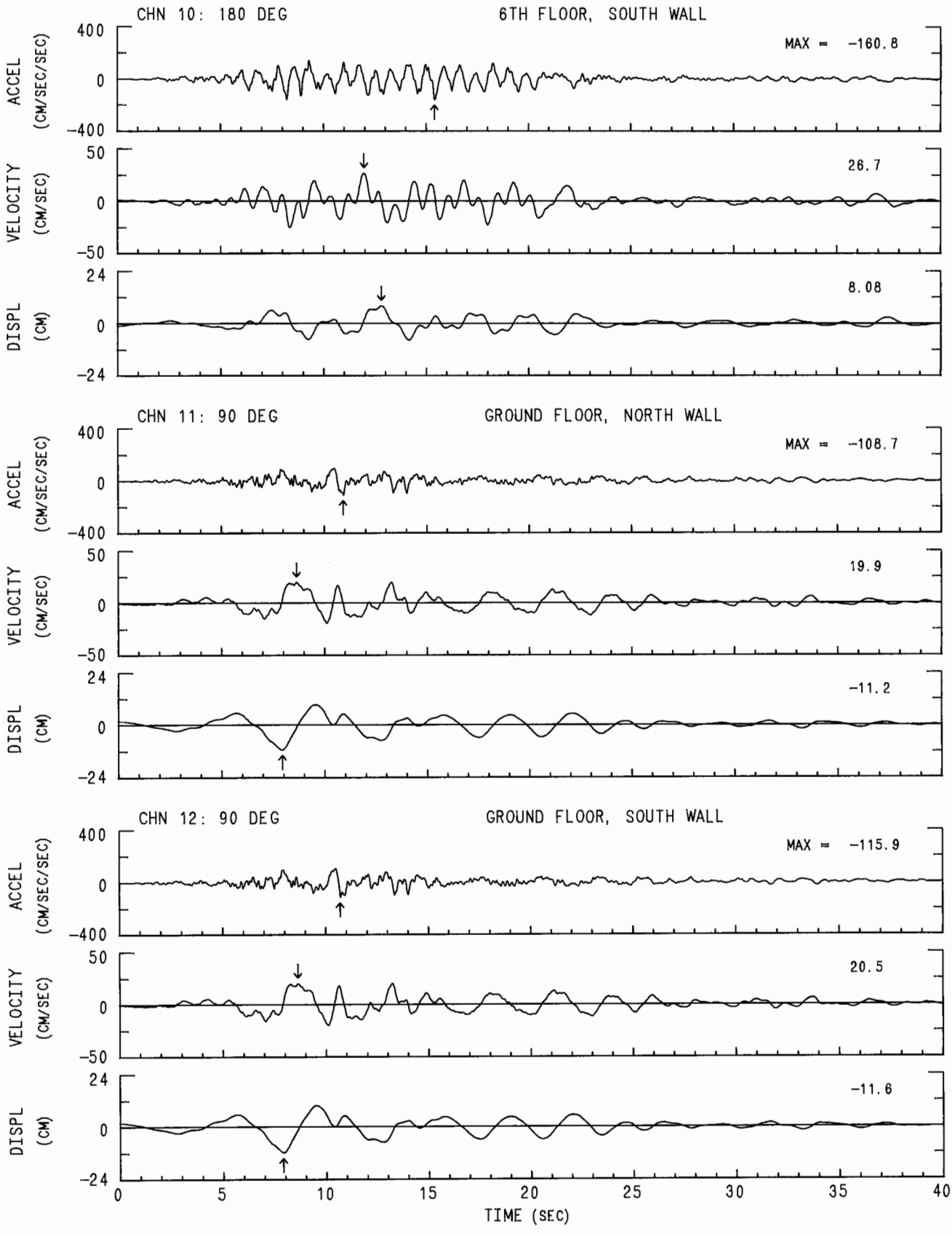
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

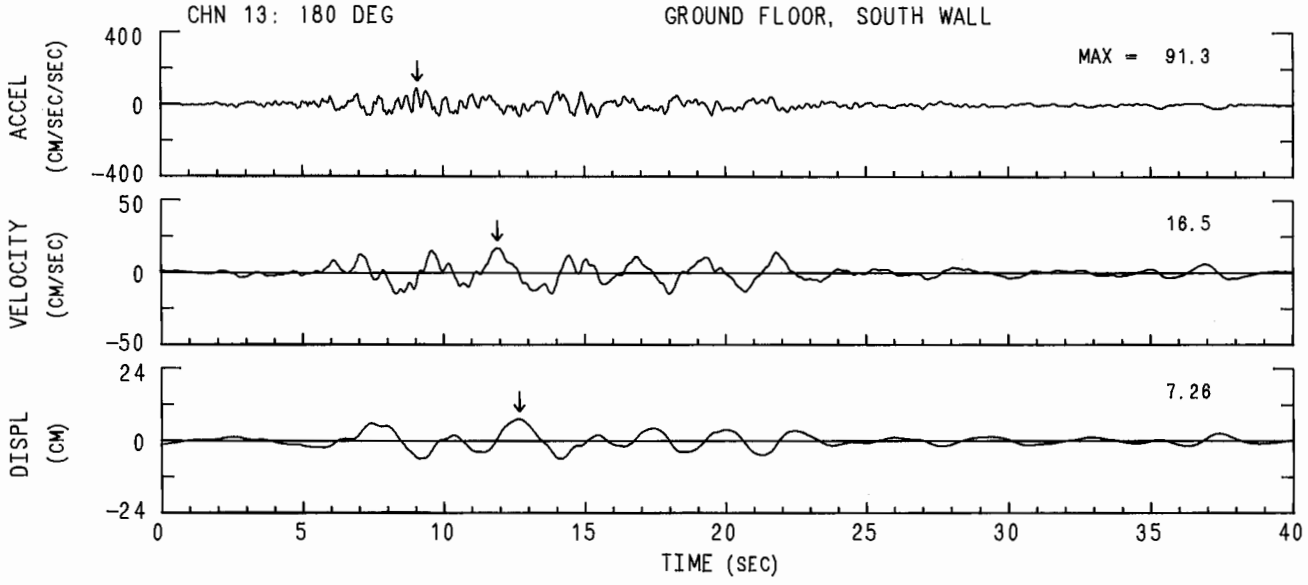
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57356-C0189-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 57356-C0189-89292.03



SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

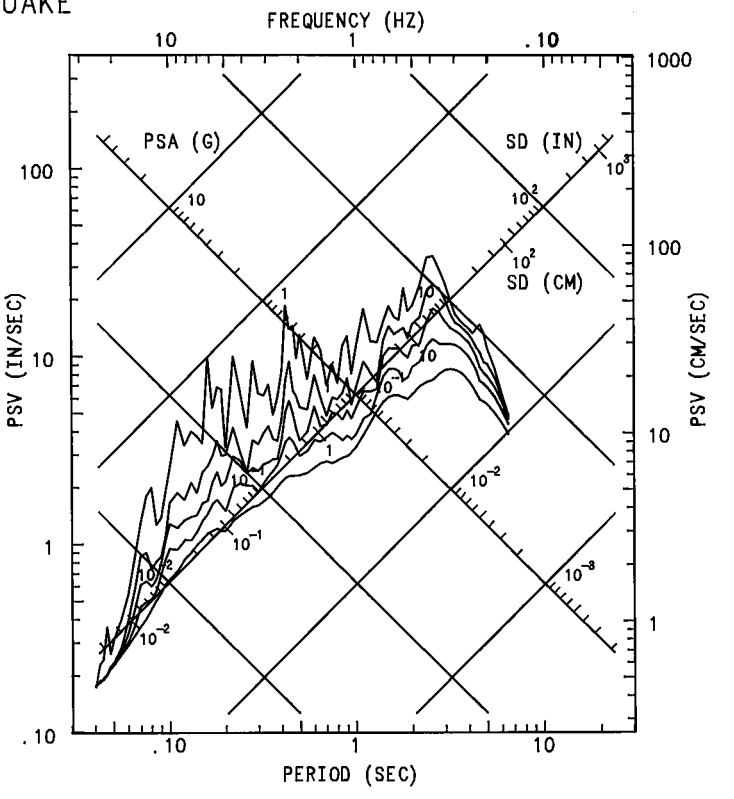
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

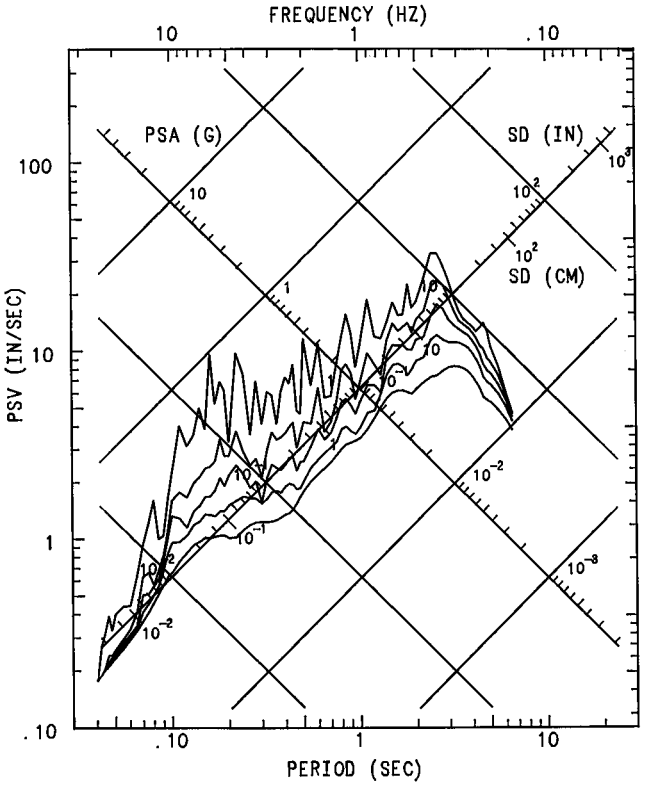
RECORD ID: 57356-C0189-89292.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

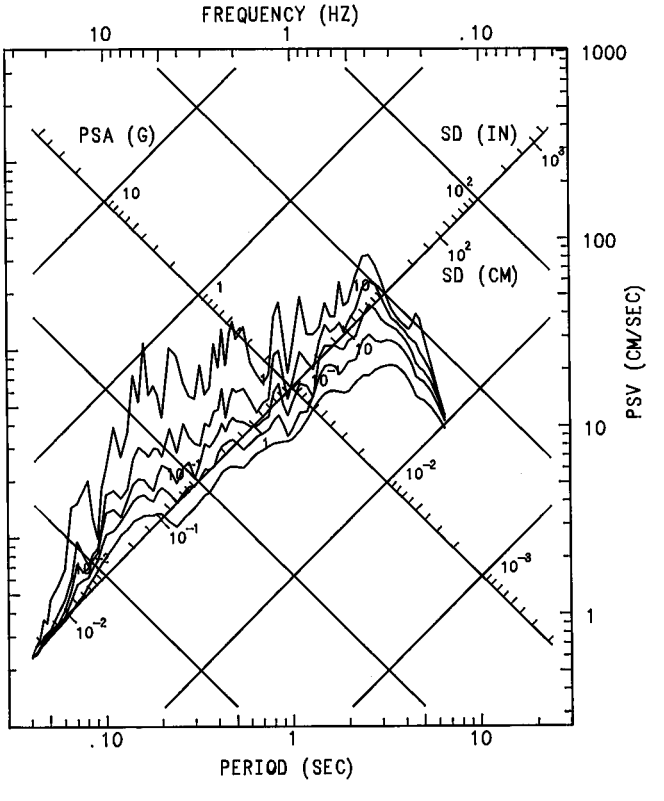
CHN 1: UP
GROUND FLOOR, E. END OF SOUTH WALL



CHN 2: UP
GROUND FLOOR, CENTER OF SOUTH WALL



CHN 3: UP
GROUND FLOOR, W. END OF SOUTH WALL



SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

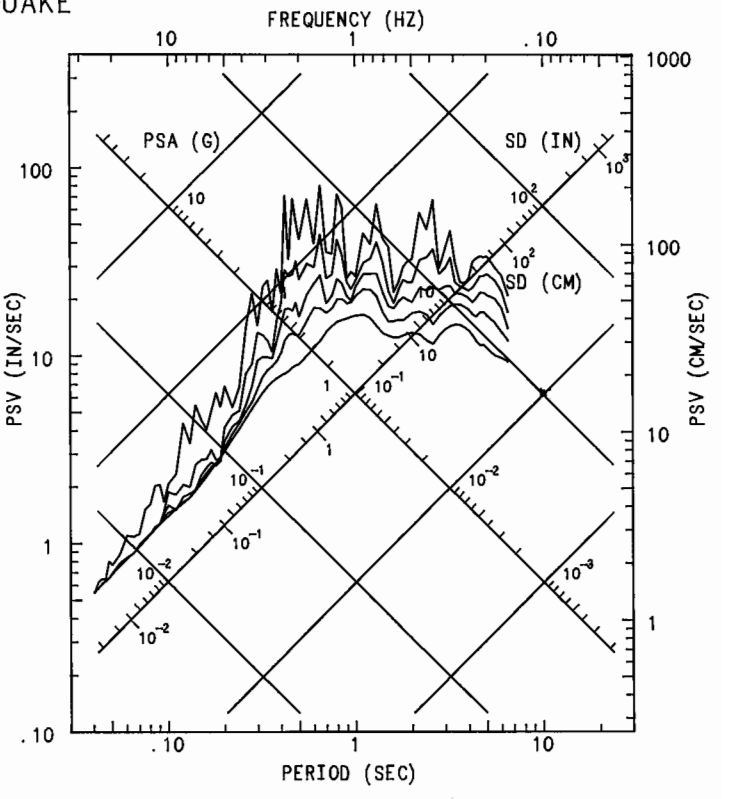
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

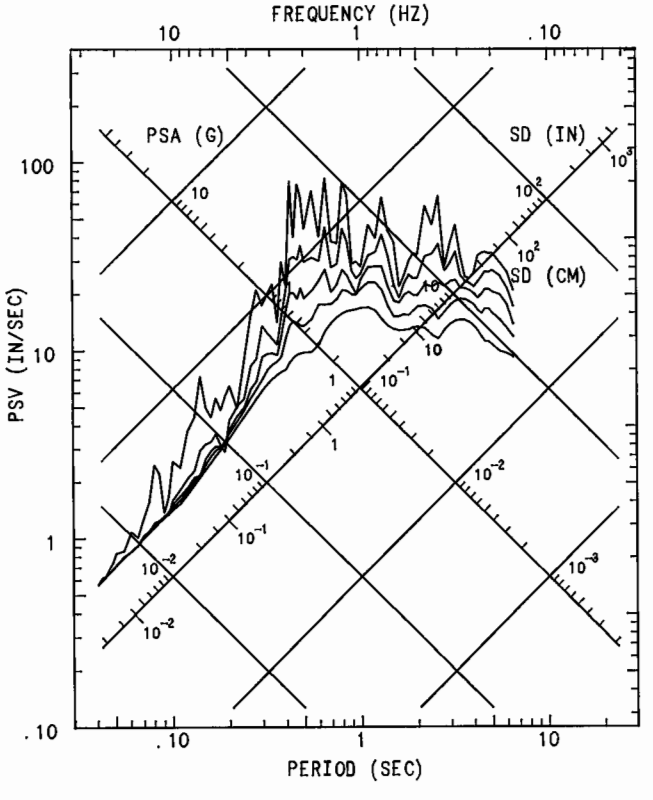
RECORD ID: 57356-C0189-89292.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

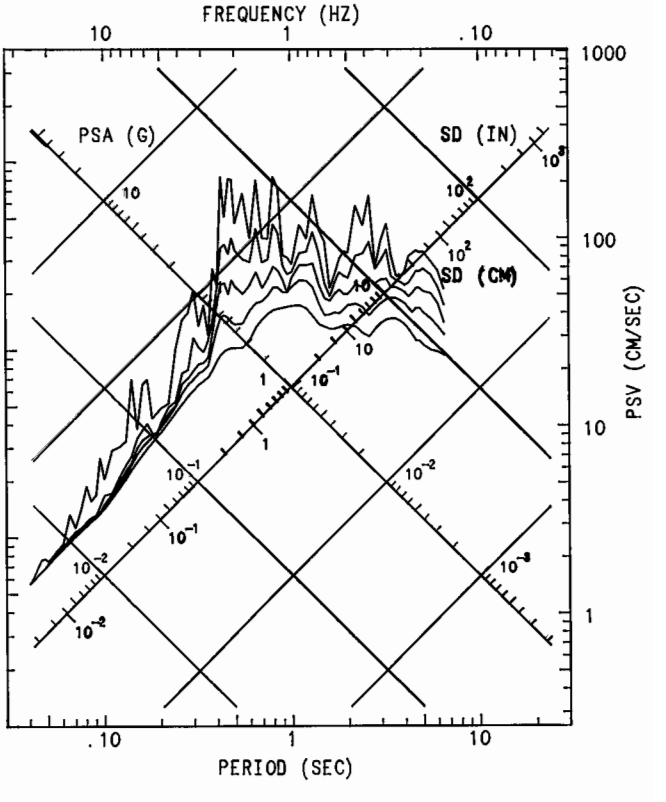
CHN 4: 90 DEG
ROOF, NORTH WALL



CHN 5: 90 DEG
ROOF, CENTER



CHN 6: 90 DEG
ROOF, SOUTH WALL



SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

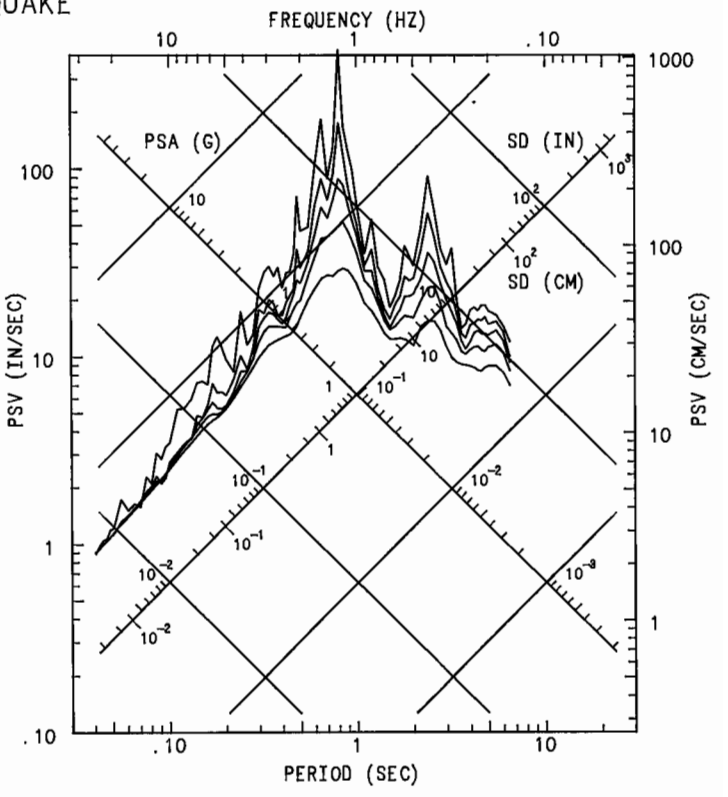
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

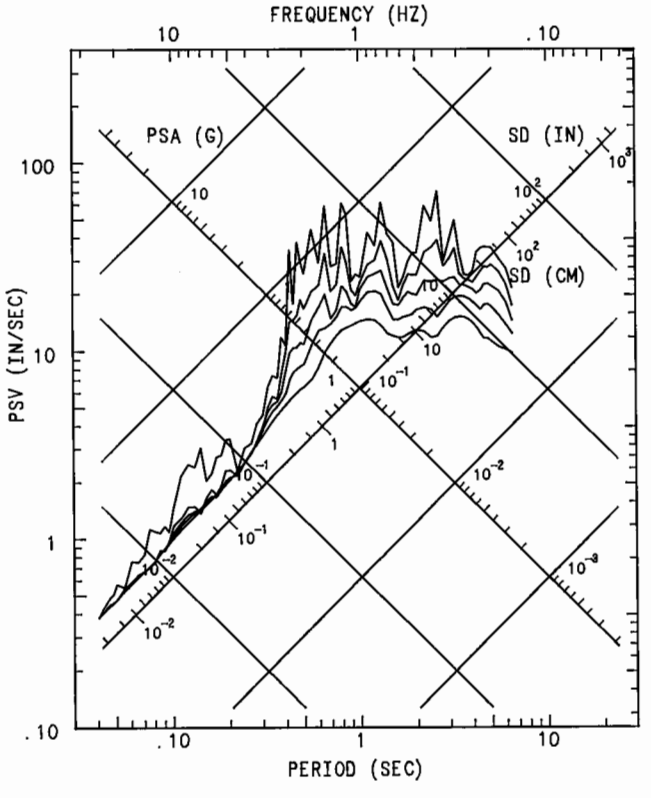
RECORD ID: 57356-C0189-89292.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

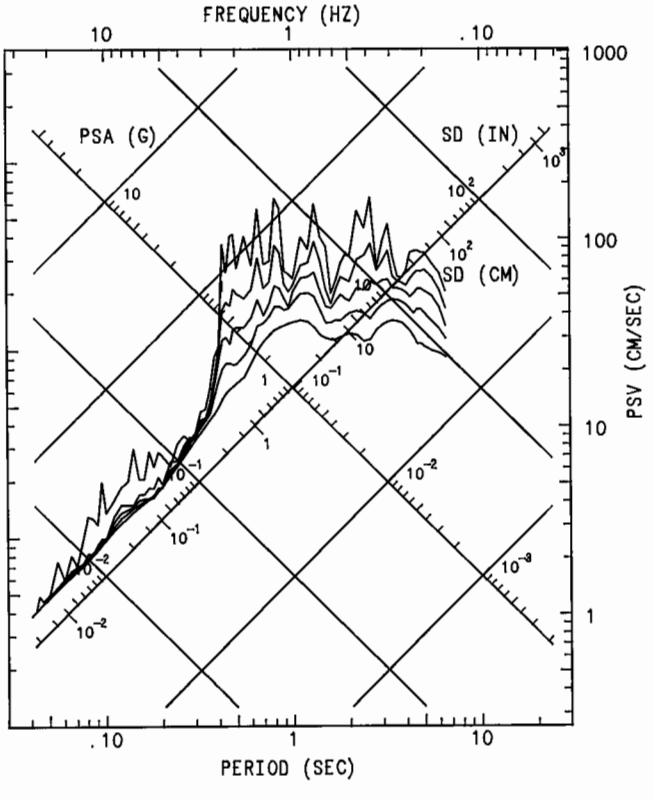
CHN 7: 180 DEG
ROOF, SOUTH WALL



CHN 8: 90 DEG
6TH FLOOR, NORTH WALL



CHN 9: 90 DEG
6TH FLOOR, SOUTH WALL



SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

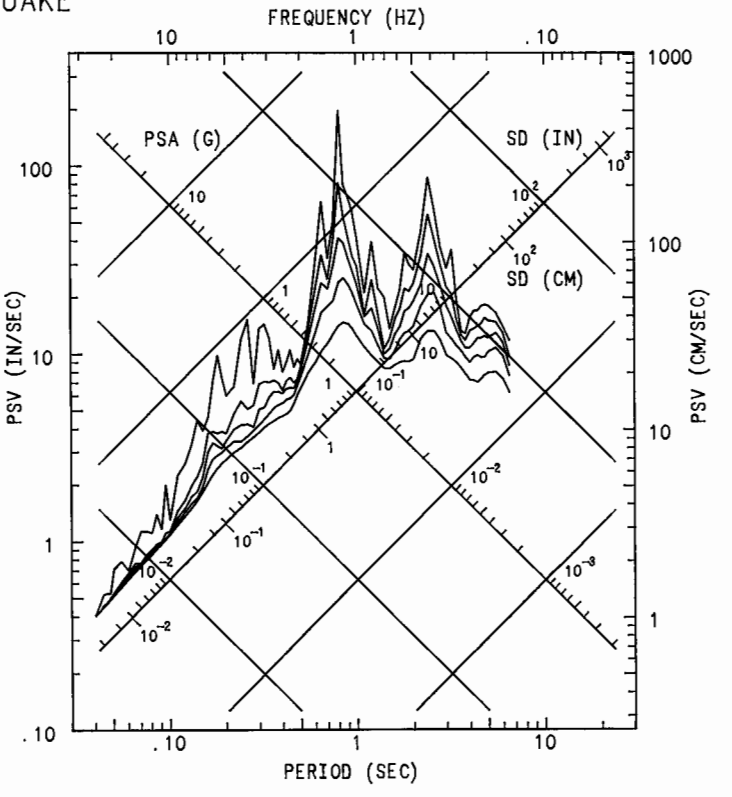
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

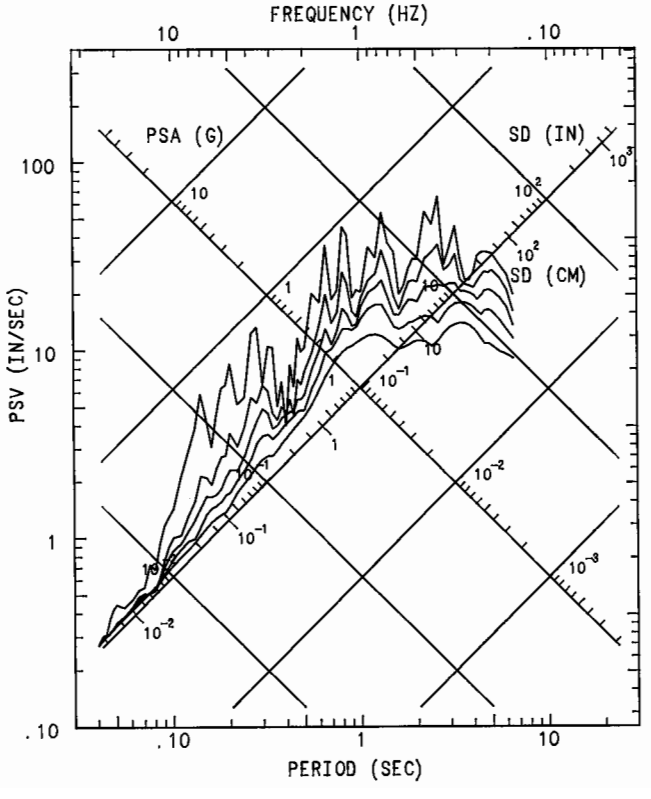
RECORD ID: 57356-C0189-89292.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

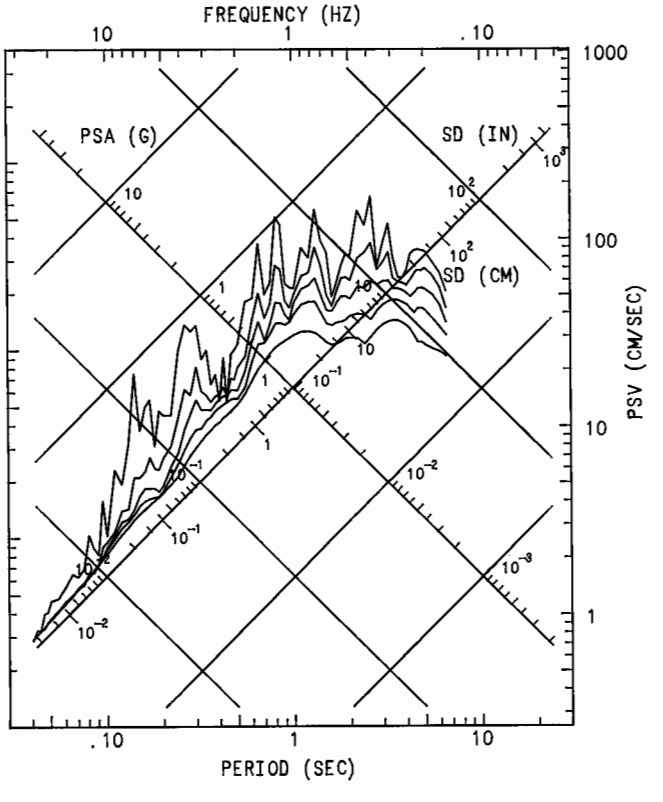
CHN 10: 180 DEG
6TH FLOOR, SOUTH WALL



CHN 11: 90 DEG
GROUND FLOOR, NORTH WALL



CHN 12: 90 DEG
GROUND FLOOR, SOUTH WALL



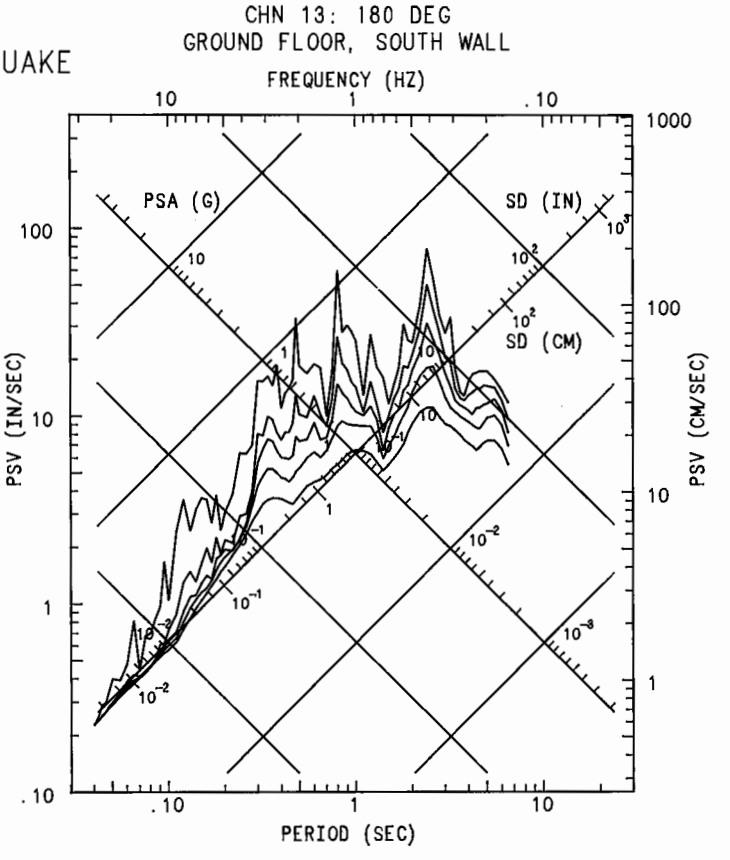
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

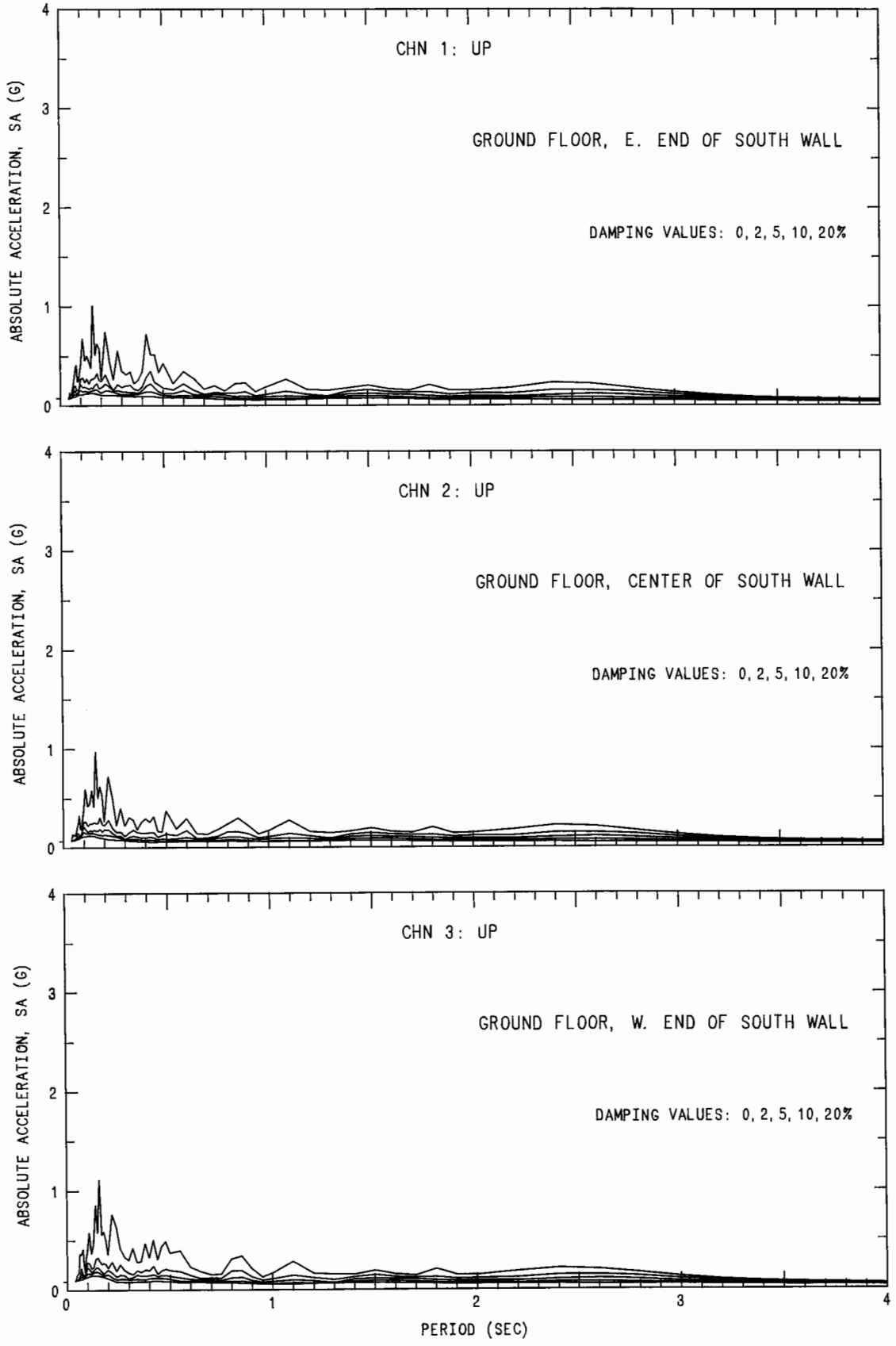
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

RECORD ID: 57356-C0189-89292.03

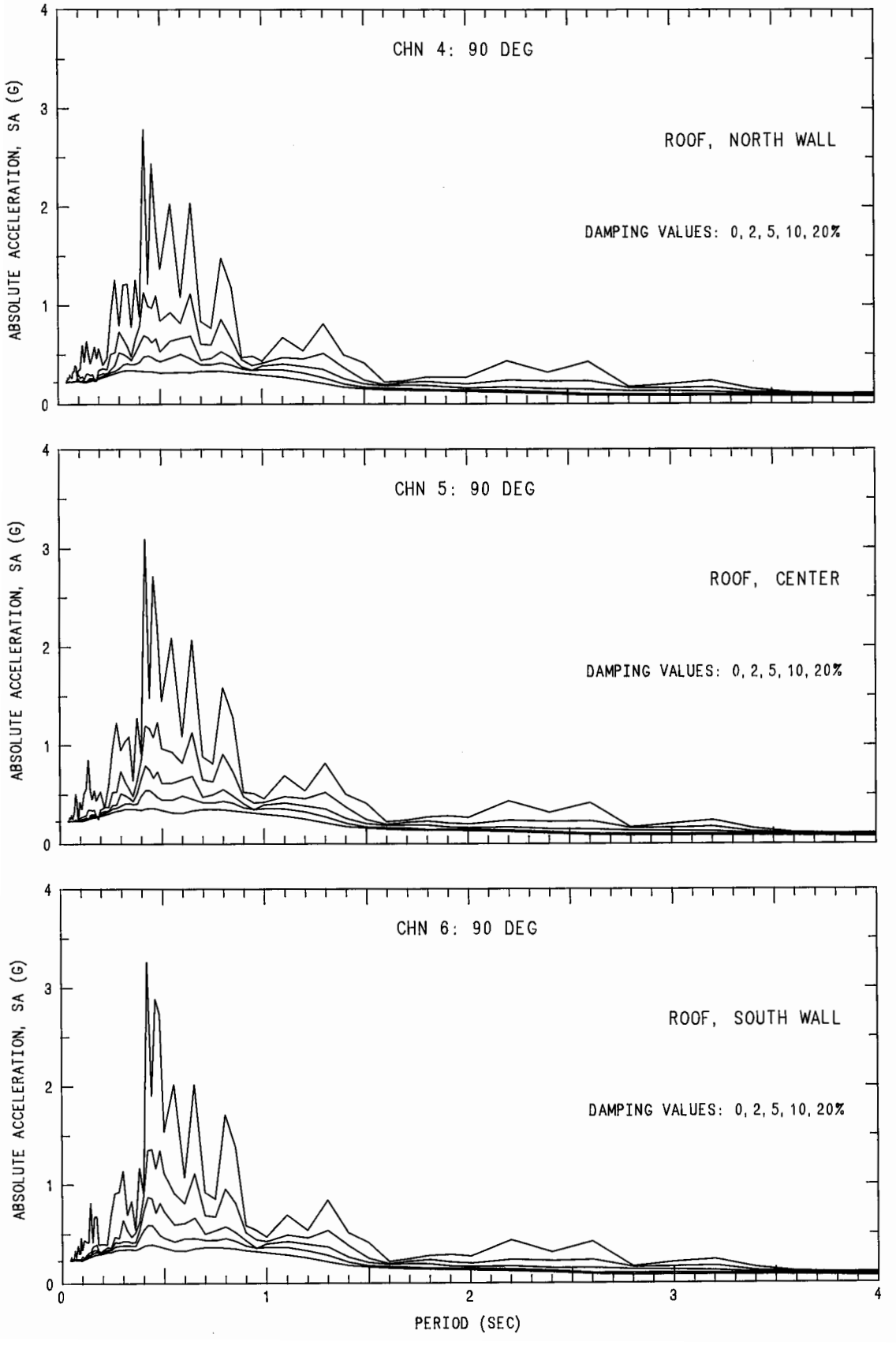
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



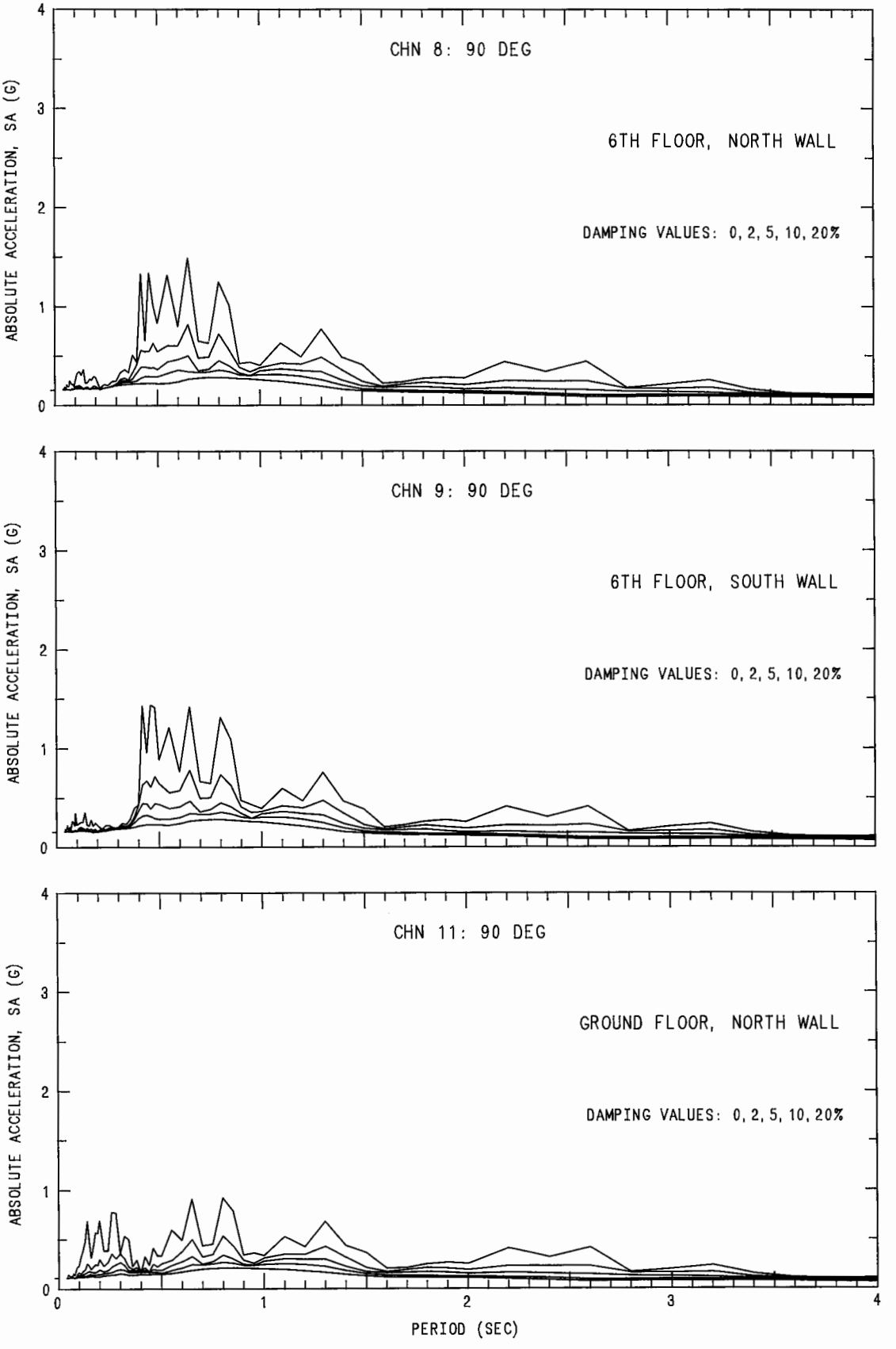
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57356-C0189-89292.03
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



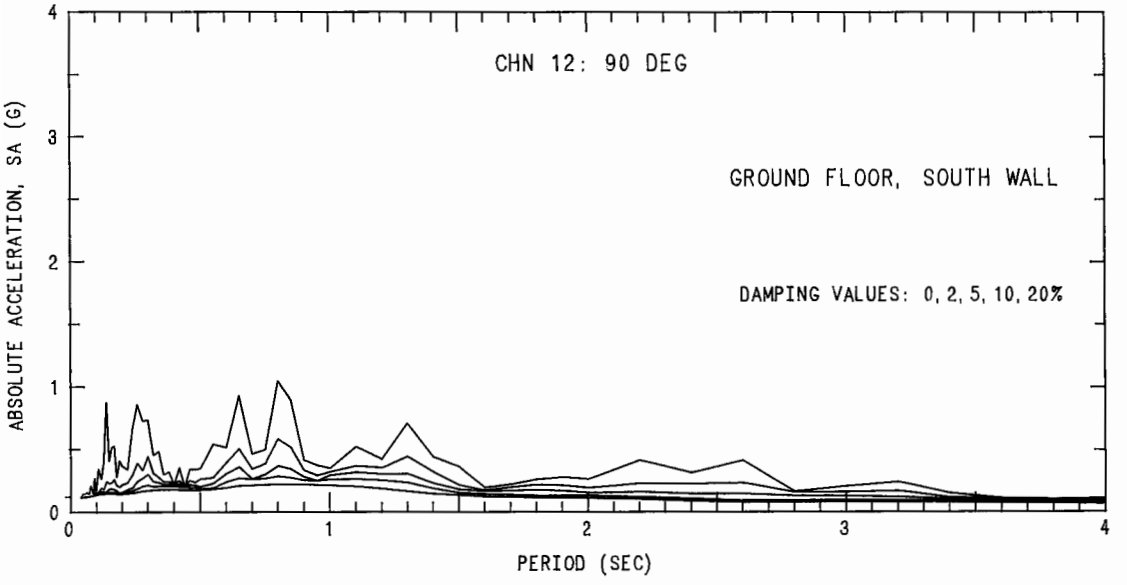
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57356-C0189-89292.03
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



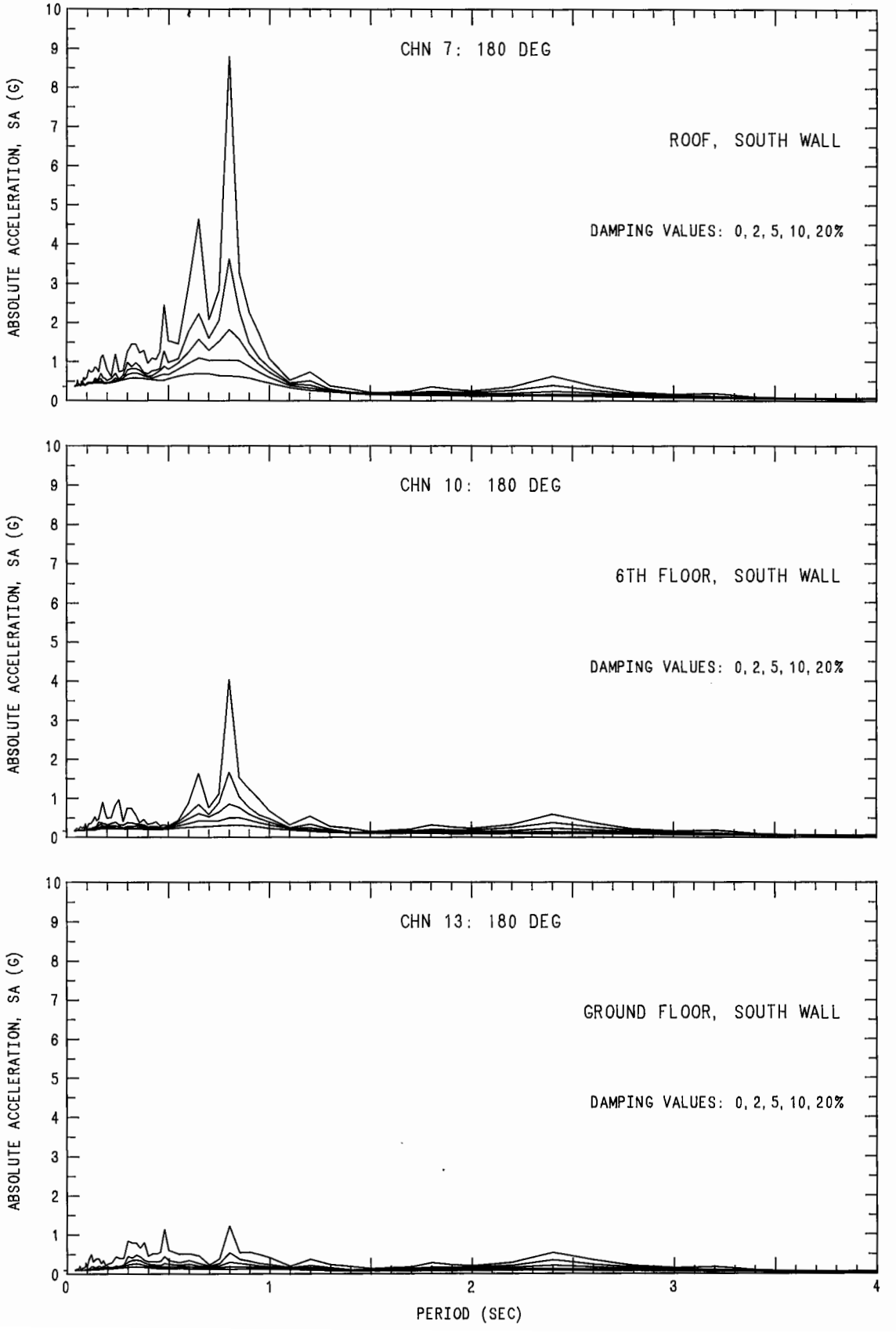
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57356-C0189-89292.03
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG. : CSMIP S/N 356
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57356-C0189-89292.03
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



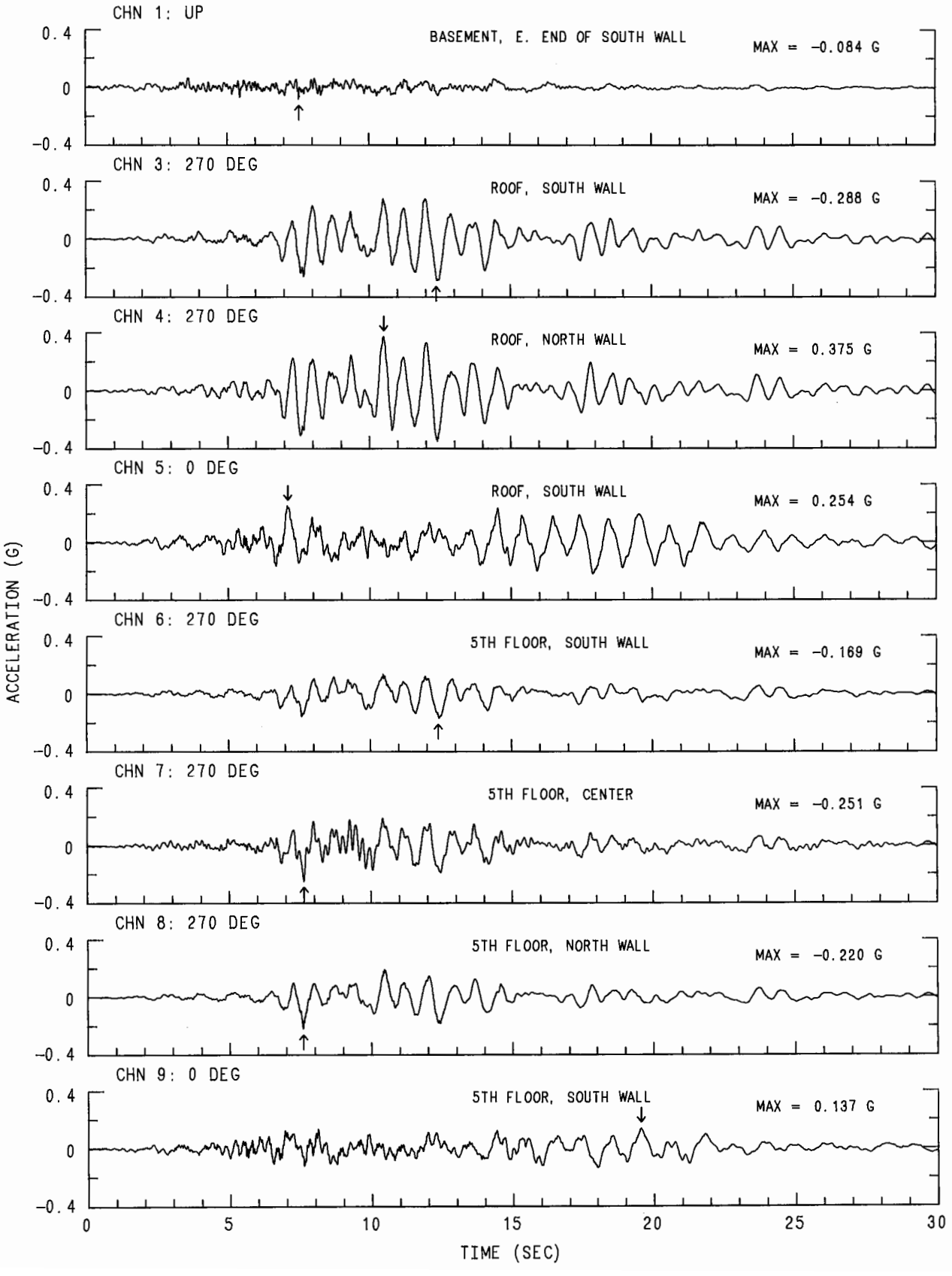
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY RESIDENTIAL BLDG.: CSMIP S/N 356
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57356-C0189-89292.03
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

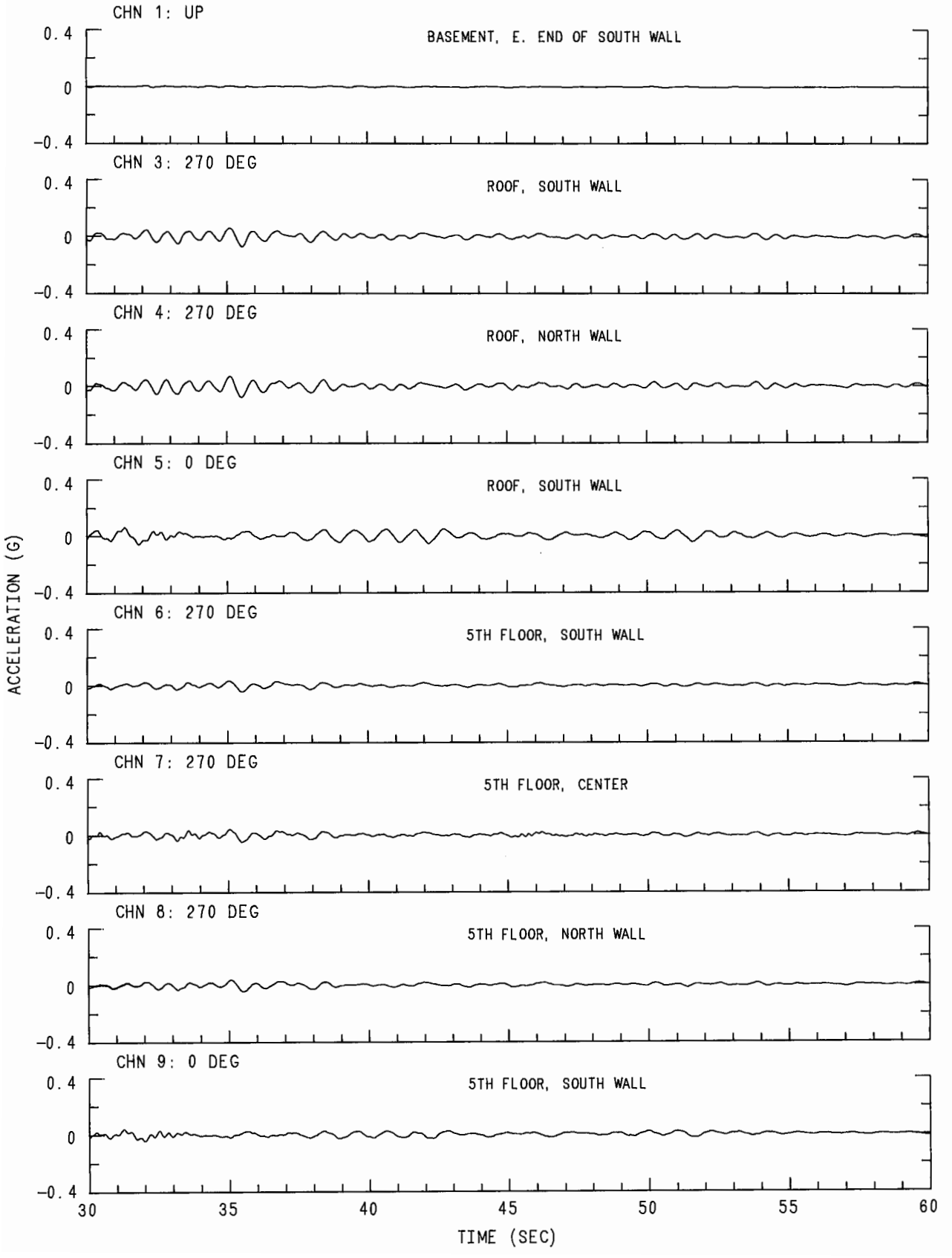
PHASE 1 ACCELERATION. RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

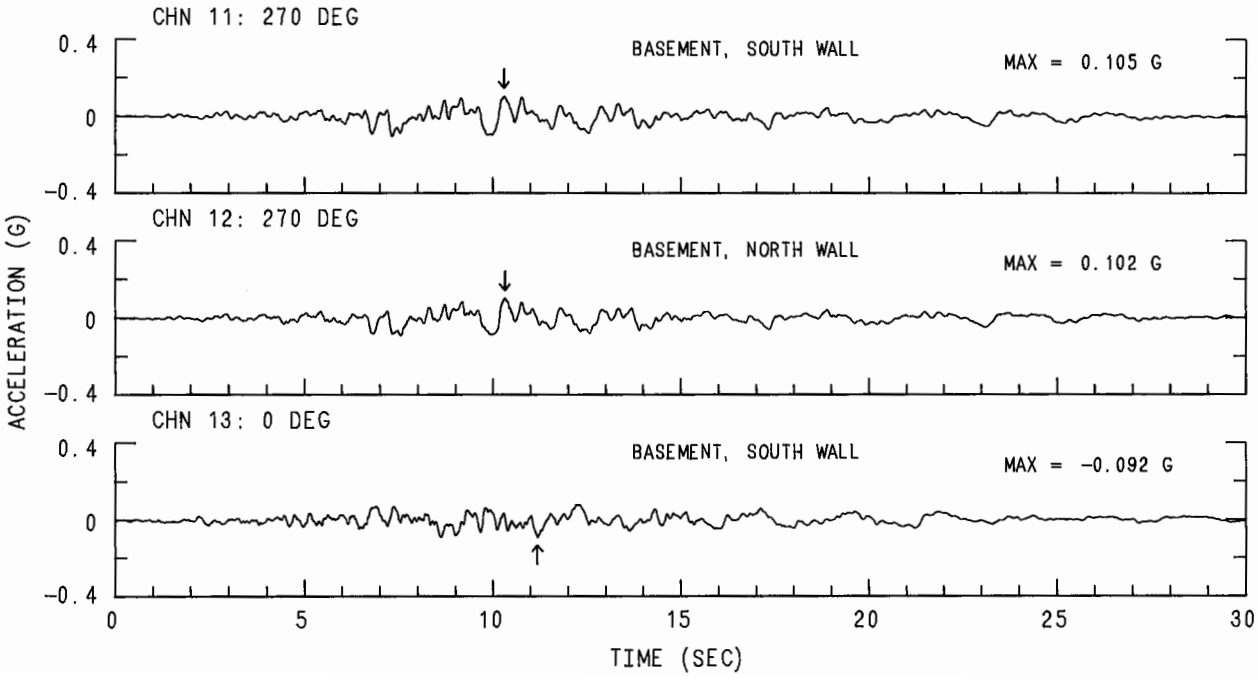
PHASE 1 ACCELERATION. RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

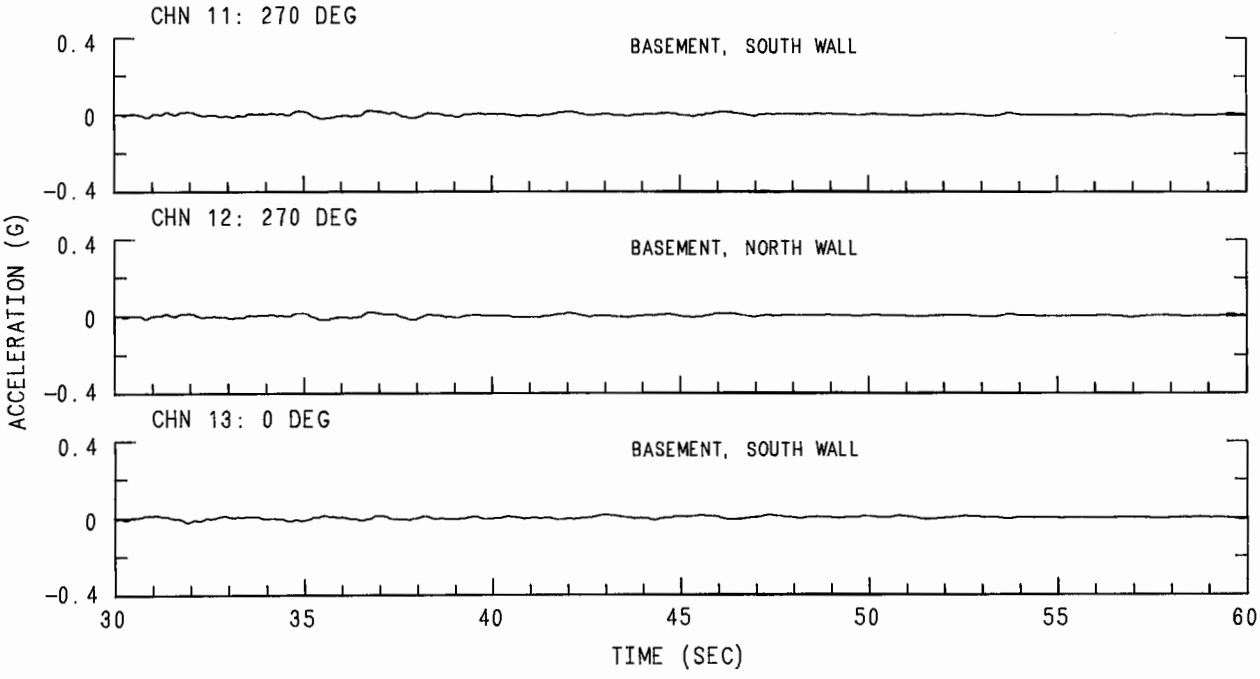
PHASE 1 ACCELERATION. RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 10-STORY COMMERCIAL BLDG. : CSMIP S/N 355

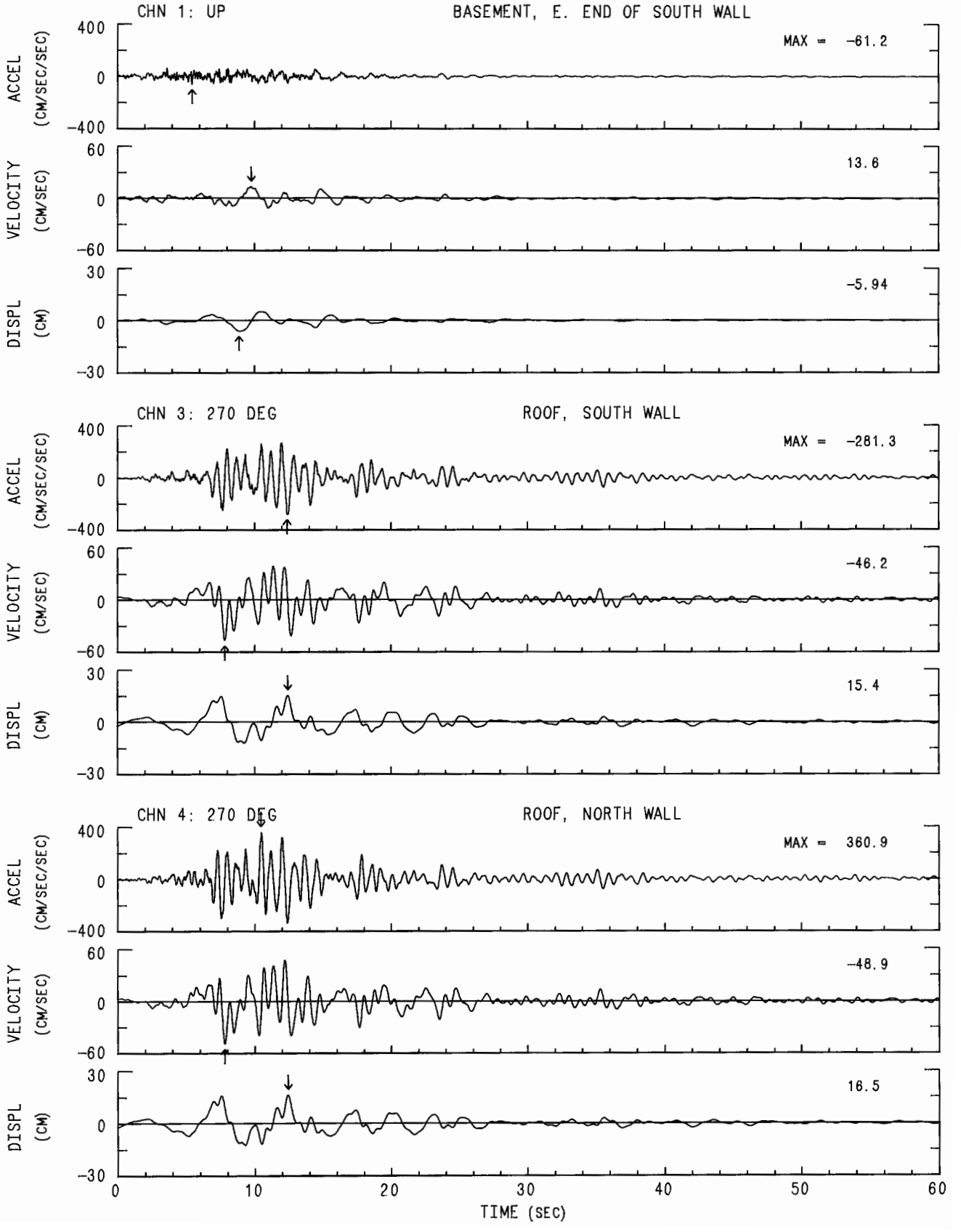
PHASE 1 ACCELERATION. RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

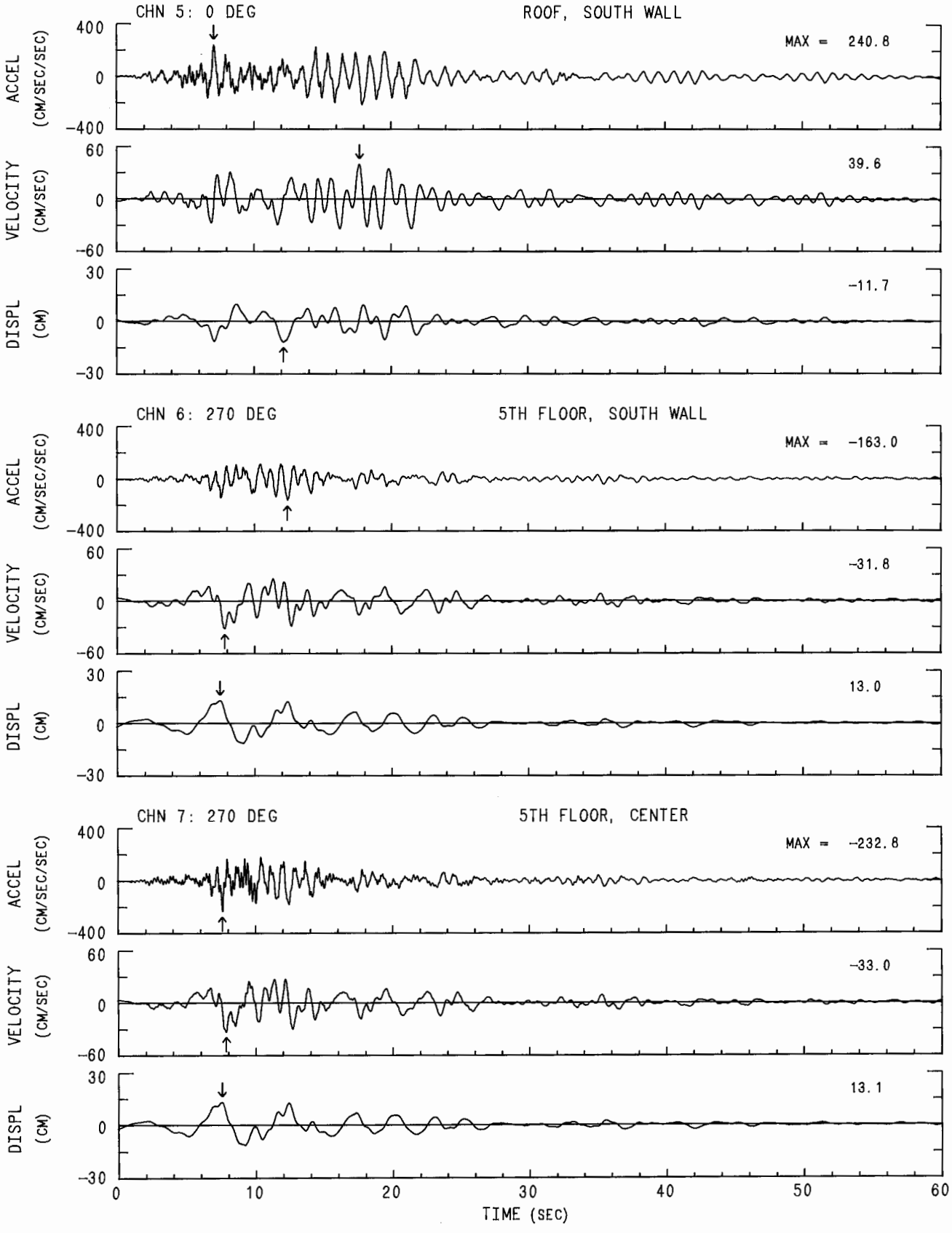
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

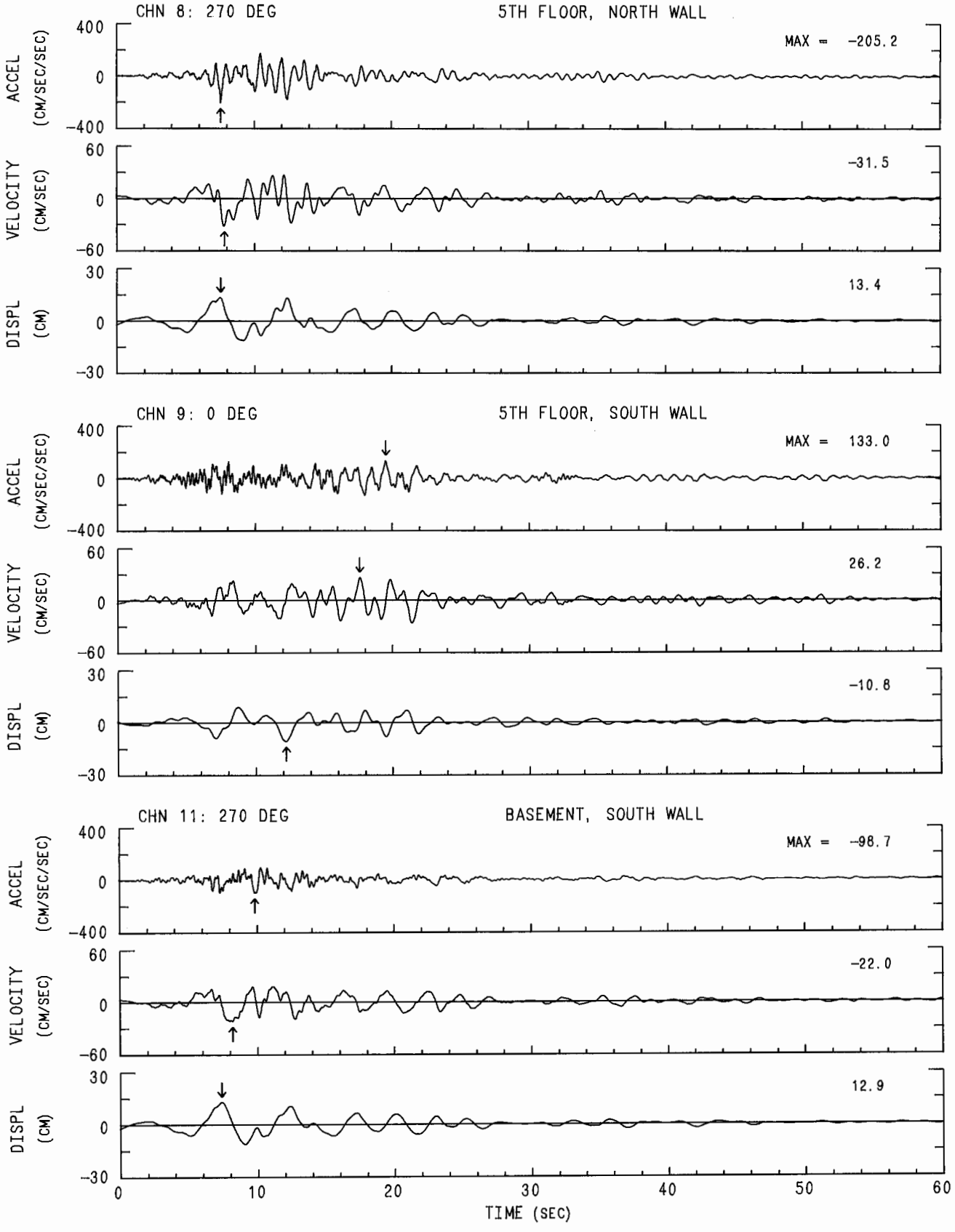
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

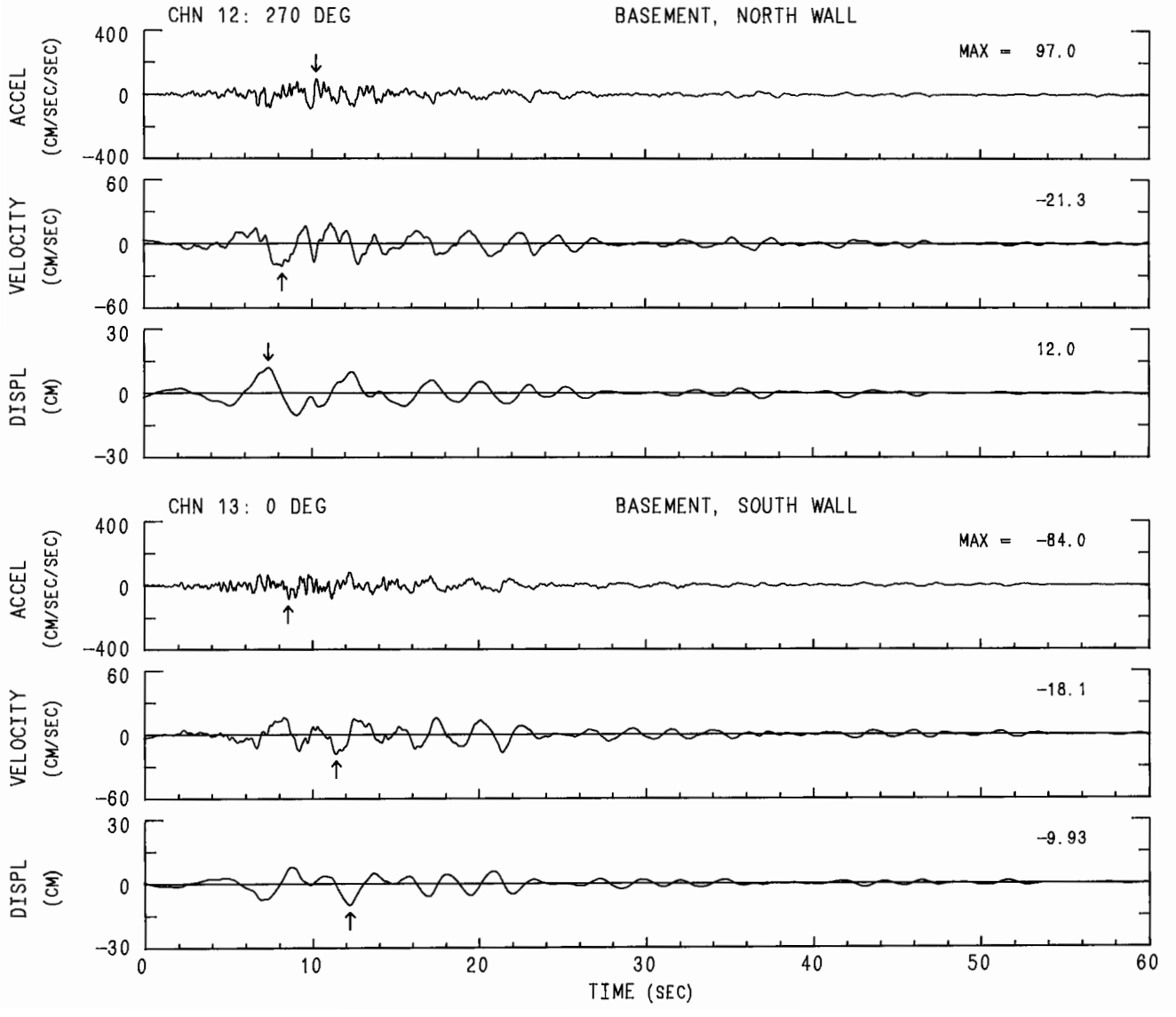
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 57355-C0112-89292.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 57355-C0112-89292.03



SAN JOSE - 10-STORY COMMERCIAL BLDG. : CSMIP S/N 355

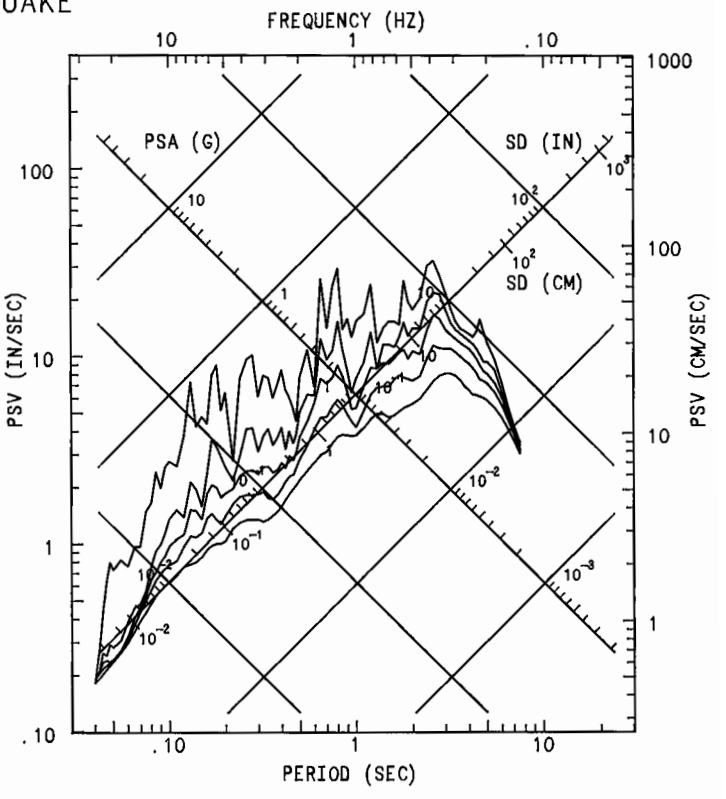
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

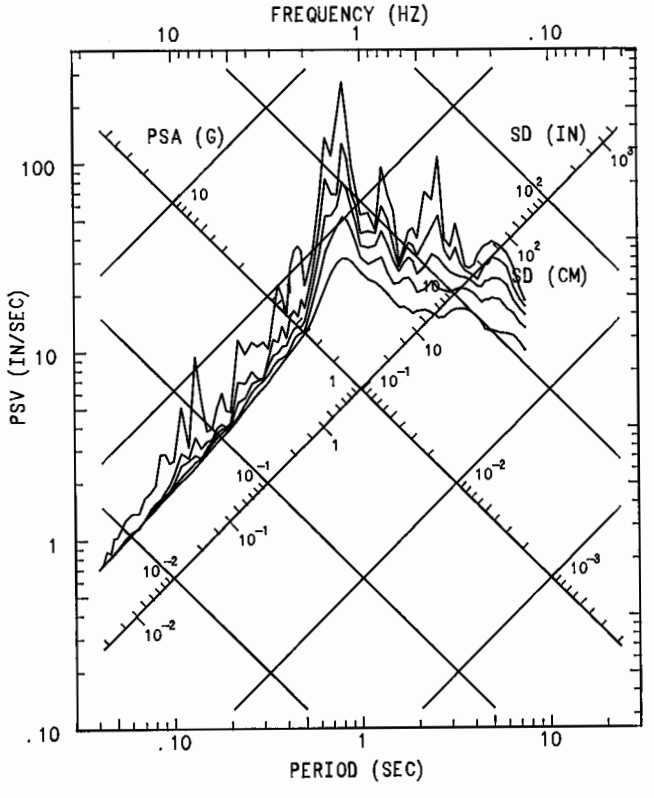
RECORD ID: 57355-C0112-89292.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

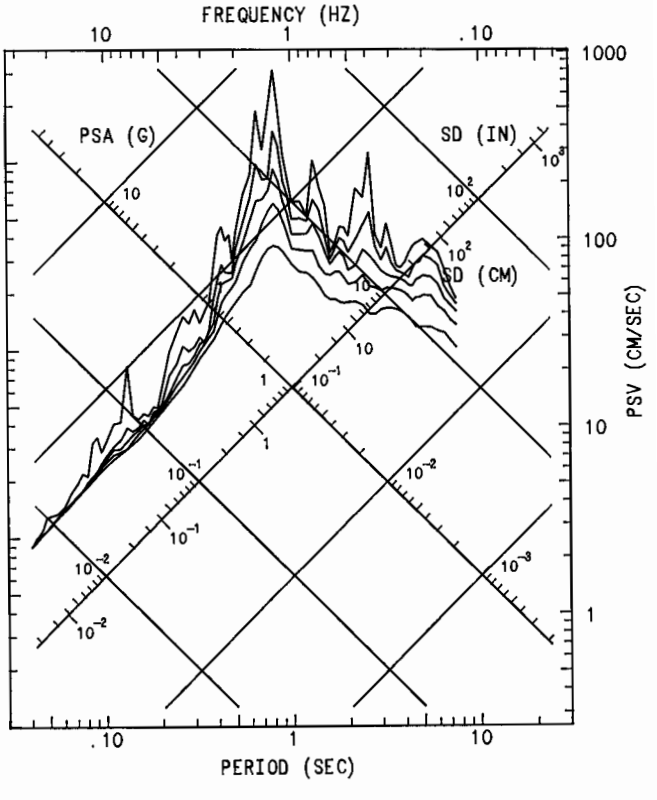
CHN 1: UP
BASEMENT, E. END OF SOUTH WALL



CHN 3: 270 DEG
ROOF, SOUTH WALL



CHN 4: 270 DEG
ROOF, NORTH WALL



SAN JOSE – 10-STORY COMMERCIAL BLDG. : CSMIP S/N 355

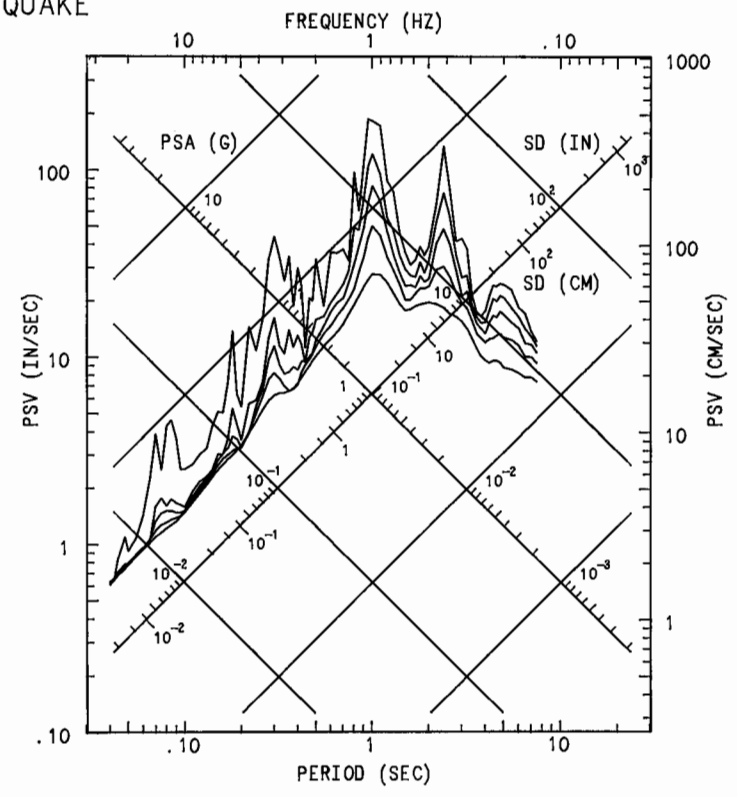
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

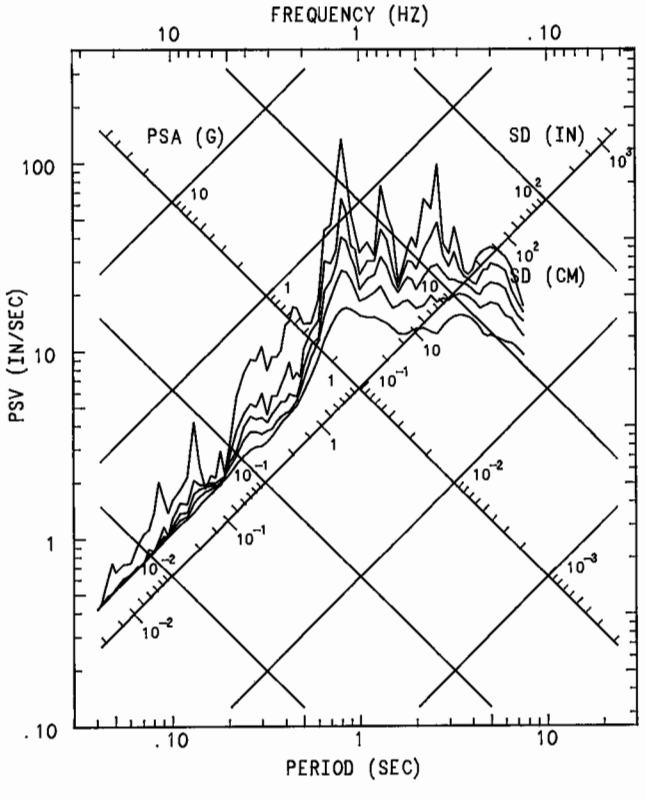
RECORD ID: 57355-C0112-89292.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

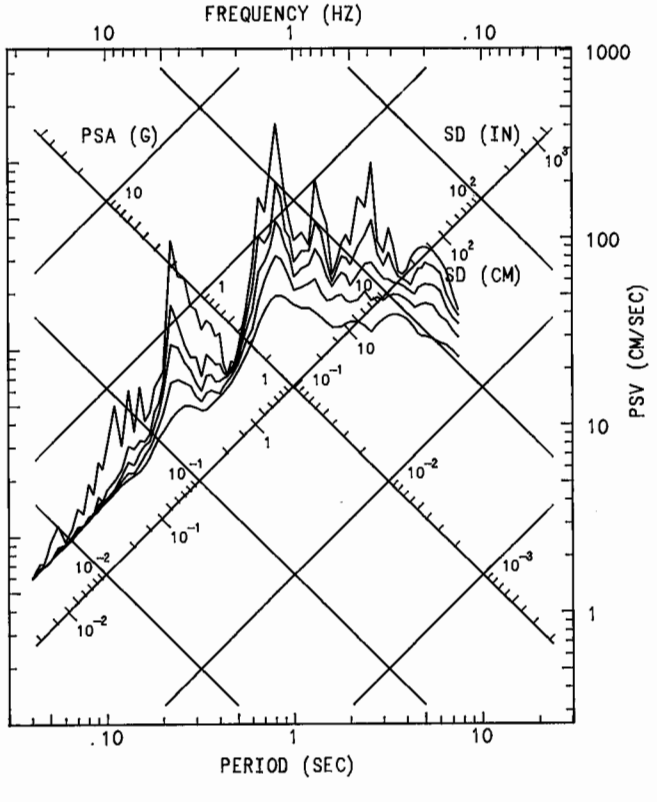
CHN 5: 0 DEG
ROOF, SOUTH WALL



CHN 6: 270 DEG
5TH FLOOR, SOUTH WALL



CHN 7: 270 DEG
5TH FLOOR, CENTER



SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

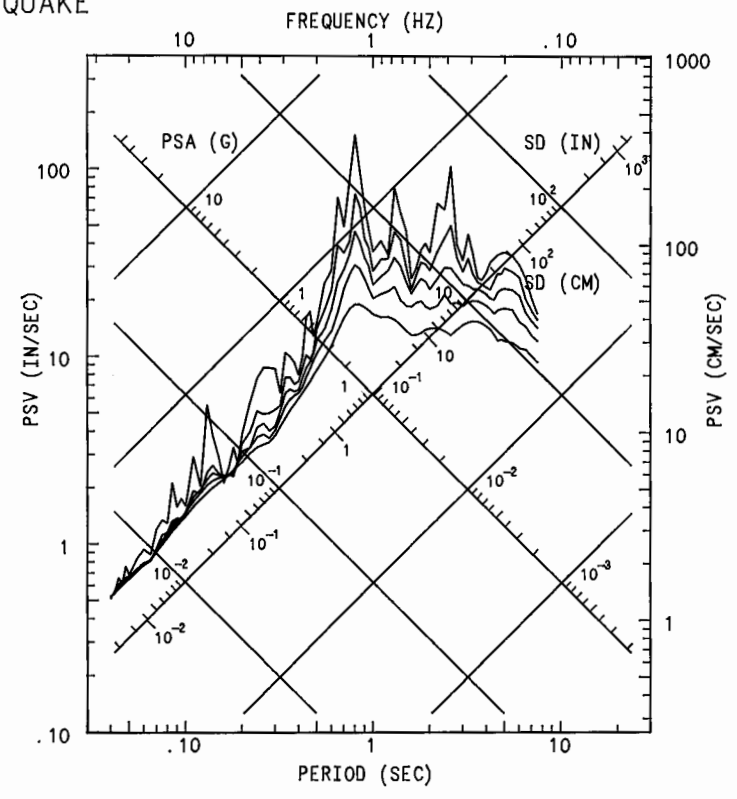
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

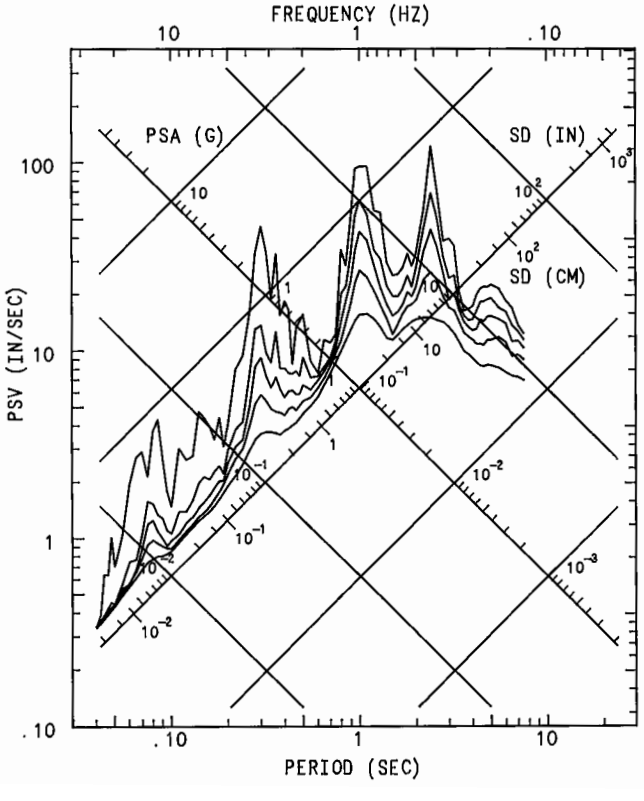
RECORD ID: 57355-C0112-89292.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

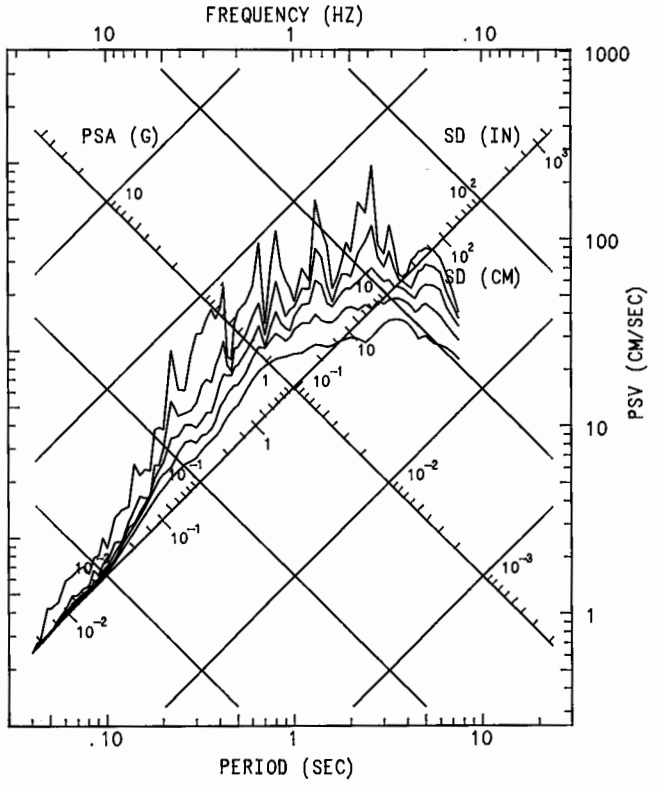
CHN 8: 270 DEG
5TH FLOOR, NORTH WALL



CHN 9: 0 DEG
5TH FLOOR, SOUTH WALL



CHN 11: 270 DEG
BASEMENT, SOUTH WALL



SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355

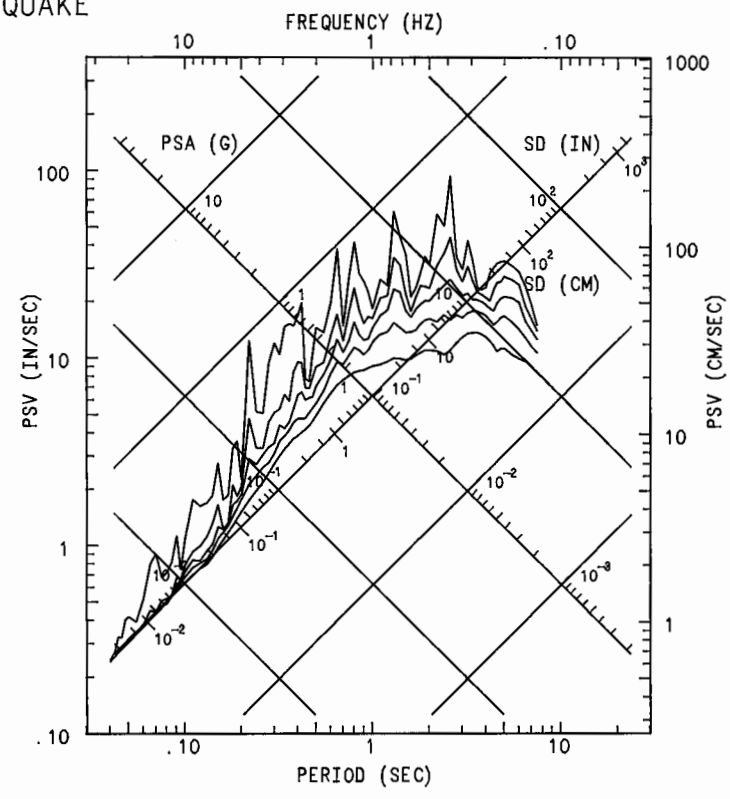
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

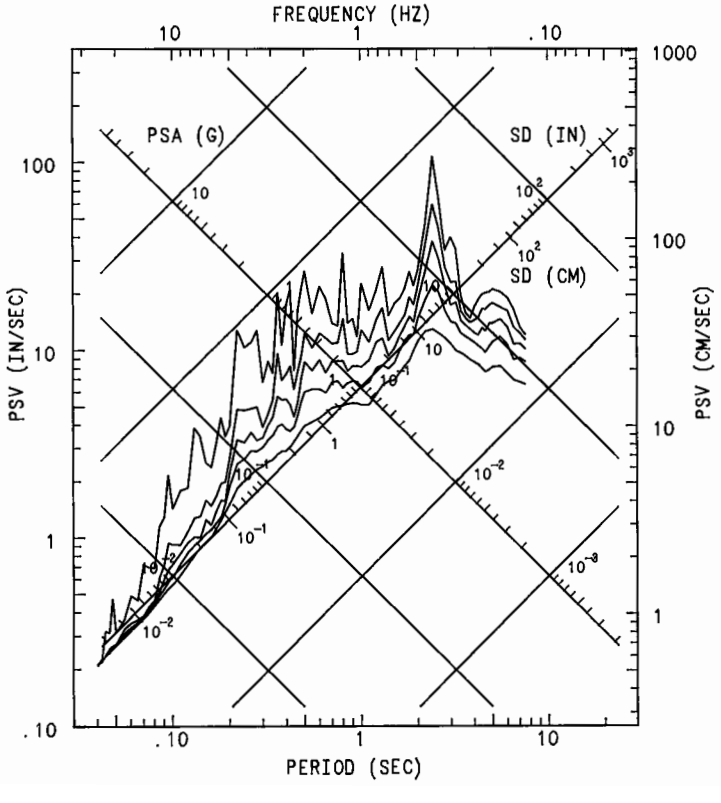
RECORD ID: 57355-C0112-89292.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

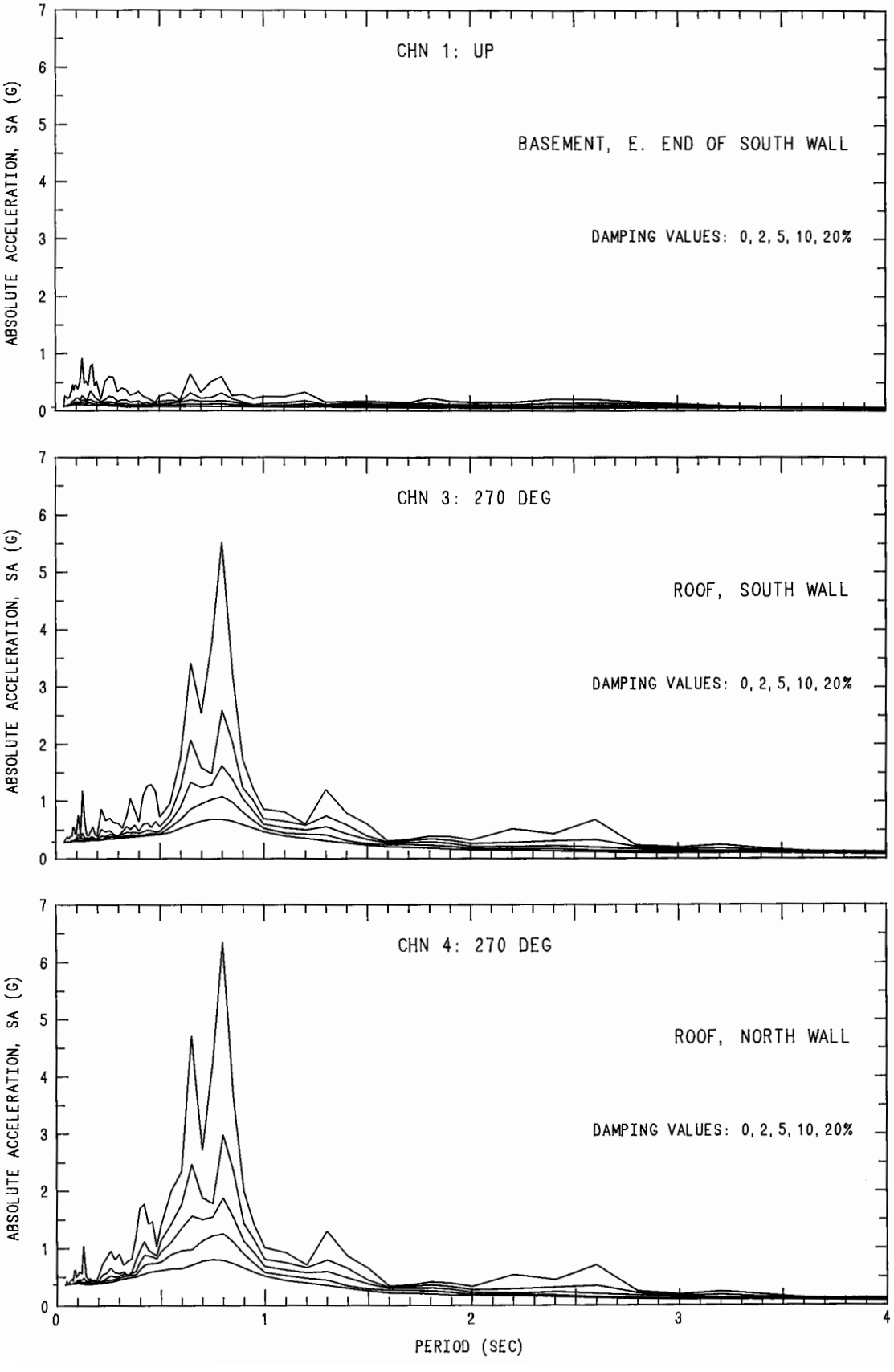
CHN 12: 270 DEG
BASEMENT, NORTH WALL



CHN 13: 0 DEG
BASEMENT, SOUTH WALL



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG. : CSMIP S/N 355
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57355-C0112-89292.03
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57355-C0112-89292.03
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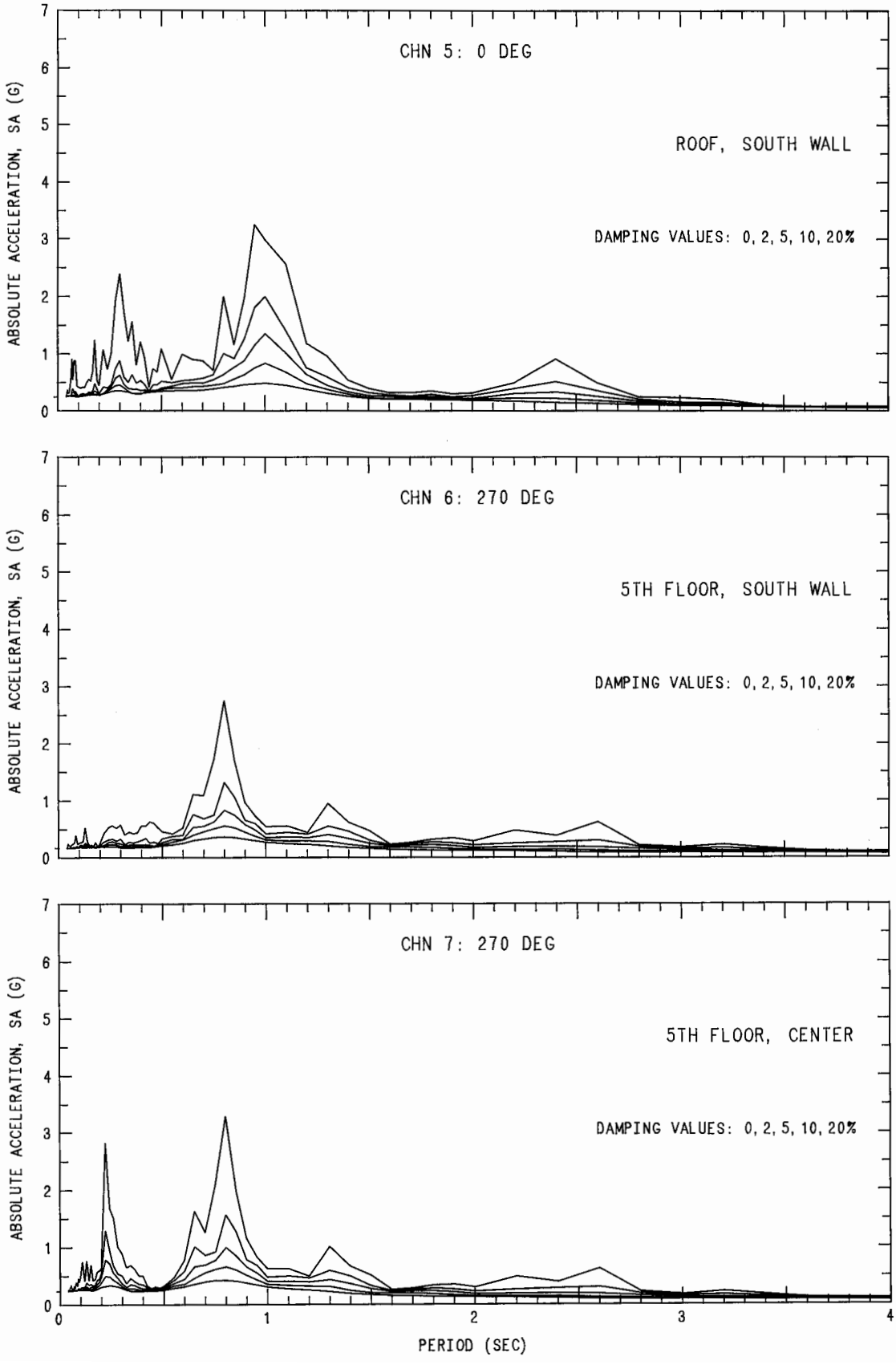
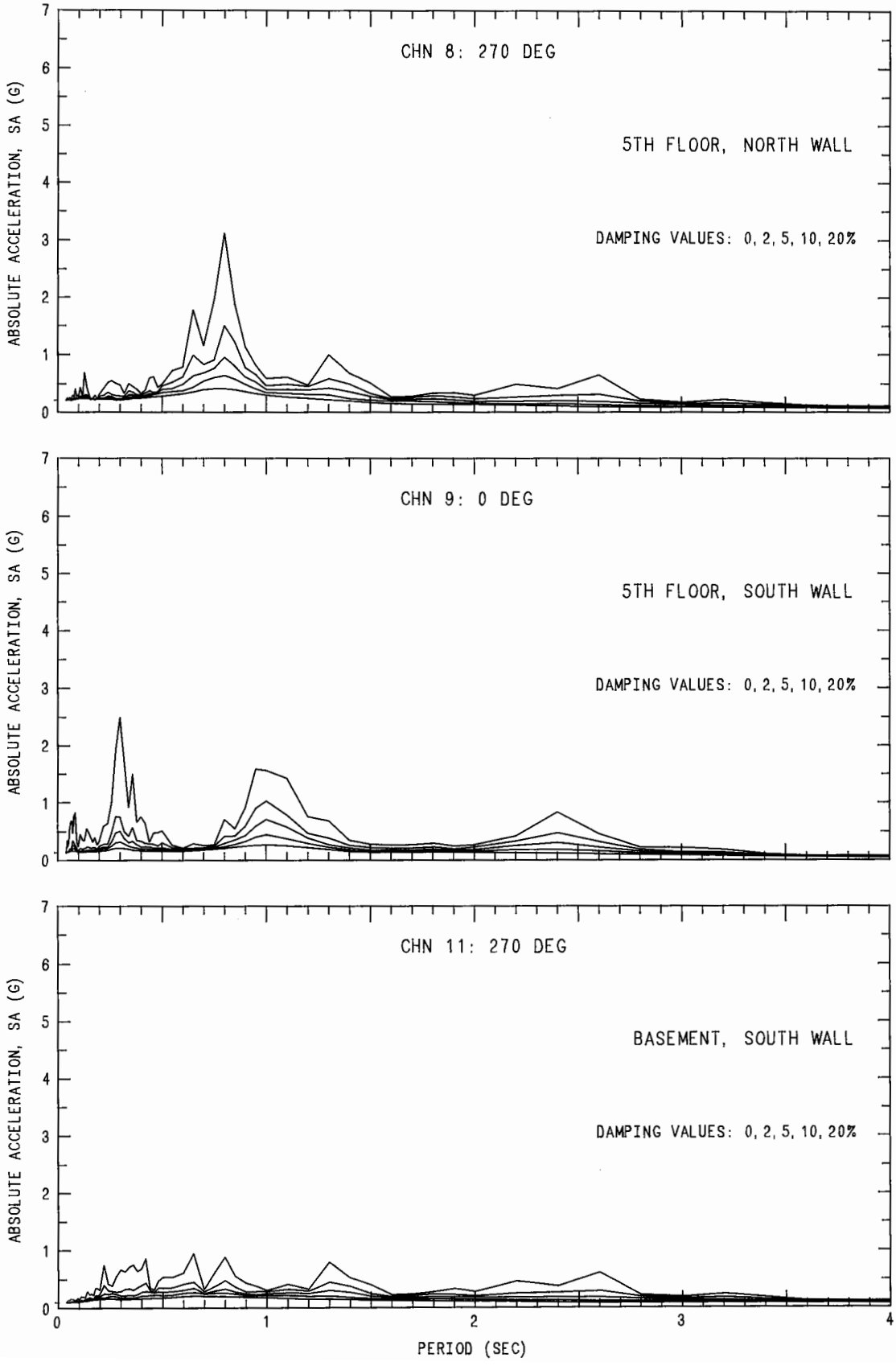
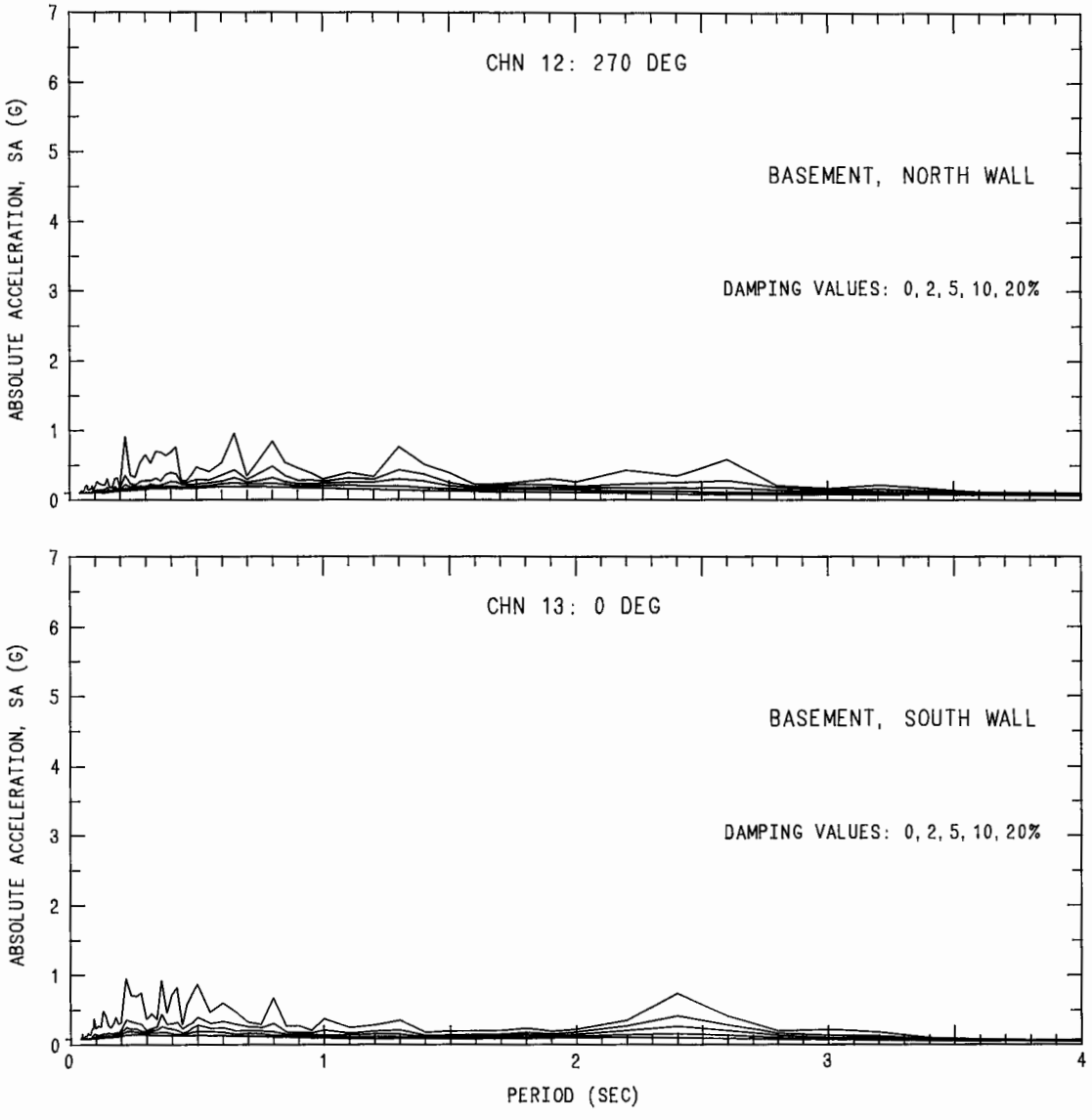


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG. : CSMIP S/N 355
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57355-C0112-89292.03
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)



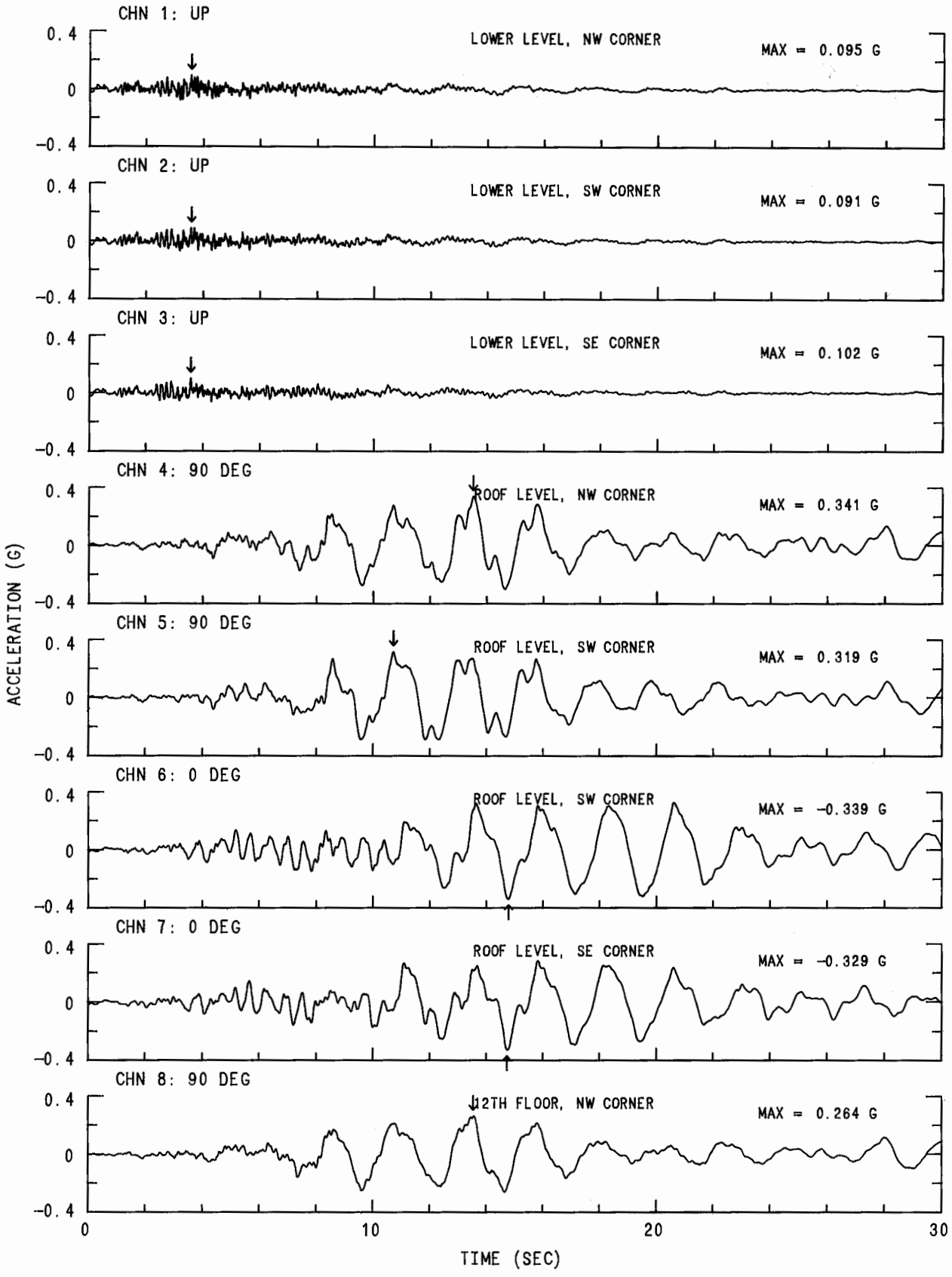
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 355
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57355-C0112-89292.03
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

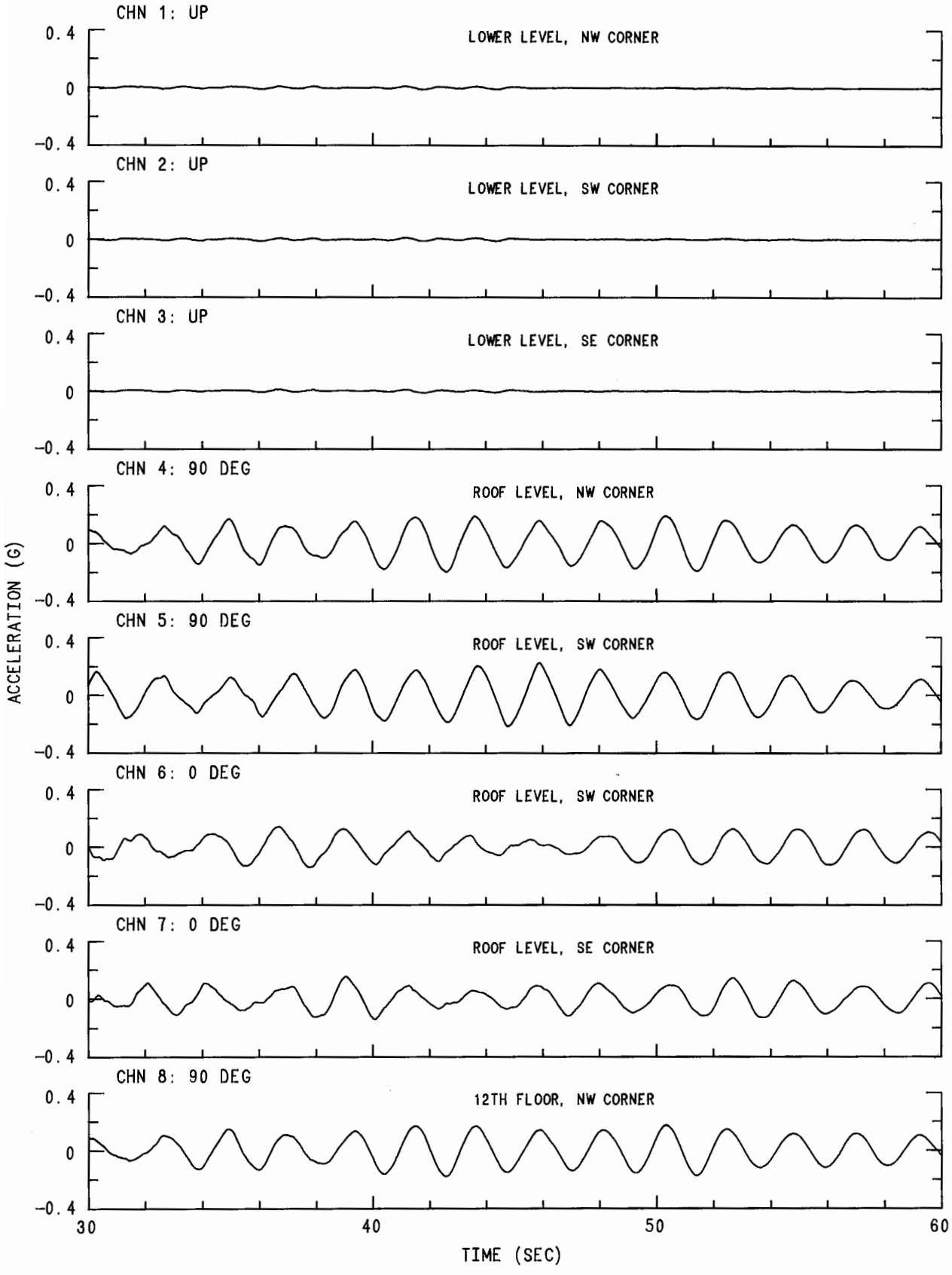
PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

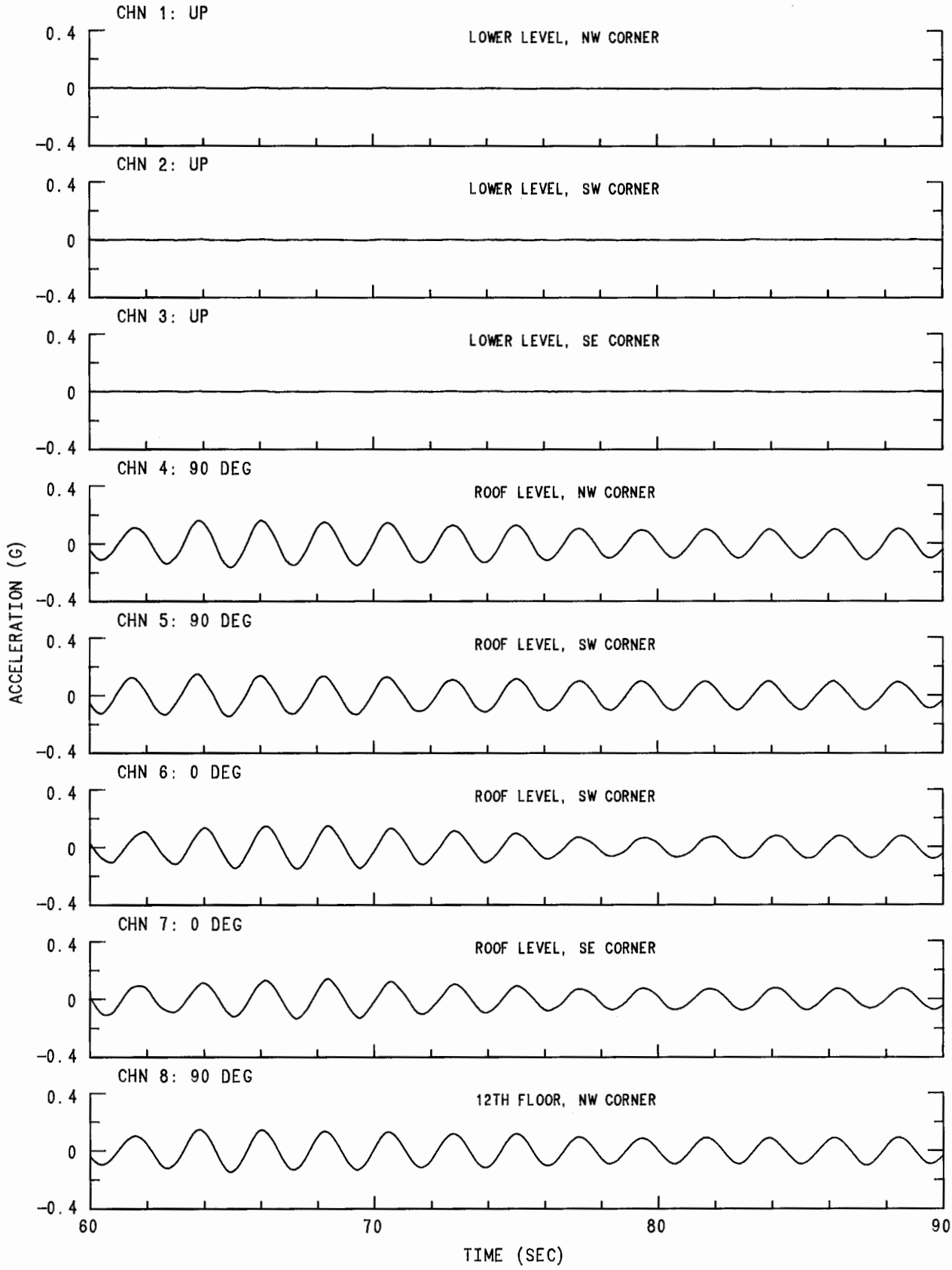
PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

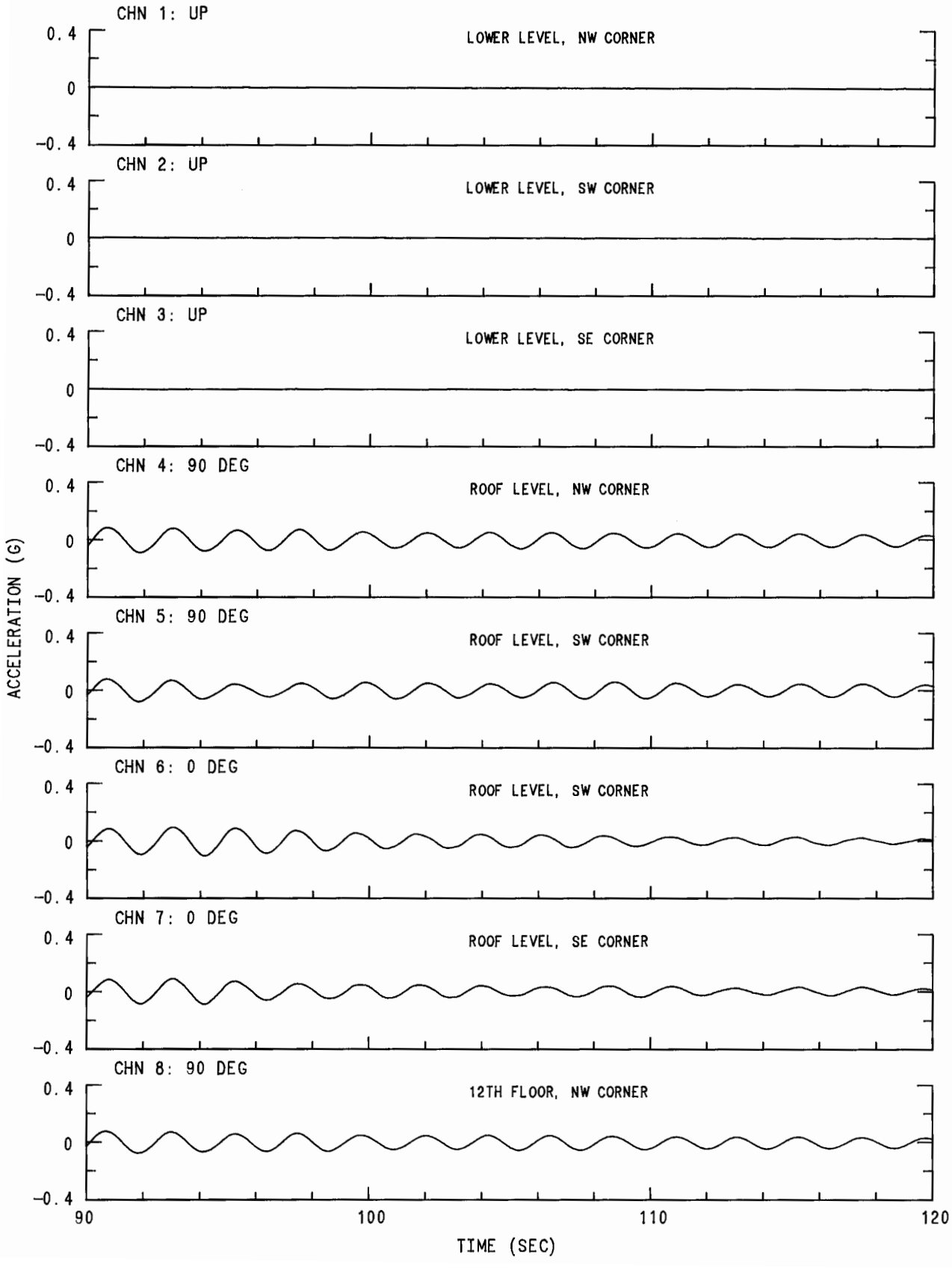
PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

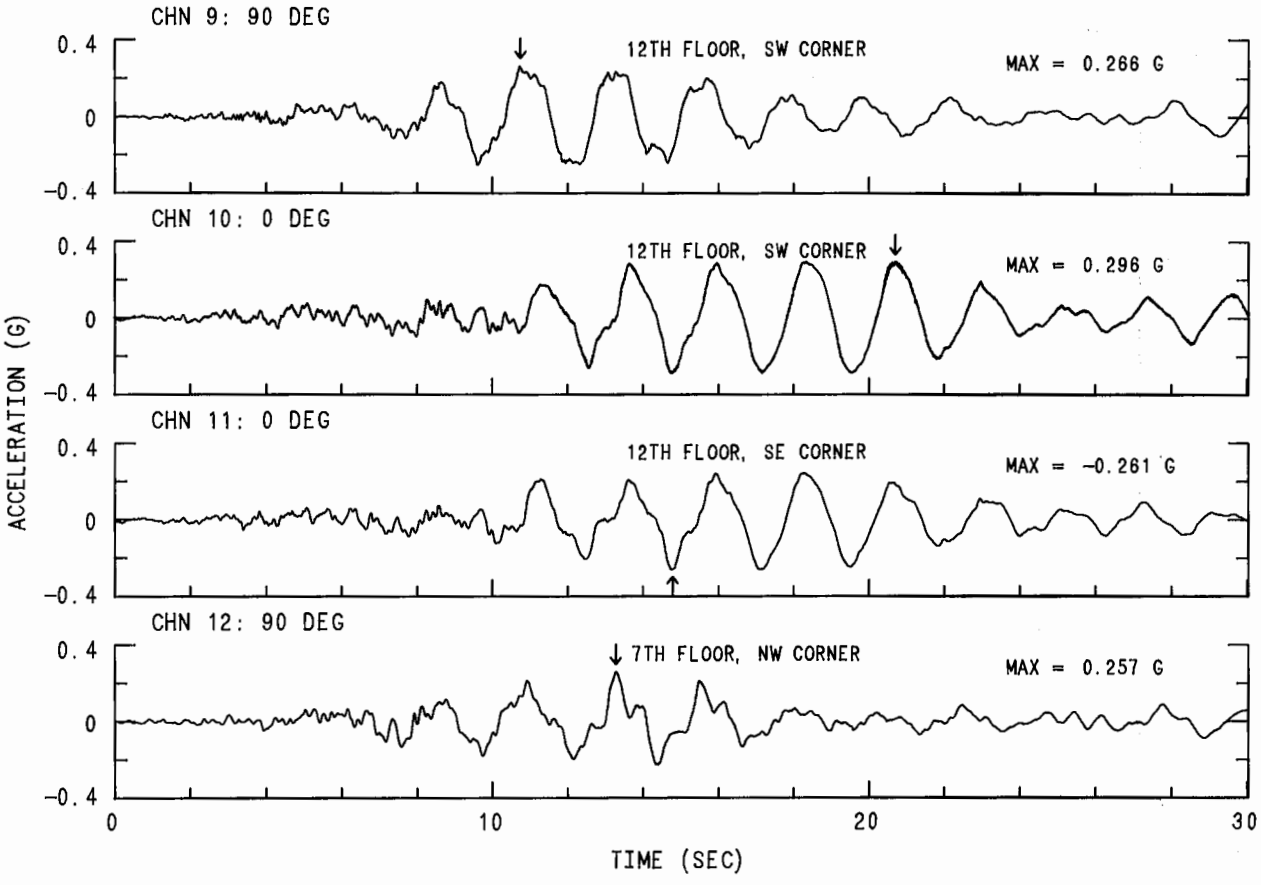
PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

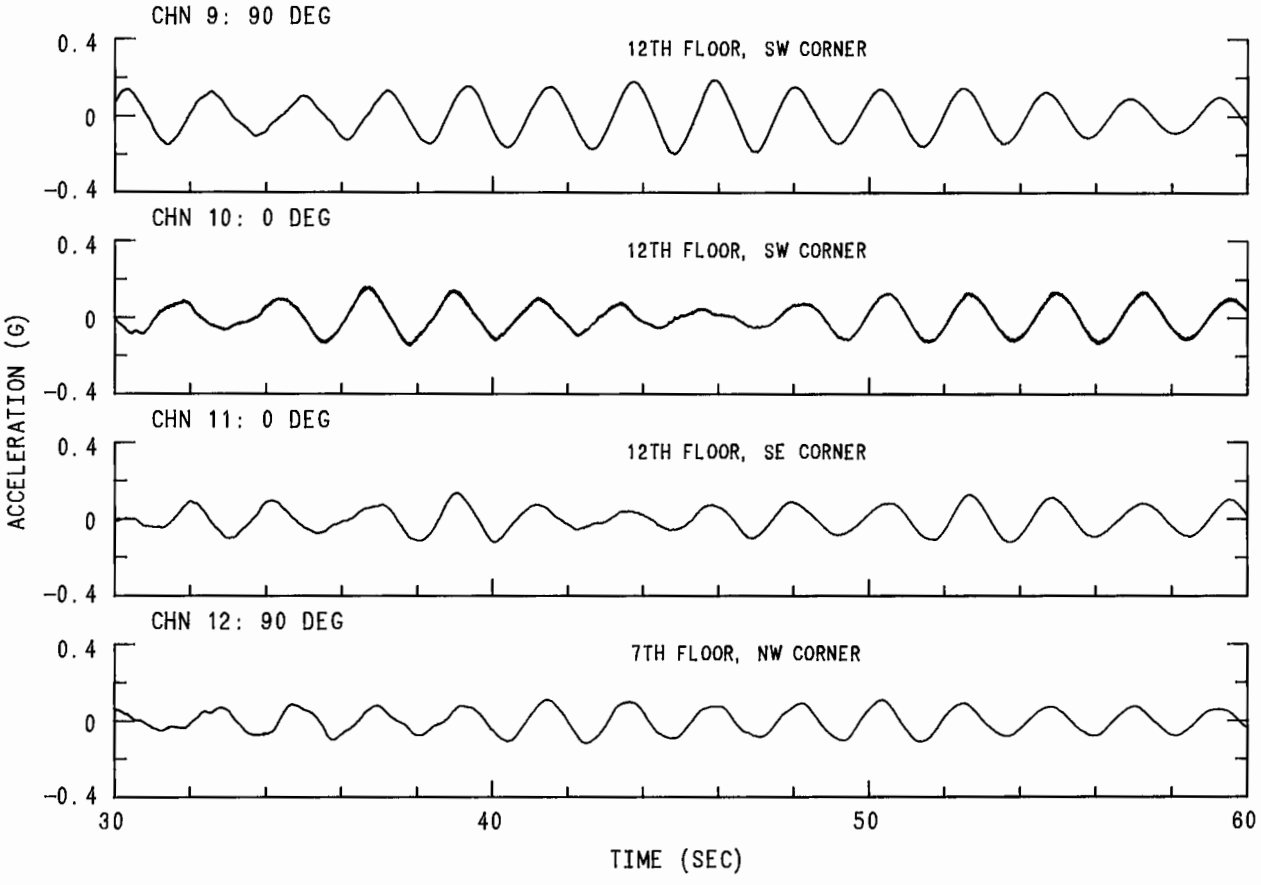
PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

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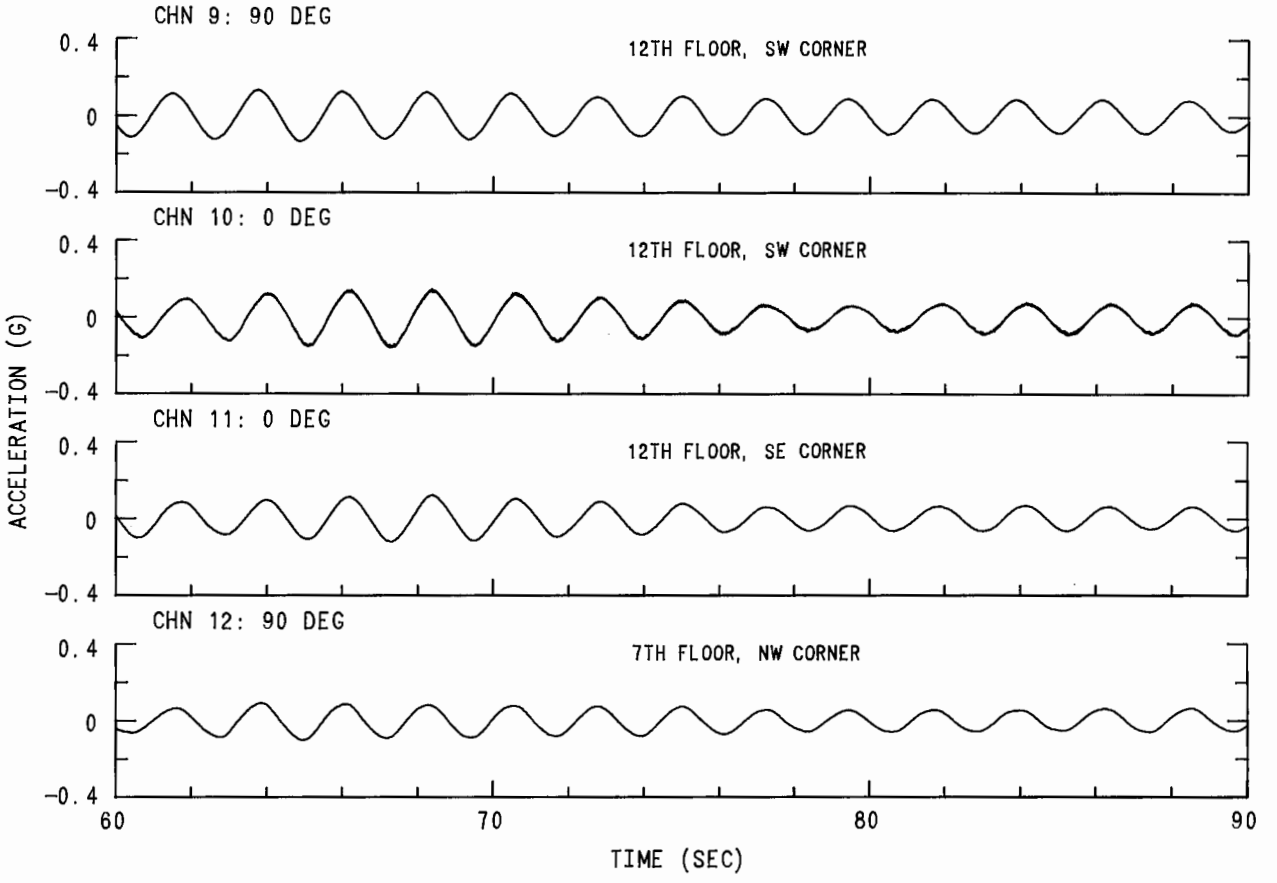
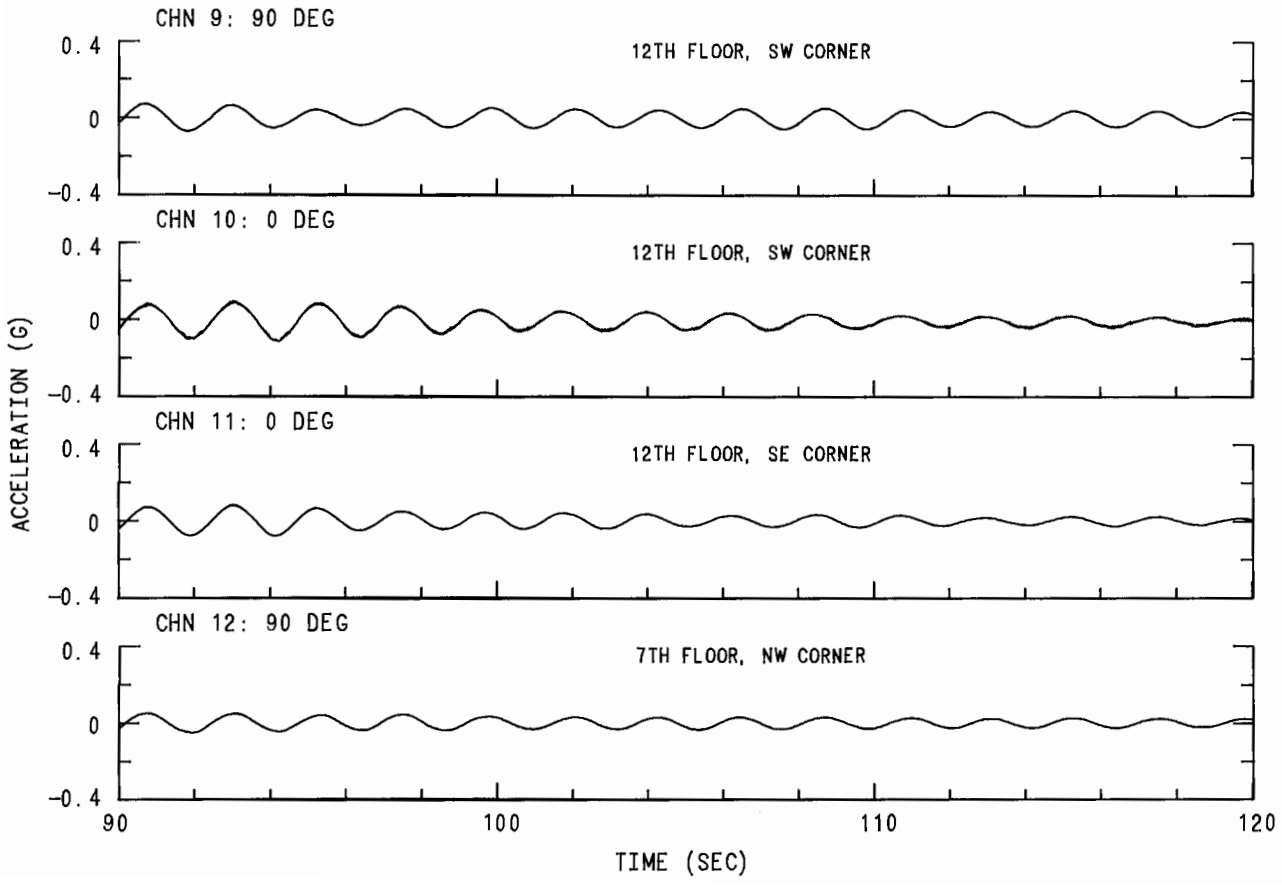


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

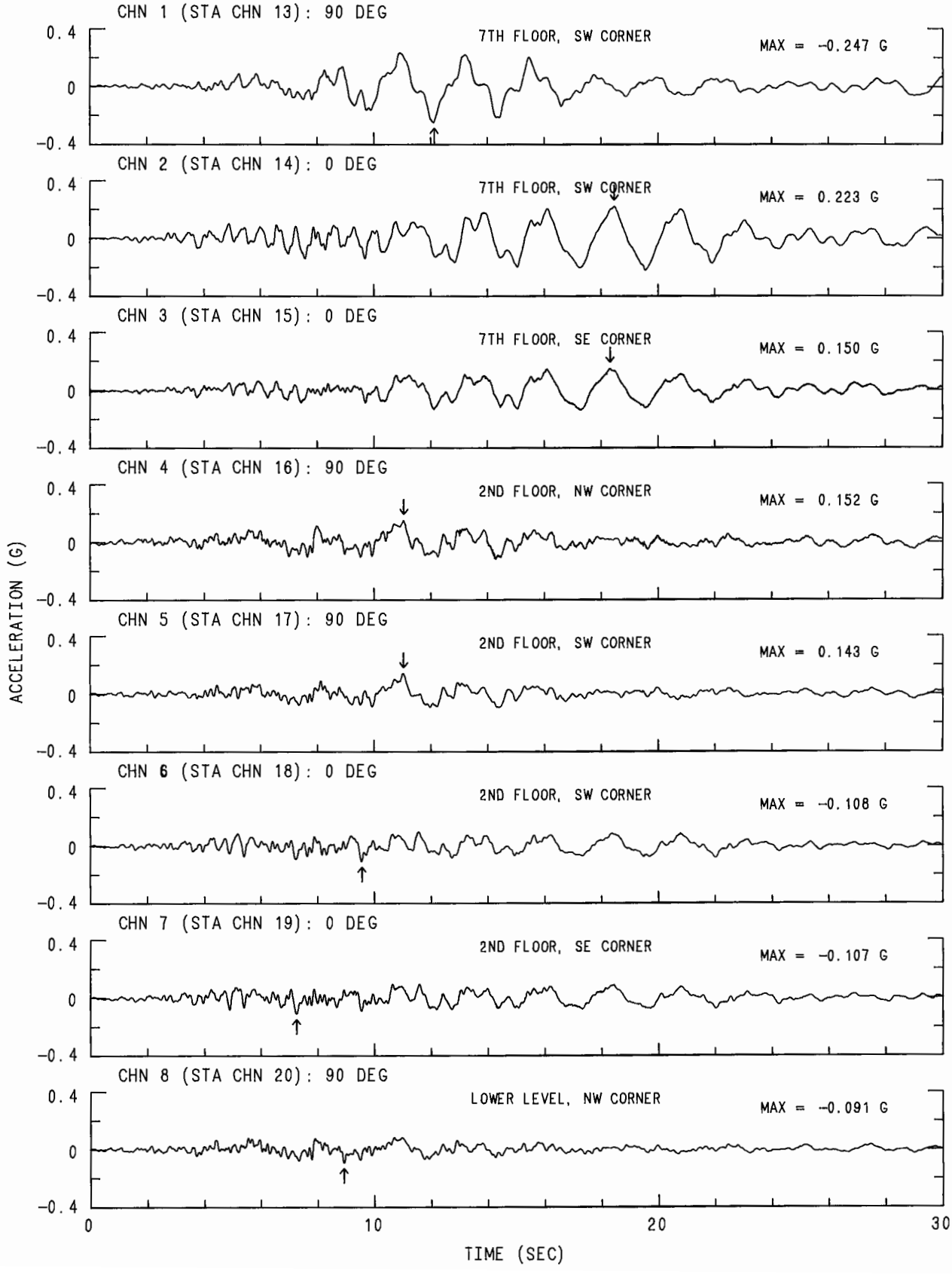
PHASE 1 ACCELERATION. RECORD ID: 57357-C0185-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 1 ACCELERATION. RECORD ID: 57357-C0145-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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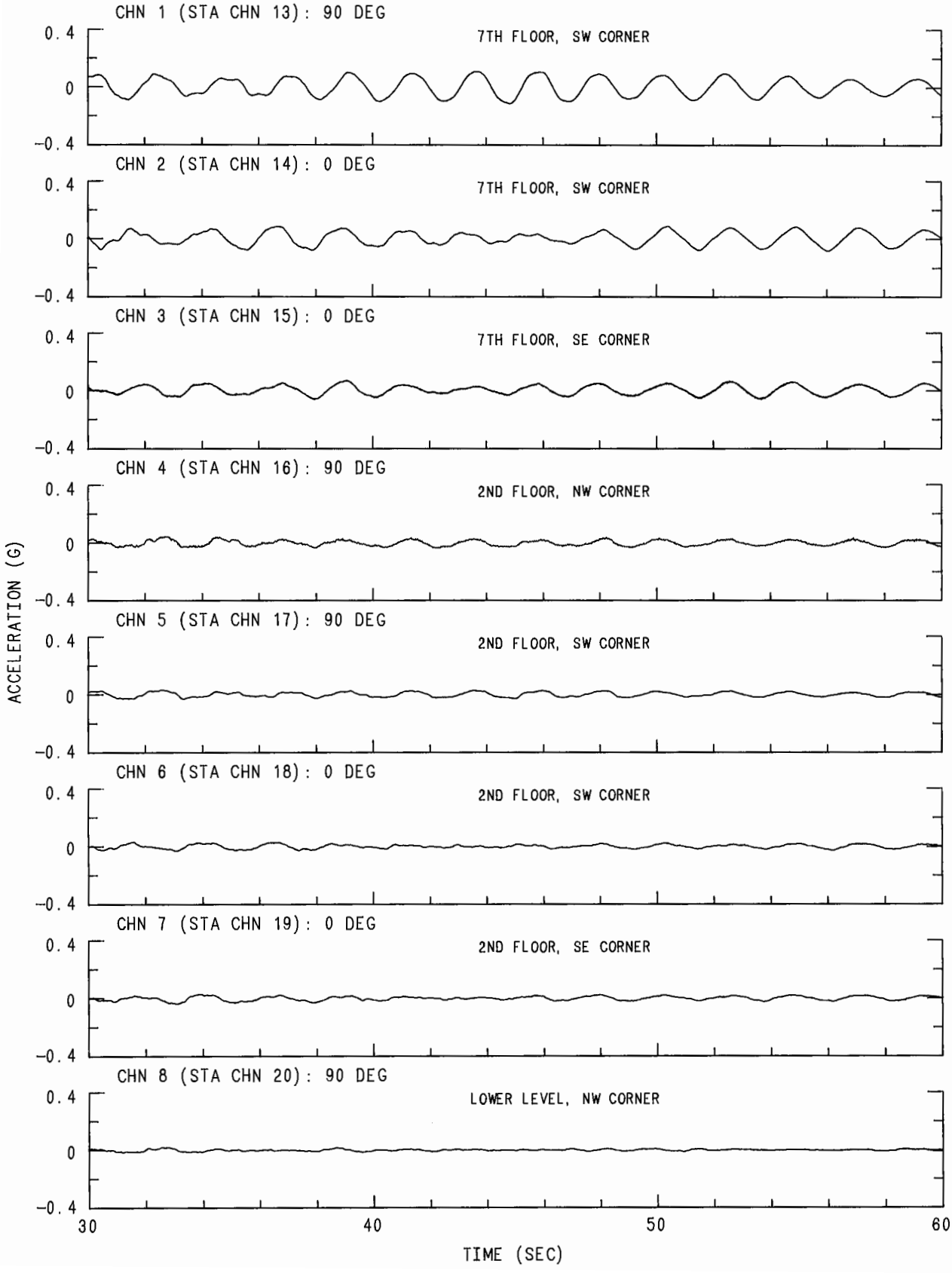

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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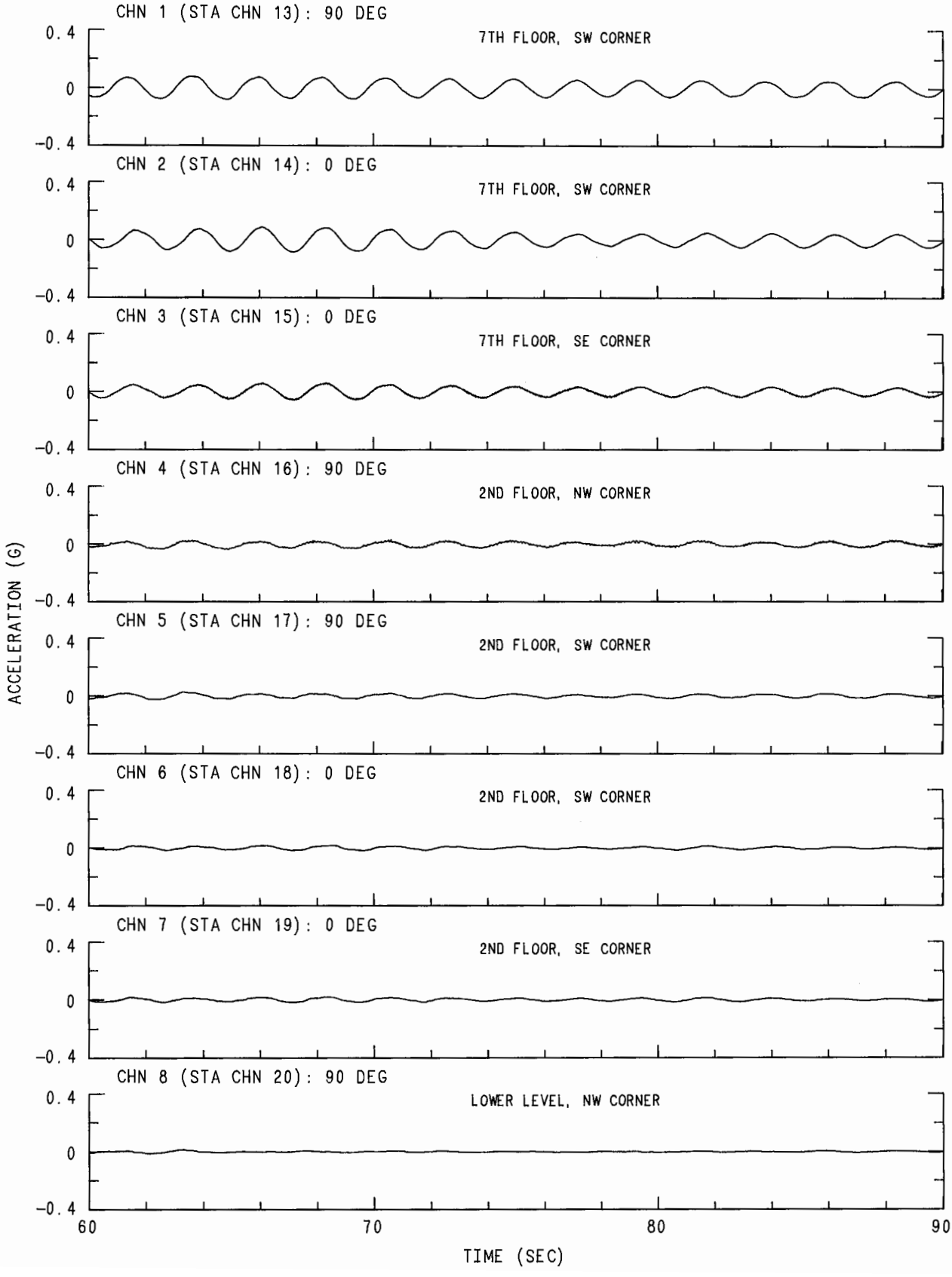

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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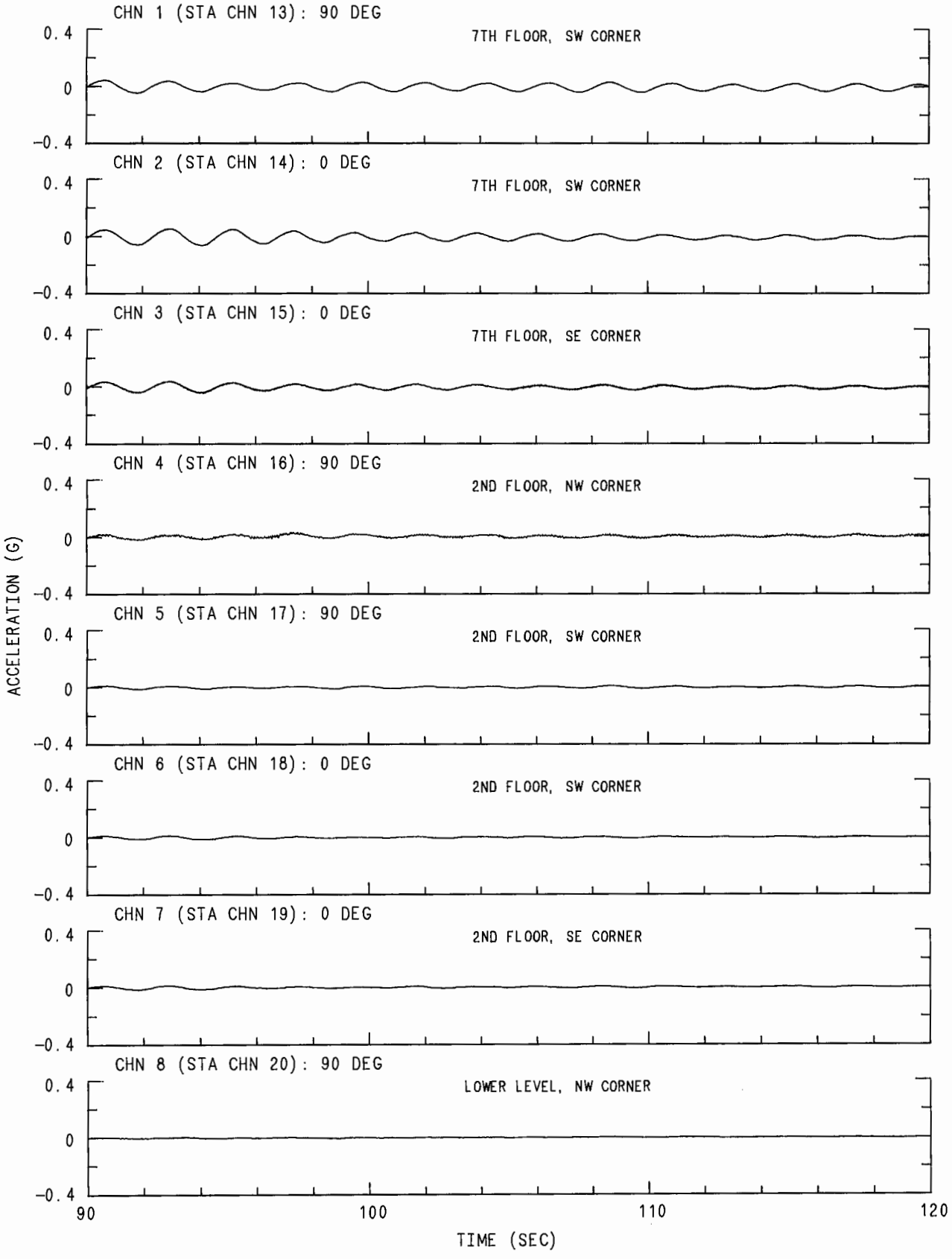

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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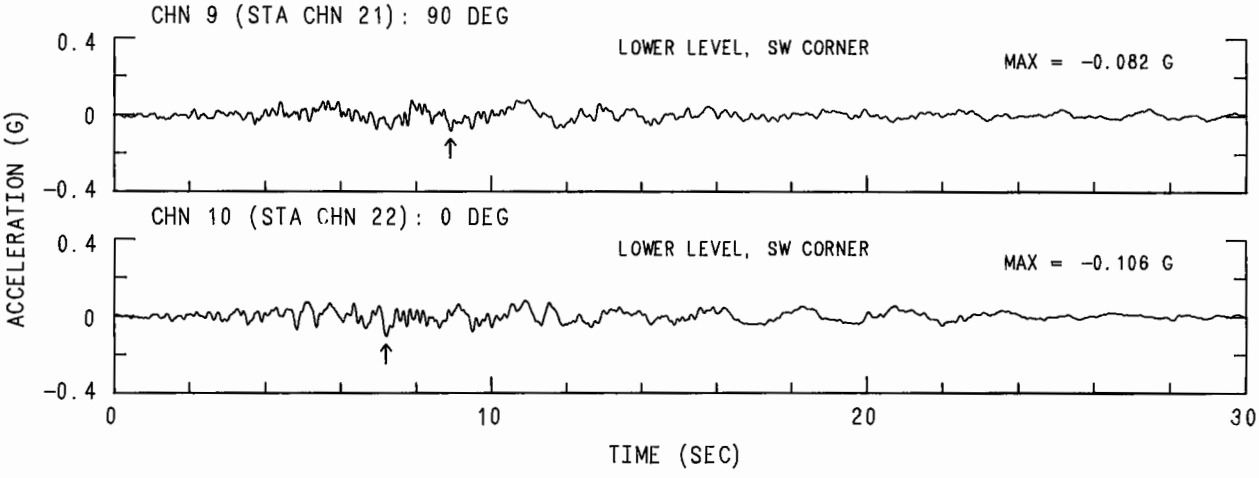

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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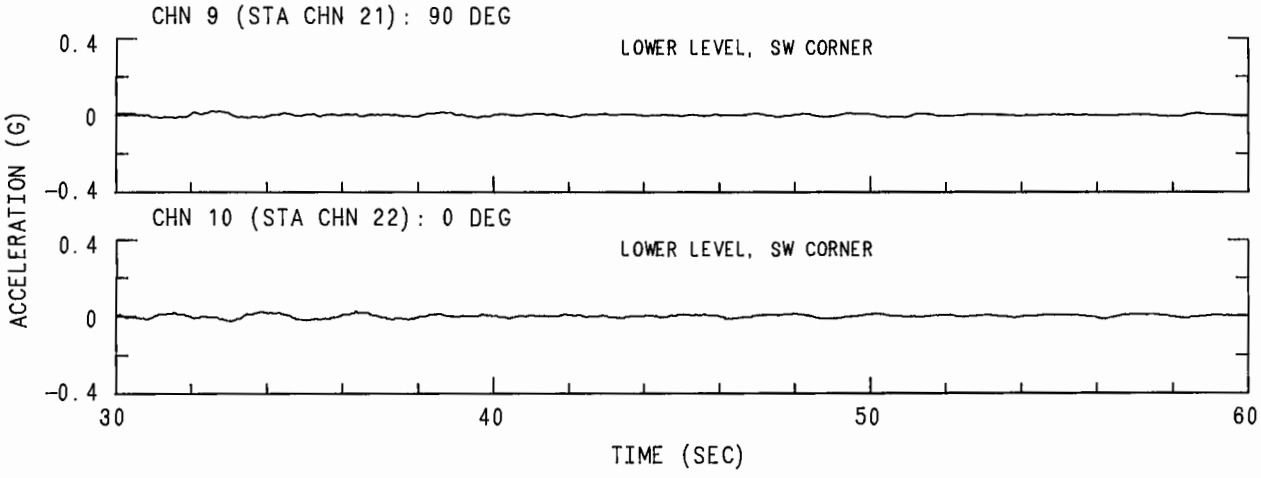
PHASE 1 ACCELERATION. RECORD ID: 57357-C0145-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

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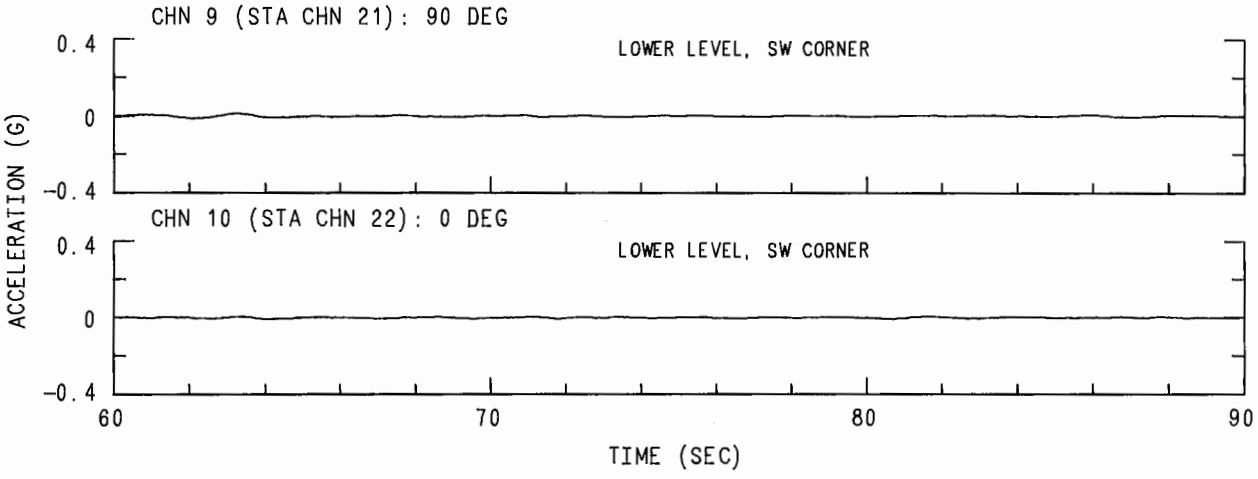
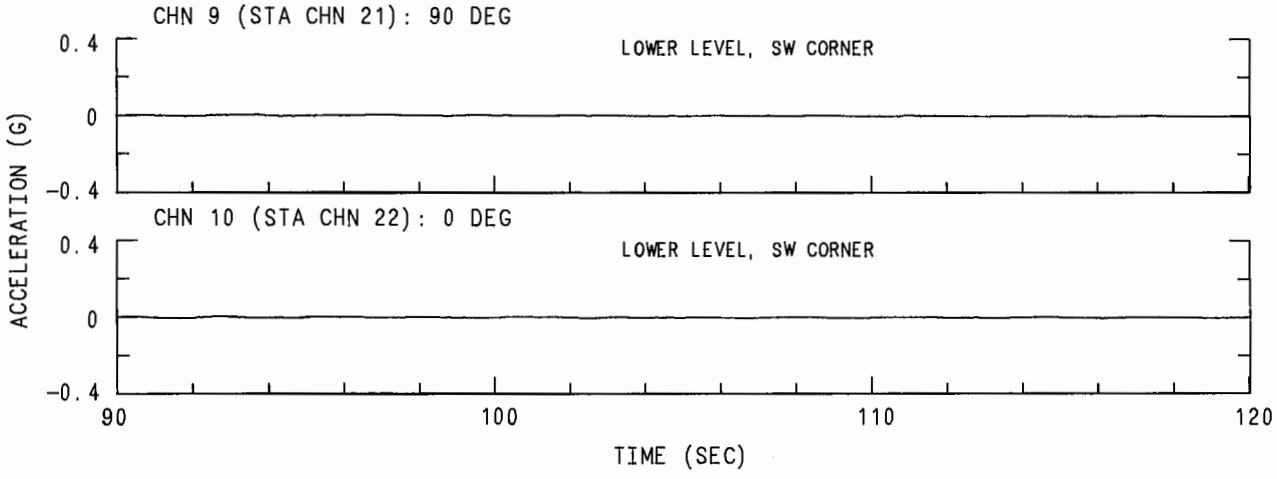


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 1 ACCELERATION. RECORD ID: 57357-C0145-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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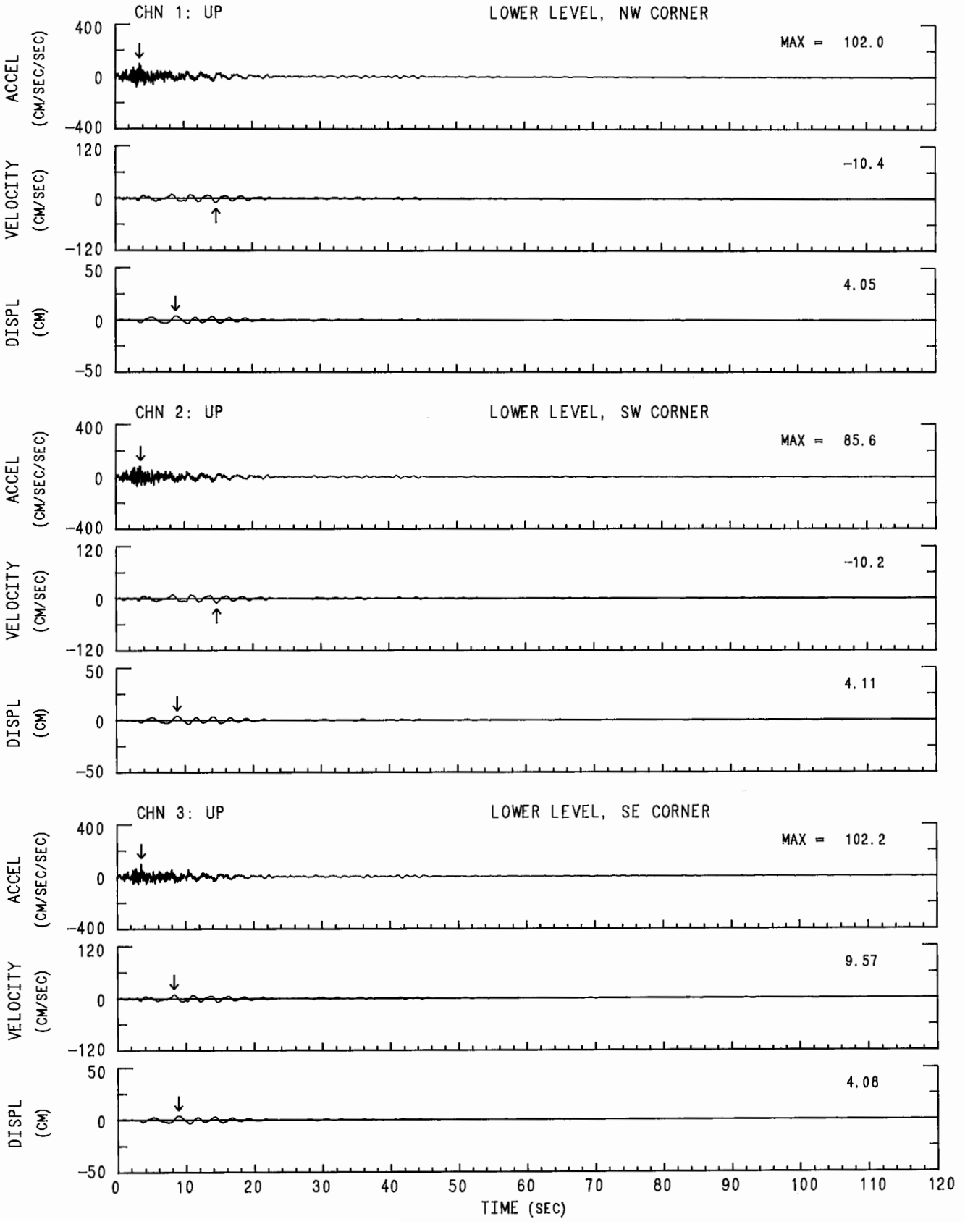

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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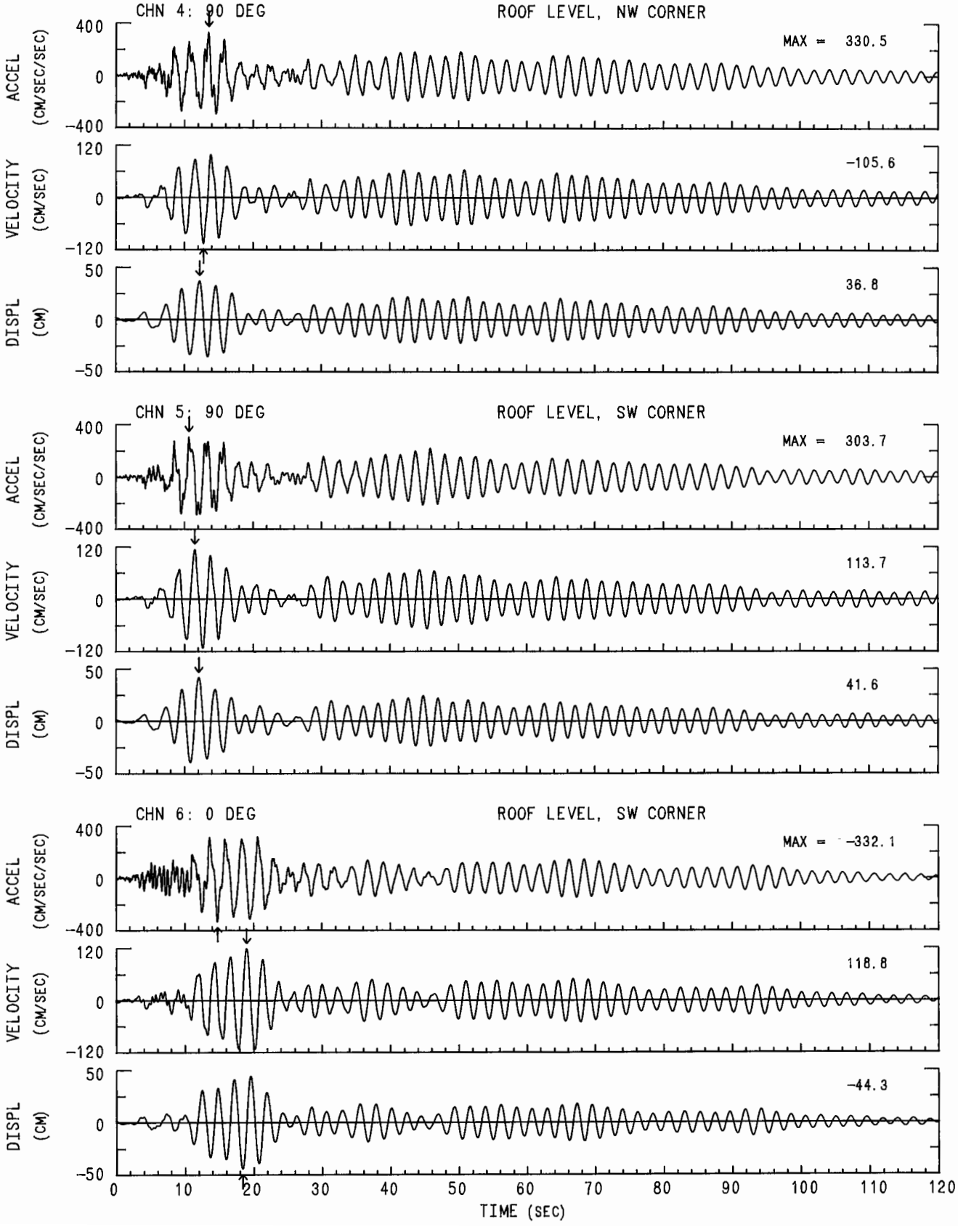

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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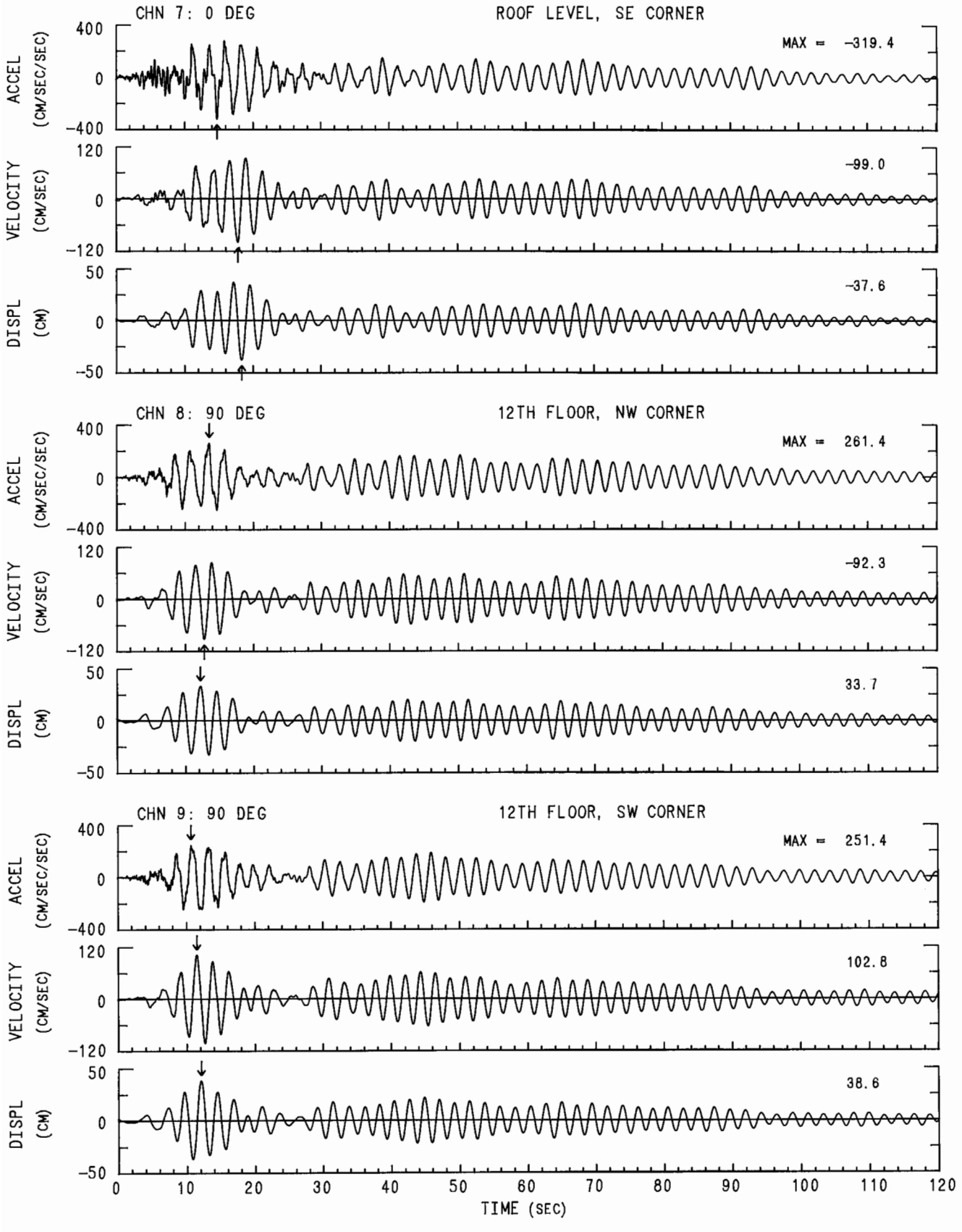

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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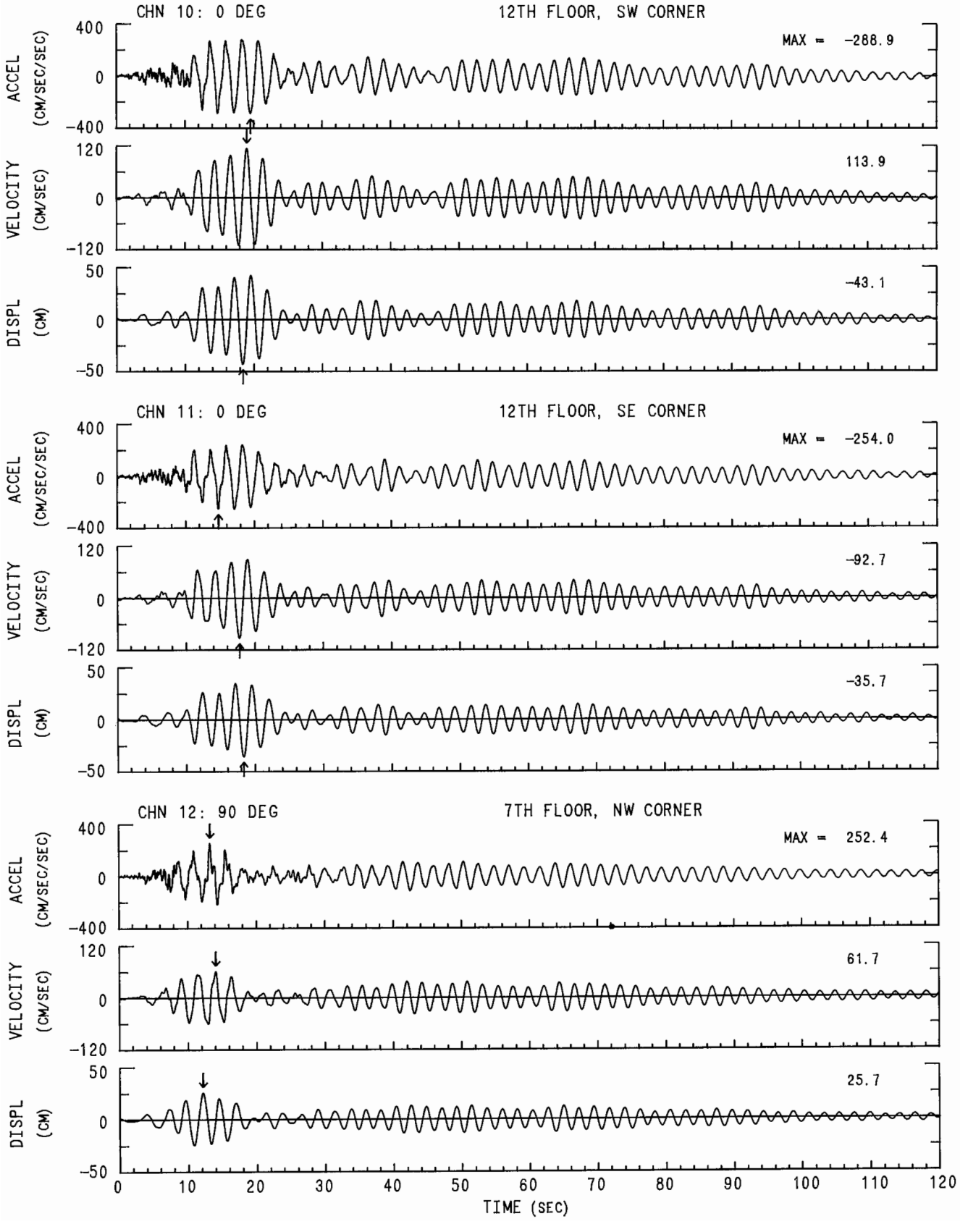

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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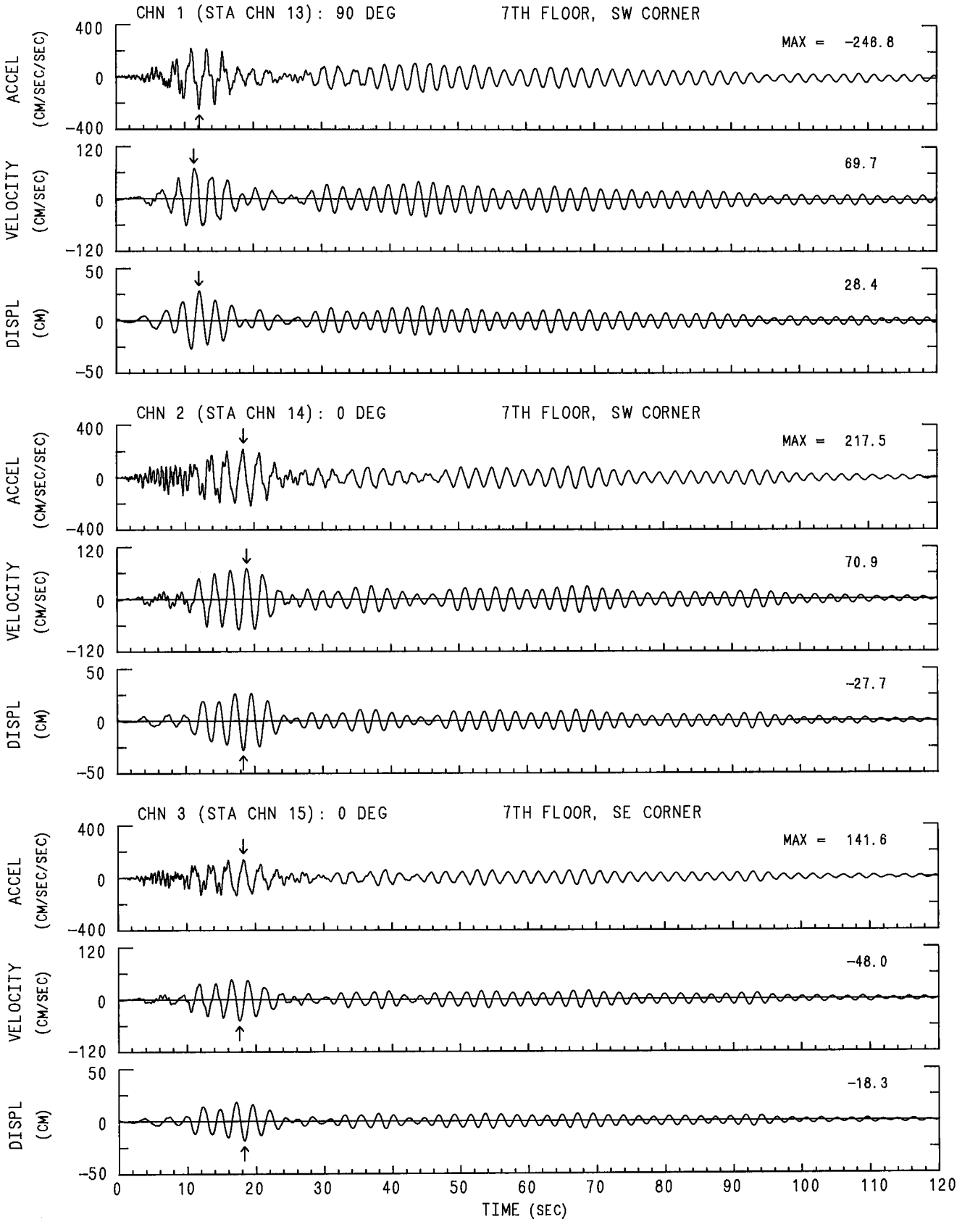

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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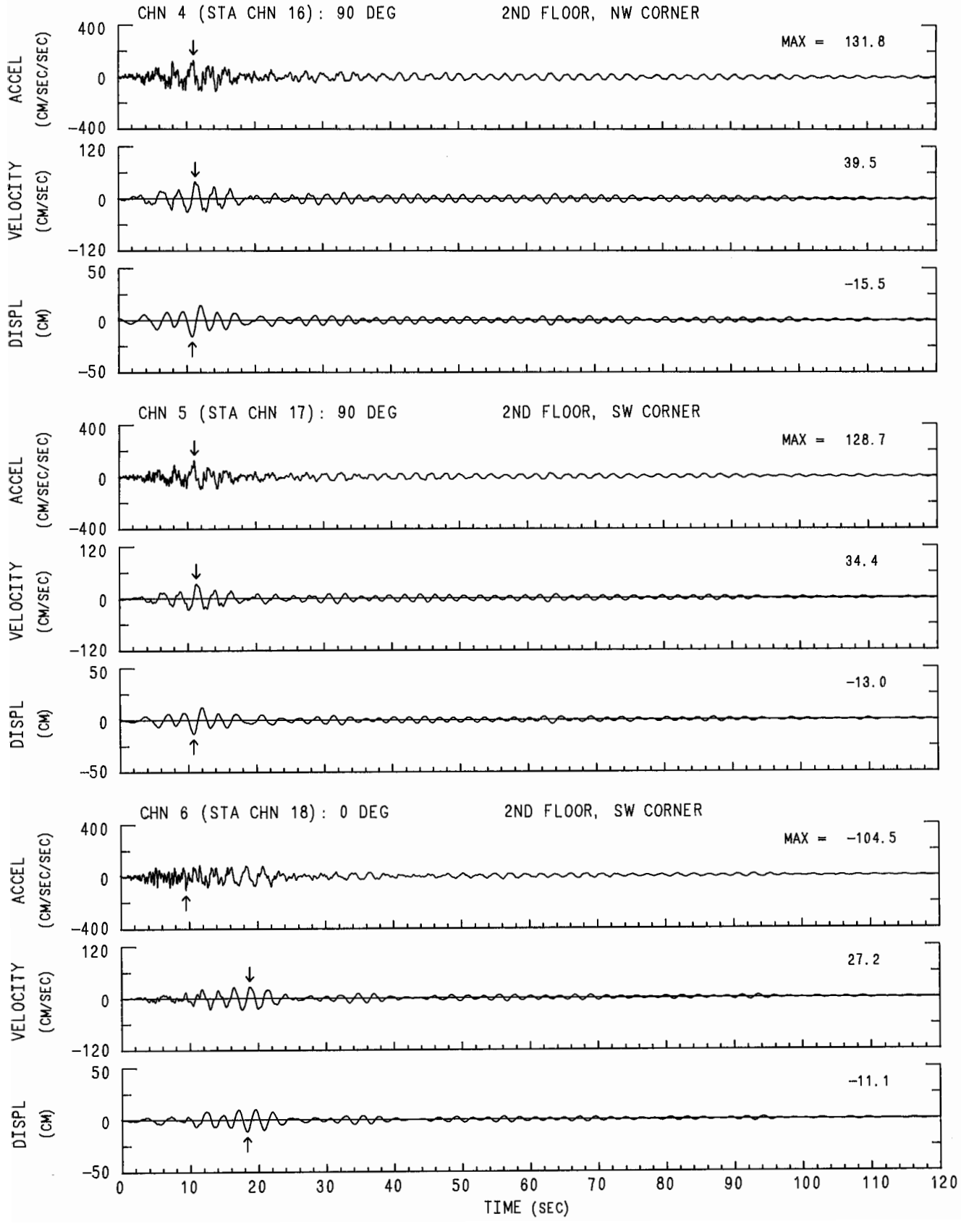

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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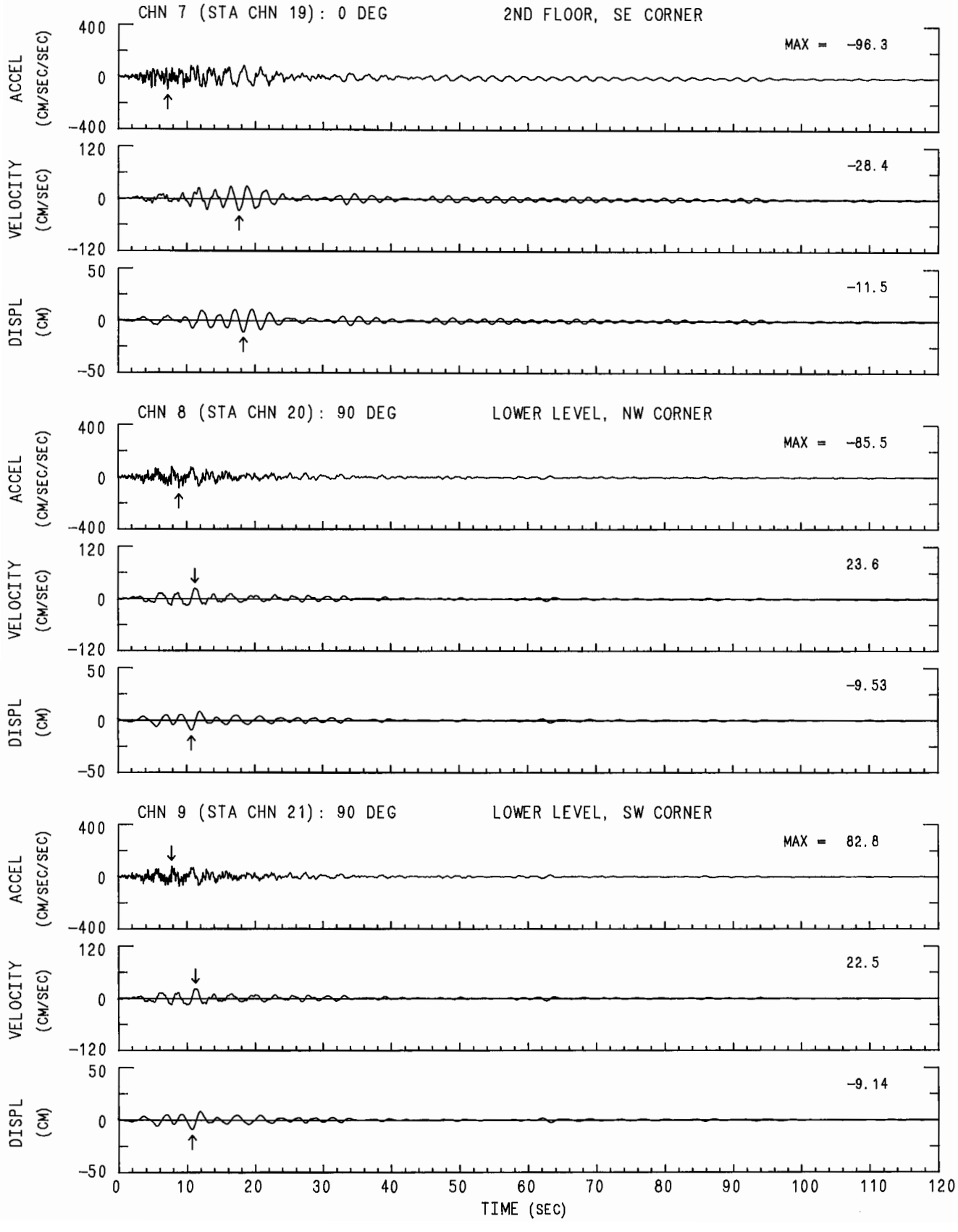

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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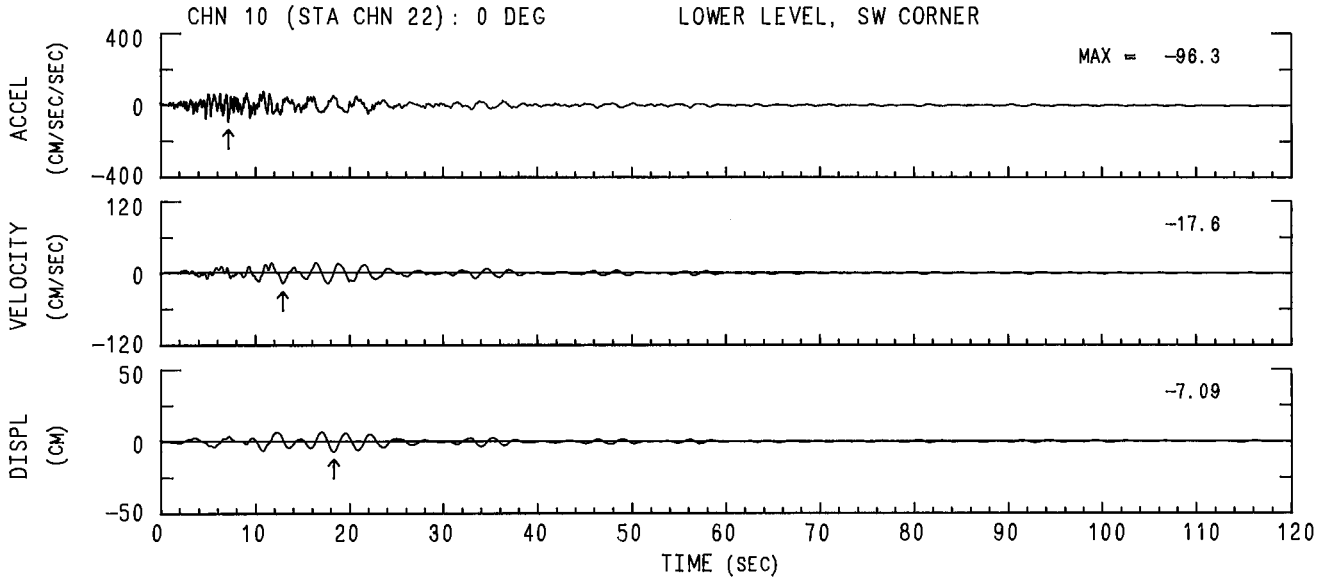


SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

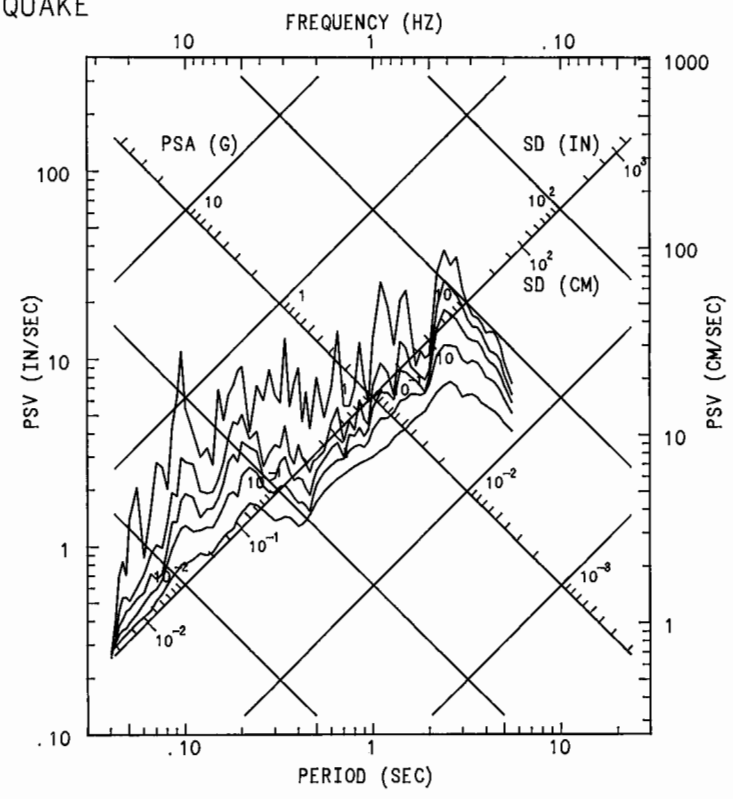
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

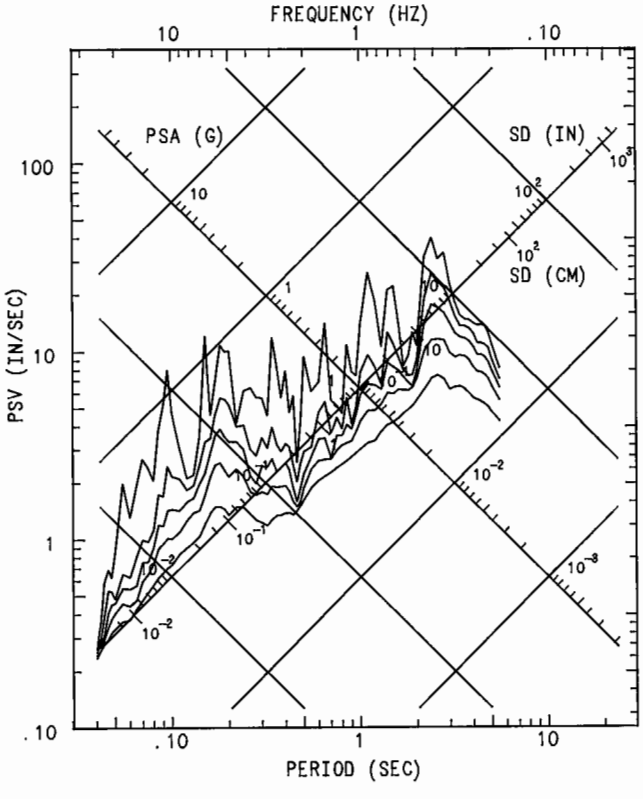
RECORD ID: 57357-C0185-89291.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

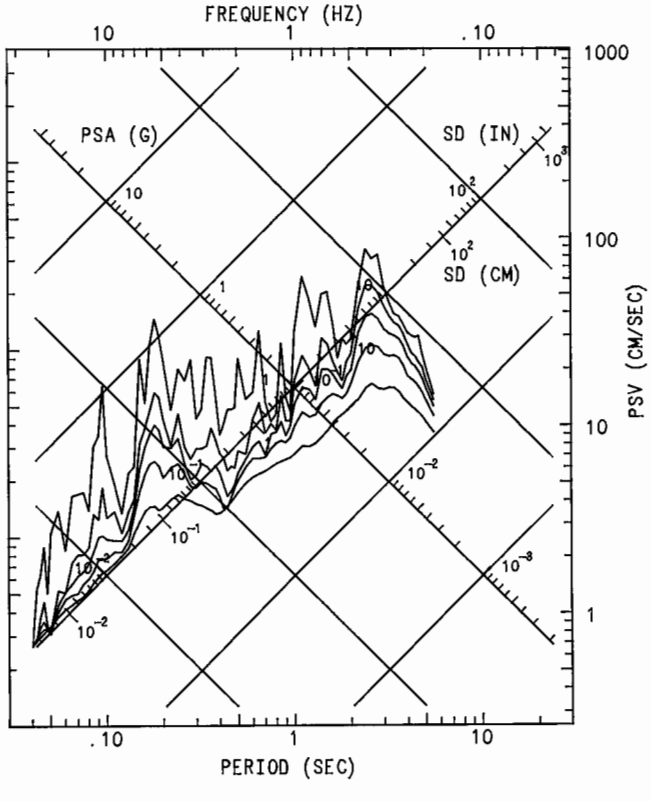
CHN 1: UP
LOWER LEVEL, NW CORNER



CHN 2: UP
LOWER LEVEL, SW CORNER



CHN 3: UP
LOWER LEVEL, SE CORNER



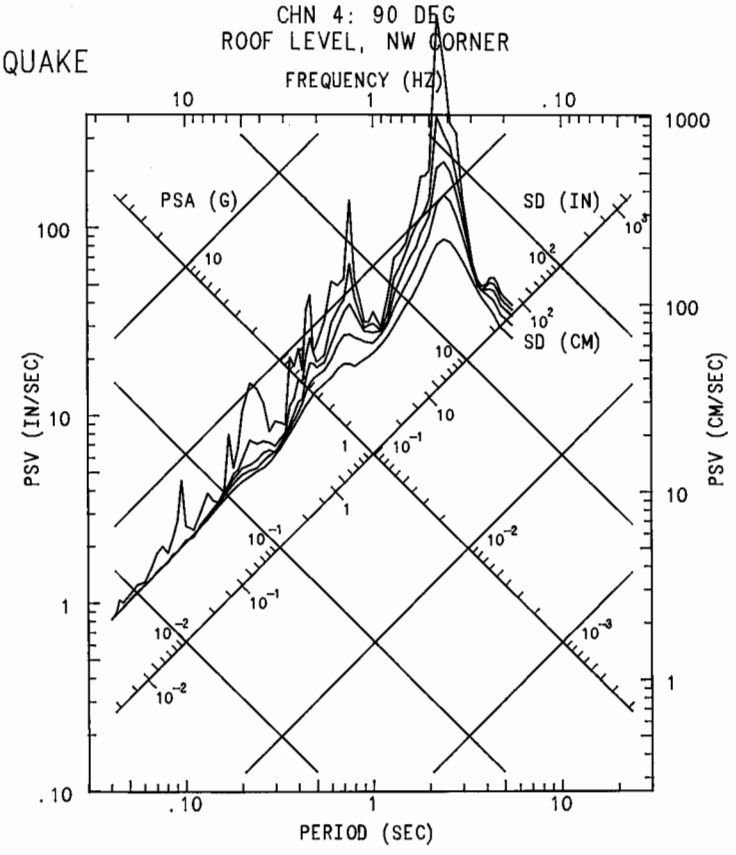
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

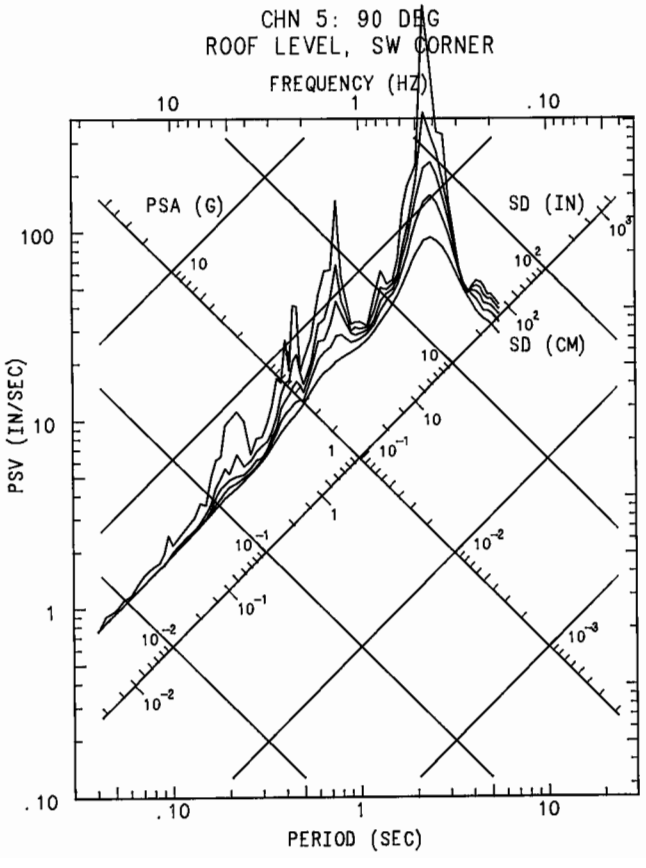
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

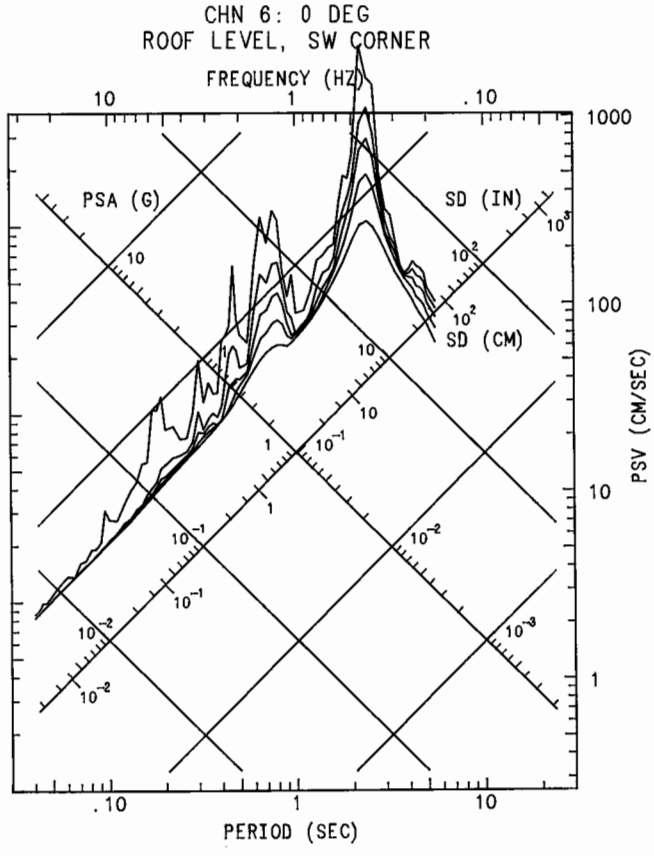
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

RECORD ID: 57357-C0185-89291.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%







SAN JOSE - 13-STORY GOVT. OFFICE BLDG. : CSMIP S/N 357

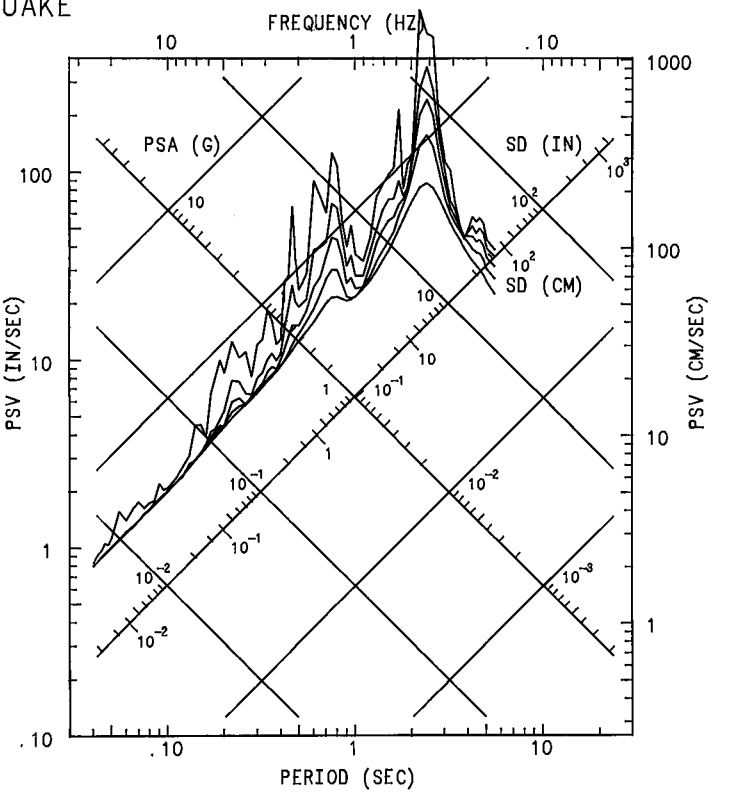
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

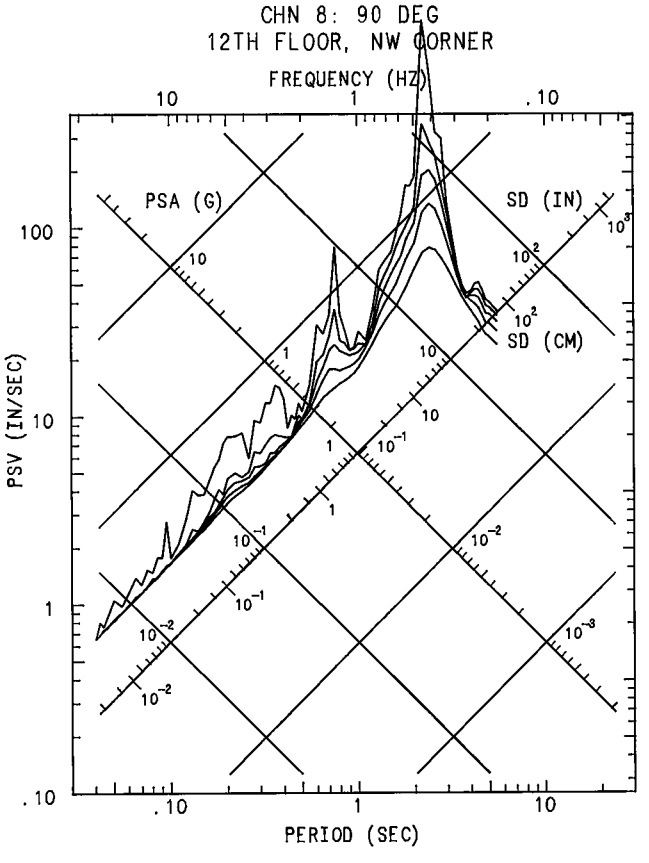
RECORD ID: 57357-C0185-89291.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

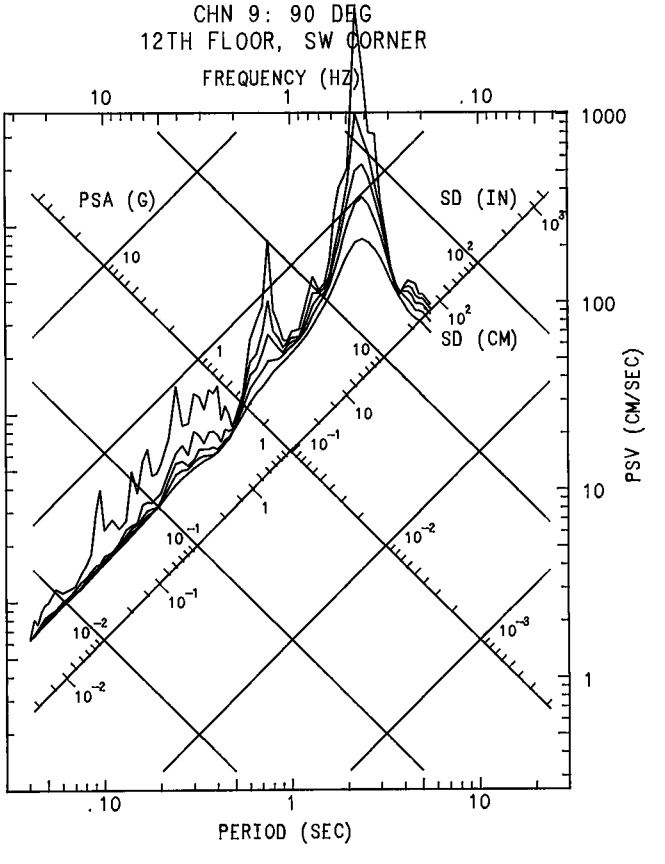
CHN 7: 0 DEG
ROOF LEVEL, SE CORNER



CHN 8: 90 DEG
12TH FLOOR, NW CORNER



CHN 9: 90 DEG
12TH FLOOR, SW CORNER



SAN JOSE - 13-STORY GOVT. OFFICE BLDG. : CSMIP S/N 357

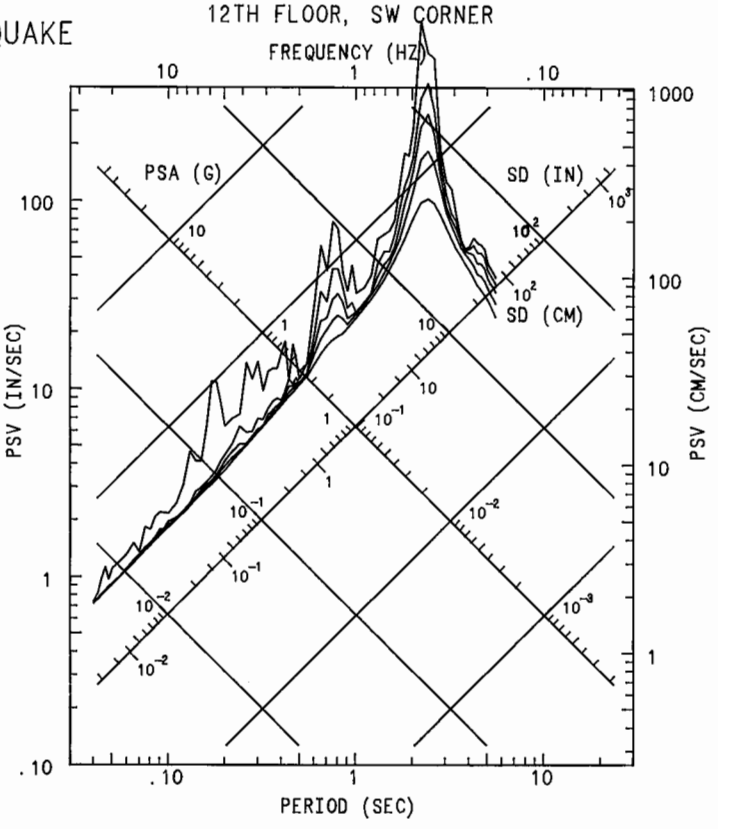
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

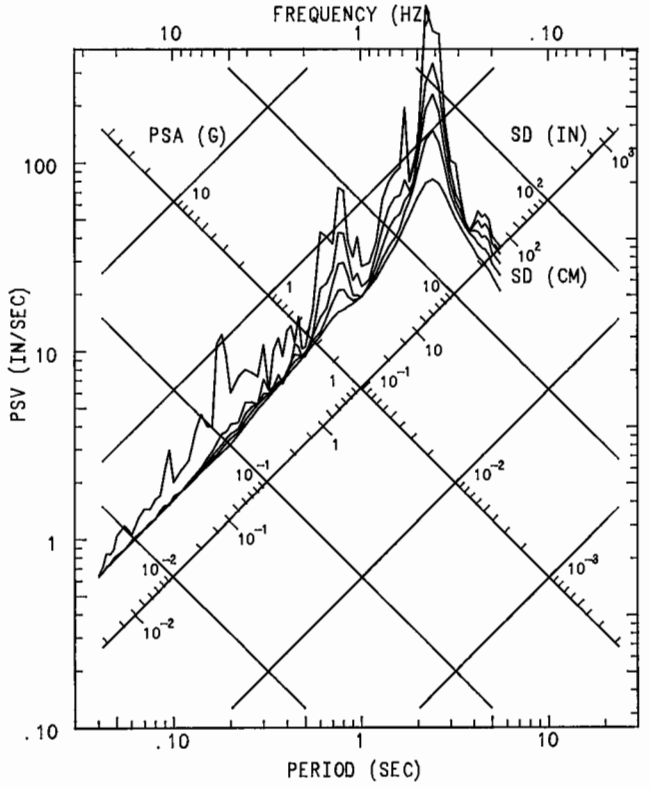
RECORD ID: 57357-C0185-89291.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

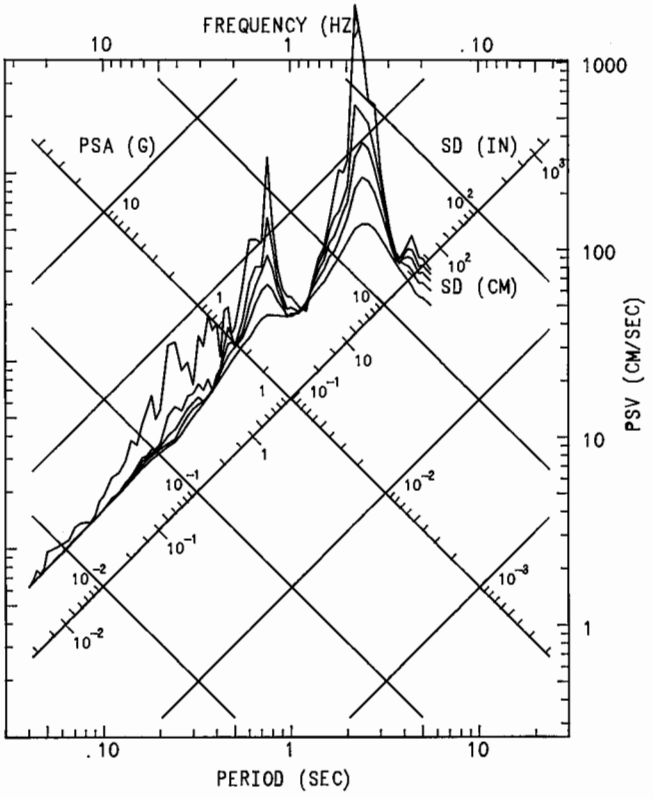
CHN 10: 0 DEG
12TH FLOOR, SW CORNER



CHN 11: 0 DEG
12TH FLOOR, SE CORNER



CHN 12: 90 DEG
7TH FLOOR, NW CORNER



SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

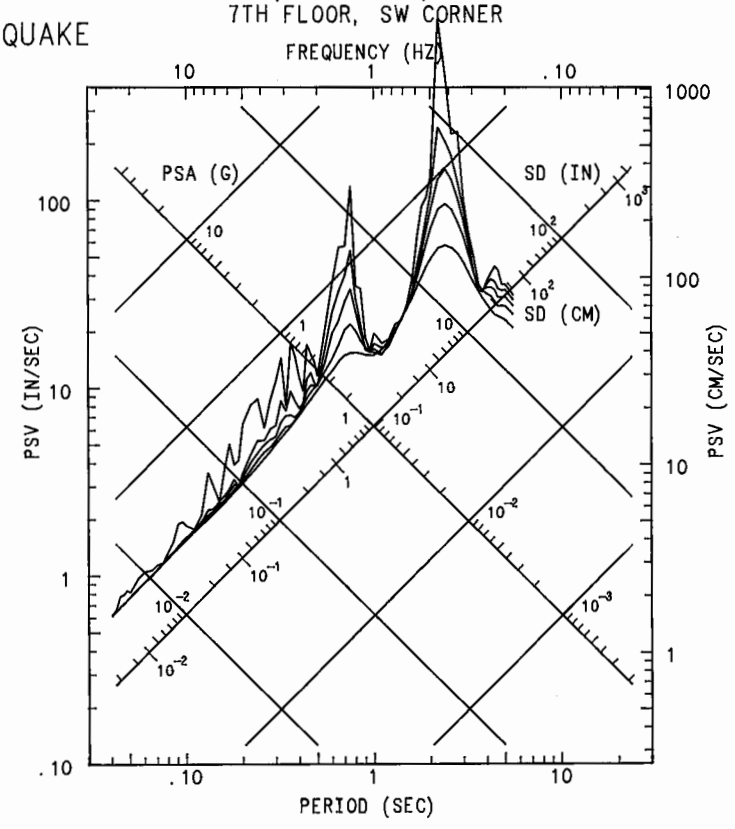
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

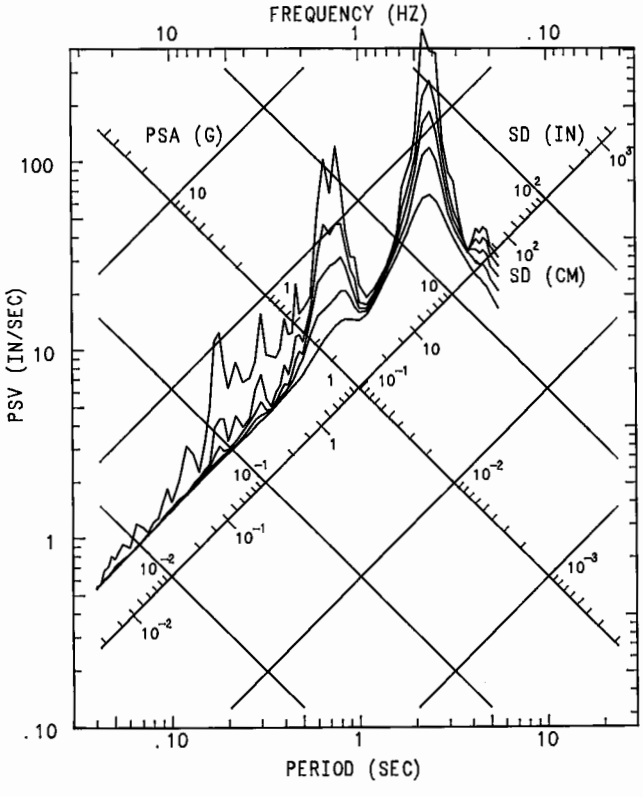
RECORD ID: 57357-C0145-89291.03

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

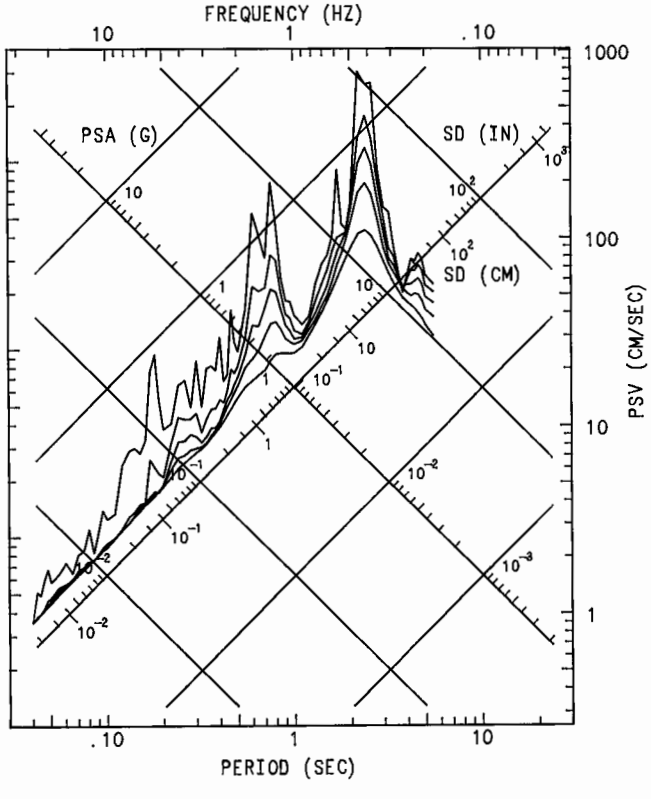
CHN 1 (STA CHN 13): 90 DEG
7TH FLOOR, SW CORNER



CHN 2 (STA CHN 14): 0 DEG
7TH FLOOR, SW CORNER



CHN 3 (STA CHN 15): 0 DEG
7TH FLOOR, SE CORNER



SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

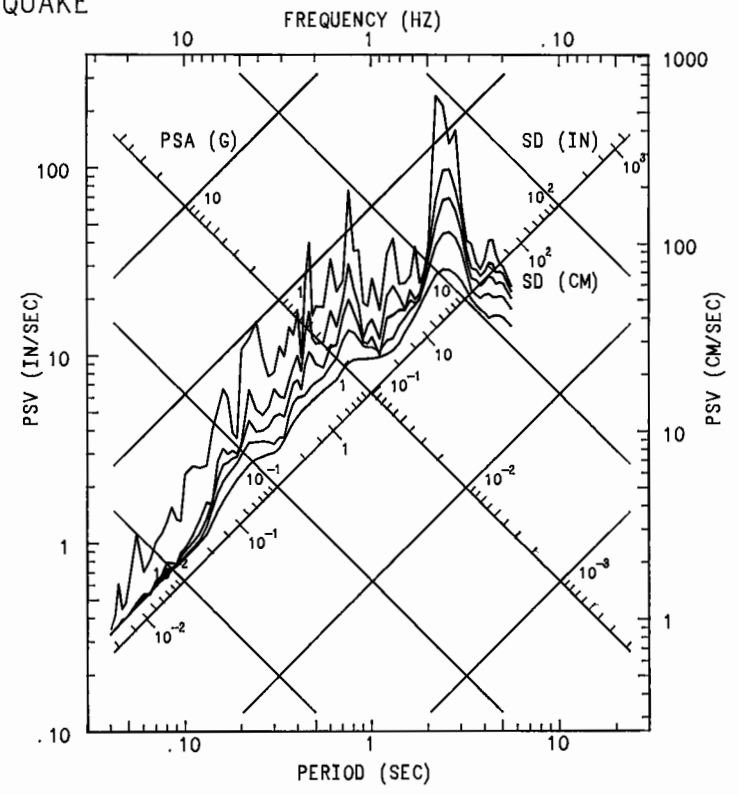
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

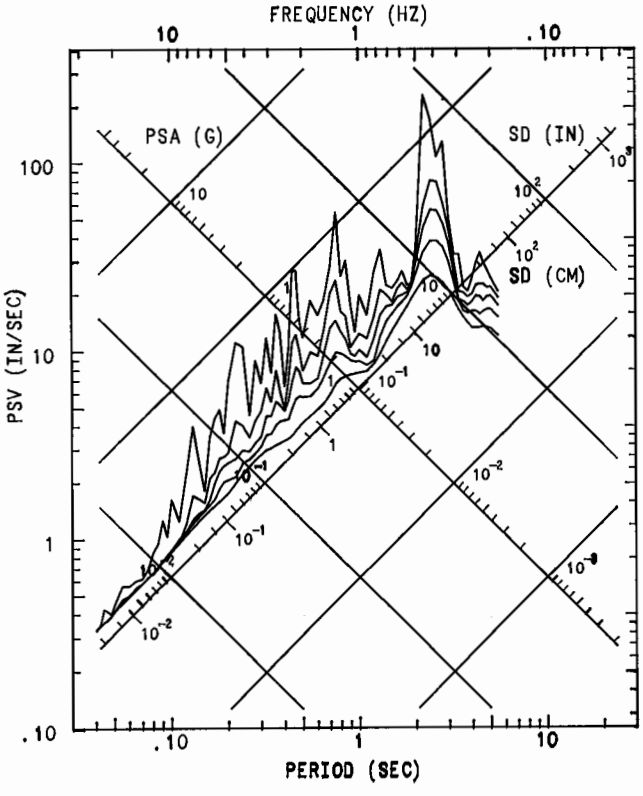
RECORD ID: 57357-C0145-89291.03

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

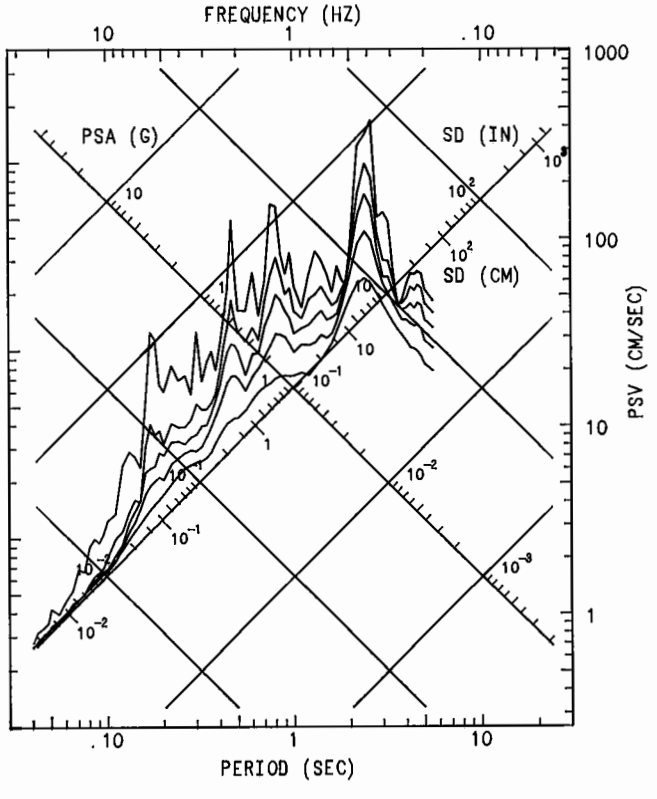
CHN 4 (STA CHN 16): 90 DEG
2ND FLOOR, NW CORNER



CHN 5 (STA CHN 17): 90 DEG
2ND FLOOR, SW CORNER



CHN 6 (STA CHN 18): 0 DEG
2ND FLOOR, SW CORNER



SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

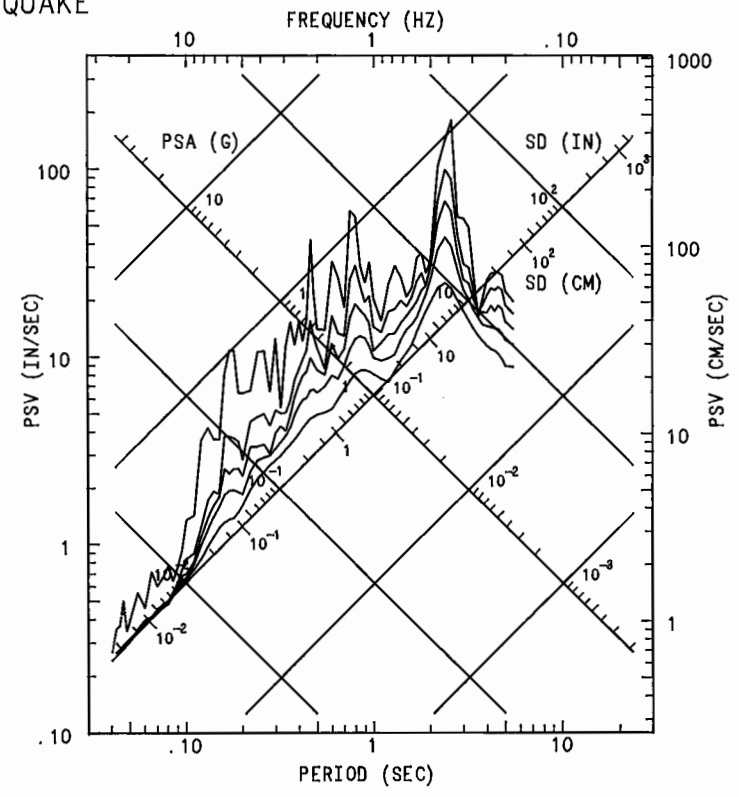
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

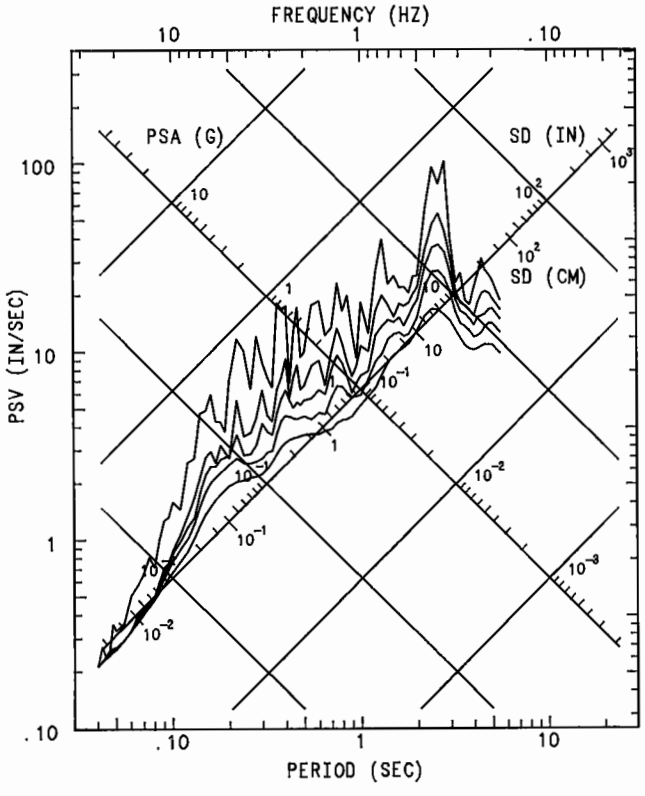
RECORD ID: 57357-C0145-89291.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

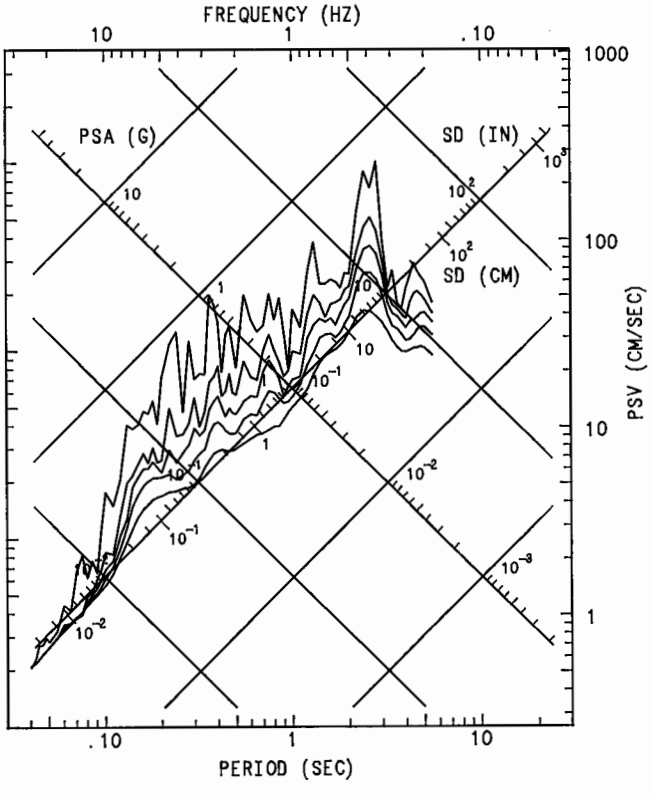
CHN 7 (STA CHN 19): 0 DEG
2ND FLOOR, SE CORNER



CHN 8 (STA CHN 20): 90 DEG
LOWER LEVEL, NW CORNER



CHN 9 (STA CHN 21): 90 DEG
LOWER LEVEL, SW CORNER



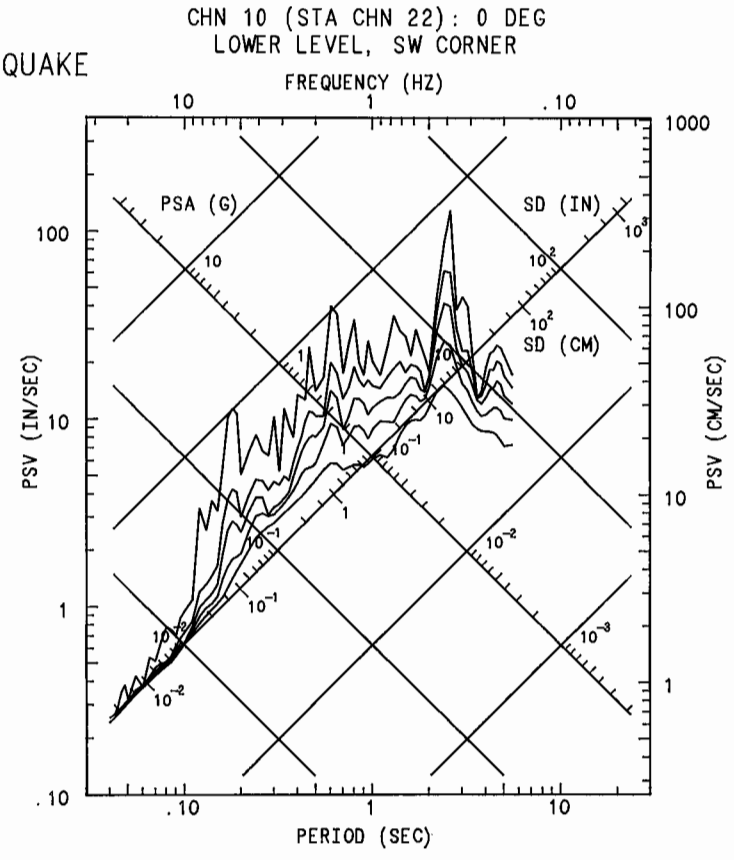
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

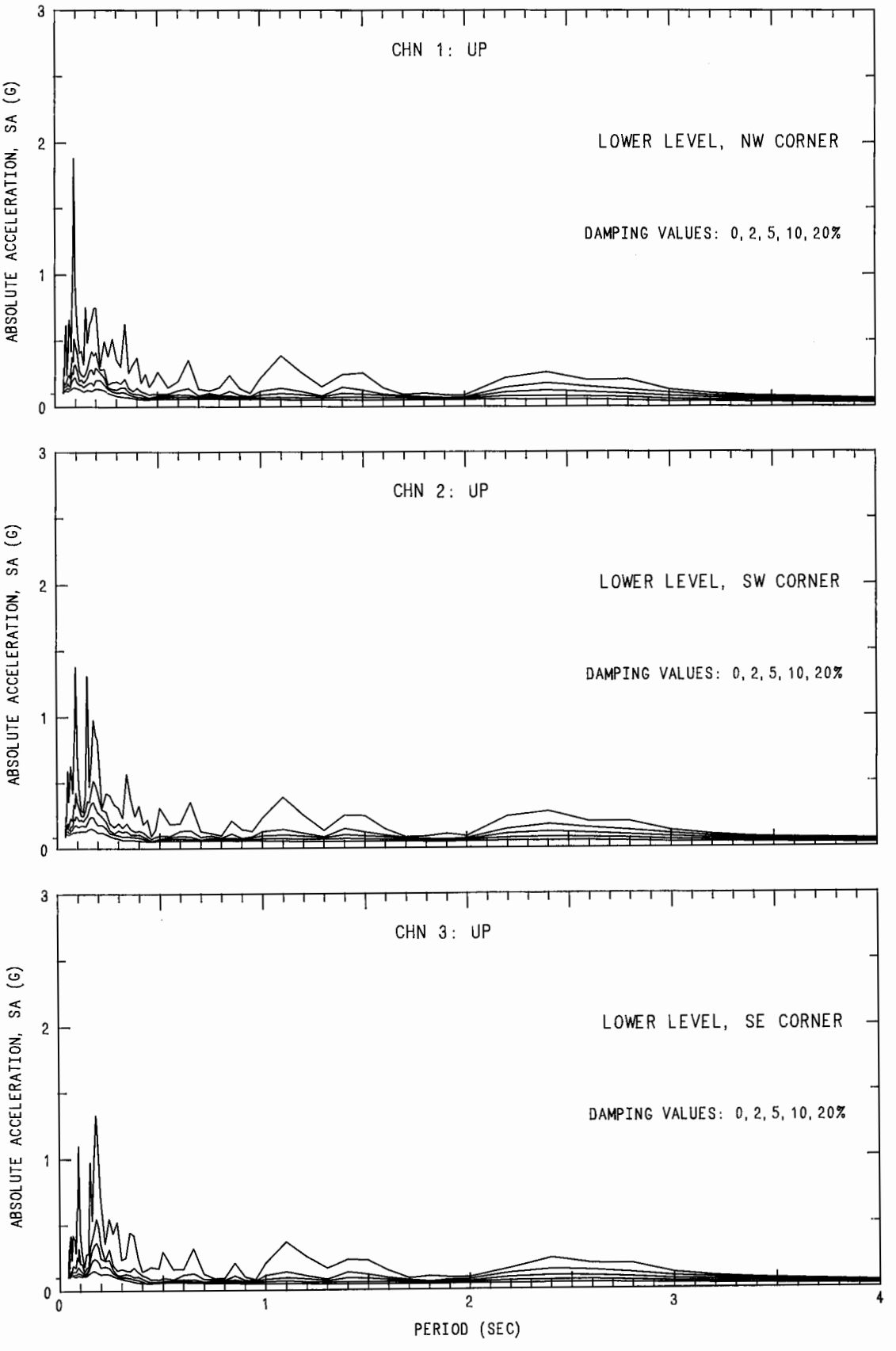
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

RECORD ID: 57357-C0145-89291.03

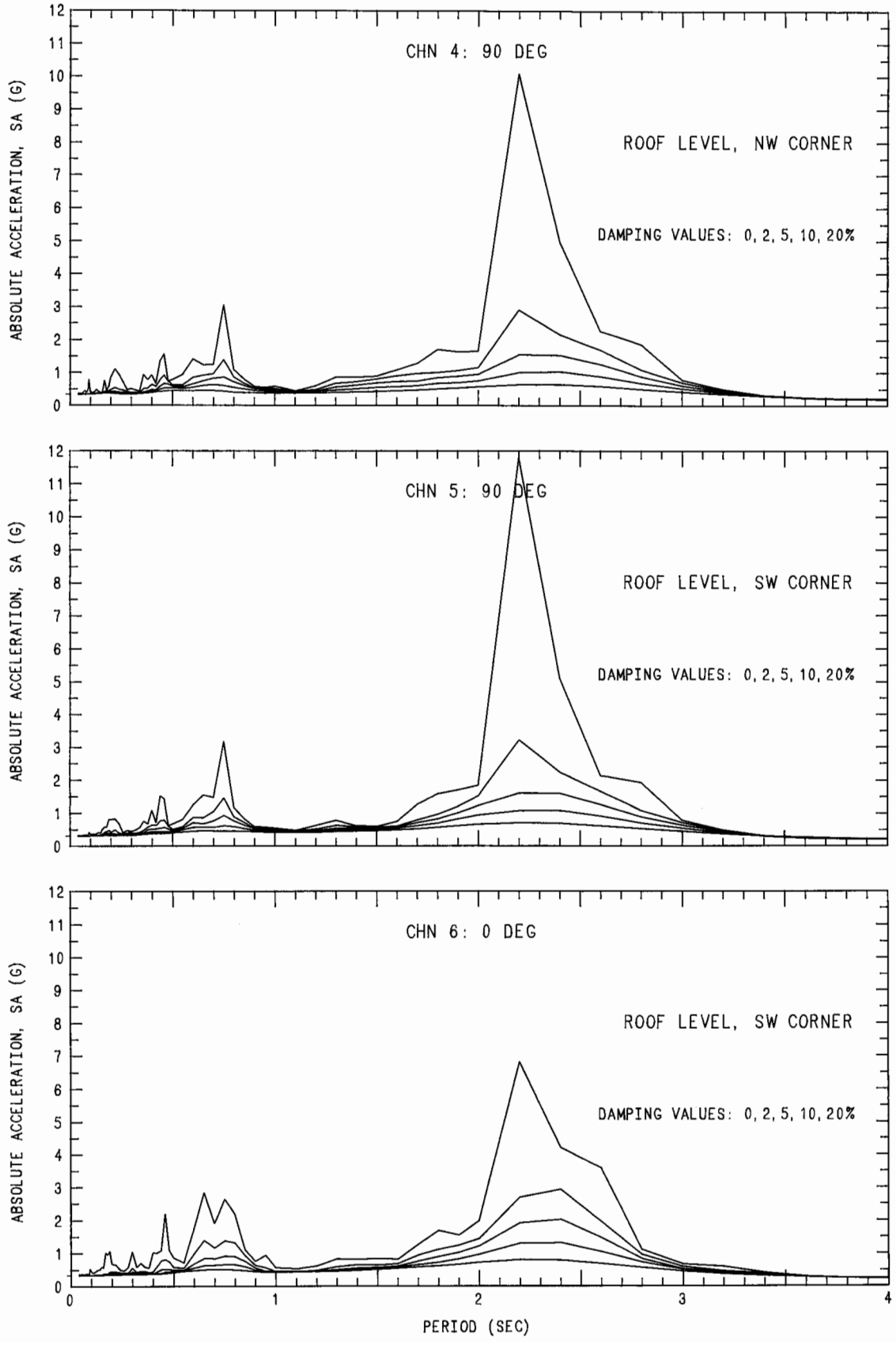
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



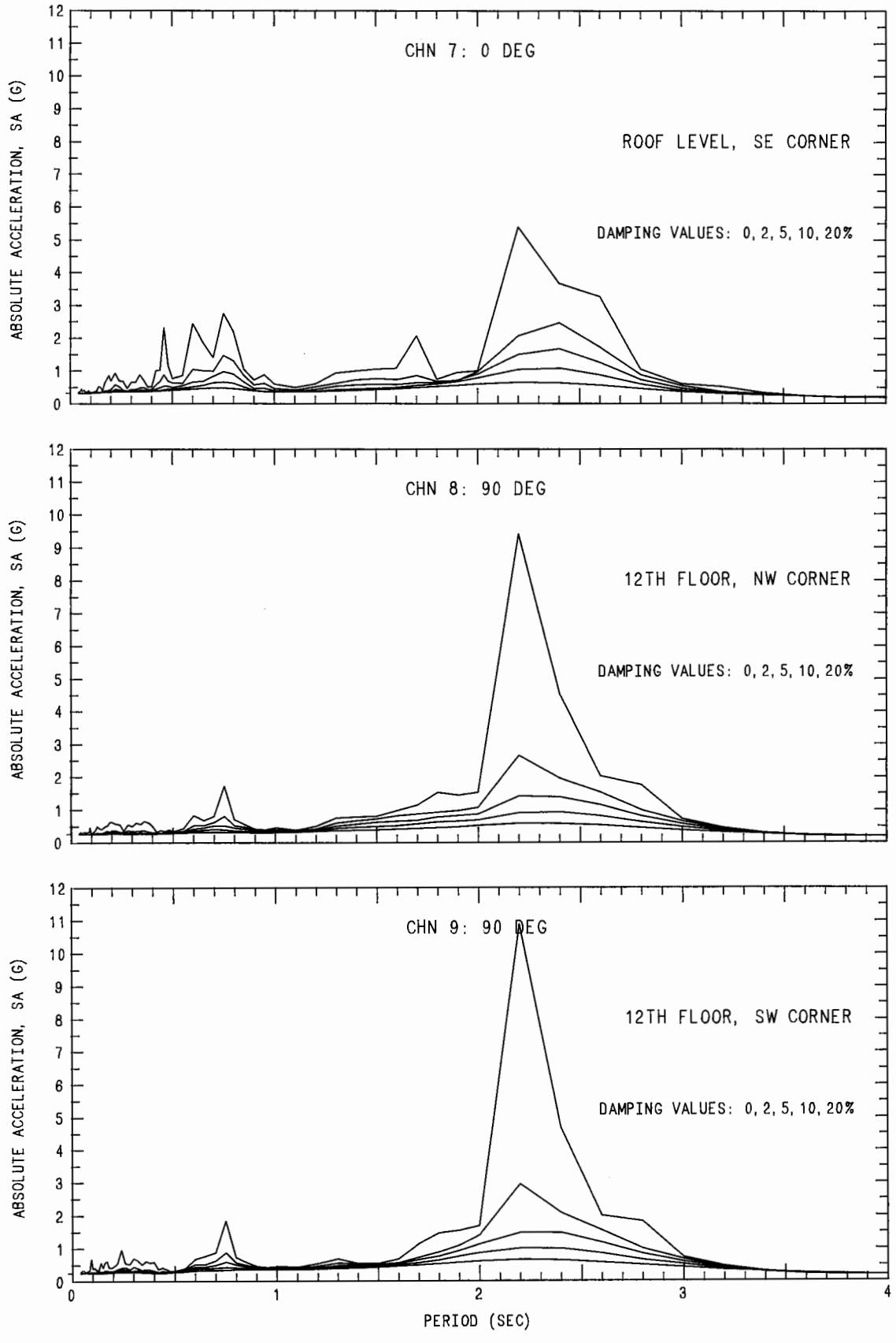
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0185-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



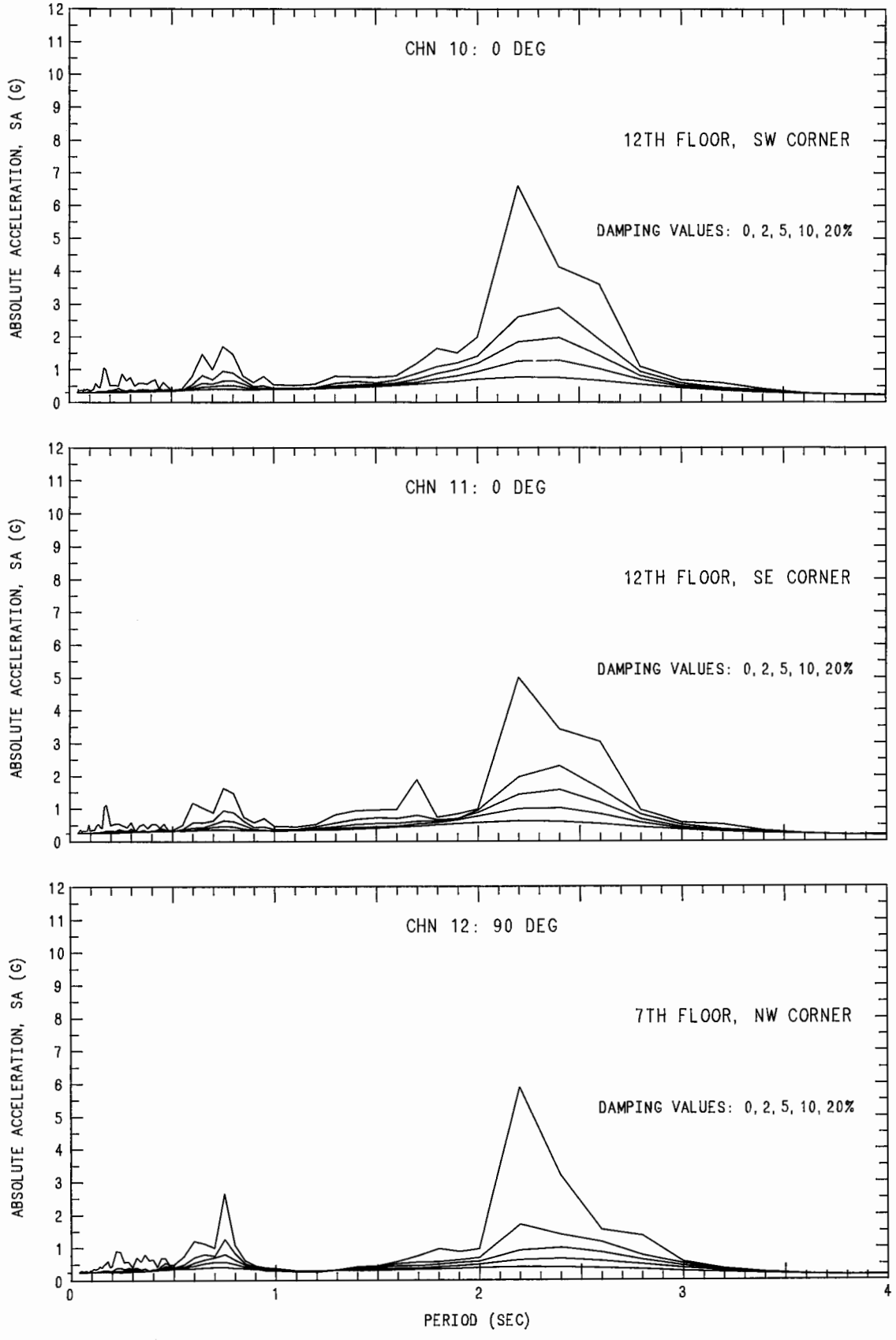
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG. . CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0185-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



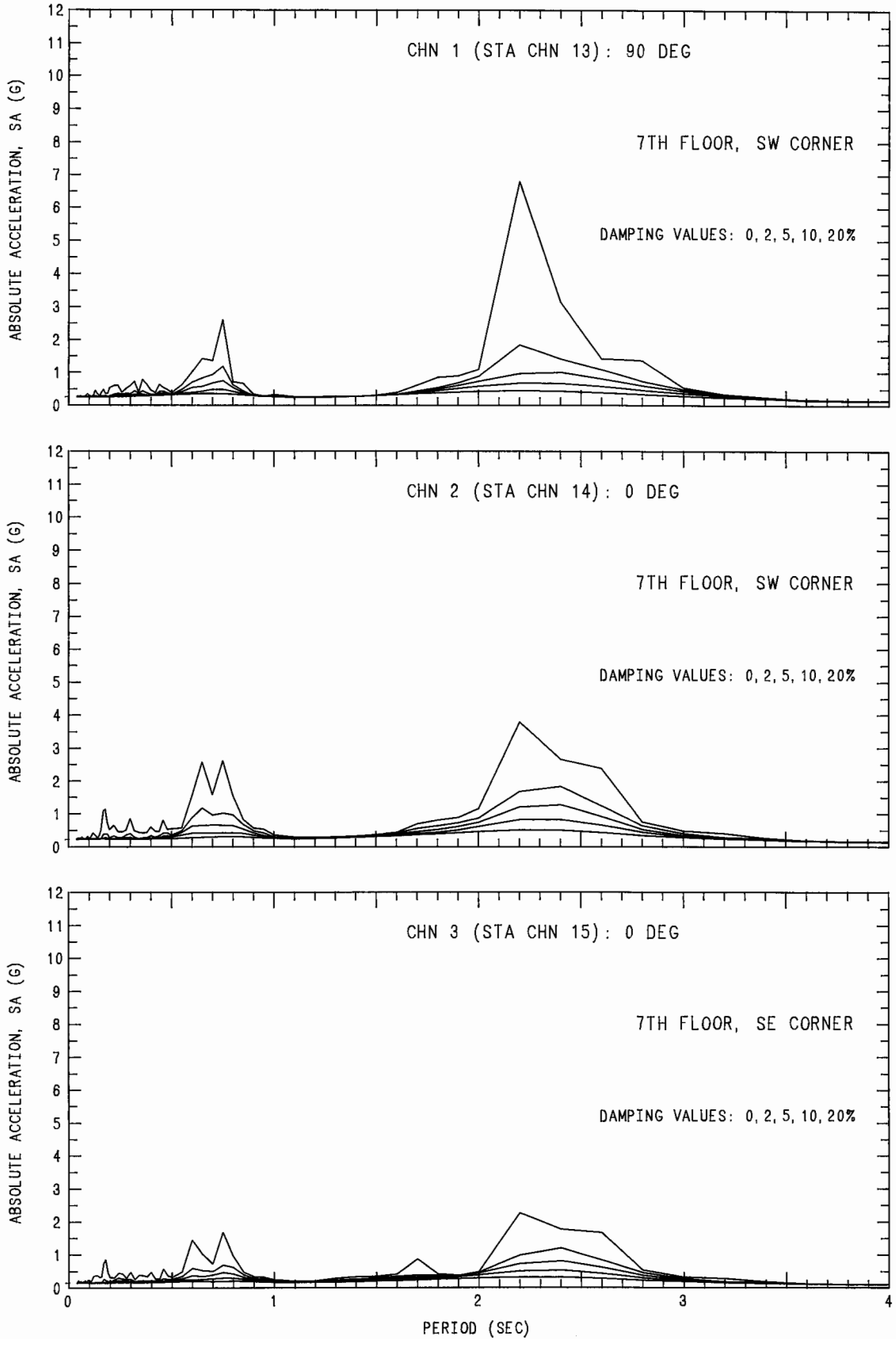
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0185-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



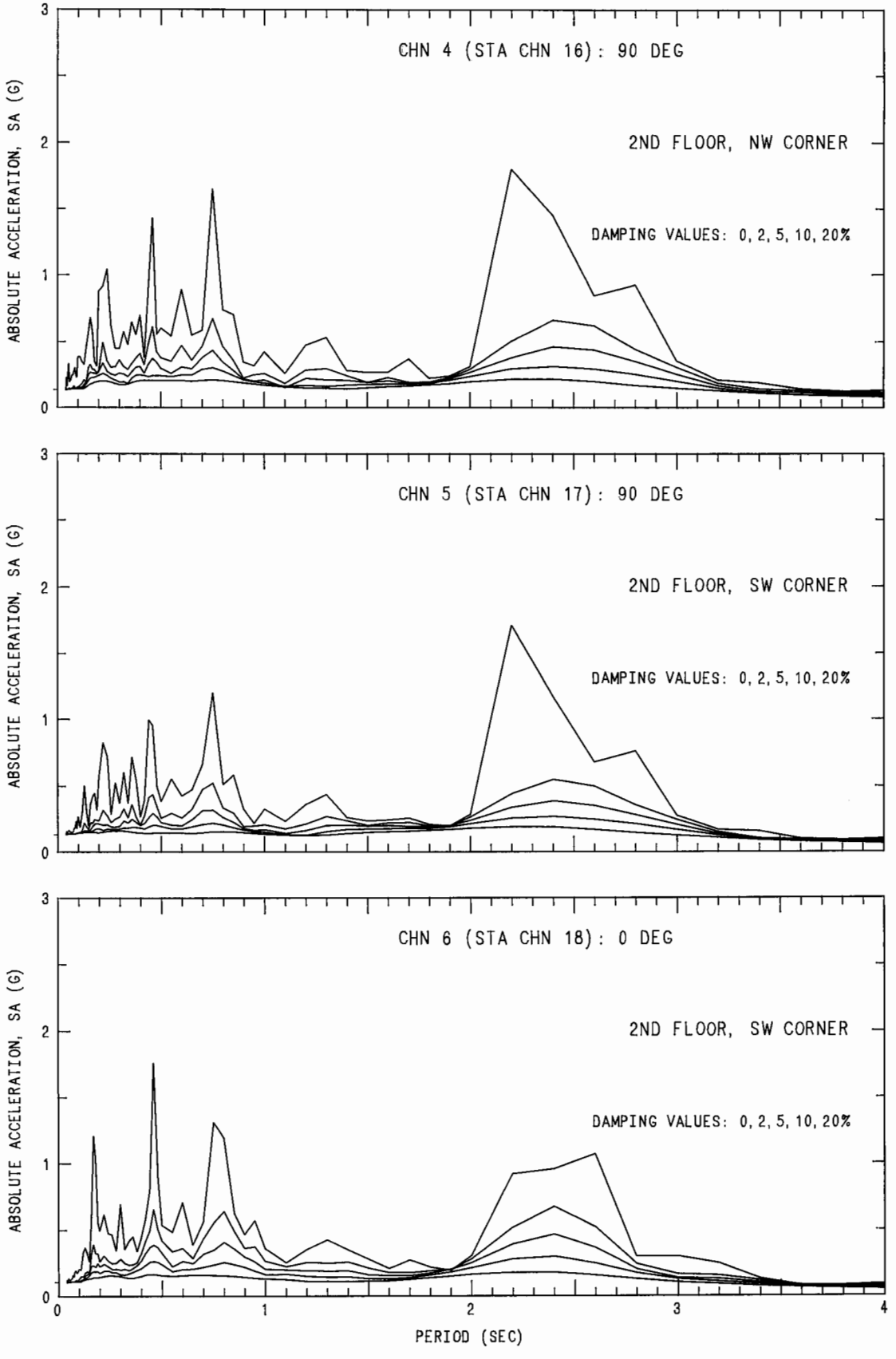
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG. CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0185-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



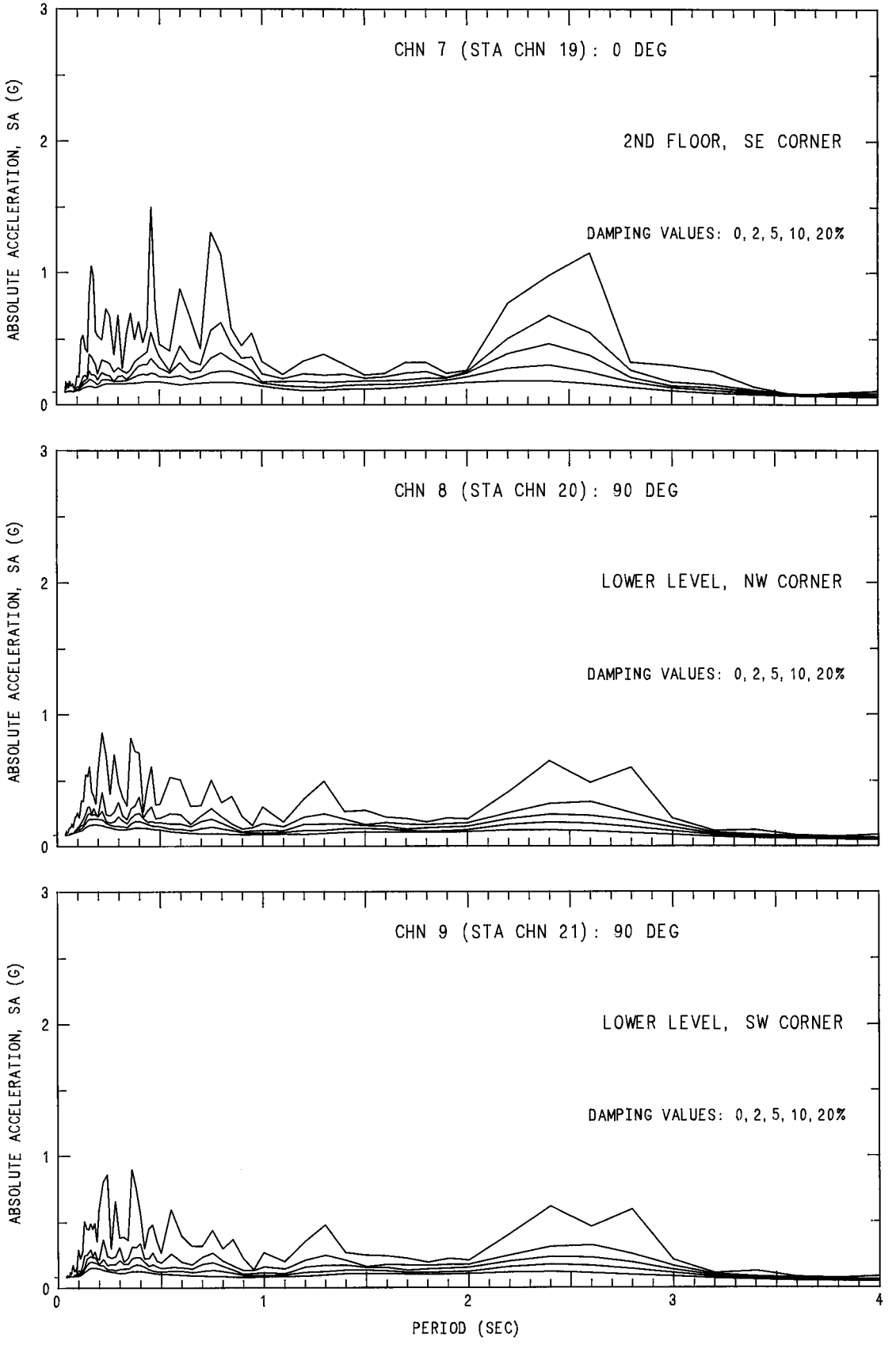
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0145-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



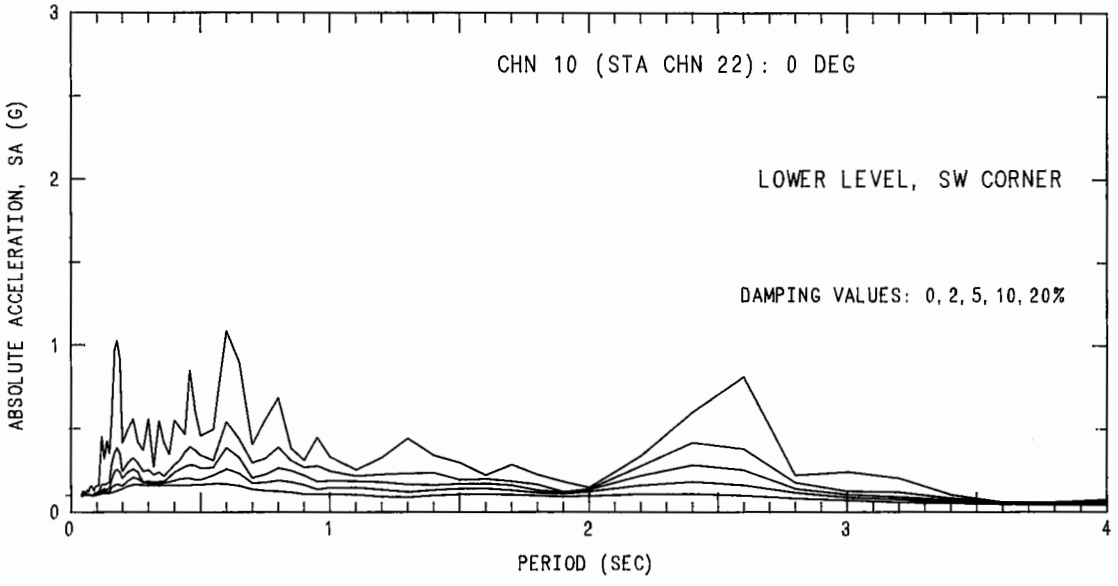
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0145-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0145-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



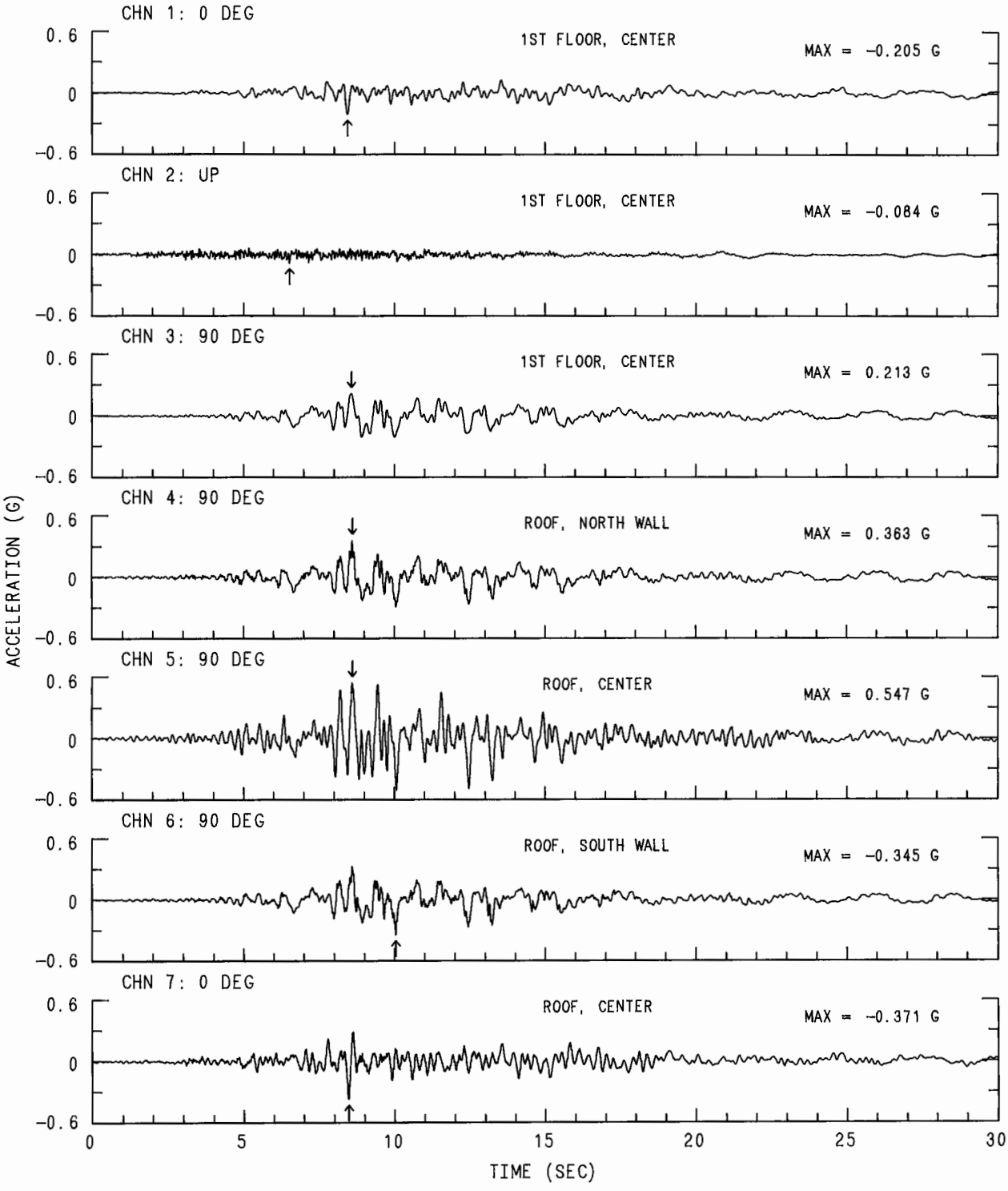
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN JOSE - 13-STORY GOVT. OFFICE BLDG.: CSMIP S/N 357
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57357-C0145-89291.03
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PALO ALTO – 2-STORY OFFICE BLDG.: CSMIP S/N 264

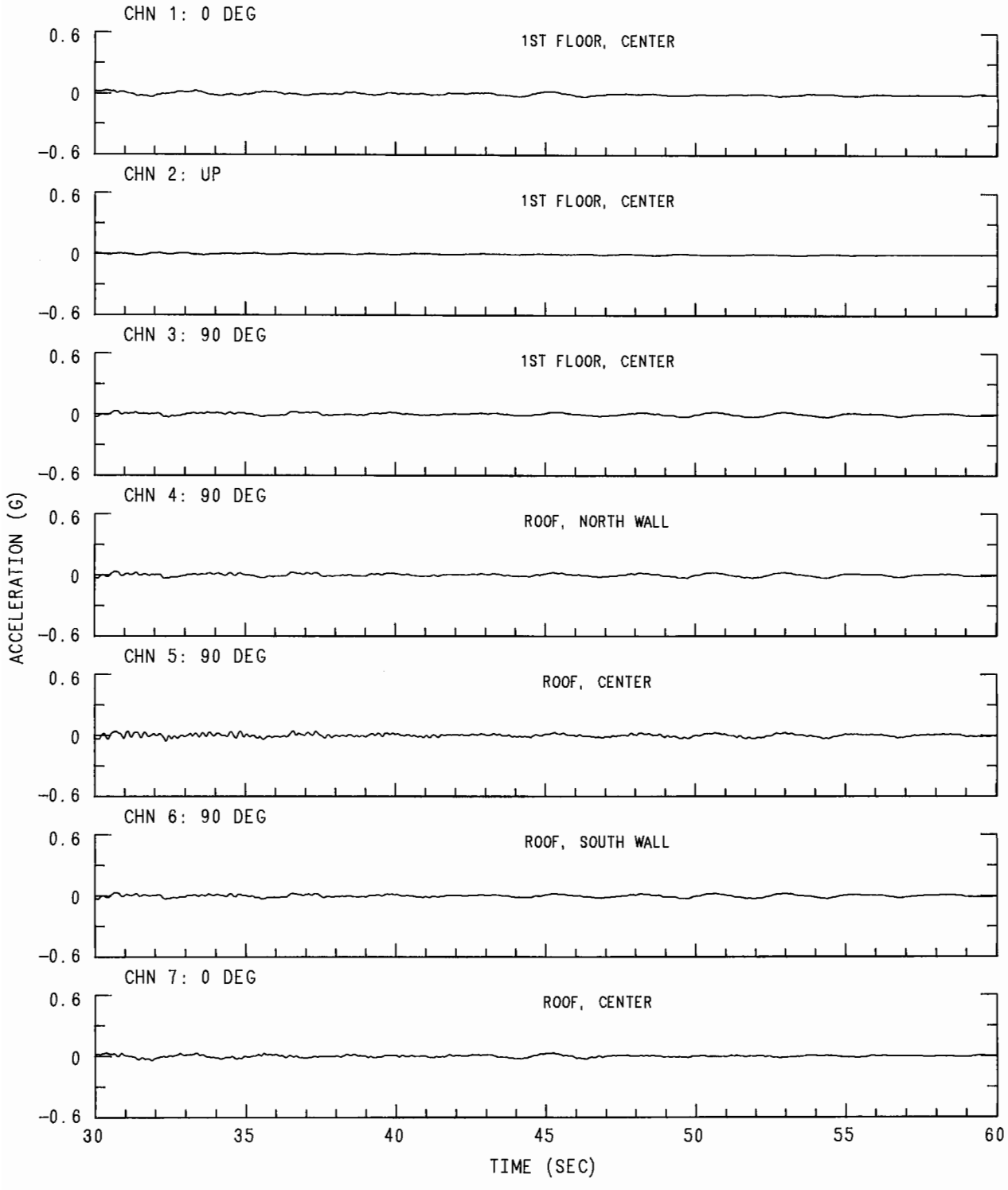
PHASE 1 ACCELERATION. RECORD ID: 58264-C0123-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PALO ALTO – 2-STORY OFFICE BLDG.: CSMIP S/N 264

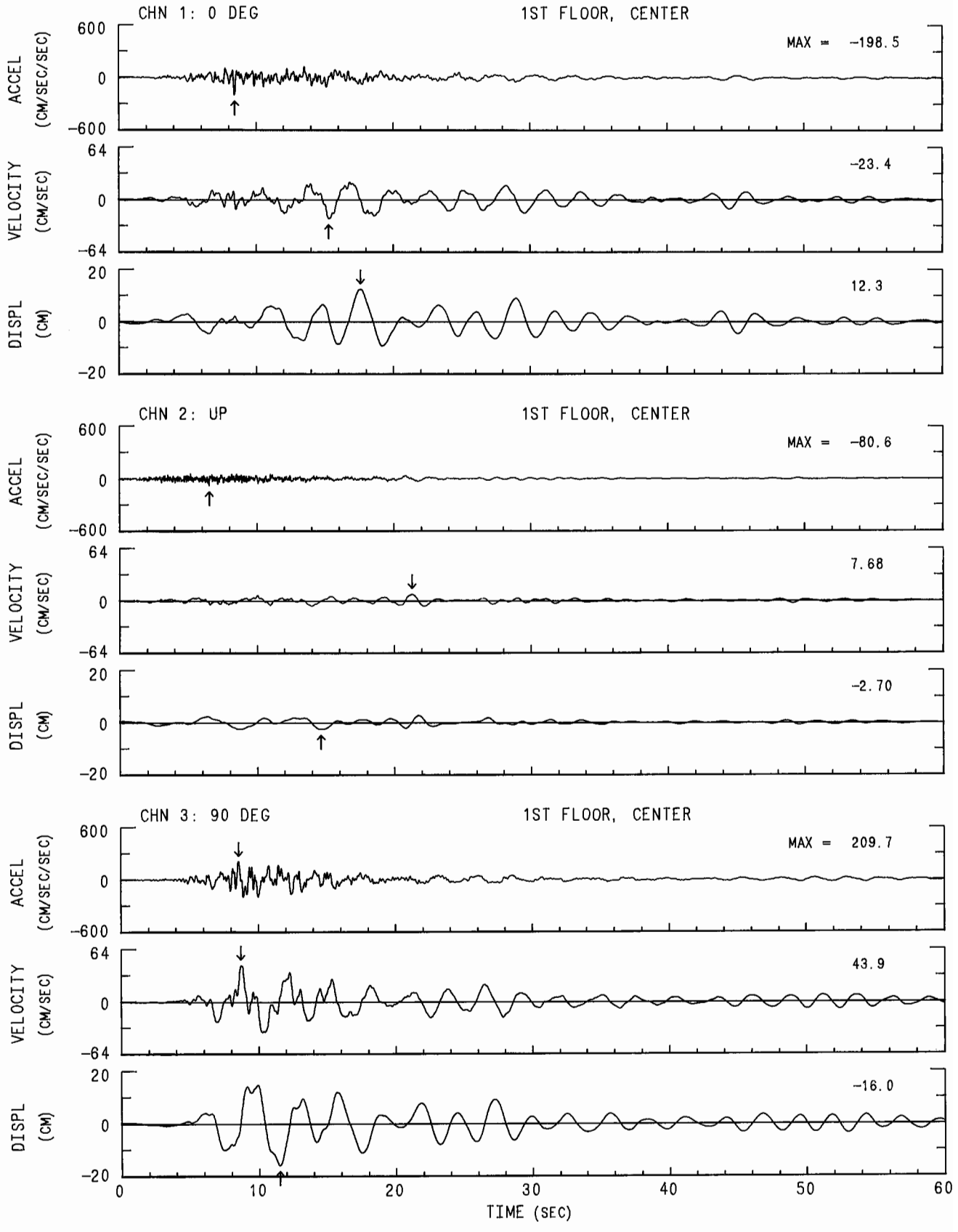
PHASE 1 ACCELERATION. RECORD ID: 58264-C0123-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PALO ALTO - 2-STORY OFFICE BLDG.: CSMIP S/N 264

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

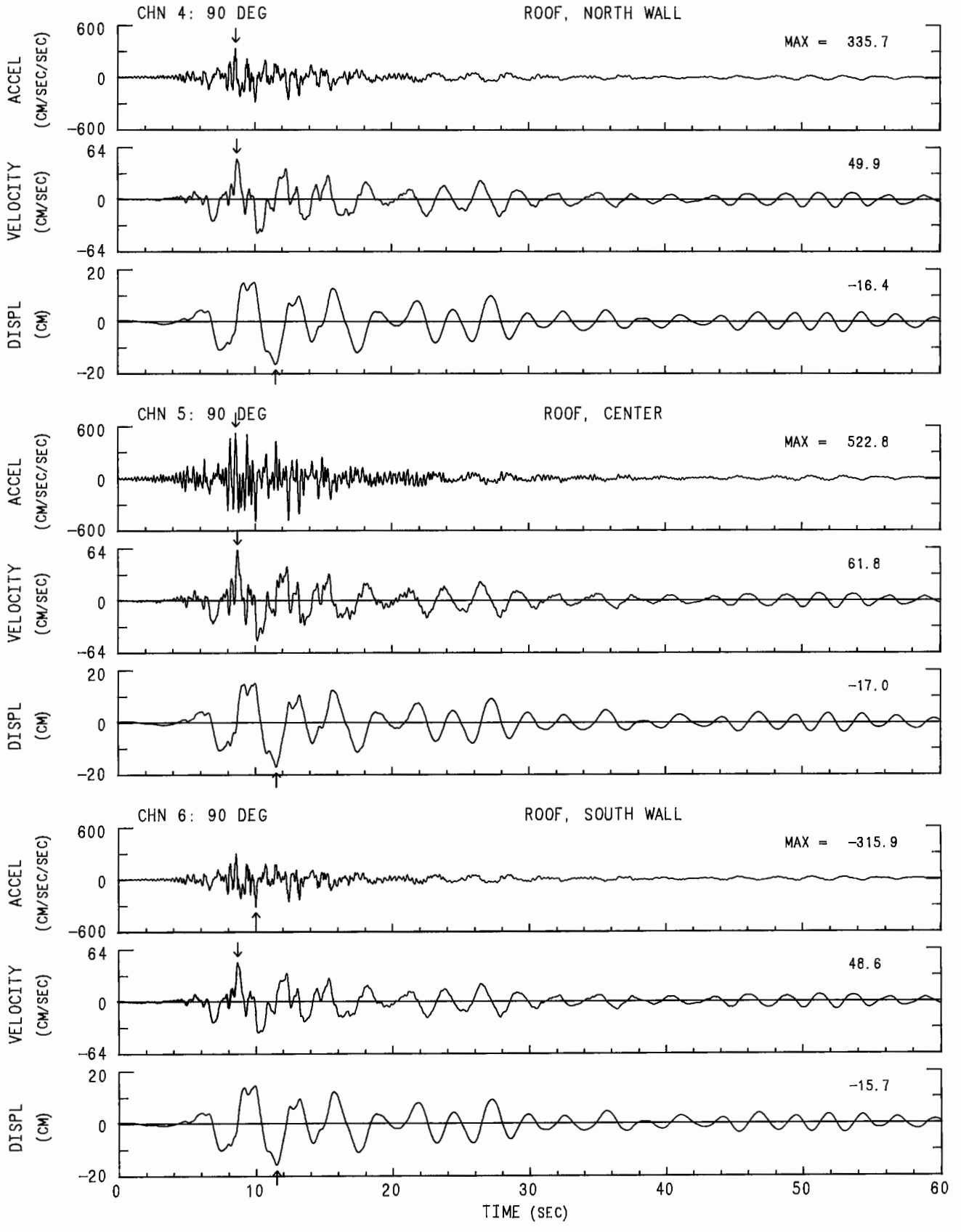
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58264-C0123-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PALO ALTO – 2-STORY OFFICE BLDG.: CSMIP S/N 264

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58264-C0123-89292.02

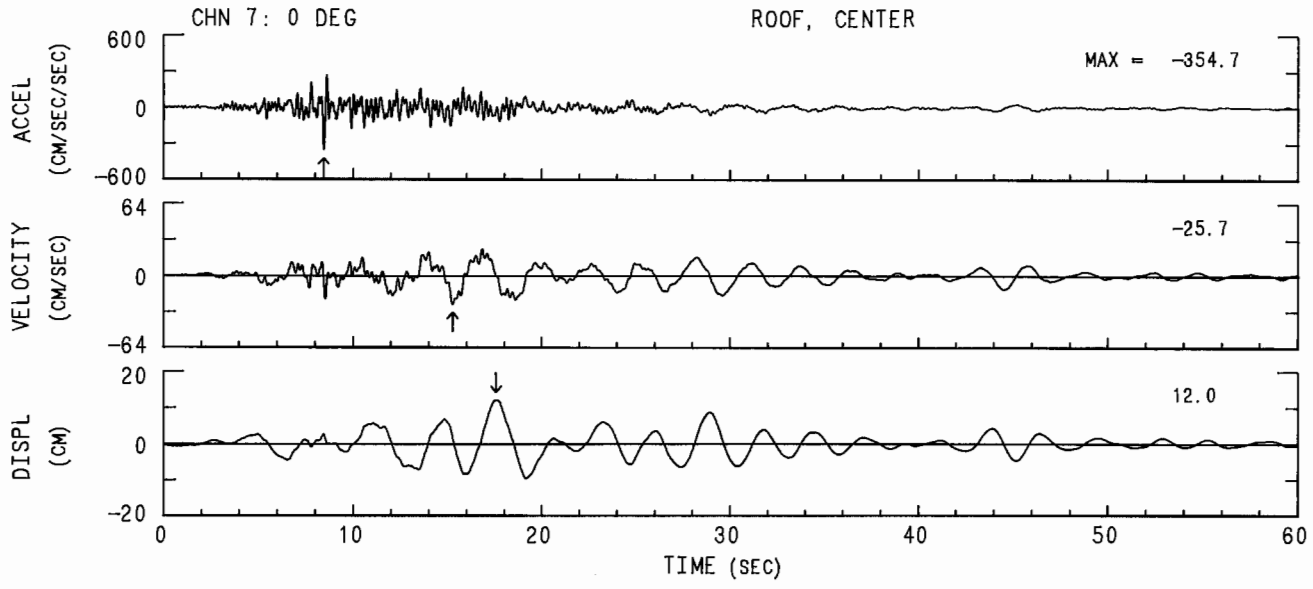


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PALO ALTO – 2–STORY OFFICE BLDG.: CSMIP S/N 264

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58264–C0123–89292.02



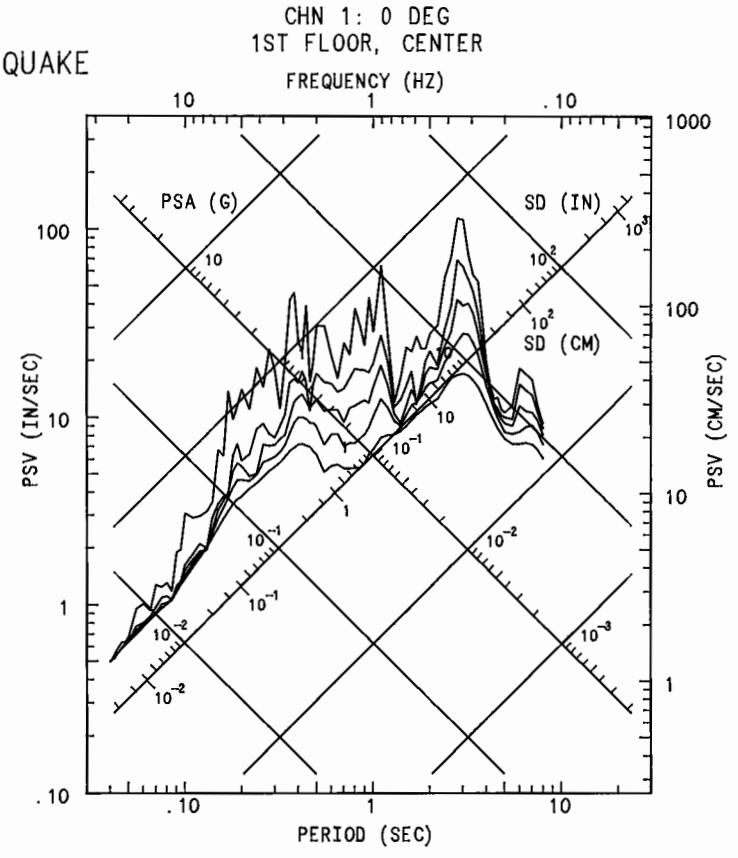
PALO ALTO - 2-STORY OFFICE BLDG.: CSMIP S/N 264

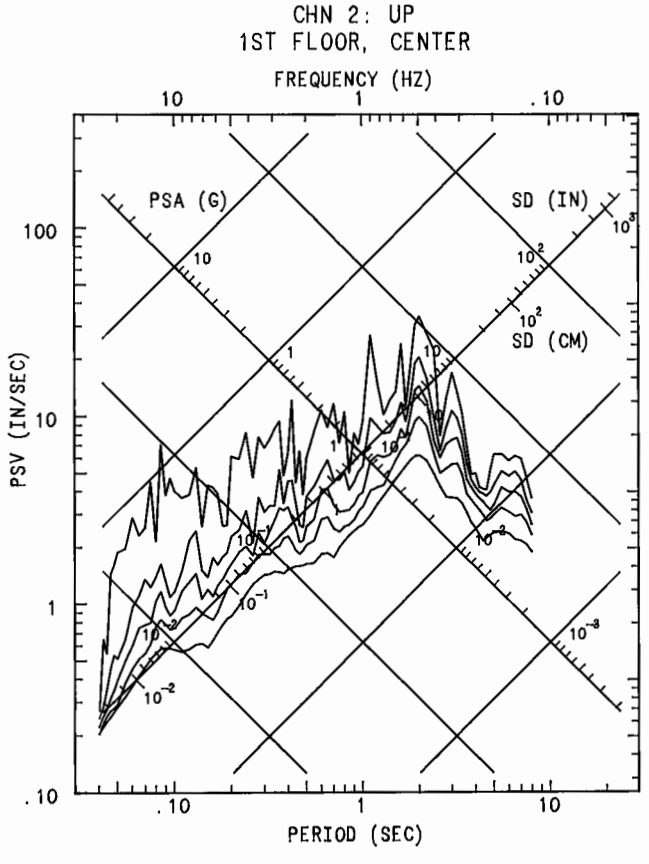
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

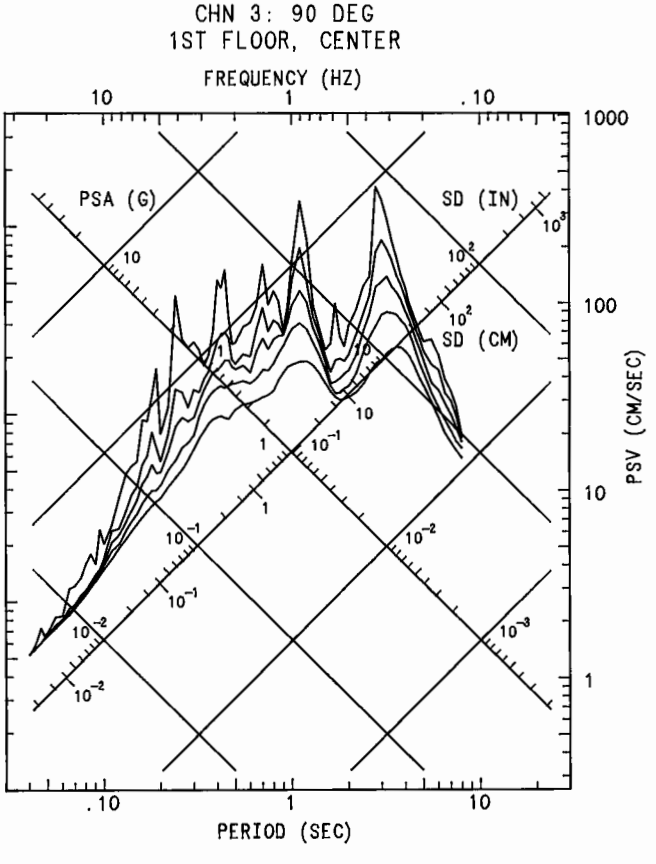
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

RECORD ID: 58264-C0123-89292.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%







PALO ALTO – 2-STORY OFFICE BLDG.: CSMIP S/N 264

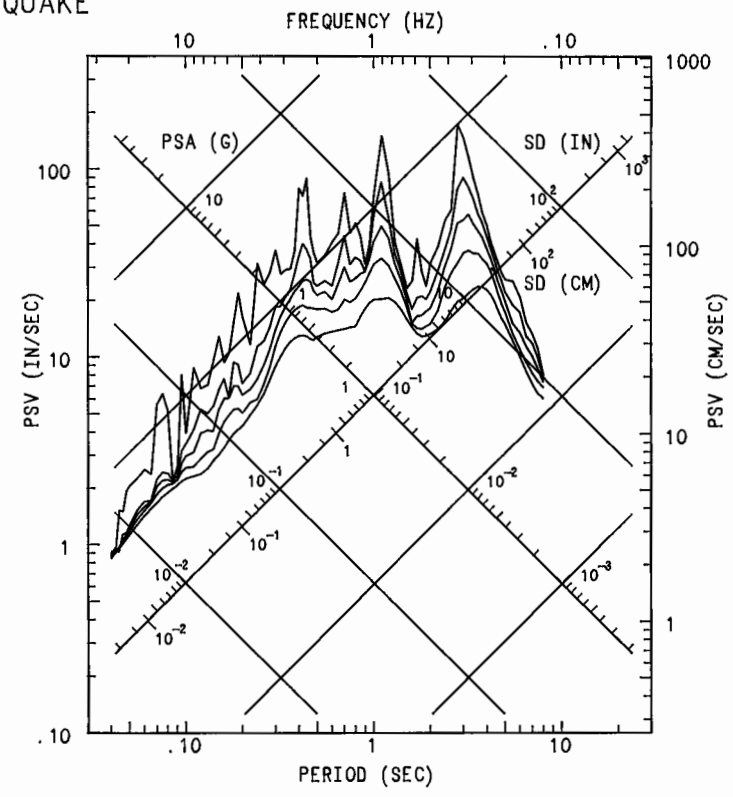
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

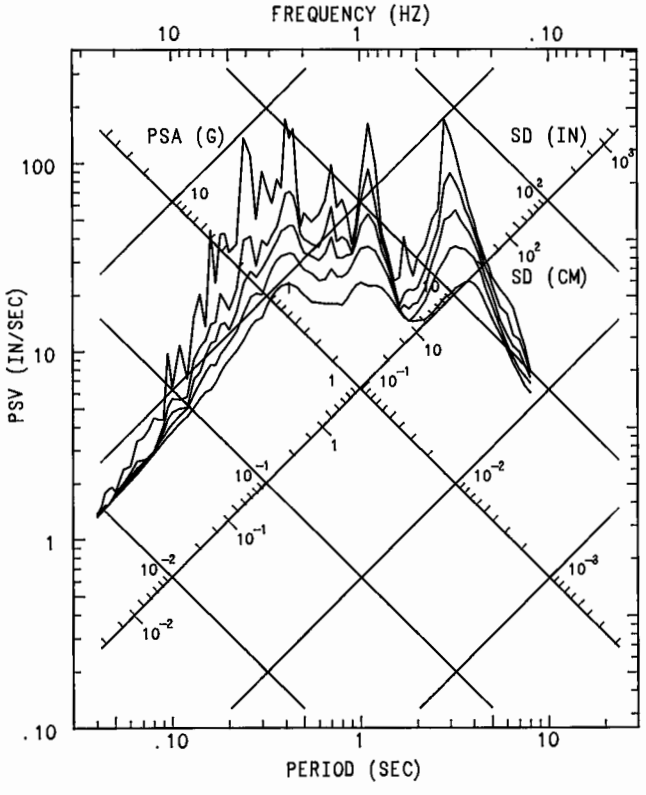
RECORD ID: 58264-C0123-89292.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

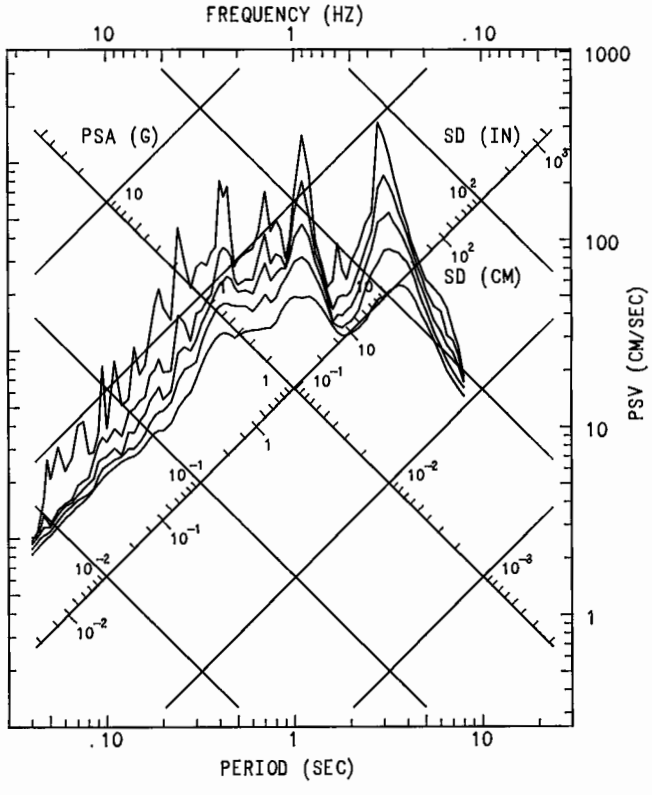
CHN 4: 90 DEG
ROOF, NORTH WALL



CHN 5: 90 DEG
ROOF, CENTER



CHN 6: 90 DEG
ROOF, SOUTH WALL



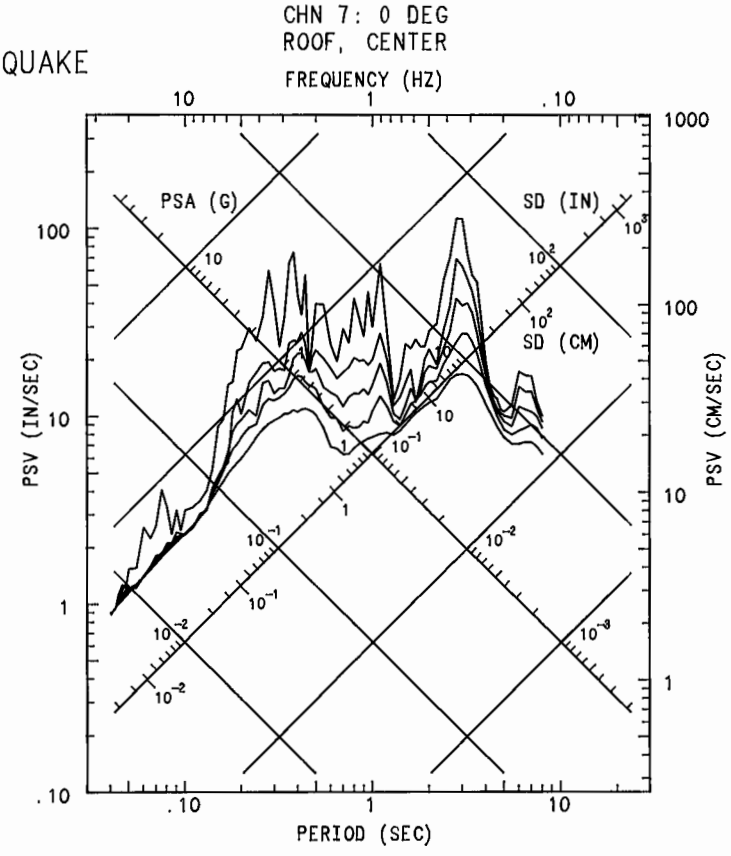
PALO ALTO – 2-STORY OFFICE BLDG.: CSMIP S/N 264

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

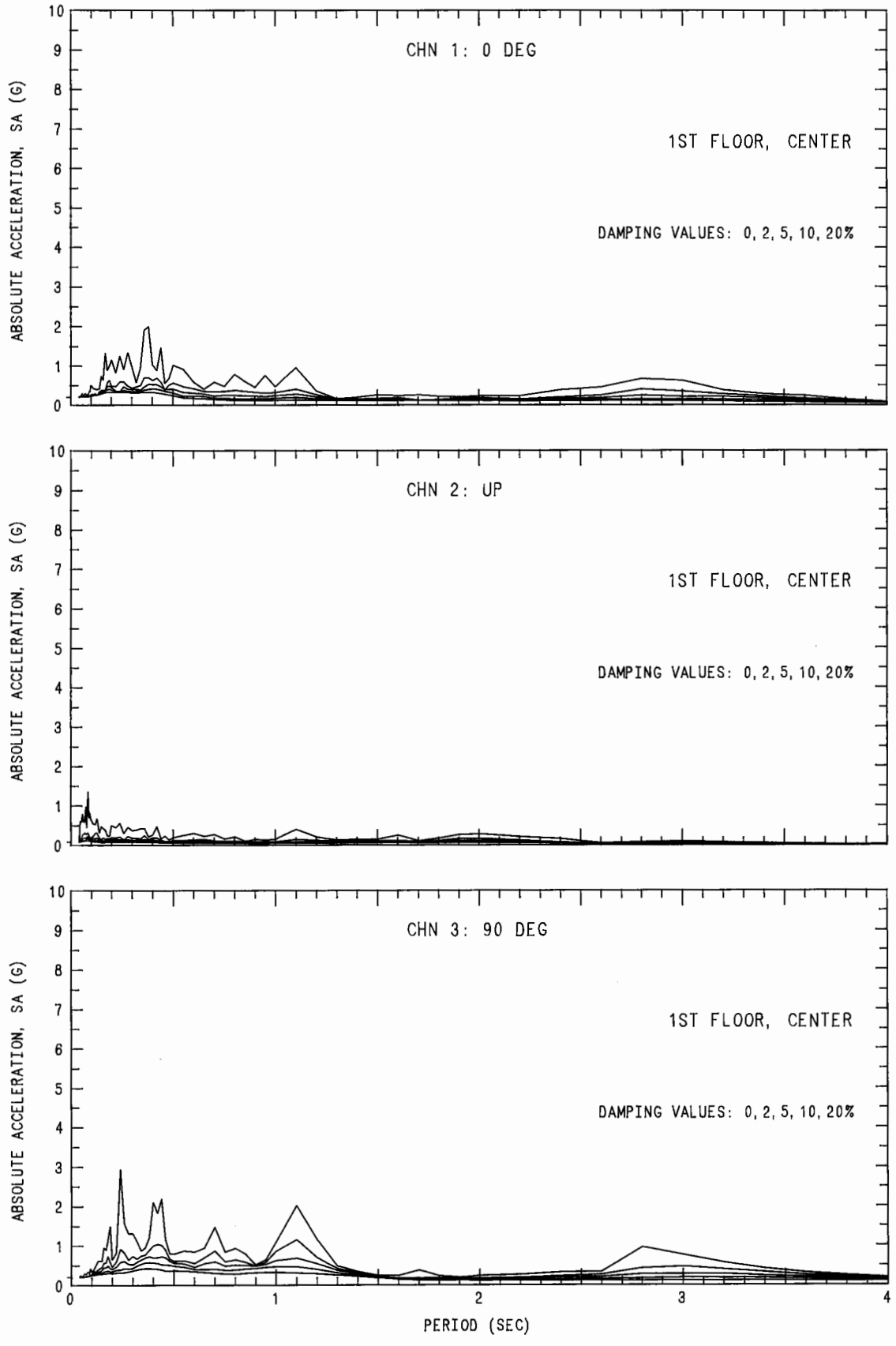
RECORD ID: 58264-C0123-89292.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

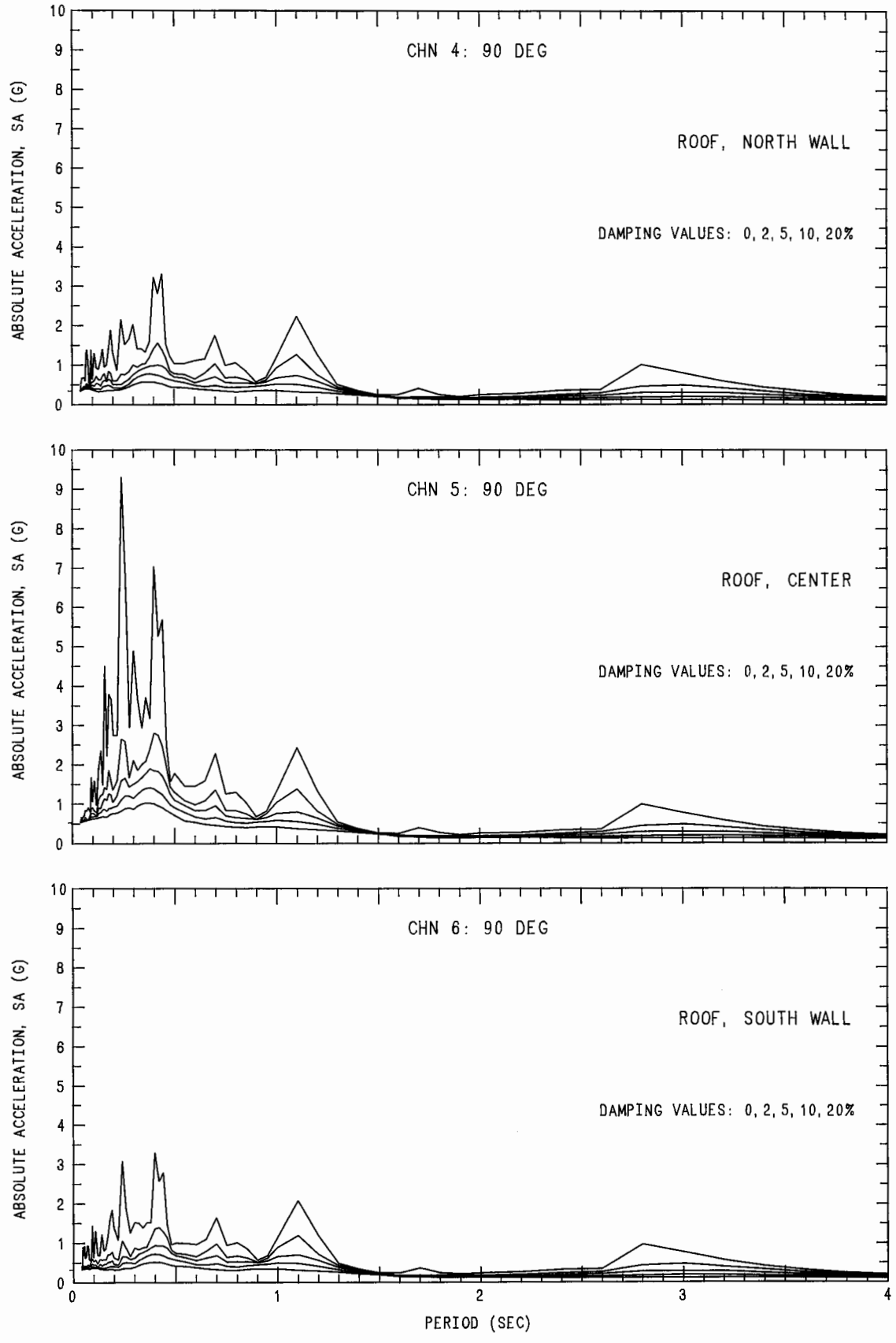


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PALO ALTO - 2-STORY OFFICE BLDG.: CSMIP S/N 264

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58264-C0123-89292.02
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)

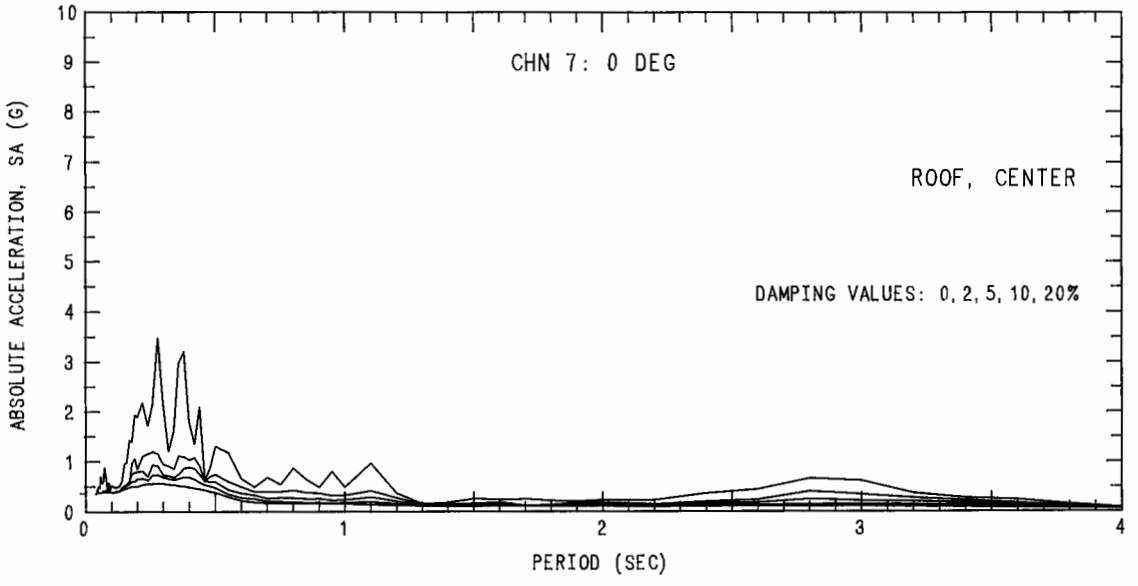


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PALO ALTO - 2-STORY OFFICE BLDG.: CSMIP S/N 264
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58264-C0123-89292.02
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PALO ALTO – 2-STORY OFFICE BLDG. : CSMIP S/N 264

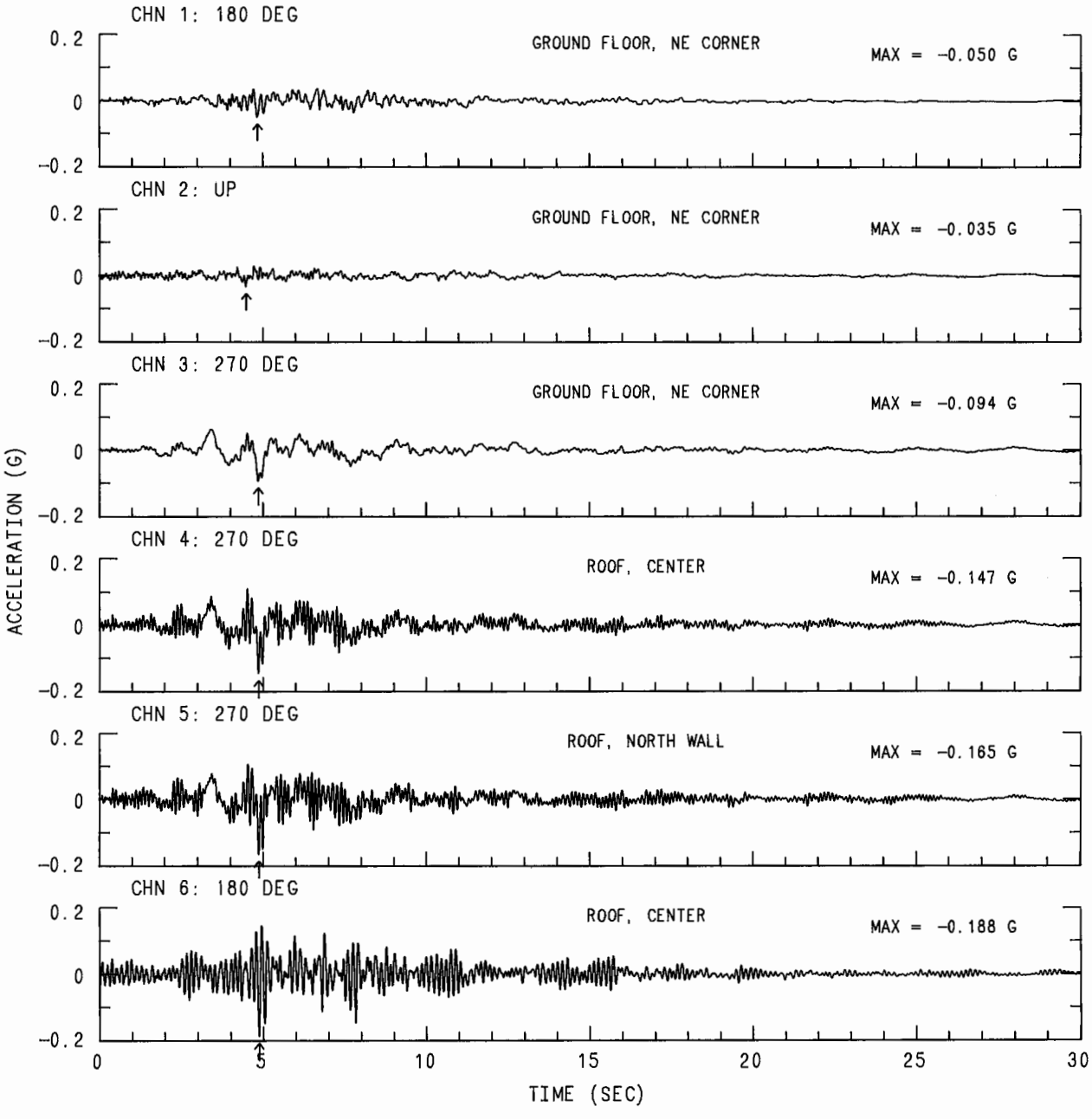
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58264-C0123-89292.02
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

REDWOOD CITY – 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263

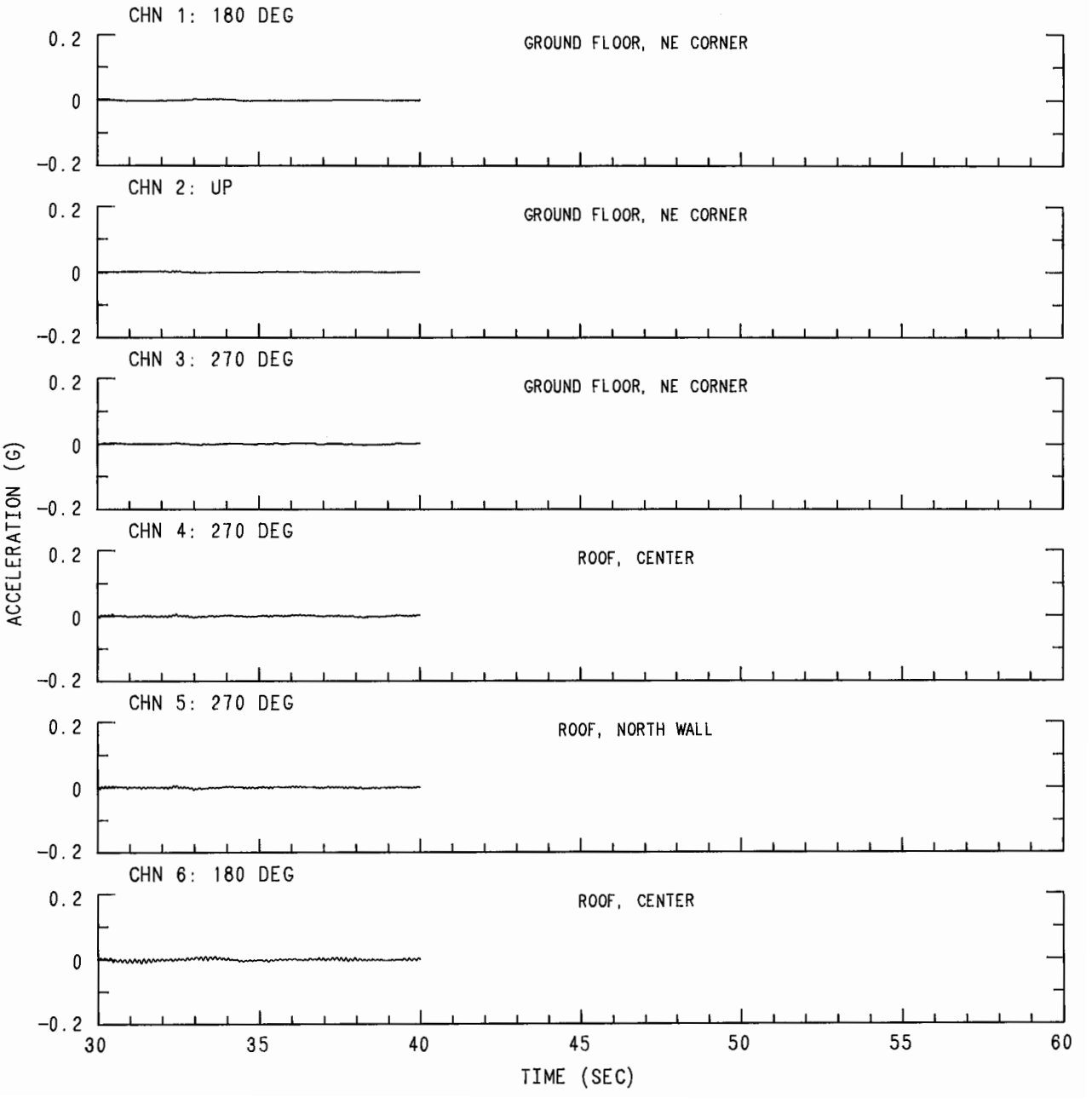
PHASE 1 ACCELERATION. RECORD ID: 58263-C0110-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

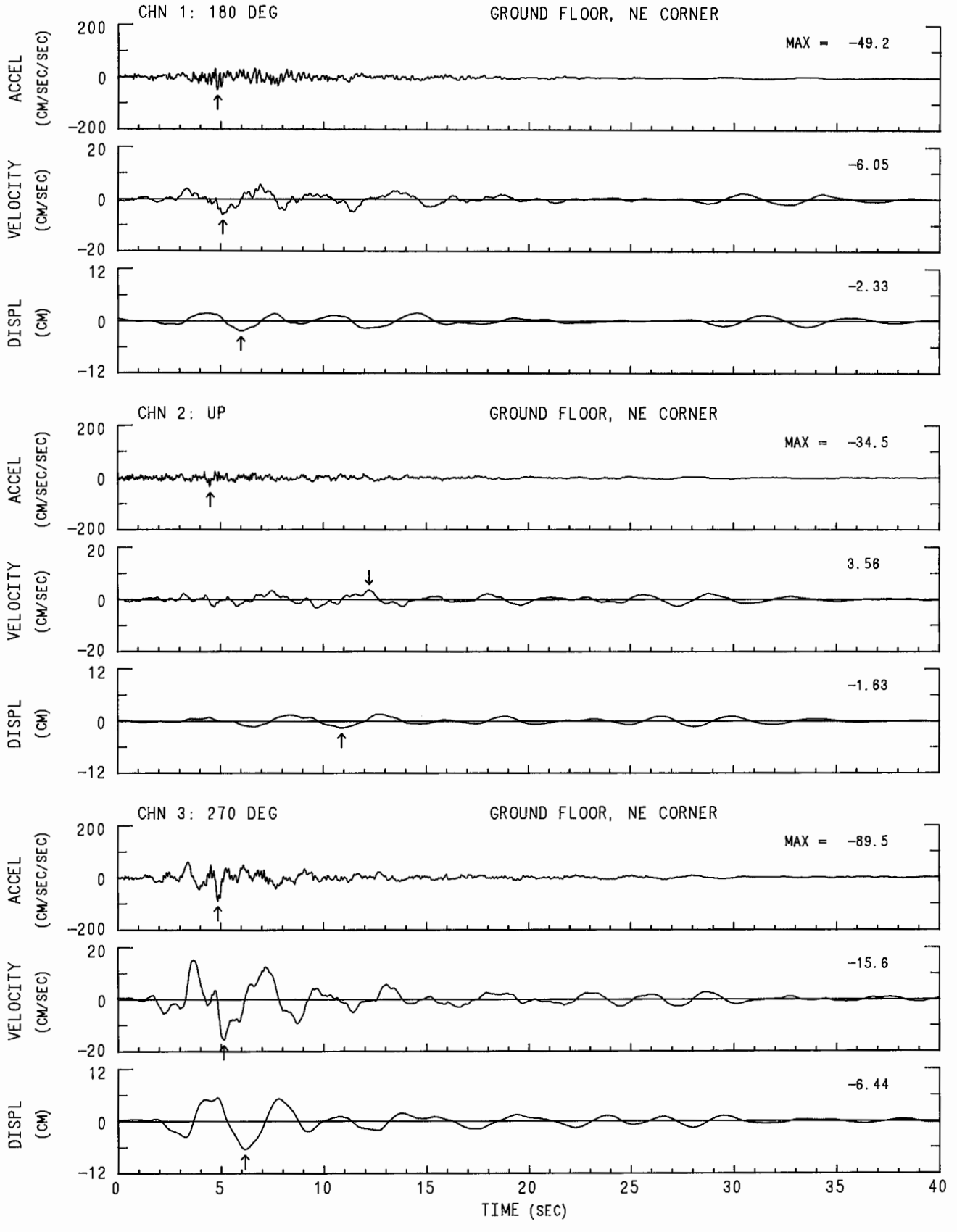
REDWOOD CITY - 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263

PHASE 1 ACCELERATION. RECORD ID: 58263-C0110-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
REDWOOD CITY – 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263

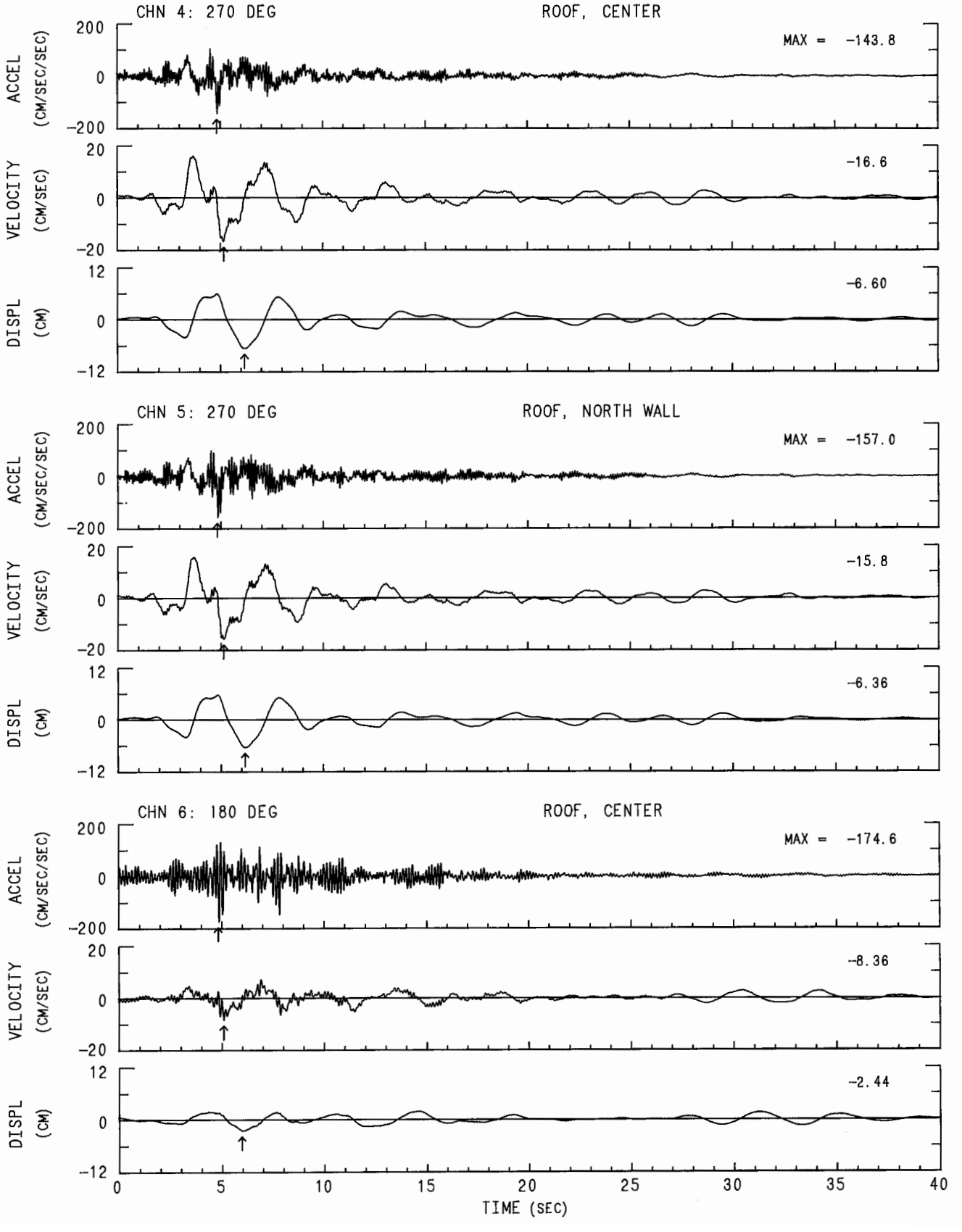
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58263-C0110-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
REDWOOD CITY - 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58263-C0110-89292.01



REDWOOD CITY - 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263

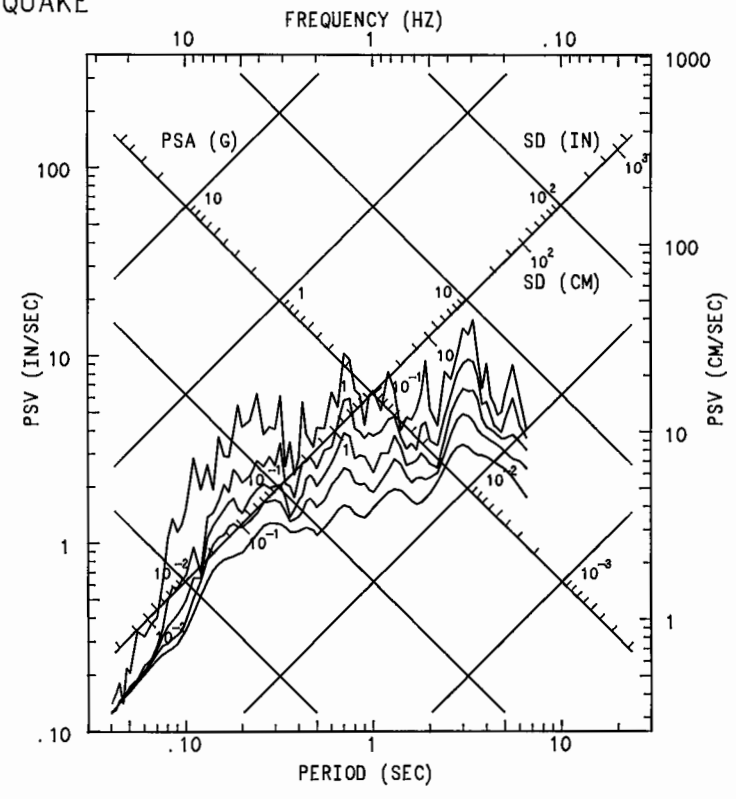
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

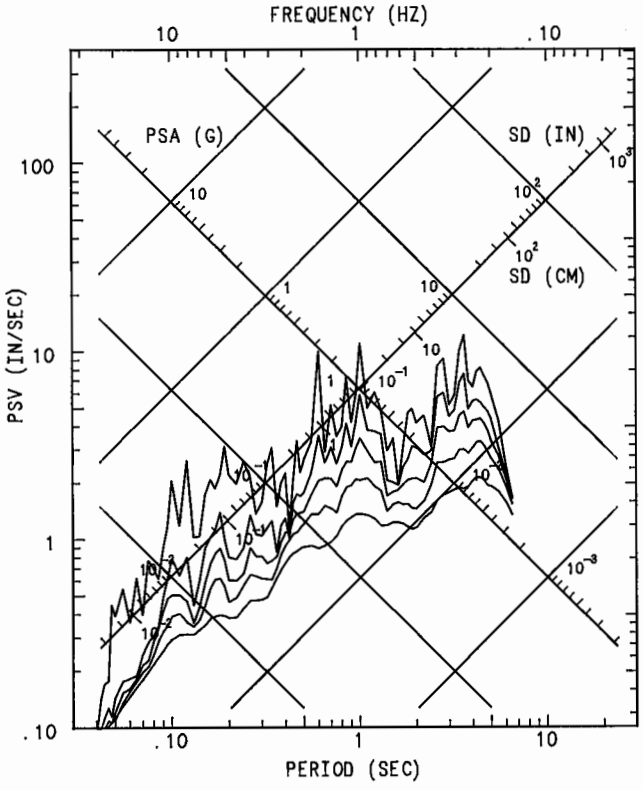
RECORD ID: 58263-C0110-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

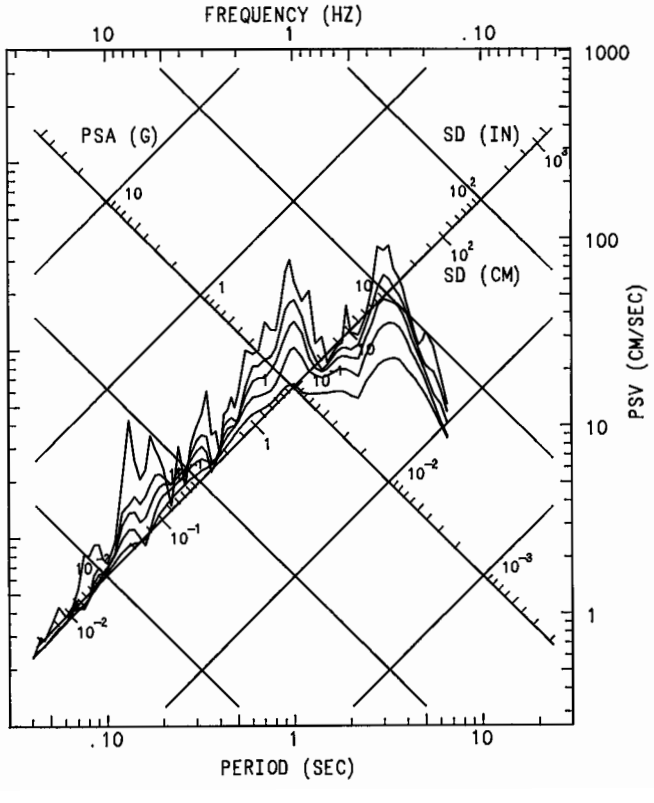
CHN 1: 180 DEG
GROUND FLOOR, NE CORNER



CHN 2: UP
GROUND FLOOR, NE CORNER



CHN 3: 270 DEG
GROUND FLOOR, NE CORNER



REDWOOD CITY – 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263

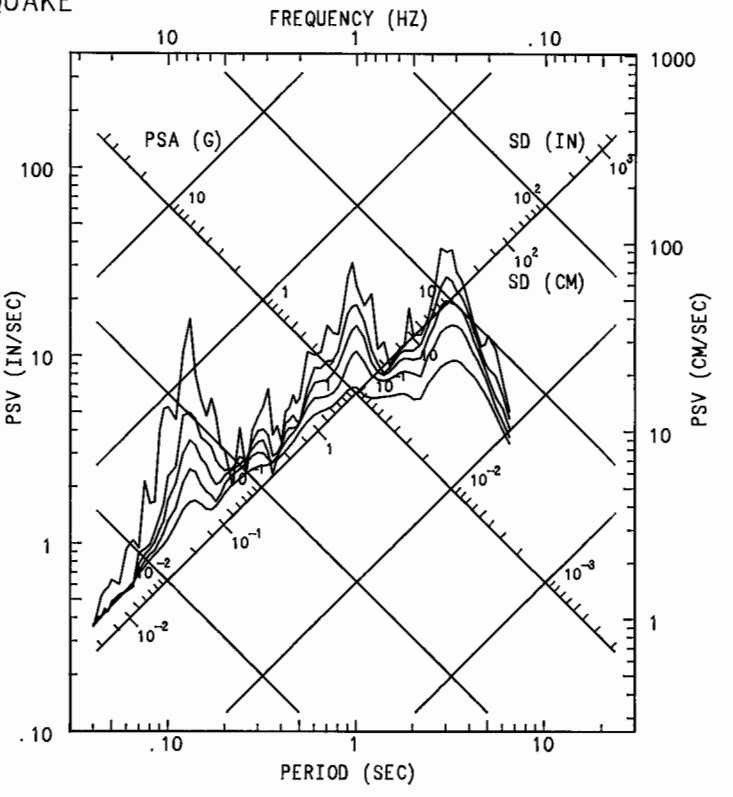
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

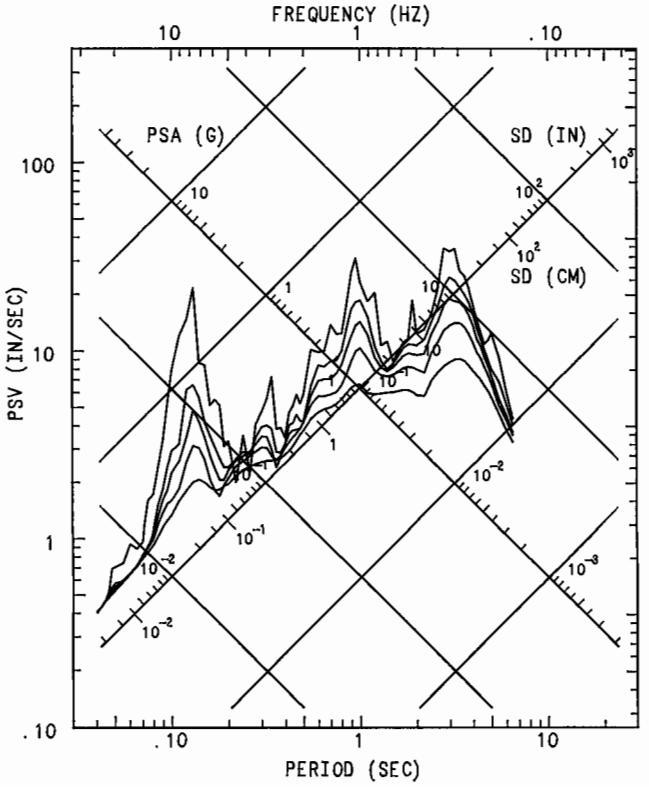
RECORD ID: 58263-C0110-89292.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

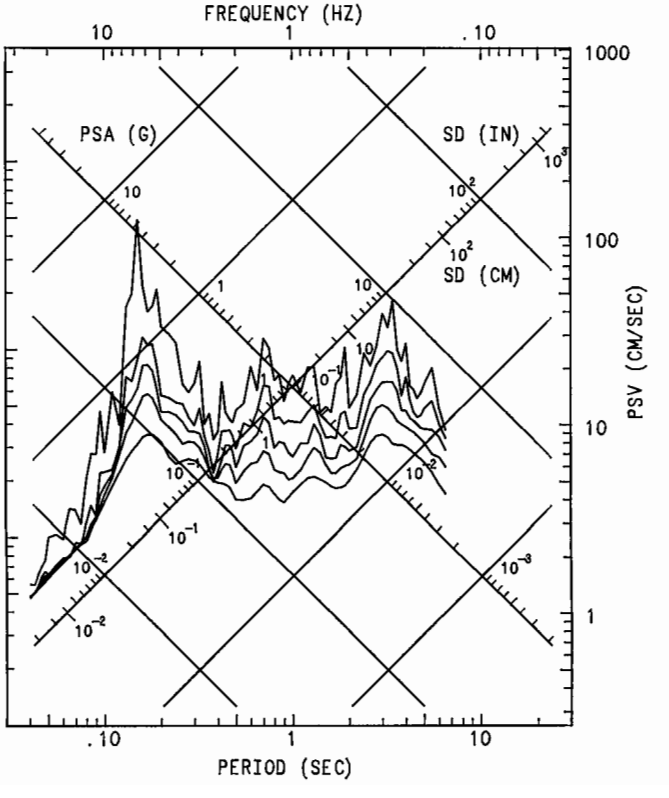
CHN 4: 270 DEG
ROOF, CENTER



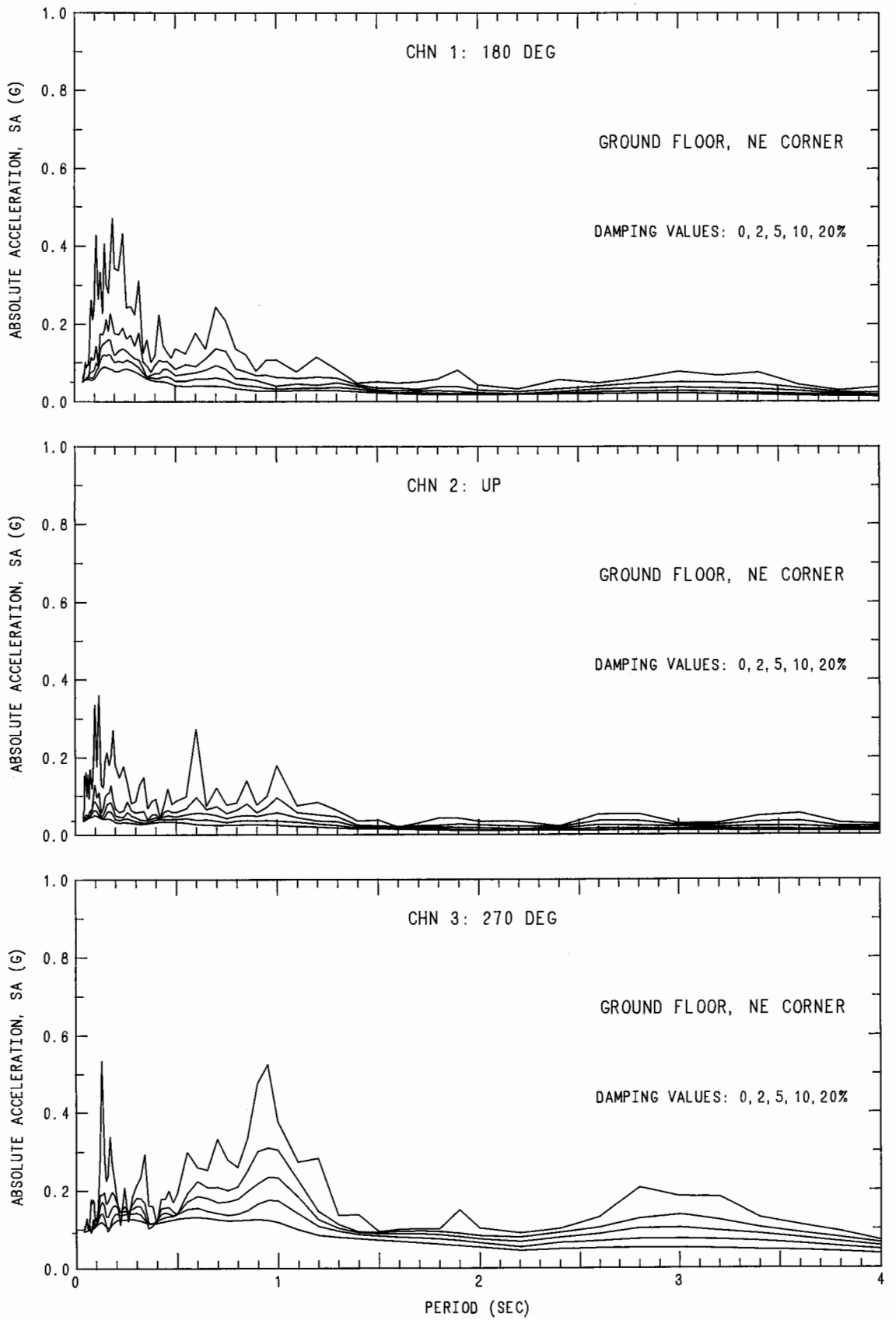
CHN 5: 270 DEG
ROOF, NORTH WALL



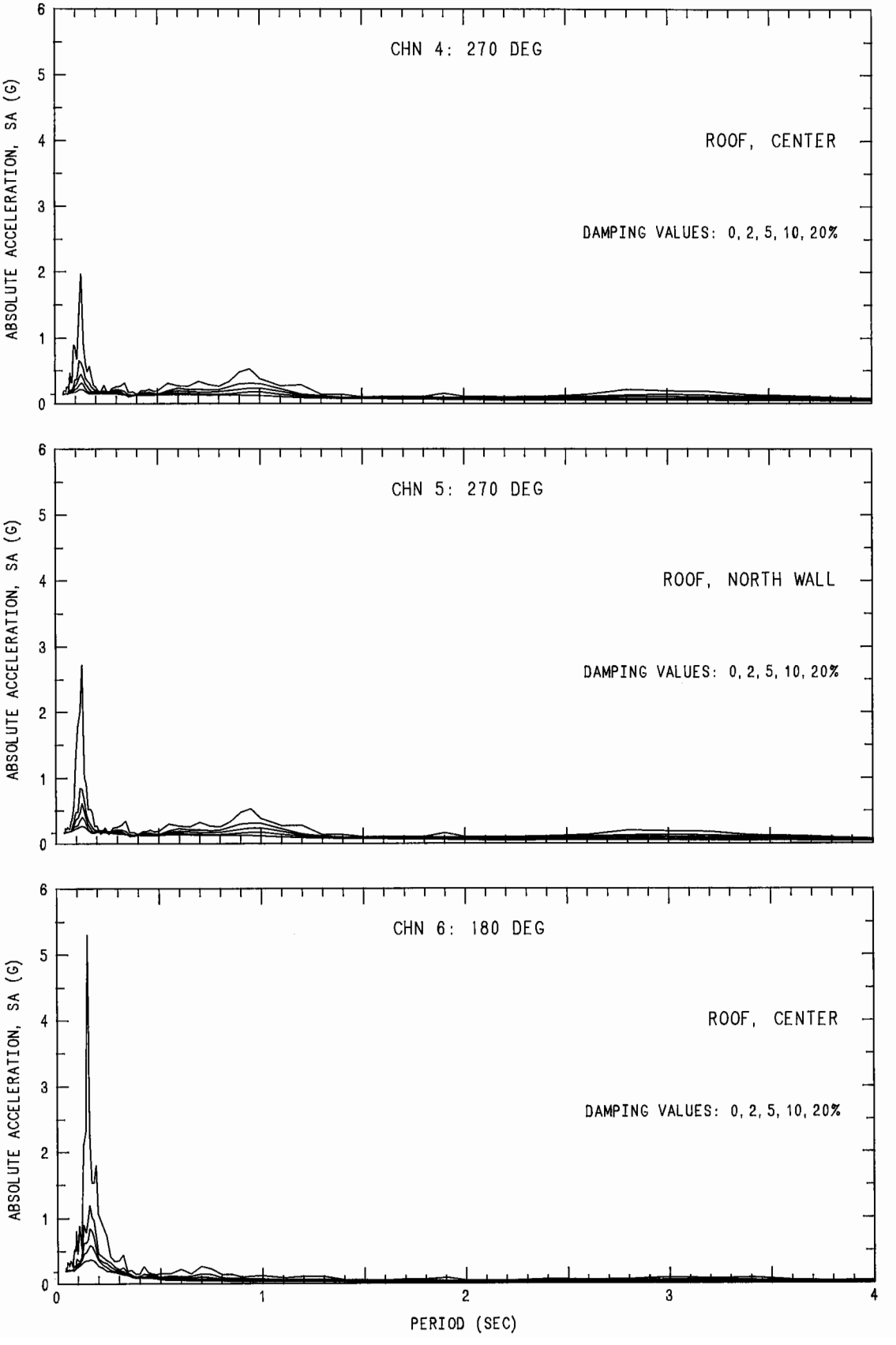
CHN 6: 180 DEG
ROOF, CENTER



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
REDWOOD CITY - 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58263-C0110-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



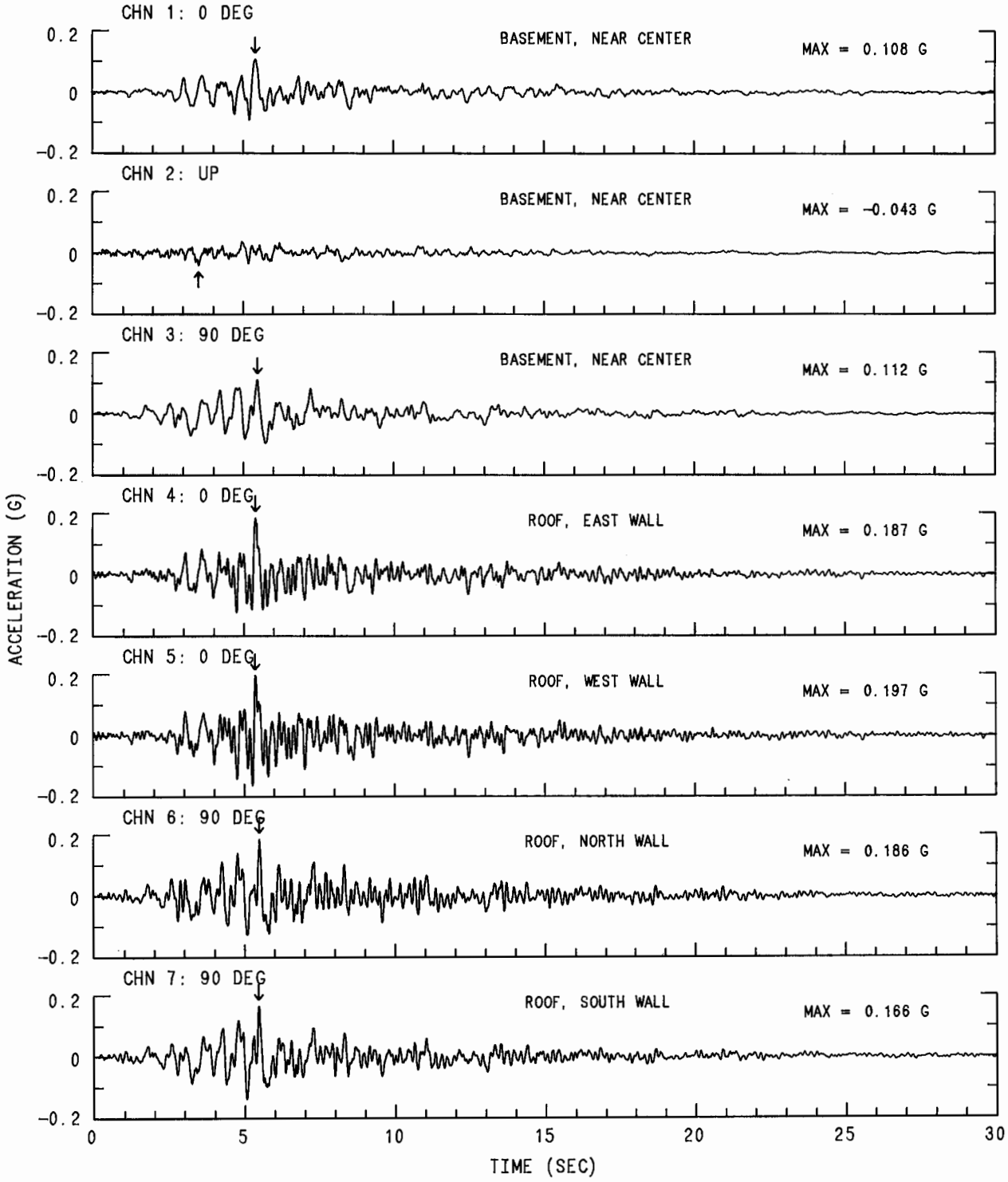
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
REDWOOD CITY - 3-STORY SCH. OFFICE BLDG.: CSMIP S/N 263
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58263-C0110-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

BELMONT – 2-STORY OFFICE BLDG.: CSMIP S/N 262

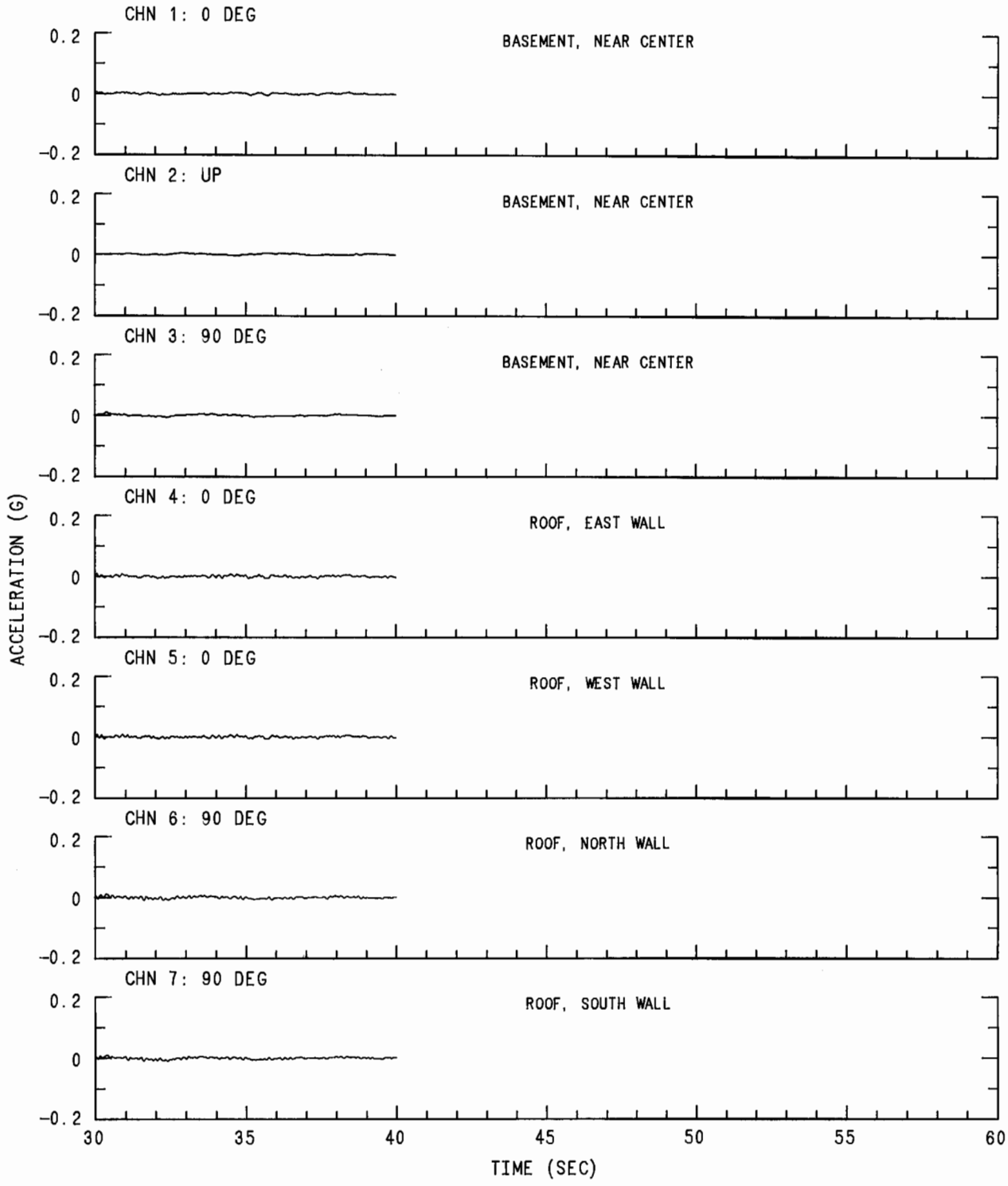
PHASE 1 ACCELERATION. RECORD ID: 58262-C0122-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

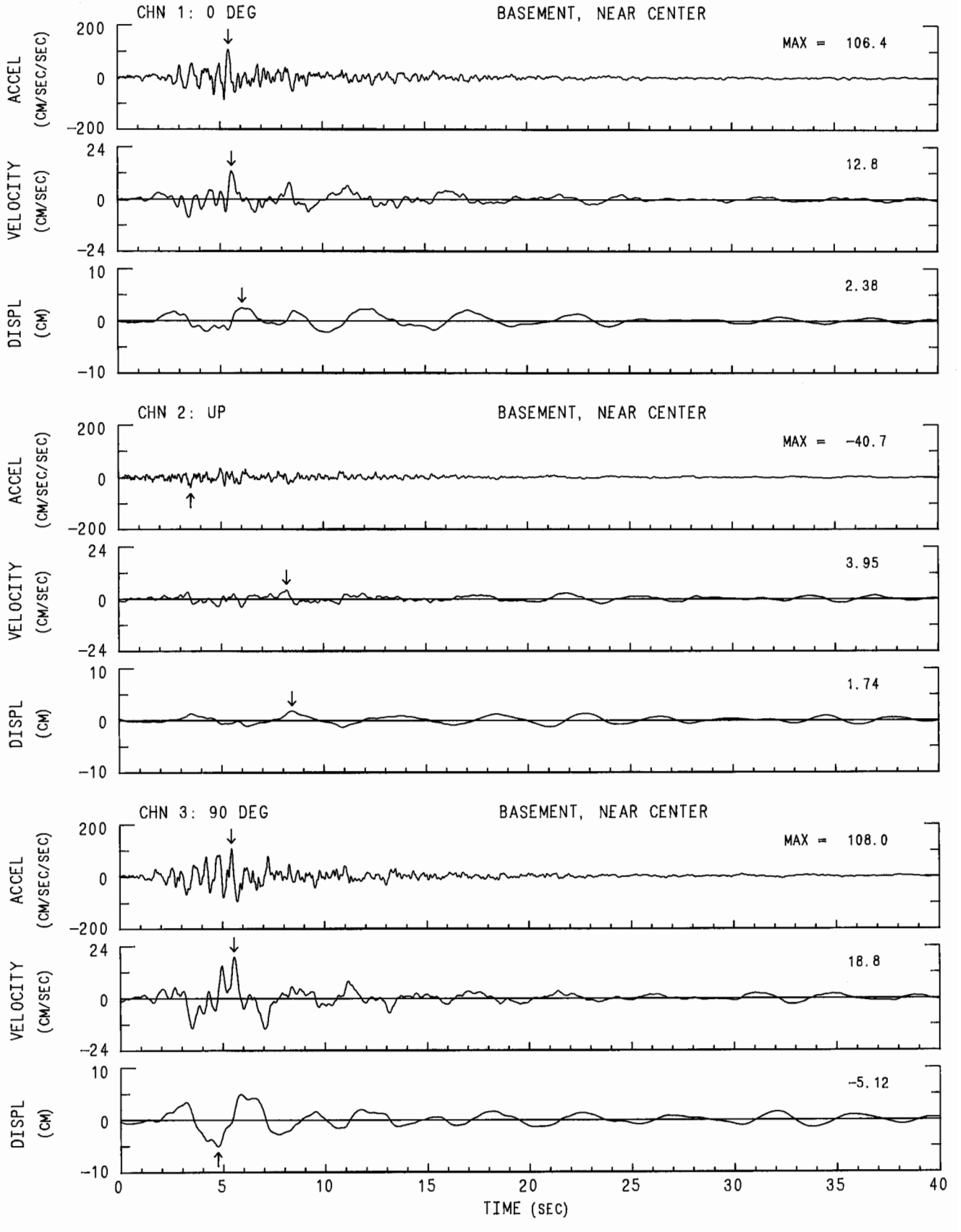
BELMONT - 2-STORY OFFICE BLDG.: CSMIP S/N 262

PHASE 1 ACCELERATION. RECORD ID: 58262-C0122-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BELMONT – 2-STORY OFFICE BLDG.: CSMIP S/N 262

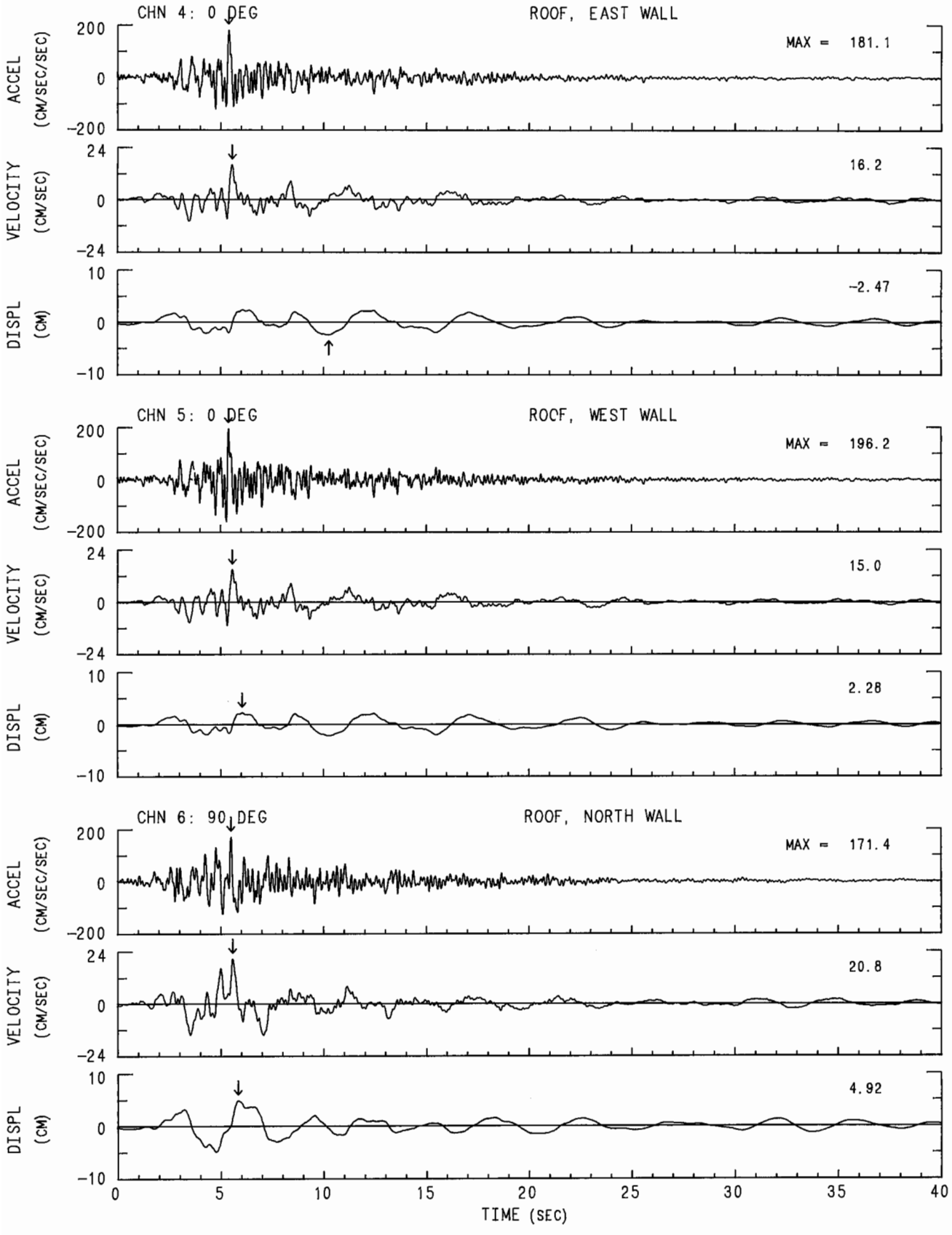
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58262-C0122-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BELMONT – 2-STORY OFFICE BLDG.: CSMIP S/N 262

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

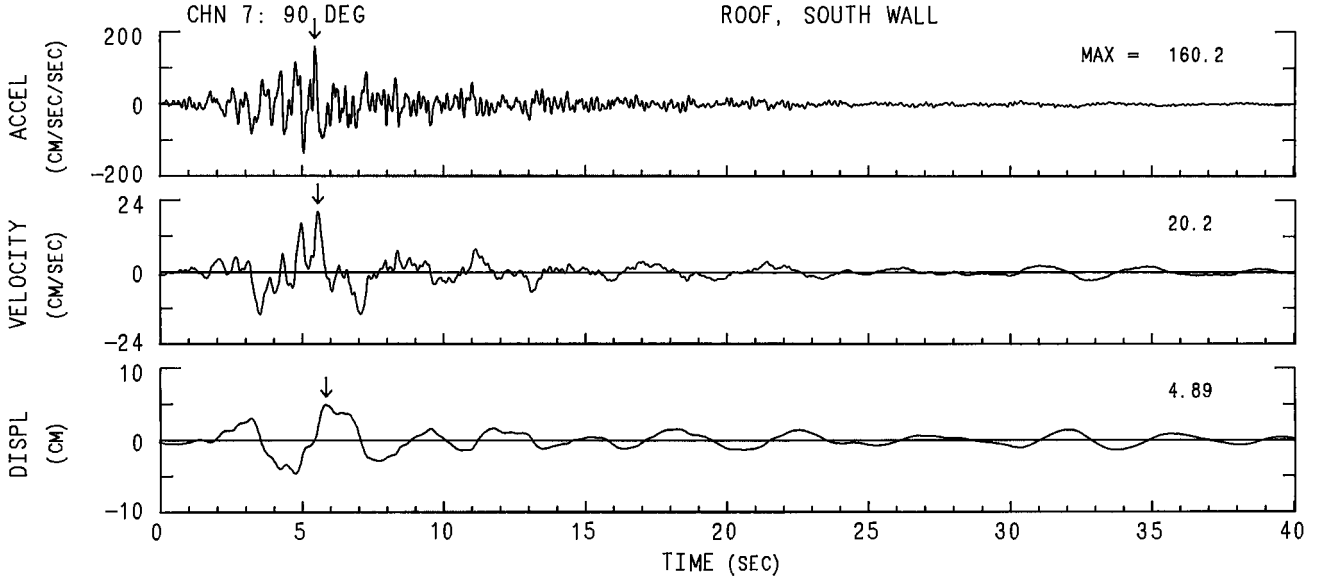
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58262-C0122-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BELMONT - 2-STORY OFFICE BLDG.: CSMIP S/N 262

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58262-C0122-89292.01



BELMONT - 2-STORY OFFICE BLDG. : CSMIP S/N 262

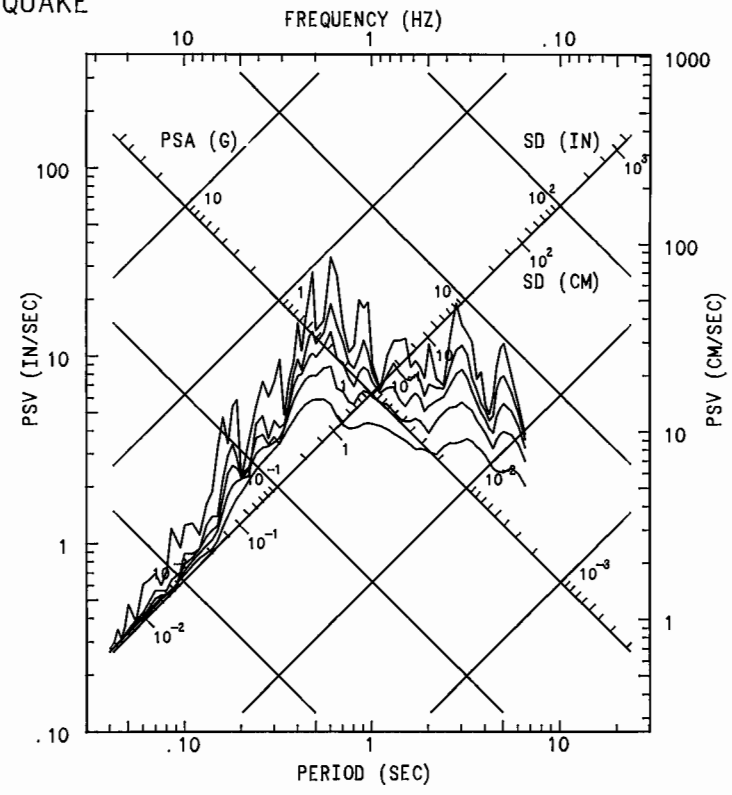
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

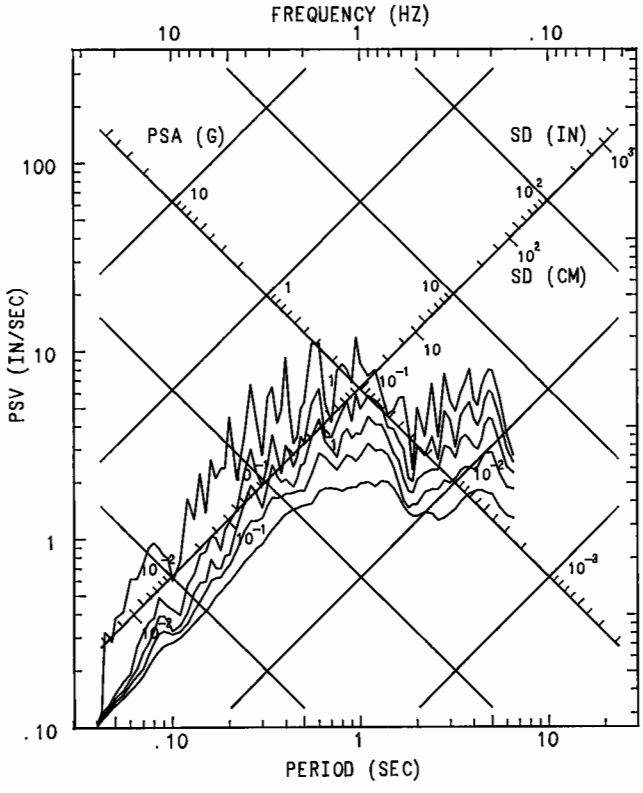
RECORD ID: 58262-C0122-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

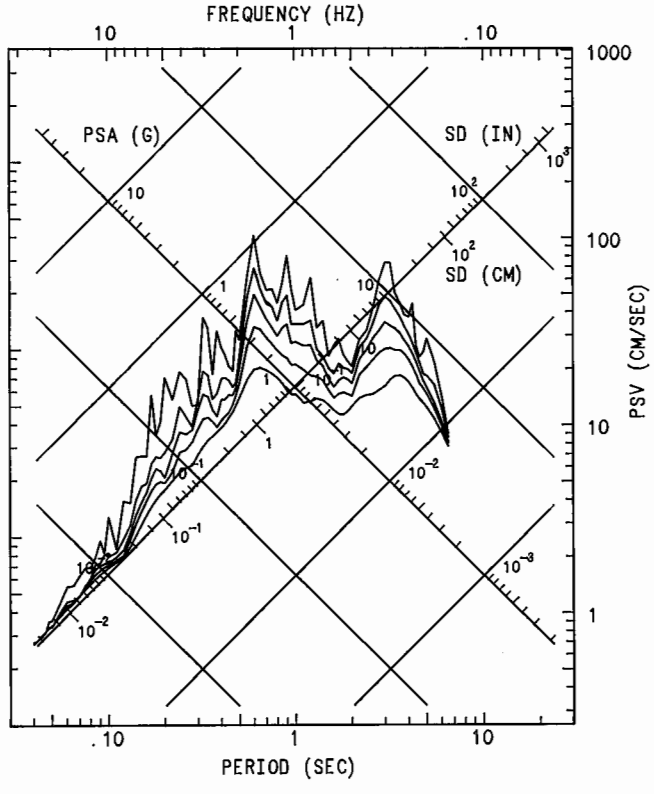
CHN 1: 0 DEG
BASEMENT, NEAR CENTER



CHN 2: UP
BASEMENT, NEAR CENTER



CHN 3: 90 DEG
BASEMENT, NEAR CENTER



BELMONT - 2-STORY OFFICE BLDG. : CSMIP S/N 262

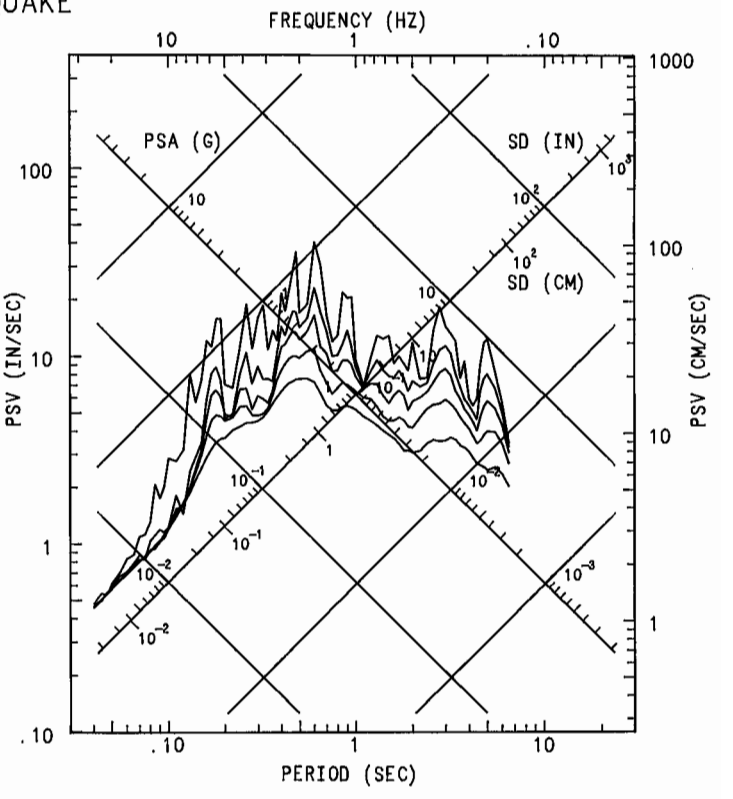
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

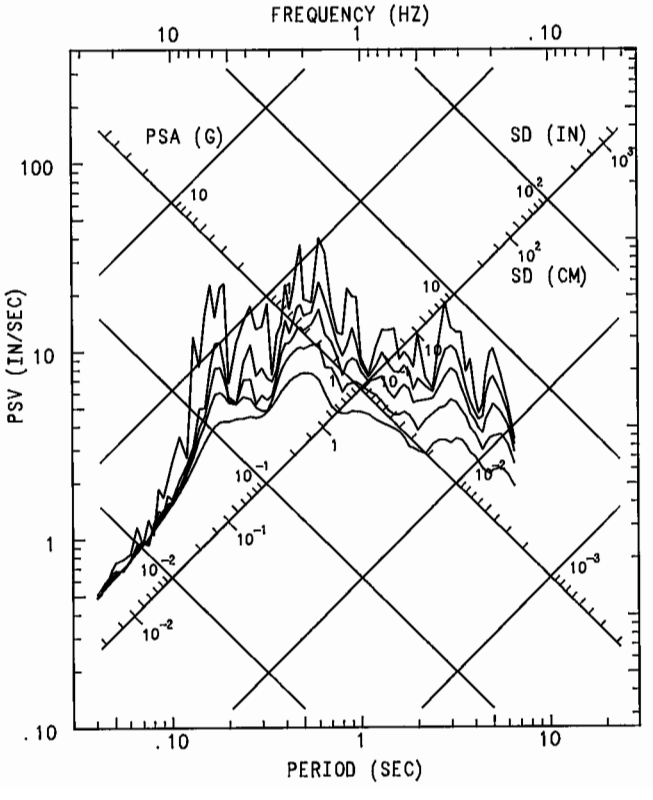
RECORD ID: 58262-C0122-89292.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

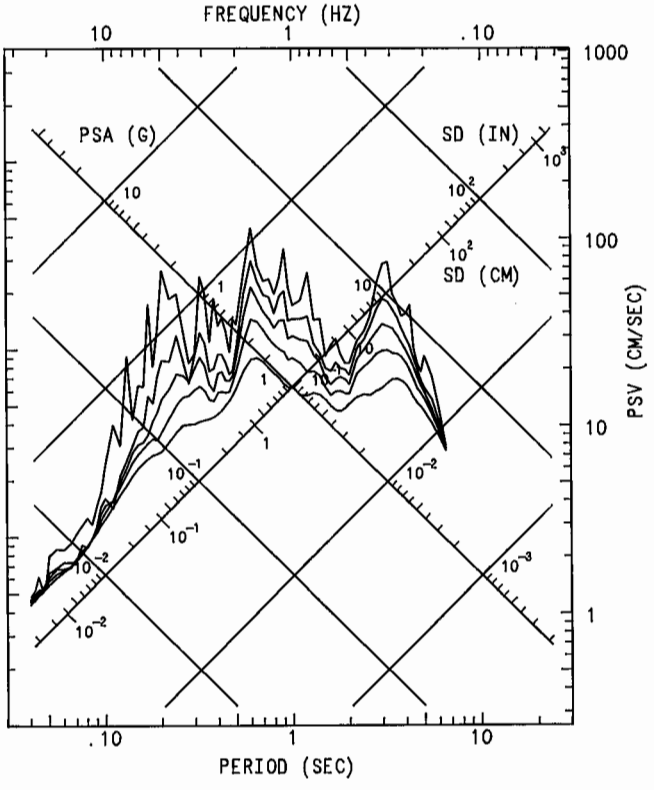
CHN 4: 0 DEG
ROOF, EAST WALL



CHN 5: 0 DEG
ROOF, WEST WALL



CHN 6: 90 DEG
ROOF, NORTH WALL



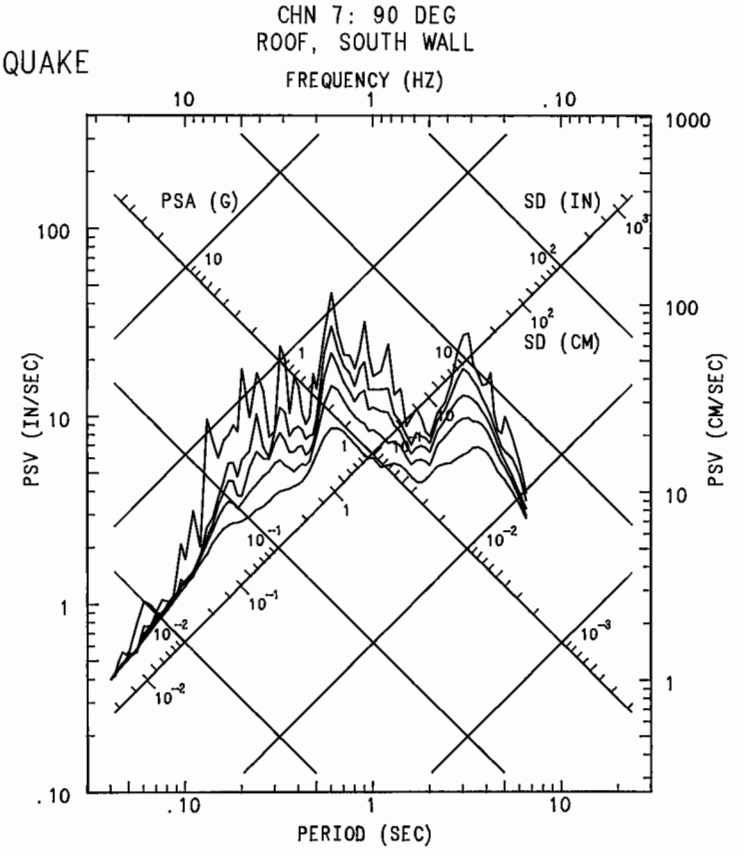
BELMONT – 2–STORY OFFICE BLDG. : CSMIP S/N 262

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

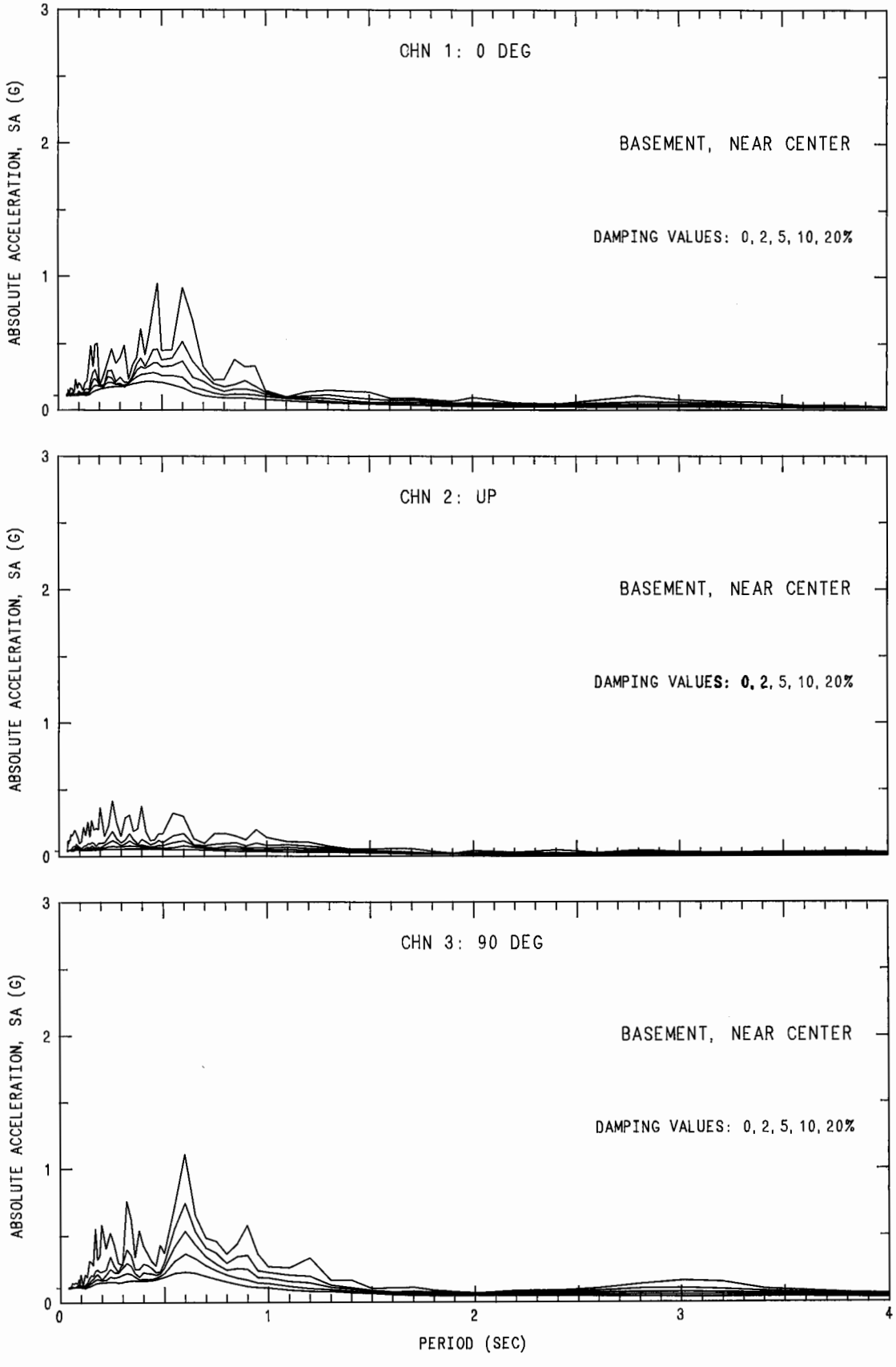
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

RECORD ID: 58262-C0122-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

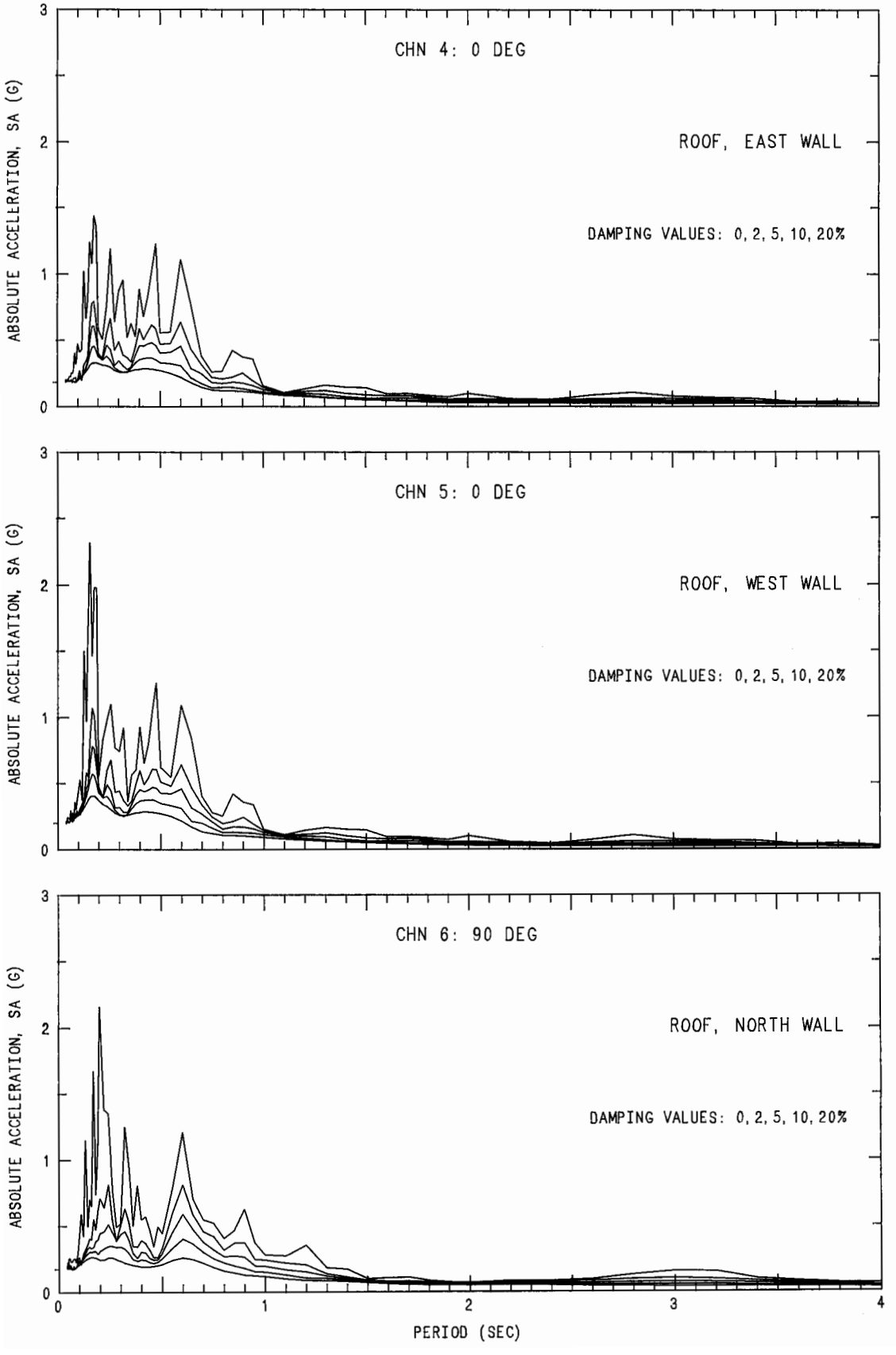


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BELMONT - 2-STORY OFFICE BLDG.: CSMIP S/N 262
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58262-C0122-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



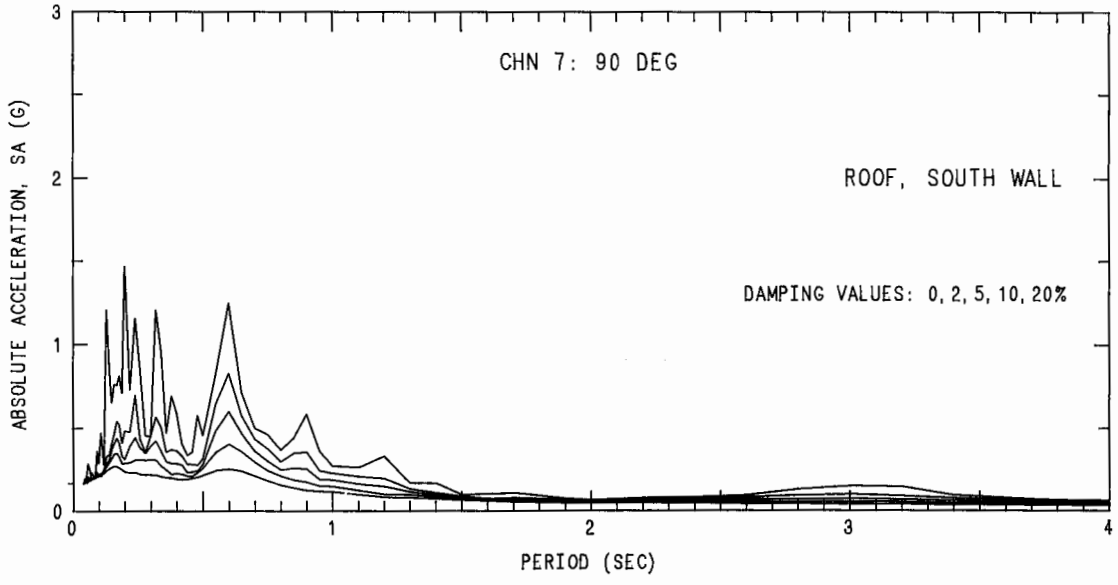
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BELMONT – 2-STORY OFFICE BLDG.: CSMIP S/N 262

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58262-C0122-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BELMONT - 2-STORY OFFICE BLDG.: CSMIP S/N 262

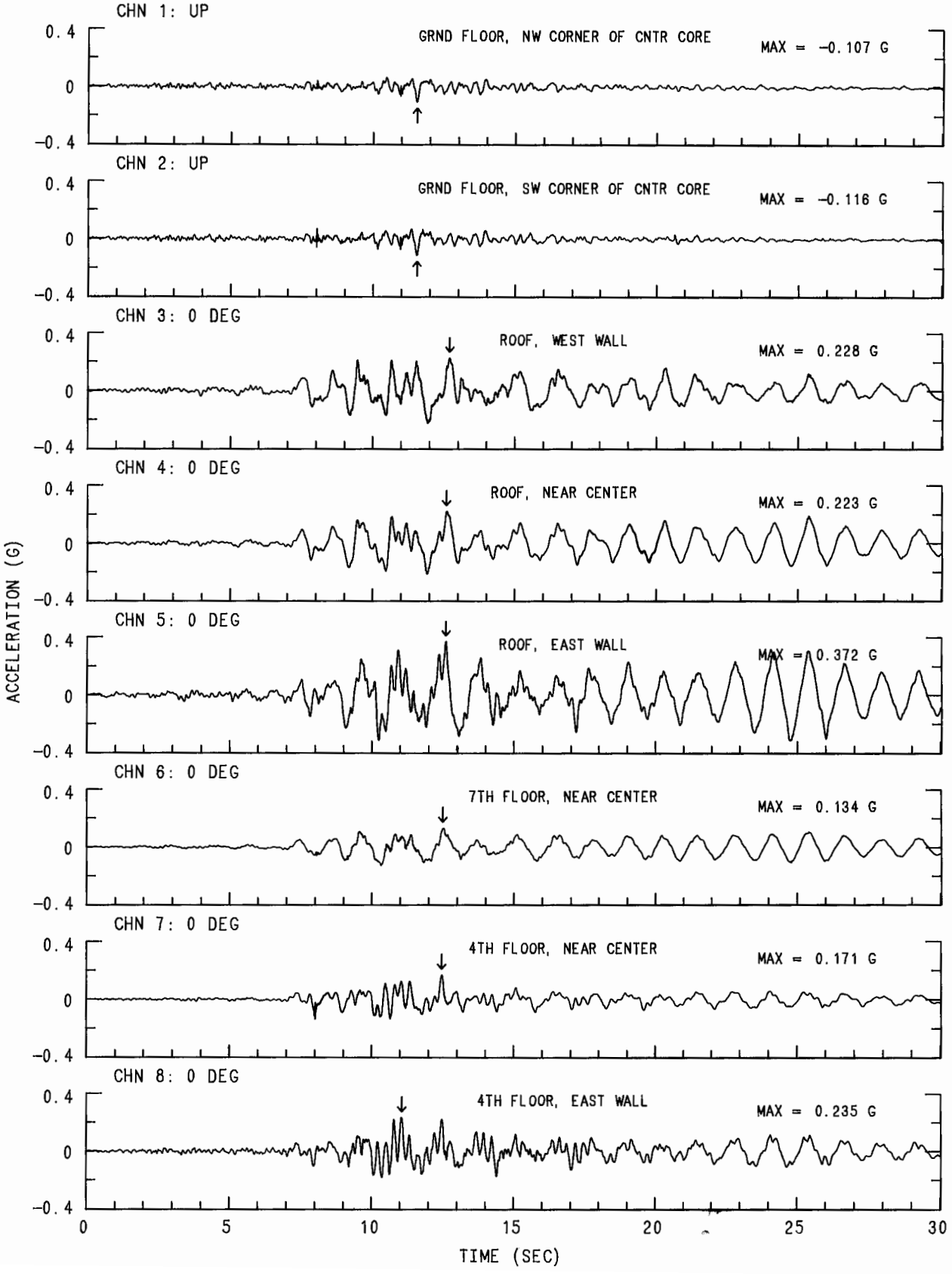
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58262-C0122-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

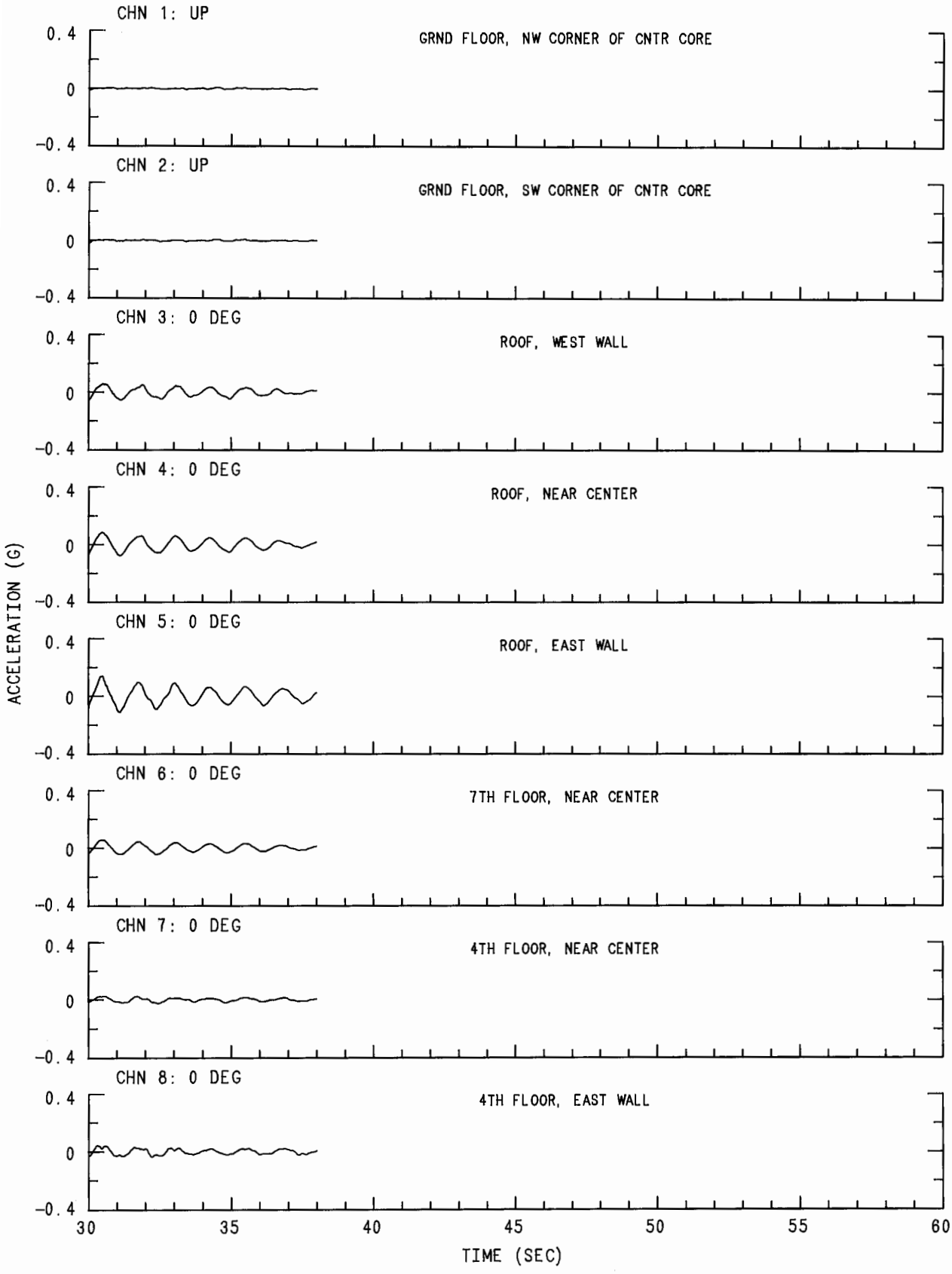
PHASE 1 ACCELERATION. RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

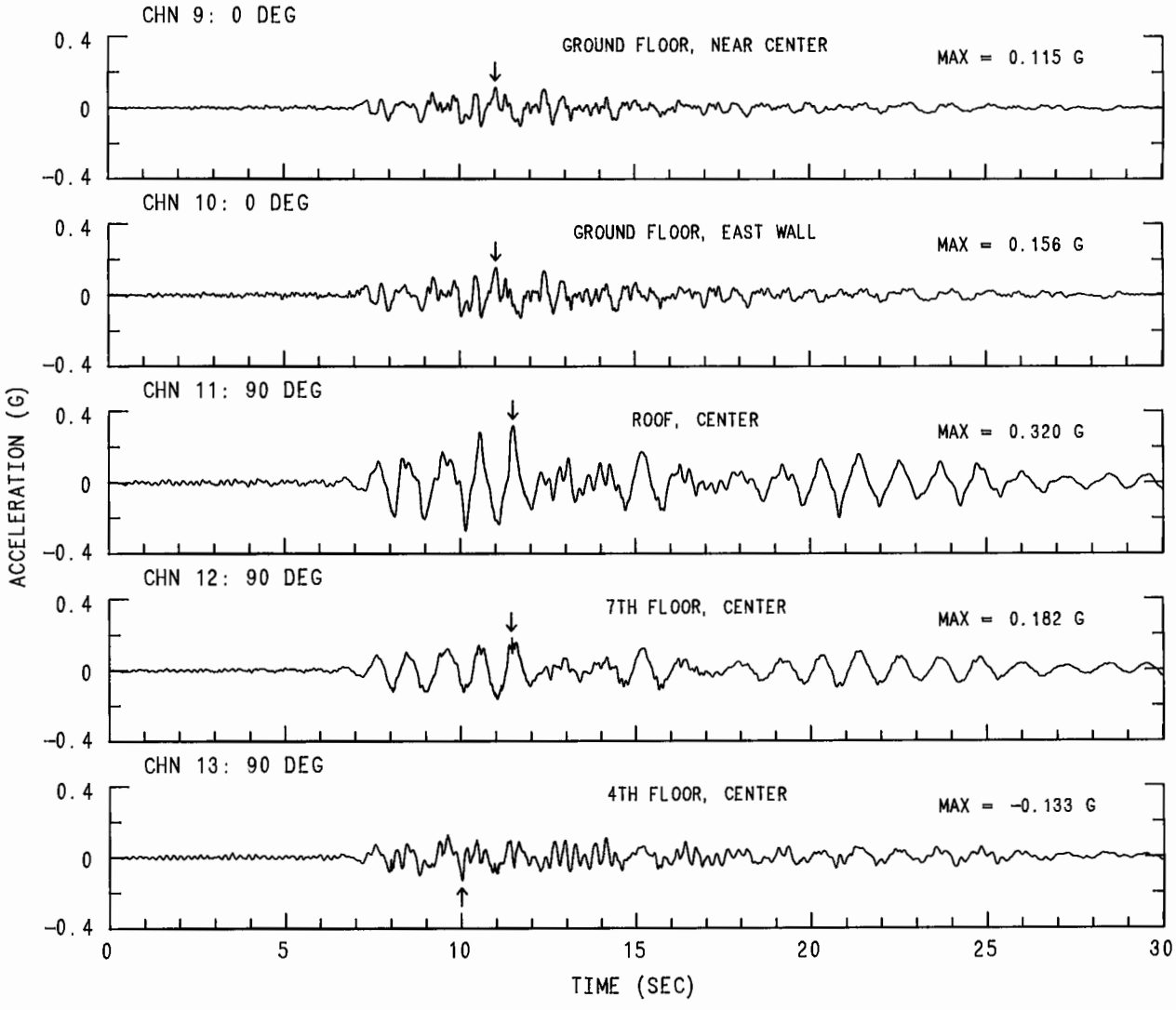
PHASE 1 ACCELERATION. RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

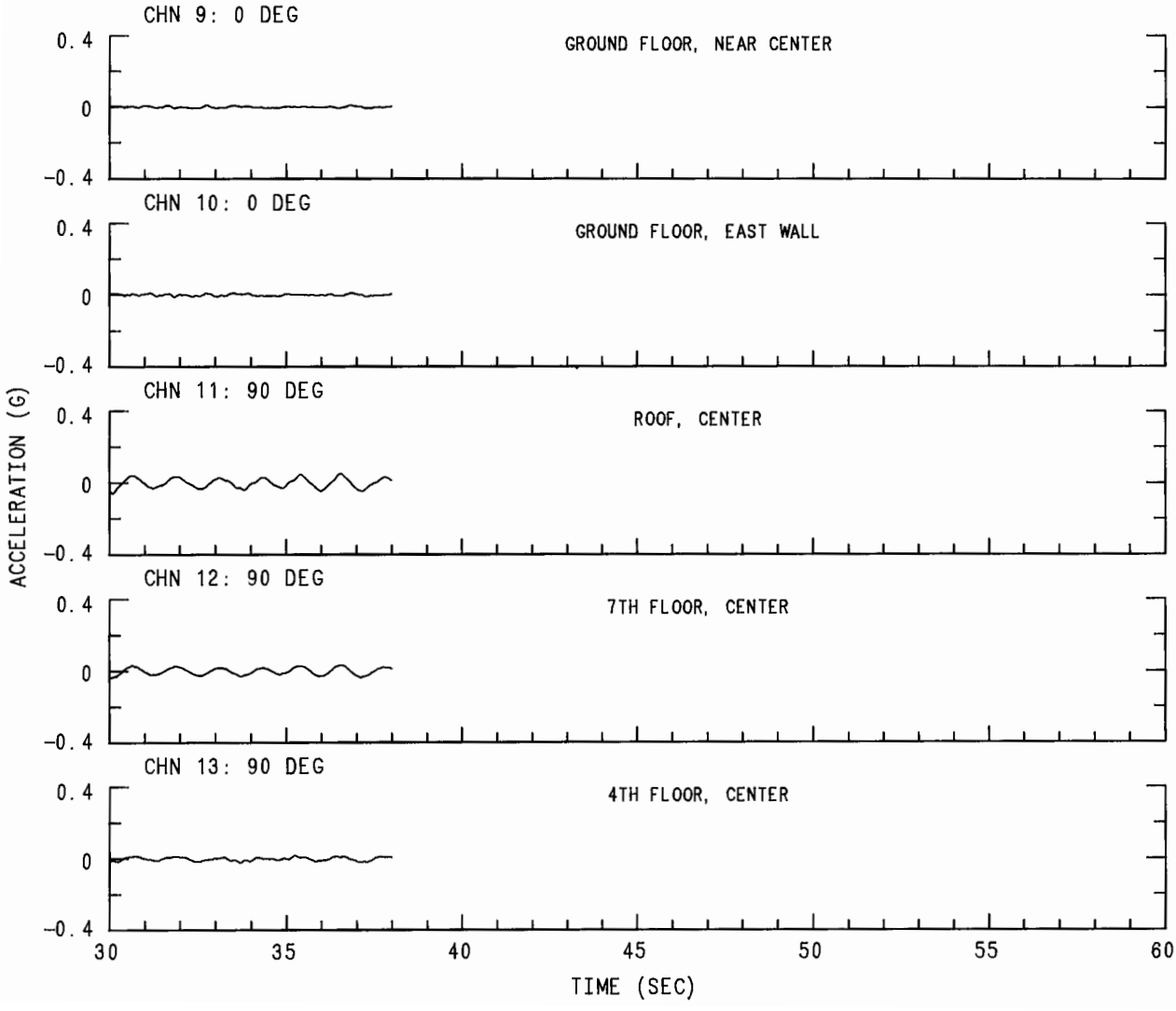
PHASE 1 ACCELERATION. RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 1 ACCELERATION. RECORD ID: 58394-C0216-89293.02

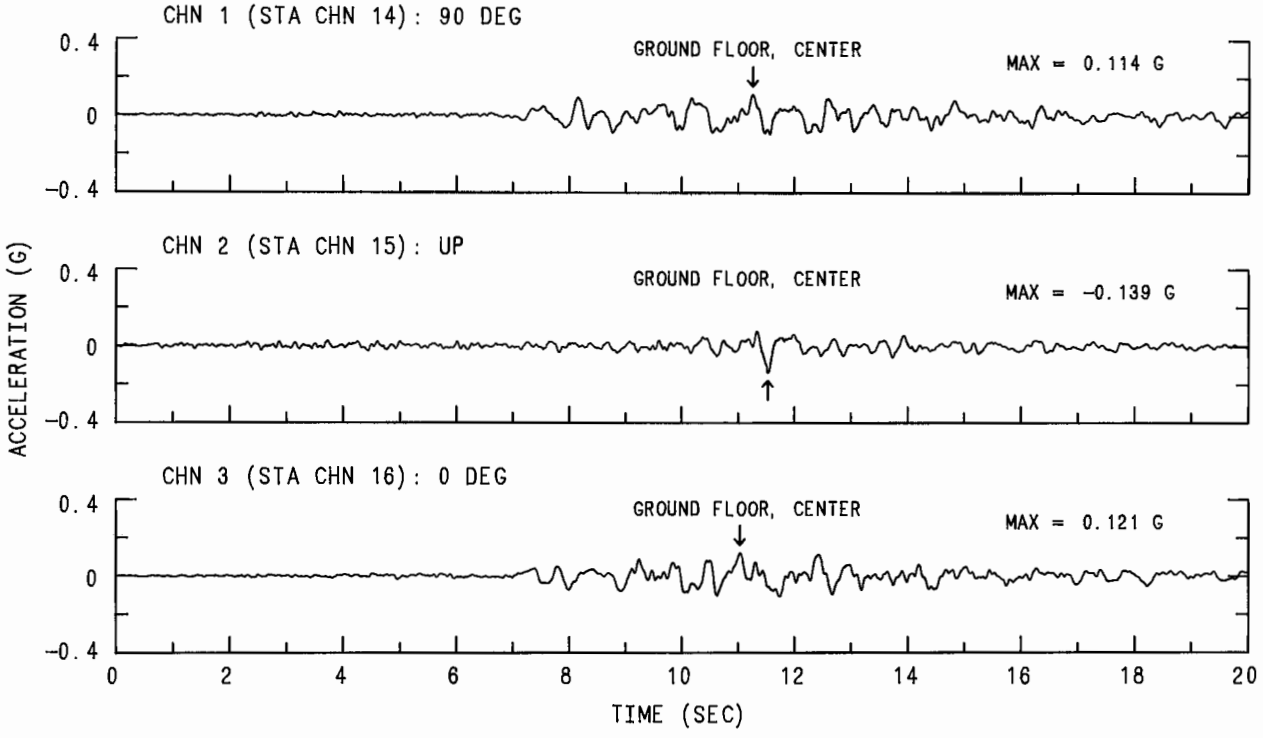


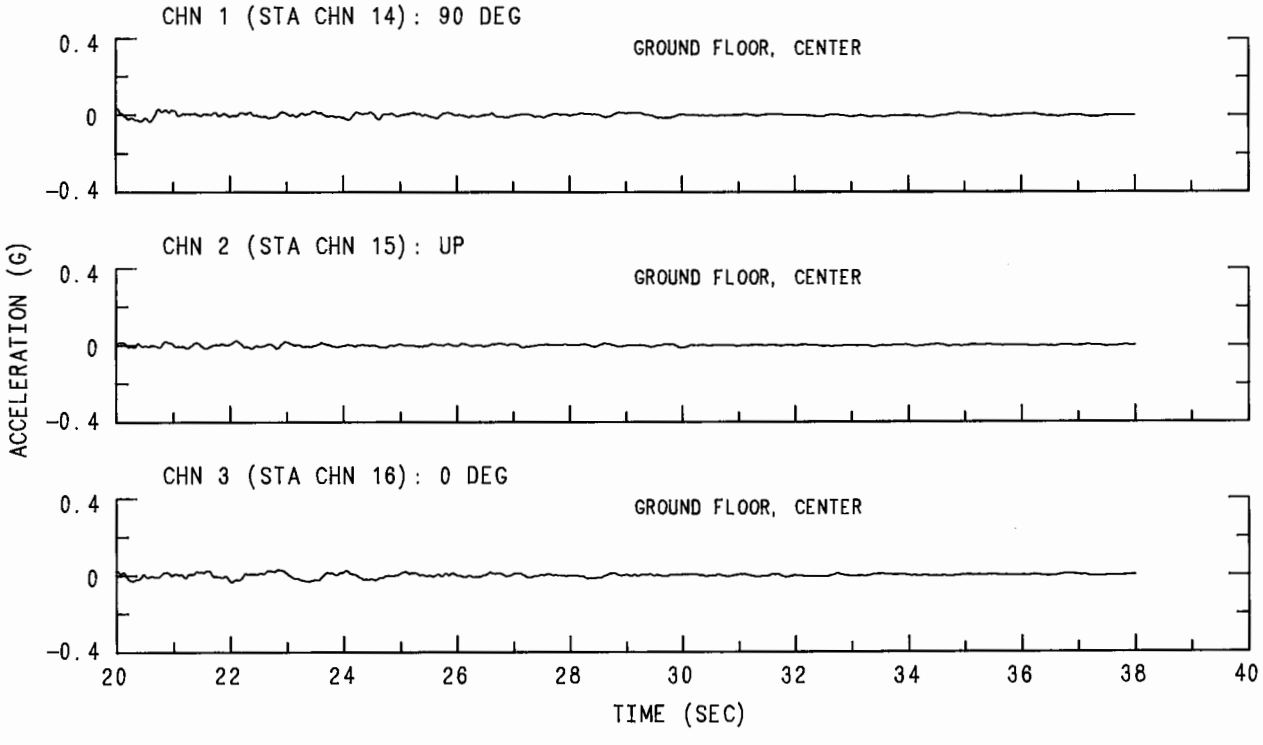
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO - 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 1 ACCELERATION

RECORD ID: 58394-S1220-89293.02

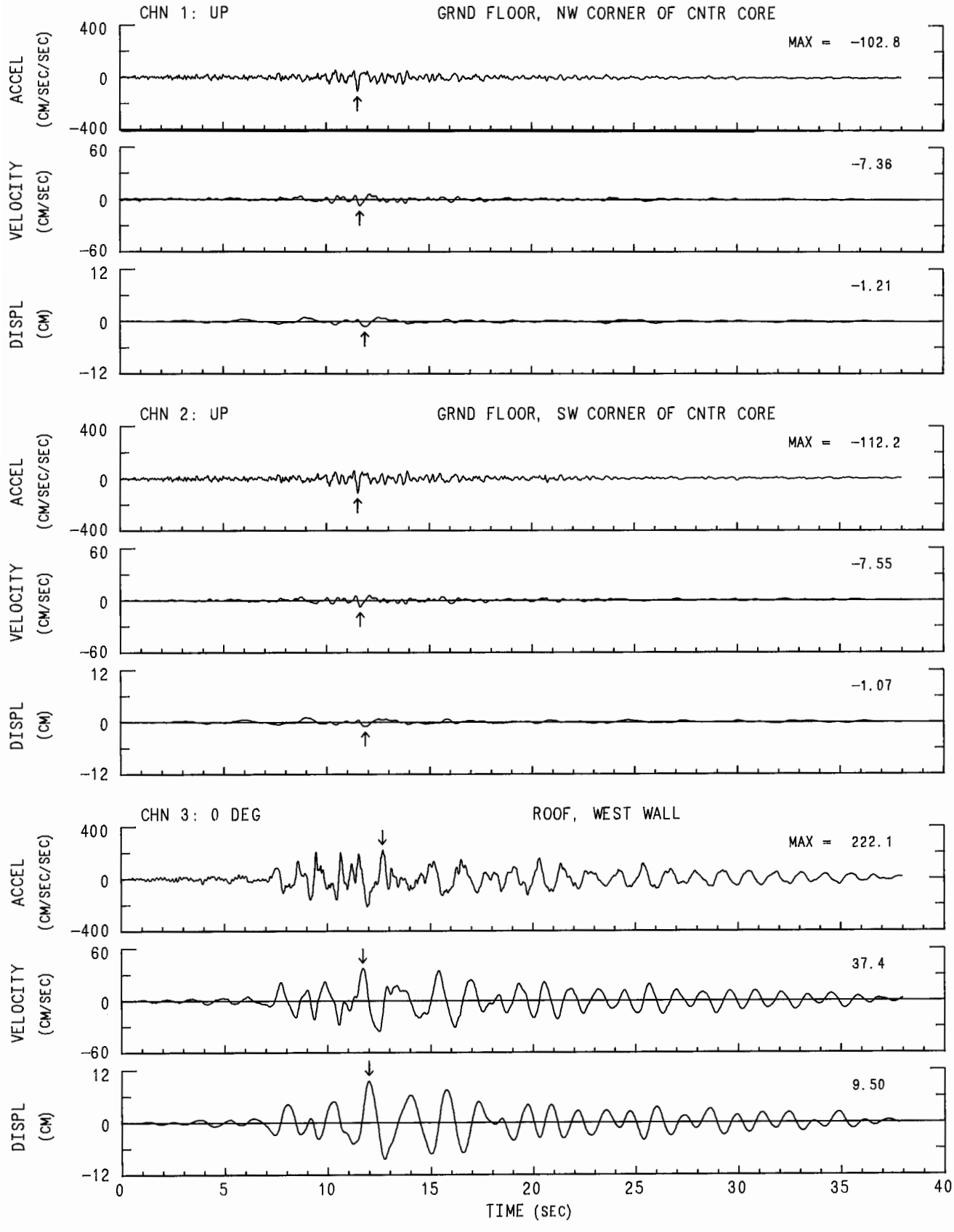




SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

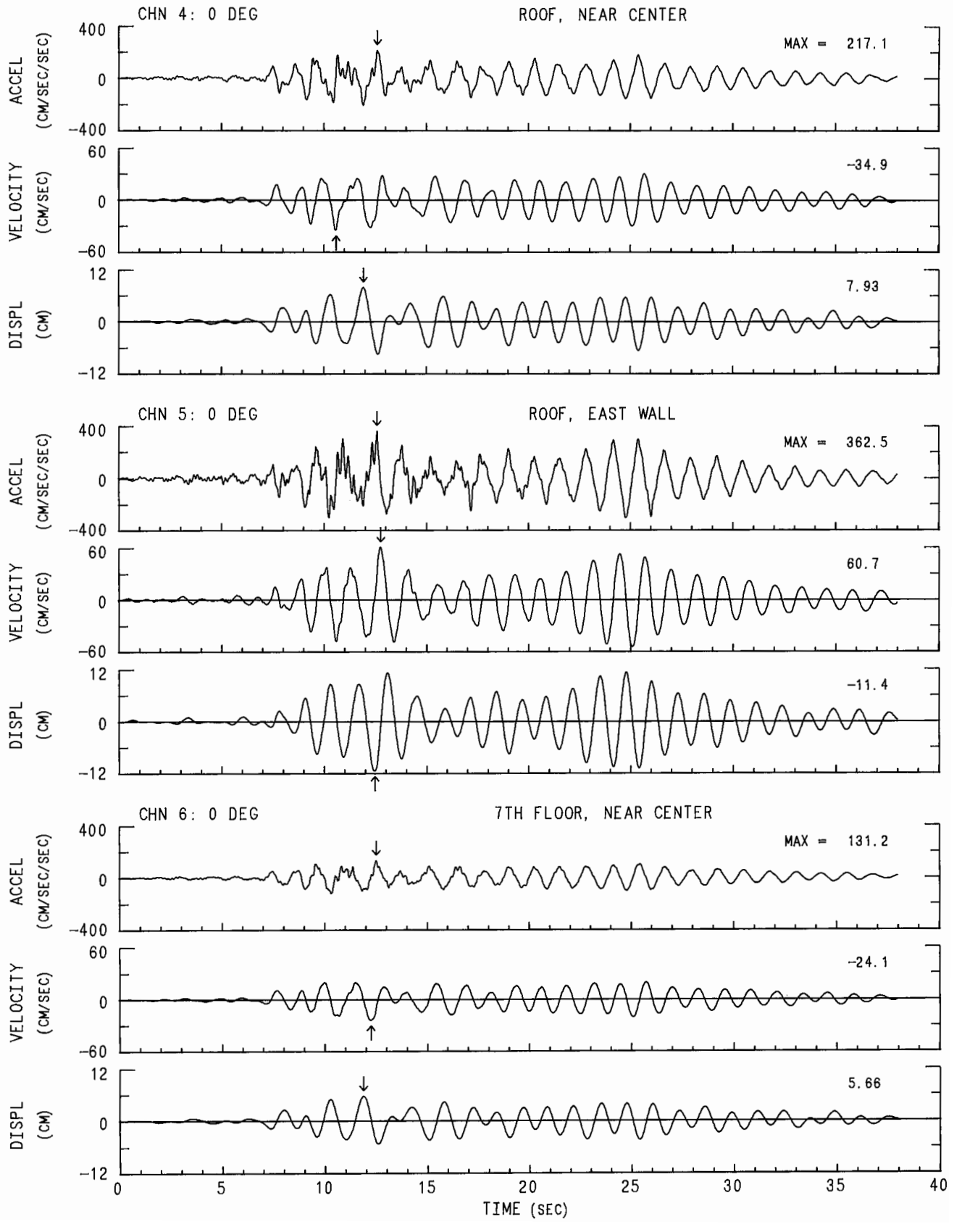
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

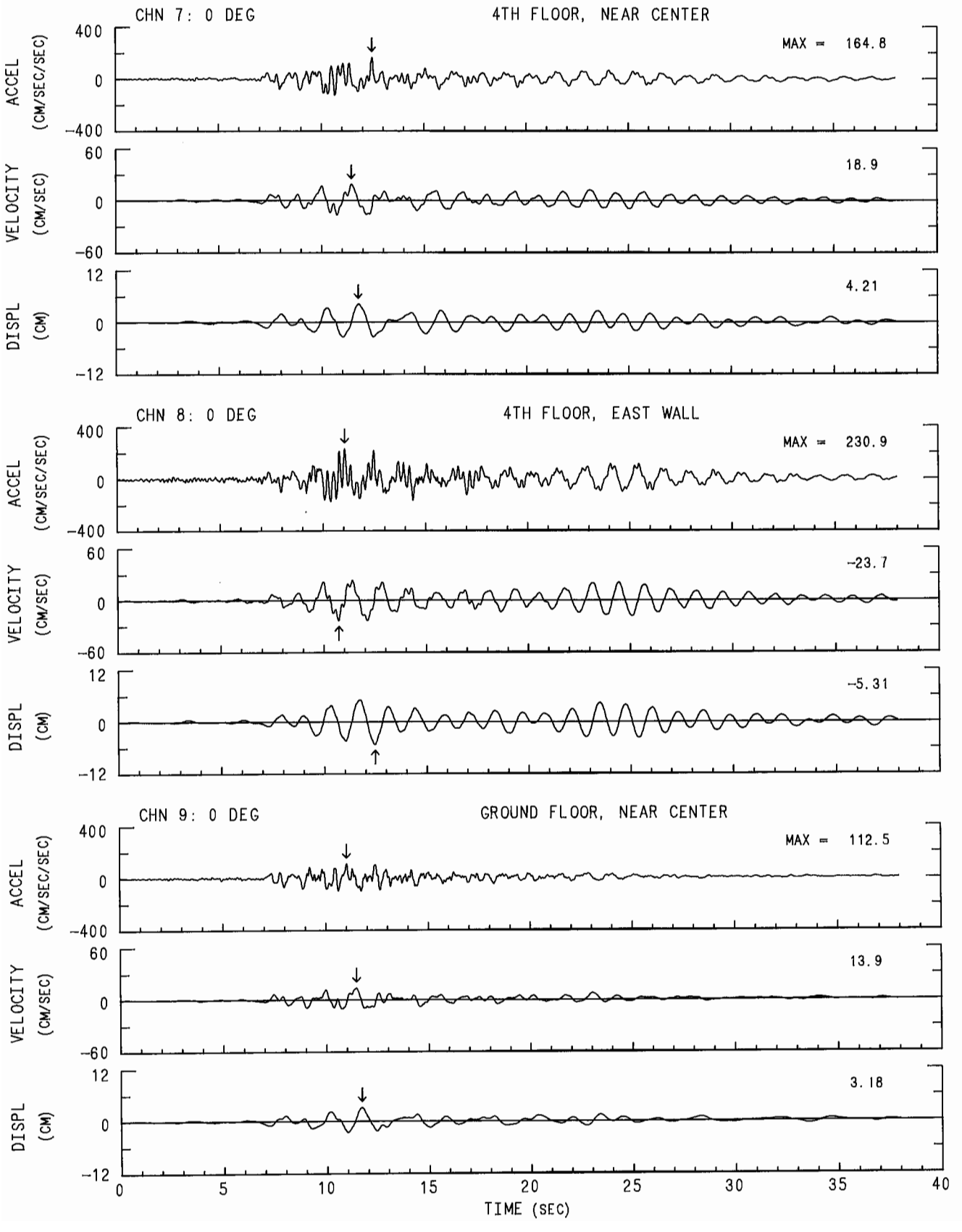
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

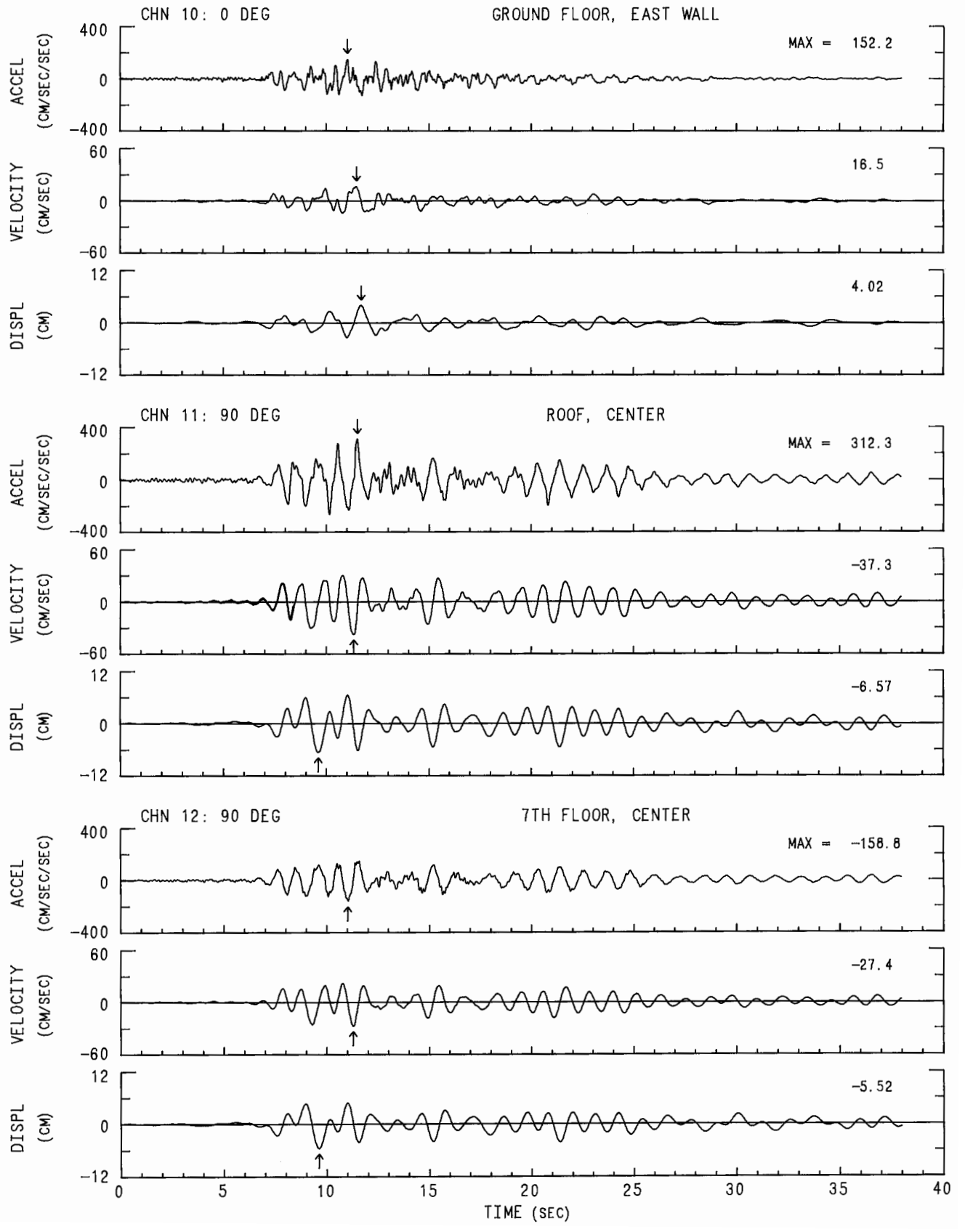
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

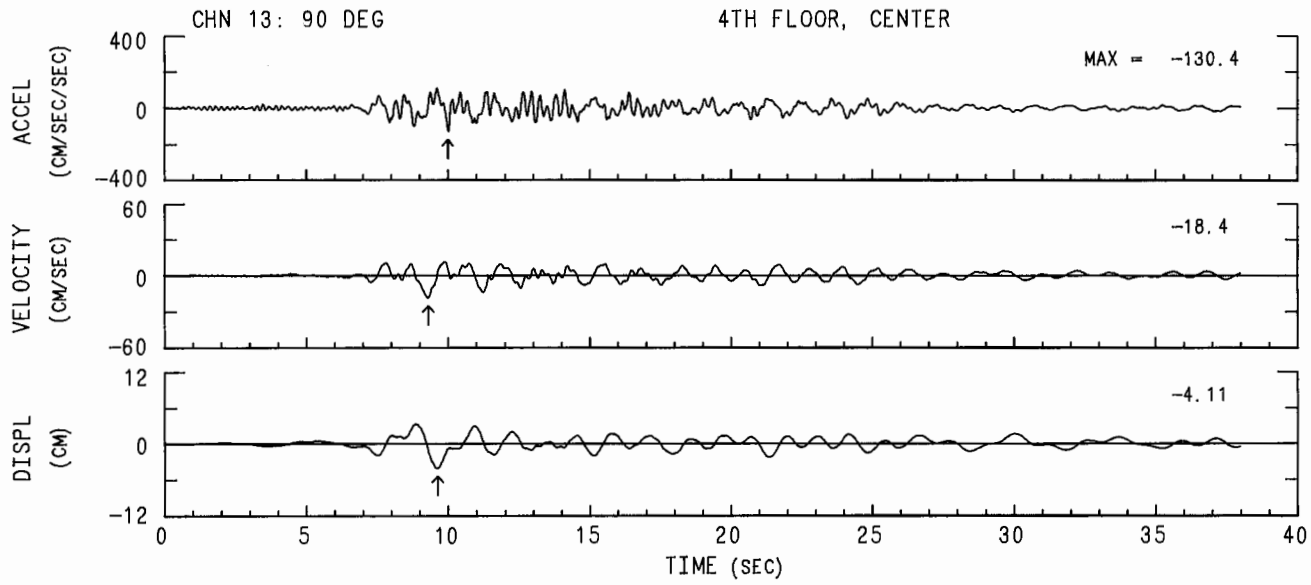
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9–STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

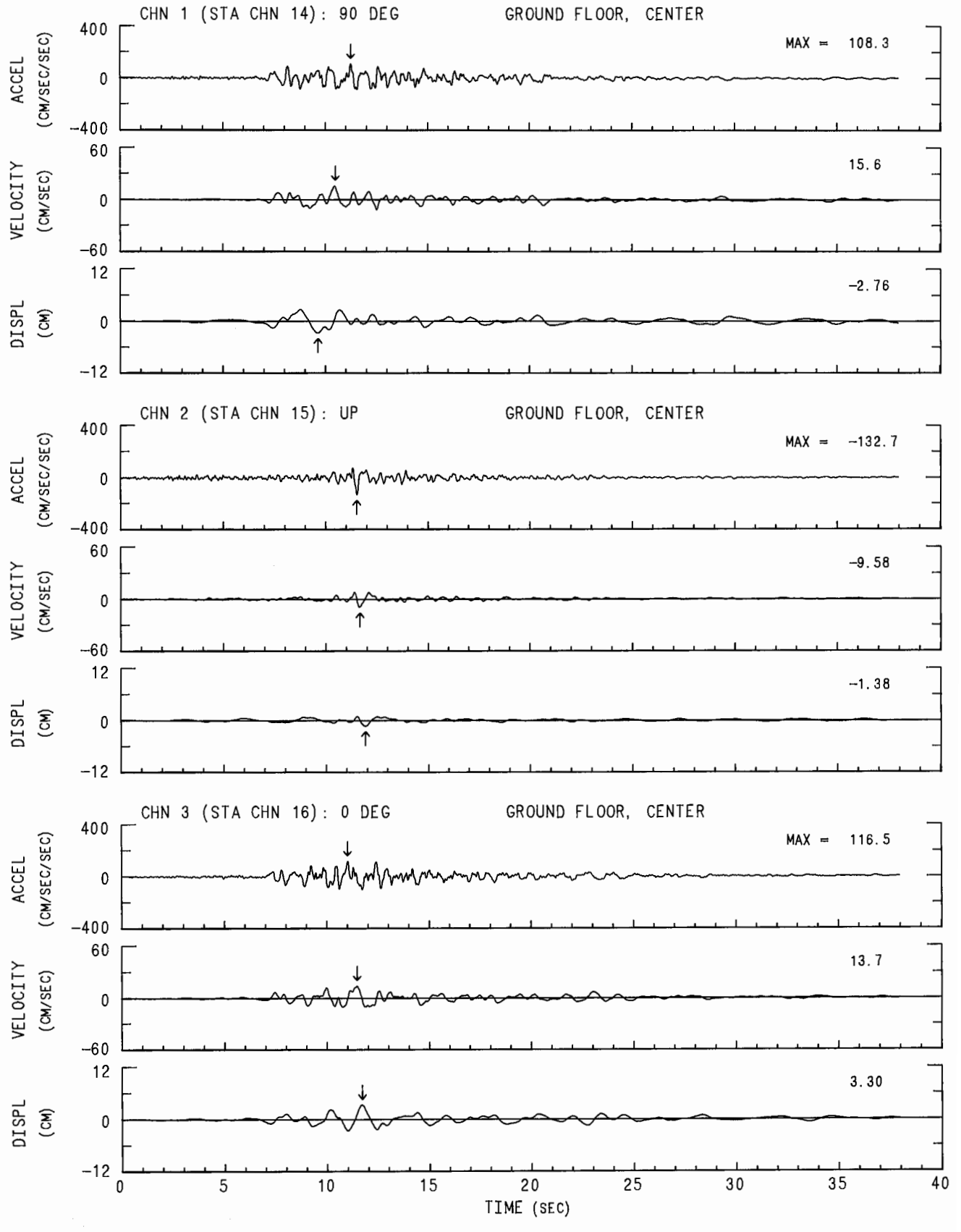
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58394-C0216-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58394-S1220-89293.02



SAN BRUNO – 9–STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

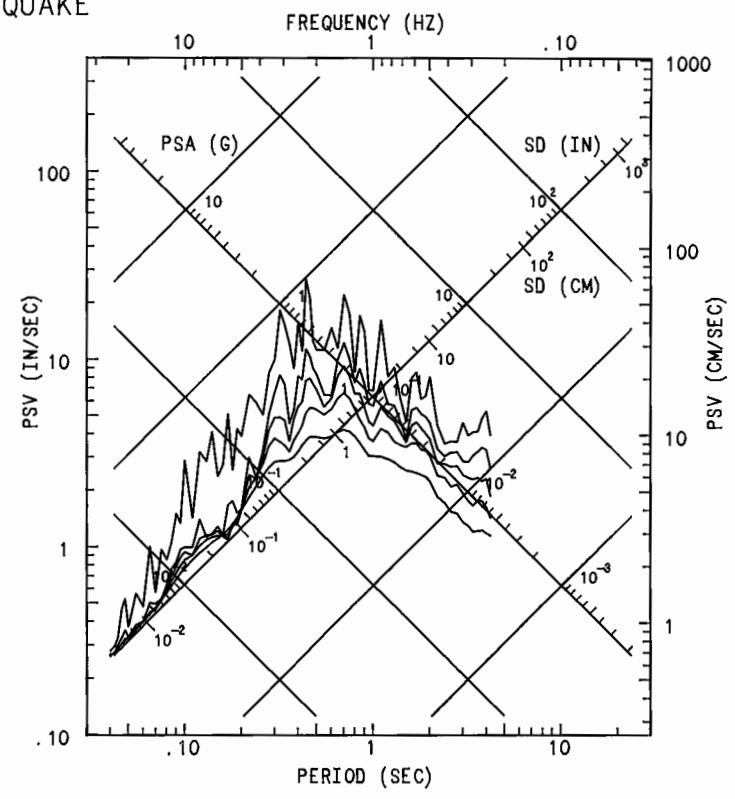
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

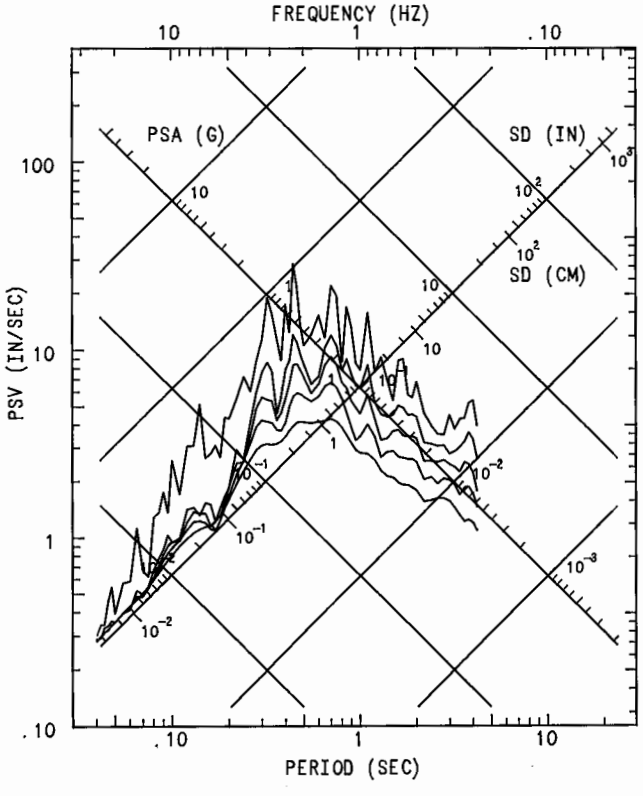
RECORD ID: 58394-C0216-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

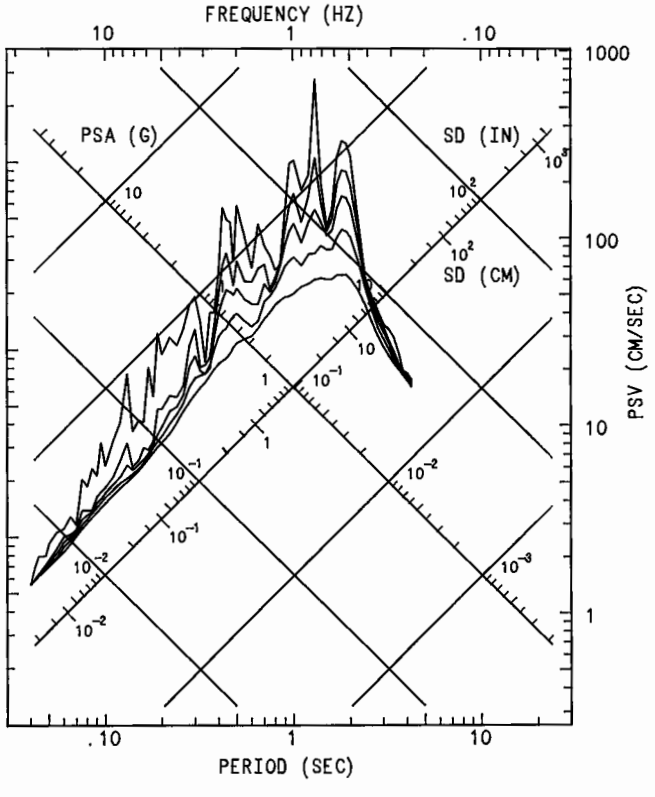
CHN 1: UP
GRND FLOOR, NW CORNER OF CNTR CORE



CHN 2: UP
GRND FLOOR, SW CORNER OF CNTR CORE



CHN 3: 0 DEG
ROOF, WEST WALL



SAN BRUNO – 9-STORY GOVT. OFFICE BLDG. : CSMIP S/N 394

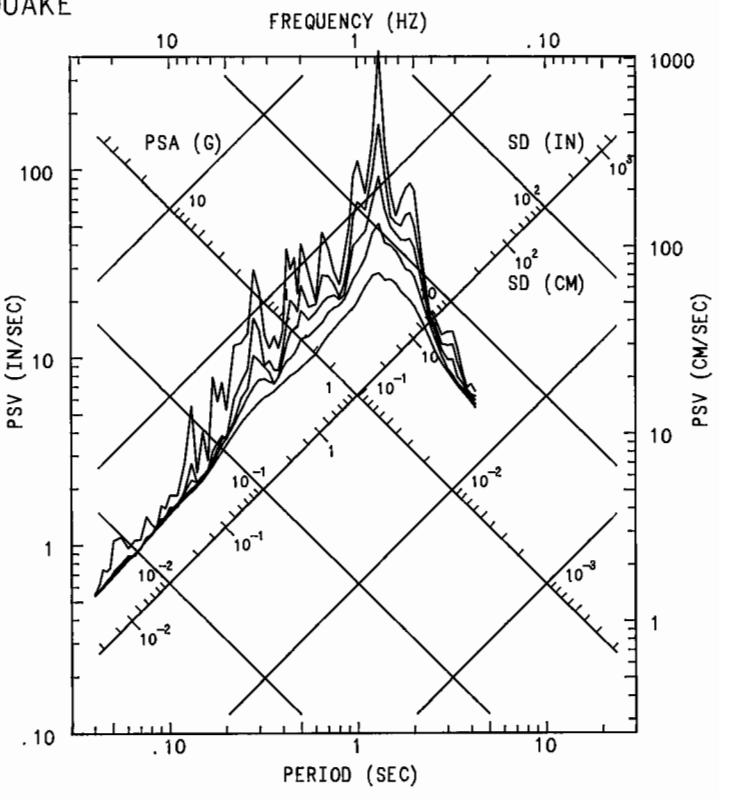
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

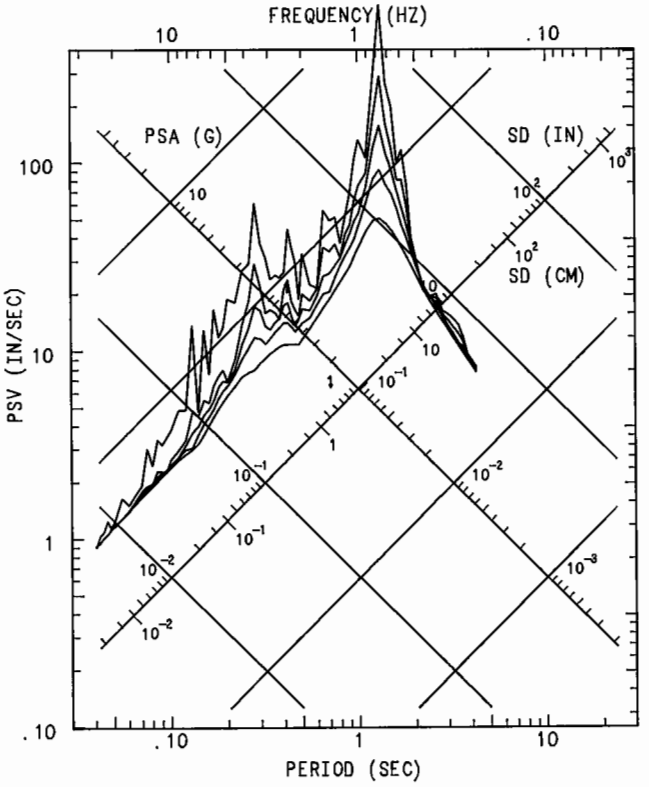
RECORD ID: 58394-C0216-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

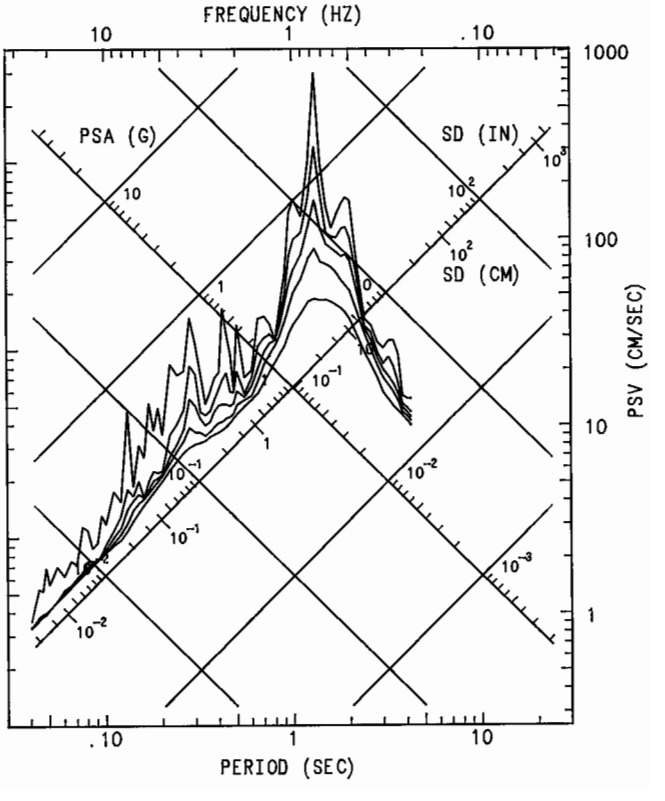
CHN 4: 0 DEG
ROOF, NEAR CENTER



CHN 5: 0 DEG
ROOF, EAST WALL



CHN 6: 0 DEG
7TH FLOOR, NEAR CENTER



SAN BRUNO – 9–STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

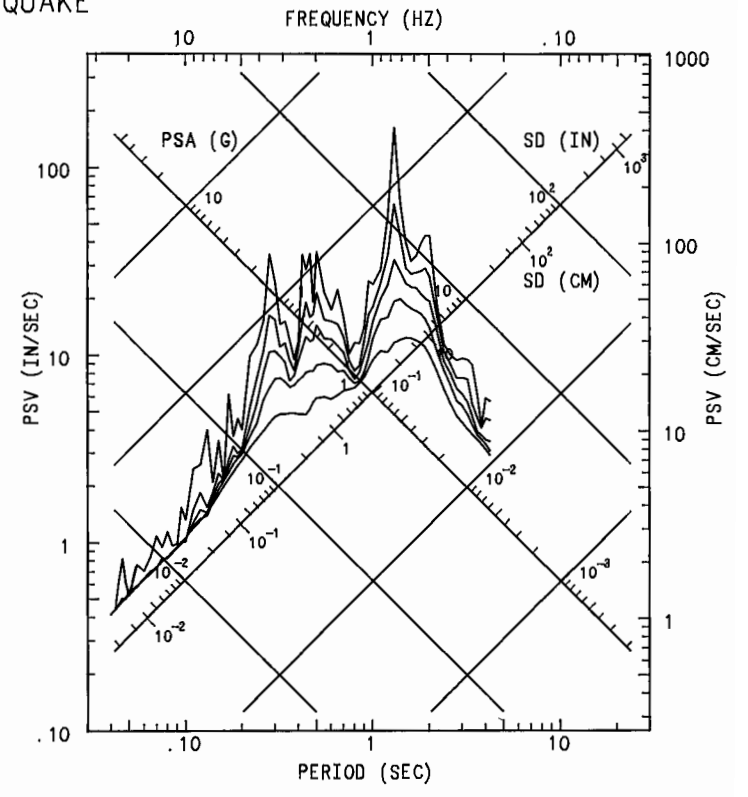
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

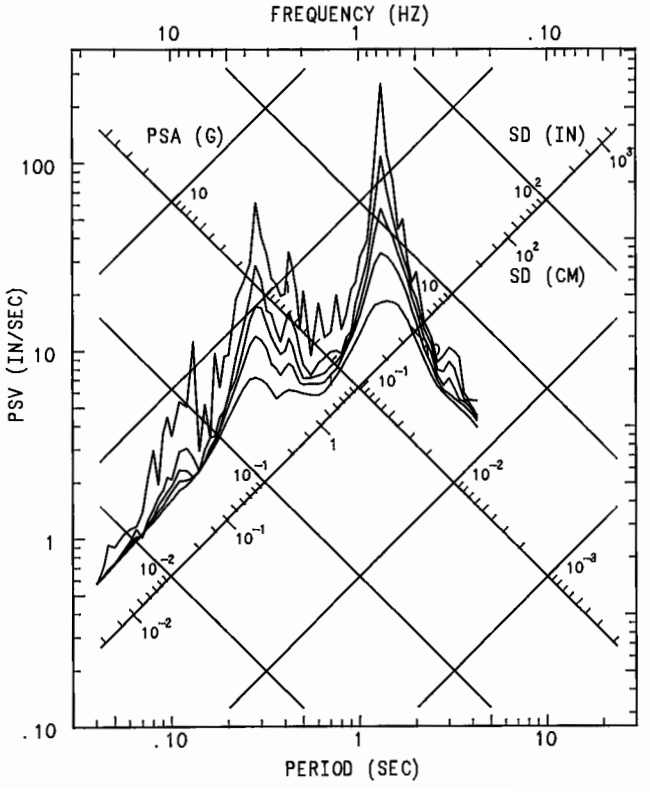
RECORD ID: 58394-C0216-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

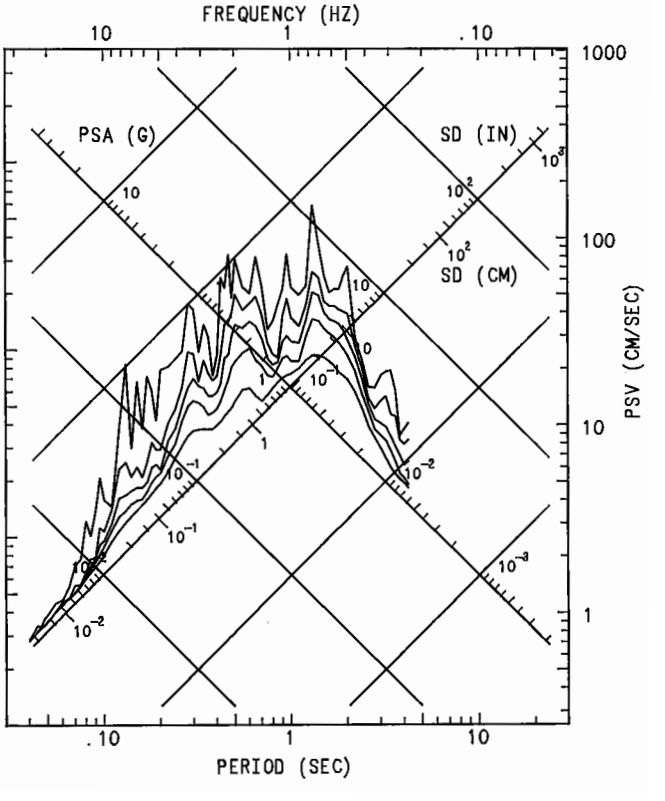
CHN 7: 0 DEG
4TH FLOOR, NEAR CENTER



CHN 8: 0 DEG
4TH FLOOR, EAST WALL



CHN 9: 0 DEG
GROUND FLOOR, NEAR CENTER



SAN BRUNO – 9-STORY GOVT. OFFICE BLDG. : CSMIP S/N 394

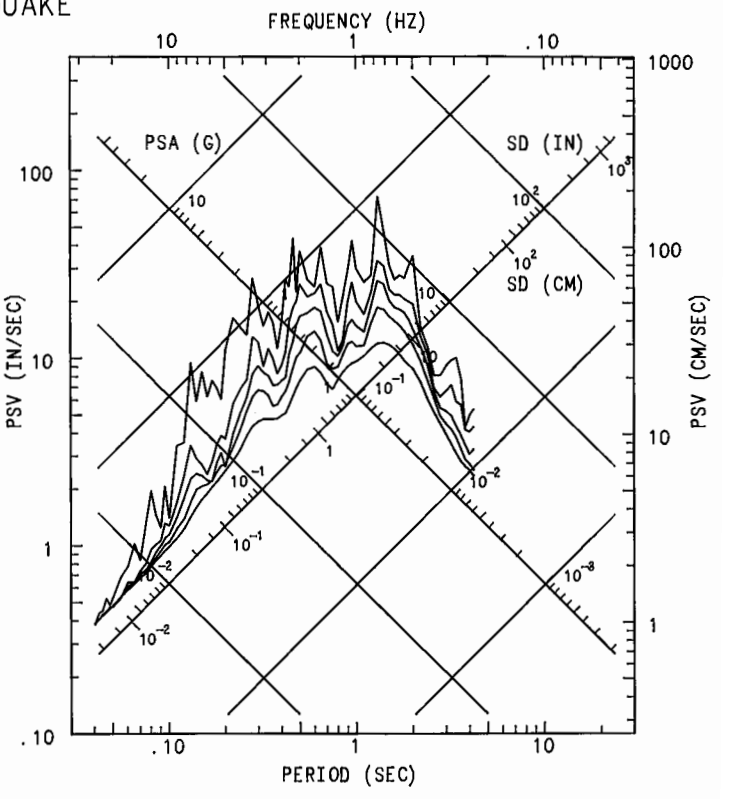
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

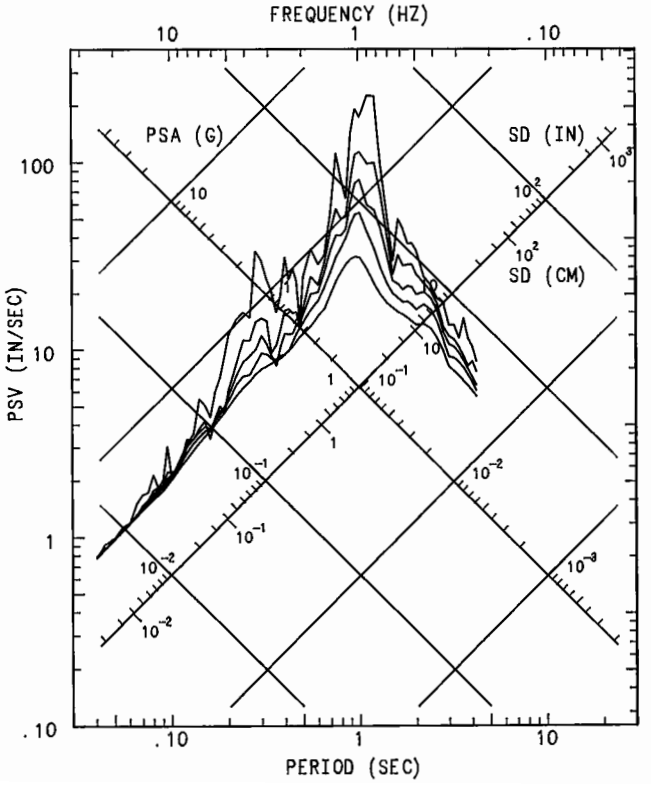
RECORD ID: 58394-C0216-89293.02

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

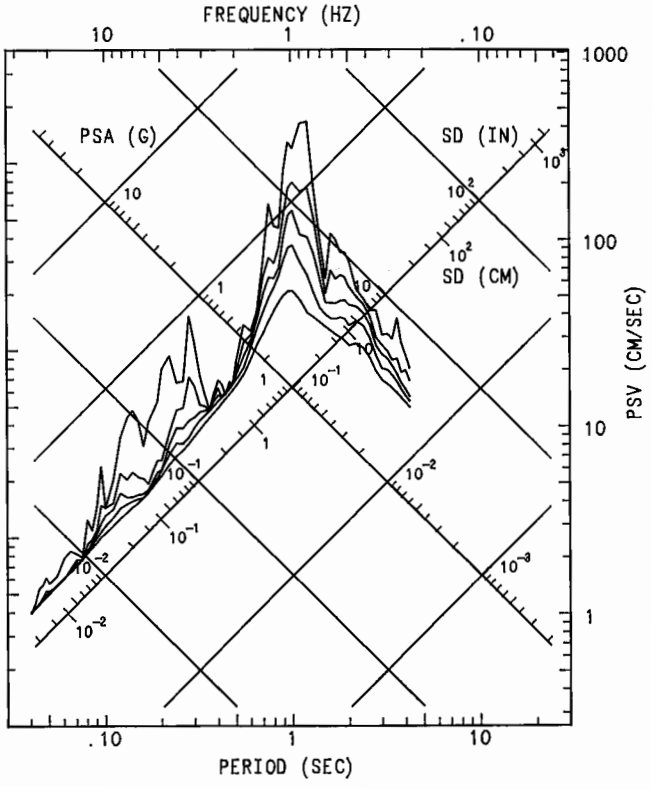
CHN 10: 0 DEG
GROUND FLOOR, EAST WALL



CHN 11: 90 DEG
ROOF, CENTER



CHN 12: 90 DEG
7TH FLOOR, CENTER



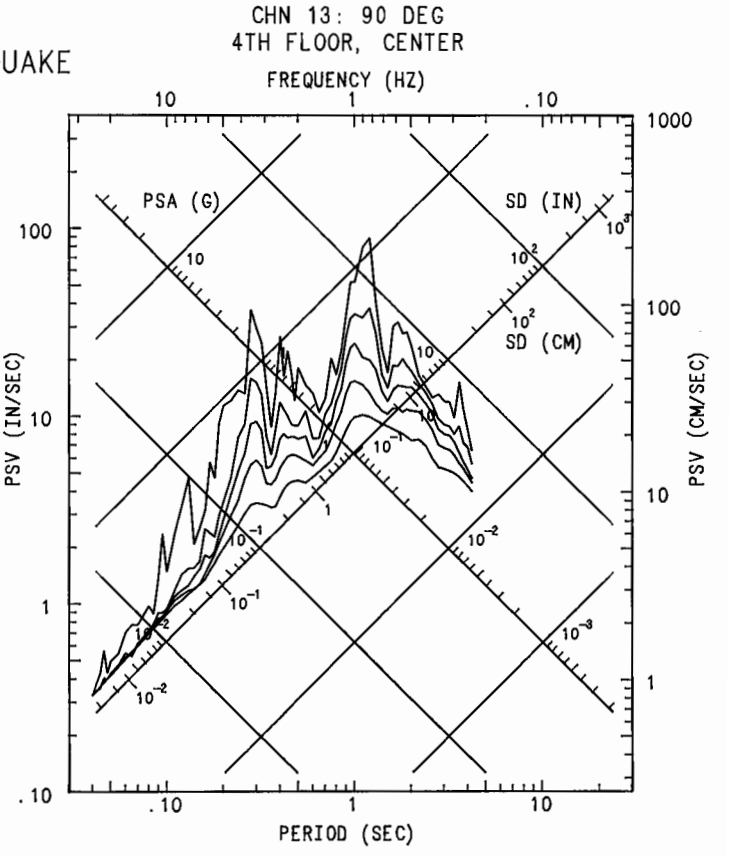
SAN BRUNO - 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58394-C0216-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



SAN BRUNO – 9-STORY GOVT. OFFICE BLDG. : CSMIP S/N 394

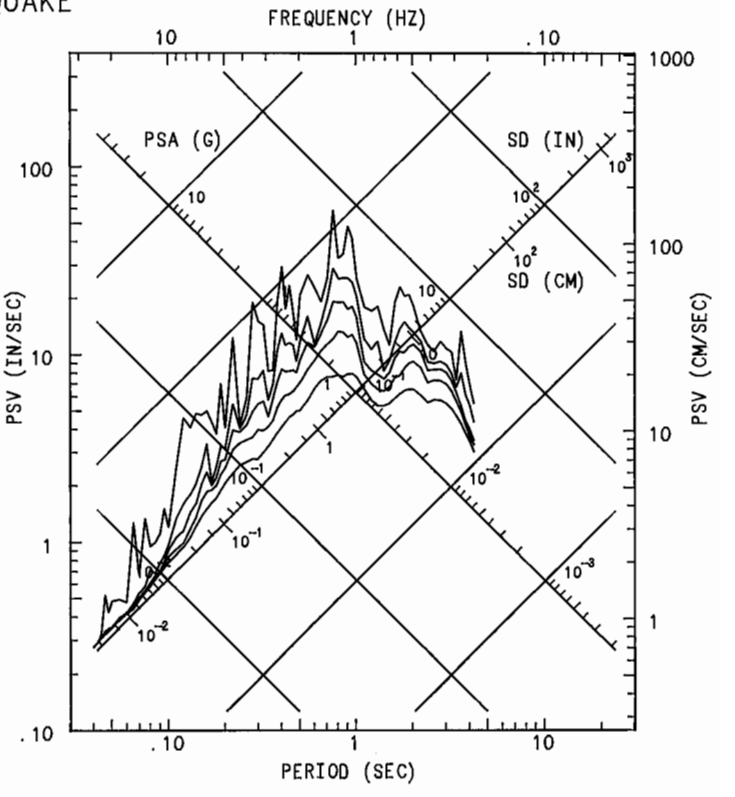
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

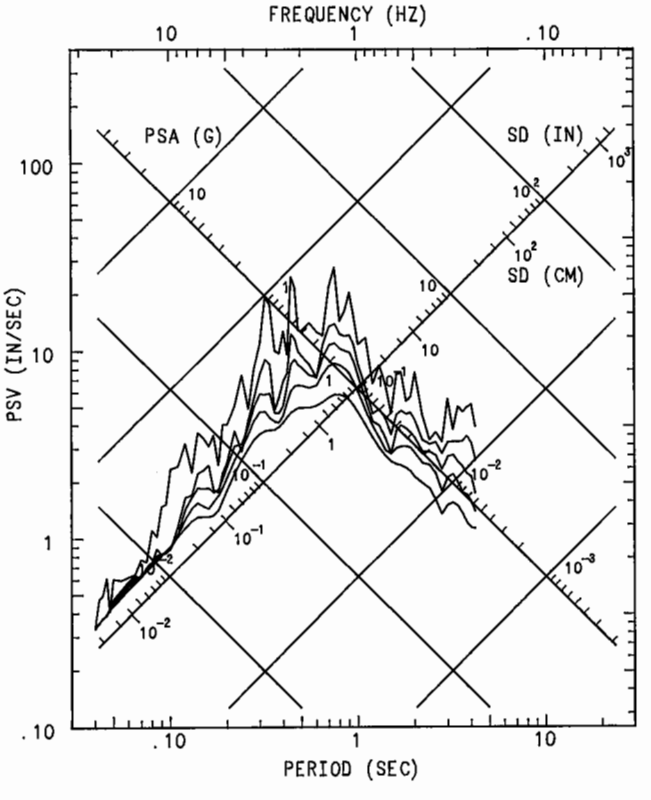
RECORD ID: 58394-S1220-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

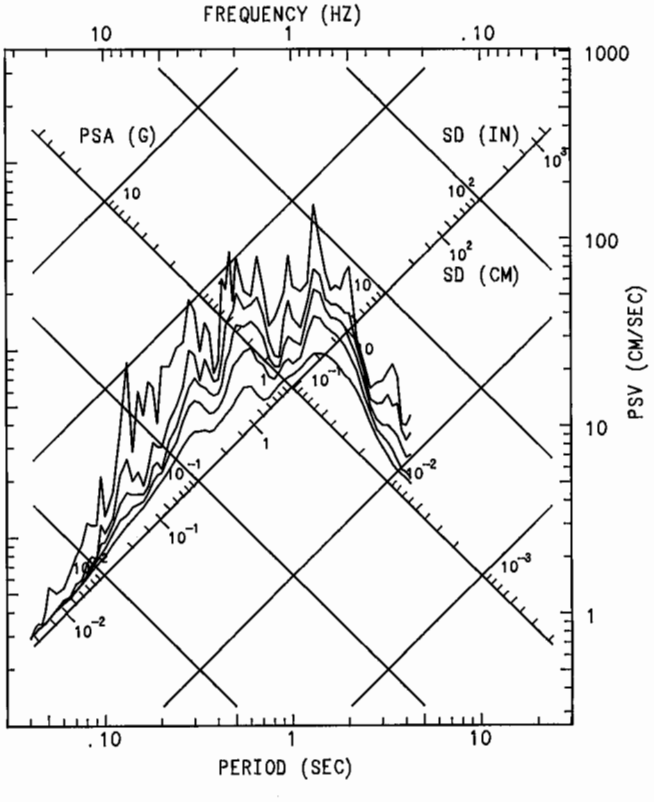
CHN 1 (STA CHN 14): 90 DEG
GROUND FLOOR, CENTER



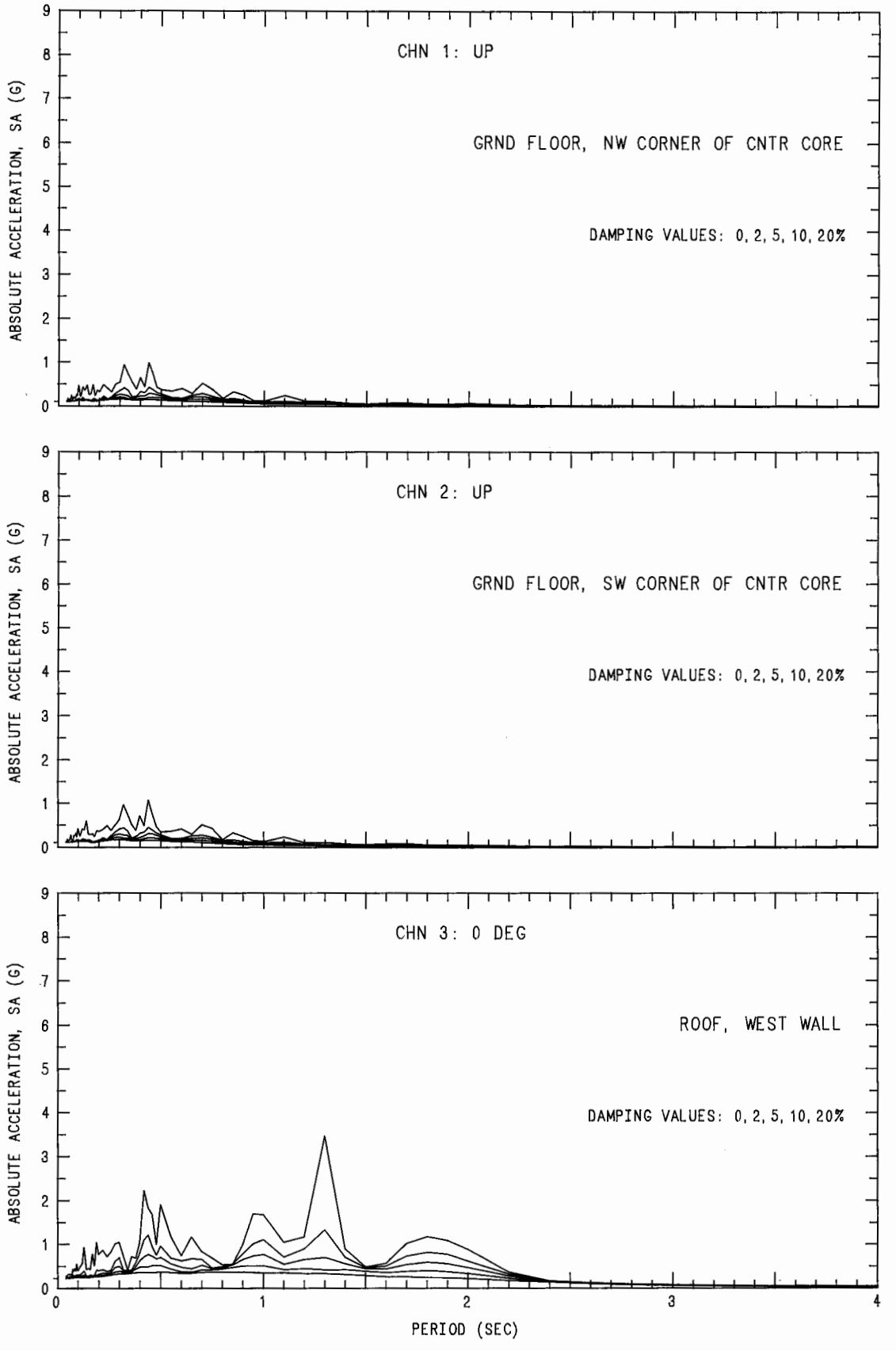
CHN 2 (STA CHN 15): UP
GROUND FLOOR, CENTER



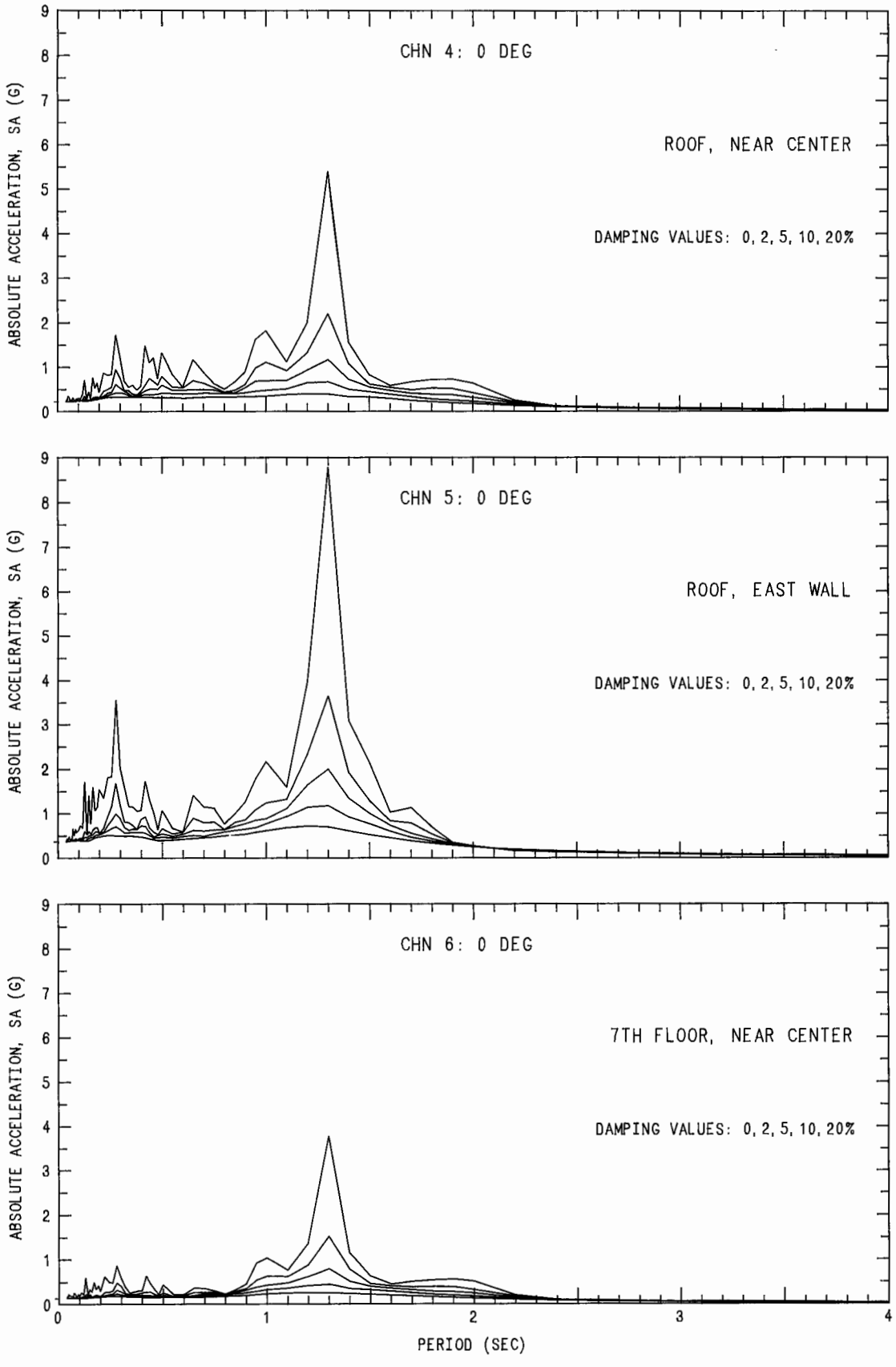
CHN 3 (STA CHN 16): 0 DEG
GROUND FLOOR, CENTER



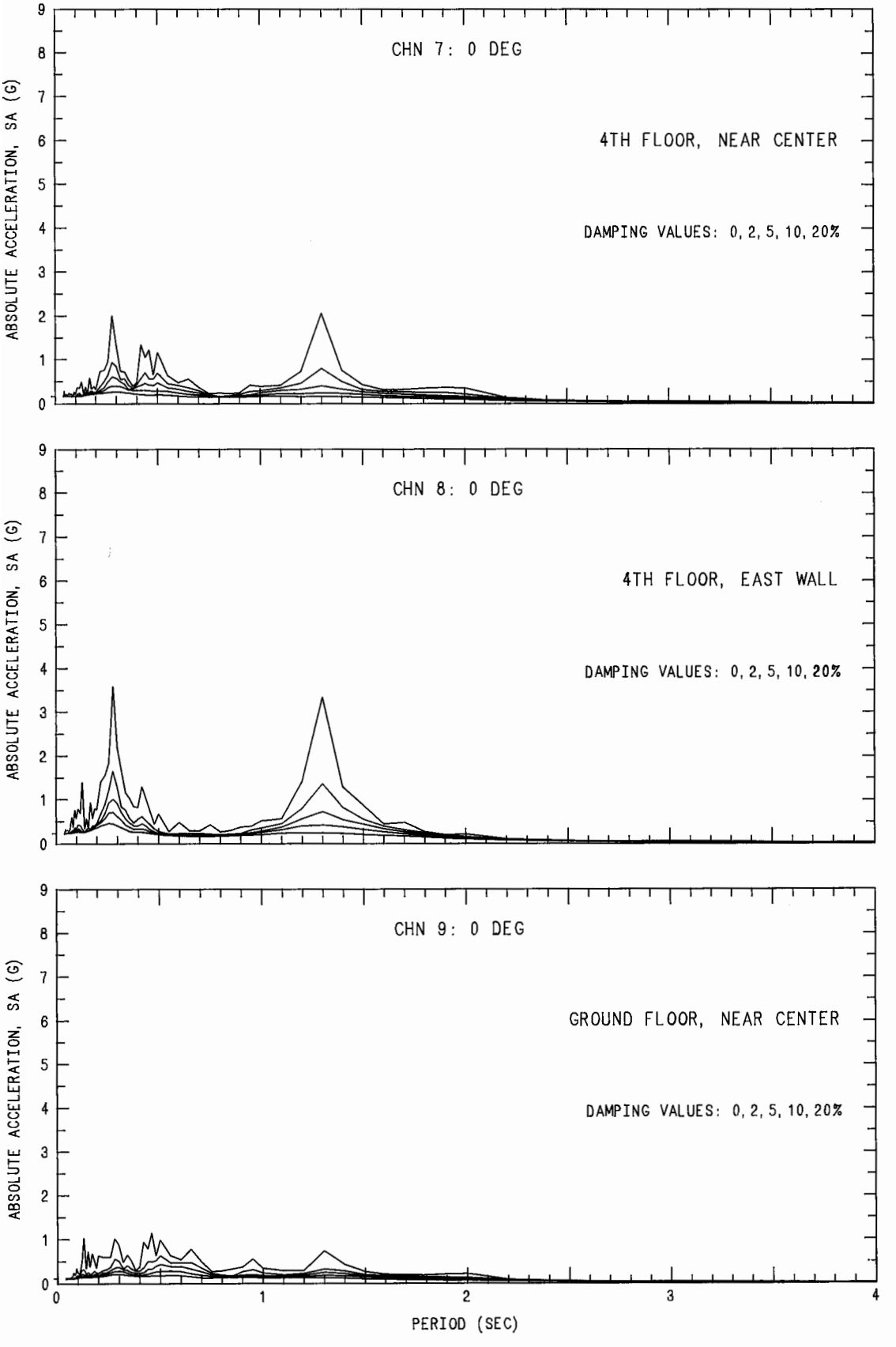
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58394-C0216-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO - 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58394-C0216-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

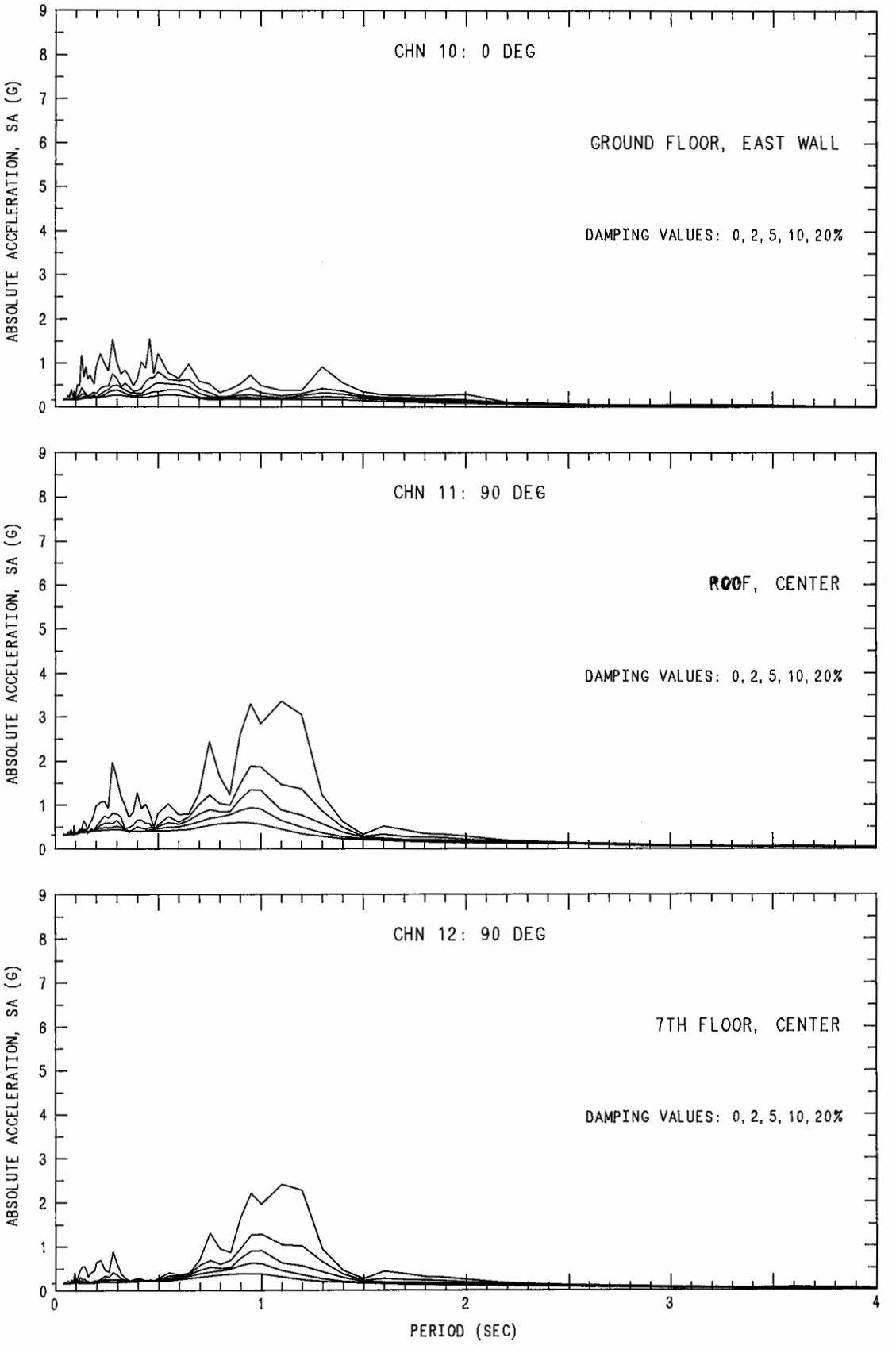


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58394-C0216-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

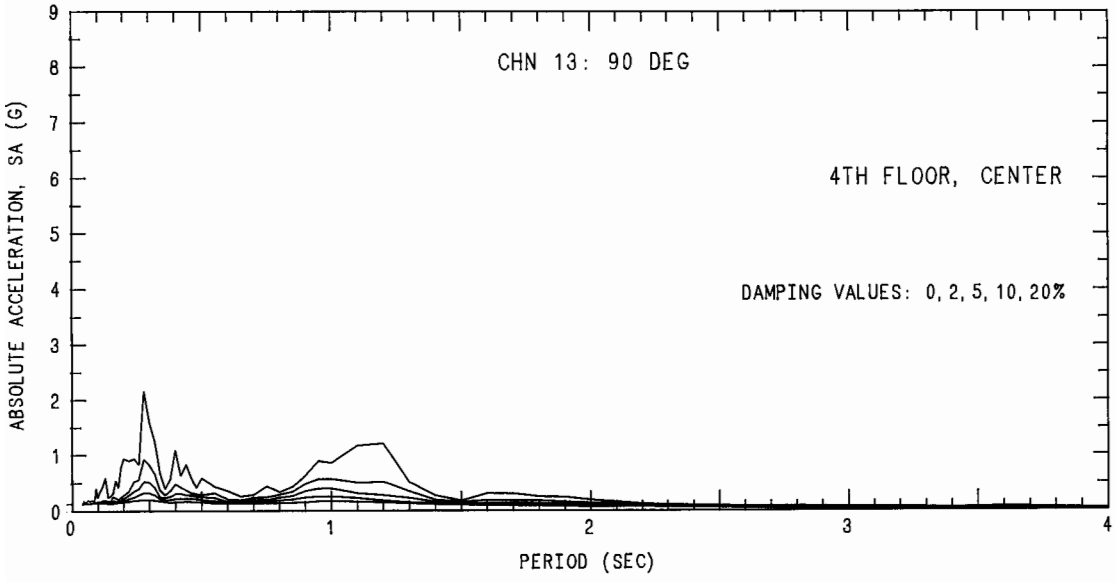


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO - 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394

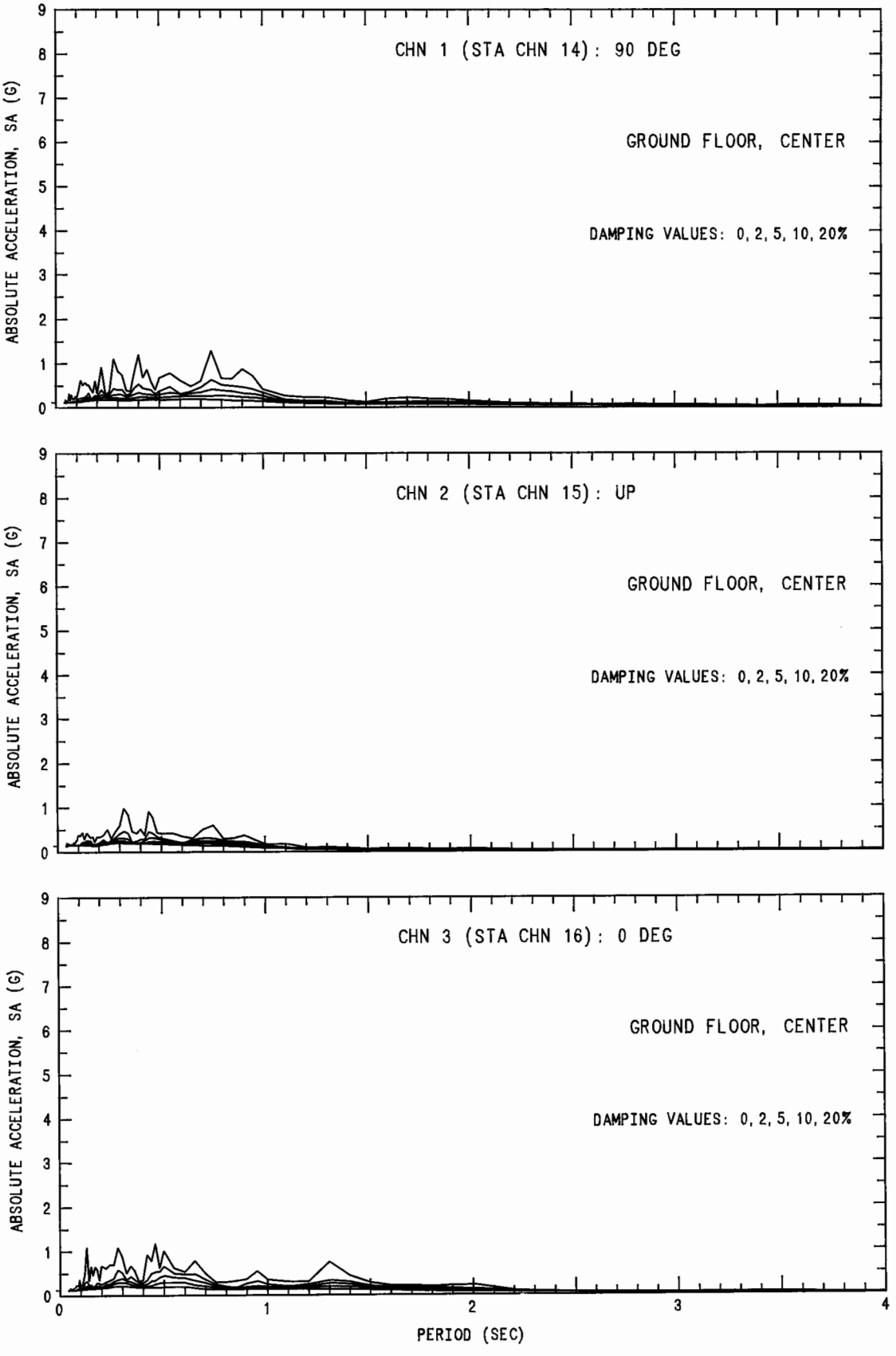
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58394-C0216-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 9–STORY GOVT. OFFICE BLDG.. CSMIP S/N 394
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58394–C0216–89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



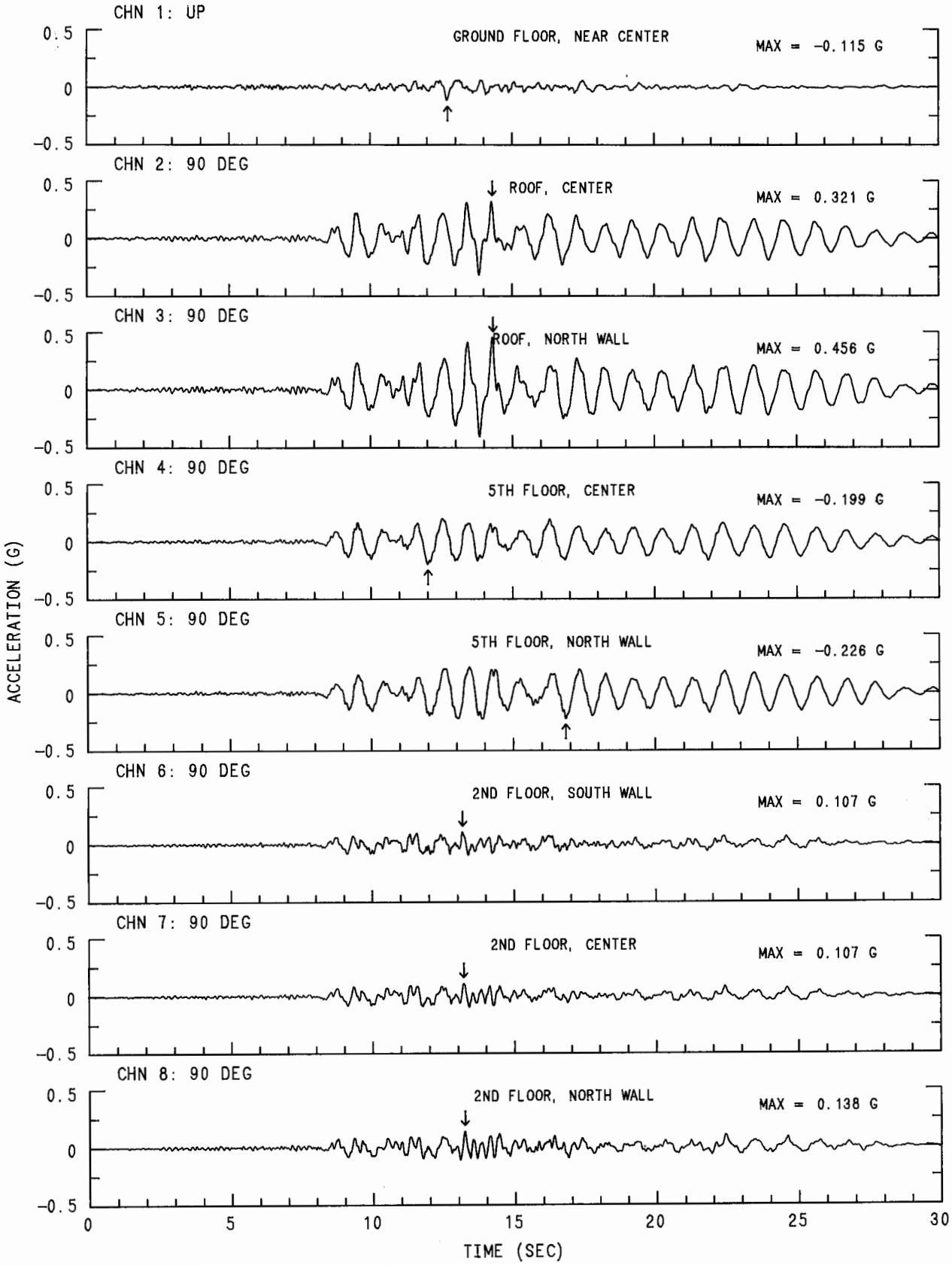
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO - 9-STORY GOVT. OFFICE BLDG.: CSMIP S/N 394
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58394-S1220-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

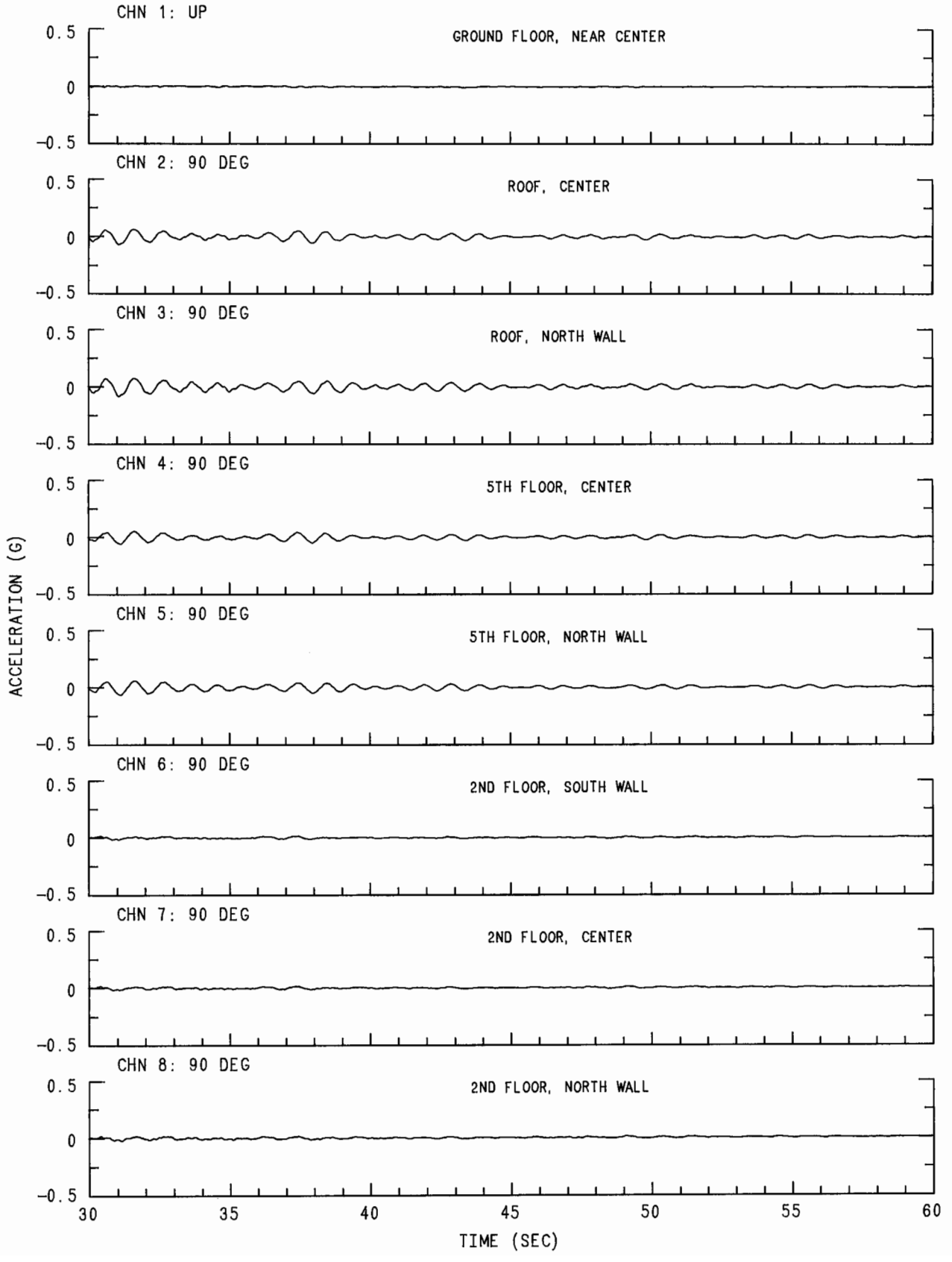
PHASE 1 ACCELERATION. RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

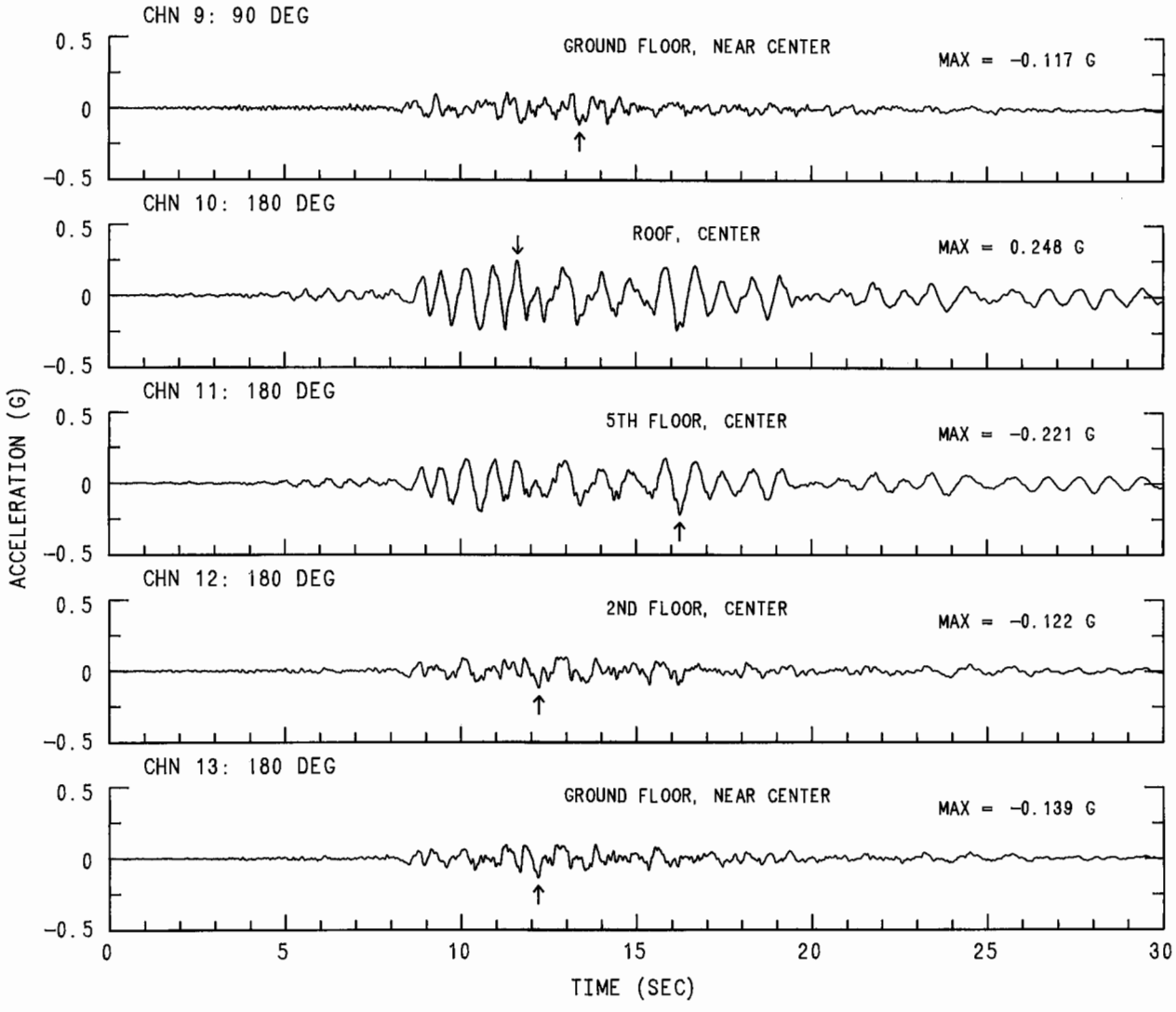
PHASE 1 ACCELERATION. RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

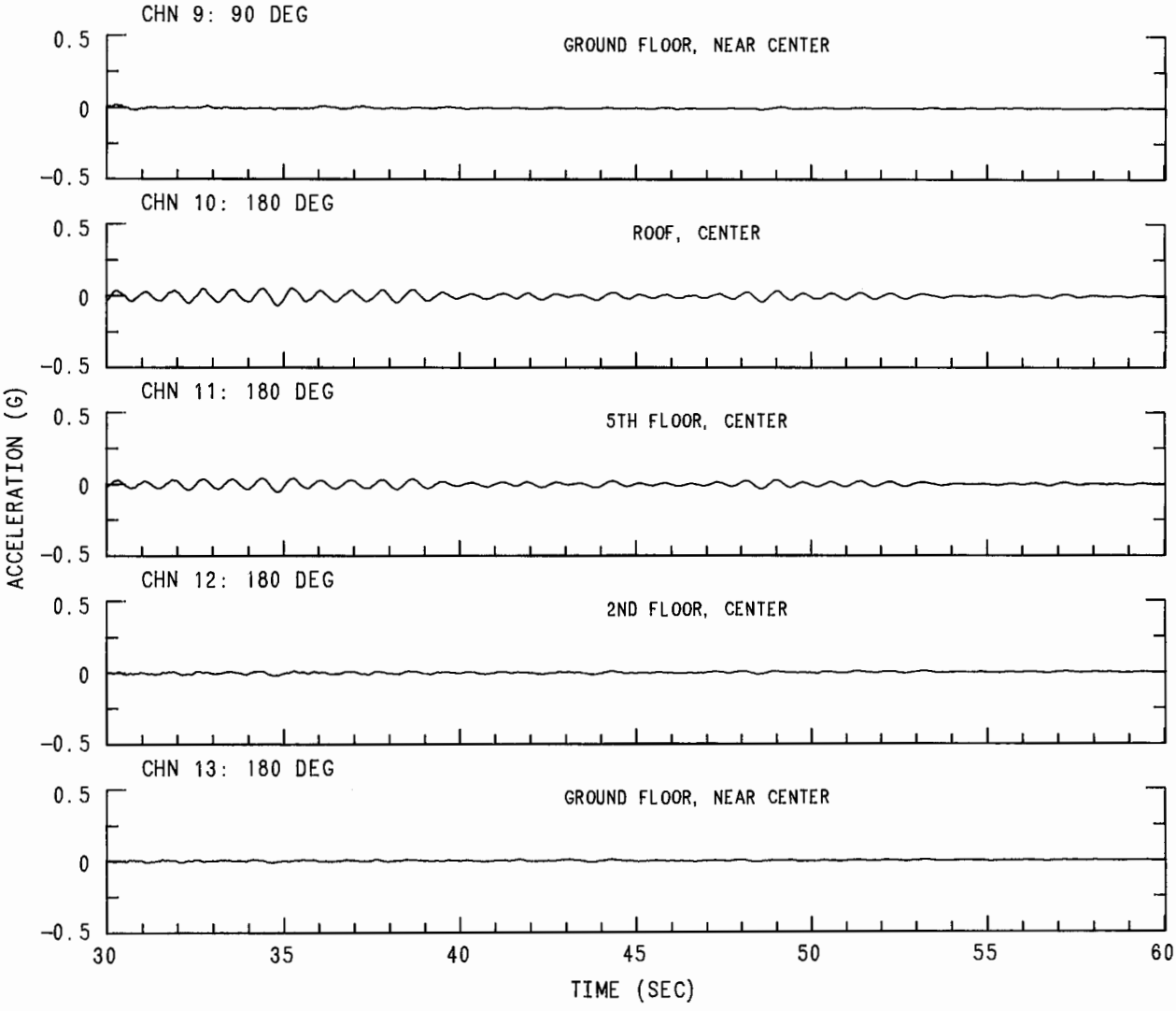
PHASE 1 ACCELERATION. RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

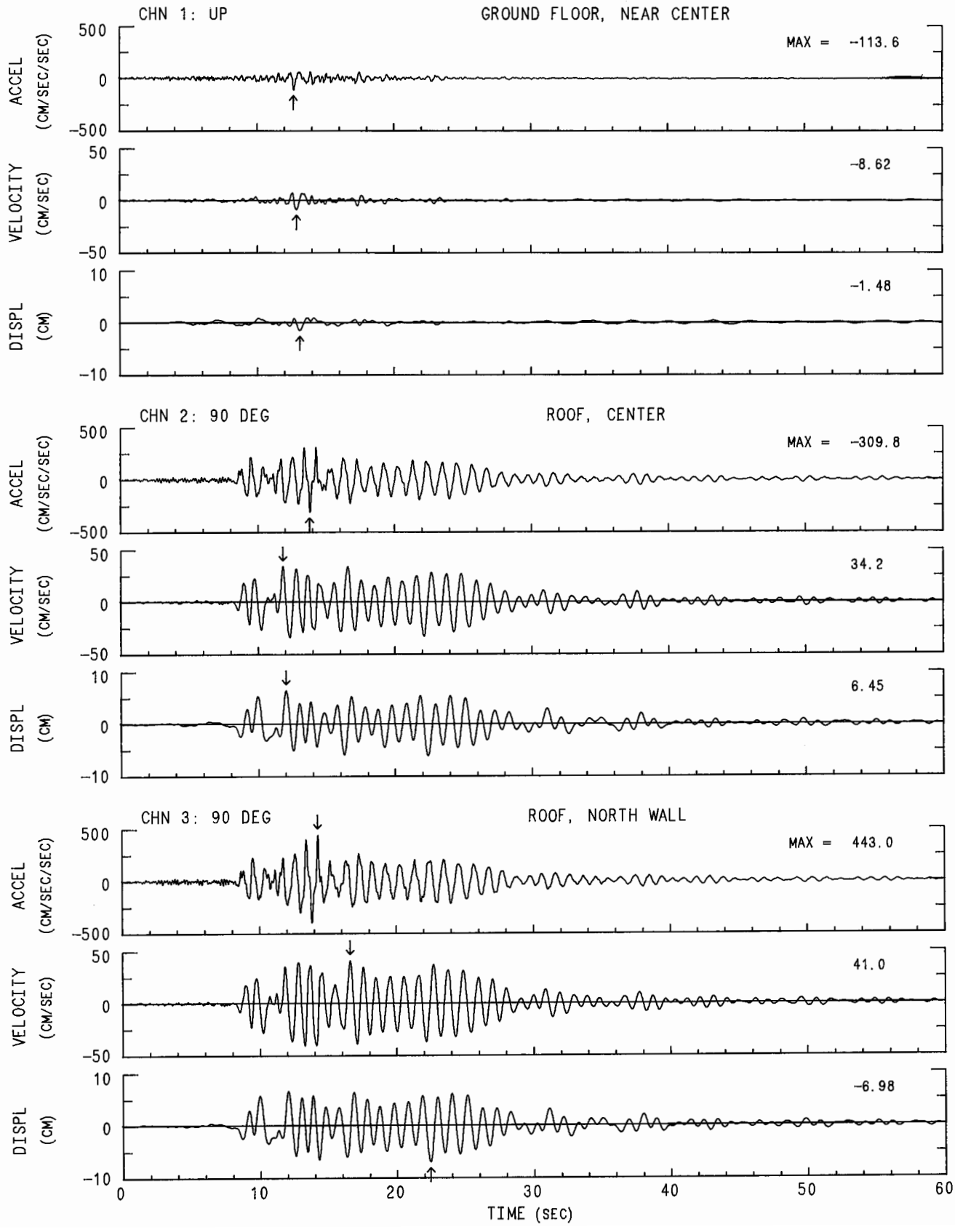
PHASE 1 ACCELERATION. RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

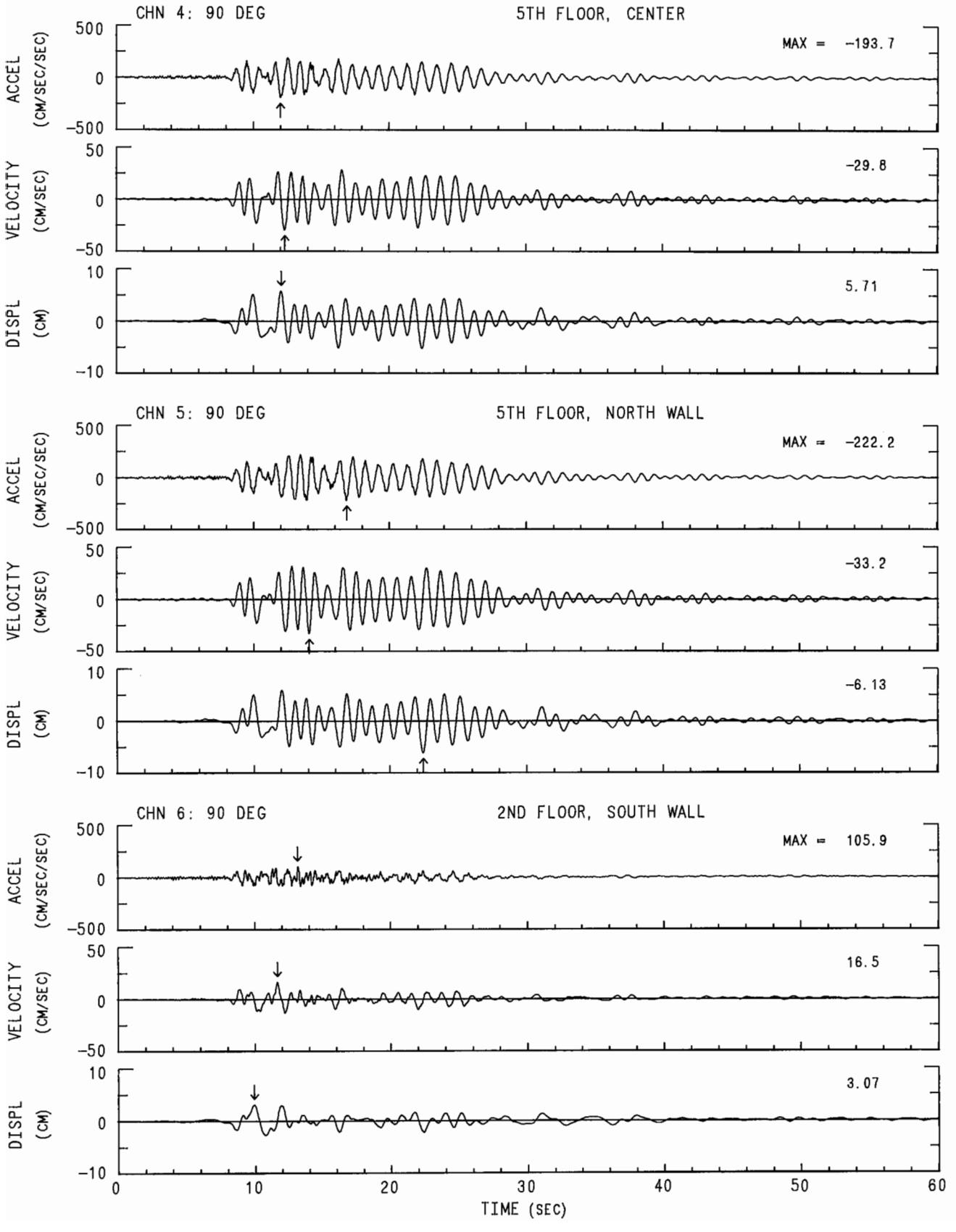
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

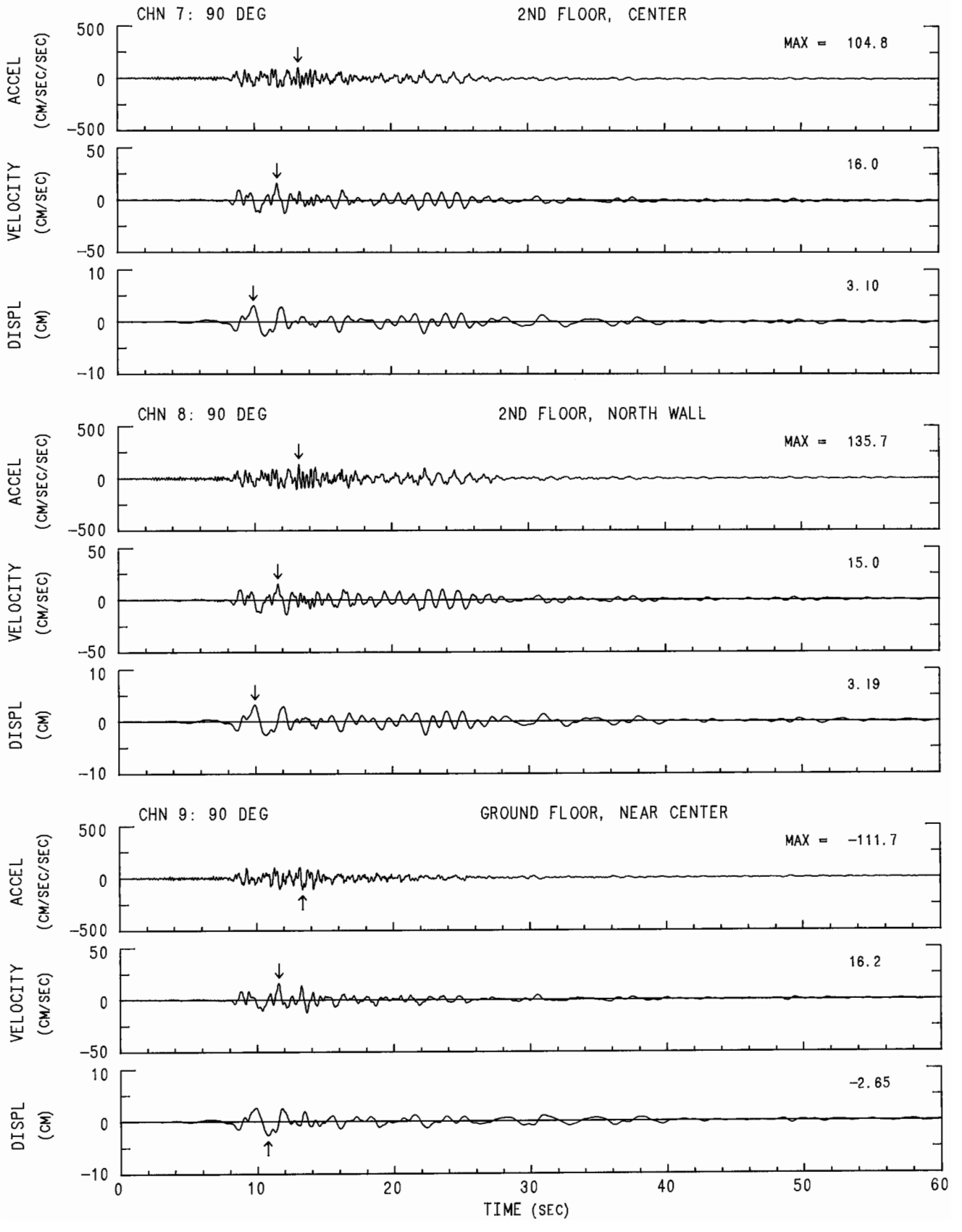
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

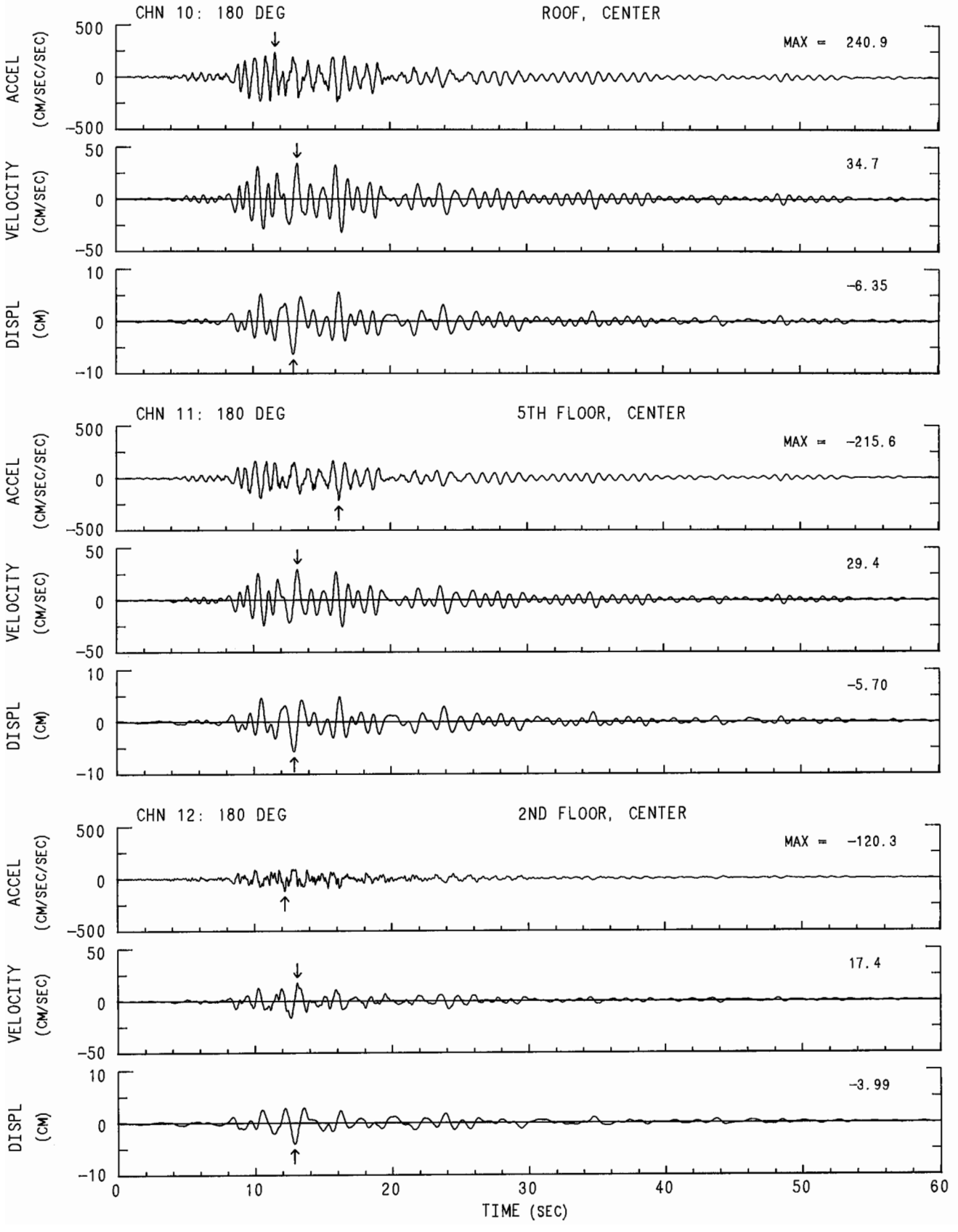
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO - 6-STORY OFFICE BLDG.: CSMIP S/N 490

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

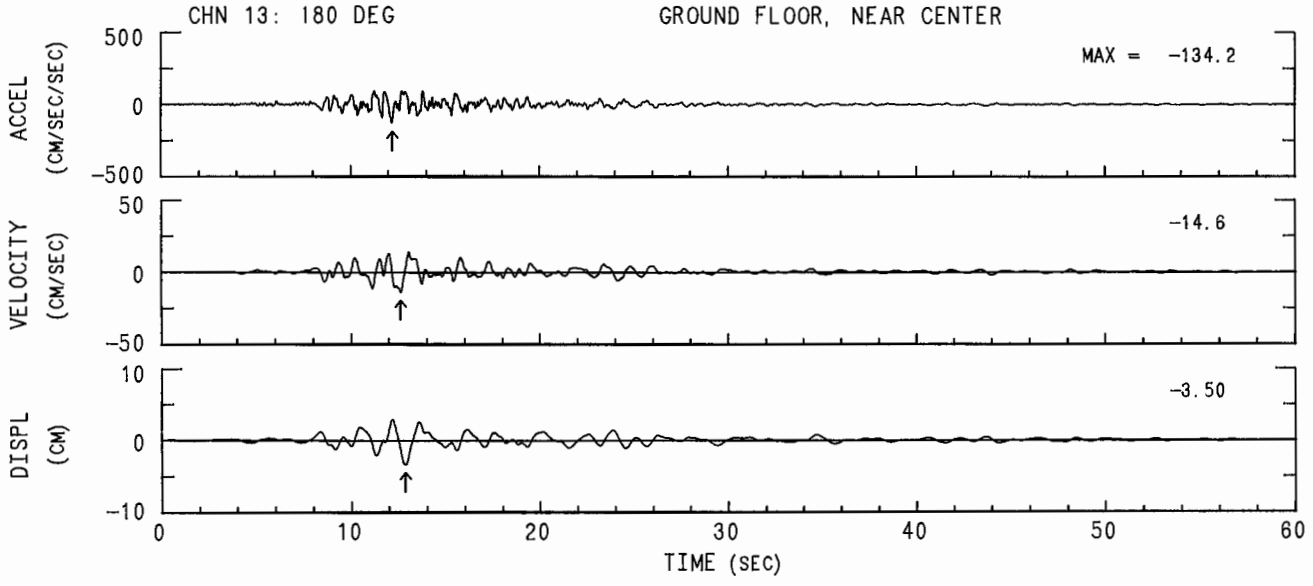
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58490-C0272-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58490-C0272-89293.02



SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

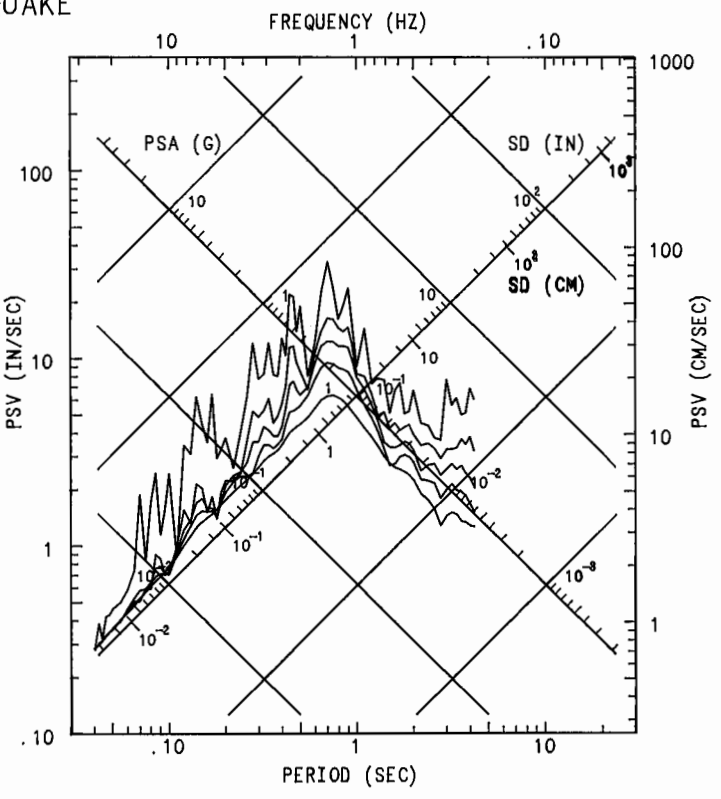
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

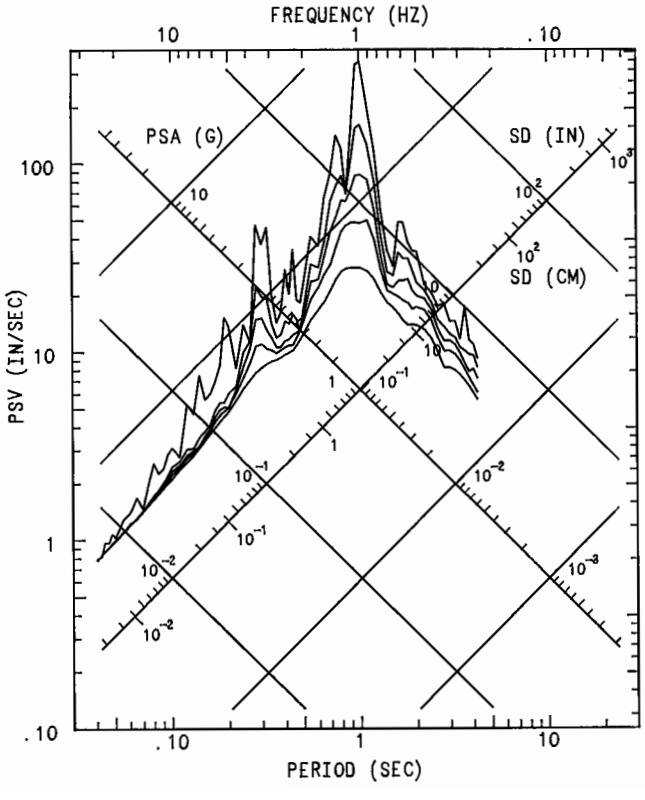
RECORD ID: 58490-C0272-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

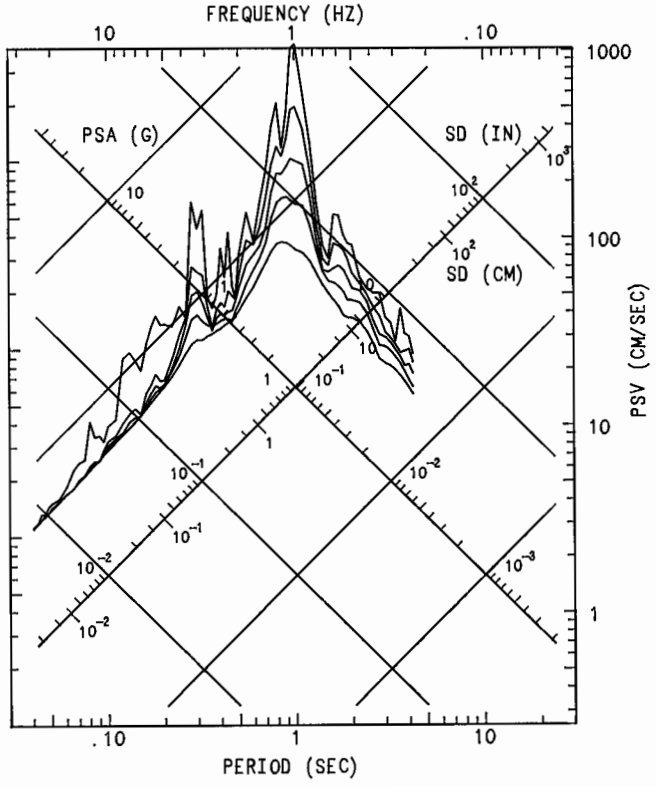
CHN 1: UP
GROUND FLOOR, NEAR CENTER



CHN 2: 90 DEG
ROOF, CENTER



CHN 3: 90 DEG
ROOF, NORTH WALL



SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

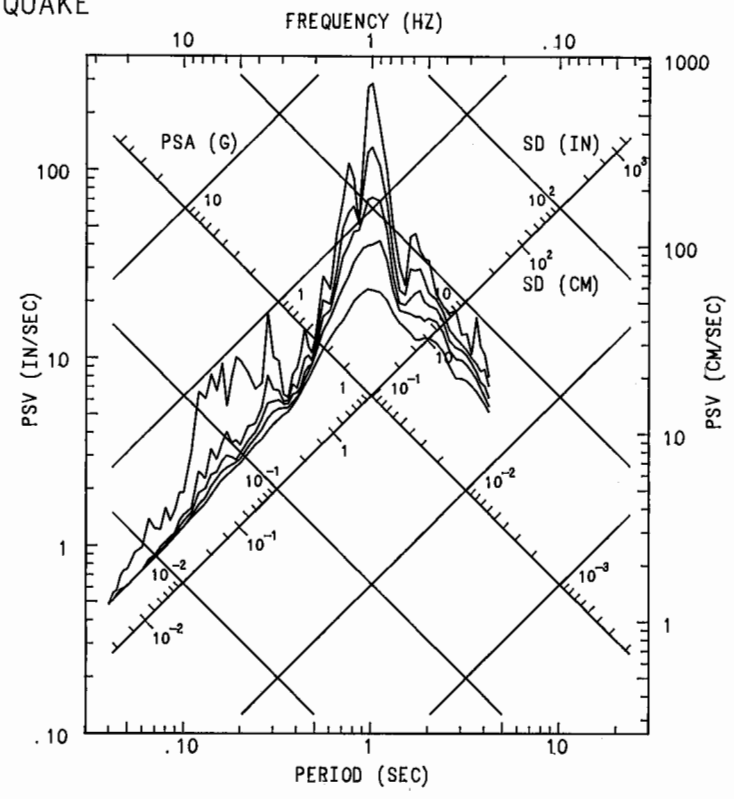
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

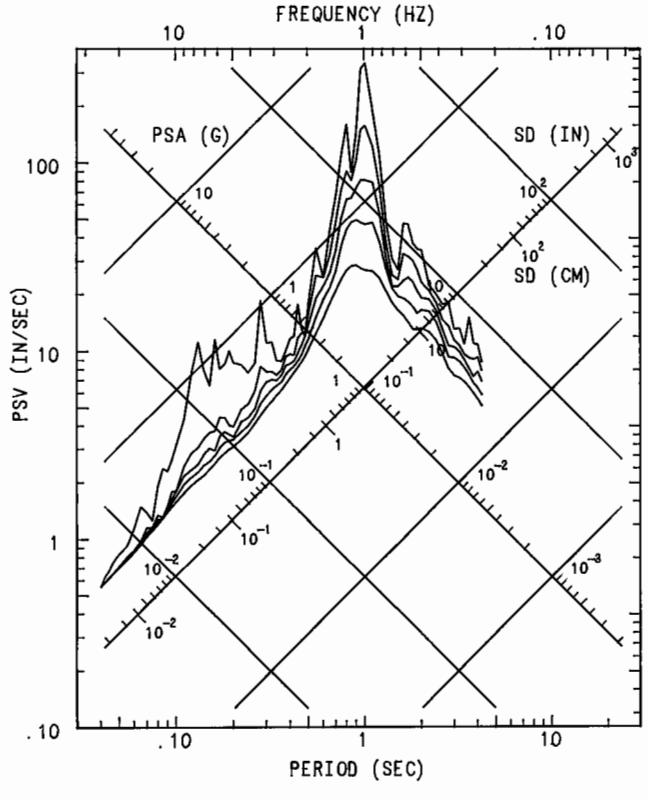
RECORD ID: 58490-C0272-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

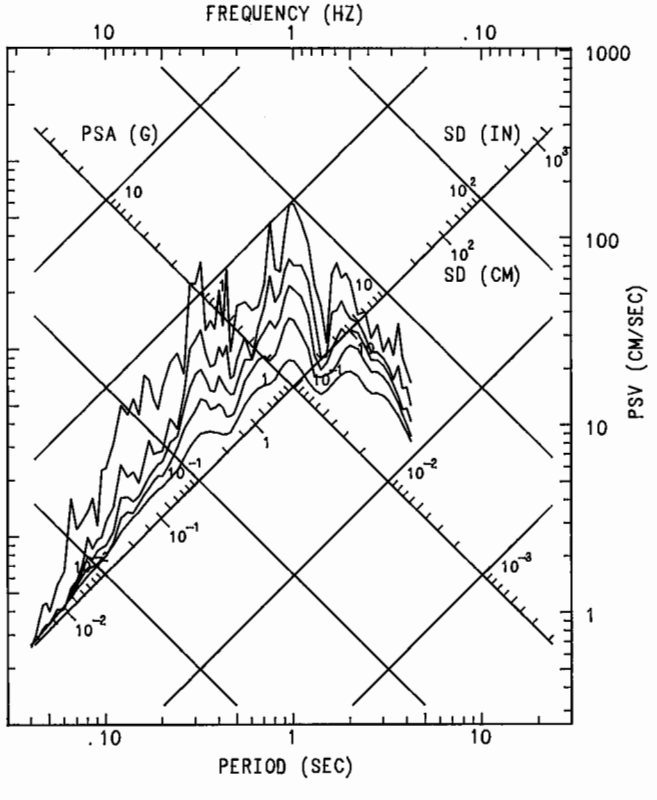
CHN 4: 90 DEG
5TH FLOOR, CENTER



CHN 5: 90 DEG
5TH FLOOR, NORTH WALL



CHN 6: 90 DEG
2ND FLOOR, SOUTH WALL



SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

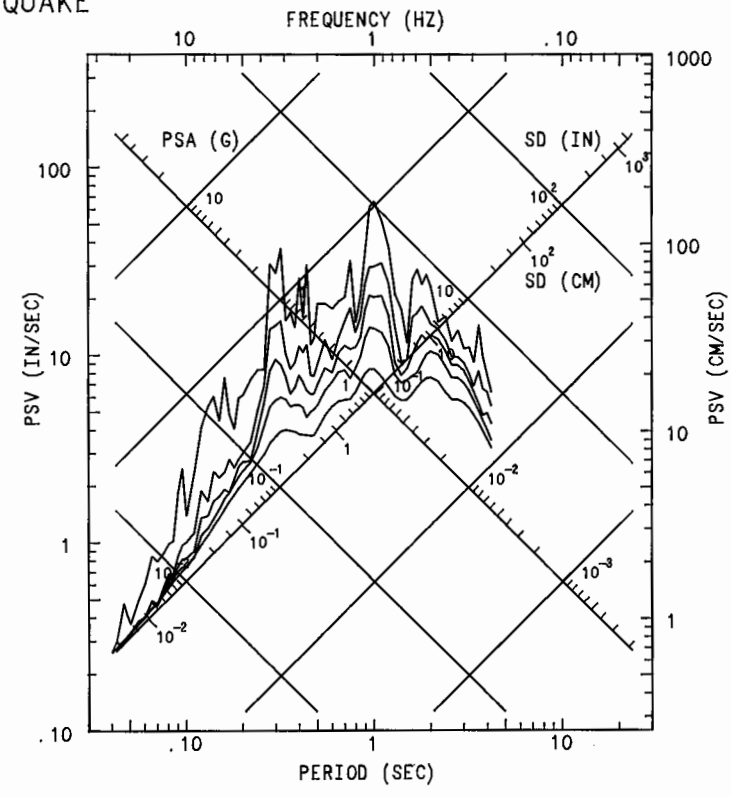
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

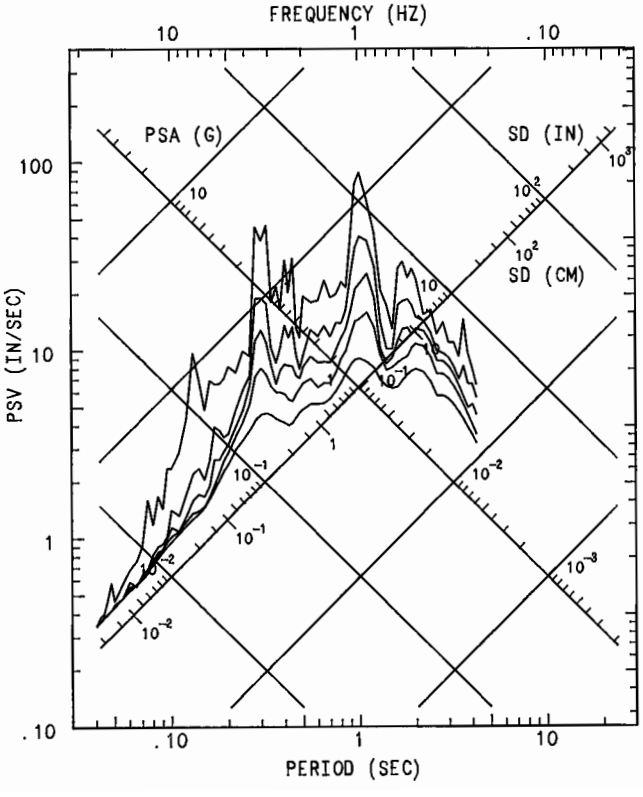
RECORD ID: 58490-C0272-89293.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

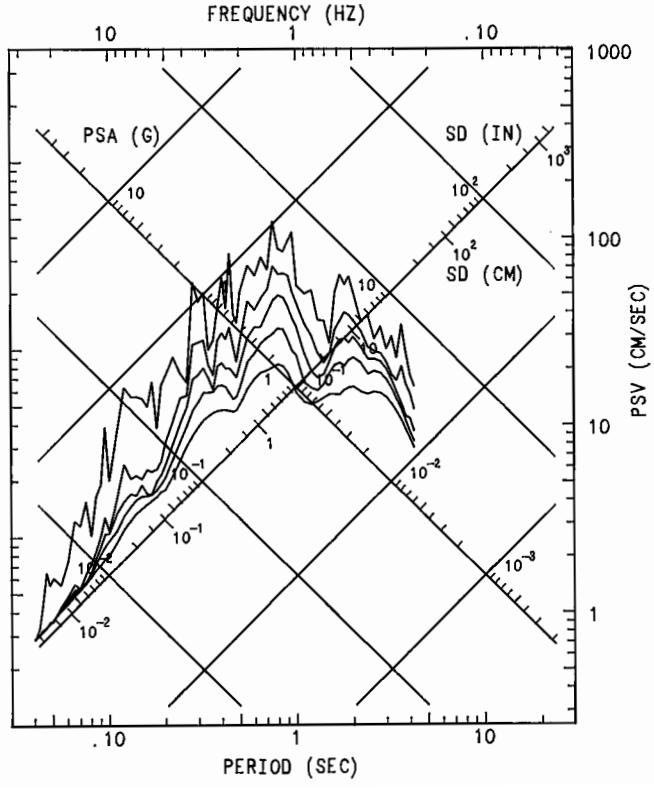
CHN 7: 90 DEG
2ND FLOOR, CENTER



CHN 8: 90 DEG
2ND FLOOR, NORTH WALL



CHN 9: 90 DEG
GROUND FLOOR, NEAR CENTER



SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

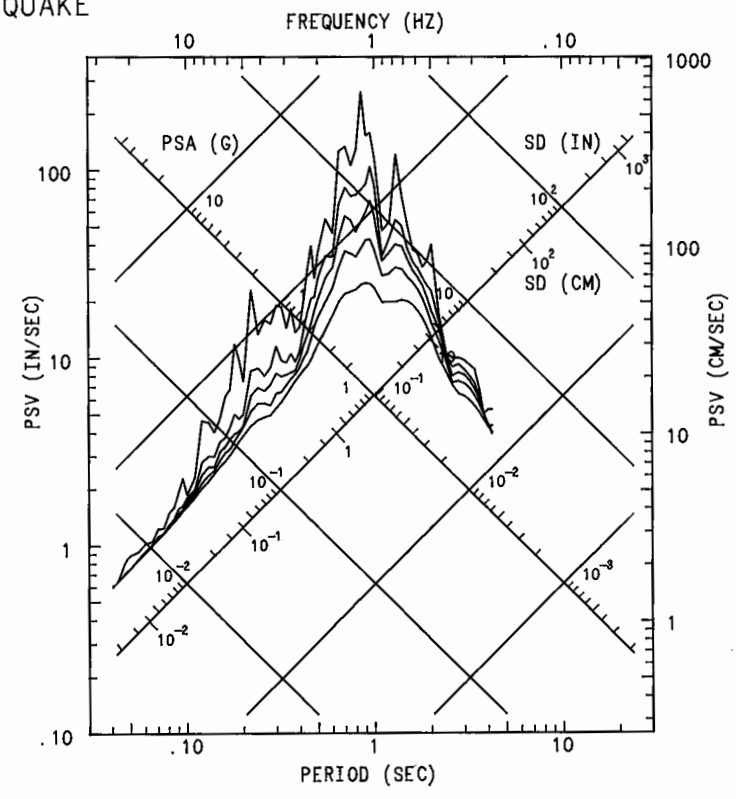
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

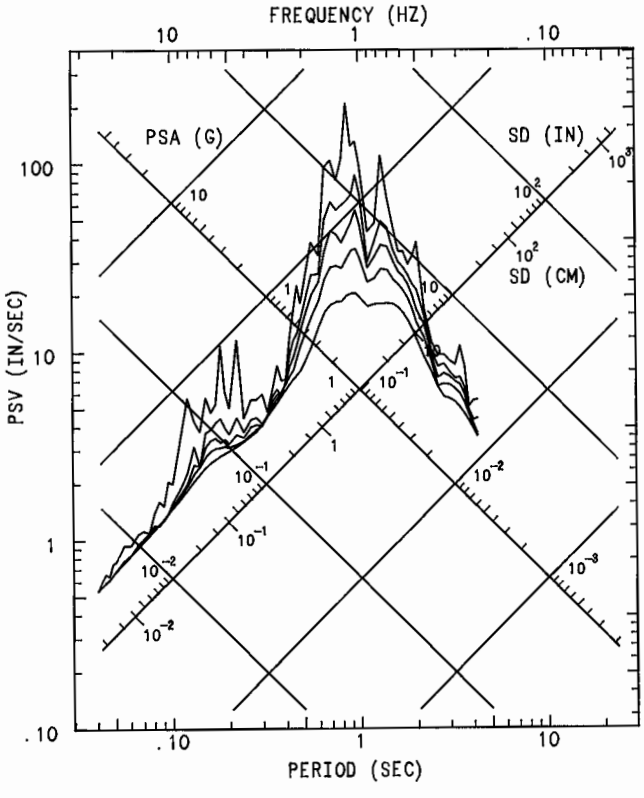
RECORD ID: 58490-C0272-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

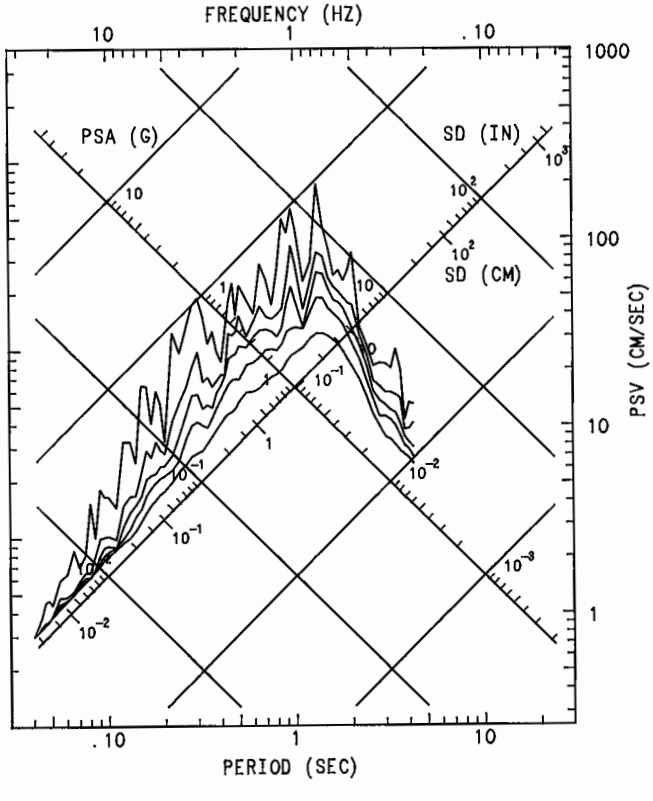
CHN 10: 180 DEG
ROOF, CENTER



CHN 11: 180 DEG
5TH FLOOR, CENTER



CHN 12: 180 DEG
2ND FLOOR, CENTER



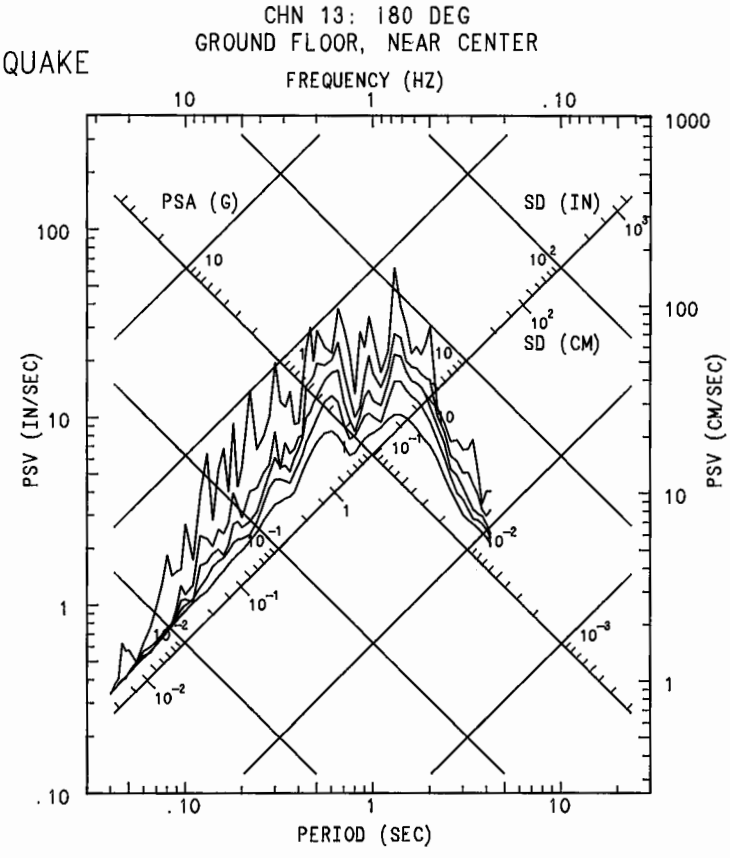
SAN BRUNO - 6-STORY OFFICE BLDG.: CSMIP S/N 490

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

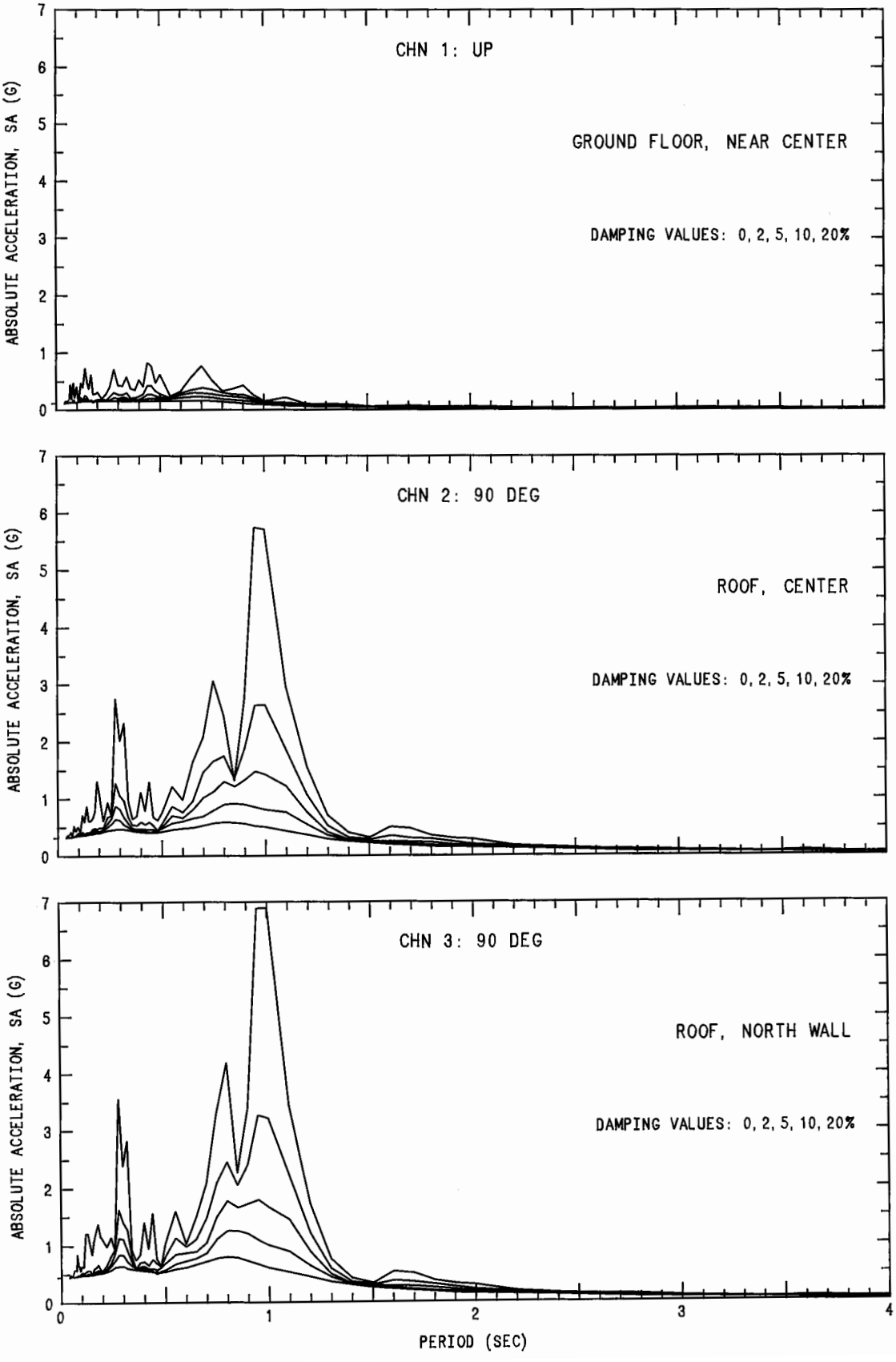
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58490-C0272-89293.02

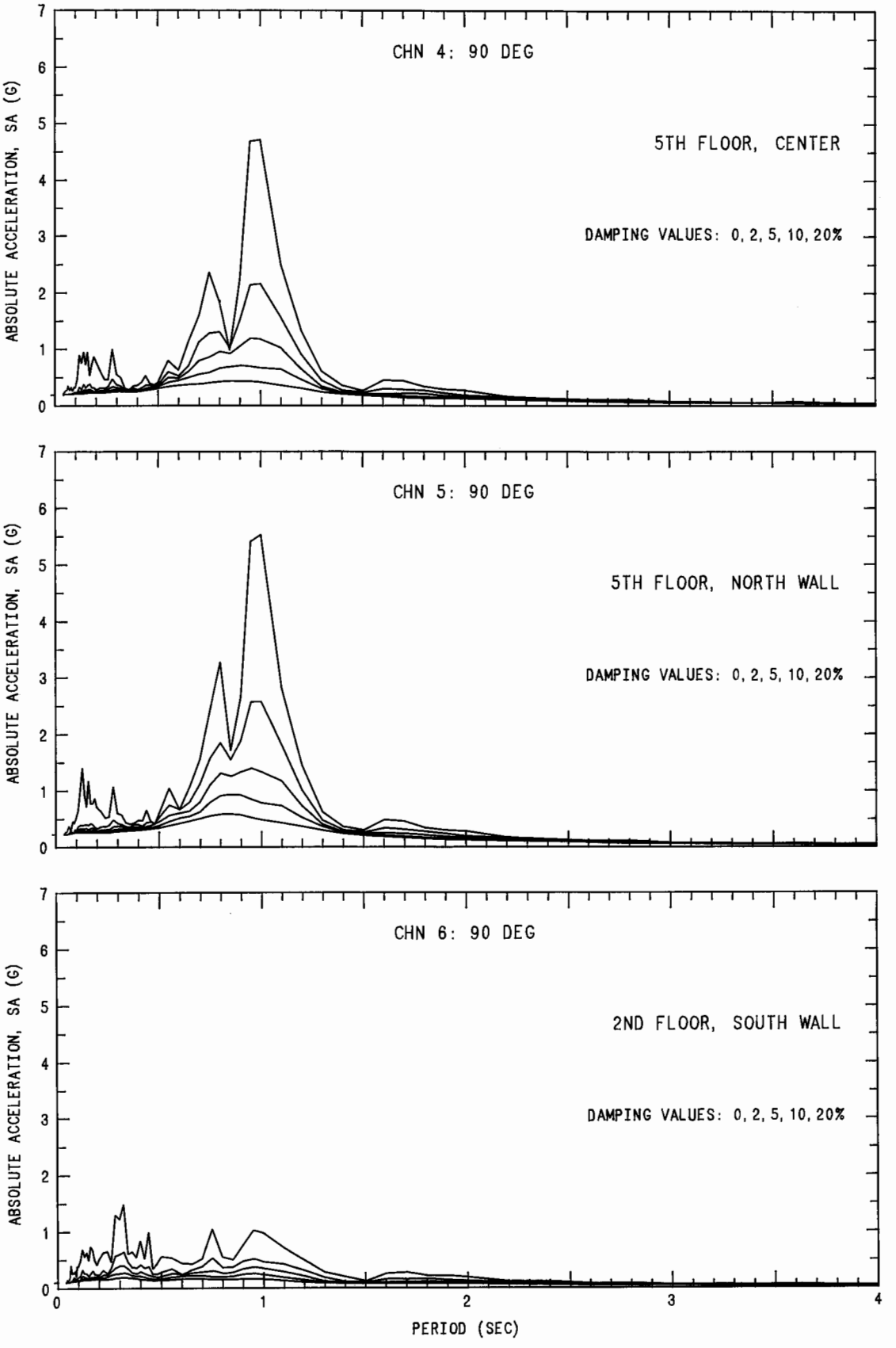
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO - 6-STORY OFFICE BLDG.: CSMIP S/N 490
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58490-C0272-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

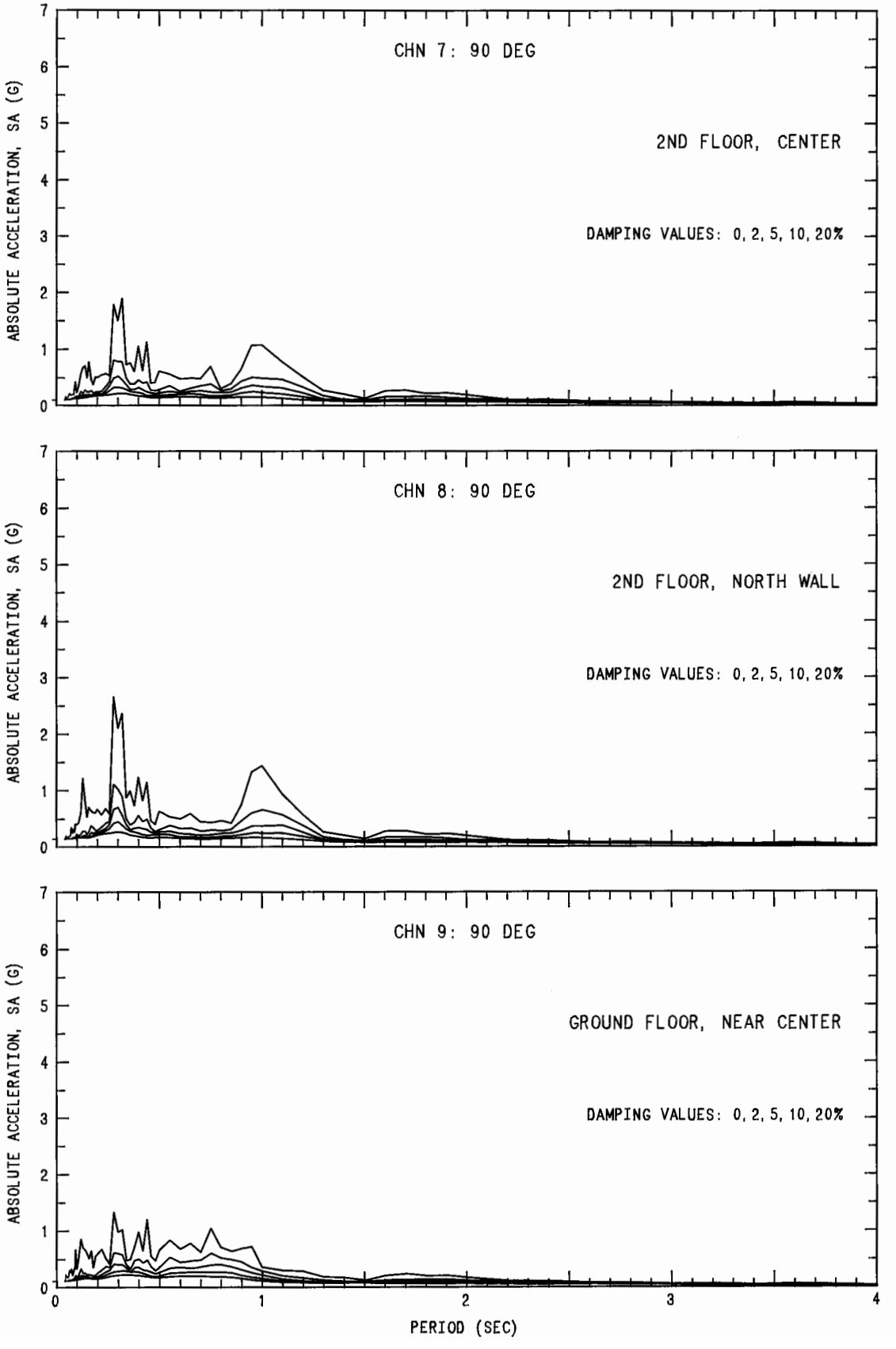


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO - 6-STORY OFFICE BLDG.: CSMIP S/N 490
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58490-C0272-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

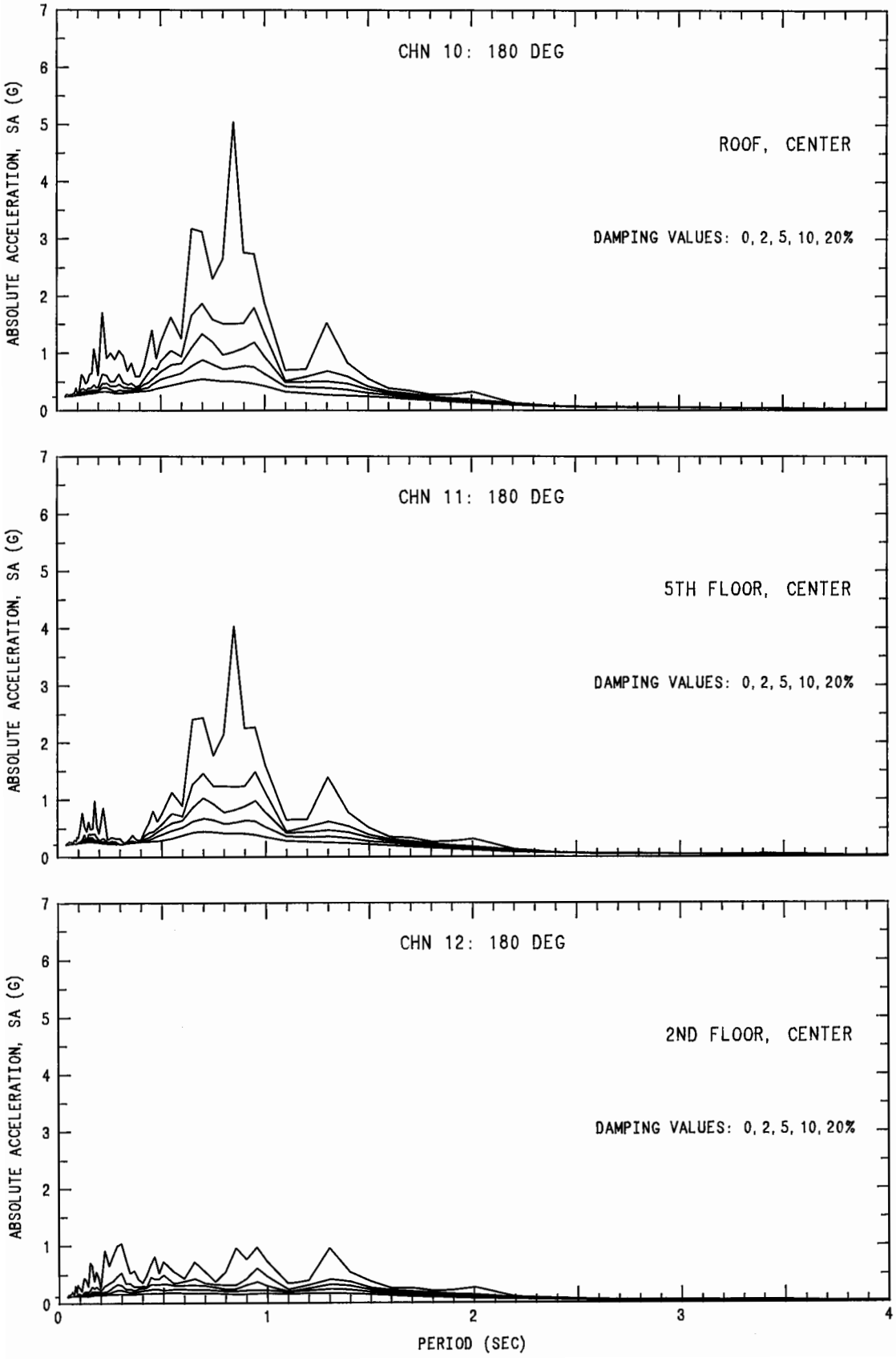


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58490-C0272-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

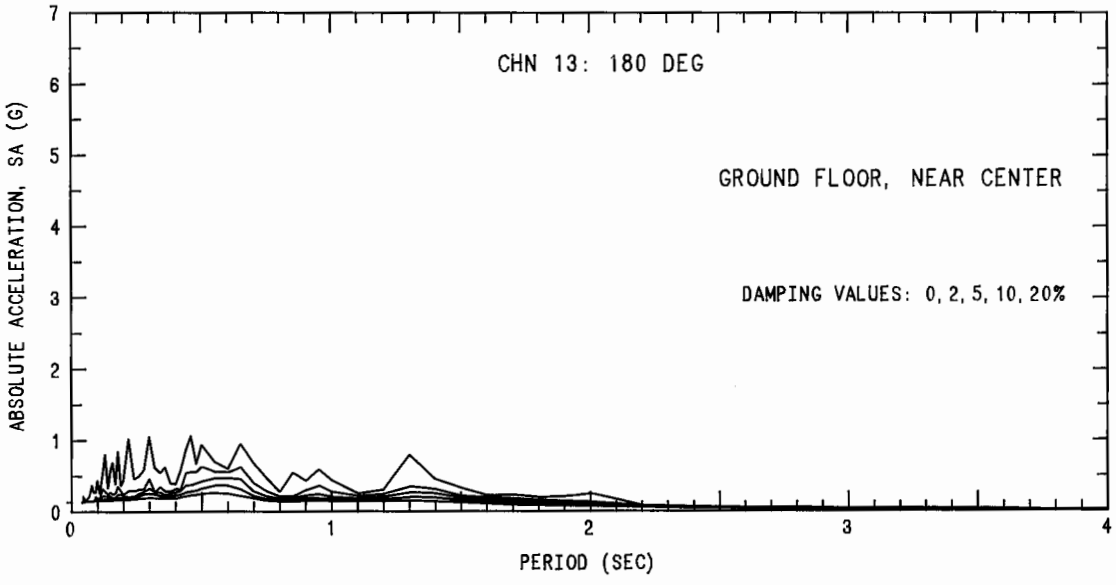


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58490-C0272-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN BRUNO – 6-STORY OFFICE BLDG.: CSMIP S/N 490

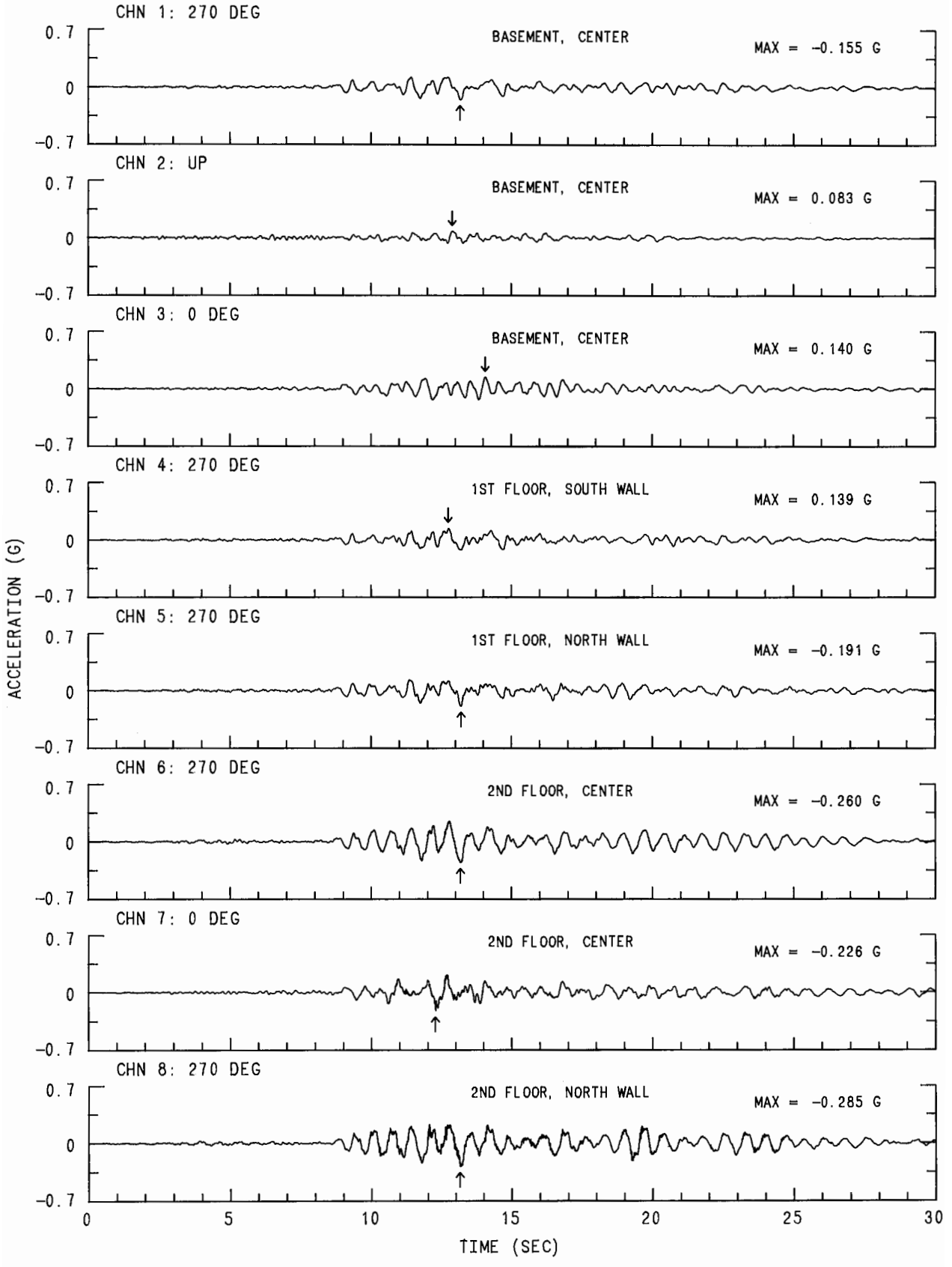
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58490-C0272-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

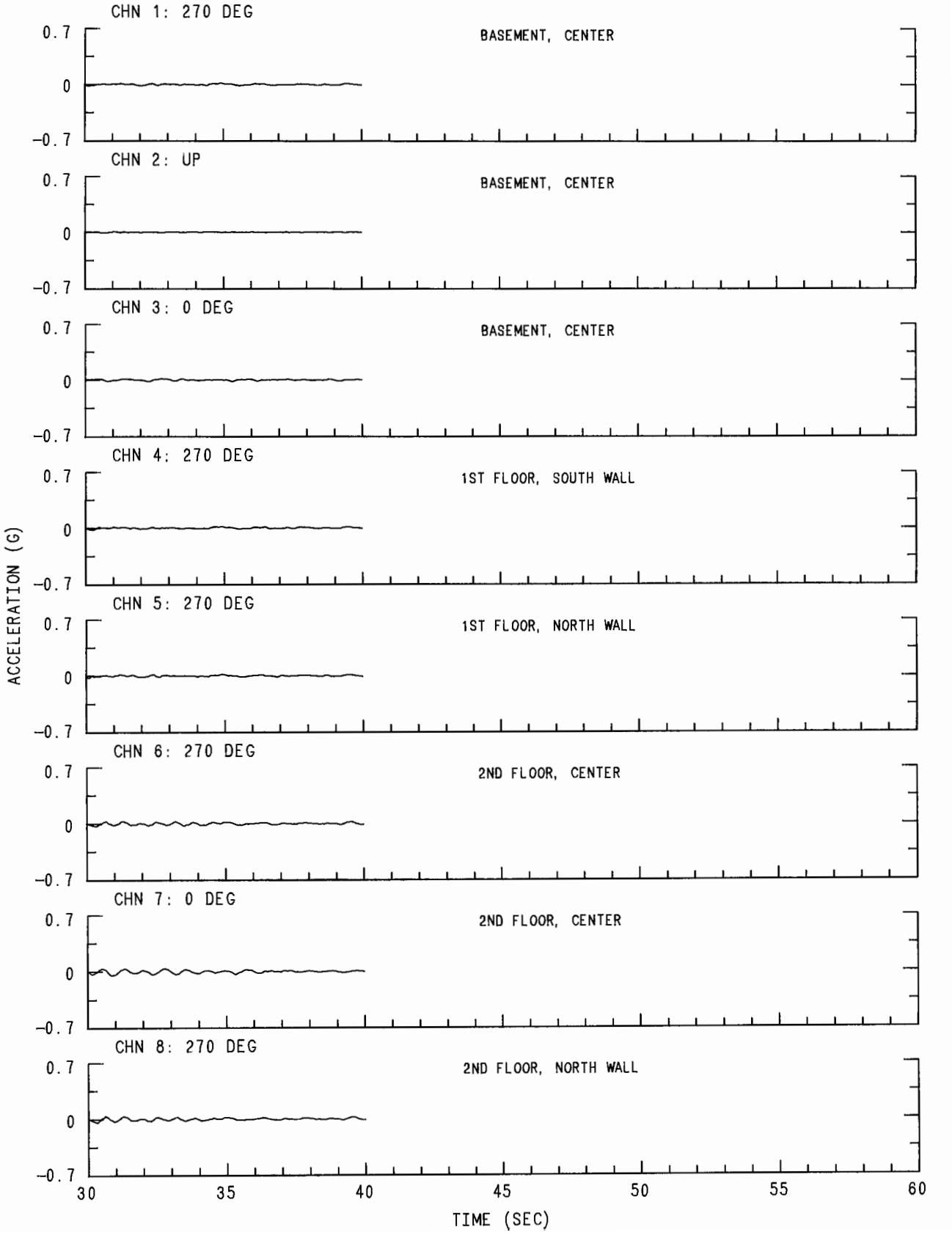
PHASE 1 ACCELERATION. RECORD ID: 58261-C0150-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SO. SAN FRANCISCO – 4–STORY HOSPITAL: CSMIP S/N 261

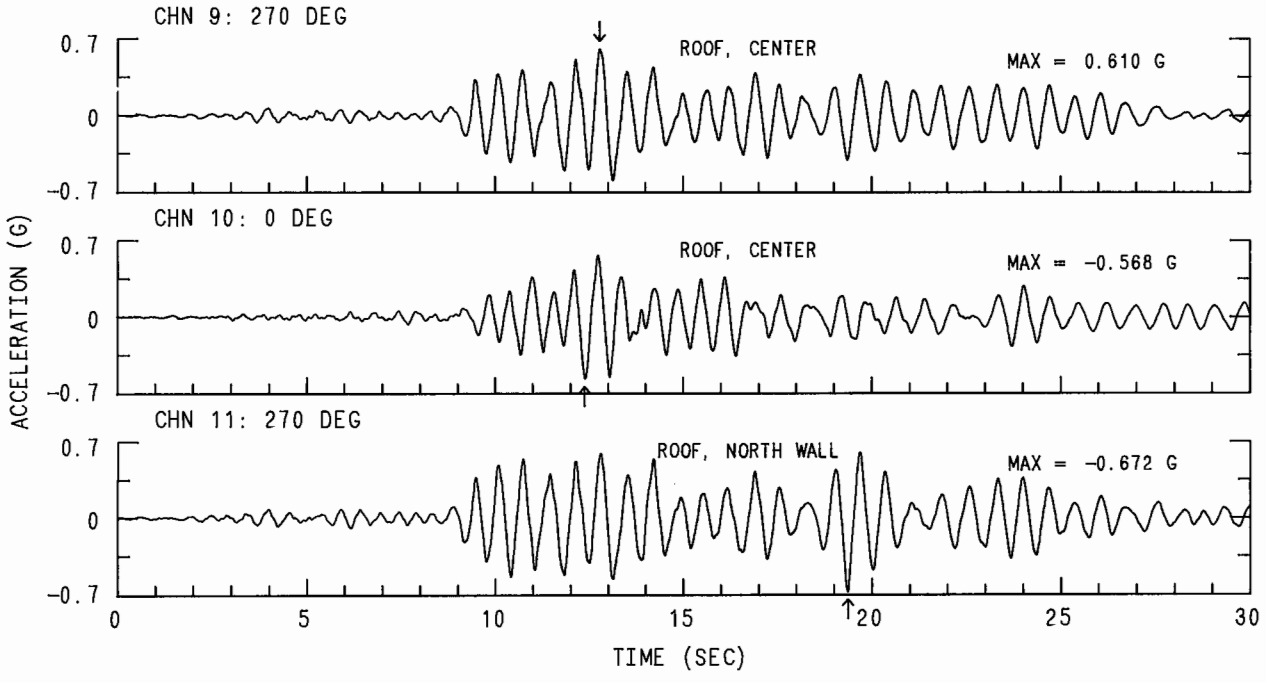
PHASE 1 ACCELERATION. RECORD ID: 58261–C0150–89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SO. SAN FRANCISCO - 4-STORY HOSPITAL: CSMIP S/N 261

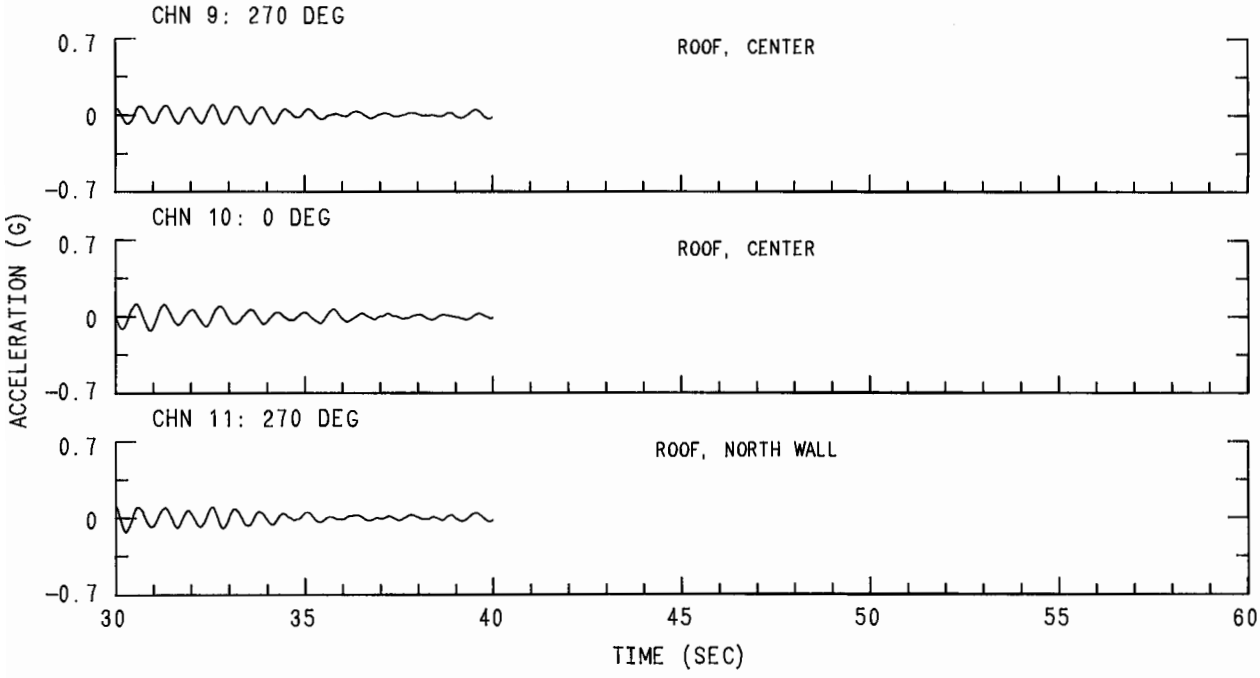
PHASE 1 ACCELERATION. RECORD ID: 58261-C0150-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

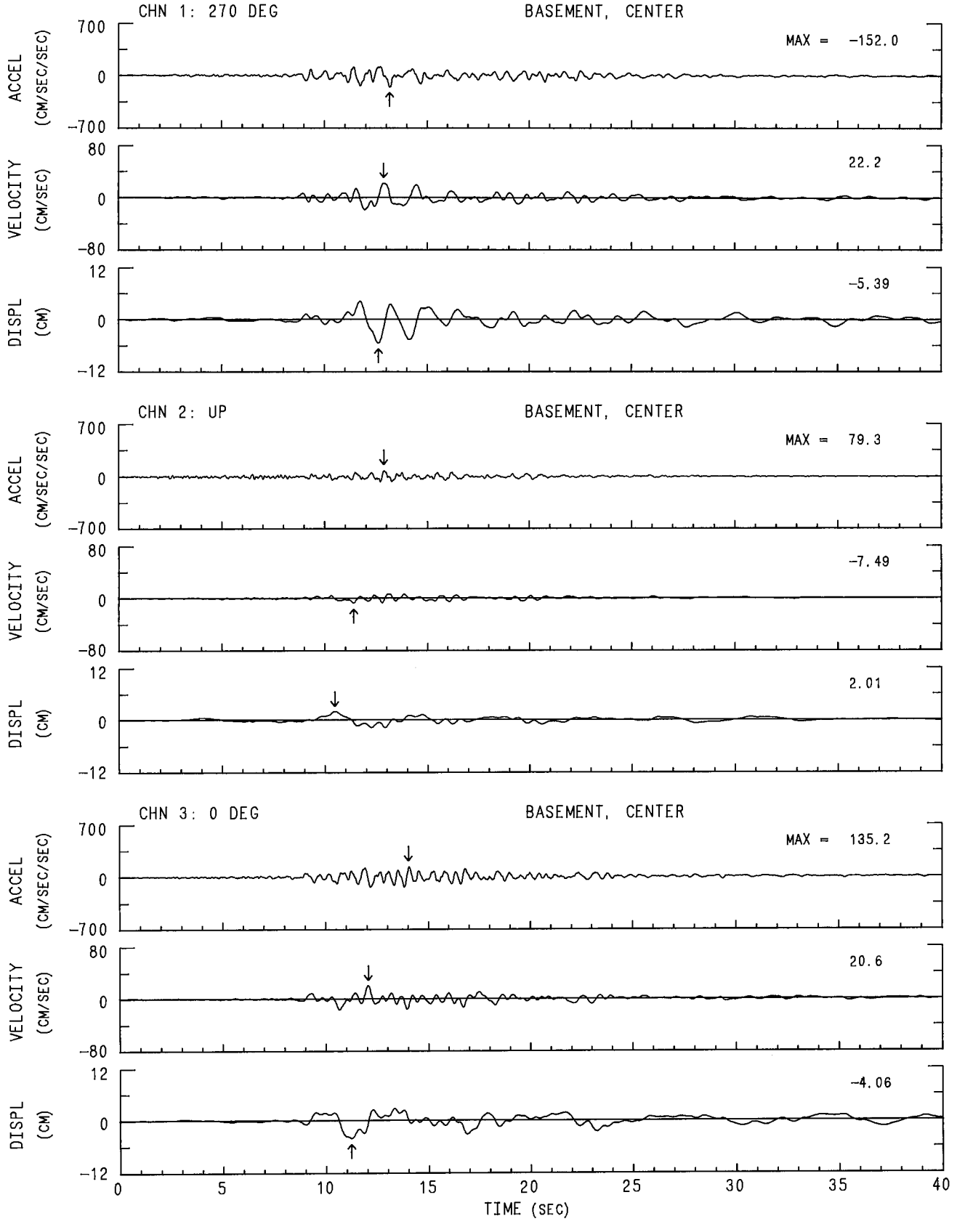
SO. SAN FRANCISCO - 4-STORY HOSPITAL: CSMIP S/N 261

PHASE 1 ACCELERATION. RECORD ID: 58261-C0150-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

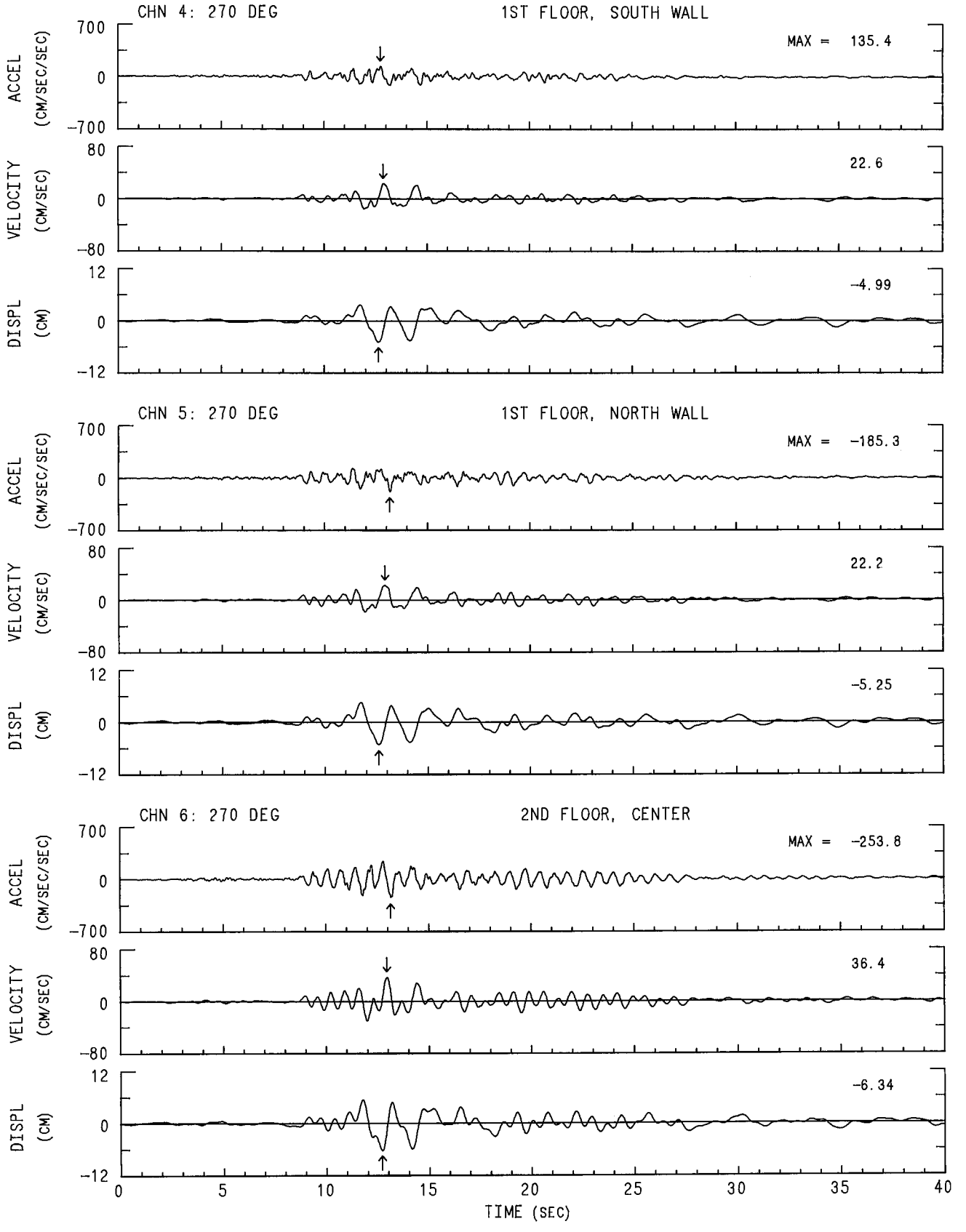
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58261-C0150-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

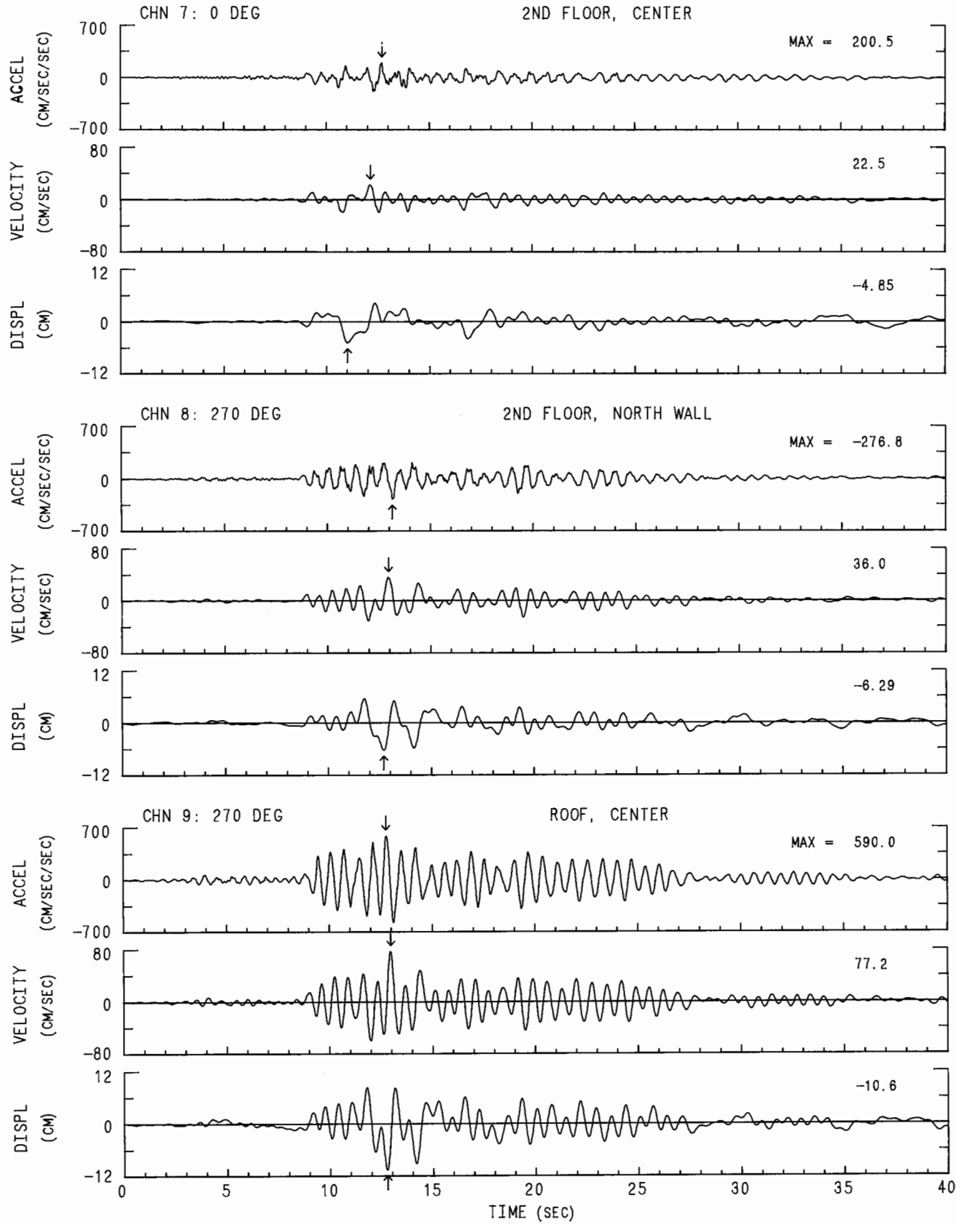
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58261-C0150-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

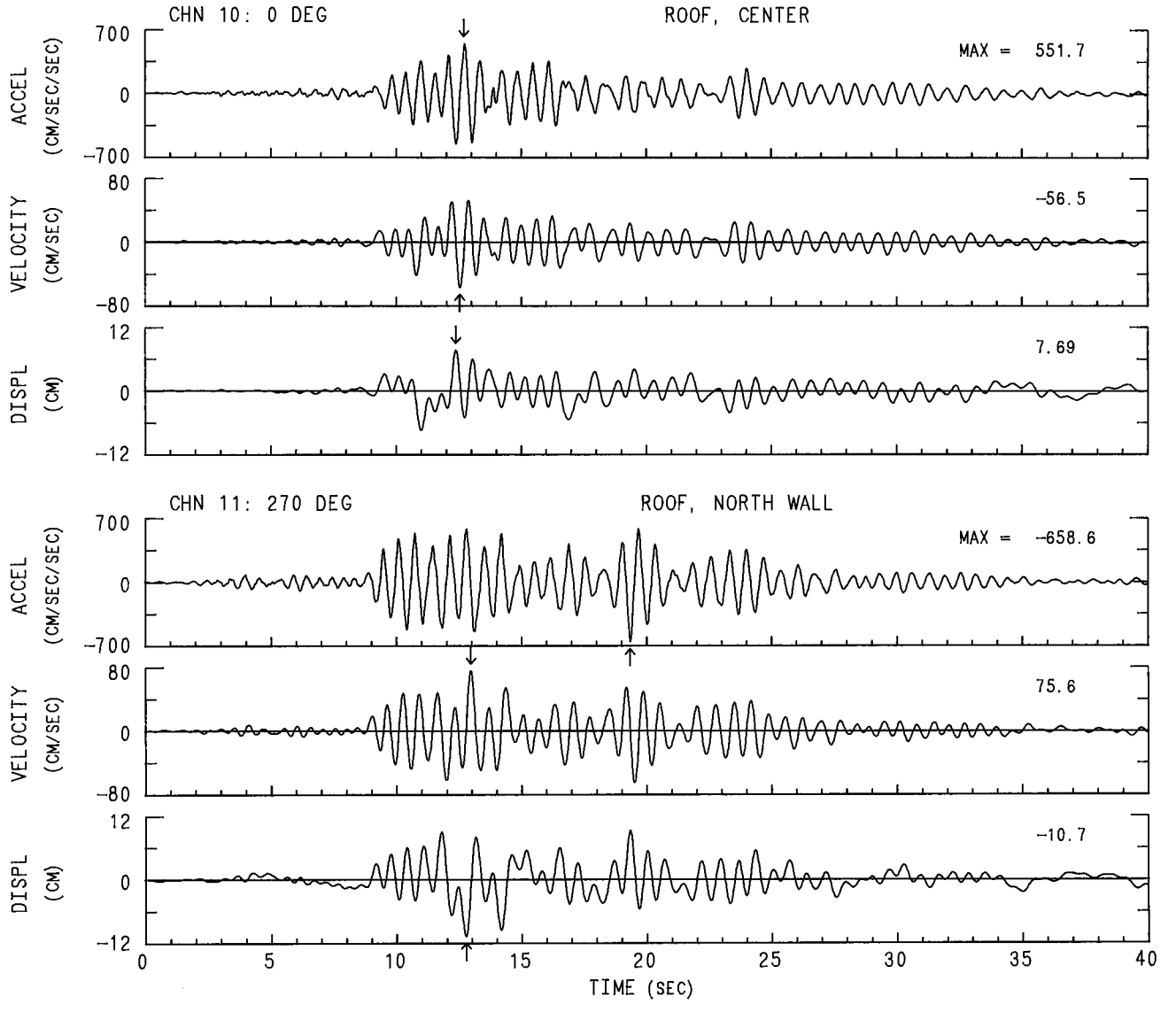
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58261-C0150-89291.03



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC) RECORD ID: 58261-C0150-89291.03



SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

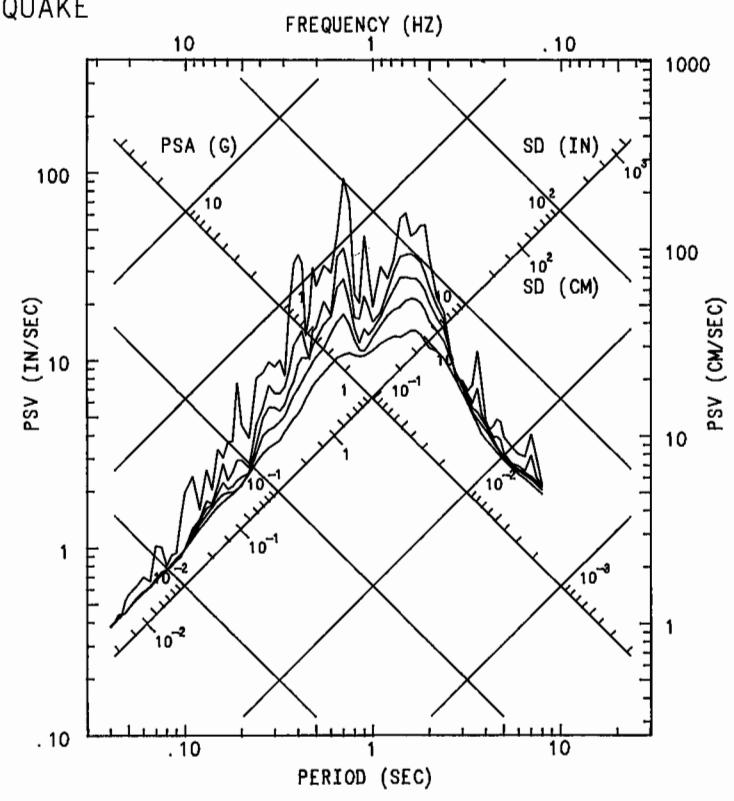
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

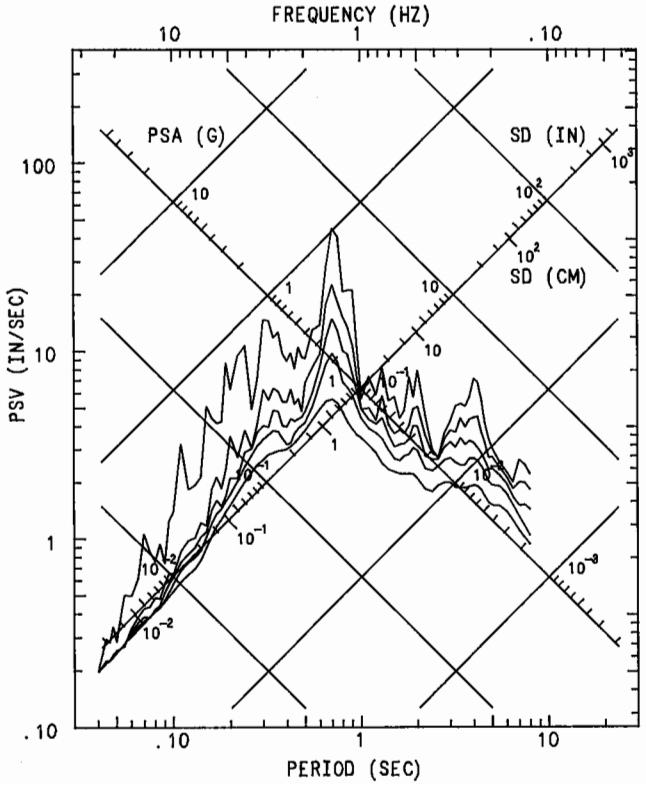
RECORD ID: 58261-C0150-89291.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

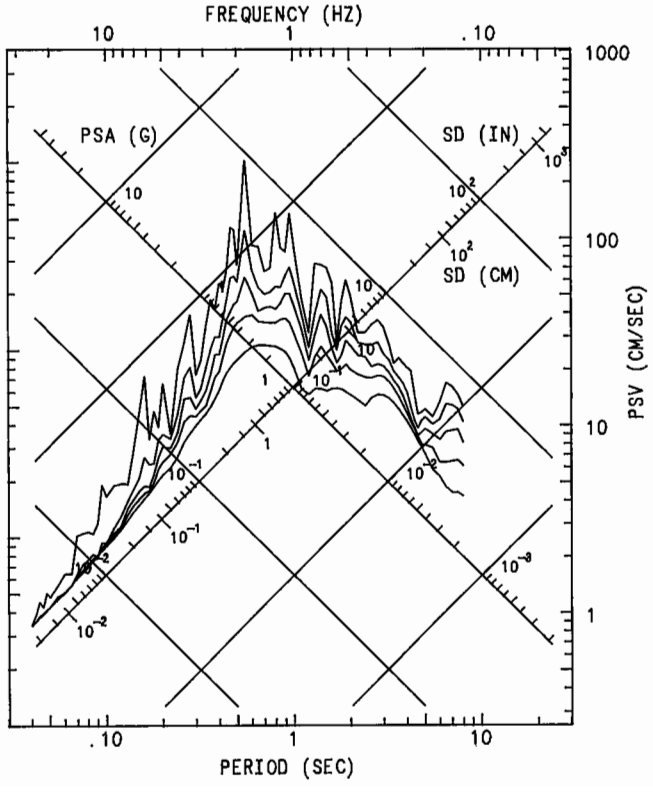
CHN 1: 270 DEG
BASEMENT, CENTER



CHN 2: UP
BASEMENT, CENTER



CHN 3: 0 DEG
BASEMENT, CENTER



SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

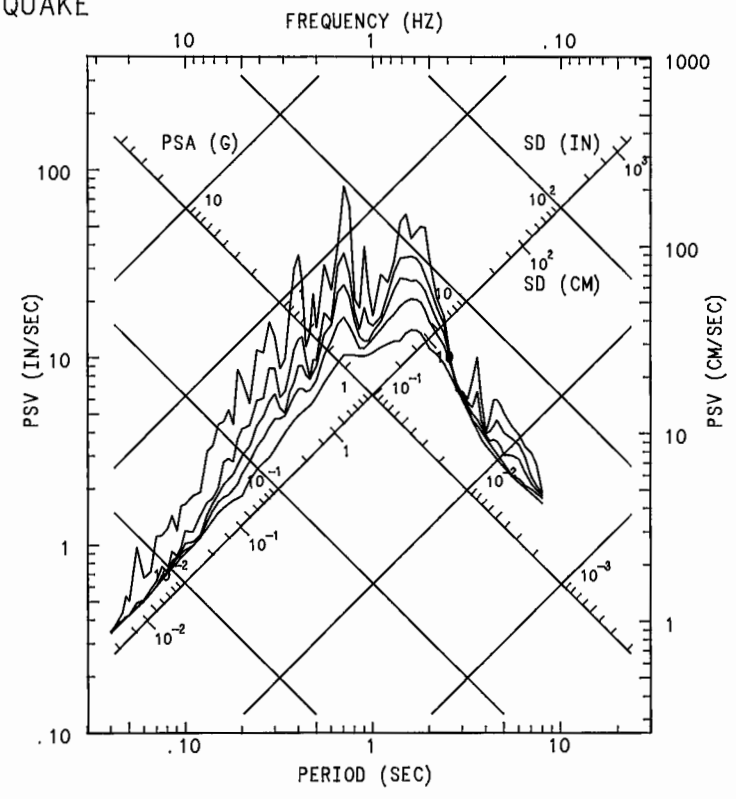
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

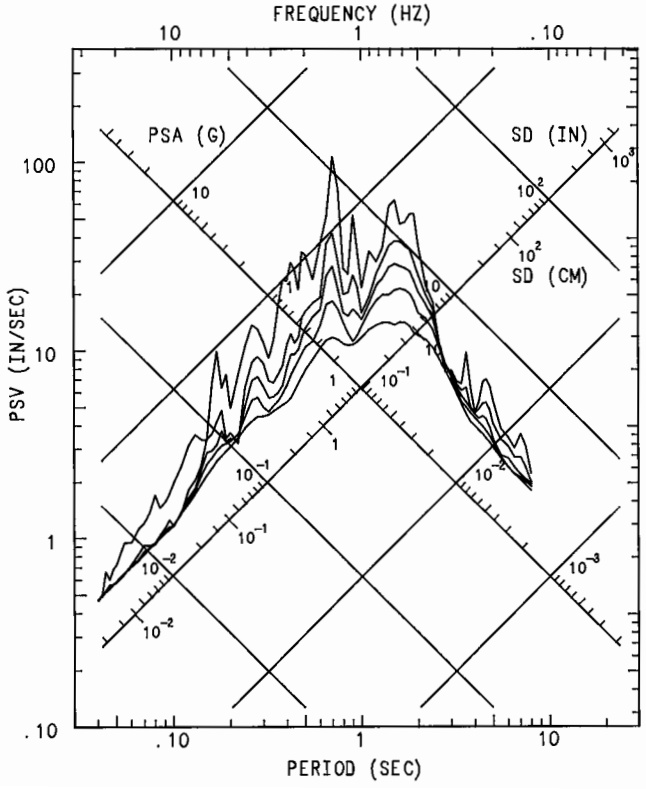
RECORD ID: 58261-C0150-89291.03

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

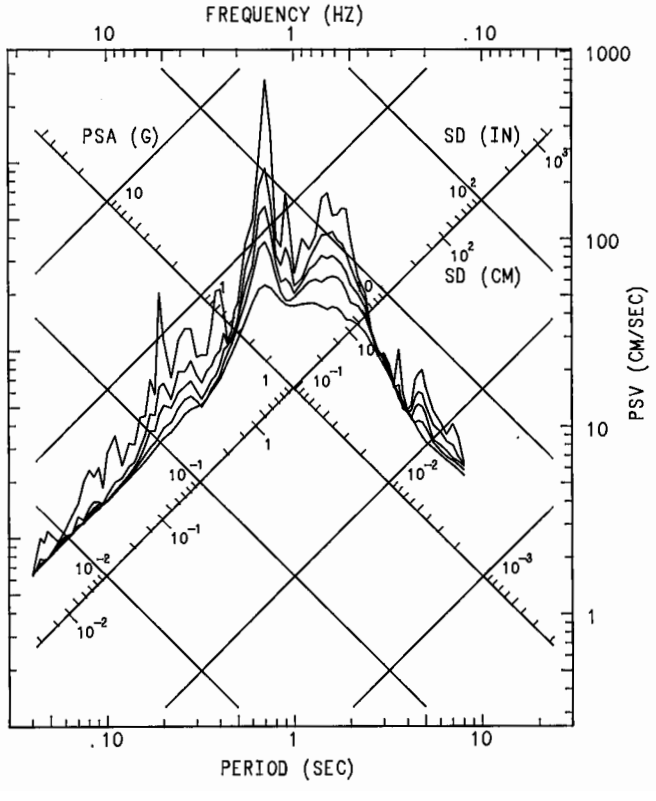
CHN 4: 270 DEG
1ST FLOOR, SOUTH WALL



CHN 5: 270 DEG
1ST FLOOR, NORTH WALL



CHN 6: 270 DEG
2ND FLOOR, CENTER



SO. SAN FRANCISCO - 4-STORY HOSPITAL: CSMIP S/N 261

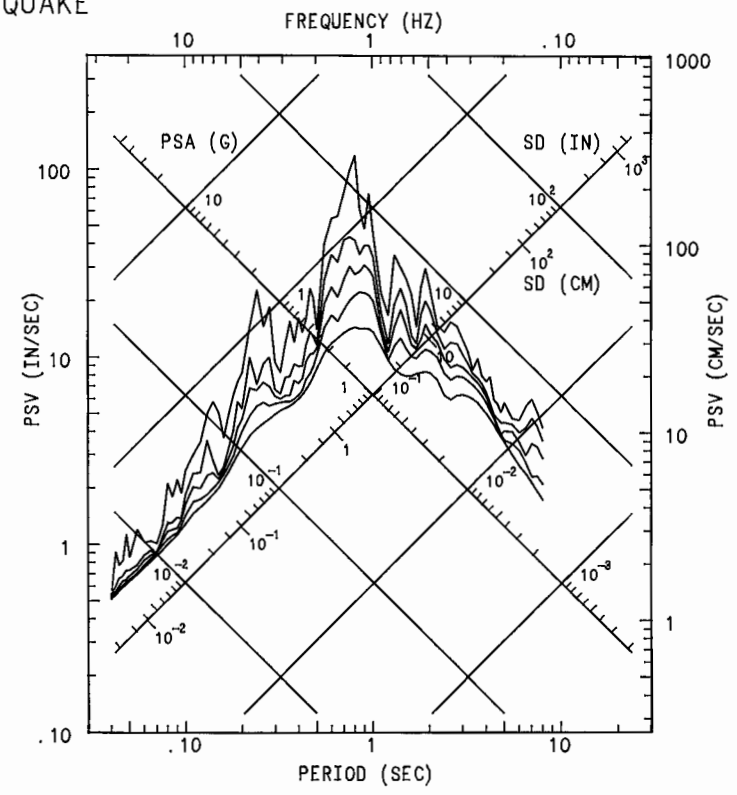
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

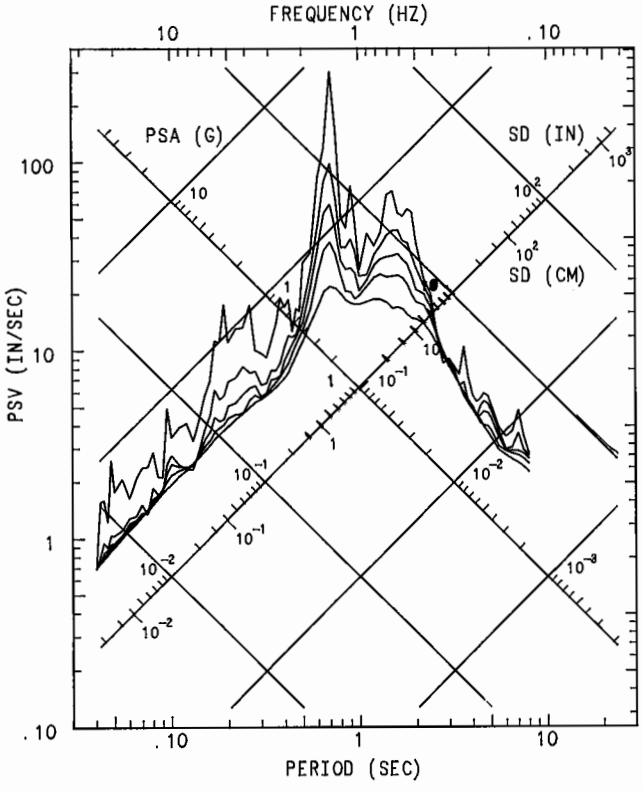
RECORD ID: 58261-C0150-89291.03

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

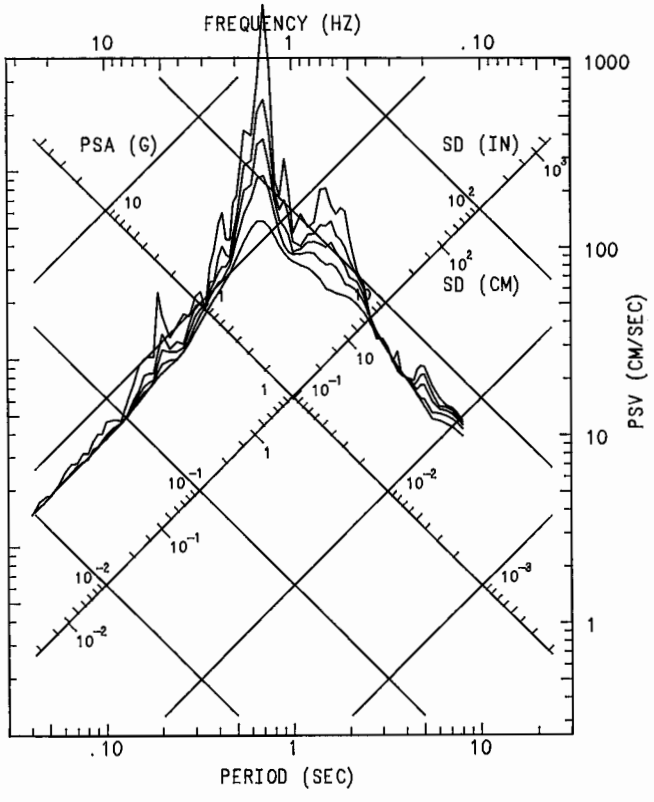
CHN 7: 0 DEG
2ND FLOOR, CENTER



CHN 8: 270 DEG
2ND FLOOR, NORTH WALL



CHN 9: 270 DEG
ROOF, CENTER



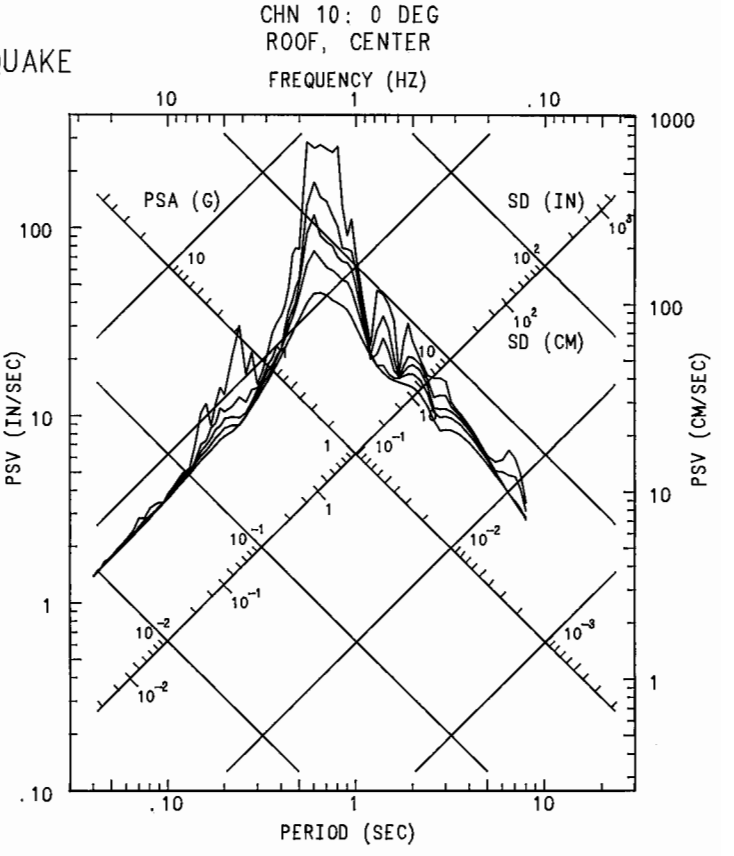
SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261

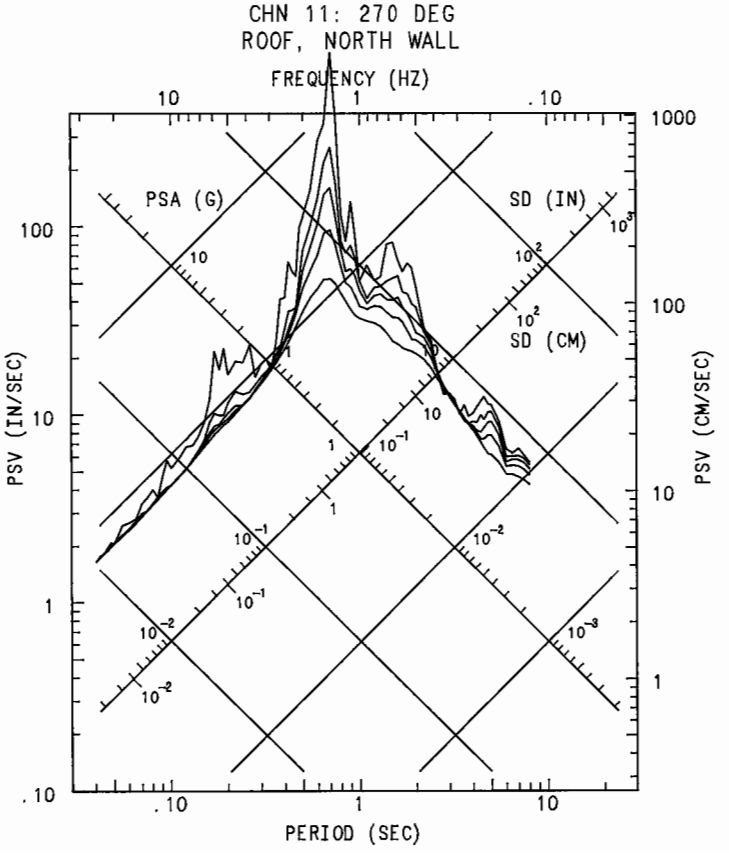
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ
(0.04 TO 7.35 SEC)

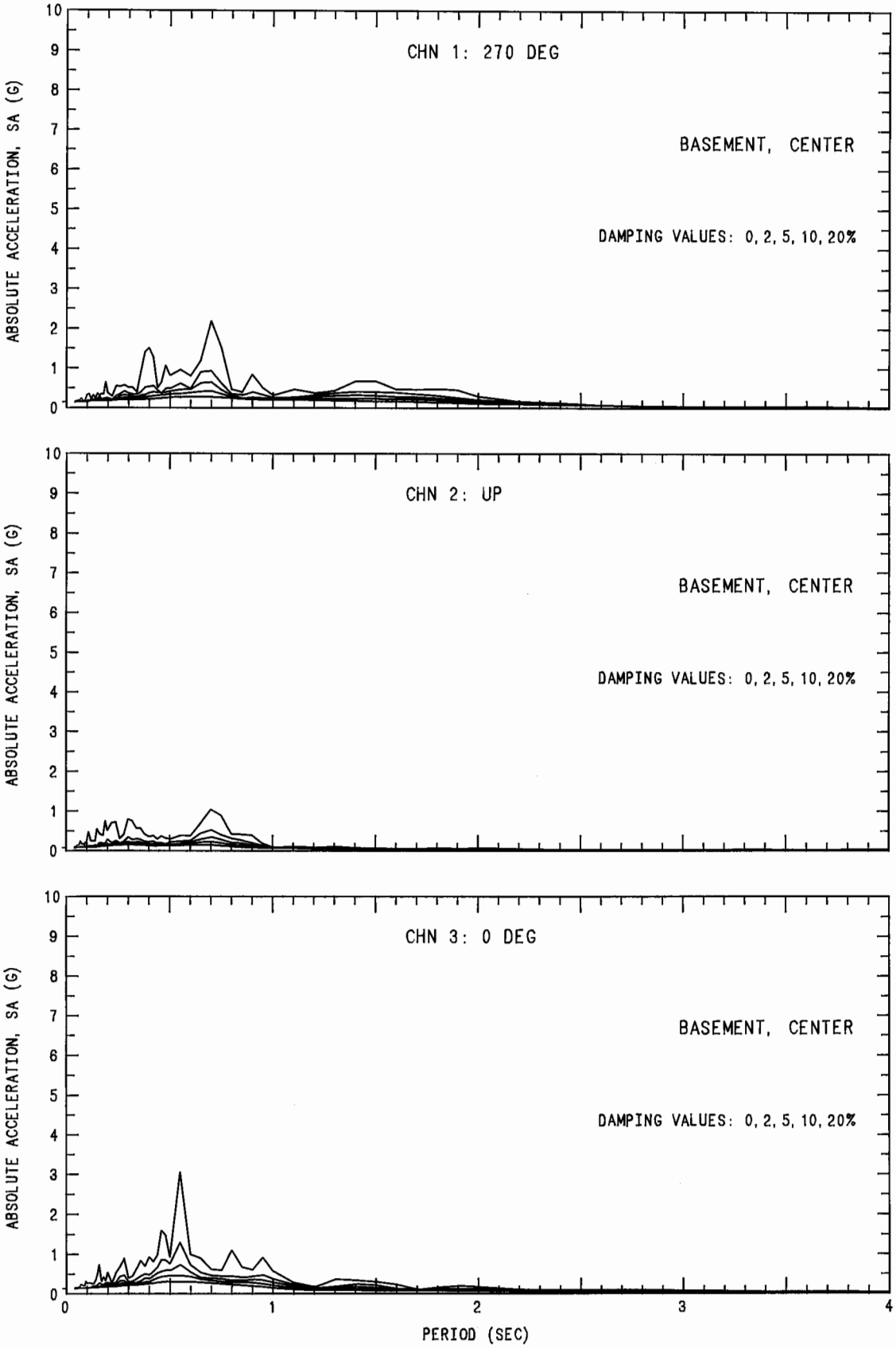
RECORD ID: 58261-C0150-89291.03

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

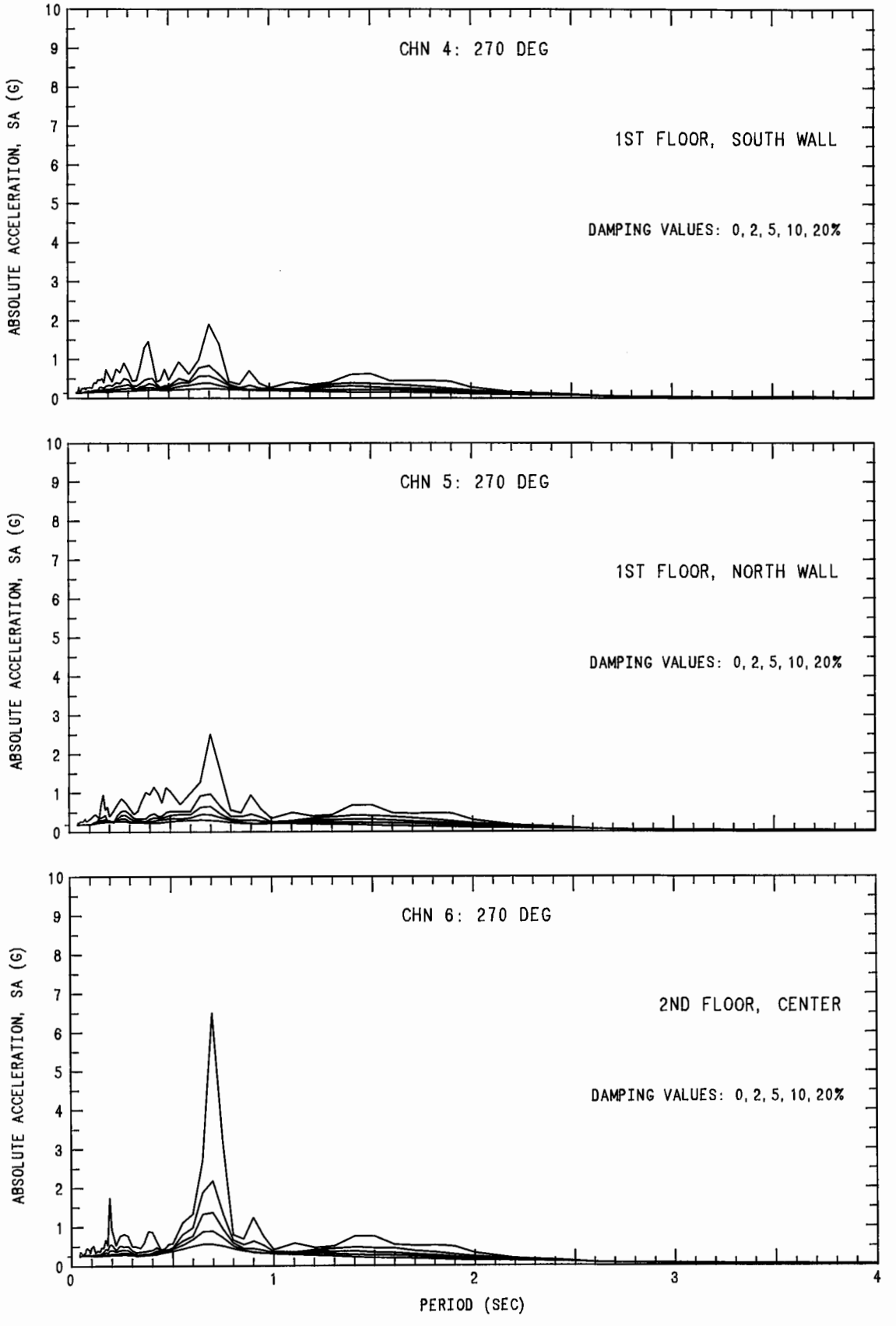




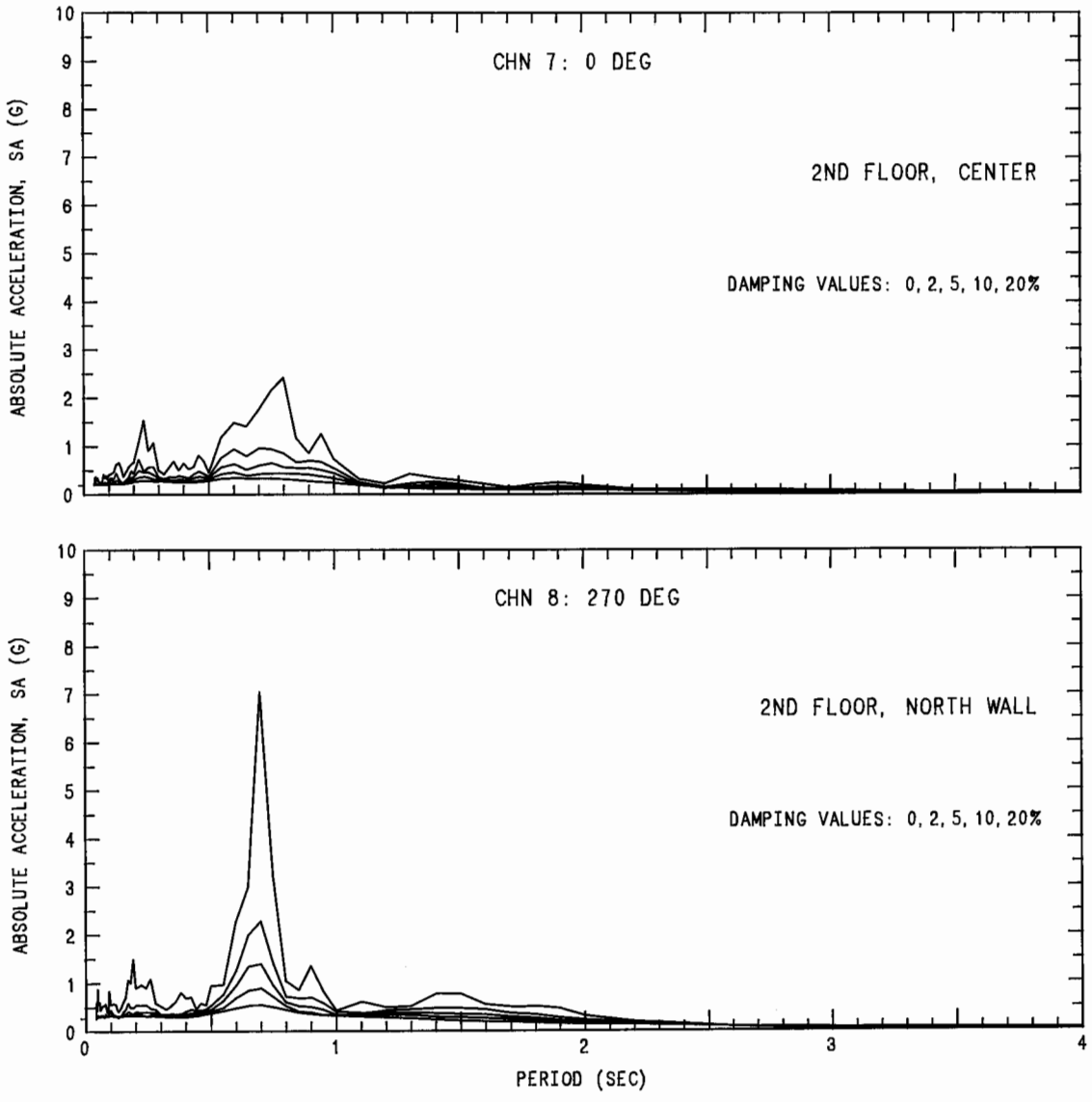
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO - 4-STORY HOSPITAL: CSMIP S/N 261
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58261-C0150-89291.03
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



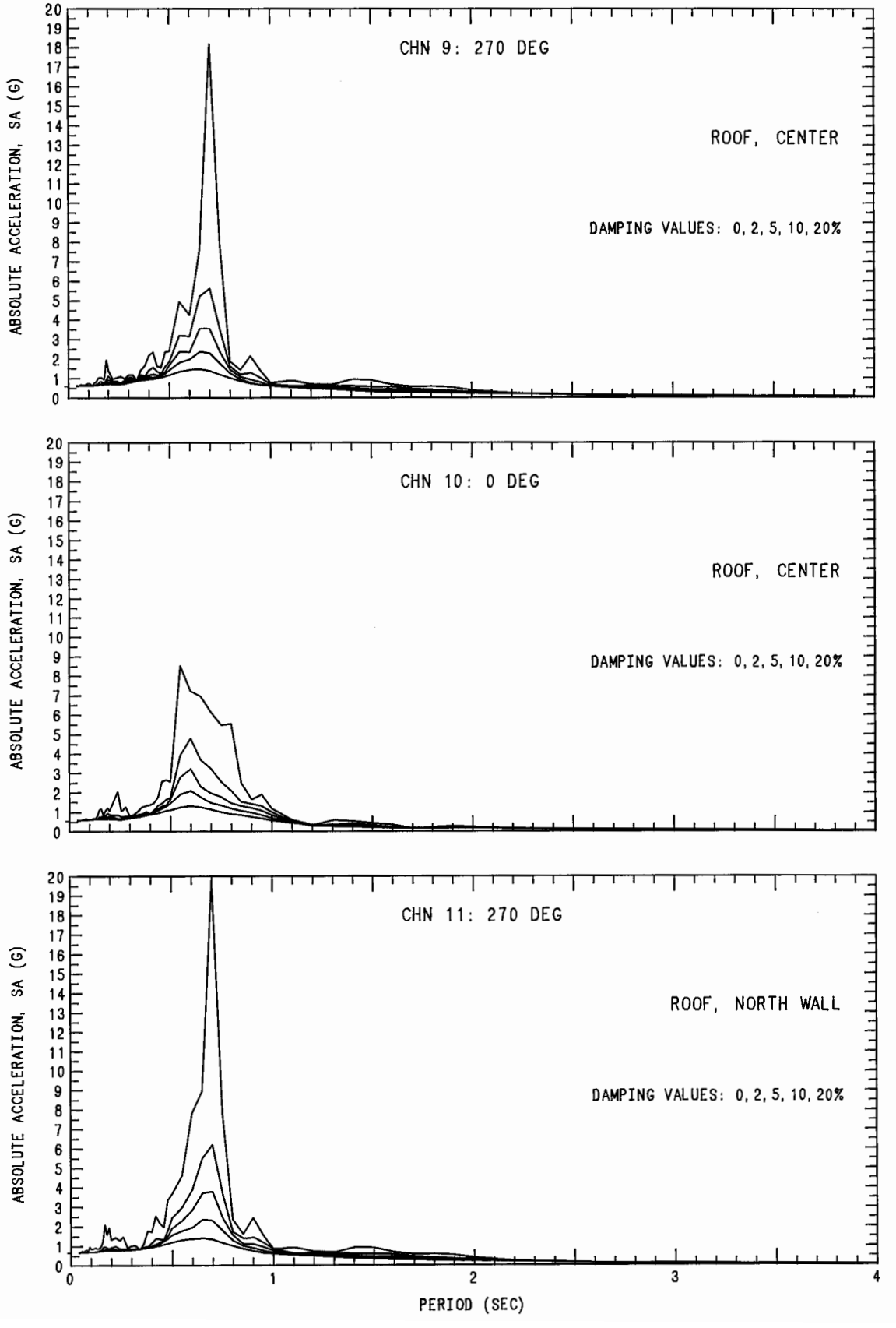
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO - 4-STORY HOSPITAL: CSMIP S/N 261
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58261-C0150-89291.03
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO - 4-STORY HOSPITAL: CSMIP S/N 261
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58261-C0150-89291.03
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



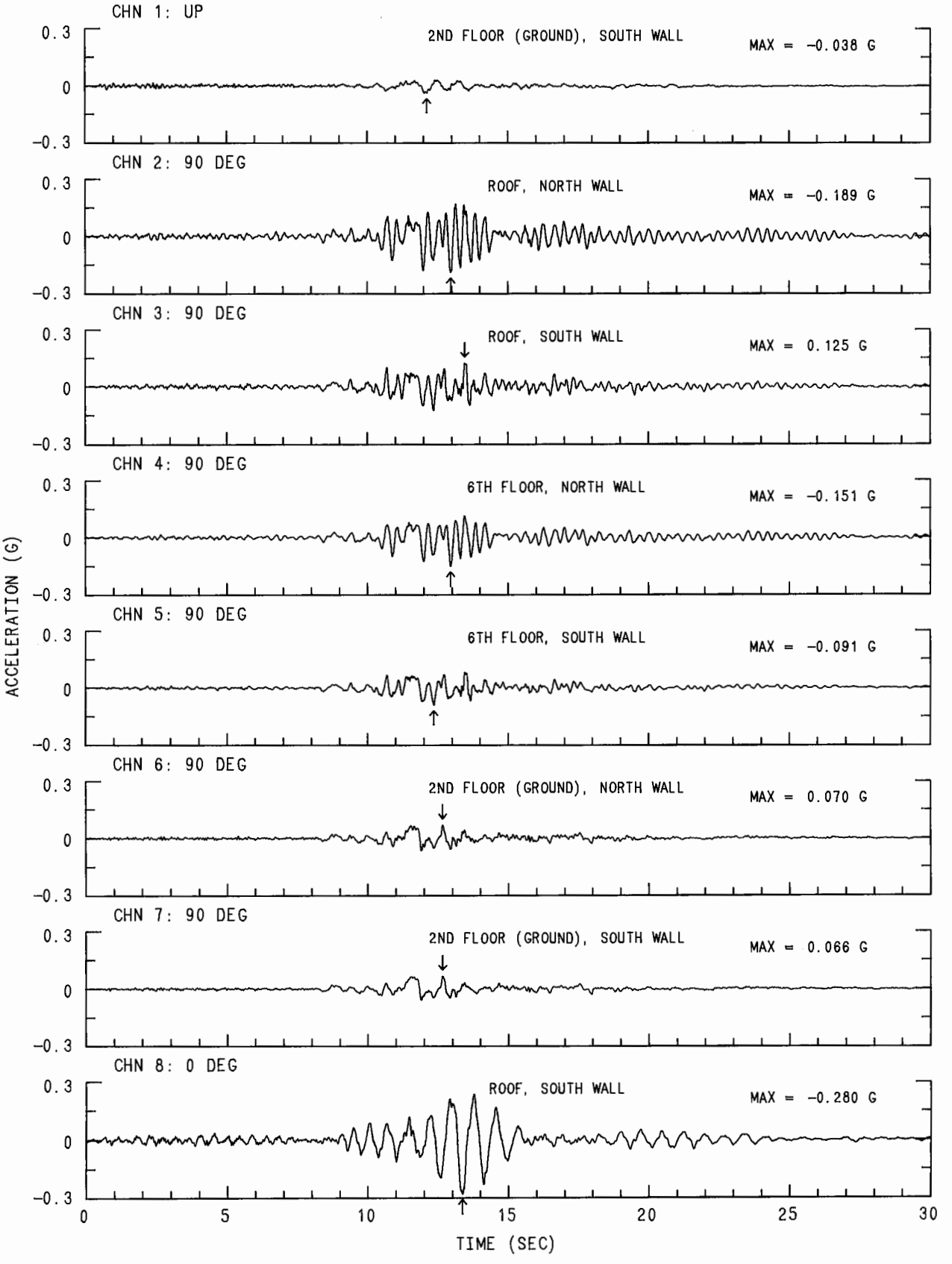
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SO. SAN FRANCISCO – 4-STORY HOSPITAL: CSMIP S/N 261
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58261-C0150-89291.03
USABLE DATA BANDWIDTH: 0.14 TO 23.6 HZ (0.04 TO 7.35 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO - 6-STORY SCHOOL BLDG.: CSMIP S/N 479

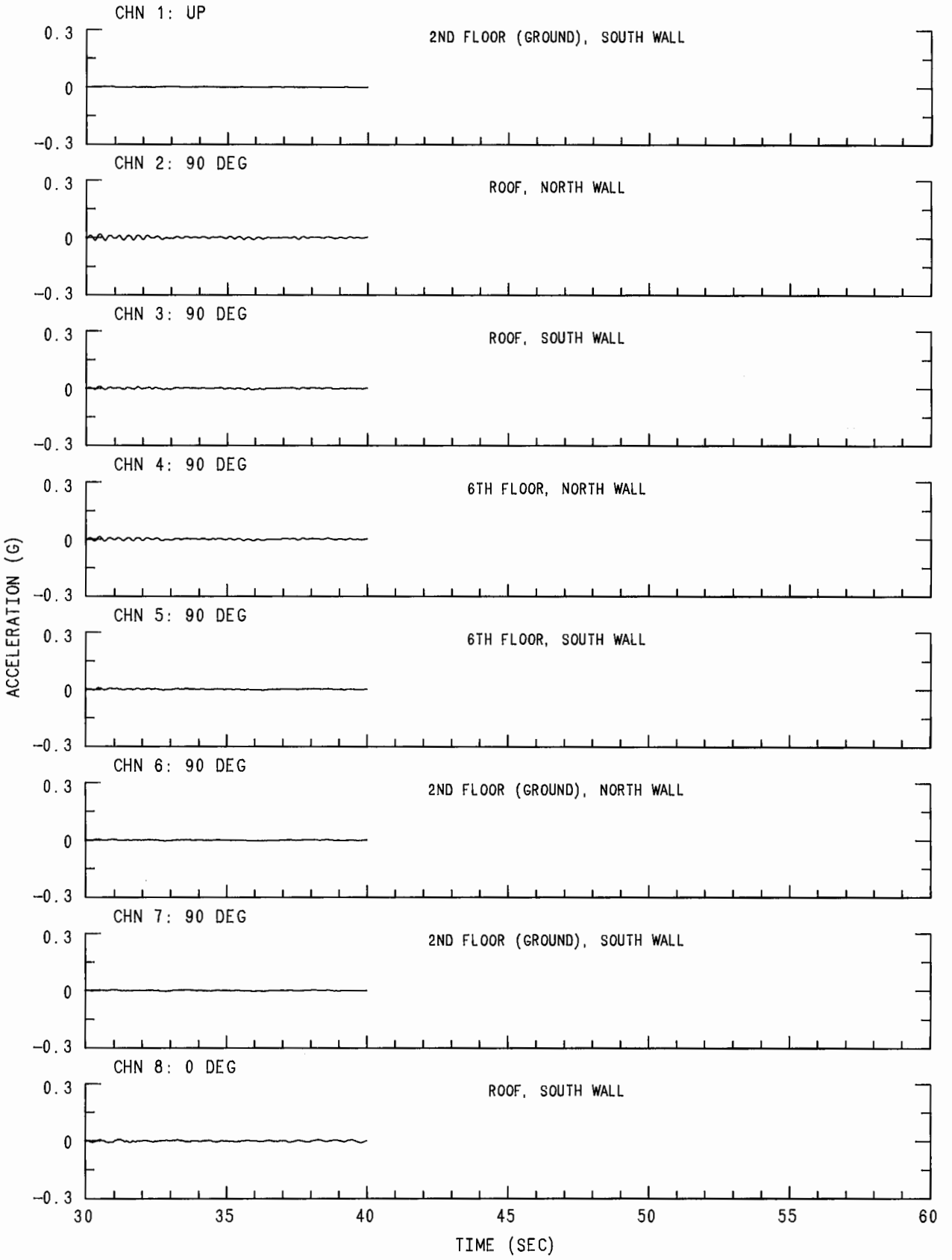
PHASE 1 ACCELERATION. RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

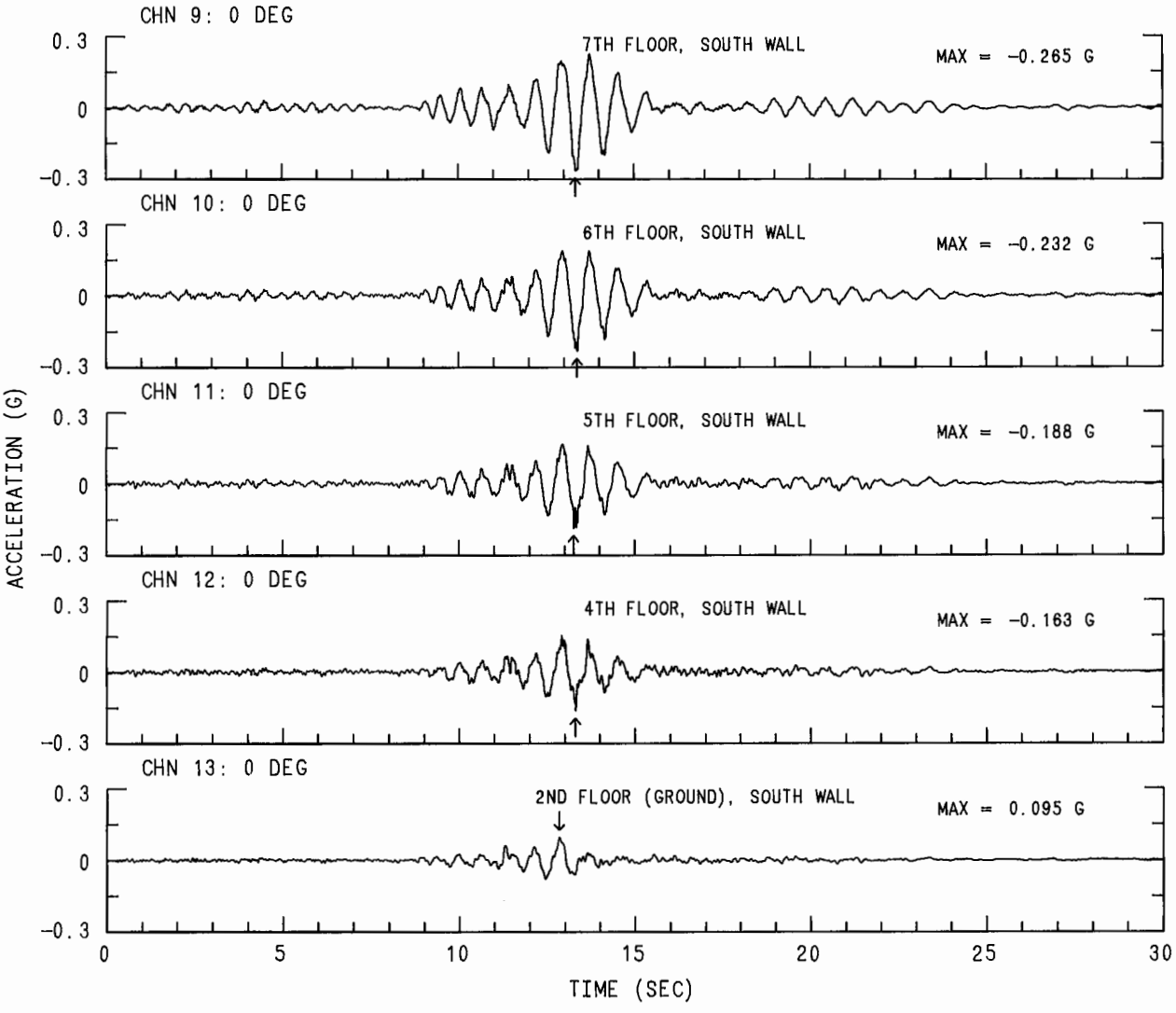
PHASE 1 ACCELERATION. RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

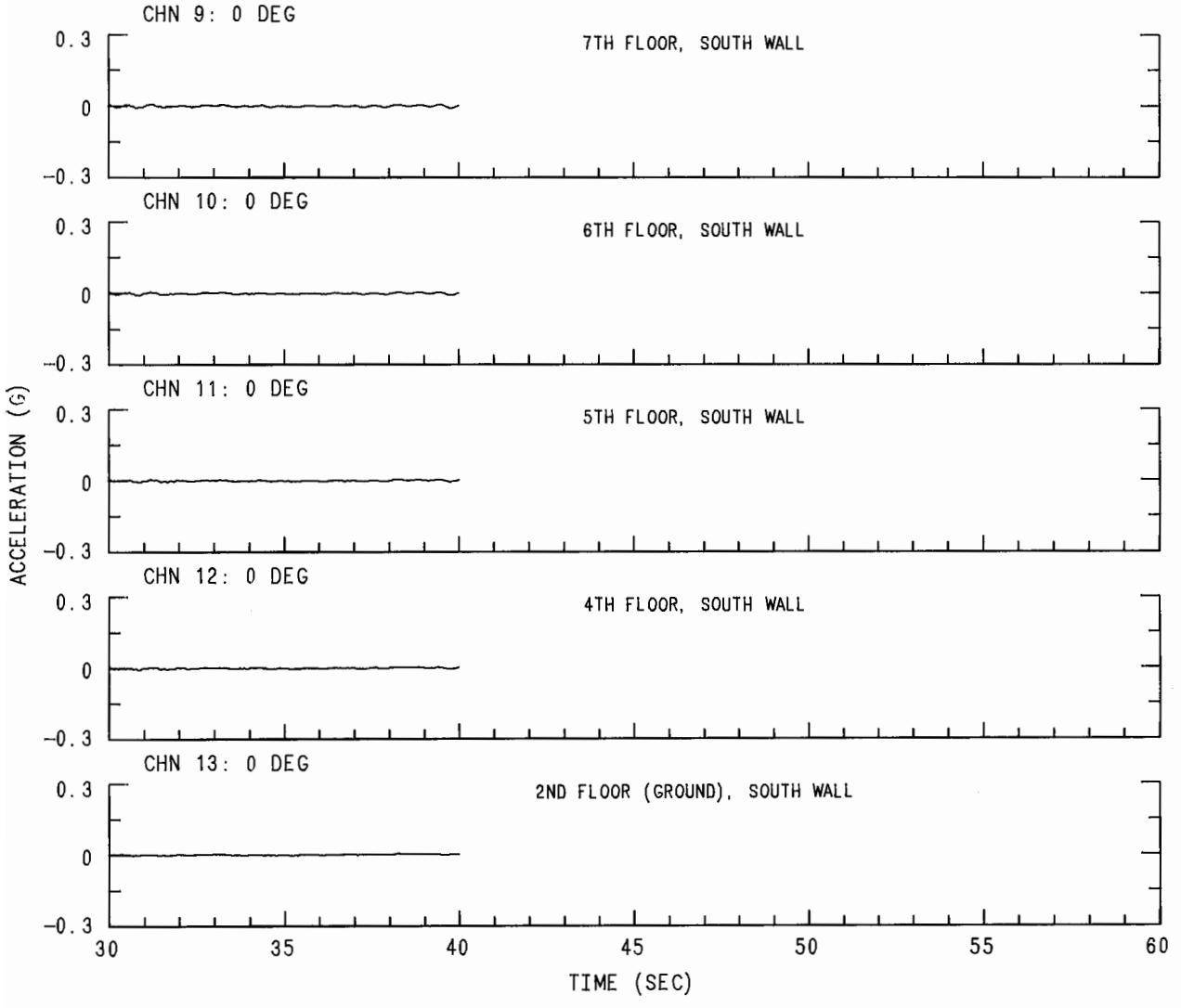
PHASE 1 ACCELERATION. RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO - 6-STORY SCHOOL BLDG.: CSMIP S/N 479

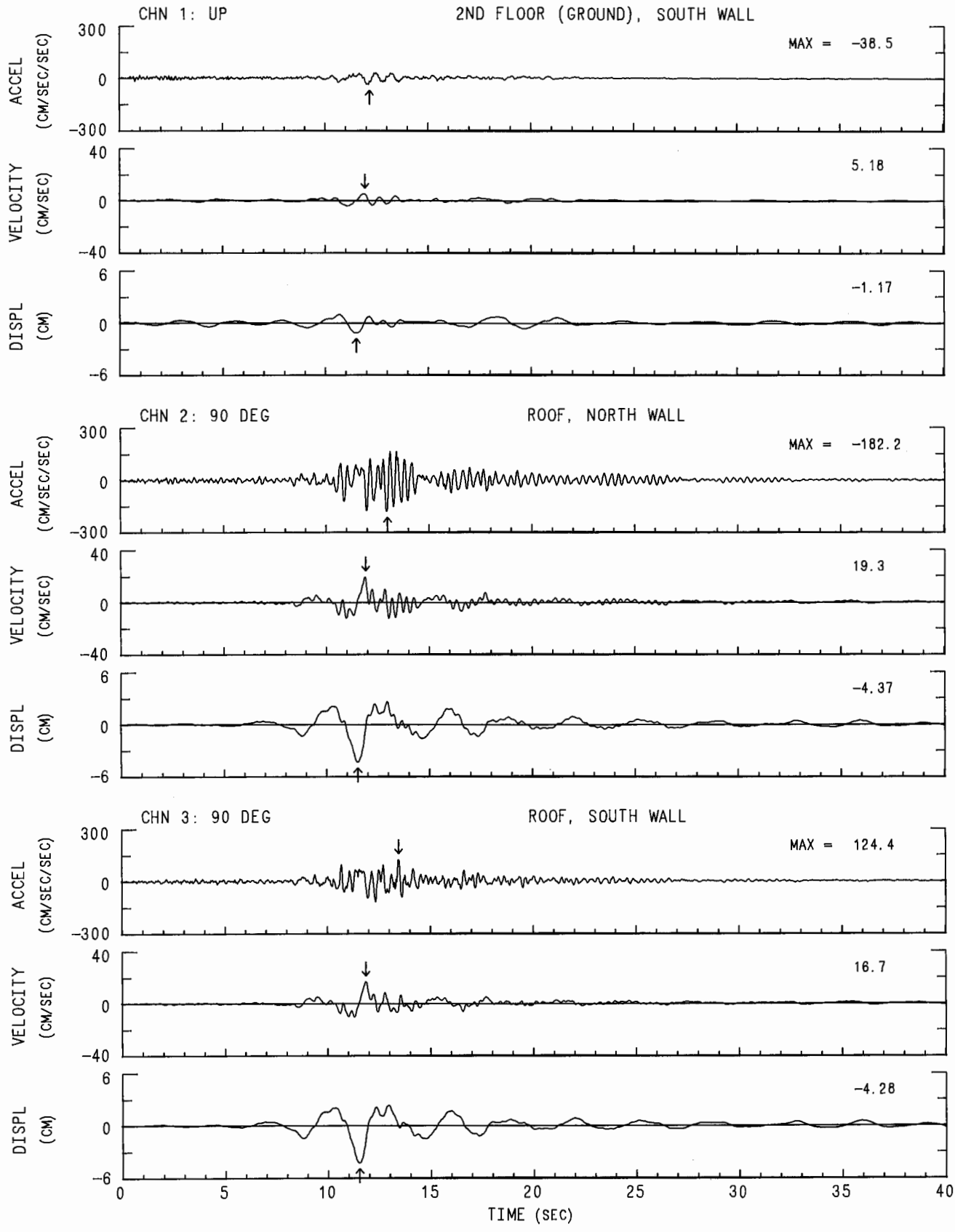
PHASE 1 ACCELERATION. RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

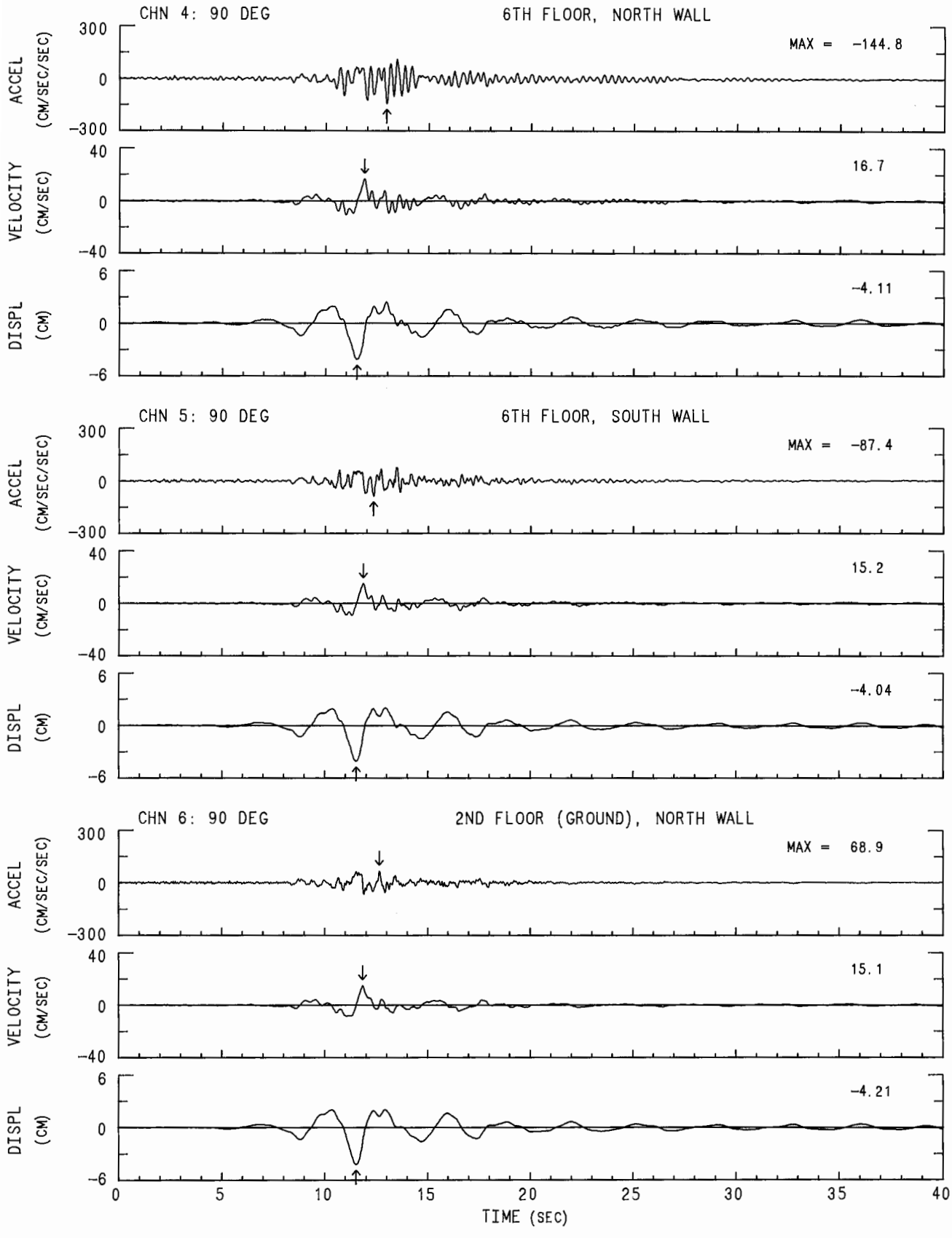
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

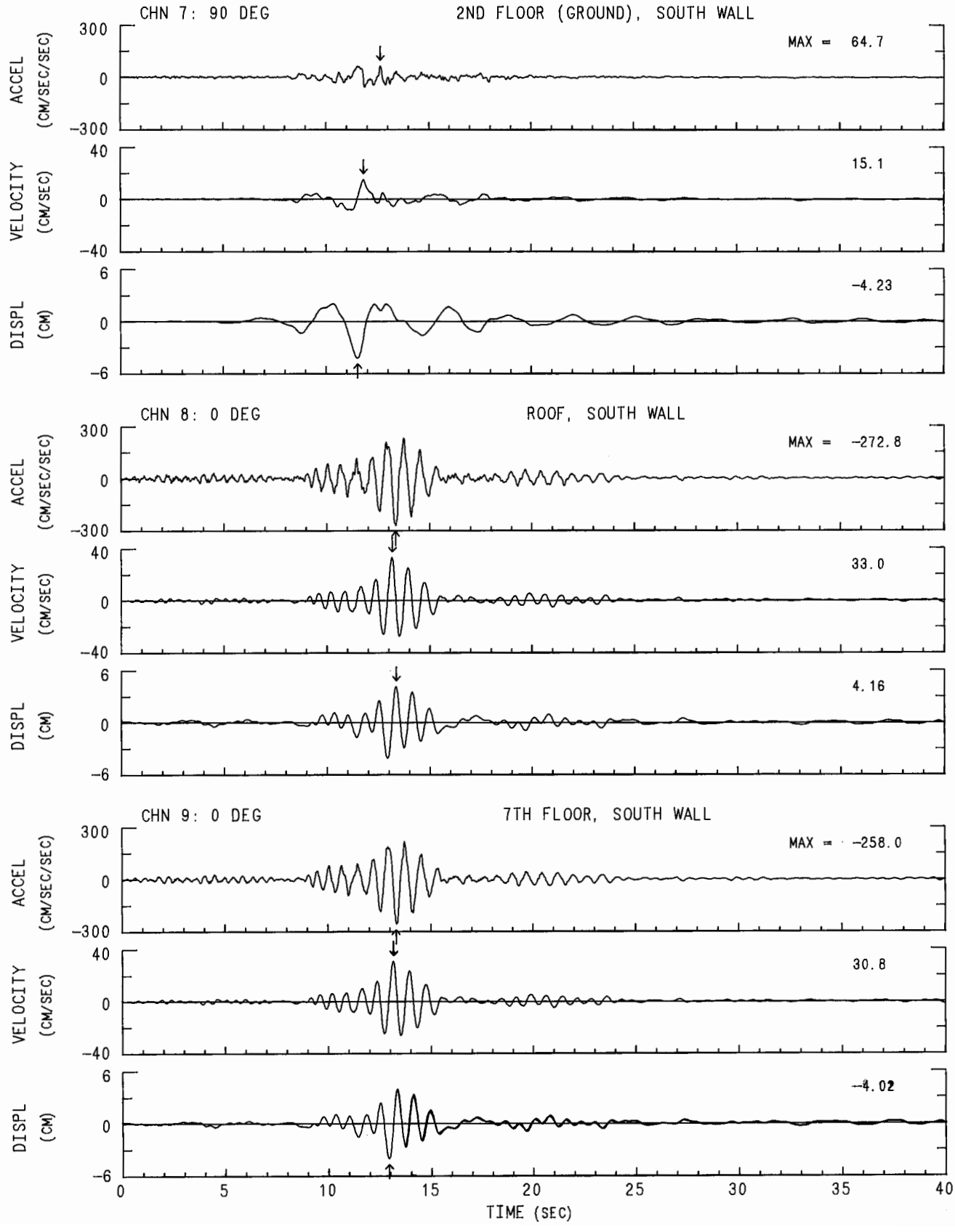
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

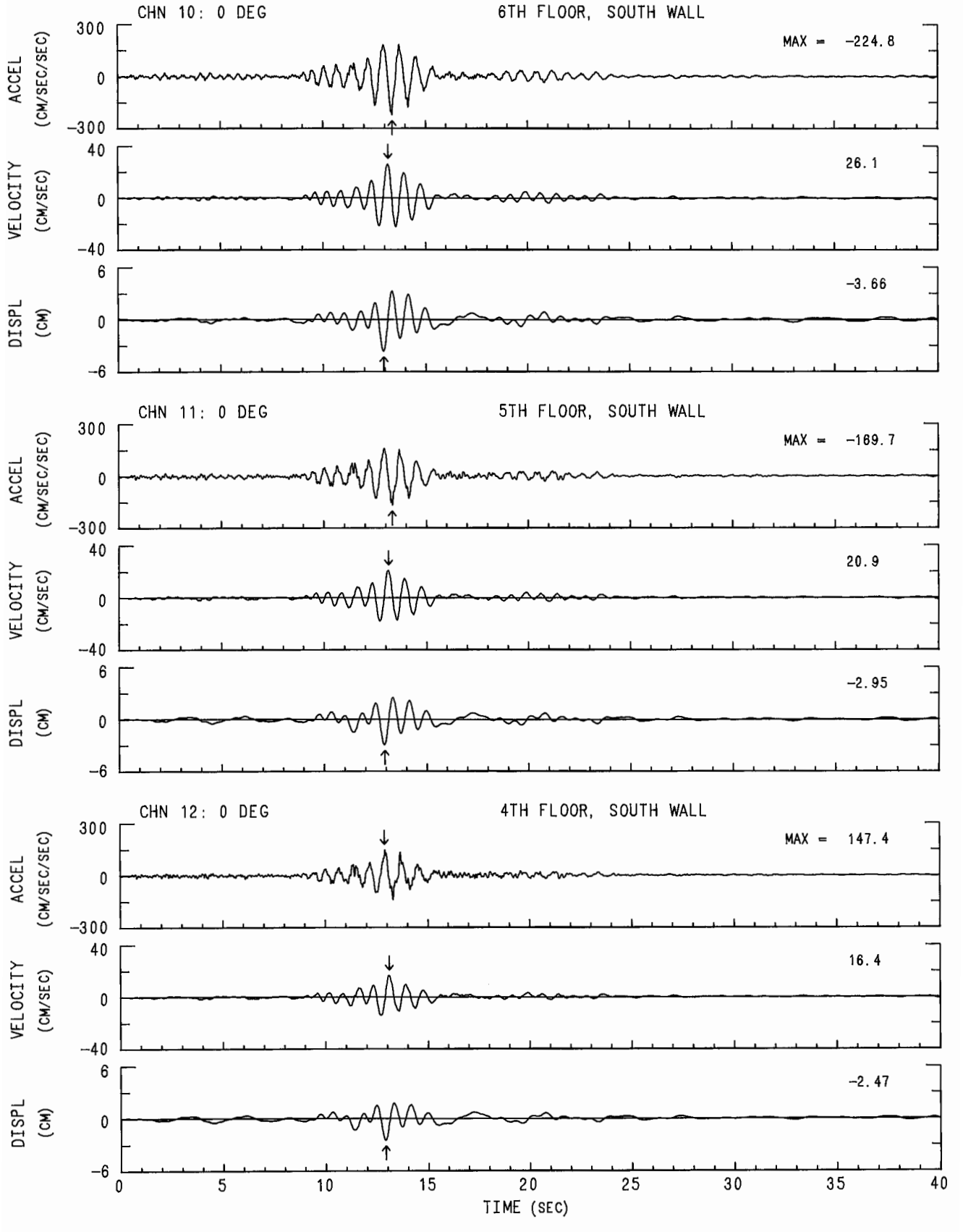
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

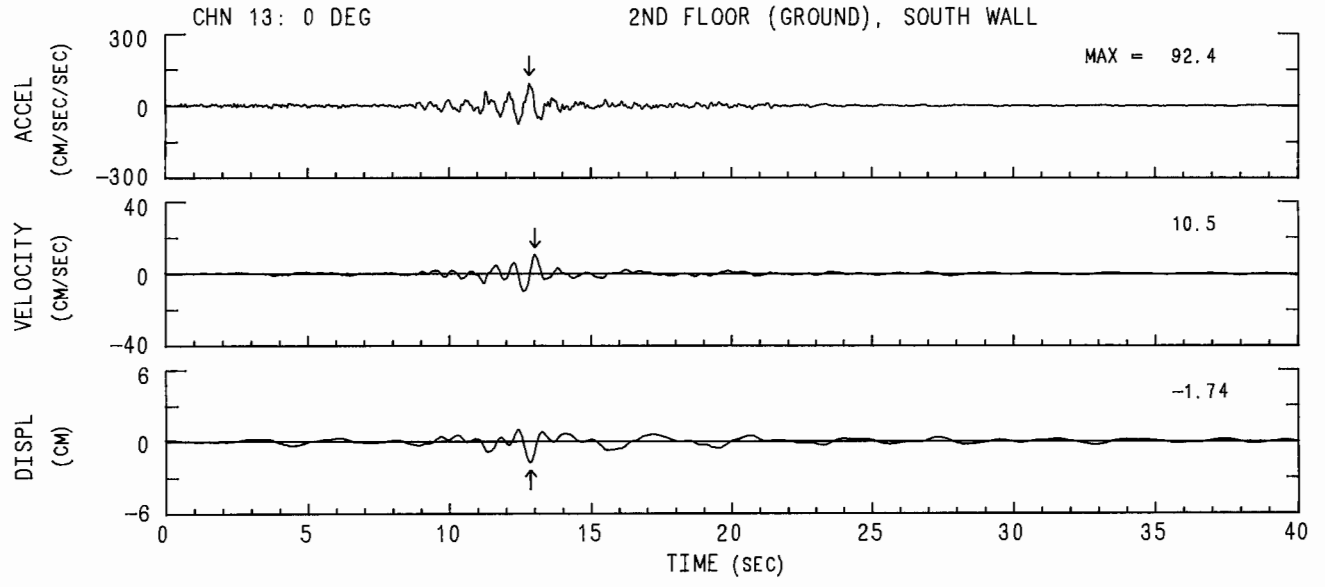
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58479-C0242-89294.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 6–STORY SCHOOL BLDG.: CSMIP S/N 479

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58479–C0242–89294.01



SAN FRANCISCO – 6-STORY SCHOOL BLDG. : CSMIP S/N 479

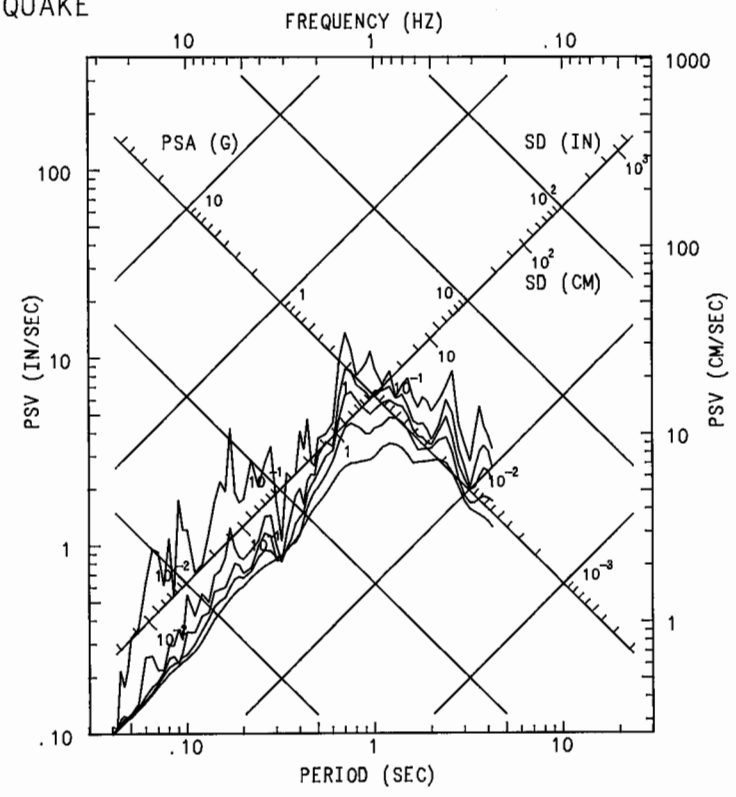
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

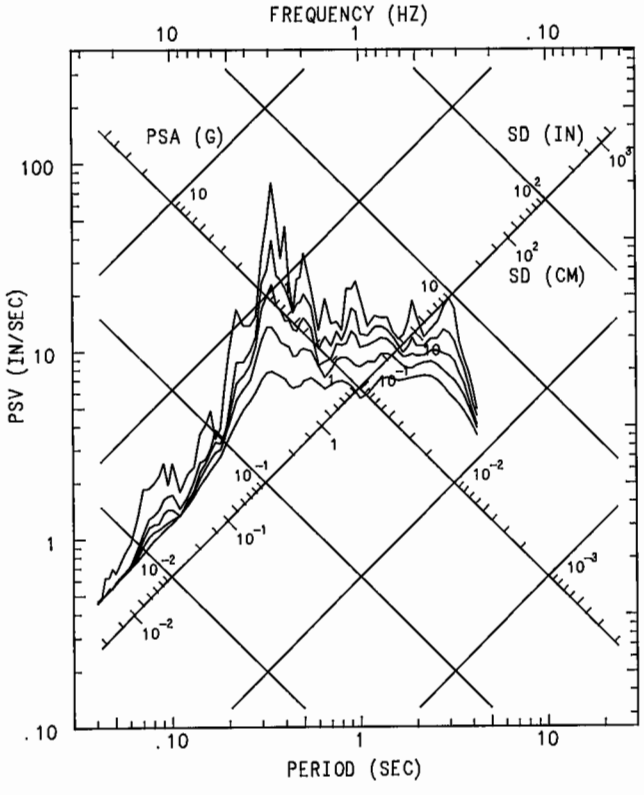
RECORD ID: 58479-C0242-89294.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

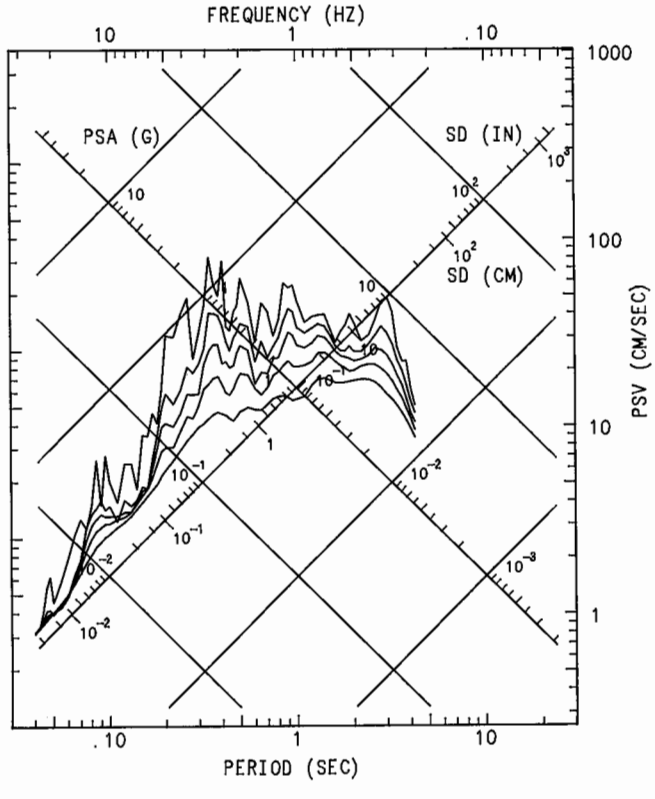
CHN 1: UP
2ND FLOOR (GROUND), SOUTH WALL



CHN 2: 90 DEG
ROOF, NORTH WALL



CHN 3: 90 DEG
ROOF, SOUTH WALL



SAN FRANCISCO – 6-STORY SCHOOL BLDG. : CSMIP S/N 479

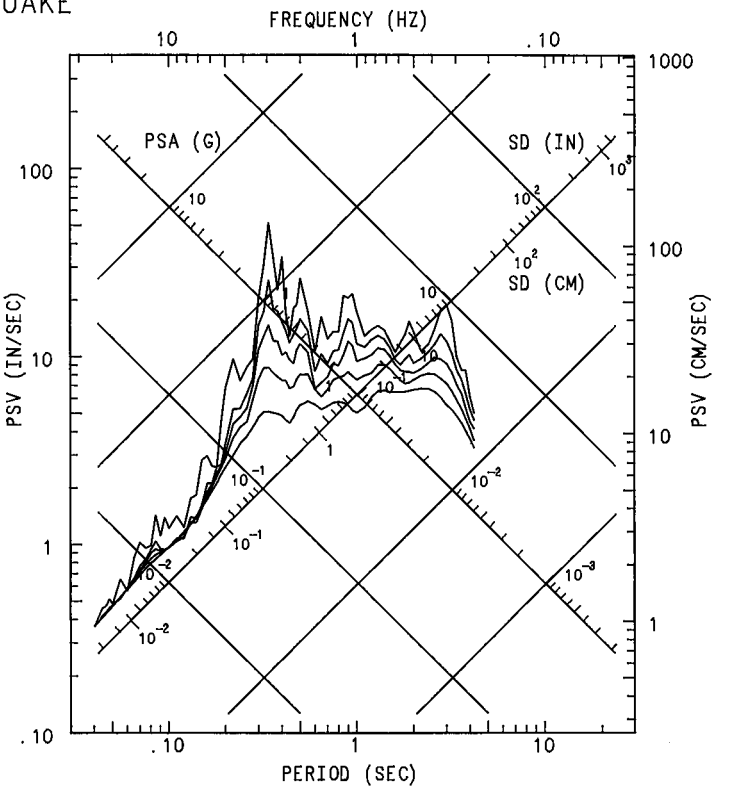
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

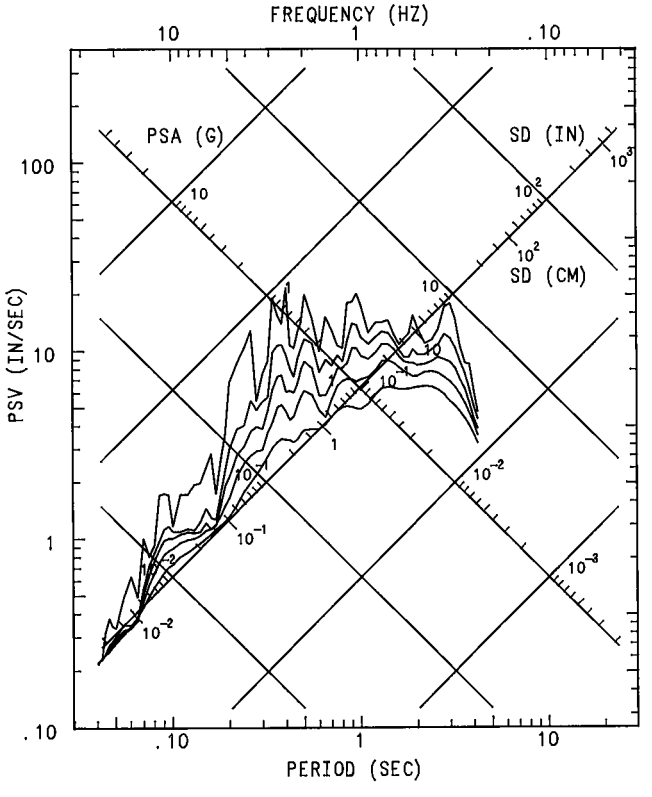
RECORD ID: 58479-C0242-89294.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

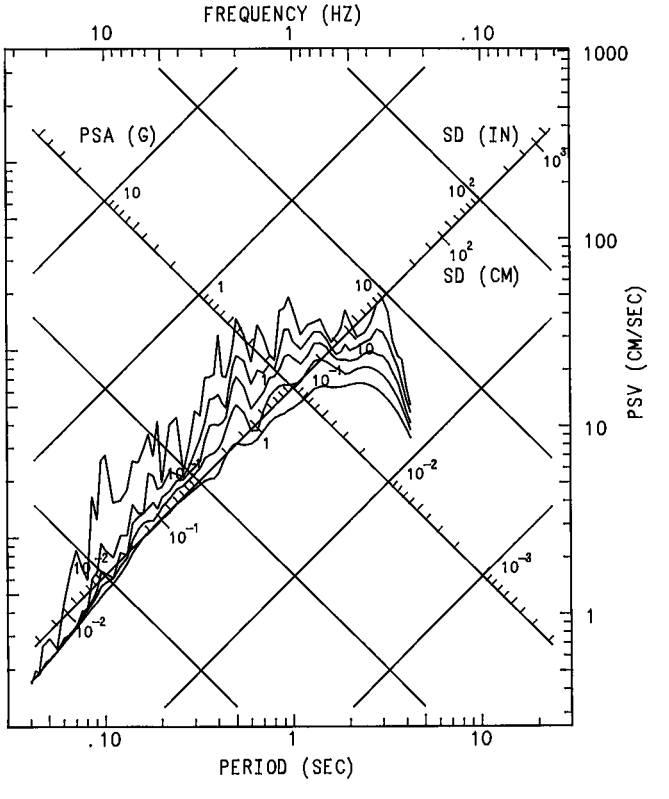
CHN 4: 90 DEG
6TH FLOOR, NORTH WALL



CHN 5: 90 DEG
6TH FLOOR, SOUTH WALL



CHN 6: 90 DEG
2ND FLOOR (GROUND), NORTH WALL



SAN FRANCISCO – 6-STORY SCHOOL BLDG. : CSMIP S/N 479

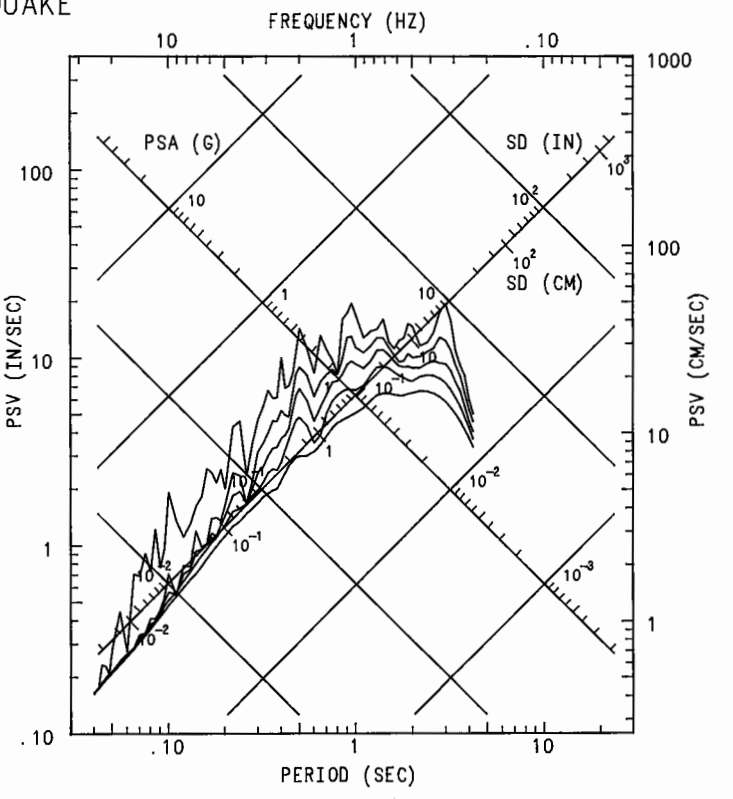
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

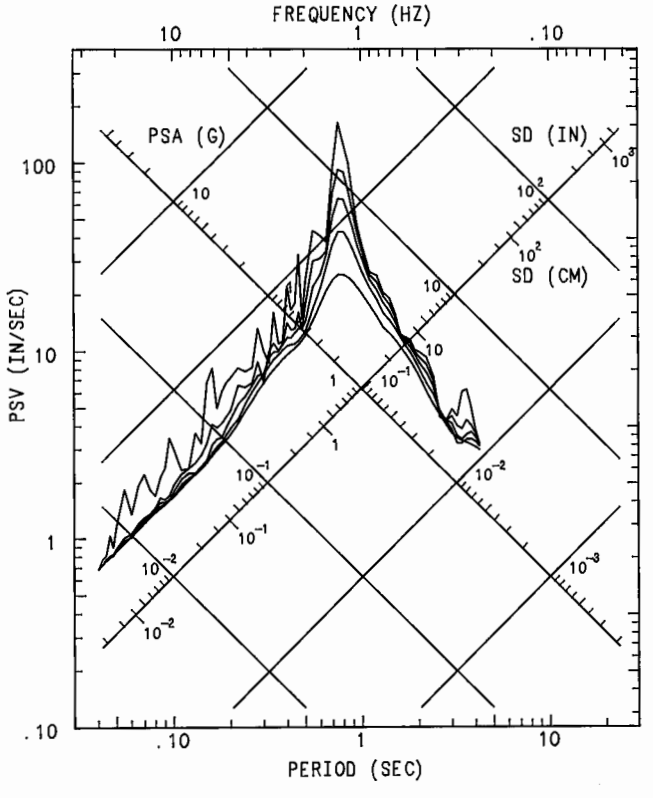
RECORD ID: 58479-C0242-89294.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

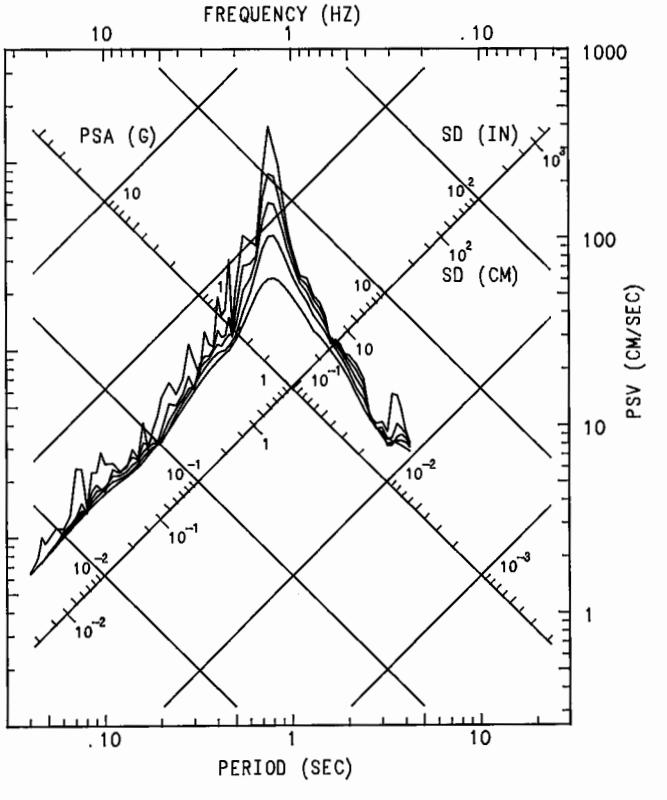
CHN 7: 90 DEG
2ND FLOOR (GROUND), SOUTH WALL



CHN 8: 0 DEG
ROOF, SOUTH WALL



CHN 9: 0 DEG
7TH FLOOR, SOUTH WALL



SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479

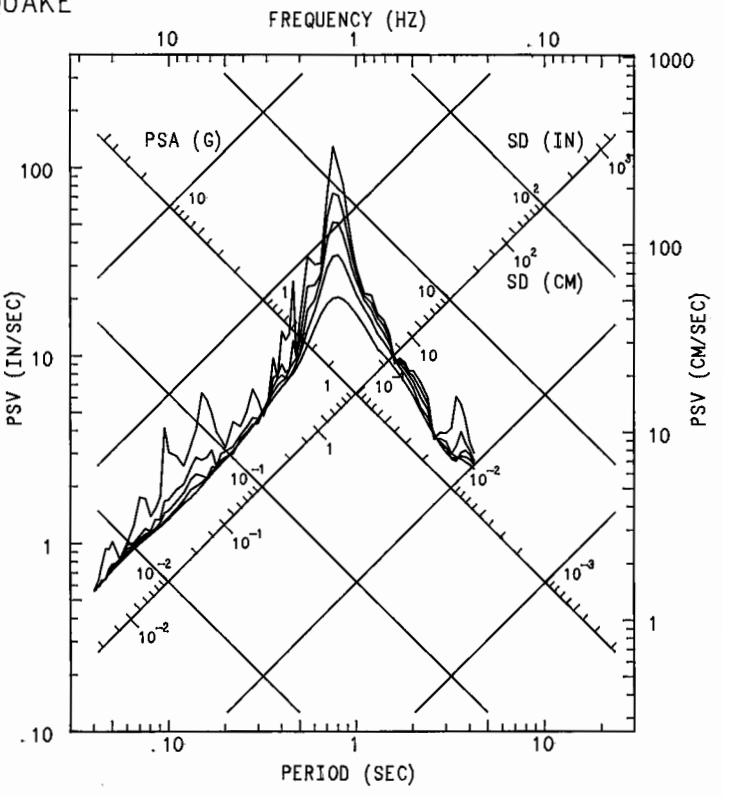
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

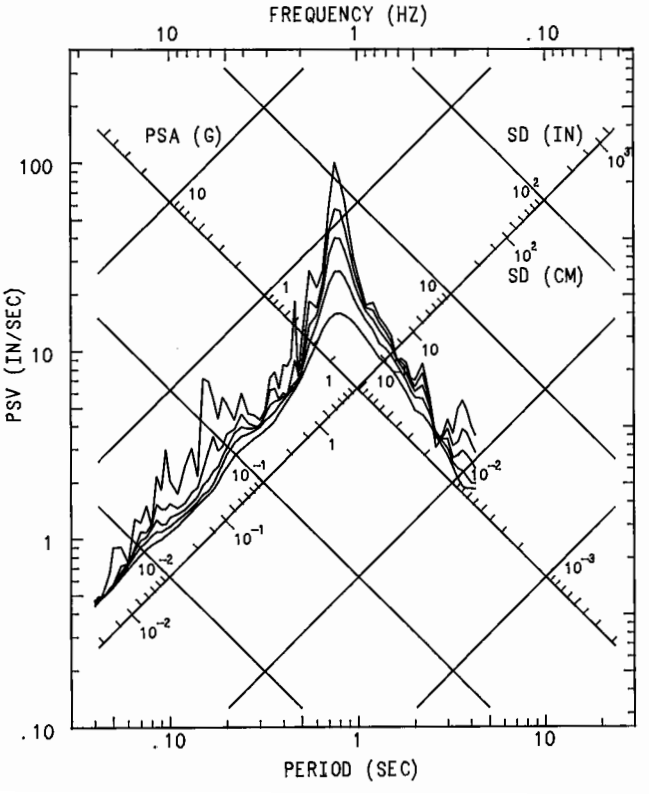
RECORD ID: 58479-C0242-89294.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

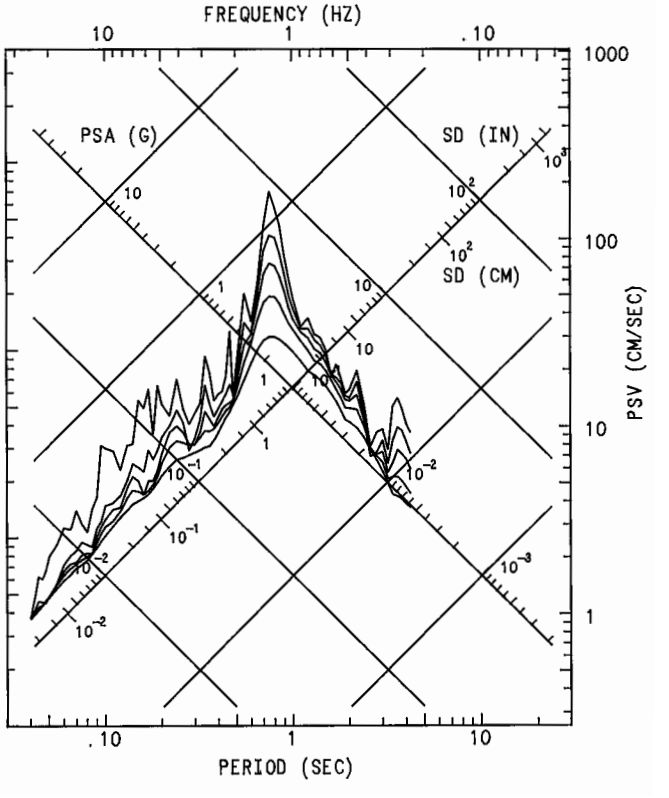
CHN 10: 0 DEG
6TH FLOOR, SOUTH WALL



CHN 11: 0 DEG
5TH FLOOR, SOUTH WALL



CHN 12: 0 DEG
4TH FLOOR, SOUTH WALL



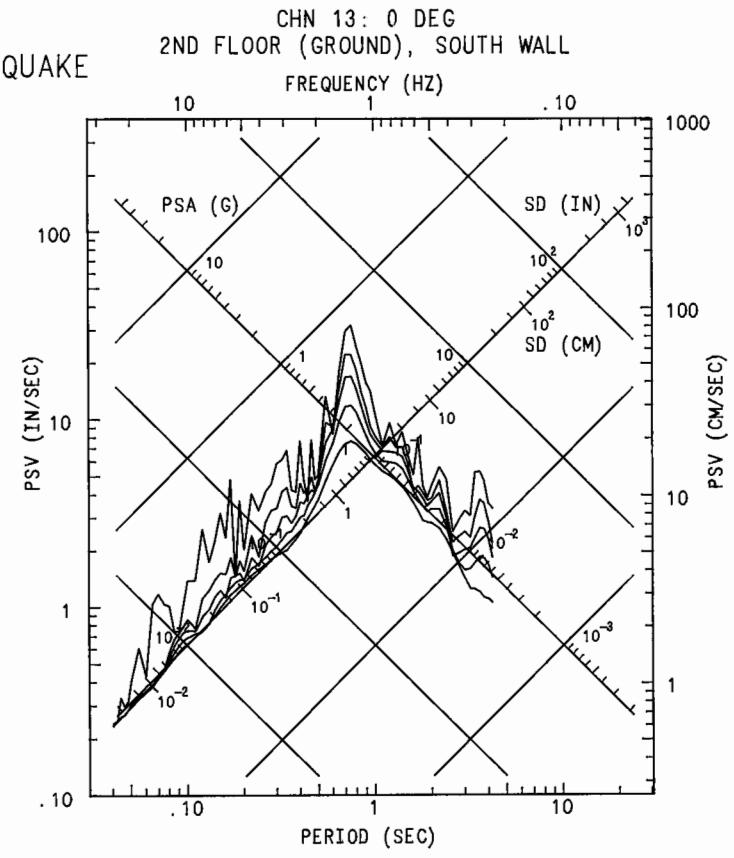
SAN FRANCISCO – 6–STORY SCHOOL BLDG. : CSMIP S/N 479

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

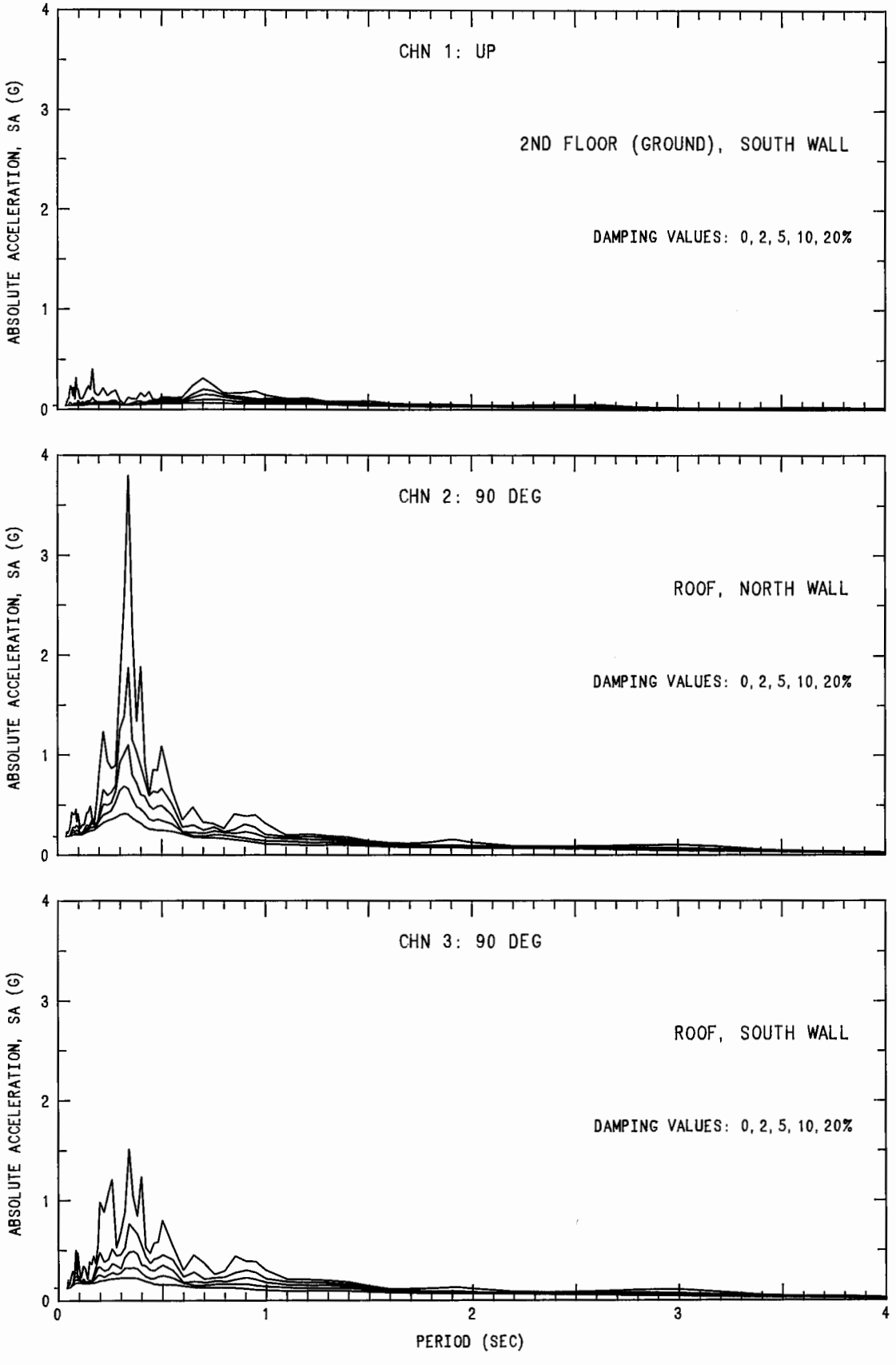
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58479-C0242-89294.01

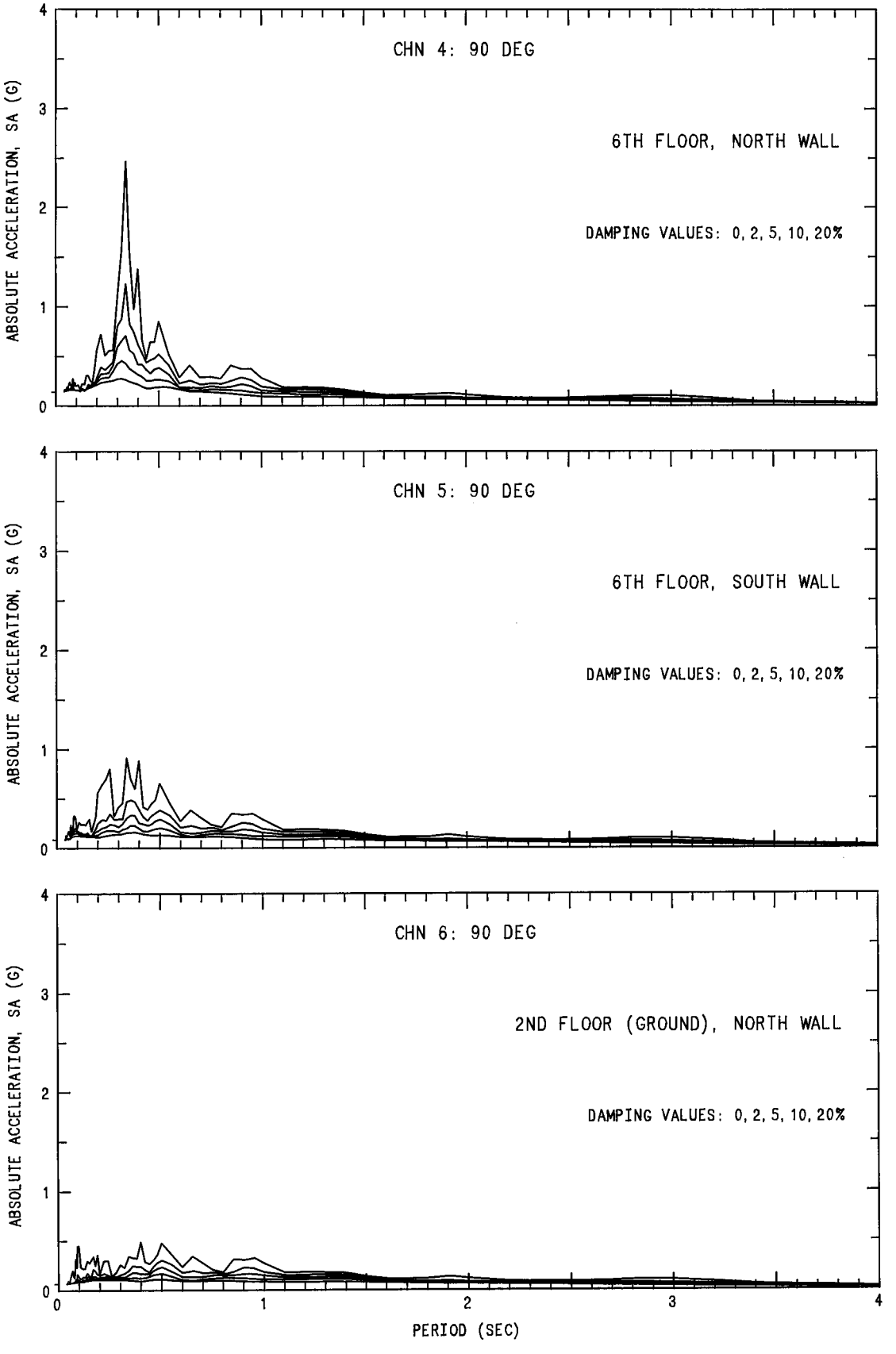
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



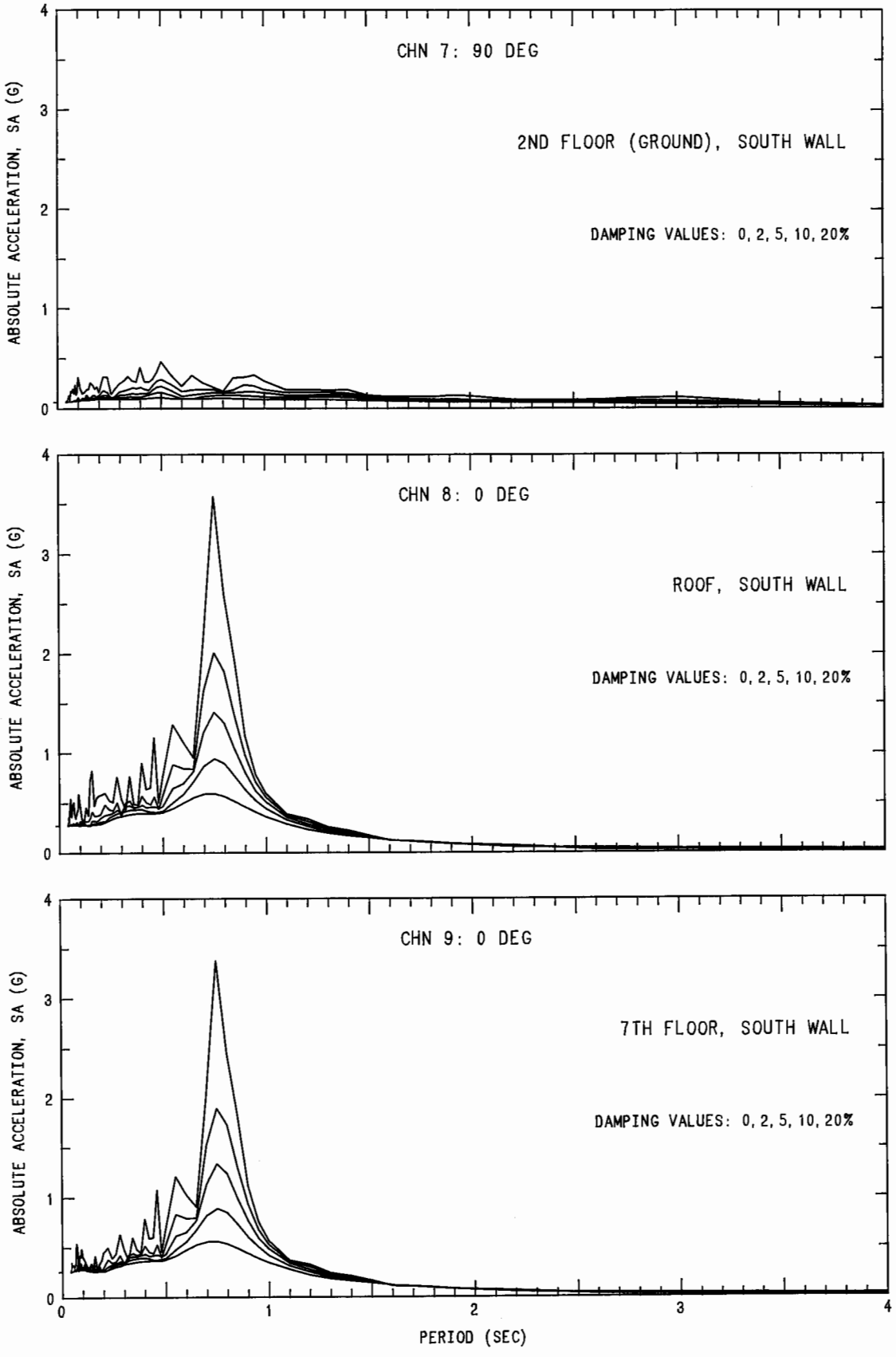
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 6-STORY SCHOOL BLDG.: CSMIP S/N 479
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58479-C0242-89294.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



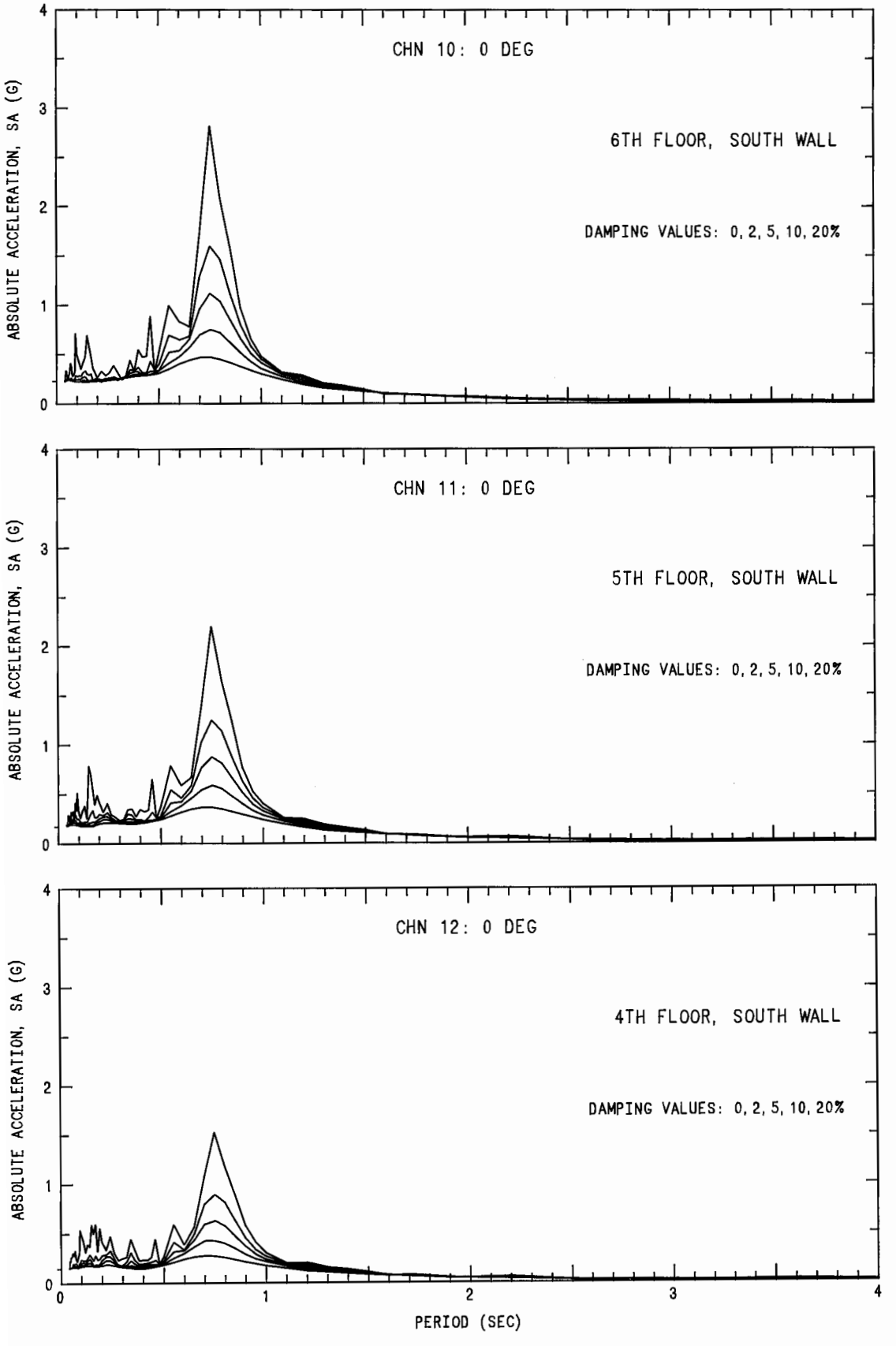
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 6-STORY SCHOOL BLDG.: CSMIP S/N 479
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58479-C0242-89294.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



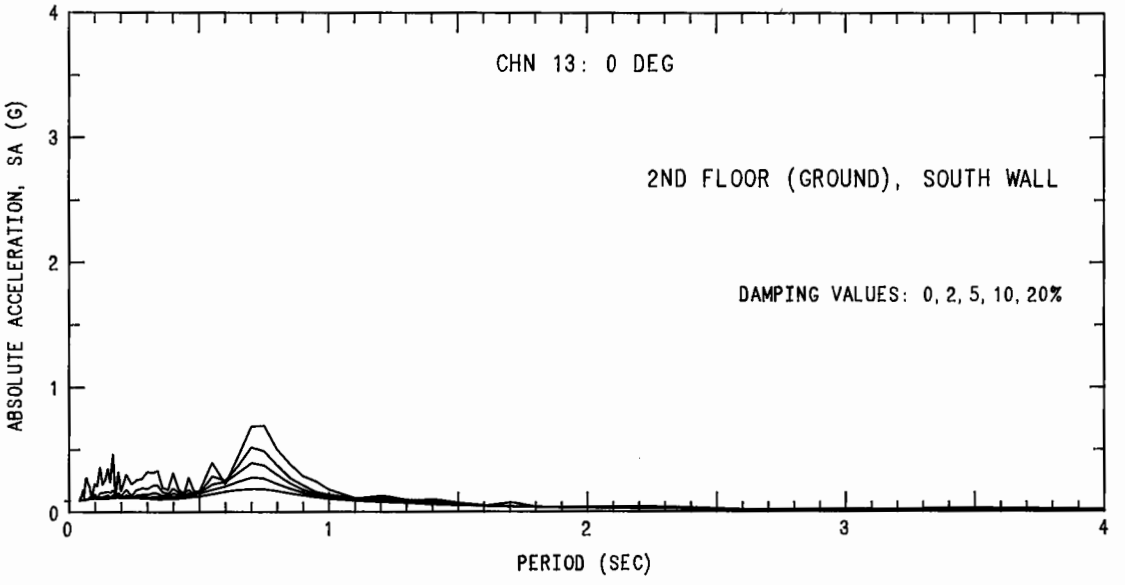
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 6-STORY SCHOOL BLDG. : CSMIP S/N 479
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58479-C0242-89294.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 6-STORY SCHOOL BLDG.: CSMIP S/N 479
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58479-C0242-89294.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



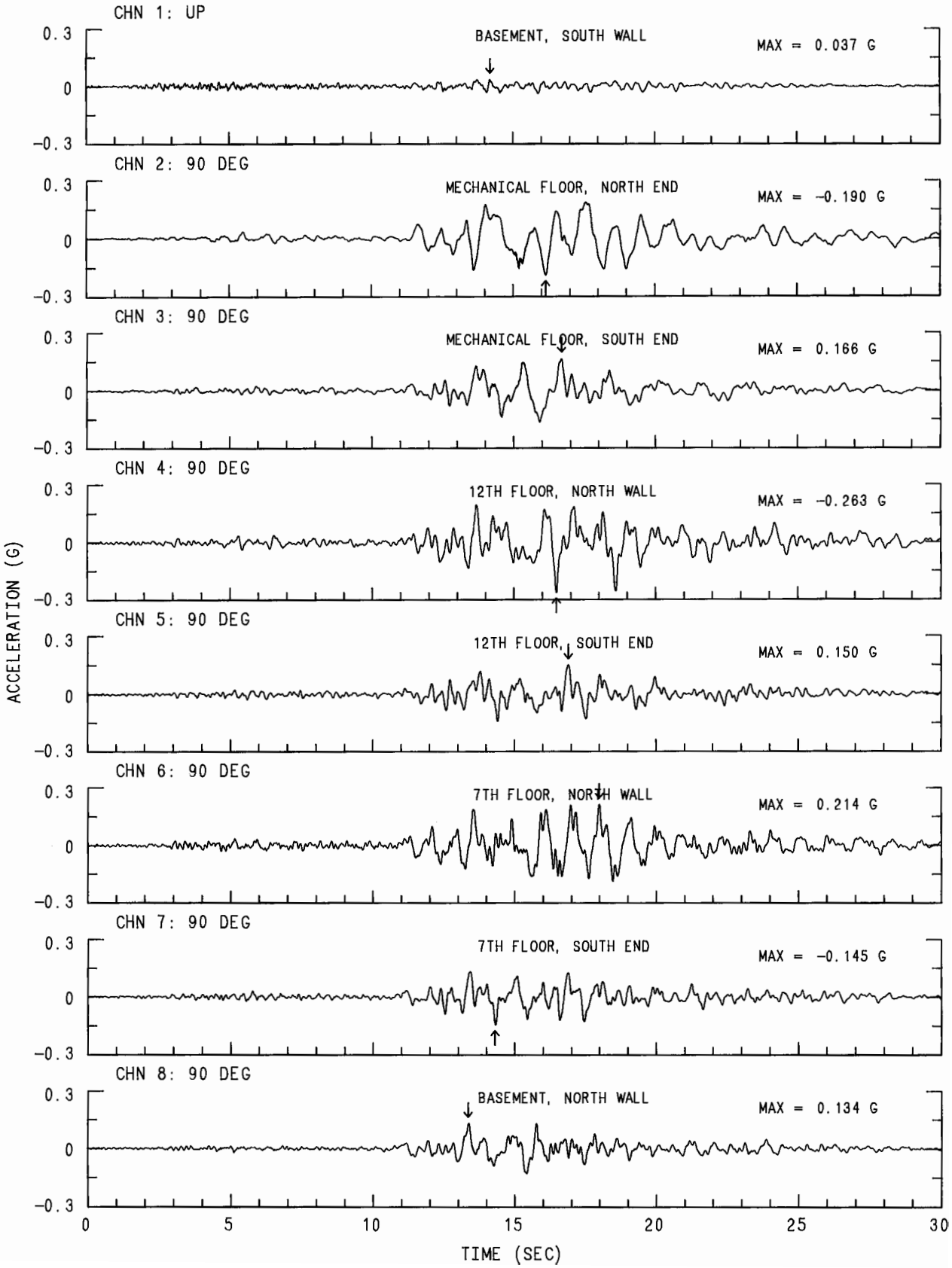
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 6-STORY SCHOOL BLDG.: CSMIP S/N 479
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58479-C0242-89294.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

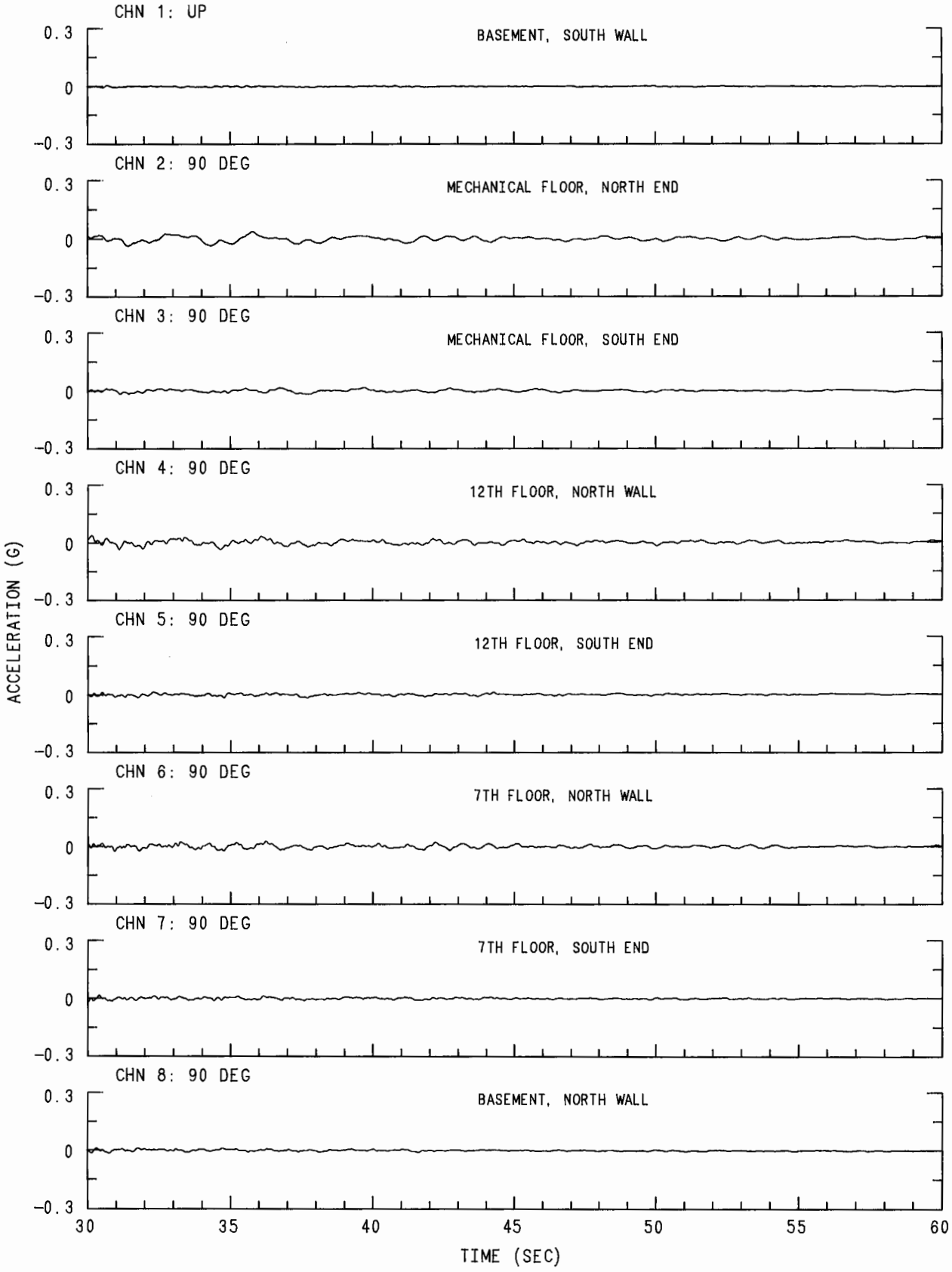
PHASE 1 ACCELERATION. RECORD ID: 58480-C0243-89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 18–STORY COMMERCIAL BLDG: CSMIP S/N 480

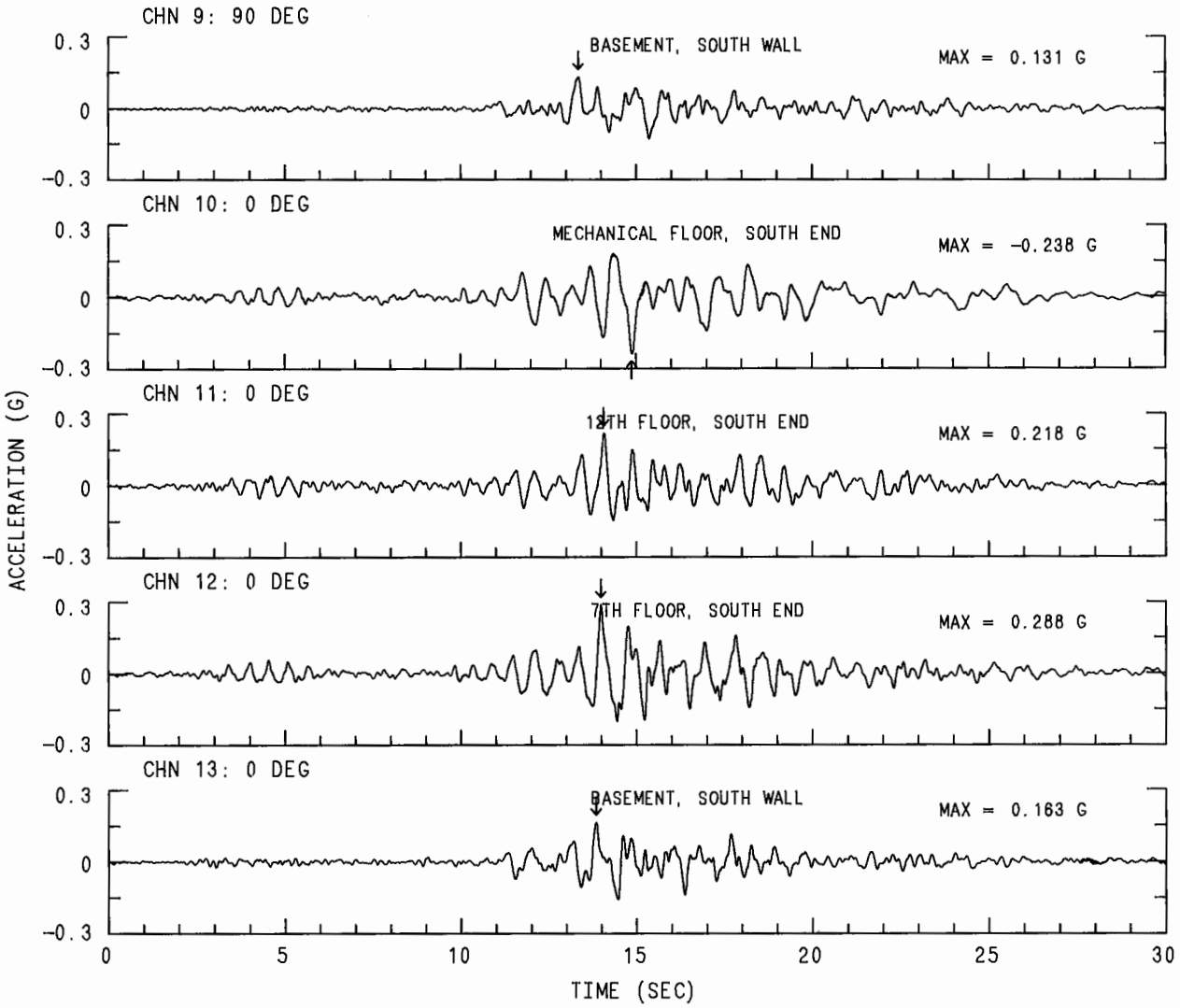
PHASE 1 ACCELERATION. RECORD ID: 58480–C0243–89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

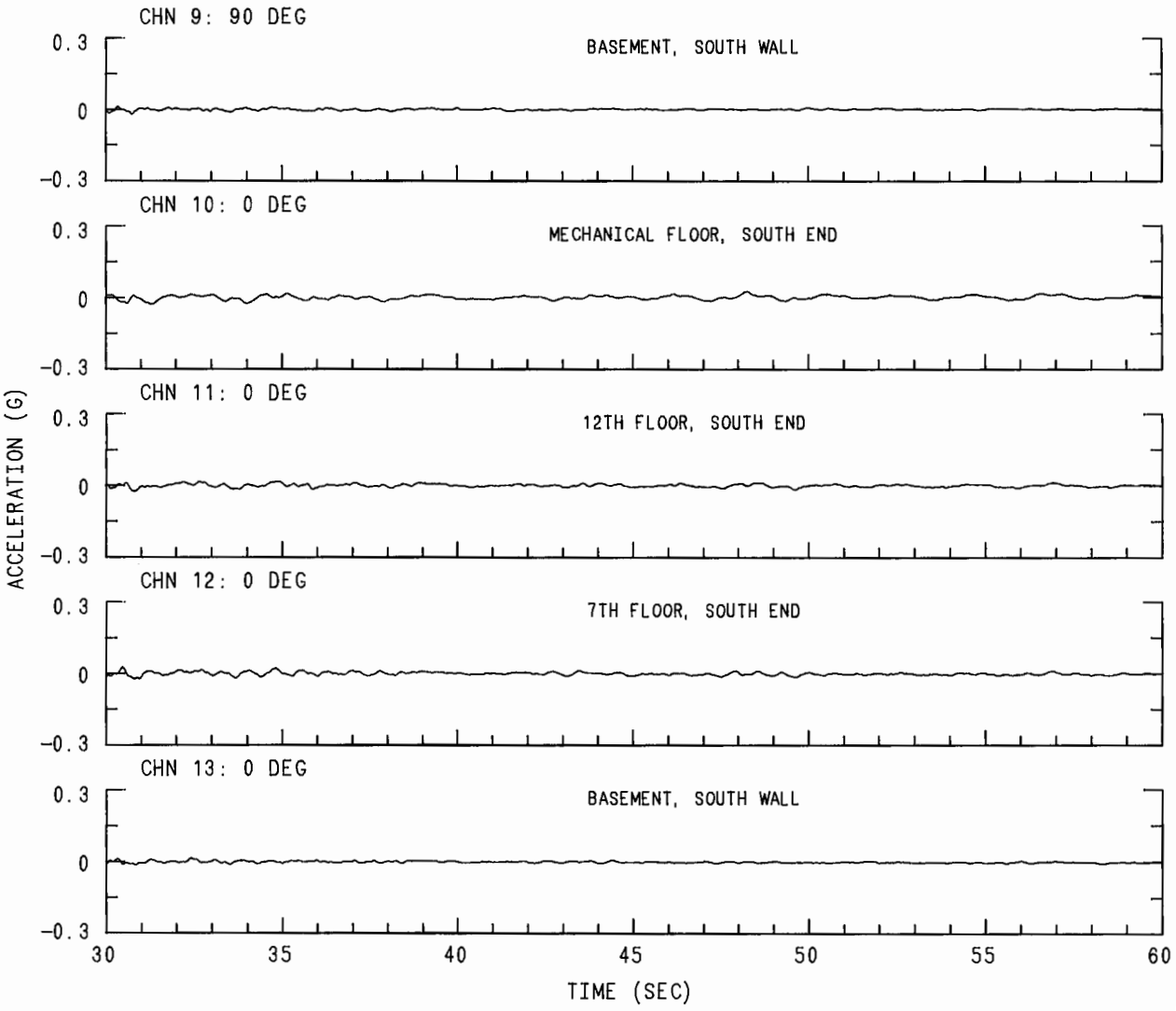
PHASE 1 ACCELERATION. RECORD ID: 58480-C0243-89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

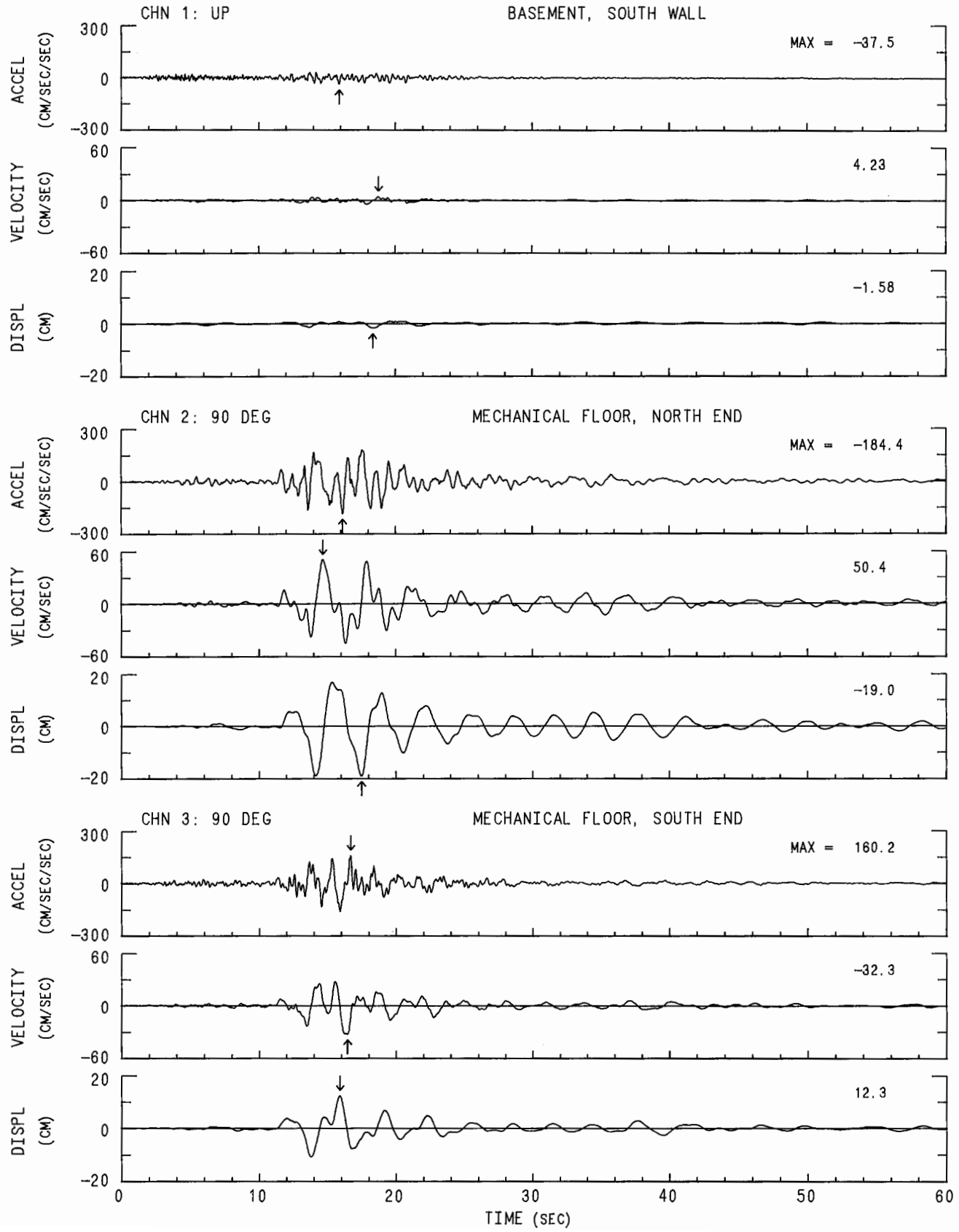
SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

PHASE 1 ACCELERATION. RECORD ID: 58480-C0243-89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

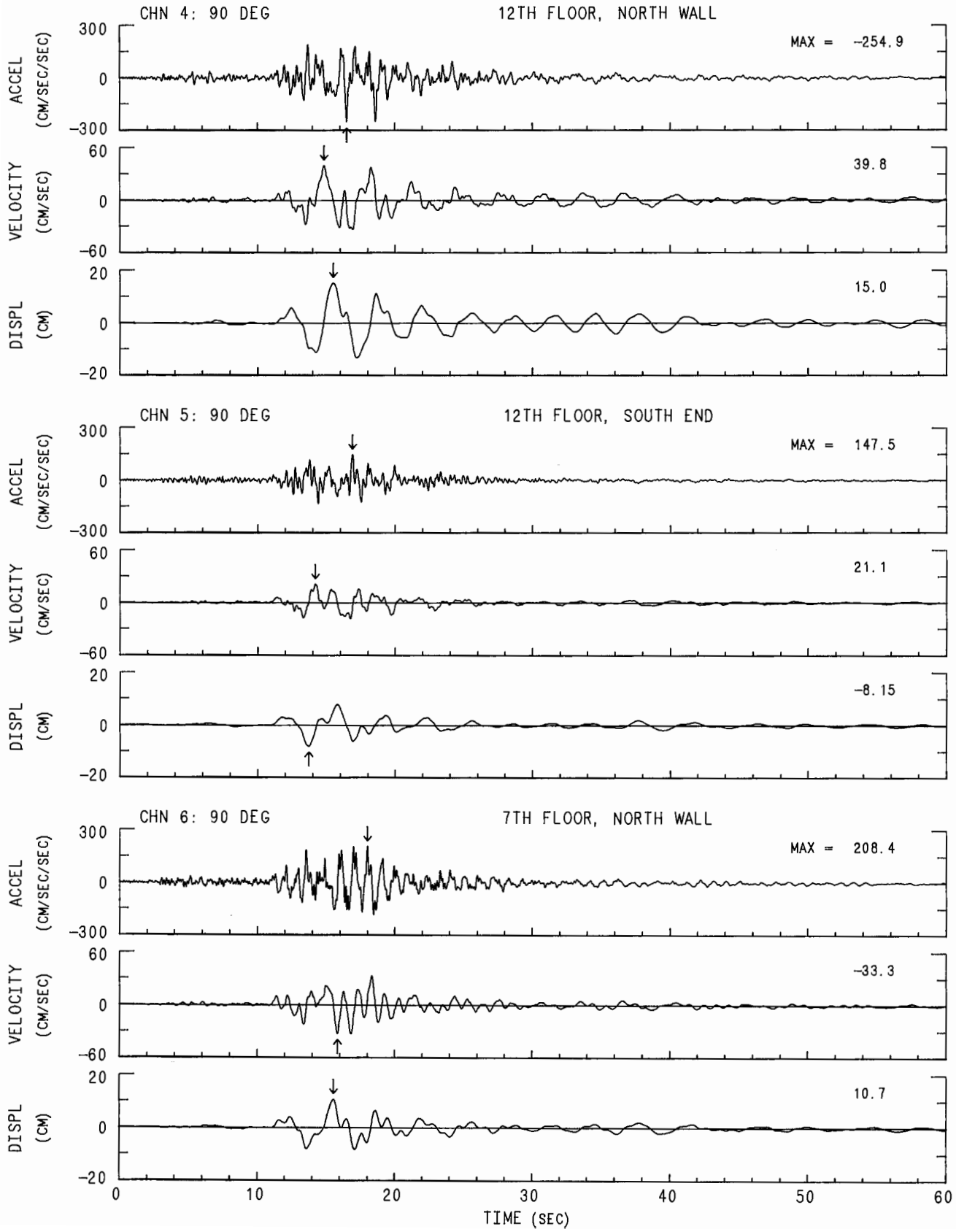
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58480-C0243-89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18–STORY COMMERCIAL BLDG: CSMIP S/N 480

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

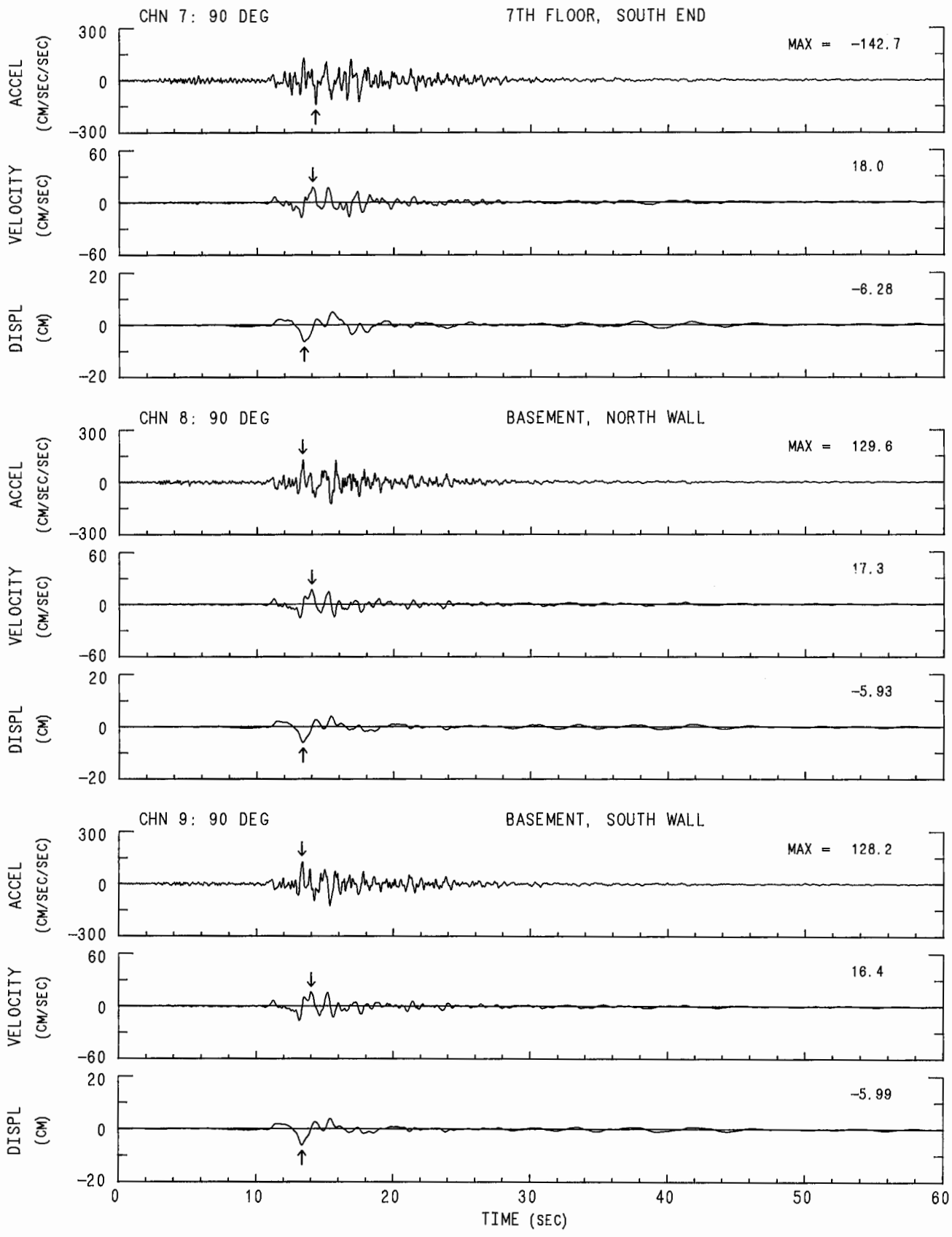
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58480–C0243–89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

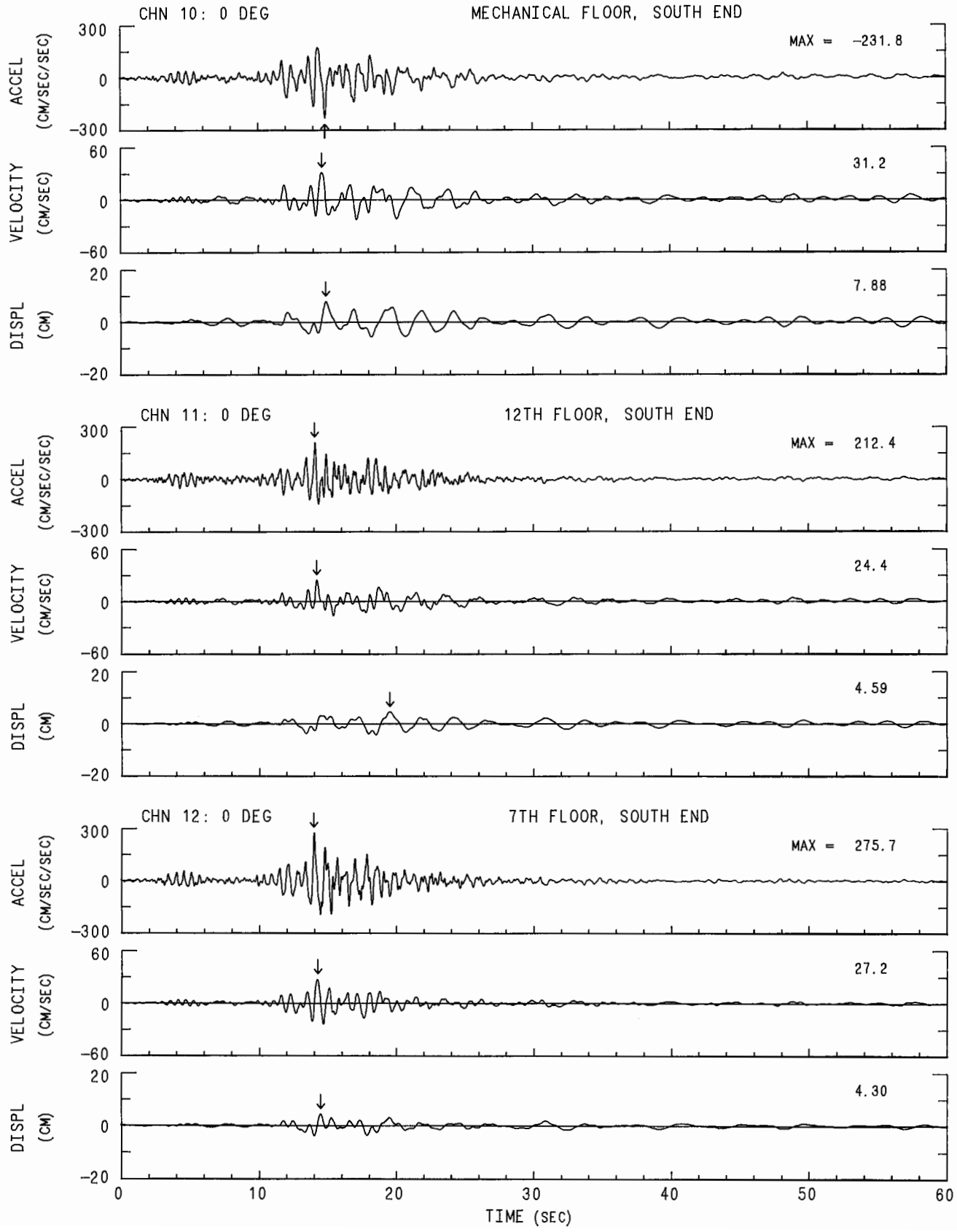
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58480-C0243-89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18–STORY COMMERCIAL BLDG: CSMIP S/N 480

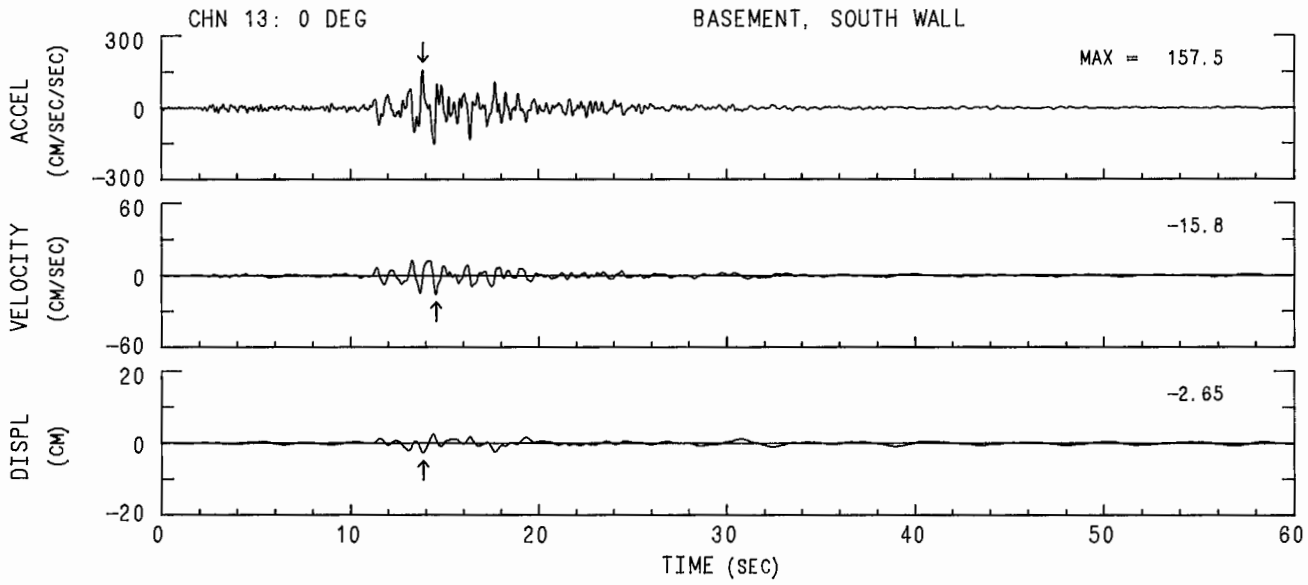
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58480–C0243–89296.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18–STORY COMMERCIAL BLDG: CSMIP S/N 480

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58480–C0243–89296.01



SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

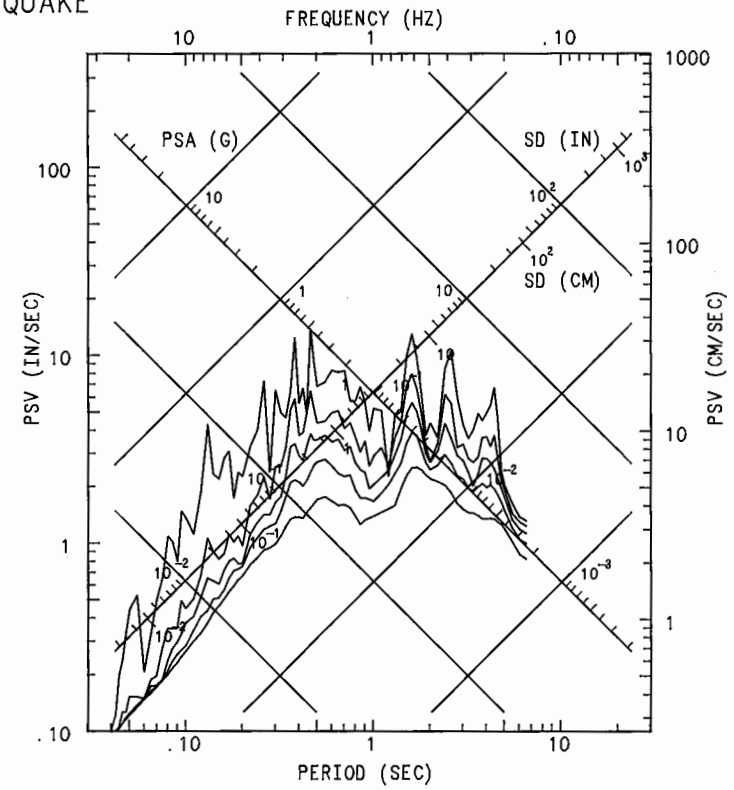
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

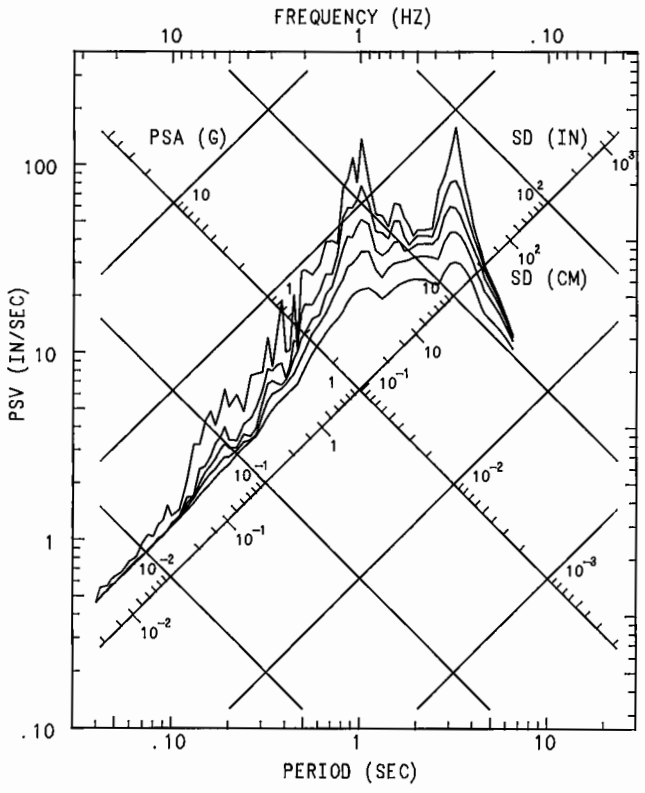
RECORD ID: 58480-C0243-89296.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

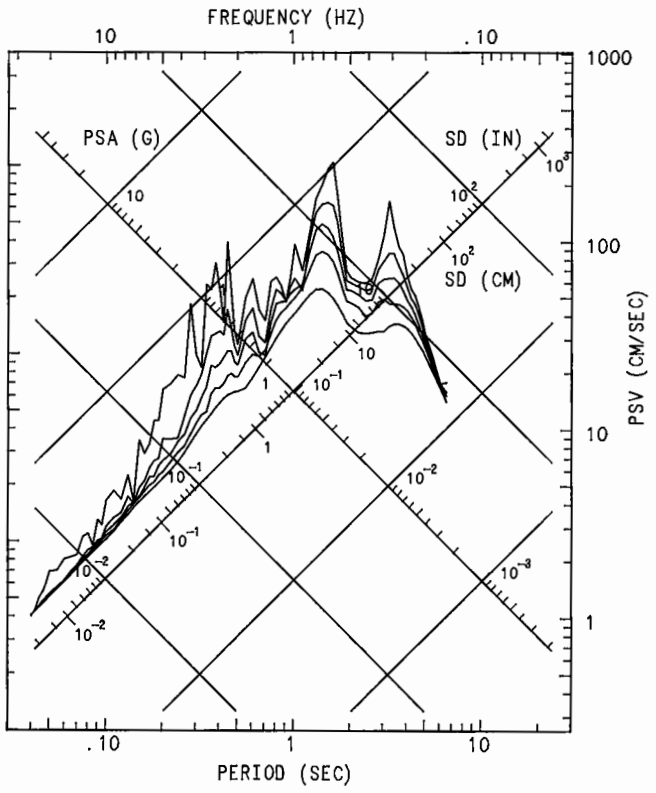
CHN 1: UP
BASEMENT, SOUTH WALL



CHN 2: 90 DEG
MECHANICAL FLOOR, NORTH END



CHN 3: 90 DEG
MECHANICAL FLOOR, SOUTH END



SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

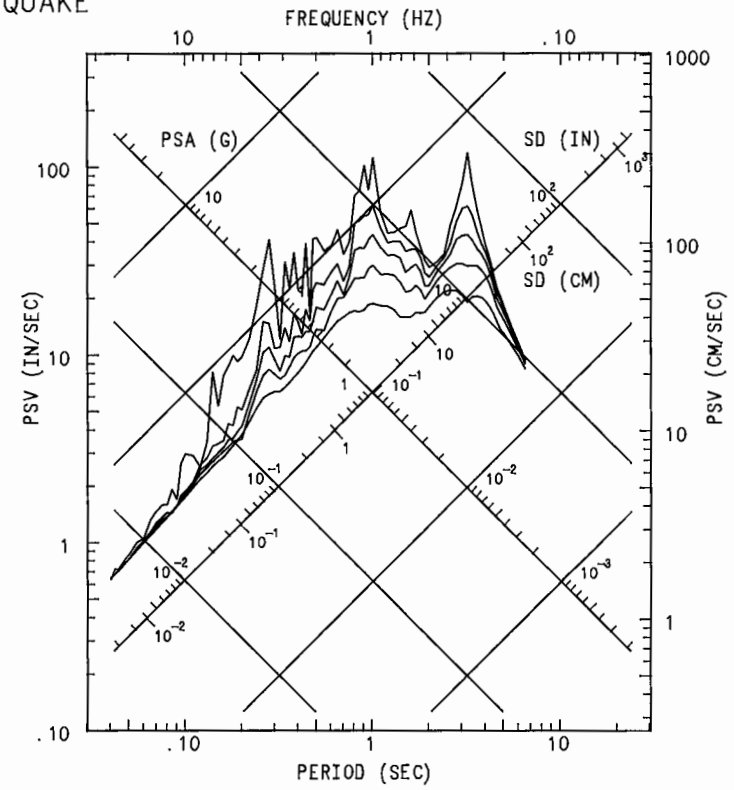
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

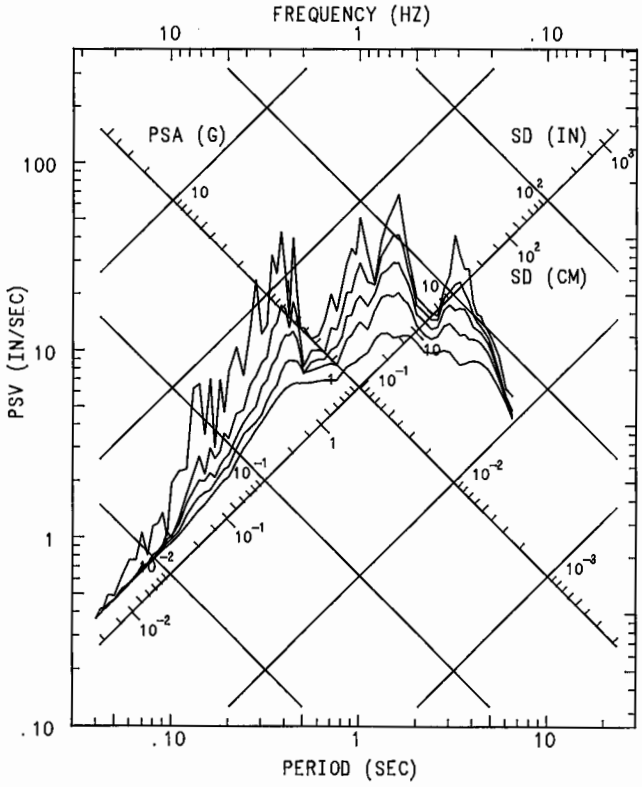
RECORD ID: 58480-C0243-89296.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

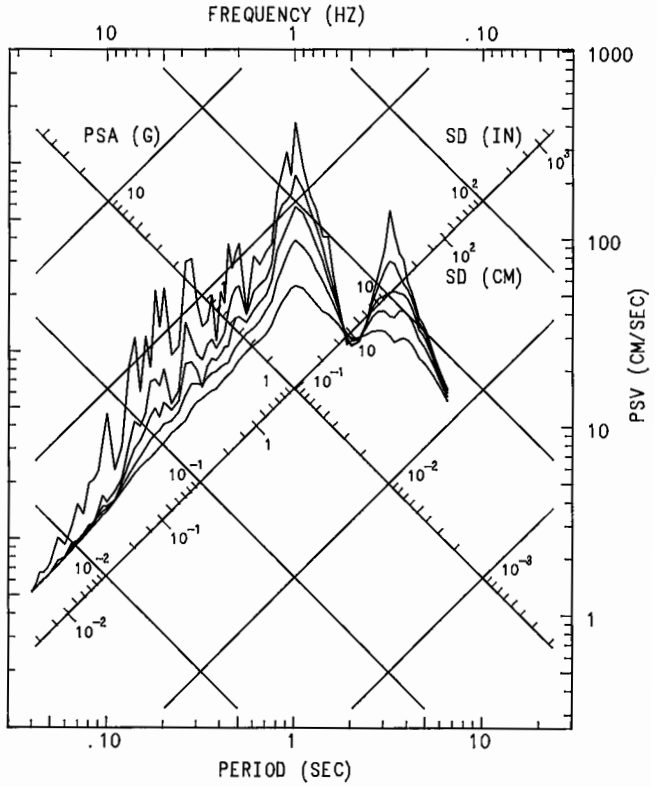
CHN 4: 90 DEG
12TH FLOOR, NORTH WALL



CHN 5: 90 DEG
12TH FLOOR, SOUTH END



CHN 6: 90 DEG
7TH FLOOR, NORTH WALL



SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

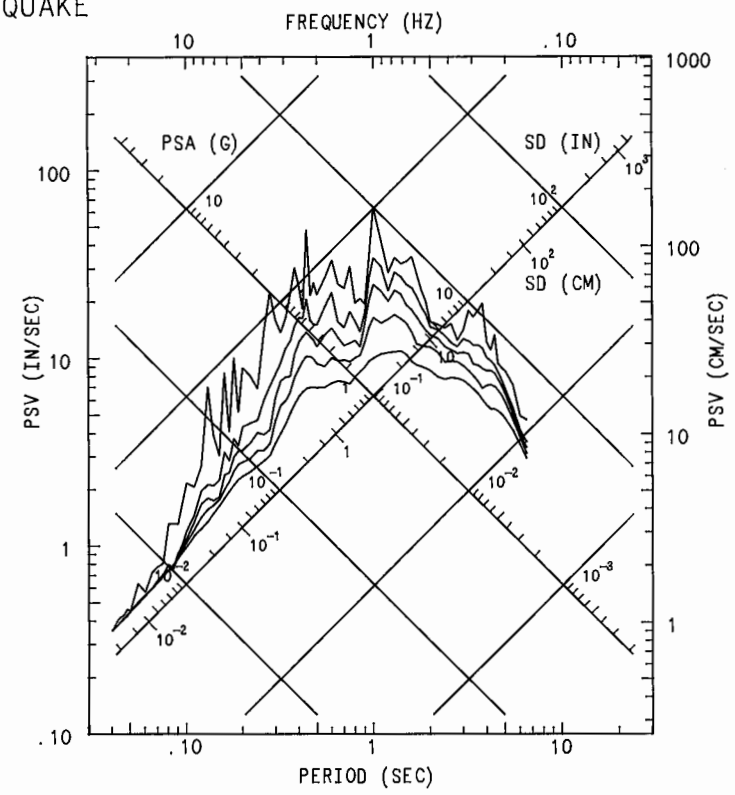
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

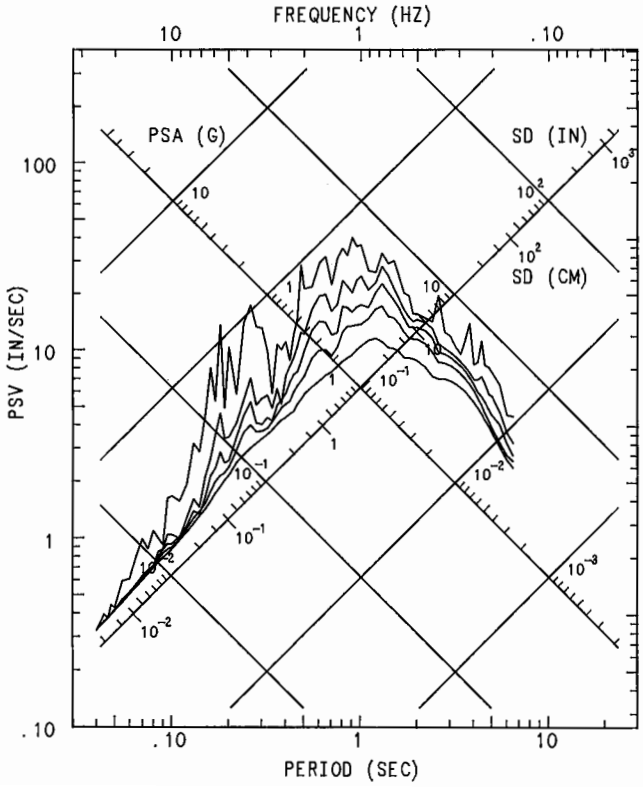
RECORD ID: 58480-C0243-89296.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

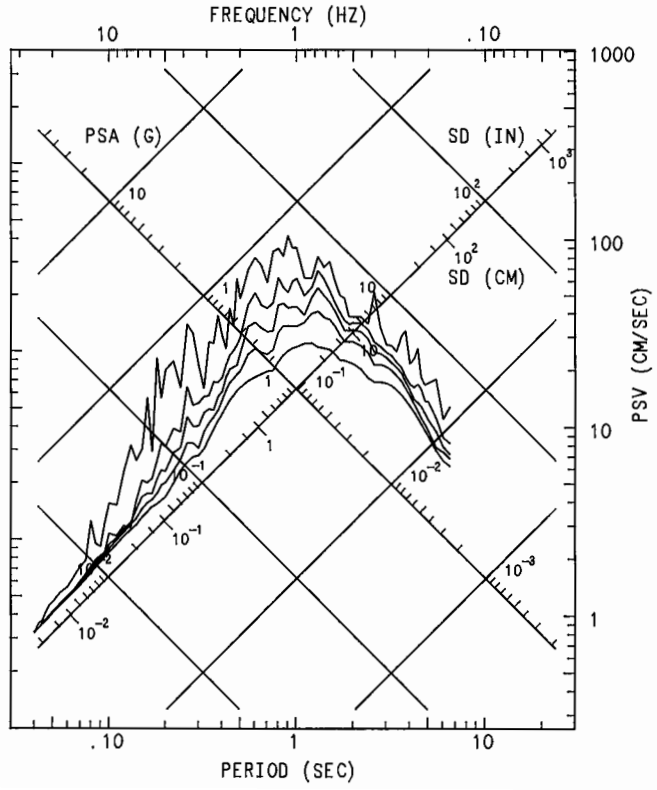
CHN 7: 90 DEG
7TH FLOOR, SOUTH END



CHN 8: 90 DEG
BASEMENT, NORTH WALL



CHN 9: 90 DEG
BASEMENT, SOUTH WALL



SAN FRANCISCO – 18–STORY COMMERCIAL BLDG: CSMIP S/N 480

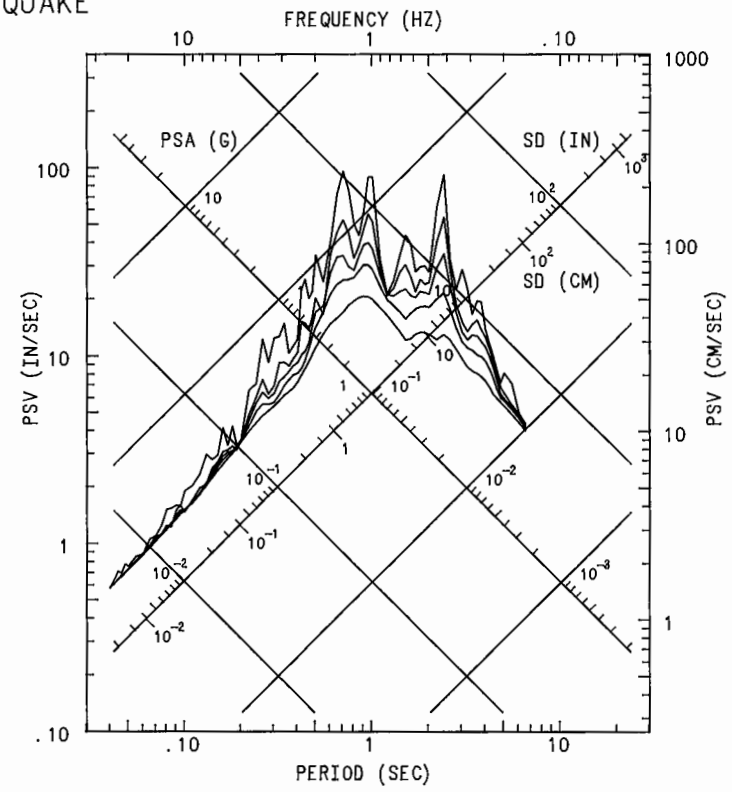
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

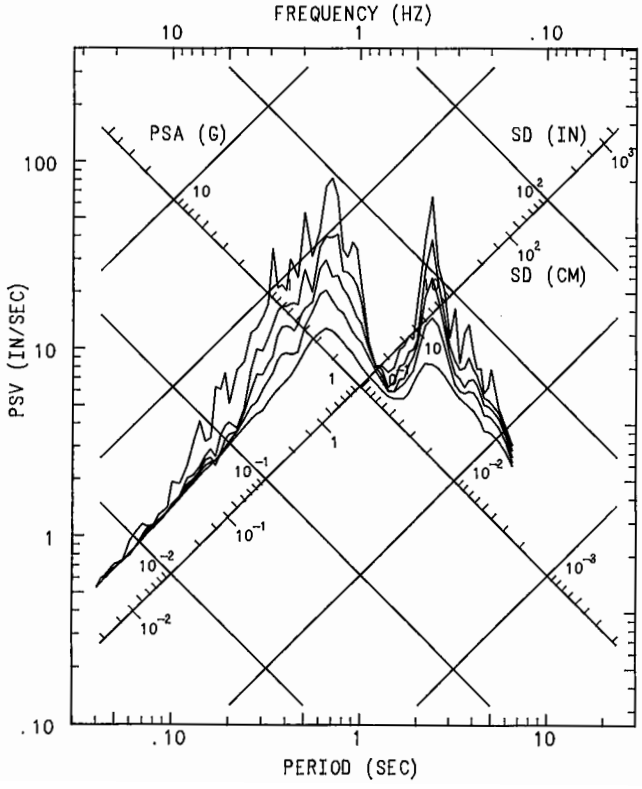
RECORD ID: 58480-C0243-89296.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

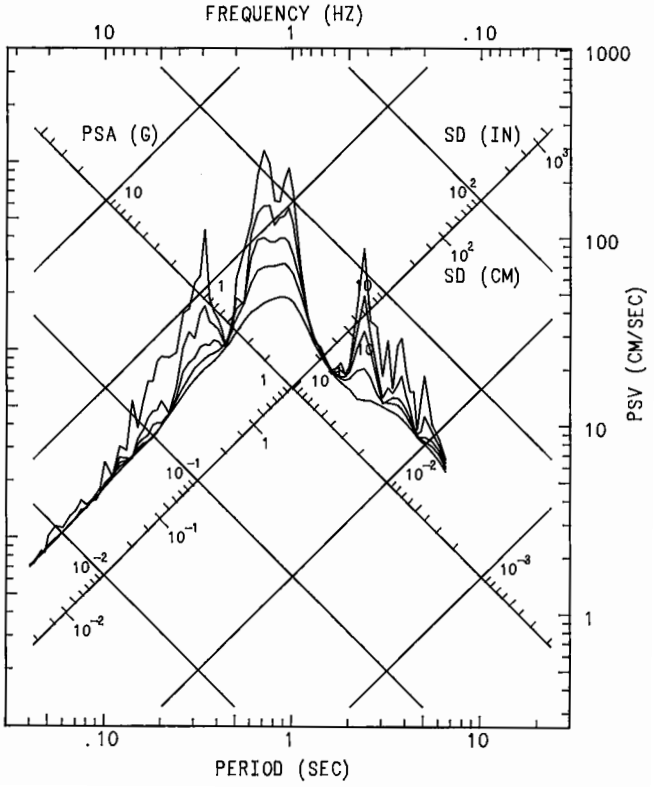
CHN 10: 0 DEG
MECHANICAL FLOOR, SOUTH END



CHN 11: 0 DEG
12TH FLOOR, SOUTH END



CHN 12: 0 DEG
7TH FLOOR, SOUTH END



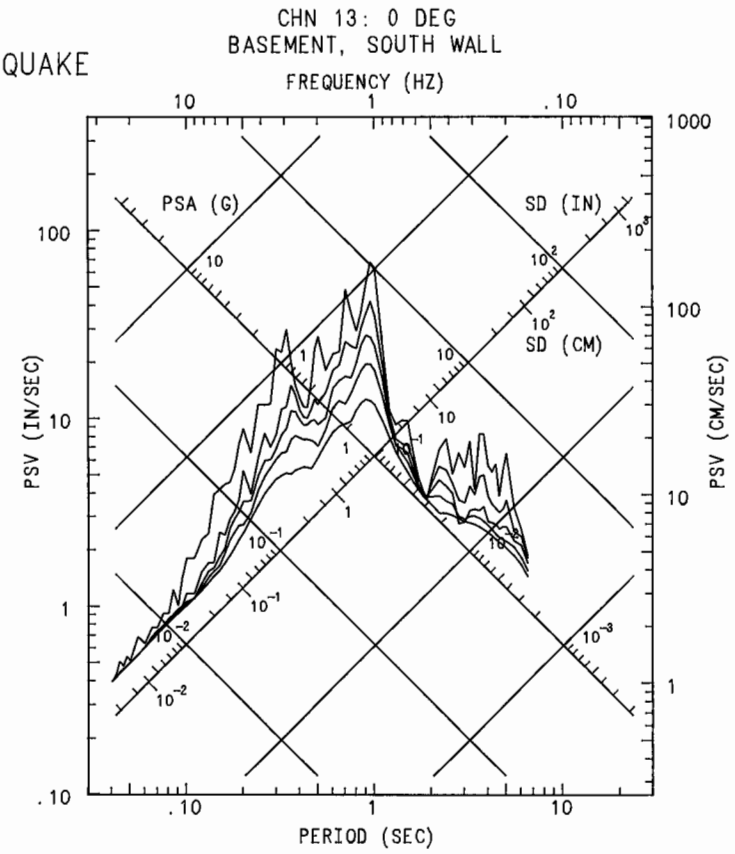
SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

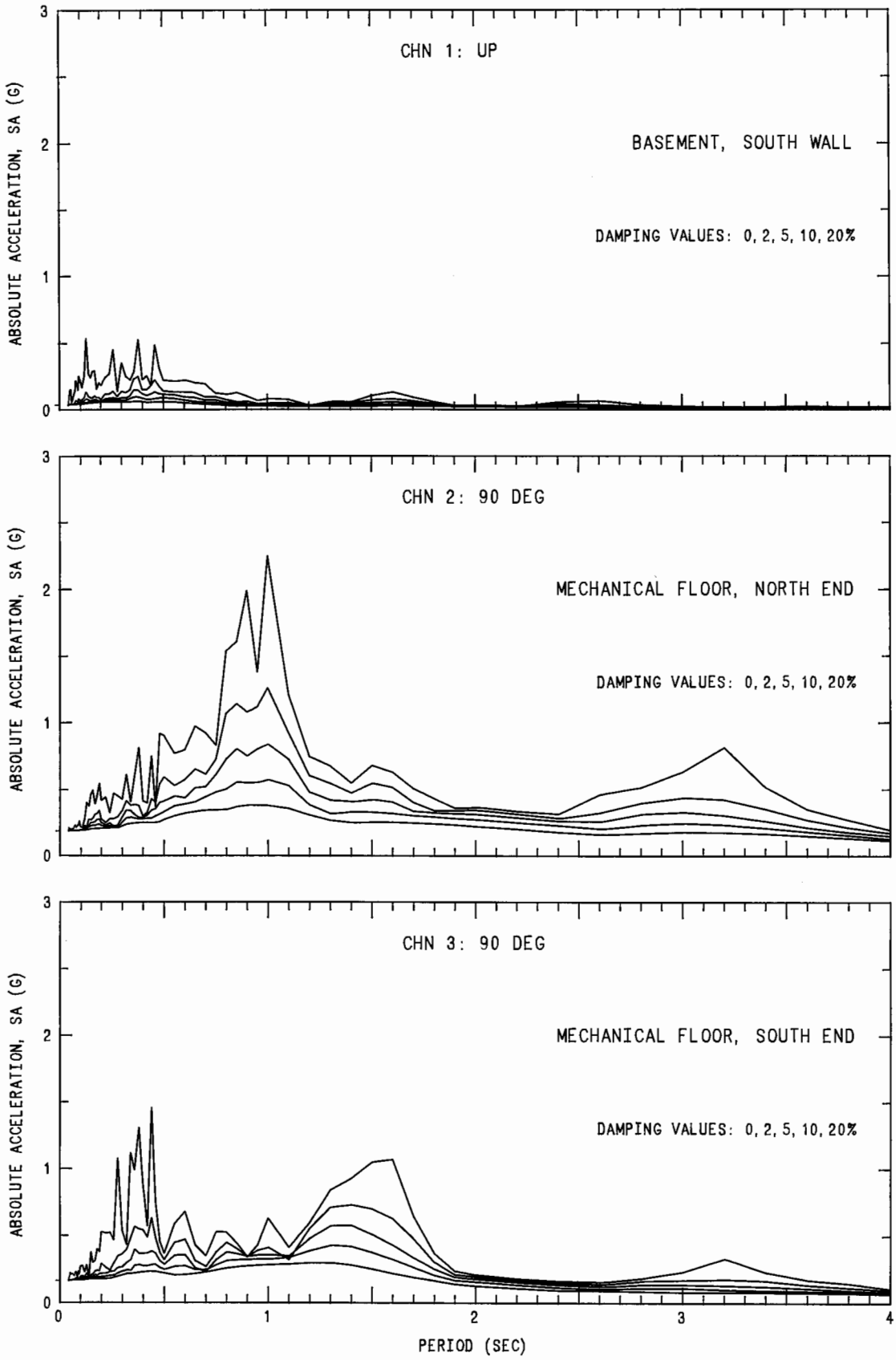
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

RECORD ID: 58480-C0243-89296.01

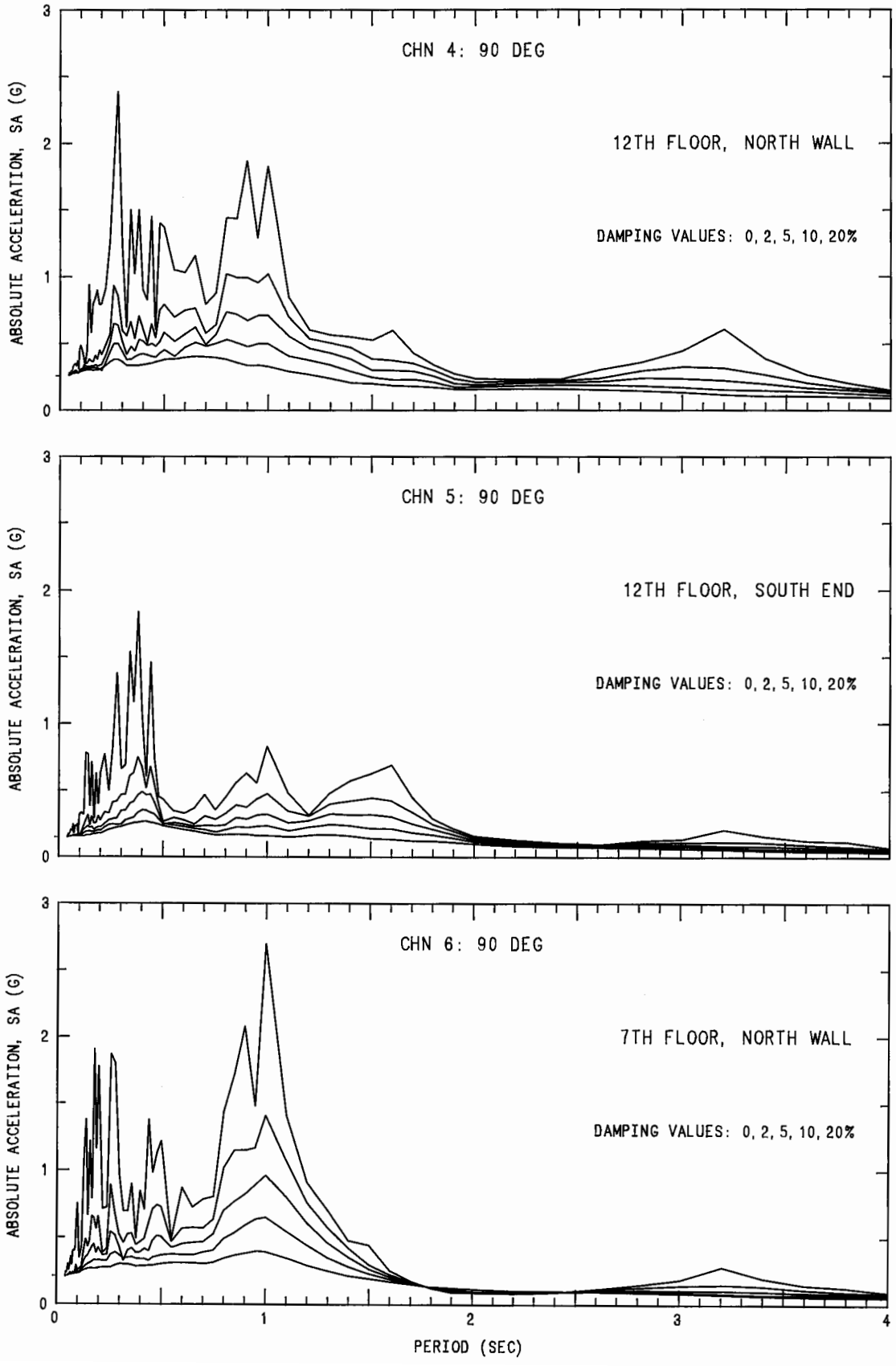
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58480-C0243-89296.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58480-C0243-89296.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58480-C0243-89296.01
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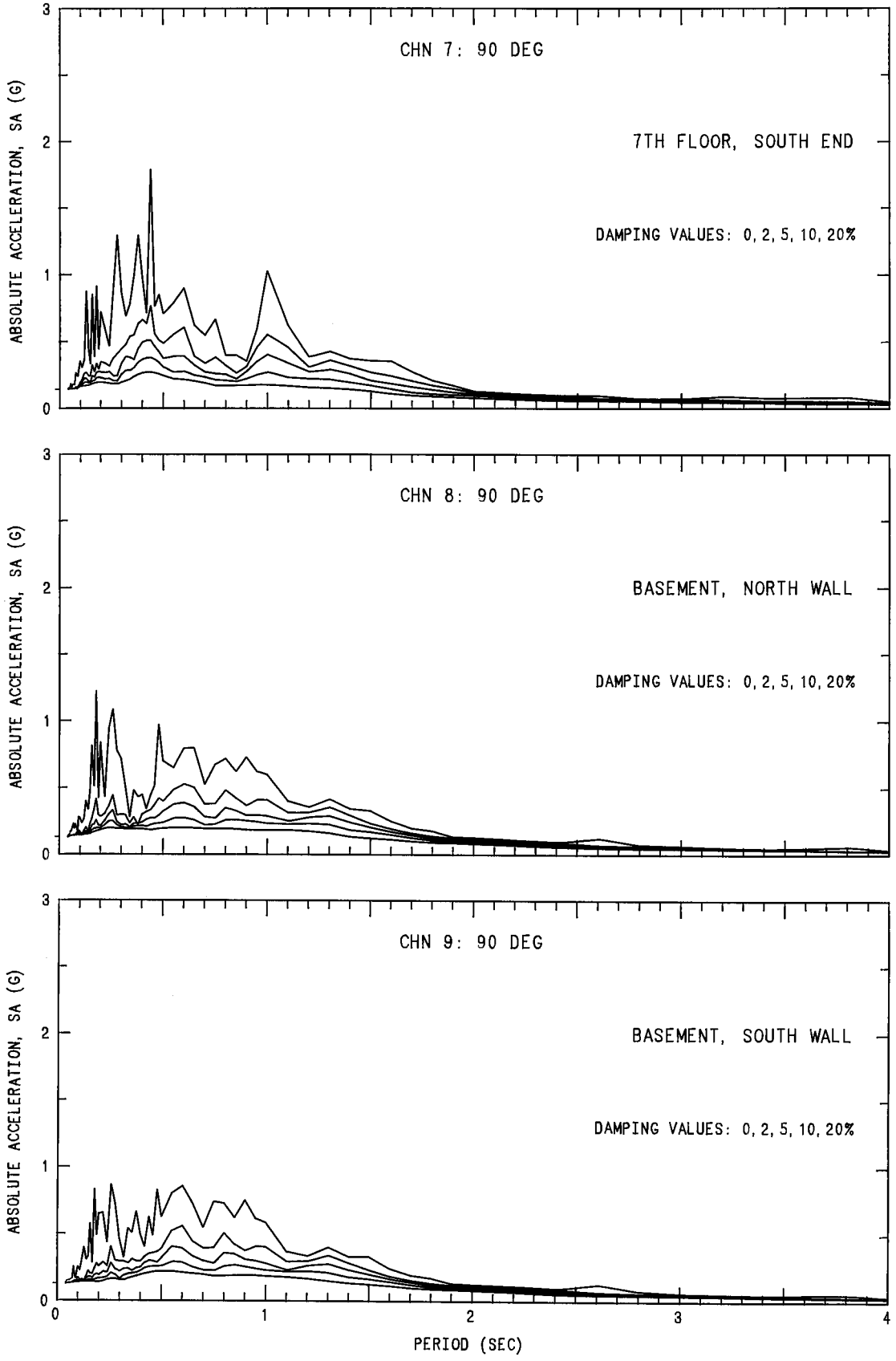
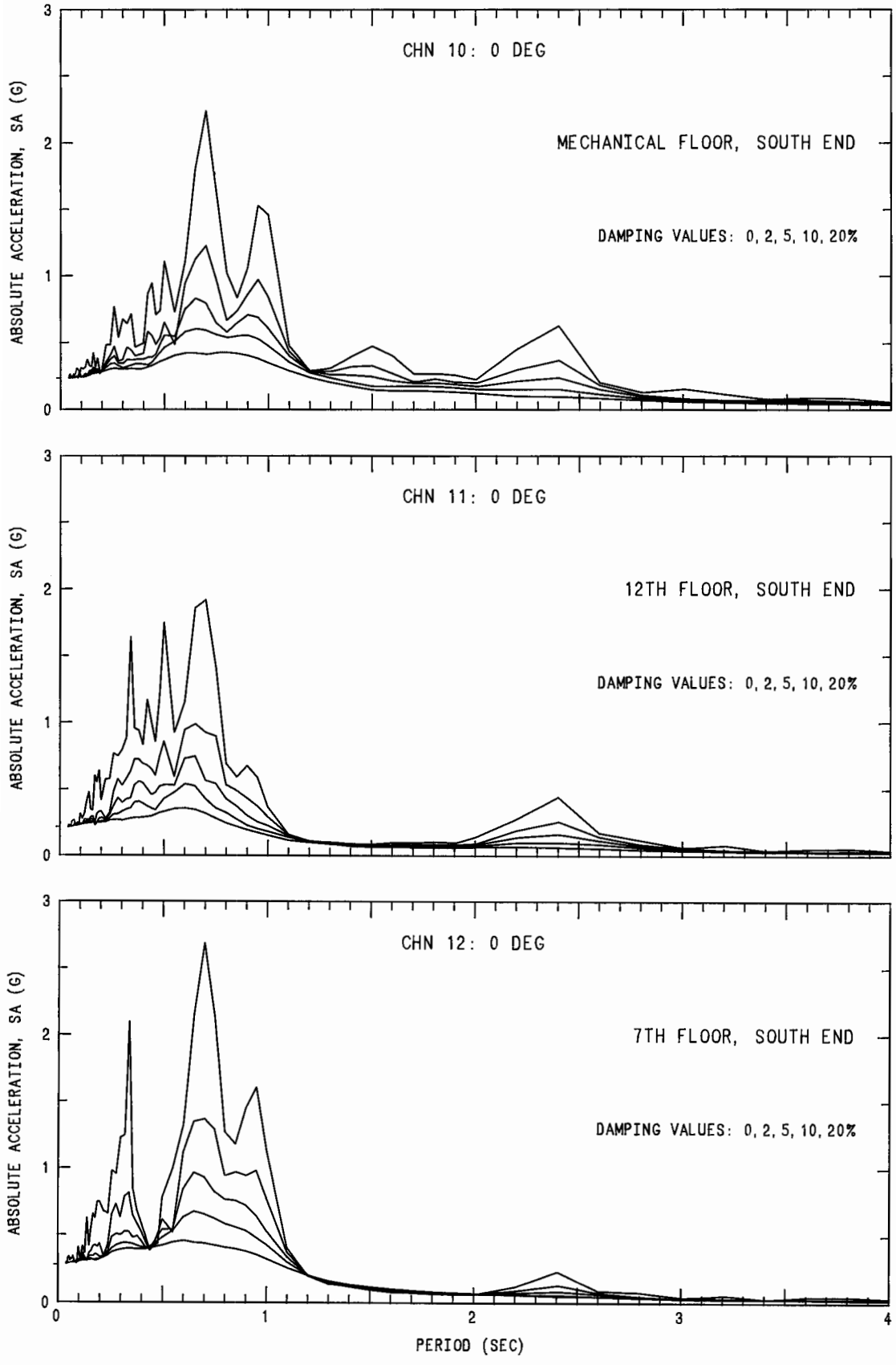


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 18-STORY COMMERCIAL BLDG: CSMIP S/N 480
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58480-C0243-89296.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 18-STORY COMMERCIAL BLDG: CSMIP S/N 480
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58480-C0243-89296.01
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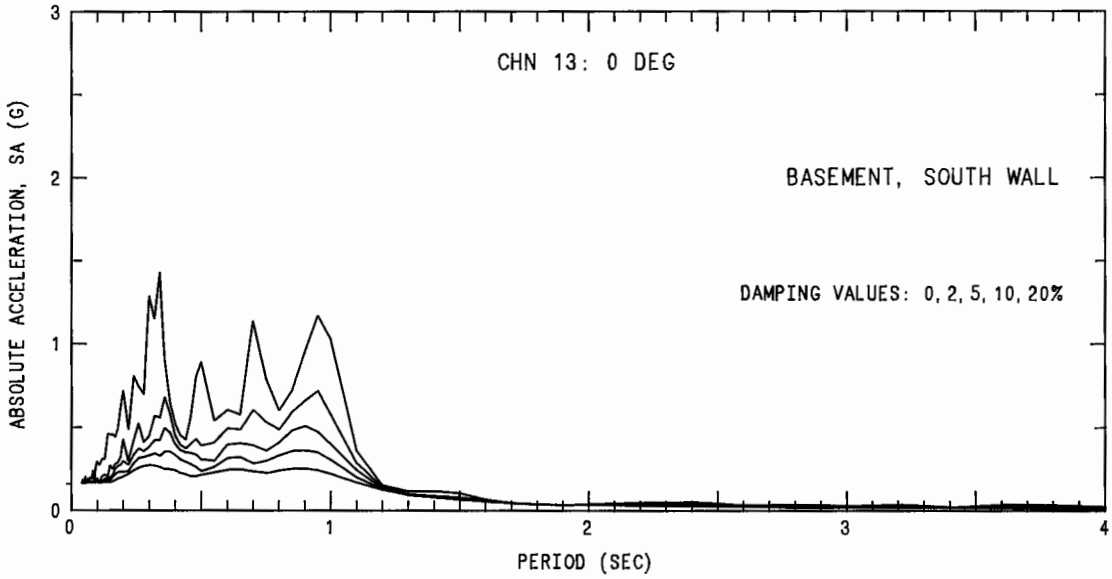
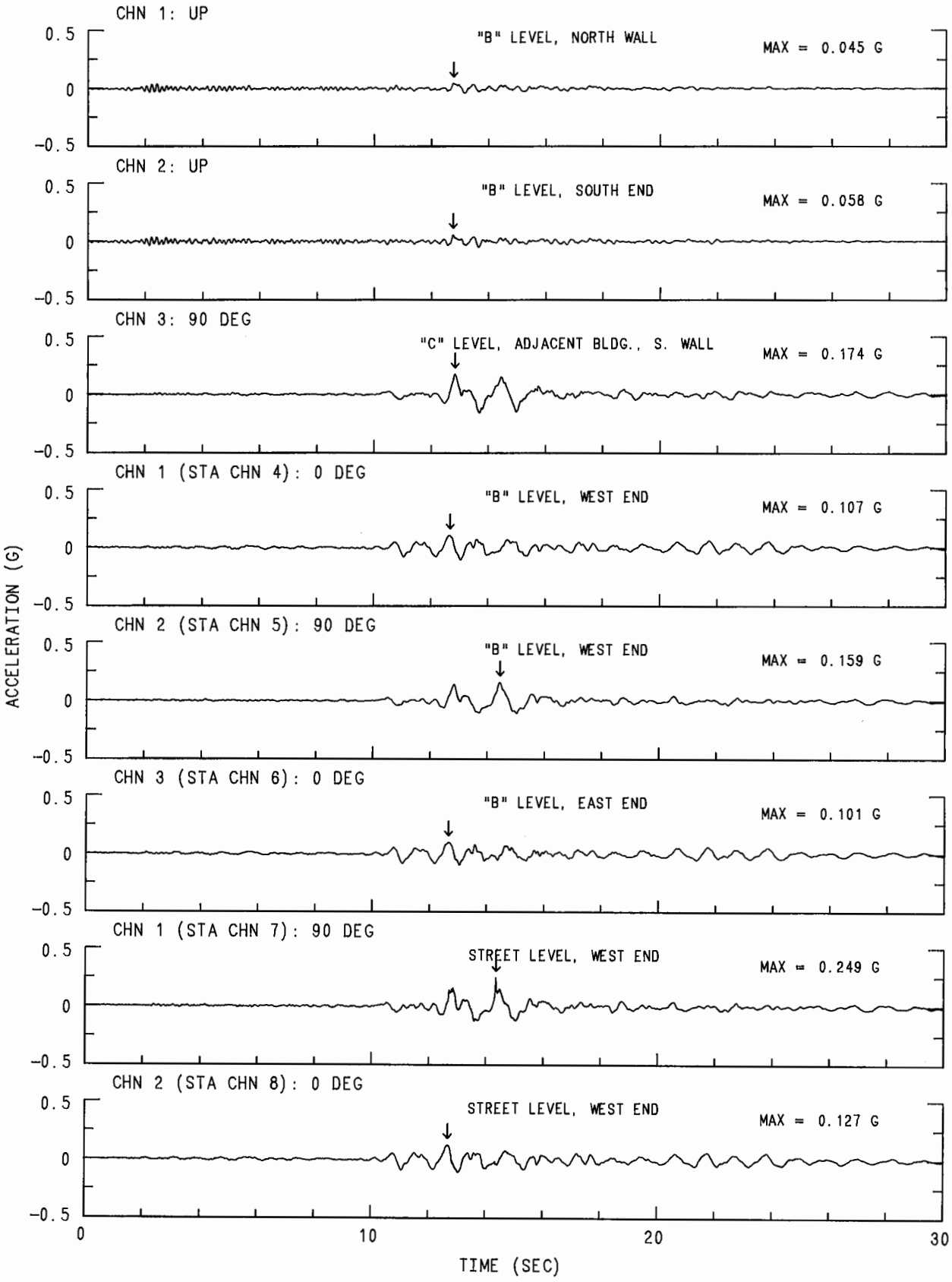


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

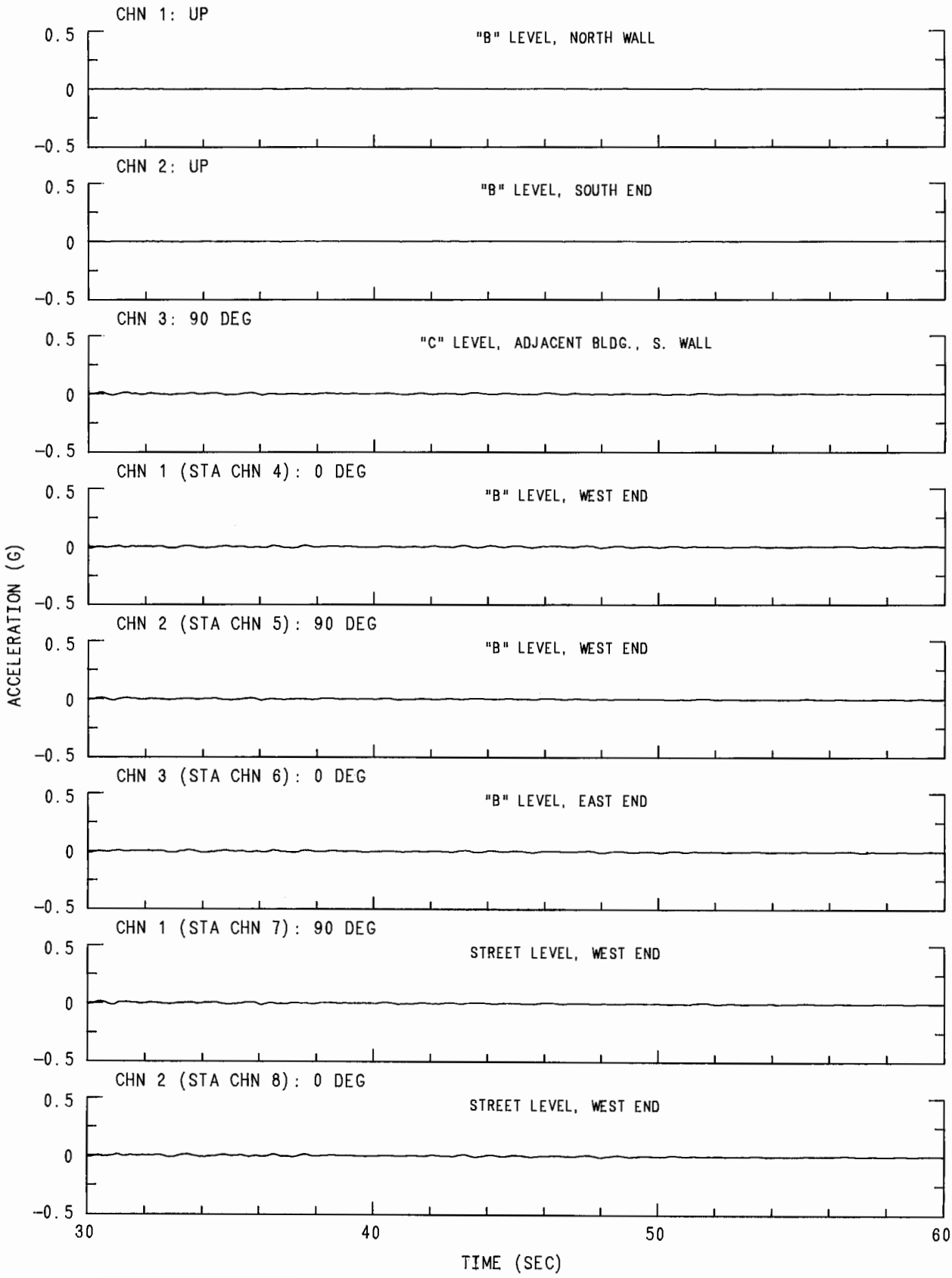
PHASE 1 ACCELERATION. RECORD ID: 58532–D0298–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

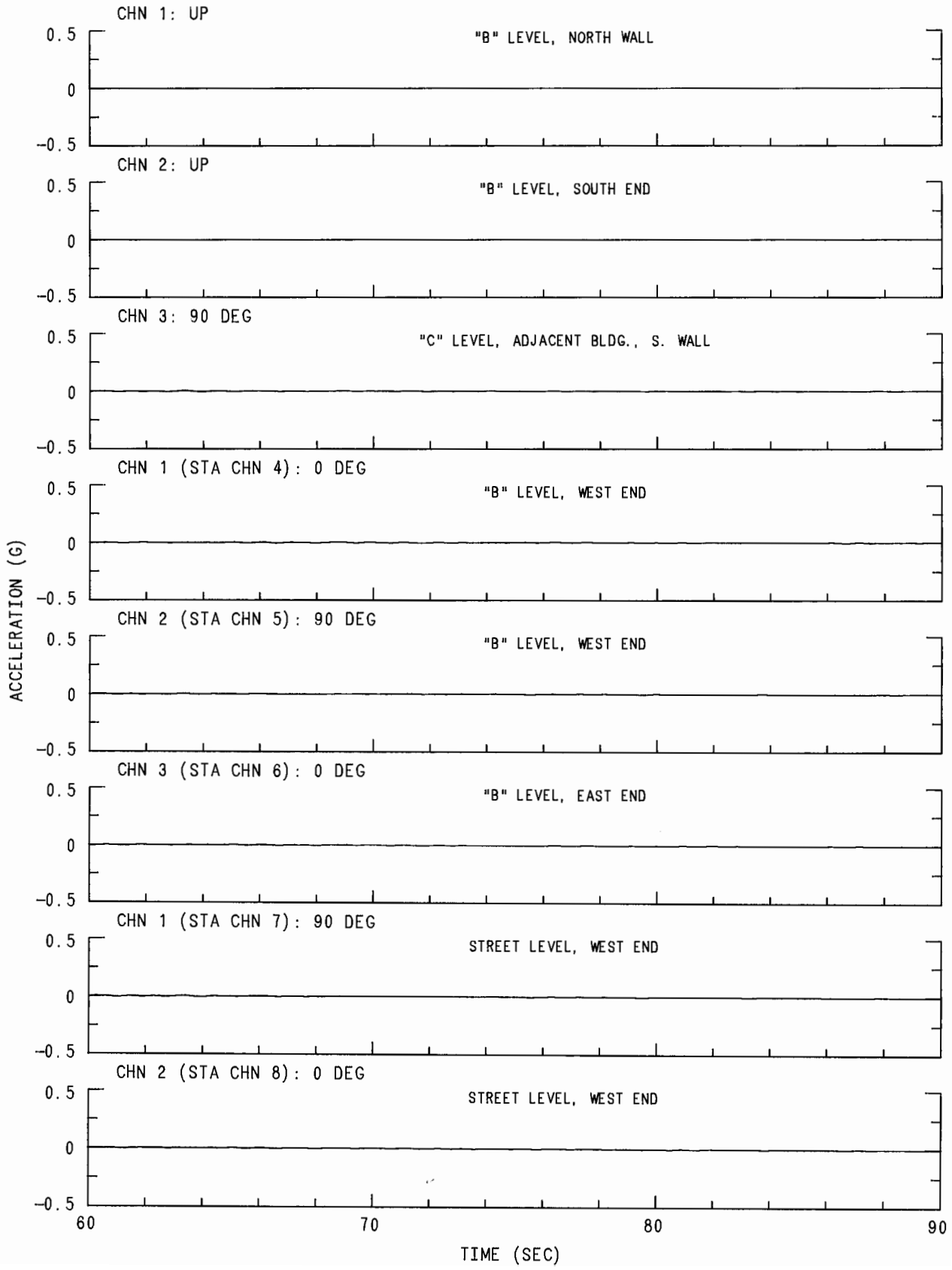
PHASE 1 ACCELERATION. RECORD ID: 58532-D0298-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

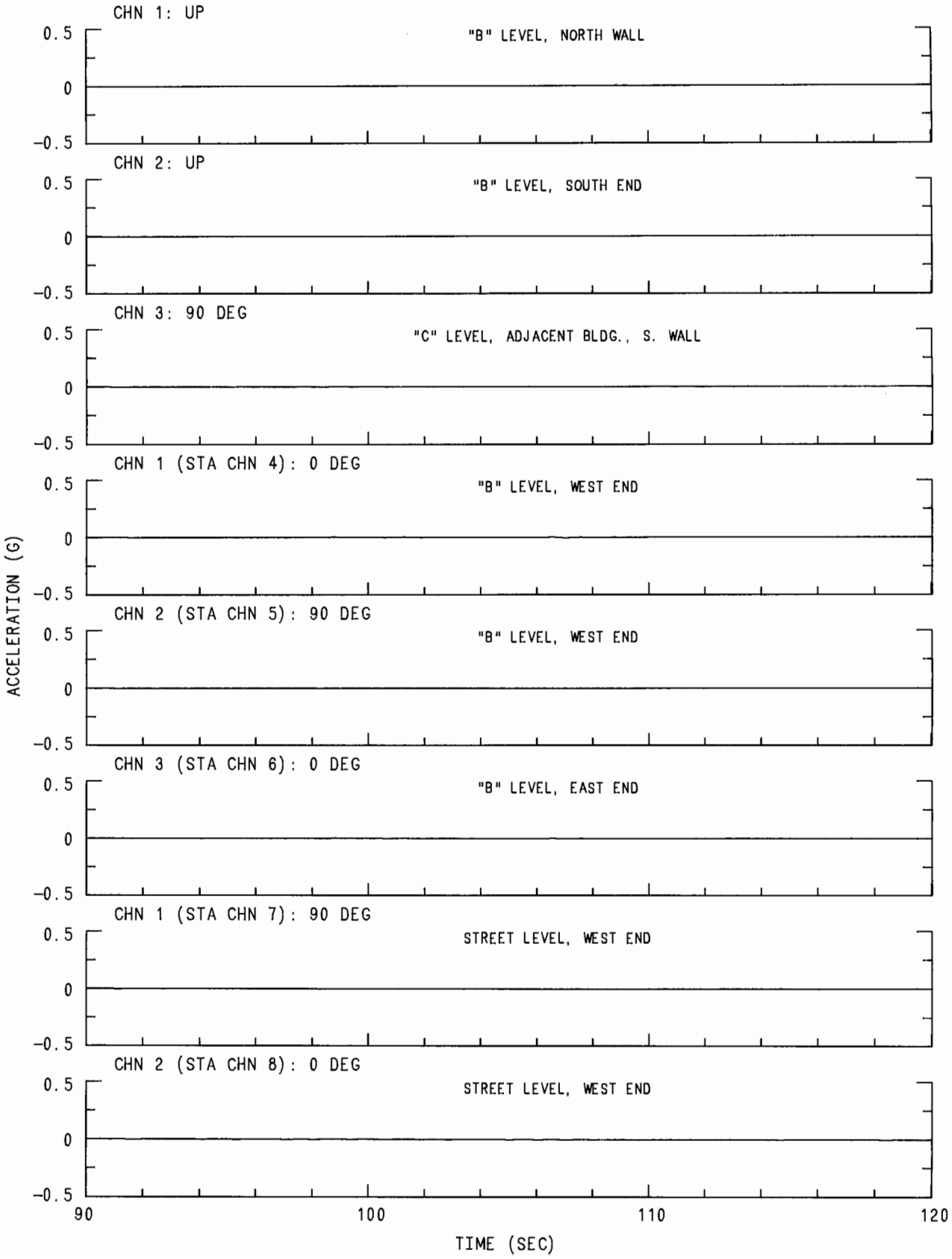
PHASE 1 ACCELERATION. RECORD ID: 58532-D0298-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

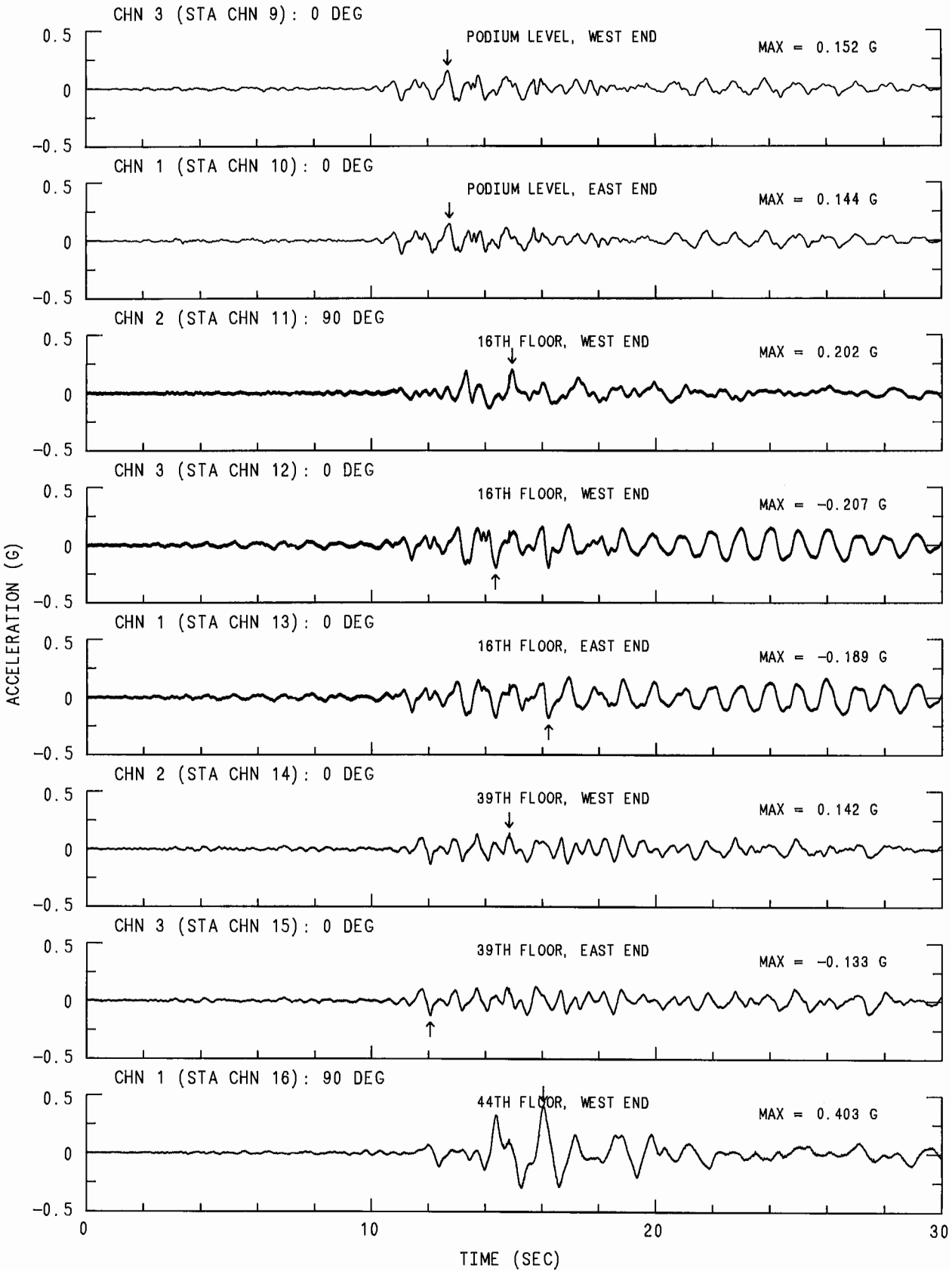
PHASE 1 ACCELERATION. RECORD ID: 58532–D0298–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

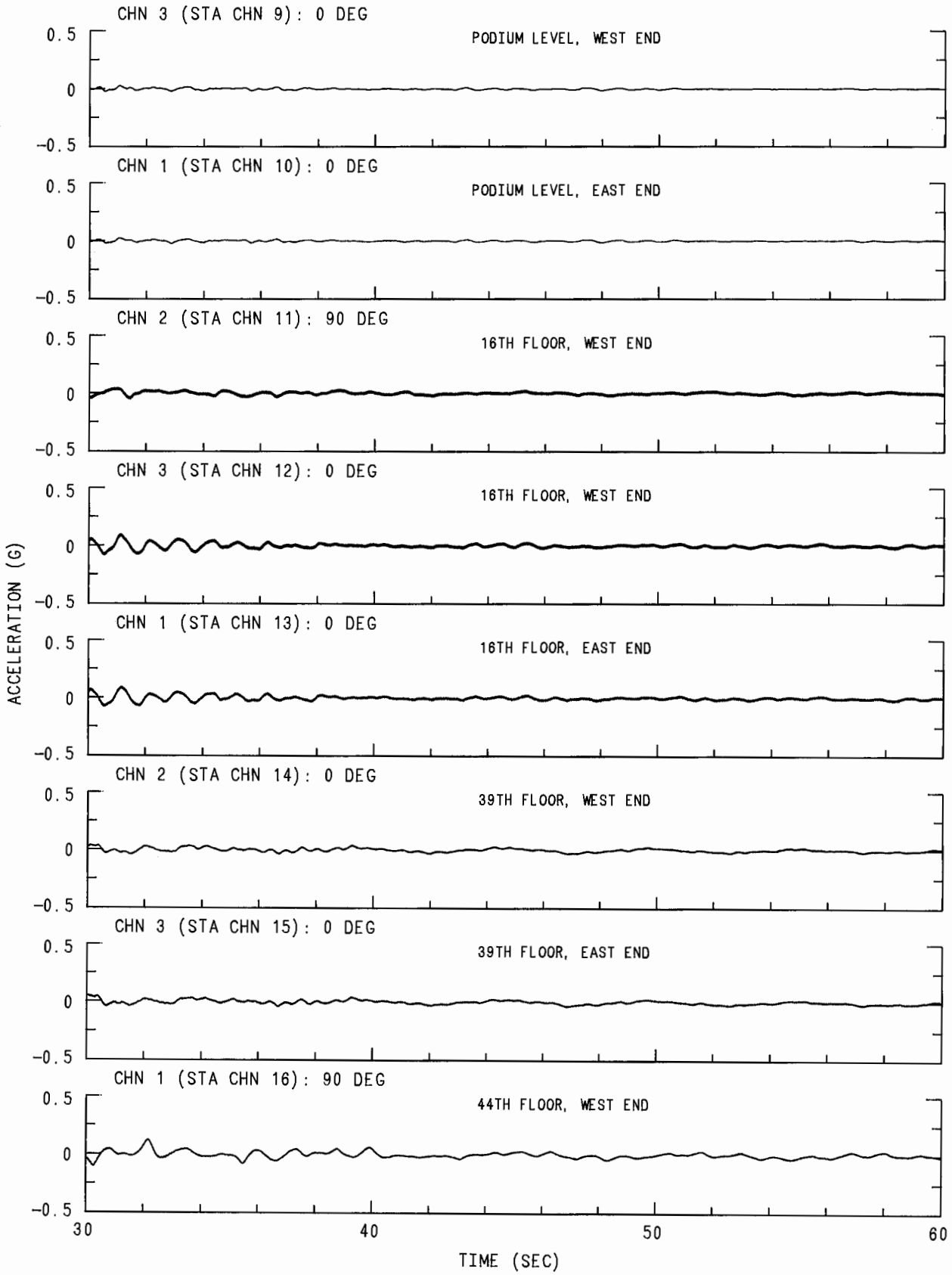
PHASE 1 ACCELERATION. RECORD ID: 58532-D0300-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

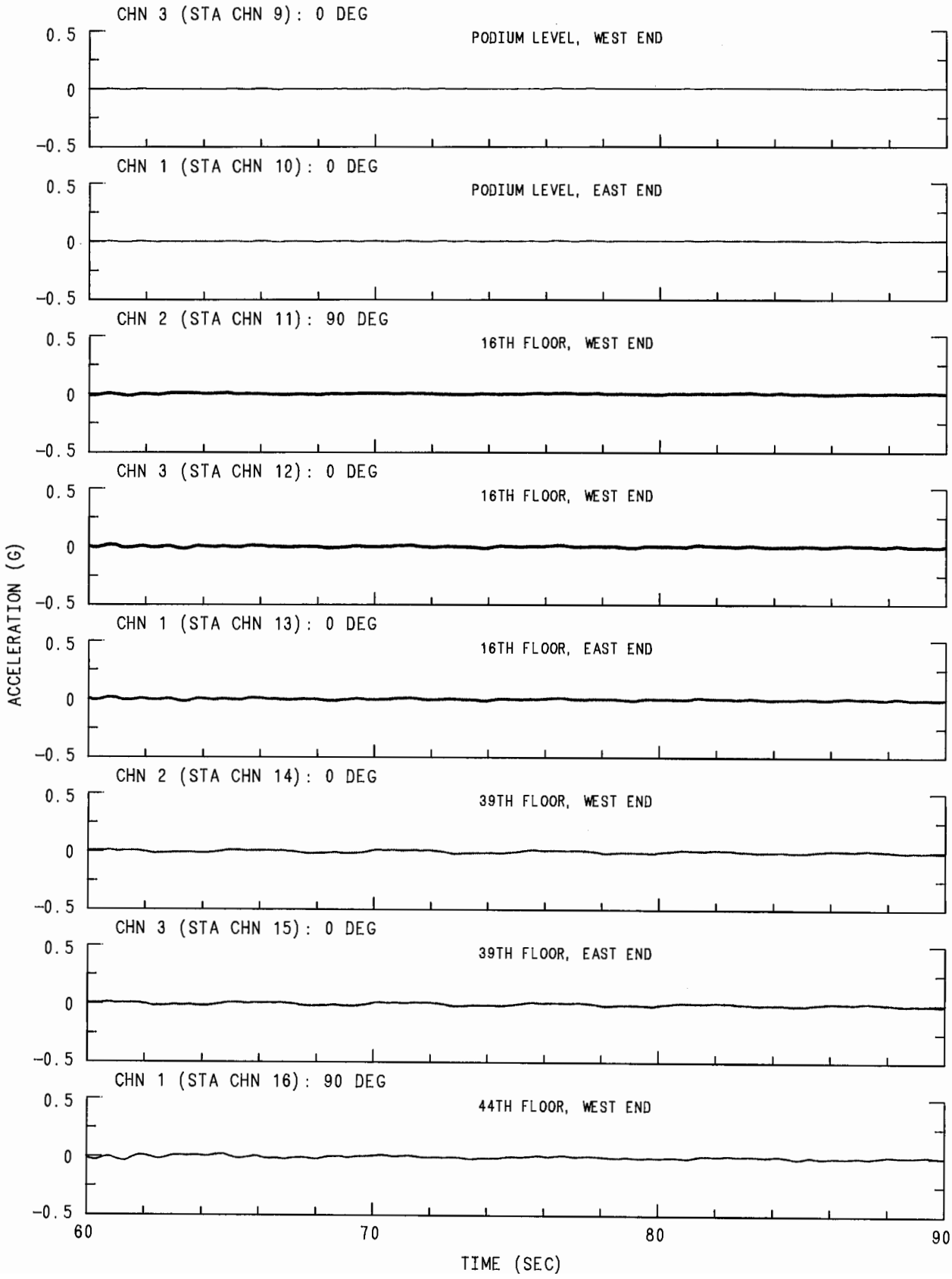
PHASE 1 ACCELERATION. RECORD ID: 58532-D0300-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

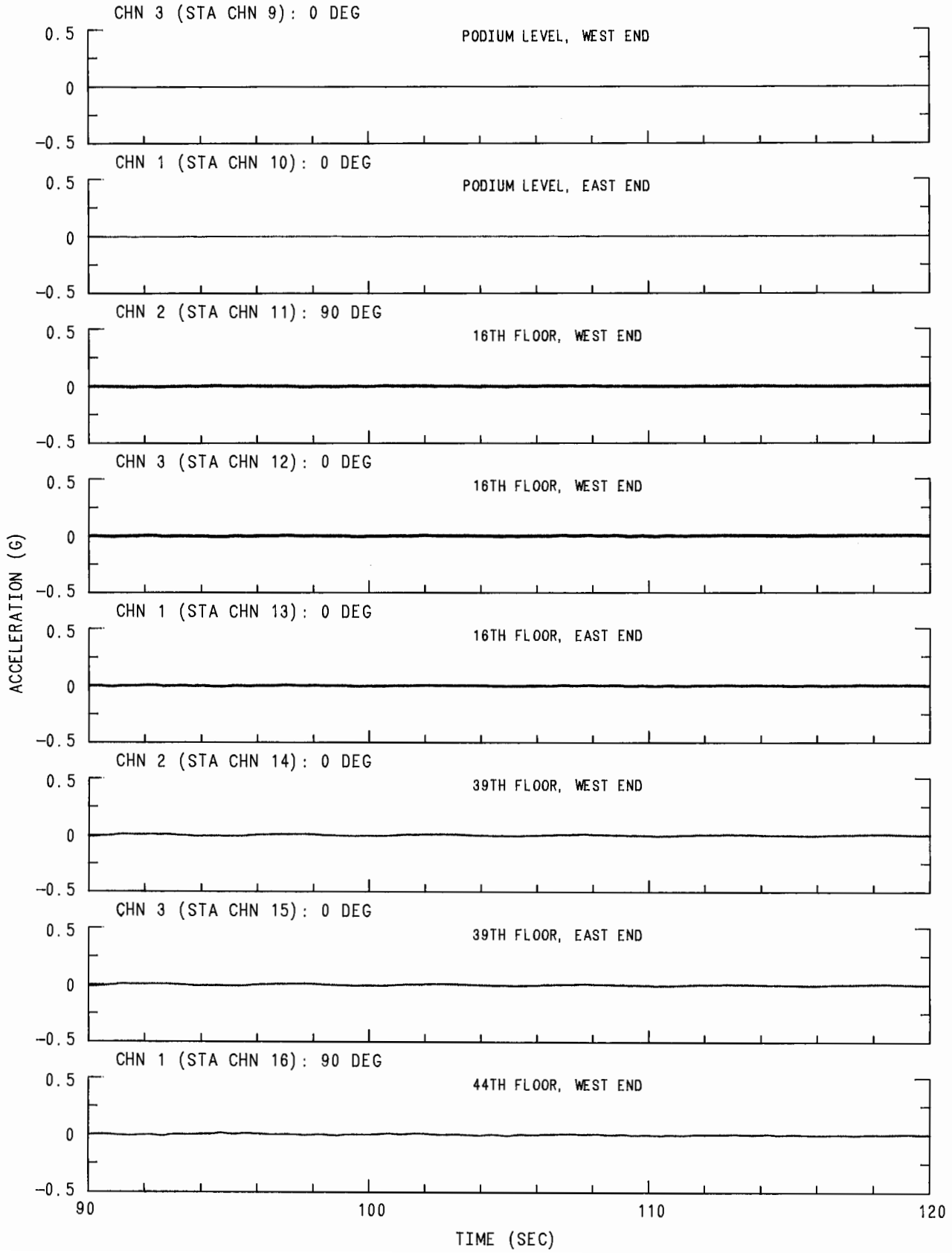
PHASE 1 ACCELERATION. RECORD ID: 58532-D0300-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

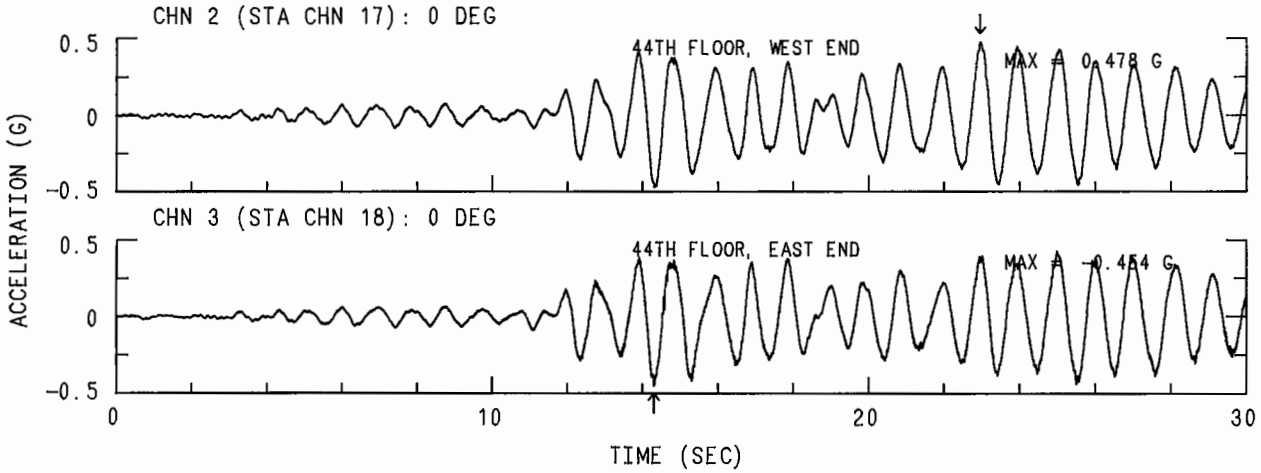
PHASE 1 ACCELERATION. RECORD ID: 58532–D0300–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

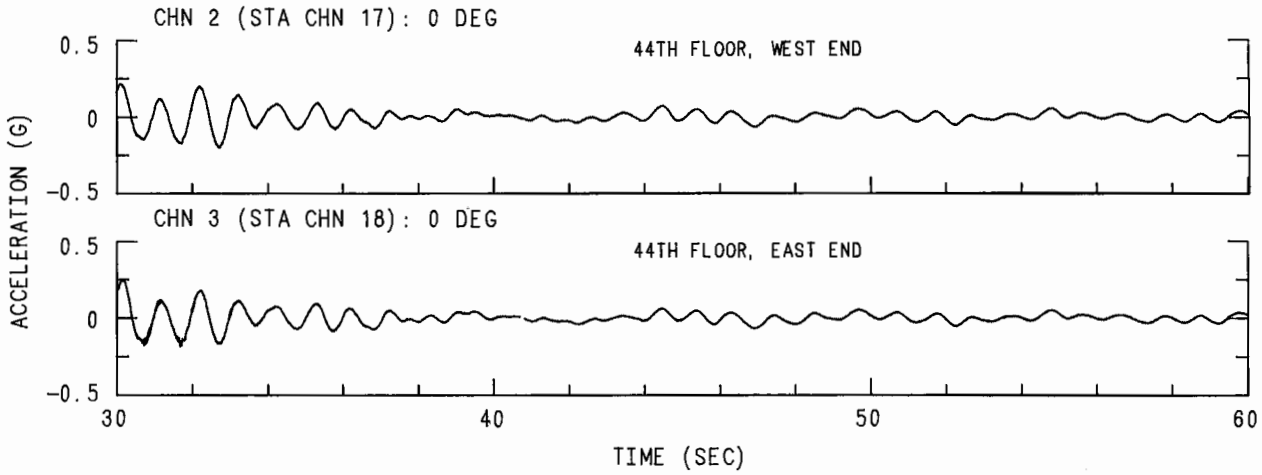
PHASE 1 ACCELERATION. RECORD ID: 58532–D0306–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

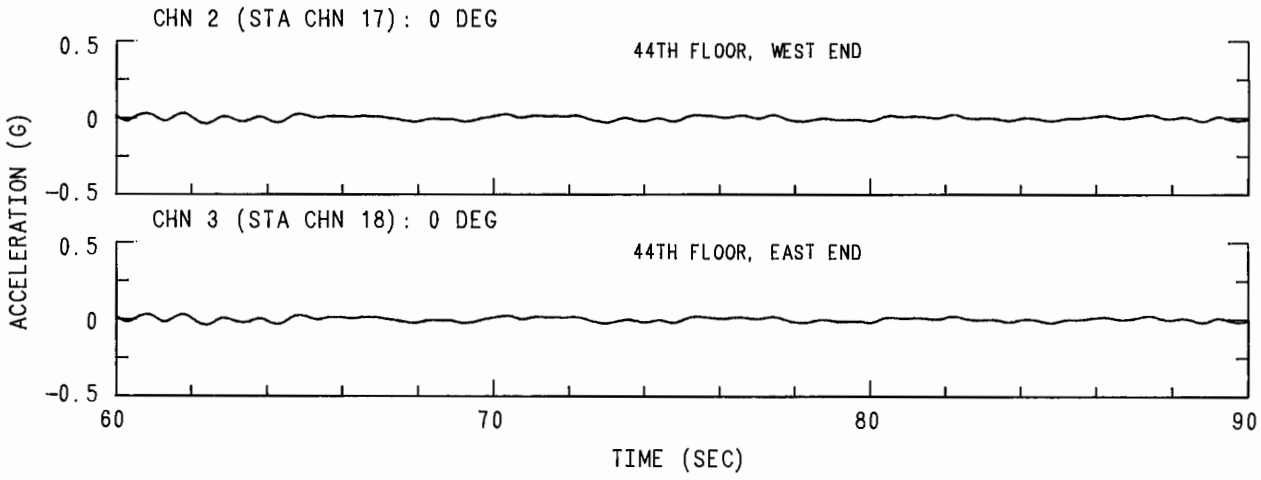
PHASE 1 ACCELERATION. RECORD ID: 58532–D0306–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

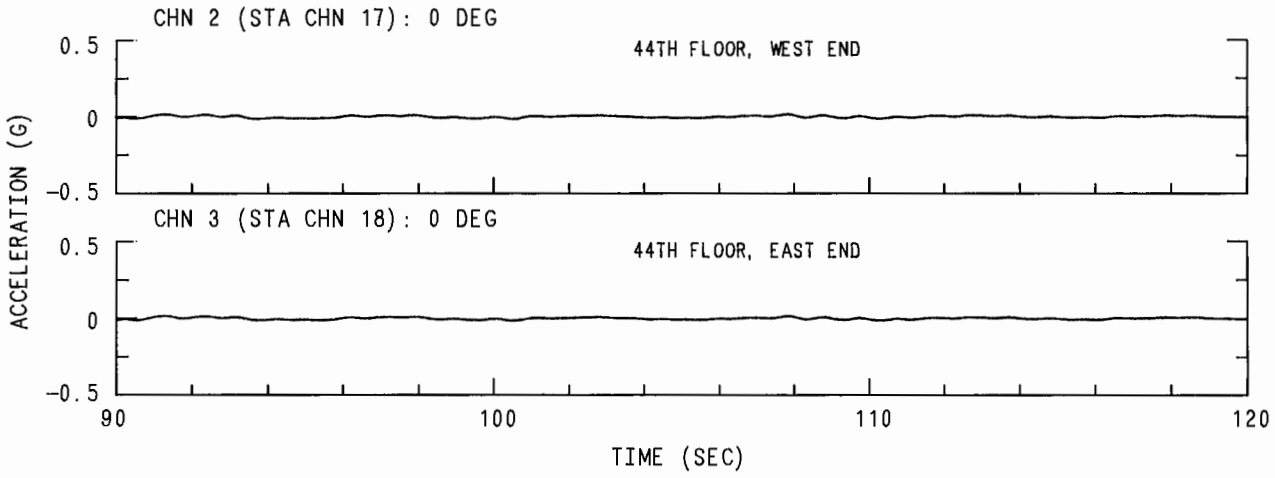
PHASE 1 ACCELERATION. RECORD ID: 58532-D0306-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

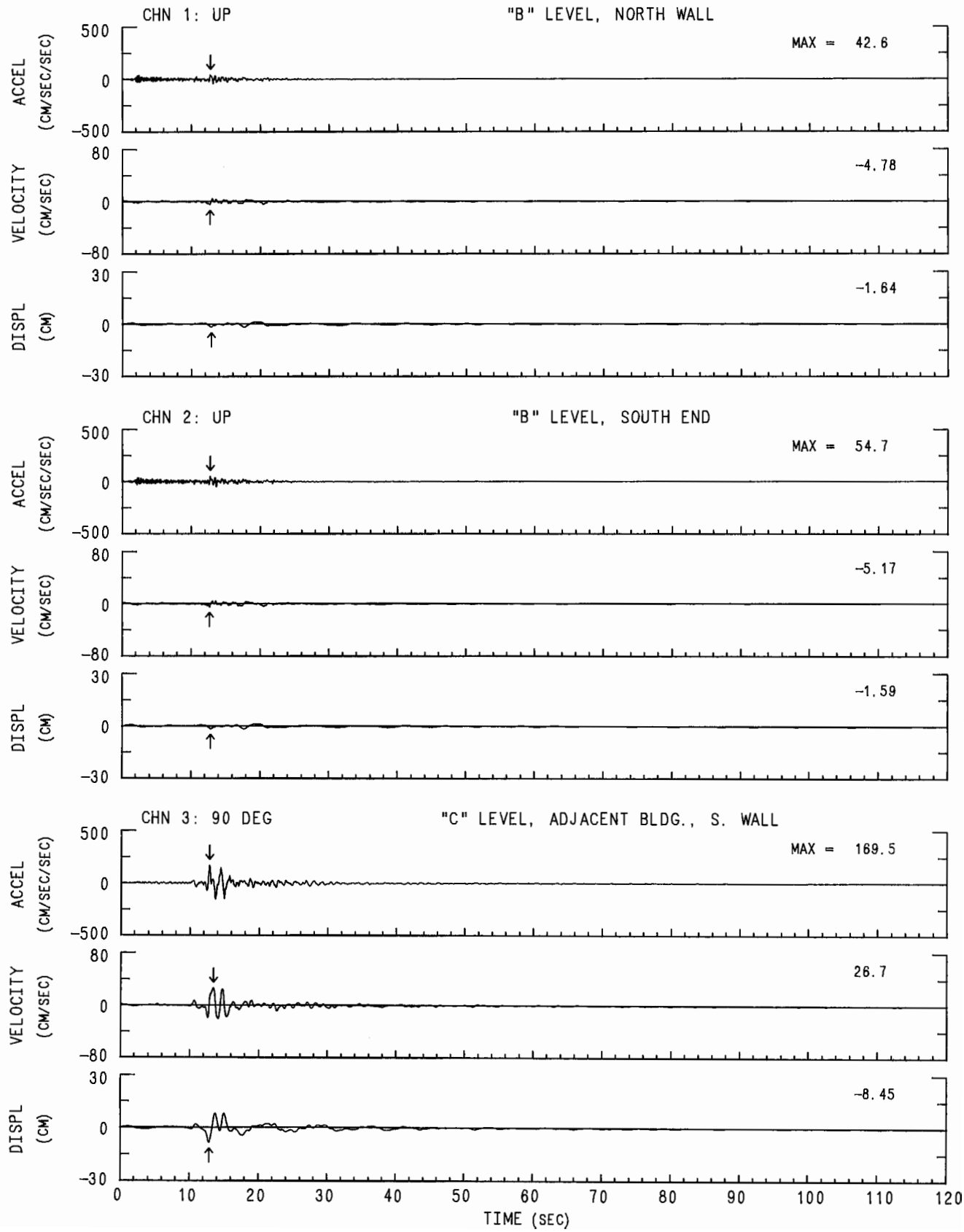
PHASE 1 ACCELERATION. RECORD ID: 58532–D0306–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

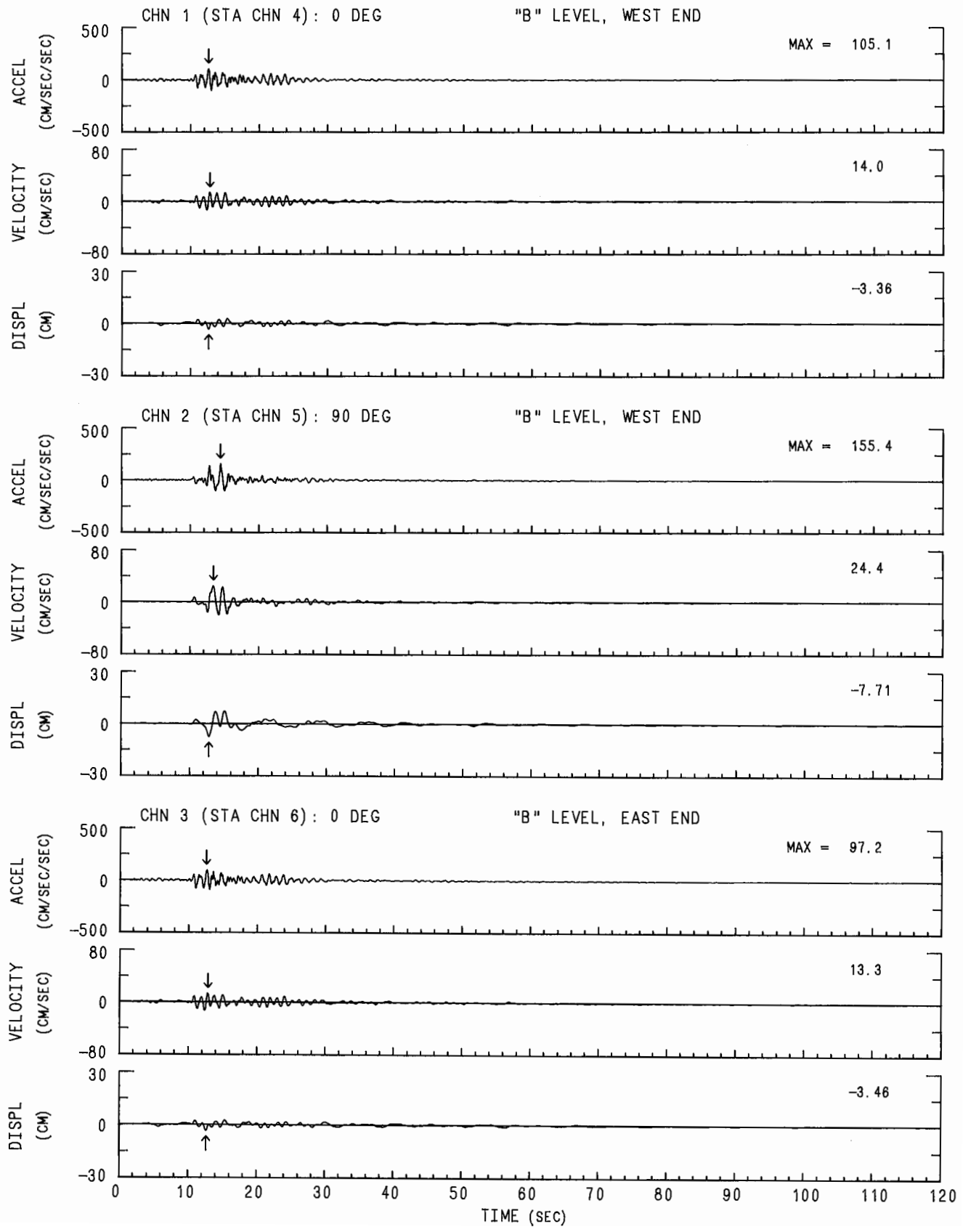
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 58532-D0298-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

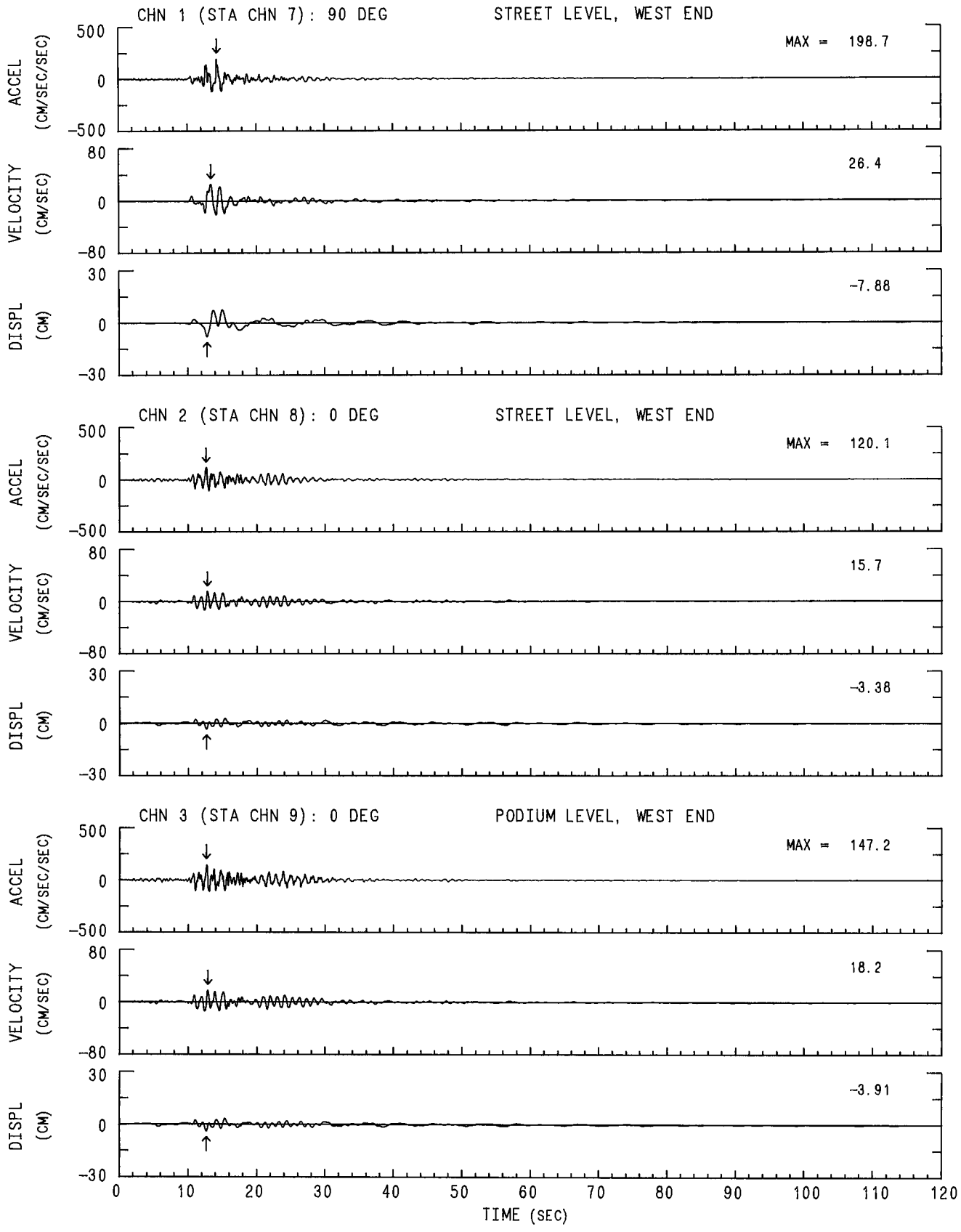
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 58532–D0299–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

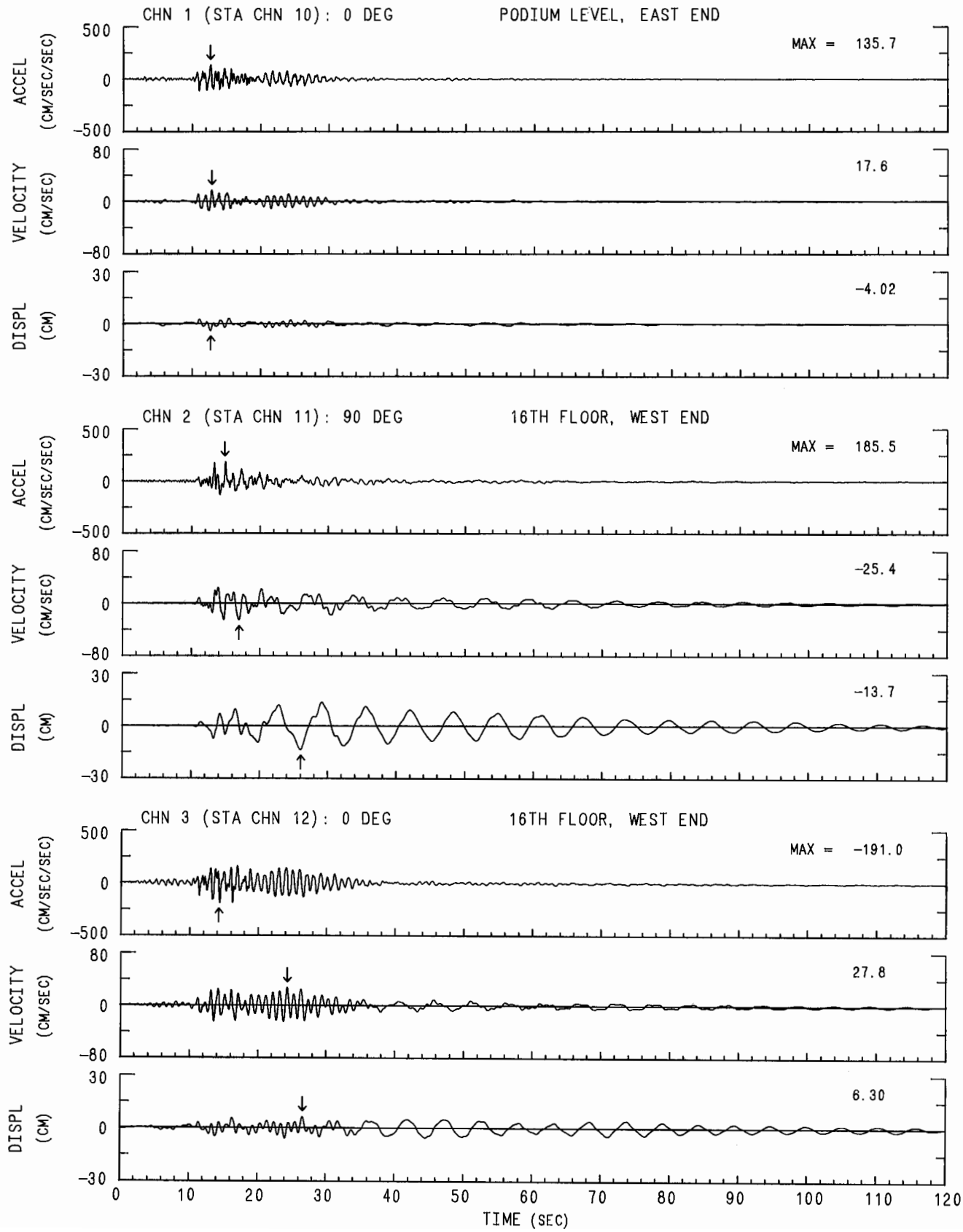
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 58532–D0300–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

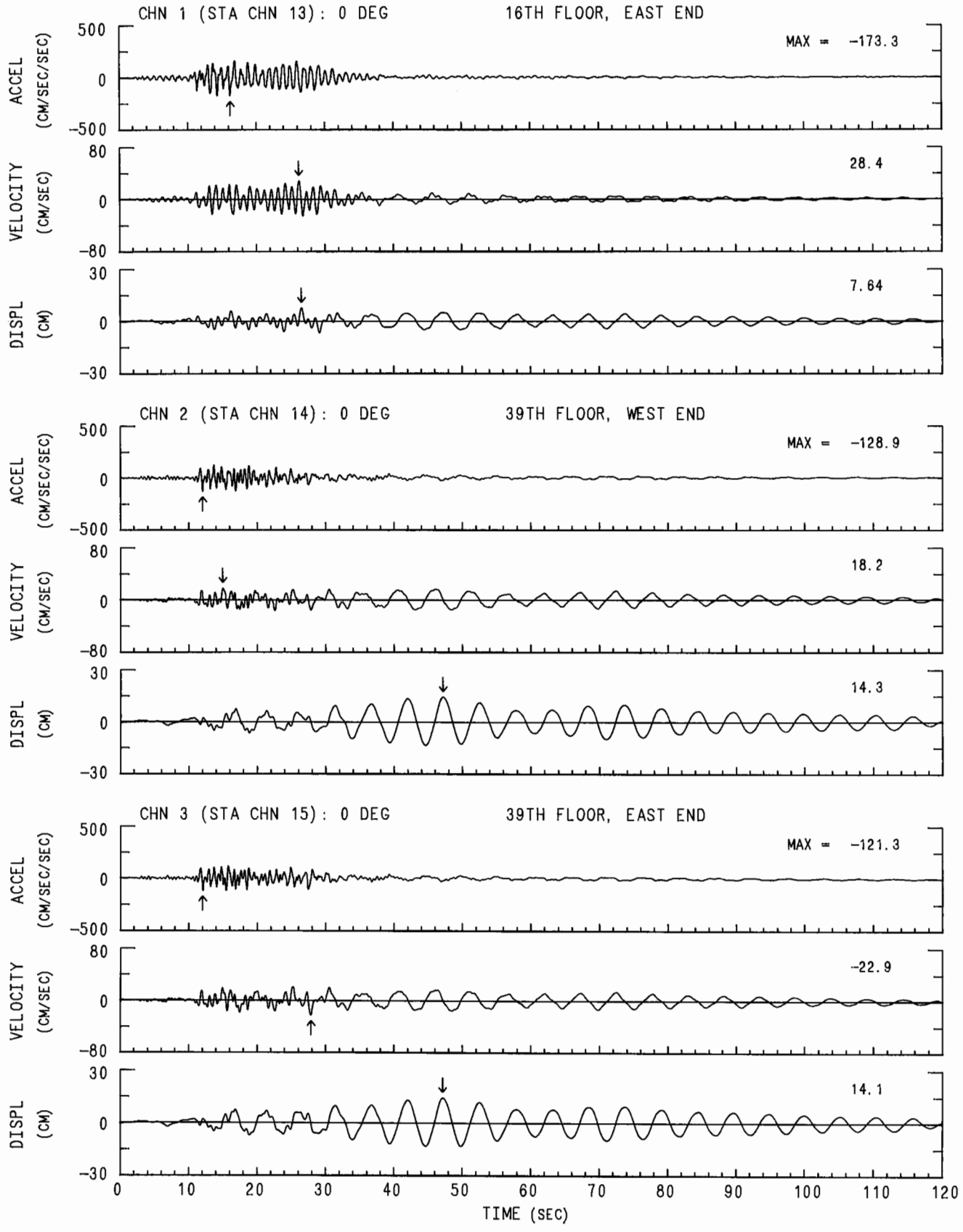
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 58532-D0301-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

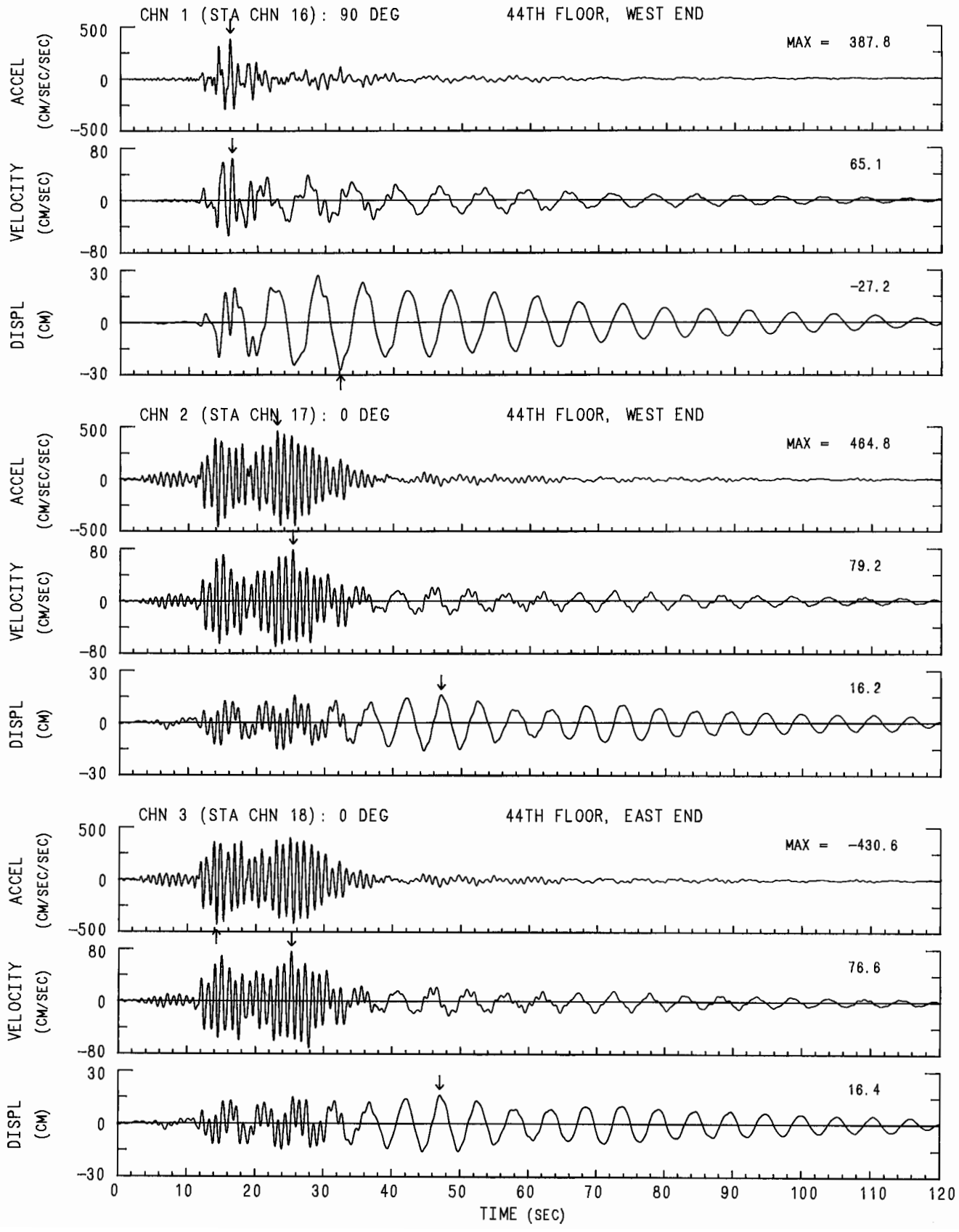
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 58532–D0305–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 58532-D0306-89293.02



SAN FRANCISCO - 47-STORY OFFICE BLDG.: CSMIP S/N 532

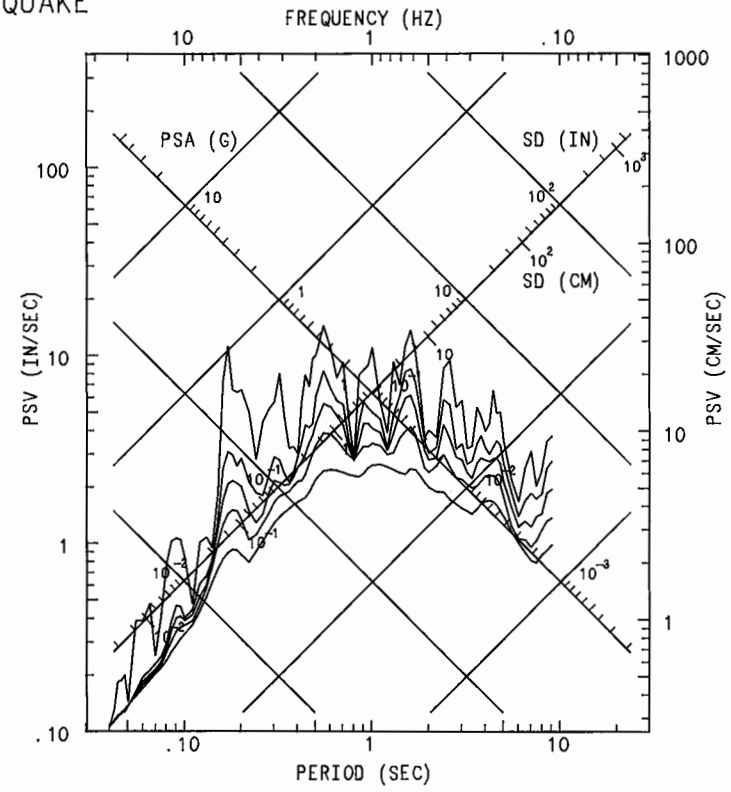
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

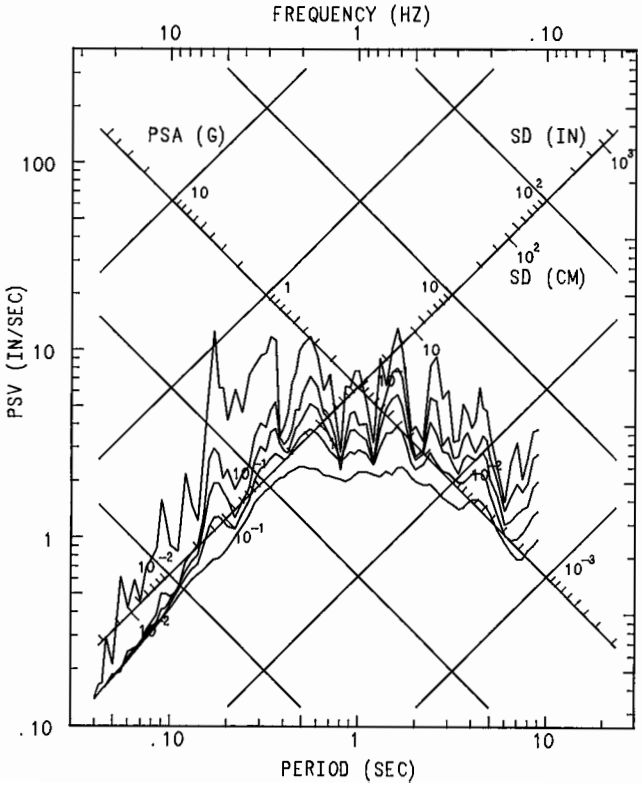
RECORD ID: 58532-D0298-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

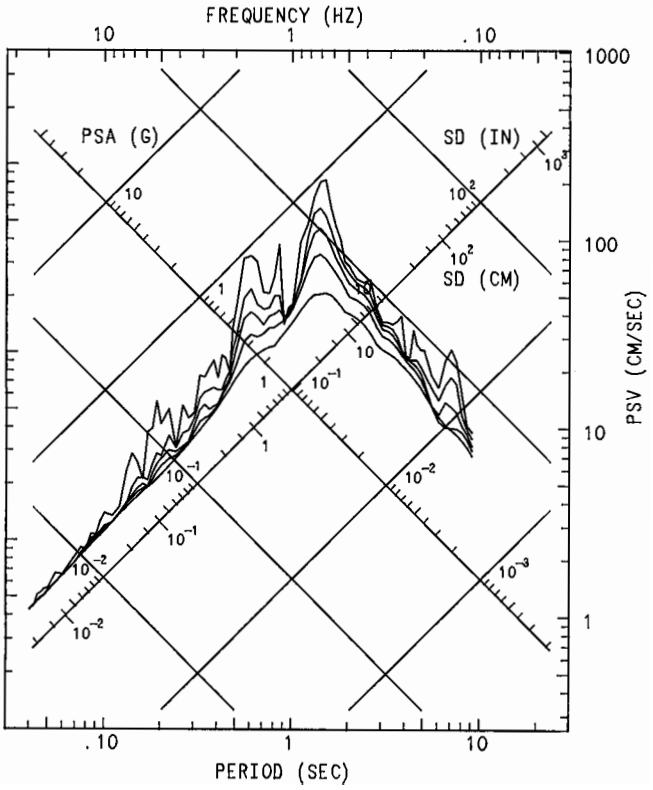
CHN 1: UP
"B" LEVEL, NORTH WALL



CHN 2: UP
"B" LEVEL, SOUTH END



CHN 3: 90 DEG
"C" LEVEL, ADJACENT BLDG., S. WALL



SAN FRANCISCO - 47-STORY OFFICE BLDG.: CSMIP S/N 532

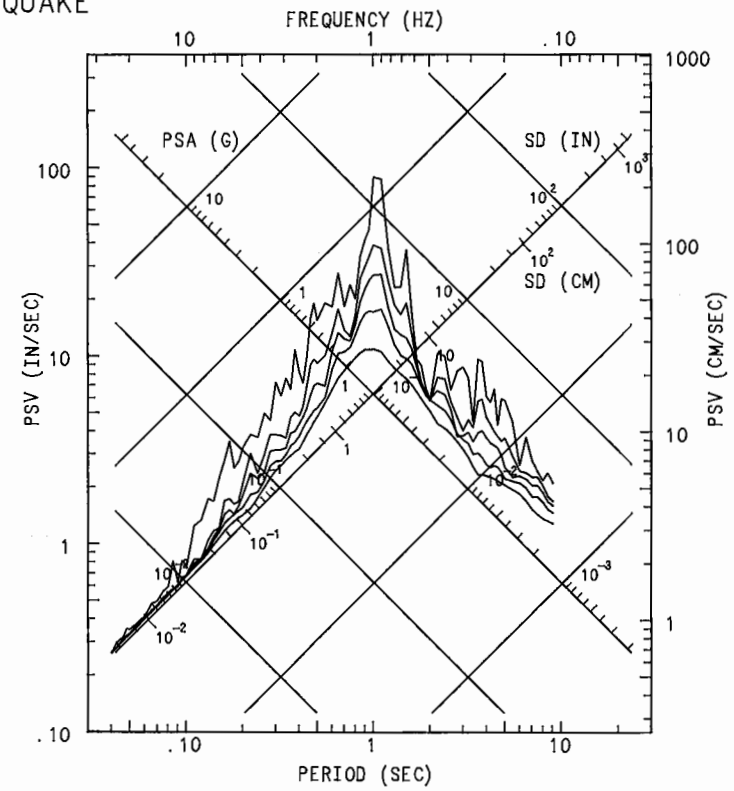
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

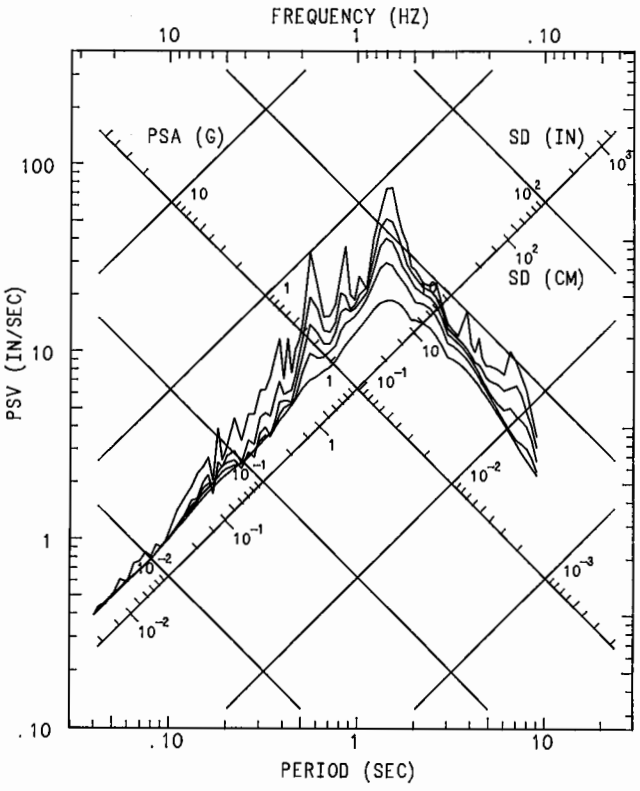
RECORD ID: 58532-D0299-89293.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

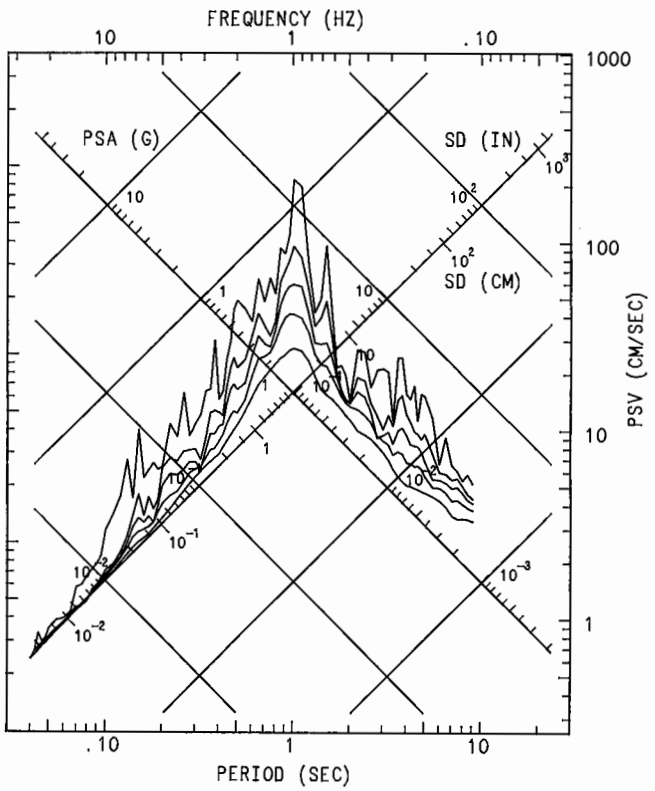
CHN 1 (STA CHN 4): 0 DEG
"B" LEVEL, WEST END



CHN 2 (STA CHN 5): 90 DEG
"B" LEVEL, WEST END



CHN 3 (STA CHN 6): 0 DEG
"B" LEVEL, EAST END



SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

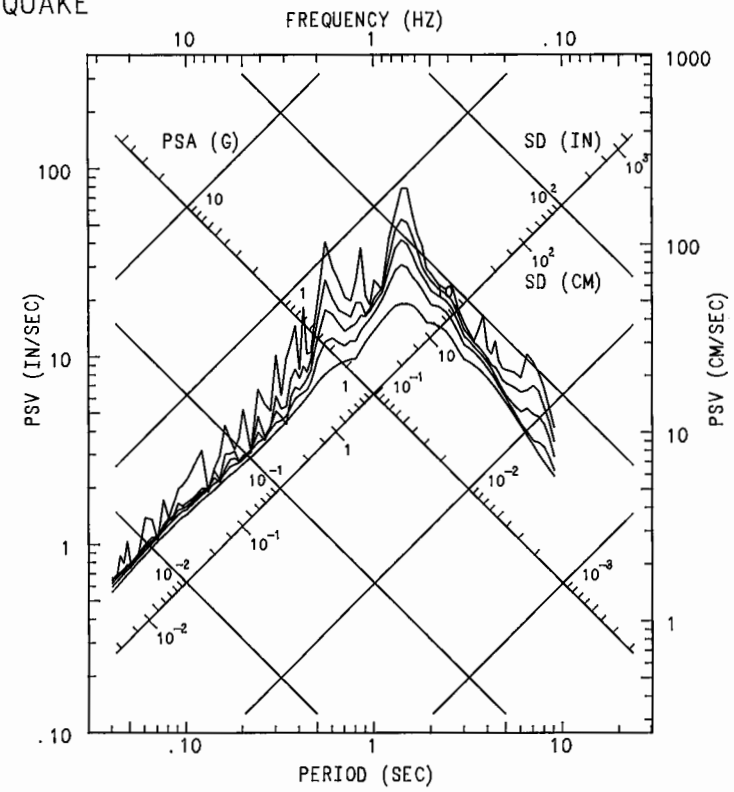
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

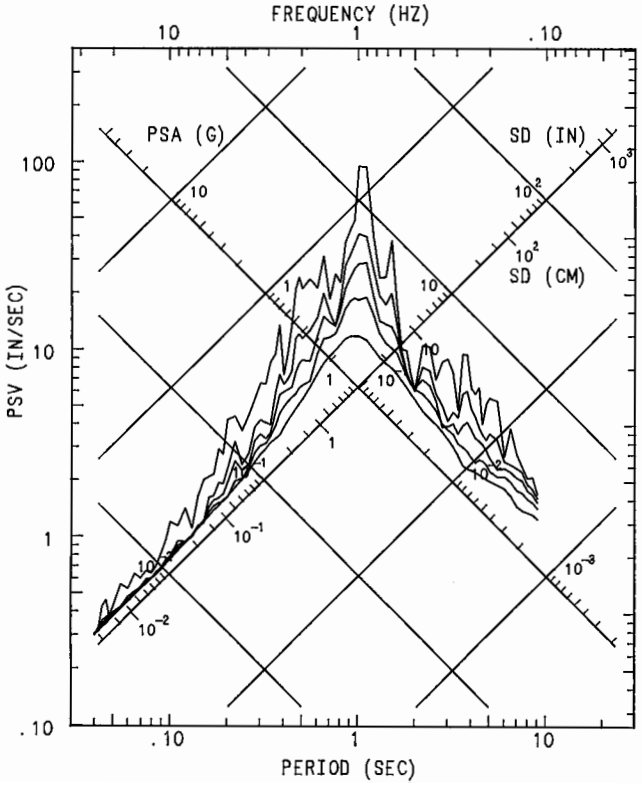
RECORD ID: 58532-D0300-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

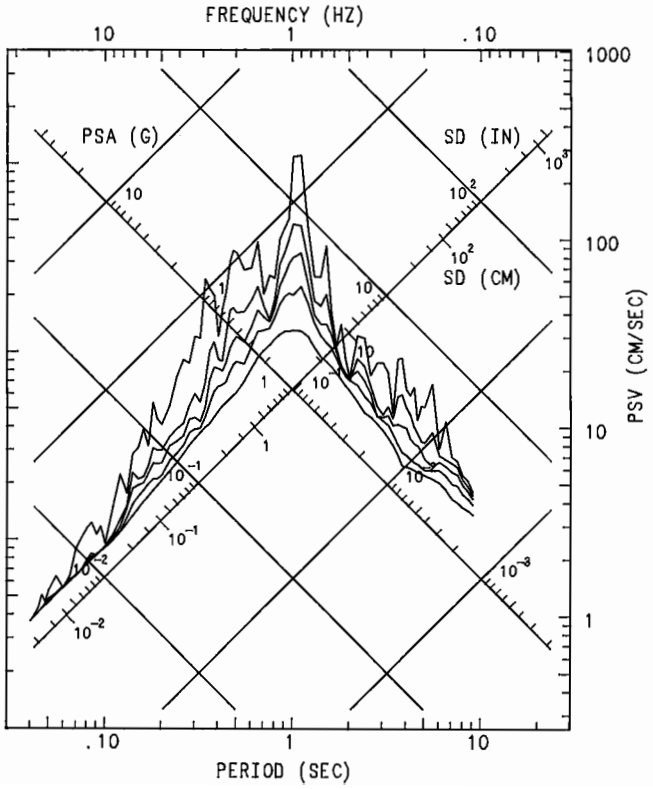
CHN 1 (STA CHN 7): 90 DEG
STREET LEVEL, WEST END



CHN 2 (STA CHN 8): 0 DEG
STREET LEVEL, WEST END



CHN 3 (STA CHN 9): 0 DEG
PODIUM LEVEL, WEST END



SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

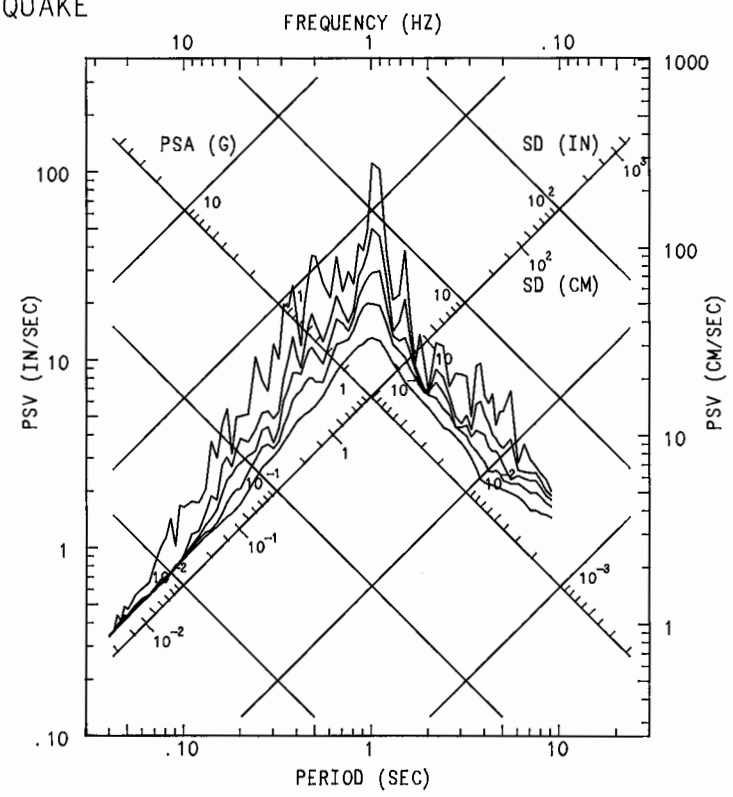
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

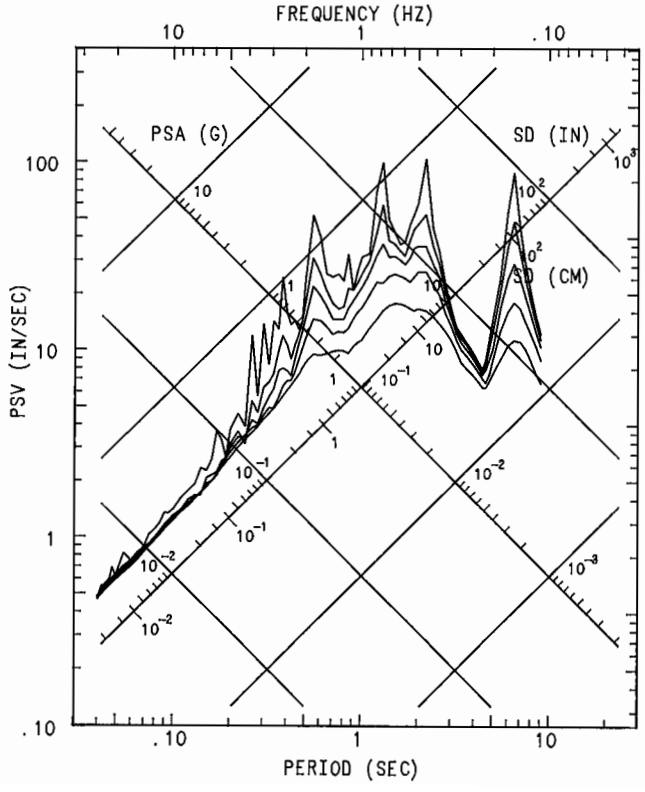
RECORD ID: 58532-D0301-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

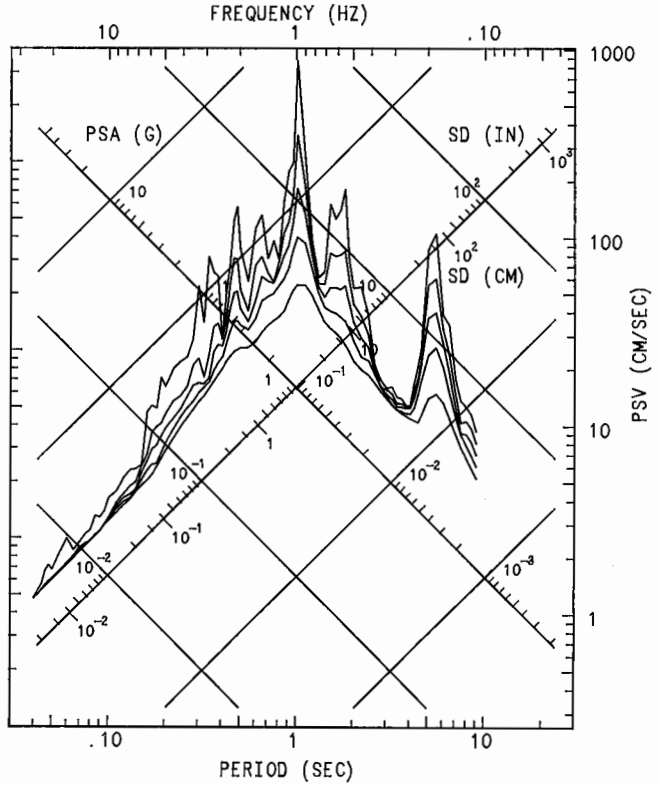
CHN 1 (STA CHN 10): 0 DEG
PODIUM LEVEL, EAST END



CHN 2 (STA CHN 11): 90 DEG
16TH FLOOR, WEST END



CHN 3 (STA CHN 12): 0 DEG
16TH FLOOR, WEST END



SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532

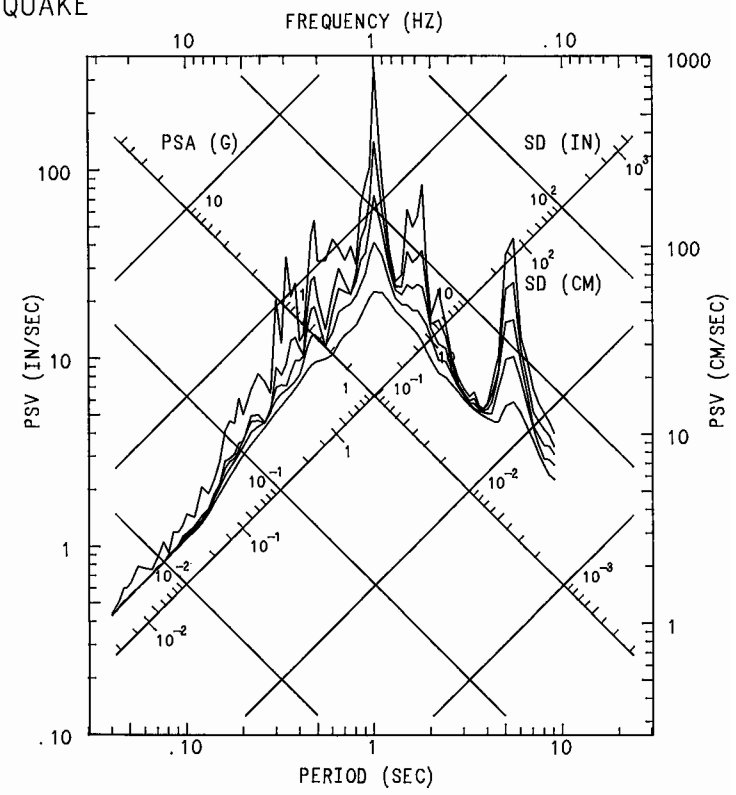
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

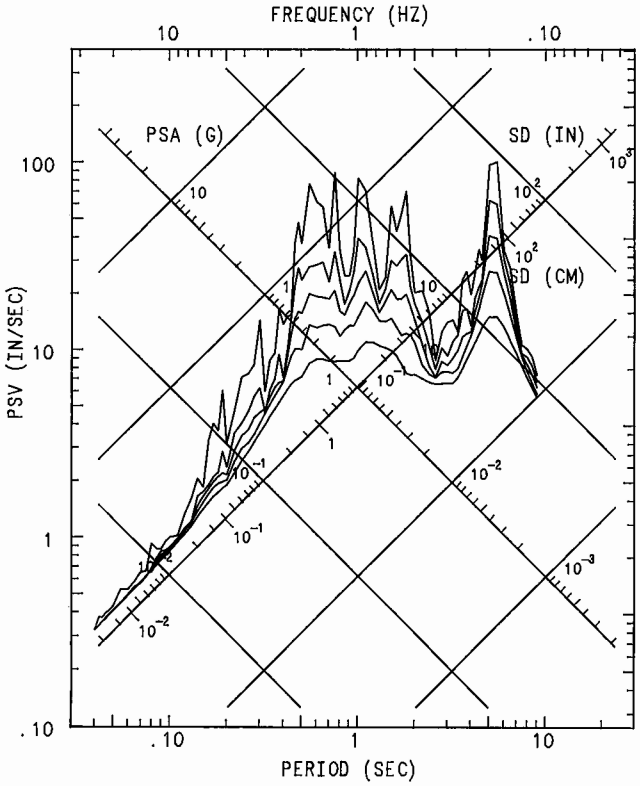
RECORD ID: 58532-D0305-89293.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

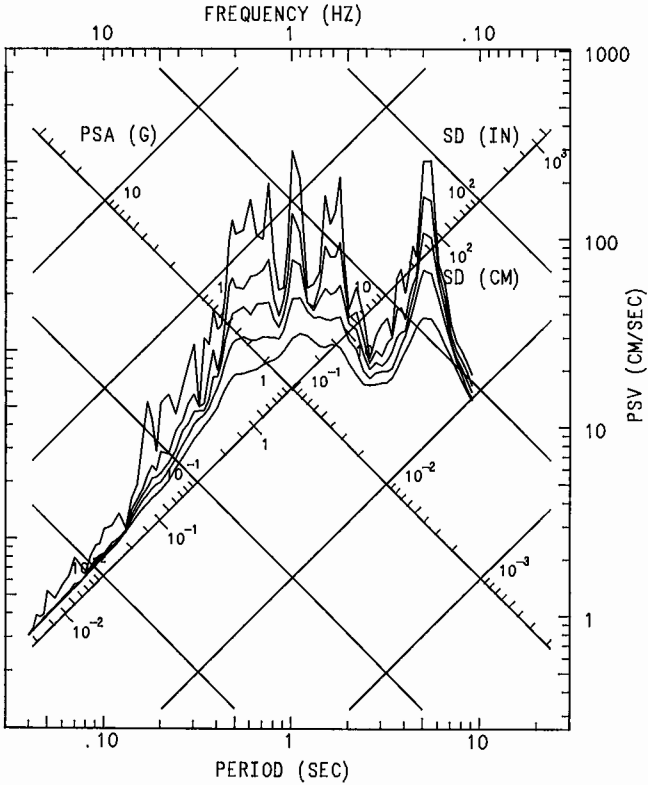
CHN 1 (STA CHN 13): 0 DEG
16TH FLOOR, EAST END



CHN 2 (STA CHN 14): 0 DEG
39TH FLOOR, WEST END



CHN 3 (STA CHN 15): 0 DEG
39TH FLOOR, EAST END



SAN FRANCISCO – 47–STORY OFFICE BLDG.: CSMIP S/N 532

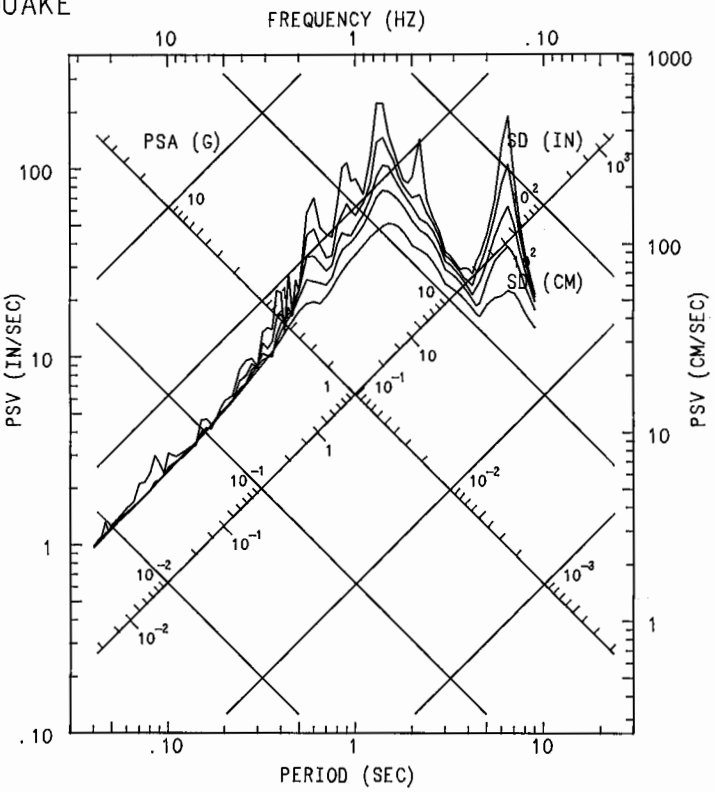
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

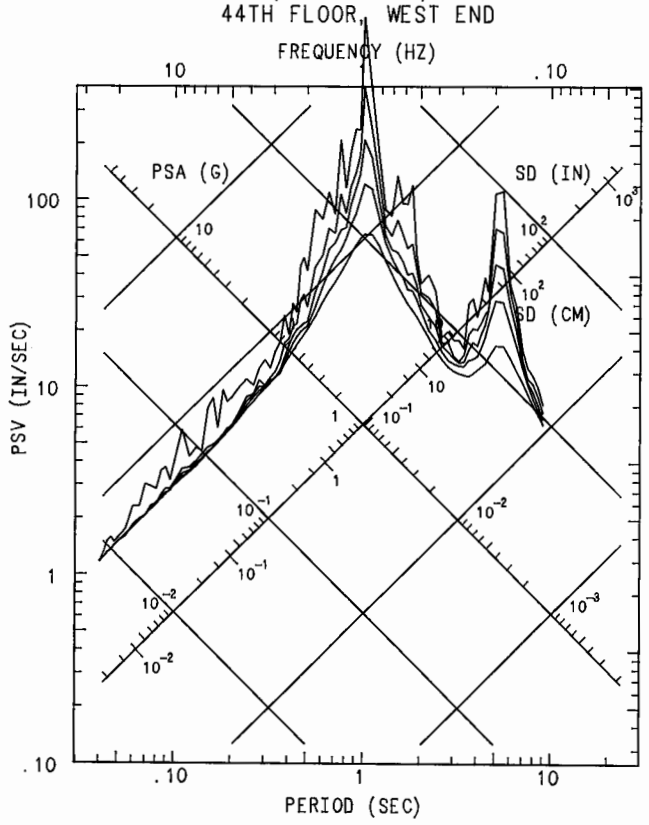
RECORD ID: 58532-D0306-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

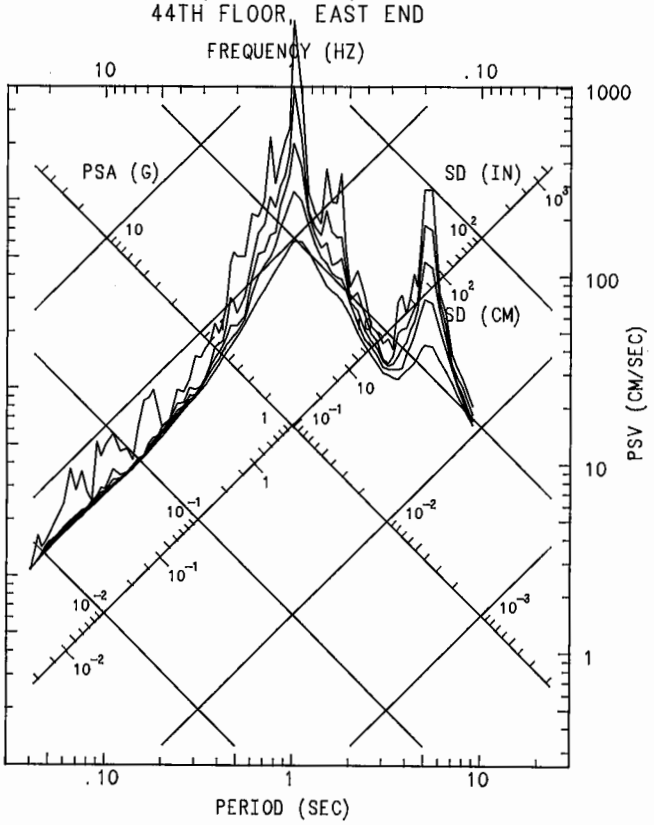
CHN 1 (STA CHN 16): 90 DEG
44TH FLOOR, WEST END



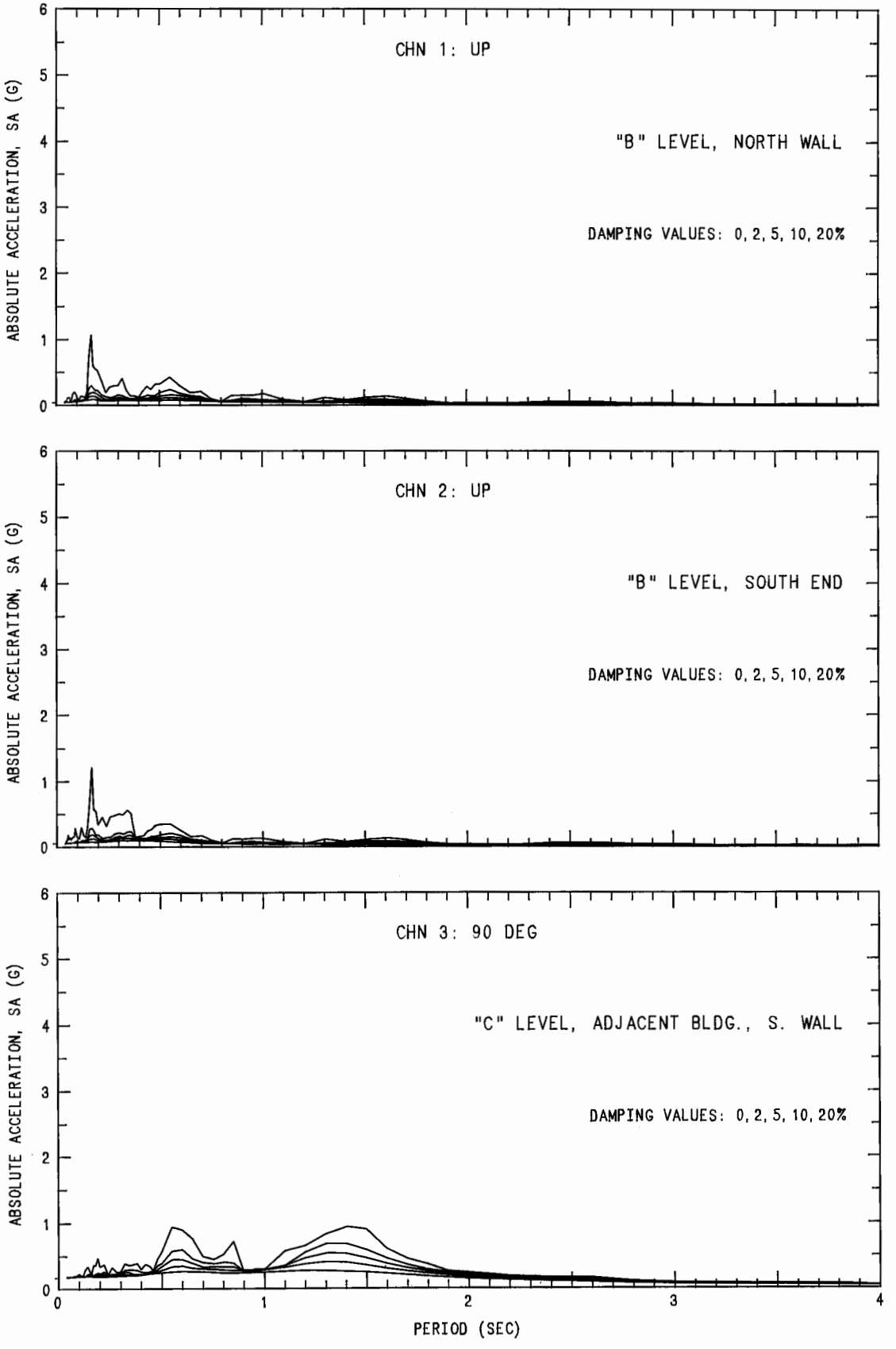
CHN 2 (STA CHN 17): 0 DEG
44TH FLOOR, WEST END



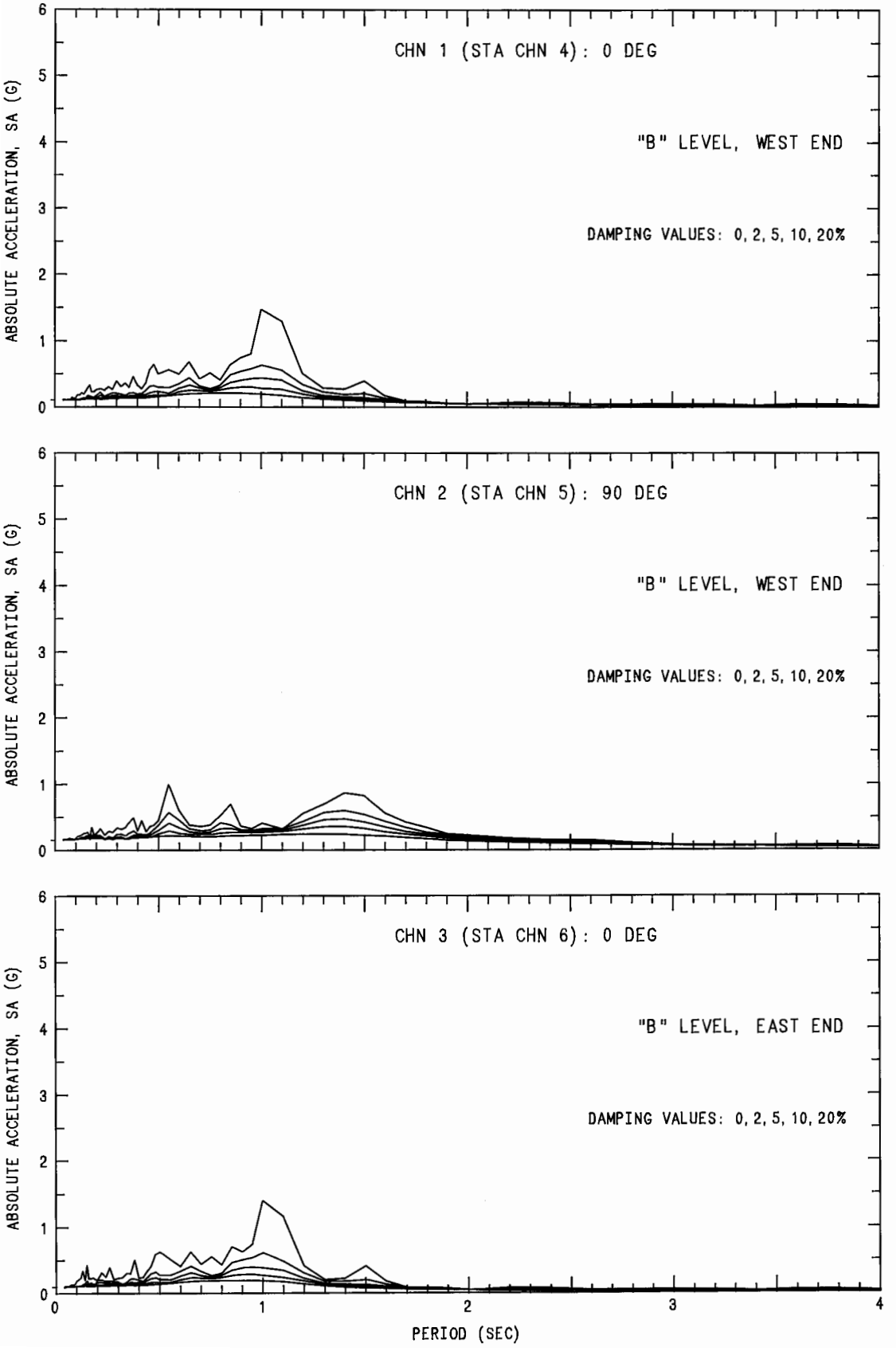
CHN 3 (STA CHN 18): 0 DEG
44TH FLOOR, EAST END



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 47-STORY OFFICE BLDG.: CSMIP S/N 532
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58532-D0298-89293.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)

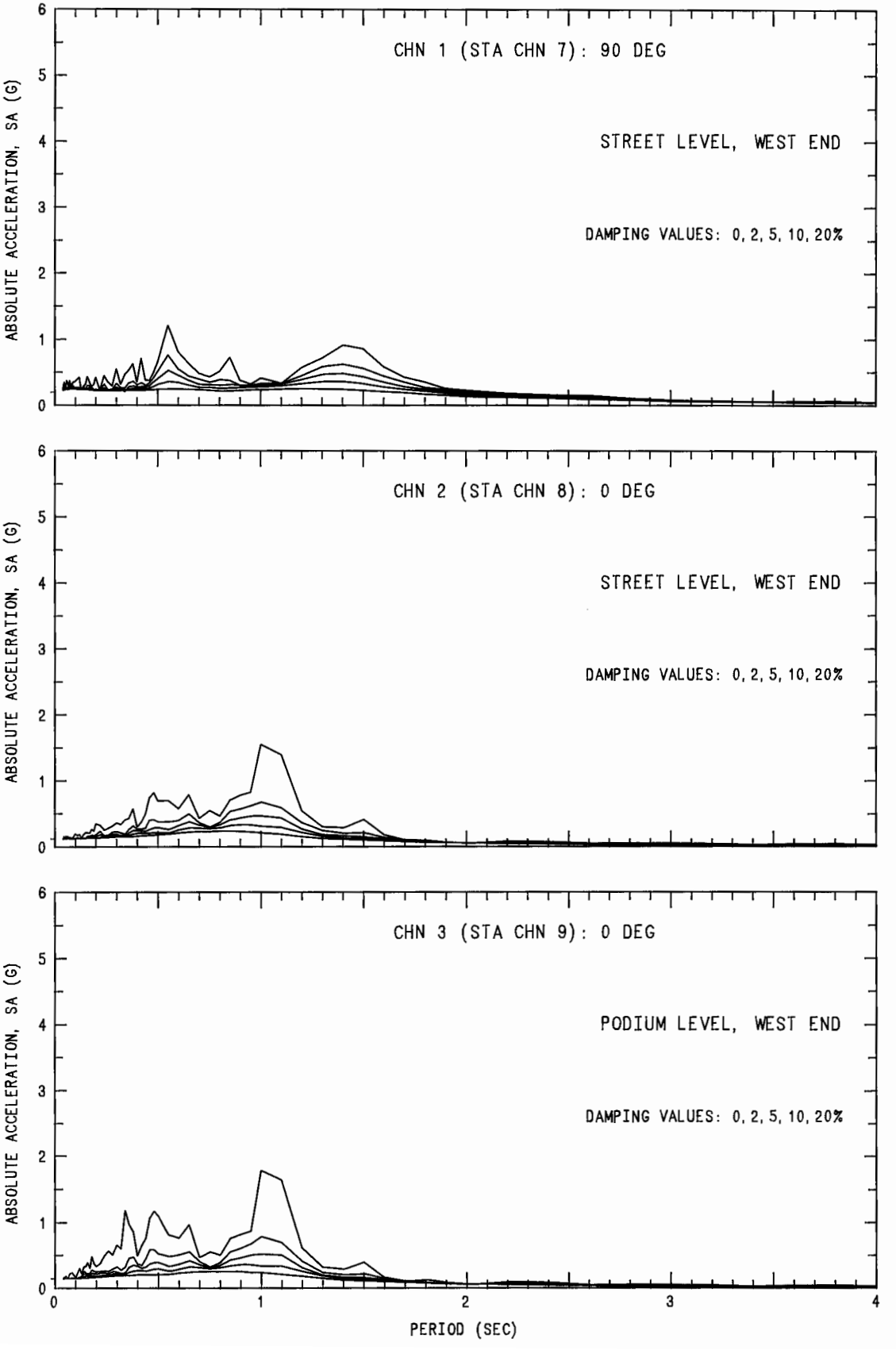


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58532-D0299-89293.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)

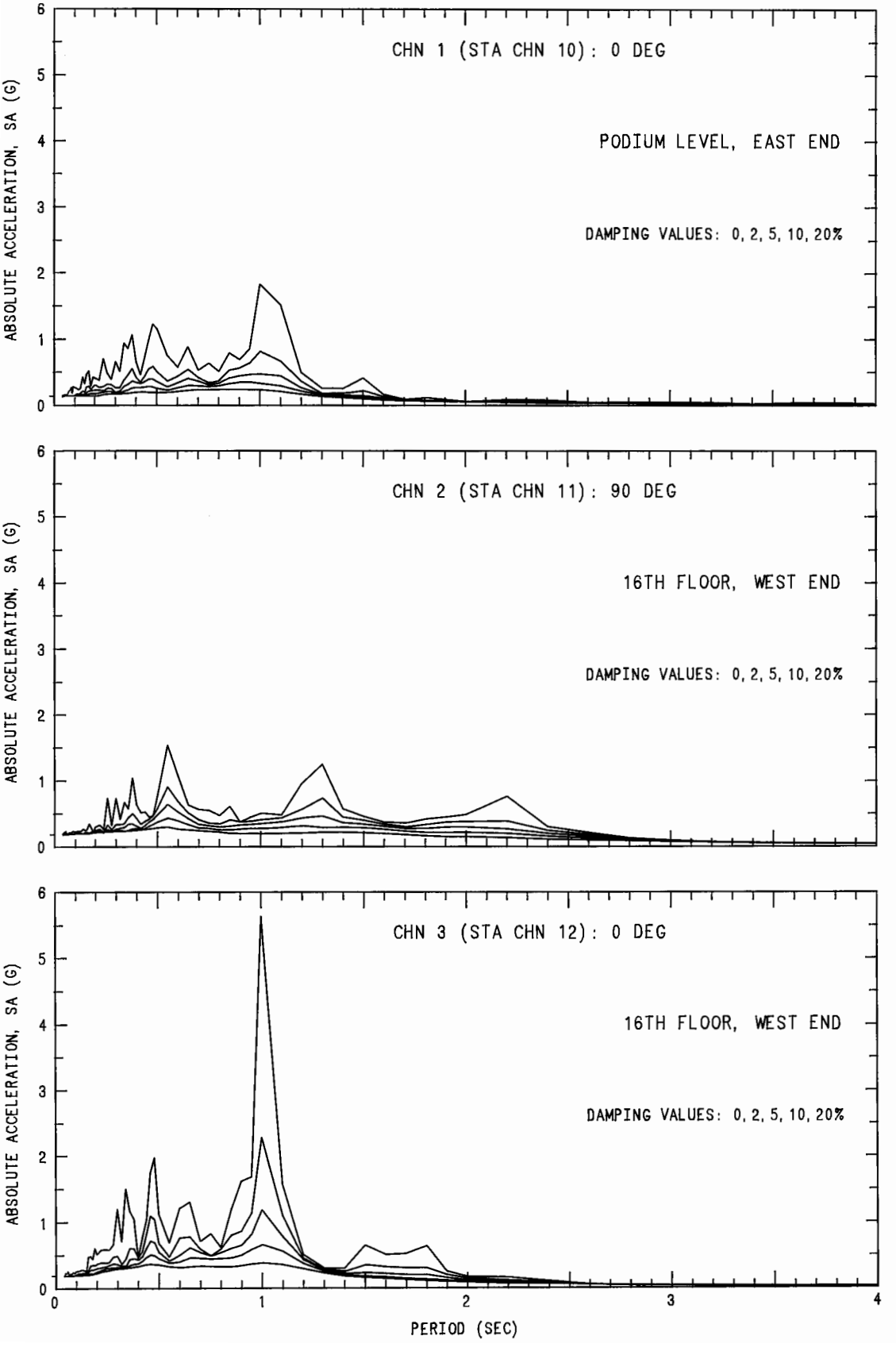


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 47-STORY OFFICE BLDG.: CSMIP S/N 532

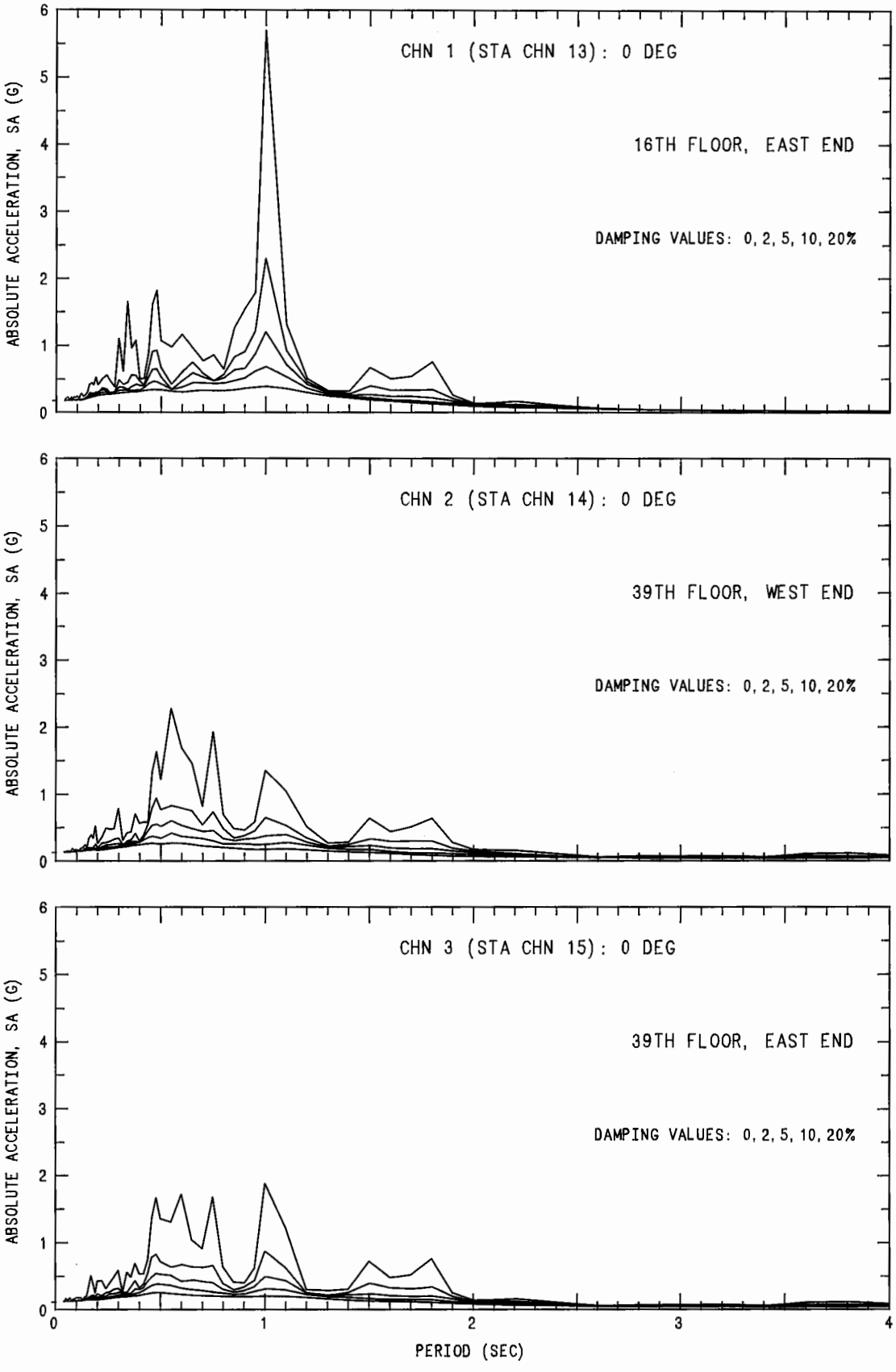
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58532-D0300-89293.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58532-D0301-89293.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)

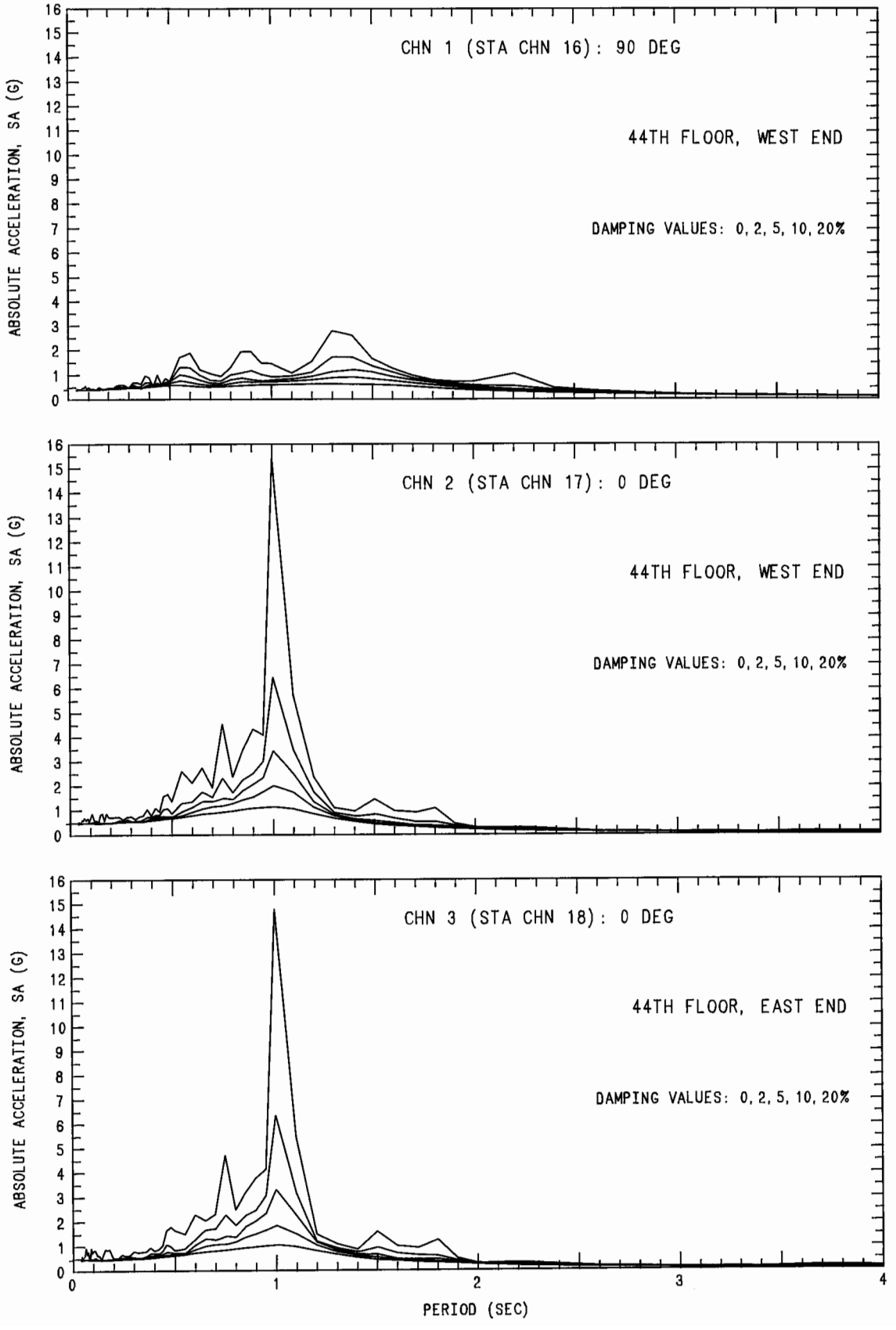


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO – 47-STORY OFFICE BLDG.: CSMIP S/N 532
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58532-D0305-89293.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
SAN FRANCISCO - 47-STORY OFFICE BLDG.: CSMIP S/N 532

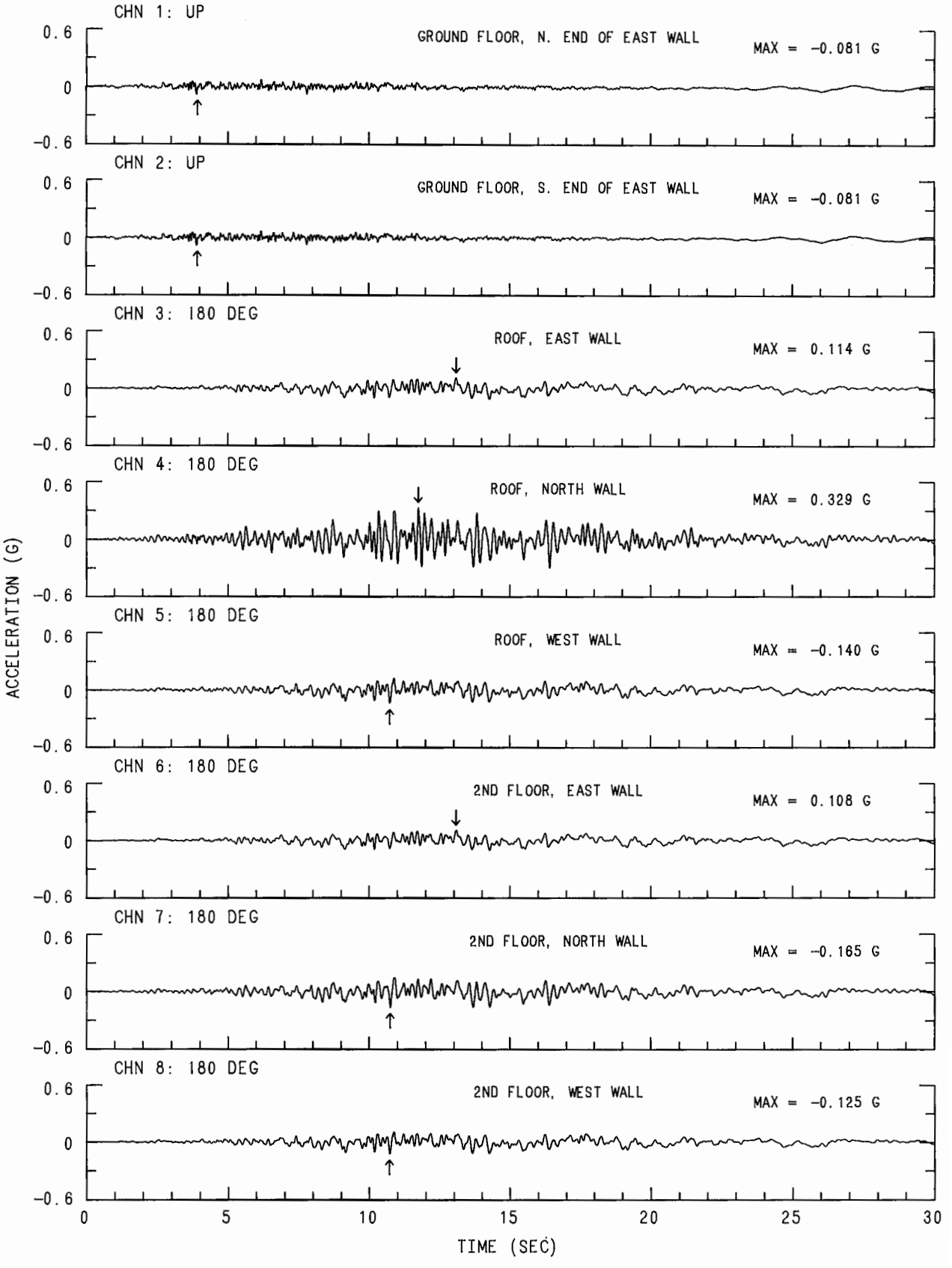
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58532-D0306-89293.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

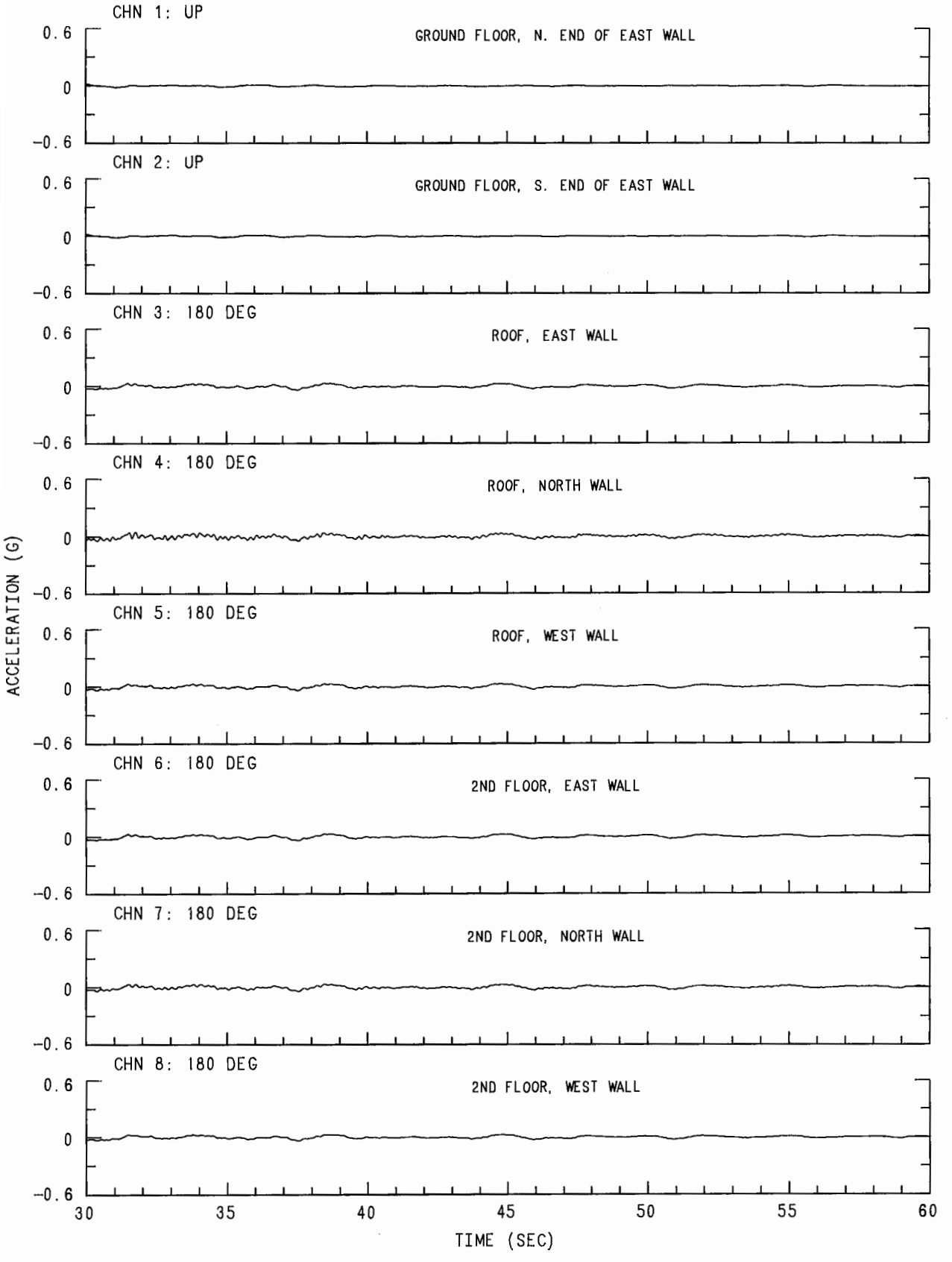
PHASE 1 ACCELERATION. RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

MILPITAS – 2-STORY INDUSTRIAL BLDG. : CSMIP S/N 502

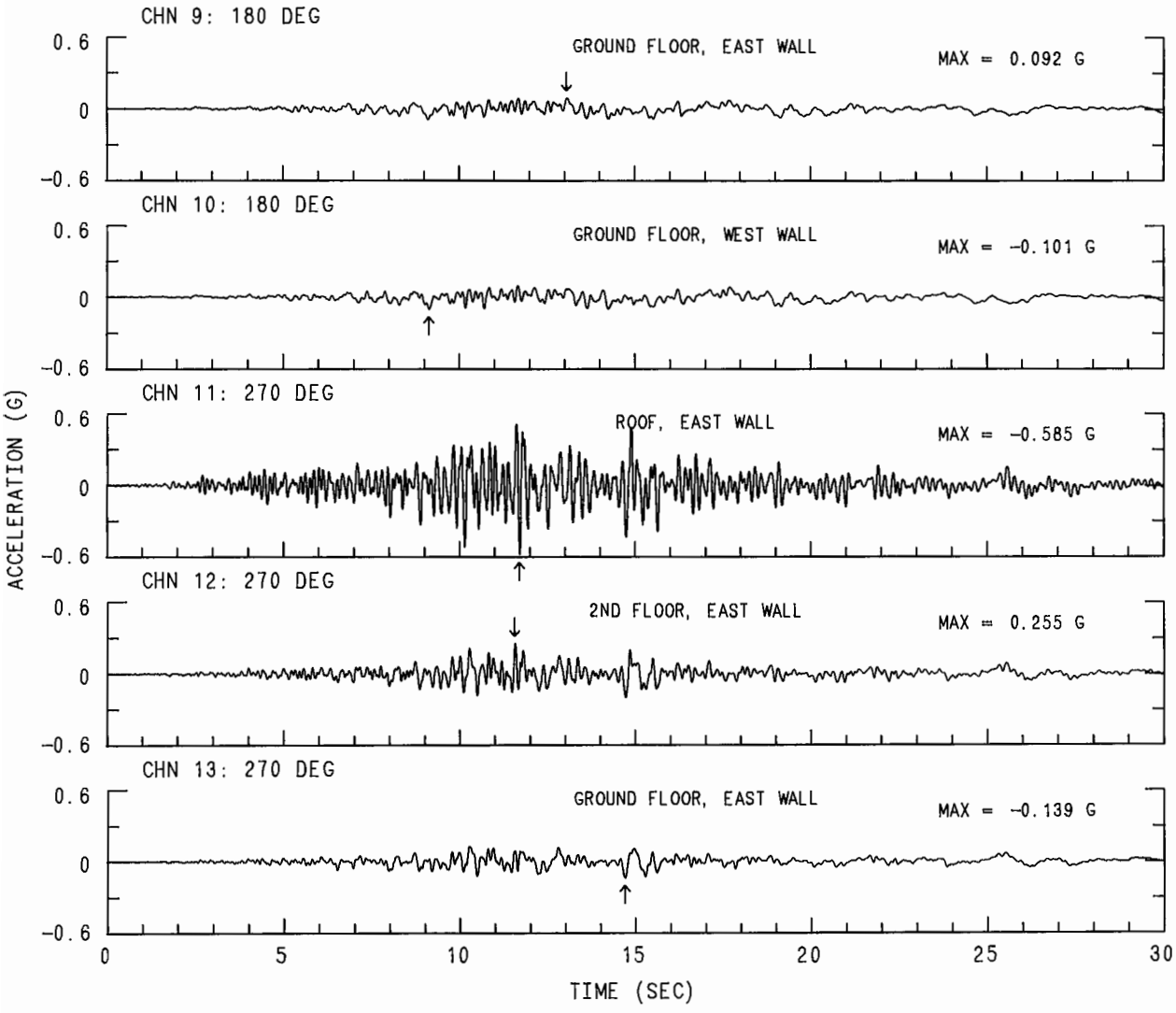
PHASE 1 ACCELERATION. RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

MILPITAS - 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

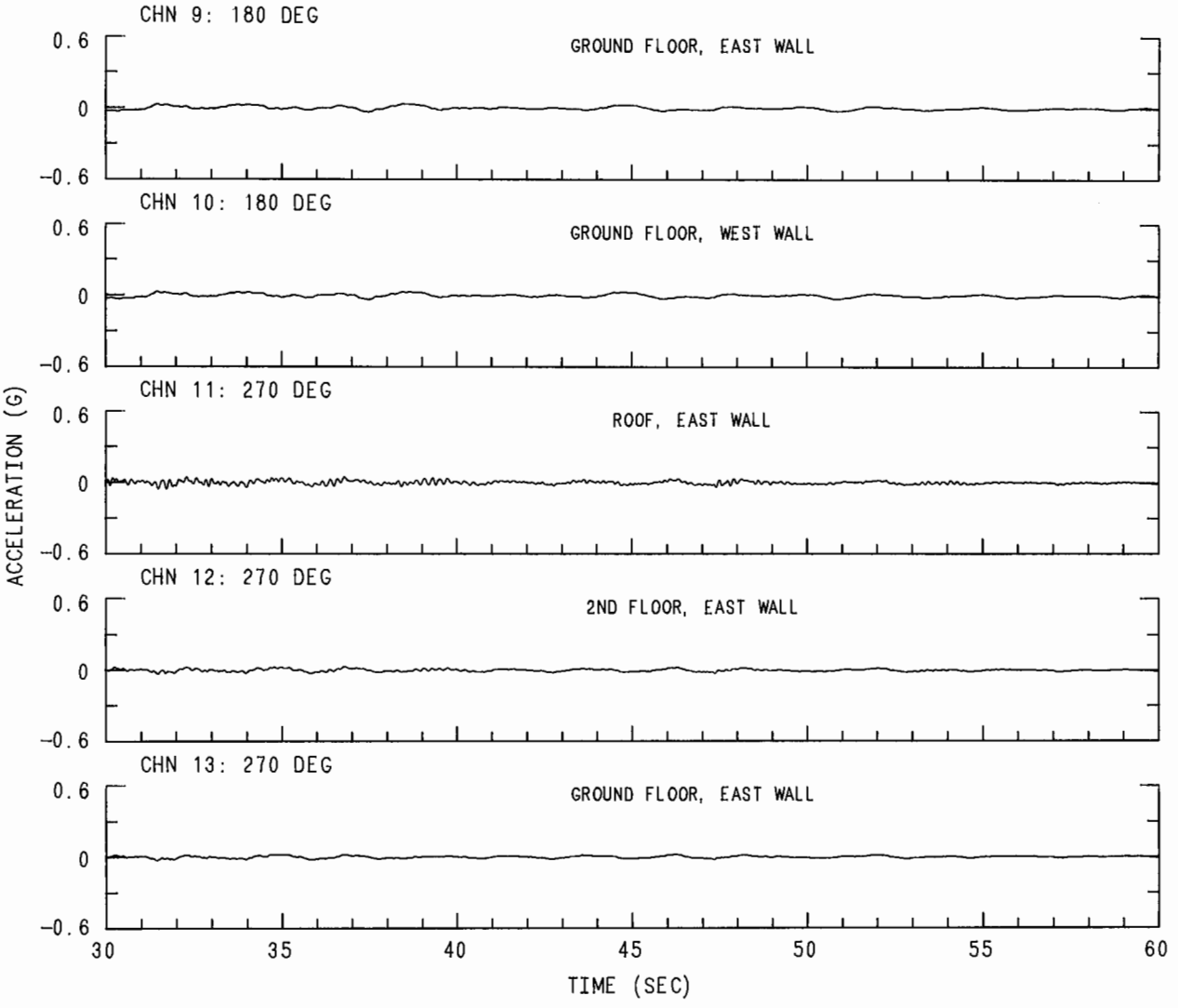
PHASE 1 ACCELERATION. RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

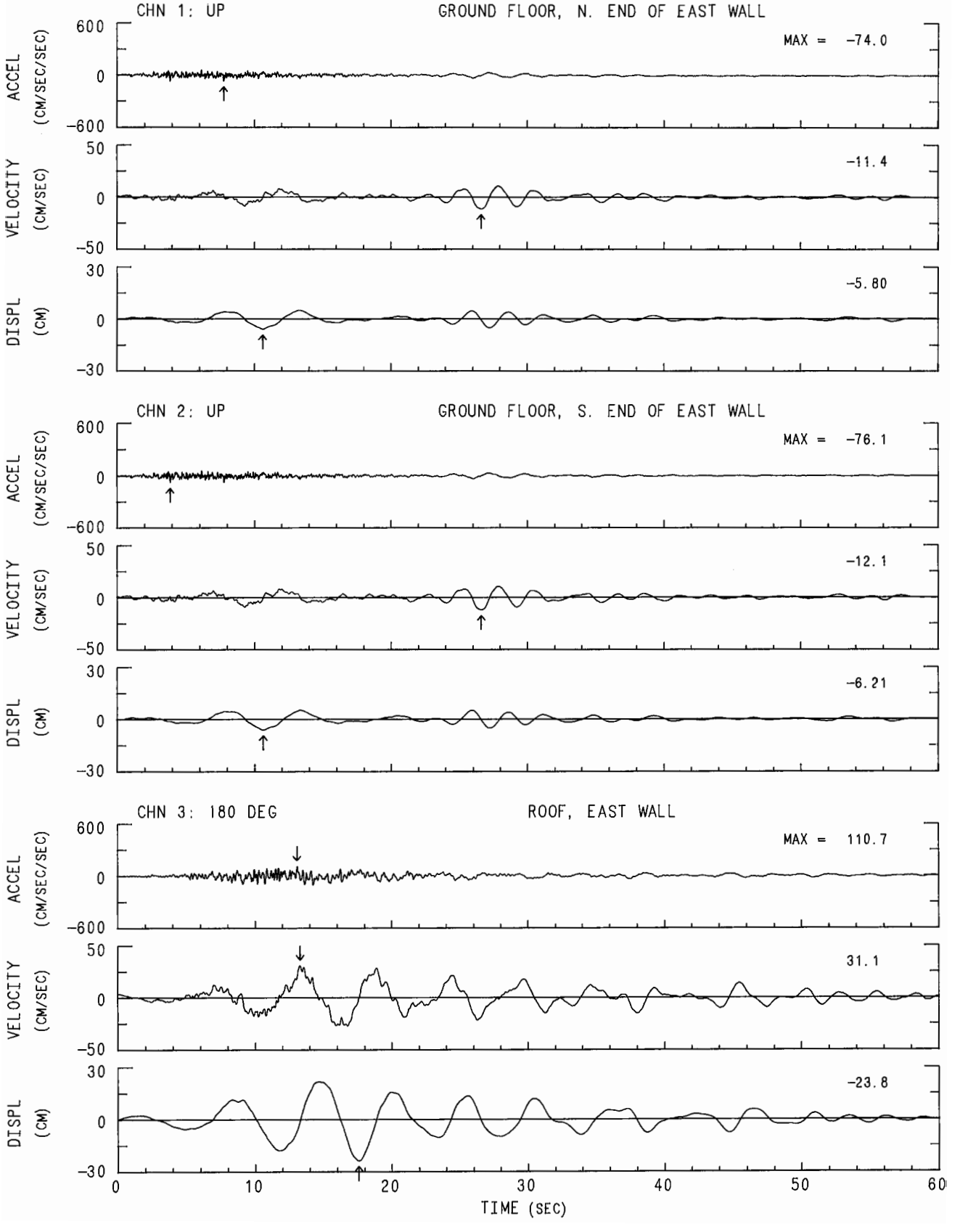
PHASE 1 ACCELERATION. RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS - 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

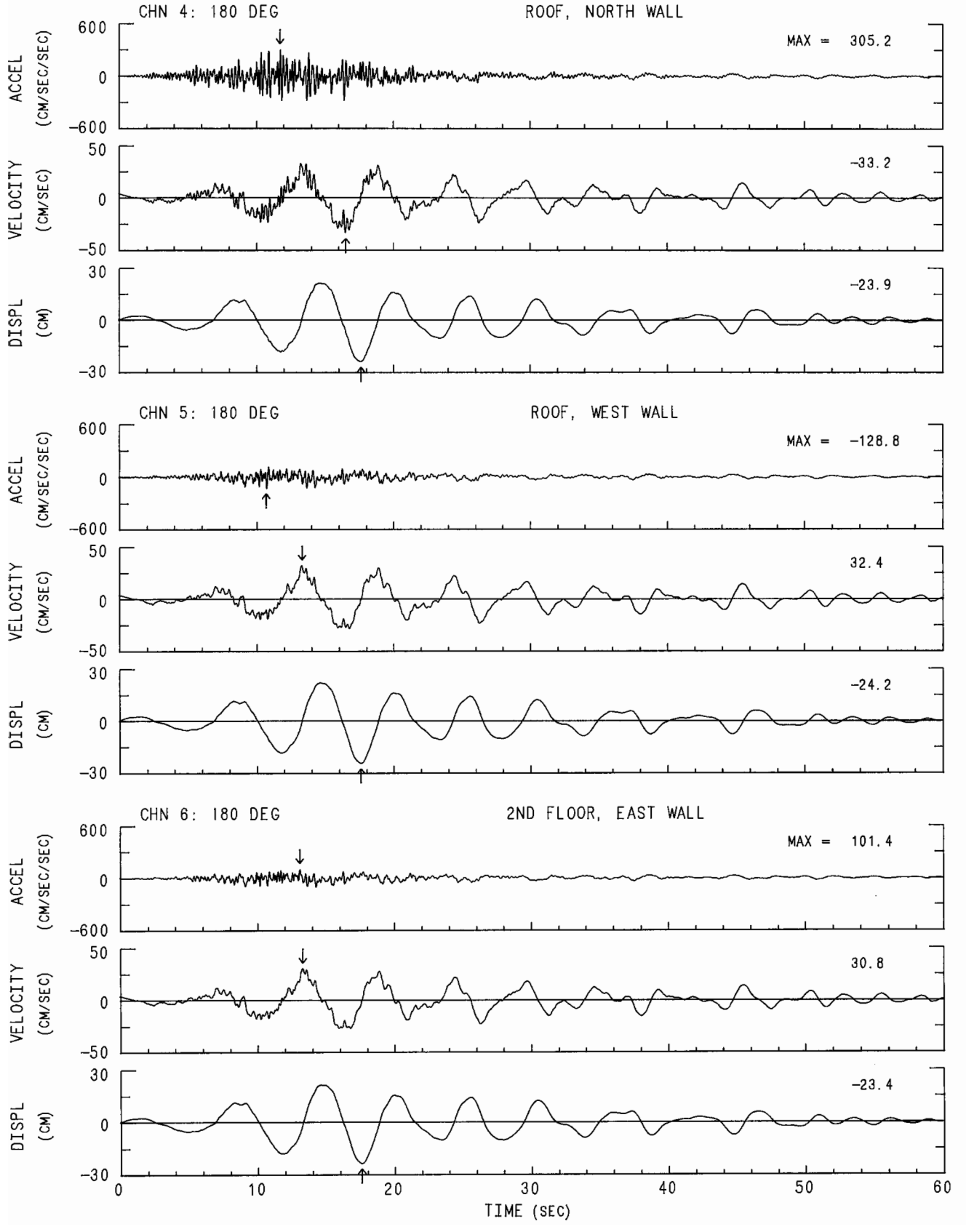
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

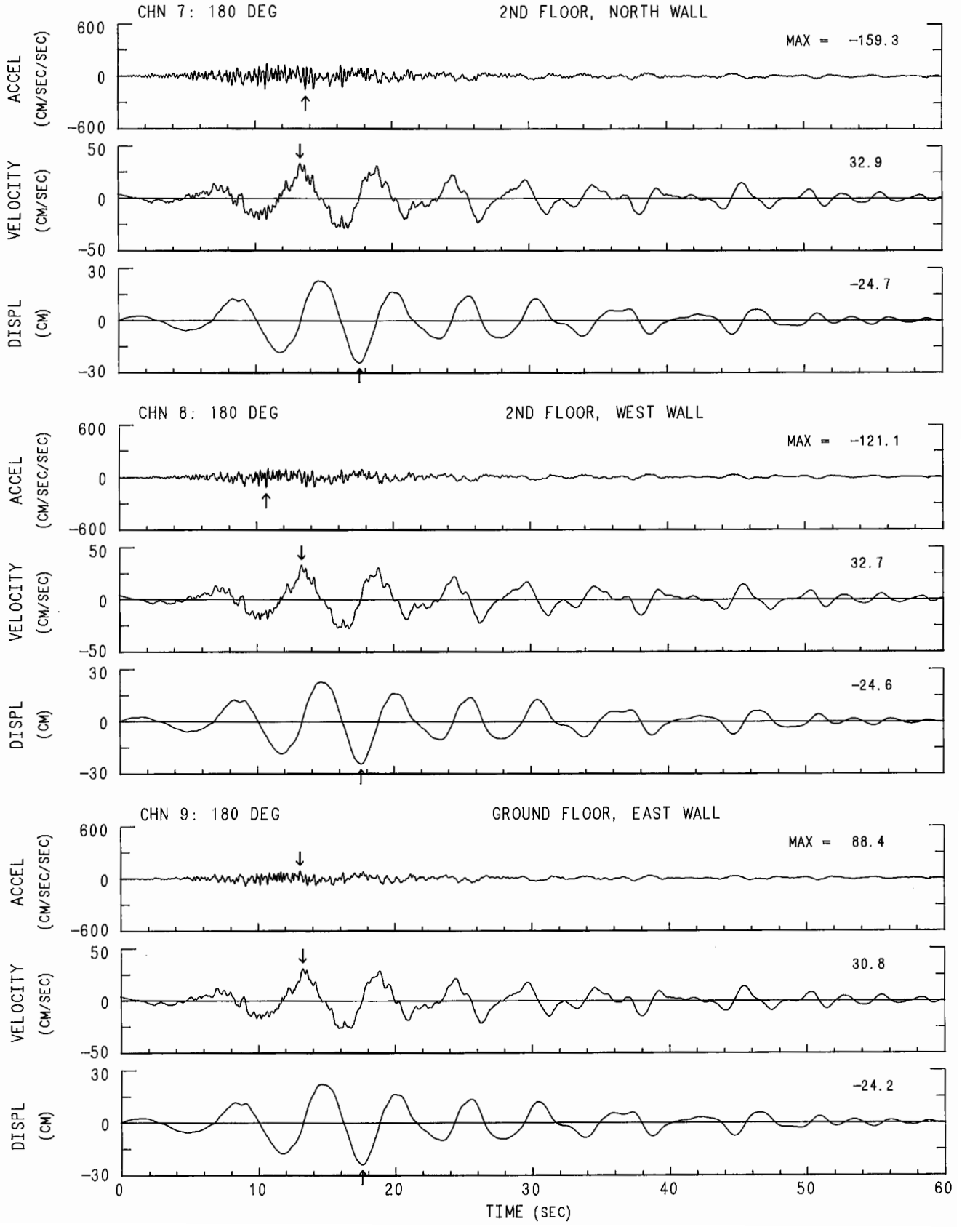
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

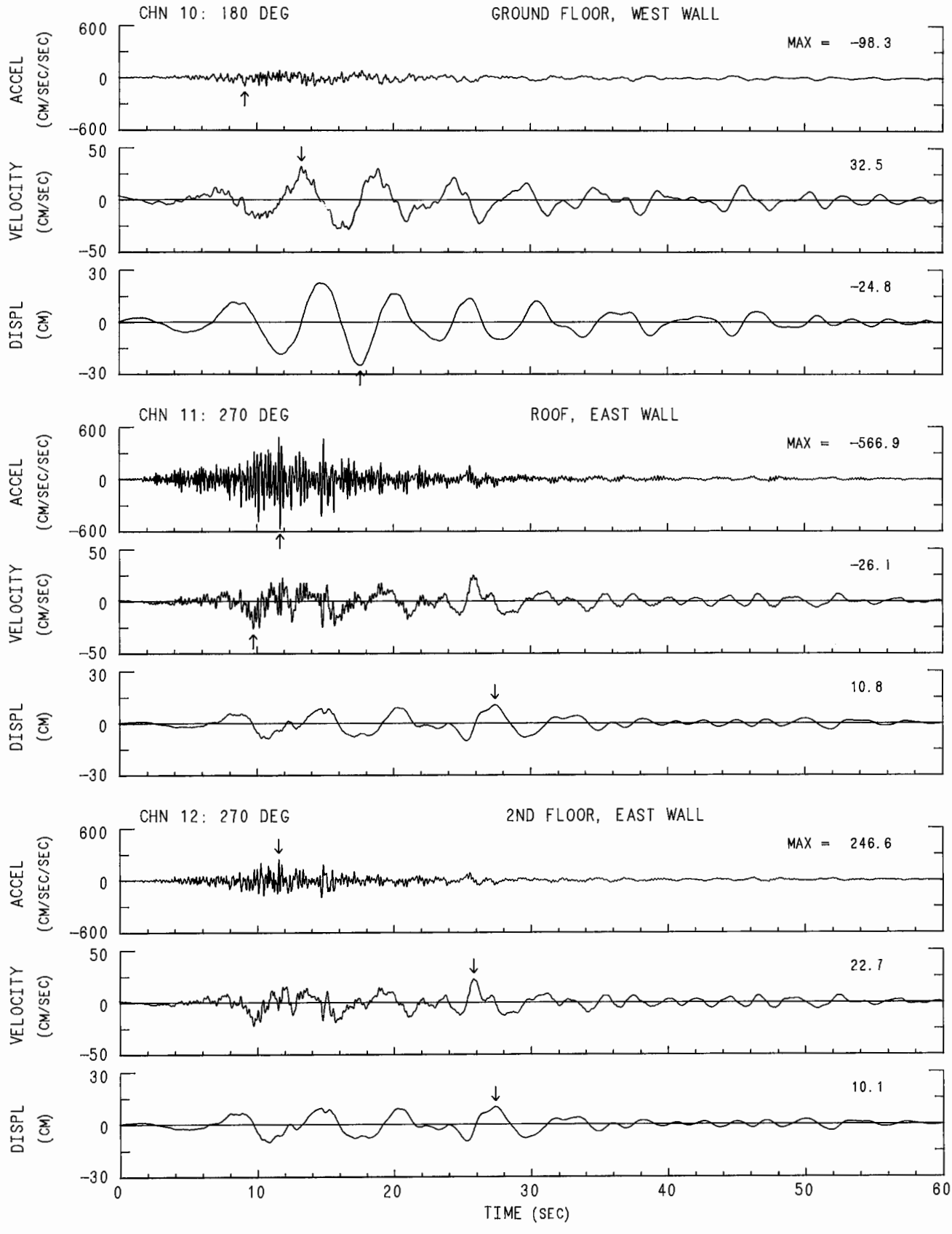
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS - 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

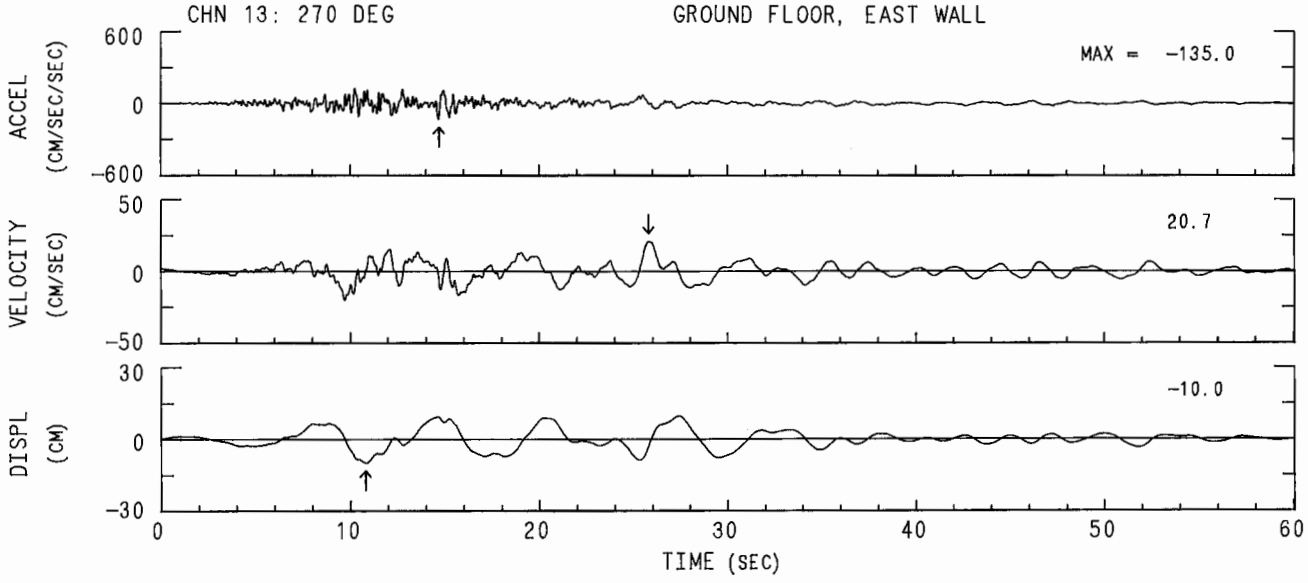
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 57502-C0275-89292.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC) RECORD ID: 57502-C0275-89292.02



MILPITAS - 2-STORY INDUSTRIAL BLDG. : CSMIP S/N 502

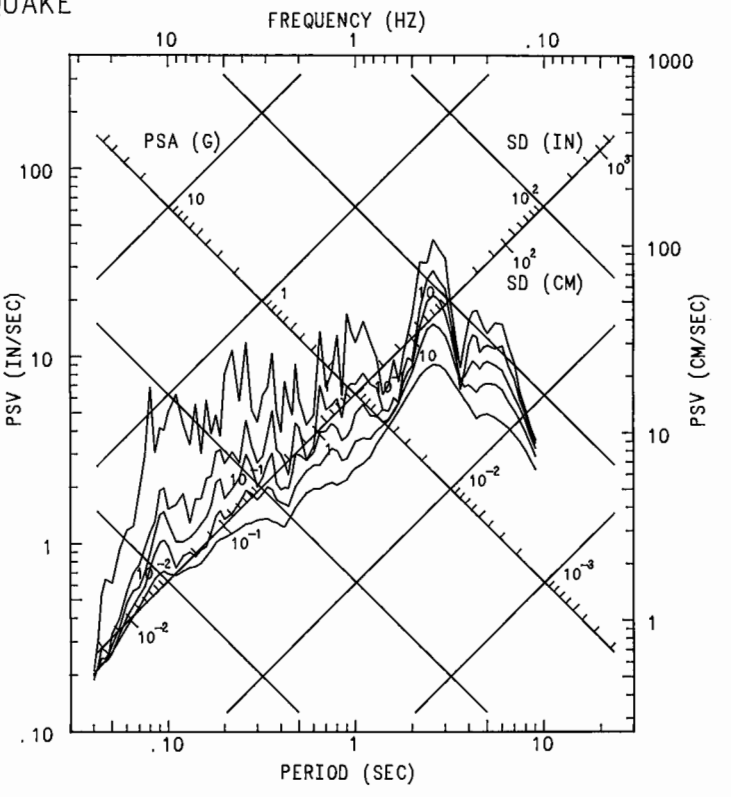
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

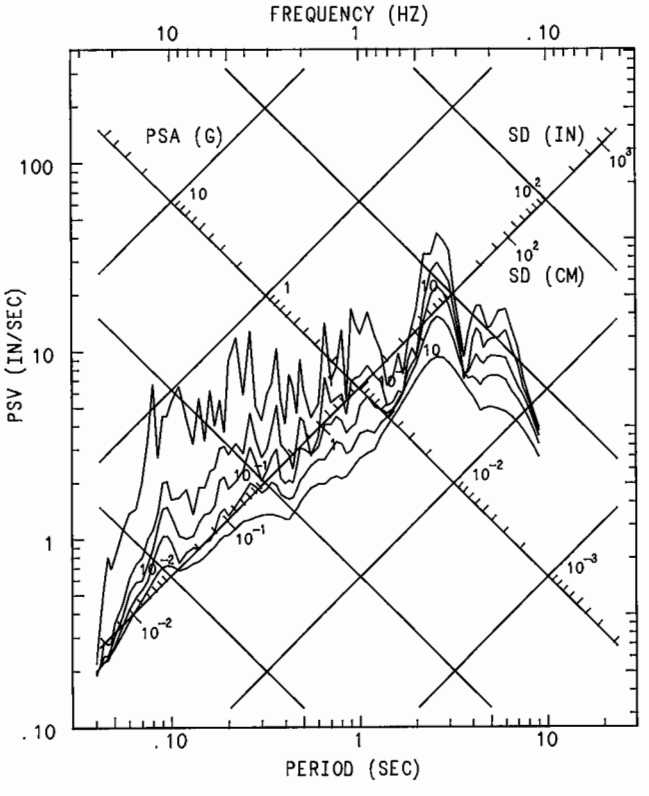
RECORD ID: 57502-C0275-89292.02

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

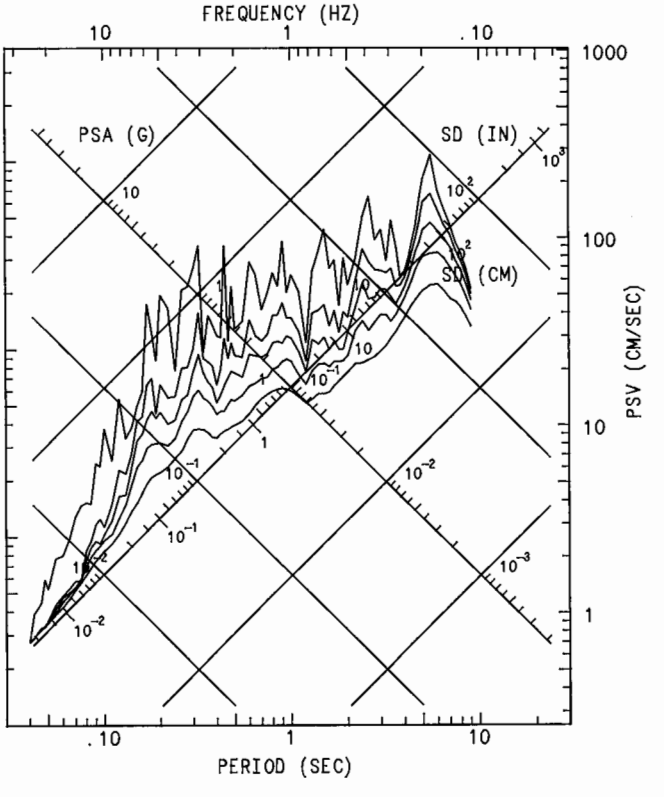
CHN 1: UP
GROUND FLOOR, N. END OF EAST WALL



CHN 2: UP
GROUND FLOOR, S. END OF EAST WALL



CHN 3: 180 DEG
ROOF, EAST WALL



MILPITAS – 2-STORY INDUSTRIAL BLDG. : CSMIP S/N 502

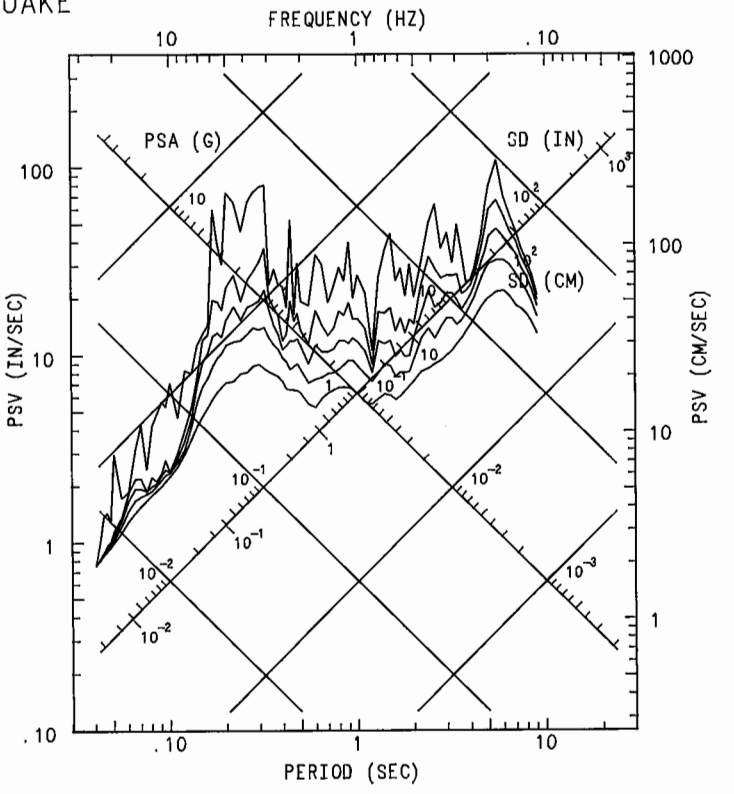
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

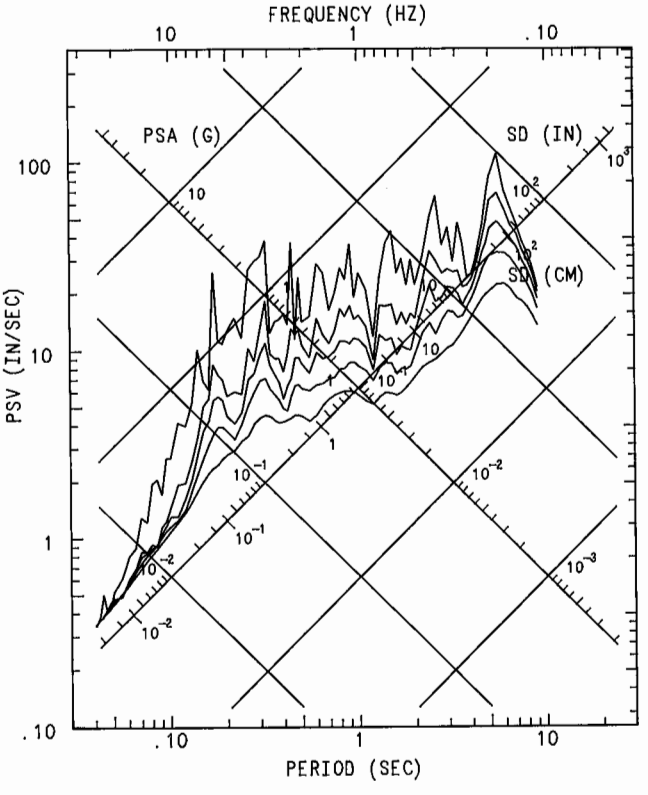
RECORD ID: 57502-C0275-89292.02

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

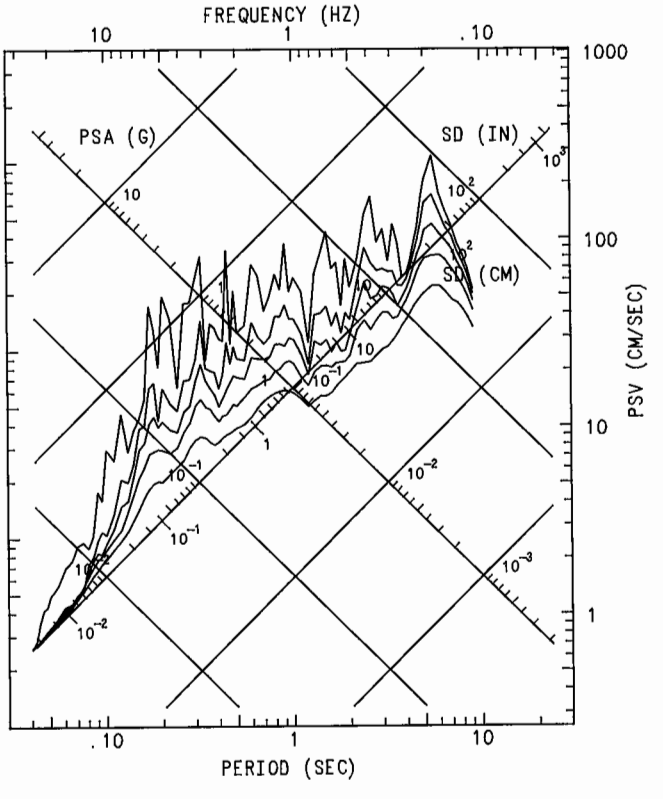
CHN 4: 180 DEG
ROOF, NORTH WALL



CHN 5: 180 DEG
ROOF, WEST WALL



CHN 6: 180 DEG
2ND FLOOR, EAST WALL



MILPITAS – 2-STORY INDUSTRIAL BLDG. : CSMIP S/N 502

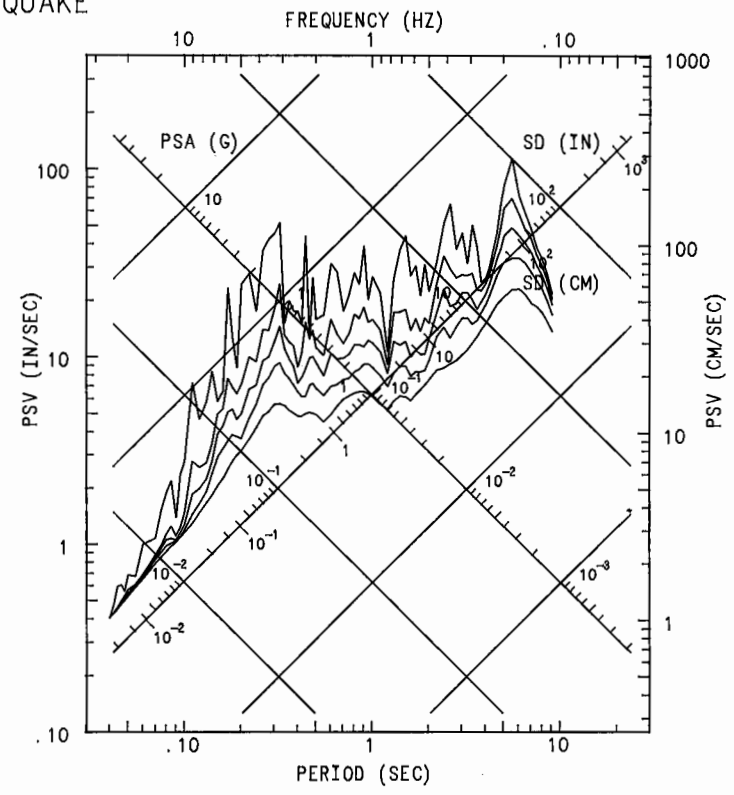
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

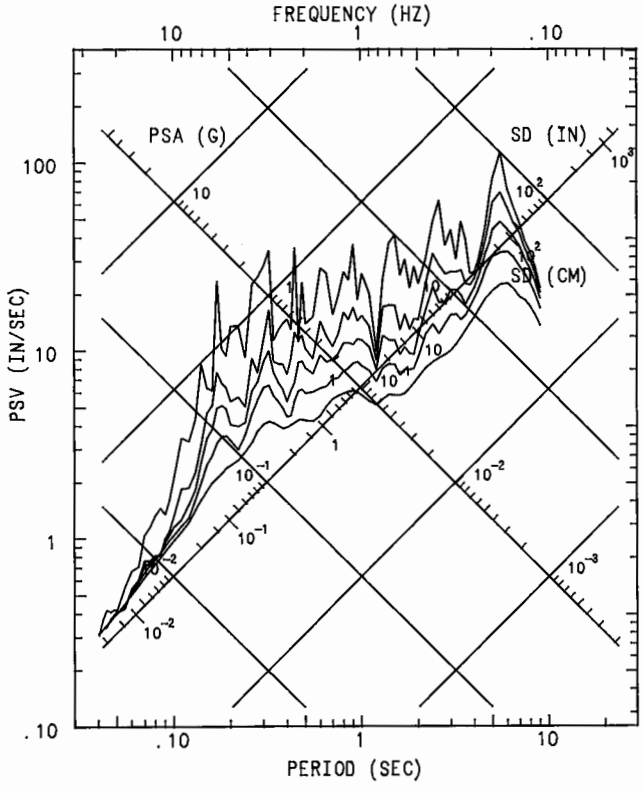
RECORD ID: 57502-C0275-89292.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

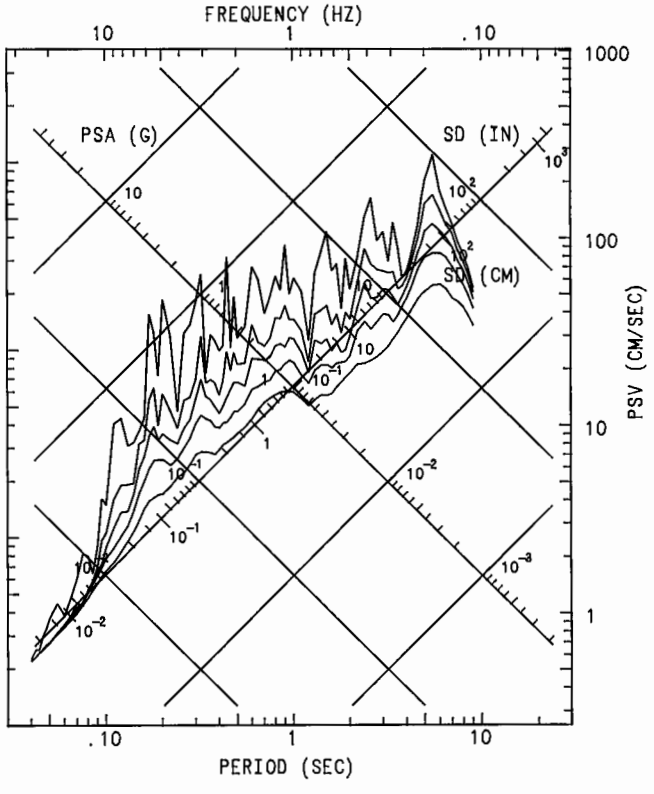
CHN 7: 180 DEG
2ND FLOOR, NORTH WALL



CHN 8: 180 DEG
2ND FLOOR, WEST WALL



CHN 9: 180 DEG
GROUND FLOOR, EAST WALL



MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

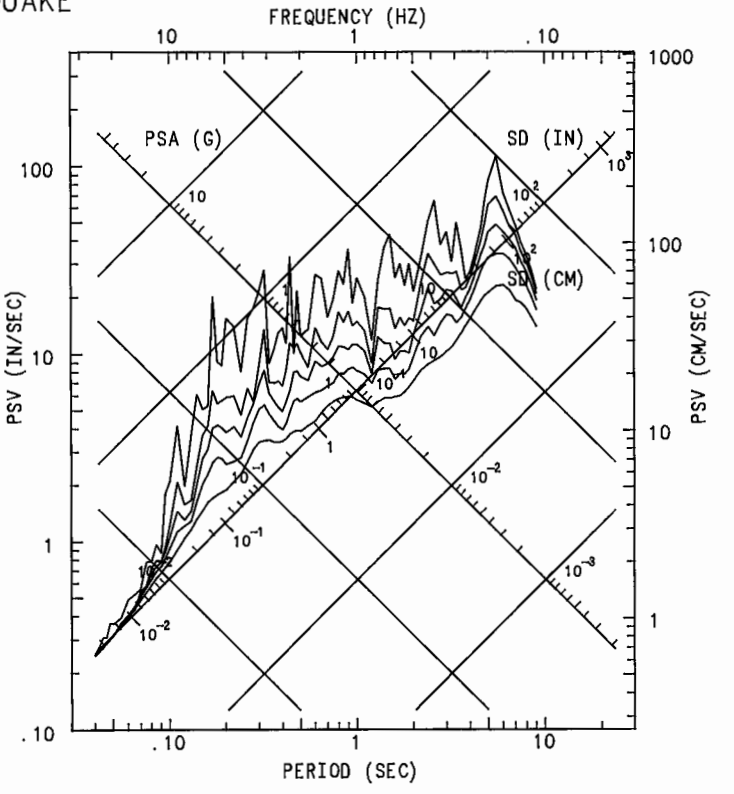
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

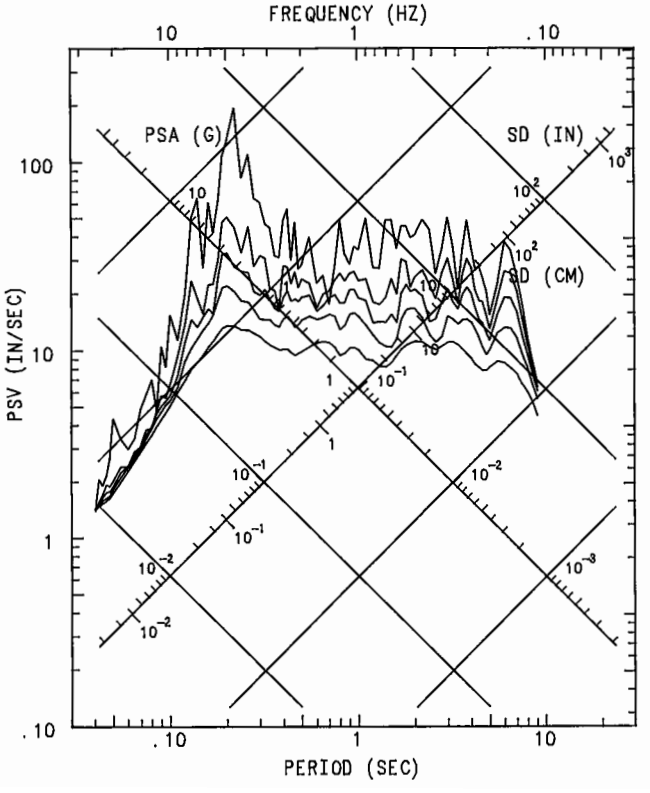
RECORD ID: 57502-C0275-89292.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

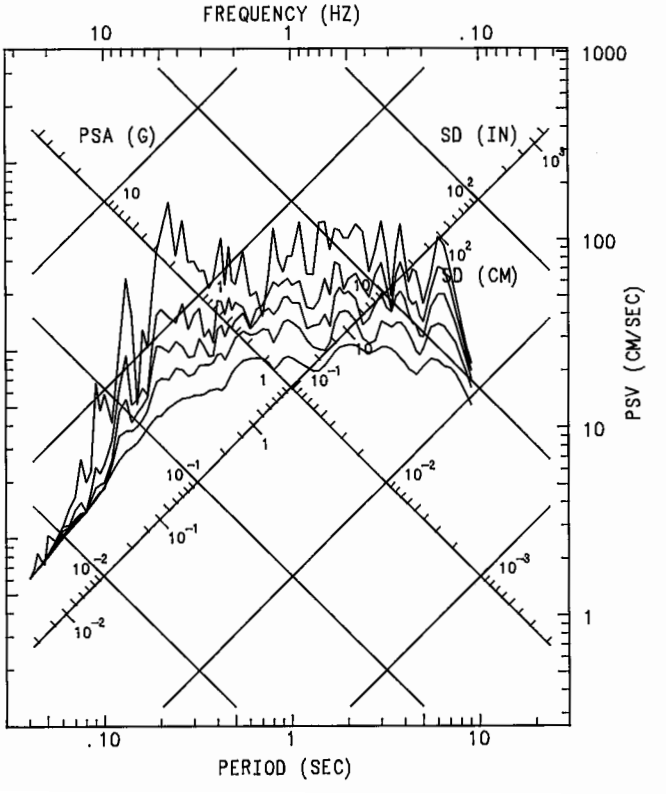
CHN 10: 180 DEG
GROUND FLOOR, WEST WALL



CHN 11: 270 DEG
ROOF, EAST WALL



CHN 12: 270 DEG
2ND FLOOR, EAST WALL



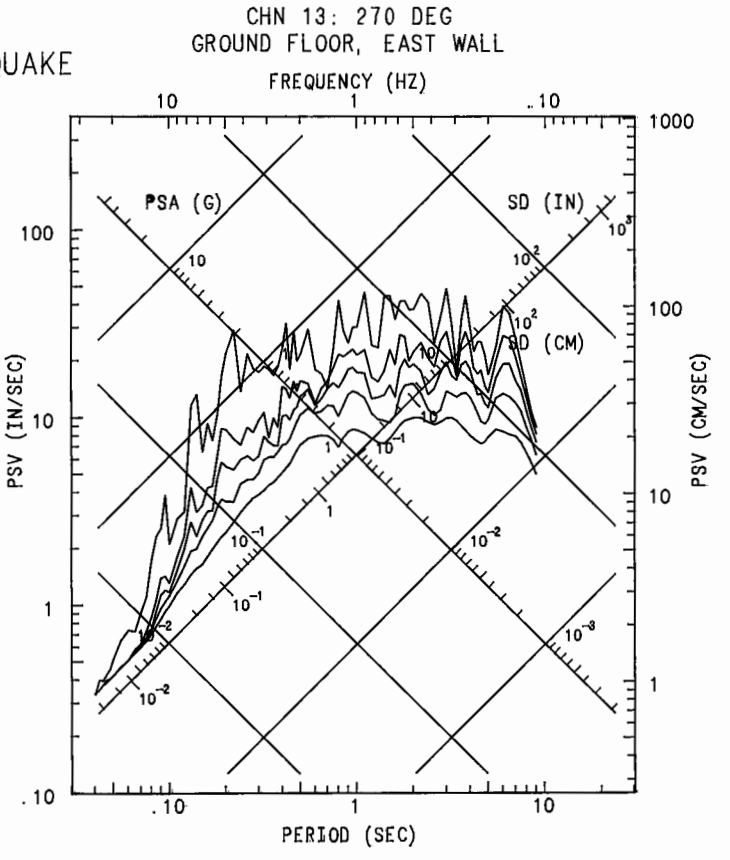
MILPITAS – 2–STORY INDUSTRIAL BLDG. : CSMIP S/N 502

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ
(0.04 TO 8.40 SEC)

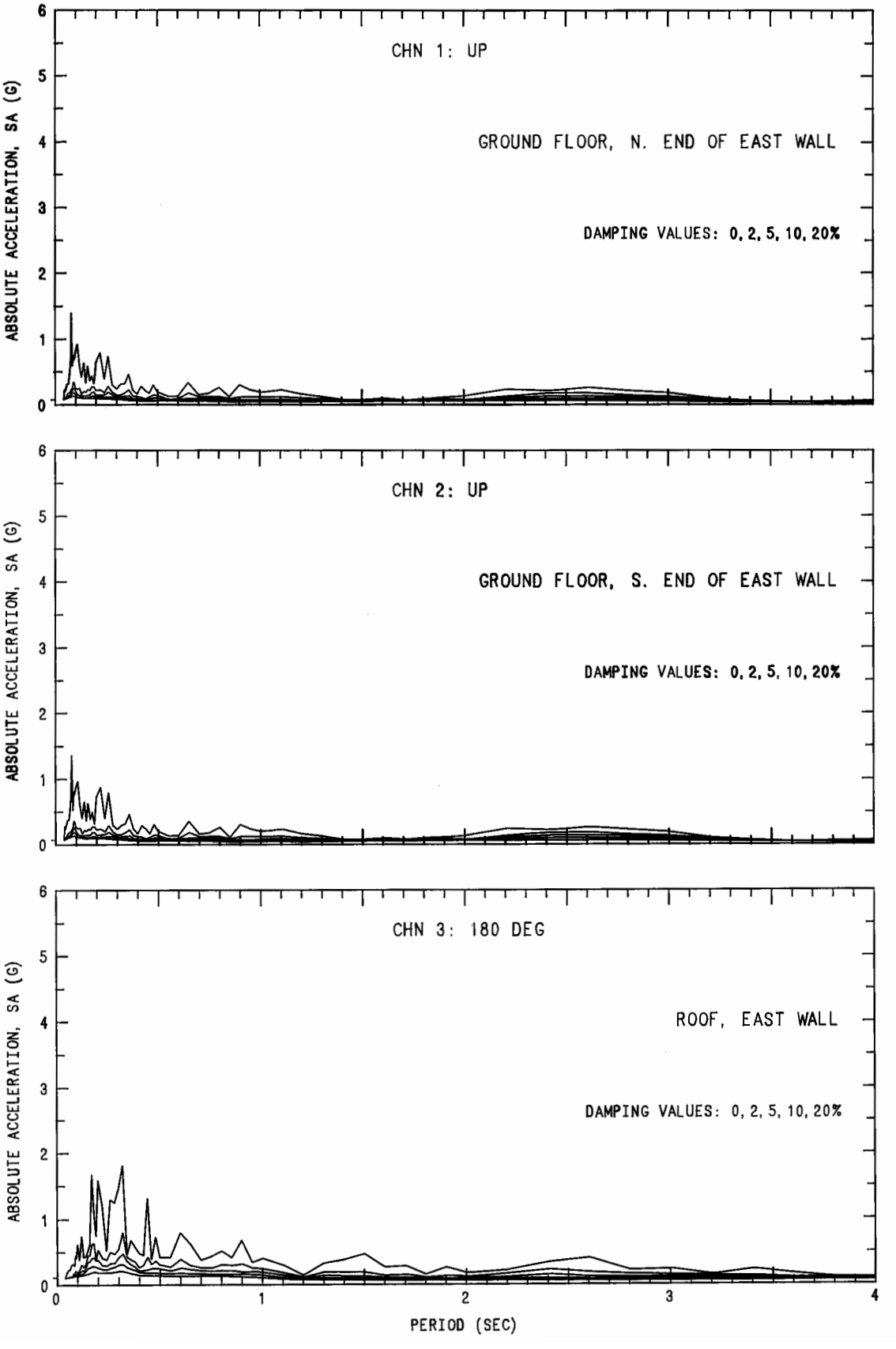
RECORD ID: 57502–C0275–89292.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



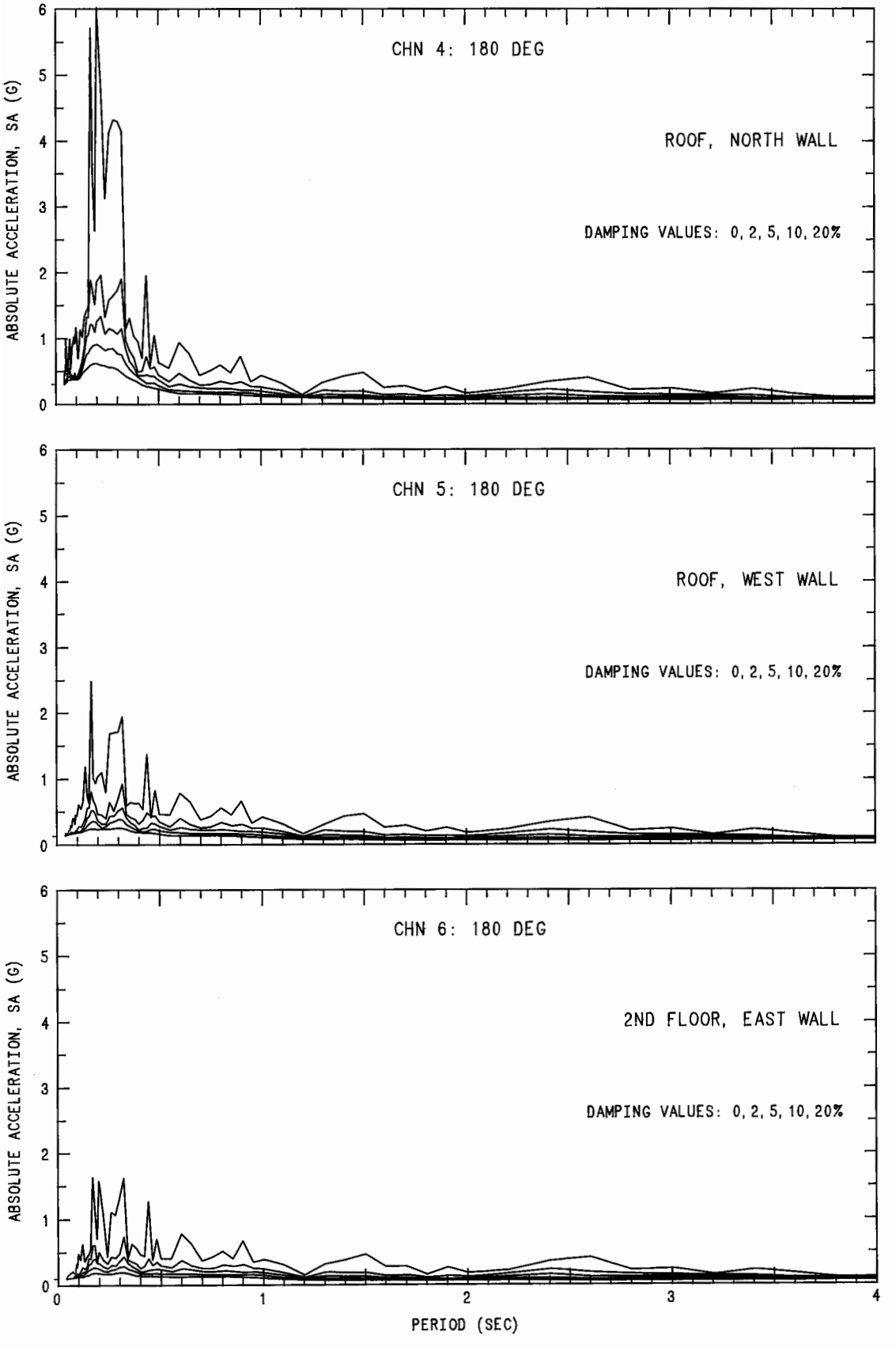
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS - 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57502-C0275-89292.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57502-C0275-89292.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS - 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57502-C0275-89292.02
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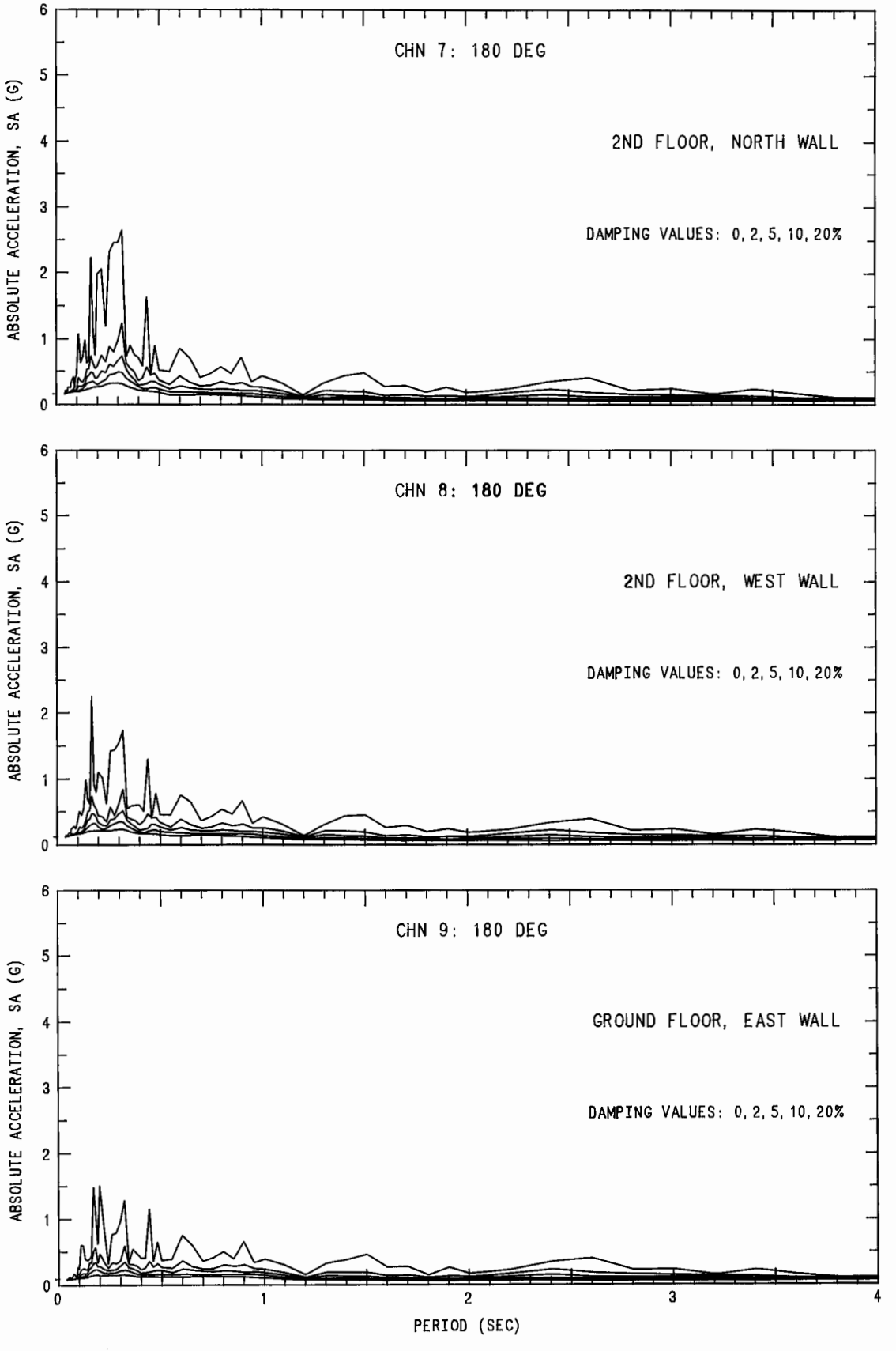

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS - 2-STORY INDUSTRIAL BLDG. : CSMIP S/N 502
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57502-C0275-89292.02
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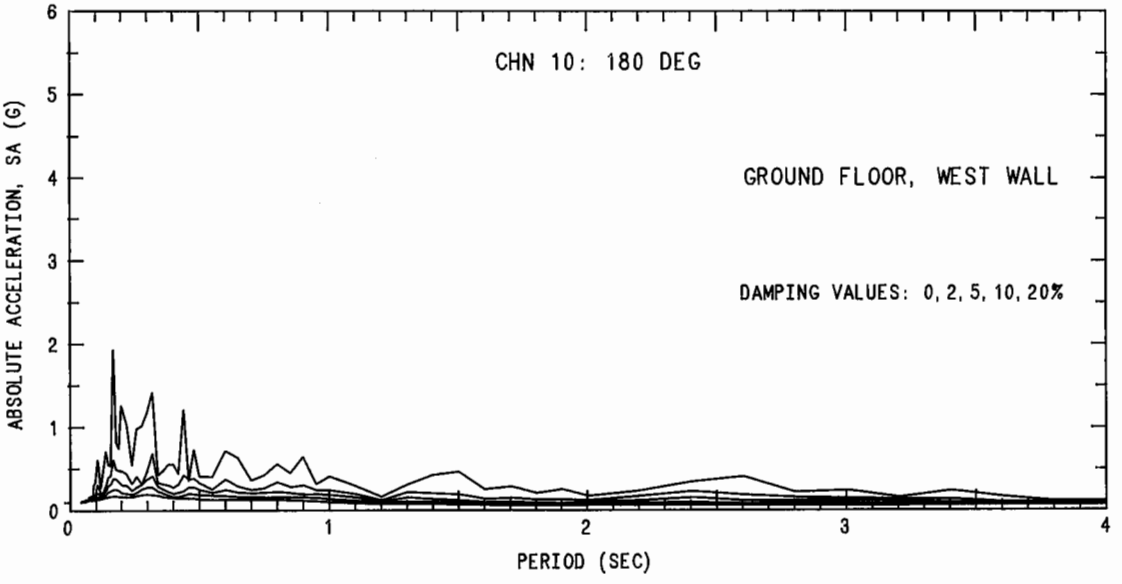
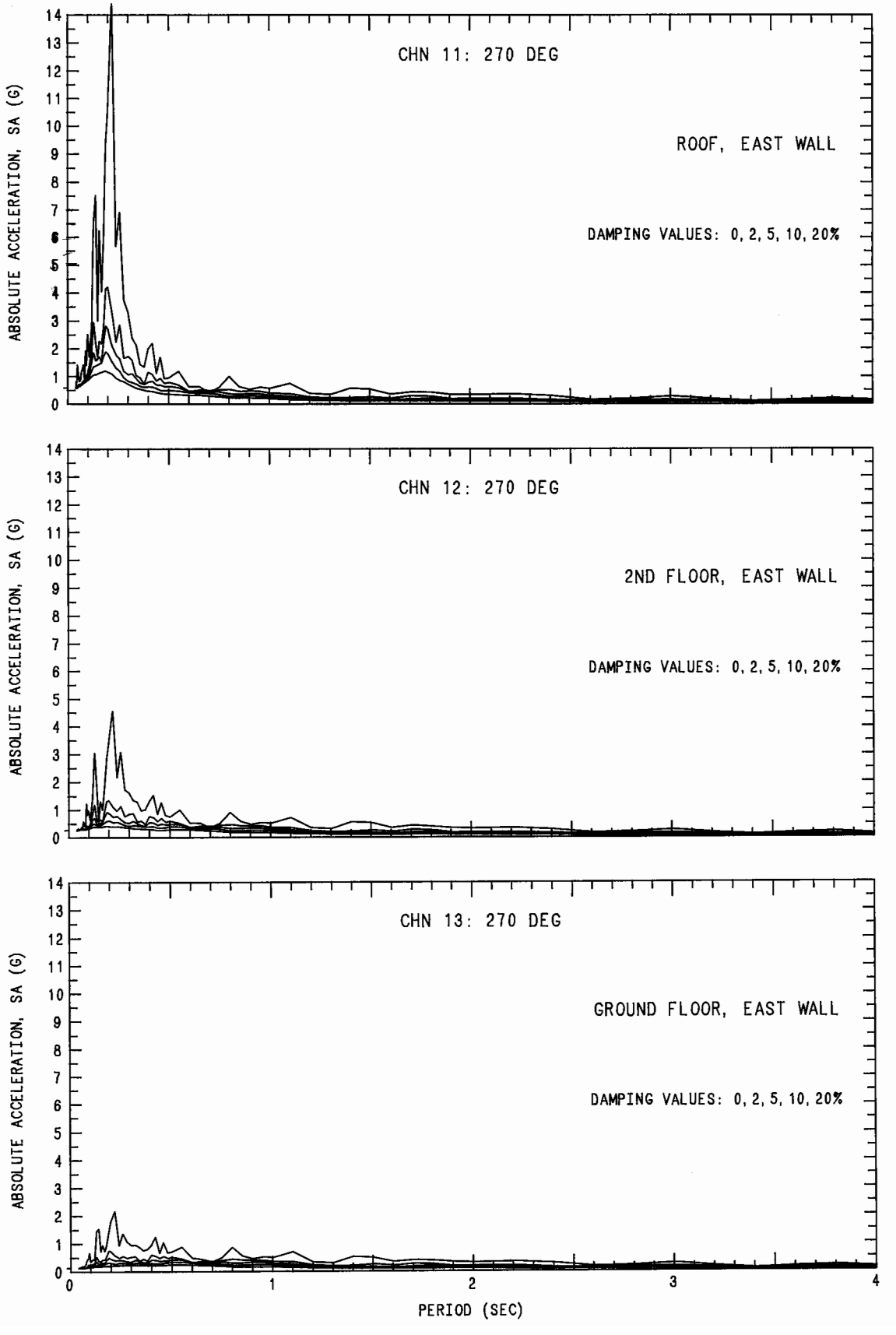


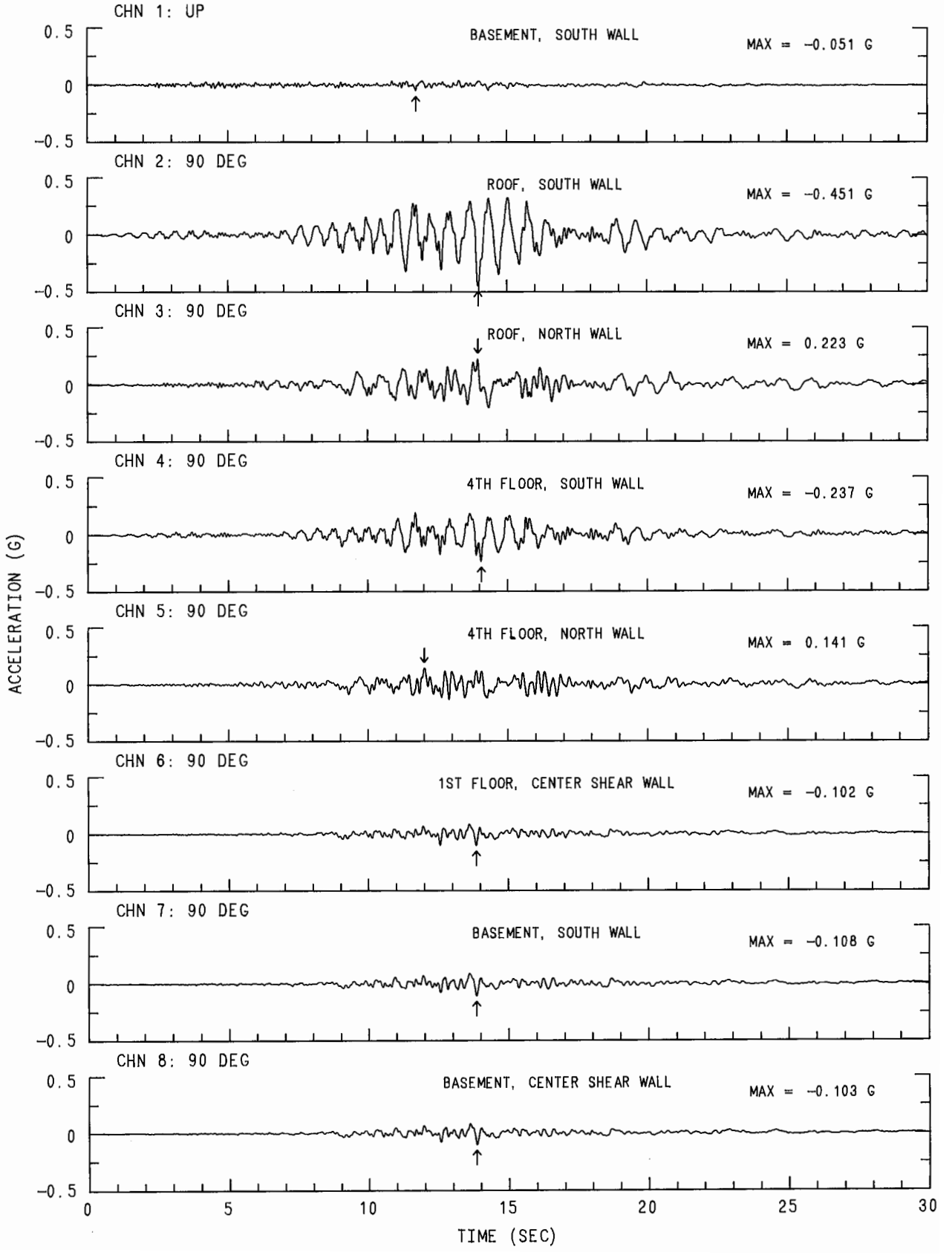
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
MILPITAS – 2-STORY INDUSTRIAL BLDG.: CSMIP S/N 502
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 57502-C0275-89292.02
USABLE DATA BANDWIDTH: 0.12 TO 23.6 HZ (0.04 TO 8.40 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 6-STORY OFFICE BLDG.: CSMIP S/N 462

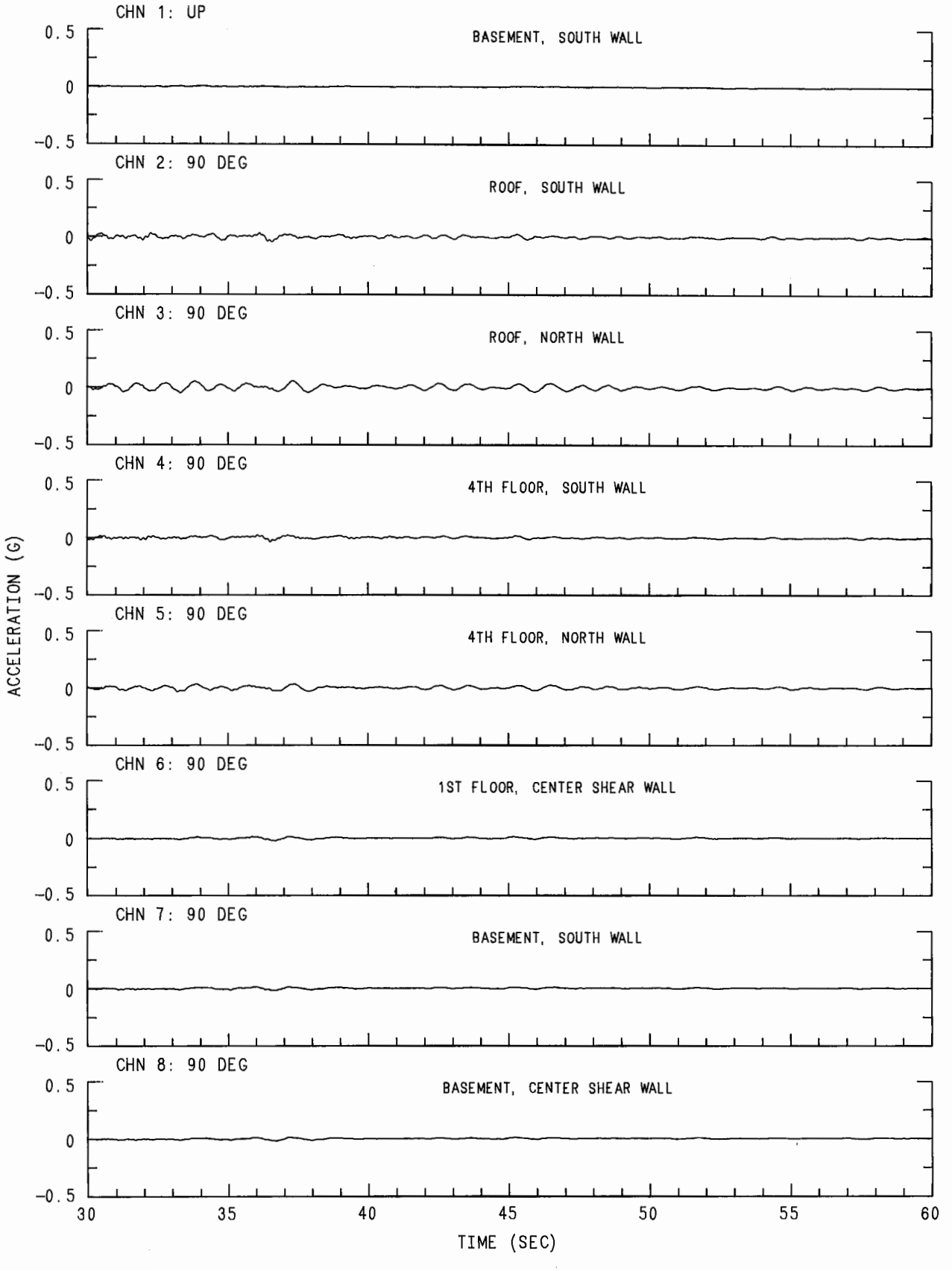
PHASE 1 ACCELERATION. RECORD ID: 58462-C0217-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD – 6–STORY OFFICE BLDG.: CSMIP S/N 462

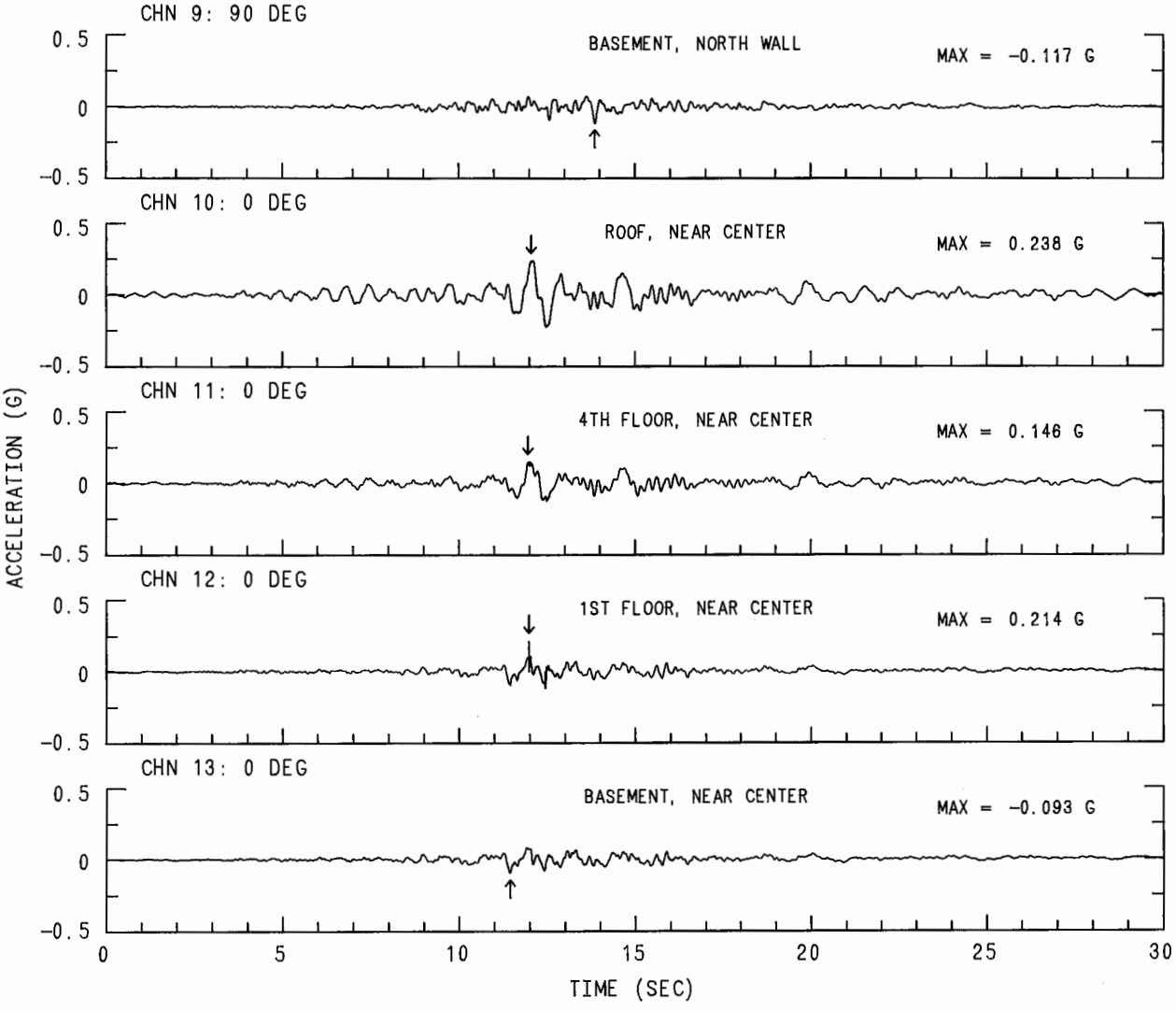
PHASE 1 ACCELERATION. RECORD ID: 58462–C0217–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD – 6–STORY OFFICE BLDG. : CSMIP S/N 462

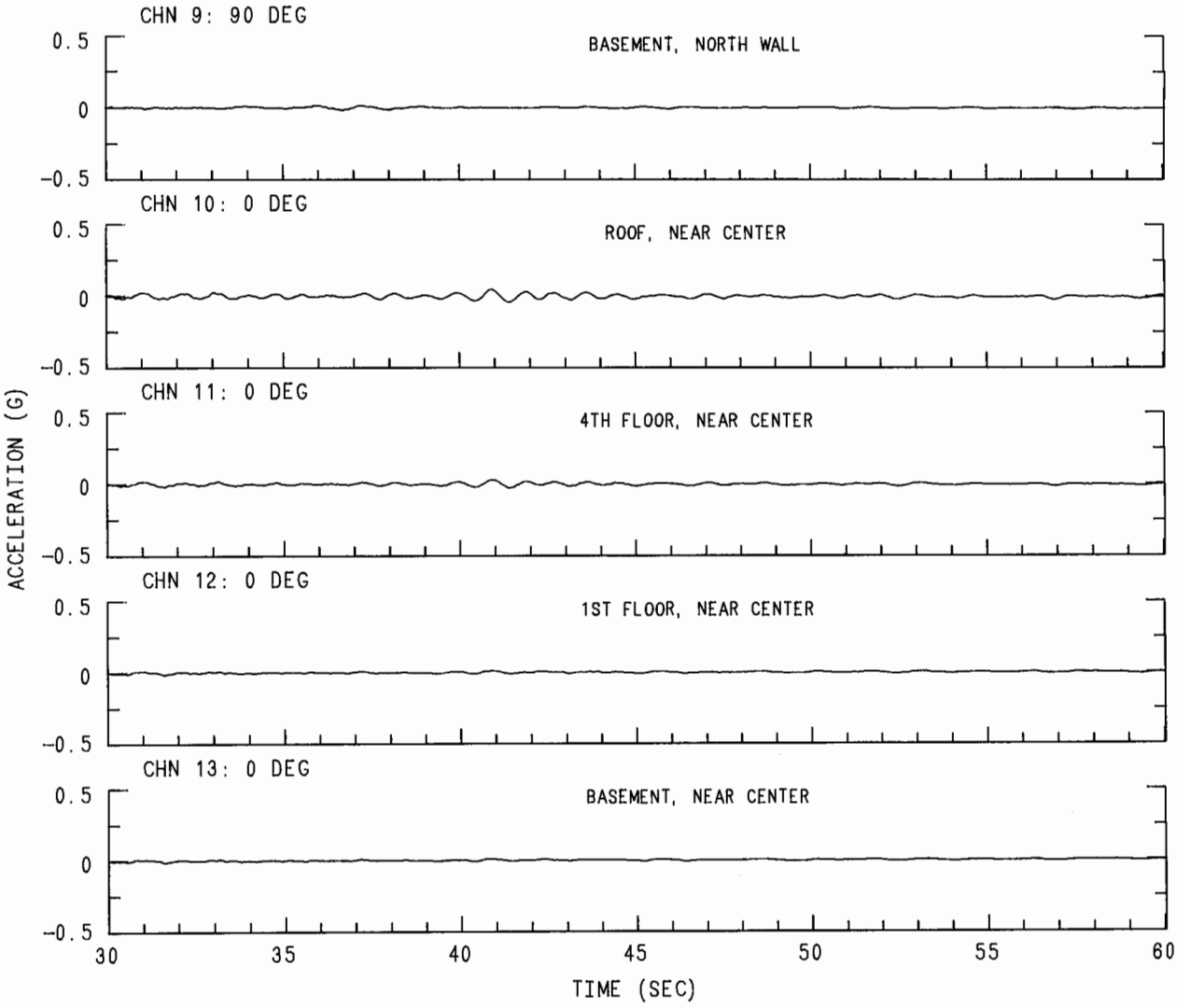
PHASE 1 ACCELERATION. RECORD ID: 58462–C0217–89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 6-STORY OFFICE BLDG. : CSMIP S/N 462

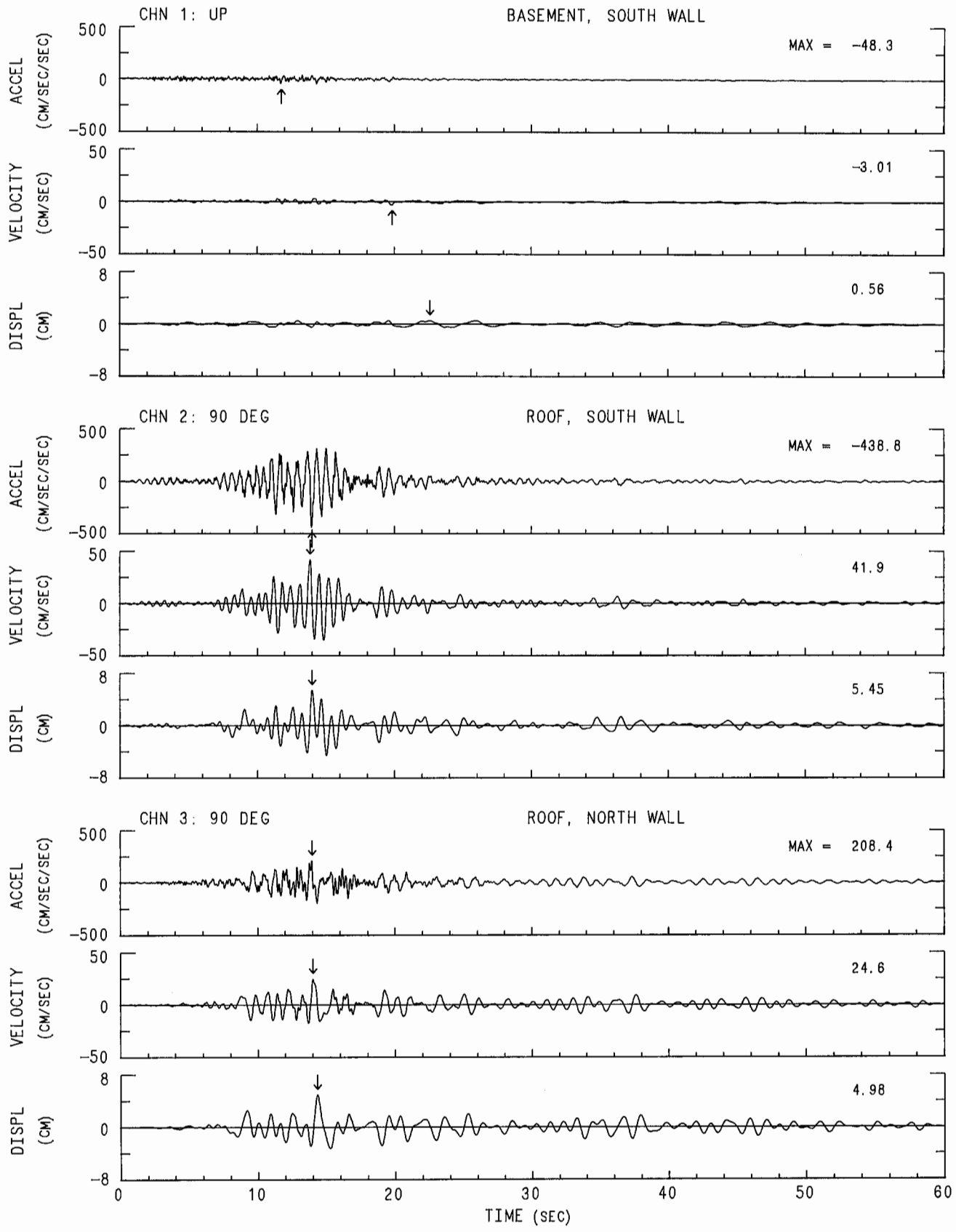
PHASE 1 ACCELERATION. RECORD ID: 58462-C0217-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 6-STORY OFFICE BLDG.: CSMIP S/N 462

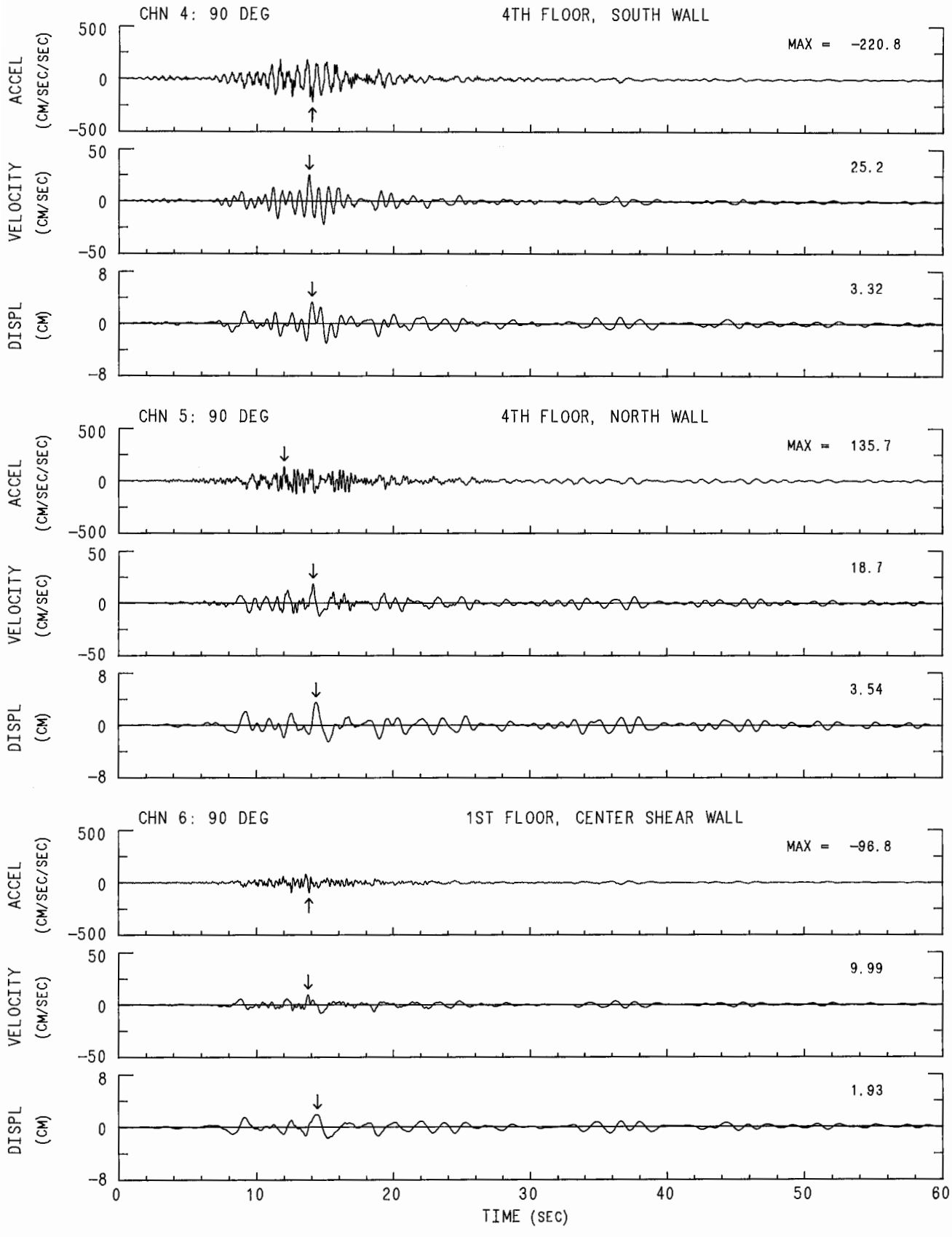
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58462-C0217-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 6-STORY OFFICE BLDG.: CSMIP S/N 462

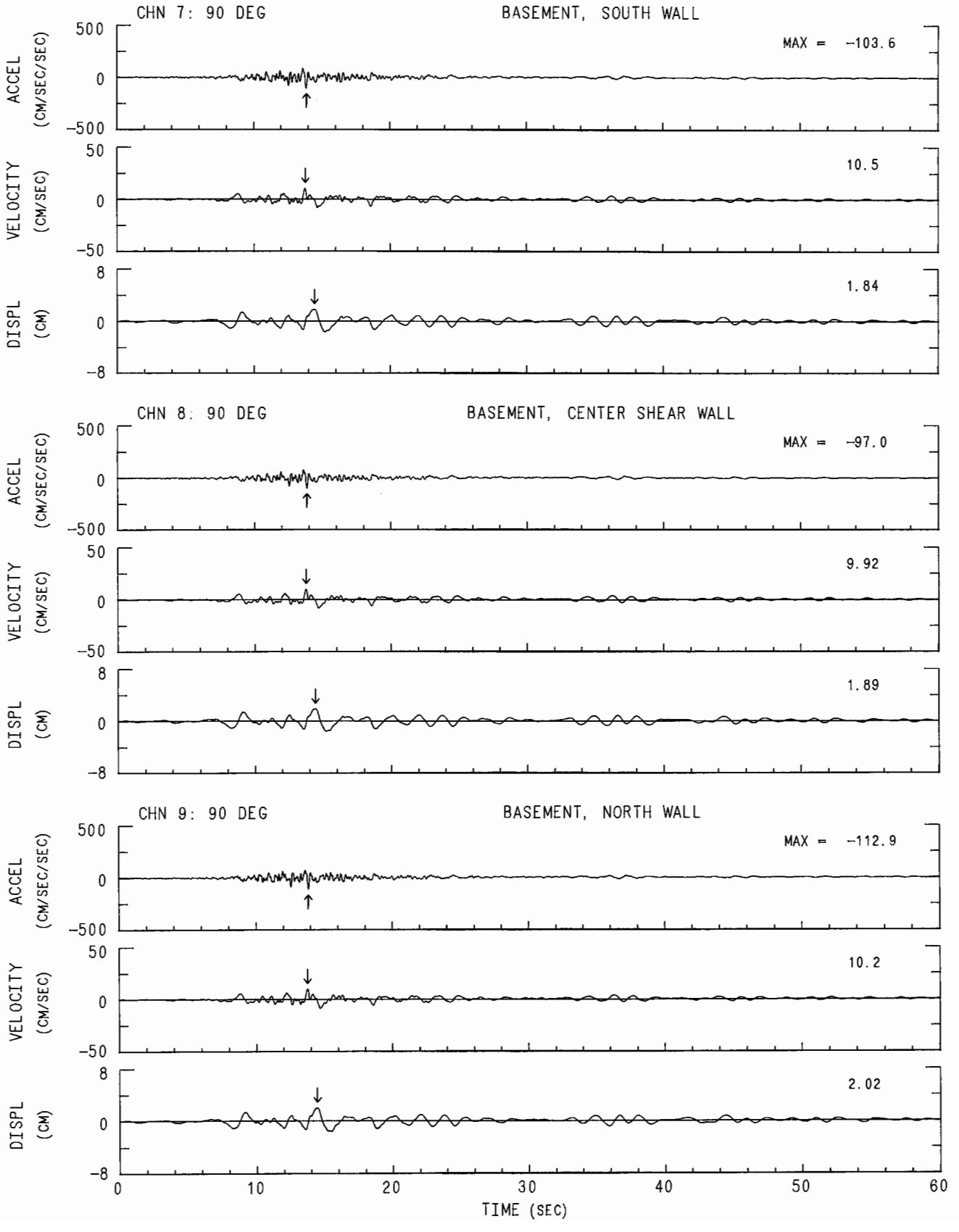
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58462-C0217-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 6-STORY OFFICE BLDG.: CSMIP S/N 462

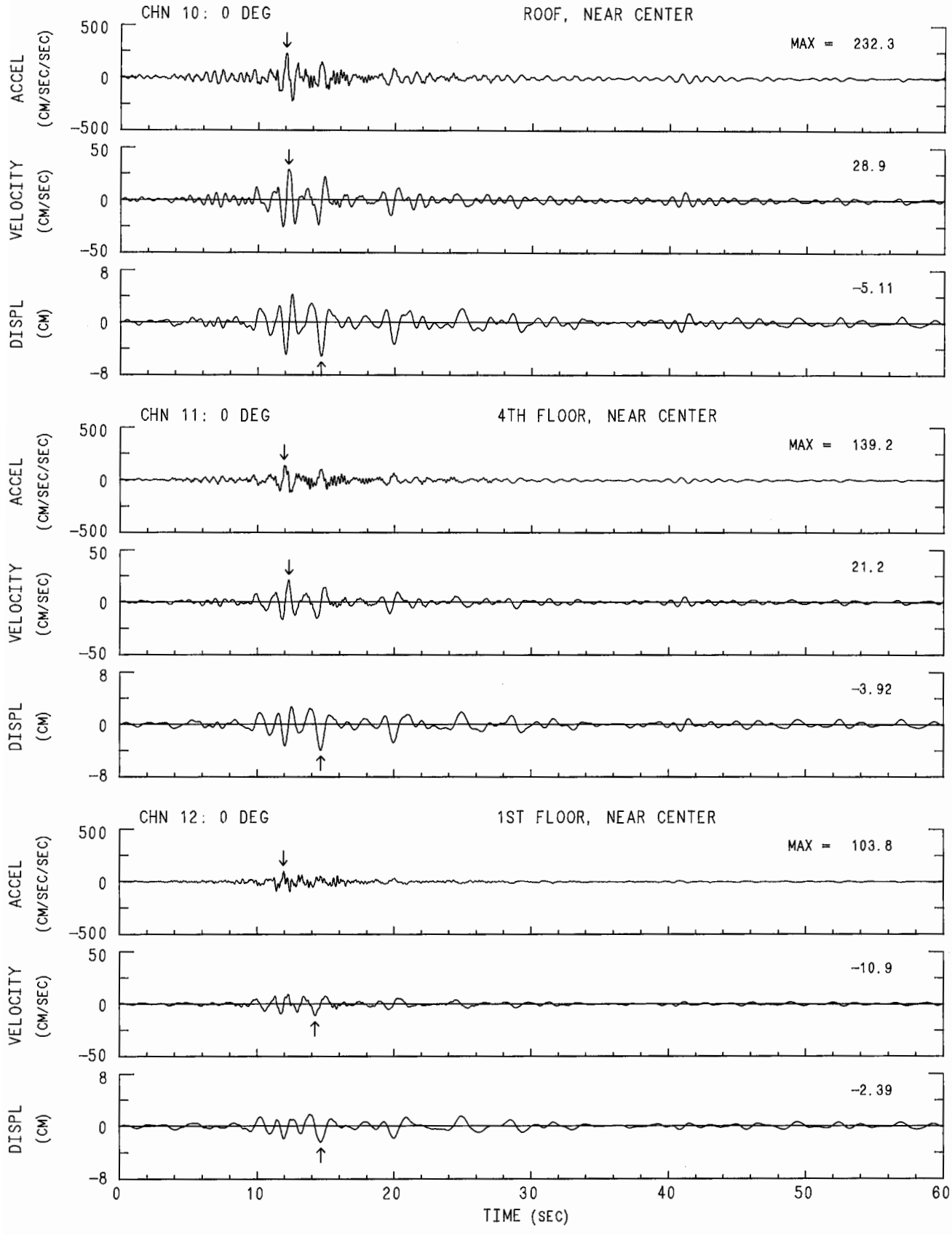
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58462-C0217-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 6-STORY OFFICE BLDG.: CSMIP S/N 462

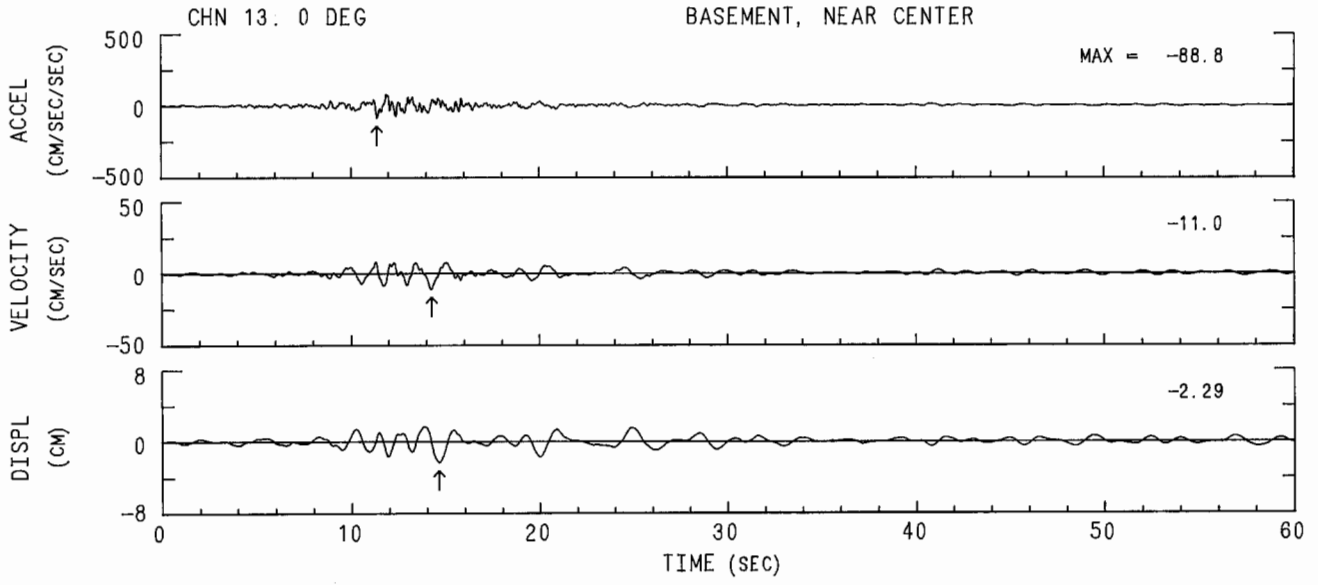
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58462-C0217-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 6-STORY OFFICE BLDG.: CSMIP S/N 462

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58462-C0217-89293.02



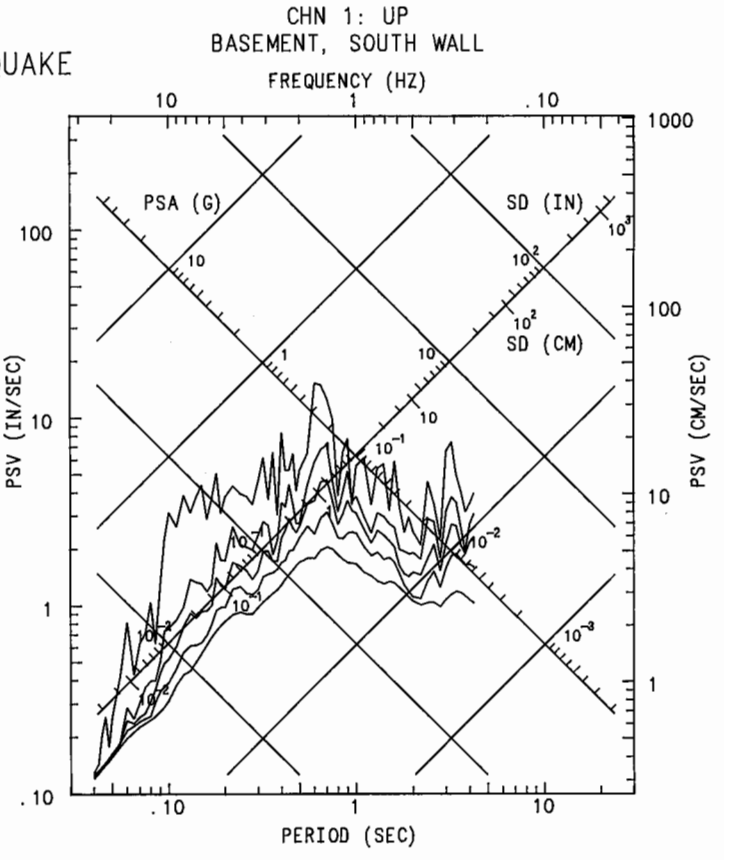
HAYWARD – 6–STORY OFFICE BLDG. : CSMIP S/N 462

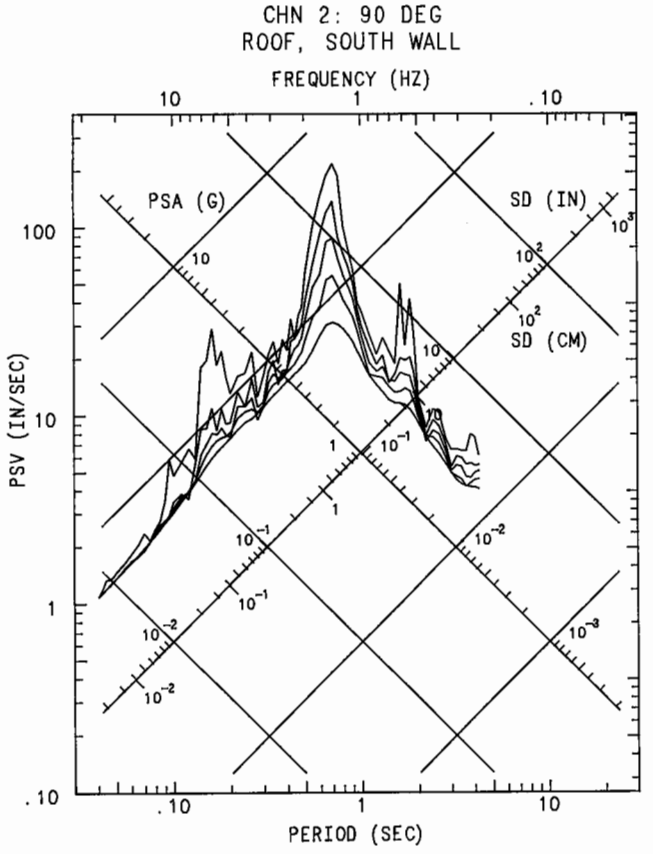
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

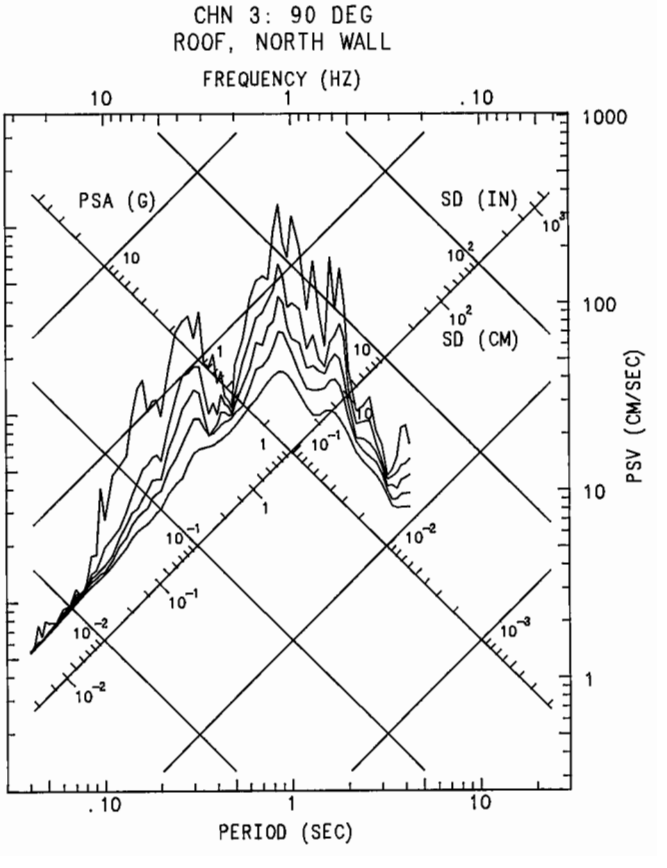
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58462–C0217–89293.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%







HAYWARD - 6-STORY OFFICE BLDG. : CSMIP S/N 462

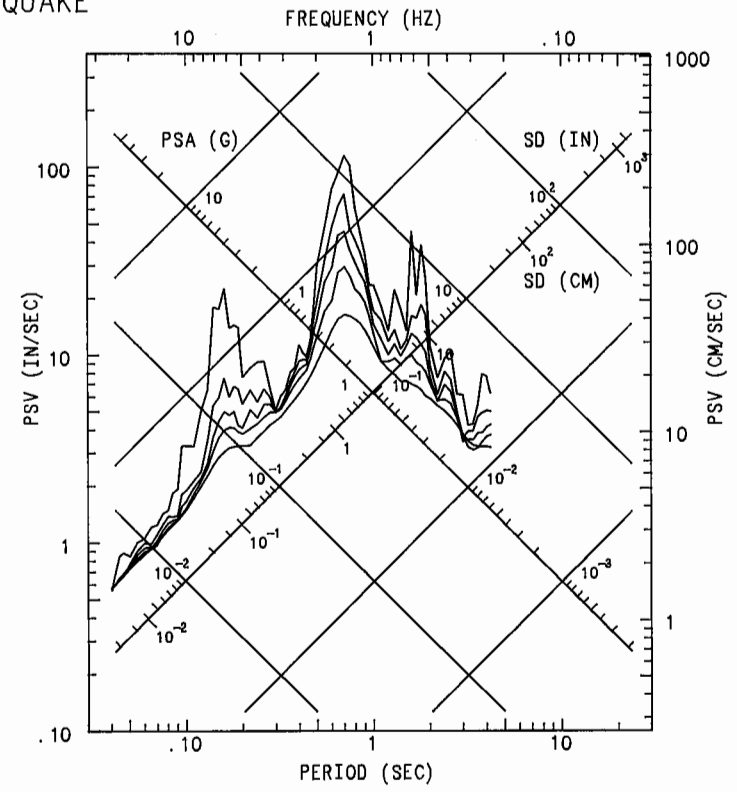
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

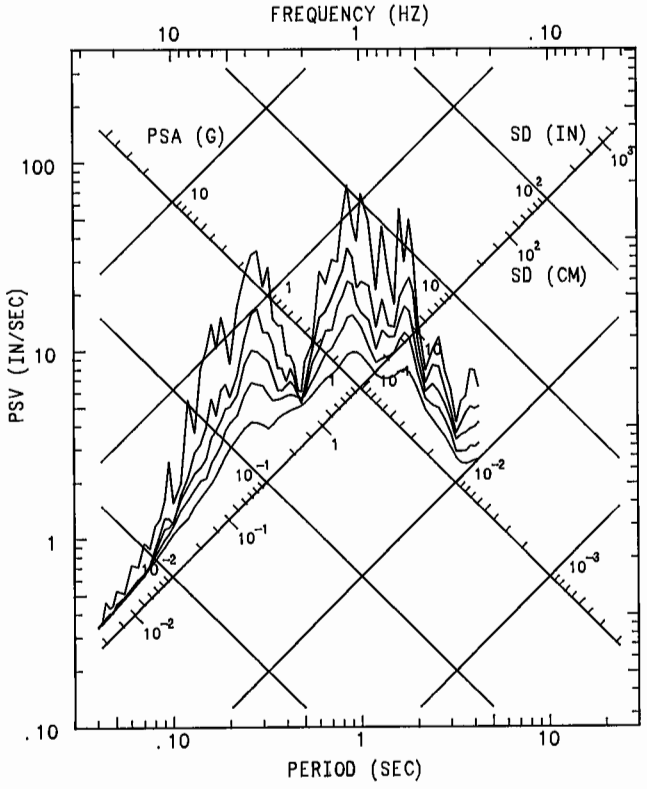
RECORD ID: 58462-C0217-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

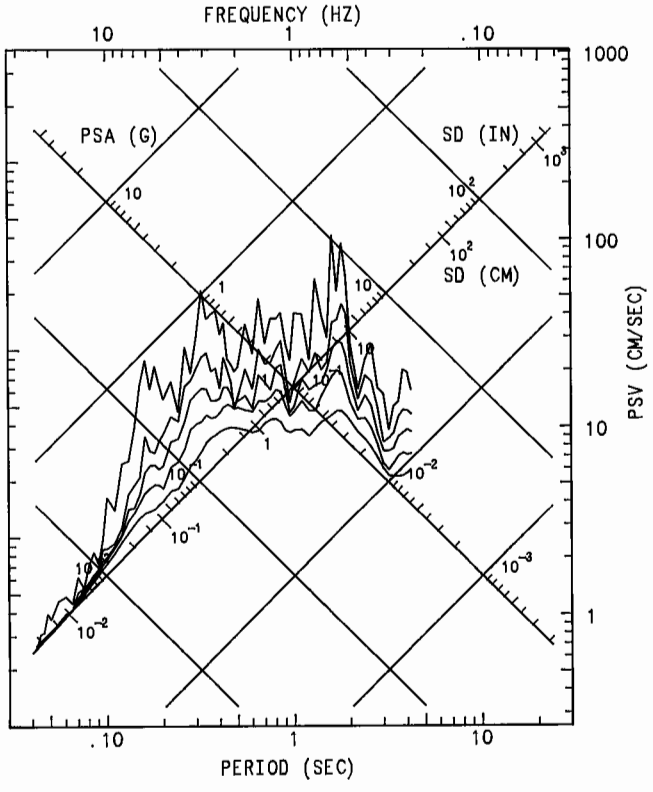
CHN 4: 90 DEG
4TH FLOOR, SOUTH WALL



CHN 5: 90 DEG
4TH FLOOR, NORTH WALL



CHN 6: 90 DEG
1ST FLOOR, CENTER SHEAR WALL



HAYWARD – 6–STORY OFFICE BLDG. : CSMIP S/N 462

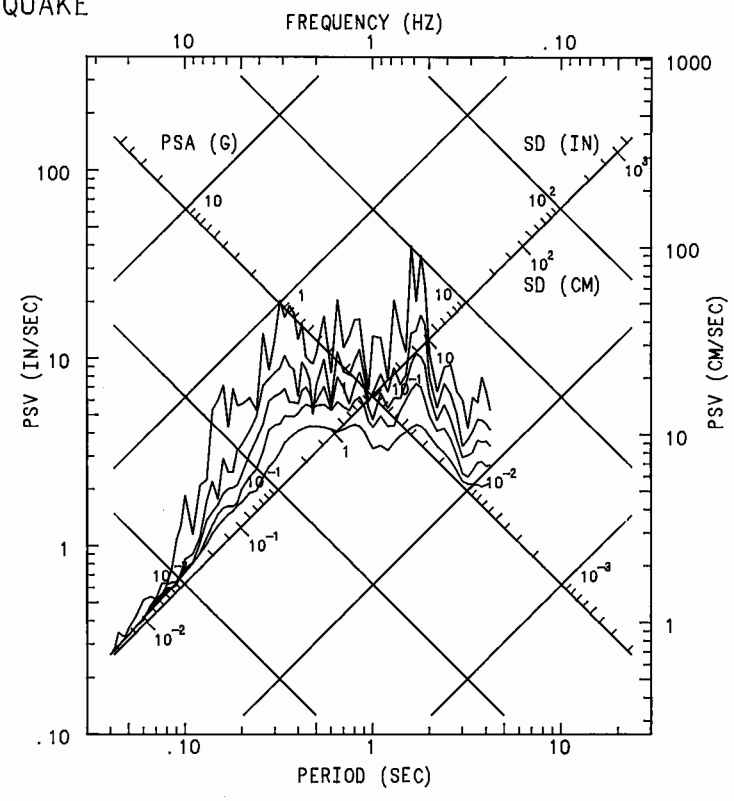
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

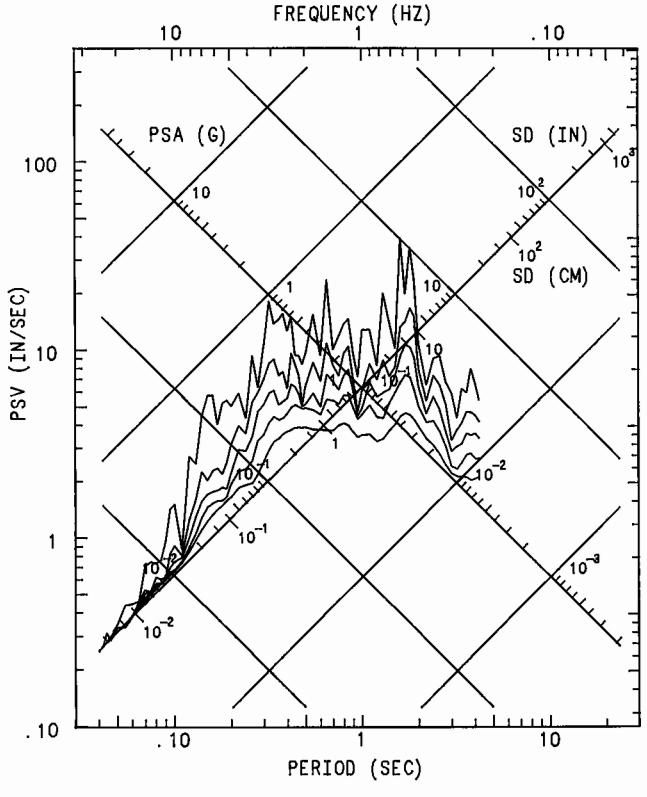
RECORD ID: 58462-C0217-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

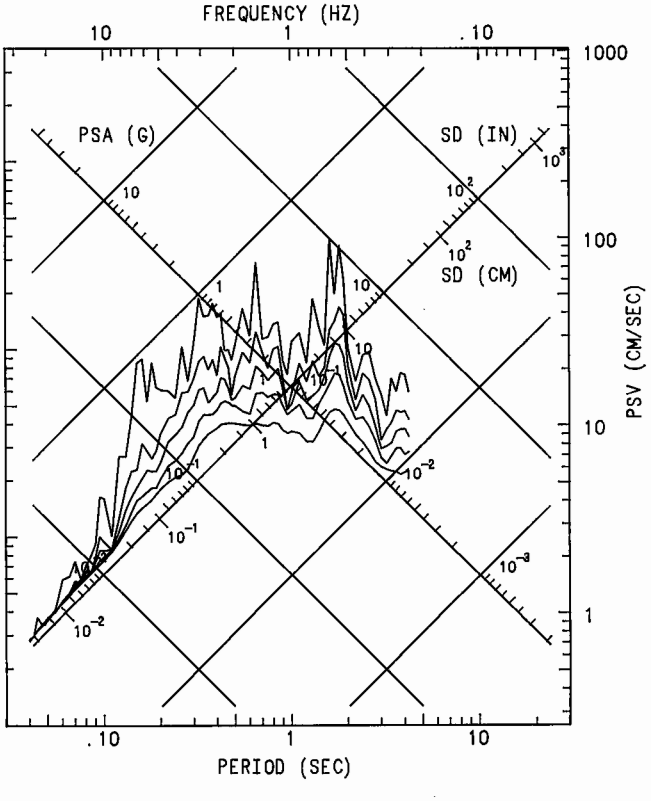
CHN 7: 90 DEG
BASEMENT, SOUTH WALL



CHN 8: 90 DEG
BASEMENT, CENTER SHEAR WALL



CHN 9: 90 DEG
BASEMENT, NORTH WALL



HAYWARD - 6-STORY OFFICE BLDG.: CSMIP S/N 462

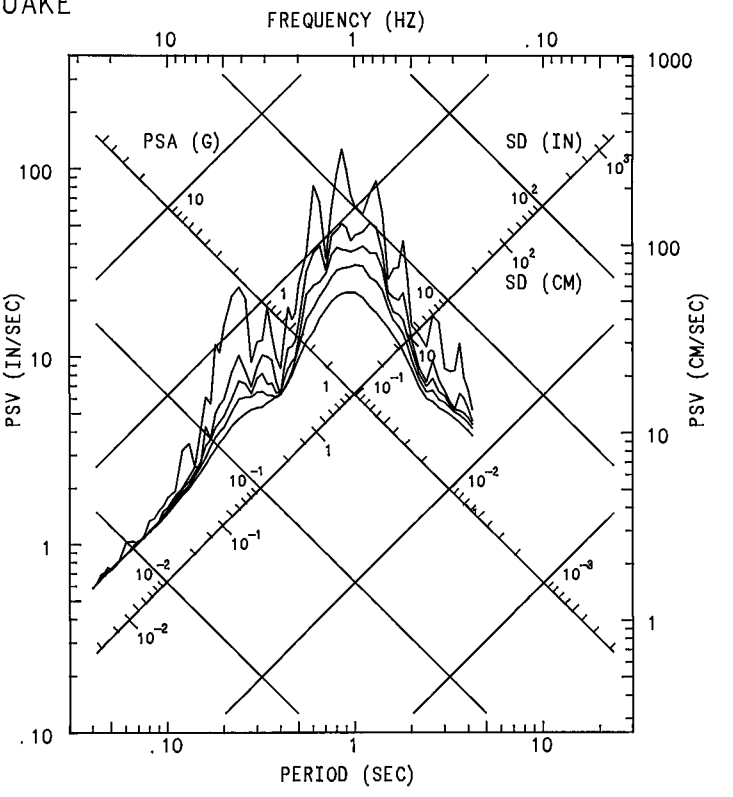
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

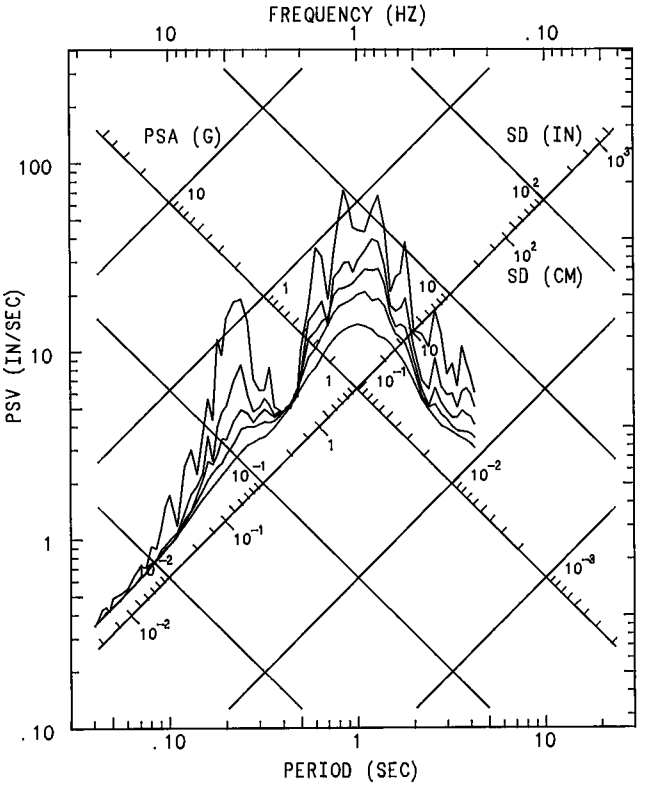
RECORD ID: 58462-C0217-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

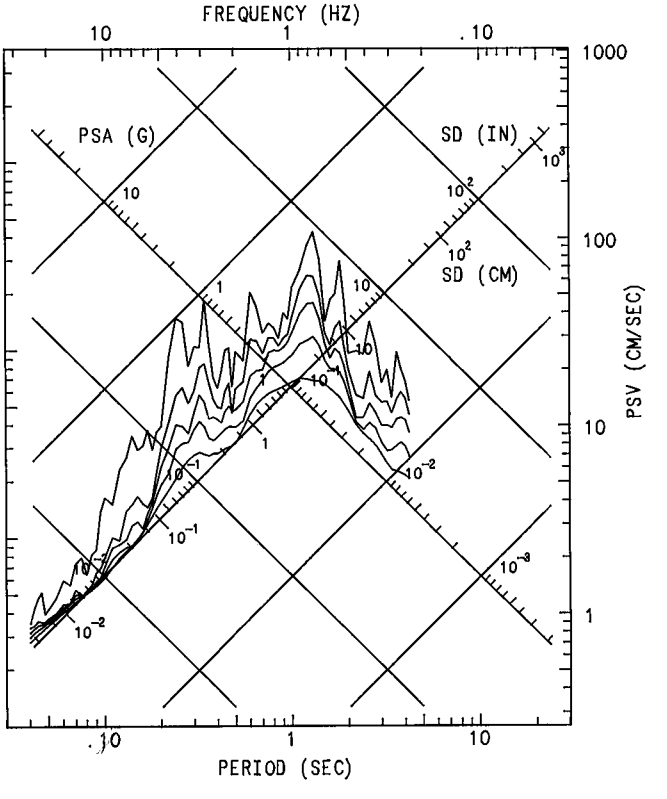
CHN 10: 0 DEG
ROOF, NEAR CENTER



CHN 11: 0 DEG
4TH FLOOR, NEAR CENTER



CHN 12: 0 DEG
1ST FLOOR, NEAR CENTER



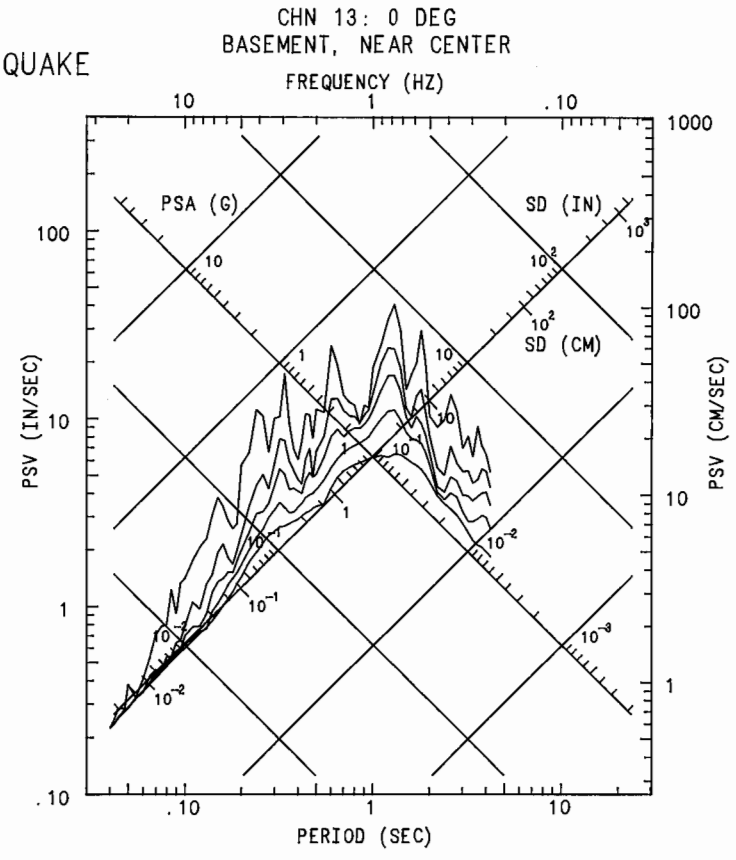
HAYWARD - 6-STORY OFFICE BLDG. : CSMIP S/N 462

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

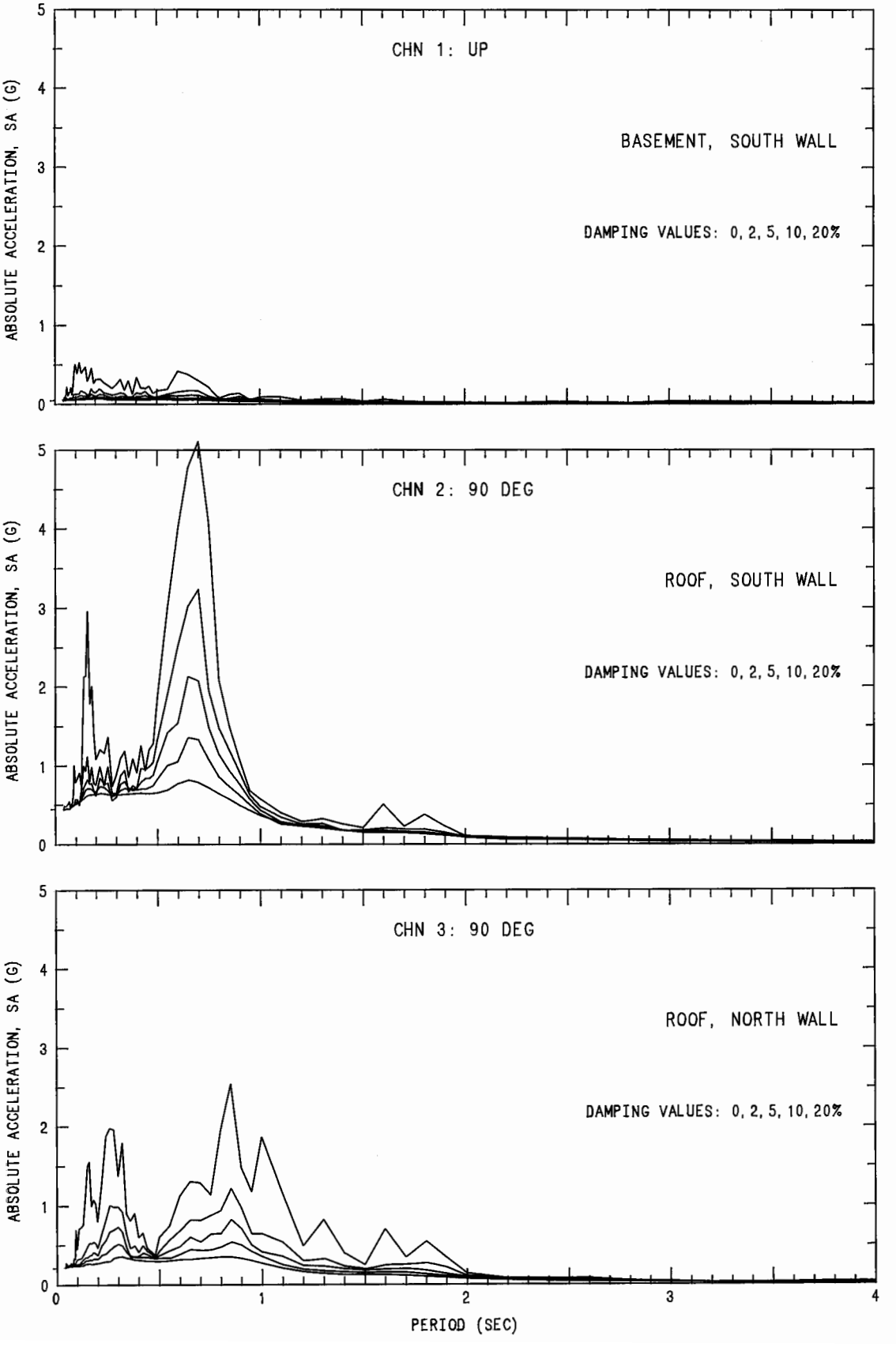
RECORD ID: 58462-C0217-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

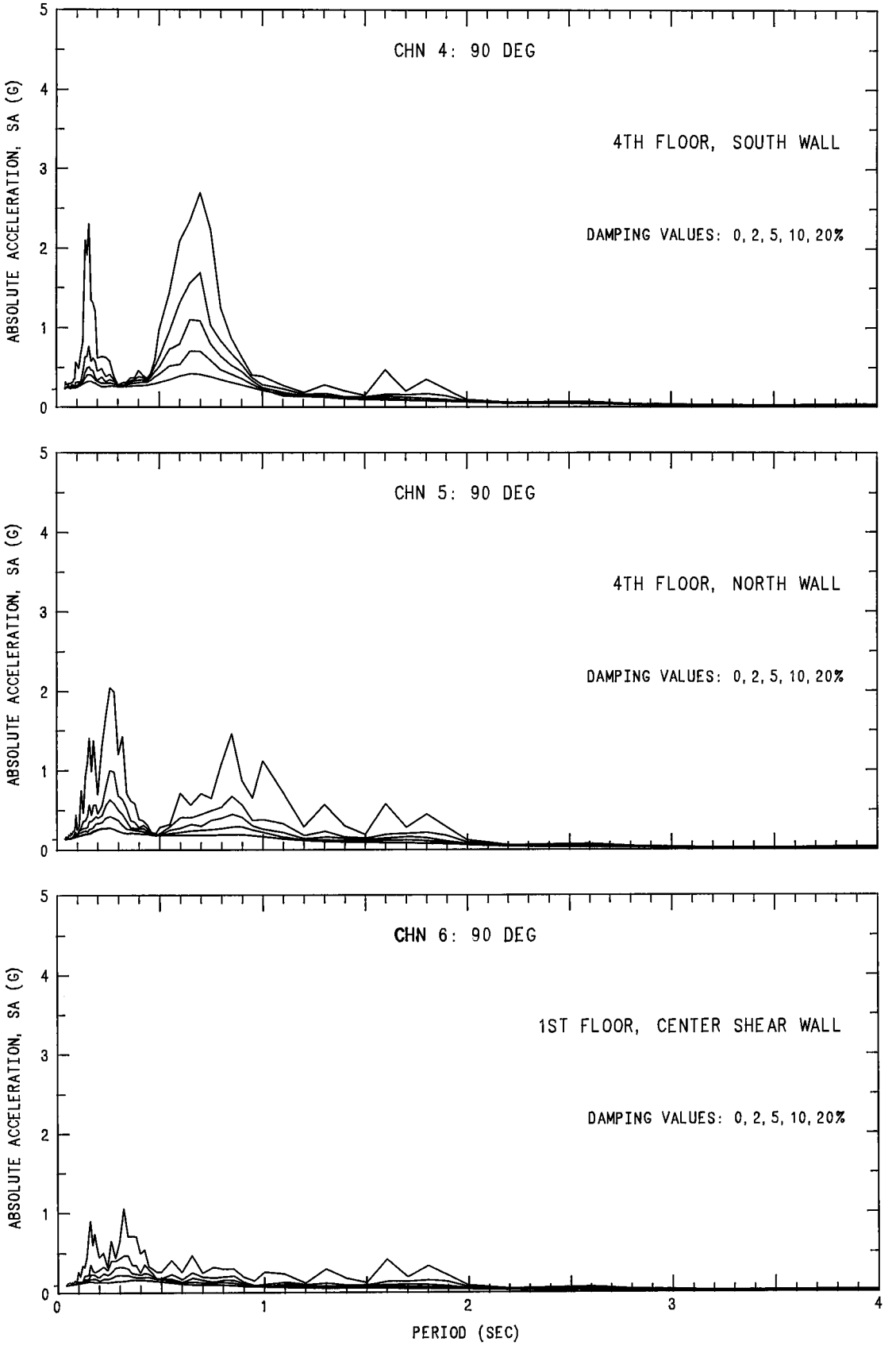


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 6-STORY OFFICE BLDG.: CSMIP S/N 462

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58462-C0217-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

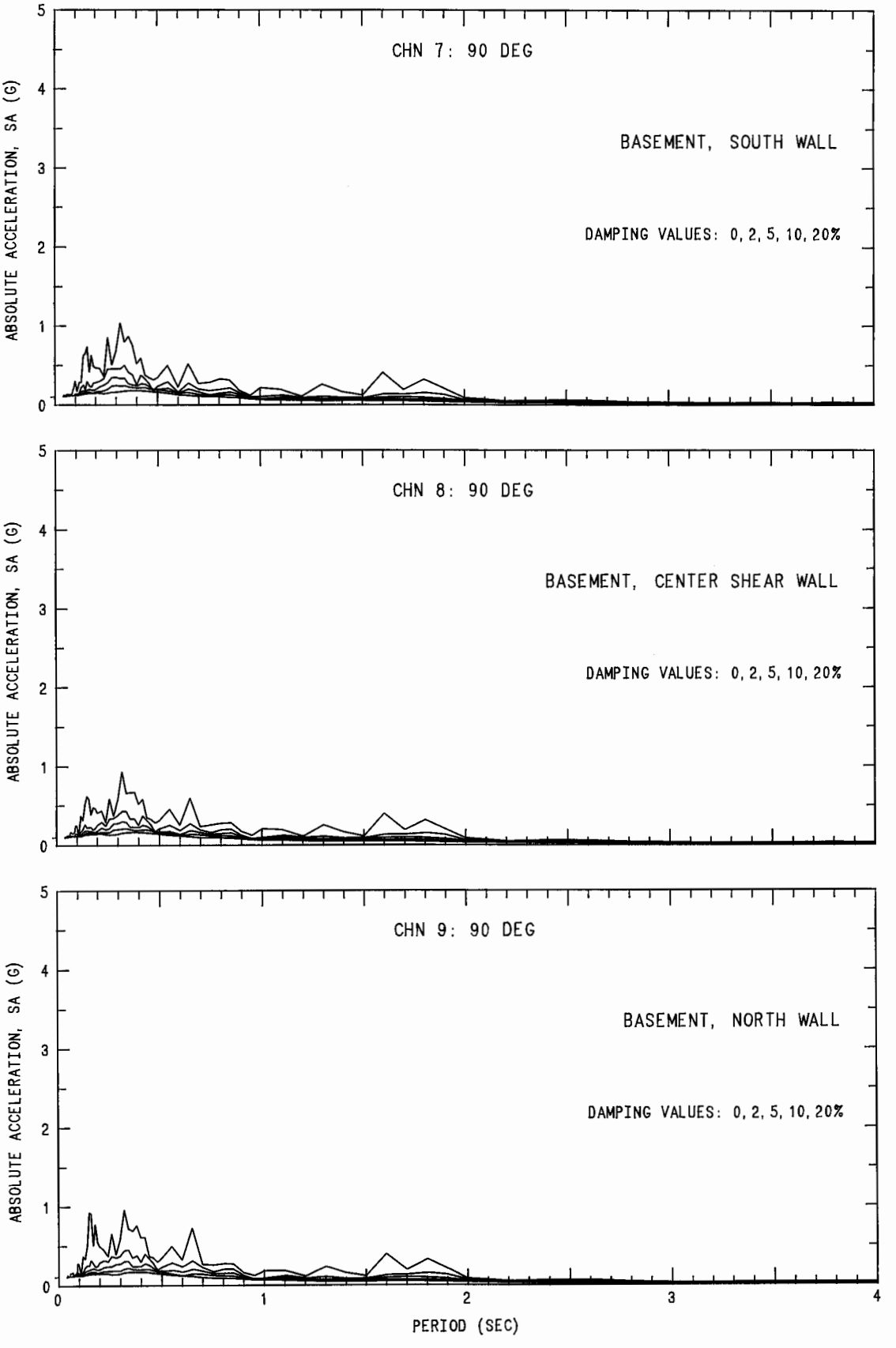


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 6-STORY OFFICE BLDG.: CSMIP S/N 462
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58462-C0217-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



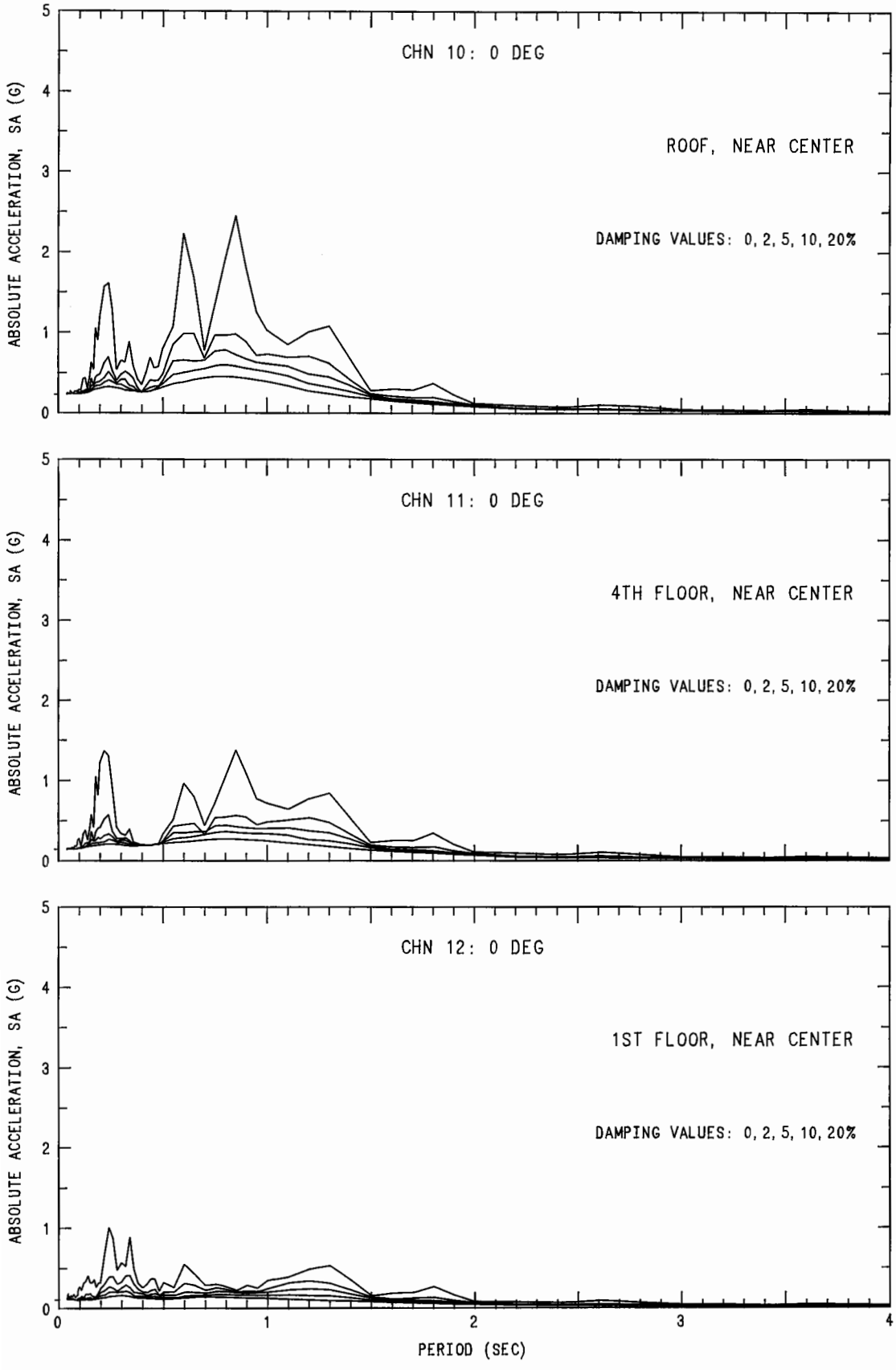
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 6-STORY OFFICE BLDG.: CSMIP S/N 462

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58462-C0217-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



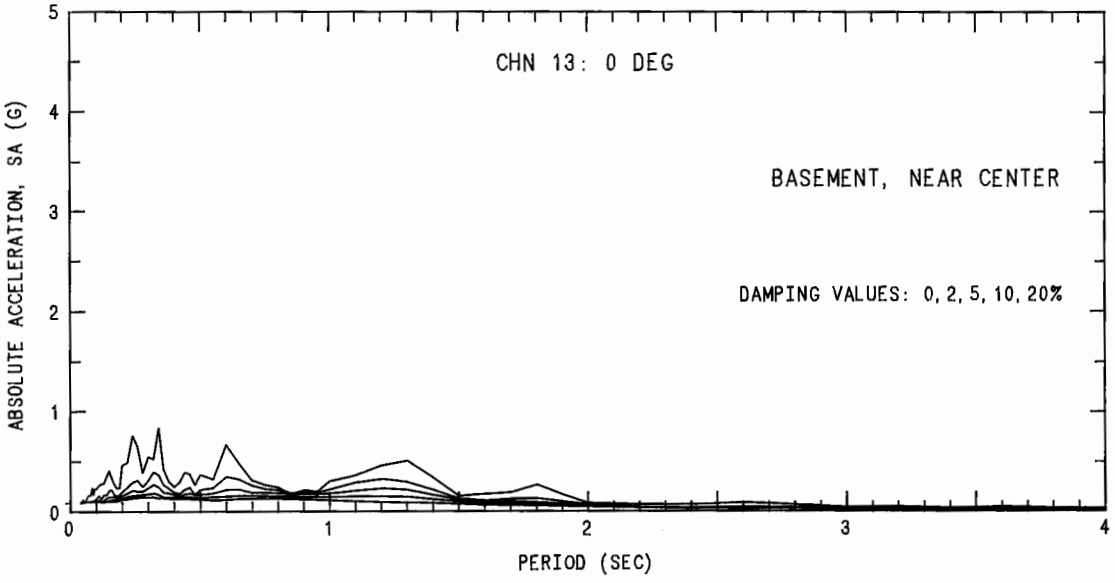
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 6-STORY OFFICE BLDG.: CSMIP S/N 462

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58462-C0217-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 6-STORY OFFICE BLDG.: CSMIP S/N 462

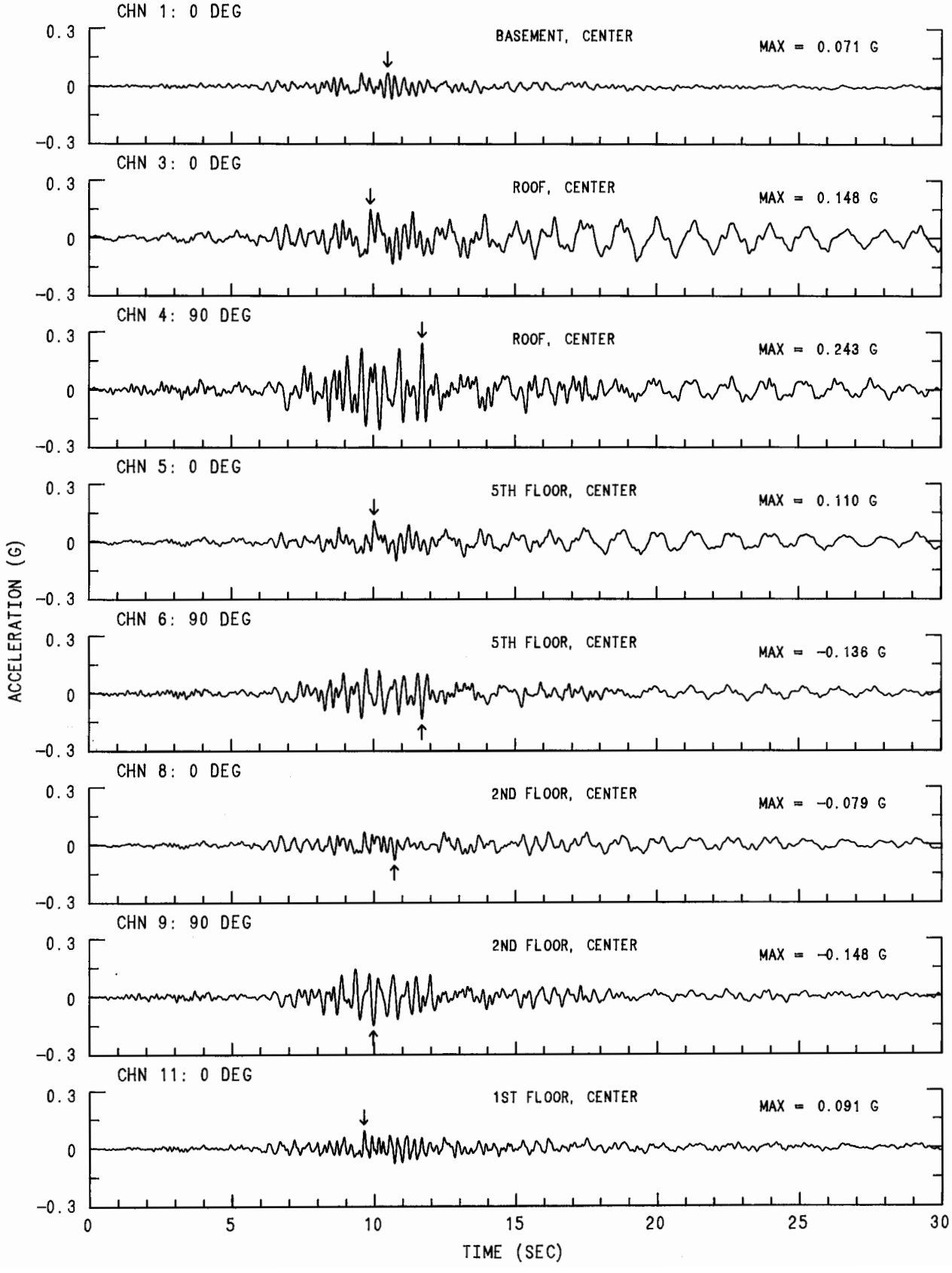
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58462-C0217-89293.02
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

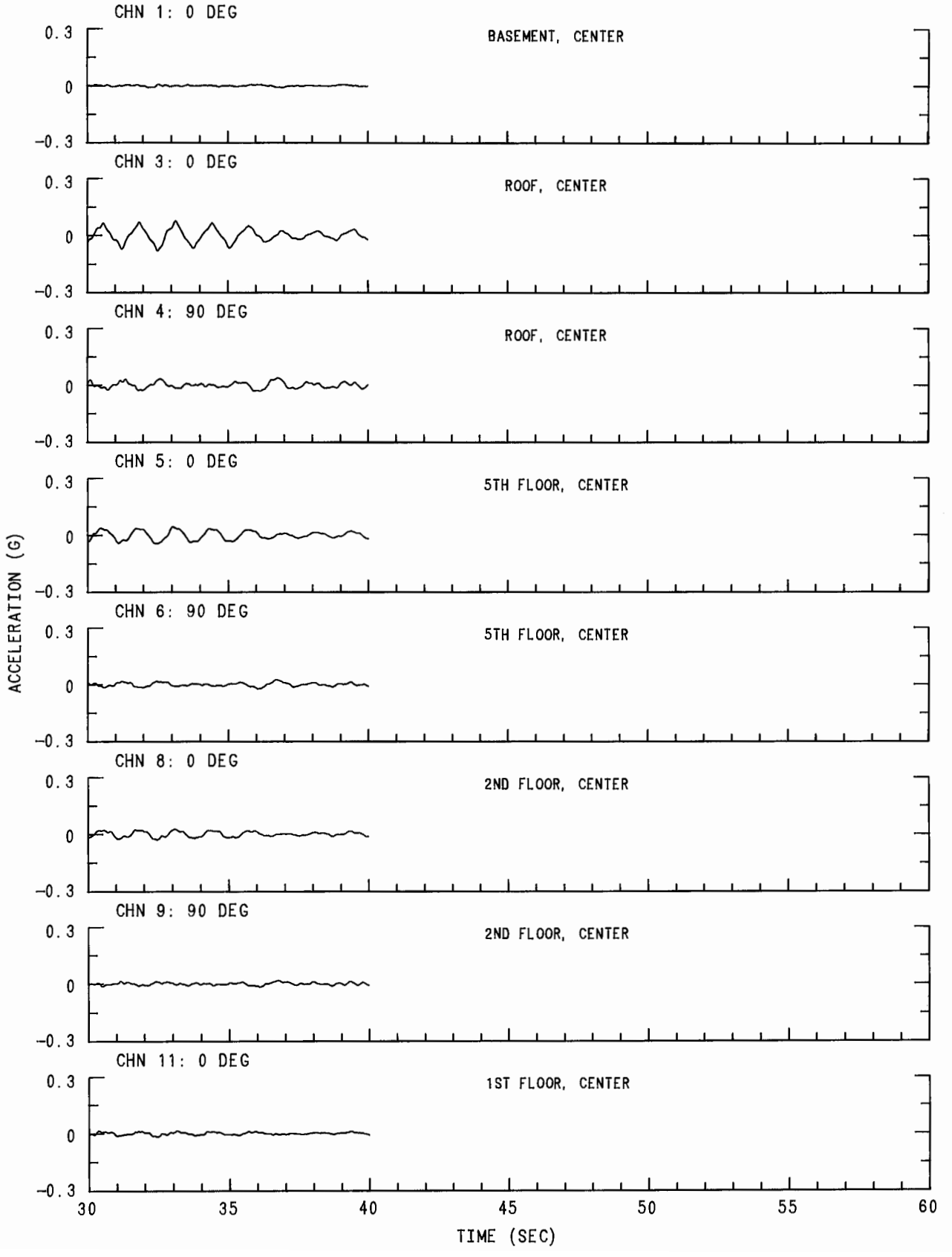
PHASE 1 ACCELERATION. RECORD ID: 58354-C0188-89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

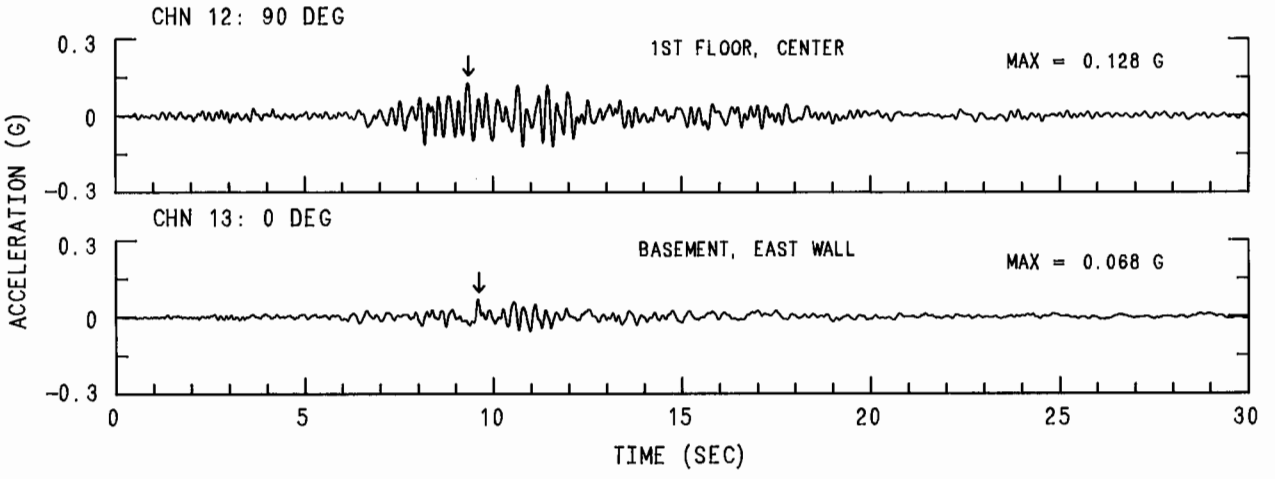
PHASE 1 ACCELERATION. RECORD ID: 58354-C0188-89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

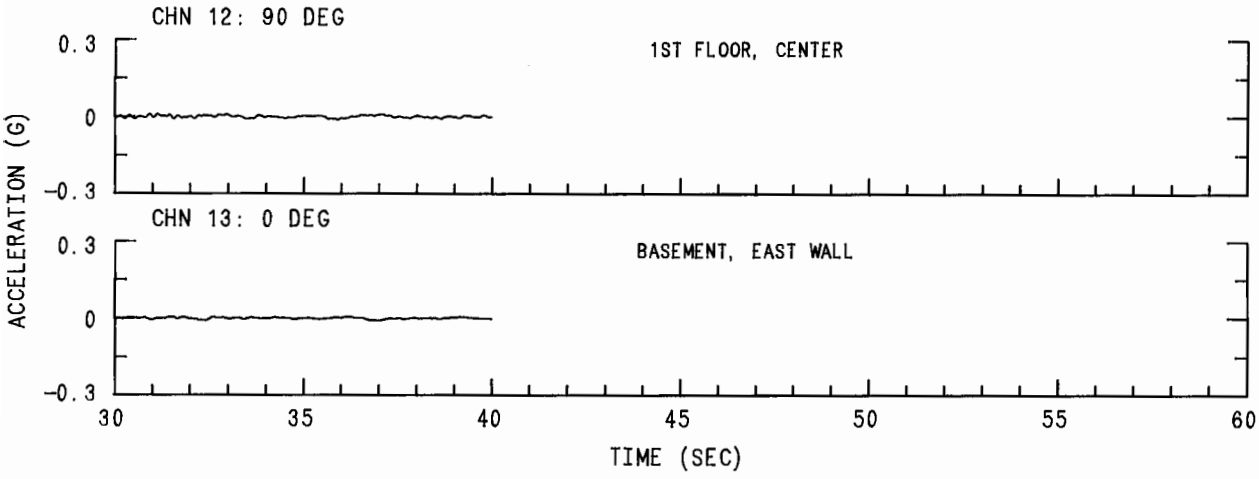
PHASE 1 ACCELERATION. RECORD ID: 58354-C0188-89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 1 ACCELERATION. RECORD ID: 58354-C0188-89291.02

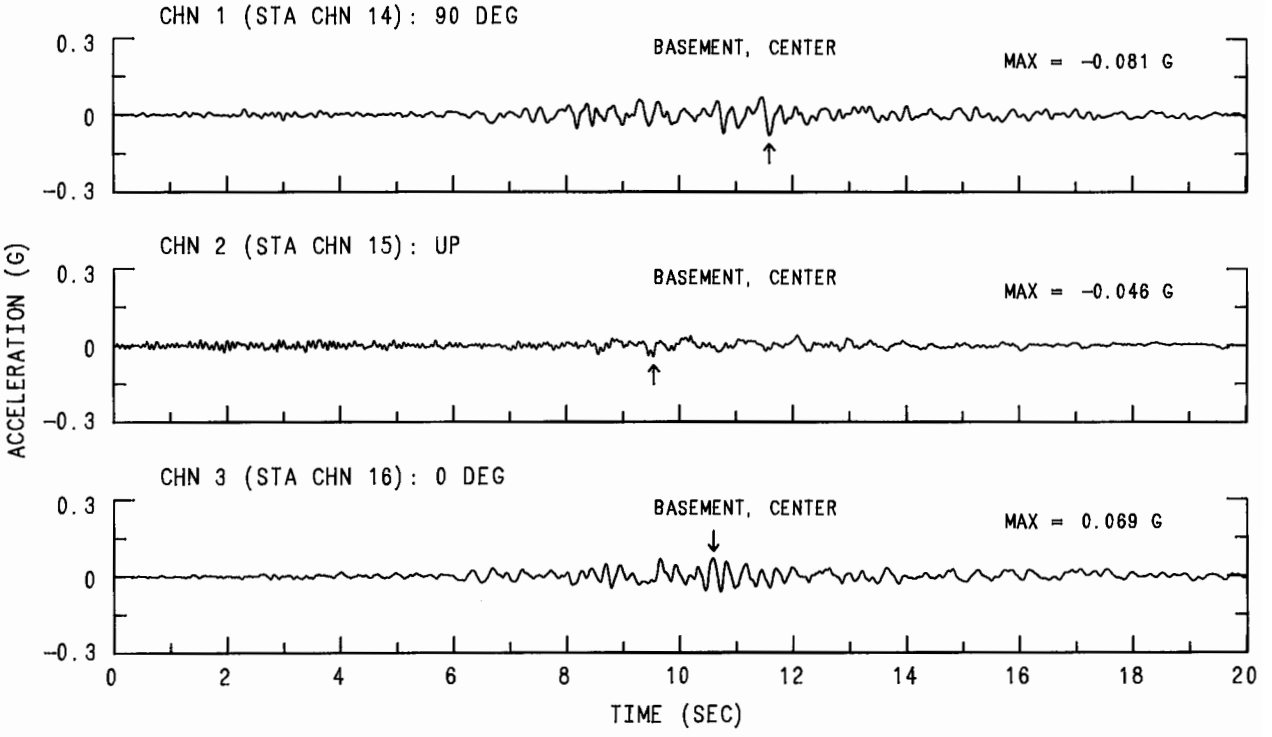


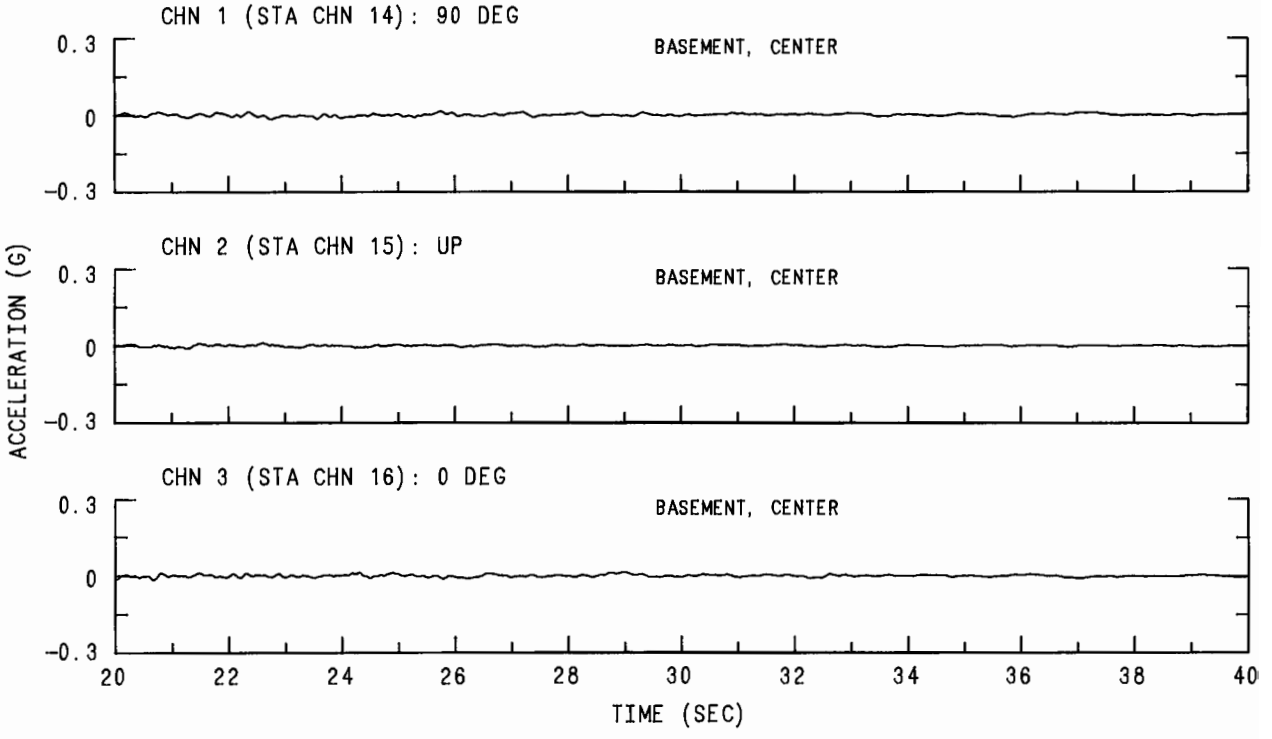
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 1 ACCELERATION

RECORD ID: 58354-S3489-89292.02

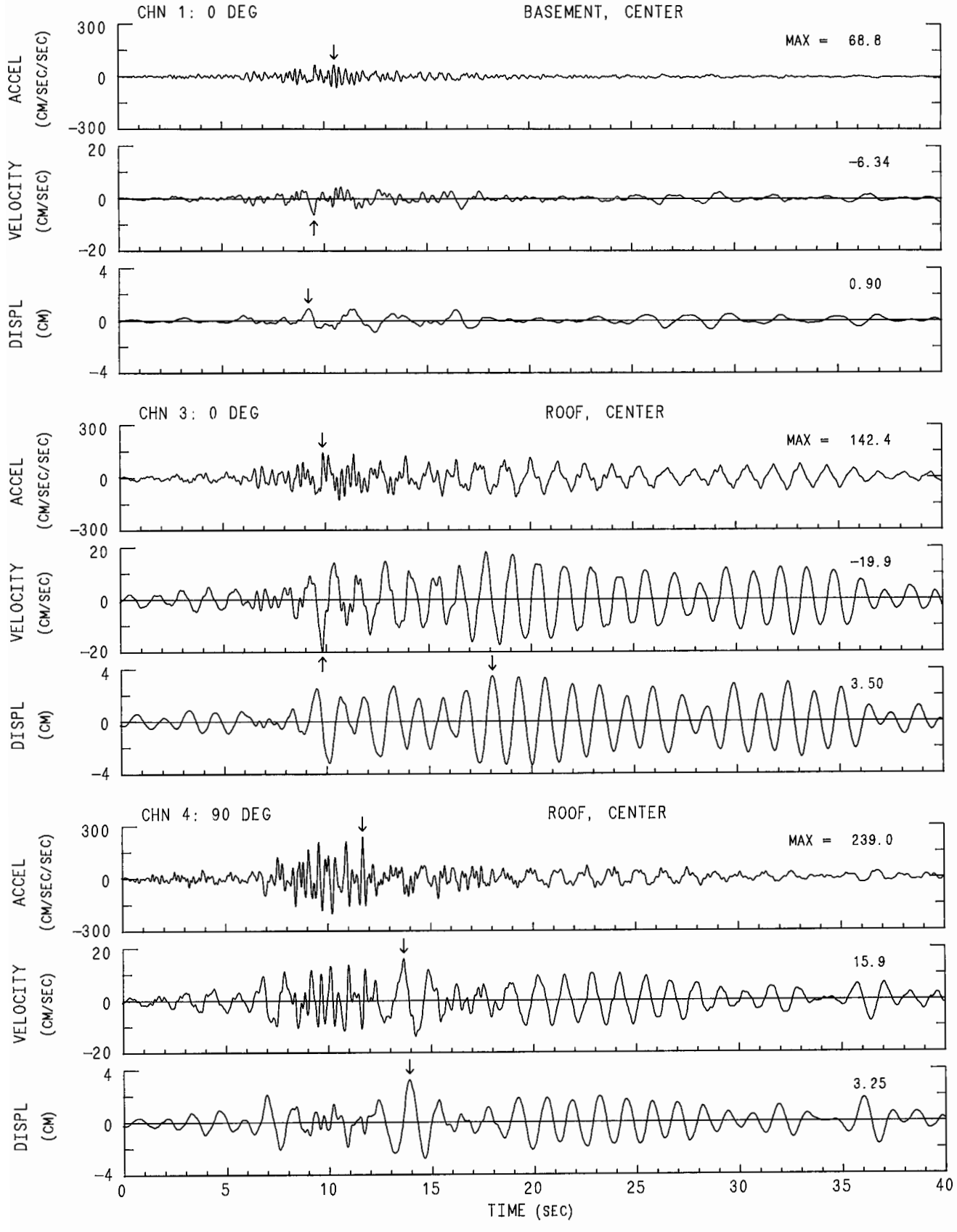




SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

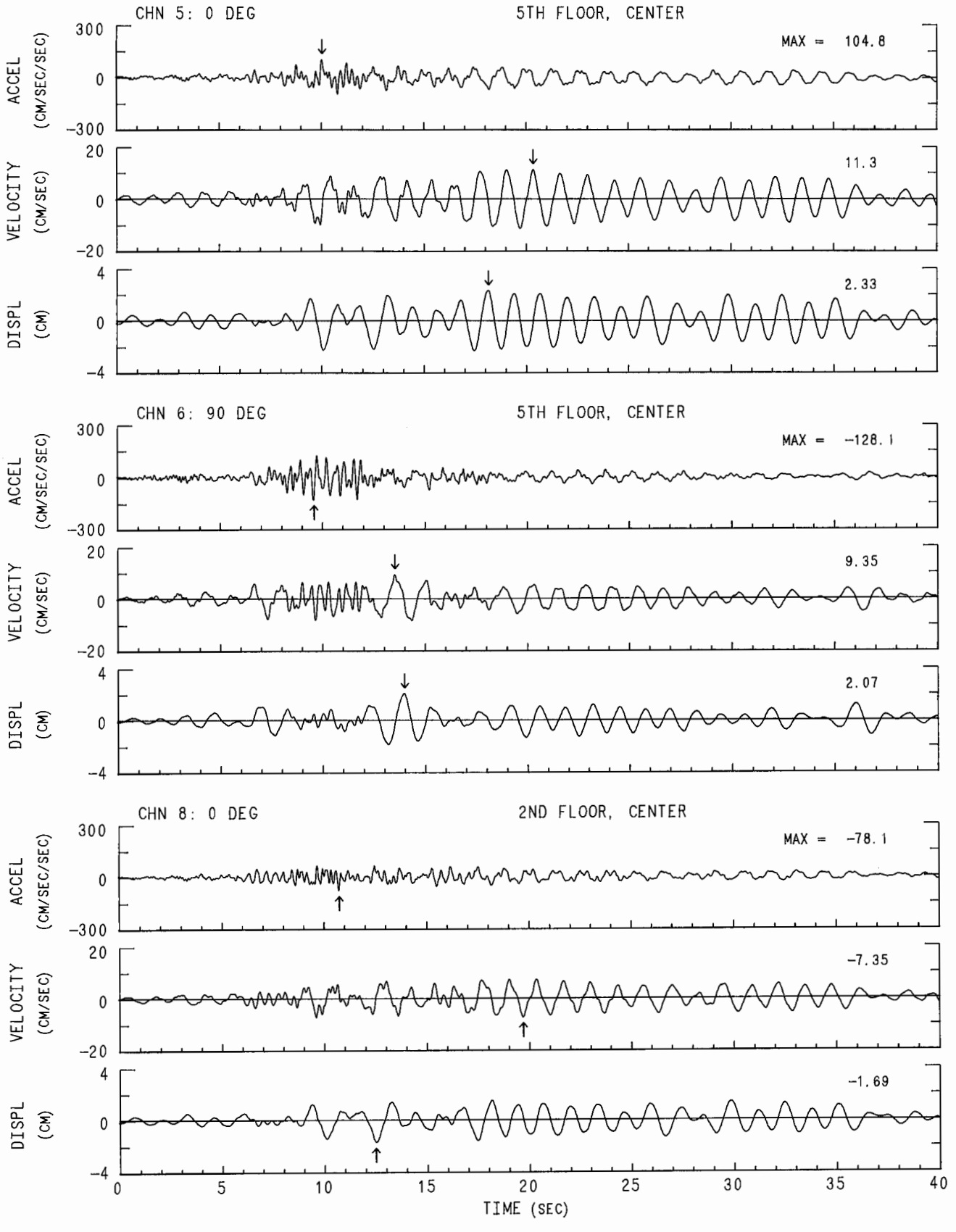
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58354-C0188-89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13–STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

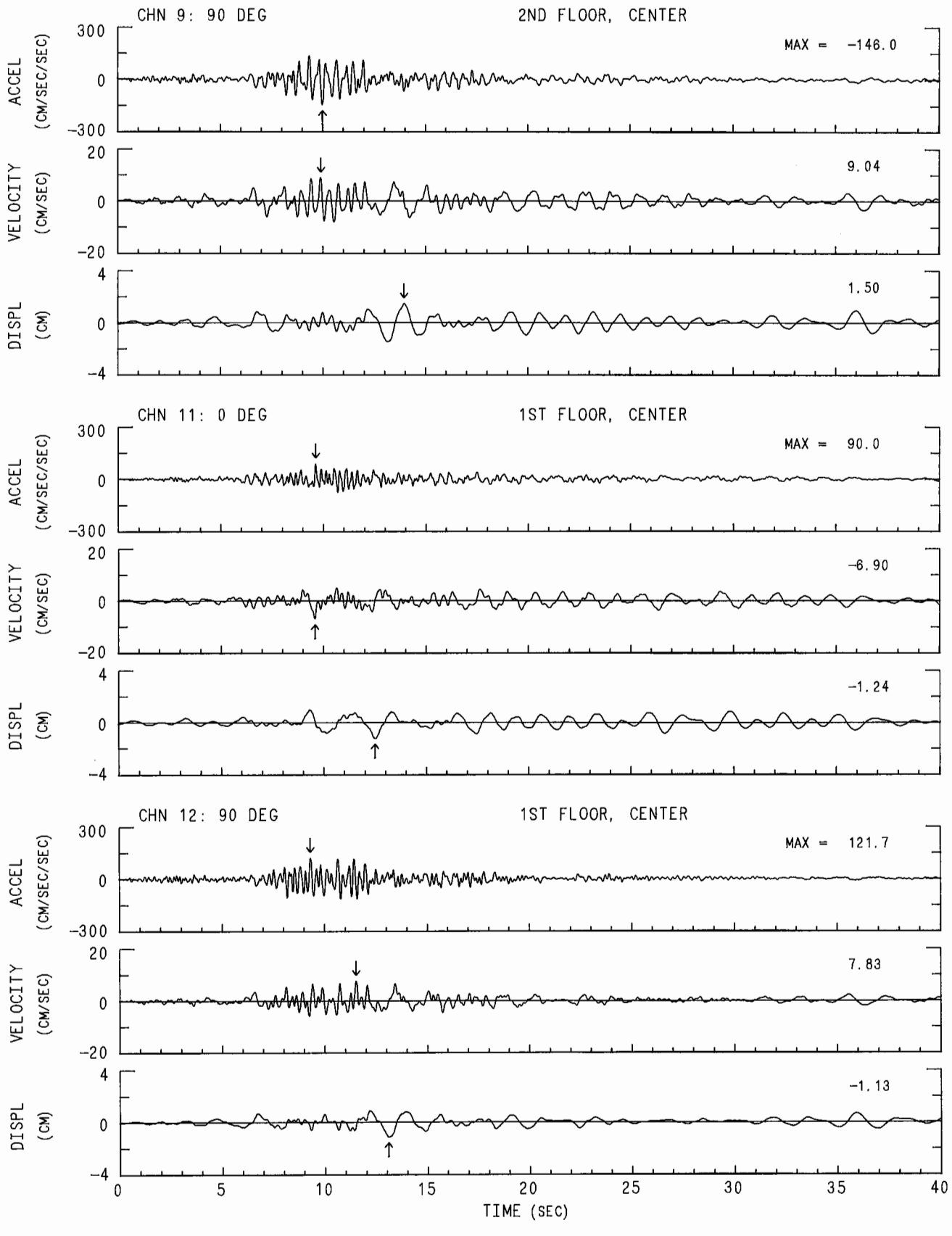
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58354–C0188–89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

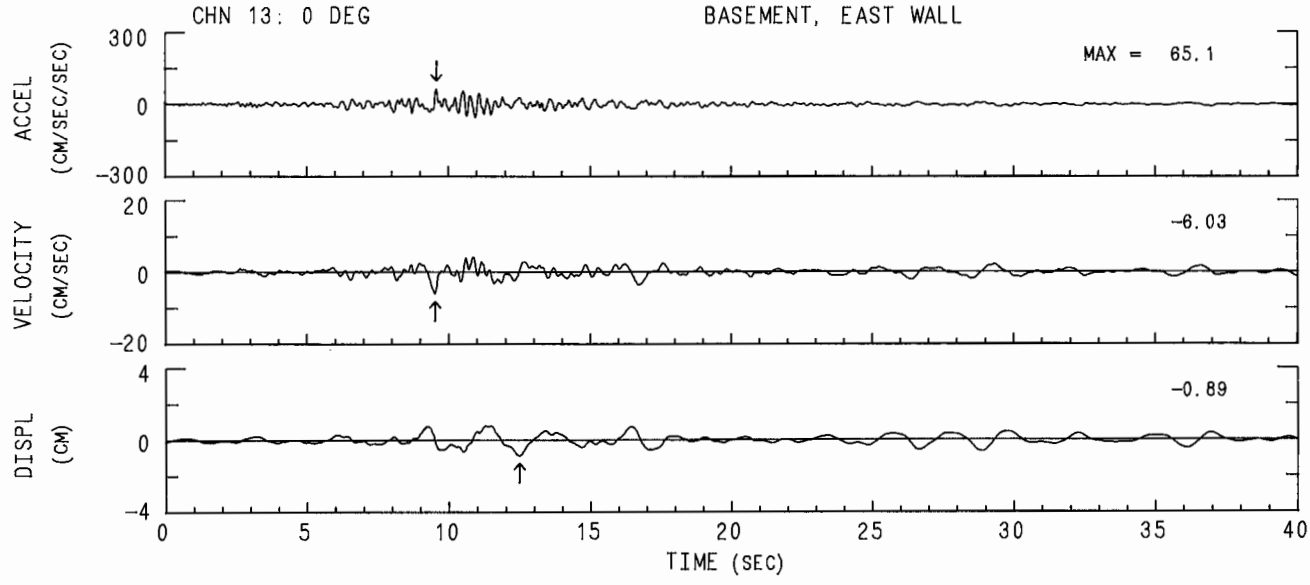
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58354-C0188-89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

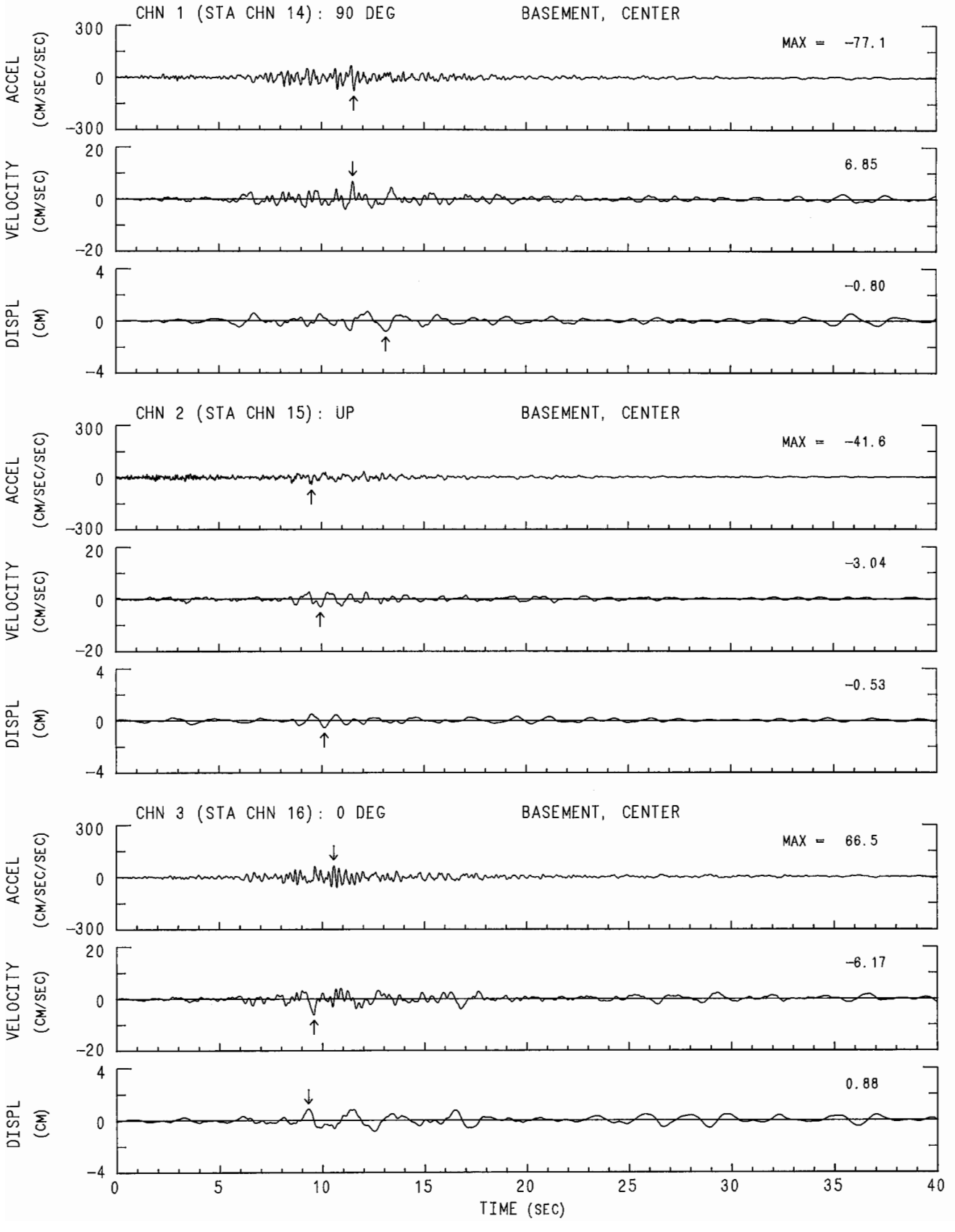
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58354-C0188-89291.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58354-S3489-89292.02



HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

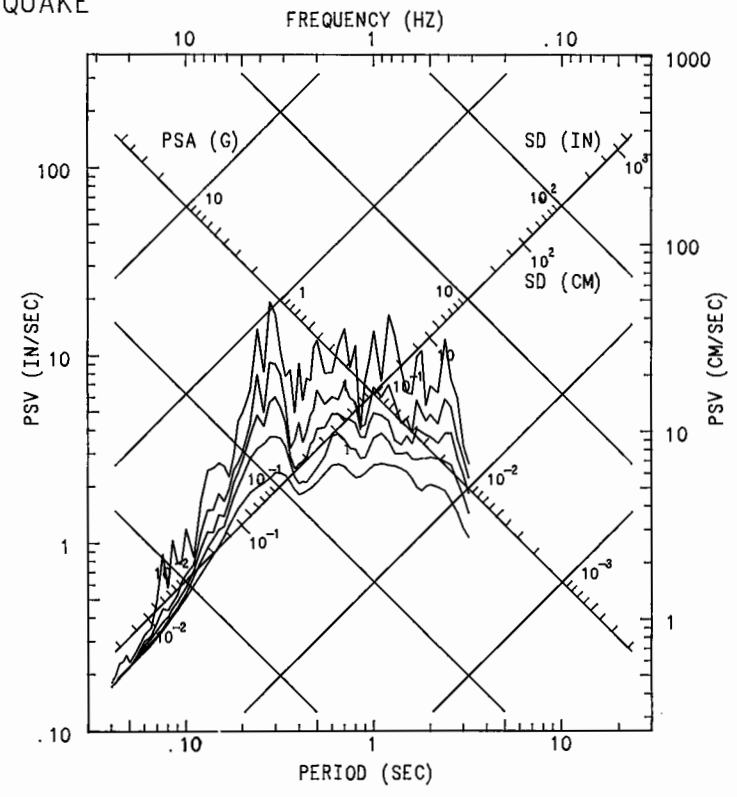
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

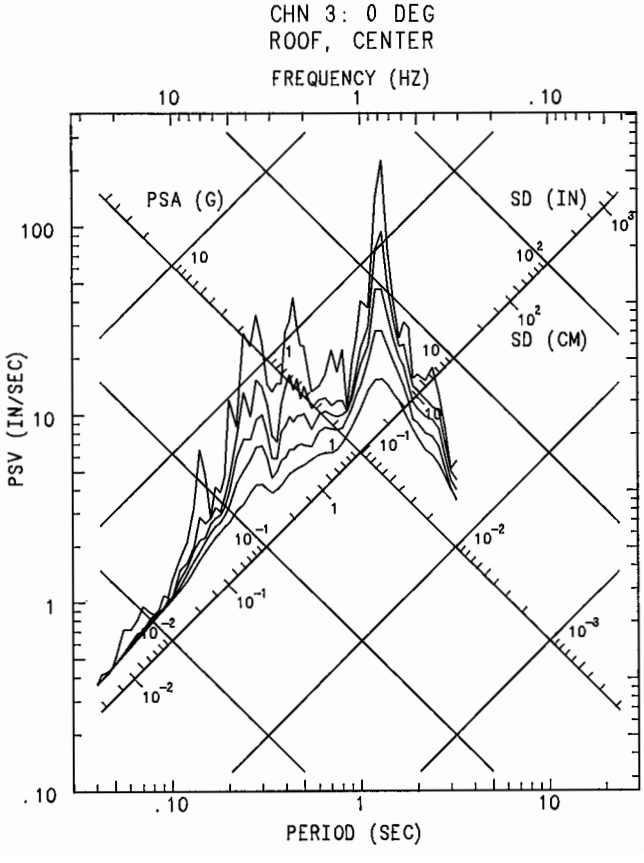
RECORD ID: 58354-C0188-89291.02

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

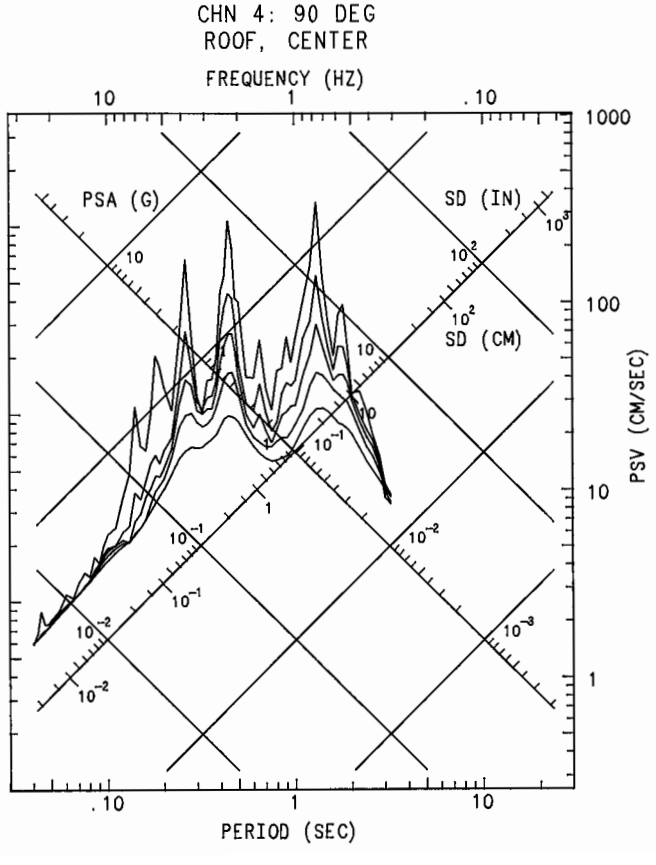
CHN 1: 0 DEG
BASEMENT, CENTER



CHN 3: 0 DEG
ROOF, CENTER



CHN 4: 90 DEG
ROOF, CENTER



HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

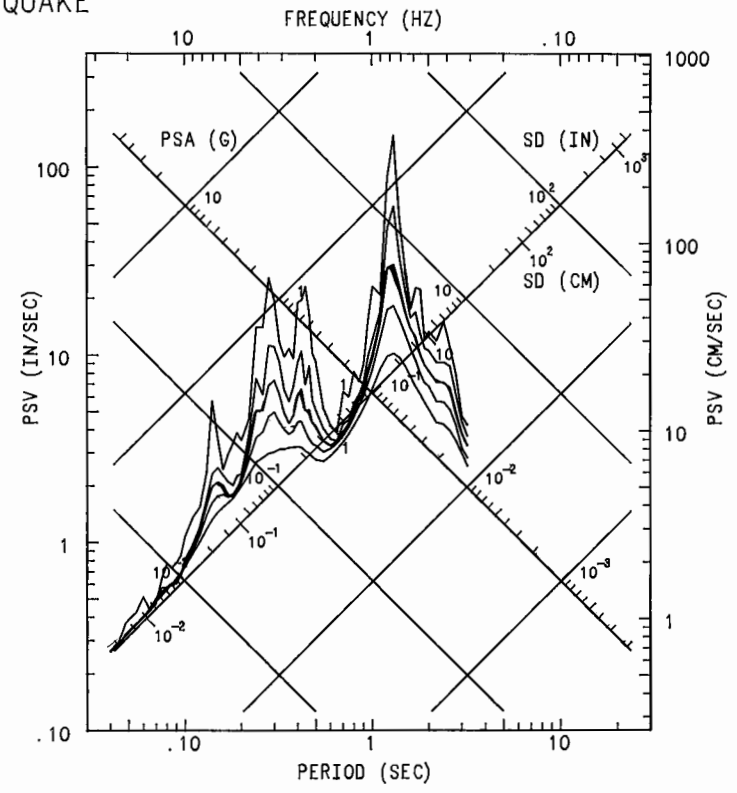
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

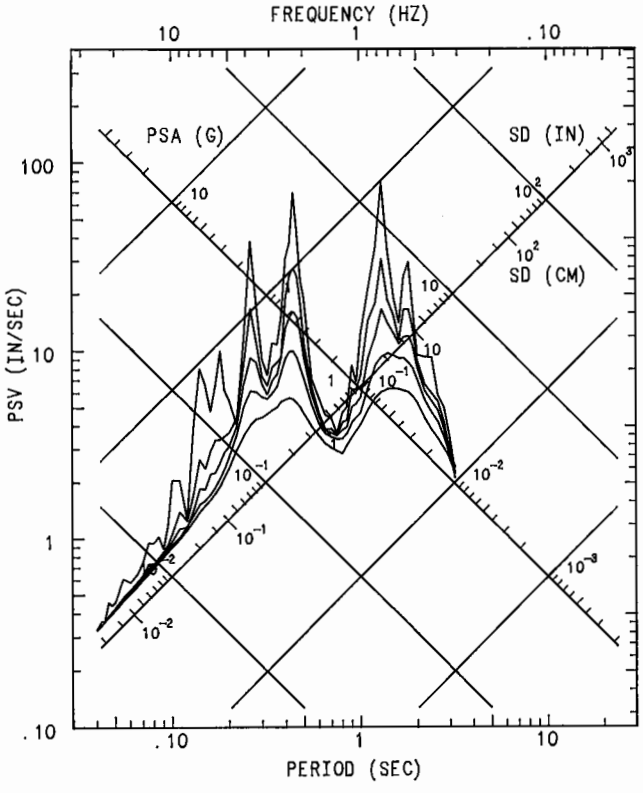
RECORD ID: 58354-C0188-89291.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

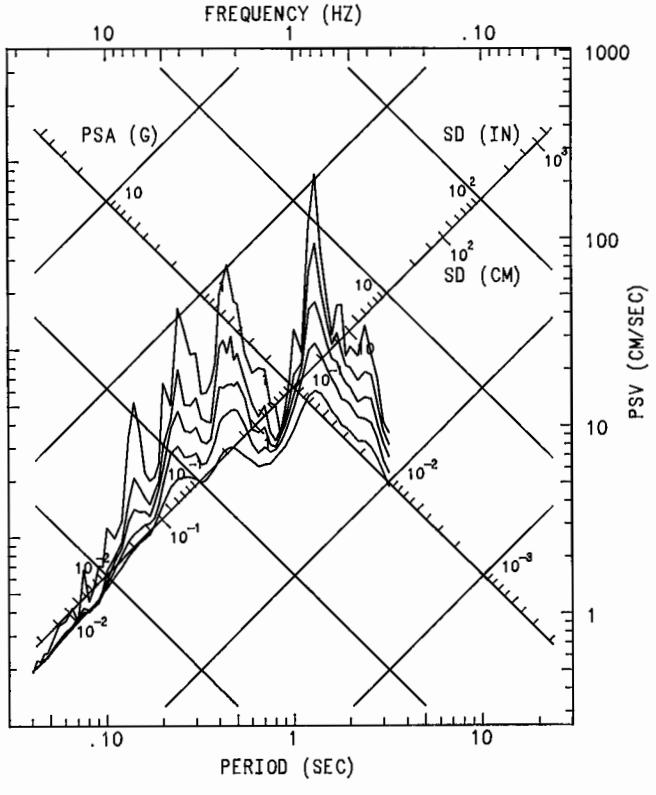
CHN 5: 0 DEG
5TH FLOOR, CENTER



CHN 6: 90 DEG
5TH FLOOR, CENTER



CHN 8: 0 DEG
2ND FLOOR, CENTER



HAYWARD – 13–STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

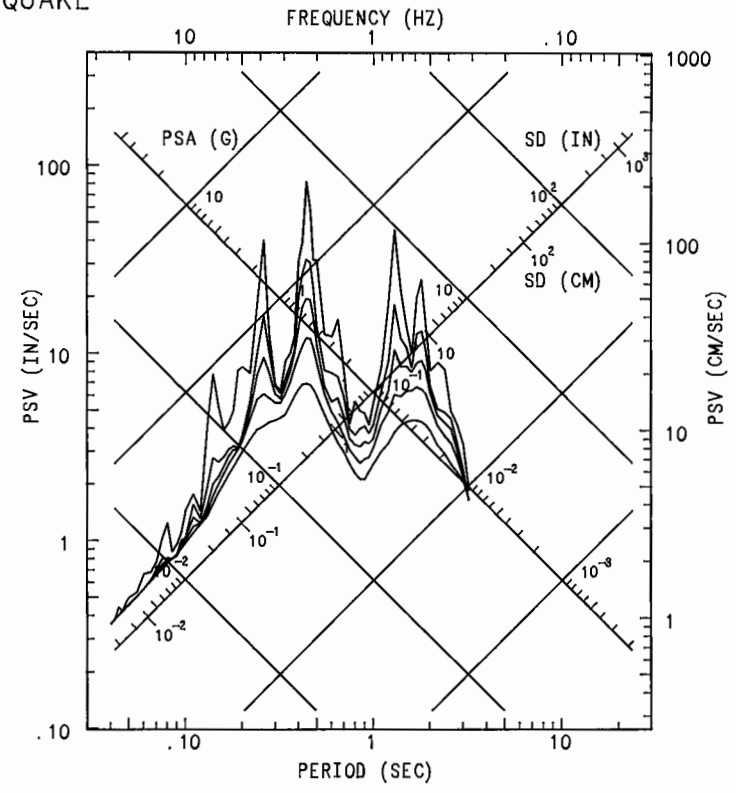
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

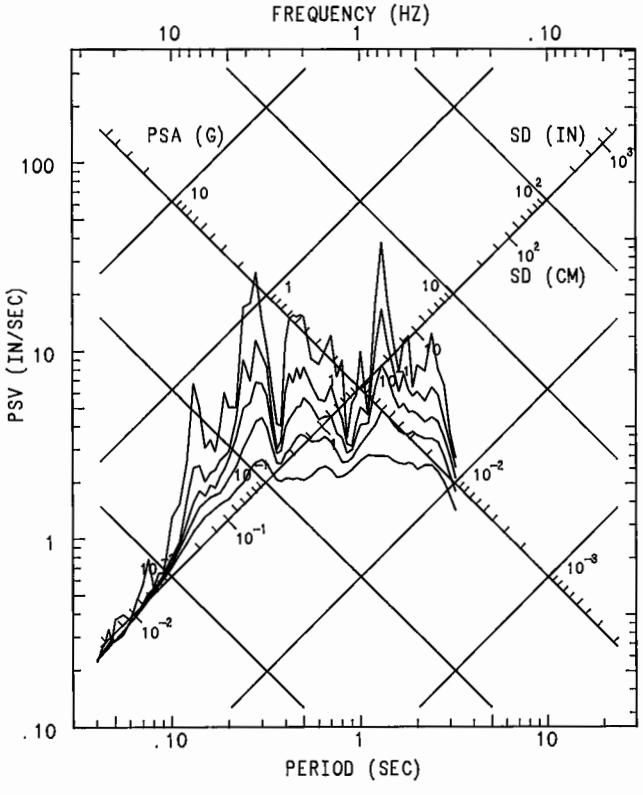
RECORD ID: 58354-C0188-89291.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

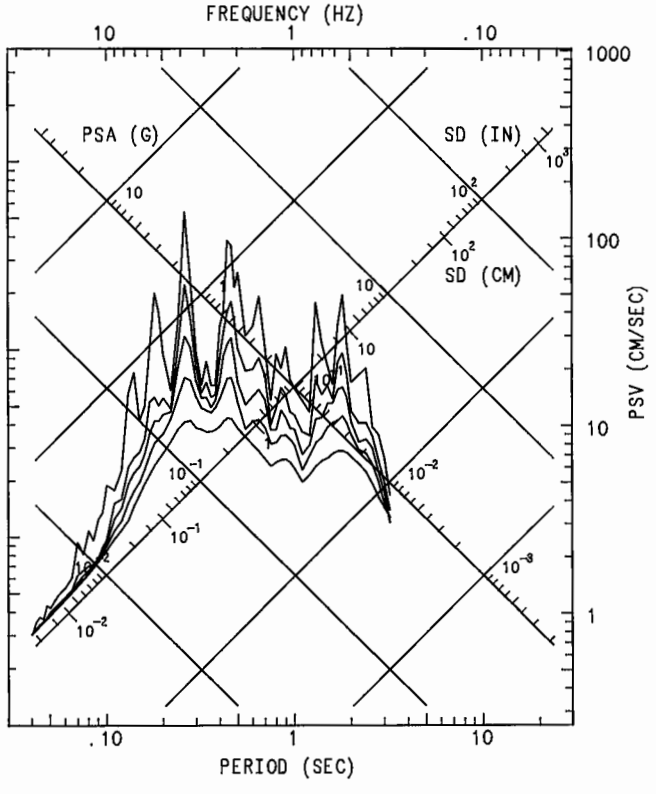
CHN 9: 90 DEG
2ND FLOOR, CENTER



CHN 11: 0 DEG
1ST FLOOR, CENTER



CHN 12: 90 DEG
1ST FLOOR, CENTER



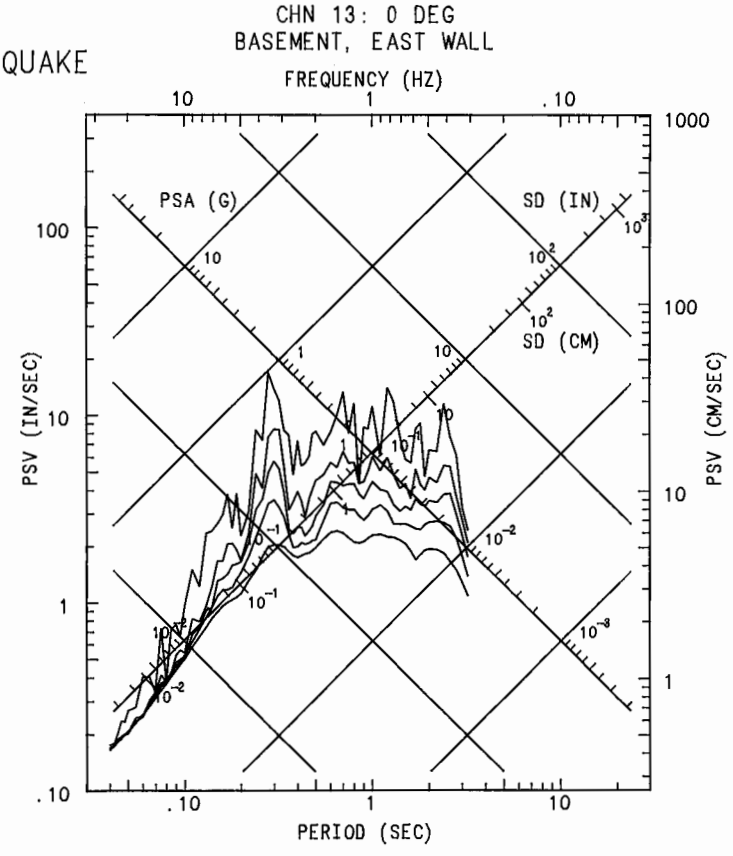
HAYWARD – 13-STORY SCHOOL OFFICE BLDG. : CSMIP S/N 354

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

RECORD ID: 58354-C0188-89291.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354

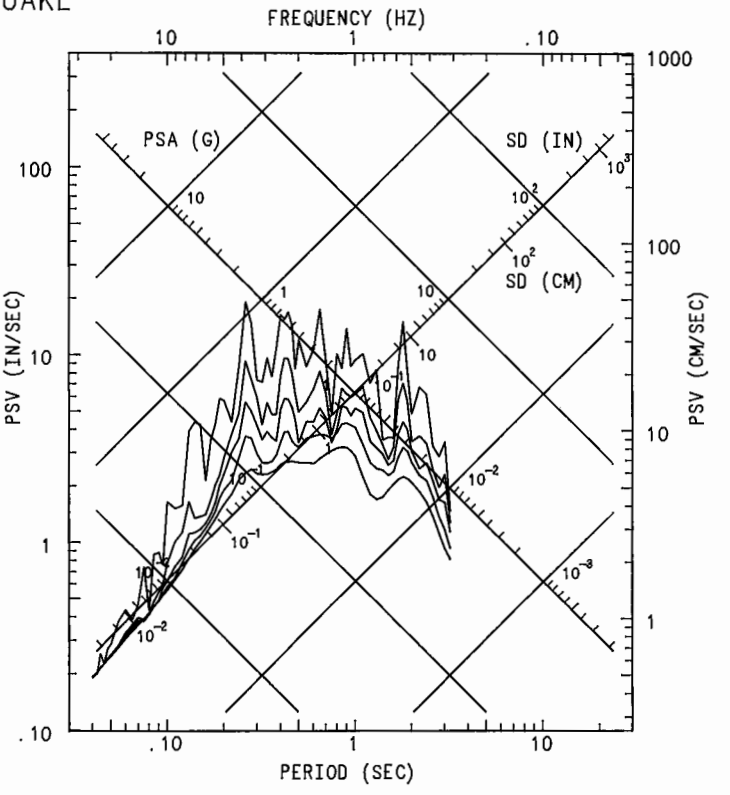
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

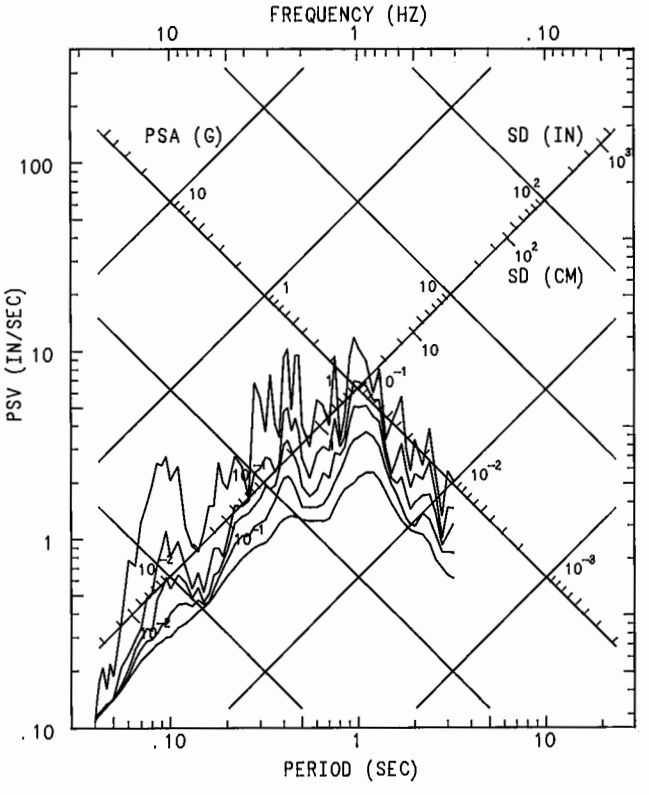
RECORD ID: 58354-S3489-89292.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

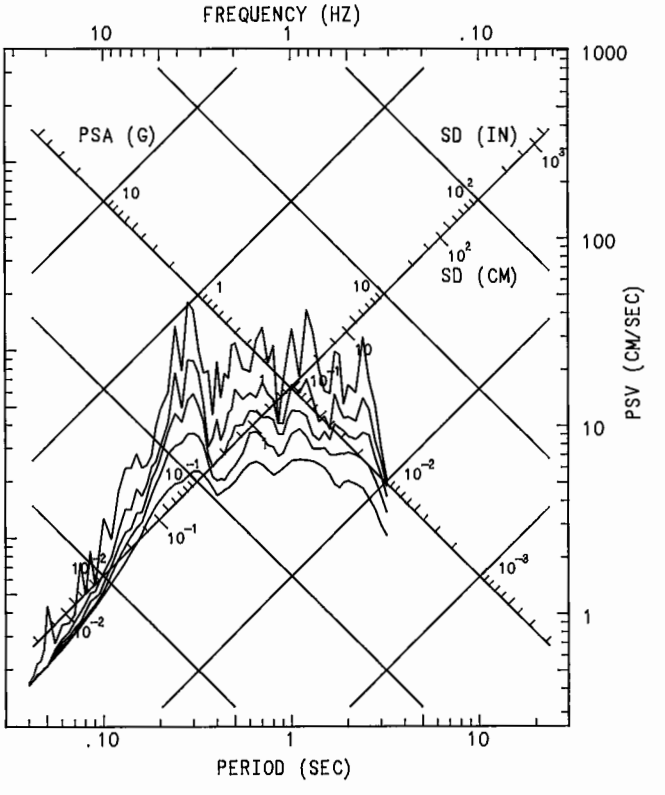
CHN 1 (STA CHN 14): 90 DEG
BASEMENT, CENTER



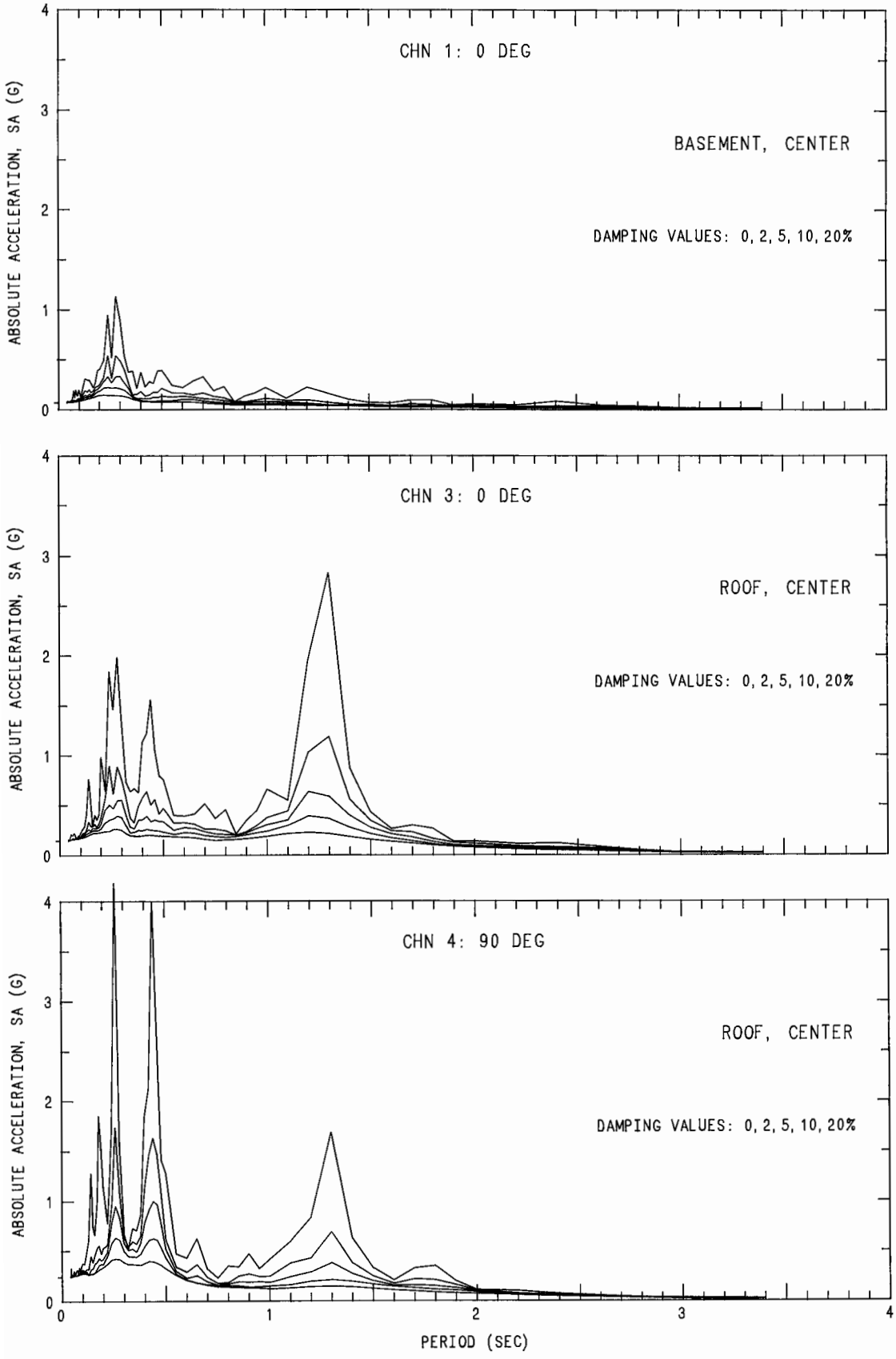
CHN 2 (STA CHN 15): UP
BASEMENT, CENTER



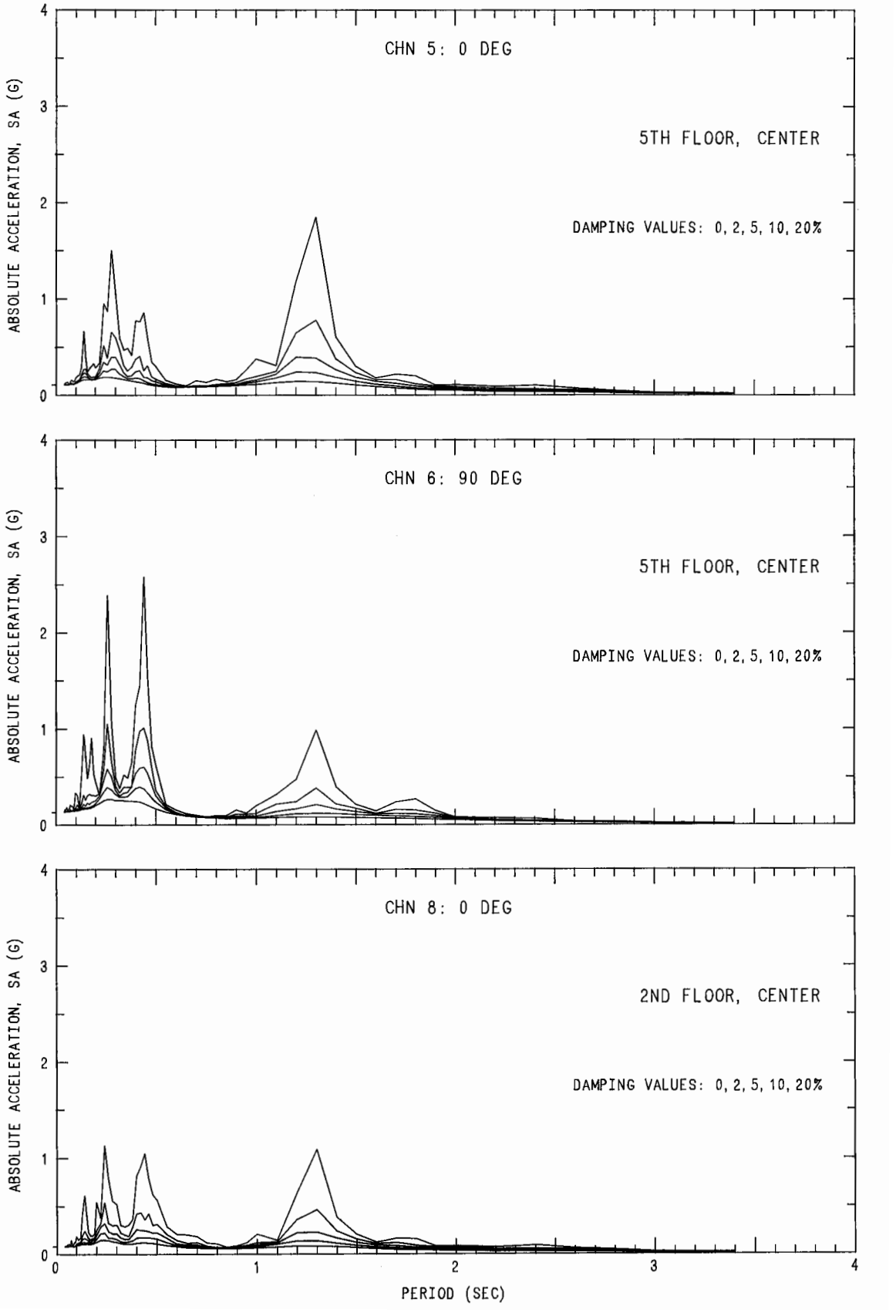
CHN 3 (STA CHN 16): 0 DEG
BASEMENT, CENTER



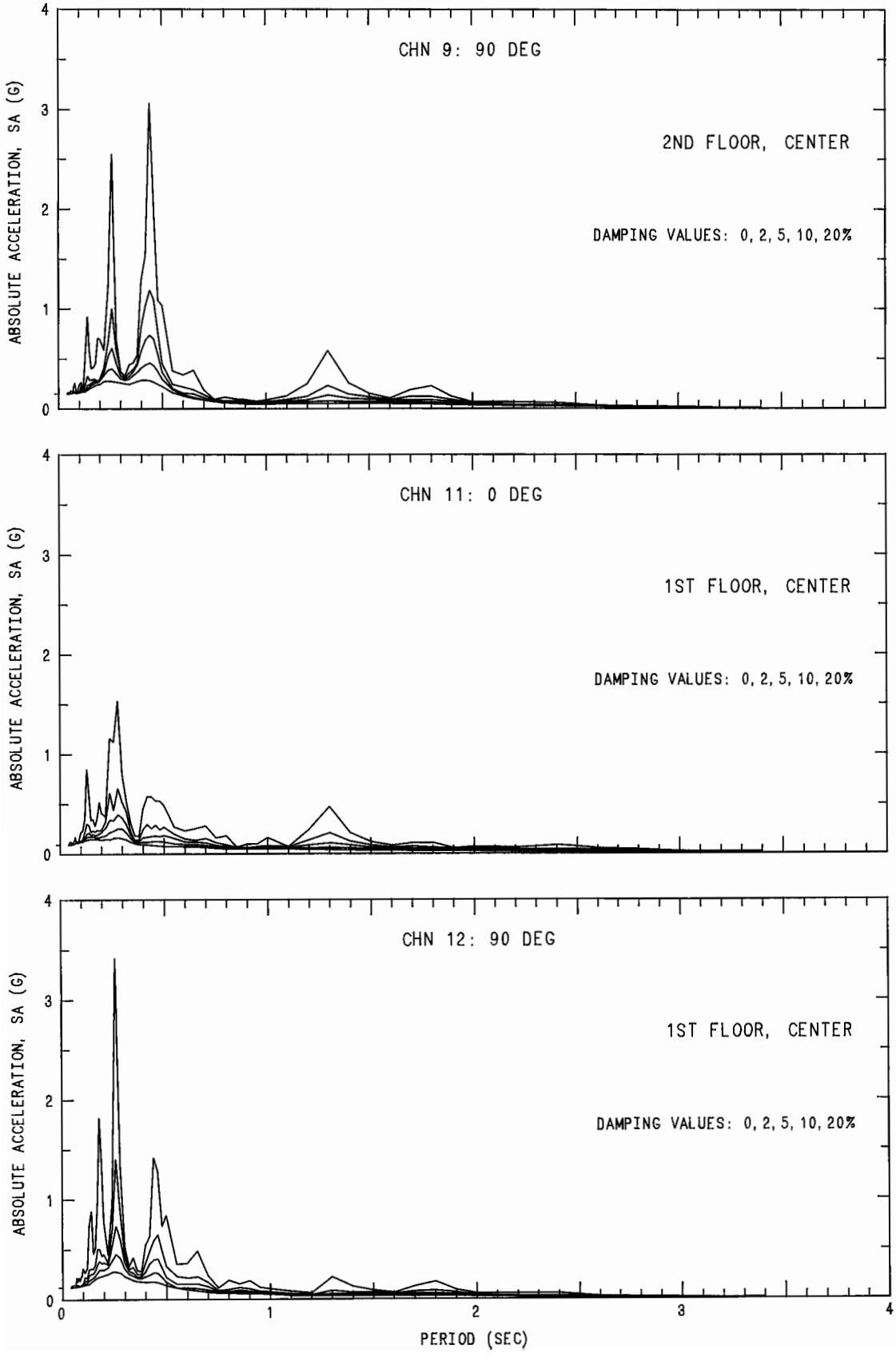
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13–STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58354–C0188–89291.02
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



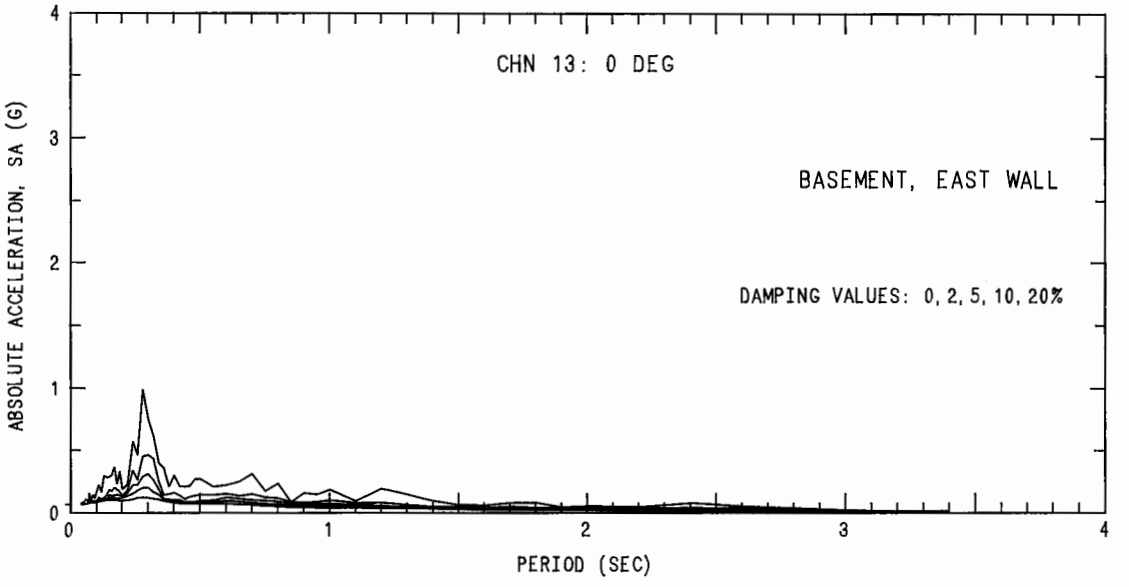
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58354-C0188-89291.02
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



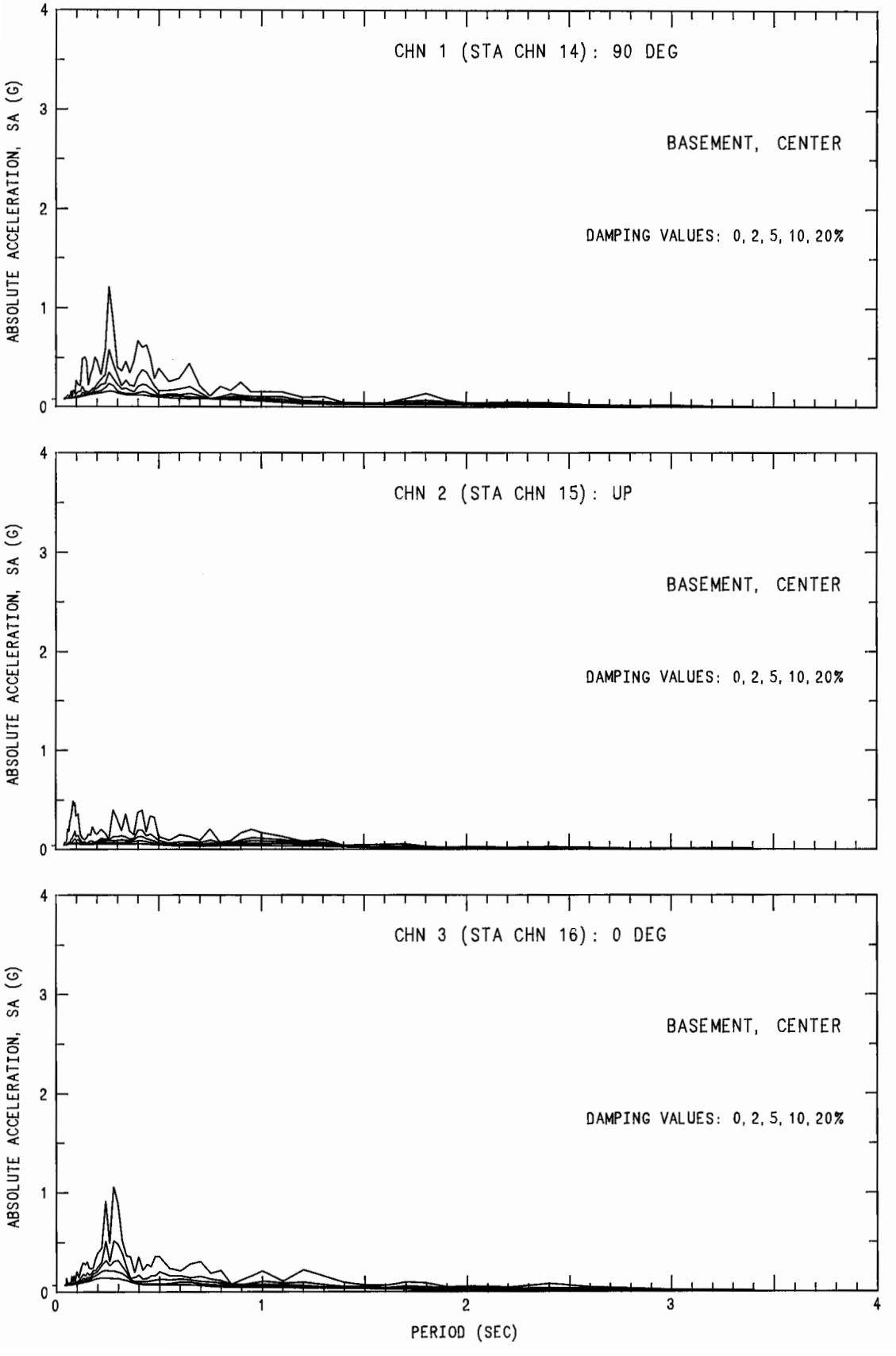
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58354-C0188-89291.02
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13–STORY SCHOOL OFFICE BLDG. : CSMIP S/N 354
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58354–C0188–89291.02
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



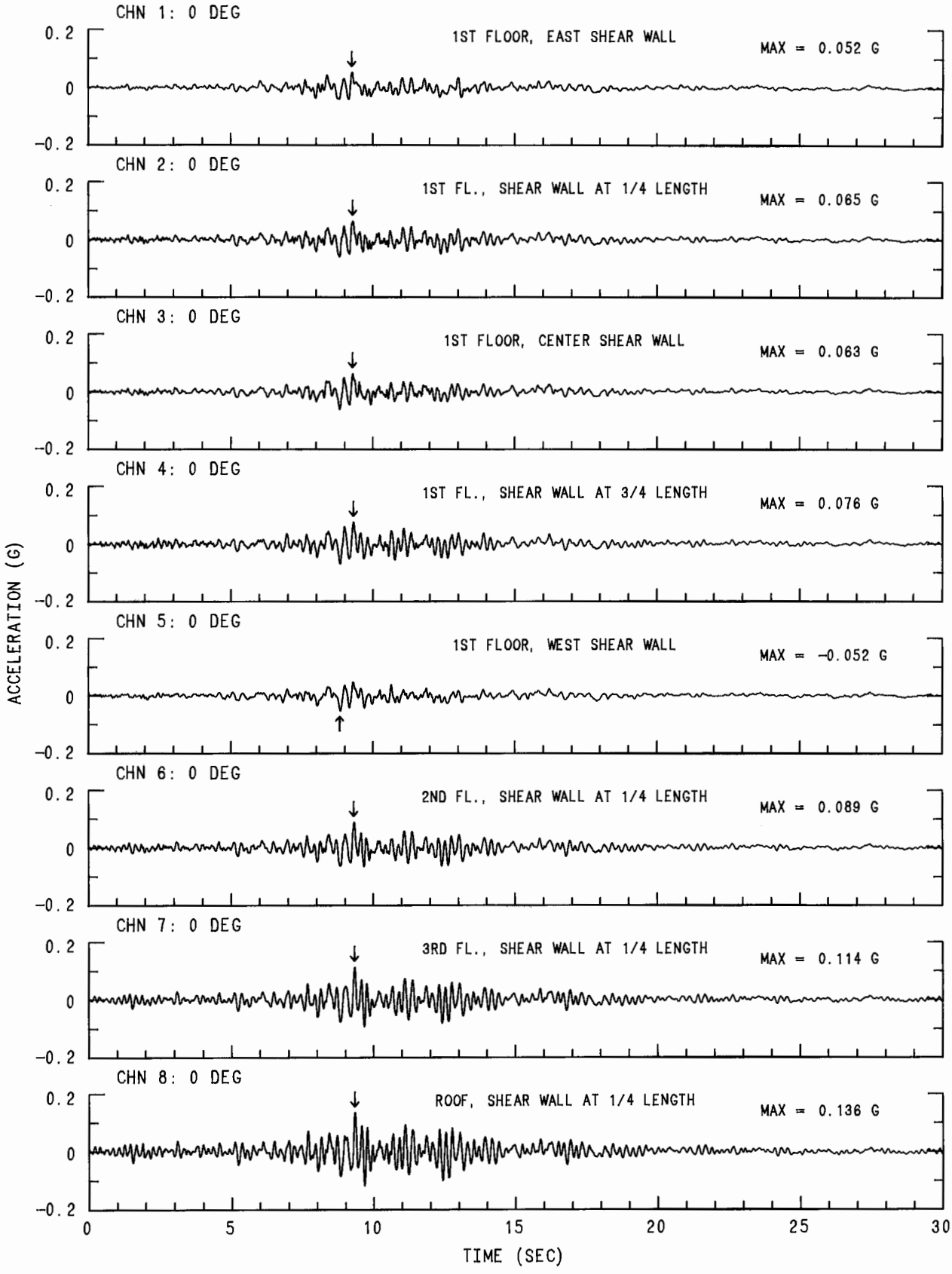
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 13-STORY SCHOOL OFFICE BLDG.: CSMIP S/N 354
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58354-S3489-89292.02
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

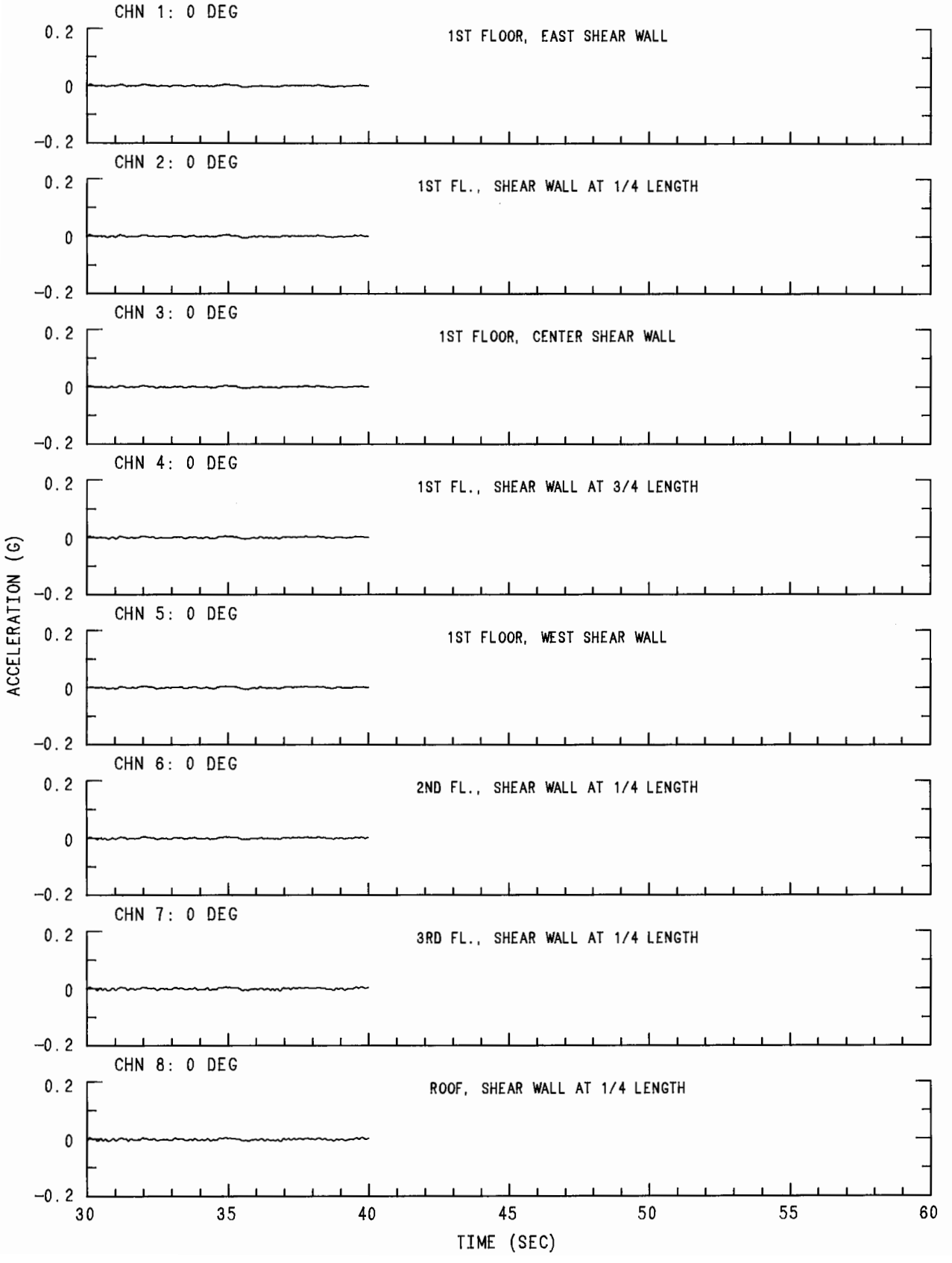
PHASE 1 ACCELERATION. RECORD ID: 58488–C0248–89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

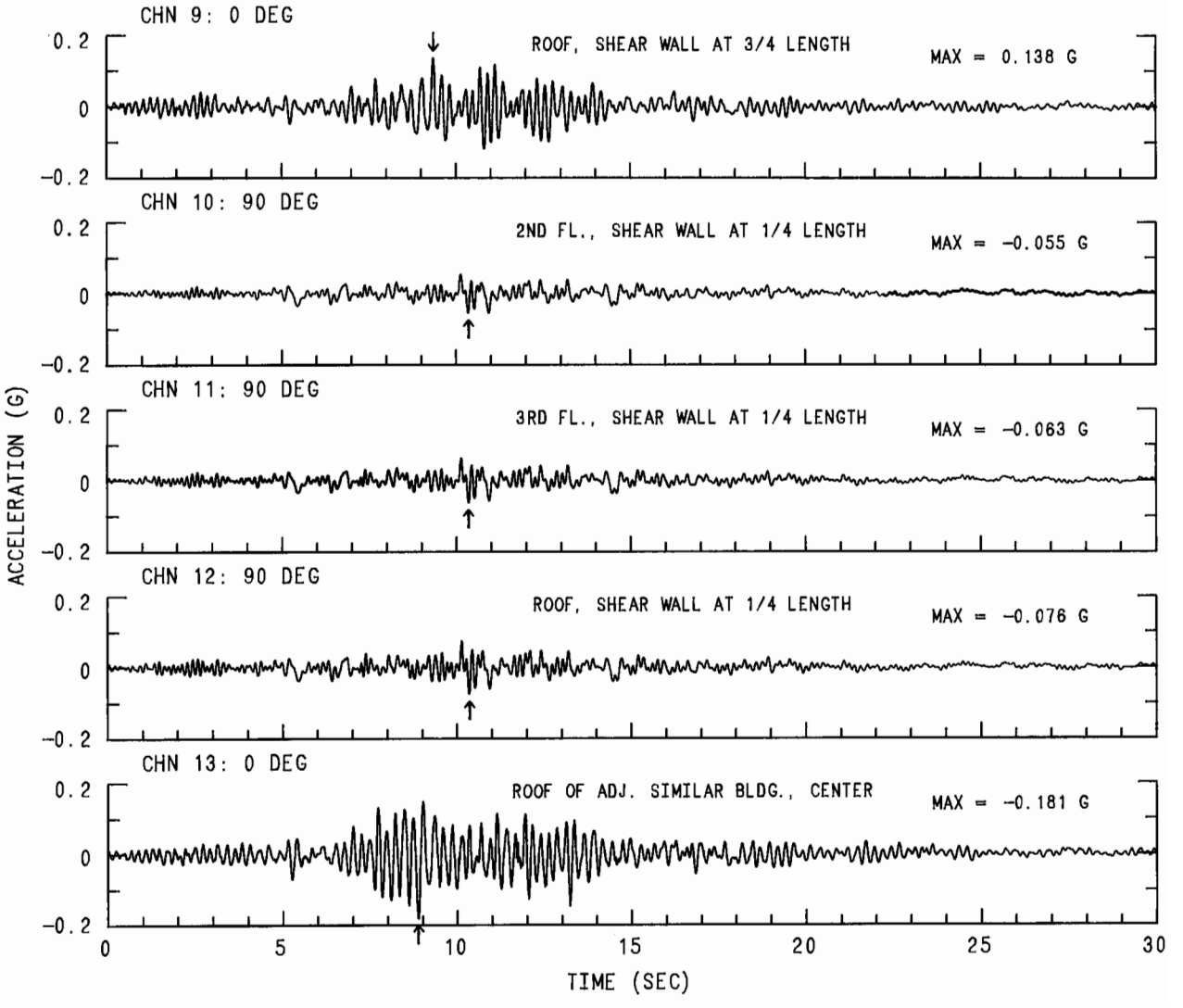
PHASE 1 ACCELERATION. RECORD ID: 58488-C0248-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

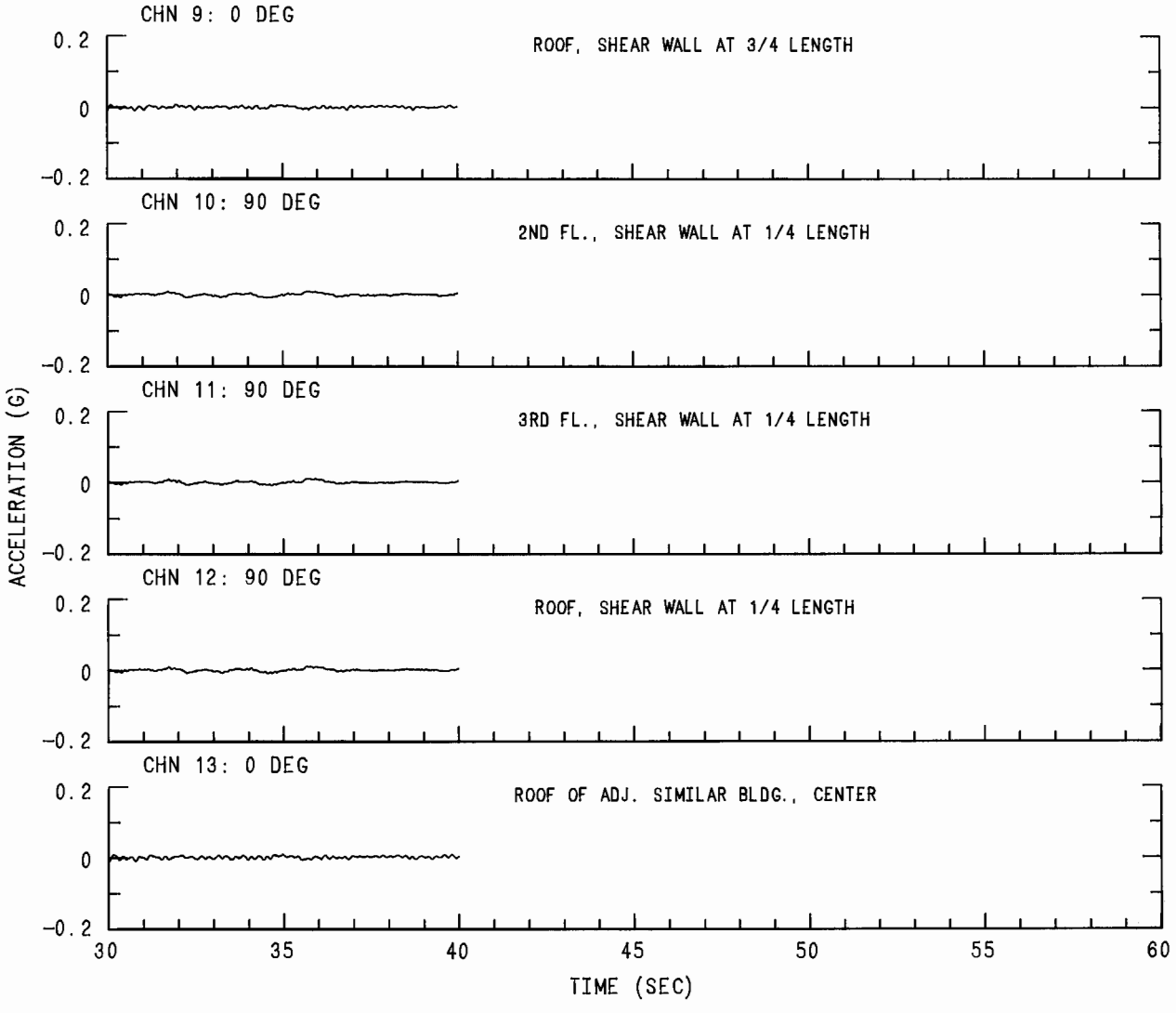
PHASE 1 ACCELERATION. RECORD ID: 58488–C0248–89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 4-STORY SCHOOL BLDG.: CSMIP S/N 488

PHASE 1 ACCELERATION. RECORD ID: 58488-C0248-89292.01

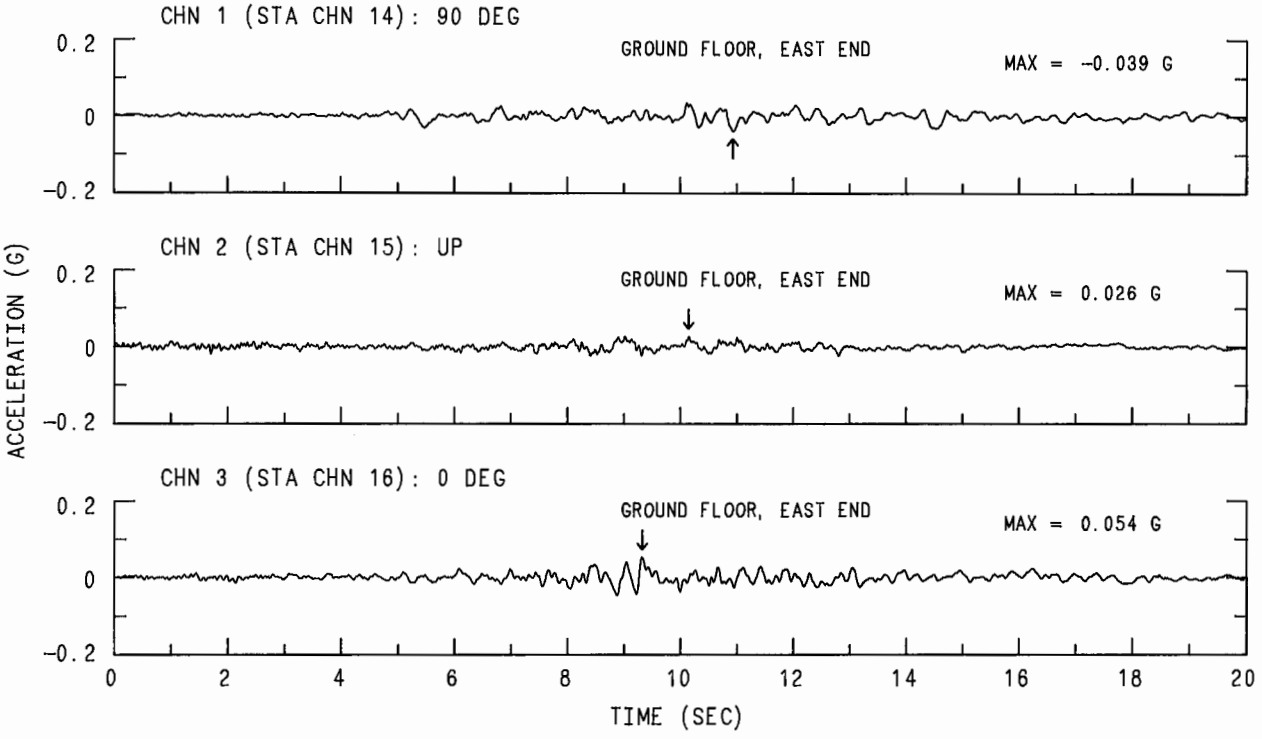


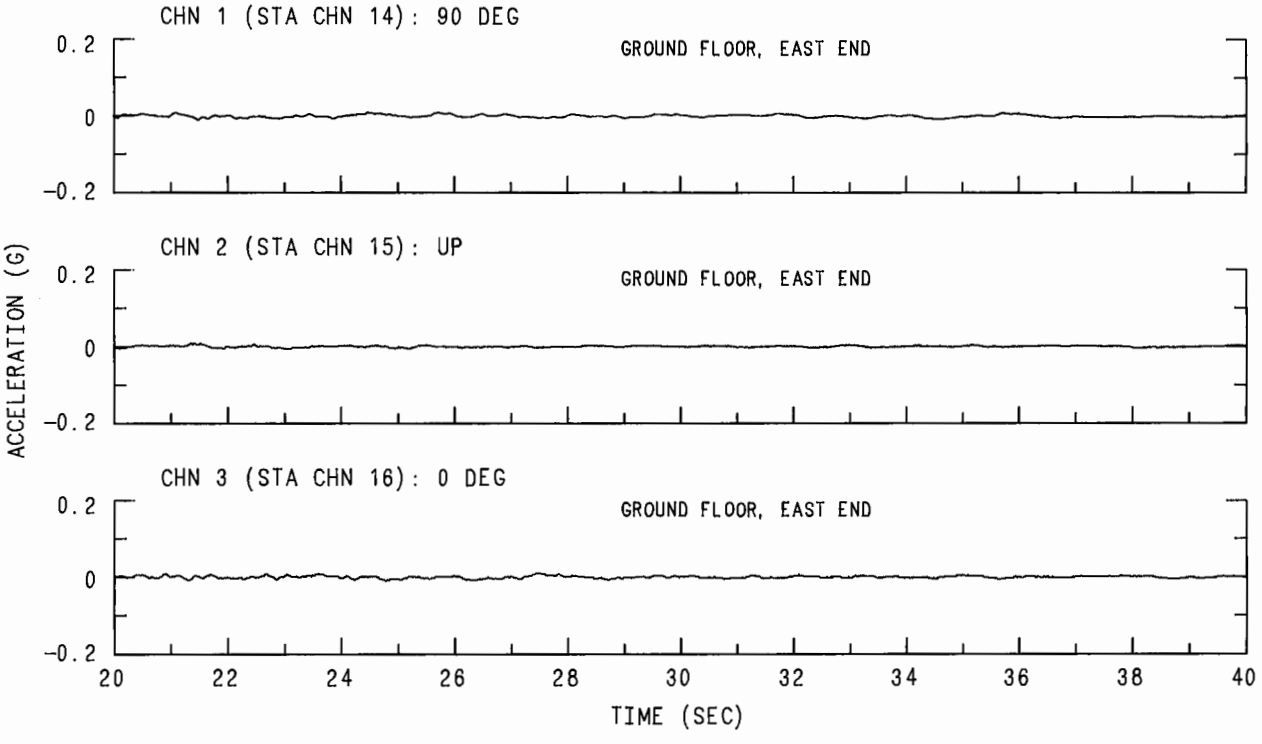
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

HAYWARD - 4-STORY SCHOOL BLDG.: CSMIP S/N 488

PHASE 1 ACCELERATION

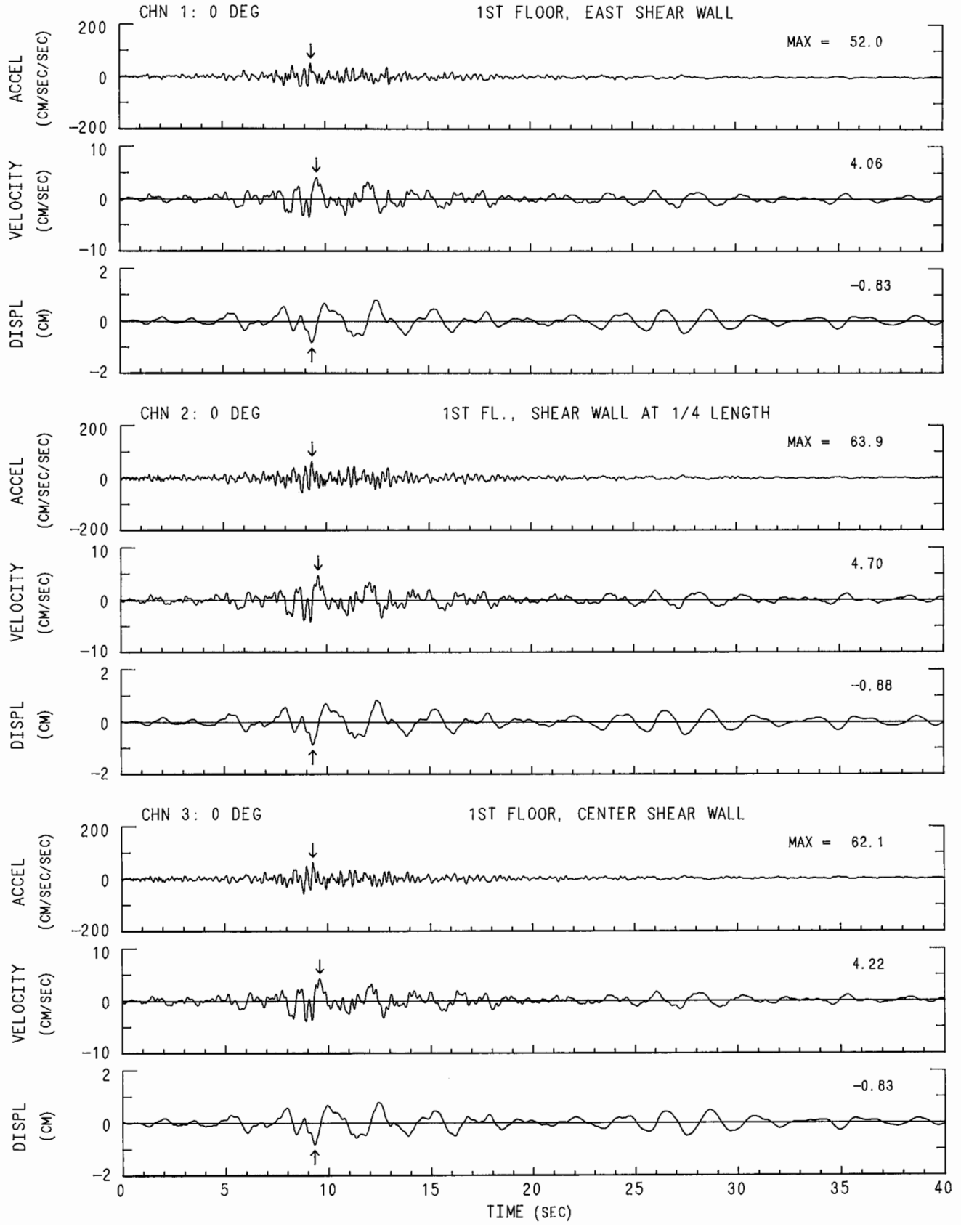
RECORD ID: 58488-S3508-89292.01





SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

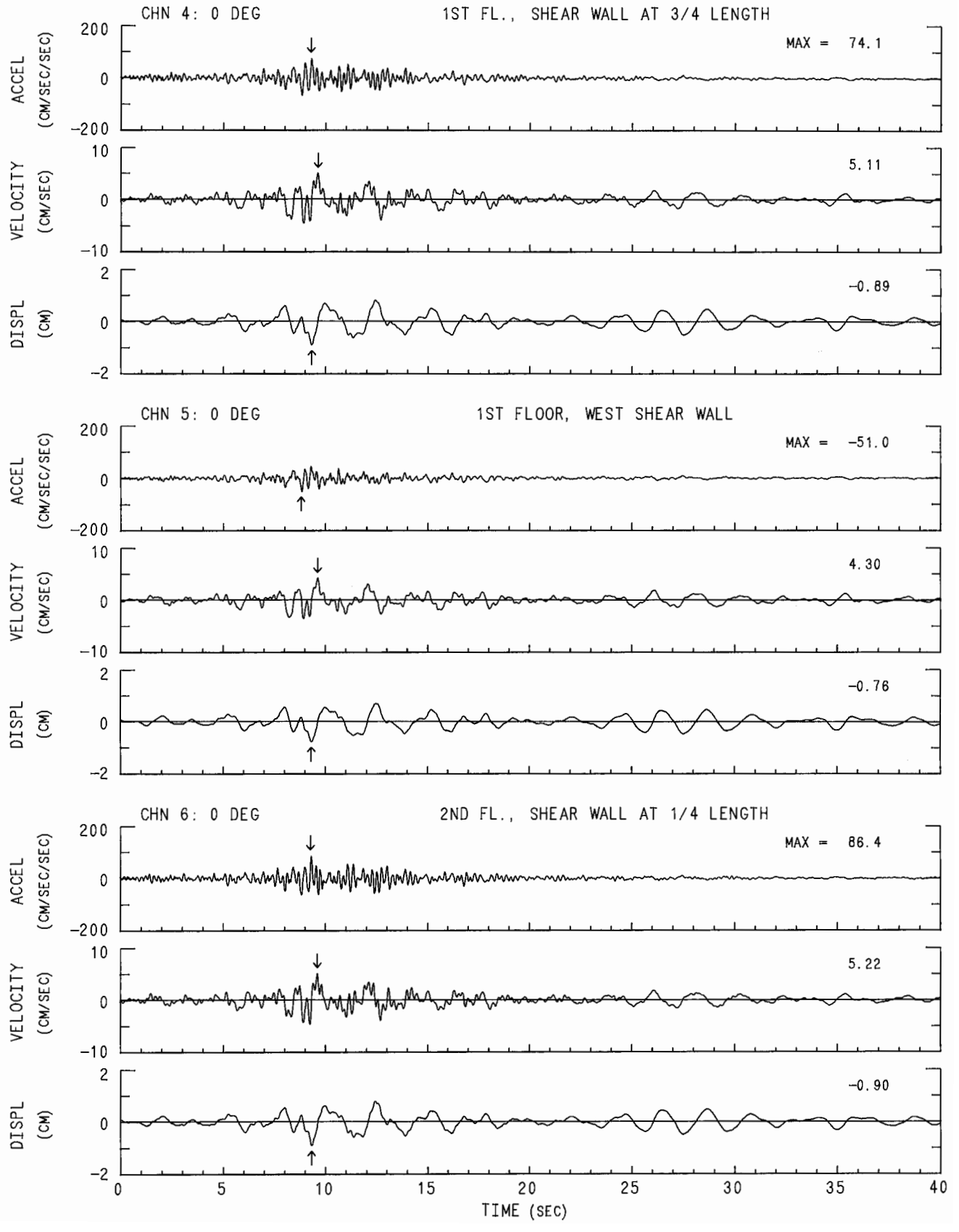
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58488-C0248-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4-STORY SCHOOL BLDG. : CSMIP S/N 488

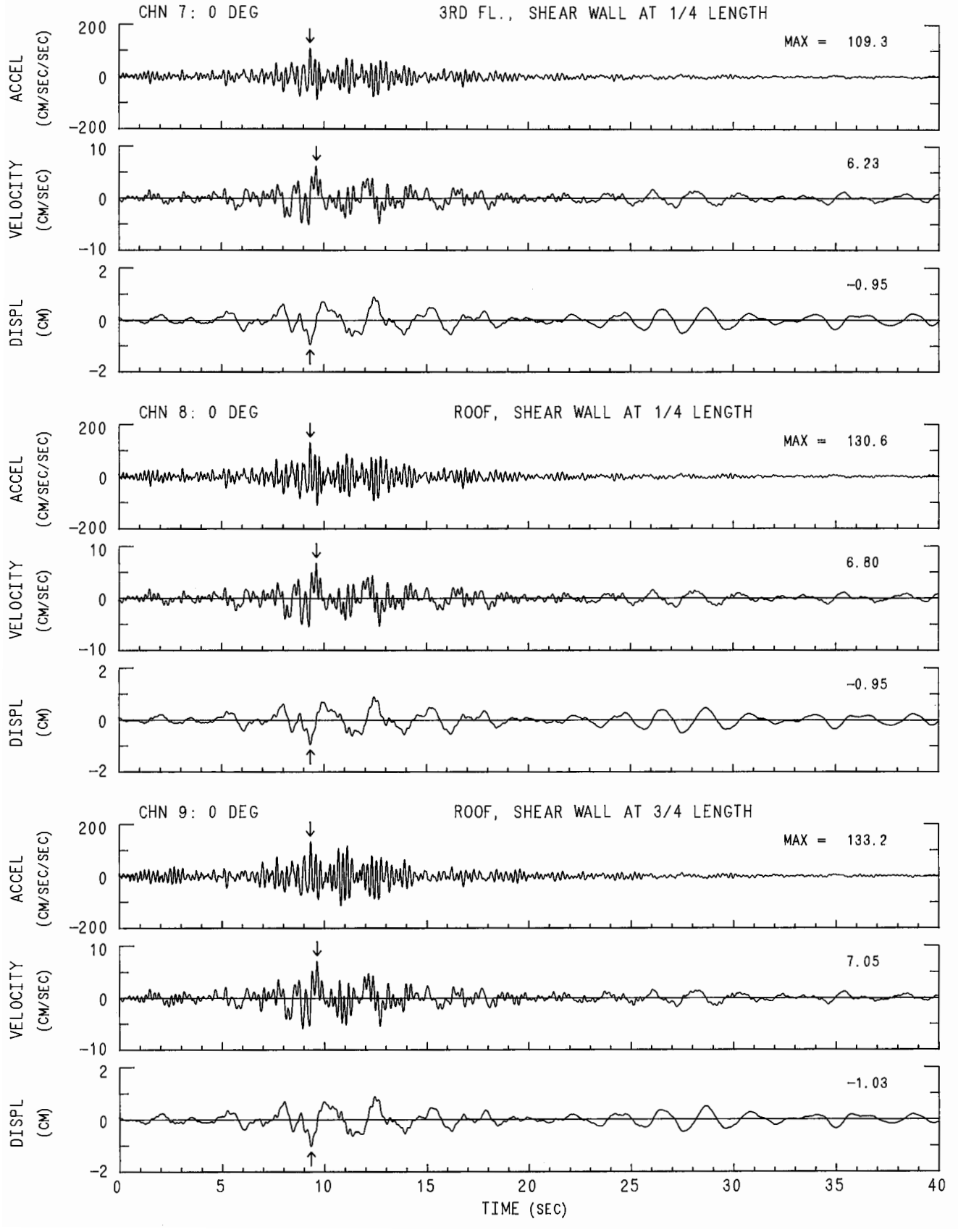
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58488-C0248-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

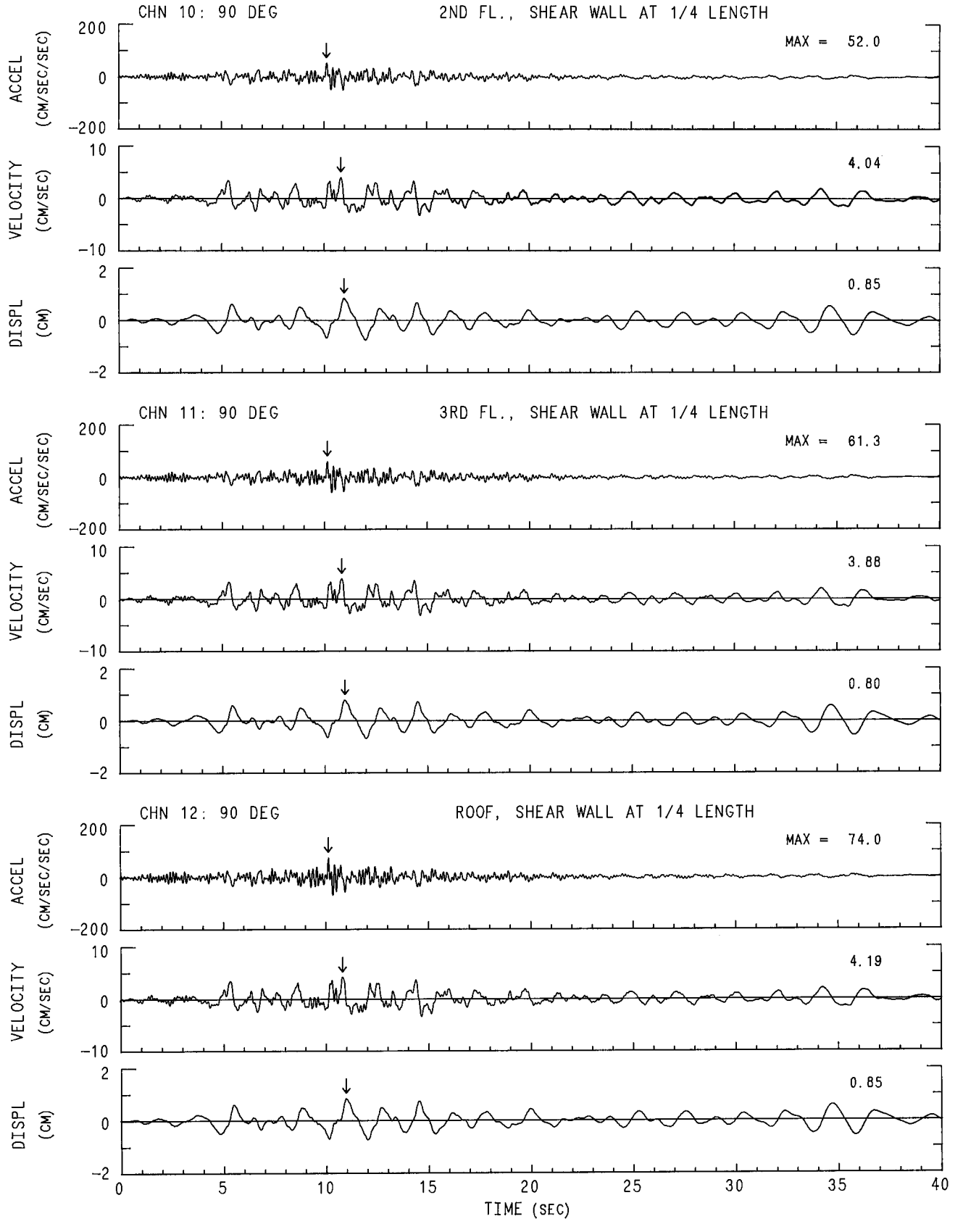
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58488-C0248-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

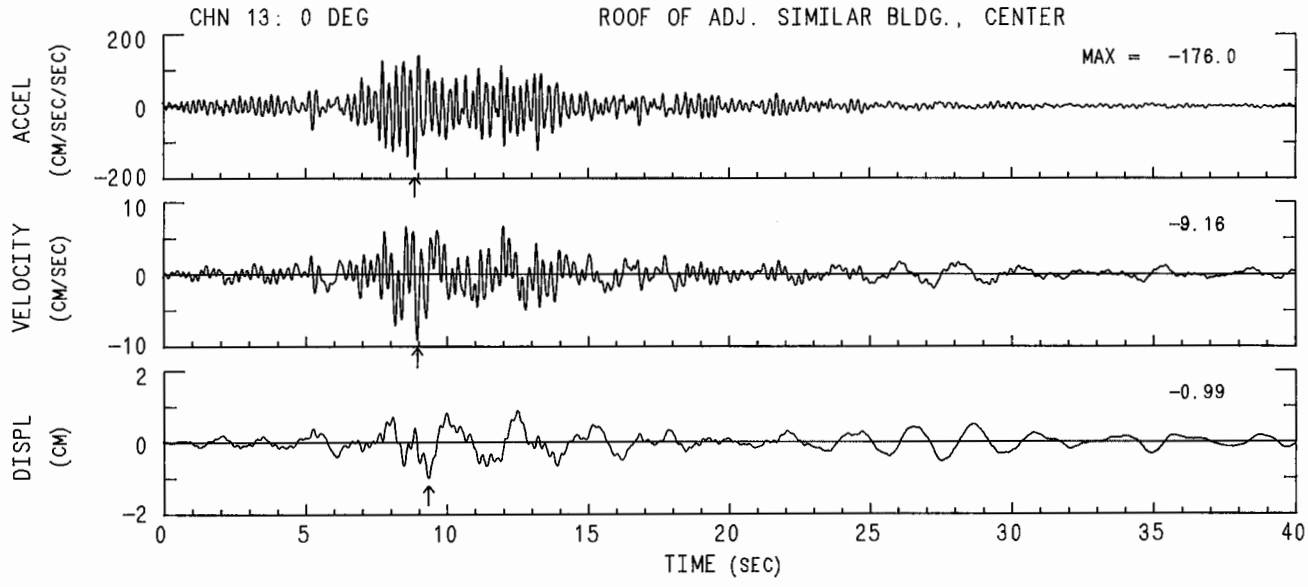
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58488-C0248-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

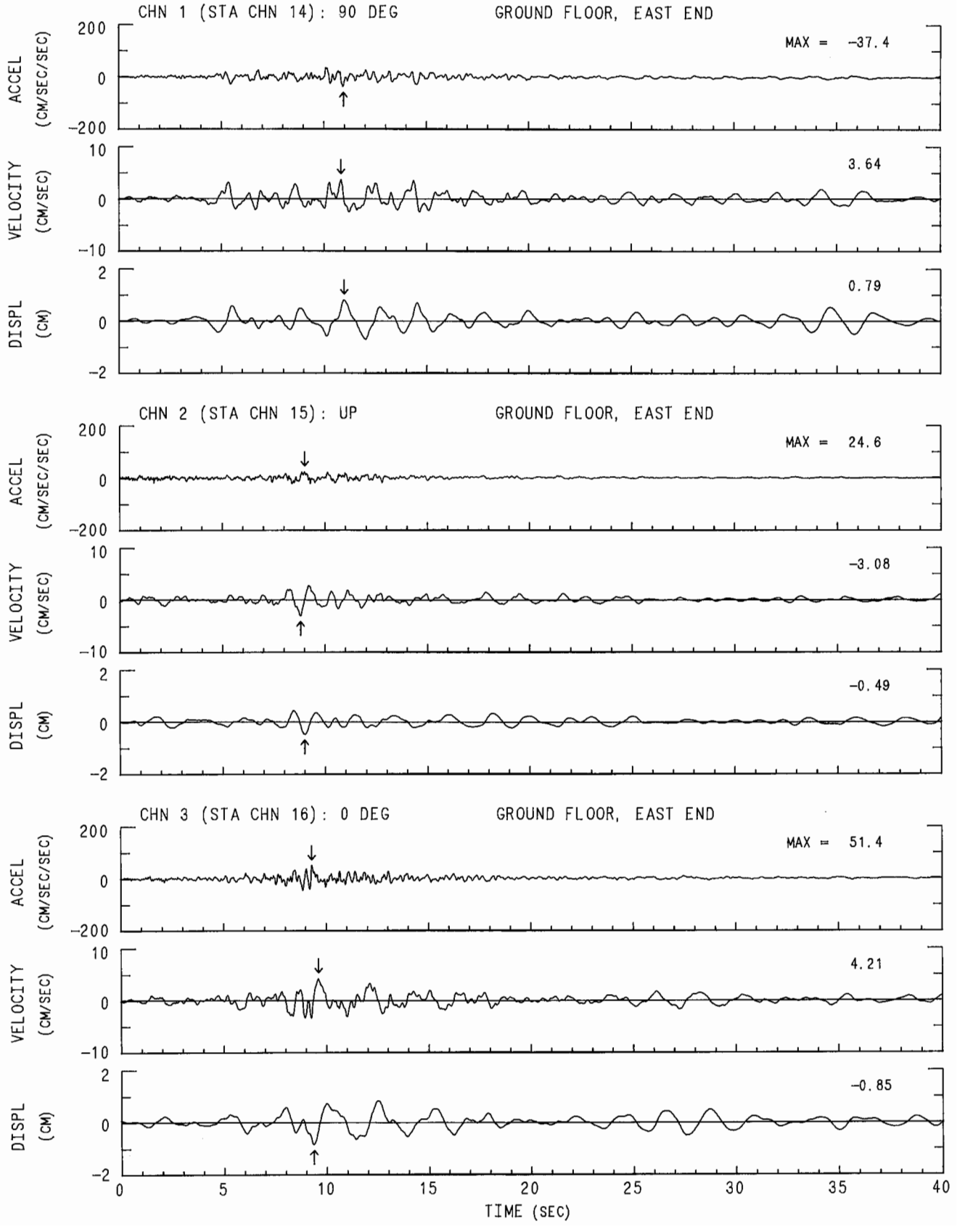
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58488–C0248–89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC) RECORD ID: 58488-S3508-89292.01



HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

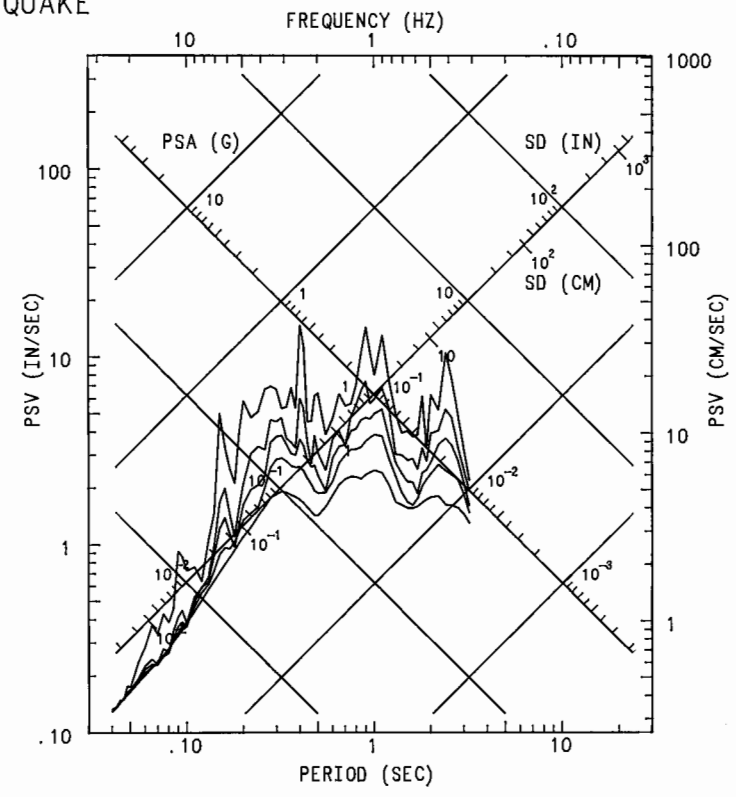
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

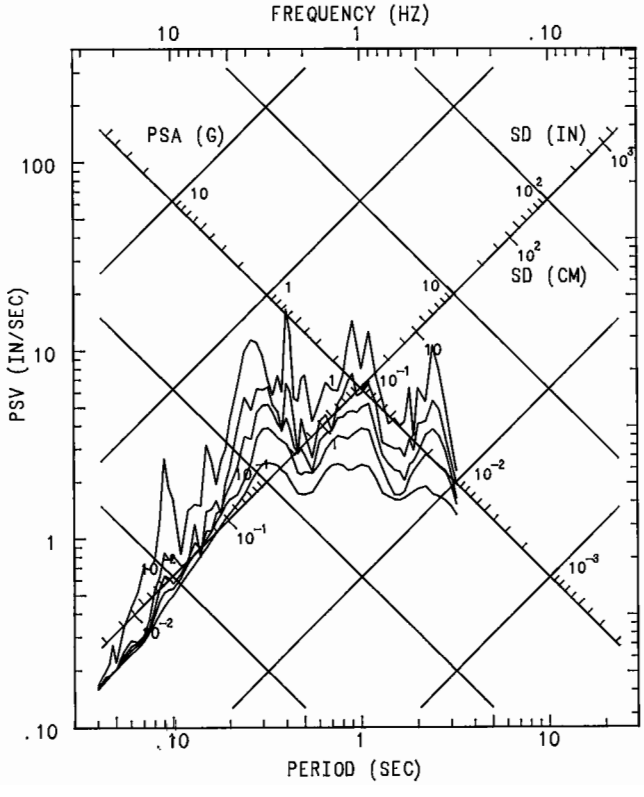
RECORD ID: 58488-C0248-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

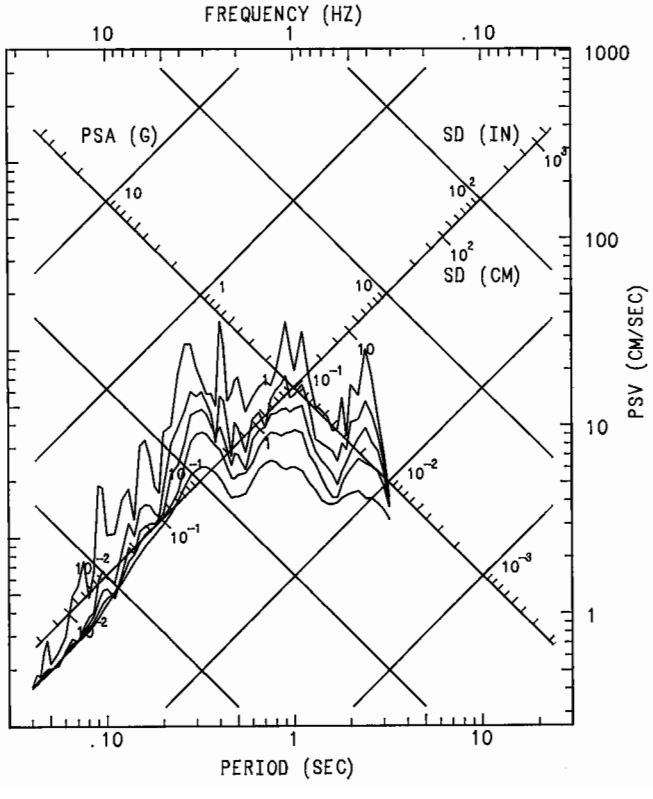
CHN 1: 0 DEG
1ST FLOOR, EAST SHEAR WALL



CHN 2: 0 DEG
1ST FL., SHEAR WALL AT 1/4 LENGTH



CHN 3: 0 DEG
1ST FLOOR, CENTER SHEAR WALL



HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

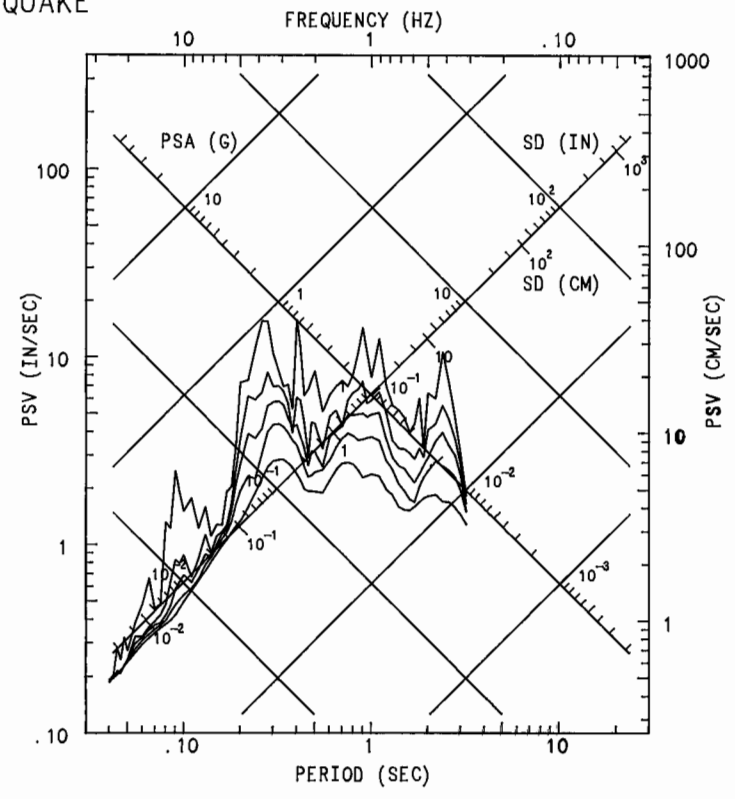
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

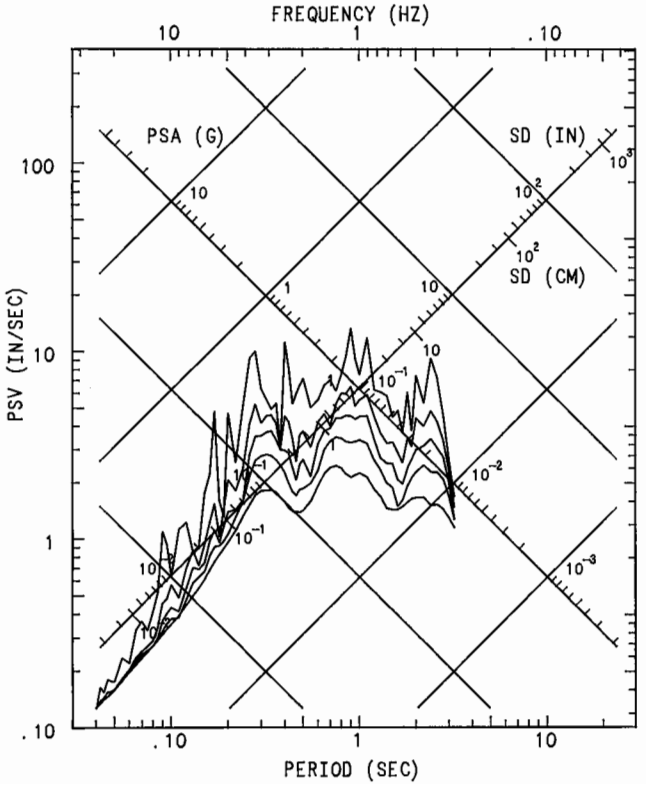
RECORD ID: 58488-C0248-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

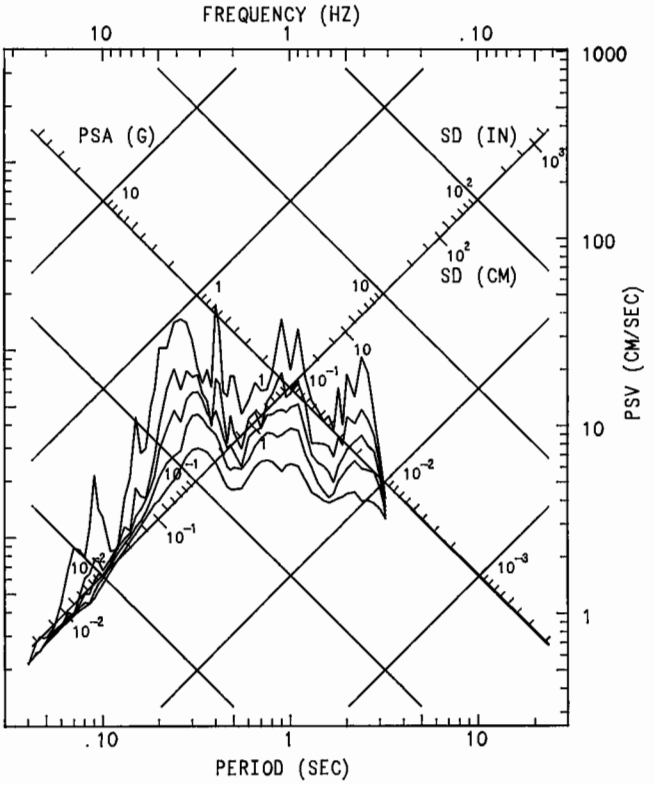
CHN 4: 0 DEG
1ST FL., SHEAR WALL AT 3/4 LENGTH



CHN 5: 0 DEG
1ST FLOOR, WEST SHEAR WALL



CHN 6: 0 DEG
2ND FL., SHEAR WALL AT 1/4 LENGTH



HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

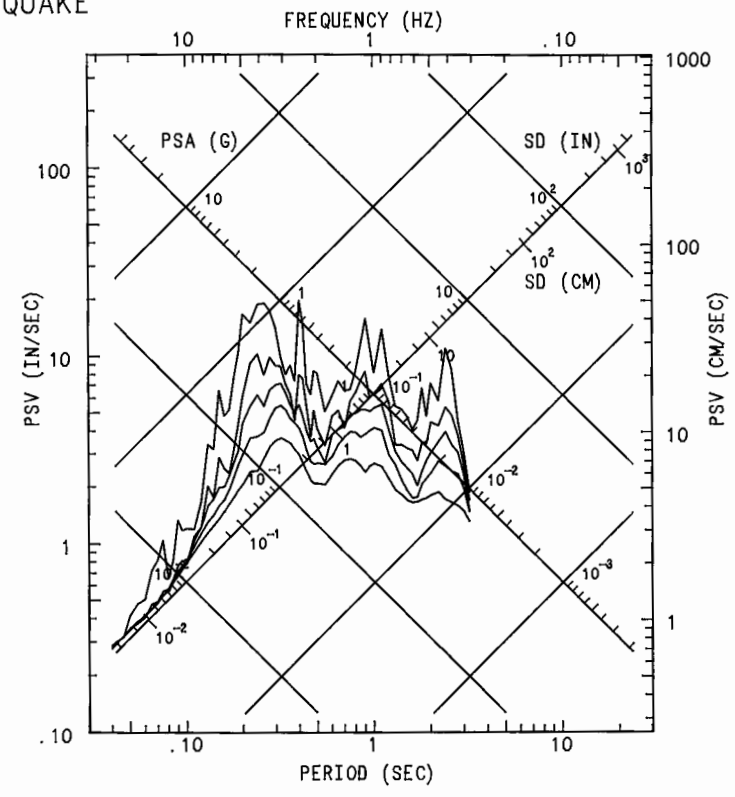
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

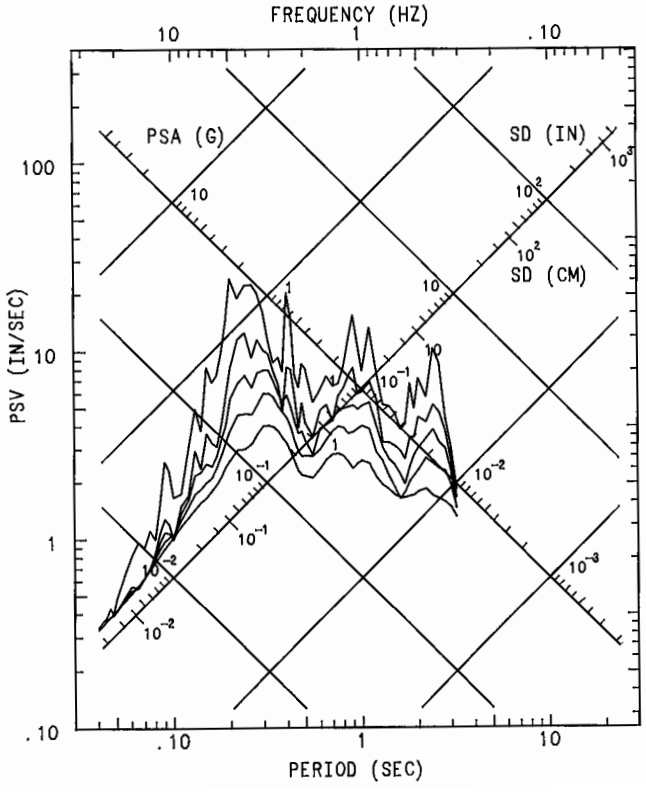
RECORD ID: 58488-C0248-89292.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

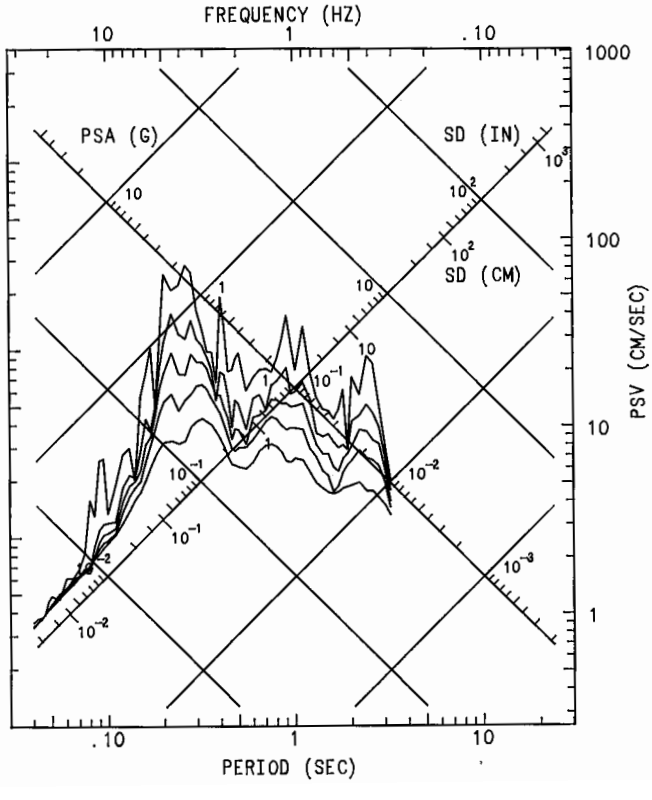
CHN 7: 0 DEG
3RD FL., SHEAR WALL AT 1/4 LENGTH



CHN 8: 0 DEG
ROOF, SHEAR WALL AT 1/4 LENGTH



CHN 9: 0 DEG
ROOF, SHEAR WALL AT 3/4 LENGTH



HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

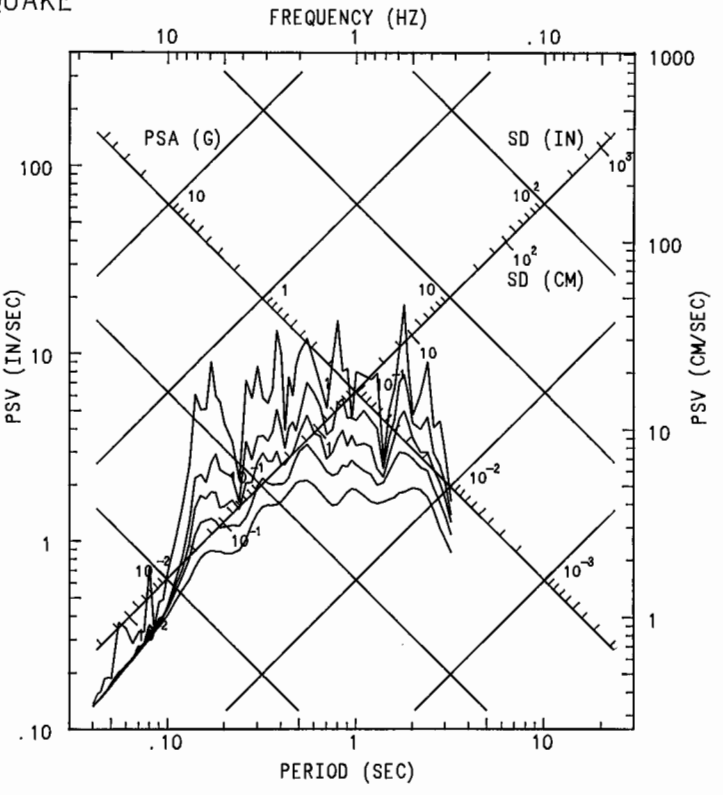
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

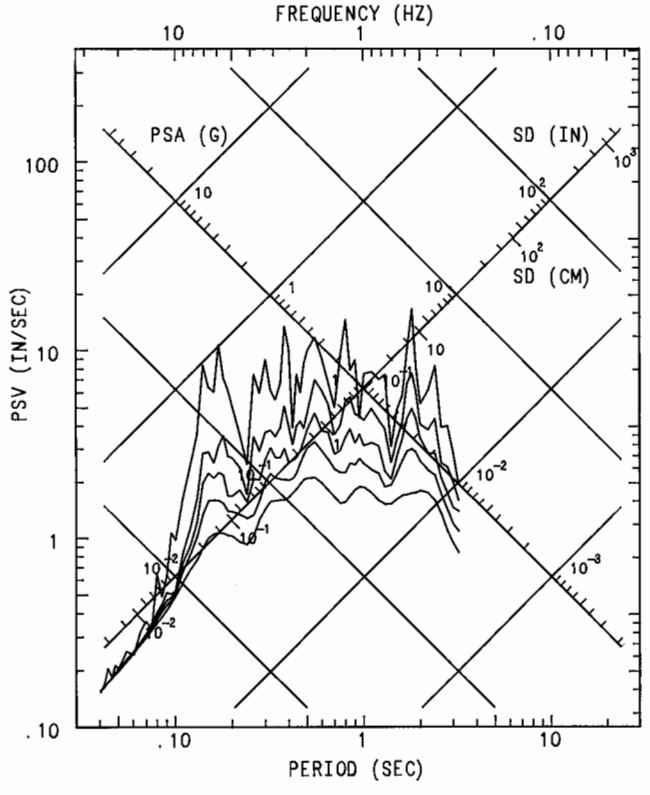
RECORD ID: 58488-C0248-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

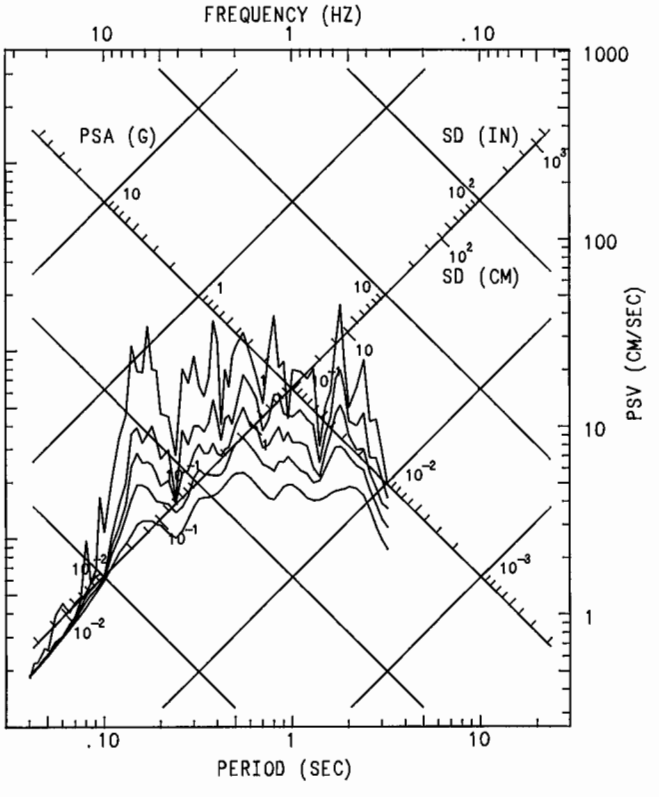
CHN 10: 90 DEG
2ND FL., SHEAR WALL AT 1/4 LENGTH



CHN 11: 90 DEG
3RD FL., SHEAR WALL AT 1/4 LENGTH



CHN 12: 90 DEG
ROOF, SHEAR WALL AT 1/4 LENGTH



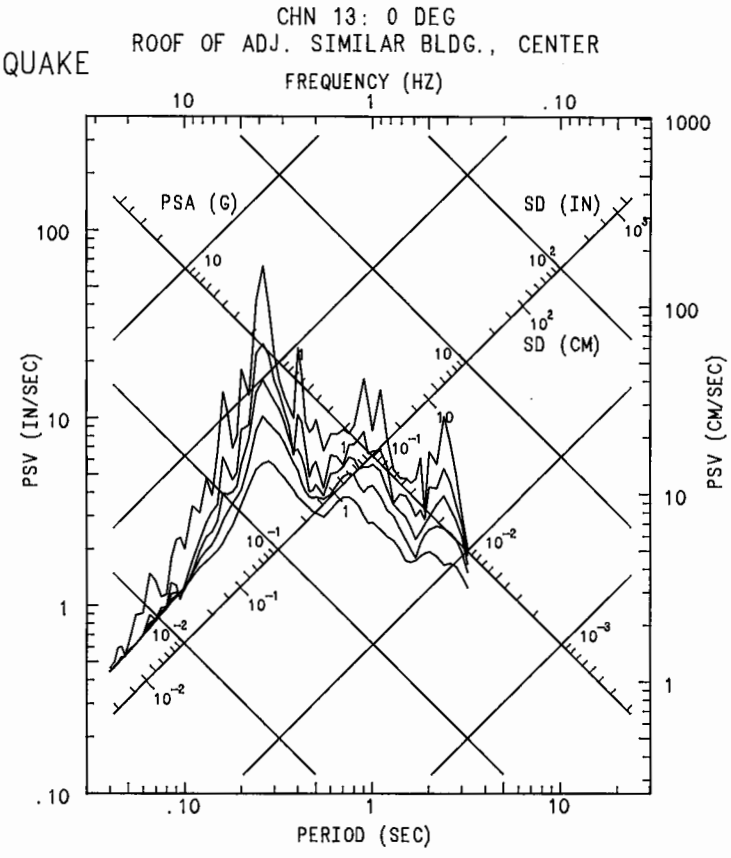
HAYWARD - 4-STORY SCHOOL BLDG. : CSMIP S/N 488

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

RECORD ID: 58488-C0248-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

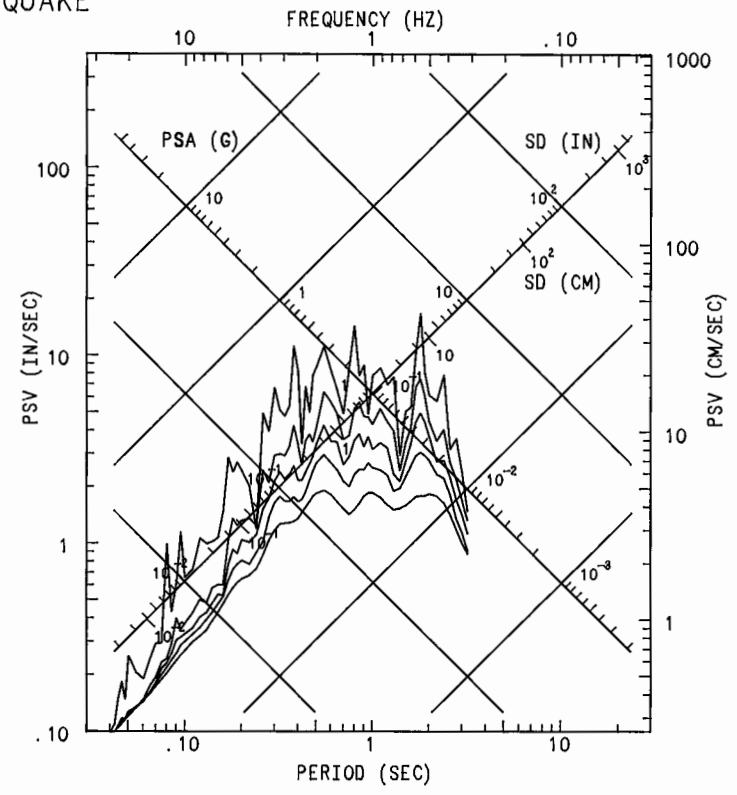
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ
(0.04 TO 2.94 SEC)

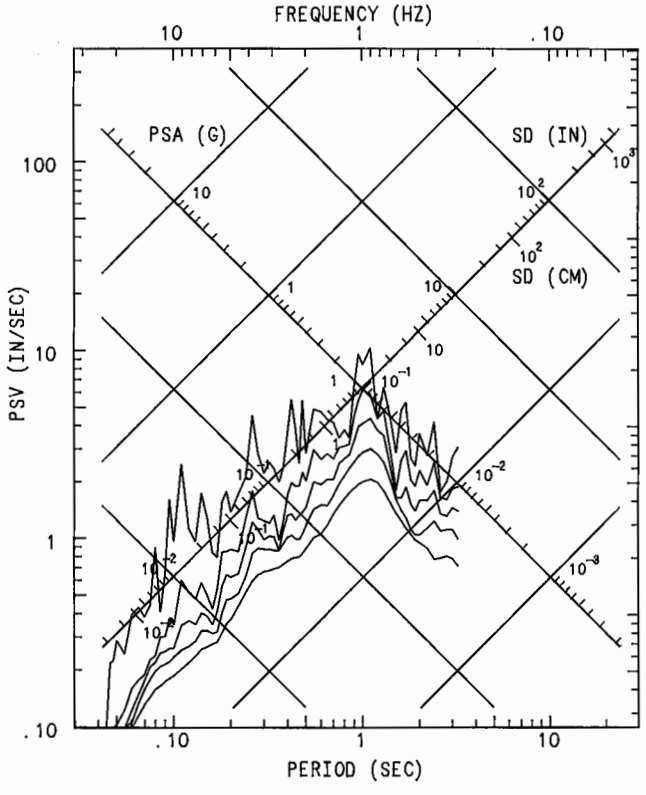
RECORD ID: 58488-S3508-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

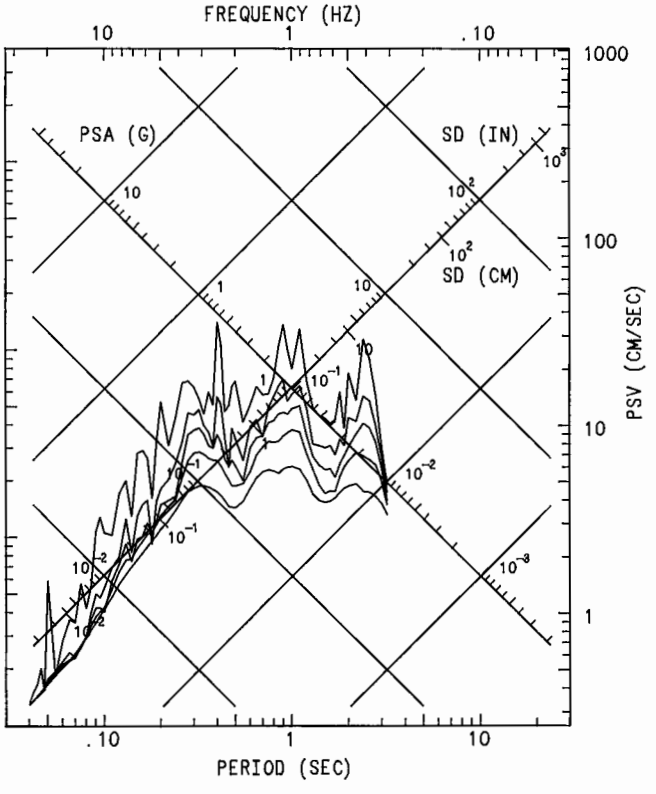
CHN 1 (STA CHN 14): 90 DEG
GROUND FLOOR, EAST END



CHN 2 (STA CHN 15): UP
GROUND FLOOR, EAST END

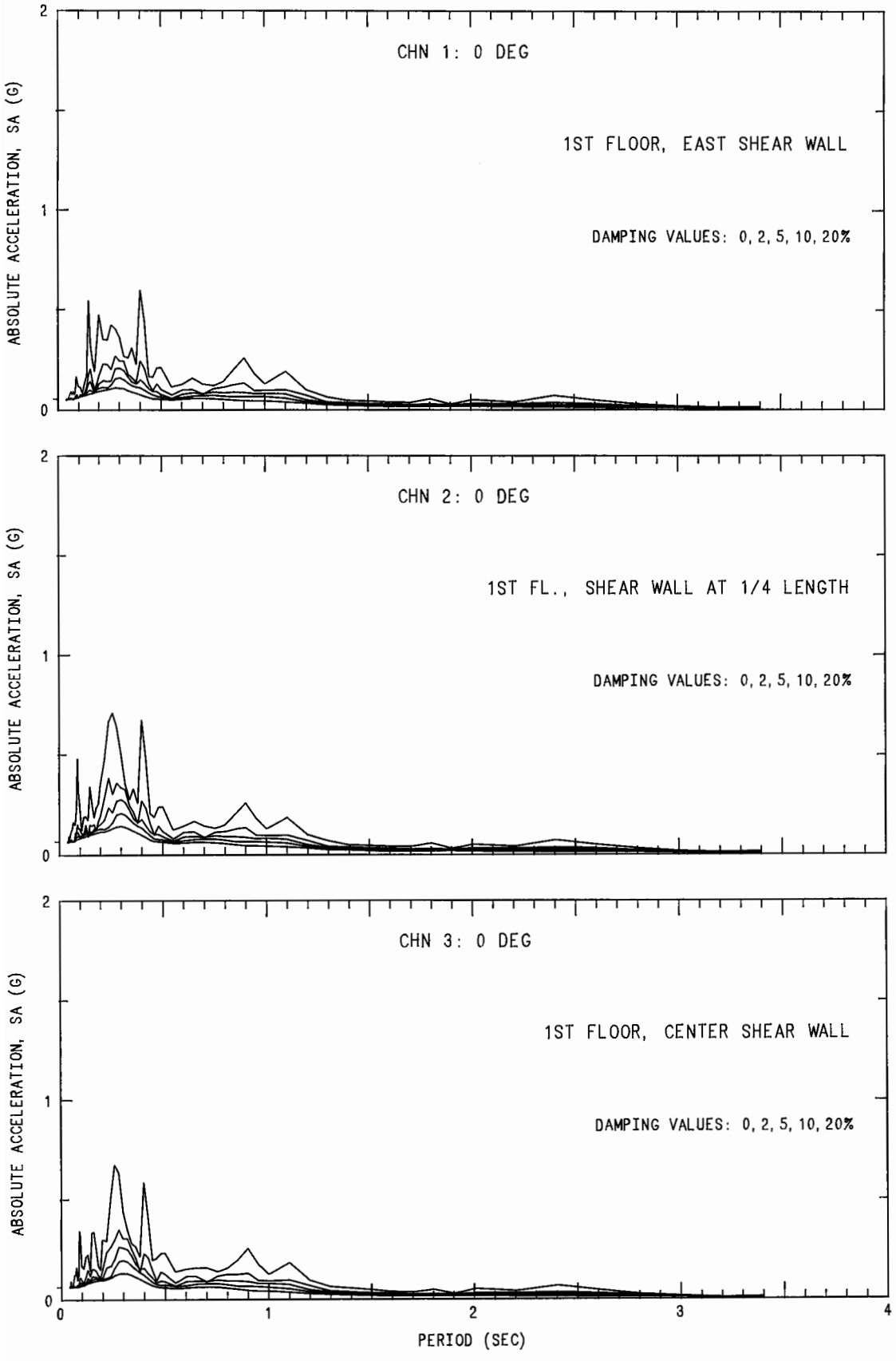


CHN 3 (STA CHN 16): 0 DEG
GROUND FLOOR, EAST END



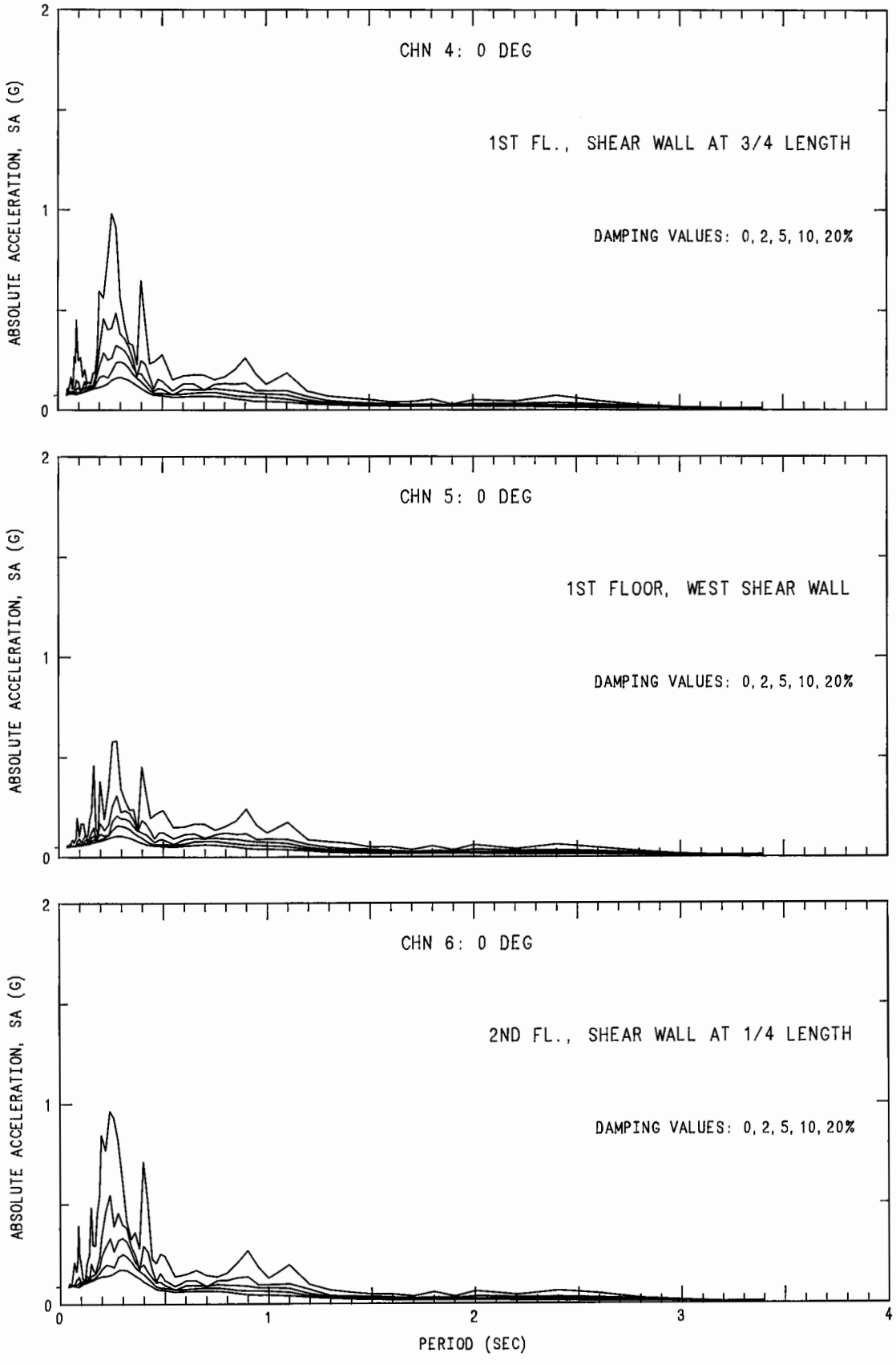
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58488–C0248–89292.01
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58488-C0248-89292.01
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG.: CSMIP S/N 488

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58488–C0248–89292.01
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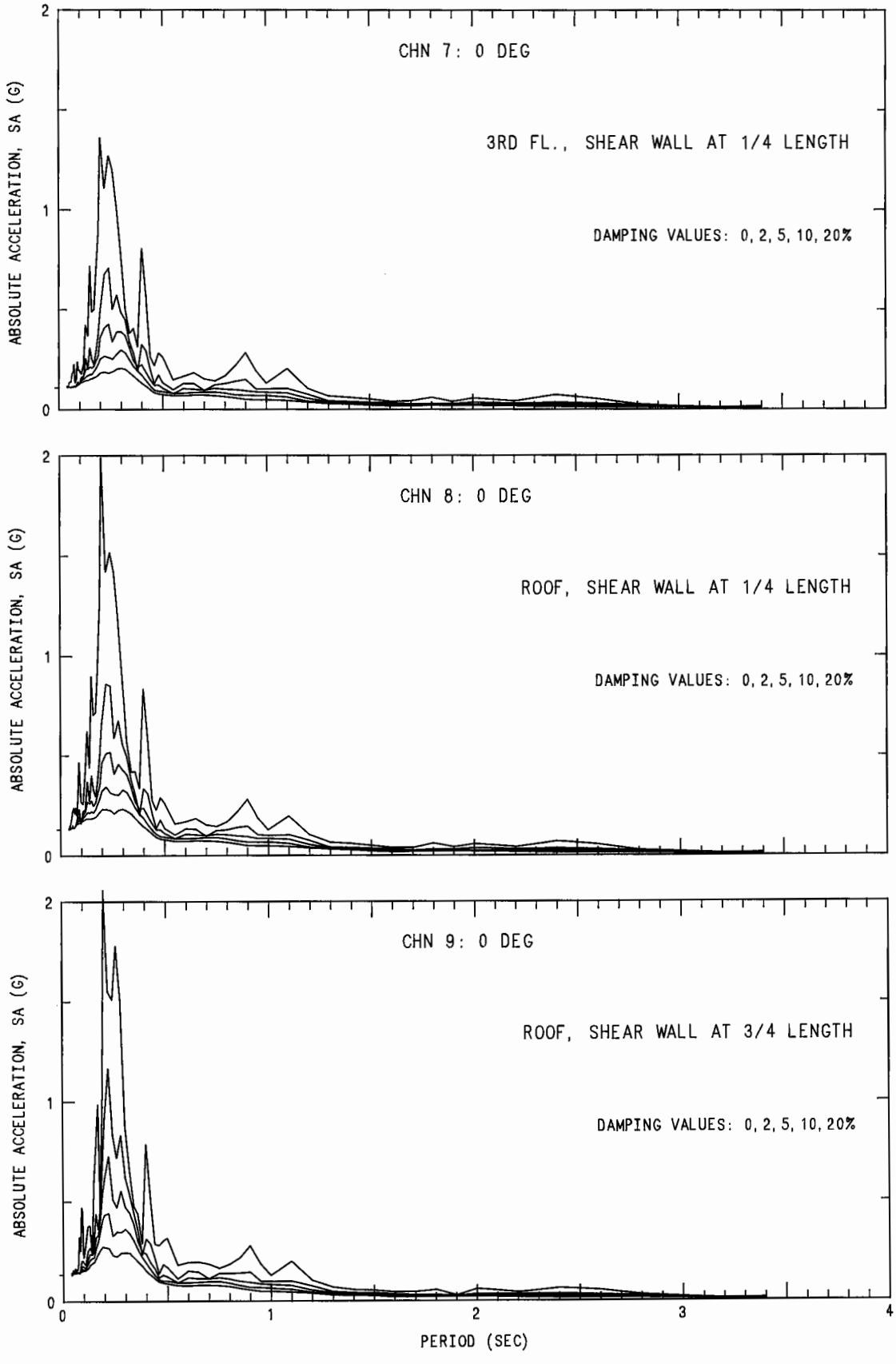

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD - 4-STORY SCHOOL BLDG. : CSMIP S/N 488

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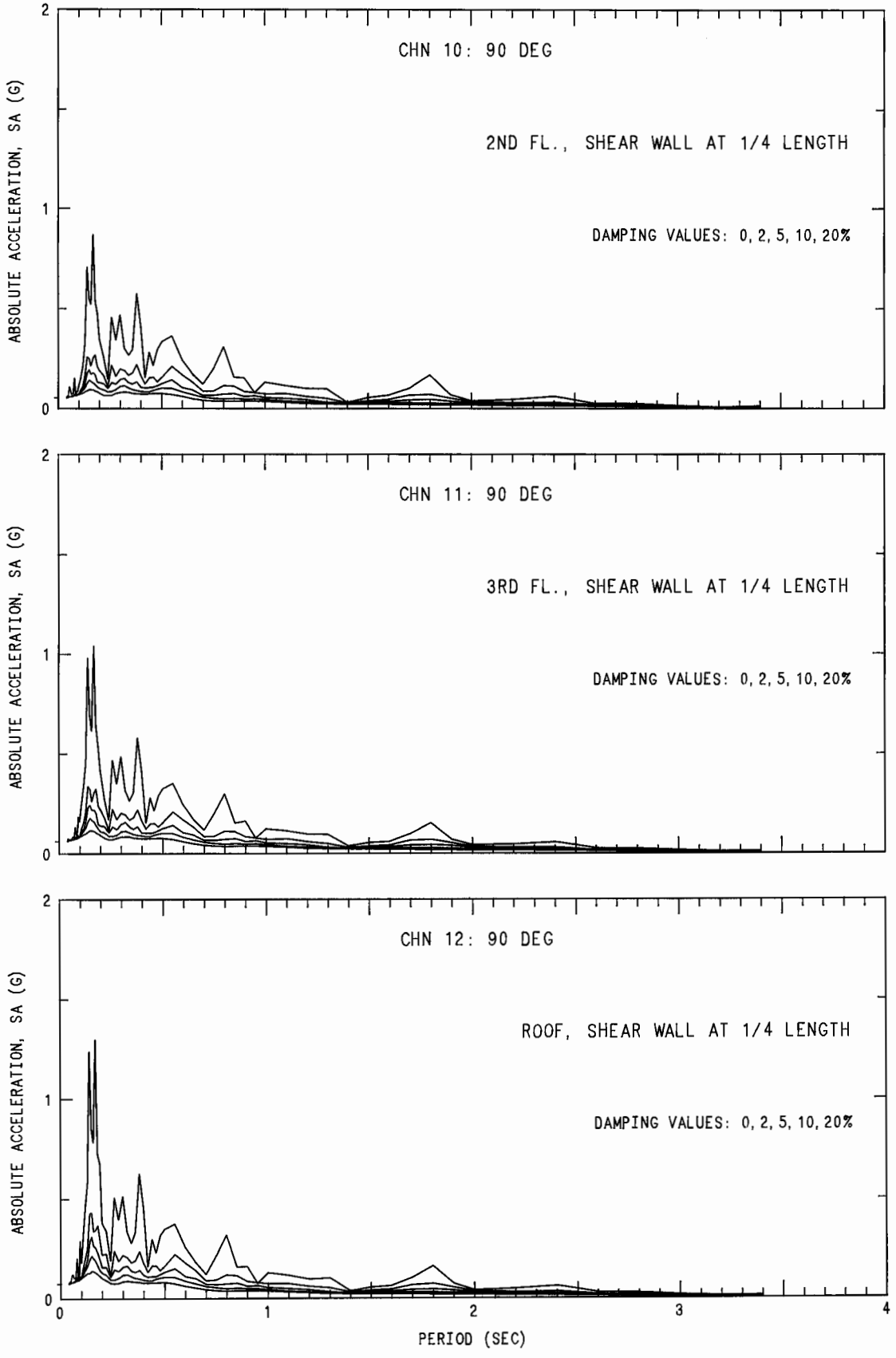
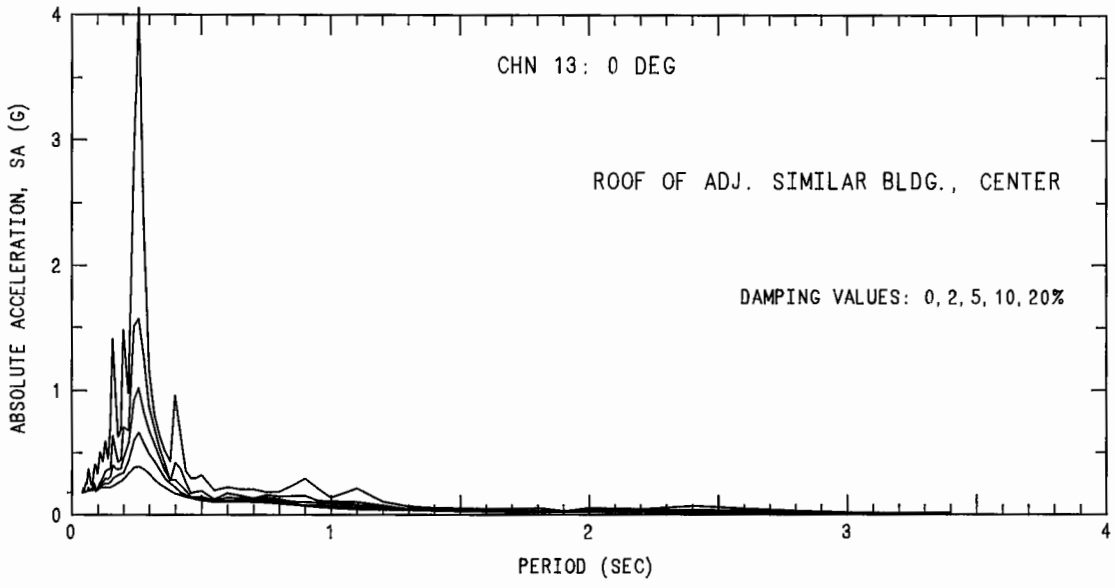
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



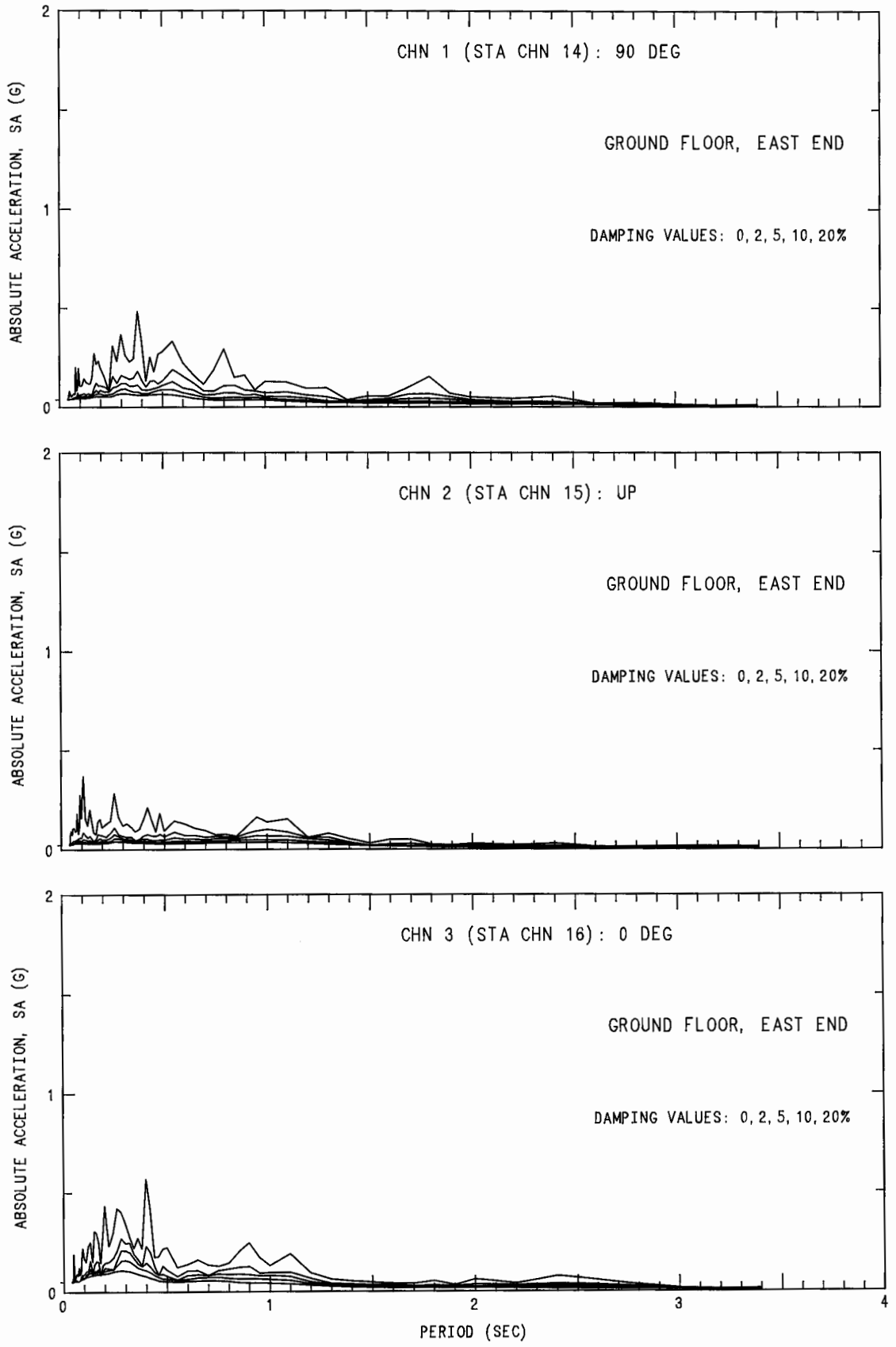
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58488–C0248–89292.01
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
HAYWARD – 4–STORY SCHOOL BLDG. : CSMIP S/N 488

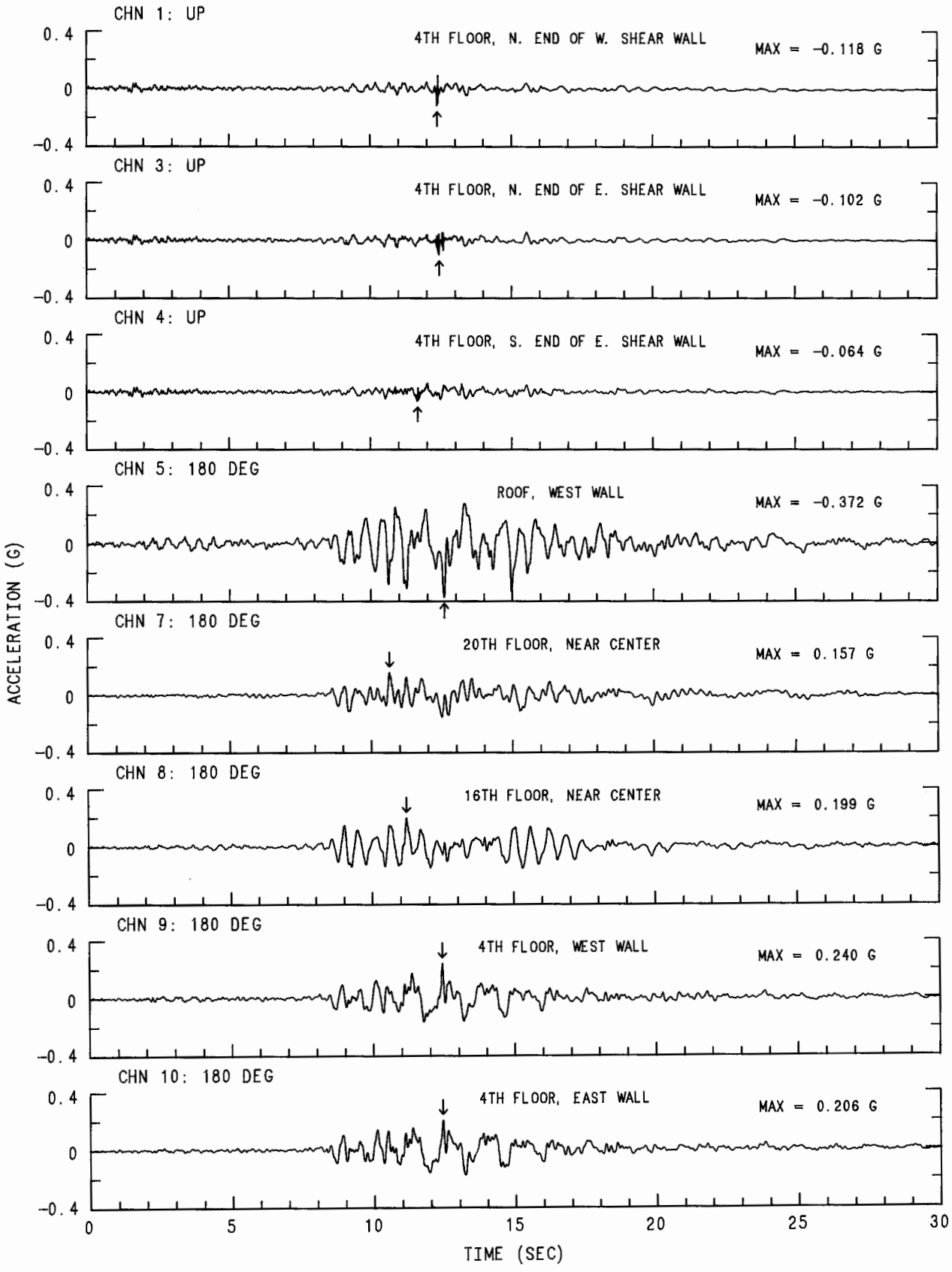
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58488–S3508–89292.01
USABLE DATA BANDWIDTH: 0.34 TO 23.6 HZ (0.04 TO 2.94 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND – 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

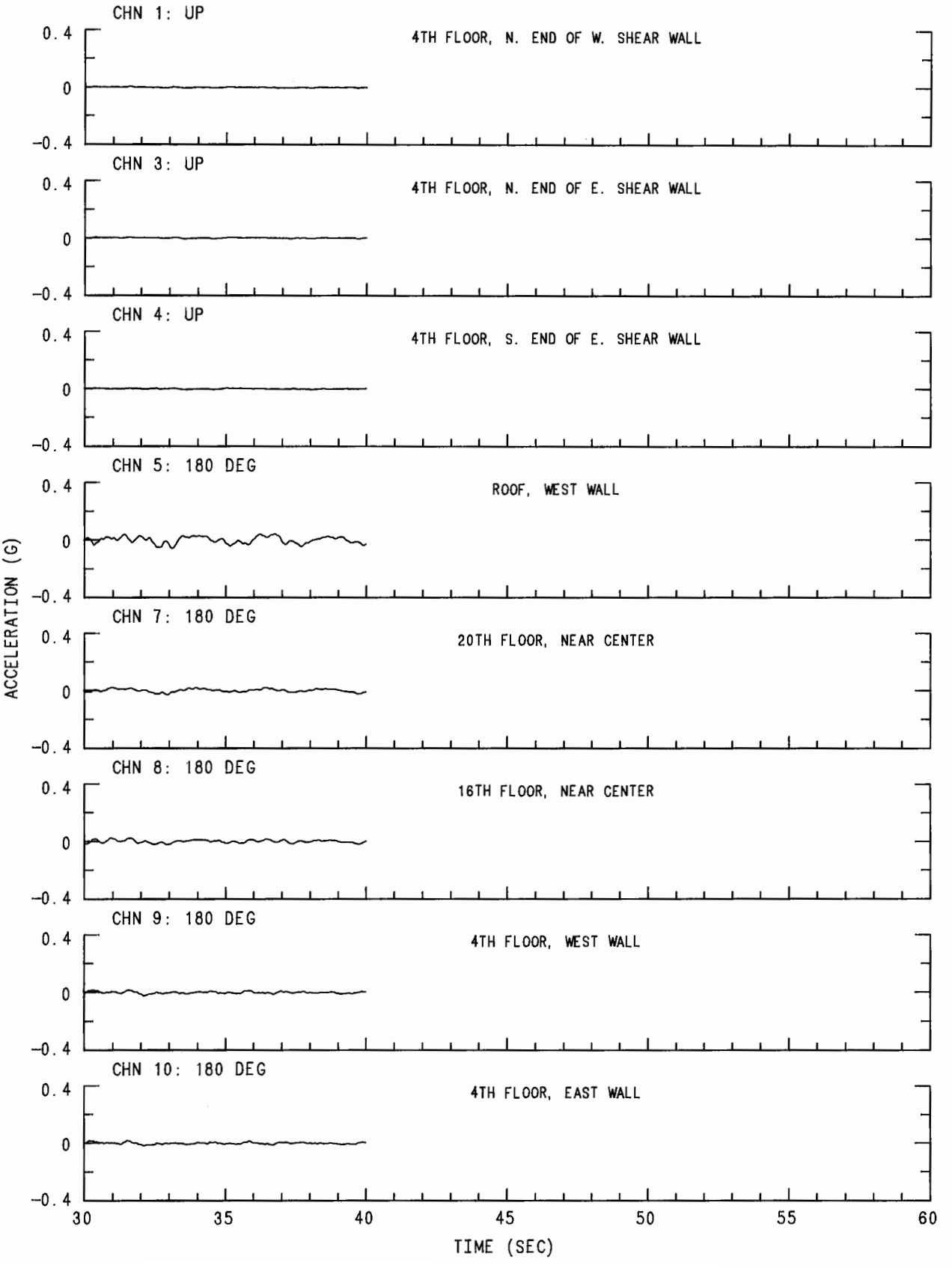
PHASE 1 ACCELERATION. RECORD ID: 58483-C0244-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

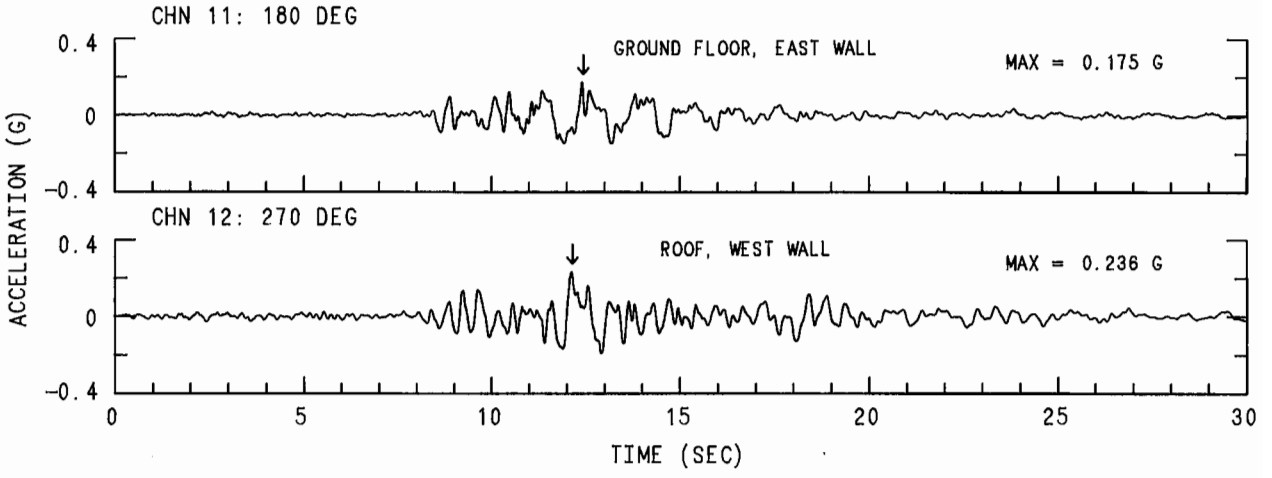
PHASE 1 ACCELERATION. RECORD ID: 58483-C0244-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

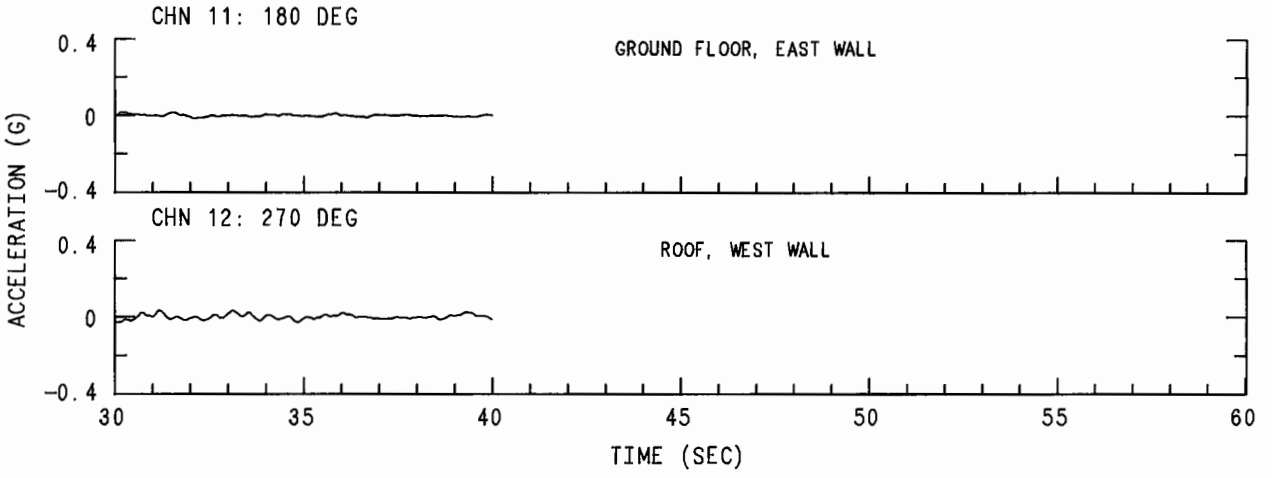
PHASE 1 ACCELERATION. RECORD ID: 58483-C0244-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND – 24–STORY RESIDENTIAL BLDG.: CSMIP S/N 483

PHASE 1 ACCELERATION. RECORD ID: 58483–C0244–89292.01

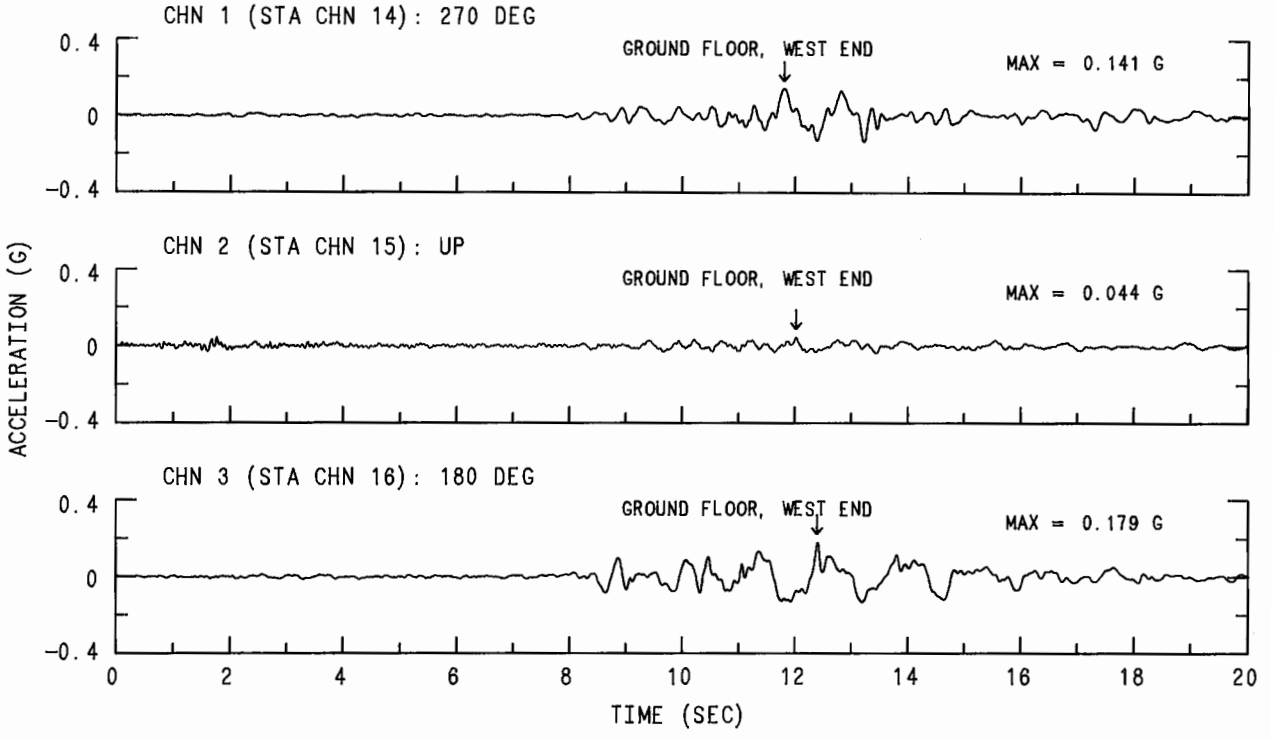


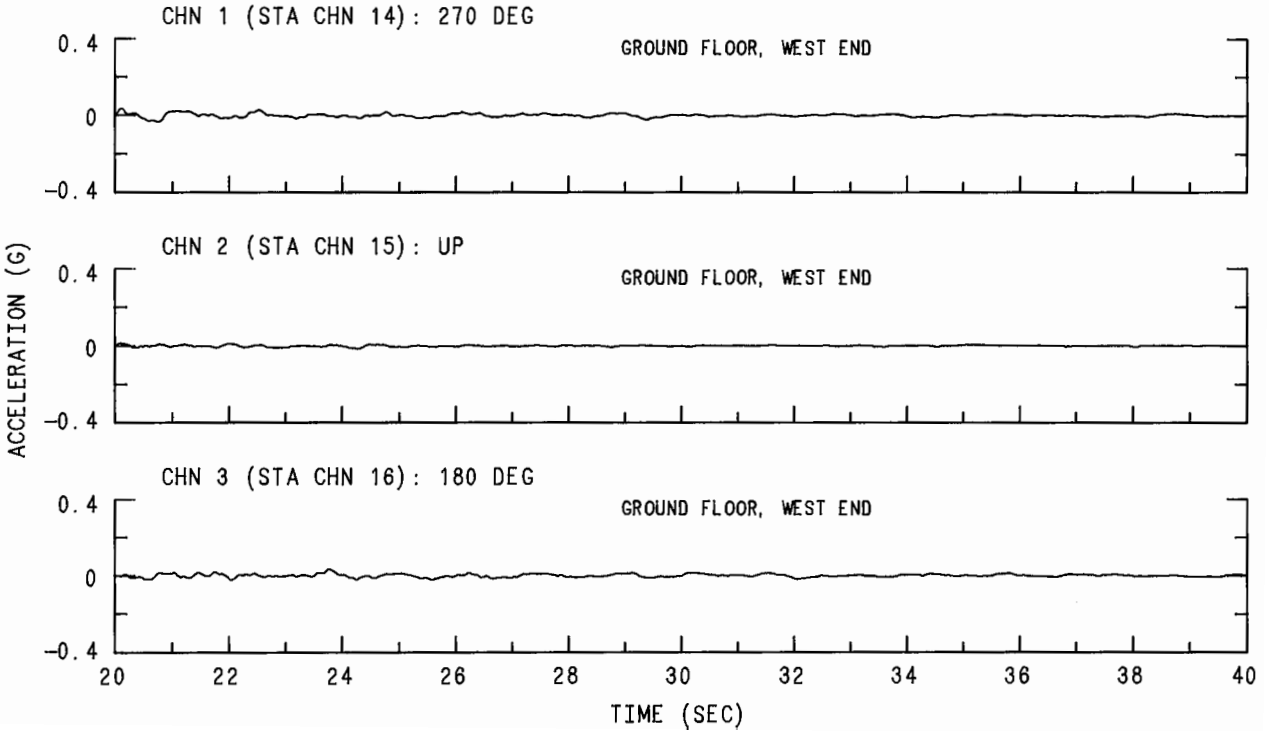
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

PHASE 1 ACCELERATION

RECORD ID: 58483-S5082-89292.01

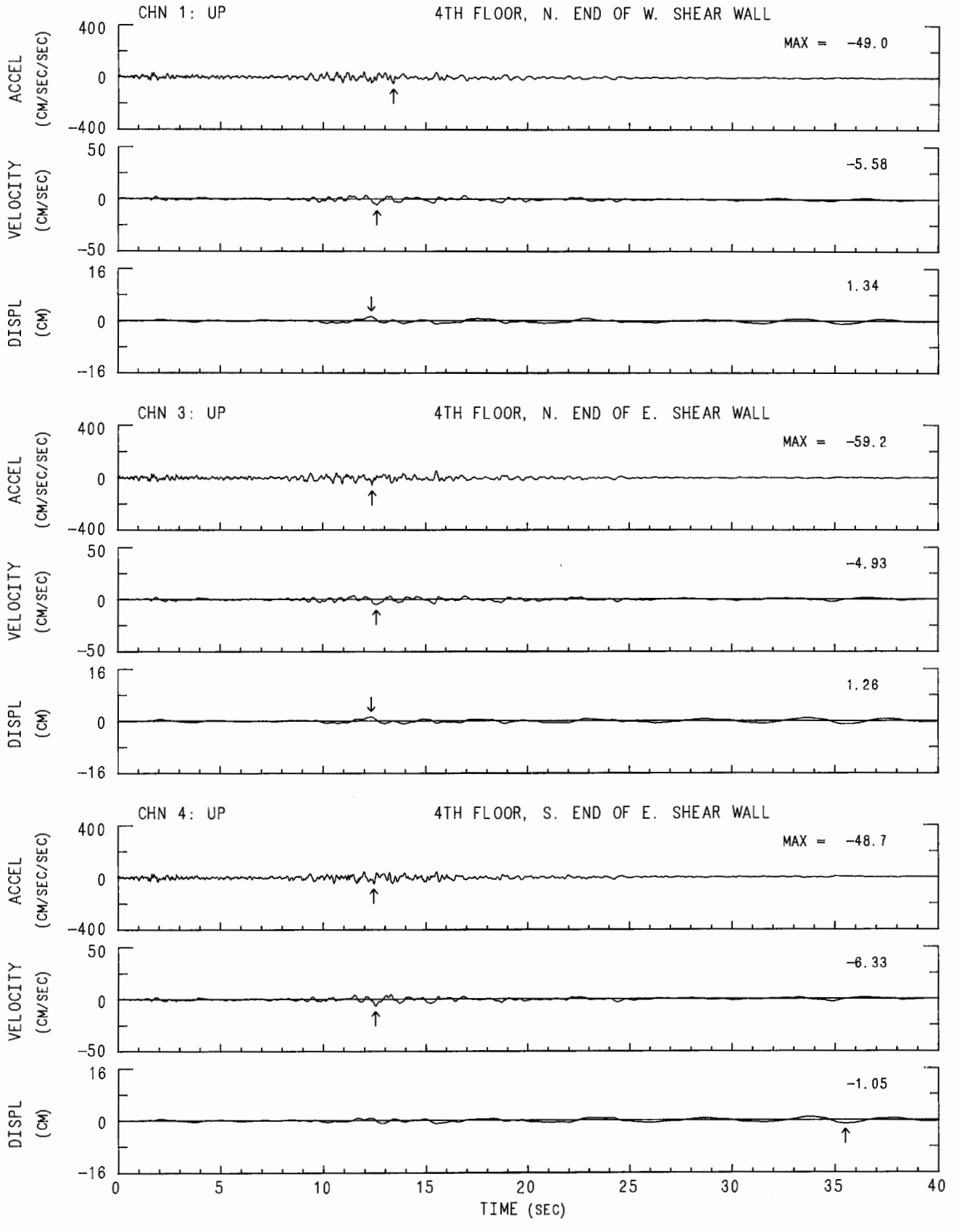




SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

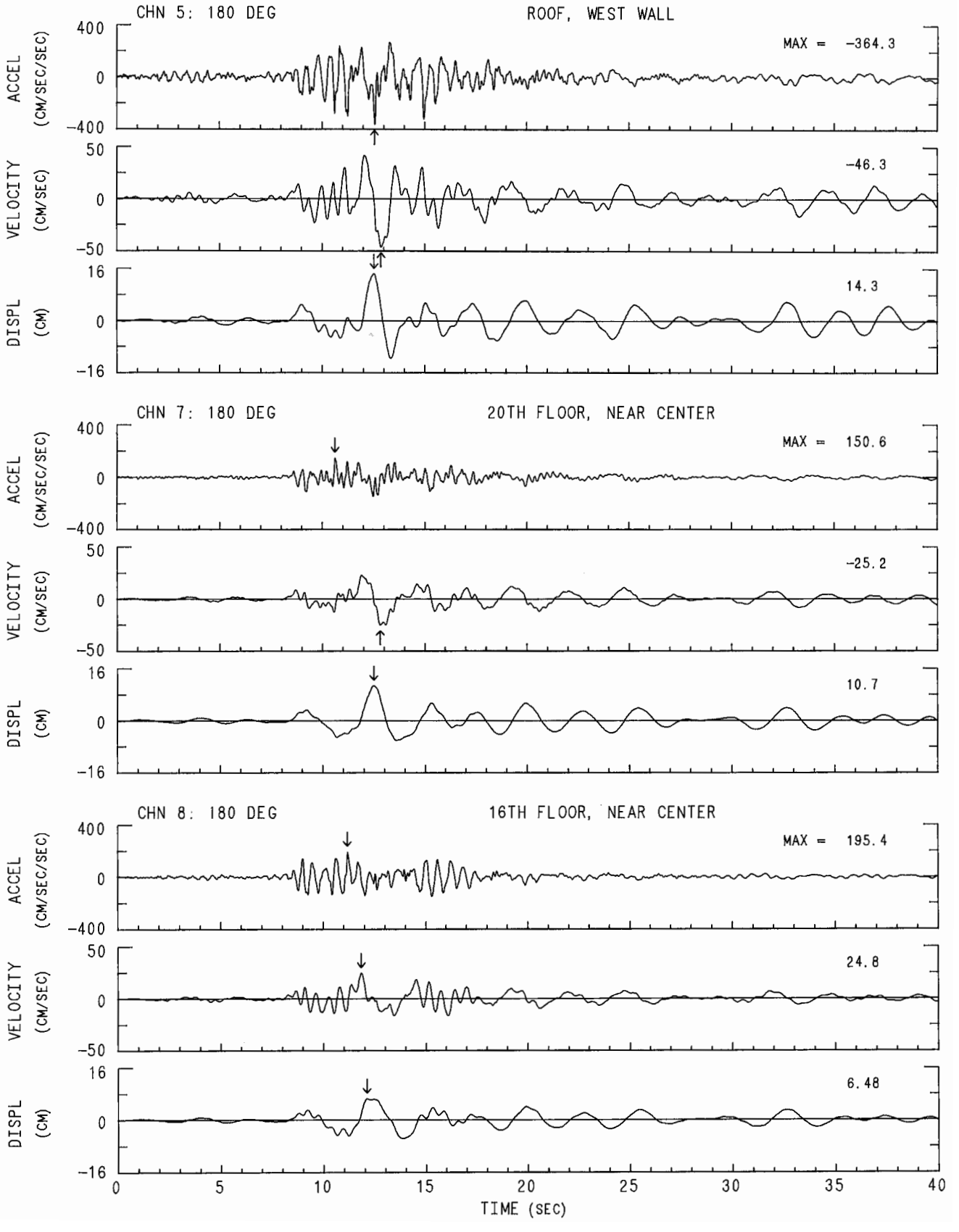
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58483-C0244-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

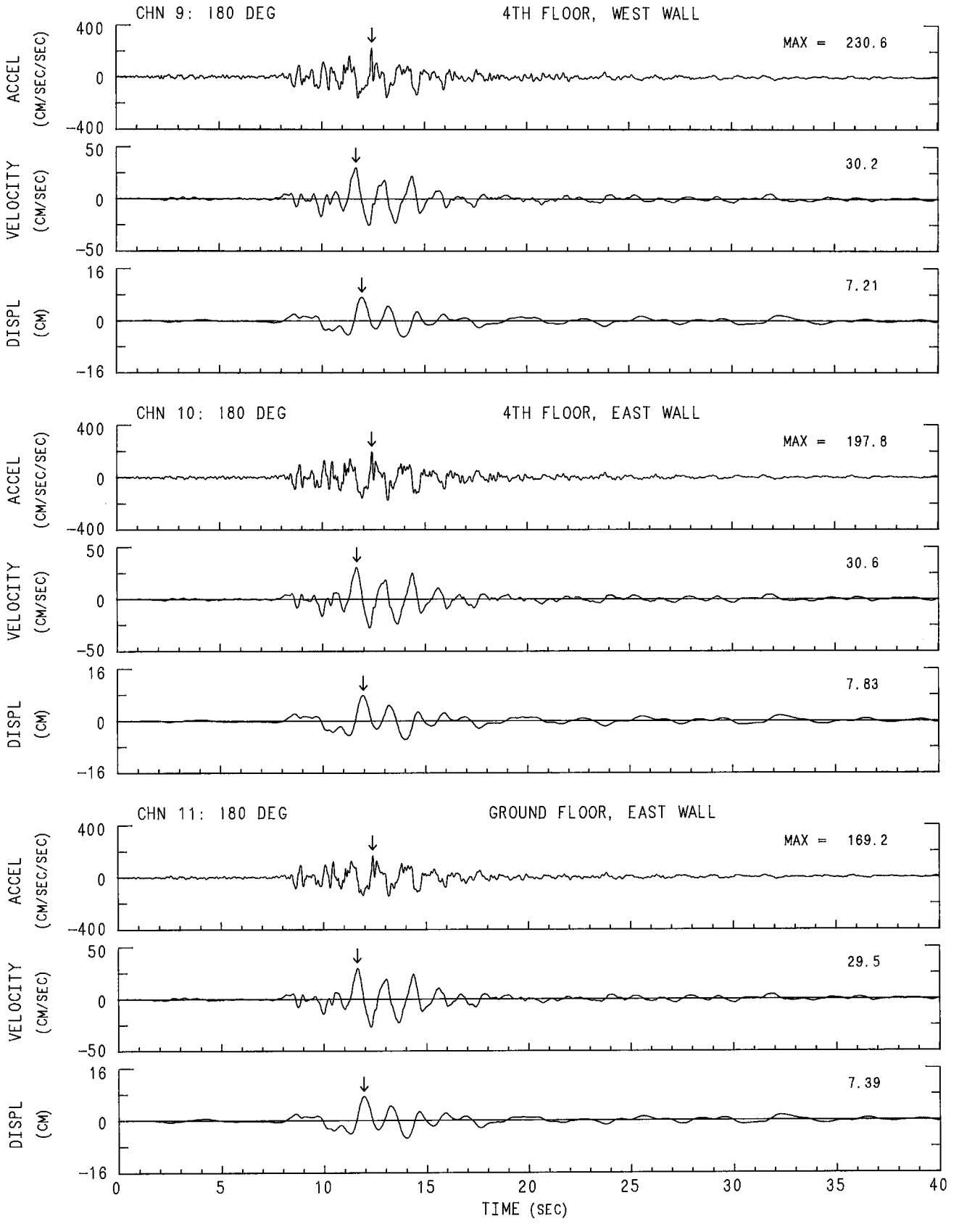
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58483-C0244-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

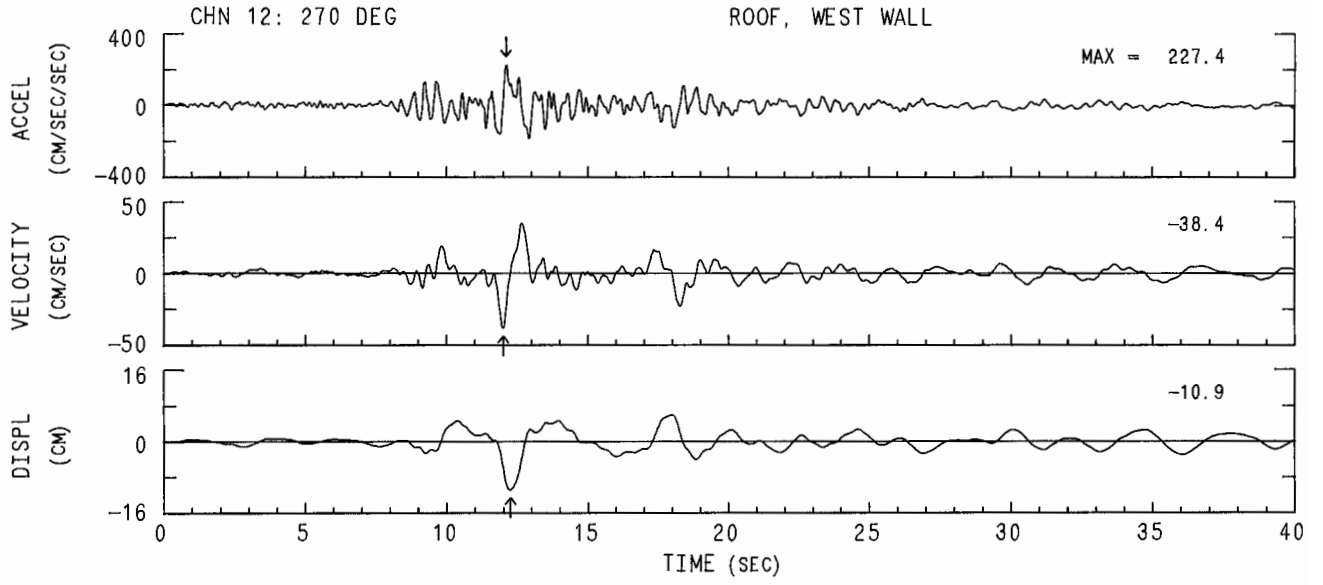
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58483-C0244-89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 24–STORY RESIDENTIAL BLDG.: CSMIP S/N 483

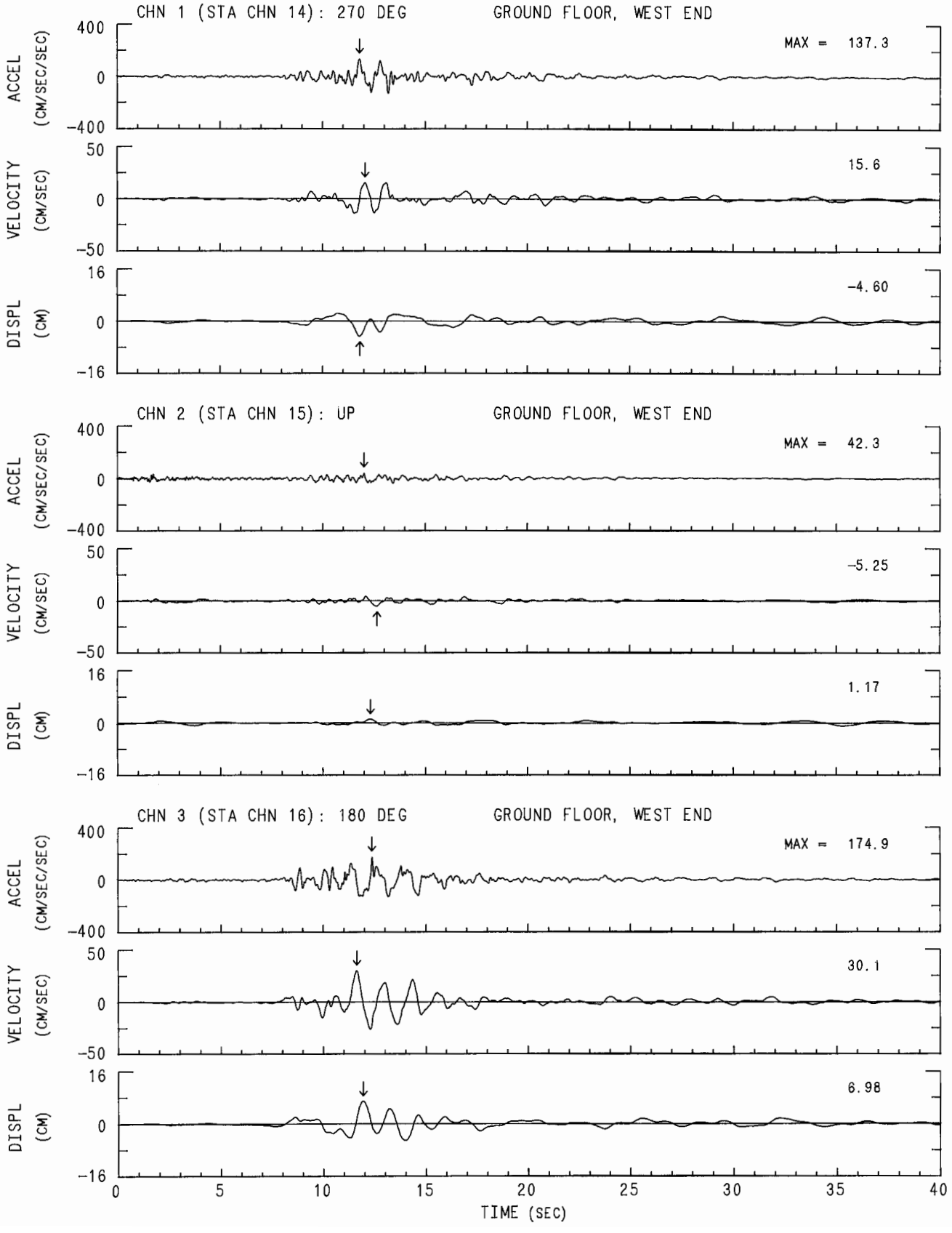
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58483–C0244–89292.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58483-S5082-89292.01



OAKLAND – 24–STORY RESIDENTIAL BLDG.: CSMIP S/N 483

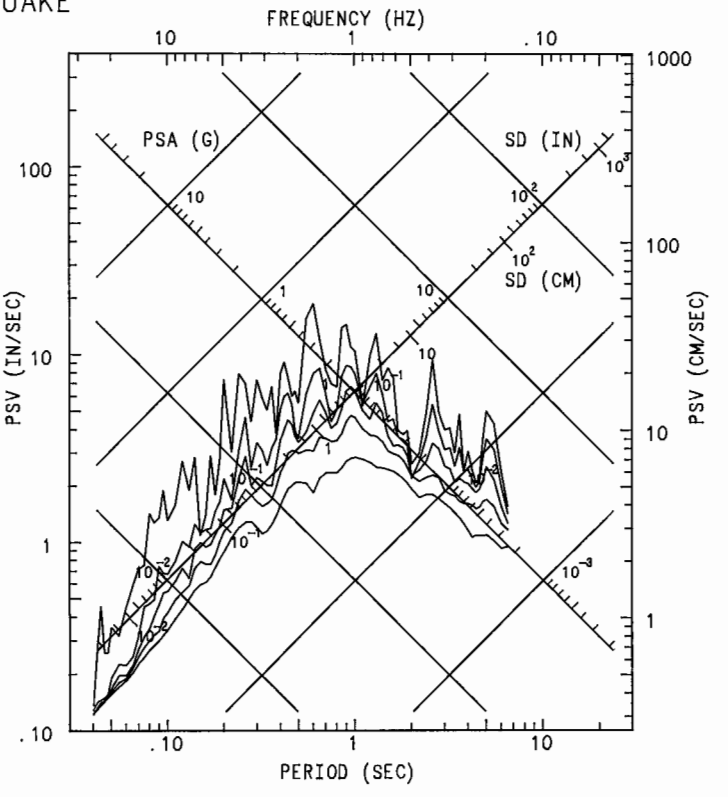
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

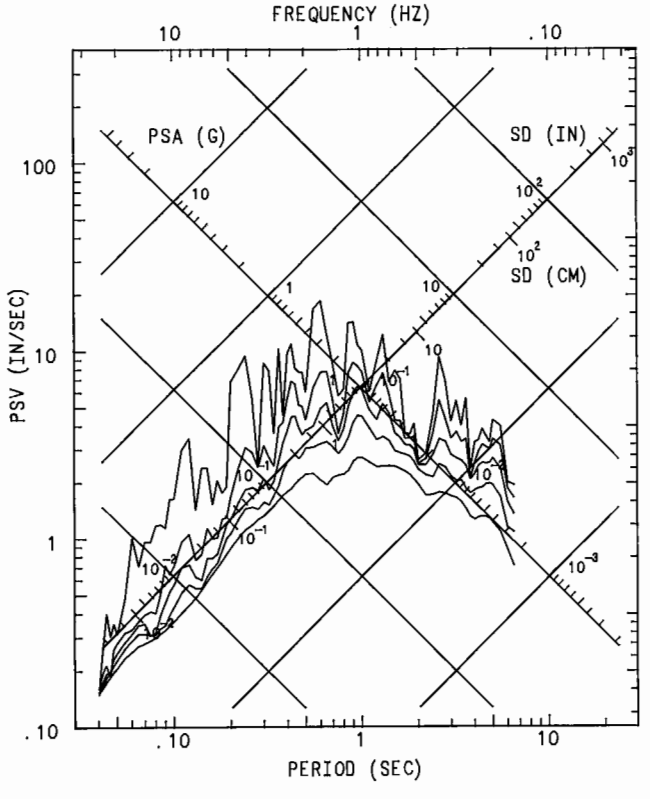
RECORD ID: 58483-C0244-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

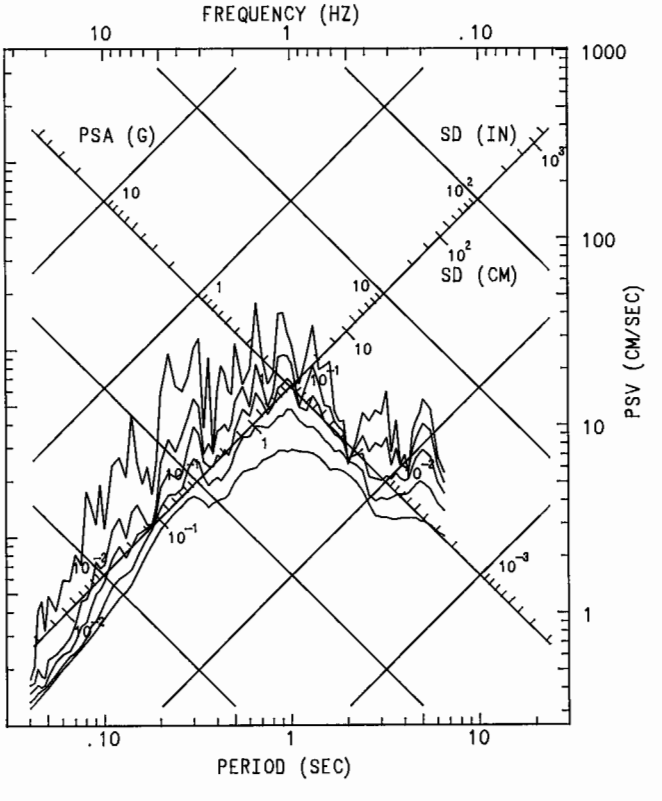
CHN 1: UP
4TH FLOOR, N. END OF W. SHEAR WALL



CHN 3: UP
4TH FLOOR, N. END OF E. SHEAR WALL



CHN 4: UP
4TH FLOOR, S. END OF E. SHEAR WALL



OAKLAND - 24-STORY RESIDENTIAL BLDG. : CSMIP S/N 483

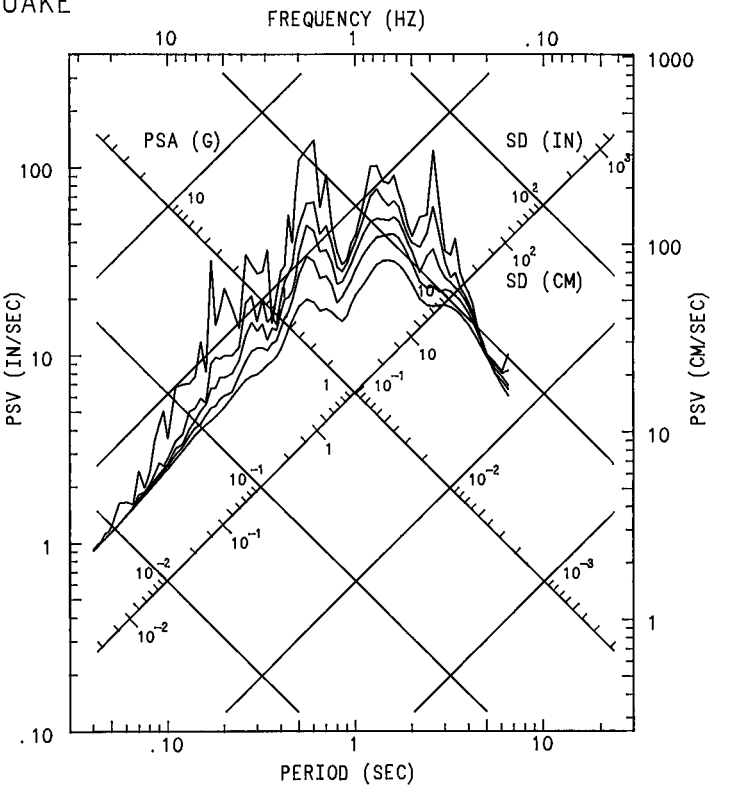
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

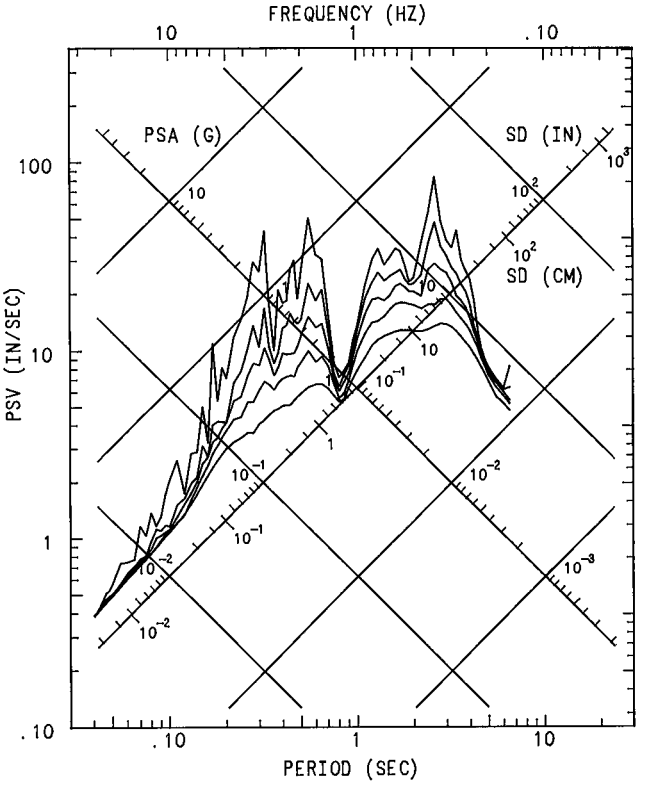
RECORD ID: 58483-C0244-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

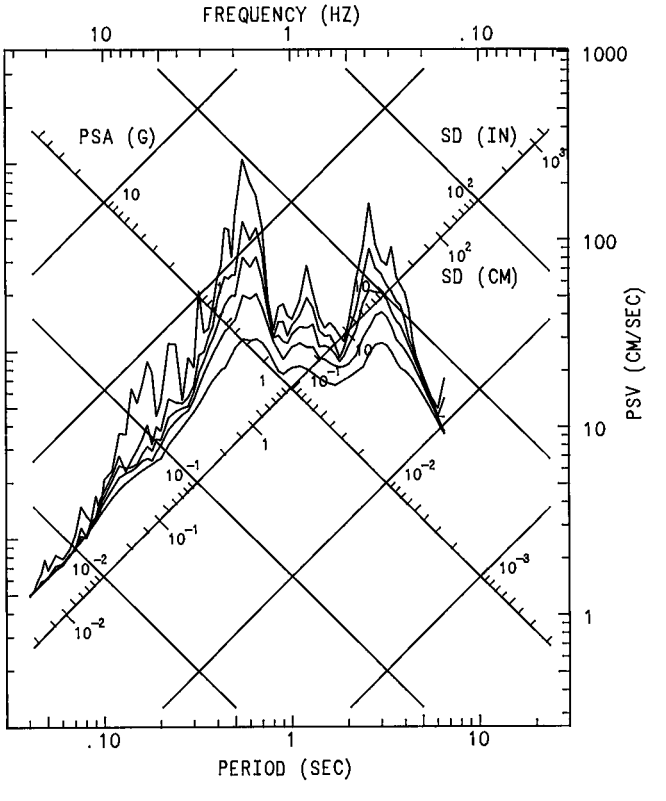
CHN 5: 180 DEG
ROOF, WEST WALL



CHN 7: 180 DEG
20TH FLOOR, NEAR CENTER



CHN 8: 180 DEG
16TH FLOOR, NEAR CENTER



OAKLAND – 24-STORY RESIDENTIAL BLDG. : CSMIP S/N 483

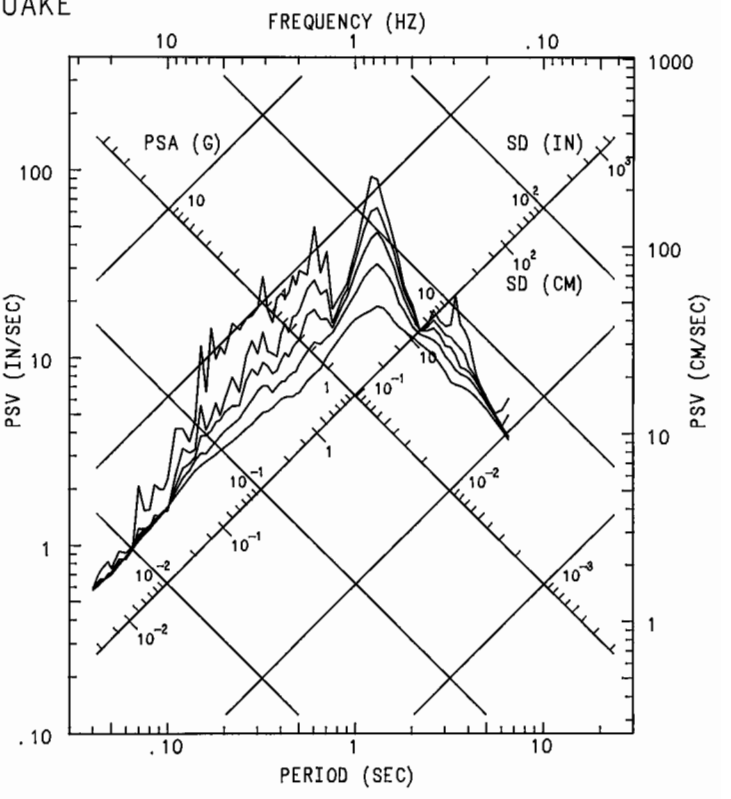
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

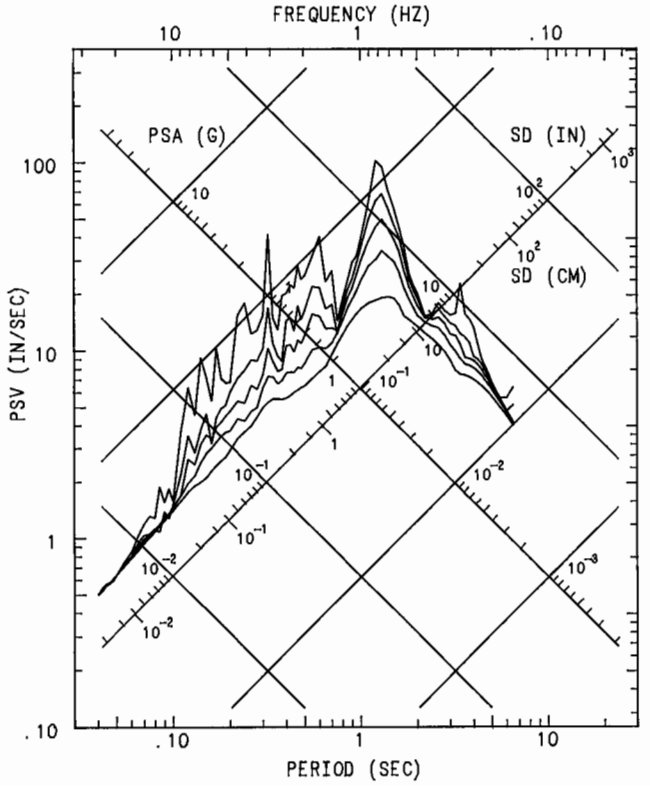
RECORD ID: 58483-C0244-89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

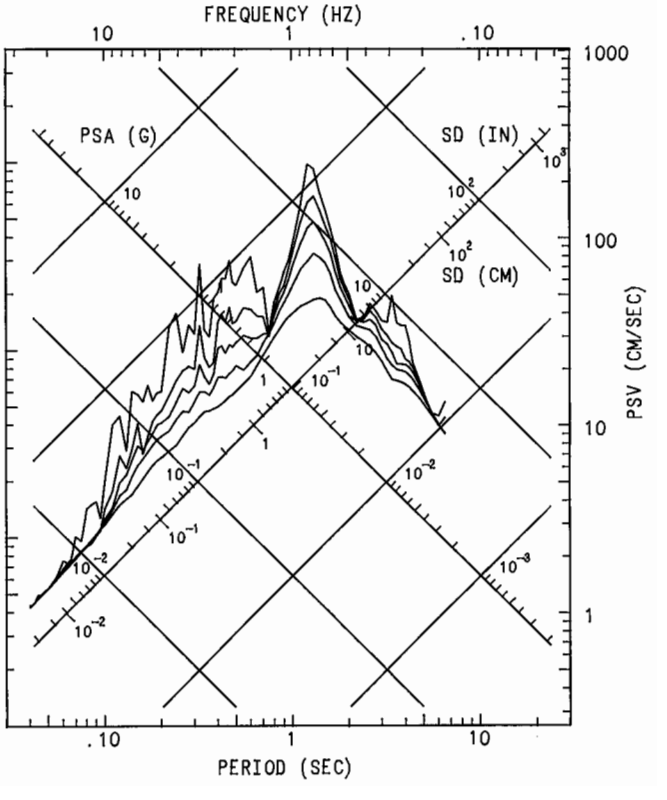
CHN 9: 180 DEG
4TH FLOOR, WEST WALL



CHN 10: 180 DEG
4TH FLOOR, EAST WALL



CHN 11: 180 DEG
GROUND FLOOR, EAST WALL



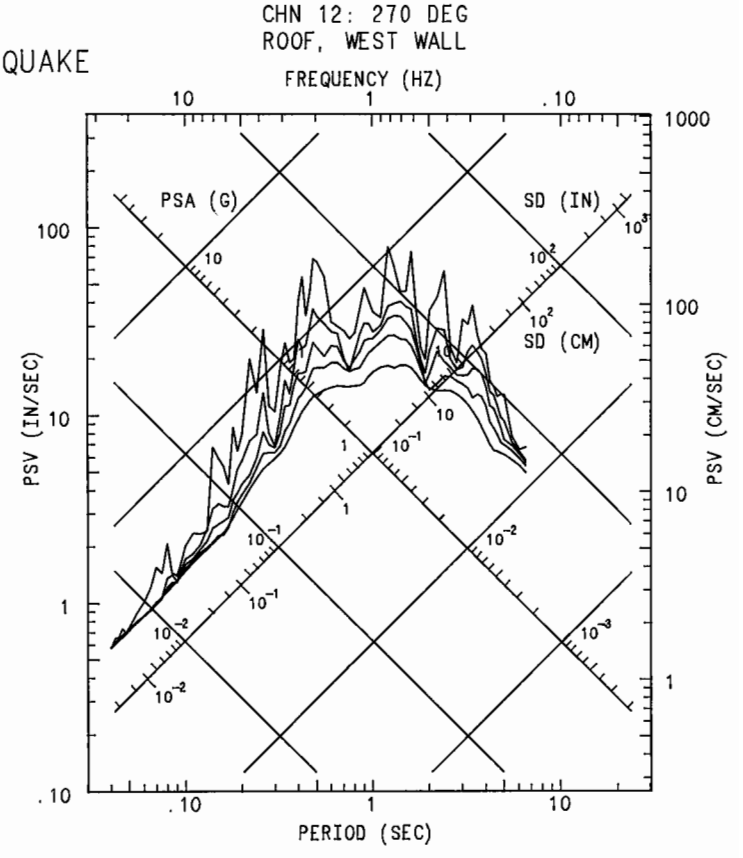
OAKLAND – 24–STORY RESIDENTIAL BLDG.: CSMIP S/N 483

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

RECORD ID: 58483–C0244–89292.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483

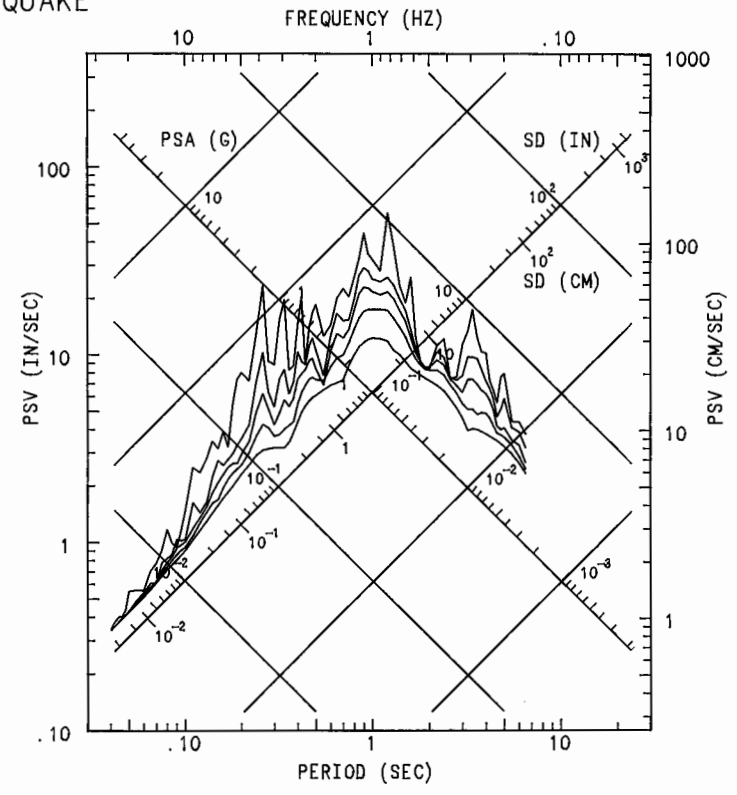
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

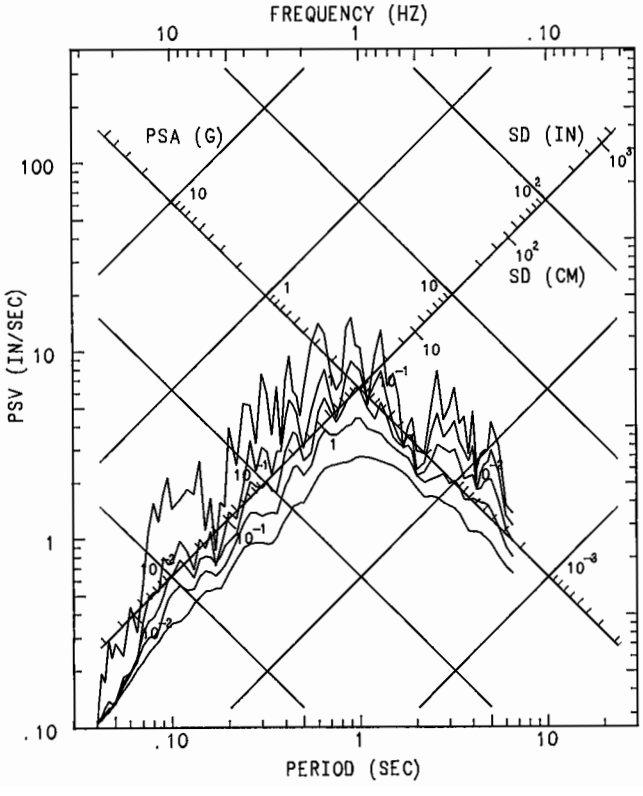
RECORD ID: 58483-S5082-89292.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

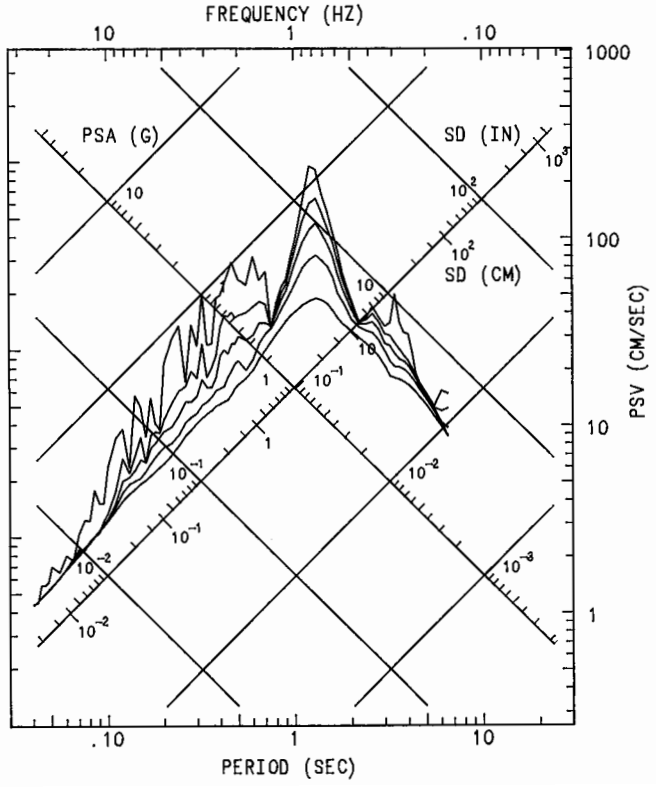
CHN 1 (STA CHN 14): 270 DEG
GROUND FLOOR, WEST END



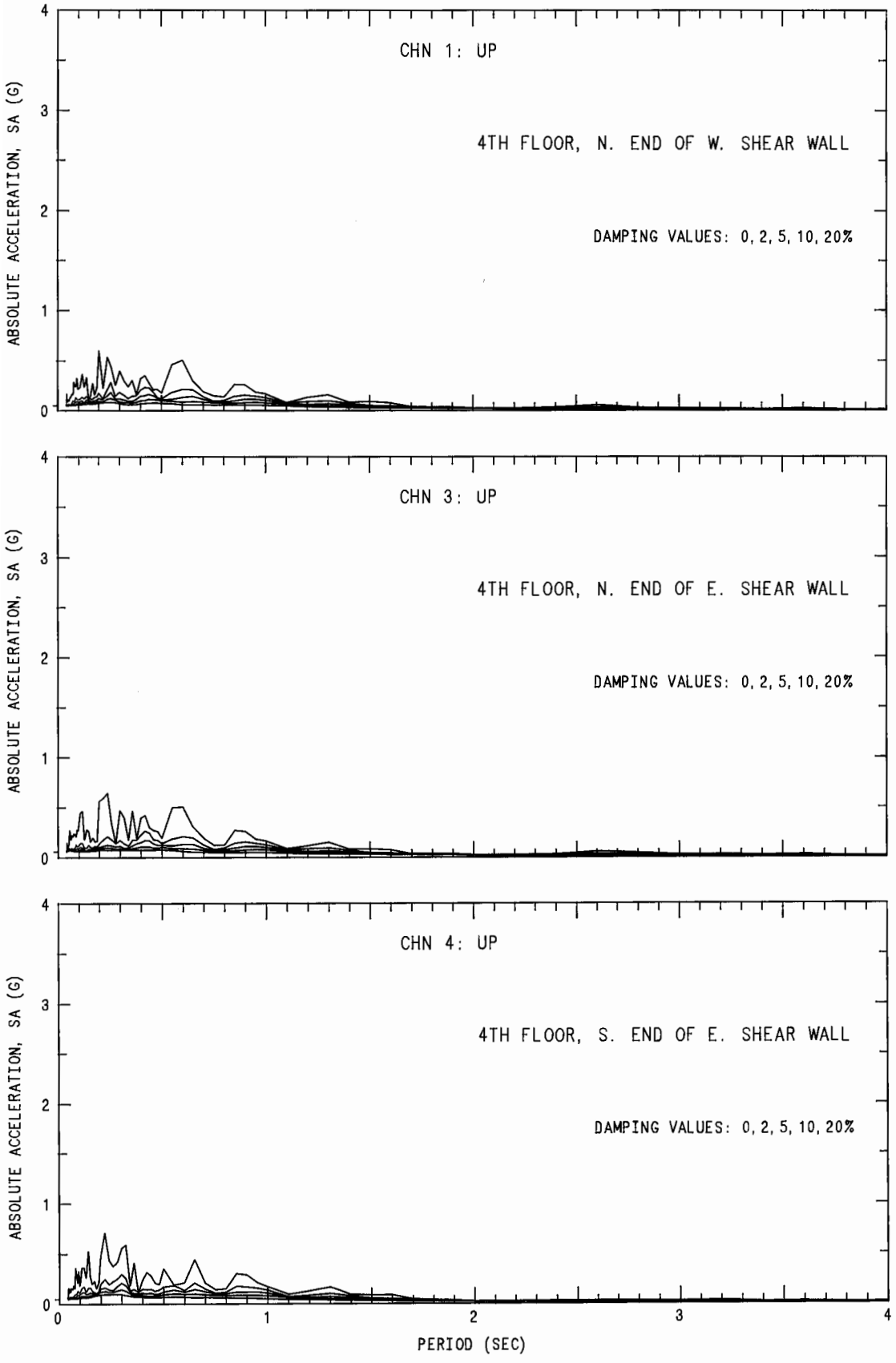
CHN 2 (STA CHN 15): UP
GROUND FLOOR, WEST END



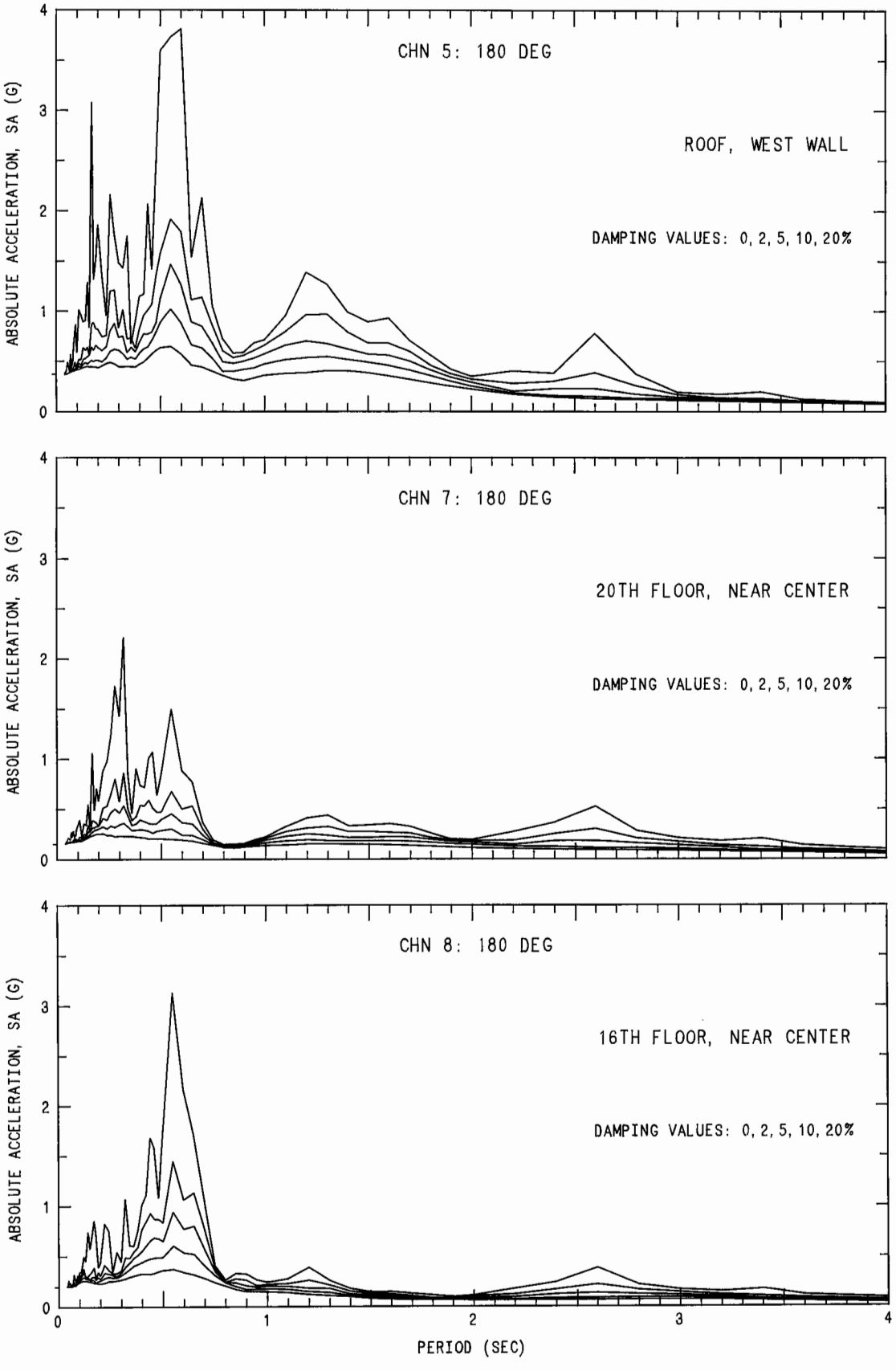
CHN 3 (STA CHN 16): 180 DEG
GROUND FLOOR, WEST END



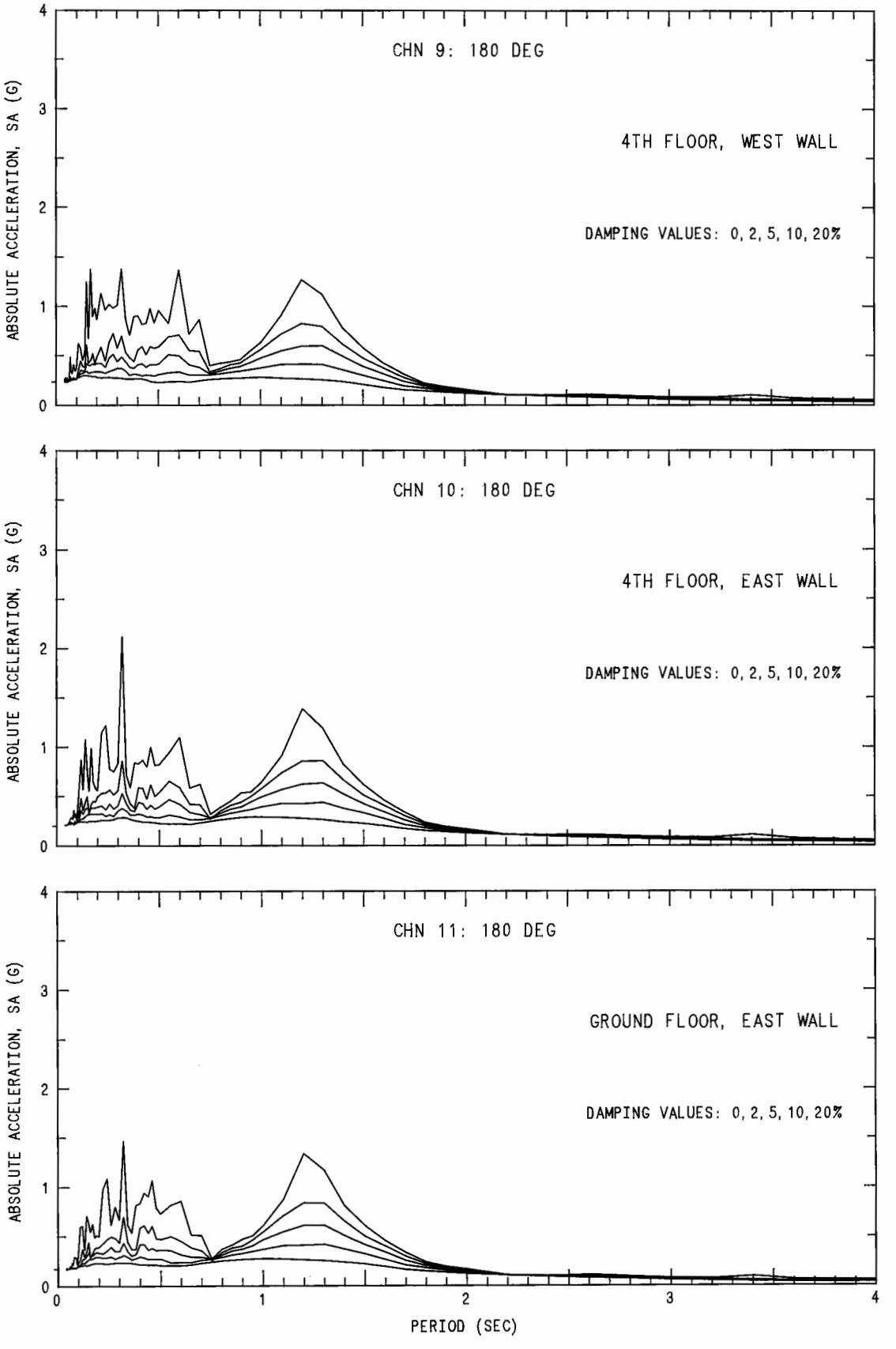
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 24–STORY RESIDENTIAL BLDG.: CSMIP S/N 483
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58483–C0244–89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



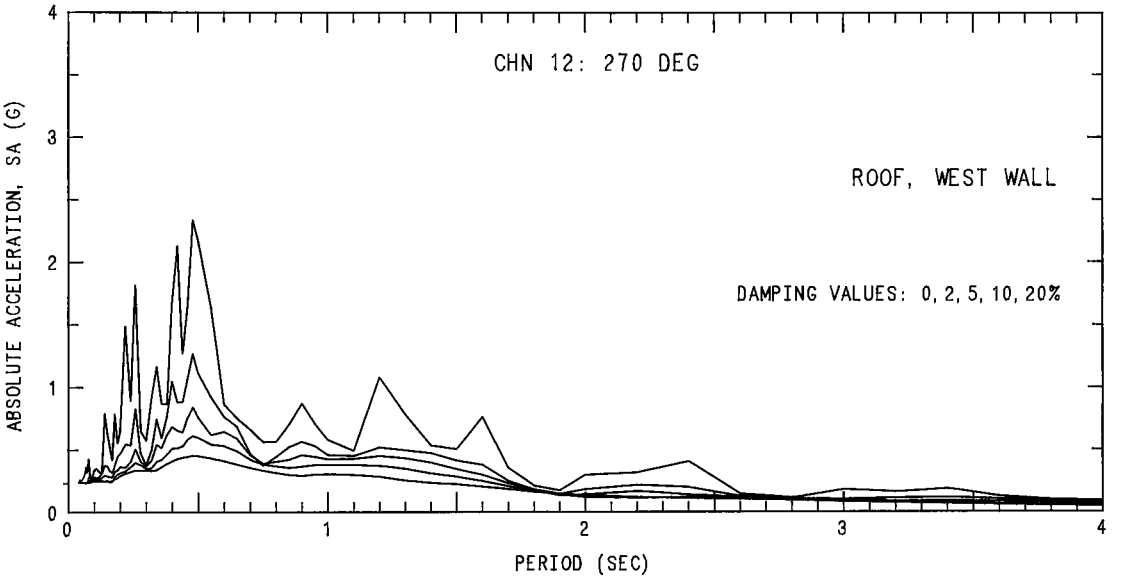
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58483-C0244-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



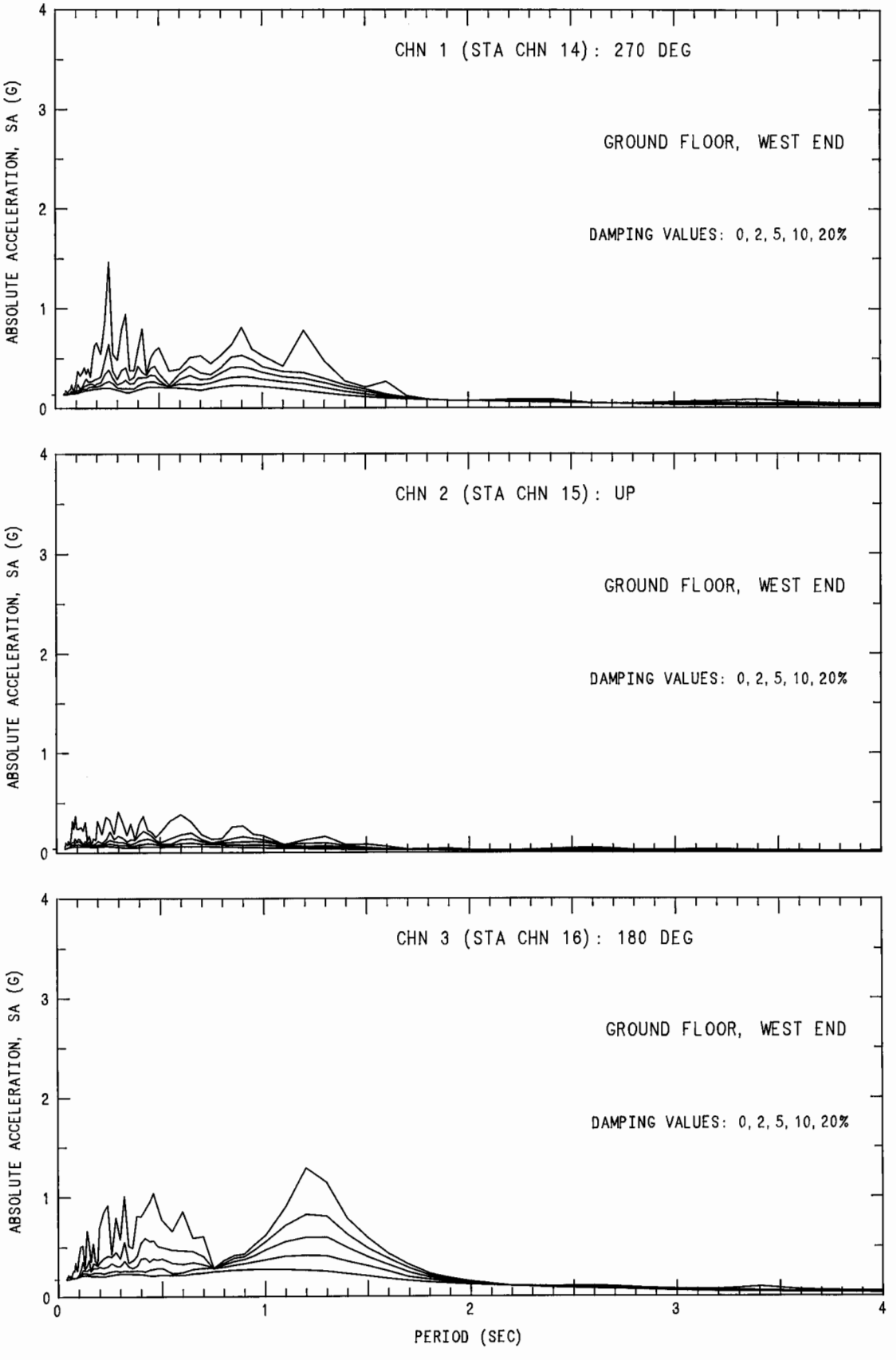
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58483-C0244-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 24-STORY RESIDENTIAL BLDG.: CSMIP S/N 483
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58483-C0244-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



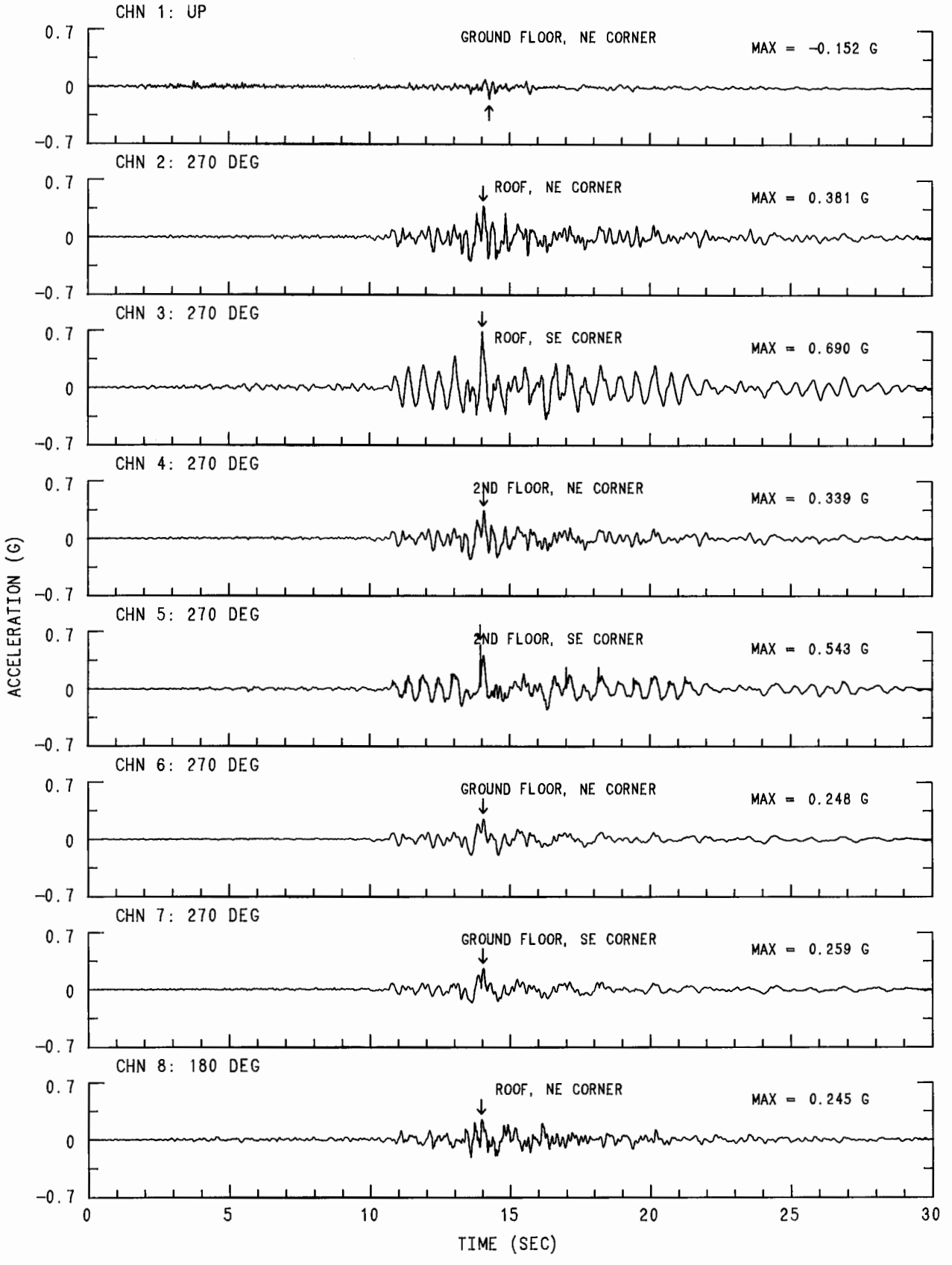
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 24-STORY RESIDENTIAL BLDG. : CSMIP S/N 483
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58483-S5082-89292.01
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND - 2-STORY OFFICE BLDG.: CSMIP S/N 224

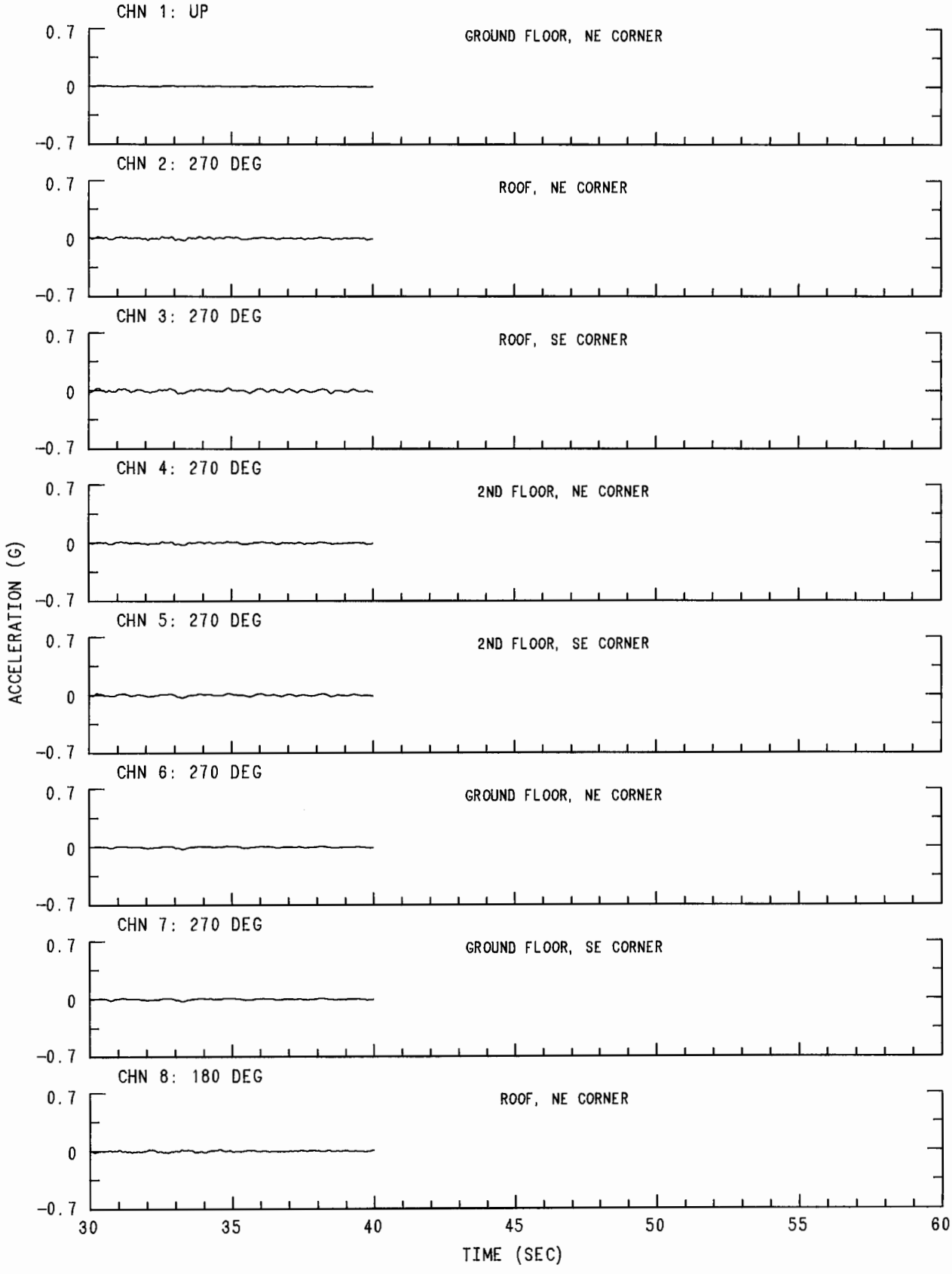
PHASE 1 ACCELERATION. RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND - 2-STORY OFFICE BLDG.: CSMIP S/N 224

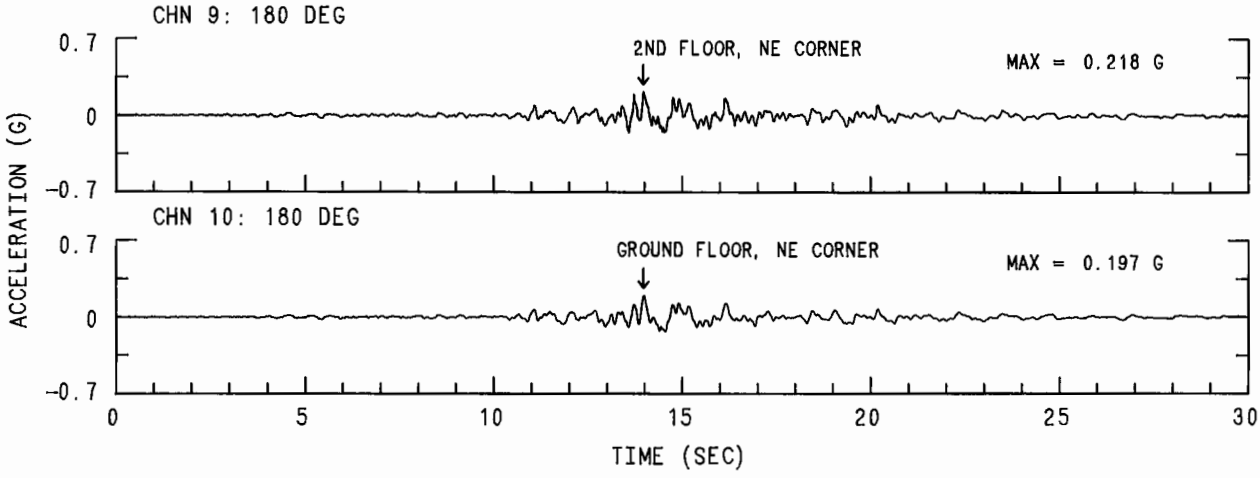
PHASE 1 ACCELERATION. RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND – 2-STORY OFFICE BLDG.: CSMIP S/N 224

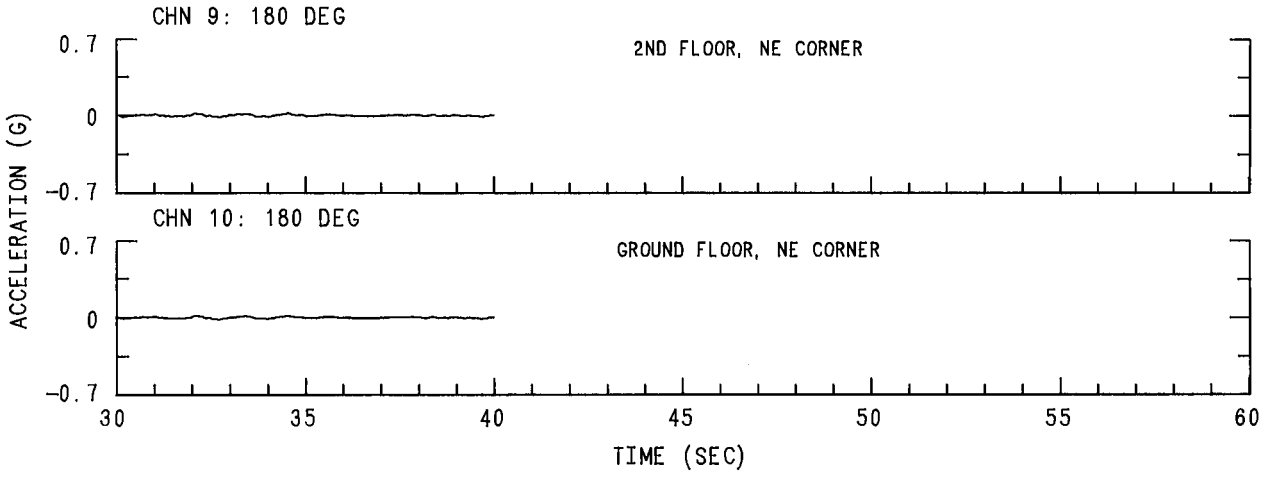
PHASE 1 ACCELERATION. RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

OAKLAND - 2-STORY OFFICE BLDG.: CSMIP S/N 224

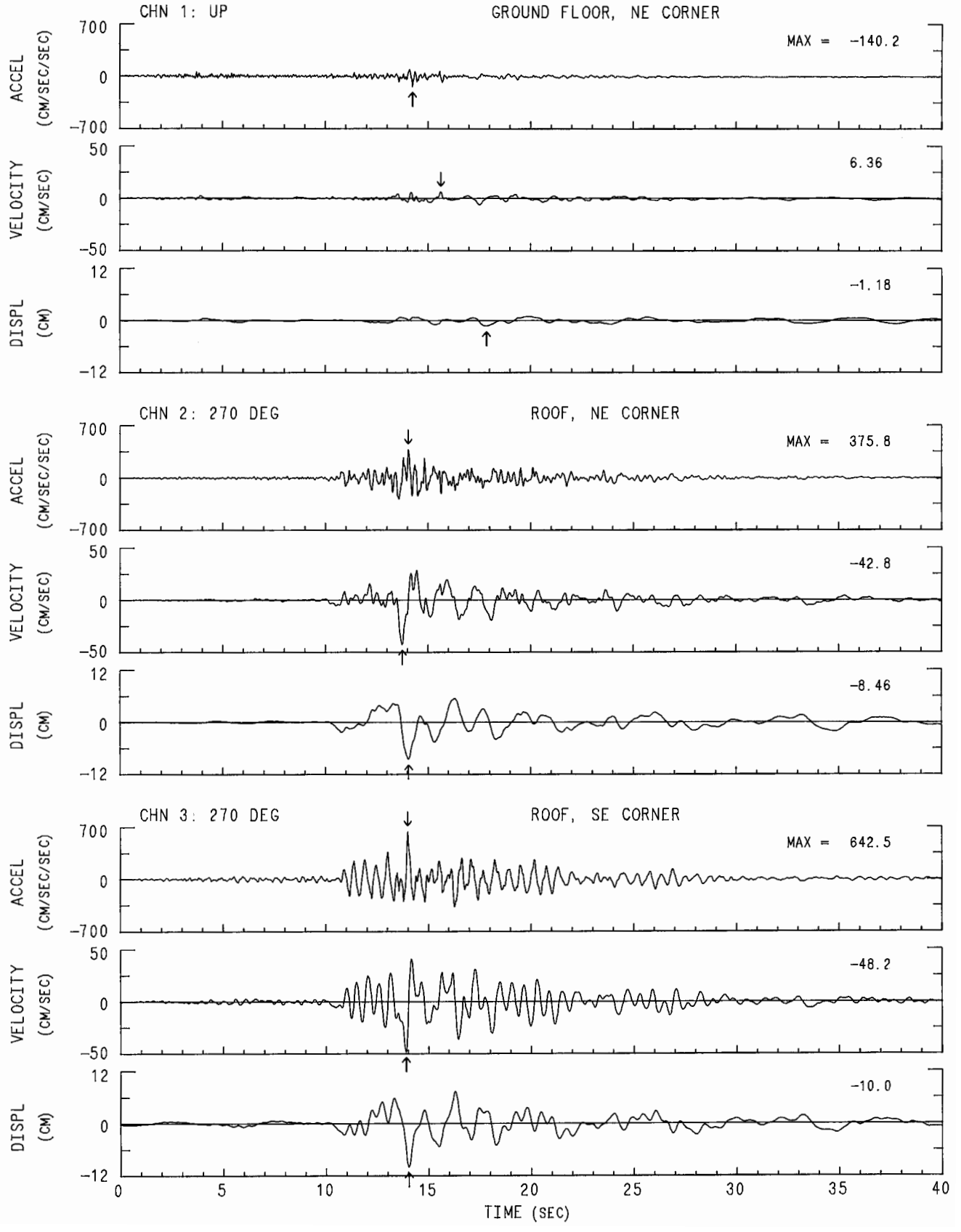
PHASE 1 ACCELERATION. RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 2-STORY OFFICE BLDG.: CSMIP S/N 224

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

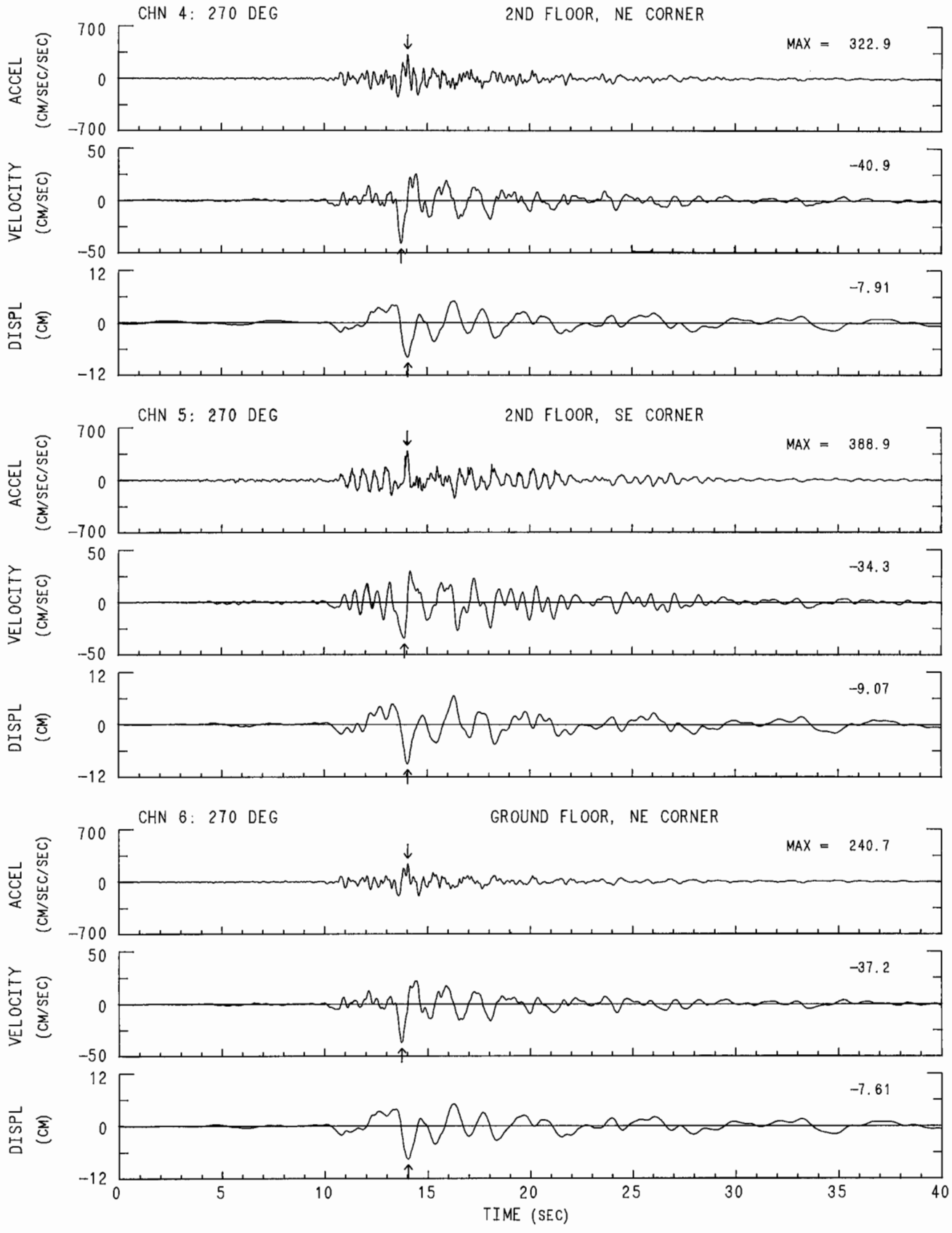
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 2-STORY OFFICE BLDG.: CSMIP S/N 224

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

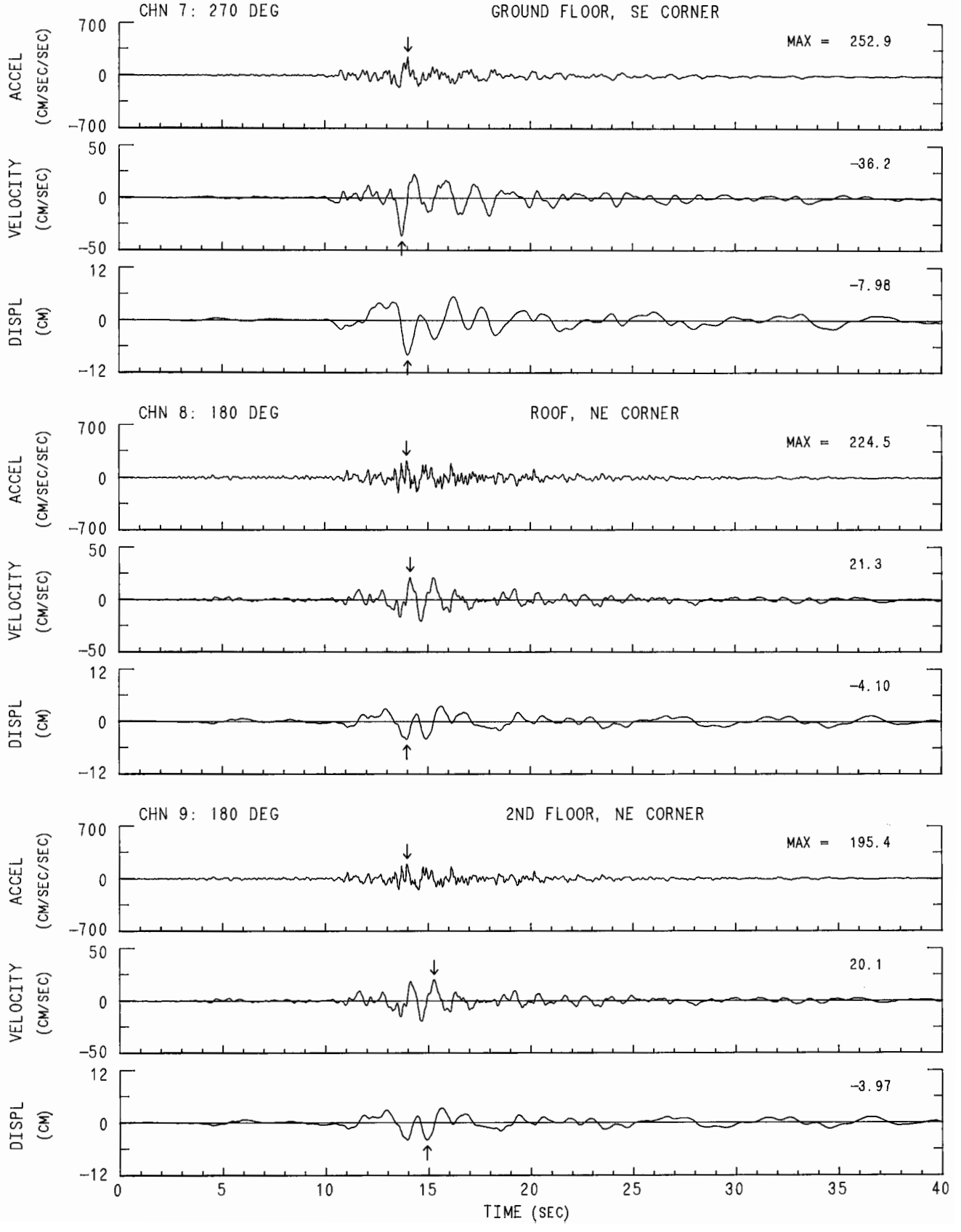
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 2-STORY OFFICE BLDG.: CSMIP S/N 224

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

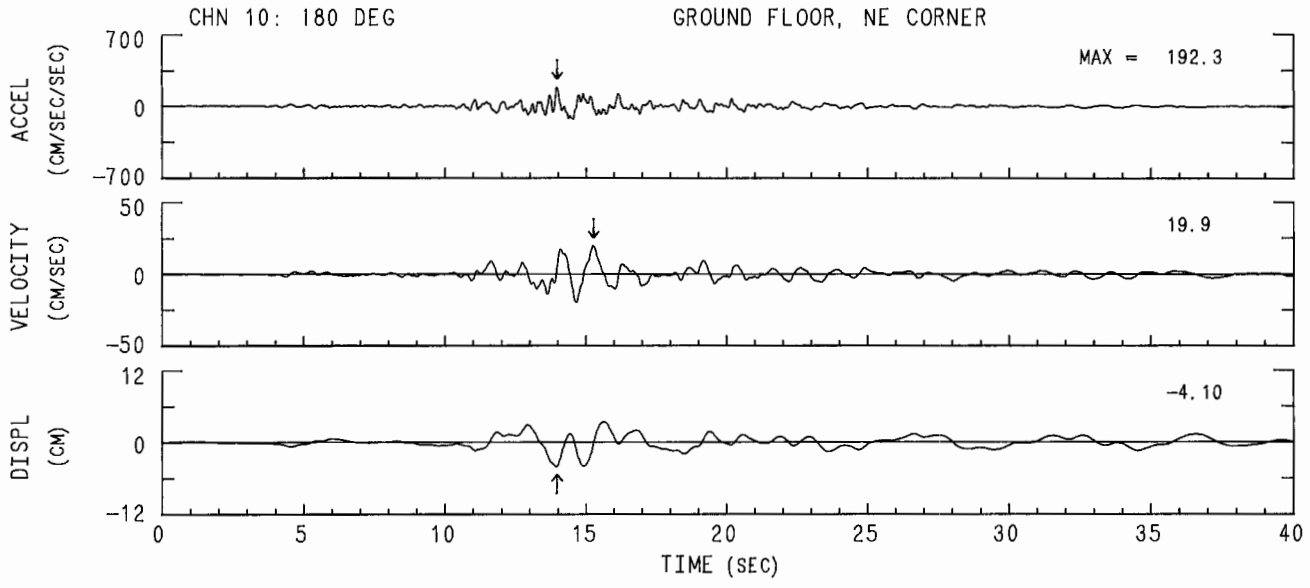
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 58224-C0120-89293.02



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 2–STORY OFFICE BLDG.: CSMIP S/N 224

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC) RECORD ID: 58224–C0120–89293.02



OAKLAND – 2-STORY OFFICE BLDG.: CSMIP S/N 224

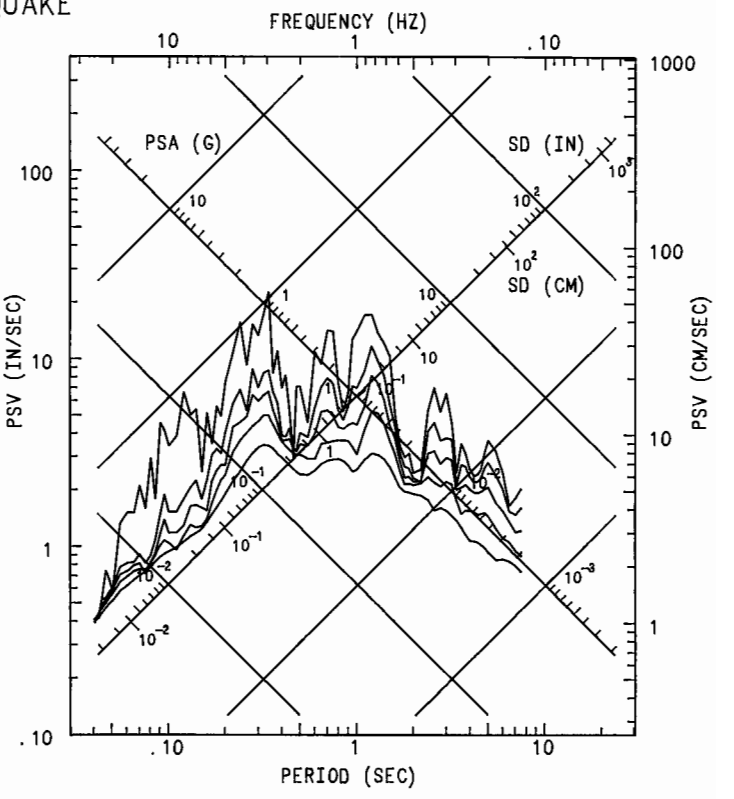
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

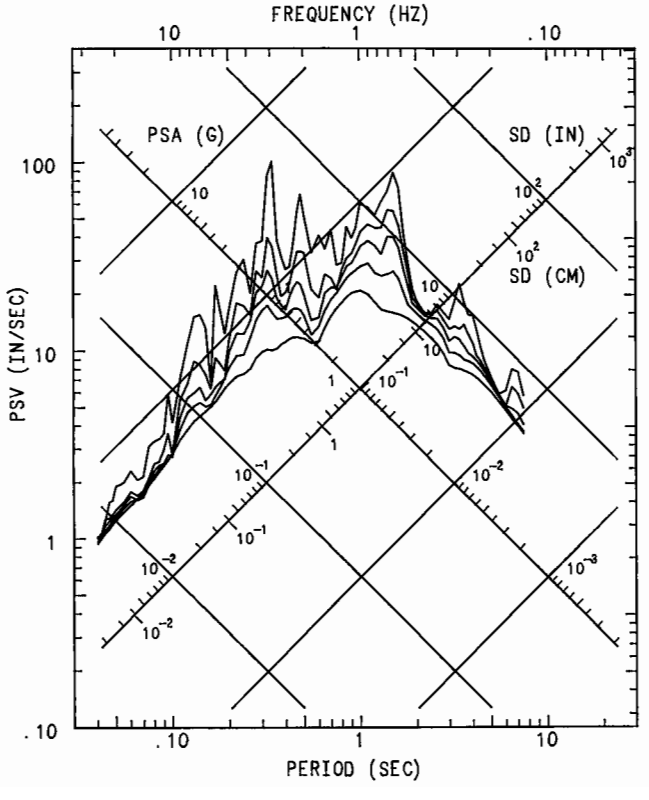
RECORD ID: 58224-C0120-89293.02

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

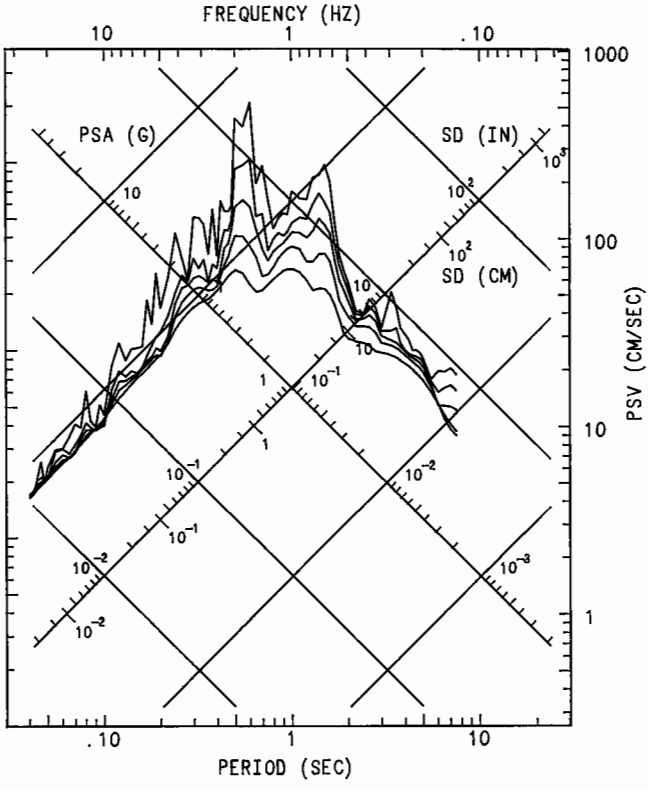
CHN 1: UP
GROUND FLOOR, NE CORNER



CHN 2: 270 DEG
ROOF, NE CORNER



CHN 3: 270 DEG
ROOF, SE CORNER



OAKLAND – 2-STORY OFFICE BLDG. : CSMIP S/N 224

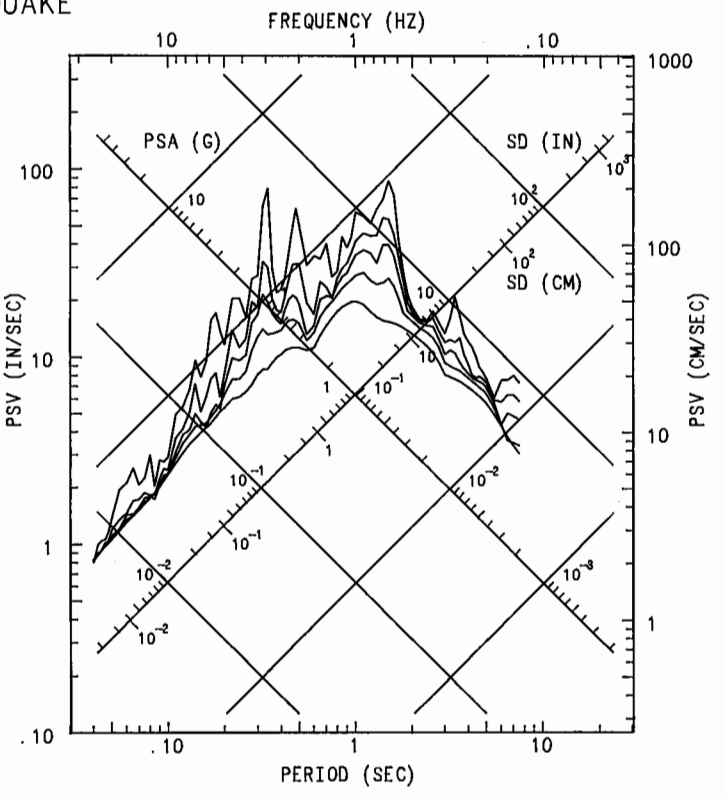
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

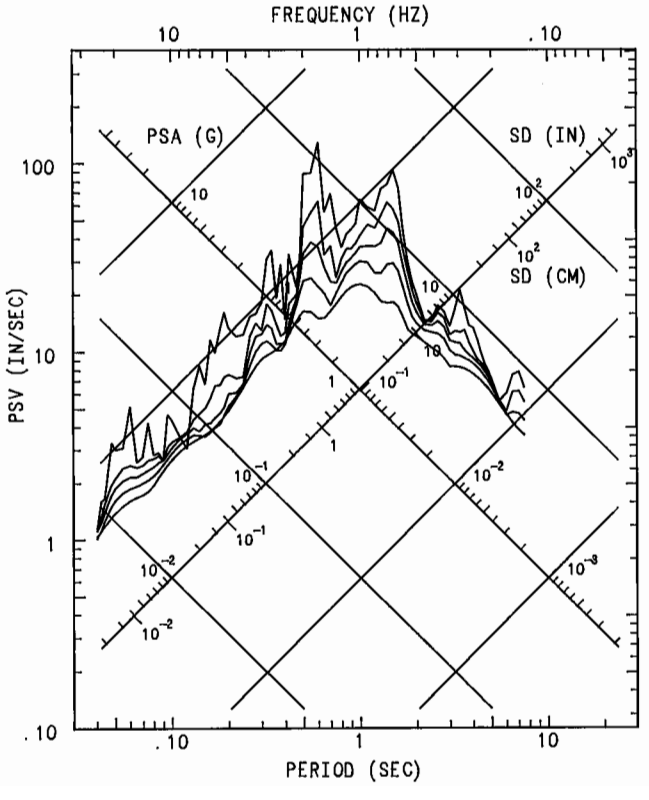
RECORD ID: 58224-C0120-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

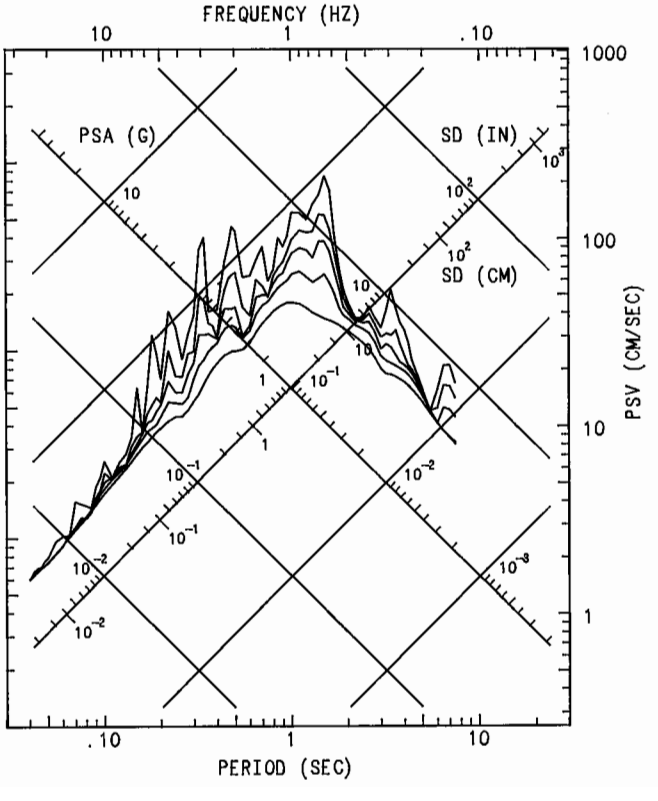
CHN 4: 270 DEG
2ND FLOOR, NE CORNER



CHN 5: 270 DEG
2ND FLOOR, SE CORNER



CHN 6: 270 DEG
GROUND FLOOR, NE CORNER



OAKLAND - 2-STORY OFFICE BLDG. : CSMIP S/N 224

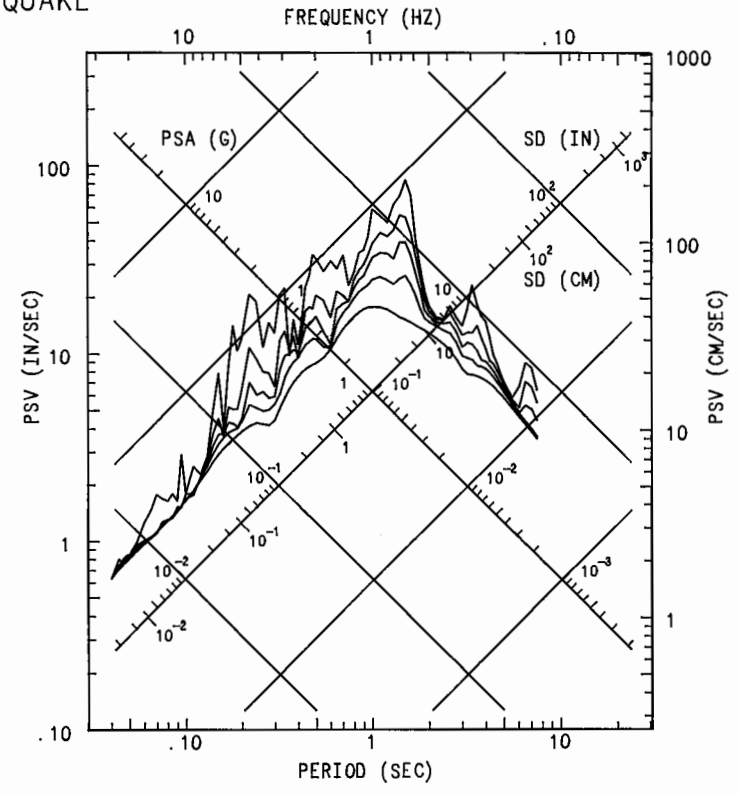
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

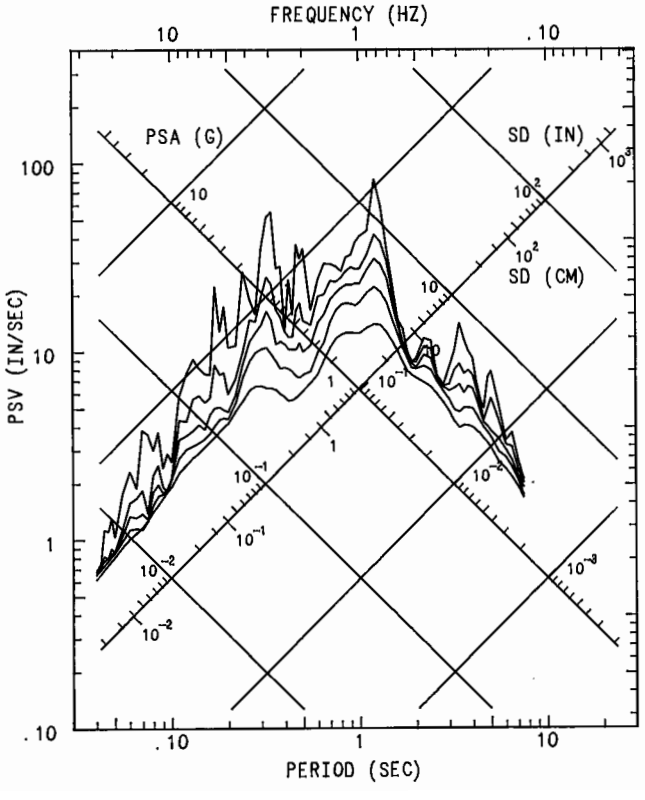
RECORD ID: 58224-C0120-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

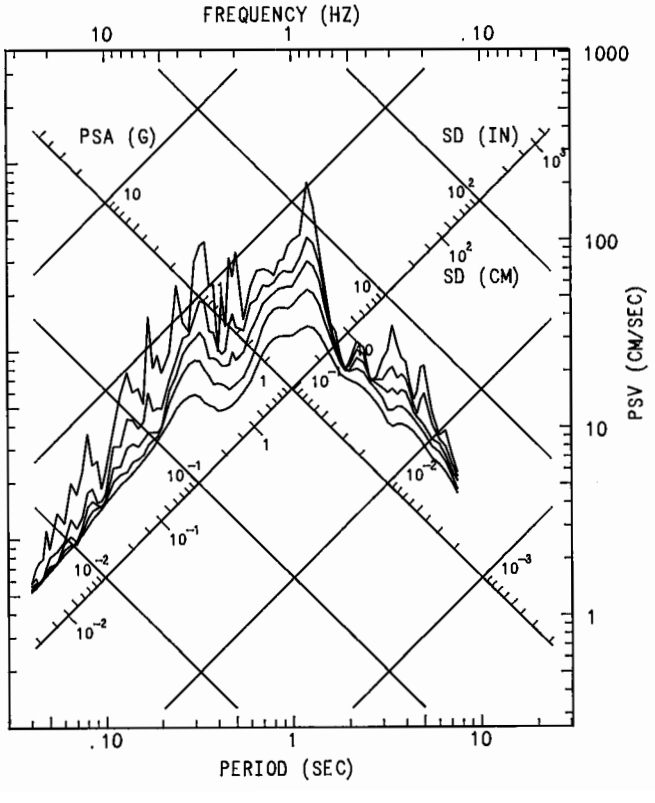
CHN 7: 270 DEG
GROUND FLOOR, SE CORNER



CHN 8: 180 DEG
ROOF, NE CORNER



CHN 9: 180 DEG
2ND FLOOR, NE CORNER



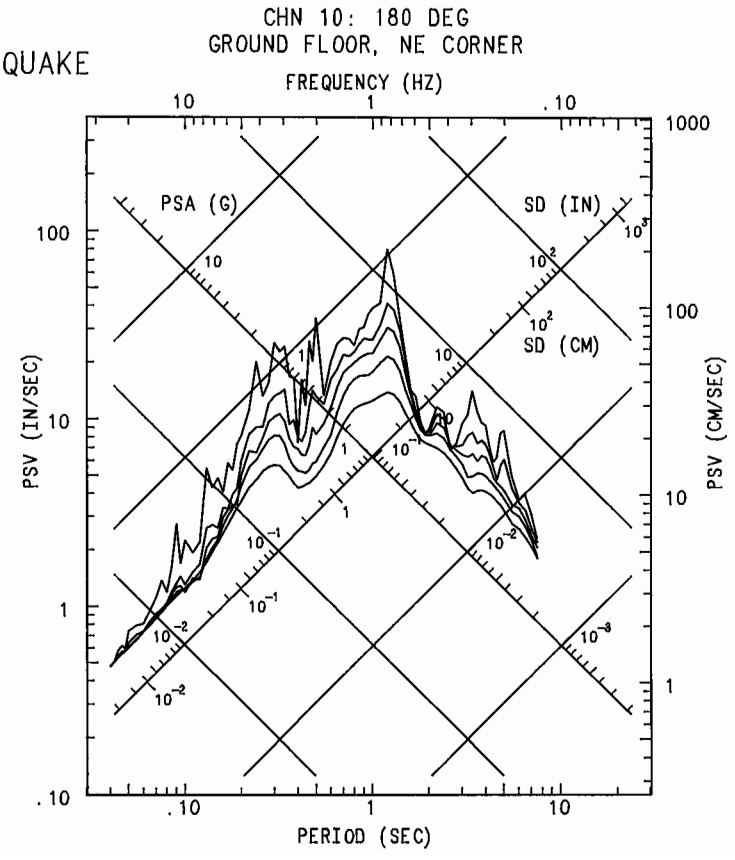
OAKLAND - 2-STORY OFFICE BLDG. : CSMIP S/N 224

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ
(0.04 TO 6.54 SEC)

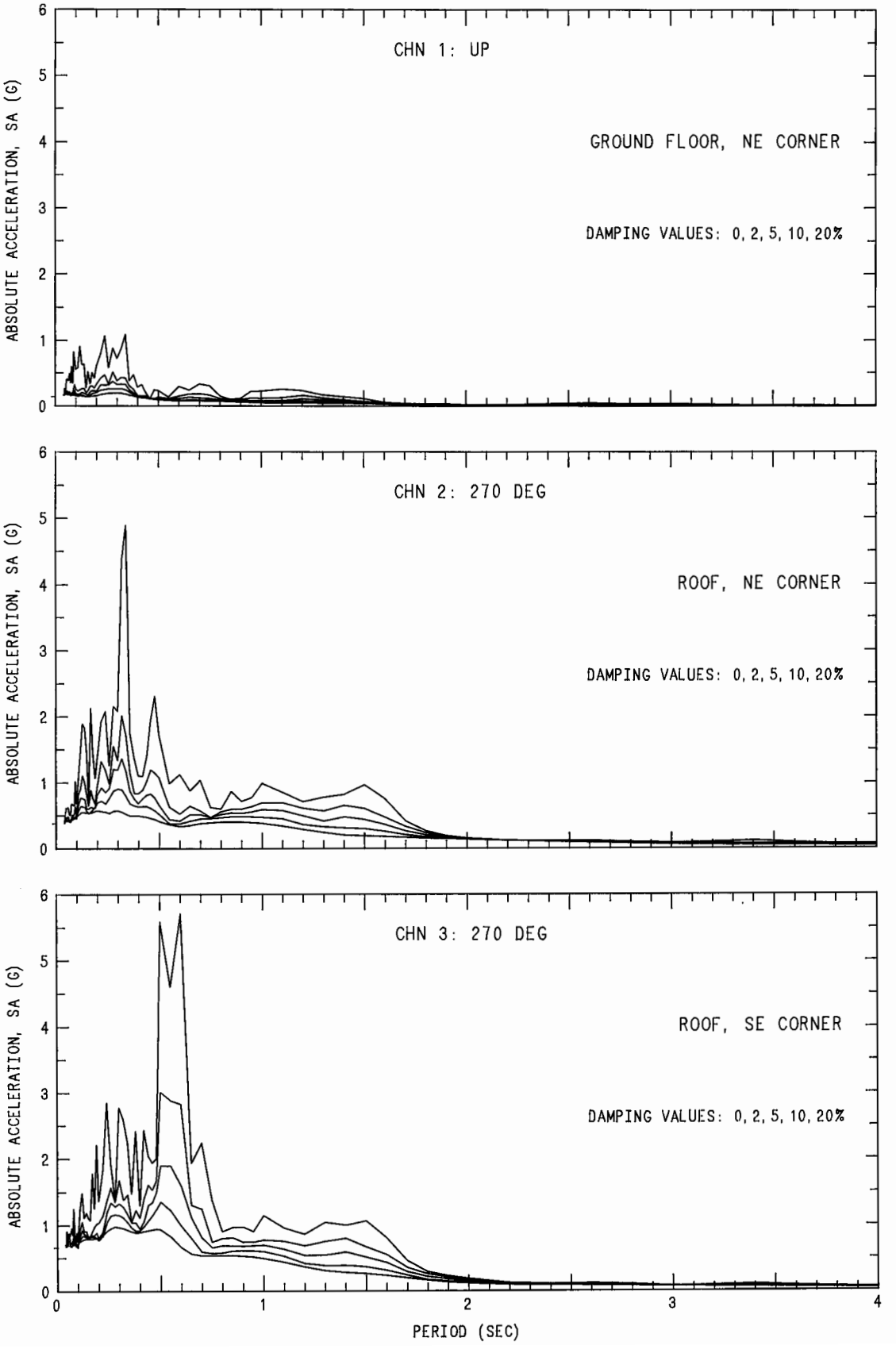
RECORD ID: 58224-C0120-89293.02

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

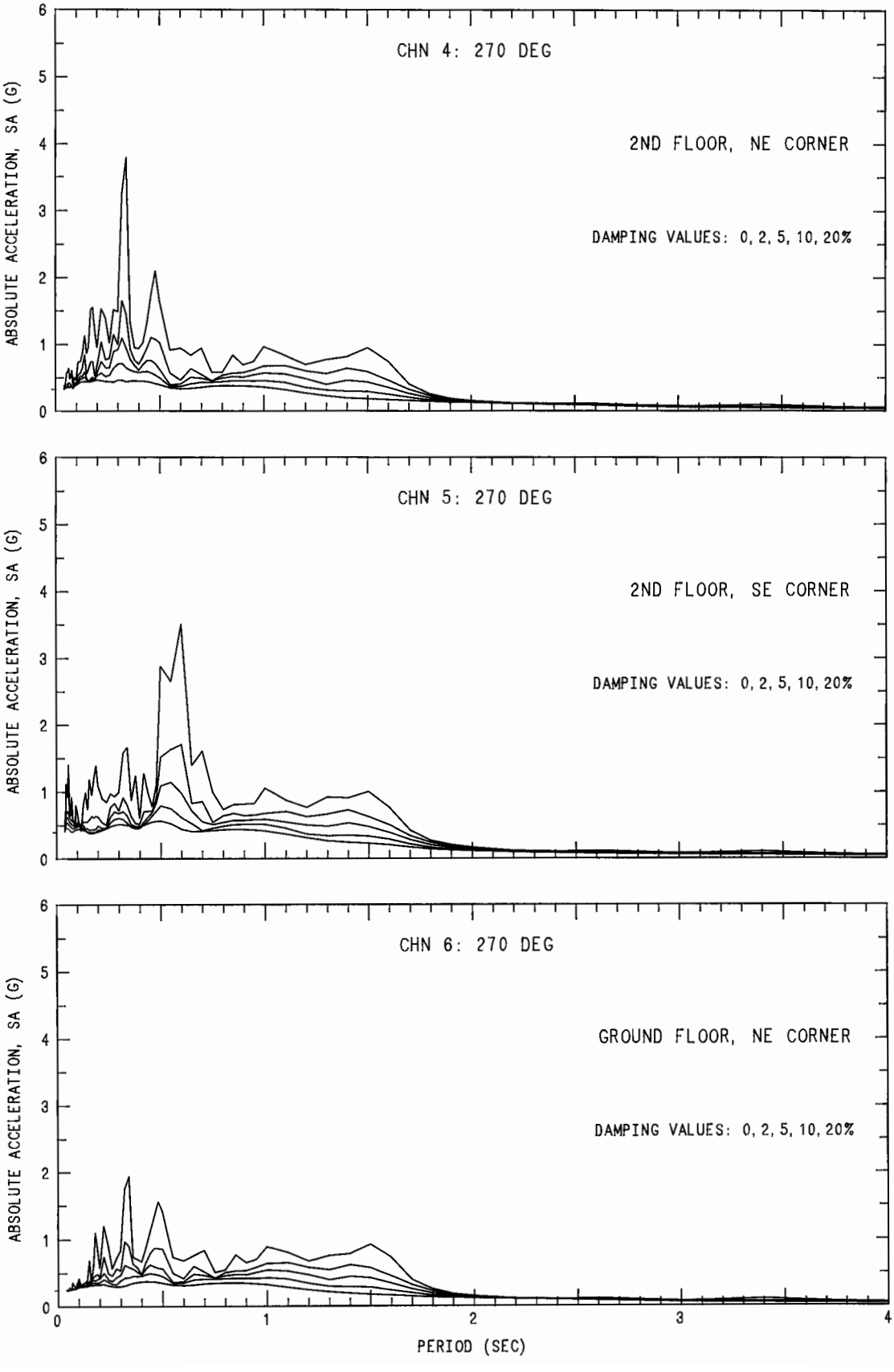


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 2-STORY OFFICE BLDG.: CSMIP S/N 224

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58224-C0120-89293.02
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)

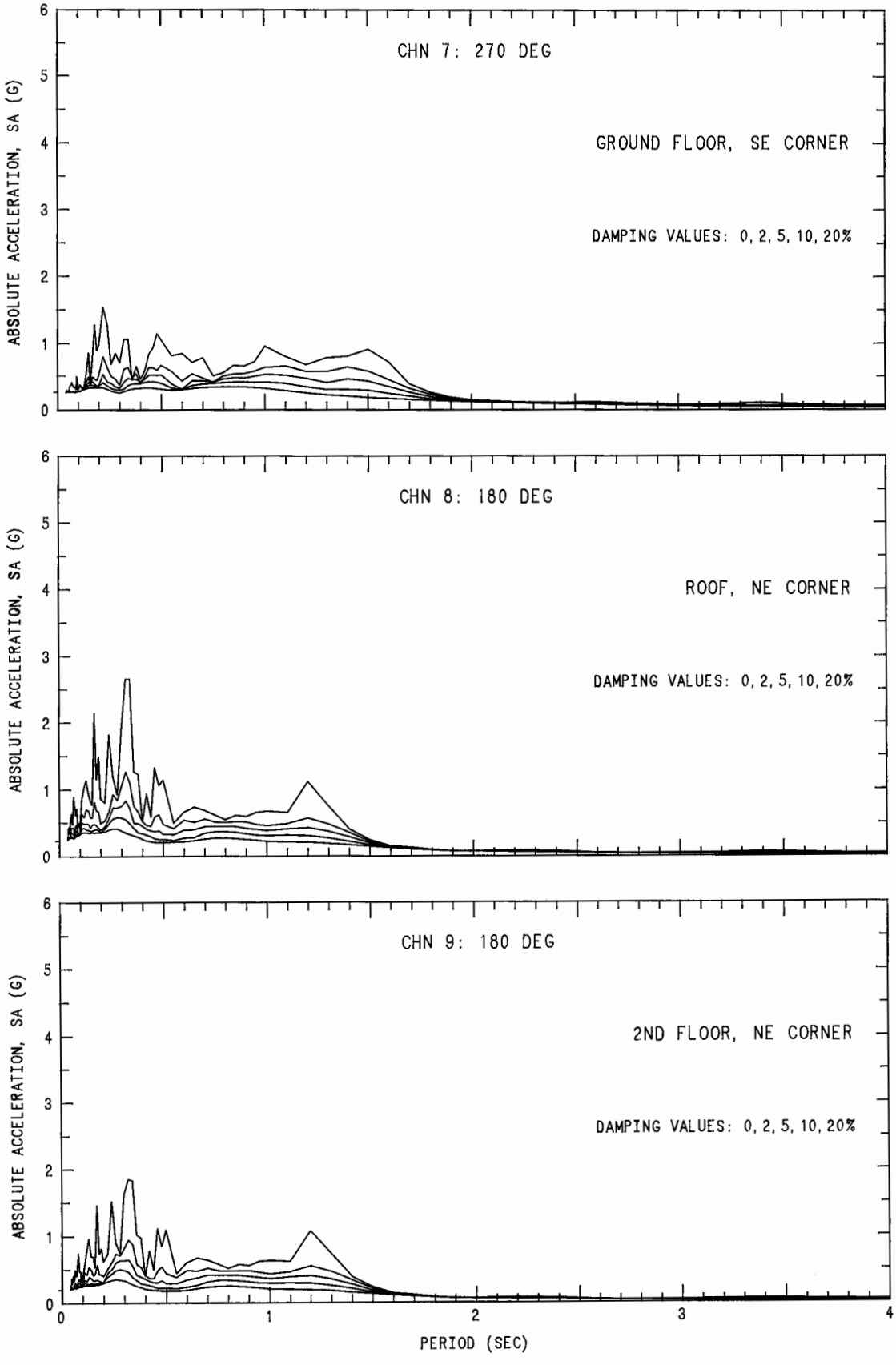


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 2-STORY OFFICE BLDG.: CSMIP S/N 224
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58224-C0120-89293.02
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)



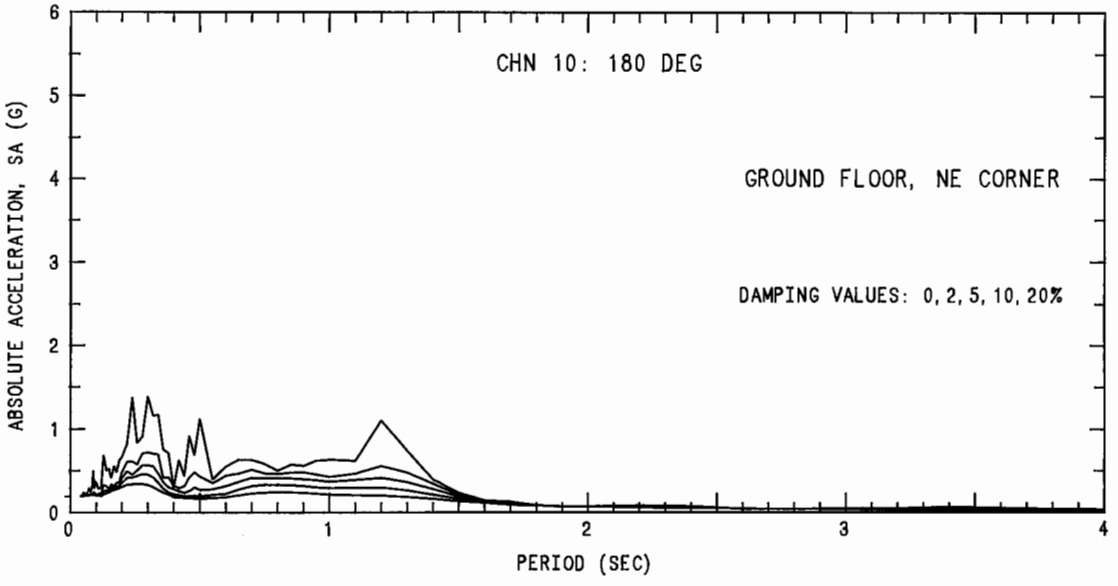
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND – 2-STORY OFFICE BLDG.: CSMIP S/N 224

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58224-C0120-89293.02
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
OAKLAND - 2-STORY OFFICE BLDG.: CSMIP S/N 224

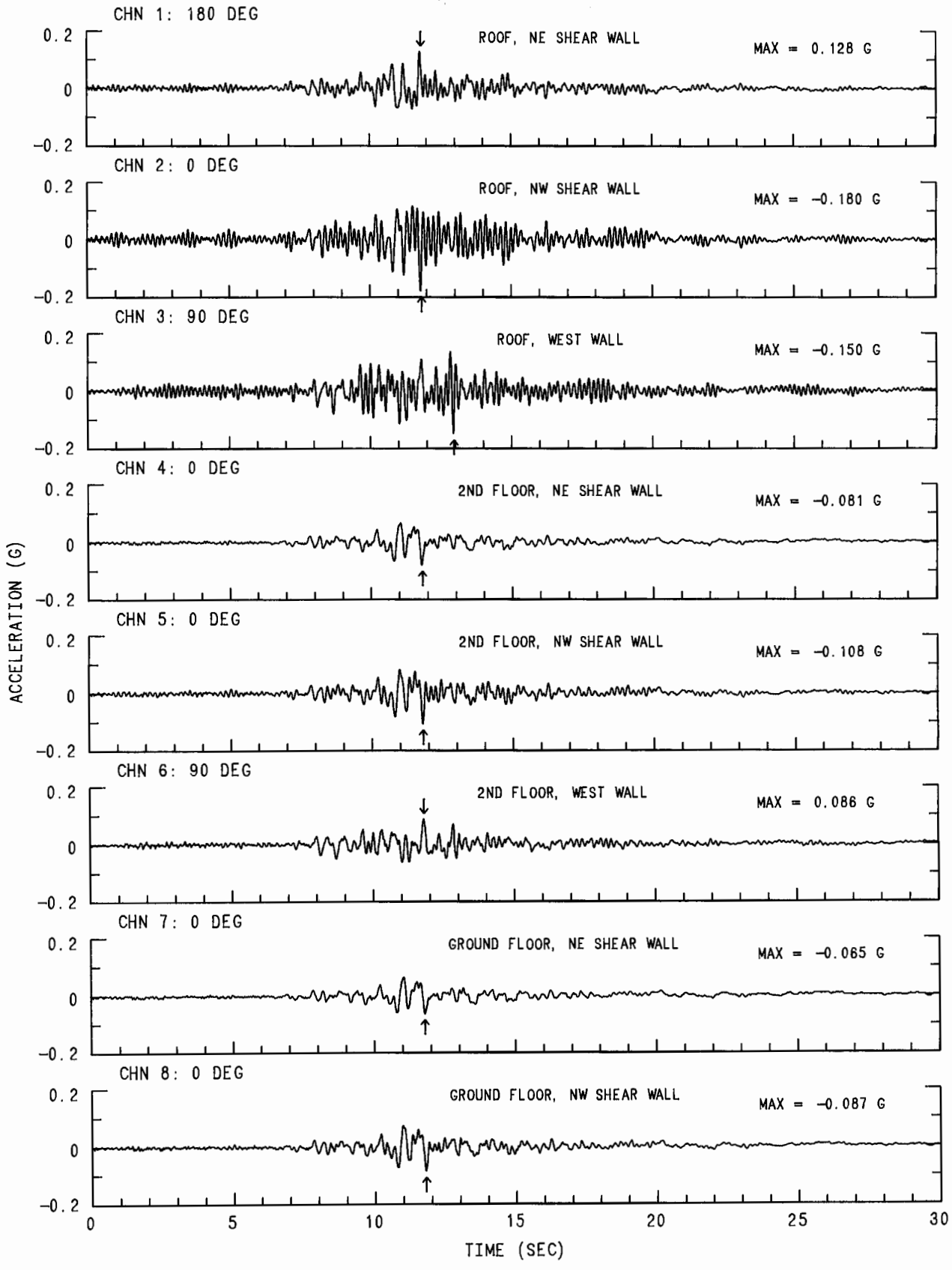
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58224-C0120-89293.02
USABLE DATA BANDWIDTH: 0.15 TO 23.6 HZ (0.04 TO 6.54 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

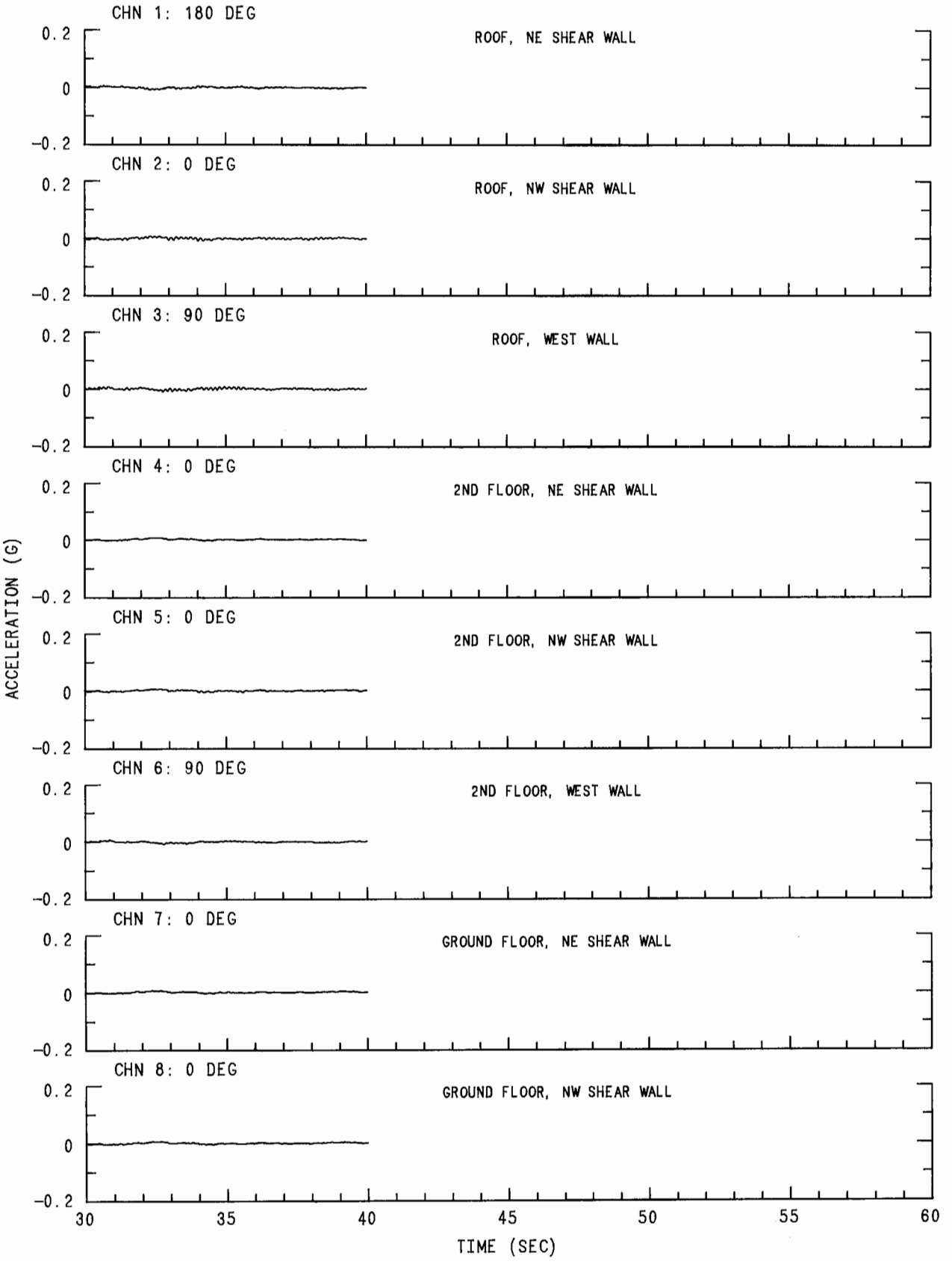
PHASE 1 ACCELERATION. RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

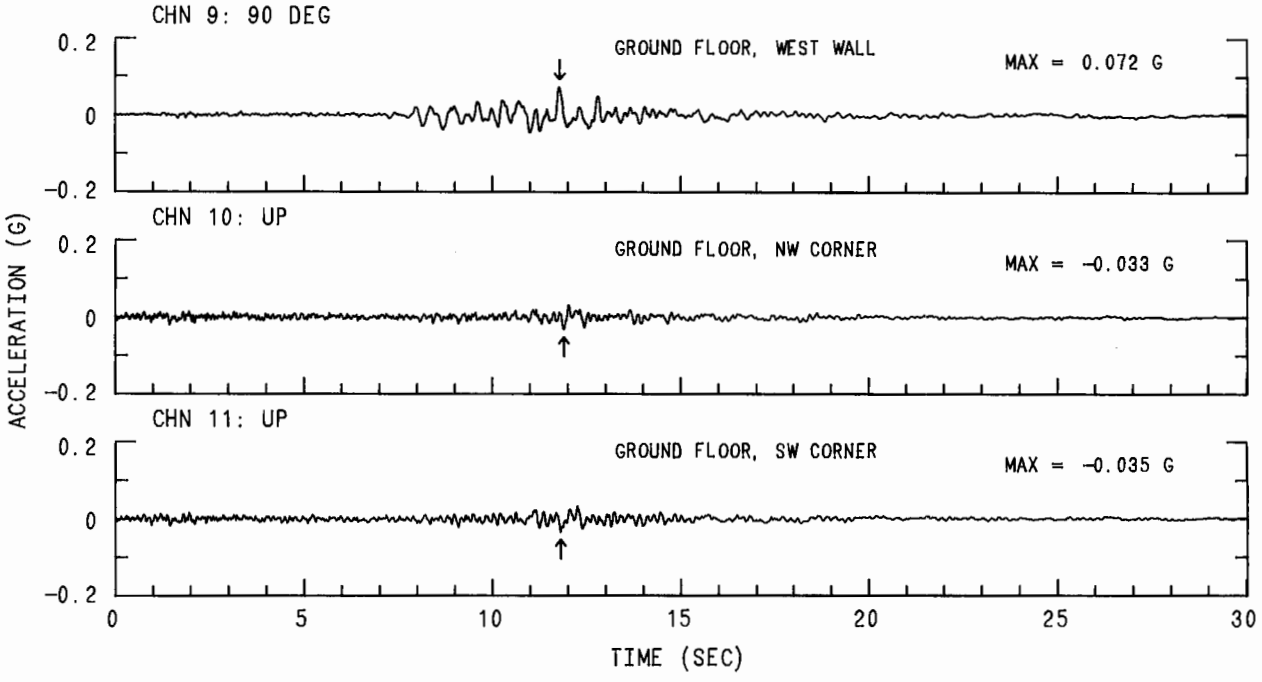
PHASE 1 ACCELERATION. RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

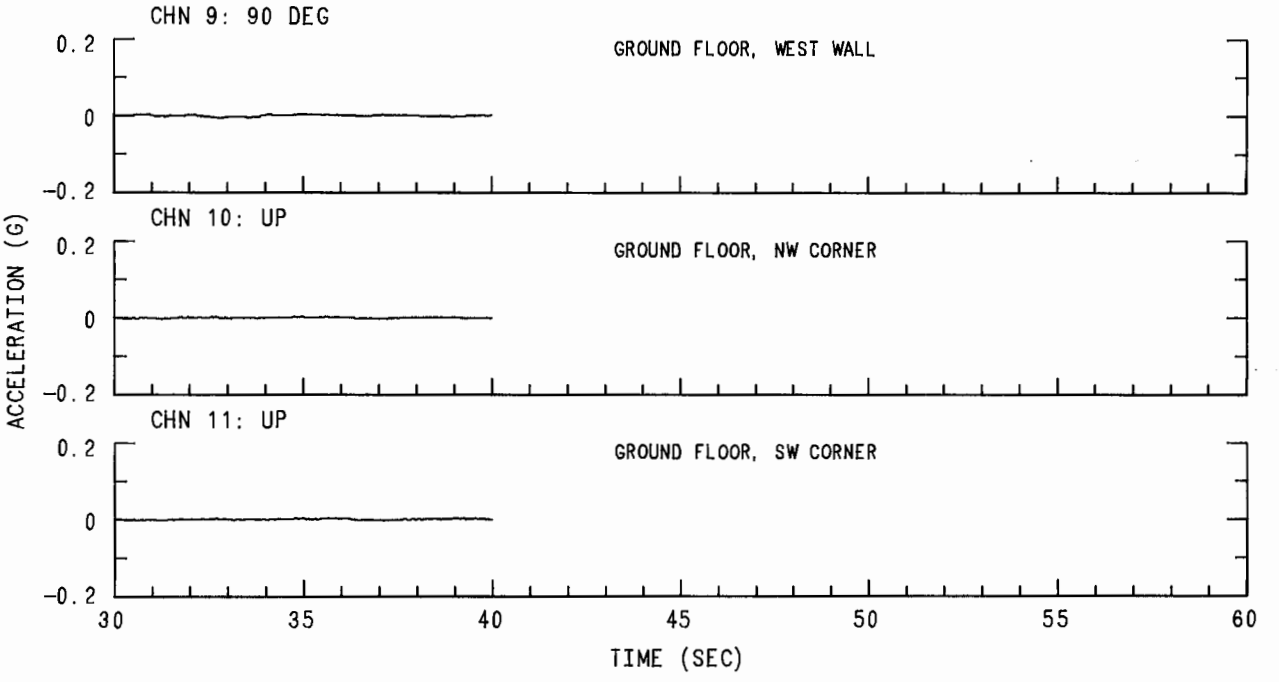
PHASE 1 ACCELERATION. RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

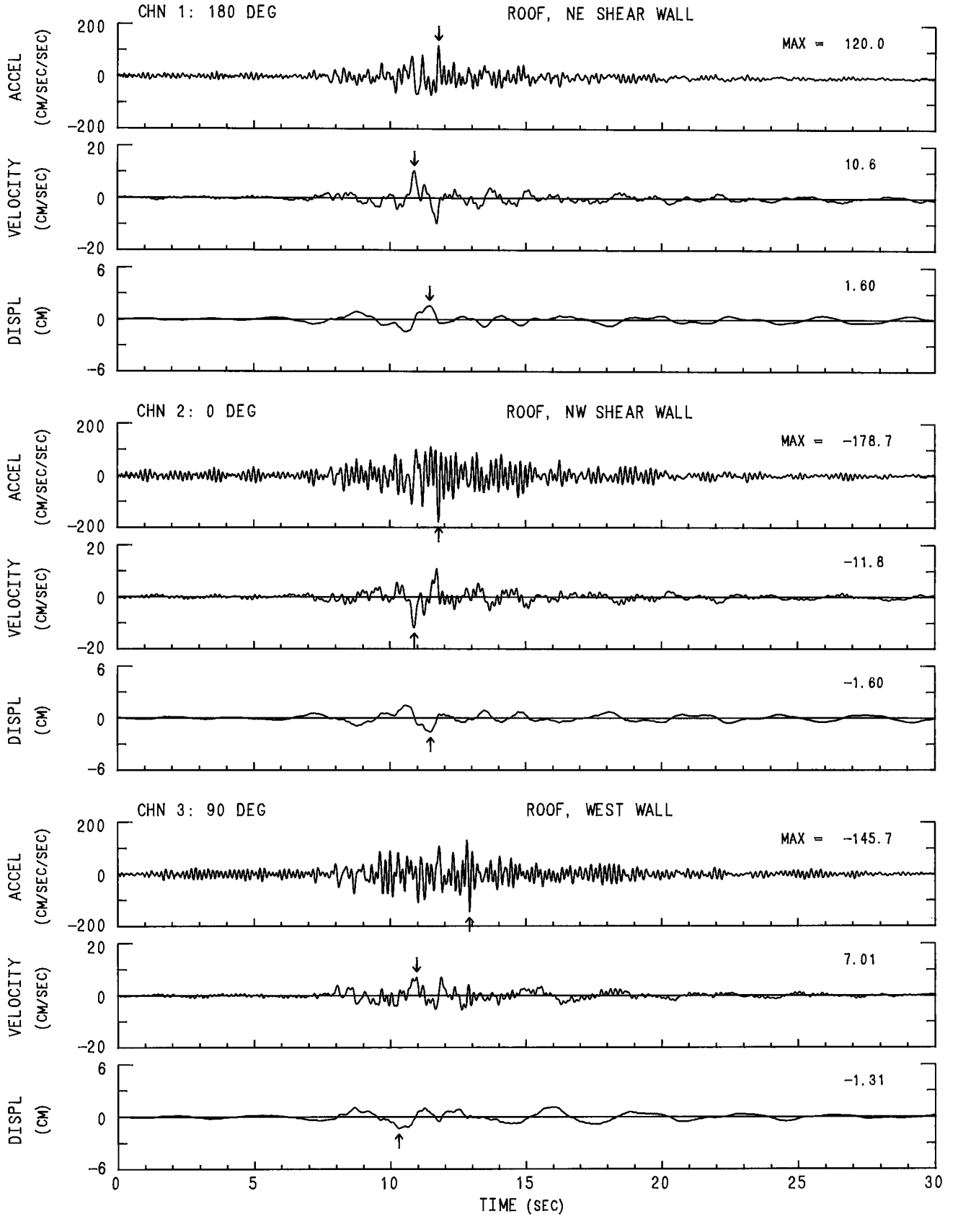
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

PHASE 1 ACCELERATION. RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

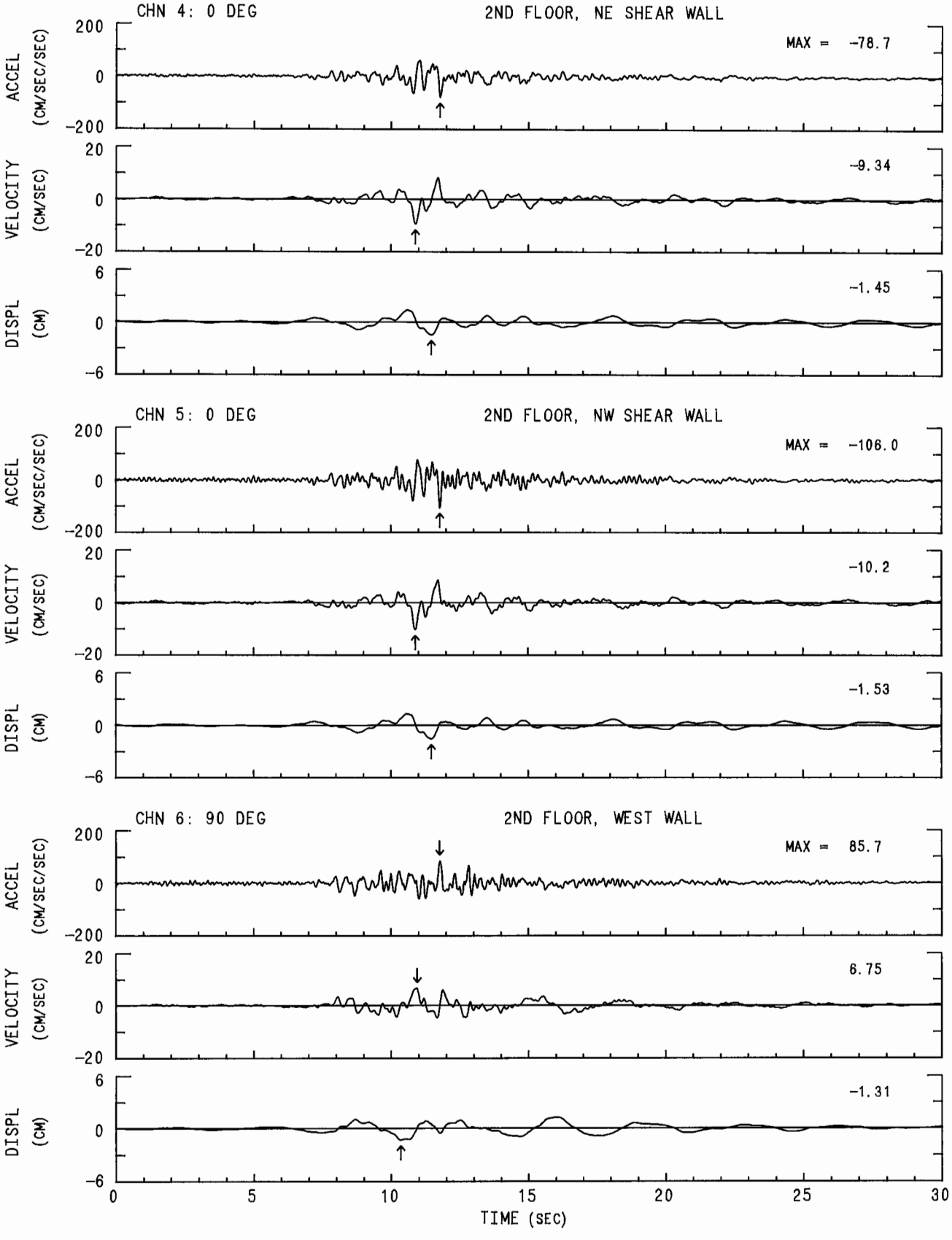
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

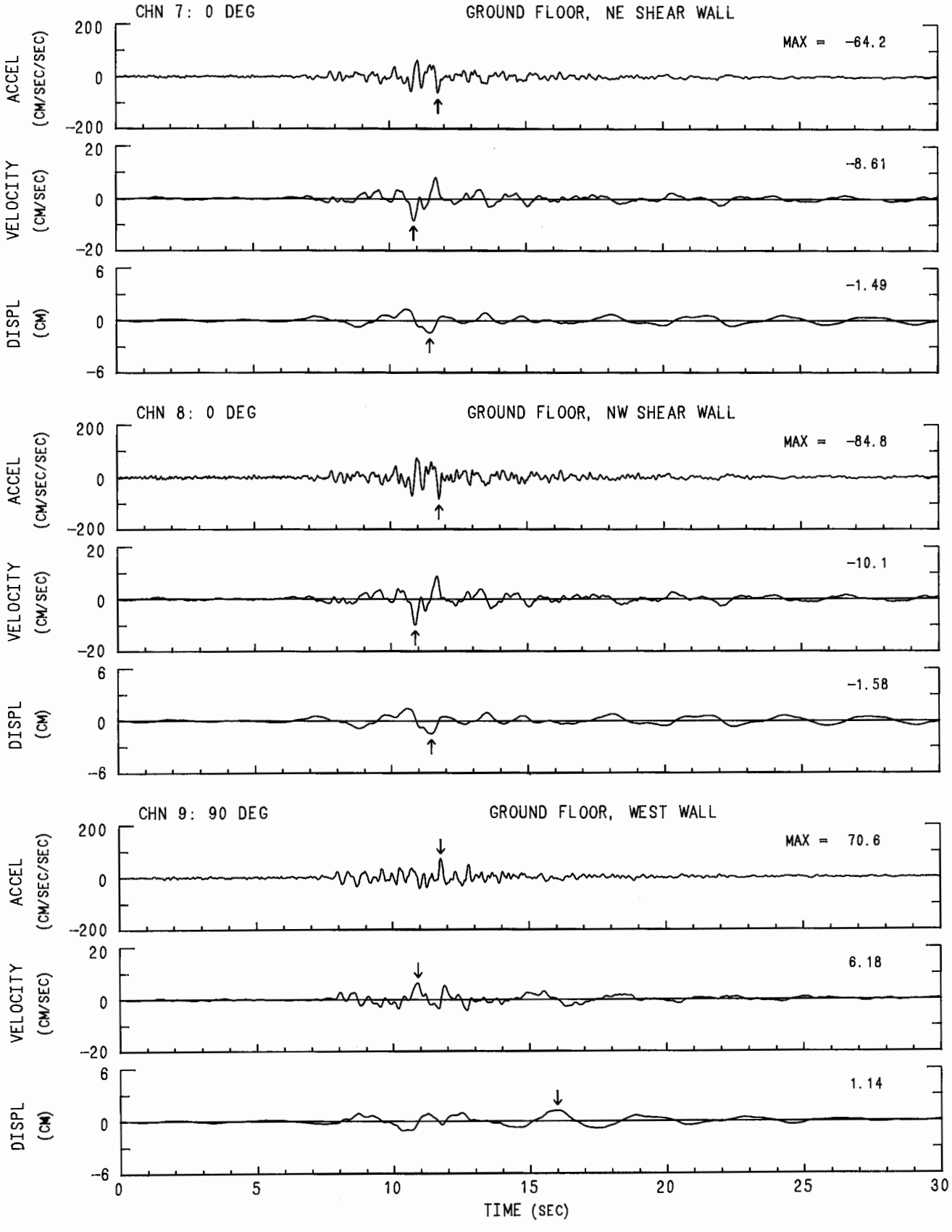
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

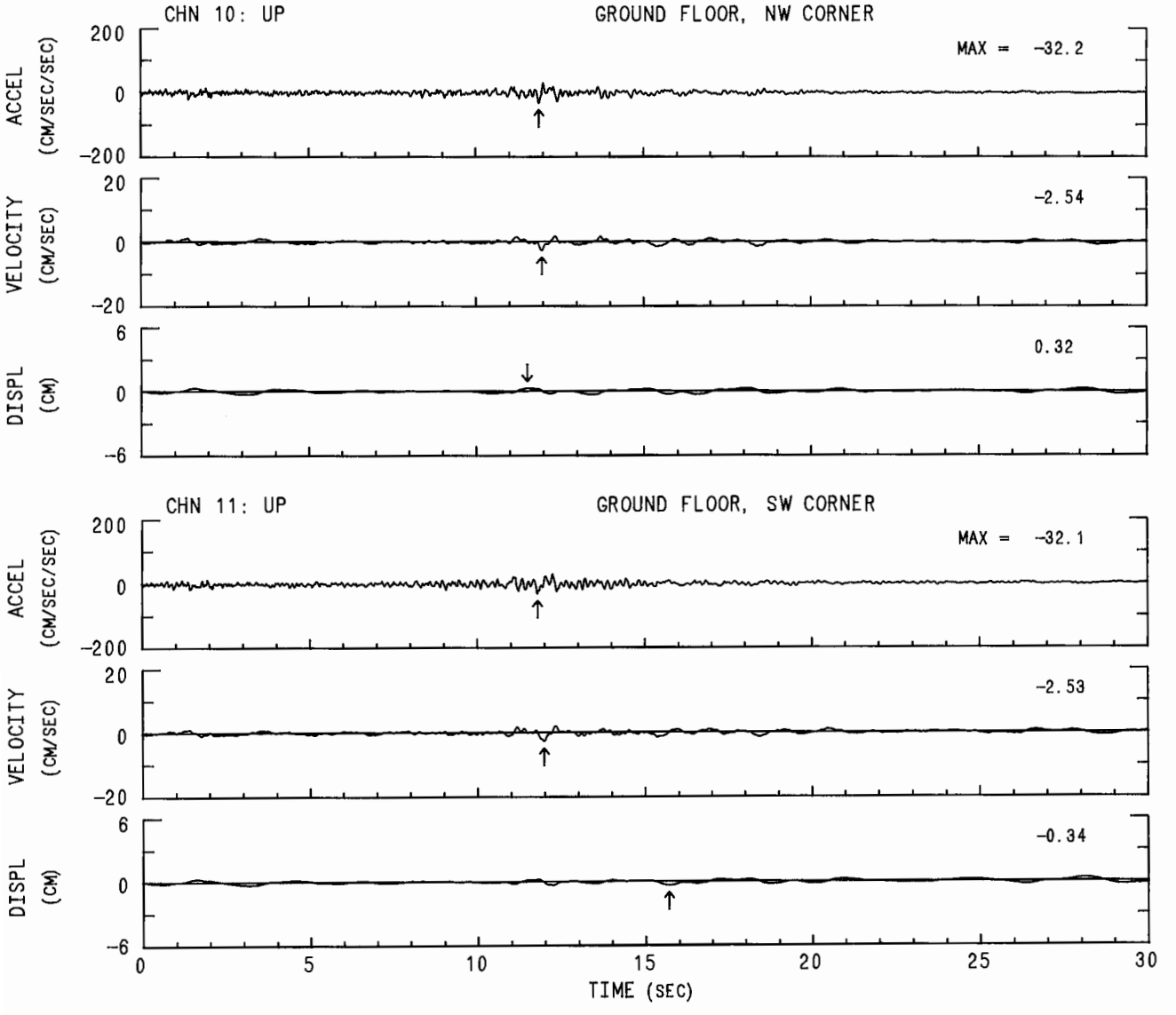
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58334-C0163-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT – 3–STORY SCHOOL BLDG.: CSMIP S/N 334

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58334–C0163–89293.01



PIEDMONT - 3-STORY SCHOOL BLDG. : CSMIP S/N 334

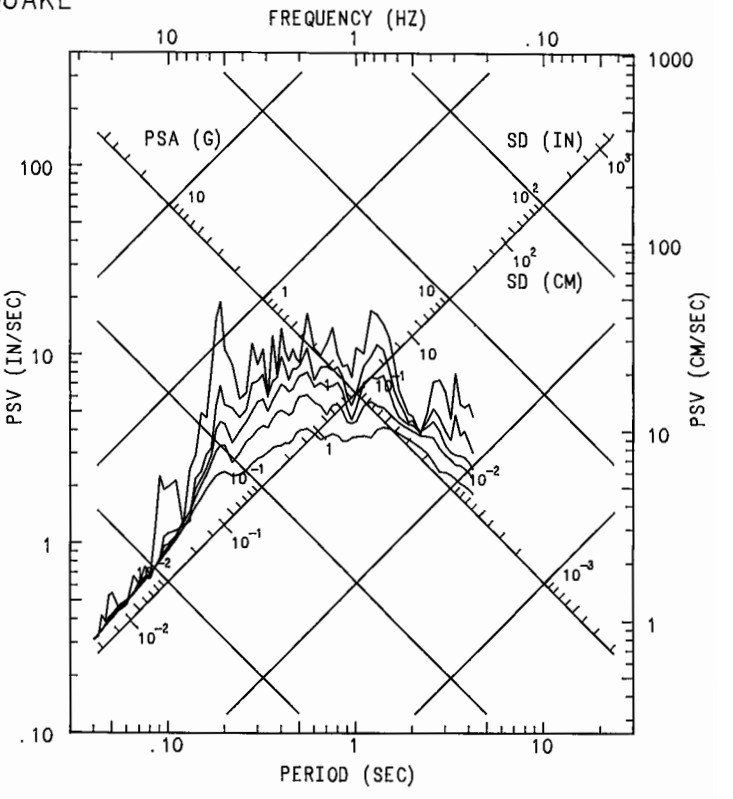
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

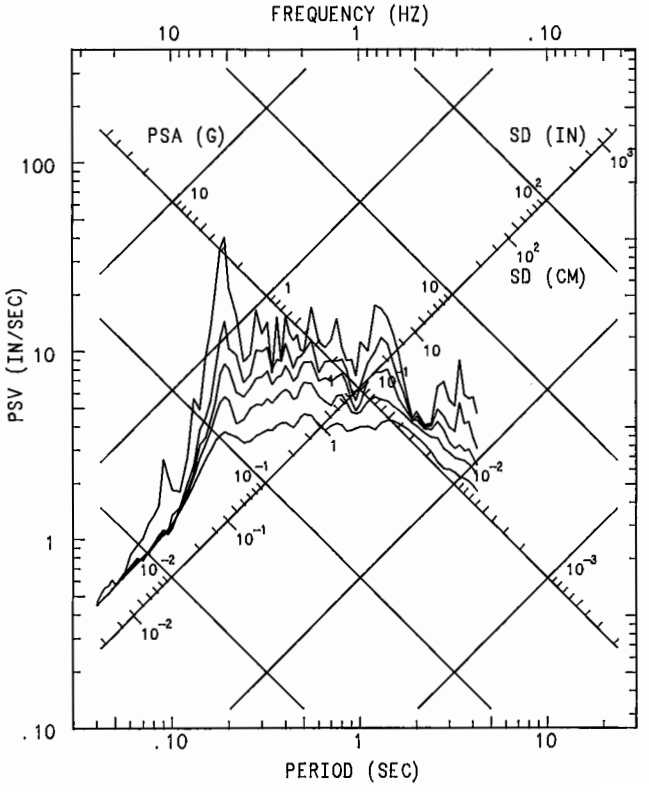
RECORD ID: 58334-C0163-89293.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

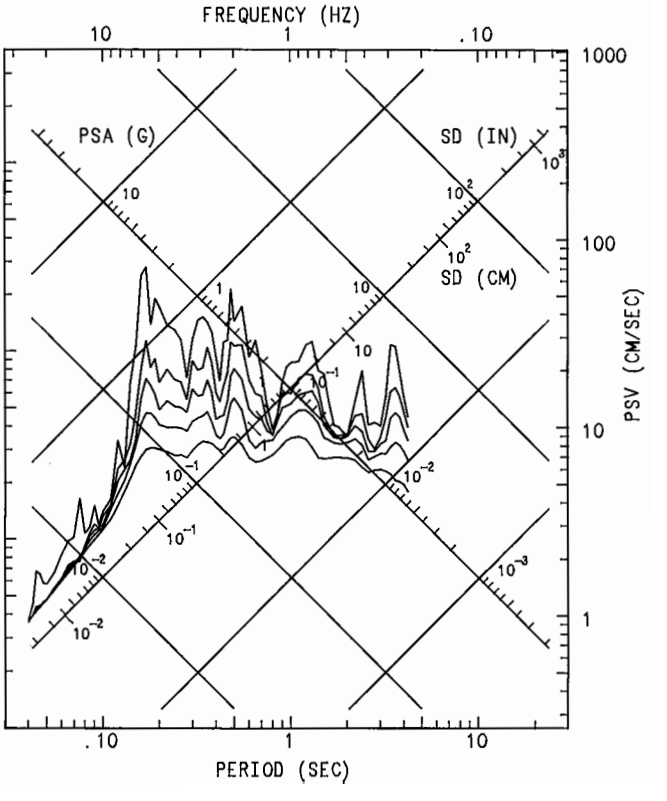
CHN 1: 180 DEG
ROOF, NE SHEAR WALL



CHN 2: 0 DEG
ROOF, NW SHEAR WALL



CHN 3: 90 DEG
ROOF, WEST WALL



PIEDMONT - 3-STORY SCHOOL BLDG. : CSMIP S/N 334

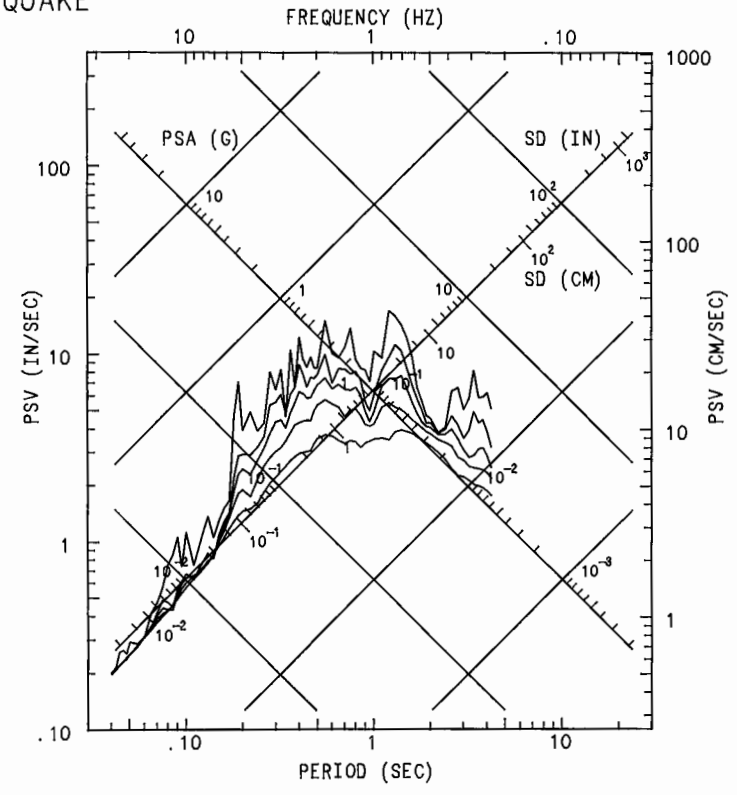
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

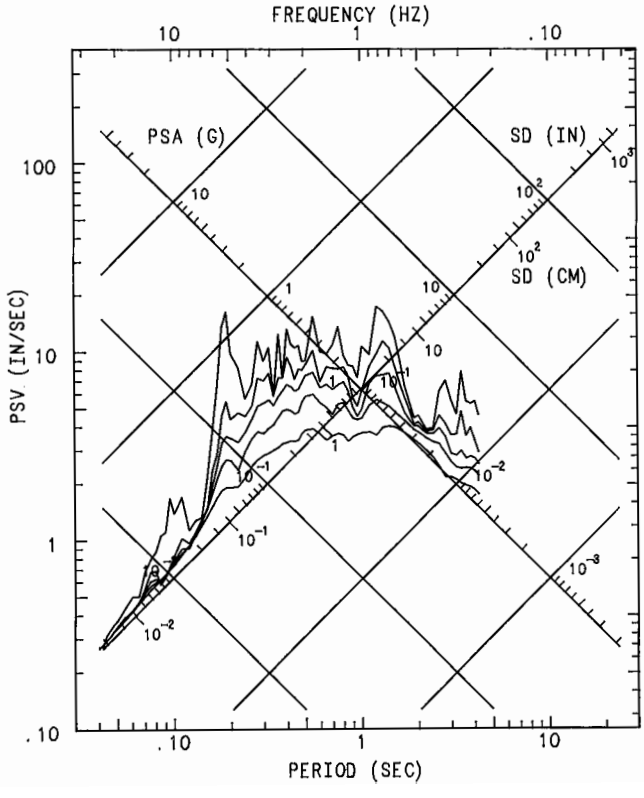
RECORD ID: 58334-C0163-89293.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

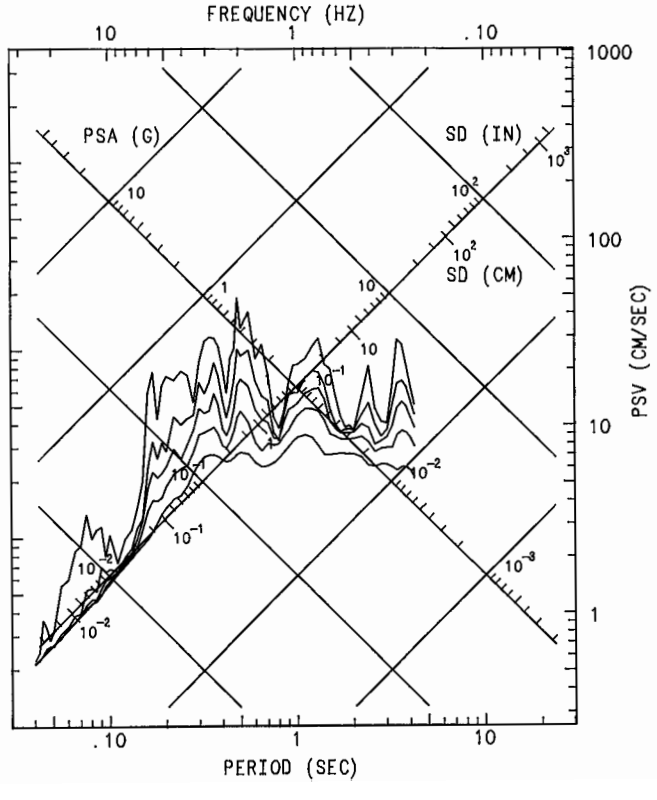
CHN 4: 0 DEG
2ND FLOOR, NE SHEAR WALL



CHN 5: 0 DEG
2ND FLOOR, NW SHEAR WALL



CHN 6: 90 DEG
2ND FLOOR, WEST WALL



PIEDMONT - 3-STORY SCHOOL BLDG. : CSMIP S/N 334

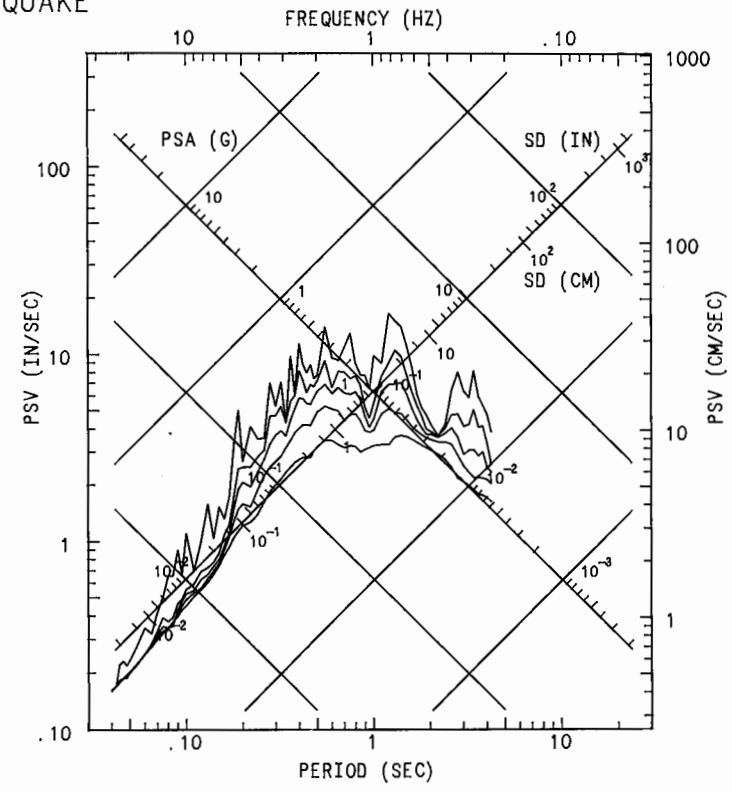
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

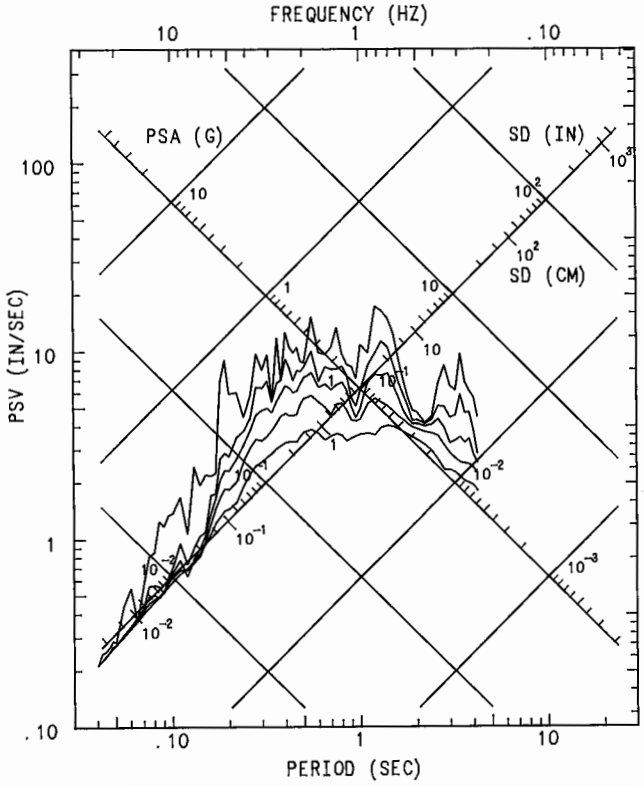
RECORD ID: 58334-C0163-89293.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

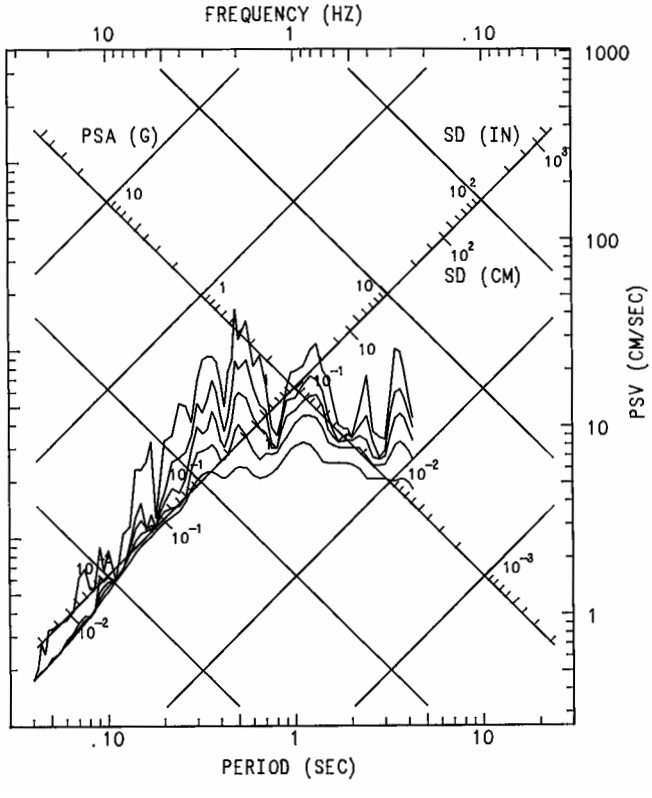
CHN 7: 0 DEG
GROUND FLOOR, NE SHEAR WALL



CHN 8: 0 DEG
GROUND FLOOR, NW SHEAR WALL



CHN 9: 90 DEG
GROUND FLOOR, WEST WALL



PIEDMONT - 3-STORY SCHOOL BLDG. : CSMIP S/N 334

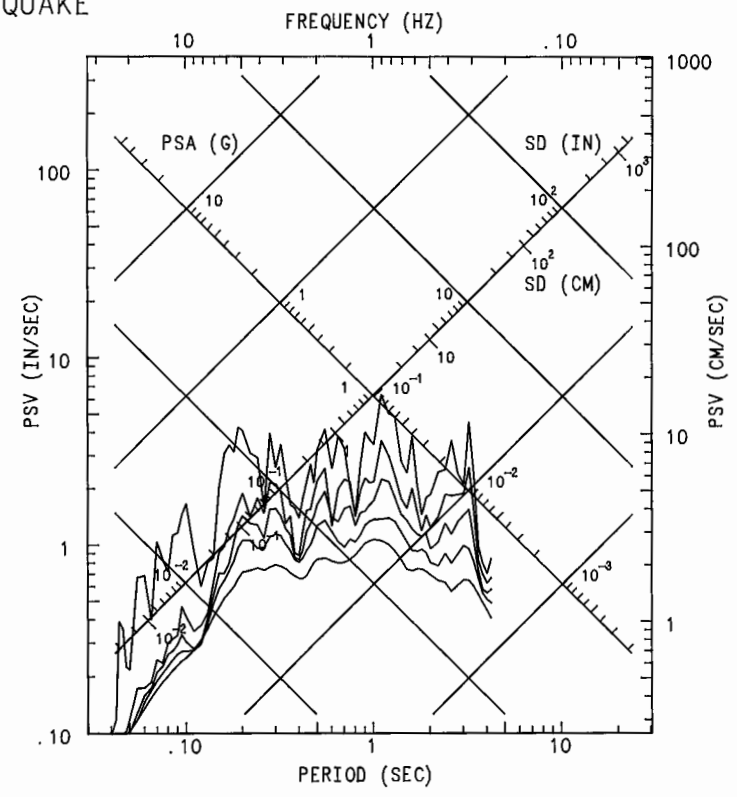
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

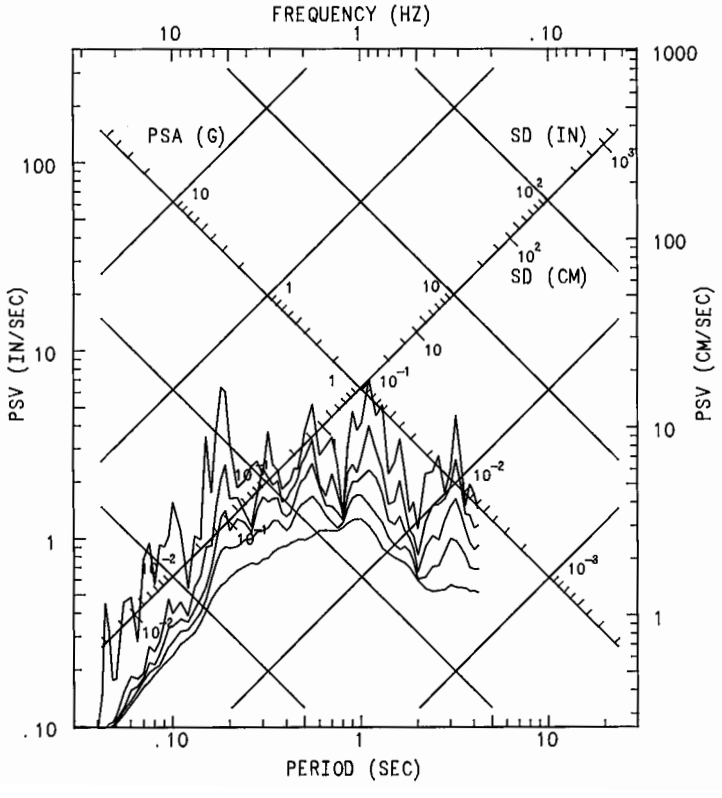
RECORD ID: 58334-C0163-89293.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

CHN 10: UP
GROUND FLOOR, NW CORNER

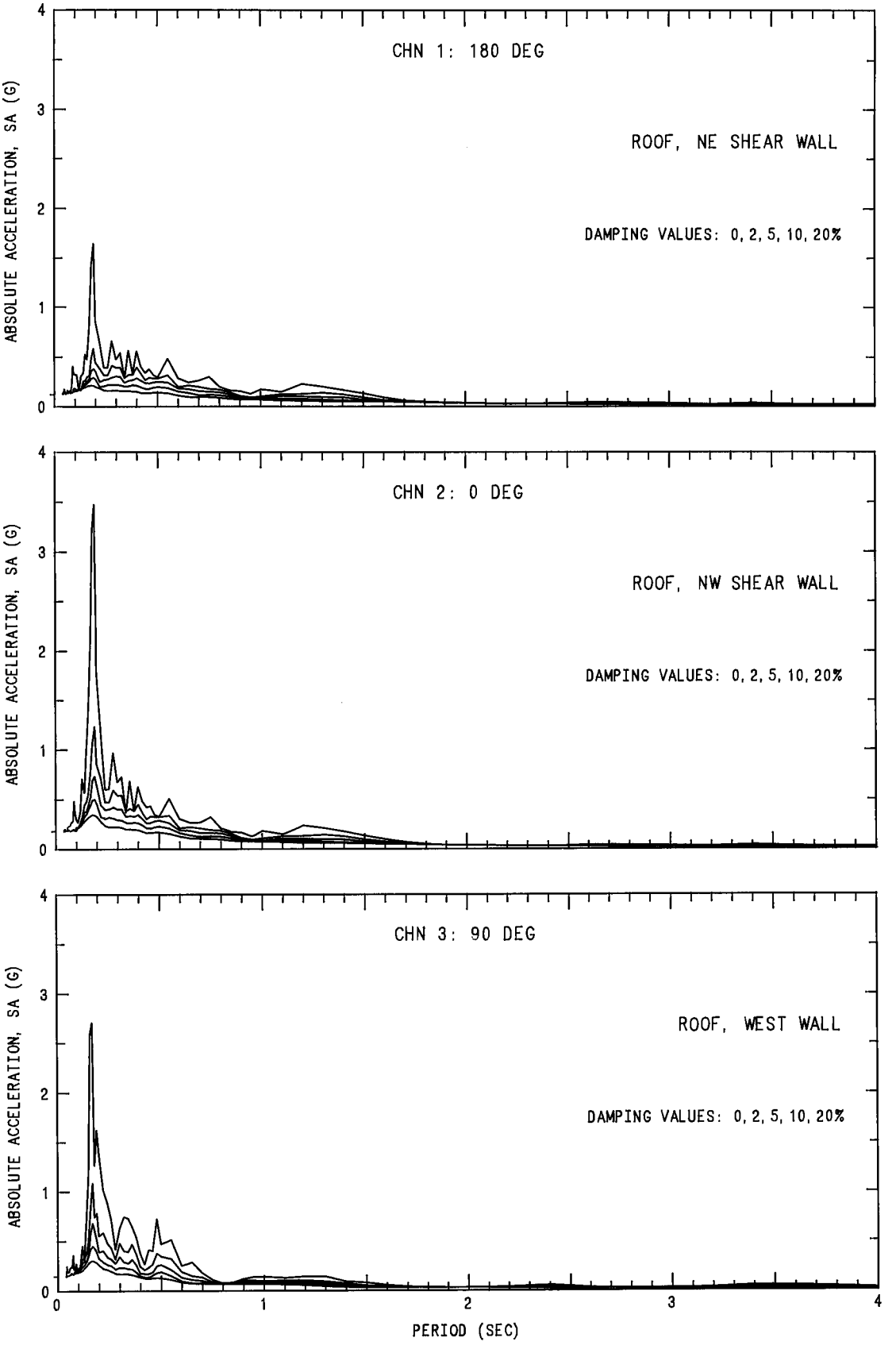


CHN 11: UP
GROUND FLOOR, SW CORNER



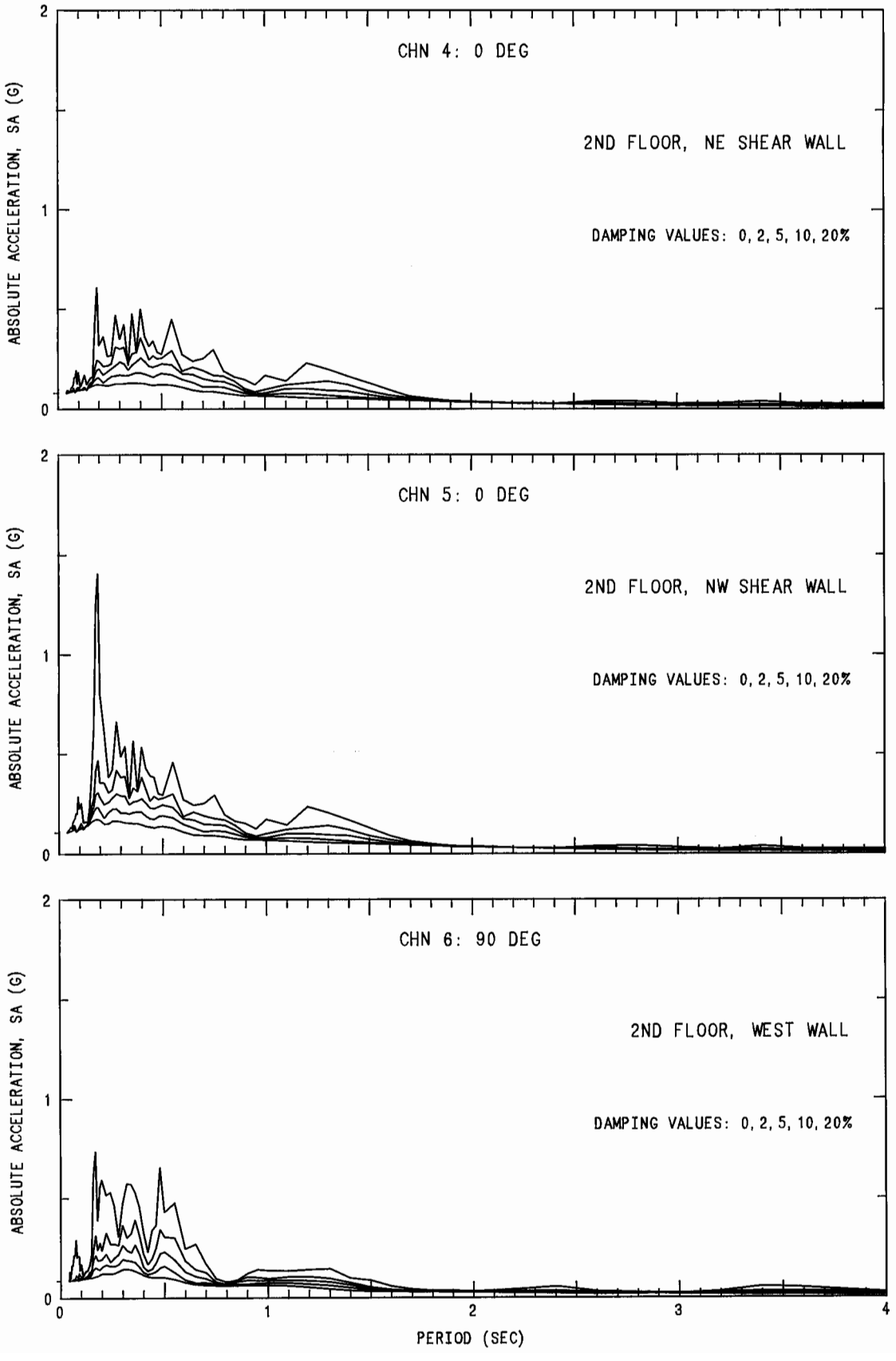
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58334-C0163-89293.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



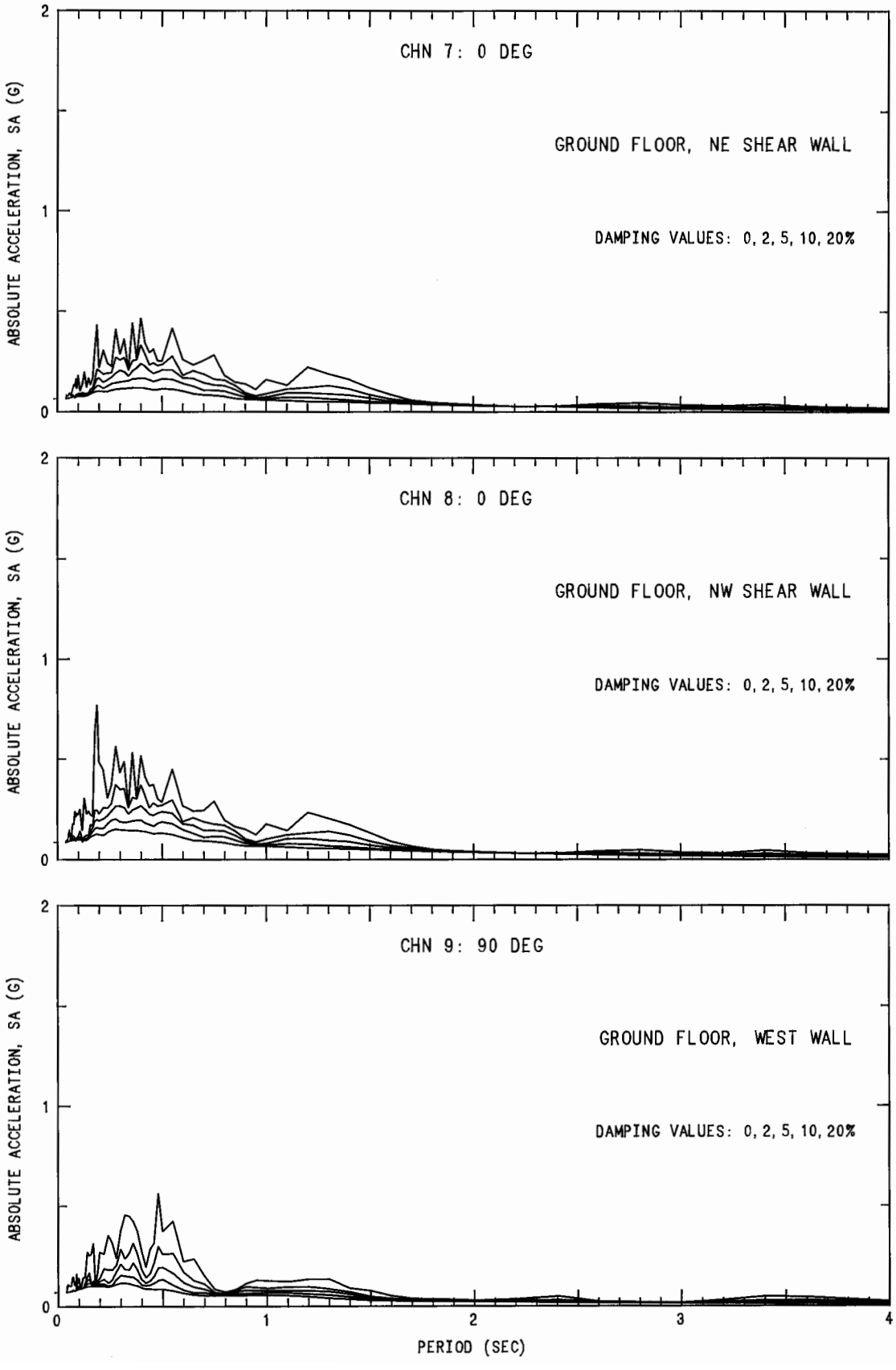
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58334-C0163-89293.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)

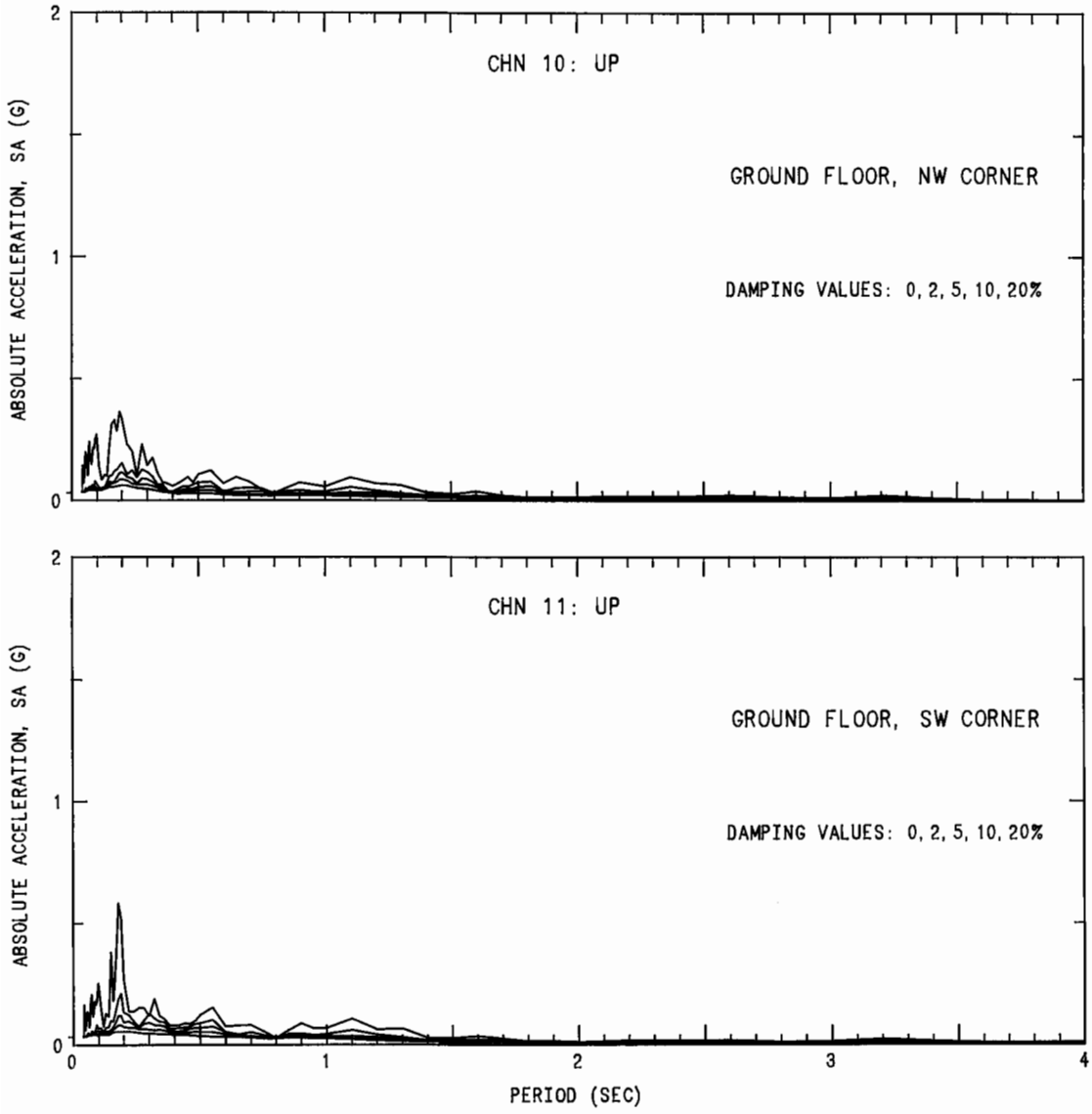


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58334-C0163-89293.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - 3-STORY SCHOOL BLDG.: CSMIP S/N 334
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58334-C0163-89293.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

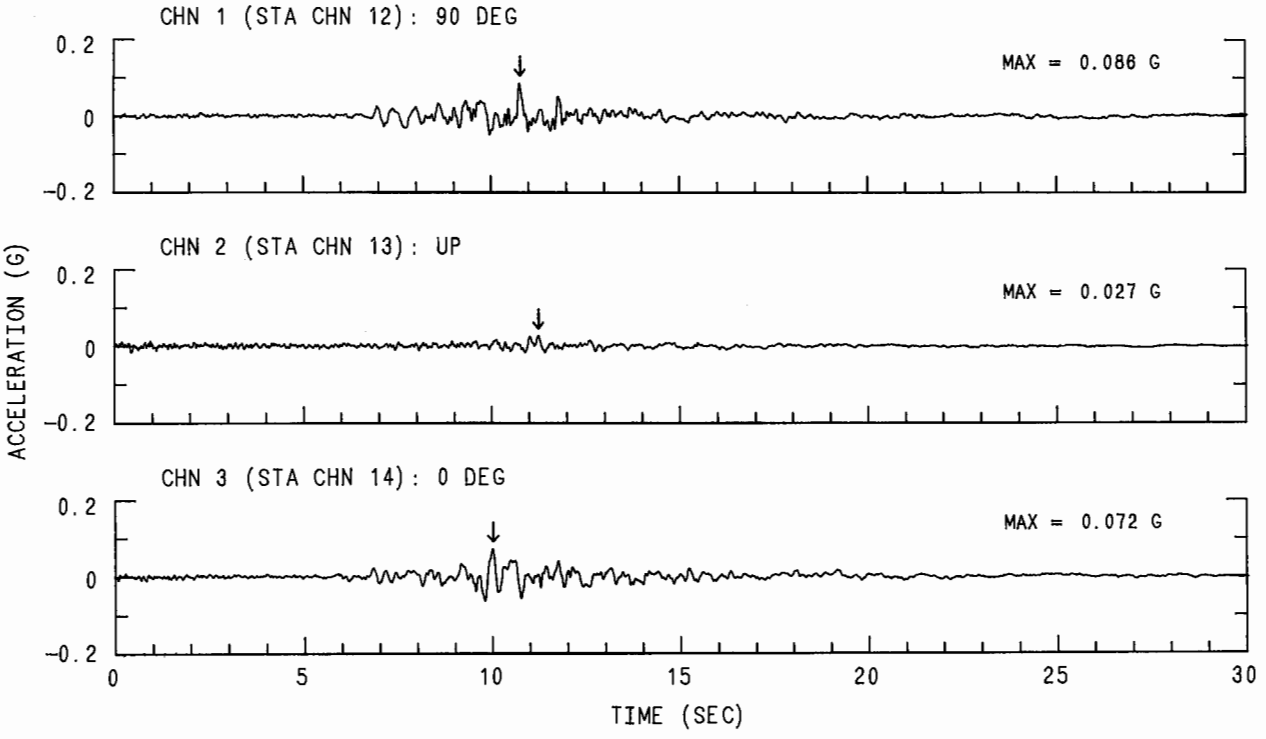
PIEDMONT - PIEDMONT JR. HIGH GROUNDS: CSMIP S/N 338

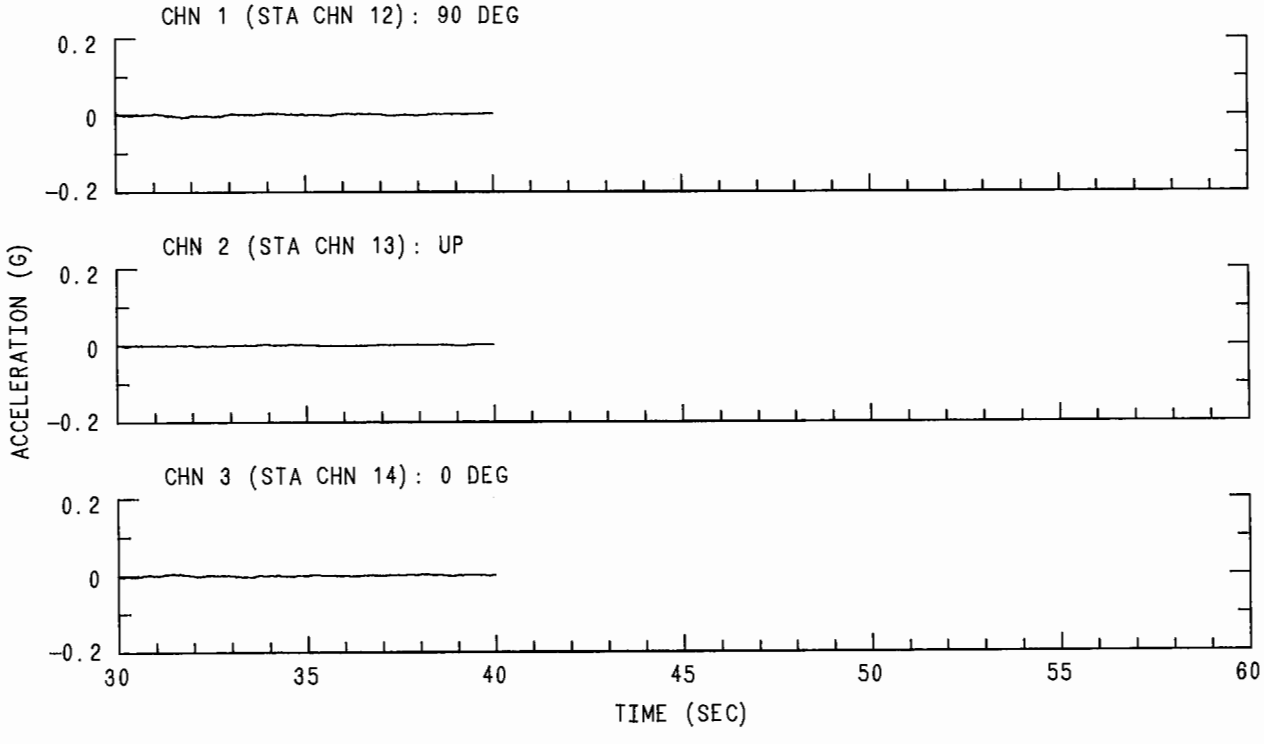
PHASE 1 ACCELERATION

RECORD ID: 58338-S2791-89293.01

(The FF and the structure channel orientations are identical)

(The FF record started about 1.0 second later than the structure)

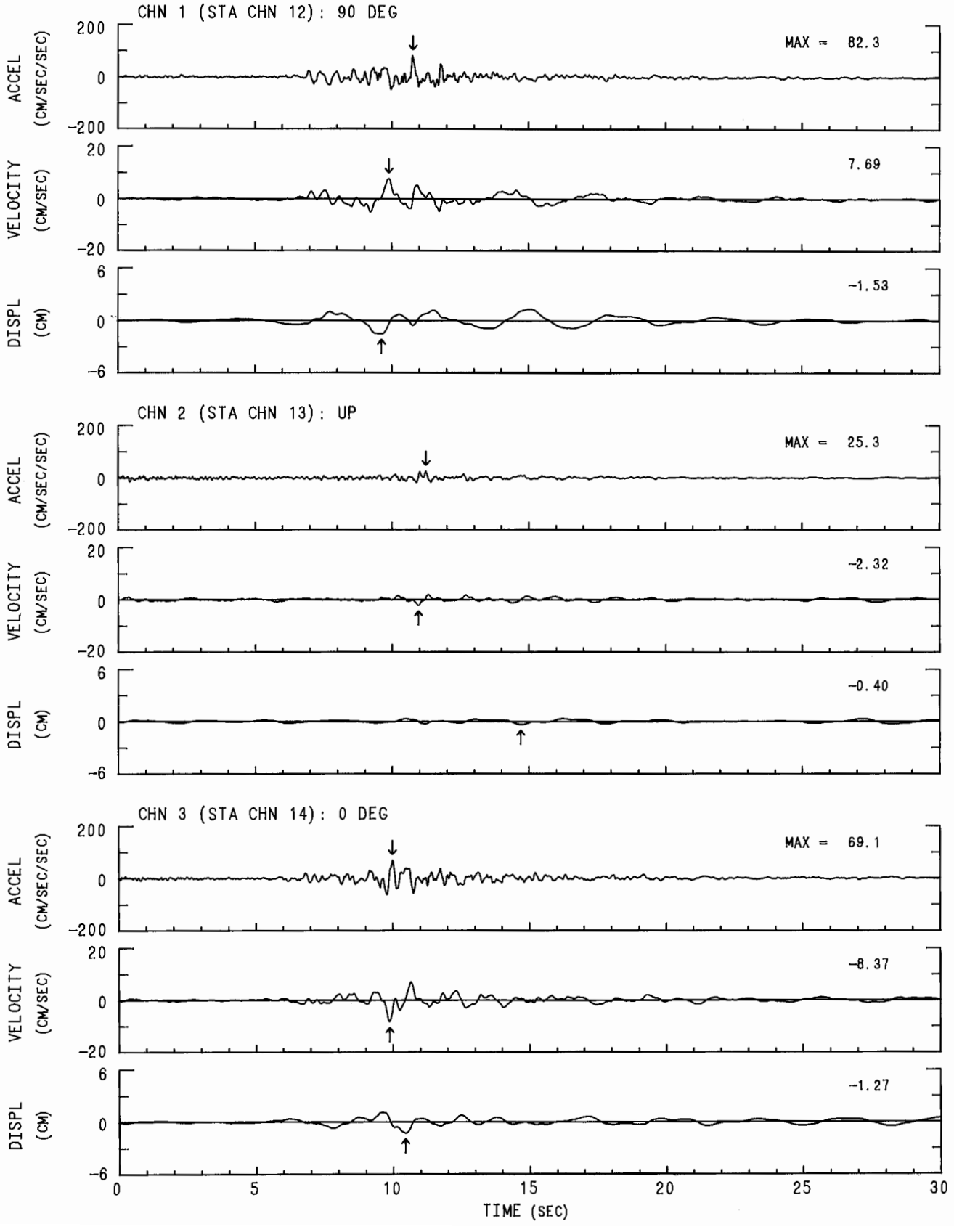




SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT – PIEDMONT JR. HIGH GROUNDS: CSMIP S/N 338

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58338-S2791-89293.01



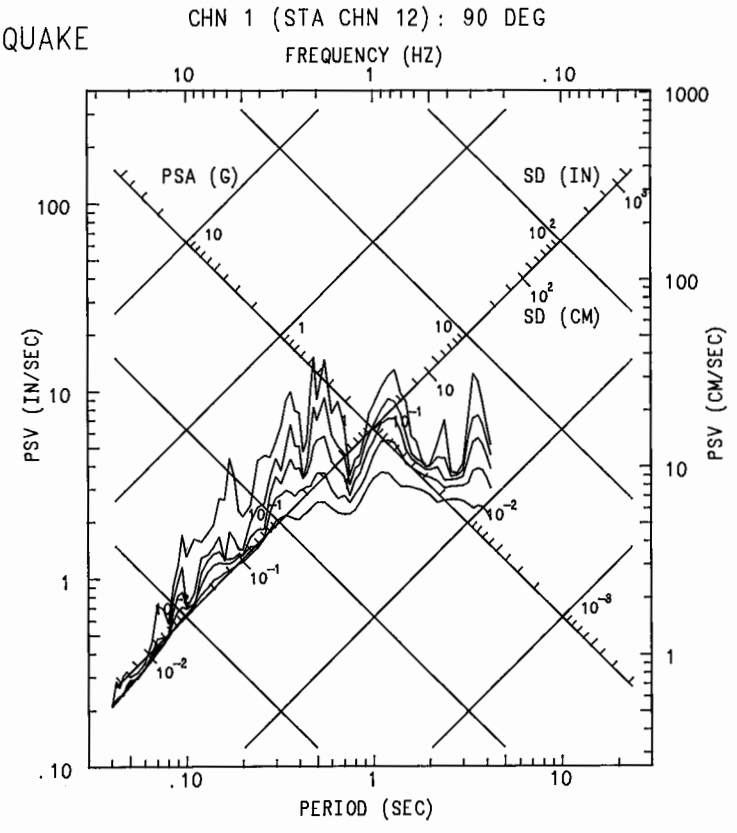
PIEDMONT – PIEDMONT JR. HIGH GROUNDS: CSMIP S/N 338

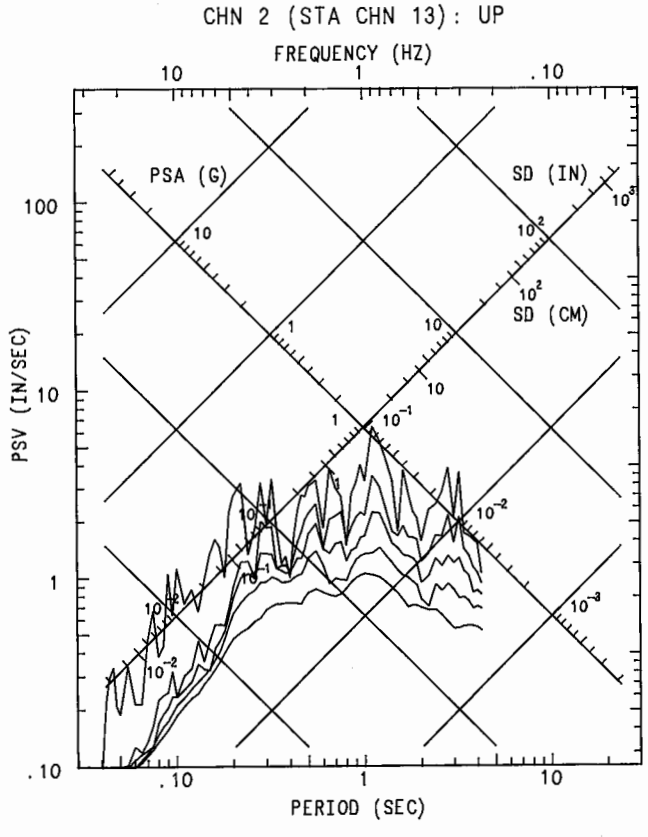
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

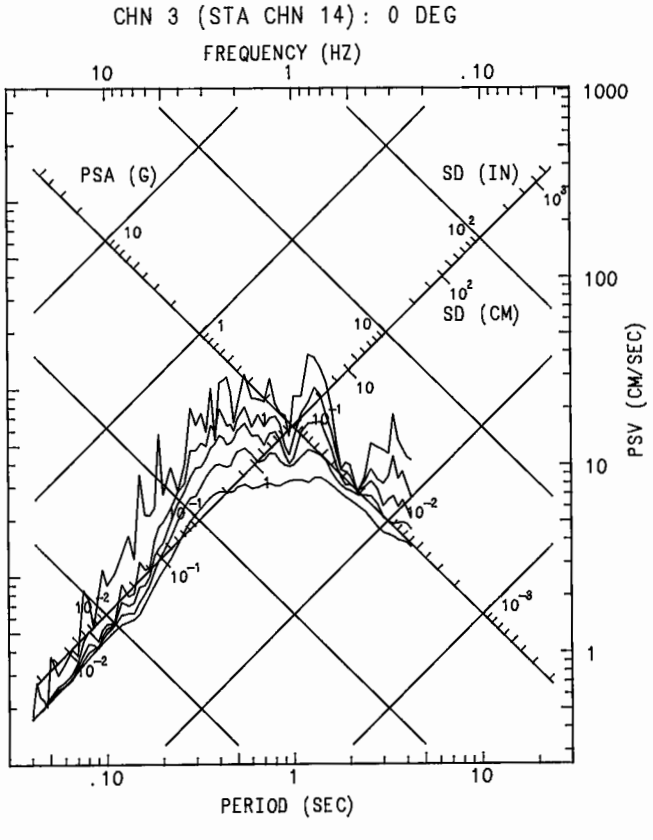
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58338-S2791-89293.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

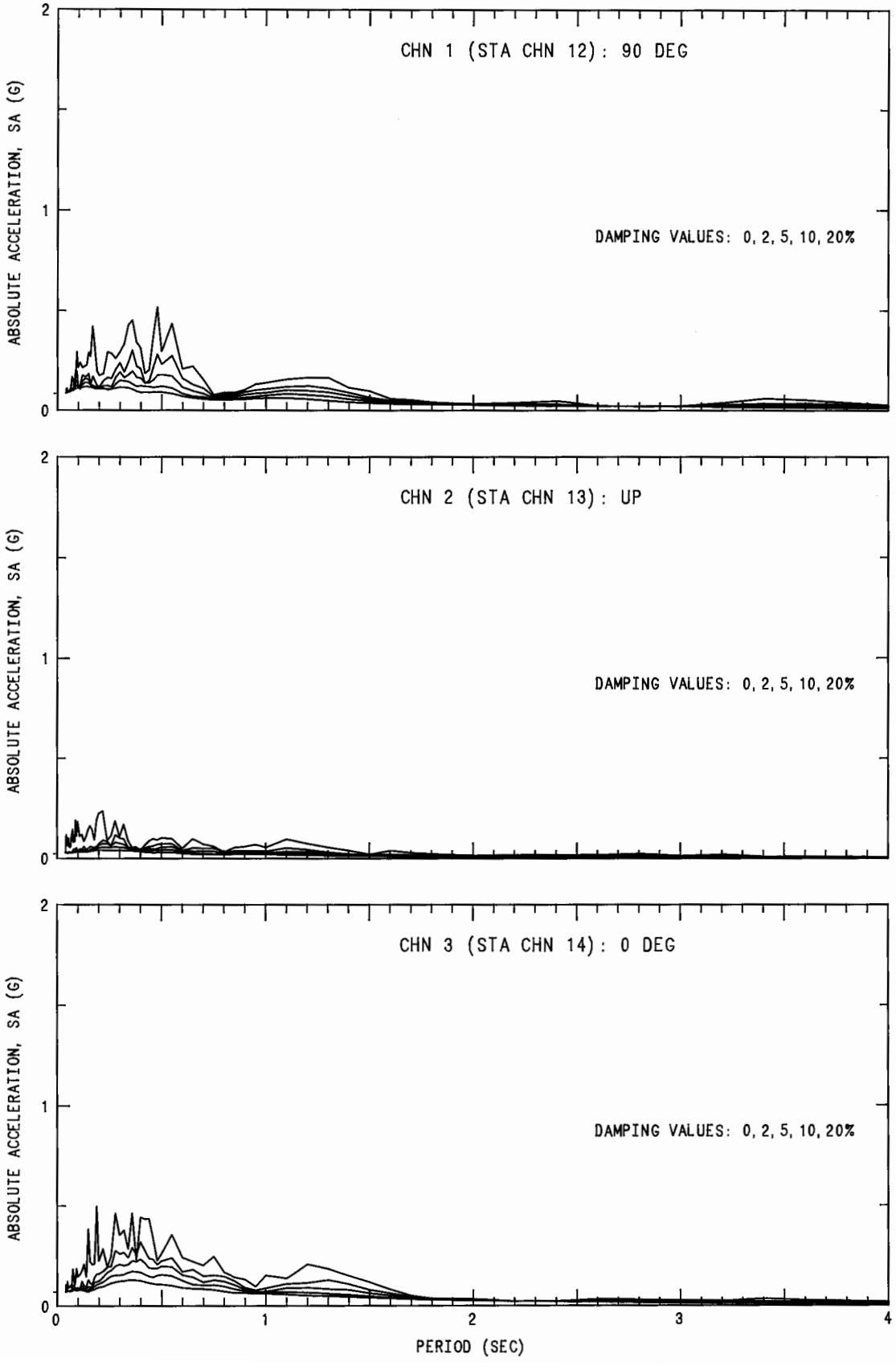






SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PIEDMONT - PIEDMONT JR. HIGH GROUNDS: CSMIP S/N 338

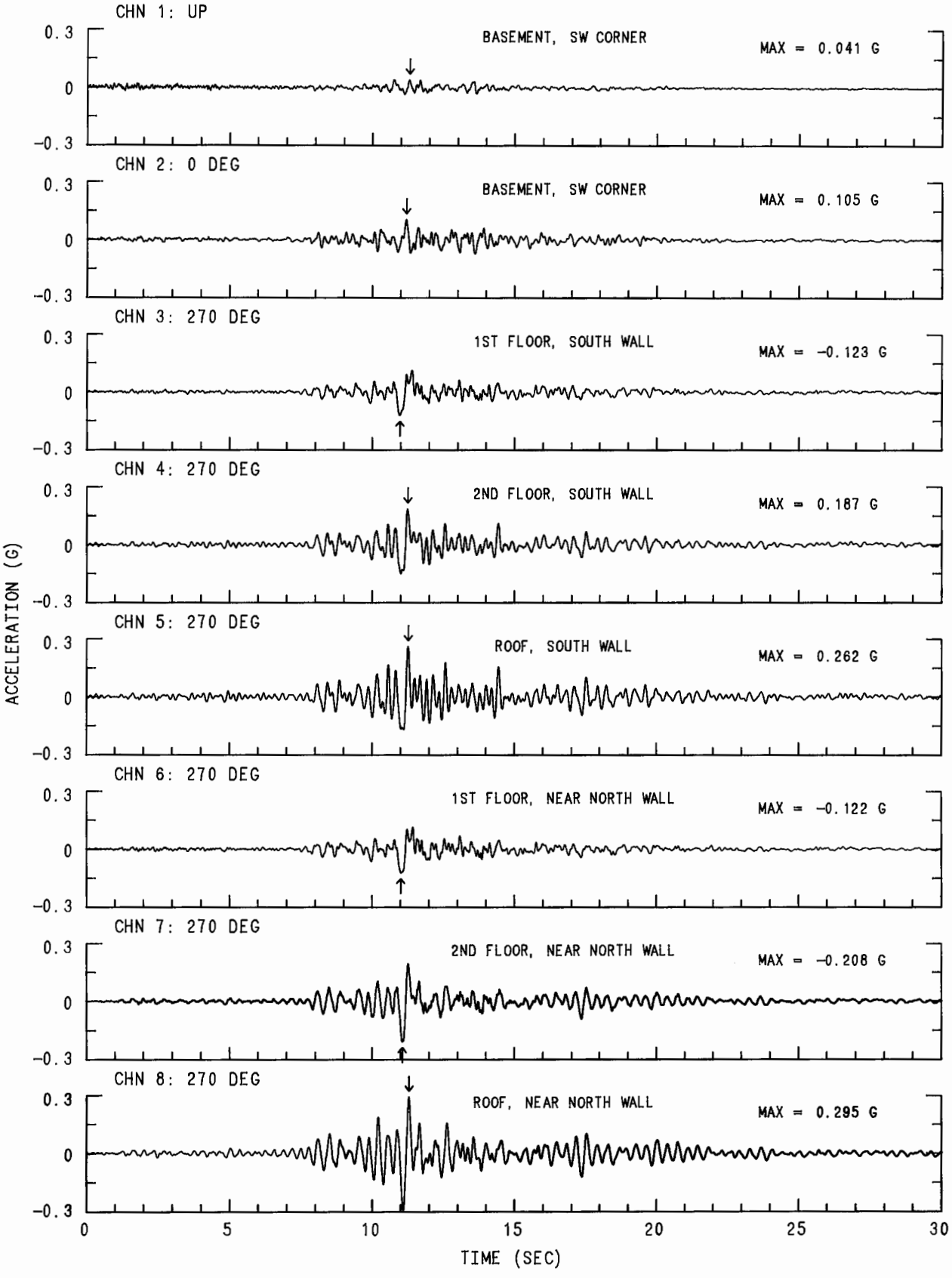
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58338-S2791-89293.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

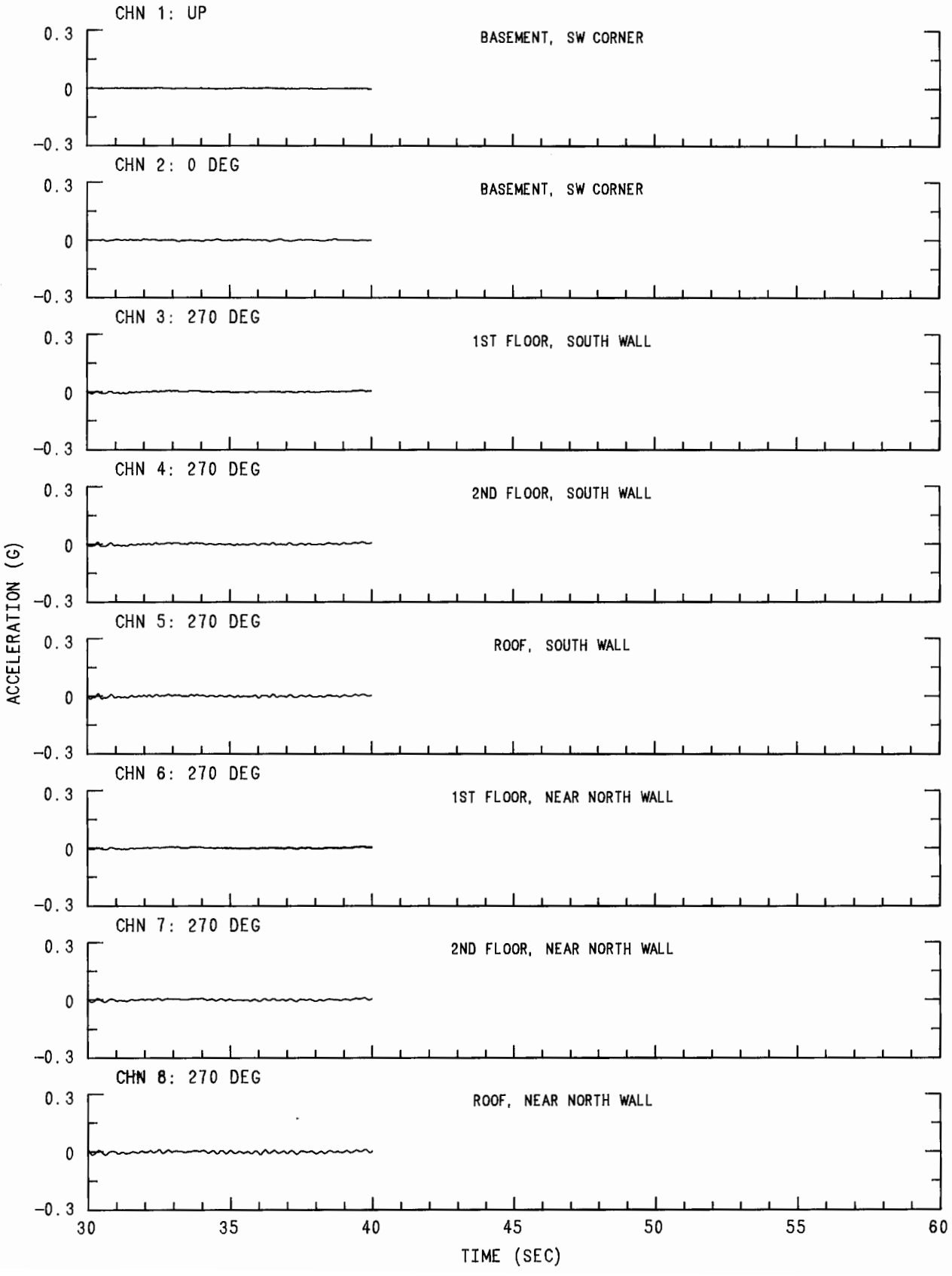
PHASE 1 ACCELERATION. RECORD ID: 58496-C0180-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

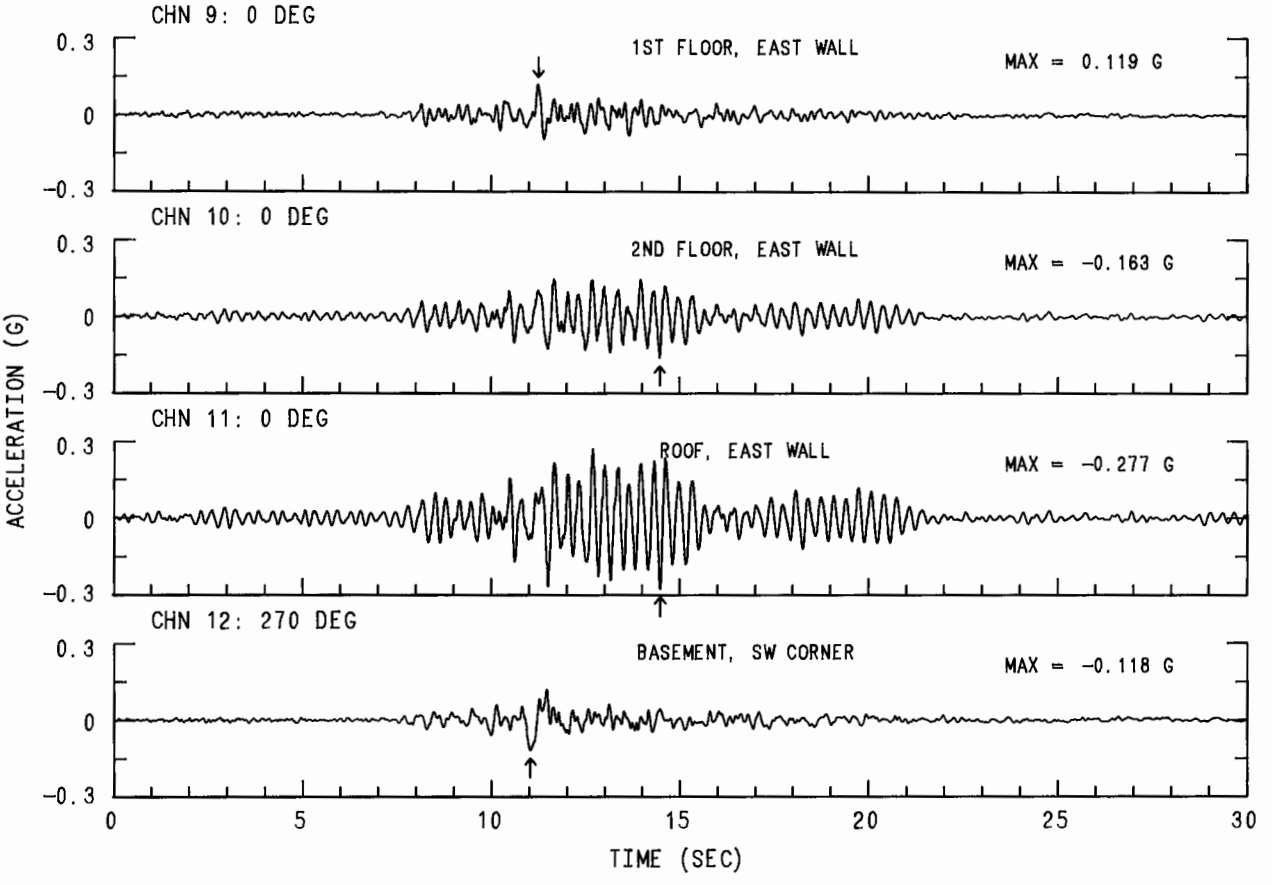
PHASE 1 ACCELERATION. RECORD ID: 58496-C0180-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

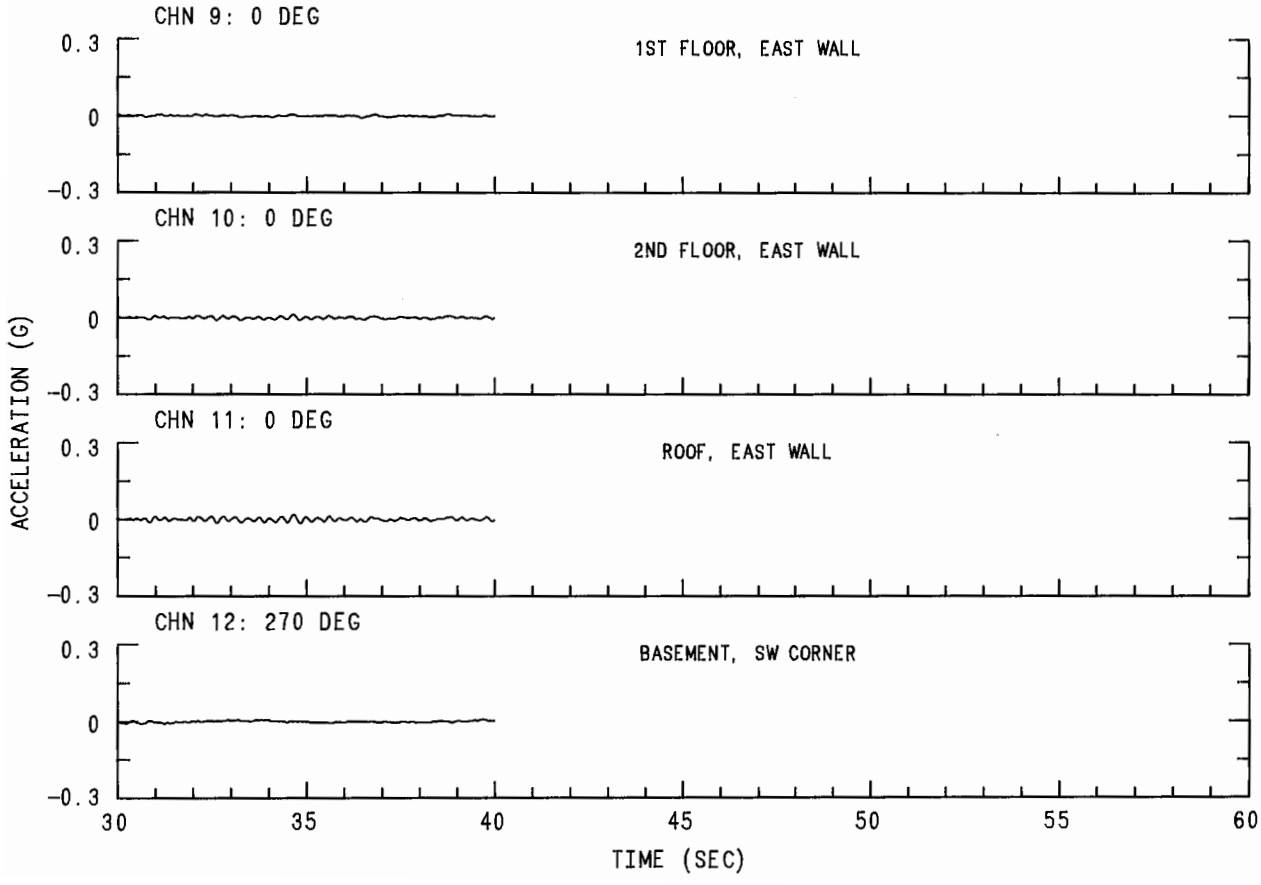
PHASE 1 ACCELERATION. RECORD ID: 58496-C0180-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

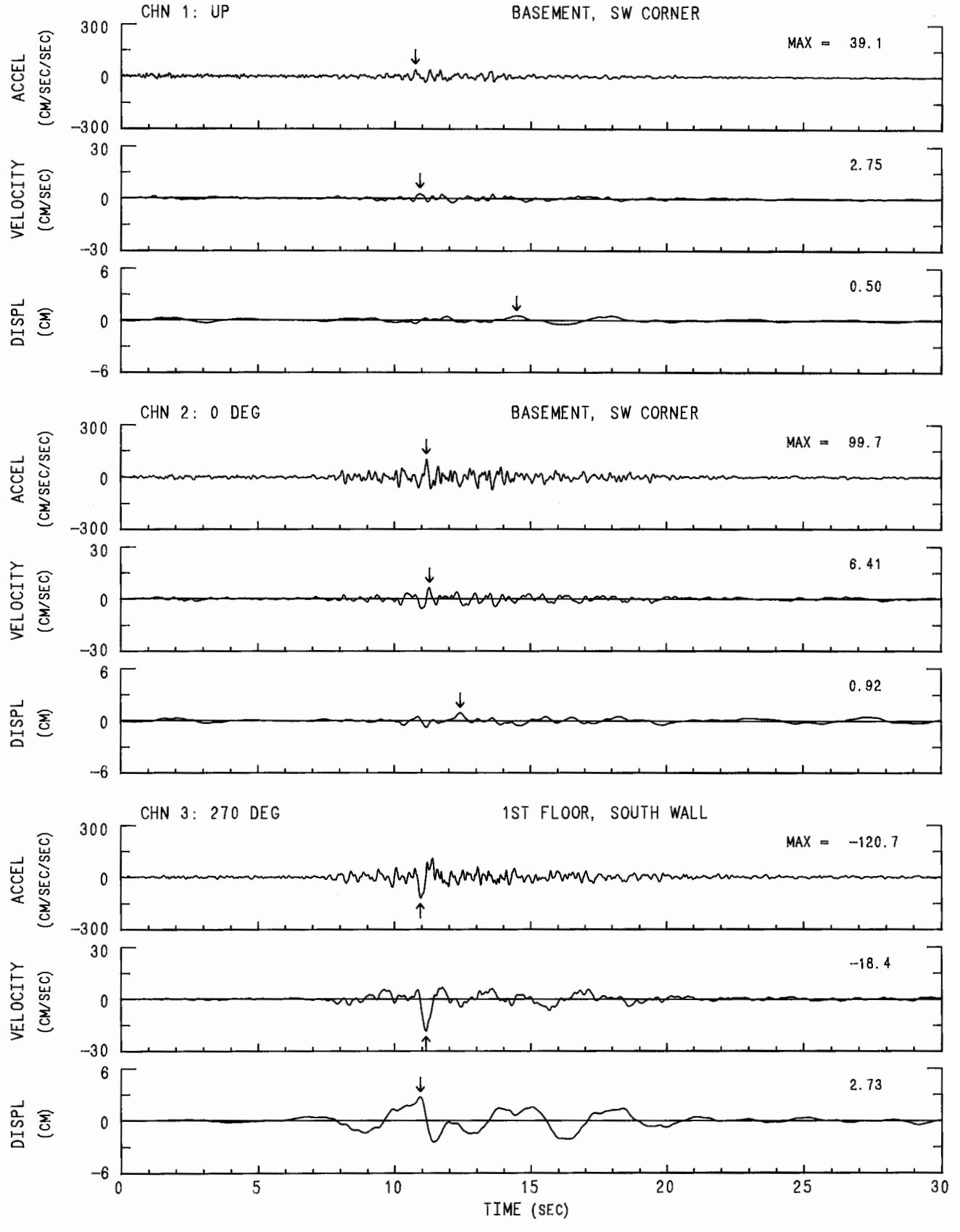
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 1 ACCELERATION. RECORD ID: 58496-C0180-89293.01



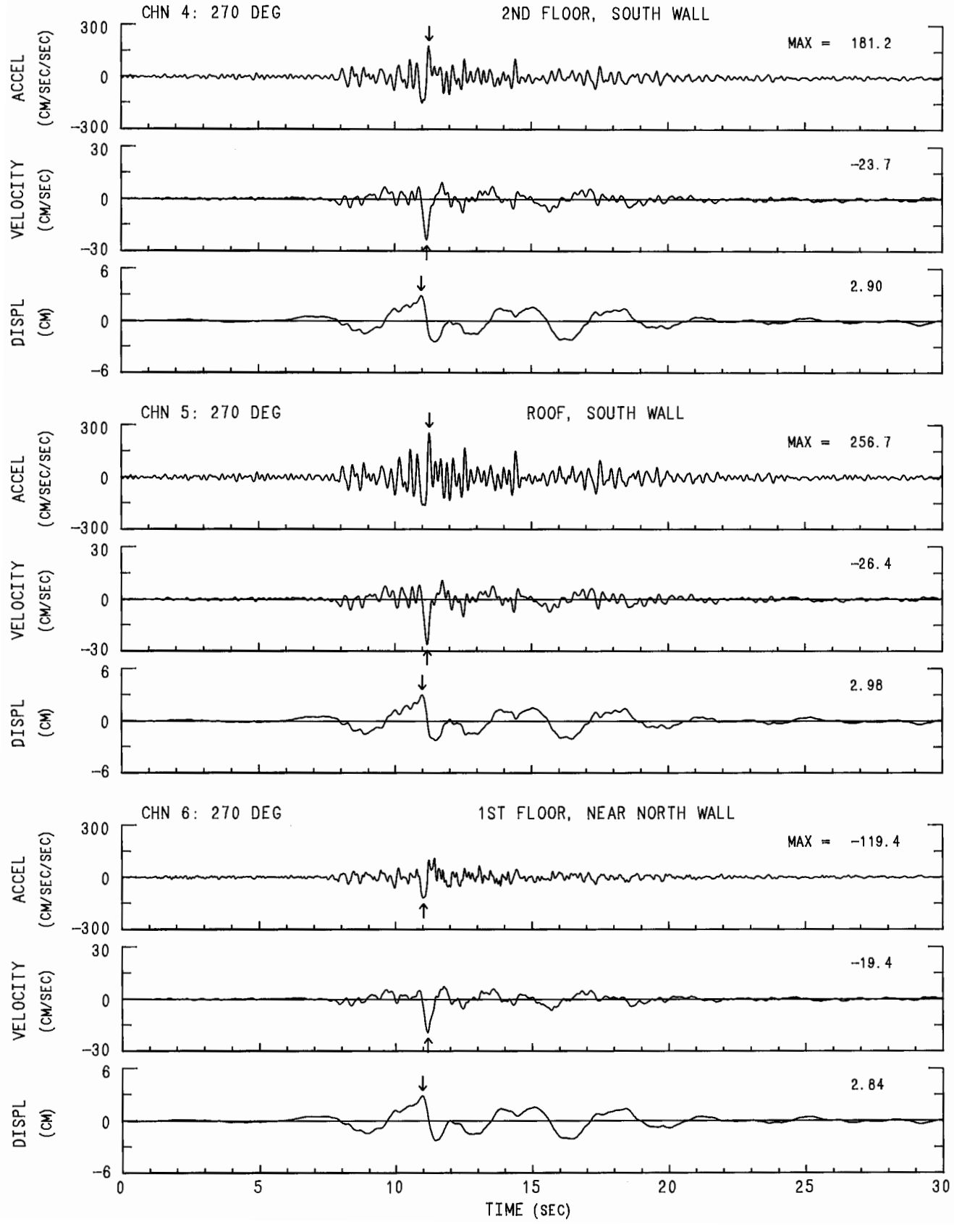
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58496-C0180-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

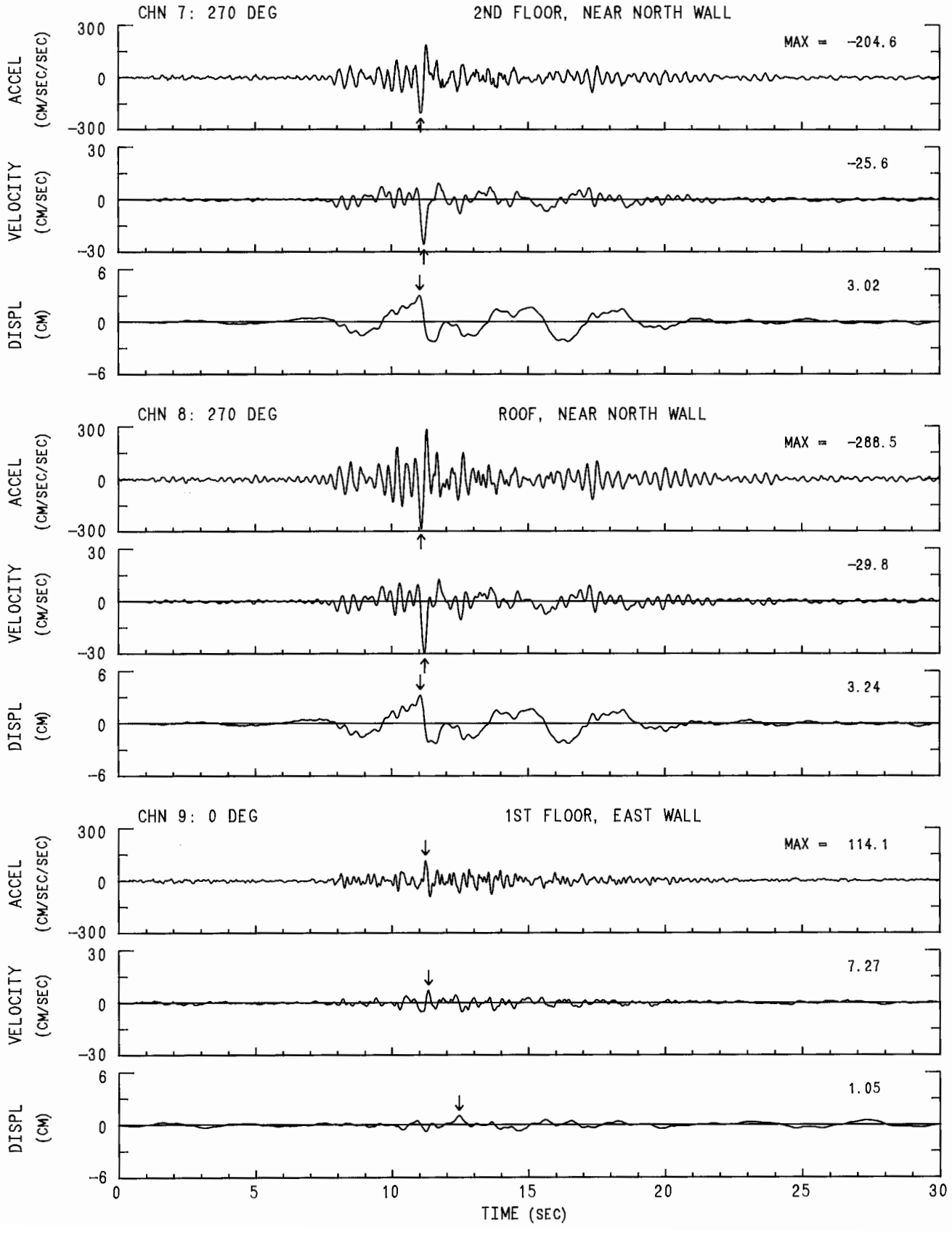
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58496-C0180-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY – 2-STORY HOSPITAL: CSMIP S/N 496

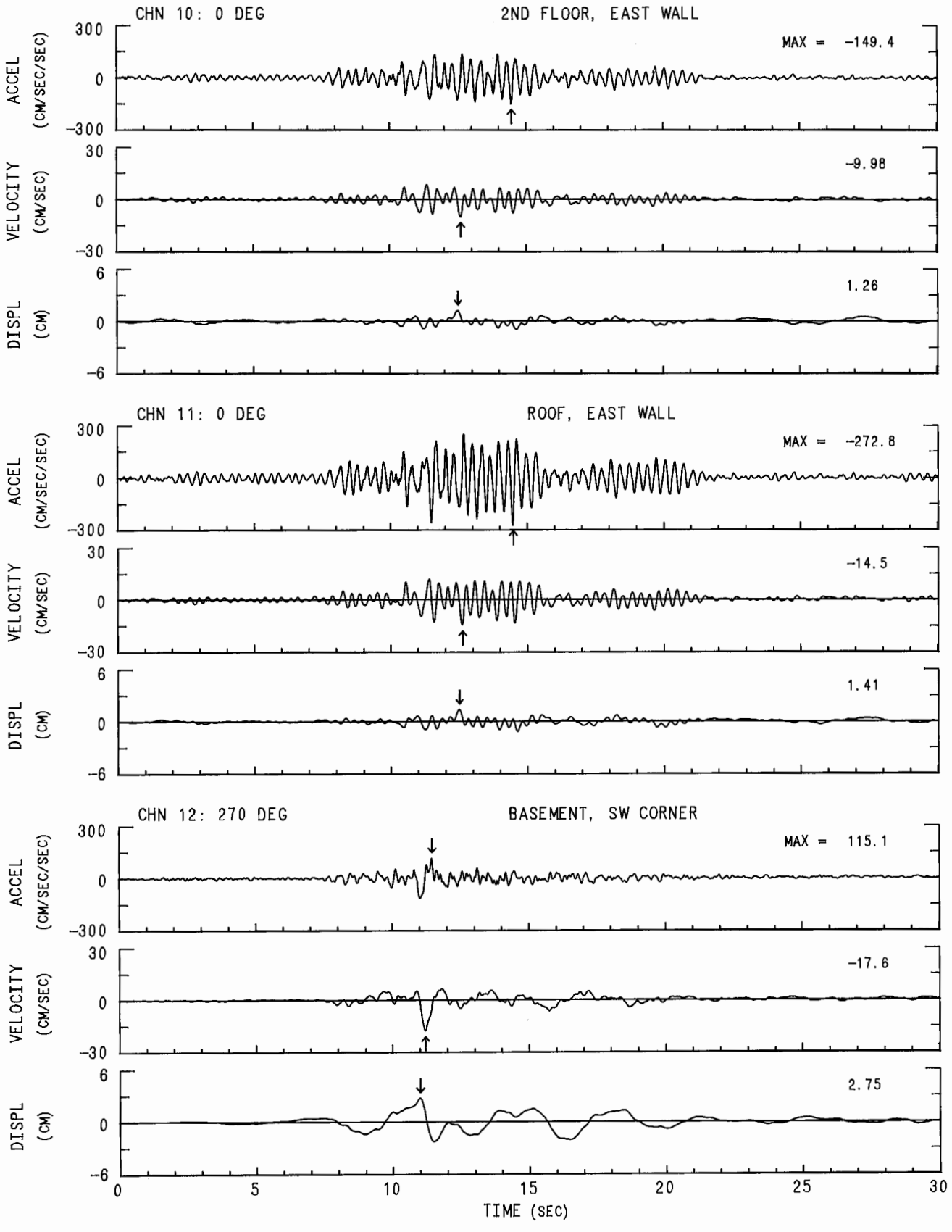
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58496-C0180-89293.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58496-C0180-89293.01



BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

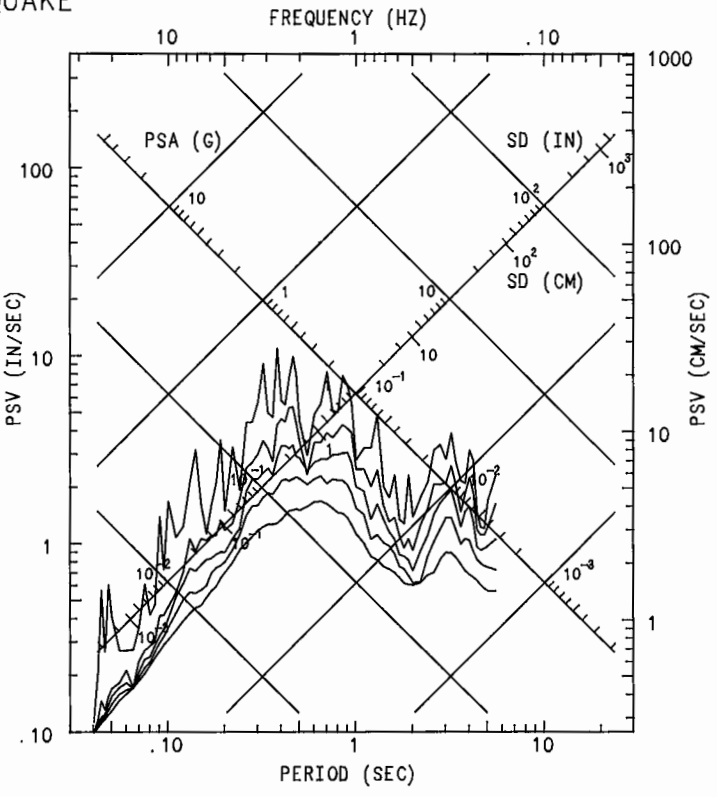
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

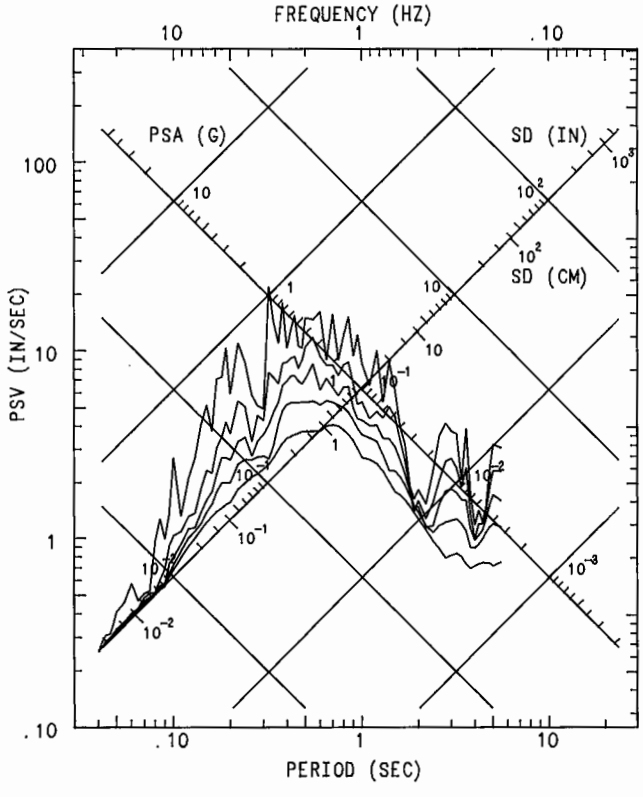
RECORD ID: 58496-C0180-89293.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

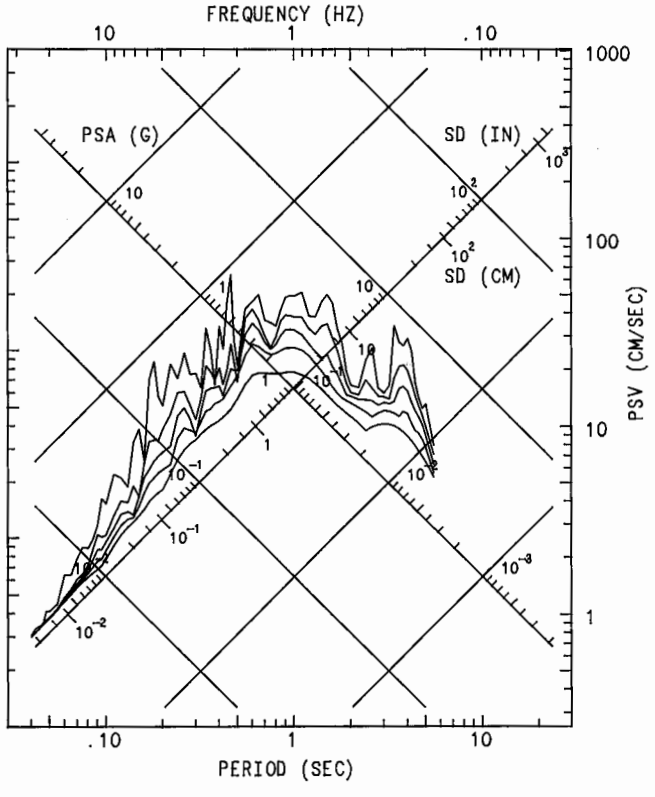
CHN 1: UP
BASEMENT, SW CORNER



CHN 2: 0 DEG
BASEMENT, SW CORNER



CHN 3: 270 DEG
1ST FLOOR, SOUTH WALL



BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

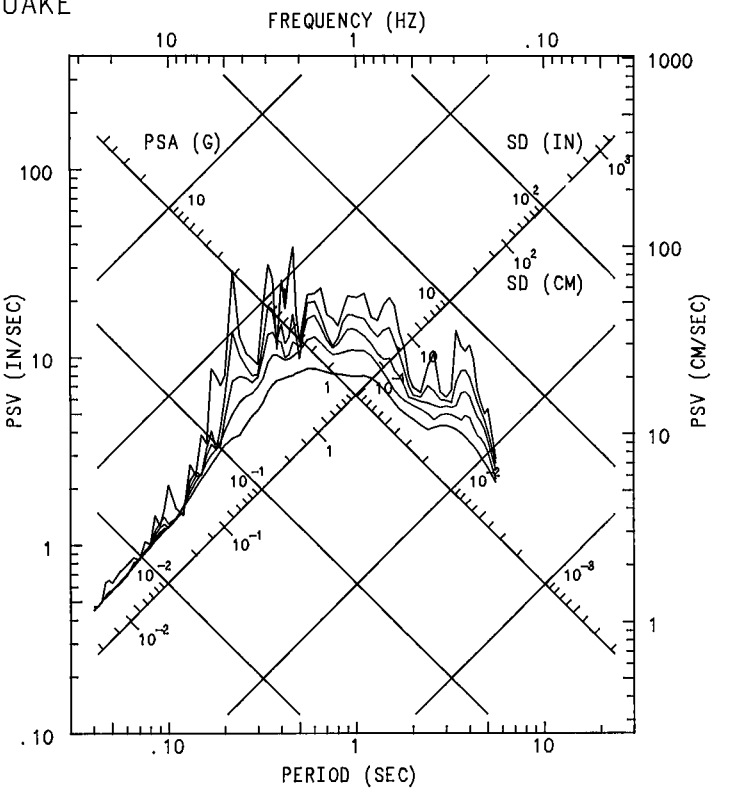
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

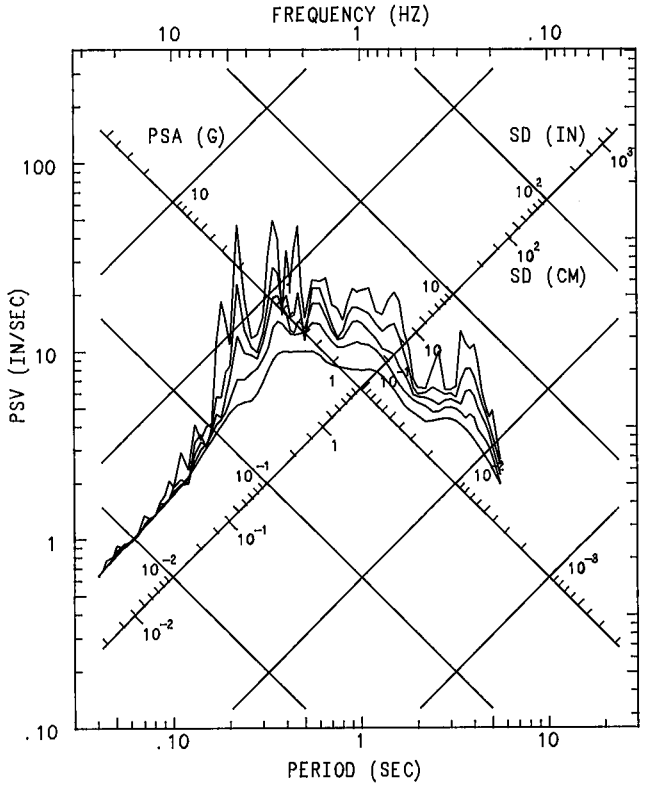
RECORD ID: 58496-C0180-89293.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

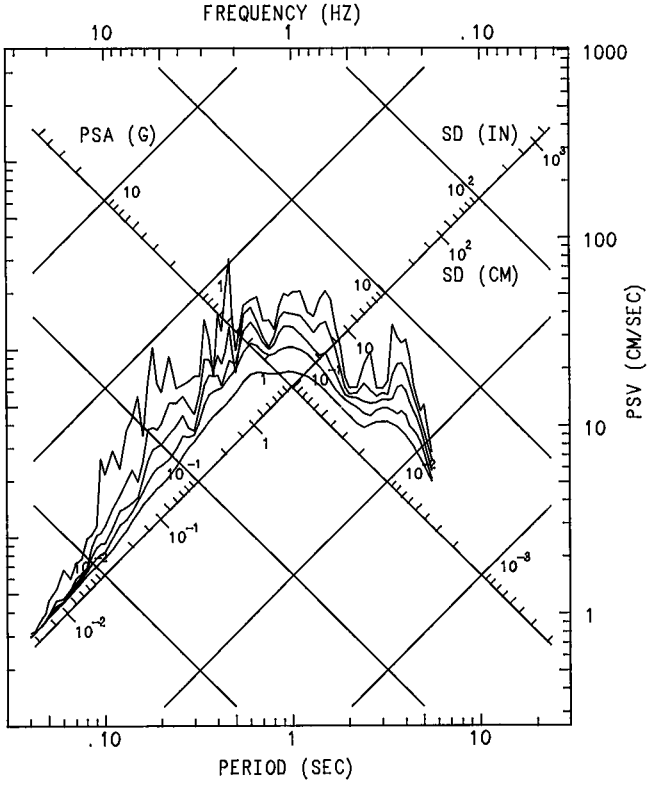
CHN 4: 270 DEG
2ND FLOOR, SOUTH WALL



CHN 5: 270 DEG
ROOF, SOUTH WALL



CHN 6: 270 DEG
1ST FLOOR, NEAR NORTH WALL



BERKELEY – 2-STORY HOSPITAL: CSMIP S/N 496

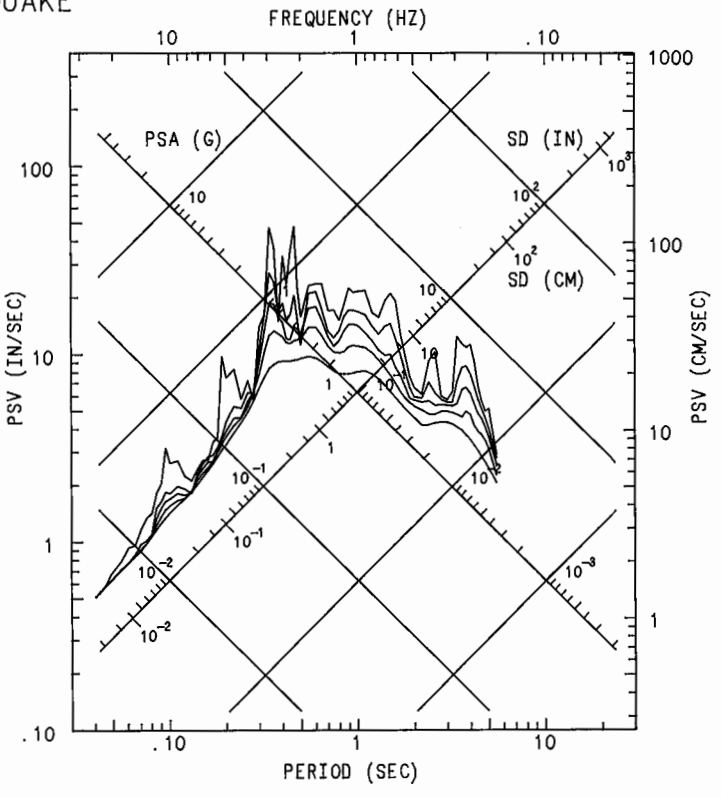
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

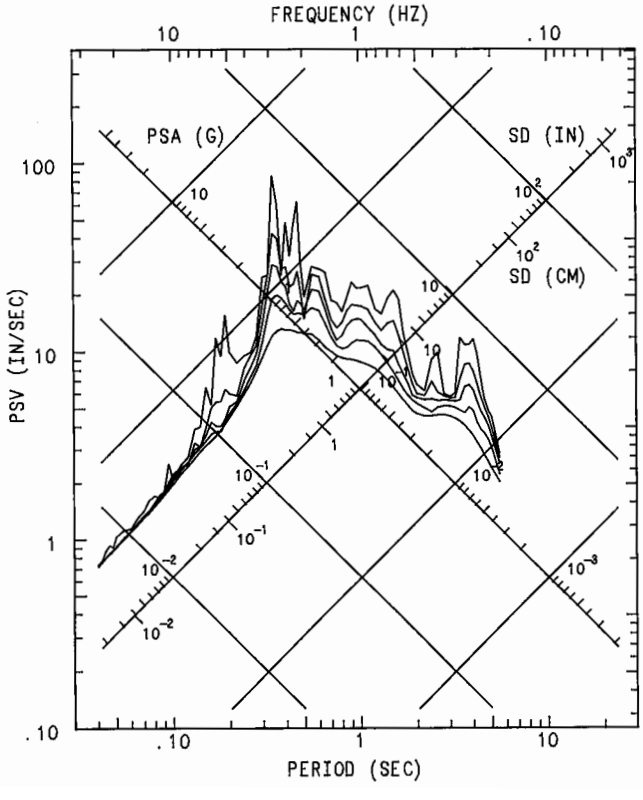
RECORD ID: 58496-C0180-89293.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

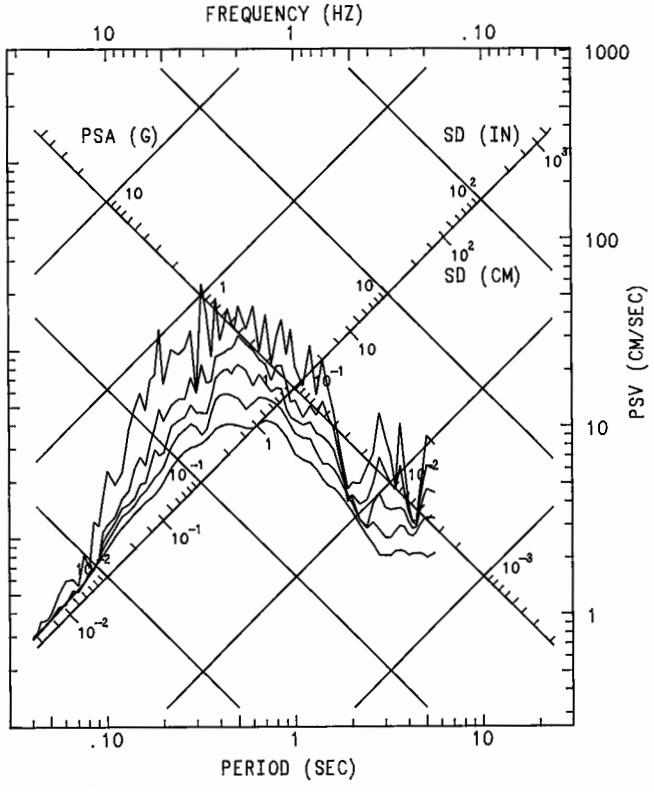
CHN 7: 270 DEG
2ND FLOOR, NEAR NORTH WALL



CHN 8: 270 DEG
ROOF, NEAR NORTH WALL



CHN 9: 0 DEG
1ST FLOOR, EAST WALL



BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

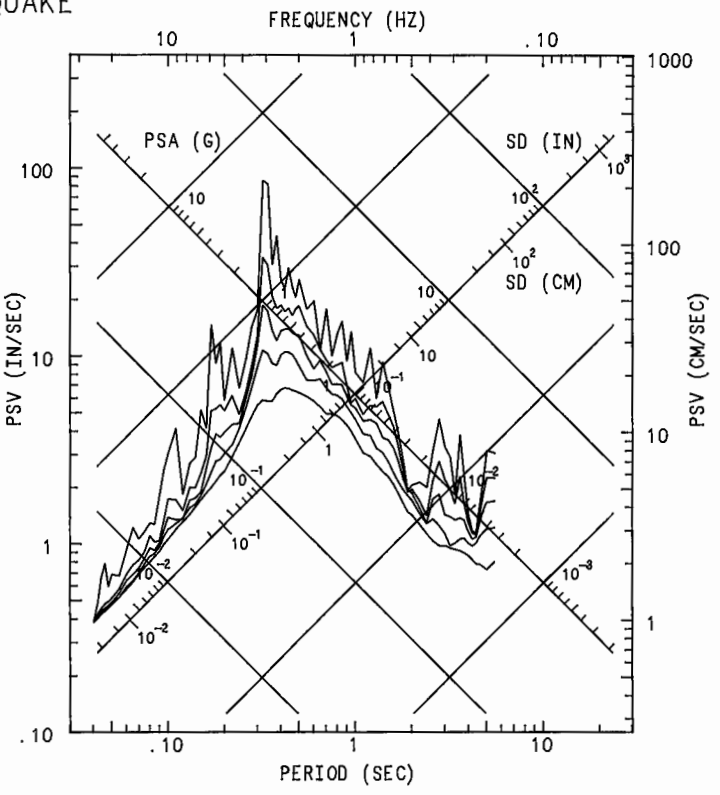
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

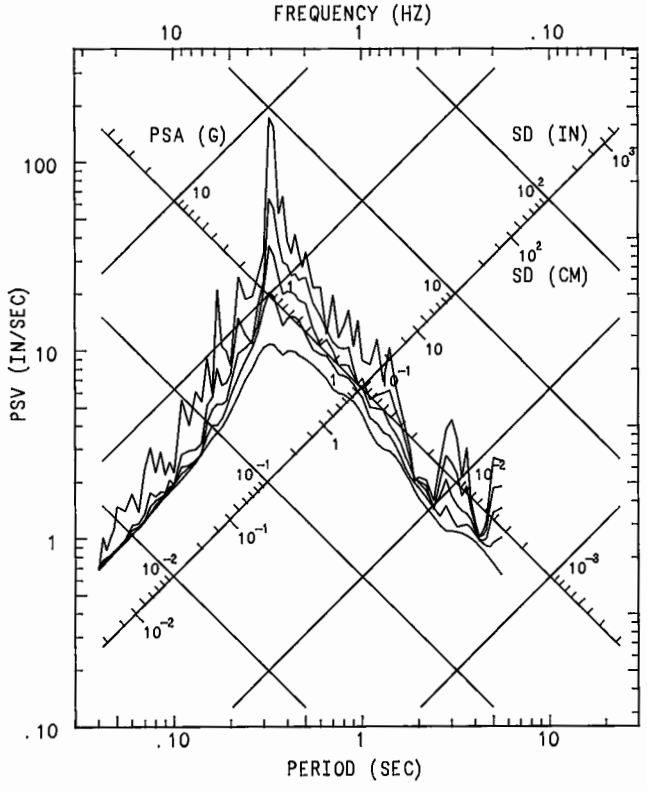
RECORD ID: 58496-C0180-89293.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

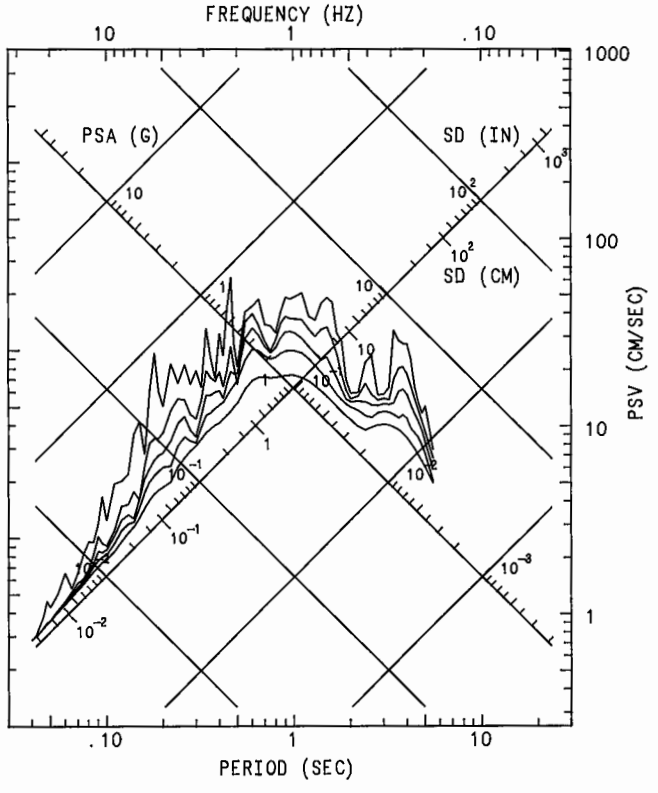
CHN 10: 0 DEG
2ND FLOOR, EAST WALL



CHN 11: 0 DEG
ROOF, EAST WALL

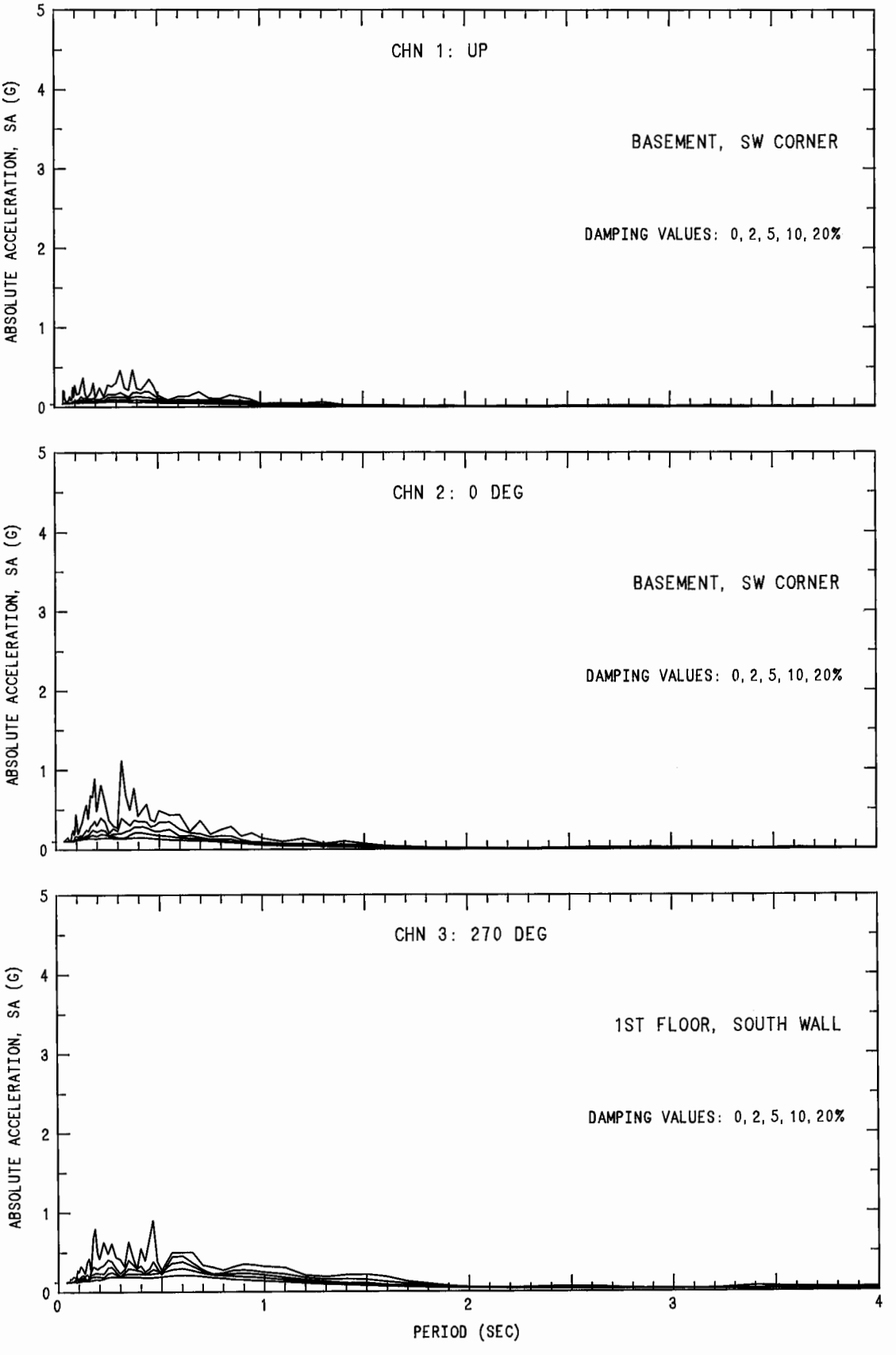


CHN 12: 270 DEG
BASEMENT, SW CORNER



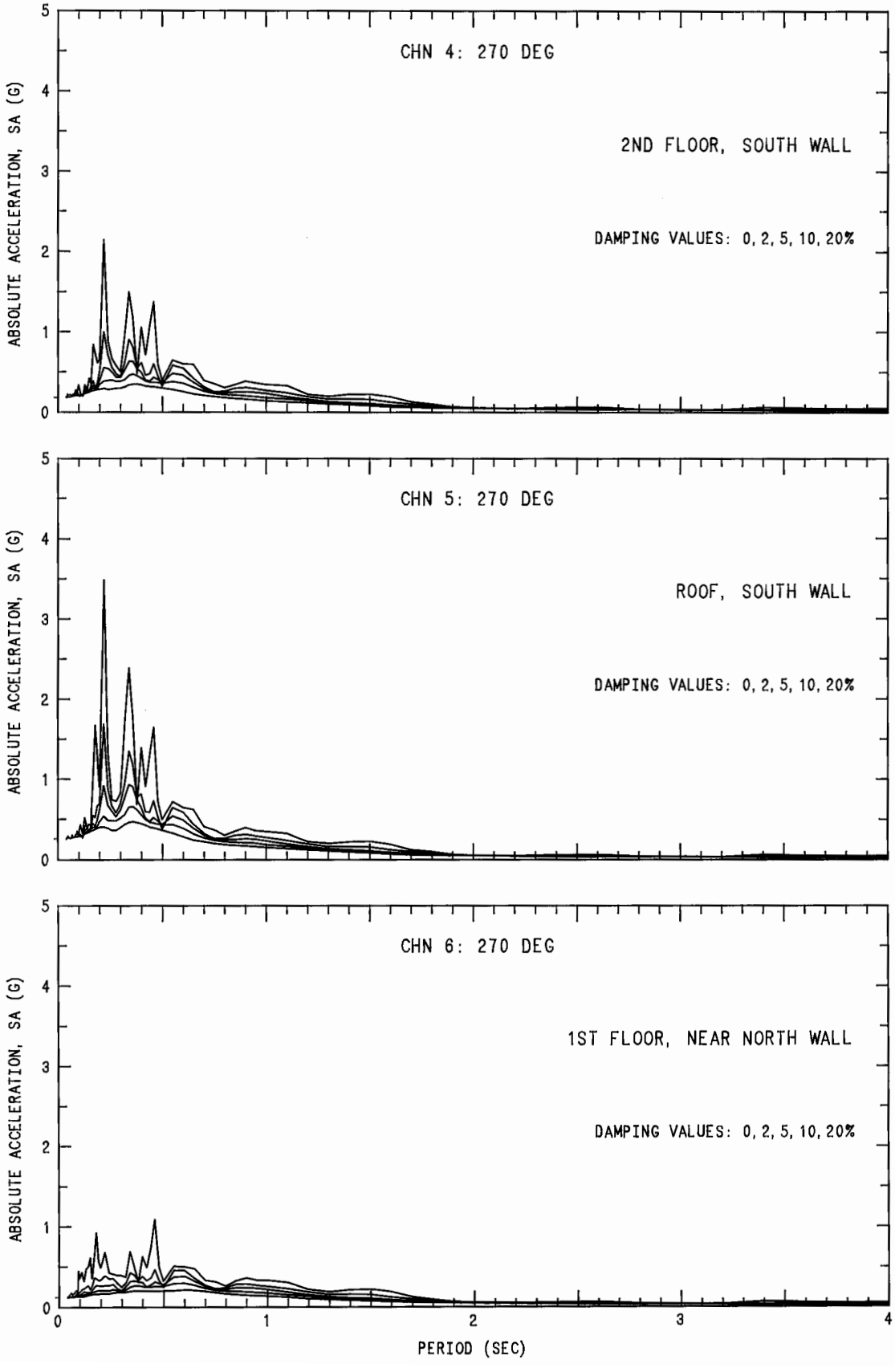
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58496-C0180-89293.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



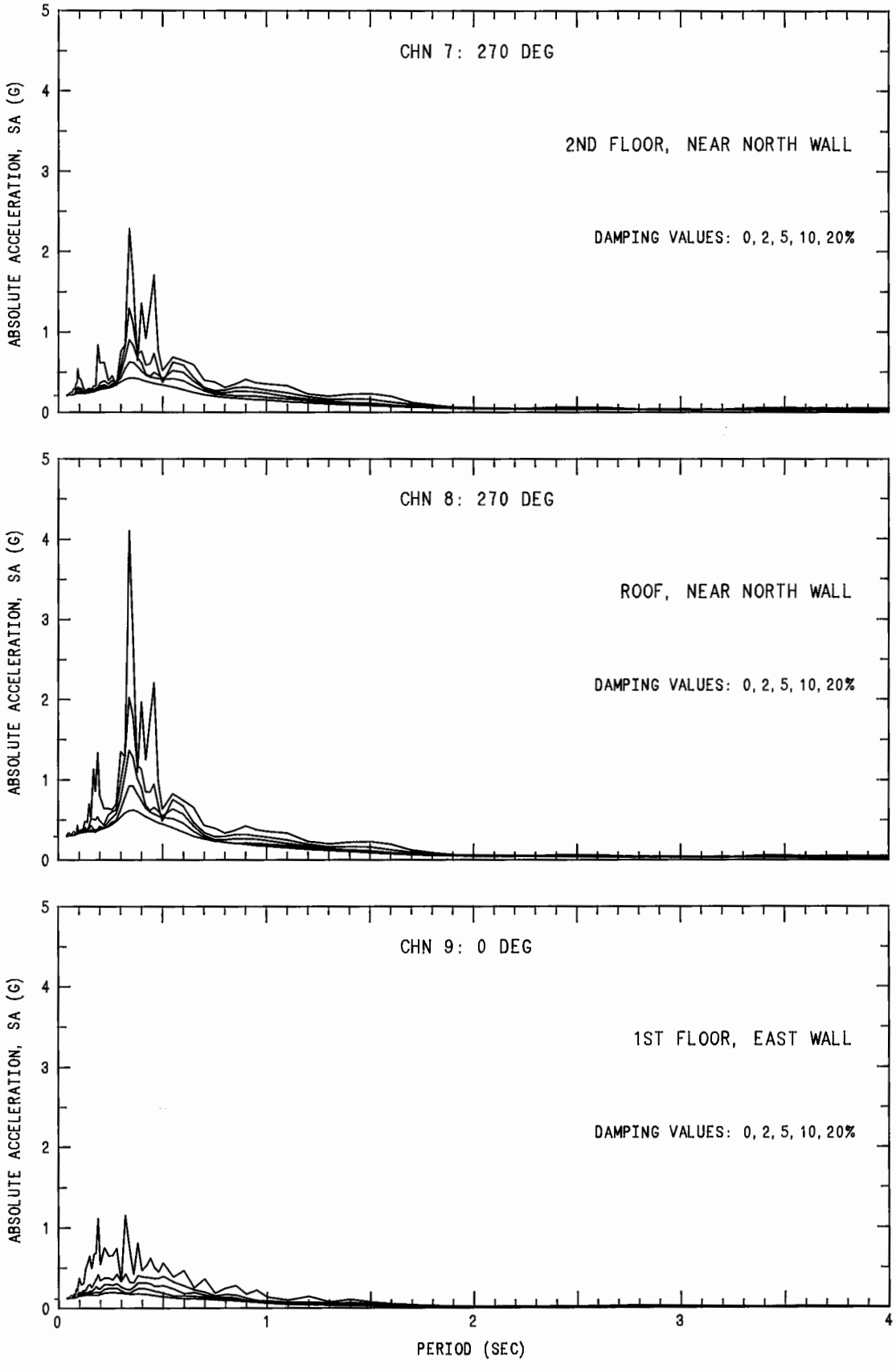
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58496-C0180-89293.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58496-C0180-89293.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
BERKELEY - 2-STORY HOSPITAL: CSMIP S/N 496

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58496-C0180-89293.01
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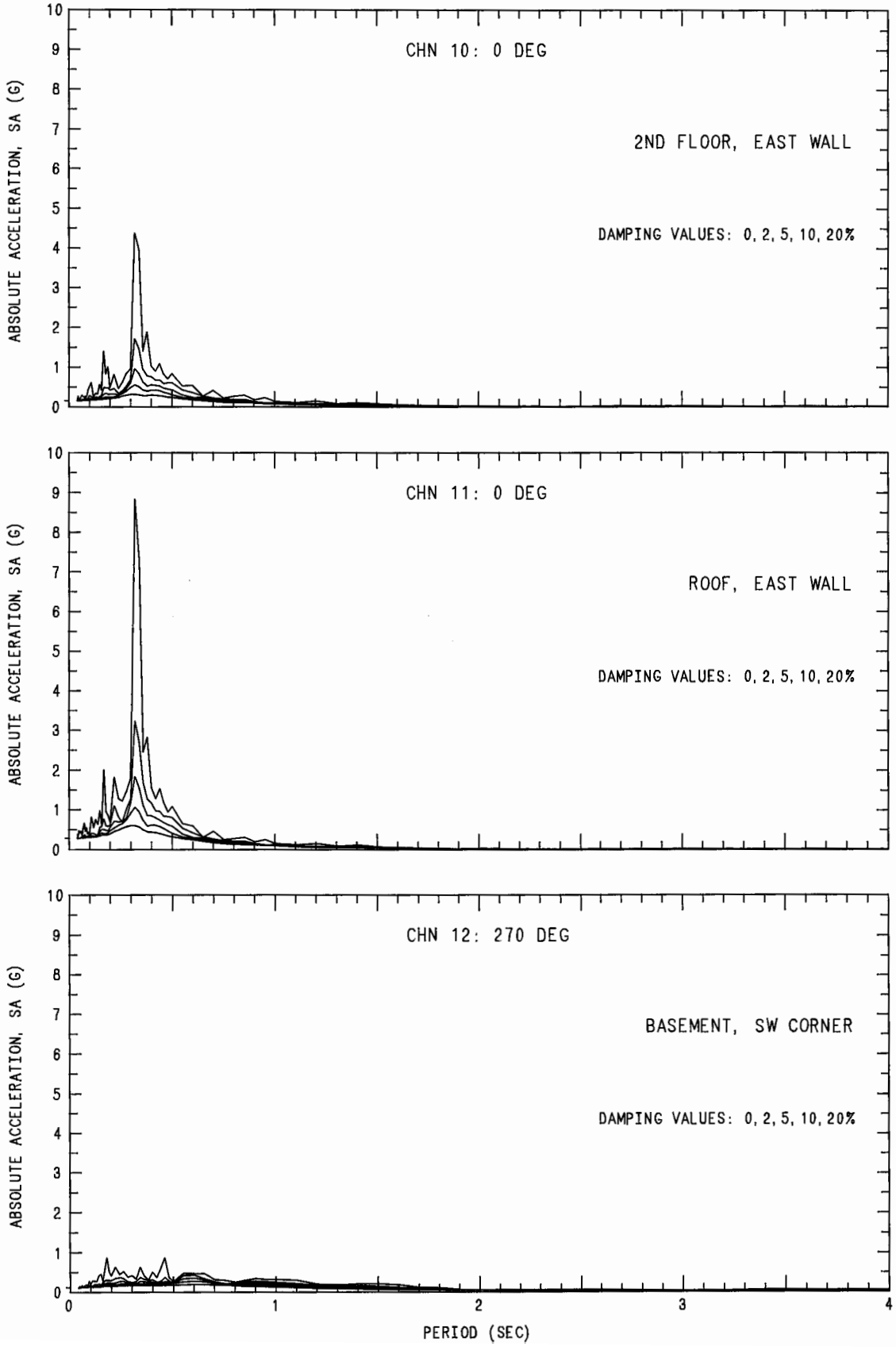
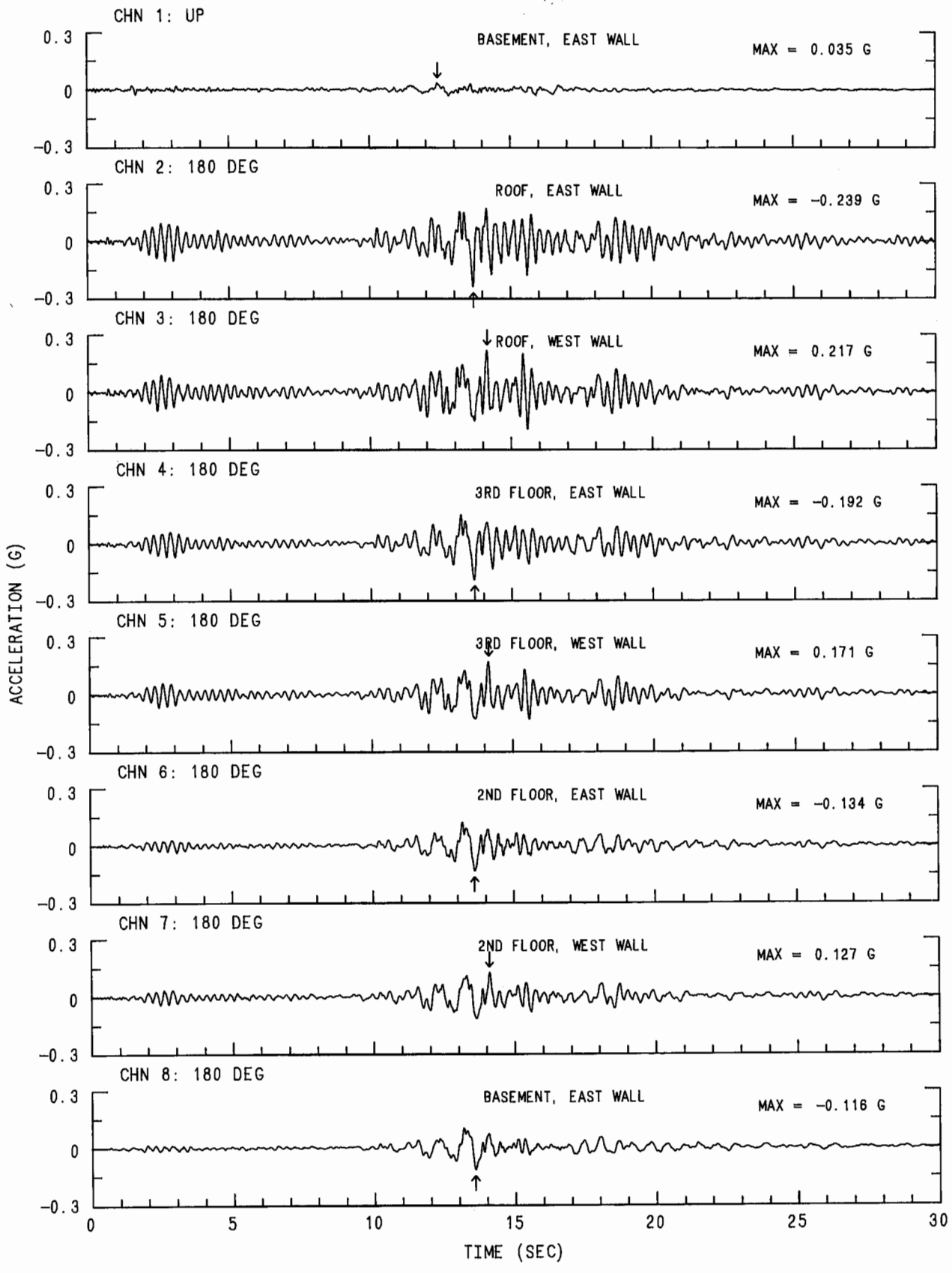


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

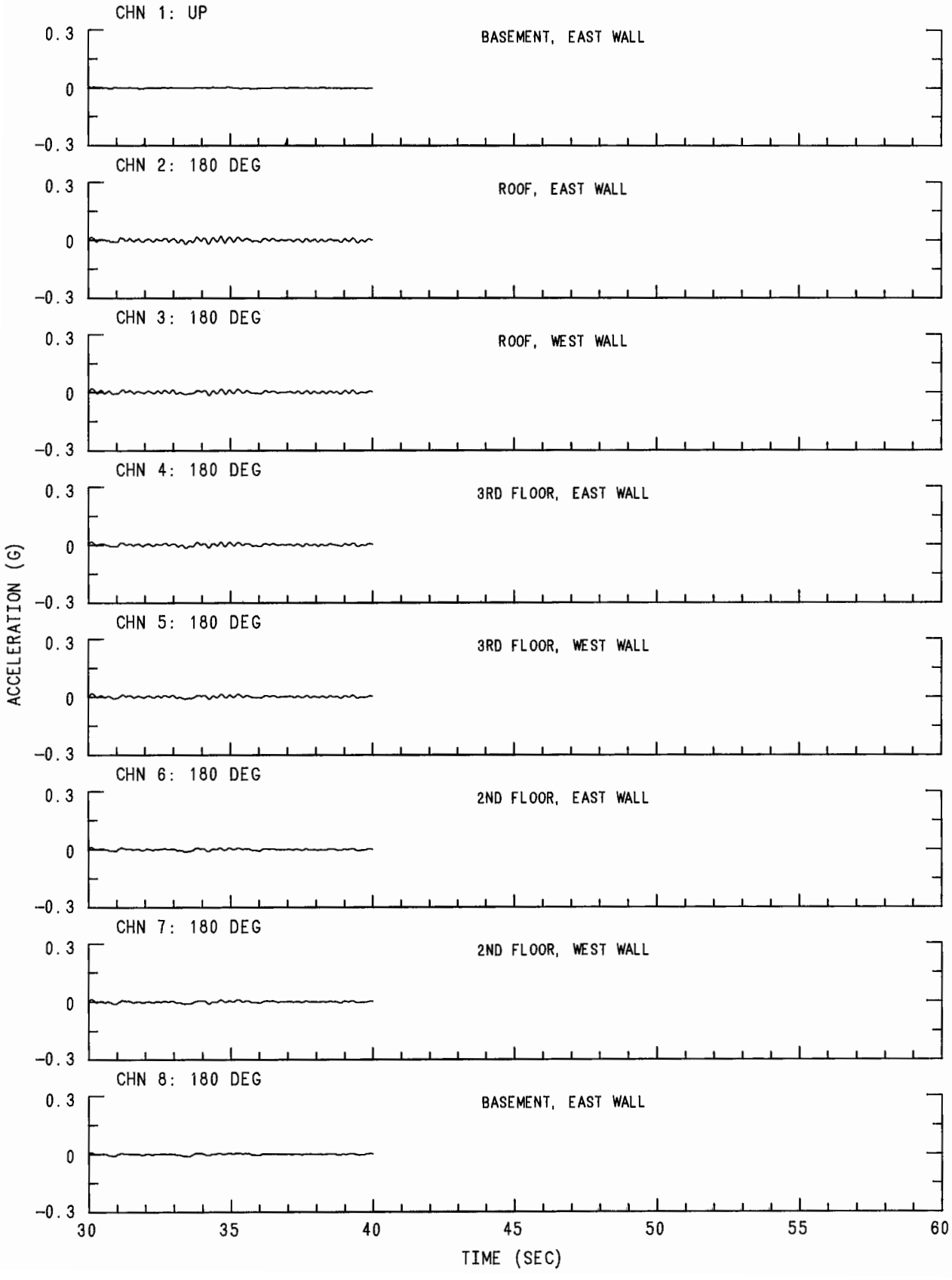
PHASE 1 ACCELERATION. RECORD ID: 58503-C0276-89297.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

PHASE 1 ACCELERATION. RECORD ID: 58503-C0276-89297.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

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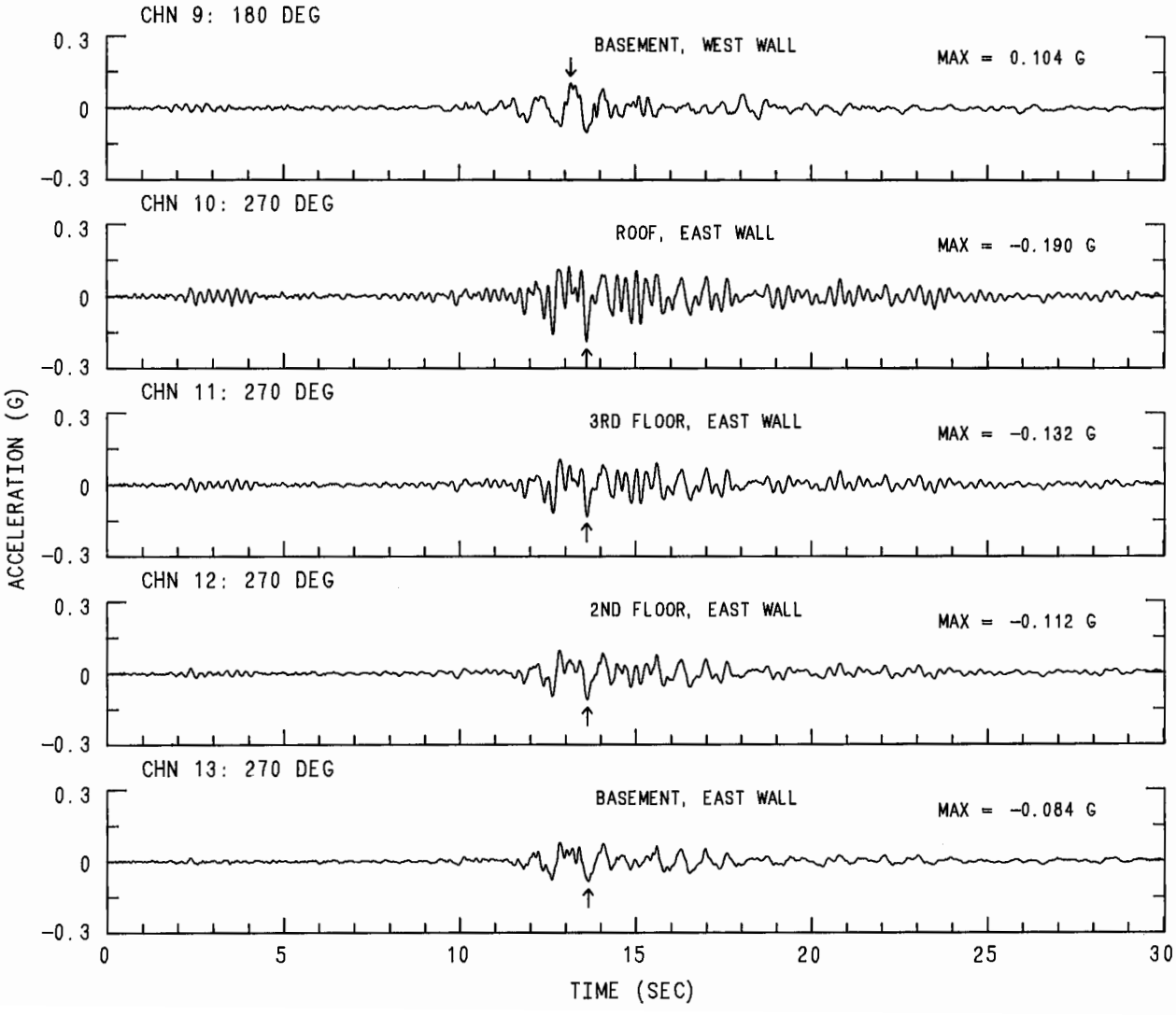

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

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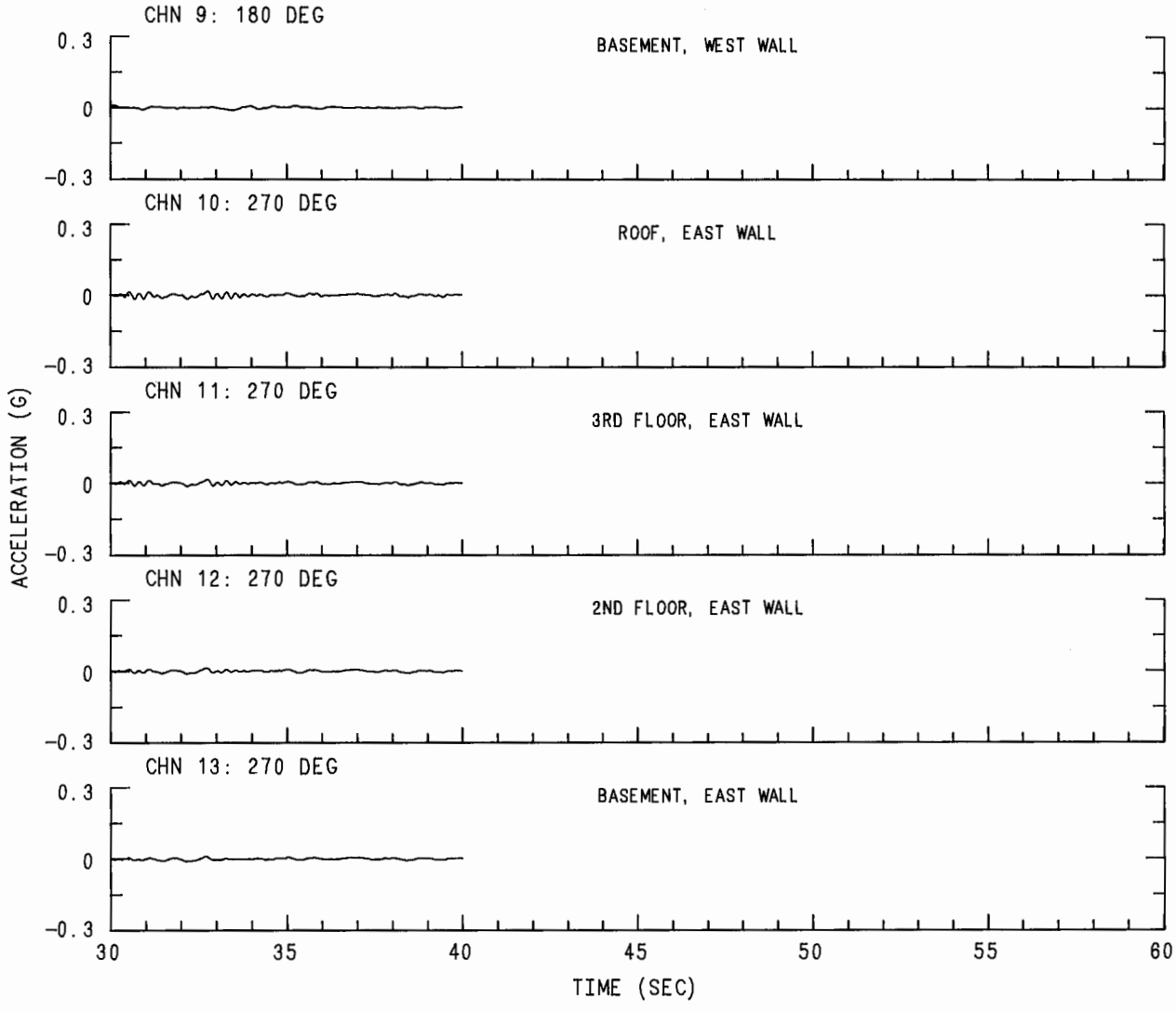

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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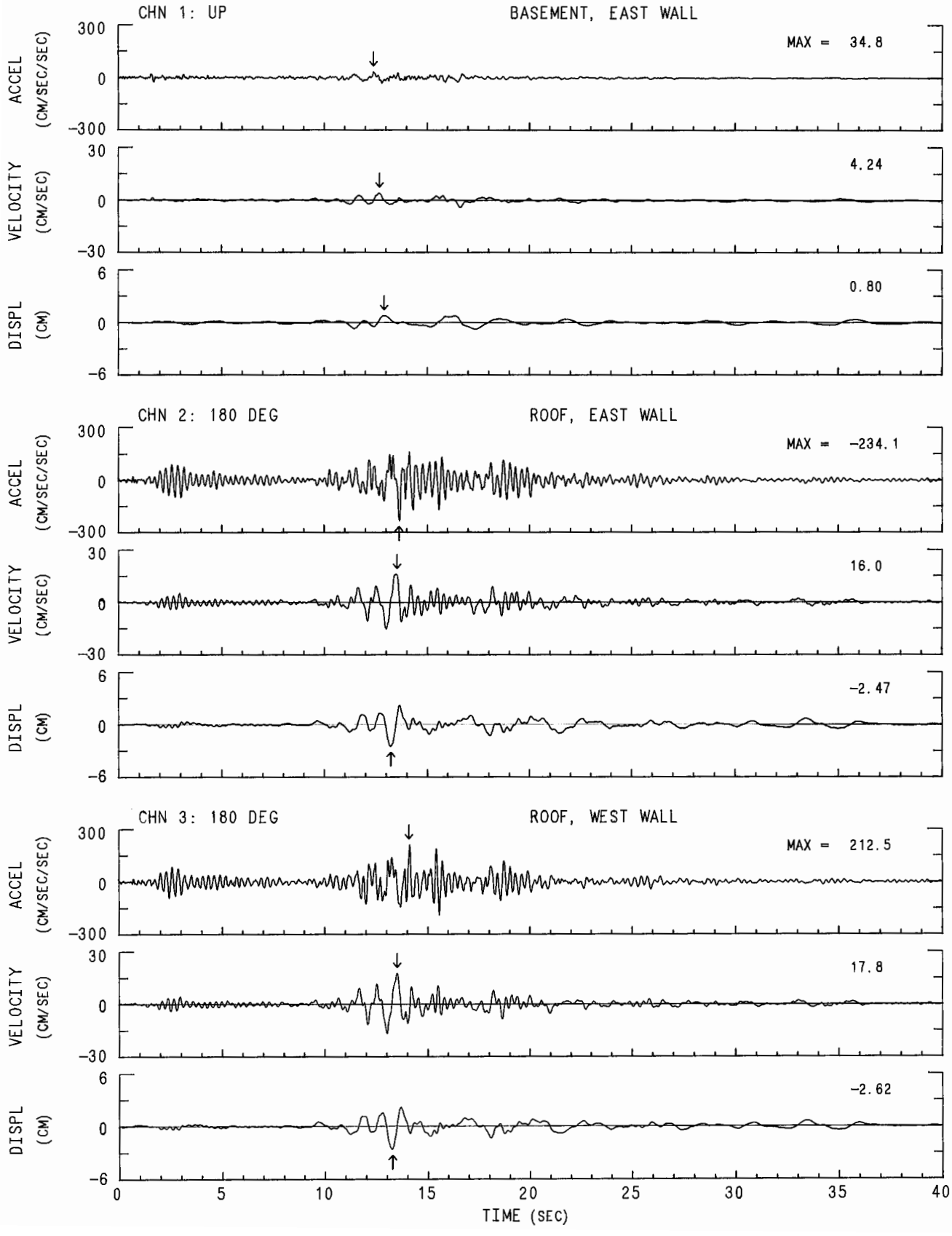
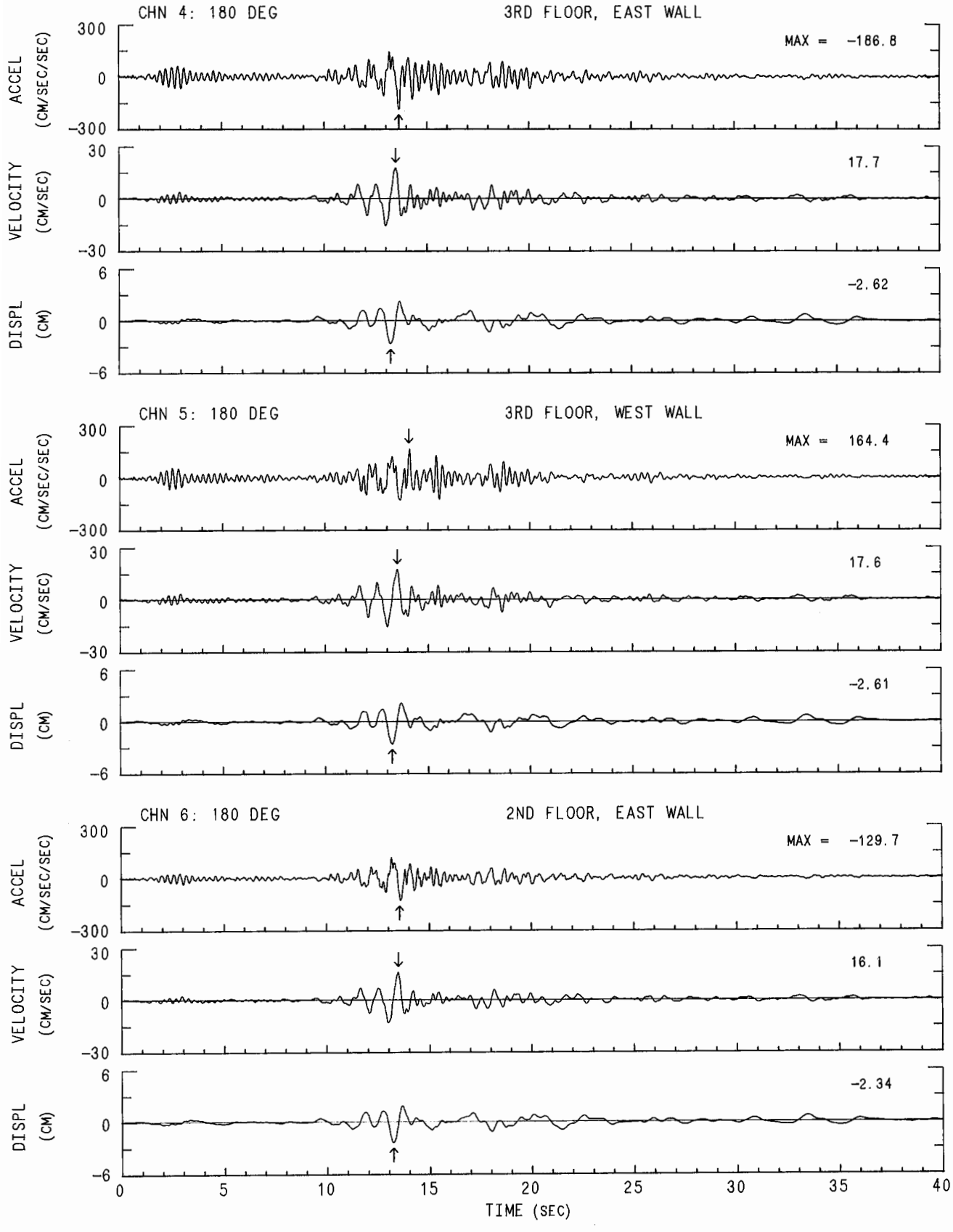


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND – 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

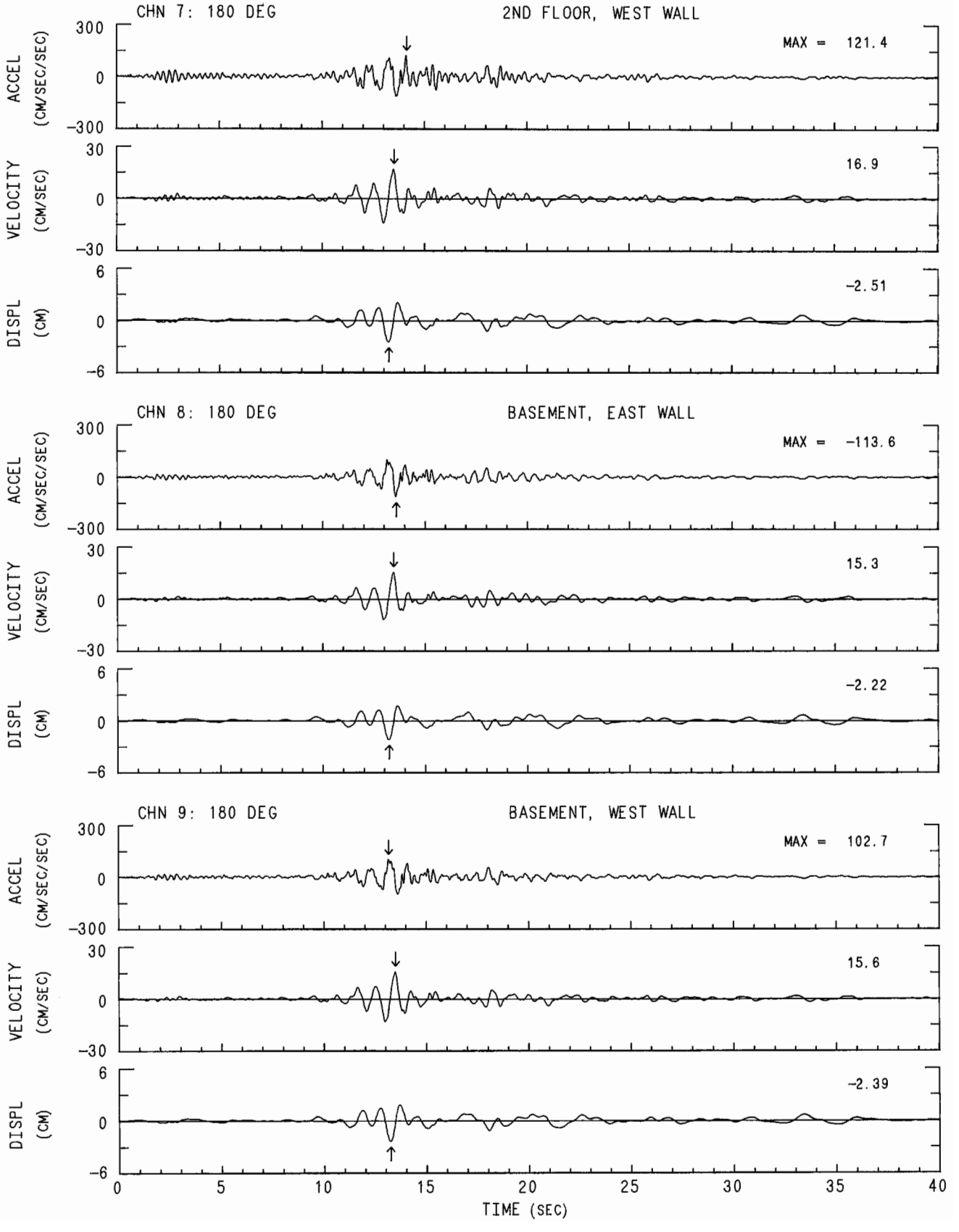
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58503-C0276-89297.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58503-C0276-89297.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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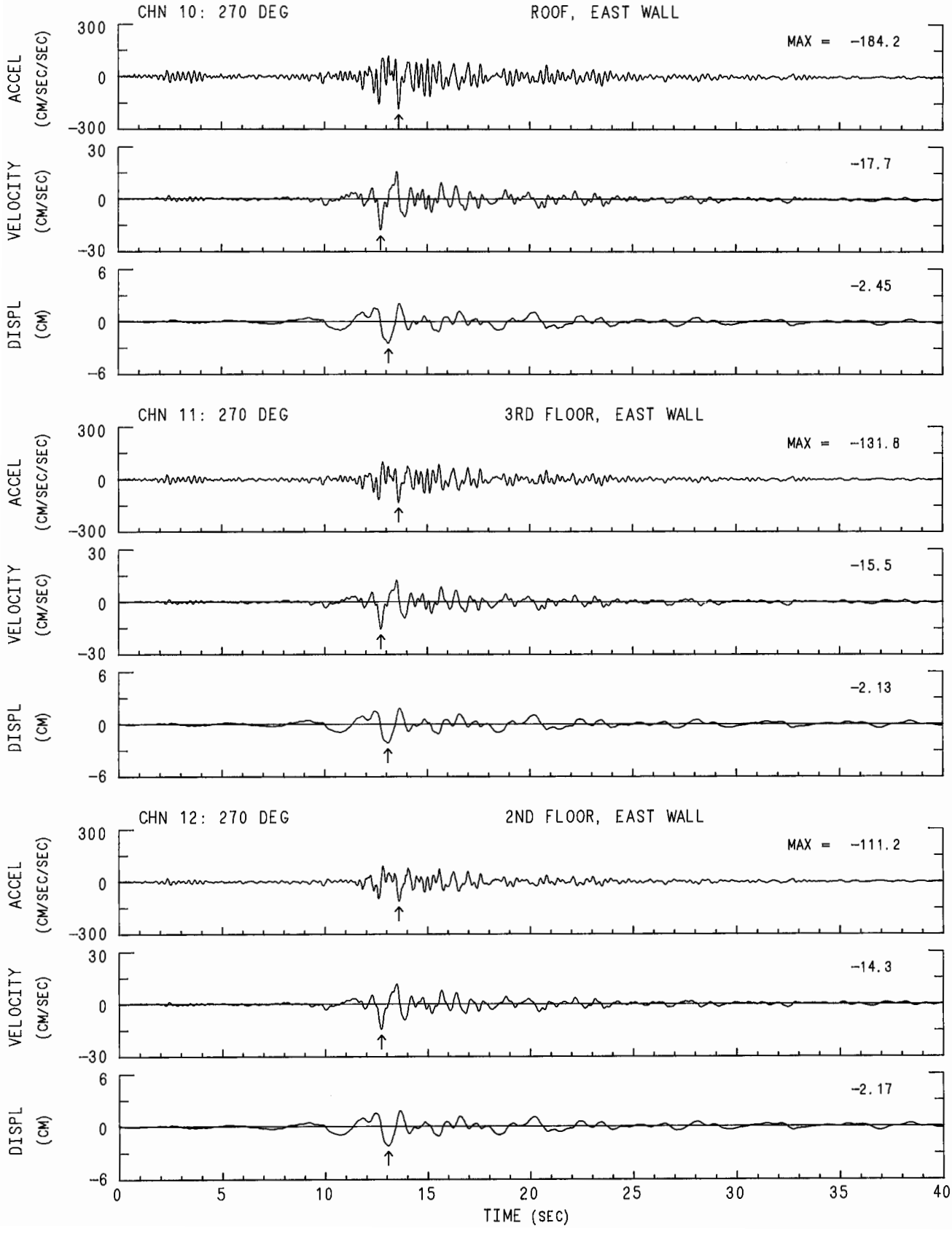
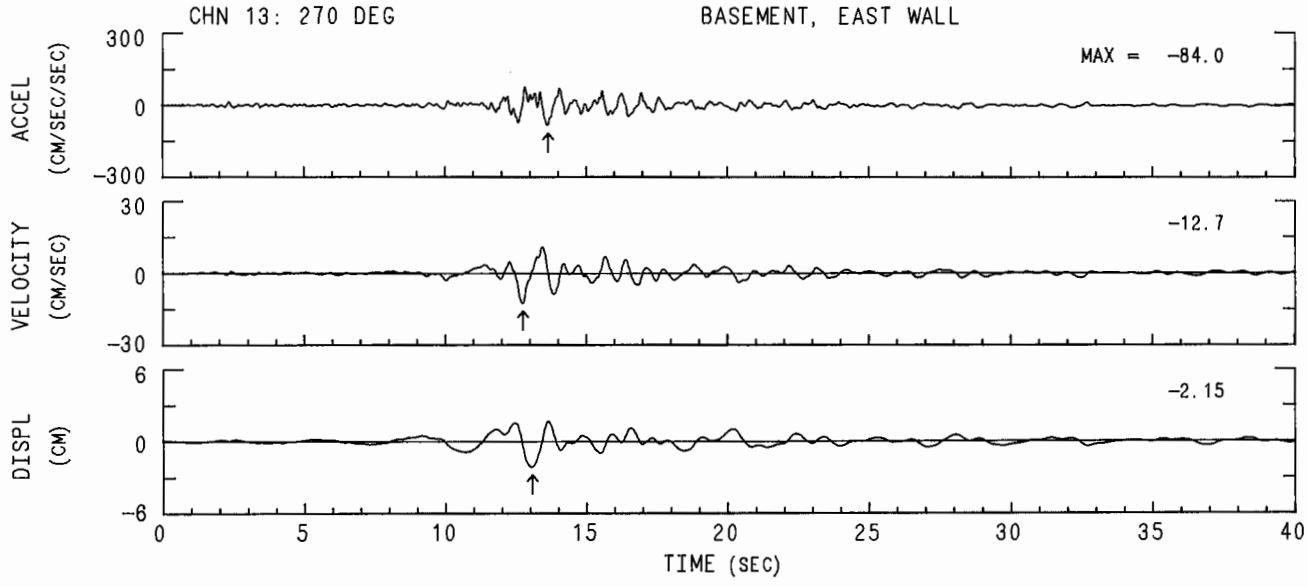


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58503-C0276-89297.01



RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

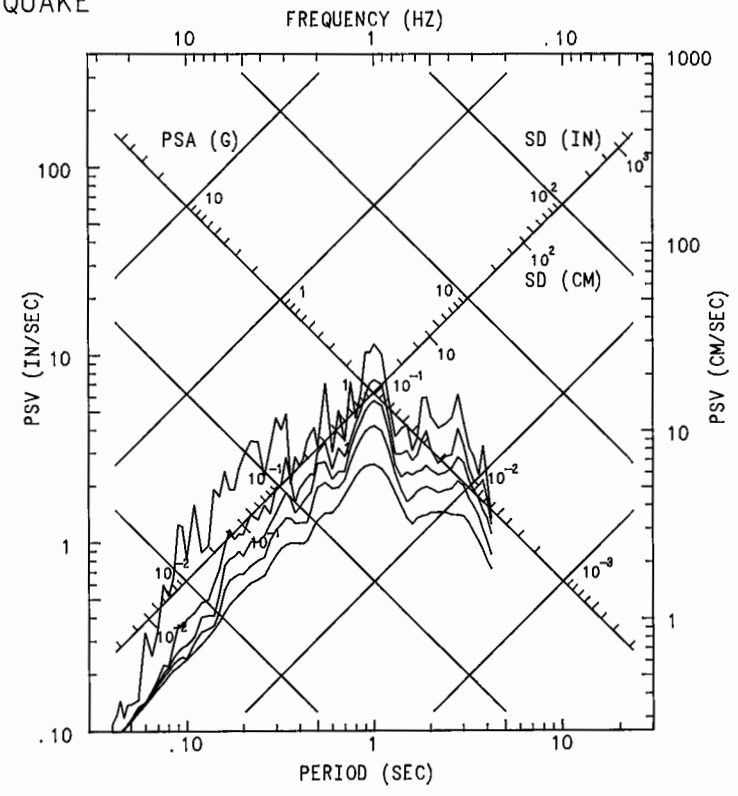
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

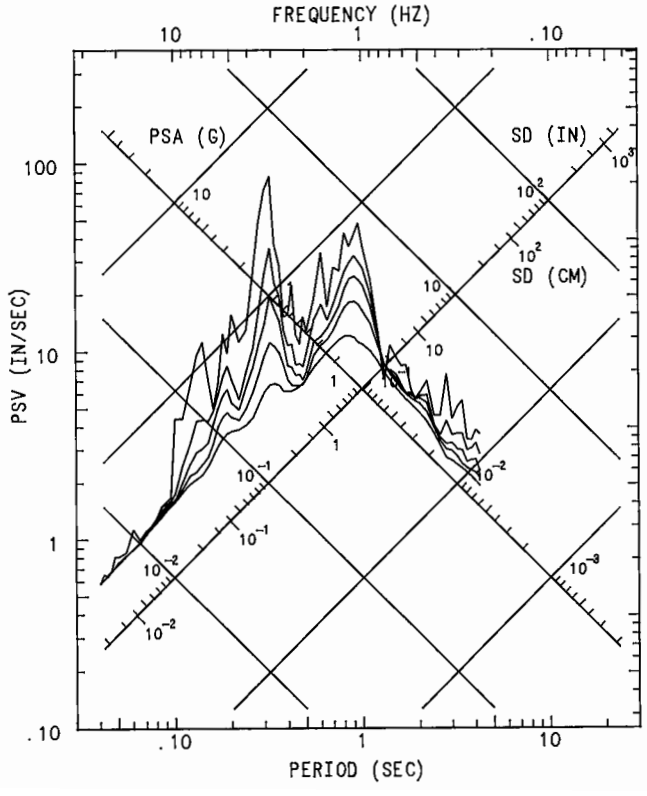
RECORD ID: 58503-C0276-89297.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

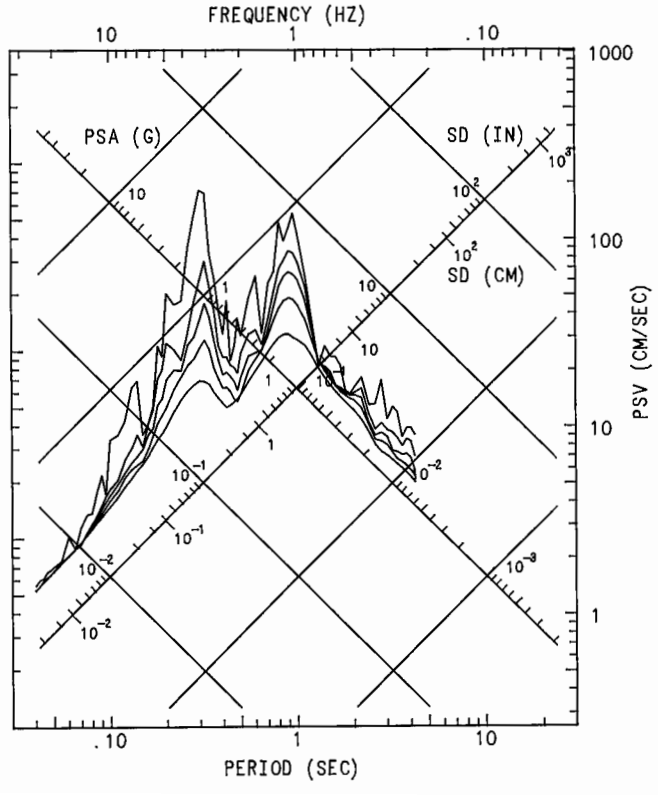
CHN 1: UP
BASEMENT, EAST WALL



CHN 2: 180 DEG
ROOF, EAST WALL



CHN 3: 180 DEG
ROOF, WEST WALL



RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

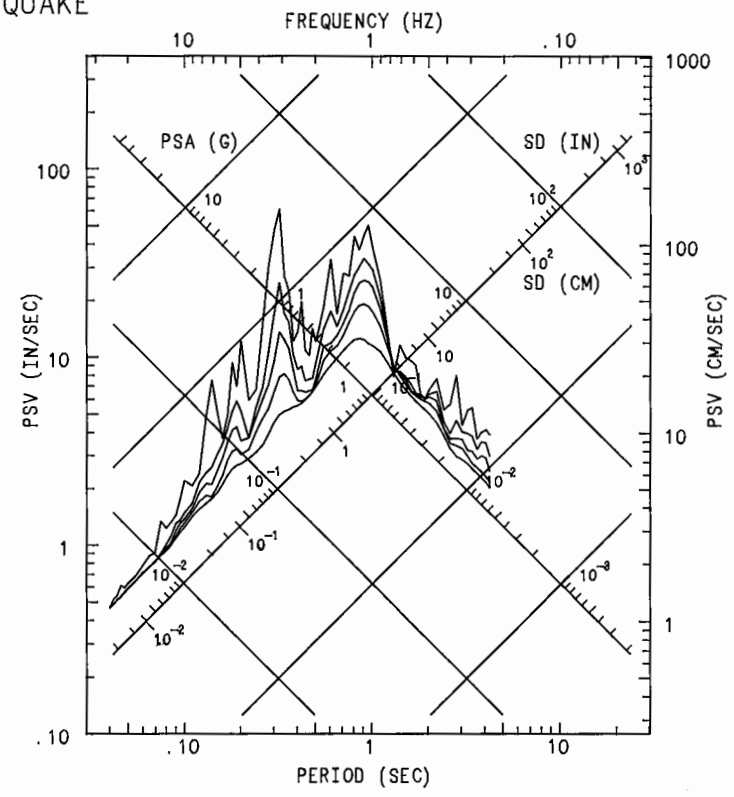
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

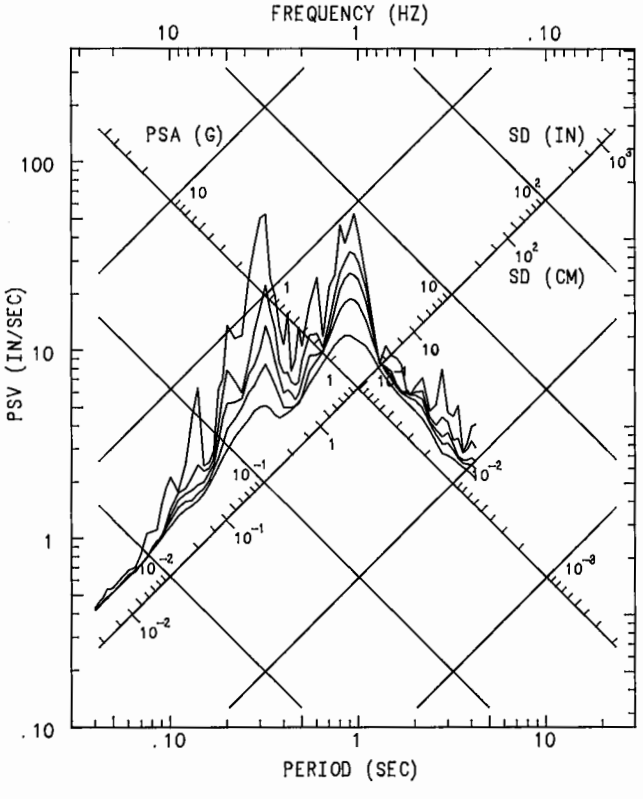
RECORD ID: 58503-C0276-89297.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

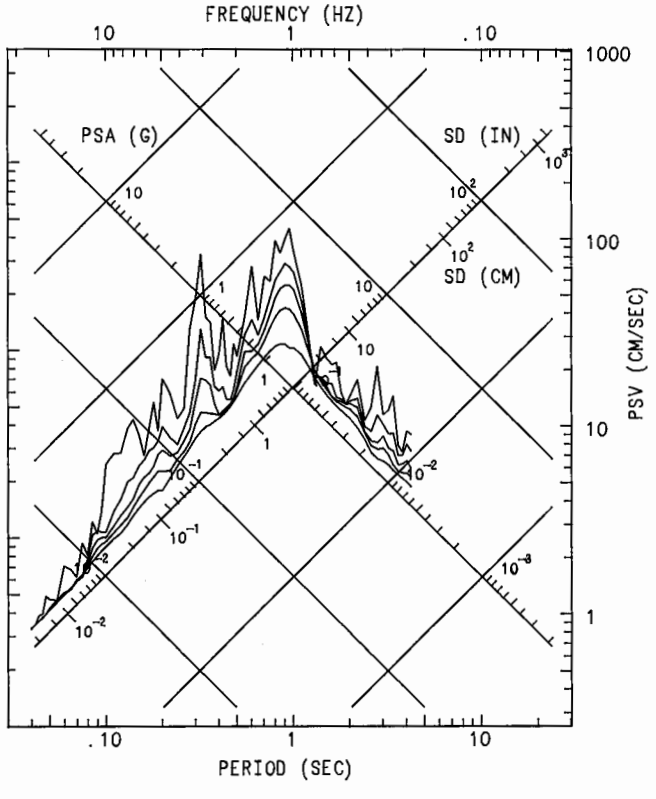
CHN 4: 180 DEG
3RD FLOOR, EAST WALL



CHN 5: 180 DEG
3RD FLOOR, WEST WALL



CHN 6: 180 DEG
2ND FLOOR, EAST WALL



RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

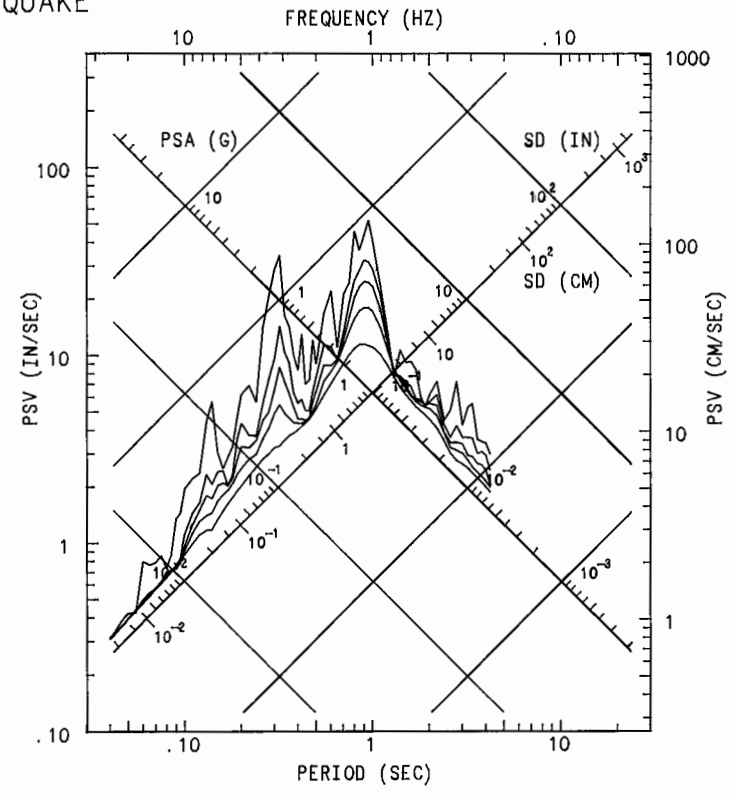
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

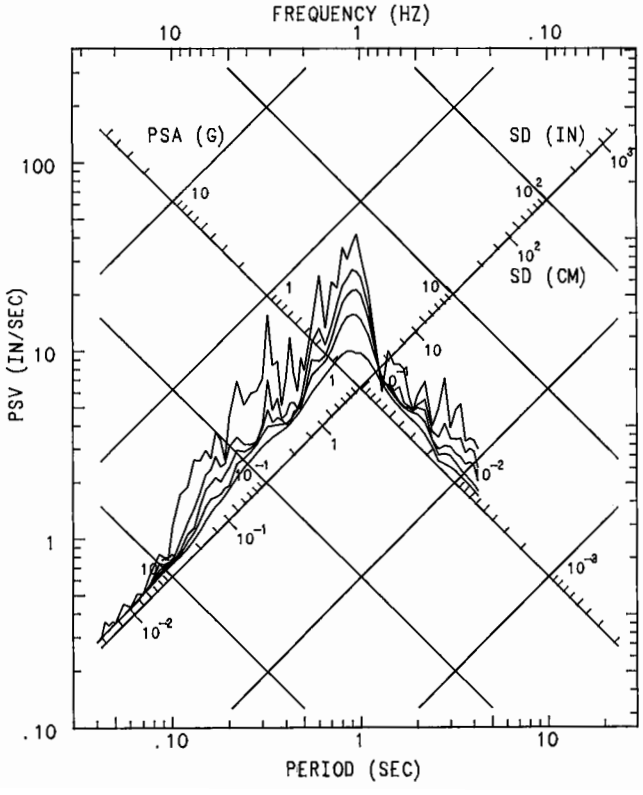
RECORD ID: 58503-C0276-89297.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

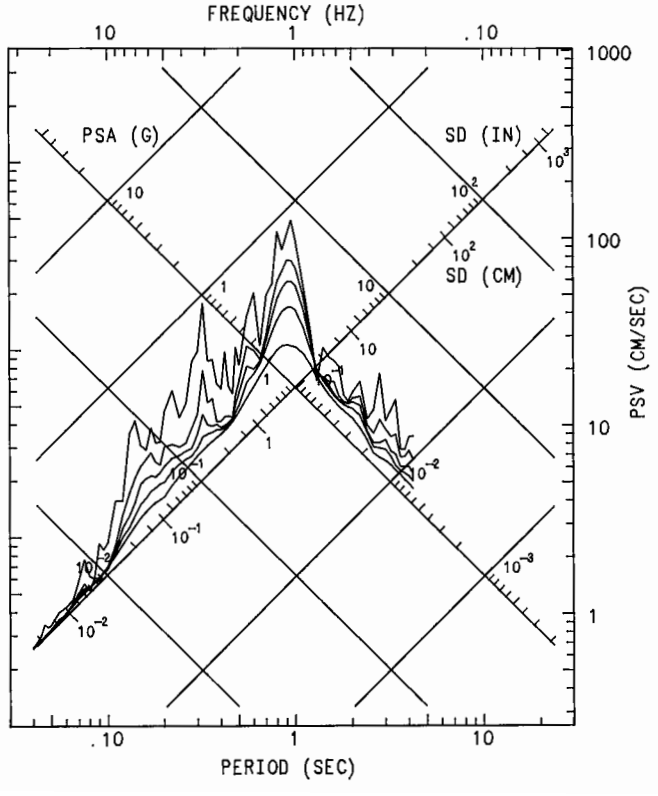
CHN 7: 180 DEG
2ND FLOOR, WEST WALL



CHN 8: 180 DEG
BASEMENT, EAST WALL



CHN 9: 180 DEG
BASEMENT, WEST WALL



RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503

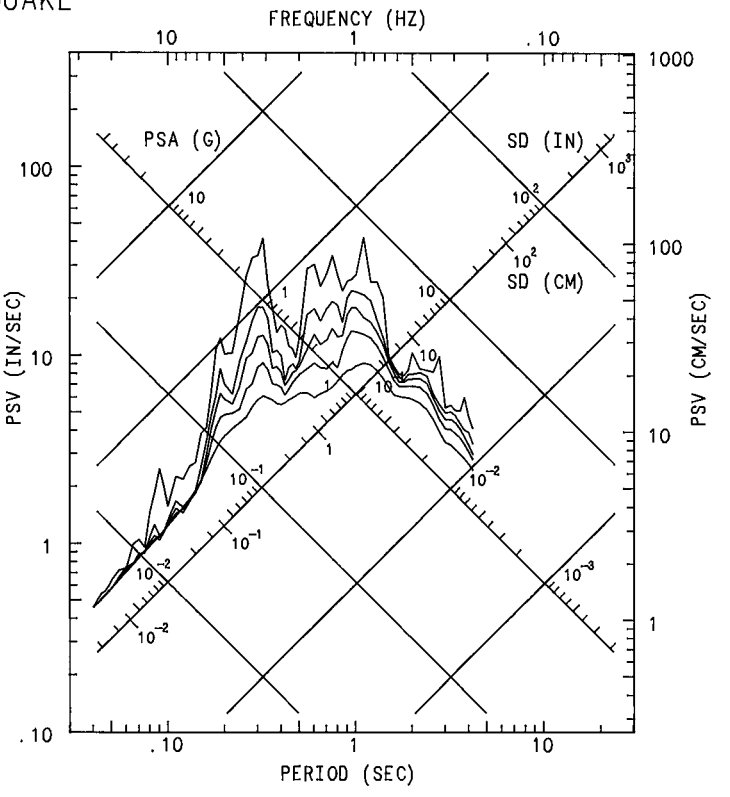
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

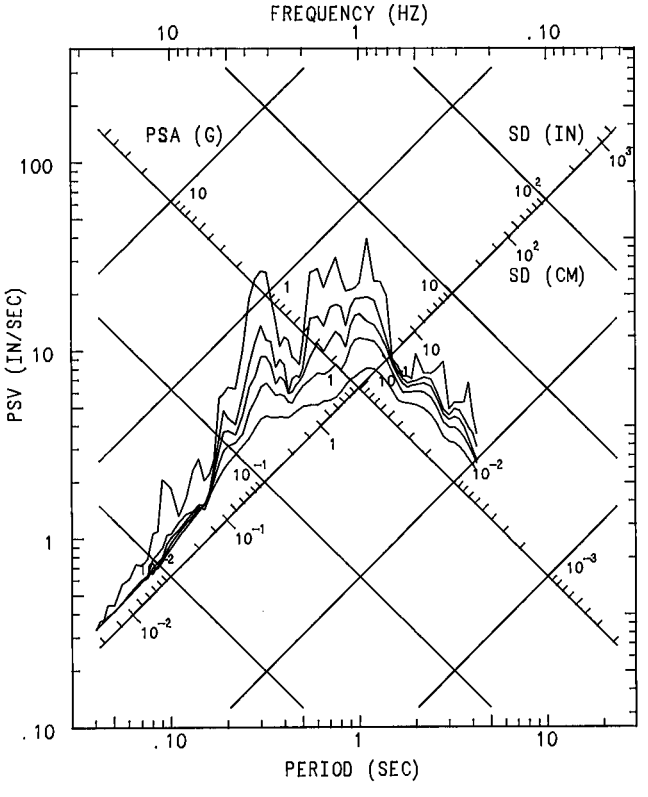
RECORD ID: 58503-C0276-89297.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

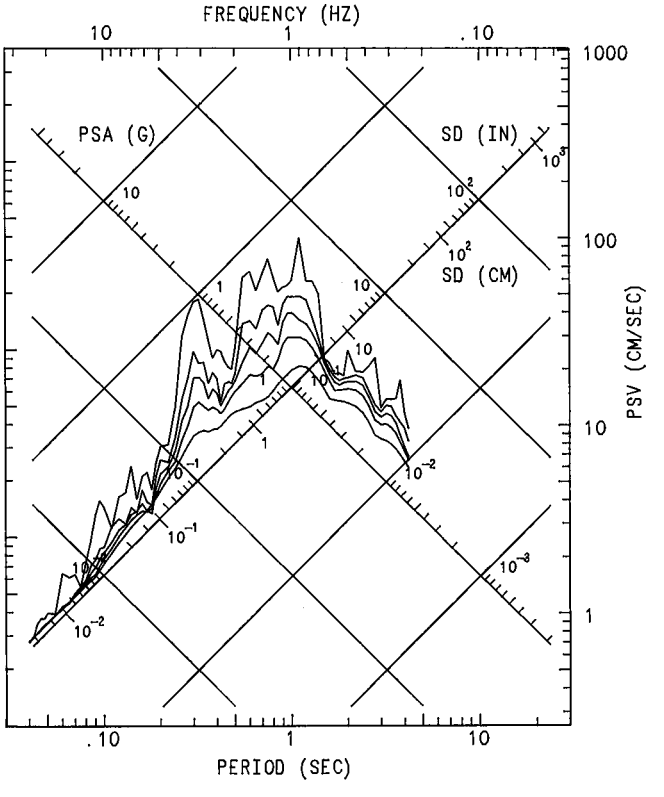
CHN 10: 270 DEG
ROOF, EAST WALL



CHN 11: 270 DEG
3RD FLOOR, EAST WALL



CHN 12: 270 DEG
2ND FLOOR, EAST WALL



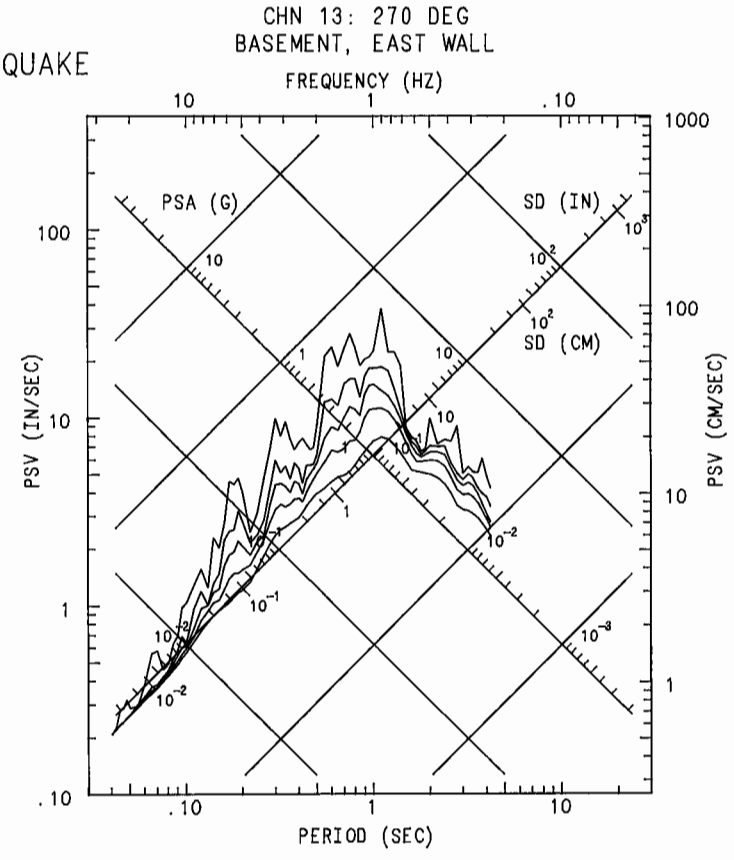
RICHMOND - 3-STORY GOVT. OFFICE BLDG. : CSMIP S/N 503

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

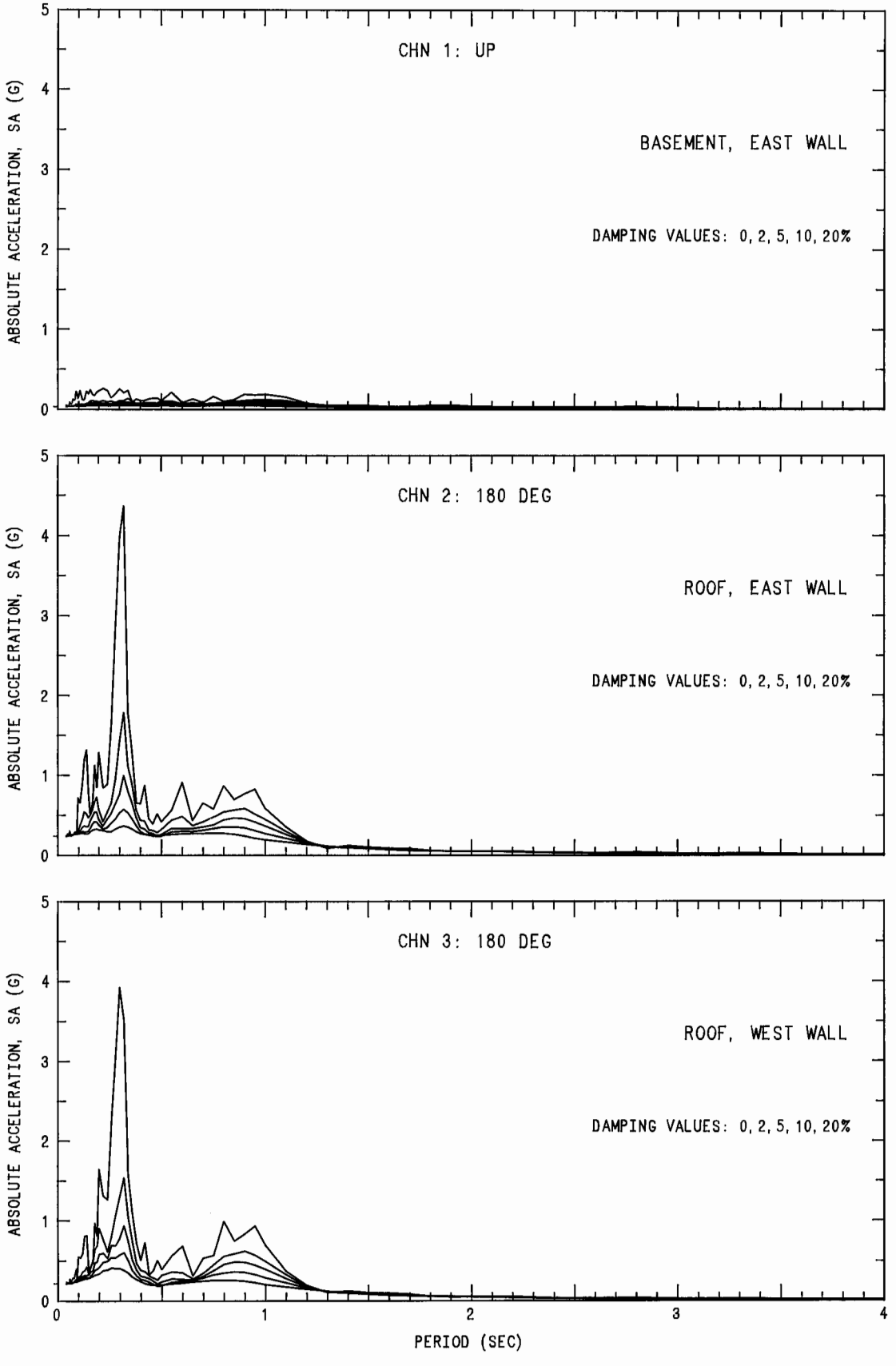
PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58503-C0276-89297.01

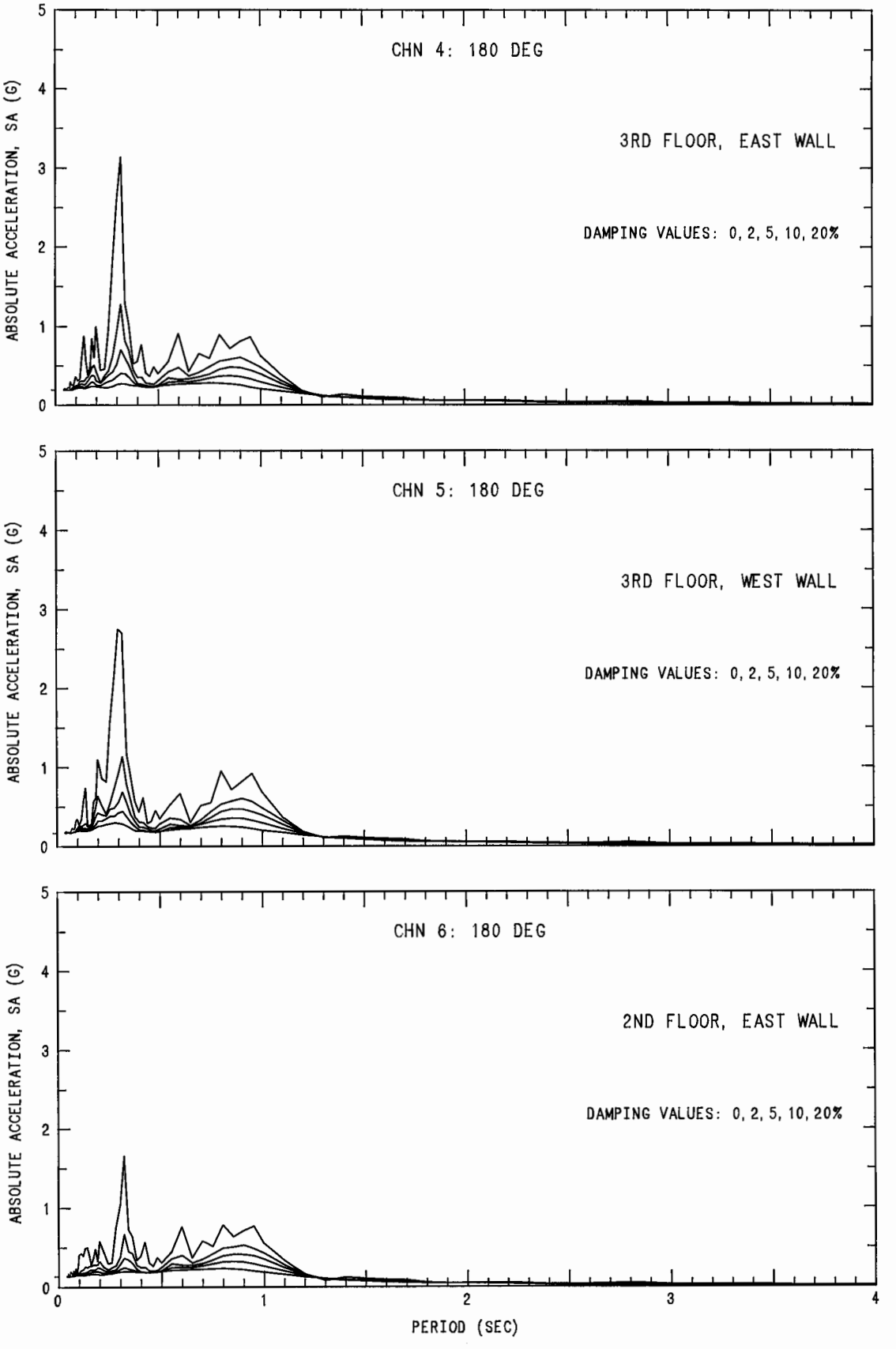
——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



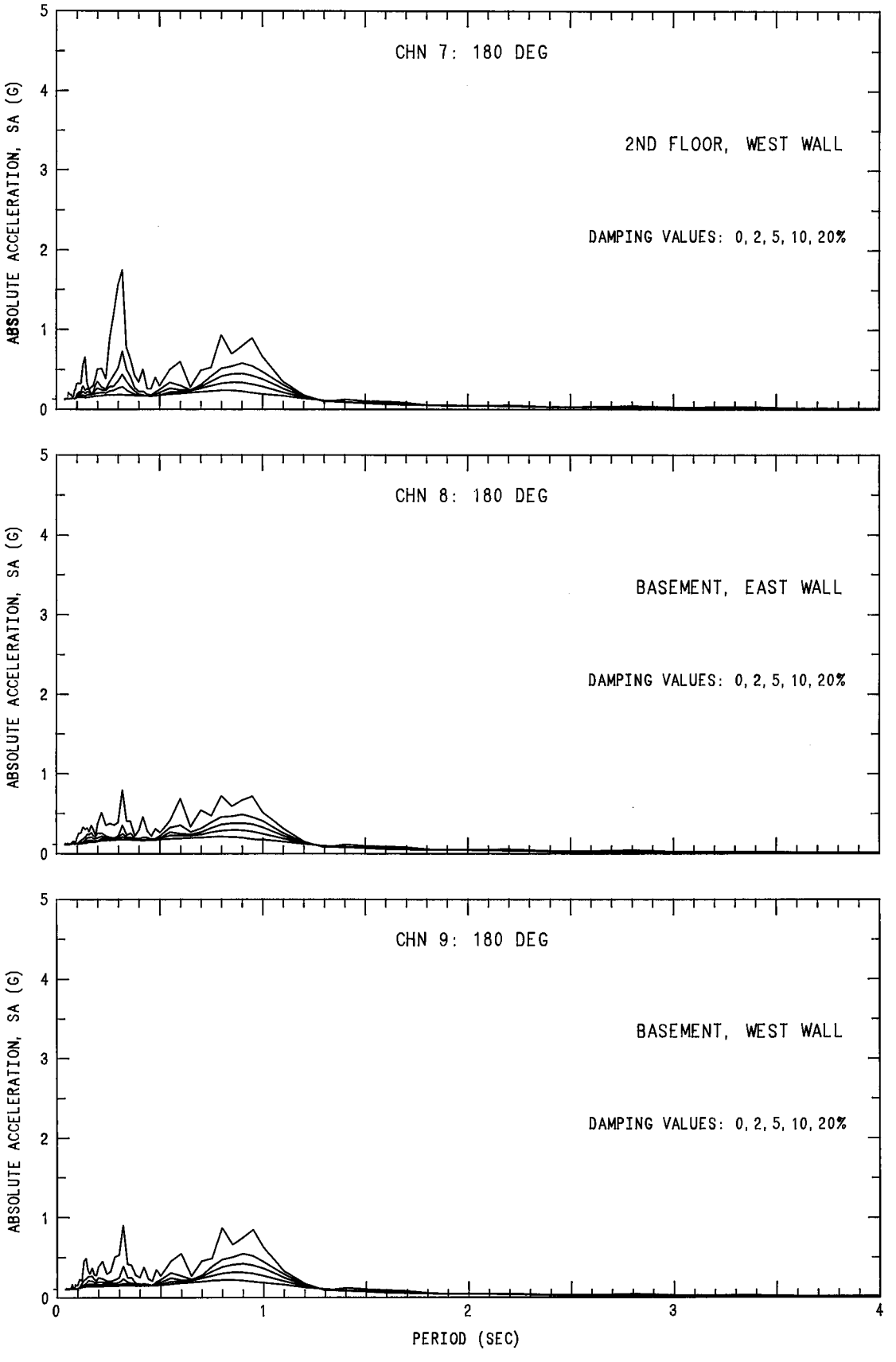
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58503-C0276-89297.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



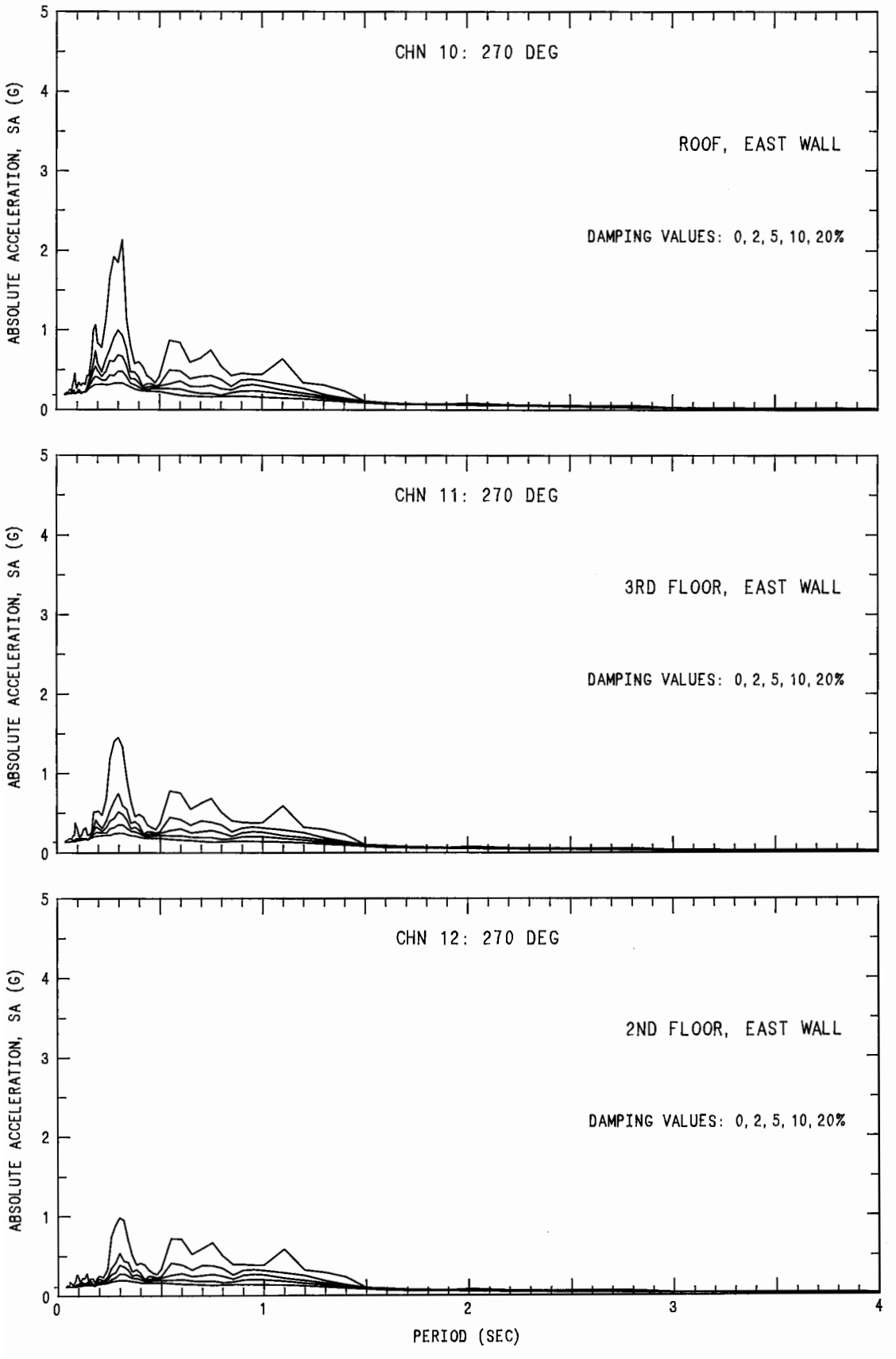
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58503-C0276-89297.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



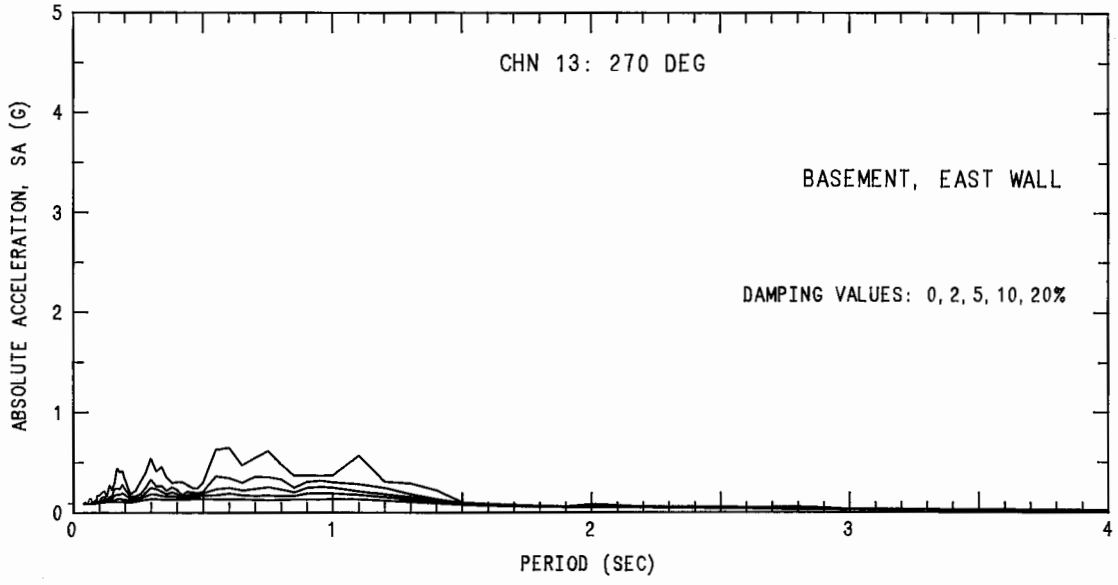
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58503-C0276-89297.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58503-C0276-89297.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY GOVT. OFFICE BLDG.: CSMIP S/N 503
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58503-C0276-89297.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



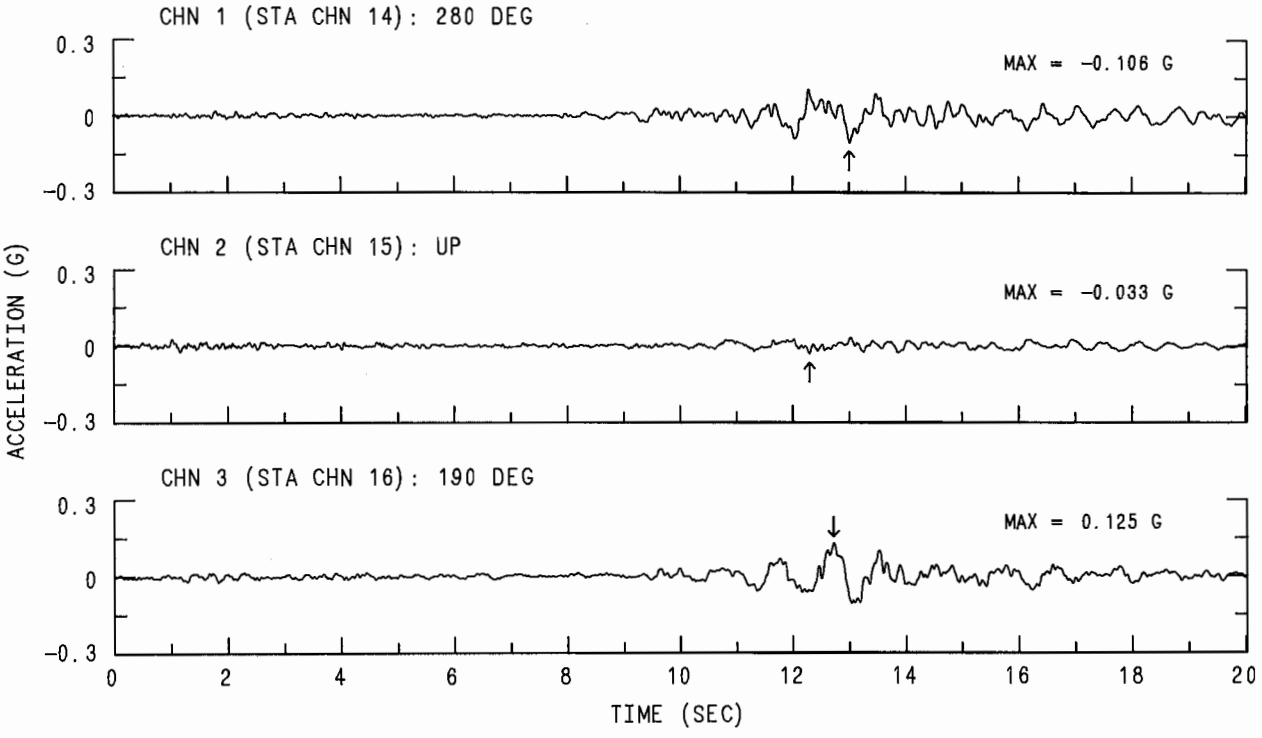
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

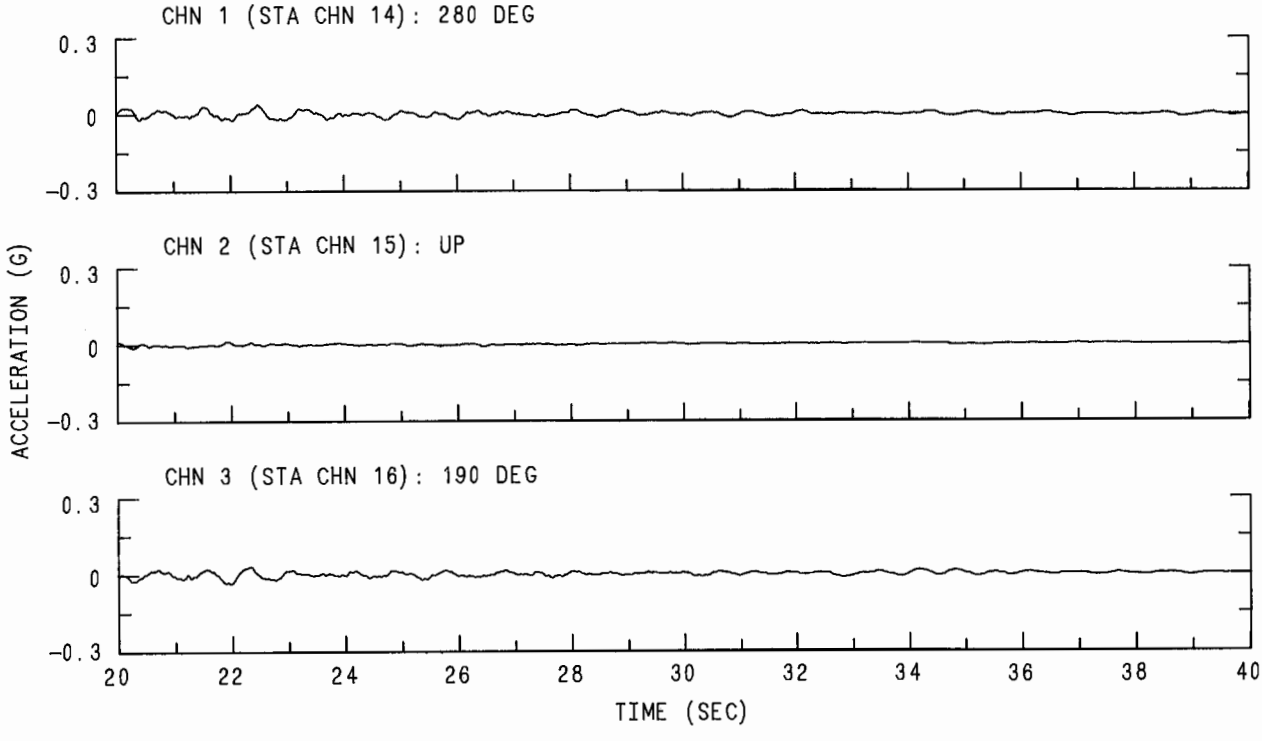
RICHMOND - CITY HALL PARKING LOT: CSMIP S/N 505

PHASE 1 ACCELERATION

RECORD ID: 58505-S4831-89297.01

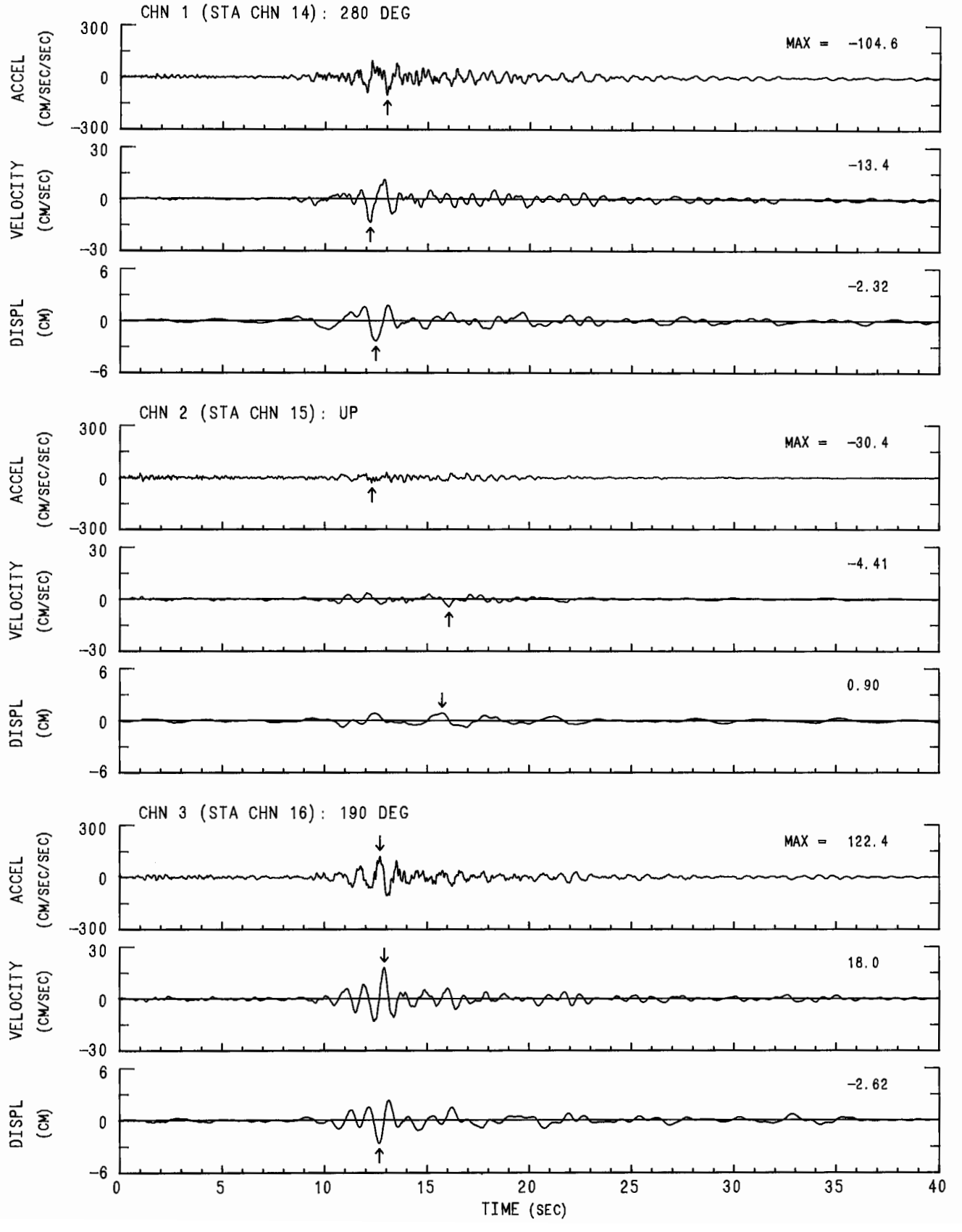
(The FF record started about 0.5 second later than the structure)
(The FF channel orientation of 280° and 190° are the same as the structure channel orientations of 270° and 180°, respectively)





SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND – CITY HALL PARKING LOT: CSMIP S/N 505

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58505-S4831-89297.01



RICHMOND - CITY HALL PARKING LOT: CSMIP S/N 505

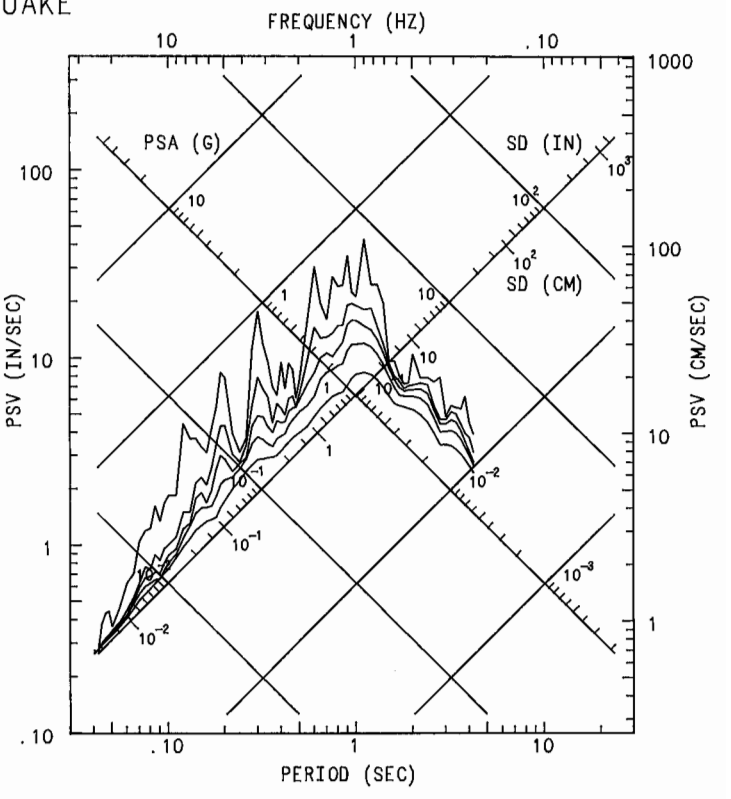
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

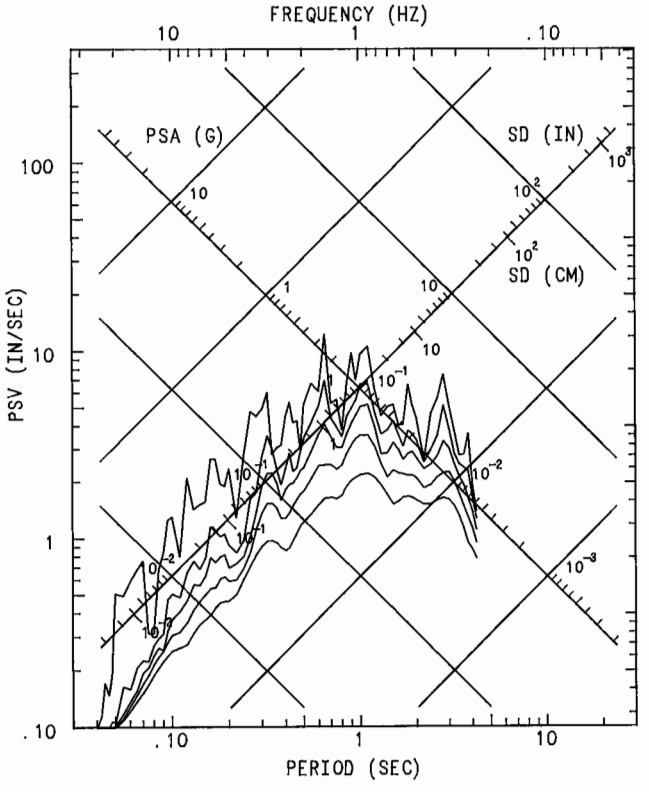
RECORD ID: 58505-S4831-89297.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

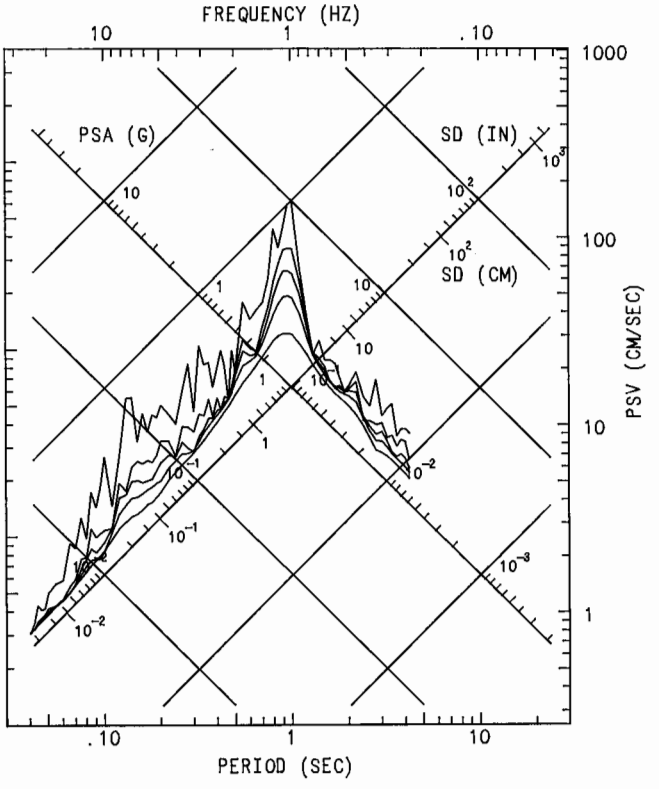
CHN 1 (STA CHN 14): 280 DEG



CHN 2 (STA CHN 15): UP

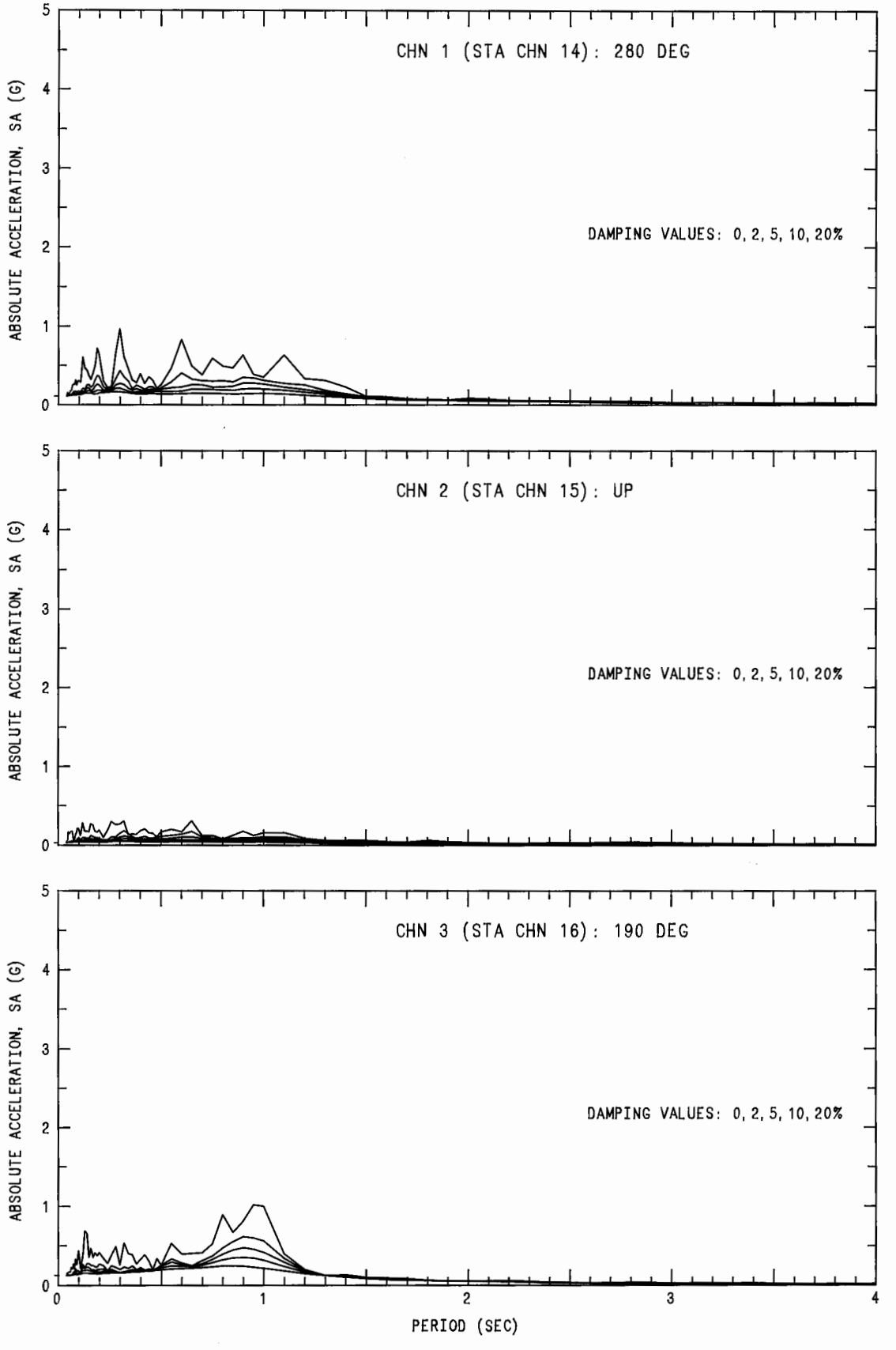


CHN 3 (STA CHN 16): 190 DEG



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - CITY HALL PARKING LOT: CSMIP S/N 505

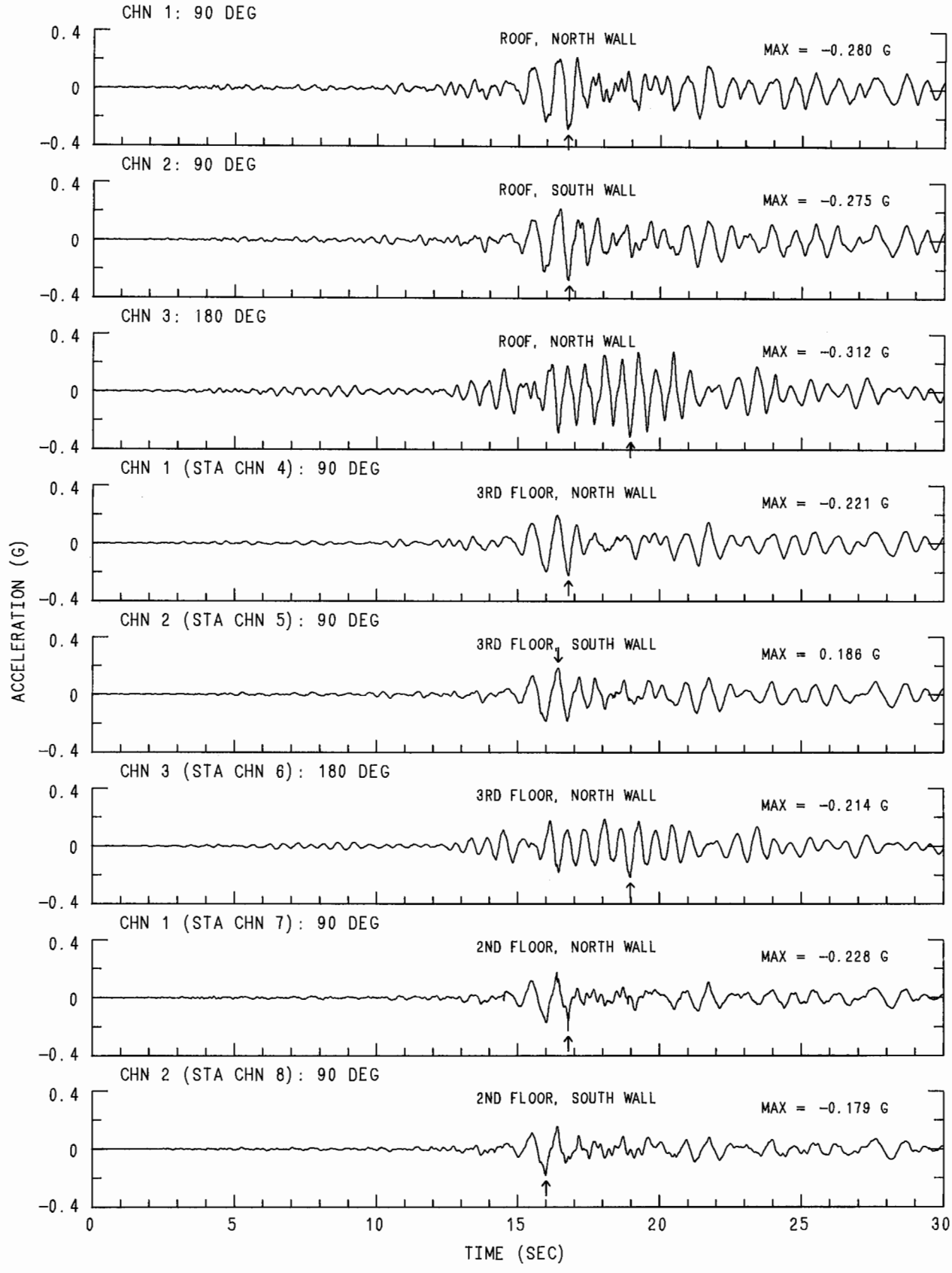
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58505-S4831-89297.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND – 3-STORY OFFICE BLDG.: CSMIP S/N 506

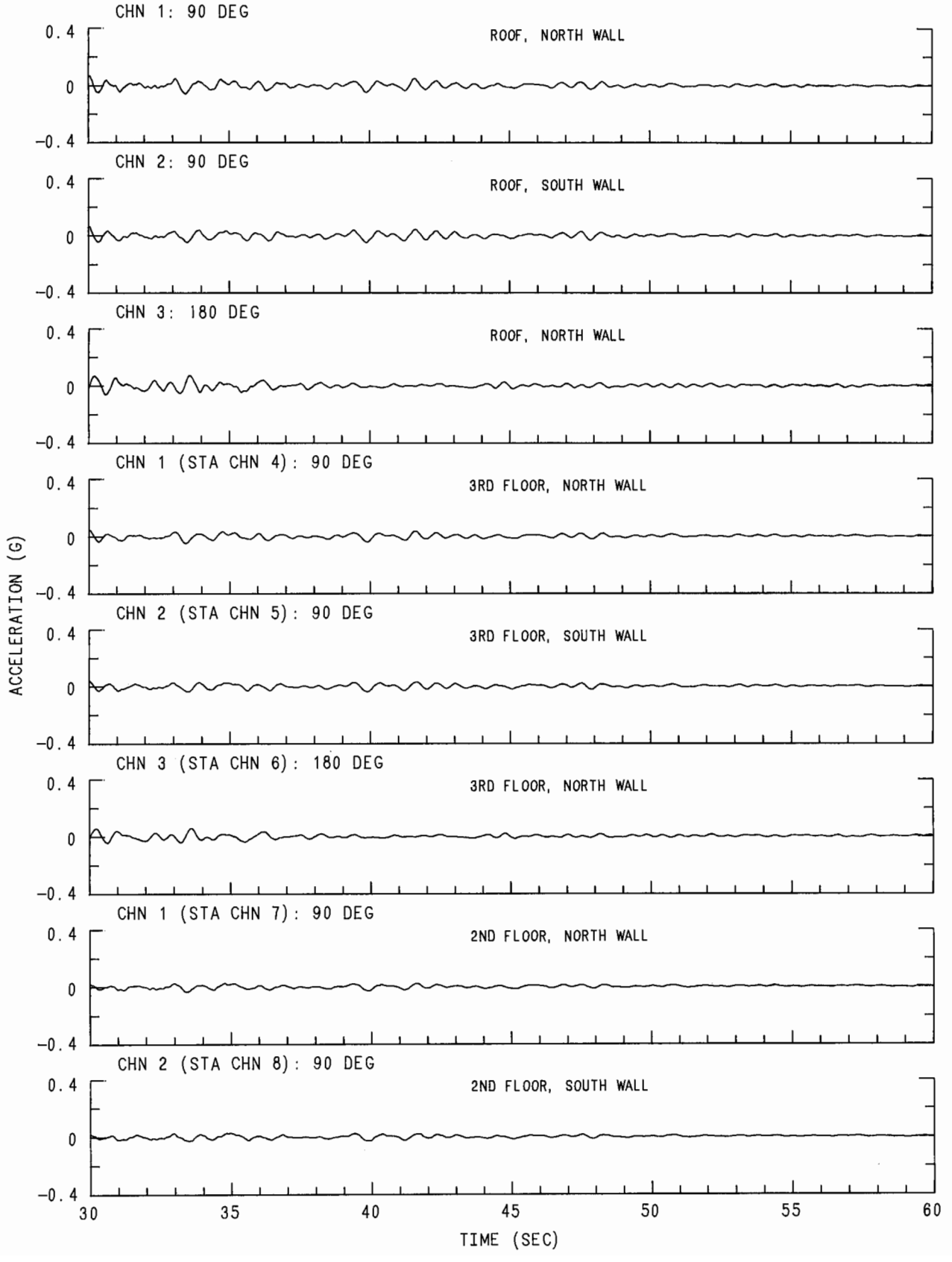
PHASE 1 ACCELERATION. RECORD ID: 58506-D0293-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

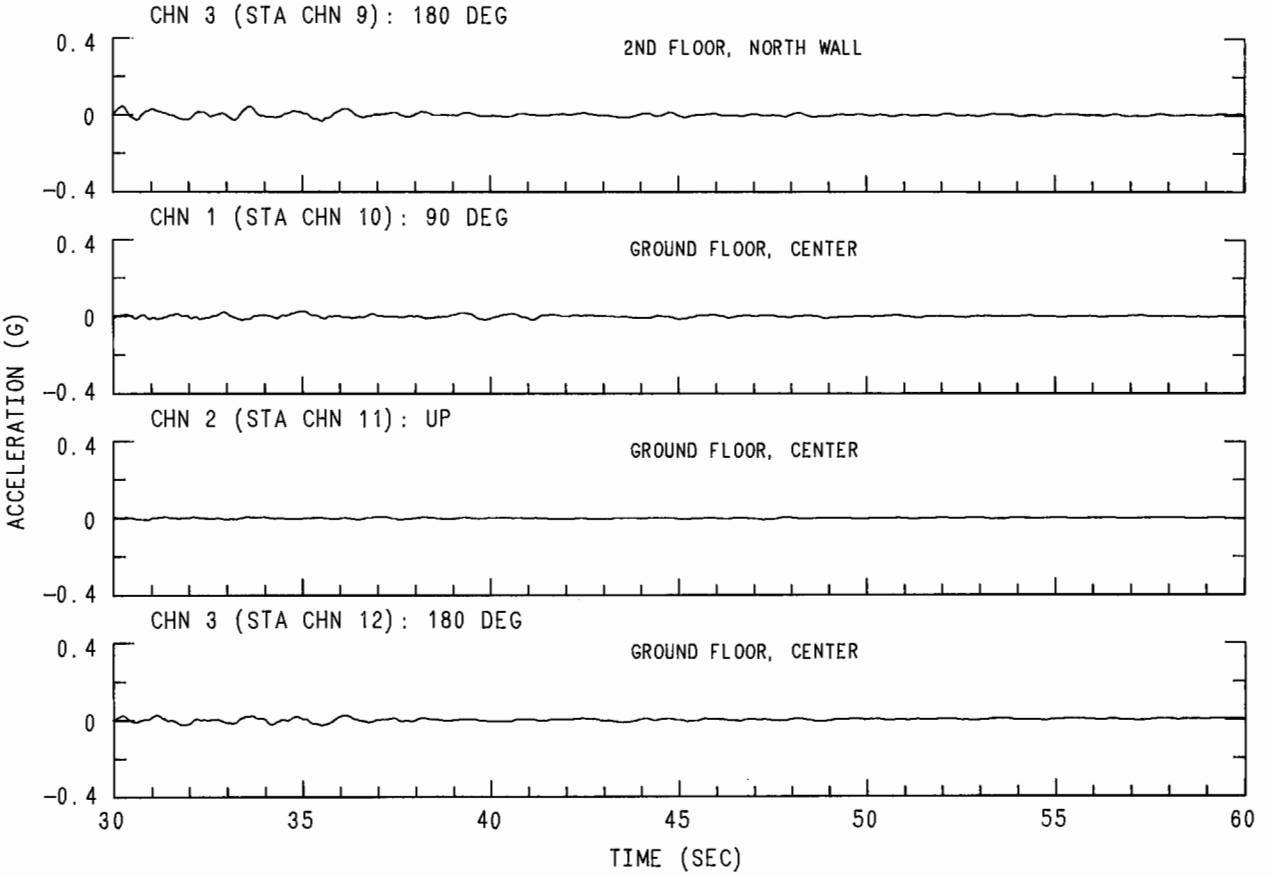
PHASE 1 ACCELERATION. RECORD ID: 58506-D0293-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

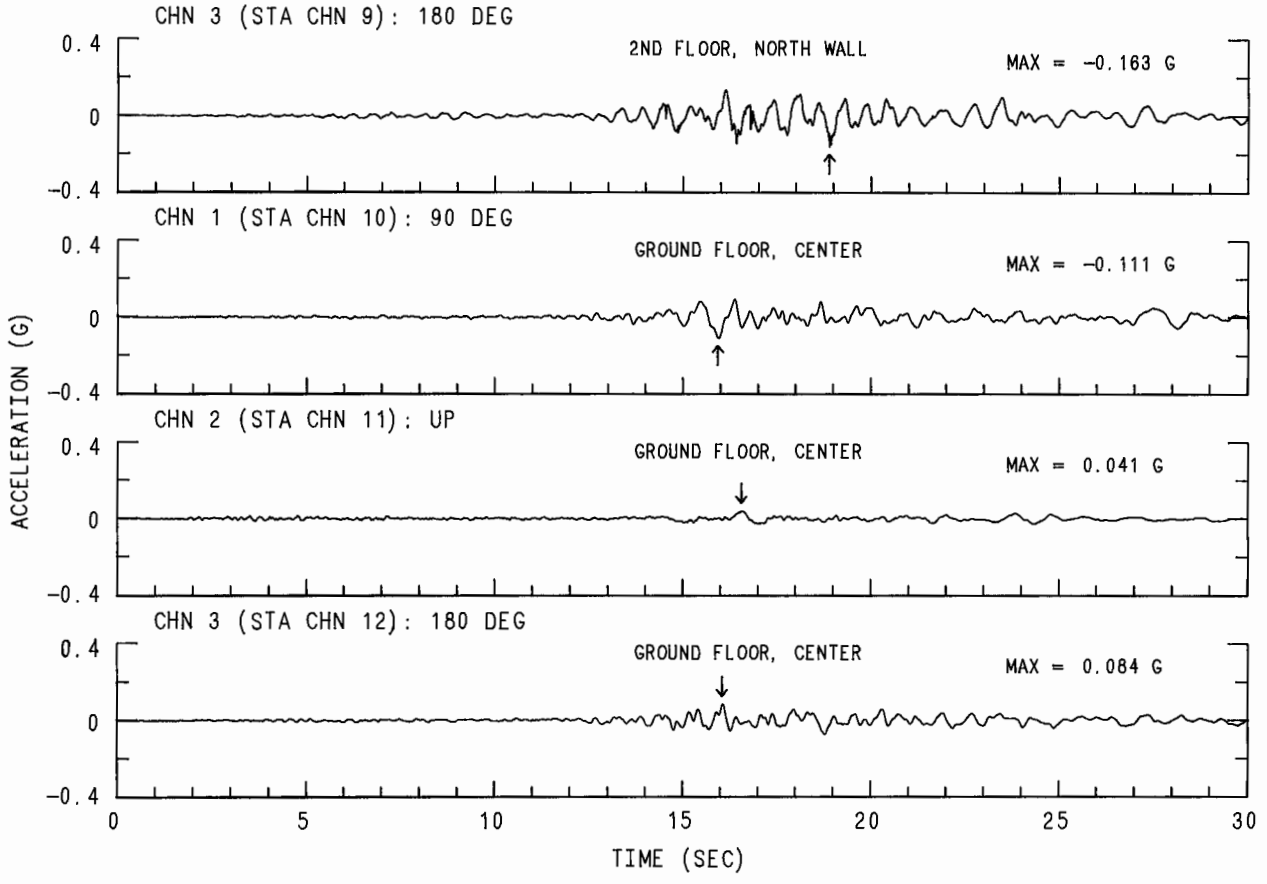
PHASE 1 ACCELERATION. RECORD ID: 58506-D0291-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

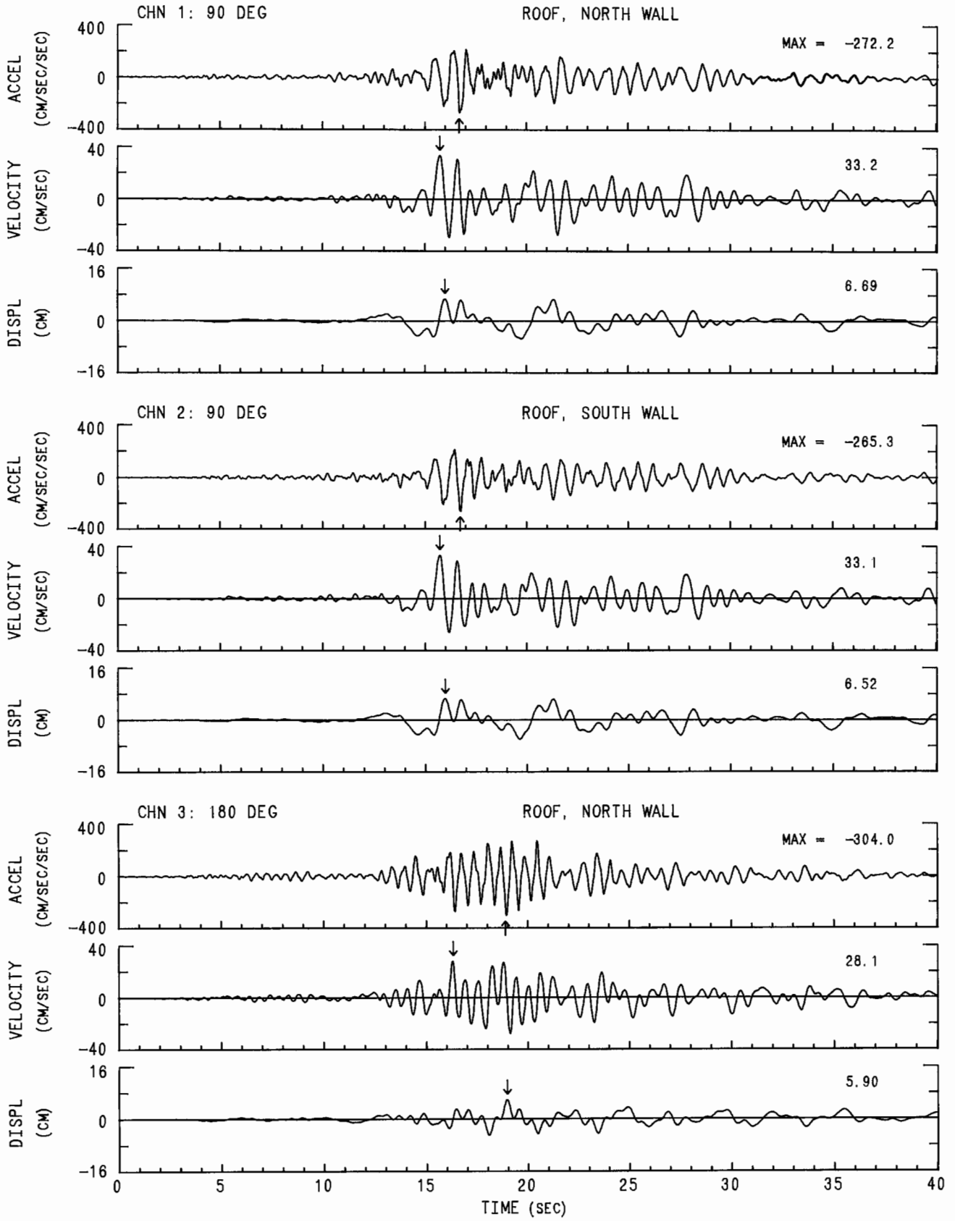
PHASE 1 ACCELERATION. RECORD ID: 58506-D0291-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

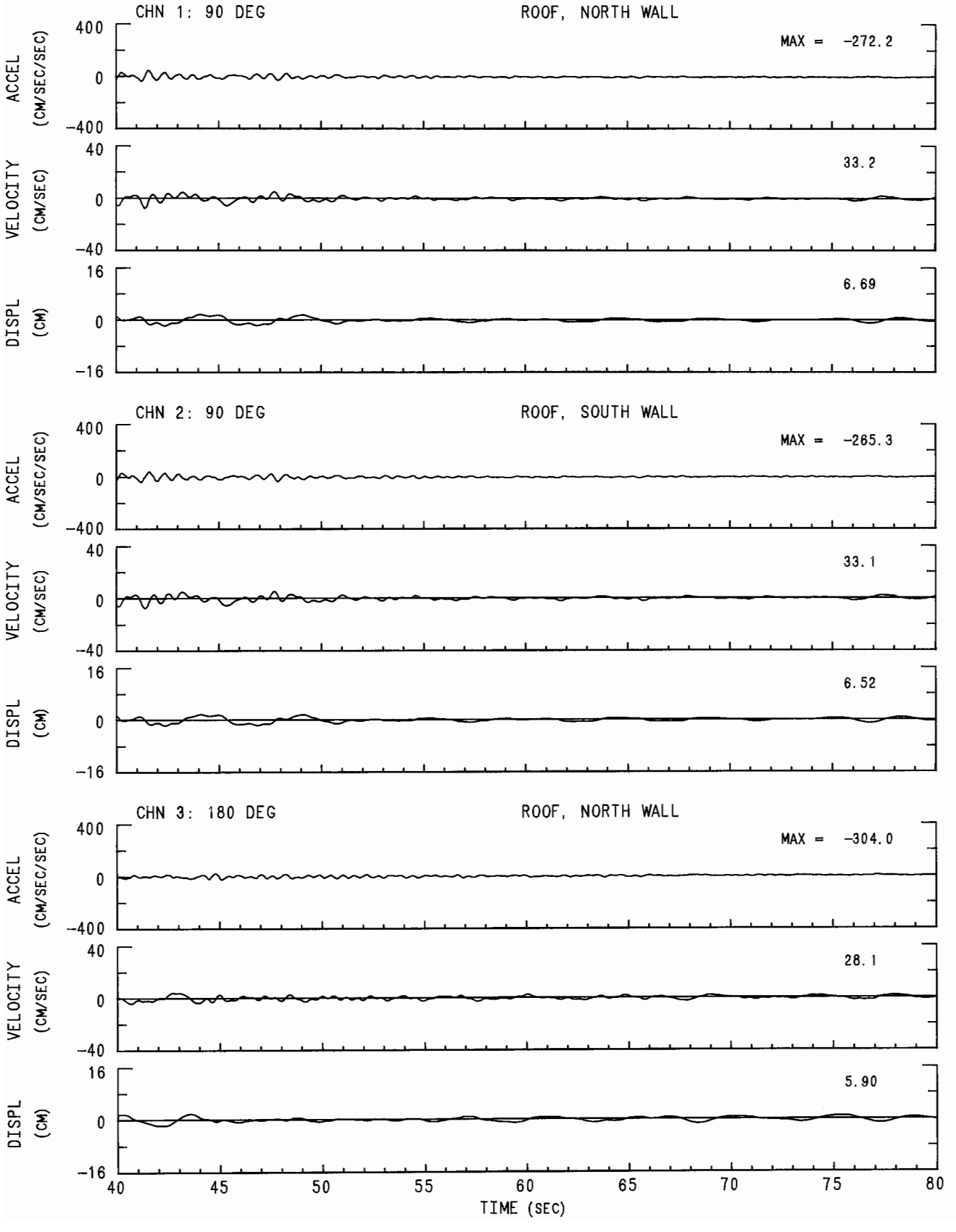
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0293-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

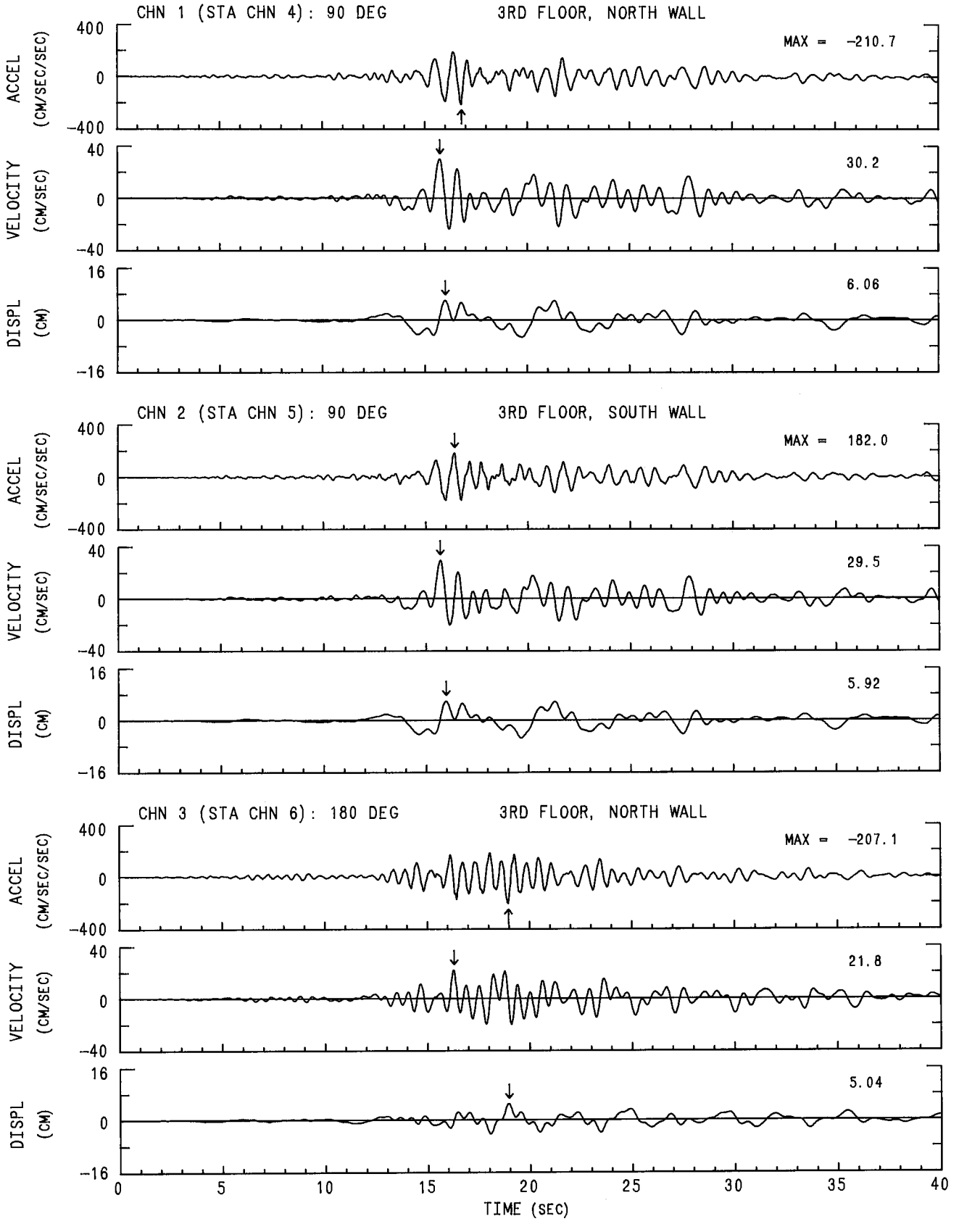
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0293-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

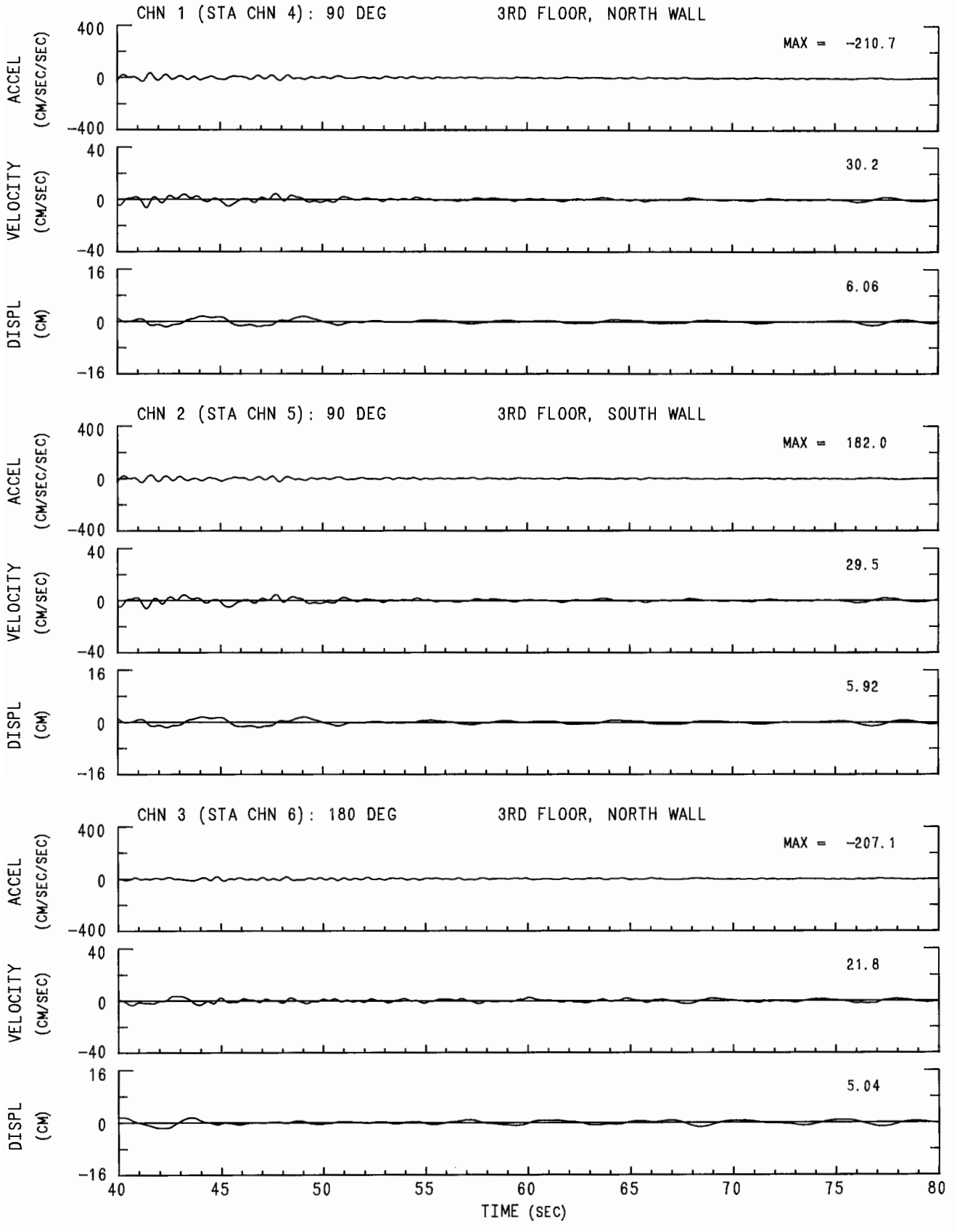
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0292-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND – 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

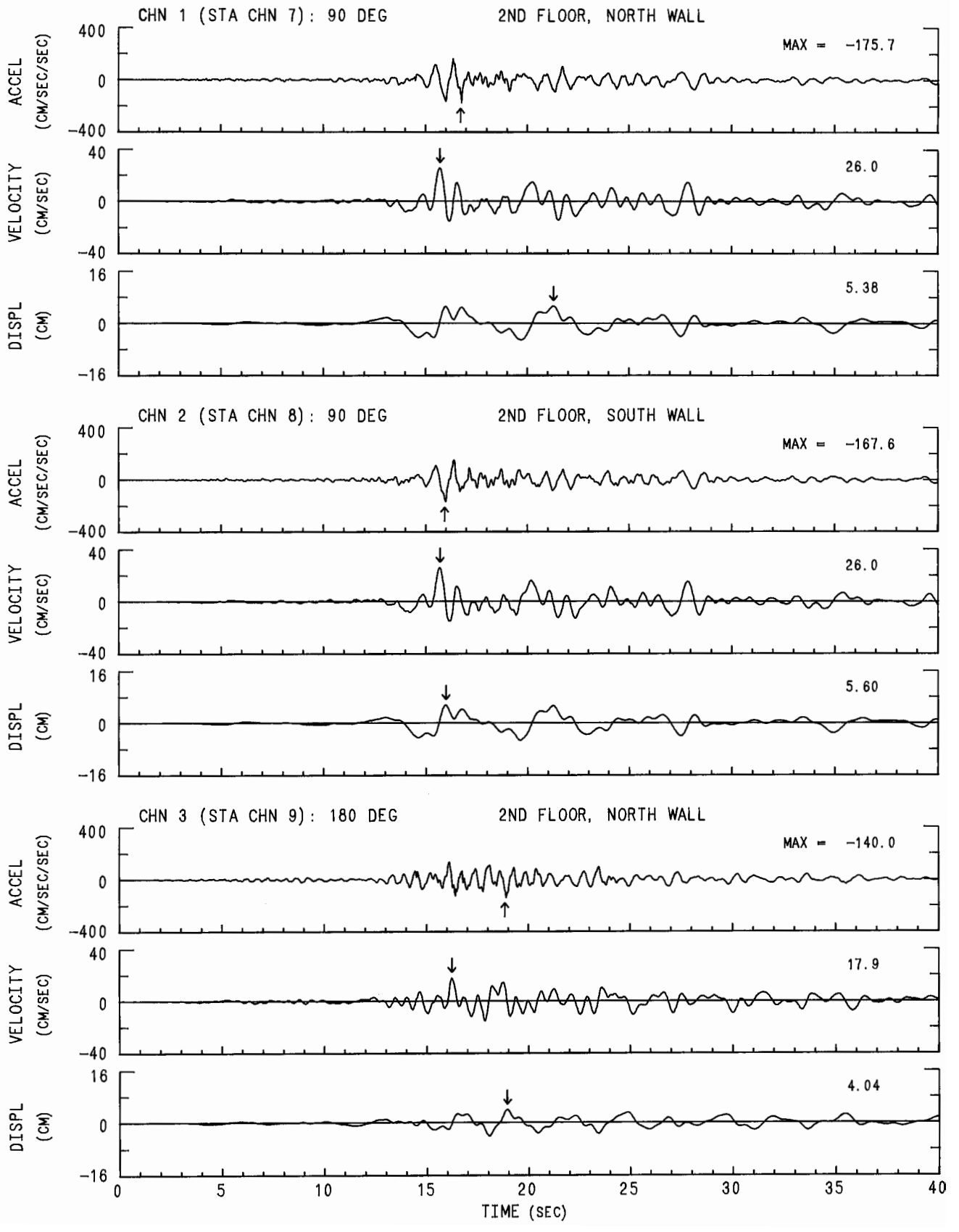
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0292-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

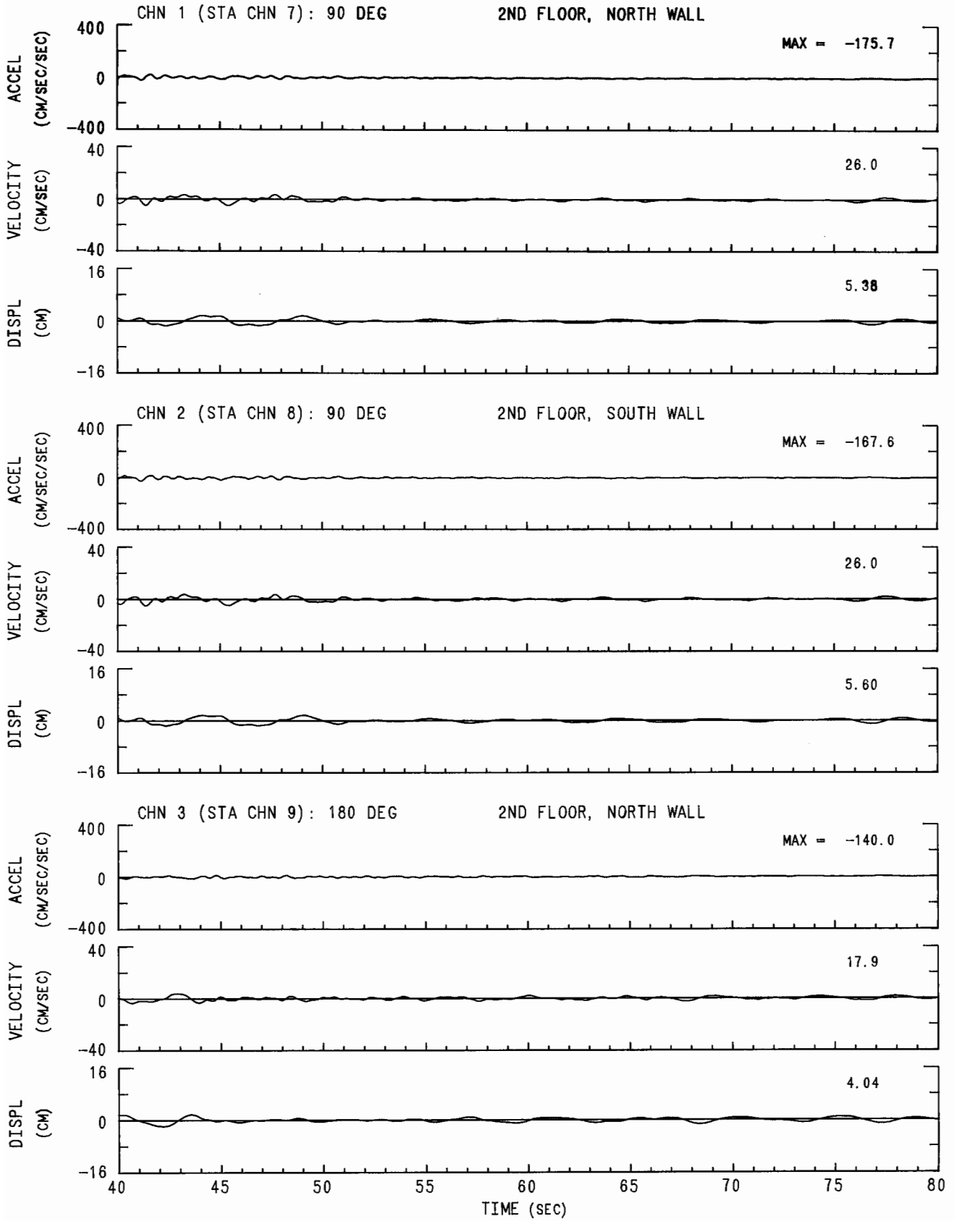
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0291-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND – 3–STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

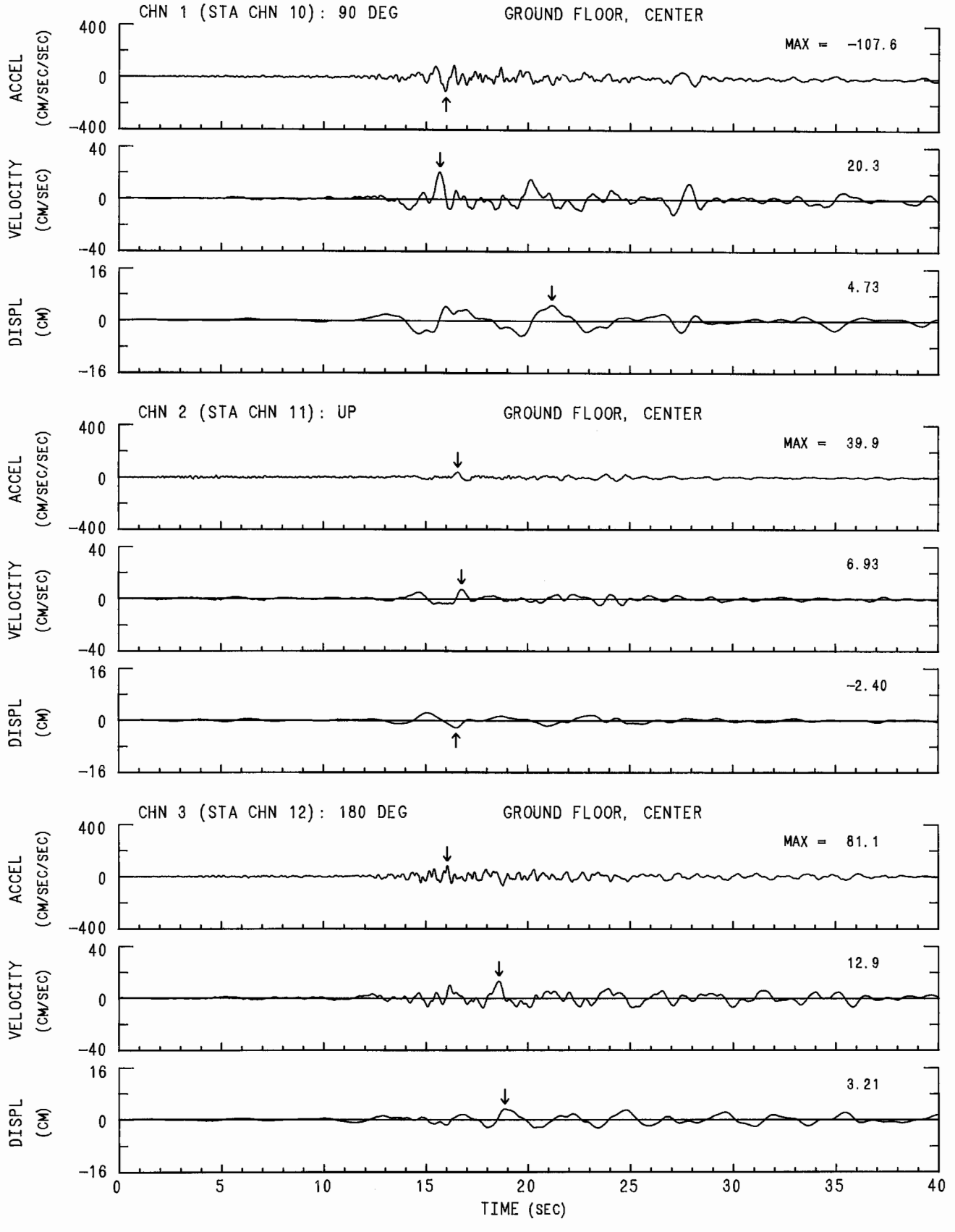
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0291-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

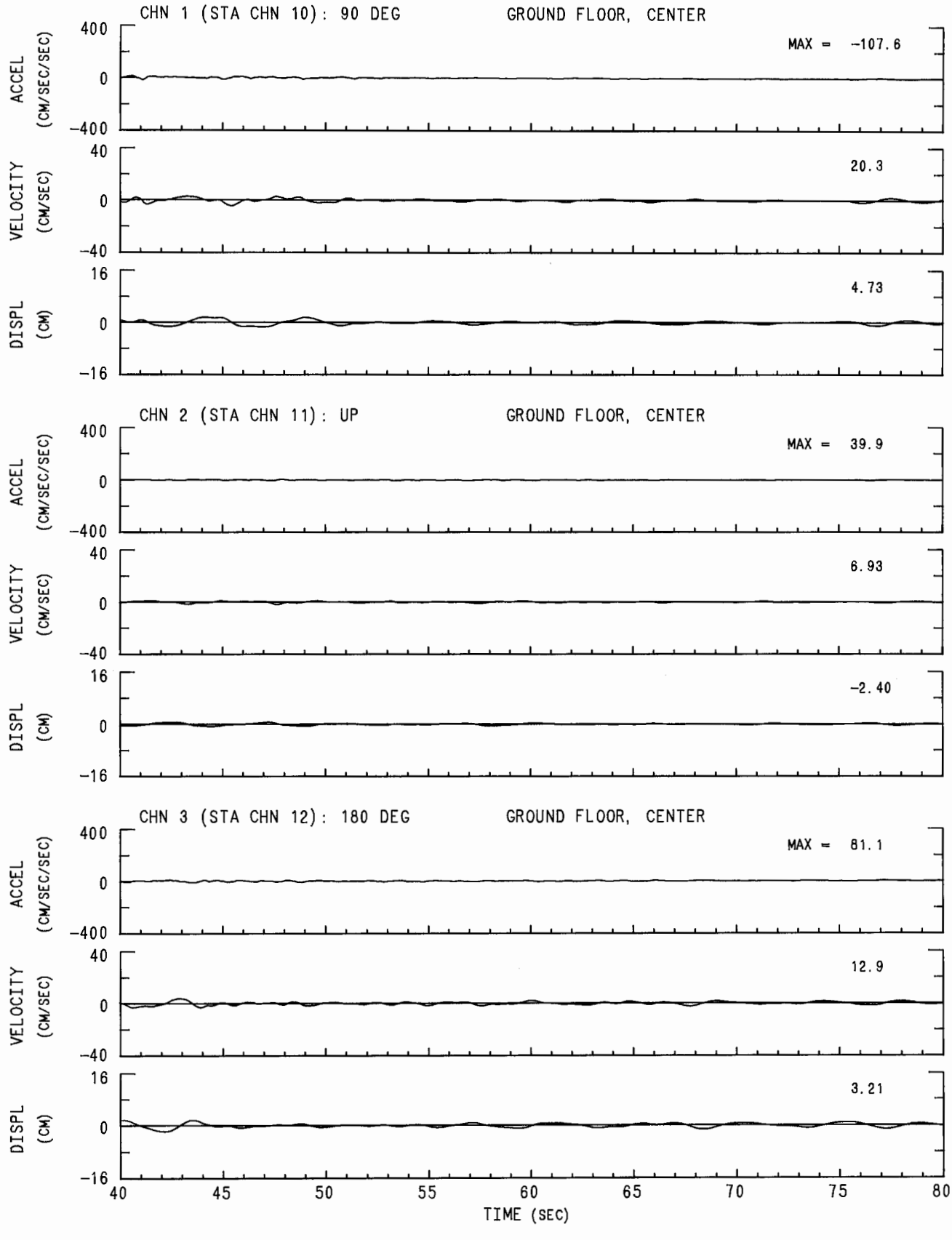
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0290-89297.04



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC) RECORD ID: 58506-D0290-89297.04



RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

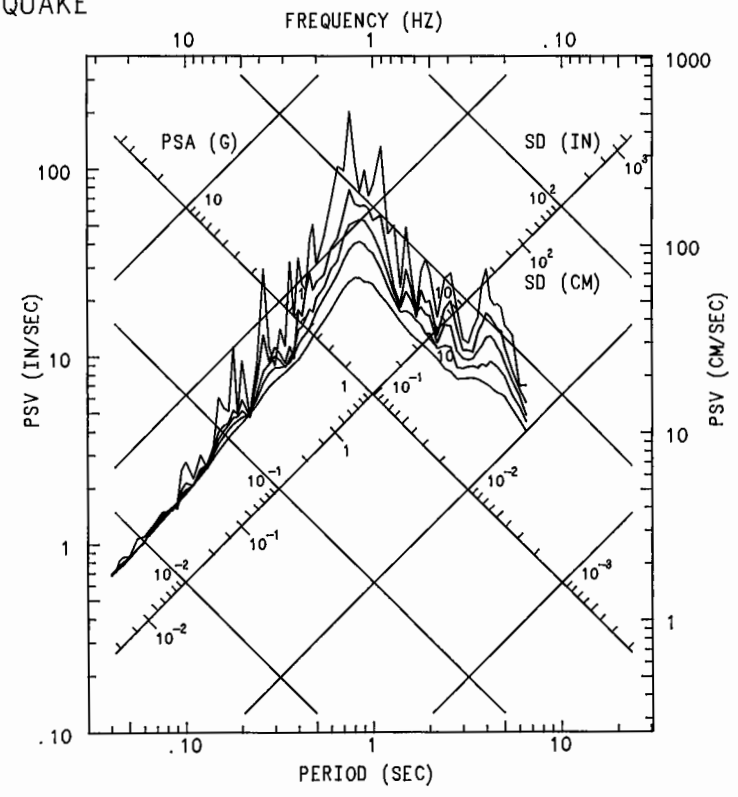
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

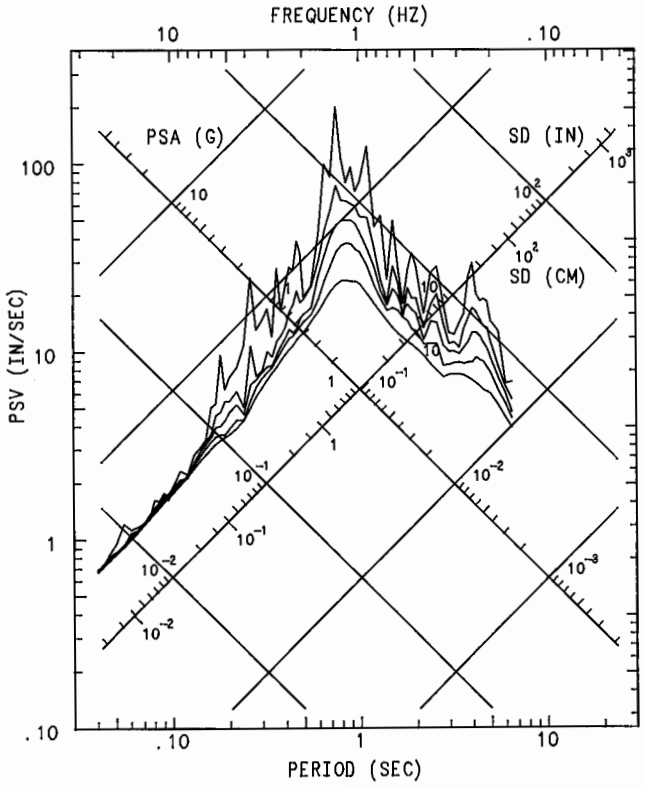
RECORD ID: 58506-D0293-89297.04

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

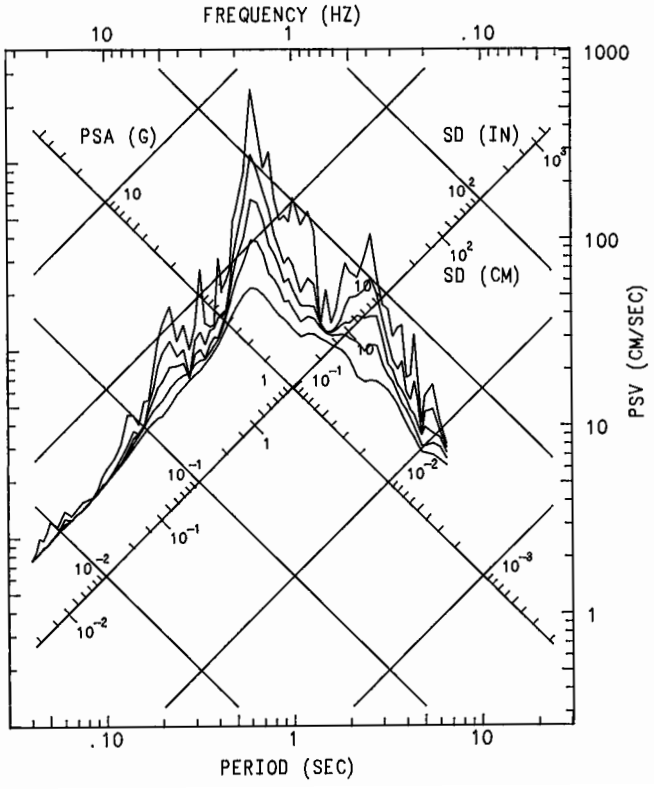
CHN 1: 90 DEG
ROOF, NORTH WALL



CHN 2: 90 DEG
ROOF, SOUTH WALL



CHN 3: 180 DEG
ROOF, NORTH WALL



RICHMOND – 3–STORY OFFICE BLDG.: CSMIP S/N 506

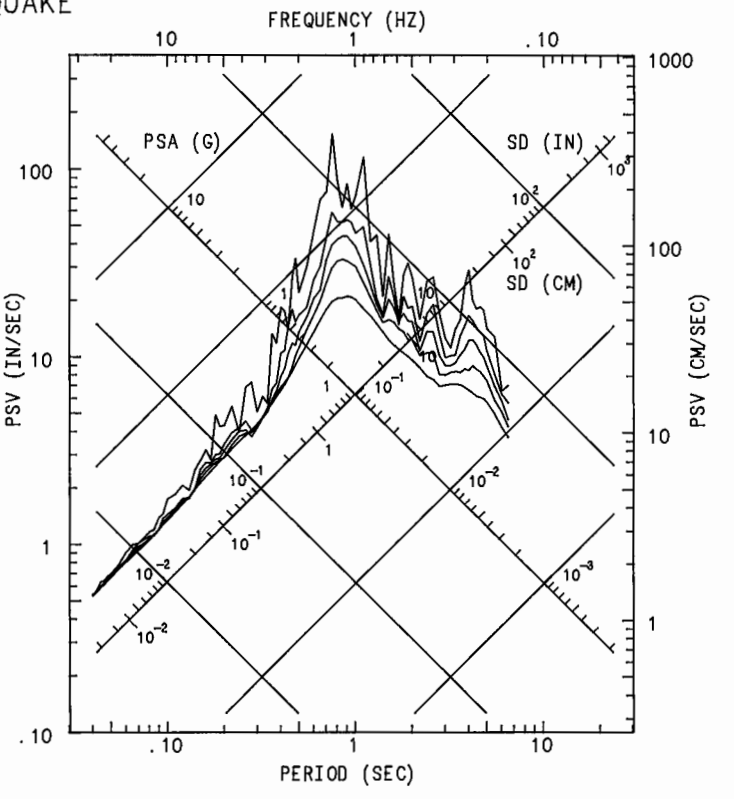
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

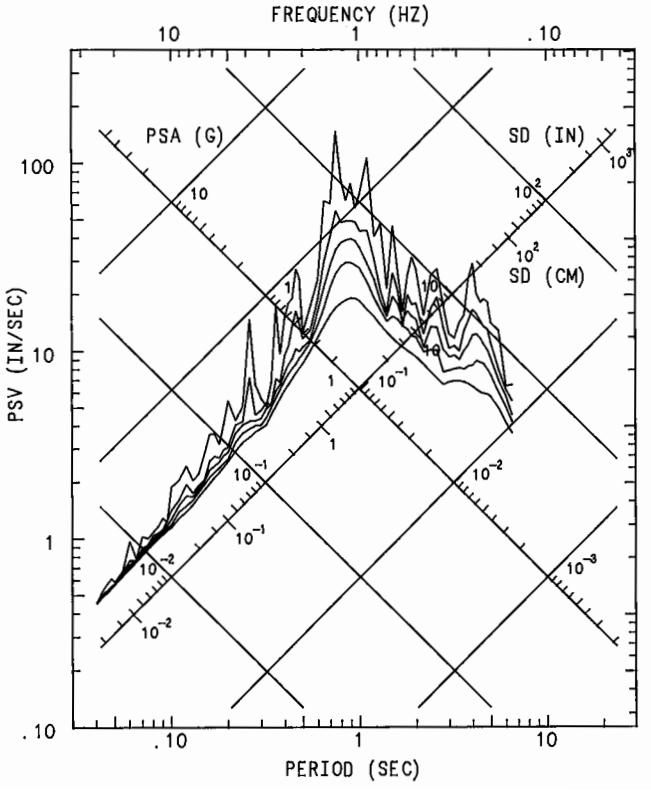
RECORD ID: 58506-D0292-89297.04

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

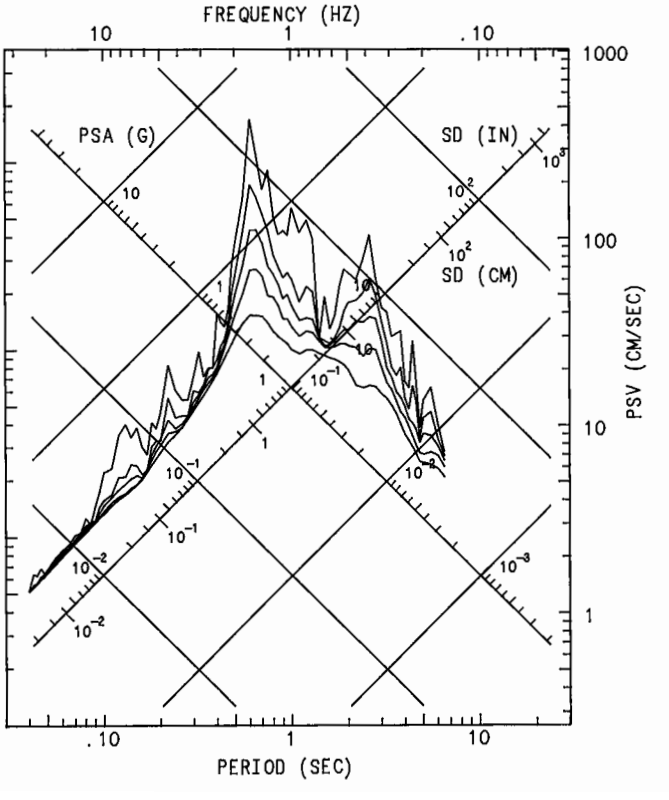
CHN 1 (STA CHN 4): 90 DEG
3RD FLOOR, NORTH WALL



CHN 2 (STA CHN 5): 90 DEG
3RD FLOOR, SOUTH WALL



CHN 3 (STA CHN 6): 180 DEG
3RD FLOOR, NORTH WALL



RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

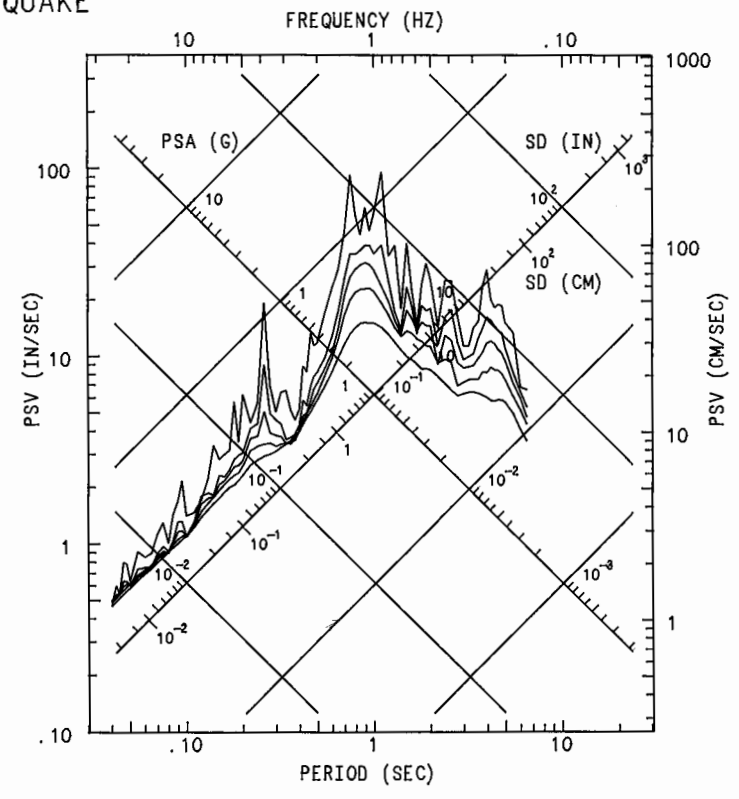
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

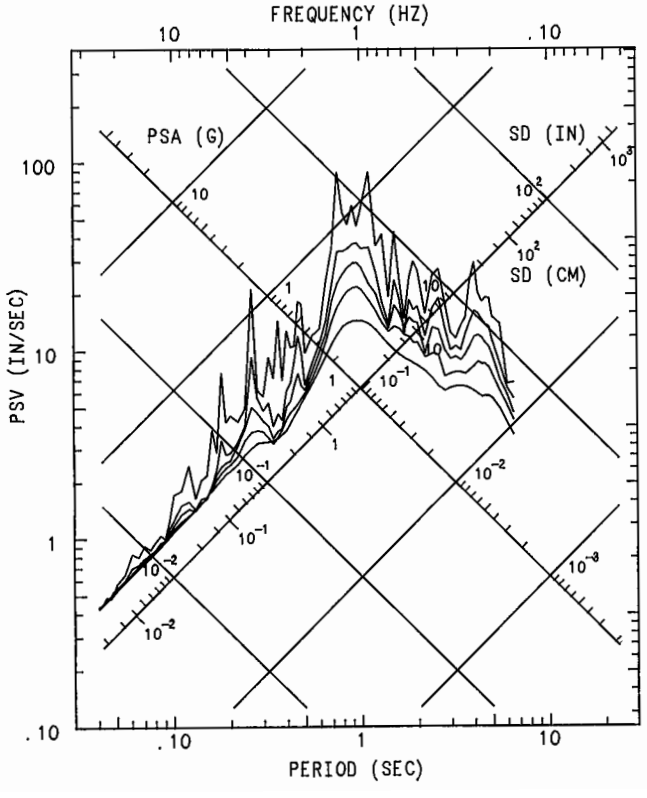
RECORD ID: 58506-D0291-89297.04

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

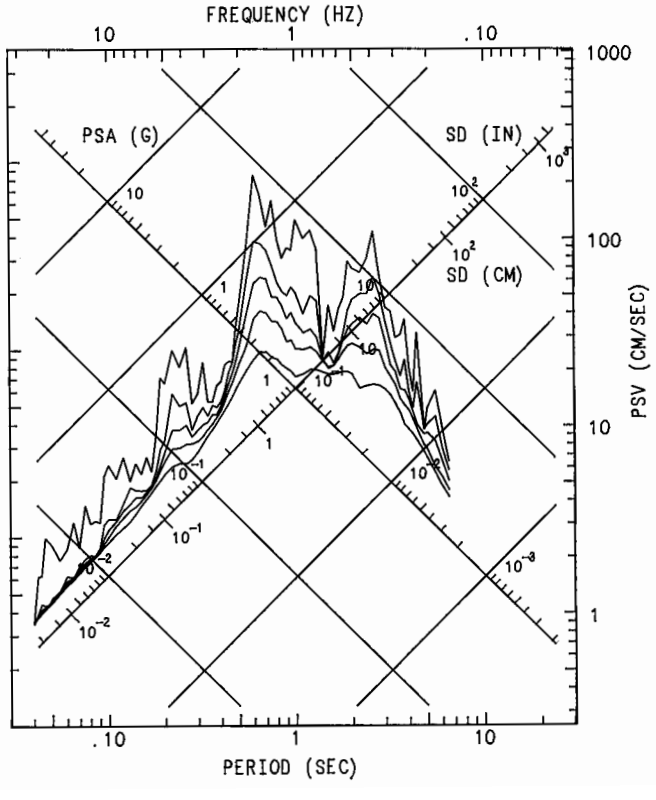
CHN 1 (STA CHN 7): 90 DEG
2ND FLOOR, NORTH WALL



CHN 2 (STA CHN 8): 90 DEG
2ND FLOOR, SOUTH WALL



CHN 3 (STA CHN 9): 180 DEG
2ND FLOOR, NORTH WALL



RICHMOND – 3-STORY OFFICE BLDG.: CSMIP S/N 506

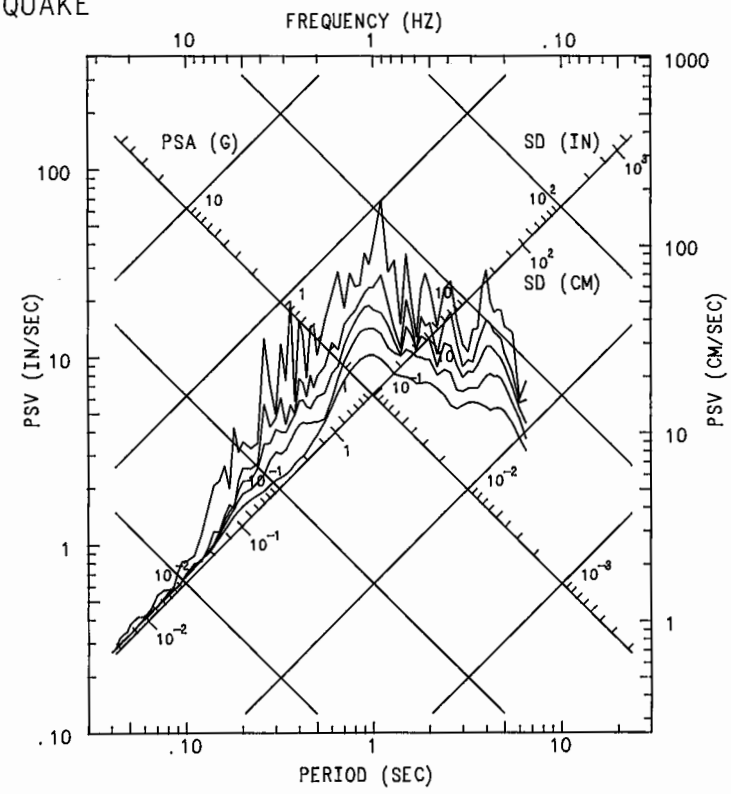
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ
(0.04 TO 5.88 SEC)

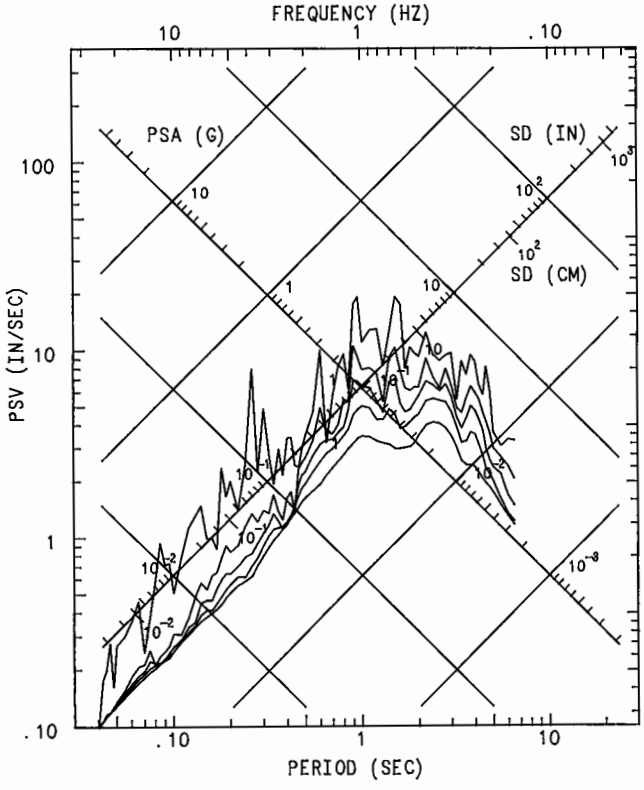
RECORD ID: 58506-D0290-89297.04

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

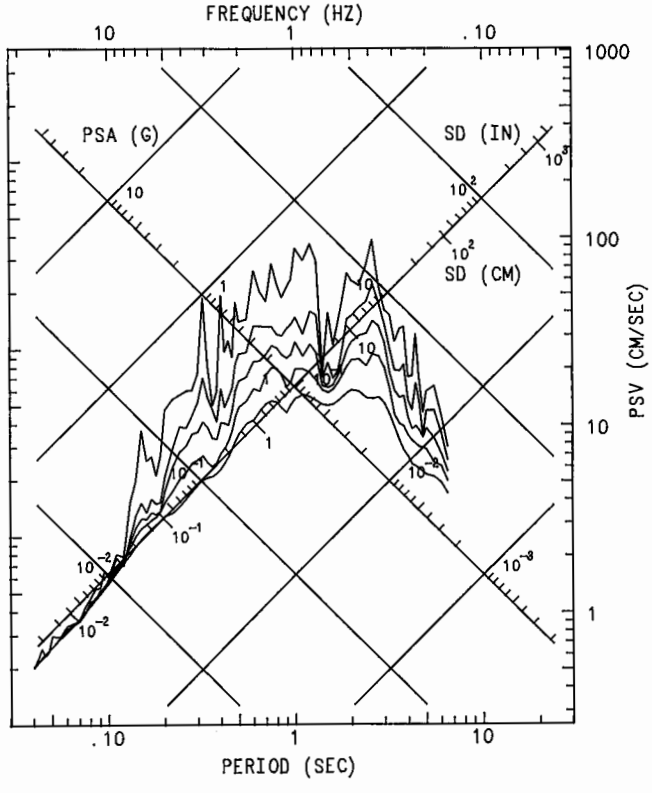
CHN 1 (STA CHN 10): 90 DEG
GROUND FLOOR, CENTER



CHN 2 (STA CHN 11): UP
GROUND FLOOR, CENTER

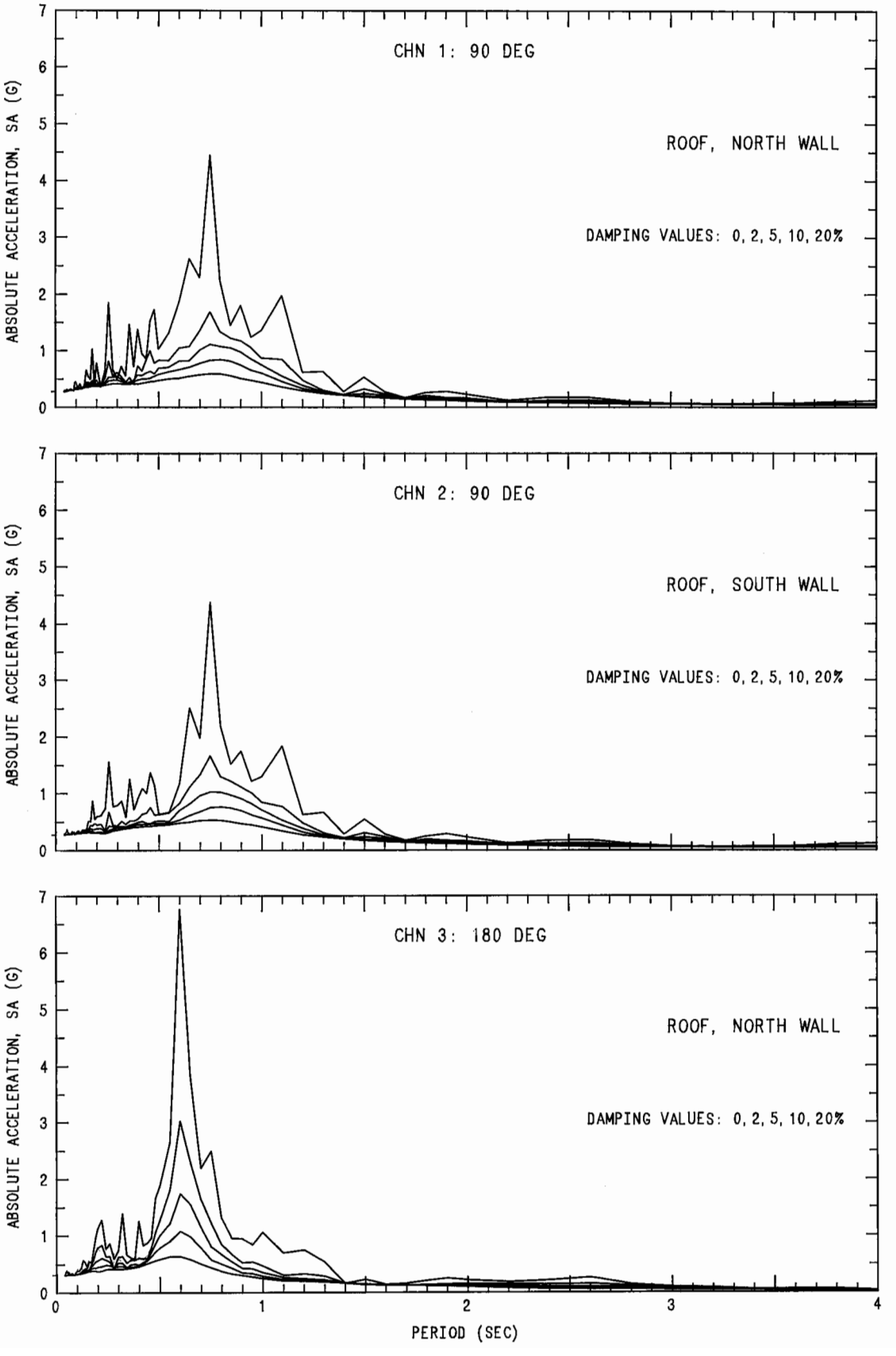


CHN 3 (STA CHN 12): 180 DEG
GROUND FLOOR, CENTER

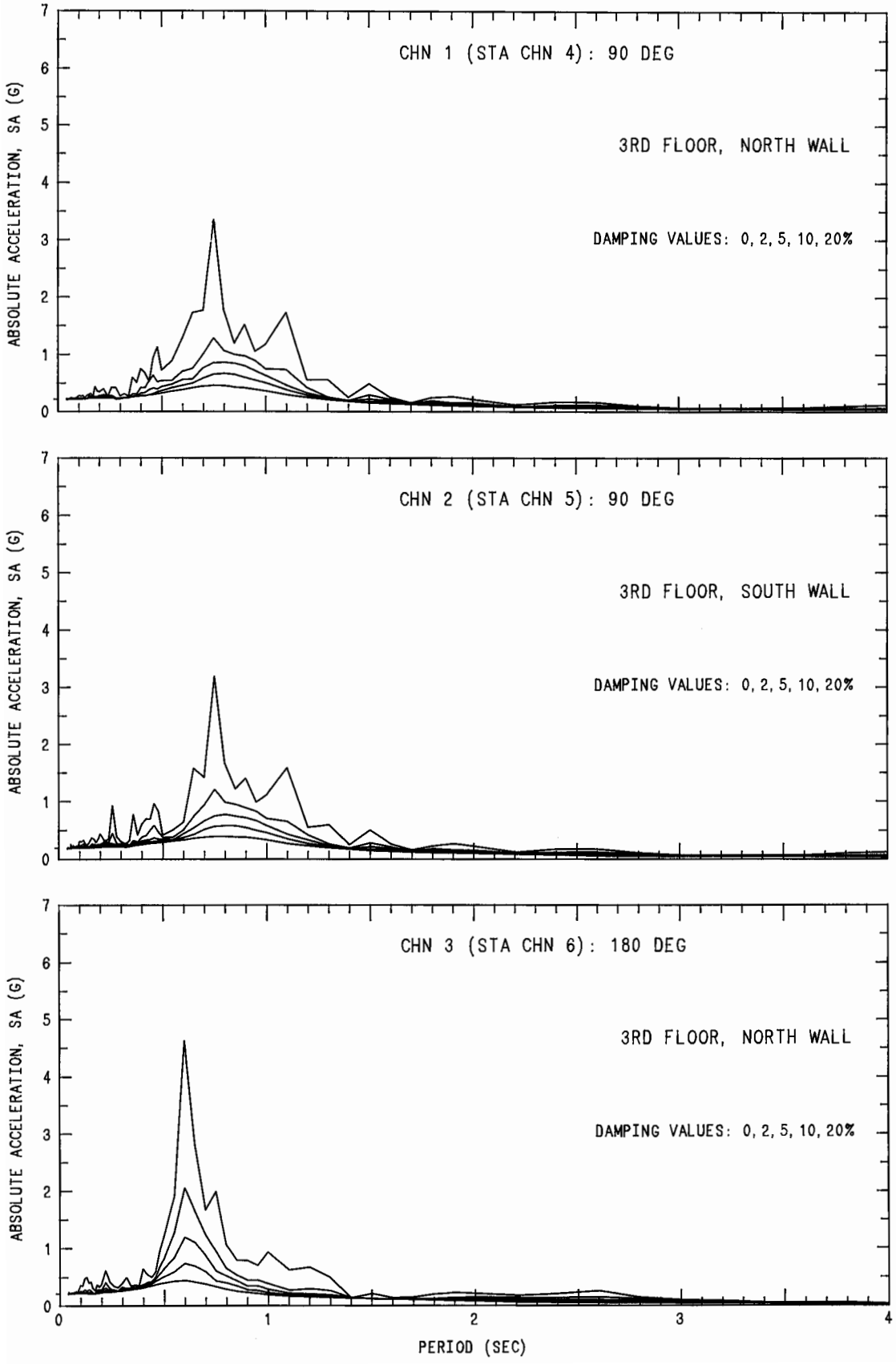


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58506-D0293-89297.04
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)

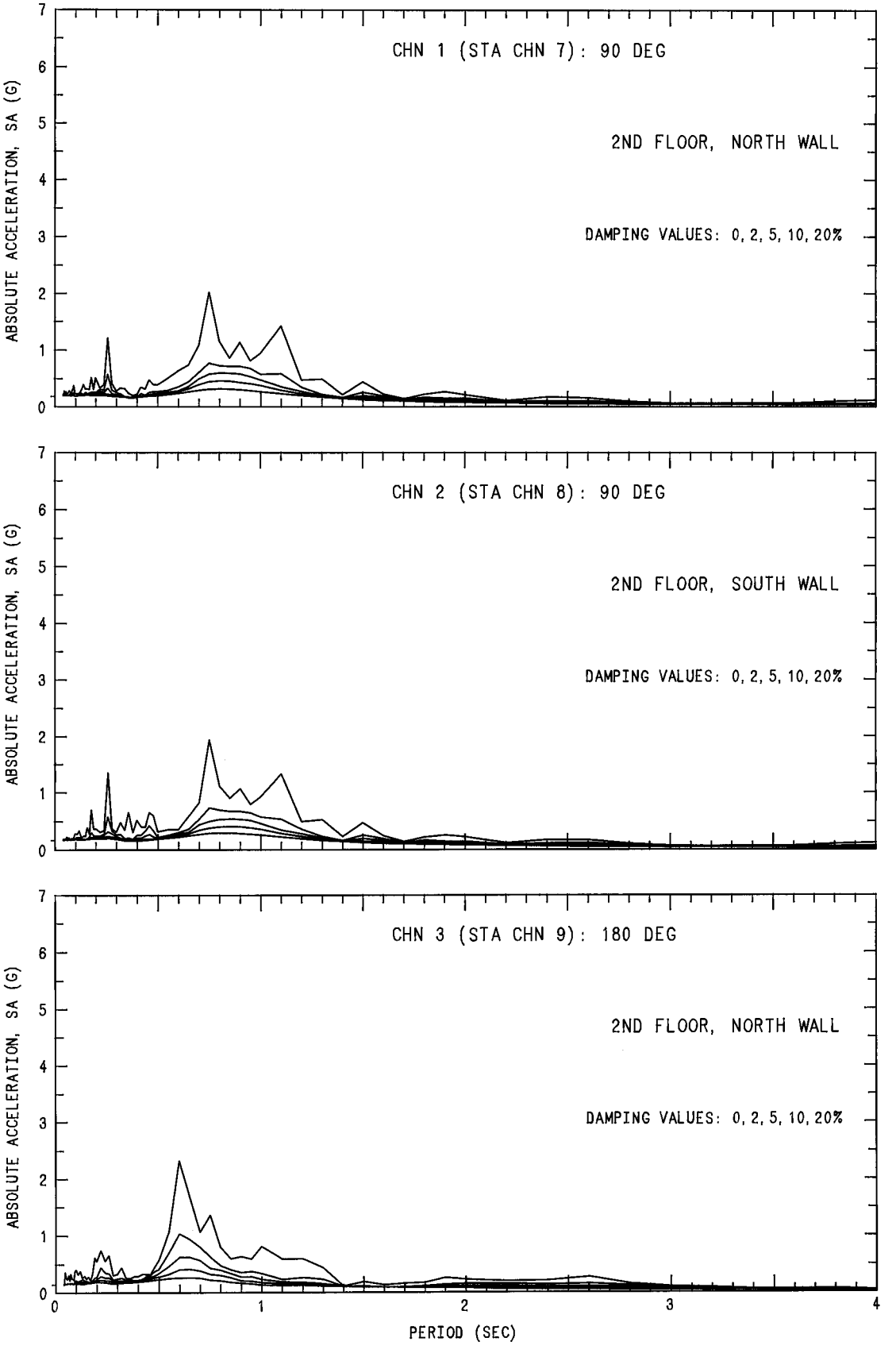


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58506-D0292-89297.04
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)

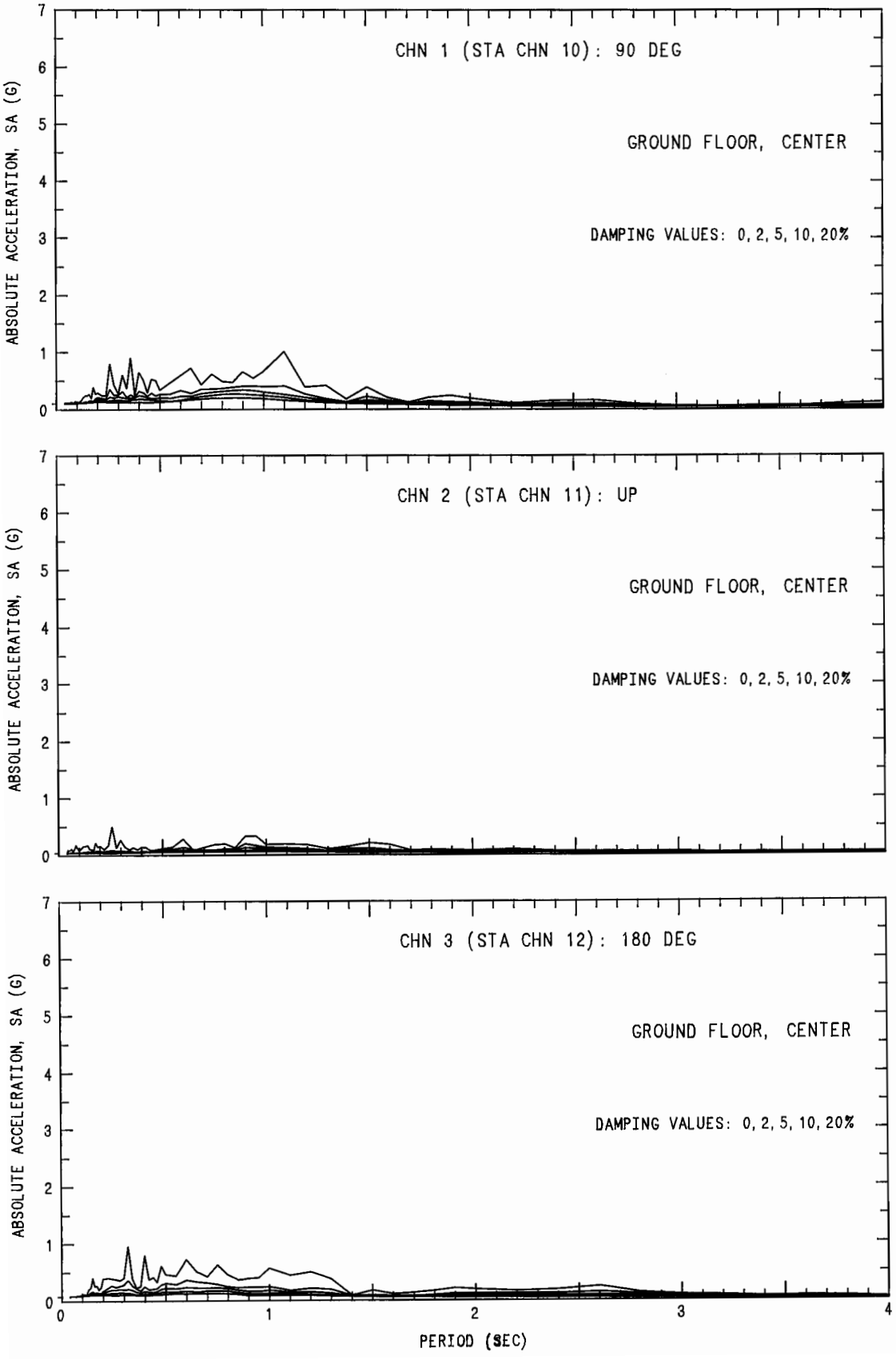


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506

PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58506-D0291-89297.04
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



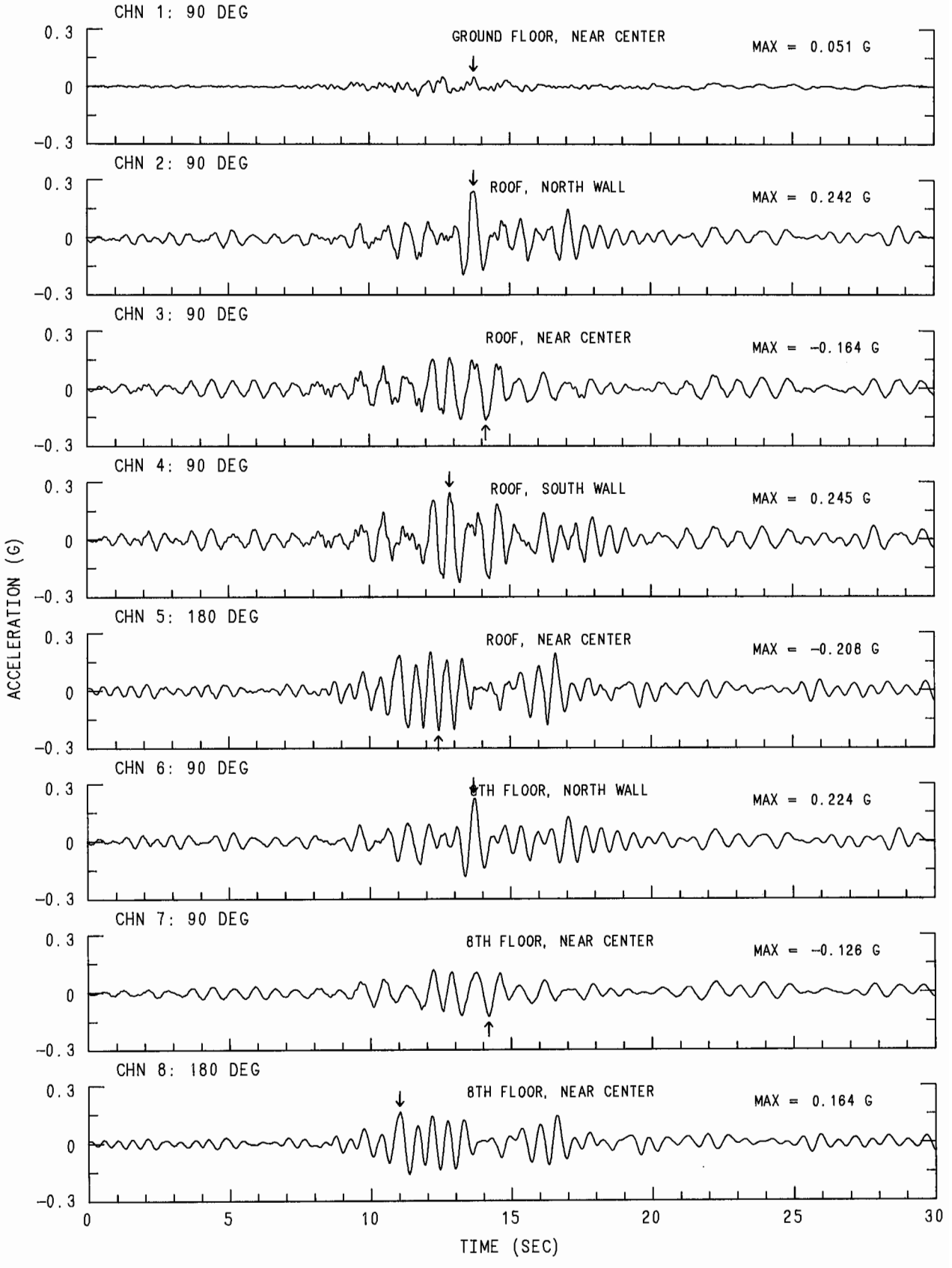
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
RICHMOND - 3-STORY OFFICE BLDG.: CSMIP S/N 506
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58506-D0290-89297.04
USABLE DATA BANDWIDTH: 0.17 TO 23.6 HZ (0.04 TO 5.88 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

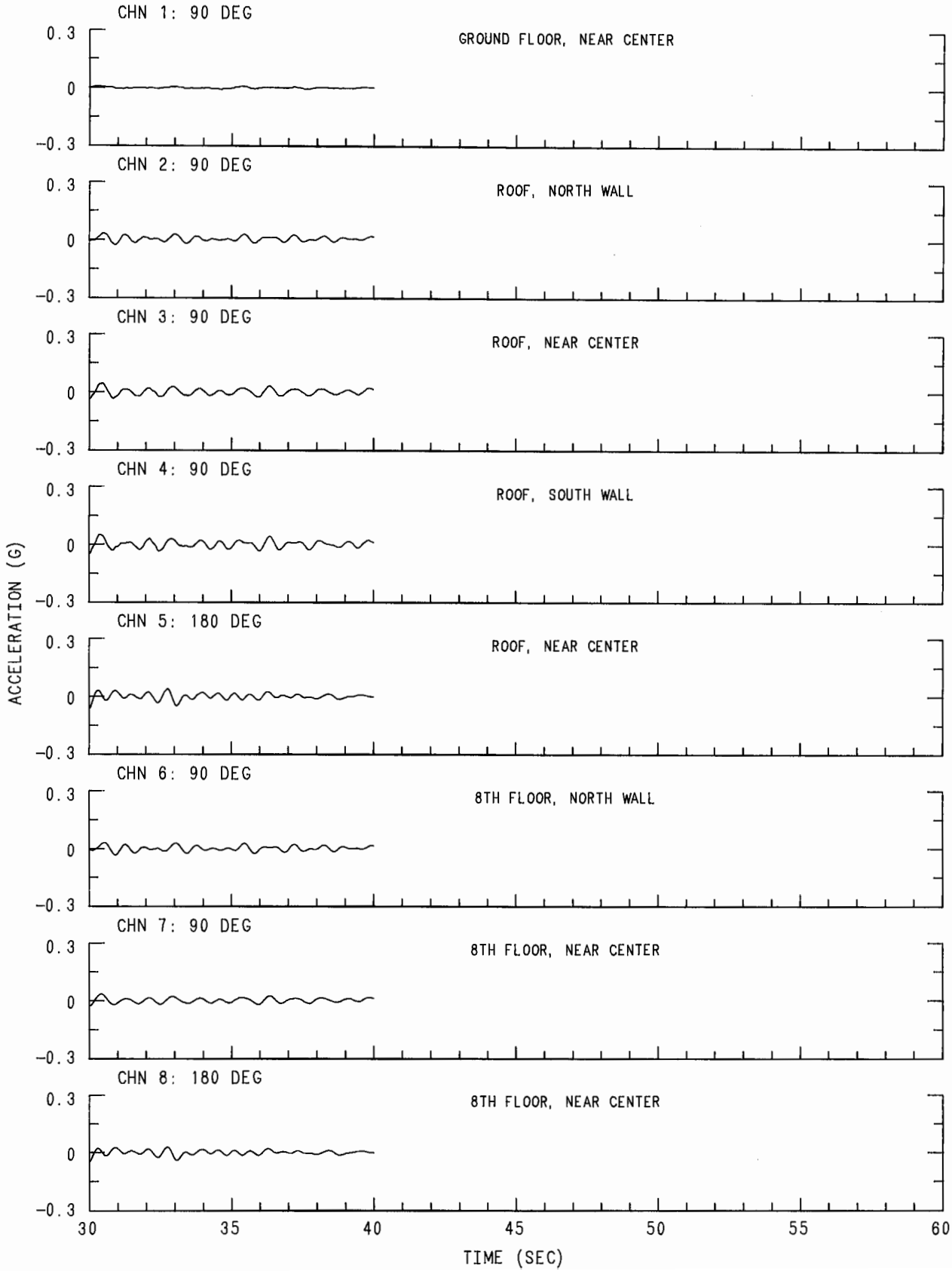
PHASE 1 ACCELERATION. RECORD ID: 58364-C0194-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

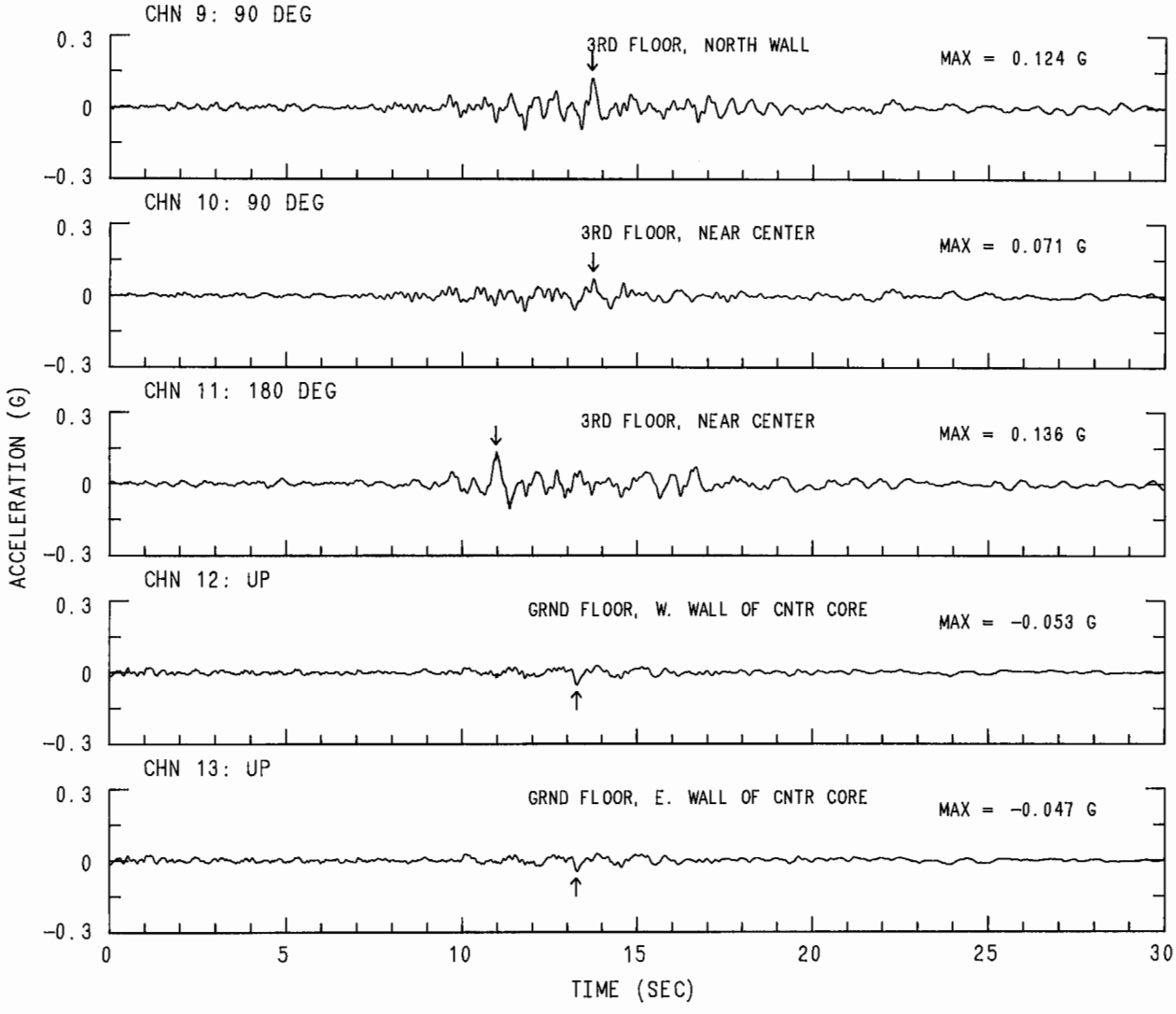
PHASE 1 ACCELERATION. RECORD ID: 58364-C0194-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

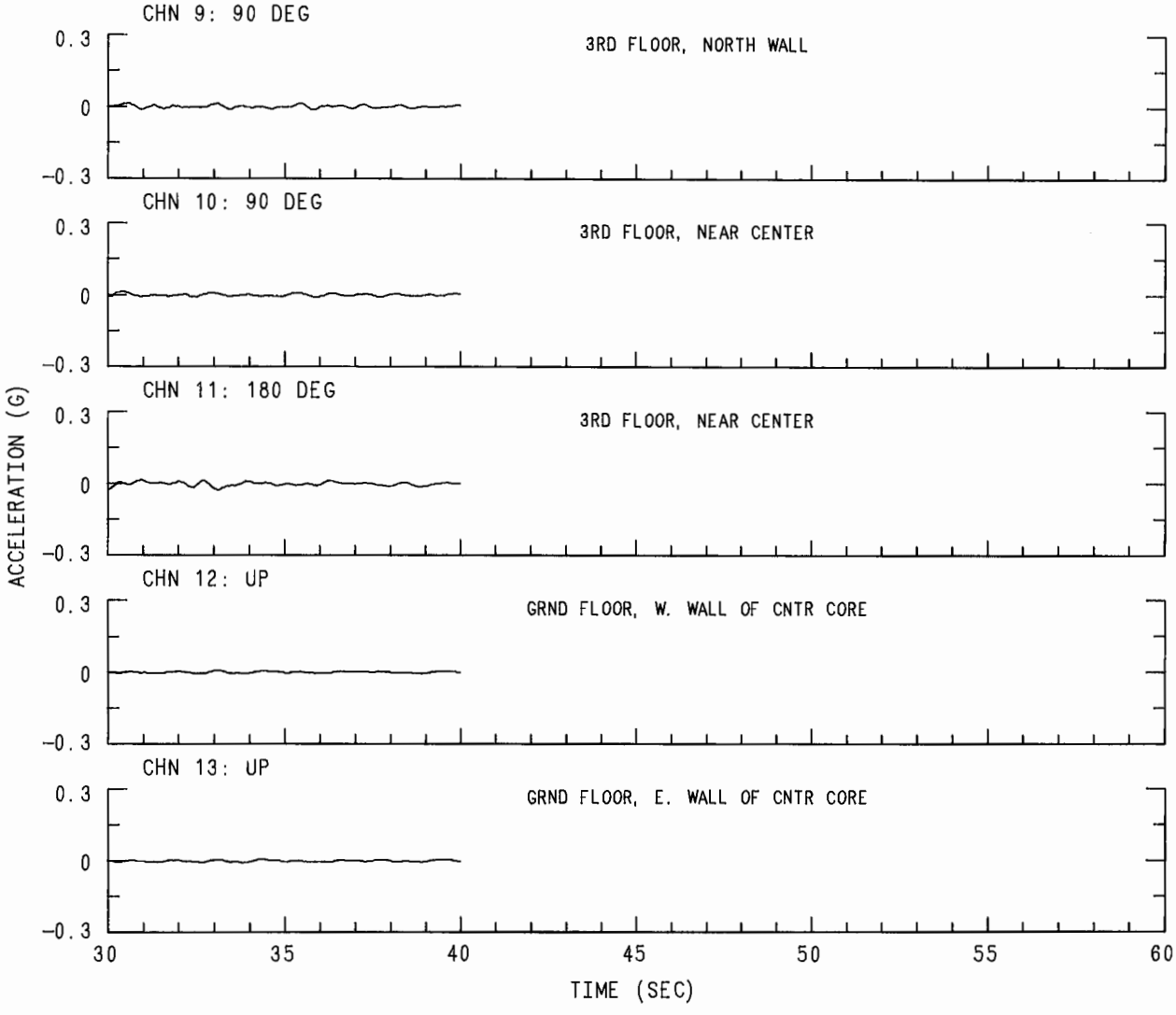
PHASE 1 ACCELERATION. RECORD ID: 58364-C0194-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WALNUT CREEK - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

PHASE 1 ACCELERATION. RECORD ID: 58364-C0194-89298.01

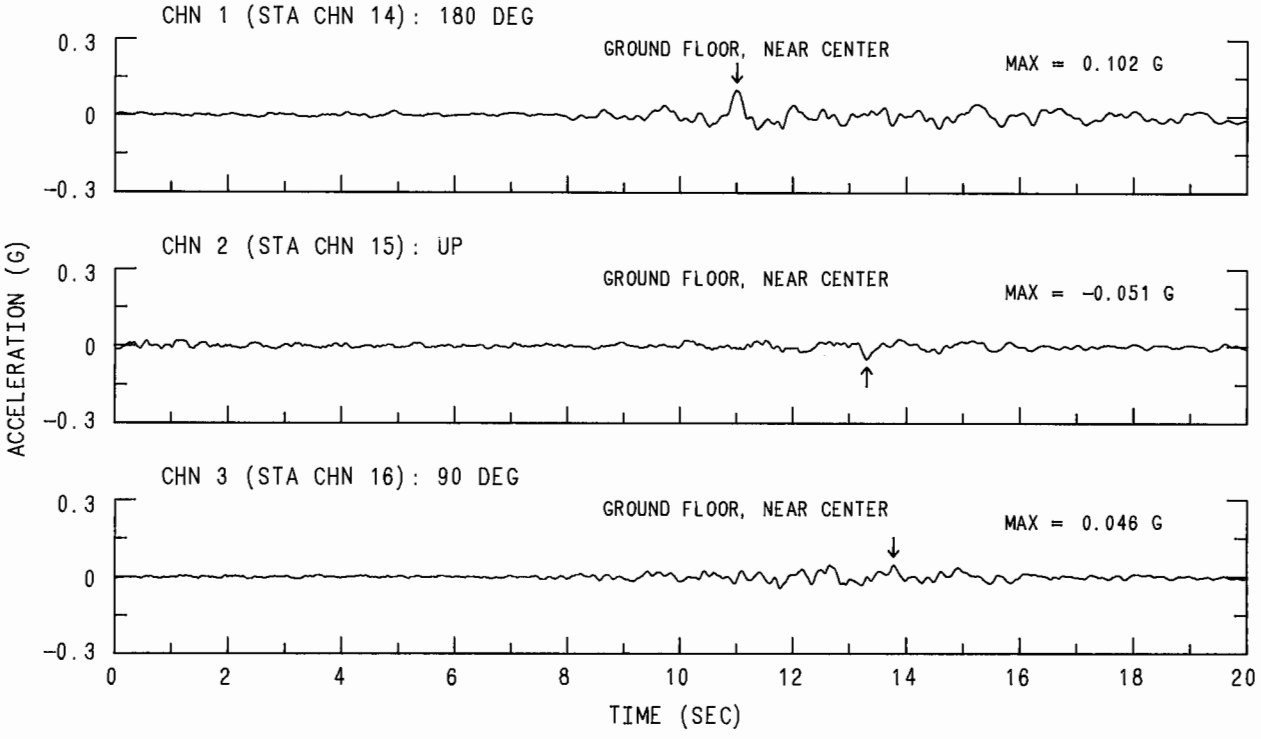


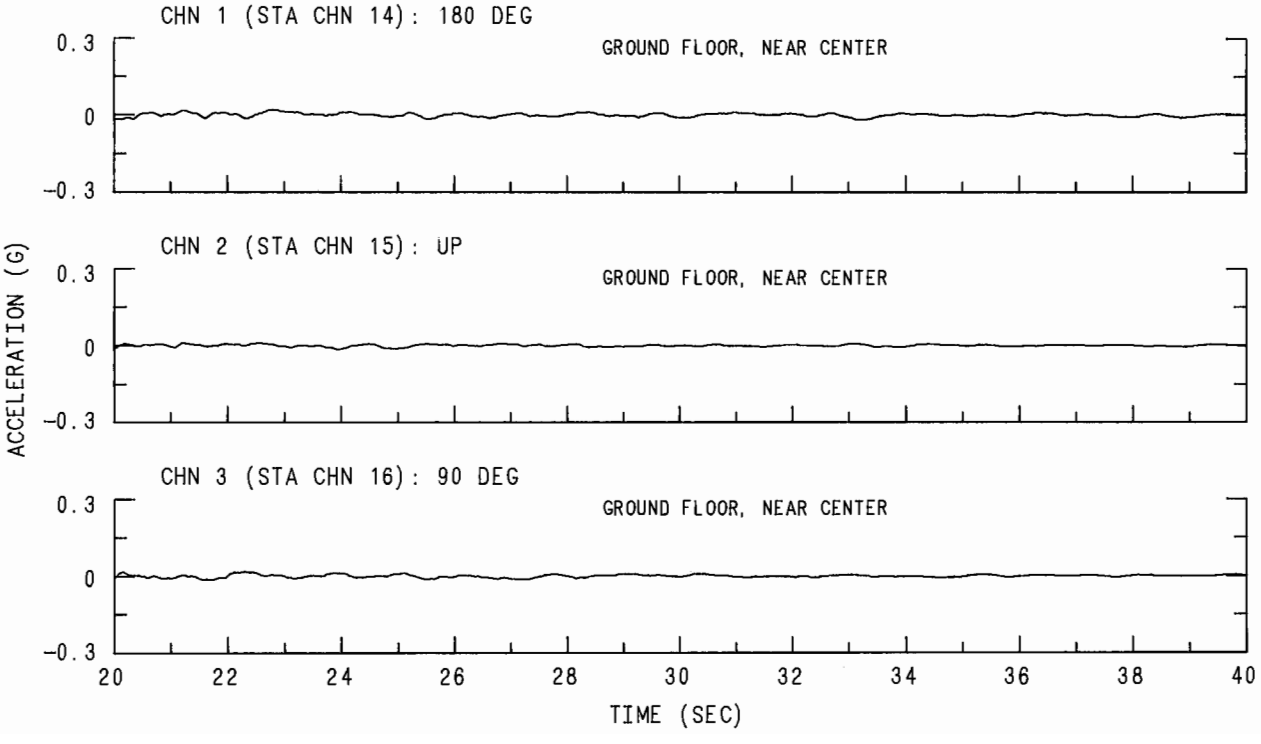
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

WALNUT CREEK – 10-STORY COMMERCIAL BLDG: CSMIP S/N 364

PHASE 1 ACCELERATION

RECORD ID: 58364-S3490-89298.01

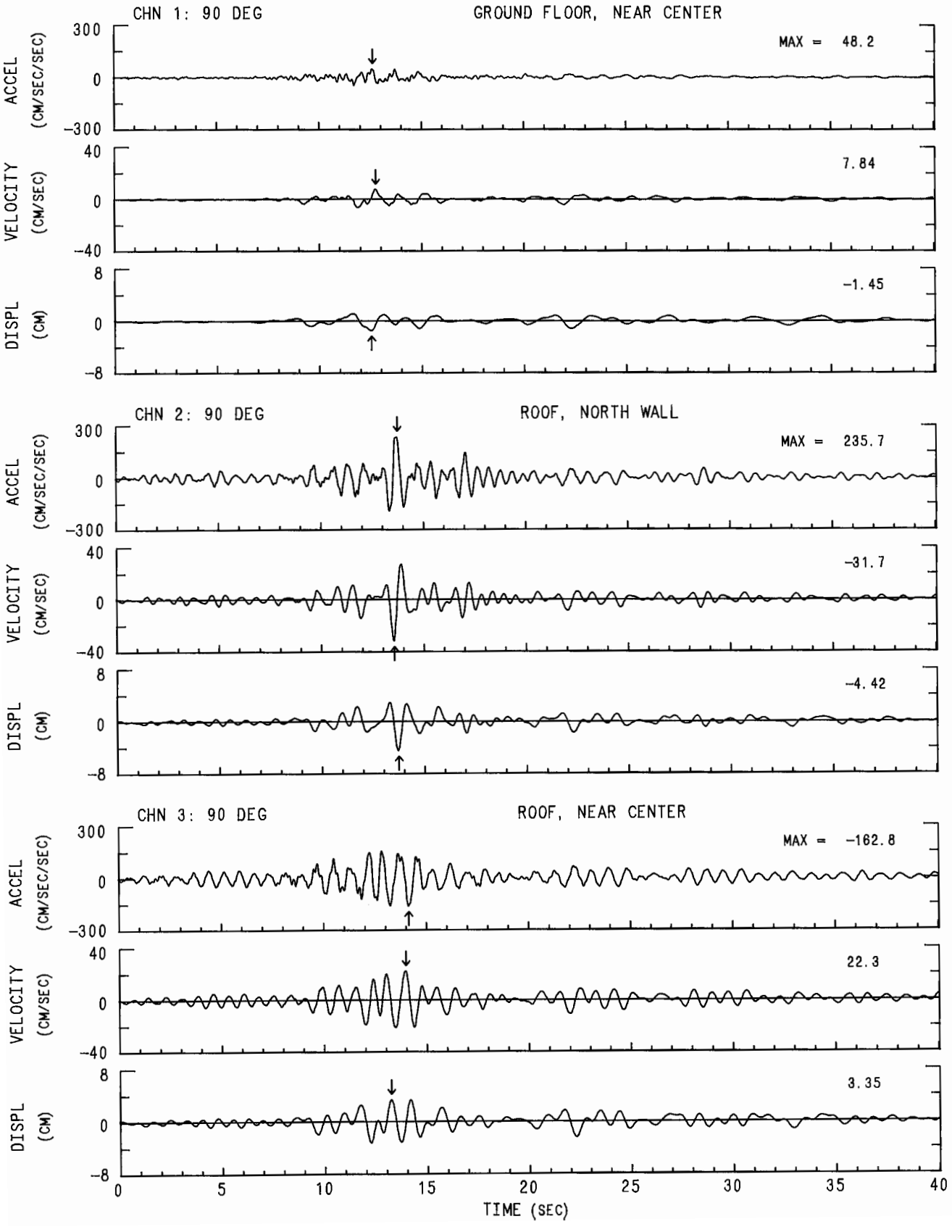




SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

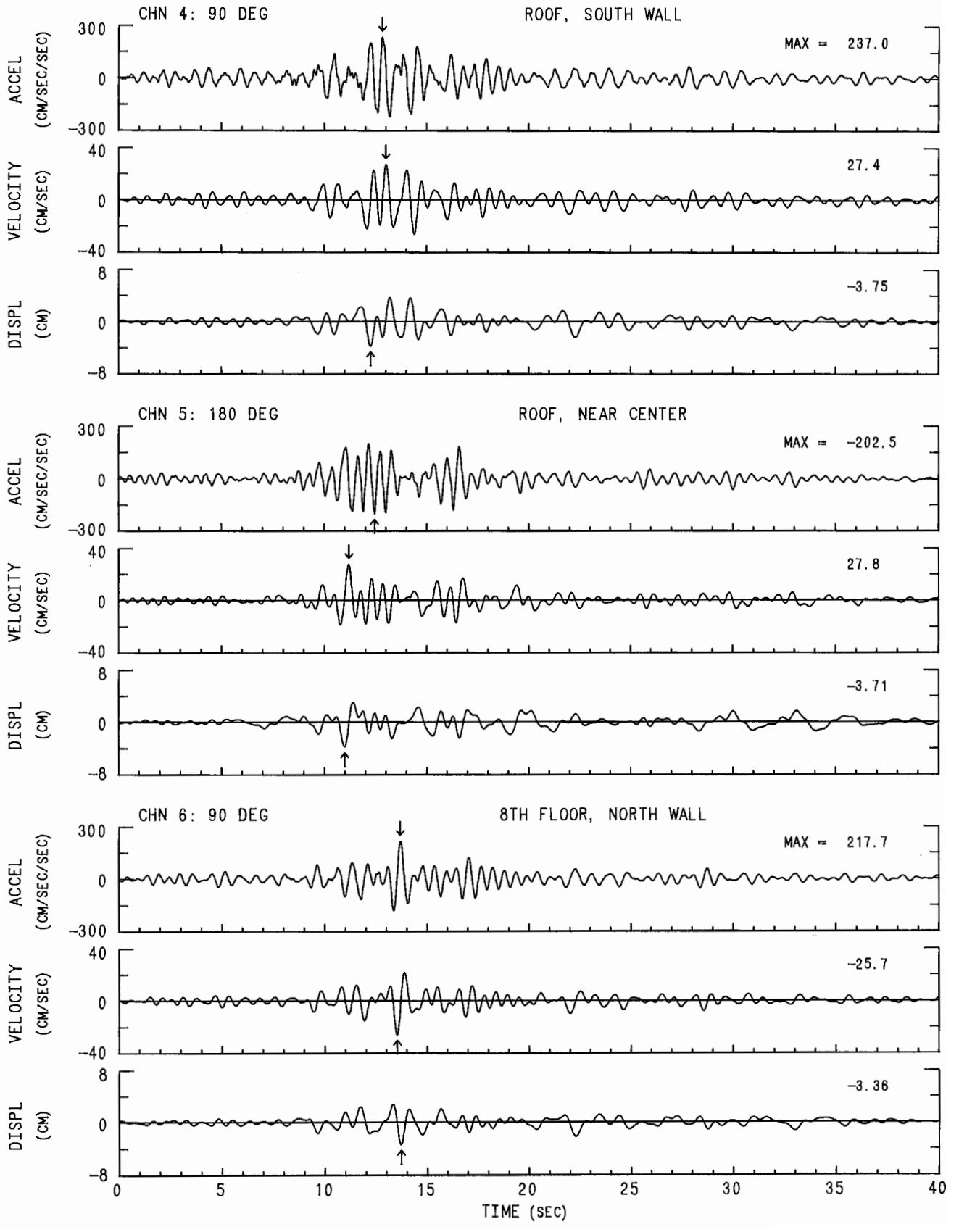
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58364-C0194-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

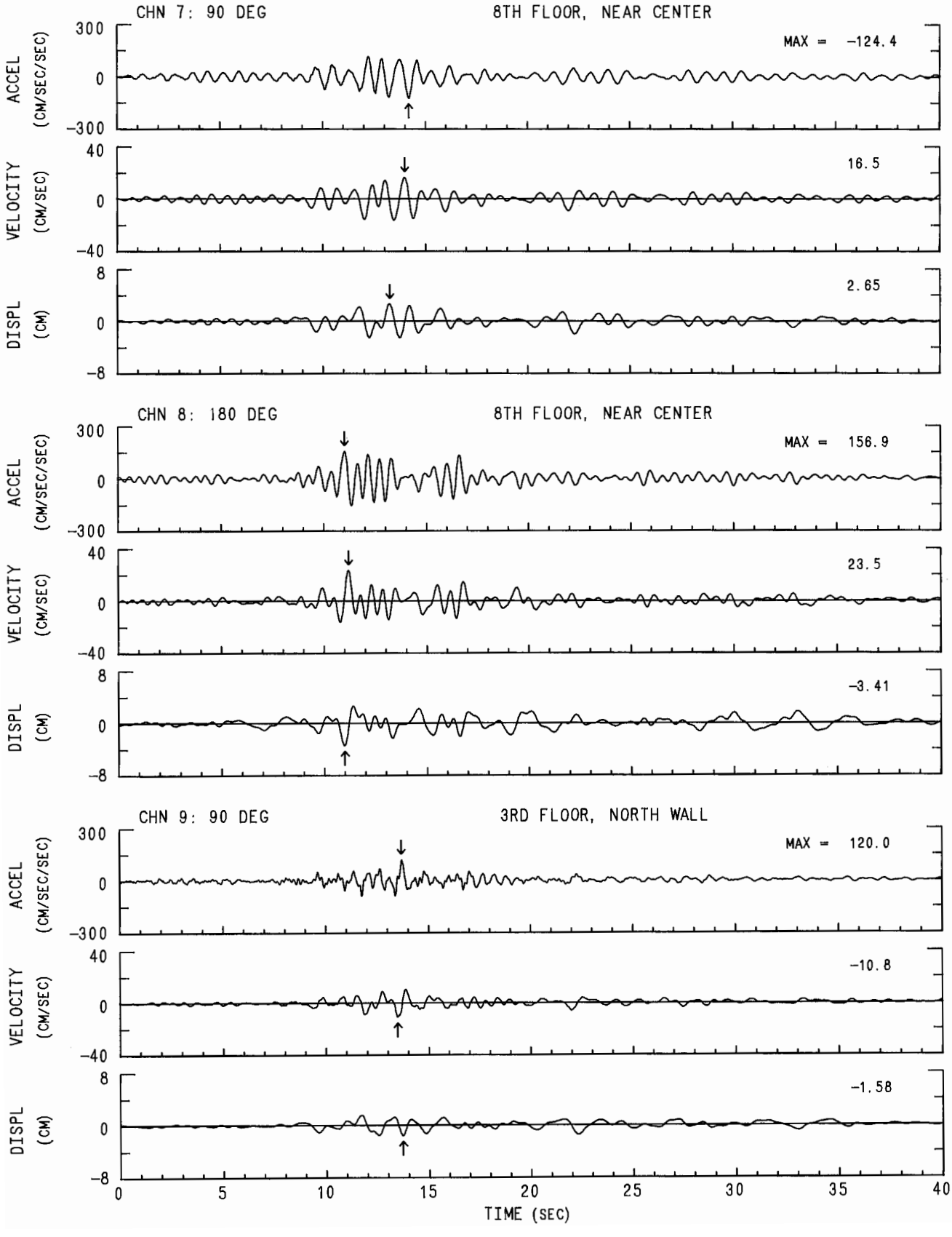
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58364-C0194-89298.01



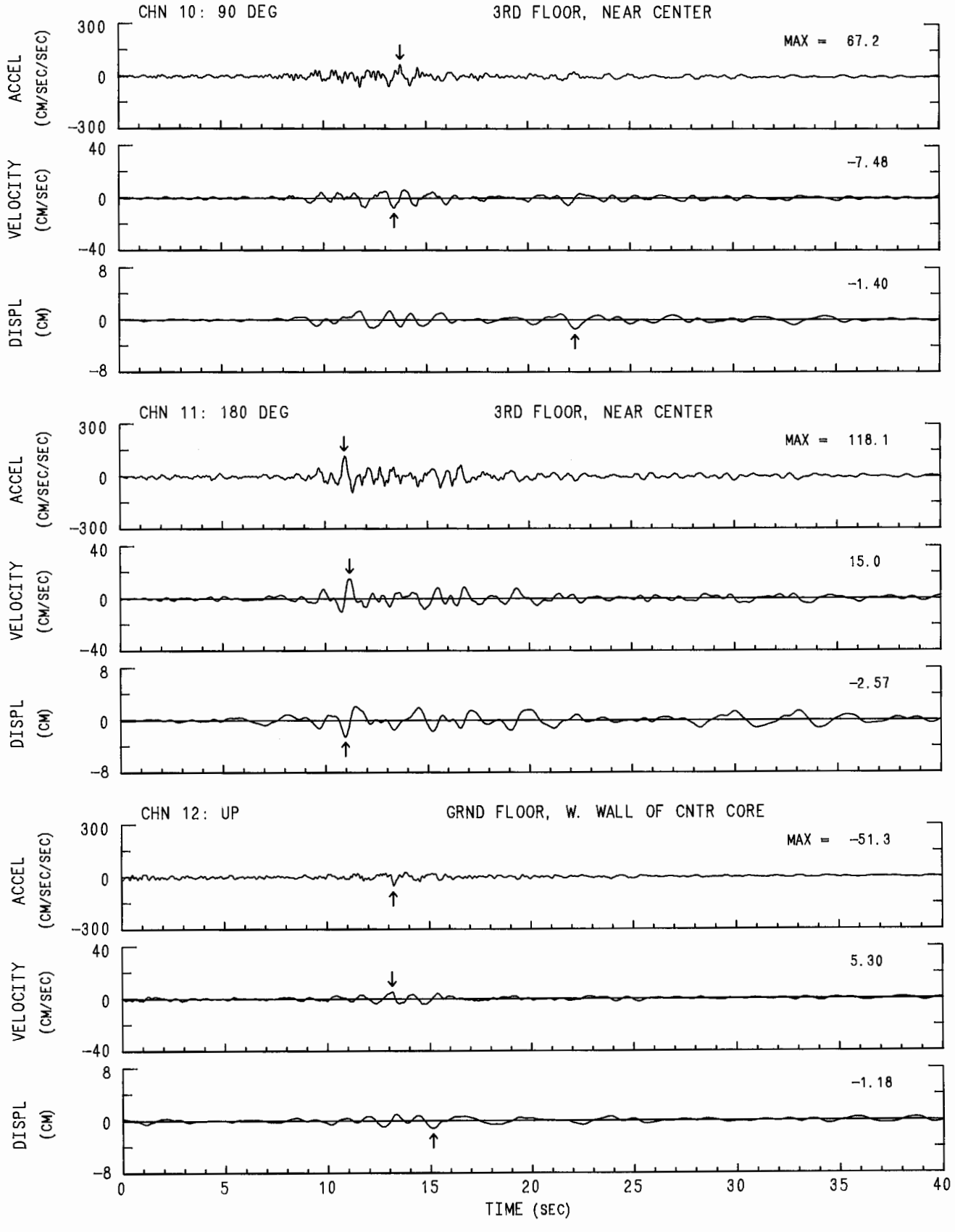
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58364-C0194-89298.01



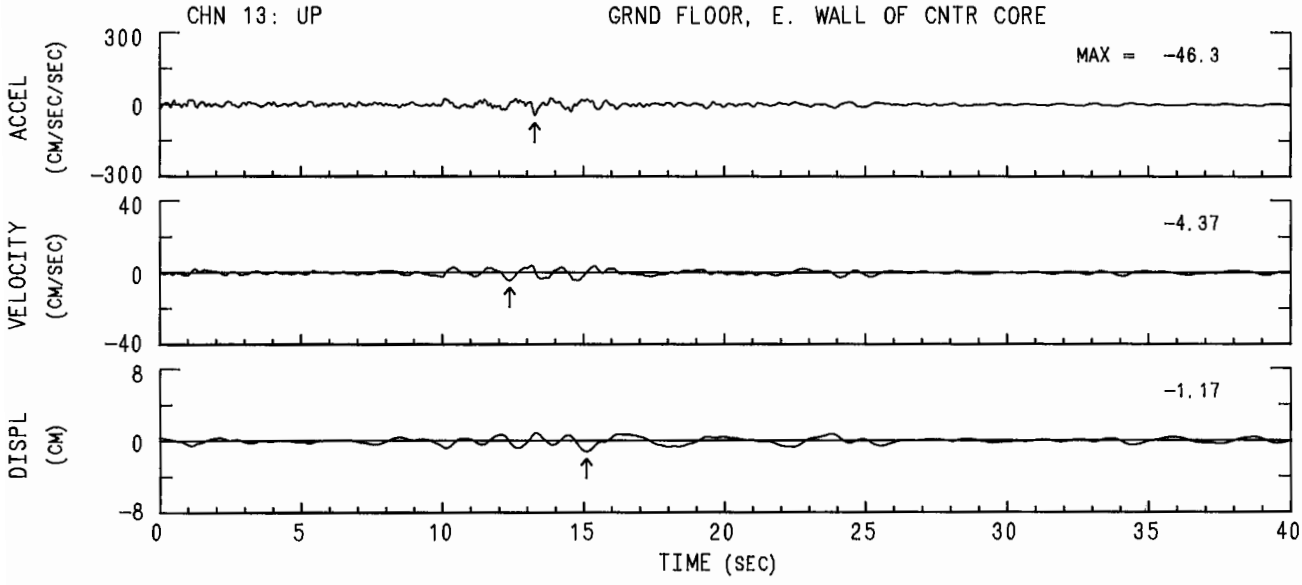
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58364-C0194-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10–STORY COMMERCIAL BLDG.: CSMIP S/N 364

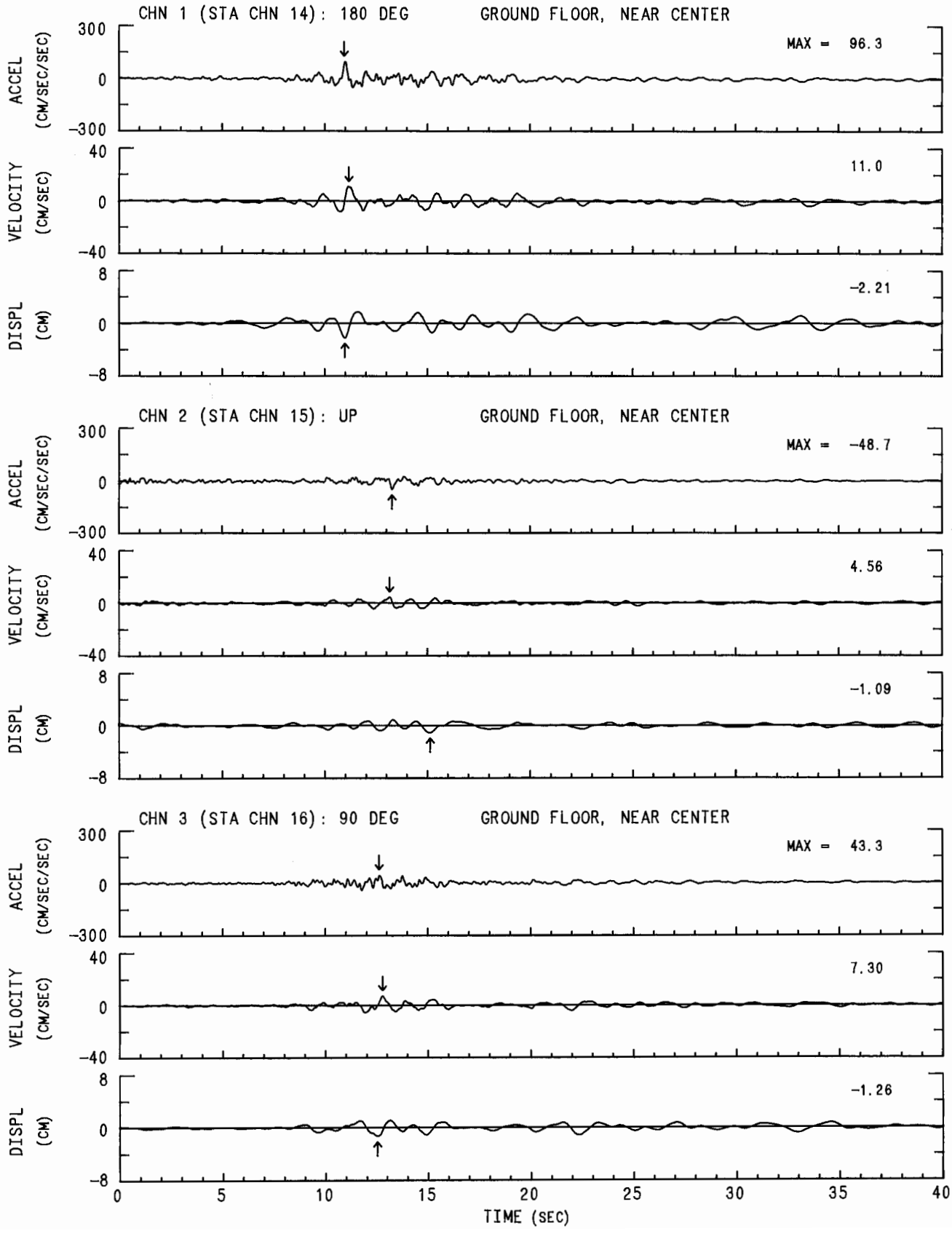
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58364–C0194–89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG: CSMIP S/N 364

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC) RECORD ID: 58364-S3490-89298.01



WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364

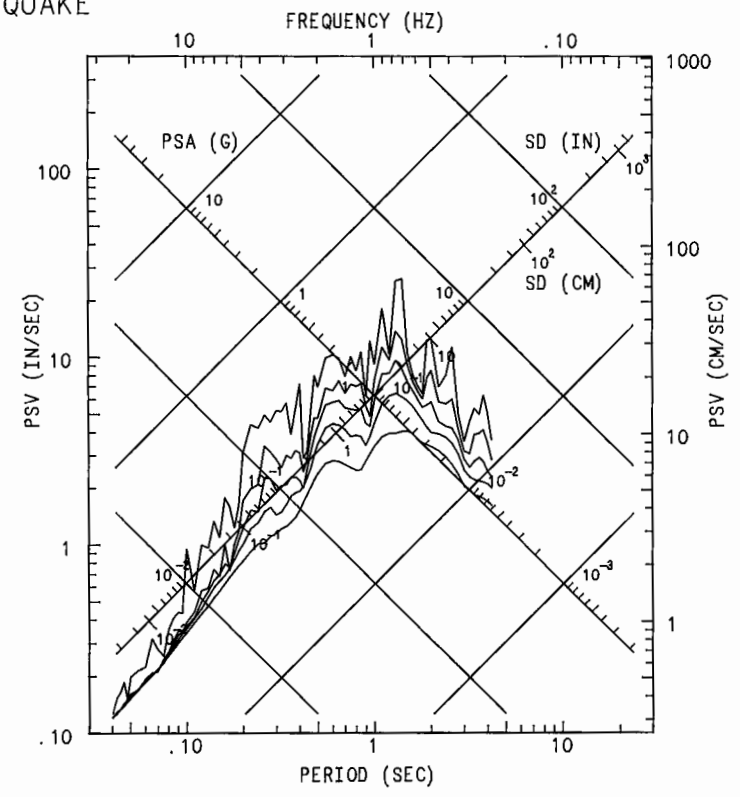
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

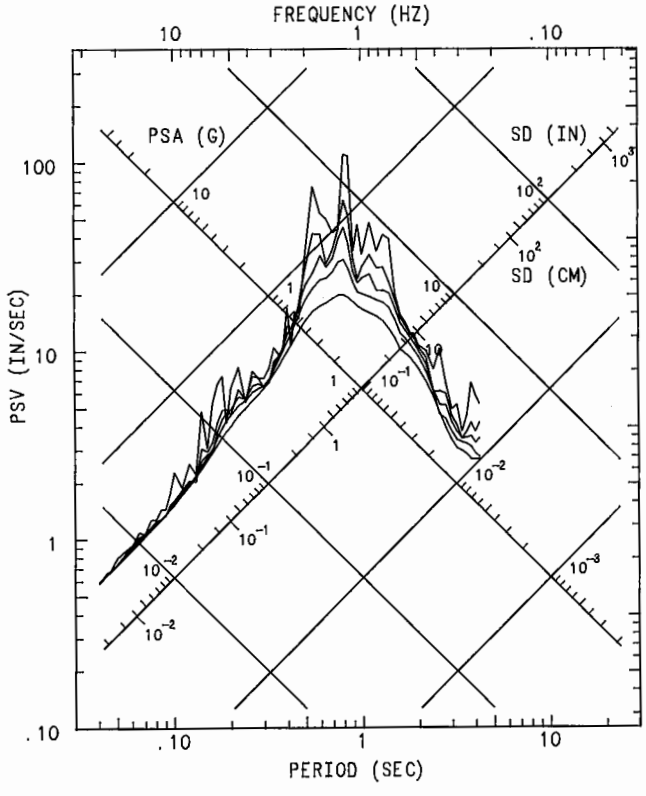
RECORD ID: 58364-C0194-89298.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

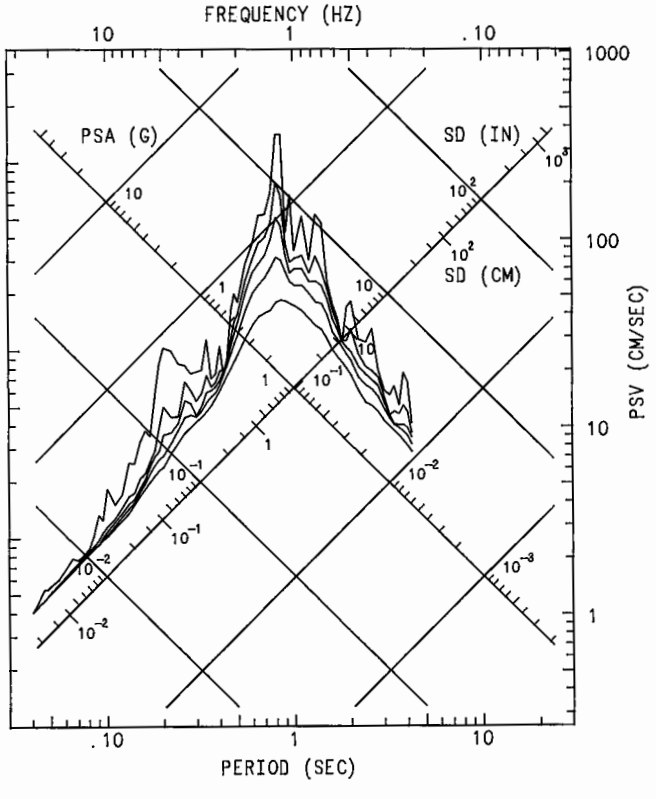
CHN 1: 90 DEG
GROUND FLOOR, NEAR CENTER



CHN 2: 90 DEG
ROOF, NORTH WALL



CHN 3: 90 DEG
ROOF, NEAR CENTER



WALNUT CREEK – 10-STORY COMMERCIAL BLDG. : CSMIP S/N 364

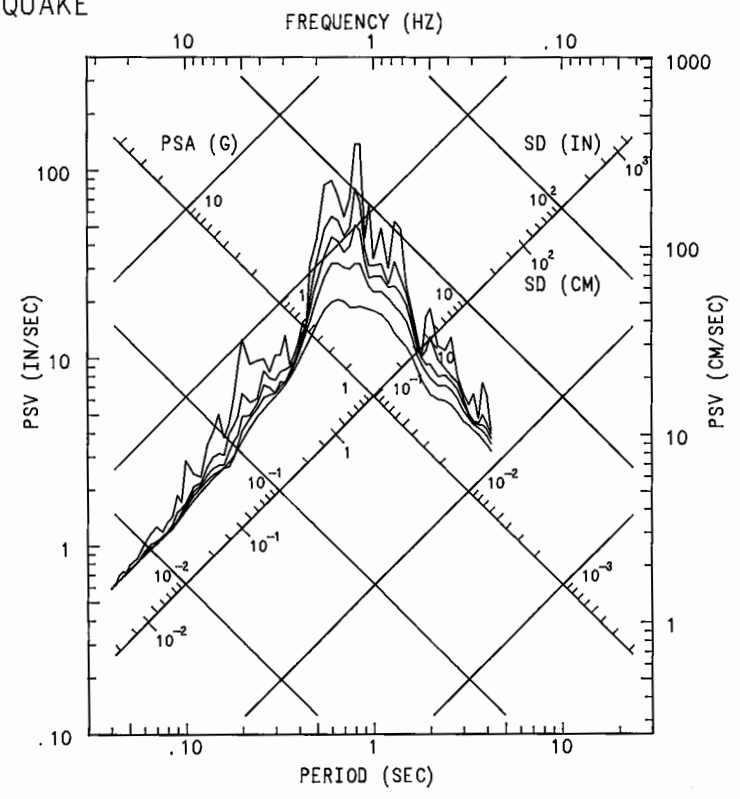
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

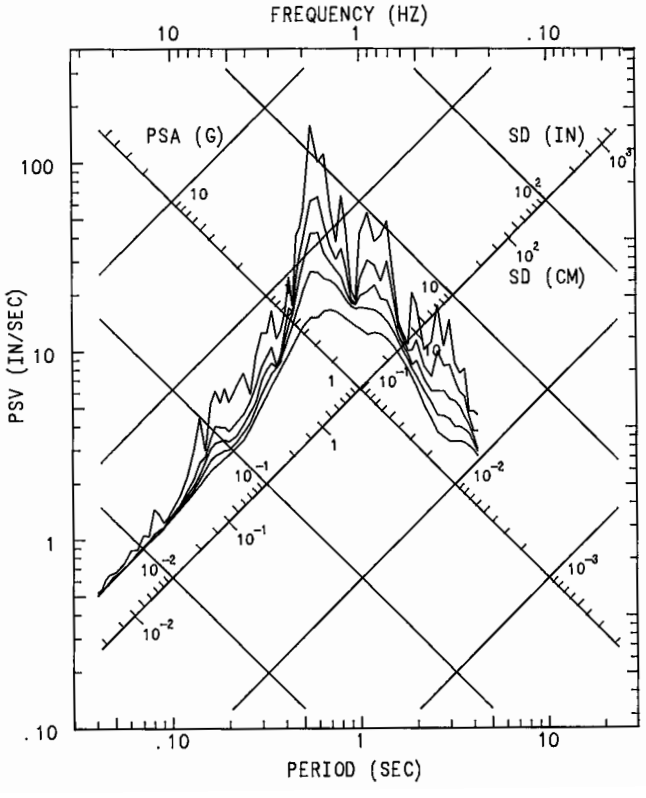
RECORD ID: 58364-C0194-89298.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

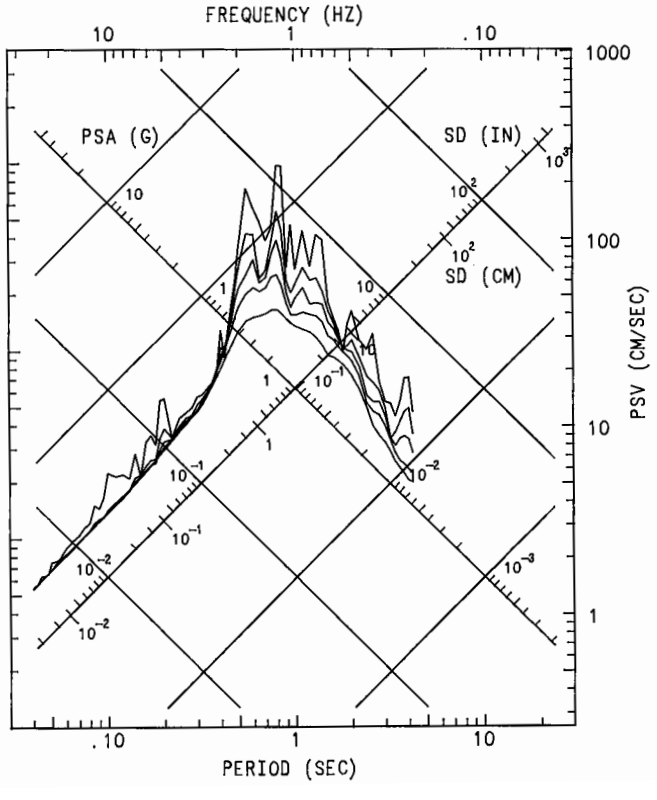
CHN 4: 90 DEG
ROOF, SOUTH WALL



CHN 5: 180 DEG
ROOF, NEAR CENTER



CHN 6: 90 DEG
8TH FLOOR, NORTH WALL



WALNUT CREEK – 10-STORY COMMERCIAL BLDG. : CSMIP S/N 364

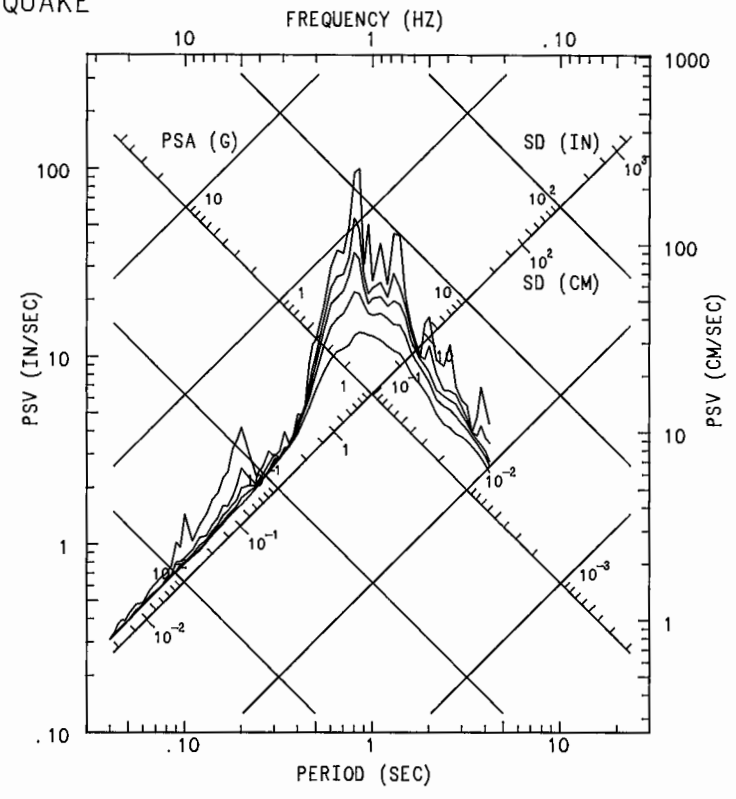
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

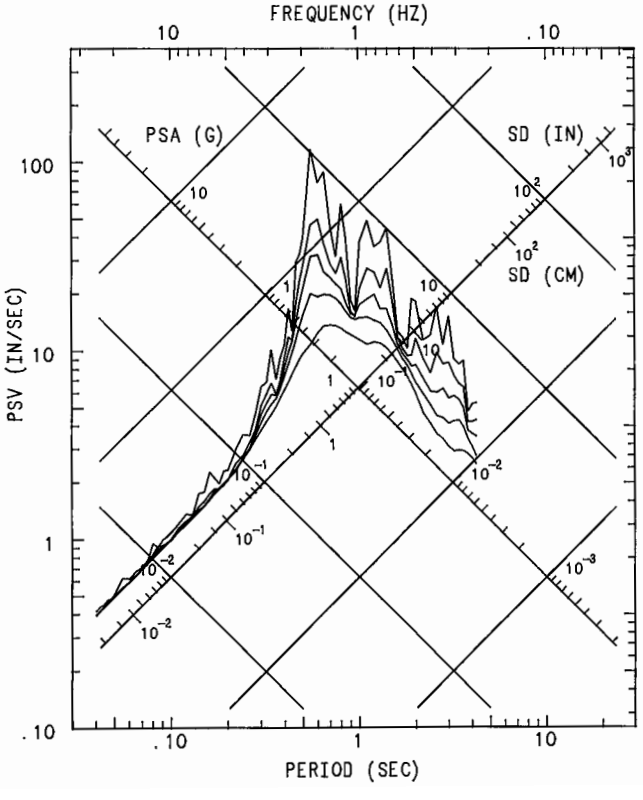
RECORD ID: 58364-C0194-89298.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

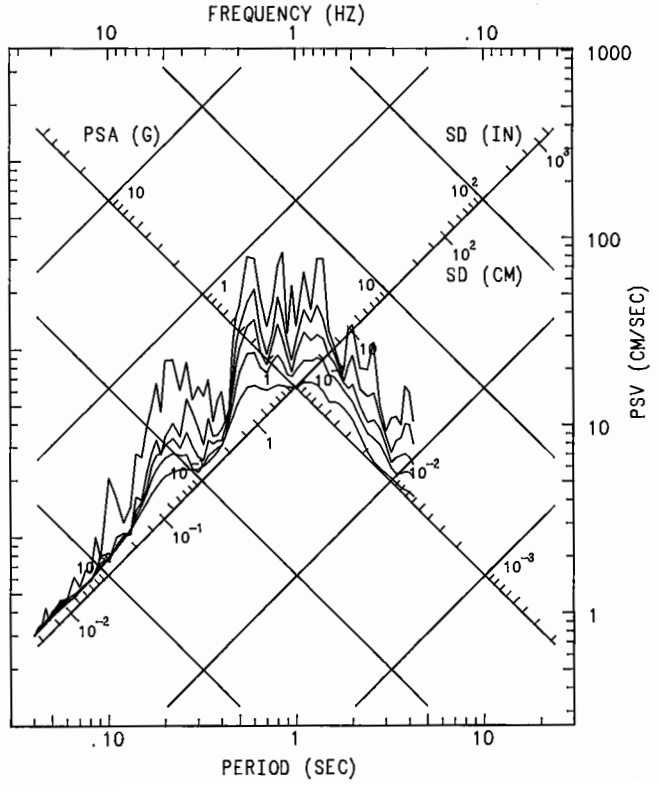
CHN 7: 90 DEG
8TH FLOOR, NEAR CENTER



CHN 8: 180 DEG
8TH FLOOR, NEAR CENTER



CHN 9: 90 DEG
3RD FLOOR, NORTH WALL



WALNUT CREEK – 10-STORY COMMERCIAL BLDG. : CSMIP S/N 364

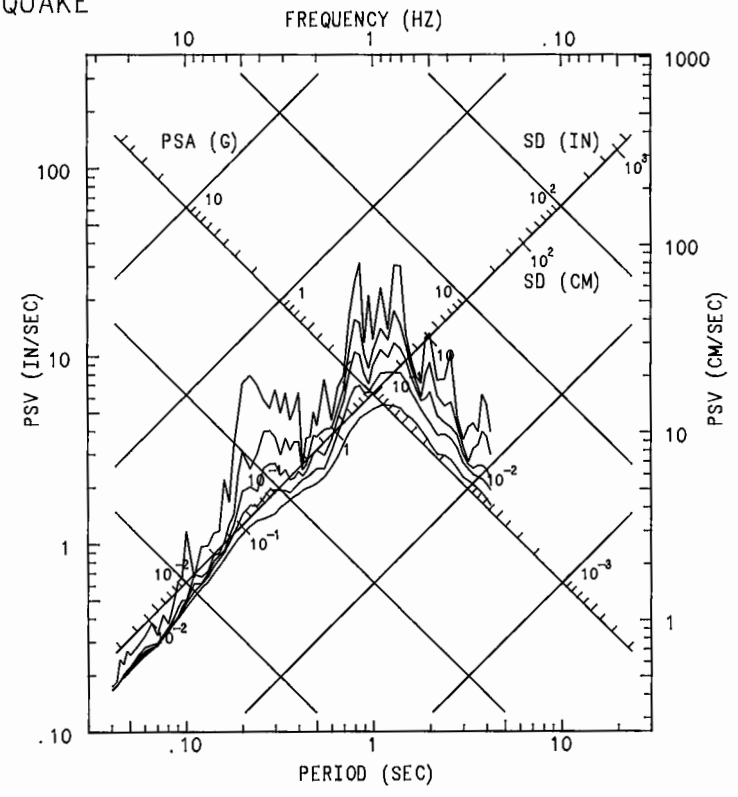
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

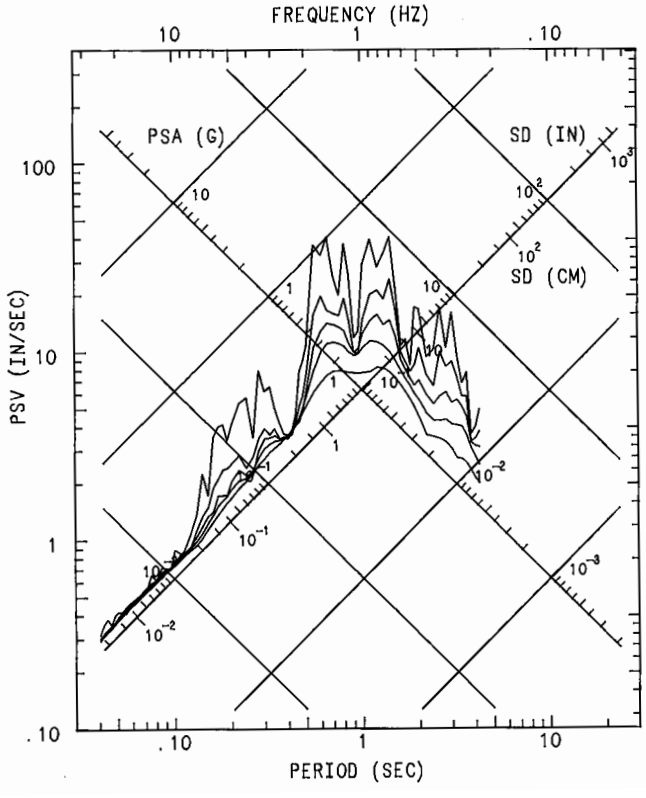
RECORD ID: 58364-C0194-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

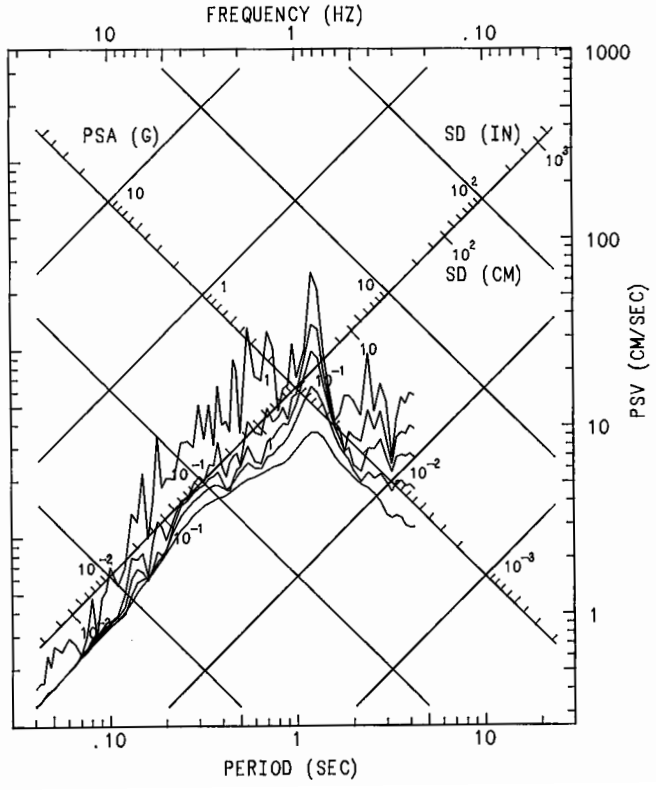
CHN 10: 90 DEG
3RD FLOOR, NEAR CENTER



CHN 11: 180 DEG
3RD FLOOR, NEAR CENTER



CHN 12: UP
GRND FLOOR, W. WALL OF CNTR CORE



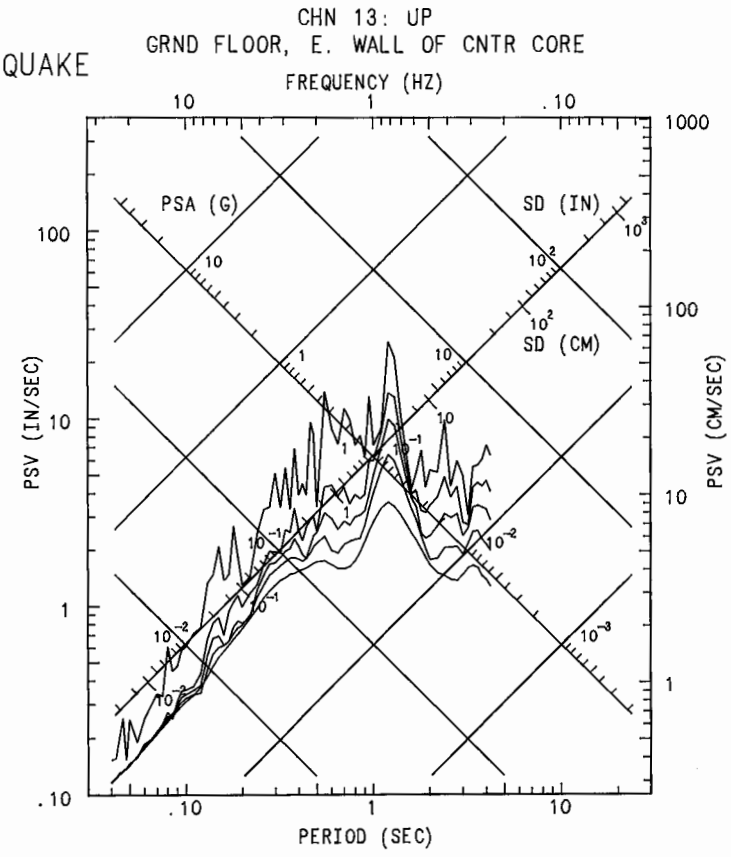
WALNUT CREEK – 10-STORY COMMERCIAL BLDG. : CSMIP S/N 364

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

RECORD ID: 58364-C0194-89298.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



WALNUT CREEK – 10-STORY COMMERCIAL BLDG: CSMIP S/N 364

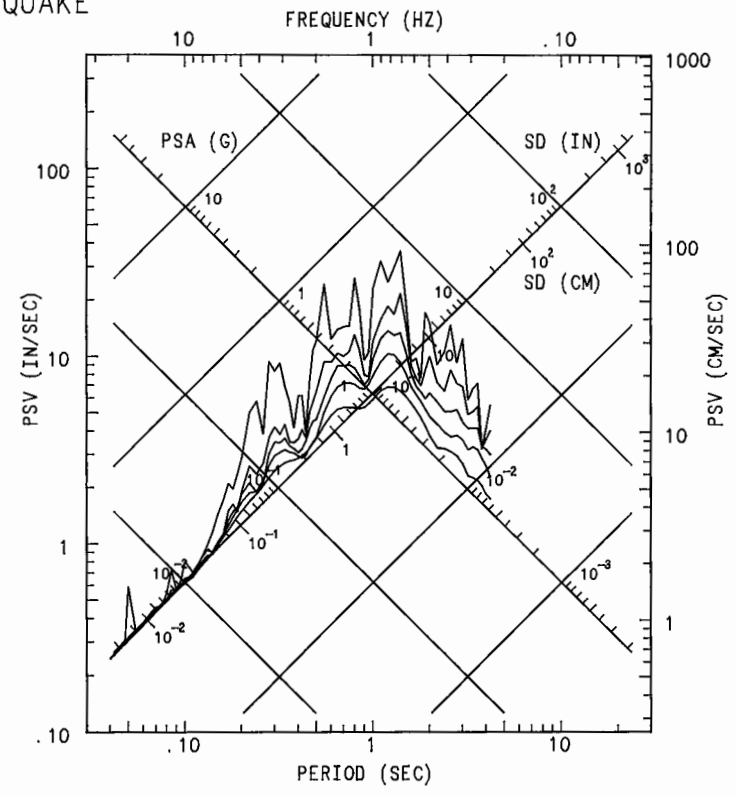
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ
(0.04 TO 3.92 SEC)

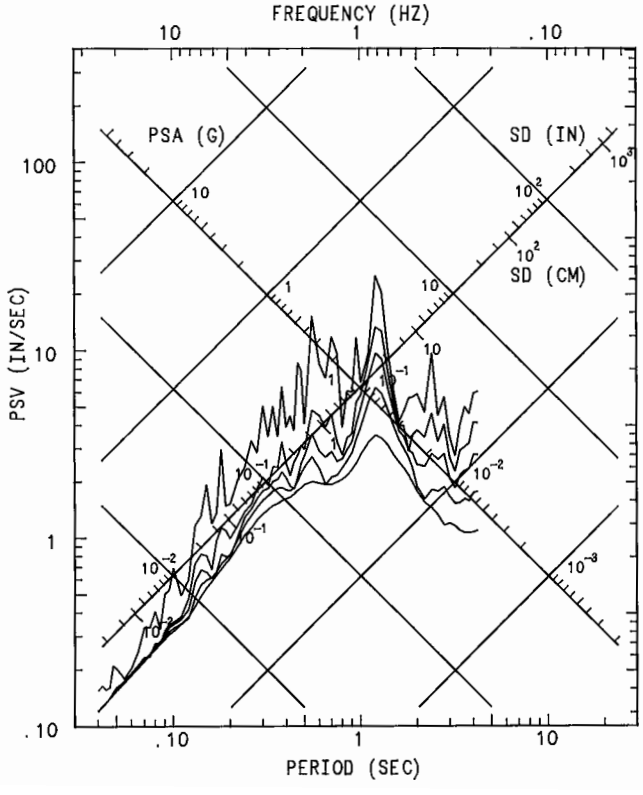
RECORD ID: 58364-S3490-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

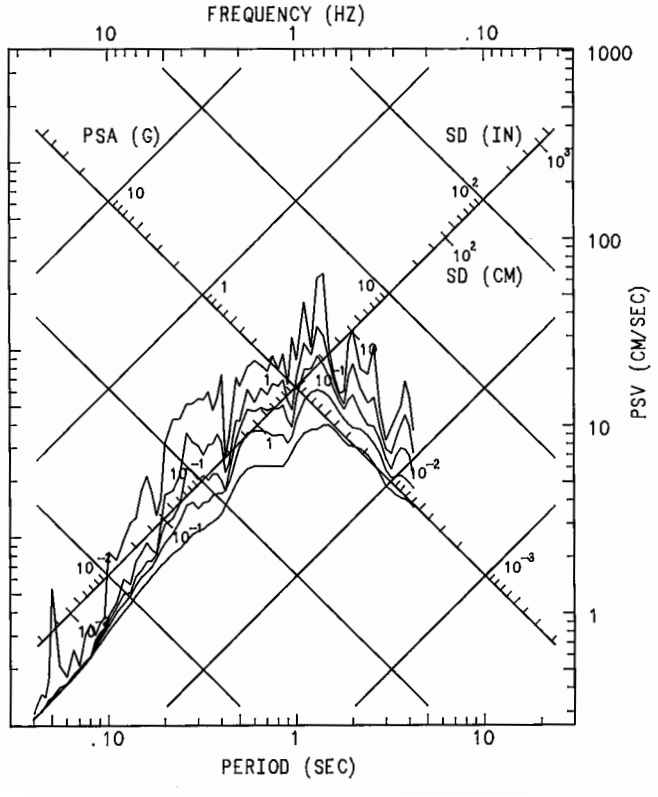
CHN 1 (STA CHN 14): 180 DEG
GROUND FLOOR, NEAR CENTER



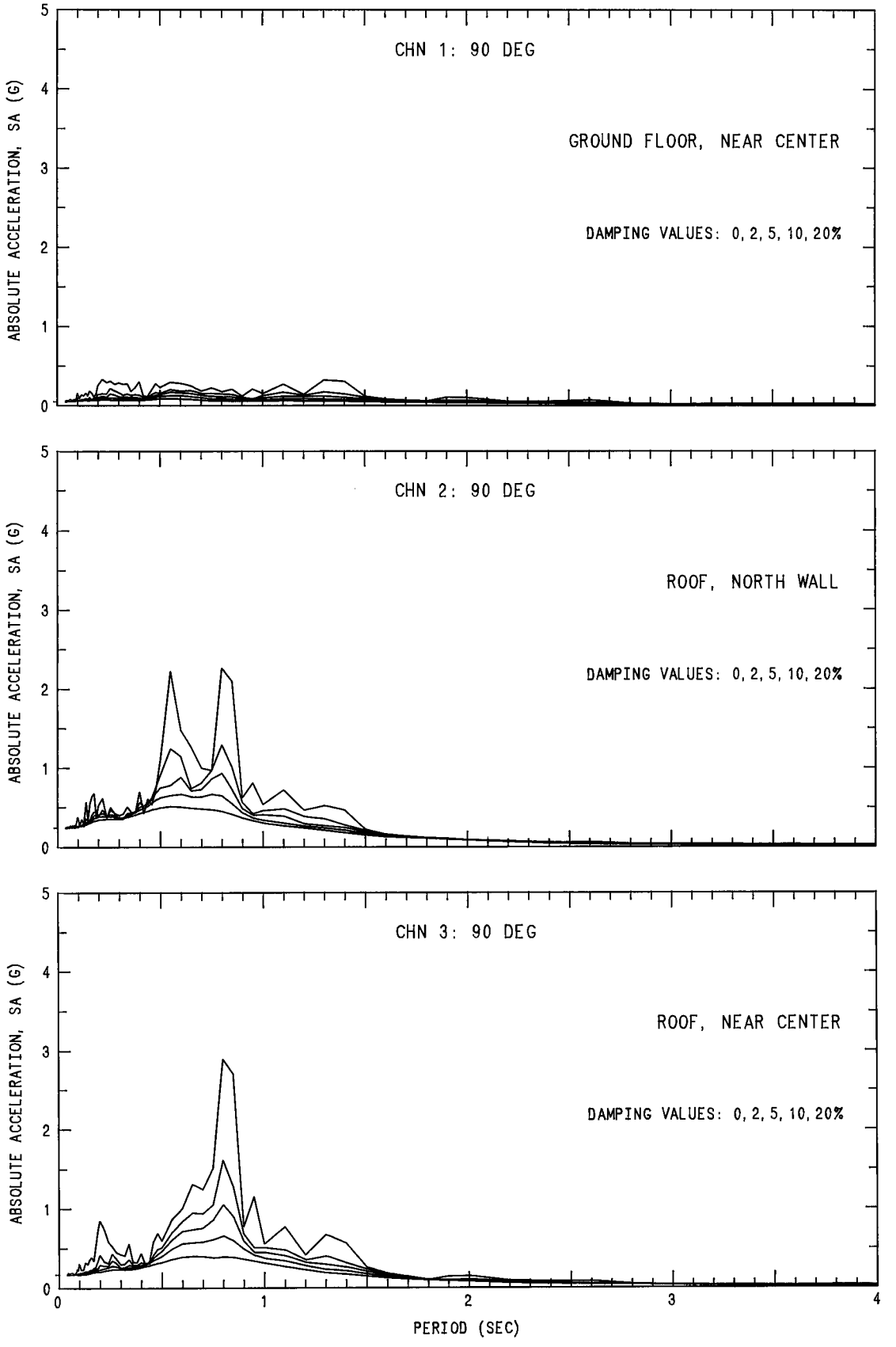
CHN 2 (STA CHN 15): UP
GROUND FLOOR, NEAR CENTER



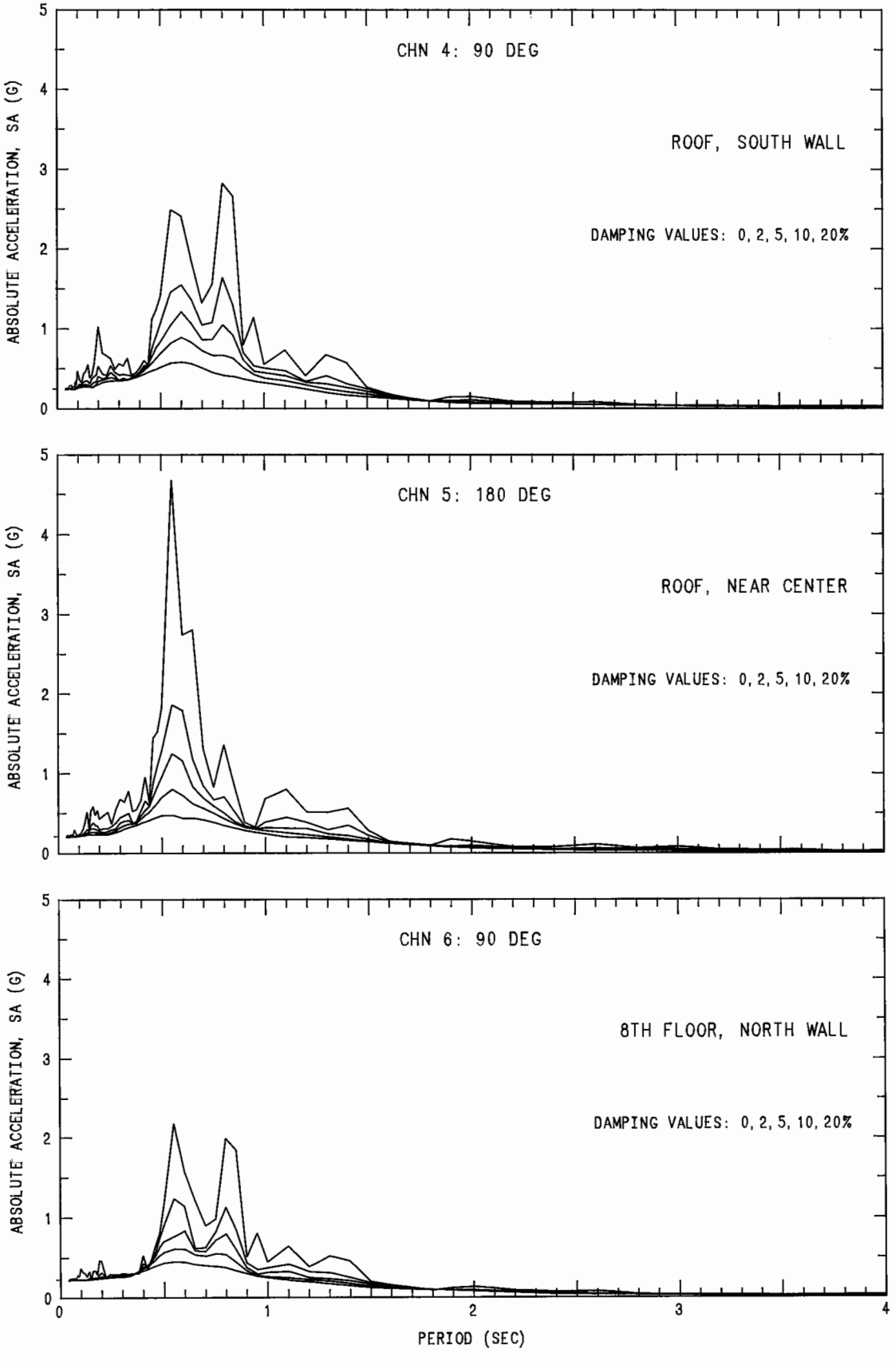
CHN 3 (STA CHN 16): 90 DEG
GROUND FLOOR, NEAR CENTER



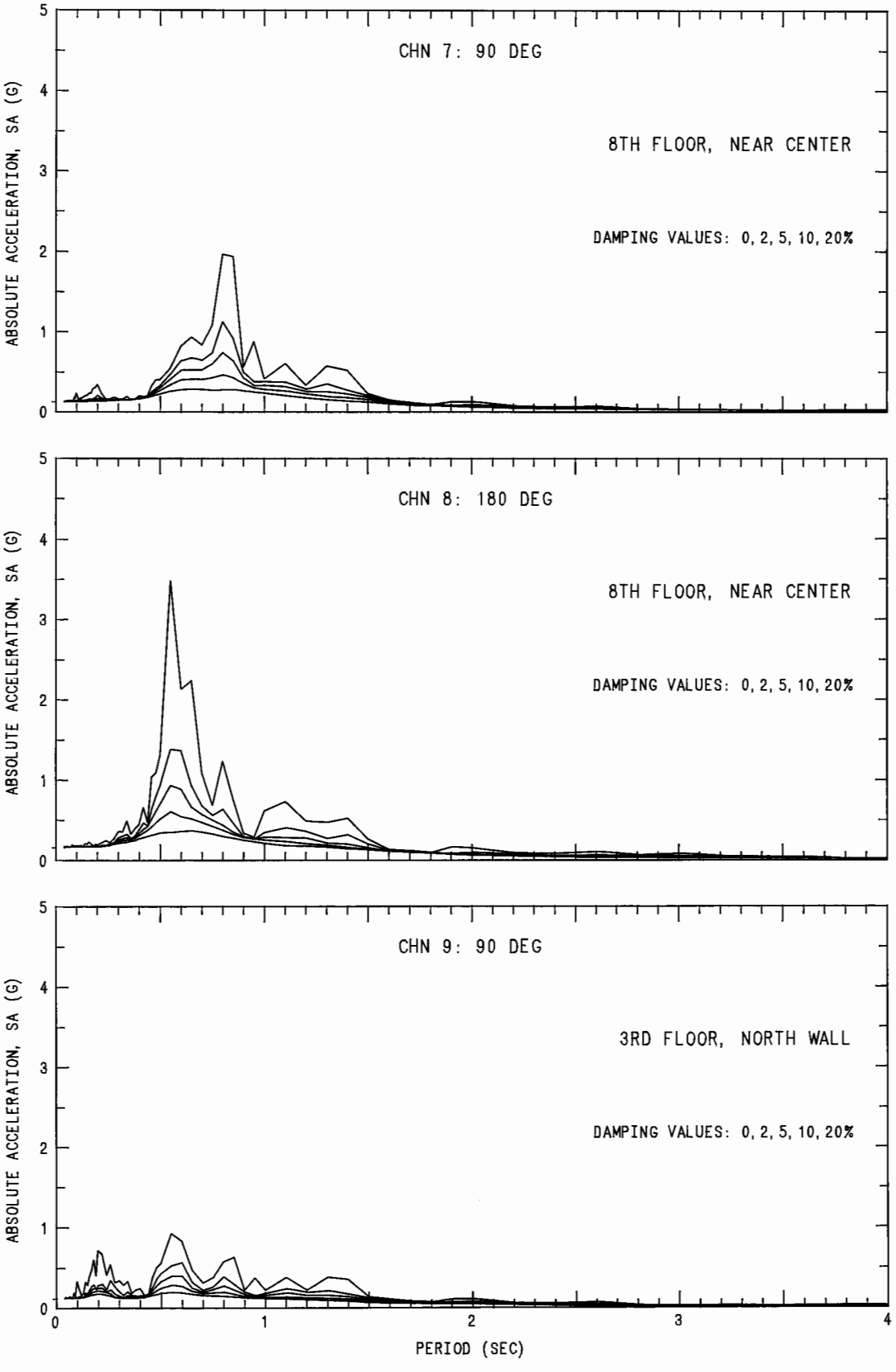
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK - 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58364-C0194-89298.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



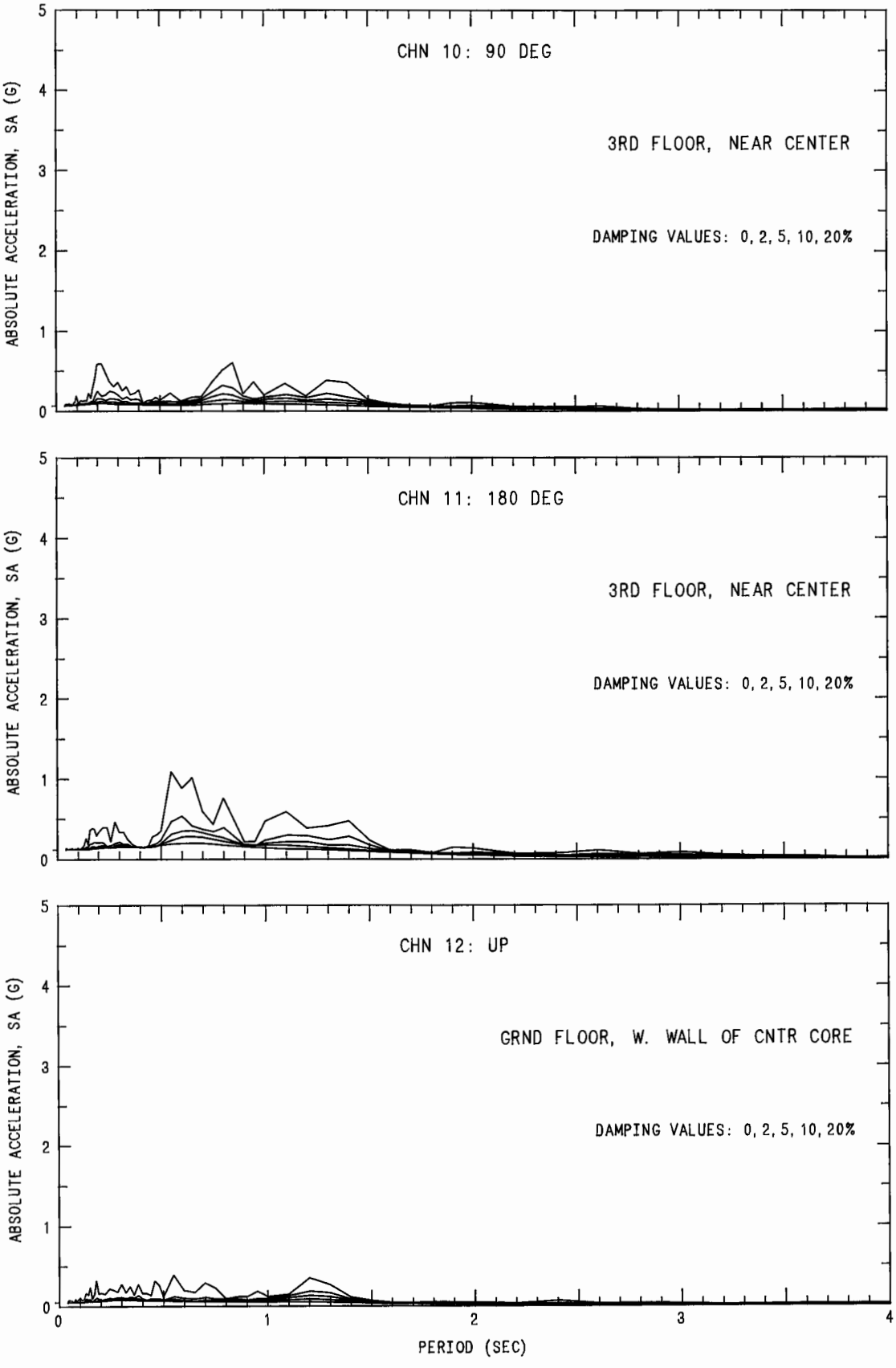
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58364-C0194-89298.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



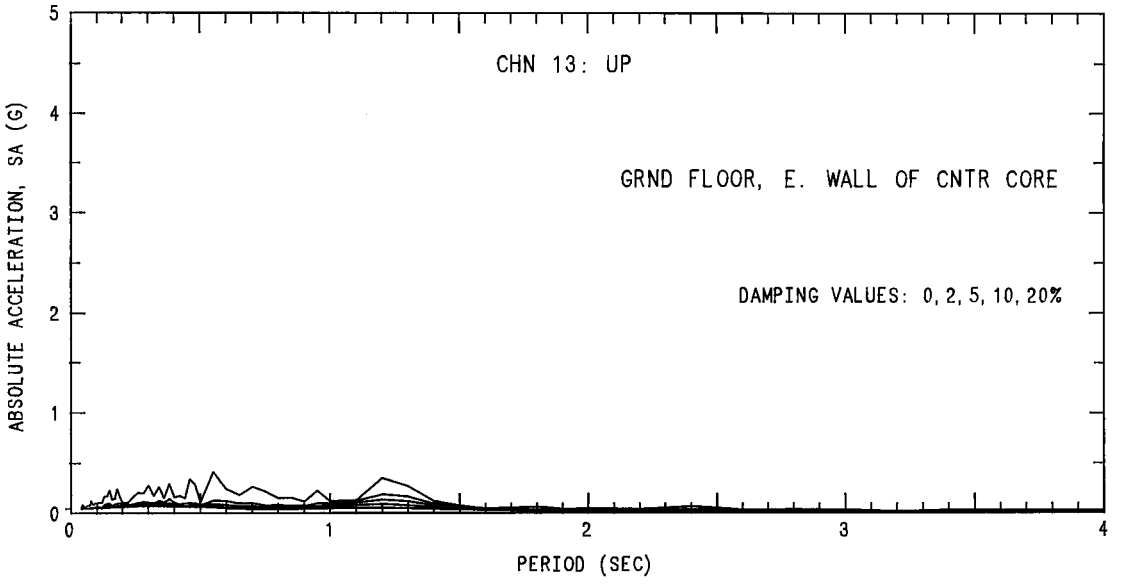
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58364-C0194-89298.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



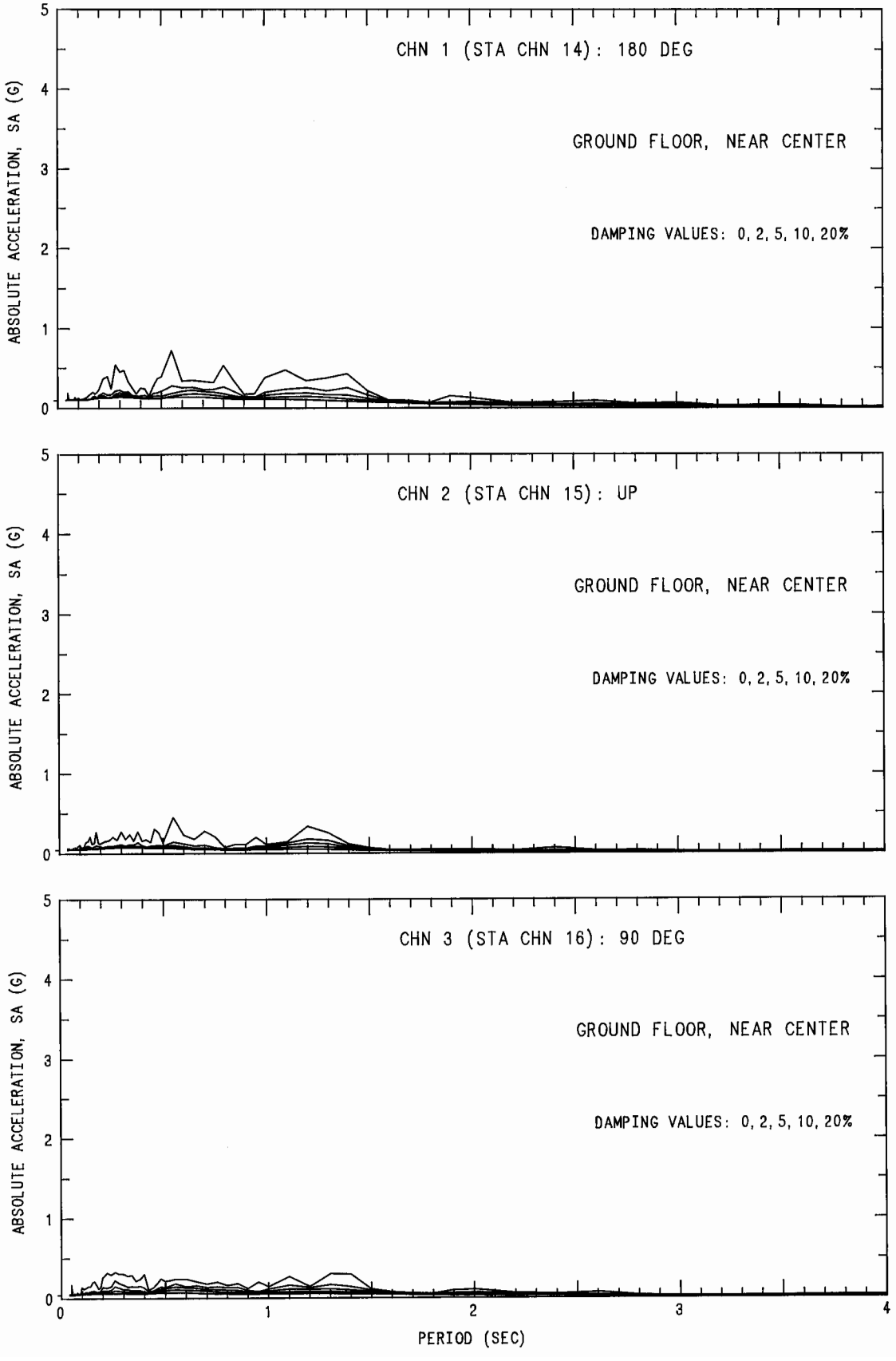
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58364-C0194-89298.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK – 10-STORY COMMERCIAL BLDG.: CSMIP S/N 364
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58364-C0194-89298.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



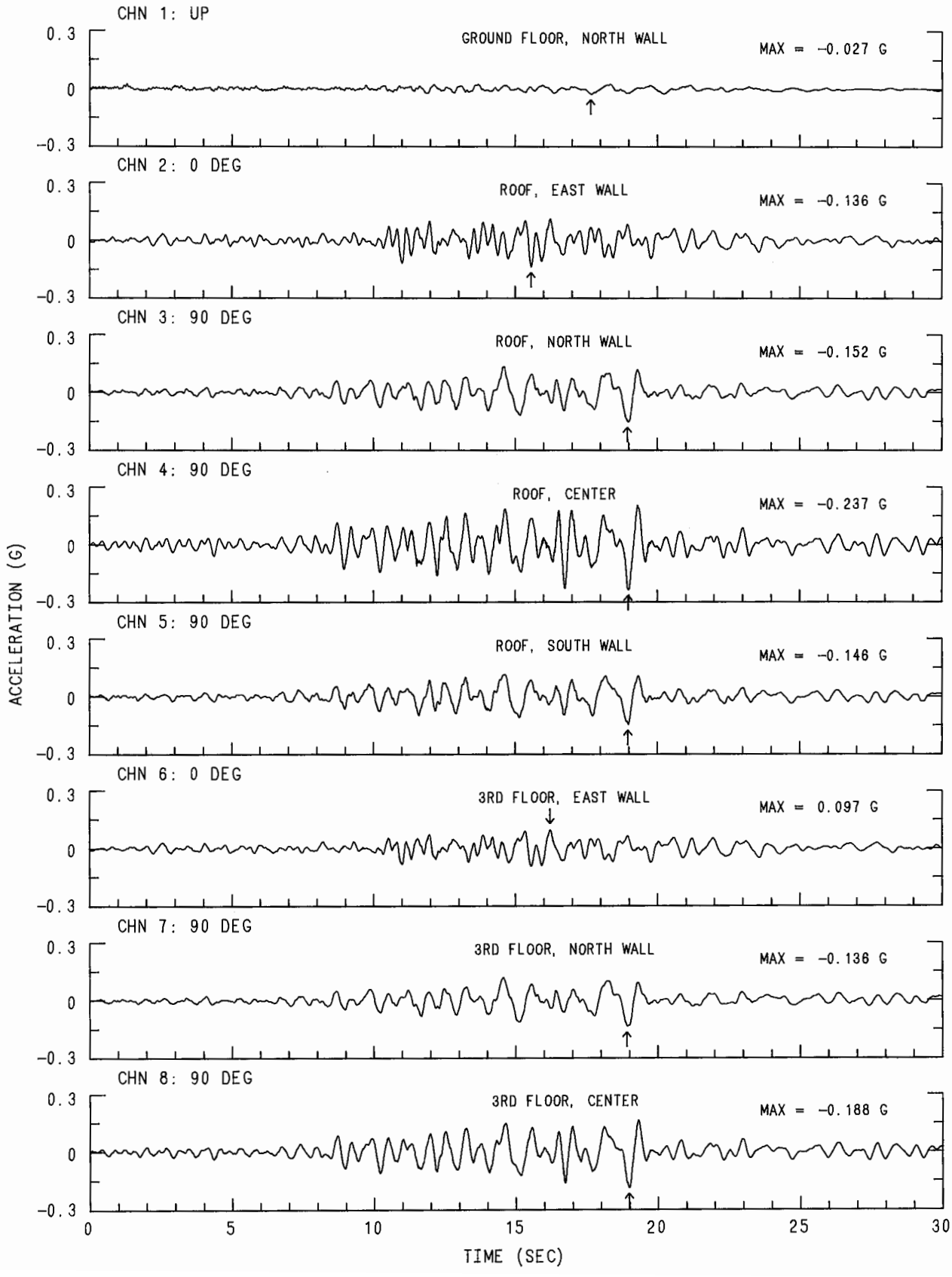
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
WALNUT CREEK - 10-STORY COMMERCIAL BLDG: CSMIP S/N 364
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58364-S3490-89298.01
USABLE DATA BANDWIDTH: 0.25 TO 23.6 HZ (0.04 TO 3.92 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

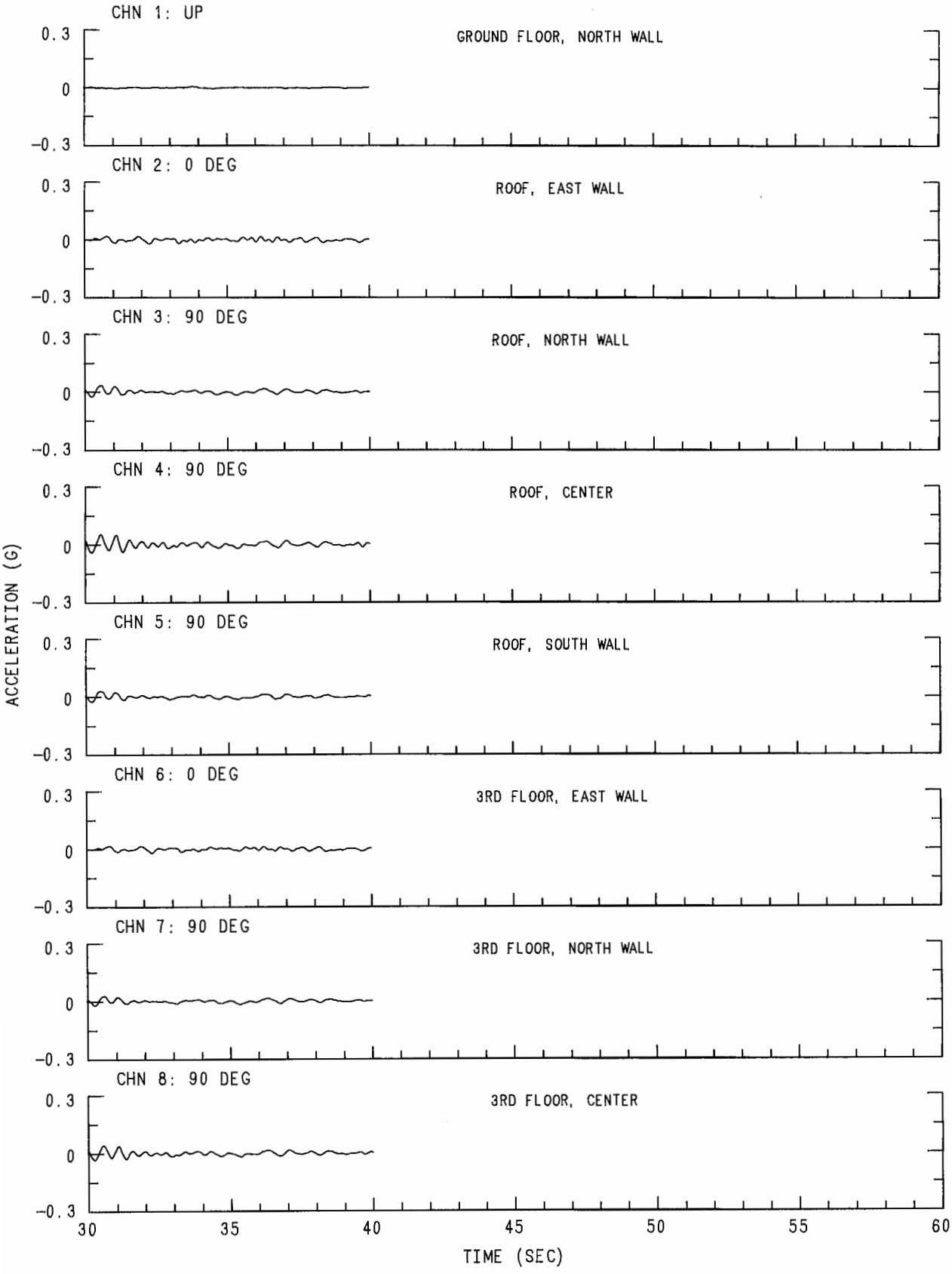
PHASE 1 ACCELERATION. RECORD ID: 58348-C0179-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

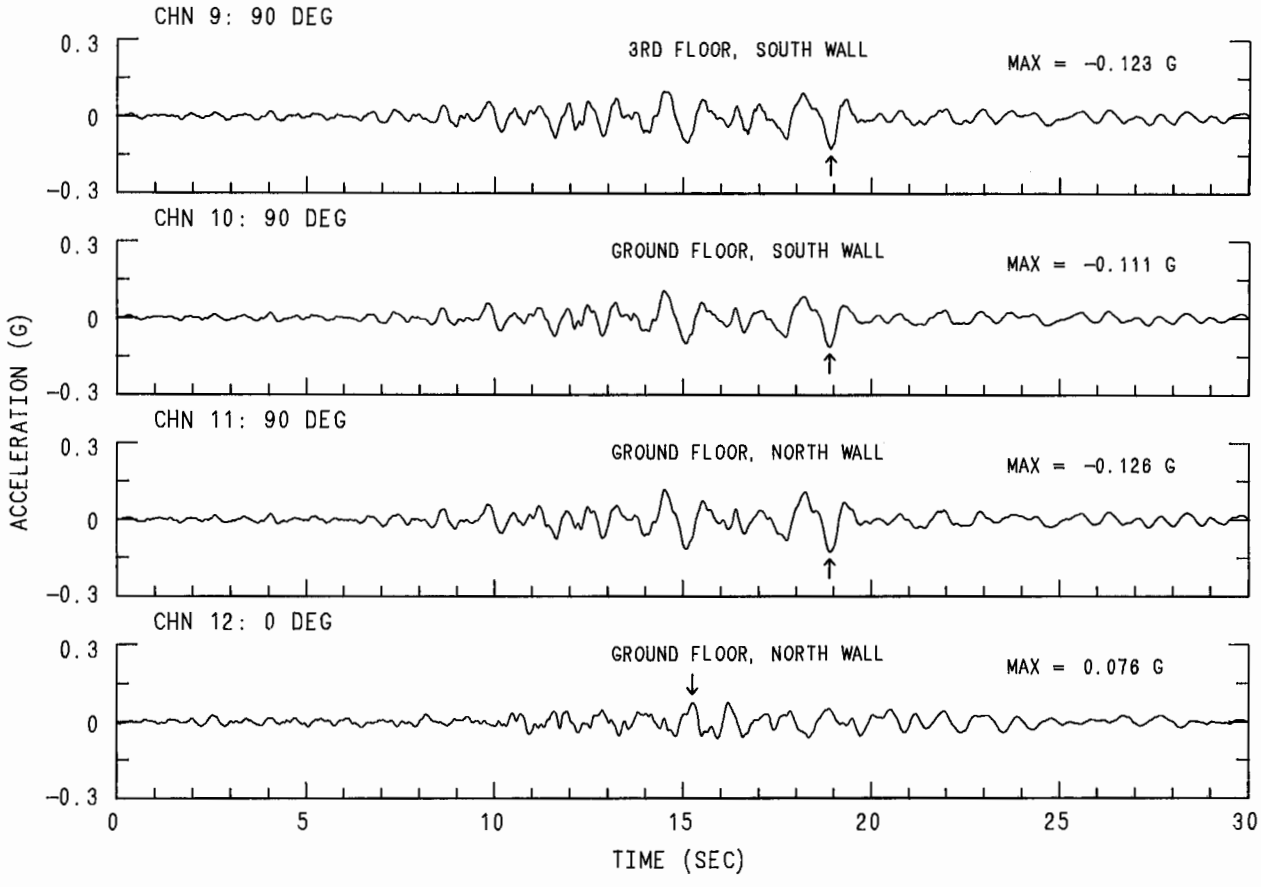
PHASE 1 ACCELERATION. RECORD ID: 58348-C0179-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

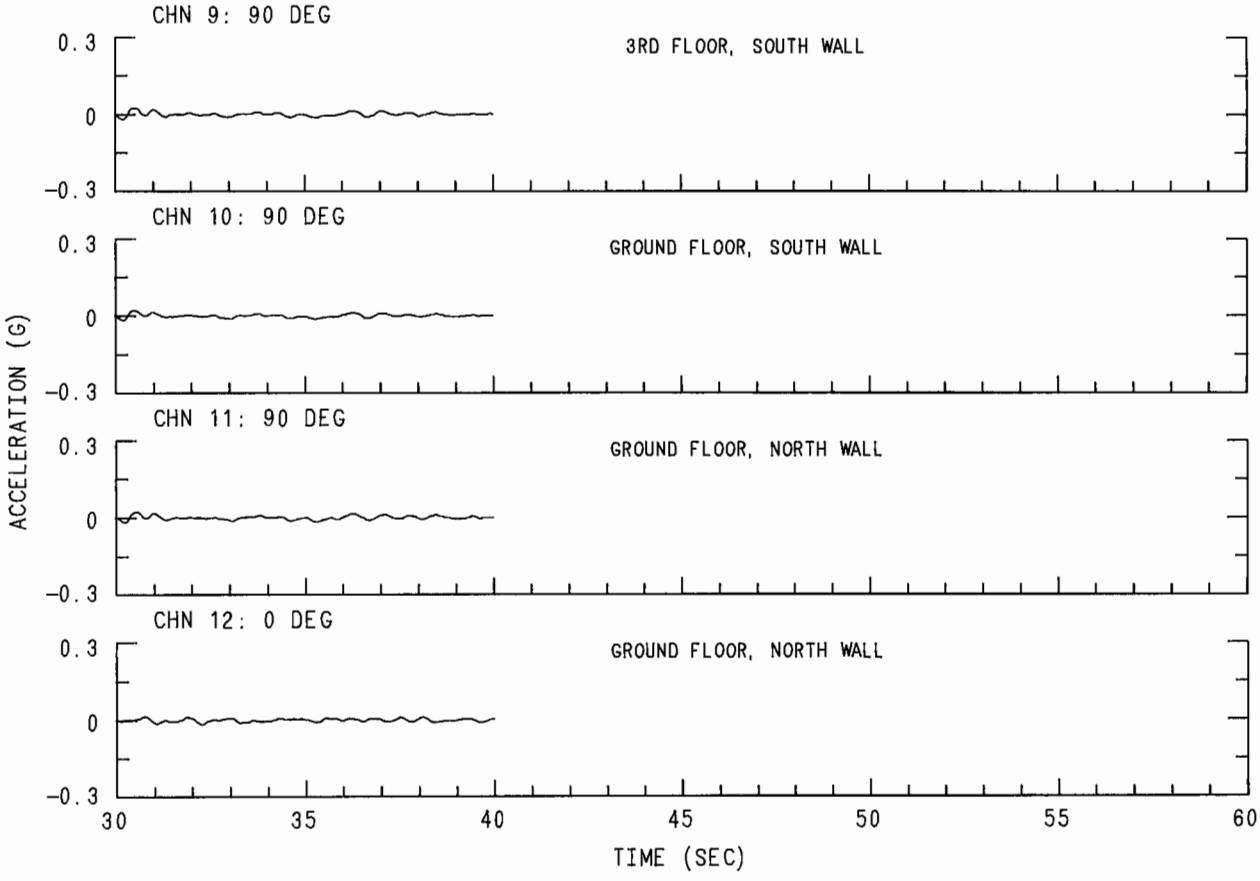
PHASE 1 ACCELERATION. RECORD ID: 58348-C0179-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

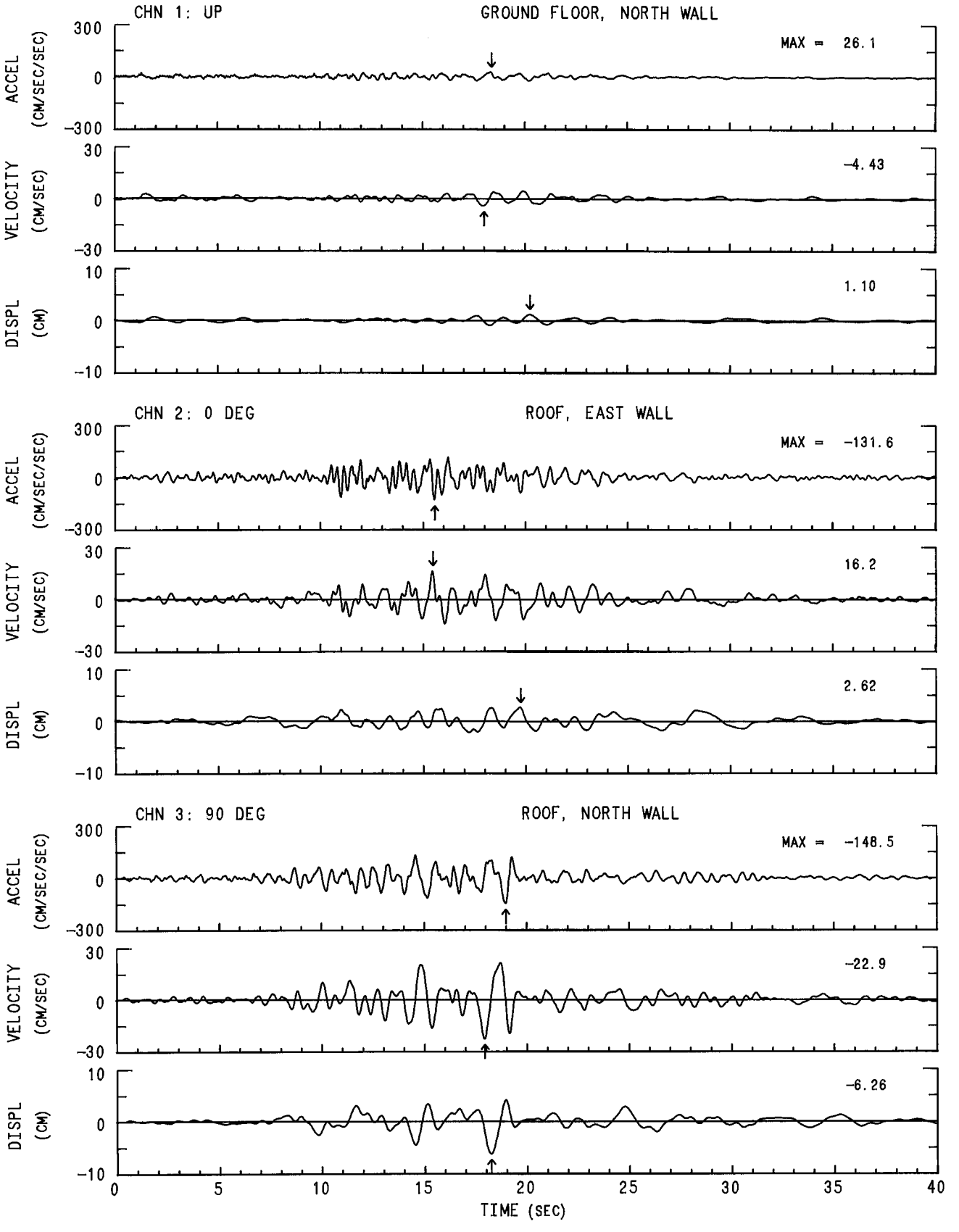
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

PHASE 1 ACCELERATION. RECORD ID: 58348-C0179-89298.01



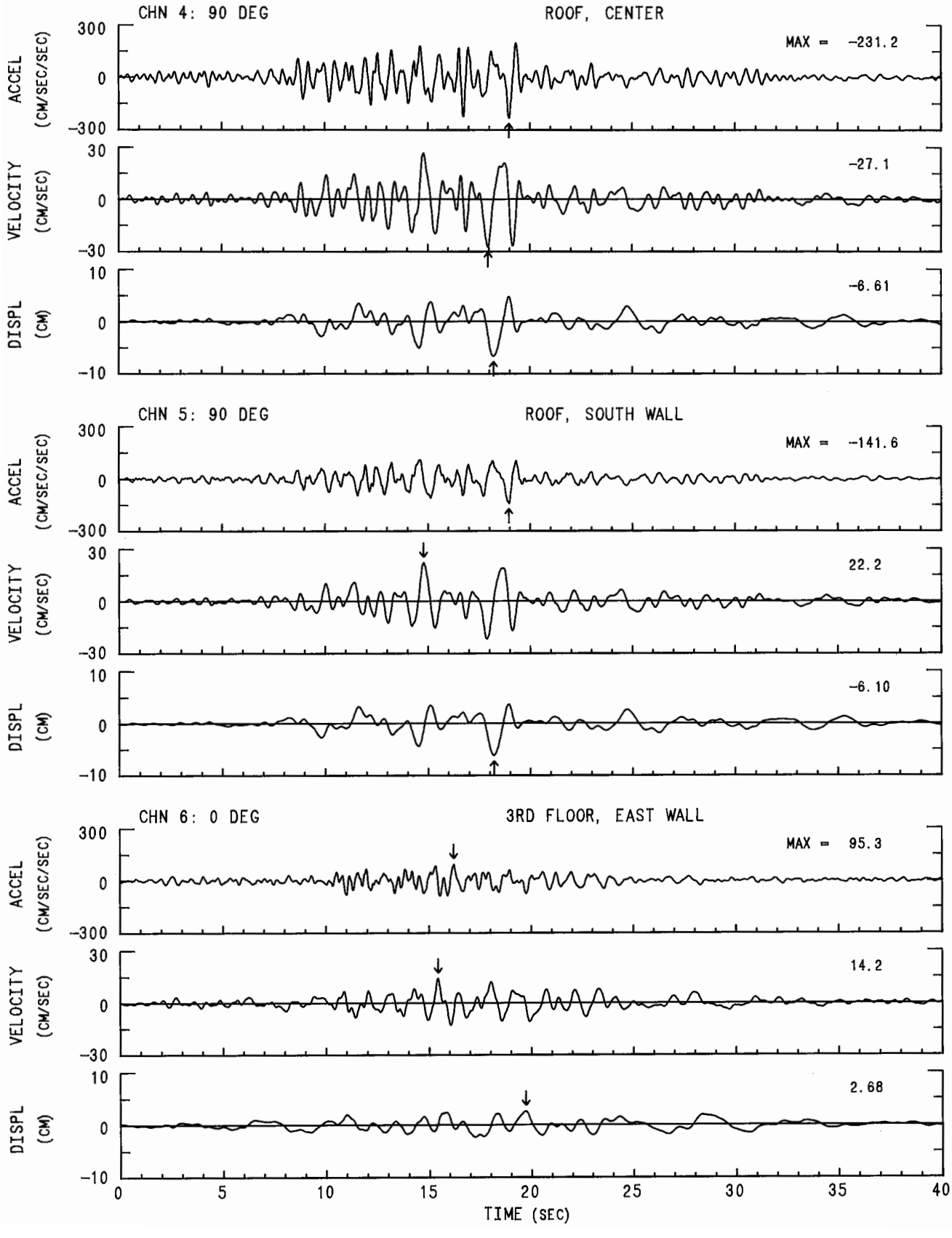
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58348-C0179-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

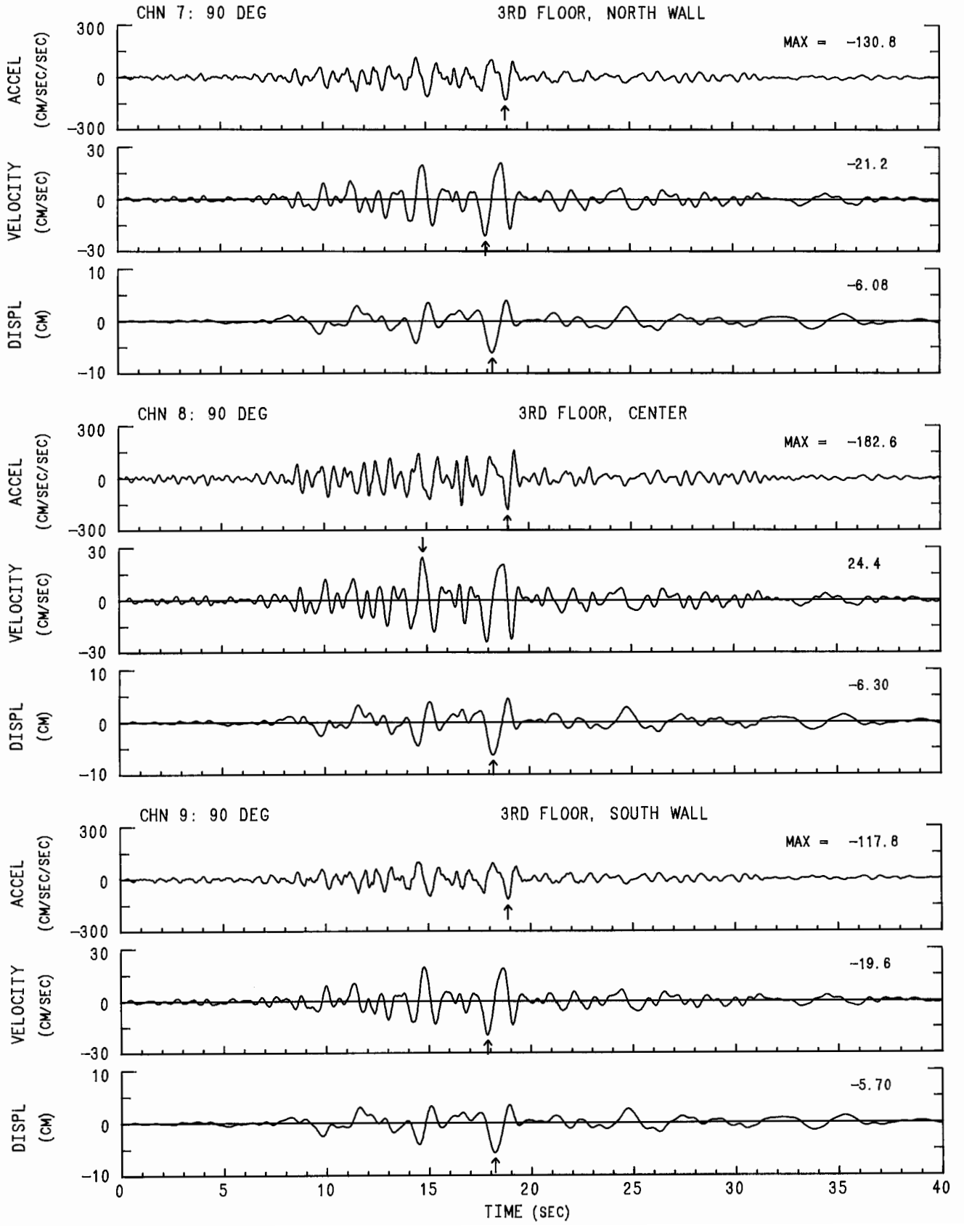
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58348-C0179-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

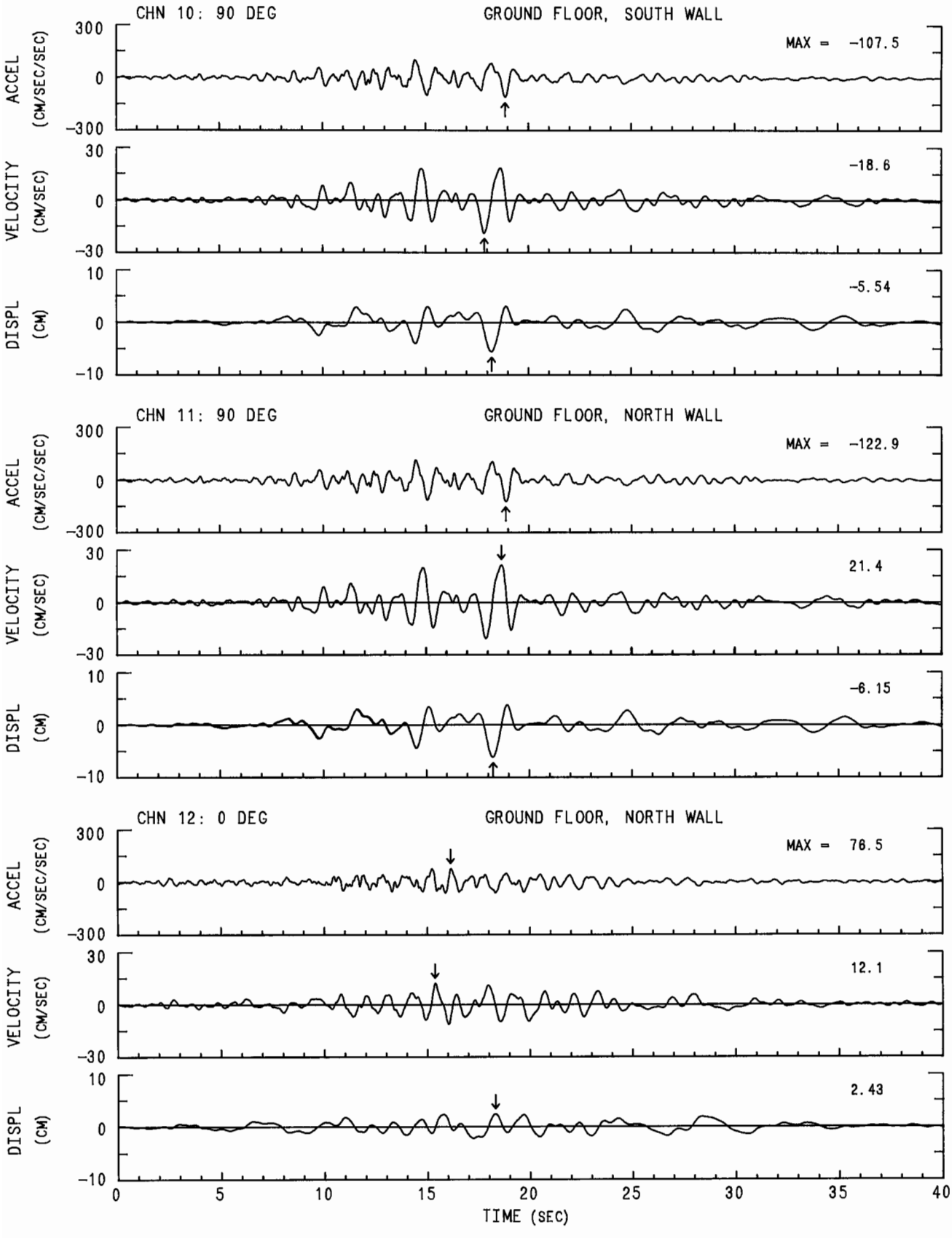
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58348-C0179-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58348-C0179-89298.01



PLEASANT HILL – 3-STORY COMMERCIAL BLDG. : CSMIP S/N 348

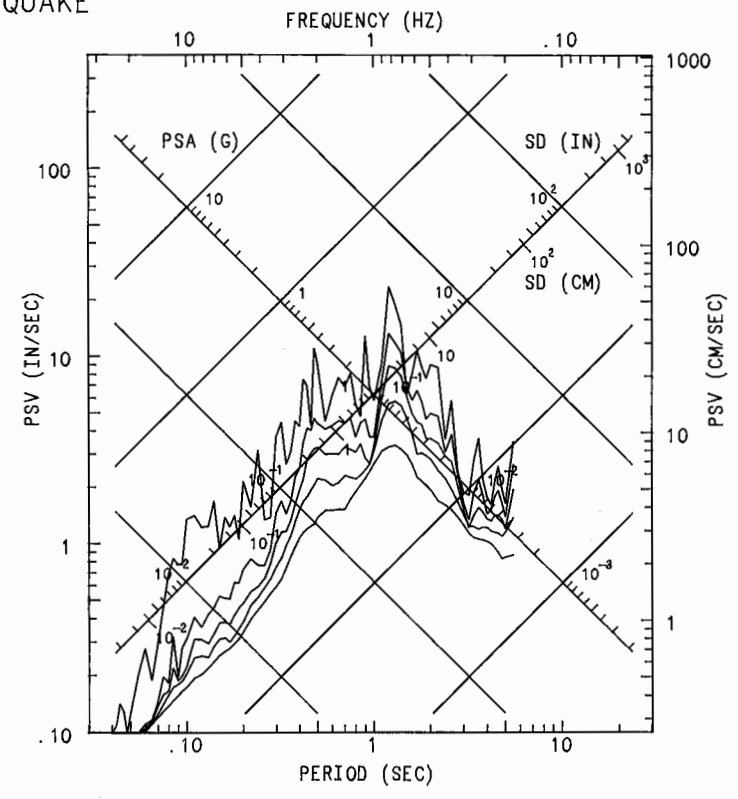
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

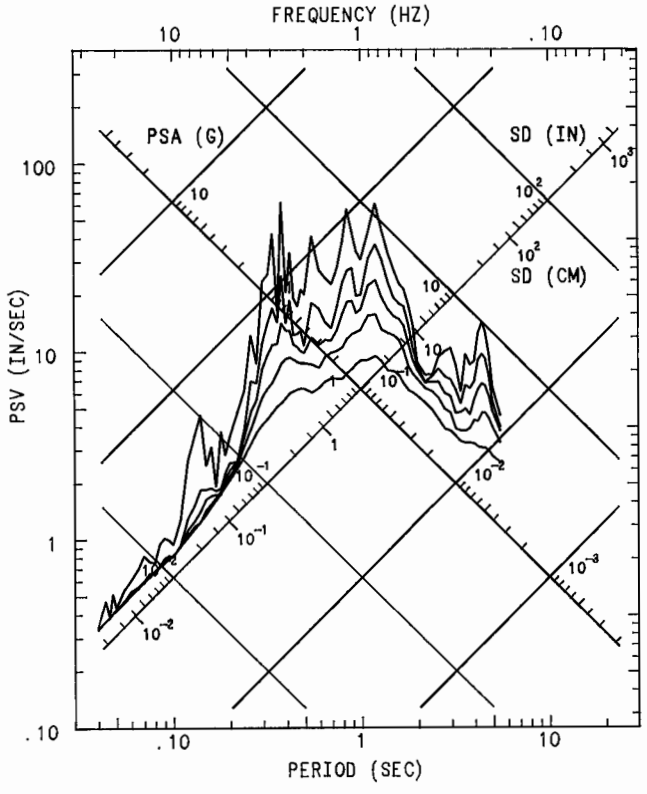
RECORD ID: 58348-C0179-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

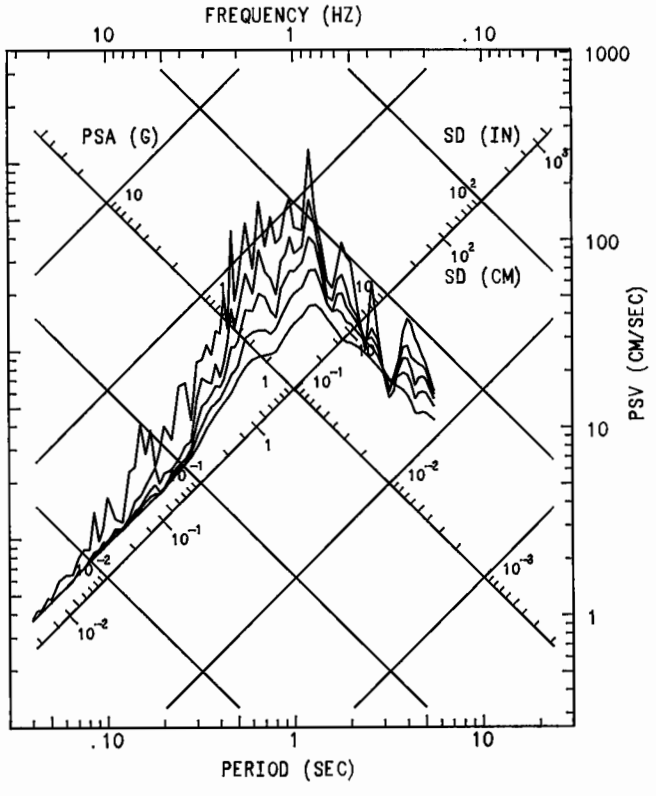
CHN 1: UP
GROUND FLOOR, NORTH WALL



CHN 2: 0 DEG
ROOF, EAST WALL



CHN 3: 90 DEG
ROOF, NORTH WALL



PLEASANT HILL – 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

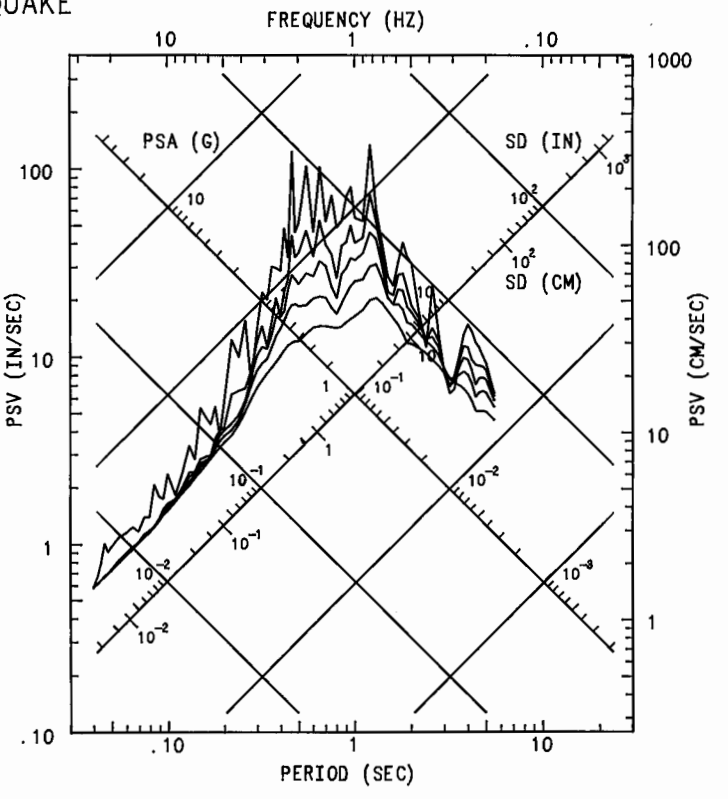
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

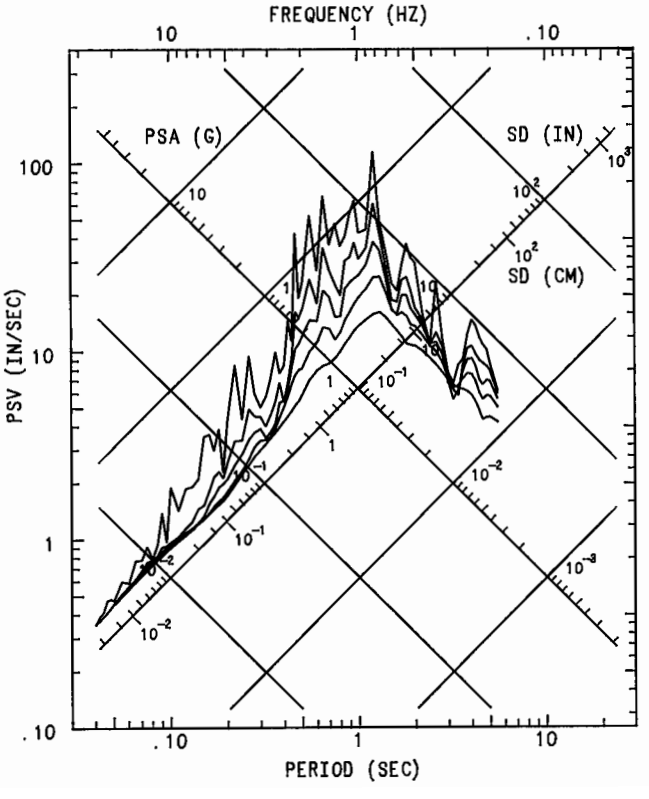
RECORD ID: 58348-C0179-89298.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

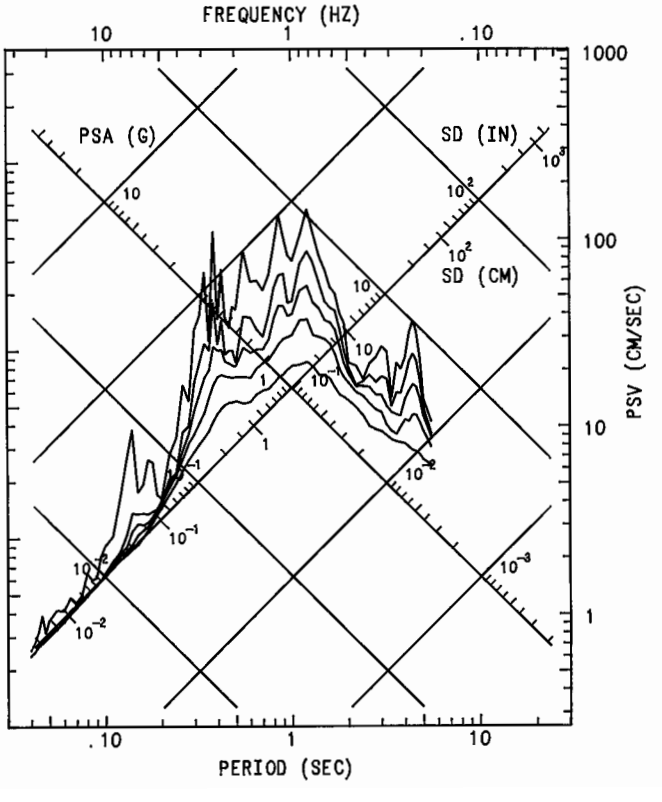
CHN 4: 90 DEG
ROOF, CENTER



CHN 5: 90 DEG
ROOF, SOUTH WALL



CHN 6: 0 DEG
3RD FLOOR, EAST WALL



PLEASANT HILL – 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

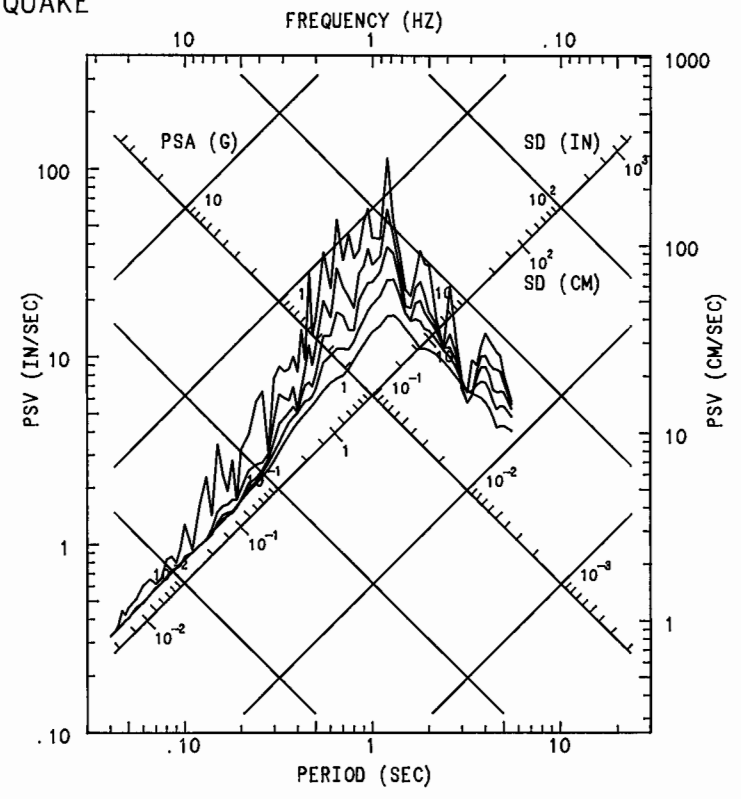
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

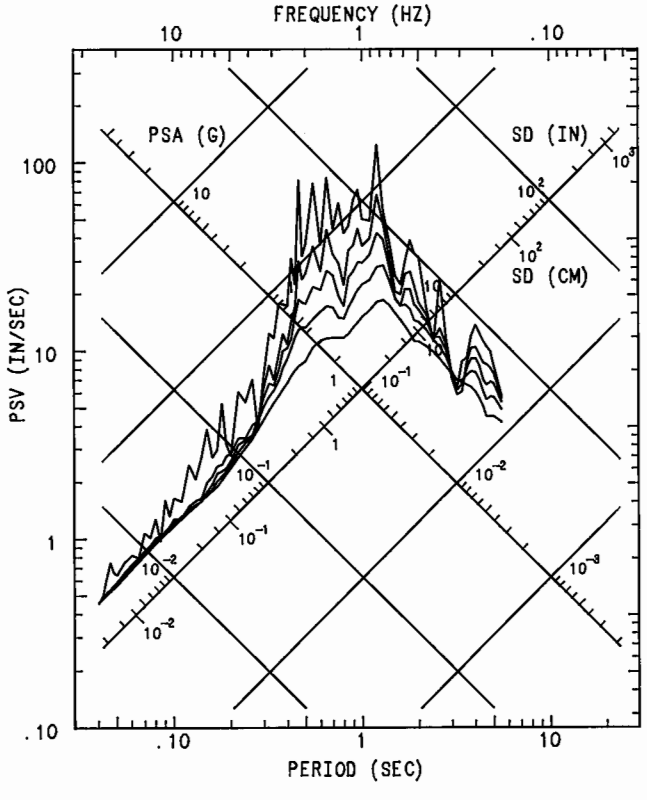
RECORD ID: 58348-C0179-89298.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

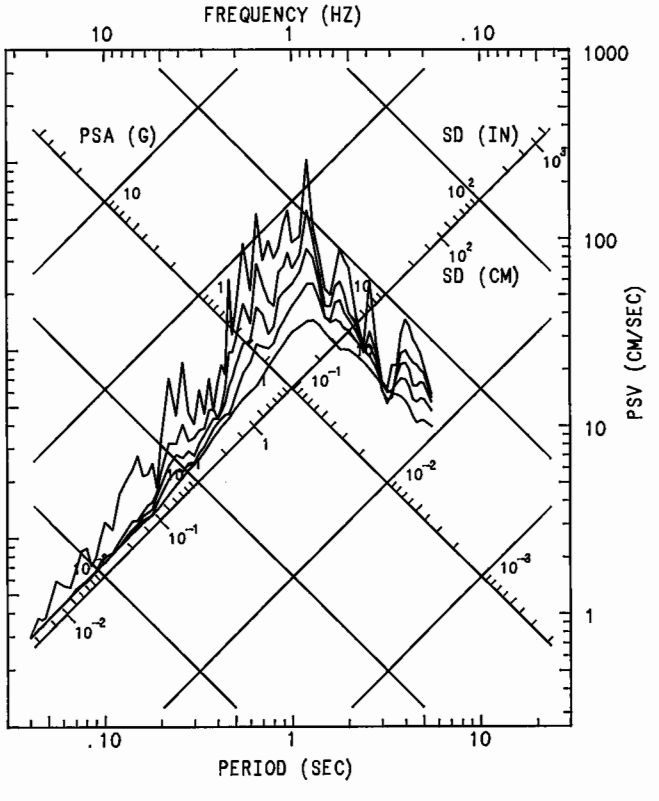
CHN 7: 90 DEG
3RD FLOOR, NORTH WALL



CHN 8: 90 DEG
3RD FLOOR, CENTER



CHN 9: 90 DEG
3RD FLOOR, SOUTH WALL



PLEASANT HILL – 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

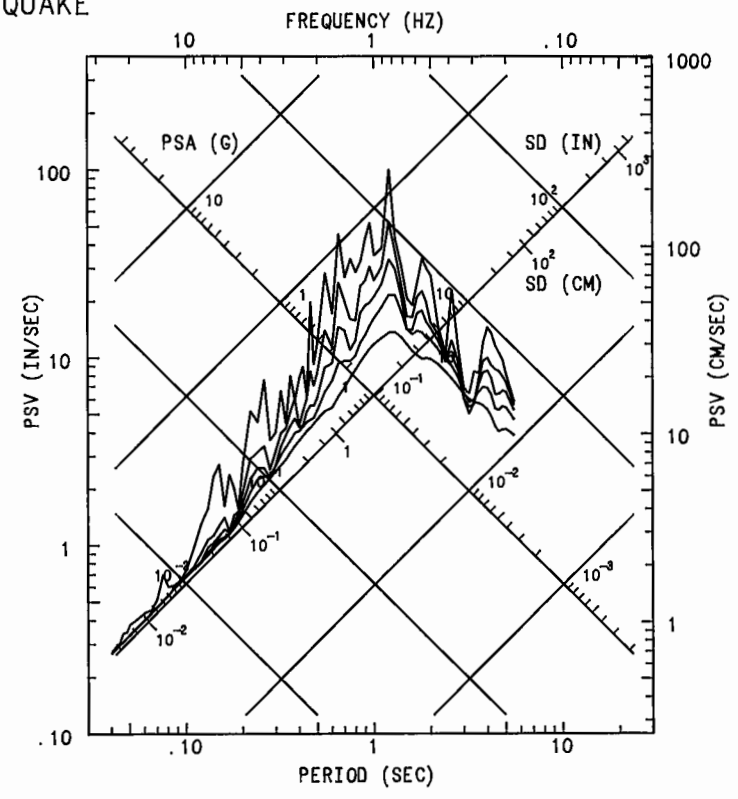
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

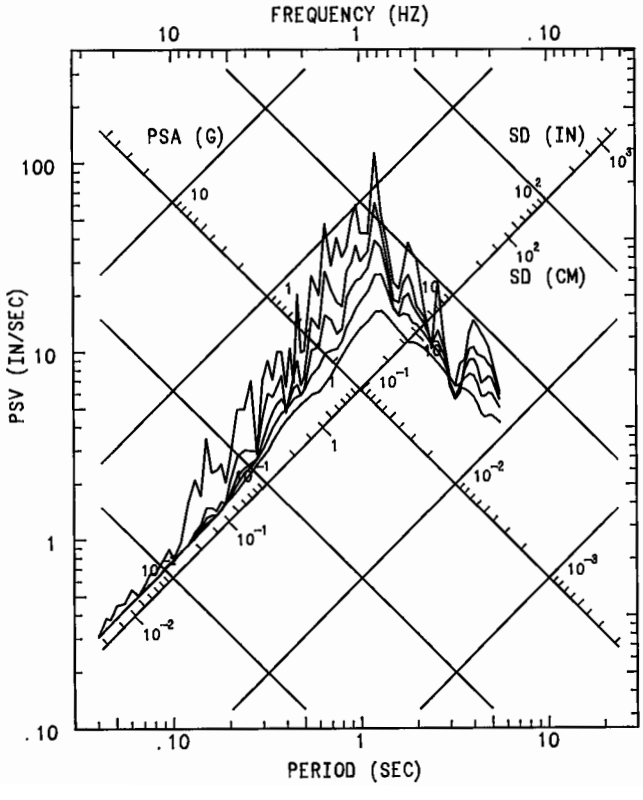
RECORD ID: 58348-C0179-89298.01

—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

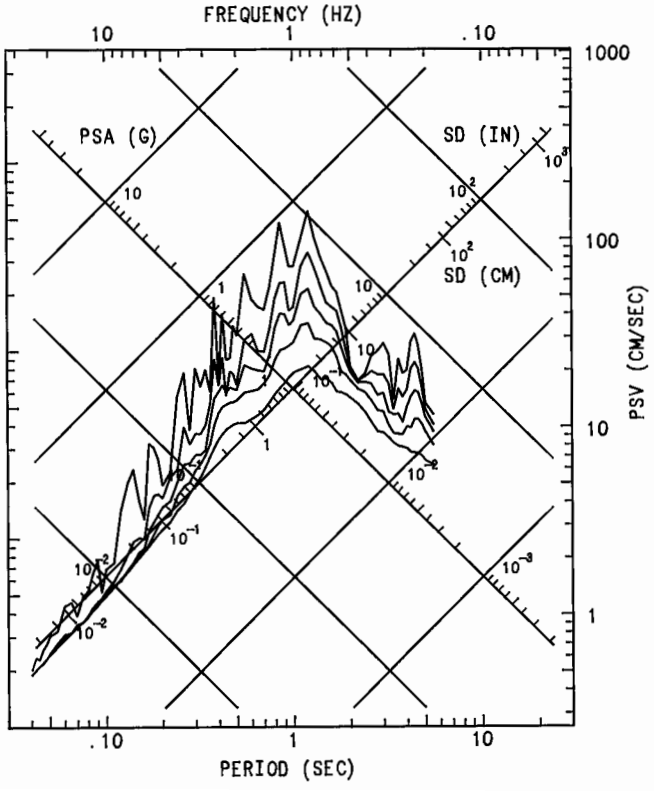
CHN 10: 90 DEG
GROUND FLOOR, SOUTH WALL



CHN 11: 90 DEG
GROUND FLOOR, NORTH WALL

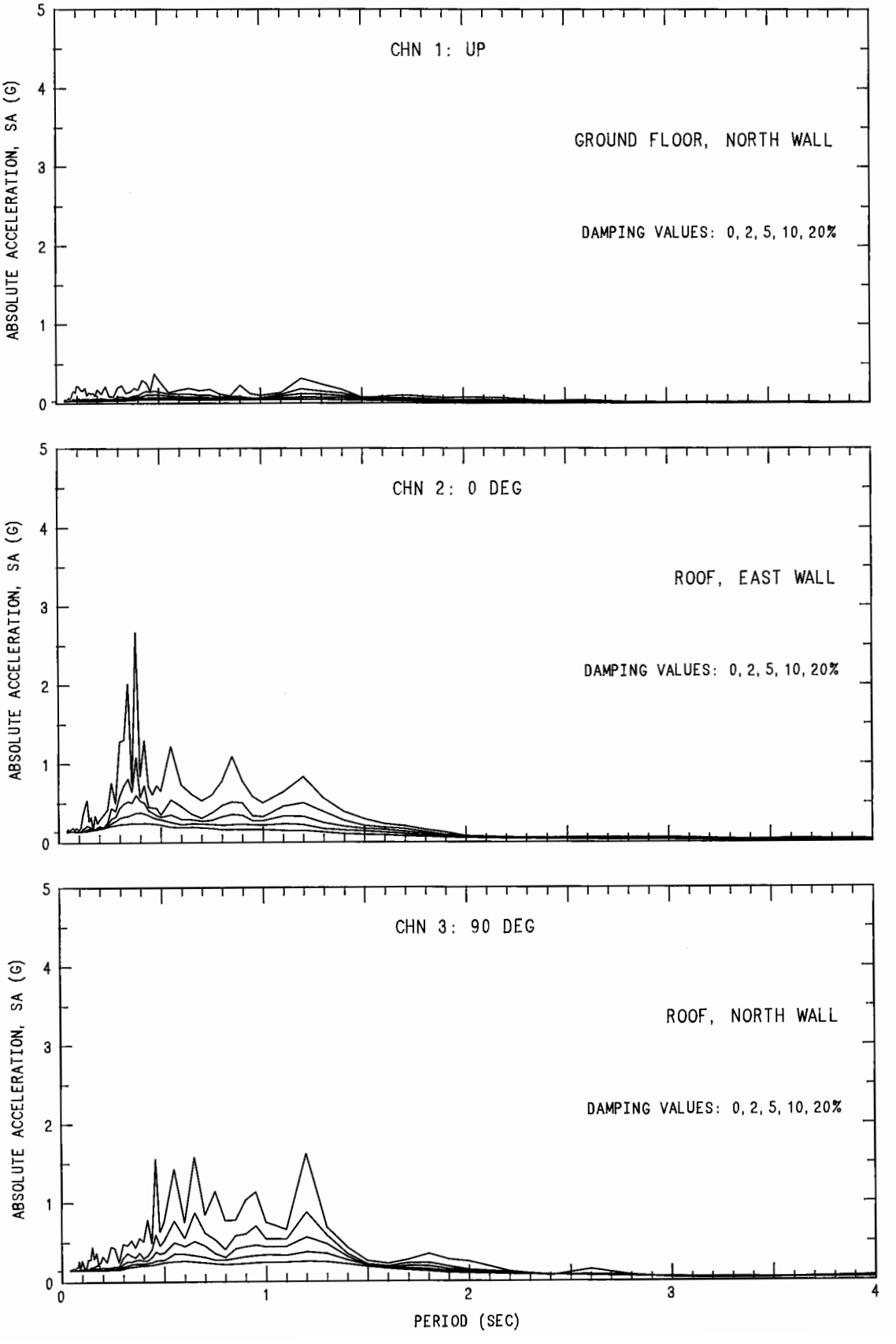


CHN 12: 0 DEG
GROUND FLOOR, NORTH WALL

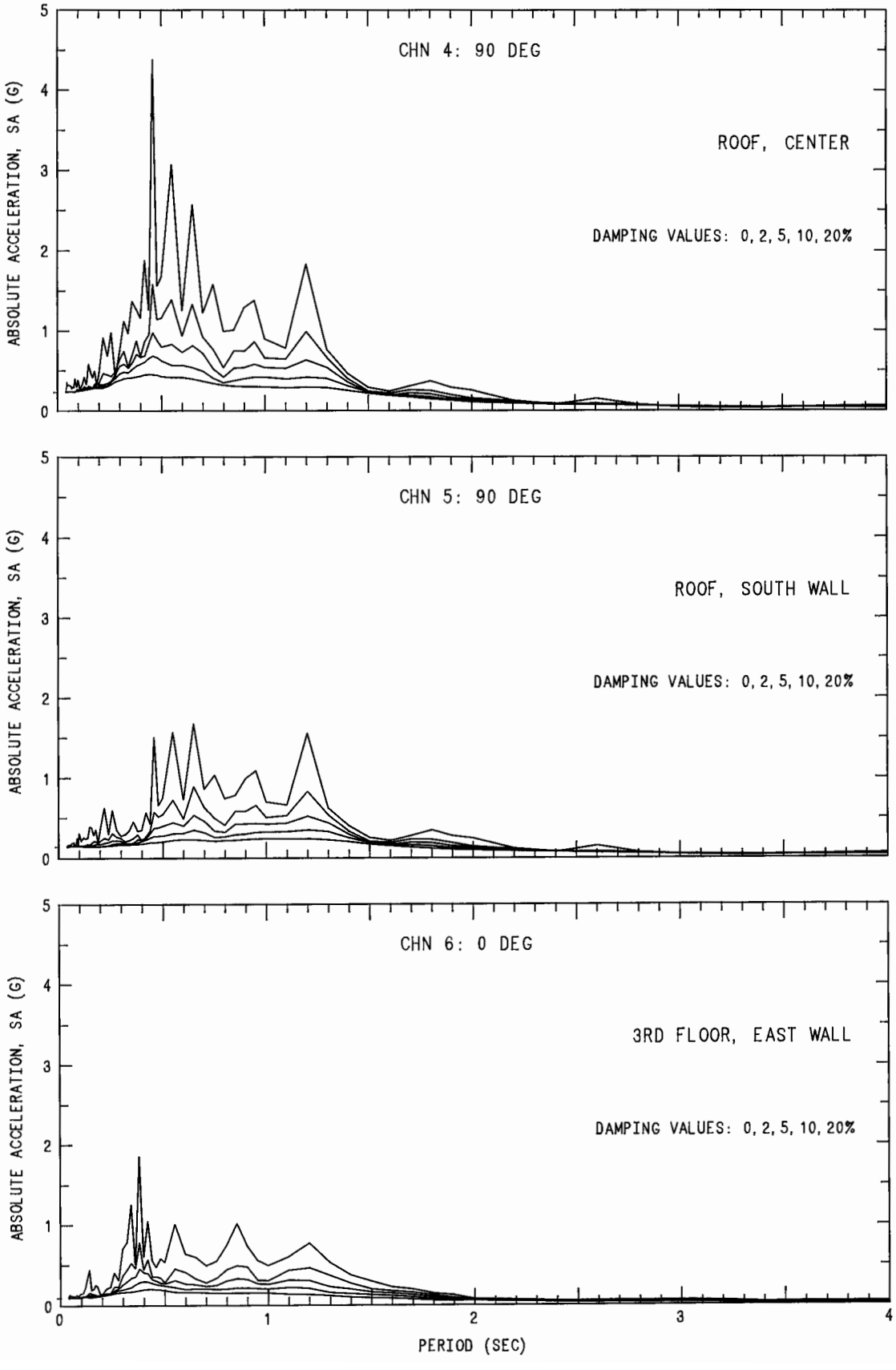


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348

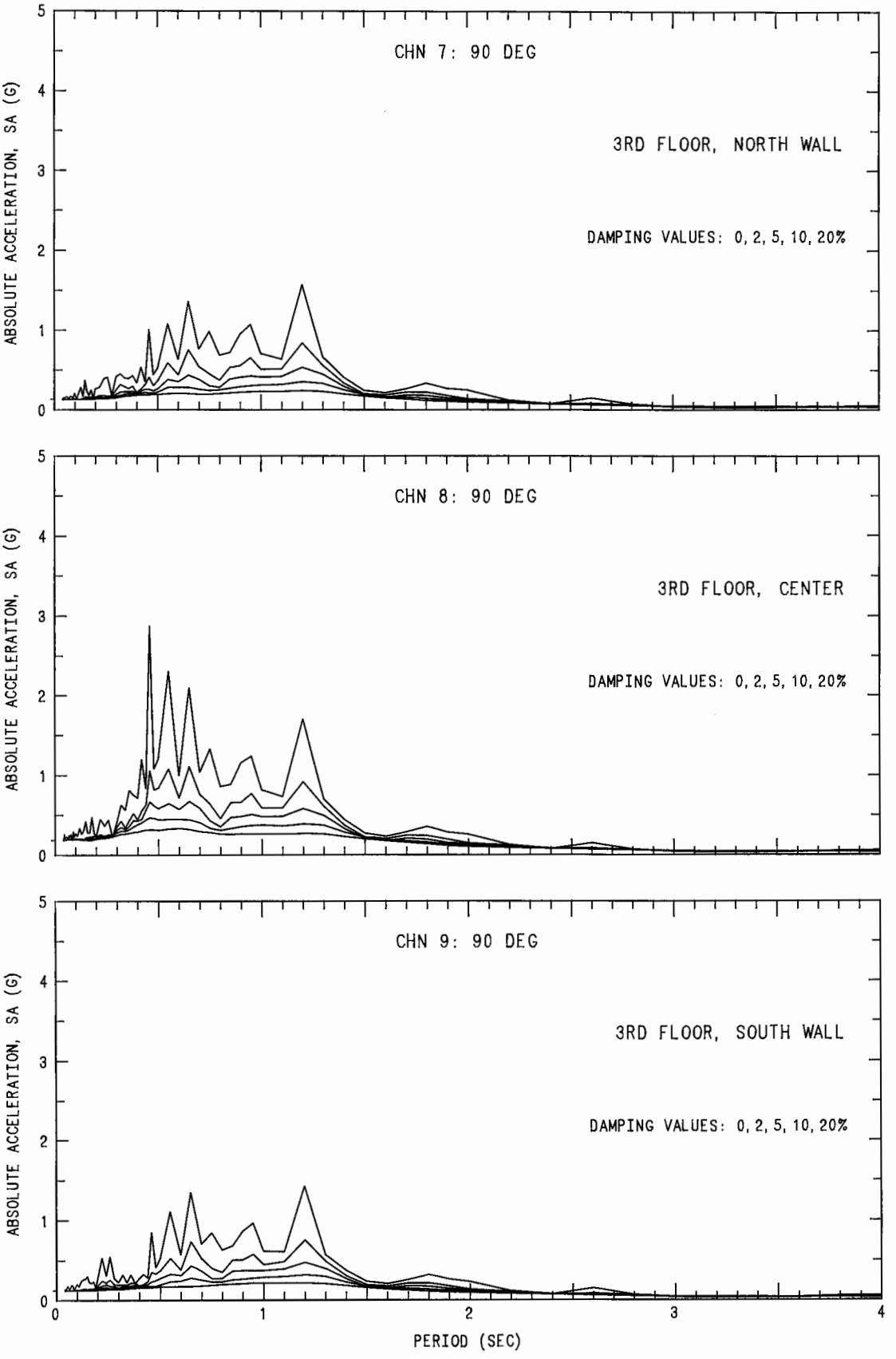
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58348-C0179-89298.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



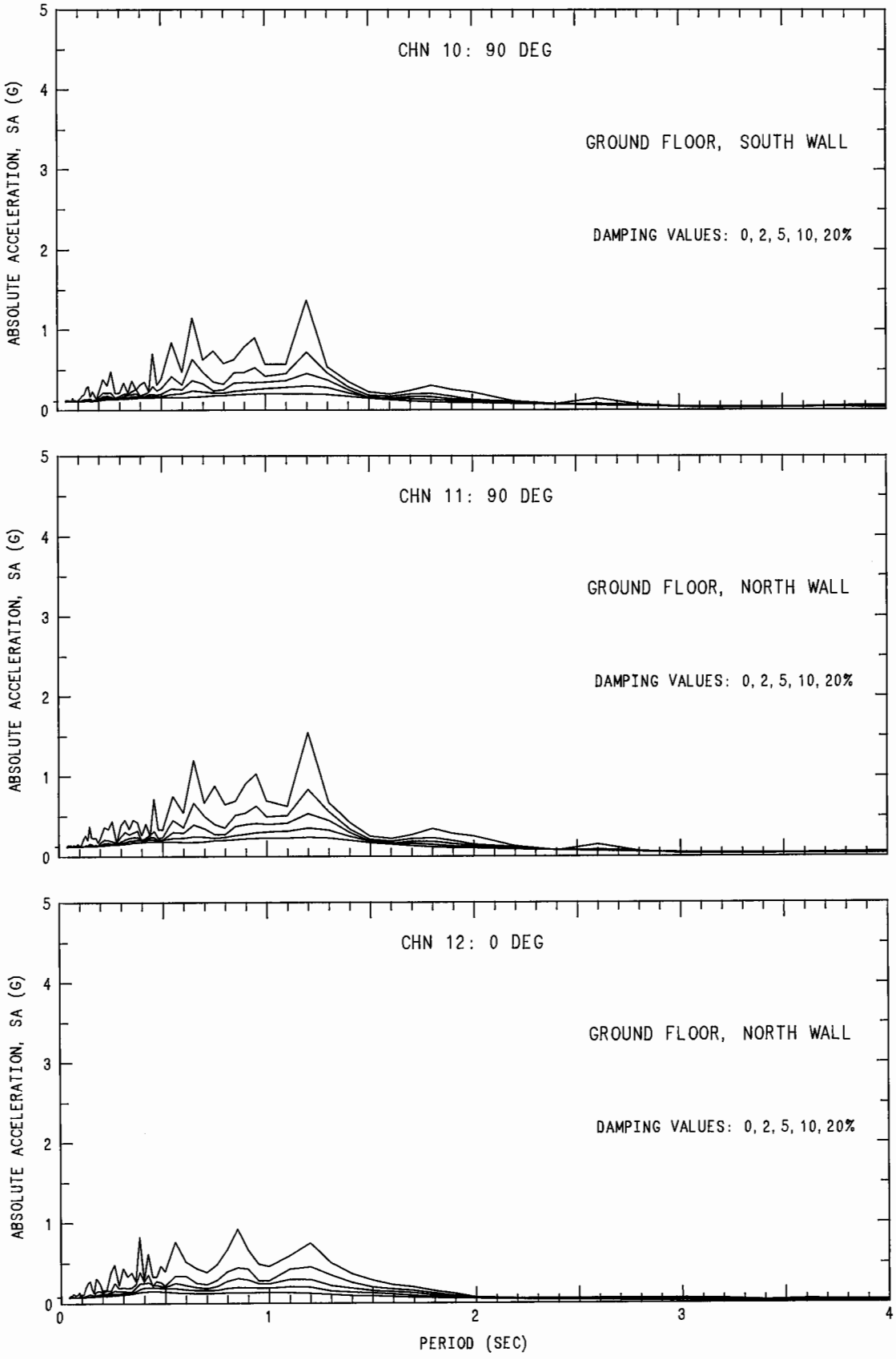
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58348-C0179-89298.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58348-C0179-89298.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



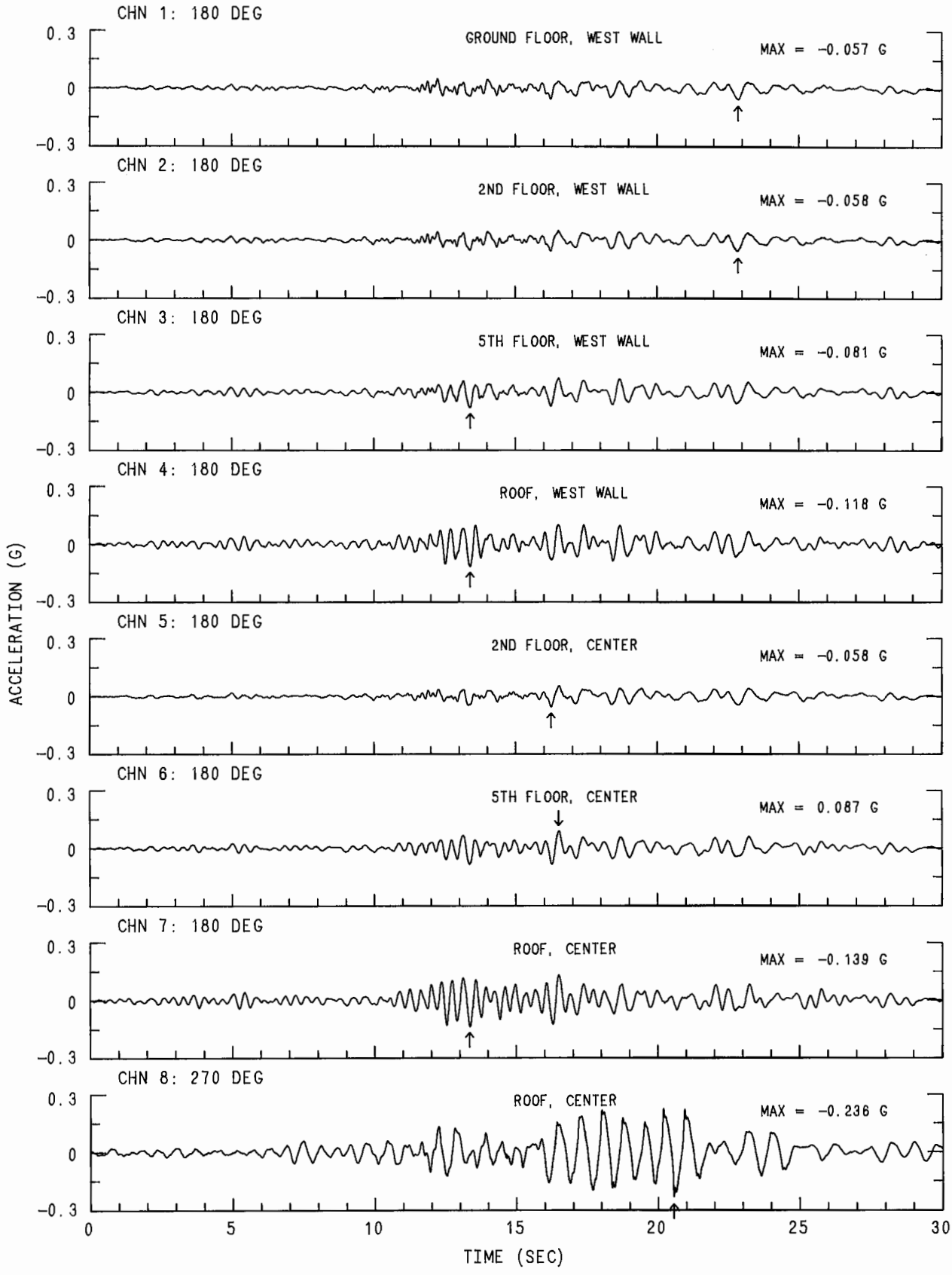
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
PLEASANT HILL - 3-STORY COMMERCIAL BLDG.: CSMIP S/N 348
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58348-C0179-89298.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

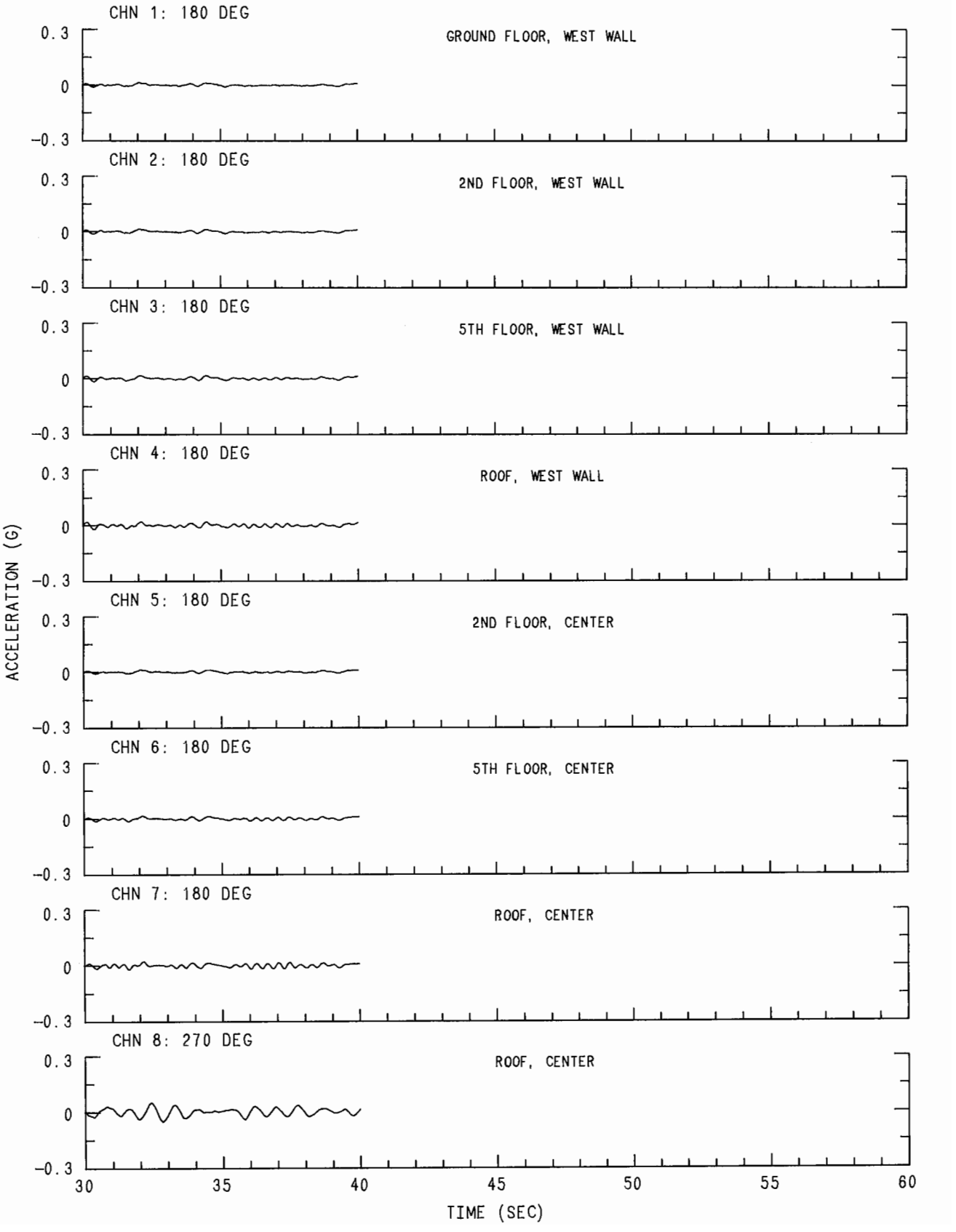
PHASE 1 ACCELERATION. RECORD ID: 58492-C0212-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

CONCORD – 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

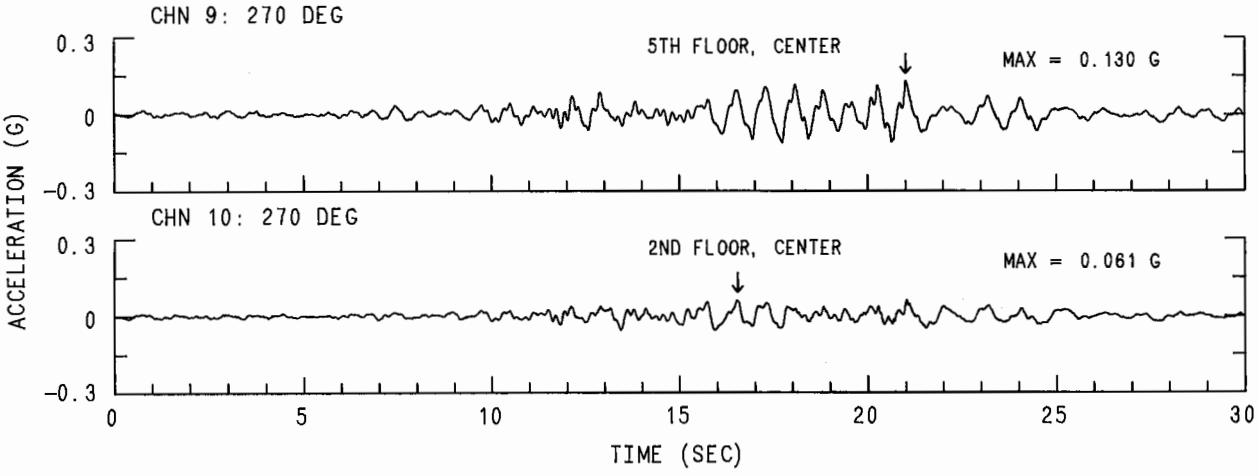
PHASE 1 ACCELERATION. RECORD ID: 58492-C0212-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

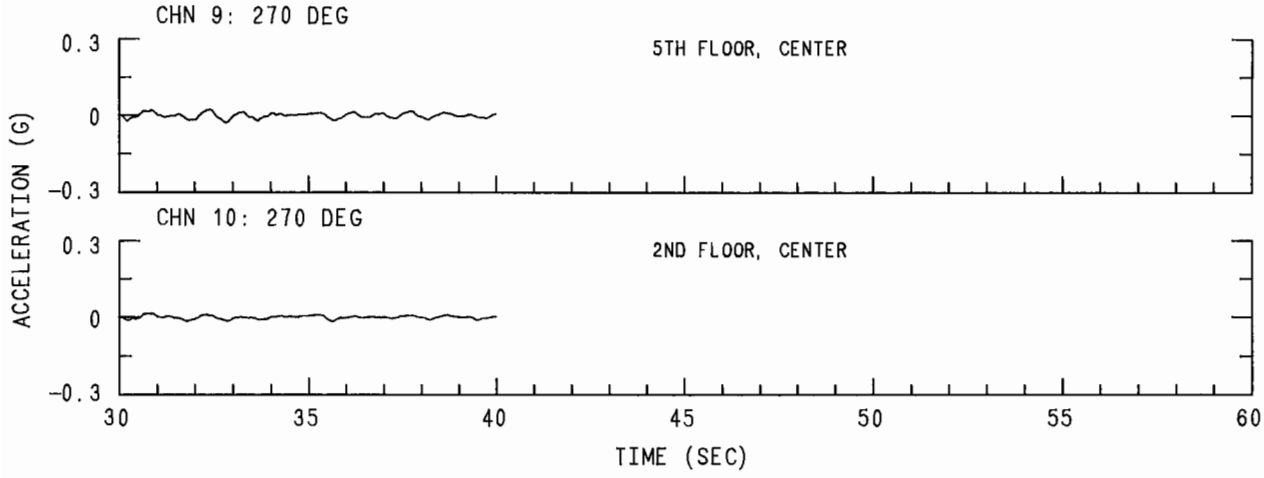
PHASE 1 ACCELERATION. RECORD ID: 58492-C0212-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

PHASE 1 ACCELERATION. RECORD ID: 58492-C0212-89298.01

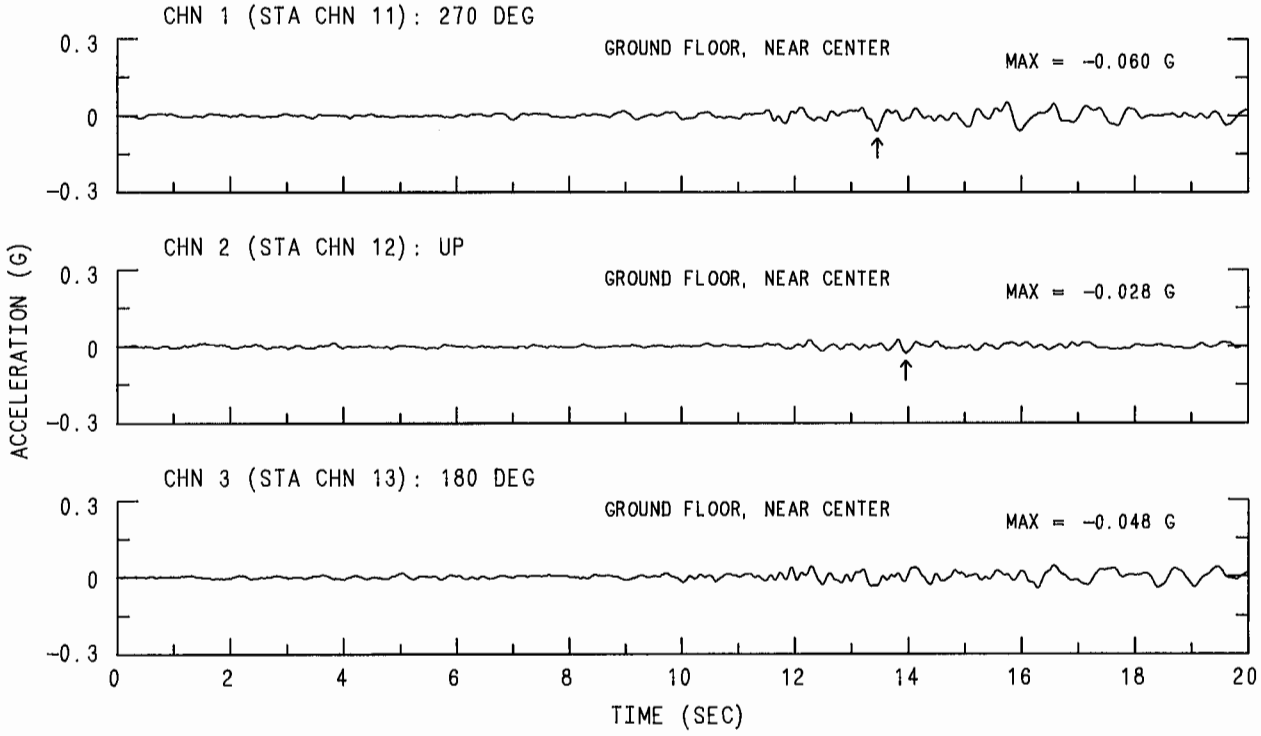


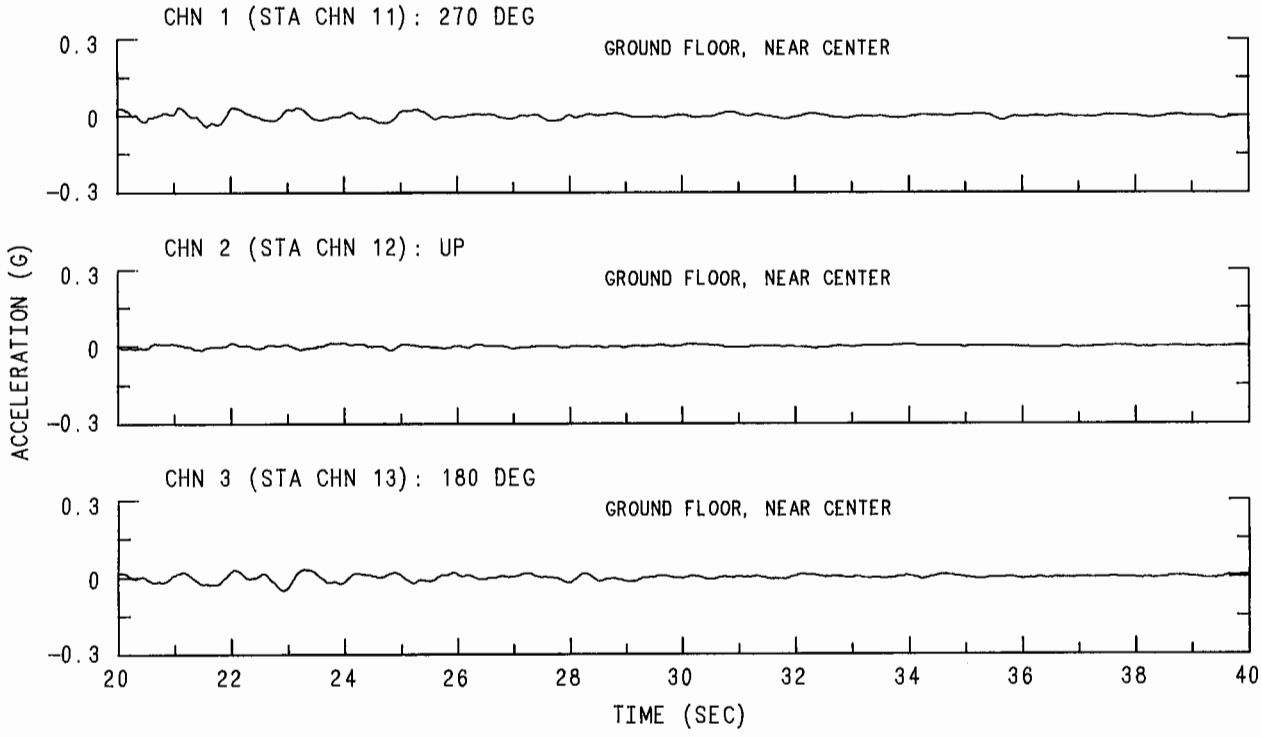
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT

CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

PHASE 1 ACCELERATION

RECORD ID: 58492-S2264-89298.01





SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

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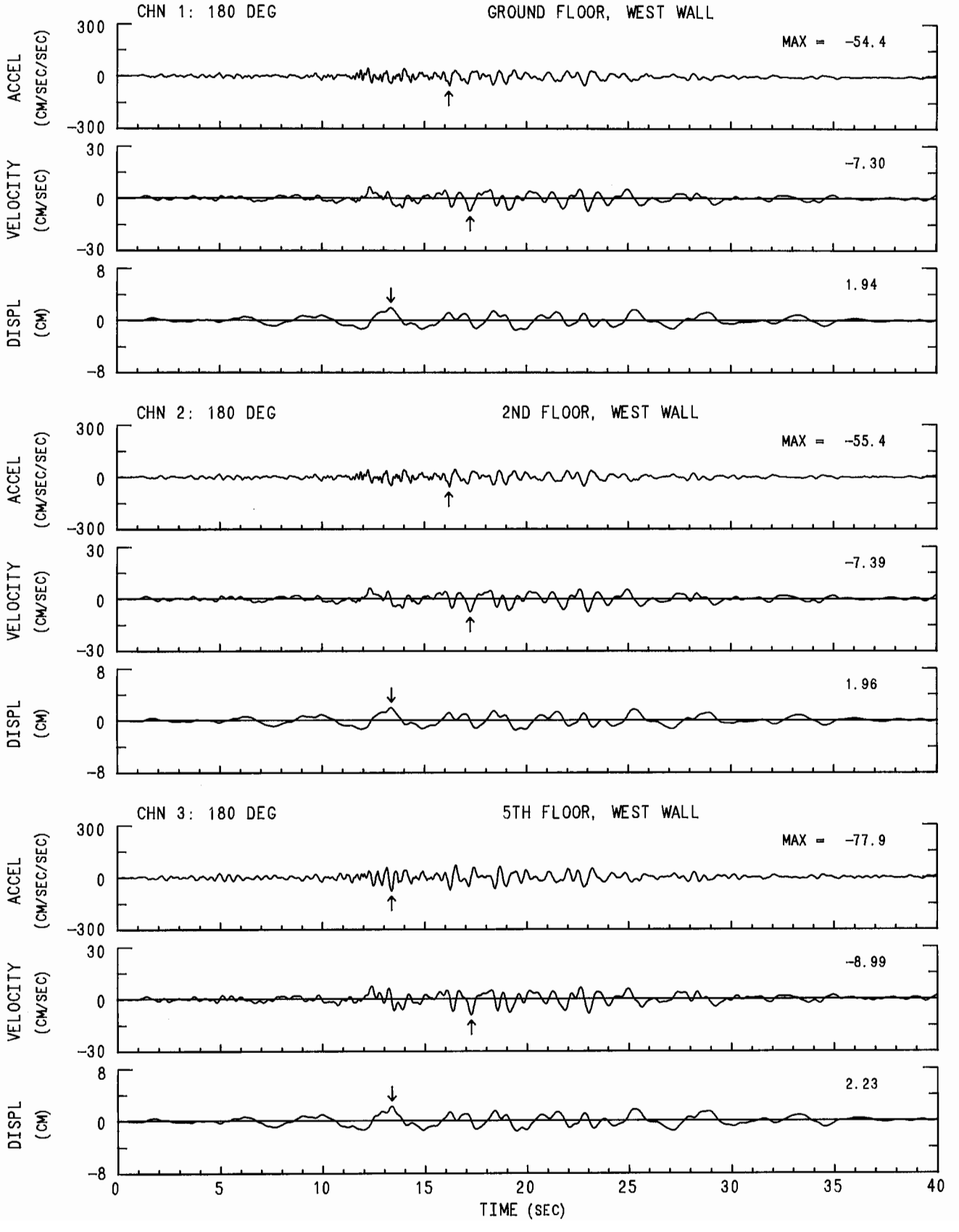
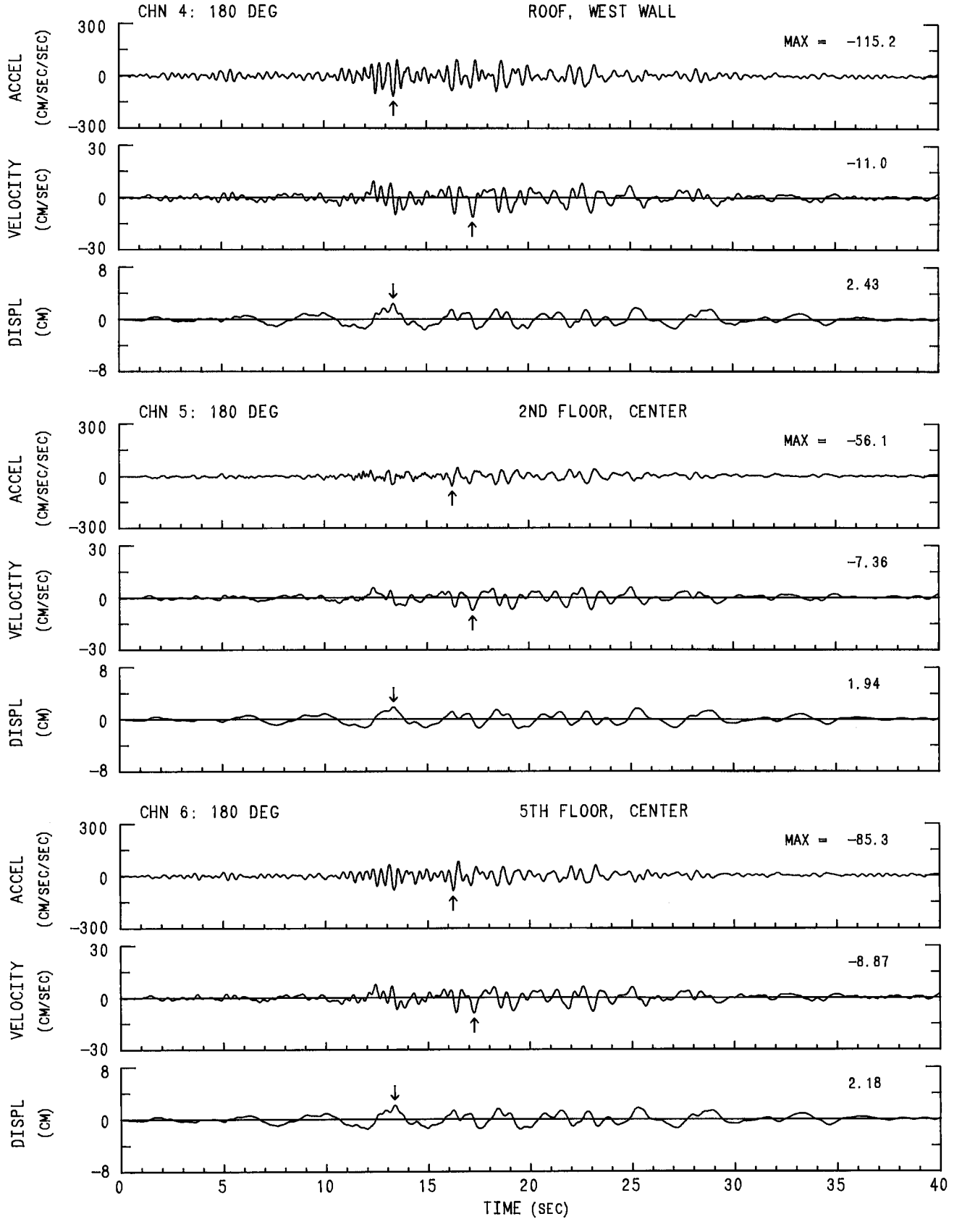


SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

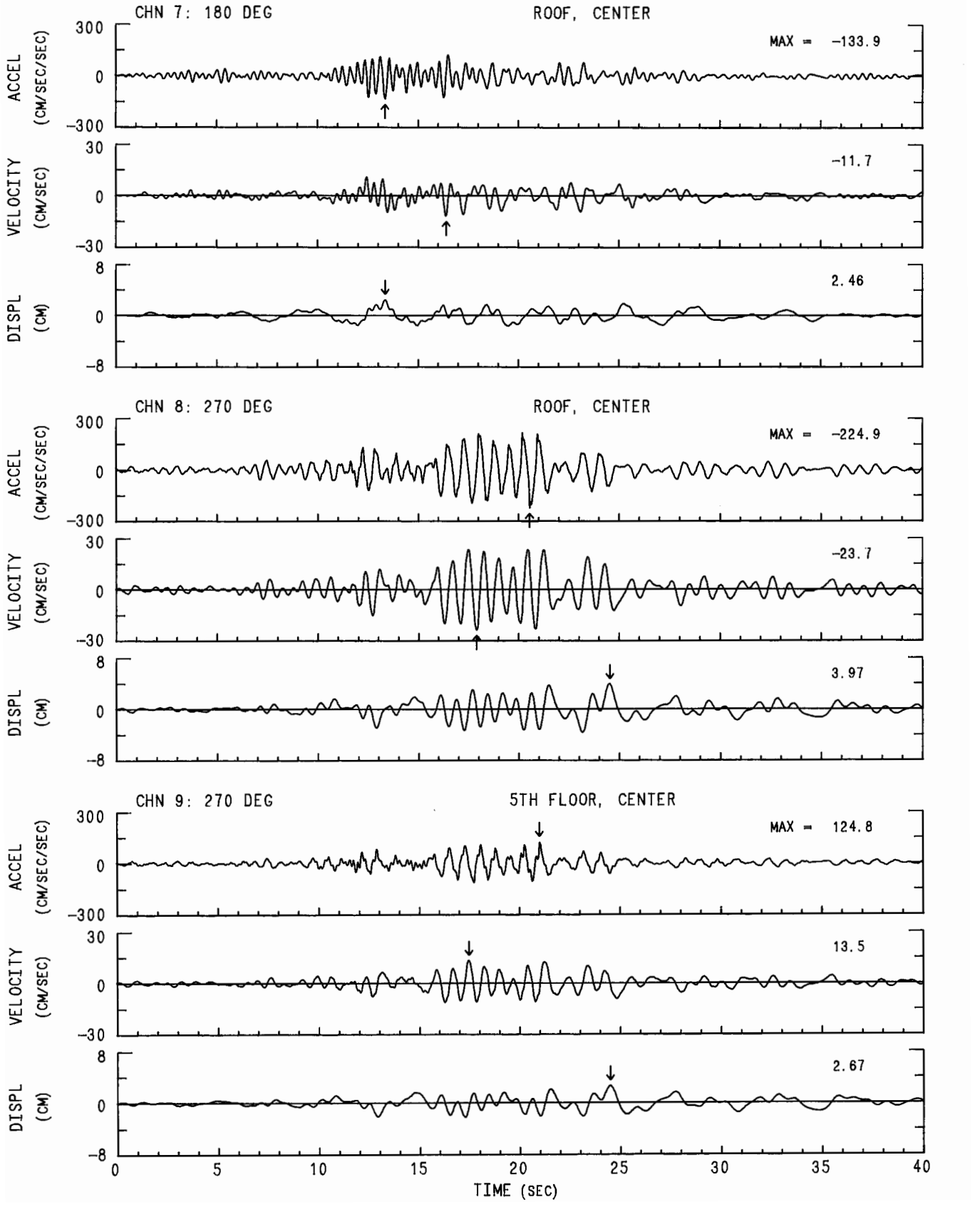
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58492-C0212-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

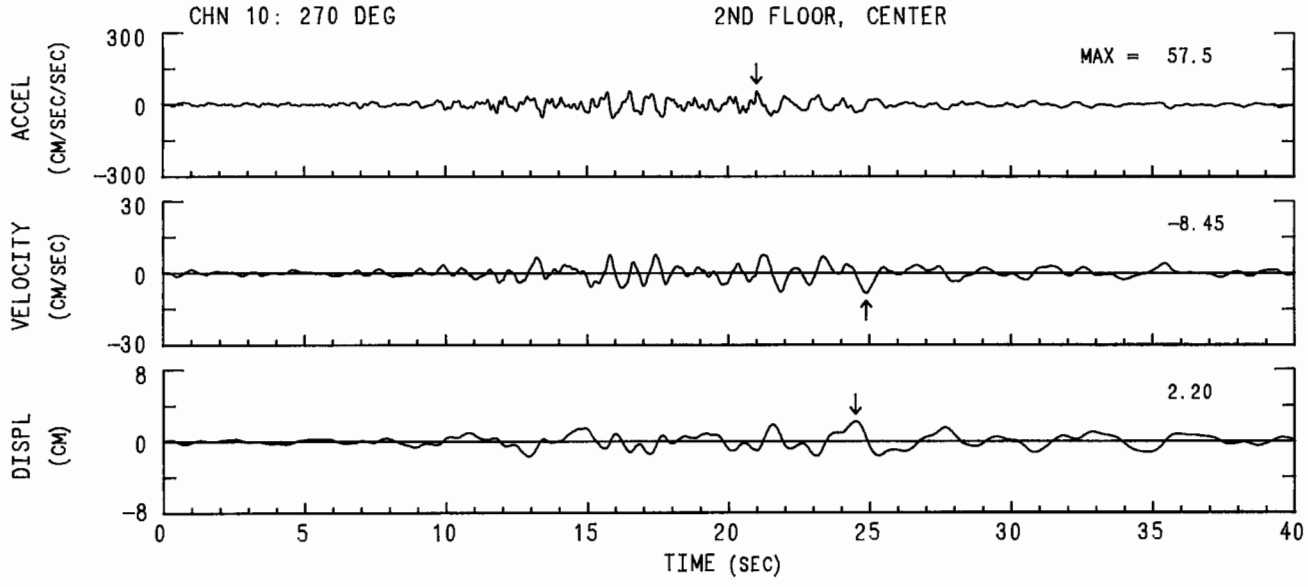
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58492-C0212-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

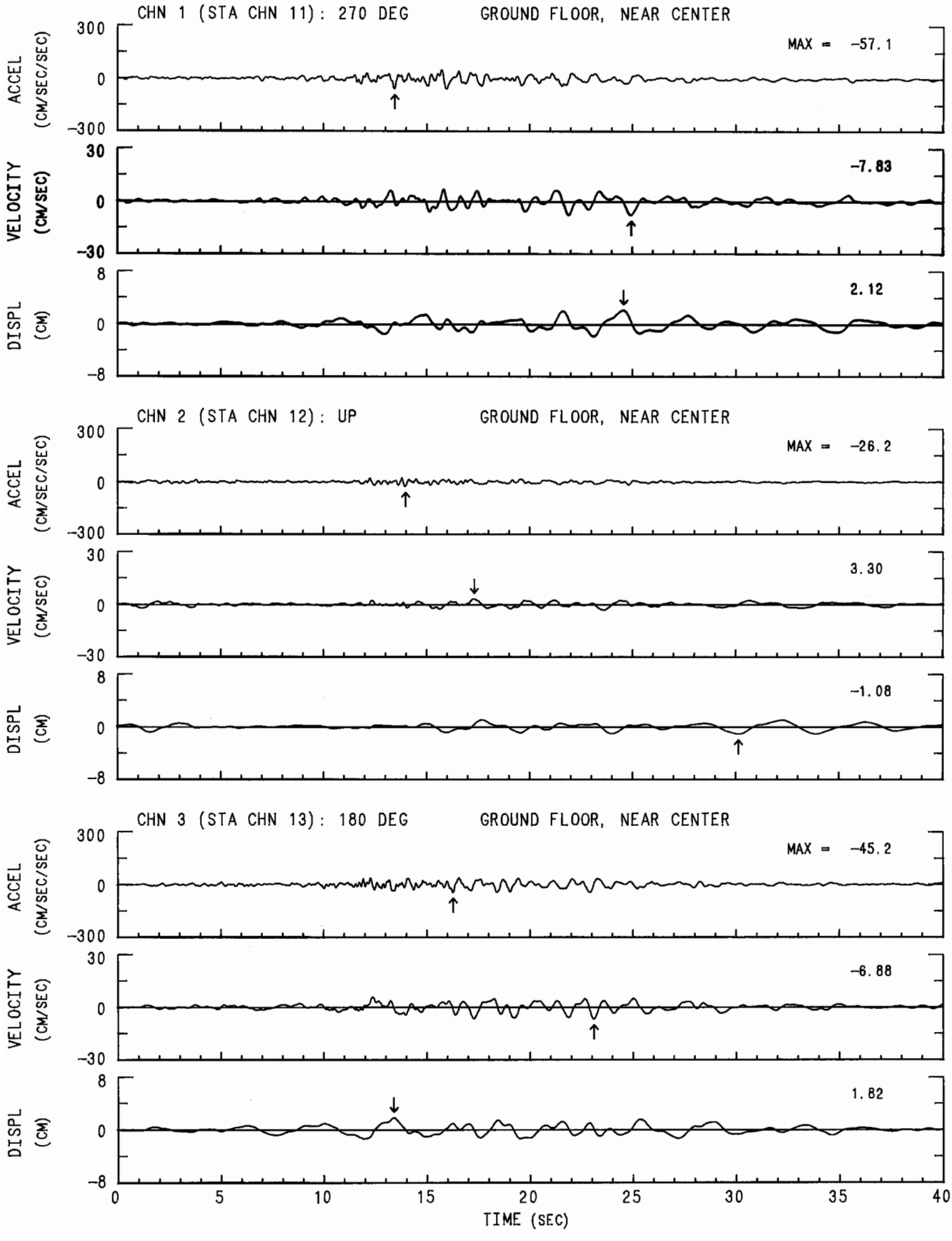
PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT

USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58492-C0212-89298.01



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

PHASE 2 FILTERED DATA: ACCELERATION, VELOCITY AND DISPLACEMENT
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC) RECORD ID: 58492-S2264-89298.01



CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

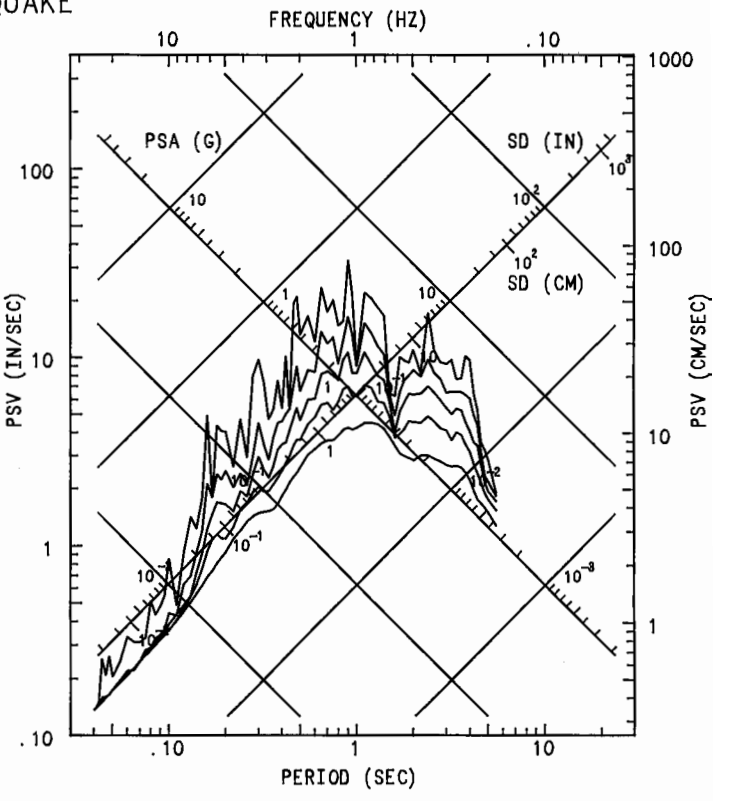
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

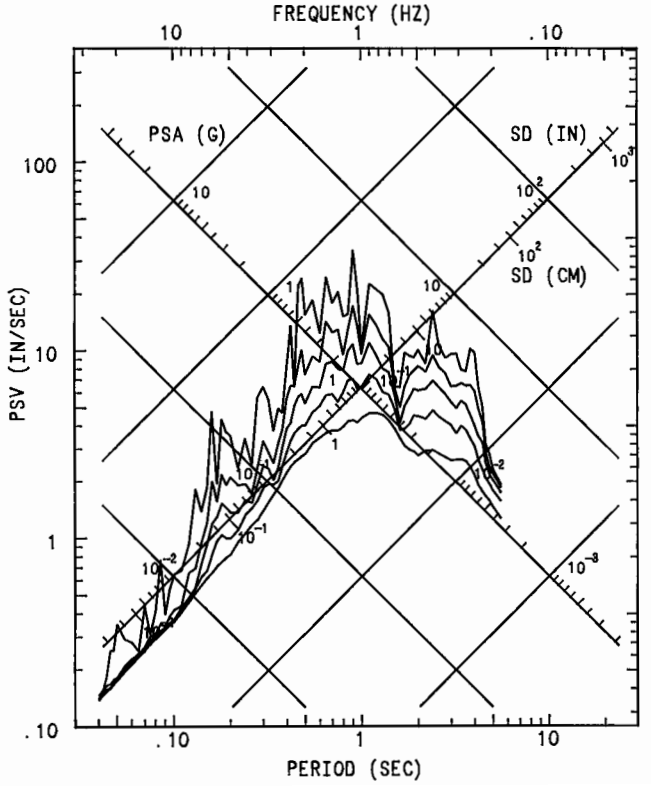
RECORD ID: 58492-C0212-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

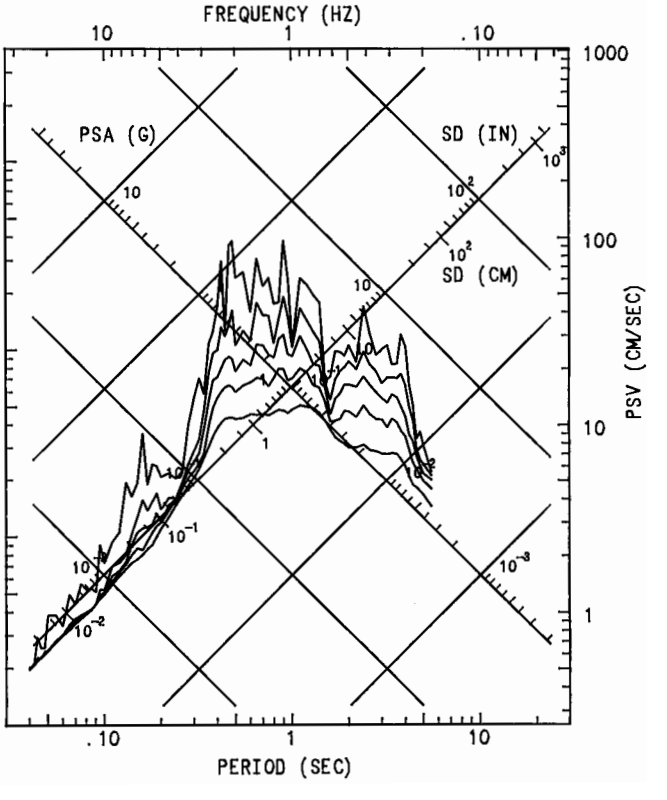
CHN 1: 180 DEG
GROUND FLOOR, WEST WALL



CHN 2: 180 DEG
2ND FLOOR, WEST WALL



CHN 3: 180 DEG
5TH FLOOR, WEST WALL



CONCORD - 8-STORY RESIDENTIAL BLDG. : CSMIP S/N 492

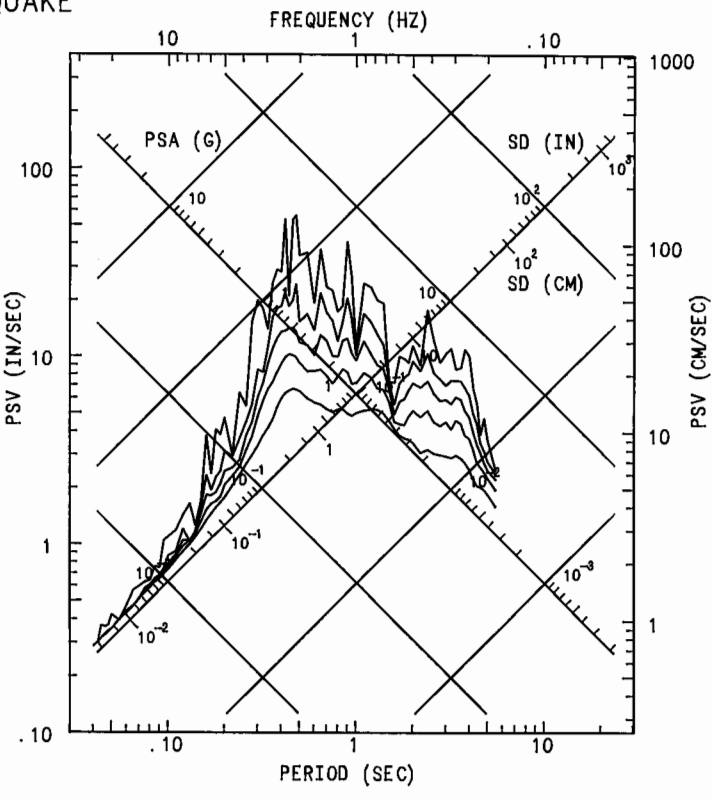
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

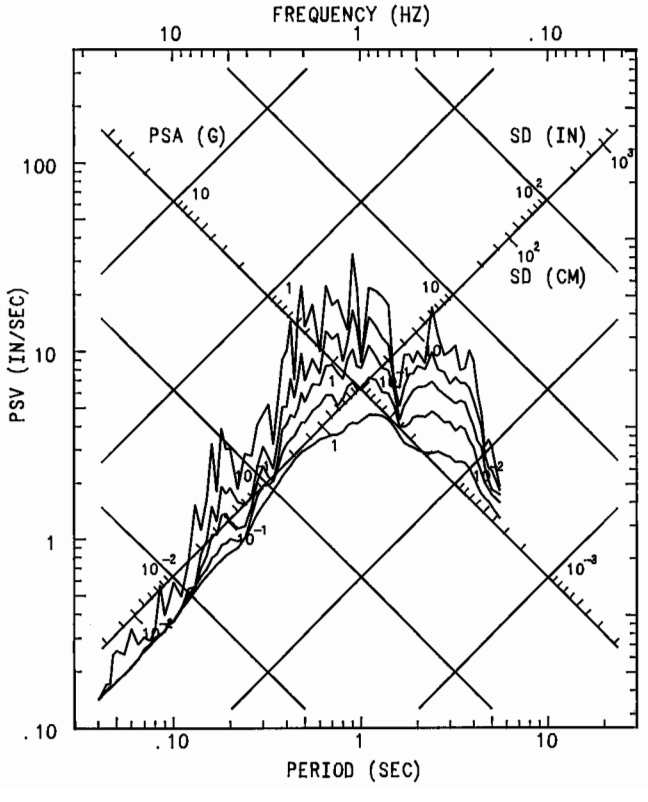
RECORD ID: 58492-C0212-89298.01

RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

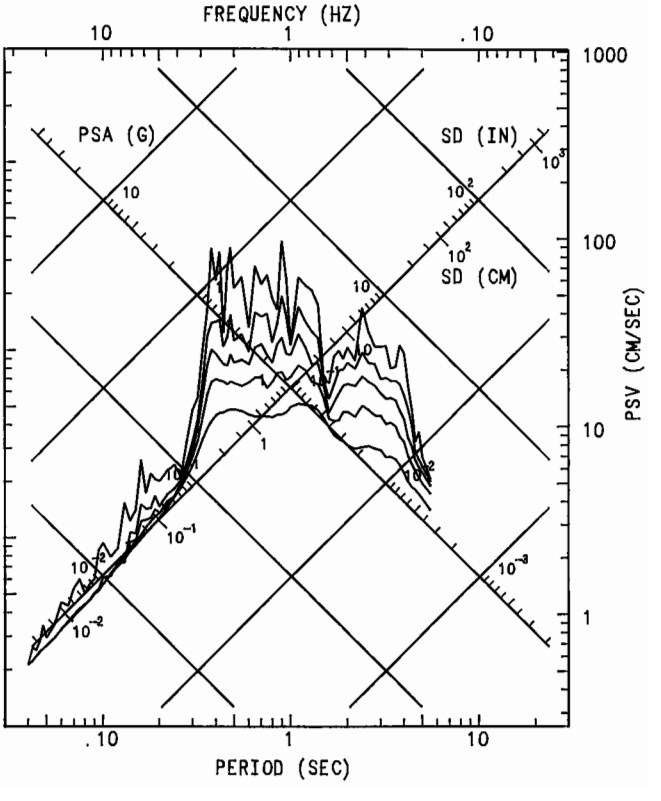
CHN 4: 180 DEG
ROOF, WEST WALL



CHN 5: 180 DEG
2ND FLOOR, CENTER



CHN 6: 180 DEG
5TH FLOOR, CENTER



CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

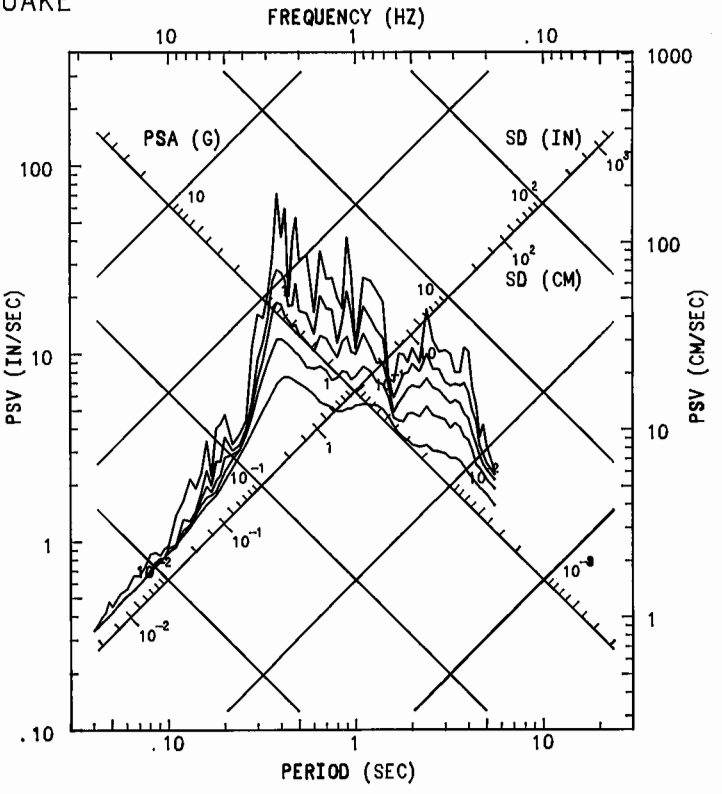
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

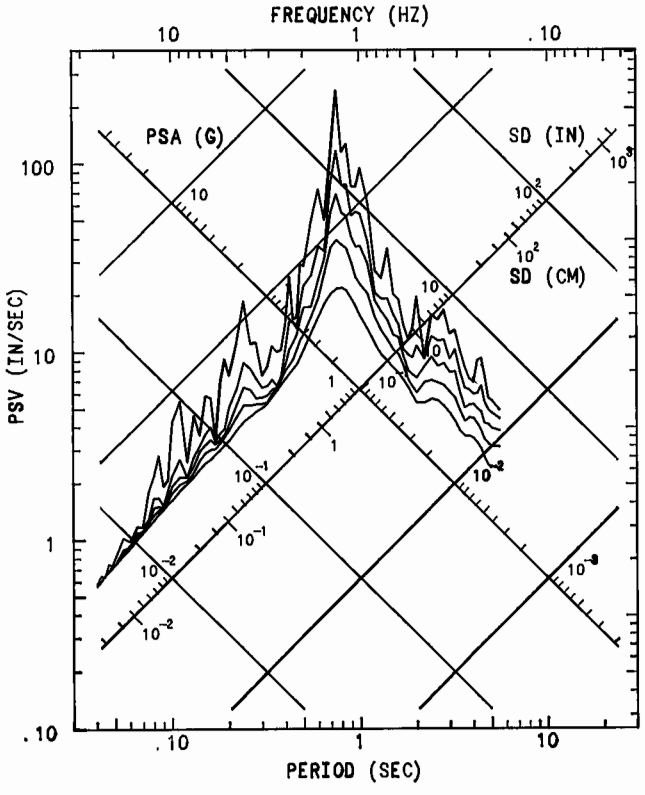
RECORD ID: 58492-C0212-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

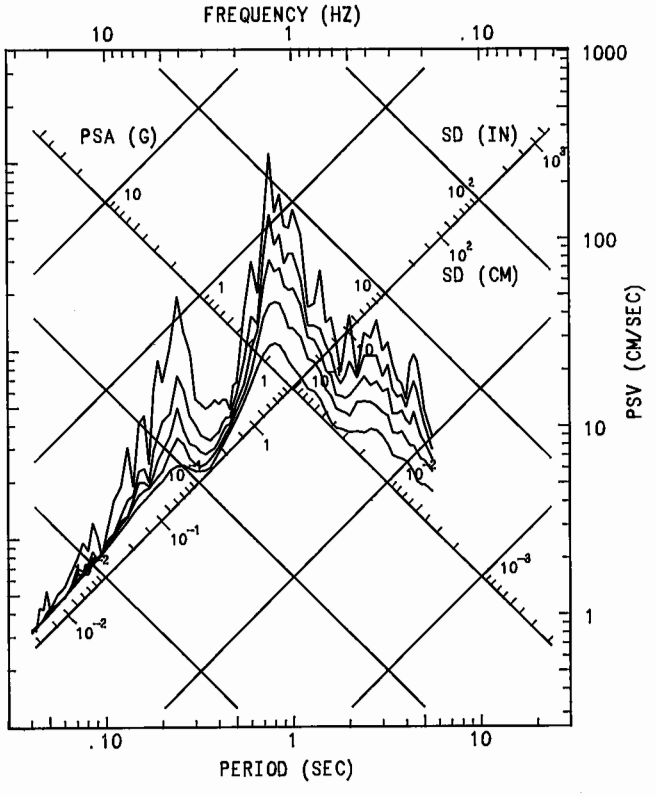
CHN 7: 180 DEG
ROOF, CENTER



CHN 8: 270 DEG
ROOF, CENTER



CHN 9: 270 DEG
5TH FLOOR, CENTER



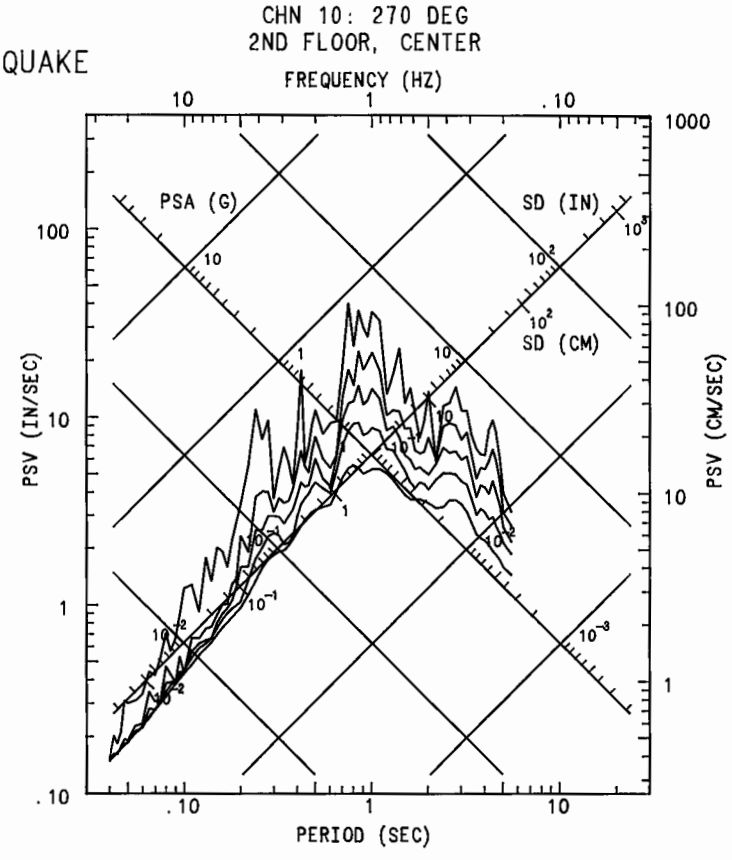
CONCORD - 8-STORY RESIDENTIAL BLDG. : CSMIP S/N 492

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

RECORD ID: 58492-C0212-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%



CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

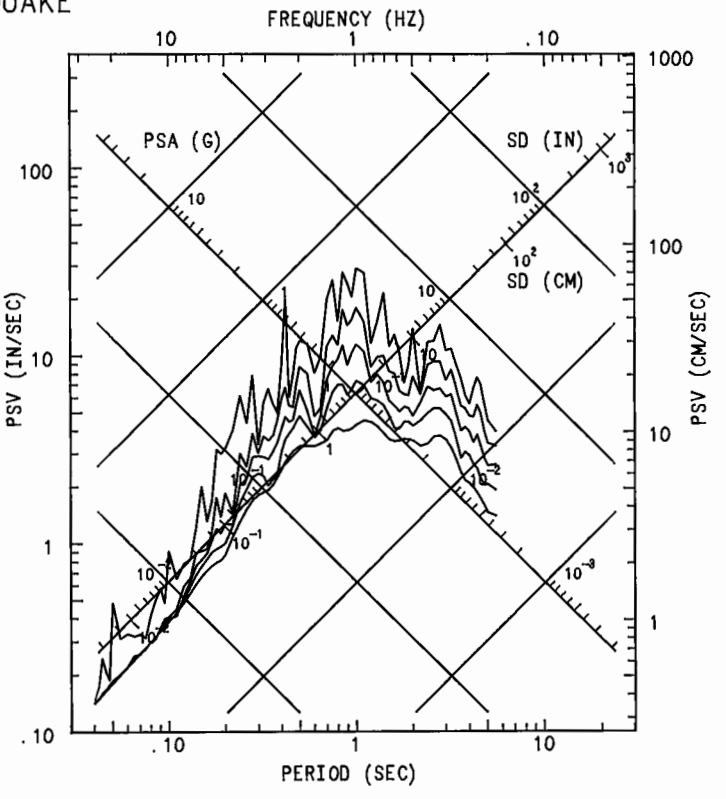
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE
OCTOBER 17, 1989 17:04 PDT

PHASE 3 DATA: RESPONSE SPECTRA
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ
(0.04 TO 4.90 SEC)

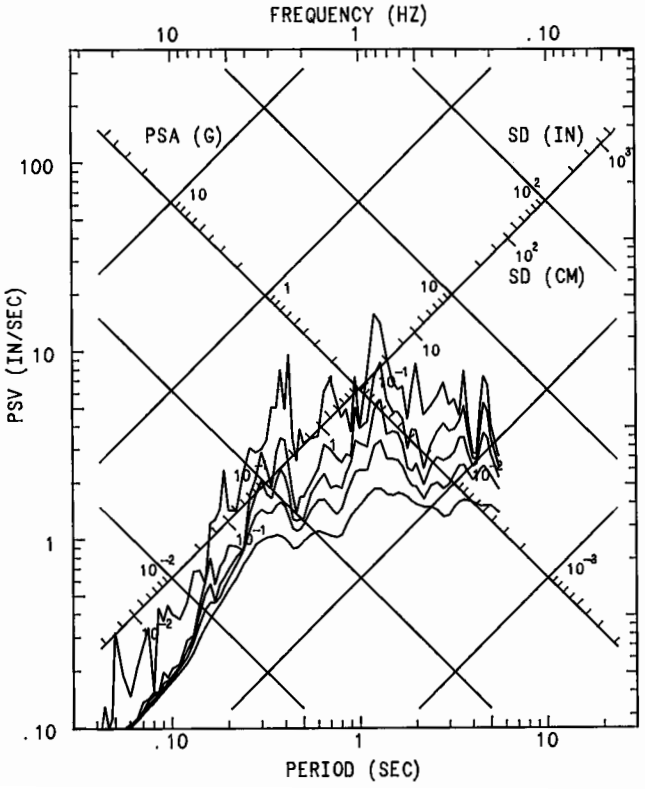
RECORD ID: 58492-S2264-89298.01

——— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

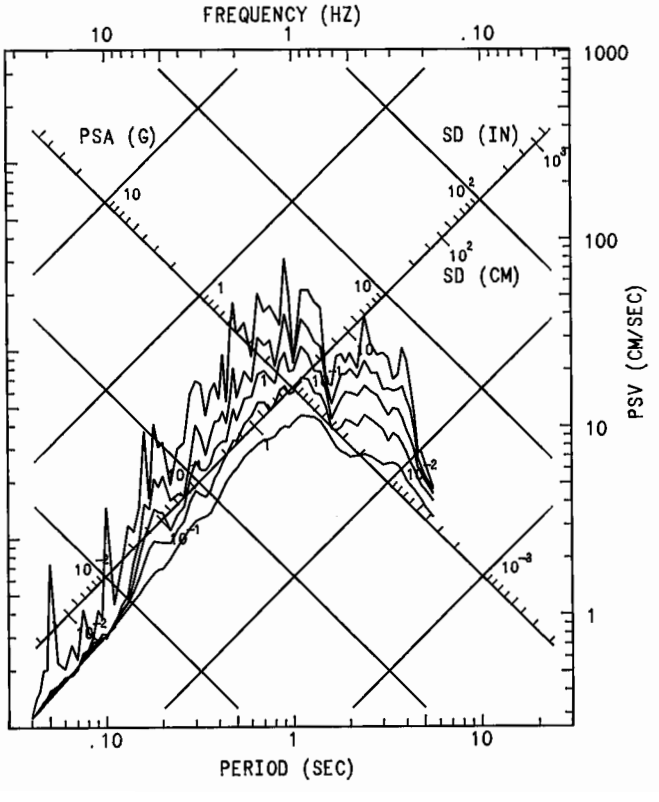
CHN 1 (STA CHN 11): 270 DEG
GROUND FLOOR, NEAR CENTER



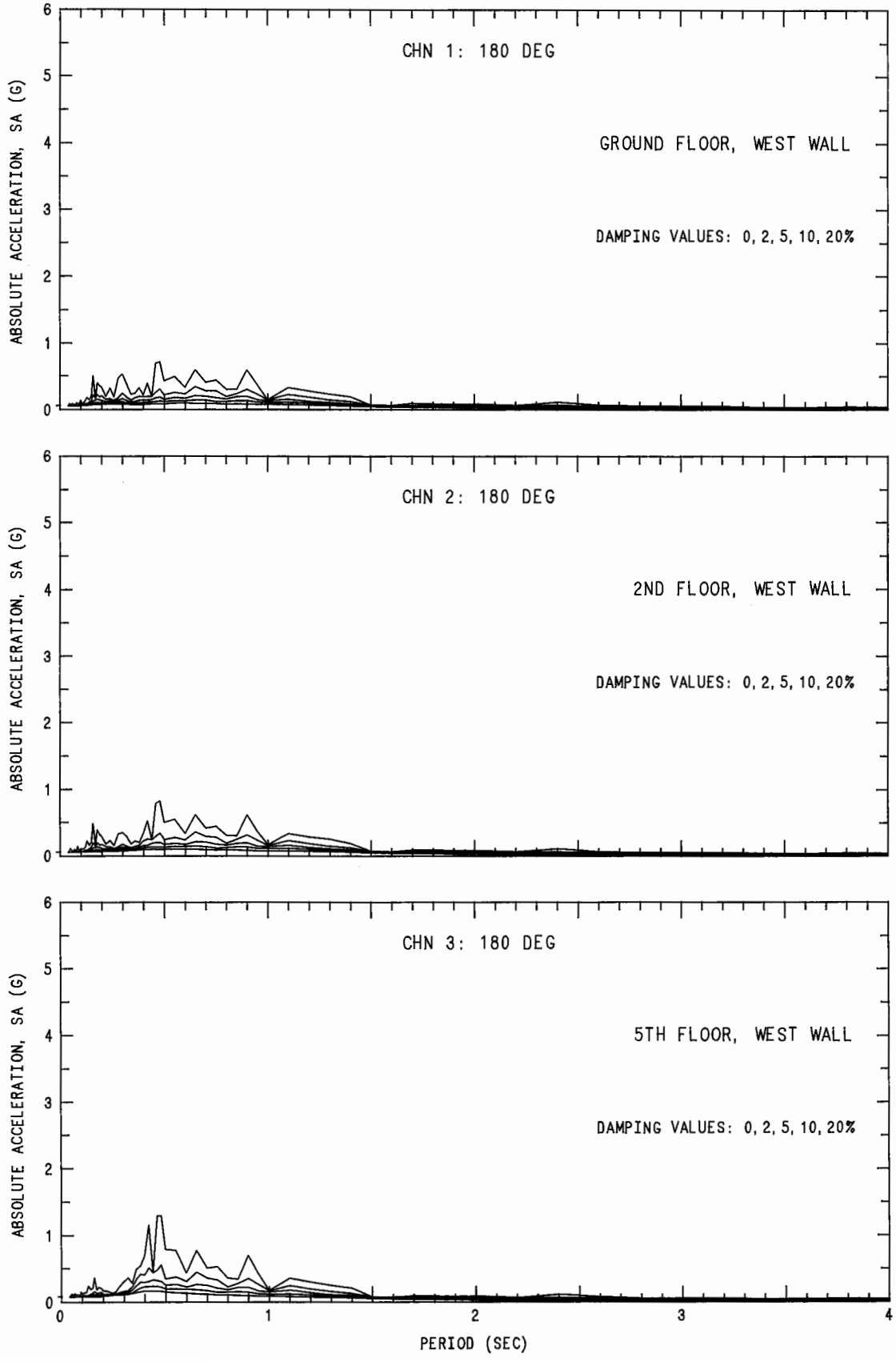
CHN 2 (STA CHN 12): UP
GROUND FLOOR, NEAR CENTER



CHN 3 (STA CHN 13): 180 DEG
GROUND FLOOR, NEAR CENTER



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD – 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58492-C0212-89298.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)



SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492
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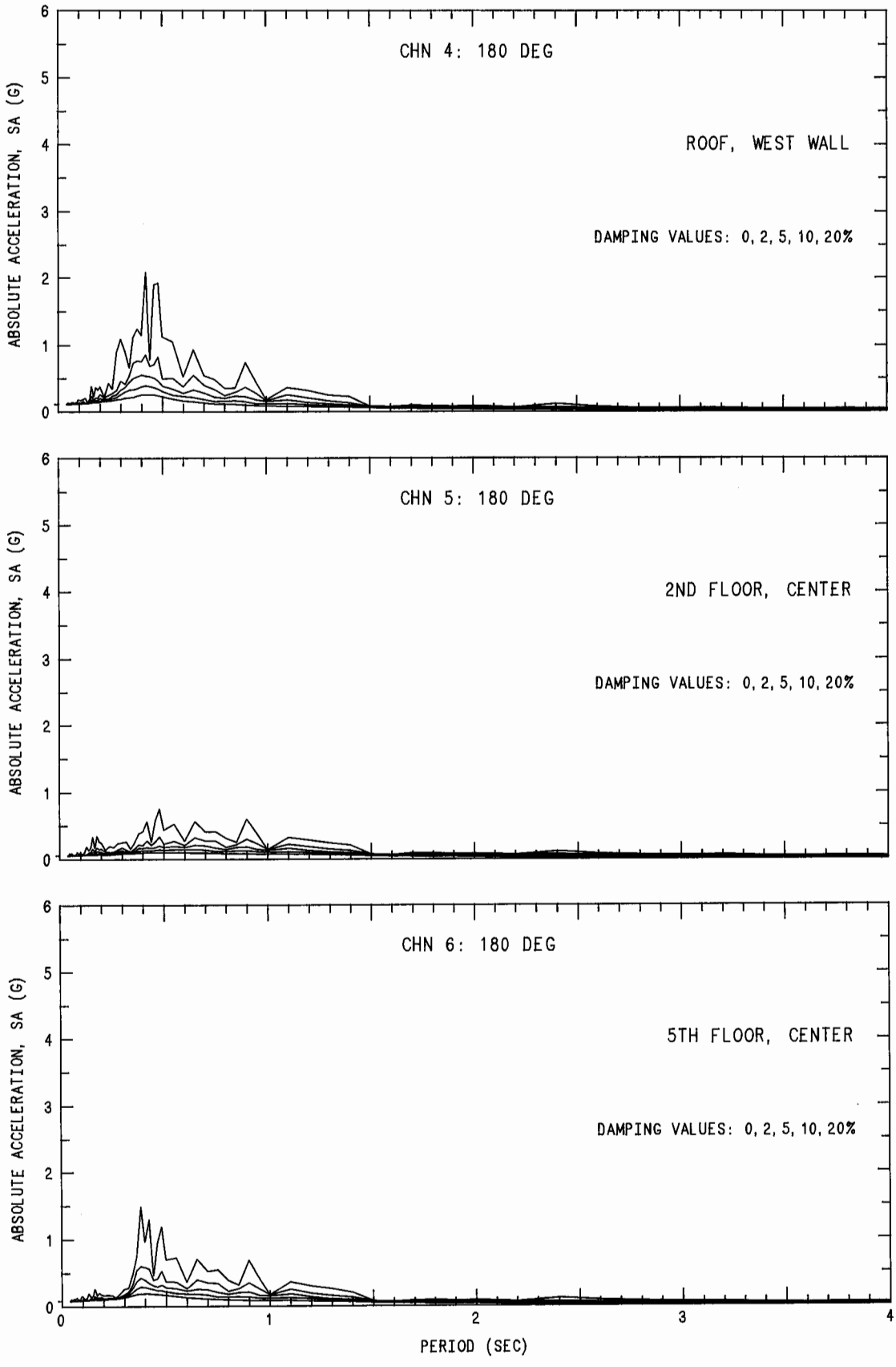

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492
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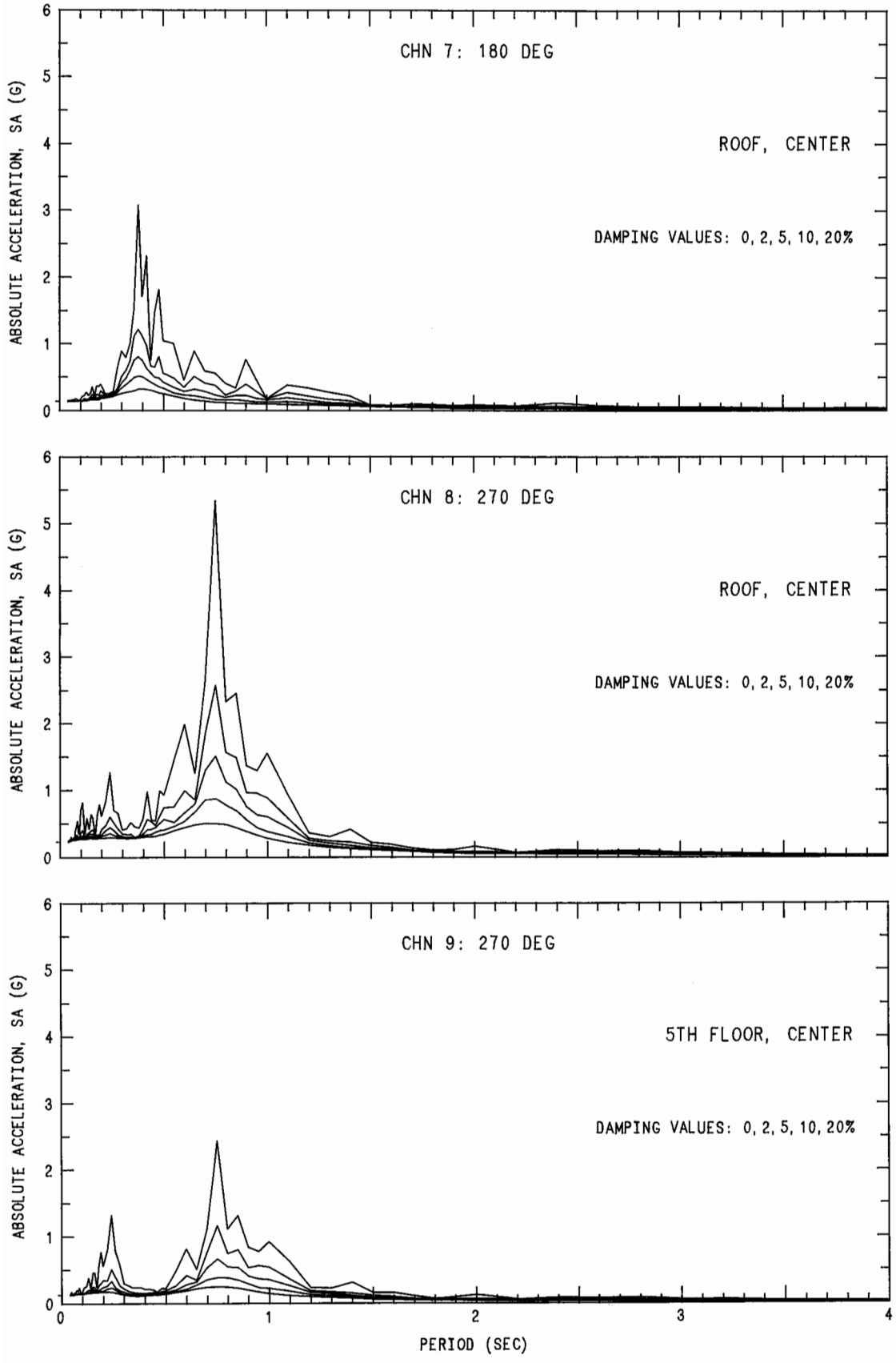

SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492

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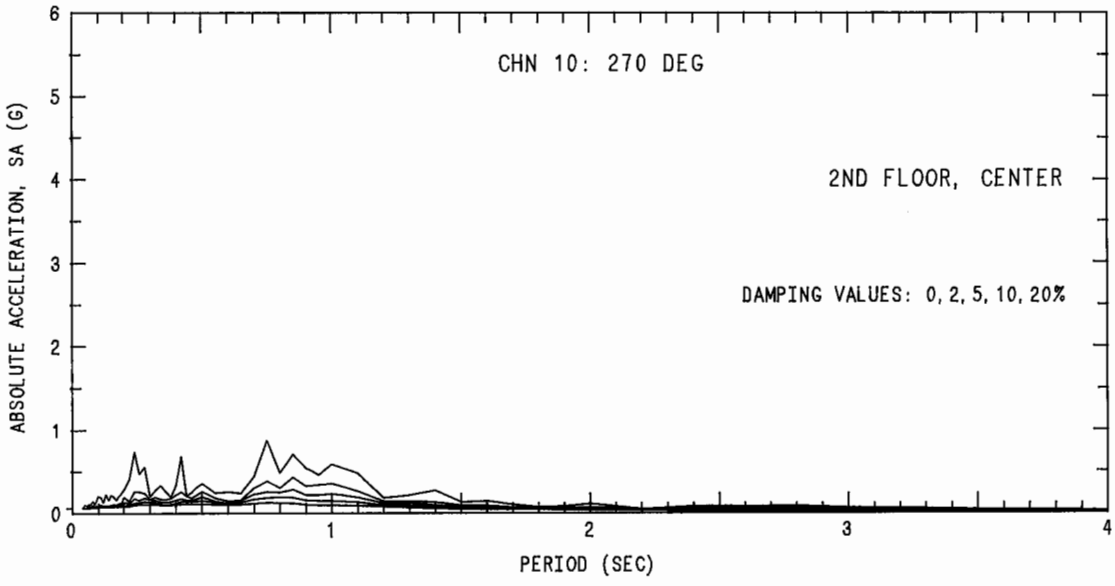
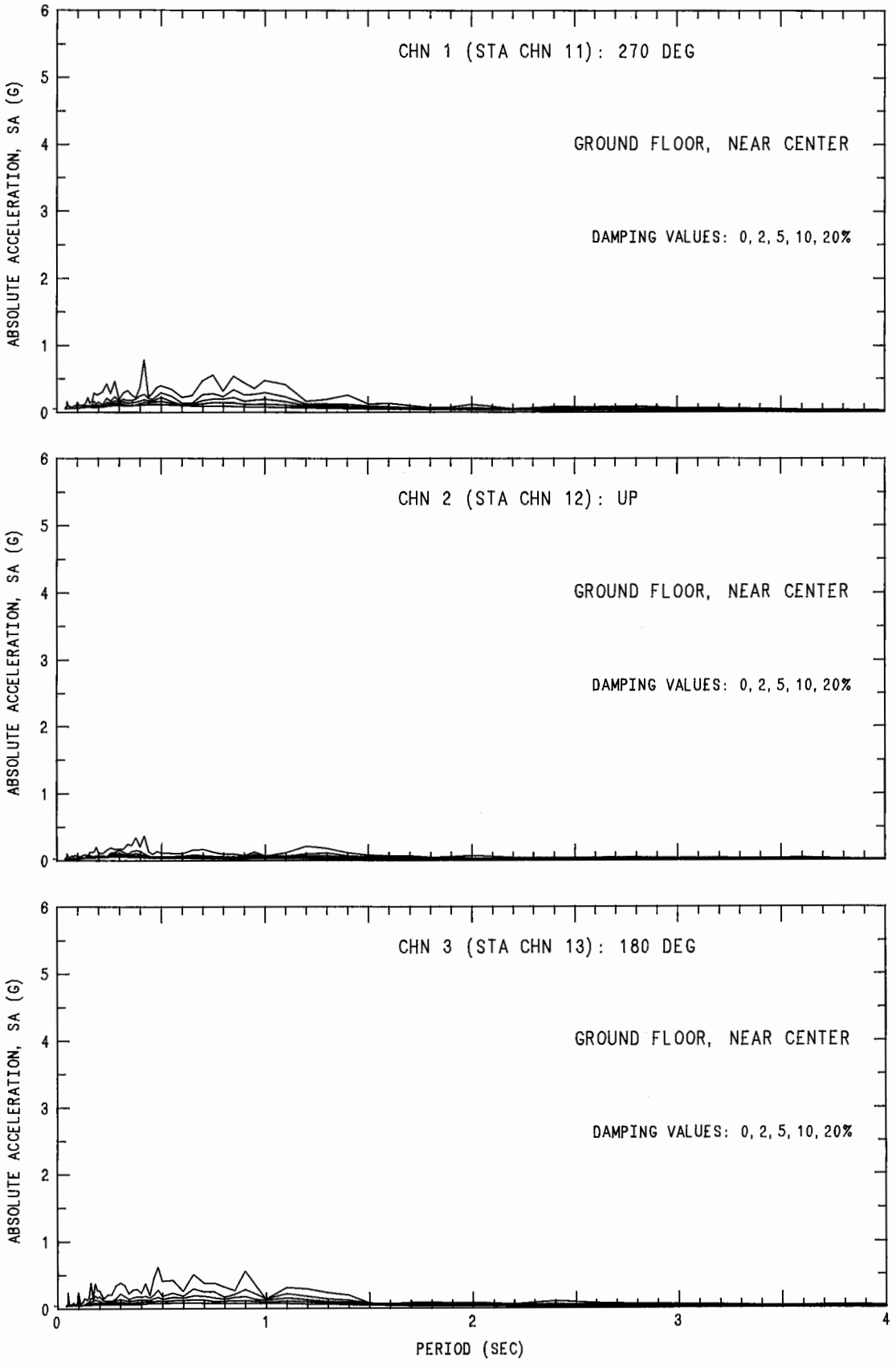
SANTA CRUZ MTNS (LOMA PRIETA) EARTHQUAKE OCTOBER 17, 1989 17:04 PDT
CONCORD - 8-STORY RESIDENTIAL BLDG.: CSMIP S/N 492
PHASE 3 DATA: RESPONSE SPECTRA RECORD ID: 58492-S2264-89298.01
USABLE DATA BANDWIDTH: 0.20 TO 23.6 HZ (0.04 TO 4.90 SEC)