LOS ANGELES CODE-INSTRUMENTED BUILDING RECORDS FROM THE NORTHRIDGE, CALIFORNIA EARTHQUAKE OF JANUARY 17 1994: PROCESSED RELEASE NO. 1

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RECORDS FROM CODE-INSTRUMENTED BUILDINGS

The California Strong Motion Instrumentation Program (CSMIP) is cooperating with the City of Los Angeles and other agencies to recover accelerograms from instruments required by the City's Building Code. The digitized and processed records obtained from instruments located in twenty Code buildings, that recorded the Northridge earthquake of January 17, 1994, are included in this first release. All twenty stations are located in the City of Los Angeles, mainly in the San Fernando Valley, West Los Angeles and Century City areas (Figure 1). Additional details and background on instrumentation required by the Uniform Building Code, as adopted by the City of Los Angeles, are discussed in a following section.

The name and station number for the twenty Code-instrumented buildings are:

Encino - Ventura Blvd #1	(C003)	Los Angeles - Wilshire Blvd #7	(C067)
Encino - Ventura Blvd #4	(C088)	Los Angeles - Wilshire Blvd #8	(C041)
Los Angeles - Ave of the Stars #2	(C016)	Los Angeles - Wilshire Blvd #9	(C009)
Los Angeles - McClintock Ave #2	(C022)	No. Hollywood - Magnolia Blvd #1	(C215)
Los Angeles - Wilshire Blvd #1	(C043)	Northridge - Oakdale Ave #1	(C001)
Los Angeles - Wilshire Blvd #2	(C040)	Sherman Oaks - Ventura Blvd #6	(C014)
Los Angeles - Wilshire Blvd #3	(C165)	Woodland Hills - Canoga Ave #2	(C133)
Los Angeles - Wilshire Blvd #4	(C168)	Woodland Hills - Canoga Ave #3	(C106)
Los Angeles - Wilshire Blvd #5	(C066)	Woodland Hills - Oxnard Blvd #4	(C246)
Los Angeles - Wilshire Blvd #6	(C042)	Woodland Hills - Ventura Blvd #5	(C206)

In this processed data report a building is referred to as "Encino - Ventura Blvd #1", for example, rather than disclosing the actual address or building name. This practice is consistent with the policy used at standard CSMIP instrumented buildings. For these buildings, CSMIP does not disclose the street address and building name so that conflicts are not created with the building owner.

Seven of the twenty buildings (Encino - Ventura Blvd #1, Los Angeles - McClintock Ave #2, Los Angeles - Wilshire #8, Los Angeles - Wilshire #9, Sherman Oaks - Ventura Blvd #6, Woodland Hills - Oxnard Blvd #4 and Woodland Hills - Ventura Blvd #5) had multiple three-component instruments, rather than a single instrument at the roof. Six of these buildings had an instrument at the base level that recorded the Northridge earthquake. Base level records may be used as an approximation for the ground motion that other buildings in the area experienced. Unfortunately, the basement instrument at Woodland Hills - Ventura Blvd #5, and the 9th floor and roof instruments at Encino - Ventura Blvd #1 did not record this earthquake.

The instrument orientation relative to the building has been obtained for all of the instruments and is noted on the plots. (By convention, 'East' means building east, which would be parallel to Wilshire Blvd, for example, and not cardinal East). In buildings with multiple instruments all of the instruments are oriented in the same direction, so the horizontal components can be compared between floors. However, in general, the multiple instruments may not be interconnected and probably did not start recording at the same time.

The following table lists the Code-instrumented building in alphabetical order. This table lists the number of the page on which the processed data is

reproduced, station name, station number, number of channels that recorded the Northridge earthquake, operational instrument location, the total number of building stories above ground and maximum horizontal acceleration values.

Page No.	Station Name	Sta. Number	No. Chns	Instrument Location	No. Stories	Max. Accel. Base (g)	Max. Accel. Struct. (g)
7	Encino - Ventura Blvd #1	C003	3	Grnd (arcade)	17	0.54	
11	Encino - Ventura Blvd #4	C088	3	Roof	13		0.44
15	Los Angeles - Ave of the Stars #2	C016	3	Roof	36		0.35
19	Los Angeles - McClintock Ave #2	C022	9	Grnd, 6th, Roof	10	0.31	0.33
31	Los Angeles - Wilshire Blvd #1	C043	3	Roof	23		0.63
35	Los Angeles - Wilshire Blvd #2	C040	3	Roof	17		0.54
49	Los Angeles - Wilshire Blvd #3	C165	3	Roof	17		0.28
43	Los Angeles - Wilshire Blvd #4	C168	3	Roof	21		0.37
47	Los Angeles - Wilshire Blvd #5	C066	3	Roof	14		0.30
51	Los Angeles - Wilshire Blvd #6	C042	3	Roof	17		0.29
55	Los Angeles - Wilshire Blvd #7	C067	3	Roof	13		0.34
59	Los Angeles - Wilshire Blvd #8	C041	9	Lobby, 9th, Roof	18	0.19	0.33
71	Los Angeles - Wilshire Blvd #9	C009	9	Bsmt, 11th, Roof	21	0.24	0.20
83	North Hollywood - Magnolia Blvd #1	C215	3	Roof	12		0.74
87	Northridge - Oakdale Ave #1	C001	3	Roof	10		0.46
91	Sherman Oaks - Ventura Blvd #6	C014	9	Bsmt, 8th, Roof	15	0.47	0.48
103	Woodland Hills - Canoga Ave #2	C133	3	Roof	17		0.49
107	Woodland Hills - Canoga Ave #3	C106	3	Roof	15		1.04
111	Woodland Hills - Oxnard Blvd #4	C246	9	Bsmt, 6th, Roof	12	0.44	0.33
123	Woodland Hills - Ventura Blvd #5	C206	6	6th, Roof	12		0.55

In contrast to standard CSMIP instrumented buildings, nominal sensitivity (1.8 cm/g), natural frequency (25 Hz) and damping (0.6) values have been used to process the records recovered from Code-instrumented buildings. Nominal values were used in the processing, to expedite the analysis of these records while the actual values are being determined. In addition, because the actual values are expected to be within 10% of the nominal values the difference in the processed results should not be significant for the early analysis of these records. Additional details on accelerogram digitizing and processing will be presented in a final CSMIP processed data report.

For each instrument four processed data plots are shown. These plots are presented in the following order:

1. Phase 2 (Vol. 2) data: Instrument and baseline-corrected acceleration, velocity and displacement. The data for first 40 seconds are plotted with equal scaling for all channels. The Usable Data Bandwidth used in the processing is indicated on the plots. In general, the Usable Data Bandwidth of the Phase 2 data is from 0.17 to 23.6 Hz (0.04 to 6.0 sec) and is indicated on the plots (see Definition of Usable Data Bandwidth). Three channels of acceleration, velocity and displacement are plotted on one page.

2. Phase 1 (Vol. 1) data: Uncorrected accelerations. Acceleration for the full processed length is plotted with each channel individually scaled; three channels are plotted on one page. In general, the full processed length is 60 seconds.

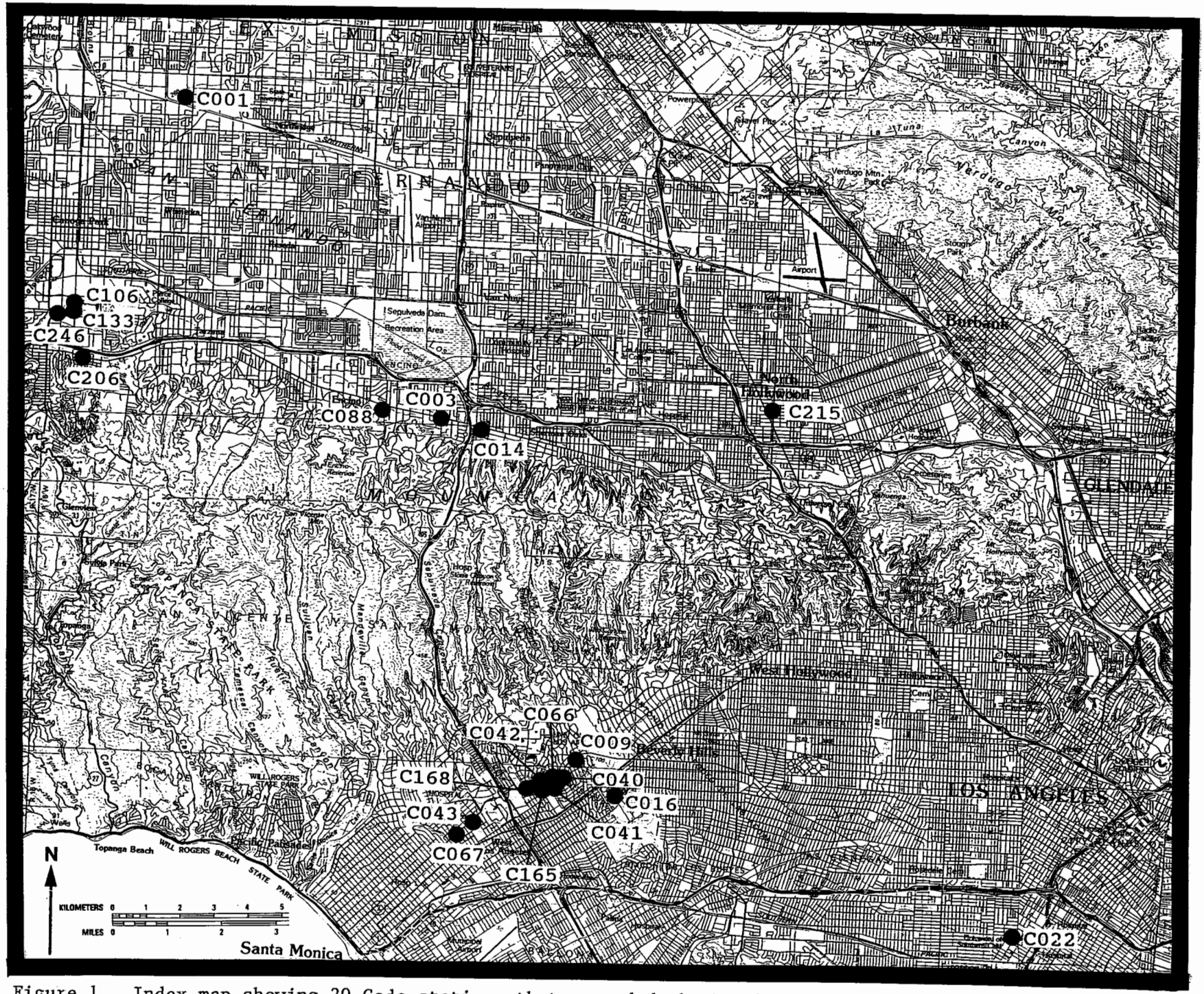


Figure 1. Index map showing 20 Code stations that recorded the Northridge earthquake. The 20 stations in this first release are identified by a 4-character code that is cross-referenced to station name in the text.

3. Phase 3 (Vol. 3) data: Response spectra. The absolute acceleration spectra (SA) for 0%, 2%, 5%, and 10% dampings are plotted against period with linear-linear scaling from 0 to 6 seconds. The spectra are plotted for periods within the Usable Data Bandwidth. Three channels are plotted on one page.

4. Phase 3 (Vol. 3) data: Response spectra. The pseudo-velocity spectra (PSV), the pseudo-acceleration spectra (PSA), and the displacement spectra (SD) are presented on a tripartite logarithmic plot for each channel for 0%, 2%, 5%, 10%, and 20% dampings. The spectra are plotted for periods within the Usable Data Bandwidth. Three channels are plotted on one page.

CODE-INSTRUMENTED BUILDINGS

In the Los Angeles Metropolitan area, there are approximately 700 Code-required accelerographs and all are privately owned by the building owner/operator. CSMIP has archived records from 490 Code instruments located in 300 buildings through December 1994. Many of these Code instruments also recorded the 1971 San Fernando earthquake.

Historically, the Uniform Building Code (UBC), as adopted by the City of Los Angeles prior to September 25, 1982, required that three strong motion instruments be located in certain buildings. The UBC states that:

> "In Seismic Zones 3 and 4 every building over six stories in height with an aggregate floor area of 60,000 square feet or more, and every building over 10 stories in height regardless of floor area, shall be provided with not less than three approved recording accelerographs."

On September 25, 1982 the City of Los Angeles changed the requirements for strong motion accelerographs. The new Ordinance, part of the City of Los Angeles Building Code, allowed one accelerograph in place of the three that had been required previously. However, for the first time, the Ordinance required the owner of the building to have that instrument serviced and maintained by a licensed accelerograph maintenance contractors at least annually. Also, after a significant earthquake, the State Geologist and CSMIP agreed to collect the film records, photographically develop them, and distribute copies to the building owner and the Building Department of the City of Los Angeles.

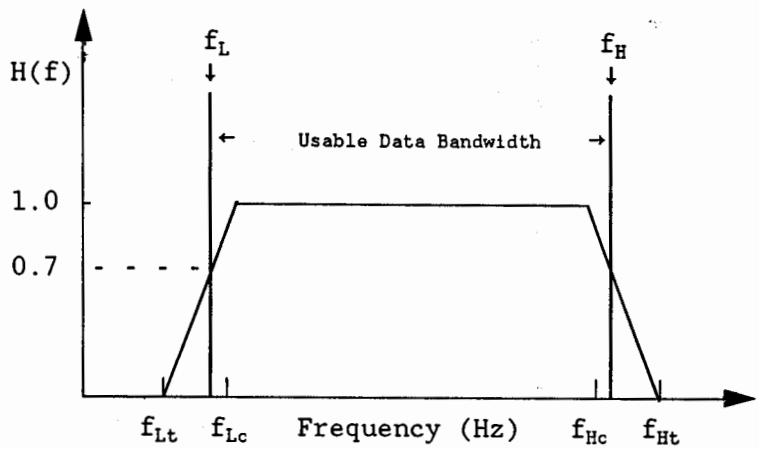
CSMIP is cooperating with the City and other agencies to recover the accelerograms from buildings with Code-required instruments that recorded the Northridge earthquake as stated in the 1982 agreement. Recovery of the records from Code-required instruments following the earthquake has been performed by CSMIP staff, and by a joint CSMIP and National Science Foundation funded project with Agbabian Associates. After record recovery, CSMIP is also developing, digitizing, processing and archiving the Code-required film records. Additional details on the accelerograph records, instrumentation and building information will be presented in a joint data report being prepared by CSMIP and Agbabian Associates.

ACKNOWLEDGEMENTS

The California Strong Motion Instrumentation Program extends its appreciation to the City of Los Angeles, and A. Johnson, K. Deppe and W. O'Brien of the City's Department of Building and Safety for their cooperation with this project. Code record recovery following the earthquake was performed by CSMIP staff, and by a project with Agbabian Associates that was jointly funded by CSMIP and the Earthquake Hazard Mitigation Section of the National Science Foundation. R. Nigbor (Agbabian Associates) supervised the subcontract work of the accelerograph service companies (Kinemetrics Inc. and Seismic System Service) that retrieved the film records and documented the condition of the instrument. CSMIP extends its appreciation to the staff of Agbabian Associates, Kinemetrics and Seismic System Service for their work on this project. The efforts of all those involved made the timely publication of these data possible.

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:

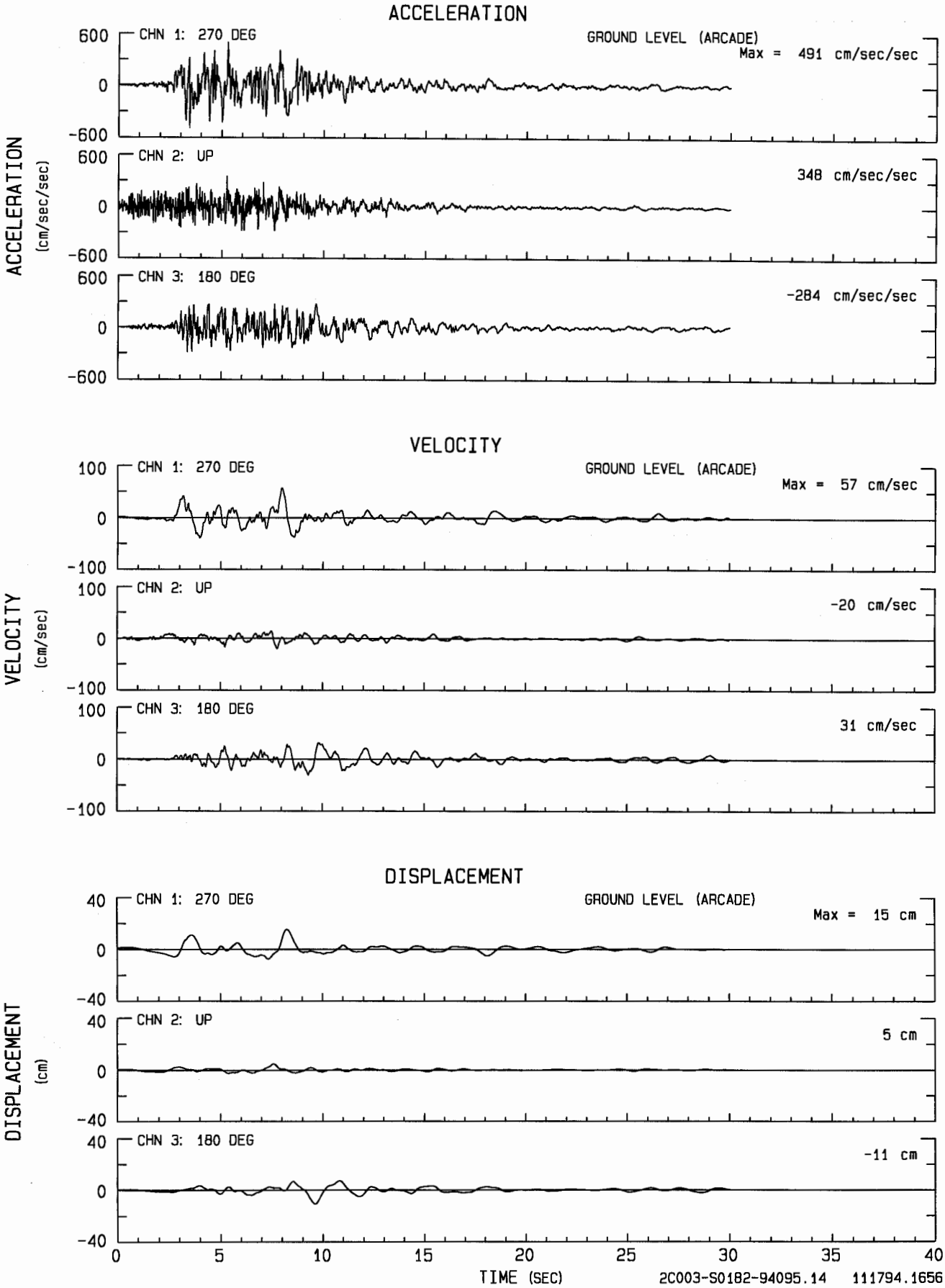
1) The values of f_H and f_L can be calculated from the corner frequencies (f_{Hc}, f_{Lc}) and the roll-off termination frequencies (f_{Ht}, f_{Lt}) used in the processing by using the formulas $f_H = f_{Hc} + 0.3 * (f_{Ht} - f_{Hc})$ and $f_L = f_{Lc} - 0.3 * (f_{Lc} - f_{Lt})$. For example, the Usable 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.

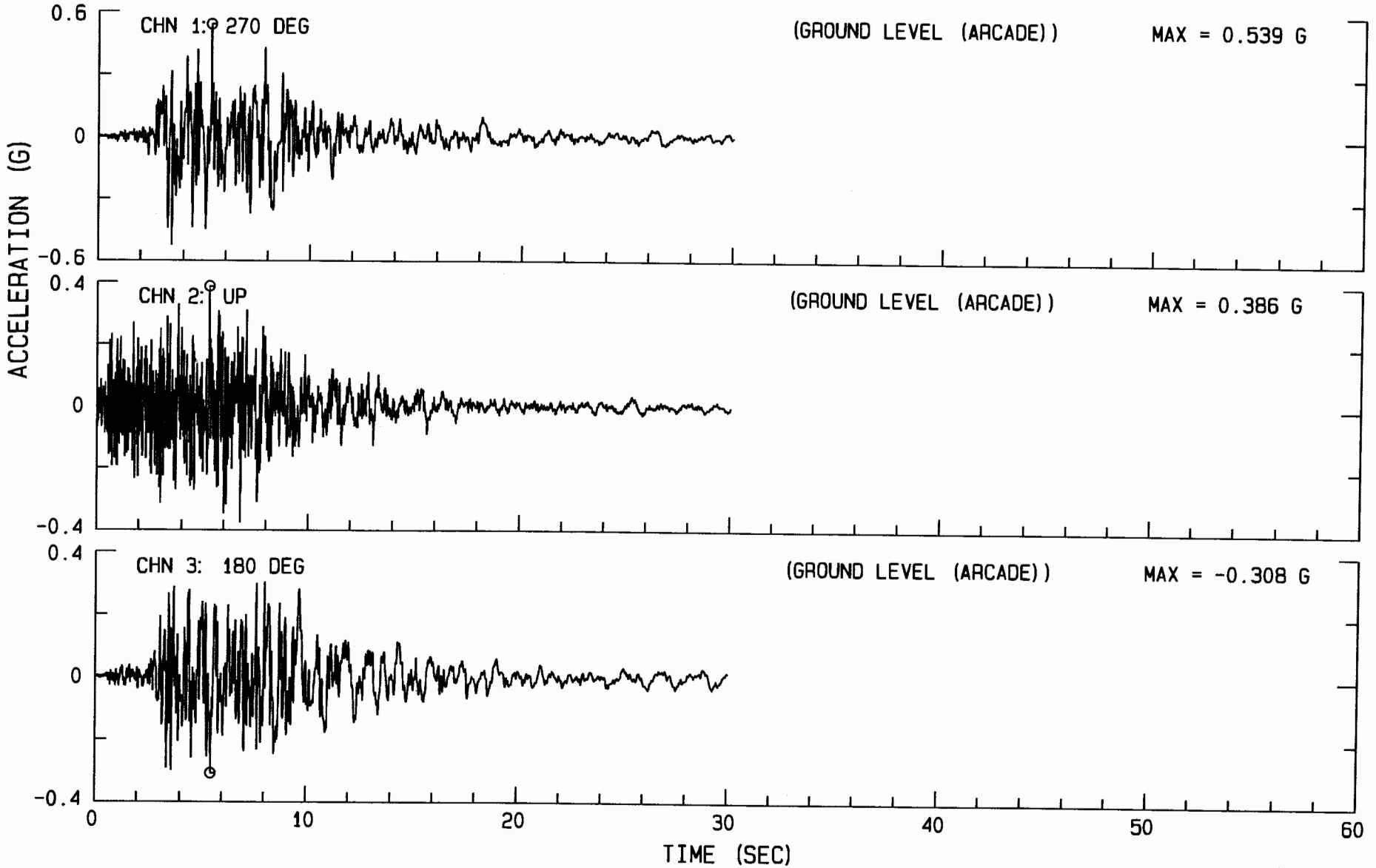
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

ENCINO - VENTURA BLVD #1 CSMIP Sta Num 2C003

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



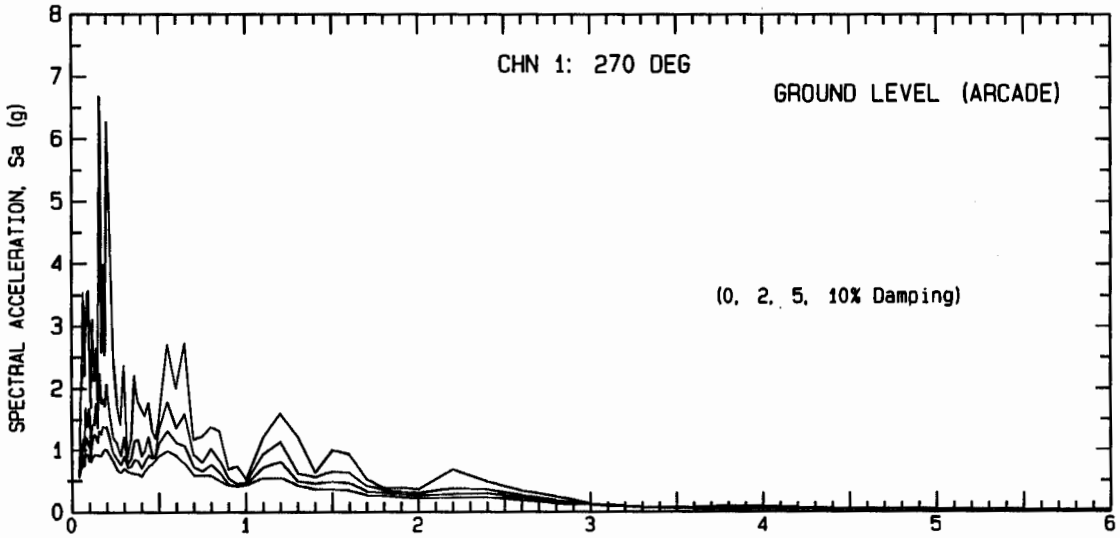
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
ENCINO - VENTURA BLVD #1
UNCORRECTED ACCELEROGRAM 2C003-S0182-94095.14 102694.0842-QN94A003

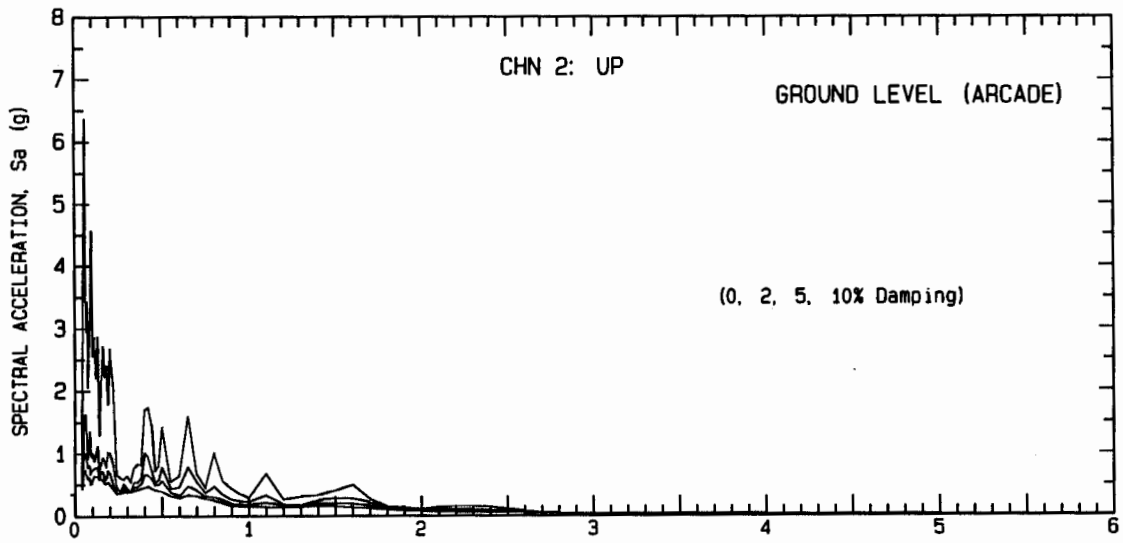


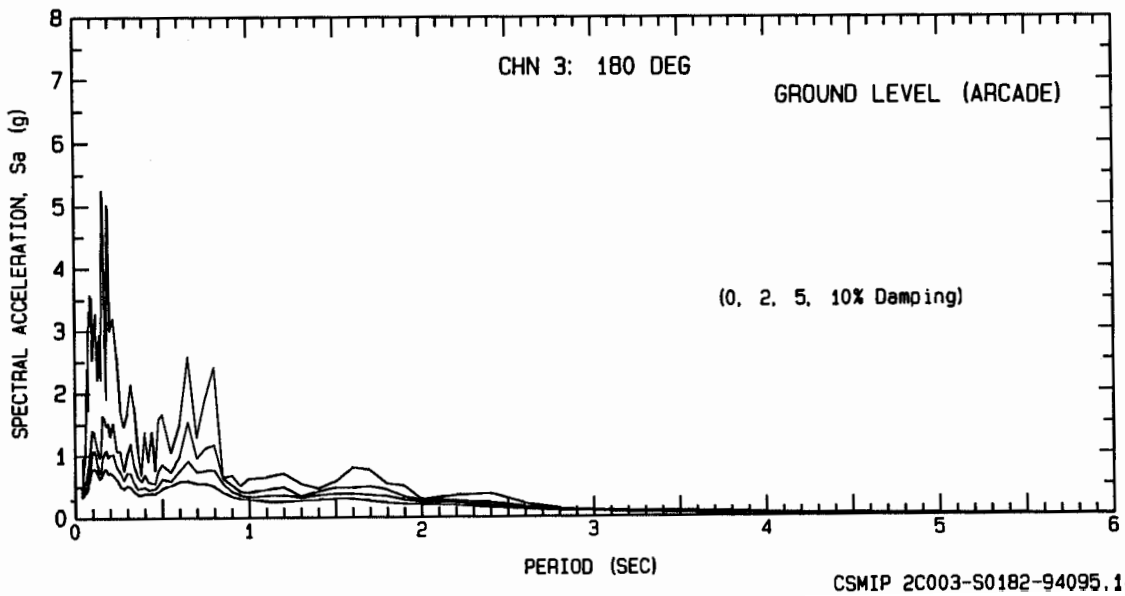
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

ENCINO - VENTURA BLVD #1 Sta Num 2C003

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C003-S0182-94095.14

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

ENCINO - VENTURA BLVD #1
Sta Num 2C003

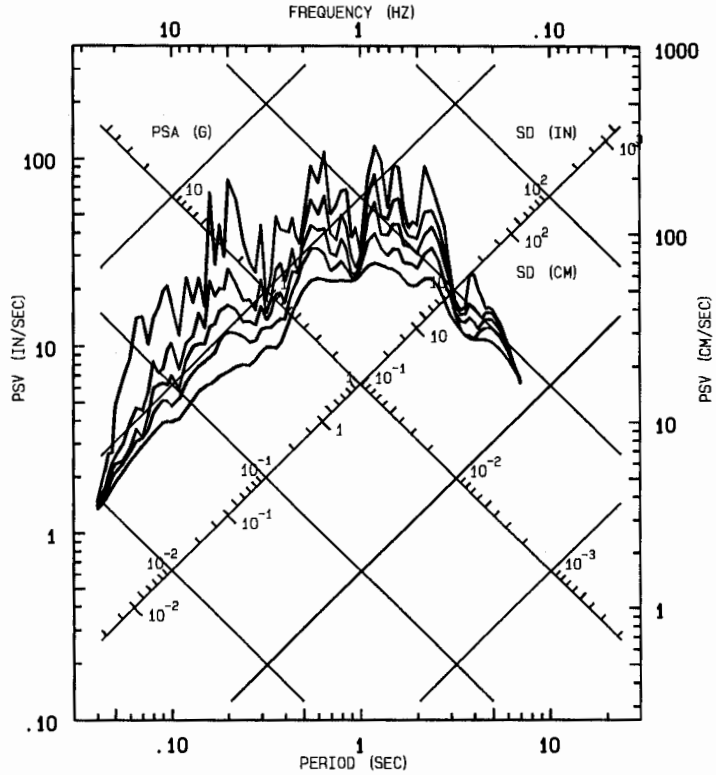
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

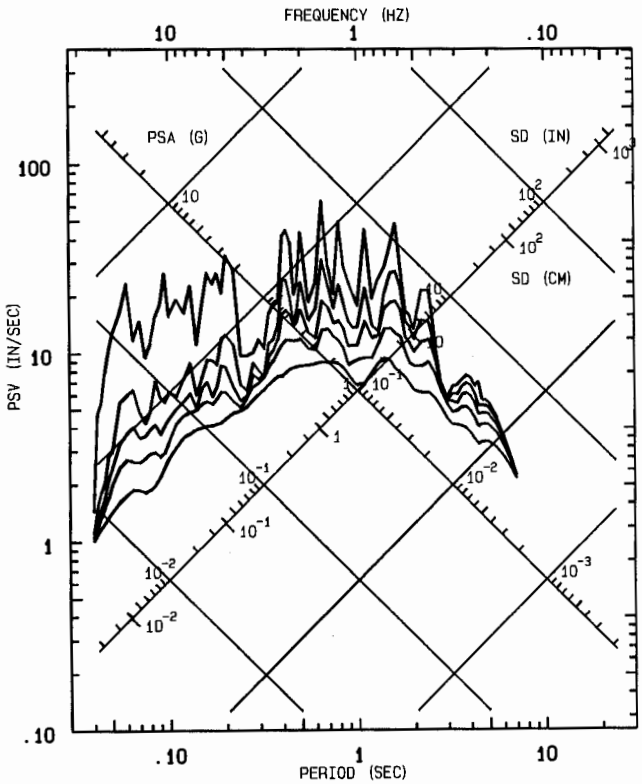
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C003-S0182-94095.14

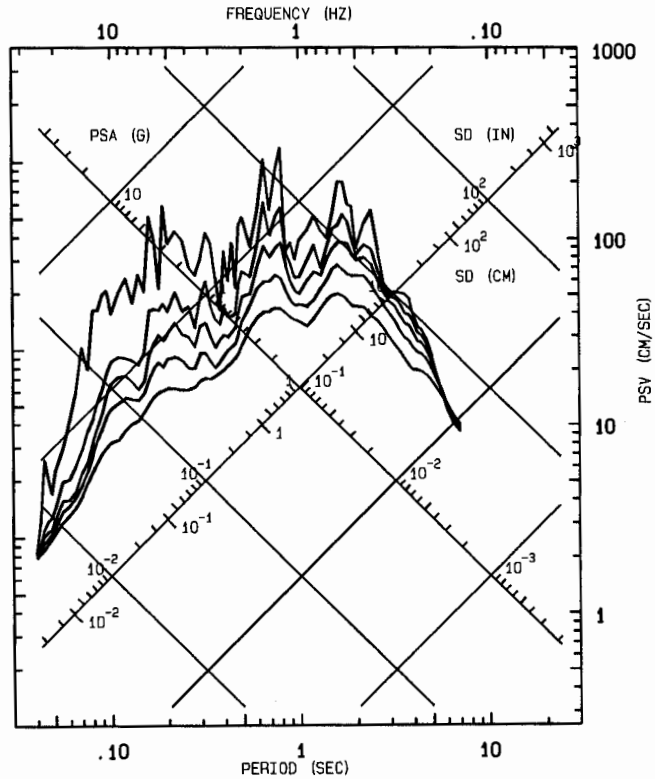
CHN 1: 270 DEG
GROUND LEVEL (ARCADE)



CHN 2: UP
GROUND LEVEL (ARCADE)



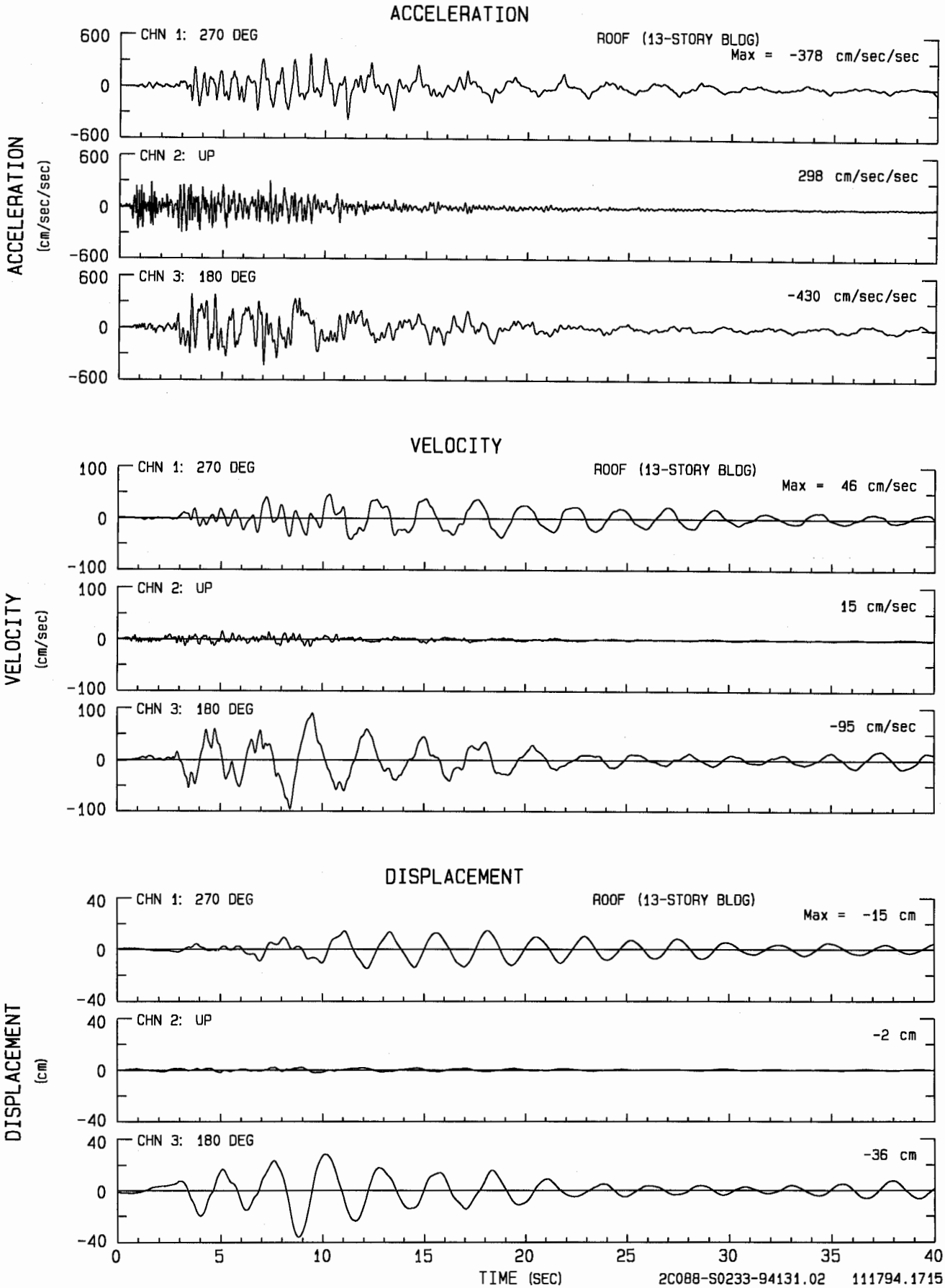
CHN 3: 180 DEG
GROUND LEVEL (ARCADE)



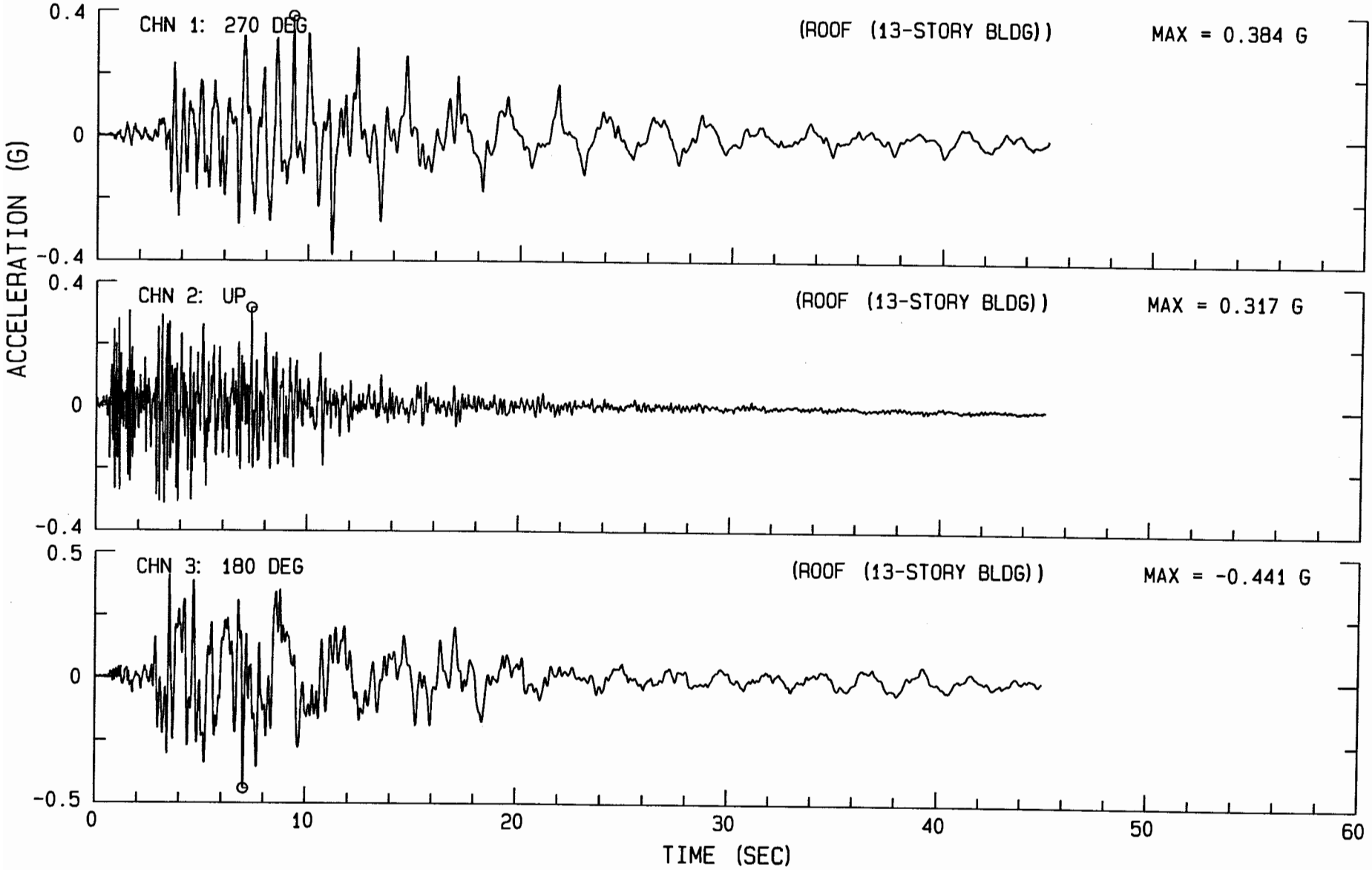
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

ENCINO - VENTURA BLVD #4 CSMIP Sta Num 2C088

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



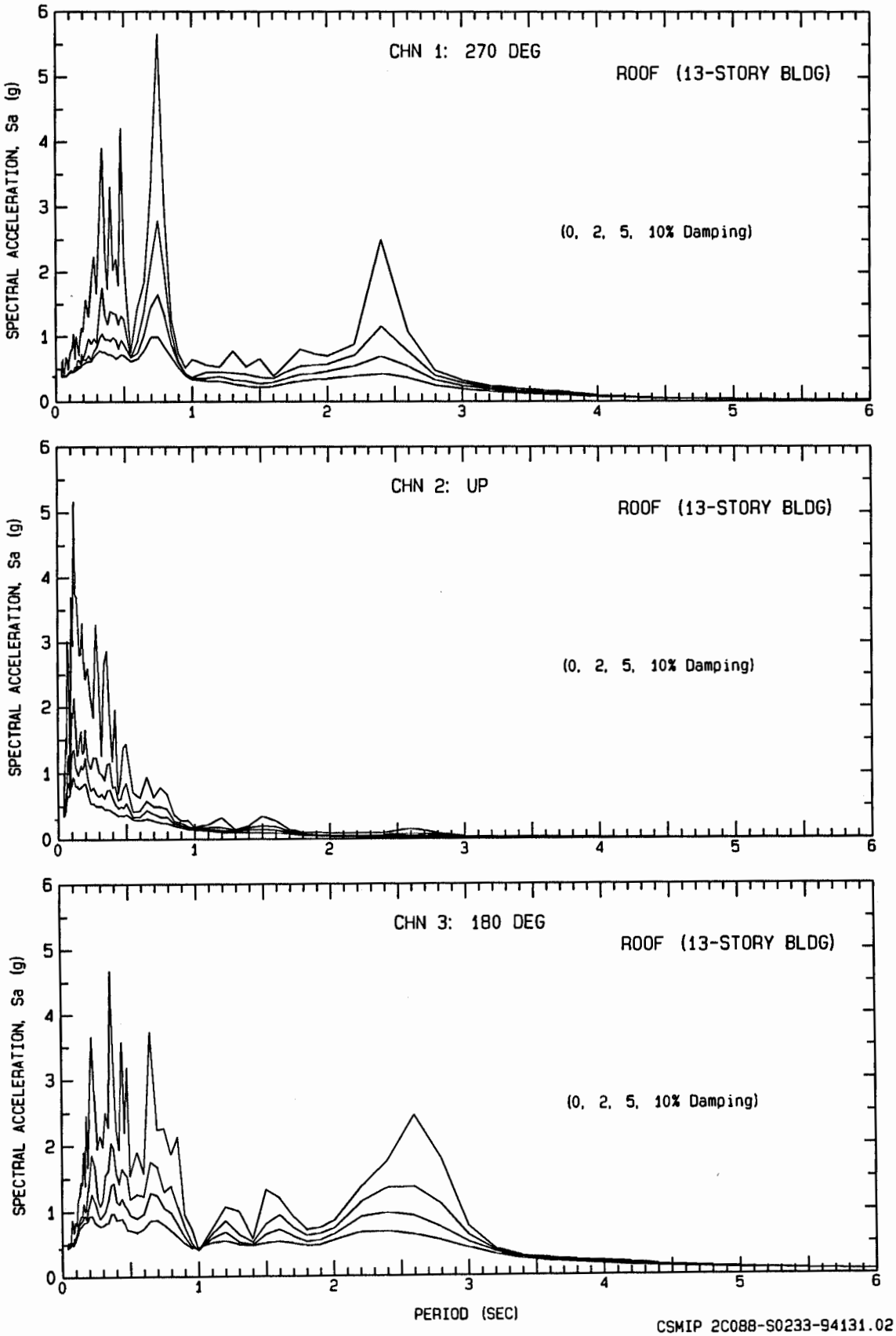
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
ENCINO - VENTURA BLVD #4
UNCORRECTED ACCELEROGRAM 2C088-S0233-94131.02 092994.1512-QN94A088



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

ENCINO - VENTURA BLVD #4 Sta Num 2C088

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C088-S0233-94131.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

ENCINO - VENTURA BLVD #4
Sta Num 2C088

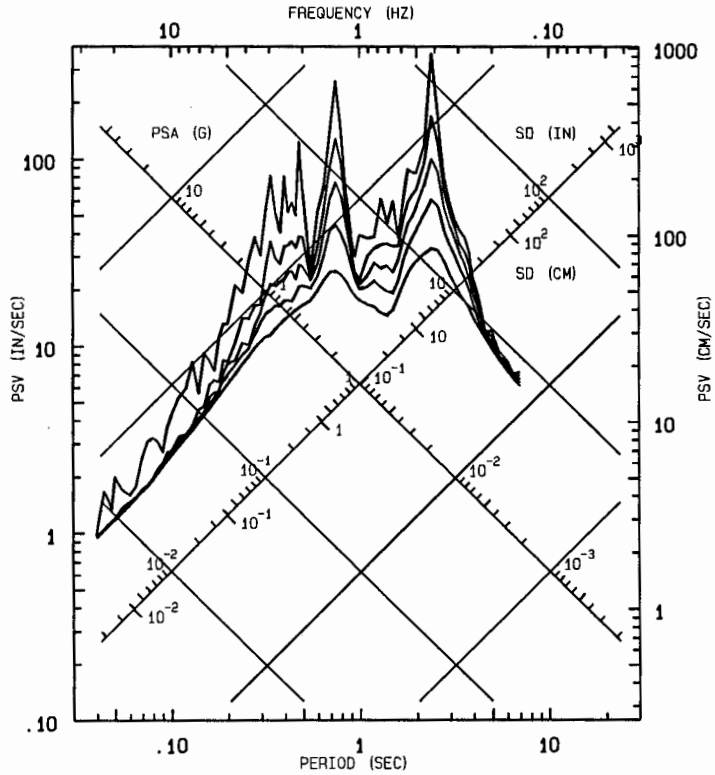
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

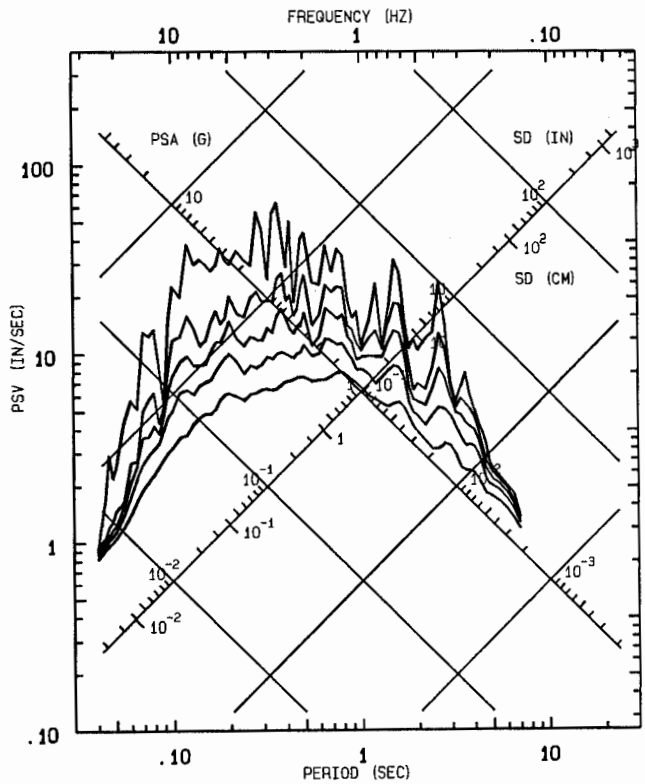
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C088-S0233-94131.02

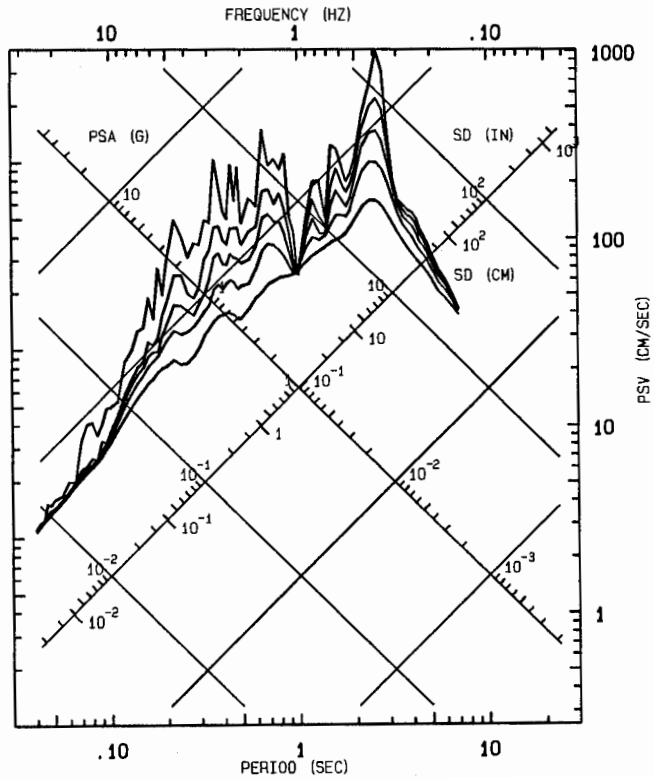
CHN 1: 270 DEG
ROOF (13-STORY BLDG)



CHN 2: UP
ROOF (13-STORY BLDG)



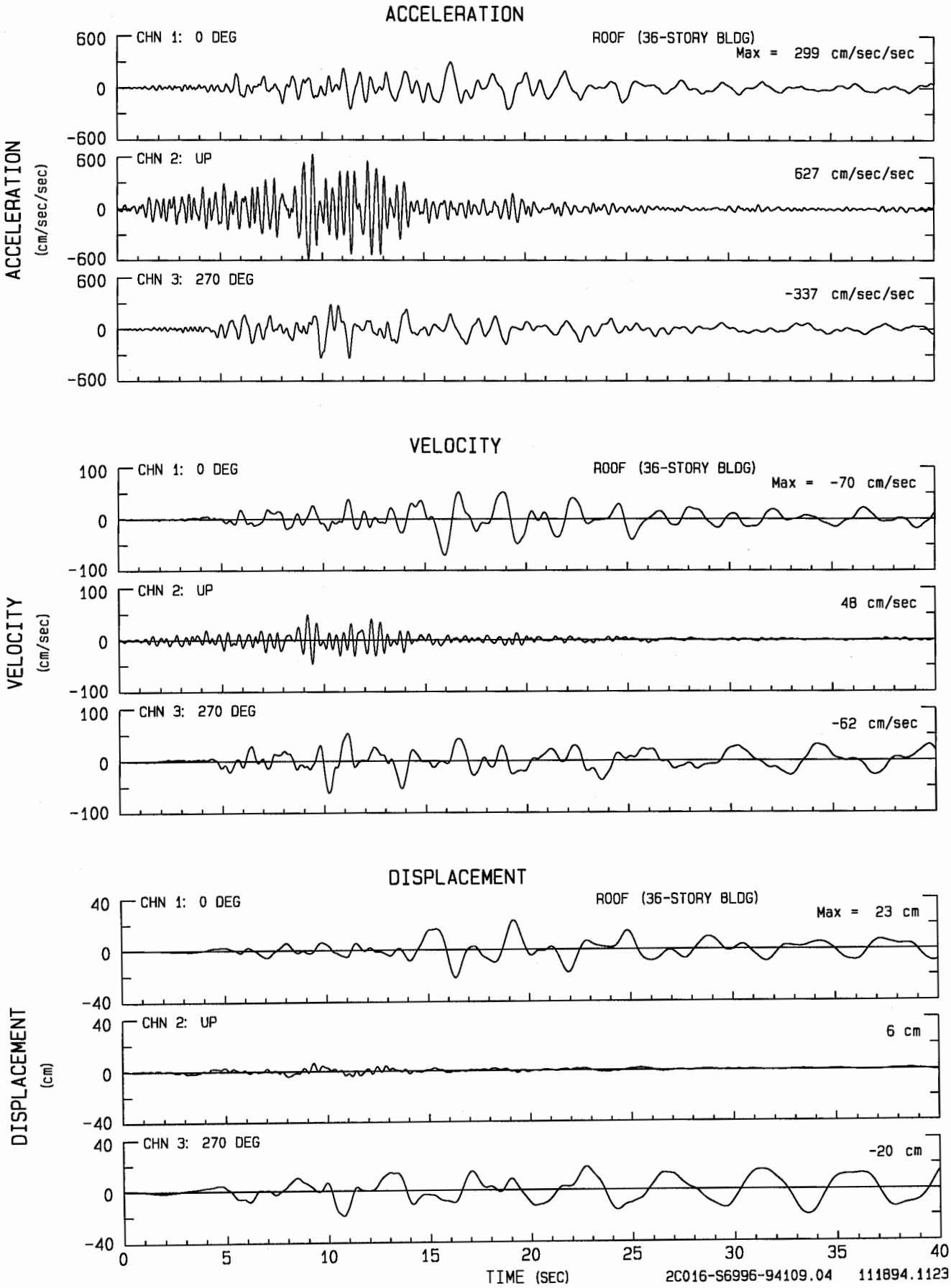
CHN 3: 180 DEG
ROOF (13-STORY BLDG)



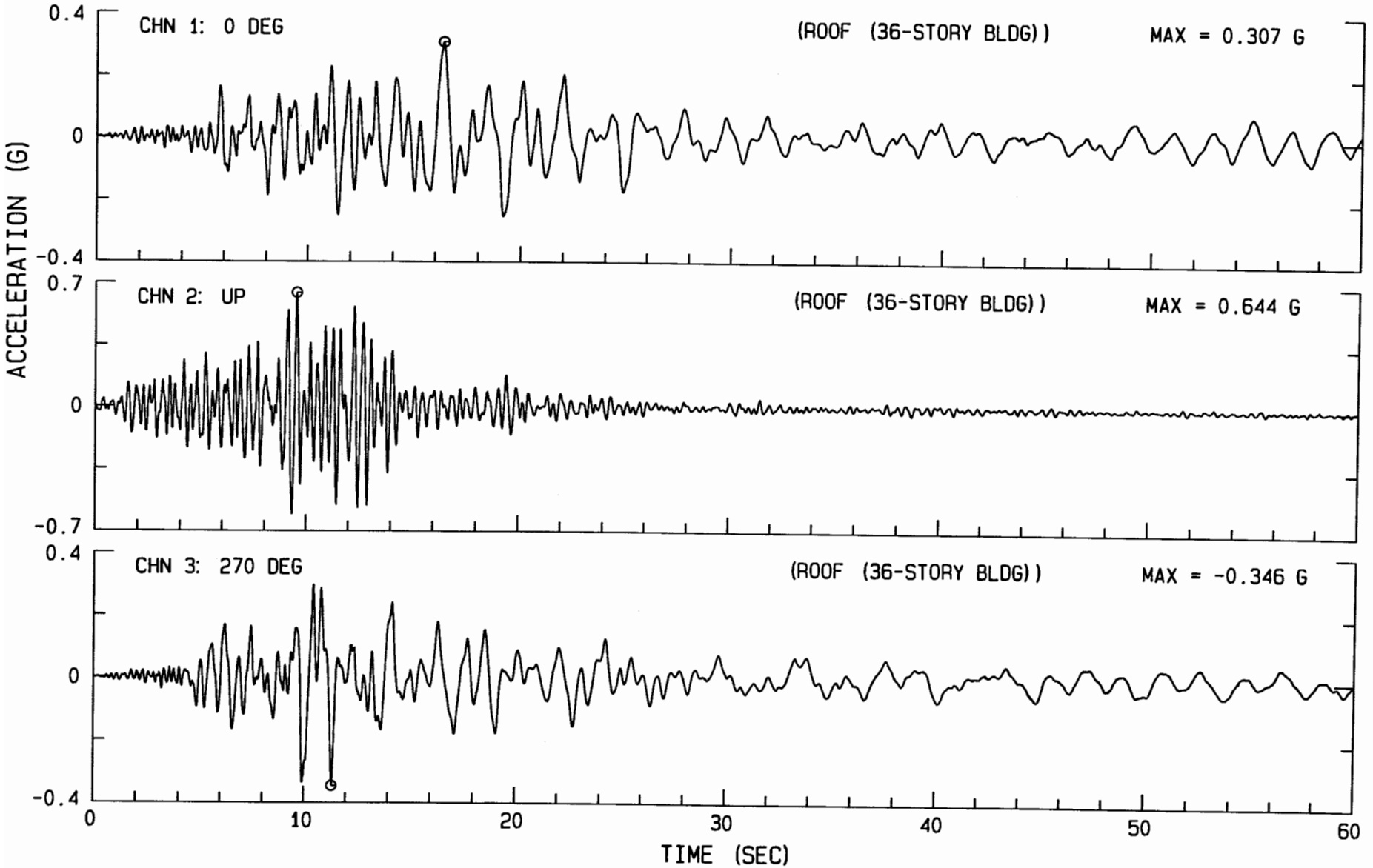
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - AVE OF THE STARS #2 CSMIP Sta Num 2C016

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



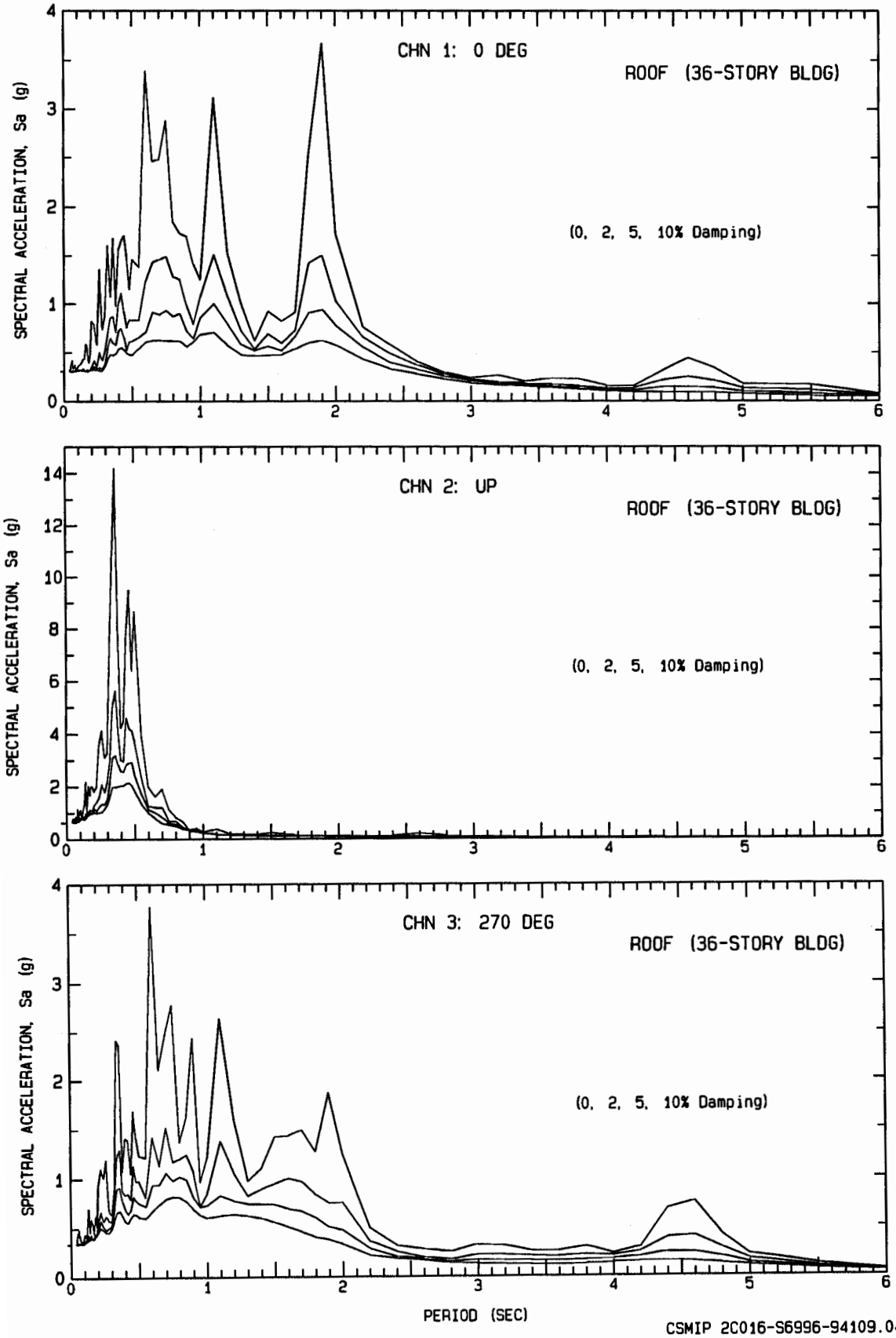
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - AVE OF THE STARS #2
UNCORRECTED ACCELEROGRAM 2C016-S6996-94109.04 081994.0932-QN94A016



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - AVE OF THE STARS #2 Sta Num 2C016

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C016-S6996-94109.04

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - AVE OF THE STARS #2
Sta Num 2C016

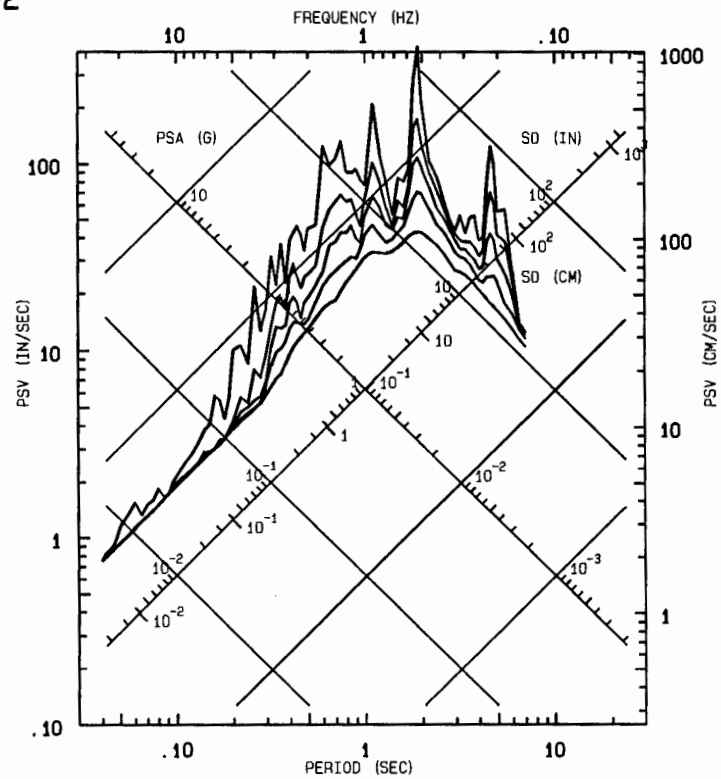
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

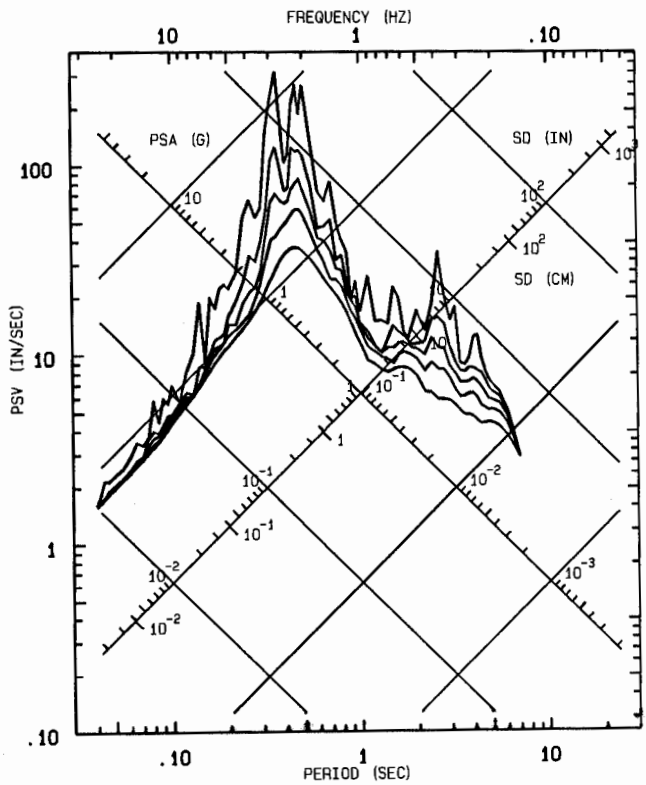
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C016-S6996-94109.04

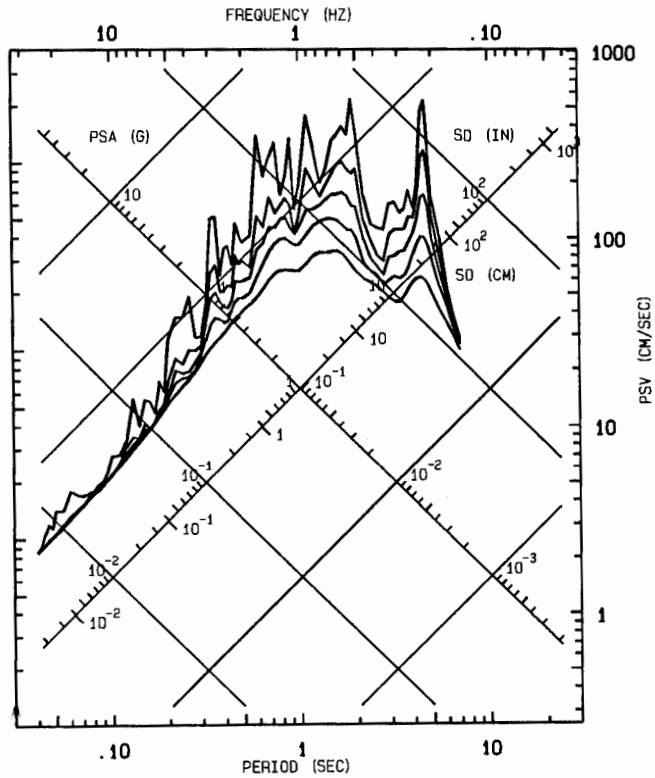
CHN 1: 0 DEG
ROOF (36-STORY BLDG)



CHN 2: UP
ROOF (36-STORY BLDG)



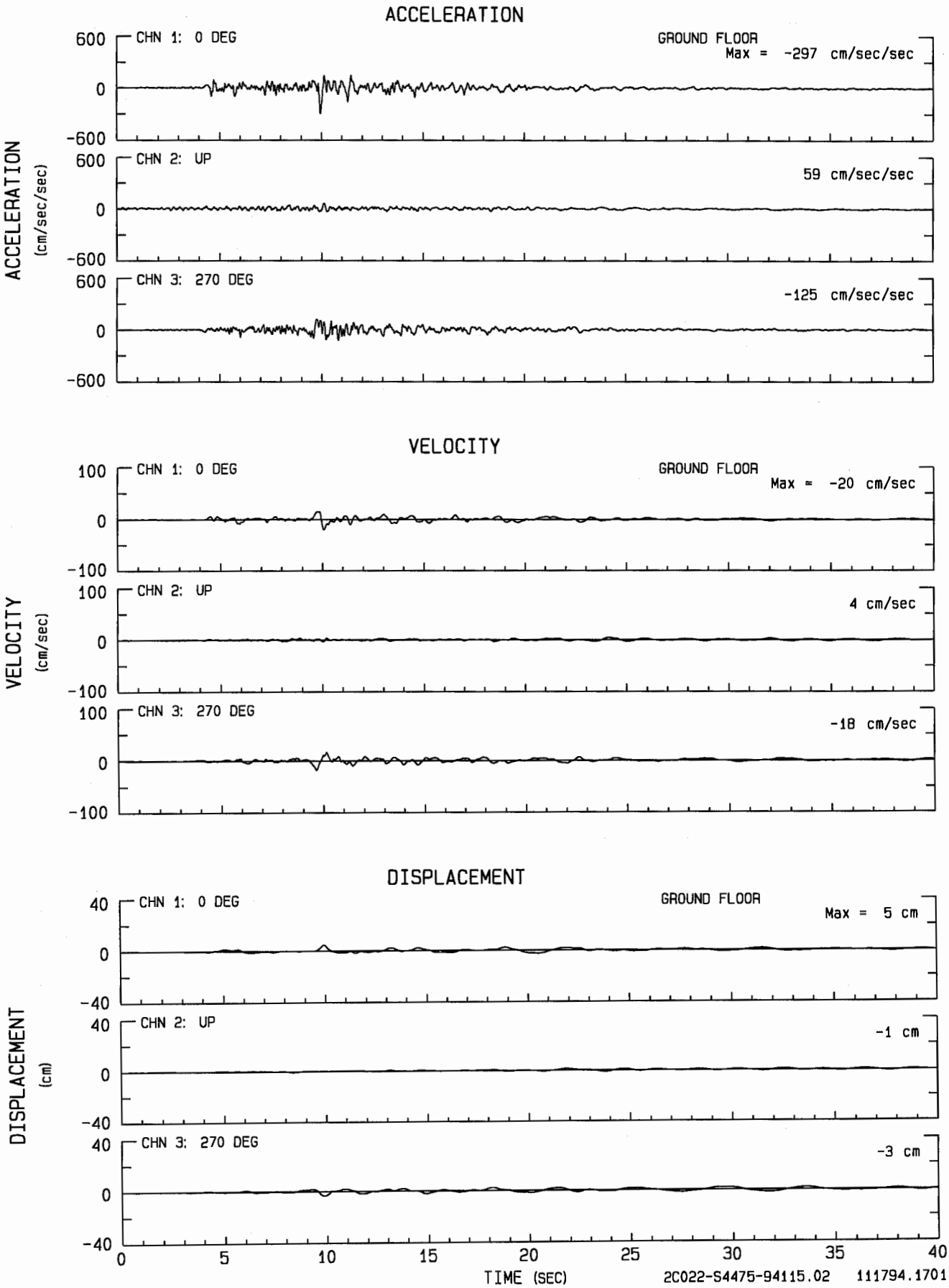
CHN 3: 270 DEG
ROOF (36-STORY BLDG)



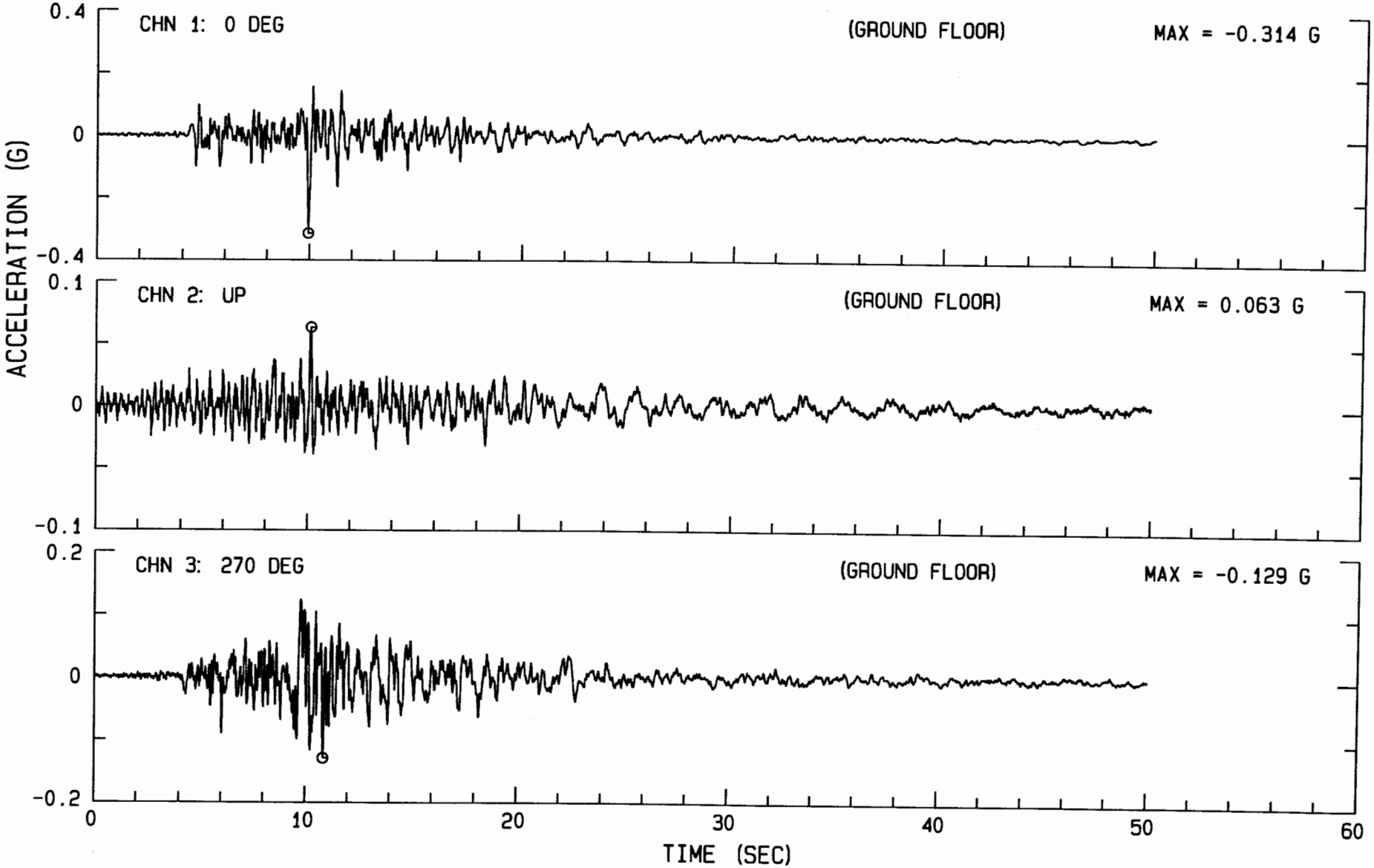
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2 CSMIP Sta Num 2C022

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



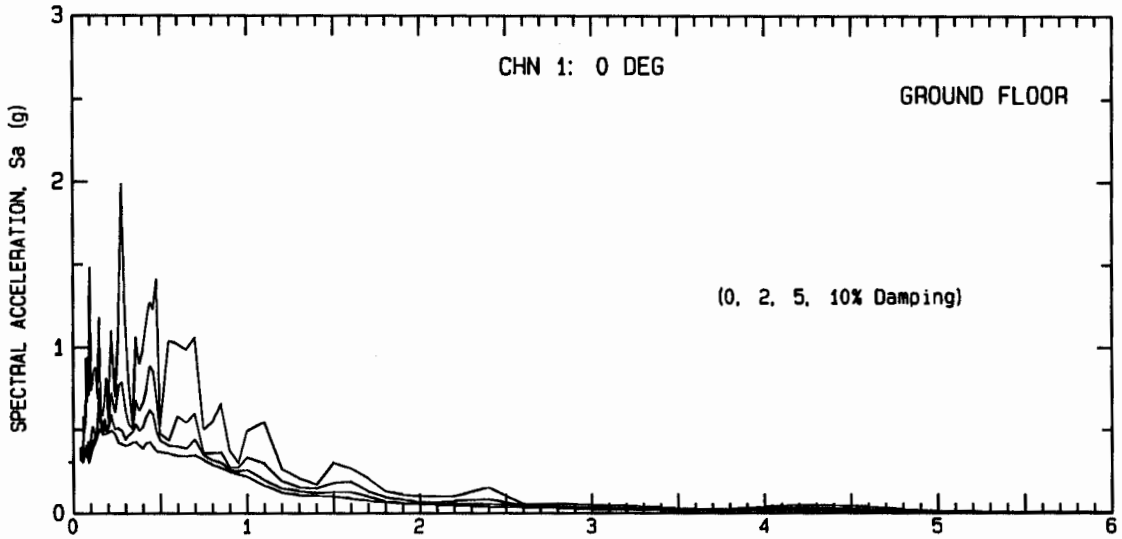
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - MCCLINTOCK AVE #2
UNCORRECTED ACCELEROGRAM 2C022-S4475-94115.02 102694.1254-QN94022A

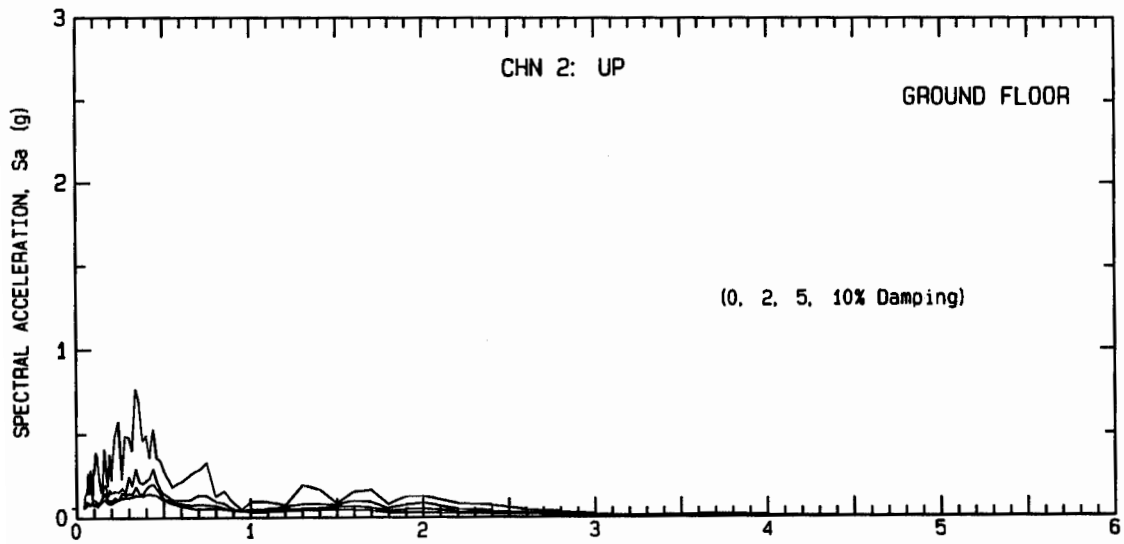


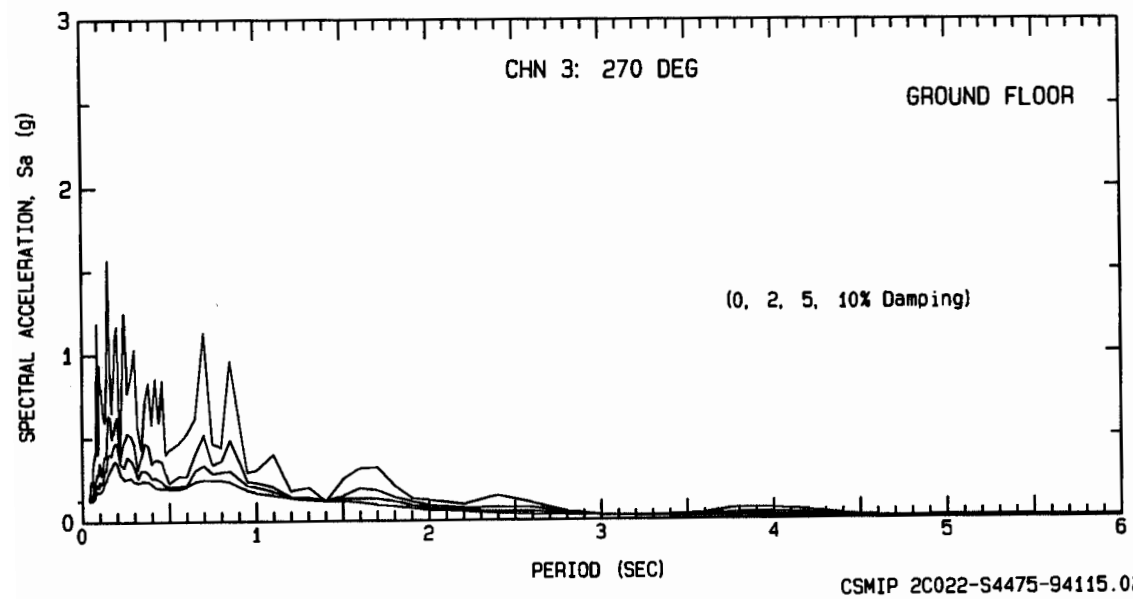
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2 Sta Num 2C022

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C022-S4475-94115.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2
Sta Num 2C022

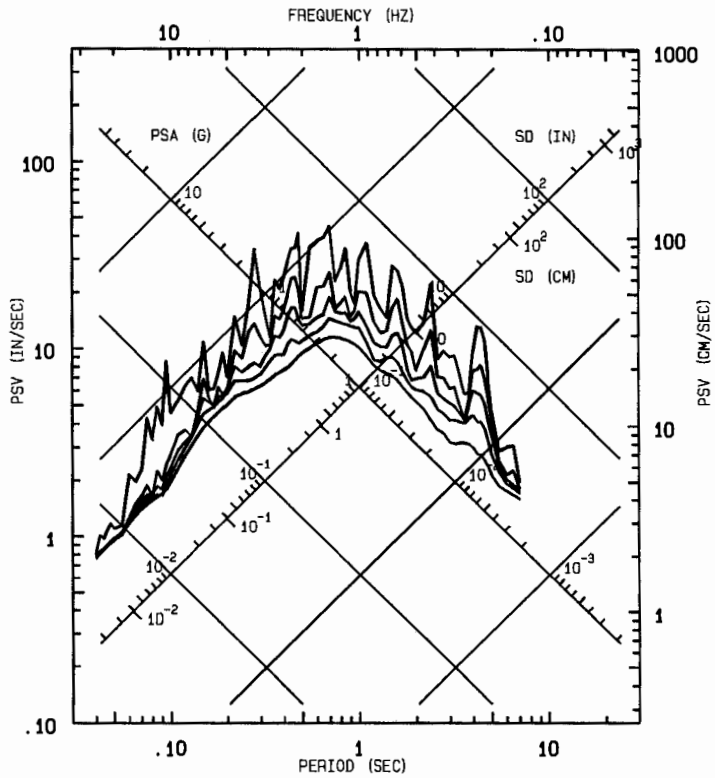
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

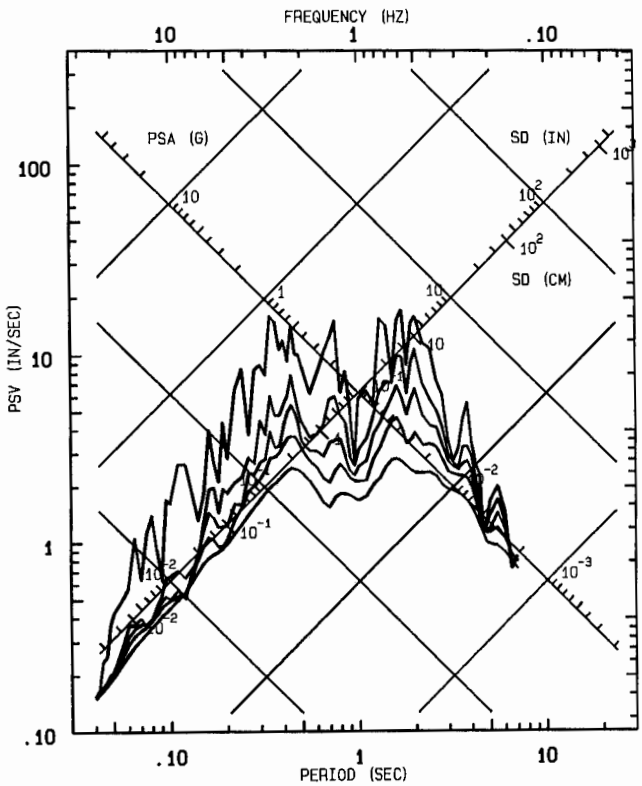
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C022-S4475-94115.02

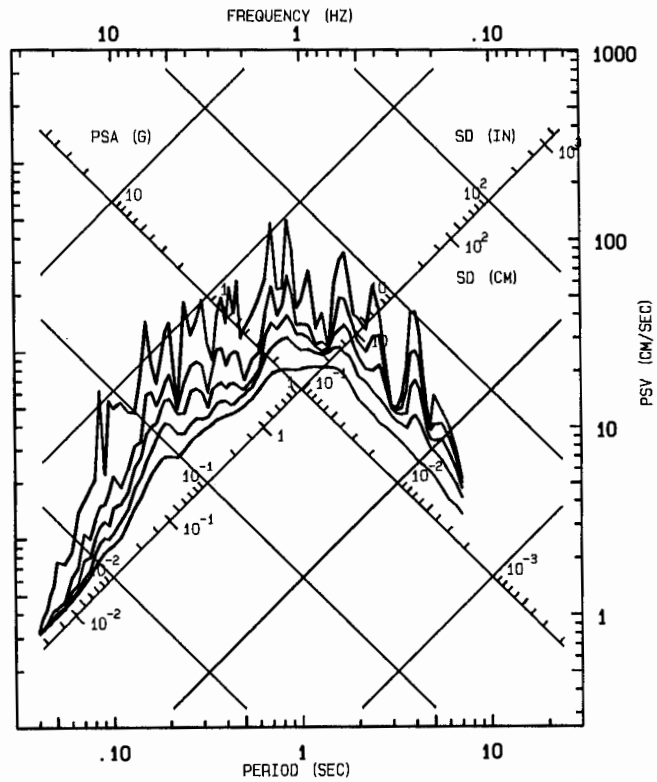
CHN 1: 0 DEG
GROUND FLOOR



CHN 2: UP
GROUND FLOOR



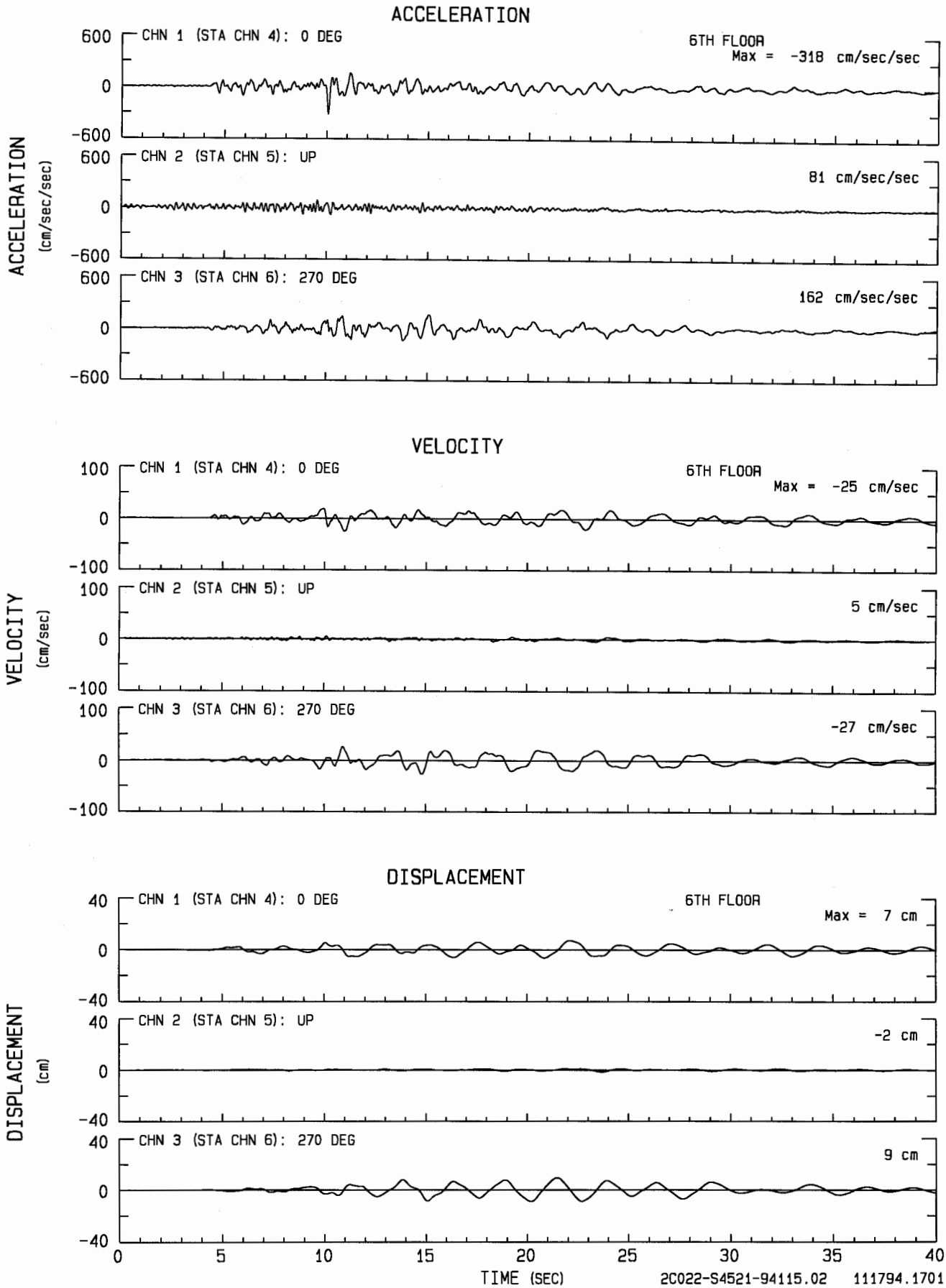
CHN 3: 270 DEG
GROUND FLOOR



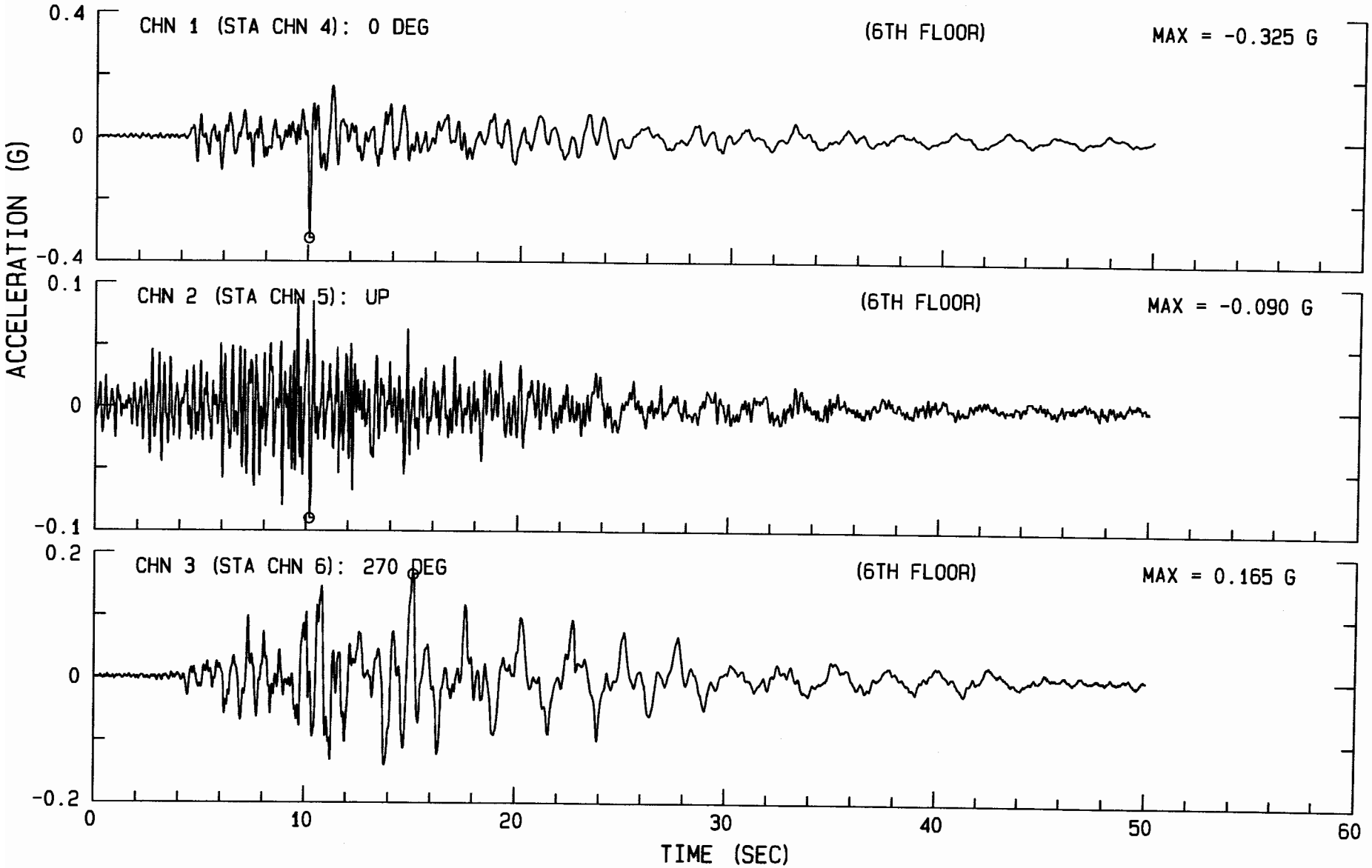
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2 CSMIP Sta Num 2C022

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



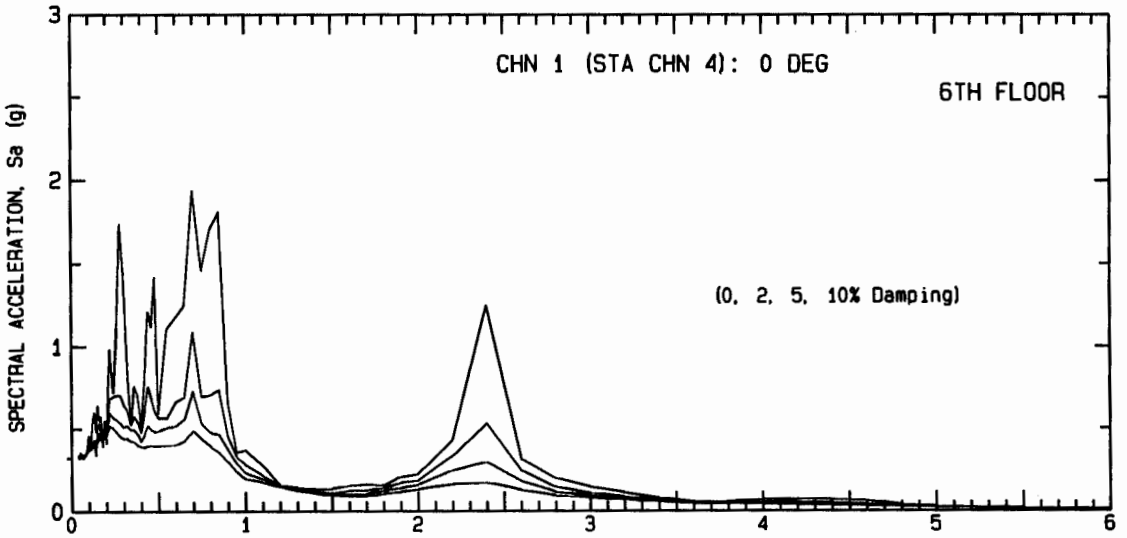
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - MCCLINTOCK AVE #2
UNCORRECTED ACCELEROGRAM 2C022-S4521-94115.02 102694.1053-QN94022B

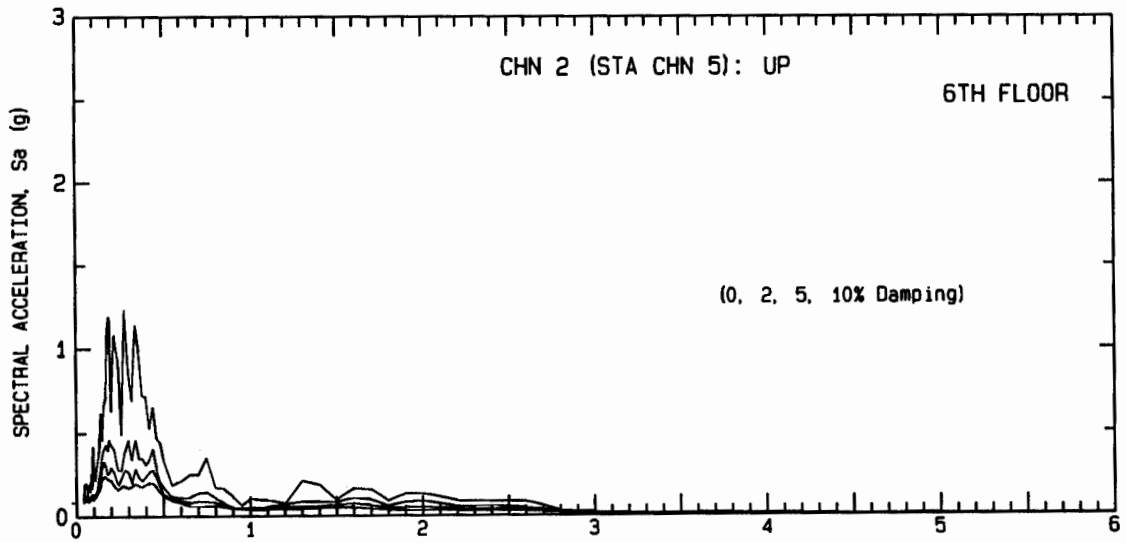


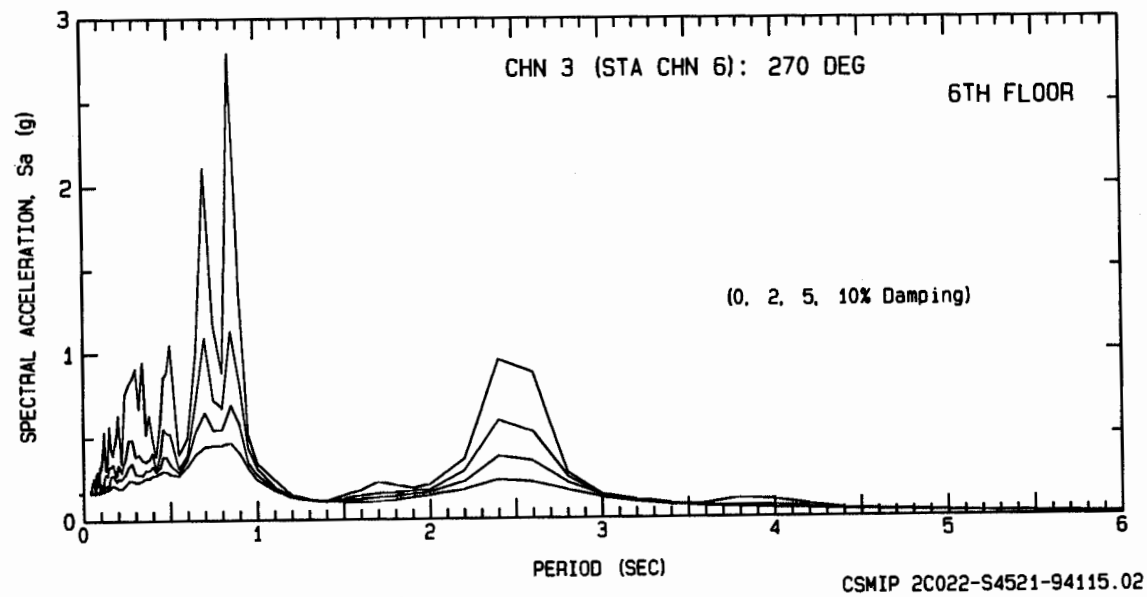
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2 Sta Num 2C022

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C022-S4521-94115.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2
Sta Num 2C022

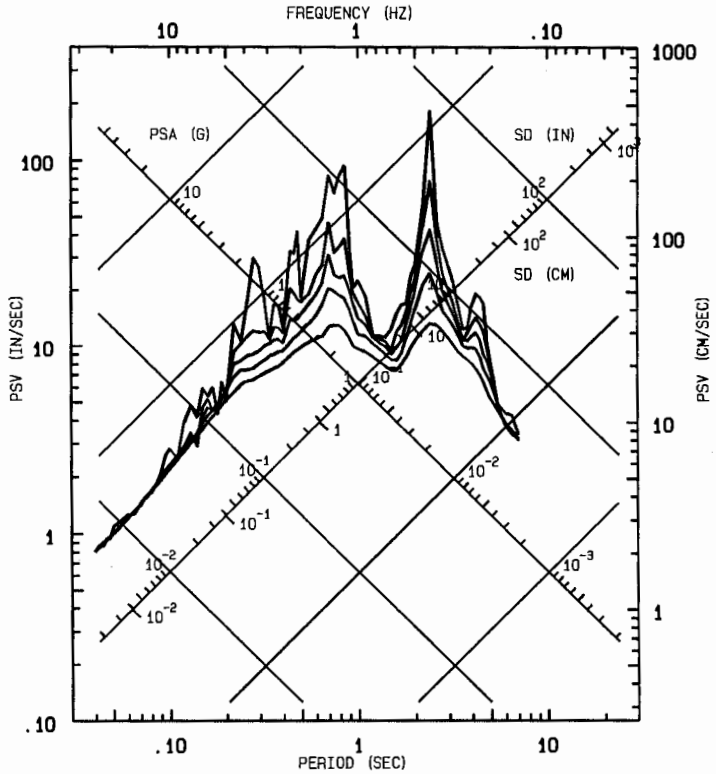
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

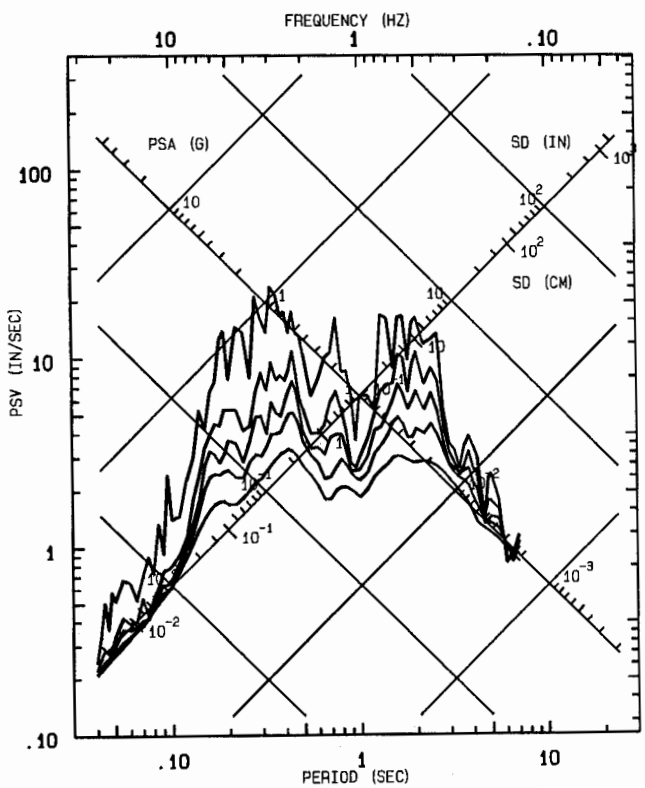
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C022-S4521-94115.02

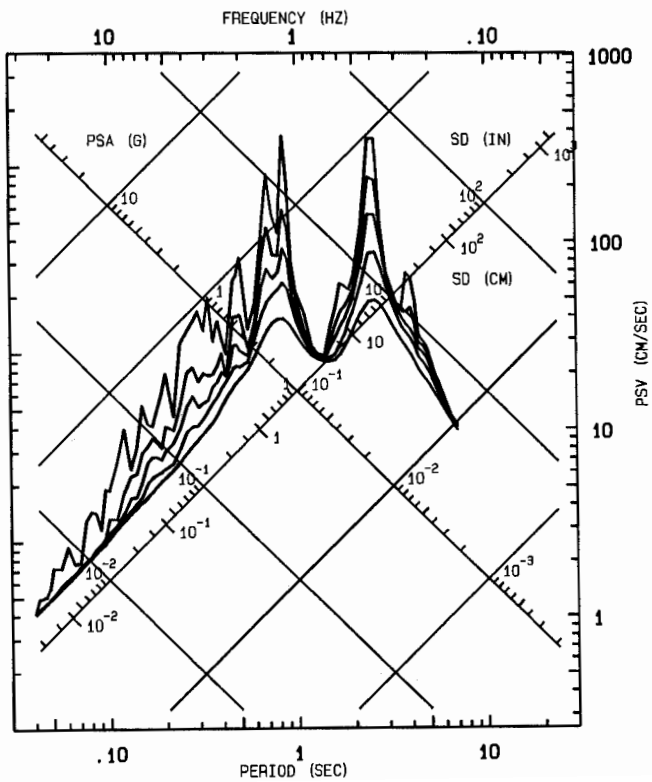
CHN 1 (STA CHN 4): 0 DEG
6TH FLOOR



CHN 2 (STA CHN 5): UP
6TH FLOOR



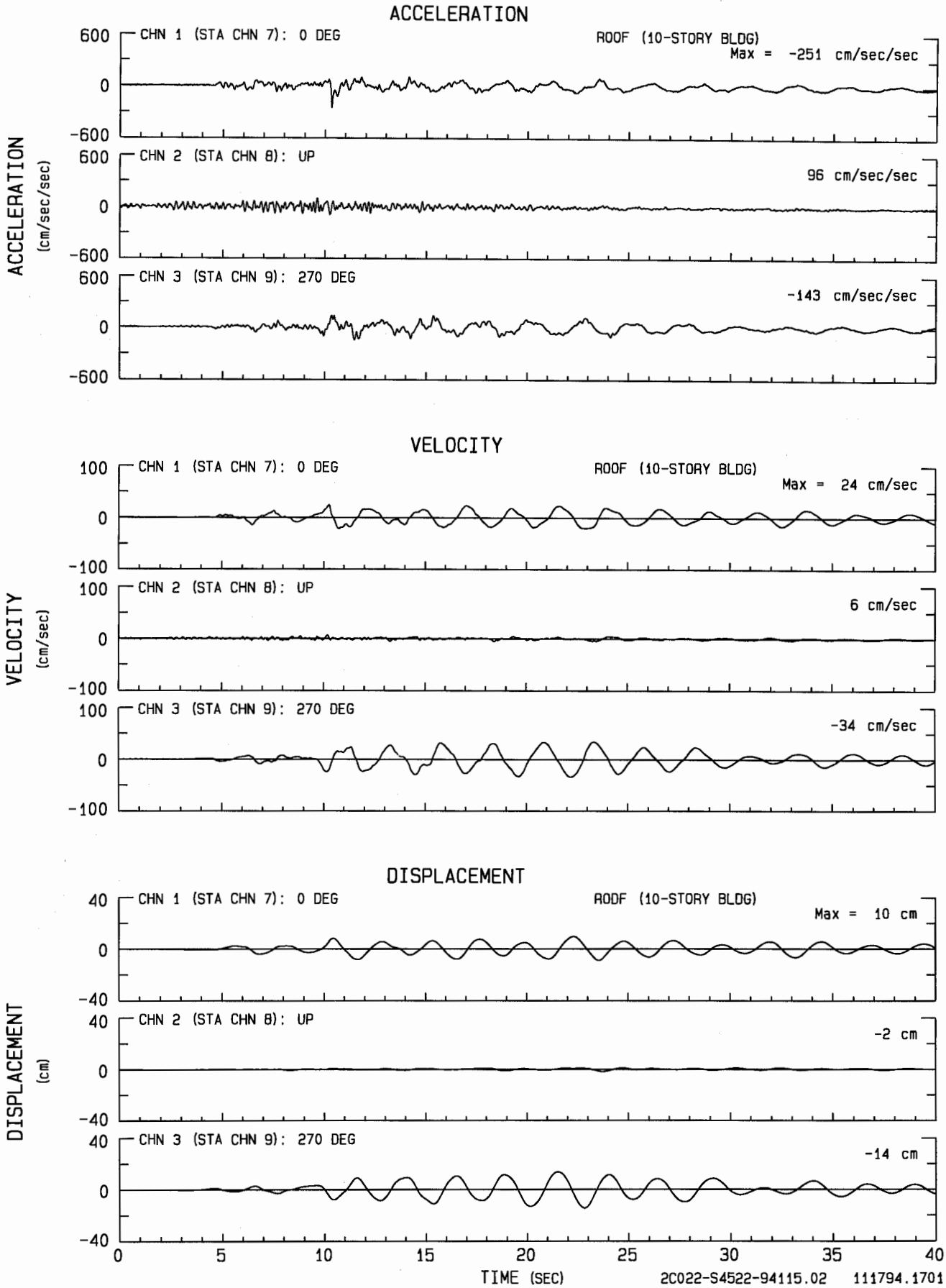
CHN 3 (STA CHN 6): 270 DEG
6TH FLOOR



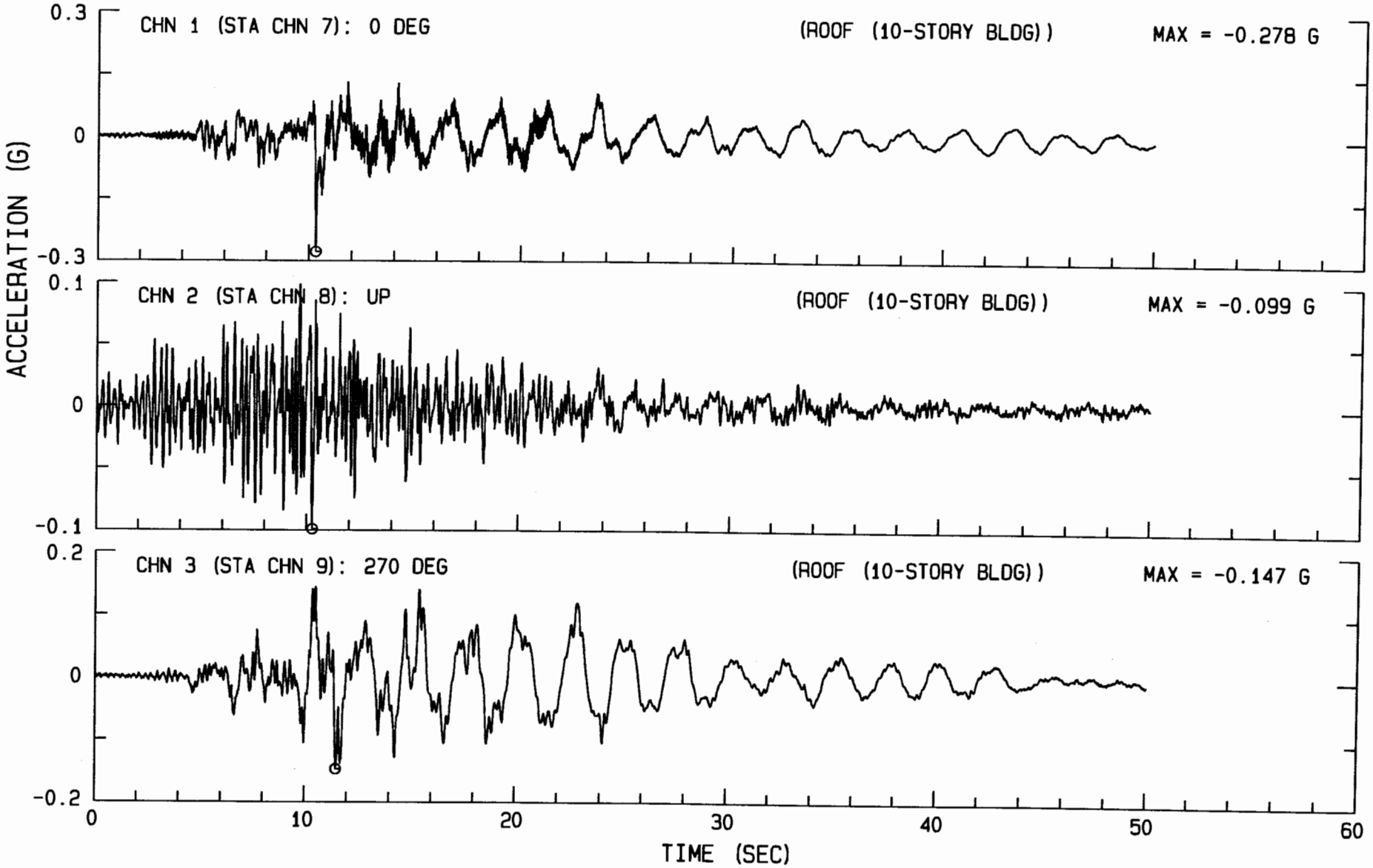
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2 CSMIP Sta Num 2C022

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



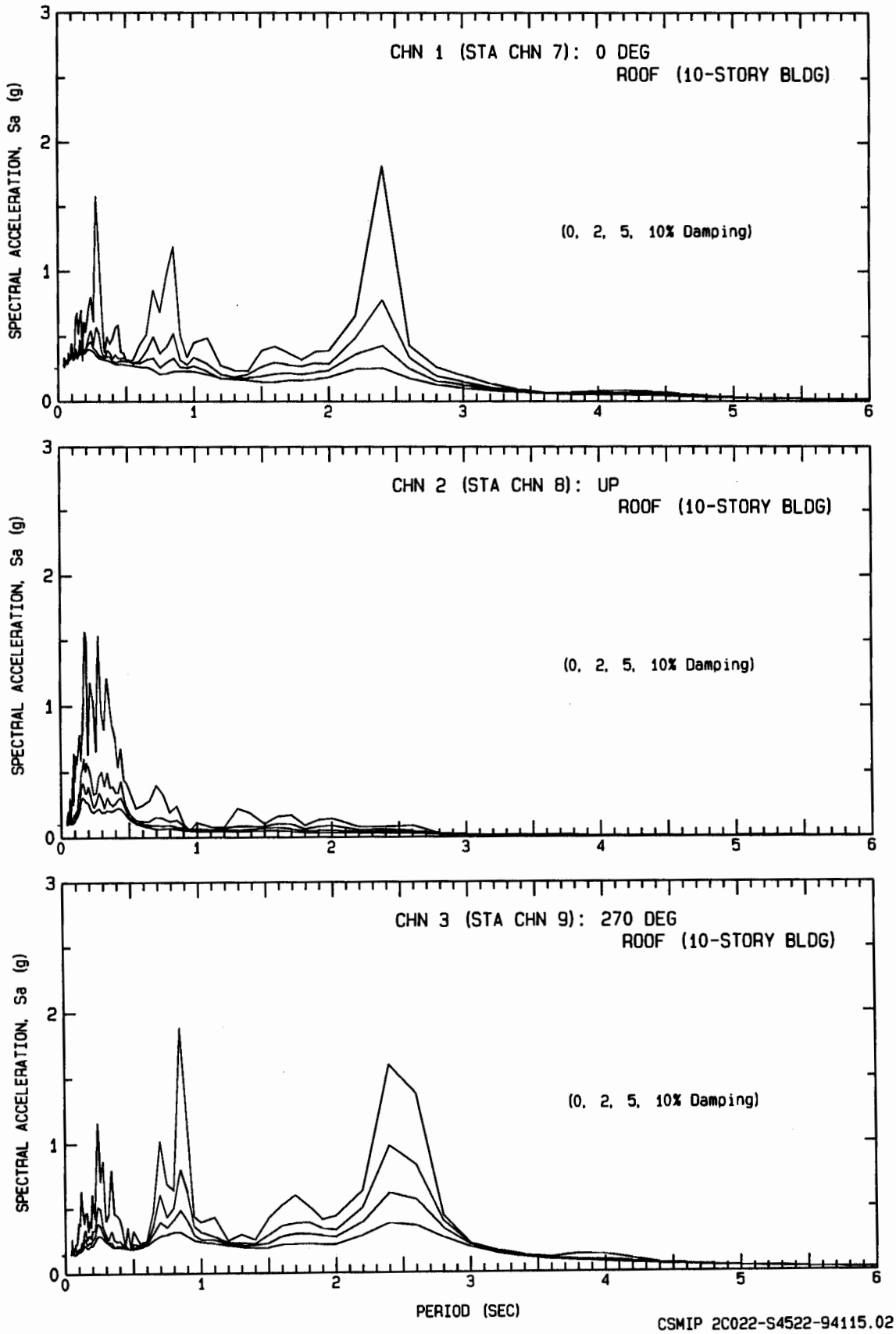
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - MCCLINTOCK AVE #2
UNCORRECTED ACCELEROGRAM 2C022-S4522-94115.02 102694.1352-QN94022C



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2 Sta Num 2C022

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C022-S4522-94115.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - MCCLINTOCK AVE #2
Sta Num 2C022

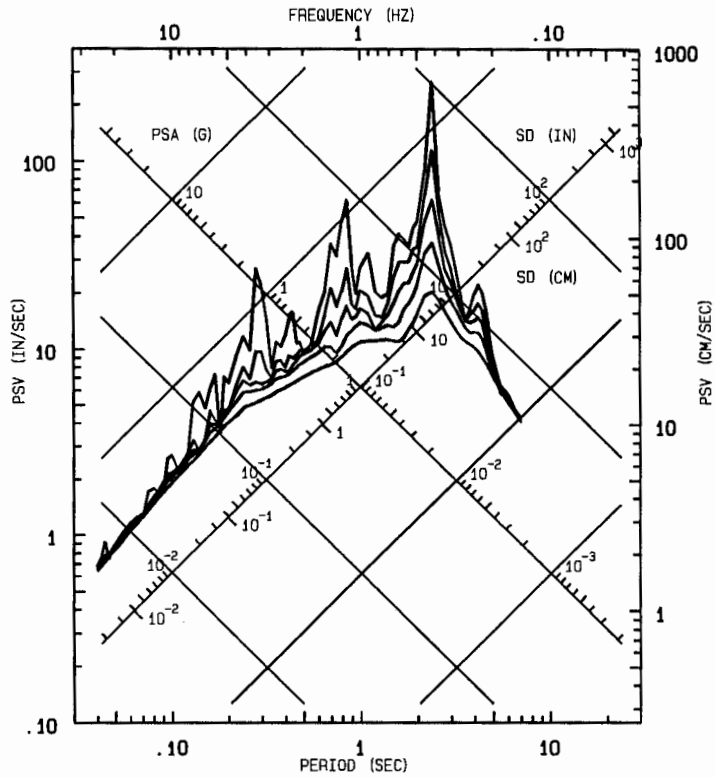
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

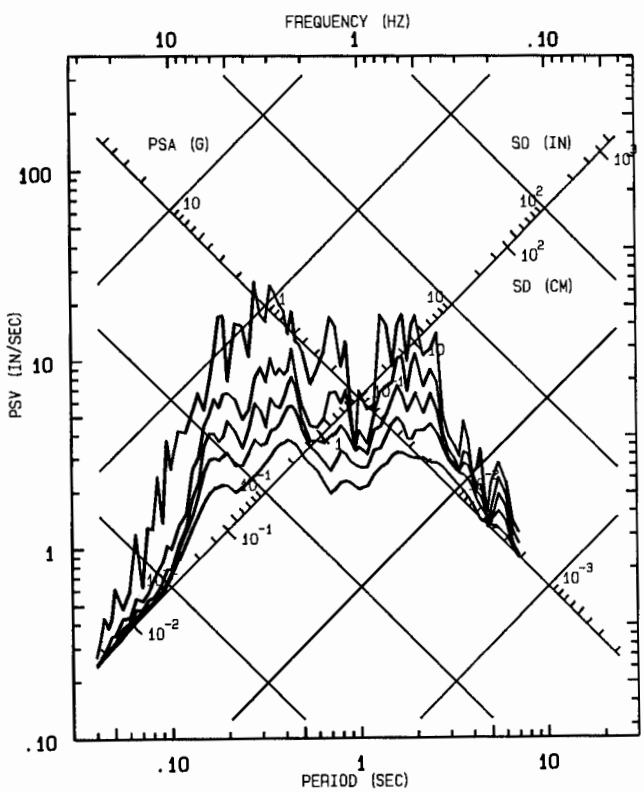
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C022-S4522-94115.02

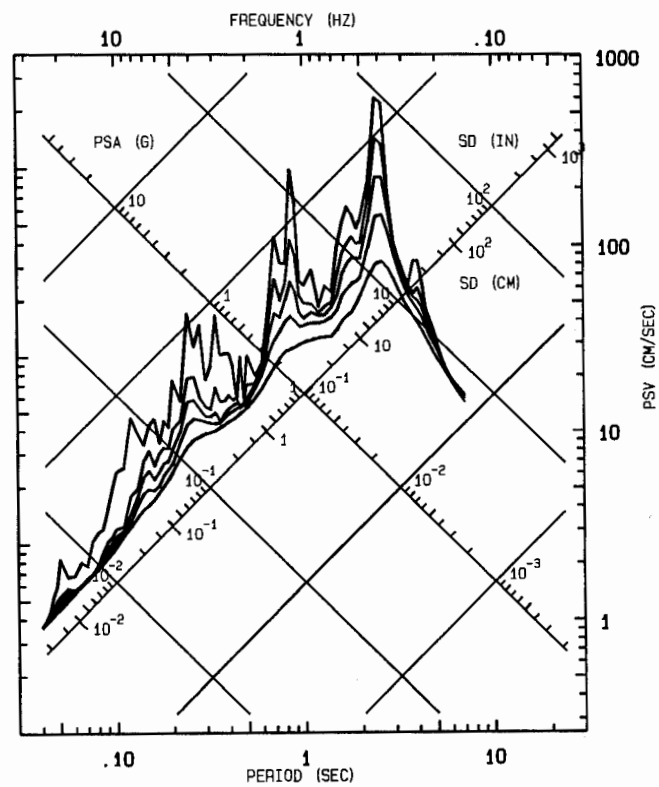
CHN 1 (STA CHN 7): 0 DEG
ROOF (10-STORY BLDG)



CHN 2 (STA CHN 8): UP
ROOF (10-STORY BLDG)



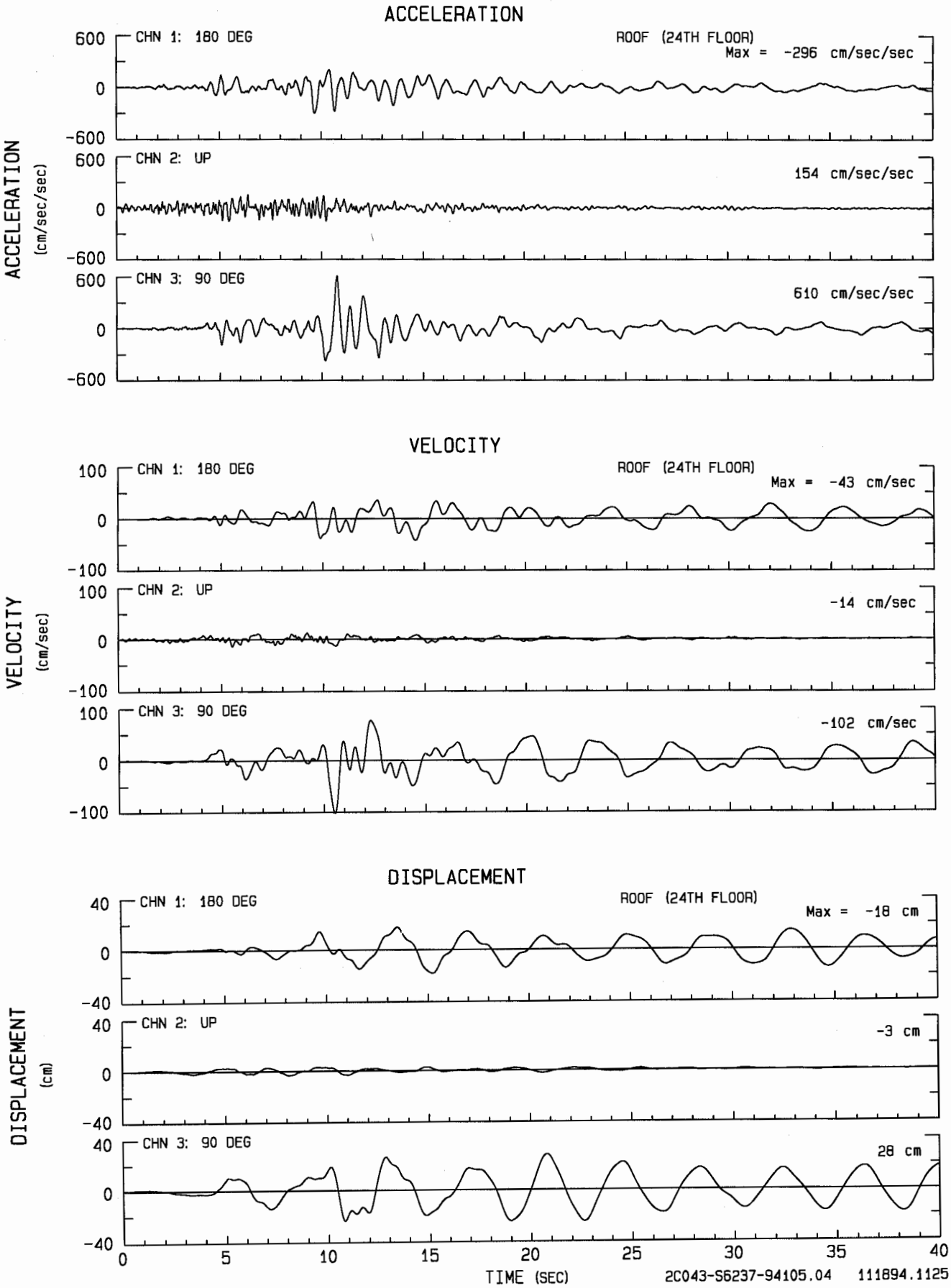
CHN 3 (STA CHN 9): 270 DEG
ROOF (10-STORY BLDG)



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

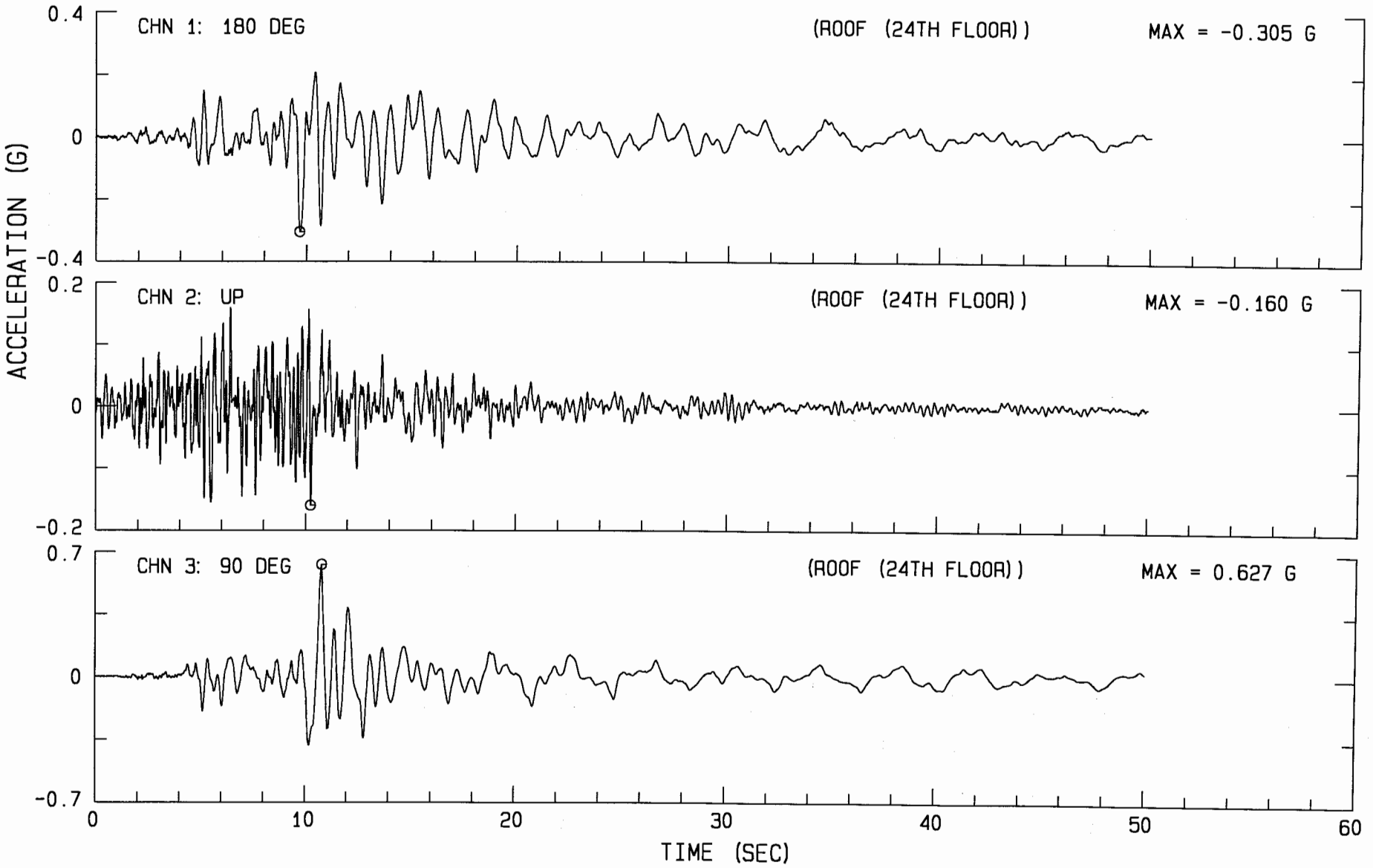
LOS ANGELES - WILSHIRE BLVD #1 CSMIP Sta Num 2C043

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



2C043-S6237-94105.04 111894.1125

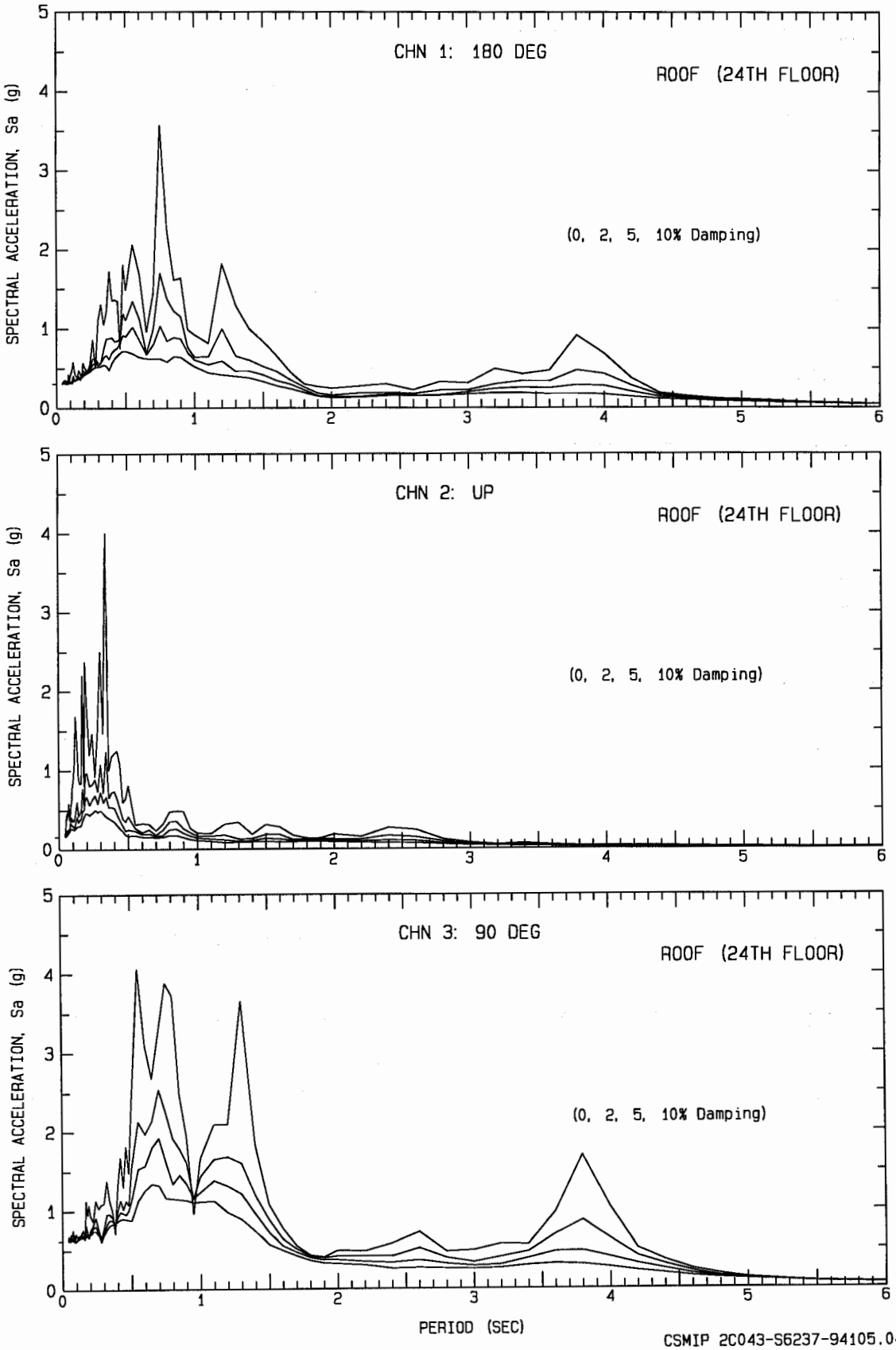
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #1
UNCORRECTED ACCELEROGRAM 2C043-S6237-94105.04 072994.0817-QN94A043



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #1 Sta Num 2C043

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C043-S6237-94105.04

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #1
Sta Num 2C043

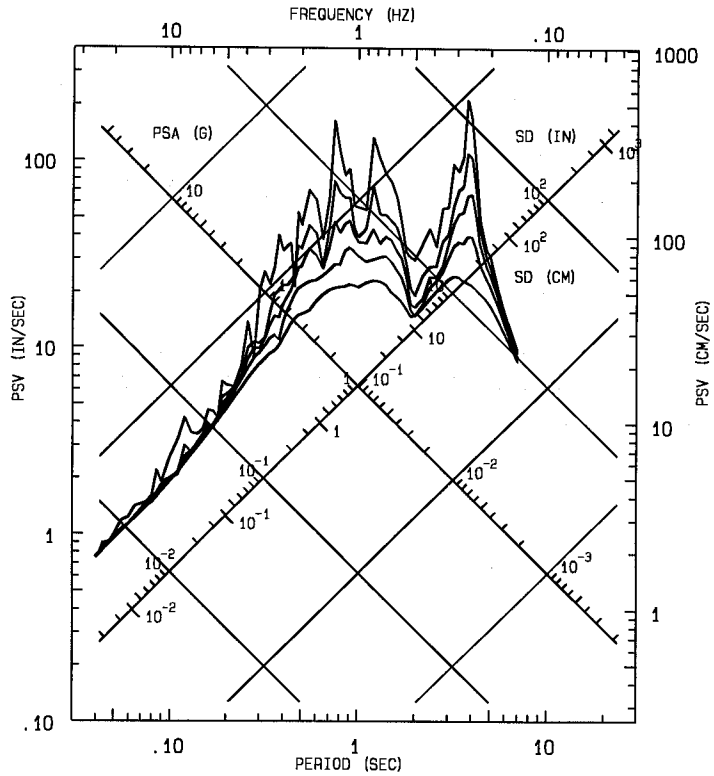
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

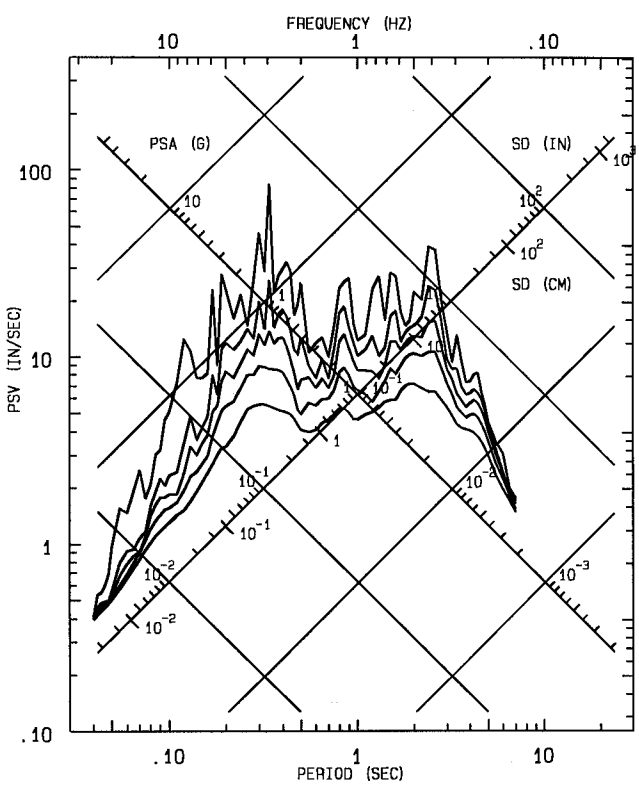
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C043-S6237-94105.04

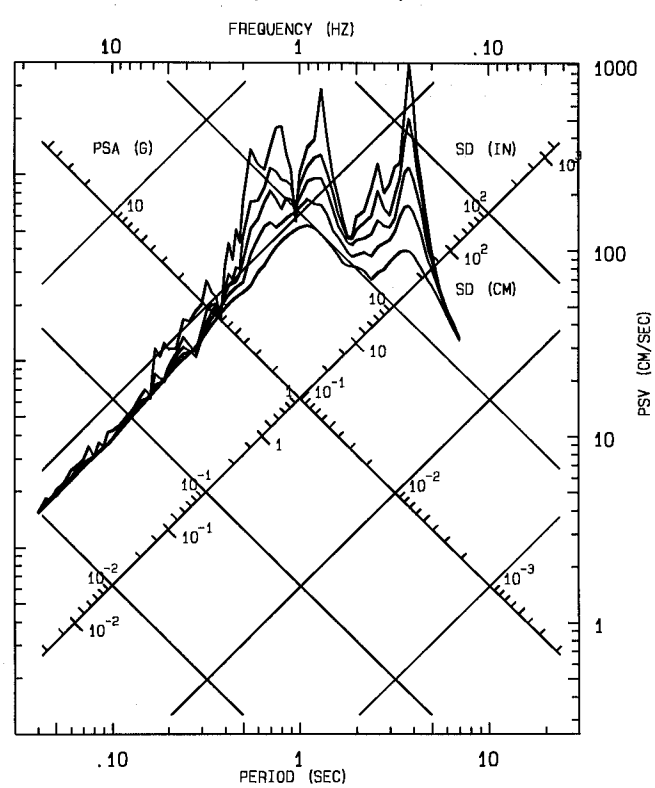
CHN 1: 180 DEG
ROOF (24TH FLOOR)



CHN 2: UP
ROOF (24TH FLOOR)



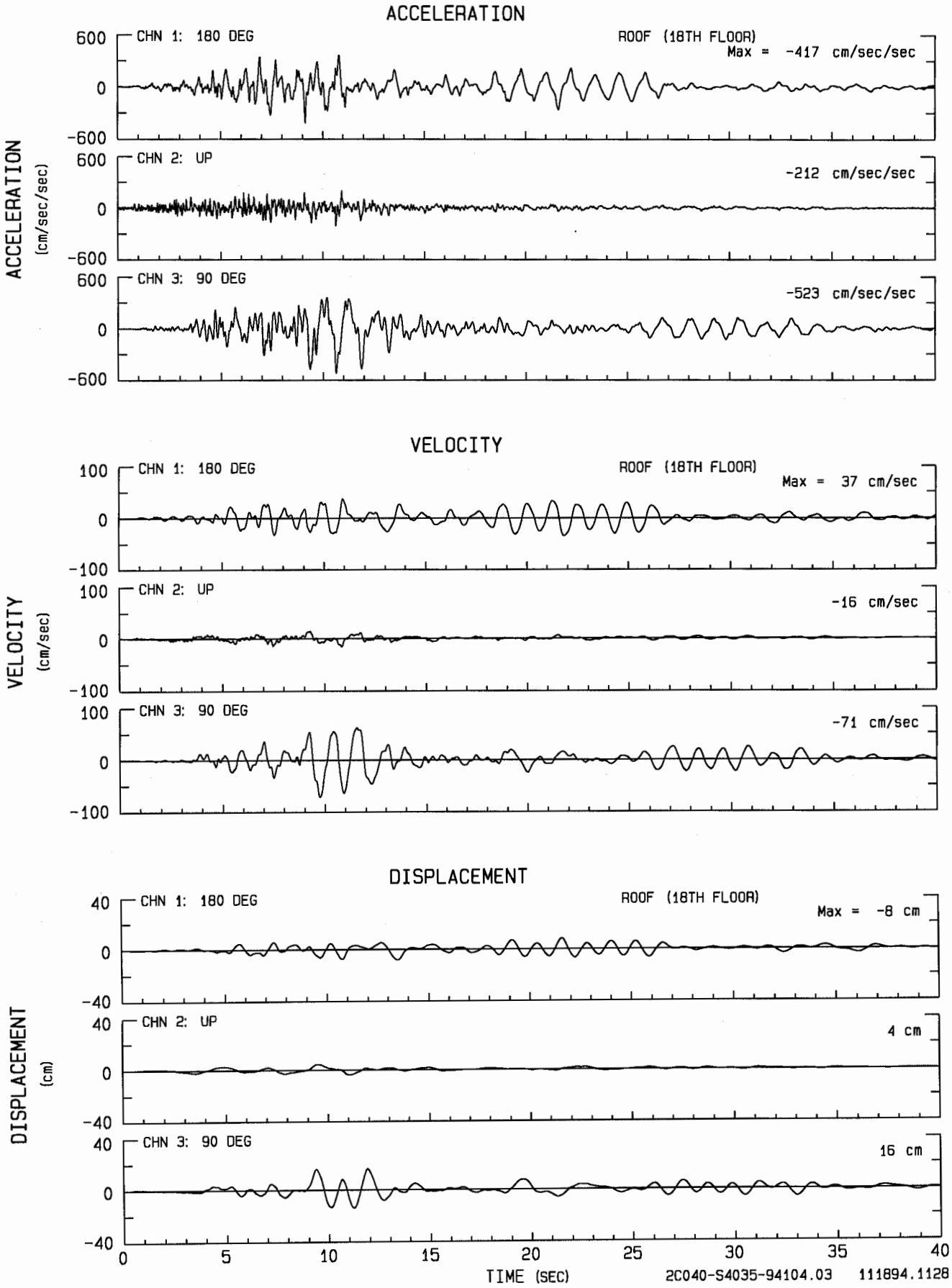
CHN 3: 90 DEG
ROOF (24TH FLOOR)



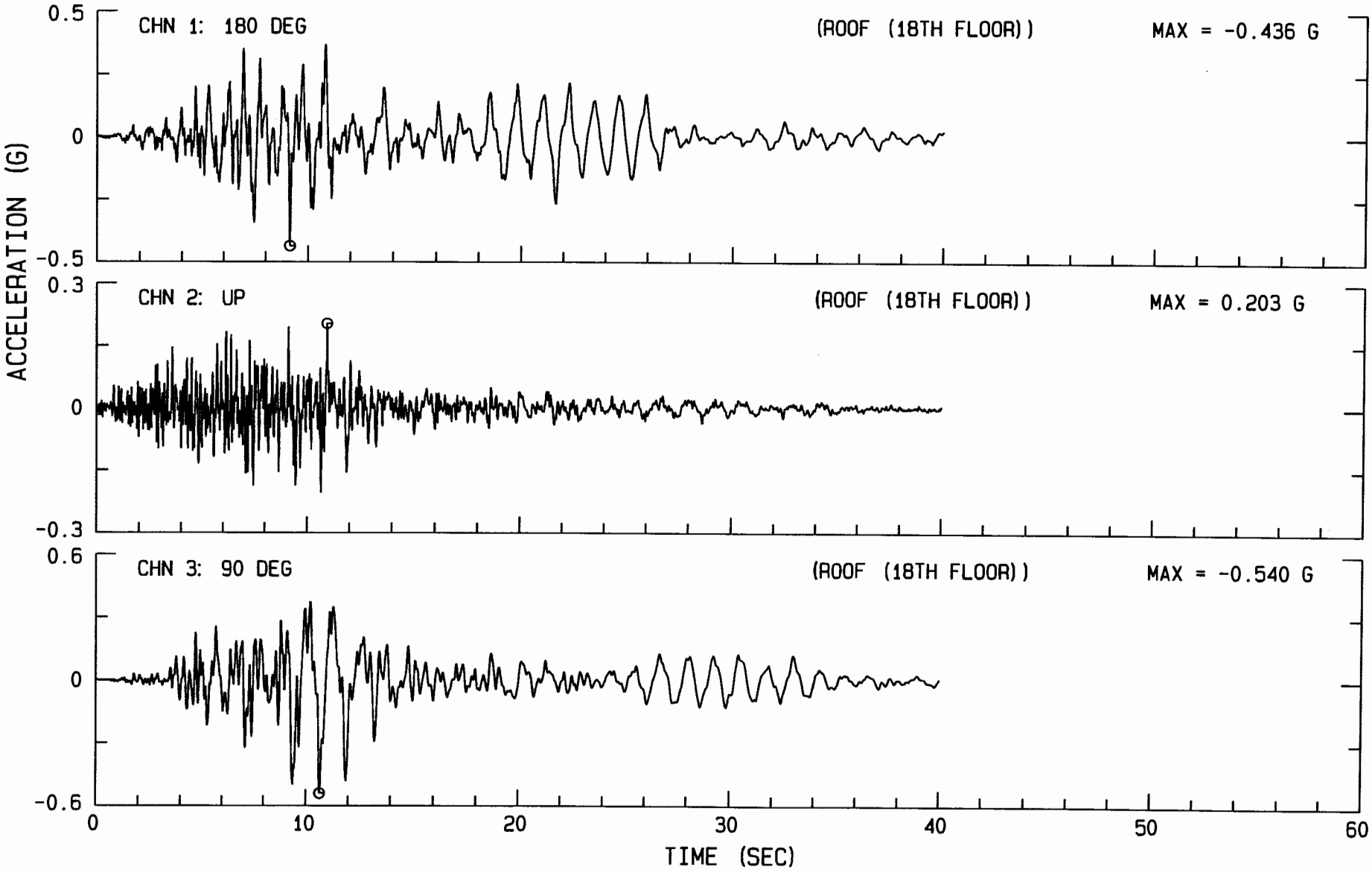
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #2 CSMIP Sta Num 2C040

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



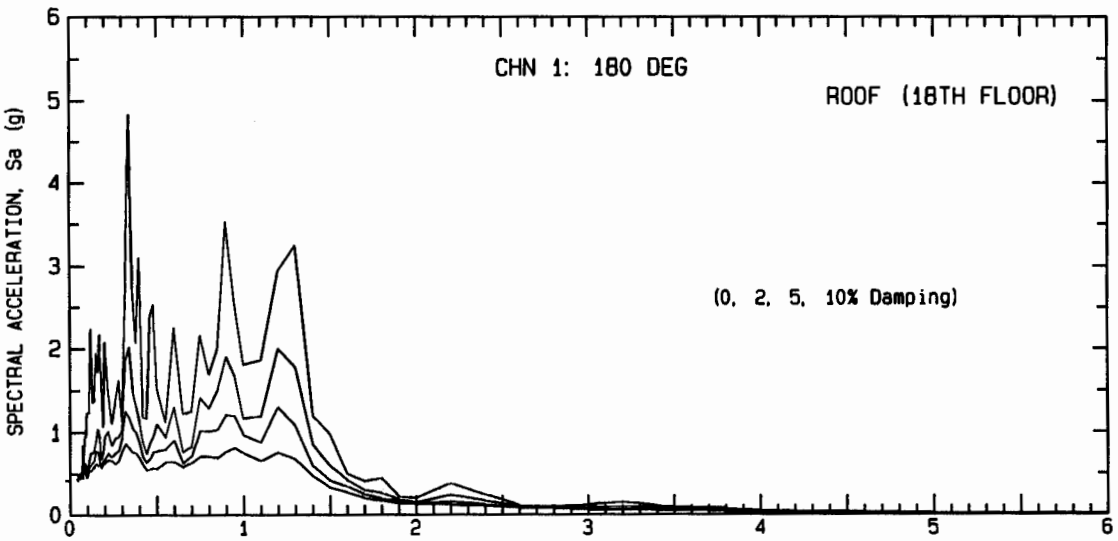
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #2
UNCORRECTED ACCELEROGRAM 2C040-S4035-94104.03 072994.0840-QN94A040

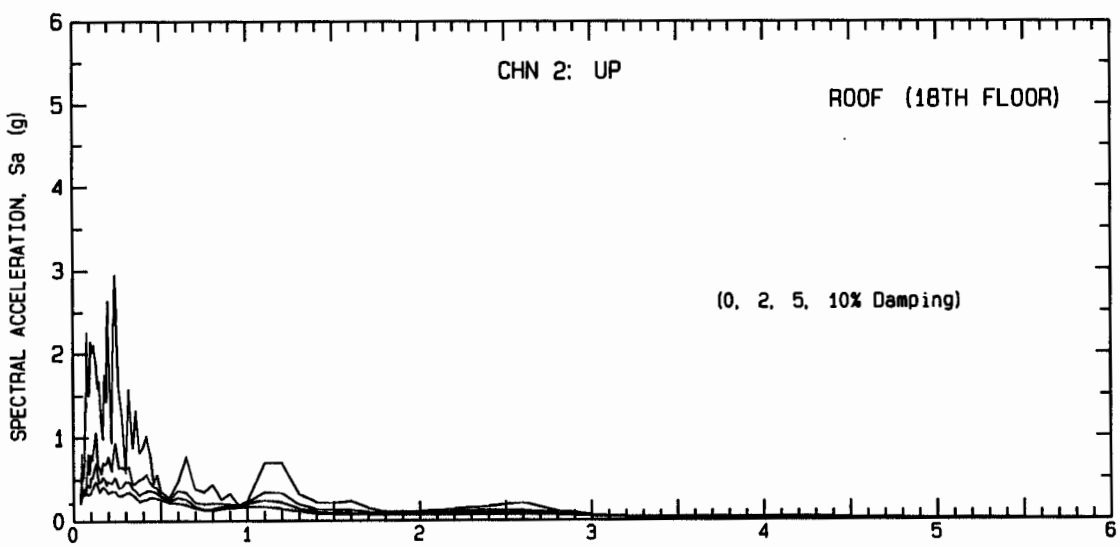


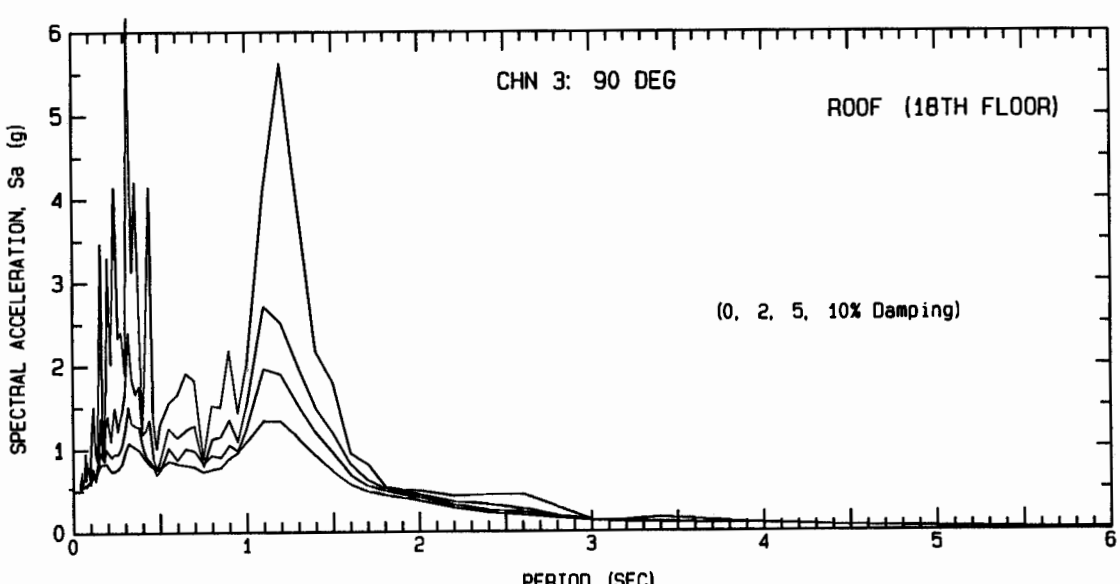
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #2 Sta Num 2C040

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C040-S4035-94104.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #2
Sta Num 2C040

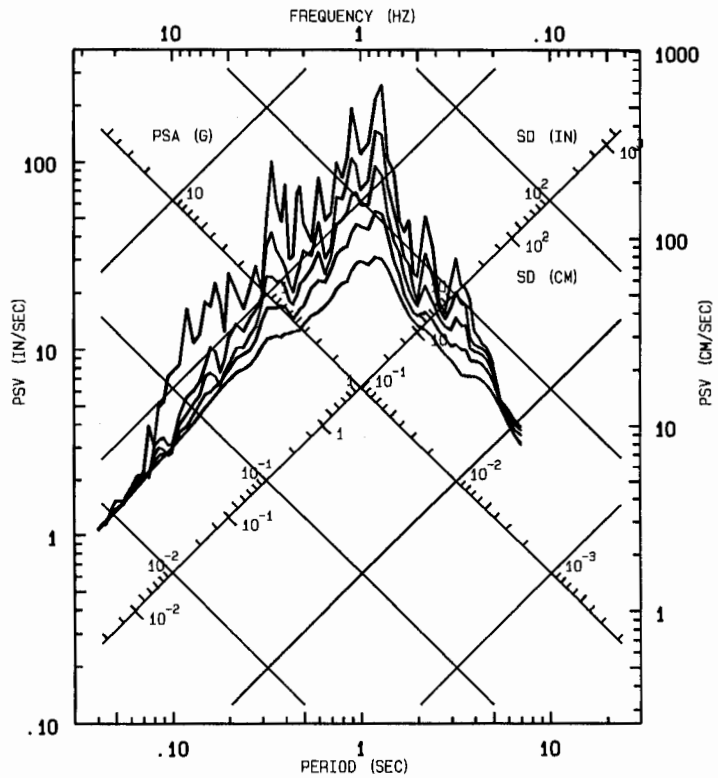
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

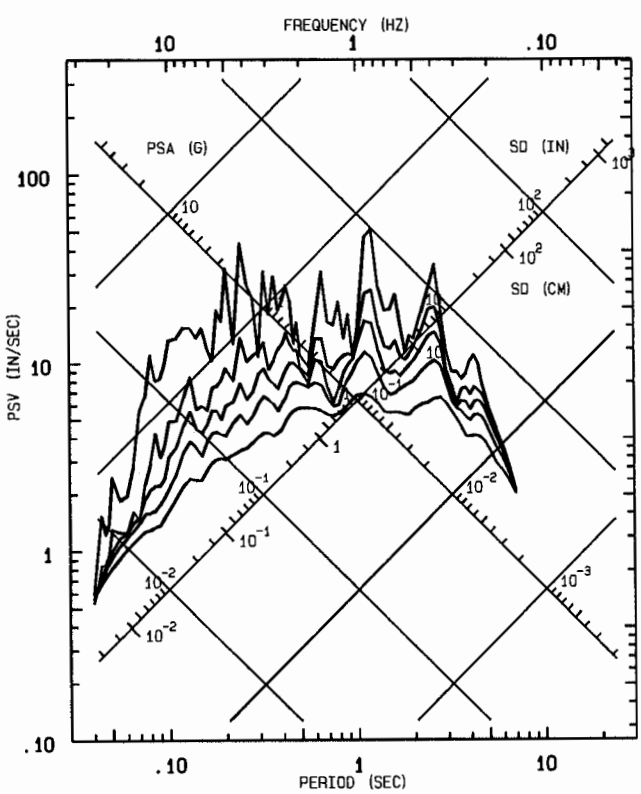
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C040-S4035-94104.03

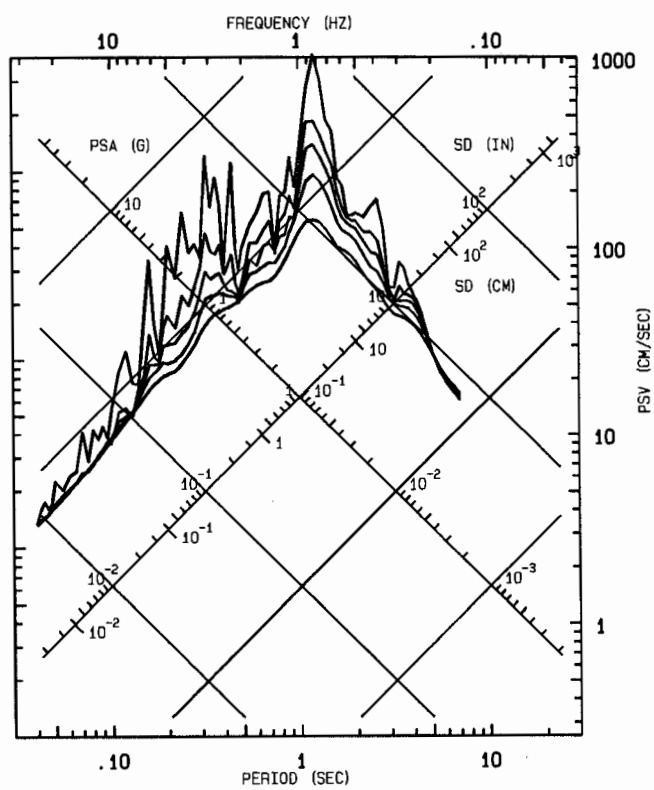
CHN 1: 180 DEG
ROOF (18TH FLOOR)



CHN 2: UP
ROOF (18TH FLOOR)



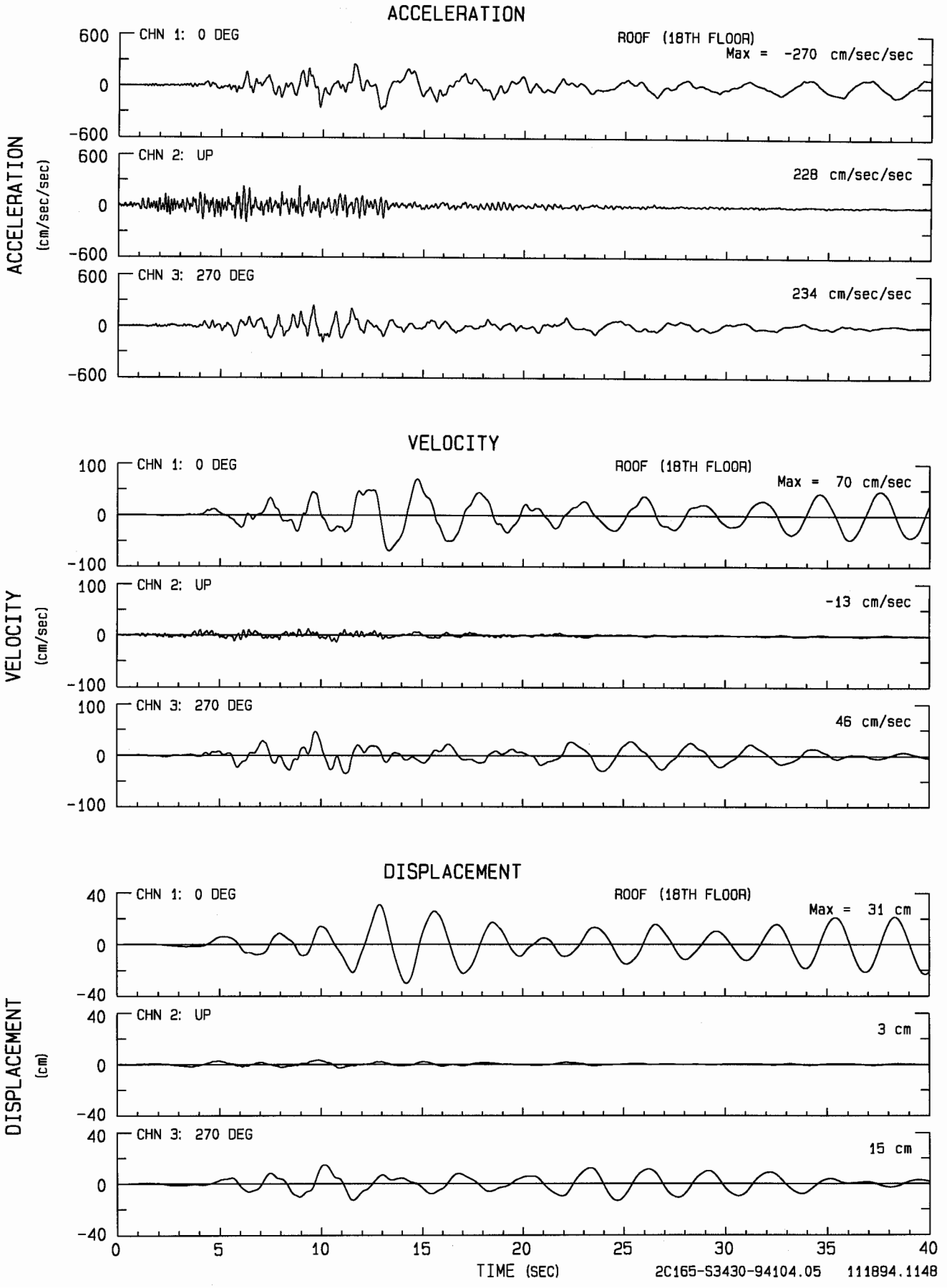
CHN 3: 90 DEG
ROOF (18TH FLOOR)



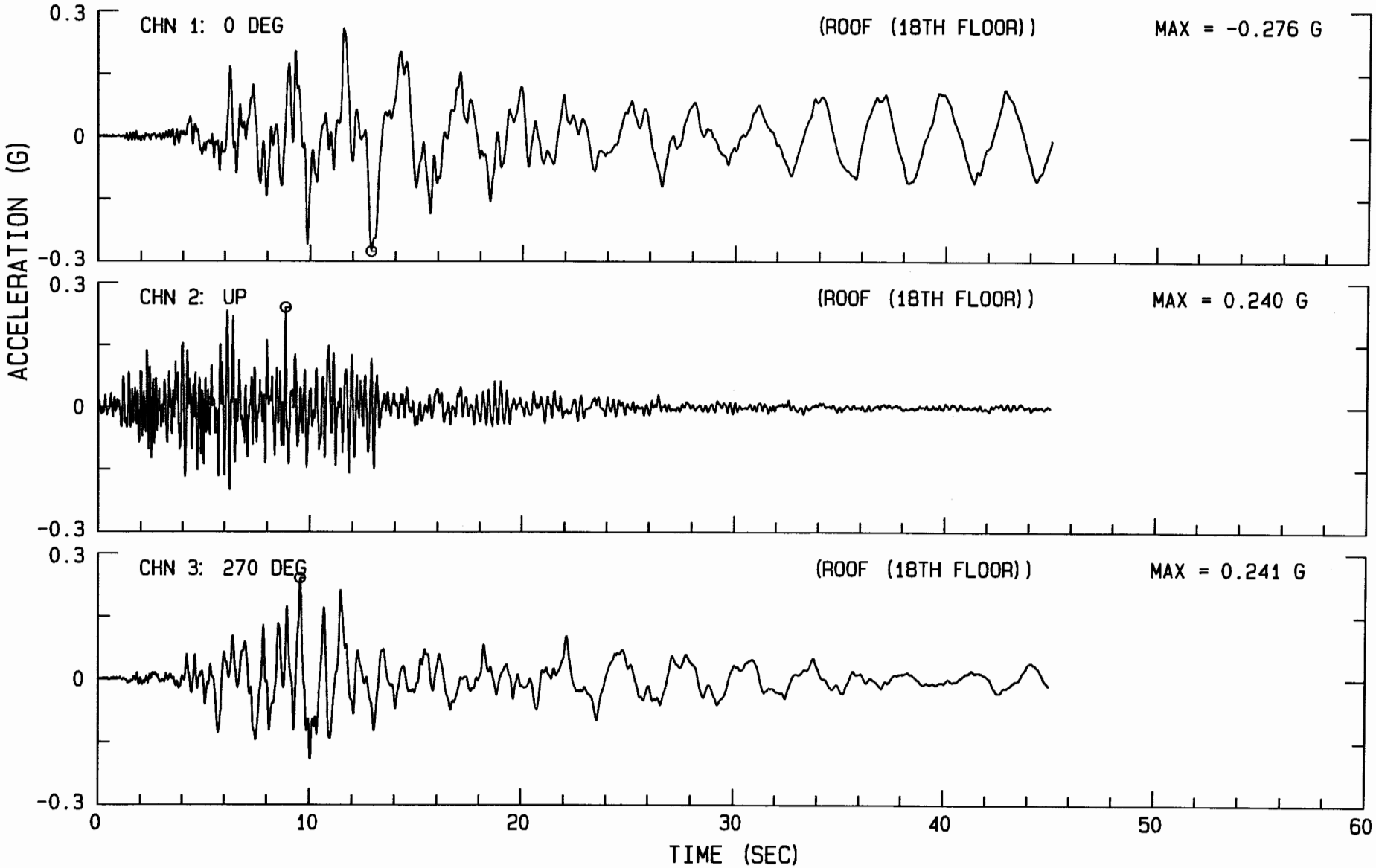
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #3 CSMIP Sta Num 2C165

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



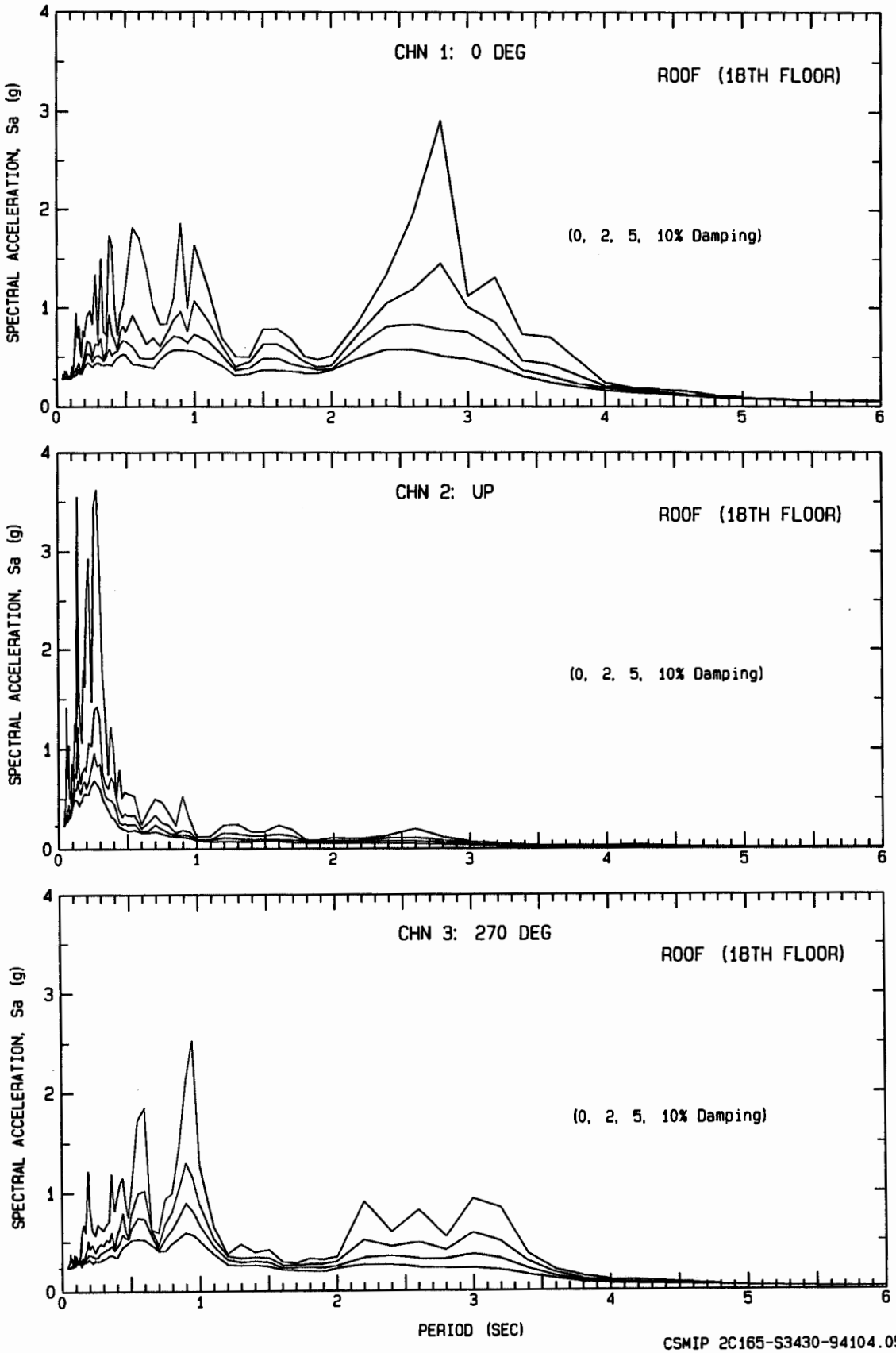
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #3
UNCORRECTED ACCELEROGRAM 2C165-S3430-94104.05 080394.0906-QN94A165



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #3 Sta Num 2C165

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C165-S3430-94104.05

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #3
Sta Num 2C165

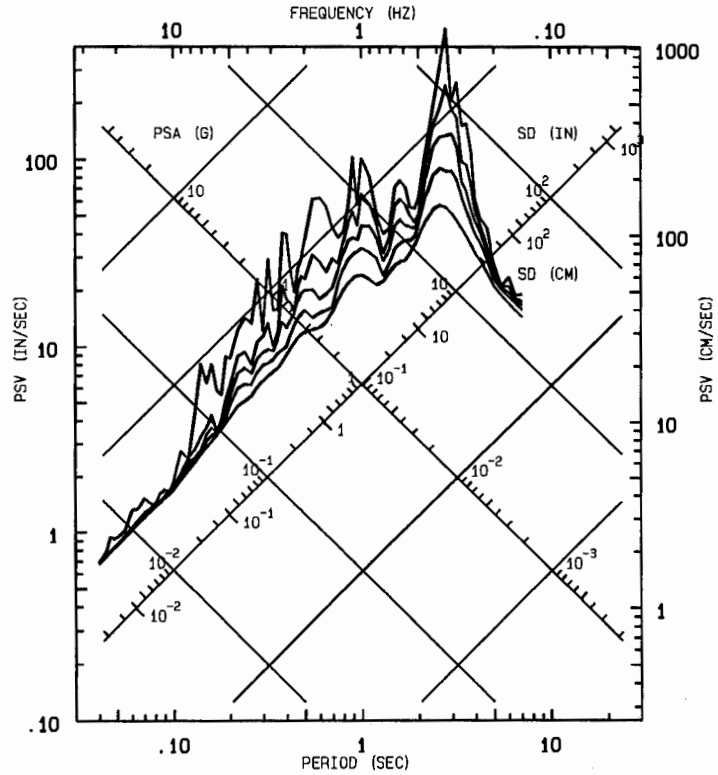
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

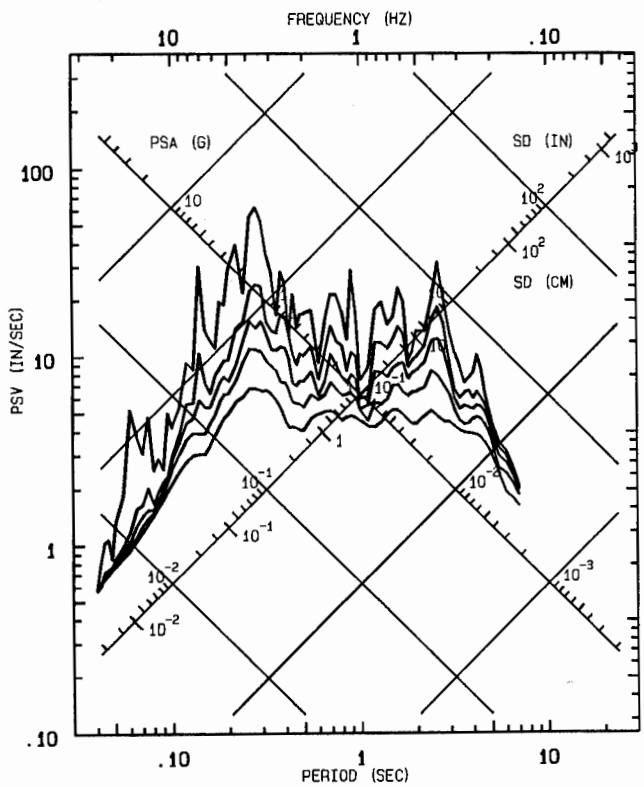
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C165-S3430-94104.05

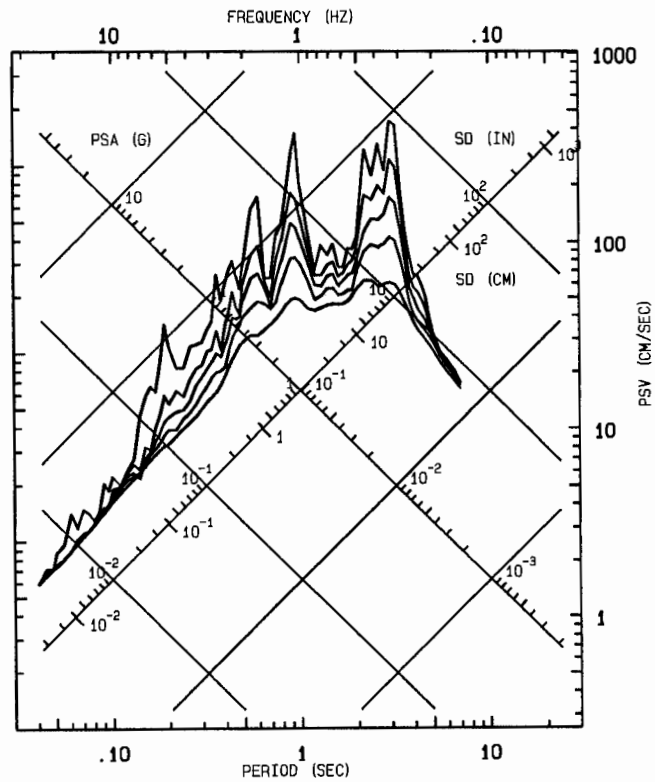
CHN 1: 0 DEG
ROOF (18TH FLOOR)



CHN 2: UP
ROOF (18TH FLOOR)



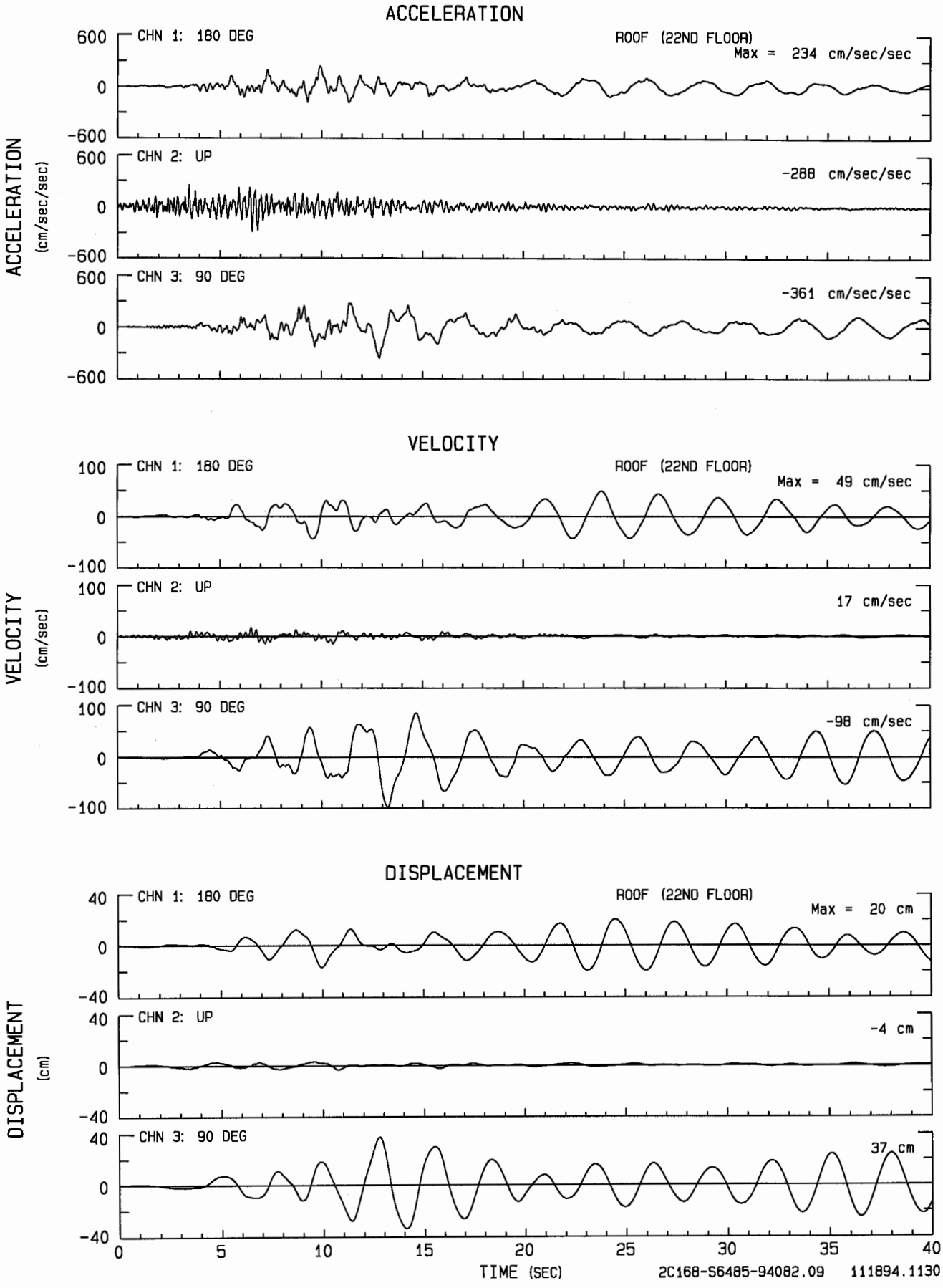
CHN 3: 270 DEG
ROOF (18TH FLOOR)



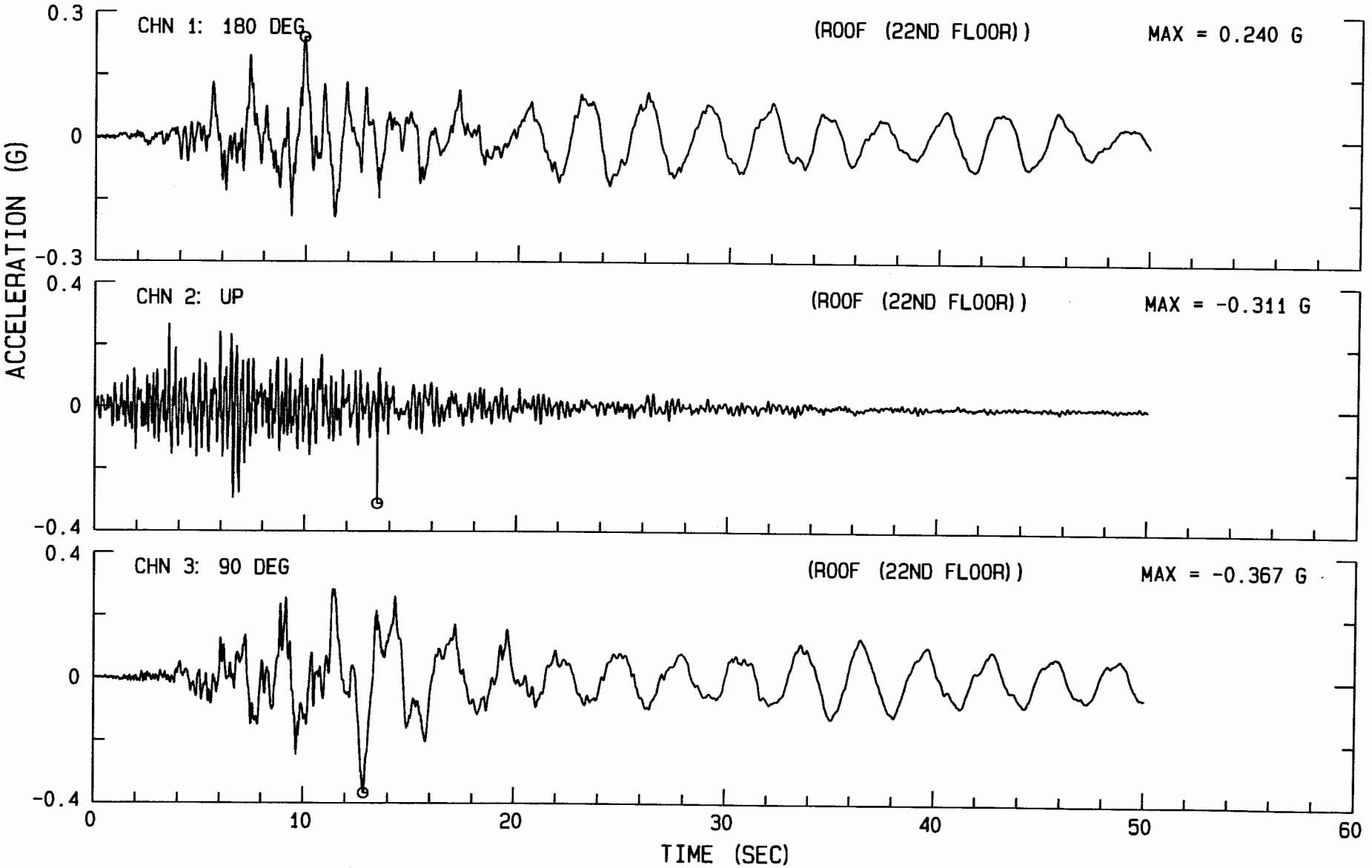
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #4 CSMIP Sta Num 2C16B

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



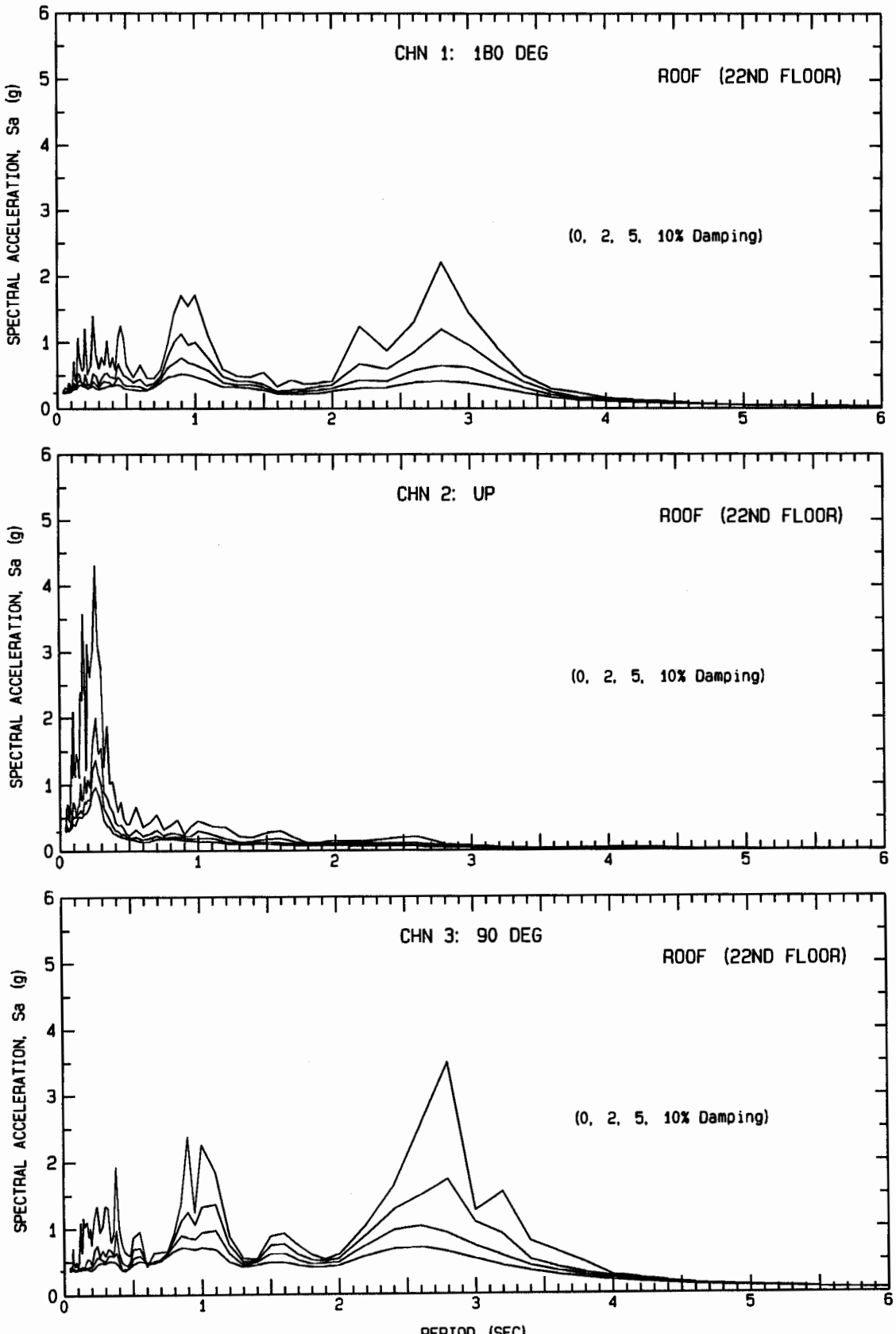
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #4
UNCORRECTED ACCELEROGRAM 2C168-S6485-94082.09 080394.1006-QN94A168



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #4 Sta Num 2C168

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C168-S6485-94082.09

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #4
Sta Num 2C168

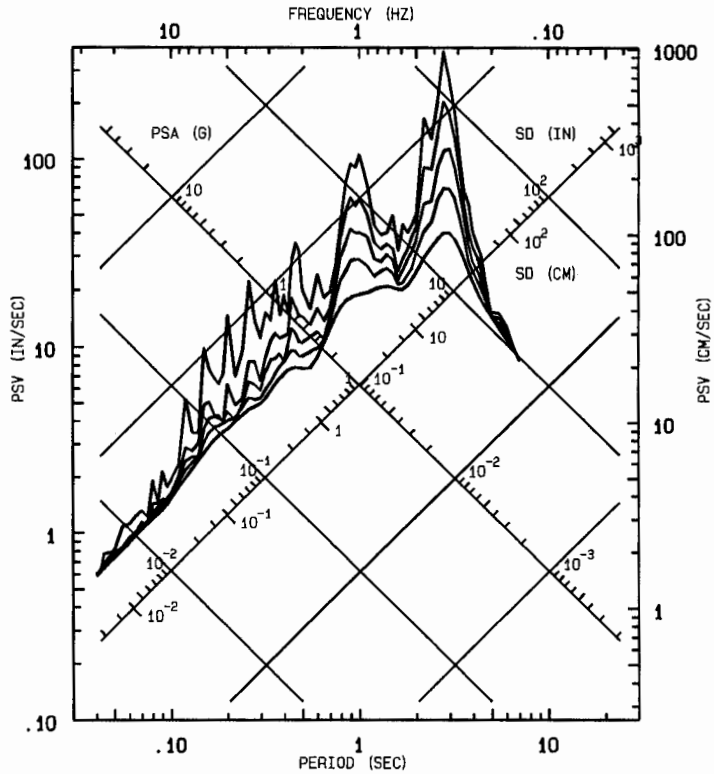
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

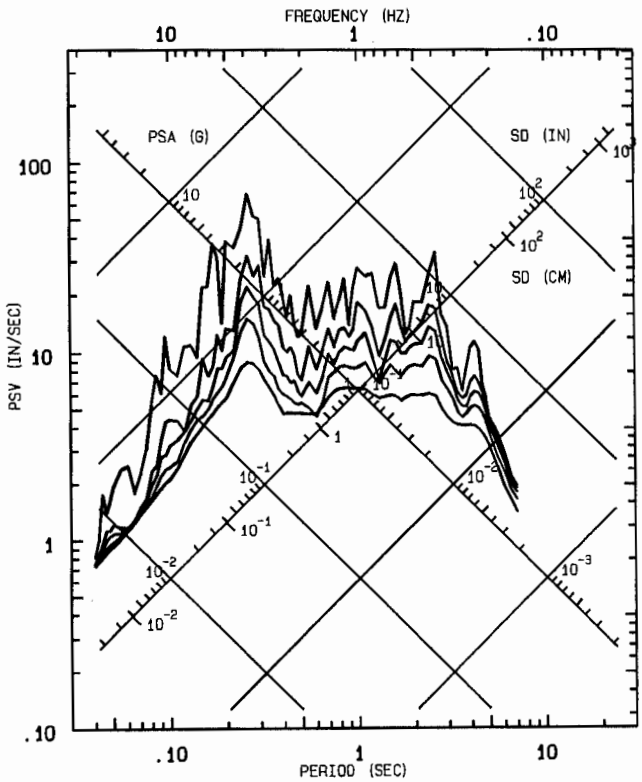
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C168-S6485-94082.09

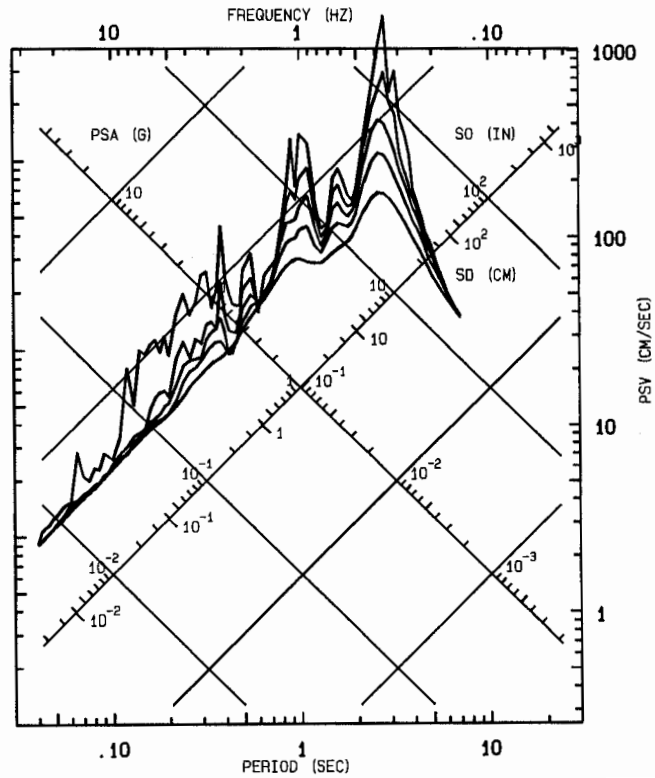
CHN 1: 180 DEG
ROOF (22ND FLOOR)



CHN 2: UP
ROOF (22ND FLOOR)



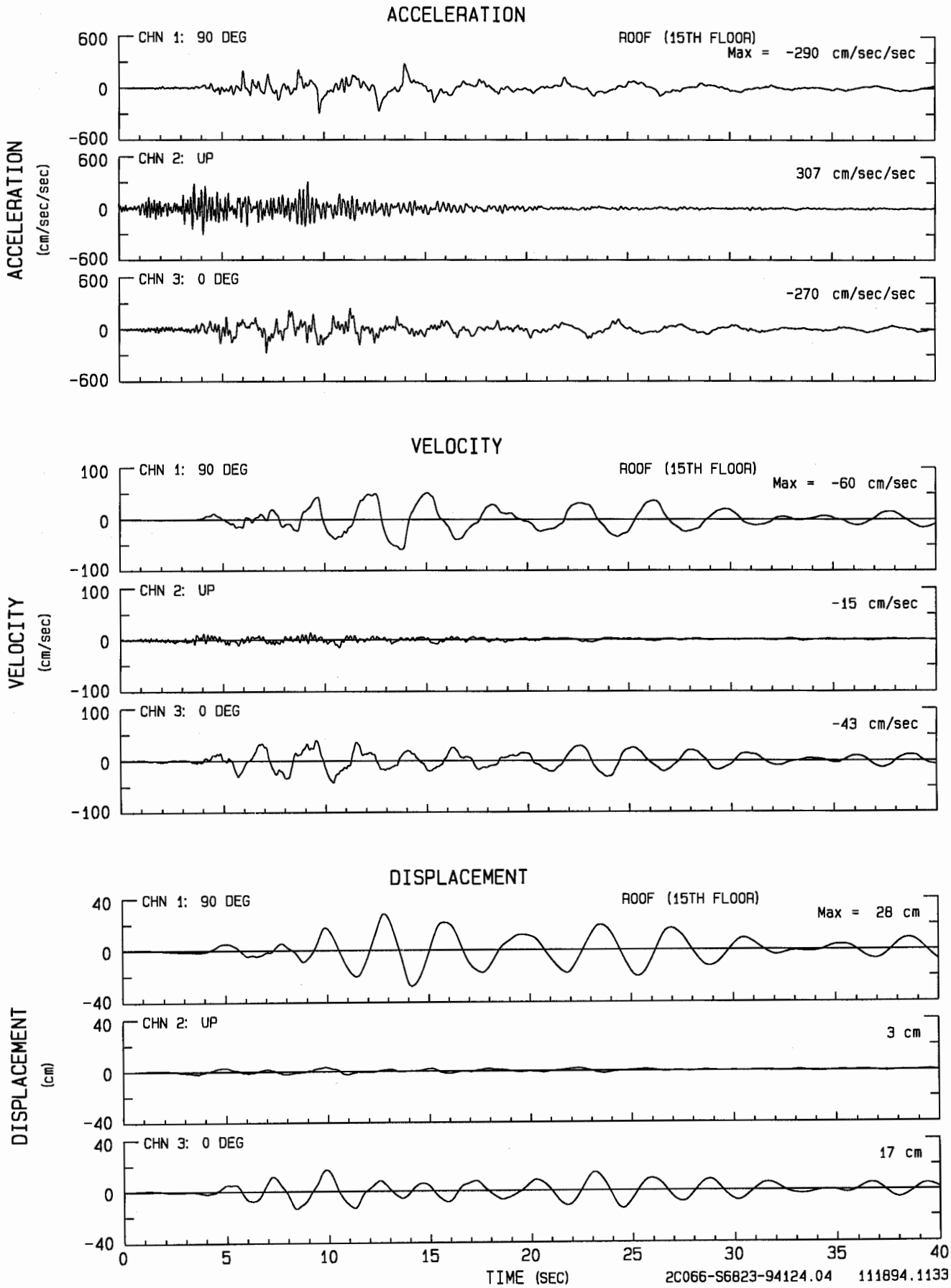
CHN 3: 90 DEG
ROOF (22ND FLOOR)



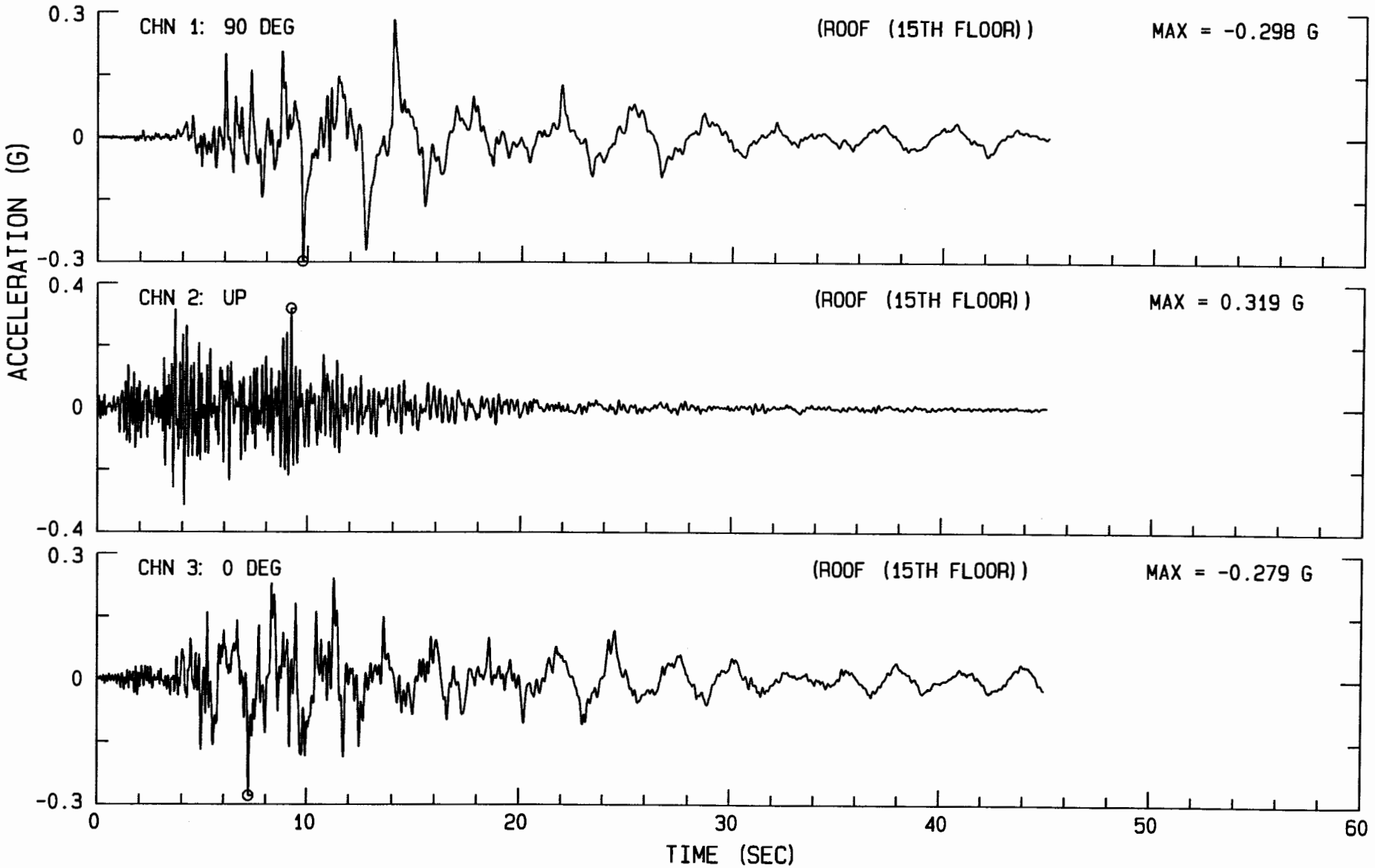
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #5 CSMIP Sta Num 2C066

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



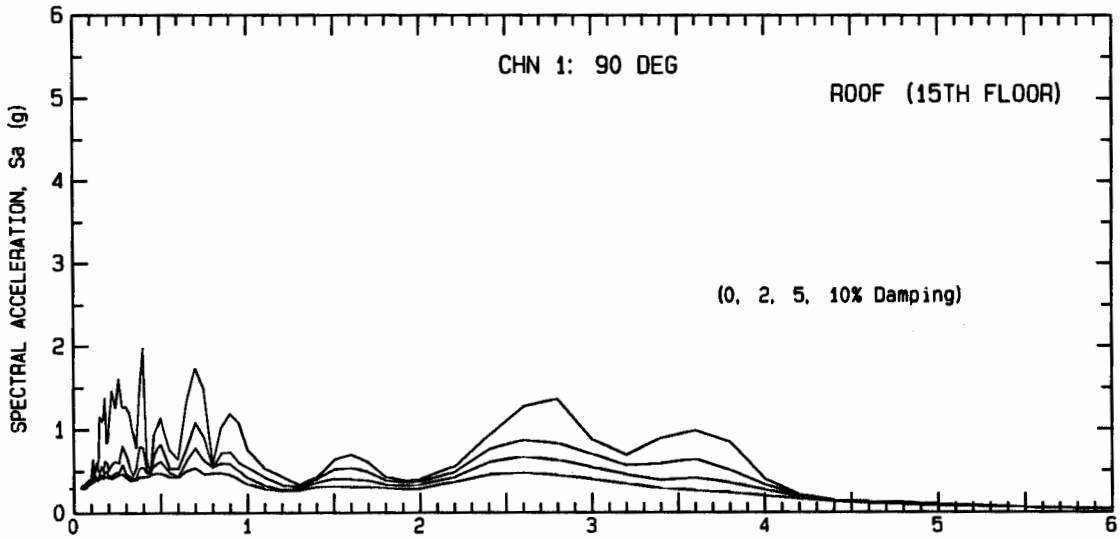
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #5
UNCORRECTED ACCELEROGRAM 2C066-S6823-94124.04 080394.1105-QN94A066

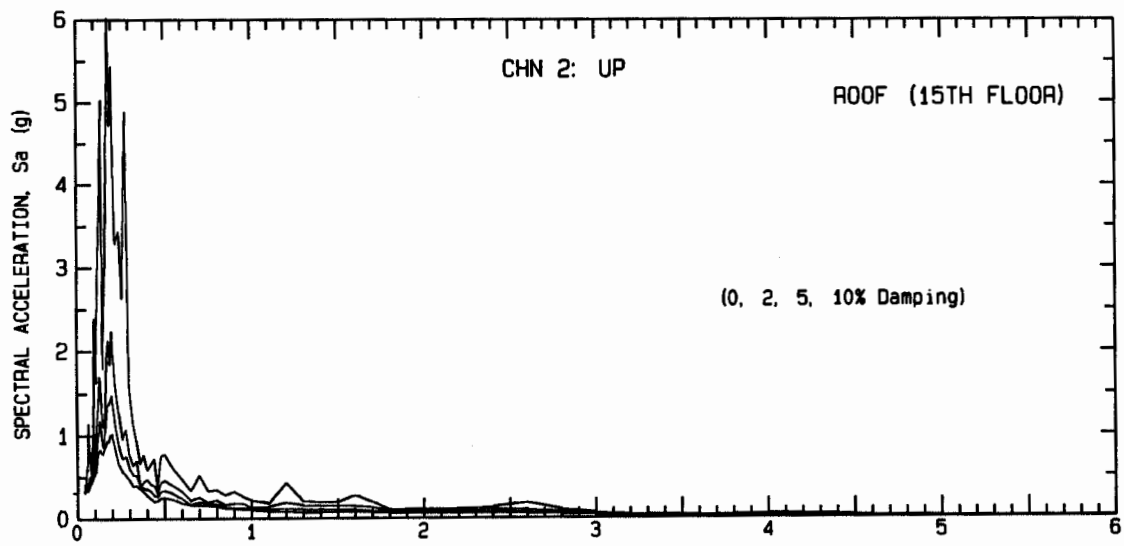


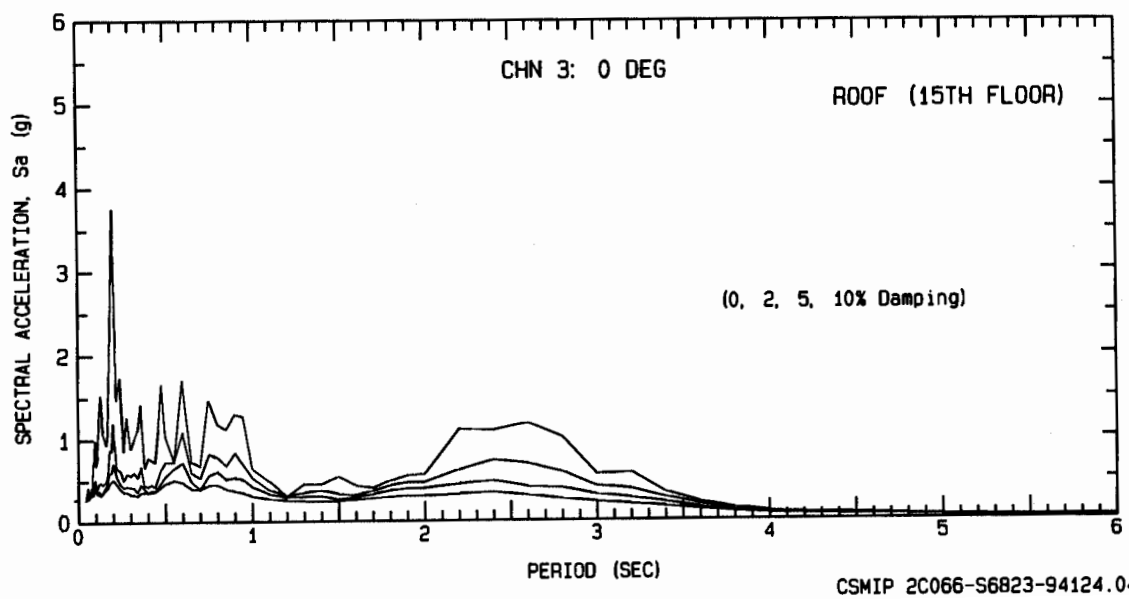
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #5 Sta Num 2C066

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C066-S6823-94124.04

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #5
Sta Num 2C066

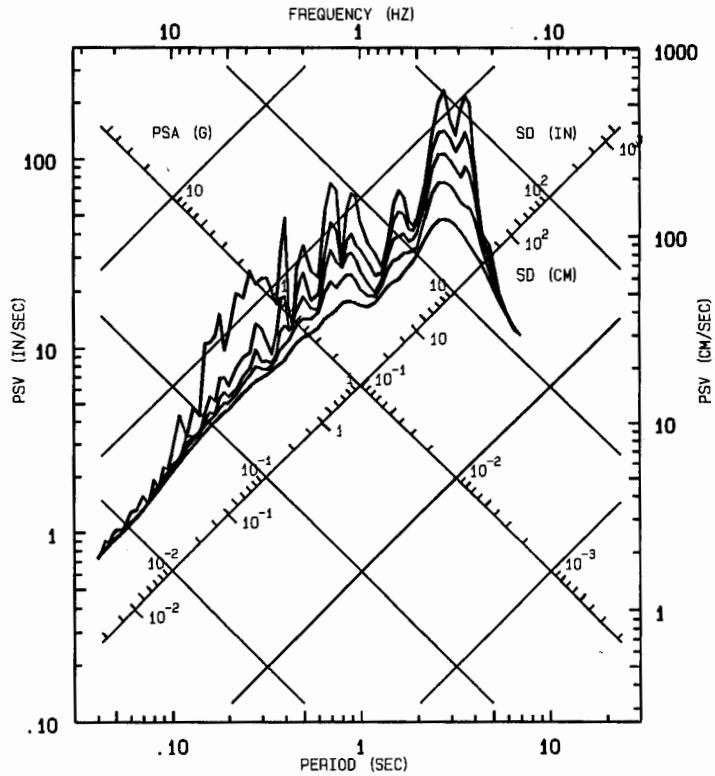
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

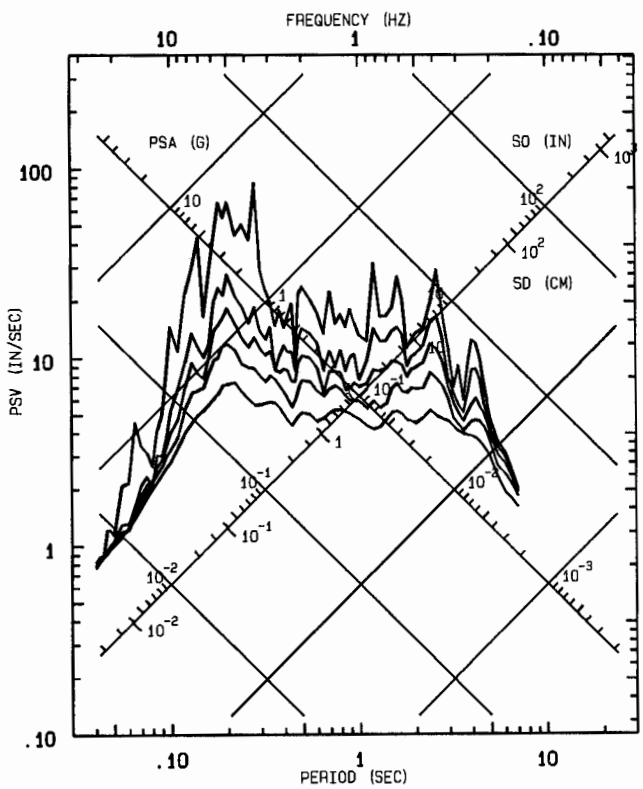
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C066-S6823-94124.04

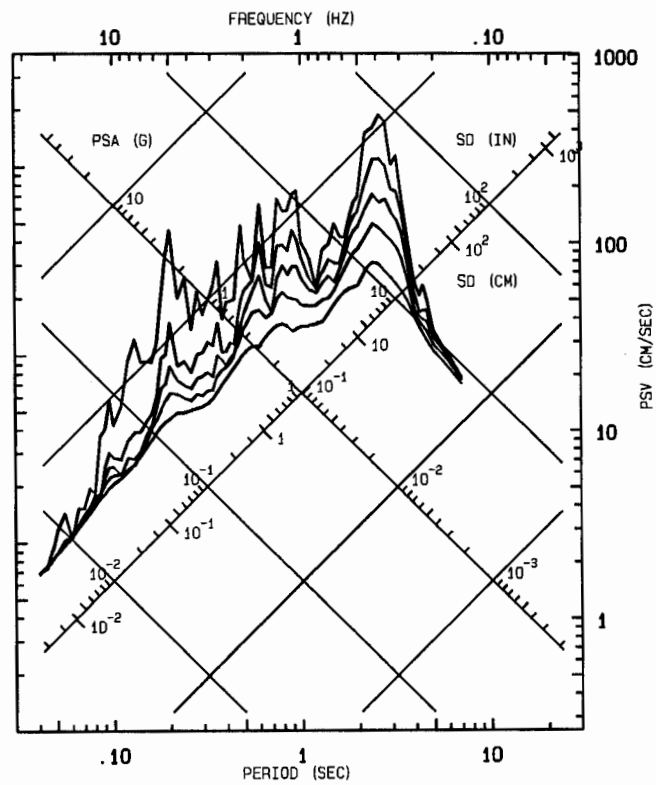
CHN 1: 90 DEG
ROOF (15TH FLOOR)



CHN 2: UP
ROOF (15TH FLOOR)



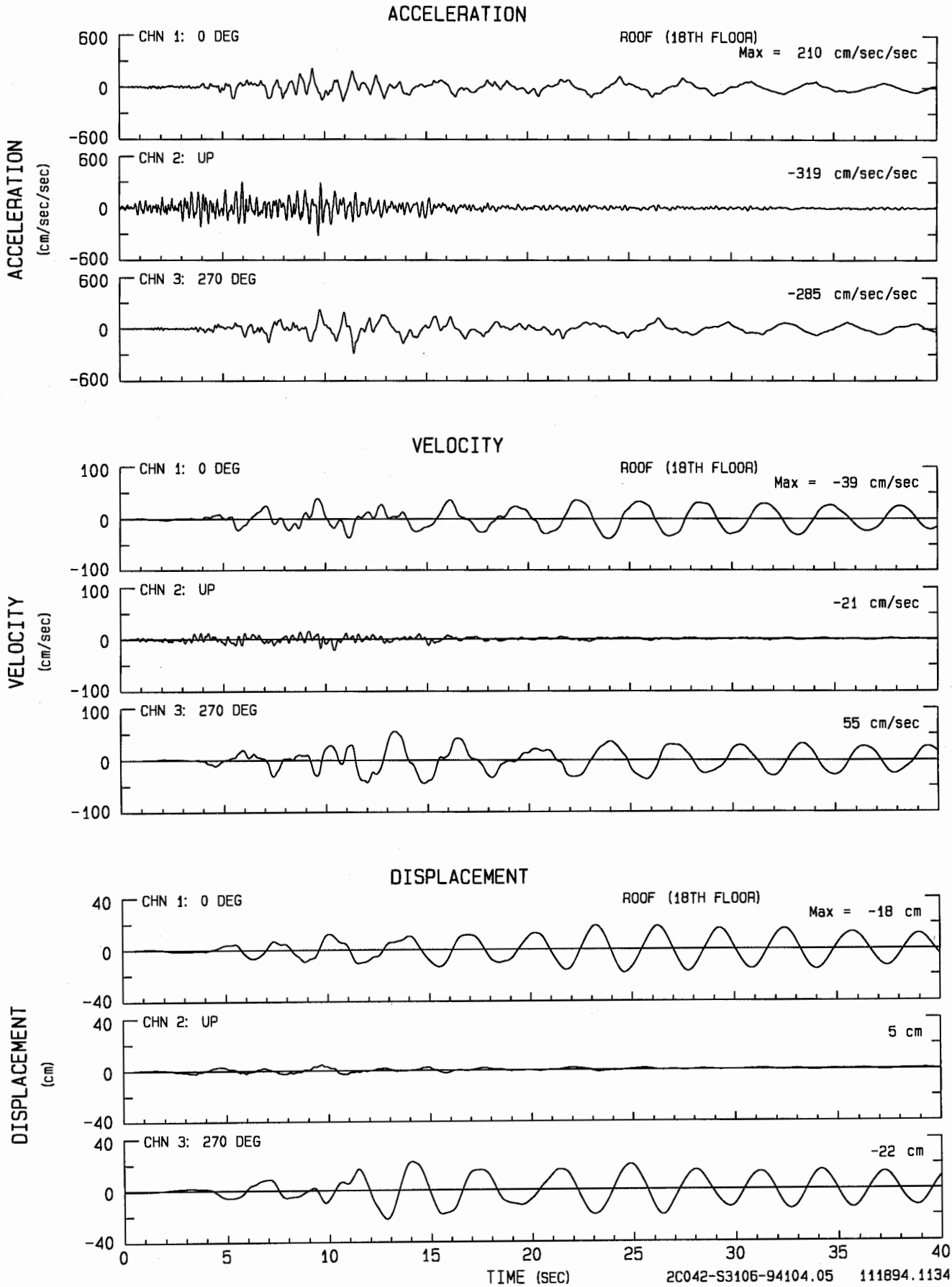
CHN 3: 0 DEG
ROOF (15TH FLOOR)



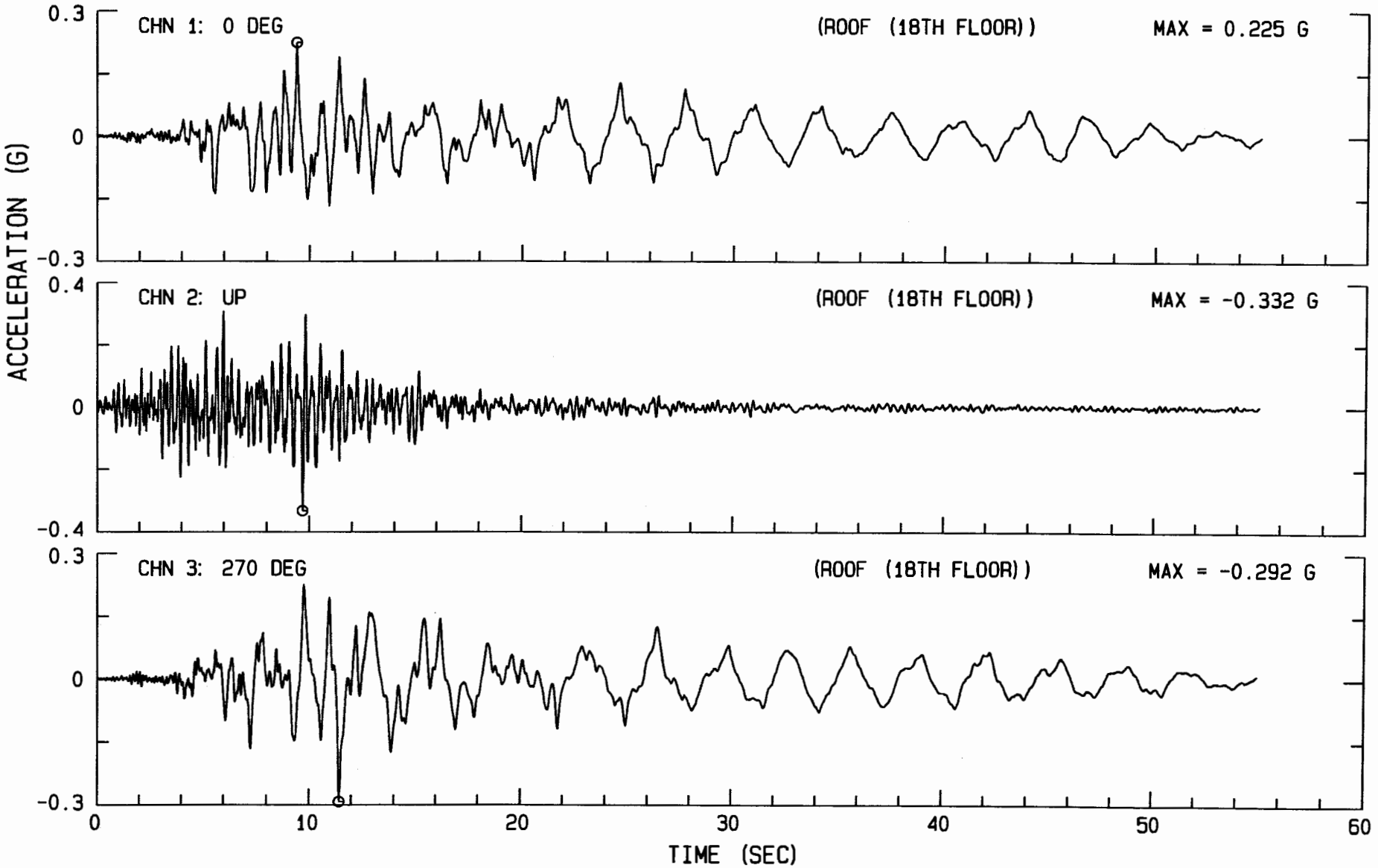
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #6 CSMIP Sta Num 2C042

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



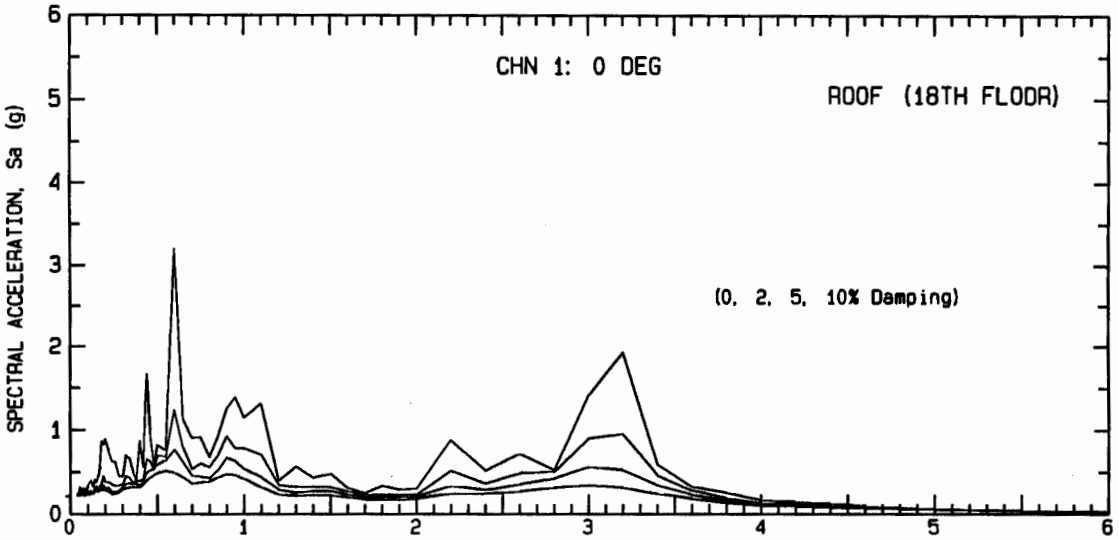
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #6
UNCORRECTED ACCELEROGRAM 2C042-S3106-94104.05 080394.1308-QN94A042

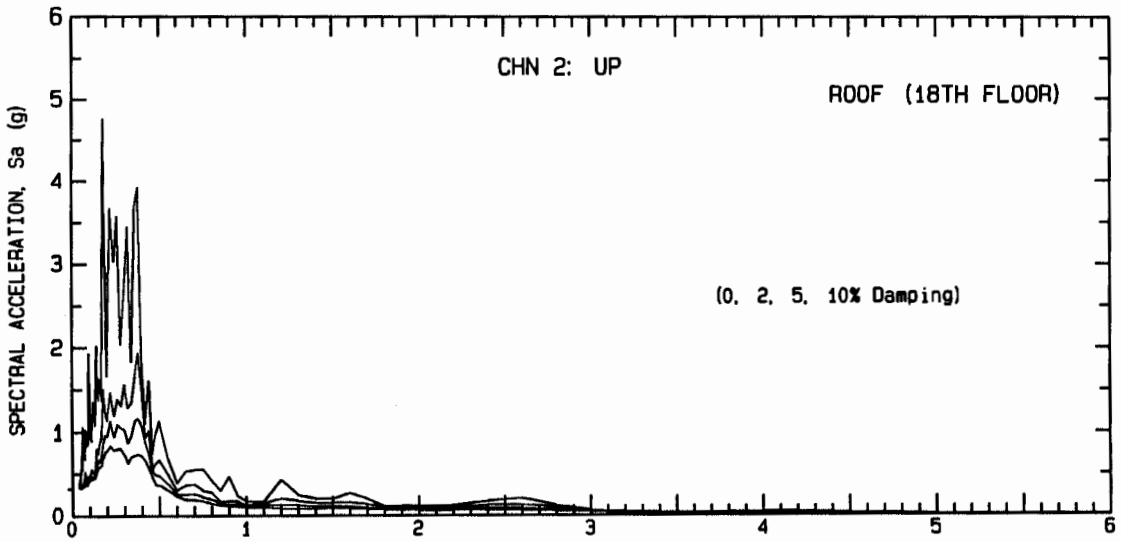


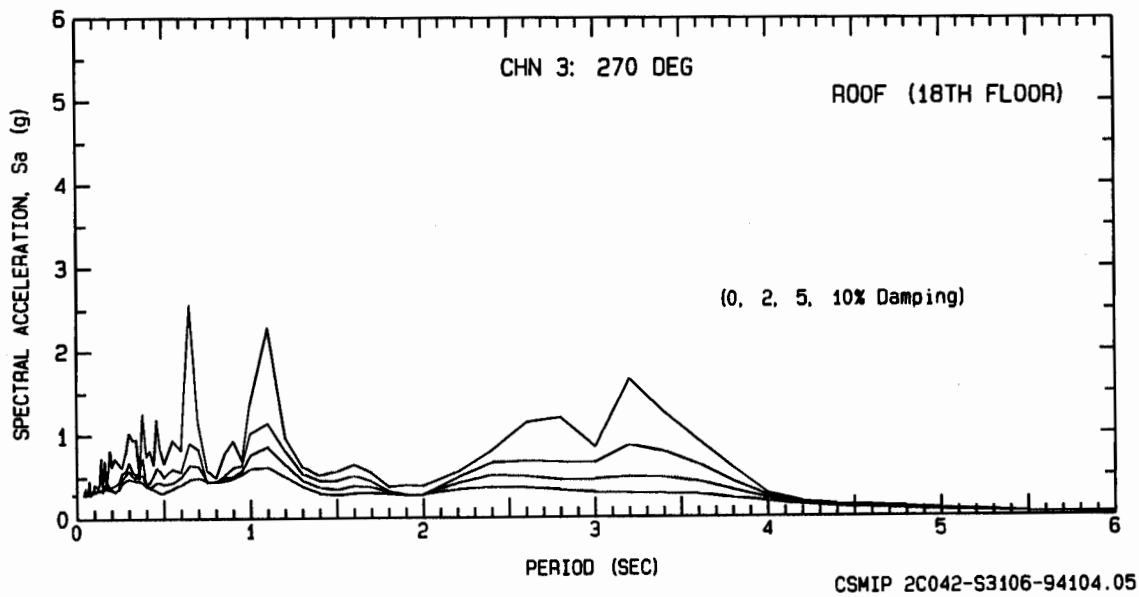
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #6 Sta Num 2C042

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C042-S3106-94104.05

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #6
Sta Num 2C042

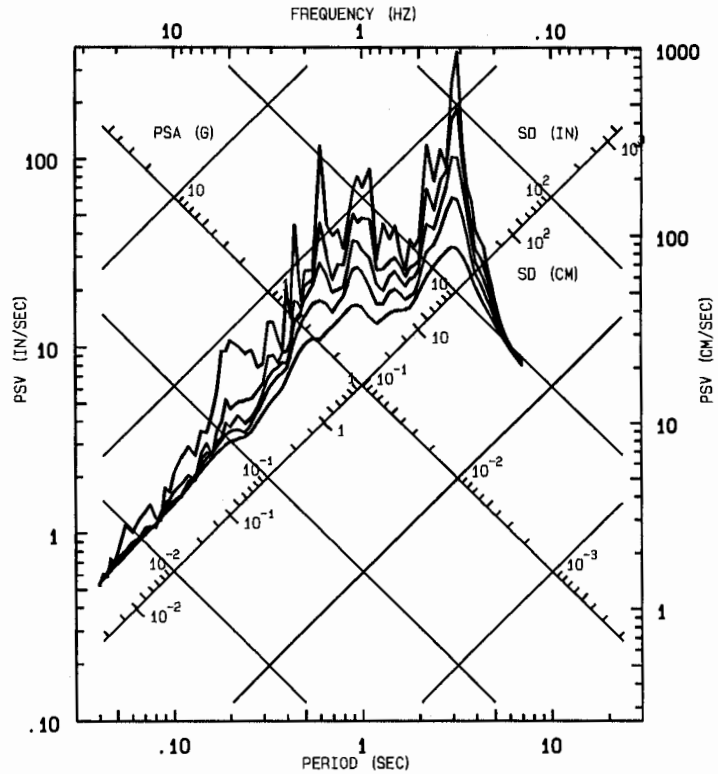
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

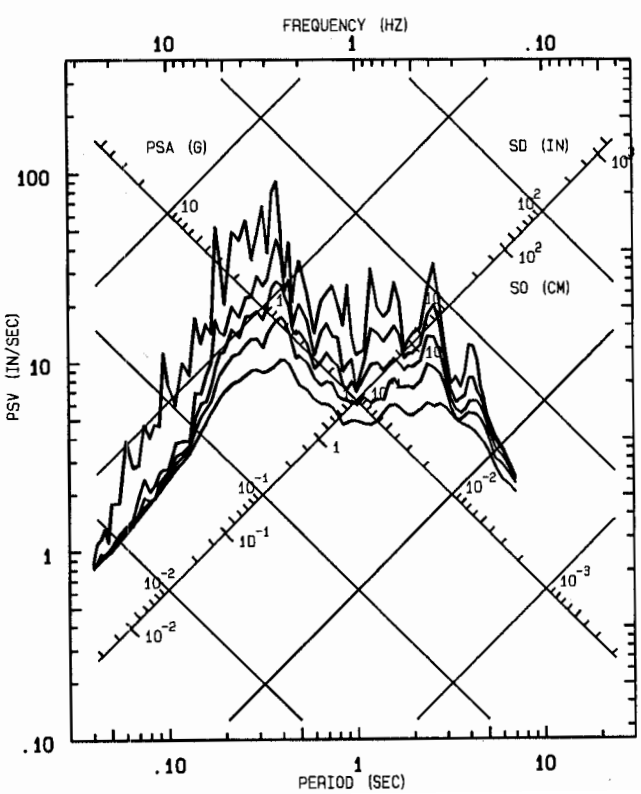
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C042-S3106-94104.05

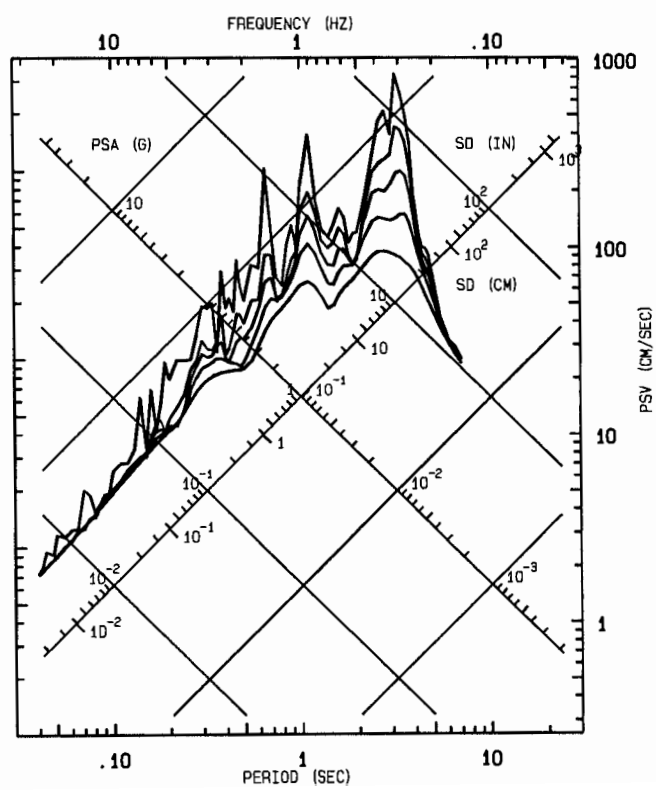
CHN 1: 0 DEG
ROOF (18TH FLOOR)



CHN 2: UP
ROOF (18TH FLOOR)



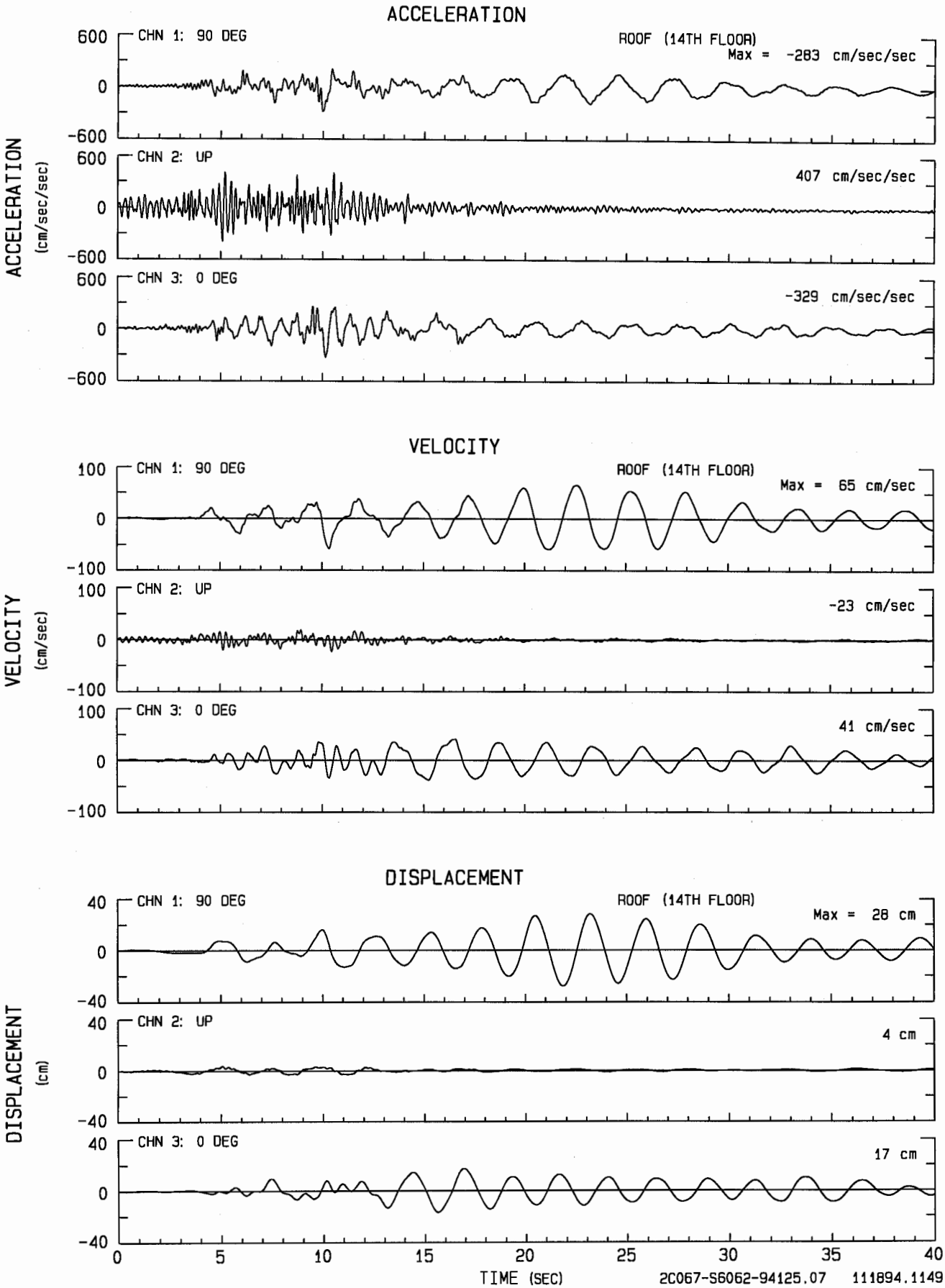
CHN 3: 270 DEG
ROOF (18TH FLOOR)



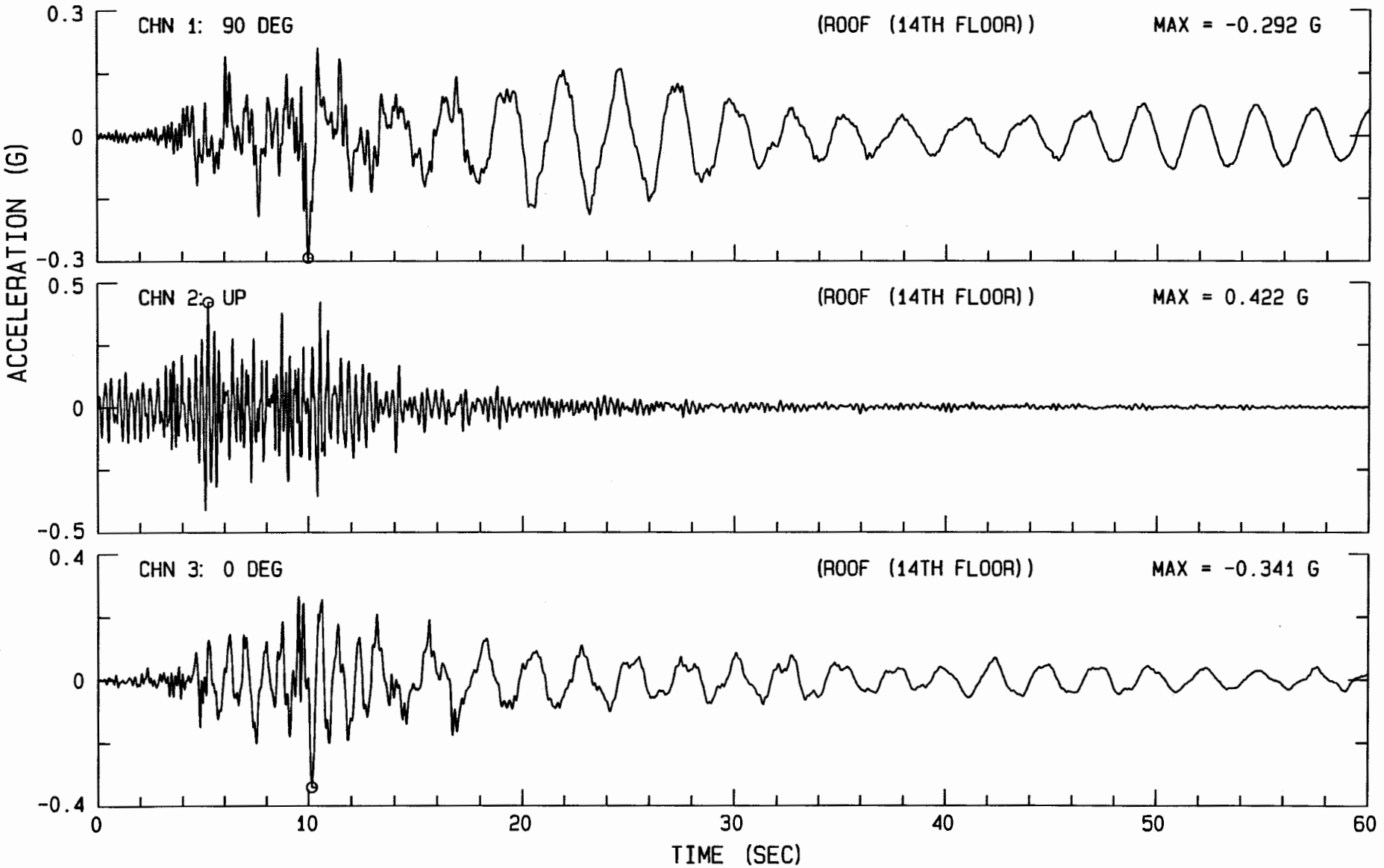
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #7 CSMIP Sta Num 2C067

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



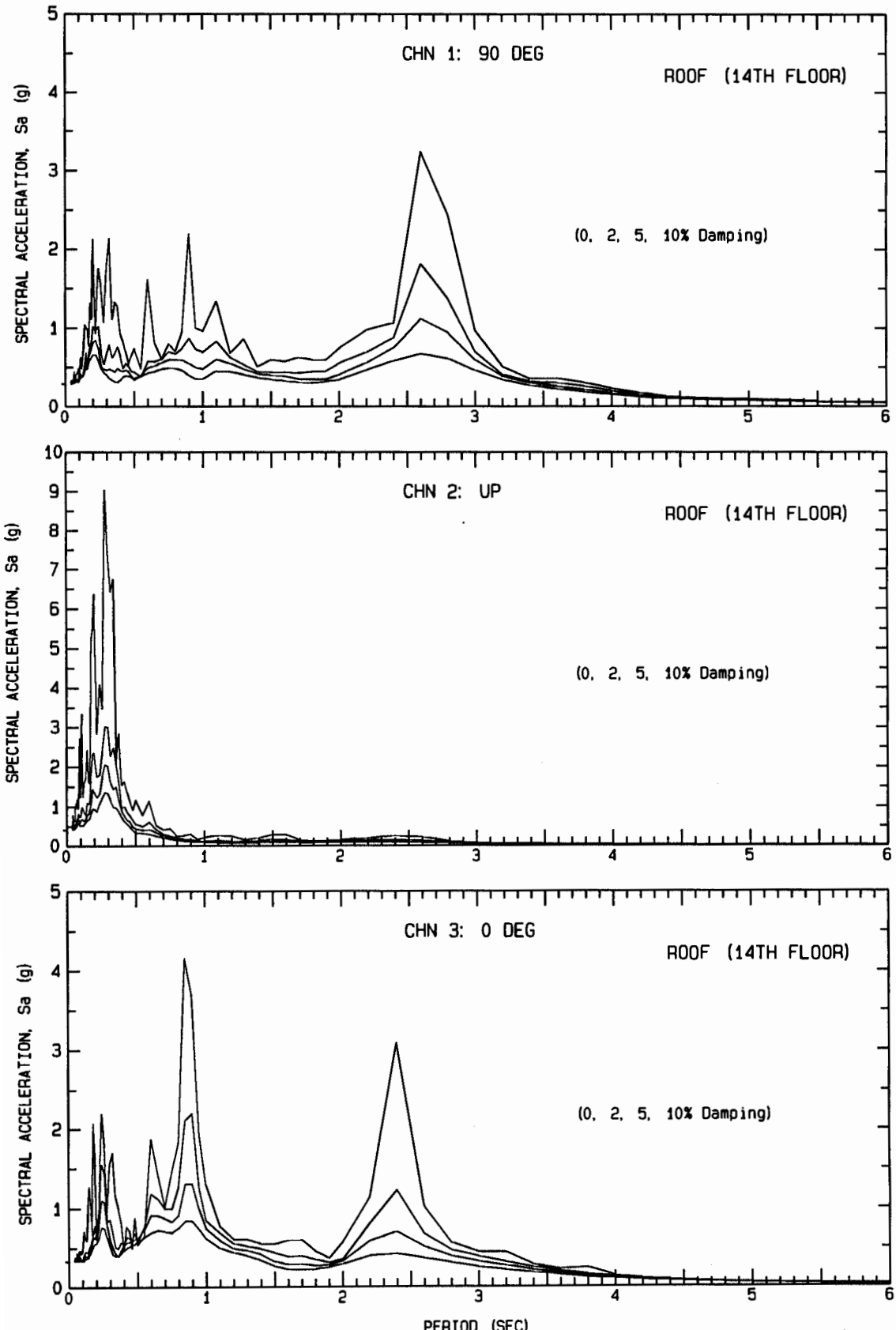
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #7
UNCORRECTED ACCELEROGRAM 2C067-S6062-94125.07 080894.1057-QN94A067



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #7 Sta Num 2C067

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C067-S6062-94125.07

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #7
Sta Num 2C067

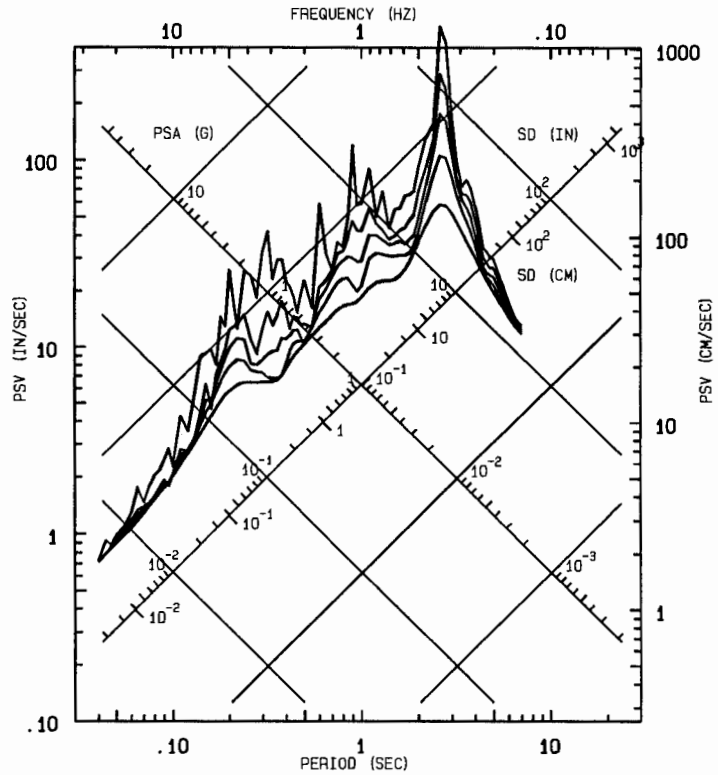
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

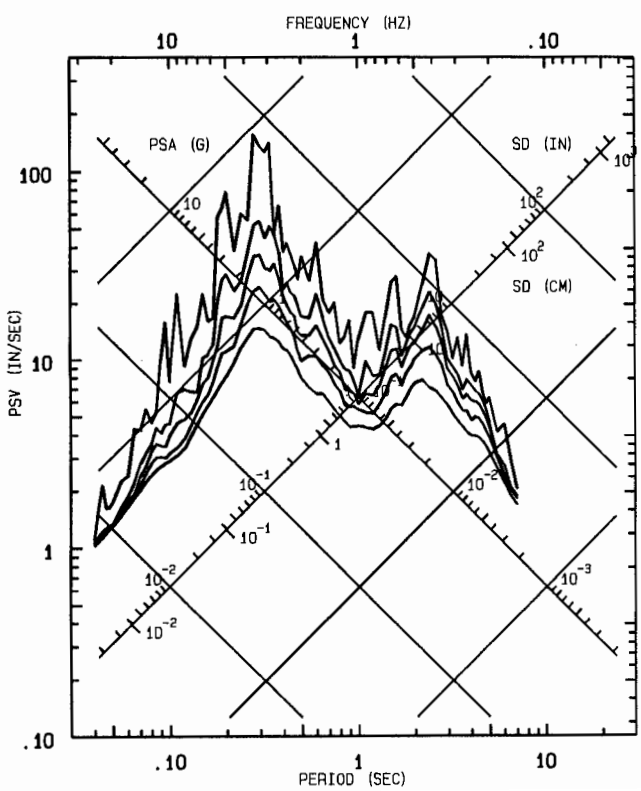
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C067-S6062-94125.07

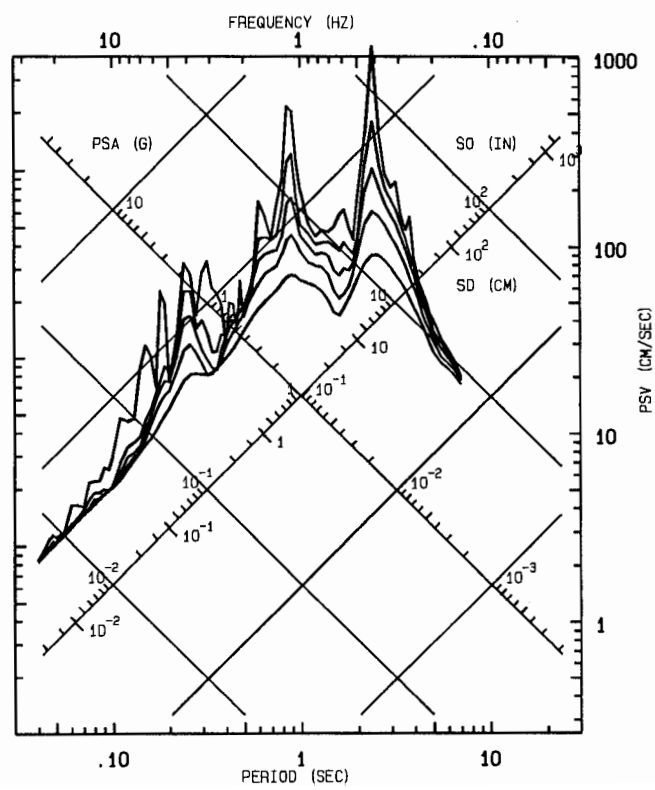
CHN 1: 90 DEG
ROOF (14TH FLOOR)



CHN 2: UP
ROOF (14TH FLOOR)



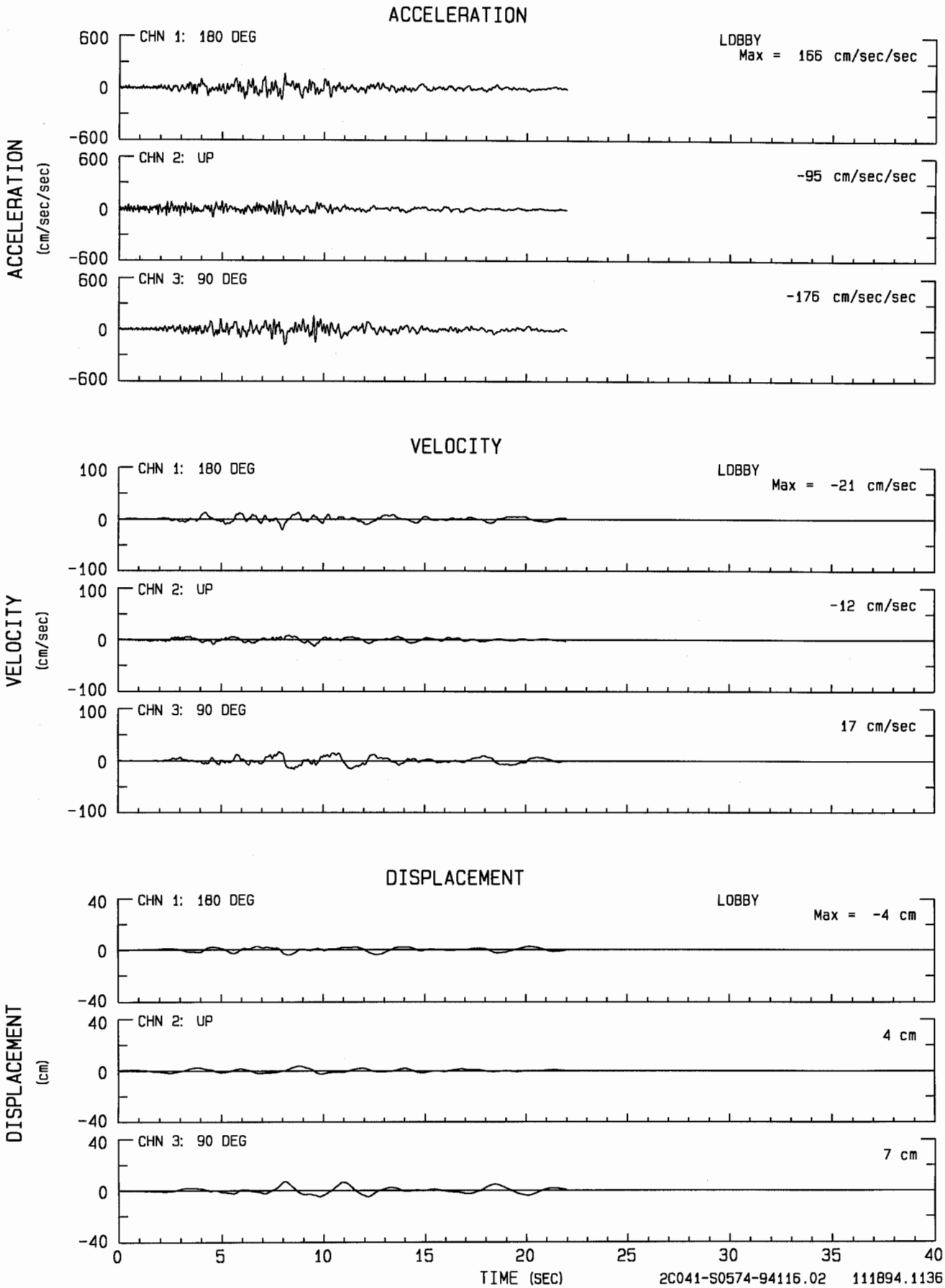
CHN 3: 0 DEG
ROOF (14TH FLOOR)



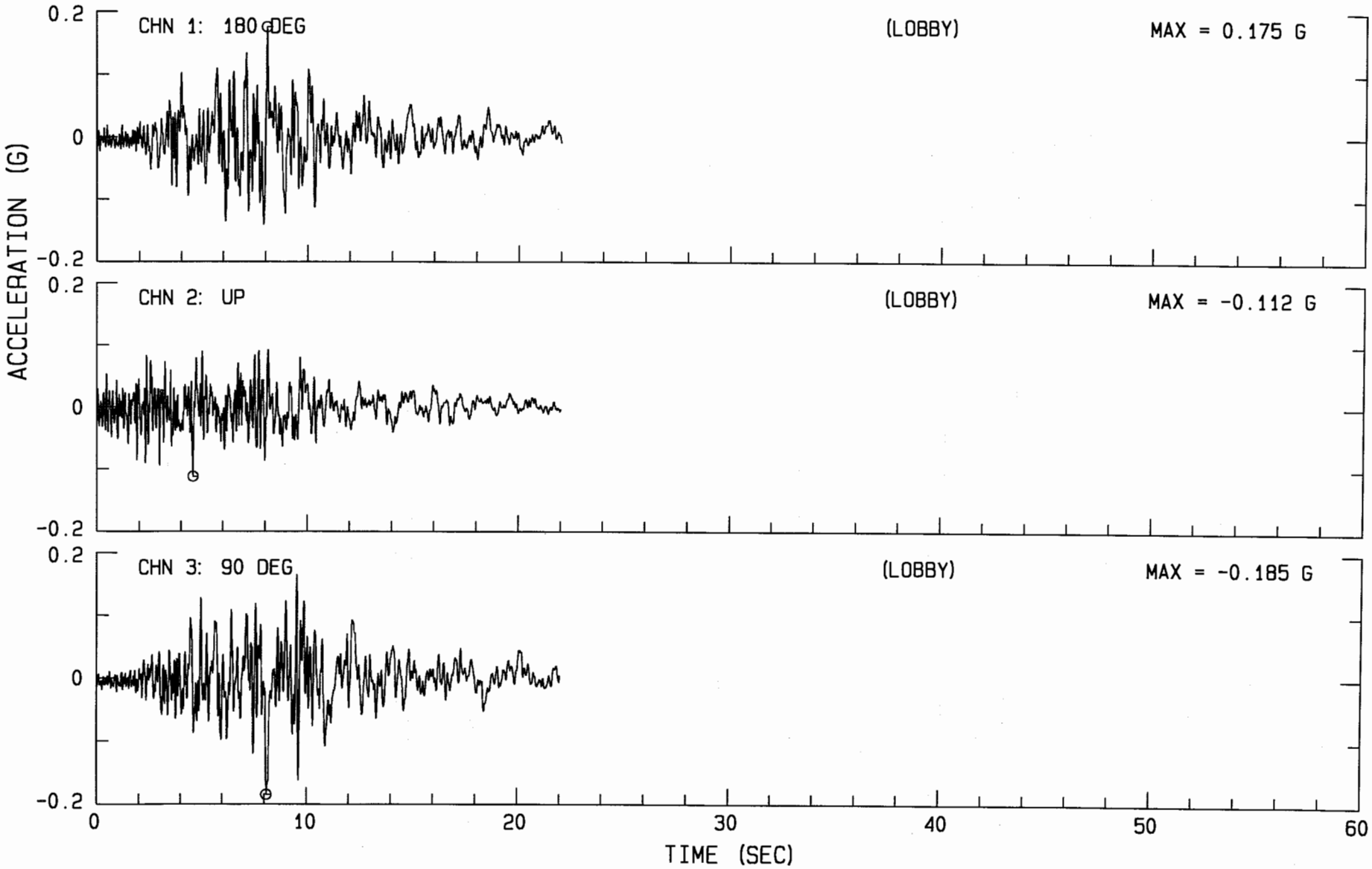
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8 CSMIP Sta Num 2C041

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



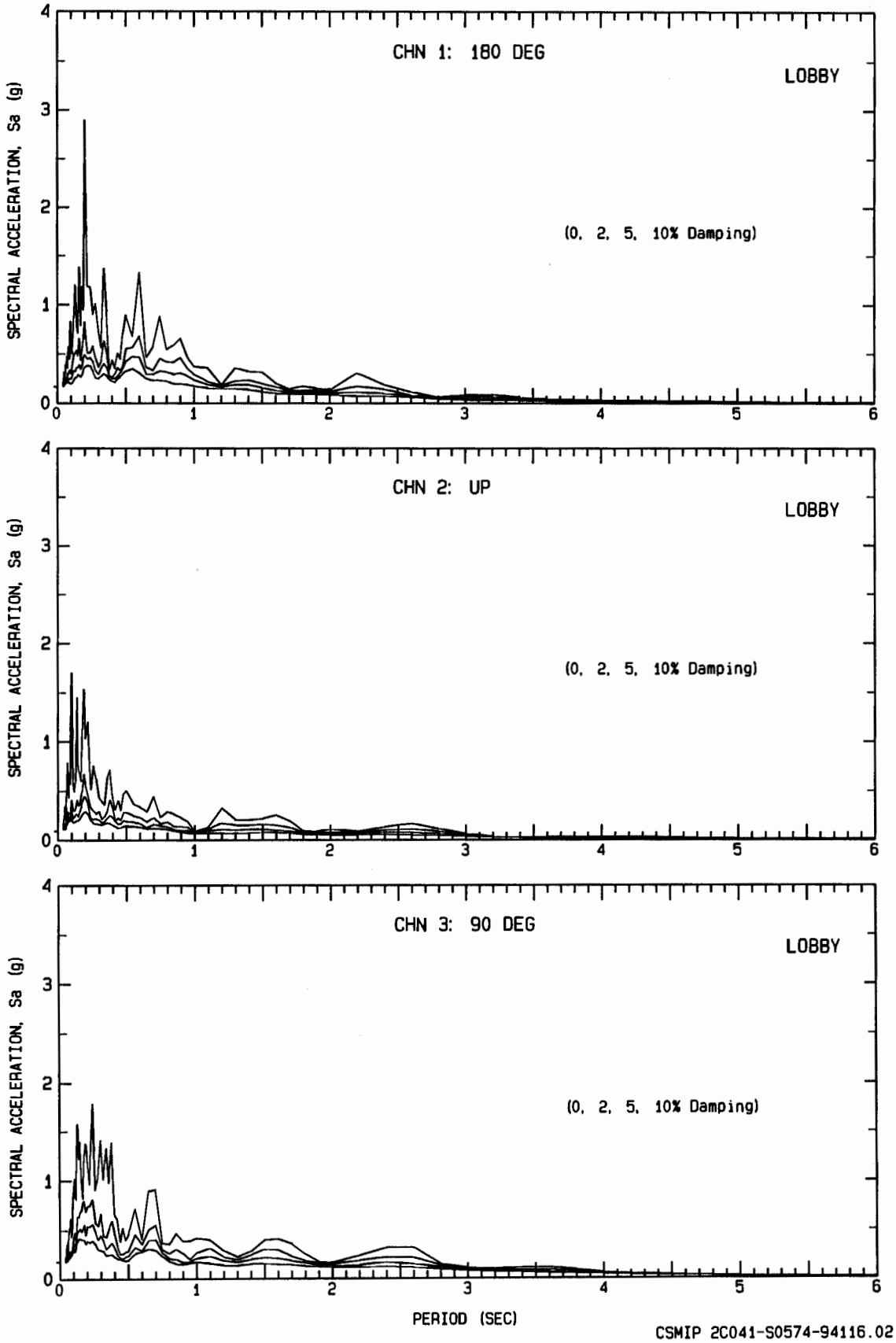
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #8
UNCORRECTED ACCELEROGRAM 2C041-S0574-94116.02 080494.1629-QN94041L



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8 Sta Num 2C041

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C041-S0574-94116.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8
Sta Num 2C041

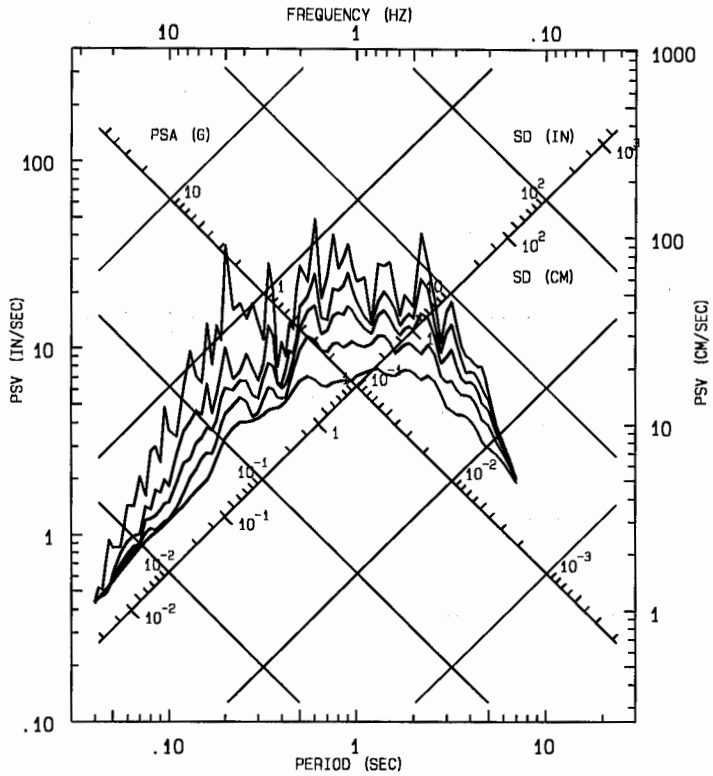
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

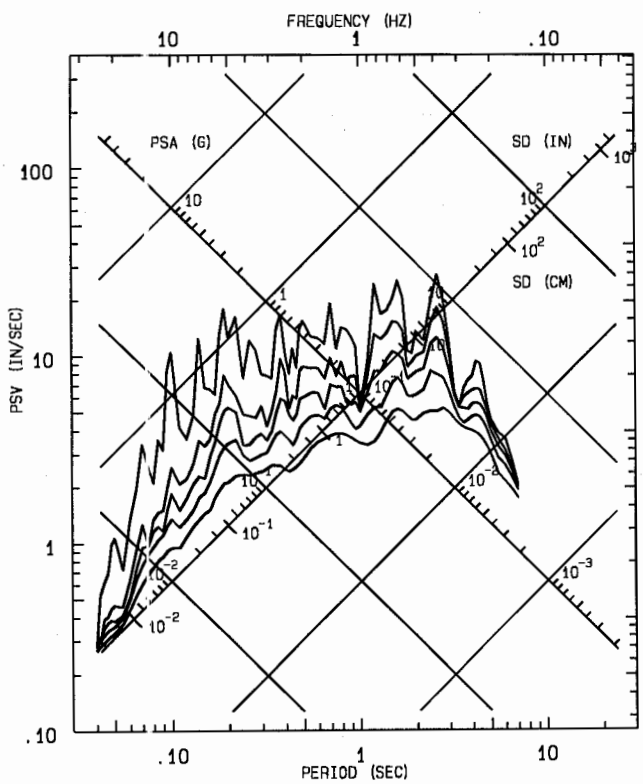
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C041-S0574-94116.02

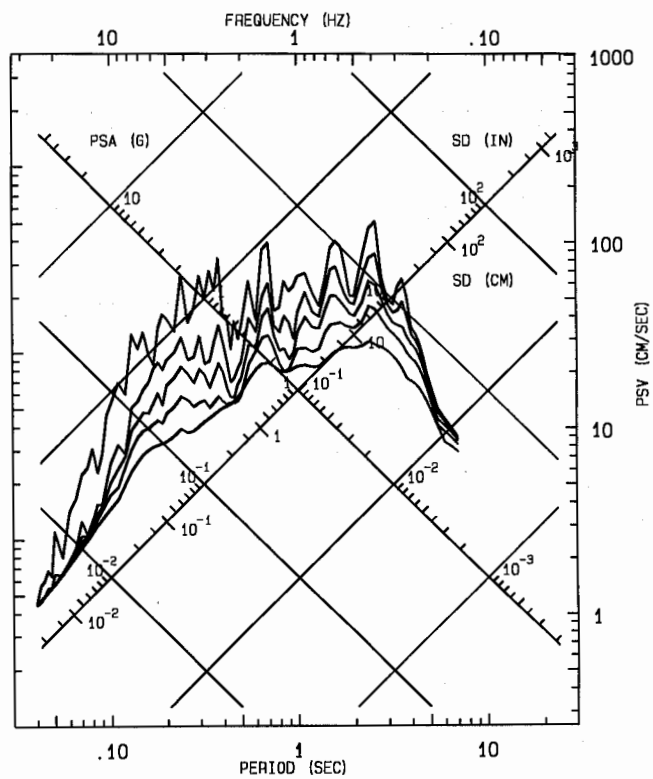
CHN 1: 180 DEG
LOBBY



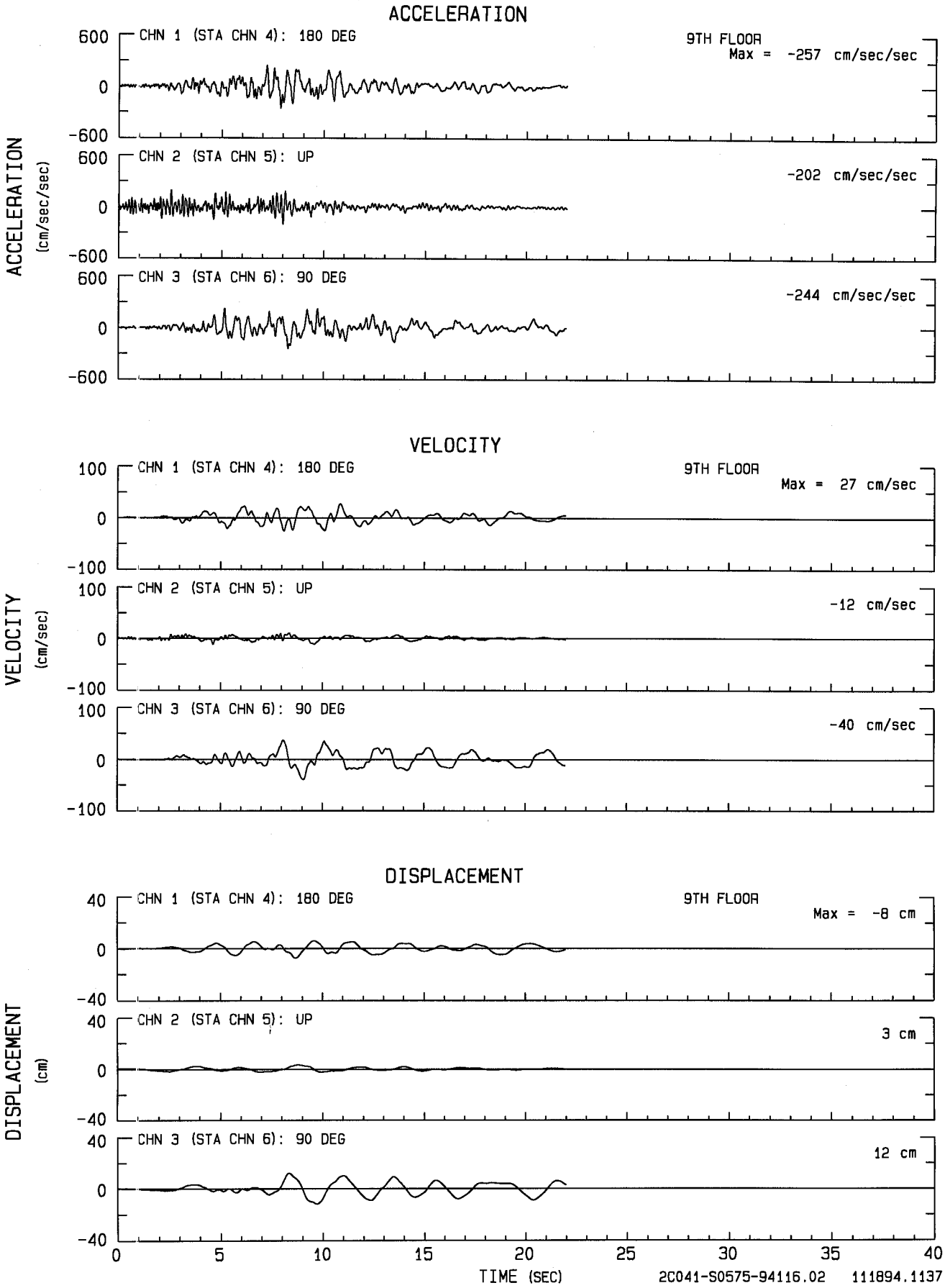
CHN 2: UP
LOBBY



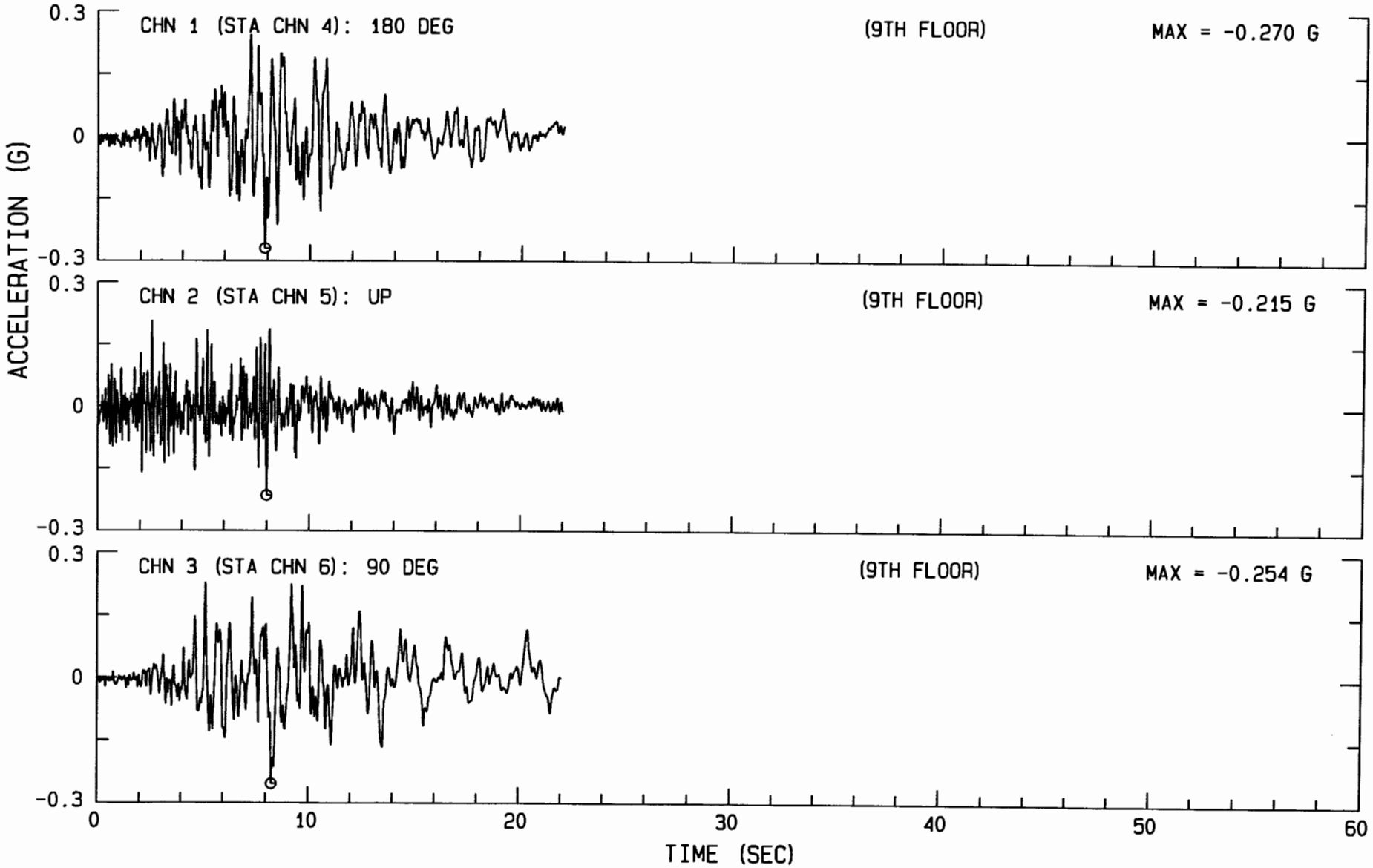
CHN 3: 90 DEG
LOBBY



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #8 CSMIP Sta Num 2C041
Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



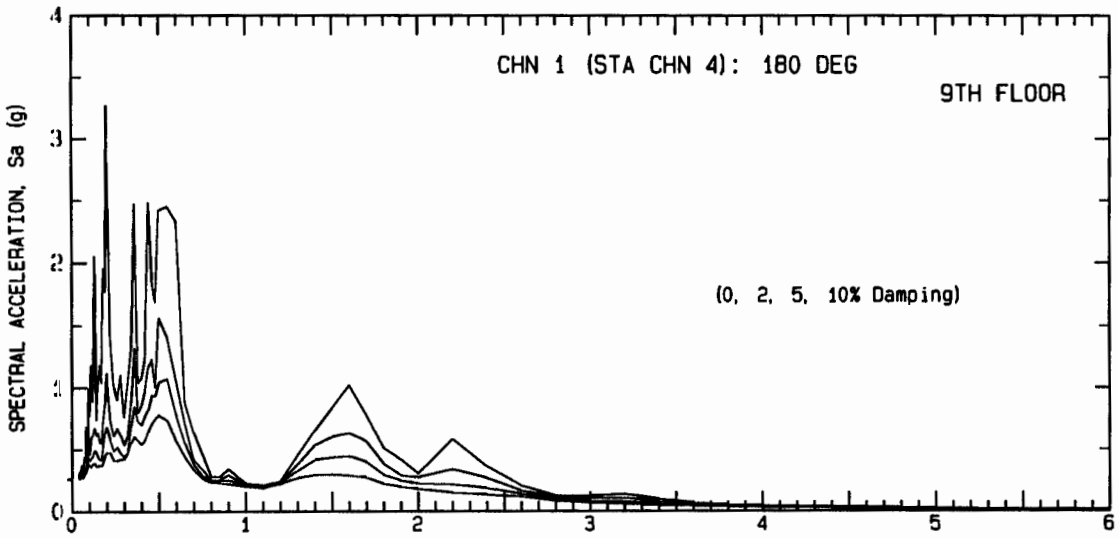
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #8
UNCORRECTED ACCELEROGRAM 2C041-S0575-94116.02 080494.1523-QN94041M

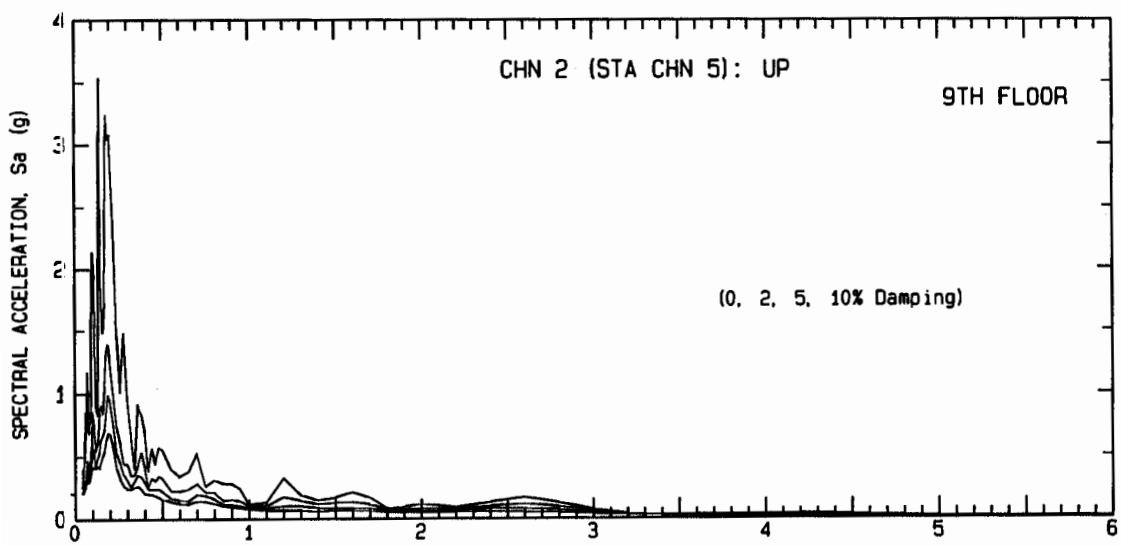


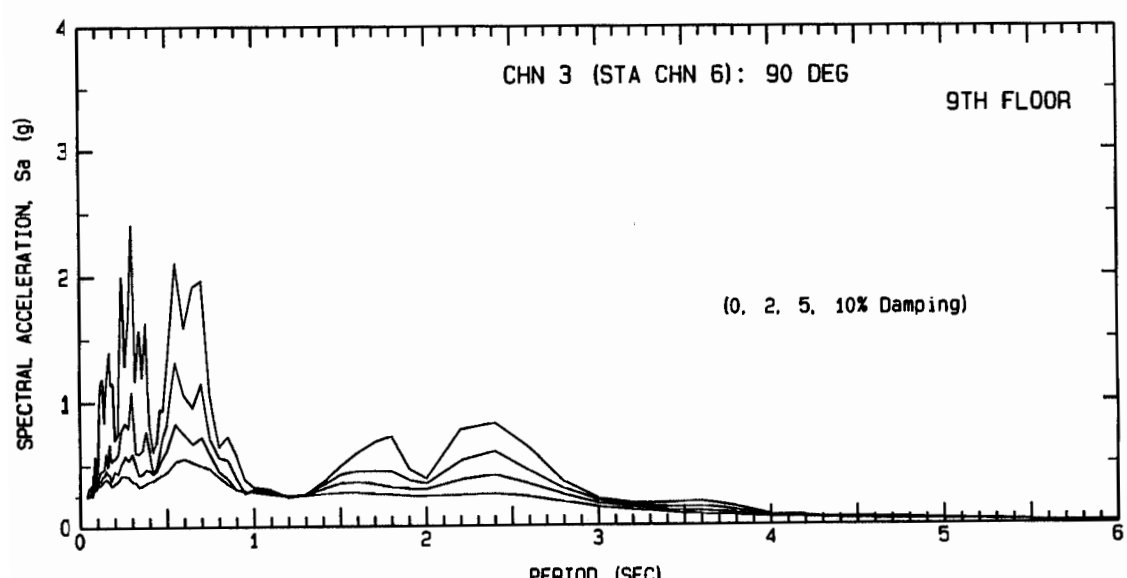
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8 Sta Num 2C041

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C041-S0575-94116.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8
Sta Num 2C041

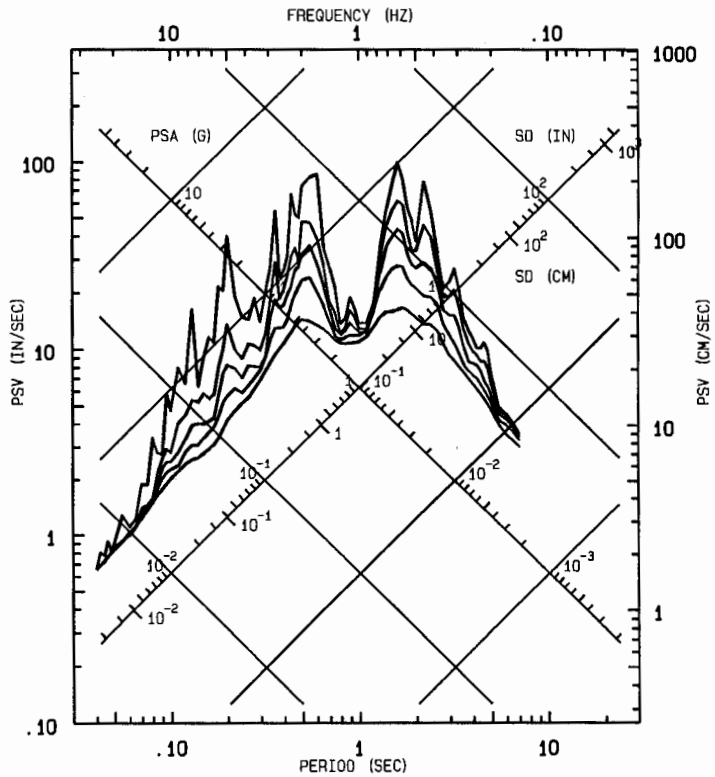
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

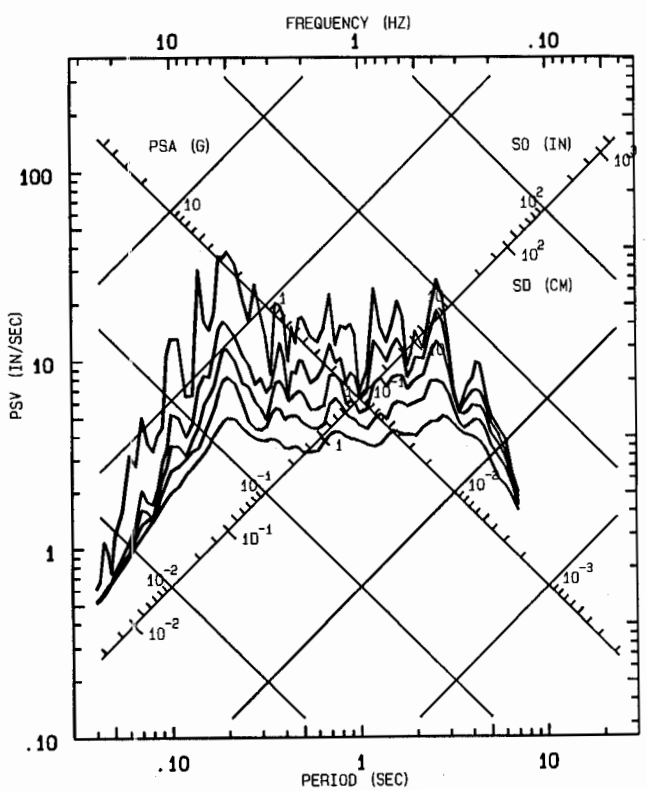
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C041-S0575-94116.02

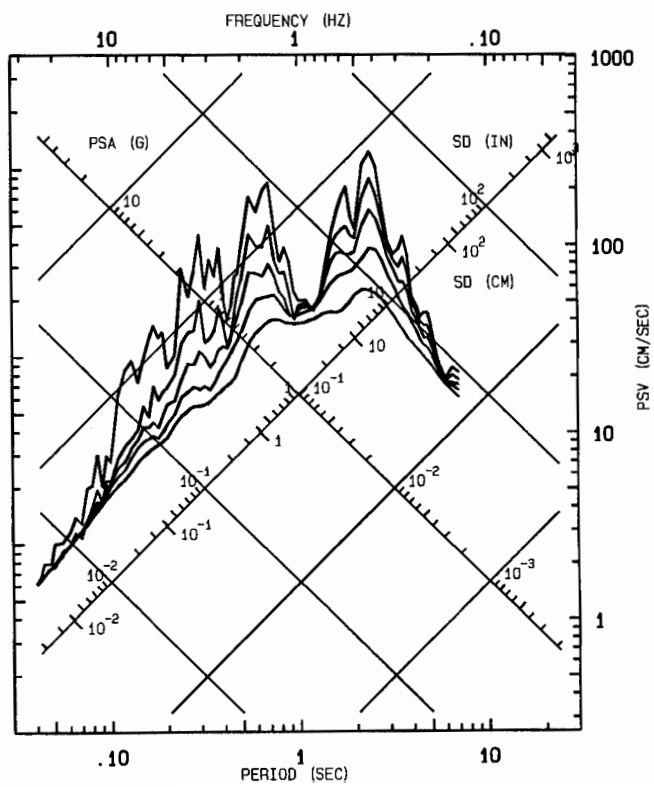
CHN 1 (STA CHN 4): 180 DEG
9TH FLOOR



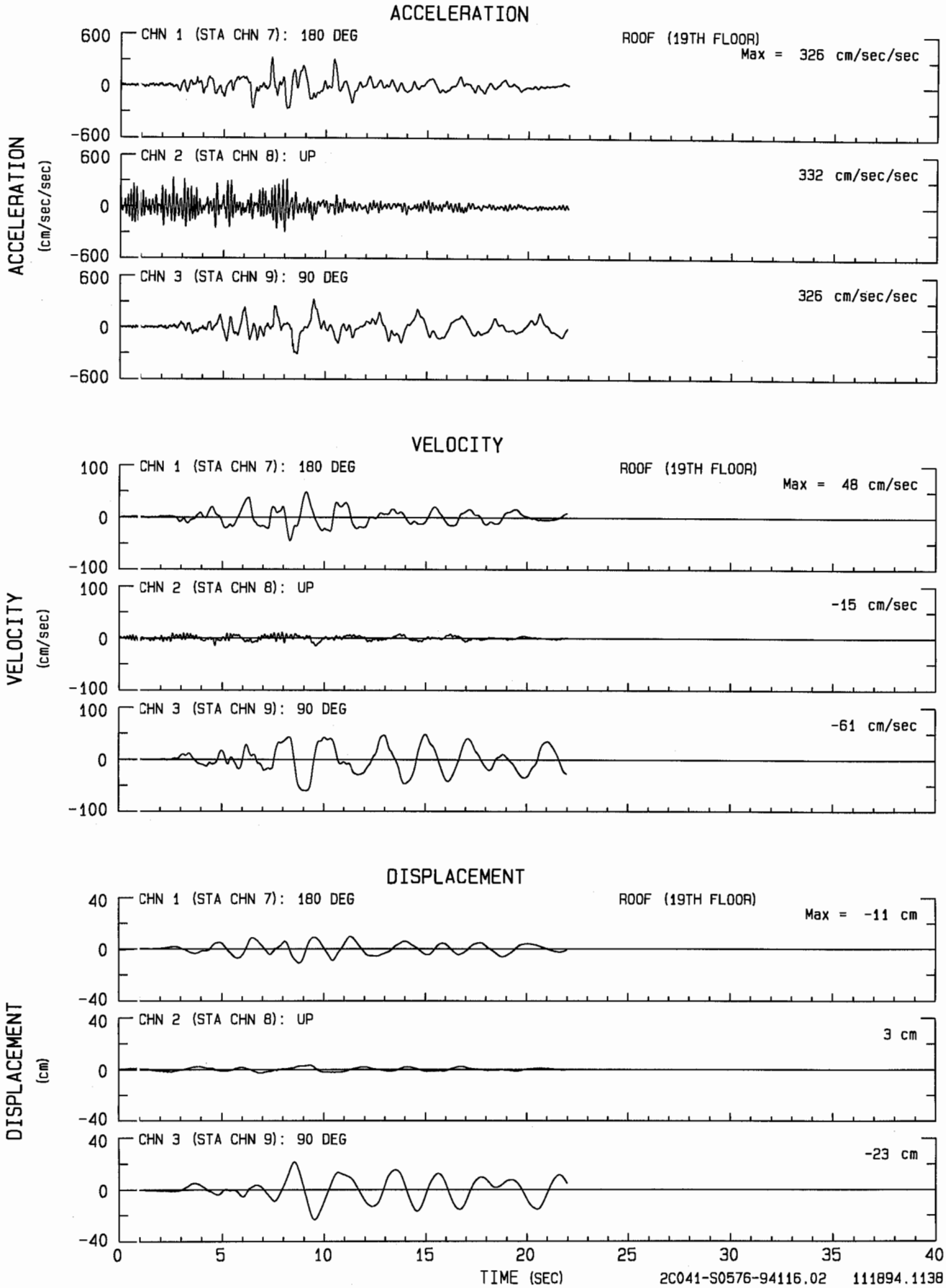
CHN 2 (STA CHN 5): UP
9TH FLOOR



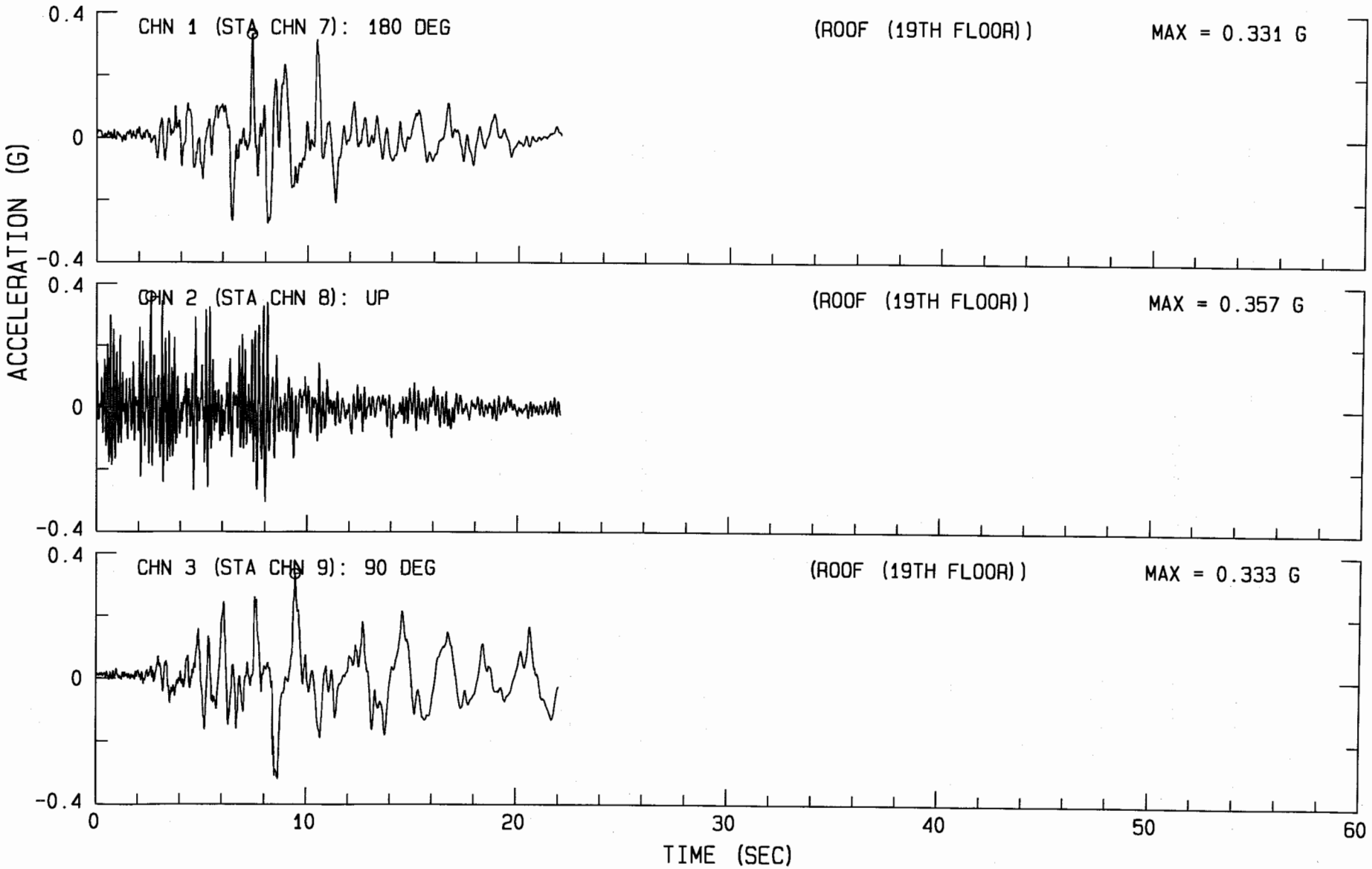
CHN 3 (STA CHN 6): 90 DEG
9TH FLOOR



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #8 CSMIP Sta Num 2C041
Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



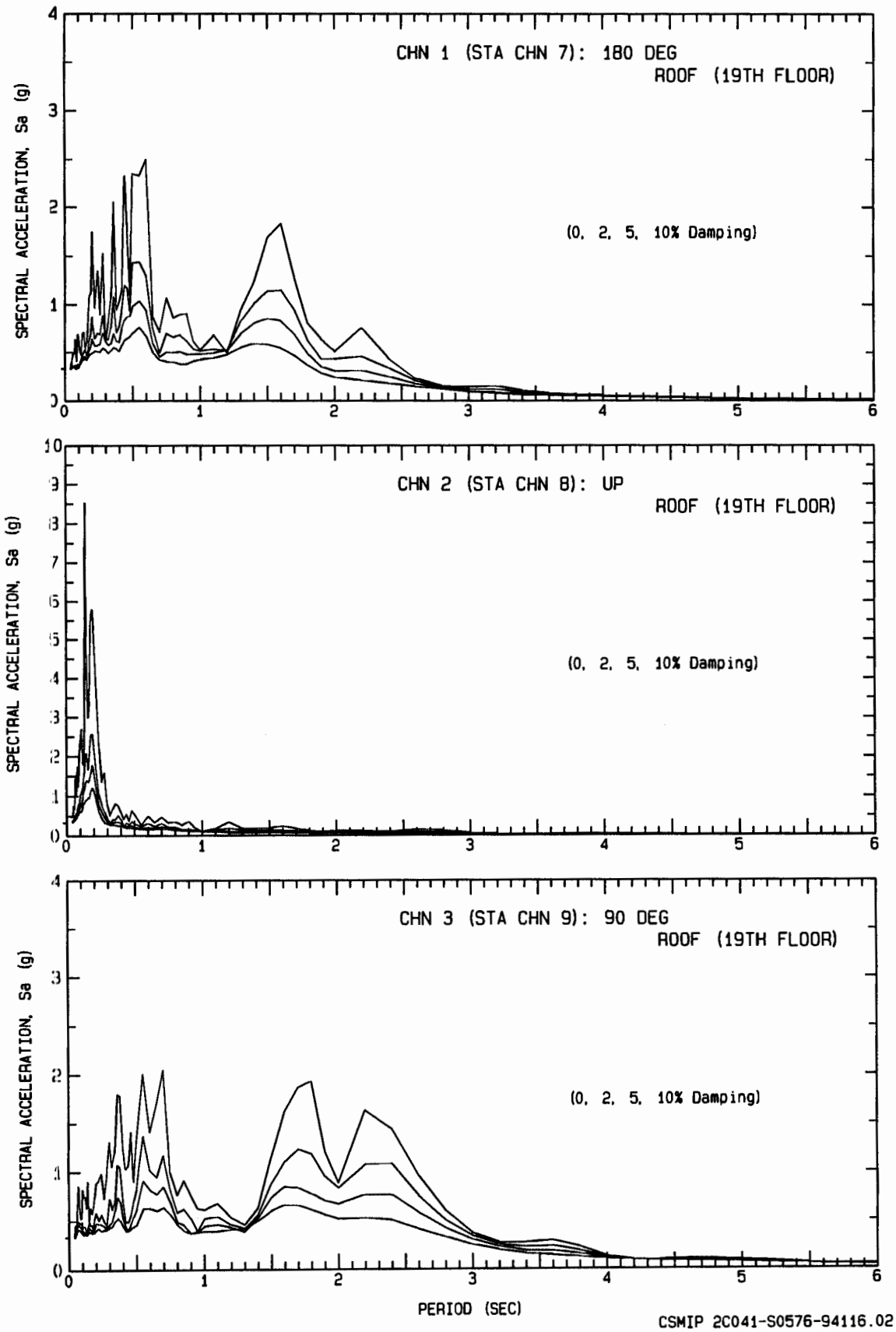
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #8
UNCORRECTED ACCELEROGRAM 2C041-S0576-94116.02 080494.1606-QN94041R



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8 Sta Num 2C041

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C041-S0576-94116.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #8
Sta Num 2C041

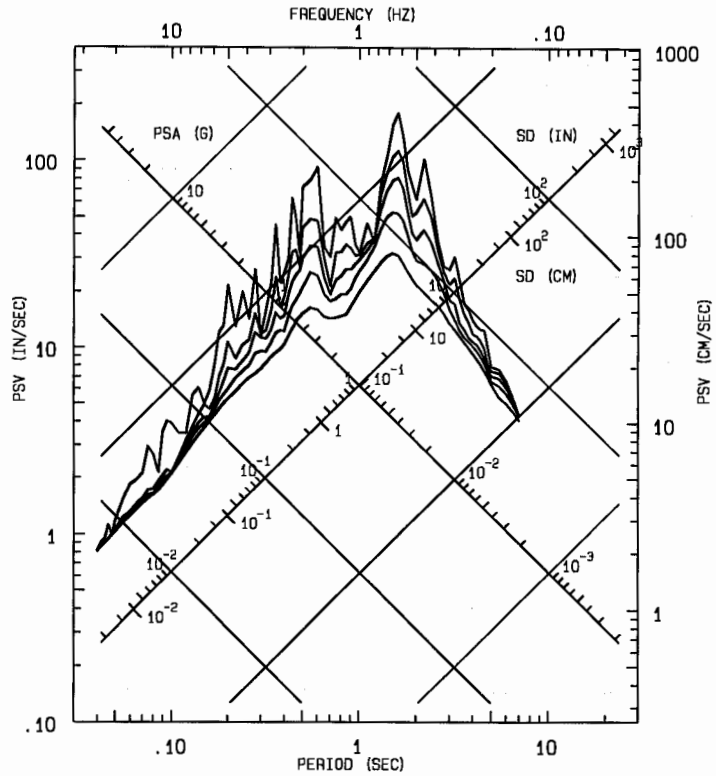
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

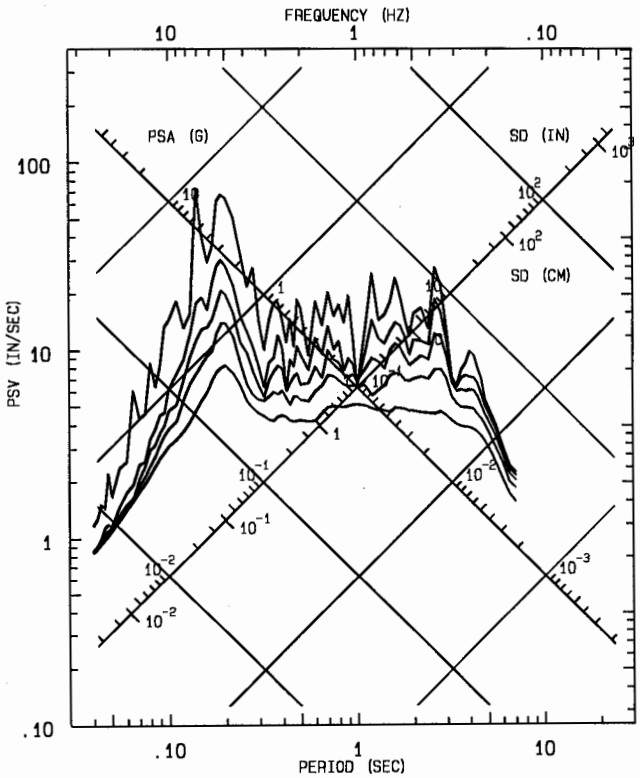
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C041-S0576-94116.02

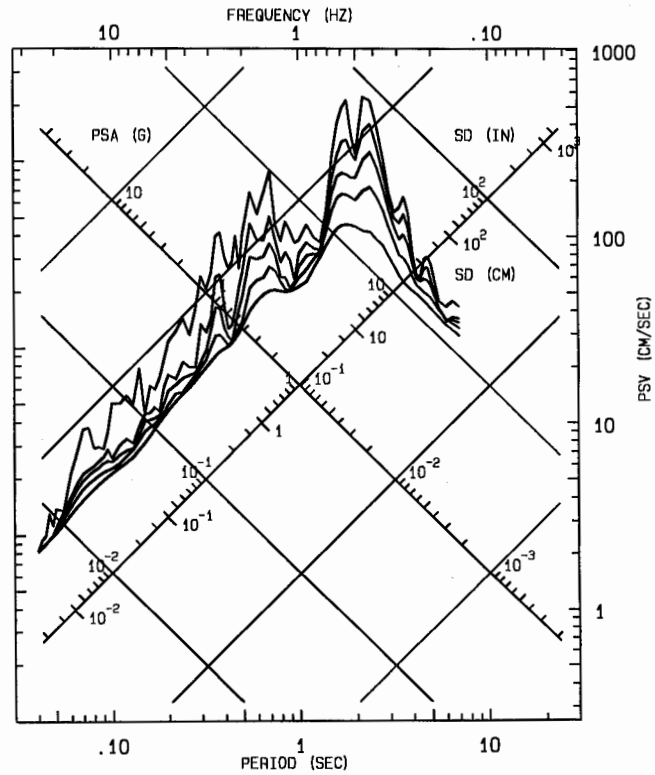
CHN 1 (STA CHN 7): 180 DEG
ROOF (19TH FLOOR)



CHN 2 (STA CHN 8): UP
ROOF (19TH FLOOR)



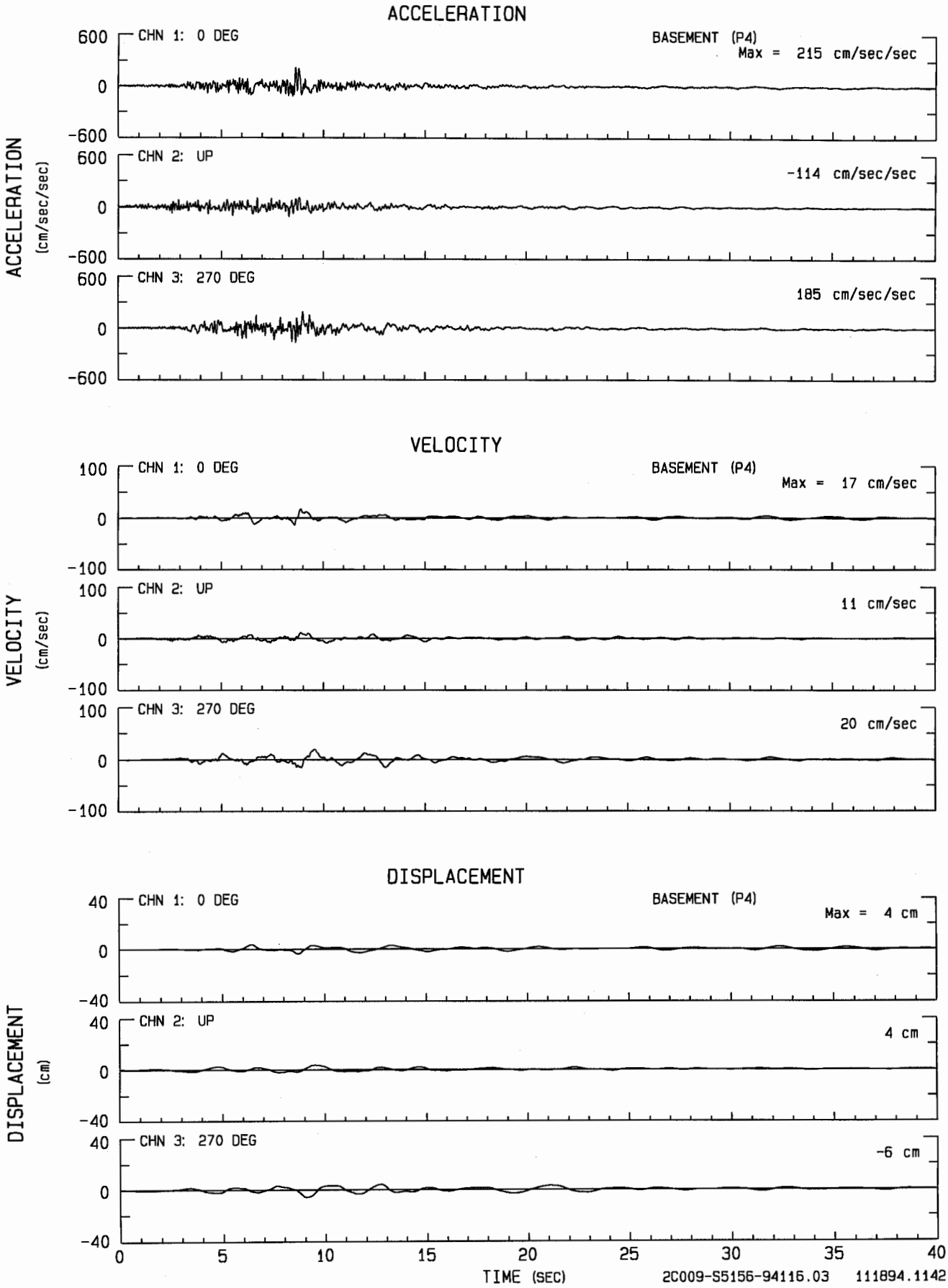
CHN 3 (STA CHN 9): 90 DEG
ROOF (19TH FLOOR)



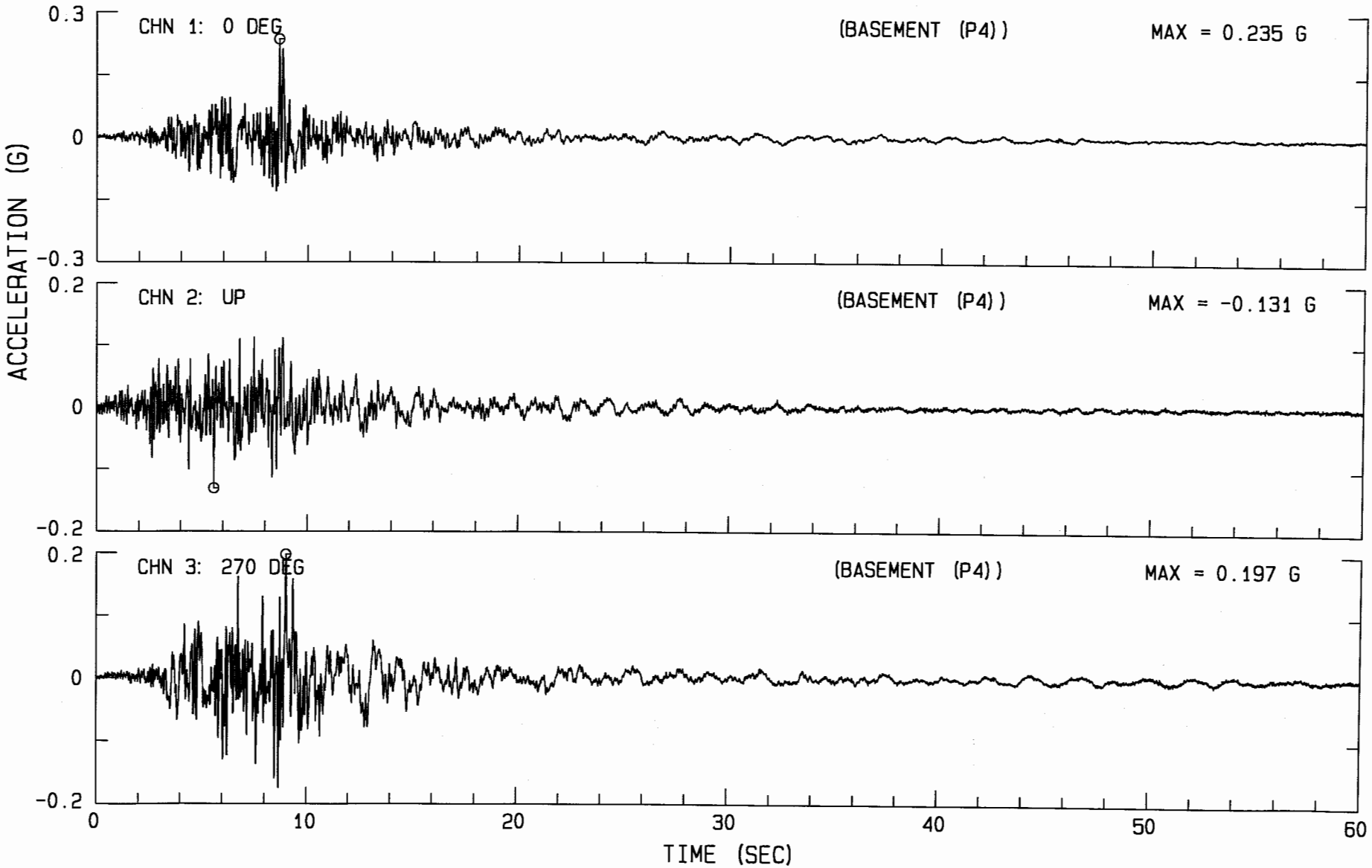
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9 CSMIP Sta Num 2C009

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



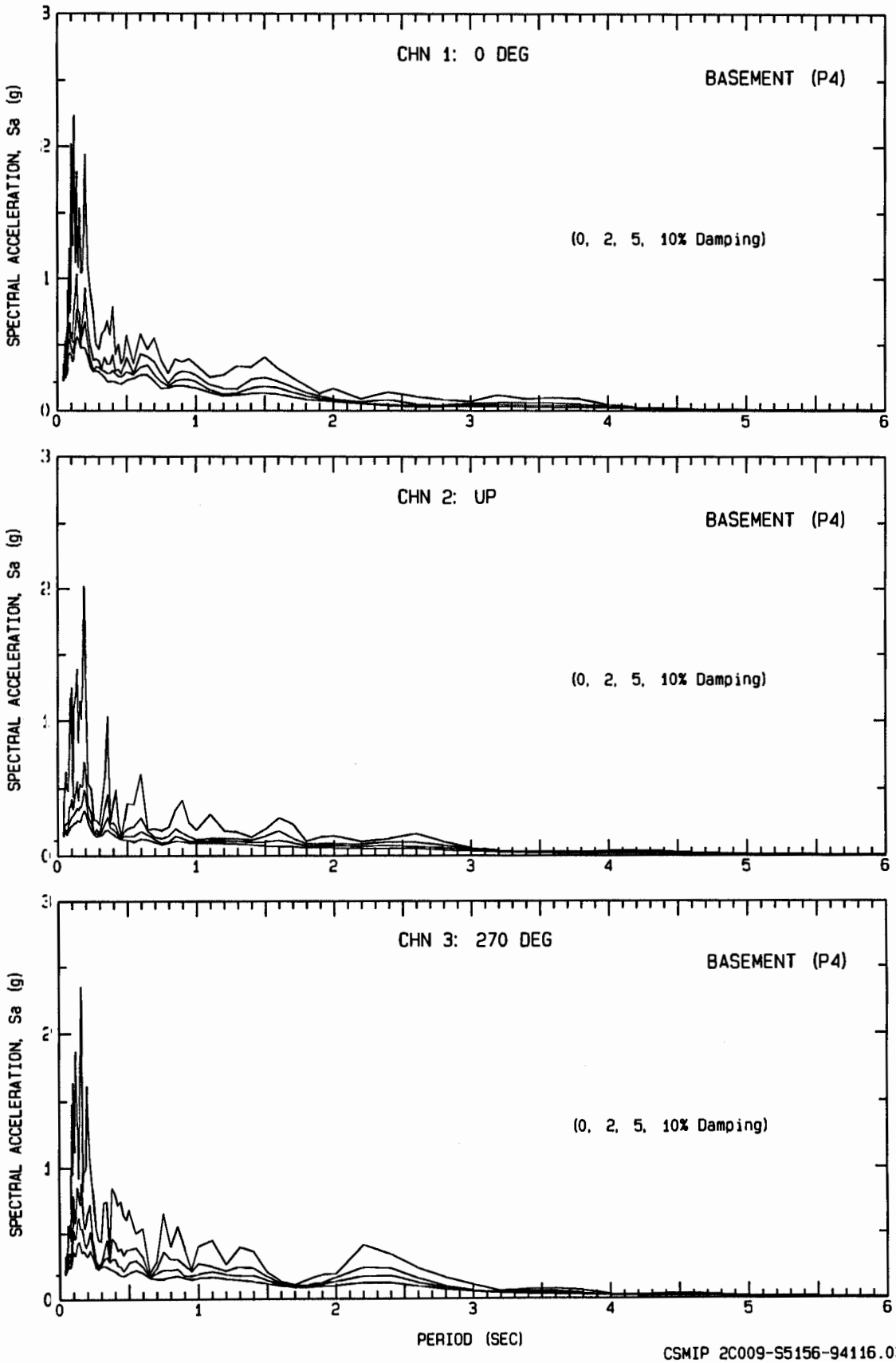
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #9
UNCORRECTED ACCELEROGRAM 2C009-S5156-94116.03 081894.1505-QN94009L



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9 Sta Num 2C009

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C009-S5156-94116.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9
Sta Num 2C009

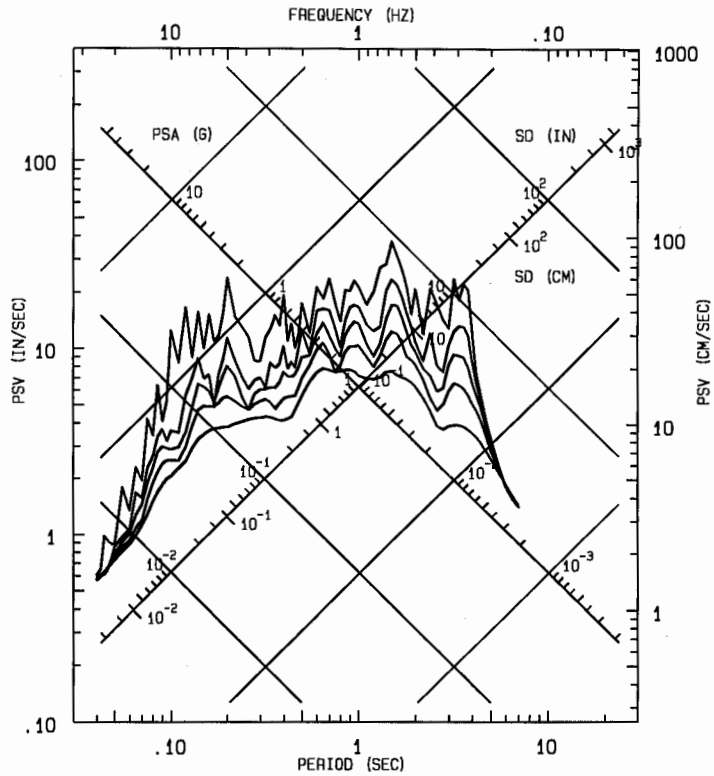
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

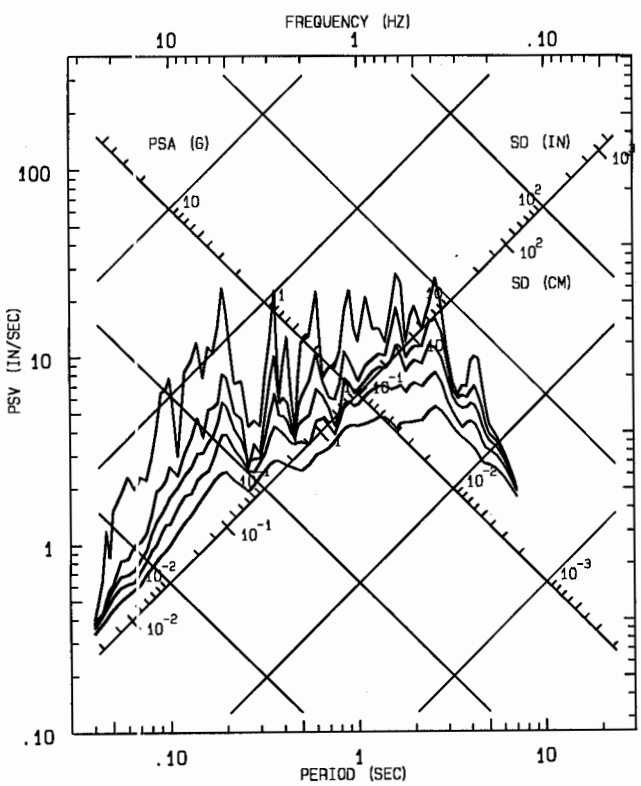
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C009-S5156-94116.03

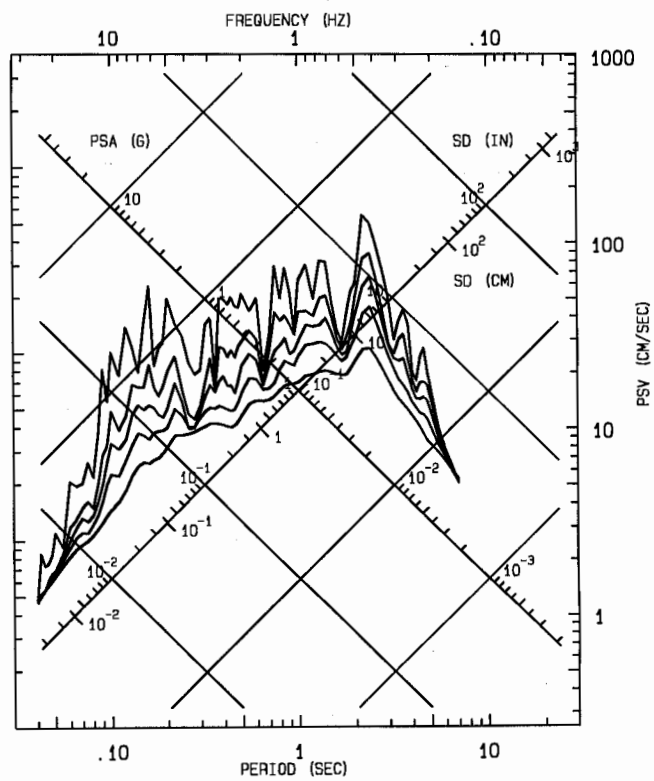
CHN 1: 0 DEG
BASEMENT (P4)



CHN 2: UP
BASEMENT (P4)



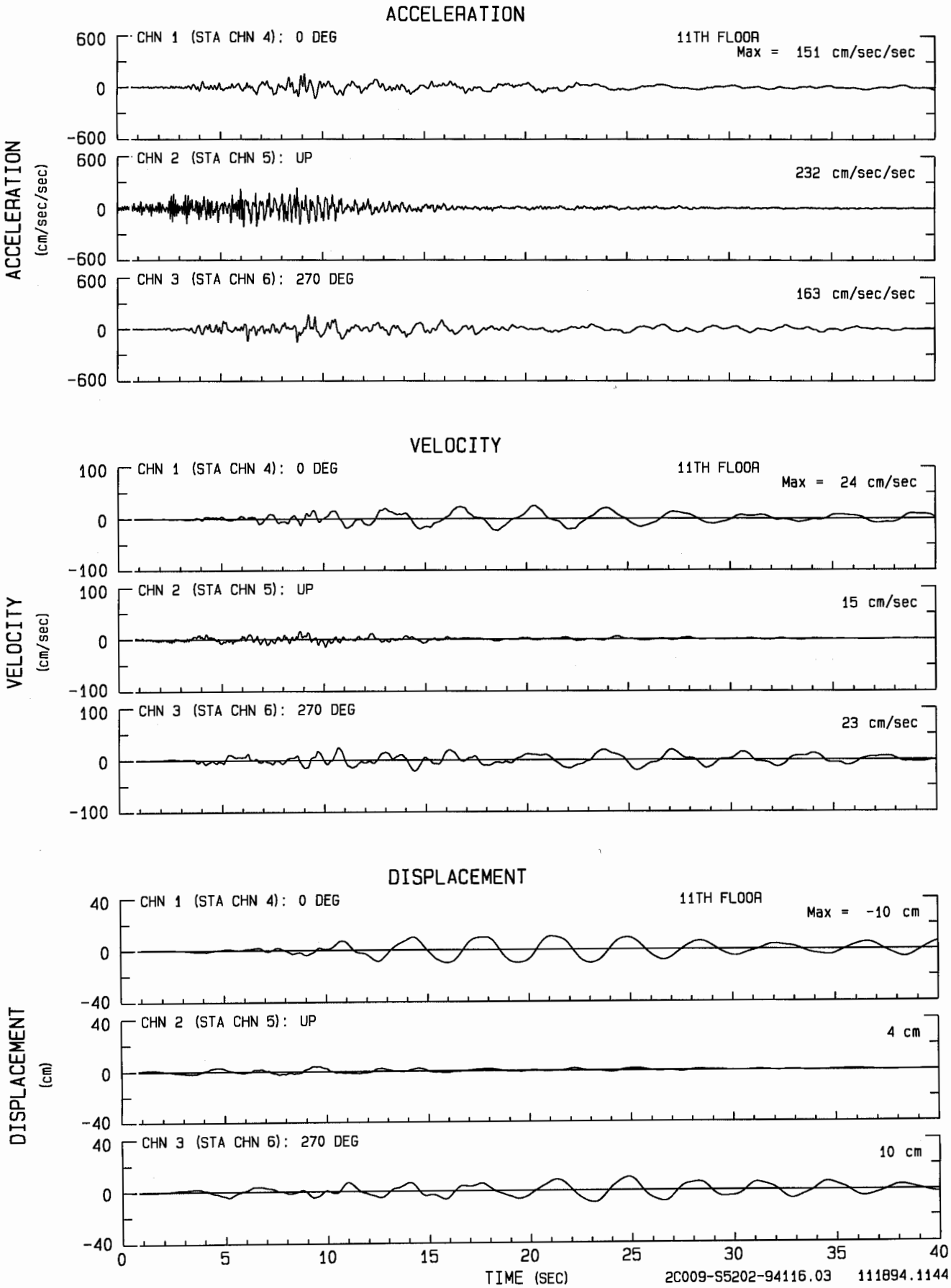
CHN 3: 270 DEG
BASEMENT (P4)



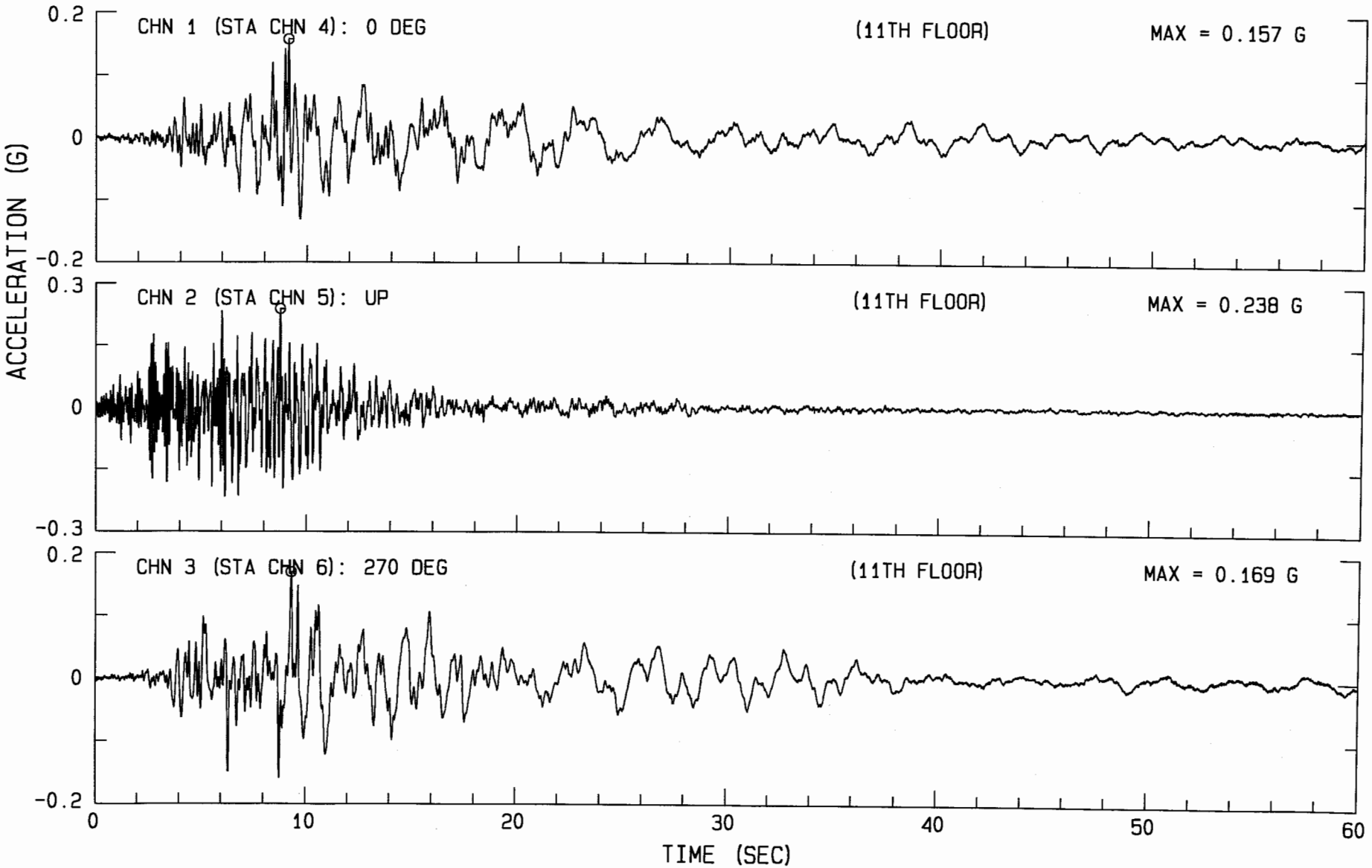
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9 CSMIP Sta Num 2C009

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



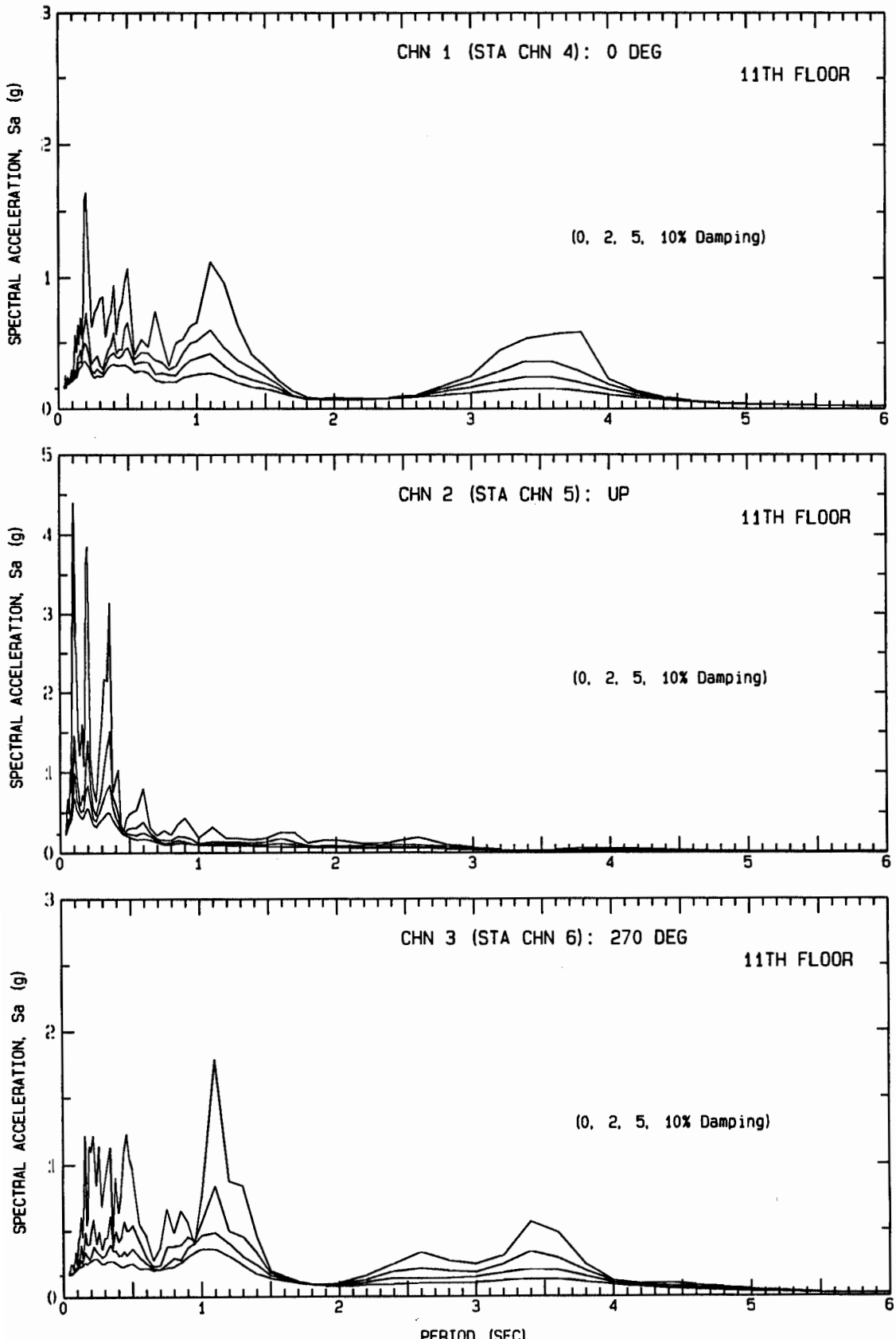
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #9
UNCORRECTED ACCELEROGRAM 2C009-S5202-94116.03 081894.1635-QN94009M



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9 Sta Num 2C009

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C009-S5202-94116.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9
Sta Num 2C009

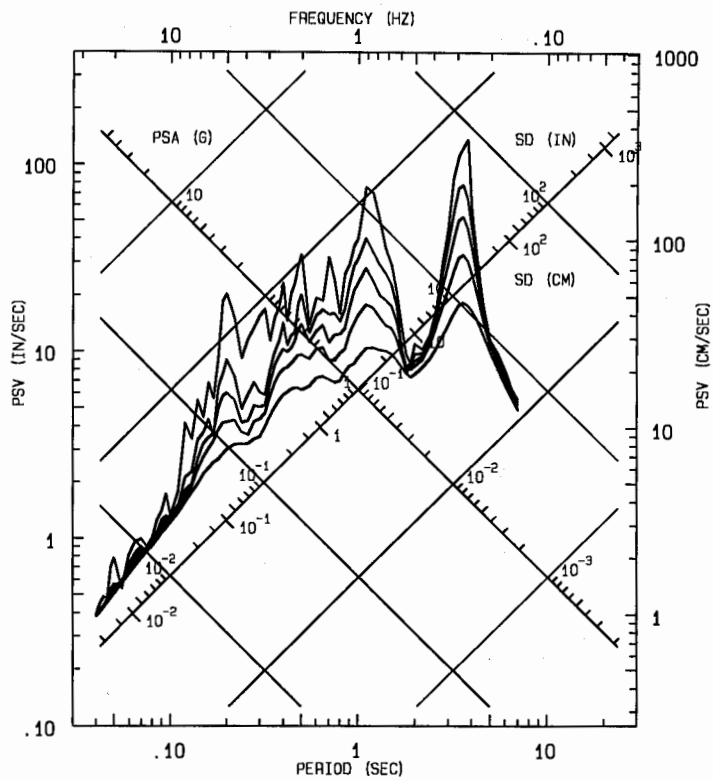
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

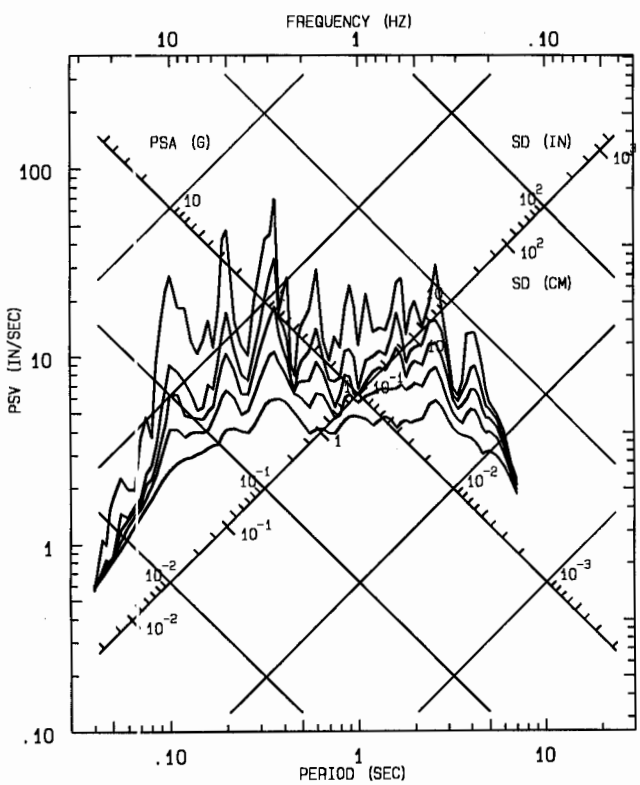
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C009-S5202-94116.03

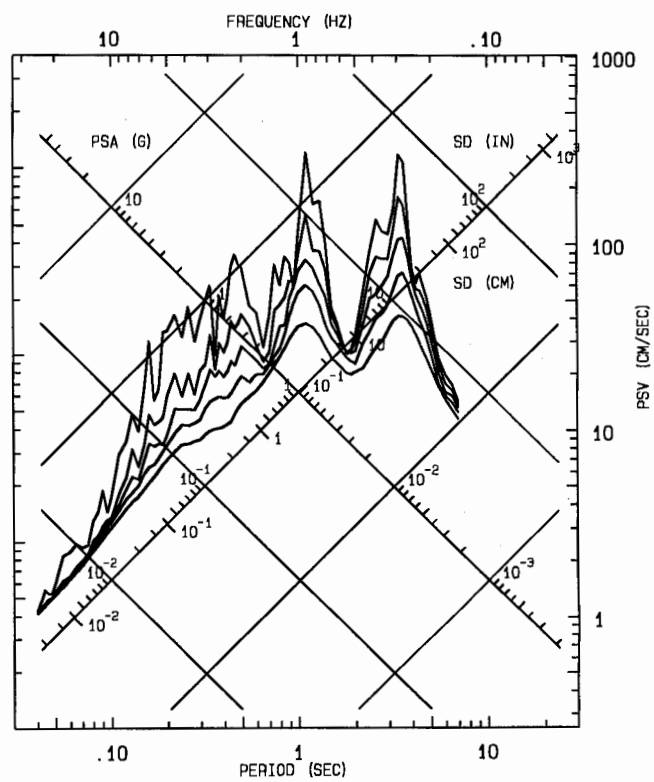
CHN 1 (STA CHN 4): 0 DEG
11TH FLOOR



CHN 2 (STA CHN 5): UP
11TH FLOOR



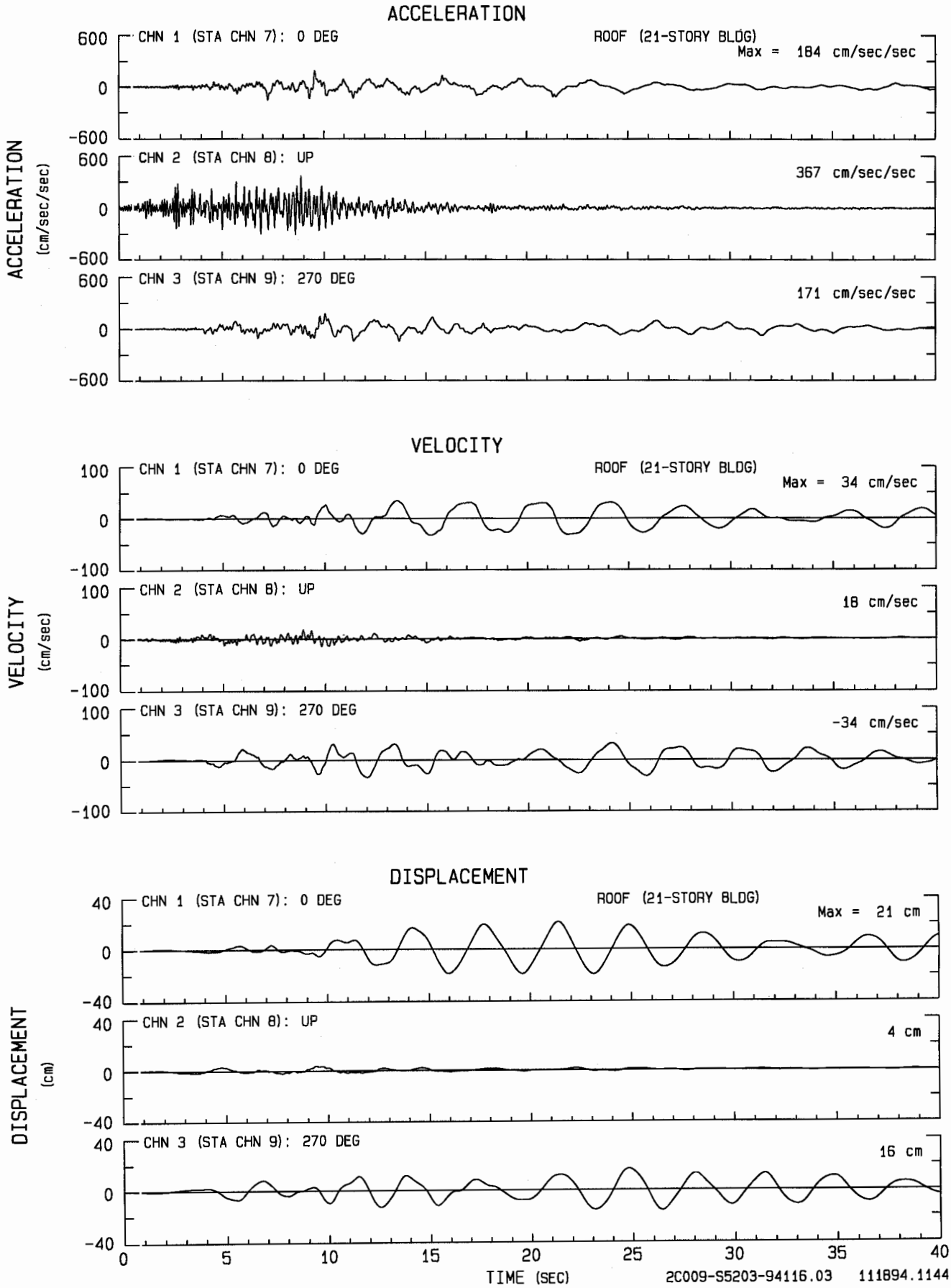
CHN 3 (STA CHN 6): 270 DEG
11TH FLOOR



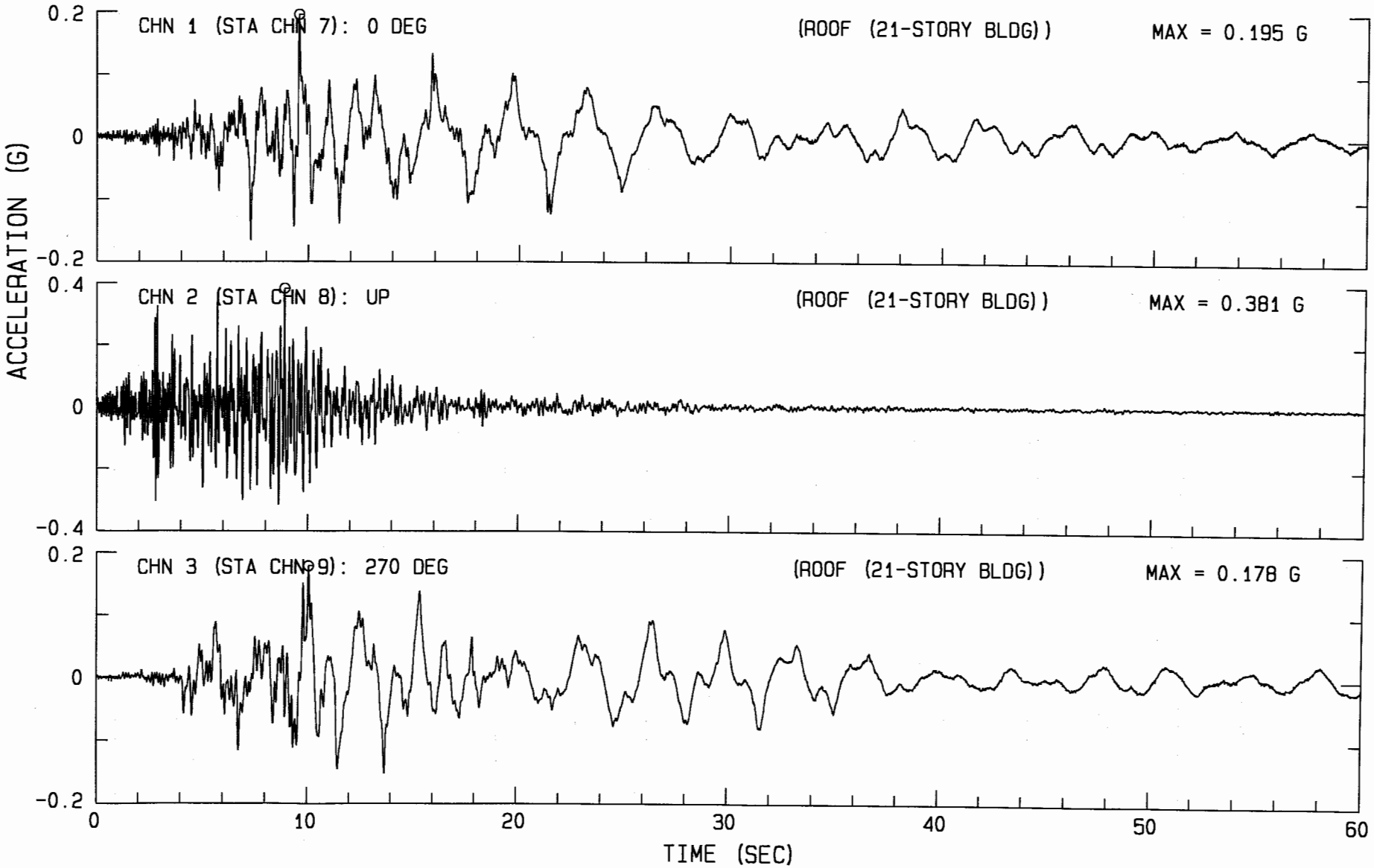
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9 CSMIP Sta Num 2C009

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



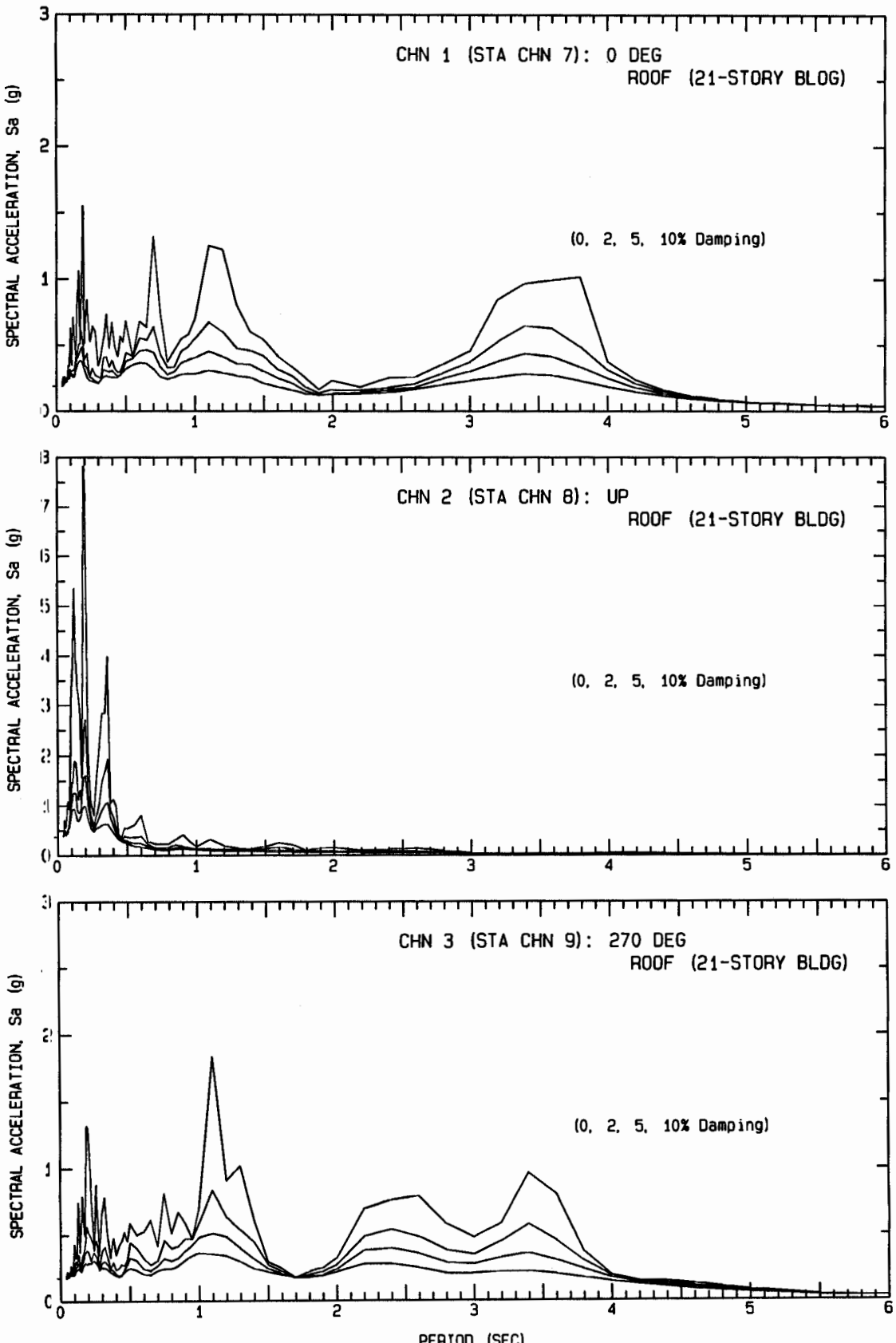
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
LOS ANGELES - WILSHIRE BLVD #9
UNCORRECTED ACCELEROGRAM 2C009-S5203-94116.03 081894.1626-QN94009R



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9 Sta Num 2C009

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C009-S5203-94116.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

LOS ANGELES - WILSHIRE BLVD #9
Sta Num 2C009

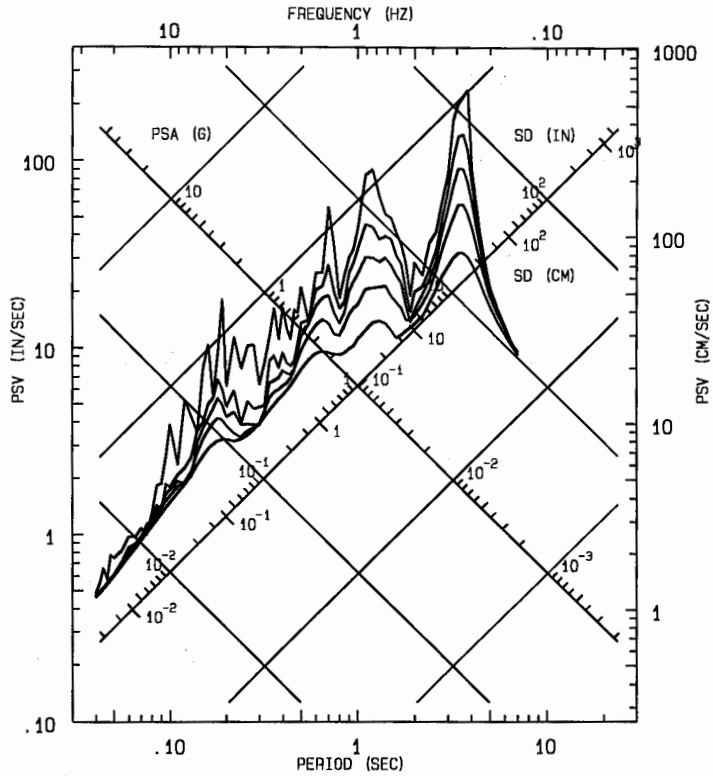
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

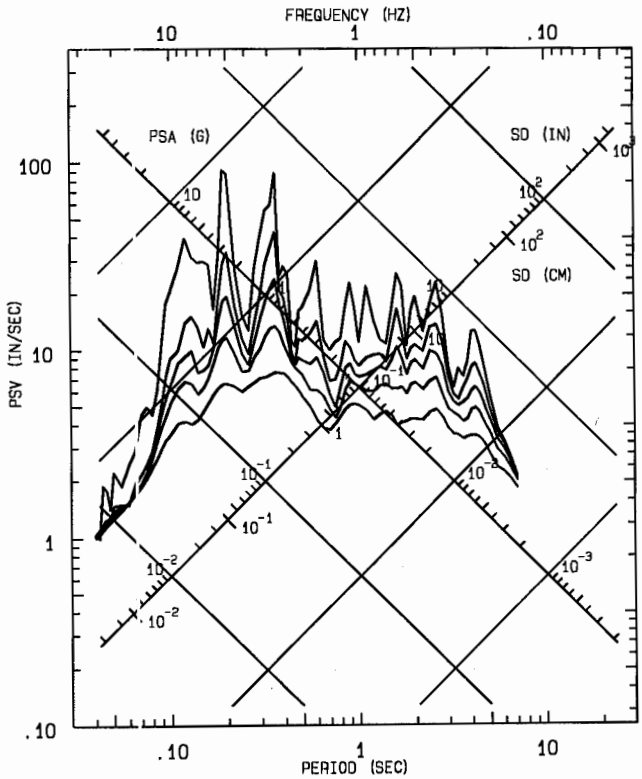
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C009-S5203-94116.03

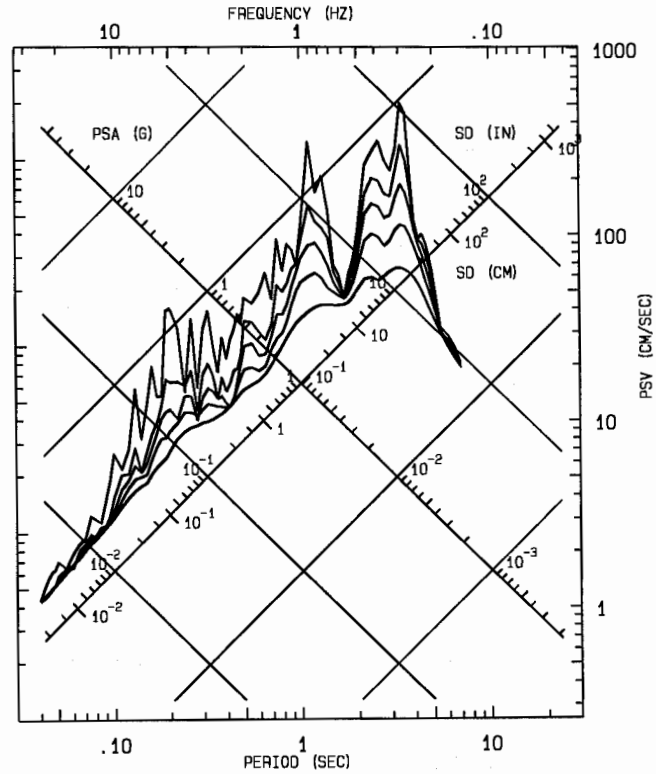
CHN 1 (STA CHN 7): 0 DEG
ROOF (21-STORY BLDG)



CHN 2 (STA CHN 8): UP
ROOF (21-STORY BLDG)



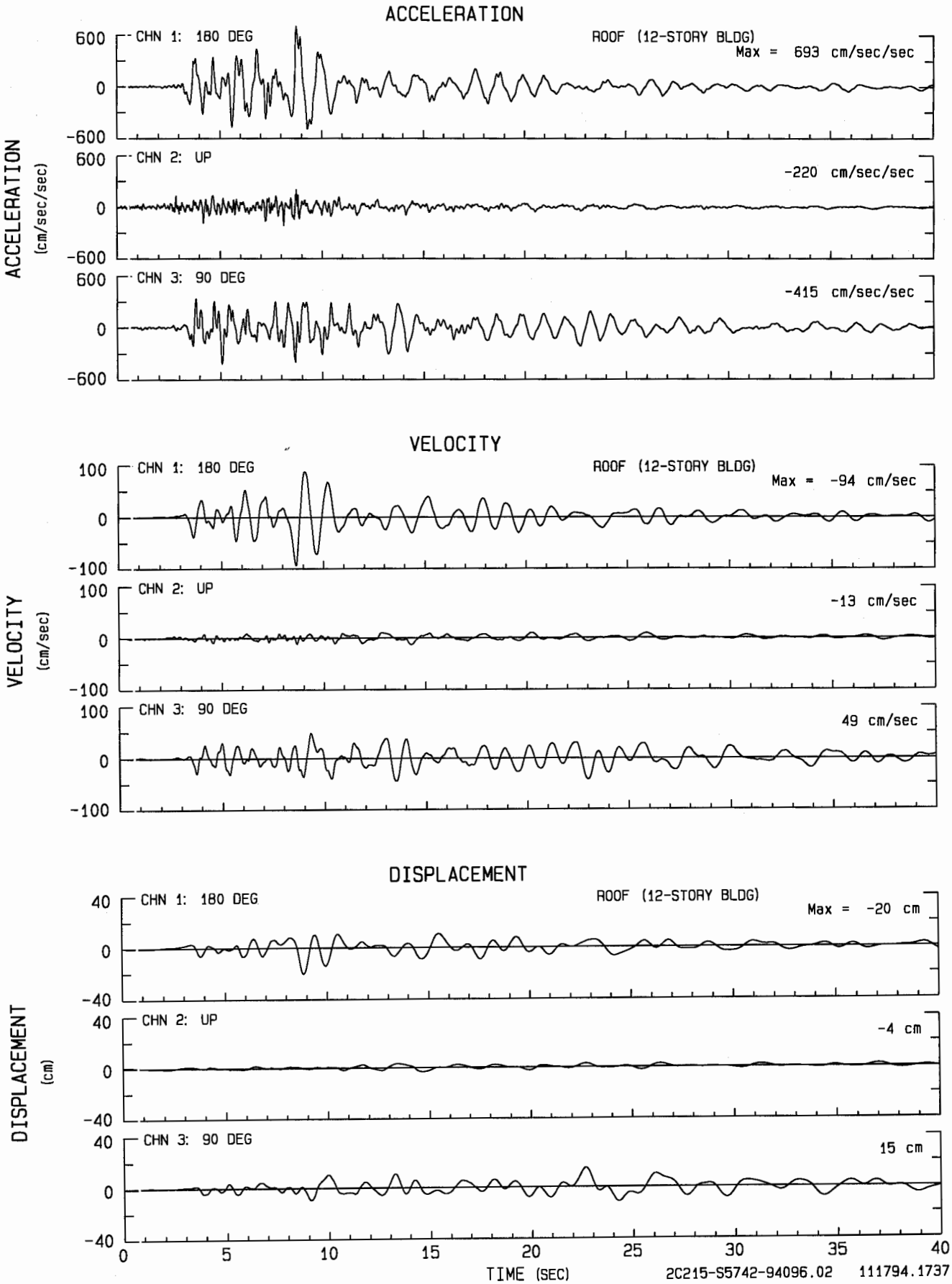
CHN 3 (STA CHN 9): 270 DEG
ROOF (21-STORY BLDG)



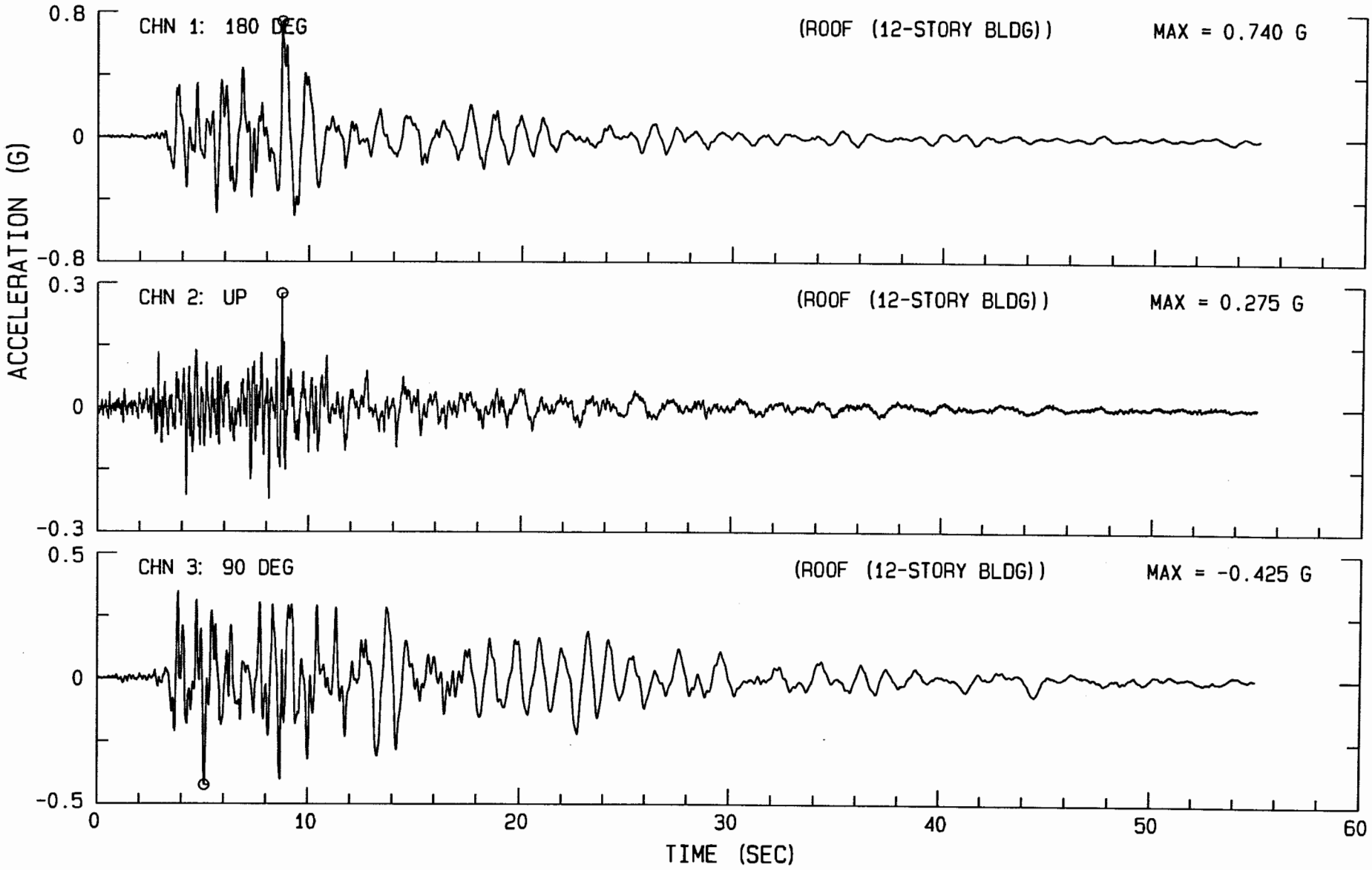
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

NORTH HOLLYWOOD - MAGNOLIA BLVD #1 CSMIP Sta Num 2C215

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



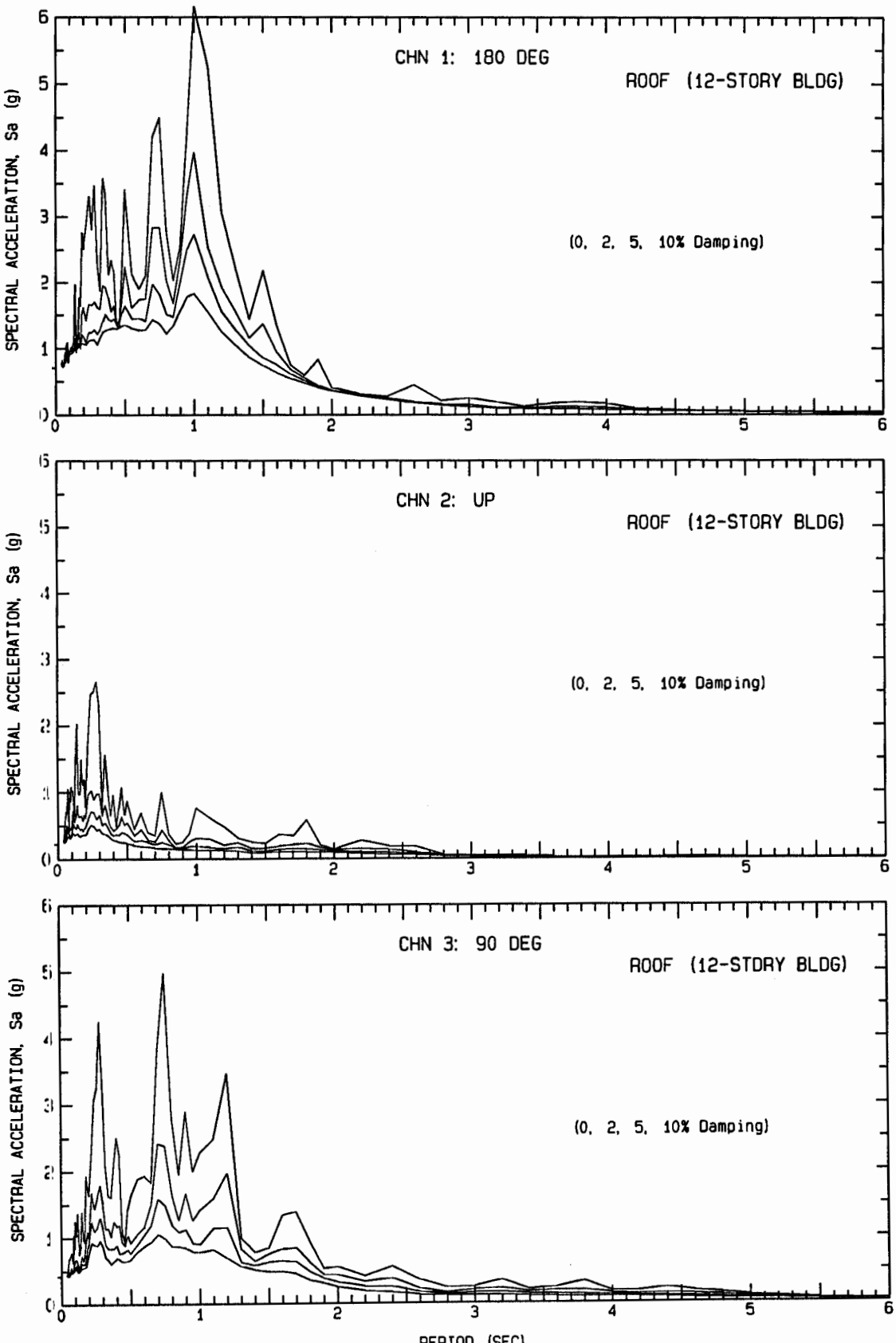
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
NORTH HOLLYWOOD - MAGNOLIA BLVD #1
UNCORRECTED ACCELEROGRAM 2C215-S5742-94096.02 092994.1550-0N94A215



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

NORTH HOLLYWOOD - MAGNOLIA BLVD #1 Sta Num 2C215

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C215-S5742-94096.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

NORTH HOLLYWOOD - MAGNOLIA BLVD #1
Sta Num 2C215

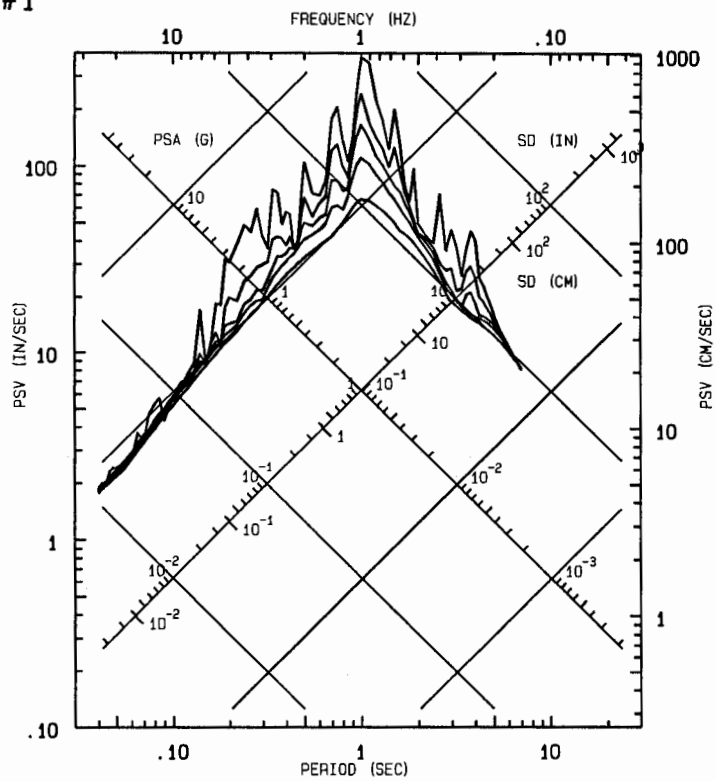
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

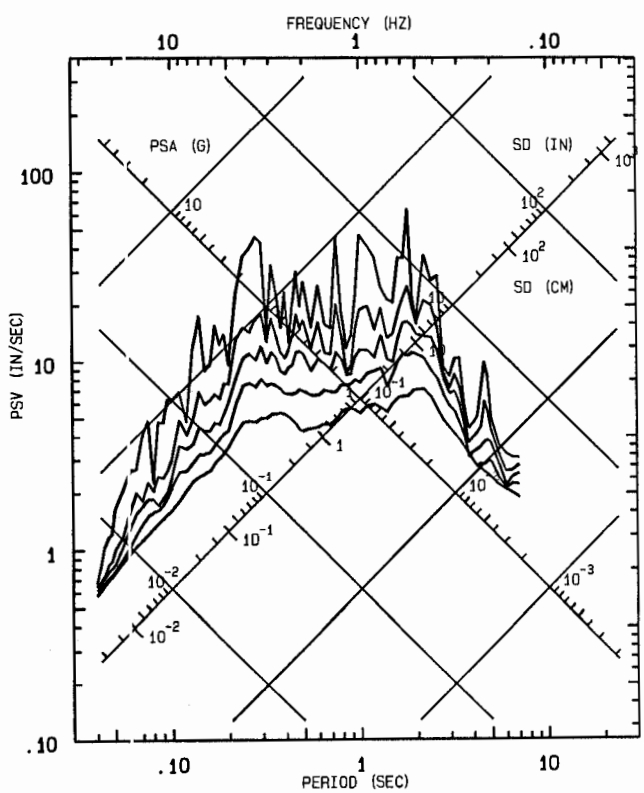
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C215-S5742-94096.02

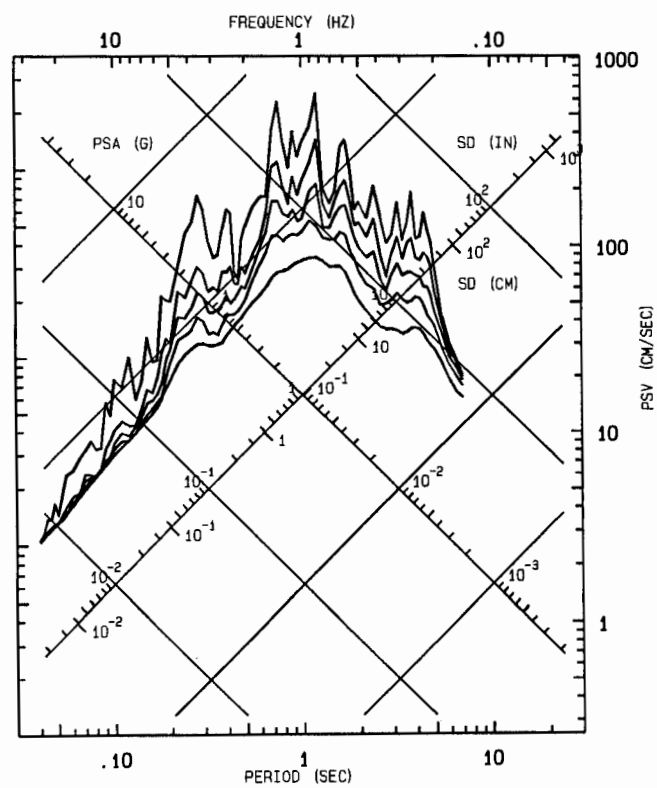
CHN 1: 180 DEG
ROOF (12-STORY BLDG)



CHN 2: UP
ROOF (12-STORY BLDG)



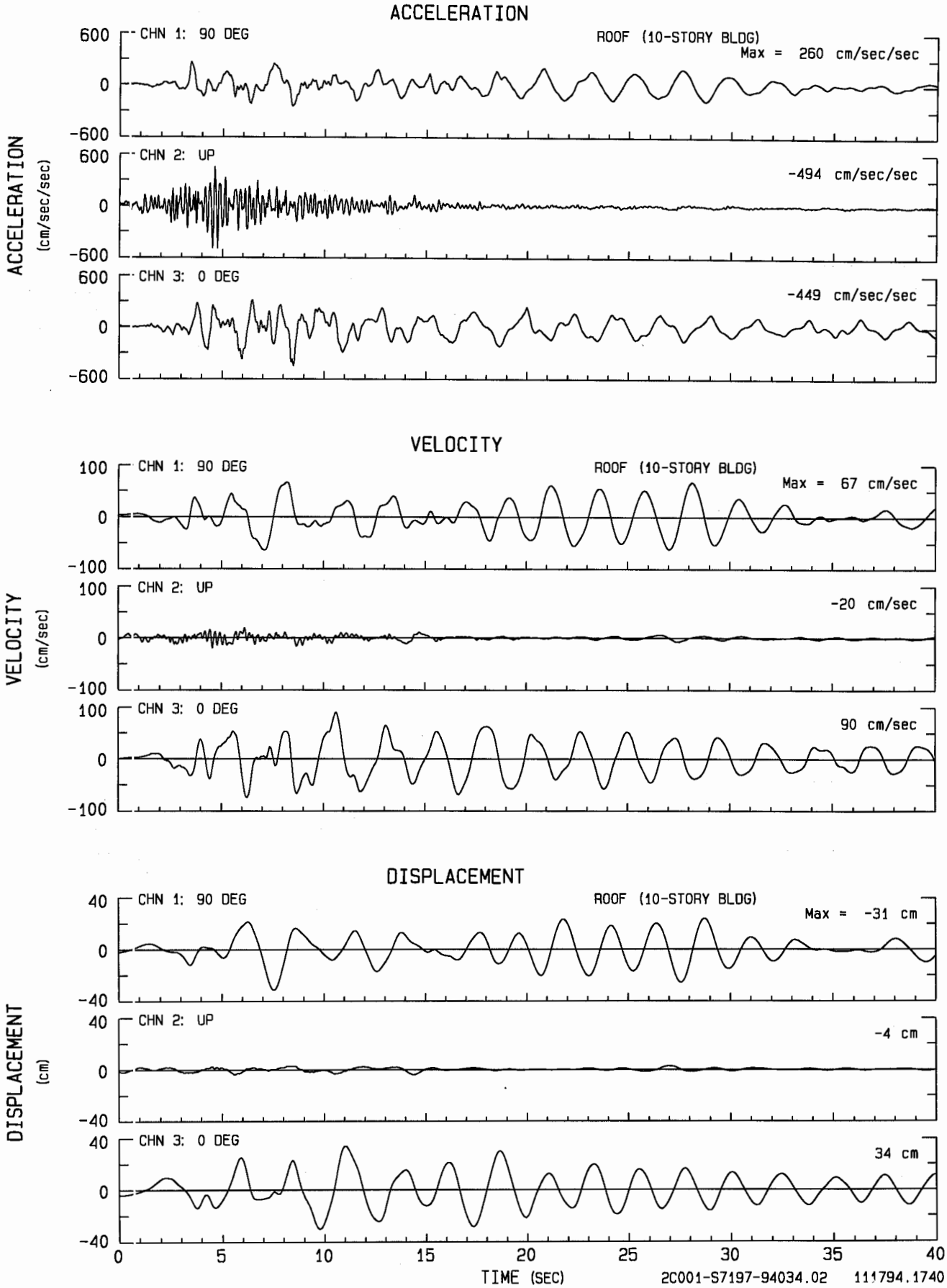
CHN 3: 90 DEG
ROOF (12-STORY BLDG)



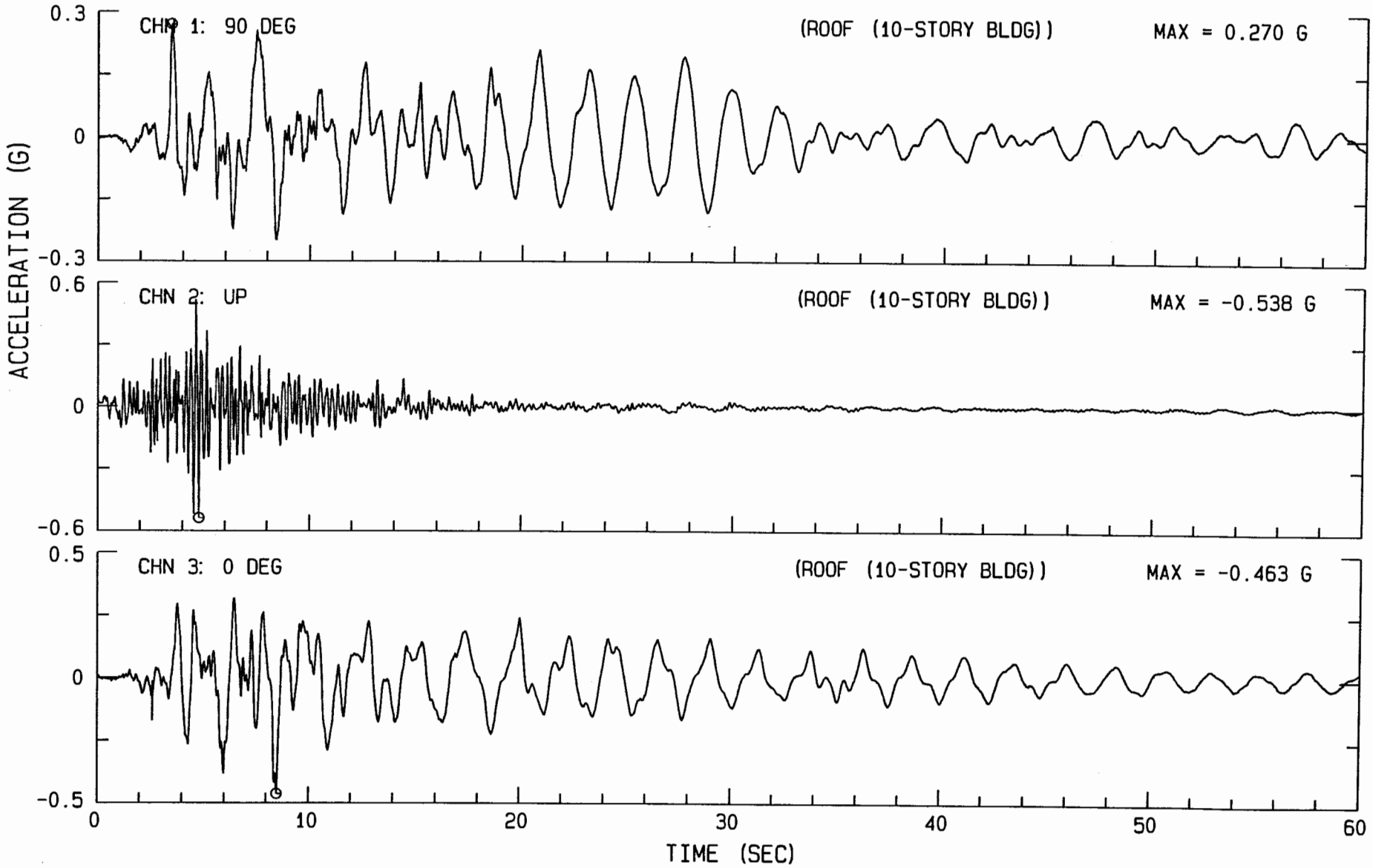
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

NORTHRIDGE - OAKDALE AVE #1 CSMIP Sta Num 2C001

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



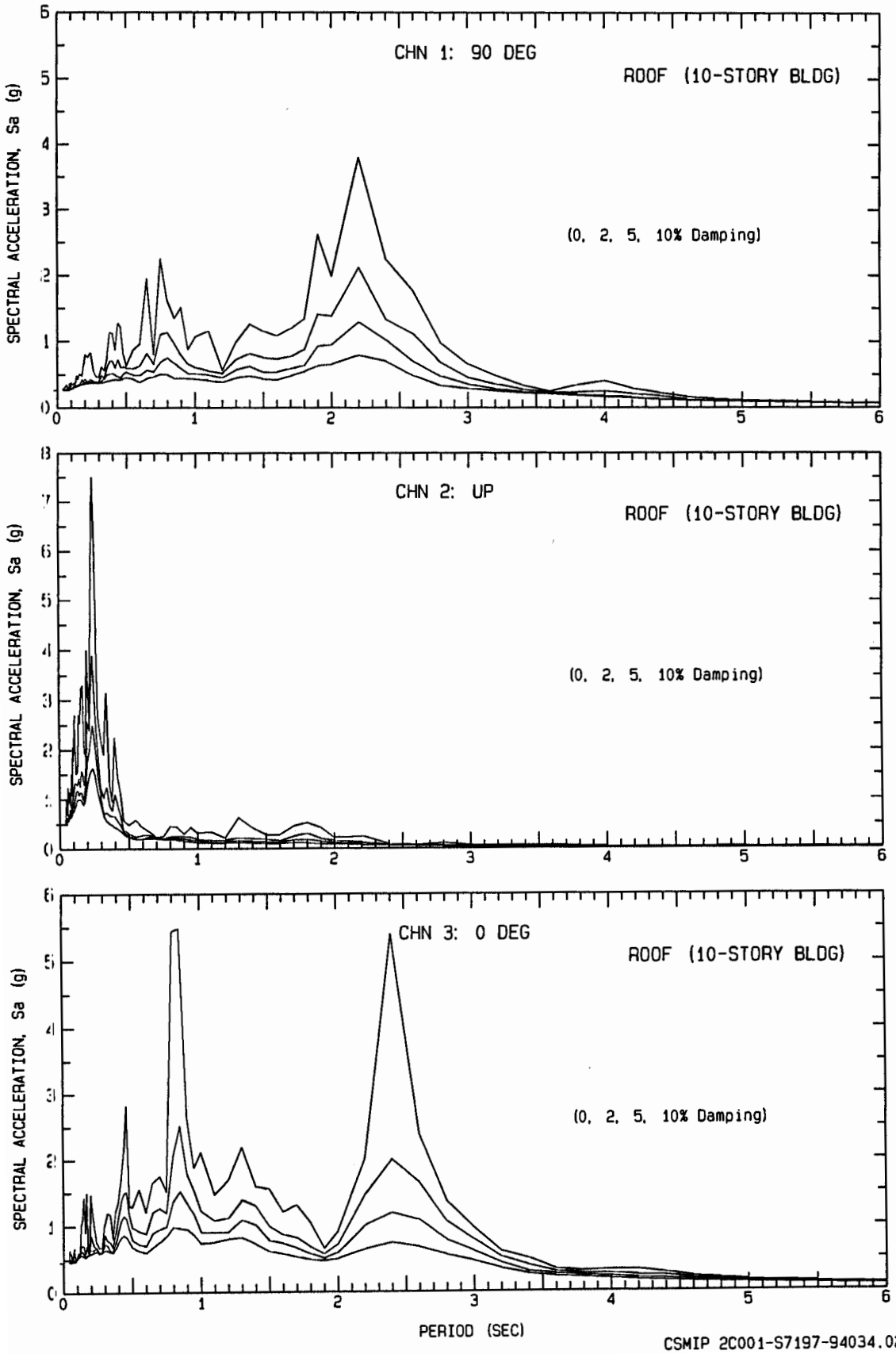
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
NORTHRIDGE - OAKDALE AVE #1
UNCORRECTED ACCELEROGRAM 2C001-S7197-94034.02 093094.0758-0N94A001



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

NORTHRIDGE - OAKDALE AVE #1 Sta Num 2C001

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C001-S7197-94034.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

NORTHRIDGE - OAKDALE AVE #1
Sta Num 2C001

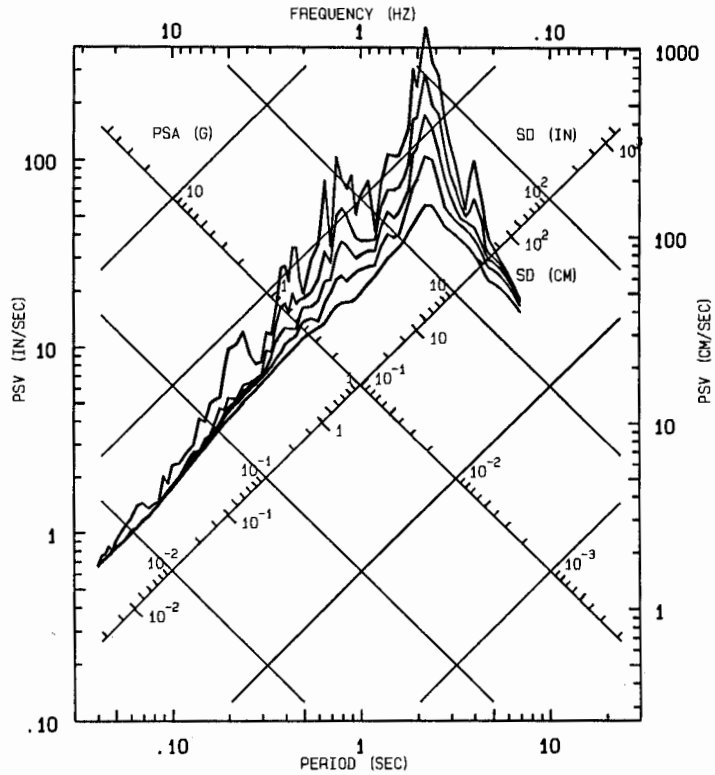
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

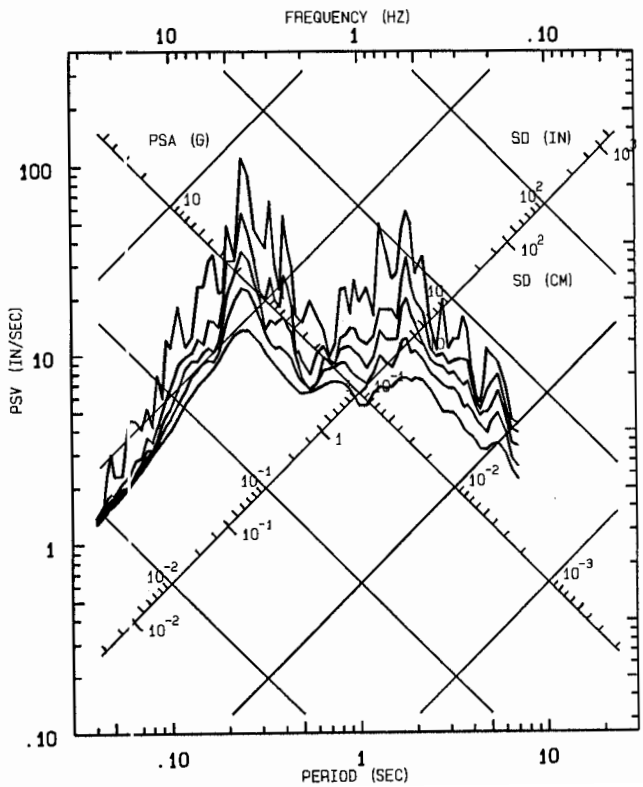
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C001-S7197-94034.02

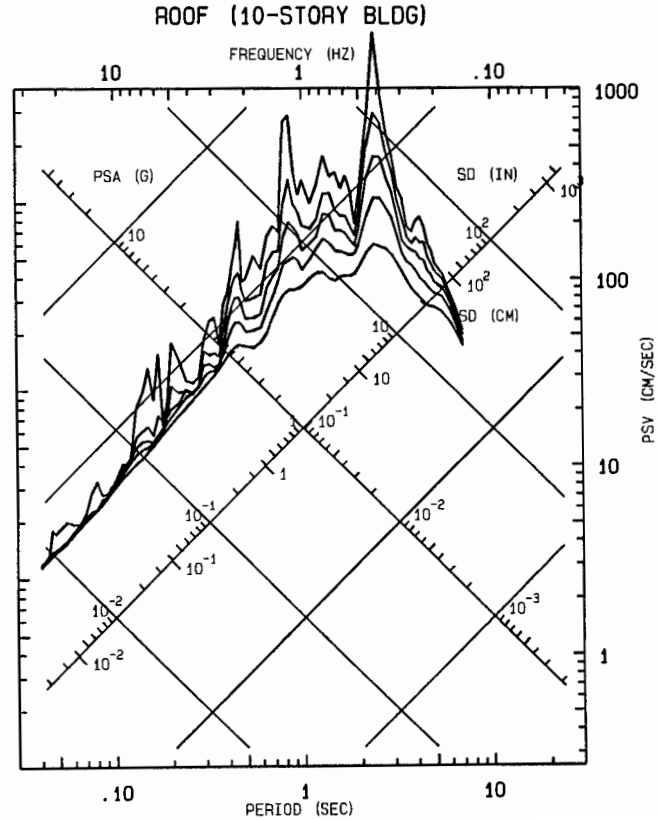
CHN 1: 90 DEG
ROOF (10-STORY BLDG)



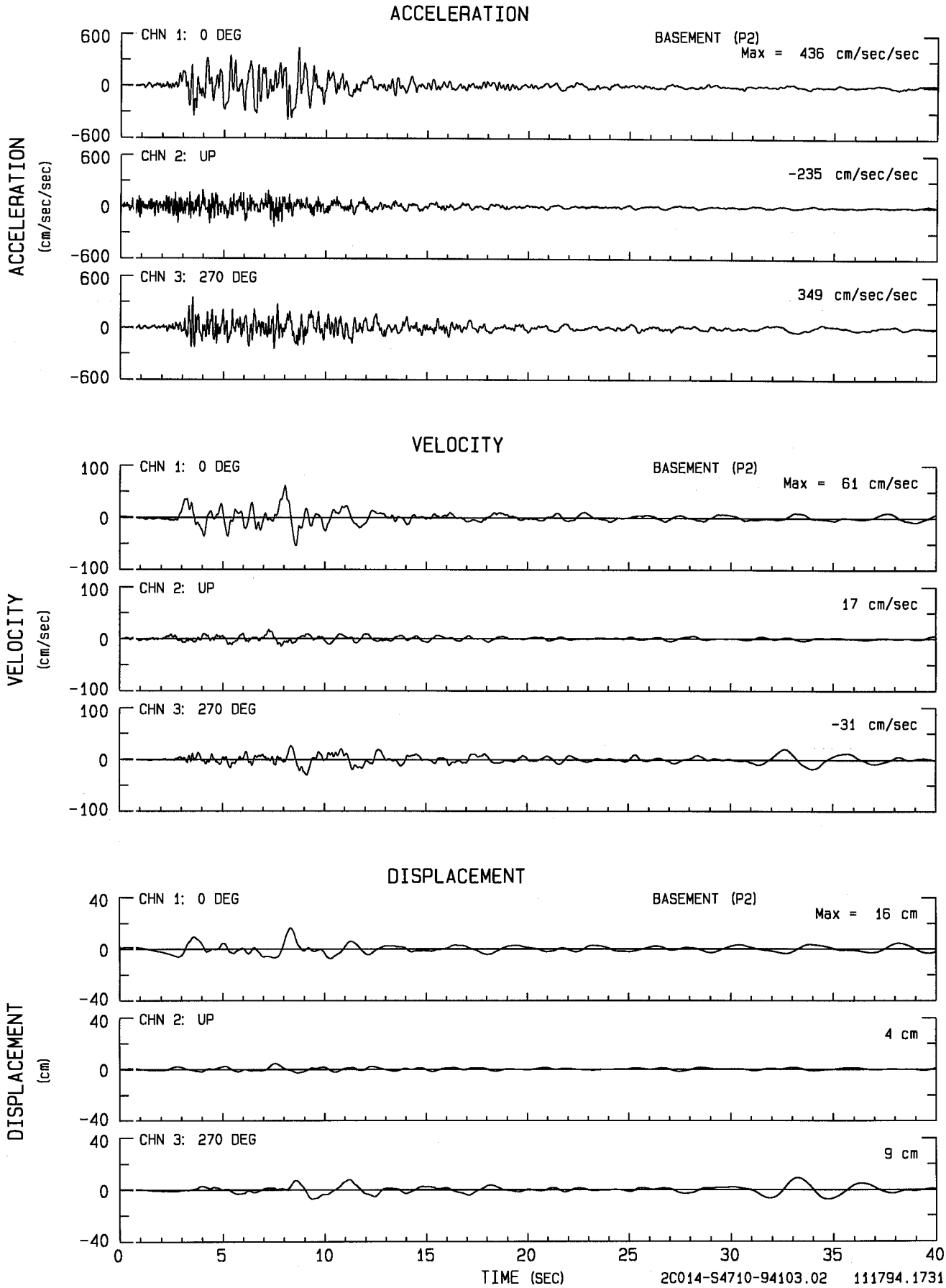
CHN 2: UP
ROOF (10-STORY BLDG)



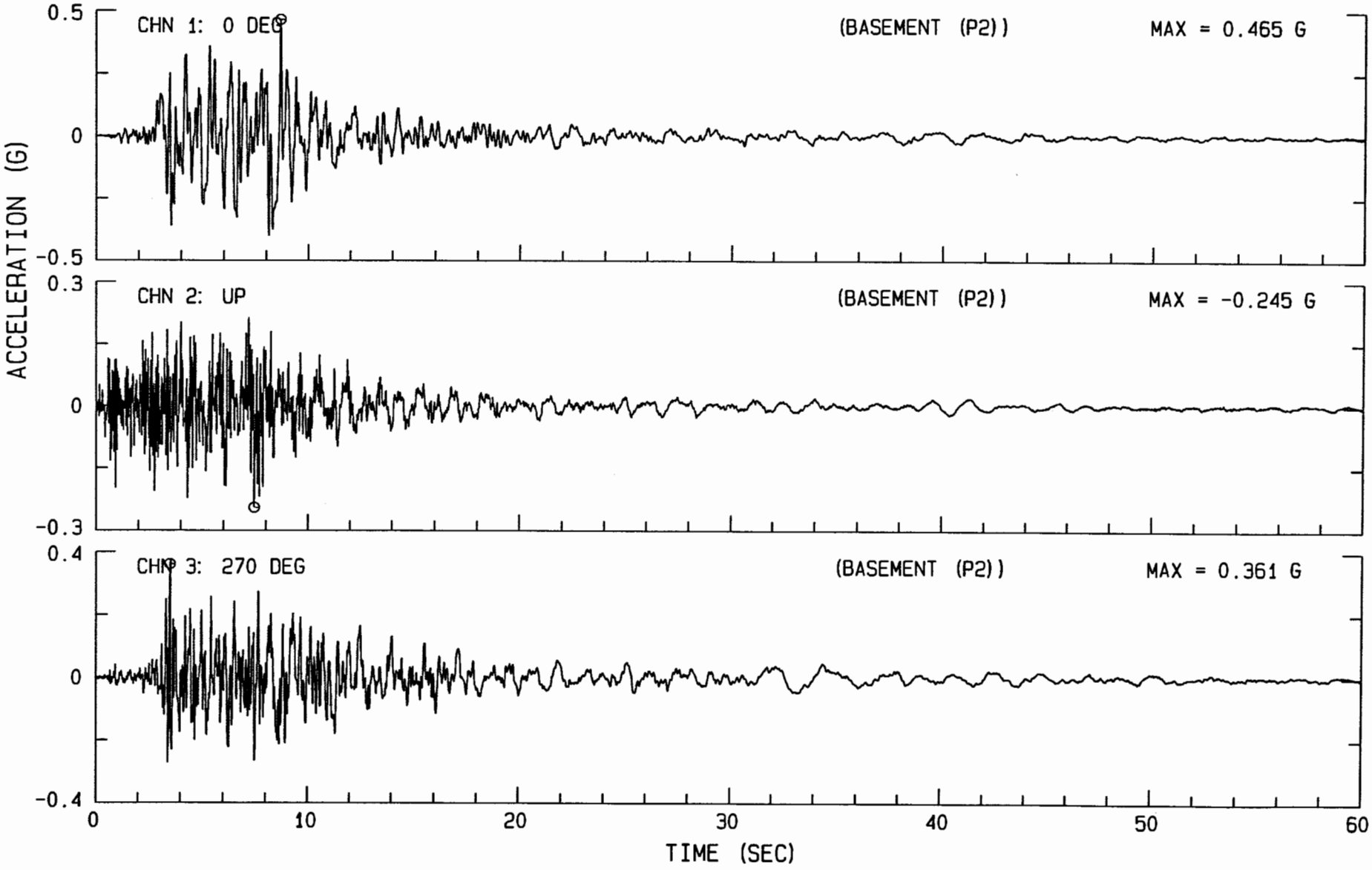
CHN 3: 0 DEG
ROOF (10-STORY BLDG)



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
SHERMAN OAKS - VENTURA BLVD #6 CSMIP Sta Num 2C014
Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



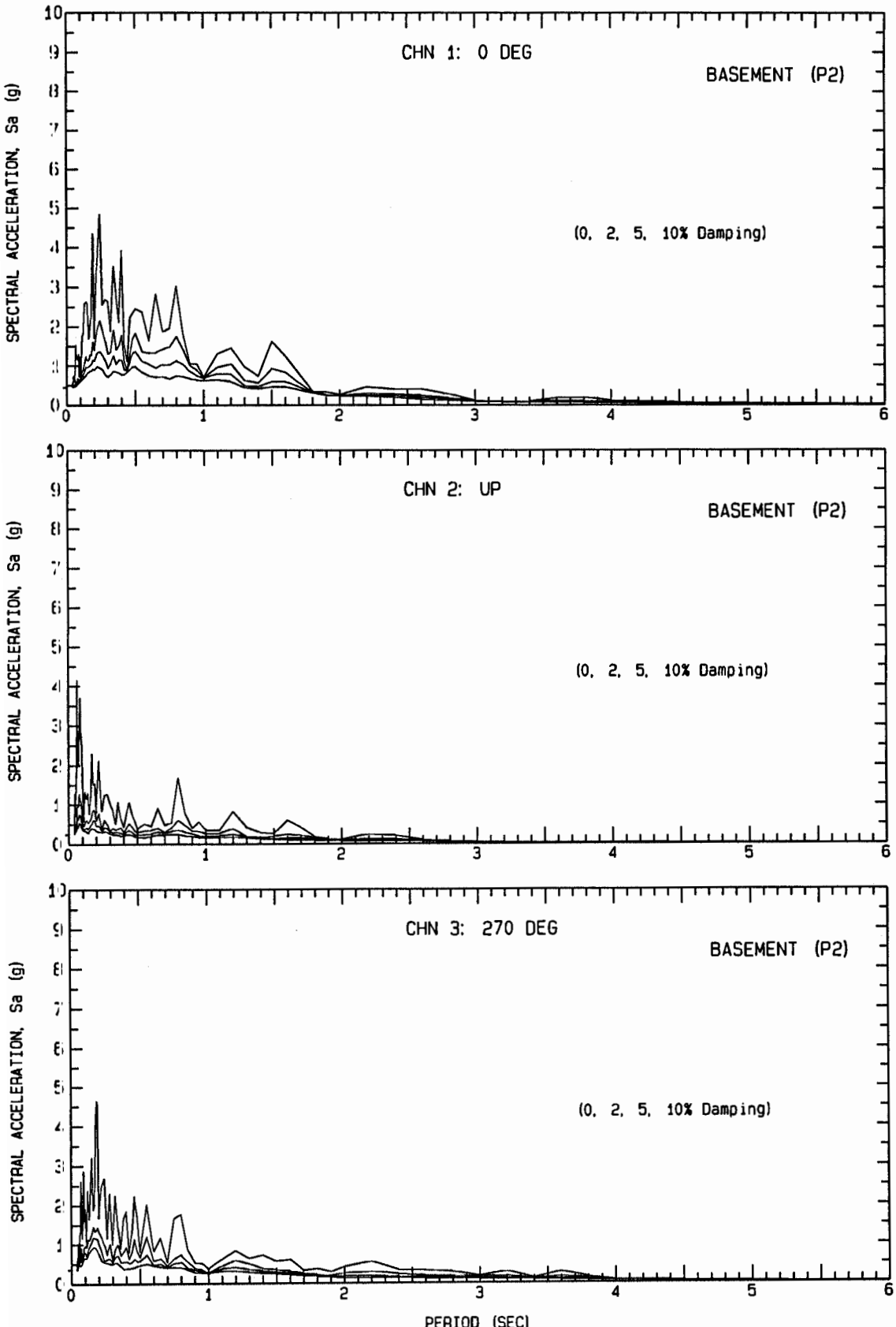
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
SHERMAN OAKS - VENTURA BLVD #6
UNCORRECTED ACCELEROGRAM 2C014-S4710-94103.02 092894.1552-QN94014P



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6 Sta Num 2C014

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C014-S4710-94103.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6
Sta Num 2C014

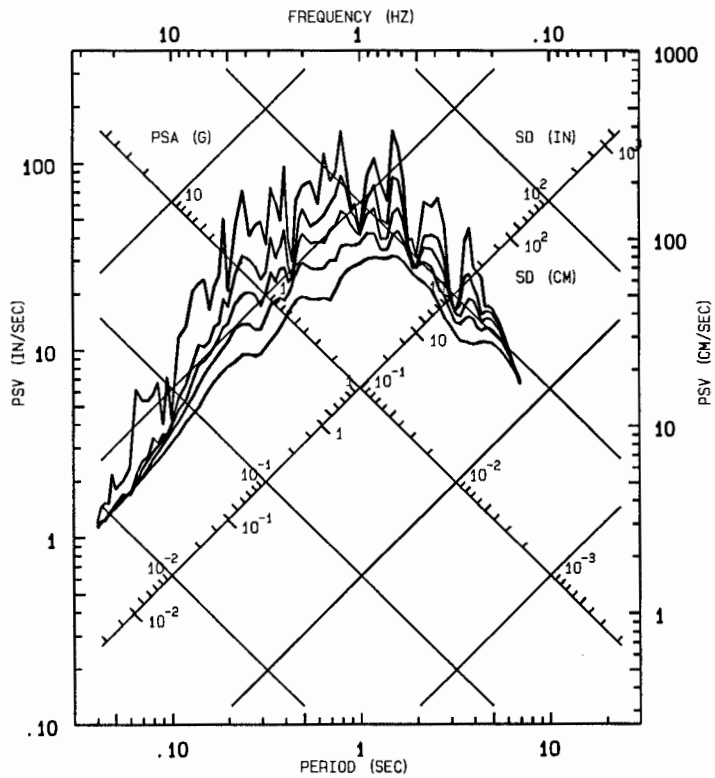
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

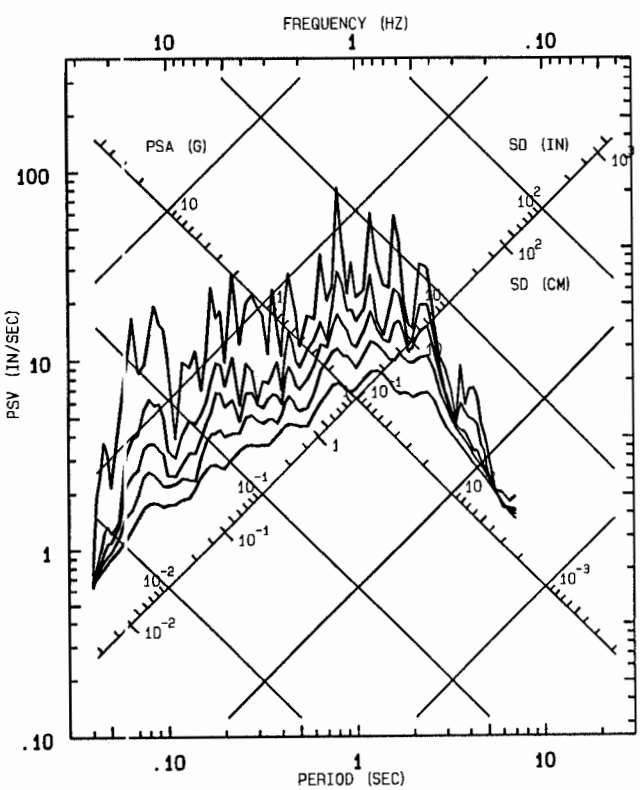
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C014-S4710-94103.02

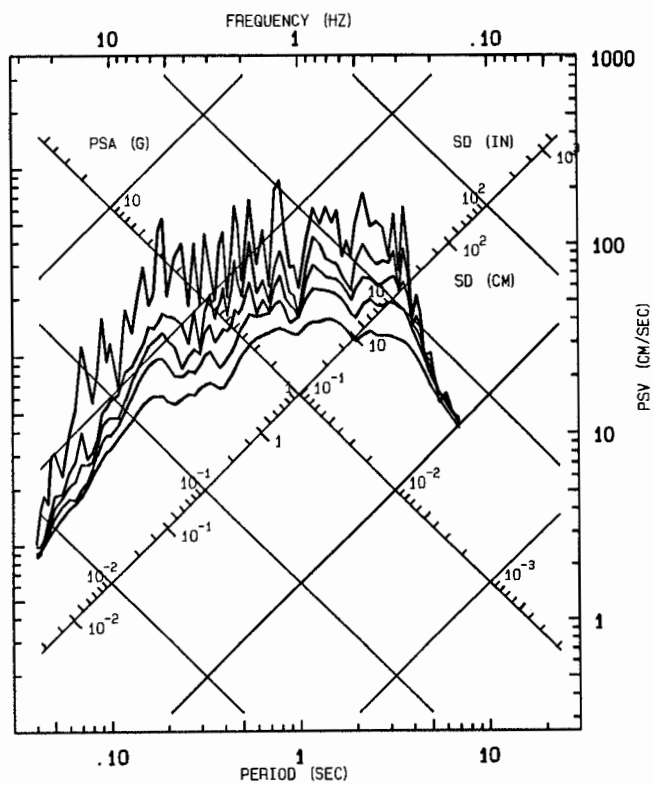
CHN 1: 0 DEG
BASEMENT (P2)



CHN 2: UP
BASEMENT (P2)



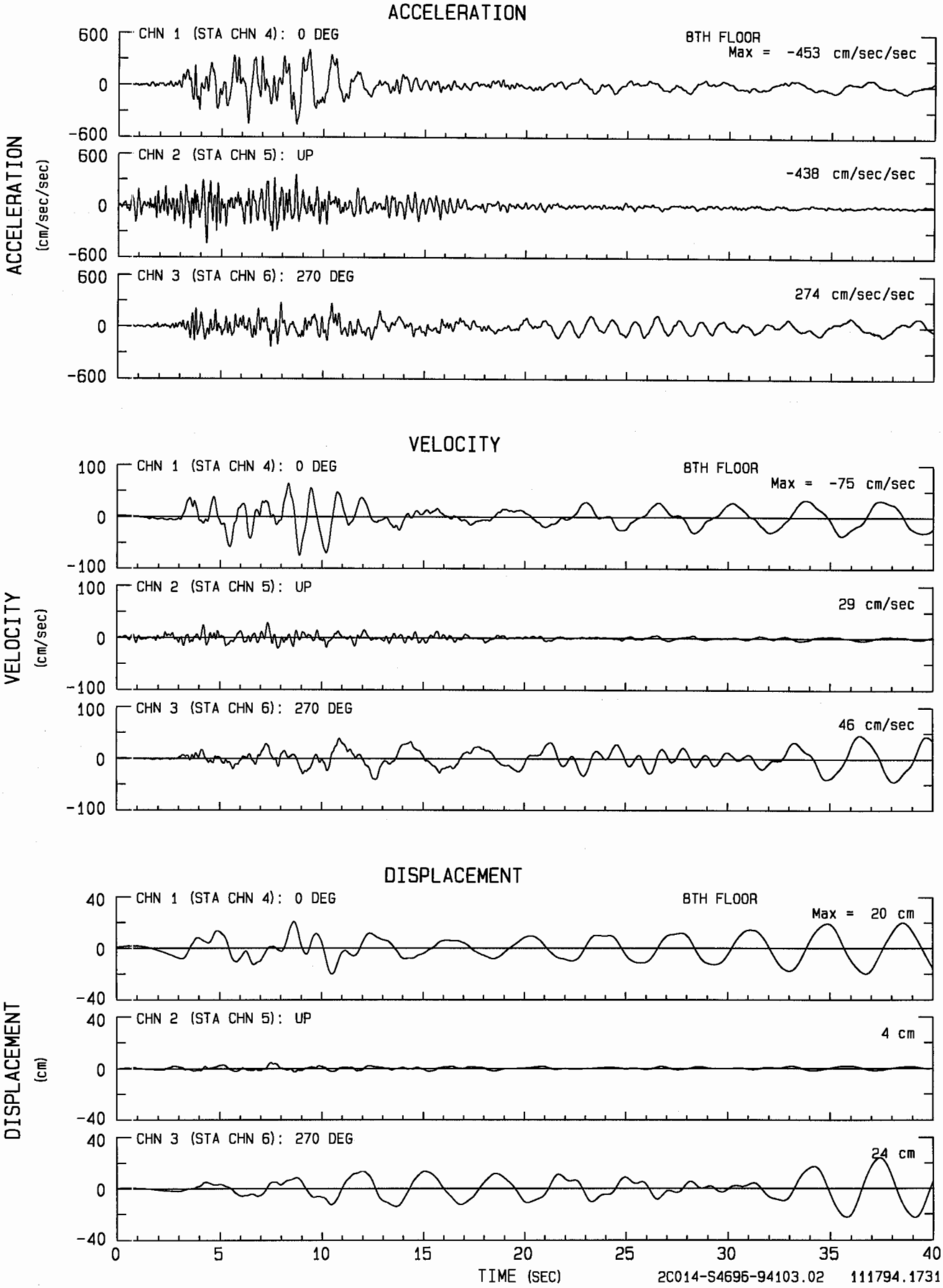
CHN 3: 270 DEG
BASEMENT (P2)



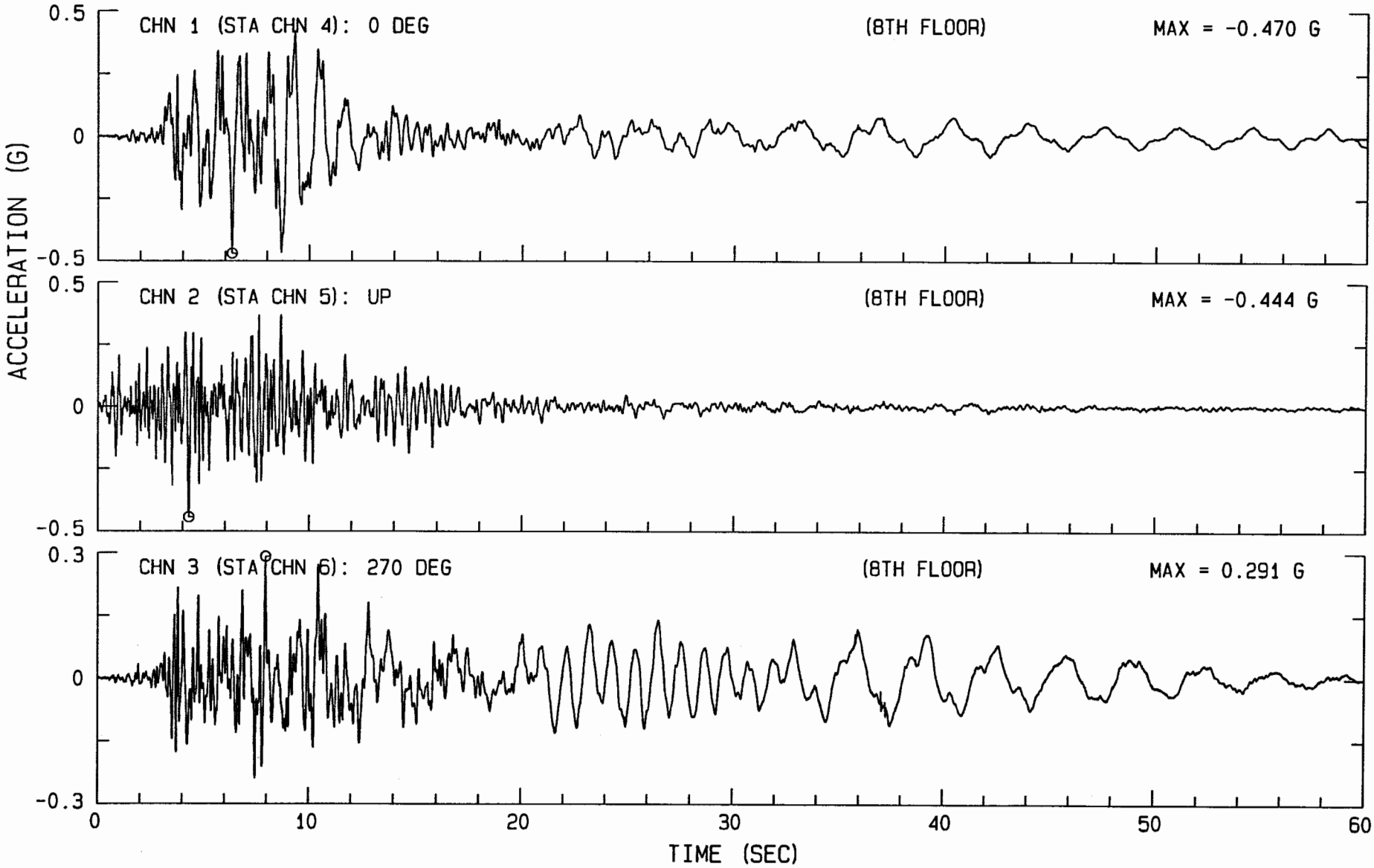
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6 CSMIP Sta Num 2C014

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



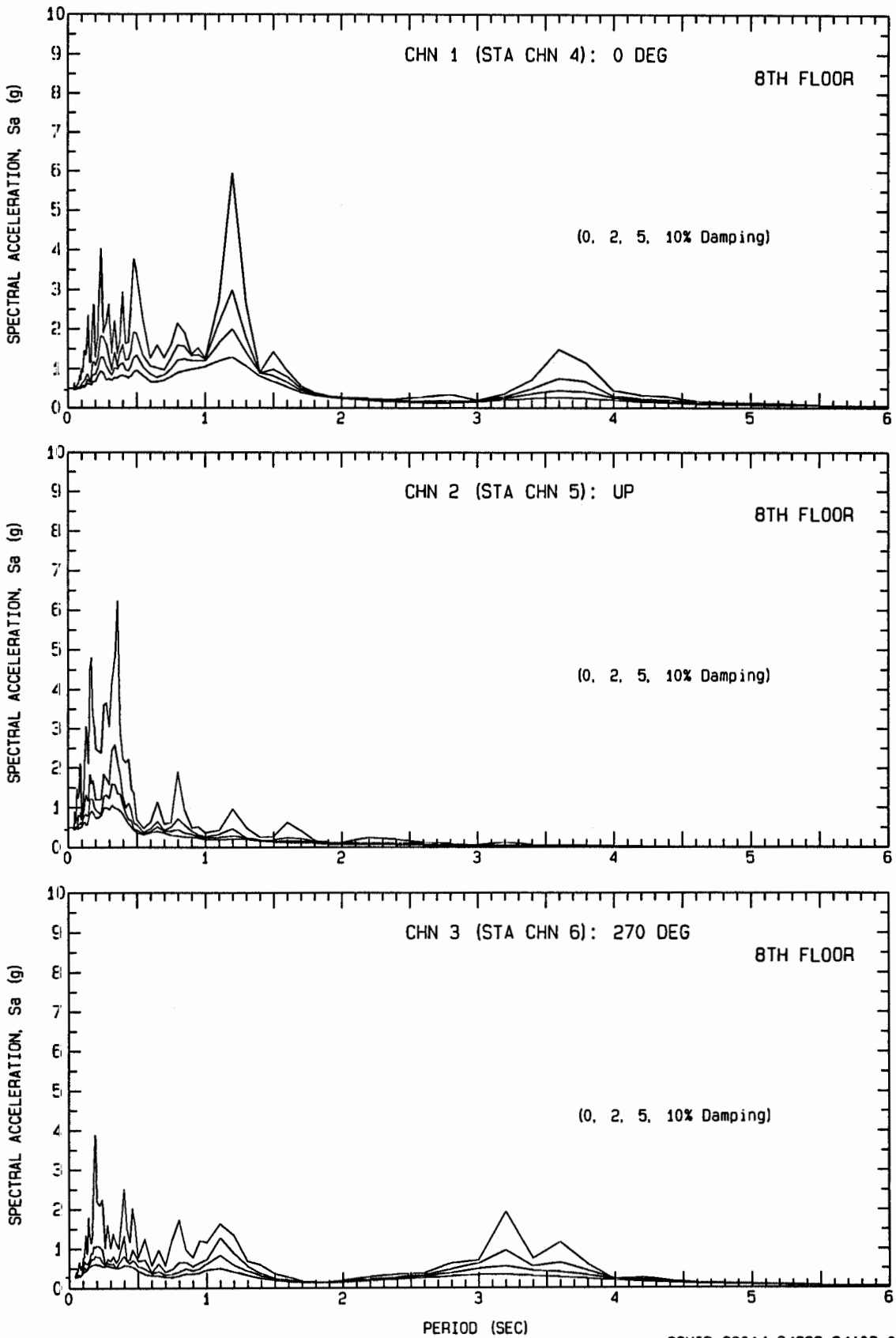
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
SHERMAN OAKS - VENTURA BLVD #6
UNCORRECTED ACCELEROGRAM 2C014-S4696-94103.02 092894.1516-QN94014M



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6 Sta Num 2C014

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C014-S4696-94103.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6
Sta Num 2C014

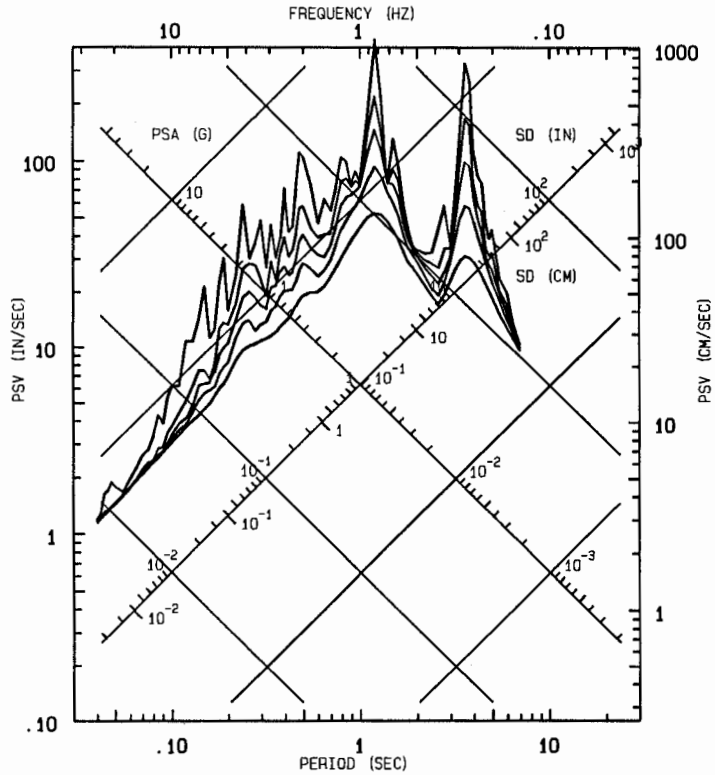
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

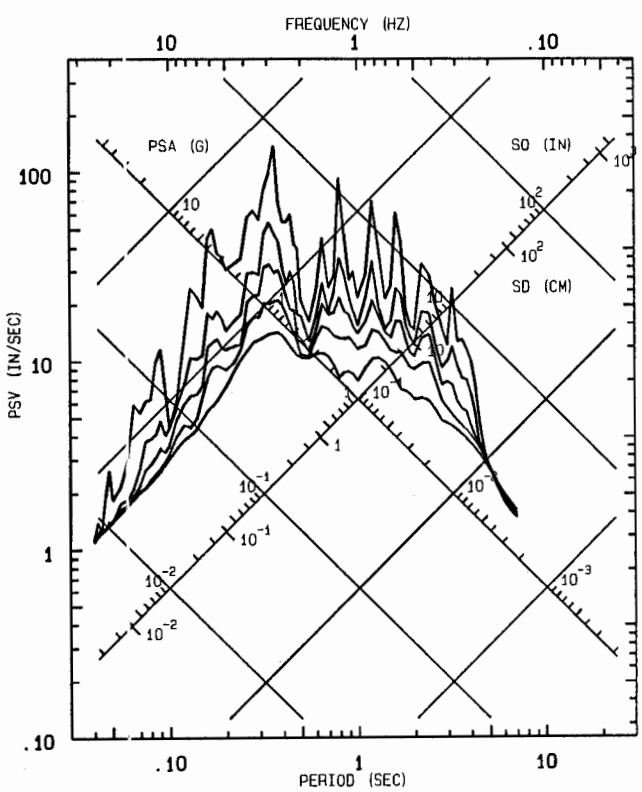
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C014-S4696-94103.02

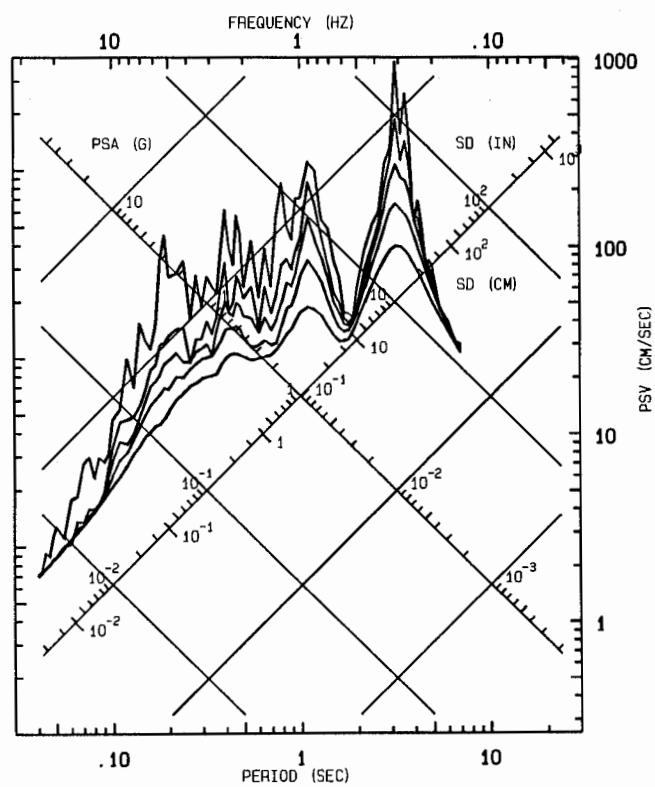
CHN 1 (STA CHN 4): 0 DEG
8TH FLOOR



CHN 2 (STA CHN 5): UP
8TH FLOOR



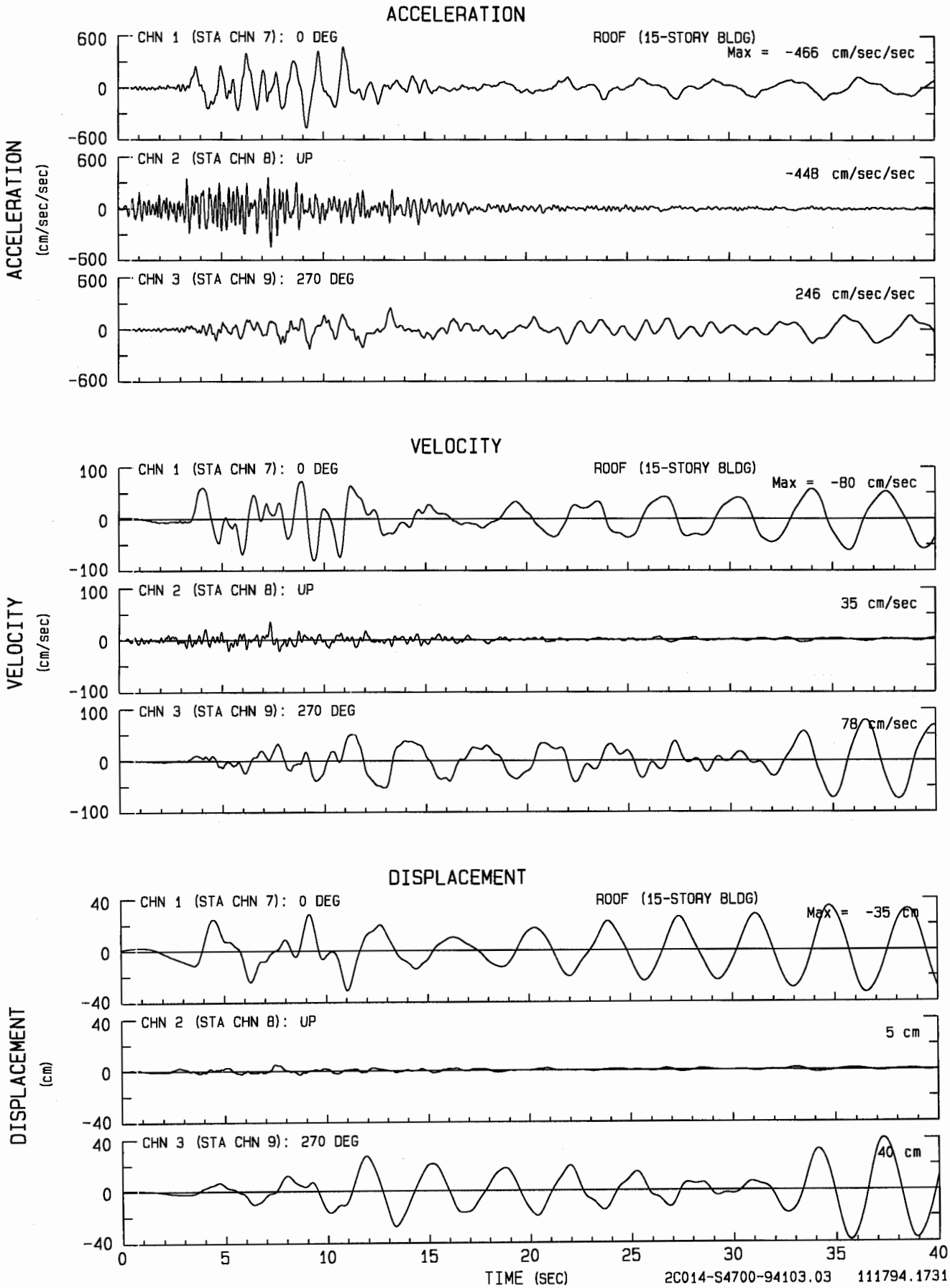
CHN 3 (STA CHN 6): 270 DEG
8TH FLOOR



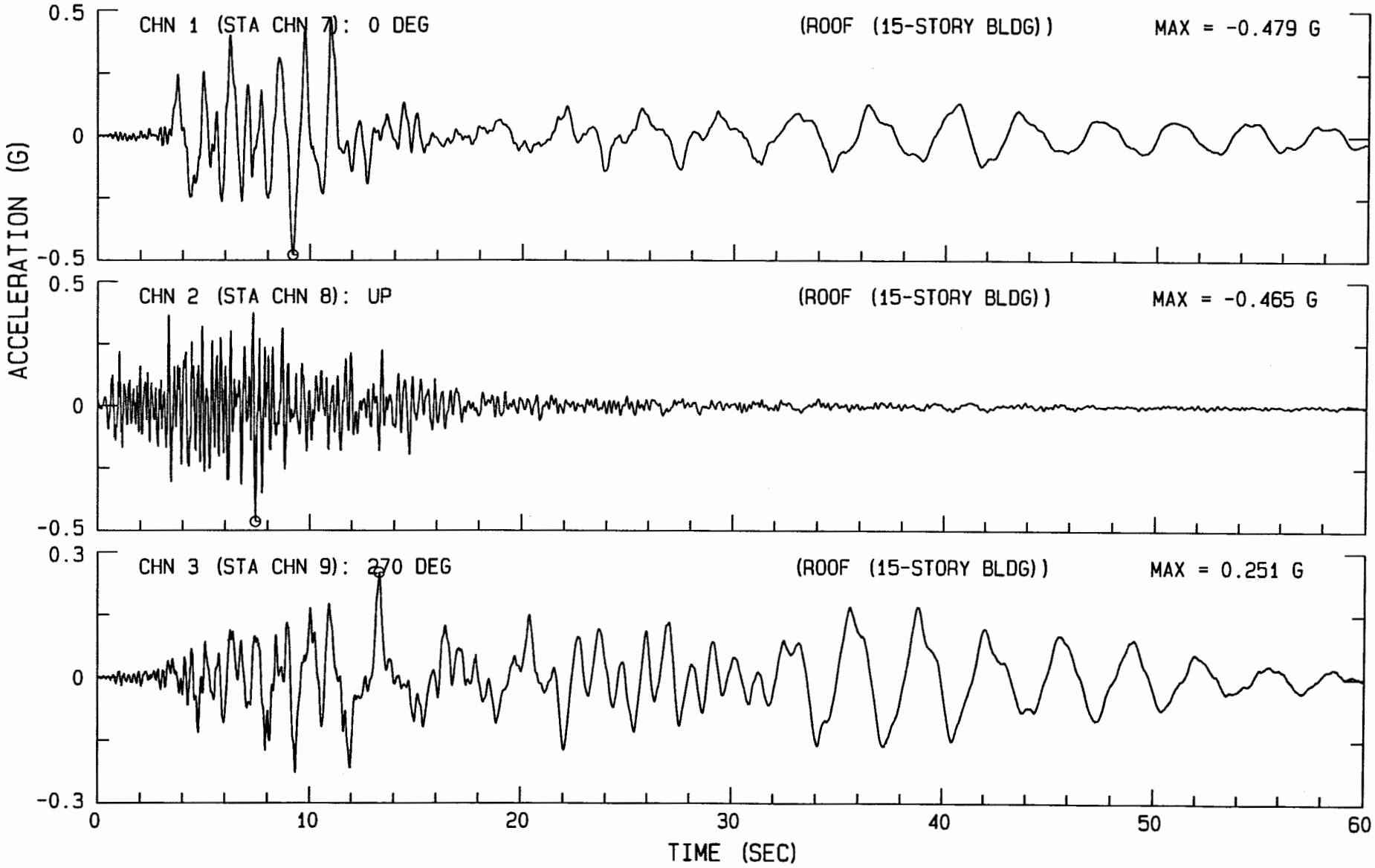
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6 CSMIP Sta Num 2C014

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



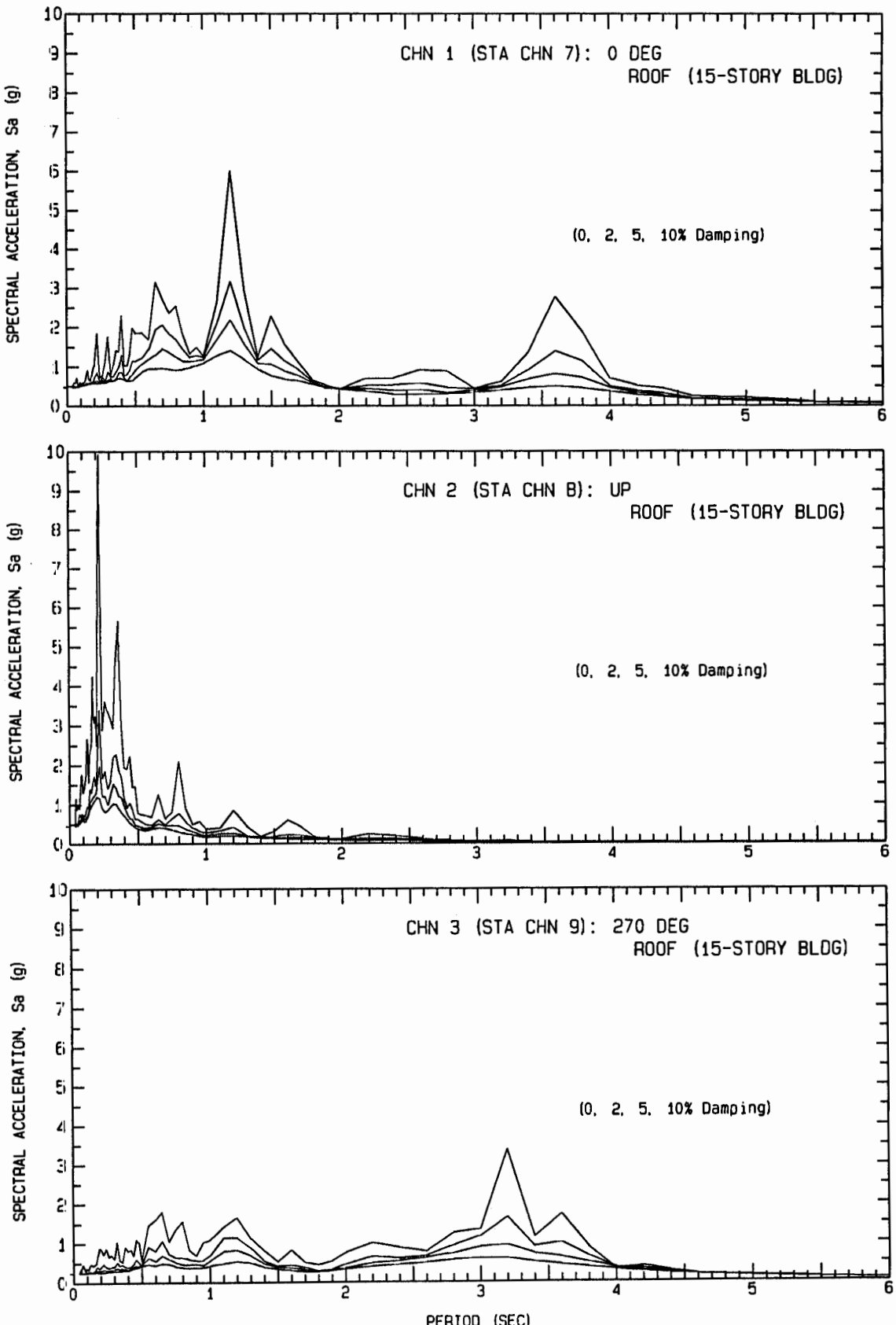
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
SHERMAN OAKS - VENTURA BLVD #6
UNCORRECTED ACCELEROGRAM 2C014-S4700-94103.03 092894.1441-QN94014R



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6 Sta Num 2C014

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C014-S4700-94103.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

SHERMAN OAKS - VENTURA BLVD #6
Sta Num 2C014

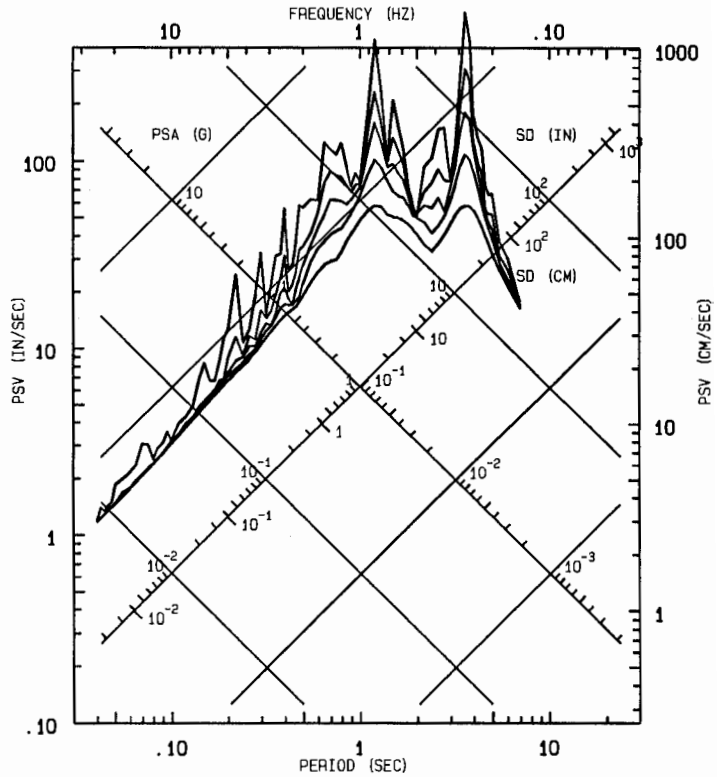
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

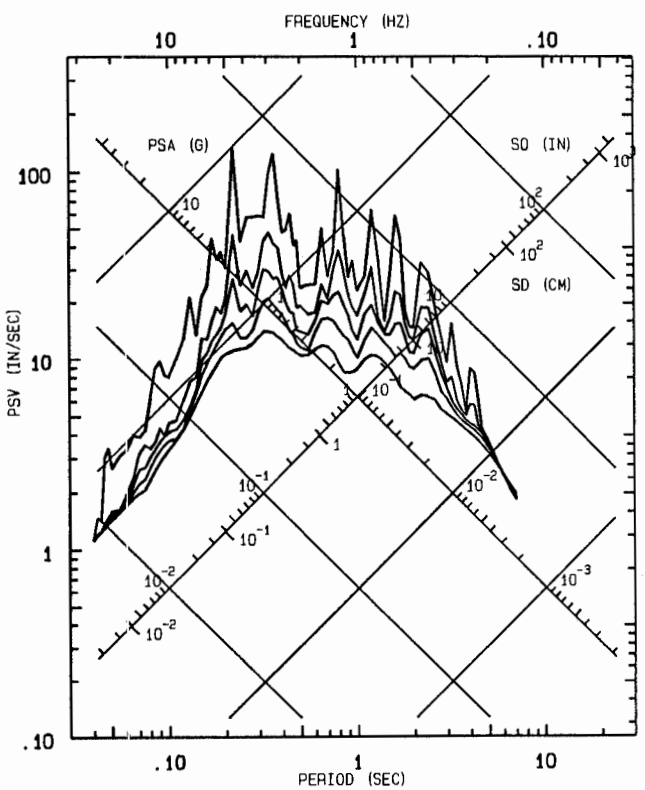
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C014-S4700-94103.03

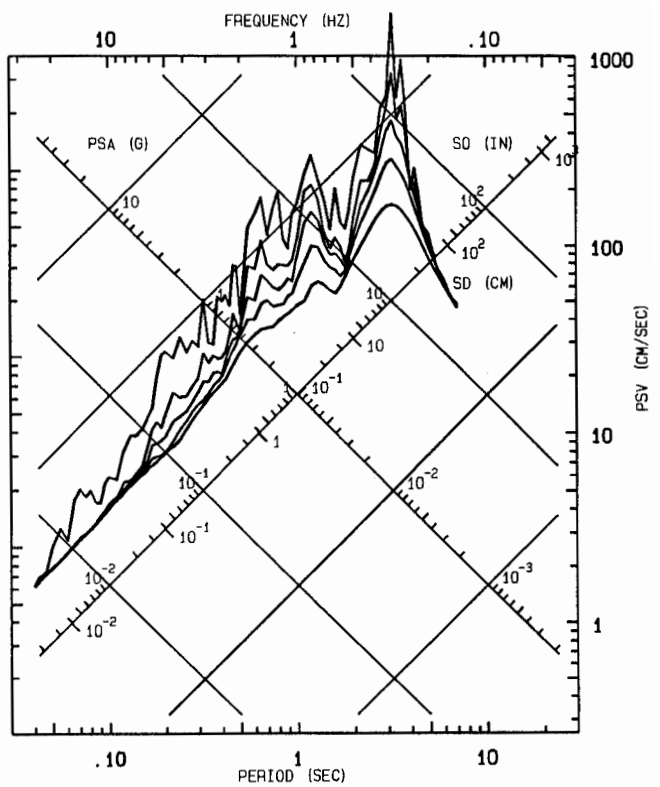
CHN 1 (STA CHN 7): 0 DEG
ROOF (15-STORY BLDG)



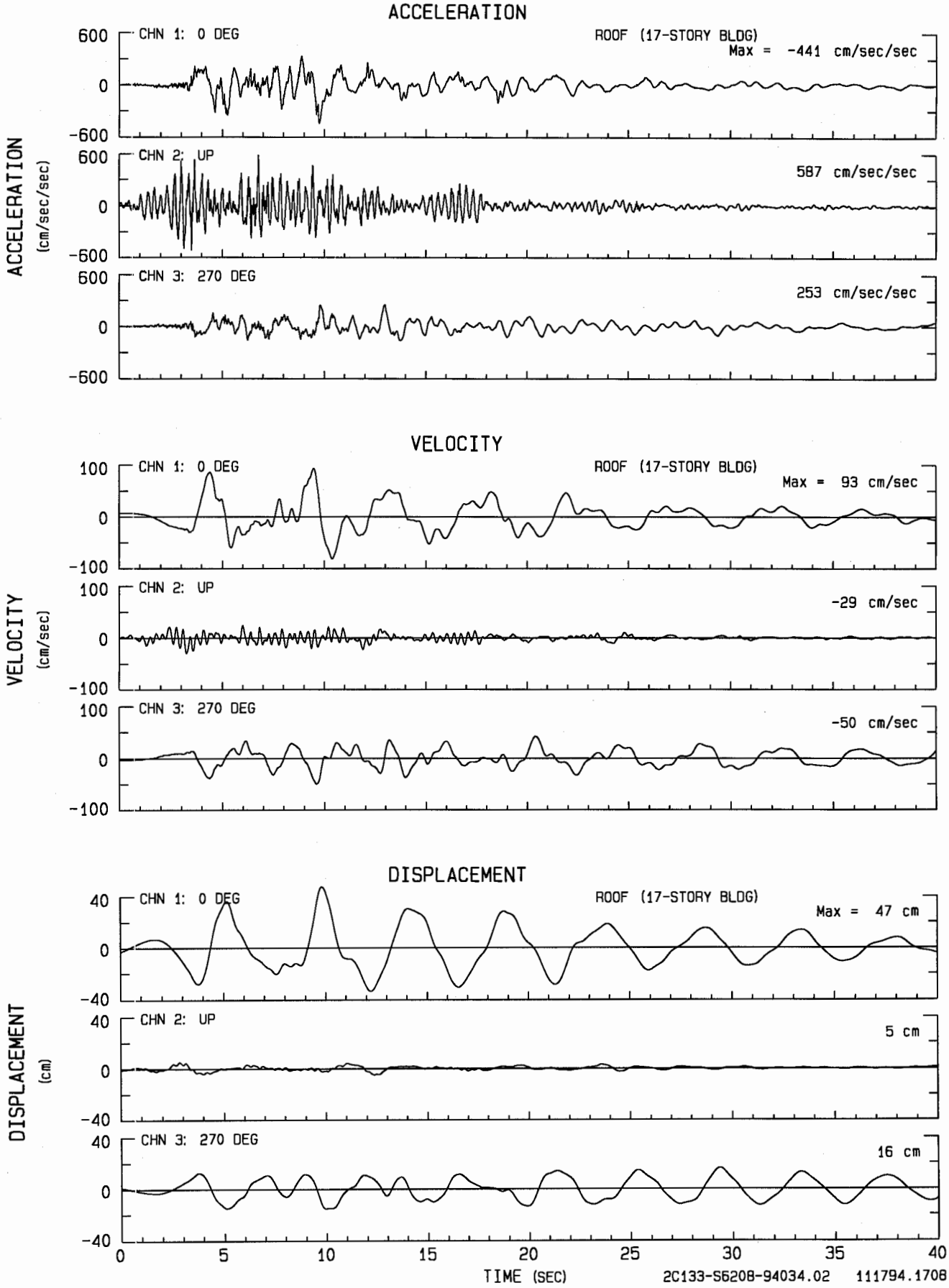
CHN 2 (STA CHN 8): UP
ROOF (15-STORY BLDG)



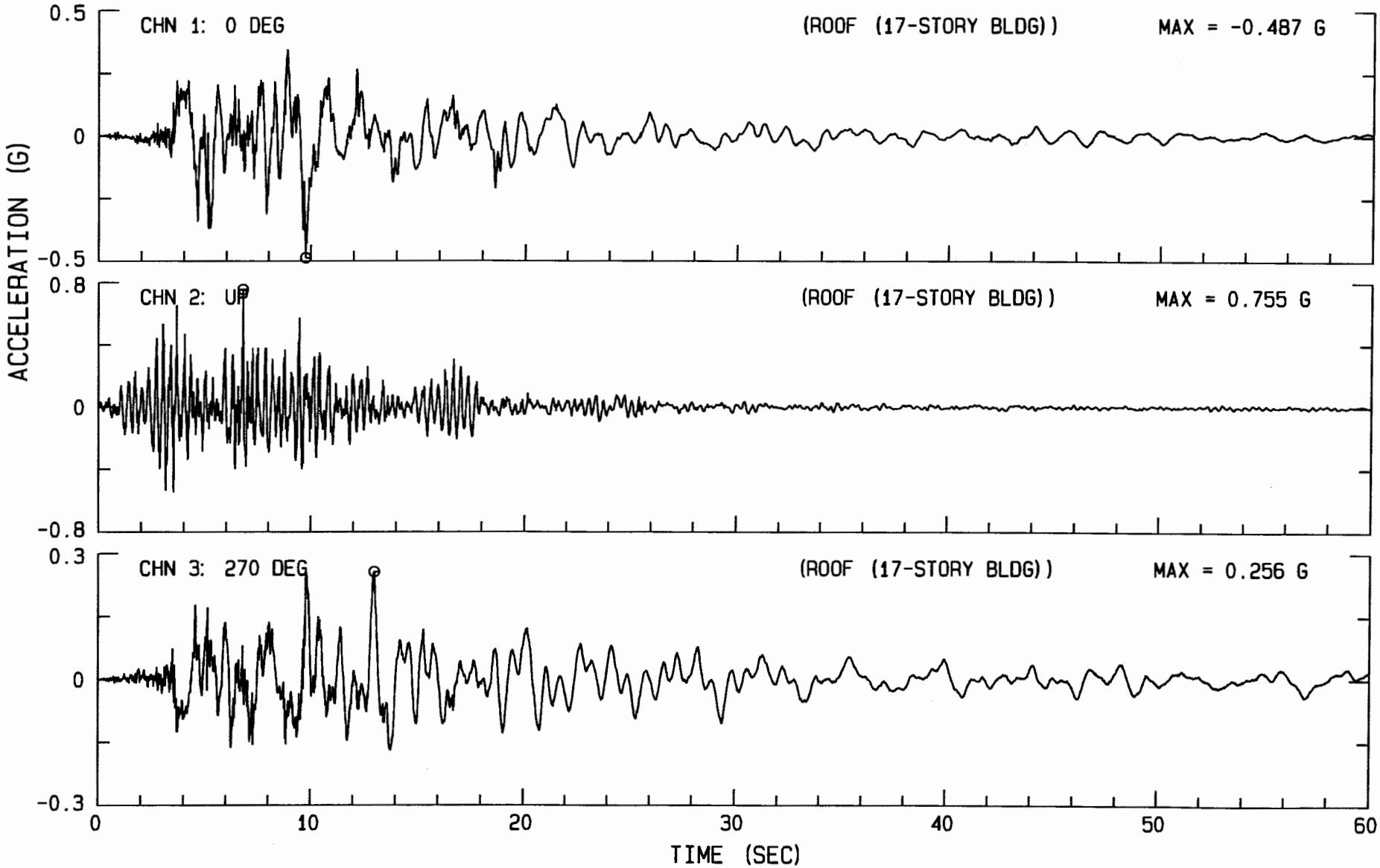
CHN 3 (STA CHN 9): 270 DEG
ROOF (15-STORY BLDG)



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - CANOGA AVE. #2 CSMIP Sta Num 2C133
Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



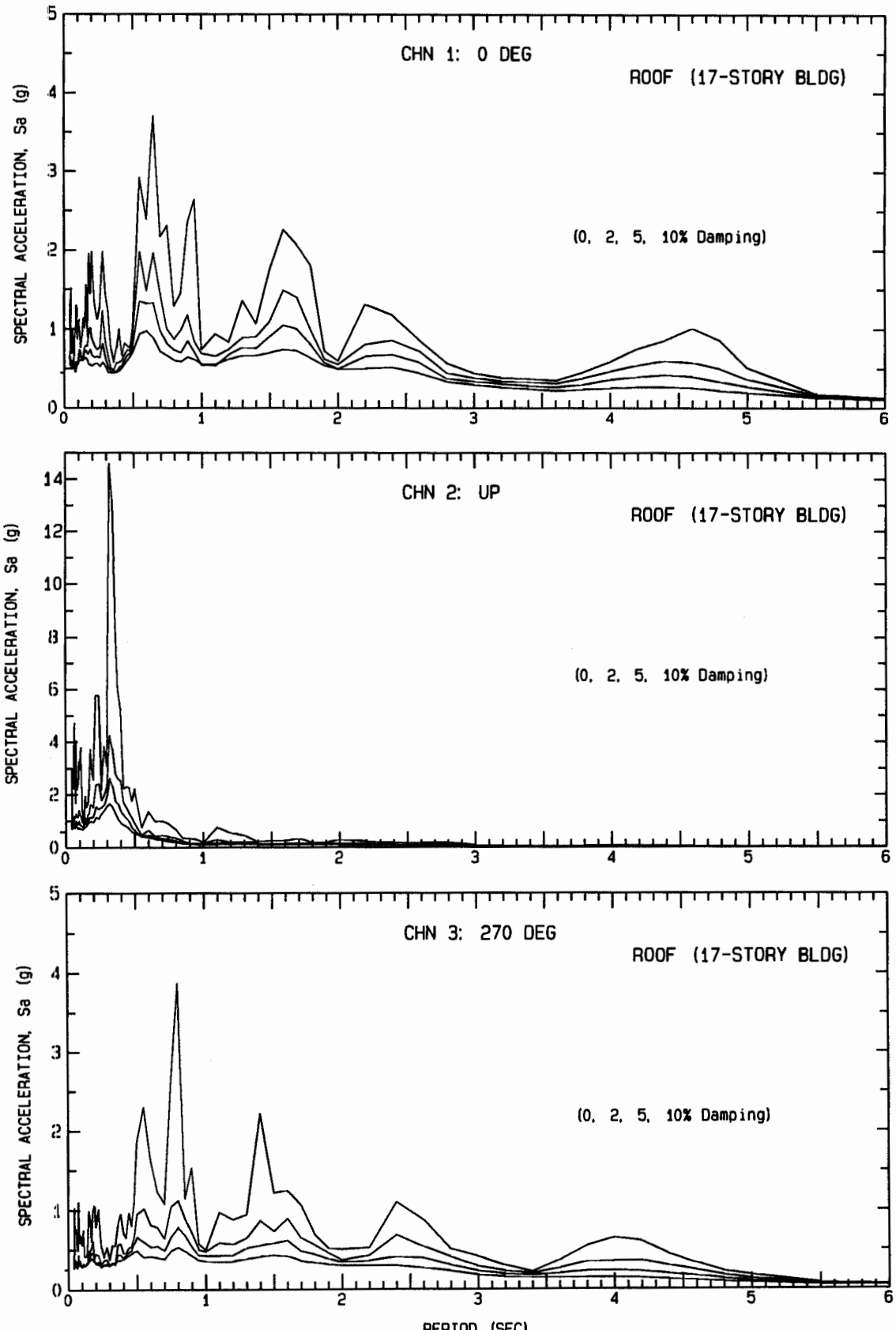
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - CANOGA AVE. #2
UNCORRECTED ACCELEROGRAM 2C133-S6208-94034.02 102694.0927-QN94A133



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - CANOGA AVE. #2 Sta Num 2C133

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C133-S6208-94034.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - CANOGA AVE. #2
Sta Num 2C133

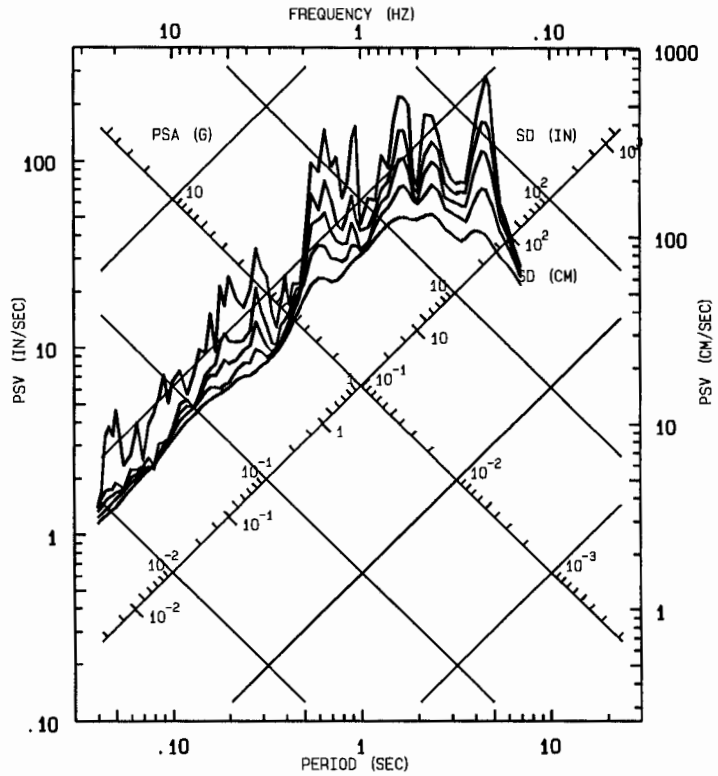
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

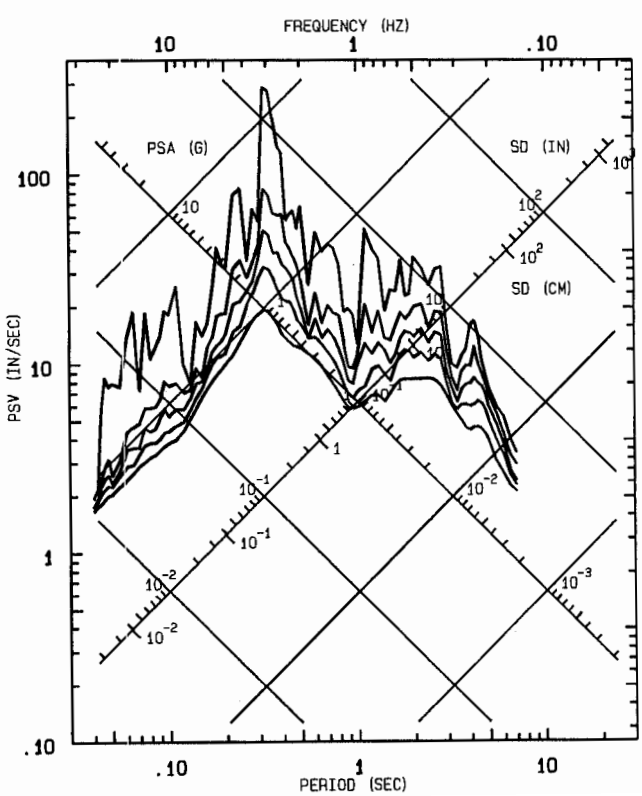
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C133-S6208-94034.02

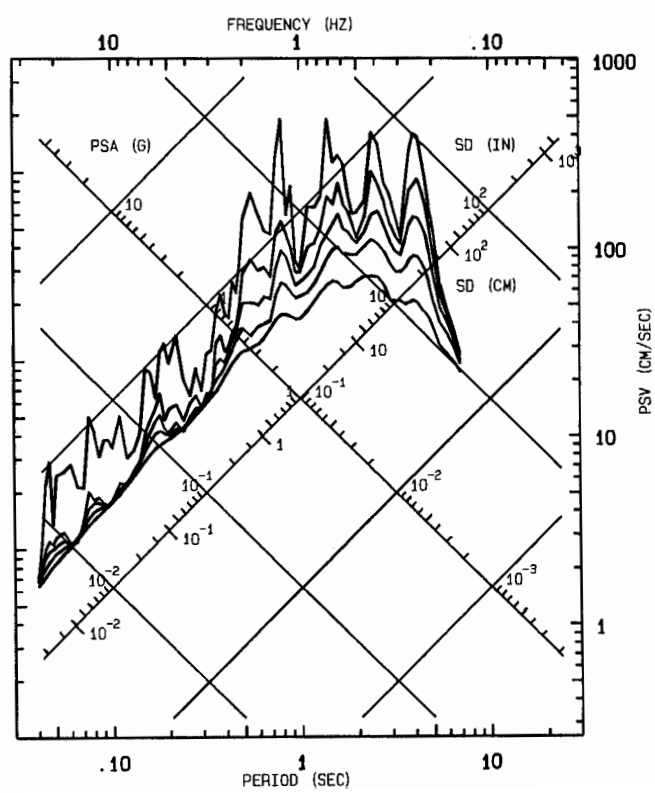
CHN 1: 0 DEG
ROOF (17-STORY BLDG)



CHN 2: UP
ROOF (17-STORY BLDG)



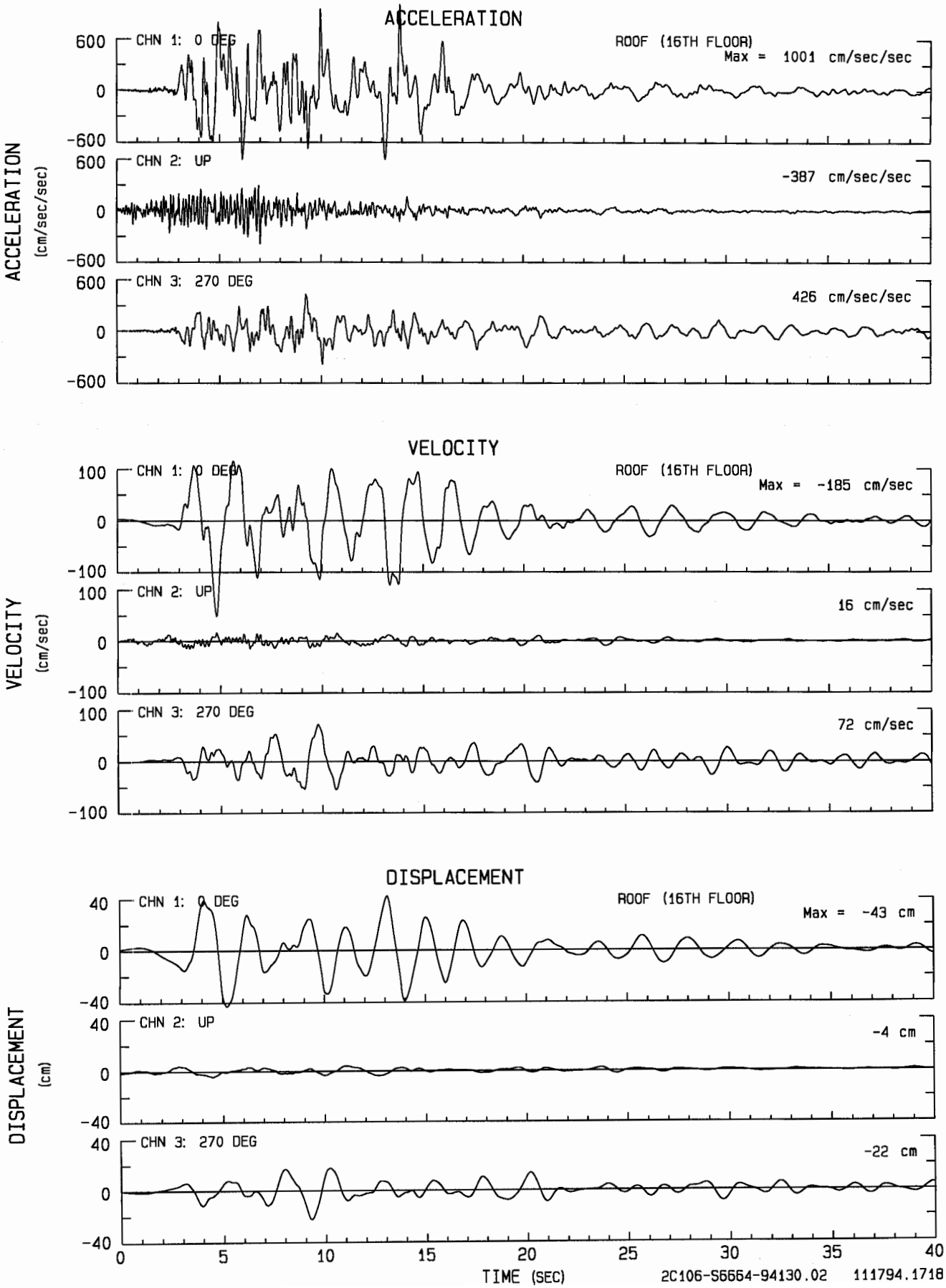
CHN 3: 270 DEG
ROOF (17-STORY BLDG)



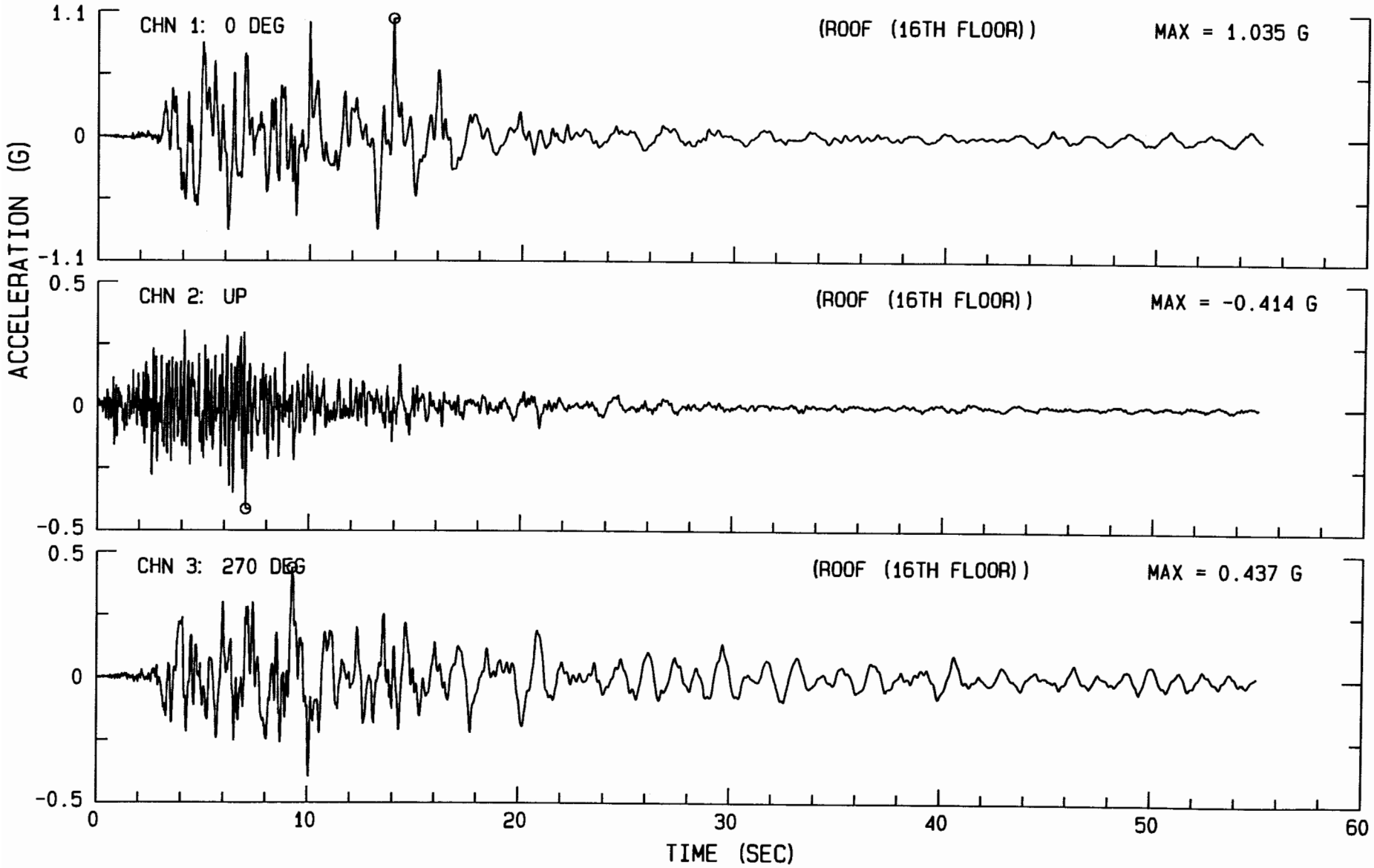
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - CANOGA AVE #3 CSMIP Sta Num 2C106

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



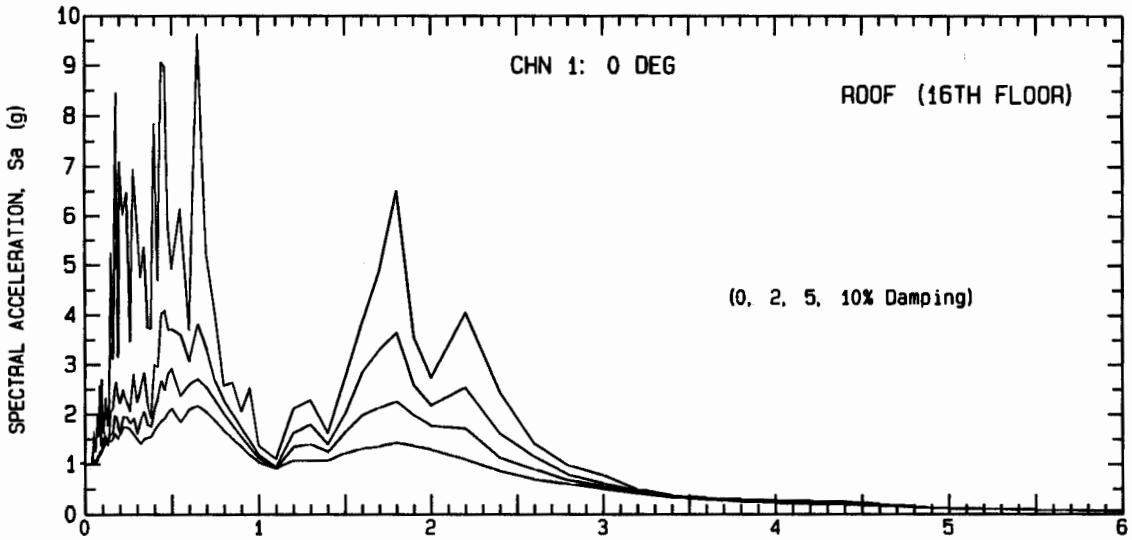
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - CANOGA AVE #3
UNCORRECTED ACCELEROGRAM 2C106-S6664-94130.02 072994.1140-QN94A106

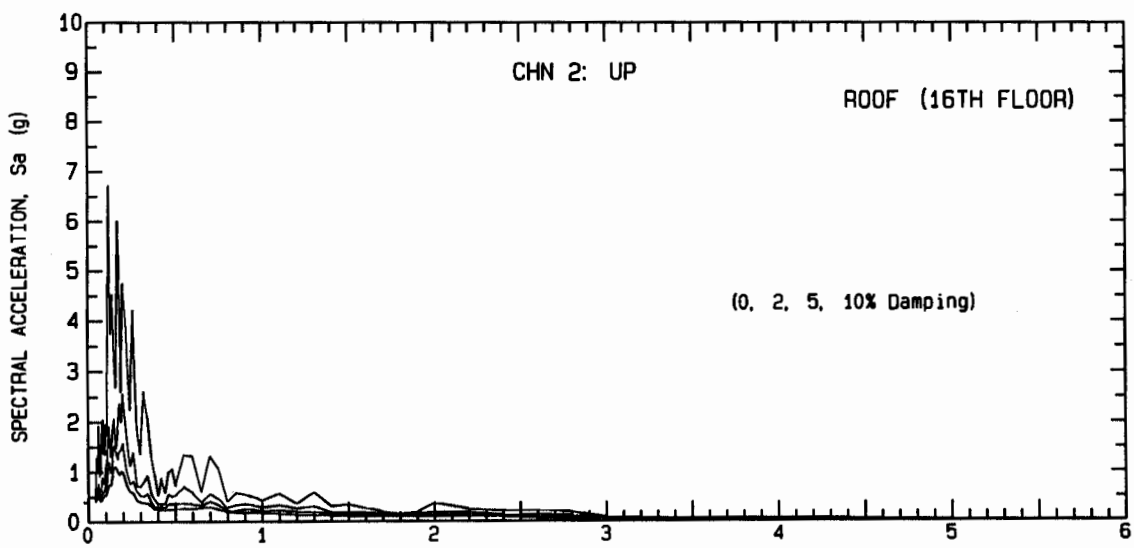


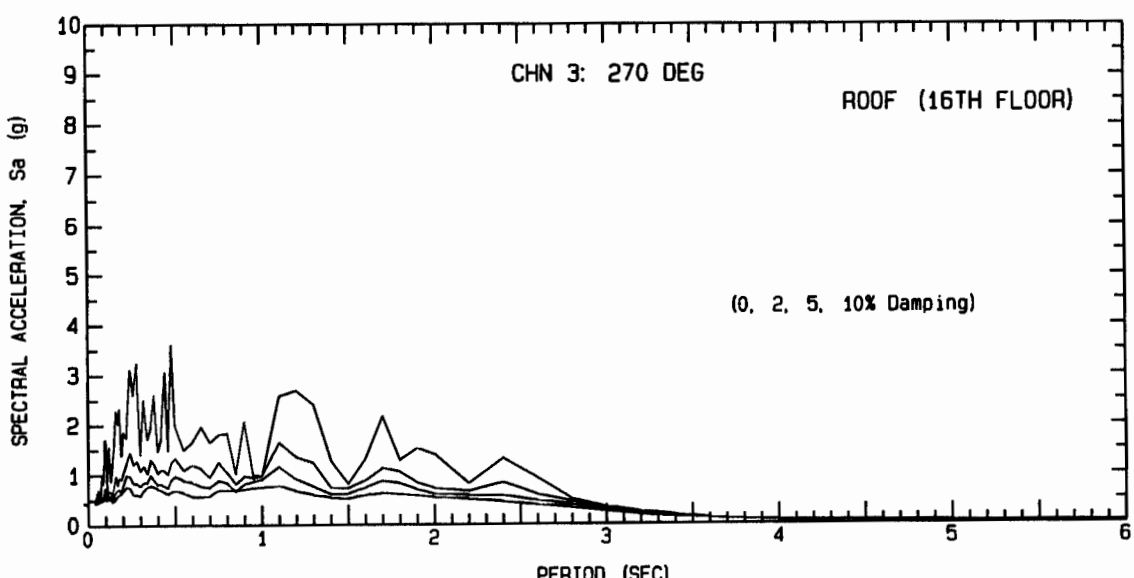
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - CANOGA AVE #3 Sta Num 2C106

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C106-S6664-94130.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - CANOGA AVE #3
Sta Num 2C106

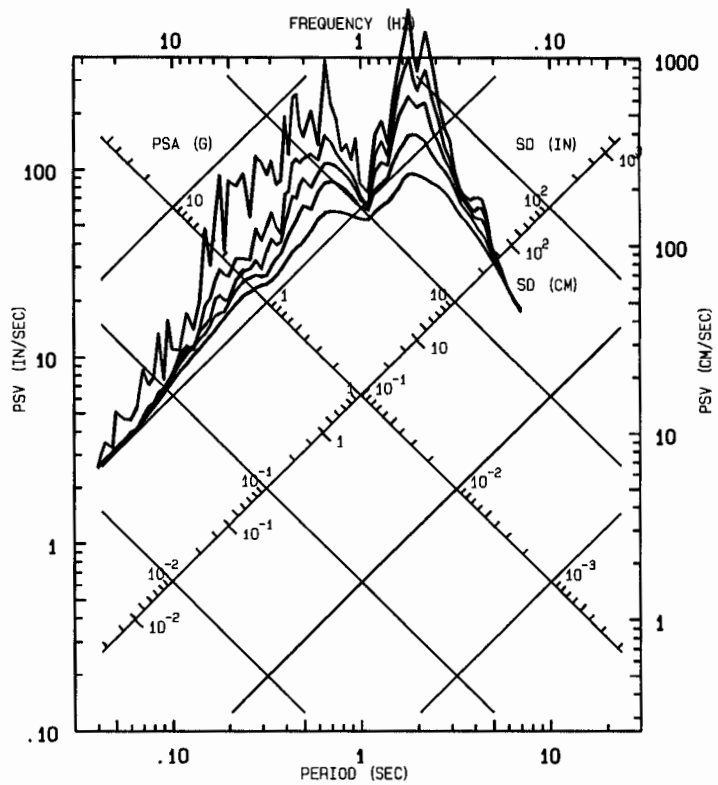
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

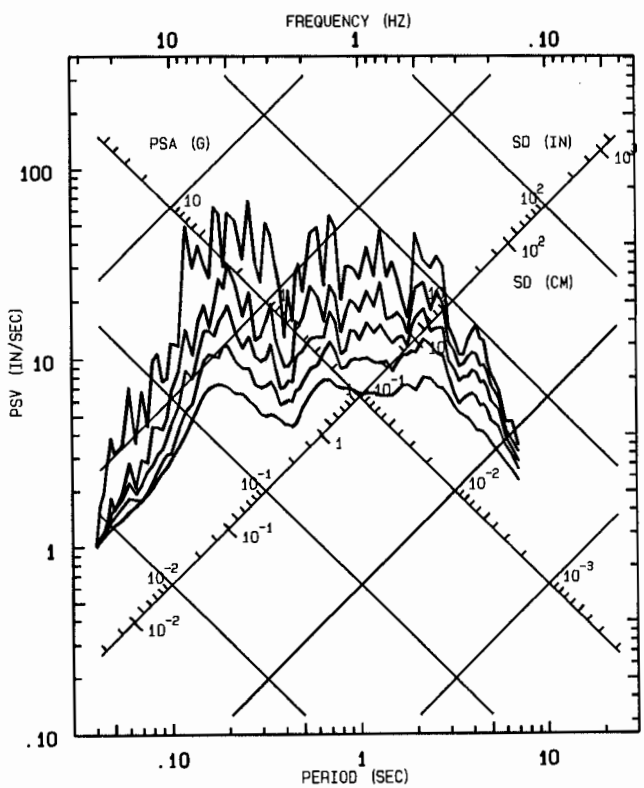
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C106-S6664-94130.02

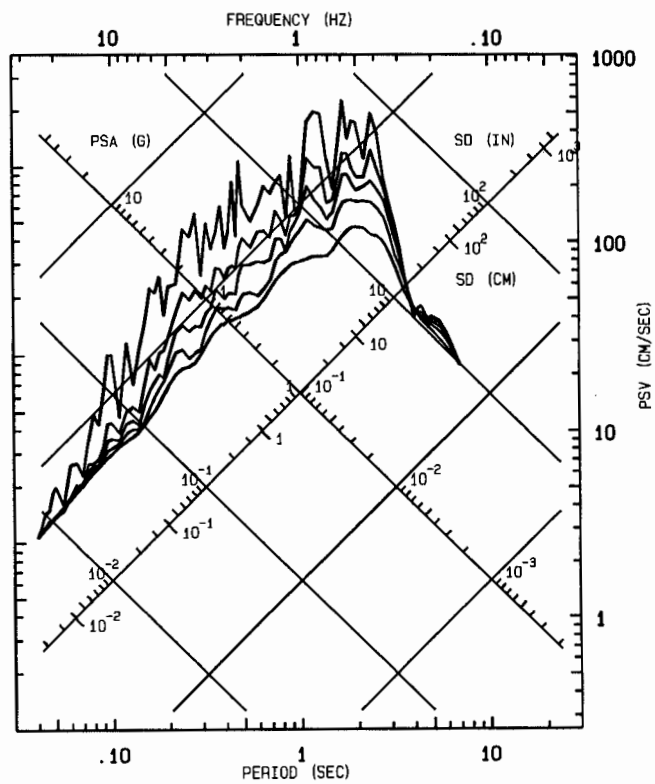
CHN 1: 0 DEG
ROOF (16TH FLOOR)



CHN 2: UP
ROOF (16TH FLOOR)



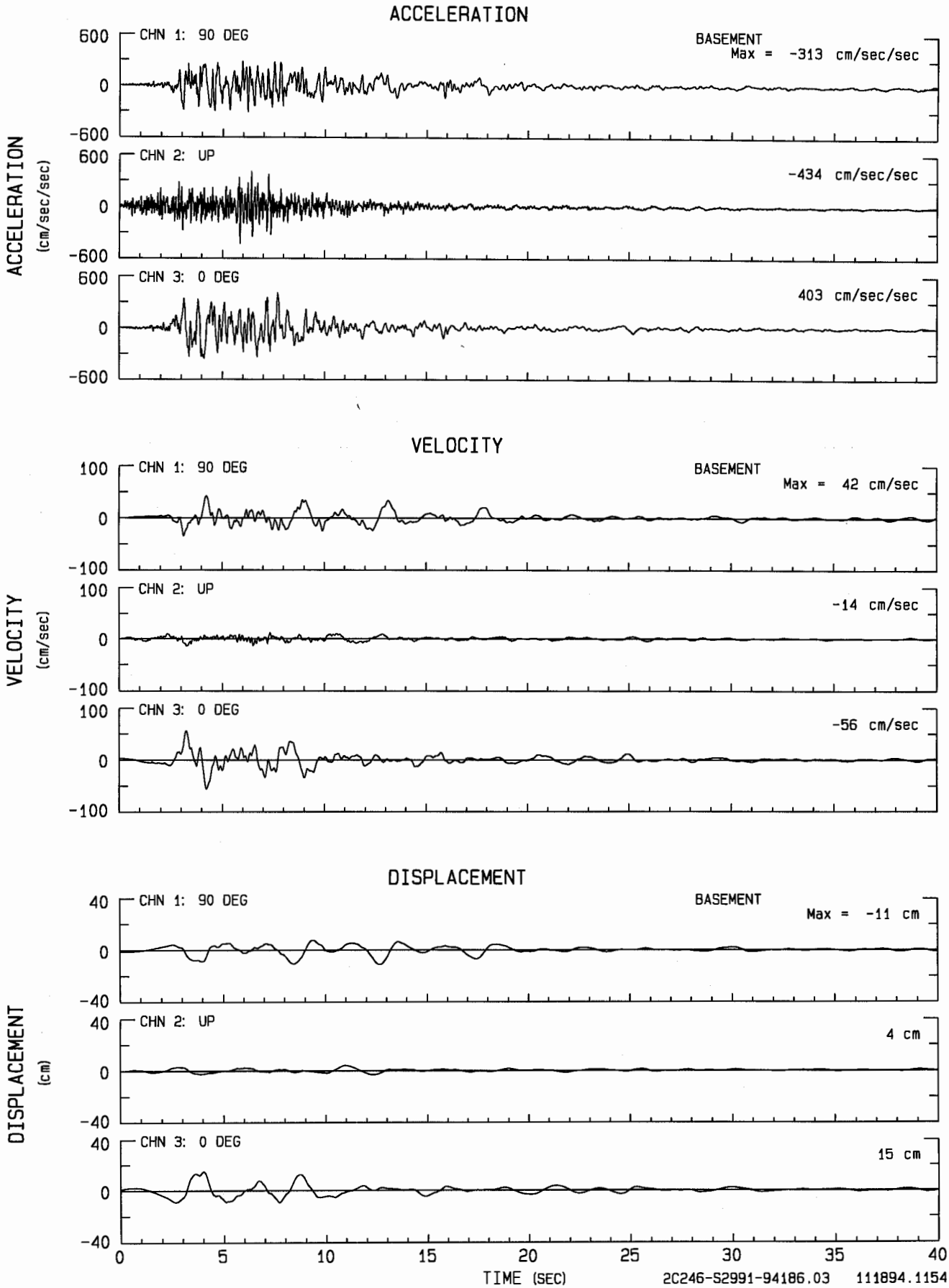
CHN 3: 270 DEG
ROOF (16TH FLOOR)



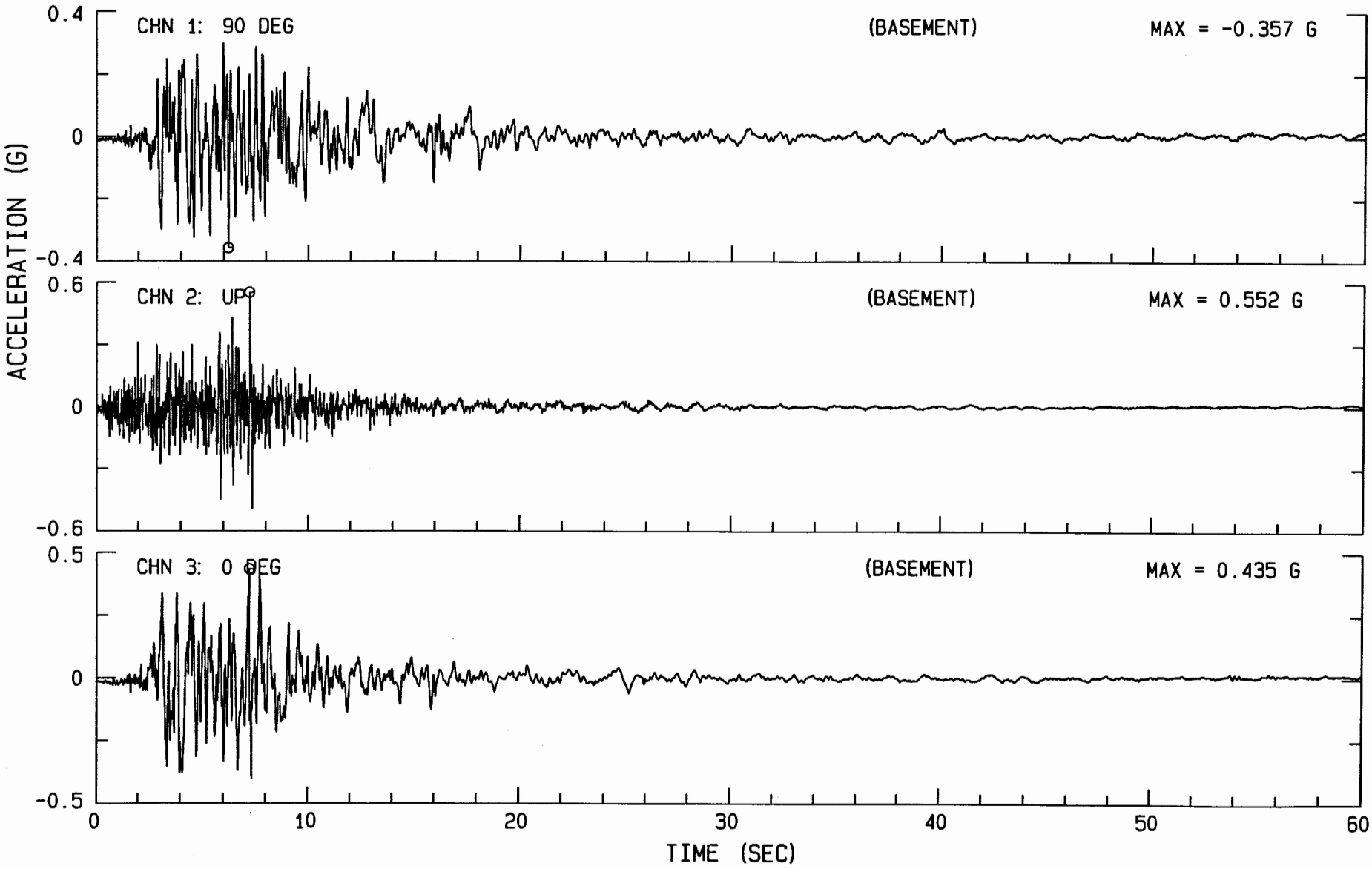
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4 CSMIP Sta Num 2C246

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



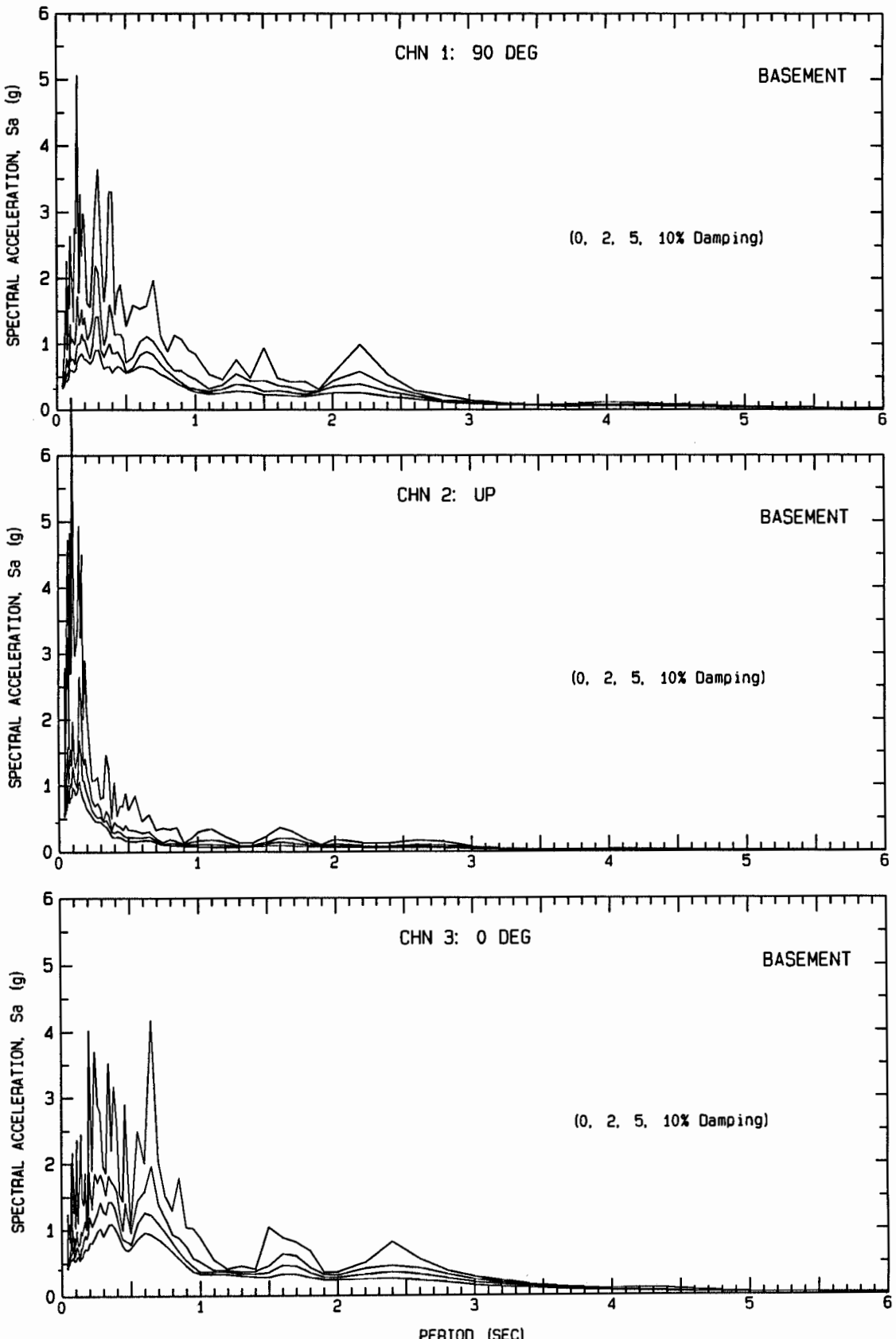
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - OXNARD BLVD #4
UNCORRECTED ACCELEROGRAM 2C246-S2991-94186.03 082694.1501-QN94246L



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4 Sta Num 2C246

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C246-S2991-94186.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4
Sta Num 2C246

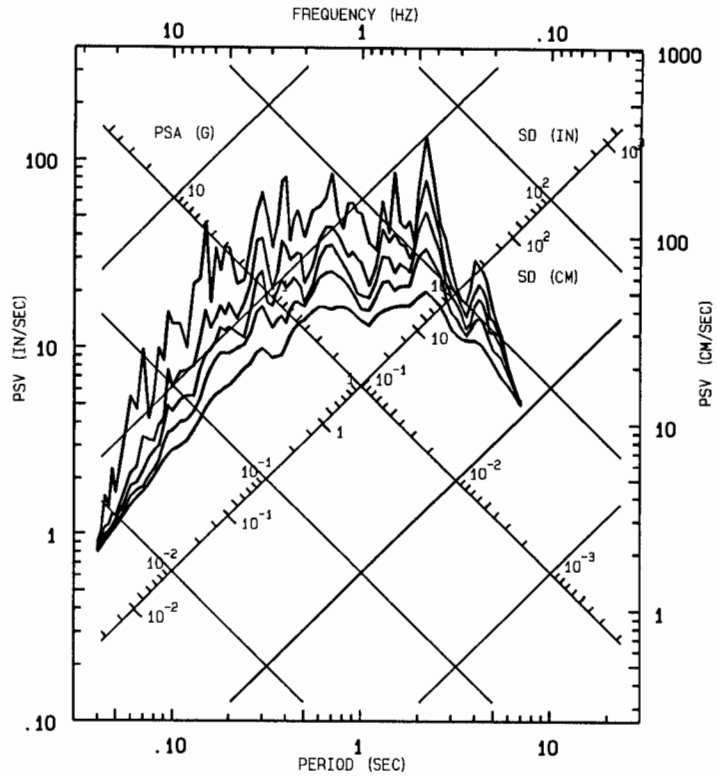
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

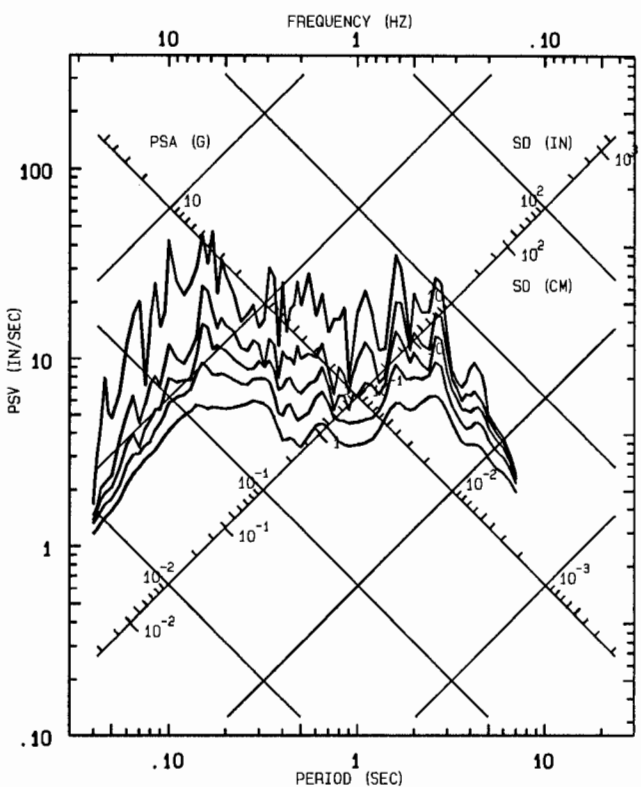
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C246-S2991-94186.03

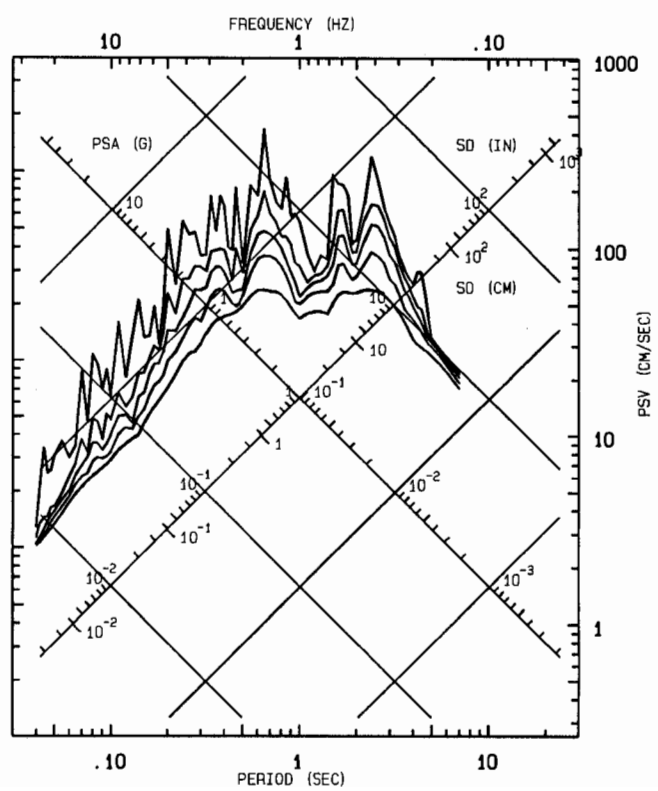
CHN 1: 90 DEG
BASEMENT



CHN 2: UP
BASEMENT



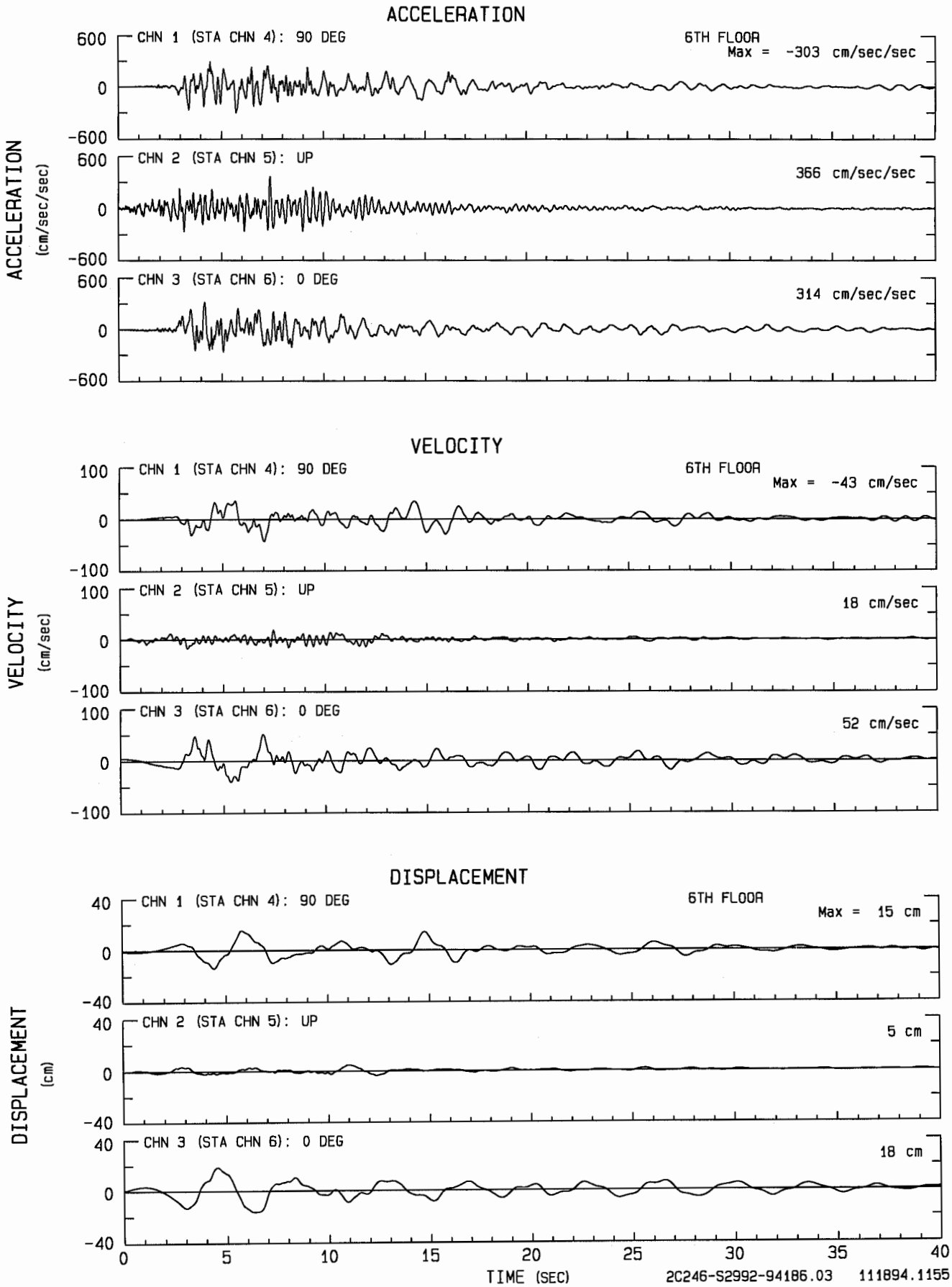
CHN 3: 0 DEG
BASEMENT



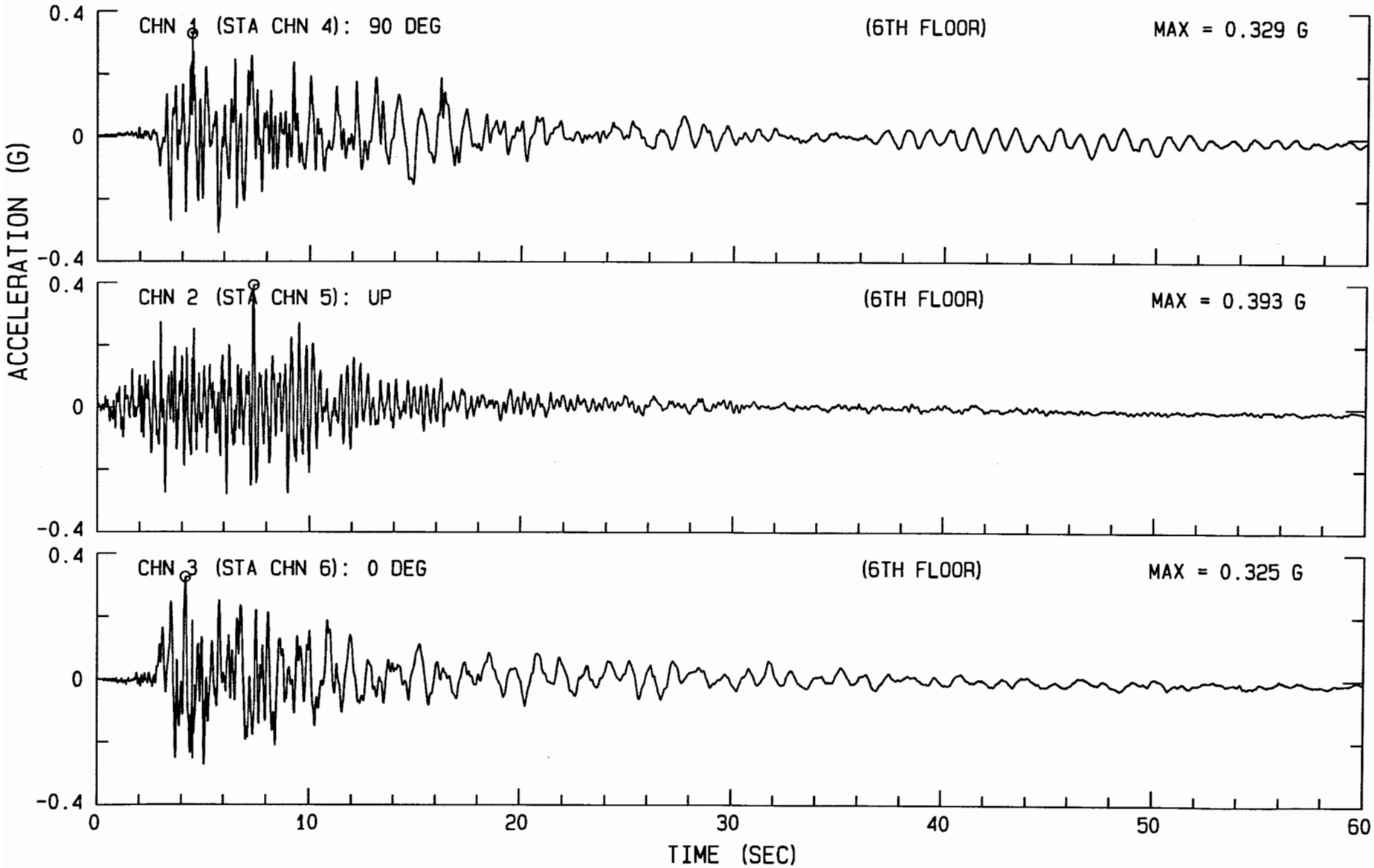
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4 CSMIP Sta Num 2C246

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



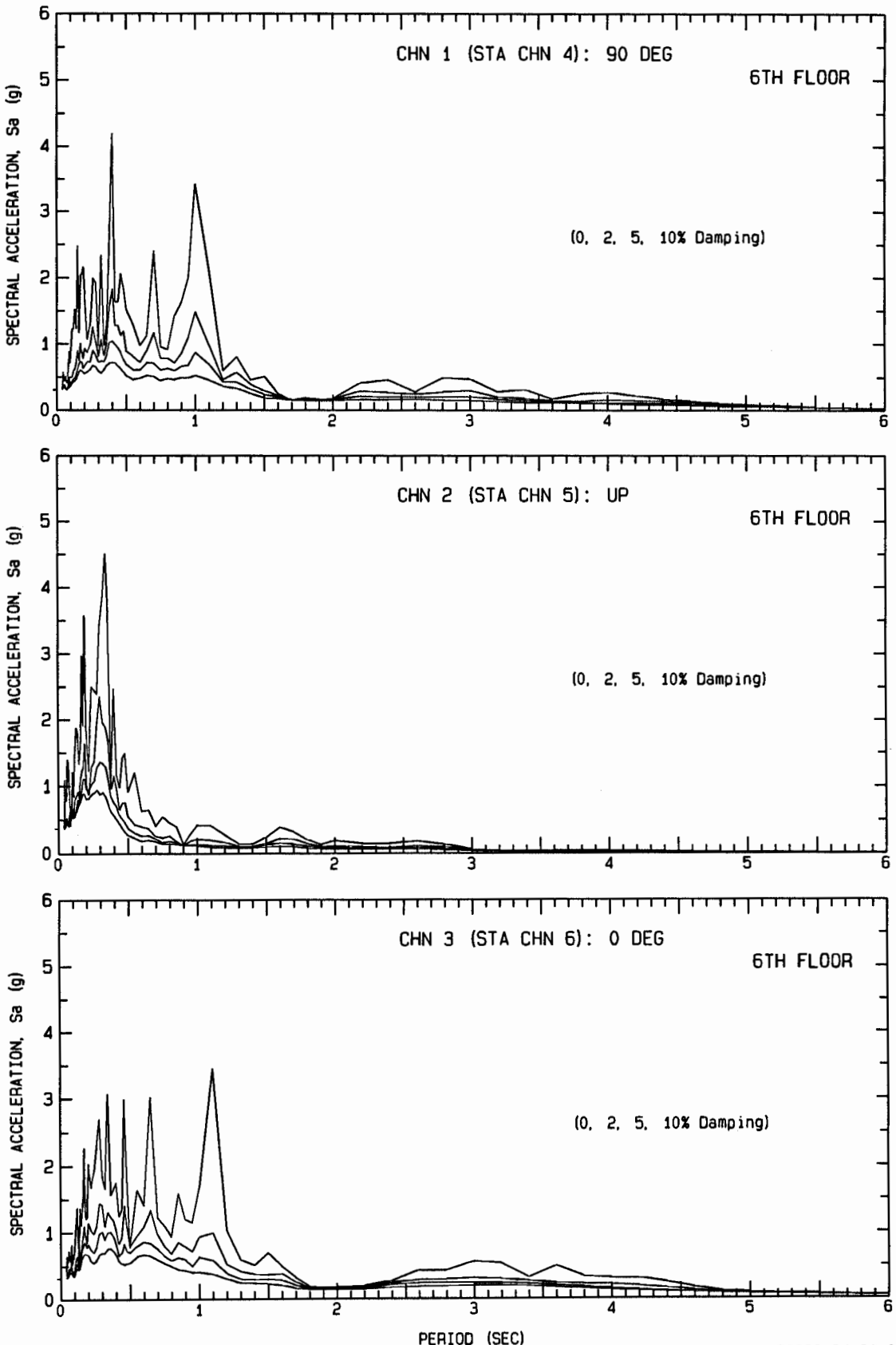
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - OXNARD BLVD #4
UNCORRECTED ACCELEROGRAM 2C246-S2992-94186.03 082694.1545-QN94246M



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4 Sta Num 2C246

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C246-S2992-94186.03

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4
Sta Num 2C246

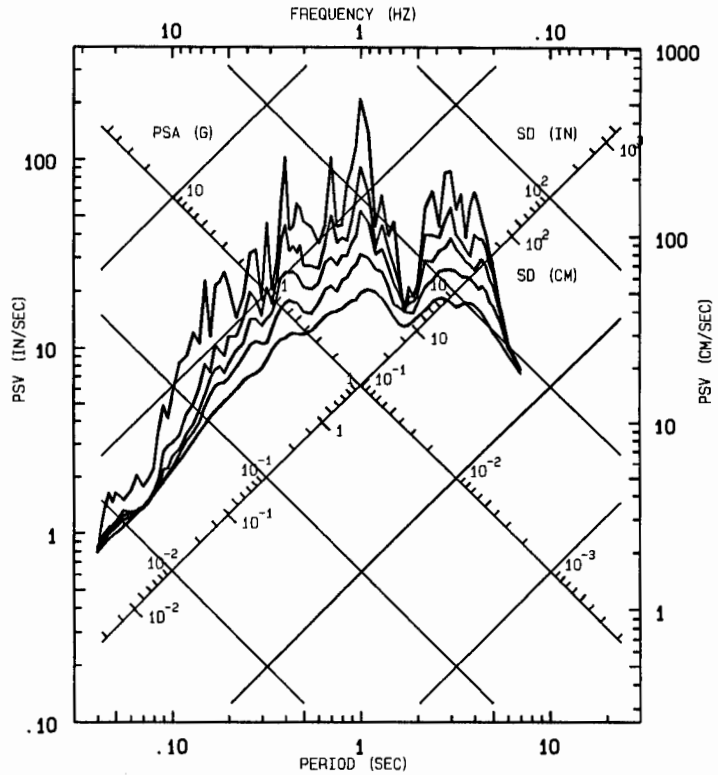
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

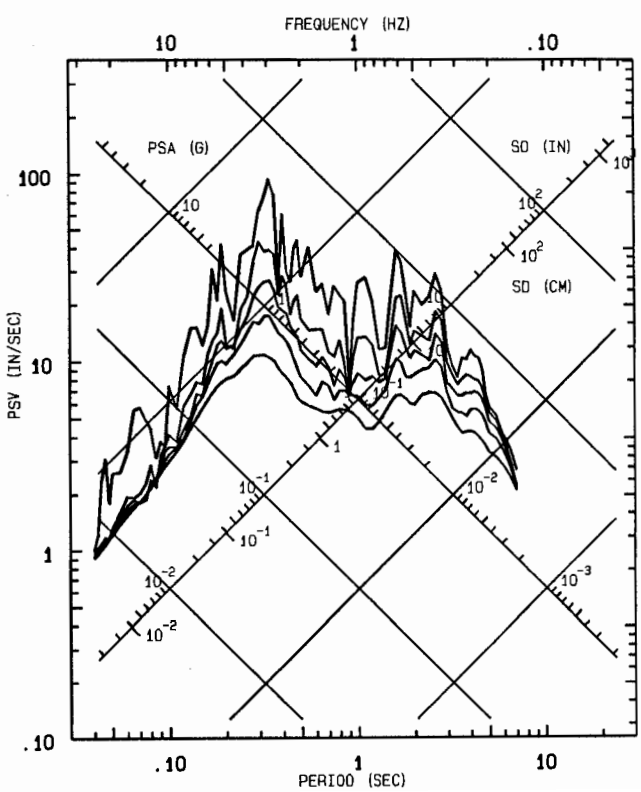
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C246-S2992-94186.03

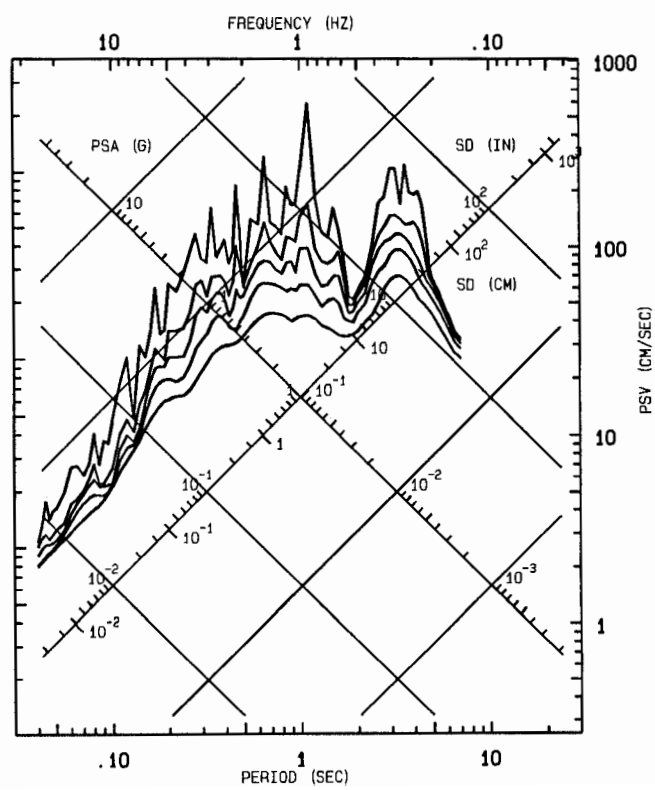
CHN 1 (STA CHN 4): 90 DEG
6TH FLOOR



CHN 2 (STA CHN 5): UP
6TH FLOOR



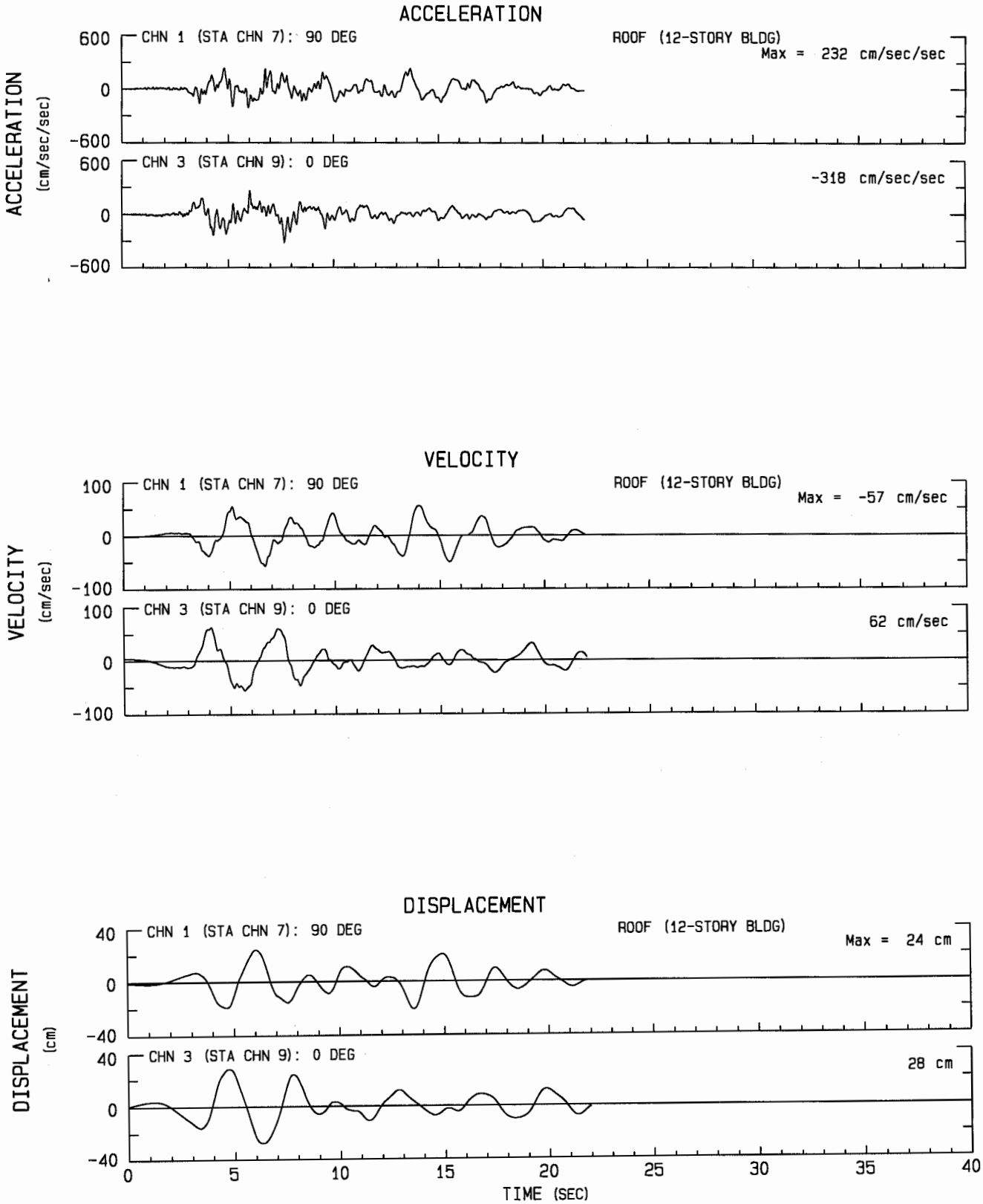
CHN 3 (STA CHN 6): 0 DEG
6TH FLOOR



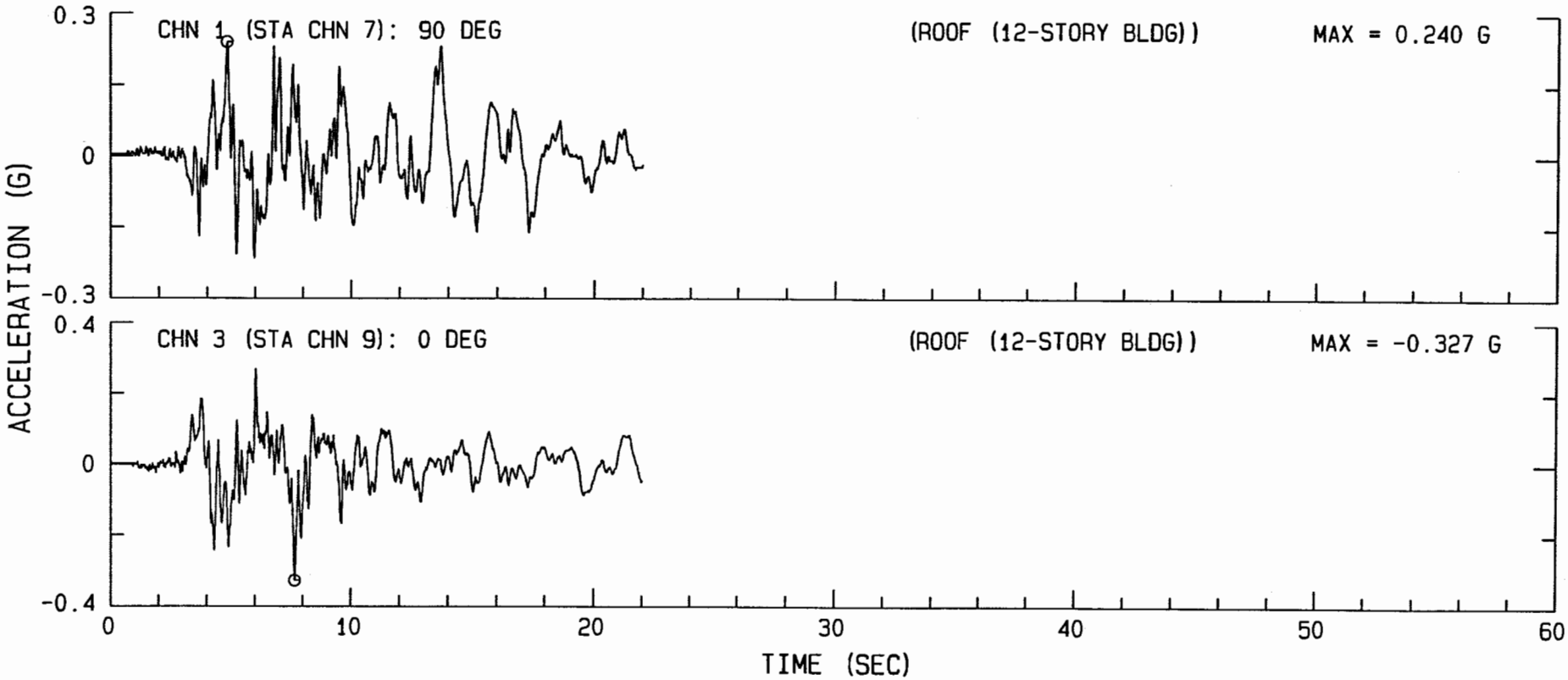
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4 CSMIP Sta Num 2C246

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



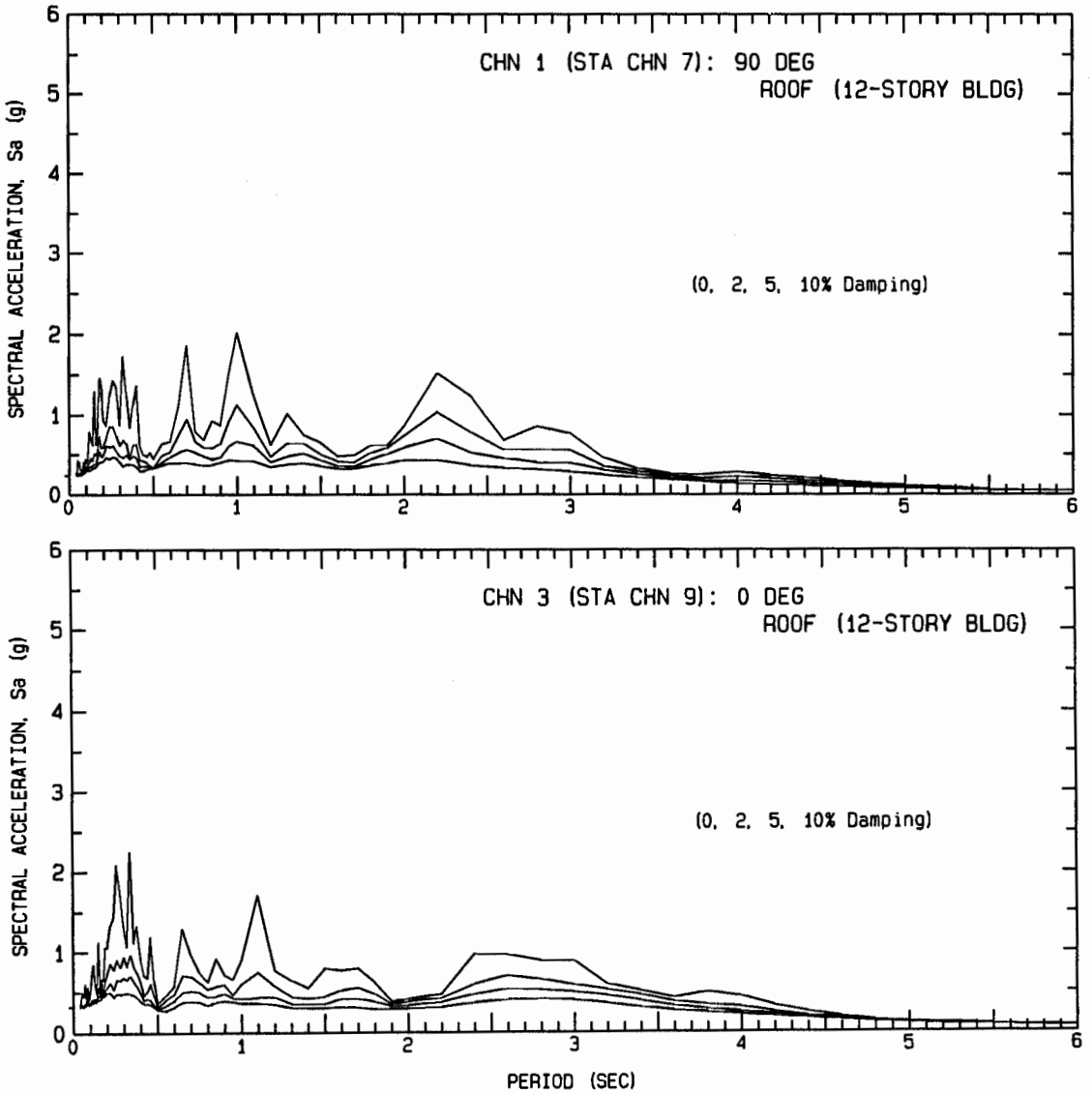
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - OXNARD BLVD #4
UNCORRECTED ACCELEROGRAM 2C246-S2993-94186.03 082694.1632-QN94A246



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4 Sta Num 2C246

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - OXNARD BLVD #4
Sta Num 2C246

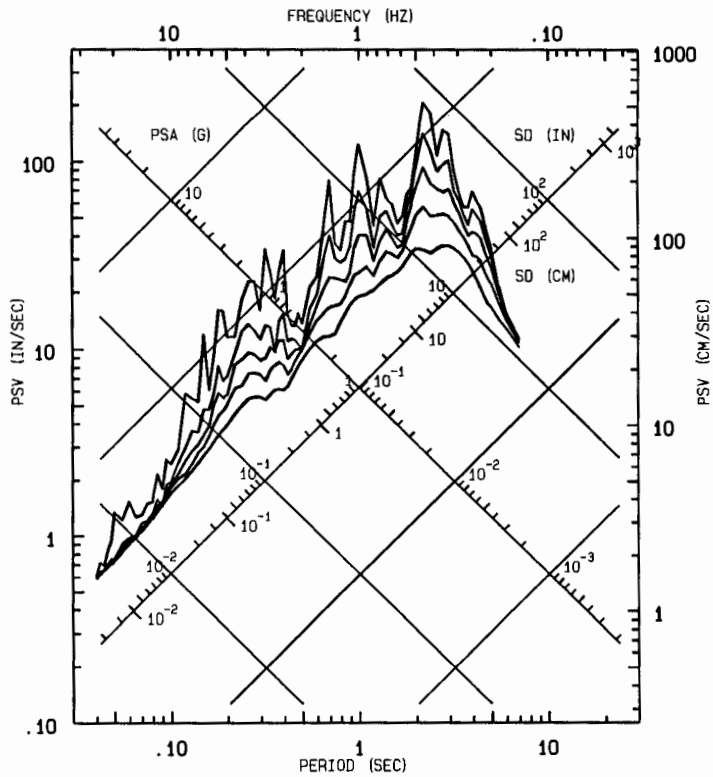
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

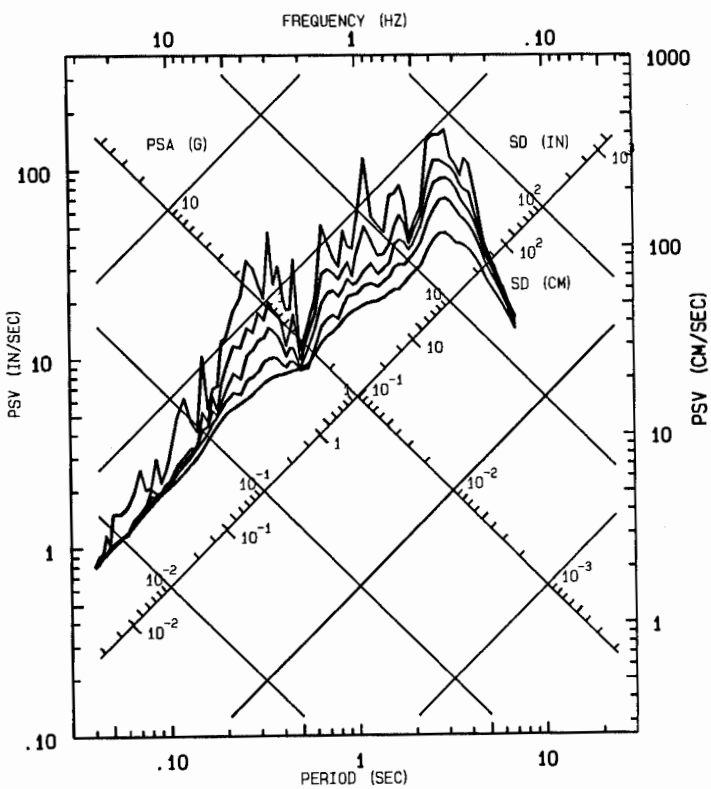
—— RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C246-S2993-94186.03

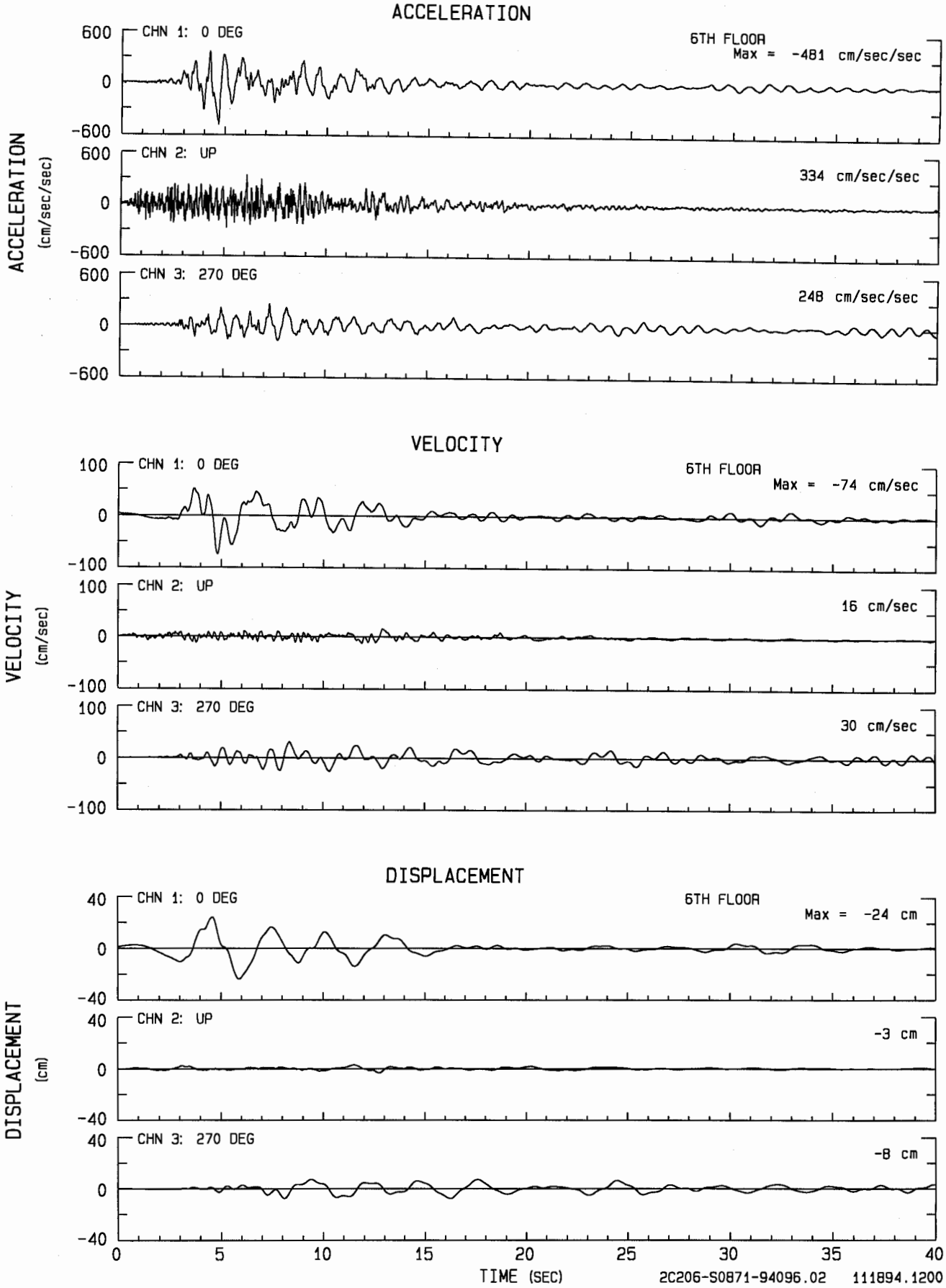
CHN 1 (STA CHN 7): 90 DEG
ROOF (12-STORY BLDG)



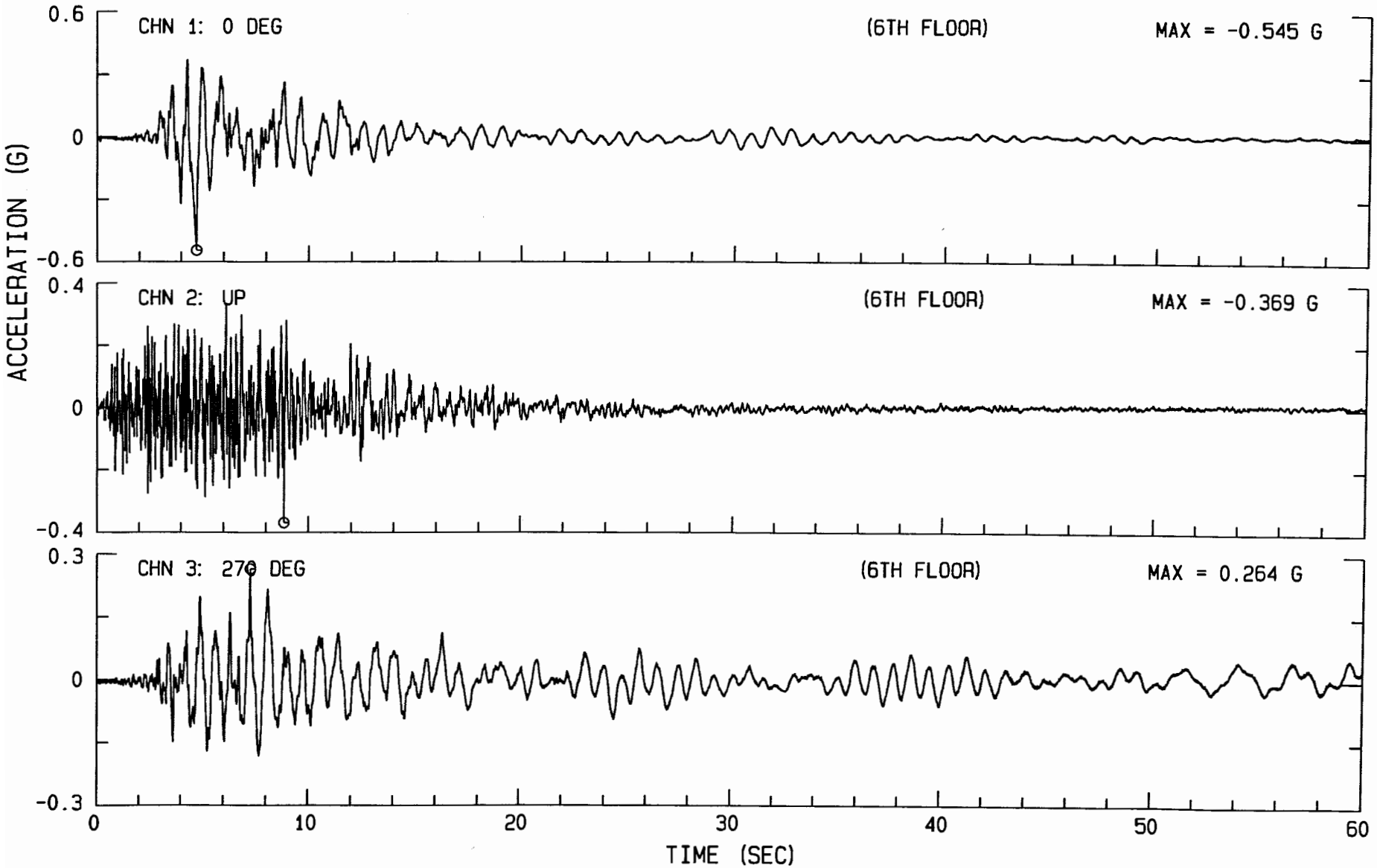
CHN 3 (STA CHN 9): 0 DEG
ROOF (12-STORY BLDG)



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - VENTURA BLVD #5 CSMIP Sta Num 2C206
Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



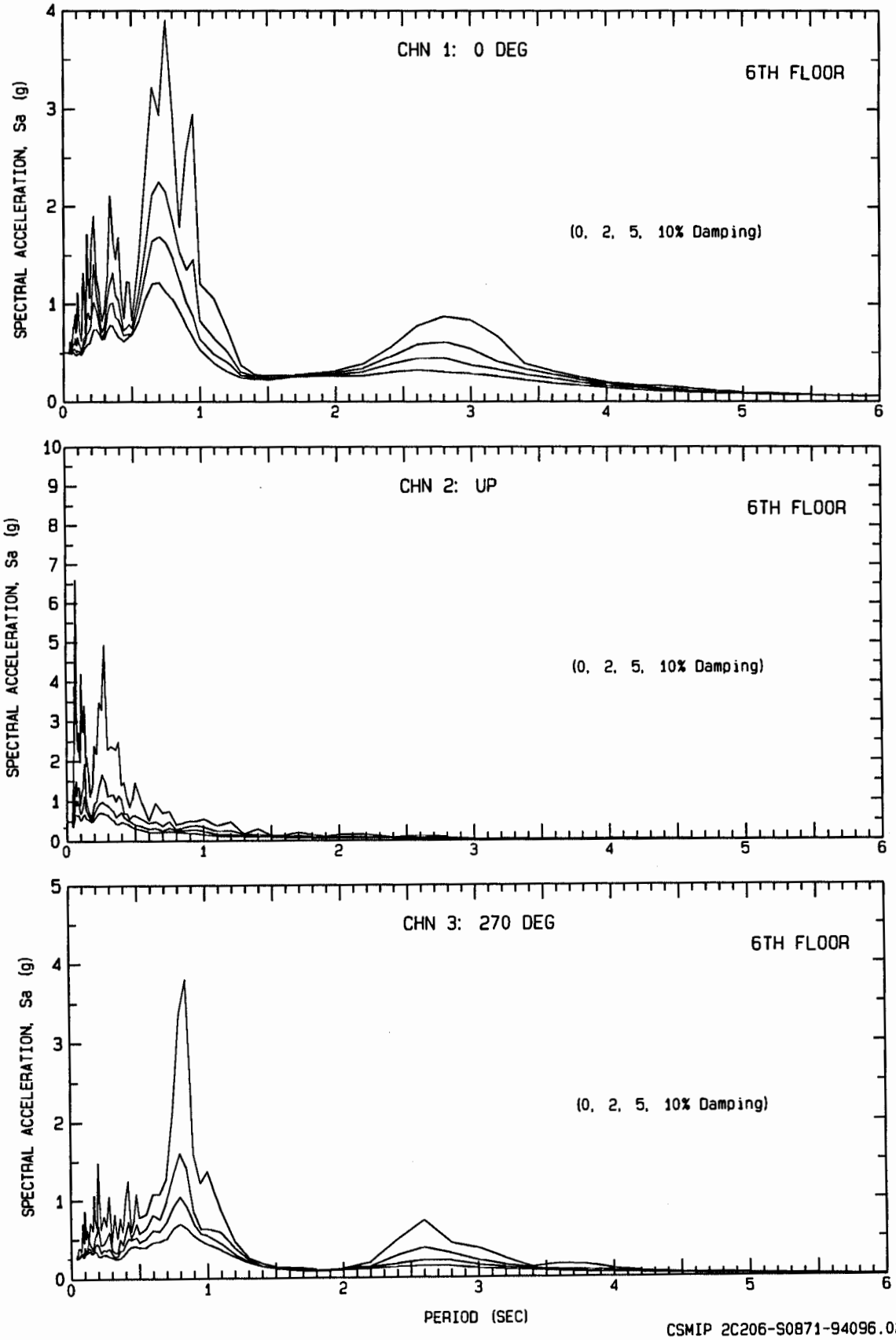
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - VENTURA BLVD #5
UNCORRECTED ACCELEROGRAM 2C206-S0871-94096.02 082694.1410-QN94206M



NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - VENTURA BLVD #5 Sta Num 2C206

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)



CSMIP 2C206-S0871-94096.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - VENTURA BLVD #5
Sta Num 2C206

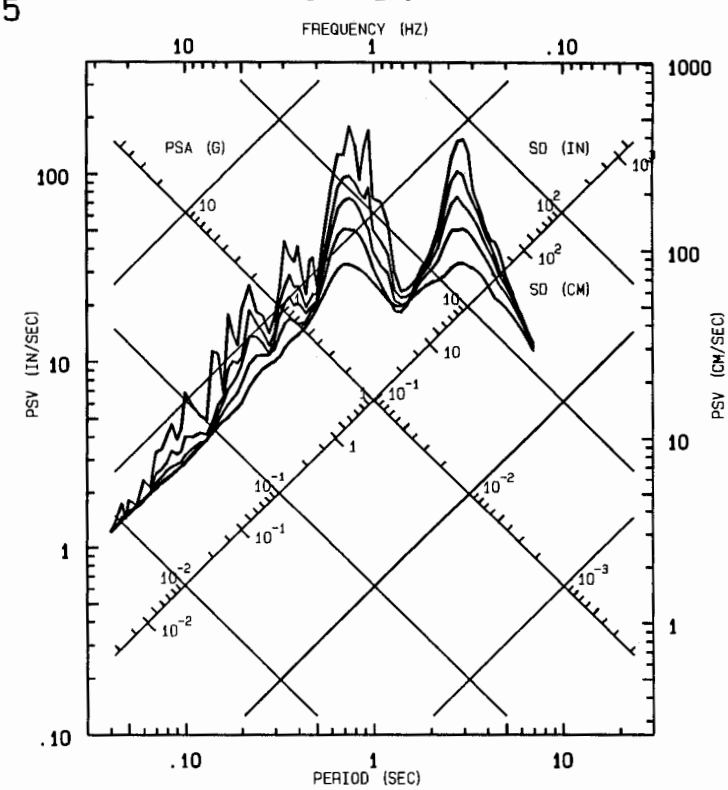
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

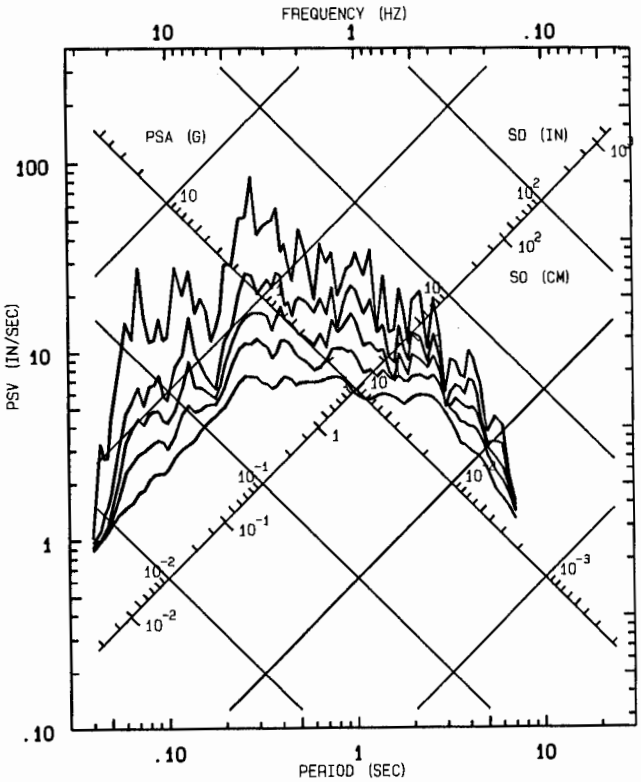
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C206-S0871-94096.02

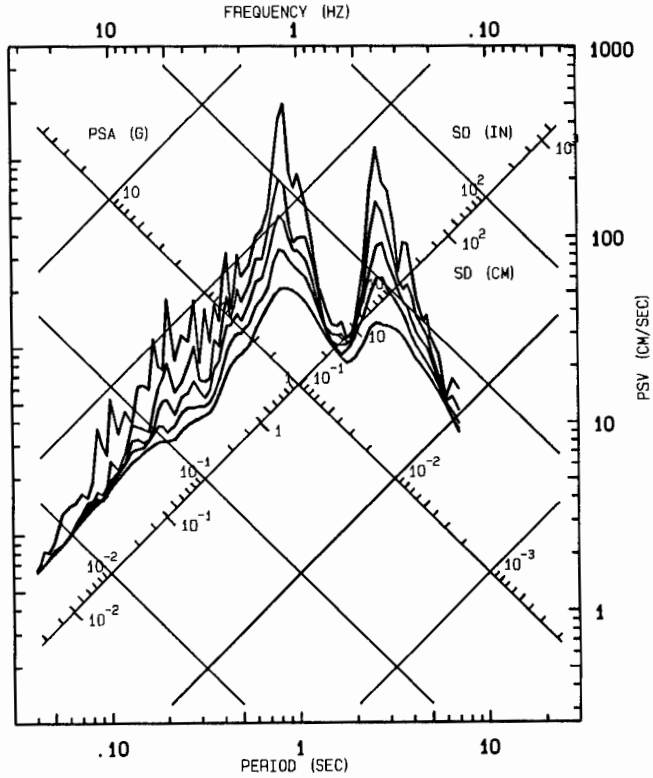
CHN 1: 0 DEG
6TH FLOOR



CHN 2: UP
6TH FLOOR



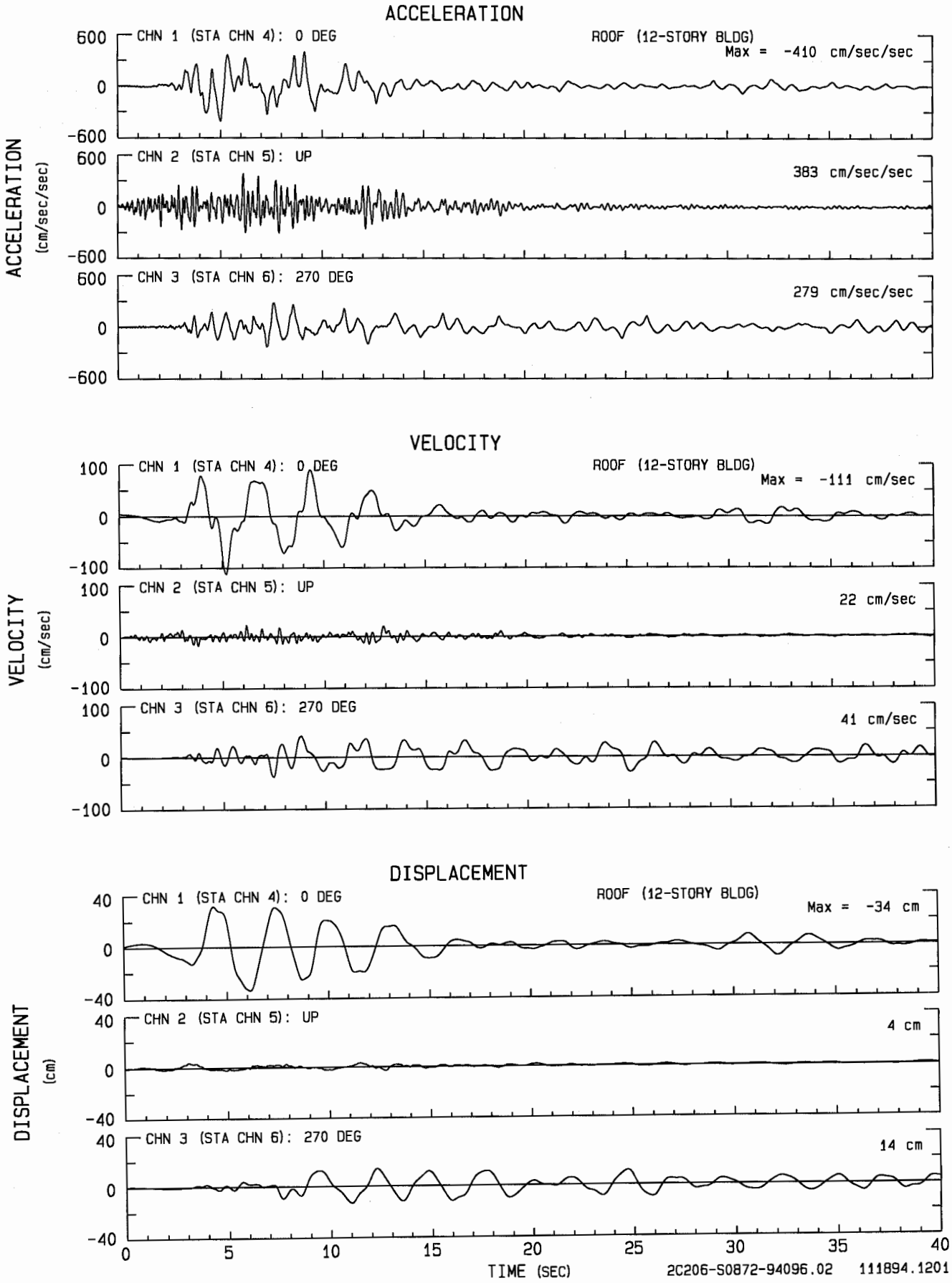
CHN 3: 270 DEG
6TH FLOOR



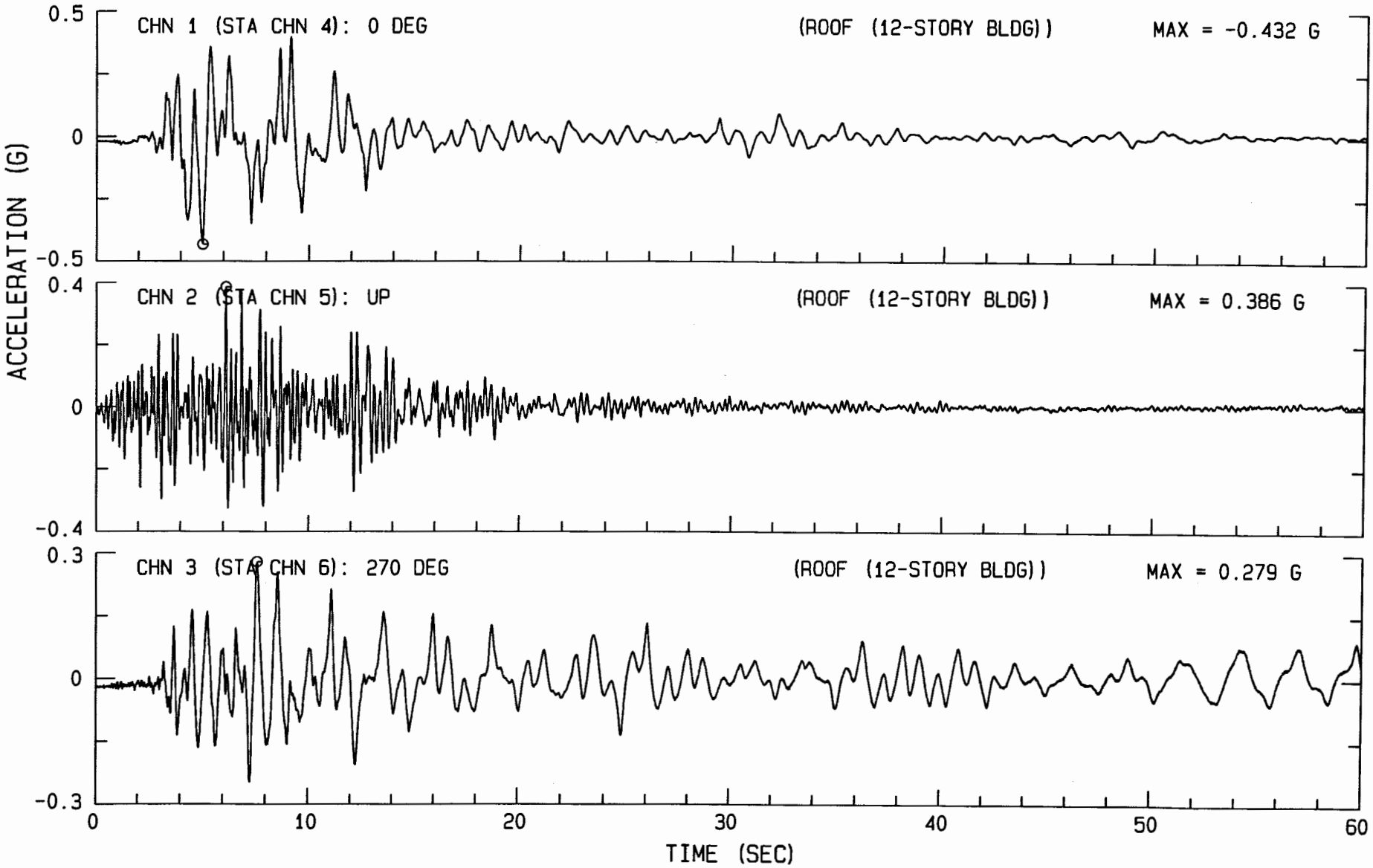
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - VENTURA BLVD #5 CSMIP Sta Num 2C206

Usable Data Bandwidth: .17 to 23.6 Hz (.04 to 6.0 Sec)



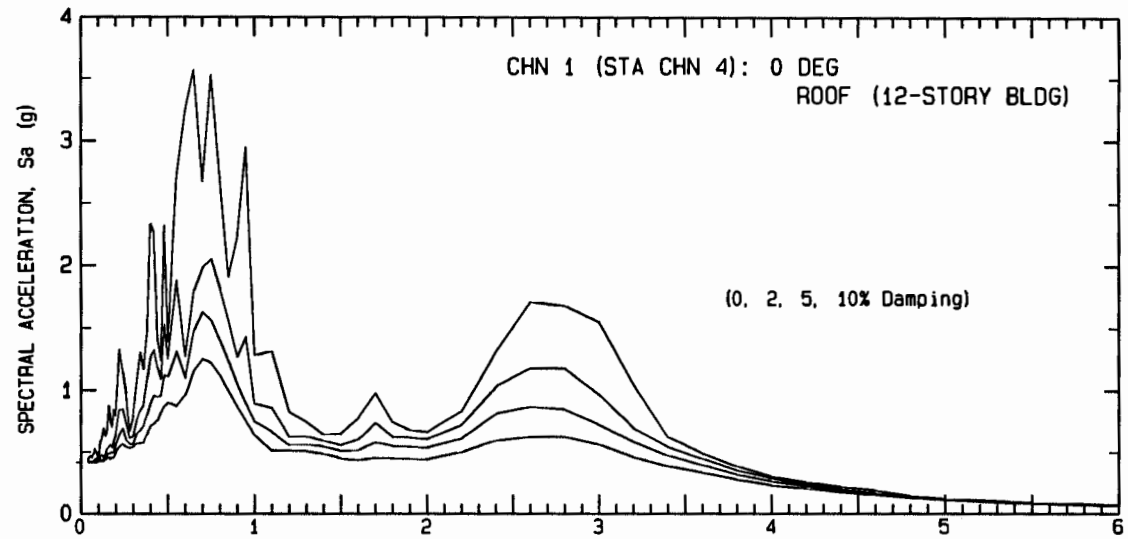
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING
WOODLAND HILLS - VENTURA BLVD #5
UNCORRECTED ACCELEROGRAM 2C206-S0872-94096.02 082694.1326-QN94206R

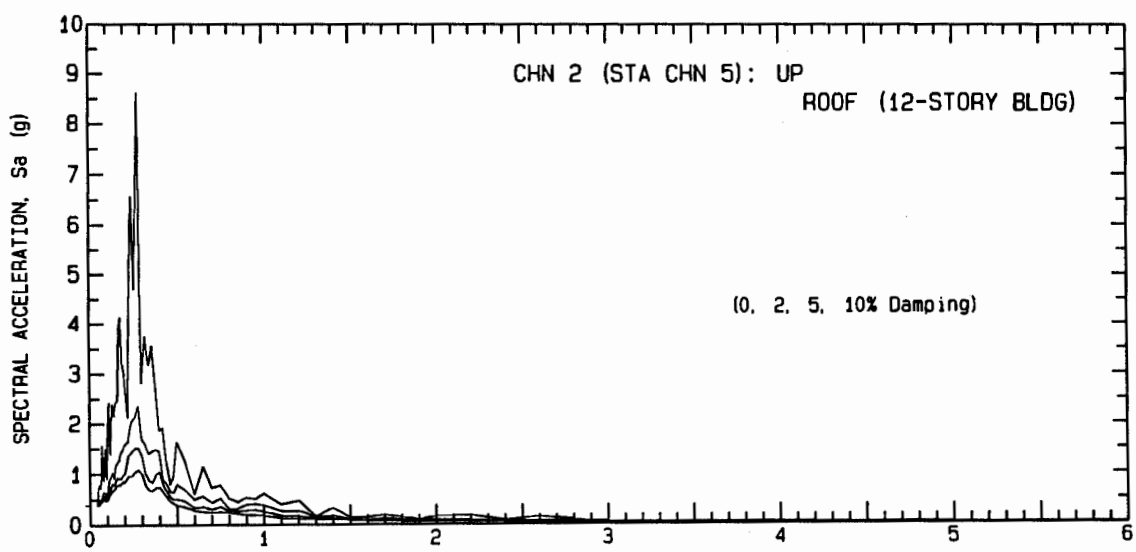


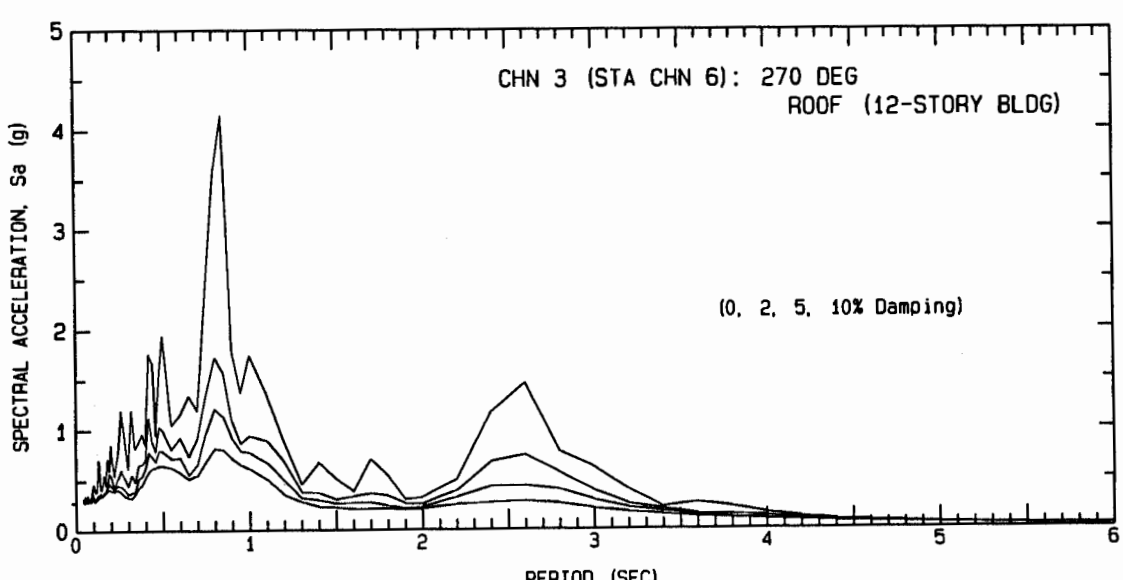
NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - VENTURA BLVD #5 Sta Num 2C206

USABLE DATA BANDWIDTH: .17 TO 23.6 HZ (.04 TO 6.0 SEC)







CSMIP 2C206-S0872-94096.02

NORTHRIDGE EARTHQUAKE OF JAN 17, 1994 CSMIP PRELIMINARY PROCESSING

WOODLAND HILLS - VENTURA BLVD #5
Sta Num 2C206

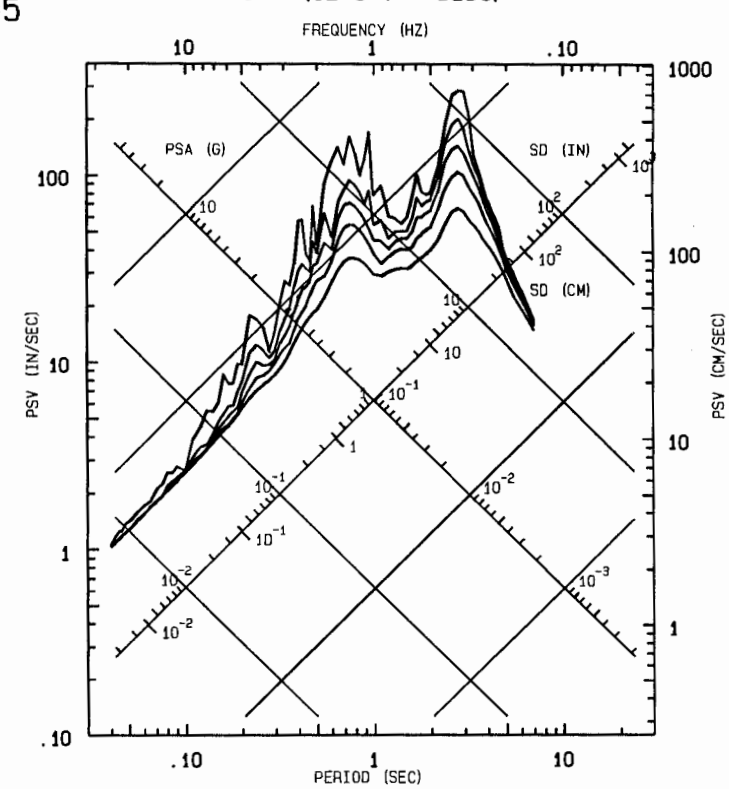
RESPONSE SPECTRA

USABLE DATA BANDWIDTH:
0.17 TO 23.6 HZ
(0.04 TO 6.0 SEC)

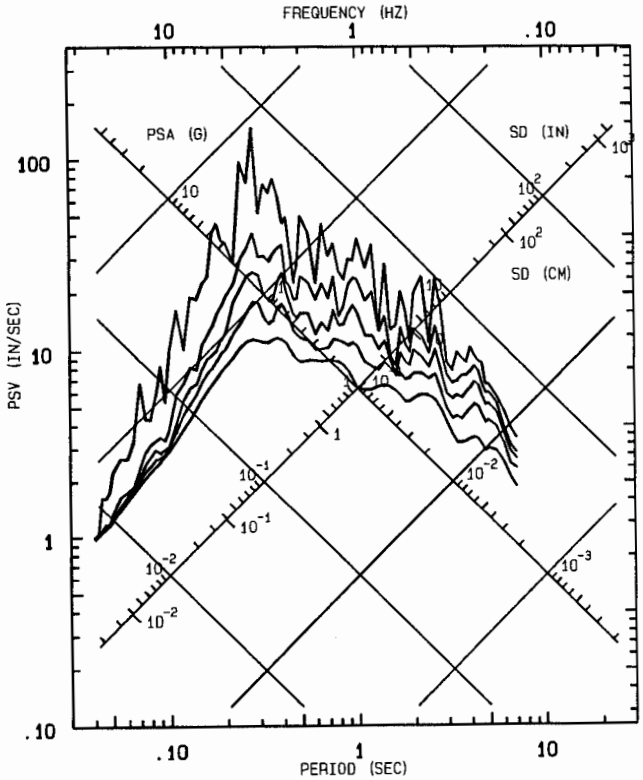
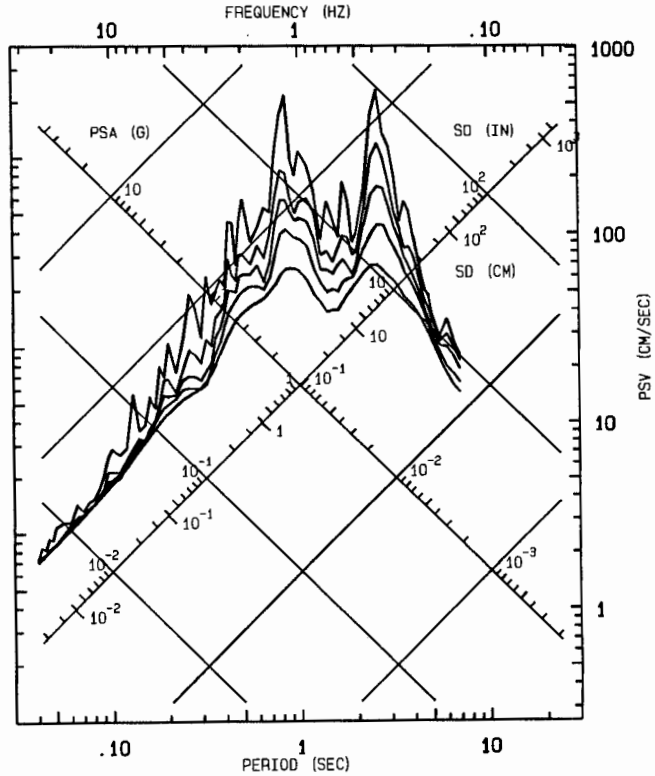
RESPONSE SPECTRA: PSV, PSA & SD
DAMPING VALUES: 0, 2, 5, 10, 20%

RECORD ID: 2C206-S0872-94096.02

CHN 1 (STA CHN 4): 0 DEG
ROOF (12-STORY BLDG)



CHN 2 (STA CHN 5): UP
ROOF (12-STORY BLDG)



CHN 3 (STA CHN 6): 270 DEG
ROOF (12-STORY BLDG)