

CALIFORNIA INSTITUTE OF TECHNOLOGY

EARTHQUAKE ENGINEERING RESEARCH LABORATORY

**DIGITAL NEAR SOURCE ACCELEROGRAMS
RECORDED BY INSTRUMENTAL
ARRAYS IN TANGSHAN, CHINA**

US-China Joint Project on Strong
Ground Motion Measurements

Report No. EERL 89-04

Sponsored by
United States National Science Foundation
State Seismological Bureau, China

Pasadena, California

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**DIGITAL NEAR SOURCE ACCELEROGRAMS RECORDED
BY INSTRUMENTAL ARRAYS IN TANGSHAN, CHINA**

**Part I
(1982.7-1984.12)**

**CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA, USA
1989 (REVISED)**

**INSTITUTE OF ENGINEERING MECHANICS
STATE SEISMOLOGICAL BUREAU
HARBIN, CHINA
1988**

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Forward

The ultimate goal of earthquake hazard mitigation research is to gain sufficient understanding of the phenomena involved in an earthquake to minimize the loss of life and property resulting from such an event. In order to design safe, economical structures and facilities in seismic areas, it is necessary to understand the nature of the ground motion generated by an earthquake. This understanding can ultimately come only from the measurement of the strong ground motion resulting from actual damaging earthquakes.

In order to facilitate the acquisition of strong ground motion data world-wide, an International Workshop on Strong Motion Earthquake Instrument Arrays was held in 1978 in Hawaii. Participants in the Workshop appealed to the earthquake-threatened countries of the world to undertake a concerted effort to establish strong-motion accelerograph arrays and networks.

In response to the appeal of these experts in earthquake hazard mitigation, and in accord with the "China-U.S. Protocol for Scientific and Technical Cooperation in Earthquake Studies," a joint research project on strong ground motion measurement has been established in China.

In the first phase of this project, from April 1981 to December 1984, 22 Kinematics PDR-1 Digital Event Recorders equipped with FBA-13 Force Balance Accelerometers, and 18 Kinematics SMA-1 Analog Accelerographs were deployed in China. Of this total, 13 PDR-1 and 3 SMA-1 instruments were deployed in a surface array and a three-dimensional array in the aftershock region of the 1976 Tangshan earthquake.

These two arrays recorded a total of 1053 near-source accelerograms from 416 earthquakes with magnitudes ranging from $M_L = 1.2$ to 5.7. The source-station distances ranged from 2 to 45 kilometers. Most of the records contain the complete P- and S-wave motion along with accurate absolute time. Both the volume and quality of the accelerograms are much greater than ever before obtained in China.

The largest event recorded was the $M_L = 5.7$ Lulong earthquake of October 19, 1982. Nine instruments were triggered by this event. The epicentral distance from the recording stations ranged from 5 to 41 kilometers, and the corresponding peak horizontal acceleration ranged from 0.217 to 0.008g.

Accelerograms were recorded by the three-dimensional array from twenty-eight events. Measurements were made to a depth of 900 meters below the ground surface. The records obtained provide a unique source of data for the study of the propagation of seismic waves near the earth's surface. In order to make these data more useful, they will be published along with site data in a separate volume.

In this report, 218 of the most significant accelerograms are published. The data was obtained from earthquakes with magnitudes ranging from $M_L = 2.3$ to 5.7. All of the data reproduced in this report is available on 9-track computer tape.

This report is a product of the China-U.S. Joint Project on Strong Ground Motion Measurement. The principal investigators of this project are:

Chinese side:

Prof. Li-Li Xie
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State Seismological Bureau

Prof. Kezhong Peng
Institute of Engineering Mechanics
State Seismological Bureau

U.S. side:

Prof. W. D. Iwan
California Institute of Technology

Dr. D. M. Boore
U.S. Geological Survey

Prof. T-L Teng
University of Southern California

Professor Huixian Liu was the initiator of this project on the Chinese side and has provided continued leadership and support for its ongoing operation.

Array operations, data acquisition, and processing were carried out by the staff of the Beijing Strong Motion Observation Center of the Institute of Engineering Mechanics.

The principal investigators wish to acknowledge the State Seismological Bureau of China and the National Science Foundation of United States for their support of this project.

Outline of Tangshan Strong Ground Motion Accelerograph Arrays

The joint research project on strong ground motion observation of IEM/CALTECH-USGS-USC started in 1981 and is now in progress. The overall goal of this project is to increase the data base of strong ground motion of large earthquakes. Of particular interest are near-source data from great ($M > 7$) earthquakes, for which data are still lacking.

1. Introduction of Arrays

As a part of this project, an experimental strong-motion array was deployed since June 30, 1982 in the meizoseismal area of the $M_s = 7.8$ Tangshan earthquake of July 28, 1976. Temporary installation of instruments in an area still experiencing aftershock was expected to afford the opportunity to gain operational field experience with the digital accelerograph system and also to yield useful data. A total of 13 stations (TS01-TS13) was included in this array, four PDR-1 digital and one SMA-1 analog accelerographs were installed along the Lulong fault where moderate earthquake seismicity was high. Eight other PDR-1 digital accelerographs were sited along a line normal to the fault. Four of these eight stations were concentrated in a small area of about 0.3 square-kilometers near the town of Tuozitou to observe the variation of ground motion over a small area.

In the spring of 1983, the array was modified and new stations were added. A three dimensional array was deployed by using the underground tunnels of the Zhaogezhuang coal mine (TS01, TS14-19, TS21). The elevation of the deepest station (TS15) is -822 m, or -898 m below the surface.

The arrays were installed at the intersection of several active faulting structures including the Tangshan, Luanxian and Lulong faults in the northeast part of the aftershock area of the Tangshan mainshock. Fig. 1 shows the primary tectonic structures at the array sites and the distribution of instruments. Details of the three-dimensional array are shown in Fig. 2 and Fig. 3. All of the station parameters are given in Table 1 and Table 2.

2. Digital Instruments

The digital accelerographs installed were Kinematics PDR-1 Digital Event Recorders, with FBA-13 Force Balance Accelerometers (Table 3). To reduce the effects of soil-structure interaction on the recorded ground motion, all of the instruments were installed in small, light shelters (Fig. 4).

The FBA-13 triaxial accelerometer packages were bolted to a steel plate which was attached to the cement floor with epoxy resin or attached to the soil directly with anchor bars (Fig. 5). These methods of attachment are convenient and reliable.

3. Near Source Accelerograms

During the first phase of this joint research project from July, 1982 to December, 1984, a total of 1053 accelerograms were obtained from 416 earthquakes of magnitude ranging from $M_L = 1.2-5.7$ (Table 4). Forty underground accelerograms were obtained from 28 events. Up to December of 1987, 1622 records had been obtained from 707 events, 66 of which had magnitudes >4.0 .

Table 4. Number of Earthquake Records from Tangshan Arrays (1982.7-1984.12)

Magnitude M_L	Unknown	1-1.9	2-2.9	3-3.9	4-4.9	>5	Total
No. of event	12	17	299	40	46	2	416
No. of records	29	21	613	142	231	17	1053

In this report, data is provided from 218 digital accelerograms which were recorded from 52 earthquakes ($M_L = 2.3-5.7$). The epicenters of these earthquakes are shown in Fig. 6 and the parameters of the earthquakes are listed in Table 5. The distribution of epicentral and focal distance, source depth and M_L of the data selected is shown in Figs. 7-9.

Table 6 gives a catalogue of the 218 three-component accelerograms selected. This catalogue contains the record number, earthquake number, start time of the accelerogram, measurement component, peak acceleration, and the data file name. Plots of the 218 accelerograms (a total 653 record traces) are provided in the body of this report.

Playback and Processing of Digital Accelerograms

Most of the digital cassette records were played back and processed in the Strong Motion Data Processing Laboratory of the Institute of Engineering Mechanics. Some of the records were played back and processed in the Beijing Strong Motion Observation Center. Most of the accelerograms were plotted in the Office of Earthquakes, Volcanoes and Engineering of U.S Geological Survey.

A block diagram of the playback system of the Strong Motion Data Processing Laboratory is given in Fig. 10. This system consists of a 16 bits mini-computer, a DSP-3 Digital Playback Unit and some peripheral equipment. In order to facilitate playback and processing of the PDR-1 cassette records, a special software package was developed, this package performs the following functions: data transfer, data parity checking, data restoration, data format conversion, decoding of data codes (i.e., sampling rate, instrument serial number, absolute time, event code), setting up header data, normalization of data files and plotting of accelerograms. Fig. 11 shows the flow chart for the main program of the processing package. The flow chart for the data reducing subroutine, SUB.REDUCE, is shown in Fig. 12.

All data files have been stored on nine-track half-inch magnetic tape (no label, record density: 1600 bit/inch, blocksize: 800 bytes, recordsize: 80 bytes).

The header data for each file includes the following:

- Line 1 : Earthquake No. and time
- 2 : Epicenter location
- 3 : Source geographic coordinates
- 4 : Magnitude
- 5 : Station No. and name
- 6 : Instrument model
- 7 : Transducer location
- 8 : Station geographic coordinates and transducer orientations
- 9 : Sensitivity of sensor
- 10 : Peak value of acceleration
- 11 : Time of acceleration peak
- 12 : The number of data points in each component
- 13 : Zero-line offset of each component
- 14 : Sampling rate
- 15 : Instrument serial No.
- 16 : Absolute time (days, hours, minutes, seconds) for the data sample indicated

- 17 : Time correction (see Notes)
- 18 : PDR-1 event code number
- 19 : Date (year, month, day)
- 20-22 : For internal use

Data for each channel are given in sequence after the header data.

A sample data file is given in Table 7. This file is the acceleration data from the Lulong Goods Bureau station during the Lulong earthquake of October 19, 1982 (IEM File No. 017).

Notes on Catalogue and Plots of Accelerograms

1. The code "Record No." is the Series Reference Number (for example record 6A001-001 appears in Volume 6, Part A "Uncorrected Accelerograms" of the "REPORT ON STRONG EARTHQUAKE MOTION RECORDS IN CHINA," and is the first record-trace of the first accelerogram in Volume 6 of the Series).
2. The time correction (Tcorr) is defined as: $T_{corr} = TBPM - TPDR$ (sec), where, TBPM is Beijing standard time, and TPDR is the absolute time as indicated by the interior clock of the instrument.
3. The code "Start-Time of Accelerogram" is the corresponding time moment of the first sample of the acceleration data file (for example the time moment corresponding to the 31.128th second of the 42th minute of the 05th hour of the 194th day is expressed as: 1940542-31.128). The codes with " * " which appear in Eq. No. 82009 are defined as the corresponding time moments of the first data sample in respective plots of the earthquake 82009, because the data for this earthquake is recorded in the same data file after the data of earthquake 82008 for the same station. The code "Time" in each plot is the time corresponding to the first data sample in the plot.
4. In "Comp.," "UP" is the positive direction of the vertical component; and "H" is the horizontal component. For $H = 0$, $H = 90$, $H = 180$ and $H = 270$, the positive direction is North, East, South and West, respectively.
5. The data sample rate for the records is 200 sps through Feb. 28, 1983, and is 100 sps after that date.
6. For a record with " + " there was obvious interference in the tail, and the tail of the corresponding plot has been plotted as a straight line.
7. For a record with " @ " the wave-form has large distortion near the peak value of the record.
8. For a record with " # " the wave-form shows an interference with small square wave pulses.

Postscript

This report is a major accomplishment of the joint project of IEM/CALTECH-USGS-USC. It has the following distinctive features:

1. It is the first volume of accelerograms recorded by digital accelerographs in China.
2. It contains the strongest multi-station earthquake data ever recorded in China.
3. Twenty-five unique underground accelerograms are provided from a three-dimensional array, including the first known deep (900 m) station records.
4. There is accurate absolute time (accuracy: 50 ms) on all the records collected in this report.
5. Most of the records published contain the entire history of the ground motion with no loss at the beginning of the record due to late triggering.

This report was edited with the support and assistance of Principal Investigators of both side: Prof. W. D. Iwan, Prof. L. L. Xie, Dr. D. M. Boore and Prof. T. L. Teng. The editors would like to express their sincere thanks to Dr. Charles Mueller, Mr. Howard Bundock and Dr. Fred W. Klein of the U.S. Geological Survey for their valuable help in processing the data, and to Crista Potter of the California Institute of Technology for preparation of the US version of this report.

The staff of IEM who participated in this program, are as follows:

Editors:	Peng Kezhong, Li Shabai
Observations:	Peng Kezhong, Li shabai, Wu Weilian Yu Shuqin, Ren Zengyun, Yu Shuangjiu Wang Tiehua, and others
Data Processing:	Li Shabai, Peng Kezhong, Hu Chengxiang Du Meiqi, Wang Shaojing, Zhao Shufang Sun Fuliang, Xu Xiufen

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APPENDIX I

List of the Titles on the Series of the
 "Report on Strong Earthquake Motion Records in China"

Volume	Number	Title	Date
I	1	Uncorrected Digital Accelerograms of Tangshan Earthquake (1976.7.28-1976.12.31)	1985
I	2	Corrected Digital Accelerograms of Tangshan Earthquake (1976.7.28-1976.12.31)	1987
I	3	Response Spectra of Tangshan Earthquake Accelerograms (1976.7.28-1976.12.31)	1990
I	4	Fourier Amplitude Spectra of Tangshan Earthquake Accelerograms (1976.7.28-1976.12.31)	1990
II	1	Uncorrected Digital Accelerograms of Haicheng Earthquake (1975.2.8-1975.2.28)	1988
II	2	Corrected Digital Accelerograms of Haicheng Earthquake (1975.2.8-1975.2.28)	1990
II	3	Response Spectra of Haicheng Earthquake Accelerograms (1975.2.8-1975.2.28)	in press
II	4	Fourier Amplitude Spectra of Haicheng Earthquake Accelerograms (1975.2.8-1975.2.28)	in press
III	—	The Report of Strong Aftershock Motion Observation on Longlin, Yunnan M = 7.4 Earthquake of 1976 (1976.6)	1989
IV	—	The Report of Earthquake Motion Observation on the Emergency Spillway of Huangbizhuang Reservoir (1967.10-1974.7)	1986
V	—	The Report of Strong Aftershock Motion Observation on Wuqia, Xinjiang M _s = 7.4 Earthquake of 1985 (1985.8.28-1985.9.20)	1988
VI	—	China-US Joint Project on Strong Ground Motion Measurements: Digital Near Source Accelerograms Recorded by the Instrumental Arrays in Tangshan, China (Part I) (1982.7-1984.12) (this report)	1989

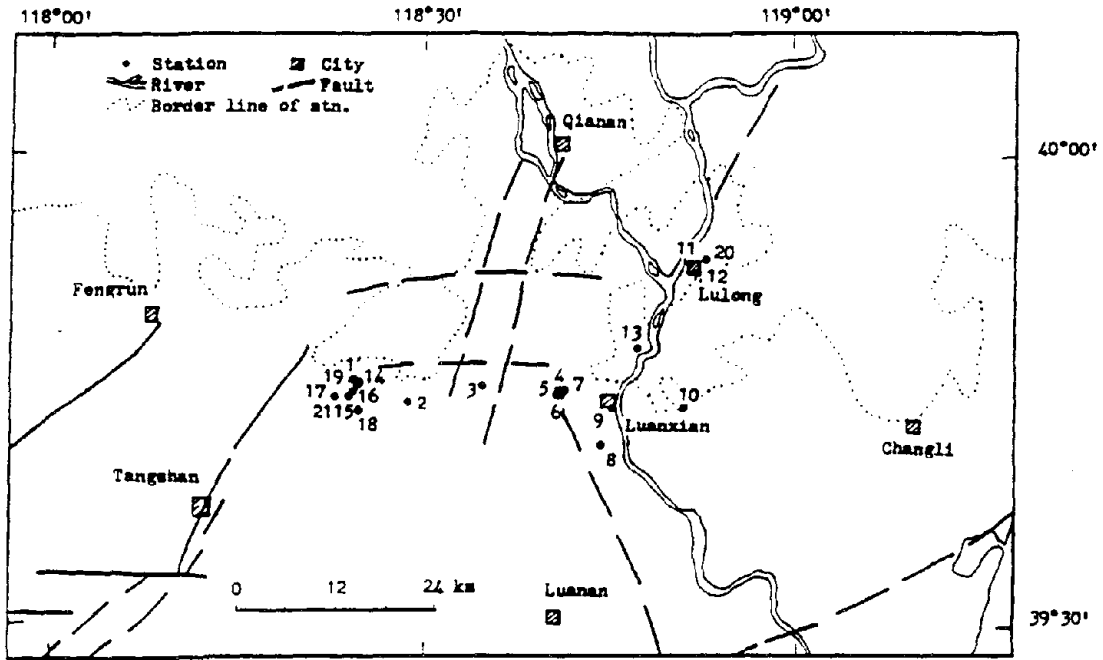
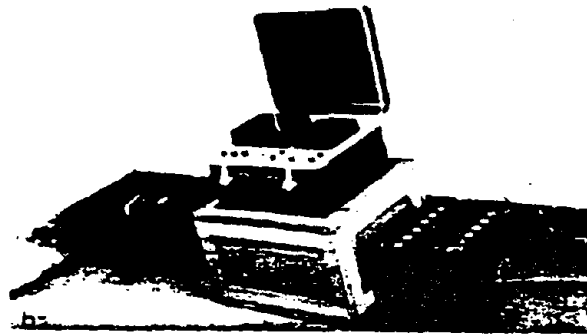


Fig. 1. Strong Ground Motion Accelerograph Arrays in Tangshan, China



a



b

Fig. 4. (a) Exterior of a Typical Station (TS-10)

Fig. 4. (b) Installation of Instruments (PDR-1/113 and FBA-13)

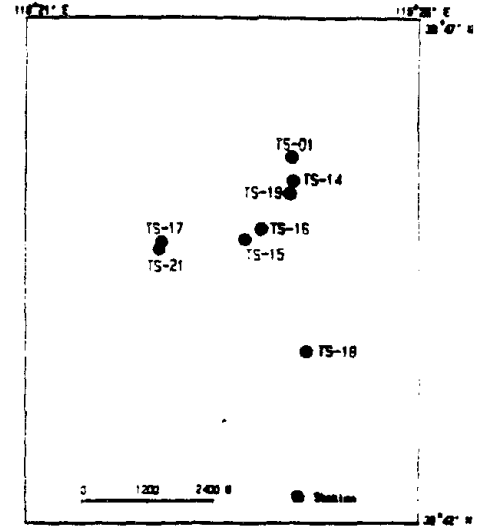


Fig. 2. Plane of TDS Array

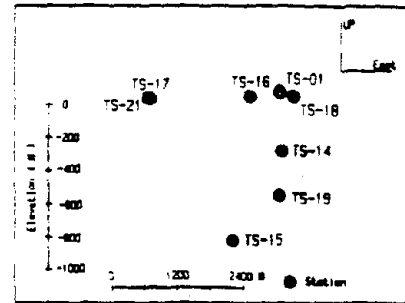


Fig. 3. Section of TDS Array

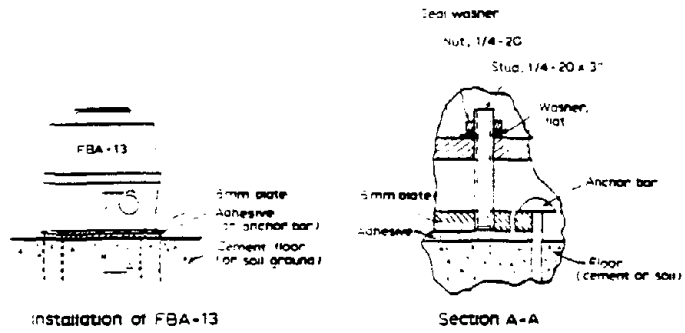


Fig. 5. Installation of FBA-13

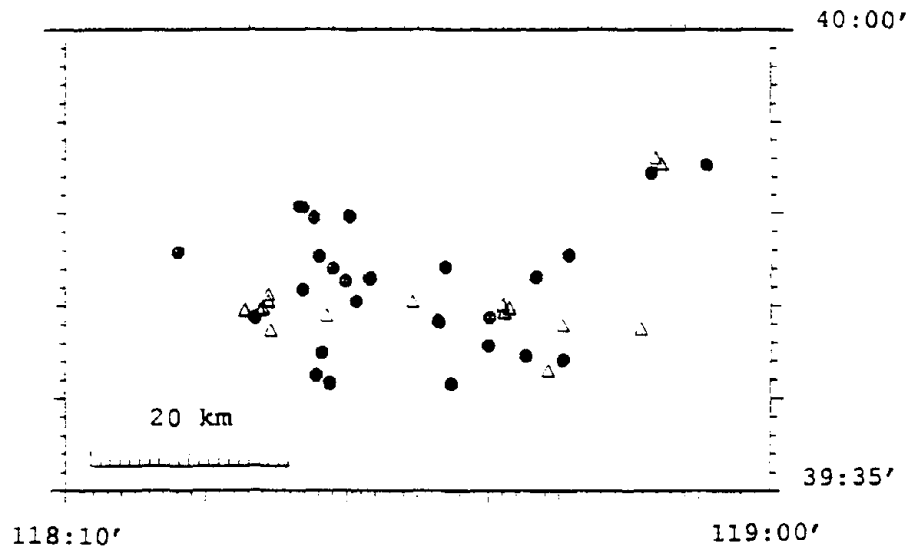


Fig. 6. Epicenter Locations of Earthquakes

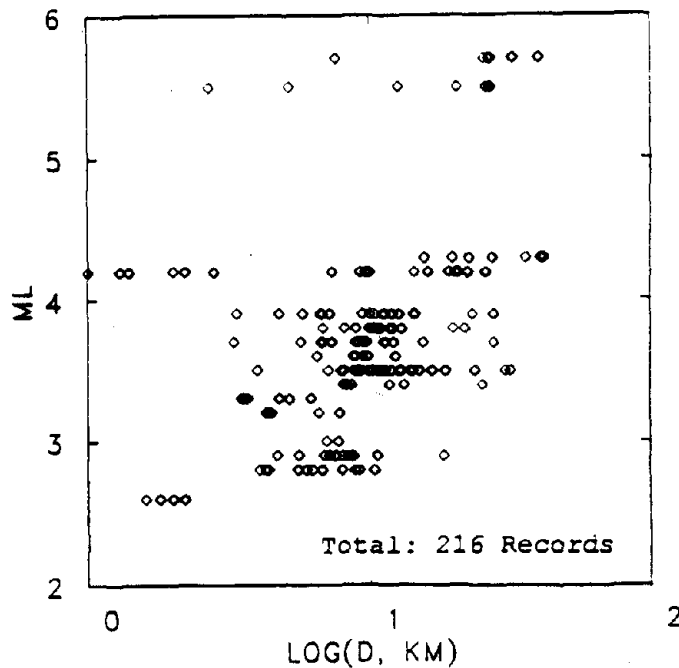


Fig. 7. Distribution of ML and Epicenter Distance of Earthquake Records

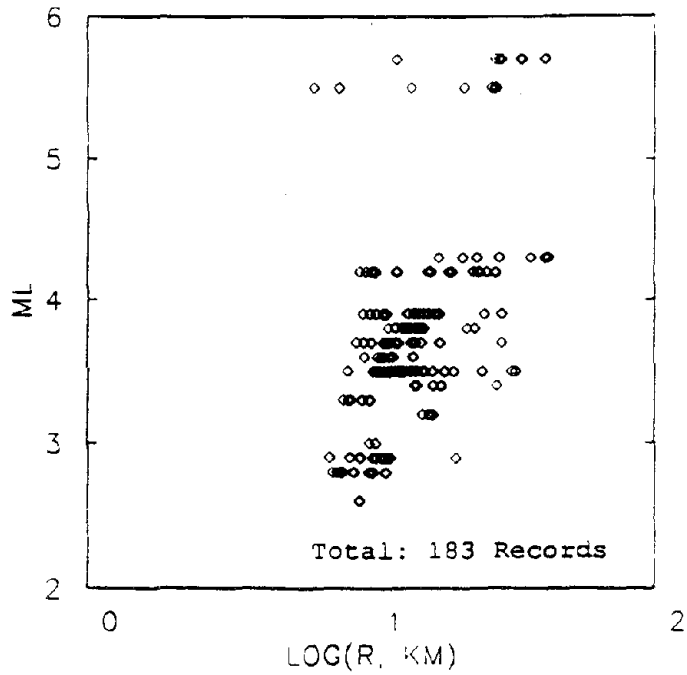


Fig. 8. Distribution of ML and Focal Distance of Earthquake Records

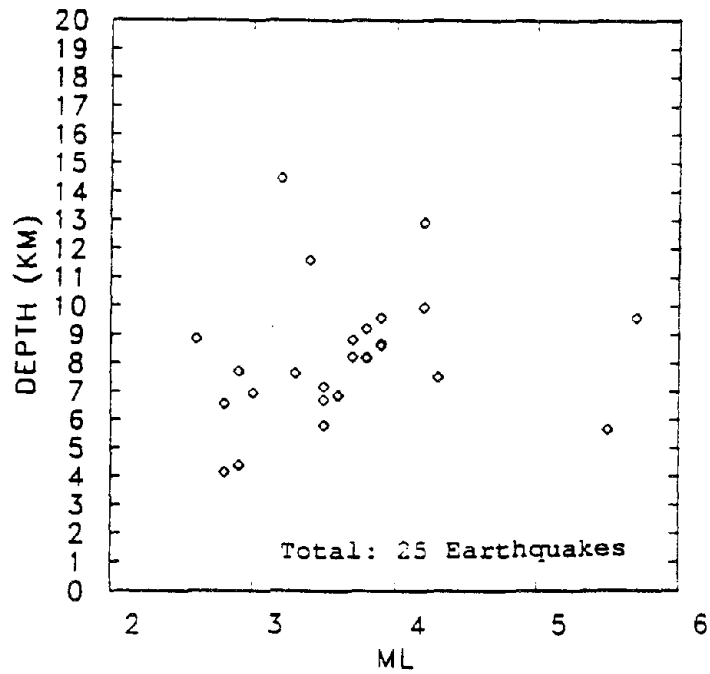


Fig. 9. Distribution of Depth and ML of Earthquake Records

Table 1 List of Stations (I)

No.	Name	Site	Coordinate	Elev.	Direction
TS01	Zhao-Mine/SS	Ground/Rock	39:45.635'N 118:24.390'E	76m	E U S
TS02	Beijiadian/RMF	Ground/Soil	39:44.487'N 118:28.527'E	40m	S U W
TS03	Leizhuang/AO	Ground/Soil	39:45.270'N 118:34.578'E	45m	N U E
TS04	Tuozitou/OD	Ground/Soil	39:45.120'N 118:40.965'E	45m	S U W
TS05	Tuozitou/OS	Ground/Soil	39:45.040'N 118:40.930'E	45m	N U E
TS06	Tuozitou/CPS	Ground/Soil	39:44.675'N 118:41.053'E	45m	N U E
TS07	Tuozitou/NS	Ground/Soil	39:44.918'N 118:41.387'E	45m	S U W
TS08	Xiangtang/SS	Ground/Rock	39:41.527'N 118:44.157'E	45m	S U W
TS09	Luanxian/SO	Ground/Soil	39:43.973'N 118:45.193'E	20m	S U W*
TS09	Luanxian/SO	Ground/Soil	39:43.973'N 118:45.193'E	20m	W U S**
TS10	Shimen/TO	Ground/Soil	39:43.783'N 118:50.790'E	30m	S U W
TS11	Lulong/SO	Ground/Soil	39:53.040'N 118:51.755'E	50m	N U E
TS12	Lulong/GB	Ground/Soil	39:52.690'N 118:52.228'E	50m	N U E
TS15	Zhao-Mine/UL10	Tunnel/Rock	39:44.818'N 118:23.793'E	-822m	E U S
TS16	Huanggezhuang	Ground/Soil	39:44.922'N 118:24.002'E	48m	S U W
TS17	East Baidaozi	Ground/Soil	39:44.787'N 118:22.730'E	38m	S U W
TS18	Guye/KAMS	Ground/Soil	39:43.698'N 118:24.563'E	47m	N U E
TS19	Zhao-Mine/UL7	Tunnel/Rock	39:45.273'N 118:24.377'E	-553m	N U E
TS21	East Baidaozi	Ground/Soil	39:44.713'N 118:22.695'E	38m	S U W

- Remarks:
1. Instrument type is PDR-1/FBA-i3.
 2. Site geology is listed in "List of Stations (II)".
 3. * --- effective period: 07/01/82 to 08/31/82.
 4. ** -- effective period: 08/31/82 to 11/18/82.

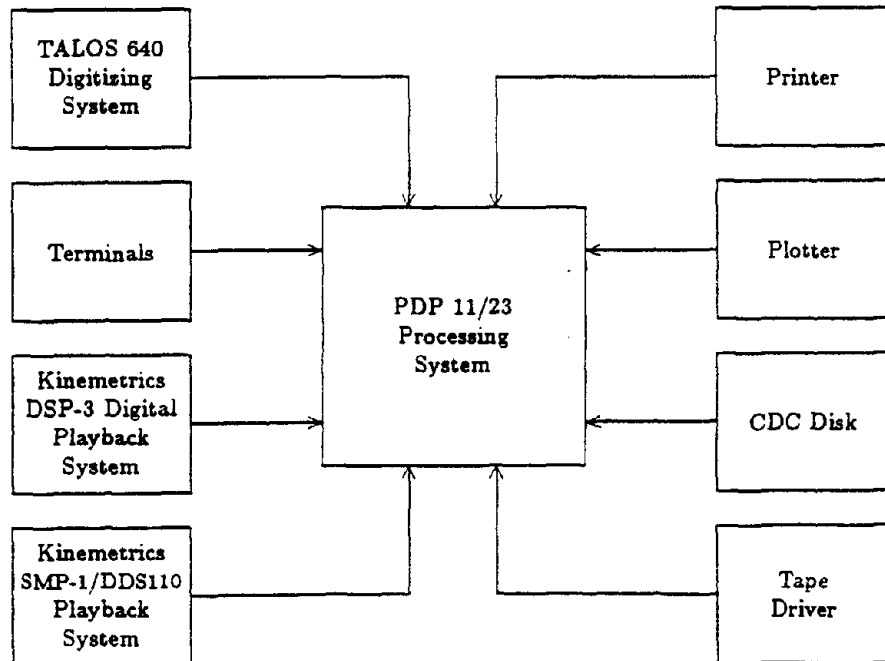


Fig. 10. Data Processing System in IEM

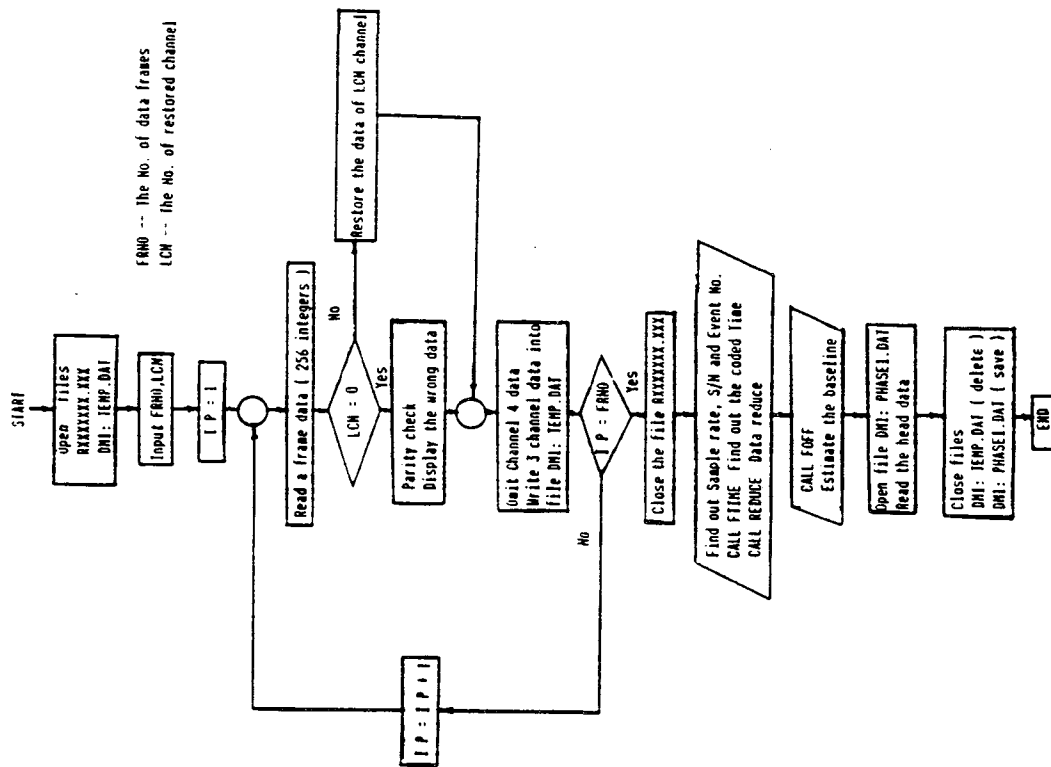


Fig.11. Main Program PDSP3.FOR Flow Chart

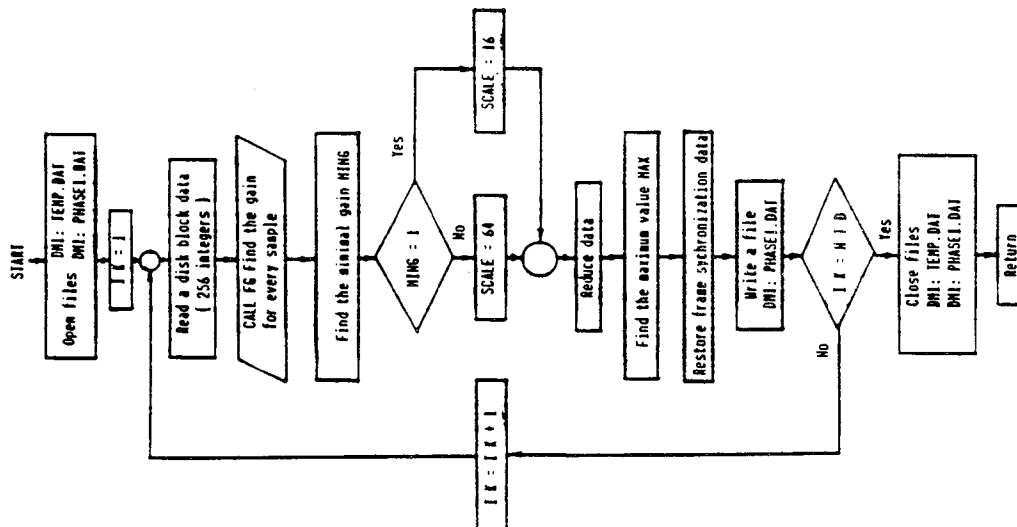


Fig.12. SUB.REDUCE Flow Chart

Table 2 List of Stations (II)

No.	Site Geology	Structure
TS01	Outcrop of basement rock of coal bed, depth of rock face Hr=0m	Ground in 1-story-bldg
TS02	Thickness of soil and sand is 12m, thickness of light broken rock layer is 2m, depth of rock face Hr=14m	Ground in 1-story-bldg
TS03	Thickness of soil layer, that consists of sand, clay, cobble and gravel, is about 40m, light weathering rock layer is 3m, Hr=43m	Ground in 1-story-bldg
TS04	Thickness of soil layer is 46m, thickness of light weathering rock layer is 2m, depth of granite face Hr=48m	Ground in 1-story-bldg
TS05	Thickness of soil layer is 41m, thickness of light weathering rock layer is 12m, depth of rock face Hr=46m	Ground in 1-story-bldg
TS06	Thickness of soil layer is 44m, thickness of light weathering rock layer is 12m, Hr=56m	Ground in 1-story-bldg
TS07	Thickness of soil layer, that consists of sand, clay, cobble and gravel, is 50m, Hr=52m	Ground in 1-story-bldg
TS08	Outcrop of granite, on Taoyuan fault zone, Hr=0m	Ground in 1-story-bldg
TS09	Soil layer consists of sand, clay, cobble and gravel, on fractured zone of Taoyuan fault	Ground in 1-story-bldg
TS10	Thickness of soil layer is 40m, on eastern plate of Taoyuan fault, Hr=45m	Ground in 1-story-bldg
TS11	Thickness of sand and gravel is 3m, depth of granite face Hr=3m, on eastern plate of Taoyuan fault	Ground in 4-story-bldg
TS12	Thickness of sand and gravel is 10m, on eastern plate of Taoyuan fault, depth of granite face Hr=10m	Ground in 1-story-bldg
TS15	Basement rock in coal bed, in coal mine	Underground tunnel
TS16	Thickness of sand and clay is about 3m, Hr=3m	Ground in 1-story-bldg
TS17	Thickness of sand and clay is about 12m, Hr=12m	Ground in 1-story-bldg
TS18	Thickness of sand and clay is about 10m, Hr=10m	Ground in 1-story-bldg
TS19	Basement rock in coal bed, in coal mine	Underground tunnel
TS21	Thickness of sand and clay is about 12m, Hr=12m	Ground in 1-story-bldg

Table 3 Specifications of PDR-1/FBA-13

Number of channels	Three
Input filtering	Selectable 2.5, 12.5, 25, 50 Hz; 12 dB/oct roll-off
Gain-ranging	+/-36dB up and down during event
Dynamic range	102dB
Resolution	12-bit
Format	Phase-encoded 4-tracks; three data, one parity
Bit density	1280 bits/inch/track
Sample rate	100 or 200 samples/sec per channel selectable
Tape speed	1.25 or 2.5 in/sec
Start-up time	150 ms
Trigger	STA/LTA selectable ratios or differences
Pre-event memory	Standard PEM is 2.56 sec with 200 sps or 5.12 sec with 100 sps
Temperature stability of TCG-1B	+/-3exp-7 (0-50 C)
Full scale	+/-2g
Natural frequency of FBA-13	50 Hz
Damping ratio of FBA-13	0.7
Power	+12 V and -12 V DC

Table 3 Catalogue of Earthquakes

Eart. No.	Time of Earthquake		Epicenter		Depth (km)	Magnitude		Rec. Qty.
	mm/dd/yy	hh-mm-ss	Lat.N	Long.E		Ml	Ms	
82007	07/13/82	05-42-29.7	39:42.9'	118:39.9'	14.5	3.2		6
82008	07/17/82	12-42-55.9	39:44.1'	118:36.4'	8.7	3.9	3.4*	8
82009	07/17/82	12-43-17.0	39:44.2'	118:36.4'	8.8	3.7*	3.1*	8
82012	07/25/82	10-10-59.3	39:47.8'	118:45.6'	11.6	3.4		8
82017	08/09/82	01-23-41.4	39:44.4'	118:40.0'	8.9	2.6		4
82025	08/31/82	19-58-42.8	39:46.6'	118:43.3'	6.6	2.8		5
82033	09/14/82	12-42-09.9	39:42'	118:45' **		2.7		5
82046	10/19/82	20-46-00.5	39:52.6'	118:55.4'	9.6	5.7	4.9	9
82048	10/19/82	20-49-52.2	39:52.6'	118:55.4'		3.4		1
82049	10/19/82	20-51-20.0	39:52.6'	118:55.4'		3.5		1
82050	10/19/82	20-53-31.4	39:52.6'	118:55.4'		2.9		1
82101	10/19/82	21-11-46.6	39:52.6'	118:55.4'		2.7*		1
82102	10/19/82	21-12-58.7	39:52.6'	118:55.4'		2.8		1
82051	10/19/82	21-16-51.2	39:52.6'	118:55.4'		2.7		1
82103	10/19/82	21-38-11.6	39:52.6'	118:55.4'		2.4*		1
82104	10/19/82	21-58-15.9	39:52.6'	118:55.4'		3.2		1
82117	10/19/82	22-02-02.4	39:52.6'	118:55.4'		2.3		1
82052	10/19/82	22-16-59.9	39:52.6'	118:55.4'		4.2		1
82105	10/19/82	22-38-57.4	39:52.6'	118:55.4'		2.6		1
82053	10/19/82	23-35-58.0	39:52.6'	118:55.4'		3.4		1
82054	10/19/82	23-39-55.6	39:52.6'	118:55.4'		3.4		1
82106	10/20/82	00-09-14.8	39:52.6'	118:55.4'		2.5		1
82107	10/20/82	00-14-47.7	39:52.6'	118:55.4'		2.5*		1
82108	10/20/82	00-43-28.0	39:52.6'	118:55.4'		2.7		1
82109	10/20/82	01-18-51.8	39:52.6'	118:55.4'		3.3		1
82110	10/20/82	01-31-56.7	39:52.6'	118:55.4'		2.3		1
82055	10/20/82	03-21-49.8	39:52.6'	118:55.4'		3.4		1
82116	10/20/82	03-30-16.7	39:52.6'	118:55.4'		---		1
82056	10/20/82	06-26-20.6	39:52.6'	118:55.4'		3.5		1
82115	10/20/82	06-42-13.0	39:52.6'	118:55.4'		---		1
82111	10/20/82	10-10-14.6	39:52.6'	118:55.4'		2.8		1
82112	10/20/82	10-16-55.4	39:52.6'	118:55.4'		2.5		1
82057	10/20/82	11-44-41.4	39:52.6'	118:55.4'		3.2		1
82082	11/30/82	22-53-48.0	39:47.1'	118:36.9'	6.9	3.0		4
83028	03/04/83	04-03-20.7	39:46.5'	118:31.6'	8.6	3.9		5
83064	05/28/83	16-20-30.8	39:40.8'	118:37.3'	12.9	4.2		9
83077	08/08/83	15-08-57.7	39:42.5'	118:28.1'	4.4	2.9		5
83079	08/09/83	22-13-27.0	39:40.8'	118:28.8'	9.2	3.8		8
83081	08/13/83	05-52-33.1	39:41.3'	118:27.8'	6.9	3.6		7
83099	09/24/83	03-08-06.0	39:46.4'	118:29.9'	7.2	3.5		10
83103	09/26/83	03-53-06.0	39:45.9'	118:26.8'	7.7	3.3		8

Catalogue of Earthquakes (Continued)

Eart. No.	Time of Earthquake		Epicenter		Depth (km)	Magnitude		Rec. Qty.
	mm/dd/yy	hh-mm-ss	Lat.N	Long.E		Ml	Ms	
83104	09/26/83	06-25-39.3	39:44.4'	118:23.4'	10.0	4.2		9
83108	10/02/83	07-31-55.6	39:47.7'	118:28.0'	4.1	2.8		8
83111	10/05/83	00-25-18.4	39:52.2'	118:51.4'	7.5	4.3		7
84006	01/07/84	19-18-23.9	39:42.3'	118:42.5'	5.7	4.9		7
84029	02/16/84	19-10-11.1	39:45.3'	118:30.6'	8.2	3.7		8
84117	11/05/84	11-48-26.2	39:47.0'	118:28.9'	7.7	2.9		8
84132	12/10/84	07-22-11.1	39:49.8'	118:30.1'	5.8	3.5		8
84137	12/11/84	00-54-47.2	39:48'	118:18**		3.2		5
84138	12/11/84	00-55-42.4	39:49.8'	118:27.6'	8.2	3.8		8
84139	12/11/84	05-51-05.3	39:50.3'	118:26.9'	9.6	3.9		8
84142	12/11/84	06-14-09.0	39:50.4'	118:26.5'	6.7	3.5		8

- Notes:
1. The magnitudes are proposed by the Institute of Geophysics/SSB, and the values with " * " are proposed by Xiangtang Seismic Station.
 2. The epicenter coordinates with " ** " are proposed by IG/SSB.
 3. The epicenter coordinates of aftershocks during 19th to 20th of October, 1982 were not measured, these data are came from the mainshock (Earthquake No. 82046).
 4. " Rec. Qty." is the quantity of accelerograms which are recorded for the same earthquake.
 5. The time of earthquake is standard time of Beijing.

Table 6 Catalogue of Accelerograms

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A001-001	82007	TS04	-0.987	1940542-31.128	UP	10.0	146-CH.2	1940542K1.004
6A001-002	82007	TS04	-0.987	1940542-31.128	H=180	-8.0	146-CH.1	1940542K2.004
6A001-003	82007	TS04	-0.987	1940542-31.128	H=270	10.2	146-CH.3	1940542K3.004
6A002-004	82007	TS05	-1.010	1940542-32.745	UP	-6.0	147-CH.2	1940542L1.005
6A002-005	82007	TS05	-1.010	1940542-32.745	H=0	13.8	147-CH.1	1940542L2.005
6A002-006	82007	TS05	-1.010	1940542-32.745	H=90	-12.7	147-CH.3	1940542L3.005
6A003-007	82007	TS07	-1.038	1940542-32.872	UP	-5.9	191-CH.2	1940542L1.007
6A003-008	82007	TS07	-1.038	1940542-32.872	H=180	-14.5	191-CH.1	1940542L2.007
6A003-009	82007	TS07	-1.038	1940542-32.872	H=270	-17.8	191-CH.3	1940542L3.007
6A004-010	82007	TS08	-0.985	1940542-32.435	UP	4.5	148-CH.2	1940542L1.008
6A004-011	82007	TS08	-0.985	1940542-32.435	H=180	7.5	148-CH.1	1940542L2.008
6A004-012	82007	TS08	-0.985	1940542-32.435	H=270	5.0	148-CH.3	1940542L3.008
6A005-013	82007	TS09	-1.005	1940542-33.190	UP	-9.5	149-CH.2	1940542L1.009
6A005-014	82007	TS09	-1.005	1940542-33.190	H=180	-7.7	149-CH.1	1940542L2.009
6A005-015	82007	TS09	-1.005	1940542-33.190	H=270	11.0	149-CH.3	1940542L3.009
6A218-649	82007	TS10	-0.107	1940542-34.883	UP	-4.1	212-CH.2	1940542L1.010
6A218-650	82007	TS10	-0.107	1940542-34.883	H=180	-8.5	212-CH.1	1940542L2.010
6A218-651	82007	TS10	-0.107	1940542-34.883	H=270	4.7	212-CH.3	1940542L3.010
6A006-016	82008	TS02	-1.096	1981242-58.419	UP	-11.0	001-CH.2	1981242T1.002
6A006-017	82008	TS02	-1.096	1981242-58.419	H=180	-15.9	001-CH.1	1981242T2.002
6A006-018	82008	TS02	-1.096	1981242-58.419	H=270	31.5	001-CH.3	1981242T3.002
6A007-019	82008	TS03	-1.135	1981242-56.075	UP	26.3	002-CH.2	1981242T1.003
6A007-020	82008	TS03	-1.135	1981242-56.075	H=0	14.8	002-CH.1	1981242T2.003
6A007-021	82008	TS03	-1.135	1981242-56.075	H=90	-39.6	002-CH.3	1981242T3.003
6A008-022	82008	TS04	-0.970	1981242-56.395	UP	-17.5	003-CH.2	1981242T1.004
6A008-023	82008	TS04	-0.970	1981242-56.395	H=180	18.6	003-CH.1	1981242T2.004
6A008-024	82008	TS04	-0.970	1981242-56.395	H=270	26.1	003-CH.3	1981242T3.004
6A009-025	82008	TS05	-1.088	1981242-56.587	UP	-19.2	004-CH.2	1981242T1.005
6A009-026	82008	TS05	-1.088	1981242-56.587	H=0	-23.4	004-CH.1	1981242T2.005
6A009-027	82008	TS05	-1.088	1981242-56.587	H=90	28.6	004-CH.3	1981242T3.005
6A010-028	82008	TS06	-1.001	1981242-56.409	UP	26.2	005-CH.2	1981242T1.006
6A010-029	82008	TS06	-1.001	1981242-56.409	H=0	-26.1	005-CH.1	1981242T2.006
6A010-030	82008	TS06	-1.001	1981242-56.409	H=90	31.7	005-CH.3	1981242T3.006
6A011-031	82008	TS07	-1.050	1981242-56.130	UP	19.9	006-CH.2	1981242T1.007
6A011-032	82008	TS07	-1.050	1981242-56.130	H=180	32.9	006-CH.1	1981242T2.007
6A011-033	82008	TS07	-1.050	1981242-56.130	H=270	23.6	006-CH.3	1981242T3.007
6A012-034	82008	TS08	-0.891	1981242-58.759	UP	2.2	007-CH.2	1981242T1.008
6A012-035	82008	TS08	-0.891	1981242-58.759	H=180	-4.8	007-CH.1	1981242T2.008
6A012-036	82008	TS08	-0.891	1981242-58.759	H=270	-3.1	007-CH.3	1981242T3.008
6A013-037	82008	TS11	-0.838	1981243-02.817	UP	-2.1	008-CH.2	1981243B1.011
6A013-038	82008	TS11	-0.838	1981243-02.817	H=0	1.9	008-CH.1	1981243B2.011
6A013-039	82008	TS11	-0.838	1981243-02.817	H=90	-1.9	008-CH.3	1981243B3.011
6A014-040	82009	TS02	-1.096	1981243-18.579*UP		4.0	001-CH.2	1981242T1.002
6A014-041	82009	TS02	-1.096	1981243-18.579*H=180		2.0	001-CH.1	1981242T2.002
6A014-042	82009	TS02	-1.096	1981243-18.579*H=270		6.8	001-CH.3	1981242T3.002

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name IEM	of Tape USGS
6A015-043	82009	TS03	-1.135	1981243-16.870	*UP	10.3	002-CH.2	1981242T1.003
6A015-044	82009	TS03	-1.135	1981243-16.870	*H=0	-8.7	002-CH.1	1981242T2.003
6A015-045	82009	TS03	-1.135	1981243-16.870	*H=90	-9.6	002-CH.3	1981242T3.003
6A016-046	82009	TS04	-0.970	1981243-17.195	*UP	-8.0	003-CH.2	1981242T1.004
6A016-047	82009	TS04	-0.970	1981243-17.195	*H=180	-12.3	003-CH.1	1981242T2.004
6A016-048	82009	TS04	-0.970	1981243-17.195	*H=270	13.4	003-CH.3	1981242T3.004
6A017-049	82009	TS05	-1.088	1981243-17.062	*UP	9.9	004-CH.2	1981242T1.005
6A017-050	82009	TS05	-1.088	1981243-17.062	*H=0	10.3	004-CH.1	1981242T2.005
6A017-051	82009	TS05	-1.088	1981243-17.062	*H=90	-12.1	004-CH.3	1981242T3.005
6A018-052	82009	TS06	-1.001	1981243-16.574	*UP	10.7	005-CH.2	1981242T1.006
6A018-053	82009	TS06	-1.001	1981243-16.574	*H=0	-9.1	005-CH.1	1981242T2.006
6A018-054	82009	TS06	-1.001	1981243-16.574	*H=90	-33.4	005-CH.3	1981242T3.006
6A019-055	82009	TS07	-1.050	1981243-16.615	*UP	8.0	006-CH.2	1981242T1.007
6A019-056	82009	TS07	-1.050	1981243-16.615	*H=180	-16.6	006-CH.1	1981242T2.007
6A019-057	82009	TS07	-1.050	1981243-16.615	*H=270	17.8	006-CH.3	1981242T3.007
6A020-058	82009	TS08	-0.891	1981243-19.239	*UP	1.5	007-CH.2	1981242T1.008
6A020-059	82009	TS08	-0.891	1981243-19.239	*H=180	-3.7	007-CH.1	1981242T2.008
6A020-060	82009	TS08	-0.891	1981243-19.239	*H=270	-3.2	007-CH.3	1981242T3.008
6A021-061	82009	TS11	-0.838	1981243-22.017	*UP	1.7	008-CH.2	1981243B1.011
6A021-062	82009	TS11	-0.838	1981243-22.017	*H=0	-1.3	008-CH.1	1981243B2.011
6A021-063	82009	TS11	-0.838	1981243-22.017	*H=90	-1.4	008-CH.3	1981243B3.011
6A022-064	82012	TS02	-1.144	2061011-06.456	UP	1.5	009-CH.2	2061011C1.002
6A022-065	82012	TS02	-1.144	2061011-06.456	H=180	2.8	009-CH.1	2061011C2.002
6A022-066	82012	TS02	-1.144	2061011-06.456	H=270	-2.2	009-CH.3	2061011C3.002
6A023-067	82012	TS04	-1.009	2061011-01.421	UP	17.9	010-CH.2	2061011A1.004
6A023-068	82012	TS04	-1.009	2061011-01.421	H=180	-12.9	010-CH.1	2061011A2.004
6A023-069	82012	TS04	-1.009	2061011-01.421	H=270	-12.7	010-CH.3	2061011A3.004
6A024-070	82012	TS05	-1.130	2061011-02.530	UP	-6.5	011-CH.2	2061011B1.005
6A024-071	82012	TS05	-1.130	2061011-02.530	H=0	11.8	011-CH.1	2061011B2.005
6A024-072	82012	TS05	-1.130	2061011-02.530	H=90	-6.6	011-CH.3	2061011B3.005
6A025-073	82012	TS06	-1.007	2061011-02.403	UP	5.6	012-CH.2	2061011B1.006
6A025-074	82012	TS06	-1.007	2061011-02.403	H=0	-21.3	012-CH.1	2061011B2.006
6A025-075	82012	TS06	-1.007	2061011-02.403	H=90	11.4	012-CH.3	2061011B3.006
6A026-076	82012	TS07	-1.088	2061011-00.822	UP	17.1	013-CH.2	2061011A1.007
6A026-077	82012	TS07	-1.088	2061011-00.822	H=180	13.7	013-CH.1	2061011A2.007
6A026-078	82012	TS07	-1.088	2061011-00.822	H=270	-10.1	013-CH.3	2061011A3.007
6A027-079	82012	TS08	-0.834	2061011-02.756	UP	1.9	016-CH.2	2061011B1.008
6A027-080	82012	TS08	-0.834	2061011-02.756	H=180	-3.5	016-CH.1	2061011B2.008
6A027-081	82012	TS08	-0.834	2061011-02.756	H=270	-3.4	016-CH.3	2061011B3.008
6A028-082	82012	TS11	-0.890	2061011-01.715	UP	-5.4	015-CH.2	2052359L1.011
6A028-083	82012	TS11	-0.890	2061011-01.715	H=0	-5.9	015-CH.1	2052359L2.011
6A028-084	82012	TS11	-0.890	2061011-01.715	H=90	-10.3	015-CH.3	2052359L3.011
6A029-085	82012	TS12	-1.086	2061011-02.039	UP	4.3	014-CH.2	2061011B1.012
6A029-086	82012	TS12	-1.086	2061011-02.039	H=0	13.3	014-CH.1	2061011B2.012
6A029-087	82012	TS12	-1.086	2061011-02.039	H=90	5.8	014-CH.3	2061011B3.012

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File IEM	Name of Tape USGS
6A030-088	82017	TS04	-1.020	2210123-42.945	UP	-4.4	188-CH.2	221012301.004
6A030-089	82017	TS04	-1.020	2210123-42.945	H=180	8.5	188-CH.1	221012302.004
6A030-090	82017	TS04	-1.020	2210123-42.945	H=270	-11.1	188-CH.3	221012303.004
6A031-091	82017	TS05	-1.340	2210123-42.780	UP	-8.3	143-CH.2	221012301.005
6A031-092	82017	TS05	-1.340	2210123-42.780	H=0	-6.8	143-CH.1	221012302.005
6A031-093	82017	TS05	-1.340	2210123-42.780	H=90	10.5	143-CH.3	221012303.005
6A032-094	82017	TS06	-0.977	2210123-42.913	UP	5.3	144-CH.2	221012301.006
6A032-095	82017	TS06	-0.977	2210123-42.913	H=0	-6.6	144-CH.1	221012302.006
6A032-096	82017	TS06	-0.977	2210123-42.913	H=90	-6.5	144-CH.3	221012303.006
6A033-097	82017	TS07	-1.145	2210123-42.990	UP	4.3	189-CH.2	221012301.007
6A033-098	82017	TS07	-1.145	2210123-42.990	H=180	11.2	189-CH.1	221012302.007
6A033-099	82017	TS07	-1.145	2210123-42.990	H=270	-13.3	189-CH.3	221012303.007
6A034-100	82025	TS04	-1.000	2431958-43.345	UP	8.4	139-CH.2	243195801.004
6A034-101	82025	TS04	-1.000	2431958-43.345	H=180	8.4	139-CH.1	243195802.004
6A034-102	82025	TS04	-1.000	2431958-43.345	H=270	13.2	139-CH.3	243195803.004
6A035-103	82025	TS05	-1.180	2431958-43.975	UP	-11.6	141-CH.2	2431958P1.005
6A035-104	82025	TS05	-1.180	2431958-43.975	H=0	-22.4	141-CH.1	2431958P2.005
6A035-105	82025	TS05	-1.180	2431958-43.975	H=90	-14.7	141-CH.3	2431958P3.005
6A036-106	82025	TS06	-0.900	2431958-44.960	UP	9.9	198-CH.2	2431958P1.006
6A036-107	82025	TS06	-0.900	2431958-44.960	H=0	-17.3	198-CH.1	2431958P2.006
6A036-108	82025	TS06	-0.900	2431958-44.960	H=90	-12.2	198-CH.3	2431958P3.006
6A037-109	82025	TS07	-1.100	2431958-44.070	UP	-11.9	142-CH.2	2431958P1.007
6A037-110	82025	TS07	-1.100	2431958-44.070	H=180	-29.3	142-CH.1	2431958P2.007
6A037-111	82025	TS07	-1.100	2431958-44.070	H=270	12.2	142-CH.3	2431958P3.007
6A038-112	82025	TS09	-0.991	2431958-44.079	UP	8.8	140-CH.2	2431958P1.009
6A038-113	82025	TS09	-0.991	2431958-44.079	H=270	-8.2	140-CH.1	2431958P2.009
6A038-114	82025	TS09	-0.991	2431958-44.079	H=180	-13.2	140-CH.3	2431958P3.009
6A039-115	82033	TS04	-1.058	2571242-13.423	UP	-6.6	190-CH.2	2570042E1.004
6A039-116	82033	TS04	-1.058	2571242-13.423	H=180	7.7	190-CH.1	2570042E2.004
6A039-117	82033	TS04	-1.058	2571242-13.423	H=270	-16.9	190-CH.3	2570042E3.004
6A040-118	82033	TS05	-1.300	2571242-13.775	UP	-9.2	199-CH.2	2571242E1.005
6A040-119	82033	TS05	-1.300	2571242-13.775	H=0	9.4	199-CH.1	2571242E2.005
6A040-120	82033	TS05	-1.300	2571242-13.775	H=90	19.5	199-CH.3	2571242E3.005
6A041-121	82033	TS06	-0.821	2571242-13.669	UP	-9.9	145-CH.2	2571242E1.006
6A041-122	82033	TS06	-0.821	2571242-13.669	H=0	-12.4	145-CH.1	2571242E2.006
6A041-123	82033	TS06	-0.821	2571242-13.669	H=90	17.5	145-CH.3	2571242E3.006
6A042-124	82033	TS07	-1.182	2571242-13.998	UP	8.4	200-CH.2	2571242E1.007
6A042-125	82033	TS07	-1.182	2571242-13.998	H=180	-15.1	200-CH.1	2571242E2.007
6A042-126	82033	TS07	-1.182	2571242-13.998	H=270	22.5	200-CH.3	2571242E3.007
6A043-127	82033	TS09	-0.954	2571242-13.771	UP	7.7	201-CH.2	2571242E1.009
6A043-128	82033	TS09	-0.954	2571242-13.771	H=270	-3.7	201-CH.1	2571242E2.009
6A043-129	82033	TS09	-0.954	2571242-13.771	H=180	-2.5	201-CH.3	2571242E3.009
6A044-130	82046	TS02	-1.465	2922046-12.100	UP	5.0	018-CH.2	2922046E1.002
6A044-131	82046	TS02	-1.465	2922046-12.100	H=180	-8.1	018-CH.1	2922046E2.002
6A044-132	82046	TS02	-1.465	2922046-12.100	H=270	-7.9	018-CH.3	2922046E3.002

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A045-133	82046	TS03	0.040	2922046-09.755	UP	8.9	019-CH.2	2922046D1.003
6A045-134	82046	TS03	0.040	2922046-09.755	H=0	-10.2	019-CH.1	2922046D2.003
6A045-135	82046	TS03	0.040	2922046-09.755	H=90	-13.7	019-CH.3	2922046D3.003
6A046-136	82046	TS04	0.100	2922046-03.740	UP	-15.5	020-CH.2	2922046B1.004
6A046-137	82046	TS04	0.100	2922046-03.740	H=180	-19.4	020-CH.1	2922046B2.004
6A046-138	82046	TS04	0.100	2922046-03.740	H=270	-29.5	020-CH.3	2922046B3.004
6A047-139	82046	TS05	-0.047	2922046-07.638	UP	-14.4	021-CH.2	2922046C1.005
6A047-140	82046	TS05	-0.047	2922046-07.638	H=0	28.3	021-CH.1	2922046C2.005
6A047-141	82046	TS05	-0.047	2922046-07.638	H=90	20.0	021-CH.3	2922046C3.005
6A048-142	82046	TS06	0.085	2922046-05.280	UP	-13.5	022-CH.2	2922046B1.006
6A048-143	82046	TS06	0.085	2922046-05.280	H=0	23.7	022-CH.1	2922046B2.006
6A048-144	82046	TS06	0.085	2922046-05.280	H=90	16.5	022-CH.3	2922046B3.006
6A049-145	82046	TS07	-1.368	2922046-04.132	UP	12.0	023-CH.2	2922046B1.007
6A049-146	82046	TS07	-1.368	2922046-04.132	H=180	23.9	023-CH.1	2922046B2.007
6A049-147	82046	TS07	-1.368	2922046-04.132	H=270	20.4	023-CH.3	2922046B3.007
6A050-148	82046	TS09	-0.766	2922046-03.234	UP	-20.0	024-CH.2	2922046B1.009
6A050-149	82046	TS09	-0.766	2922046-03.234	H=270	13.5	024-CH.1	2922046B2.009
6A050-150	82046	TS09	-0.766	2922046-03.234	H=180	18.7	024-CH.3	2922046B3.009
6A051-151	82046	TS10	0.000	2922046-03.080	UP	26.7	202-CH.2	2922046B1.010
6A051-152	82046	TS10	0.000	2922046-03.080	H=180	56.6	202-CH.1	2922046B2.010
6A051-153	82046	TS10	0.000	2922046-03.080	H=270	-37.0	202-CH.3	2922046B3.010
6A052-154	82046	TS12	-0.148	2922045-59.737	UP	-134.0	017-CH.2	2922045T1.012
6A052-155	82046	TS12	-0.148	2922045-59.737	H=0	217.0	017-CH.1	2922045T2.012
6A052-156	82046	TS12	-0.148	2922045-59.737	H=90	-184.0	017-CH.3	2922045T3.012
6A053-157	82048	TS12	-0.150	2922049-53.335	UP	-4.0	083-CH.2	2922049R1.012
6A053-158	82048	TS12	-0.150	2922049-53.335	H=0	-9.1	083-CH.1	2922049R2.012
6A053-159	82048	TS12	-0.150	2922049-53.335	H=90	7.5	083-CH.3	2922049R3.012
6A054-160	82049	TS12	-0.150	2922050-38.135	UP	-6.2	084-CH.2	2922050M1.012
6A054-161	82049	TS12	-0.150	2922050-38.135	H=0	10.6	084-CH.1	2922050M2.012
6A054-162	82049	TS12	-0.150	2922050-38.135	H=90	12.2	084-CH.3	2922050M3.012
6A055-163	82050	TS12	-0.150	2922053-30.935	UP	-13.9	085-CH.2	2922053K1.012
6A055-164	82050	TS12	-0.150	2922053-30.935	H=0	-14.0	085-CH.1	2922053K2.012
6A055-165	82050	TS12	-0.150	2922053-30.935	H=90	-10.6	085-CH.3	2922053K3.012
6A056-166	82101	TS12	-0.150	2922111-47.890	UP	4.6	086-CH.2	2922111P1.012
6A056-167	82101	TS12	-0.150	2922111-47.890	H=0	-7.0	086-CH.1	2922111P2.012
6A056-168	82101	TS12	-0.150	2922111-47.890	H=90	7.5	086-CH.3	2922111P3.012
6A057-169	82102	TS12	-0.150	2922112-59.890	UP	-2.8	087-CH.2	2922112T1.012
6A057-170	82102	TS12	-0.150	2922112-59.890	H=0	-2.7	087-CH.1	2922112T2.012
6A057-171	82102	TS12	-0.150	2922112-59.890	H=90	-2.8	087-CH.3	2922112T3.012
6A058-172	82051	TS12	-0.150	2922116-52.210	UP	5.3	088-CH.2	2922116R1.012
6A058-173	82051	TS12	-0.150	2922116-52.210	H=0	-7.1	088-CH.1	2922116R2.012
6A058-174	82051	TS12	-0.150	2922116-52.210	H=90	-9.4	088-CH.3	2922116R3.012
6A059-175	82103	TS12	-0.150	2922138-12.210	UP	6.8	089-CH.2	2922138E1.012
6A059-176	82103	TS12	-0.150	2922138-12.210	H=0	6.6	089-CH.1	2922138E2.012
6A059-177	82103	TS12	-0.150	2922138-12.210	H=90	6.4	089-CH.3	2922138E3.012

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A060-178	82104	TS12	-0.155	2922158-16.045	UP	-11.8	090-CH.2	2922158F1.012
6A060-179	82104	TS12	-0.155	2922158-16.045	H=0	15.6	090-CH.1	2922158F2.012
6A060-180	82104	TS12	-0.155	2922158-16.045	H=90	-6.4	090-CH.3	2922158F3.012
6A061-181	82117	TS12	-0.155	2922202-03.400	UP	3.8	091-CH.2	2922202G1.012
6A061-182	82117	TS12	-0.155	2922202-03.400	H=0	-6.5	091-CH.1	2922202G2.012
6A061-183	82117	TS12	-0.155	2922202-03.400	H=90	6.0	091-CH.3	2922202G3.012
6A062-184	82052	TS12	-0.155	2922216-59.880	UP	21.3	092-CH.2	2922216T1.012
6A062-185	82052	TS12	-0.155	2922216-59.880	H=0	50.4	092-CH.1	2922216T2.012
6A062-186	82052	TS12	-0.155	2922216-59.880	H=90	-39.0	092-CH.3	2922216T3.012
6A063-187	82105	TS12	-0.155	2922238-57.960	UP	3.8	093-CH.2	2922238T1.012
6A063-188	82105	TS12	-0.155	2922238-57.960	H=0	6.4	093-CH.1	2922238T2.012
6A063-189	82105	TS12	-0.155	2922238-57.960	H=90	-4.2	093-CH.3	2922238T3.012
6A064-190	82053	TS12	-0.155	2922335-59.075	UP	4.7	094-CH.2	2922335T1.012
6A064-191	82053	TS12	-0.155	2922335-59.075	H=0	-5.3	094-CH.1	2922335T2.012
6A064-192	82053	TS12	-0.155	2922335-59.075	H=90	7.9	094-CH.3	2922335T3.012
6A065-193	82054	TS12	-0.155	2922339-55.235	UP	8.1	095-CH.2	2922339S1.012
6A065-194	82054	TS12	-0.155	2922339-55.235	H=0	16.3	095-CH.1	2922339S2.012
6A065-195	82054	TS12	-0.155	2922339-55.235	H=90	10.0	095-CH.3	2922339S3.012
6A066-196	82106	TS12	-0.155	2930009-15.550	UP	4.6	096-CH.2	2930009F1.012
6A066-197	82106	TS12	-0.155	2930009-15.550	H=0	5.8	096-CH.1	2930009F2.012
6A066-198	82106	TS12	-0.155	2930009-15.550	H=90	-3.8	096-CH.3	2930009F3.012
6A067-199	82107	TS12	-0.155	2930014-47.710	UP	-3.2	097-CH.2	2930014P1.012
6A067-200	82107	TS12	-0.155	2930014-47.710	H=0	3.8	097-CH.1	2930014P2.012
6A067-201	82107	TS12	-0.155	2930014-47.710	H=90	4.1	097-CH.3	2930014P3.012
6A068-202	82108	TS12	-0.155	2930043-27.385	UP	12.5	098-CH.2	2930043J1.012
6A068-203	82108	TS12	-0.155	2930043-27.385	H=0	16.0	098-CH.1	2930043J2.012
6A068-204	82108	TS12	-0.155	2930043-27.385	H=90	-9.9	098-CH.3	2930043J3.012
6A069-205	82109	TS12	-0.155	2930118-53.140	UP	-4.3	099-CH.2	2930118R1.012
6A069-206	82109	TS12	-0.155	2930118-53.140	H=0	3.5	099-CH.1	2930118R2.012
6A069-207	82109	TS12	-0.155	2930118-53.140	H=90	-6.0	099-CH.3	2930118R3.012
6A070-208	82110	TS12	-0.155	2930131-57.455	UP	6.2	100-CH.2	2930131T1.012
6A070-209	82110	TS12	-0.155	2930131-57.455	H=0	-5.3	100-CH.1	2930131T2.012
6A070-210	82110	TS12	-0.155	2930131-57.455	H=90	8.9	100-CH.3	2930131T3.012
6A071-211	82055	TS12	-0.156	2930321-49.434	UP	32.0	101-CH.2	2930321O1.012
6A071-212	82055	TS12	-0.156	2930321-49.434	H=0	-44.1	101-CH.1	2930321O2.012
6A071-213	82055	TS12	-0.156	2930321-49.434	H=90	-37.0	101-CH.3	2930321O3.012
6A072-214	82116	TS12	-0.156	2930330-14.714	UP	3.1	102-CH.2	2930330E1.012
6A072-215	82116	TS12	-0.156	2930330-14.714	H=0	3.5	102-CH.1	2930330E2.012
6A072-216	82116	TS12	-0.156	2930330-14.714	H=90	3.2	102-CH.3	2930330E3.012
6A073-217	82056	TS12	-0.161	2930626-21.709	UP	5.5	103-CH.2	2930626H1.012
6A073-218	82056	TS12	-0.161	2930626-21.709	H=0	-6.0	103-CH.1	2930626H2.012
6A073-219	82056	TS12	-0.161	2930626-21.709	H=90	9.8	103-CH.3	2930626H3.012
6A074-220	82115	TS12	-0.161	2930642-14.344	UP	-1.7	104-CH.2	2930642E1.012
6A074-221	82115	TS12	-0.161	2930642-14.344	H=0	-2.6	104-CH.1	2930642E2.012
6A074-222	82115	TS12	-0.161	2930642-14.344	H=90	-3.1	104-CH.3	2930642E3.012

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A075-223	82111	TS12	-0.166	2931010-14.924	UP	4.5	108-CH.2	2931010E1.012
6A075-224	82111	TS12	-0.166	2931010-14.924	H=0	6.5	108-CH.1	2931010E2.012
6A075-225	82111	TS12	-0.166	2931010-14.924	H=90	11.8	108-CH.3	2931010E3.012
6A076-226	82112	TS12	-0.166	2931016-55.884	UP	-4.6	105-CH.2	2931016S1.012
6A076-227	82112	TS12	-0.166	2931016-55.884	H=0	-4.5	105-CH.1	2931016S2.012
6A076-228	82112	TS12	-0.166	2931016-55.884	H=90	-6.4	105-CH.3	2931016S3.012
6A077-229	82057	TS12	-0.166	2931144-42.434	UP	5.6	106-CH.2	2931144O1.012
6A077-230	82057	TS12	-0.166	2931144-42.434	H=0	11.7	106-CH.1	2931144O2.012
6A077-231	82057	TS12	-0.166	2931144-42.434	H=90	-11.6	106-CH.3	2931144O3.012
6A078-232	82082	TS03	0.010	3342253-51.750	UP	1.9	203-CH.2	3342253R1.003
6A078-233	82082	TS03	0.010	3342253-51.750	H=0	-4.1	203-CH.1	3342253R2.003
6A078-234	82082	TS03	0.010	3342253-51.750	H=90	-3.6	203-CH.3	3342253R3.003
6A079-235	82082	TS04	-0.021	3342253-49.179	UP	8.9	192-CH.2	3342253Q1.004
6A079-236	82082	TS04	-0.021	3342253-49.179	H=180	9.5	192-CH.1	3342253Q2.004
6A079-237	82082	TS04	-0.021	3342253-49.179	H=270	13.2	192-CH.3	3342253Q3.004
6A080-238	82082	TS05	-0.889	3342253-49.736	UP	-5.9	150-CH.2	3342253Q1.005
6A080-239	82082	TS05	-0.889	3342253-49.736	H=0	-11.0	150-CH.1	3342253Q2.005
6A080-240	82082	TS05	-0.889	3342253-49.736	H=90	9.4	150-CH.3	3342253Q3.005
6A081-241	82082	TS07	-2.242	3342253-49.738	UP	-3.9	193-CH.2	3342253Q1.007
6A081-242	82082	TS07	-2.242	3342253-49.738	H=180	5.6	193-CH.1	3342253Q2.007
6A081-243	82082	TS07	-2.242	3342253-49.738	H=270	-10.0	193-CH.3	3342253Q3.007
6A082-244	83028	TS01	0.020	0630403-21.900	UP	-5.6	116-CH.2	0630403H1.001
6A082-245	83028	TS01	0.020	0630403-21.900	H=90	-14.2	116-CH.1	0630403H2.001
6A082-246	83028	TS01	0.020	0630403-21.900	H=180	-11.3	116-CH.3	0630403H3.001
6A083-247	83028	TS02	-0.020	0630403-21.340	UP	6.2	112-CH.2	0630403H1.002
6A083-248	83028	TS02	-0.020	0630403-21.340	H=180	-12.2	112-CH.1	0630403H2.002
6A083-249	83028	TS02	-0.020	0630403-21.340	H=270	-11.2	112-CH.3	0630403H3.002
6A084-250	83028	TS03	-0.320	0630403-21.550	UP	-9.2	113-CH.2	0630403H1.003
6A084-251	83028	TS03	-0.320	0630403-21.550	H=0	-12.9	113-CH.1	0630403H2.003
6A084-252	83028	TS03	-0.320	0630403-21.550	H=90	17.0	113-CH.3	0630403H3.003
6A085-253	83028	TS07	-0.050	0630403-22.685	UP	-7.1	114-CH.2	0630403H1.007
6A085-254	83028	TS07	-0.050	0630403-22.685	H=180	-10.2	114-CH.1	0630403H2.007
6A085-255	83028	TS07	-0.050	0630403-22.685	H=270	-6.4	114-CH.3	0630403H3.007
6A086-256	83028	TS12	-0.006	0630403-29.944	UP	1.2	115-CH.2	0630012P1.012
6A086-257	83028	TS12	-0.006	0630403-29.944	H=0	2.2	115-CH.1	0630012P2.012
6A086-258	83028	TS12	-0.006	0630403-29.944	H=90	-1.7	115-CH.3	0630012P3.012
6A087-259	83064	TS01	0.036	1481620-34.436	UP	2.5	117-CH.2	1481620L1.001
6A087-260	83064	TS01	0.036	1481620-34.436	H=90	5.1	117-CH.1	1481620L2.001
6A087-261	83064	TS01	0.036	1481620-34.436	H=180	-6.2	117-CH.3	1481620L3.001
6A088-262	83064	TS02	-0.060	1481620-33.410	UP	-4.2	118-CH.2	1481620L1.002
6A088-263	83064	TS02	-0.060	1481620-33.410	H=180	-12.0	118-CH.1	1481620L2.002
6A088-264	83064	TS02	-0.060	1481620-33.410	H=270	12.6	118-CH.3	1481620L3.002
6A089-265	83064	TS03	-0.020	1481620-30.800	UP	-7.0	119-CH.2	1481620K1.003
6A089-266	83064	TS03	-0.020	1481620-30.800	H=0	-18.4	119-CH.1	1481620K2.003
6A089-267	83064	TS03	-0.020	1481620-30.800	H=90	15.5	119-CH.3	1481620K3.003

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A090-268	83064	TS07	-0.067	1481620-31.023	UP	-29.1	120-CH.2	1481620K1.007
6A090-269	83064	TS07	-0.067	1481620-31.023	H=180	-31.2	120-CH.1	1481620K2.007
6A090-270	83064	TS07	-0.067	1481620-31.023	H=270	40.4	120-CH.3	1481620K3.007
6A091-271	83064	TS08	0.092	1481620-31.552	UP	-9.9	121-CH.2	1481620K1.008
6A091-272	83064	TS08	0.092	1481620-31.552	H=180	-11.3	121-CH.1	1481620K2.008
6A091-273	83064	TS08	0.092	1481620-31.552	H=270	-8.2	121-CH.3	1481620K3.008
6A092-274	83064	TS10	-0.058	1481620-33.902	UP	-7.6	122-CH.2	1481620L1.010
6A092-275	83064	TS10	-0.058	1481620-33.902	H=180	11.5	122-CH.1	1481620L2.010
6A092-276	83064	TS10	-0.058	1481620-33.902	H=270	7.0	122-CH.3	1481620L3.010
6A093-277	83064	TS16	0.017	1481620-35.903	UP	-1.0	123-CH.2	1481620L1.016
6A093-278	83064	TS16	0.017	1481620-35.903	H=180	-6.5	123-CH.1	1481620L2.016
6A093-279	83064	TS16	0.017	1481620-35.903	H=270	3.2	123-CH.3	1481620L3.016
6A094-280	83064	TS17	0.010	1481620-35.470	UP	-0.4	124-CH.2	1481620L1.017
6A094-281	83064	TS17	0.010	1481620-35.470	H=180	-6.5	124-CH.1	1481620L2.017
6A094-282	83064	TS17	0.010	1481620-35.470	H=270	-3.7	124-CH.3	1481620L3.017
6A095-283	83064	TS18	-0.140	1481620-34.800	UP	2.4	125-CH.2	1481620L1.018
6A095-284	83064	TS18	-0.140	1481620-34.800	H=0	13.9	125-CH.1	1481620L2.018
6A095-285	83064	TS18	-0.140	1481620-34.800	H=90	-9.2	125-CH.3	1481620L3.018
6A096-286	83077	TS01	0.026	2201508-57.206	UP	12.1	166-CH.2	2201508T1.001
6A096-287	83077	TS01	0.026	2201508-57.206	H=90	-29.6	166-CH.1	2201508T2.001
6A096-288	83077	TS01	0.026	2201508-57.206	H=180	-25.3	166-CH.3	2201508T3.001
6A097-289	83077	TS03	-0.070	2201508-58.730	UP	-2.1	167-CH.2	2201508T1.003
6A097-290	83077	TS03	-0.070	2201508-58.730	H=0	-2.6	167-CH.1	2201508T2.003
6A097-291	83077	TS03	-0.070	2201508-58.730	H=90	3.1	167-CH.3	2201508T3.003
6A098-292	83077	TS15	0.172	2201508-56.722	UP	-6.1	163-CH.2	2201508S1.015
6A098-293	83077	TS15	0.172	2201508-56.722	H=90	-12.6	163-CH.1	2201508S2.015
6A098-294	83077	TS15	0.172	2201508-56.722	H=180	5.1	163-CH.3	2201508S3.015
6A099-295	83077	TS18	-0.775	2201508-56.415	UP	-5.2	164-CH.2	2201508S1.018
6A099-296	83077	TS18	-0.775	2201508-56.415	H=0	-13.4	164-CH.1	2201508S2.018
6A099-297	83077	TS18	-0.775	2201508-56.415	H=90	20.3	164-CH.3	2201508S3.018
6A100-298	83077	TS19	0.205	2201508-56.315	UP	-4.5	165-CH.2	2201508S1.019
6A100-299	83077	TS19	0.205	2201508-56.315	H=0	-4.1	165-CH.1	2201508S2.019
6A100-300	83077	TS19	0.205	2201508-56.315	H=90	-10.8	165-CH.3	2201508S3.019
6A101-301	83079	TS01	0.029	2212213-27.969	UP	-4.7	032-CH.2	2212213J1.001
6A101-302	83079	TS01	0.029	2212213-27.969	H=90	-11.4	032-CH.1	2212213J2.001
6A101-303	83079	TS01	0.029	2212213-27.969	H=180	-7.7	032-CH.3	2212213J3.001
6A102-304	83079	TS02	-0.143	2212213-27.667	UP	5.5	031-CH.2	2212213J1.002
6A102-305	83079	TS02	-0.143	2212213-27.667	H=180	-12.1	031-CH.1	2212213J2.002
6A102-306	83079	TS02	-0.143	2212213-27.667	H=270	13.3	031-CH.3	2212213J3.002
6A103-307	83079	TS03	-0.070	2212213-28.740	UP	5.7	030-CH.2	2212213J1.003
6A103-308	83079	TS03	-0.070	2212213-28.740	H=0	-16.5	030-CH.1	2212213J2.003
6A103-309	83079	TS03	-0.070	2212213-28.740	H=90	10.3	030-CH.3	2212213J3.003
6A104-310	83079	TS07	-0.760	2212213-33.320	UP	-4.0	029-CH.2	2212213L1.007
6A104-311	83079	TS07	-0.760	2212213-33.320	H=180	-7.9	029-CH.1	2212213L2.007
6A104-312	83079	TS07	-0.760	2212213-33.320	H=270	-5.1	029-CH.3	2212213L3.007

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name IEM	of Tape USGS
6A105-313	83079	TS15	0.170	2212213-26.810	UP	-2.0	028-CH.2	2212213I1.015
6A105-314	83079	TS15	0.170	2212213-26.810	H=90	-6.5	028-CH.1	2212213I2.015
6A105-315	83079	TS15	0.170	2212213-26.810	H=180	3.8	028-CH.3	2212213I3.015
6A106-316	83079	TS16	-0.194	2212213-28.496	UP	-3.2	027-CH.2	2212213J1.016
6A106-317	83079	TS16	-0.194	2212213-28.496	H=180	5.6	027-CH.1	2212213J2.016
6A106-318	83079	TS16	-0.194	2212213-28.496	H=270	13.2	027-CH.3	2212213J3.016
6A107-319	83079	TS18	-0.450	2212213-27.560	UP	3.3	025-CH.2	2212213J1.018
6A107-320	83079	TS18	-0.450	2212213-27.560	H=0	-12.1	025-CH.1	2212213J2.018
6A107-321	83079	TS18	-0.450	2212213-27.560	H=90	-11.6	025-CH.3	2212213J3.018
6A108-322	83079	TS19	0.210	2212213-27.160	UP	1.1	026-CH.2	2212213I1.019
6A108-323	83079	TS19	0.210	2212213-27.160	H=0	-2.5	026-CH.1	2212213I2.019
6A108-324	83079	TS19	0.210	2212213-27.160	H=90	6.0	026-CH.3	2212213I3.019
6A109-325	83081	TS01	0.030	2250552-33.040	UP	4.9	168-CH.2	2250552L1.001
6A109-326	83081	TS01	0.030	2250552-33.040	H=90	6.8	168-CH.1	2250552L2.001
6A109-327	83081	TS01	0.030	2250552-33.040	H=180	10.8	168-CH.3	2250552L3.001
6A110-328	83081	TS03	-0.080	2250552-34.360	UP	3.1	169-CH.2	2250552L1.003
6A110-329	83081	TS03	-0.080	2250552-34.360	H=0	6.2	169-CH.1	2250552L2.003
6A110-330	83081	TS03	-0.080	2250552-34.360	H=90	3.8	169-CH.3	2250552L3.003
6A111-331	83081	TS15	0.200	2250552-32.770	UP	1.5	170-CH.2	2250552K1.015
6A111-332	83081	TS15	0.200	2250552-32.770	H=90	3.7	170-CH.1	2250552K2.015
6A111-333	83081	TS15	0.200	2250552-32.770	H=180	4.7	170-CH.3	2250552K3.015
6A112-334	83081	TS16	-0.220	2250552-33.800	UP	-3.0	171-CH.2	2250552L1.016
6A112-335	83081	TS16	-0.220	2250552-33.800	H=180	13.1	171-CH.1	2250552L2.016
6A112-336	83081	TS16	-0.220	2250552-33.800	H=270	-7.7	171-CH.3	2250552L3.016
6A113-337	83081	TS17	-0.110	2250552-33.350	UP	3.9	172-CH.2	2250552L1.017
6A113-338	83081	TS17	-0.110	2250552-33.350	H=180	7.6	172-CH.1	2250552L2.017
6A113-339	83081	TS17	-0.110	2250552-33.350	H=270	-3.7	172-CH.3	2250552L3.017
6A114-340	83081	TS18	-0.893	2250552-33.037	UP	8.3	173-CH.2	2250552L1.018
6A114-341	83081	TS18	-0.893	2250552-33.037	H=0	-21.3	173-CH.1	2250552L2.018
6A114-342	83081	TS18	-0.893	2250552-33.037	H=90	10.0	173-CH.3	2250552L3.018
6A115-343	83081	TS19	0.240	2250552-32.360	UP	1.2	174-CH.2	2250552K1.019
6A115-344	83081	TS19	0.240	2250552-32.360	H=0	2.9	174-CH.1	2250552K2.019
6A115-345	83081	TS19	0.240	2250552-32.360	H=90	-3.1	174-CH.3	2250552K3.019
6A116-346	83099	TS01	0.090	2670308-04.920	UP	18.4	033-CH.2	2670308B1.001
6A116-347	83099	TS01	0.090	2670308-04.920	H=90	-44.9	033-CH.1	2670308B2.001
6A116-348	83099	TS01	0.090	2670308-04.920	H=180	55.2	033-CH.3	2670308B3.001
6A117-349	83099	TS02	0.233	2670308-05.593	UP	-38.9	034-CH.2	2670308B1.002
6A117-350	83099	TS02	0.233	2670308-05.593	H=180	-114.0	034-CH.1	2670308B2.002
6A117-351	83099	TS02	0.233	2670308-05.593	H=270	-59.6	034-CH.3	2670308B3.002
6A118-352	83099	TS03	0.079	2670308-04.779	UP	-9.9	035-CH.2	2670308B1.003
6A118-353	83099	TS03	0.079	2670308-04.779	H=0	25.3	035-CH.1	2670308B2.003
6A118-354	83099	TS03	0.079	2670308-04.779	H=90	-14.5	035-CH.3	2670308B3.003
6A119-355	83099	TS07	-0.115	2670308-08.935	UP	-5.1	036-CH.2	2670308C1.007
6A119-356	83099	TS07	-0.115	2670308-08.935	H=180	10.6	036-CH.1	2670308C2.007
6A119-357	83099	TS07	-0.115	2670308-08.935	H=270	9.4	036-CH.3	2670308C3.007

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A120-358	83099	TS10	-0.088	2670308-12.642	UP	-2.7	037-CH.2	2670308E1.010
6A120-359	83099	TS10	-0.088	2670308-12.642	H=180	3.3	037-CH.1	2670308E2.010
6A120-360	83099	TS10	-0.088	2670308-12.642	H=270	4.3	037-CH.3	2670308E3.010
6A121-361	83099	TS15	0.123	2670308-04.203	UP	7.4	038-CH.2	2670308B1.015
6A121-362	83099	TS15	0.123	2670308-04.203	H=90	11.5	038-CH.1	2670308B2.015
6A121-363	83099	TS15	0.123	2670308-04.203	H=180	-17.2	038-CH.3	2670308B3.015
6A122-364	83099	TS16	0.122	2670308-04.702	UP	-6.4	039-CH.2	2670308B1.016
6A122-365	83099	TS16	0.122	2670308-04.702	H=180	-36.1	039-CH.1	2670308B2.016
6A122-366	83099	TS16	0.122	2670308-04.702	H=270	-10.7	039-CH.3	2670308B3.016
6A123-367	83099	TS17	-0.006	2670308-05.684	UP	-7.9	040-CH.2	2670308B1.017
6A123-368	83099	TS17	-0.006	2670308-05.684	H=180	-20.6	040-CH.1	2670308B2.017
6A123-369	83099	TS17	-0.006	2670308-05.684	H=270	-17.4	040-CH.3	2670308B3.017
6A124-370	83099	TS18	-0.616	2670308-05.634	UP	10.5	041-CH.2	2670308B1.018
6A124-371	83099	TS18	-0.616	2670308-05.634	H=0	-106.0	041-CH.1	2670308B2.018
6A124-372	83099	TS18	-0.616	2670308-05.634	H=90	58.8	041-CH.3	2670308B3.018
6A125-373	83099	TS19	0.150	2670308-05.640	UP	-5.5	042-CH.2	2670308B1.019
6A125-374	83099	TS19	0.150	2670308-05.640	H=0	7.1	042-CH.1	2670308B2.019
6A125-375	83099	TS19	0.150	2670308-05.640	H=90	-3.7	042-CH.3	2670308B3.019
6A126-376	83103	TS01	0.100	2690053-05.030	UP	-3.6	175-CH.2	2690053B1.001
6A126-377	83103	TS01	0.100	2690053-05.030	H=90	6.4	175-CH.1	2690053B2.001
6A126-378	83103	TS01	0.100	2690053-05.030	H=180	-10.1	175-CH.3	2690053B3.001
6A127-379	83103	TS02	0.257	2690053-04.897	UP	-17.8	176-CH.2	2690053B1.002
6A127-380	83103	TS02	0.257	2690053-04.897	H=180	-56.5	176-CH.1	2690053B2.002
6A127-381	83103	TS02	0.257	2690053-04.897	H=270	-32.5	176-CH.3	2690053B3.002
6A128-382	83103	TS03	0.084	2690053-06.324	UP	2.9	204-CH.2	2690053B1.003
6A128-383	83103	TS03	0.084	2690053-06.324	H=0	-5.9	204-CH.1	2690053B2.003
6A128-384	83103	TS03	0.084	2690053-06.324	H=90	3.8	204-CH.3	2690053B3.003
6A129-385	83103	TS15	0.135	2690053-04.575	UP	2.4	177-CH.2	2690053B1.015
6A129-386	83103	TS15	0.135	2690053-04.575	H=90	3.9	177-CH.1	2690053B2.015
6A129-387	83103	TS15	0.135	2690053-04.575	H=180	-3.1	177-CH.3	2690053B3.015
6A130-388	83103	TS16	0.136	2690053-05.706	UP	-2.1	205-CH.2	2690053B1.016
6A130-389	83103	TS16	0.136	2690053-05.706	H=180	-12.6	205-CH.1	2690053B2.016
6A130-390	83103	TS16	0.136	2690053-05.706	H=270	2.7	205-CH.3	2690053B3.016
6A131-391	83103	TS17	-0.009	2690053-05.921	UP	1.2	178-CH.2	2690053B1.017
6A131-392	83103	TS17	-0.009	2690053-05.921	H=180	-4.8	178-CH.1	2690053B2.017
6A131-393	83103	TS17	-0.009	2690053-05.921	H=270	-5.4	178-CH.3	2690053B3.017
6A132-394	83103	TS18	-0.672	2690053-05.648	UP	3.9	179-CH.2	2690053B1.018
6A132-395	83103	TS18	-0.672	2690053-05.648	H=0	-30.1	179-CH.1	2690053B2.018
6A132-396	83103	TS18	-0.672	2690053-05.648	H=90	21.2	179-CH.3	2690053B3.018
6A133-397	83103	TS19	0.164	2690053-05.284	UP	-2.9	180-CH.2	2690053B1.019
6A133-398	83103	TS19	0.164	2690053-05.284	H=0	3.2	180-CH.1	2690053B2.019
6A133-399	83103	TS19	0.164	2690053-05.284	H=90	1.8	180-CH.3	2690053B3.019
6A134-400	83104	TS01	0.100	2690625-39.580	UP	-6.5	043-CH.2	2690625N1.001
6A134-401	83104	TS01	0.100	2690625-39.580	H=90	23.9	043-CH.1	2690625N2.001
6A134-402	83104	TS01	0.100	2690625-39.580	H=180	-9.4	043-CH.3	2690625N3.001

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of IEM	Tape USGS
6A135-403	83104	TS02	0.257	2690625-40.787	UP	-7.8	044-CH.2	2690625N1.002
6A135-404	83104	TS02	0.257	2690625-40.787	H=180	-11.0	044-CH.1	2690625N2.002
6A135-405	83104	TS02	0.257	2690625-40.787	H=270	14.1	044-CH.3	2690625N3.002
6A136-406	83104	TS03	0.084	2690625-42.004	UP	-3.5	045-CH.2	2690625O1.003
6A136-407	83104	TS03	0.084	2690625-42.004	H=0	-7.2	045-CH.1	2690625O2.003
6A136-408	83104	TS03	0.084	2690625-42.004	H=90	6.1	045-CH.3	2690625O3.003
6A137-409	83104	TS07	-0.126	2690625-44.984	UP	3.8	046-CH.2	2690625O1.007
6A137-410	83104	TS07	-0.126	2690625-44.984	H=180	5.6	046-CH.1	2690625O2.007
6A137-411	83104	TS07	-0.126	2690625-44.984	H=270	6.9	046-CH.3	2690625O3.007
6A138-412	83104	TS15	0.135	2690625-38.355	UP	3.7	047-CH.2	2690625M1.015
6A138-413	83104	TS15	0.135	2690625-38.355	H=90	6.6	047-CH.1	2690625M2.015
6A138-414	83104	TS15	0.135	2690625-38.355	H=180	8.8	047-CH.3	2690625M3.015
6A139-415	83104	TS16	0.136	2690625-38.226	UP	5.9	048-CH.2	2690625M1.016
6A139-416	83104	TS16	0.136	2690625-38.226	H=180	14.9	048-CH.1	2690625M2.016
6A139-417	83104	TS16	0.136	2690625-38.226	H=270	-13.9	048-CH.3	2690625M3.016
6A140-418	83104	TS17	-0.009	2690625-38.981	UP	5.0	049-CH.2	2690625M1.017
6A140-419	83104	TS17	-0.009	2690625-38.981	H=180	-7.3	049-CH.1	2690625M2.017
6A140-420	83104	TS17	-0.009	2690625-38.981	H=270	-10.0	049-CH.3	2690625M3.017
6A141-421	83104	TS18	-0.672	2690625-38.918	UP	-7.3	050-CH.2	2690625M1.018
6A141-422	83104	TS18	-0.672	2690625-38.918	H=0	-20.5	050-CH.1	2690625M2.018
6A141-423	83104	TS18	-0.672	2690625-38.918	H=90	27.4	050-CH.3	2690625M3.018
6A142-424+83104	83104	TS19	0.164	2690625-38.984	UP	-1.6	051-CH.2	2690625M1.019
6A142-425+83104	83104	TS19	0.164	2690625-38.984	H=0	-3.5	051-CH.1	2690625M2.019
6A142-426+83104	83104	TS19	0.164	2690625-38.984	H=90	6.5	051-CH.3	2690625M3.019
6A143-427	83108	TS01	0.140	2750731-54.600	UP	6.7	181-CH.2	2750731S1.001
6A143-428	83108	TS01	0.140	2750731-54.600	H=90	20.7	181-CH.1	2750731S2.001
6A143-429	83108	TS01	0.140	2750731-54.600	H=180	14.3	181-CH.3	2750731S3.001
6A144-430	83108	TS02	-0.038	2750731-54.652	UP	-17.5	182-CH.2	2750731S1.002
6A144-431	83108	TS02	-0.038	2750731-54.652	H=180	25.3	182-CH.1	2750731S2.002
6A144-432	83108	TS02	-0.038	2750731-54.652	H=270	14.6	182-CH.3	2750731S3.002
6A145-433	83108	TS03	0.120	2750731-56.390	UP	-2.1	183-CH.2	2750731S1.003
6A145-434	83108	TS03	0.120	2750731-56.390	H=0	2.9	183-CH.1	2750731S2.003
6A145-435	83108	TS03	0.120	2750731-56.390	H=90	-3.1	183-CH.3	2750731S3.003
6A146-436	83108	TS15	0.155	2750731-54.395	UP	-5.2	184-CH.2	2750731S1.015
6A146-437	83108	TS15	0.155	2750731-54.395	H=90	-7.3	184-CH.1	2750731S2.015
6A146-438	83108	TS15	0.155	2750731-54.395	H=180	8.7	184-CH.3	2750731S3.015
6A147-439	83108	TS16	0.182	2750731-55.472	UP	-4.4	206-CH.2	2750731S1.016
6A147-440	83108	TS16	0.182	2750731-55.472	H=180	20.2	206-CH.1	2750731S2.016
6A147-441	83108	TS16	0.182	2750731-55.472	H=270	22.0	206-CH.3	2750731S3.016
6A148-442	83108	TS17	0.130	2750731-55.660	UP	1.7	185-CH.2	2750731S1.017
6A148-443	83108	TS17	0.130	2750731-55.660	H=180	5.3	185-CH.1	2750731S2.017
6A148-444	83108	TS17	0.130	2750731-55.660	H=270	-6.9	185-CH.3	2750731S3.017
6A149-445	83108	TS18	-0.840	2750731-53.990	UP	11.7	186-CH.2	2750731S1.018
6A149-446	83108	TS18	-0.840	2750731-53.990	H=0	-24.0	186-CH.1	2750731S2.018
6A149-447	83108	TS18	-0.840	2750731-53.990	H=90	-20.2	186-CH.3	2750731S3.018

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A150-448	83108	TS19	0.200	2750731-54.930	UP	-3.6	187-CH.2	2750731S1.019
6A150-449	83108	TS19	0.200	2750731-54.930	H=0	4.1	187-CH.1	2750731S2.019
6A150-450	83108	TS19	0.200	2750731-54.930	H=90	8.2	187-CH.3	2750731S3.019
6A151-451	83111	TS01	0.161	2780025-27.831	UP	-2.7	128-CH.2	2780025J1.001
6A151-452	83111	TS01	0.161	2780025-27.831	H=90	-6.3	128-CH.1	2780025J2.001
6A151-453	83111	TS01	0.161	2780025-27.831	H=180	6.4	128-CH.3	2780025J3.001
6A152-454	83111	TS02	-0.058	2780025-27.262	UP	7.1	129-CH.2	2780025J1.002
6A152-455	83111	TS02	-0.058	2780025-27.262	H=180	18.4	129-CH.1	2780025J2.002
6A152-456	83111	TS02	-0.058	2780025-27.262	H=270	22.6	129-CH.3	2780025J3.002
6A153-457	83111	TS03	0.135	2780025-20.905	UP	-6.9	109-CH.2	2780025G1.003
6A153-458	83111	TS03	0.135	2780025-20.905	H=0	-8.8	109-CH.1	2780025G2.003
6A153-459	83111	TS03	0.135	2780025-20.905	H=90	12.6	109-CH.3	2780025G3.003
6A154-460	83111	TS07	-0.200	2780025-19.750	UP	13.6	111-CH.2	2780025G1.007
6A154-461	83111	TS07	-0.200	2780025-19.750	H=180	-27.3	111-CH.1	2780025G2.007
6A154-462	83111	TS07	-0.200	2780025-19.750	H=270	-26.8	111-CH.3	2780025G3.007
6A155-463	83111	TS08	0.380	2780025-19.520	UP	-7.5	126-CH.2	2780025G1.008
6A155-464	83111	TS08	0.380	2780025-19.520	H=180	16.9	126-CH.1	2780025G2.008
6A155-465	83111	TS08	0.380	2780025-19.520	H=270	-19.3	126-CH.3	2780025G3.008
6A156-466	83111	TS10	-0.135	2780025-18.735	UP	32.4	127-CH.2	2780025G1.010
6A156-467	83111	TS10	-0.135	2780025-18.735	H=180	-22.0	127-CH.1	2780025G2.010
6A156-468	83111	TS10	-0.135	2780025-18.735	H=270	-25.7	127-CH.3	2780025G3.010
6A157-469	83111	TS18	-0.922	2780025-29.028	UP	-1.8	110-CH.2	2780025J1.018
6A157-470	83111	TS18	-0.922	2780025-29.028	H=0	6.5	110-CH.1	2780025J2.018
6A157-471	83111	TS18	-0.922	2780025-29.028	H=90	12.2	110-CH.3	2780025J3.018
6A158-472	84006	TS01	0.168	0071918-29.418	UP	-4.9	052-CH.2	0071918J1.001
6A158-473	84006	TS01	0.168	0071918-29.418	H=90	-6.9	052-CH.1	0071918J2.001
6A158-474	84006	TS01	0.168	0071918-29.418	H=180	12.1	052-CH.3	0071918J3.001
6A159-475	84006	TS02	-0.354	0071918-27.756	UP	-12.1	053-CH.2	0071918J1.002
6A159-476	84006	TS02	-0.354	0071918-27.756	H=180	18.4	053-CH.1	0071918J2.002
6A159-477	84006	TS02	-0.354	0071918-27.756	H=270	24.0	053-CH.3	0071918J3.002
6A160-478	84006	TS03	0.137	0071918-23.047	UP	16.4	054-CH.2	0071918H1.003
6A160-479	84006	TS03	0.137	0071918-23.047	H=0	-45.9	054-CH.1	0071918H2.003
6A160-480	84006	TS03	0.137	0071918-23.047	H=90	30.0	054-CH.3	0071918H3.003
6A161-481	84006	TS07	-0.590	0071918-22.360	UP	49.0	055-CH.2	0071918H1.007
6A161-482	84006	TS07	-0.590	0071918-22.360	H=180	103.0	055-CH.1	0071918H2.007
6A161-483	84006	TS07	-0.590	0071918-22.360	H=270	67.0	055-CH.3	0071918H3.007
6A162-484	84006	TS08	0.110	0071918-21.570	UP	19.8	056-CH.2	0071918H1.008
6A162-485	84006	TS08	0.110	0071918-21.570	H=180	77.2	056-CH.1	0071918H2.008
6A162-486	84006	TS08	0.110	0071918-21.570	H=270	-42.1	056-CH.3	0071918H3.008
6A163-487	84006	TS16	0.050	0071918-27.430	UP	1.8	057-CH.2	0071918J1.016
6A163-488	84006	TS16	0.050	0071918-27.430	H=180	5.2	057-CH.1	0071918J2.016
6A163-489	84006	TS16	0.050	0071918-27.430	H=270	4.6	057-CH.3	0071918J3.016
6A164-490	84006	TS18	-0.600	0071918-28.840	UP	-3.2	058-CH.2	0071918J1.018
6A164-491	84006	TS18	-0.600	0071918-28.840	H=0	-8.6	058-CH.1	0071918J2.018
6A164-492	84006	TS18	-0.600	0071918-28.840	H=90	-7.6	058-CH.3	0071918J3.018

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name IEM	of Tape USGS
6A165-493	84029	TS02	-0.414	0471910-09.286	UP	9.5	151-CH.2	0471910D1.002
6A165-494	84029	TS02	-0.414	0471910-09.286	H=180	-11.8	151-CH.1	0471910D2.002
6A165-495	84029	TS02	-0.414	0471910-09.286	H=270	-8.6	151-CH.3	0471910D3.002
6A166-496	84029	TS03	0.069	0471910-10.289	UP	12.0	154-CH.2	0471911D1.003
6A166-497	84029	TS03	0.069	0471910-10.289	H=0	32.3	154-CH.1	0471911D2.003
6A166-498	84029	TS03	0.069	0471910-10.289	H=90	-17.1	154-CH.3	0471911D3.003
6A167-499	84029	TS07	-0.910	0471910-13.560	UP	-4.5	152-CH.2	0471911E1.007
6A167-500	84029	TS07	-0.910	0471910-13.560	H=180	-10.8	152-CH.1	0471911E2.007
6A167-501	84029	TS07	-0.910	0471910-13.560	H=270	7.4	152-CH.3	0471911E3.007
6A168-502	84029	TS15	0.166	0471910-11.186	UP	5.1	155-CH.2	0471910D1.015
6A168-503	84029	TS15	0.166	0471910-11.186	H=90	6.8	155-CH.1	0471910D2.015
6A168-504	84029	TS15	0.166	0471910-11.186	H=180	-6.0	155-CH.3	0471910D3.015
6A169-505+84029		TS16	0.560	0471910-11.790	UP	-5.7	194-CH.2	0471910D1.016
6A169-506+84029		TS16	0.560	0471910-11.790	H=180	-11.5	194-CH.1	0471910D2.016
6A169-507+84029		TS16	0.560	0471910-11.790	H=270	-7.1	194-CH.3	0471910D3.016
6A170-508#84029		TS17	0.048	0471910-12.018	UP	2.2	195-CH.2	0471910E1.017
6A170-509	84029	TS17	0.048	0471910-12.018	H=180	5.3	195-CH.1	0471910E2.017
6A170-510	84029	TS17	0.048	0471910-12.018	H=270	-5.0	195-CH.3	0471910E3.017
6A171-511	84029	TS18	-0.880	0471910-11.800	UP	-11.1	196-CH.2	0471910D1.018
6A171-512	84029	TS18	-0.880	0471910-11.800	H=0	-22.3	196-CH.1	0471910D2.018
6A171-513#84029		TS18	-0.880	0471910-11.800	H=90	22.7	196-CH.3	0471910D3.018
6A172-514	84029	TS19	0.274	0471910-11.044	UP	3.7	153-CH.2	0471910D1.019
6A172-515	84029	TS19	0.274	0471910-11.044	H=0	-4.3	153-CH.1	0471910D2.019
6A172-516	84029	TS19	0.274	0471910-11.044	H=90	6.6	153-CH.3	0471910D3.019
6A173-517	84117	TS01	0.080	3101148-26.160	UP	-8.7	156-CH.2	3101147I1.001
6A173-518	84117	TS01	0.080	3101148-26.160	H=90	-23.9	156-CH.1	3101147I2.001
6A173-519	84117	TS01	0.080	3101148-26.160	H=180	11.2	156-CH.3	3101147I3.001
6A174-520	84117	TS02	-0.200	3101148-25.720	UP	-5.6	159-CH.2	3101147I1.002
6A174-521	84117	TS02	-0.200	3101148-25.720	H=180	12.4	159-CH.1	3101147I2.002
6A174-522	84117	TS02	-0.200	3101148-25.720	H=270	6.5	159-CH.3	3101147I3.002
6A175-523	84117	TS03	0.085	3101148-26.165	UP	4.8	157-CH.2	3101147I1.003
6A175-524	84117	TS03	0.085	3101148-26.165	H=0	8.0	157-CH.1	3101147I2.003
6A175-525	84117	TS03	0.085	3101148-26.165	H=90	7.8	157-CH.3	3101147I3.003
6A176-526	84117	TS07	-0.280	3101148-29.590	UP	-4.1	158-CH.2	3101147J1.007
6A176-527	84117	TS07	-0.280	3101148-29.590	H=180	1.4	158-CH.1	3101147J2.007
6A176-528	84117	TS07	-0.280	3101148-29.590	H=270	1.2	158-CH.3	3101147J3.007
6A177-529	84117	TS15	0.080	3101148-26.250	UP	-4.1	160-CH.2	3101147I1.015
6A177-530	84117	TS15	0.080	3101148-26.250	H=90	-7.4	160-CH.1	3101147I2.015
6A177-531	84117	TS15	0.080	3101148-26.250	H=180	-3.8	160-CH.3	3101147I3.015
6A178-532	84117	TS16	0.015	3101148-26.195	UP	-2.6	161-CH.2	3101147I1.016
6A178-533	84117	TS16	0.015	3101148-26.195	H=180	8.0	161-CH.1	3101147I2.016
6A178-534	84117	TS16	0.015	3101148-26.195	H=270	-5.5	161-CH.3	3101147I3.016
6A179-535	84117	TS18	-0.490	3101148-26.910	UP	-3.3	197-CH.2	3101147I1.018
6A179-536	84117	TS18	-0.490	3101148-26.910	H=0	-6.4	197-CH.1	3101147I2.018
6A179-537#84117		TS18	-0.490	3101148-26.910	H=90	-13.3	197-CH.3	3101147I3.018

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File IEM	Name of Tape USGS
6A180-538	84117	TS19	0.150	3101148-26.070	UP	-3.4	162-CH.2	3101147I1.019
6A180-539	84117	TS19	0.150	3101148-26.070	H=0	2.8	162-CH.1	3101147I2.019
6A180-540	84117	TS19	0.150	3101148-26.070	H=90	-7.3	162-CH.3	3101147I3.019
6A181-541	84132	TS01	0.087	3450722-11.177	UP	13.4	059-CH.2	3450722D1.001
6A181-542	84132	TS01	0.087	3450722-11.177	H=0	-22.0	059-CH.1	3450722D2.001
6A181-543	84132	TS01	0.087	3450722-11.177	H=90	-34.3	059-CH.3	3450722D3.001
6A182-544	84132	TS02	-0.119	3450722-10.561	UP	9.4	060-CH.2	3450722D1.002
6A182-545	84132	TS02	-0.119	3450722-10.561	H=180	-18.2	060-CH.1	3450722D2.002
6A182-546	84132	TS02	-0.119	3450722-10.561	H=270	-12.4	060-CH.3	3450722D3.002
6A183-547	84132	TS03	0.052	3450722-11.192	UP	-9.4	061-CH.2	3450722D1.003
6A183-548	84132	TS03	0.052	3450722-11.192	H=0	-24.7	061-CH.1	3450722D2.003
6A183-549	84132	TS03	0.052	3450722-11.192	H=90	-23.5	061-CH.3	3450722D3.003
6A184-550	84132	TS07	-0.259	3450722-14.131	UP	3.7	062-CH.2	3450722E1.007
6A184-551	84132	TS07	-0.259	3450722-14.131	H=180	-5.6	062-CH.1	3450722E2.007
6A184-552	84132	TS07	-0.259	3450722-14.131	H=270	-6.0	062-CH.3	3450722E3.007
6A185-553	84132	TS10	-0.180	3450722-17.620	UP	1.3	063-CH.2	3450722F1.010
6A185-554	84132	TS10	-0.180	3450722-17.620	H=180	-1.8	063-CH.1	3450722F2.010
6A185-555	84132	TS10	-0.180	3450722-17.620	H=270	2.2	063-CH.3	3450722F3.010
6A186-556	84132	TS15	0.116	3450722-12.536	UP	6.7	064-CH.2	3450722E1.015
6A186-557	84132	TS15	0.116	3450722-12.536	H=90	14.0	064-CH.1	3450722E2.015
6A186-558	84132	TS15	0.116	3450722-12.536	H=180	-10.5	064-CH.3	3450722E3.015
6A187-559	84132	TS18	-0.389	3450722-12.441	UP	-5.2	065-CH.2	3450722E1.018
6A187-560	84132	TS18	-0.389	3450722-12.441	H=0	-41.7	065-CH.1	3450722E2.018
6A187-561	84132	TS18	-0.389	3450722-12.441	H=90	-58.4	065-CH.3	3450722E3.018
6A188-562	84132	TS21	-0.004	3450722-12.316	UP	-4.0	066-CH.2	3450722E1.021
6A188-563	84132	TS21	-0.004	3450722-12.316	H=180	-8.3	066-CH.1	3450722E2.021
6A188-564	84132	TS21	-0.004	3450722-12.316	H=270	13.3	066-CH.3	3450722E3.021
6A189-565	84137	TS01	0.096	3460054-45.586	UP	-4.1	207-CH.2	3460054P1.001
6A189-566	84137	TS01	0.096	3460054-45.586	H=90	6.0	207-CH.1	3460054P2.001
6A189-652	84137	TS01	0.096	3460054-45.586	H=180	-7.8	207-CH.3	3460054P3.001
6A190-567	84137	TS02	-0.139	3460054-45.241	UP	-10.2	130-CH.2	3460054P1.002
6A190-568	84137	TS02	-0.139	3460054-45.241	H=180	-7.5	130-CH.1	3460054P2.002
6A190-569	84137	TS02	-0.139	3460054-45.241	H=270	-10.5	130-CH.3	3460054P3.002
6A191-570	84137	TS03	0.054	3460054-46.884	UP	2.2	208-CH.2	3460054Q1.003
6A191-571	84137	TS03	0.054	3460054-46.884	H=0	-2.6	208-CH.1	3460054Q2.003
6A191-572	84137	TS03	0.054	3460054-46.884	H=90	-2.9	208-CH.3	3460054Q3.003
6A192-573	84137	TS18	-0.424	3460054-46.686	UP	6.0	209-CH.2	3460054P1.018
6A192-574	84137	TS18	-0.424	3460054-46.686	H=0	5.7	209-CH.1	3460054P2.018
6A193-575	84137	TS21	-0.008	3460054-45.682	UP	2.8	210-CH.2	3460054P1.021
6A193-576	84137	TS21	-0.008	3460054-45.682	H=180	5.3	210-CH.1	3460054P2.021
6A193-653	84137	TS21	-0.008	3460054-45.682	H=270	-2.9	210-CH.3	3460054P3.021
6A194-577	84138	TS01	0.096	3460055-41.896	UP	-8.8	067-CH.2	3460055N1.001
6A194-578	84138	TS01	0.096	3460055-41.896	H=90	13.5	067-CH.1	3460055N2.001
6A194-579	84138	TS01	0.096	3460055-41.896	H=180	-16.5	067-CH.3	3460055N3.001

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of Tape IEM	USGS
6A195-580	84138	TS02	-0.139	3460055-44.121	UP	-15.6	068-CH.2	346005501.002
6A195-581	84138	TS02	-0.139	3460055-44.121	H=180	21.7	068-CH.1	346005502.002
6A195-582	84138	TS02	-0.139	3460055-44.121	H=270	-22.4	068-CH.3	346005503.002
6A196-583	84138	TS03	0.054	3460055-41.934	UP	4.1	069-CH.2	3460055N1.003
6A196-584	84138	TS03	0.054	3460055-41.934	H=0	-7.7	069-CH.1	3460055N2.003
6A196-585	84138	TS03	0.054	3460055-41.934	H=90	7.8	069-CH.3	3460055N3.003
6A197-586	84138	TS07	-0.289	3460055-43.651	UP	3.0	070-CH.2	346005501.007
6A197-587	84138	TS07	-0.289	3460055-43.651	H=180	-2.7	070-CH.1	346005502.007
6A197-588	84138	TS07	-0.289	3460055-43.651	H=270	2.8	070-CH.3	346005503.007
6A198-589	84138	TS15	0.129	3460055-42.389	UP	-4.9	071-CH.2	346005501.015
6A198-590	84138	TS15	0.129	3460055-42.389	H=90	-5.2	071-CH.1	346005502.015
6A198-591	84138	TS15	0.129	3460055-42.389	H=180	-16.7	071-CH.3	346005503.015
6A199-592	84138	TS18	-0.424	3460055-41.716	UP	13.7	073-CH.2	3460055N1.018
6A199-593	84138	TS18	-0.424	3460055-41.716	H=0	18.0	073-CH.1	3460055N2.018
6A199-594#	84138	TS18	-0.424	3460055-41.716	H=90	-12.5	073-CH.3	3460055N3.018
6A200-595	84138	TS19	0.170	3460055-43.480	UP	4.6	211-CH.2	3460055N1.019
6A200-596	84138	TS19	0.170	3460055-43.480	H=0	16.8	211-CH.1	3460055N2.019
6A200-597	84138	TS19	0.170	3460055-43.480	H=90	5.7	211-CH.3	3460055N3.019
6A201-598	84138	TS21	-0.008	3460055-43.212	UP	7.7	072-CH.2	346005501.021
6A201-599	84138	TS21	-0.008	3460055-43.212	H=180	17.5	072-CH.1	346005502.021
6A201-600	84138	TS21	-0.008	3460055-43.212	H=270	6.2	072-CH.3	346005503.021
6A202-601	84139	TS01	0.096	3460551-04.736	UP	-8.8	074-CH.2	3460551B1.001
6A202-602	84139	TS01	0.096	3460551-04.736	H=90	11.5	074-CH.1	3460551B2.001
6A202-603	84139	TS01	0.096	3460551-04.736	H=180	-10.7	074-CH.3	3460551B3.001
6A203-604	84139	TS02	-0.139	3460551-05.581	UP	-6.4	075-CH.2	3460551B1.002
6A203-605	84139	TS02	-0.139	3460551-05.581	H=180	13.4	075-CH.1	3460551B2.002
6A203-606	84139	TS02	-0.139	3460551-05.581	H=270	-12.8	075-CH.3	3460551B3.002
6A204-607	84139	TS03	0.054	3460551-06.514	UP	-2.3	076-CH.2	3460551C1.003
6A204-608	84139	TS03	0.054	3460551-06.514	H=0	-3.9	076-CH.1	3460551C2.003
6A204-609	84139	TS03	0.054	3460551-06.514	H=90	3.4	076-CH.3	3460551C3.003
6A205-610	84139	TS07	-0.289	3460551-09.711	UP	-3.9	077-CH.2	3460551D1.007
6A205-611	84139	TS07	-0.289	3460551-09.711	H=180	1.8	077-CH.1	3460551D2.007
6A205-612	84139	TS07	-0.289	3460551-09.711	H=270	-1.6	077-CH.3	3460551D3.007
6A206-613	84139	TS15	0.129	3460551-05.799	UP	-3.3	078-CH.2	3460551B1.015
6A206-614	84139	TS15	0.129	3460551-05.799	H=90	-5.4	078-CH.1	3460551B2.015
6A206-615	84139	TS15	0.129	3460551-05.799	H=180	-8.6	078-CH.3	3460551B3.015
6A207-616	84139	TS18	-0.424	3460551-06.416	UP	-12.6	080-CH.2	3460551C1.018
6A207-617	84139	TS18	-0.424	3460551-06.416	H=0	12.7	080-CH.1	3460551C2.018
6A207-618#	84139	TS18	-0.424	3460551-06.416	H=90	-11.4	080-CH.3	3460551C3.018
6A208-619	84139	TS19	0.170	3460551-04.860	UP	3.2	081-CH.2	3460551B1.019
6A208-620	84139	TS19	0.170	3460551-04.860	H=0	10.0	081-CH.1	3460551B2.019
6A208-621	84139	TS19	0.170	3460551-04.860	H=90	-7.8	081-CH.3	3460551B3.019
6A209-622	84139	TS21	-0.008	3460551-05.202	UP	4.3	079-CH.2	3460551B1.021
6A209-623	84139	TS21	-0.008	3460551-05.202	H=180	-9.6	079-CH.1	3460551B2.021
6A209-624	84139	TS21	-0.008	3460551-05.202	H=270	-5.1	079-CH.3	3460551B3.021

Catalogue of Accelerograms (Continued)

Record No.	Eq. No.	Sta. No.	Time Corr.	Start-Time of Accelerogram	Comp.	Am (gal)	File Name of IEM	Tape Name of USGS
6A210-625	84142	TS01	0.096	3460614-08.406	UP	-3.7	131-CH.2	3460614C1.001
6A210-626	84142	TS01	0.096	3460614-08.406	H=90	-7.8	131-CH.1	3460614C2.001
6A210-627	84142	TS01	0.096	3460614-08.406	H=180	-9.1	131-CH.3	3460614C3.001
6A211-628	84142	TS02	-0.139	3460614-07.961	UP	-6.1	132-CH.2	3460614C1.002
6A211-629	84142	TS02	-0.139	3460614-07.961	H=180	-16.2	132-CH.1	3460614C2.002
6A211-630	84142	TS02	-0.139	3460614-07.961	H=270	8.7	132-CH.3	3460614C3.002
6A212-631	84142	TS03	0.054	3460614-10.174	UP	3.4	134-CH.2	3460614D1.003
6A212-632	84142	TS03	0.054	3460614-10.174	H=0	5.1	134-CH.1	3460614D2.003
6A212-633	84142	TS03	0.054	3460614-10.174	H=90	-6.1	134-CH.3	3460614D3.003
6A213-634	84142	TS07	-0.289	3460614-12.751	UP	4.0	135-CH.2	3460614E1.007
6A213-635	84142	TS07	-0.289	3460614-12.751	H=180	-2.3	135-CH.1	3460614E2.007
6A213-636	84142	TS07	-0.289	3460614-12.751	H=270	3.1	135-CH.3	3460614E3.007
6A214-637	84142	TS15	0.129	3460614-09.469	UP	-3.3	136-CH.2	3460614D1.015
6A214-638	84142	TS15	0.129	3460614-09.469	H=90	-4.4	136-CH.1	3460614D2.015
6A214-639	84142	TS15	0.129	3460614-09.469	H=180	-8.6	136-CH.3	3460614D3.015
6A215-640	84142	TS18	-0.424	3460614-09.456	UP	-5.3	137-CH.2	3460614D1.018
6A215-641	84142	TS18	-0.424	3460614-09.456	H=0	11.0	137-CH.1	3460614D2.018
6A215-642#	84142	TS18	-0.424	3460614-09.456	H=90	-11.4	137-CH.3	3460614D3.018
6A216-643	84142	TS19	0.170	3460614-08.530	UP	2.2	133-CH.2	3460614C1.019
6A216-644	84142	TS19	0.170	3460614-08.530	H=0	7.8	133-CH.1	3460614C2.019
6A216-645	84142	TS19	0.170	3460614-08.530	H=90	-3.6	133-CH.3	3460614C3.019
6A217-646	84142	TS21	-0.008	3460614-08.852	UP	-3.6	138-CH.2	3460614C1.021
6A217-647	84142	TS21	-0.008	3460614-08.852	H=180	8.4	138-CH.1	3460614C2.021
6A217-648	84142	TS21	-0.008	3460614-08.852	H=270	4.0	138-CH.3	3460614C3.021

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0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.00
0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00
0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
0.01	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00
0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.01	0.01
0.01	0.01	0.00	0.00	0.01	0.01	0.00	-0.01	-0.01	0.00
0.06	0.13	0.09	-0.12	-0.21	-0.07	0.03	-0.01	0.09	0.48
0.46	-0.10	-0.30	0.13	0.06	-0.51	-0.25	0.46	0.06	-0.61
0.15	1.14	0.73	0.19	0.04	-0.87	-1.48	-0.54	0.52	0.34
0.18	0.30	-0.48	-0.30	2.41	5.10	5.36	4.57	4.01	1.53
-2.77	-4.06	-1.71	-0.84	-2.74	-4.00	-2.81	0.28	3.92	5.66
1.98	-3.98	-6.44	-7.05	-7.10	-3.41	2.53	1.68	0.81	-0.24
-0.30	0.61	5.49	11.51	12.53	7.10	0.55	-2.23	0.34	4.86
3.28	-5.63	-12.18	-11.83	-8.79	-3.11	3.32	4.27	0.10	-2.74
-2.98	-4.27	-1.90	6.92	15.03	14.85	9.36	6.36	6.62	8.11
7.11	0.75	-7.33	-9.10	-5.13	-2.71	-4.13	-7.74	-11.29	-13.91
-10.54	0.69	12.53	17.68	16.81	12.57	5.09	-3.40	-6.65	-5.18
-2.42	0.52	3.28	3.97	3.44	6.89	10.13	6.60	-4.98	-14.97
-13.47	-2.65	8.19	8.29	2.56	-9.10	-26.76	-39.16	-31.26	-5.87
22.93	40.06	41.79	36.58	30.18	15.99	-6.53	-20.60	-19.34	-14.73
-15.33	-15.63	-8.20	3.23	9.52	7.19	-4.31	-10.22	2.47	27.06
40.12	28.80	4.37	-17.66	-21.79	-2.75	9.34	-2.81	-17.84	-13.53
2.51	5.39	-2.28	0.60	10.30	9.94	-2.75	-10.60	-3.77	4.04
2.65	-9.49	-22.72	-23.59	-17.78	-15.03	-12.51	-1.92	10.12	13.23
15.93	29.10	45.39	49.52	39.04	28.56	18.08	-7.13	-46.58	-72.45
-63.47	-30.78	-3.65	1.56	-4.07	-3.41	4.37	11.26	16.17	21.85
18.74	1.50	-13.41	-10.24	-2.57	-7.72	-11.50	0.18	18.38	21.55
34.37	23.05	0.66	-17.48	-16.41	2.04	20.90	27.66	18.62	-3.41
-26.23	-40.24	-51.43	-61.79	-59.04	-34.97	0.24	30.36	46.04	50.42
48.92	41.37	29.82	16.47	4.13	0.54	3.29	5.03	-2.11	-18.32
-33.23	-36.28	-26.58	-15.87	-8.56	-4.61	-7.60	-15.45	-15.81	5.93
27.66	46.88	49.10	41.49	27.78	9.88	-3.05	-8.26	-12.39	-23.53
-37.30	-42.57	-34.13	-14.37	10.18	32.27	47.66	47.18	25.15	-6.35
-28.86	-34.25	-25.93	-13.65	-5.51	-7.96	-22.87	-40.60	-47.00	-36.88
-17.66	-0.60	5.93	3.89	4.61	14.79	32.81	54.37	75.92	90.59
94.66	86.28	67.12	37.42	-0.66	-34.43	-55.98	-67.48	-71.31	-68.44
-62.21	-54.55	-49.52	-50.00	-51.91	-44.25	-24.85	-4.97	9.64	24.73
43.89	61.85	71.19	68.08	64.96	52.27	35.27	19.46	11.32	9.88
4.37	-3.77	-0.18	9.40	6.53	-13.35	-37.78	-54.07	-56.94	-54.55
-55.03	-56.46	-50.95	-43.53	-43.53	-47.12	-44.97	-31.31	-7.72	22.39
51.85	71.13	74.49	64.67	42.75	11.02	-18.20	-34.61	-41.43	-45.09
-43.83	-30.72	-6.17	19.46	37.12	35.21	17.72	1.98	-5.45	-3.07
17.80	52.51	74.60	71.31	36.64	-17.96	-62.27	-84.01	-93.82	-104.12
-111.31	-110.83	-104.36	-89.99	-65.08	-28.68	20.90	76.34	131.79	168.91
184.48	173.94	137.29	81.25	23.77	-1.86	4.13	-9.62	-53.95	-105.32
-139.57	-164.00	-188.19	-201.12	-187.95	-144.36	-75.14	2.45	66.88	118.85
164.60	195.49	205.07	204.12	200.28	189.51	165.80	131.79	91.07	44.61
-12.63	-82.81	-152.50	-199.21	-206.63	-187.71	-157.77	-131.91	-113.94	-86.40

-44.25	5.57	58.74	108.31	140.89	146.40	132.98	115.50	98.26	95.86
109.75	118.61	108.79	93.23	85.32	75.74	52.99	20.18	-5.21	-20.06
-40.89	-63.29	-85.68	-93.35	-106.76	-132.62	-156.81	-176.45	-186.99	-169.75
-127.12	-68.44	-10.24	33.83	69.28	105.44	148.31	199.75	214.65	217.05
200.28	164.12	107.12	35.03	-39.46	-109.39	-169.03	-202.08	-197.29	-167.59
-134.54	-108.91	-85.20	-57.18	-28.92	-9.28	-0.42	2.45	1.02	-0.66
6.77	23.29	42.45	62.81	88.68	114.06	129.87	134.66	127.24	100.65
53.71	-2.34	-50.95	-80.65	-94.30	-103.88	-114.66	-124.96	-126.40	-114.42
-94.30	-71.31	-42.81	-9.04	20.18	38.26	56.34	71.67	90.59	107.36
112.63	104.48	82.21	45.09	1.50	-33.23	-49.76	-49.28	-38.26	-23.41
-11.92	-7.13	-8.80	-13.65	-17.18	-17.18	-16.29	-13.83	-6.47	5.39
15.93	20.06	18.08	14.37	11.56	6.95	-4.61	-20.42	-28.74	-23.23
-10.78	1.98	19.16	45.74	73.95	86.28	75.26	45.80	12.75	-9.70
-20.42	-25.75	-30.00	-29.28	-22.63	-16.29	-16.41	-19.88	-20.36	-18.86
-20.60	-23.41	-22.27	-15.15	-3.47	8.56	19.22	28.02	33.41	35.75
38.08	35.27	29.34	26.35	27.54	28.32	25.03	15.21	-0.78	-17.36
-29.28	-35.93	-40.54	-47.96	-56.94	-60.71	-54.61	-41.61	-27.36	-13.65
1.80	18.38	28.14	22.69	6.23	-10.30	-19.28	-21.32	-19.04	-13.65
-5.81	4.07	14.67	26.05	37.12	44.49	44.07	35.75	22.51	8.32
-3.71	-13.62	-21.02	-24.55	-23.23	-12.69	5.87	22.09	28.08	24.67
15.39	4.97	-2.57	-5.39	-3.35	1.32	5.51	8.50	11.26	10.48
4.43	-5.21	-15.39	-25.87	-36.34	-45.57	-47.96	-40.95	-28.62	-18.32
-11.44	-2.75	13.65	37.36	60.77	75.26	76.46	69.52	54.67	34.07
13.47	-2.34	-12.87	-22.93	-34.91	-46.64	-56.22	-63.65	-67.48	-67.96
-61.49	-45.68	-23.41	-2.34	12.99	23.53	33.59	43.65	52.27	57.06
53.95	43.89	29.76	15.87	3.89	-10.48	-27.24	-39.70	-43.53	-39.70
-32.51	-26.29	-23.17	-22.15	-17.72	-11.32	-6.35	-0.42	10.24	22.45
31.49	37.12	40.00	40.54	39.22	32.93	17.78	-0.03	-17.84	-25.63
-26.70	-26.41	-27.96	-29.76	-29.10	-24.31	-13.23	1.86	15.21	22.09
21.85	19.22	18.68	22.09	28.74	34.07	34.25	30.24	23.17	14.91
7.54	2.22	-1.80	-4.49	-4.67	-4.01	-3.65	-3.41	-4.37	-5.97
-10.84	-17.96	-21.91	-22.51	-21.08	-19.76	-17.78	-13.65	-6.23	2.51
9.58	15.45	22.57	30.90	37.12	40.00	42.57	45.33	42.63	29.76
6.41	-21.08	-42.81	-55.21	-60.23	-60.59	-56.52	-47.42	-34.91	-23.17
-15.57	-8.80	-2.04	10.72	25.03	35.39	39.46	37.36	29.40	18.44
9.94	4.91	-0.84	-10.18	-21.20	-29.10	-32.63	-32.69	-31.43	-30.06
-27.12	-20.54	-10.96	-1.44	6.23	11.44	15.33	19.70	25.21	30.00
31.55	30.72	28.56	23.59	14.19	2.75	-6.41	-10.60	-10.36	-10.00
-12.57	-17.30	-19.94	-15.51	-5.45	2.93	5.87	6.29	9.10	13.17
12.69	5.33	-4.79	-11.80	-14.25	-12.51	-8.50	-4.49	-1.02	2.93
8.50	14.37	19.64	23.71	24.79	21.02	17.24	12.57	7.60	1.38
-6.11	-12.93	-17.00	-17.30	-15.27	-14.07	-14.73	-15.87	-16.71	-16.59
-12.75	-3.59	8.26	19.04	25.87	26.11	20.24	13.11	11.38	14.61
16.35	14.31	8.74	0.72	-7.78	-14.43	-19.28	-22.21	-21.02	-15.75
-8.86	-3.29	-1.50	-2.16	-1.56	1.62	5.45	8.20	9.94	9.82
7.07	2.99	-0.96	-4.55	-4.94	-2.34	0.79	1.30	-1.29	-3.08
-1.17	2.60	5.40	5.61	3.89	2.84	3.64	3.47	0.75	-1.83
-4.40	-5.07	-5.67	-7.62	-11.99	-17.11	-19.07	-15.12	-6.84	2.69
11.17	16.63	19.10	18.26	16.53	14.67	12.09	7.96	2.22	-3.89
-8.92	-11.32	-10.30	-8.56	-7.54	-6.29	-4.91	-3.59	-2.75	-2.75
-2.89	-0.06	5.43	10.36	11.87	11.15	9.15	3.70	-4.76	-10.67
-9.82	-5.42	-2.19	-2.37	-5.49	-8.92	-10.64	-8.94	-3.91	2.63
7.20	7.17	5.03	4.49	6.59	9.49	10.93	10.69	11.21	12.96

— End of data file sample —

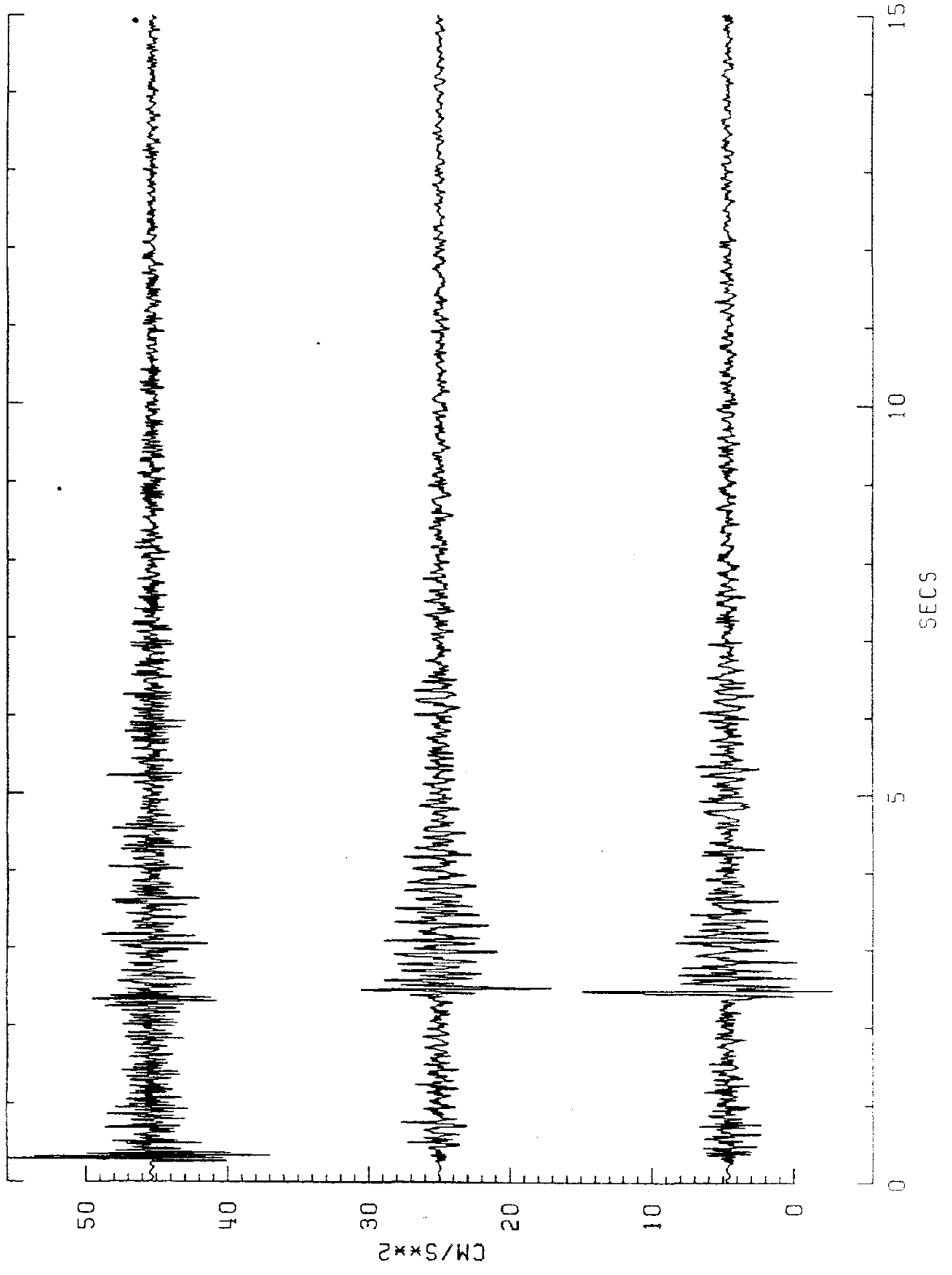
THE PLOTS OF ACCELEROGRAMS

(6A001 -- 6A218)

6A001-001,002,003 82007/T504 IEM 146

TIME: 194 0542 32.129

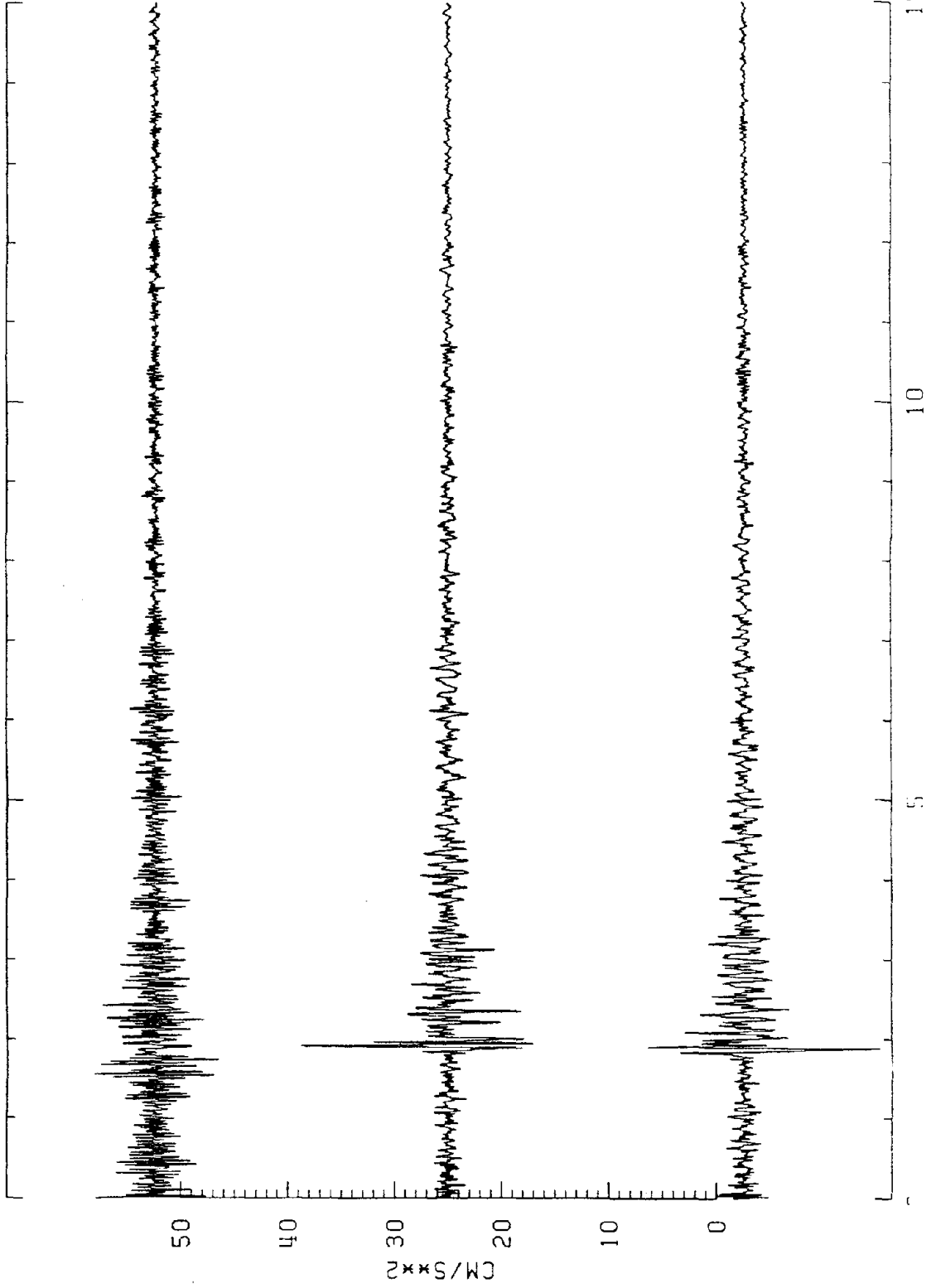
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6A002-004,005,006 82007/TS05 IEM 147

TIME: 194 0542 32.744

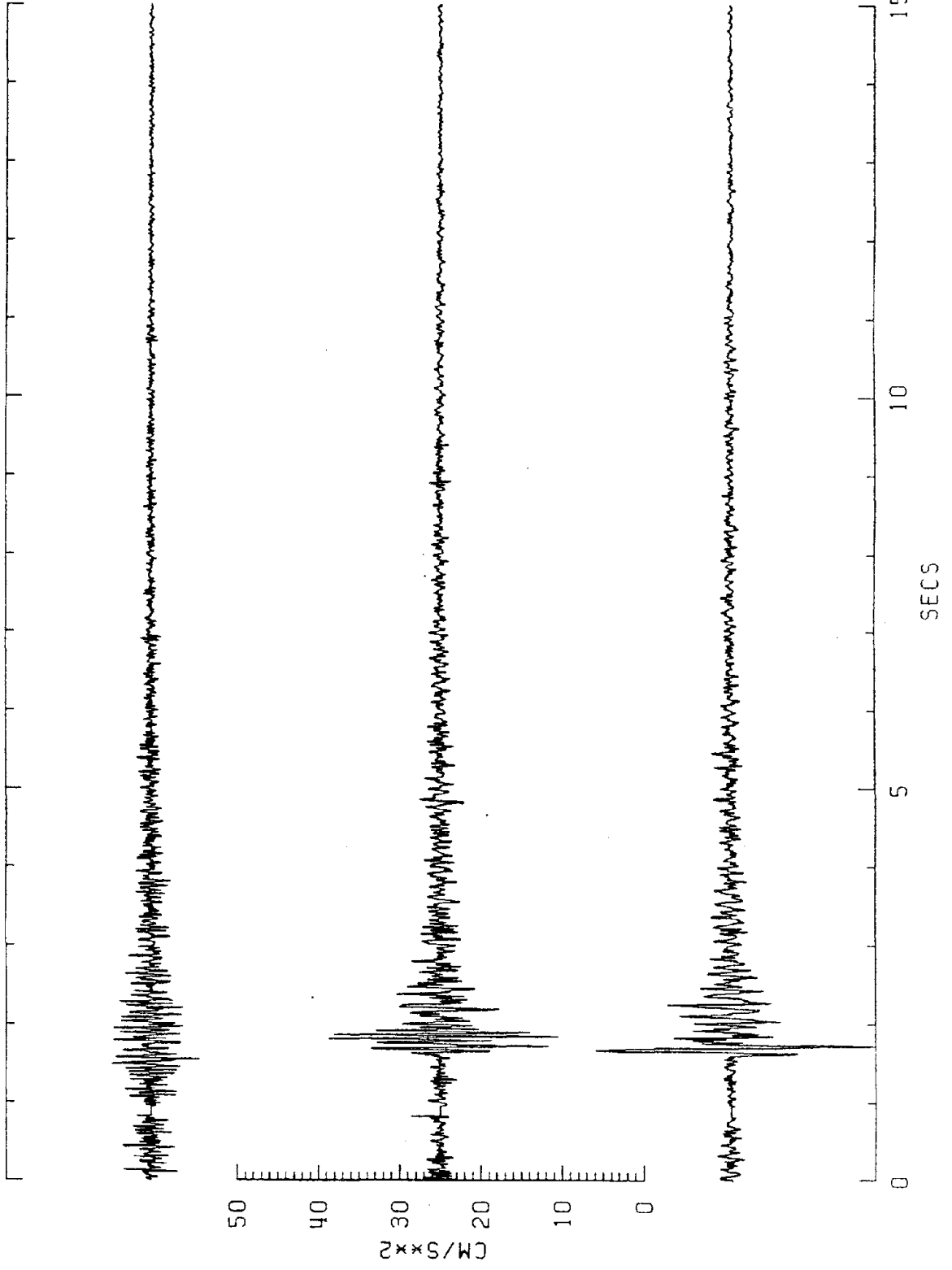
1940542L*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A003-007,008,009 82007/TS07 IEM 191

TIME: 194 0542 32.871

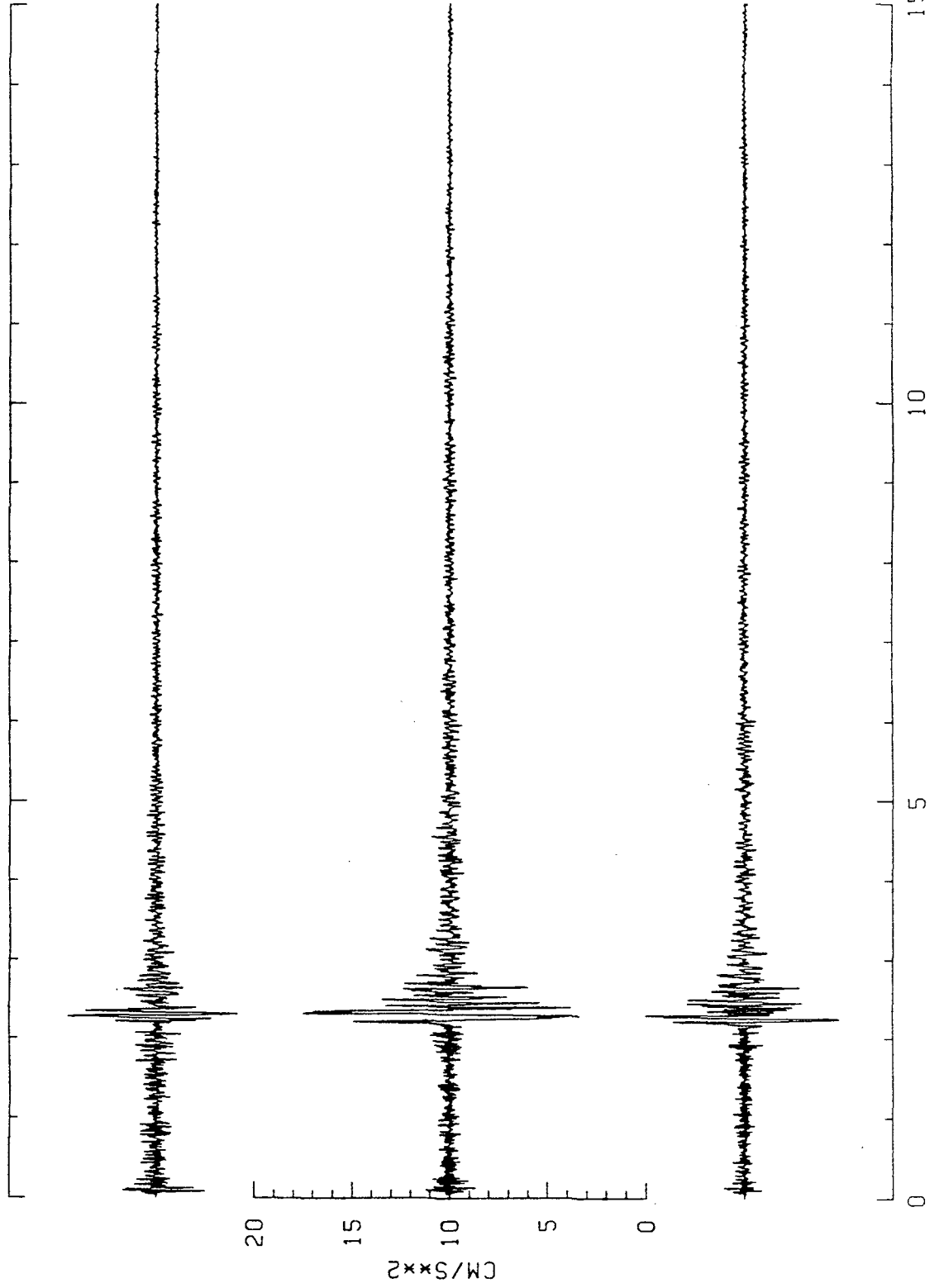
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6A004-010,011,012 82007/Ts08 IEM 148

TIME: 194 0542 32.435

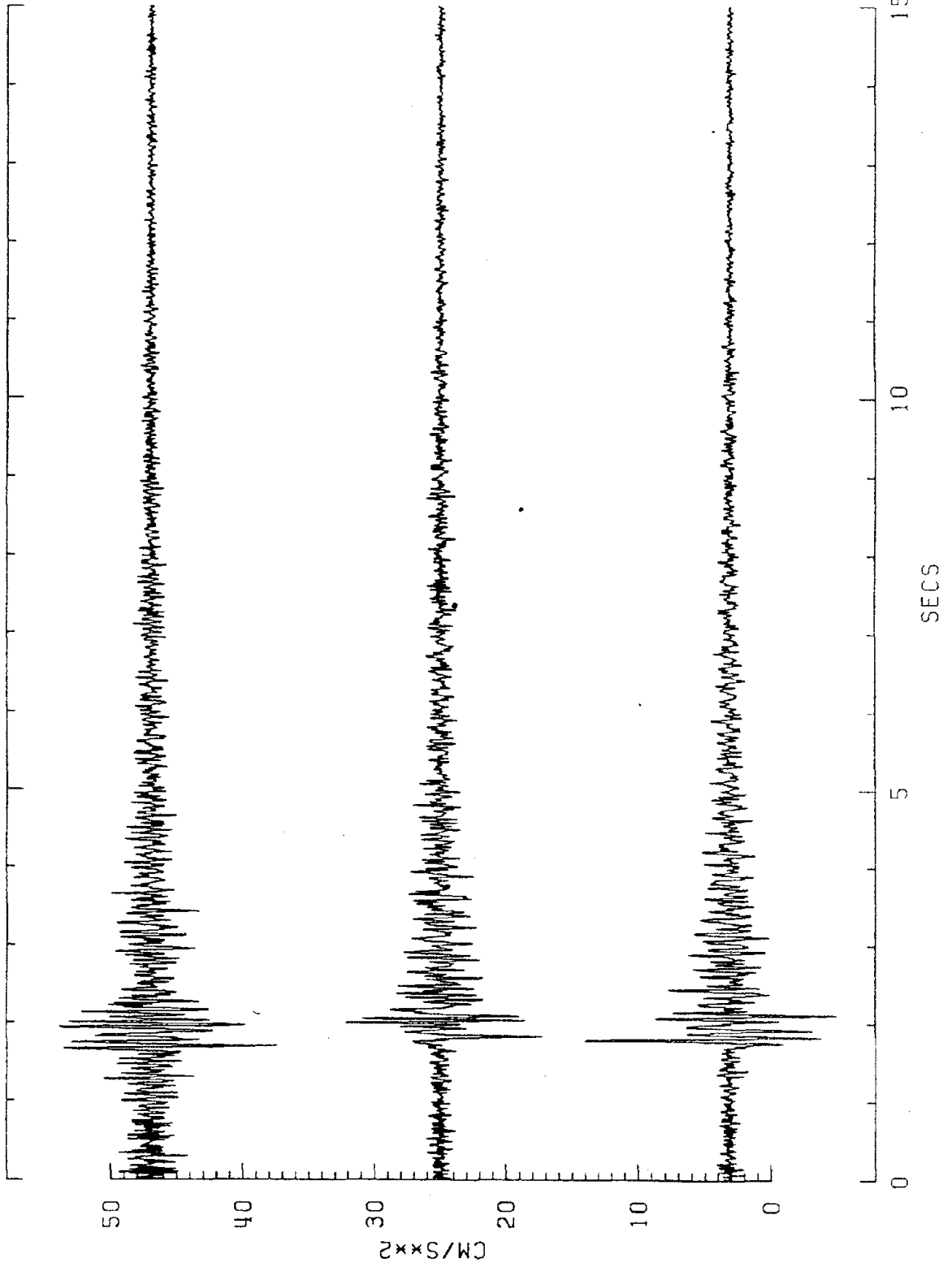
1940542L*.008 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A005-013,014,015 82007/T509 IEM 149

TIME: 194 0542 33.190

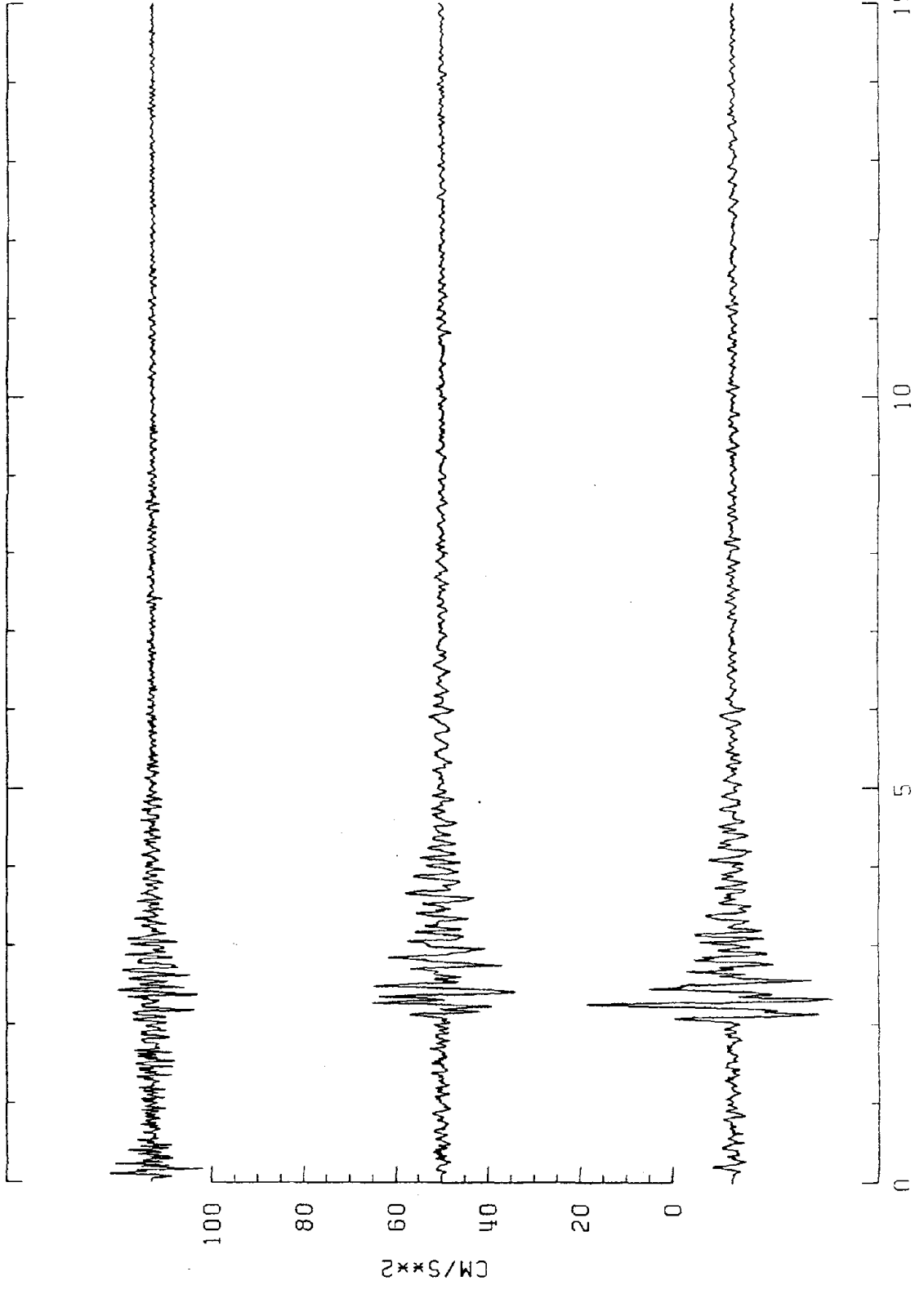
1940542L*.009 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A006-016,017,018 82008/TS02 IEM 001

TIME: 198 1242 58.418

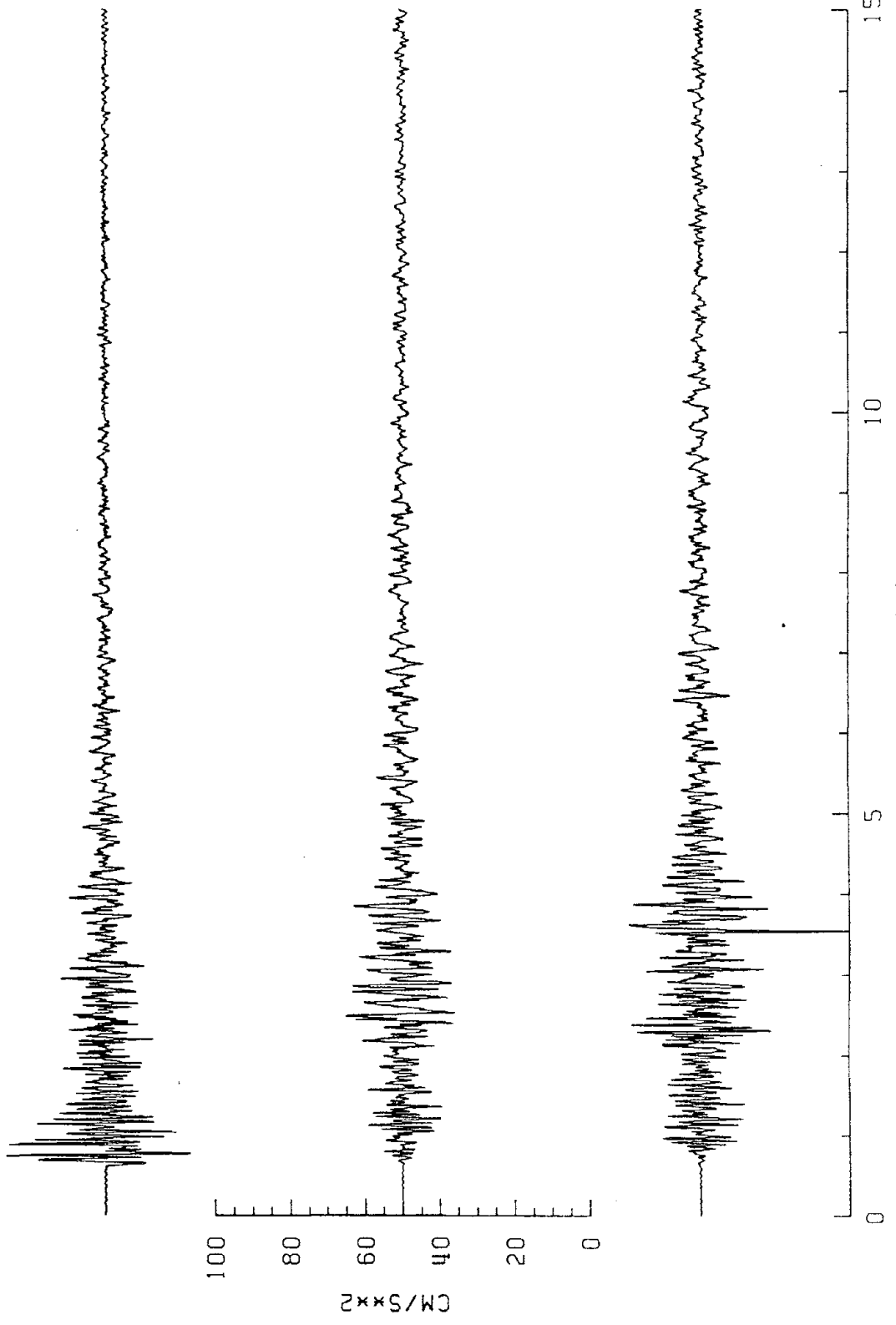
1981242T*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A007-019,020,021 82008/TS03 IEM 002

TIME: 198 1242 57.073

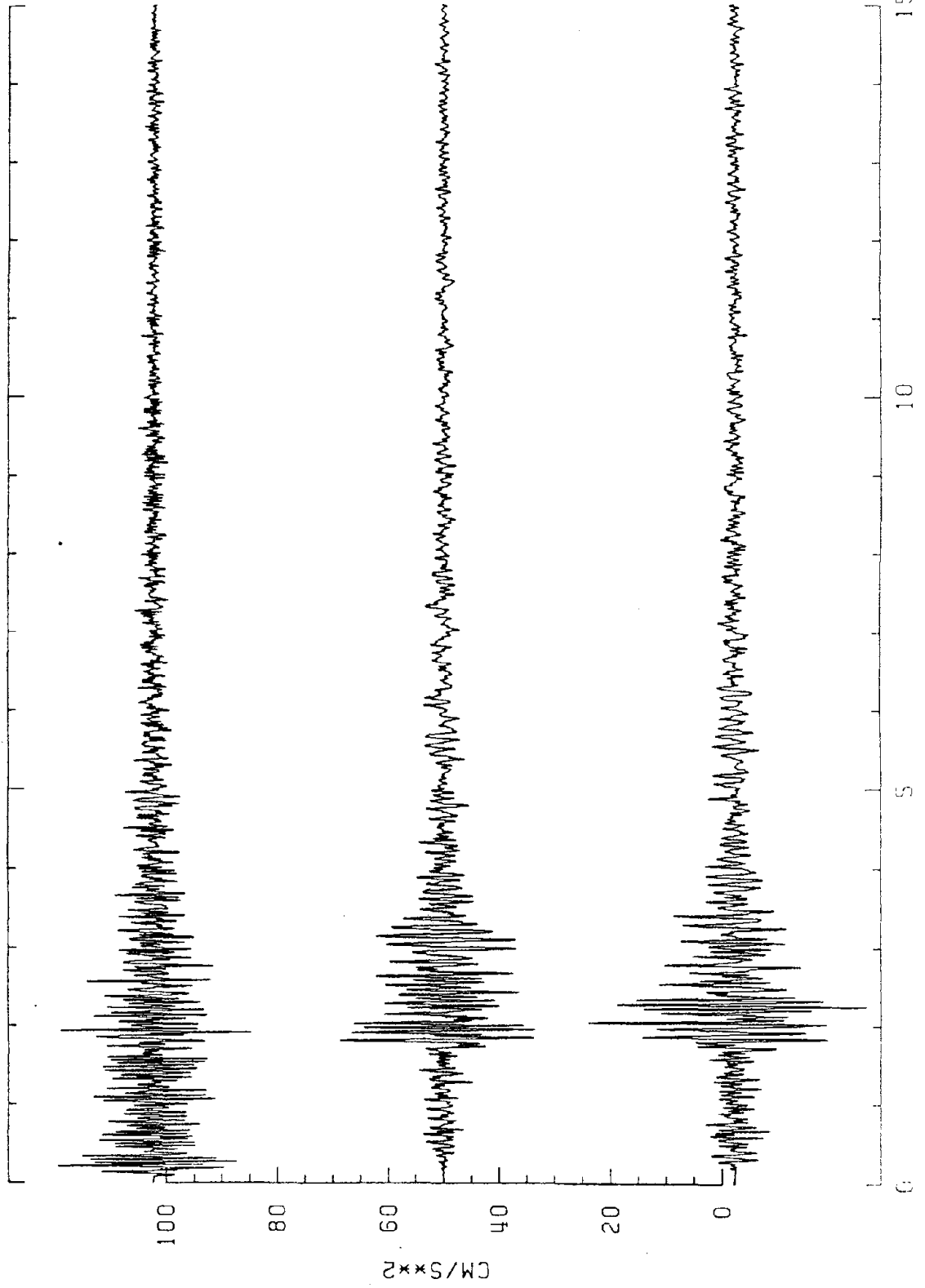
1981242T*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A008-022,023,024 82008/TS04 IEM 003

TIME: 198 1242 57.896

1981242T*.004 COMP: 1 (UP), 2 (H=180), 3 (H=270)



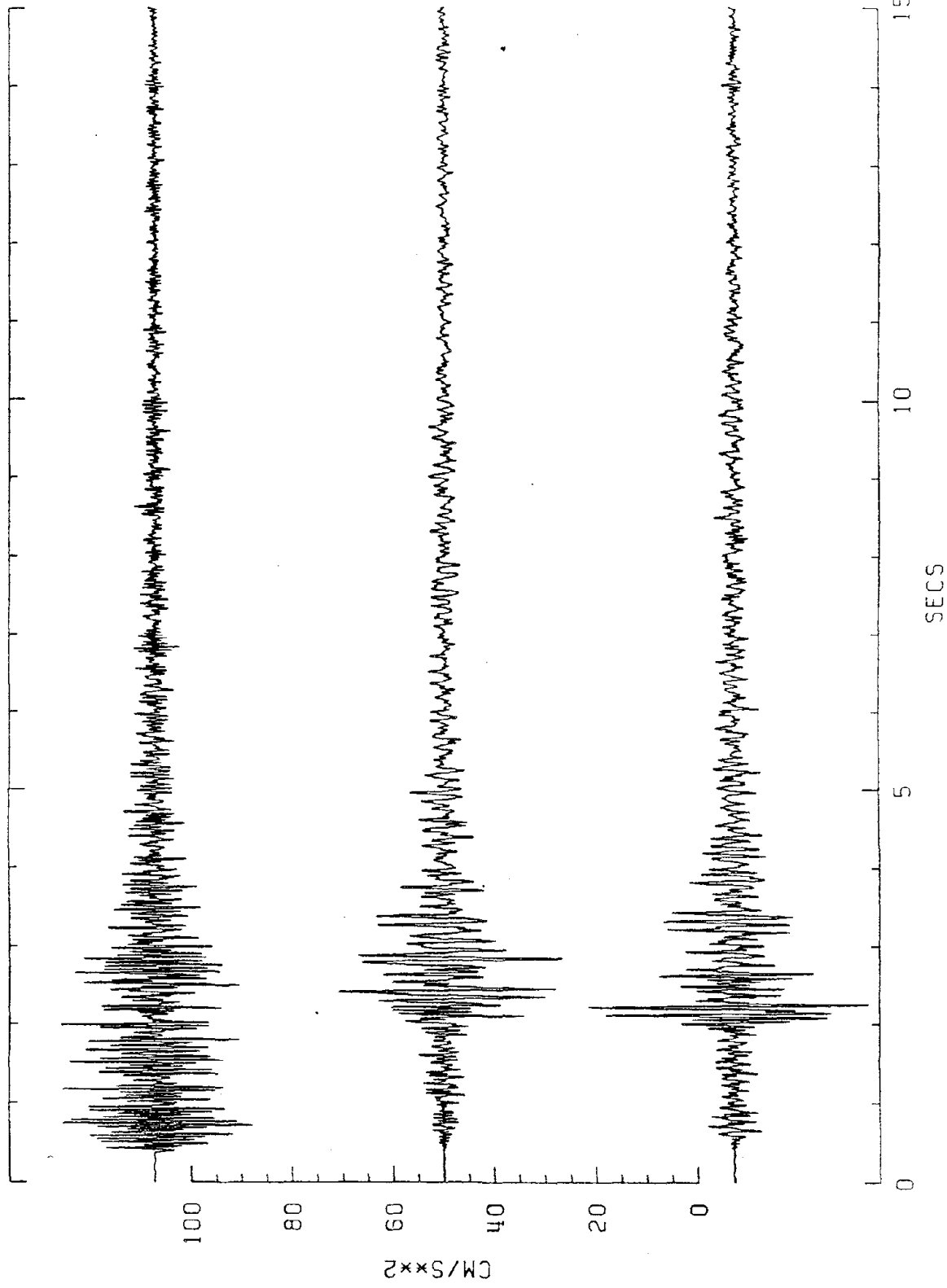
IEM 004

82008/TS05

6A009-025,026,027

TIME: 198 1242 57.584

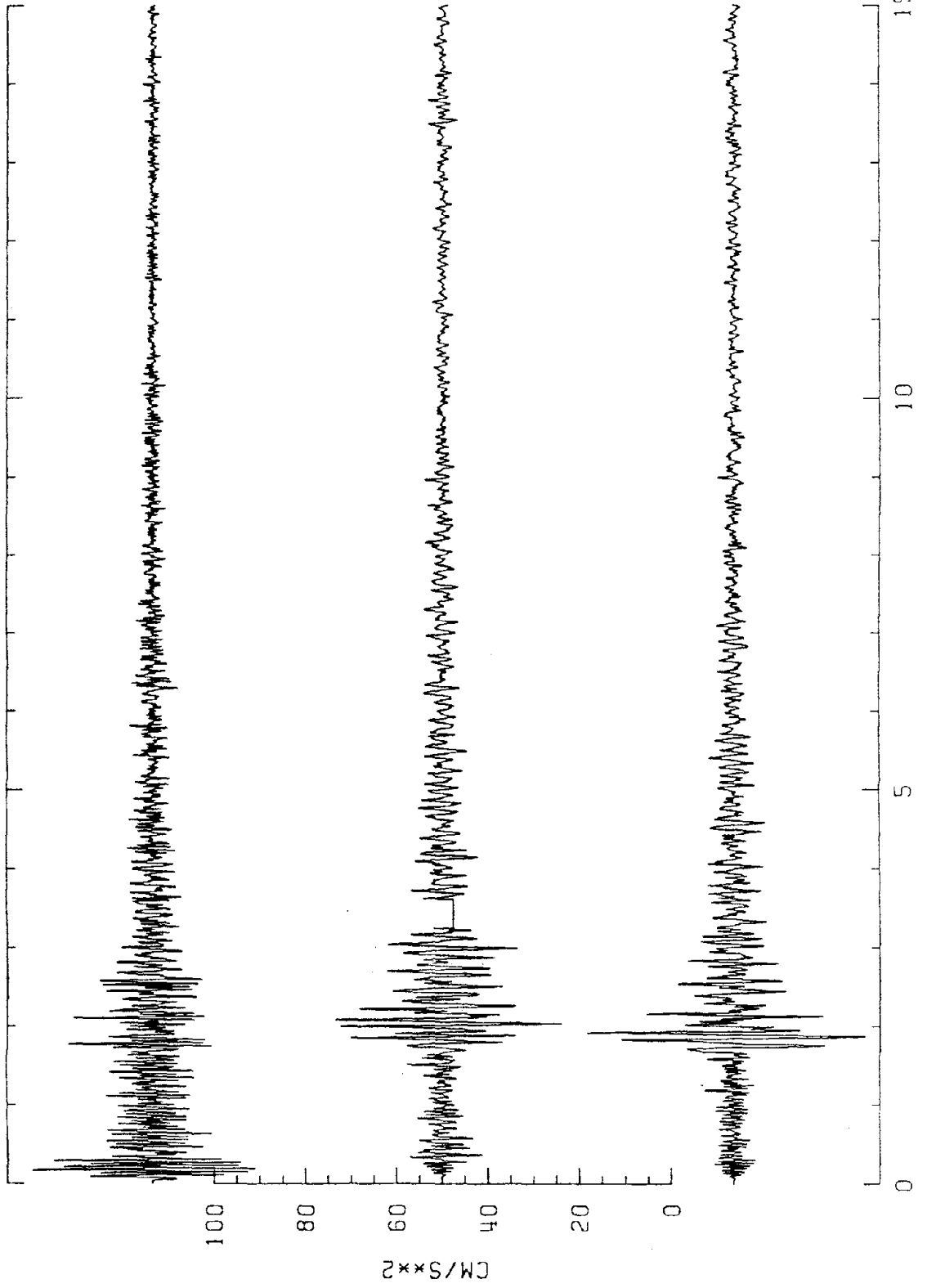
1981242T*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A010-028,029,030 82008/TS06 IEM 005

TIME: 198 1242 57.909

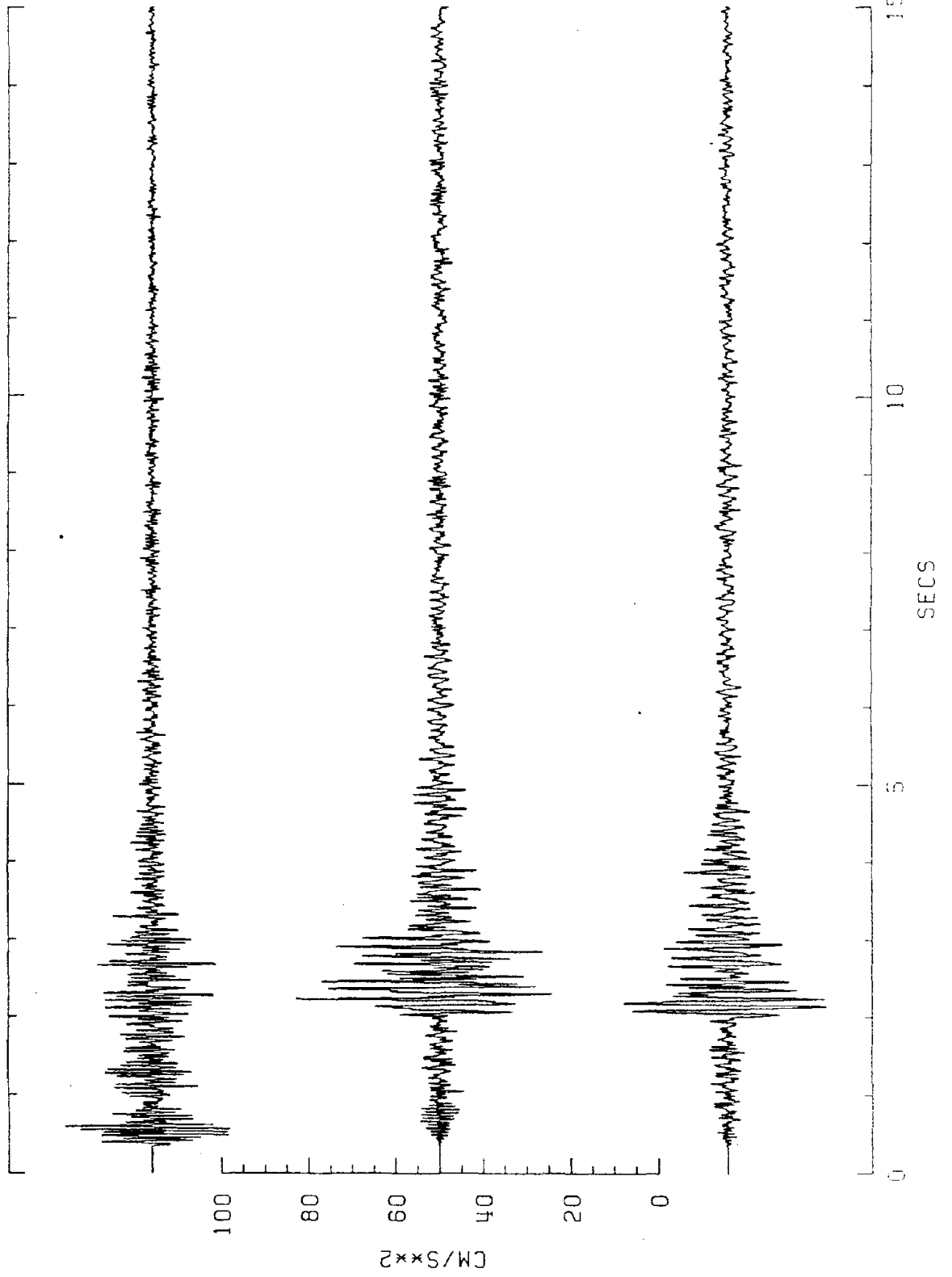
1981242T*.006 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A011-031,032,033 82008/TS07 IEM 006

TIME: 198 1242 57.628

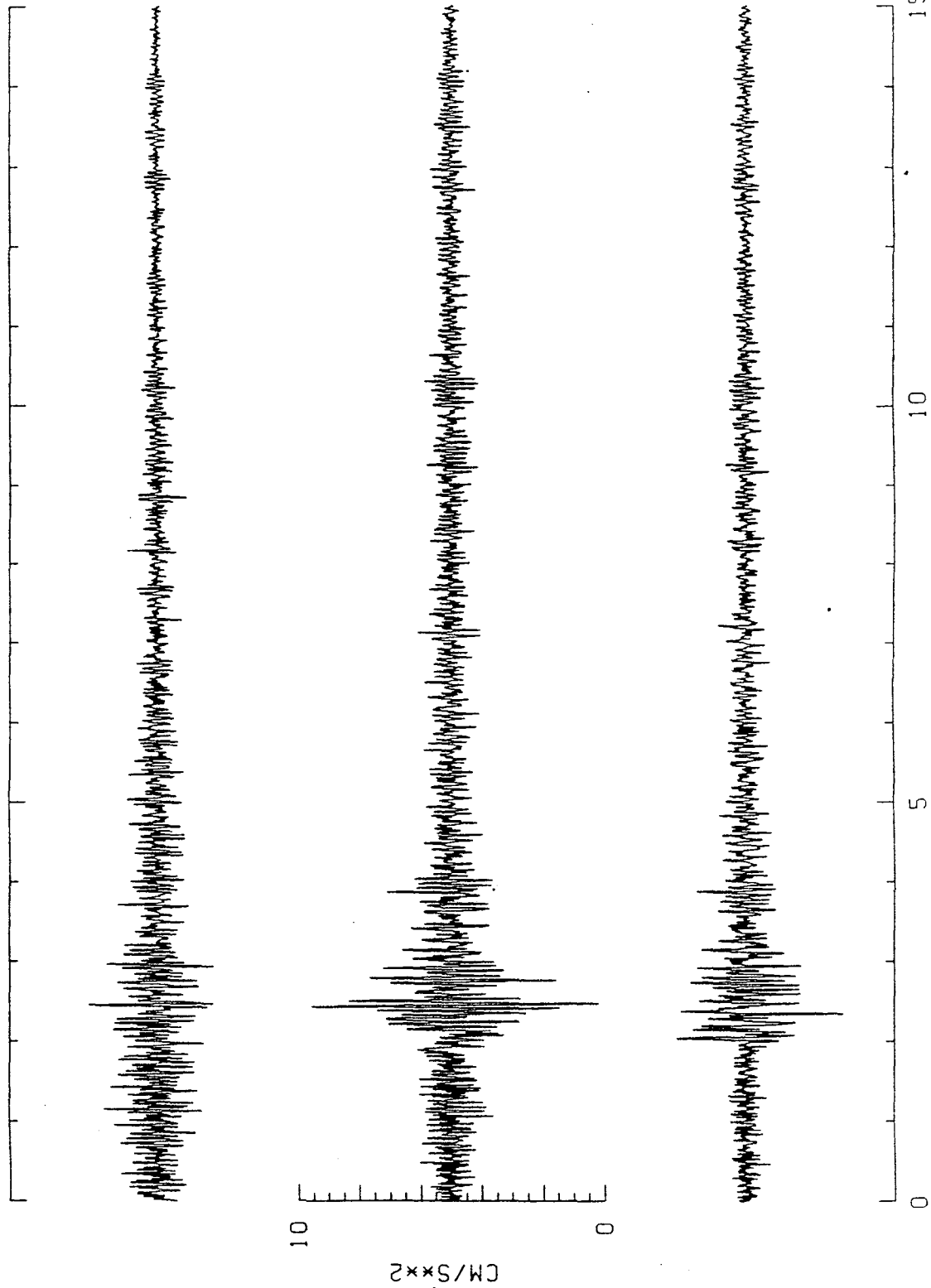
1981242T*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A012-034,035,036 82008/TS08 IEM 007

TIME: 198 1242 58.758

1981242T*.008 COMP: 1 (UP), 2 (H=180), 3 (H=270)



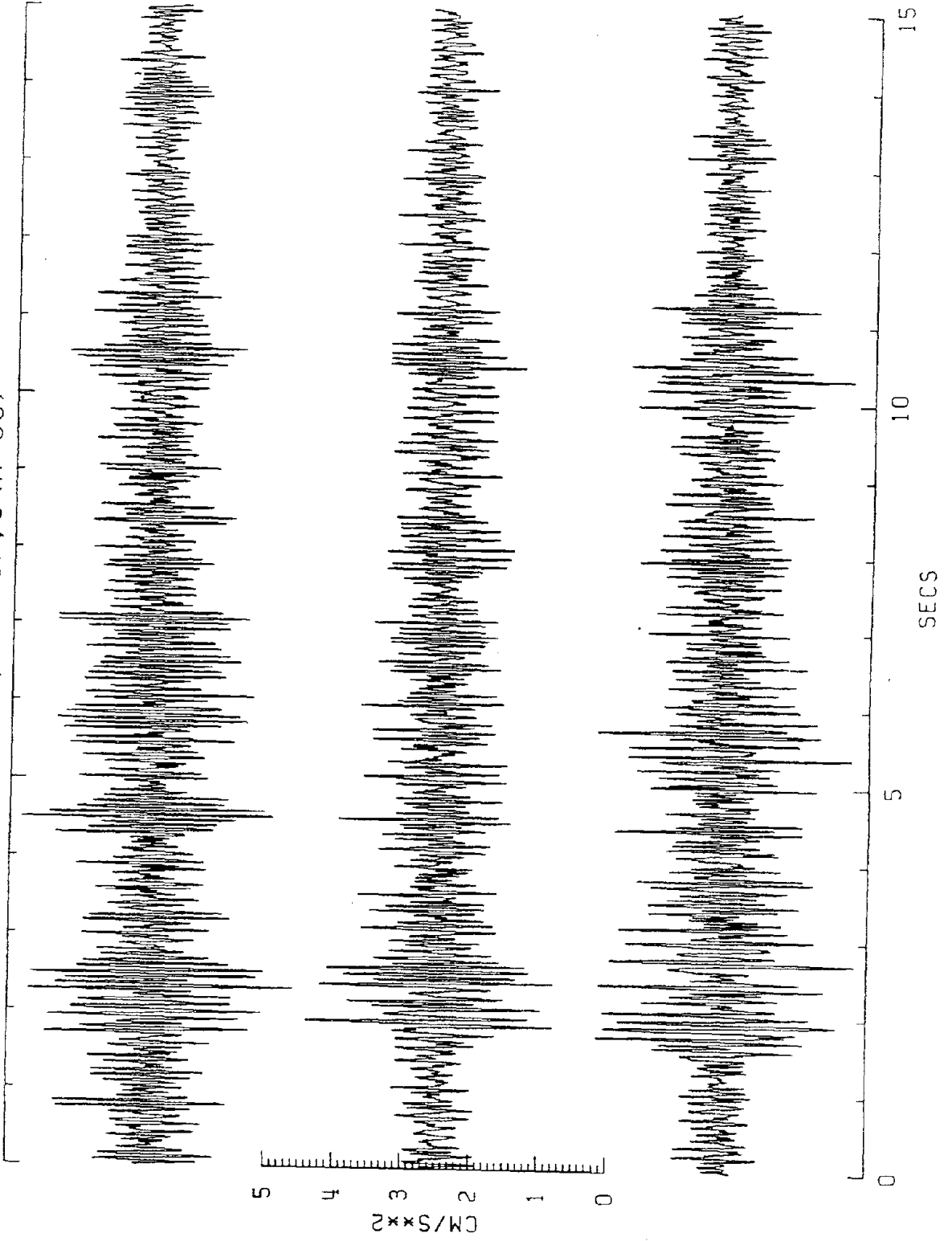
6A013-037,038,039

82008/TS11

IEM 008

TIME: 198 1243 02.812

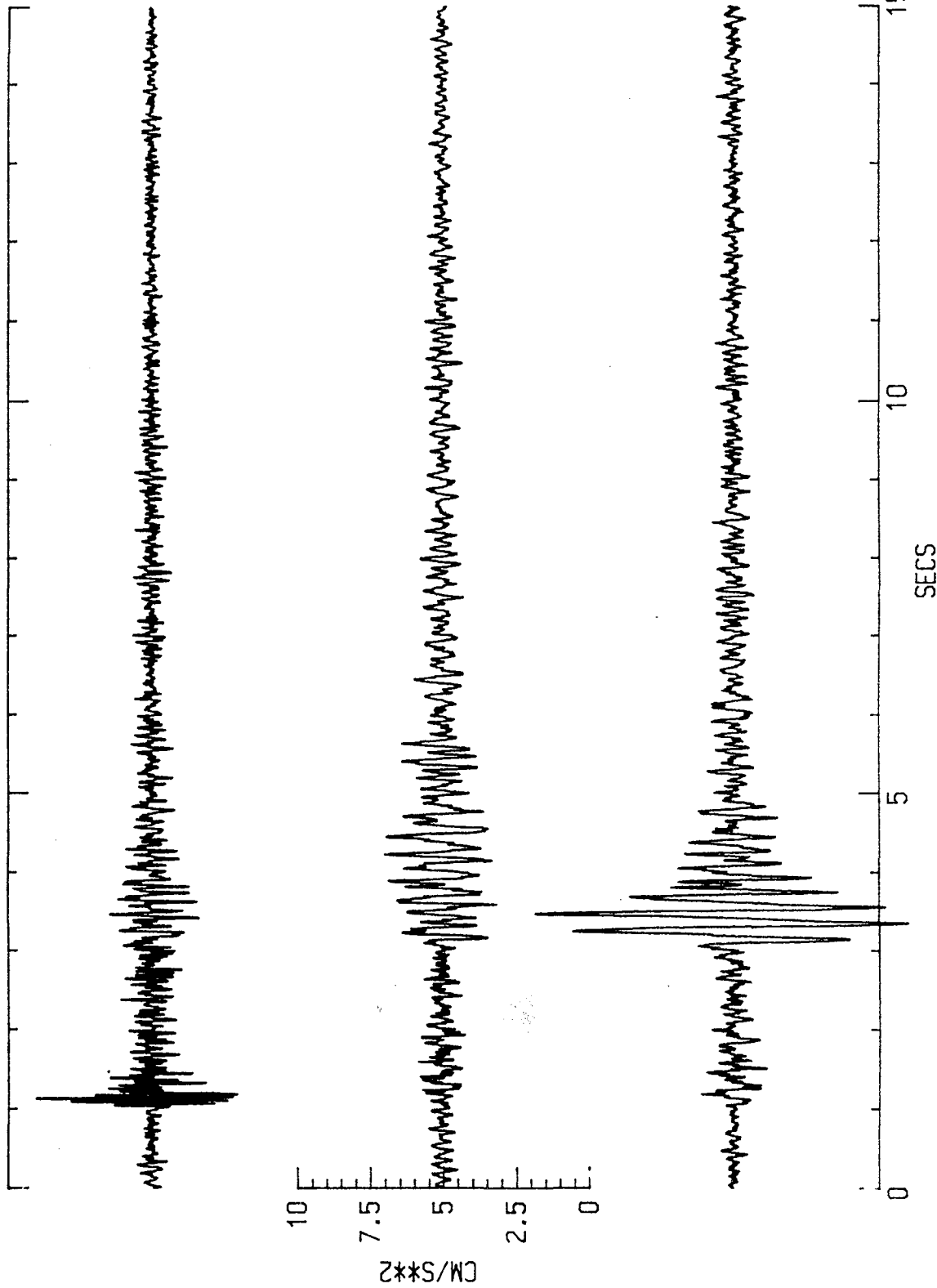
1981243B*.011 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A014-040,041,042 82009/TS02 IEM 001

TIME:198 1243 18.579

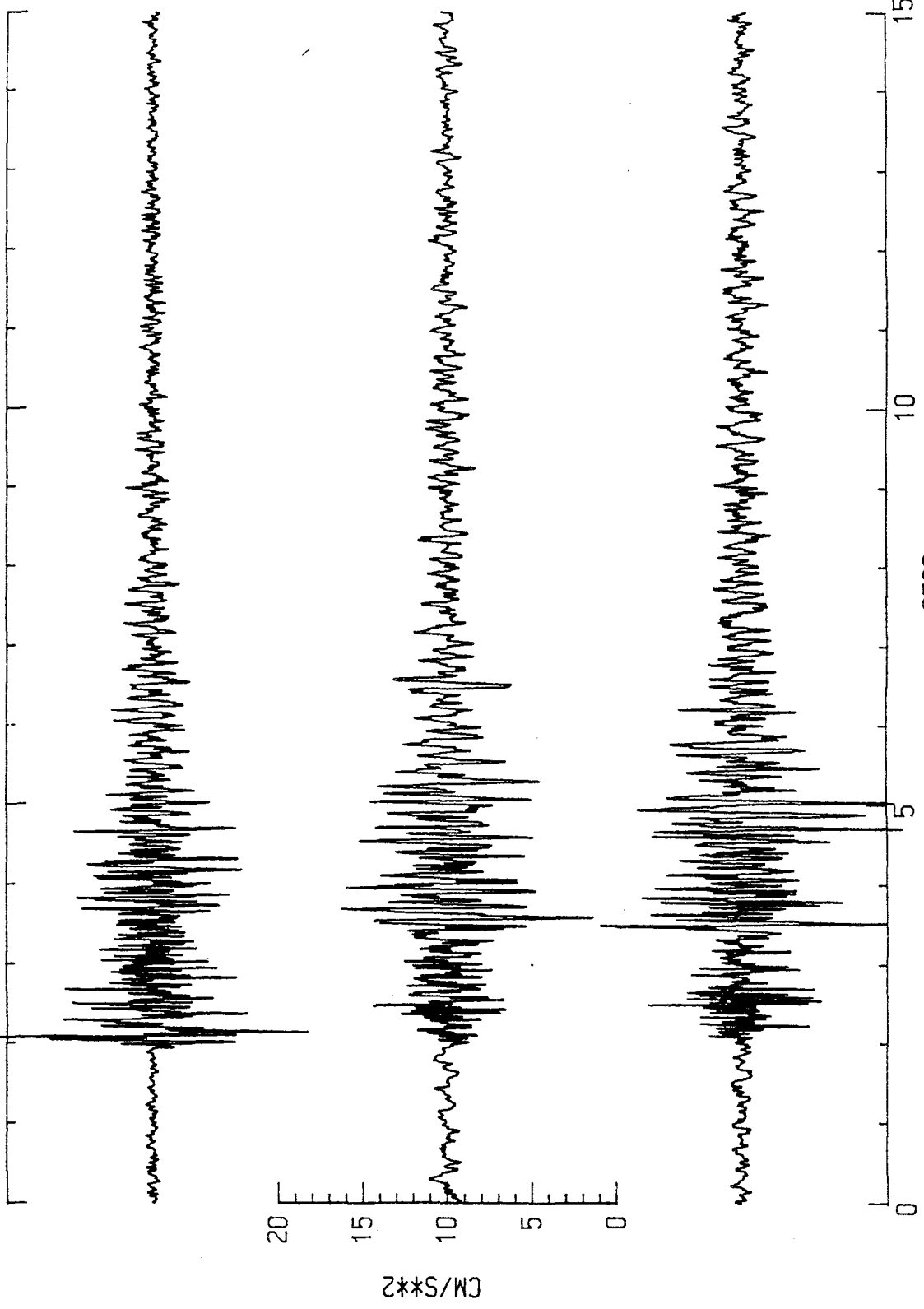
1981242T*.002 COMP:1[UP],2[H=180],3[H=270]



6A015-043,044,045 82009/TS03 IEM 002

TIME:198 1243 16.870

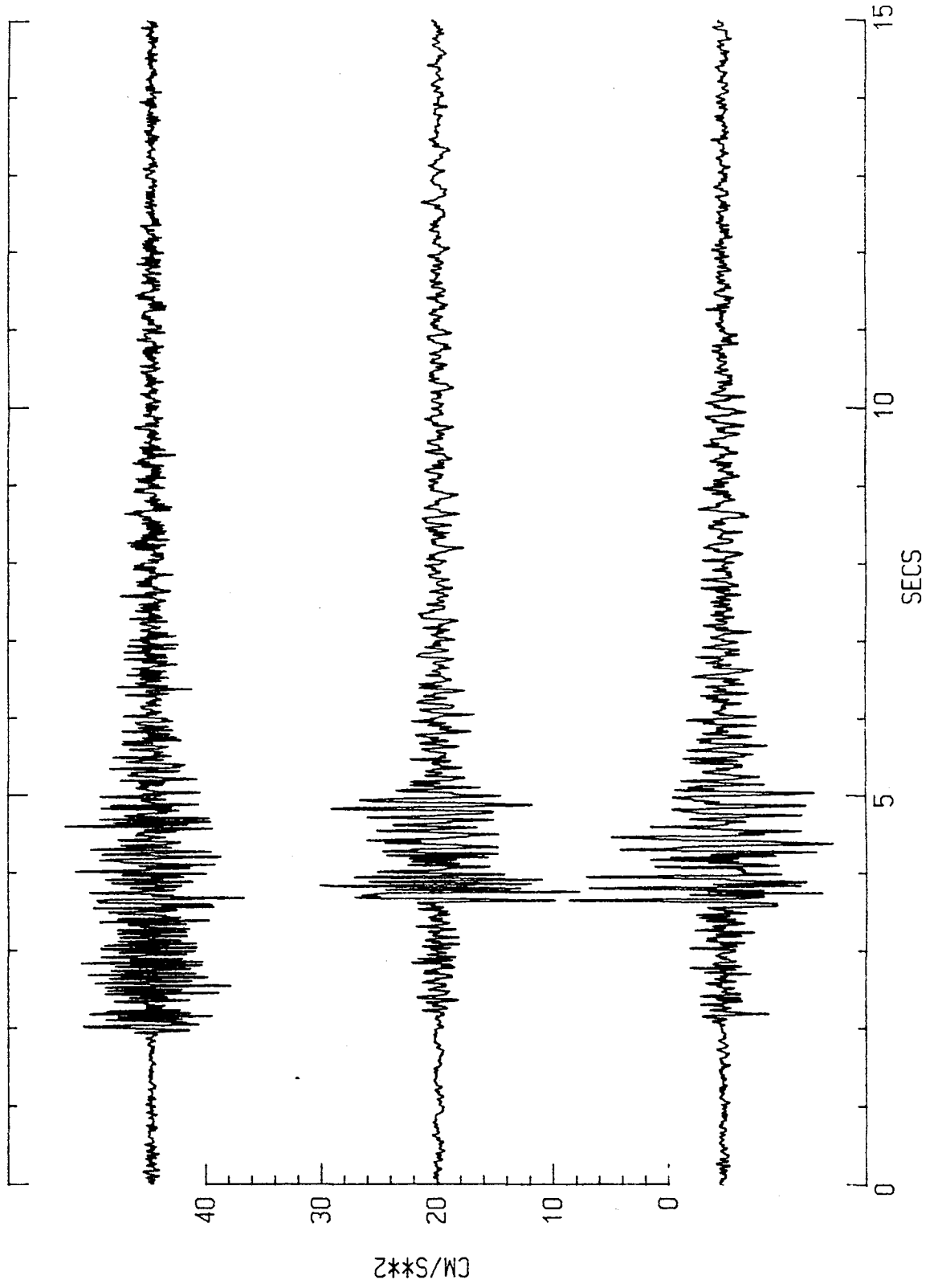
1981242T*.003 COMP:1[UP],2[H=0],3[H=90]



6A016-046,047,048 82009/T504 IEM 003

TIME:198 1243 17.195

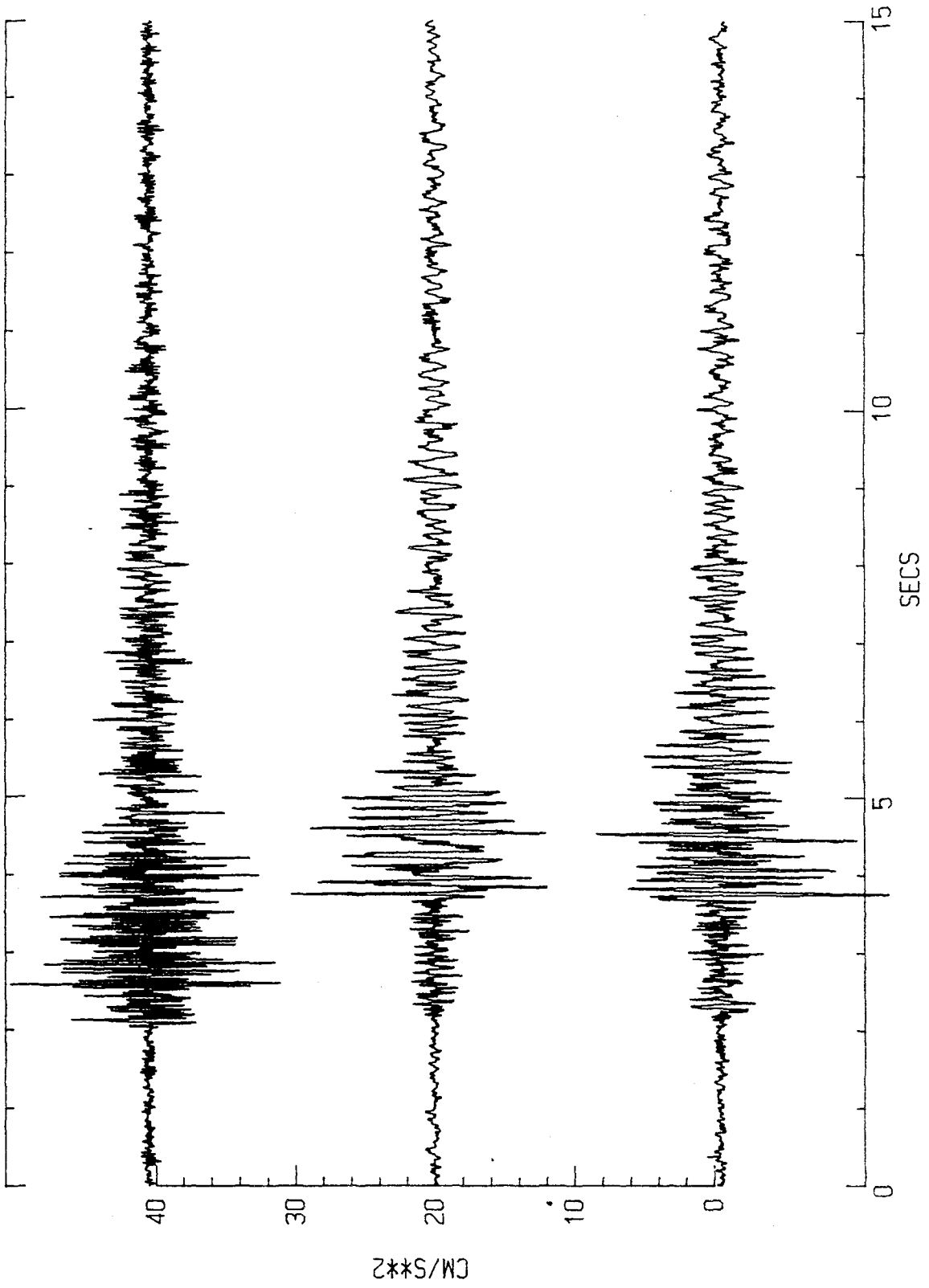
1981242T*.004 COMP:1[UP],2[H=180],3[H=270]



6A017-049,050,051 82009/TS05 IEM 004

TIME:198 1243 17.062

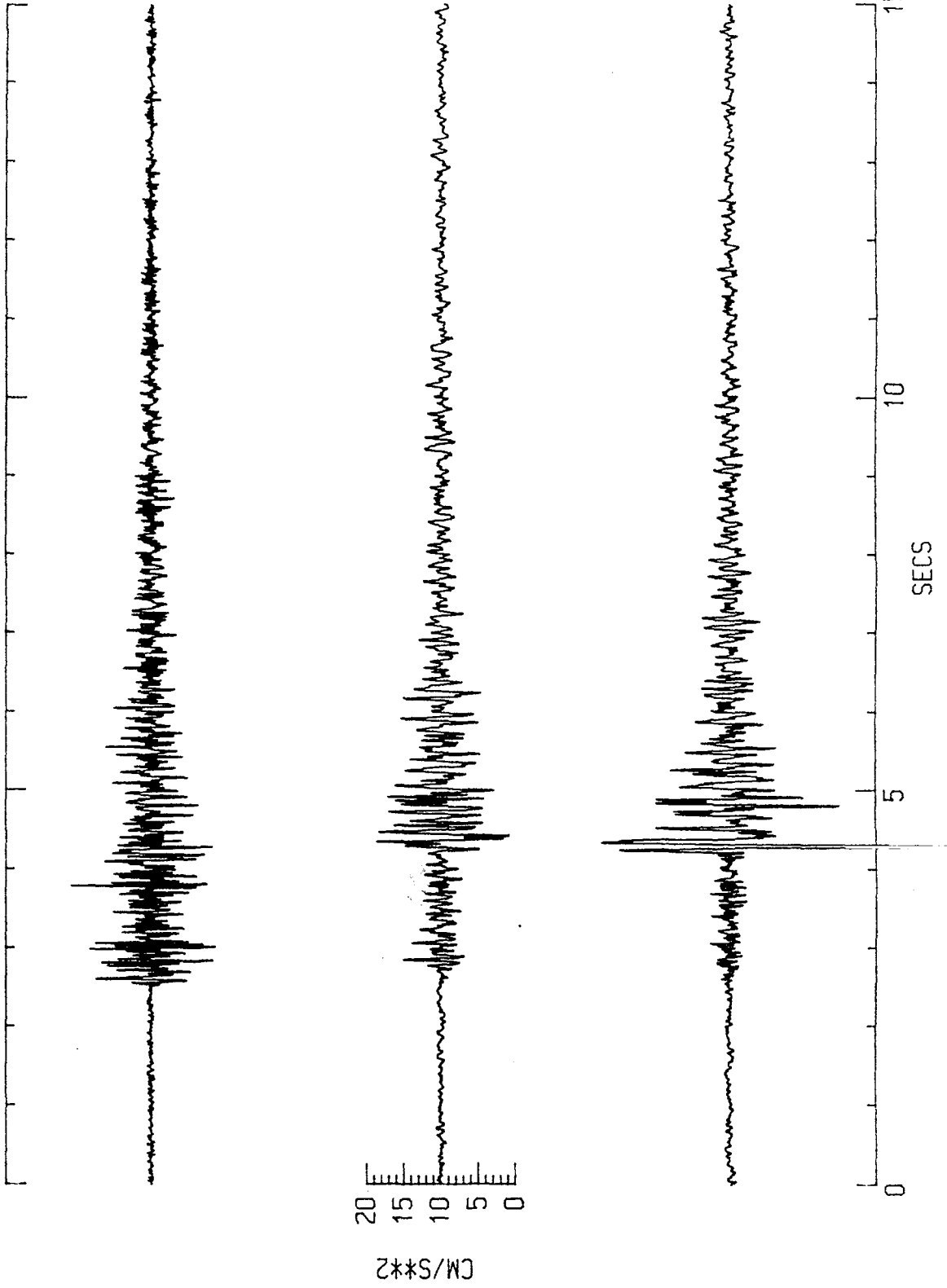
1981242T*.005 COMP:1[UP],2[H=0],3[H=90]



6A018-052,053,054 82009/TS06 IEM 005

TIME:198 1243 16.574

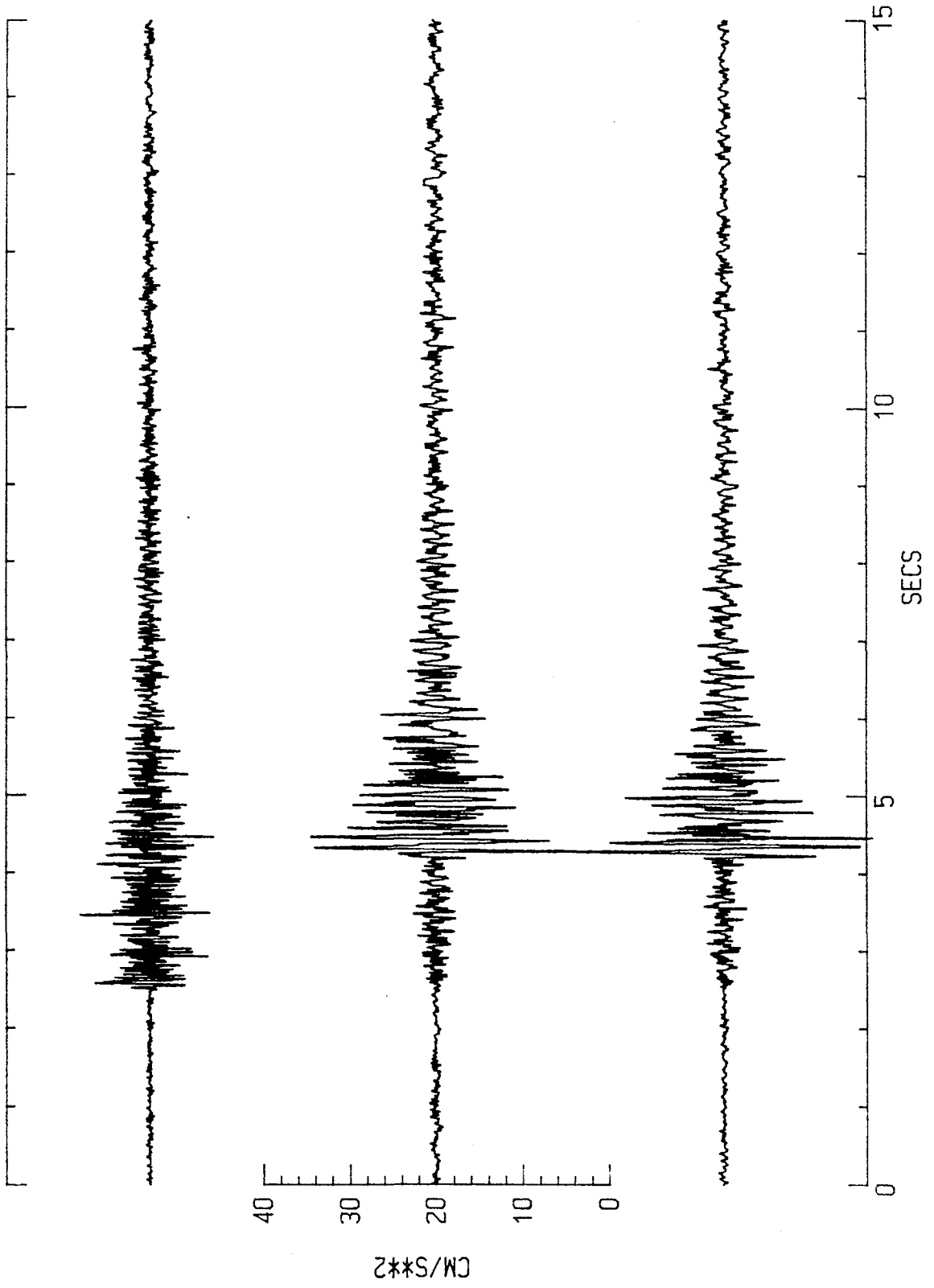
1981242T*.006 COMP:1[UP],2[H=0],3[H=90]



6A019-055,056,057 82009/TS07 IEM 006

TIME:198 1243 16.615

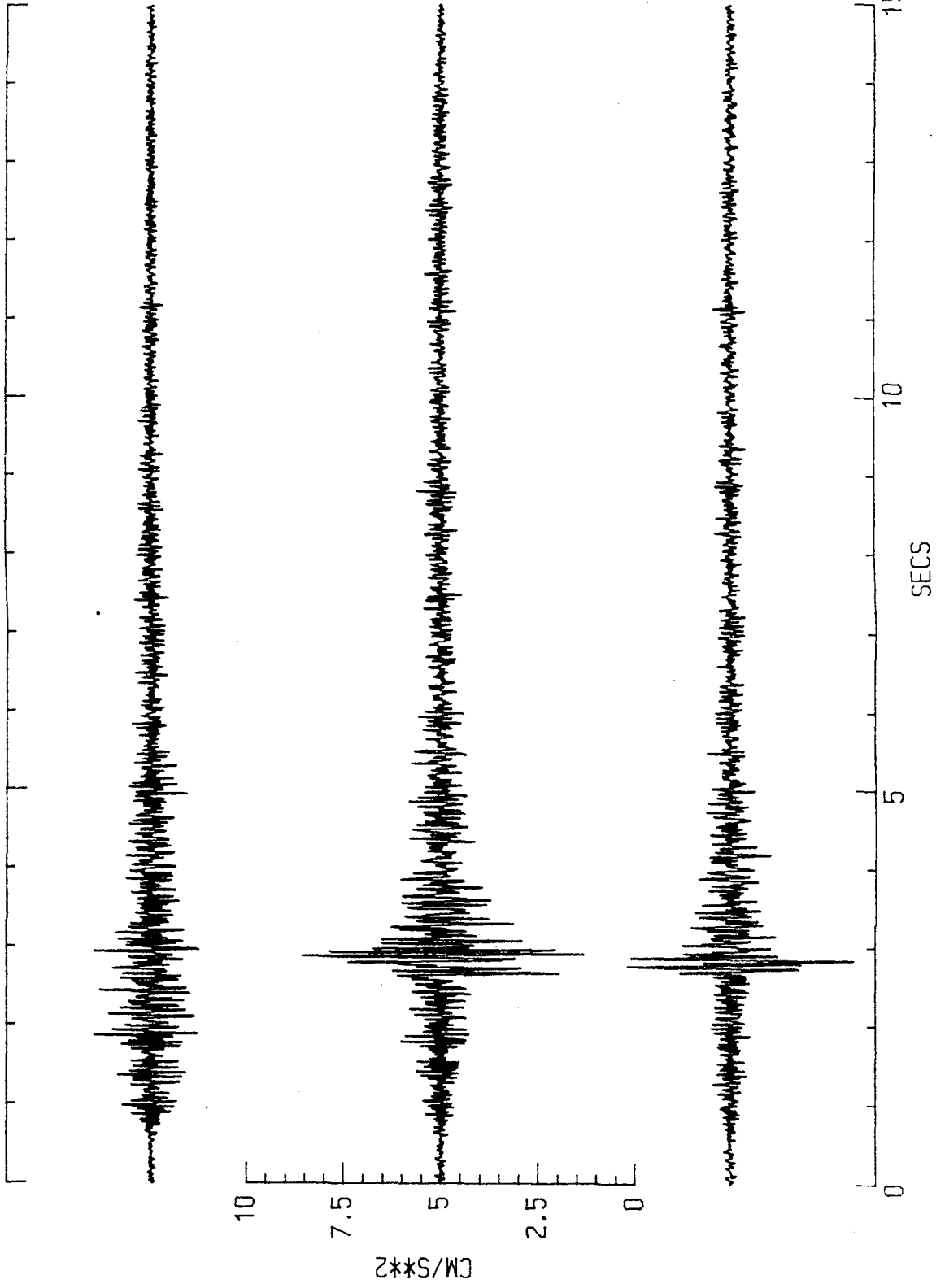
1981242T*.007 COMP:1[UP],2[H=180],3[H=270]



6A020-058, 059, 060 82009/TS08 IEM 007

TIME:198 1243 19.239

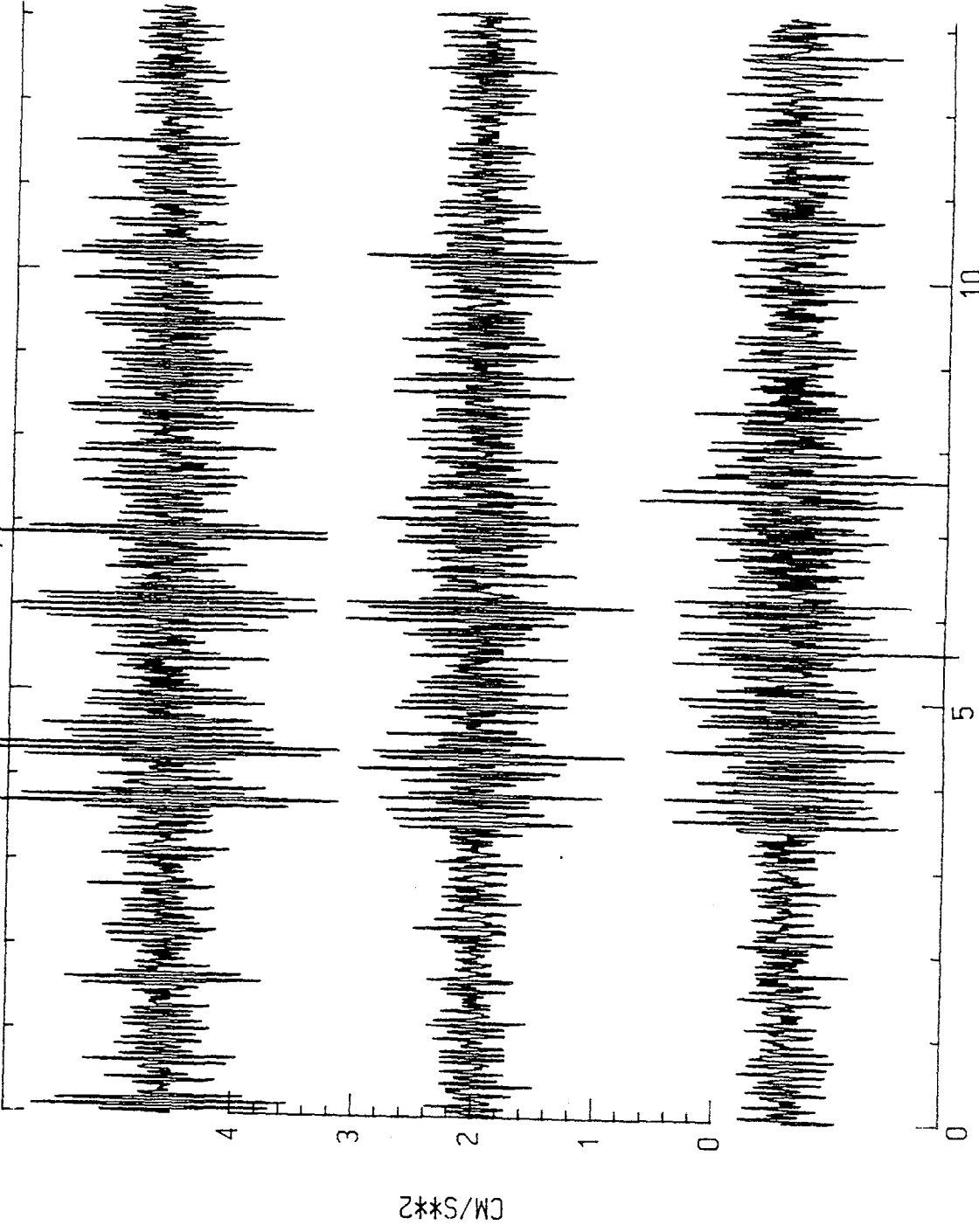
1981242T*.008 COMP:1[UP], 2[H=180], 3[H=270]



6A021-061,062,063 IEM 008
82009/TS11

TIME:198 1243 22.017

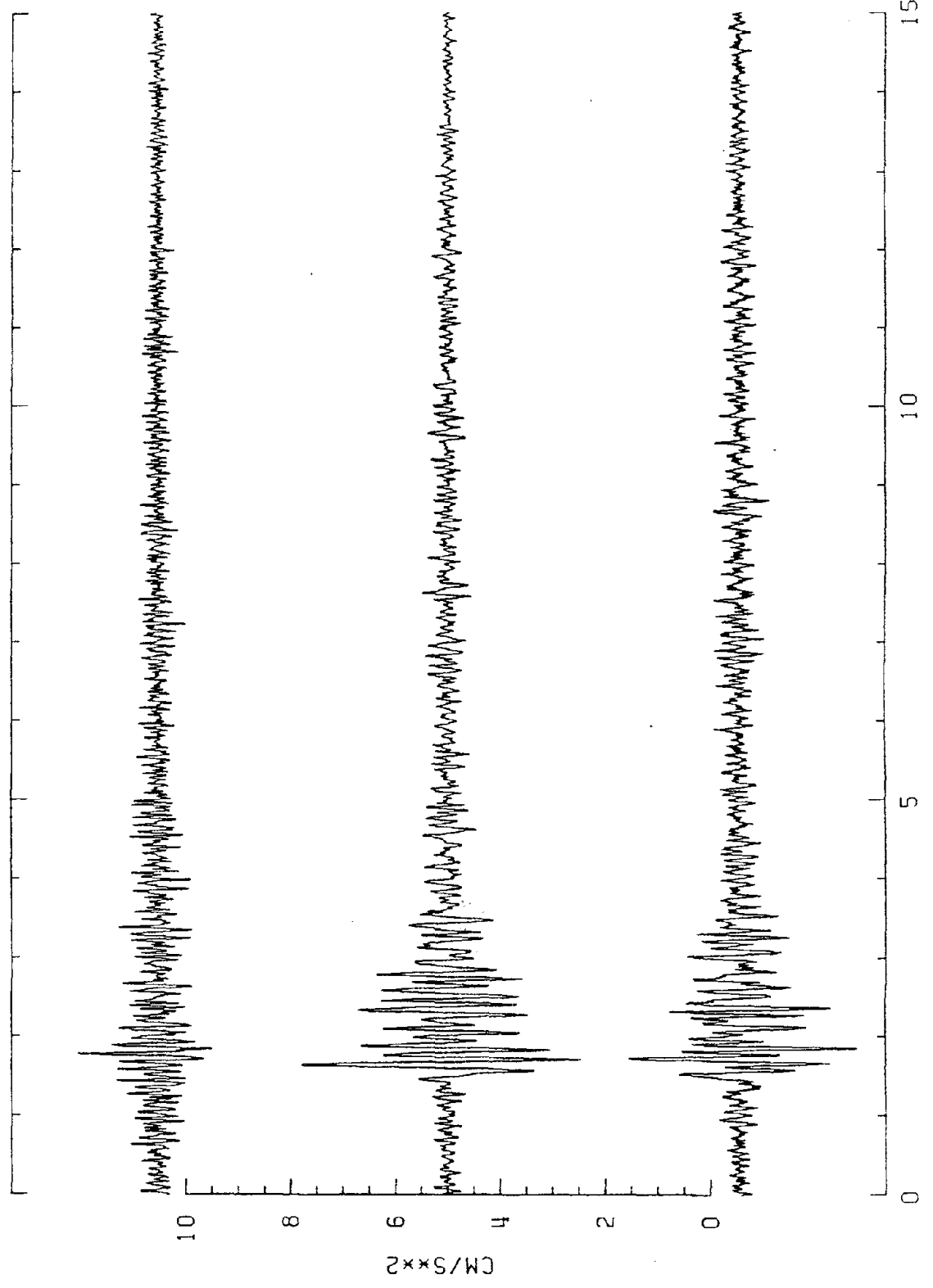
1981243B*.011 COMP:1 [UP], 2 [H=0], 3 [H=90]



6A022-064,065,066 82012/TS02 IEM 009

TIME: 206 1011 06.453

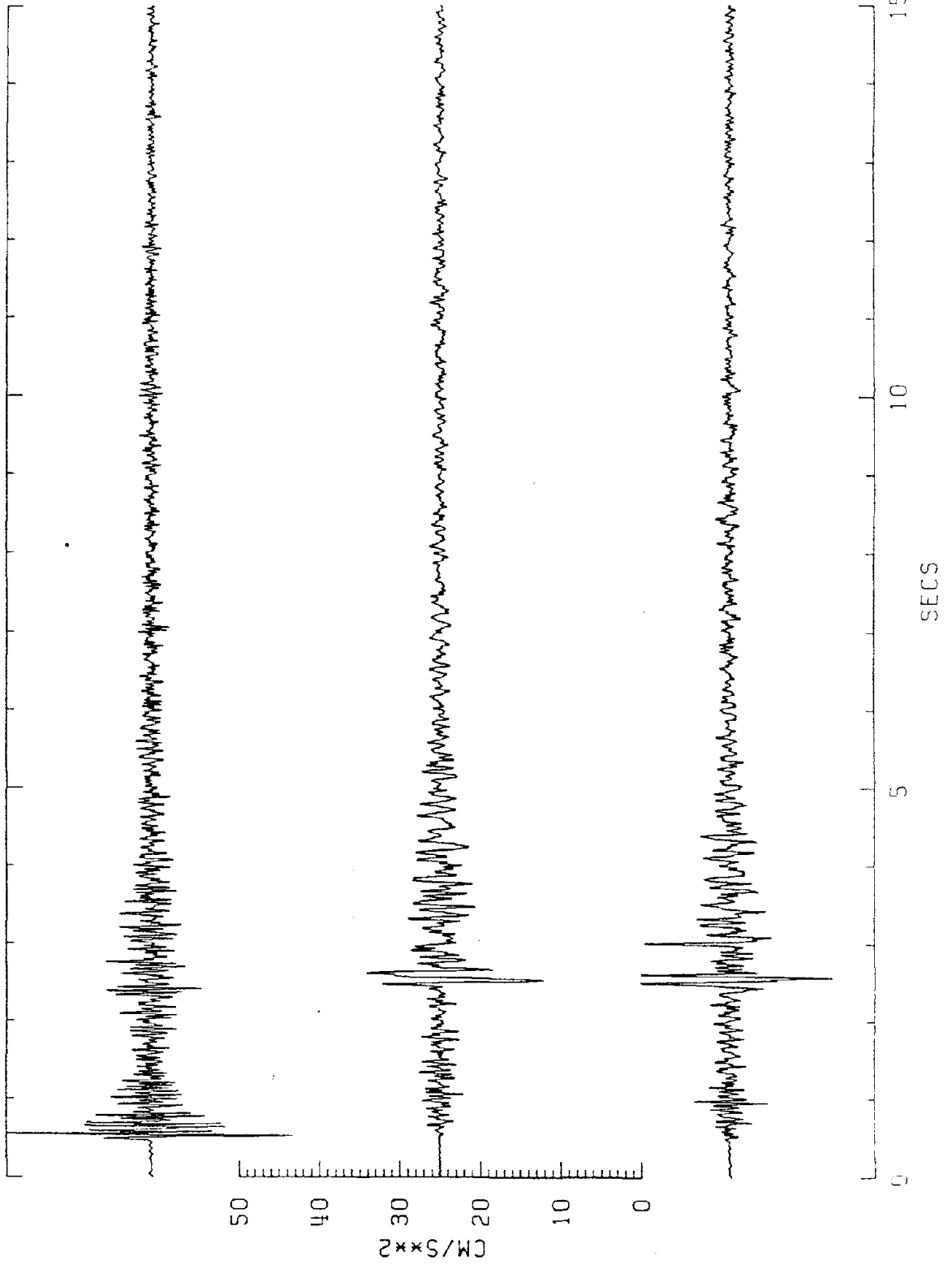
2061011C*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A023-067,068,069 82012/TS04 IEM 010

TIME: 206 1011 01.420

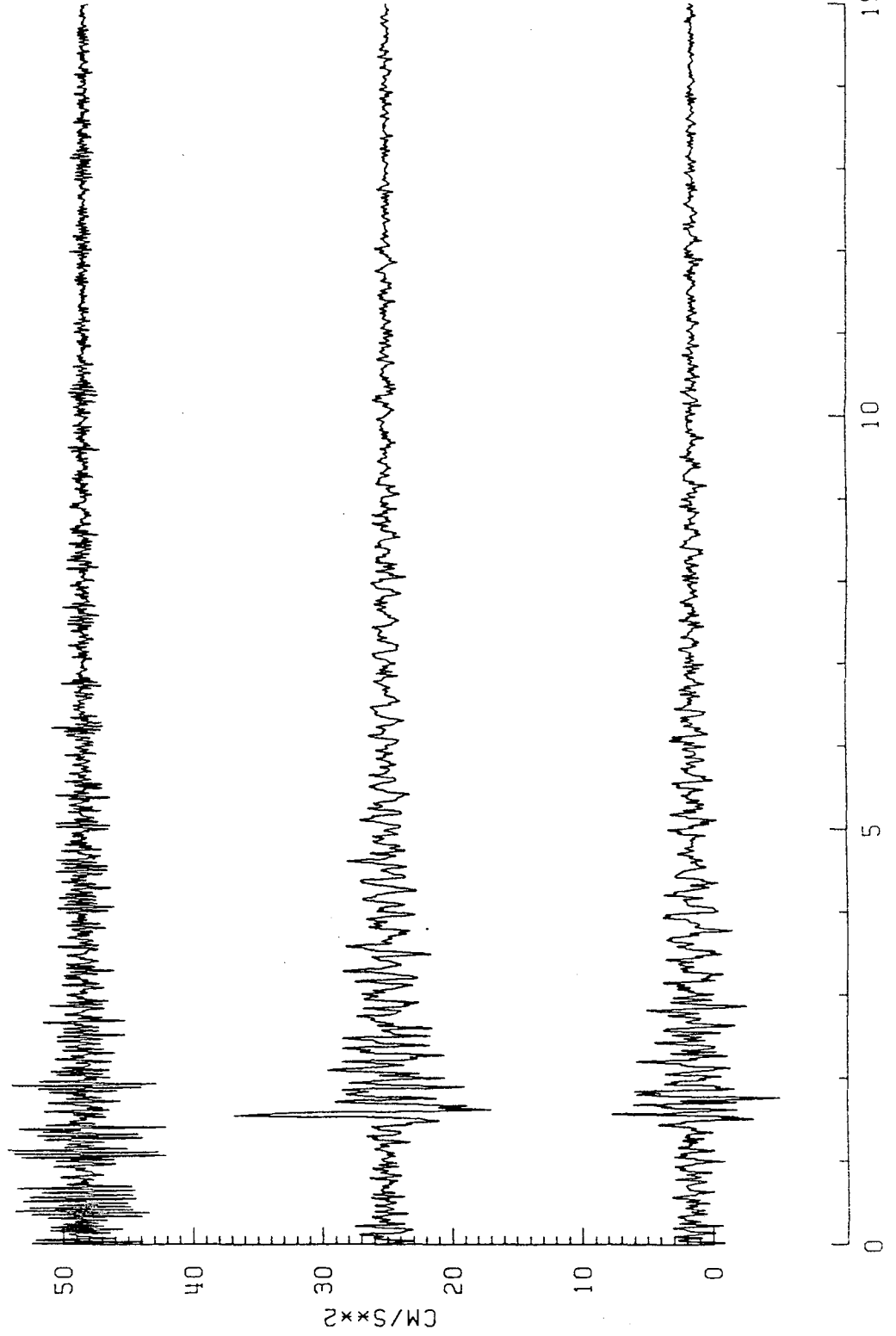
2061011A*.004 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A024-070,071,072 82012/TS05 IEM 011

TIME: 206 1011 02.529

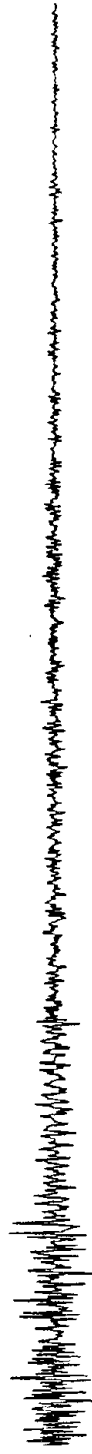
2061011B*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A025-073, 074, 075 82012/T506 IEM 012

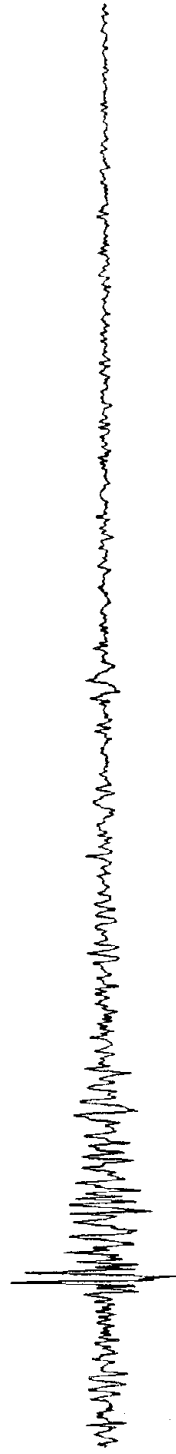
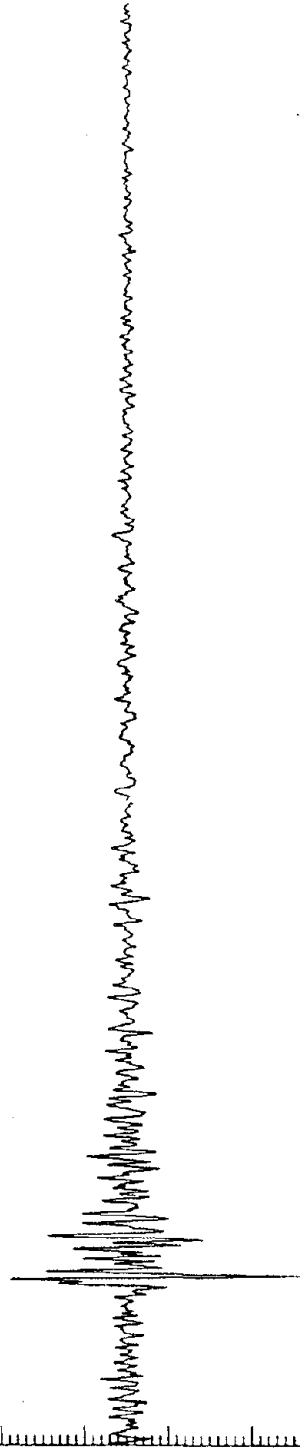
TIME: 206 1011 02.402

2061011B*.006 COMP: 1 (UP), 2 (H=0), 3 (H=90)



50
40
30
20
10
0

CM/S**2



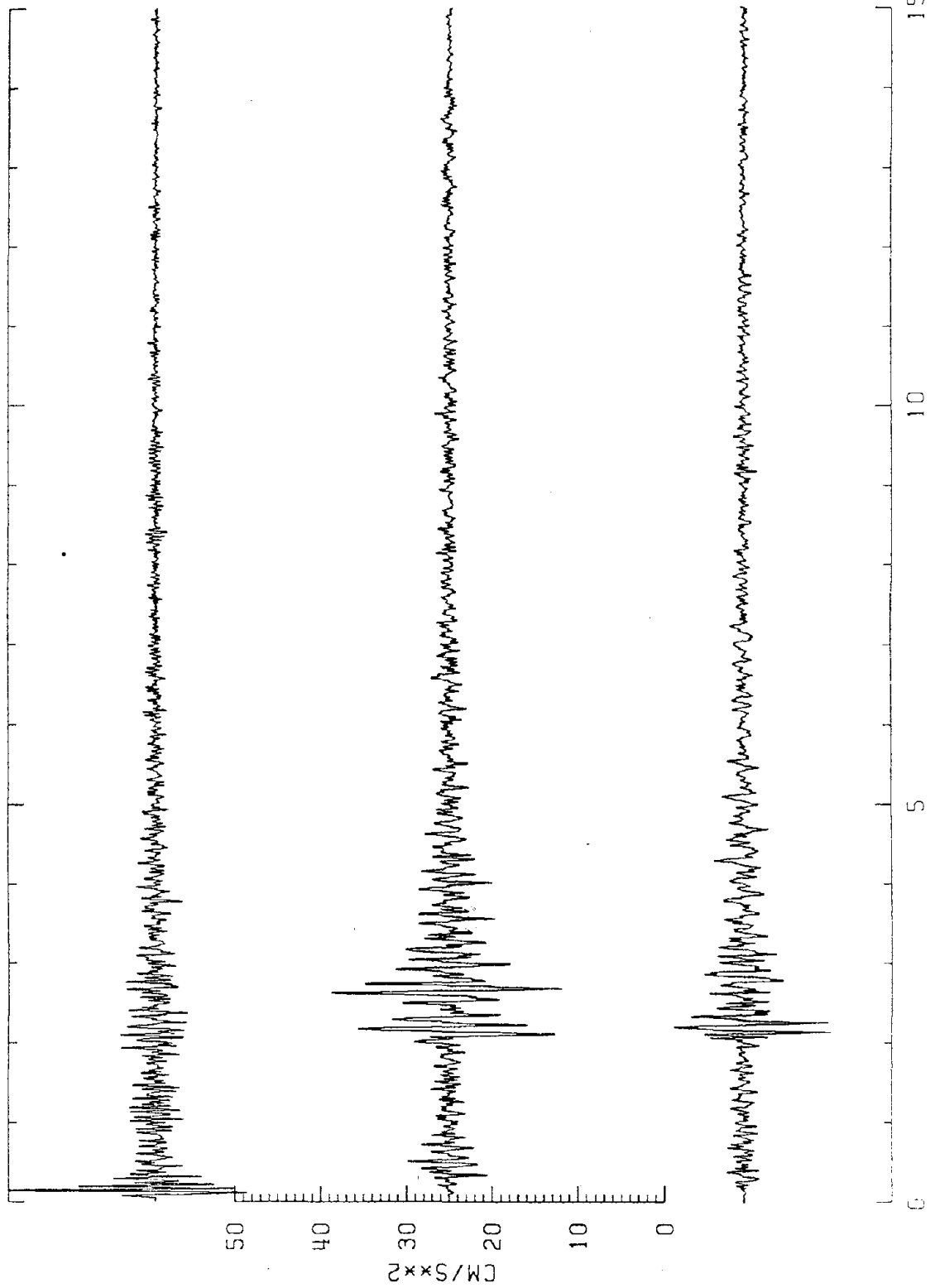
0 5 10 15

SECS

6A026-076,077,078 82012/T507 IEM 013

TIME: 206 1011 01.819

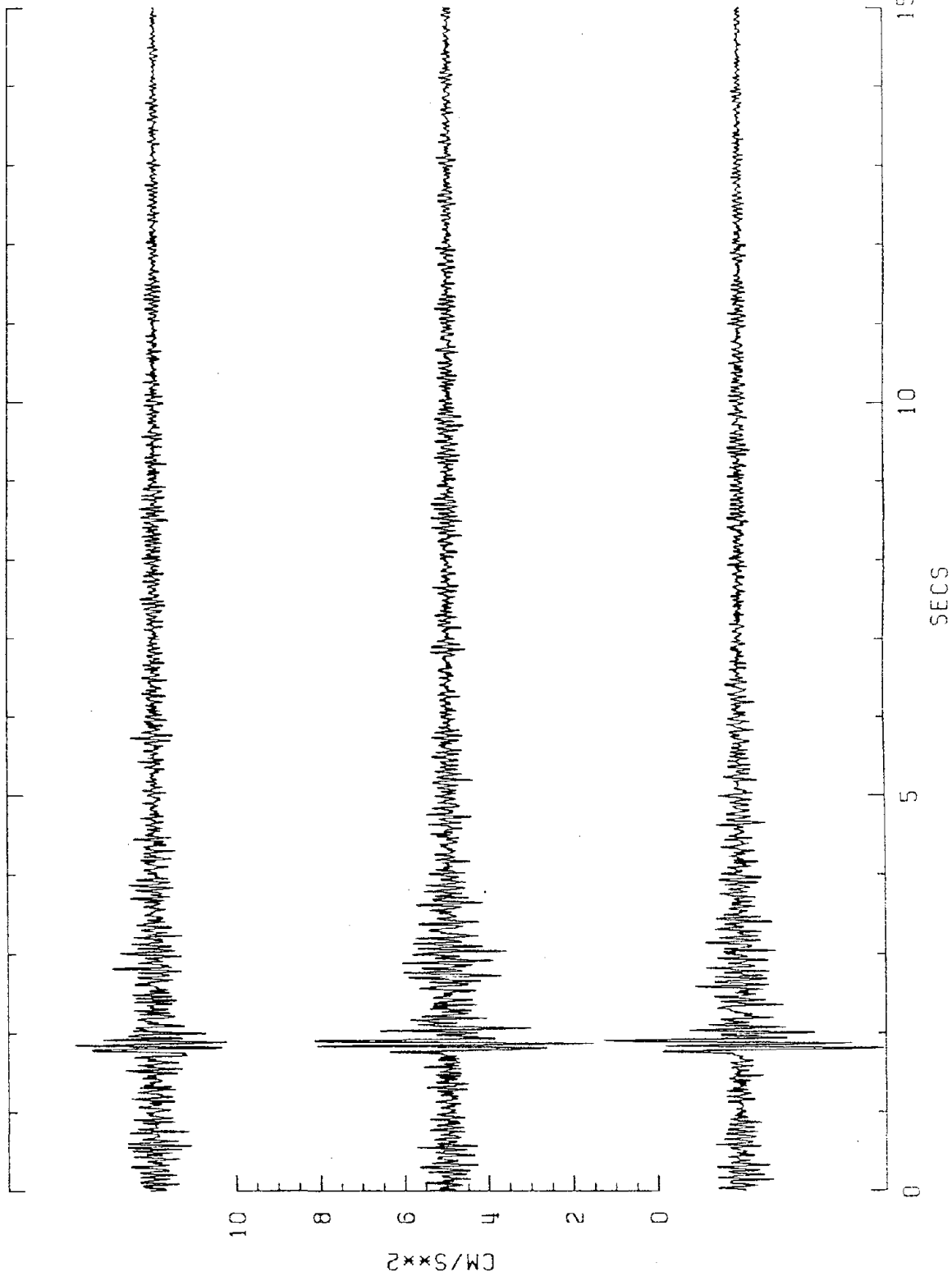
2061011A*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A027-079,080,081 82012/TS08 IEM 016

TIME: 206 1011 02.752

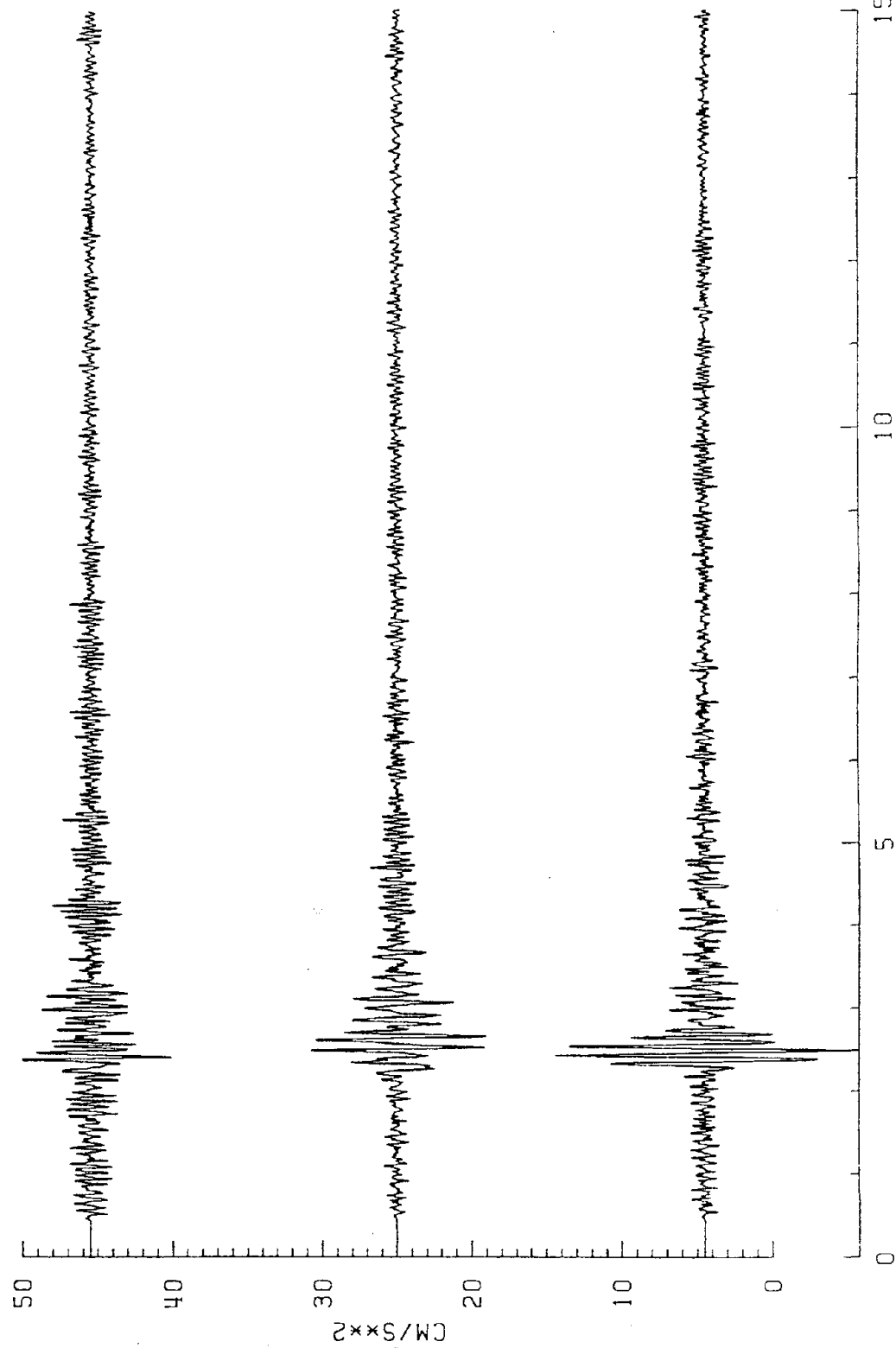
2061011B*.008 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A028-082,083,084 82012/TS11 IEM 015

TIME: 206 1011 01.715

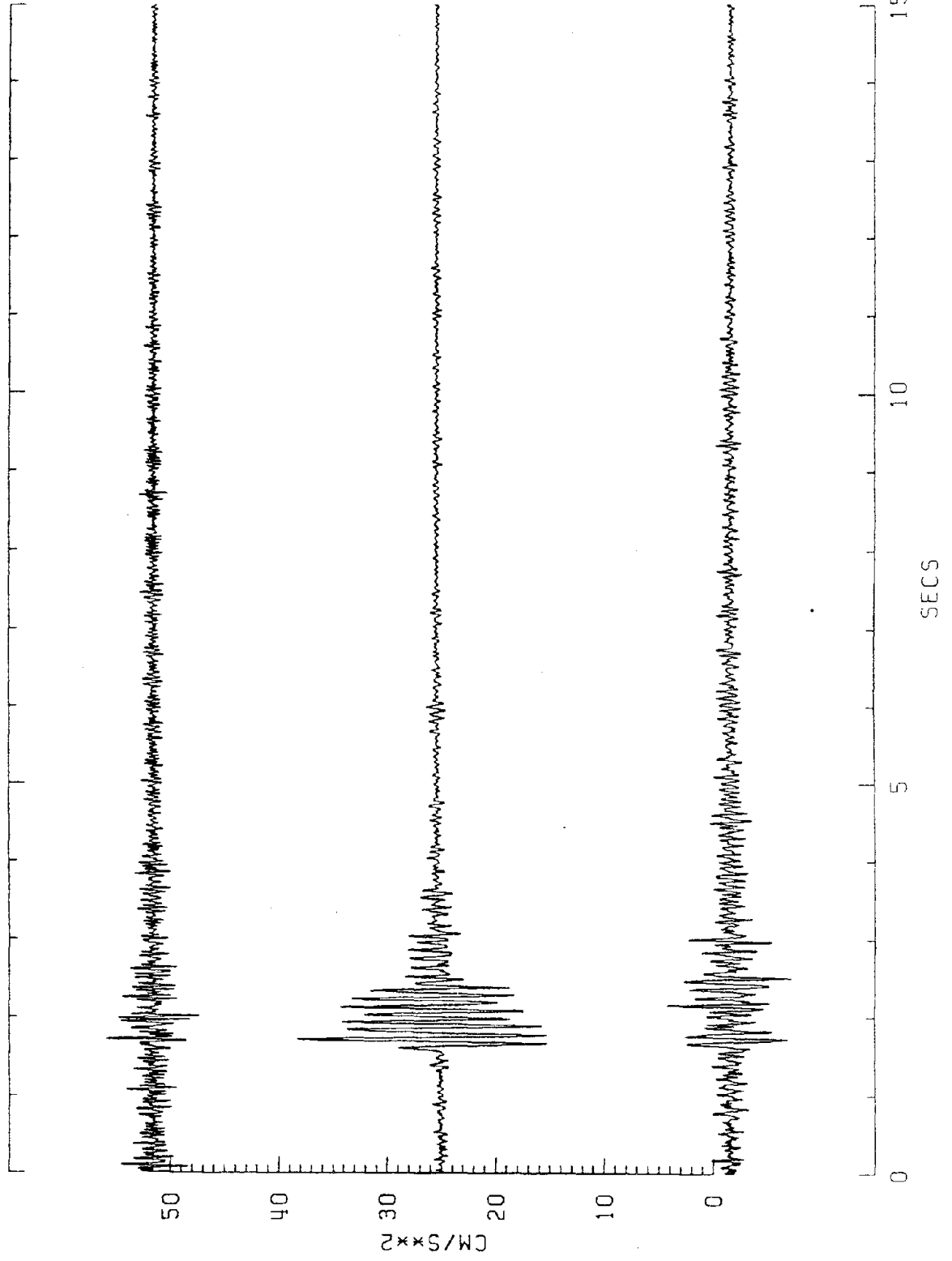
2052359L*.011 COMP:1 (UP), 2 (H=0), 3 (H=90)



6A029-085,086,087 82012/T512 IEM 014

TIME: 206 1011 02.038

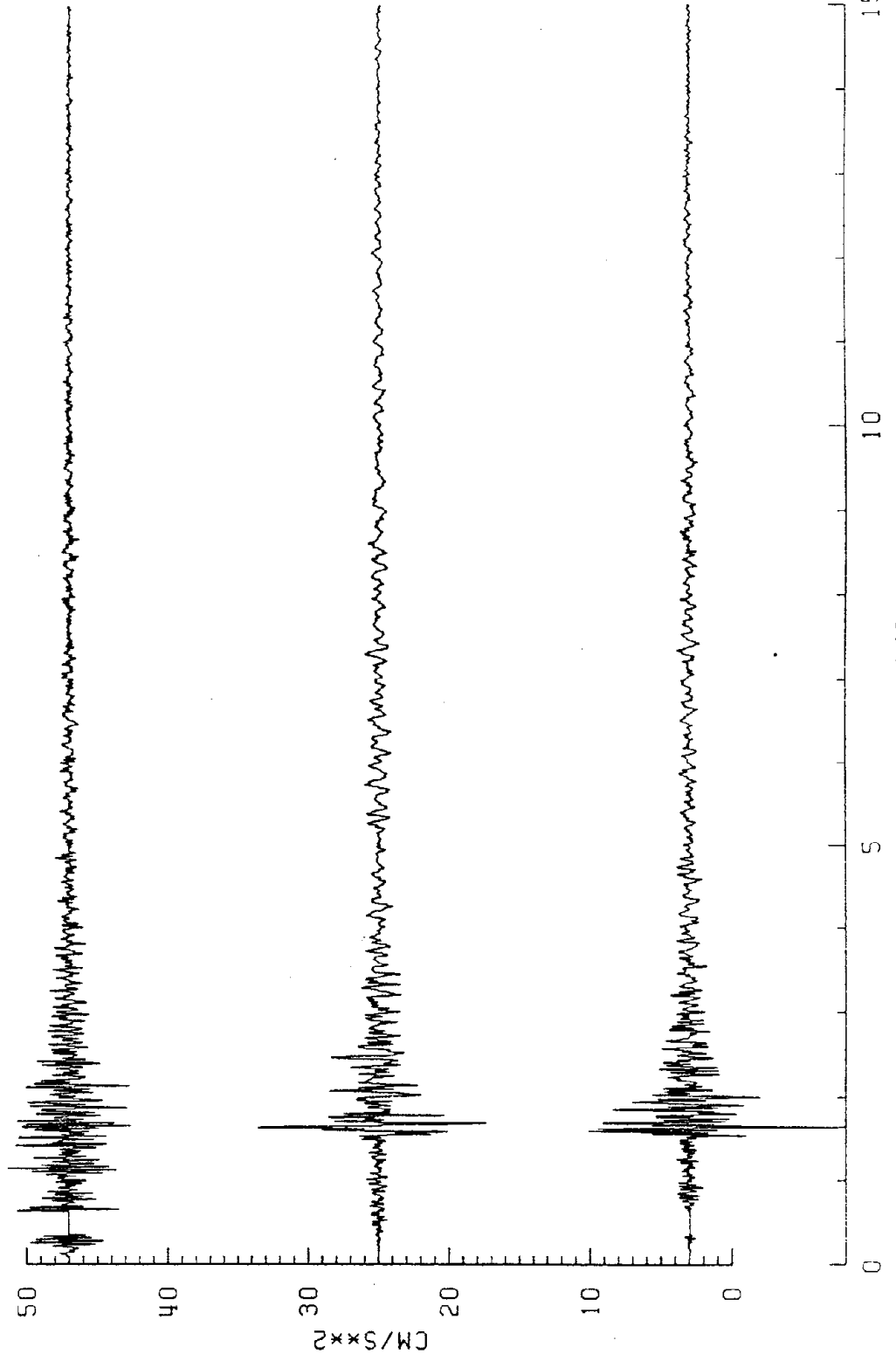
2061011B*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A030-088, 089, 090 82017/TSD04 IEM 188

TIME: 221 0123 42.944

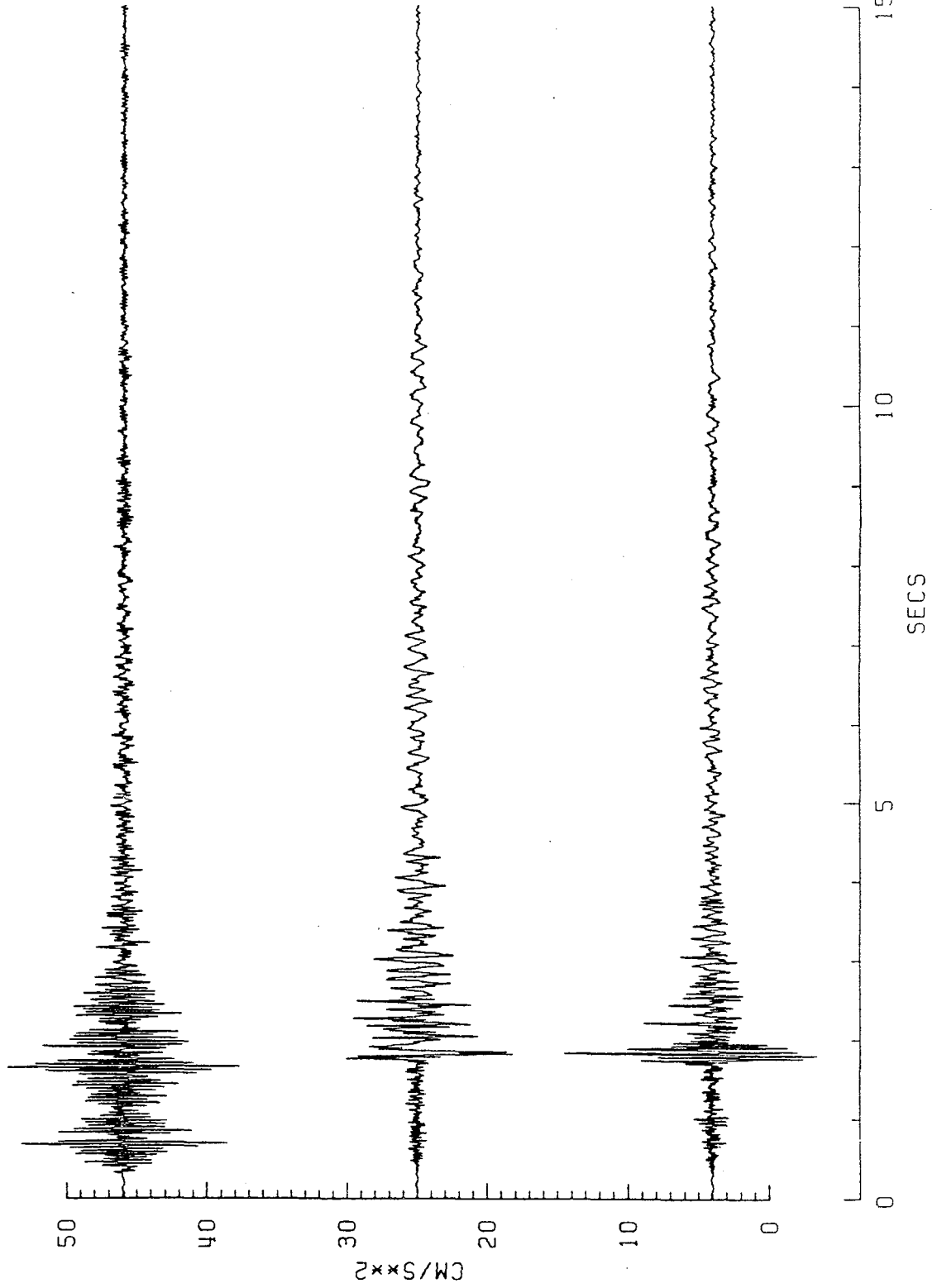
22101230*.004 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A031-091,092,093 82017/T505 IEM 143

TIME: 21 0123 42.780

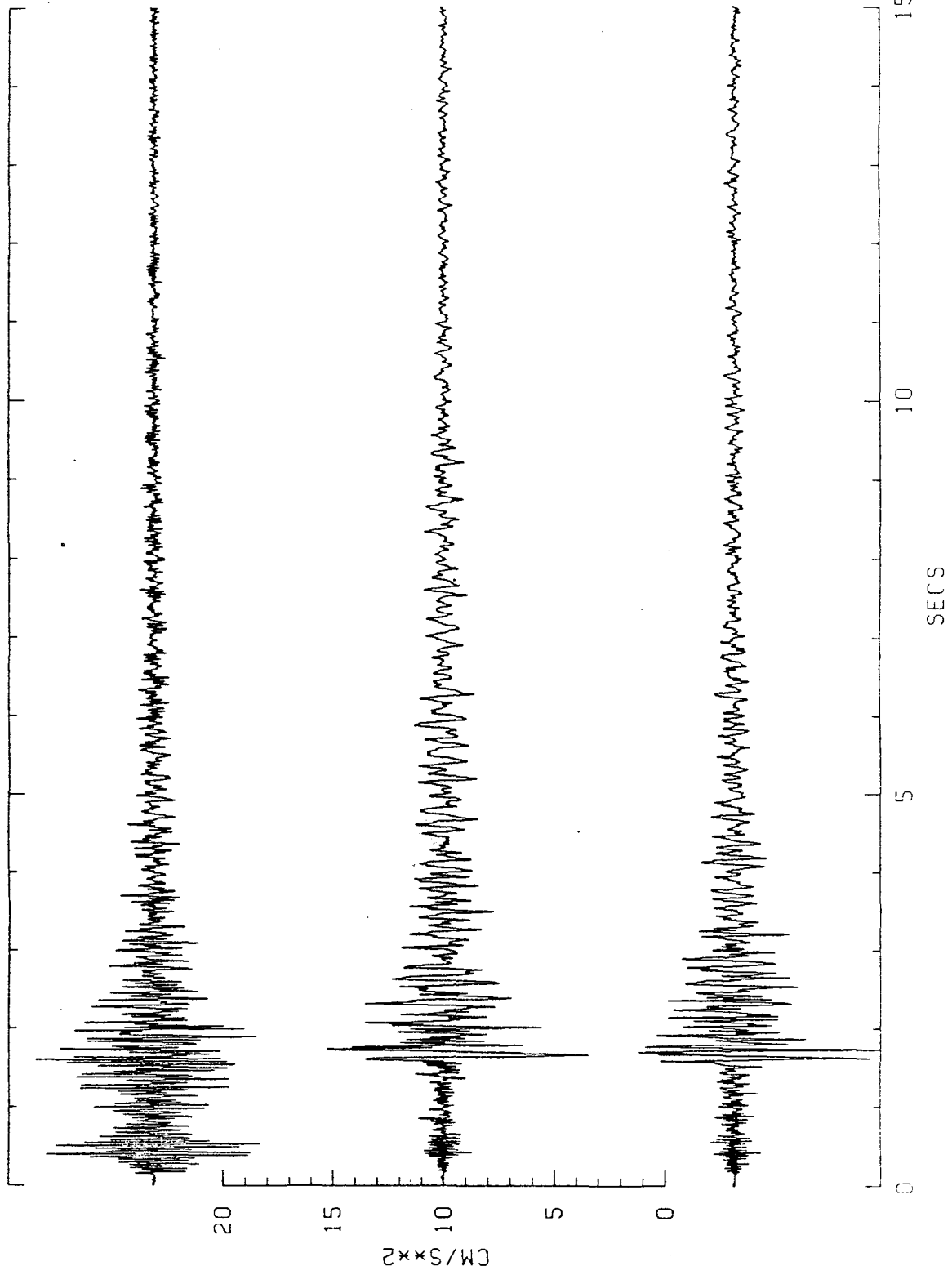
22101230*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A032-094, 095, 096 82017/T506 IEM 144

TIME: 221 0123 42.913

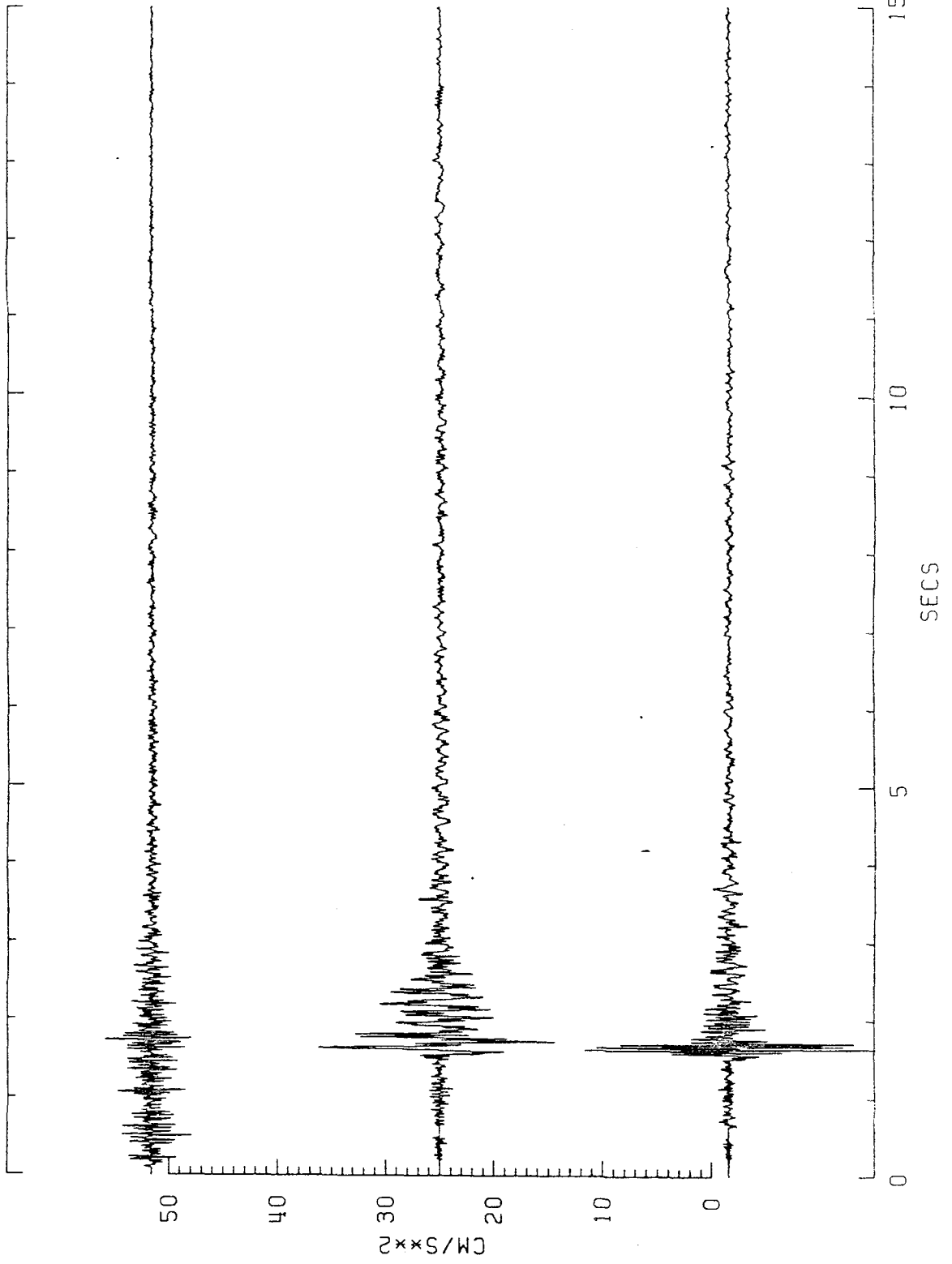
22101230*.006 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A033-097,098,099 82017/TS07 IEM 189

TIME: 221 0123 42.989

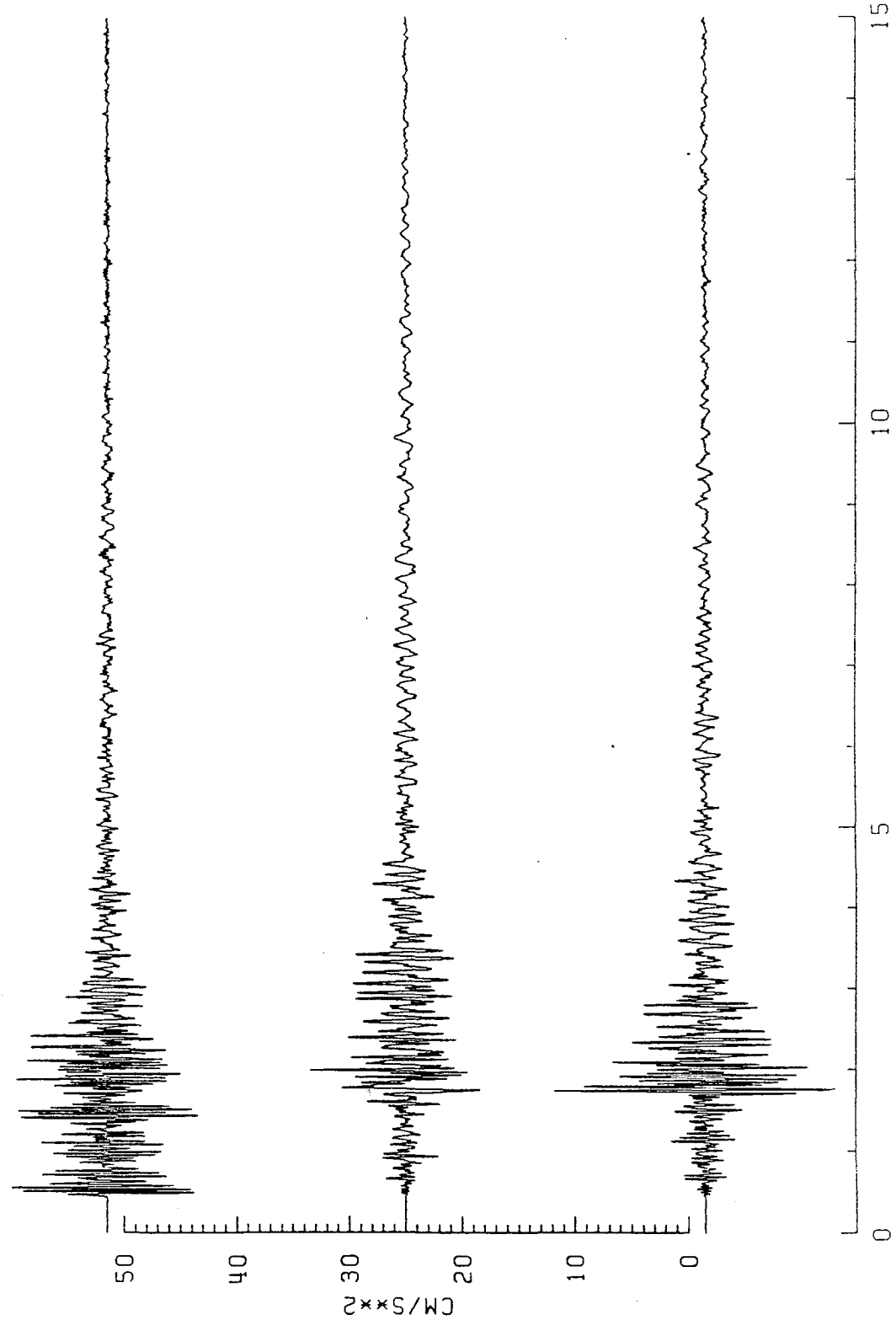
22101230*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A034-100,101,102 82025/TS04 IEM 139

TIME: 243 1958 43.845

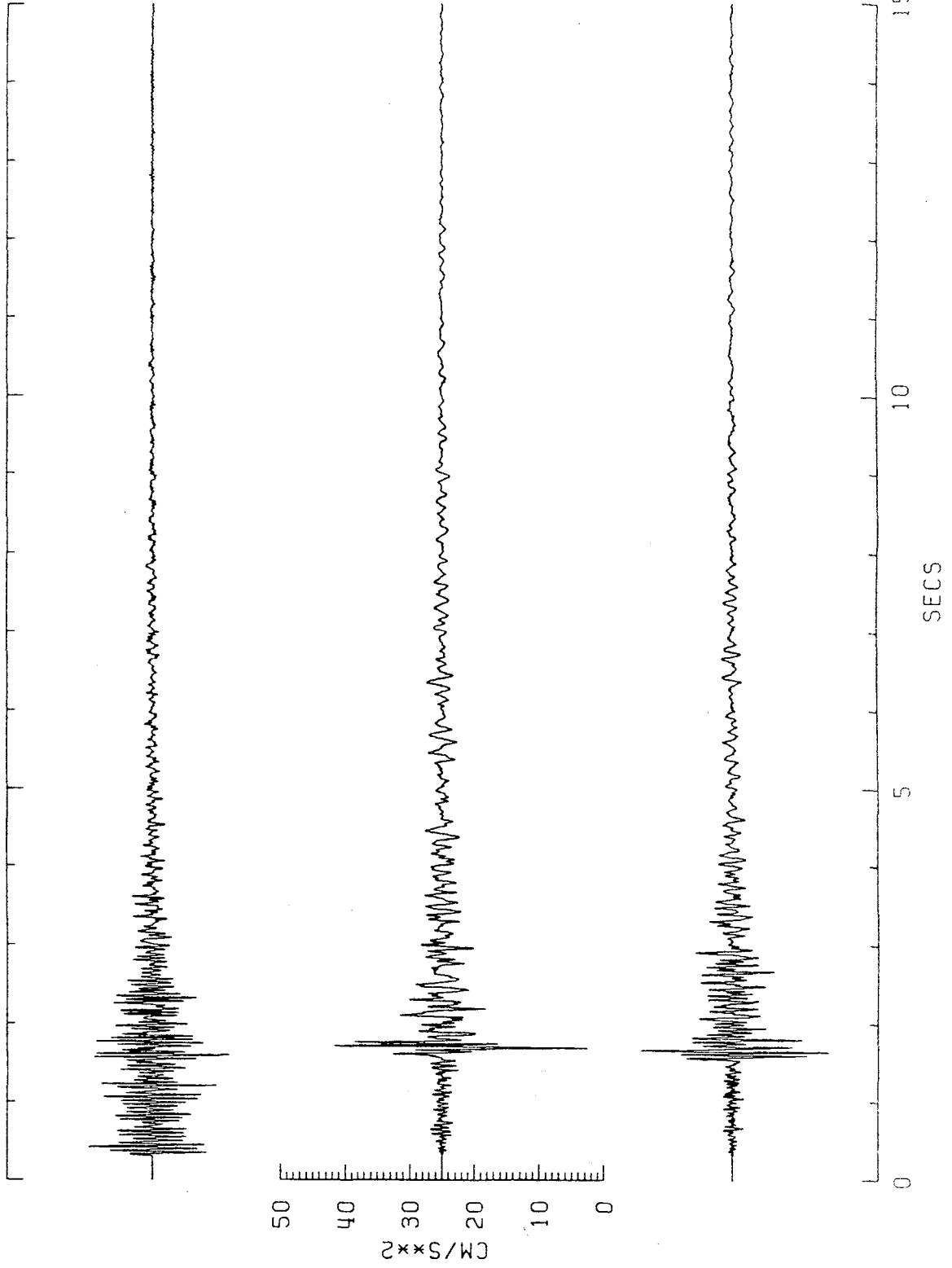
24319580*.004 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A035-103,104,105 82025/TS05 IEM 141

TIME: 243 1958 43.975

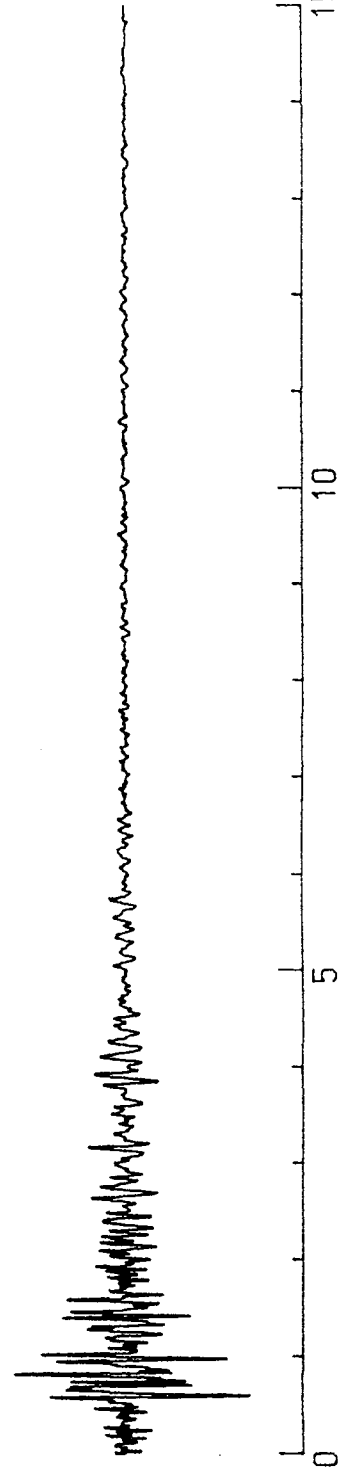
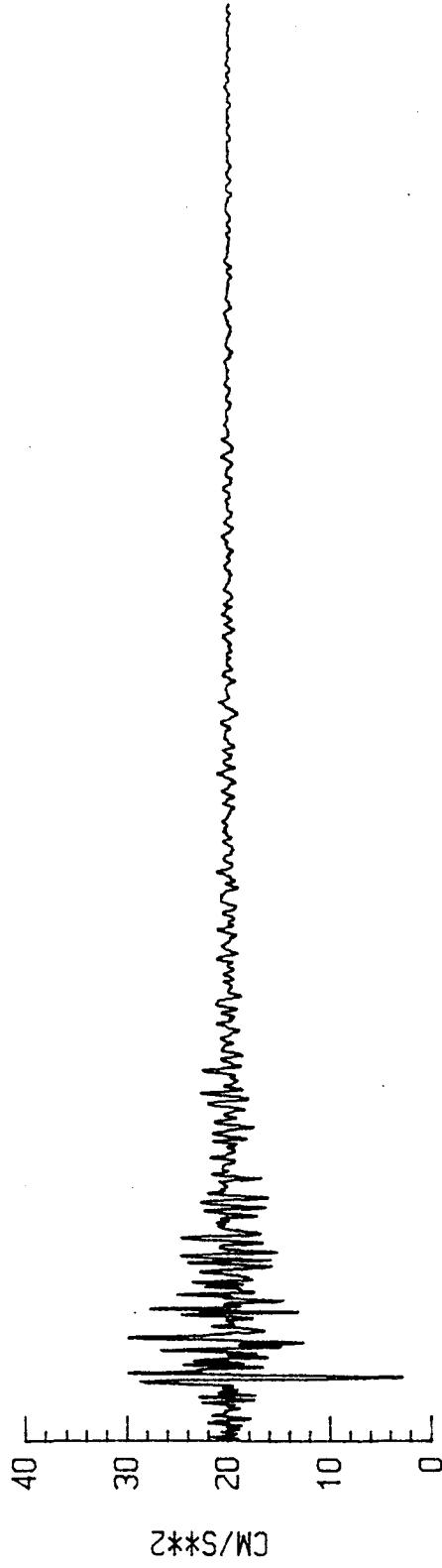
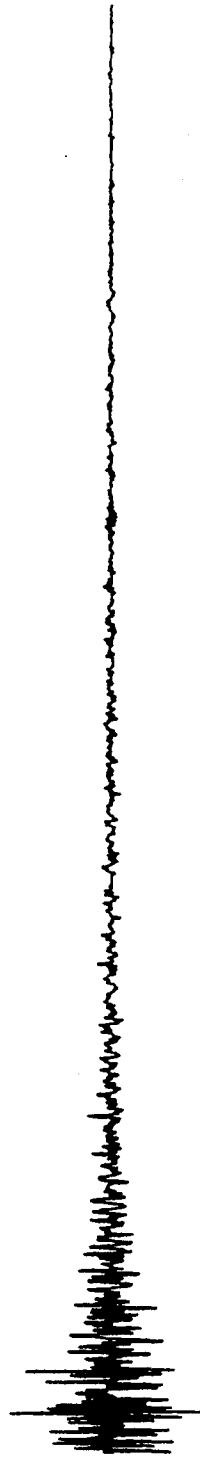
2431958P*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A036-106,107,108 82025/TS06 IEM 198

TIME:243 1958 44.960

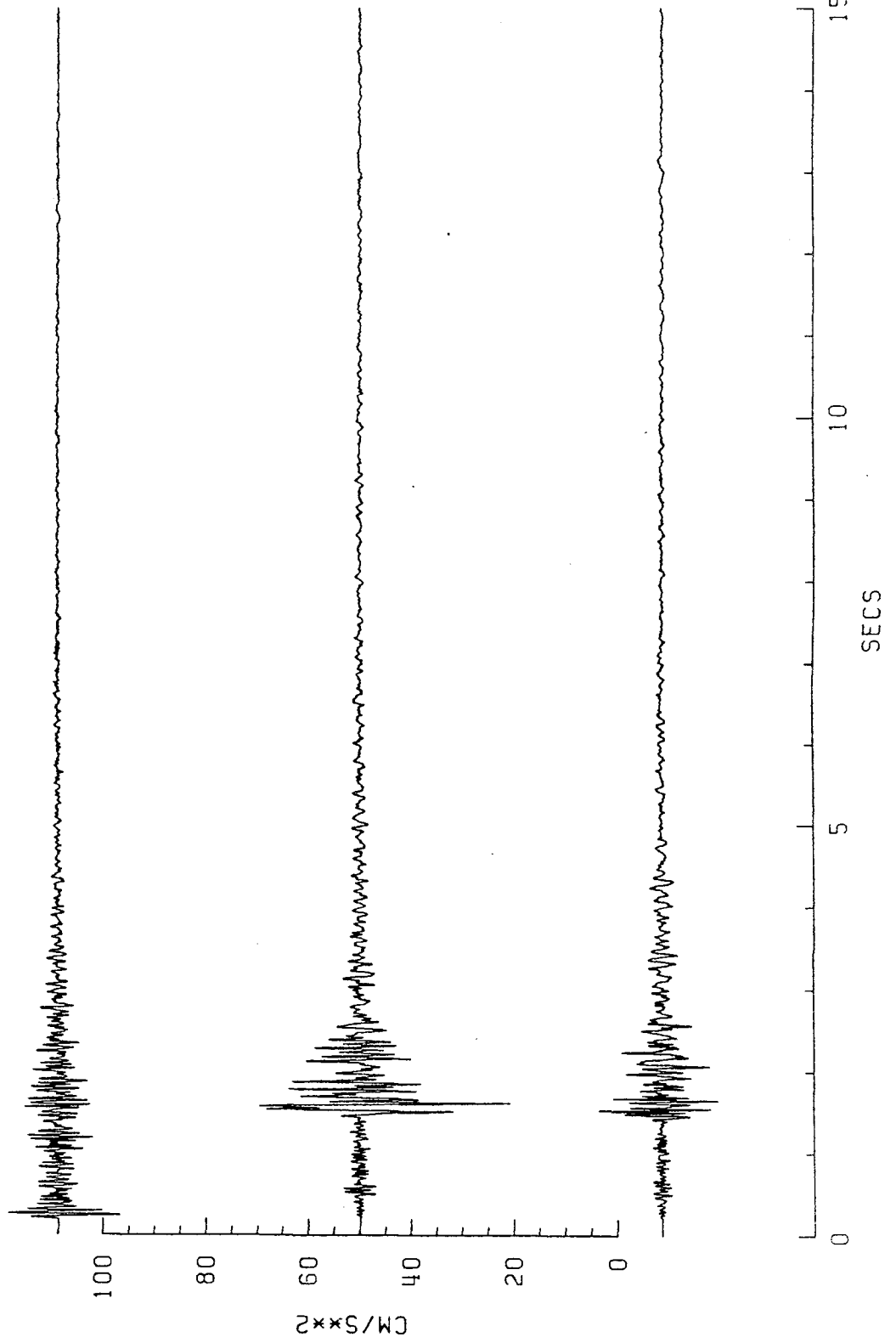
2431958P*.006 COMP:1[UP],2[H=0],3[H=90]



6A037-109,110,111 82025/TS07 IEM 142

TIME: 243 1958 44.073

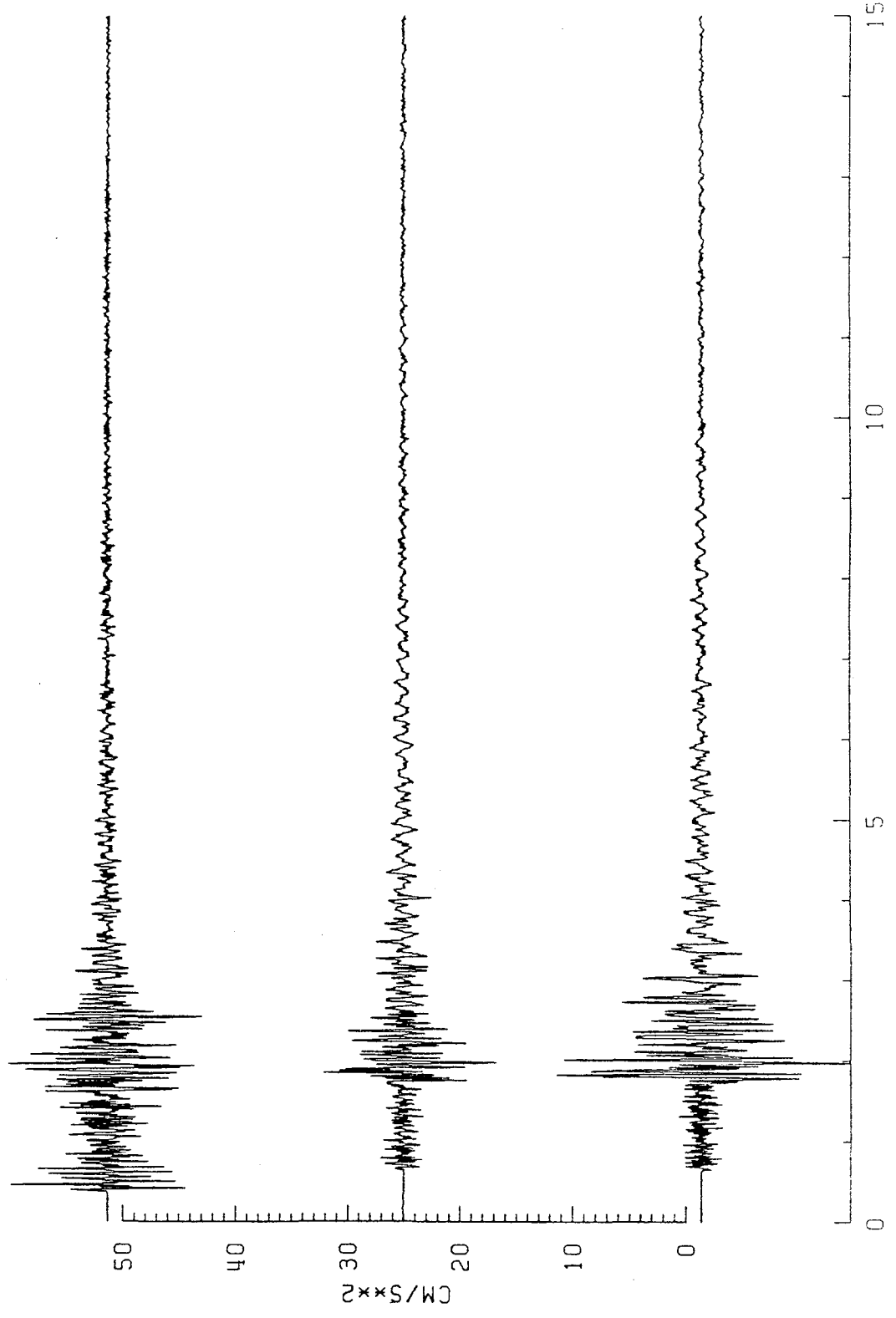
2431958P*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A038-112,113,114 82025/TS09 IEM 140

TIME: 243 1958 44.079

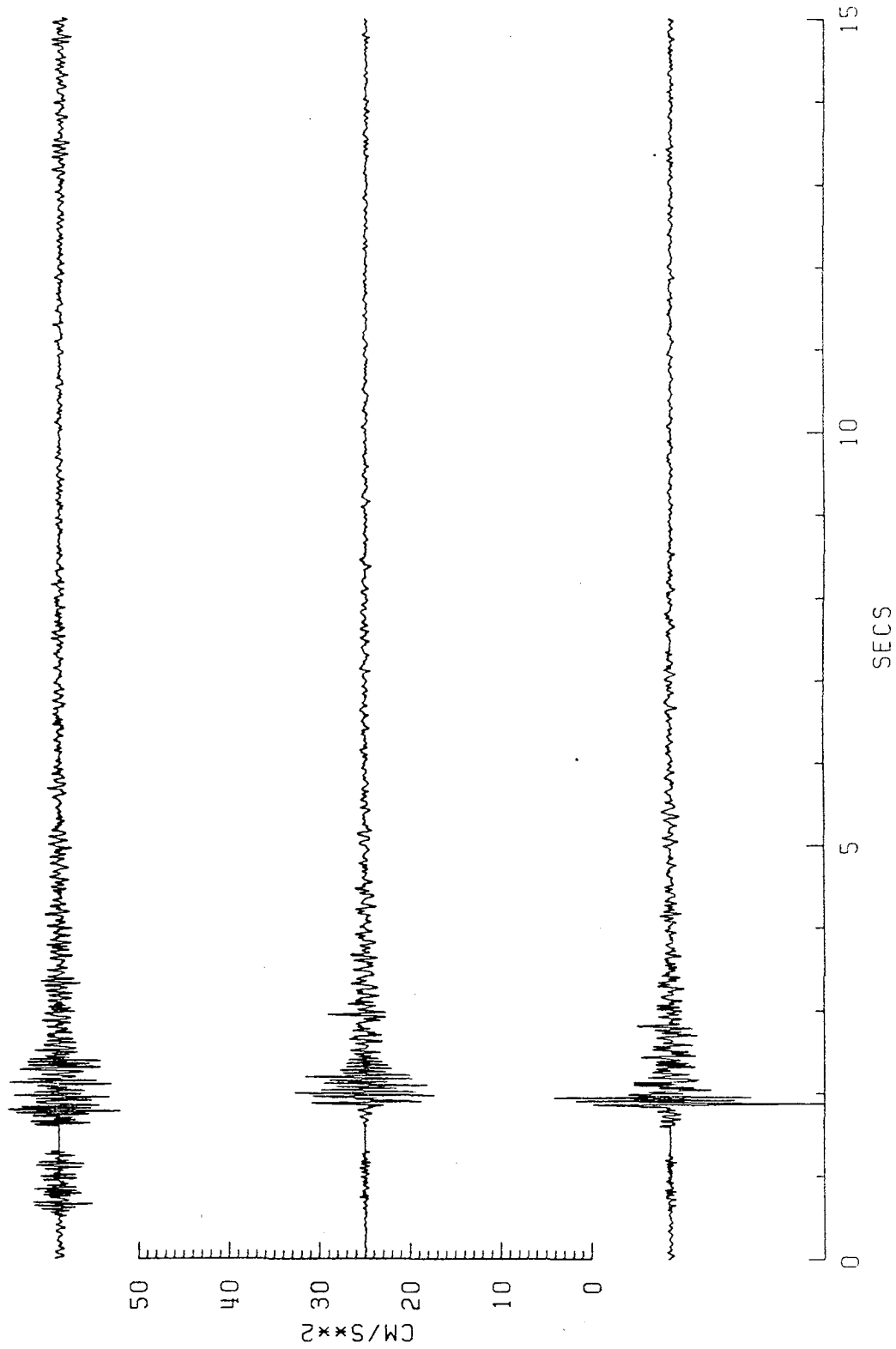
2431958P*.009 COMP: 1 (UP), 2 (H=270), 3 (H=180)



6A039-115,116,117 82033/TS04 IEM 190

TIME: 257 1242 13.423

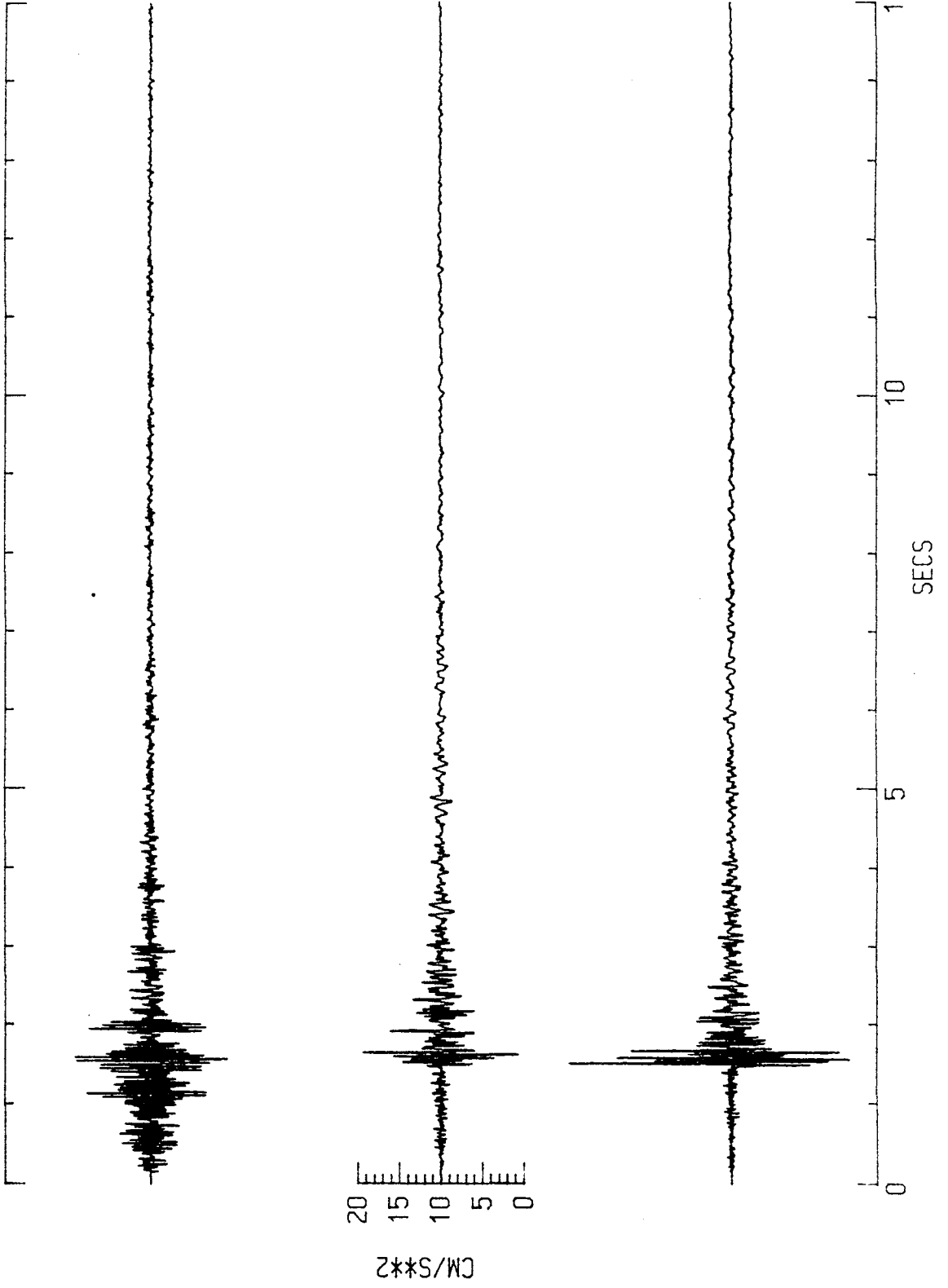
2570042E*.004 COMP: 1 (UP) , 2 (H=180) , 3 (H=270)



6A040-118,119,120 82033/TS05 IEM 199

TIME:257 1242 13.775

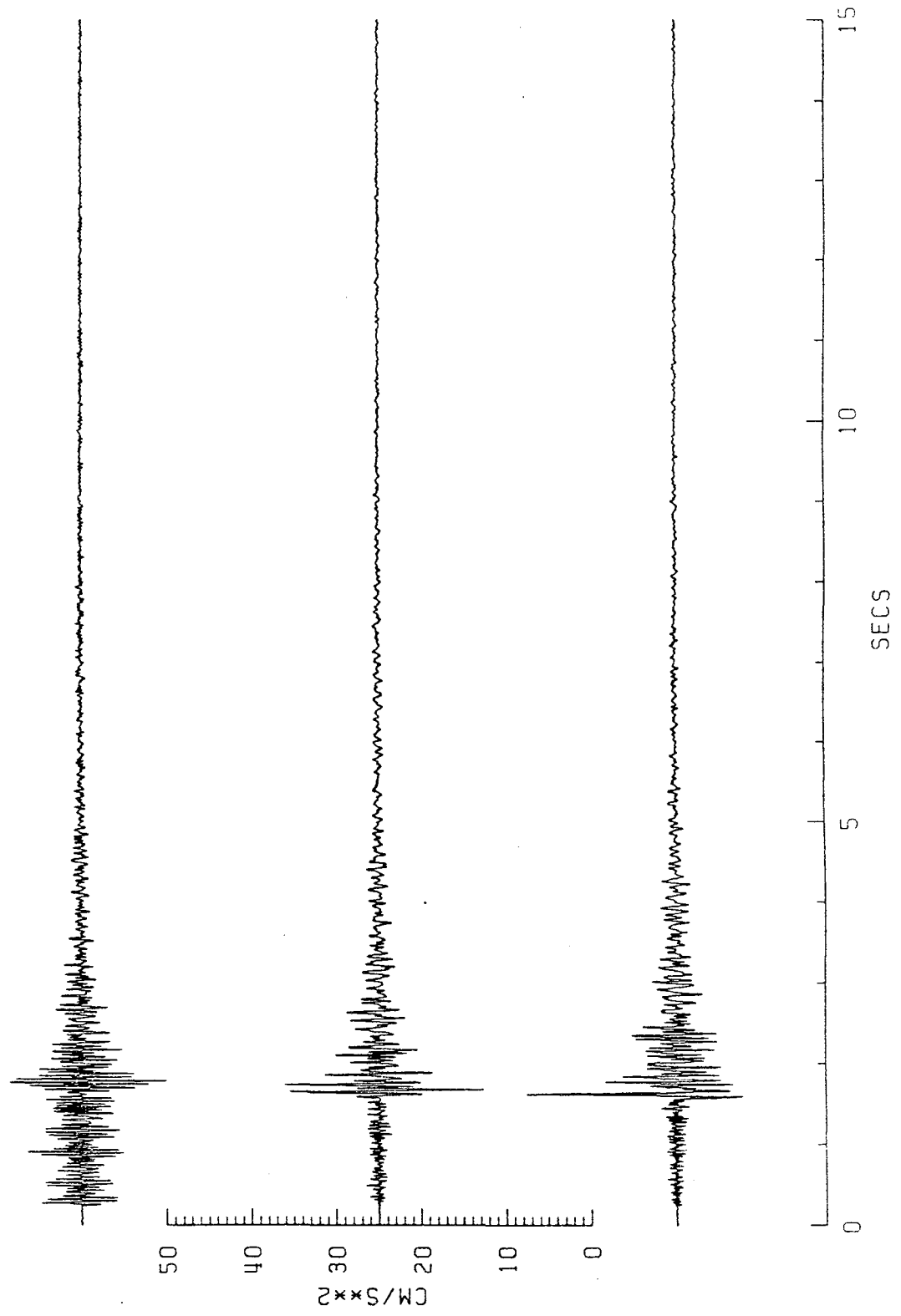
2571242E*.005 COMP:1[U]1,2[H=0],3[H=90]



6A041-121,122,123 82033/TS06 IEM 145

TIME: 257 1242 13.669

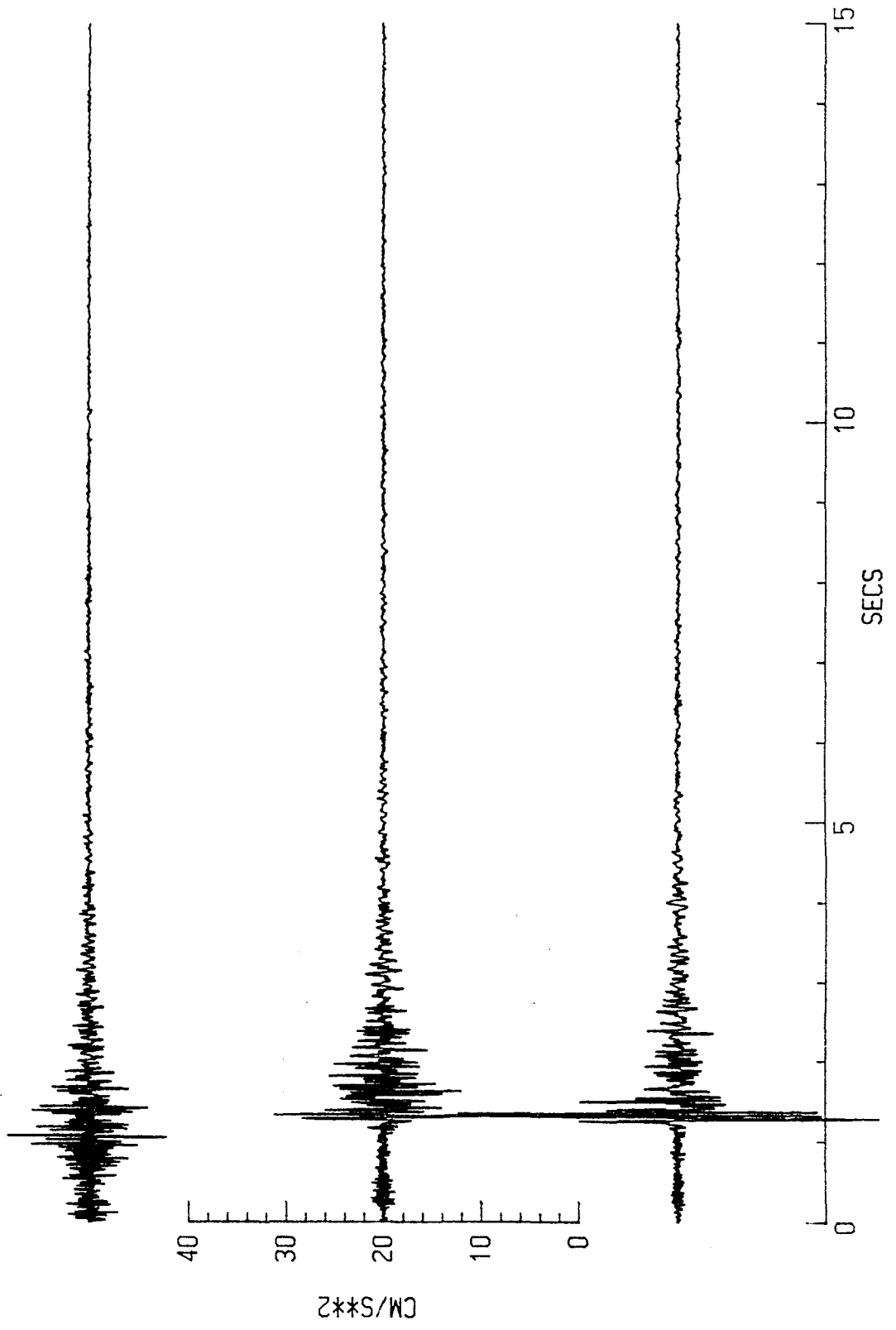
2571242E*.006 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A042-124,125,126 82033/TS07 IEM 200

TIME:257 1242 13.998

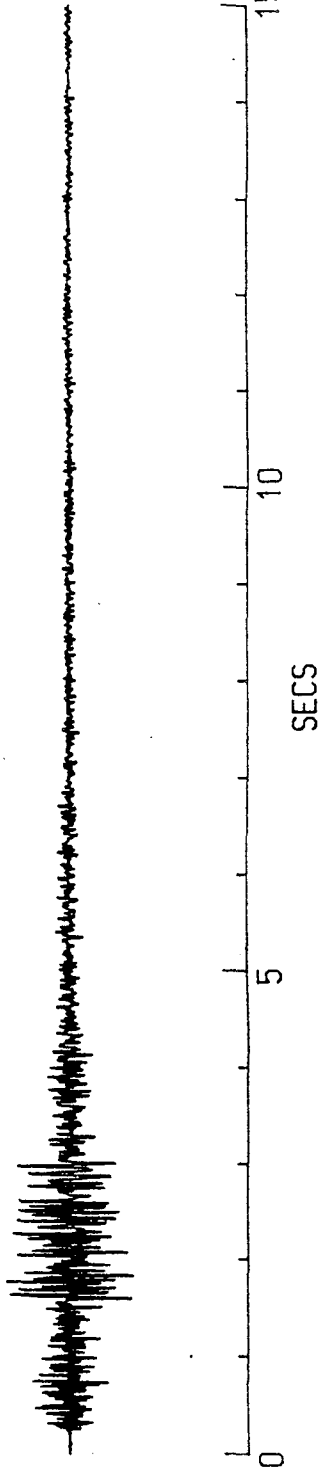
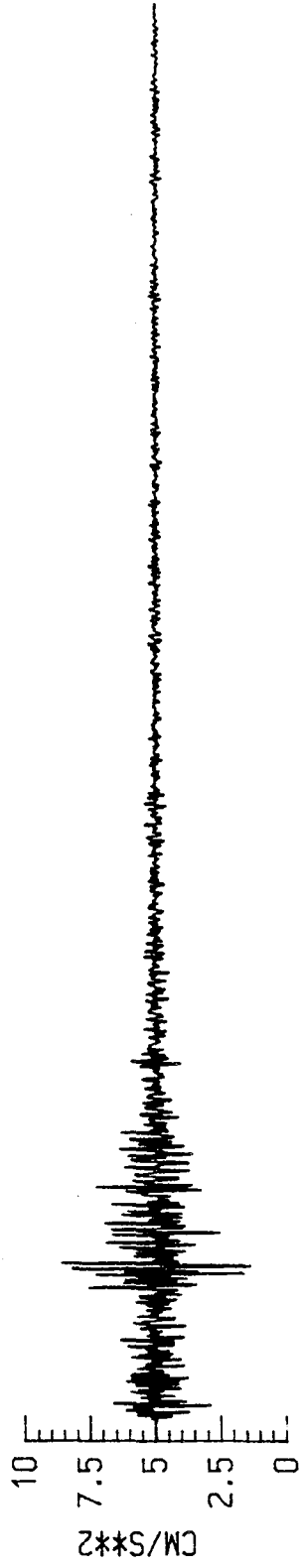
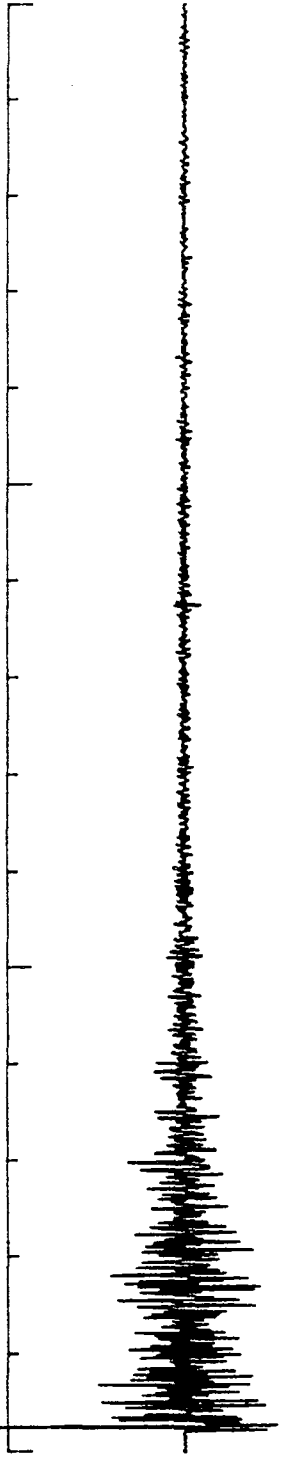
2571242E*.007 COMP:1[U],2[H=180],3[H=270]



6A043-127,128,129 82033/TS09 IEM 201

TIME:257 1242 13.771

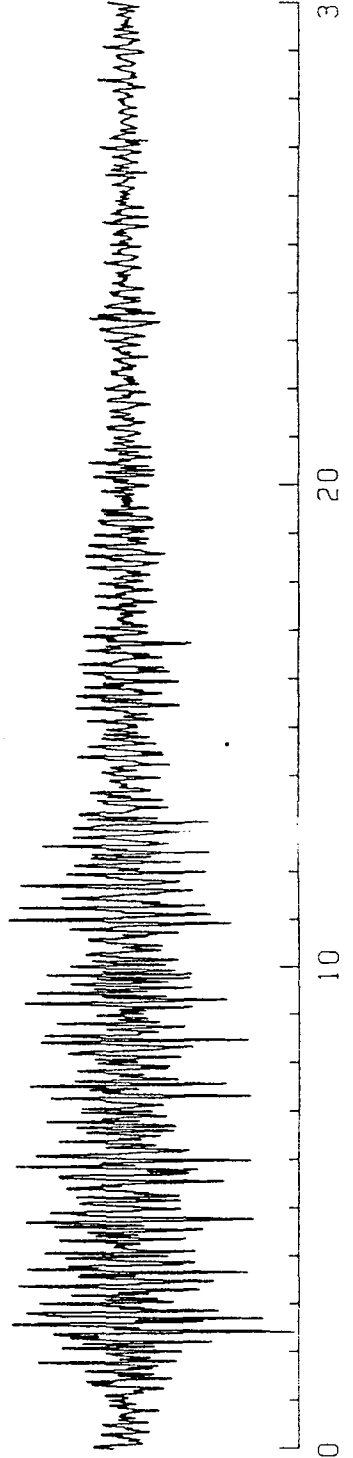
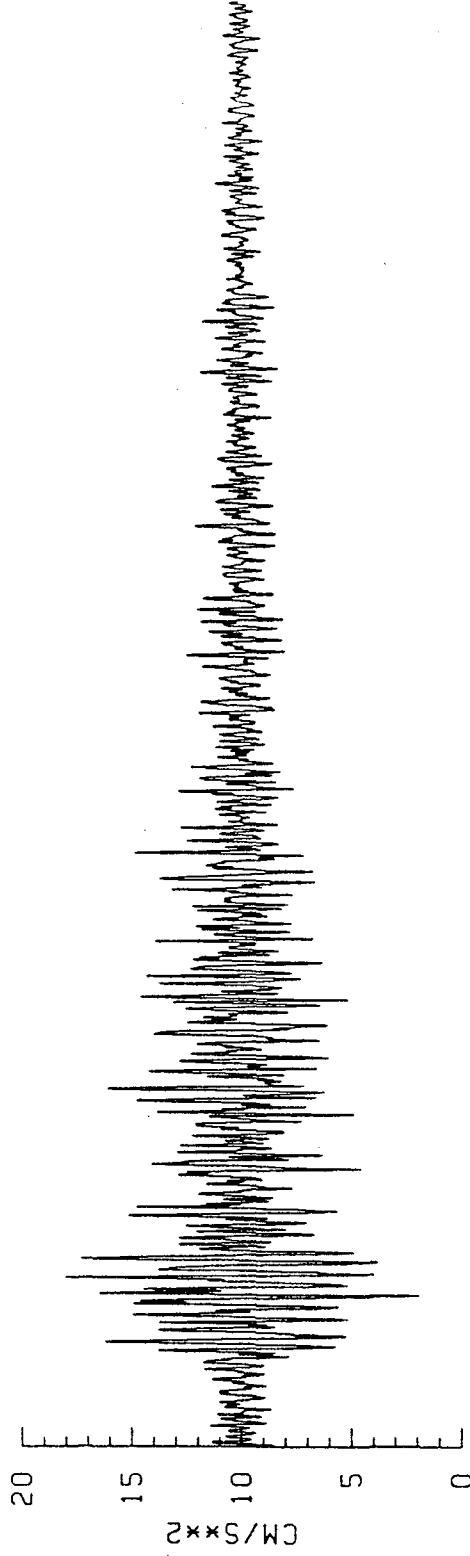
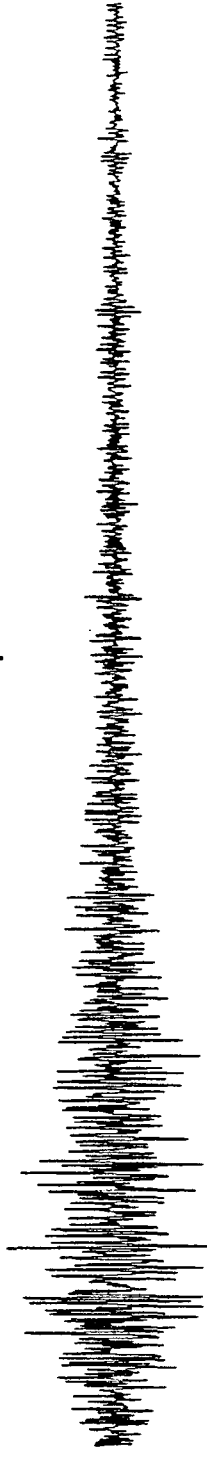
2571242E*.009 COMP:1[UP],2[H=270],3[H=180]



6A044-130,131,132 82046/TS02 IEM 018

TIME: 292 2046 12.100

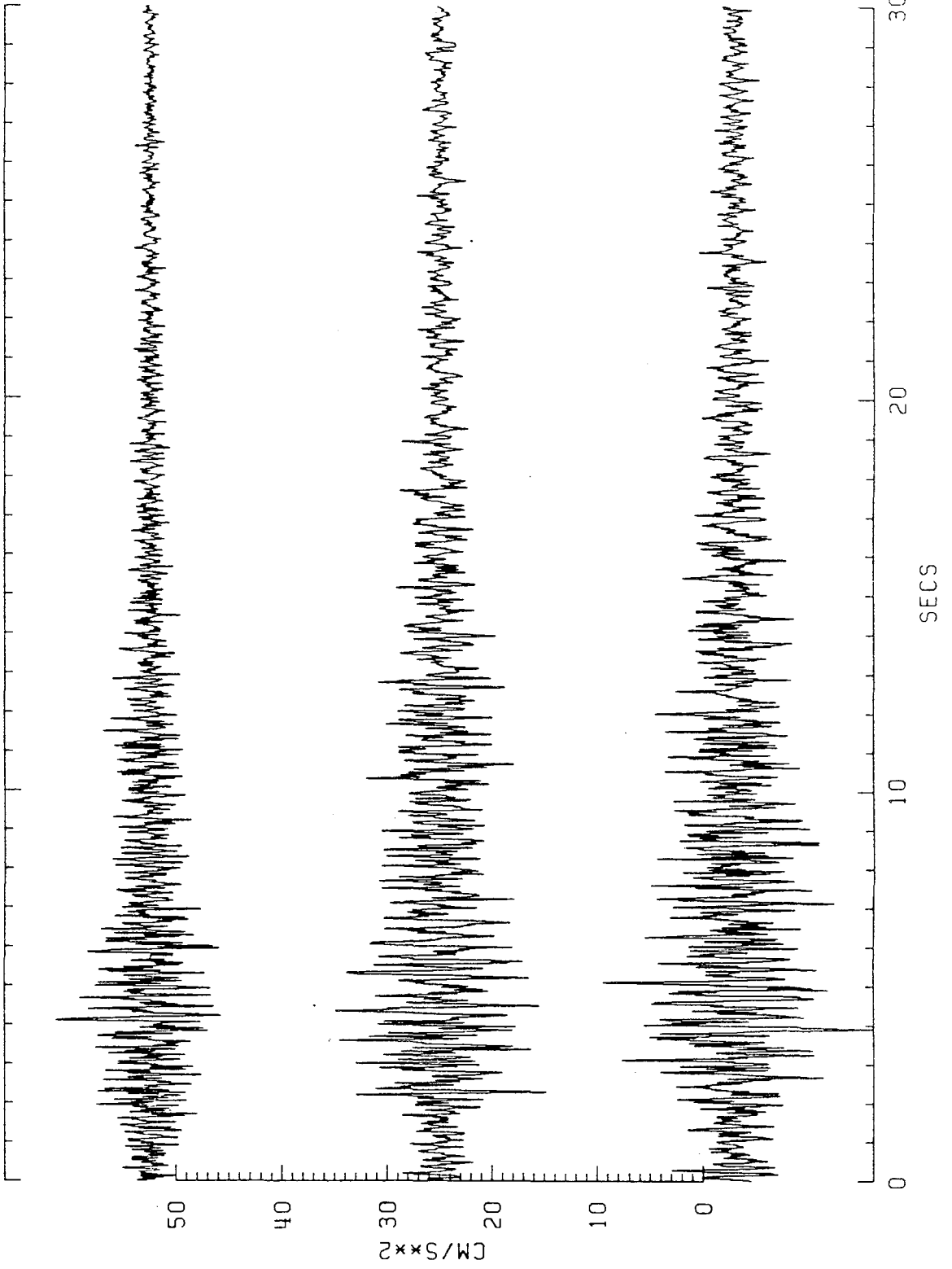
2922046E*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A045-133,134,135 82046/TS03 IEM 019

TIME: 292 2046 09.756

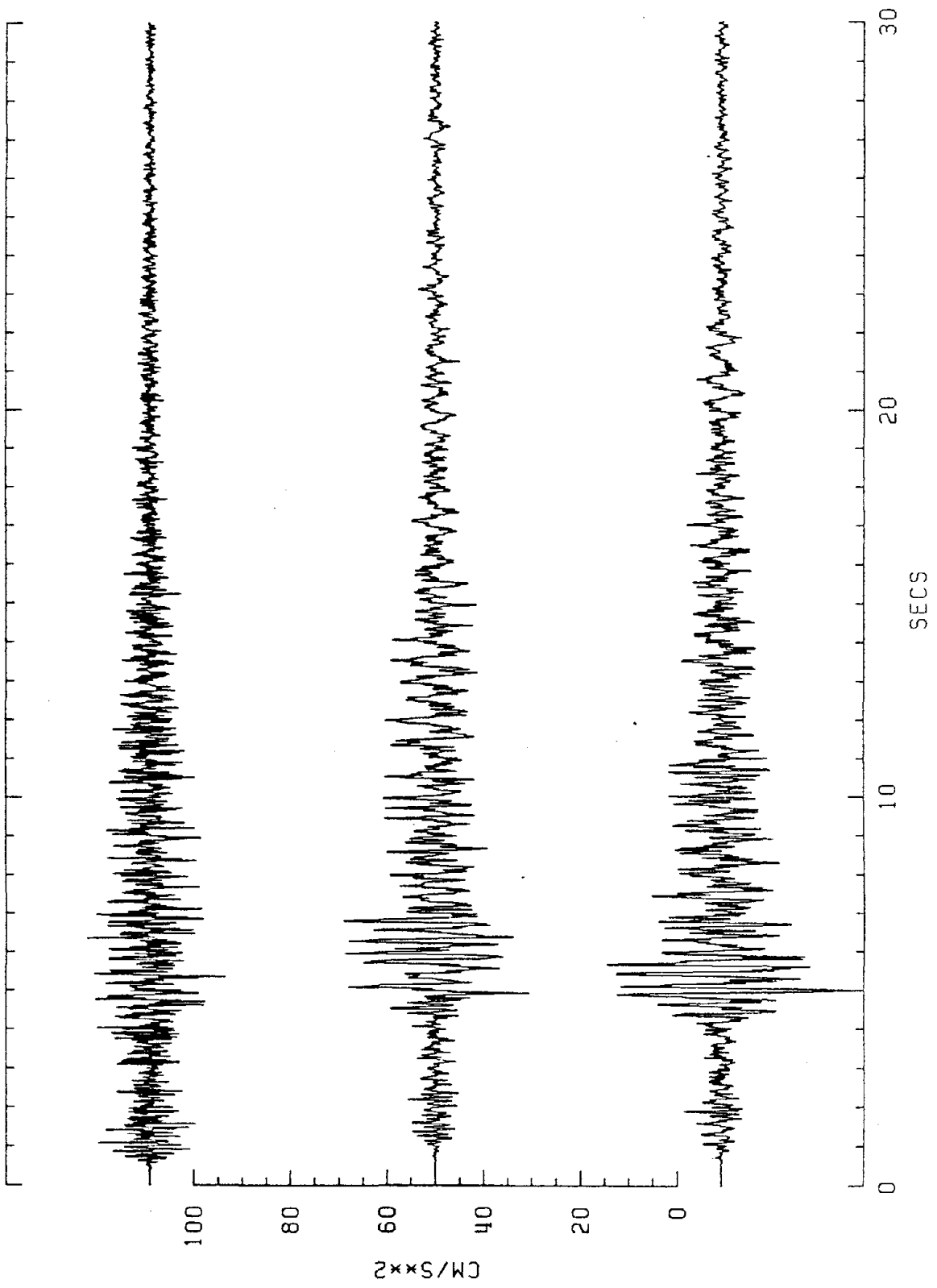
29220460*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A046-136,137,138 82046/TS04 IEM 020

TIME: 292 2046 04.740

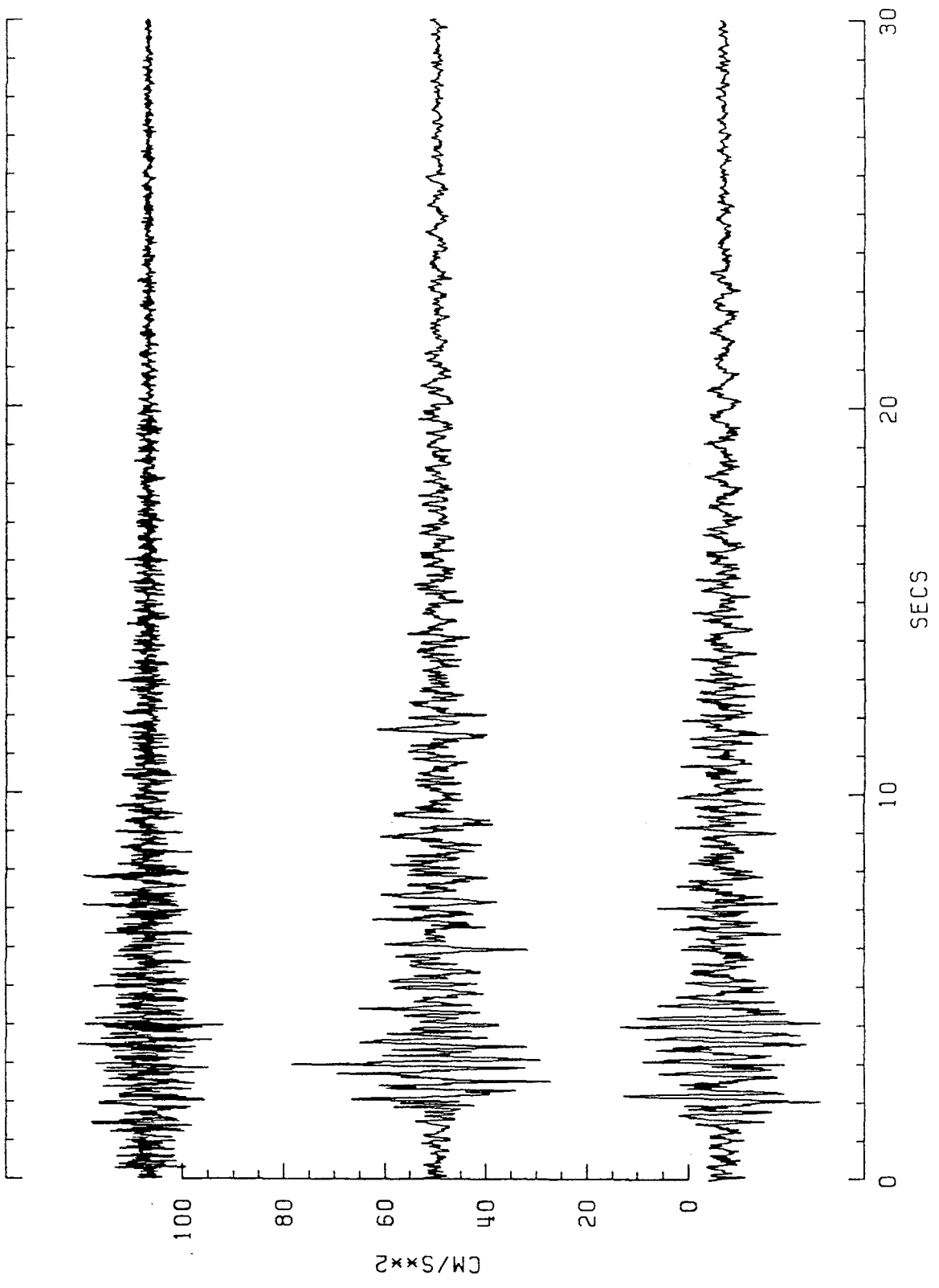
2922046B*.004 COMP: 1 (UP) . 2 (H=180) . 3 (H=270)



6A047-139,140,141 82046/T505 IEM 021

TIME: 292 2046 07.638

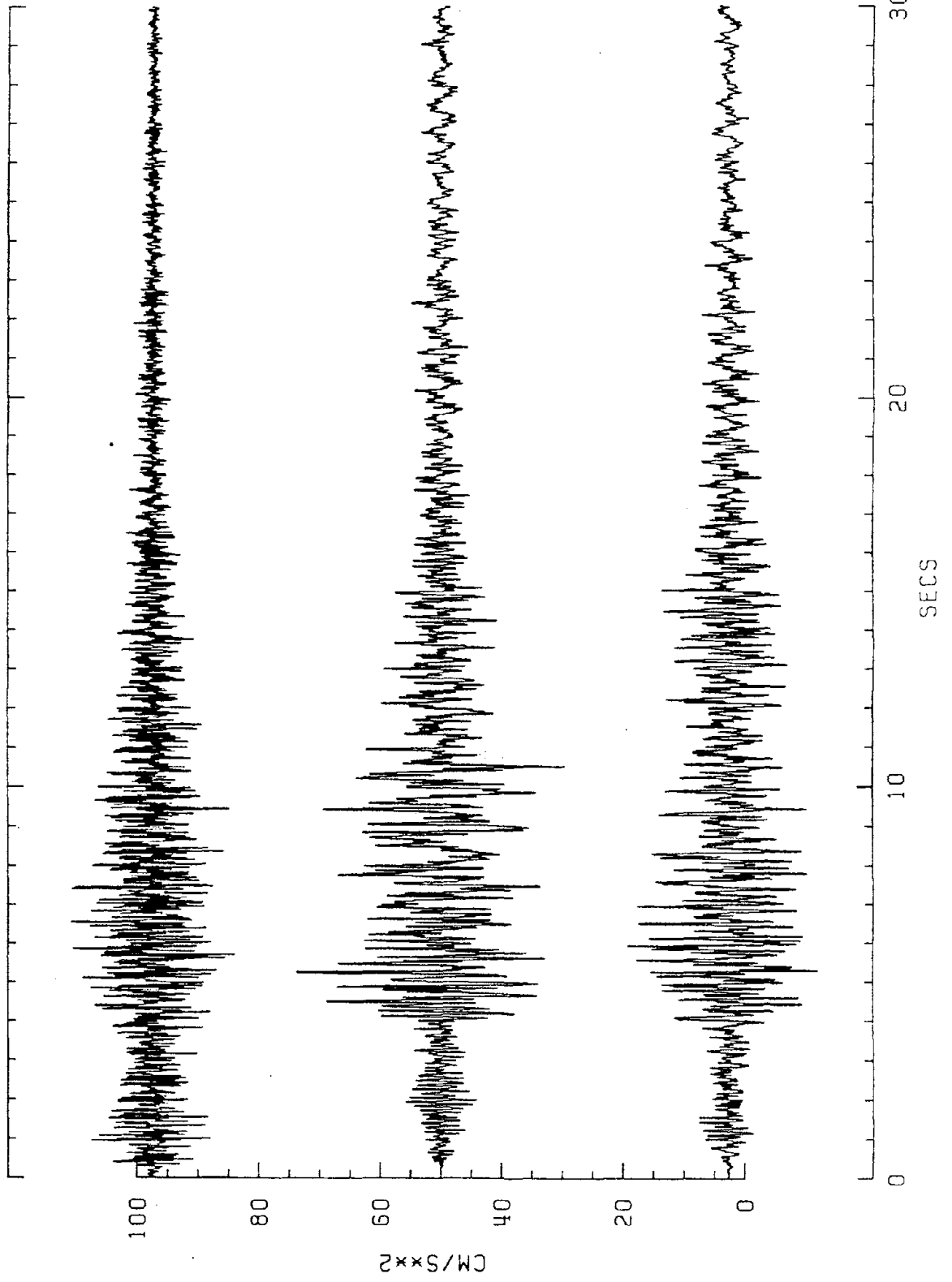
2922046C*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A048-142,143,144 82046/TS06 IEM 022

TIME: 292 2046 05.280

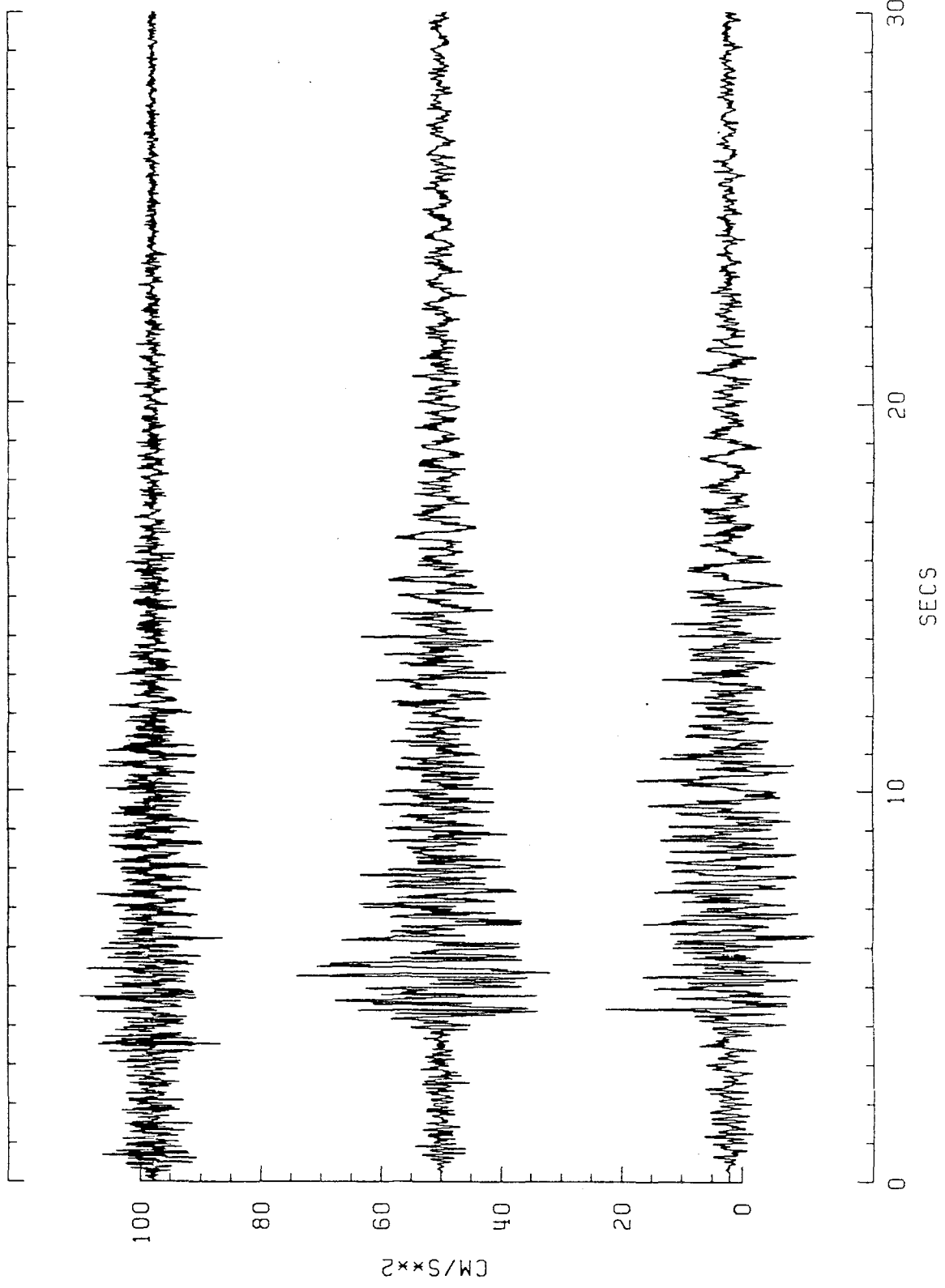
2922046B*.006 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A049-145,146,147 82046/TS07 IEM 023

TIME: 292 2046 05.132

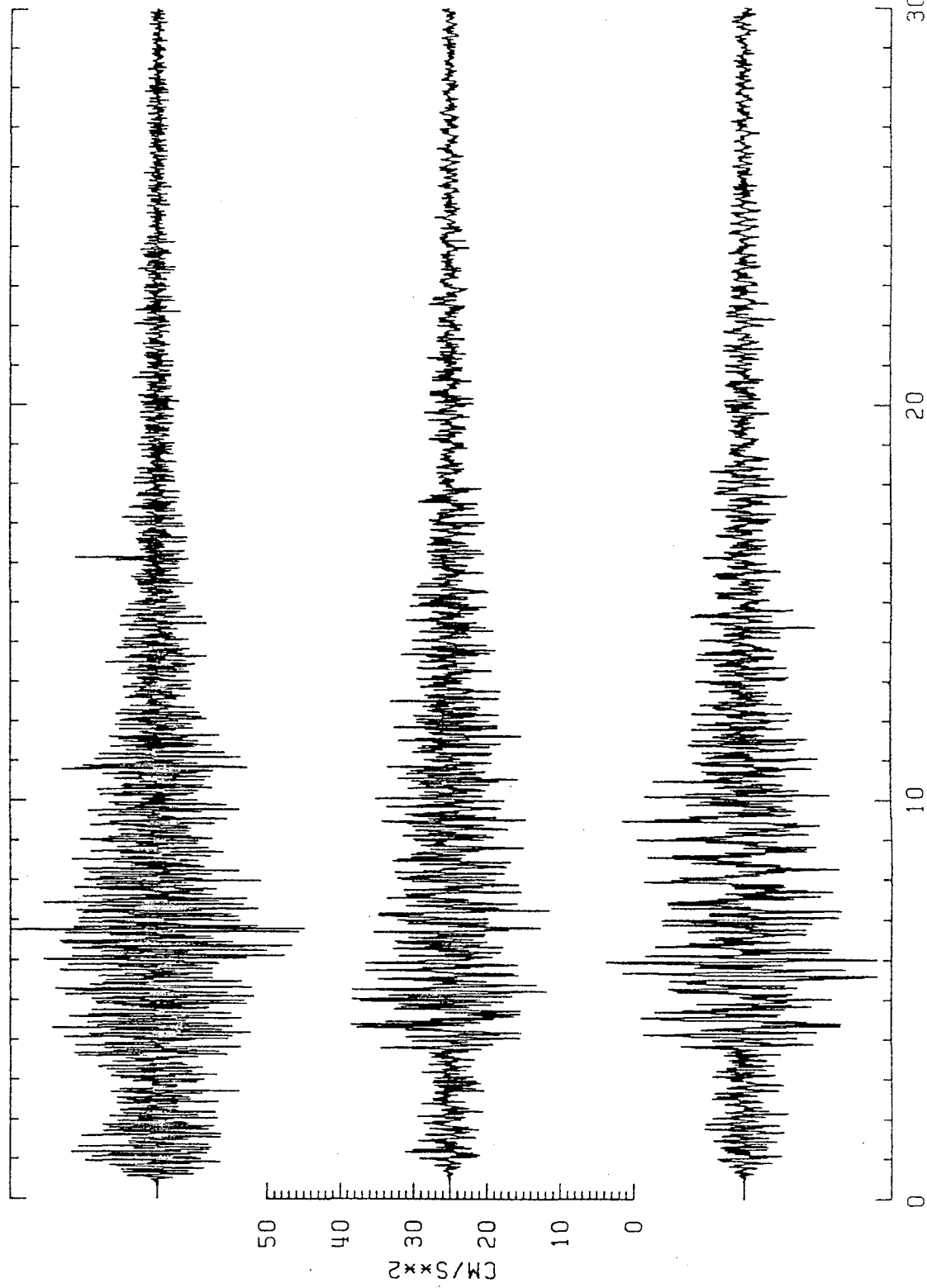
2922046B*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A050-148,149,150 82046/T509 IEM 024

TIME: 292 2046 04.234

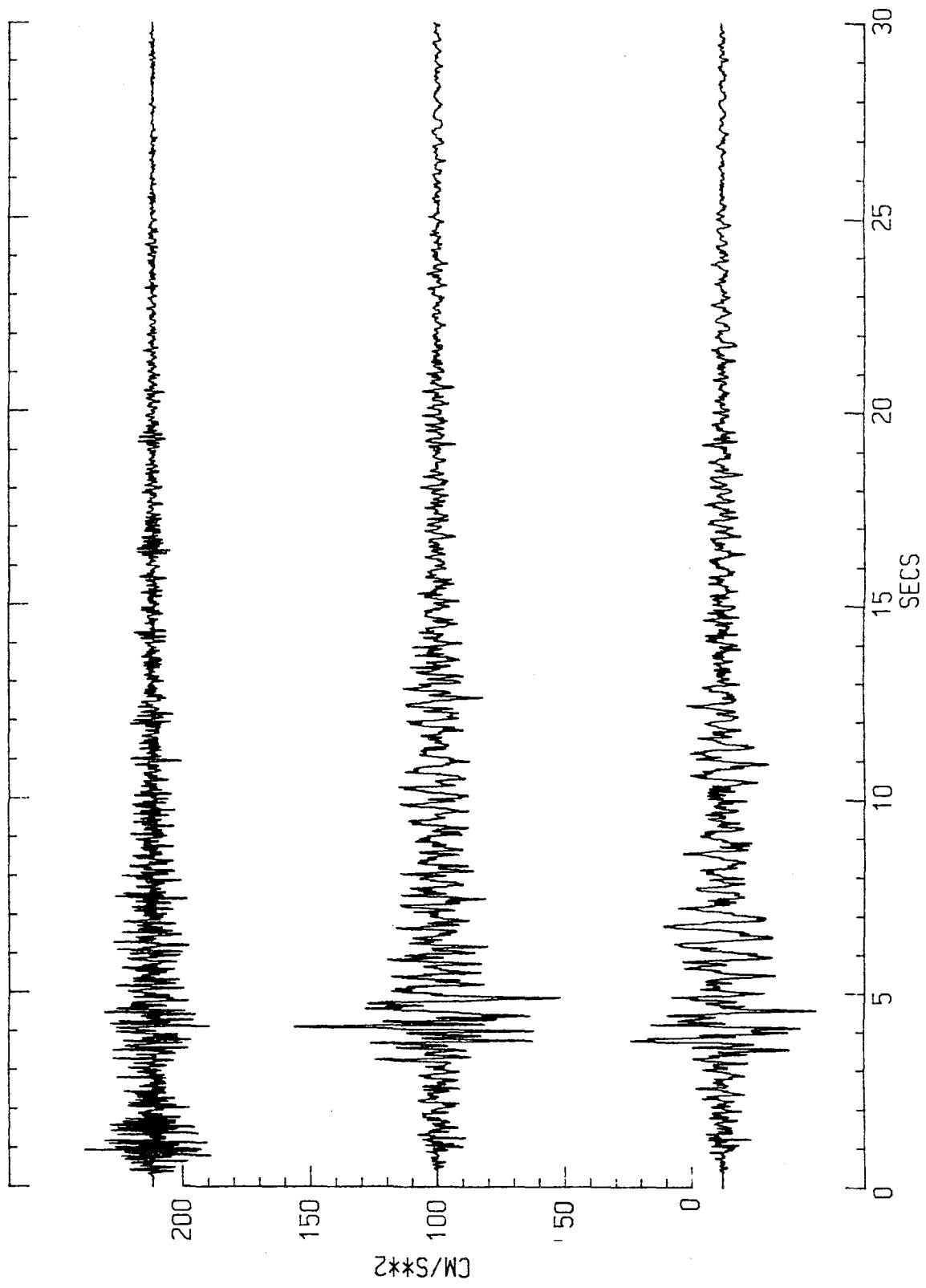
2922046B*.009 COMP: 1 (UP), 2 (H=270), 3 (H=180)



6A051-151, 152, 153 82046/TS10 IEM 202

TIME: 292 2046 03.080

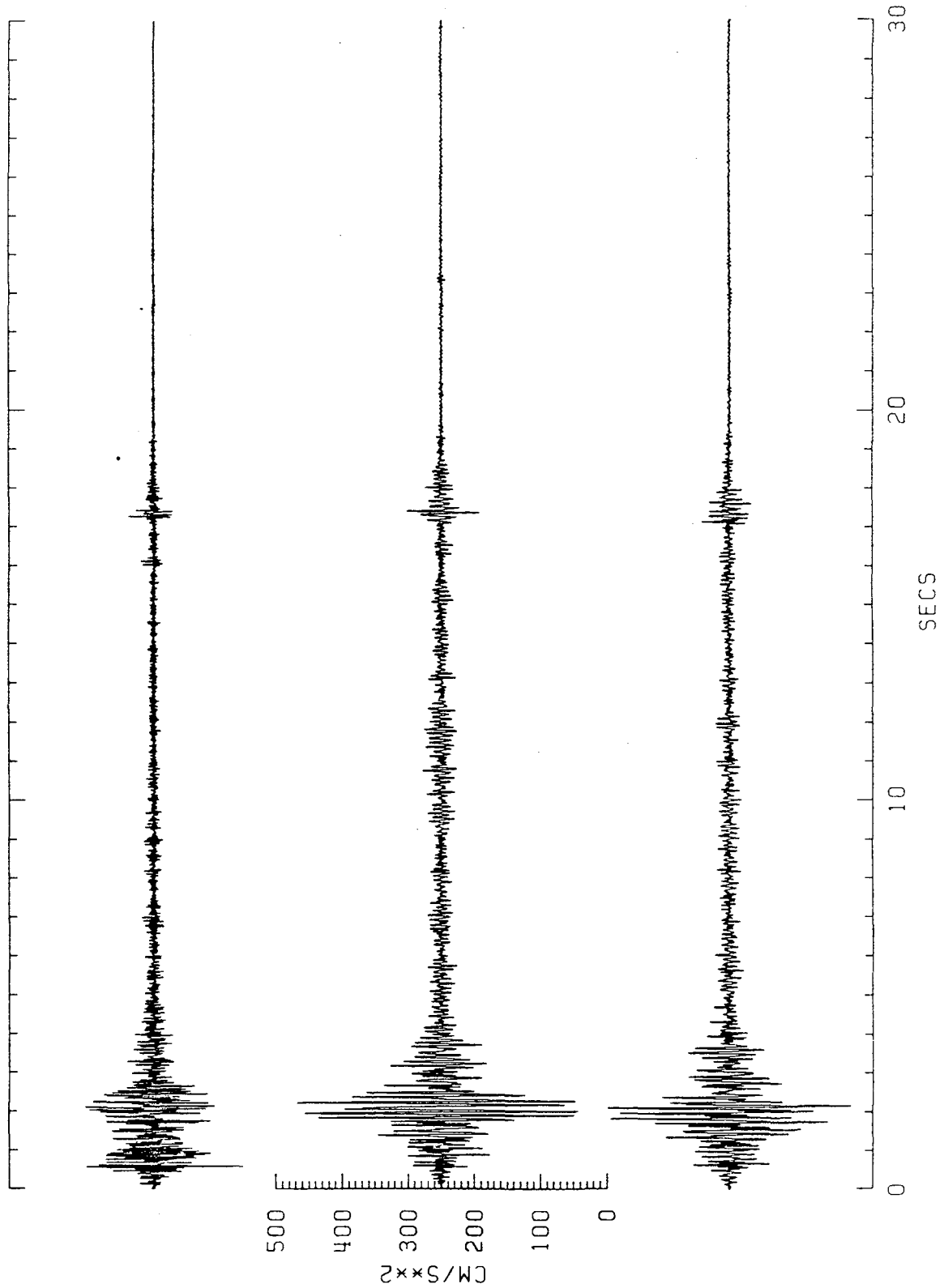
2922046B*.010 COMP: 1[UP], 2[H=180], 3[H=270]



6A052-154,155,156 82046/TS12 IEM 017

TIME: 292 2046 01.738

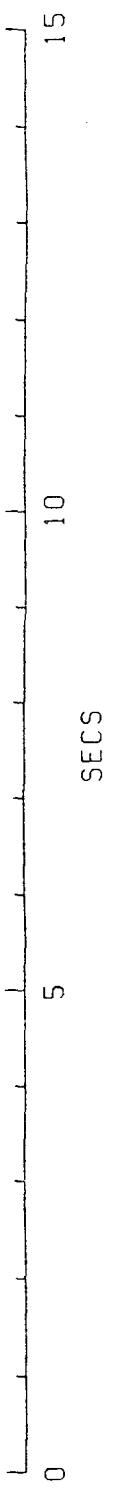
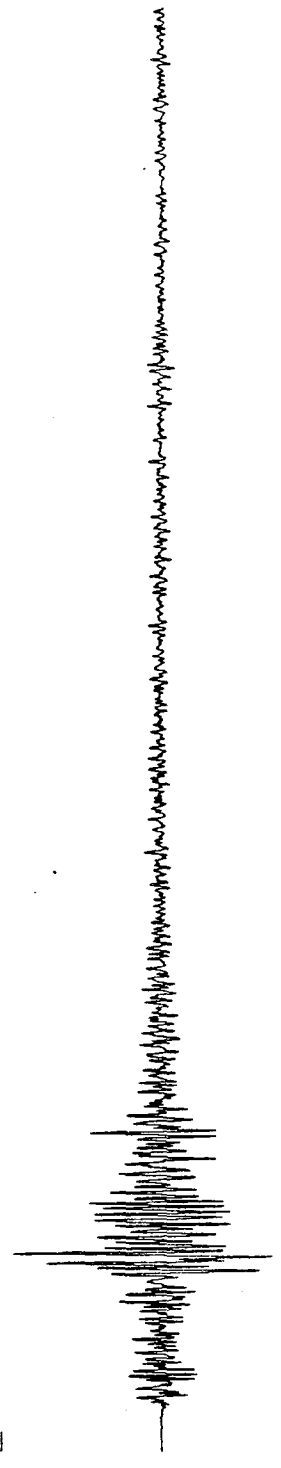
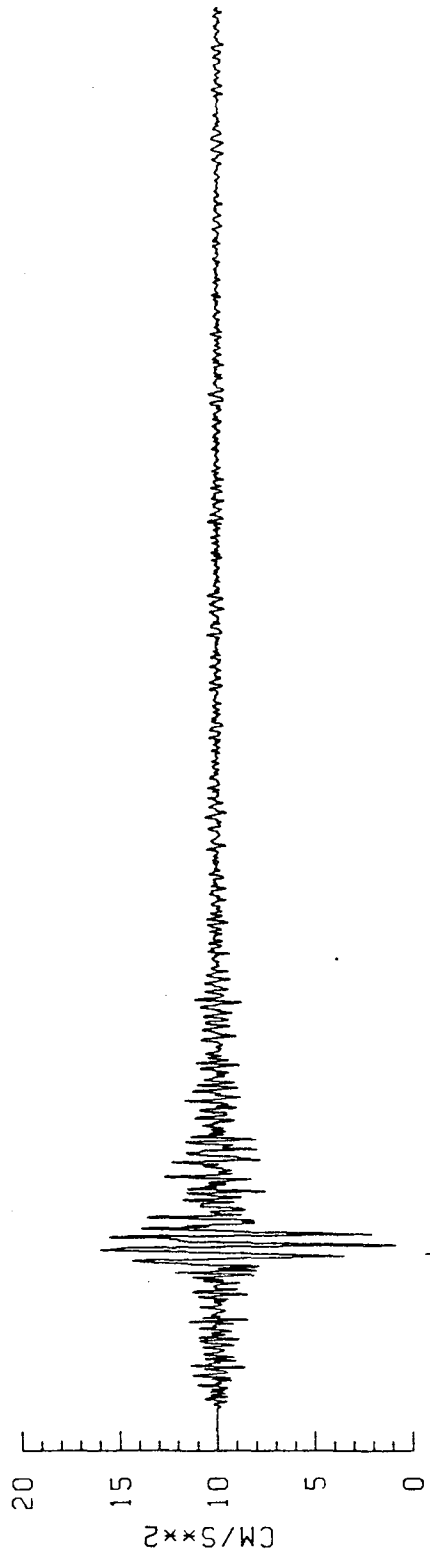
2922045T*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A053-157,158,159 82048/TS12 IEM 083

TIME: 292 2049 53.341

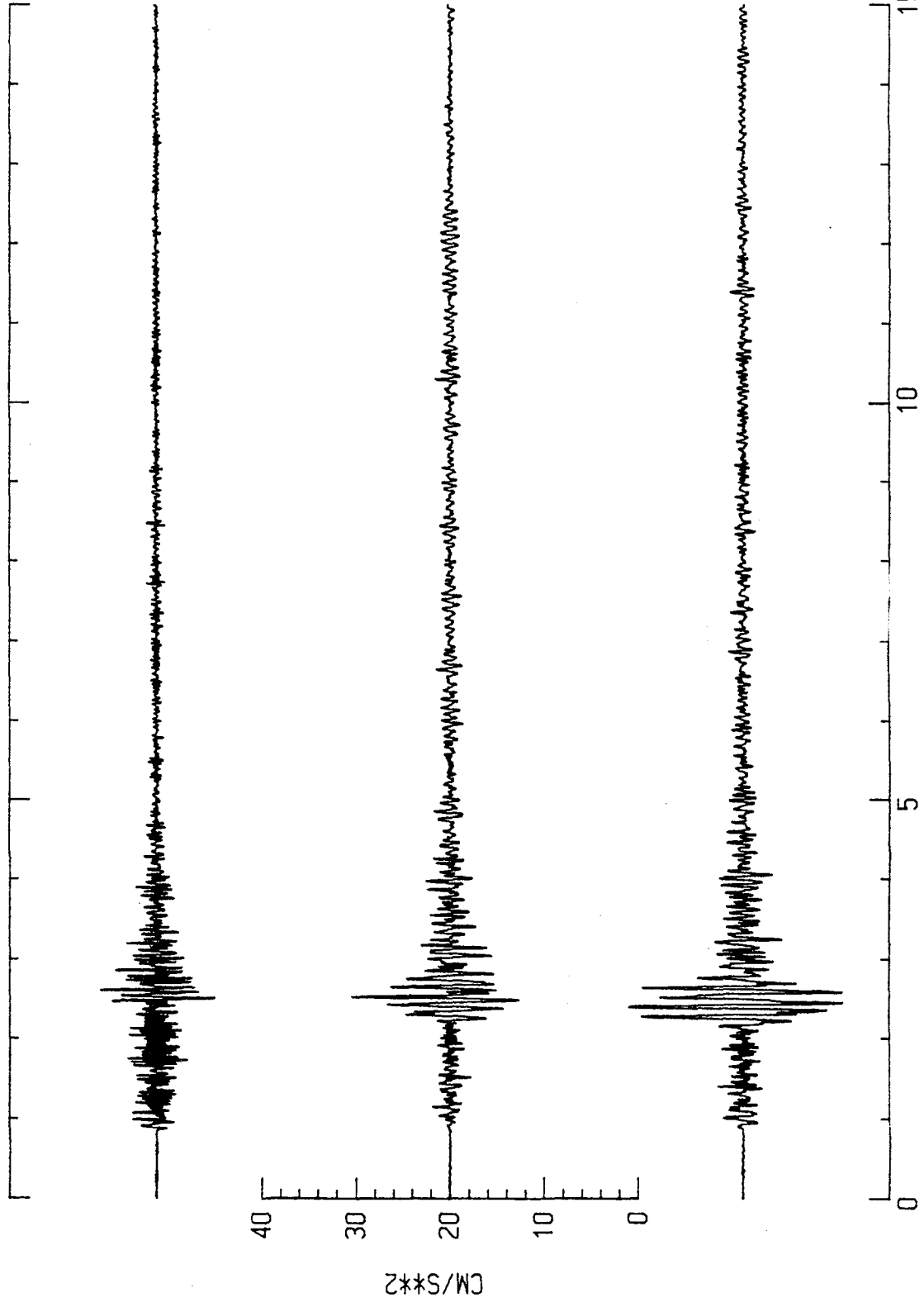
2922049R*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A054-160,161,162 82049/TS12 IEM 084

TIME:292 2051 20.700

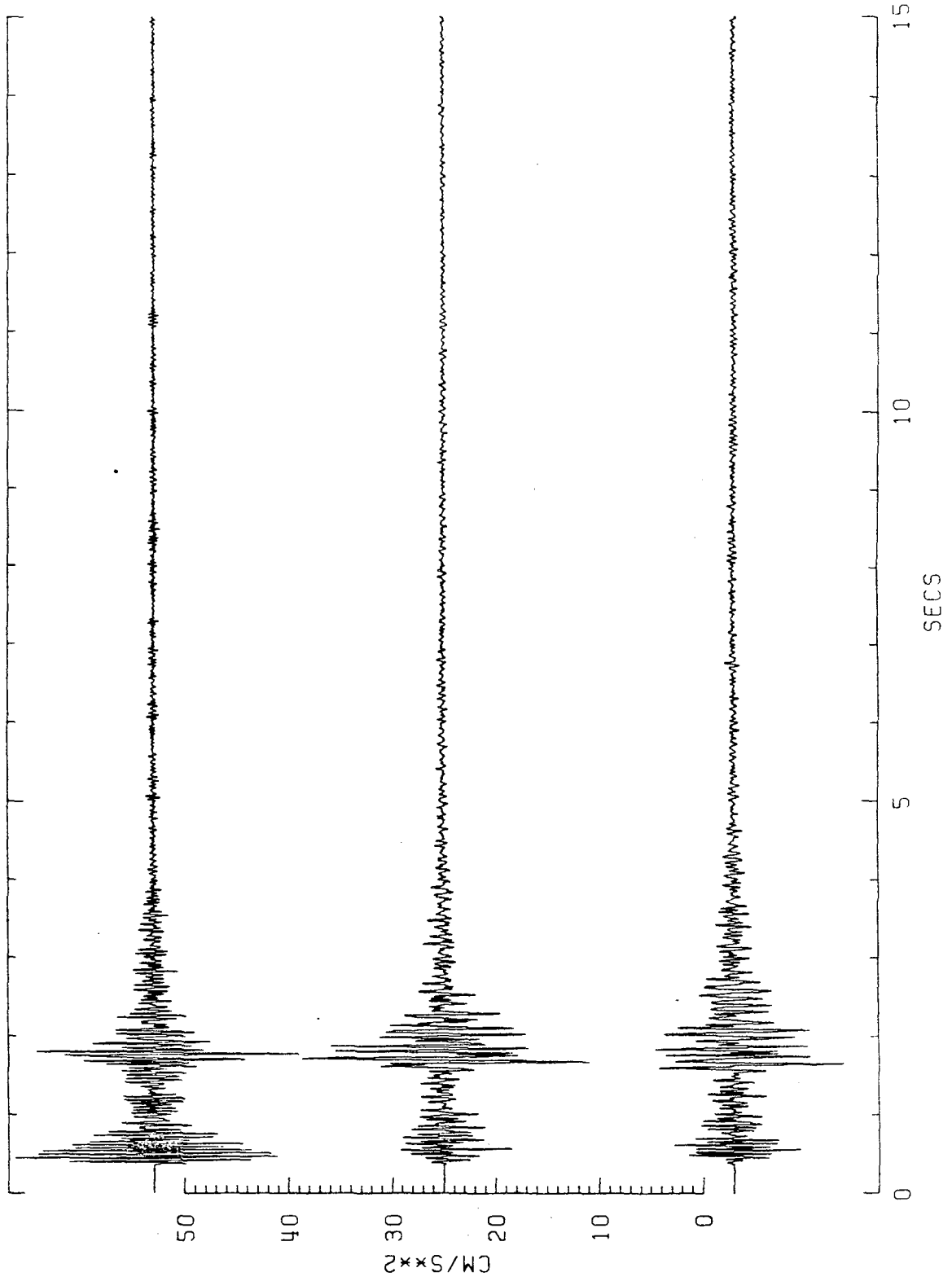
2922050M*.012 COMP:1[UP],2[H=0],3[H=90]



6A055-163,164,165 82050/TS12 IEM 085

TIME: 292 2053 32.432

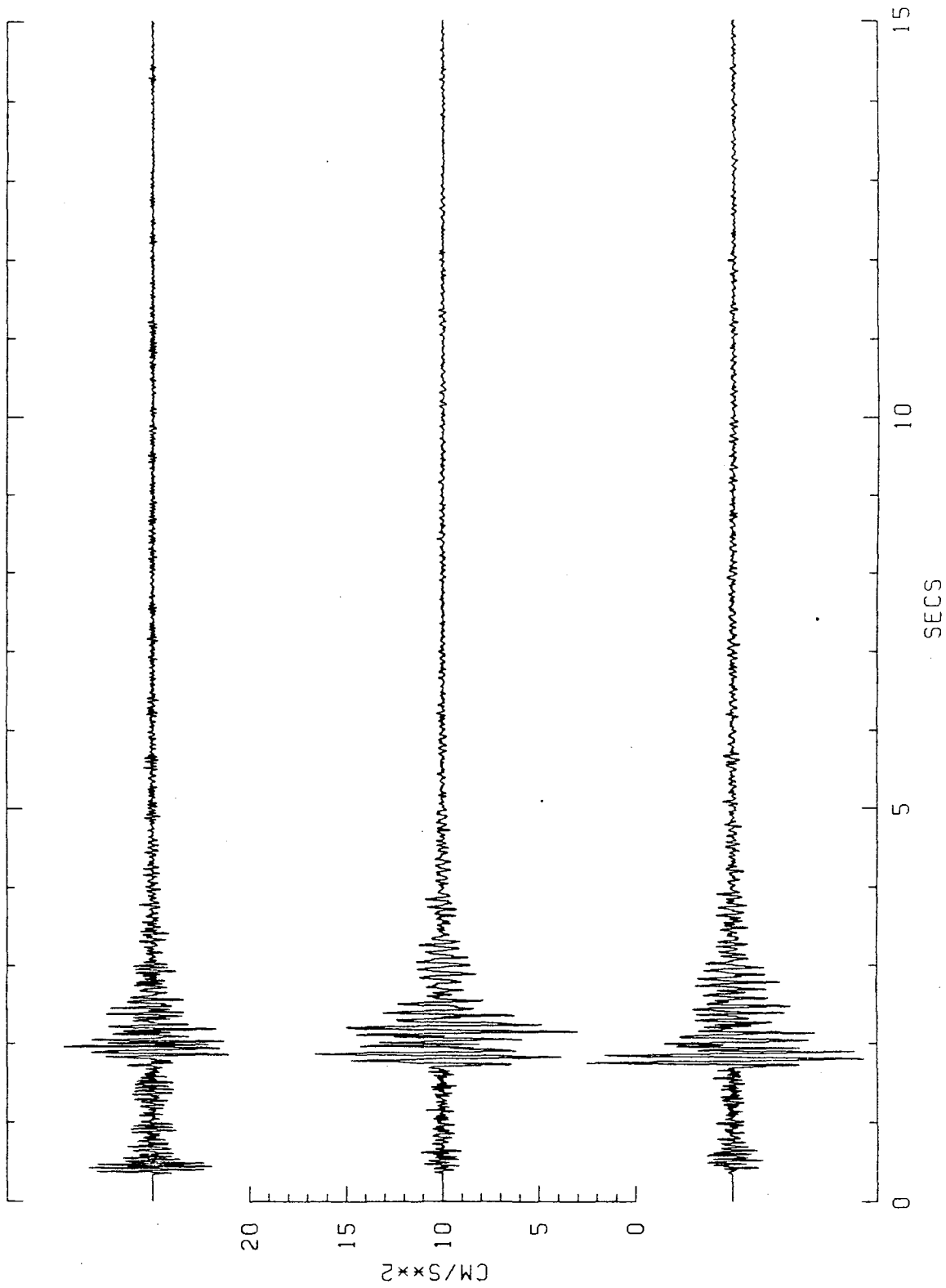
2922053K*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



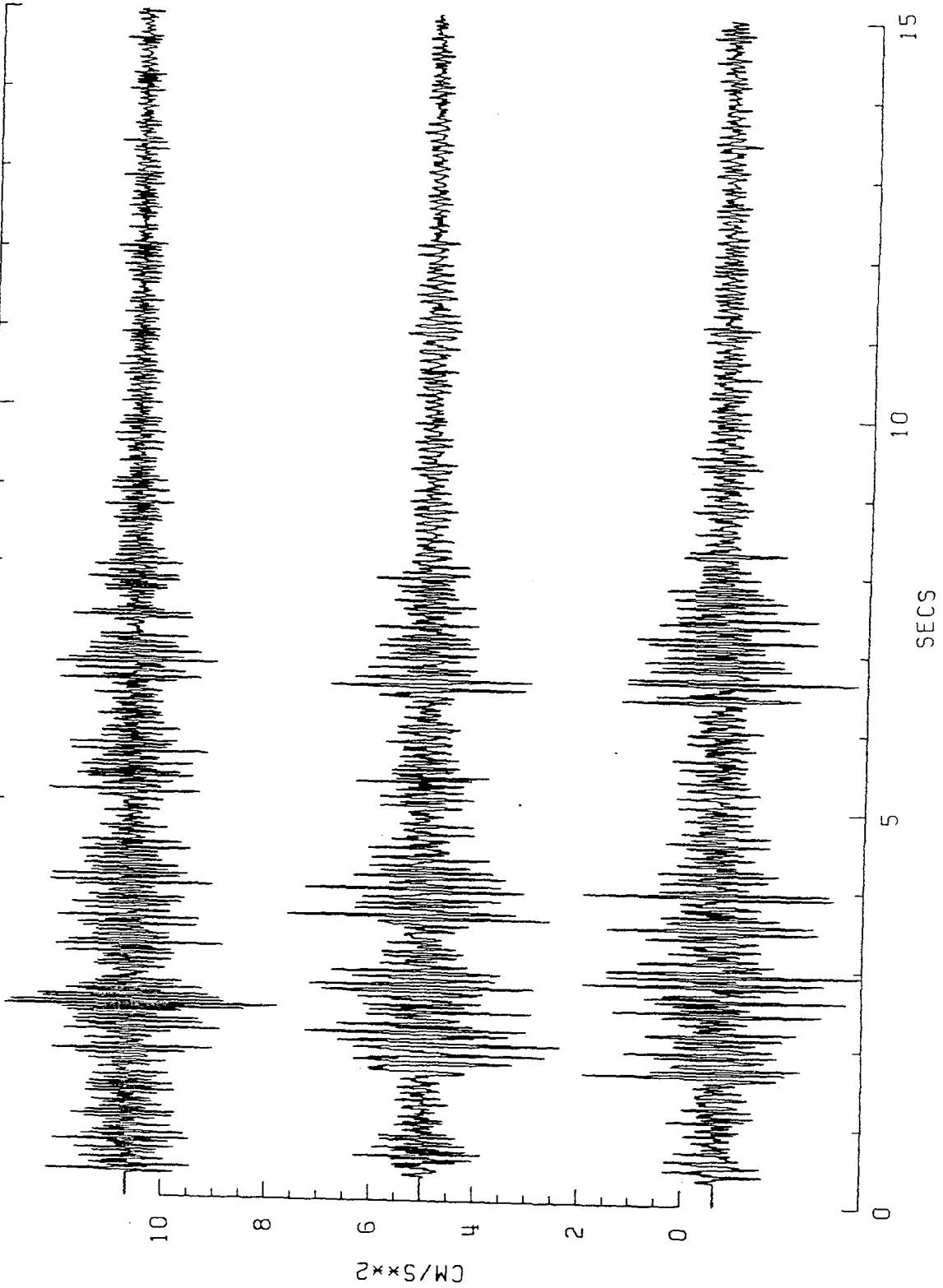
6A056-166,167,168 82010/TS12 IEM 086

TIME: 292 2111 47.890

2922111P*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



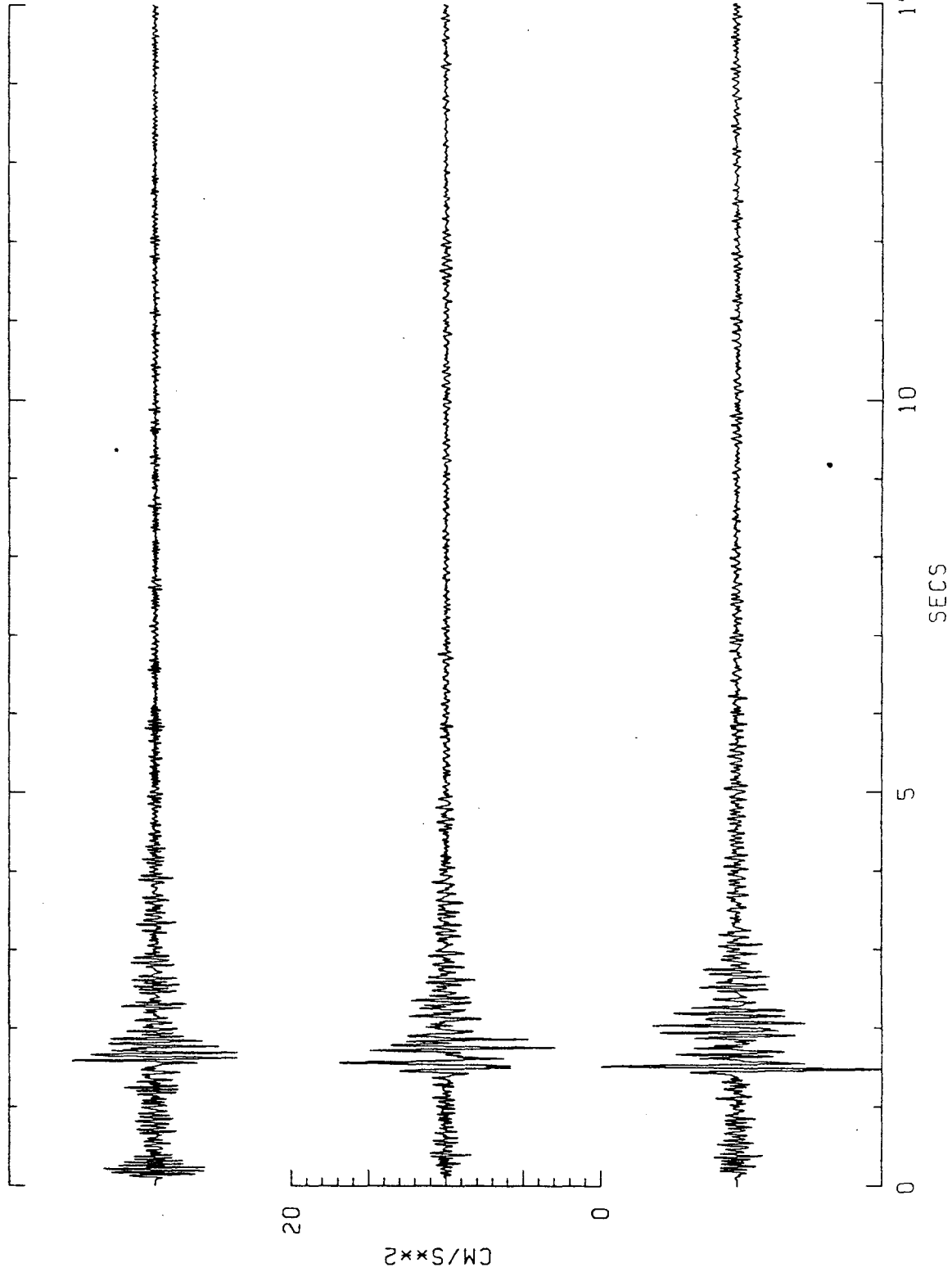
6A057-169,170,171 82102/TS12 IEM 087
TIME: 292 2112 59.891
2922112T*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A058-172,173,174 82051/TS12 IEM 088

TIME: 292 2116 52.704

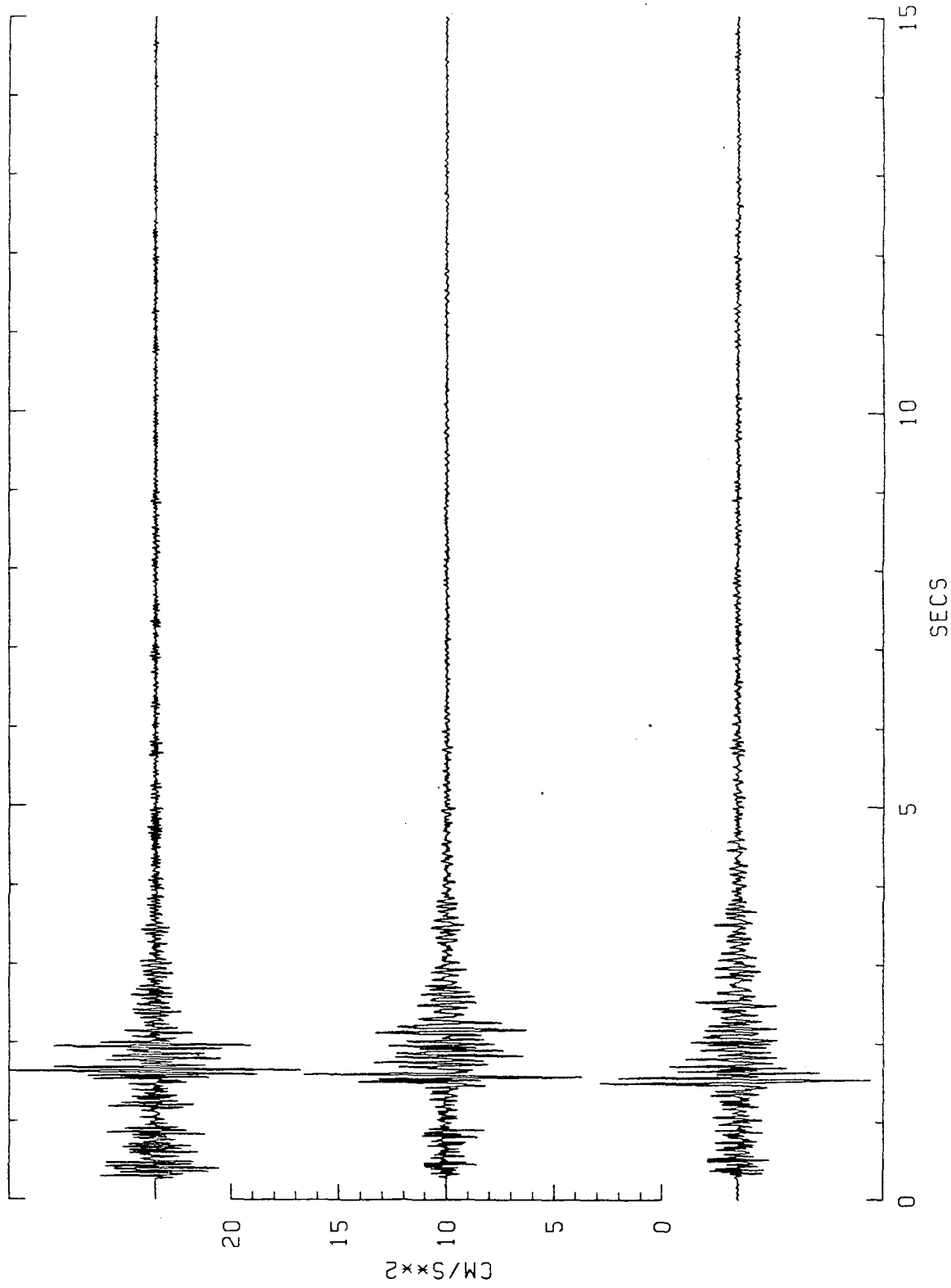
2922116R*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A059-175,176,177 82103/TS12 IEM 089

TIME: 292 2138 12.708

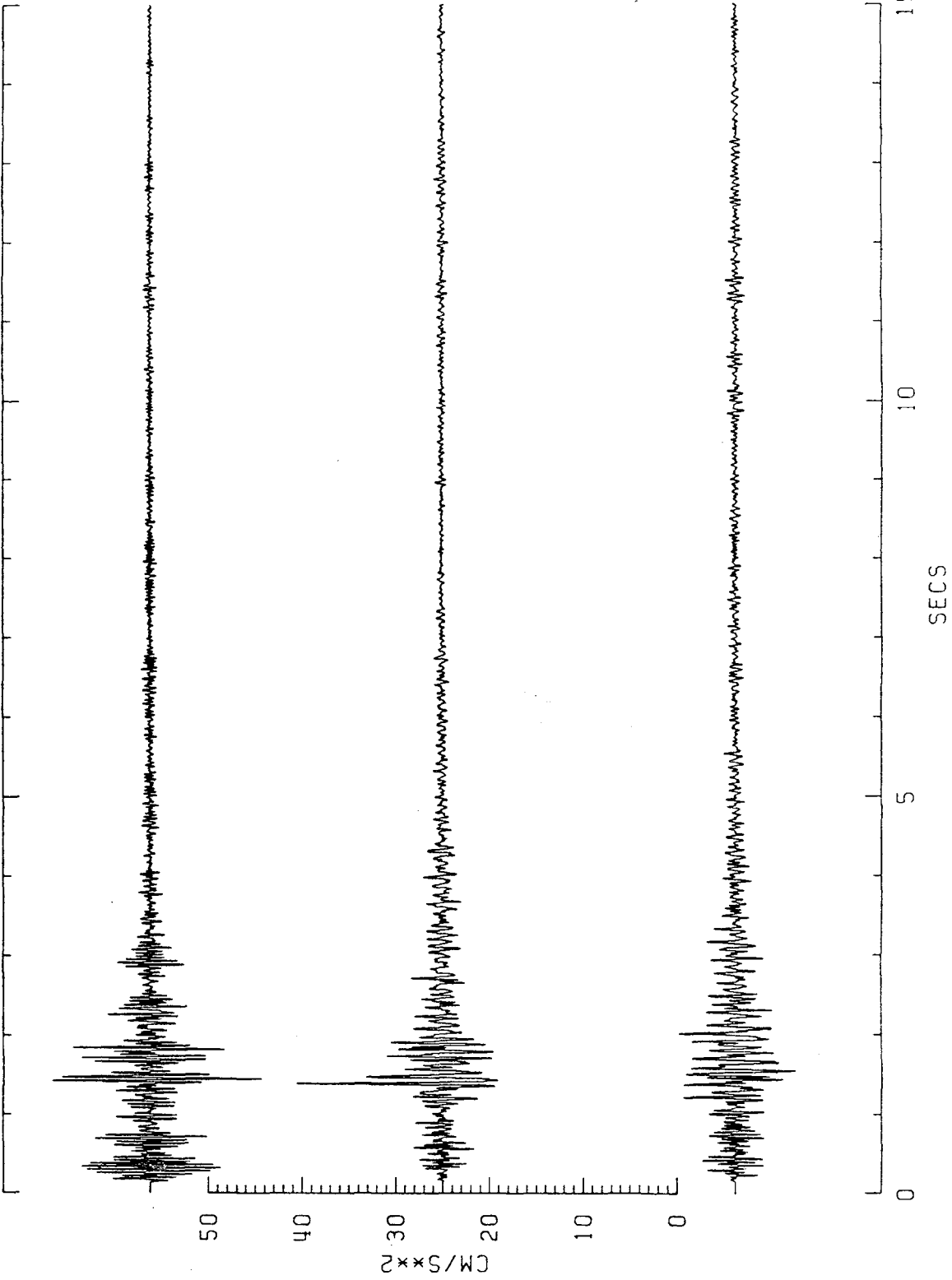
2922138E*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A060-178,179,180 82104/TS12 IEM 090

TIME: 292 2158 17.048

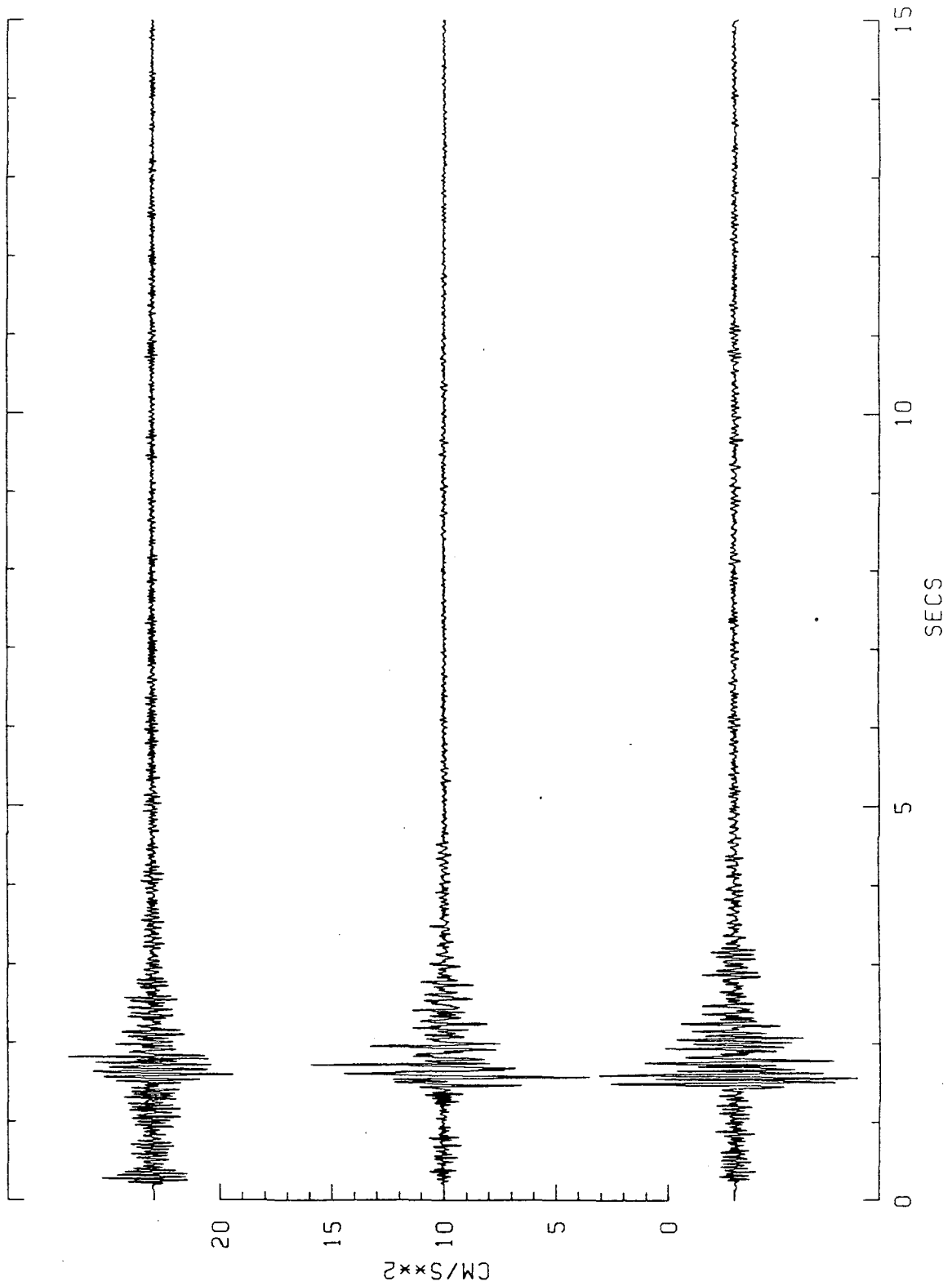
2922158F*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A061-181,182,183 82117/Ts12 IEM 091

TIME: 292 2202 03.900

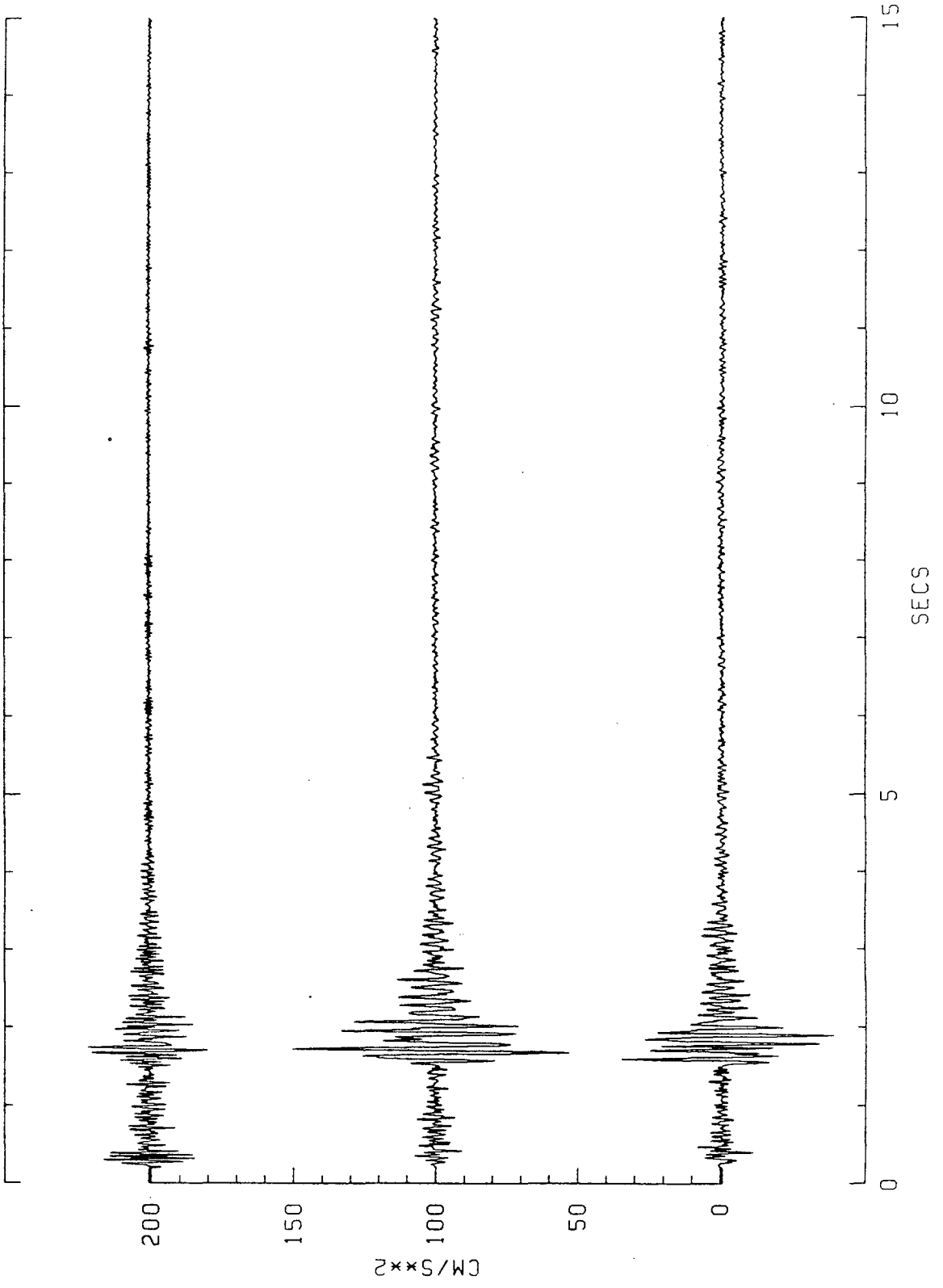
292220G*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A062-184,185,186 82052/TS12 IEM 092

TIME: 292 2217 01.374

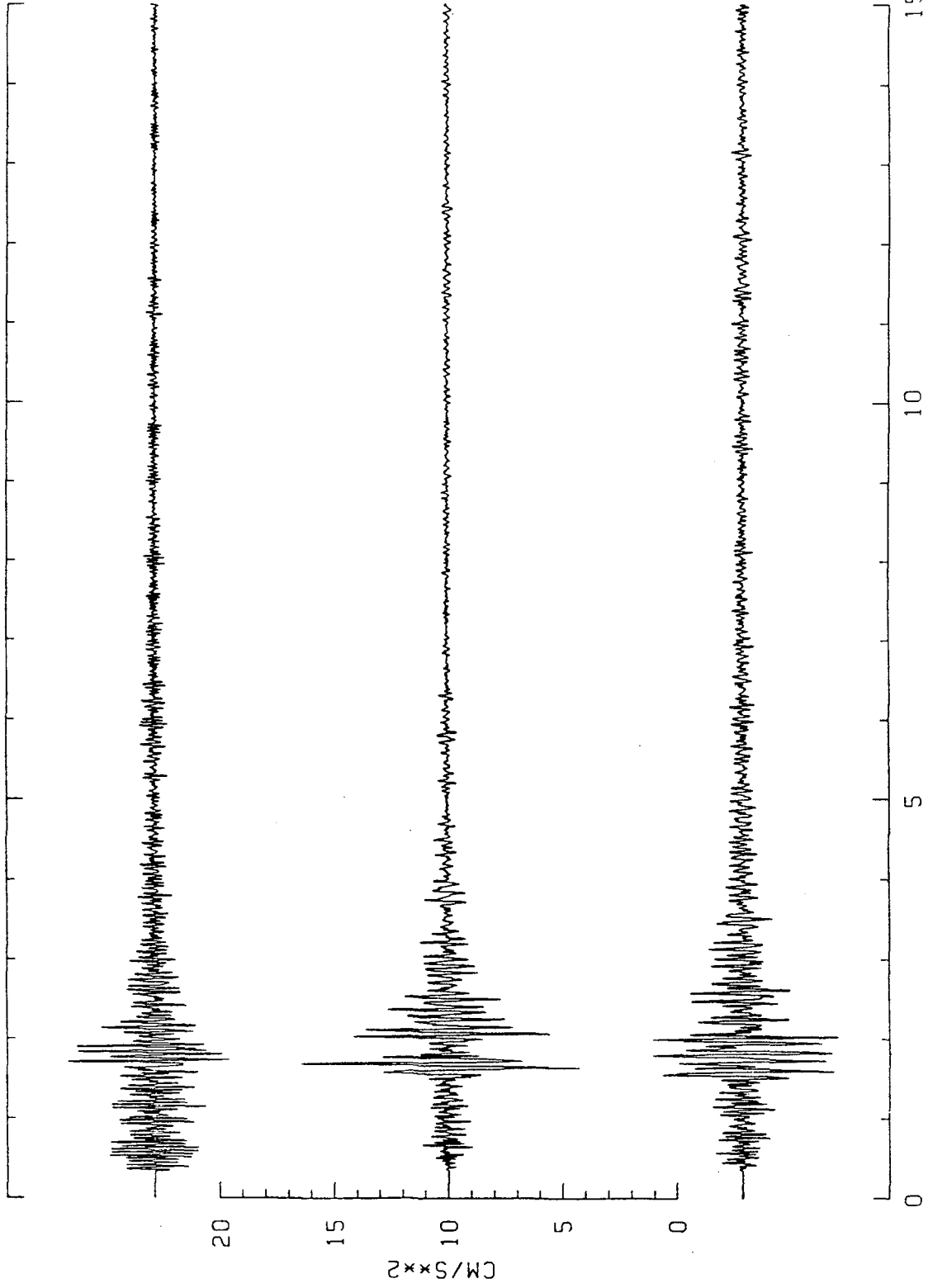
2922216T*.012 COMP: 1 (UP) , 2 (H=0) , 3 (H=90)



6A063-187, 188, 189 82105/TS12 IEM 093

TIME: 292 2238 58.452

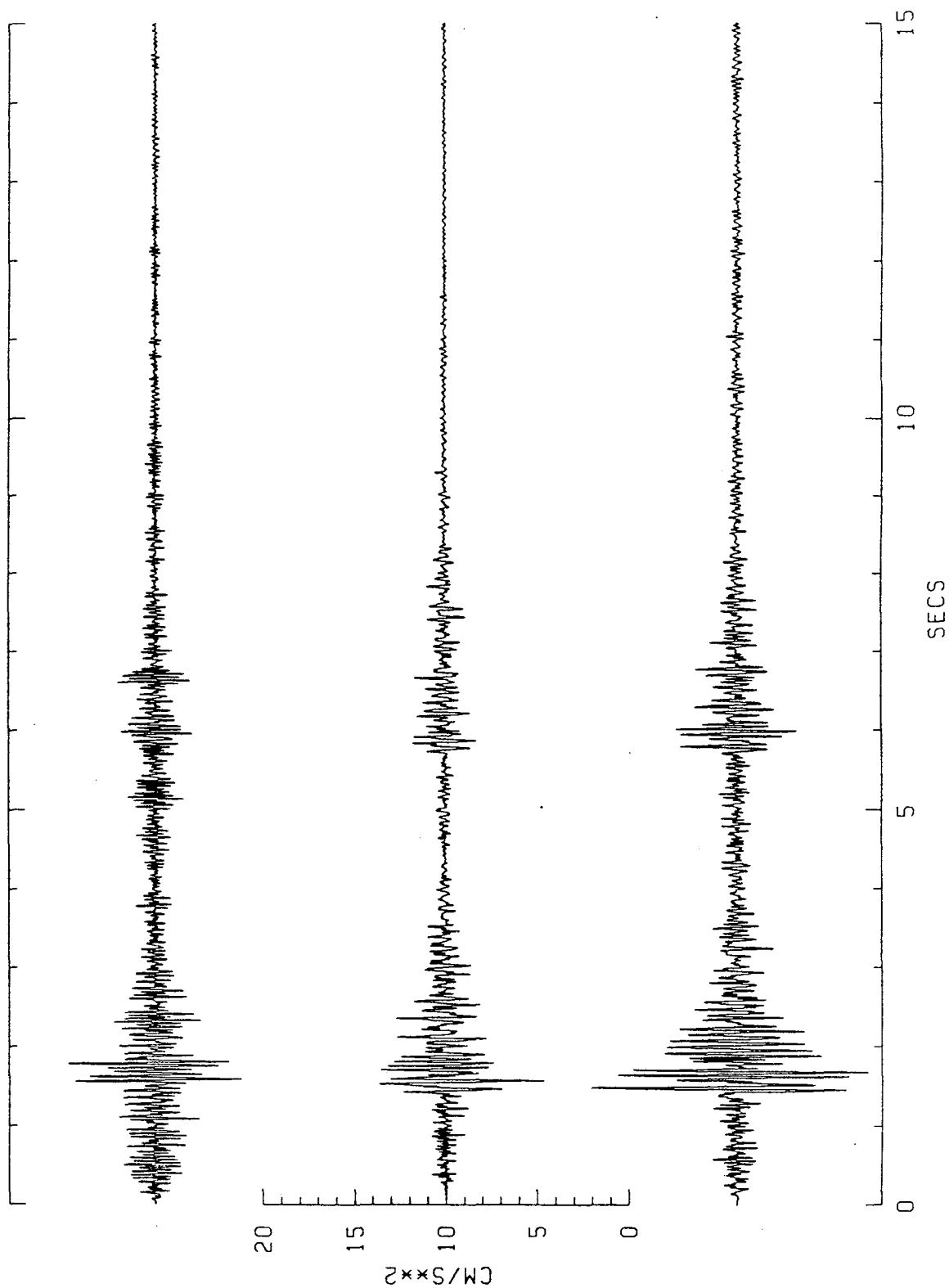
2922238T*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A064-190,191,192 82053/TS12 IEM 094

TIME: 292 2335 59.574

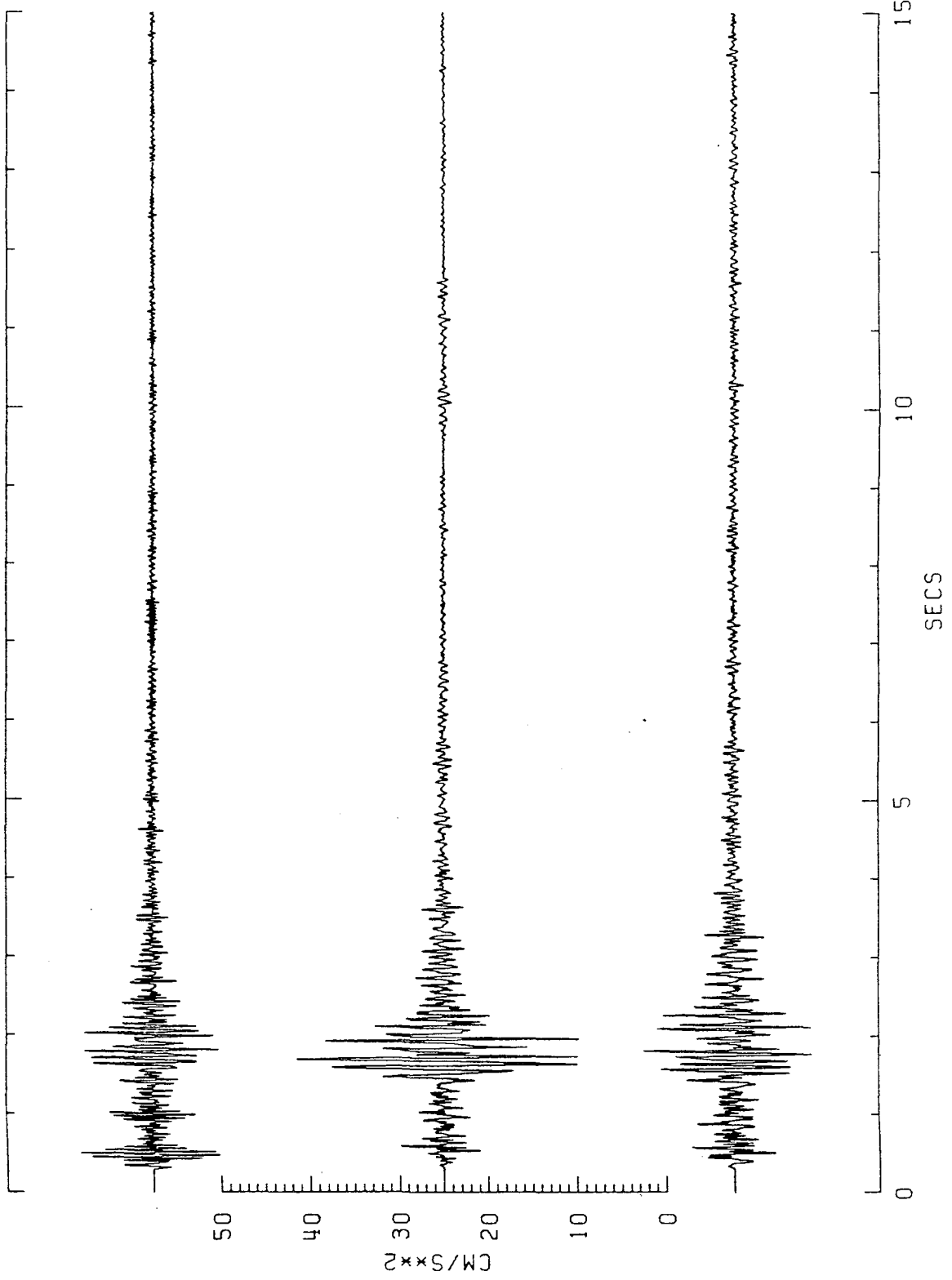
2922335T*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A065-193, 194, 195 82054/TS12 IEM 095

TIME: 292 2339 56.732

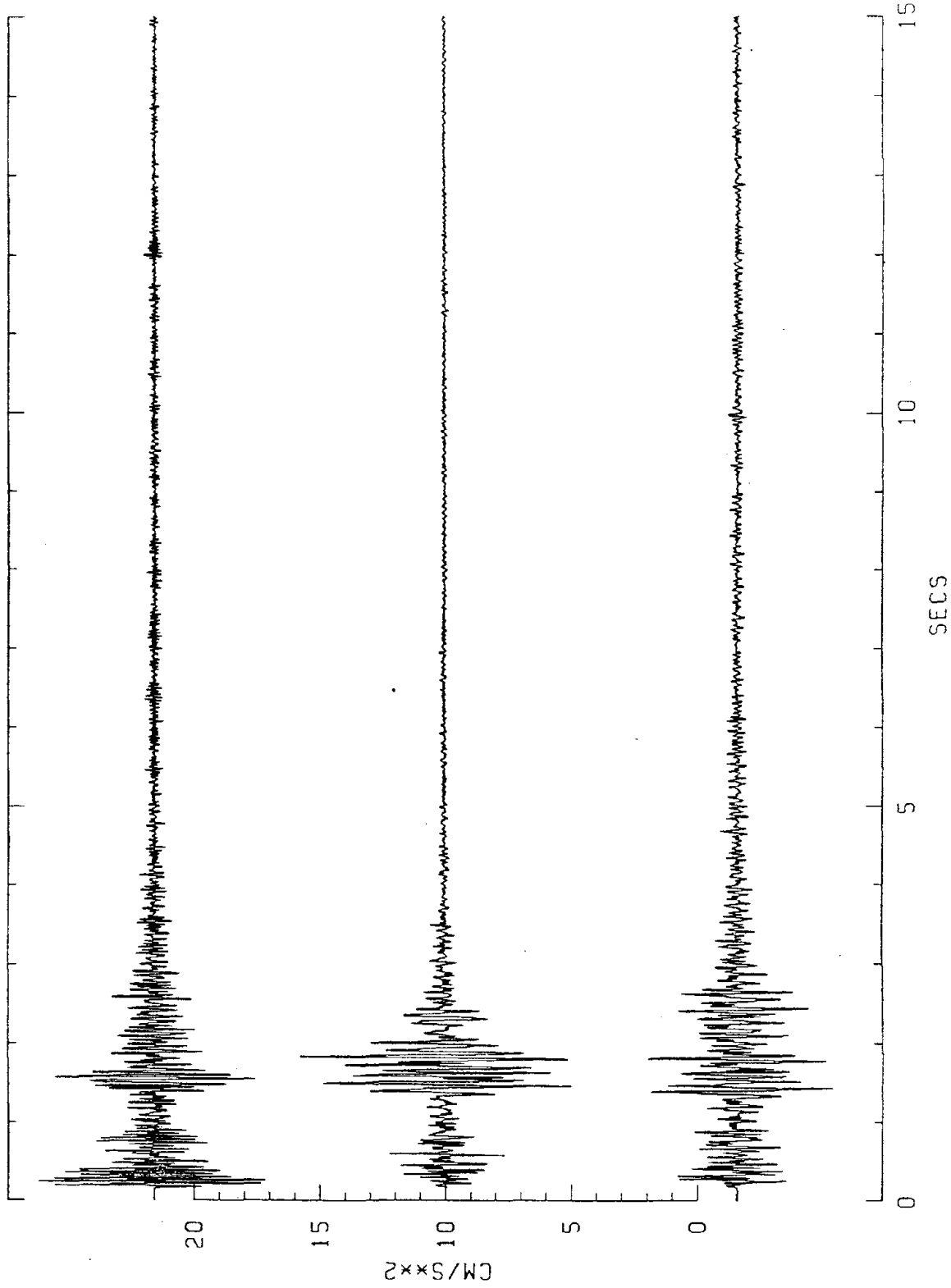
2922339S*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A066-196,197,198 82106/TS12 IEM 096

TIME: 293 0009 16.050

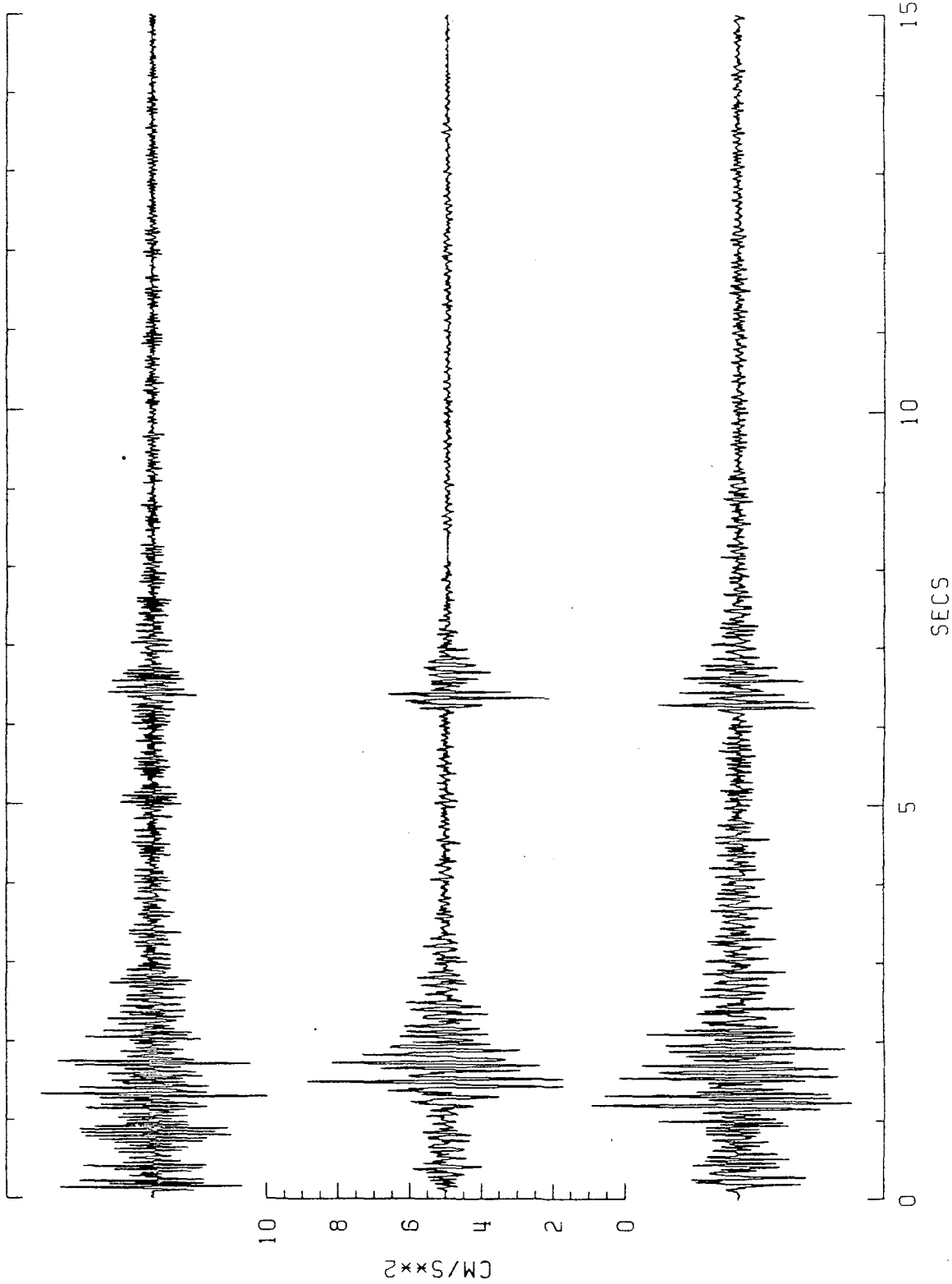
2930009F*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A067-199,200,201 82107/TS12 IEM 097

TIME: 293 0014 48.210

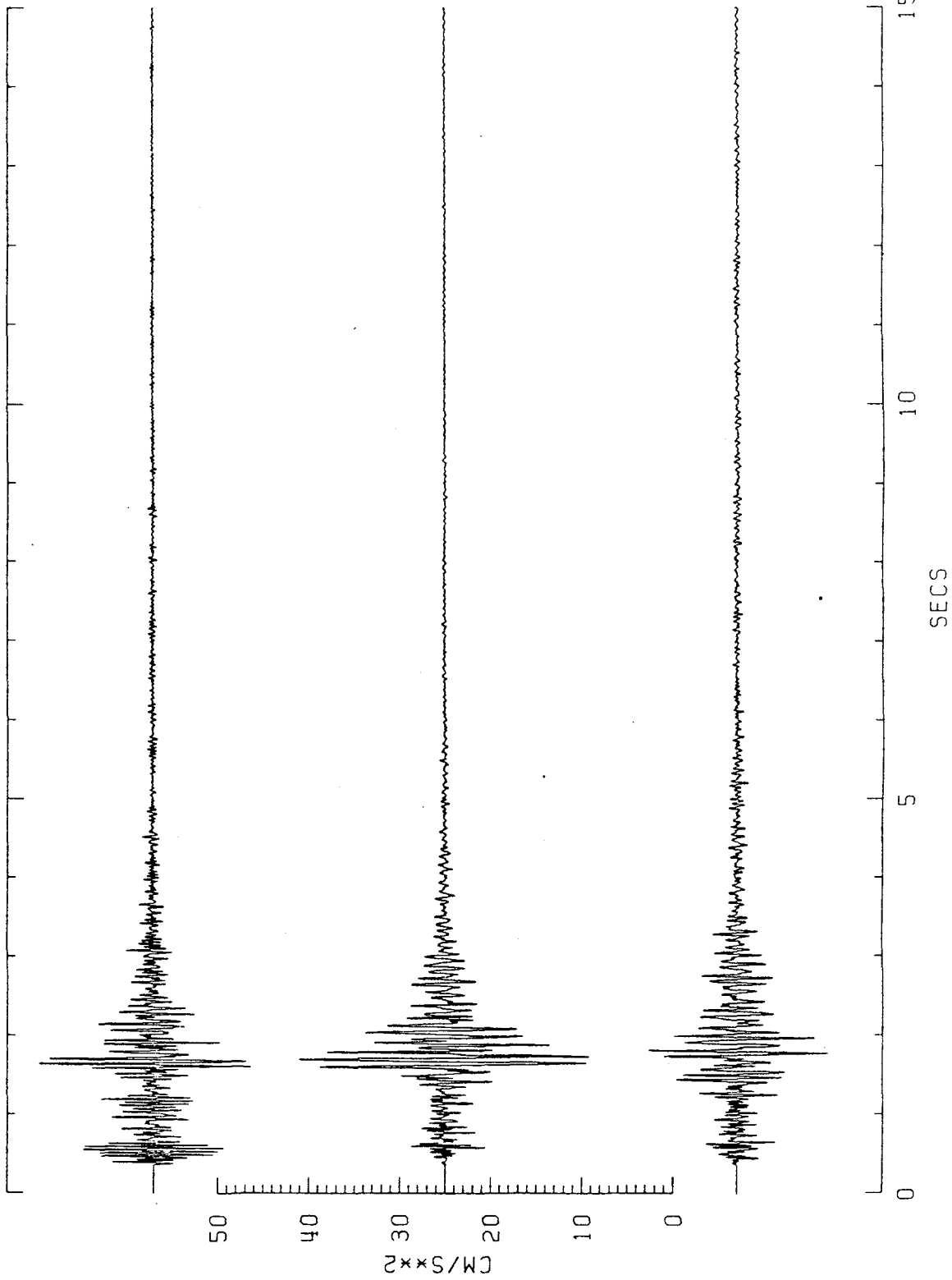
2930014P*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A068-202,203,204 82108/TS12 IEM 098

TIME: 293 0043 28.885

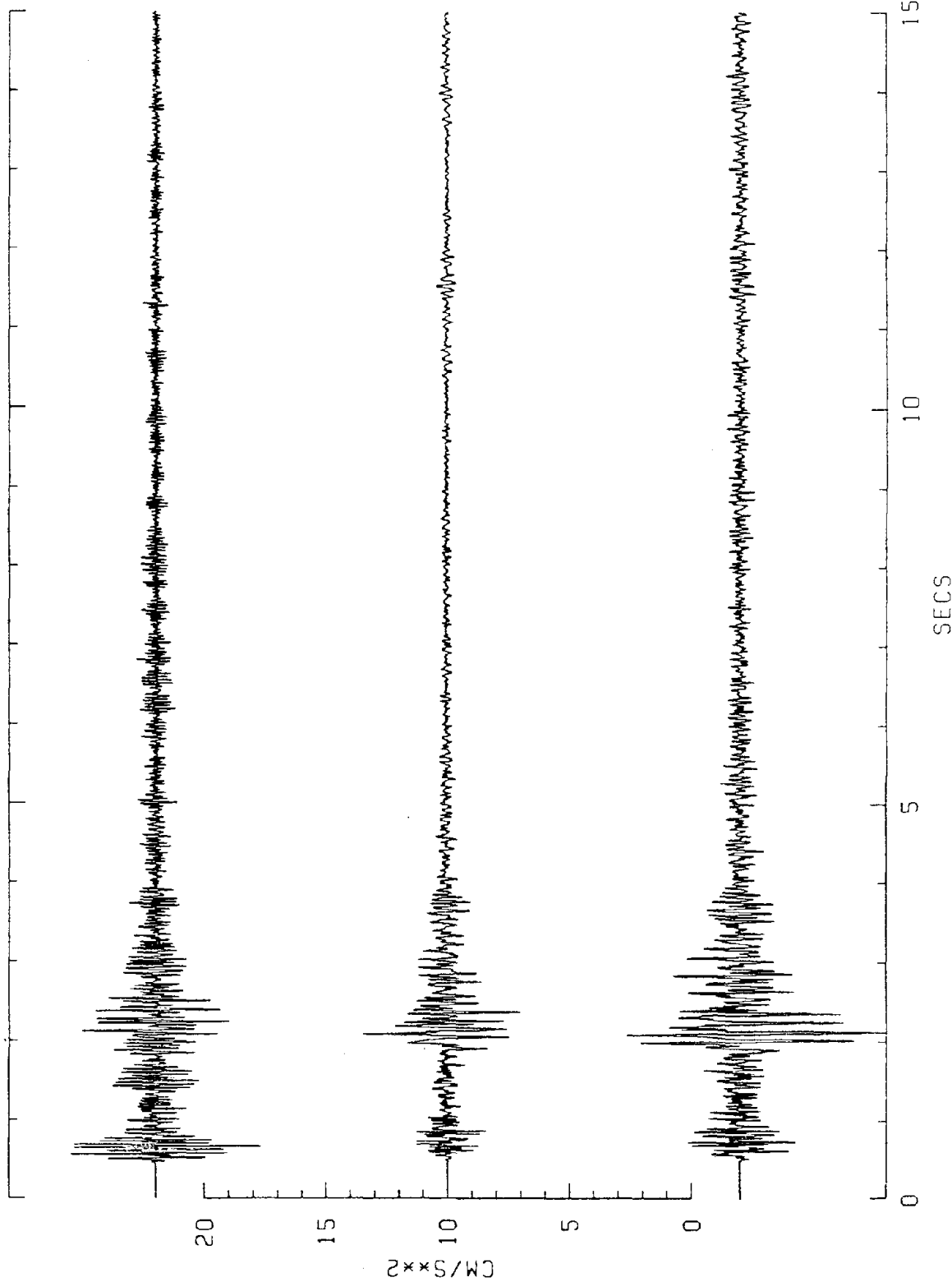
2930043J*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A069-205, 206, 207 82109/TS12 IEM 099

TIME: 293 0118 53.140

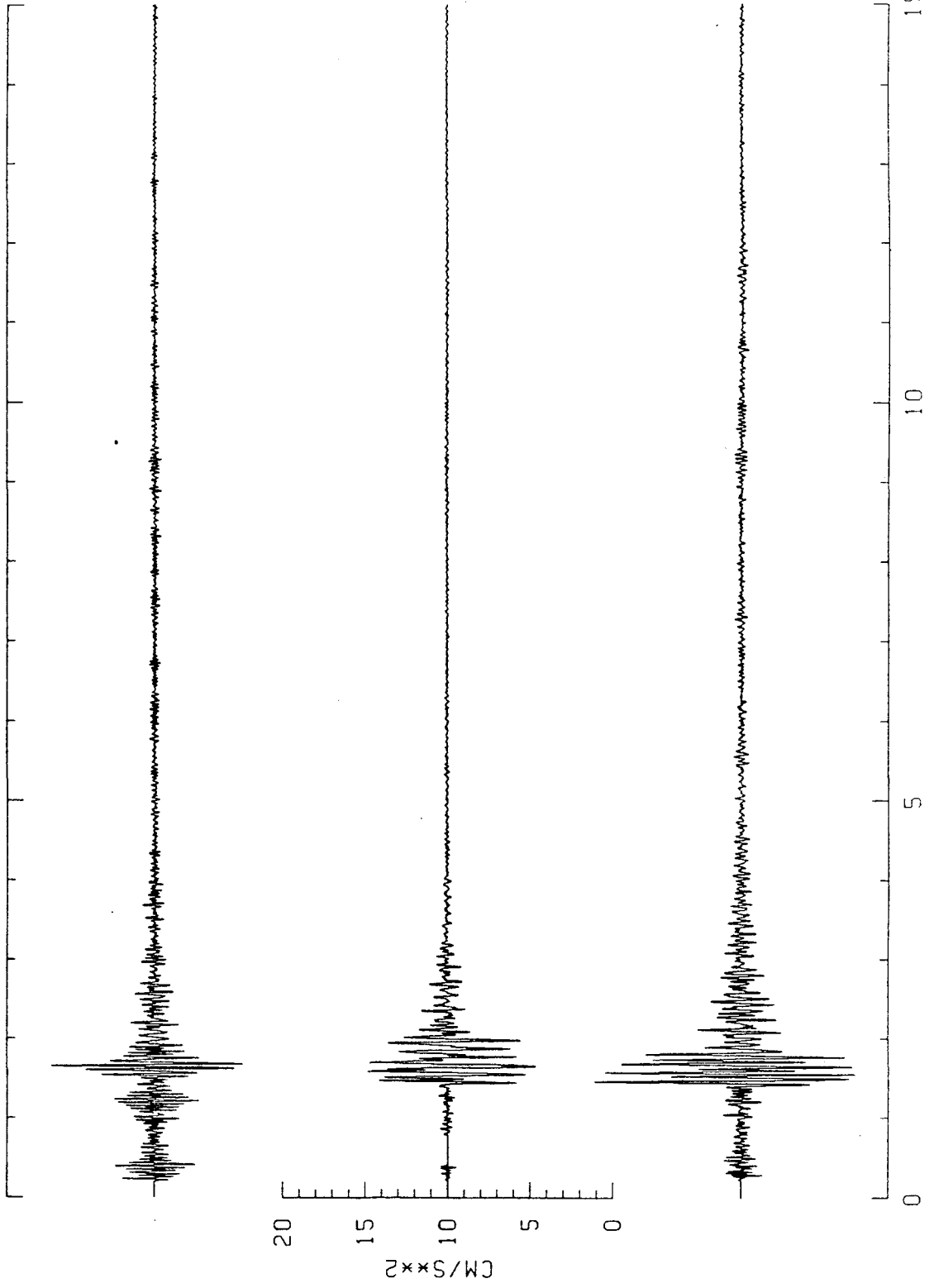
2930118R*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A070-208,209,210 82110/TS12 IEM 100

TIME: 293 0131 57.955

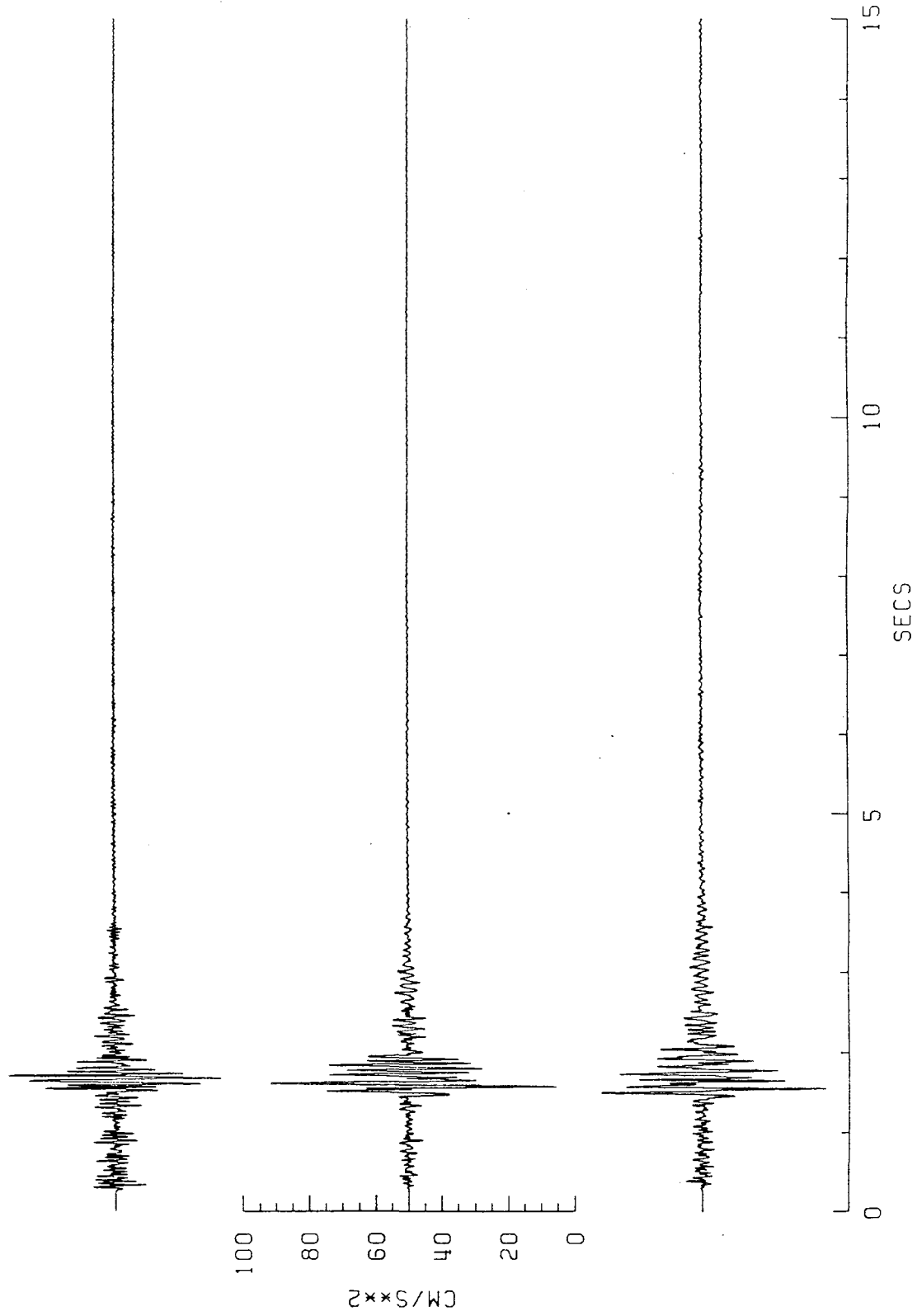
2930131T*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A071-211,212,213 82055/TS12 IEM 101

TIME: 293 0321 49.933

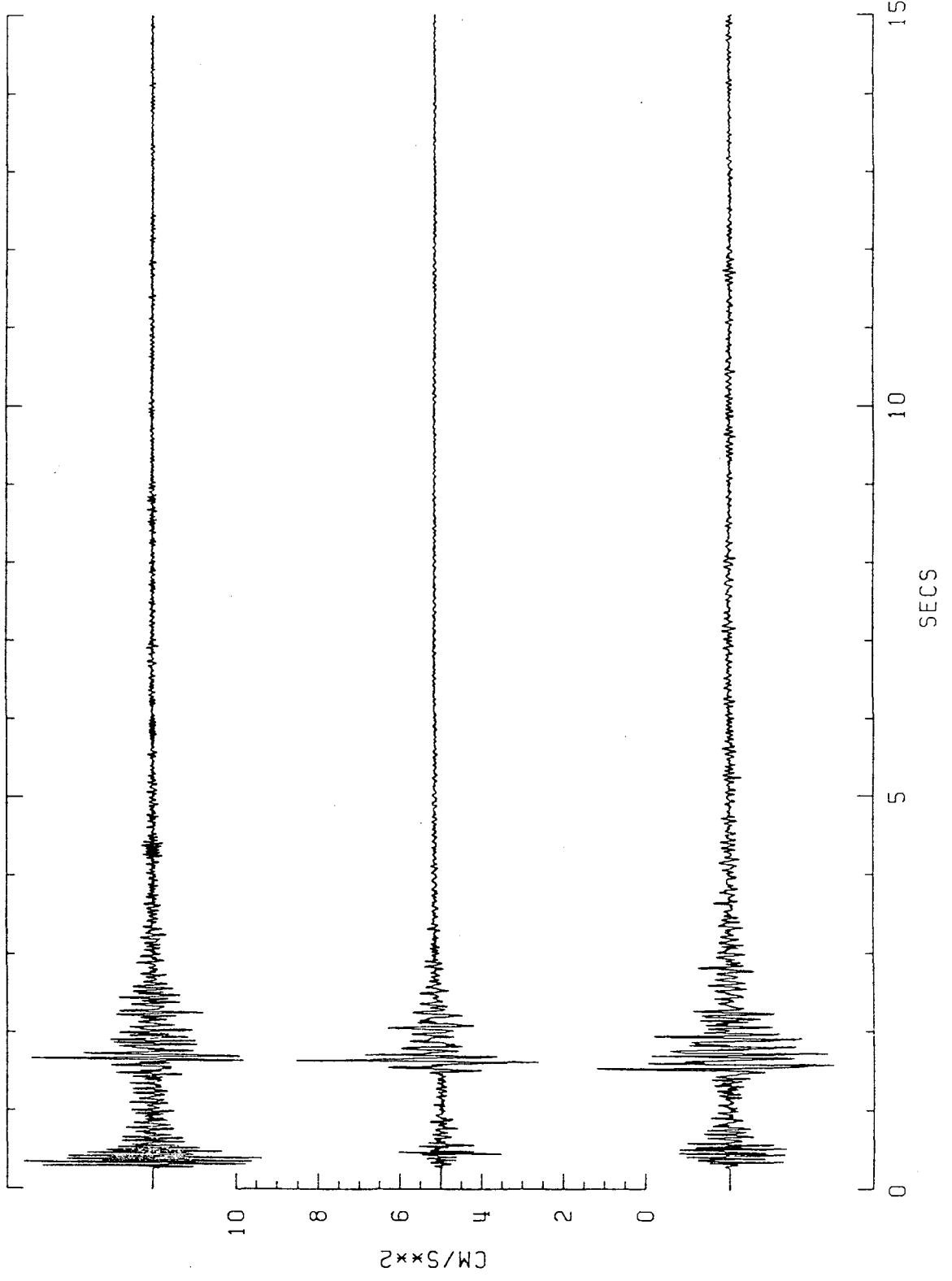
29303210*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A072-214,215,216 82116/TS12 IEM 102

TIME: 293 0330 14.714

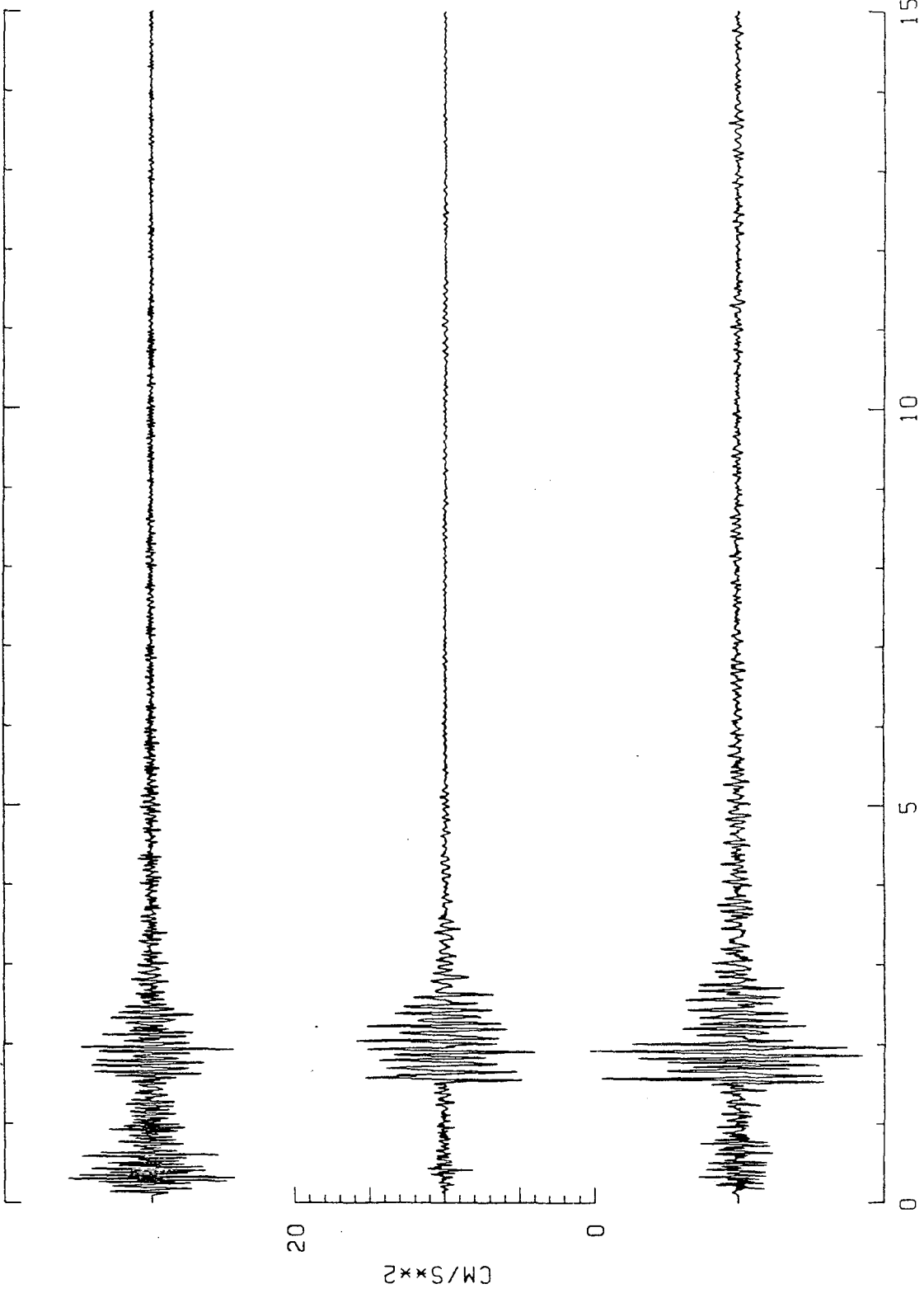
2930330E*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A073-217, 218, 219 82056/TS12 IEM 103

TIME: 293 0626 22.208

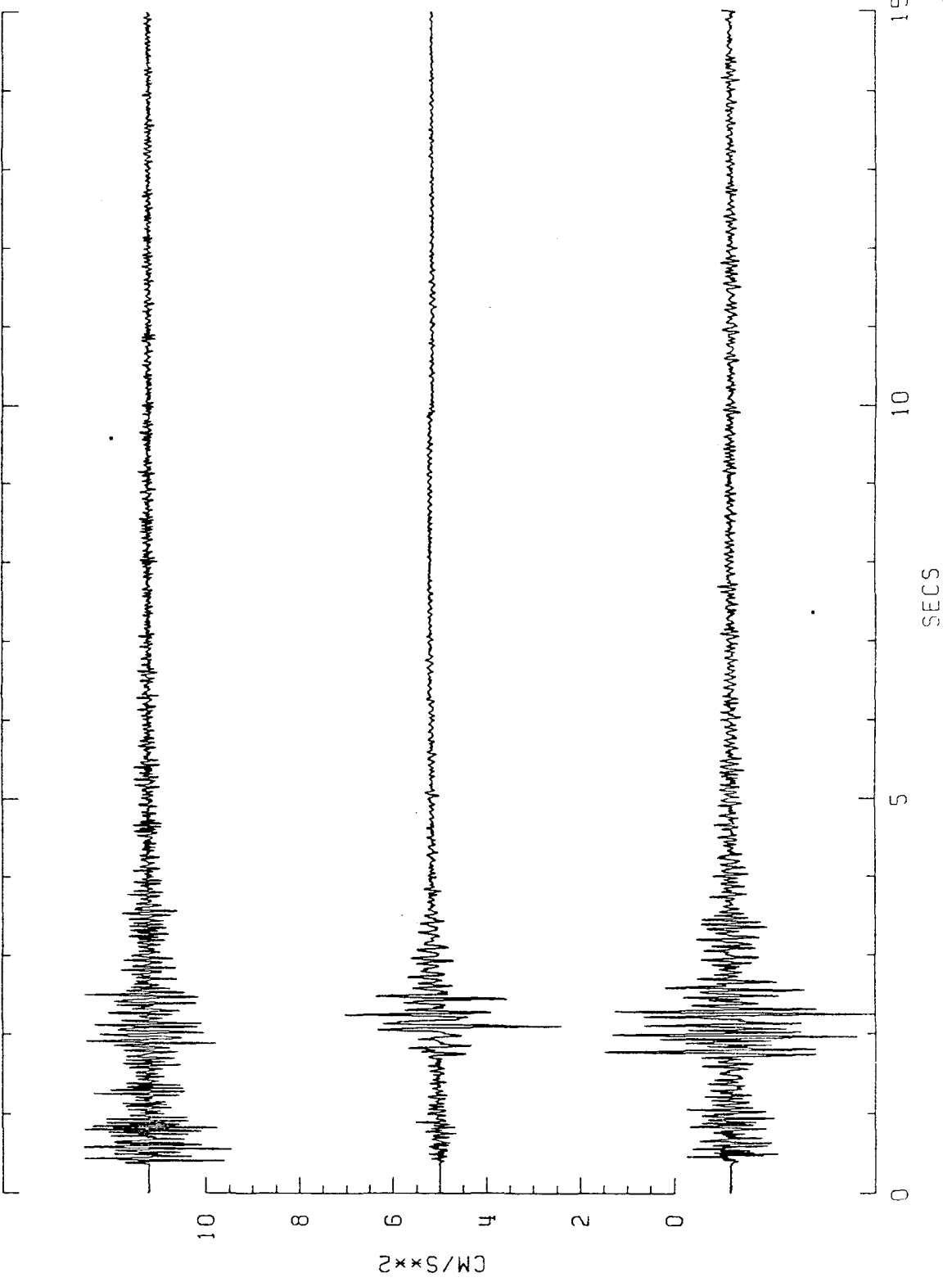
2930626H*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A074-220,221,222 82115/TS12 IEM 104

TIME: 293 0642 14.343

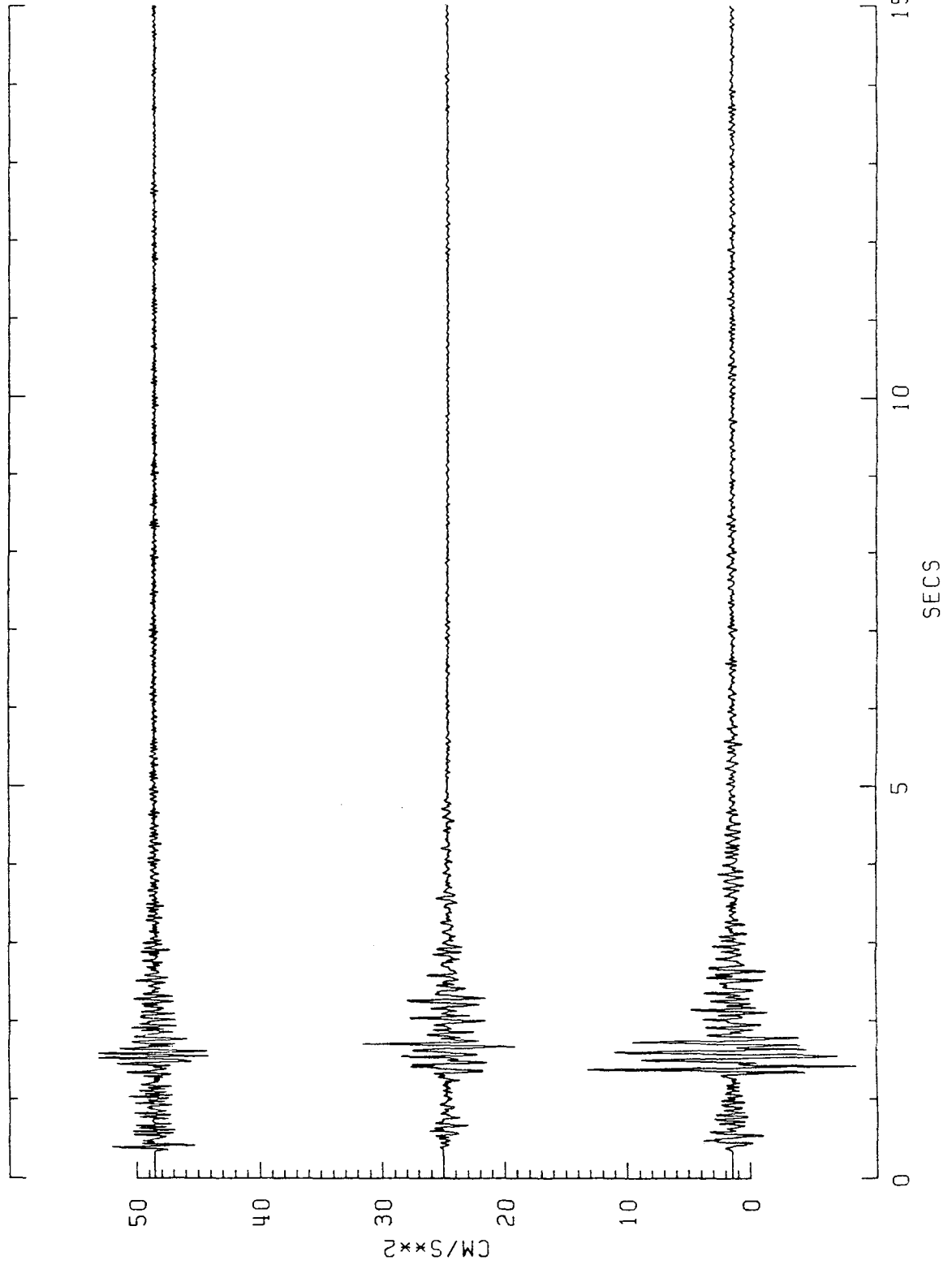
2930642E*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A075-223,224,225 82111/TS12 IEM 108

TIME: 293 1010 15.425

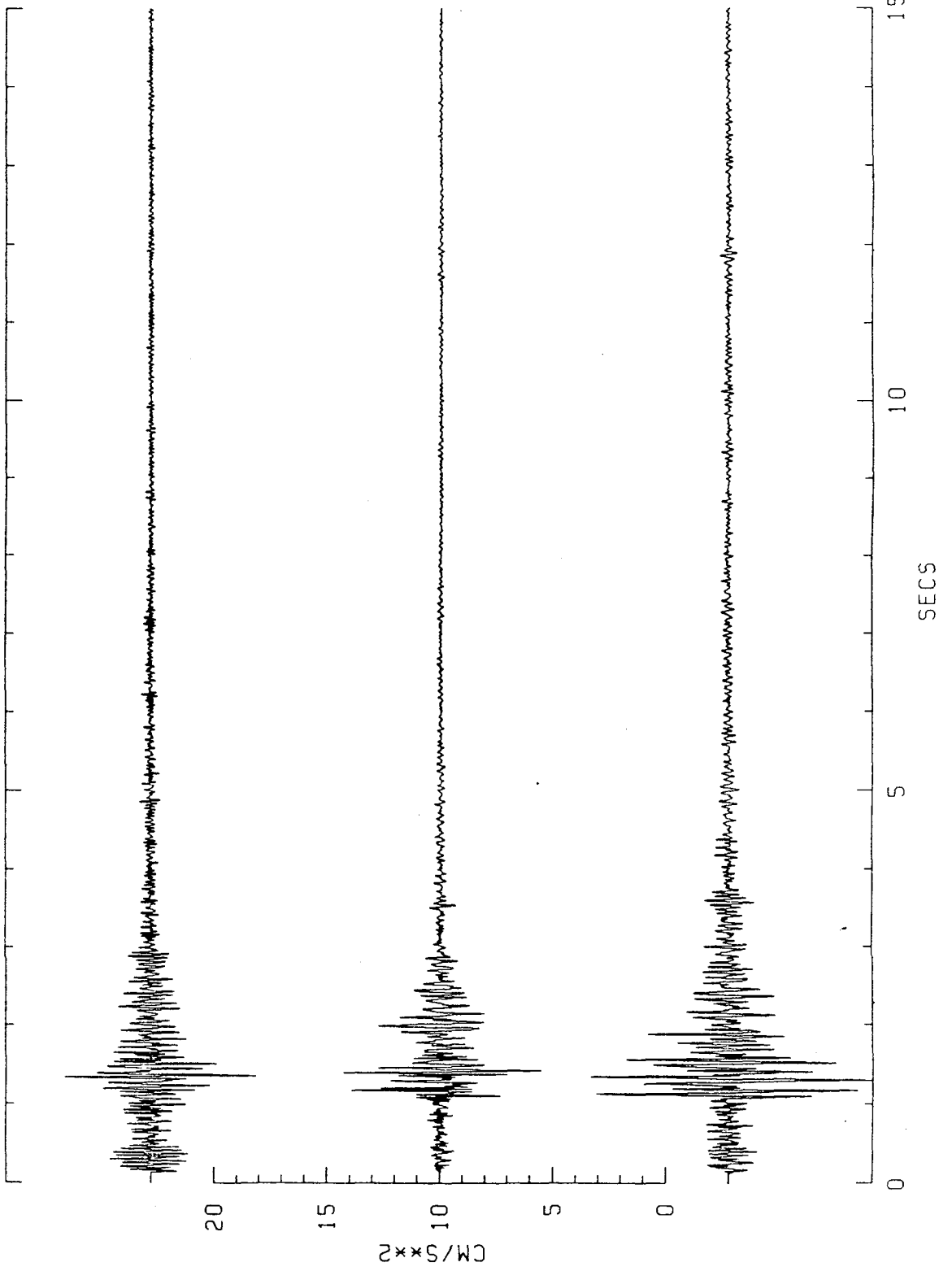
2931010E*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A076-226,227,228 82112/TS12 IEM 105

TIME: 293 1016 56.385

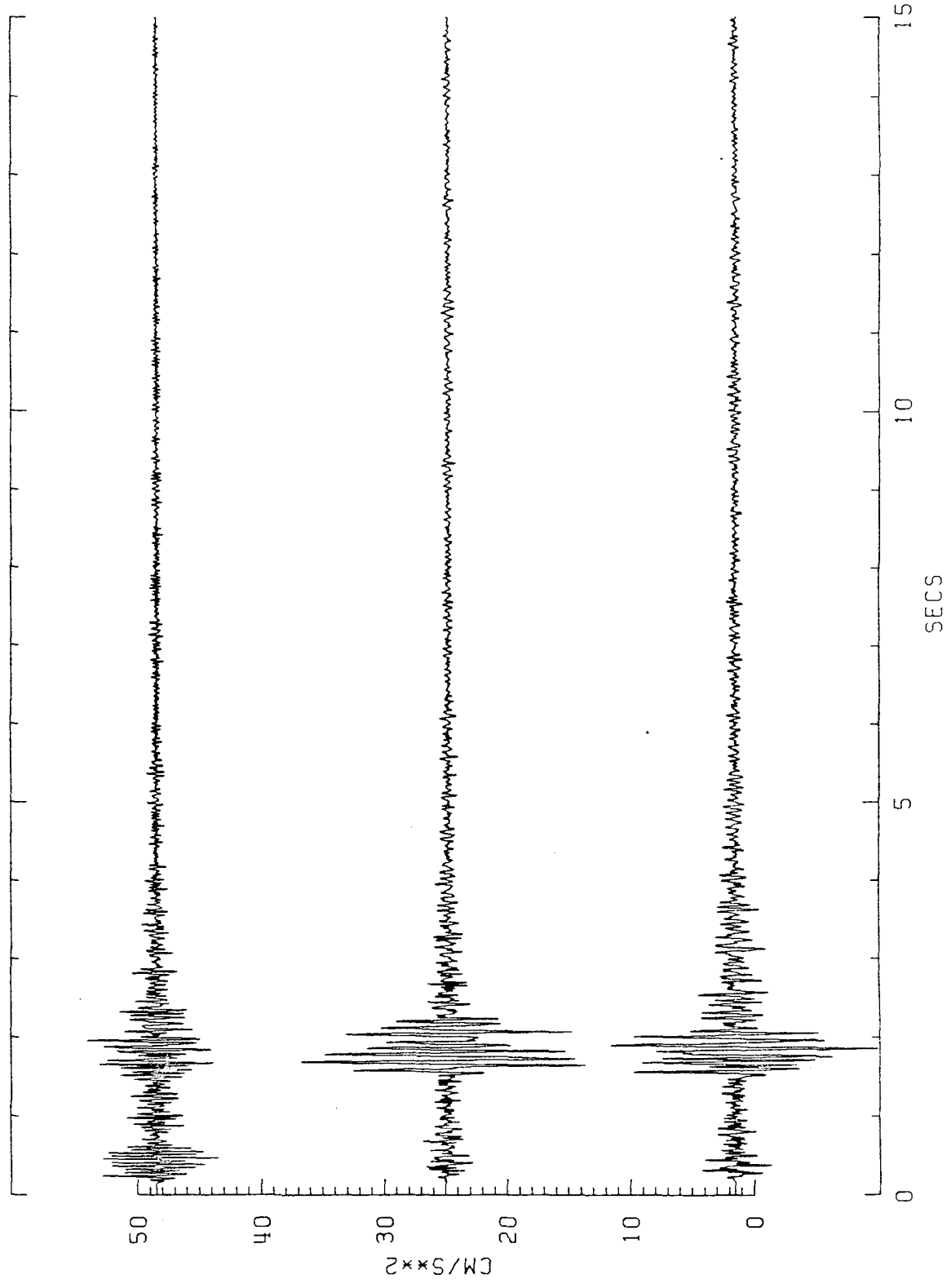
2931016S*.012 COMP: 1 (UP) . 2 (H=0) . 3 (H=90)



6A077-229,230,231 82057/TS12 IEM 106

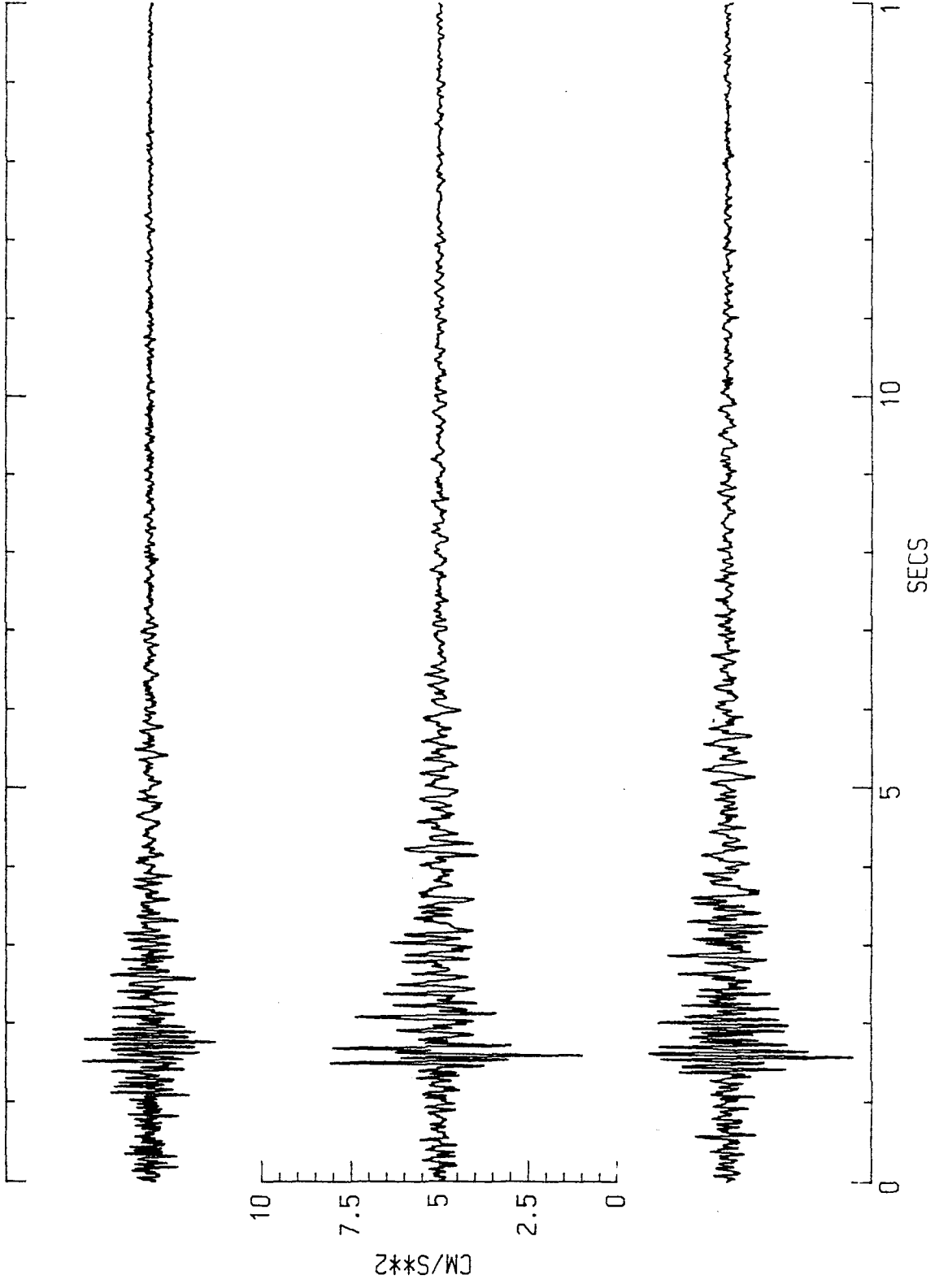
TIME: 293 1144 42.935

29311440*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A078-232, 233, 234 82082/TS03 IEM 203

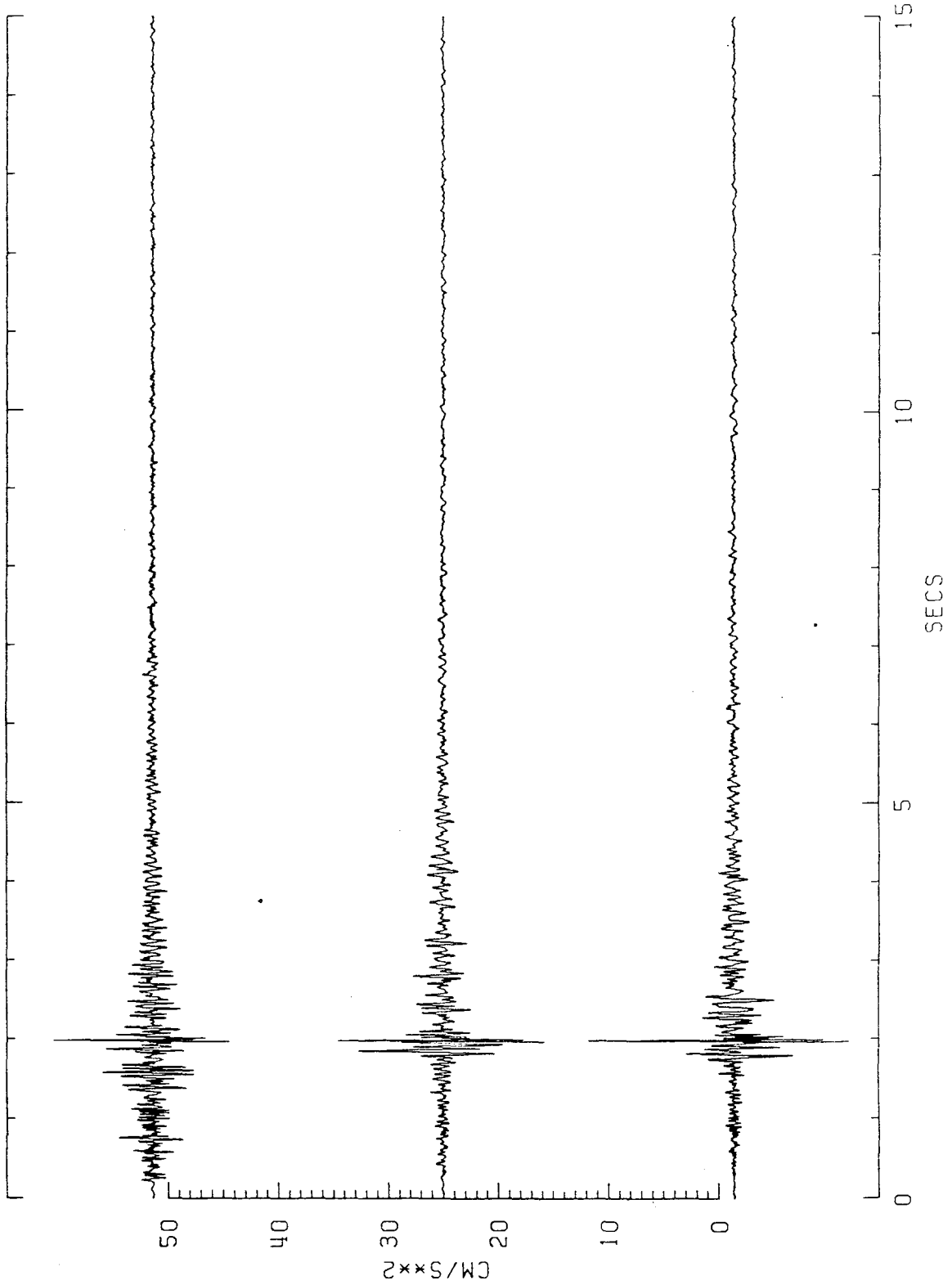
TIME: 334 2253 51.750
3342253R*.003 COMP: 1[UP], 2[H=0], 3[H=90]



6A079-235, 236, 237 82082/TS04 IEM 192

TIME: 334 2253 49.177

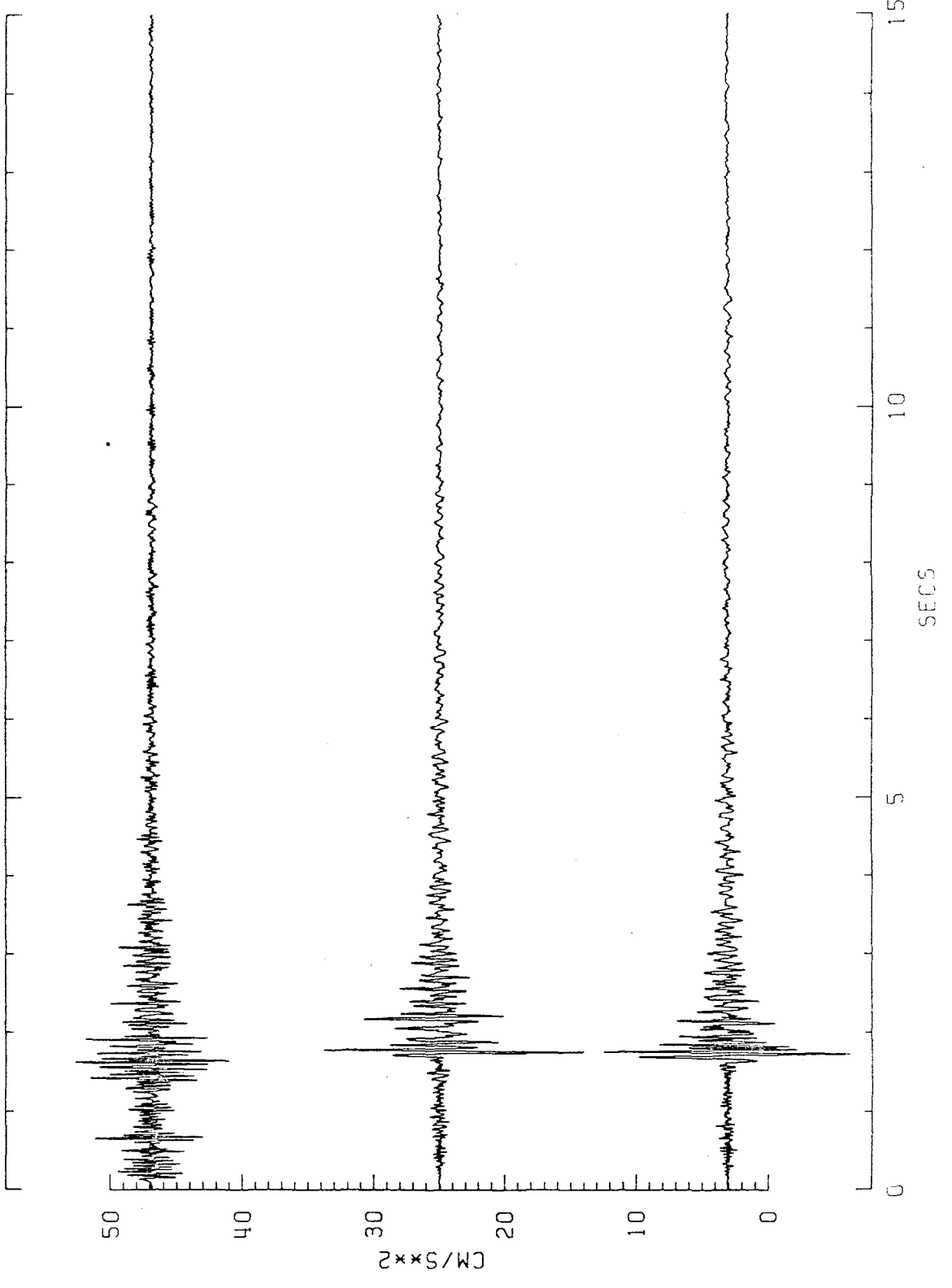
33422530*.004 COMP: 1 (UP) , 2 (H=180) , 3 (H=270)



6A080-238, 239, 240 82082/TS05 IEM 150

TIME: 334 2253 49.740

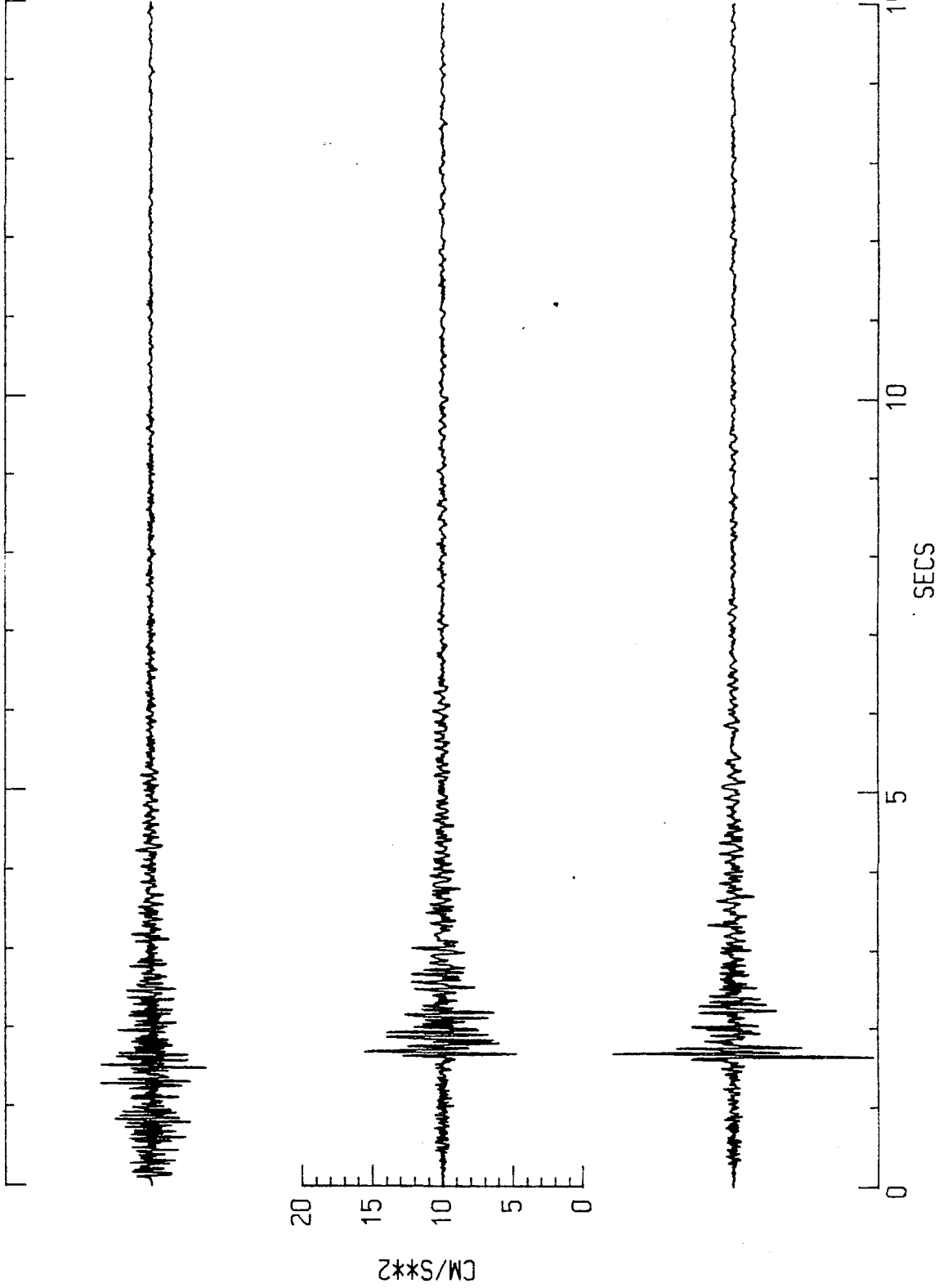
33422530*.005 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A081-241, 242, 243 82082/TS07 IEM 193

TIME: 334 2253 49.738

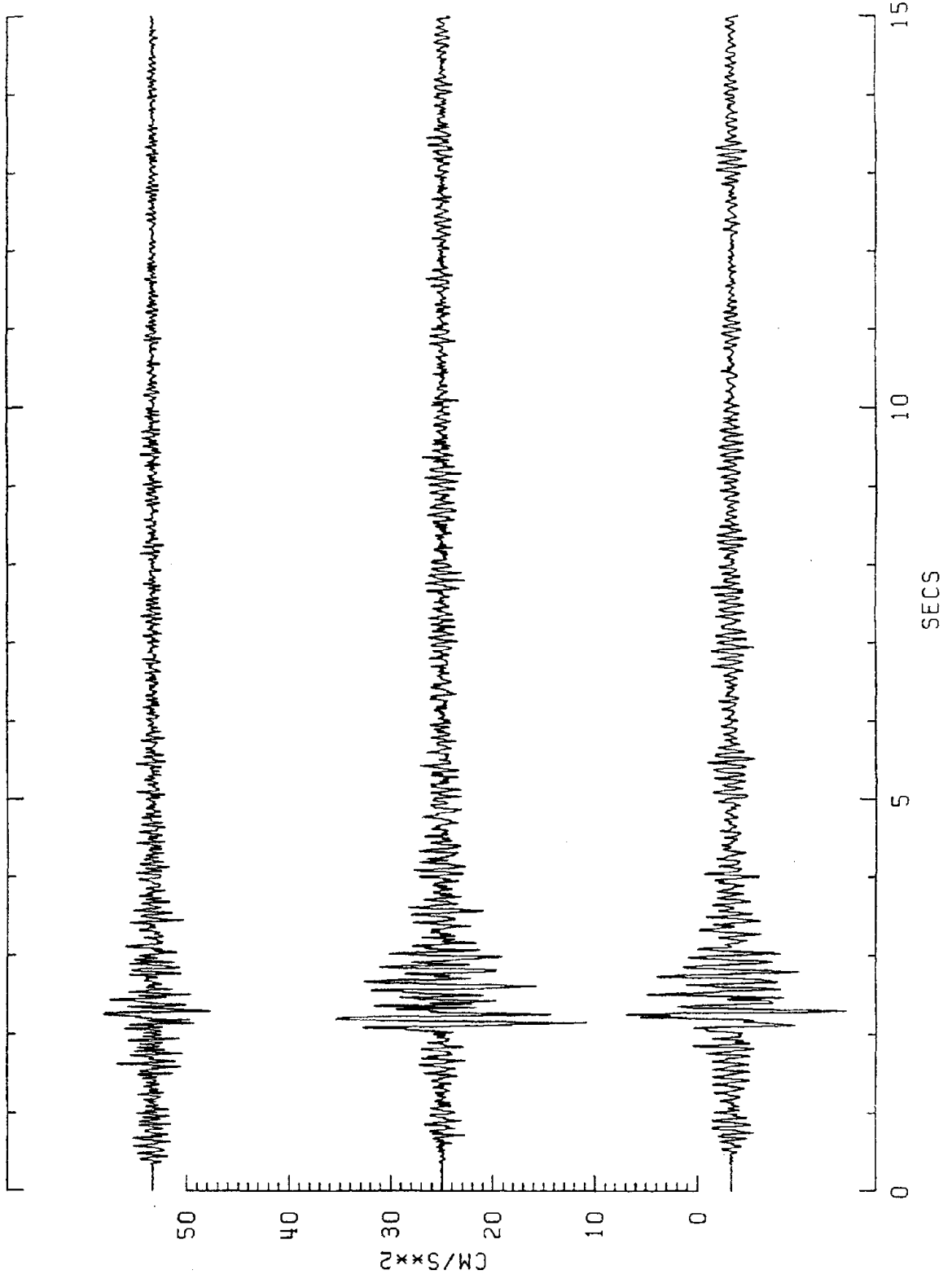
3342253Q*.007 COMP: 1[UP], 2[H=180], 3[H=270]



6A082-244, 245, 246 83028/T501 IEM 116

TIME: 063 0403 22.901

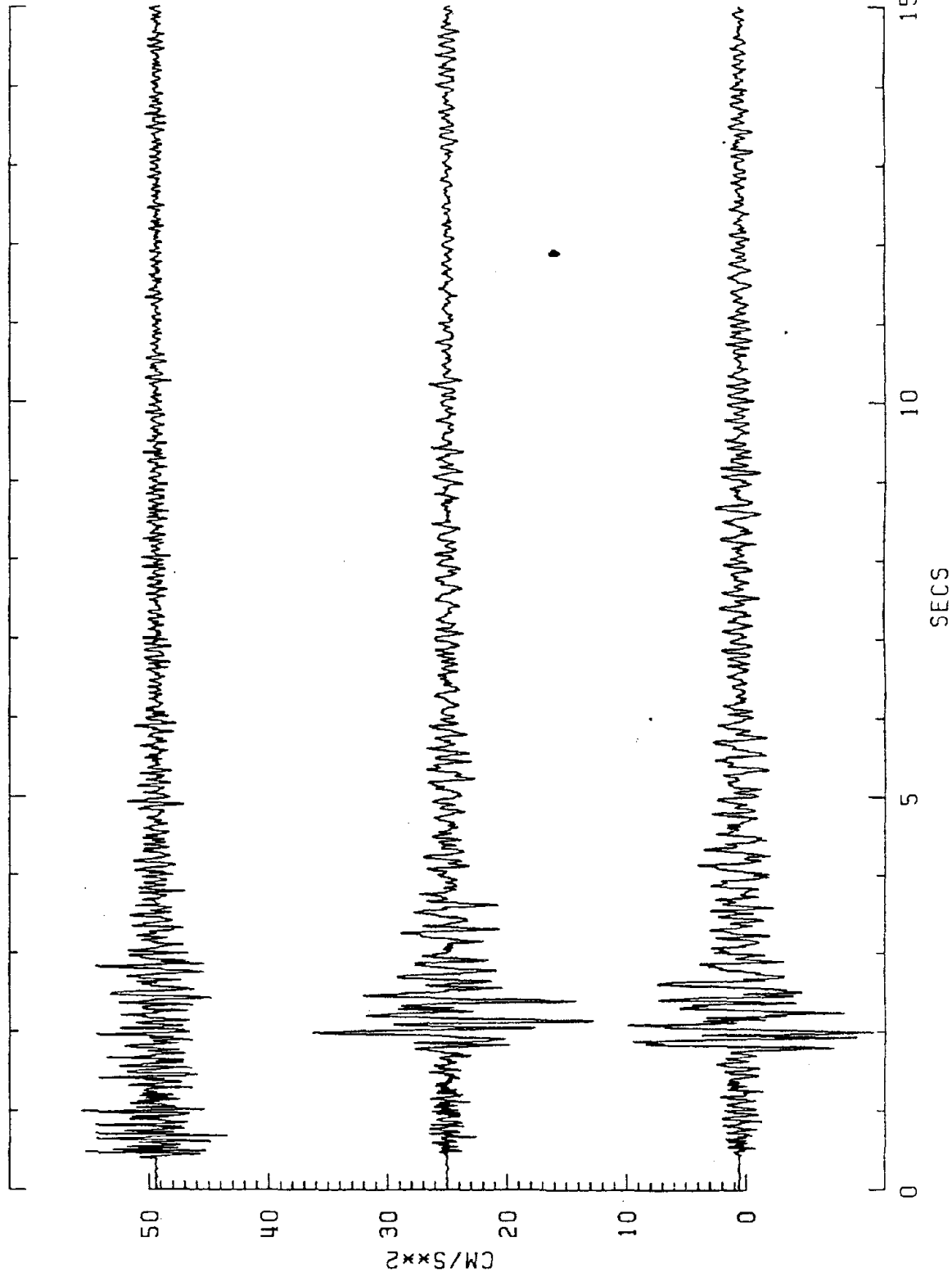
0630403H*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A083-247,248,249 83028/TS02 IEM 112

TIME: 063 0403 22.339

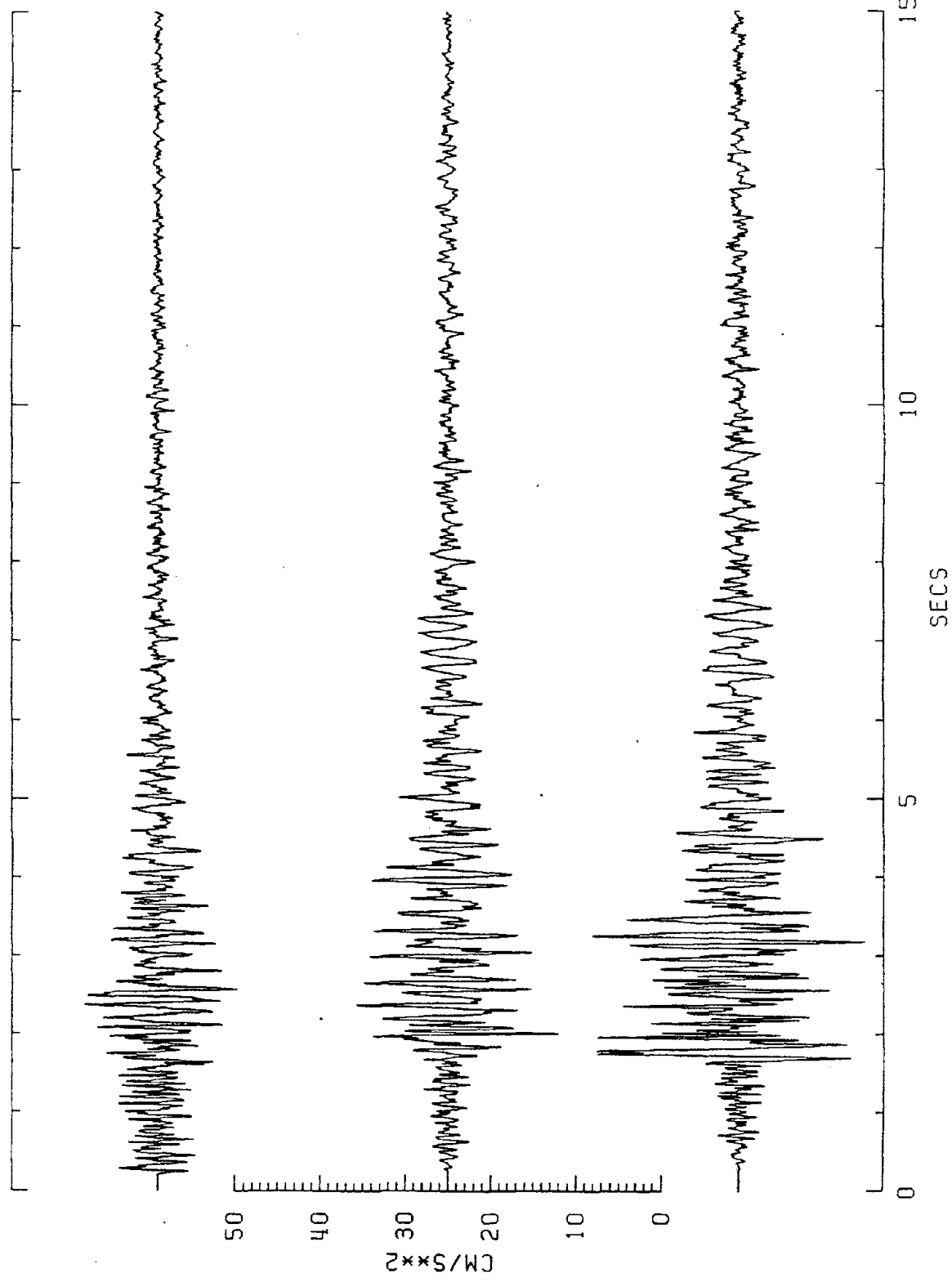
0630403H*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A084-250,251,252 83028/TS03 IEM 113

TIME: 063 0403 22.551

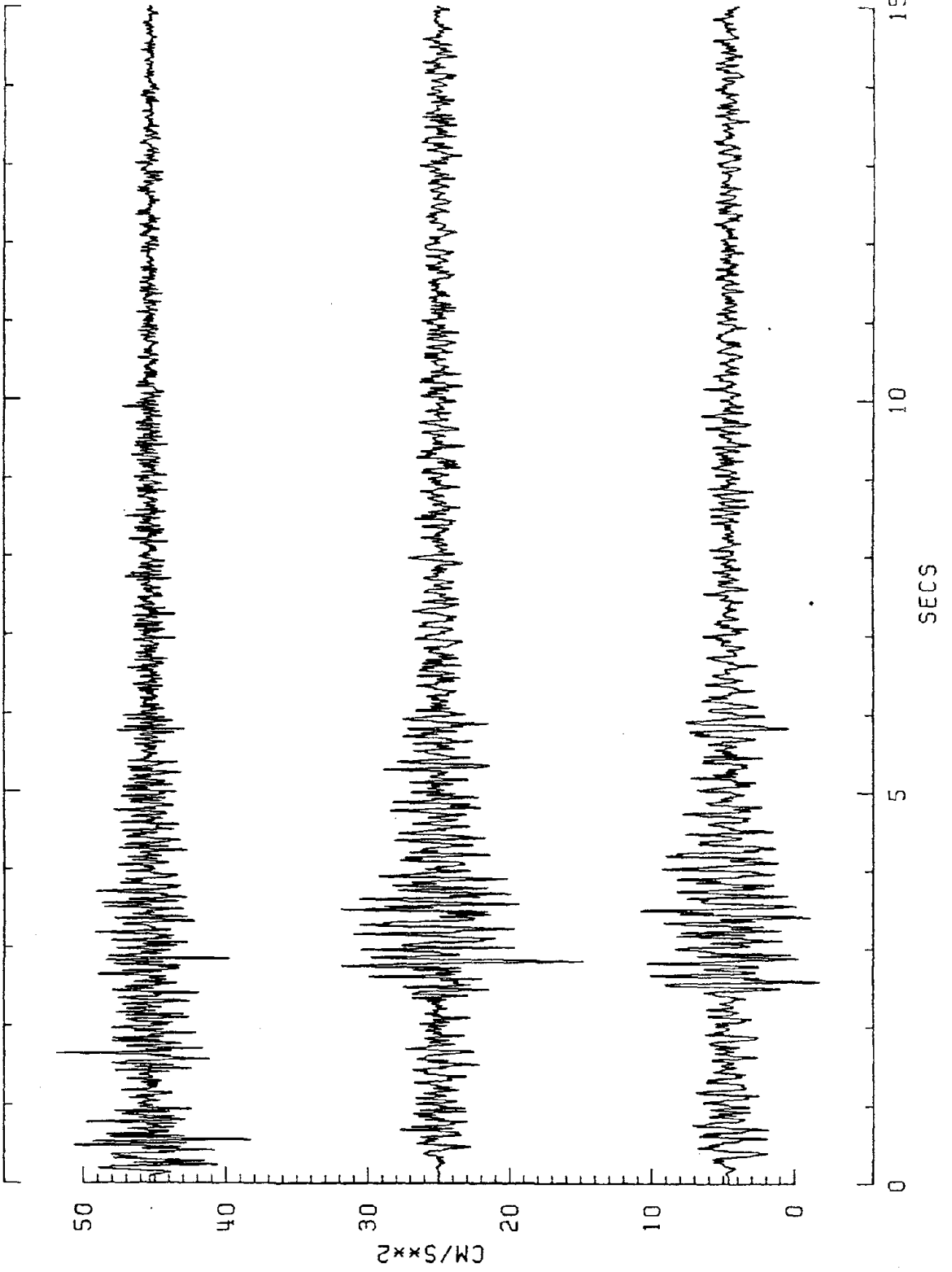
0630403H*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A085-253,254,255 83028/TS07 IEM 114

TIME: 063 0403 23.685

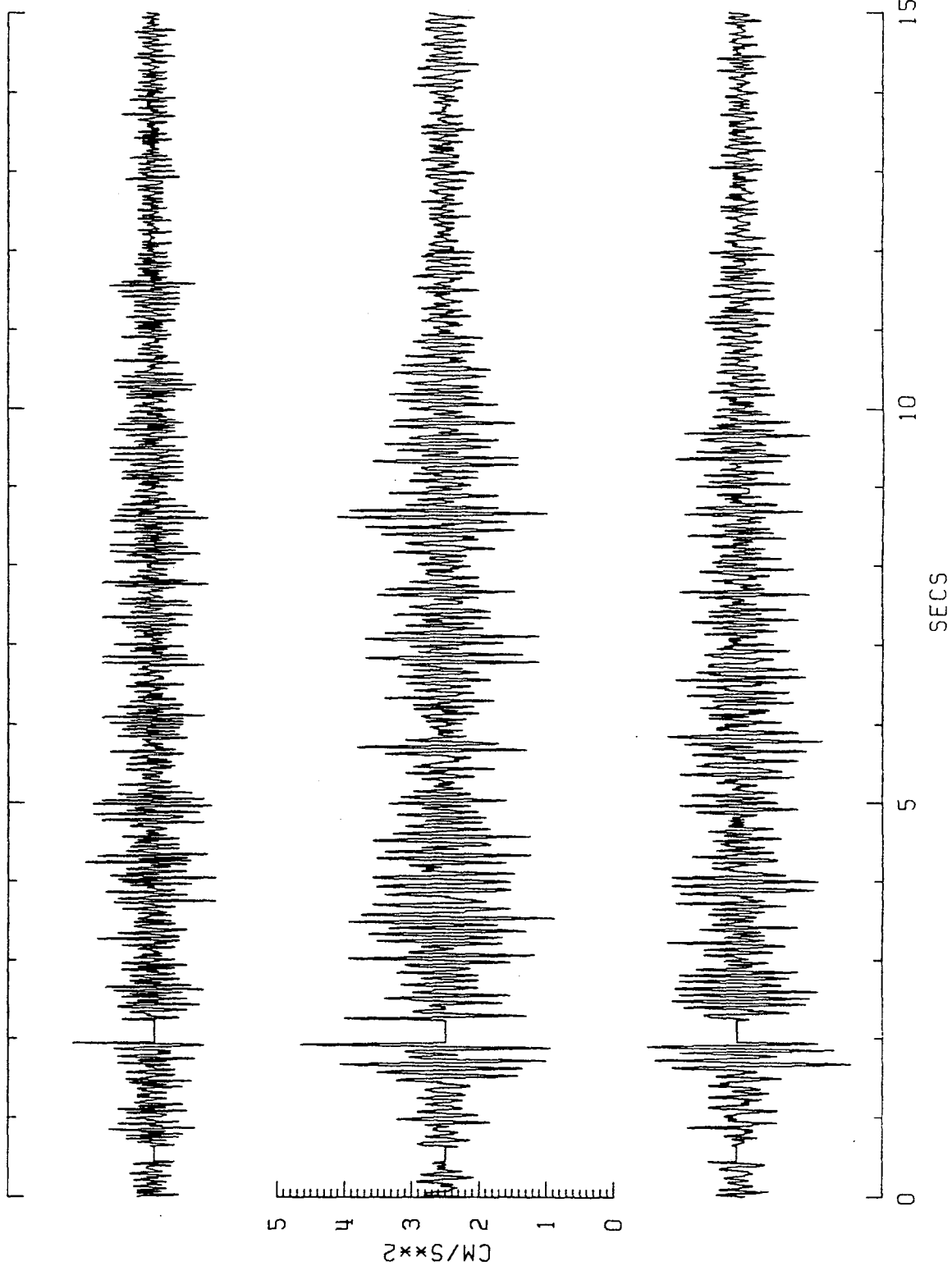
0630403H*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A086-256, 257, 258 83028/TS12 IEM 115

TIME: 063 0403 29.944

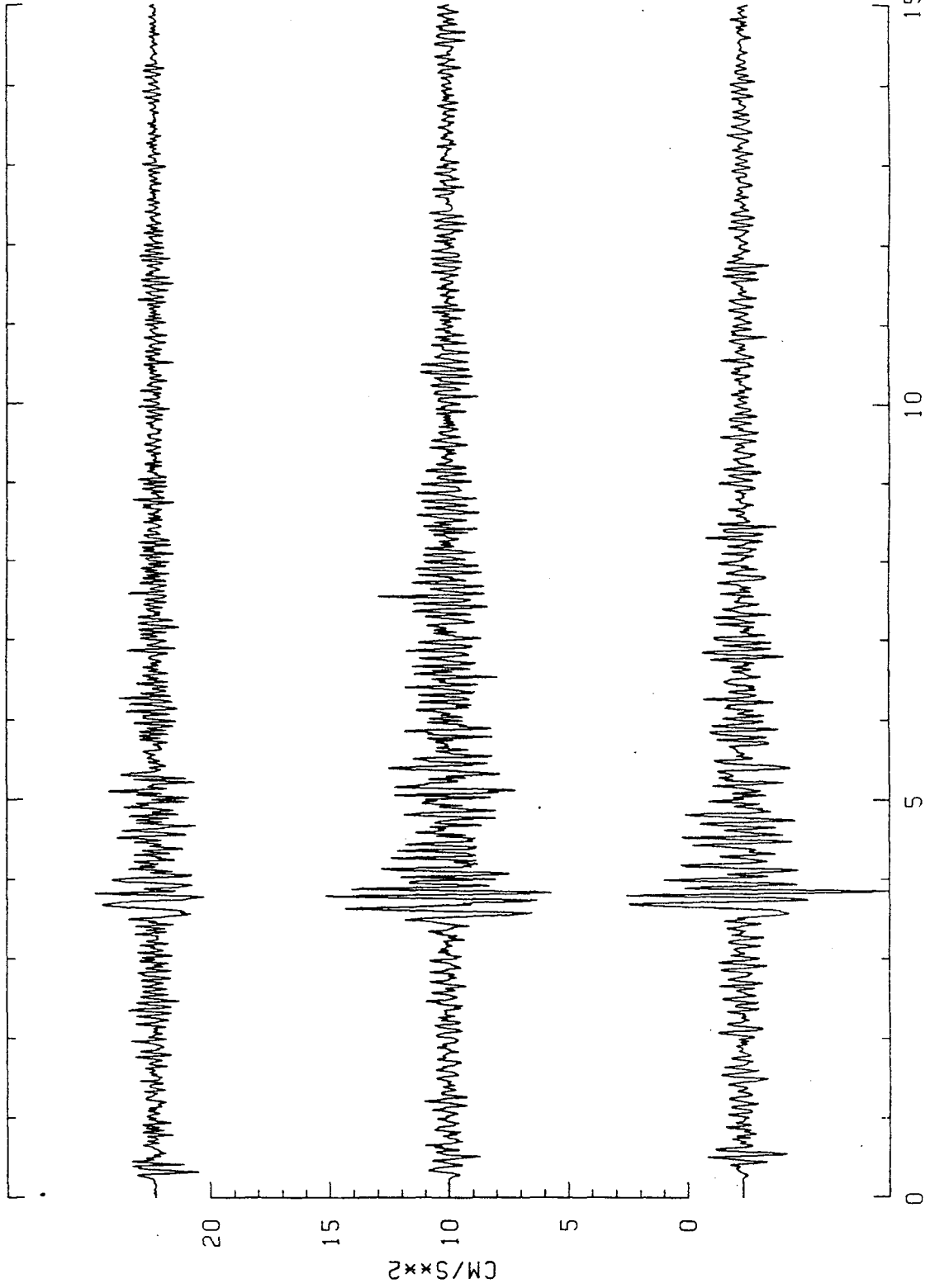
0630012P*.012 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A087-259,260,261 83064/TS01 IEM 117

TIME: 148 1620 34.737

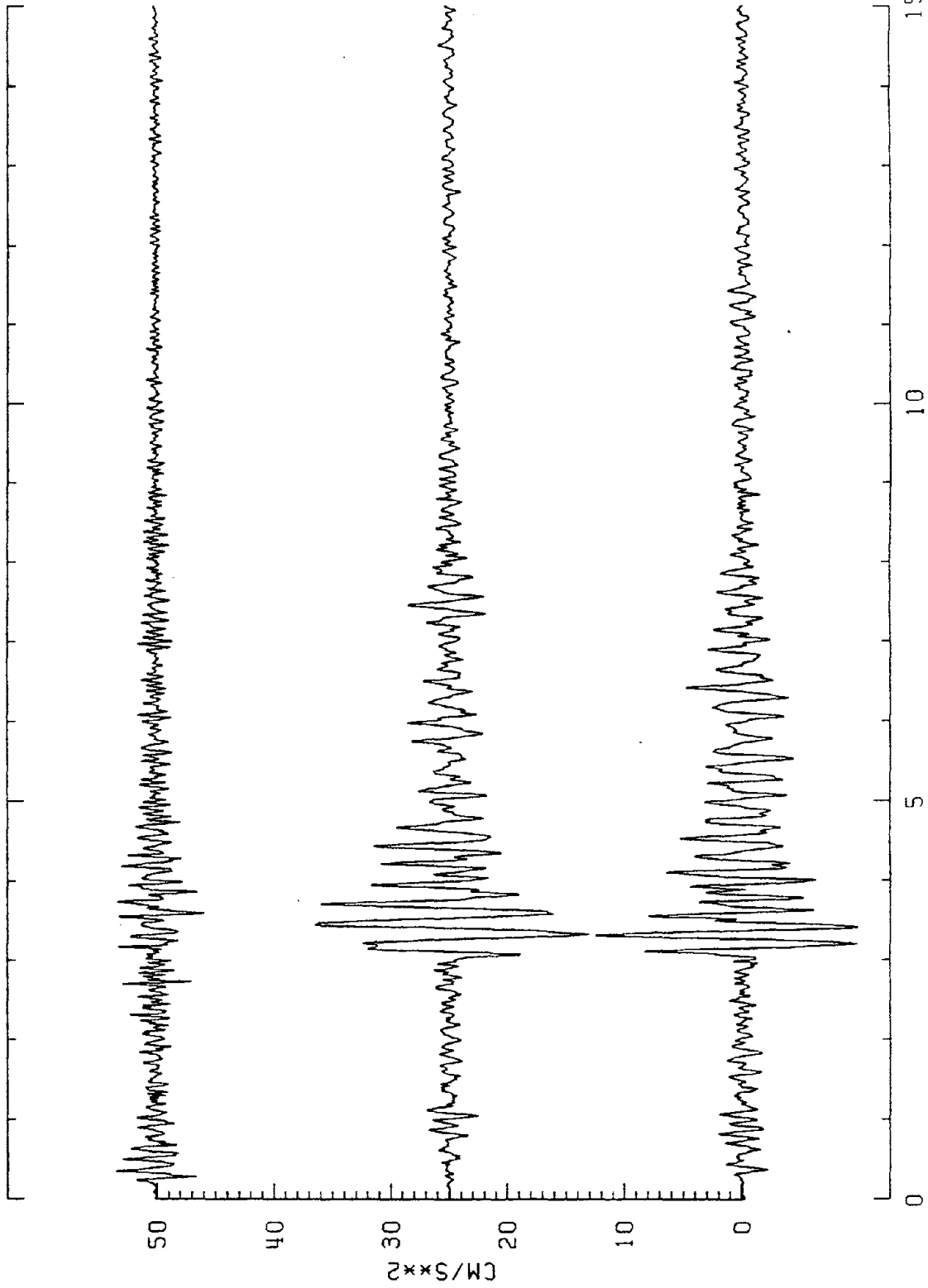
1481620L*.001 COMP: 1 (UP) , 2 (H=90) , 3 (H=180)



6A088-262,264 83064/T502 IEM 118

TIME: 148 1620 33.907

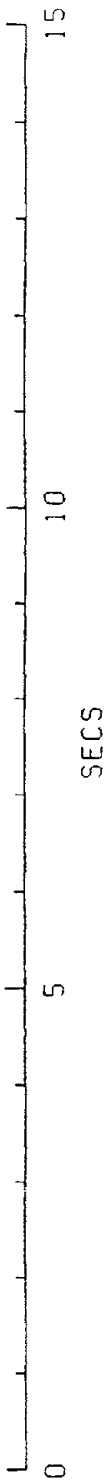
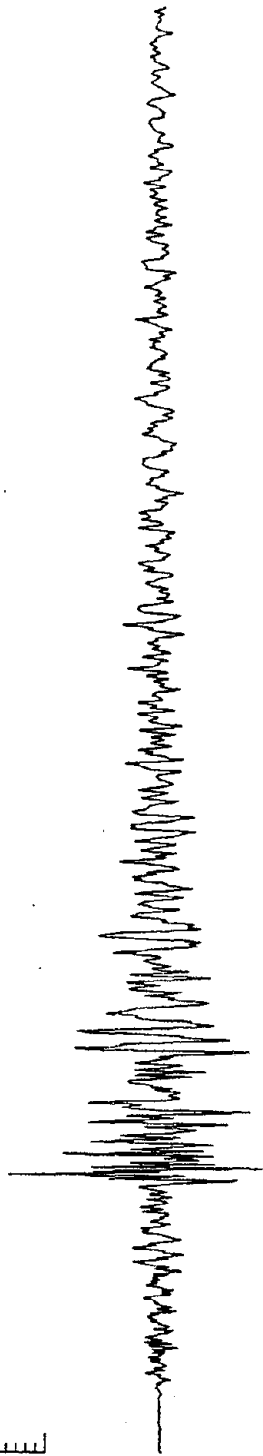
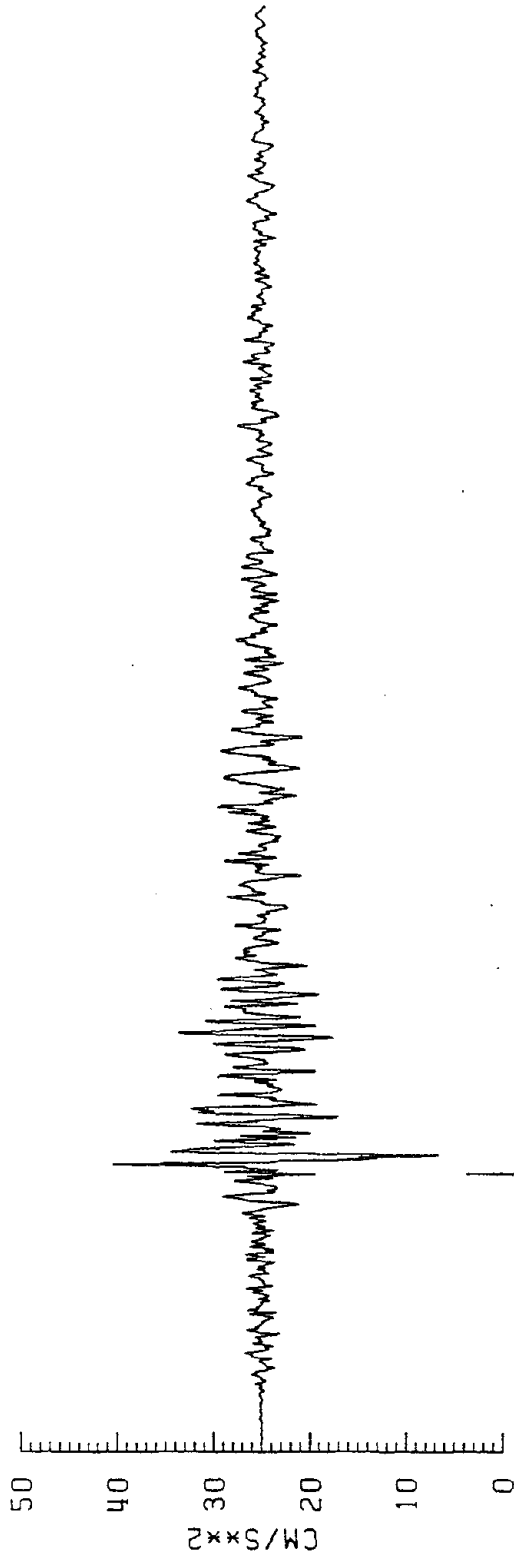
1481620L*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A089-265,266,267 83064/TS03 IEM 119

TIME: 148 1620 33.305

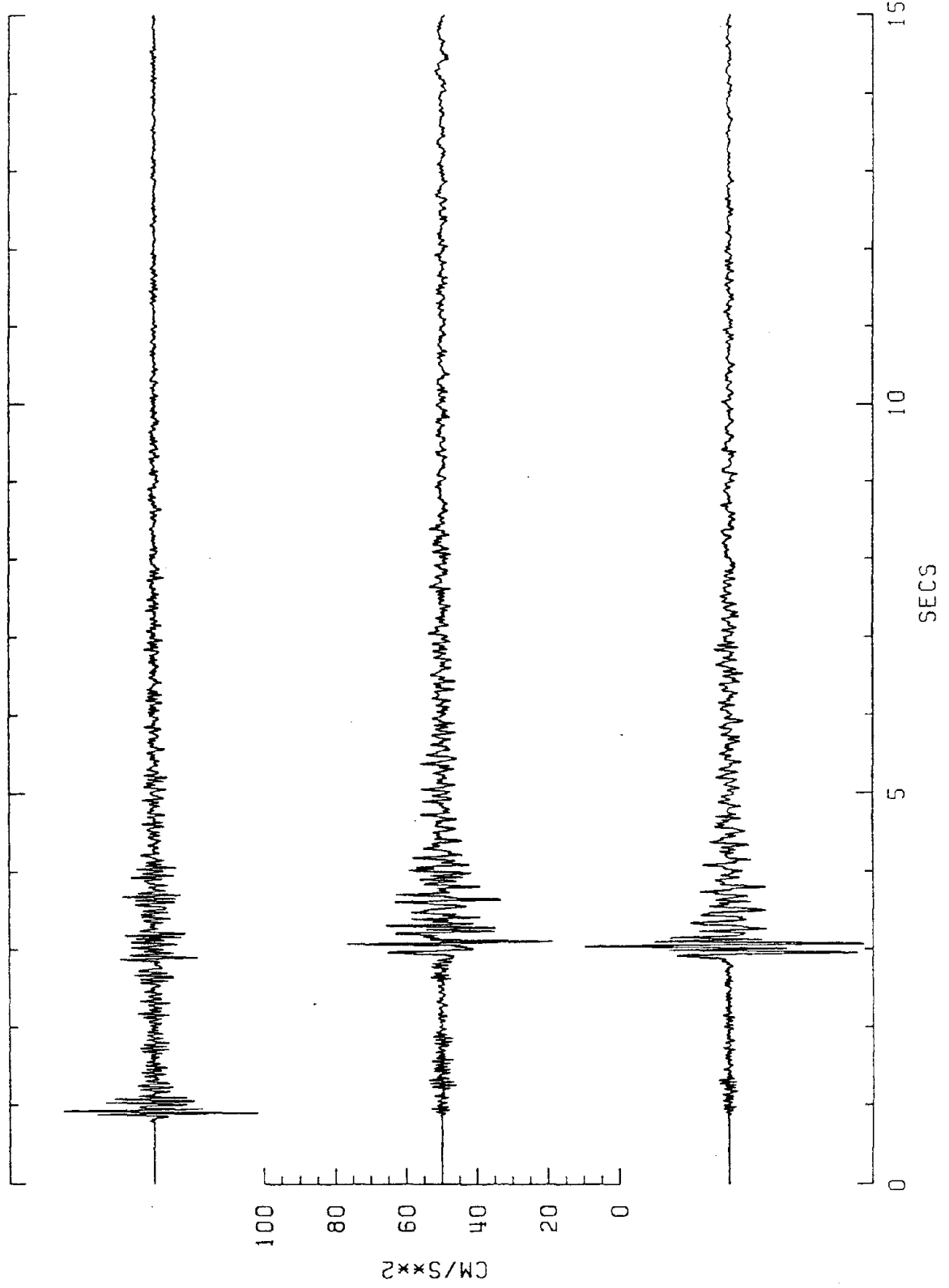
1481620K*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A090-268,269,270 83064/TS07 IEM 120

TIME: 148 1620 33.018

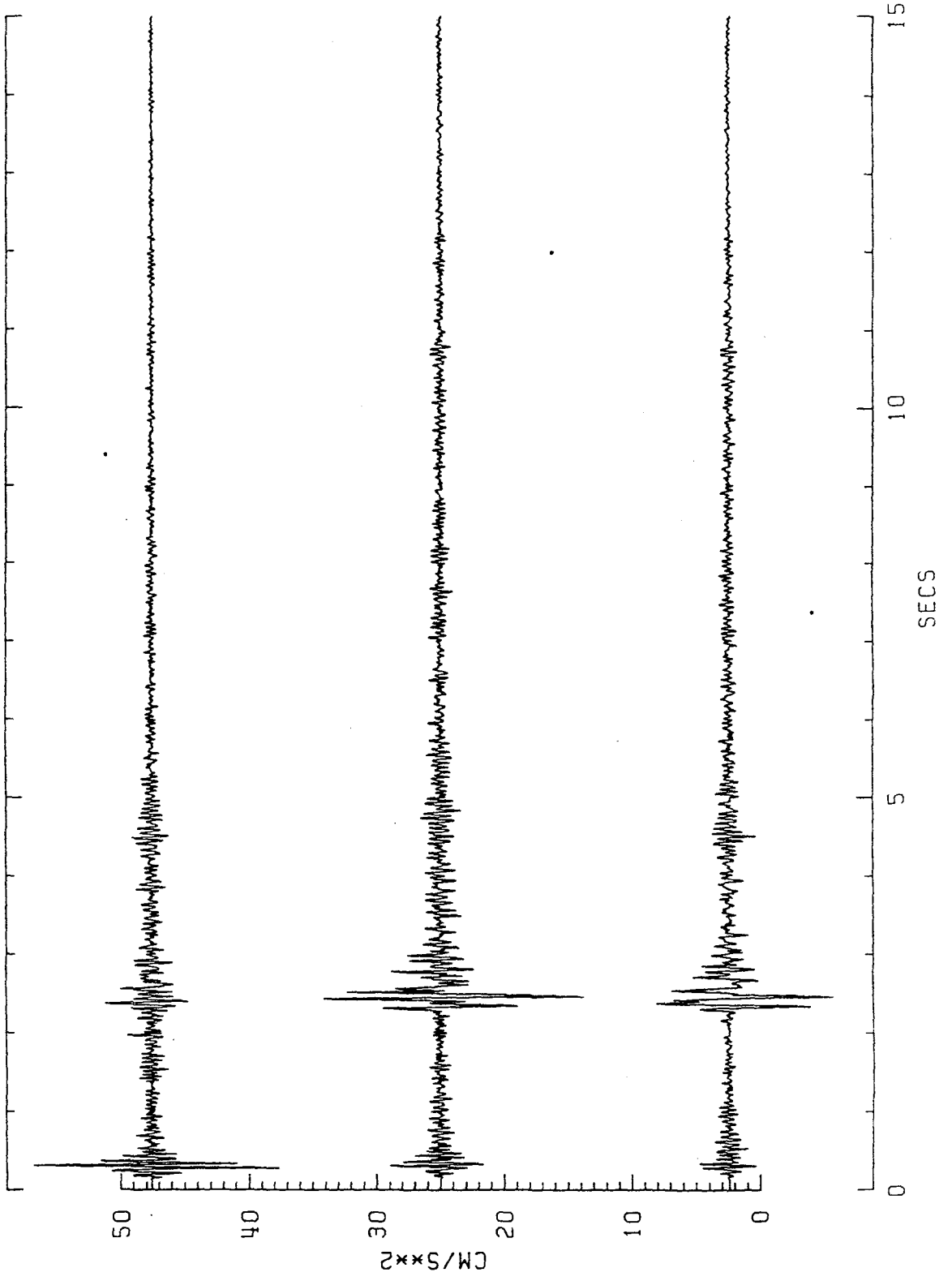
1481620K*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A091-271,272,273 83064/TS08 IEM 121

TIME: 148 1620 33.553

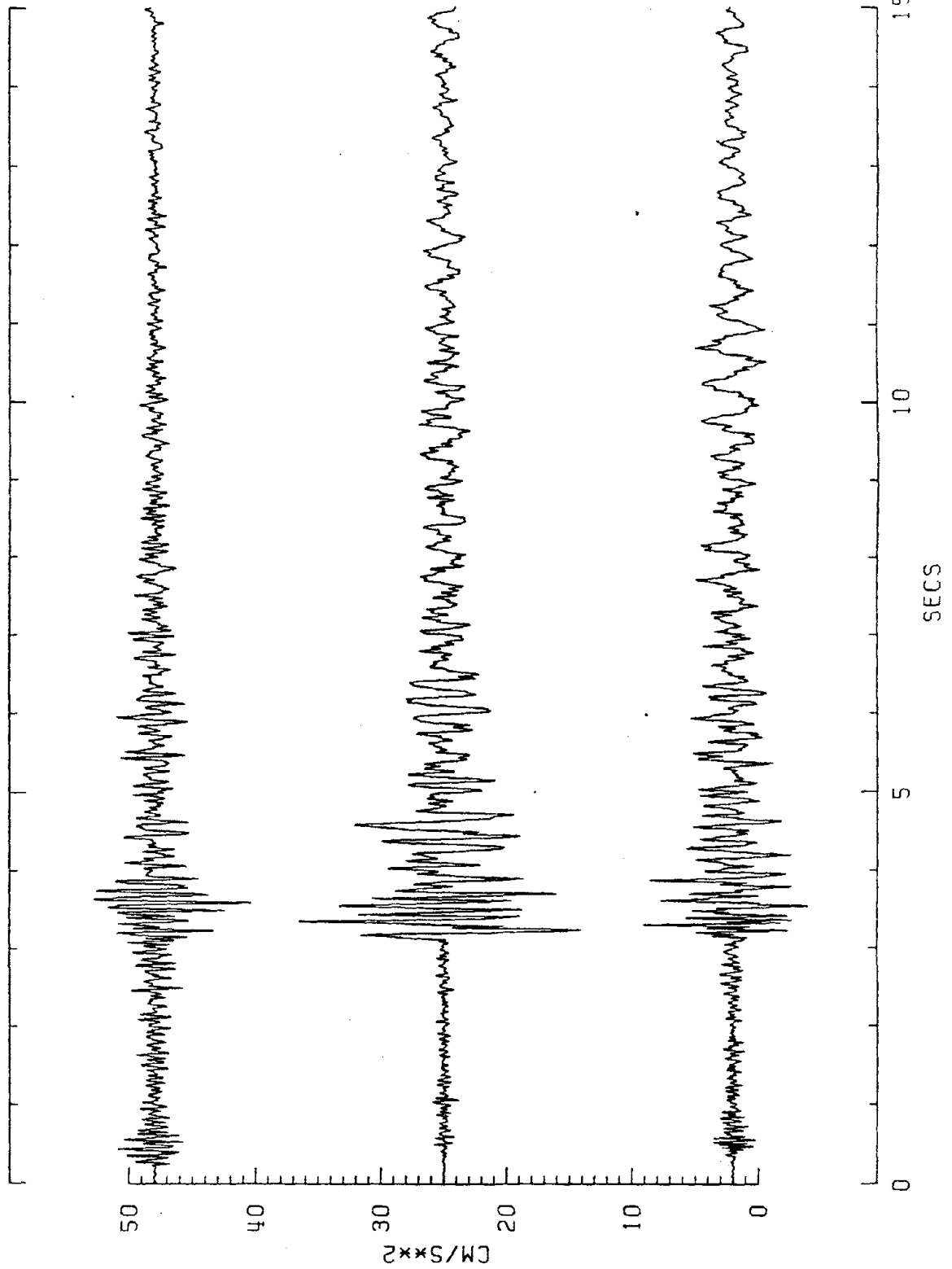
1481620K*.008 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A092-274,275,276 83064/TS10 IEM 122

TIME: 148 1620 34.408

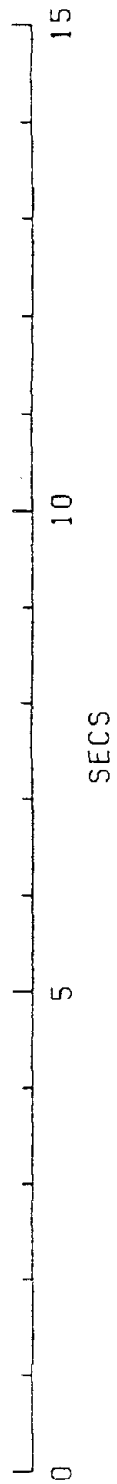
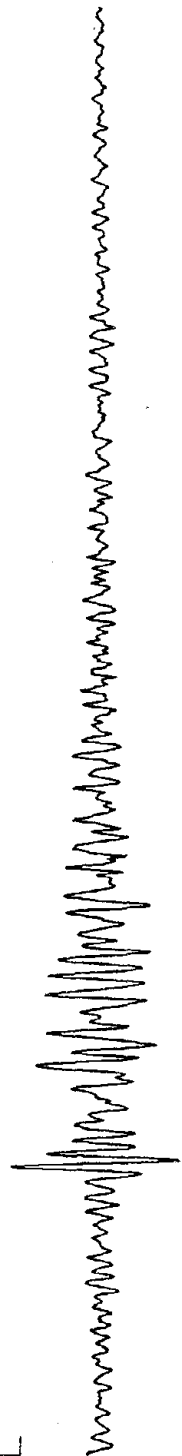
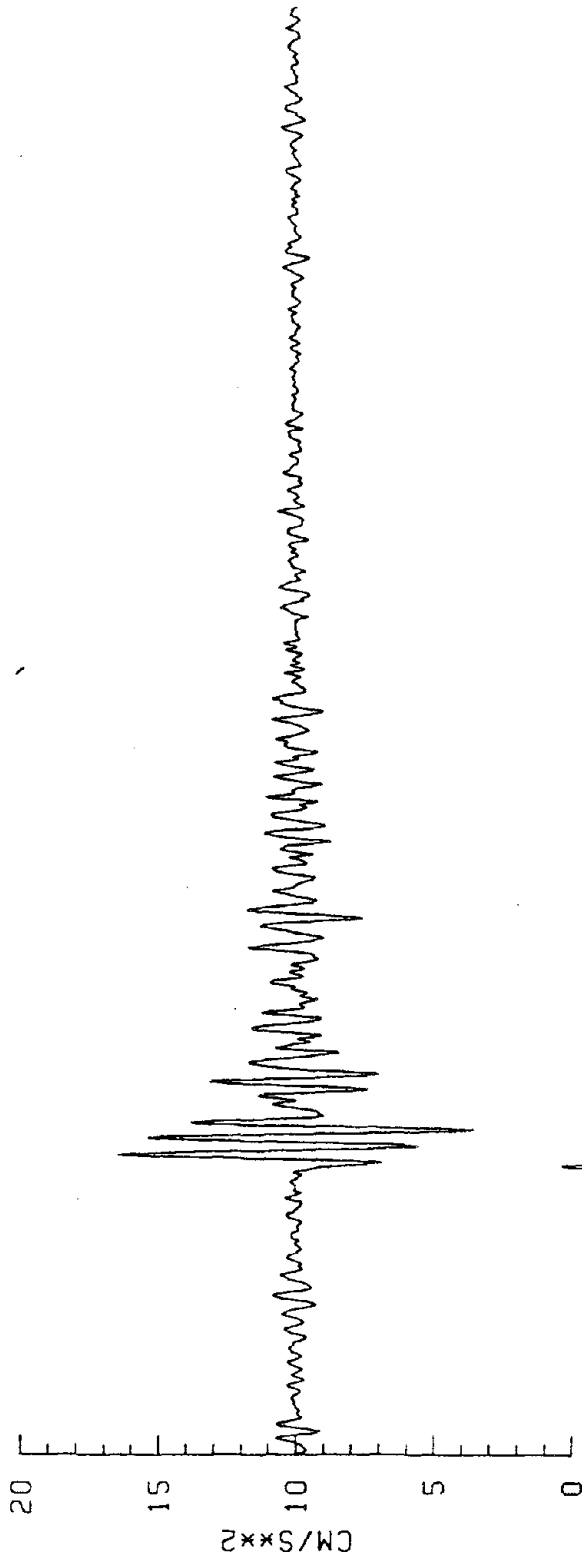
1481620L*.010 COMP: 1 (UP) .2 (H=180) , 3 (H=270)



6A093-277,278,279 83064/TS16 IEM 123

TIME: 148 1620 35.906

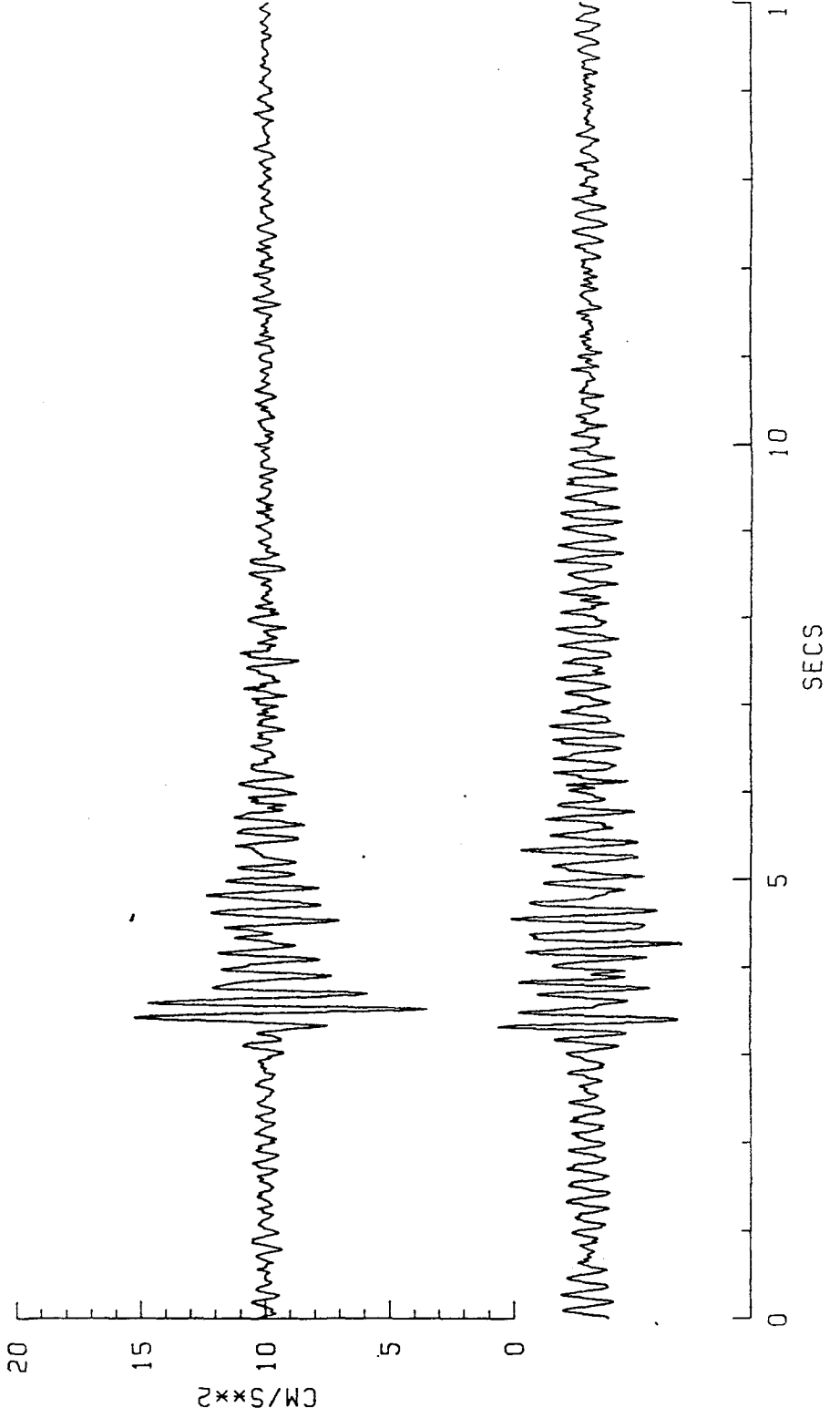
1481620L*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A094-280,281,282 83064/TS17 IEM 124

TIME: 148 1620 35.467

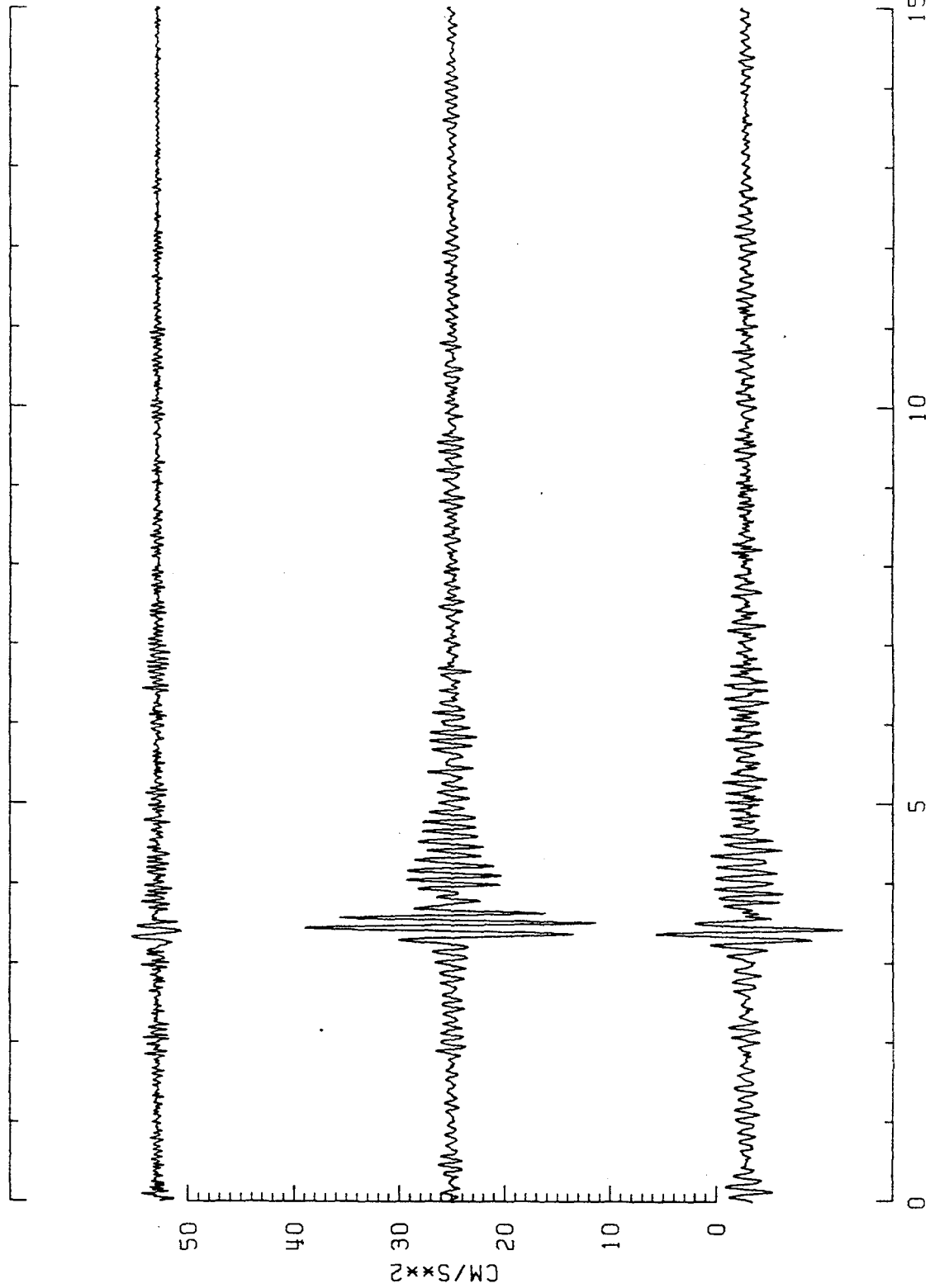
1481620L*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



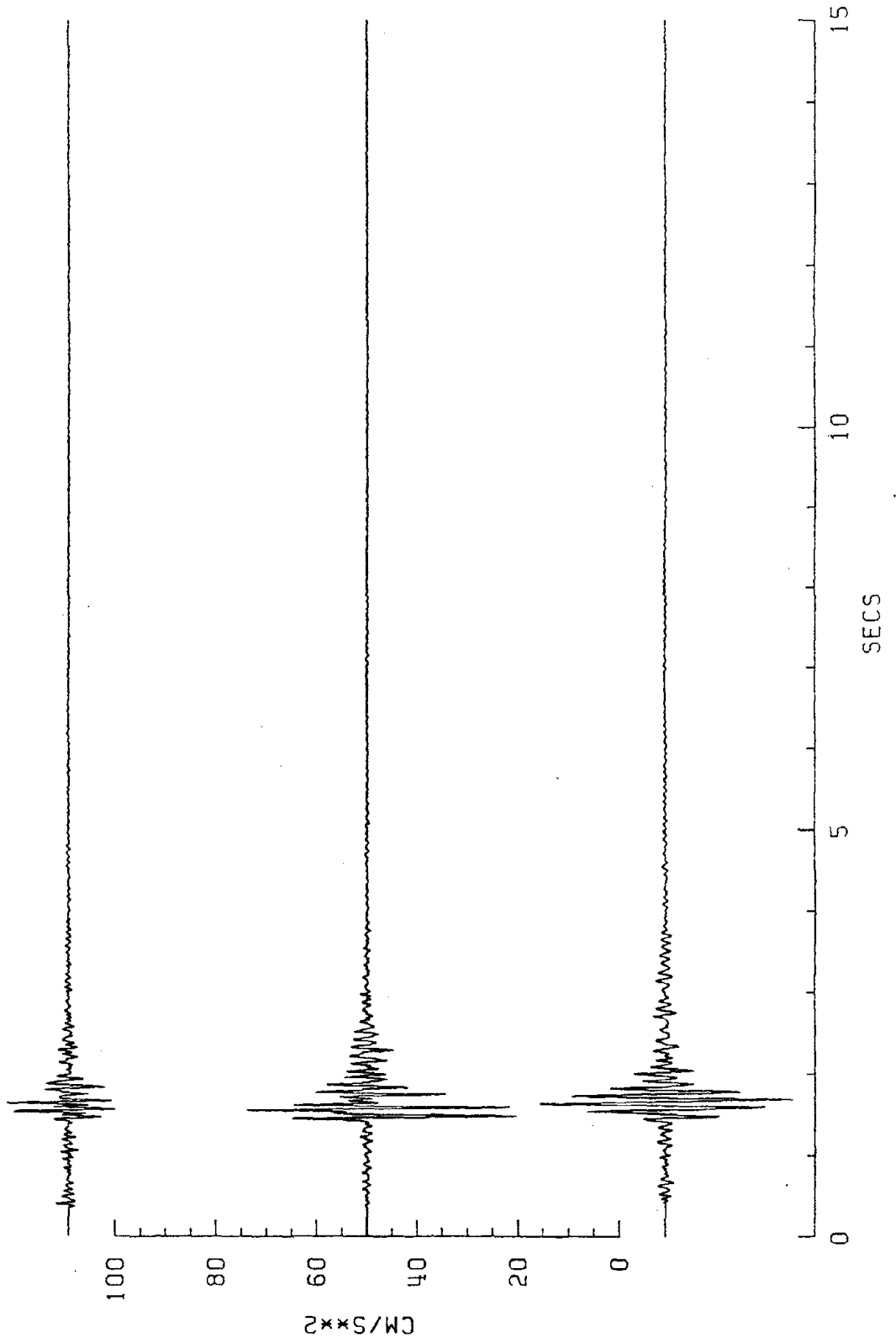
6A095-283,284,285 83064/TS18 IEM 125

TIME: 148 1620 34.808

1481620L*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



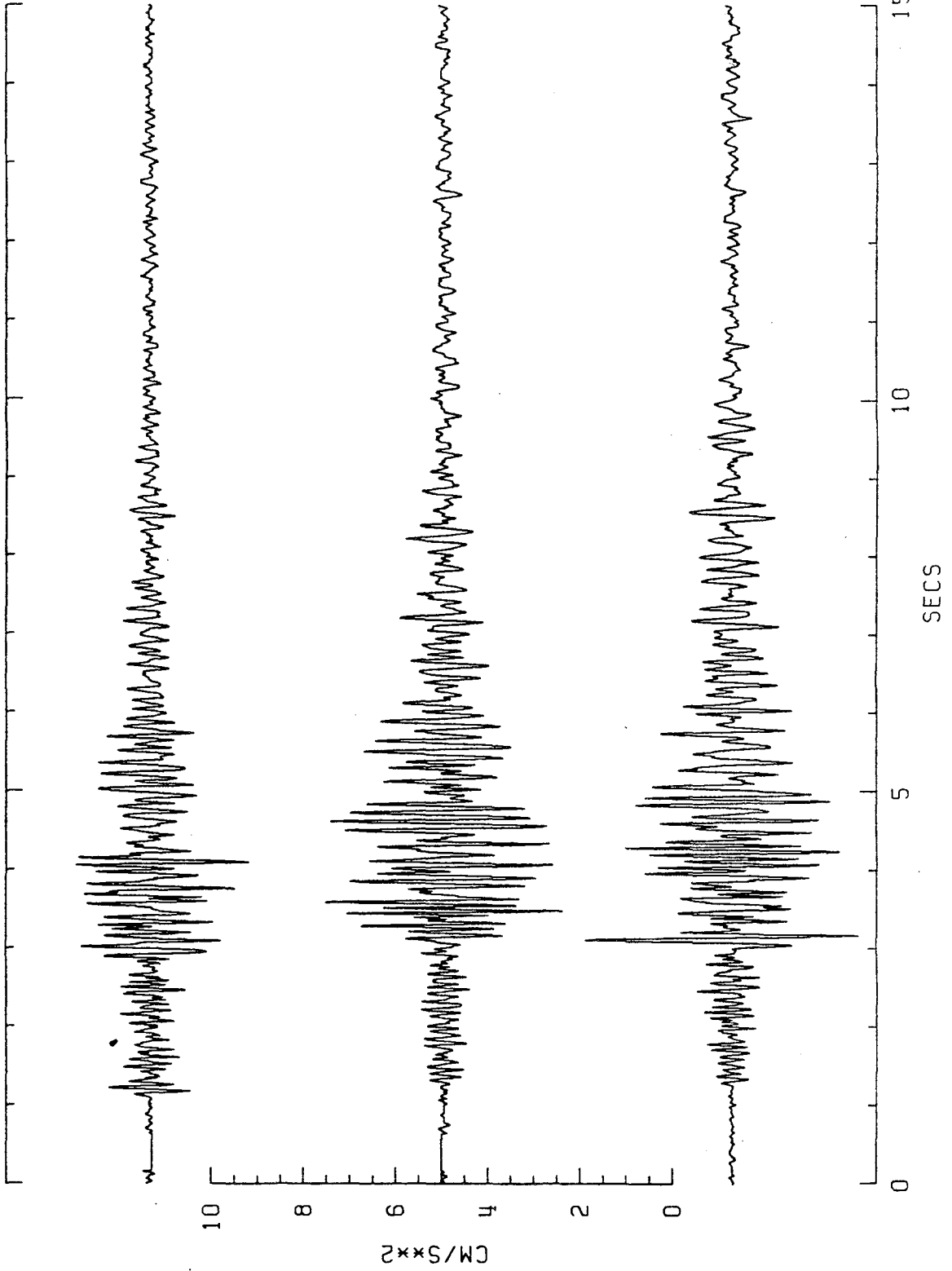
6A096-286,287,288 83077/TS01 IEM 166
TIME: 220 1508 59.207
2201508Δ1.001 (UP), 2201508Δ2.001 (H=90), 2201508Δ3.001 (H=180)



6A097-289,290,291 83077/TS03 IEM 167

TIME: 220 1508 58.731

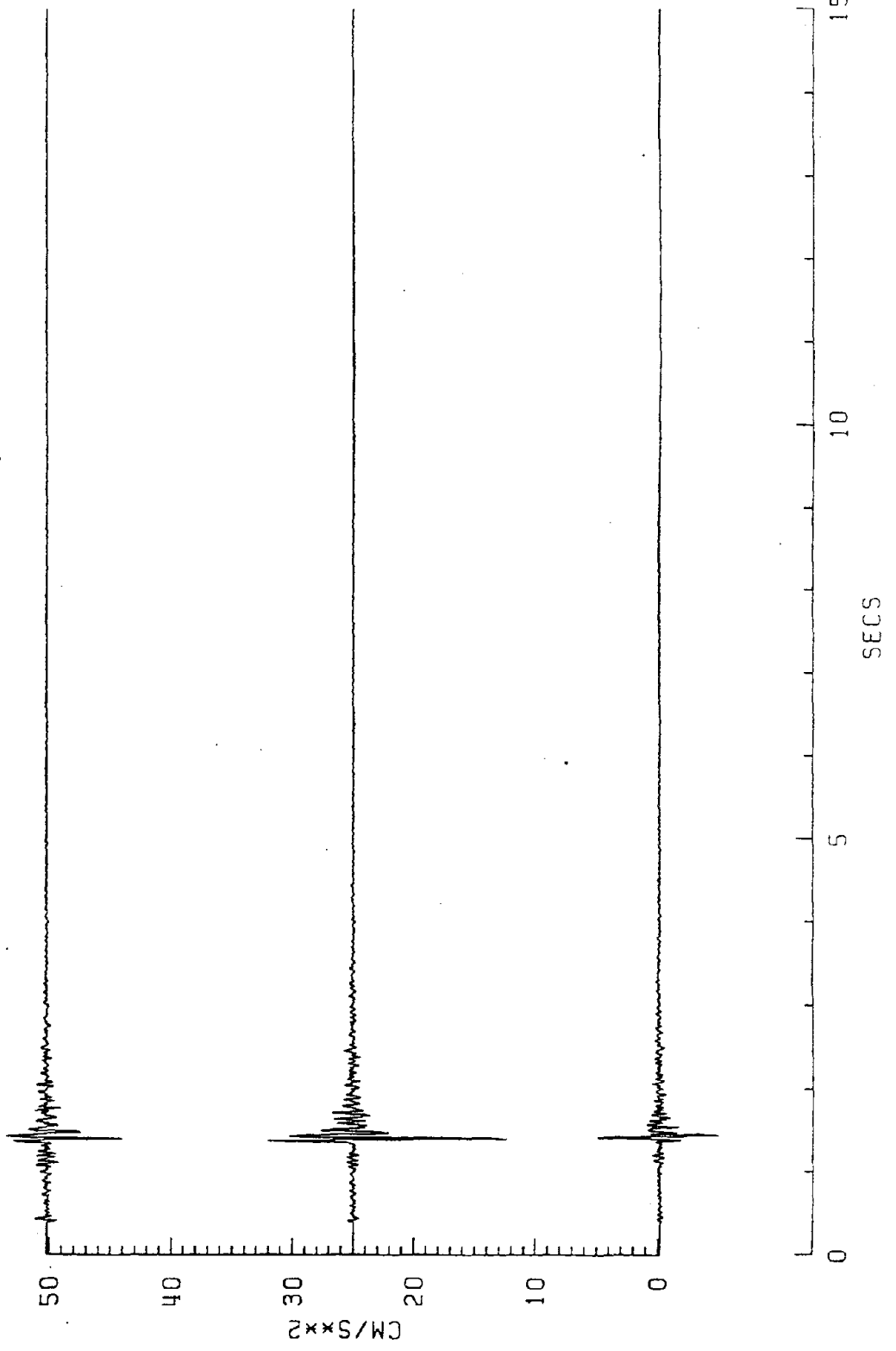
2201508T*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A098-292,293,294 83077/TS15 IEM 163

TIME: 220 1508 58.719

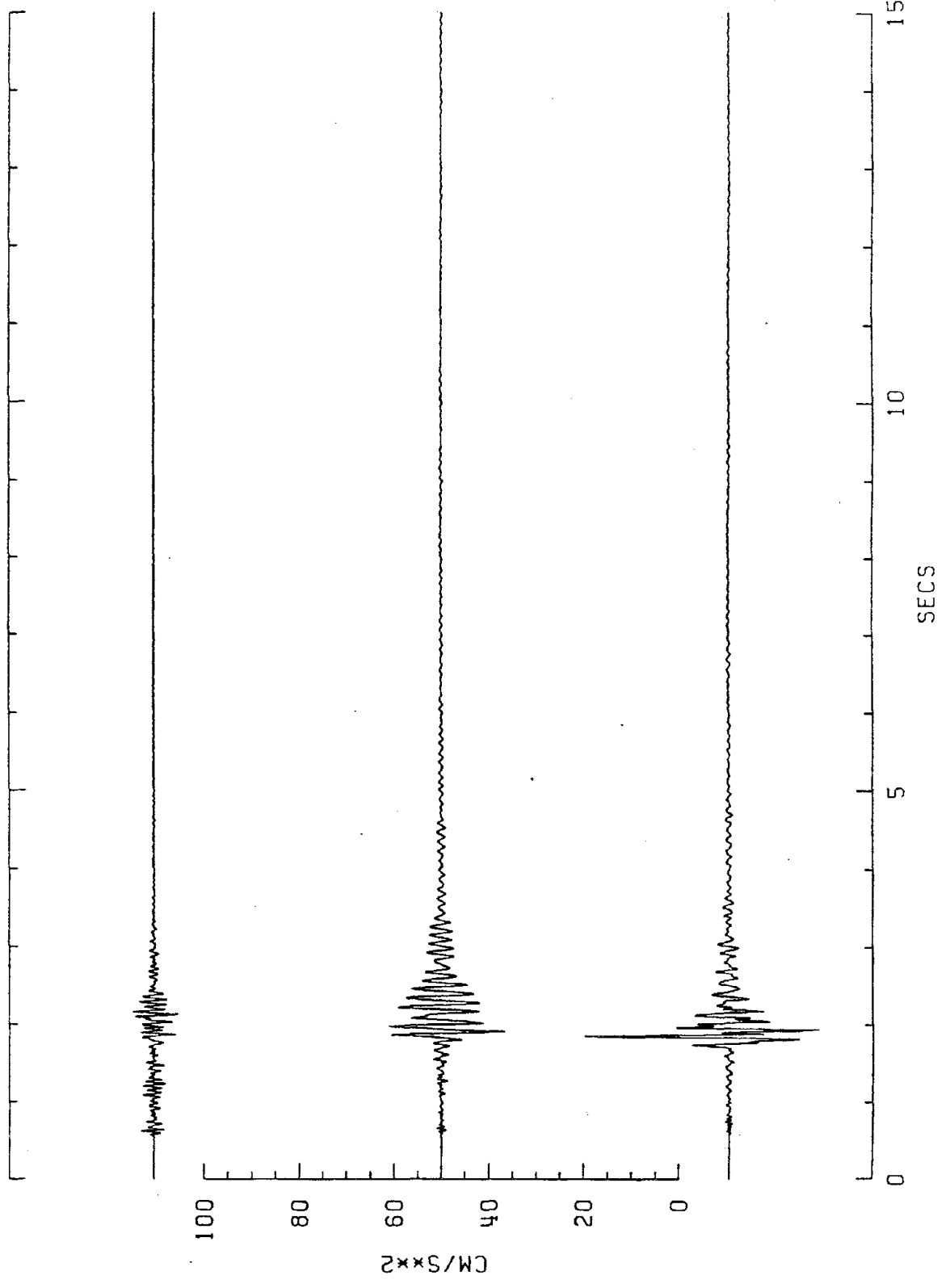
2201508S*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A099-295,296,297 83077/TS18 IEM 164

TIME: 220 1508 58.414

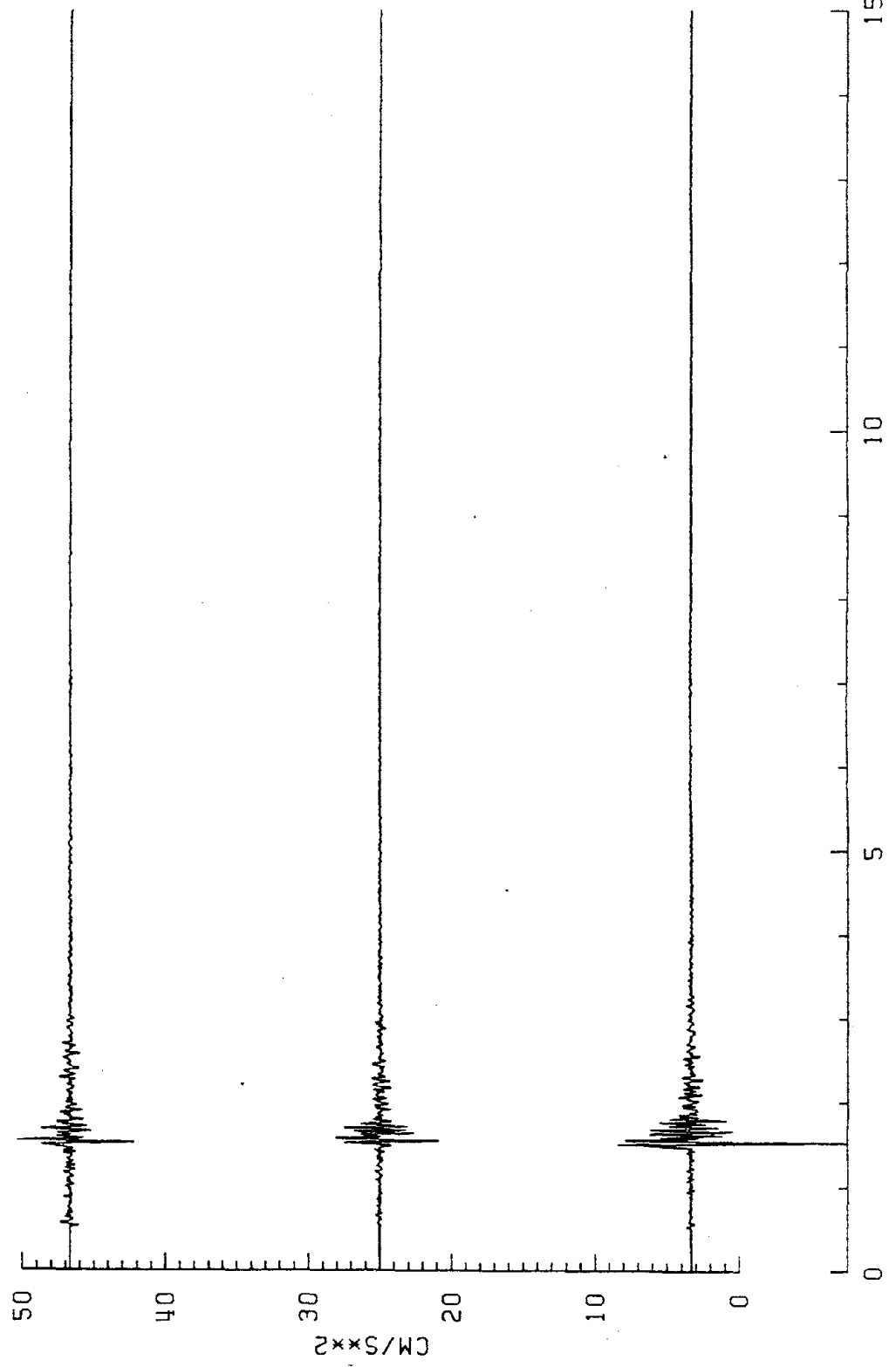
2201508S*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A100-298,299,300 83077/TS19 IEM 165

TIME: 220 1508 58.315

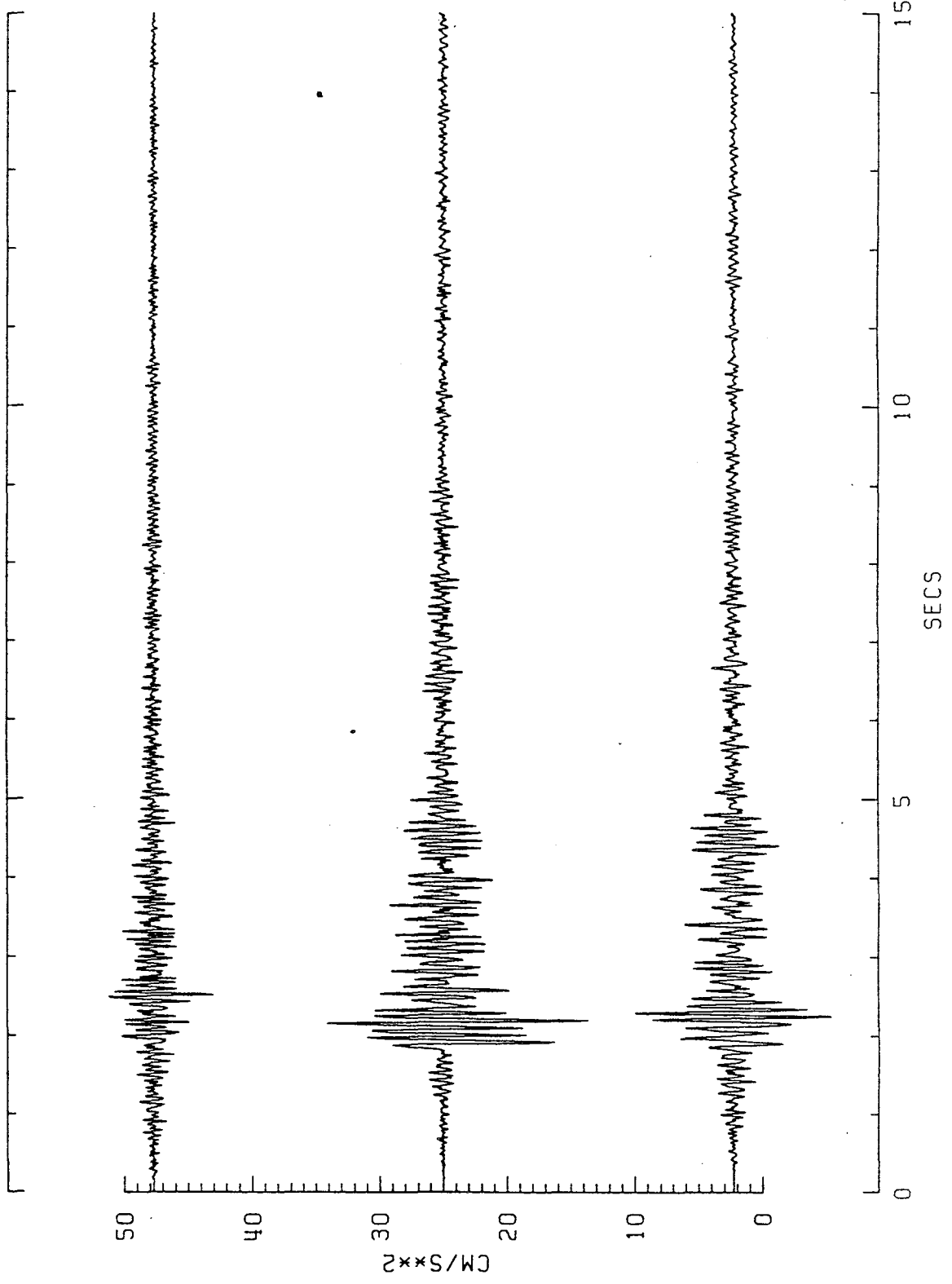
2201508S*.019 COMP: 1 (UP) , 2 (H=0) , 3 (H=90)



6A101-301, 302, 303 83079/TS01 IEM 032

TIME: 221 2213 29.729

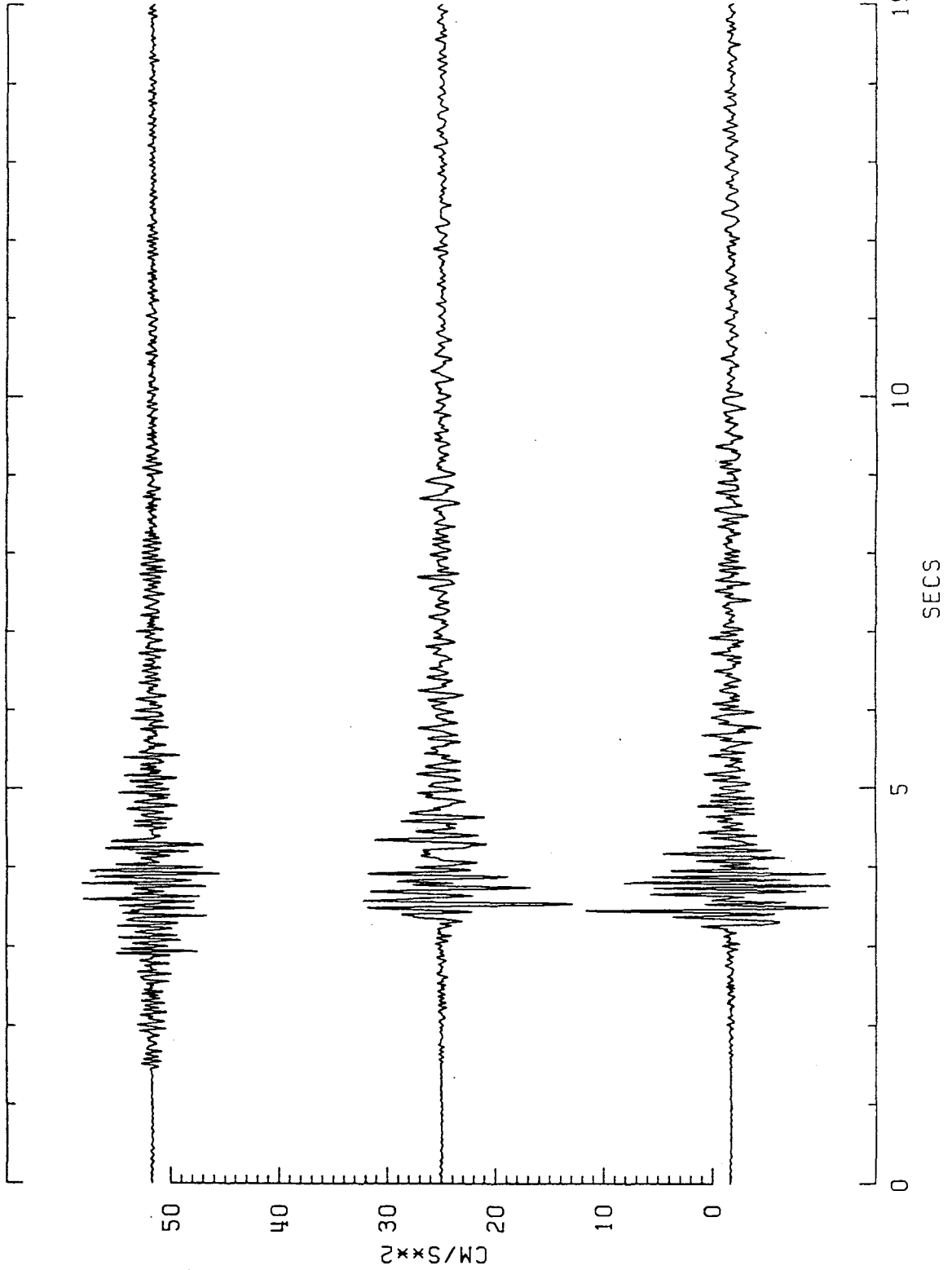
2212213J*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A102-304, 305, 306 83079/T502 IEM 031

TIME: 221 2213 27.666

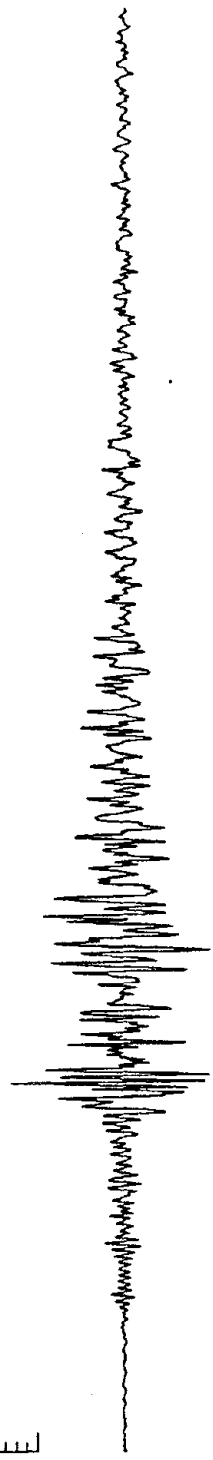
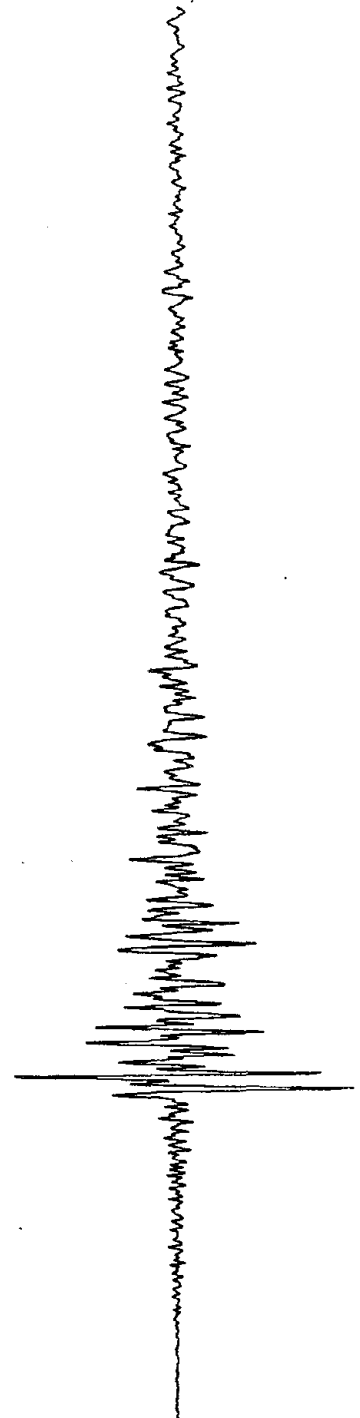
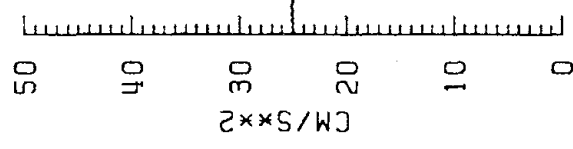
2212213J*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A103-307, 308, 309 83079/TS03 IEM 030

TIME: 221 2213 28.744

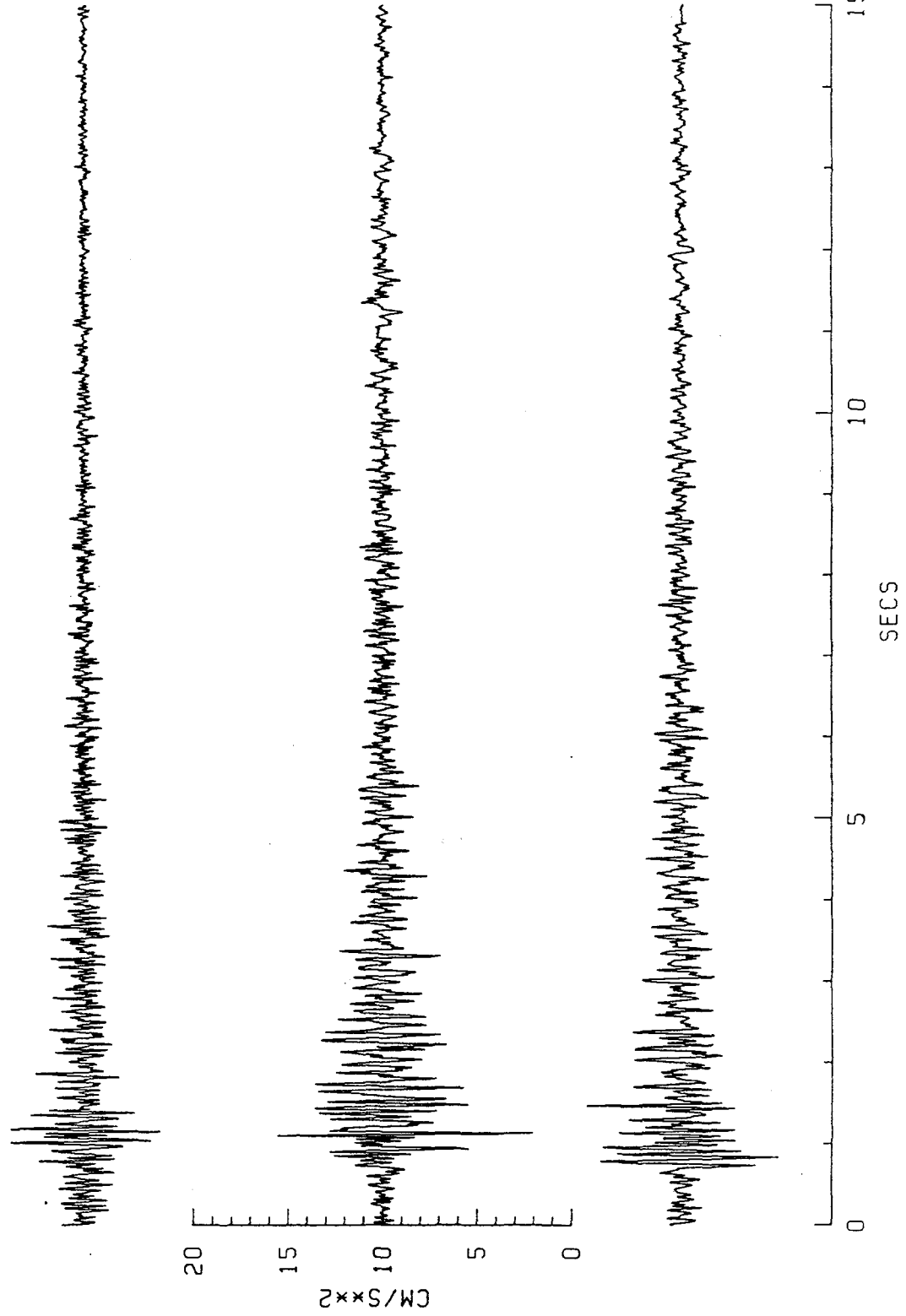
2212213J*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A104-310, 311, 312 83079/TS07 IEM 029

TIME: 2213 33.324

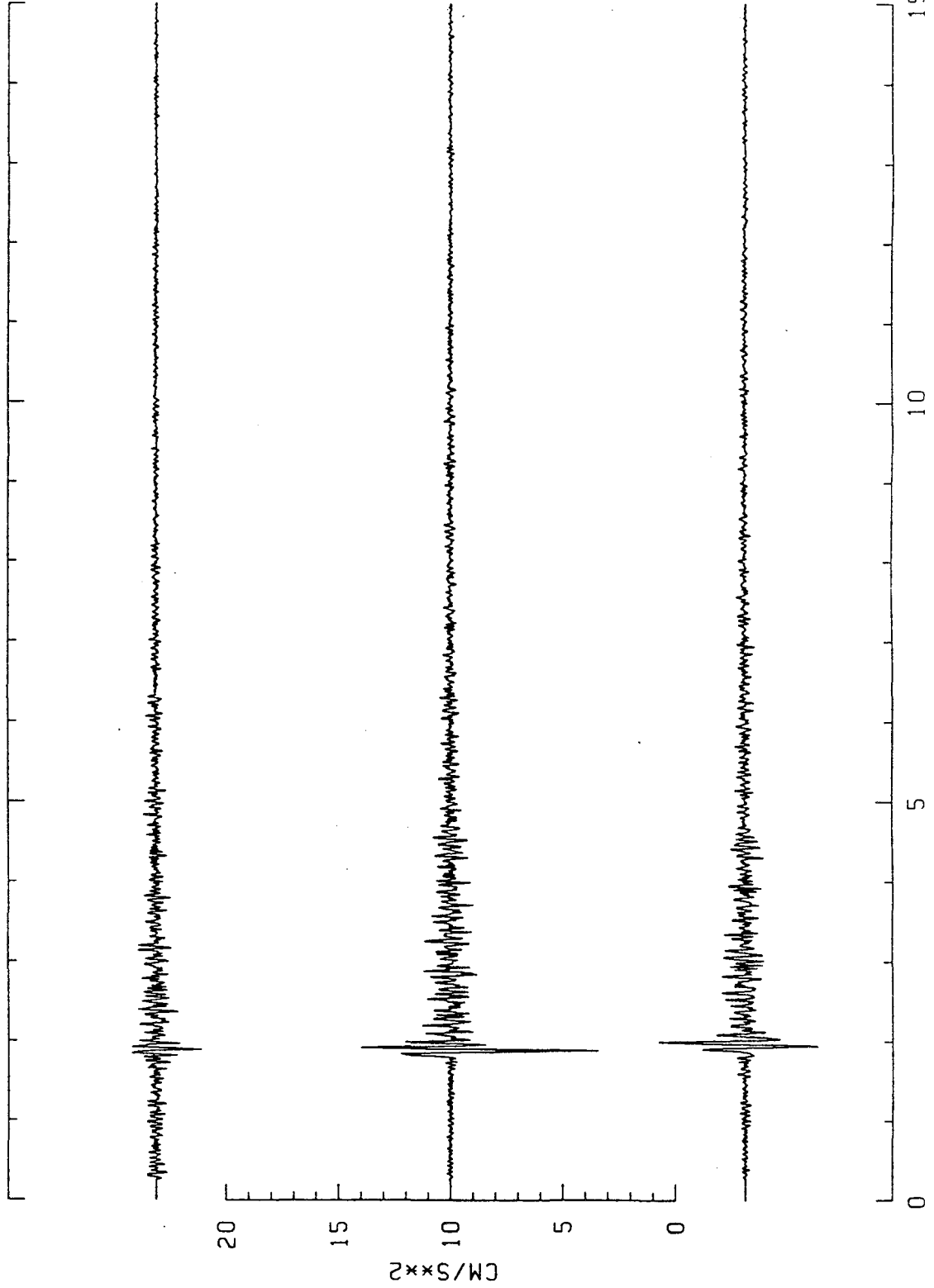
2212213L*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A105-313, 314, 315 83079/TS15 IEM 028

TIME: 221 2213 28.810

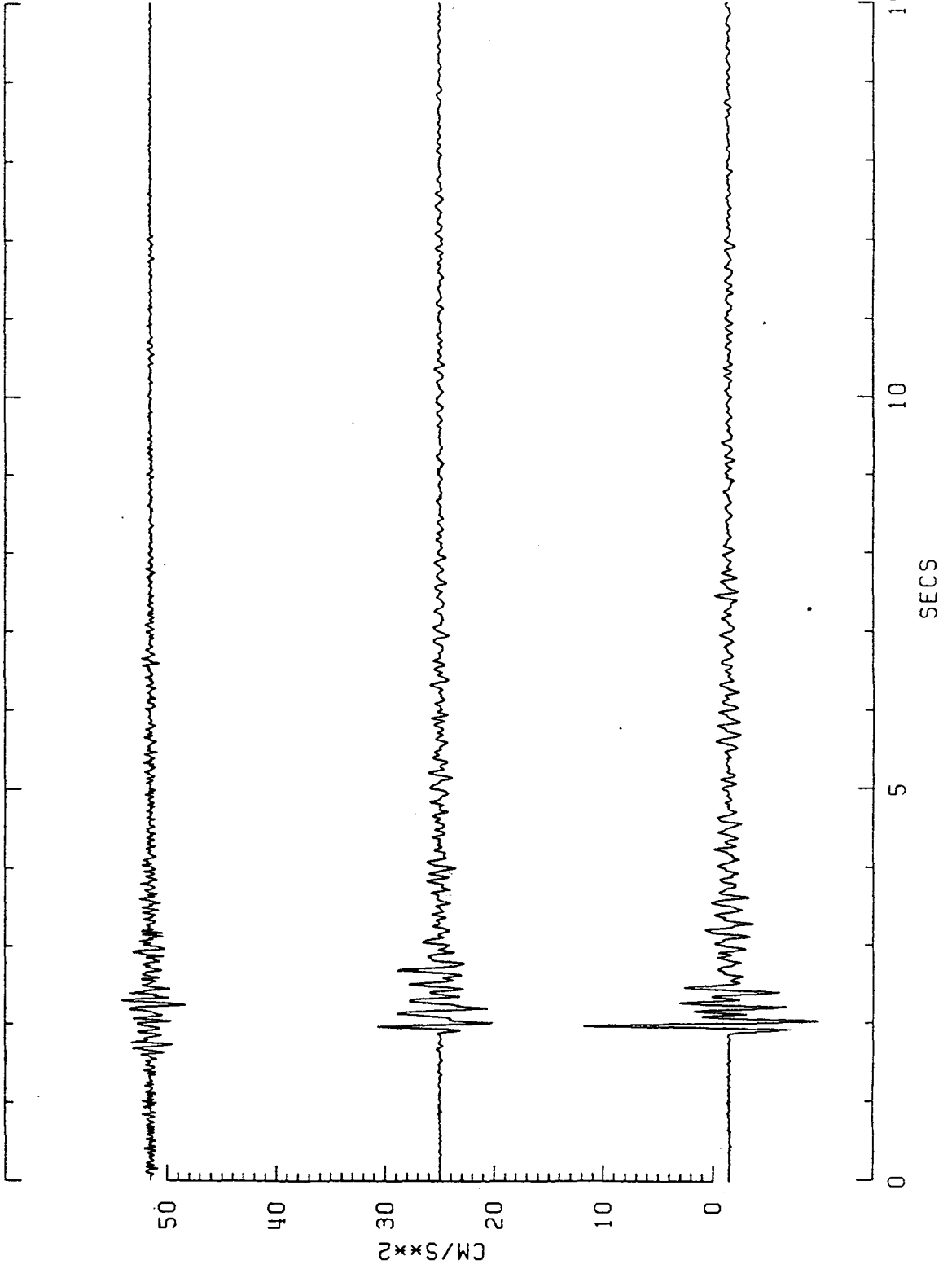
2212213I*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A106-316, 317, 318 83079/TS16 IEM 027

TIME: 221 2213 29.504

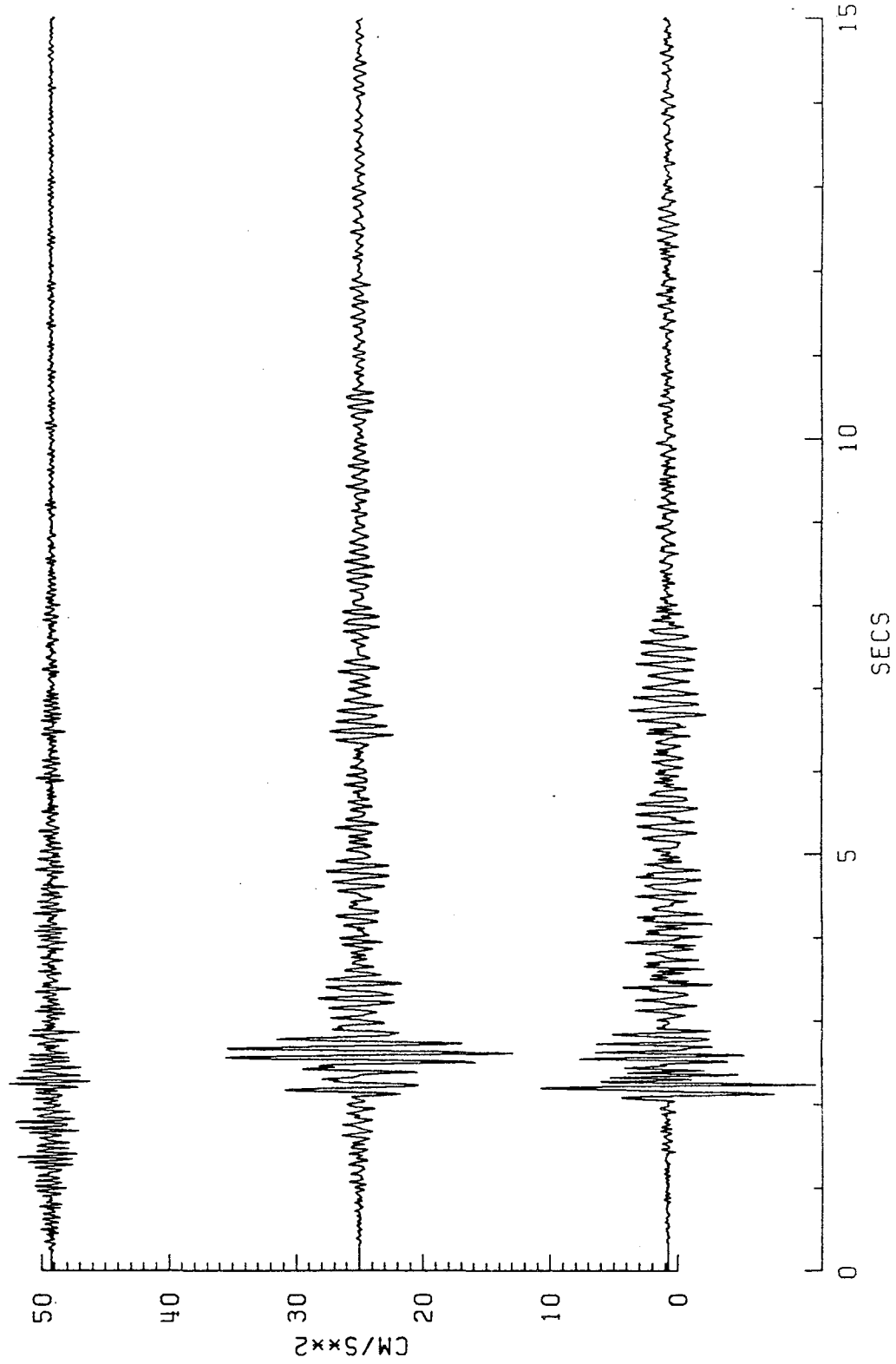
2212213J*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A107-319,320,321 83079/TS18 IEM 025

TIME: 221 2213 29.056

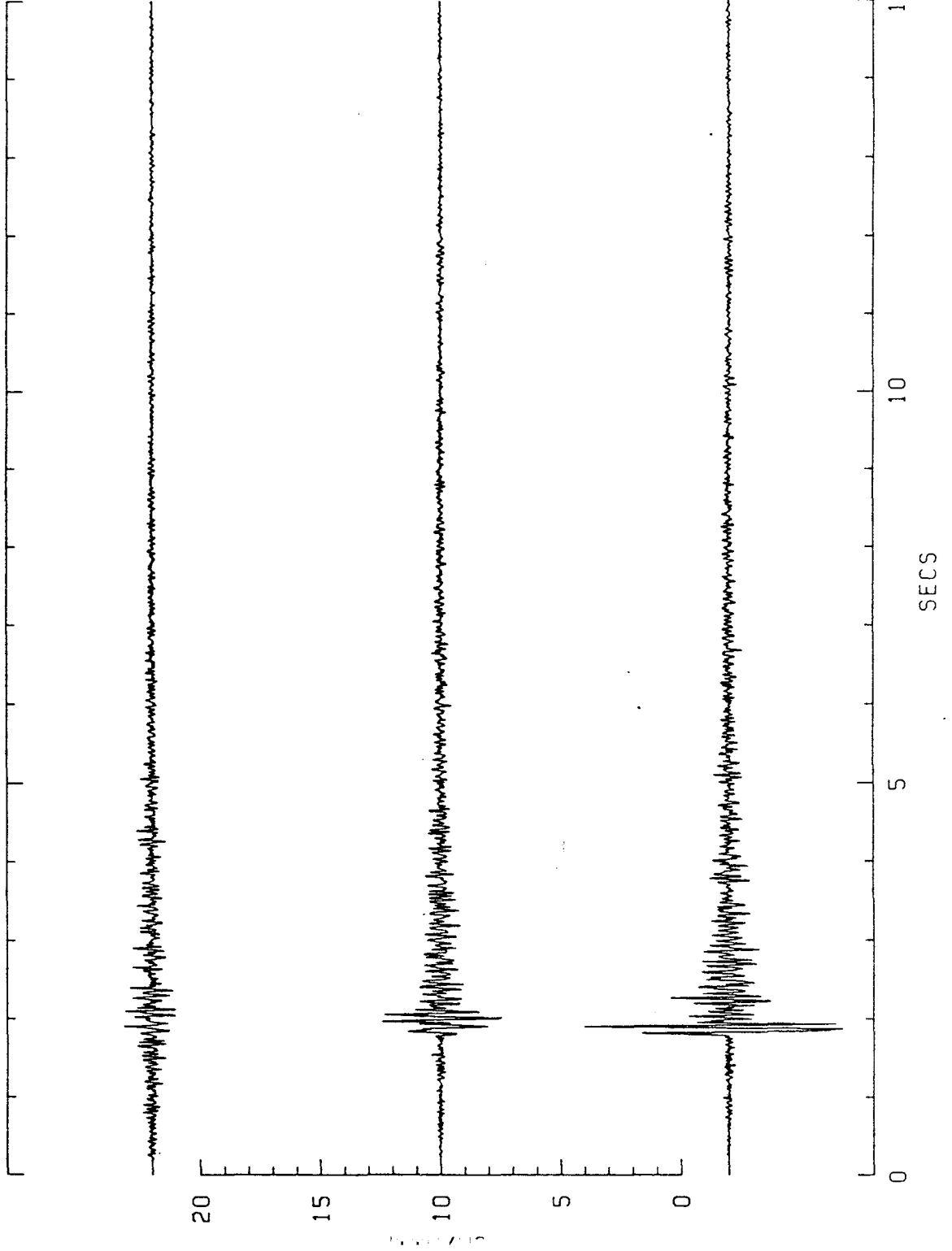
2212213J*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A108-322, 323, 324 83079/TS19 IEM 026

TIME: 221 2213 28.659

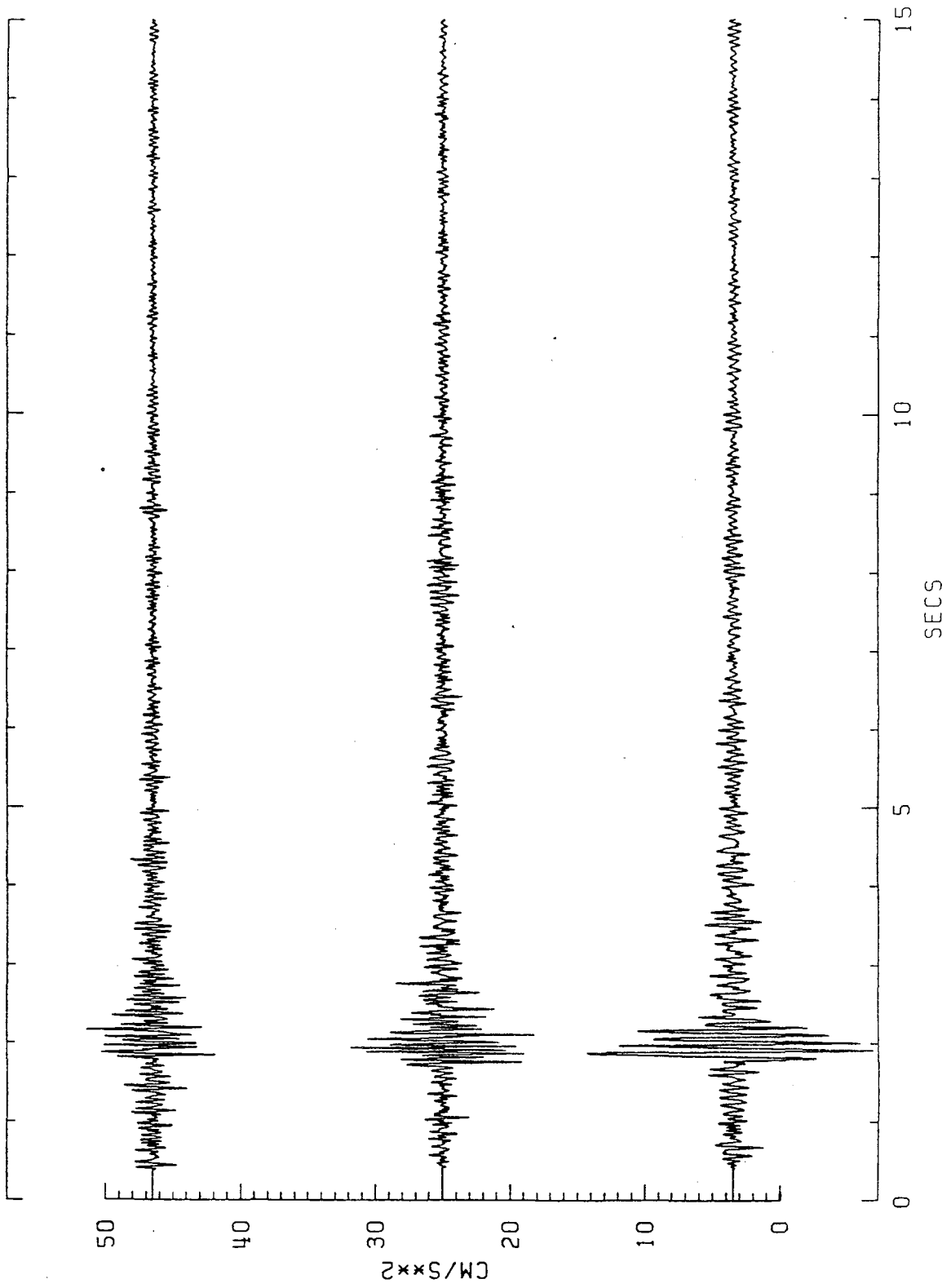
2212213I*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A109-325,326,327 83081/TS01 IEM 168

TIME: 225 0552 35.040

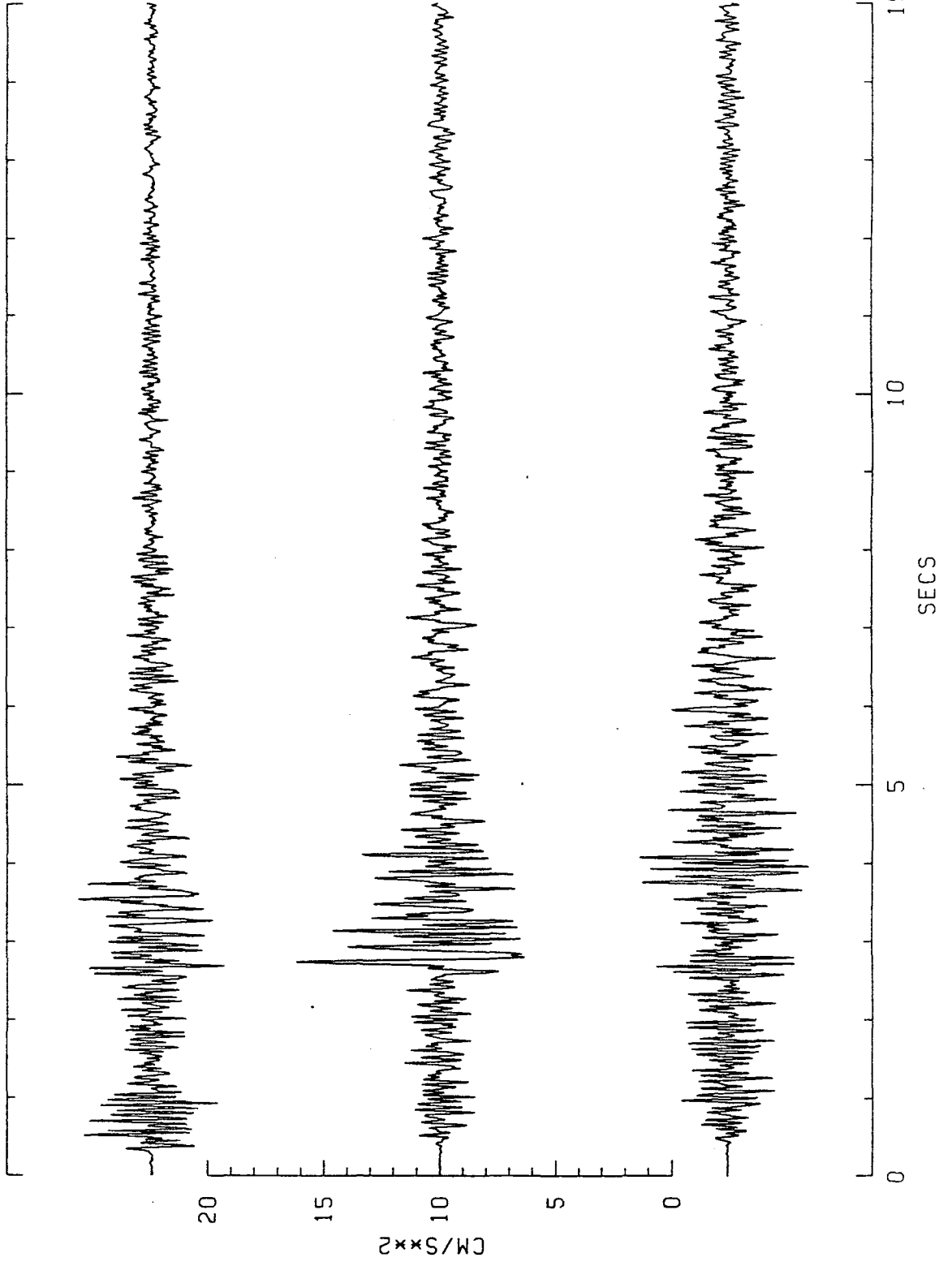
2250552L*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A110-328, 329, 330 83081/TS03 IEM 169

TIME: 225 0552 35.360

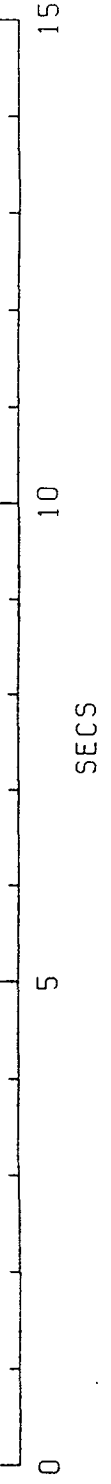
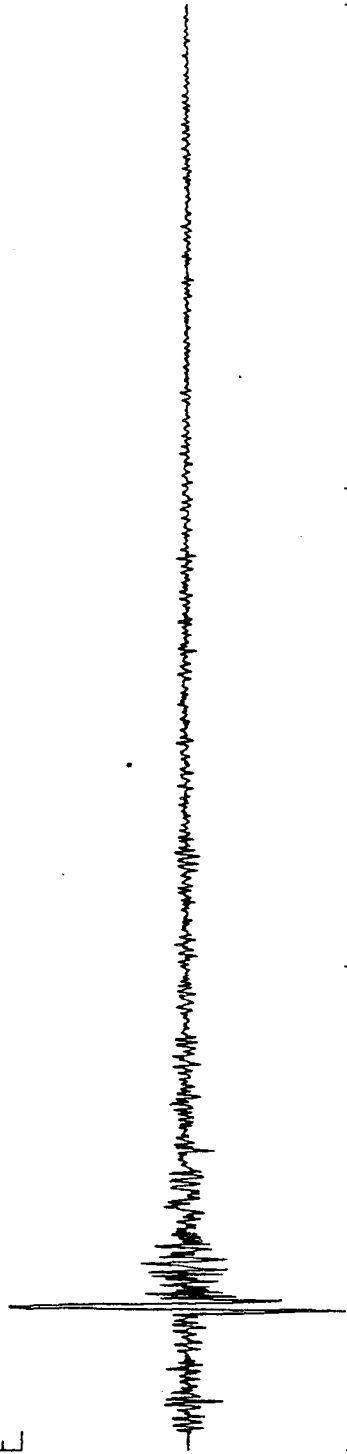
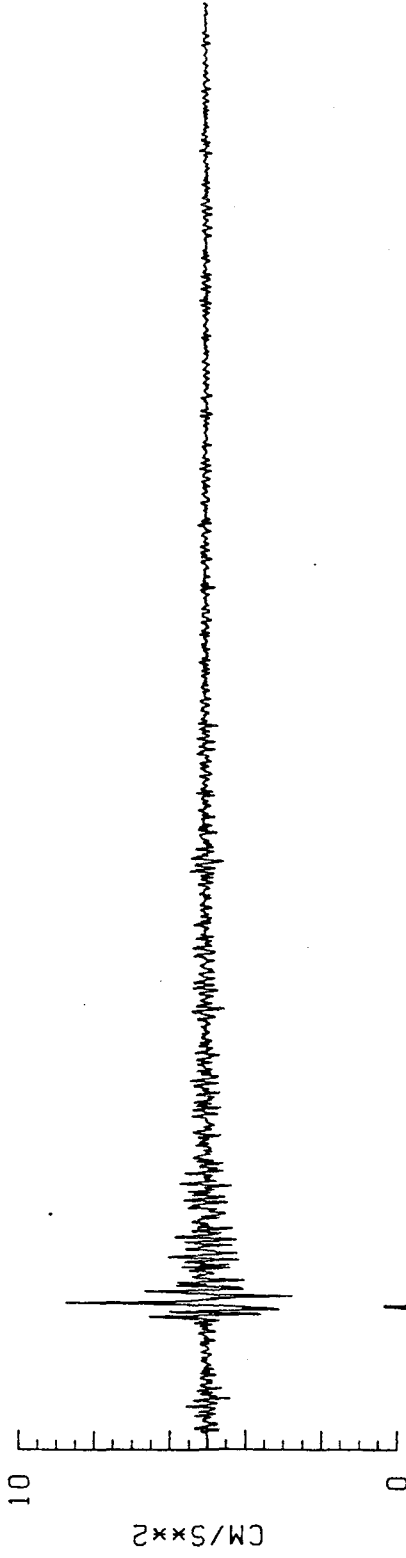
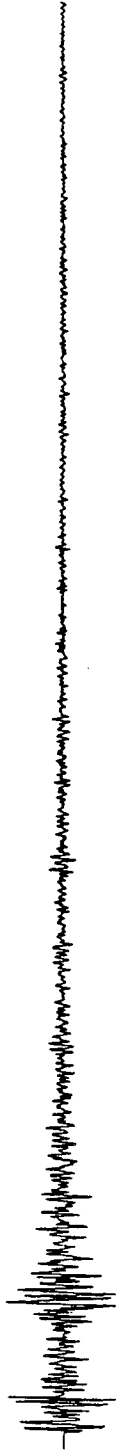
2250552L*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A111-331, 332, 333 83081/TS15 IEM 170

TIME: 225 0552 34.772

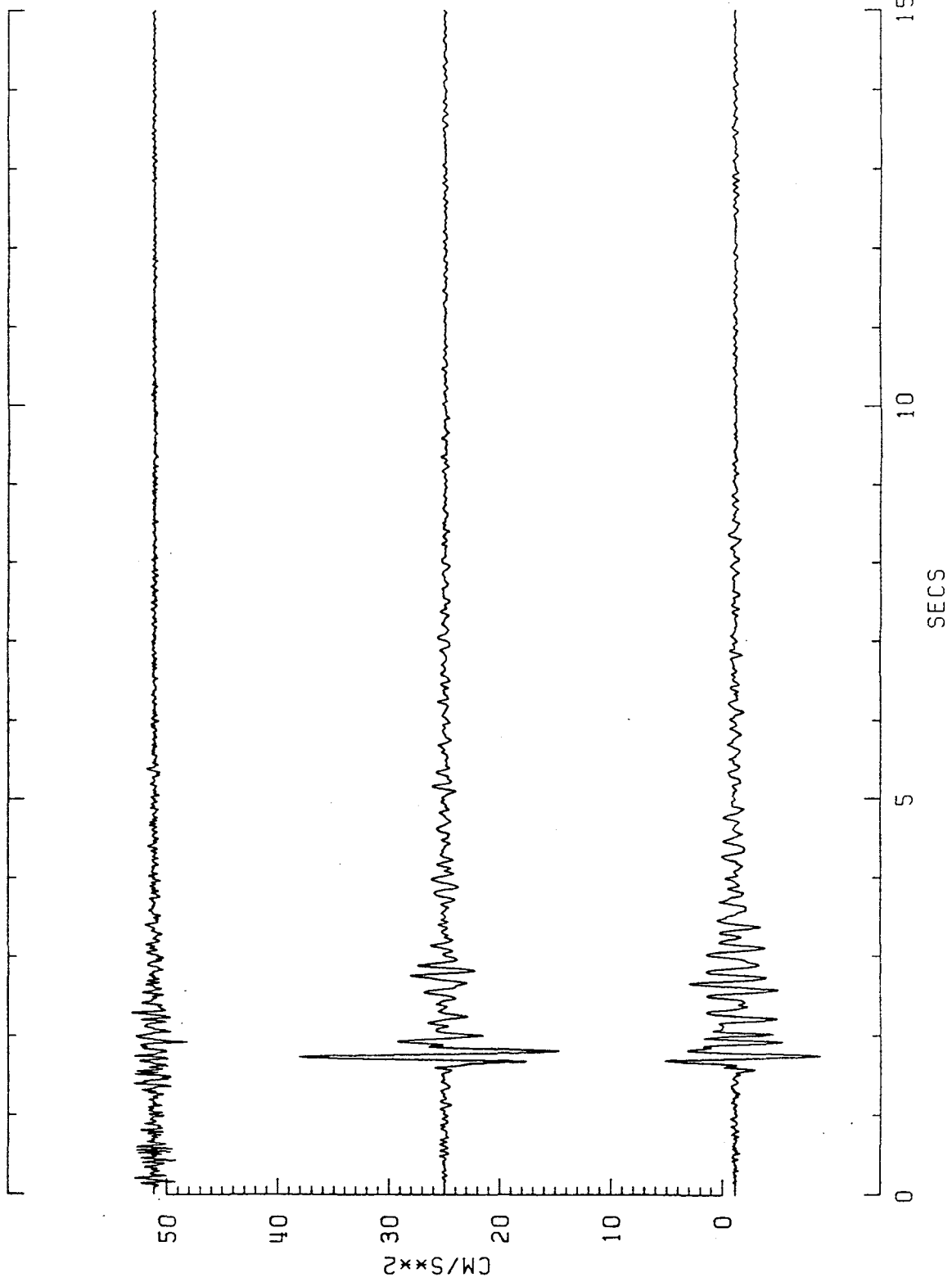
2250552K*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A112-334, 335, 336 83081/TS16 IEM 171

TIME: 225 0552 35.300

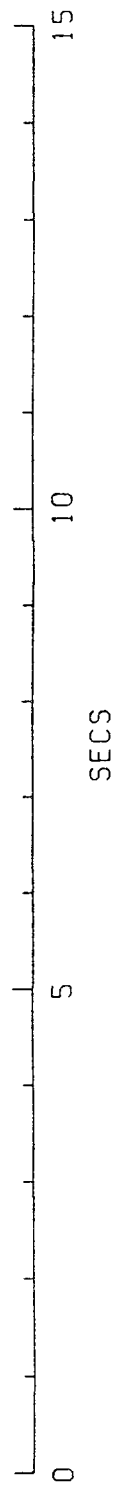
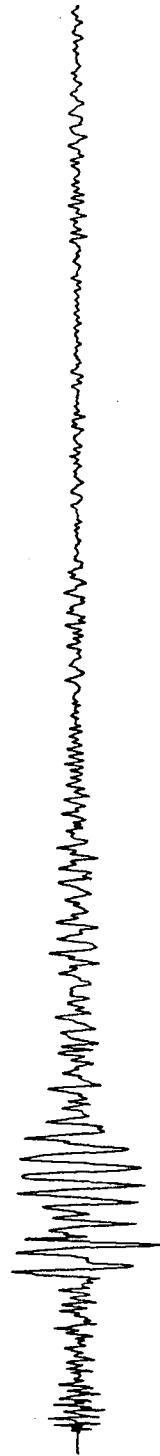
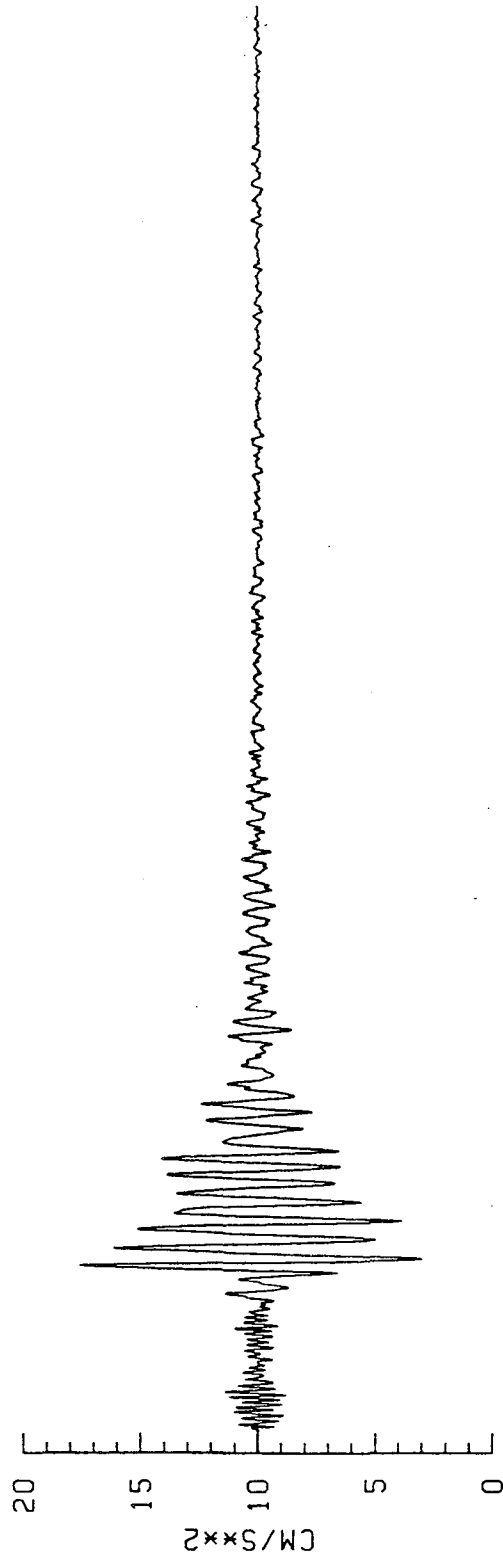
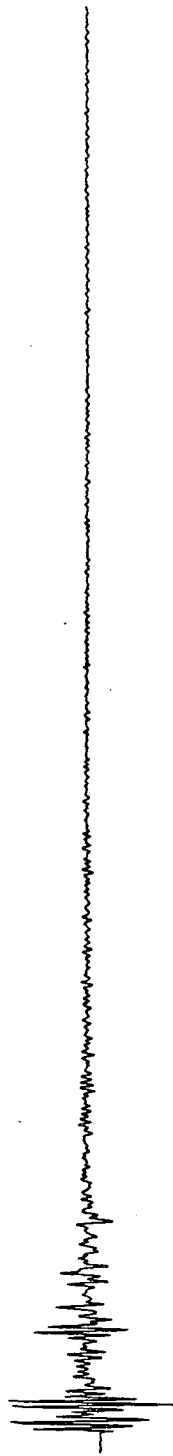
2250552L*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A113-337, 338, 339 83081/TS17 IEM 172

TIME: 225 0552 34.850

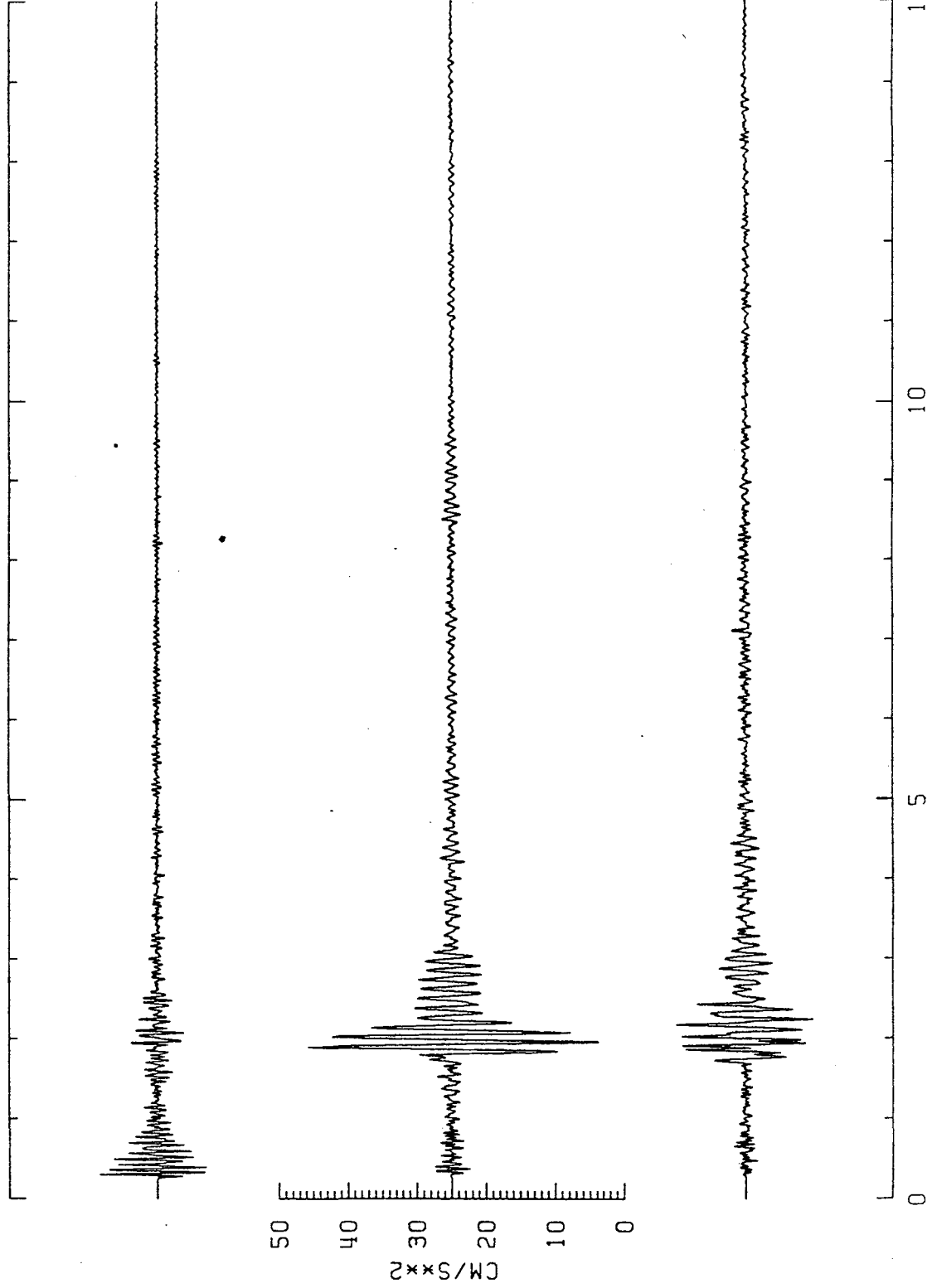
2250552L*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A114-340, 341, 342 83081/TS18 IEM 173

TIME: 225 0552 34.538

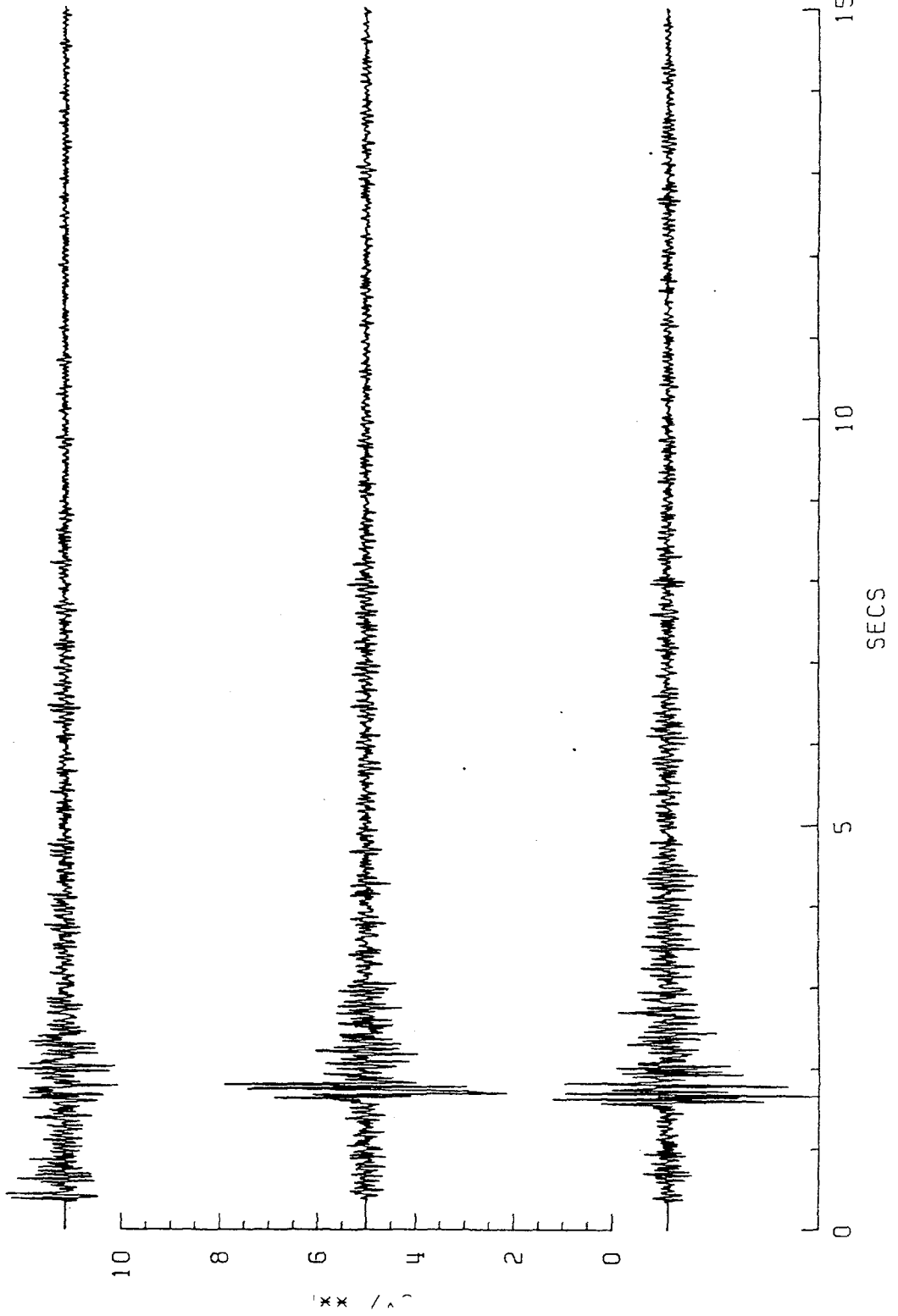
2250552L*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A115-343, 344, 345 83081/TS19 IEM 174

TIME: 225 0552 34.356

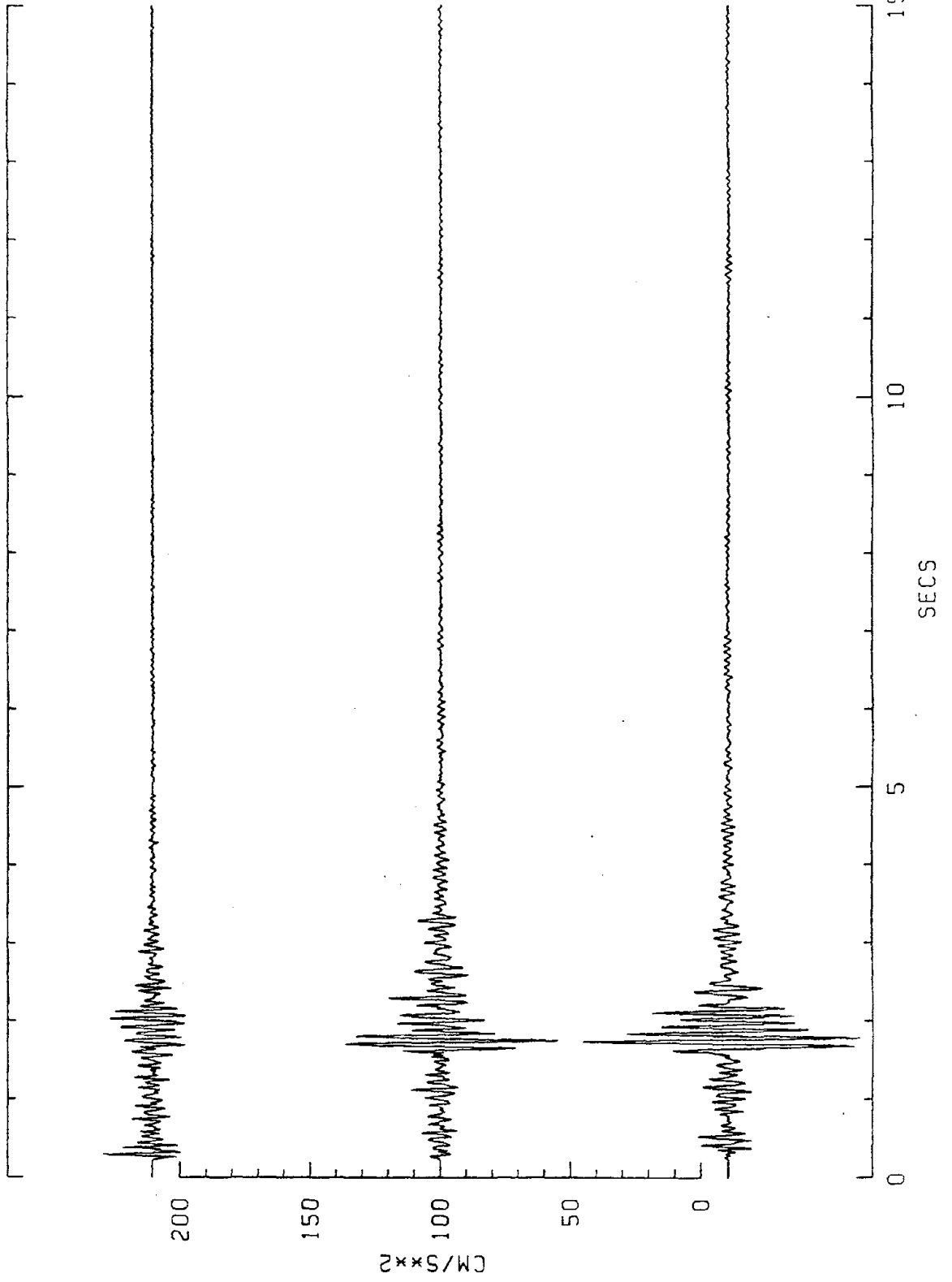
2250552K*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A116-346,347,348 83099/TSO1 IEM 033

TIME: 267 0308 07.921

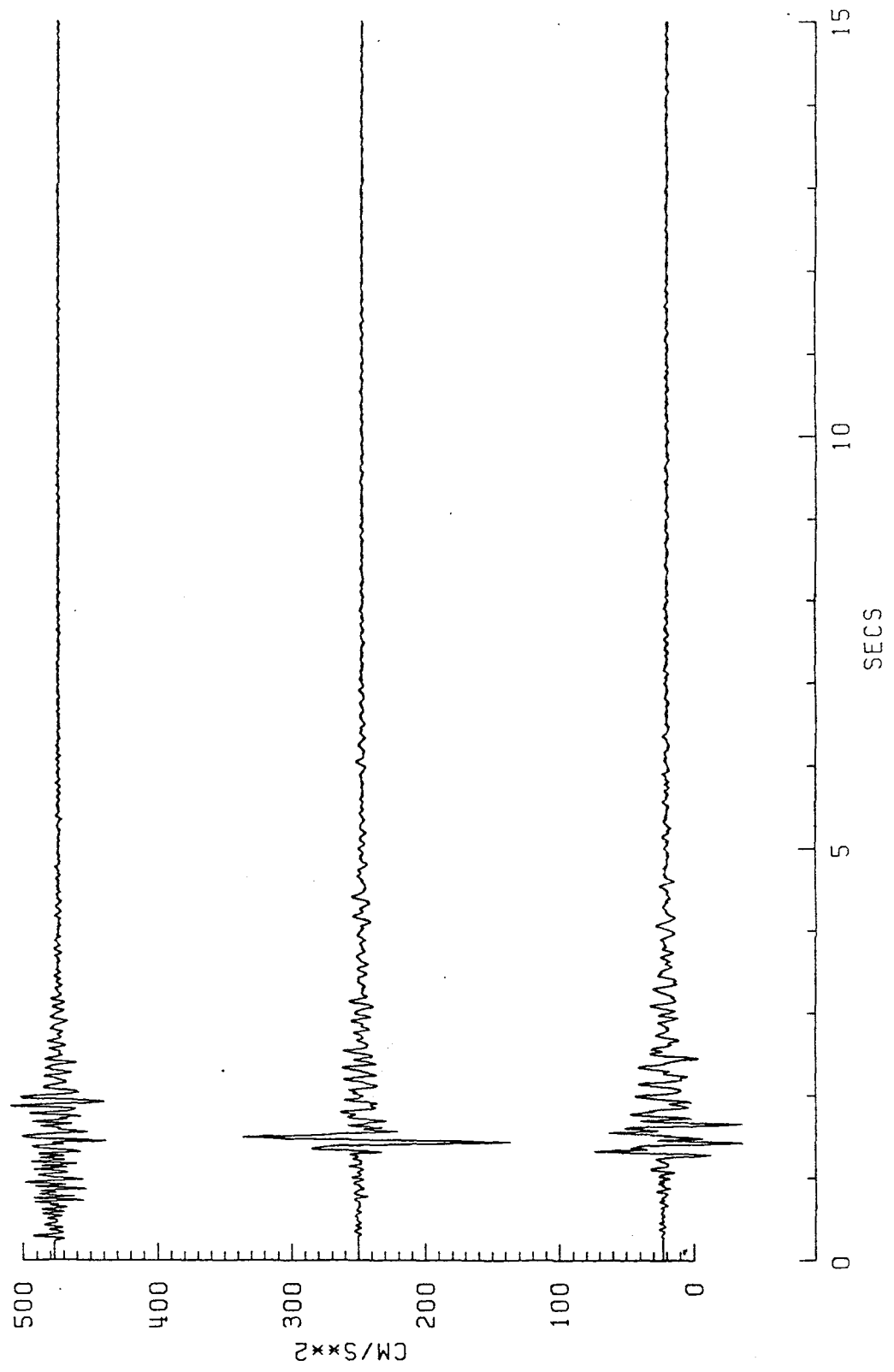
2670308B*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A117-349, 350, 351 83099/TS02 IEM 034

TIME: 267 0308 08.093

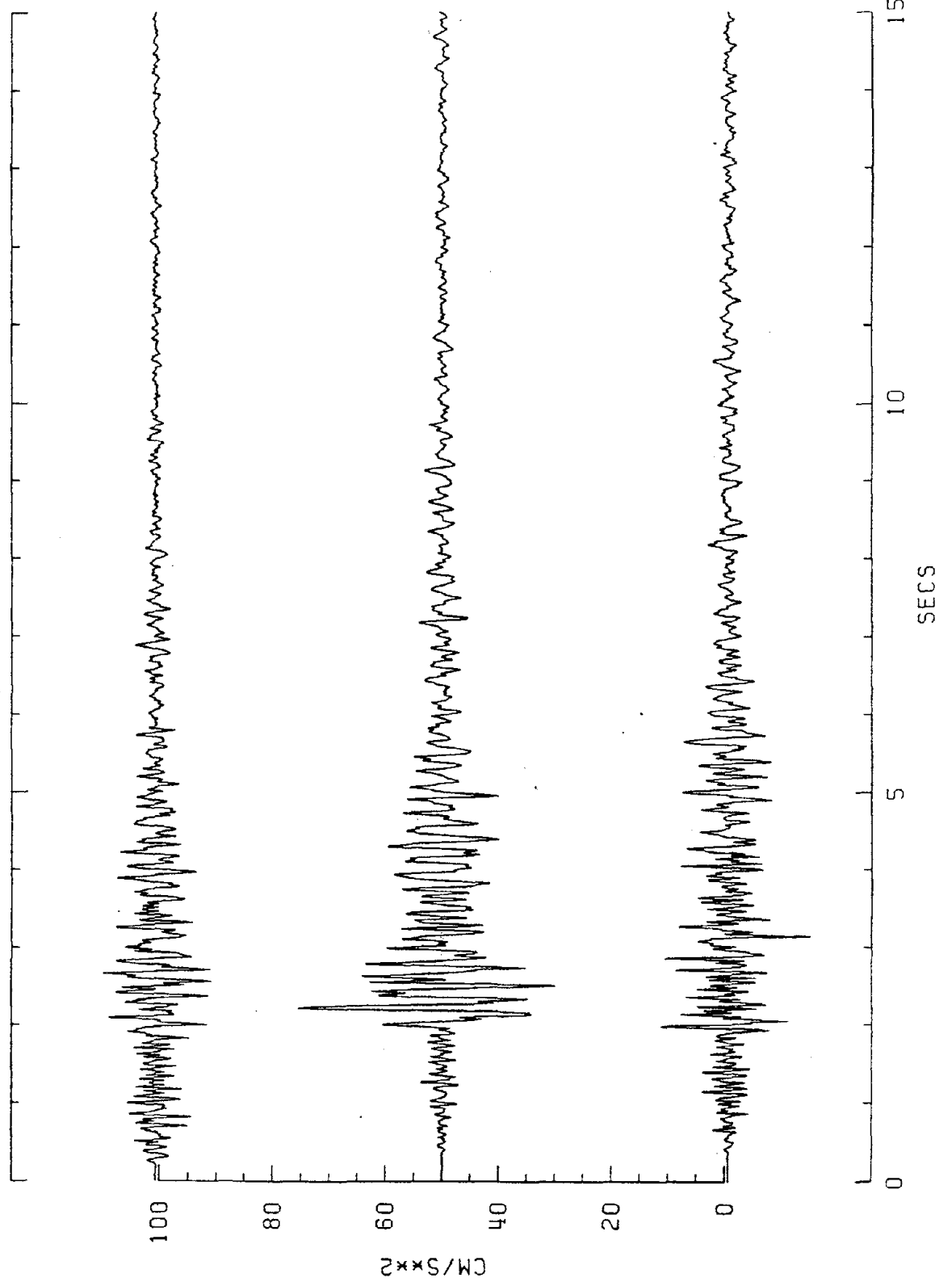
2670308B*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A118-352, 353, 354 83099/TS03 IEM 035

TIME: 267 0308 07.779

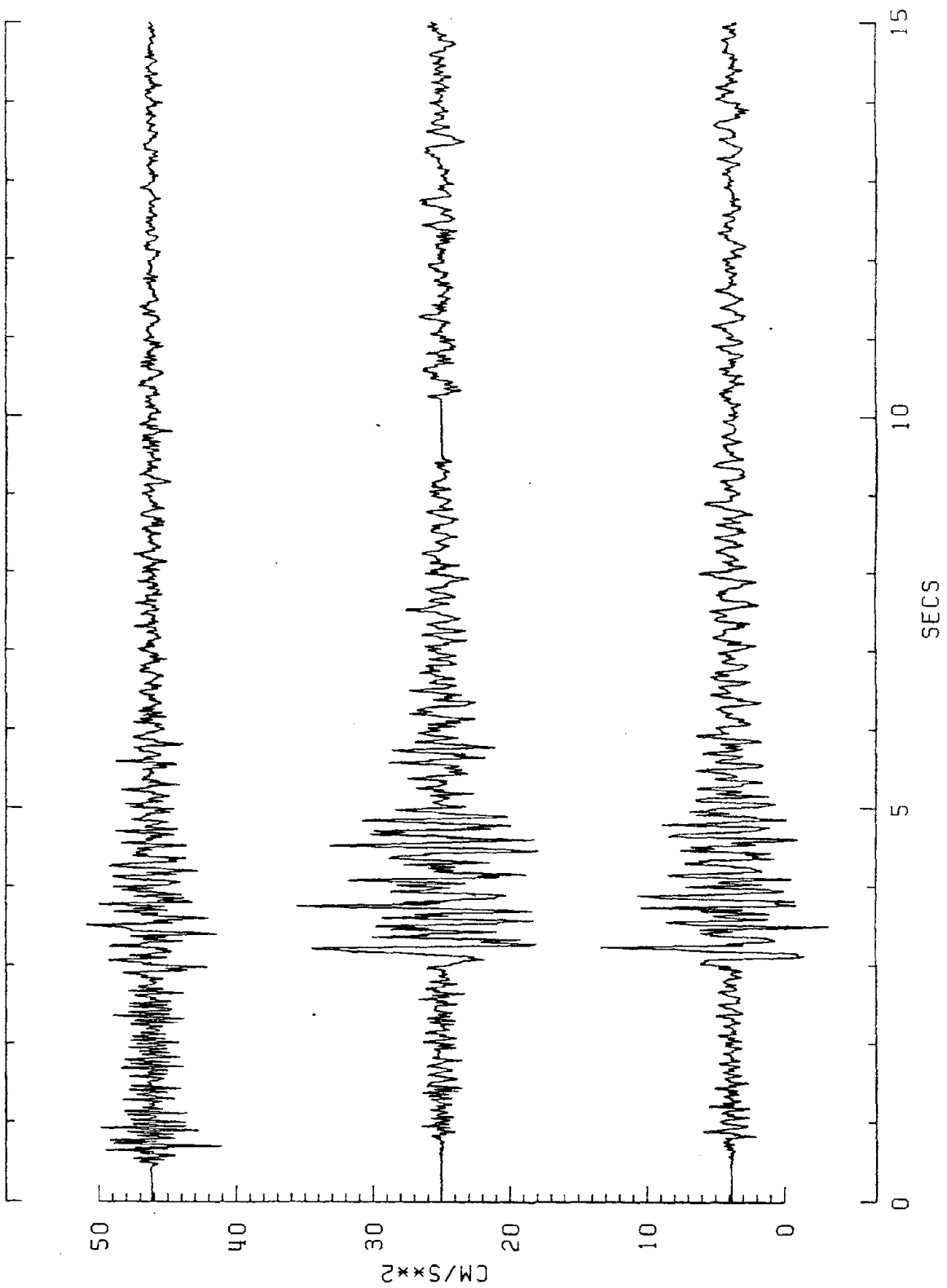
2670308B*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A119-355, 356, 357 83099/TS07 IEM 036

TIME: 267 0308 08.935

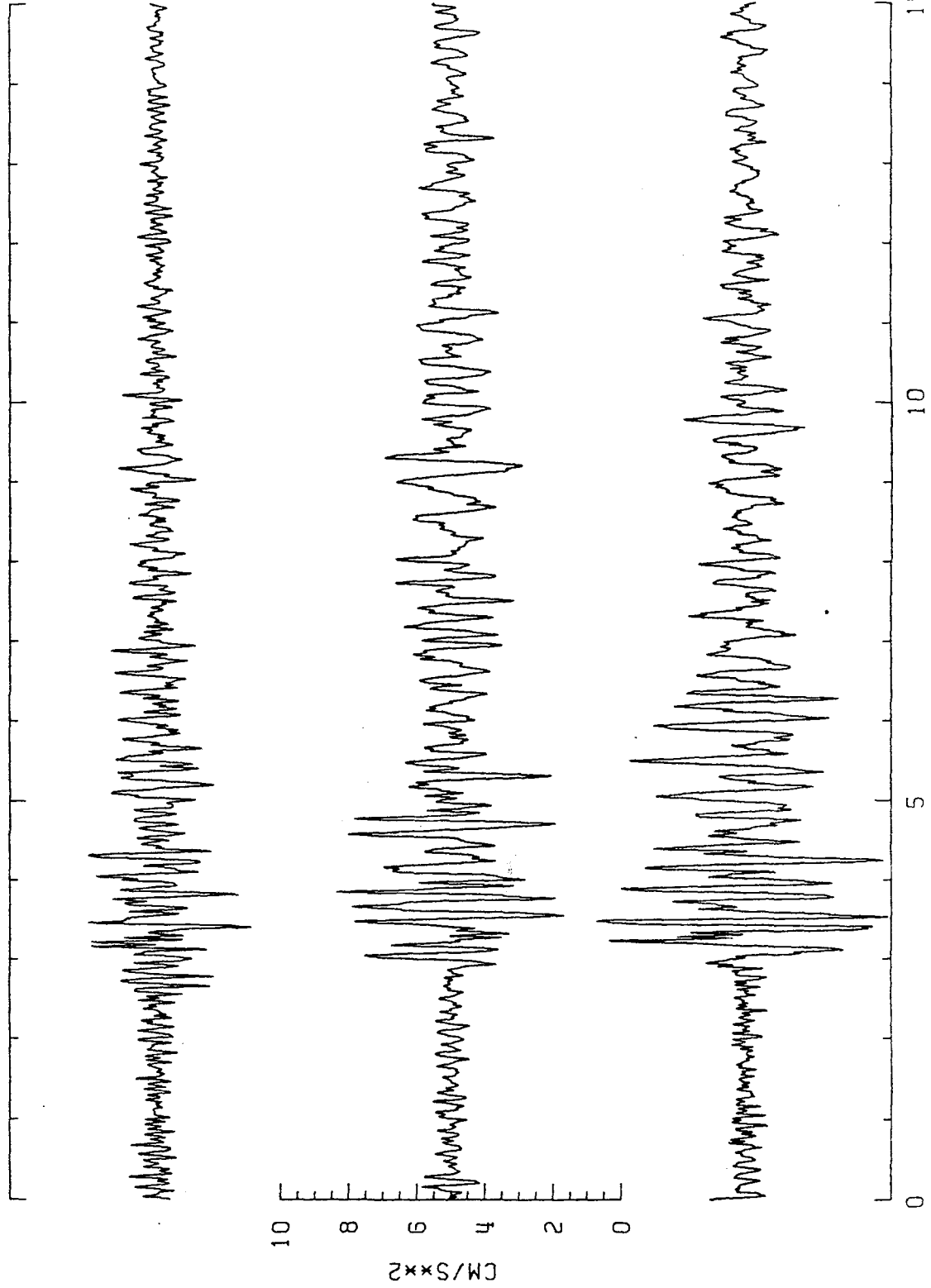
2670308C*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A120-358, 359, 360 83099/TS10 IEM 037

TIME: 267 0308 12.641

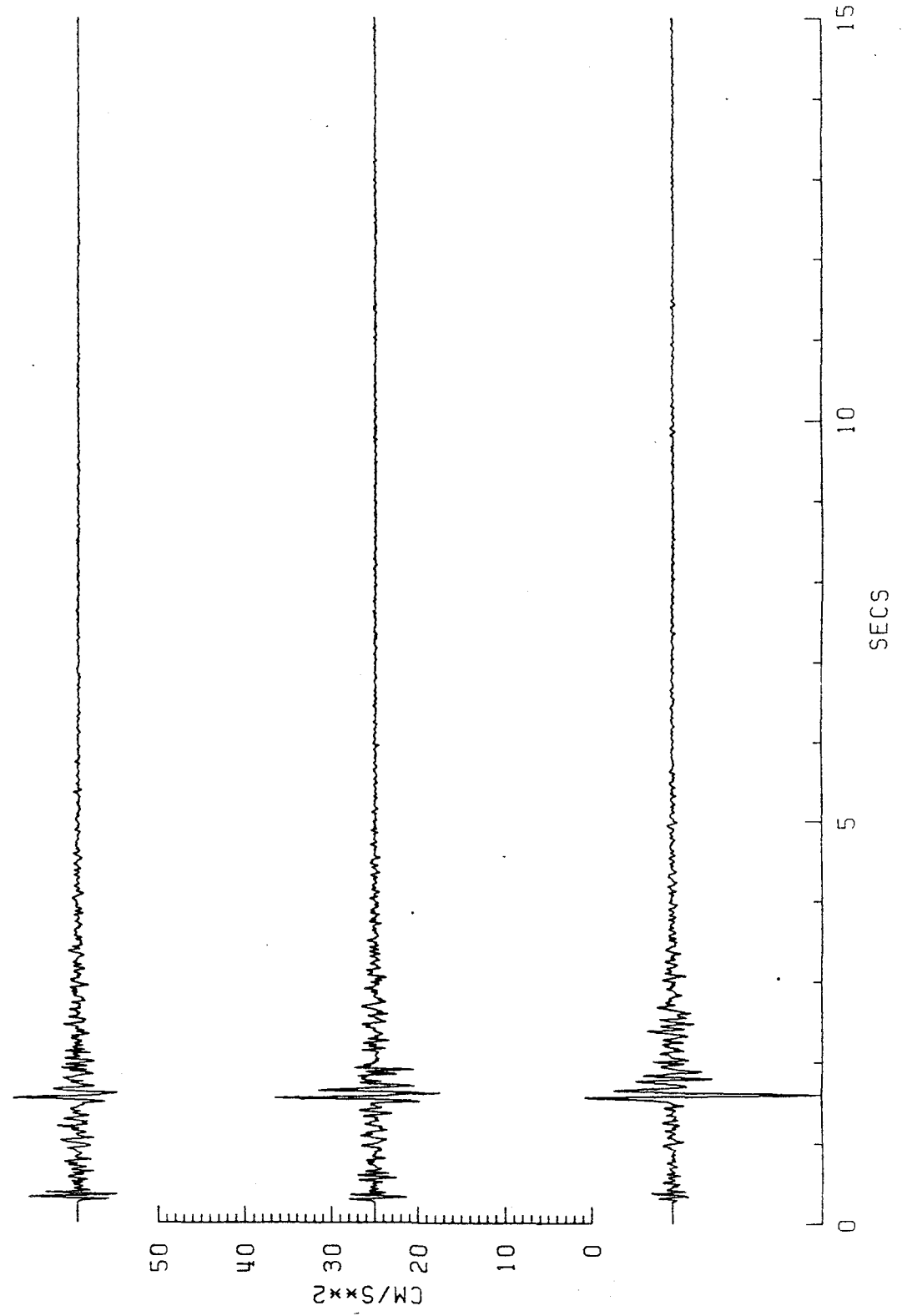
2670308E*.010 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A121-361, 362, 363 83099/TS15 IEM 038

TIME: 267 0308 07.203

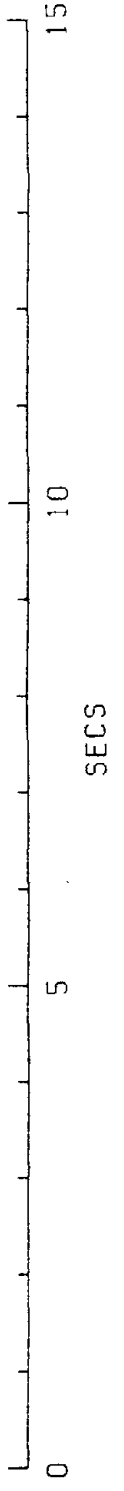
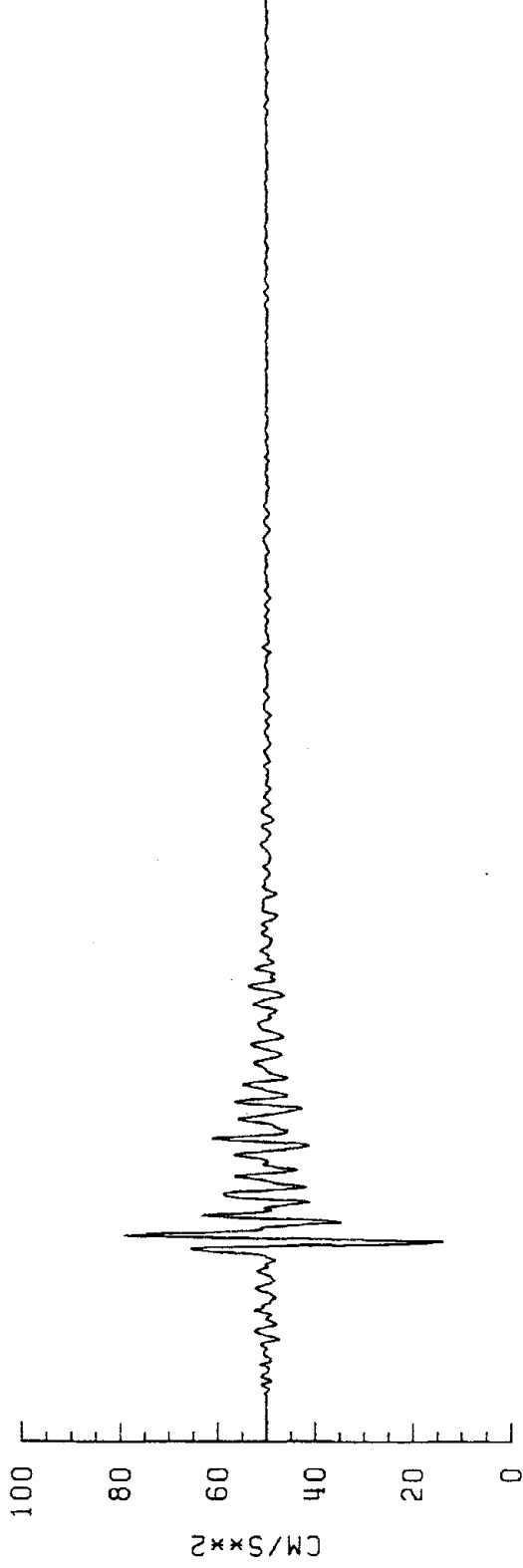
2670308B*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A122-364, 365, 366 83099/TS16 IEM 039

TIME: 267 0308 07.202

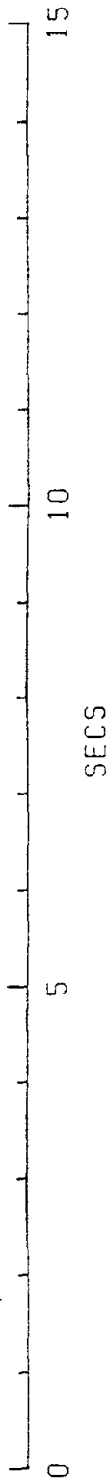
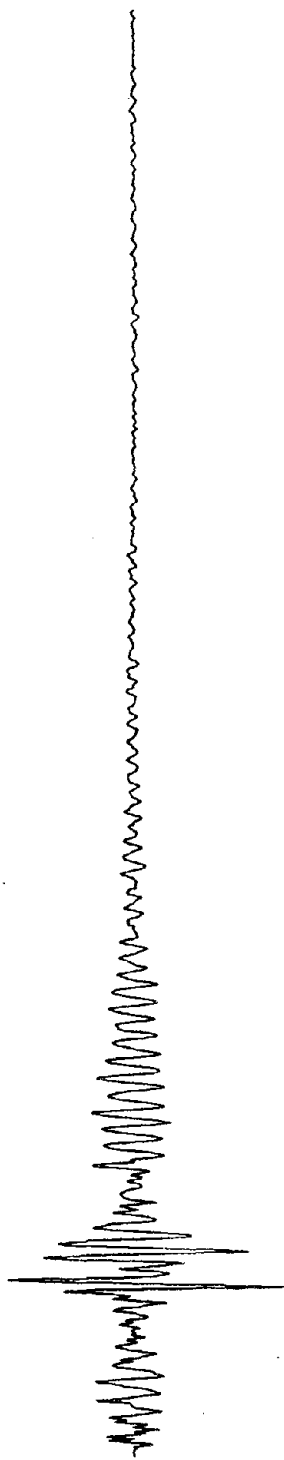
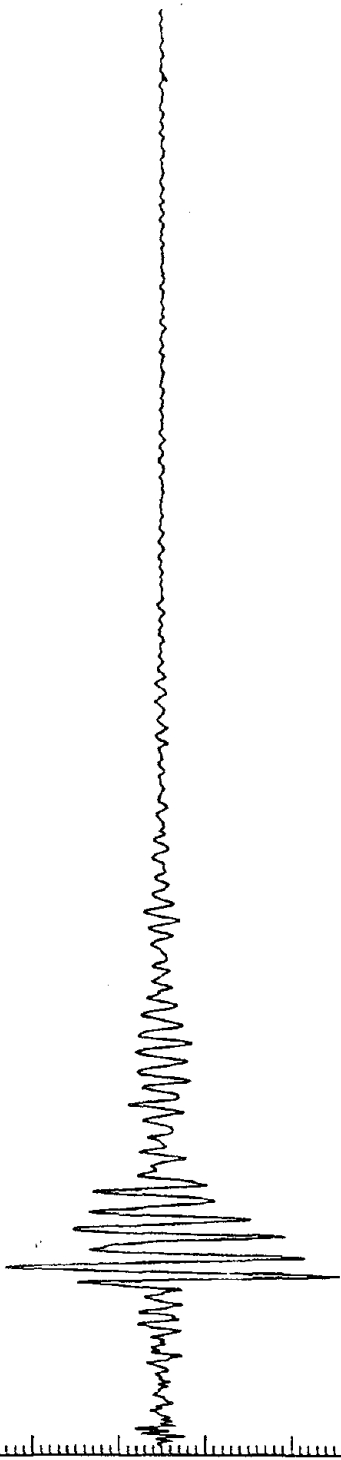
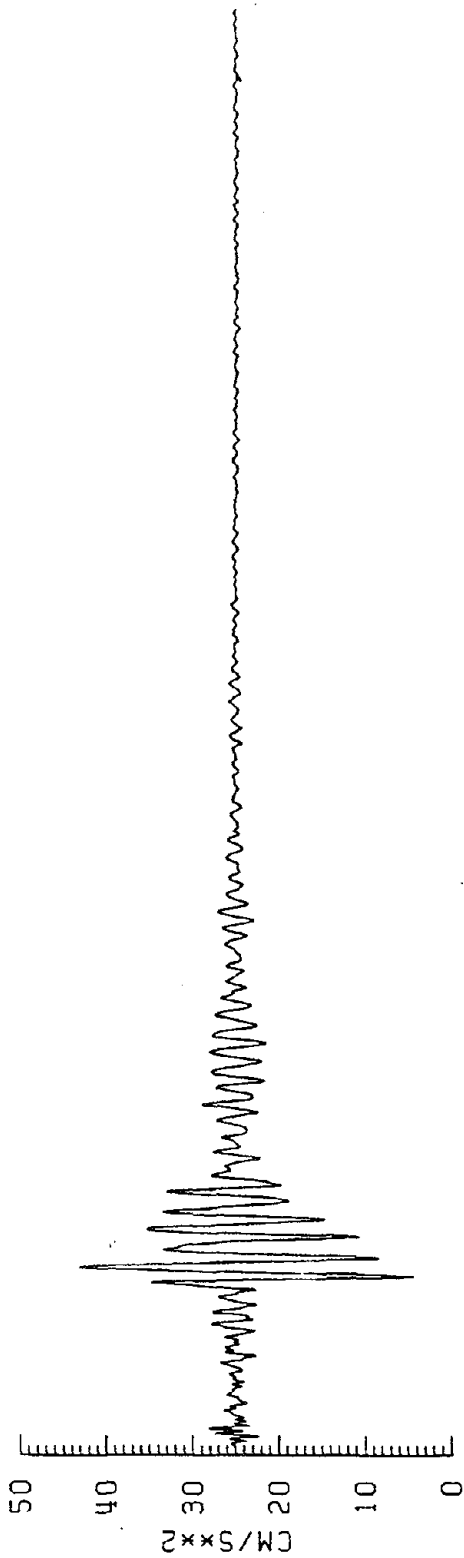
2670308B*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A123-367, 368, 369 83099/TS17 IEM 040

TIME: 267 0308 08.184

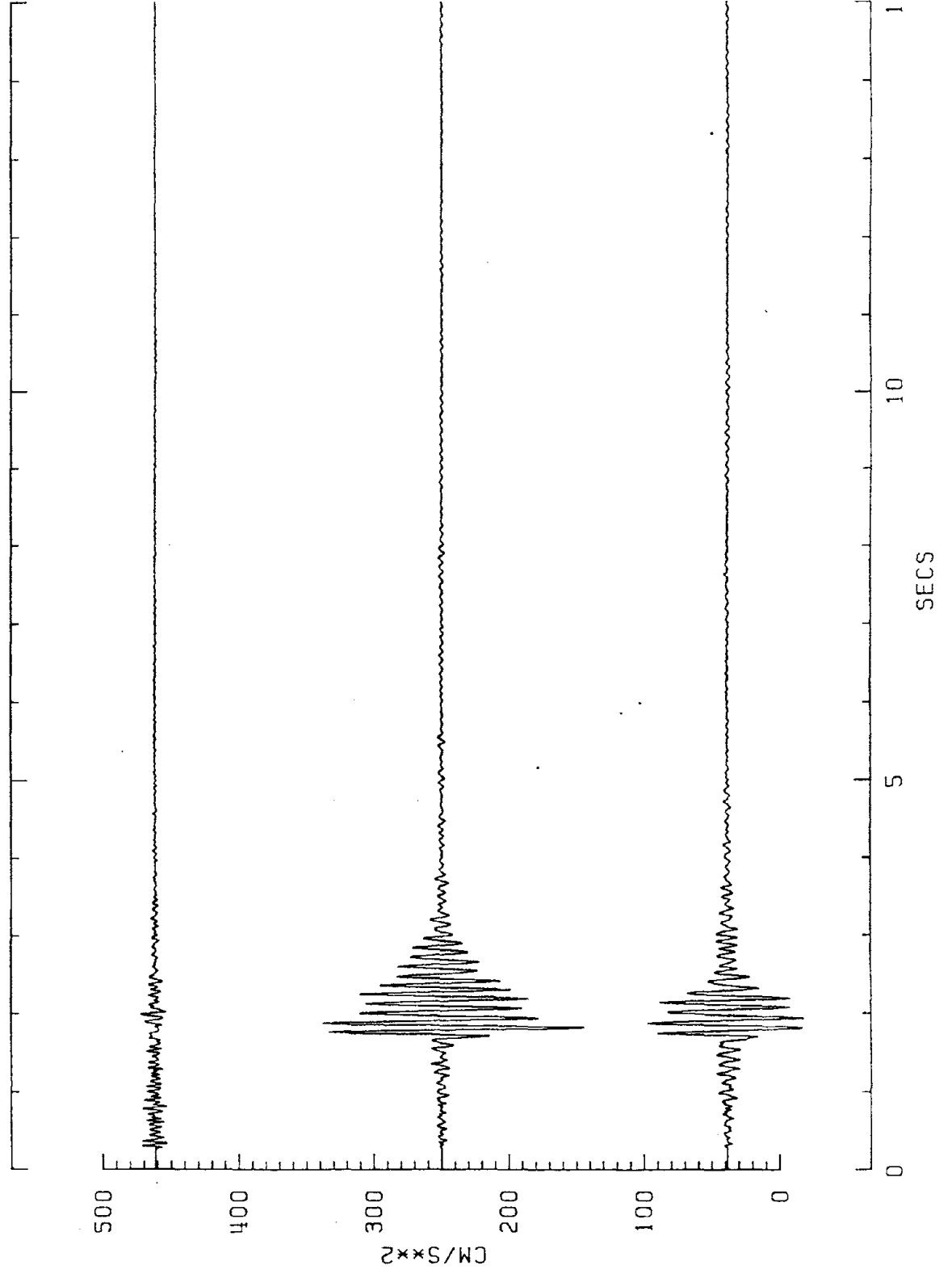
2670308B*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A124-370,371,372 83099/TS18 IEM 041

TIME: 267 0308 08.134

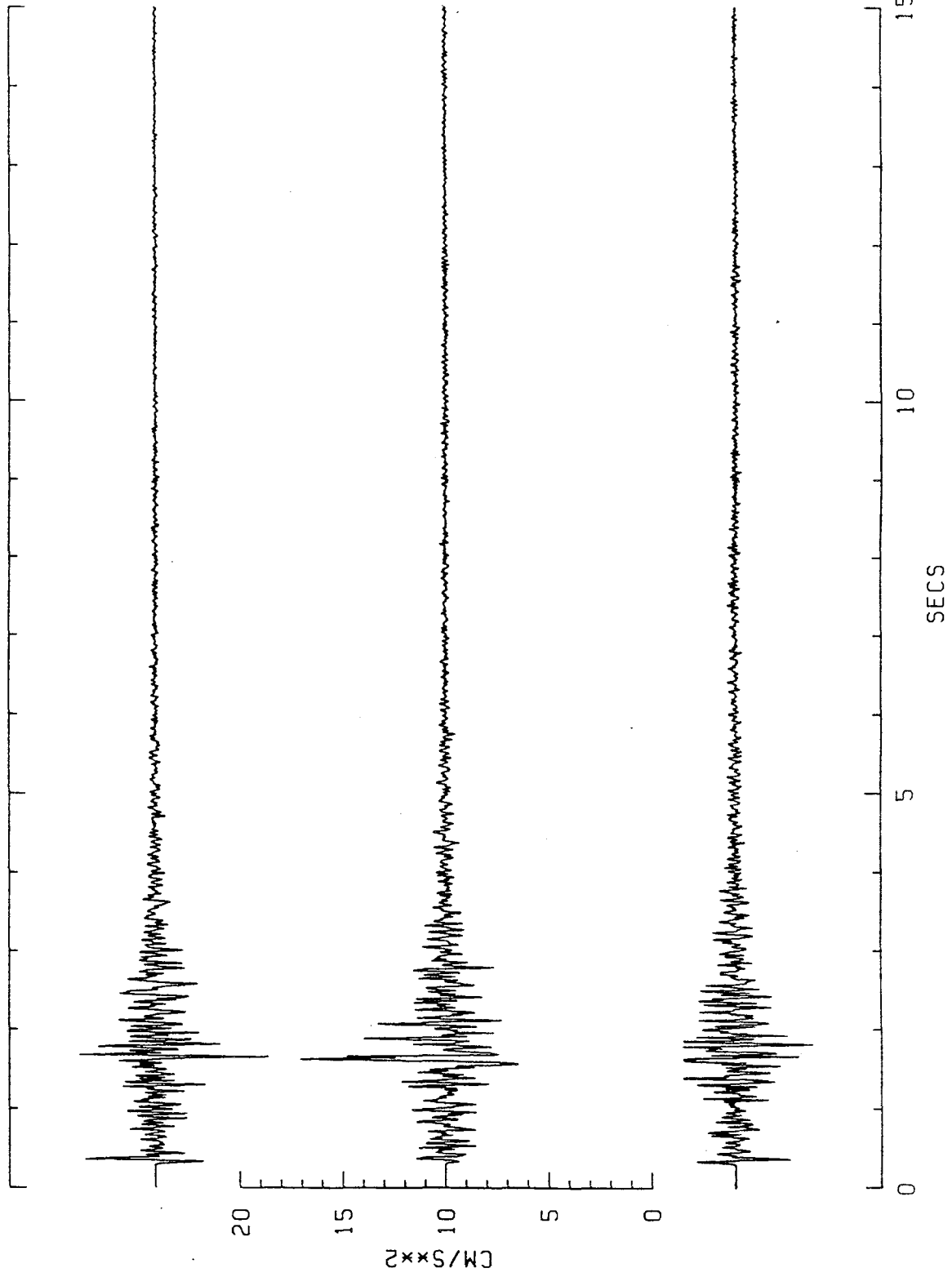
2670308B*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A125-373, 374, 375 83099/TS19 IEM 042

TIME: 267 0308 07.640

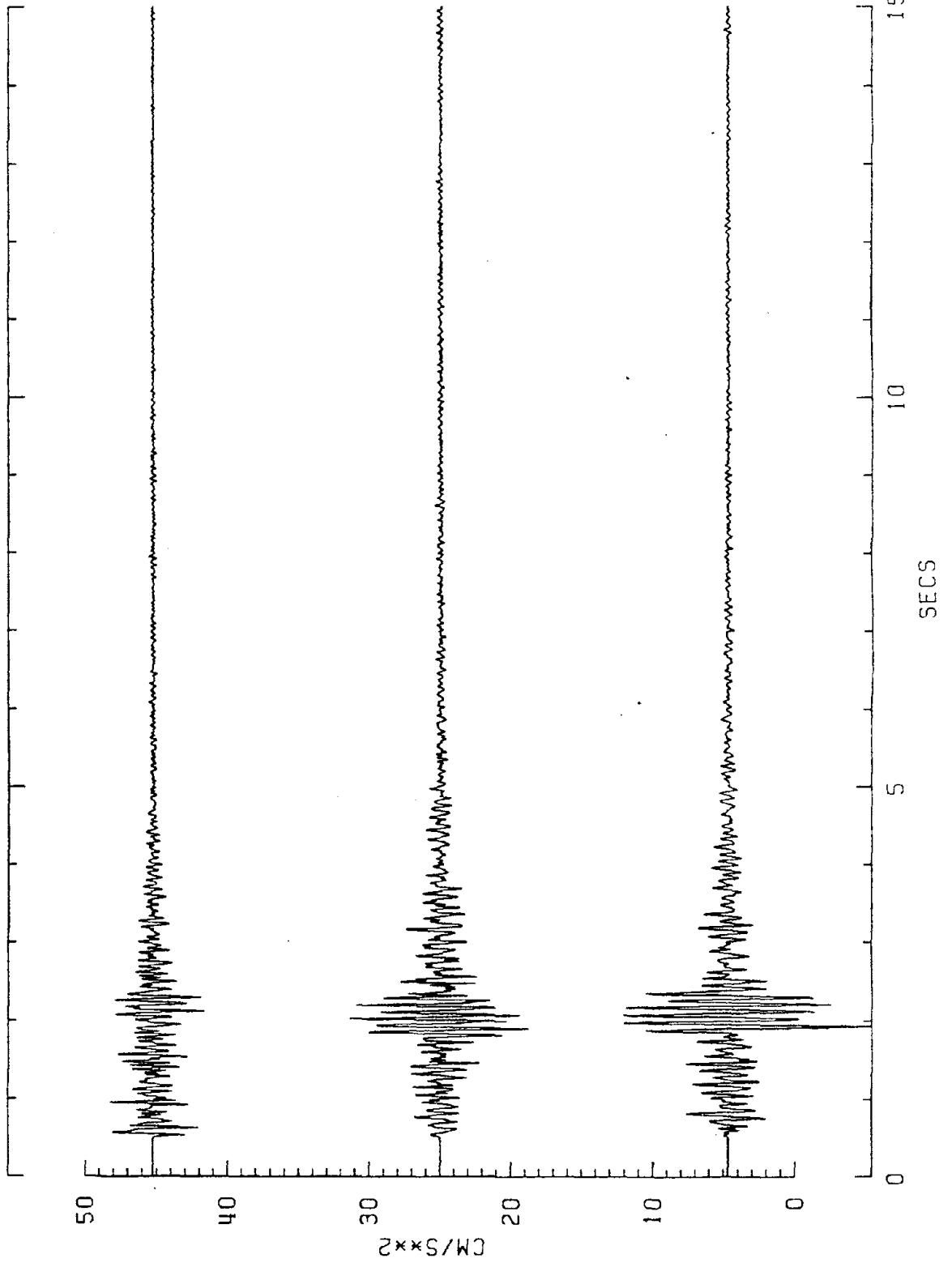
2670308B*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A126-376,377,378 83103/TS01 IEM 175

TIME: 269 0053 07.029

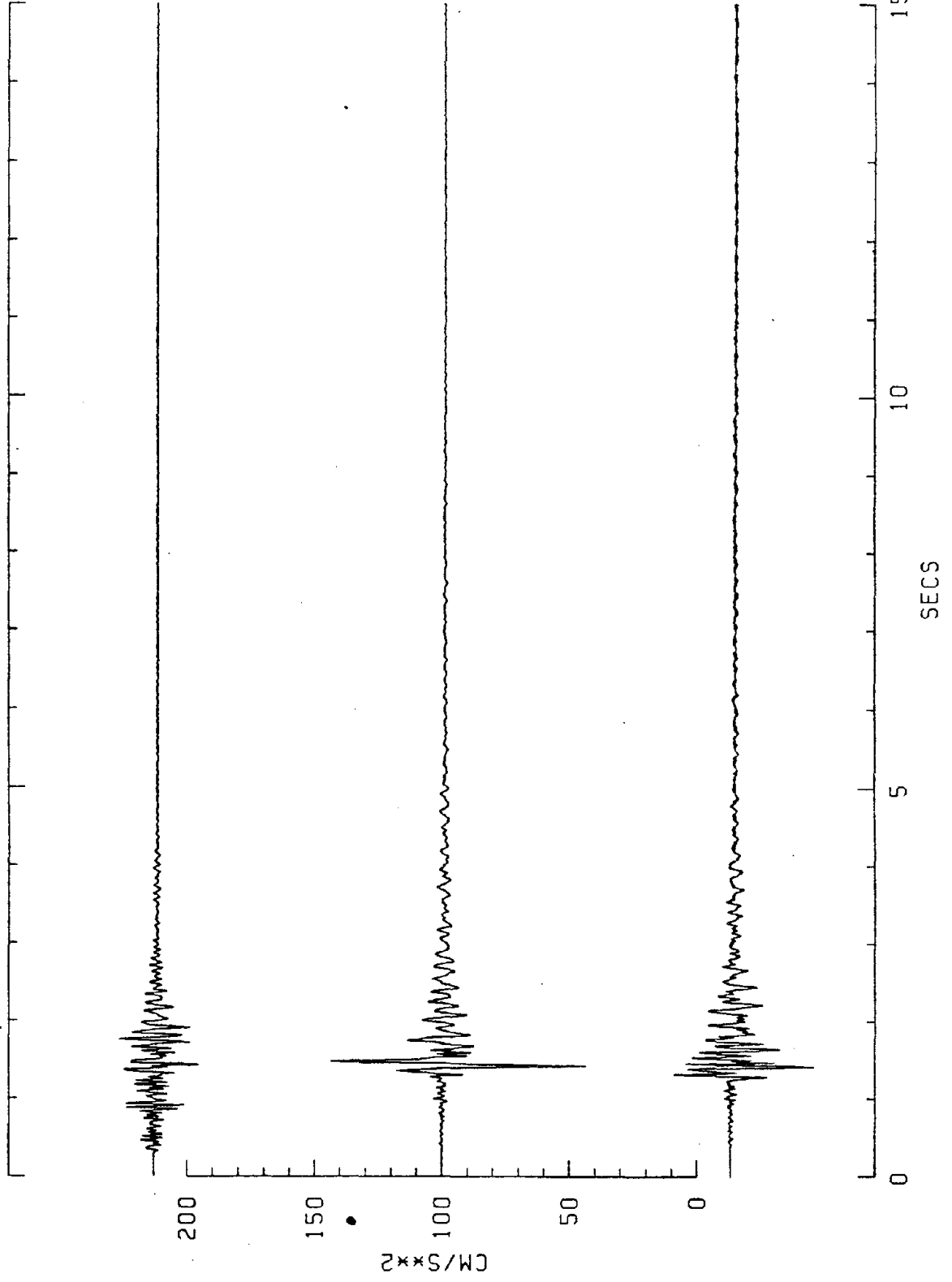
2690053B*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A127-379, 380, 381 83103/TS02 IEM 176

TIME: 269 0053 07.397

2690053B*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



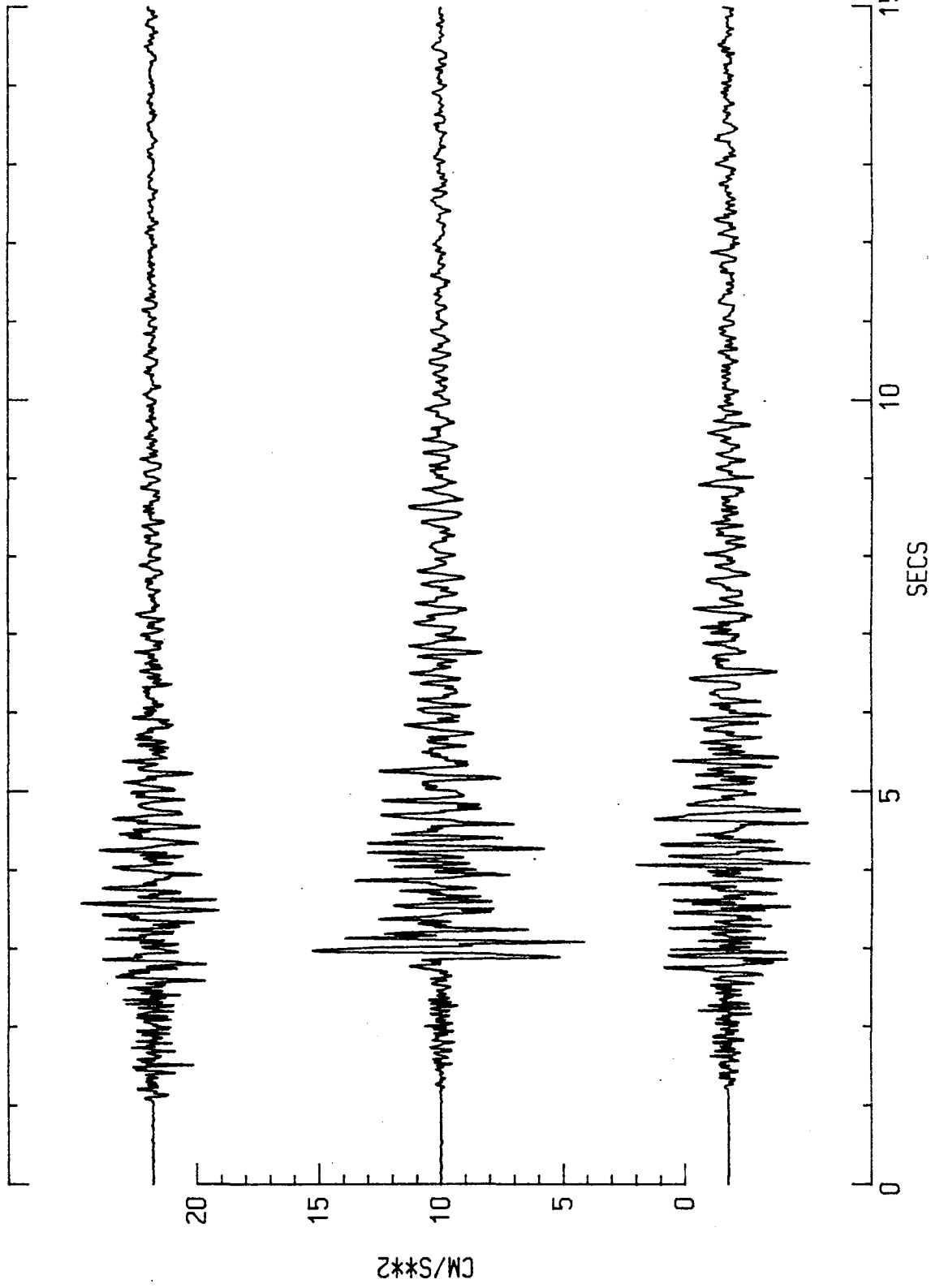
IEM 204

83103/TS03

6A128-382, 383, 384

TIME: 269 0053 06.324

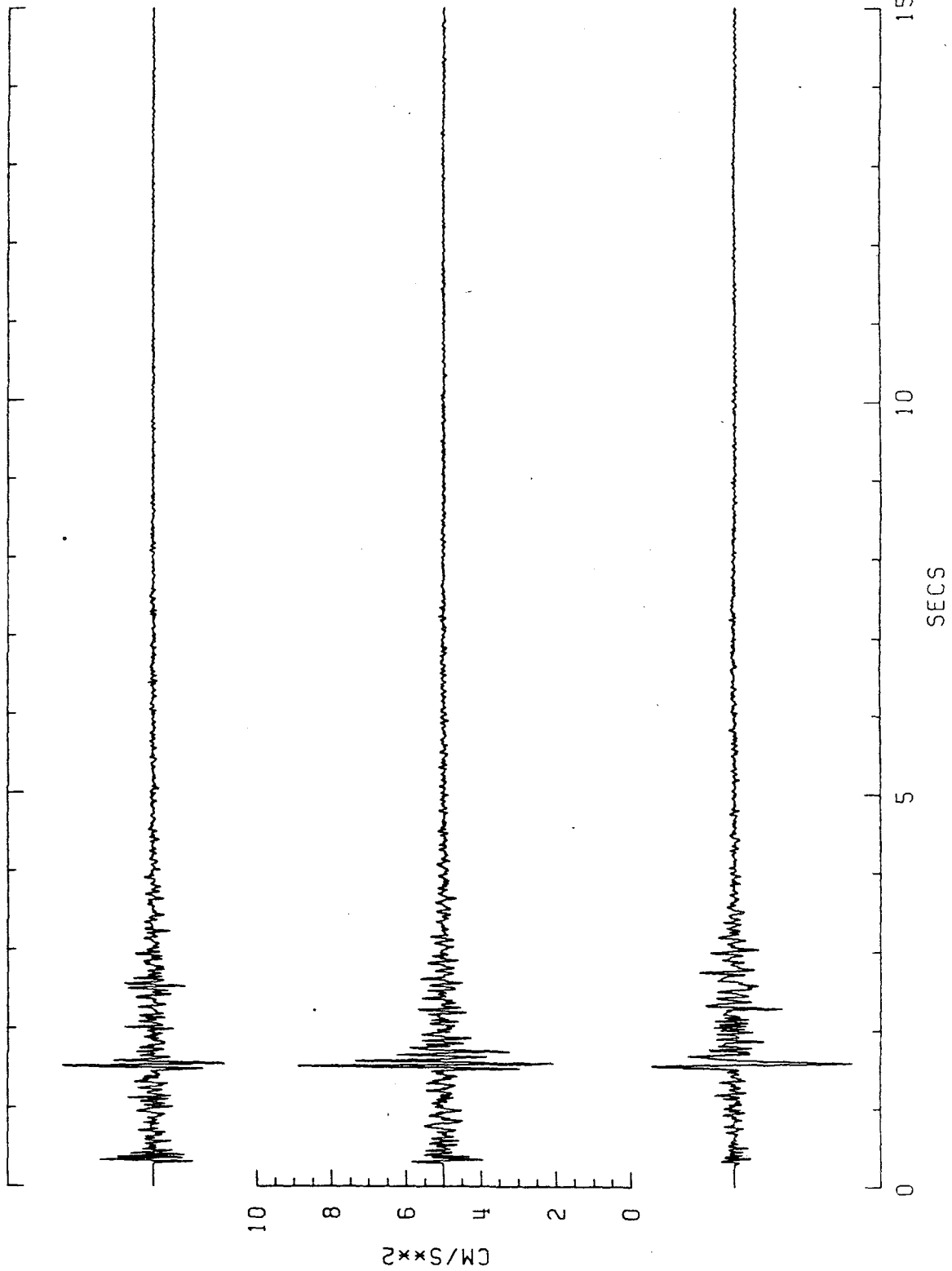
2690053B*.003 COMP: 1[U], 2[H=0], 3[H=90]



6A129-385, 386, 387 83103/TS15 IEM 177

TIME: 269 0053 06.574

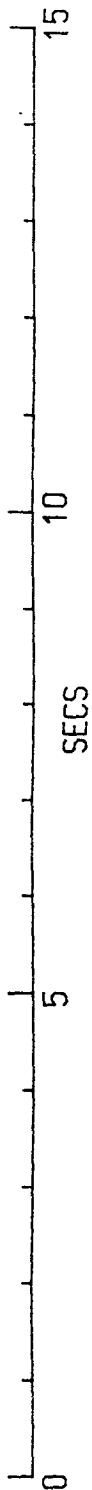
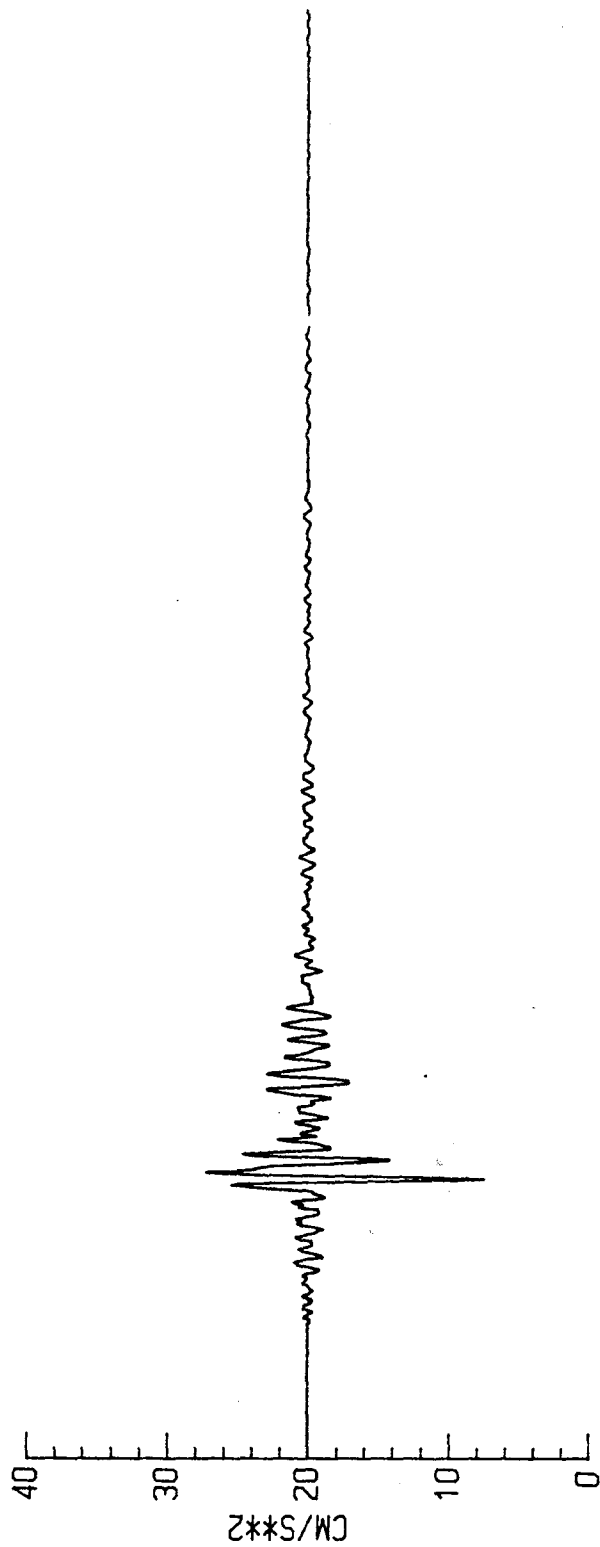
2690053B*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A130-388, 389, 390 83103/TS16 IEM 205

TIME:269 0053 05.706

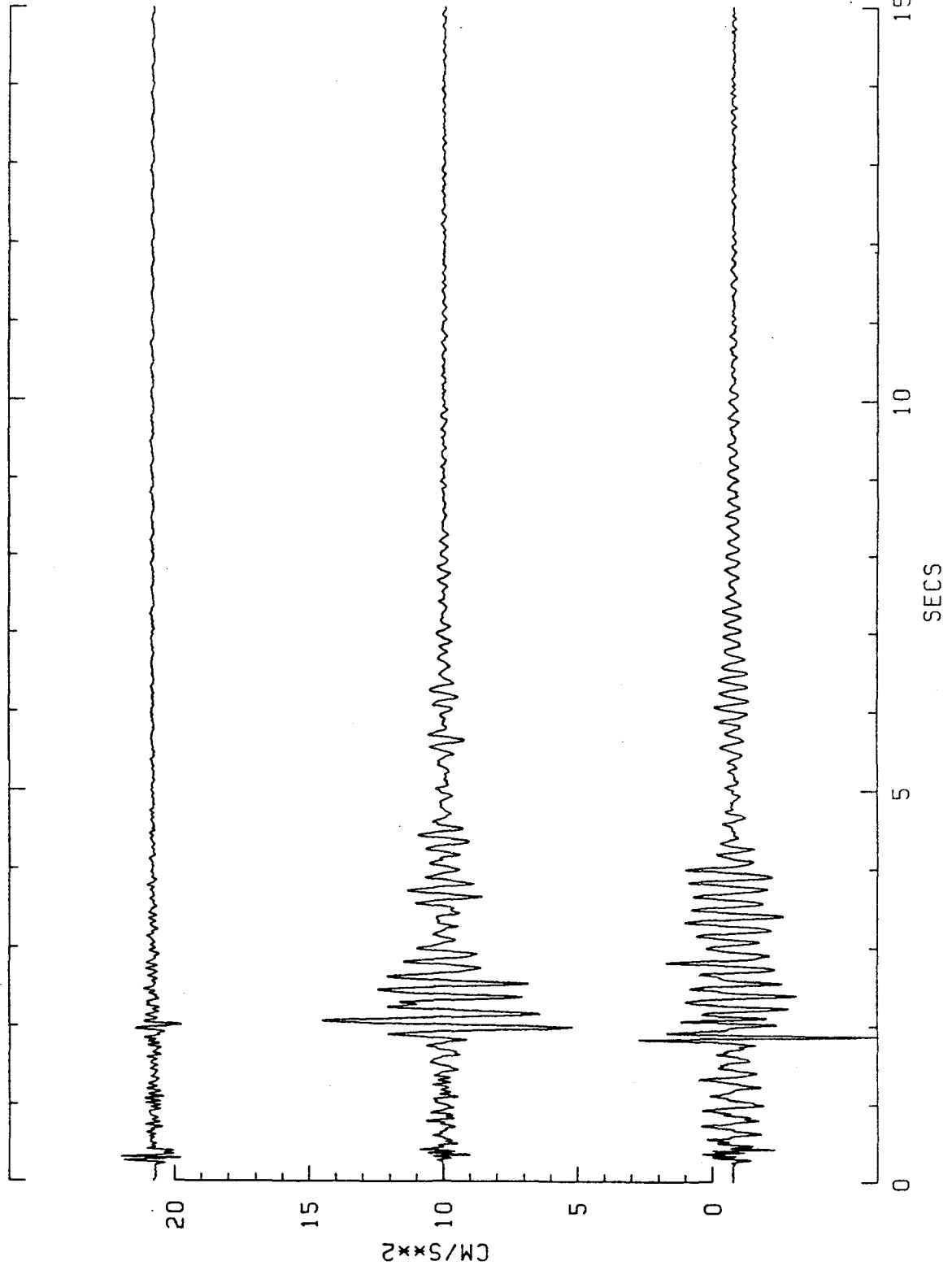
2690053B*.016 COMP:1[U P], 2[H=180], 3[H=270]



6A131-391, 392, 393 83103/TS17 IEM 178

TIME: 269 0053 07.420

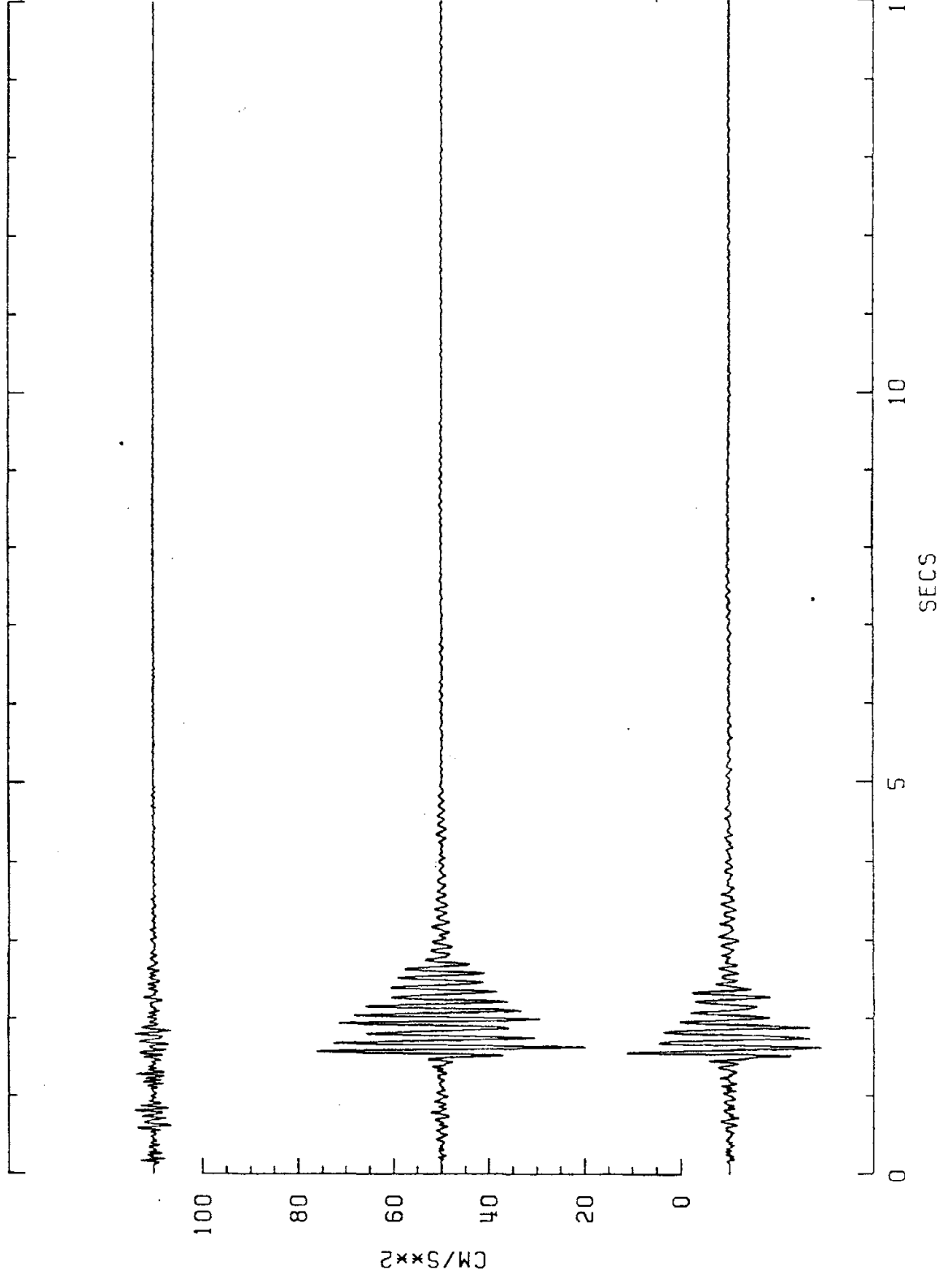
2690053B*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A132-394, 395, 396 83103/TS18 IEM 179

TIME: 269 0053 07.648

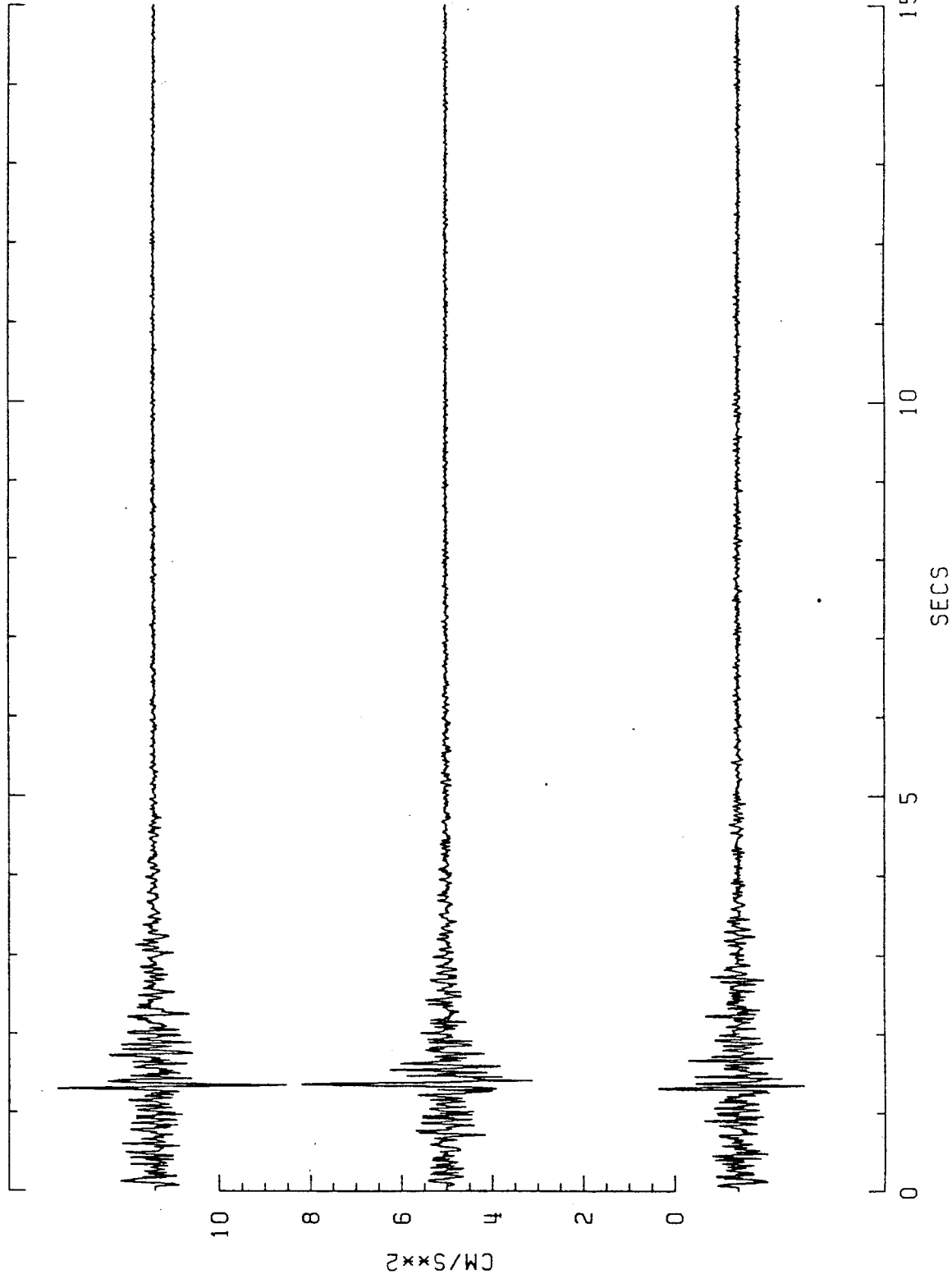
2690053B*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A133-397, 398, 399 83103/TS19 IEM 180

TIME: 269 0053 07.283

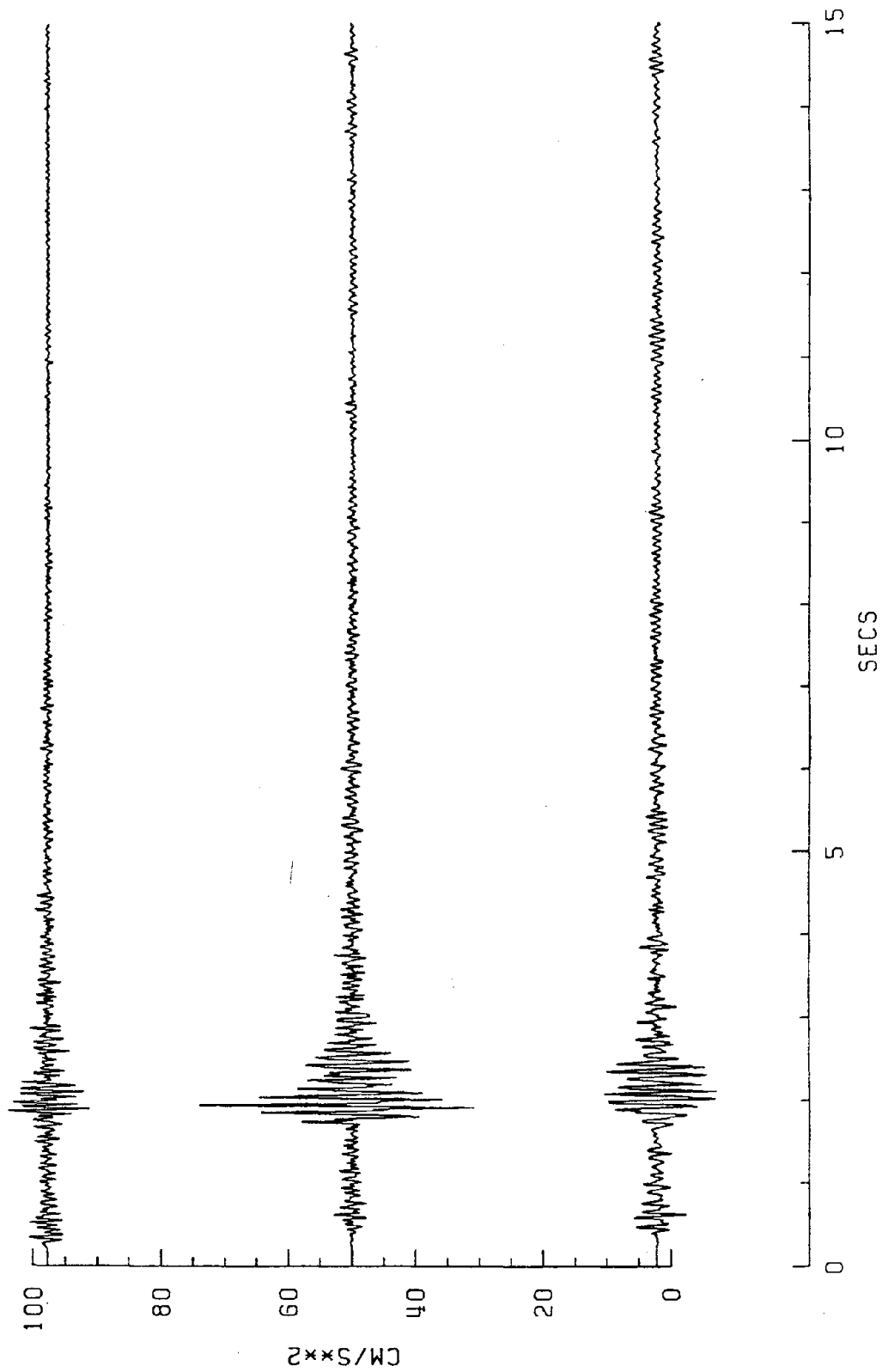
2690053B*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A134-400, 401, 402 83104/TS01 IEM 043

TIME: 269 0625 41.079

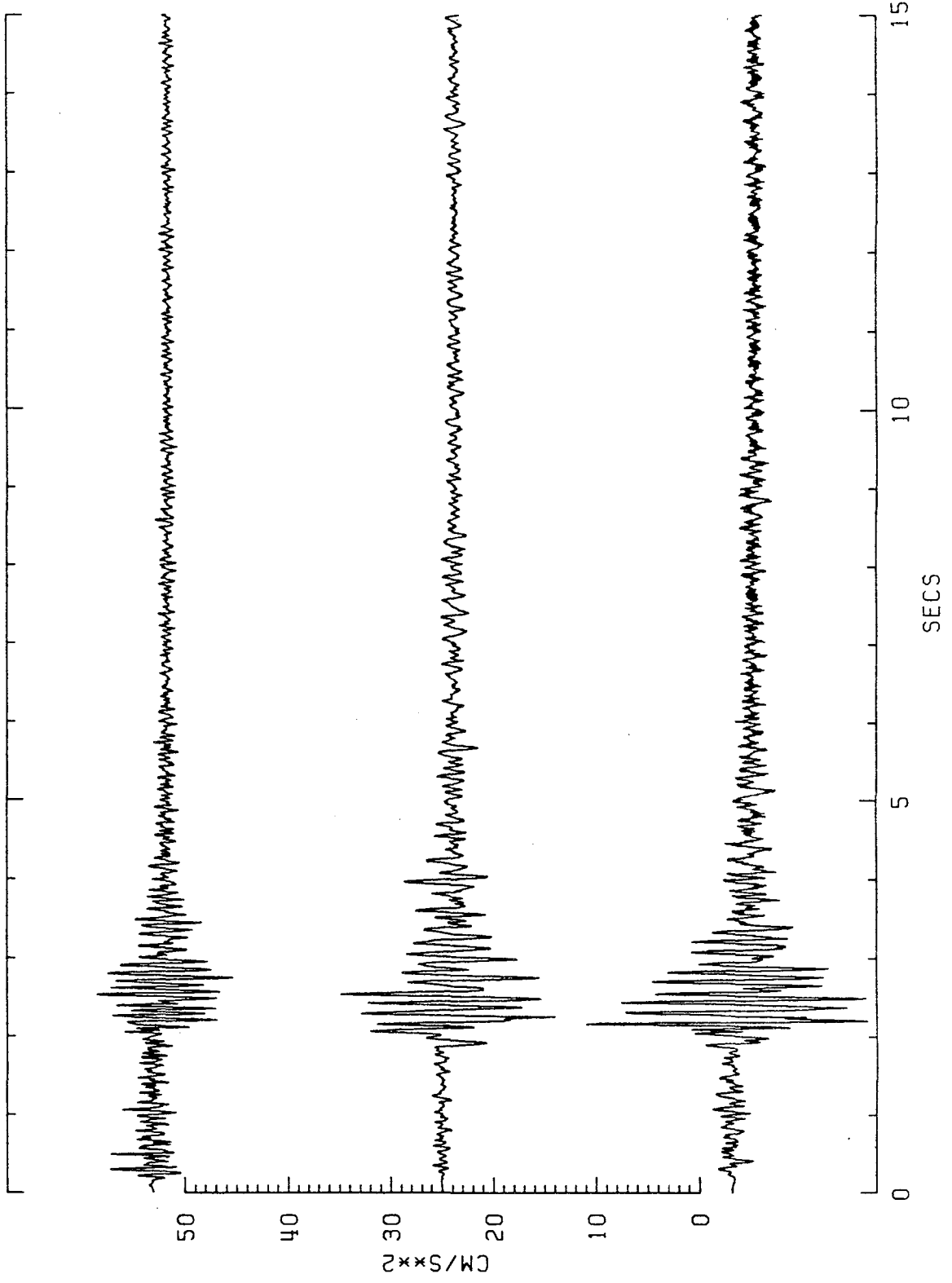
2690625N*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A135-403, 404, 405 83104/TS02 IEM 044

TIME: 269 0625 42.286

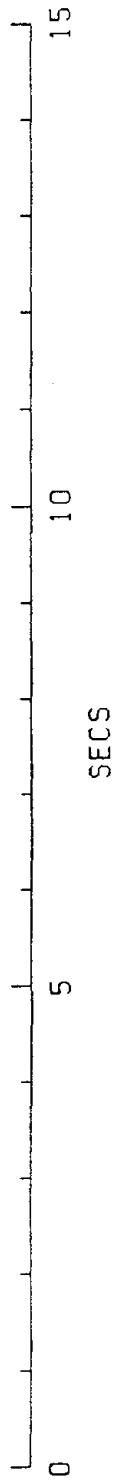
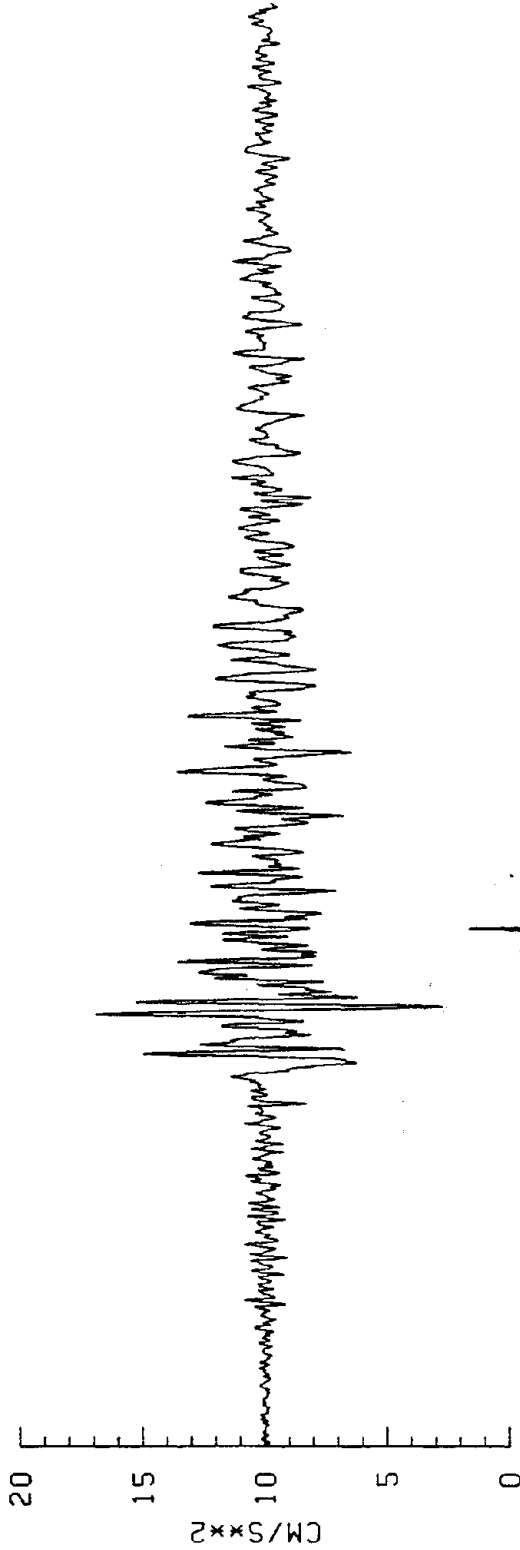
2690625N*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A136-406, 407, 408 83104/TS03 IEM 045

TIME: 269 0625 42.004

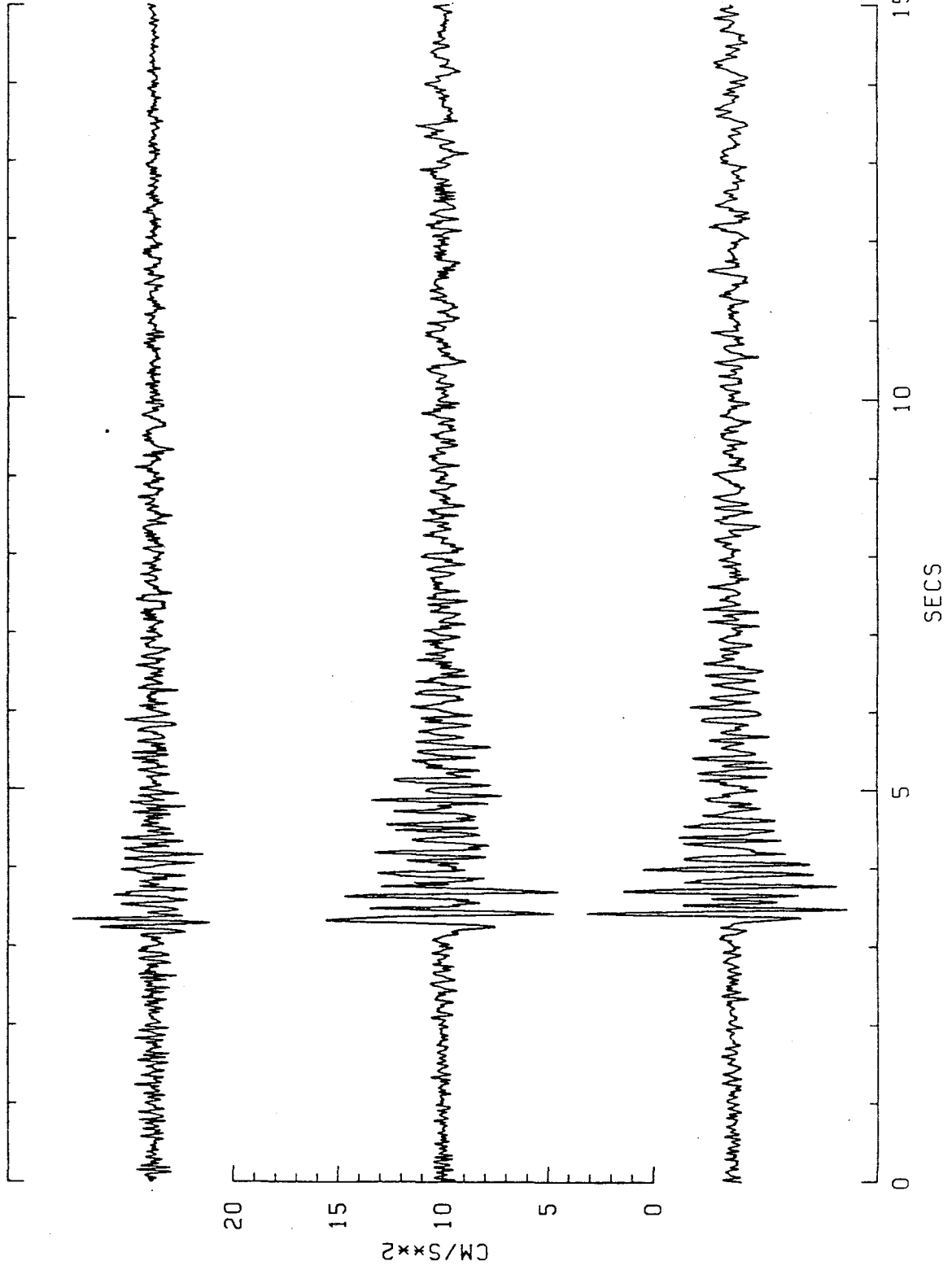
26906250*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A137-409, 410, 411 83104/TS07 IEM 046

TIME: 269 0625 44.985

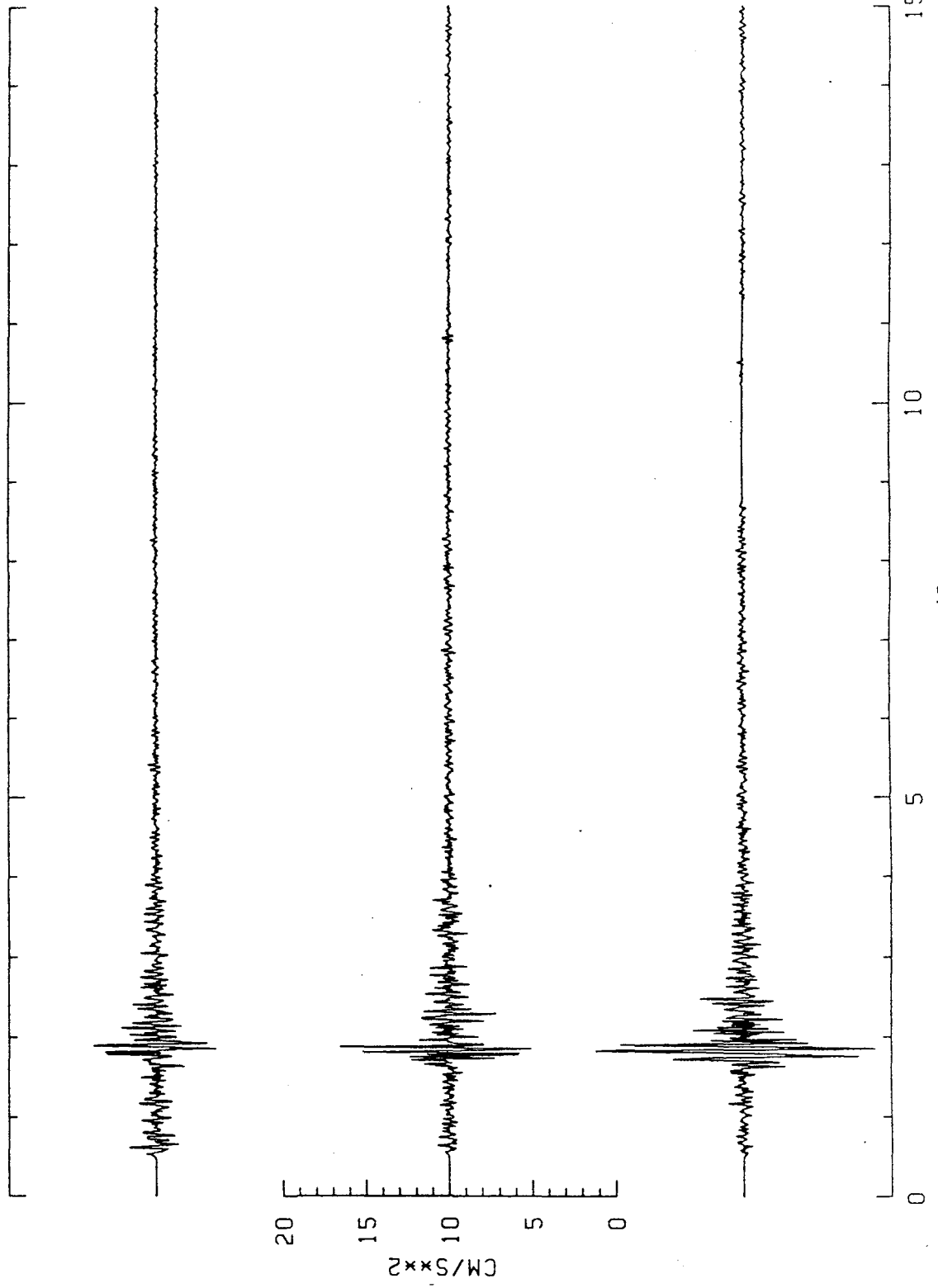
26906250*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A138-412, 413, 414 83104/TS15 IEM 047

TIME: 269 0625 39.855

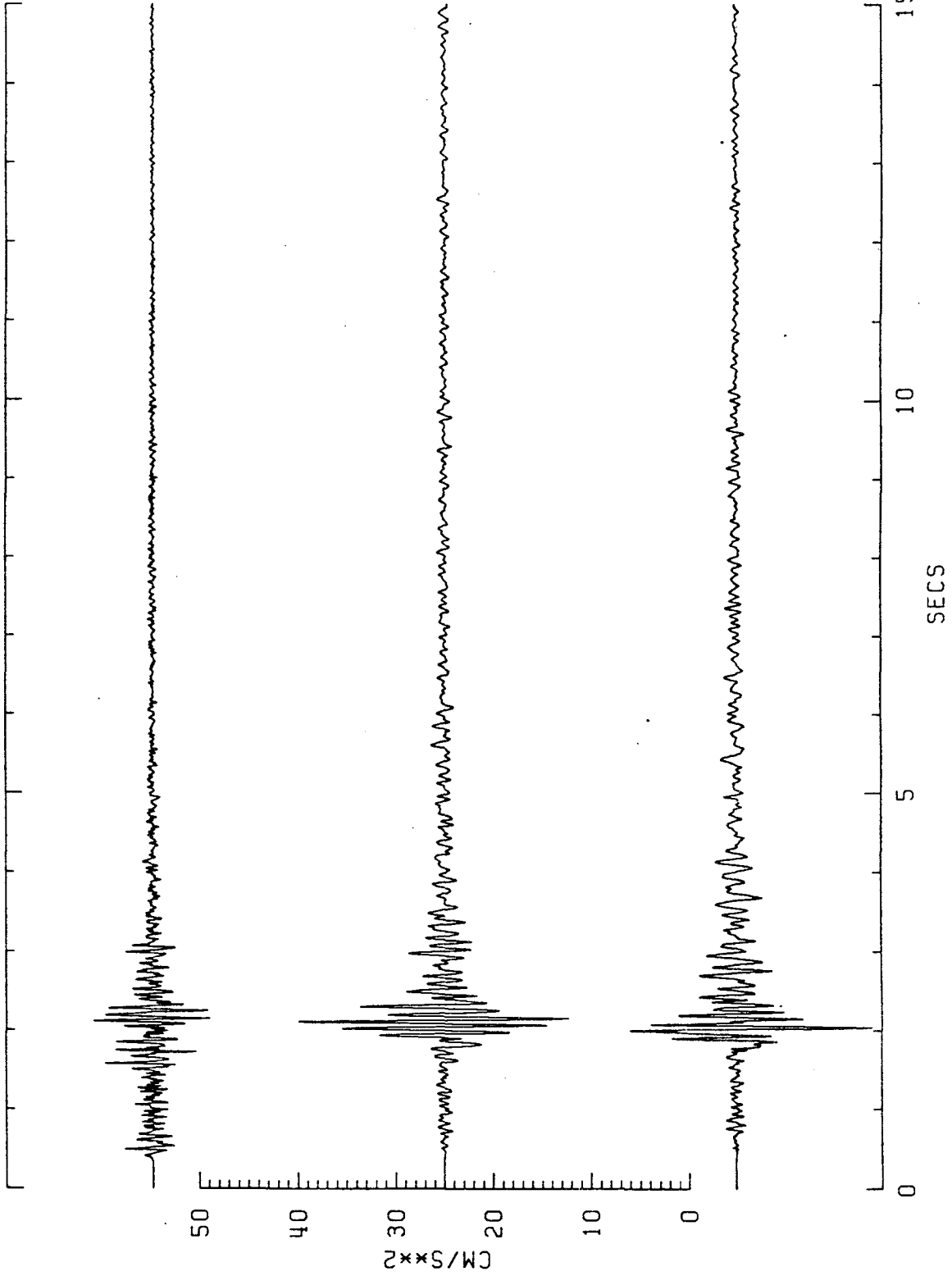
2690625M*.015 COMP: 1 (UP) , 2 (H=90) , 3 (H=180)



6A139-415,416,417 83104/TS16 IEM 048

TIME: 269 0625 40.224

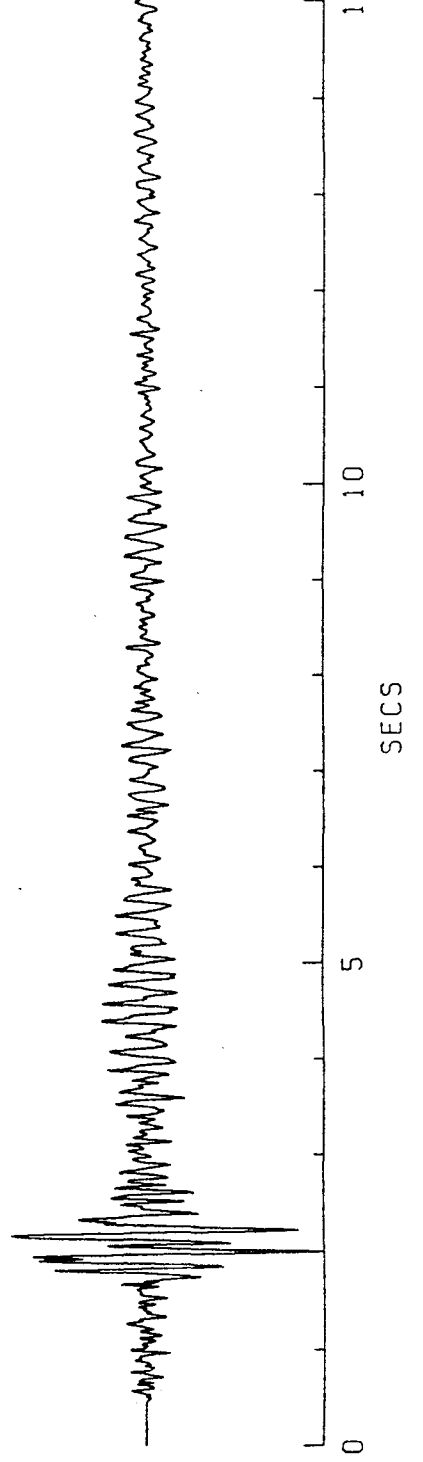
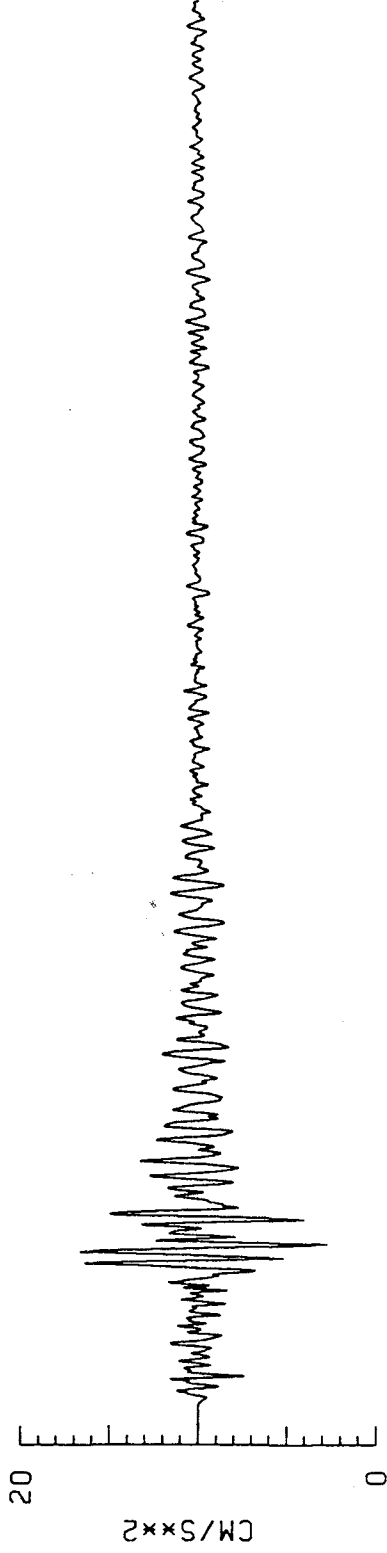
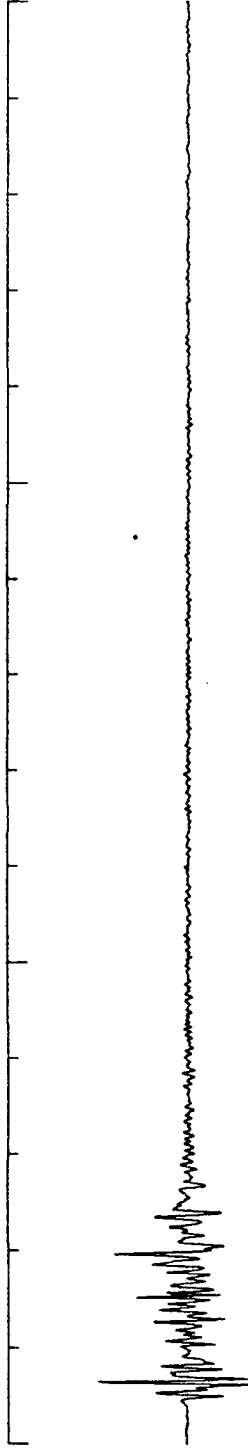
2690625M*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A140-418, 419, 420 83104/TS17 IEM 049

TIME: 269 0625 40.480

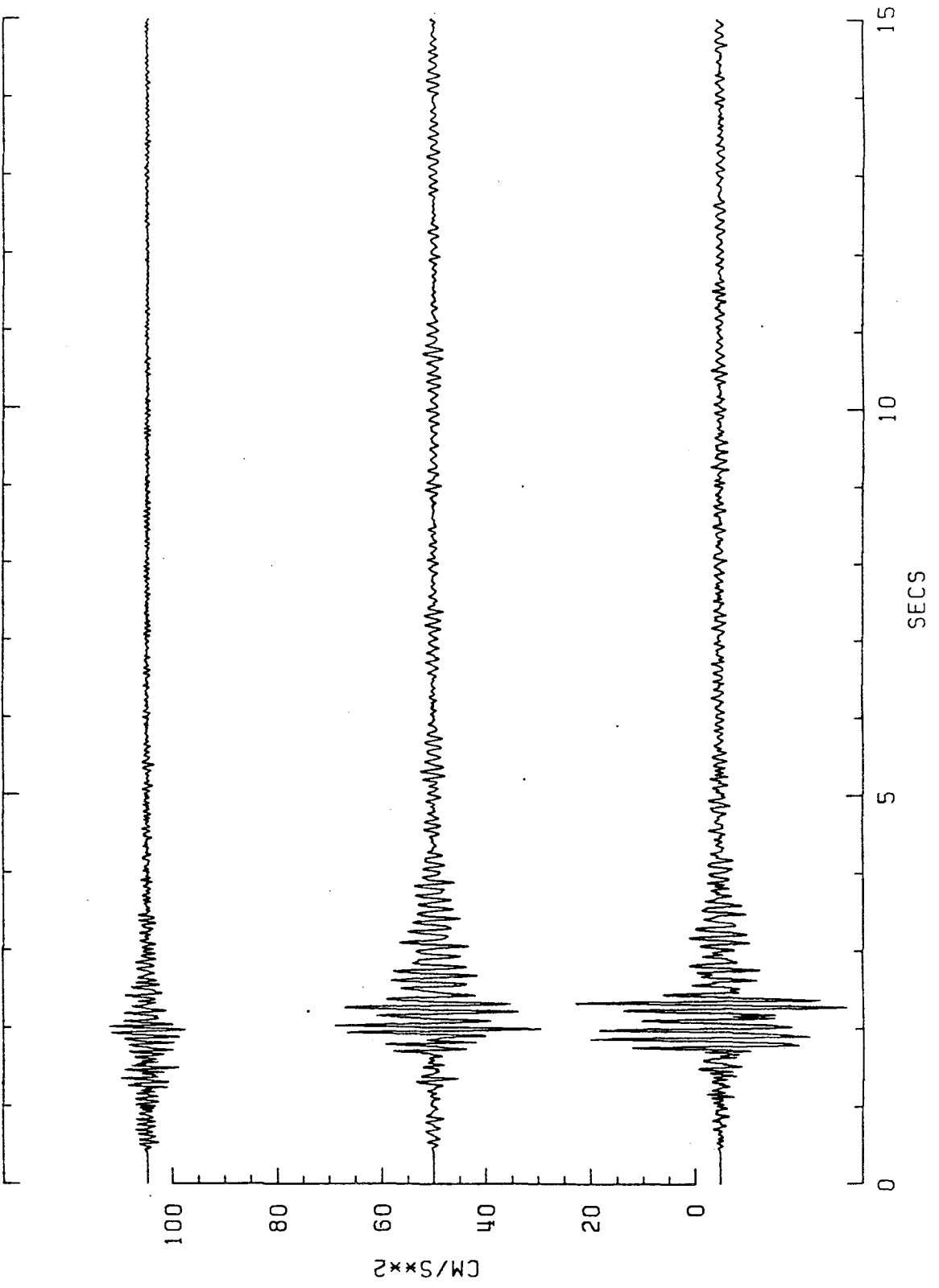
2690625M*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A141-421, 422, 423 83104/TS18 IEM 050

TIME: 269 0625 40.918

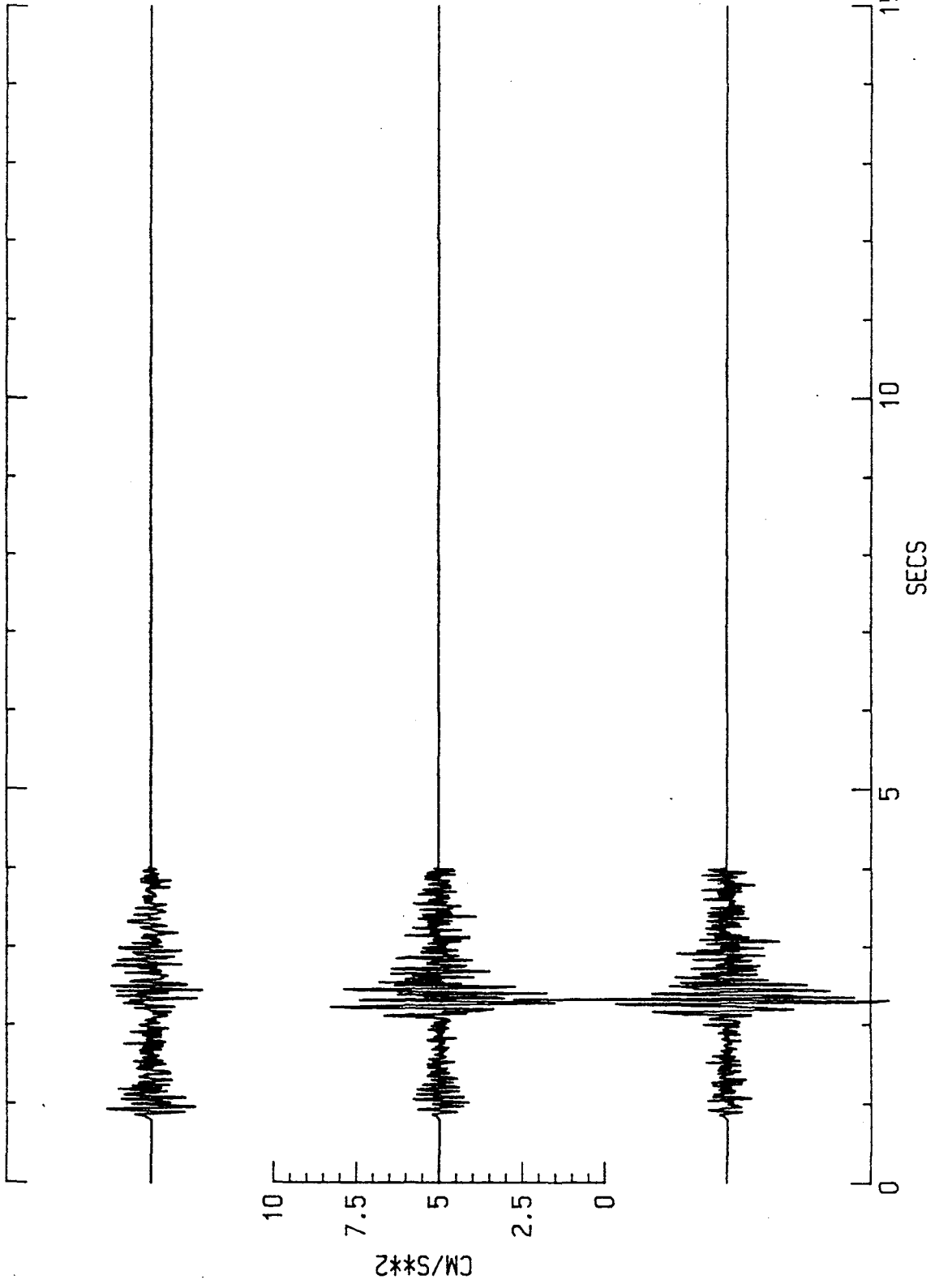
2690625M*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A142-424, 425, 426 83104/TS19 IEM 051

TIME:269 0625 40.254

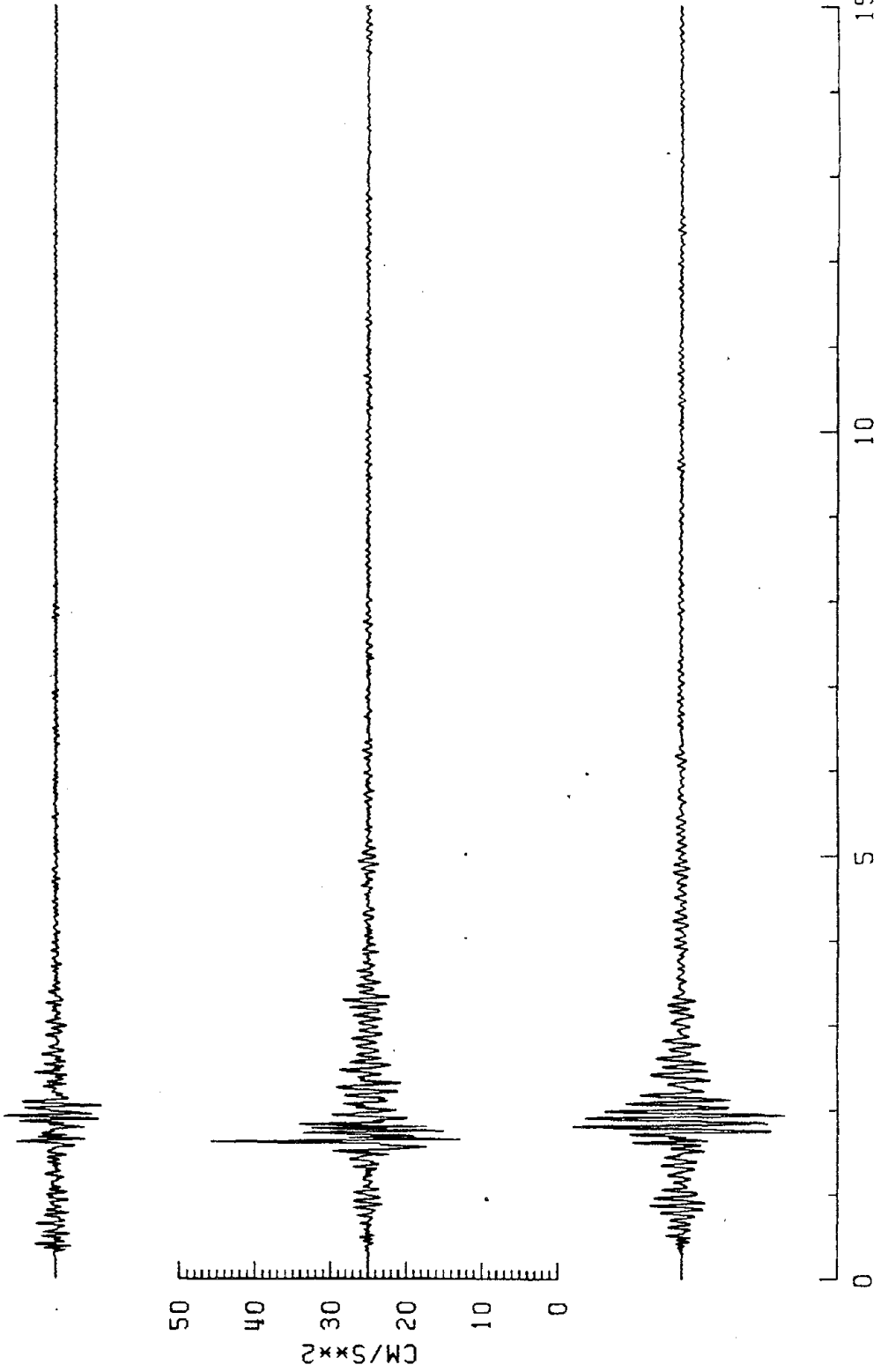
2690625M*.019 COMP:1[UP], 2[H=0], 3[H=90]



6A143-427, 428, 429 83108/TS01 IEM 181

TIME: 275 0731 56.601

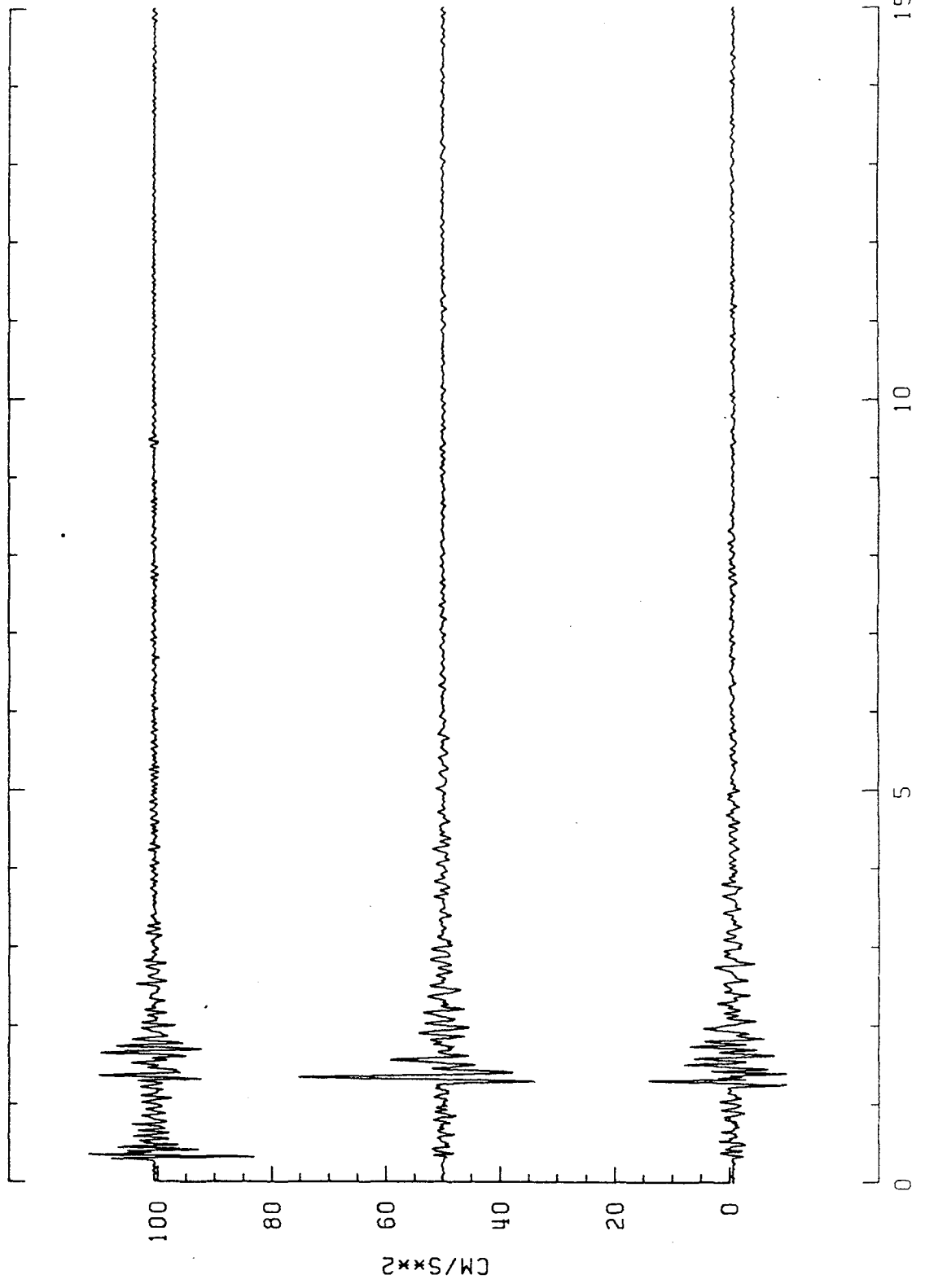
2750731S*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A144-430, 431, 432 83108/TS02 IEM 182

TIME: 275 0731 56.652

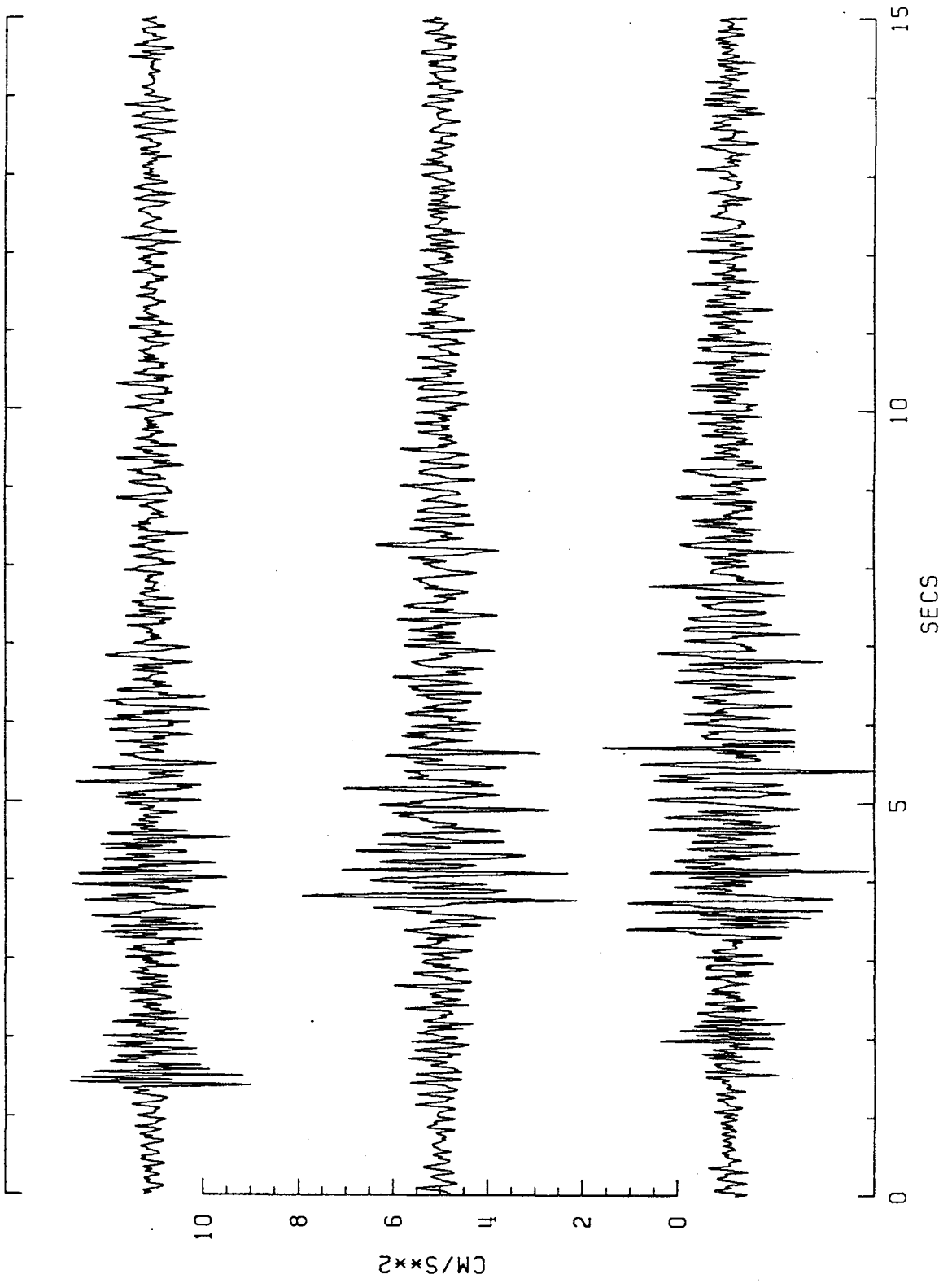
2750731S*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A145-433, 434, 435 83108/TS03 IEM 183

TIME: 275 0731 56.389

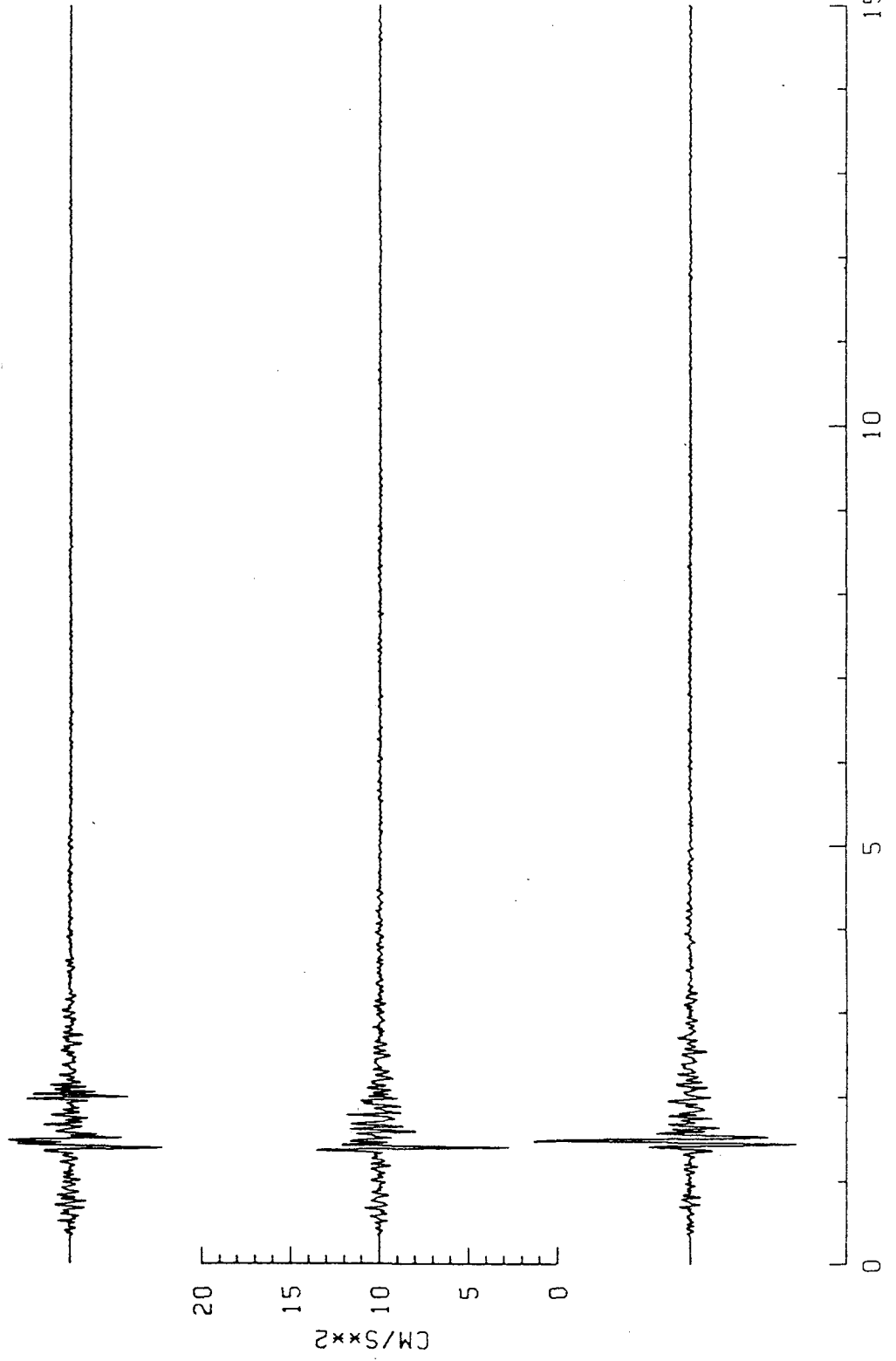
2750731S*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A146-436, 437, 438 83108/TS15 IEM 184

TIME: 275 0731 56.395

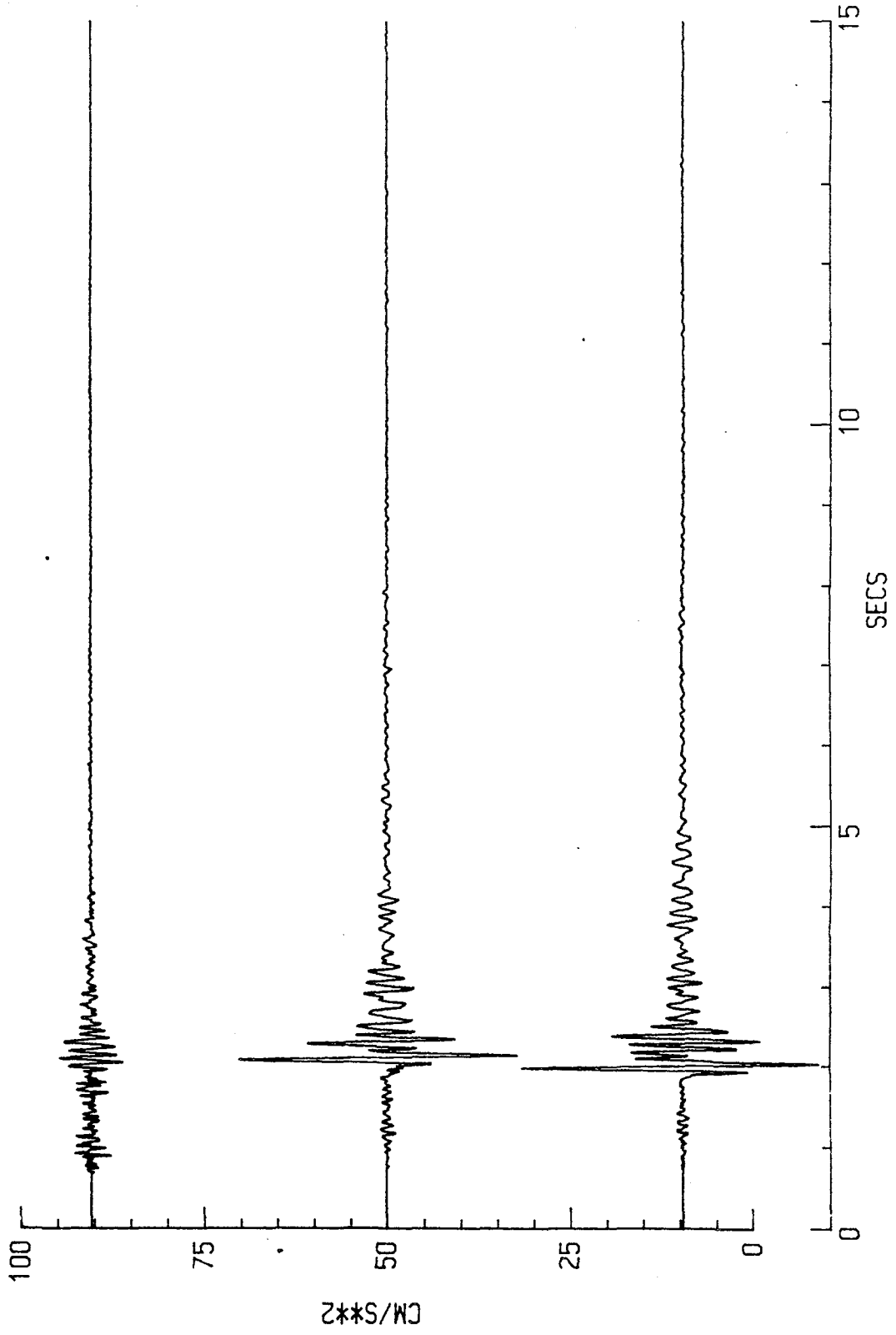
2750731S*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A147-439, 440, 441 83108/TS16 IEM 206

TIME: 275 0731 55.472

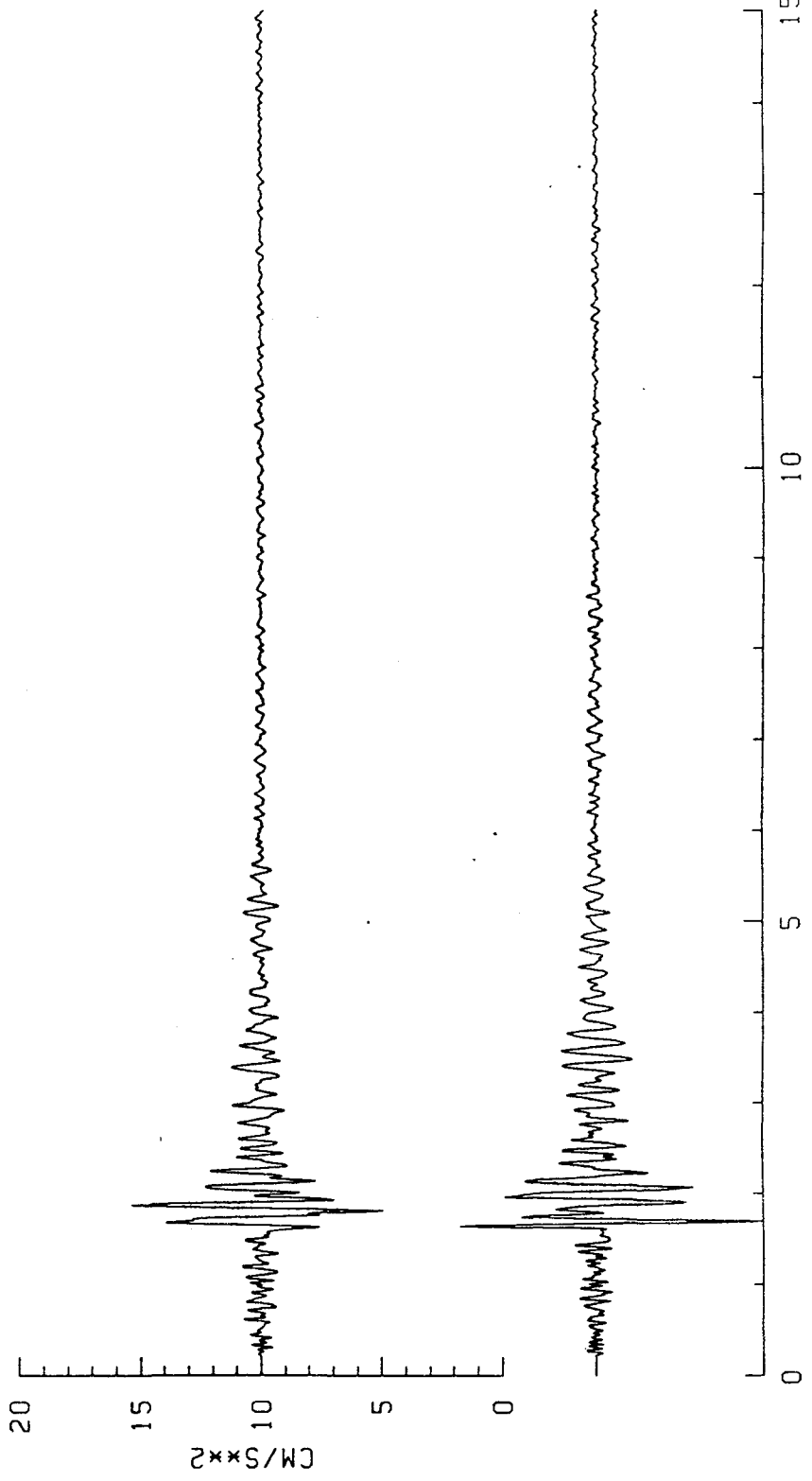
2750731S*.016 COMP: 1[UP], 2[H=180], 3[H=270]



6A148-442, 443, 444 83108/TS17 IEM 185

TIME: 275 0731 57.660

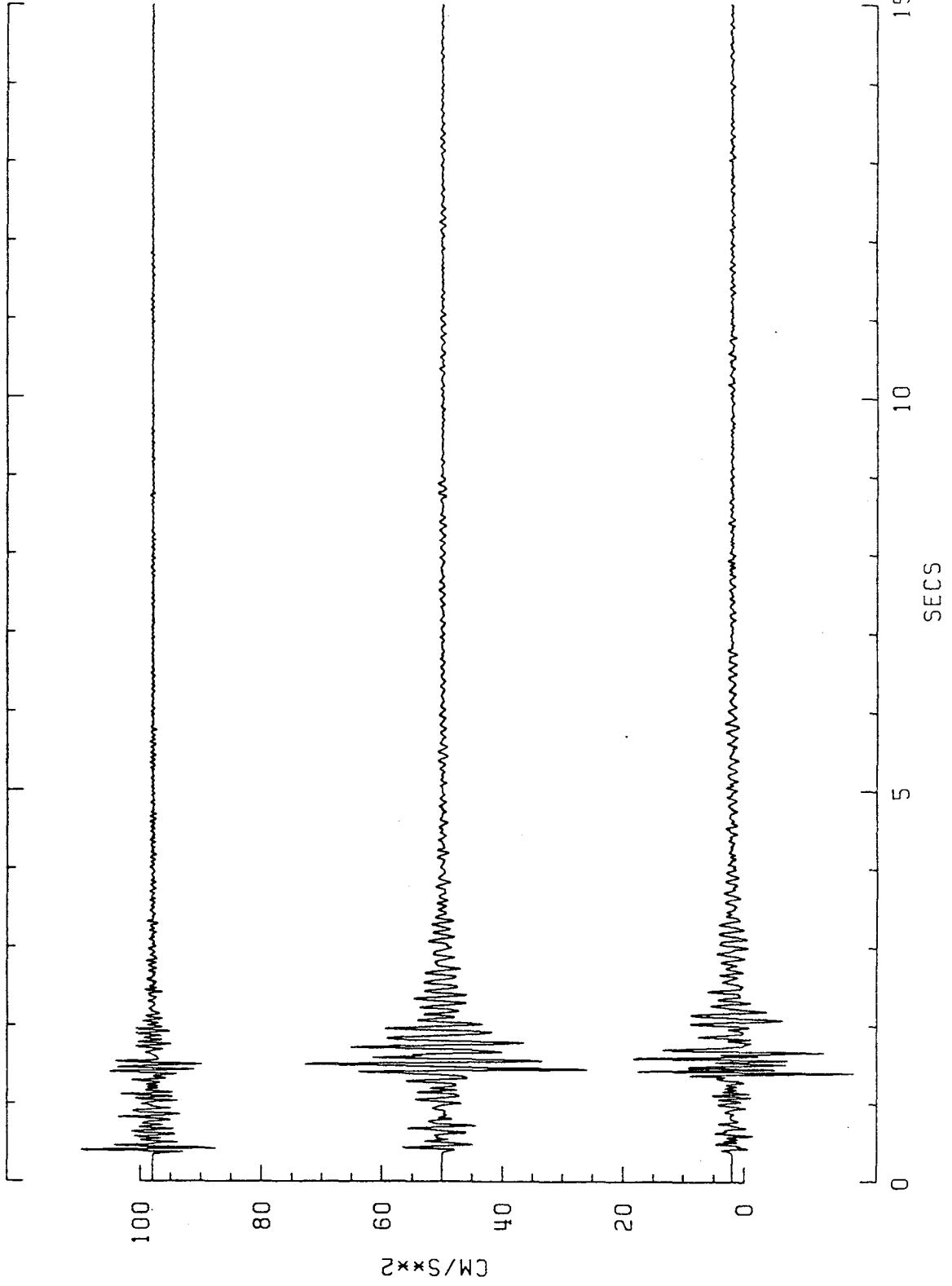
2750731S*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A149-445,446,447 83108/TS18 IEM 186

TIME: 275 0731 57.000

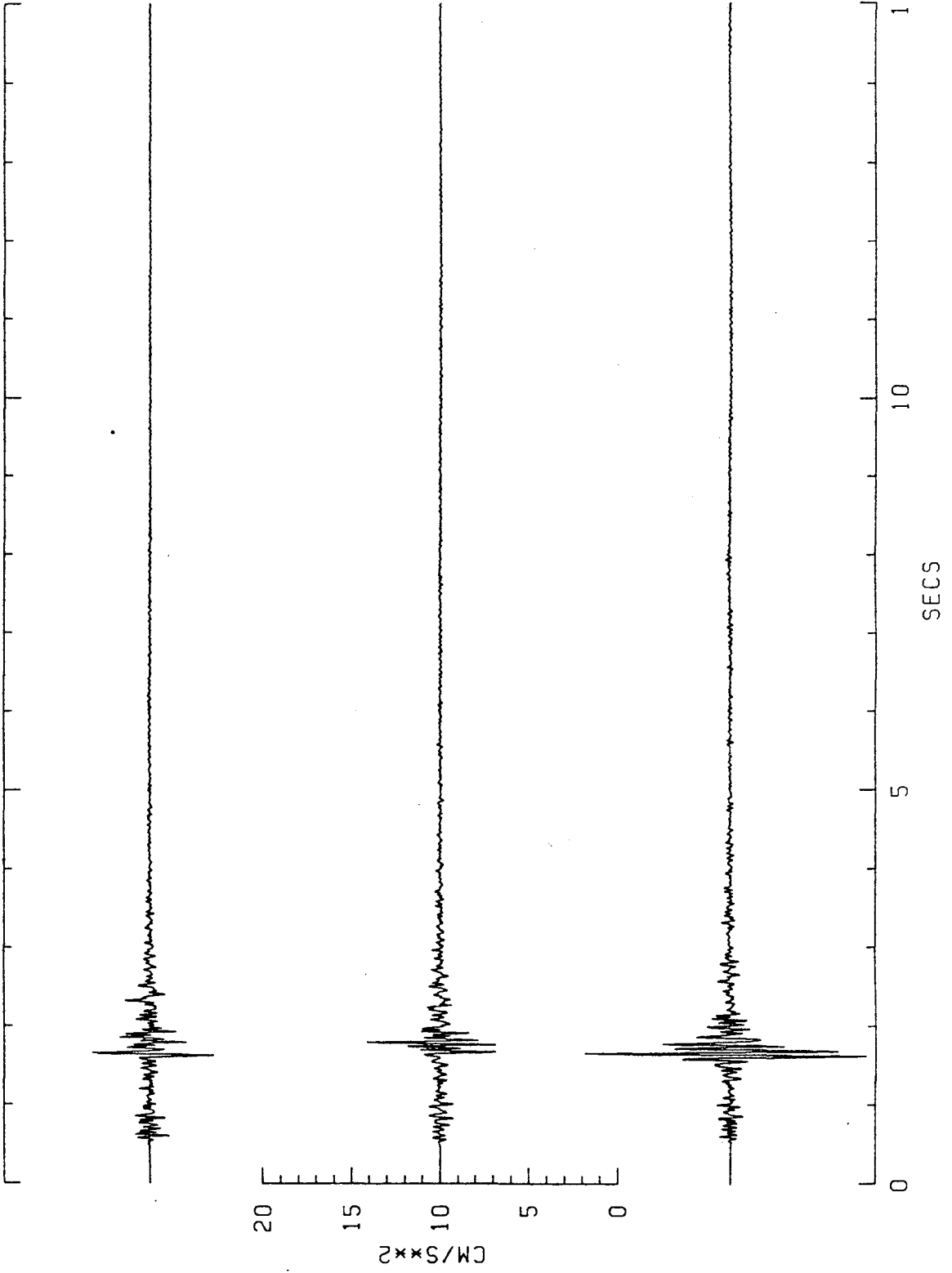
2750731S*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A150-448,449,450 83108/TS19 IEM 187

TIME: 275 0731 56.930

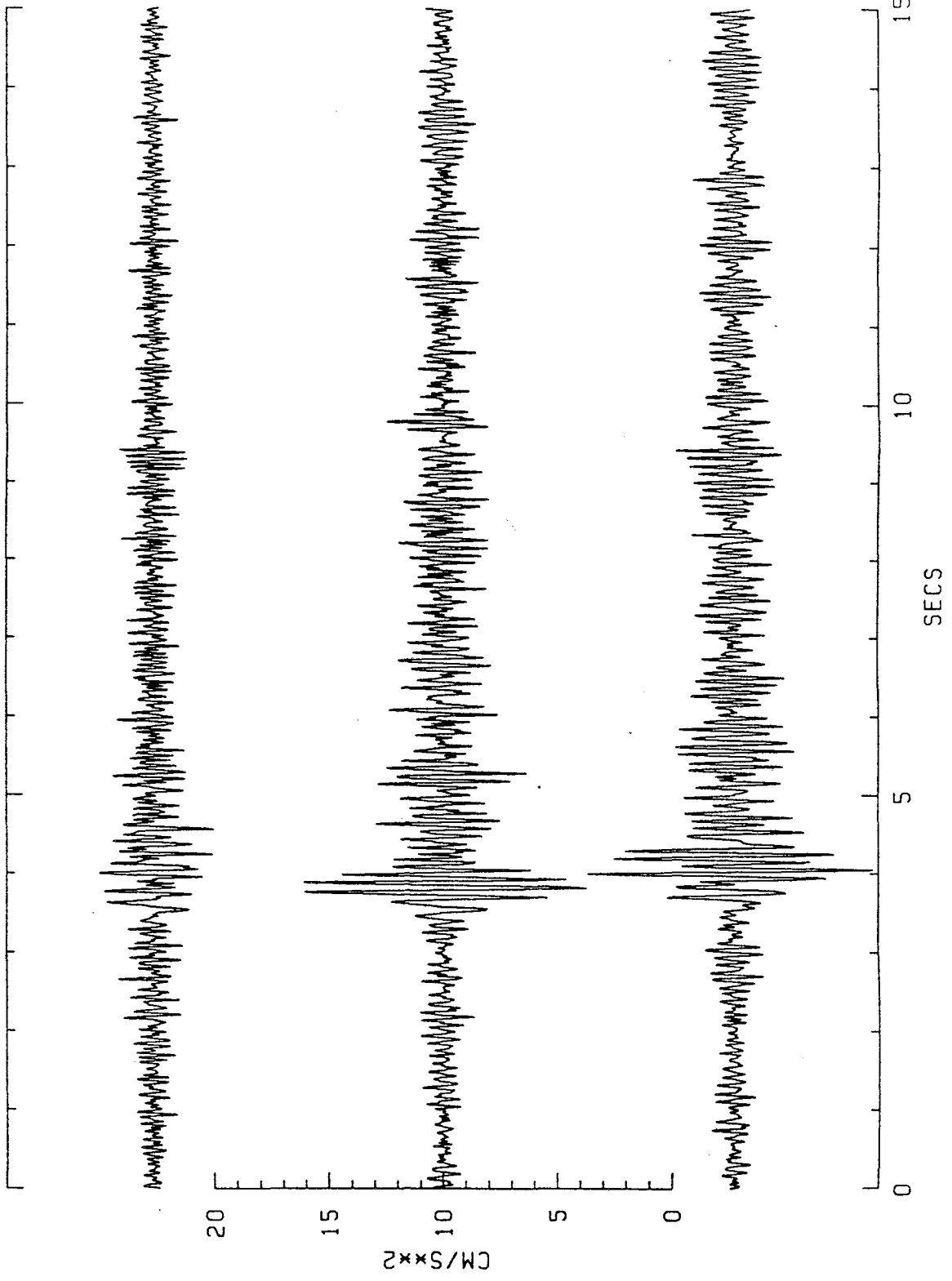
2750731S*.019 COMP: 1 (UP) , 2 (H=0) , 3 (H=90)



6A151-451, 452, 453 83111/TSO1 IEM 128

TIME: 278 0025 27.831

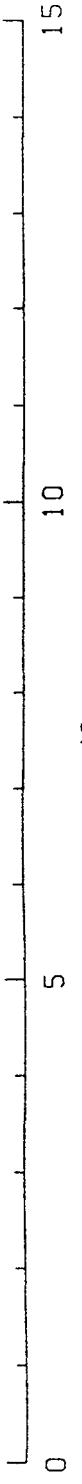
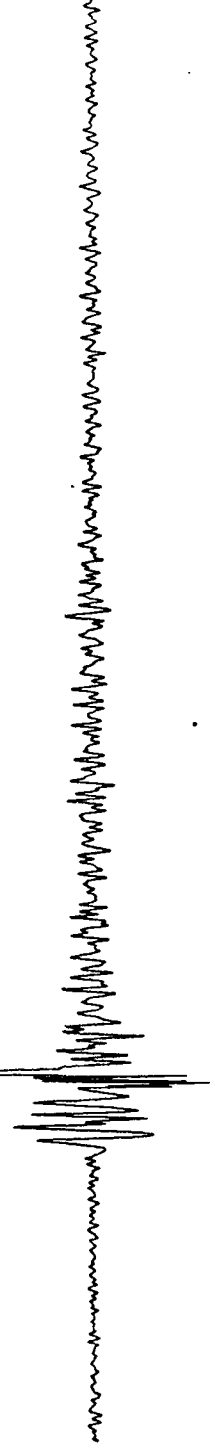
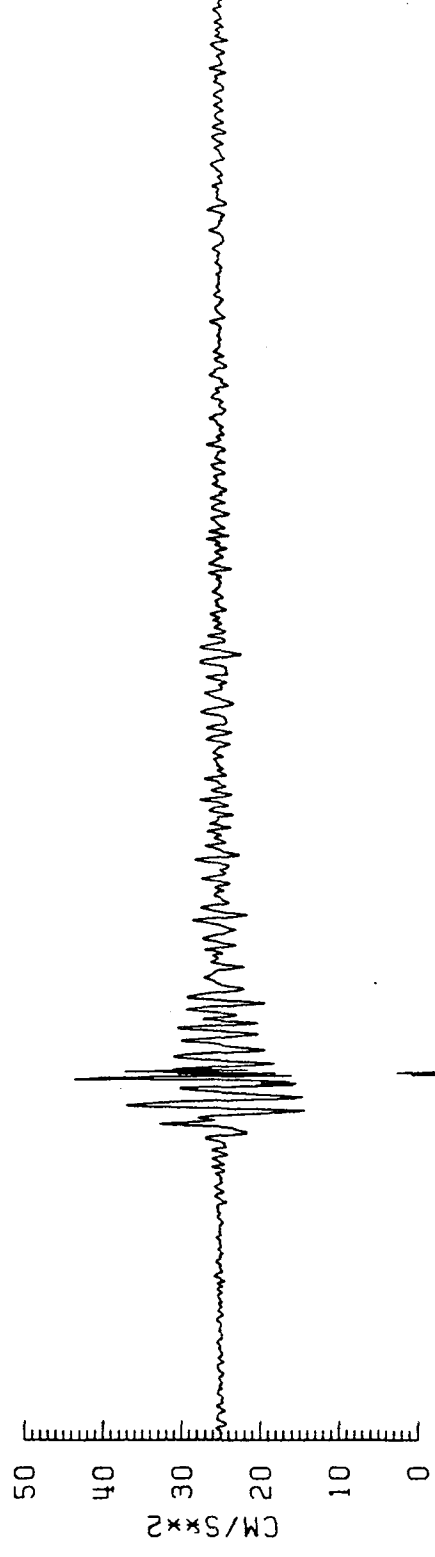
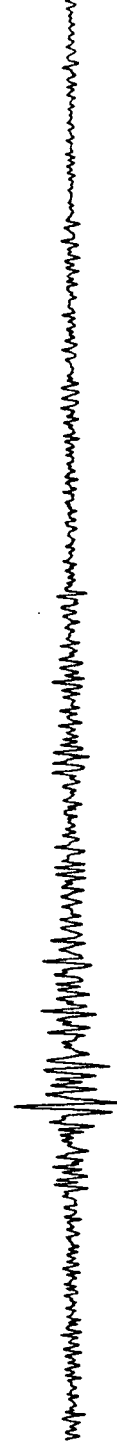
2780025J*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A152-454, 455, 456 83111/TS02 IEM 129

TIME: 278 0025 27.259

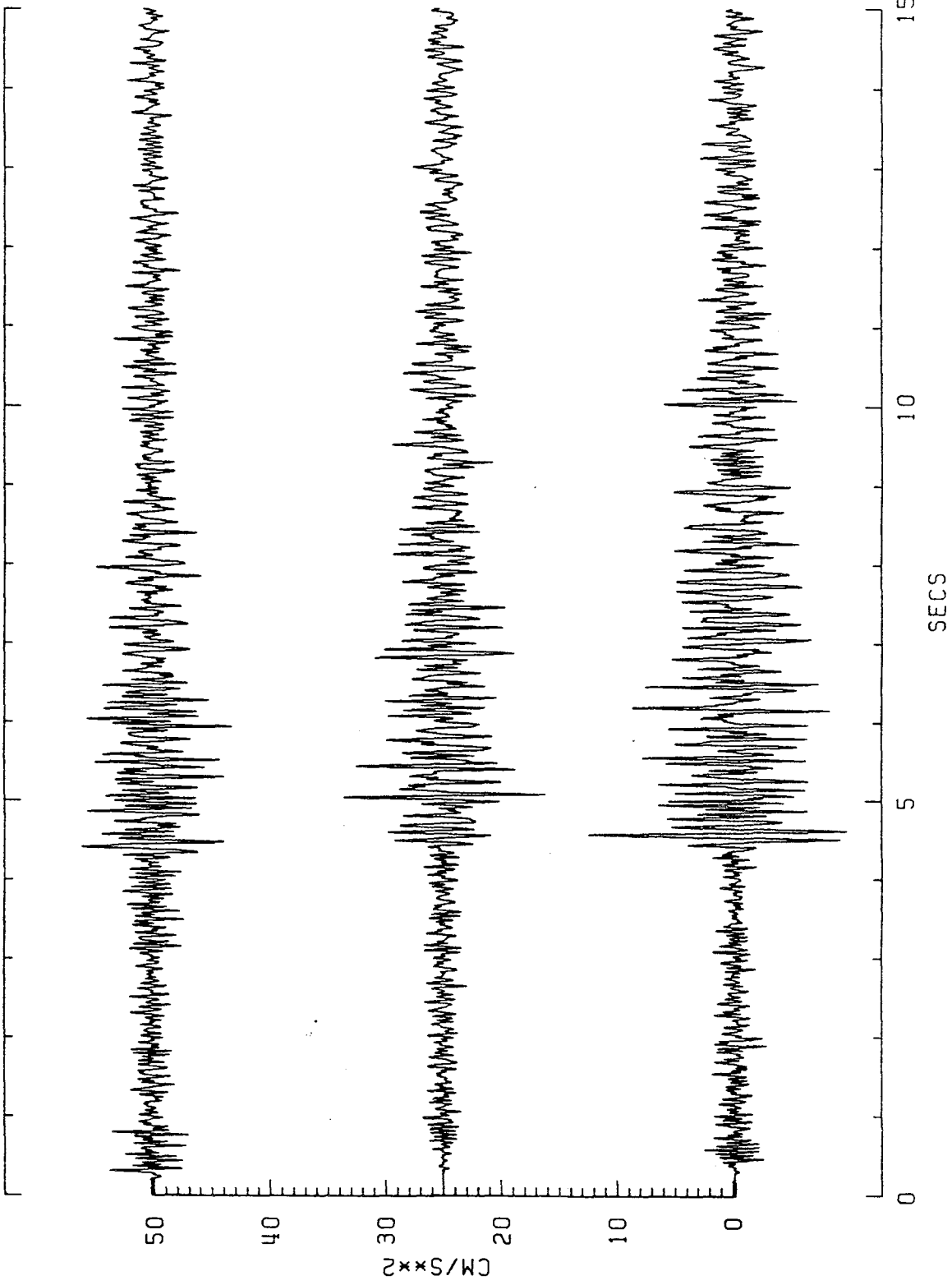
2780025J*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A153-457, 458, 459 83111/TS03 IEM 109

TIME: 278 0025 23.404

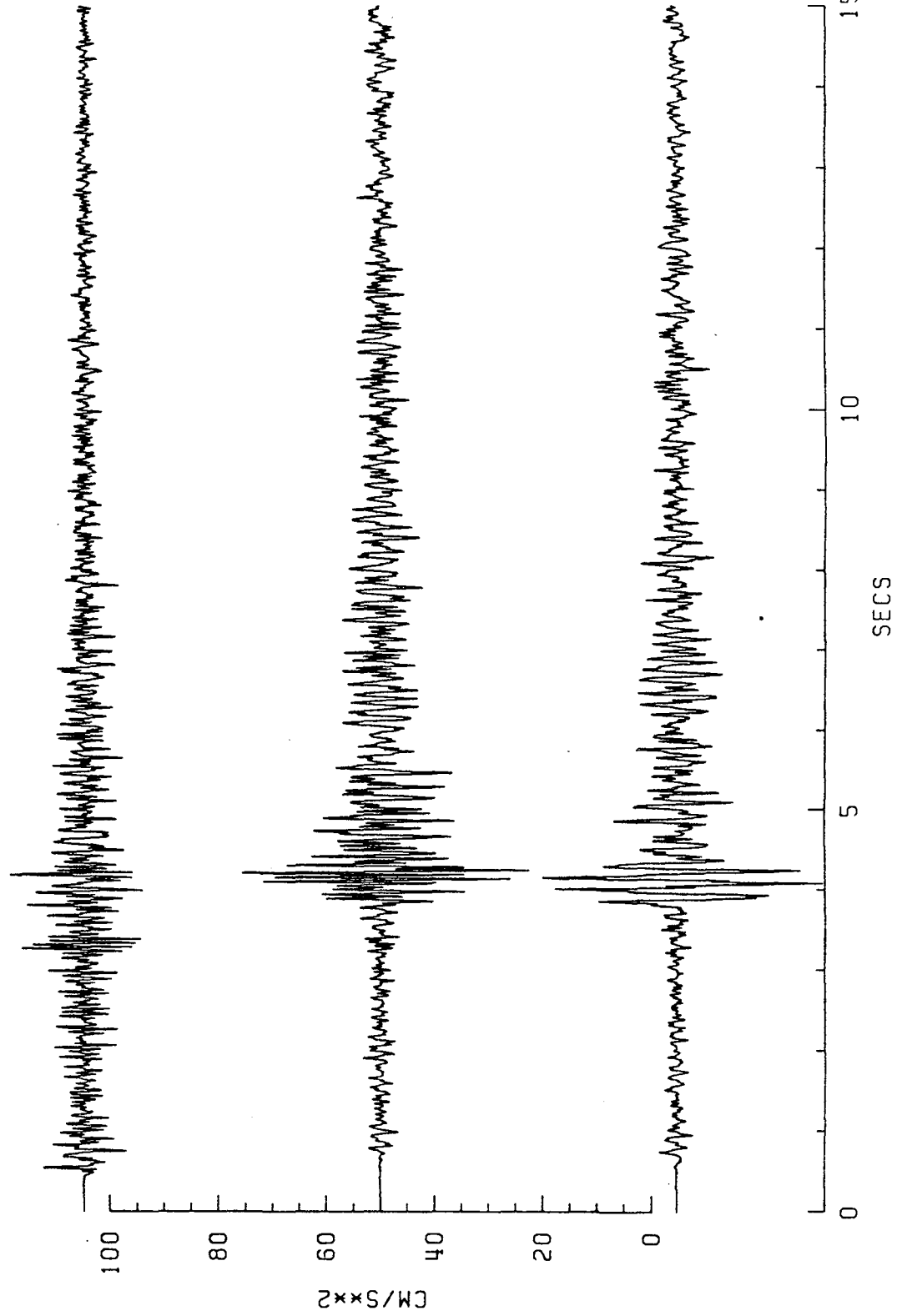
2780025G*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A154-460,461,462 83111/TS07 IEM 111

TIME: 278 0025 22.249

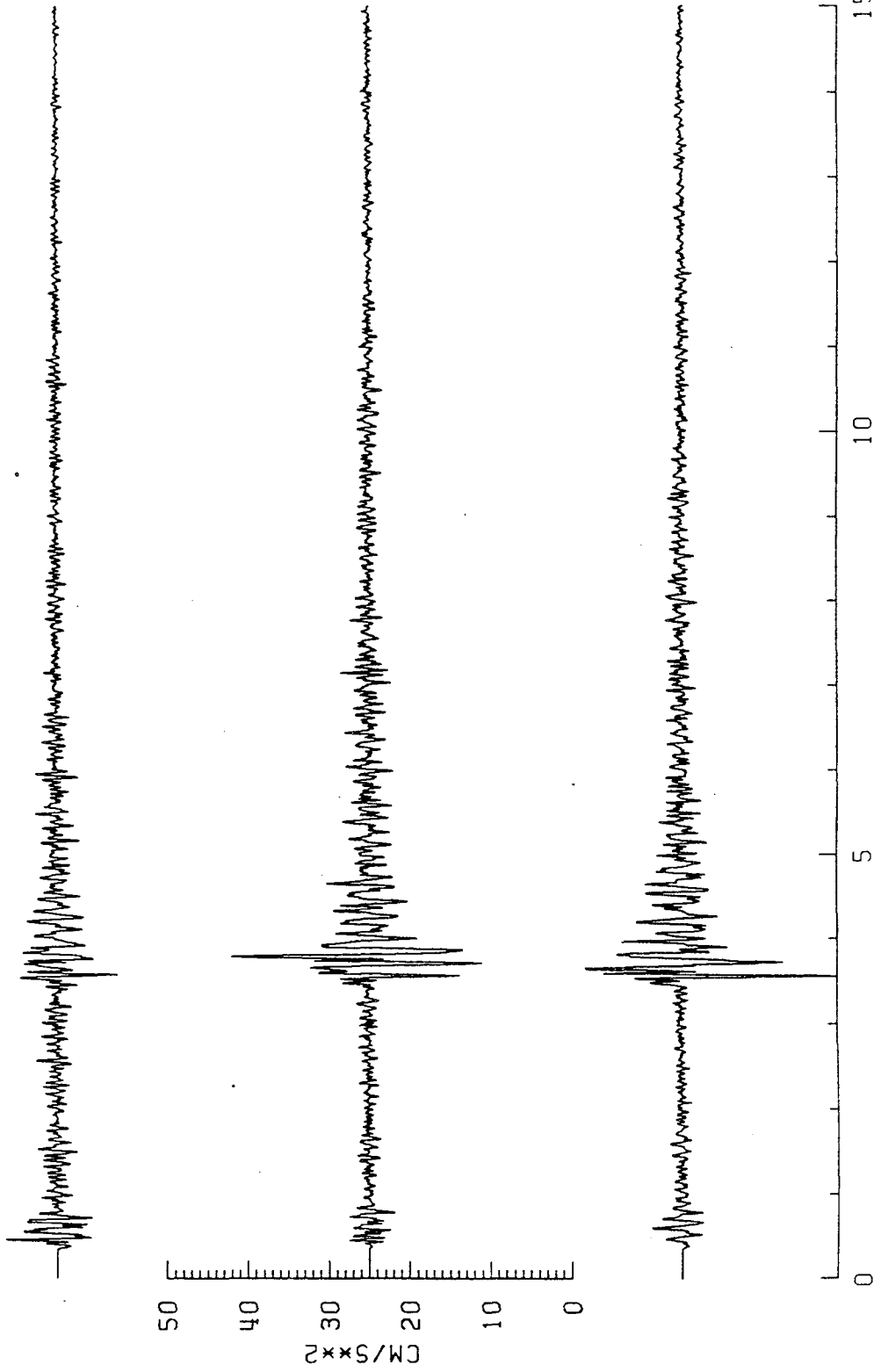
27800250*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A155-463, 464, 465 83111/TS08 IEM 126

TIME: 278 0025 22.519

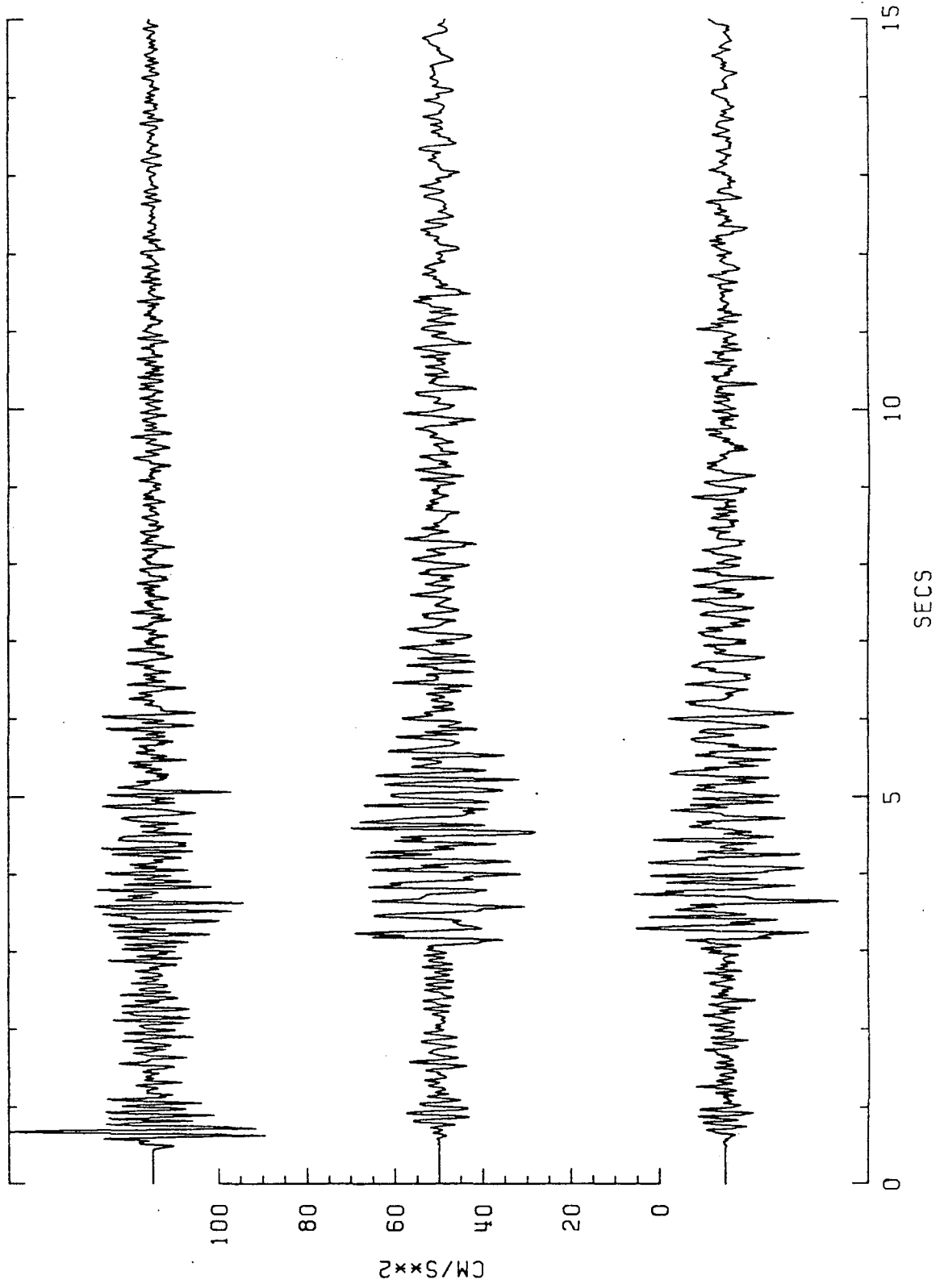
2780025G*.008 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A156-466, 467, 468 83111/TS10 IEM 127

TIME: 278 0025 21.235

2780025G*.010 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A157-469,470,471 83111/TS18 IEM 110

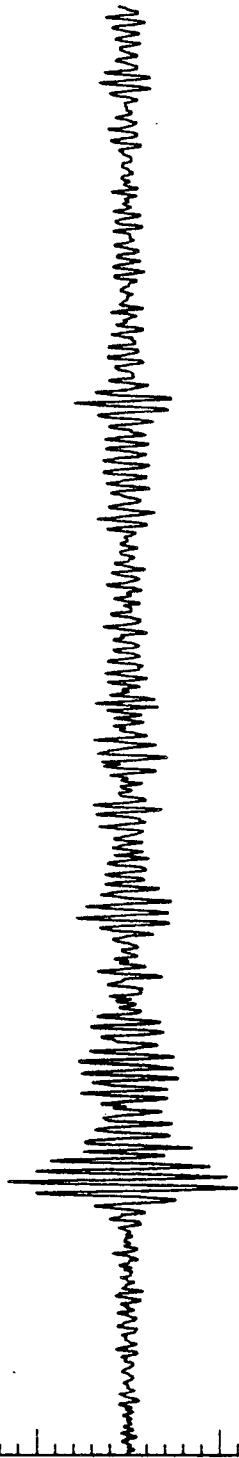
TIME:278 0025 29.658

2780025J*.018 COMP:1[UP],2[H=0],3[H=90]



20
15
10
5
0

CM/S**2



SECS

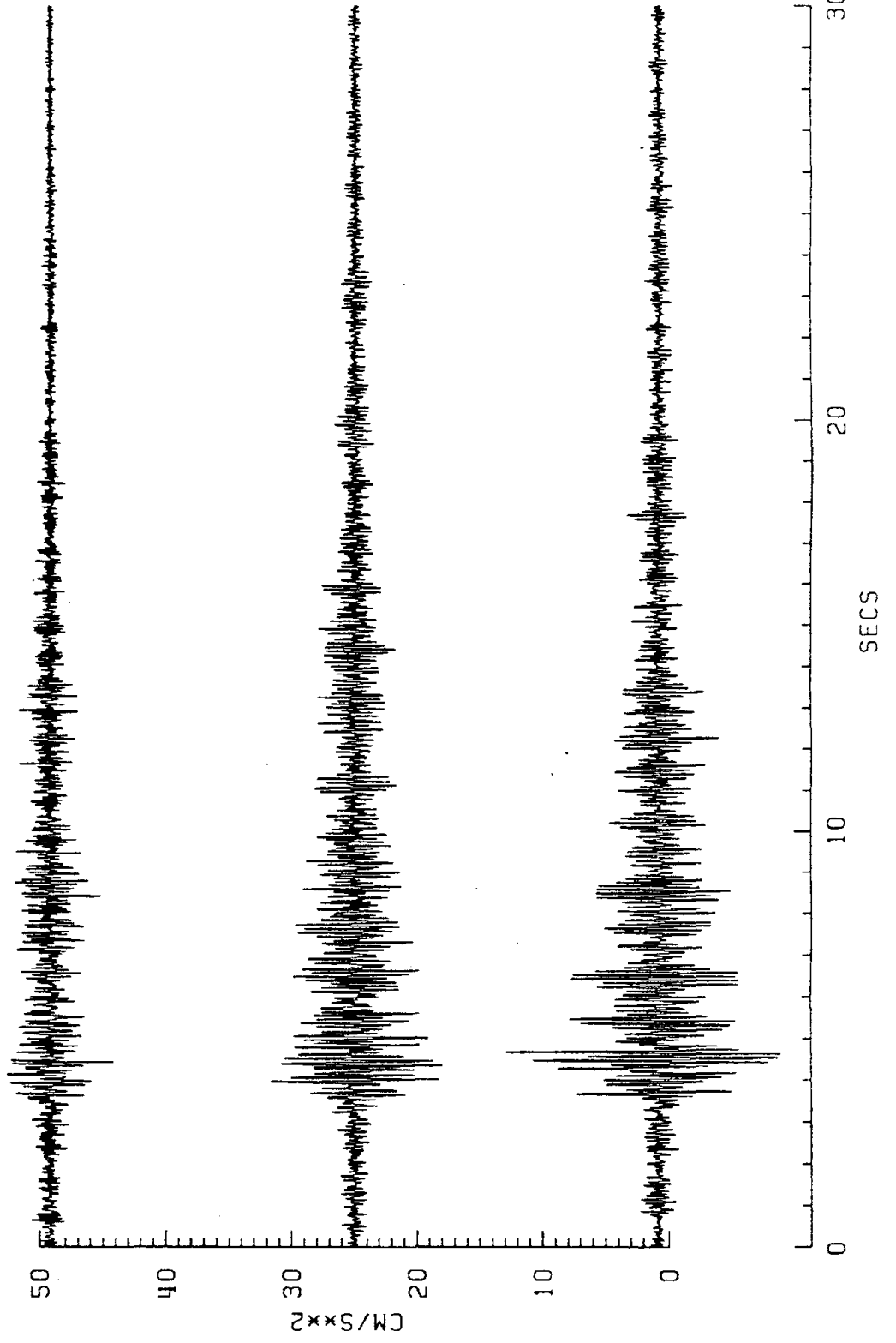
15
10
5
0



6A158-472,473,474 84006/TS01 IEM 052

TIME: 007 1918 29.413

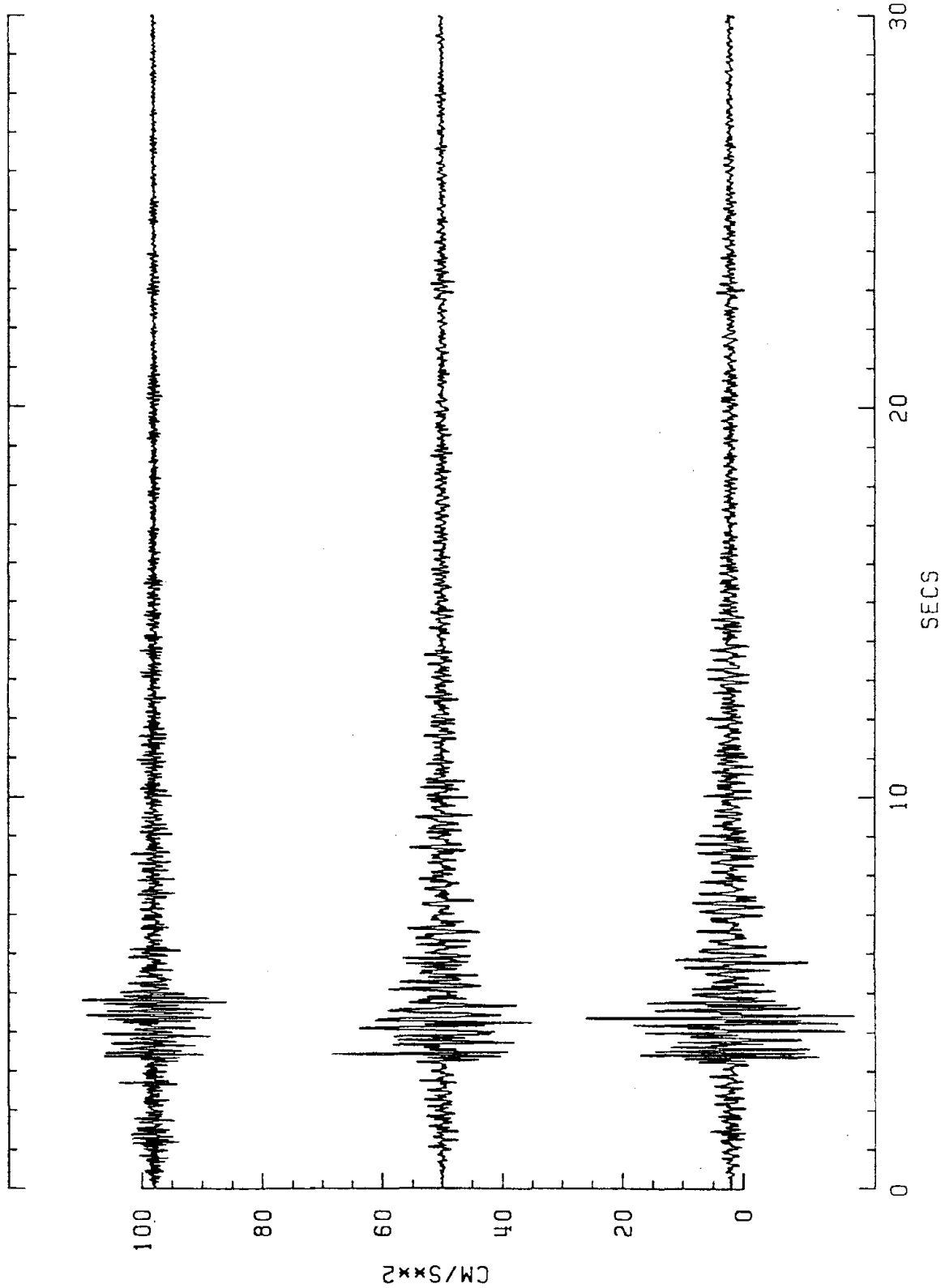
0071918J*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A159-475,476,477 84006/TS02 IEM 053

TIME: 007 1918 27.751

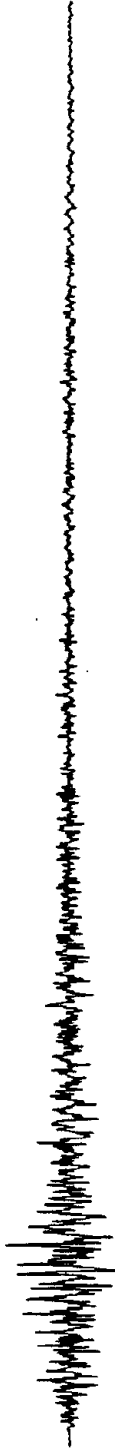
0071918J*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A160-478, 479, 480 84006/TS03 IEM 054

TIME: 007 1918 25.547

0071918H*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)

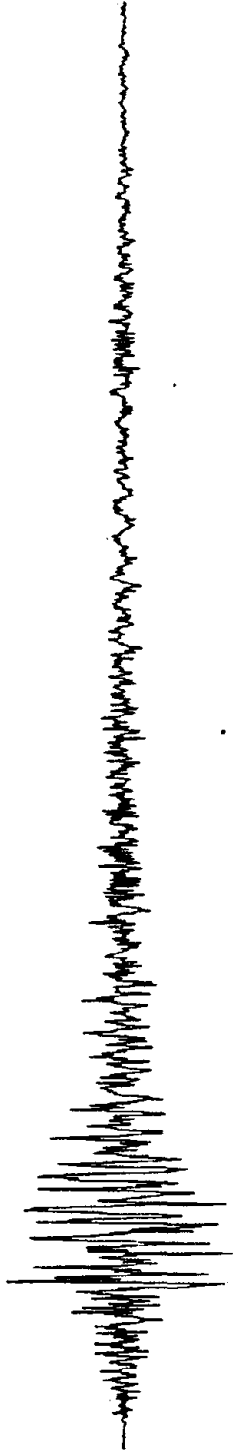
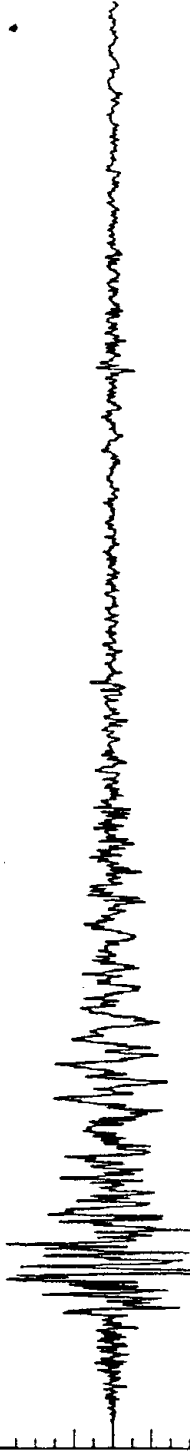


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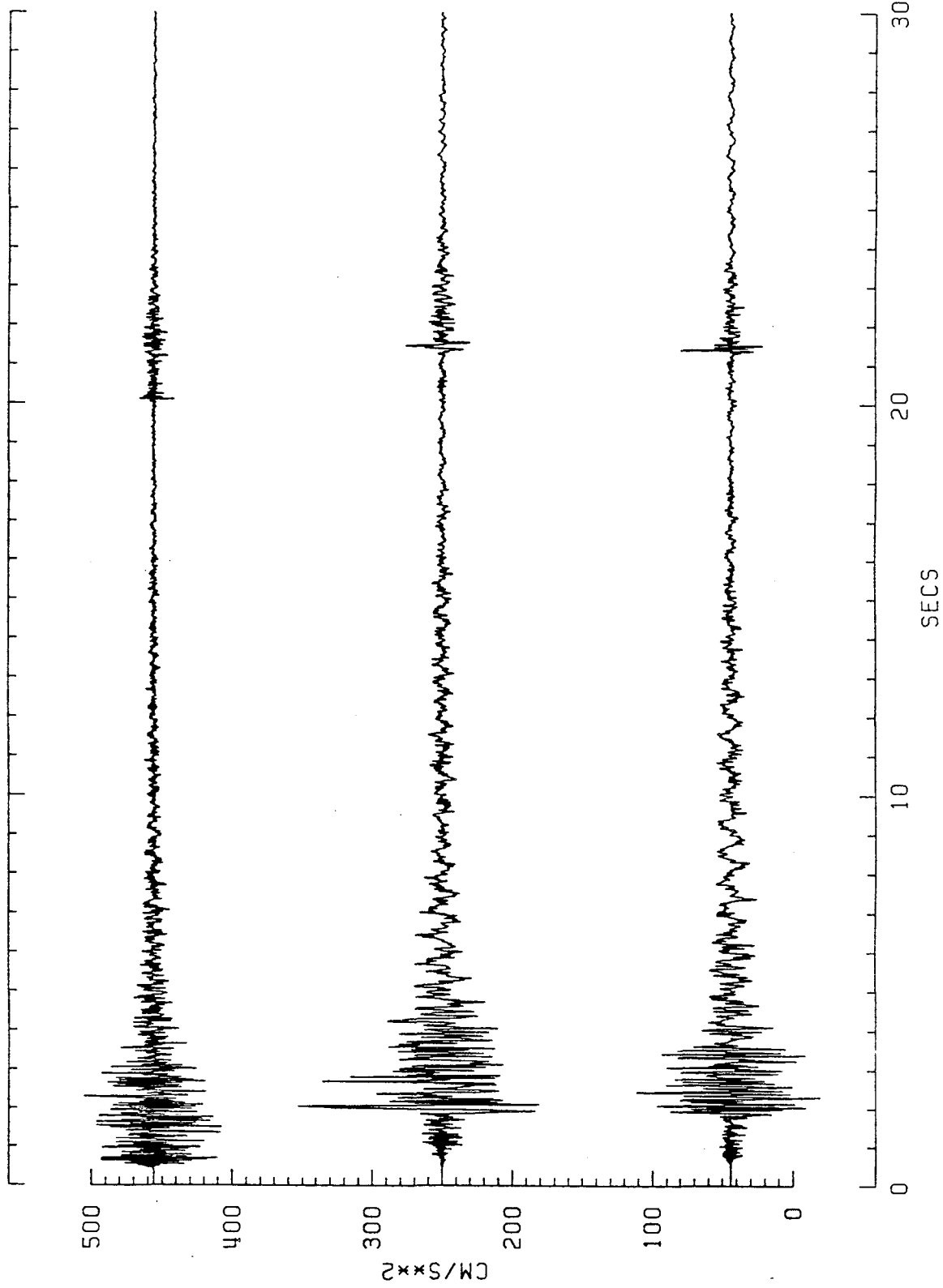
30

SECS

6A161-481, 482, 483 84006/TS07 IEM 055

TIME: 007 1918 24.854

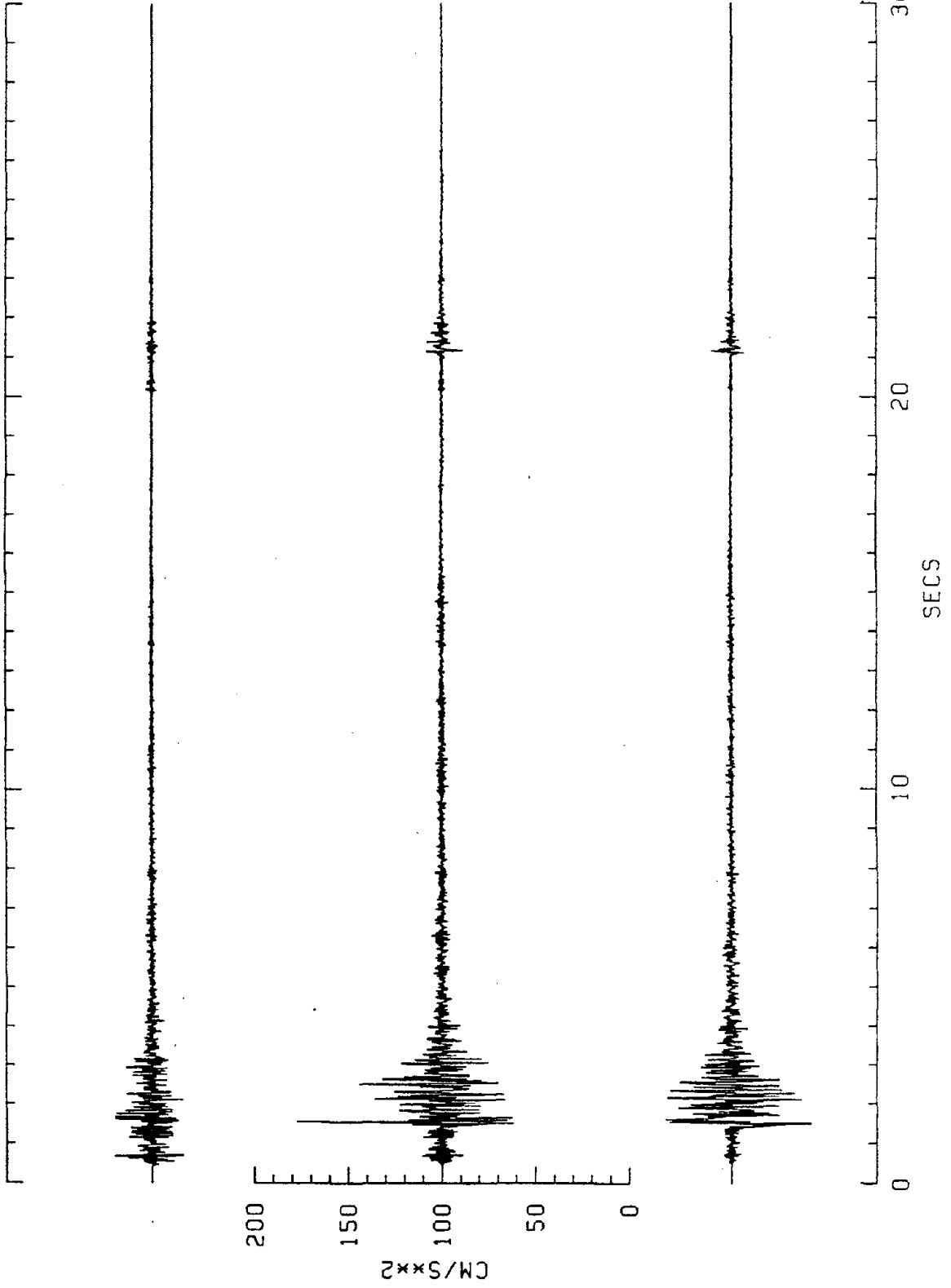
0071918H*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A162-484, 485, 486 84006/T508 IEM 056

TIME: 007 1918 24.564

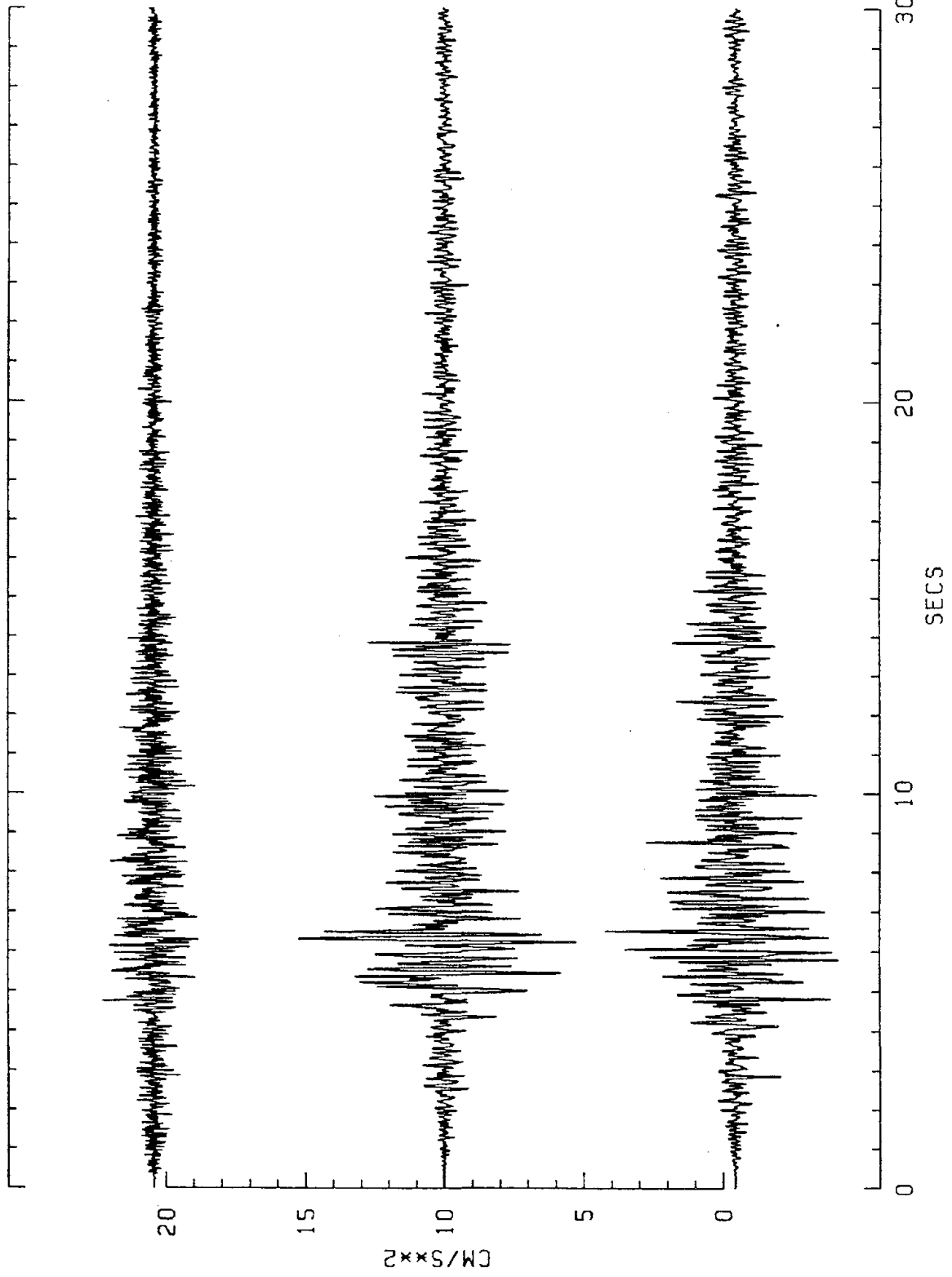
0071918H*.008 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A163-487, 488, 489 84006/TS16 IEM 057

TIME: 007 1918 27.928

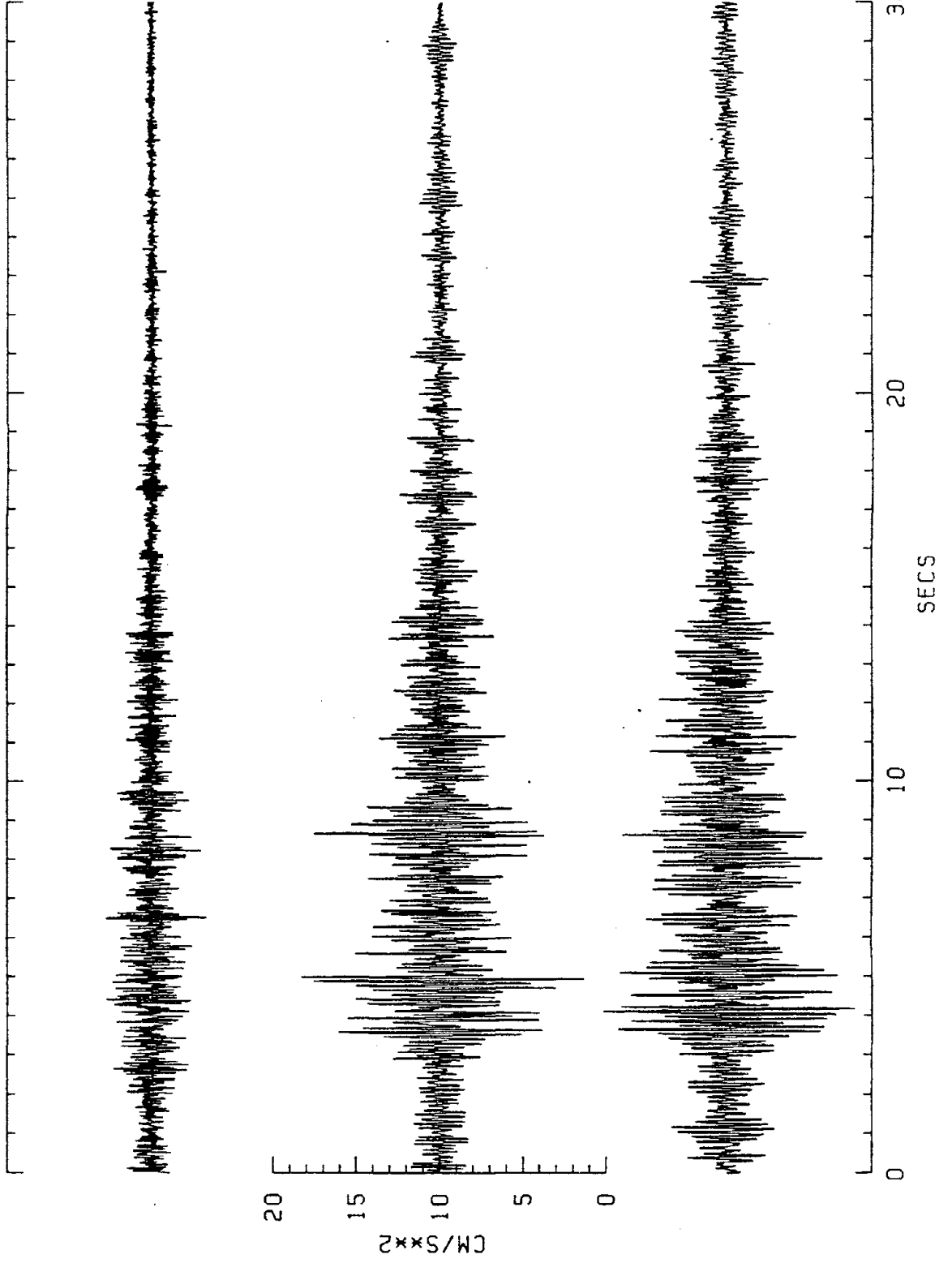
0071918J*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A164-490,491,492 84006/TS18 IEM 058

TIME: 007 1918 28.843

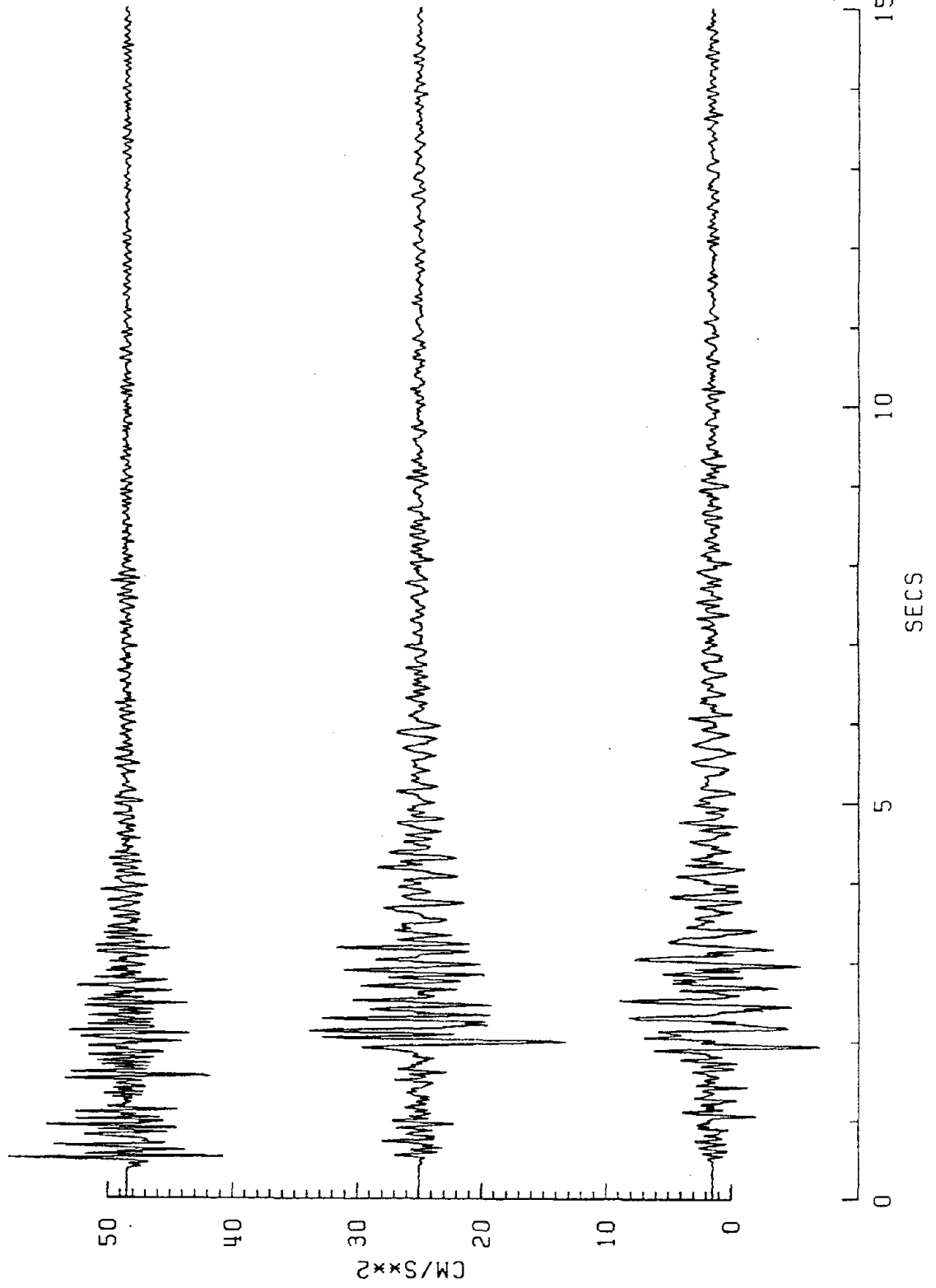
0071918J*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A165-493, 494, 495 84029/TS02 IEM 151

TIME: 047 1910 12.288

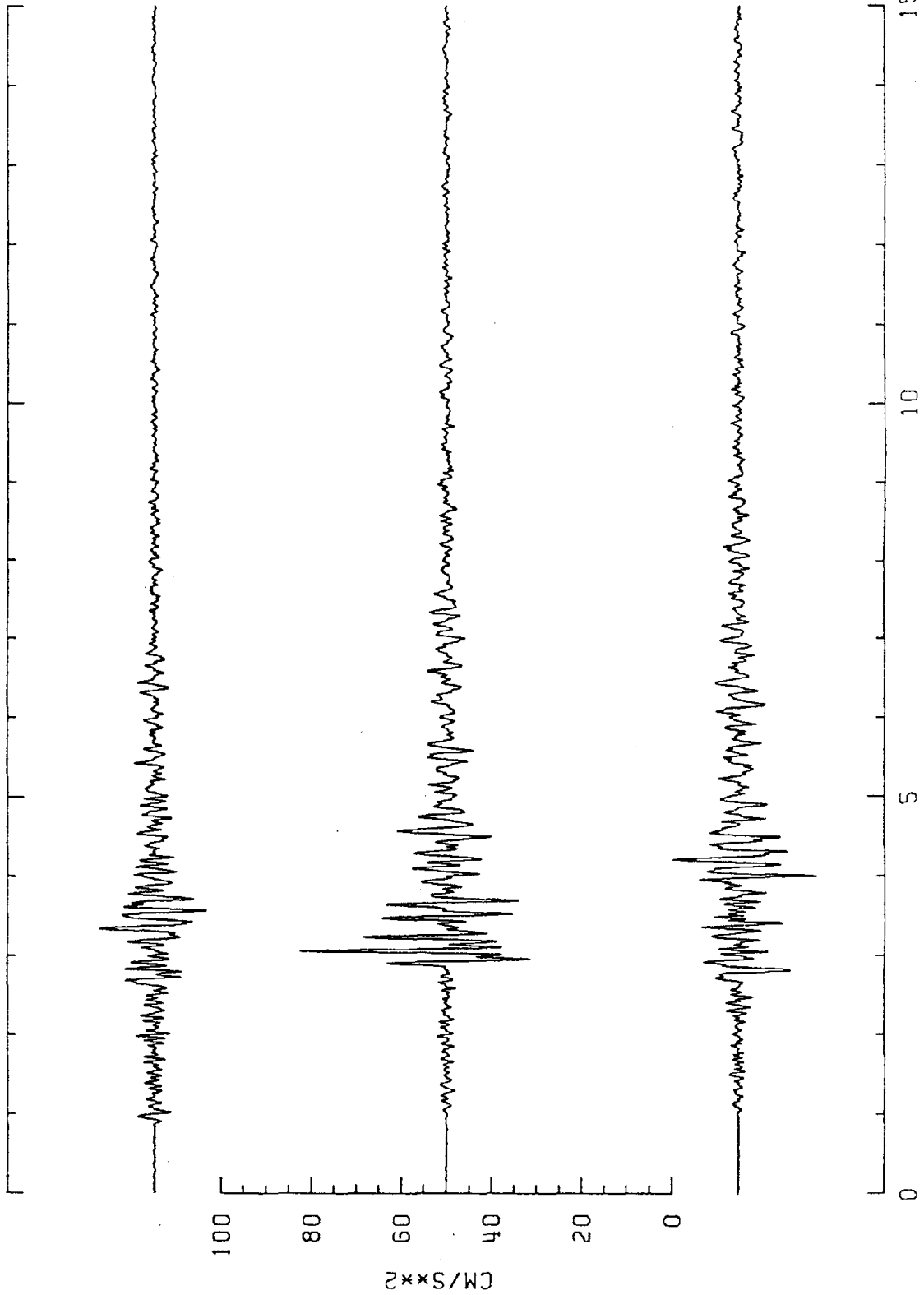
04719100*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A166-496,497,498 84029/TS03 IEM 154

TIME: 047 1910 12.789

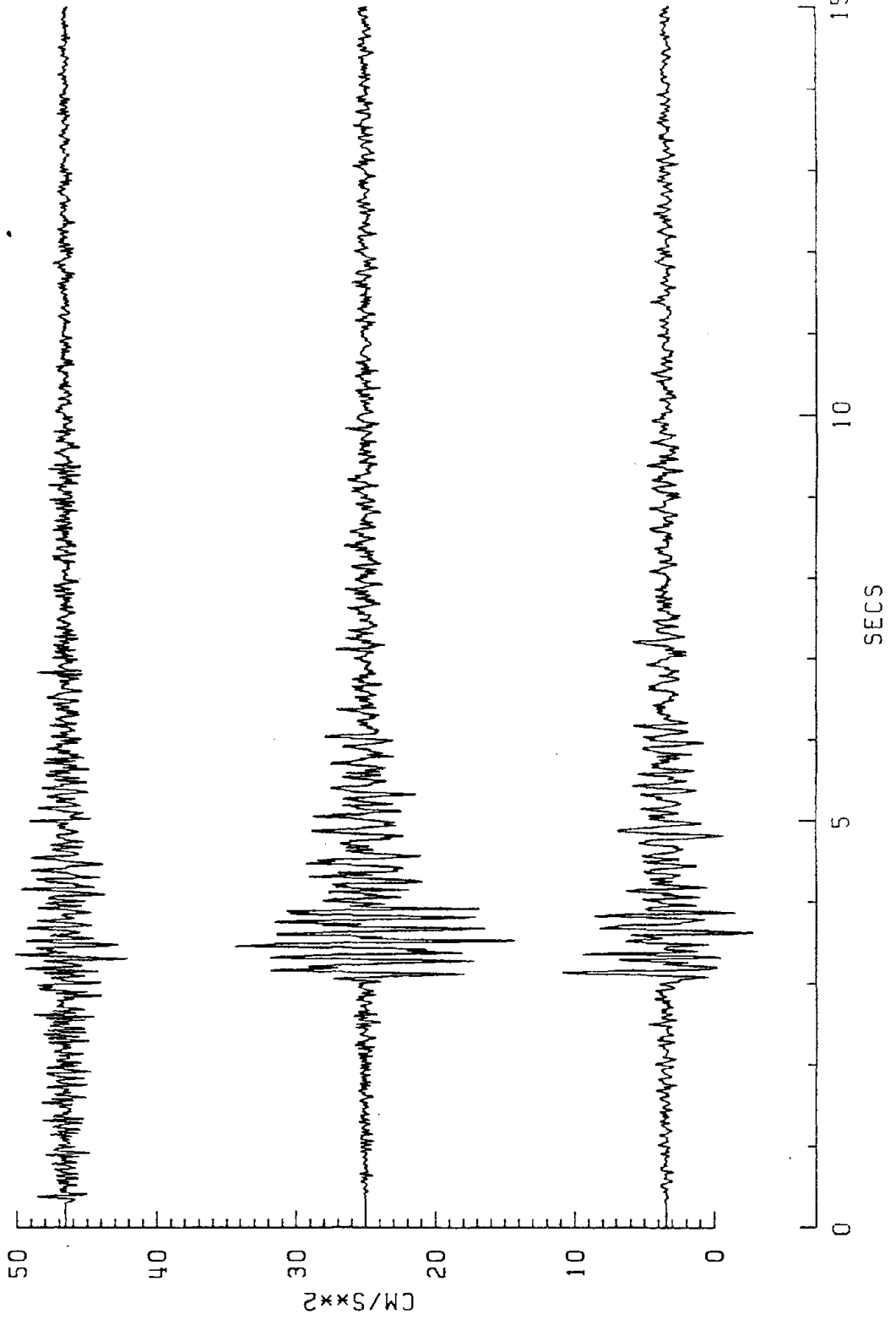
04719110*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A167-499,500,501 84029/TS07 IEM 152

TIME: 047 1910 14.051

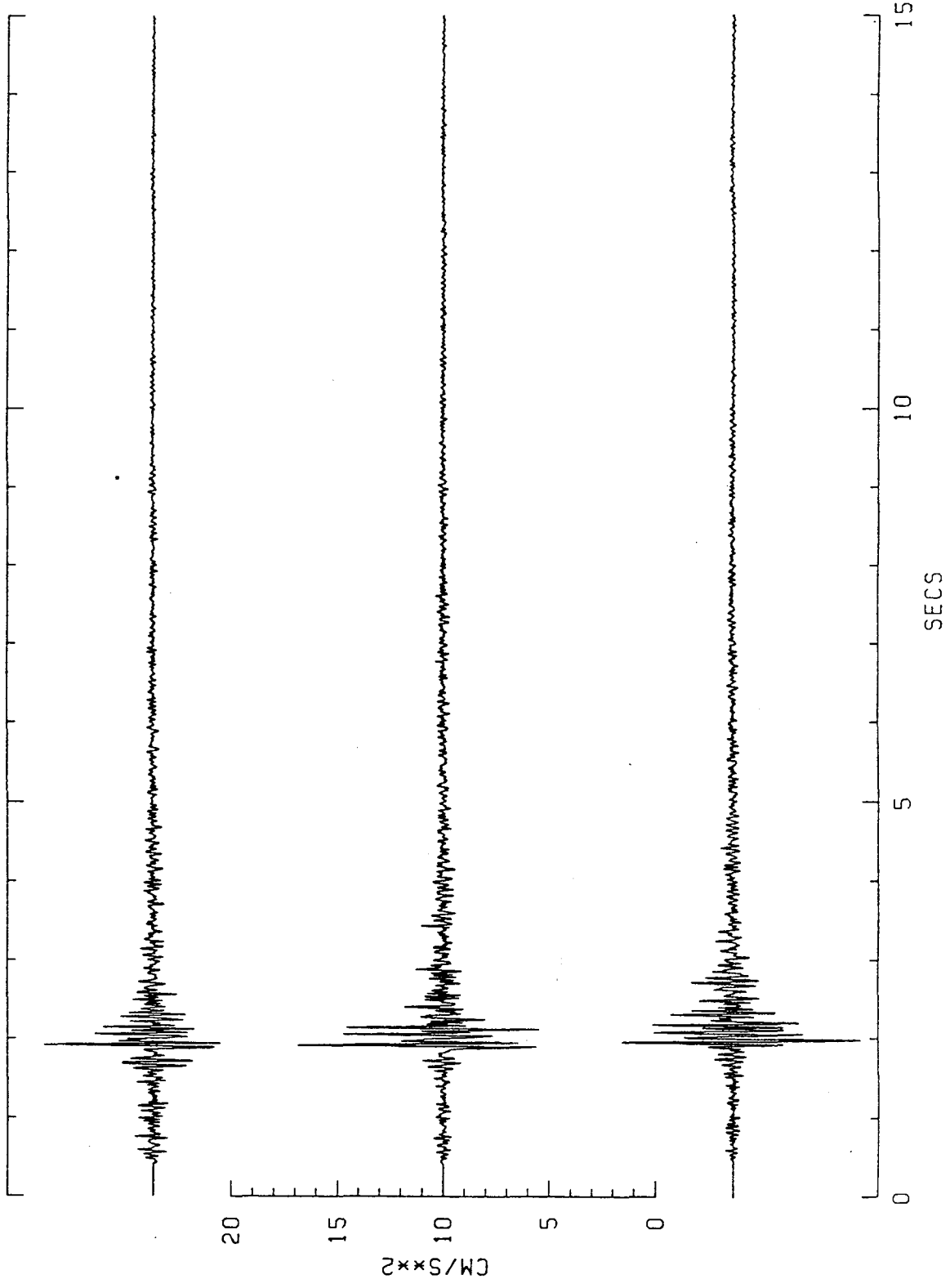
0471911E*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A168-502, 503, 504 84029/TS15 IEM 155

TIME: 047 1910 13.183

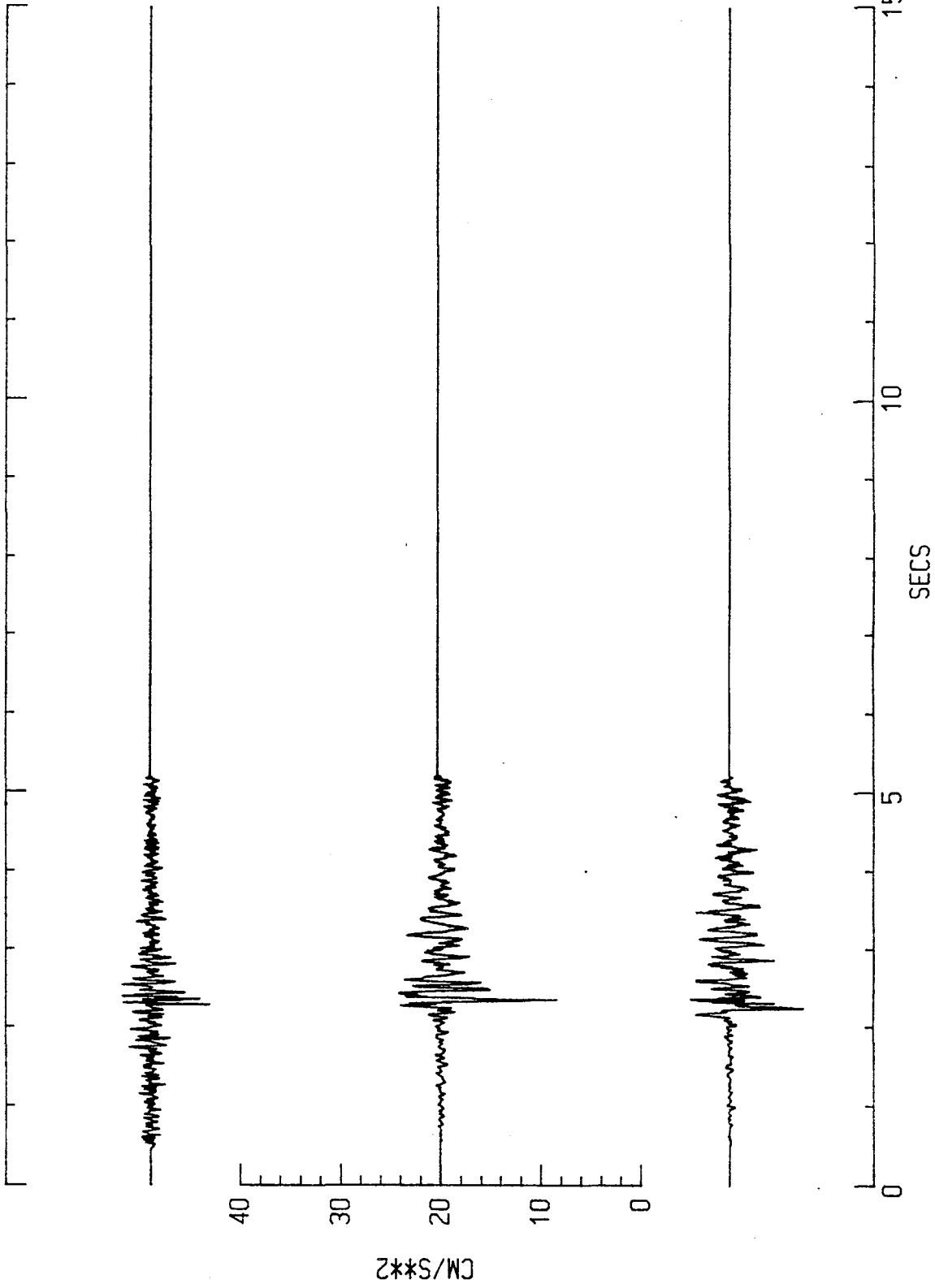
04719100*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A169-505,506,507 84029/TS16 IEM 194

TIME:047 1910 13.070

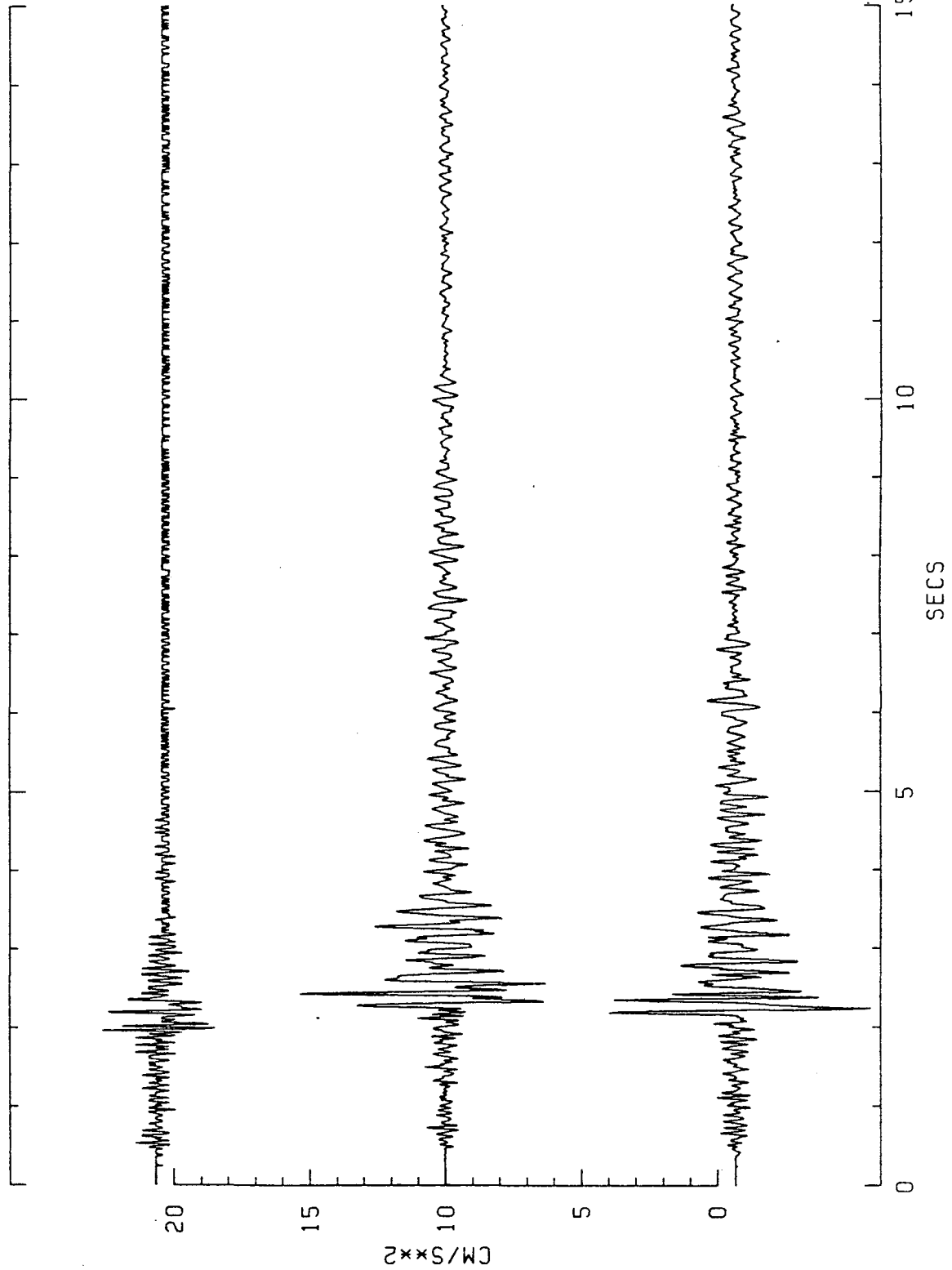
0471910D*.016 COMP:1[UPI,2[H=180],3[H=270]



6A170-508, 509, 510 84029/TS17 IEM 195

TIME: 047 1910 13.520

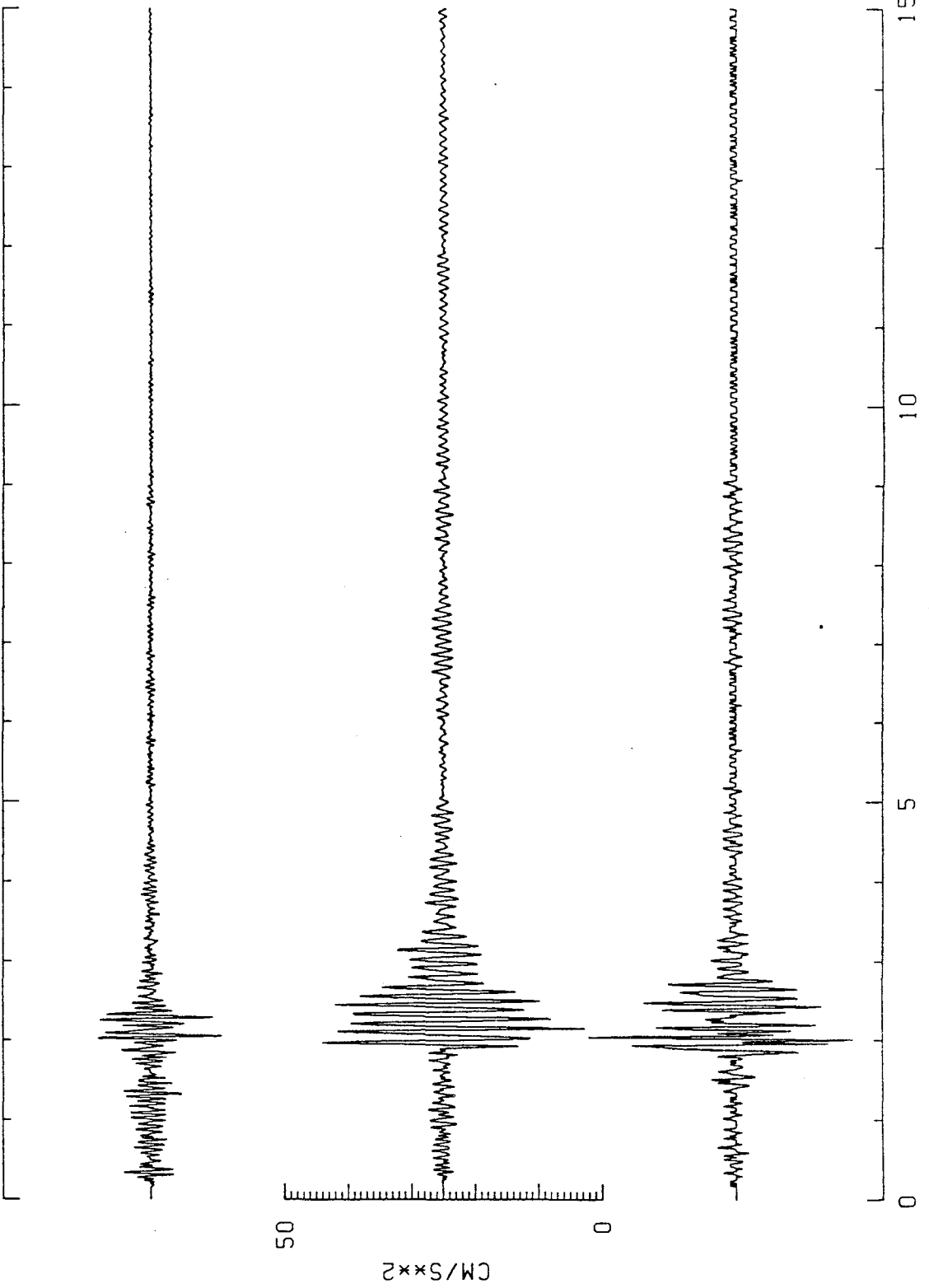
0471910E*.017 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A171-511,512,513 84029/TS18 IEM 196

TIME: 047 1910 13.301

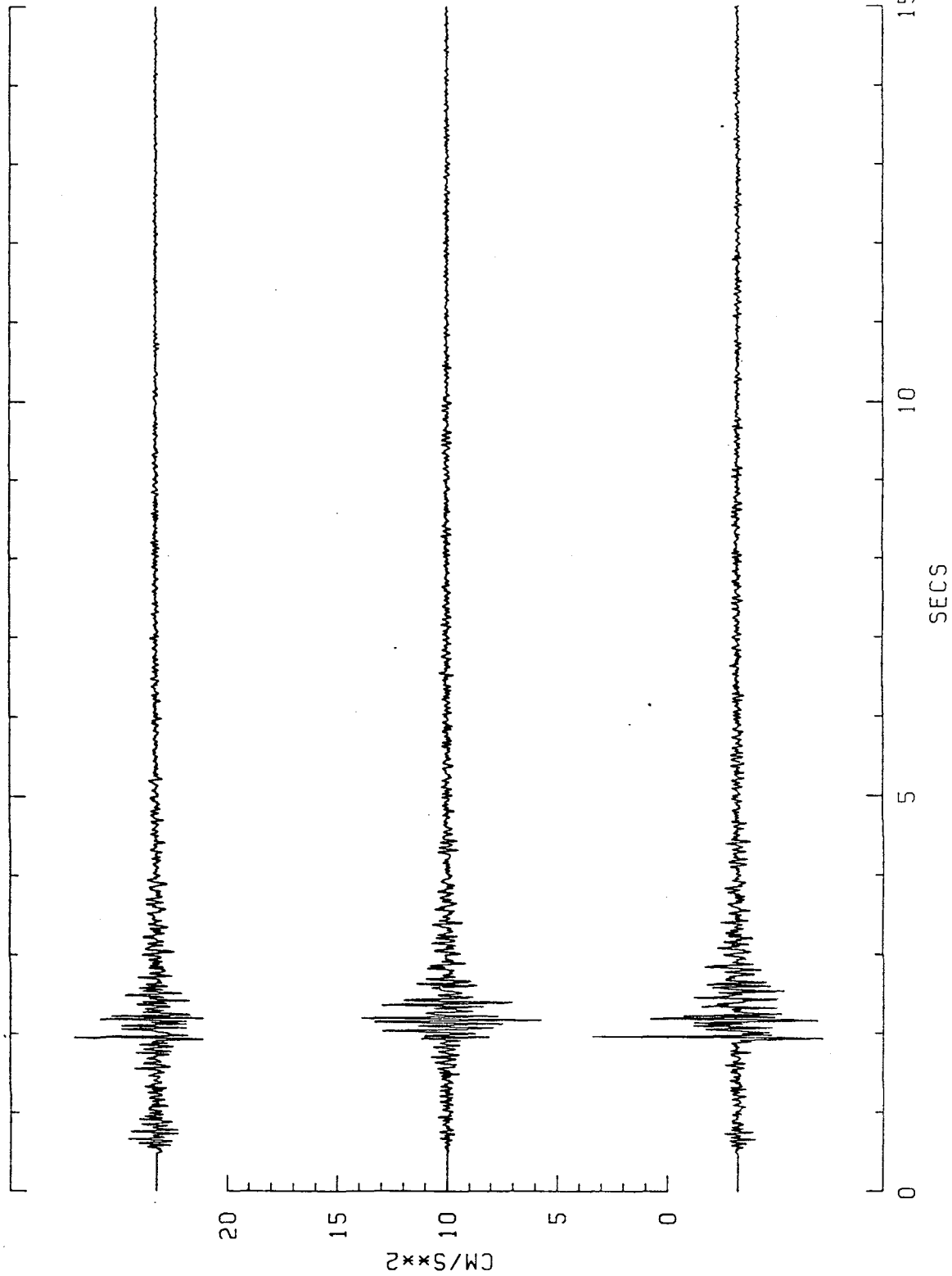
0471910D*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A172-514,515,516 84029/TS19 IEM 153

TIME: 047 1910 12.538

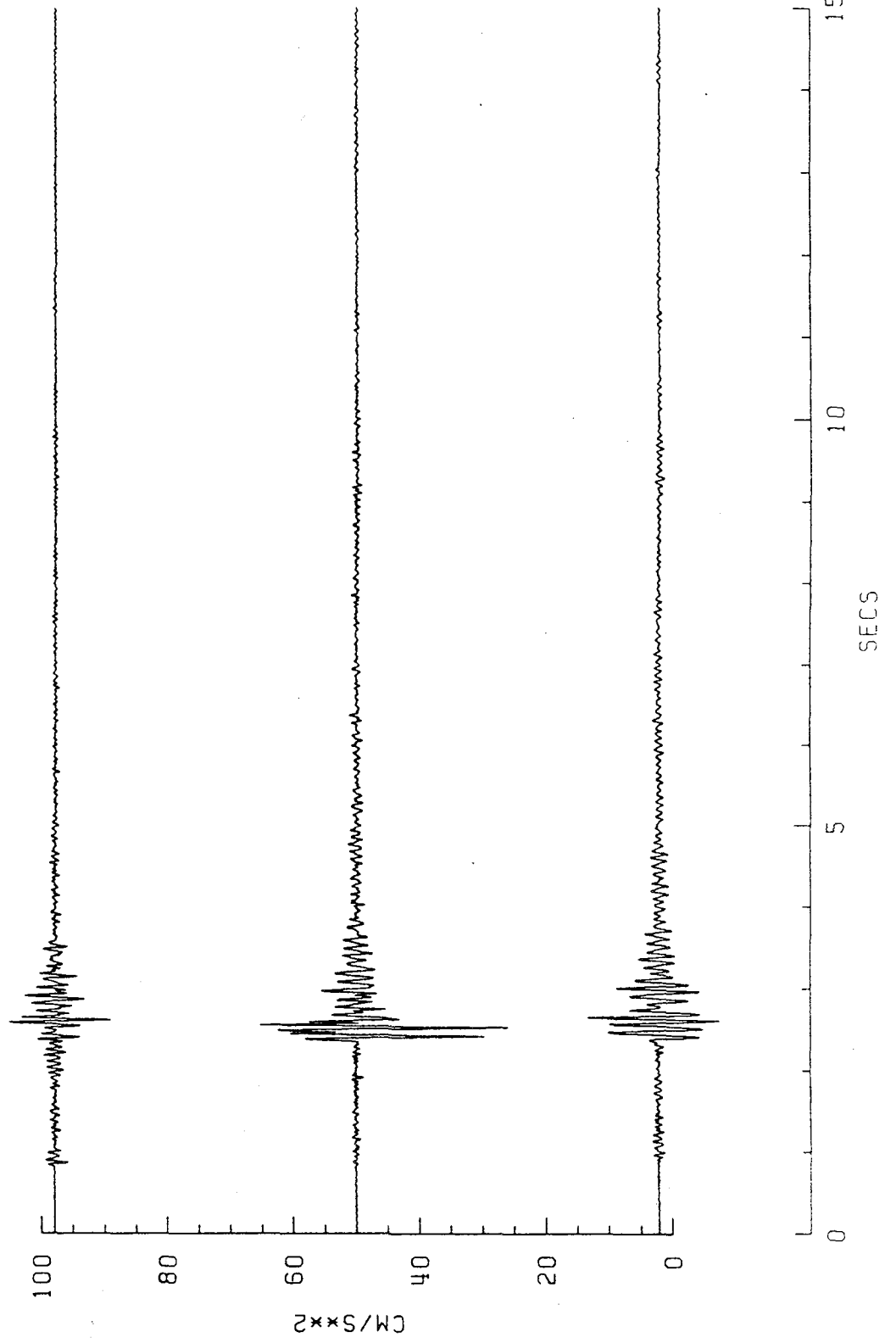
0471910D*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A173-517,518,519 84117/TSO1 IEM 156

TIME: 310 1148 27.165

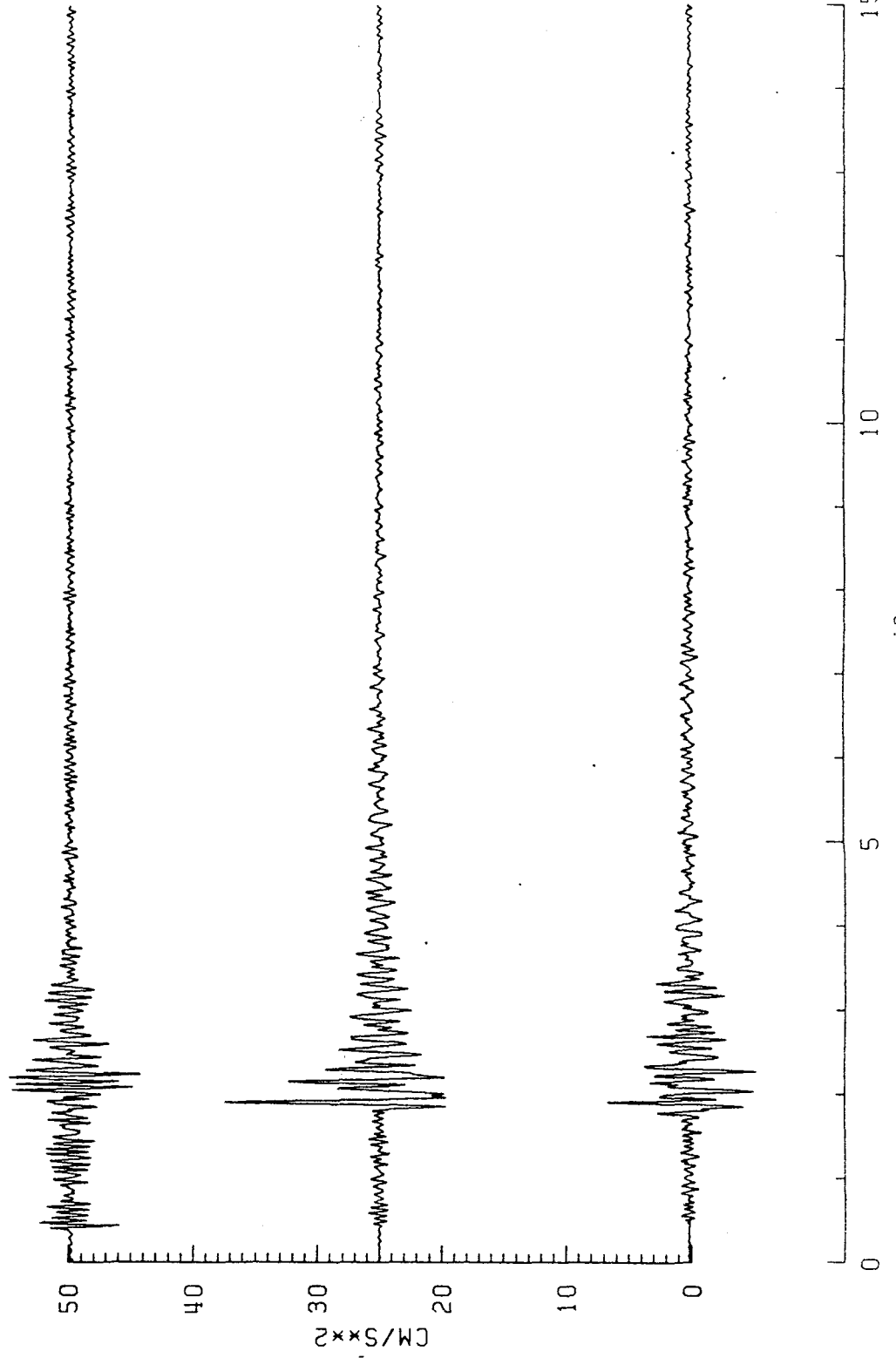
3101147I*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A174-520,521,522 84117/TS02 IEM 159

TIME: 310 1148 27.223

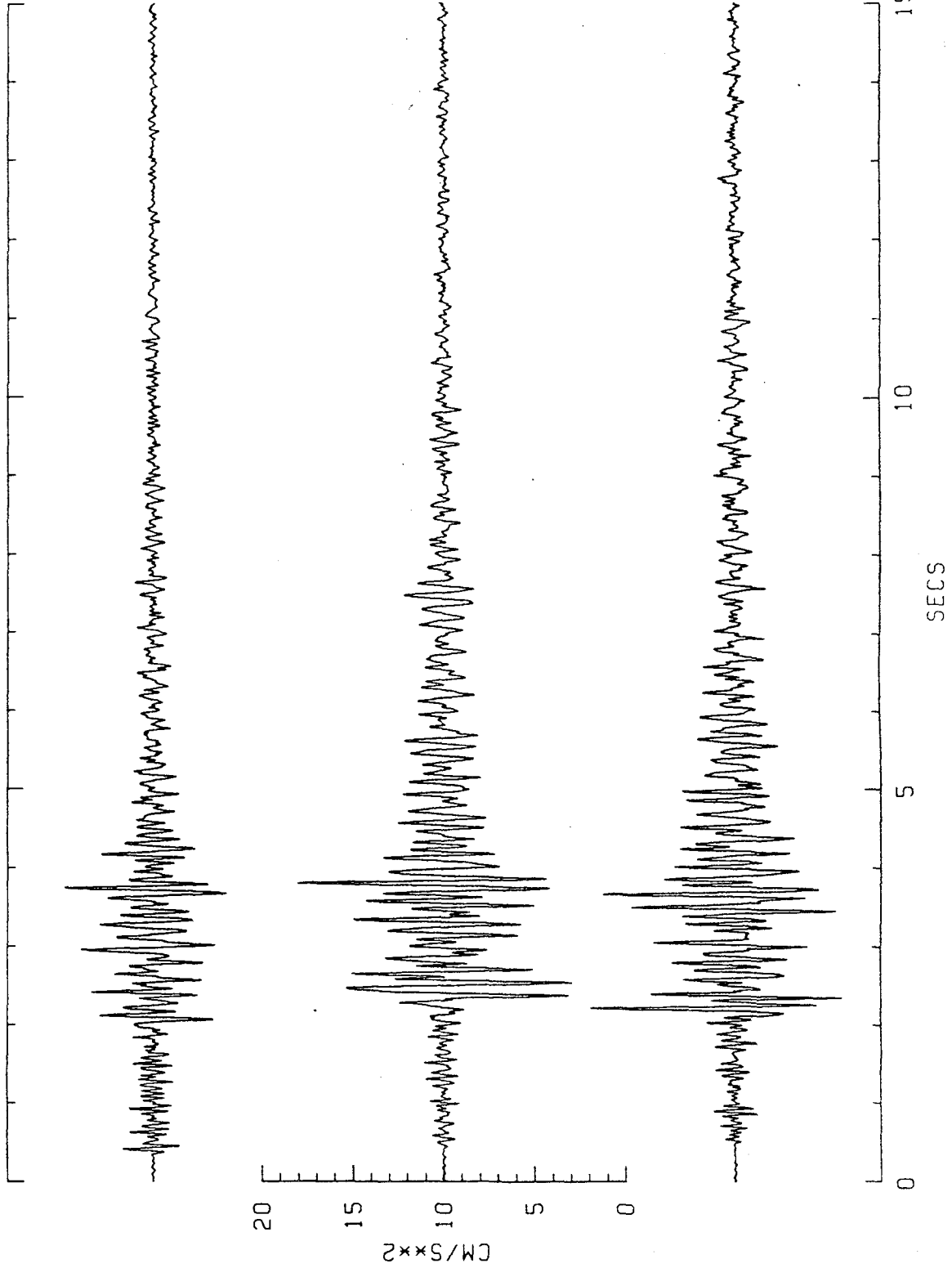
3101147I*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A175-523,524,525 84117/TS03 IEM 157

TIME: 310 1148 28.166

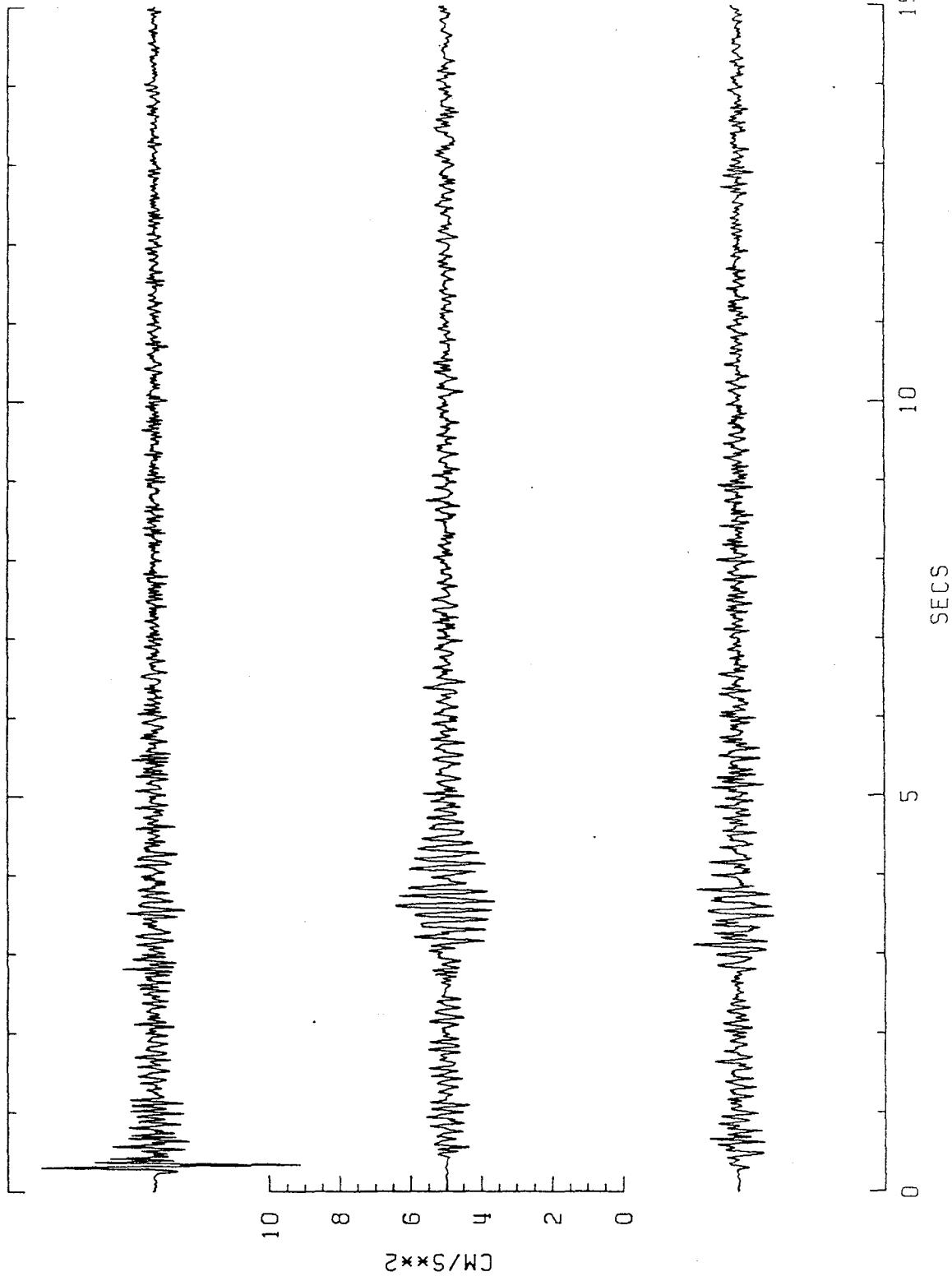
3101147I*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A176-526,527,528 84117/TS07 IEM 158

TIME: 310 1148 29.589

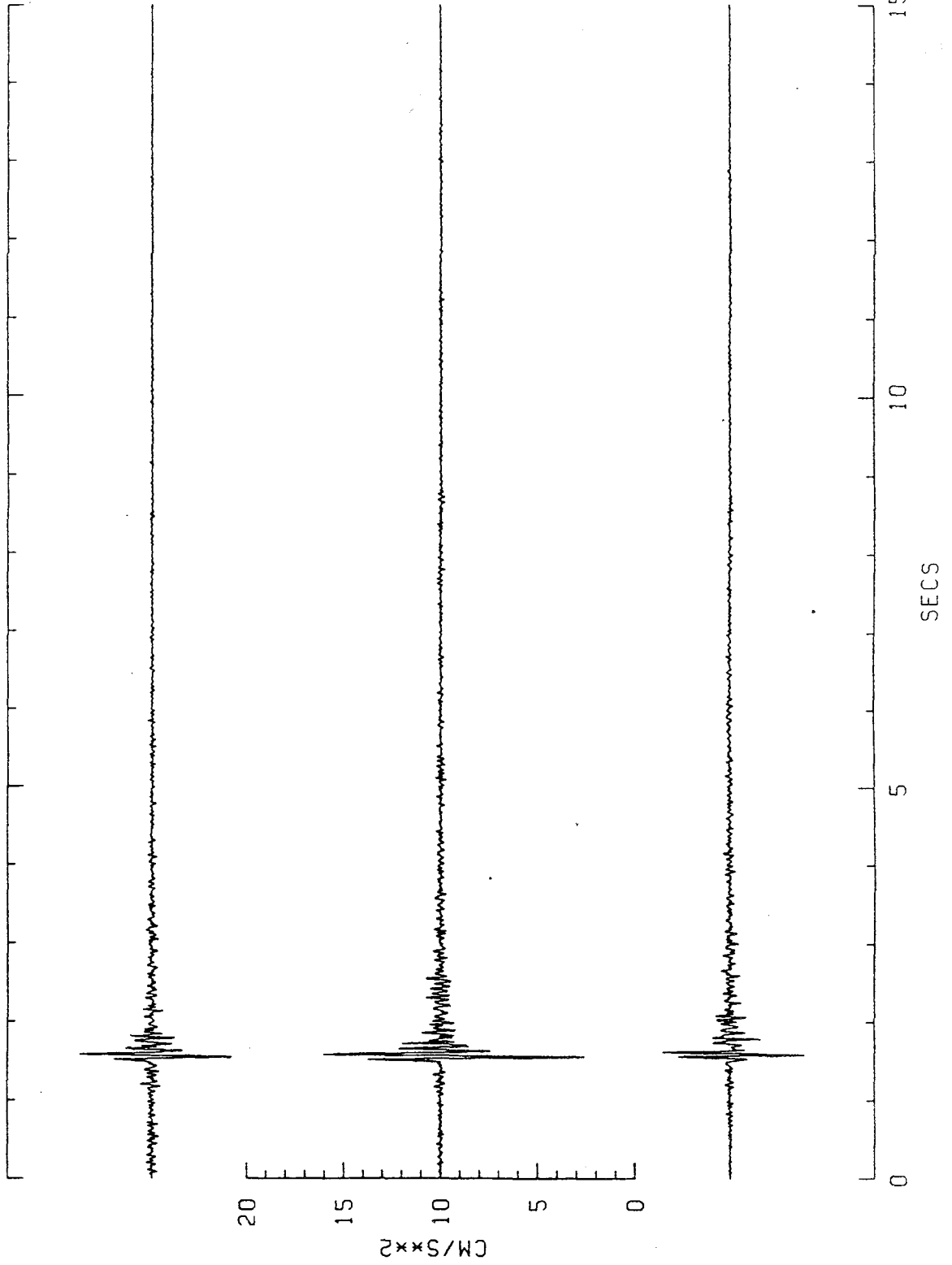
3101147J*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A177-529, 530, 531 84117/TS15 IEM 160

TIME: 310 1148 28.248

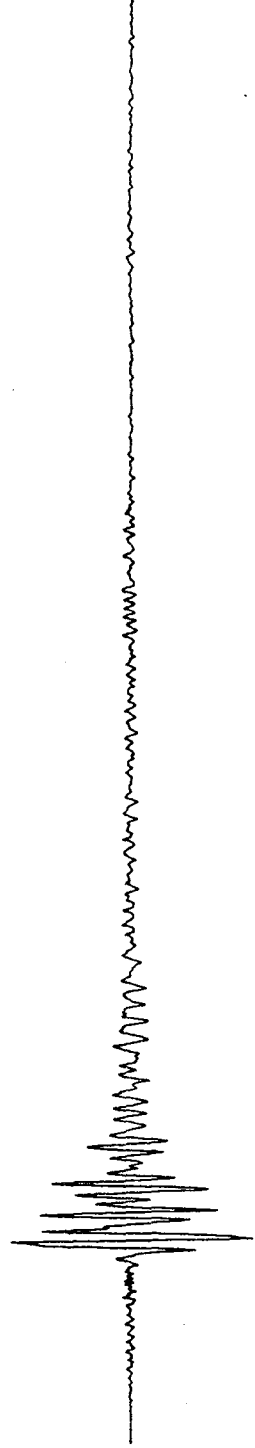
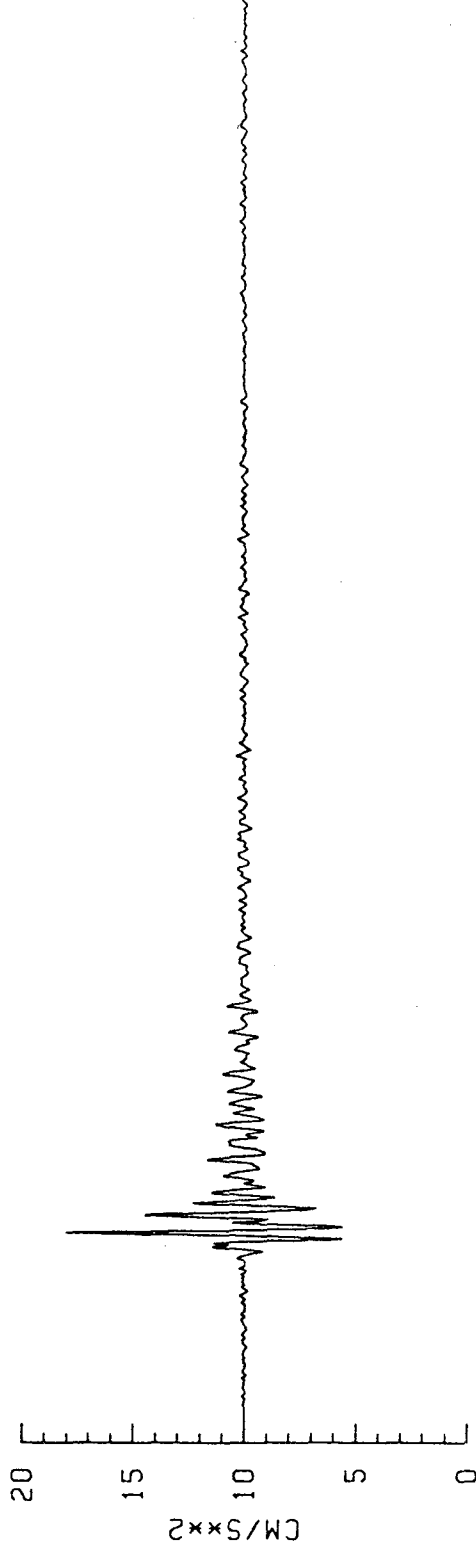
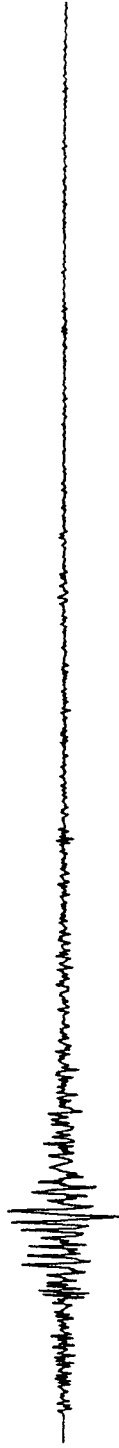
3101147I*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A178-532,533,534 84117/TS16 IEM 161

TIME: 310 1148 27.693

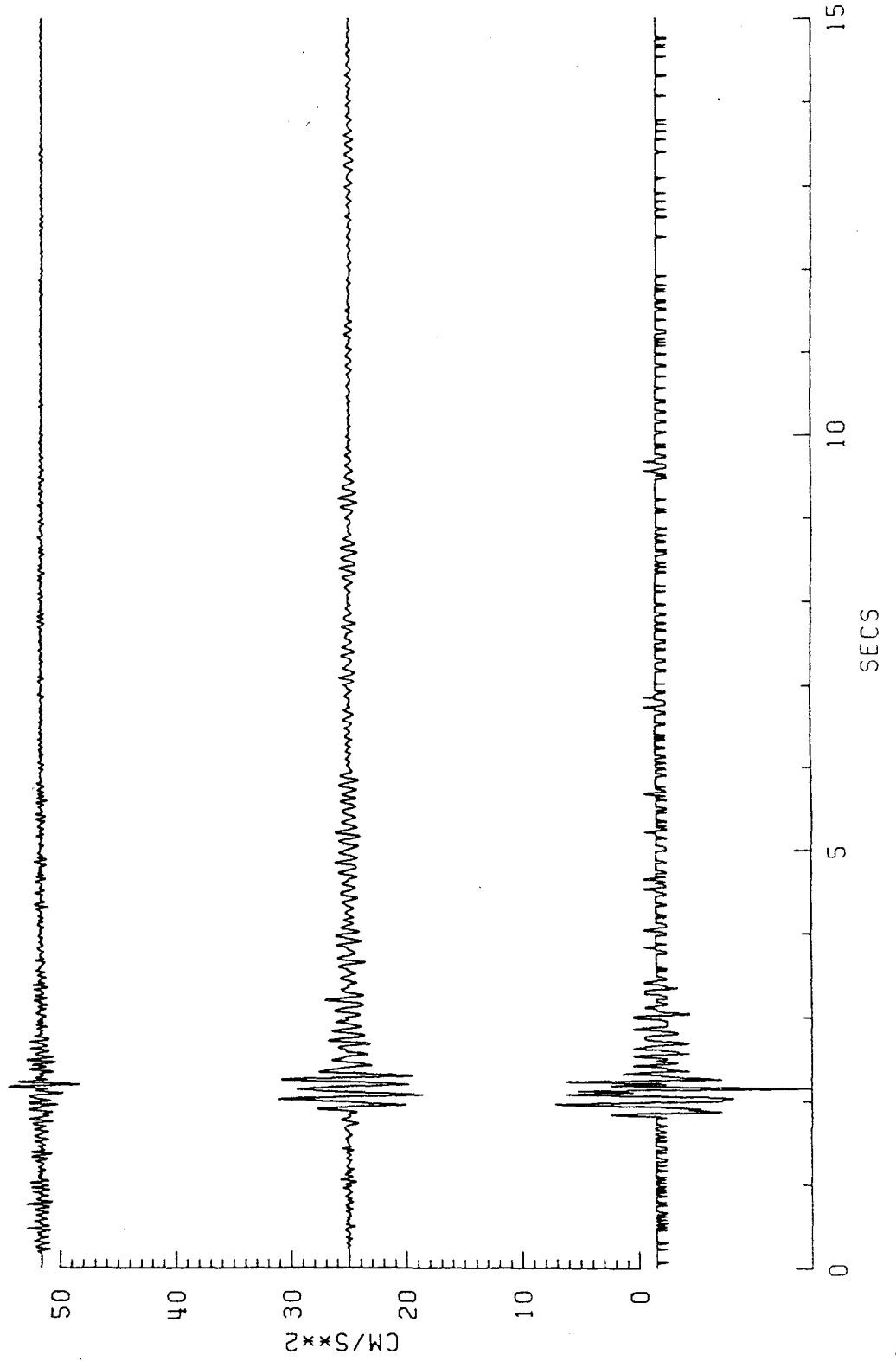
3101147I*.016 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A179-535, 536, 537 84117/TS18 IEM 197

TIME: 310 1148 28.411

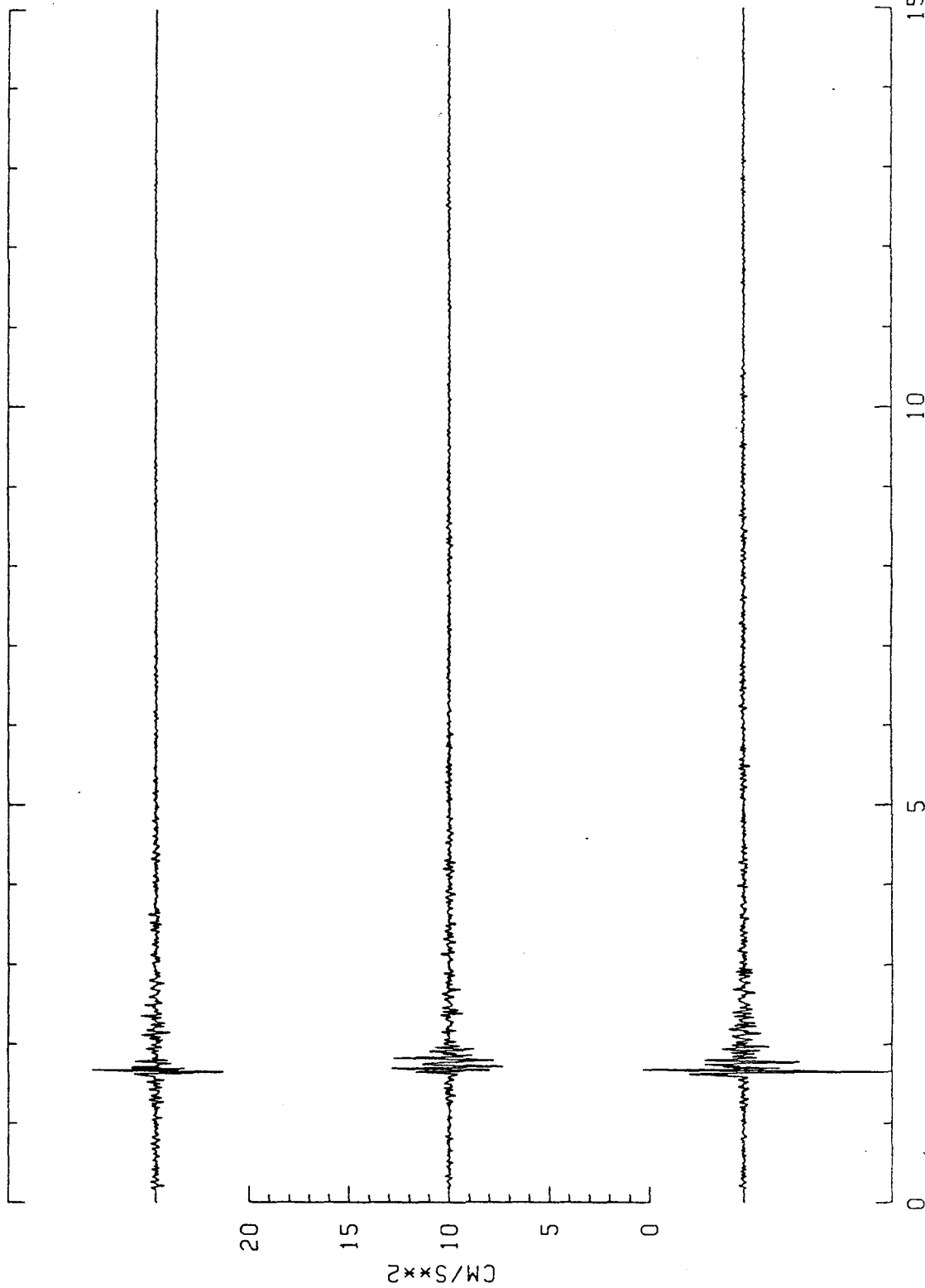
3101147I*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A180-538,539,540 84117/TS19 IEM 162

TIME: 310 1148 28.070

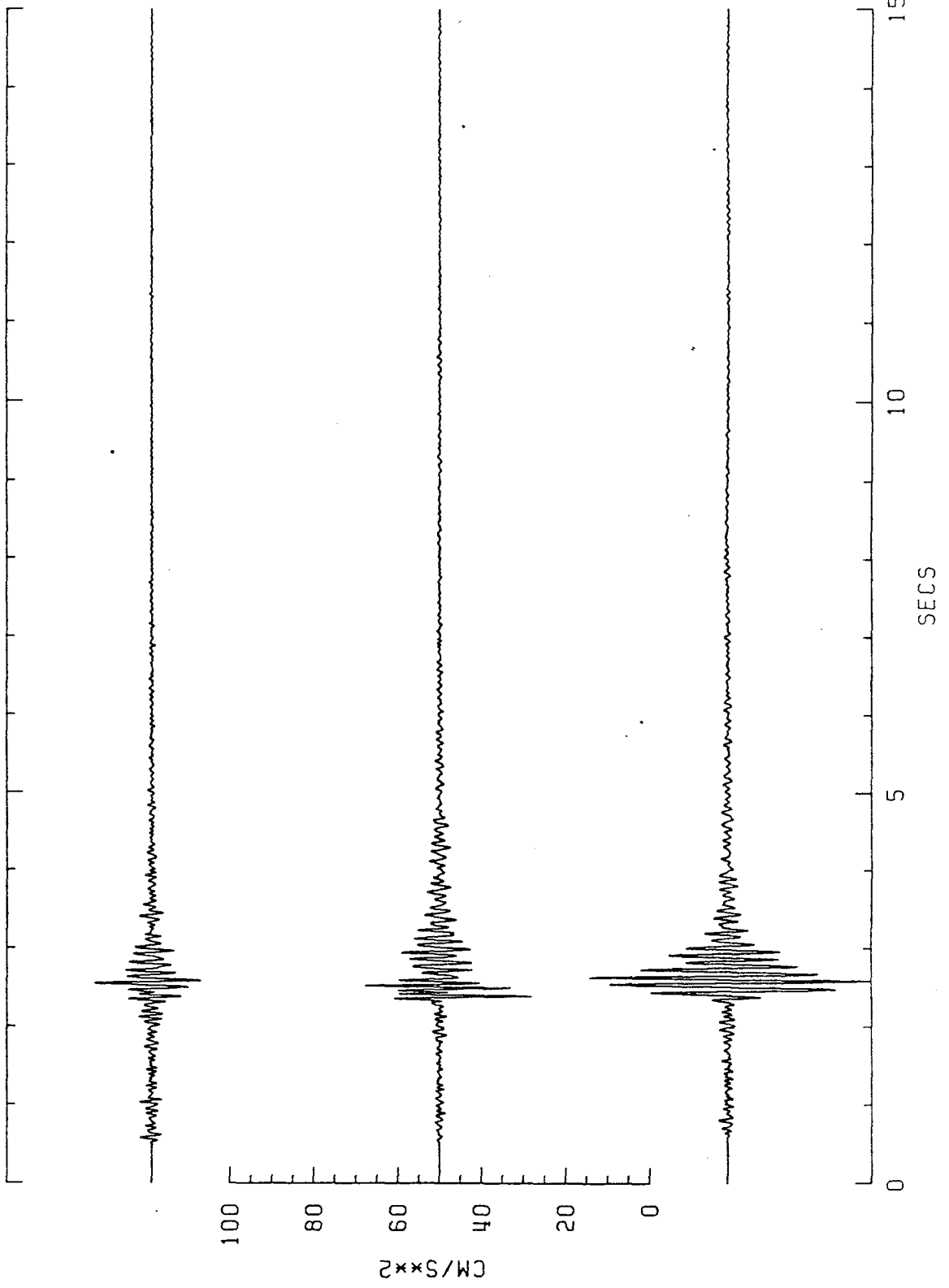
3101147I*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A181-541,542,543 84132/T501 IEM 059

TIME: 345 0722 12.679

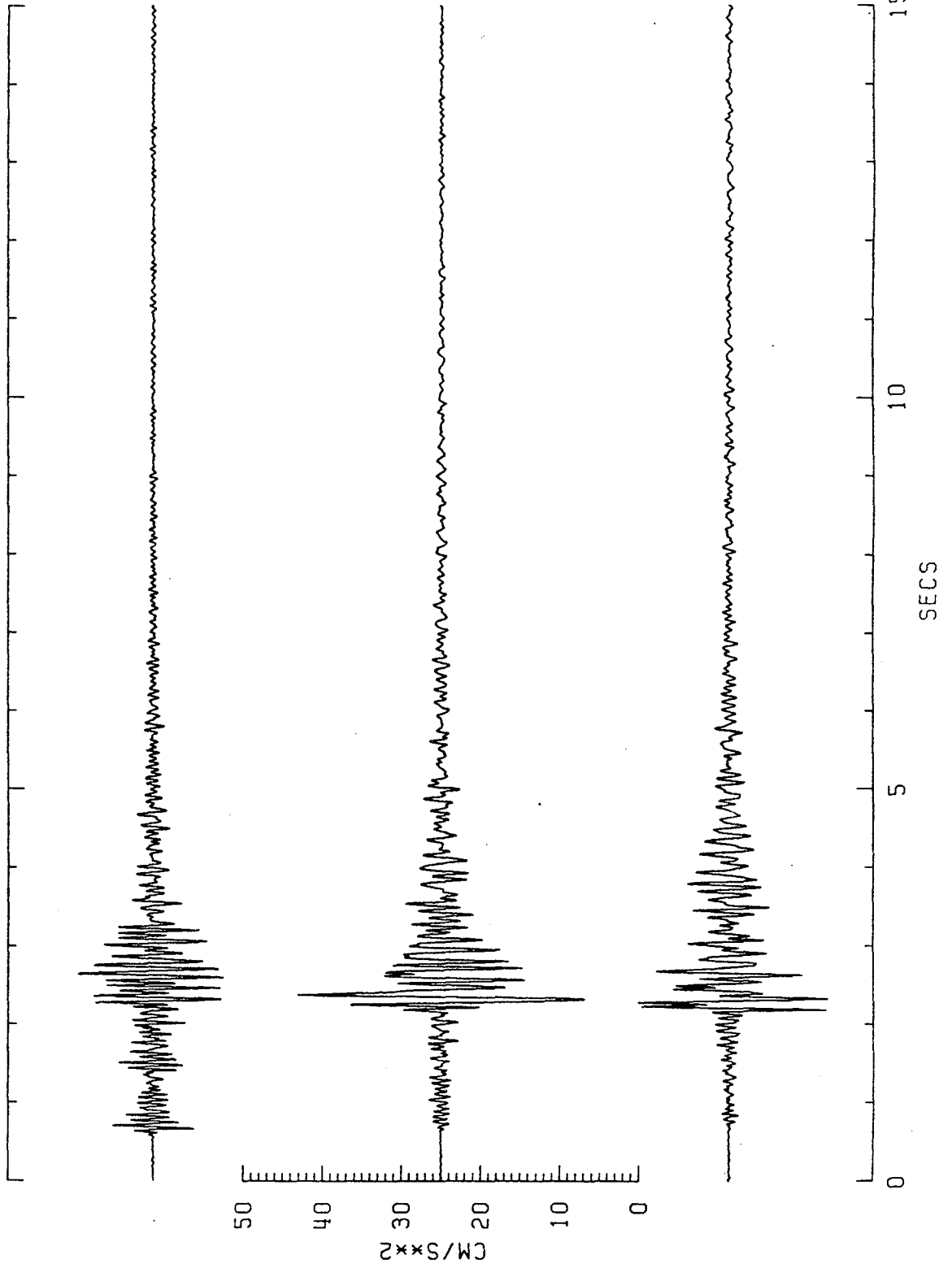
3450722D*.001 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A182-544,545,546 84132/TS02 IEM 060

TIME: 345 0722 13.061

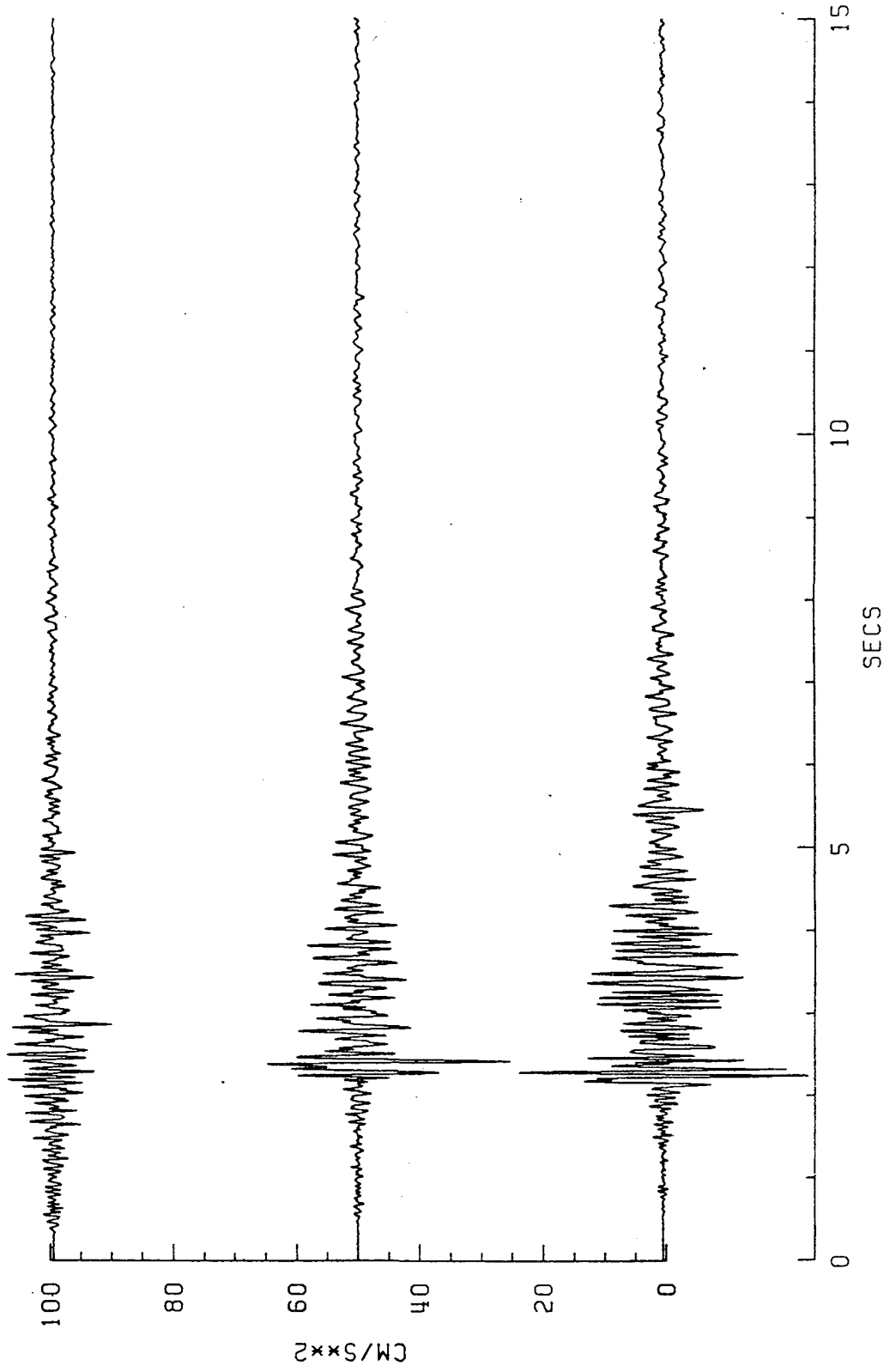
3450722D*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A183-547,548,549 84132/TS03 IEM 061

TIME: 345 0722 12.692

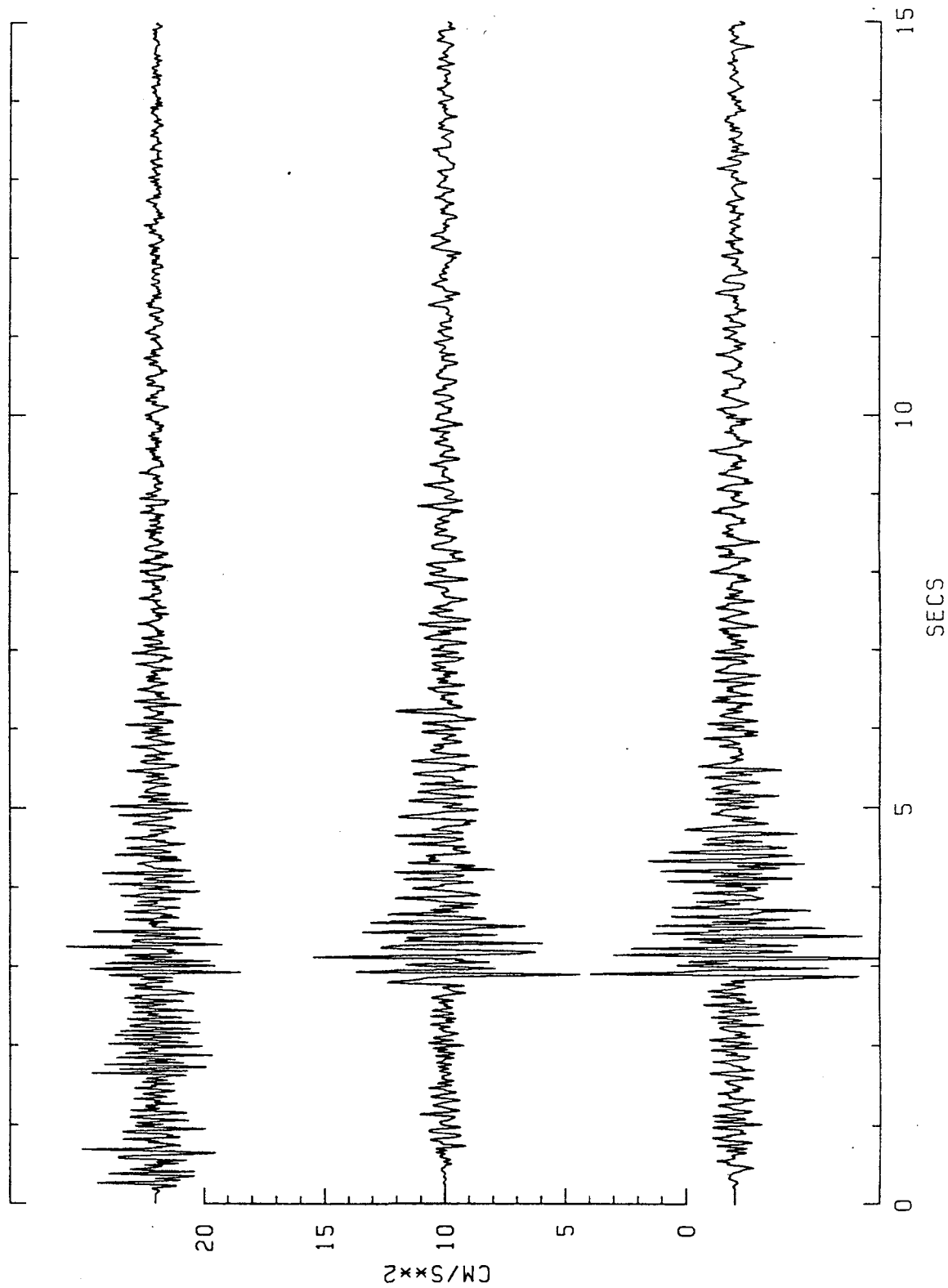
3450722D*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A184-550,551,552 84132/TS07 IEM 062

TIME: 345 0722 14.631

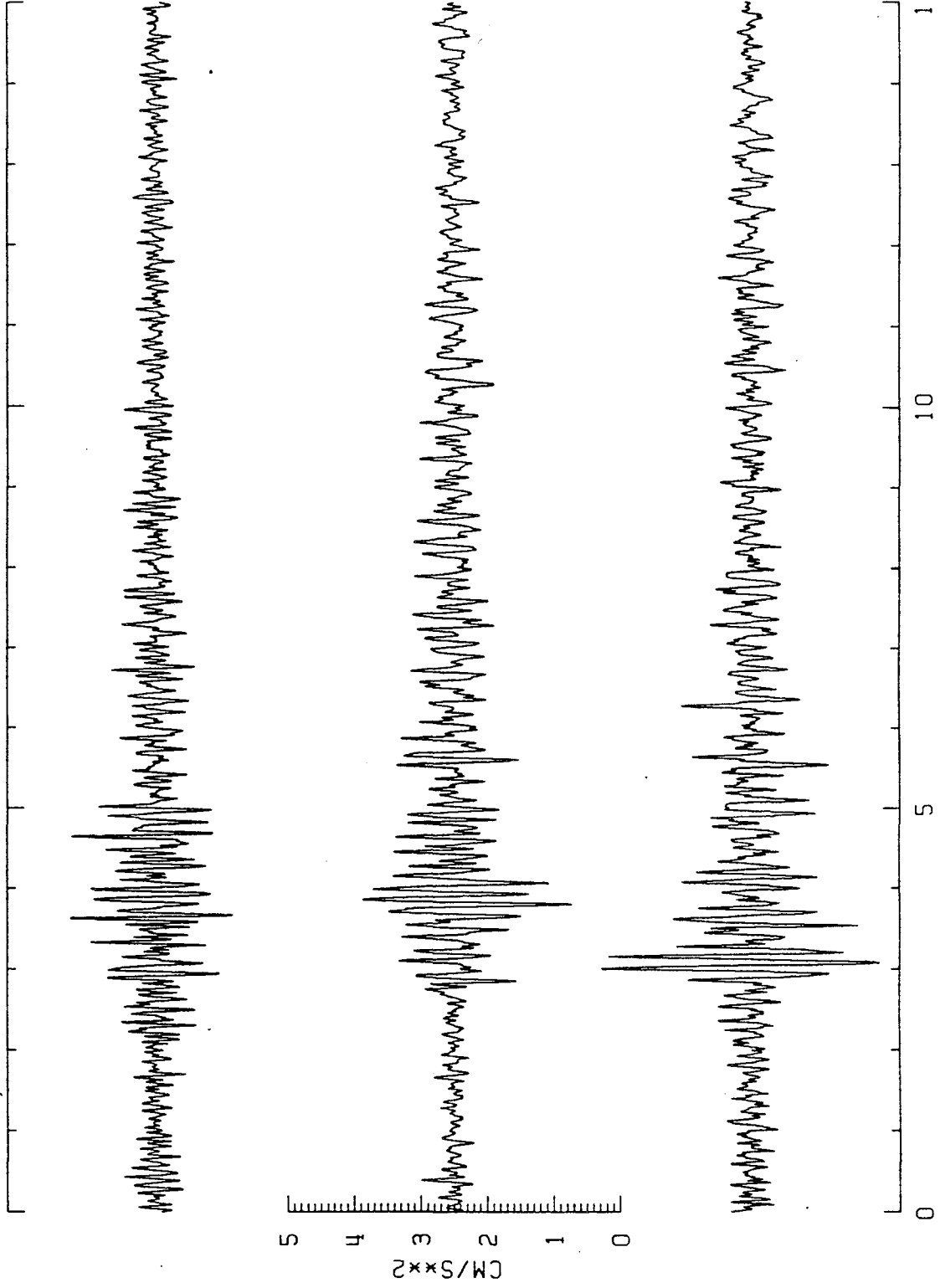
3450722E*.007 COMP:1 (UP), 2 (H=180), 3 (H=270)



6A185-553,554,555 84132/TS10 IEM 063

TIME: 345 0722 17.619

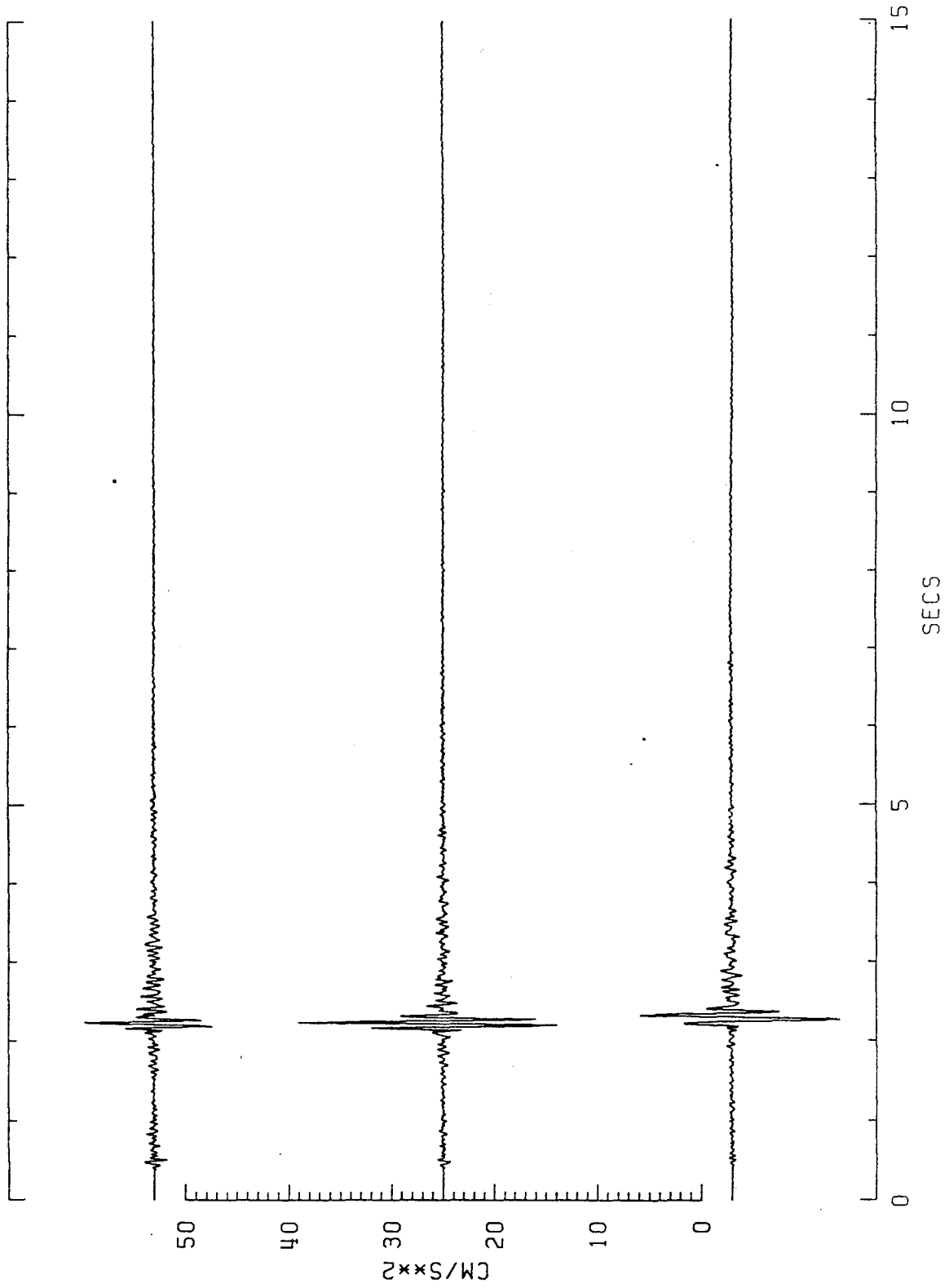
3450722F*.010 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A186-556,557,558 84132/TS15 IEM 064

TIME: 345 0722 13.536

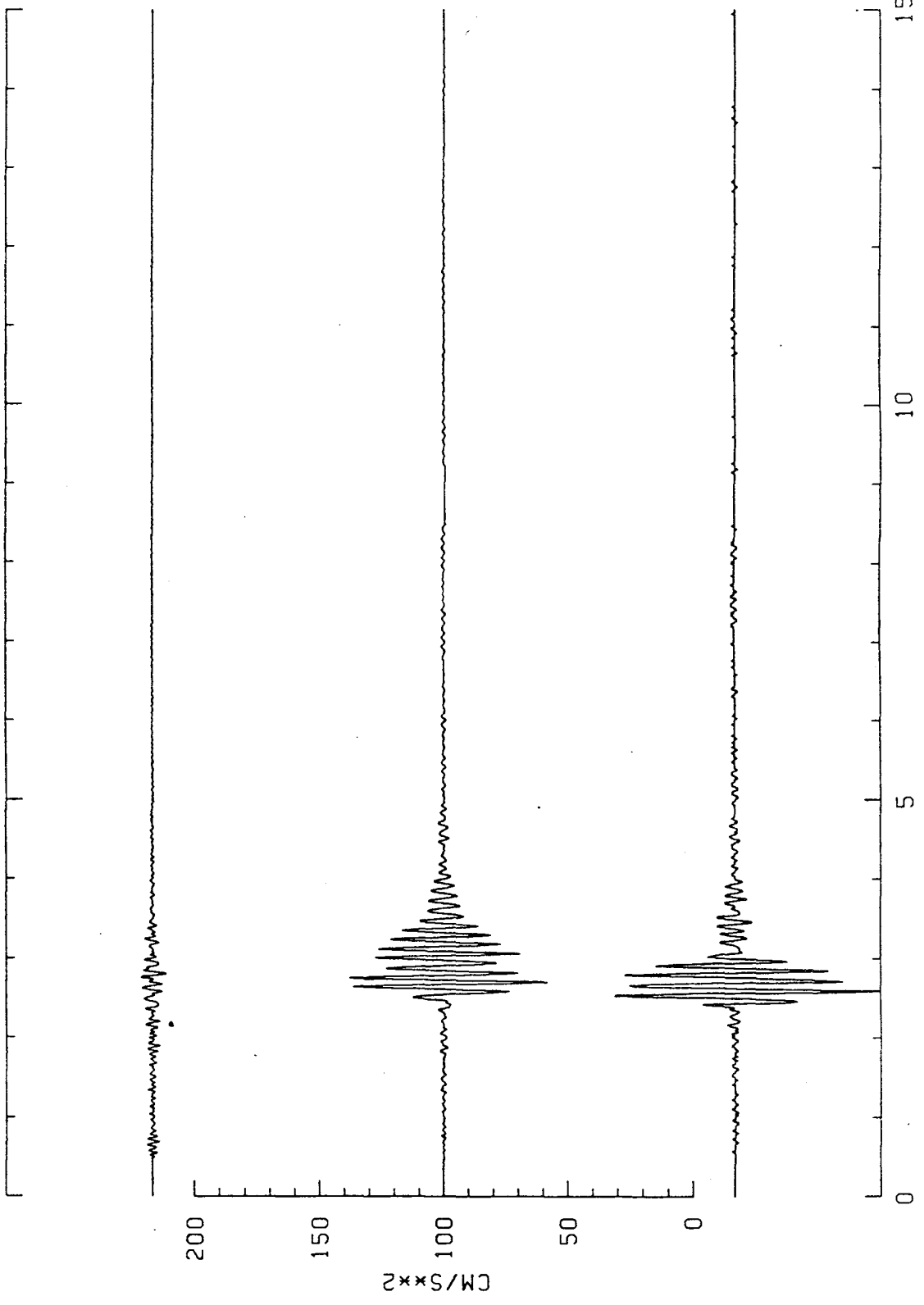
3450722E*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A187-559,560,561 84132/TS18 IEM 065

TIME: 345 0722 13.440

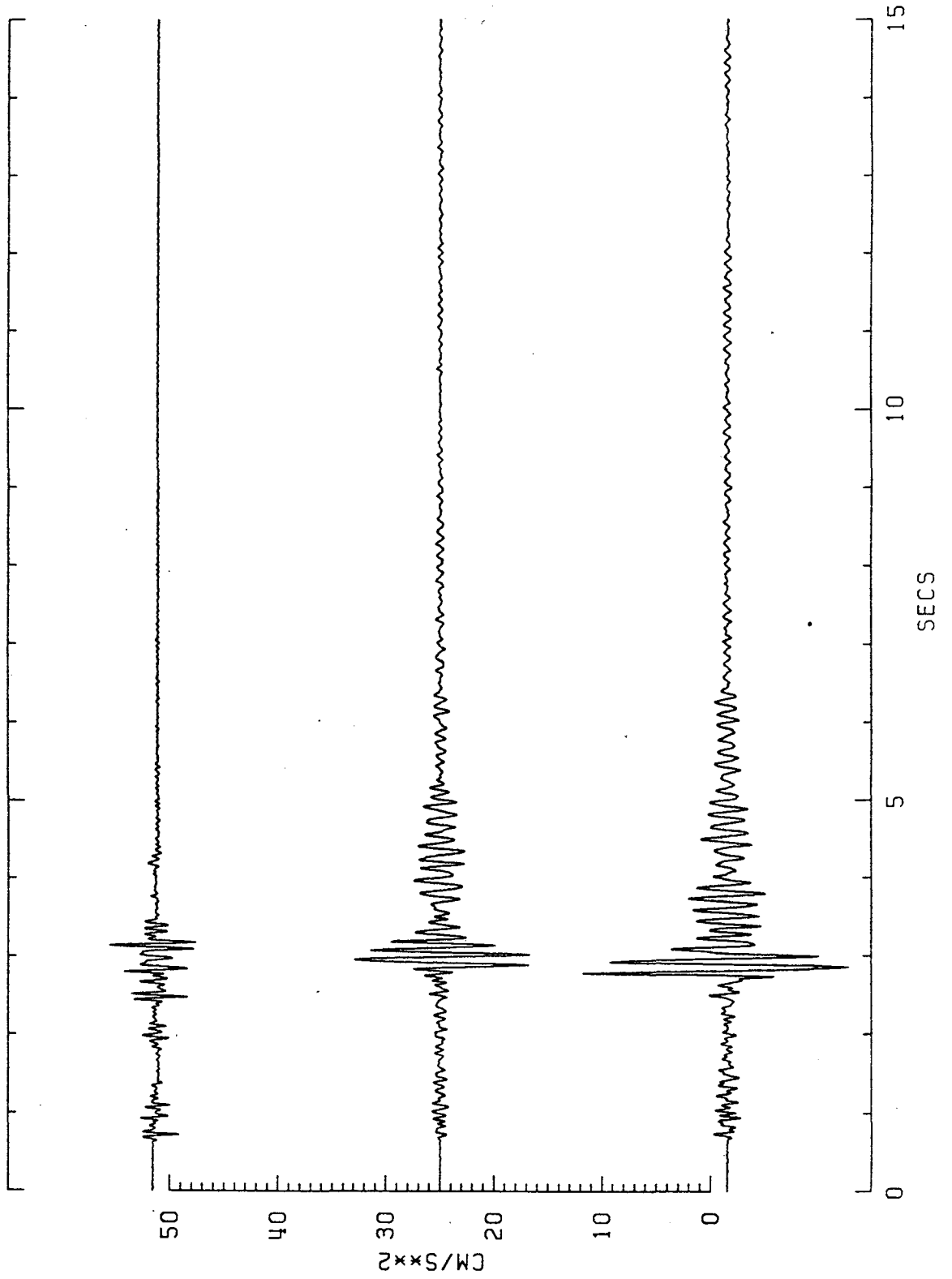
3450722E*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A188-562,563,564 84132/TS21 IEM 066

TIME: 345 0722 12.817

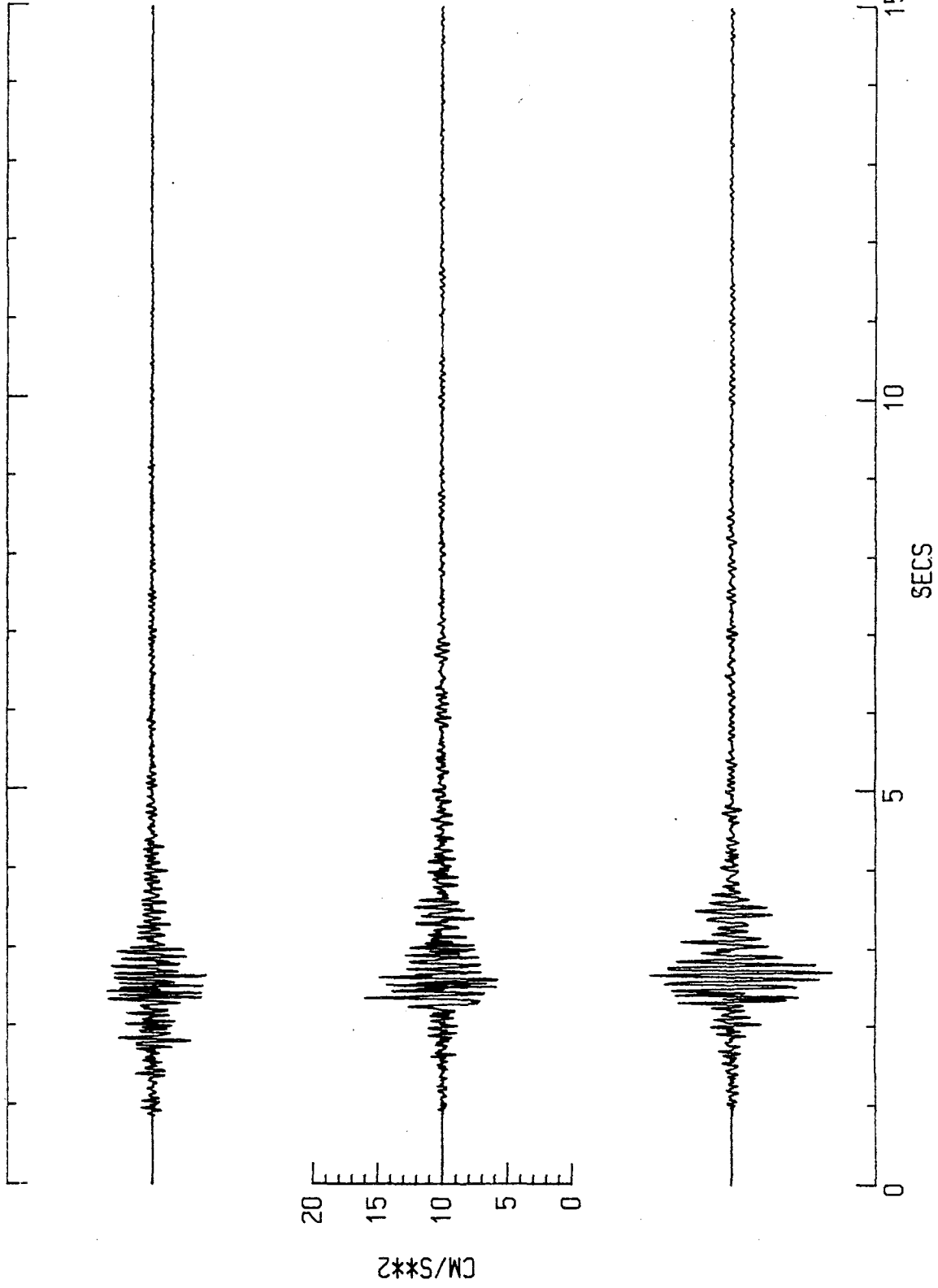
3450722E*.021 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A189-565,566,652 84137/TS01 IEM 207

TIME:346 0054 45.586

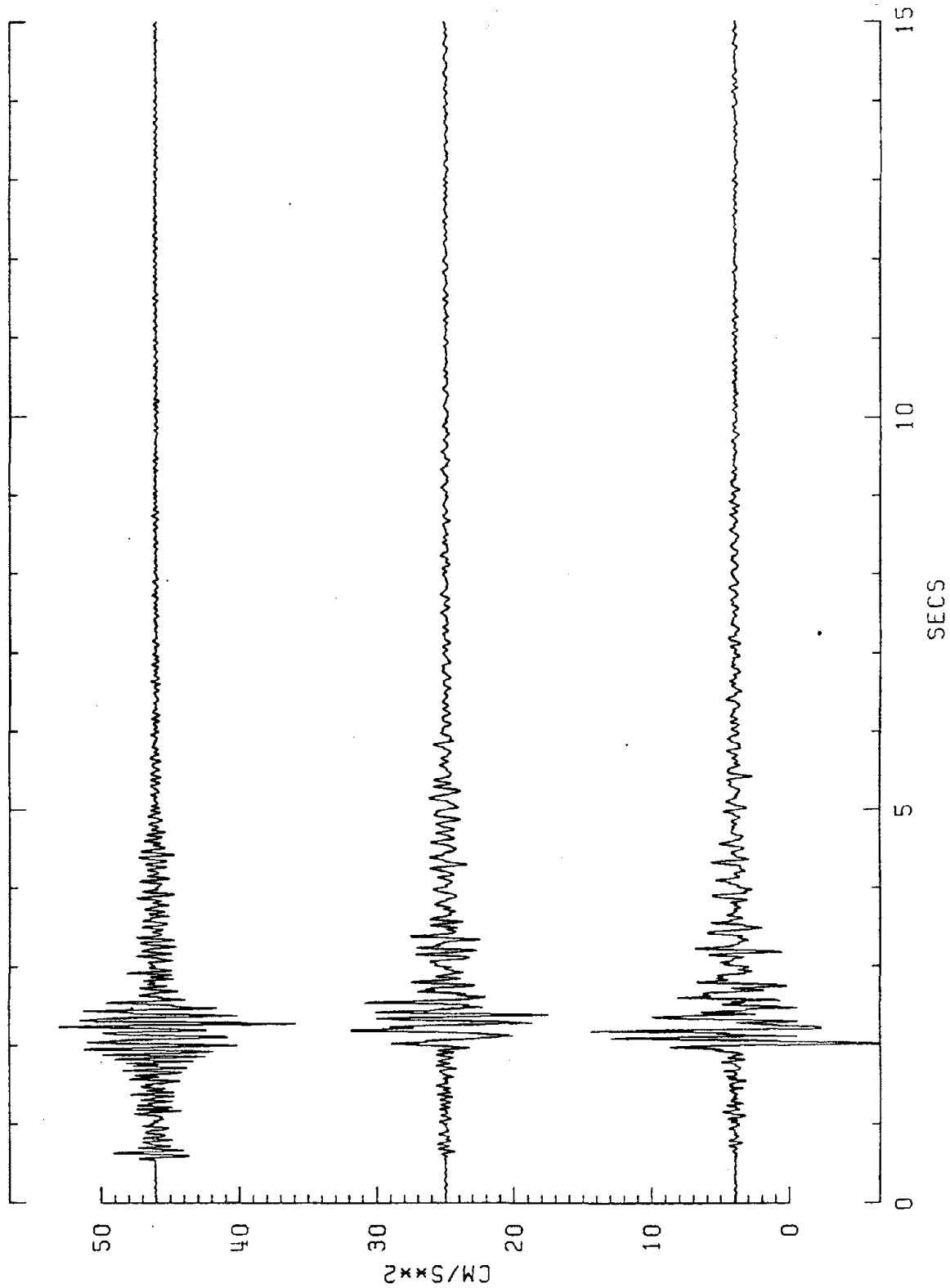
3460054P*.001 COMP:1 [UP], 2 [H=90], 3 [H=180]



6A190-567, 568, 569 84137/TS02 IEM 130

TIME: 346 0054 46.740

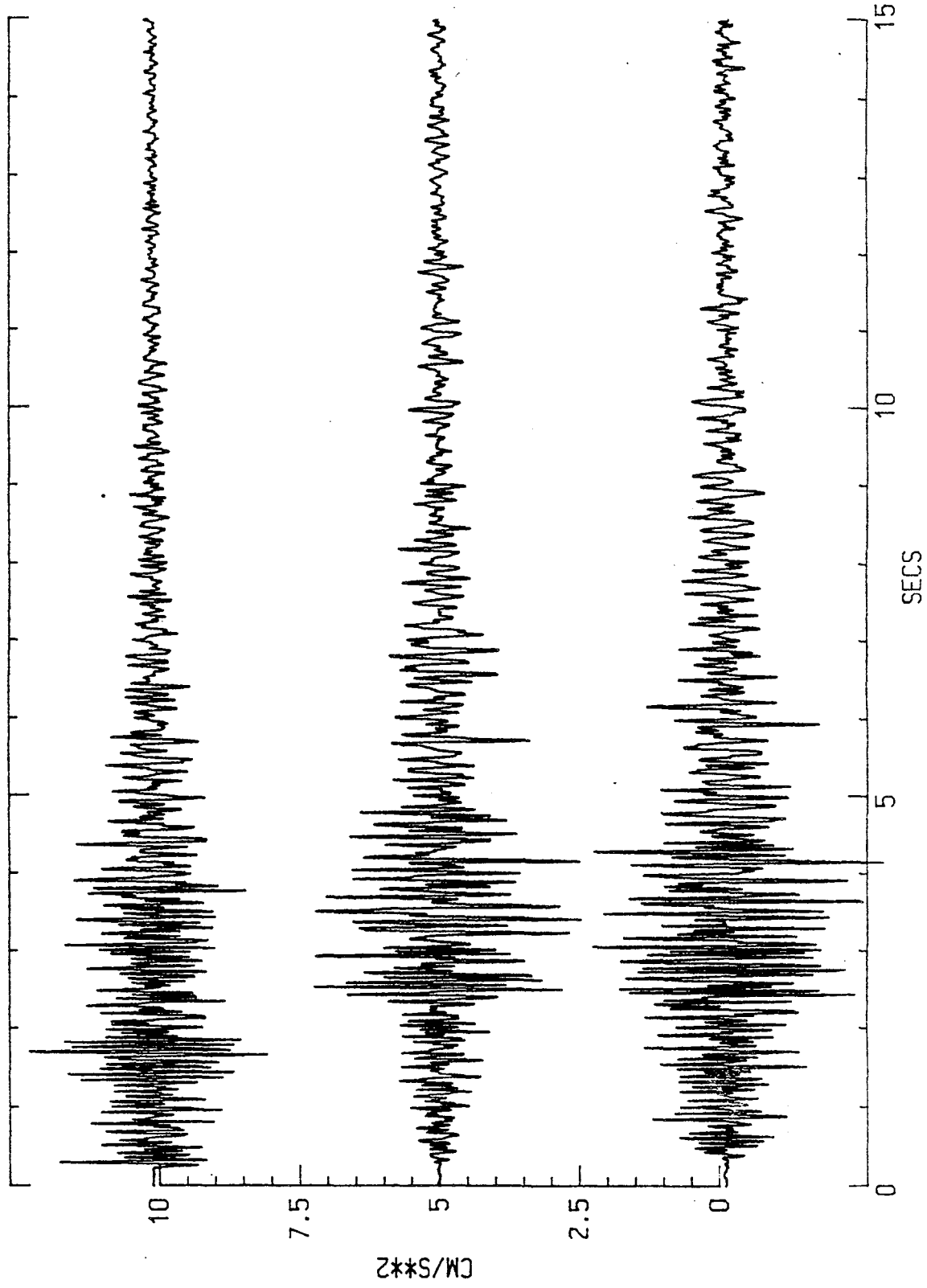
3460054P*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A191-570,571,572 84137/TS03 IEM 208

TIME:346 0054 46.884

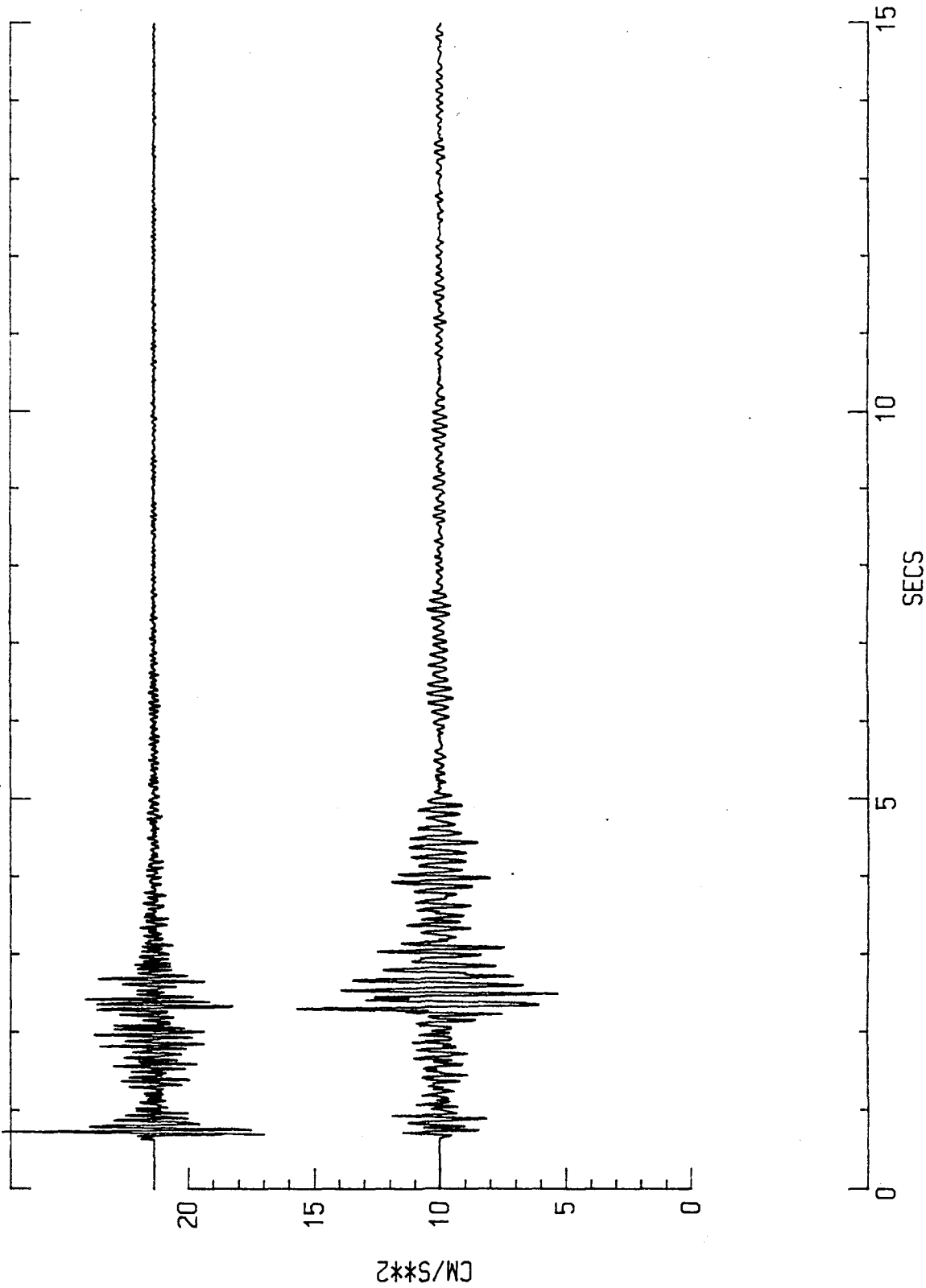
3460054Q*.003 COMP:1[U],2[H=0],3[H=90]



6A192-573,574 84137/TS18 IEM 209

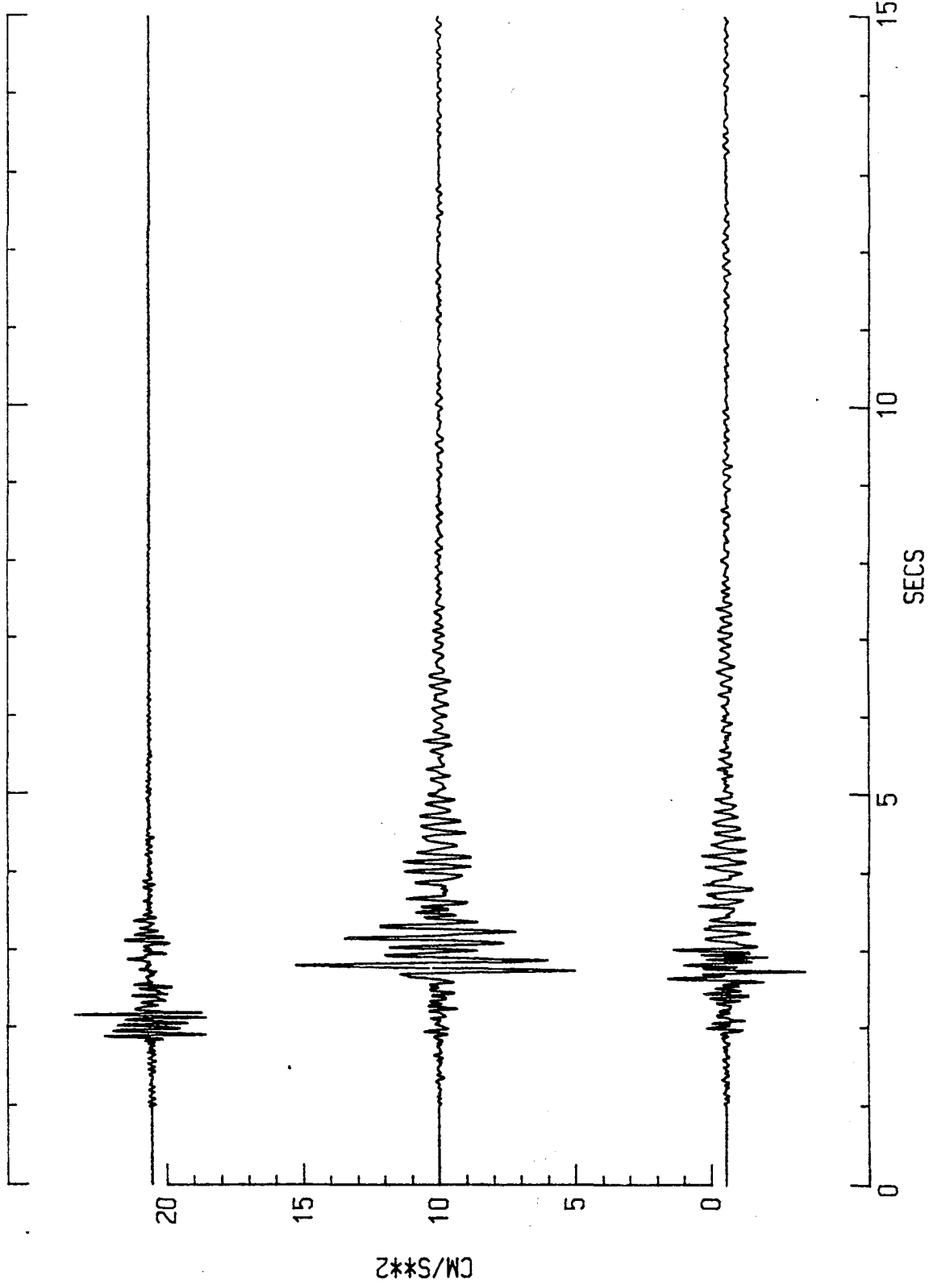
TIME:346 0054 46.686

3460054P*.018 COMP:1[UPL],2[H=0]



6A193-575, 576, 653 84137/TS21 IEM 210

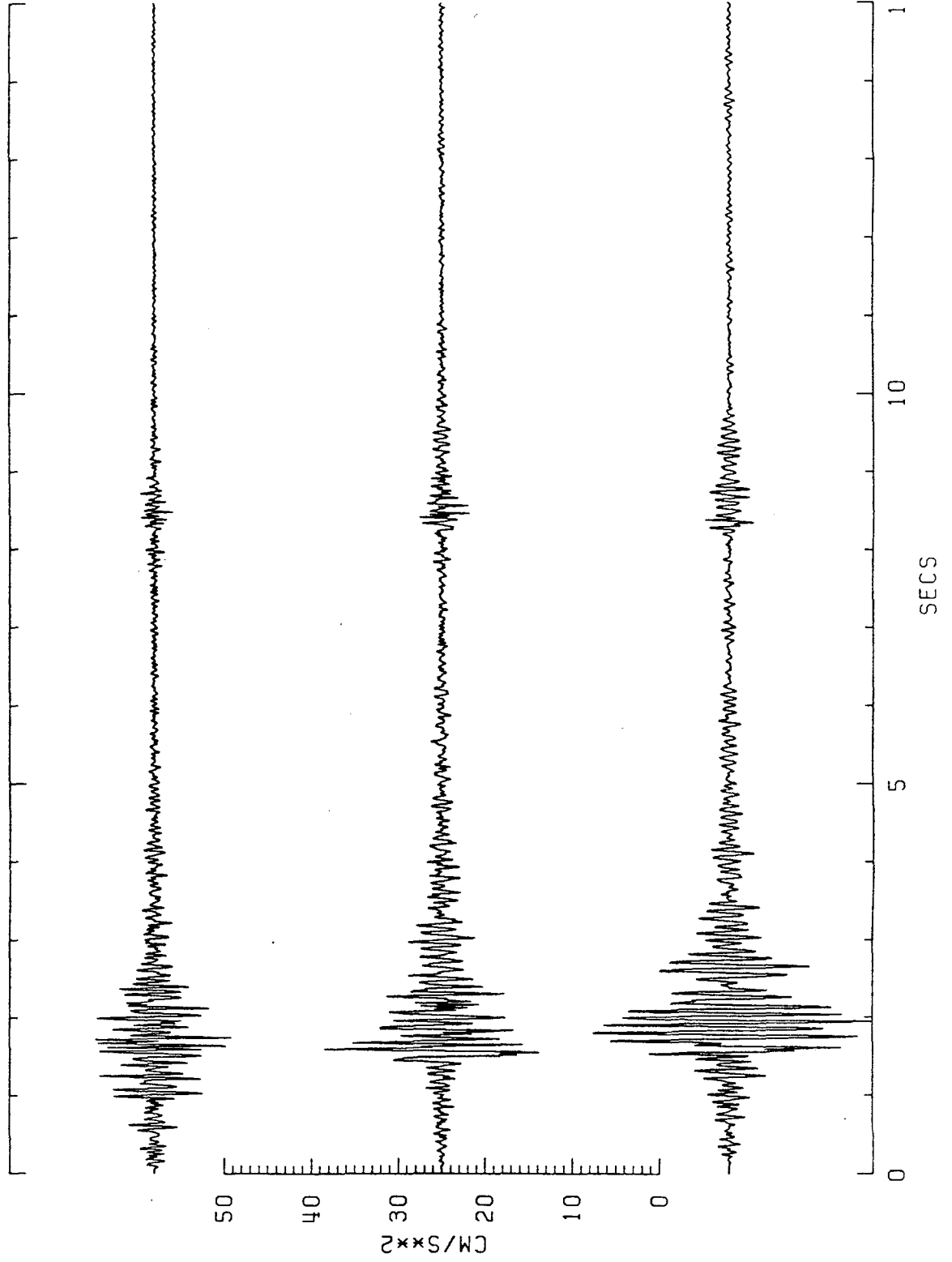
TIME: 346 0054 45.682
3460054P*.021 COMP: 1[U], 2[H=180], 3[H=270]



6A194-577,578,579 84138/TS01 IEM 067

TIME: 346 0055 43.895

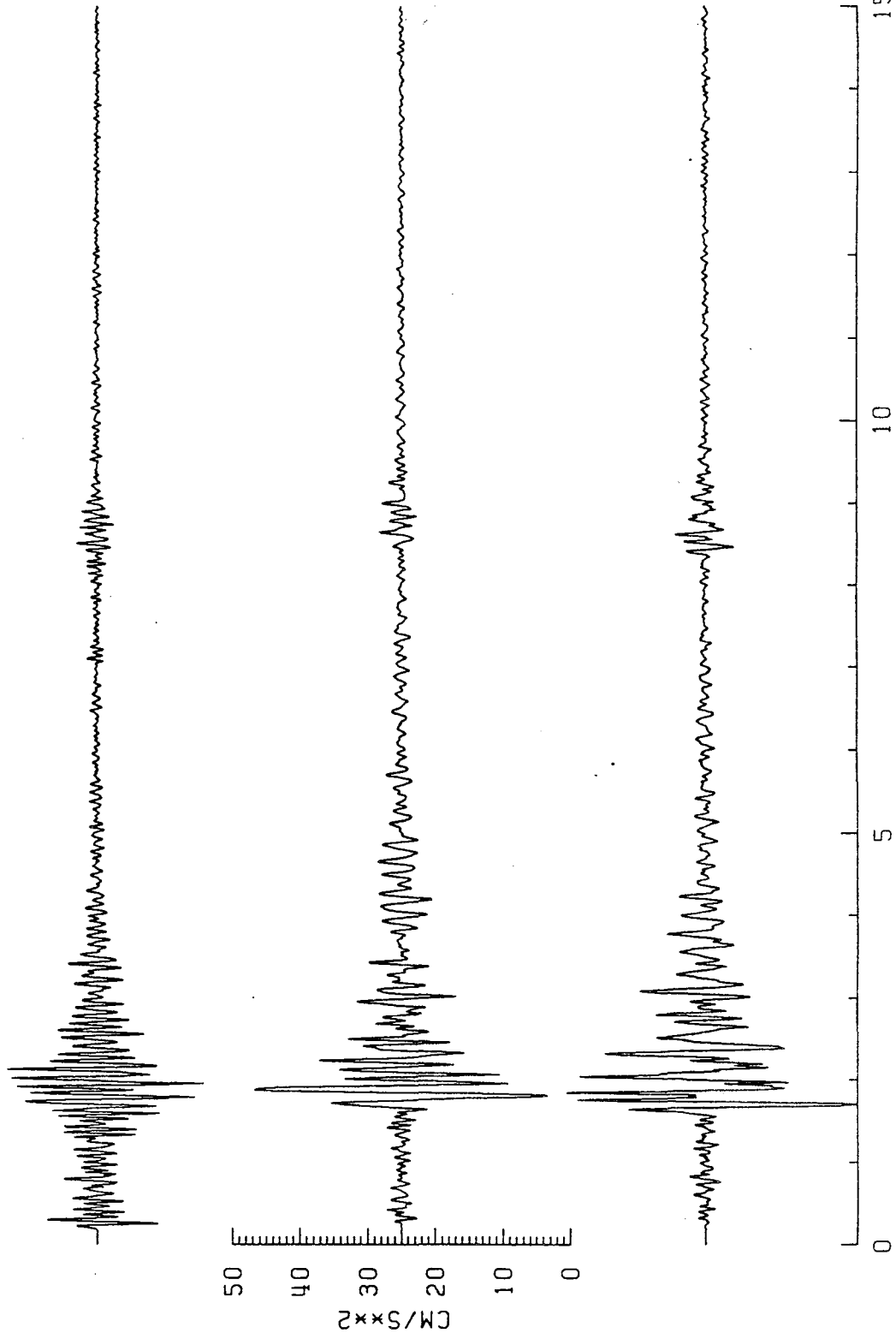
3460055N*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A195-580,581,582 84138/T502 IEM 068

TIME: 346 0055 44.620

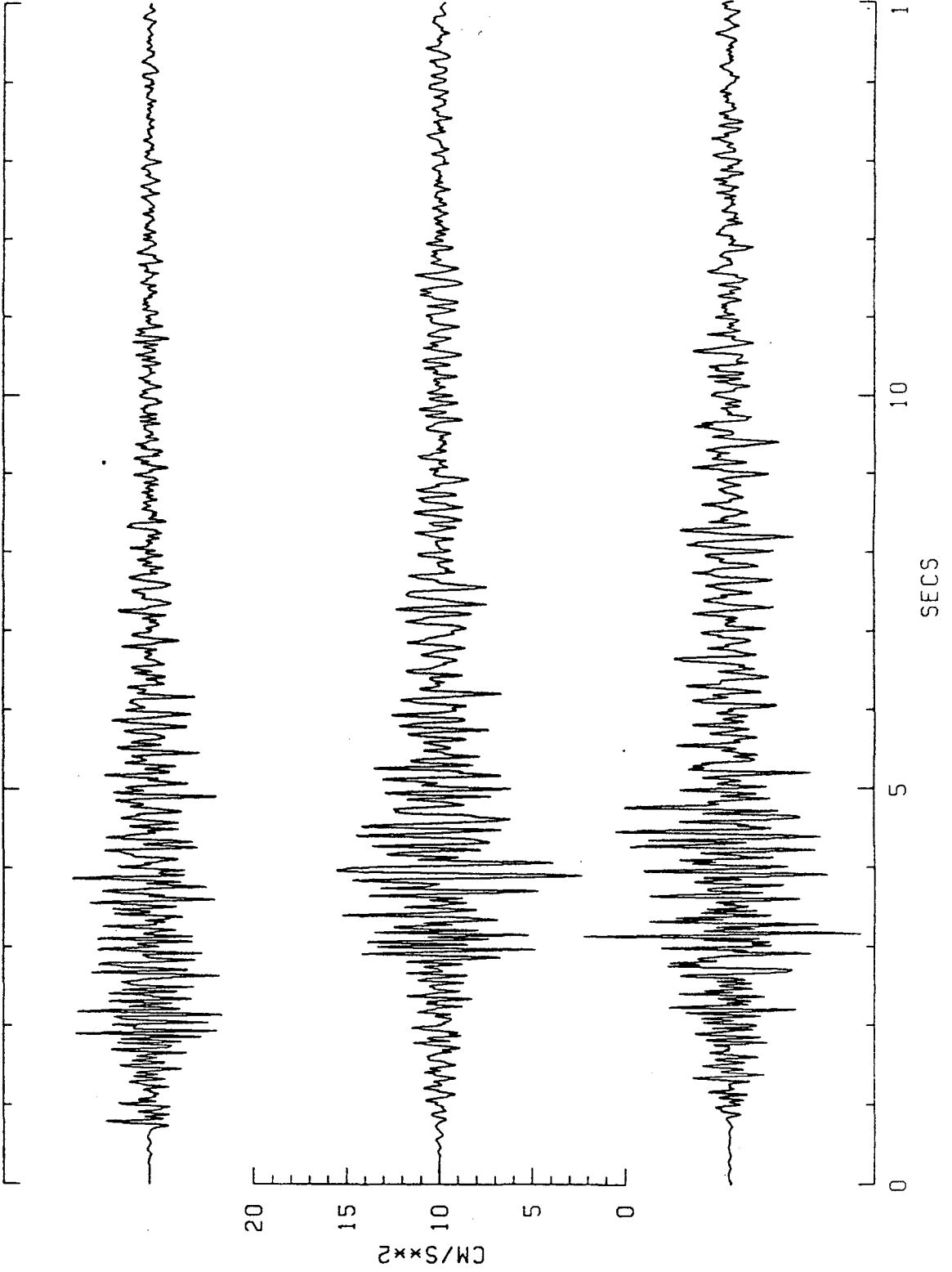
34600550*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A196-583,584,585 84138/TS03 IEM 069

TIME: 346 0055 43.934

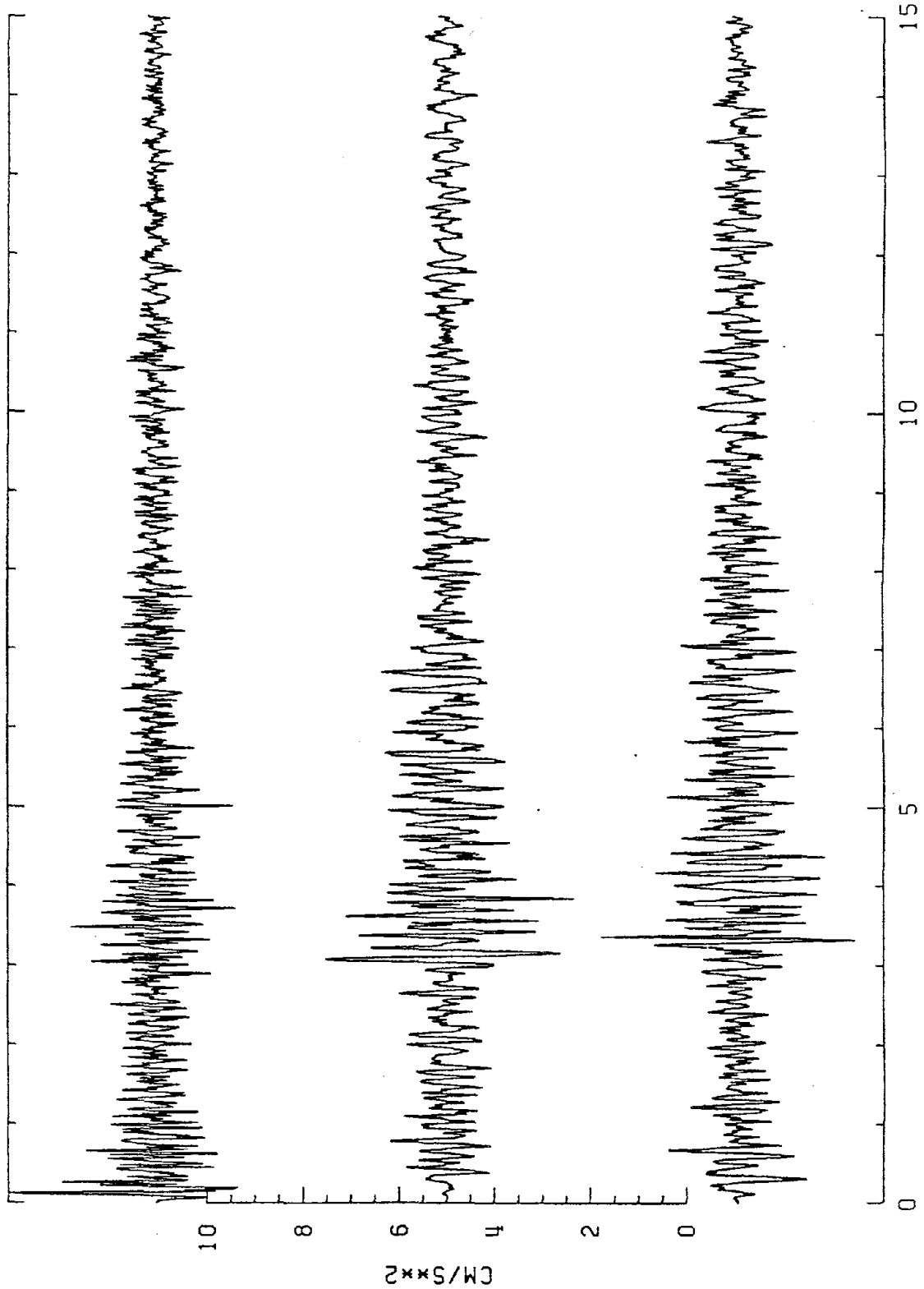
3460055N*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A197-586,587,588 84138/TS07 IEM 070

TIME: 346 0055 46.650

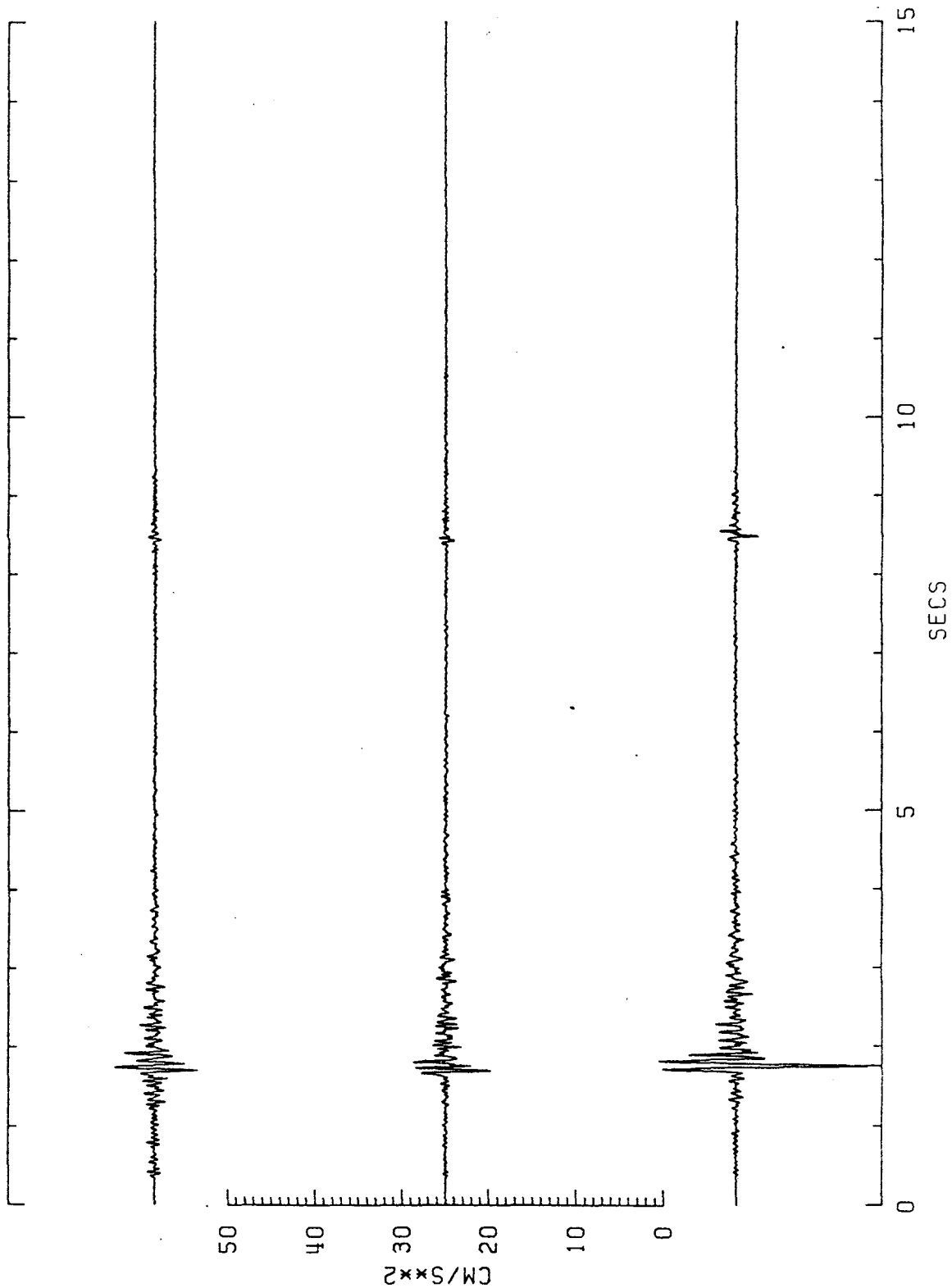
34600550*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A198-589,590,591 84138/TS15 IEM 071

TIME: 346 0055 44.389

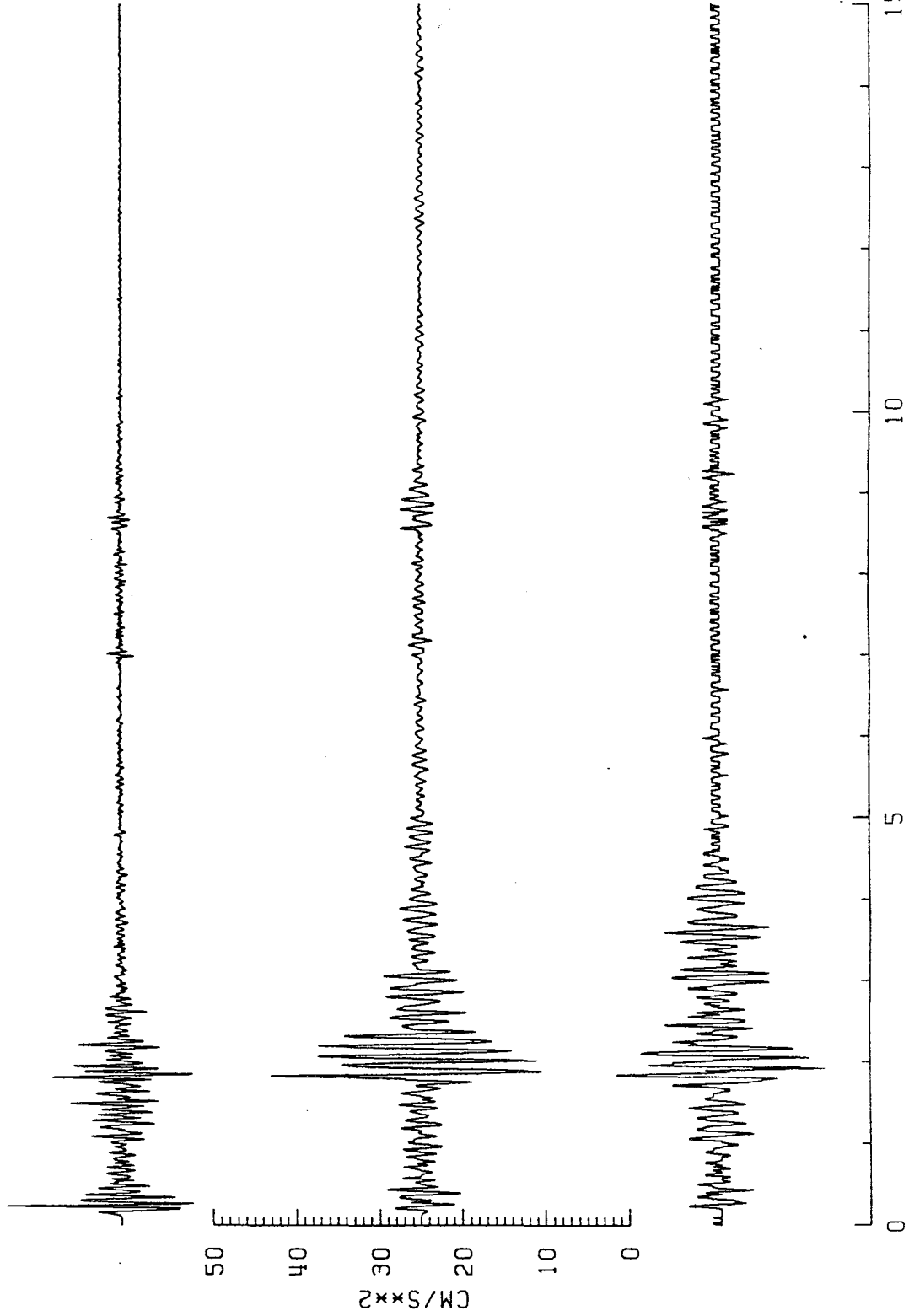
34600550*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A199-592,593,594 84138/TS18 IEM 073

TIME: 346 0055 44.716

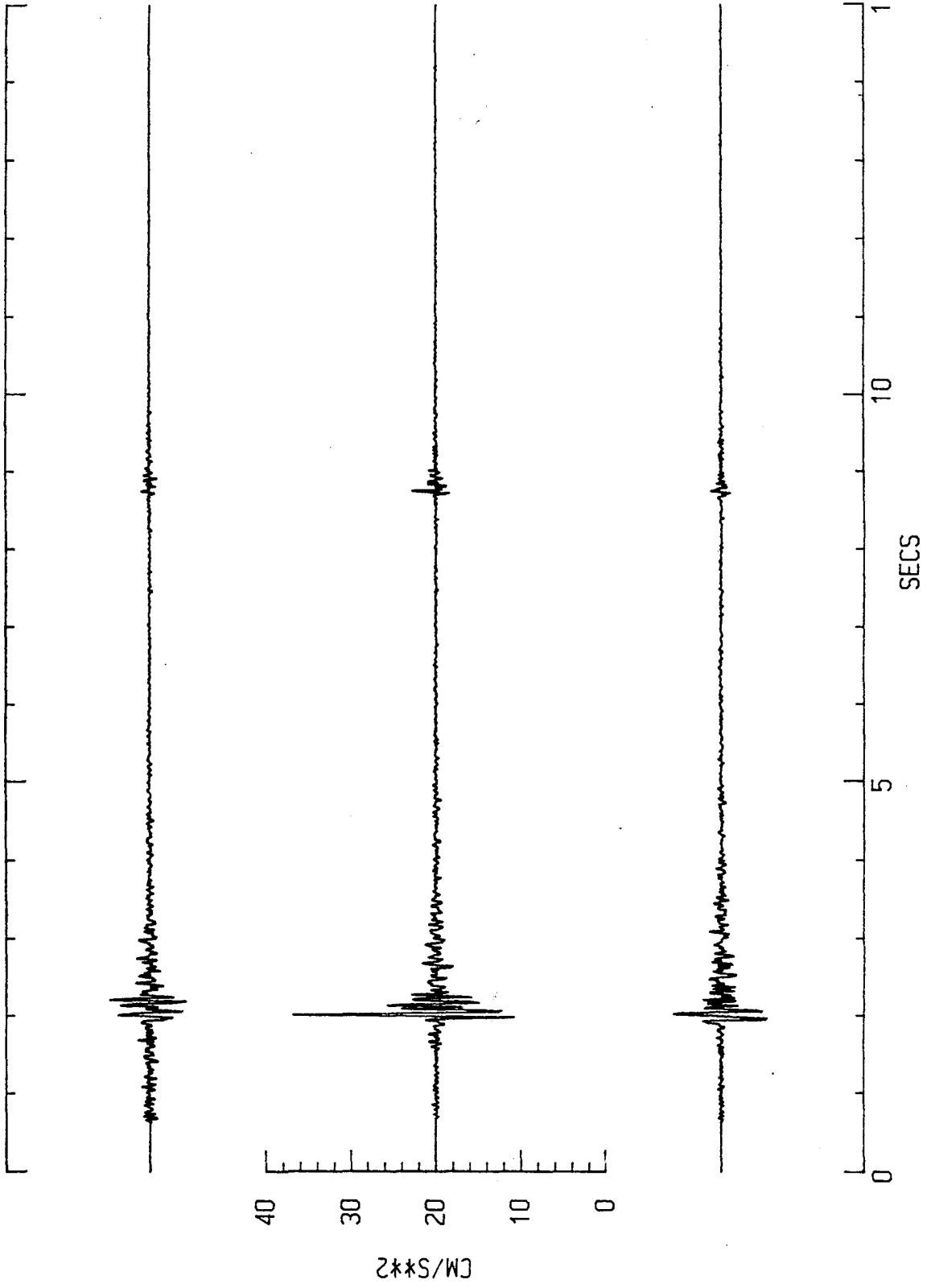
3460055N*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A200-595,596,597 84138/TS19 IEM 211

TIME:346 0055 43.480

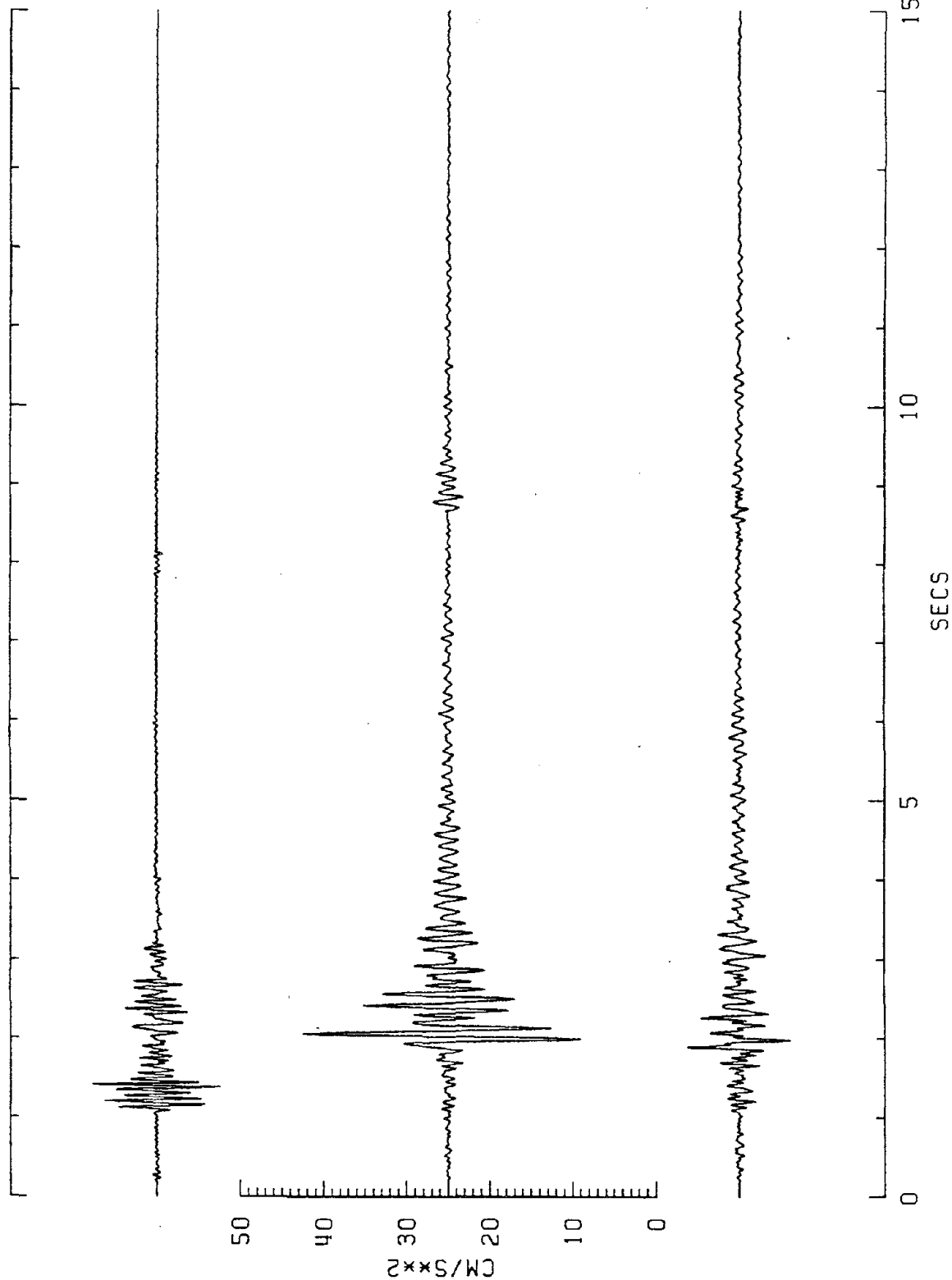
3460055N*.019 COMP:1[UP],2[H=0],3[H=90]



6A201-598,599,600 84138/TS21 IEM 072

TIME: 346 0055 45.211

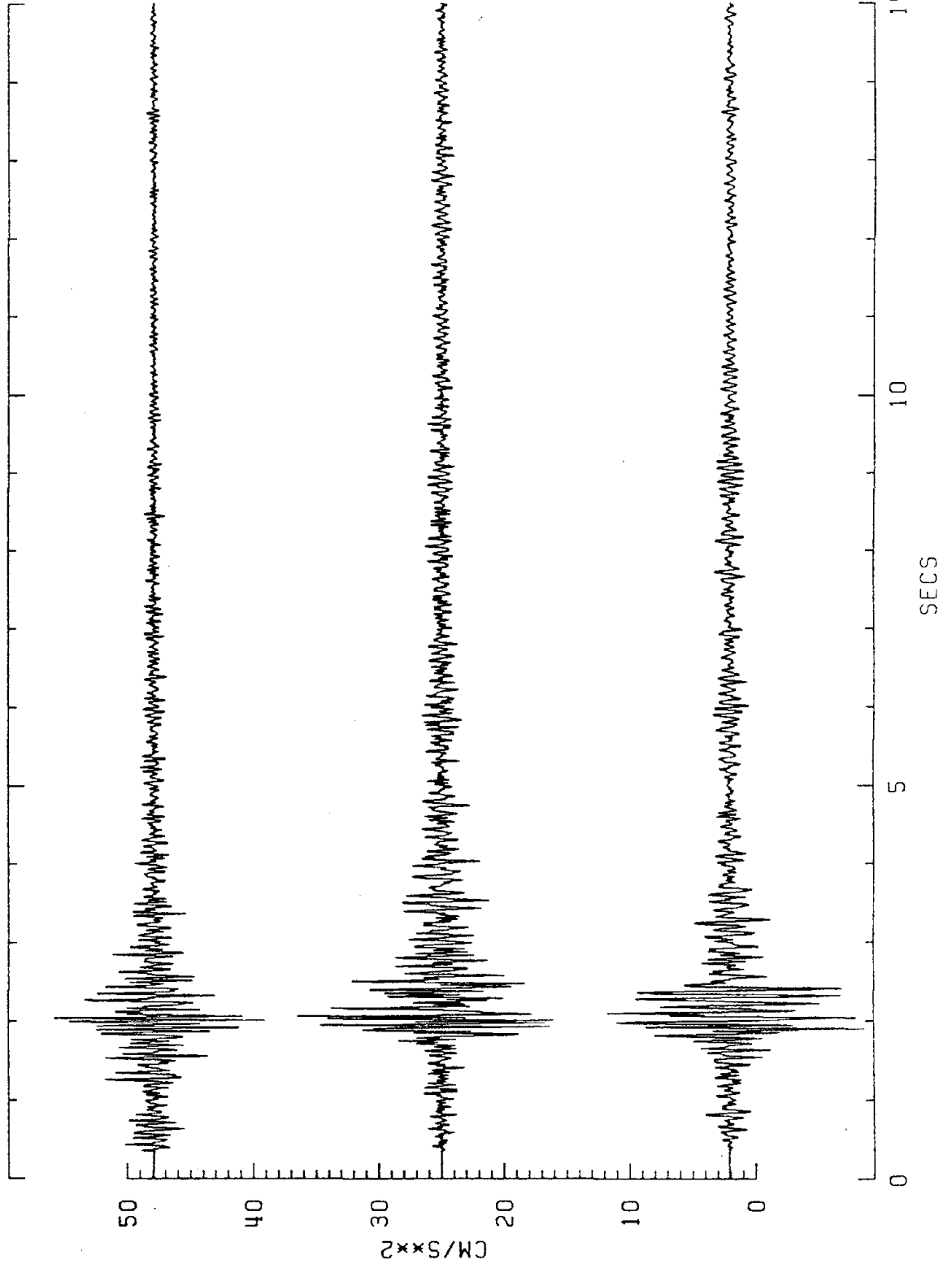
34600550*.021 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A202-601,602,603 84139/T501 IEM 074

TIME: 346 0551 06.735

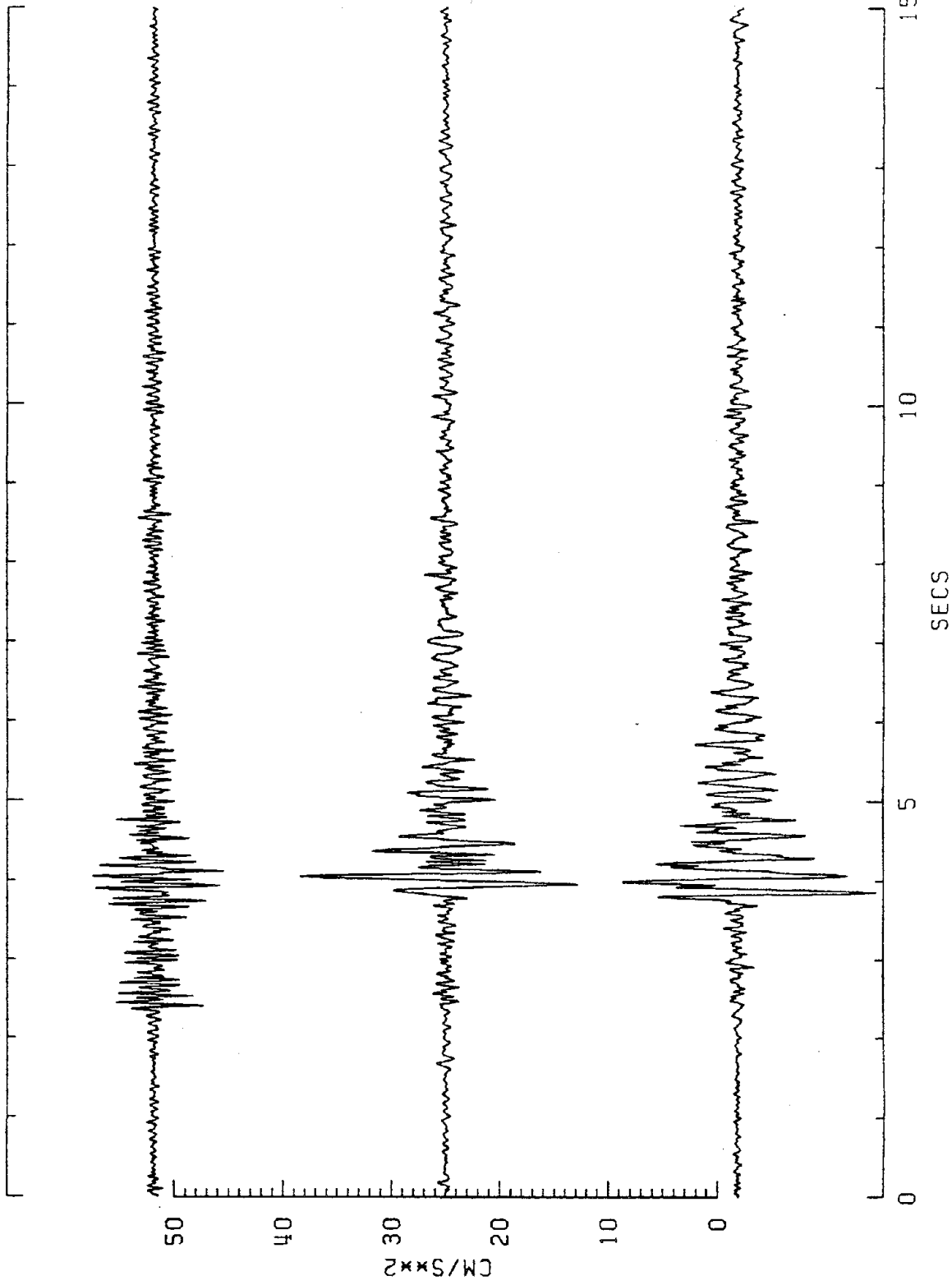
3460551B*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A203-604,605,606 84139/TS02 IEM 075

TIME: 346 0551 05.580

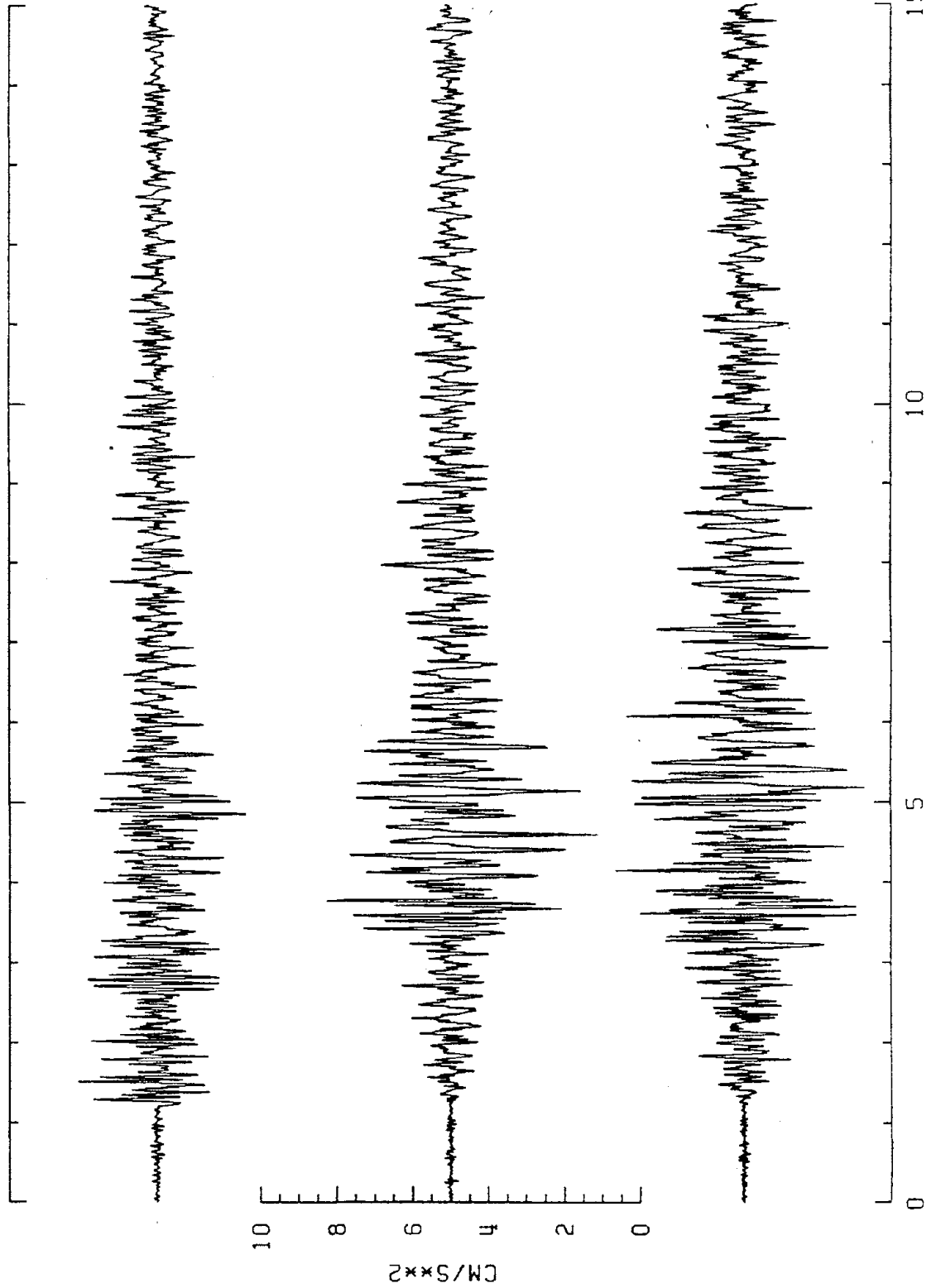
3460551B*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A204-607,608,609 84139/TS03 IEM 076

TIME: 346 0551 06.512

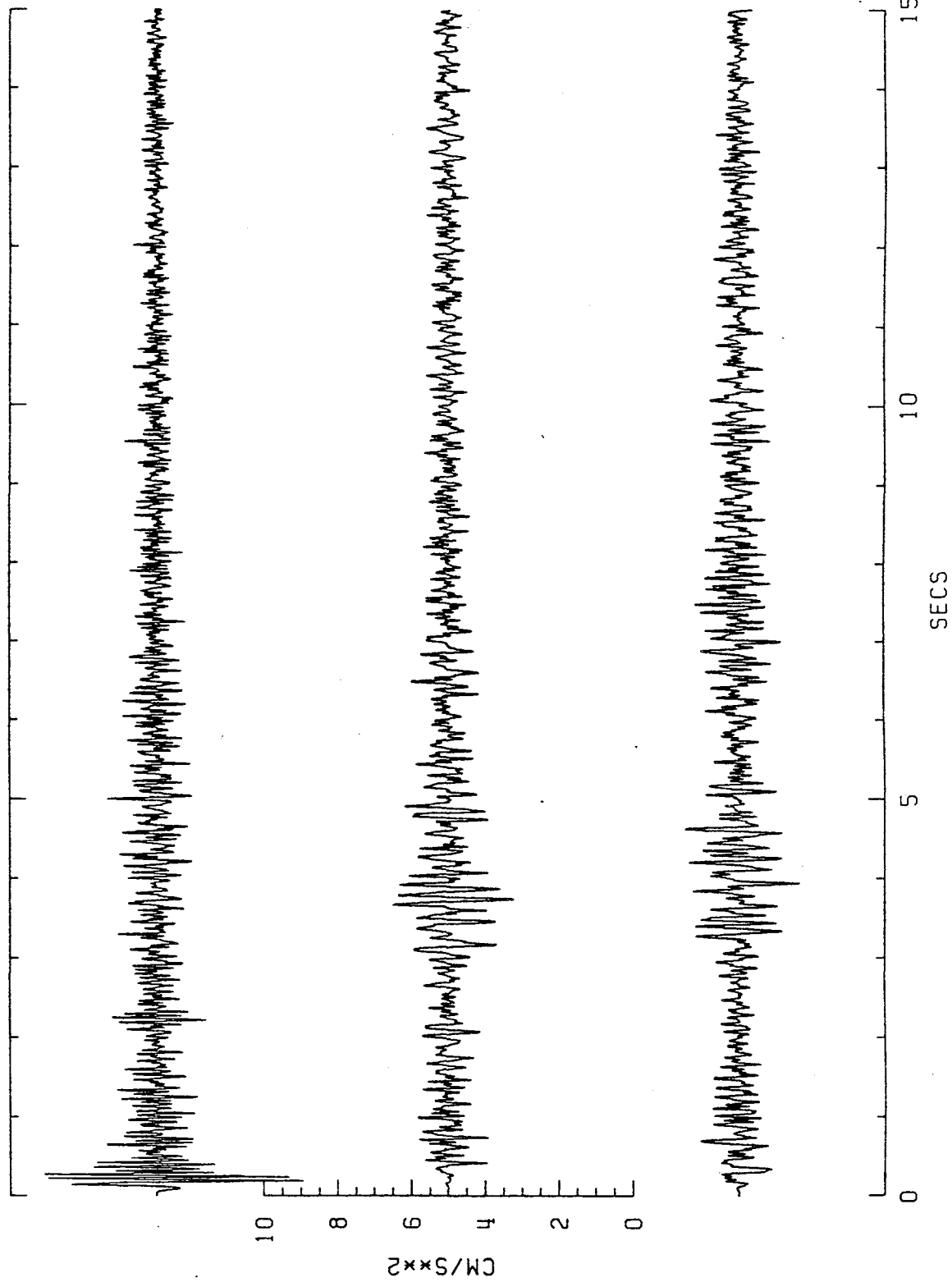
3460551C*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A205-610,611,612 84139/TS07 IEM 077

TIME: 346 0551 09.710

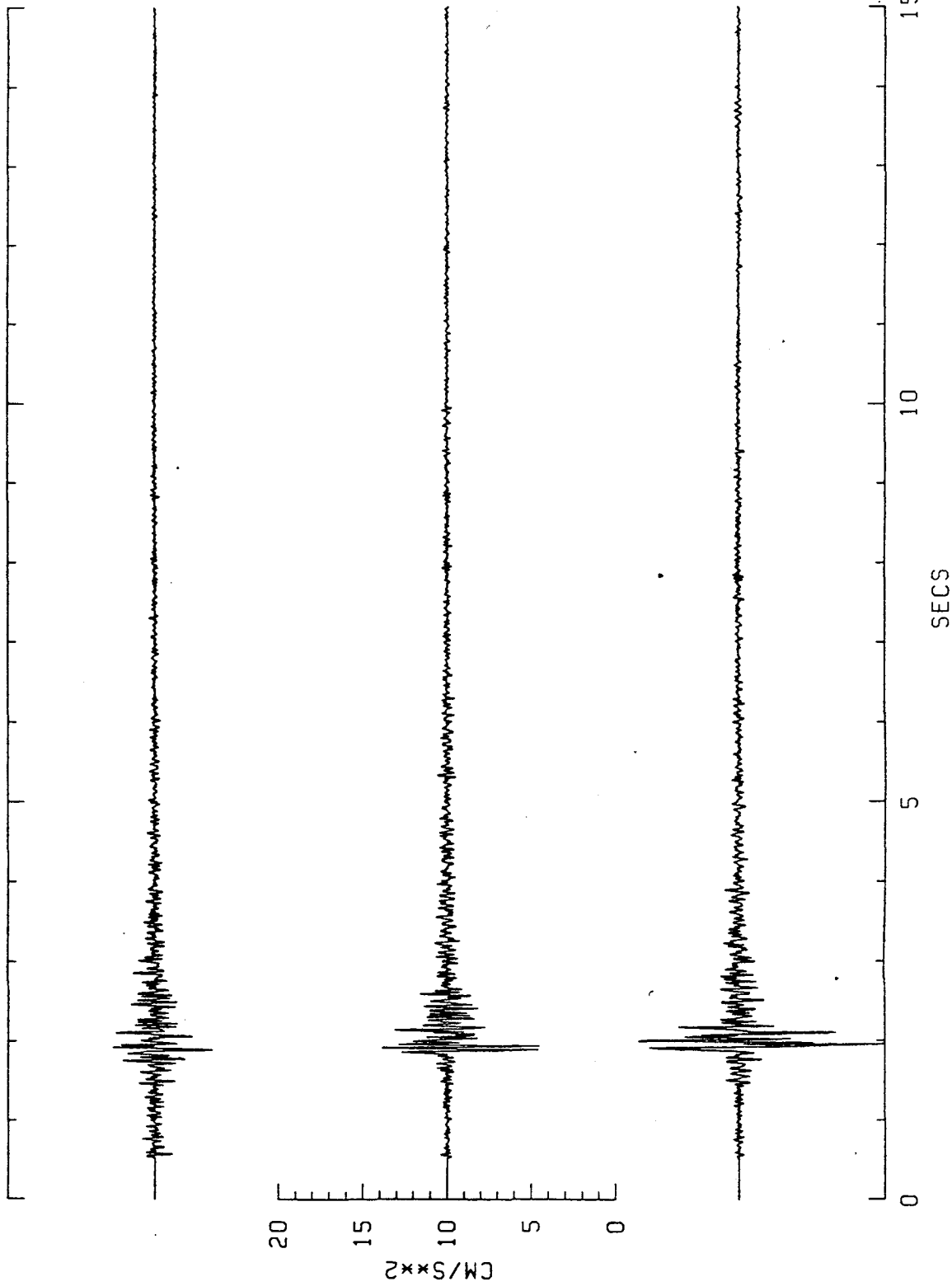
3460551D*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A206-613,614,615 84139/TS15 IEM 078

TIME: 346 0551 07.298

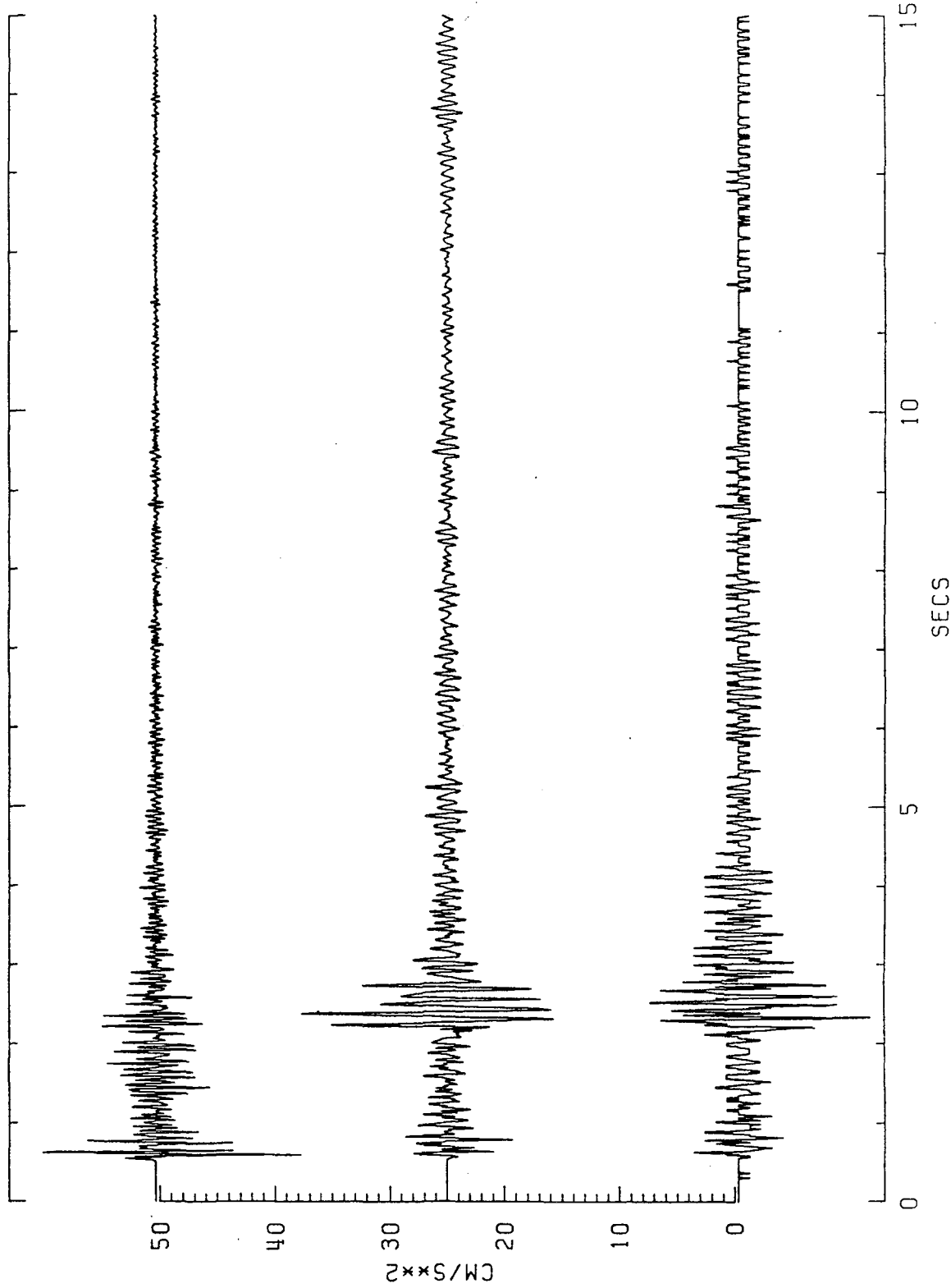
3460551B*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A207-616,617,618 84139/TS18 IEM 080

TIME: 346 0551 07.414

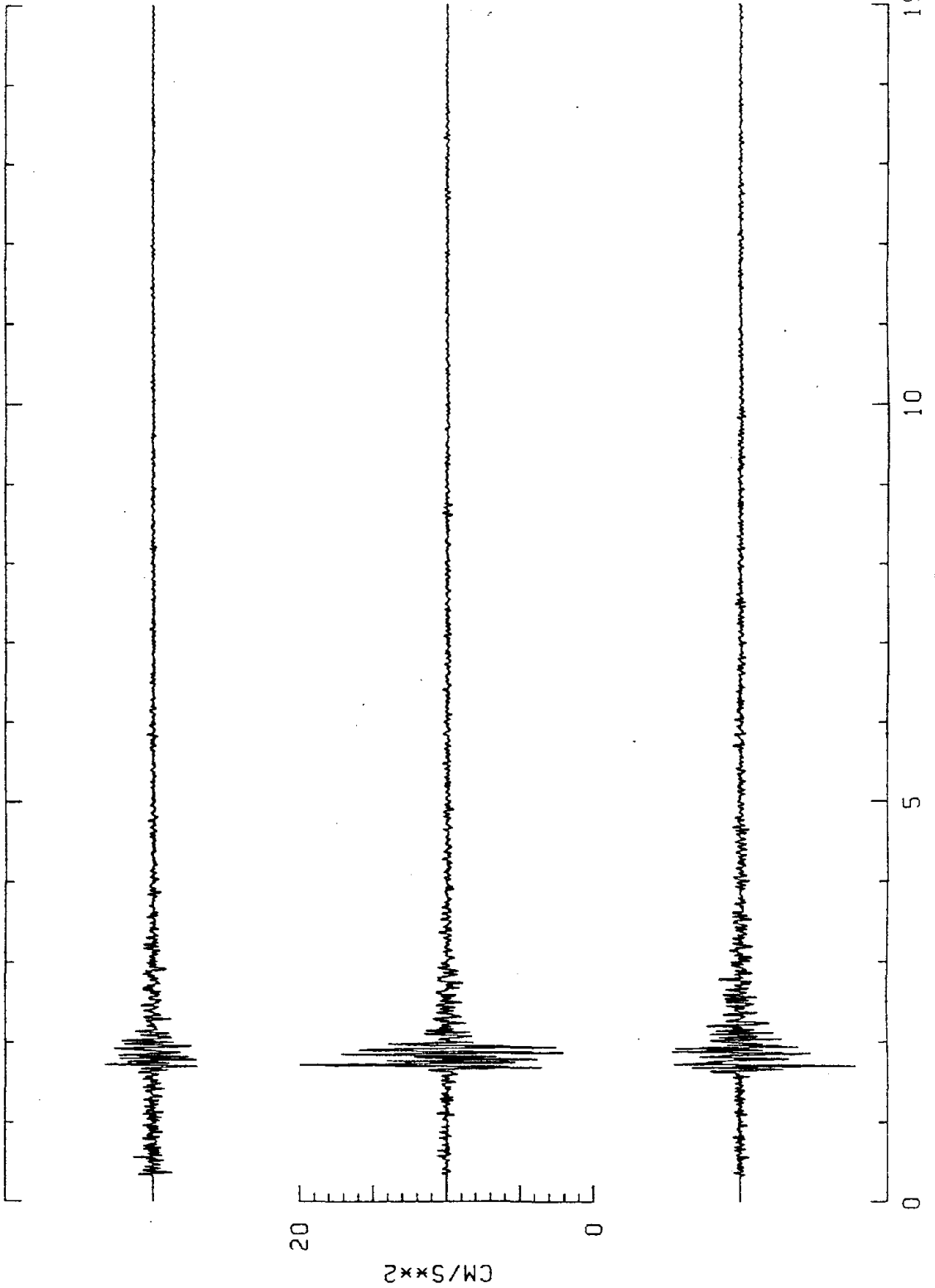
3460551C*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A208-619,620,621 84139/TS19 IEM 081

TIME: 346 0551 06.859

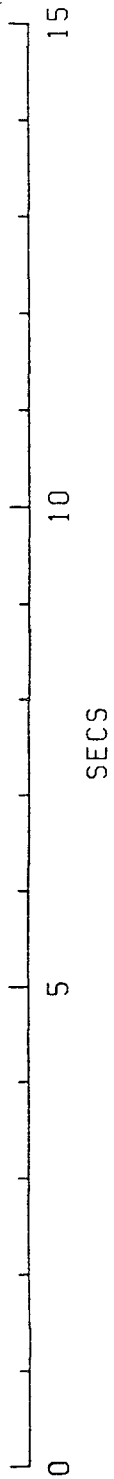
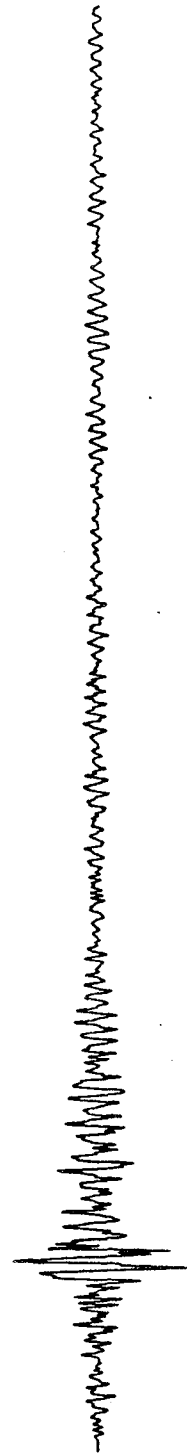
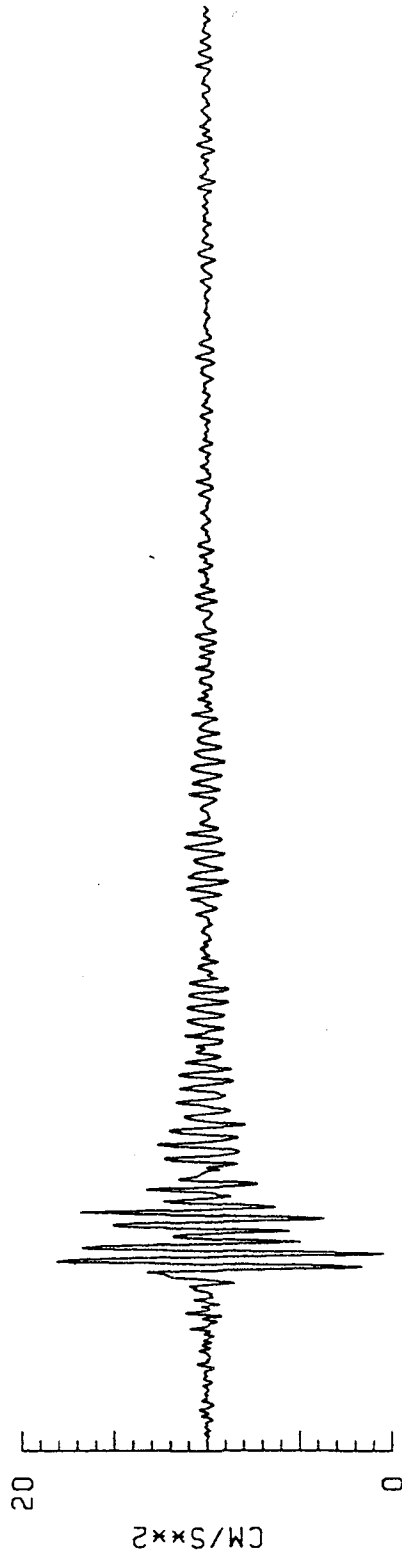
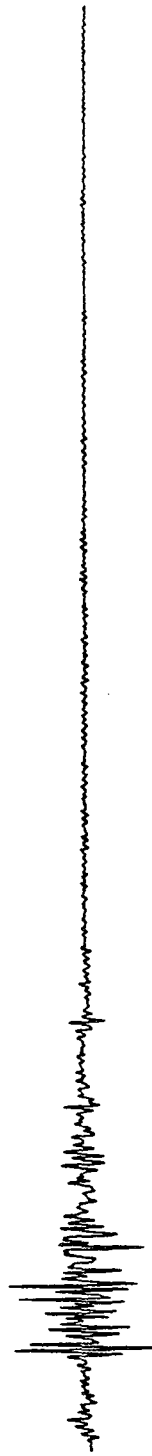
3460551B*.019 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A209-622,623,624 84139/TS21 IEM 079

TIME: 346 0551 07.201

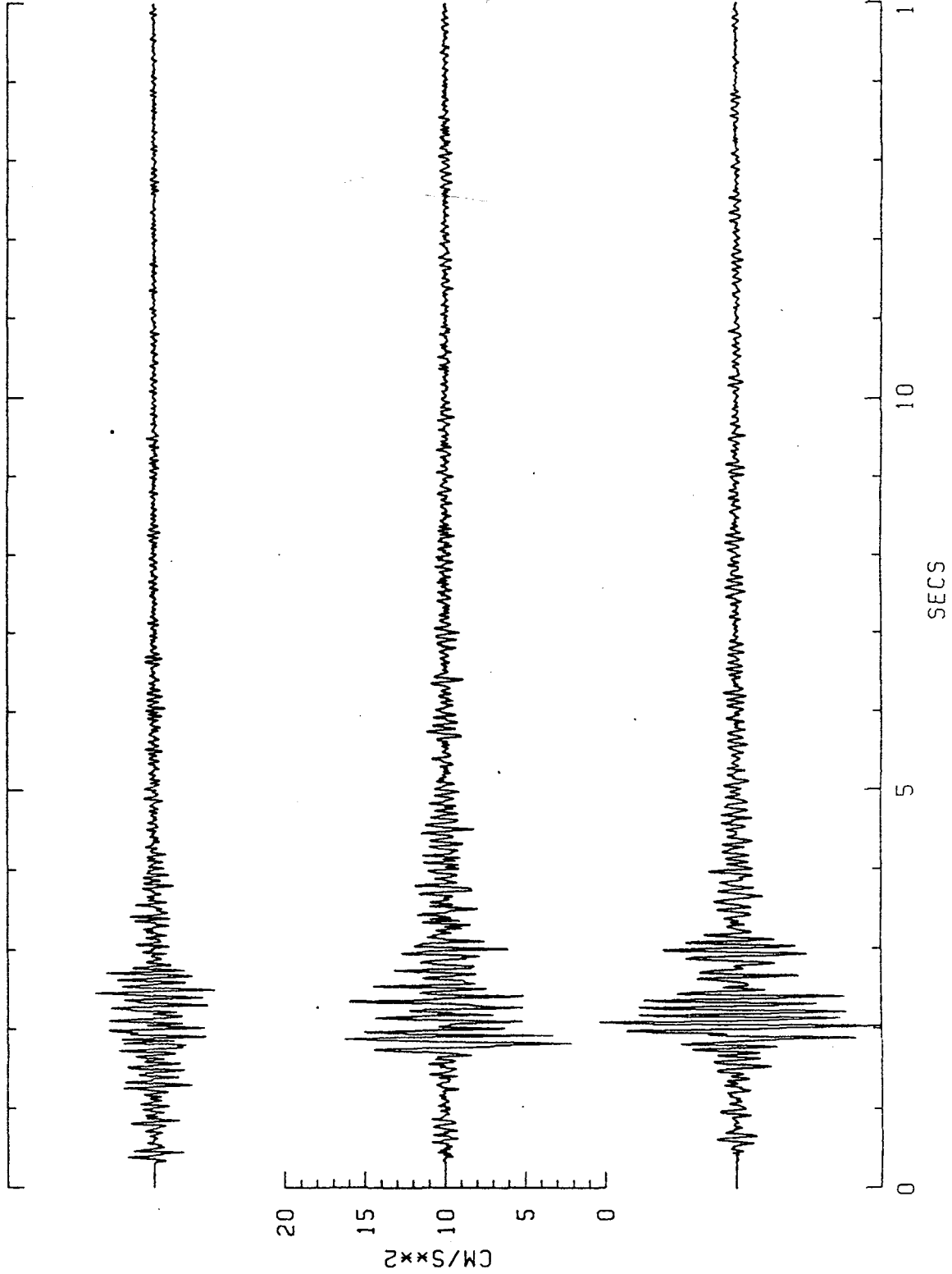
3460551B*.021 COMP:1 (UP) , 2 (H=180) , 3 (H=270)



6A210-625,626,627 84142/TS01 IEM 131

TIME: 346 0614 10.405

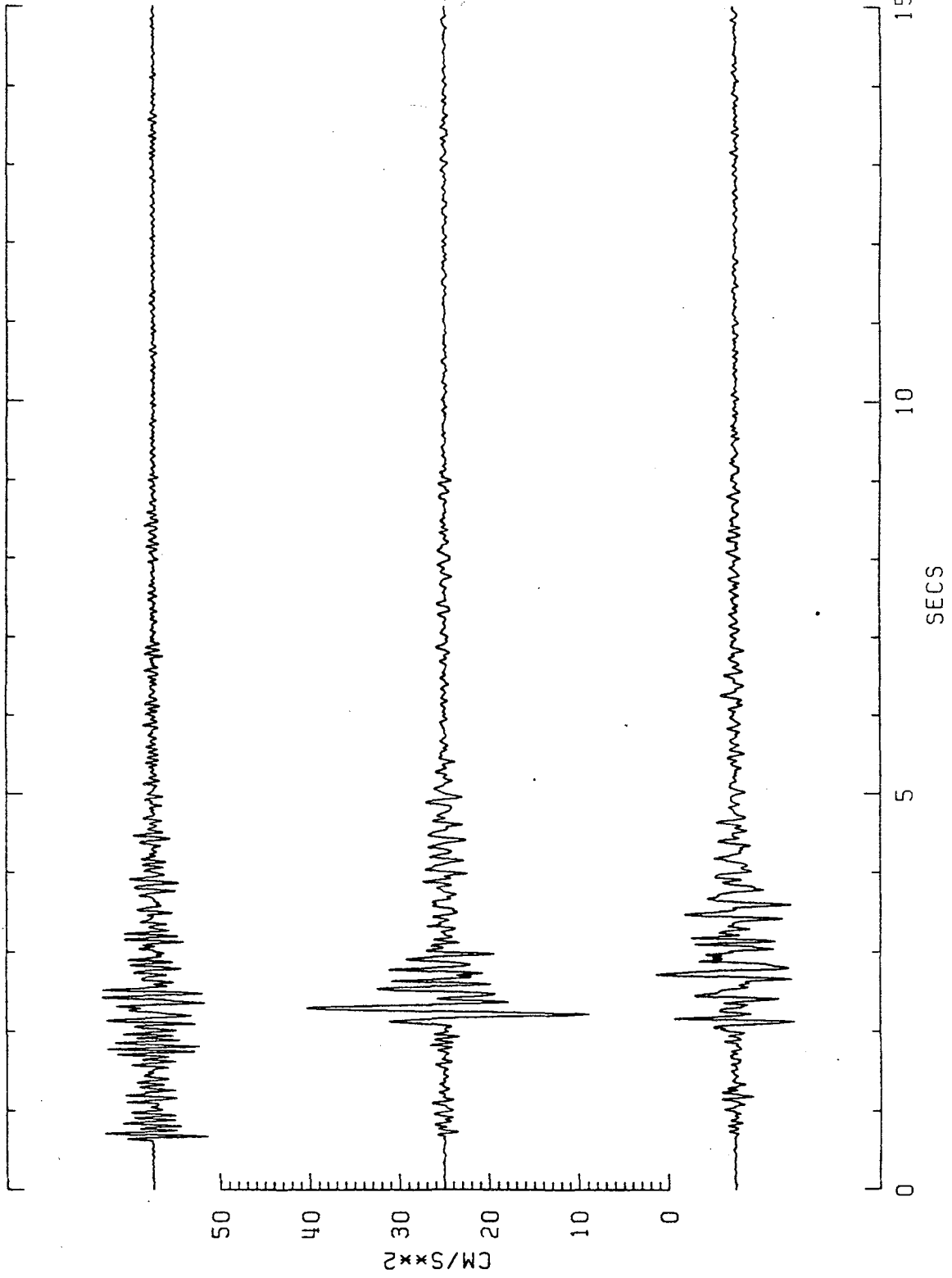
3460614C*.001 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A211-628,629,630 84142/TS02 IEM 132

TIME: 346 0614 10.959

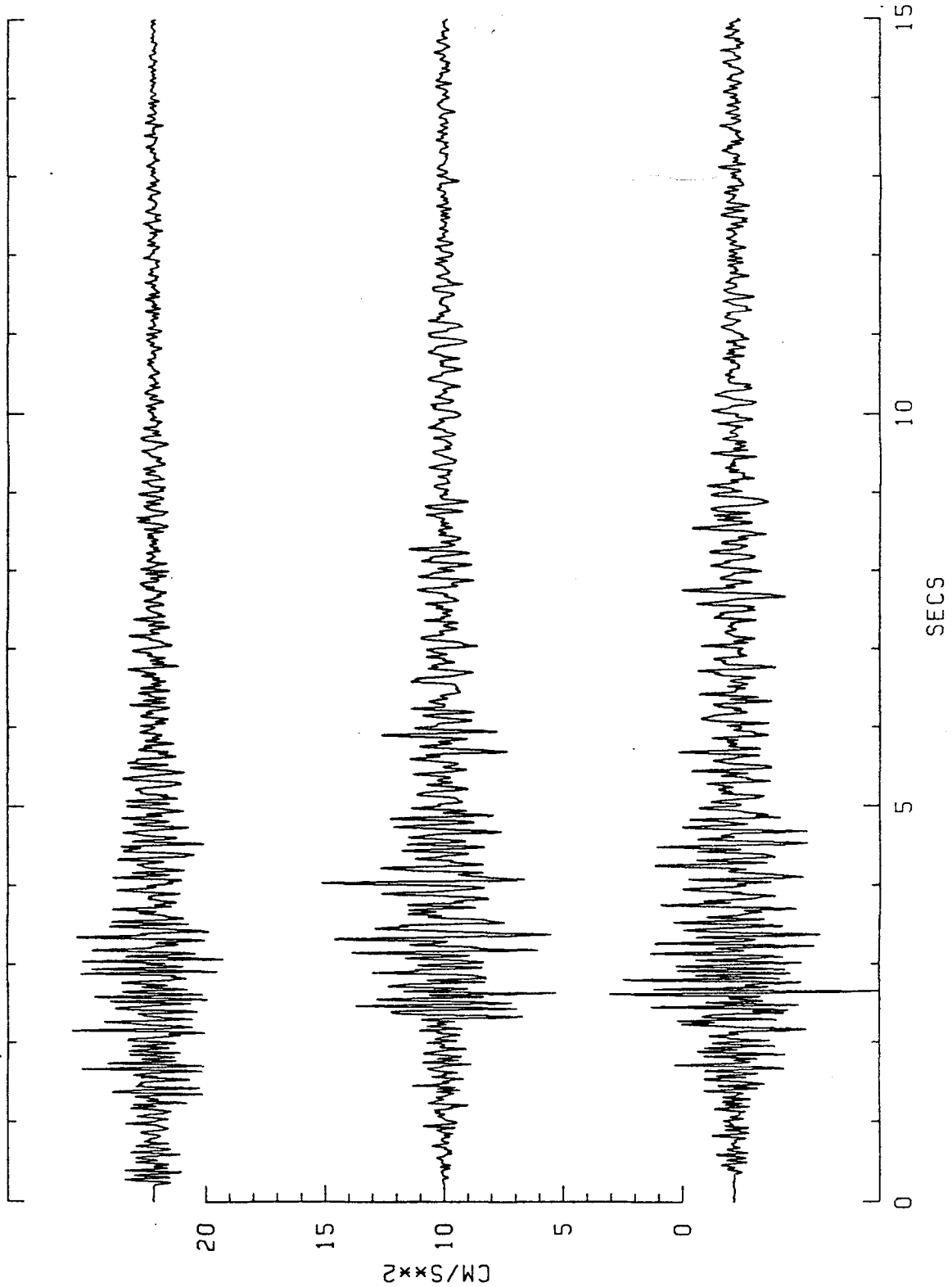
3460614C*.002 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A212-631, 632, 633 84142/TS03 IEM 134

TIME: 346 0614 11.171

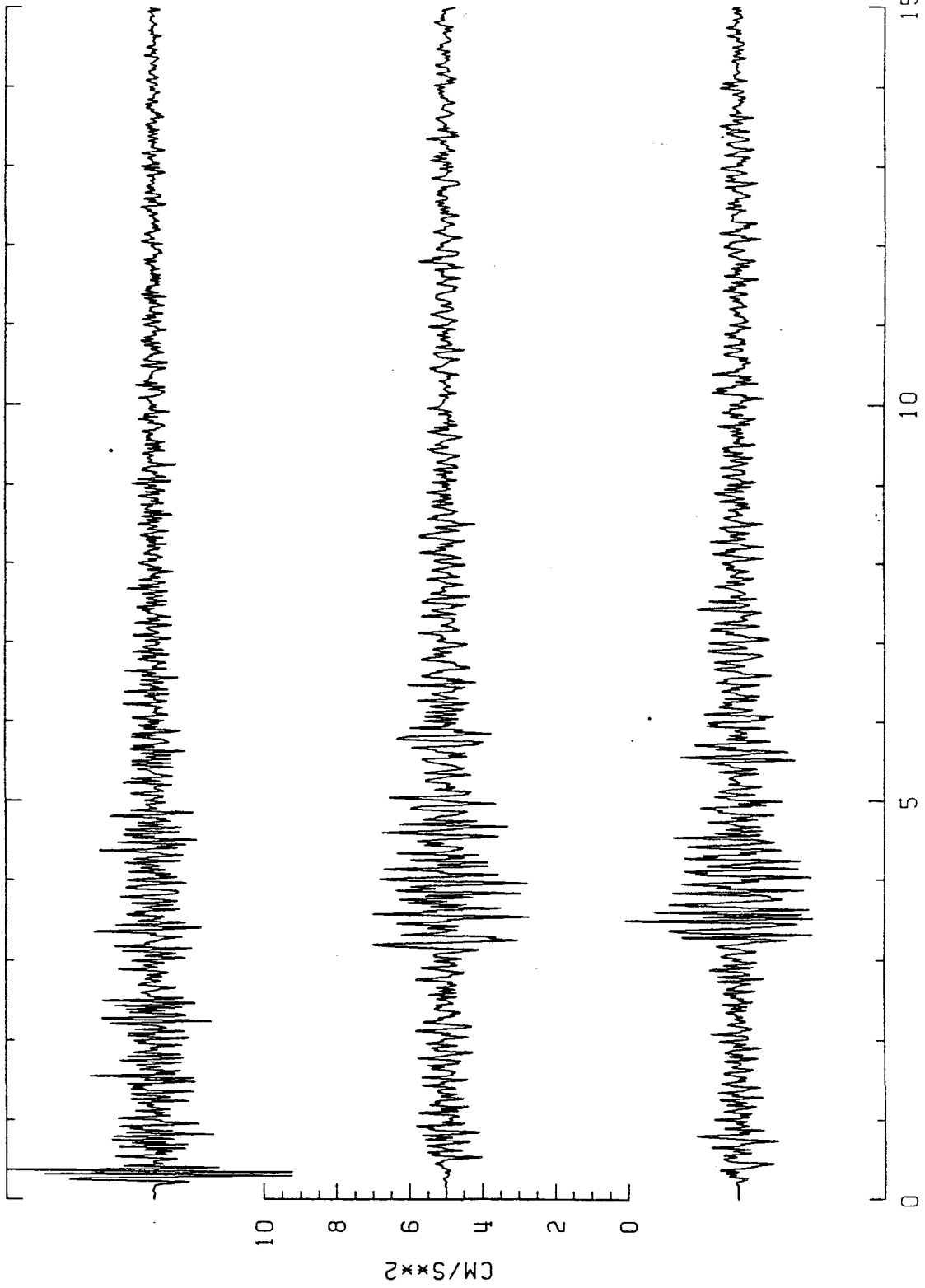
3460614D*.003 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A213-634, 635, 636 84142/TS07 IEM 135

TIME: 346 0614 13.251

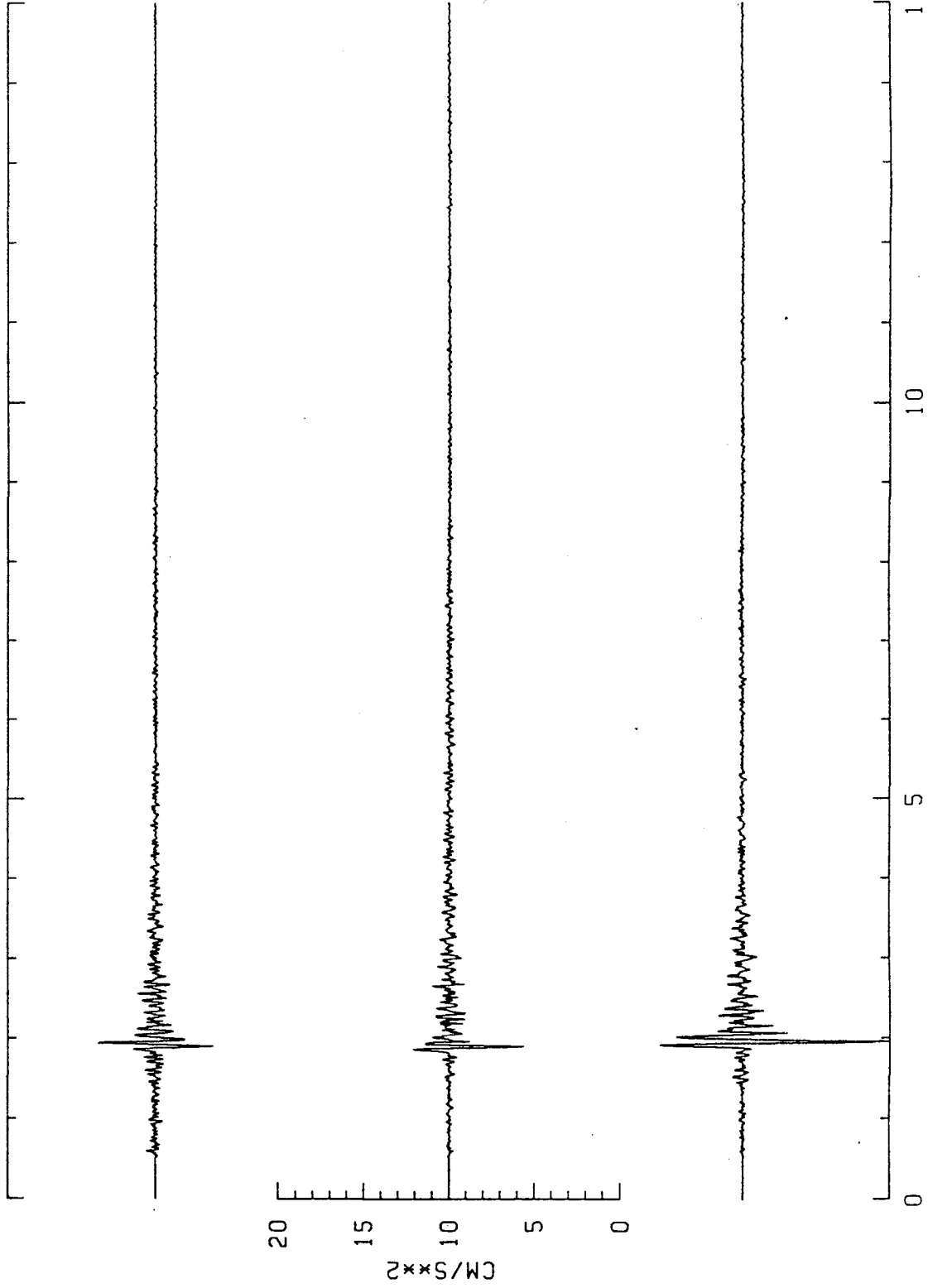
3460614E*.007 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A214-637, 638, 639 84142/TS15 IEM 136

TIME: 346 0614 10.966

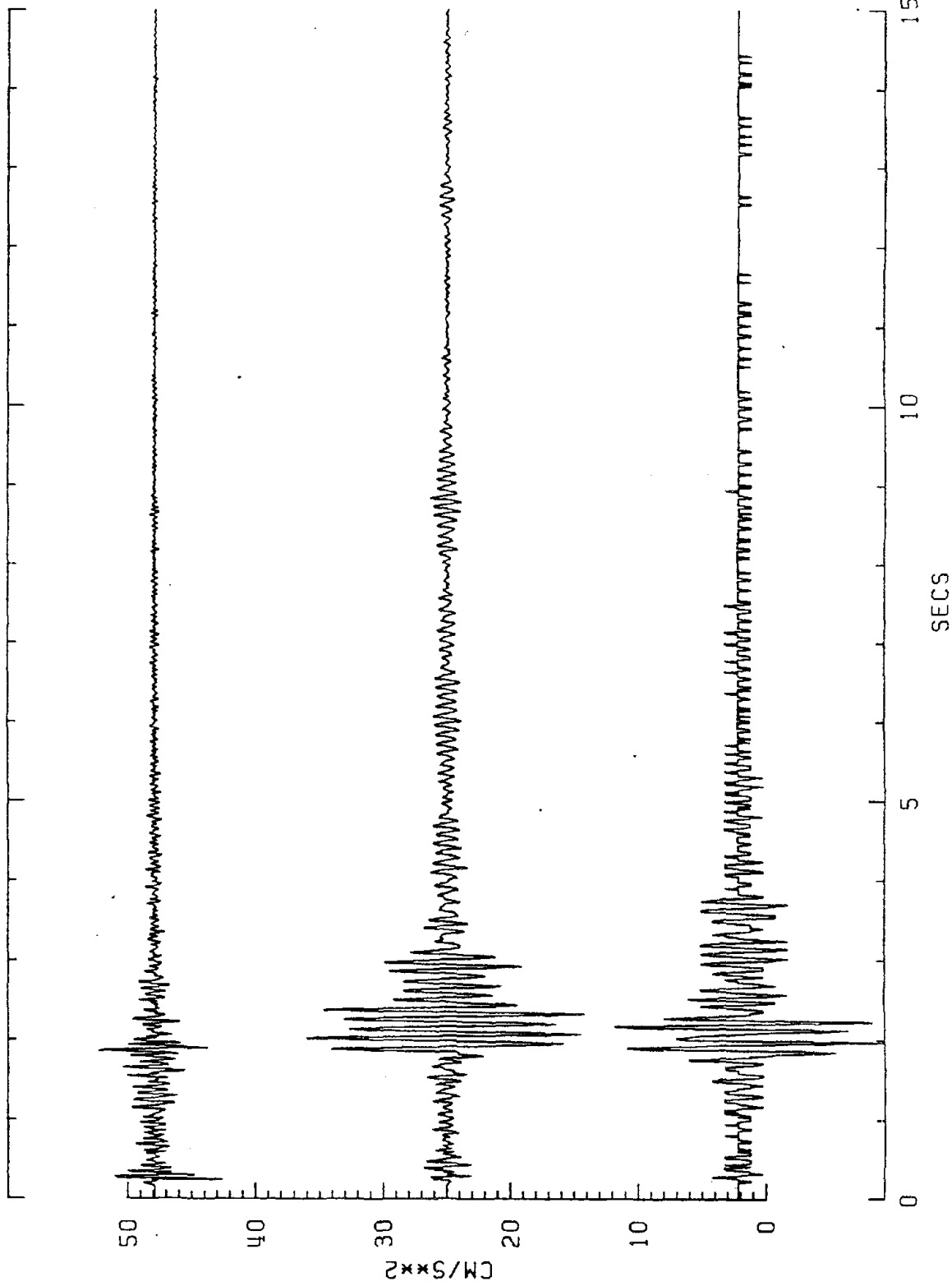
3460614D*.015 COMP: 1 (UP), 2 (H=90), 3 (H=180)



6A215-640,641,642 84142/TS18 IEM 137

TIME: 346 0614 11.456

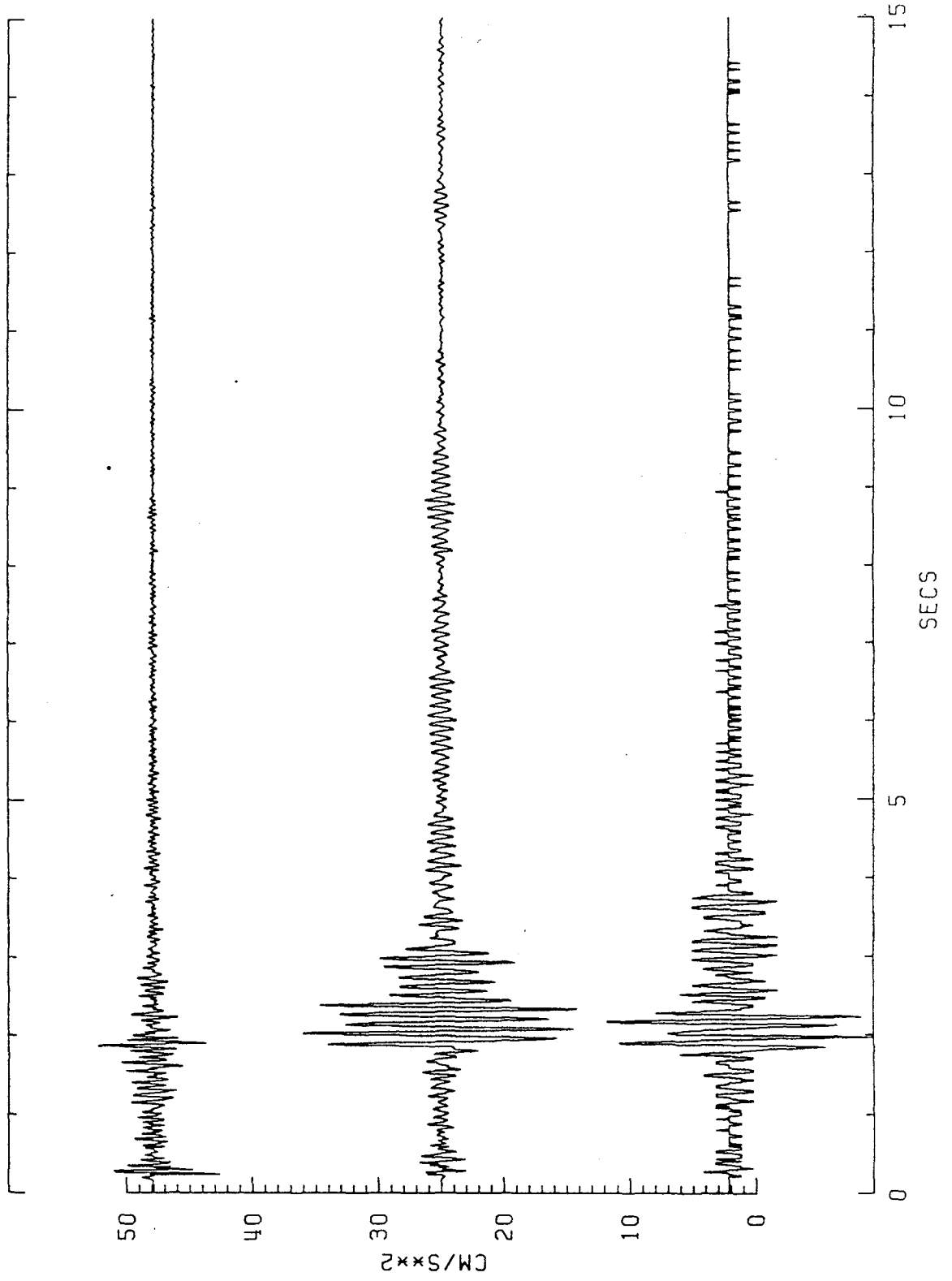
3460614D*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A215-640,641,642 84142/TS18 IEM 137

TIME: 346 0614 11.456

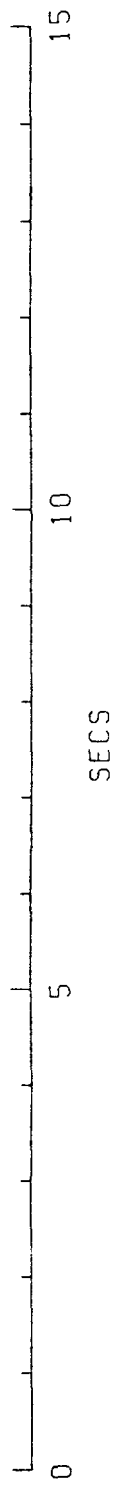
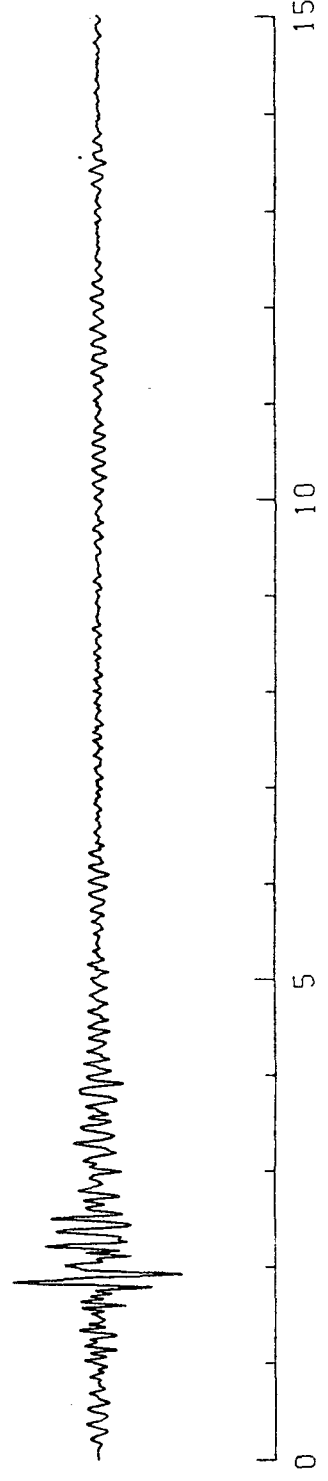
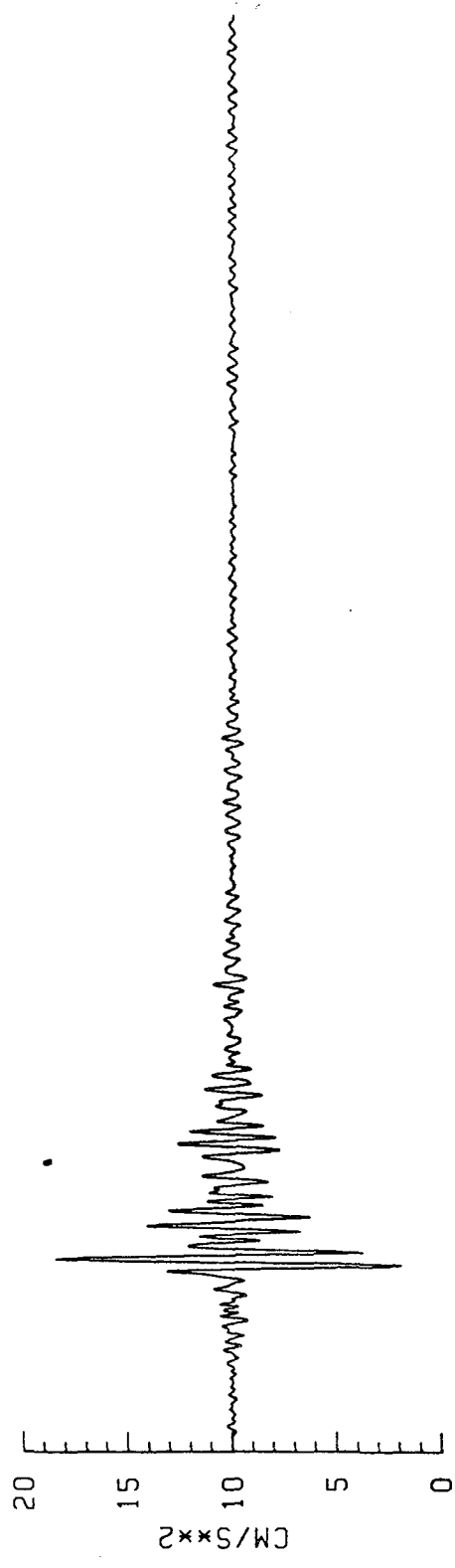
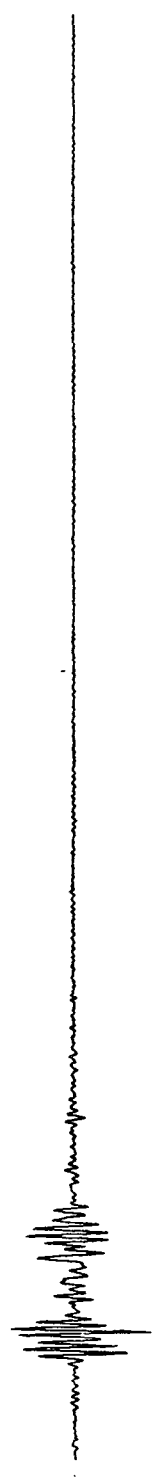
3460614D*.018 COMP: 1 (UP), 2 (H=0), 3 (H=90)



6A217-646,647,648 84142/TS21 IEM 138

TIME: 346 0614 10.851

3460614C*.021 COMP: 1 (UP), 2 (H=180), 3 (H=270)



6A218-649,650,651 82007/TS10 IEM 212

TIME:194 0542 34.883

1940542L*.010 COMP:1[UP],2[H=180],3[H=270]

