ANALYSES OF
STRONG MOTION EARTHQUAKE ACCELEROGRAMS

VOLUME IV - FOURIER AMPLITUDE SPECTRA
PART C - ACCELEROGRAMS II C041 THROUGH II C055

A REPORT ON RESEARCH CONDUCTED UNDER A
GRANT FROM THE NATIONAL SCIENCE FOUNDATION

PASADENA, CALIFORNIA
MAY 1973
CALIFORNIA INSTITUTE OF TECHNOLOGY
EARTHQUAKE ENGINEERING RESEARCH LABORATORY

ANALYSES
OF
STRONG MOTION EARTHQUAKE ACCELEROGRAMS

Volume IV - Fourier Amplitude Spectra
Part C - Accelerograms IIC041 through IIC055

EERL 73-101

A Report on Research Conducted Under a Grant
from the National Science Foundation

Pasadena, California
May, 1973
ABSTRACT

This is the third report (Part C) of a series (Volume IV series) presenting Fourier amplitude spectra for earthquake ground motions and for structural response accelerations. Volume IV, Part A, Report No. EERL 72-100 included an introduction summarizing Fourier spectrum techniques in earthquake engineering as a background to the use of the data. For each earthquake accelerogram, two spectrum plots are given - a Fourier amplitude spectrum versus frequency on a linear scale, and a log-spectrum, log-frequency plot. In the series, Fourier amplitude spectra will be given for all corrected accelerograms, including building response measurements. The corrected records analyzed in this report, Volume IV, Part C, appeared in Volume II, Part C, Report No. EERL 72-51. Their uncorrected versions were published in Volume I, Part C, Report No. EERL 71-20.
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PREFACE

This report, Volume IV, Part C, Report No. EERL 73-101 is the third report of the Volume IV series presenting Fourier spectrum curves calculated from corrected strong-motion accelerograms including measurements in structures as well as at ground sites. An extensive introduction was prepared for Volume IV, Part A, Report No. EERL 72-100, where details of the methods used can be found together with examples of applications to various problems of earthquake engineering and strong-motion seismology. That introduction should also serve as a basic summary of background information for users of the data.

The series of reports in Volume I present "uncorrected" digitized and plotted strong-motion earthquake accelerograph data, while the series in Volume II present corrected digitized data prepared so that the maximum information over the widest practicable frequency range would be available. The corrections include high frequency smoothing, an instrument correction to account for the high frequency response characteristics of the accelerograph transducer, and long period filtering to ensure a uniform type of base-line adjustment.


A thorough description of the naming of component directions of the records was given in Volume II, Part B, Report EERL 72-50. Consistent
with this, the component direction, where it appears in this report, refers
to the direction of the transducer pendulum motion for trace "up" on the
record when viewed in the normal way with time increasing from left to
right. For the direction of true ground acceleration a reversal of this
pendulum motion direction is required and the method chosen for Volume II
is described in Volume II, Part B. The spectral calculations in this
volume, however, are concerned with the amplitude spectrum only and
the particular component sense is thus immaterial.

For each component in the following pages the Fourier amplitude
spectrum is presented in two forms - a linear plot and a log-log plot.
Details concerning identification are given at the top of each plot. The
second line gives the name, date, and time of occurrence of the earthquake;
the third line is comprised of two labels, the observation station and the
component processed. The Roman numeral "IV" in the first identification
label indicates that the results pertain to the fourth stage of data processing,
i.e., Volume IV of Fourier spectra of accelerogram records already
corrected for baseline adjustment and instrument response. The letter
"C" following the Roman numerals implies that the processed record
belongs to Part C of Volume IV. The three digit number completing the
first label is the Caltech Reference Number for the given earthquake record
in Volume I, right-adjusted in a three-digit numerical field. The second
label is a string of three numbers separated by periods; the first number
gives the year in which the earthquake occurred; the second is the serial
number of the record as it was received at the Caltech Earthquake
Engineering Research Laboratory during that year; and the last number
indicates whether it was a main event or an aftershock (sequentially numbered, the main event starting from zero). On the linear spectrum plot, the data lying above the 95 percent confidence level may be considered relevant to that degree. The spectra have been plotted up to a frequency of 25 cyc/sec on linear and logarithmic scales, corresponding to the capabilities of the instrumentation and data processing methods used.

A reproduction of the corrected digitized version of the acceleration - time record corresponding to each spectrum plot appears in Volume II, Part C, Report No. EERL 72-51.

While Volume II, Part C, was in the process of printing, it was learned that the reported directions of the horizontal components for the Pacoima Dam accelerograph were in error by a 30° magnetic correction. The recently revised list in "Strong-Motion Station Instrumental Data," Seismological Field Survey, NOAA-ERL-ESL, June 30, 1972, indicates the actual directions as S14W and N76W instead of S16E and S74W, respectively. These changes have been incorporated in this report.

This report presents many spectra of accelerograms recorded simultaneously at different locations in the same building, for example, IVC048, IVC049, and IVC050, at 8244 Orion Boulevard, on the 1st, 4th, and 8th floors. At present it is planned to calculate frequency transfer functions, involving smoothing and calculating the ratio of two such spectra, in supplementary reports.

The cooperative efforts of many people are essential in the preparation of a series of reports of this kind and we have been fortunate in the quality of staff that has carried out the various details with special
care and attention. We should like to express our appreciation to Mr. James E. Justiss for his assistance with many details of computer programming, to Miss Barbara Turner for the care taken over typing and editing, to the staff of the Willis H. Booth Computing Center for their continued help with all aspects of the computing process, and to the staff of the Caltech Graphic Arts Facilities for very efficient work on publication details. The whole project has been made possible by the continued support of the National Science Foundation, supplemented in an important way by contributions from the Earthquake Research Affiliates program of the California Institute of Technology.

M. D. Trifunac
A. G. Brady
D. E. Hudson
Earthquake Engineering Research Laboratory
California Institute of Technology
INDEX OF EARTHQUAKE RECORDS IN
VOLUME IV, PART C

San Fernando Earthquake, February 9, 1971 - 0600 PST

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<th>Record</th>
<th>Location Details</th>
<th>Page</th>
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<tr>
<td>IVC041</td>
<td>Pacoima Dam, California; S14W, N76W, Down</td>
<td>10</td>
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<tr>
<td>IVC042</td>
<td>Pacoima Dam, aftershock at 52.6 sec; N76W, S14W, Down</td>
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<tr>
<td>IVC043</td>
<td>Pacoima Dam, aftershock at 69.6 sec; N76W, S14W, Down</td>
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<td>IVC044</td>
<td>Pacoima Dam, aftershock at 104.6 sec; N76W, S14W, Down</td>
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<tr>
<td>IVC045</td>
<td>Pacoima Dam, aftershock at 162.0 sec; N76W, S14W, Down</td>
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<td>IVC046</td>
<td>Pacoima Dam, aftershock at 230.1 sec; N76W, S14W, Down</td>
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<tr>
<td>IVC047</td>
<td>Pacoima Dam, aftershock at 309.1 sec; N76W, S14W, Down</td>
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<td>IVC048</td>
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<tr>
<td>IVC050</td>
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<td>IVC051</td>
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<td>IVC052</td>
<td>250 East First Street, 8th Floor, Los Angeles, Calif. N36E, N54W, Down</td>
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<td>250 East First Street, 17th Floor, Los Angeles, Calif. N36E, N54W, Down</td>
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</tr>
<tr>
<td>IVC054</td>
<td>445 Figueroa Street, Sub-basement, Los Angeles, Calif. N52W, S38W, Down</td>
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</tr>
<tr>
<td>IVC055</td>
<td>445 Figueroa Street, 19th Floor, Los Angeles, Calif. N52W, S38W, Down</td>
<td>94</td>
</tr>
</tbody>
</table>
EARTHQUAKE DATA

The San Fernando, California, Earthquake of February 9, 1971, 0600 PST; epicenter, 34°24.0'N, 118°23.7'W; maximum intensity, XI; magnitude, (ML), 6.6; depth, 13.0 km.
REFERENCES (See additional list, page 100)


FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVCO41 71.001.0 PACOIMA DAM, CAL. COMP S14W

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVCO41 71.001.0 PICOIMA DAM, CAL. COMP N76W

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVCO41 71.001.0 PACOIMA DAM, CAL. COMP N76W

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVCO42  71.001.1  PACOIMA DAM, CAL. AFTER SHOCK AT +52.6 SEC  COMP N76W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
1VCO42  71.001.1  PACOIMA DAM, CAL.  AFTER SHOCK AT +52.6 SEC  COMP N76W
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC042  71.001.1  PACOIMA DAM, CAL.  AFTER SHOCK AT +52.6 SEC  COMP S14W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB. 9, 1971 - 0600 PST
IVC042 71.001.1 PHILMAR DAM, CAL. AFTER SHOCK AT +52.6 SEC
COMP S14.W
LOG OF FREQUENCY - CPS
LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC042 71.001.1 PACOIMA DAM, CAL. AFTER SHOCK AT +52.6 SEC  COMP DOWN

-20-

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC042  71.001.1  PACOIMA DAM, CAL. AFTER SHOCK AT +52.6 SEC  COMP DOWN

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE    FEB 9, 1971 - 0600 PST
IVCO43  71.001.2  PACOIMA DAM, CAL. AFTER SHOCK AT +69.6 SEC    COMP S14W

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC043  71.001.2  PACOIMA DAM, CAL. AFTER SHOCK AT +69.6 SEC  COMP DOWN

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC044  71.001.3  PACOIMA DAM, CAL. AFTER SHOCK AT +104.6 SEC  COMP N76W
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVCO44  71.001.3  PACOIMA DAM, CAL.  AFTER SHOCK AT +104.6 SEC  COMP S14W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL

-30-
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC044  71.001.3  PACOIMA DAM, CAL. AFTER SHOCK AT +104.6 SEC  COMP S14W

The graph shows a log-log plot of Fourier amplitude spectrum against log of frequency in CPS. The x-axis represents the log of frequency in CPS ranging from -2 to 2, and the y-axis represents the log of Fourier amplitude spectrum in CM/SEC ranging from -3 to 2.
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVCO44  71.001.3  PACOIMA DAM, CAL.  AFTER SHOCK AT +104.6 SEC  COMP DOWN

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVCO45 71.001.4 PACOIMA DAM, CAL. AFTER SHOCK AT +162.0 SEC COMP N76W

FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM - CM/SEC

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC045  71.001.4  PACOIMA DAM, CAL. AFTER SHOCK AT +162.0 SEC  COMP S14W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
PACIFICA DAM, CAL. AFTER SHOCK AT +162.0 SEC
COMP SLW

LOG OF FREQUENCY - CPS
LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC045  71.0014  PACOIMA DAM, CAL. AFTER SHOCK AT +162.0 SEC  COMP DOWN

LOG OF FREQUENCY - CPS

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC046 71.001.5 PACOIMA DAM, CAL. AFTER SHOCK AT +230.1 SEC  COMP N76W

FREQUENCY - CPS

FOURIER AMPLITUDE SPECTRUM - CM/SEC

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC046  71.001.5  PACOIMA DAM, CAL.  AFTER SHOCK AT +230.1 SEC  COMP DOWN

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC046  71.001.5  PACOIMA DAM, CAL. AFTER SHOCK AT +230.1 SEC  COMP DOWN
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE    FEB 9, 1971 - 0600 PST
IVCO47 71.001.6 PACOIMA DAM, CAL. AFTER SHOCK AT +309.1 SEC  COMP N76W

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVCO47 71.001.6 PACOIMA DAM, CAL. AFTER SHOCK AT +309.1 SEC COMP DOWN

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVC048 71.008.0 6244 ORION BLVD, 1ST FLOOR, LOS ANGELES, CAL. COMP NOOW

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC048  71.008.0  8244 ORION BLVD. 1ST FLOOR, LOS ANGELES, CAL.  COMP NOON

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE    FEB 9, 1971 - 0600 PST
IVC048    71.008.0    8244 ORION BLVD. 1ST FLOOR, LOS ANGELES, CAL.   COMP 590W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC048 71.008.0  8244 ORION BLVD. 1ST FLOOR, LOS ANGELES, CAL.  COMP DOWN

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
1VC048 71.008.0 8244 ORION BLVD. 1ST FLOOR, LOS ANGELES, CAL.  COMP DOWN

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS

-2 -1 0 1 2
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE   FEB 9, 1971 - 0600 PST
IVC049 71.002.0 8244 ORION BLVD. 4TH FLOOR, LOS ANGELES, CAL.  COMP 590W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVC049 71.002.0 8244 ORION BLVD. 4TH FLOOR, LOS ANGELES, CAL. COMP DOWN

FREQUENCY - CPS

FOURIER AMPLITUDE SPECTRUM - CM/SEC

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
12/30/71 71.014.0 8244 ORION BLVD. 8TH FLOOR, LOS ANGELES, CAL.

Log of Fourier Amplitude Spectrum - CMS/SEC
Log of Frequency - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC050 71.014.0  8244 ORION BLVD. 8TH FLOOR, LOS ANGELES, CAL.  COMP SQ0W
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC050  71.014.0  8244 ORION BLVD, 8TH FLOOR, LOS ANGELES, CAL.  COMP DOWN

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC051  71.005.0  250 E FIRST STREET BASEMENT, LOS ANGELES, CAL.  CMP N36E

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC051  71.005.0  250 E FIRST STREET BASEMENT, LOS ANGELES, CAL.  COMP N54W

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC051  71.005.0  250 E FIRST STREET BASEMENT, LOS ANGELES, CAL. COMP N54W

LOG OF FREQUENCY - CPS

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC051  71.005.0  250 E FIRST STREET BASEMENT, LOS ANGELES, CAL.  COMP DOWN

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC

LOG OF FREQUENCY - CPS
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC052  71.011.0  250 E FIRST STREET 8TH FLOOR, LOS ANGELES, CAL.  COMP N36E

0  5  10  15  20  25
FREQUENCY - CPS

0  100  200
FOURIER AMPLITUDE SPECTRUM - CM/SEC

--- 95 PERCENT CONFIDENCE LEVEL ---
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0800 PST
250 E FIRST STREET 8TH FLOOR, LOS ANGELES, CAL., COMP N35E

LOG OF FREQUENCY - CPS

LOG OF FOURIER AMPLITUDE SPECTRUM - CM/SEC
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE   FEB 9, 1971 - 0600 PST
IVC052 71.011.0 250 E FIRST STREET 8TH FLOOR, LOS ANGELES, CAL.  COMP DOWN

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC053  71.016.0  250 E FIRST STREET 17TH FLOOR, LOS ANGELES, CAL.  COMP N54W

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC053  71.016.0  250 E FIRST STREET 17TH FLOOR, LOS ANGELES, CAL.  COMP DOWN

frequency - cps

95 percent confidence level
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE FEB 9, 1971 - 0600 PST
IVC053 71.016.0 250 E FIRST STREET 17TH FLOOR, LOS ANGELES, CAL. COMP DOWN
FOURIER AMPLITUDE SPECTRUM OF ACCELERATION
SAN FERNANDO EARTHQUAKE  FEB 9, 1971 - 0600 PST
IVC055 71.091.0 445 FIGUEROA STREET, 19TH FLOOR, LOS ANGELES, CAL. COMP DOWN

FOURIER AMPLITUDE SPECTRUM - CM/SEC

FREQUENCY - CPS

95 PERCENT CONFIDENCE LEVEL
California Institute of Technology
Earthquake Engineering Research Laboratory

The following reports of the Earthquake Engineering Research Laboratory from 1970 on can be obtained from the National Technical Information Service, Springfield, Virginia 22151:

| EERL 70-20 | Strong-Motion Earthquake Accelerograms - Digitized and Plotted Data (Vol.I, Part A) | PB-187 847 |
| EERL 70-21 | " " (Vol.I, Part B) | PB-196 823 |
| EERL 71-20 | " " (Vol.I, Part C) | PB-204 364 |
| EERL 71-21 | " " (Vol.I, Part D) | PB-208 529 |
| EERL 71-22 | " " (Vol.I, Part E) | PB-209 749 |
| EERL 71-23 | " " (Vol.I, Part F) | PB-210 619 |
| EERL 72-20 | " " (Vol.I, Part G) | PB-211 357 |
| EERL 72-21 | " " (Vol.I, Part H) | PB-211 781 |
| EERL 72-22 | " " (Vol.I, Part I) | PB-213 422 |
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