

**DEPARTMENT OF THE INTERIOR  
U.S. GEOLOGICAL SURVEY**

**National Earthquake Information Center  
Waveform Catalog  
March 1985**

by

**Madeleine D. Zirbes  
Janna M. Lishner  
Beverly J. Moon  
U.S. Geological Survey  
Denver, Colorado**

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**This report is preliminary and has not been reviewed for conformity with  
U.S. Geological Survey editorial standards.**

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## Introduction

This report provides a visual catalog of digitally recorded waveform data available from the event tapes produced by the United States Geological Survey's National Earthquake Information Center (NEIC). It is intended to provide the researcher with a quick index both to the availability of data and to the character of the data for each event (e.g., complexity and directionality).

The network-event tapes are a data service initiated by the NEIC in 1984. Currently, these tapes contain data from the Global Digital Seismograph Network (GDSN), the Regional Seismograph Test Network (RSTN), and the Glen Almond, Canada, SRO station. In the future, data from other high-quality stations and arrays, installed and operated by countries around the world, will be added to the event tapes as they are made available to us.

Network-event tapes contain digital data for earthquakes of magnitude 5.5 or greater in the NEIC network-day tape format. For this catalog, all available vertical component recordings in all period bands are shown, including those for stations that were saturated or nonoperational or that had some other difficulty during the event. Horizontal component records were omitted in order to minimize the size of this catalog. In general, one can expect them to be of approximately the same quality as the vertical component records at any particular time. Most of the available stations do not record short-period horizontal components. All stations that have intermediate-period recordings, however, record all three components in this band. Only long-period components are recorded continuously; short- and intermediate-period channels are recorded only when an event is detected. Horizontal components (where available) are recorded whenever the vertical component is, and never otherwise.

This report mainly consists of vertical component waveforms from all reporting stations, organized by event. The section for each event is prefaced by a station coverage map, in which stations and geography within  $100^\circ$  of the source are shown in an azimuthal equidistant projection centered at the epicenter. Following the coverage map, all short-period, vertical component waveforms are shown in order of increasing epicentral distance. Each short-period waveform is two minutes long and is identified by station

code, start time, and epicentral distance,  $\Delta$ , in degrees. The start time is chosen to be about 15 seconds before the earliest theoretical arrival time of interest (P, Pdiff, or PKPdiff, depending on distance). The vertical scale is in microns of ground displacement at the dominant period of the instrument response, which is taken to be 1 second. Each page of waveforms is titled with the event origin date-time, the Flinn-Engdahl region name, and the component identifier (SPZ, LPZ or IPZ). Also, the depth of the event ( $h$ ) in kilometers and its average body ( $m_b$ ) and vertical surface wave ( $M_{sz}$ ) magnitudes are shown for convenience.

Following the short-period waveforms (SPZ), long-period vertical (LPZ) and finally intermediate-period vertical (IPZ) waveforms are shown. In each case, the format is the same as for the short-period waveforms. Fifty minutes of long-period data are shown beginning 1 minute before the theoretical first arrival, and the dominant period is taken to be 25 seconds. Four minutes of intermediate-period data are shown beginning 30 seconds before the theoretical first arrival, and the dominant period is assumed to be 1 second. Because (1) the event detection algorithm is not perfect, (2) only about half of the available stations have intermediate-period channels, and (3) one station (GAC) has no short-period recordings, it is not uncommon for stations with good long-period recordings to have no intermediate-period and perhaps no short-period recordings at all.

Table 1. Earthquakes for March 1985 with magnitudes  $\geq 5.5$

	Origin Time UTC	Latitude	Longitude	Depth (km)	Magnitude $m_b$	Magnitude $M_{sz}$	Flinn-Engdahl Region Name
1.	1985 03 01 12:52:07.31	2.122° S	119.587° E	33.0	5.2	5.8	Sulawesi
2.	1985 03 01 17:11:18.52	2.121° S	119.631° E	23.6	5.6	6.3	Sulawesi
3.	1985 03 02 07:56:51.82	6.258° S	131.604° E	33.0	6.3		Tanimbar Islands Region
4.	1985 03 02 15:47:33.47	1.978° S	119.704° E	44.6	5.6	6.6	Sulawesi
5.	1985 03 03 22:47:06.97	33.155° S	71.980° W	33.0	6.9	7.8	Near Coast of Central Chile
6.	1985 03 03 23:38:30.93	32.889° S	71.753° W	33.0	6.5		Near Coast of Central Chile
7.	1985 03 04 00:11:45.31	32.893° S	71.408° W	33.0	5.7		Near Coast of Central Chile
8.	1985 03 04 00:32:21.46	33.233° S	71.758° W	33.0	6.0	6.7	Near Coast of Central Chile
9.	1985 03 04 03:17:54.15	34.169° S	71.930° W	33.0	5.5	6.2	Near Coast of Central Chile
10.	1985 03 04 03:32:49.86	32.654° S	71.630° W	33.0	5.7	6.6	Near Coast of Central Chile
11.	1985 03 04 06:06:57.80	33.581° S	71.861° W	33.0	5.4	6.0	Near Coast of Central Chile
12.	1985 03 04 13:49:29.67	33.952° S	71.960° W	33.0	4.9	5.5	Near Coast of Central Chile
13.	1985 03 04 15:01:06.27	33.835° S	71.317° W	33.0	6.1	6.1	Near Coast of Central Chile
14.	1985 03 04 17:00:09.80	34.117° S	72.007° W	33.0	5.0	5.8	Near Coast of Central Chile
15.	1985 03 04 19:03:07.28	32.750° S	71.600° W	33.0	5.3	6.1	Near Coast of Central Chile
16.	1985 03 05 08:15:14.22	6.595° S	147.642° E	78.4	5.6		East Papua New Guinea Region
17.	1985 03 05 13:40:10.16	1.194° N	122.809° E	33.0	5.5	5.9	Minahassa Peninsula
18.	1985 03 05 14:01:02.13	45.749° N	178.790° E	28.1	5.3	5.7	Aleutian Islands Region
19.	1985 03 05 21:06:57.72	6.922° S	129.412° E	191.2	5.7		Banda Sea
20.	1985 03 06 04:34:57.79	12.491° S	166.621° E	33.0	5.7	5.3	Santa Cruz Islands
21.	1985 03 06 22:31:51.78	55.249° N	161.998° E	33.0	5.8	5.4	Near East Coast of Kamchatka
22.	1985 03 07 00:54:56.96	33.005° S	72.144° W	33.0	5.5	5.3	Off Coast of Central Chile
23.	1985 03 07 11:19:42.19	5.830° N	126.400° E	93.2	5.8		Mindanao, Philippine Islands
24.	1985 03 09 01:21:12.68	33.043° S	179.130° W	33.0	5.5		South of Kermadec Islands
25.	1985 03 09 14:08:04.11	66.215° N	150.063° W	11.5	5.9	6.0	Alaska
26.	1985 03 09 15:11:43.13	33.701° S	72.013° W	33.0	5.0	5.8	Off Coast of Central Chile
27.	1985 03 11 12:26:09.72	10.356° N	125.559° E	96.4	5.5		Leyte, Philippine Islands
28.	1985 03 12 08:23:15.36	33.103° S	72.155° W	33.0	5.3	5.5	Off Coast of Central Chile
29.	1985 03 13 19:34:57.81	43.514° N	127.502° W	10.0	6.1	6.3	Off Coast of Oregon
30.	1985 03 15 00:16:03.49	20.629° S	178.327° W	551.2	5.5		Fiji Islands Region
31.	1985 03 16 08:19:11.01	55.207° S	28.205° W	33.0	5.6		South Sandwich Islands Region
32.	1985 03 16 14:54:01.10	17.073° N	62.410° W	14.1	6.2	6.3	Leeward Islands
33.	1985 03 17 10:41:37.91	32.658° S	71.561° W	33.0	5.9	6.6	Near Coast of Central Chile
34.	1985 03 18 16:09:32.96	5.240° S	153.504° E	33.0	5.5		New Ireland Region

Table 1. Earthquakes for March 1985 with magnitudes  $\geq 5.5$ , continued

	Origin Time UTC	Latitude	Longitude	Depth (km)	$m_b$	Magnitude $M_{SZ}$	Flinn-Engdahl Region Name
35.	1985 03 18 19:49:45.56	7.713° N	123.572° E	33.0	6.0	6.5	Mindanao, Philippine Islands
36.	1985 03 19 04:01:06.57	33.284° S	71.756° W	33.0	5.9	6.7	Near Coast of Central Chile
37.	1985 03 19 10:28:36.59	18.573° S	63.600° W	33.0	5.5	5.2	Bolivia
38.	1985 03 21 08:18:39.21	6.586° N	94.887° E	33.0	5.2	7.1	Nicobar Islands Region
39.	1985 03 22 14:02:47.36	18.495° S	63.649° W	33.0	5.4	5.7	Bolivia
40.	1985 03 22 14:42:58.97	6.620° S	105.471° E	72.0	5.7		Sunda Strait
41.	1985 03 23 13:45:19.36	34.279° S	72.111° W	33.0	5.4	5.5	Near Coast of Central Chile
42.	1985 03 23 14:36:57.06	33.304° S	72.216° W	33.0	5.6	5.2	Off Coast of Central Chile
43.	1985 03 24 16:16:33.09	34.354° S	72.129° W	33.0	5.4	5.5	Near Coast of Central Chile
44.	1985 03 25 05:14:33.20	34.343° S	72.282° W	33.0	6.1	6.5	Near Coast of Central Chile
45.	1985 03 25 11:07:19.11	6.451° S	128.758° E	246.8	5.7		Banda Sea
46.	1985 03 27 12:48:12.48	44.389° N	146.701° E	154.4	6.0		Kuril Islands
47.	1985 03 28 01:48:38.55	5.331° S	147.322° E	33.0	5.5		East Papua New Guinea Region
48.	1985 03 28 16:07:06.68	40.299° N	140.351° E	165.1	6.1		Honshu, Japan
49.	1985 03 30 15:39:27.66	55.469° S	127.597° W	10.0	5.3	5.6	South Pacific Cordillera

**Table 2.** Current network-event tape station list

<b>Code</b>	<b>ID</b>	<b>Station</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Elevation</b> (m)	<b>Type*</b>
AFI	69	Afamalu, Western Samoa	13.91° S	171.78° W	706.0	DWWSSN
ANMO	30	Albuquerque, New Mexico	34.95° N	106.46° W	1740.0	SRO
ANTO	31	Ankara, Turkey	39.87° N	32.79° E	883.0	SRO
BCAO	37	Bangui, Central African Republic	4.43° N	18.54° E	336.0	SRO
BDF	72	Brasilia, Brazil	15.66° S	47.90° W	1500.0	DWWSSN
CHTO	33	Chiang Mai, Thailand	18.79° N	98.98° E	316.0	SRO
COL	62	College, Alaska	64.90° N	147.79° W	320.0	DWWSSN
CTAO	50	Charters Towers, Australia	20.09° S	146.25° E	357.0	ASRO
GAC	43	Glen Almond, Quebec, Canada	45.70° N	75.48° W	620.0	SRO
GDH	70	Godhavn, Greenland	69.25° N	53.53° W	23.0	DWWSSN
GRFO	39	Graefenberg, Germany	49.69° N	11.22° E	500.0	SRO
HON	66	Honolulu, Hawaii	21.32° N	158.01° W	2.0	DWWSSN
JAS	64	Jamestown, California	37.93° N	120.42° W	425.0	DWWSSN
KEV	67	Kevo, Finland	69.76° N	27.01° E	80.0	DWWSSN
LON	63	Longmire, Washington	46.75° N	121.81° W	854.0	DWWSSN
MAJO	53	Matsushiro, Japan	36.54° N	138.21° E	422.0	ASRO
NWAO	38	Mundaring (Narrogin), Australia	32.93° S	117.24° E	265.0	SRO
RSNY	84	Adirondack, New York	44.55° N	74.53° W	351.0	RSTN
RSO	85	Red Lake, Ontario	50.86° N	93.70° W	302.0	RSTN
RSSD	83	Black Hills, South Dakota	44.12° N	104.04° W	1948.0	RSTN
SCP	61	State College, Pennsylvania	40.79° N	77.87° W	352.0	DWWSSN
SHIO	40	Shillong, India	25.57° N	91.88° E	1600.0	SRO
SLR	71	Silverton, South Africa	25.73° S	28.28° E	1348.0	DWWSSN
SNZO	42	Wellington (South Karori), New Zealand	41.31° S	174.70° E	-12.0	SRO
TATO	41	Taipei, Taiwan	24.98° N	121.49° E	53.0	SRO
TAU	74	Hobart, Tasmania	42.91° S	147.32° E	132.0	DWWSSN
TOL	73	Toledo, Spain	39.88° N	4.05° W	480.0	DWWSSN
ZOBO	51	La Paz (Zongo), Bolivia	16.27° S	68.13° W	4450.0	ASRO

\* SRO - Seismic Research Observatory

ASRO - Abbreviated Seismic Research Observatory

DWWSSN - Digital World Wide Standardized Seismograph Network

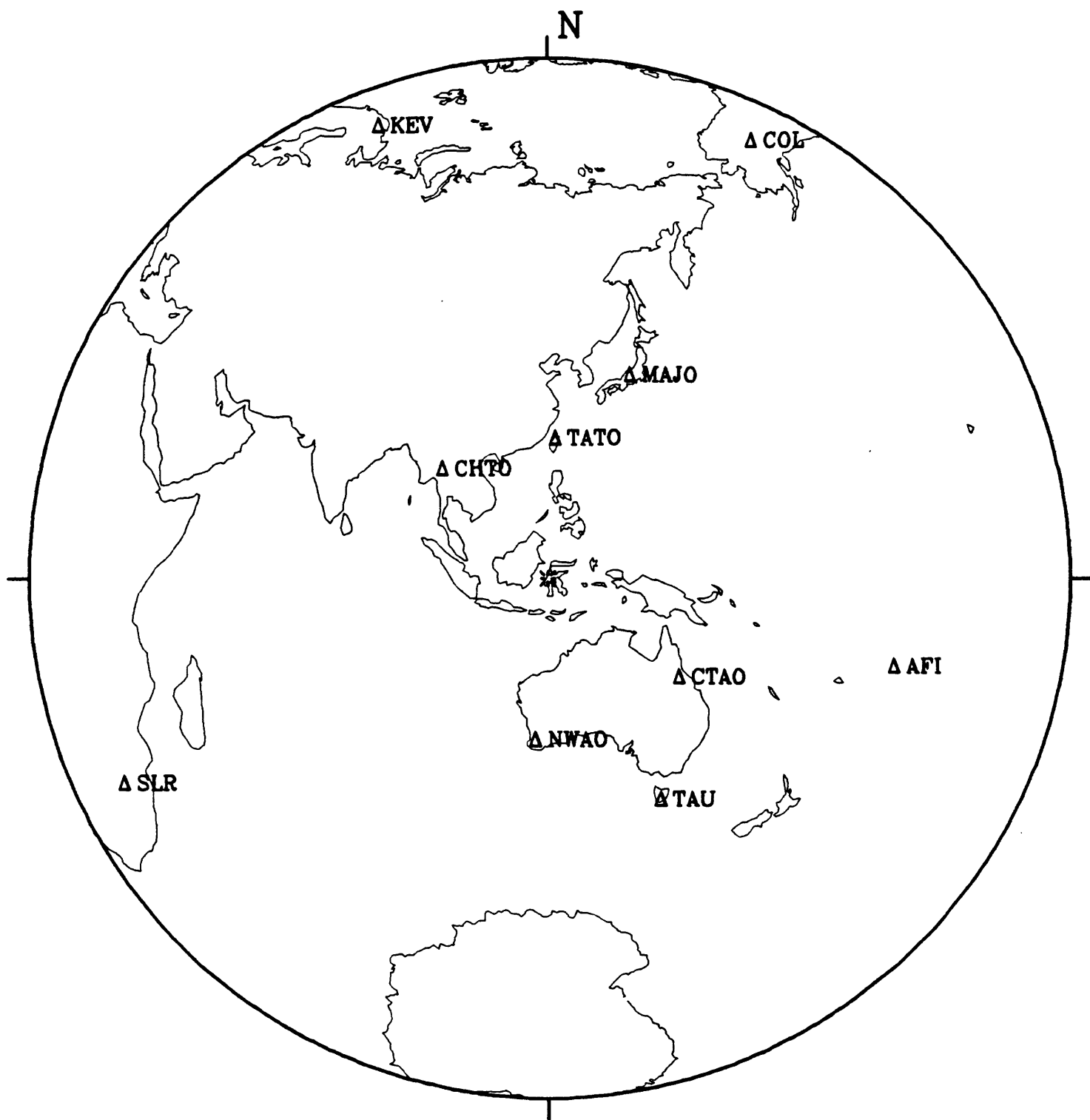
RSTN - Regional Seismic Test Network



viii

01 March 1985 12:52:07.31

## Sulawesi

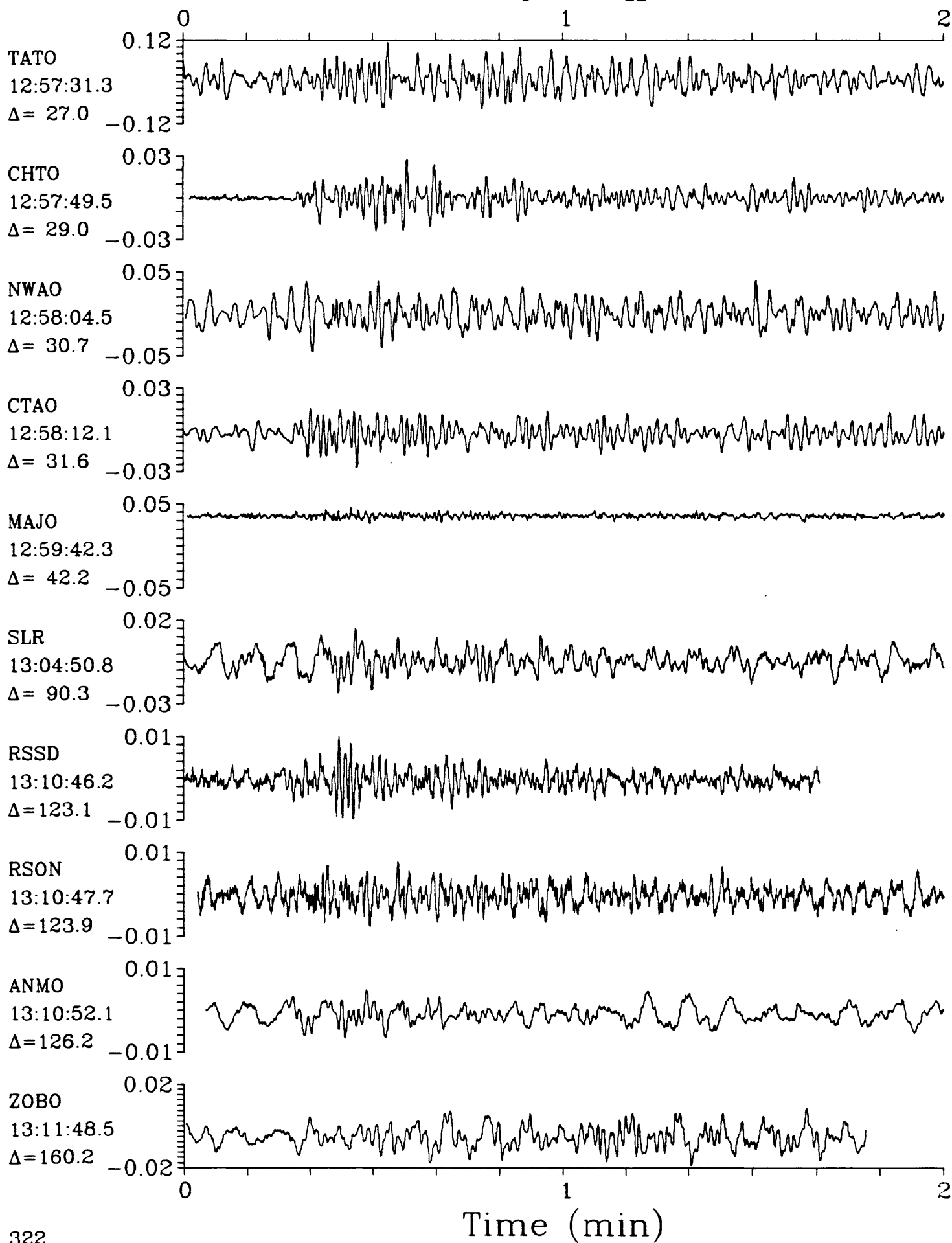


STARTING : 321

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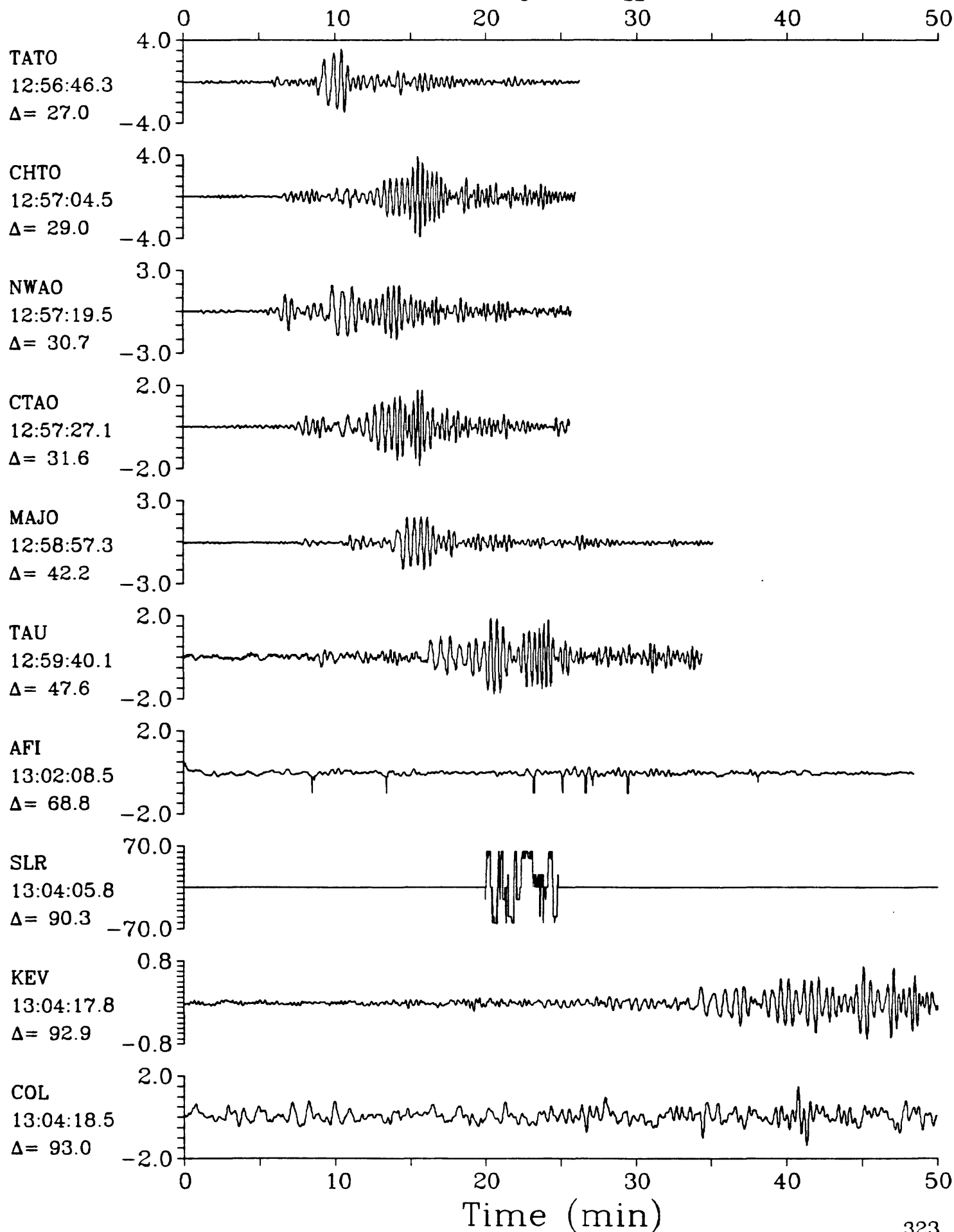
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LPZ

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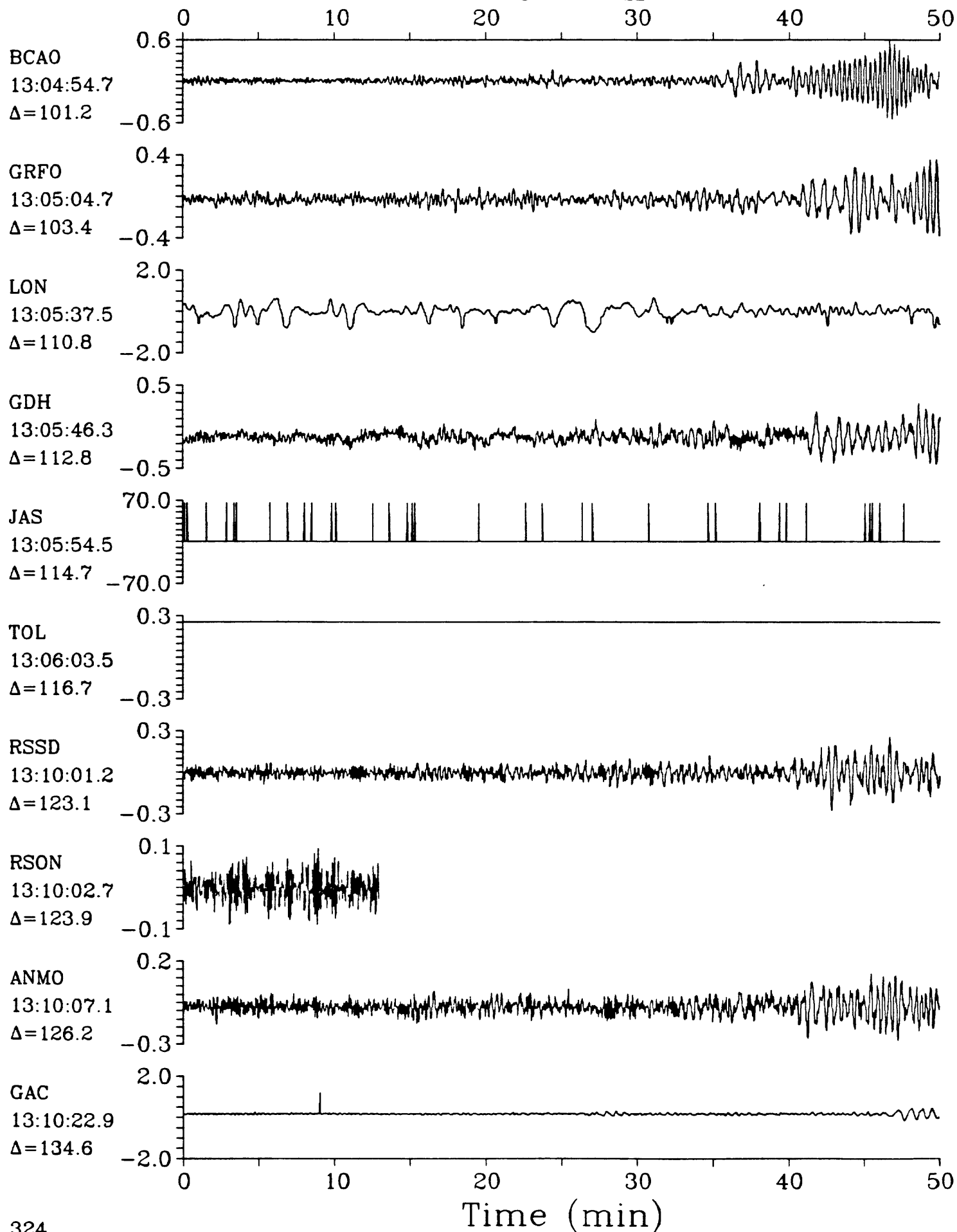
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LPZ

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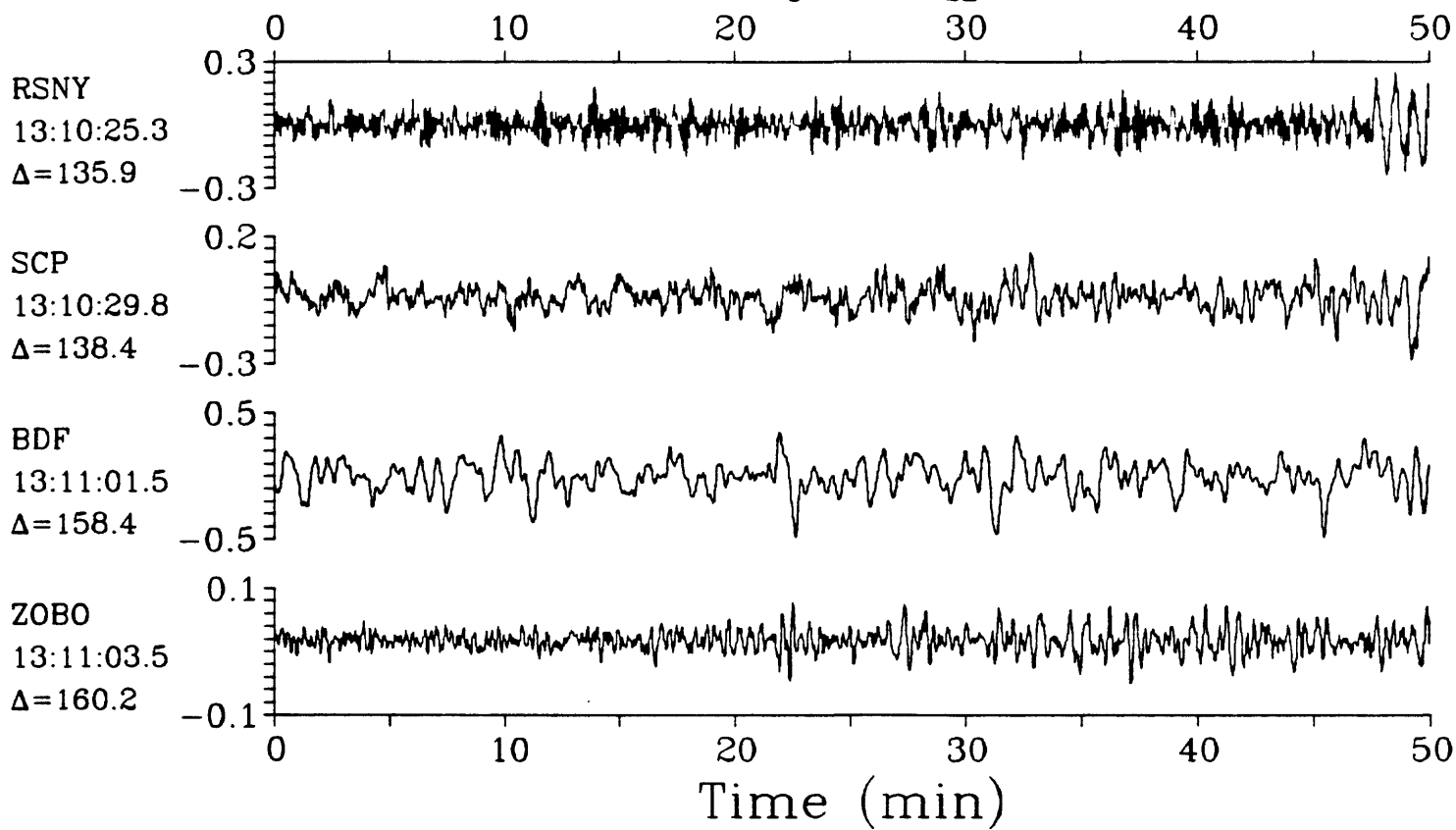
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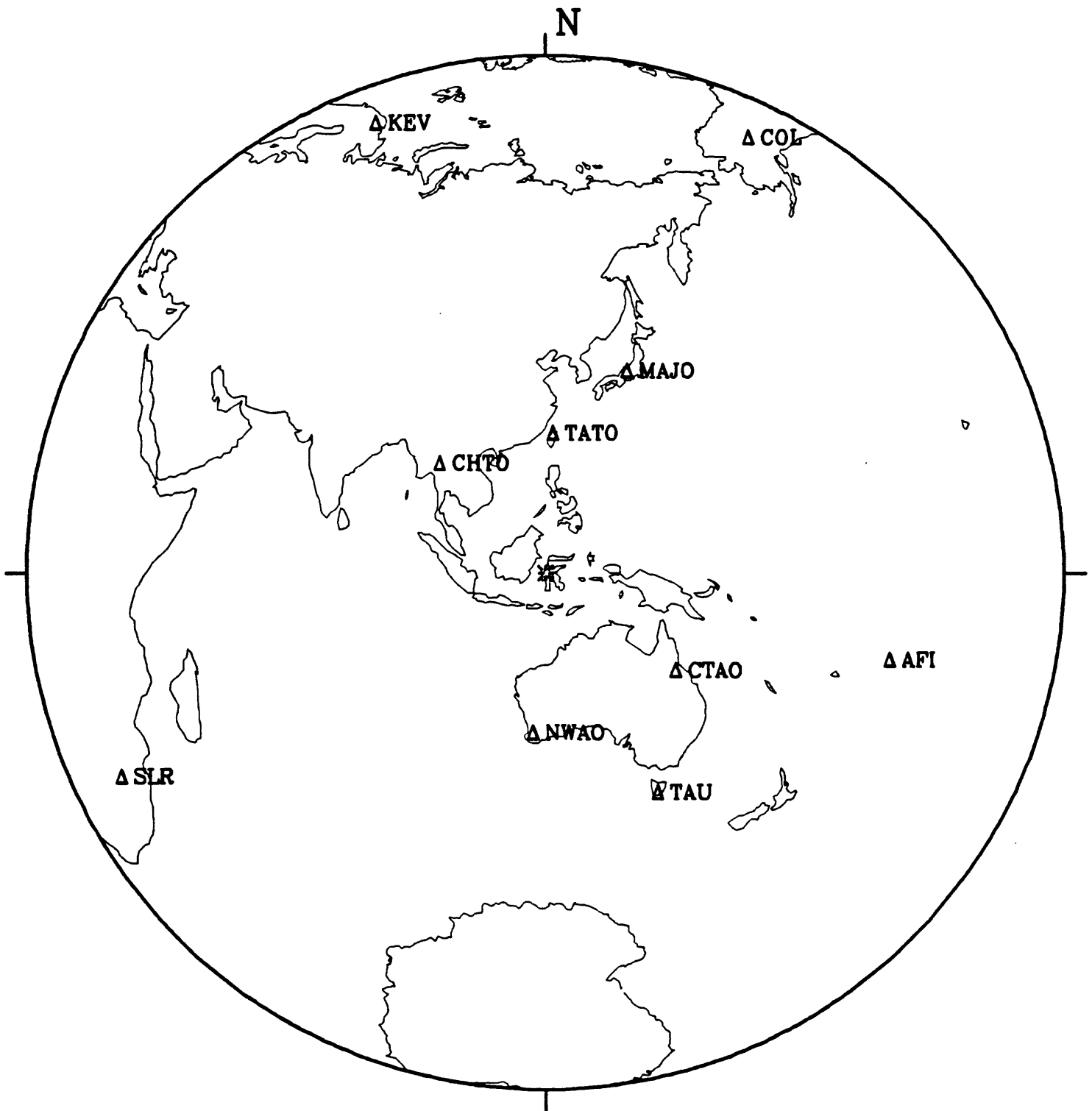
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LPZ



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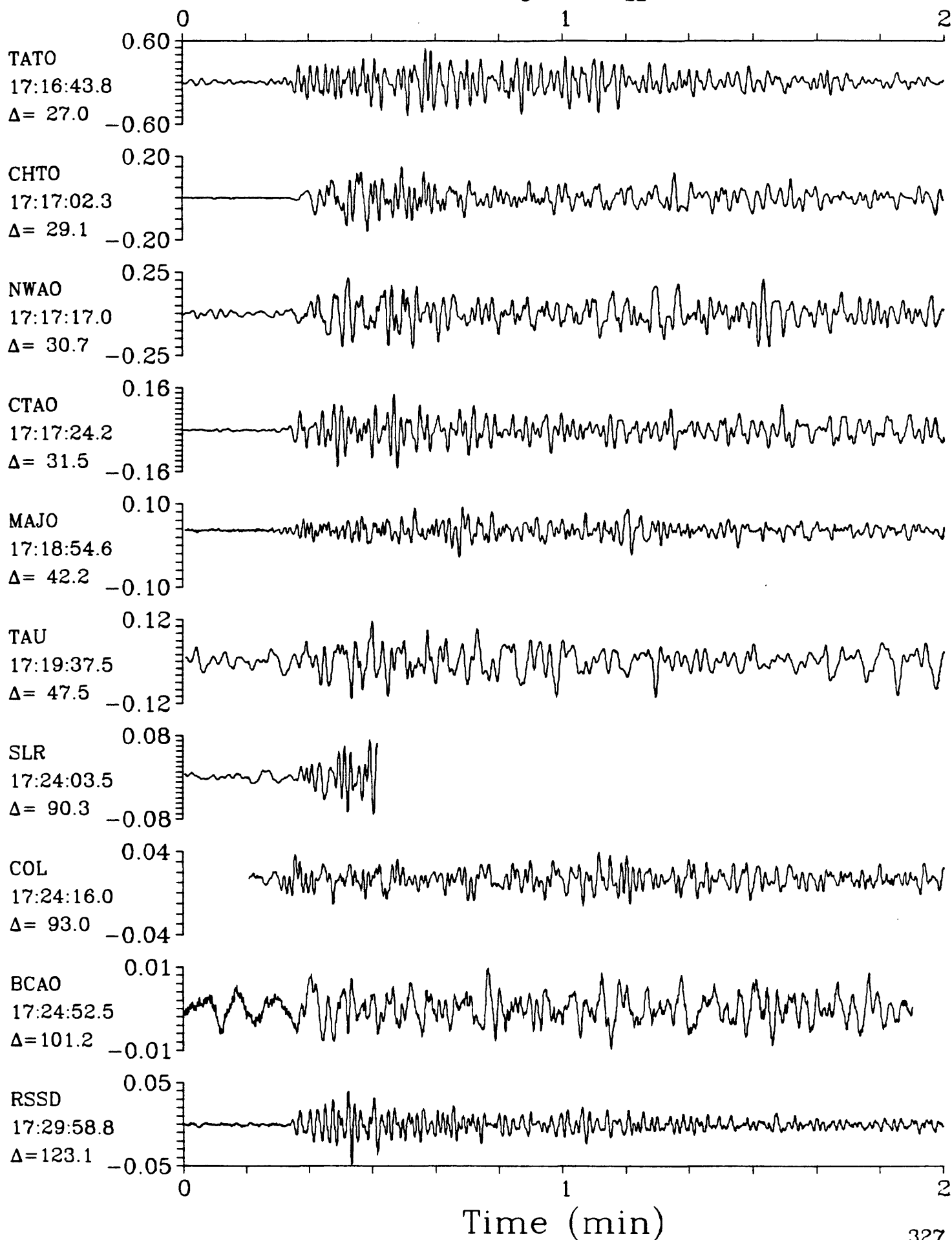
## Sulawesi



SPZ

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SPZ

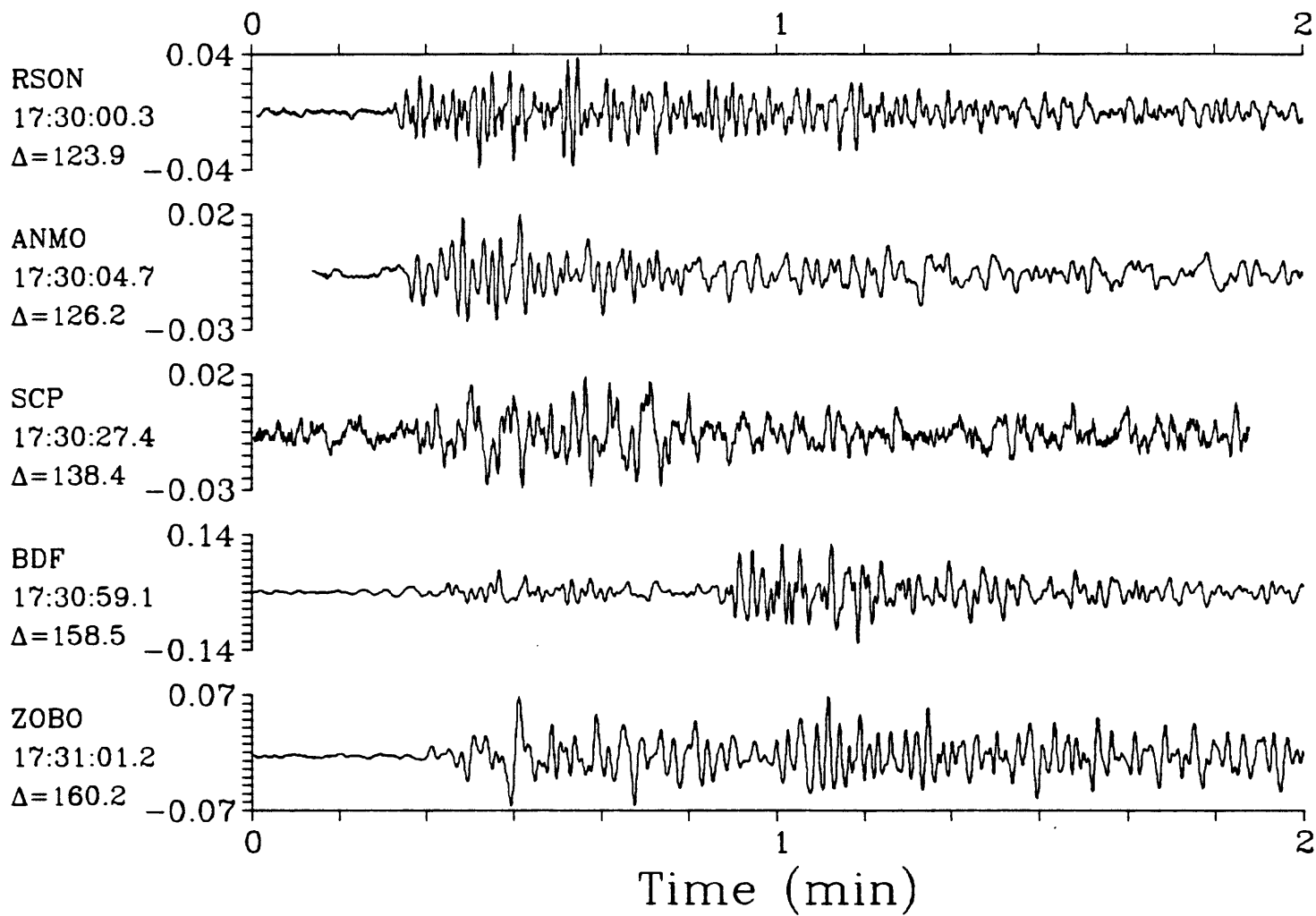


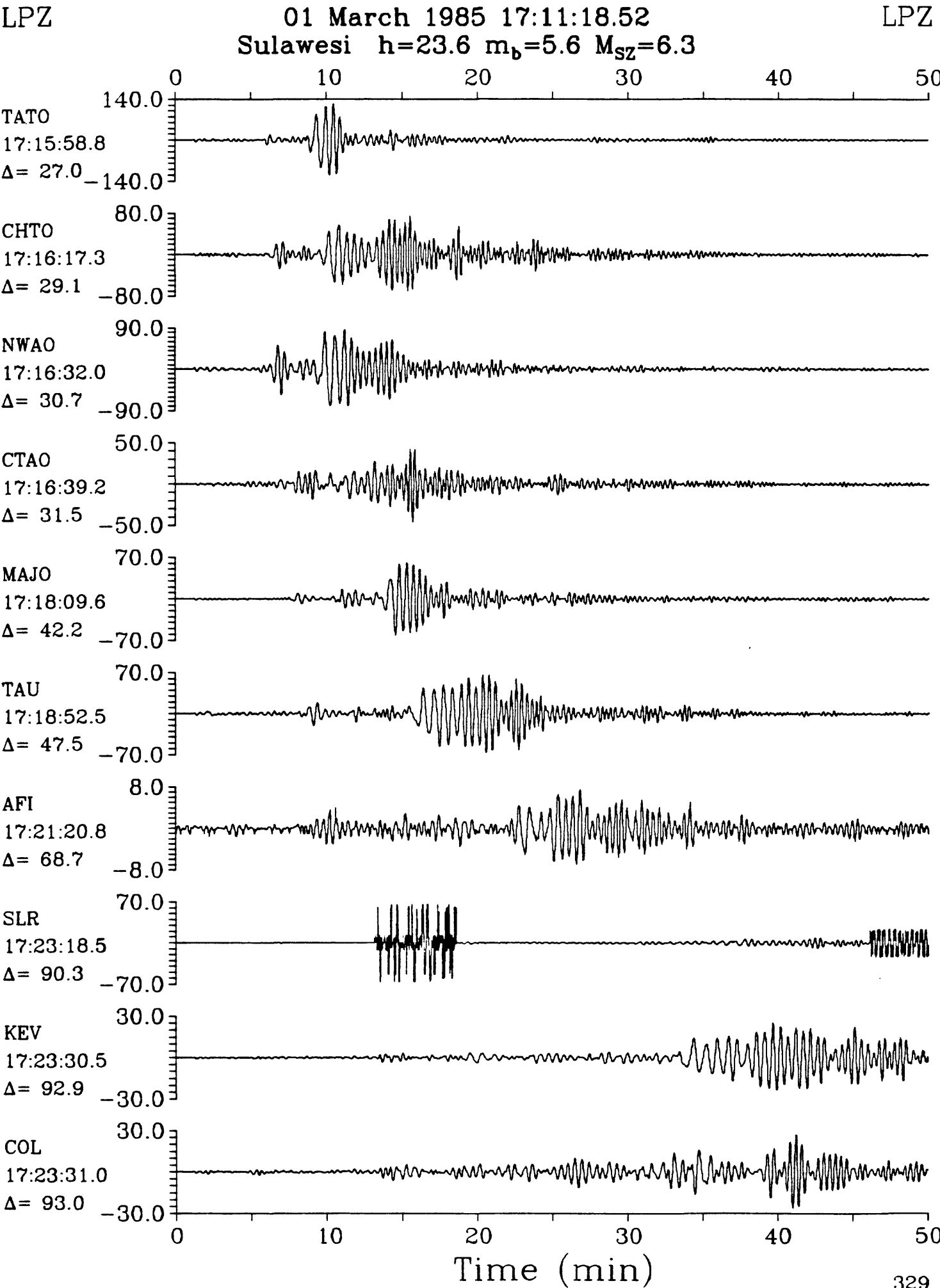


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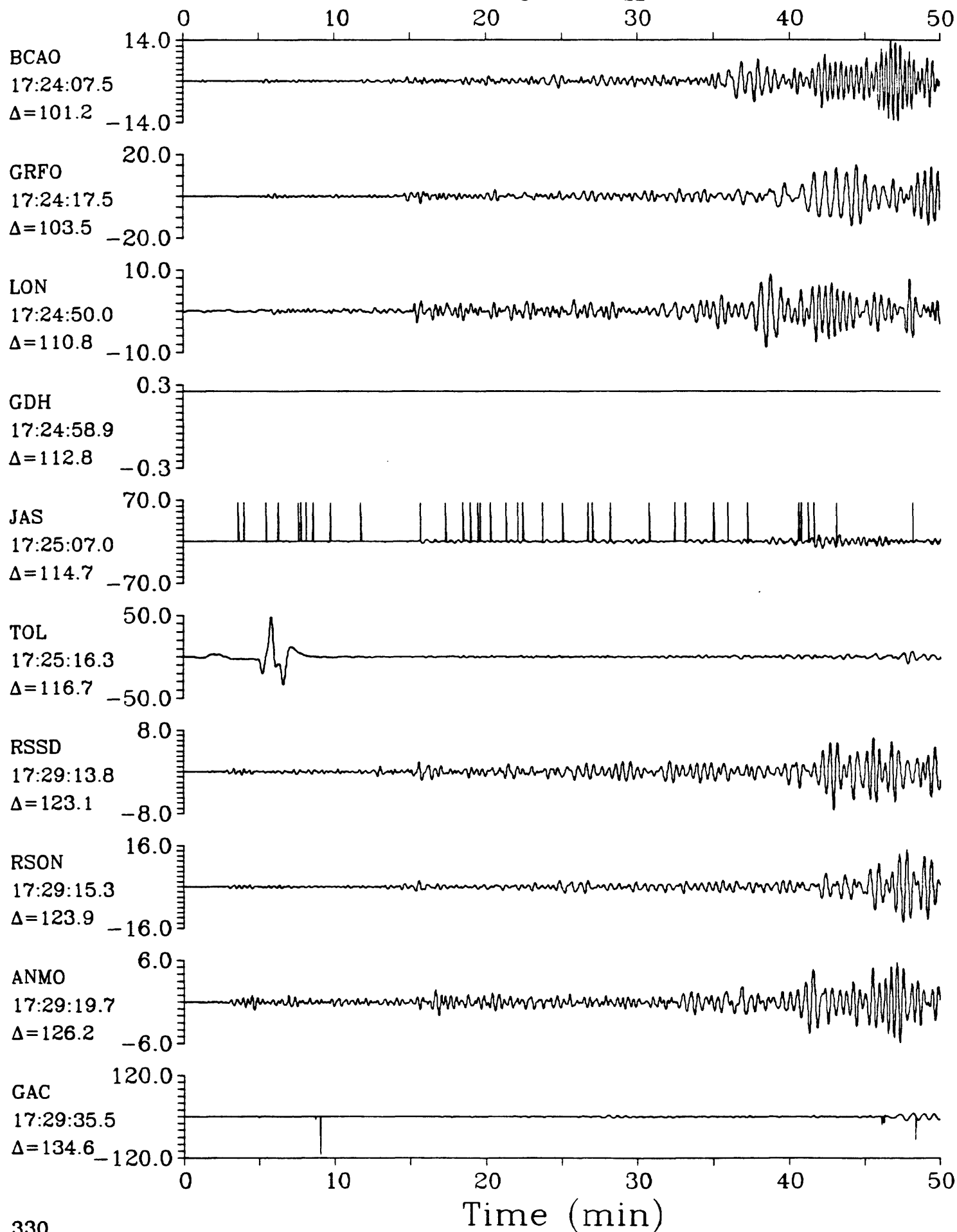




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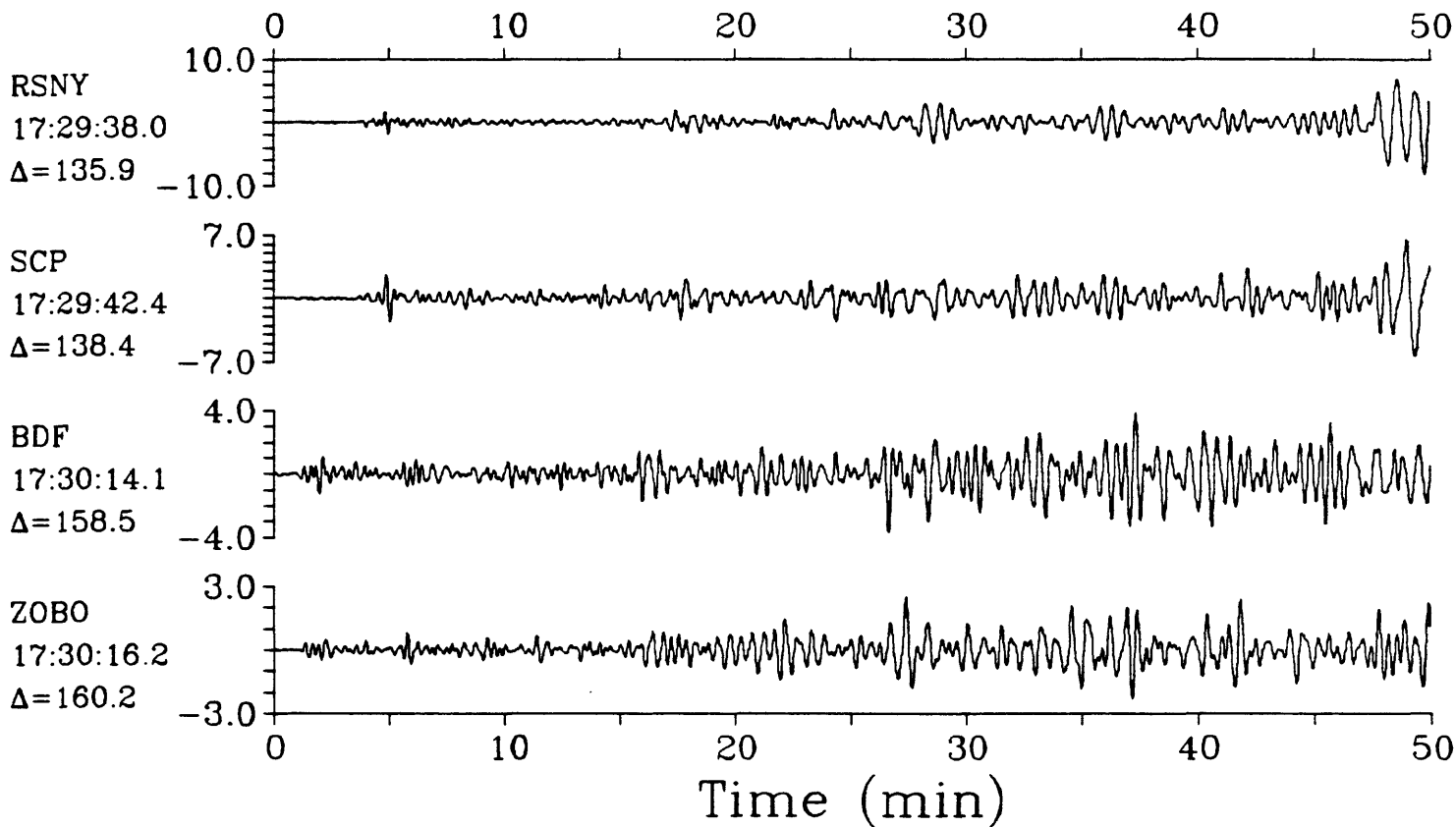
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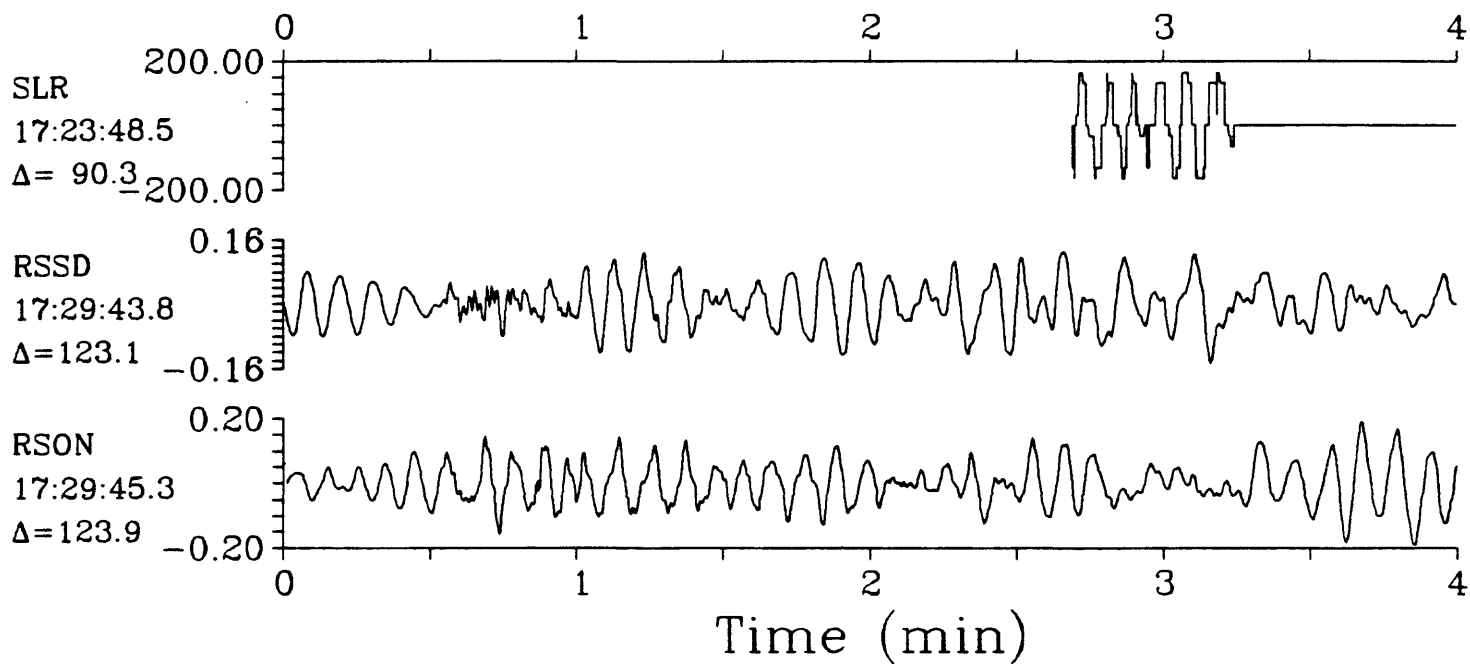
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IPZ

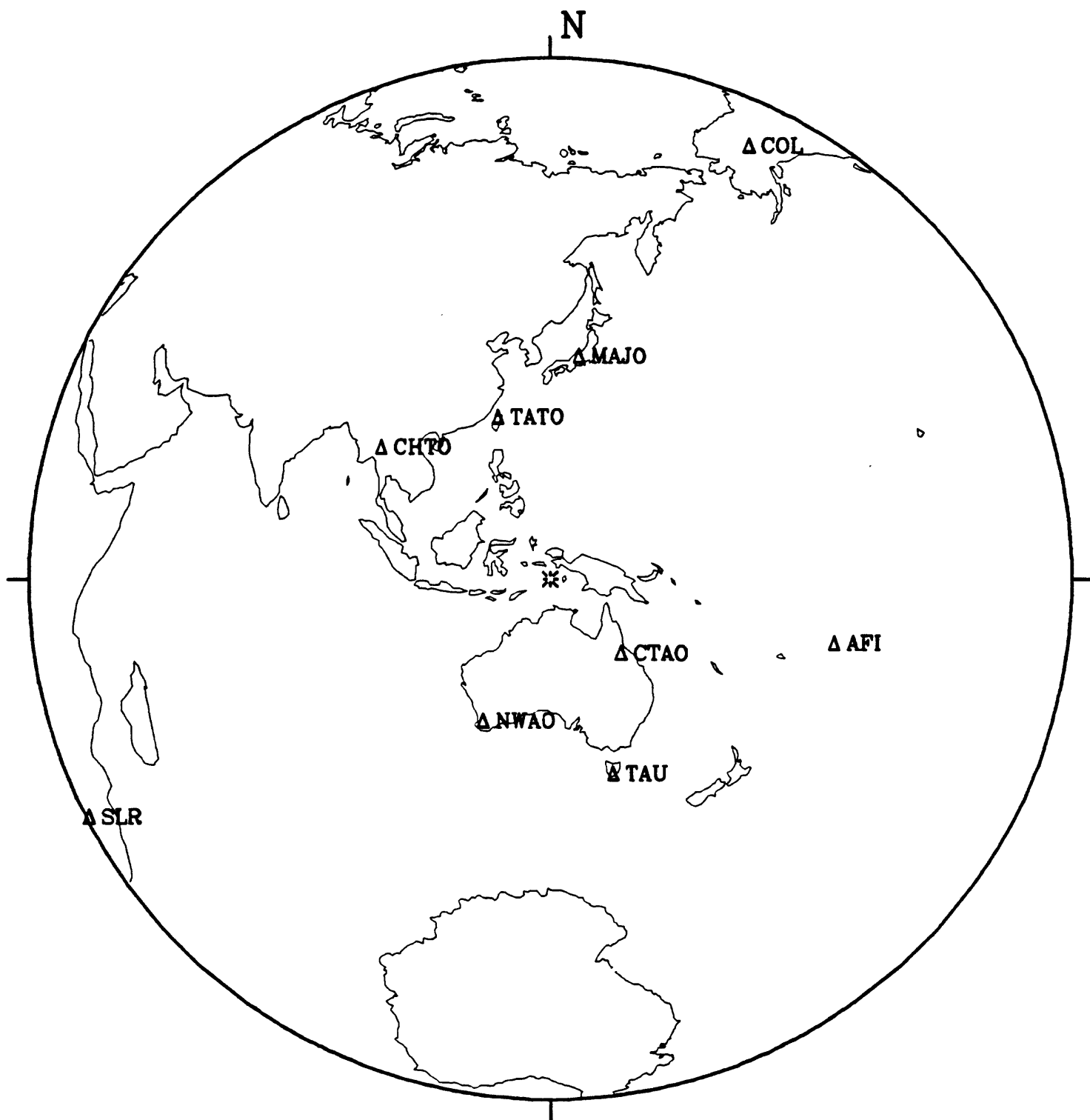
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IPZ



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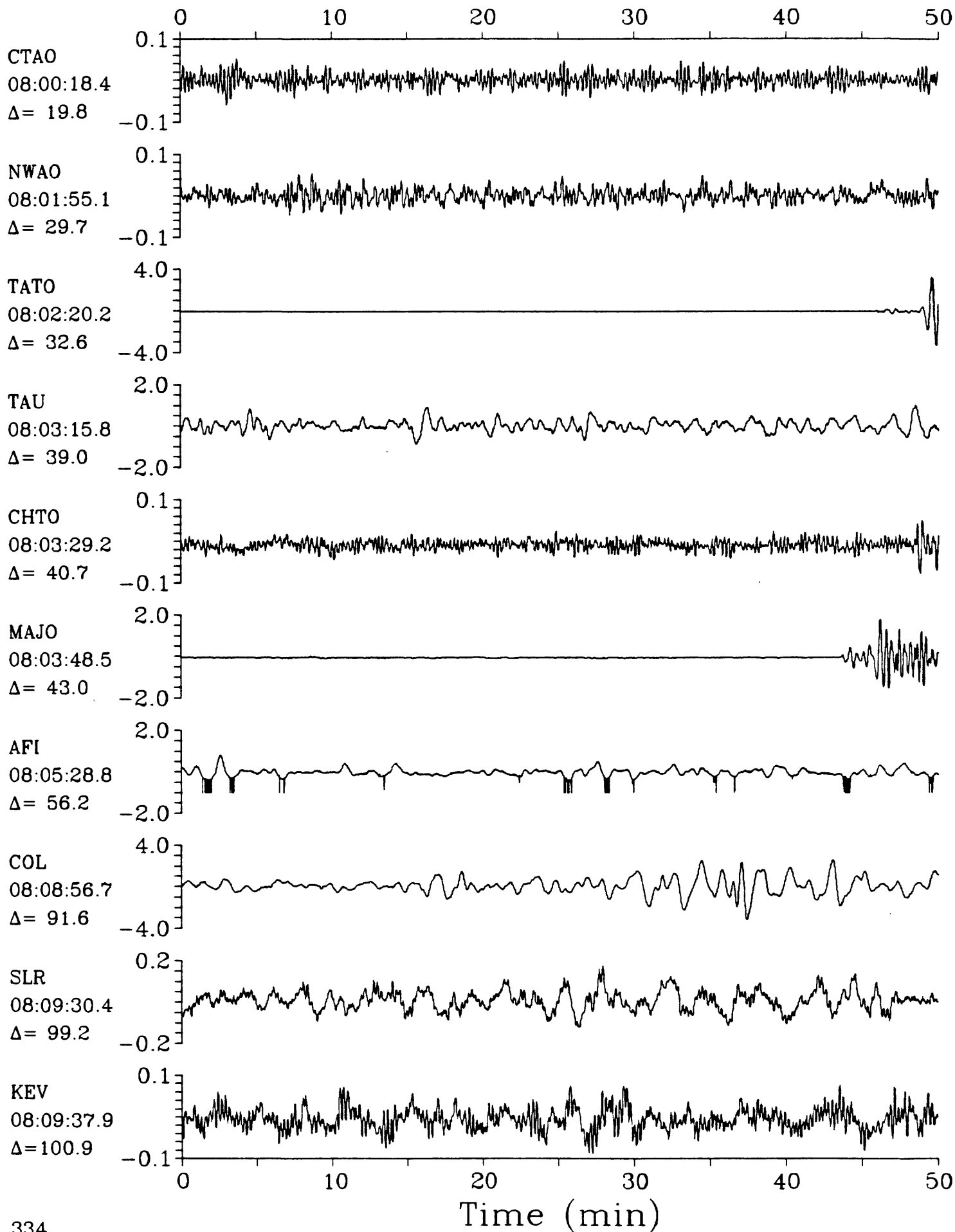
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LPZ

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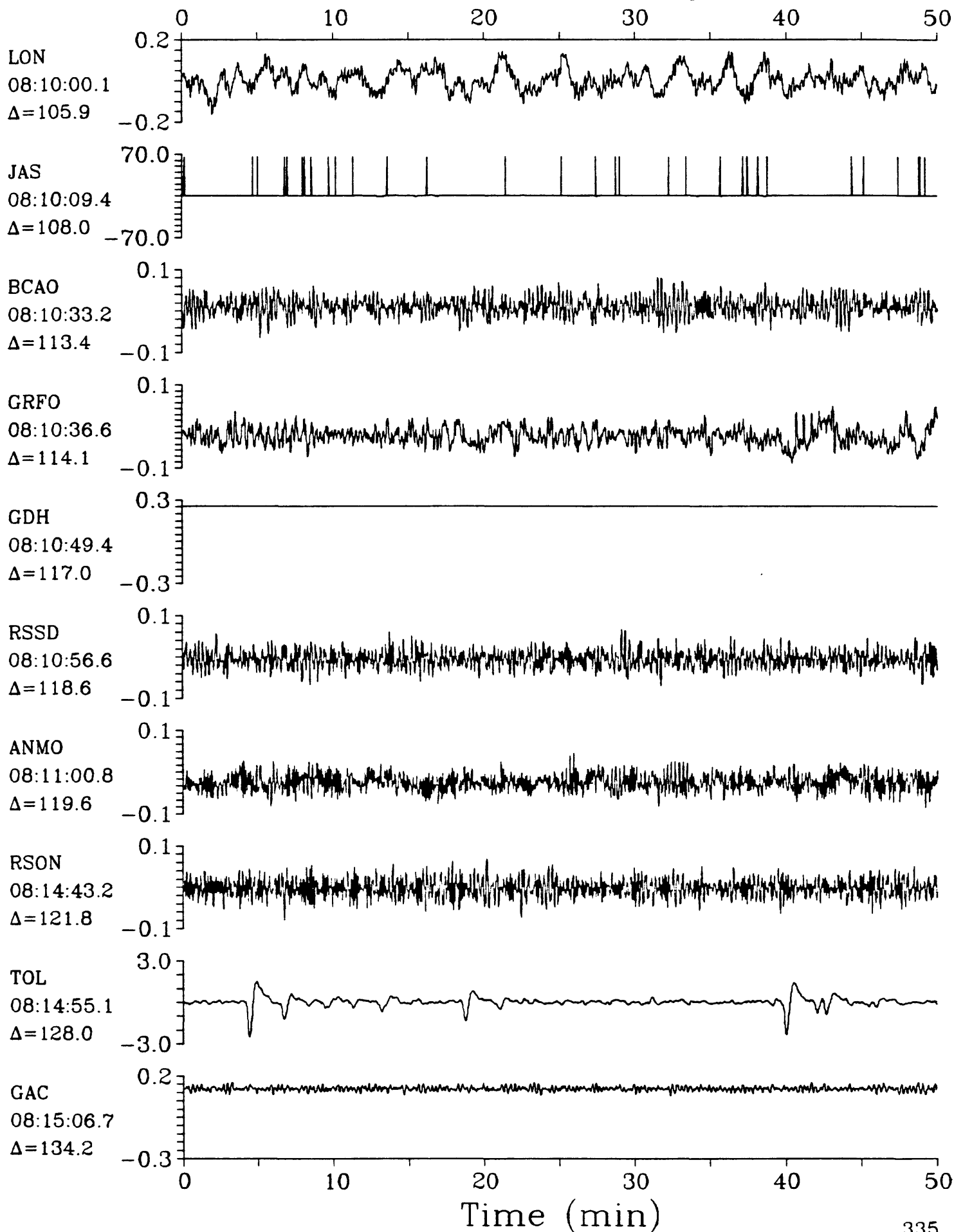
LPZ

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LPZ

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LPZ

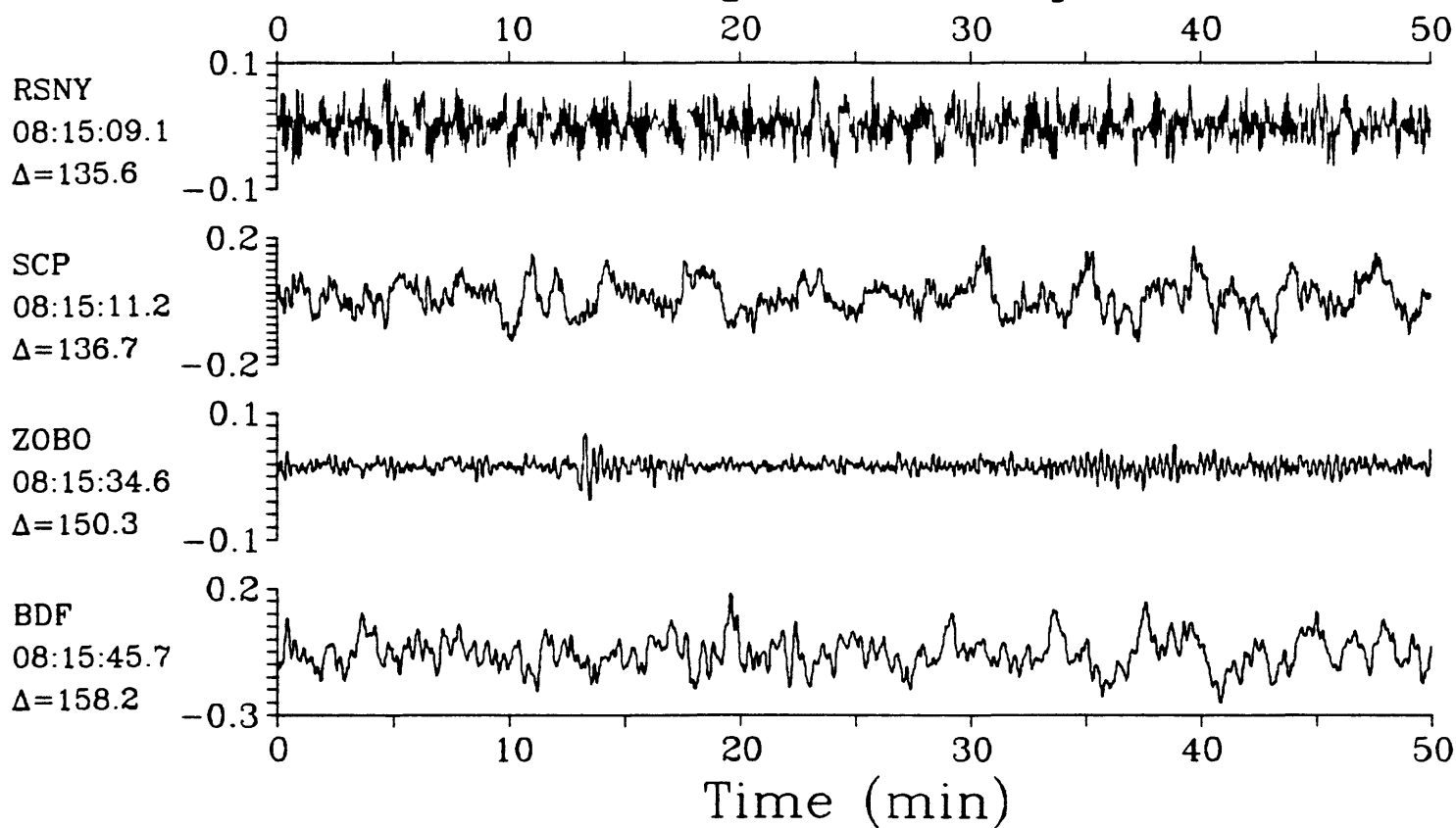
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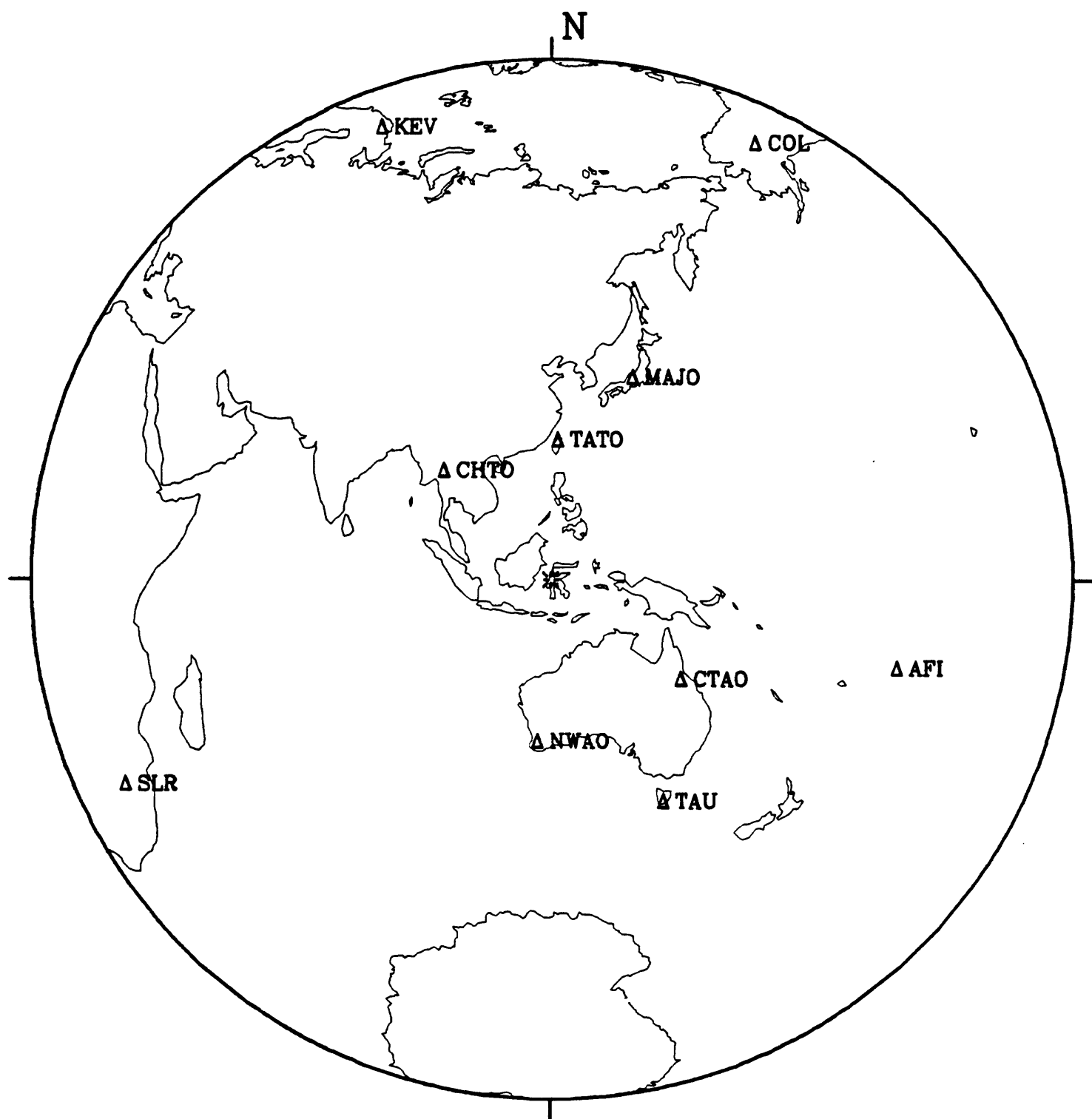
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LPZ

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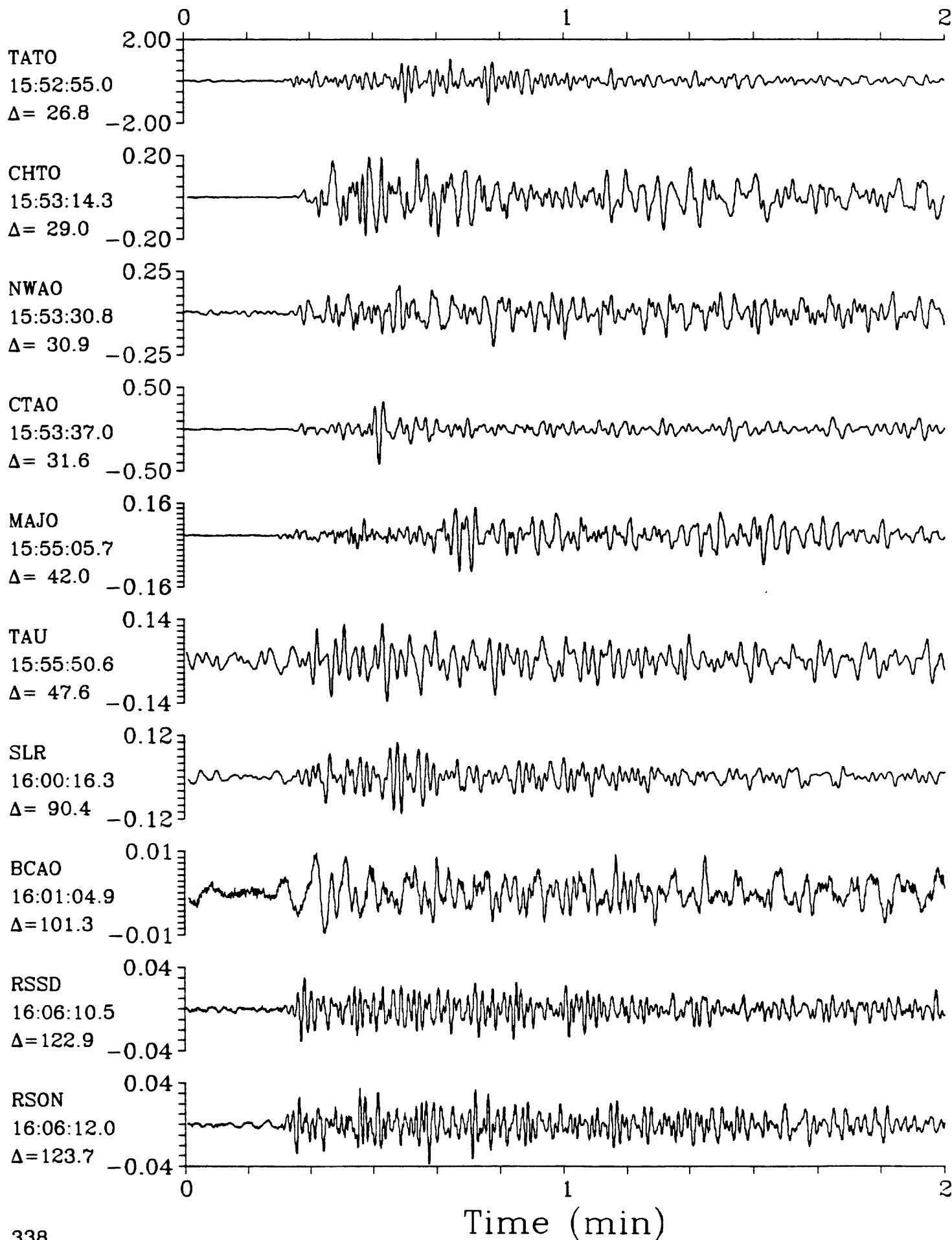
## Sulawesi



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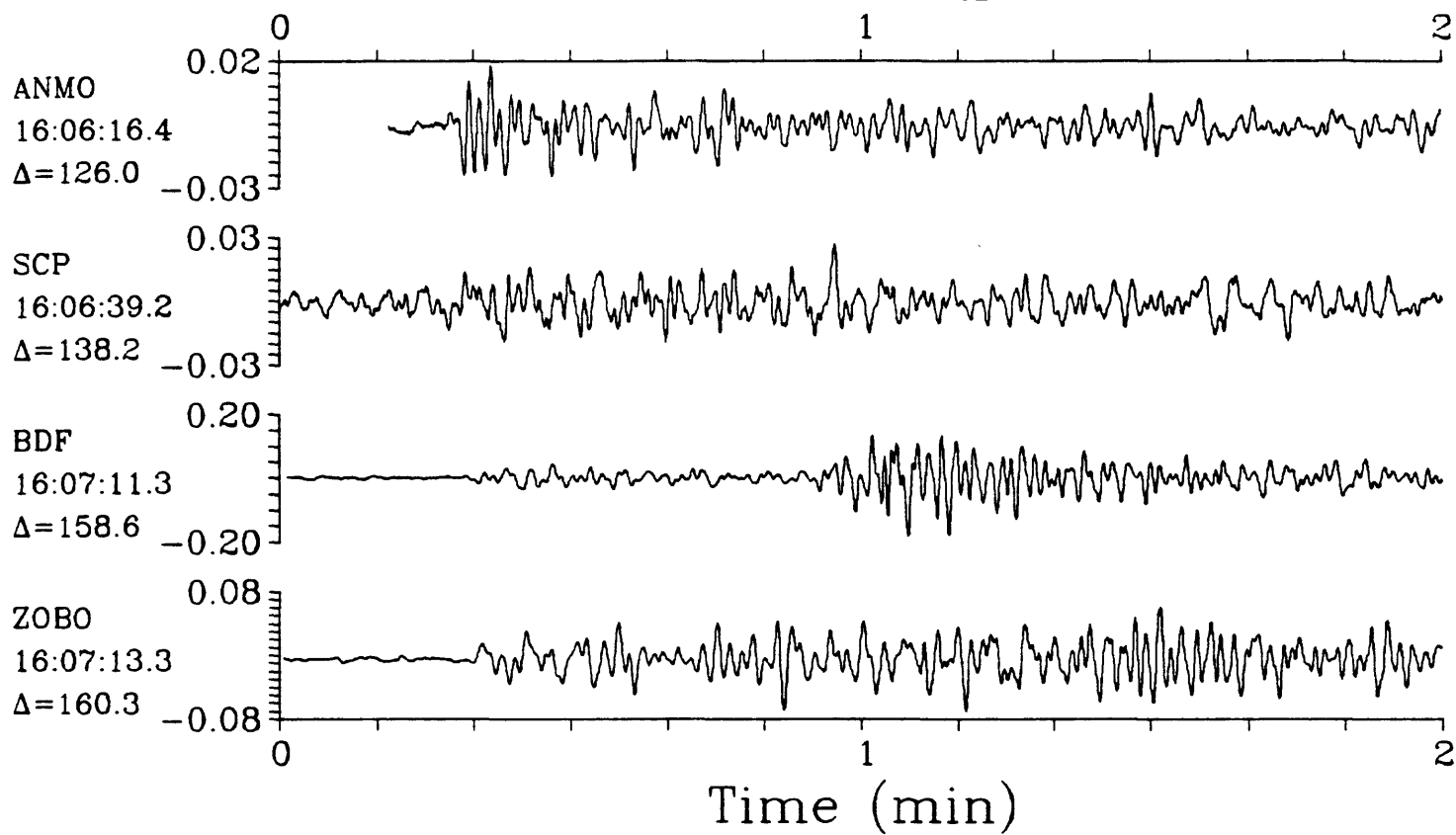
SPZ



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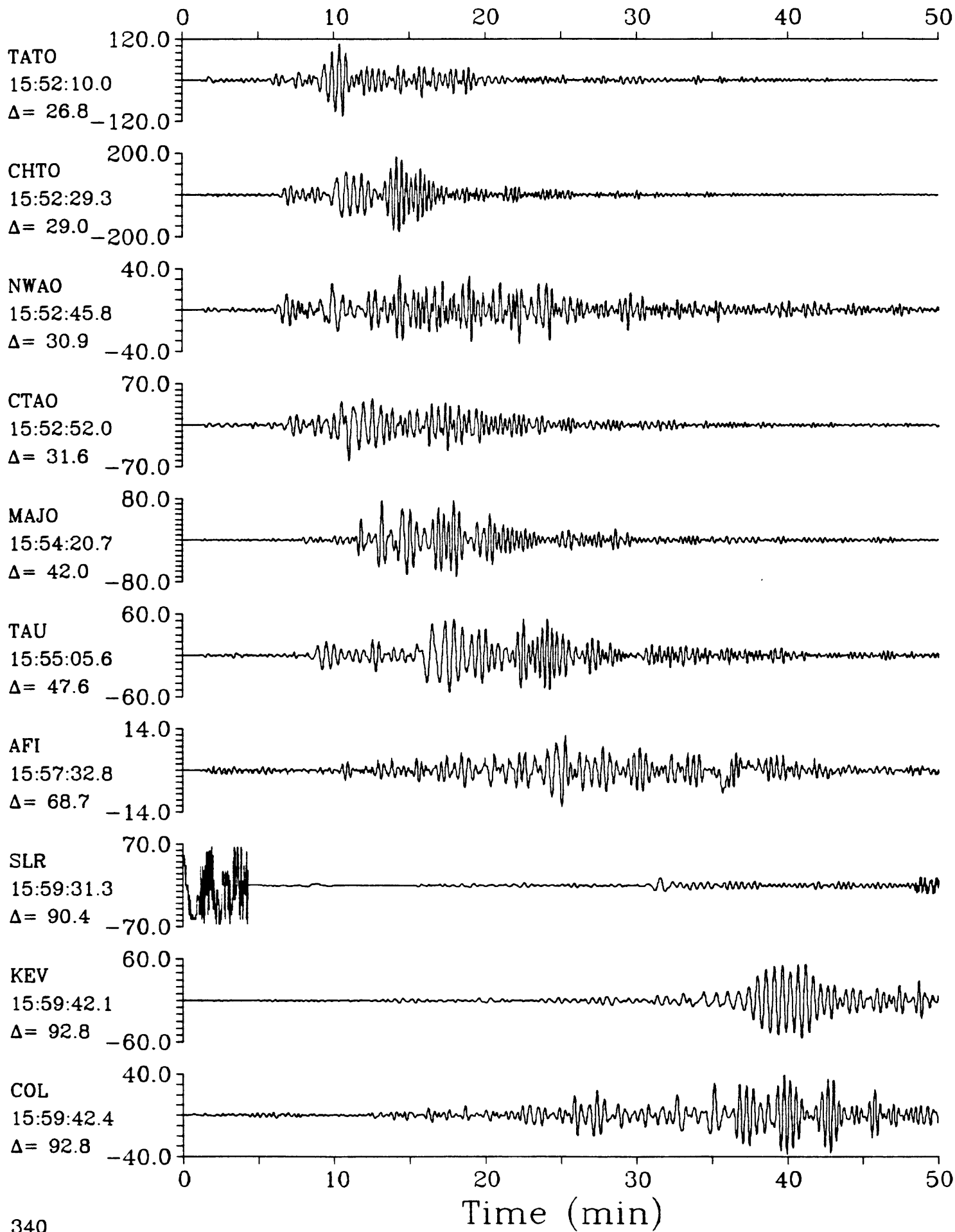
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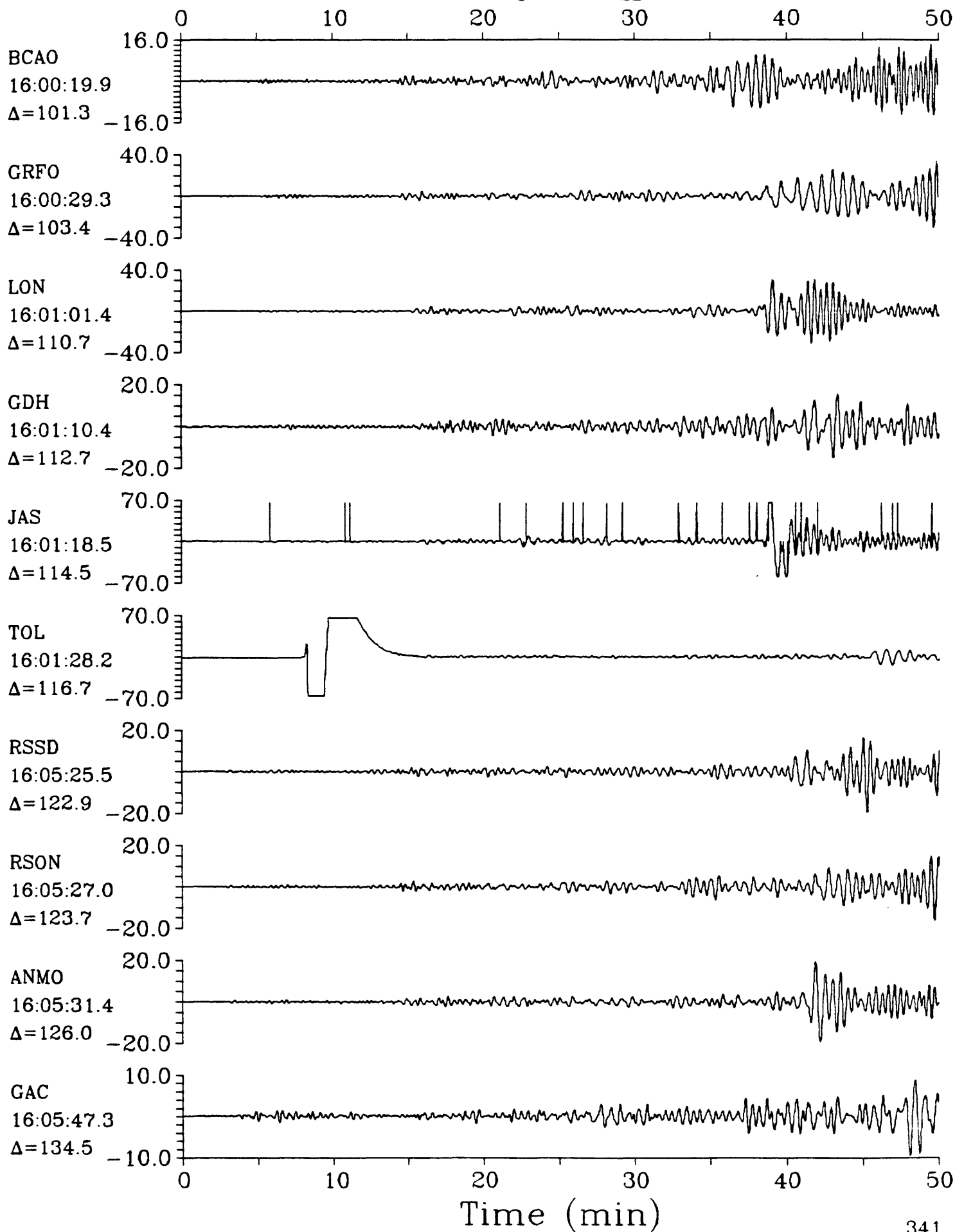
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LPZ

02 March 1985 15:47:33.47  
Sulawesi  $h=44.6$   $m_b=5.6$   $M_{SZ}=6.6$ 

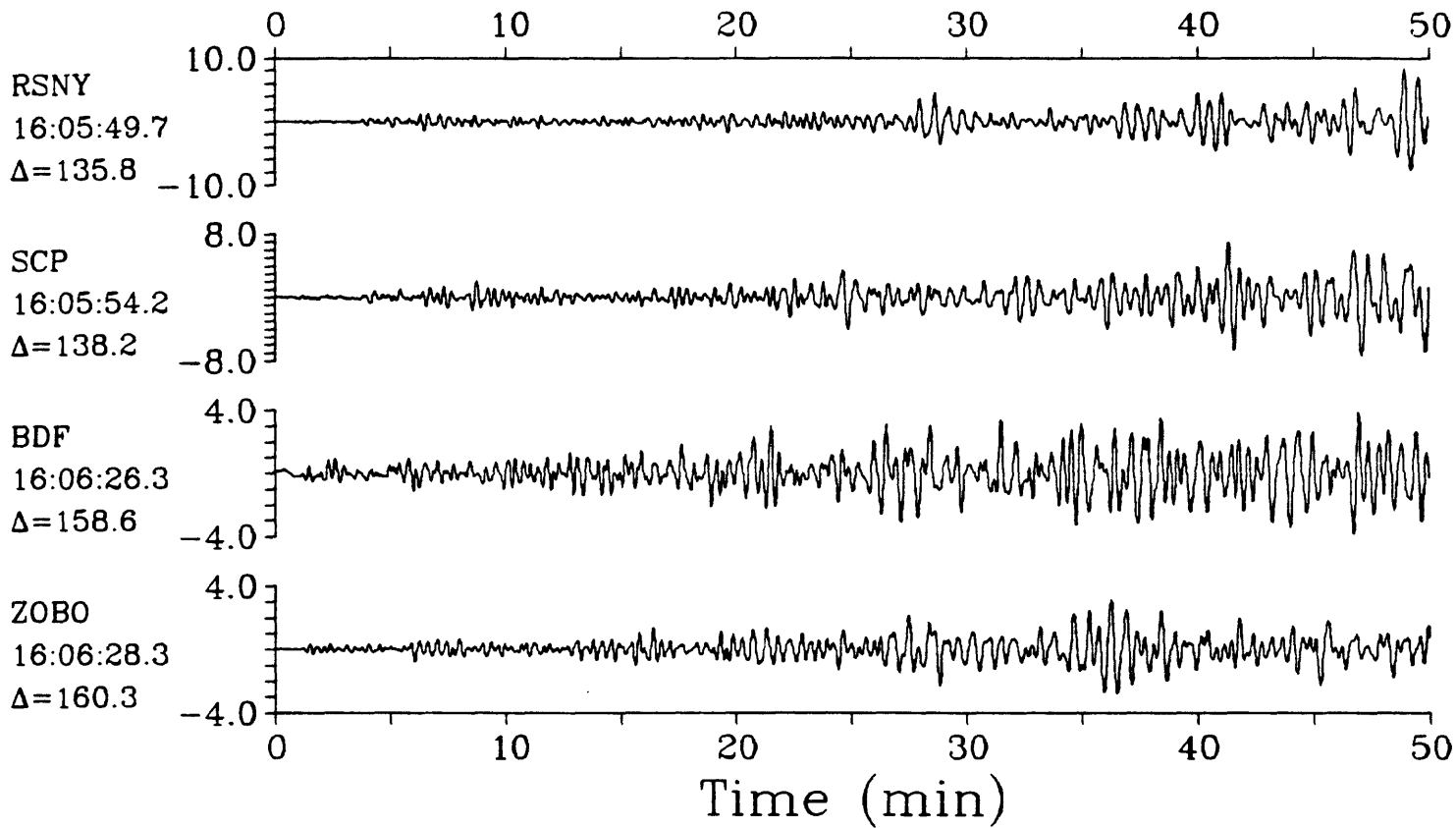
LPZ



LPZ

02 March 1985 15:47:33.47  
Sulawesi  $h=44.6$   $m_b=5.6$   $M_{sz}=6.6$

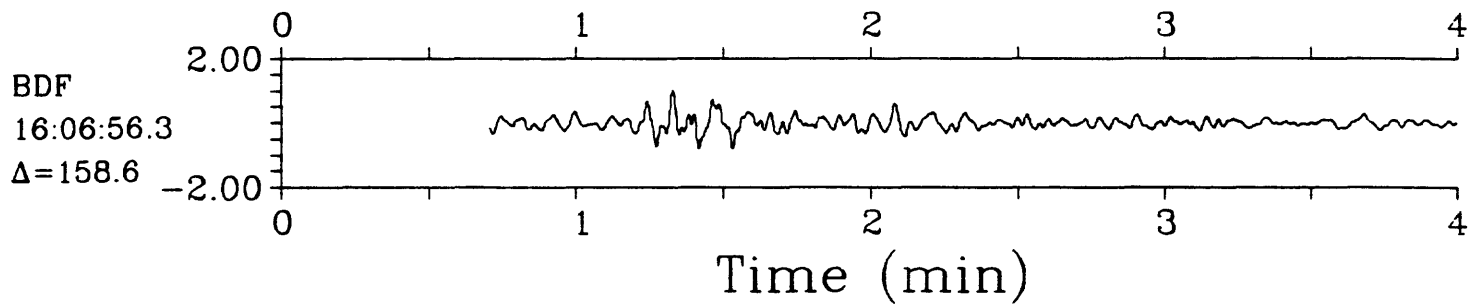
LPZ



IPZ

02 March 1985 15:47:33.47  
Sulawesi  $h=44.6$   $m_b=5.6$   $M_{sz}=6.6$

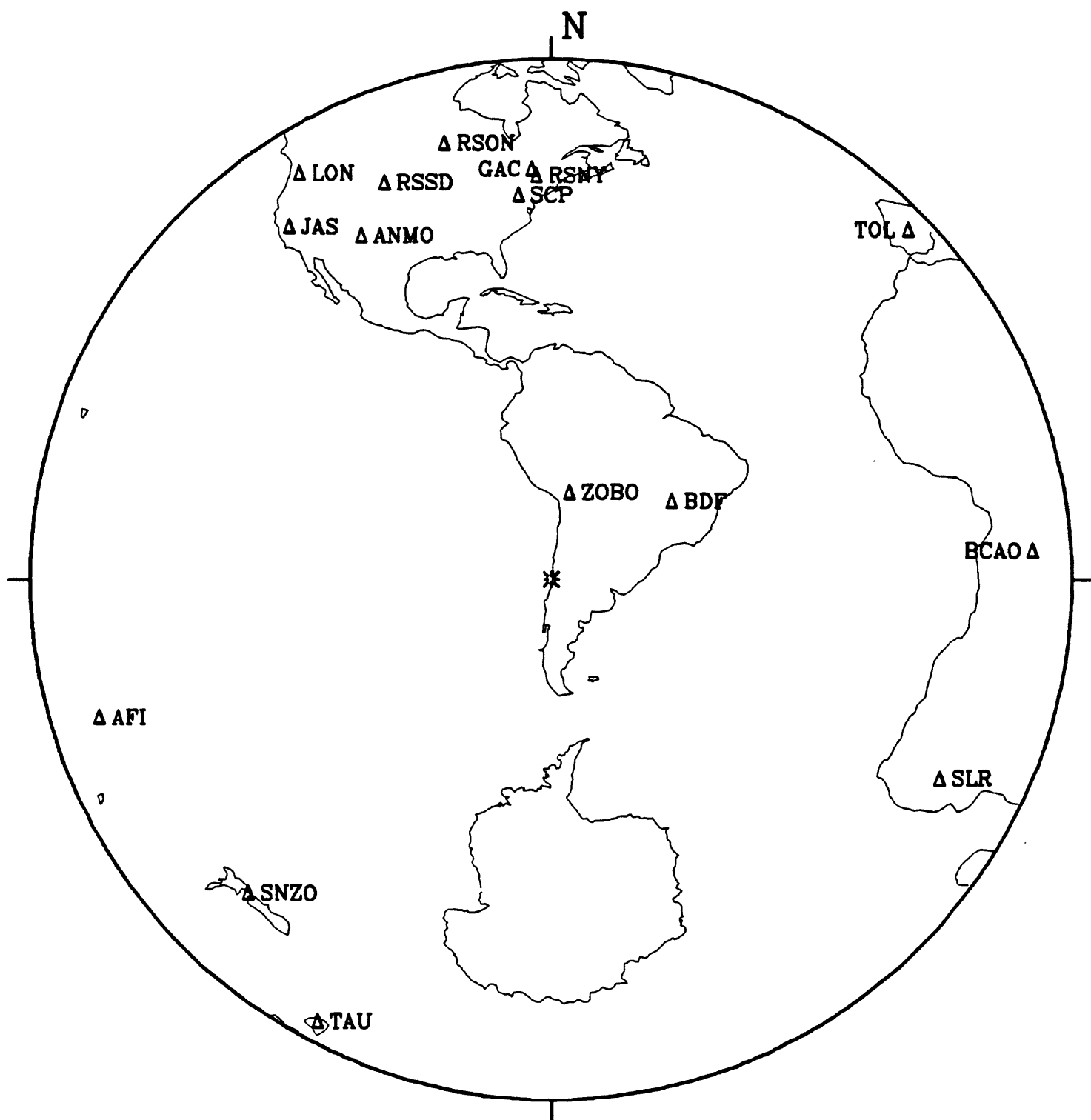
IPZ





03 March 1985 22:47:06.97

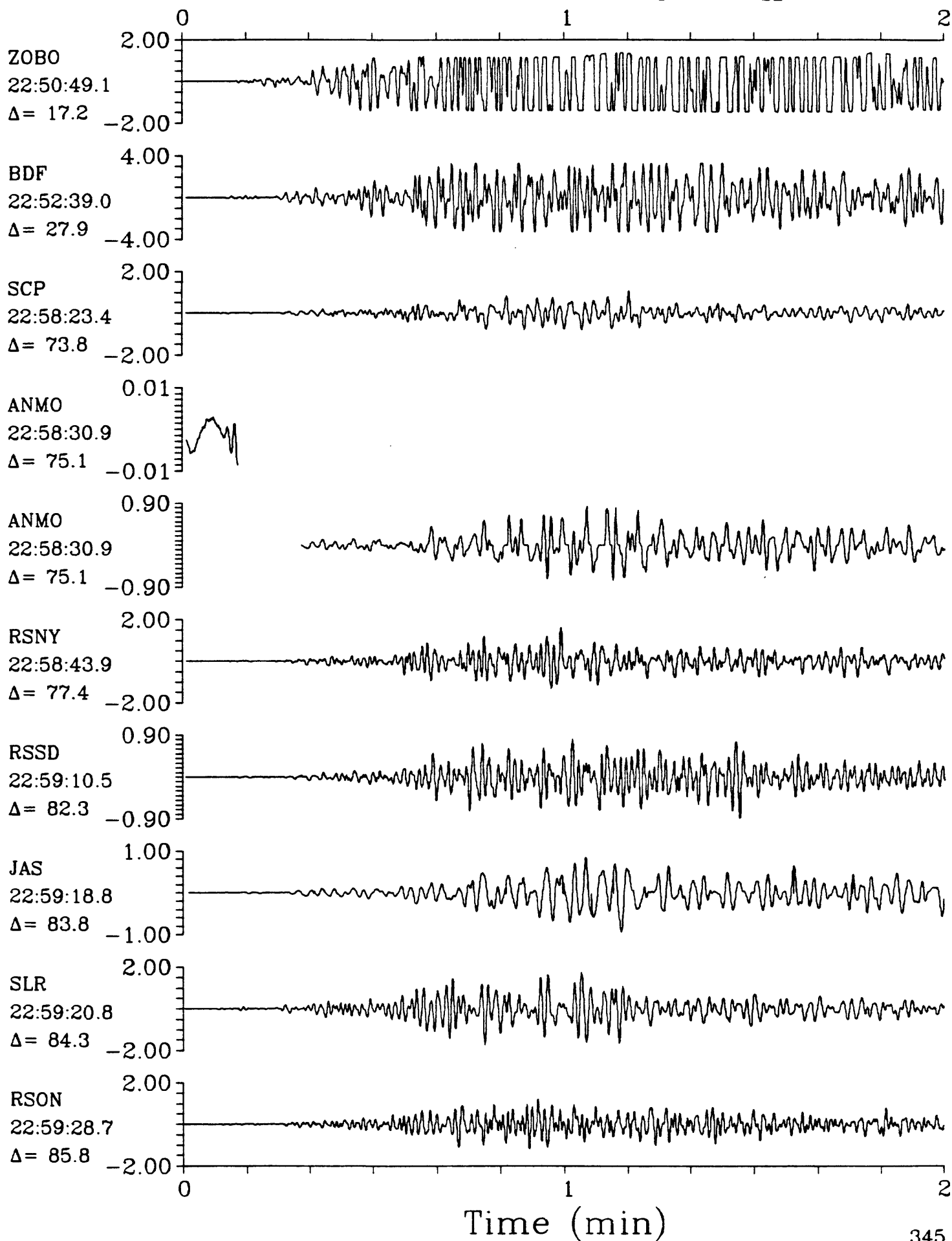
Near Coast of Central Chile



SPZ

03 March 1985 22:47:06.97

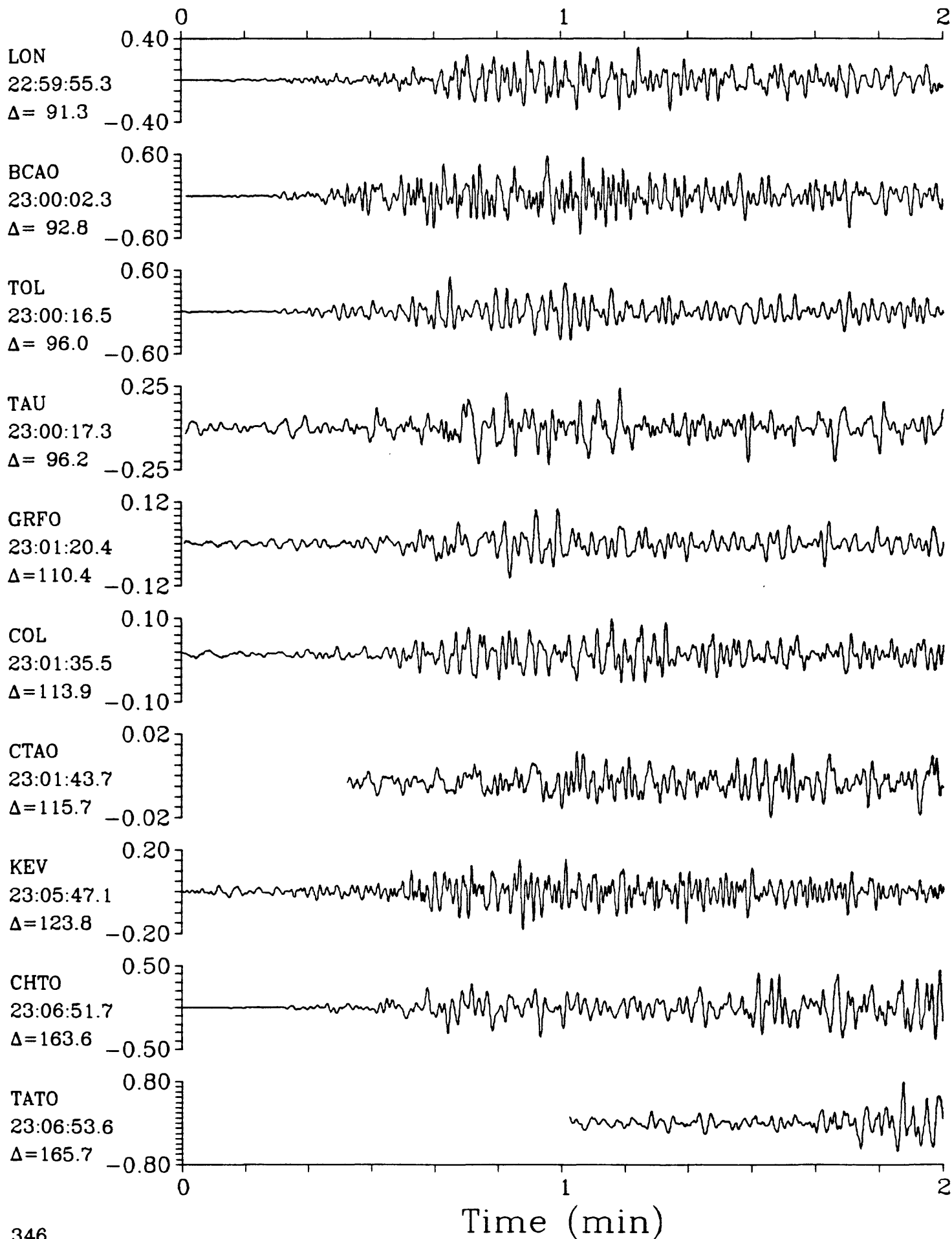
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.9$   $M_{sz}=7.8$ 

SPZ

03 March 1985 22:47:06.97

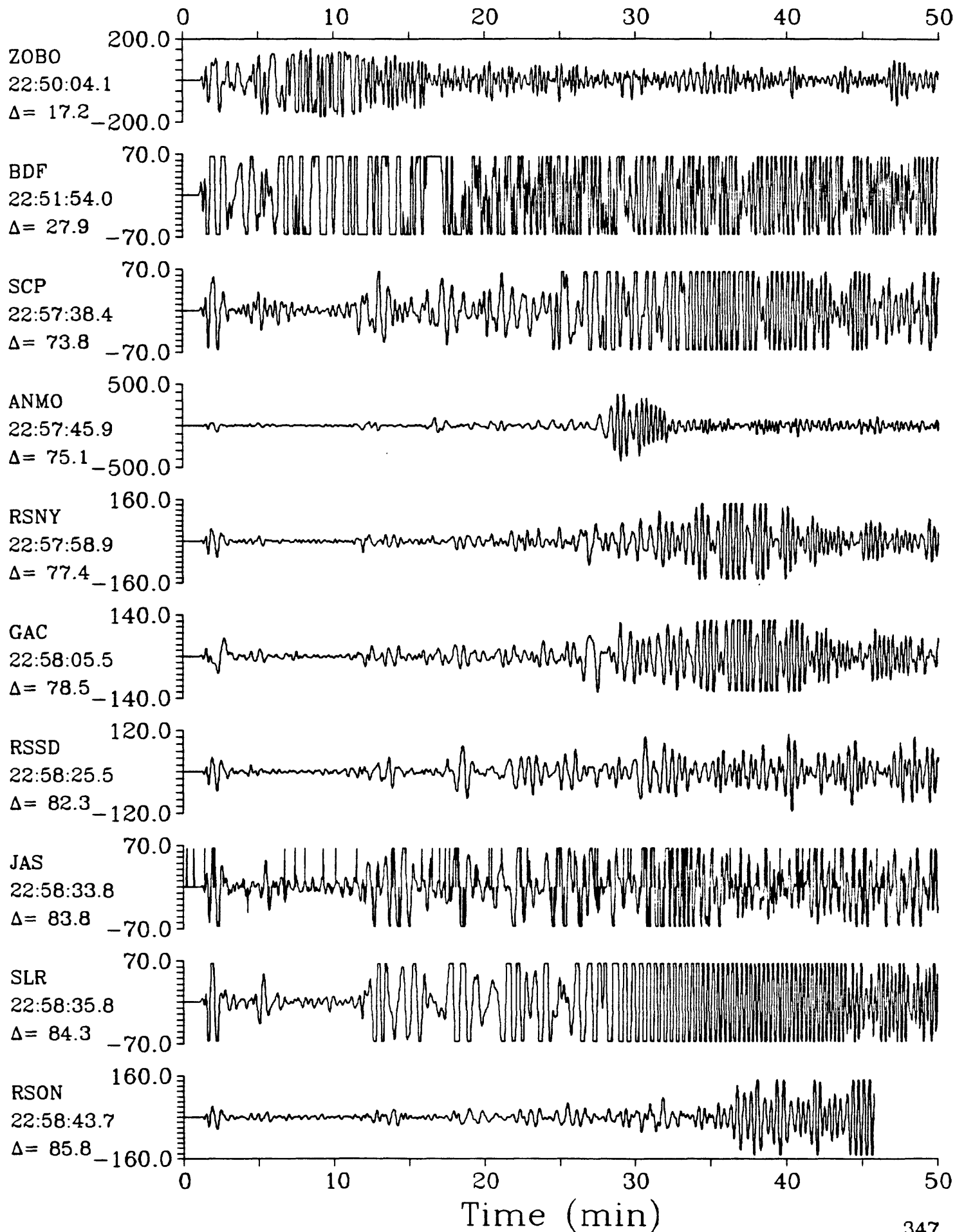
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.9$   $M_{sz}=7.8$ 

LPZ

03 March 1985 22:47:06.97

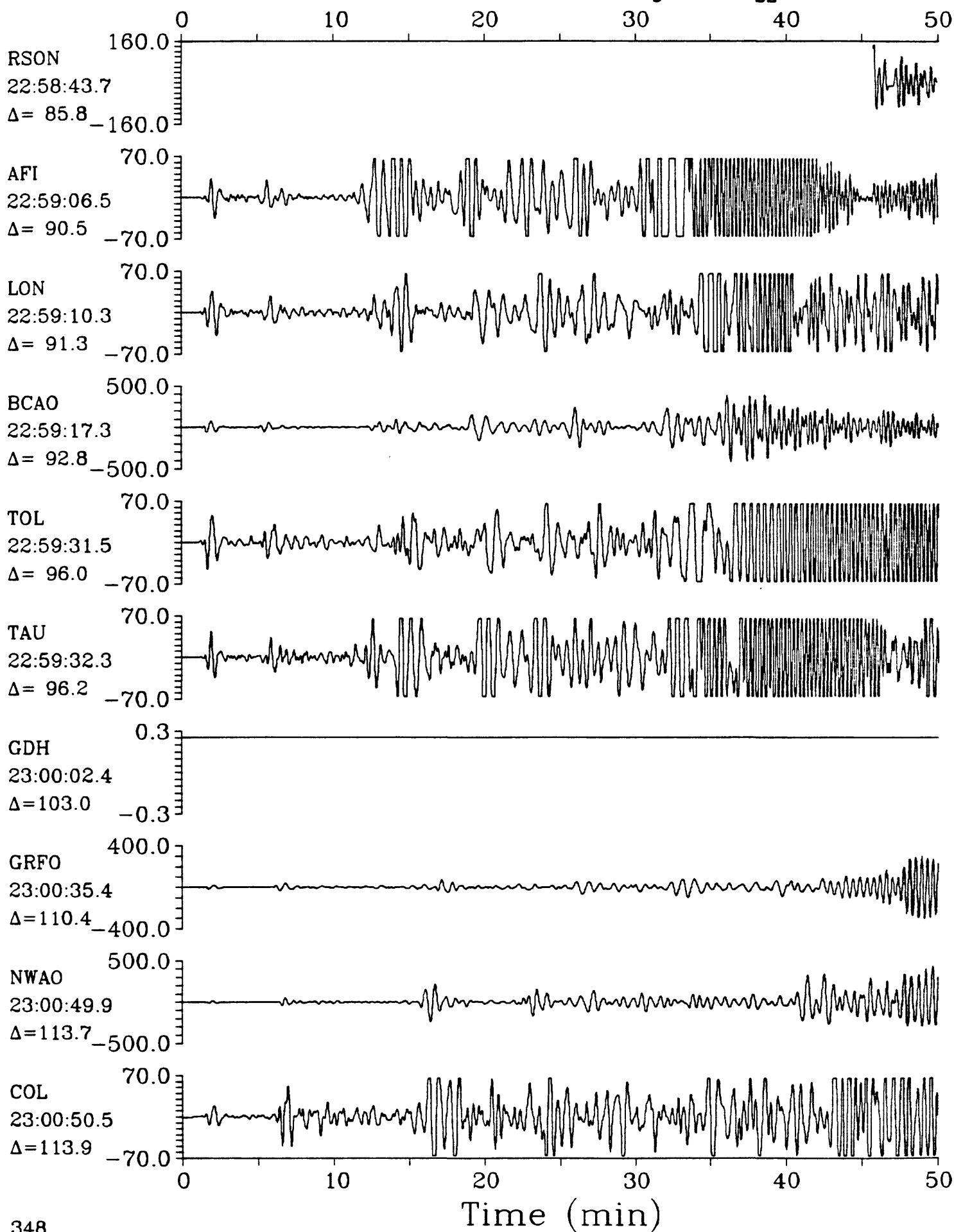
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.9$   $M_{sz}=7.8$ 

LPZ

03 March 1985 22:47:06.97

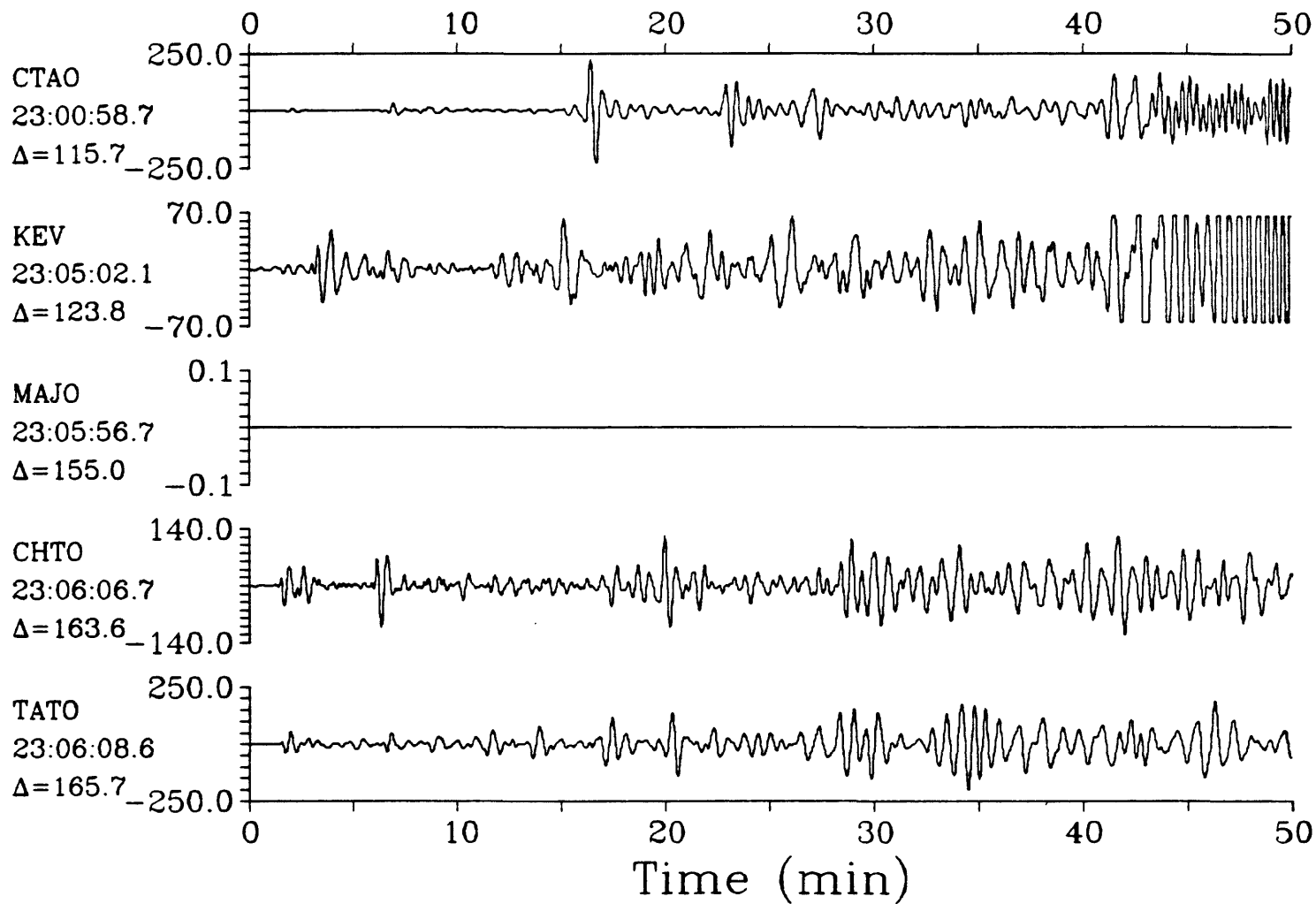
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.9$   $M_{sz}=7.8$ 

LPZ

03 March 1985 22:47:06.97

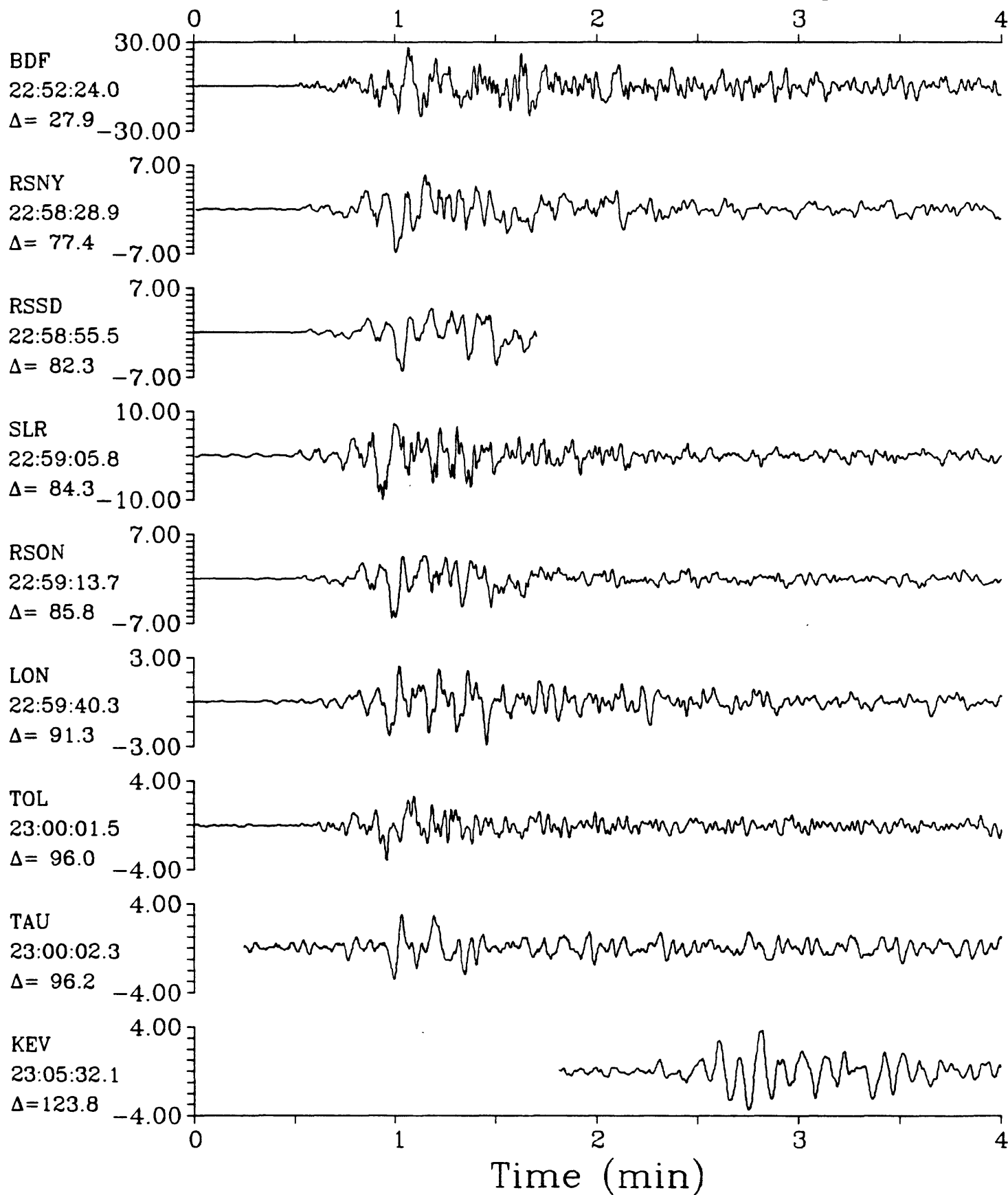
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.9$   $M_{sz}=7.8$ 

IPZ

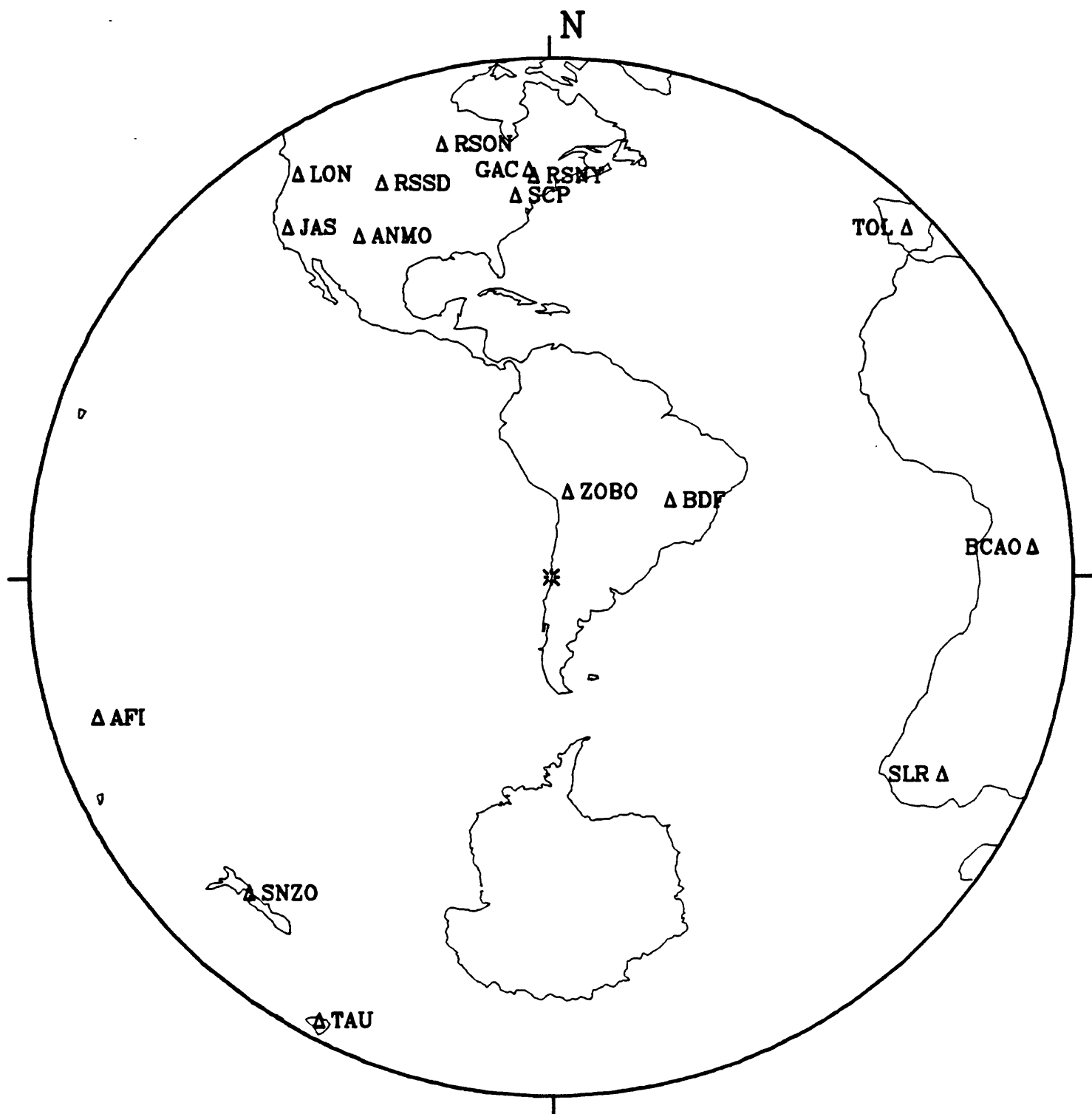
03 March 1985 22:47:06.97

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.9$   $M_{sz}=7.8$ 

03 March 1985 23:38:30.93

Near Coast of Central Chile

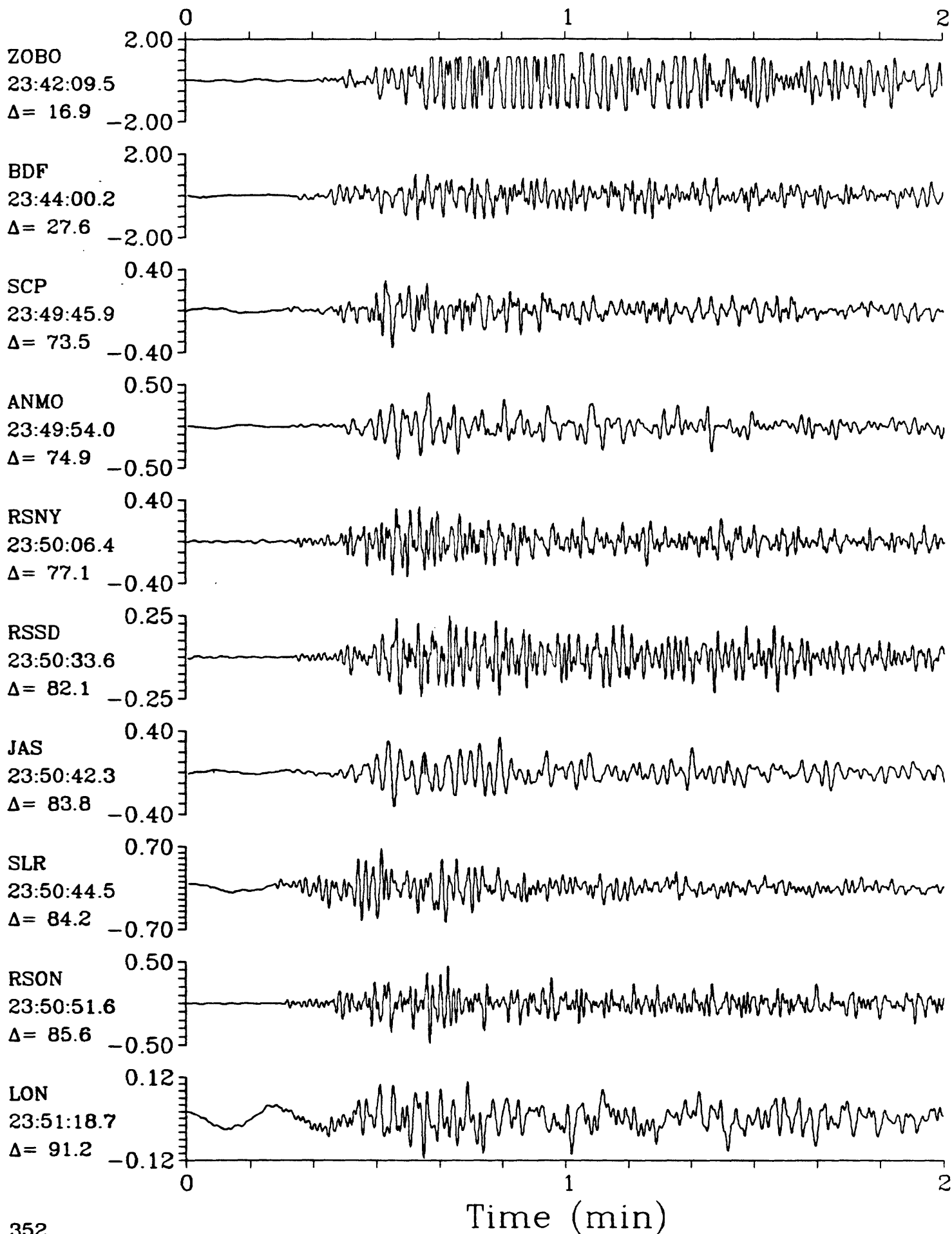




SPZ

03 March 1985 23:38:30.93

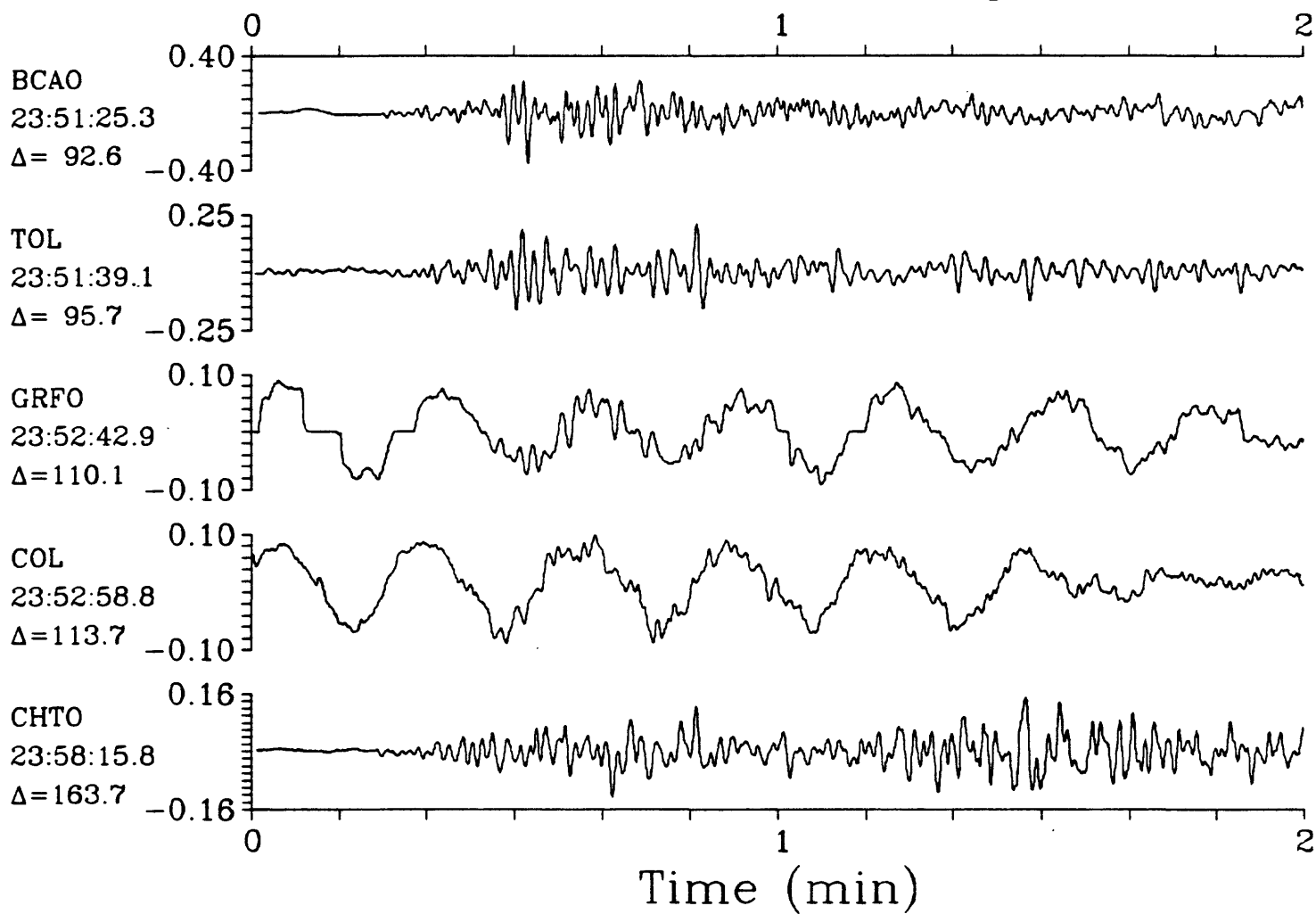
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.5$ 

SPZ

03 March 1985 23:38:30.93

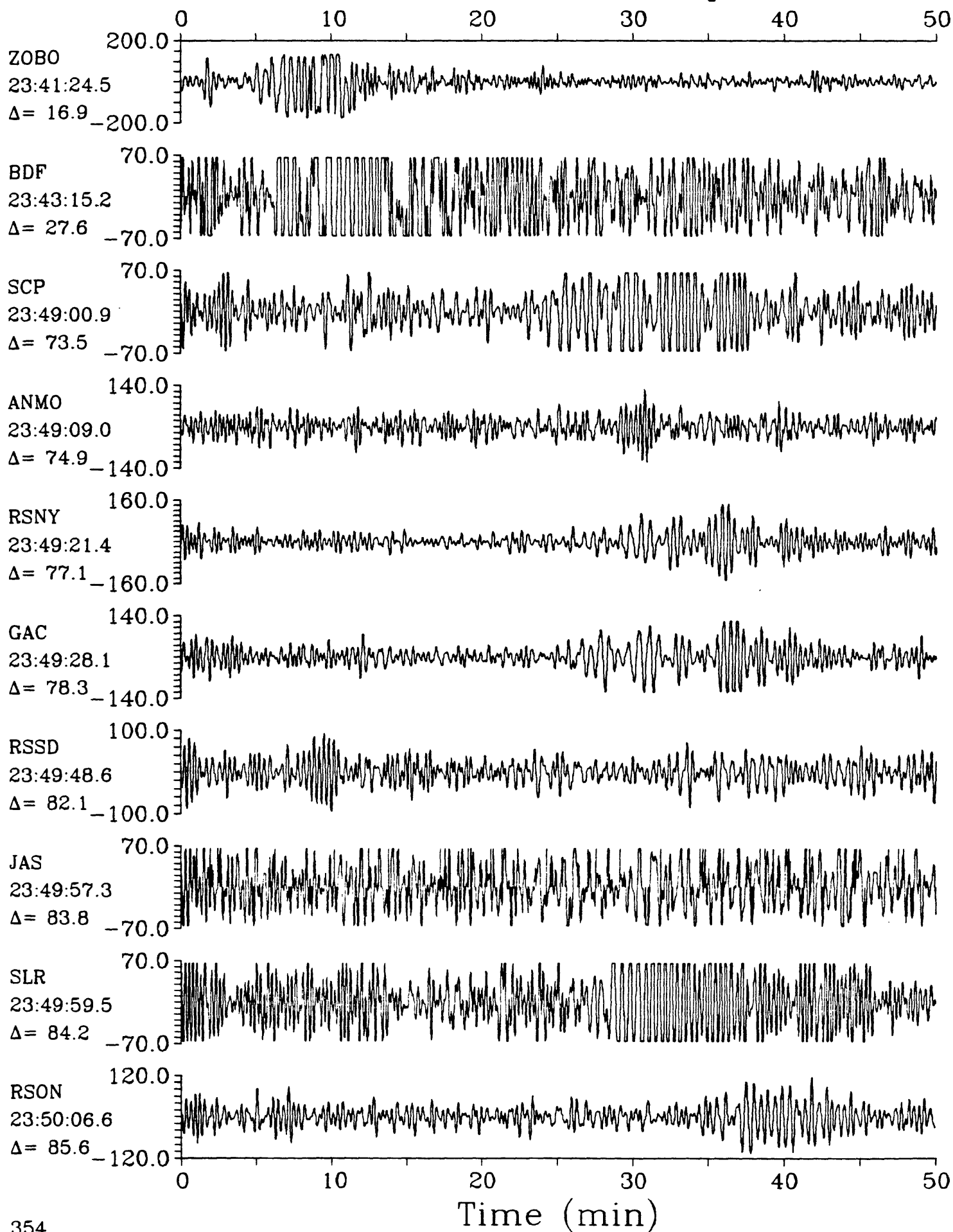
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.5$ 

LPZ

03 March 1985 23:38:30.93

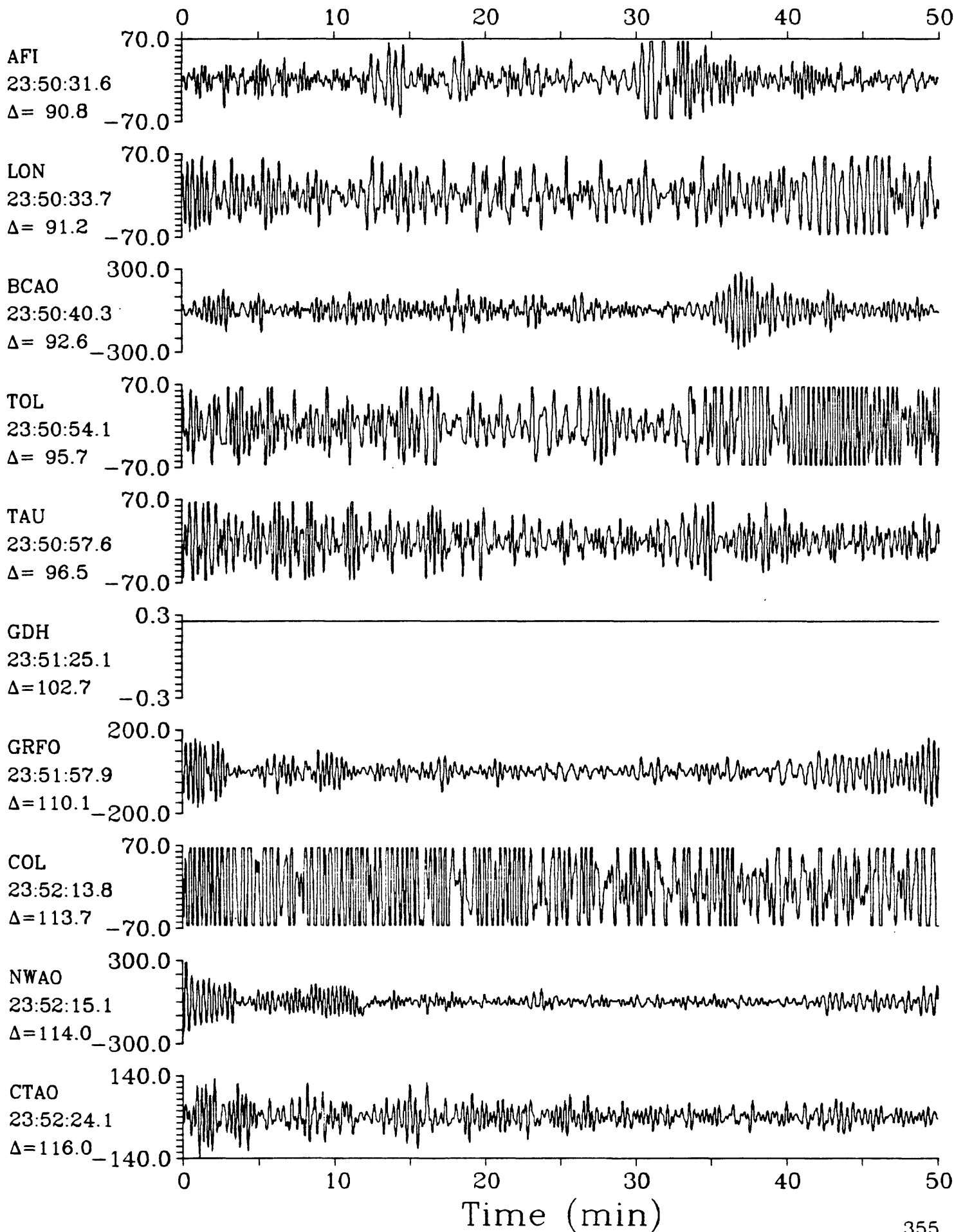
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.5$ 

LPZ

03 March 1985 23:38:30.93

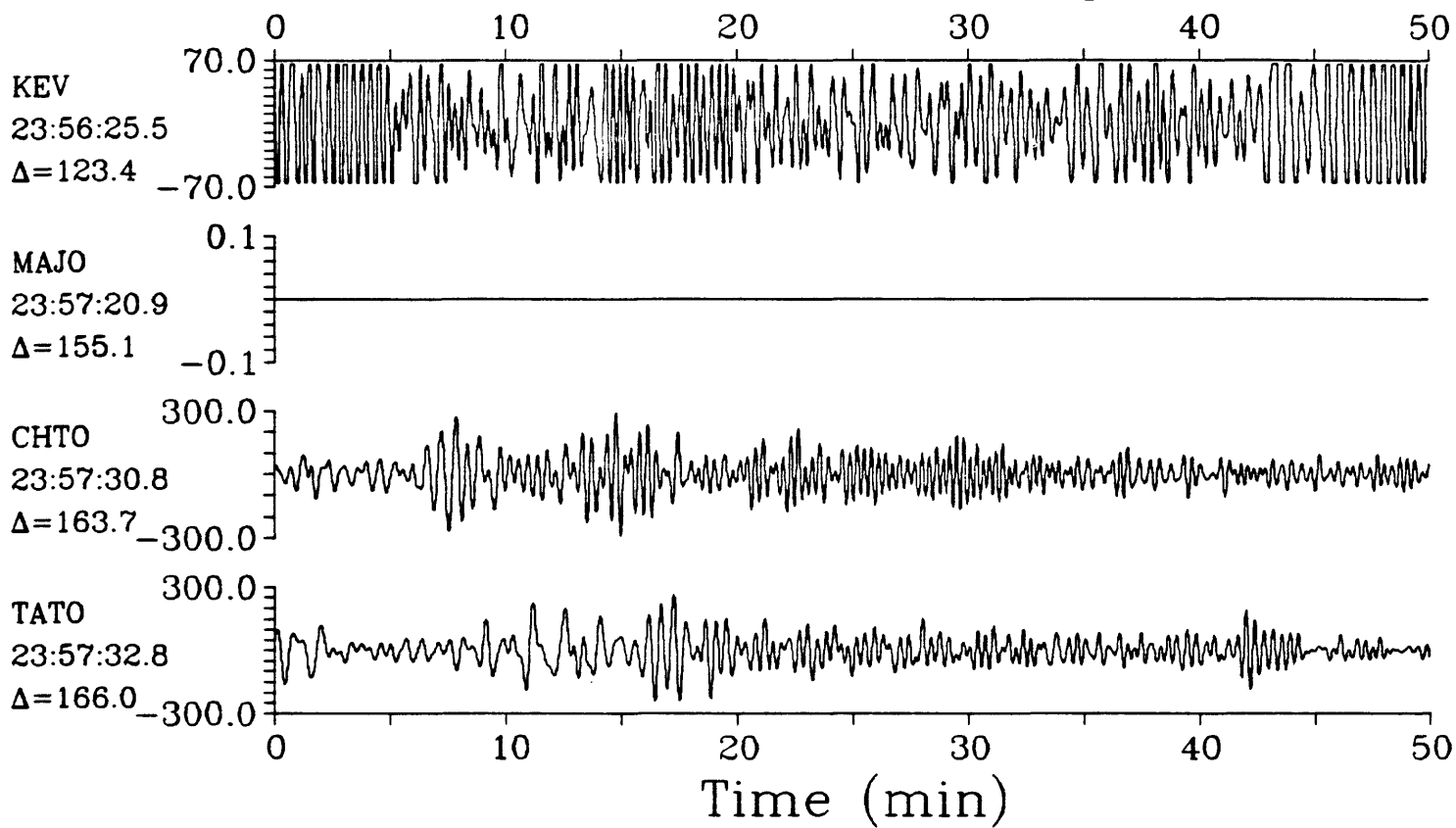
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.5$ 

LPZ

03 March 1985 23:38:30.93

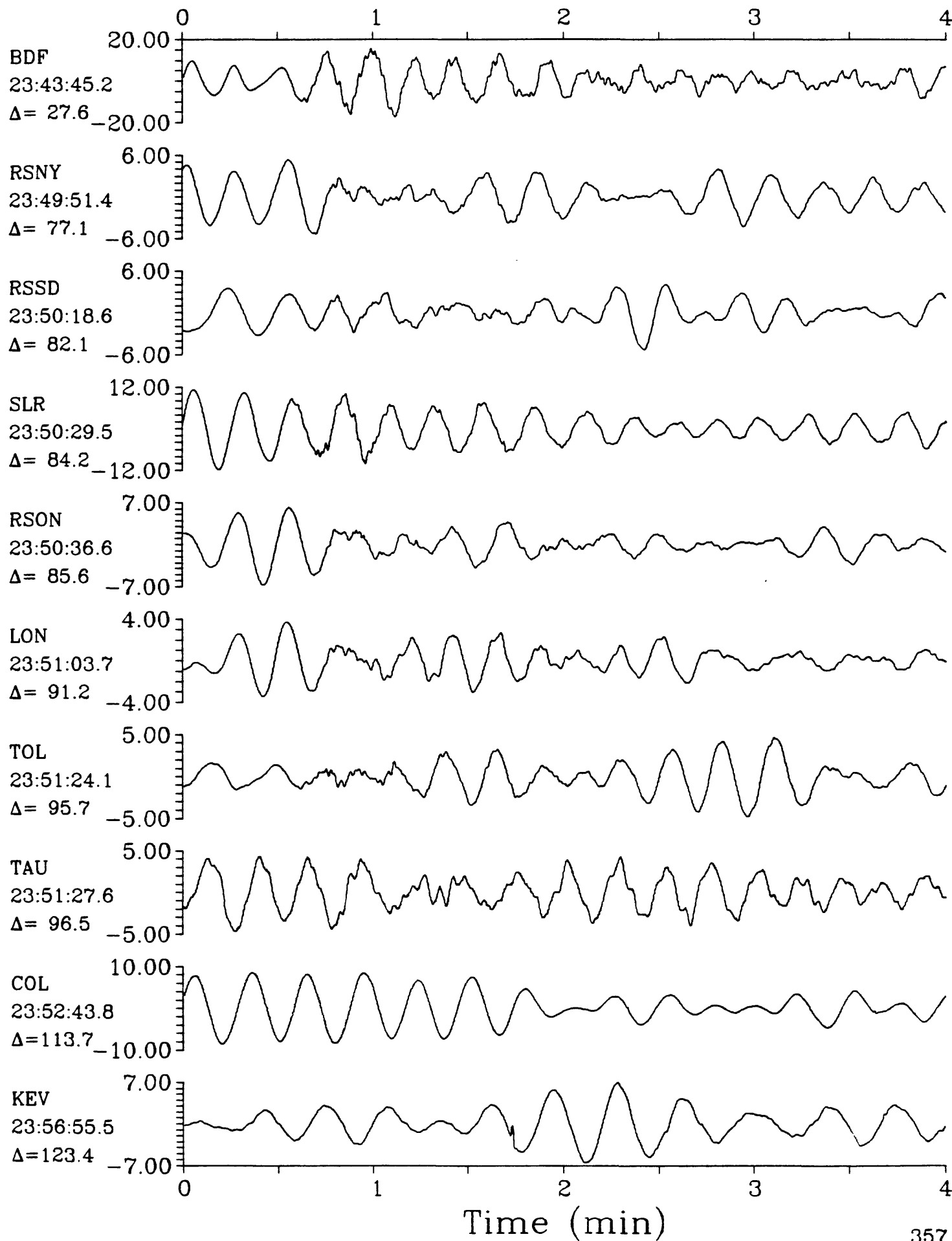
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.5$ 

IPZ

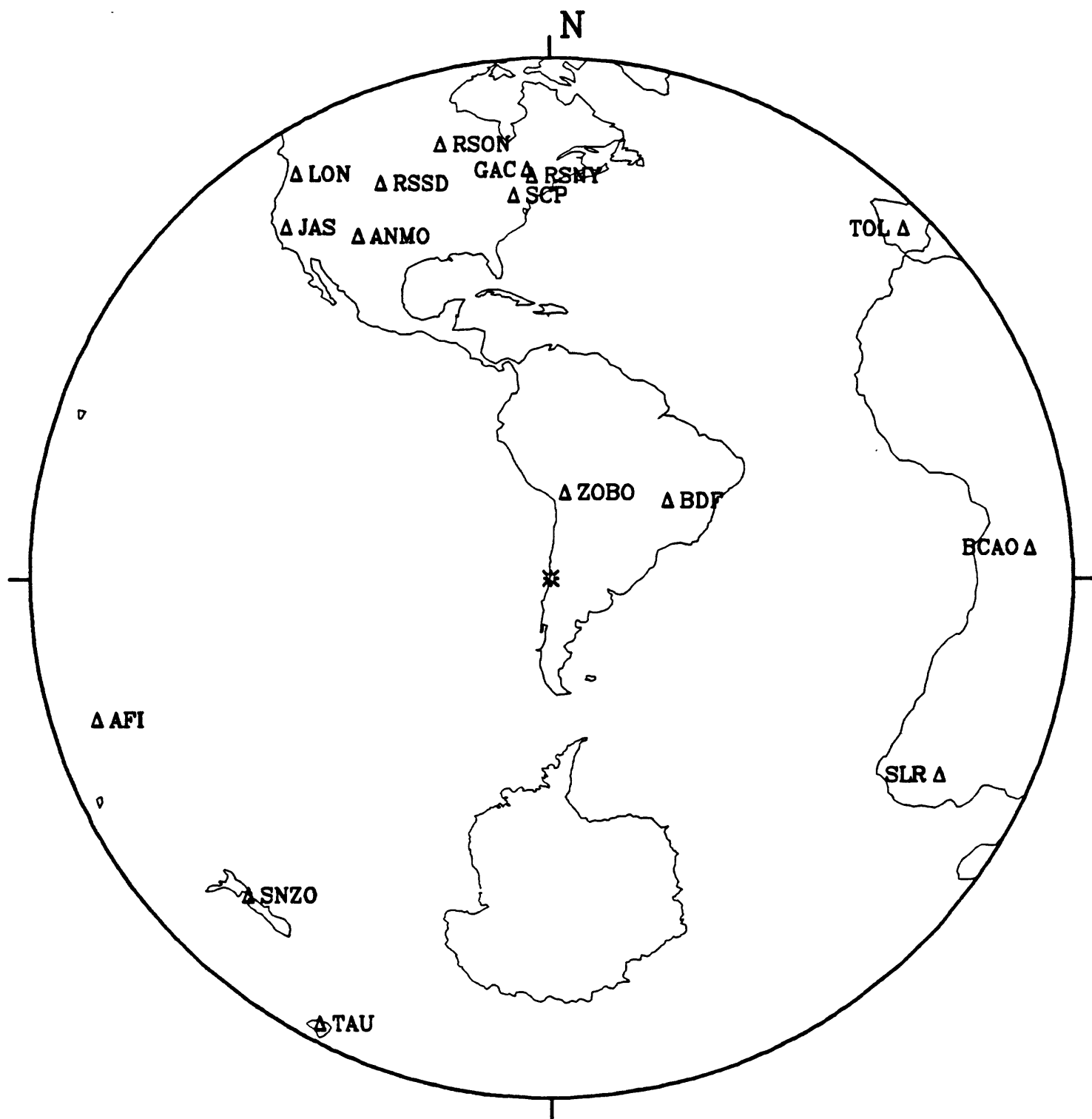
03 March 1985 23:38:30.93  
Near Coast of Central Chile  $h=33.0$   $m_b=6.5$

IPZ



04 March 1985 00:11:45.31

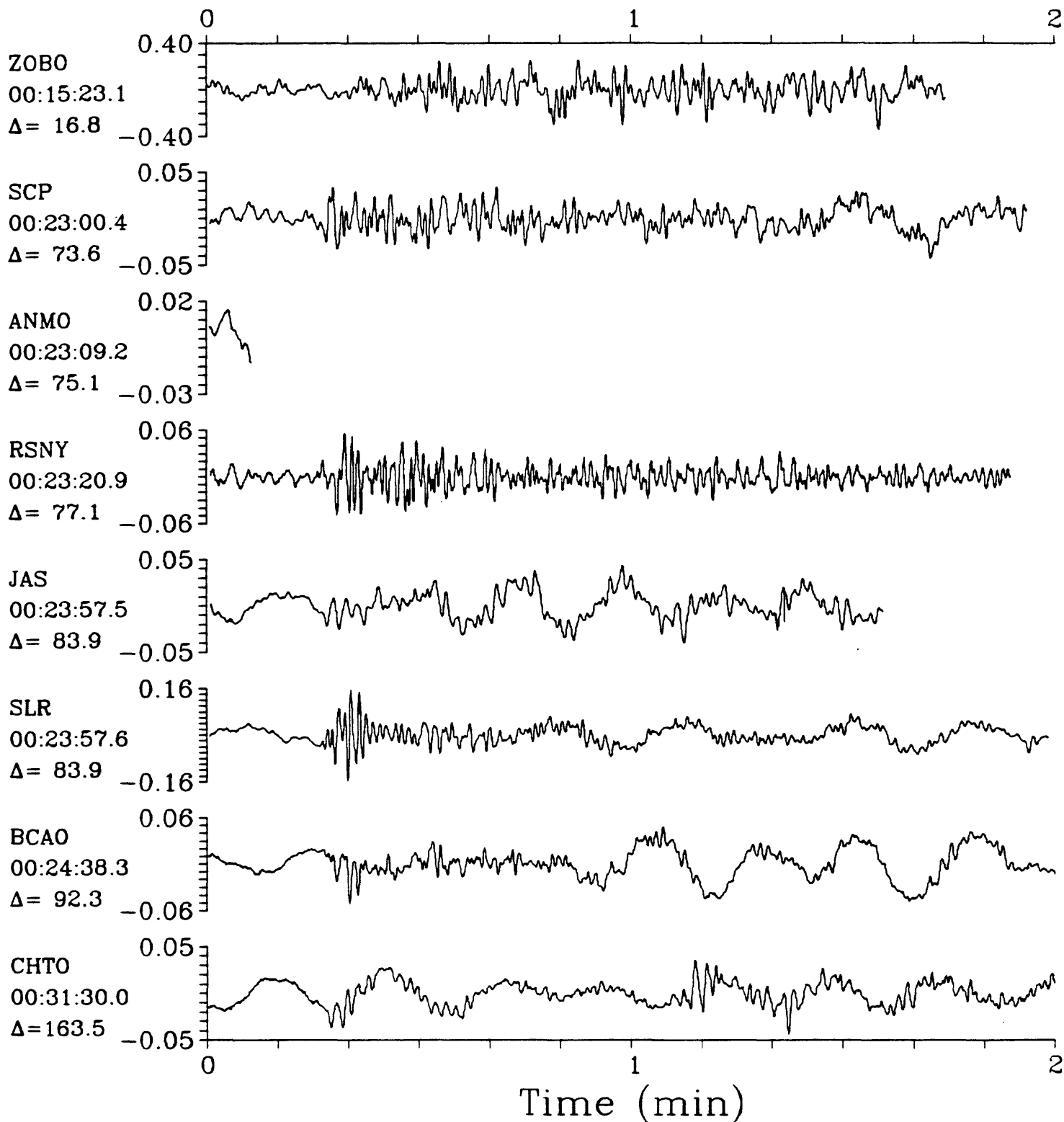
Near Coast of Central Chile



SPZ

04 March 1985 00:11:45.31

SPZ

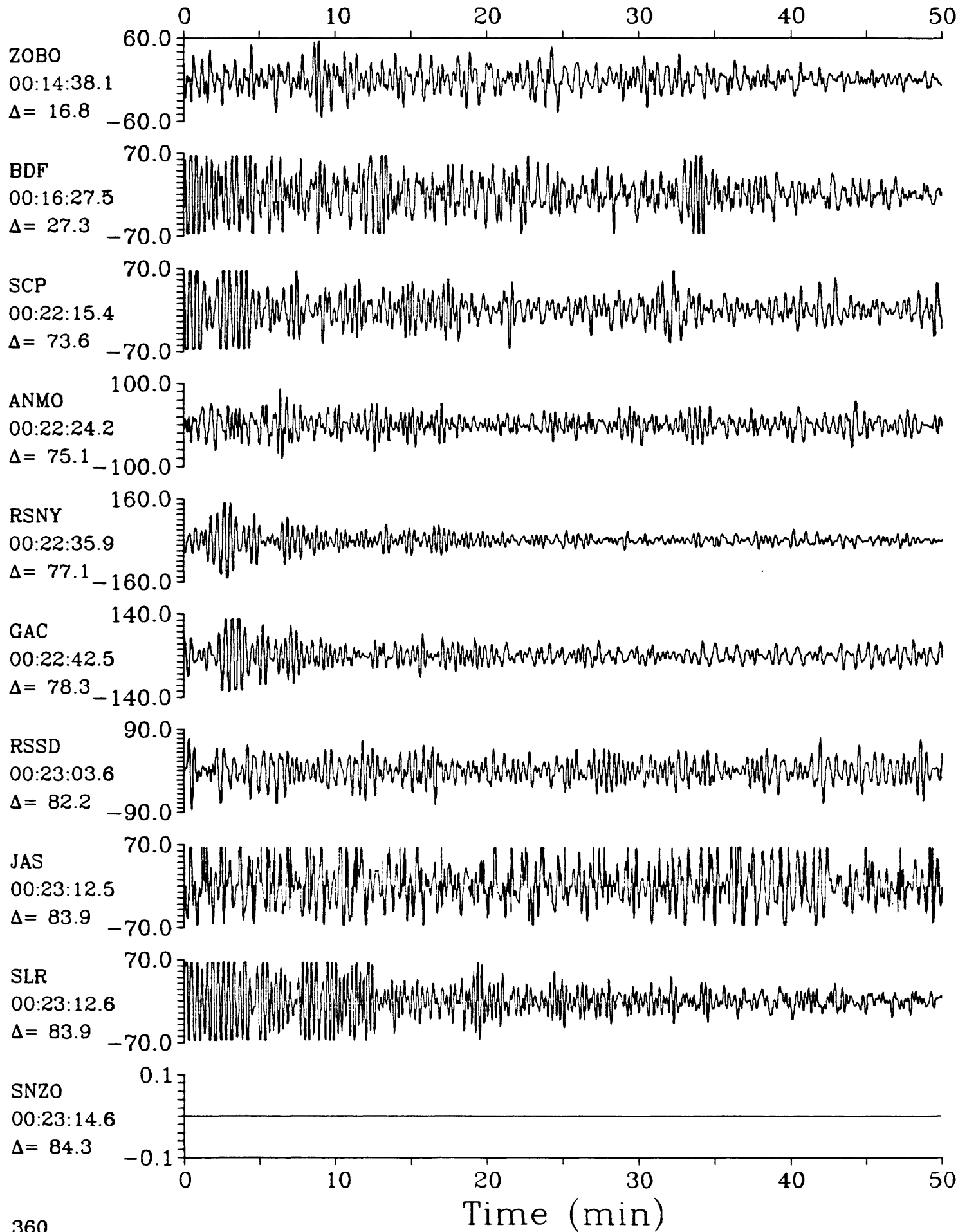
Near Coast of Central Chile  $h=33.0$   $m_b=5.7$ 



LPZ

04 March 1985 00:11:45.31

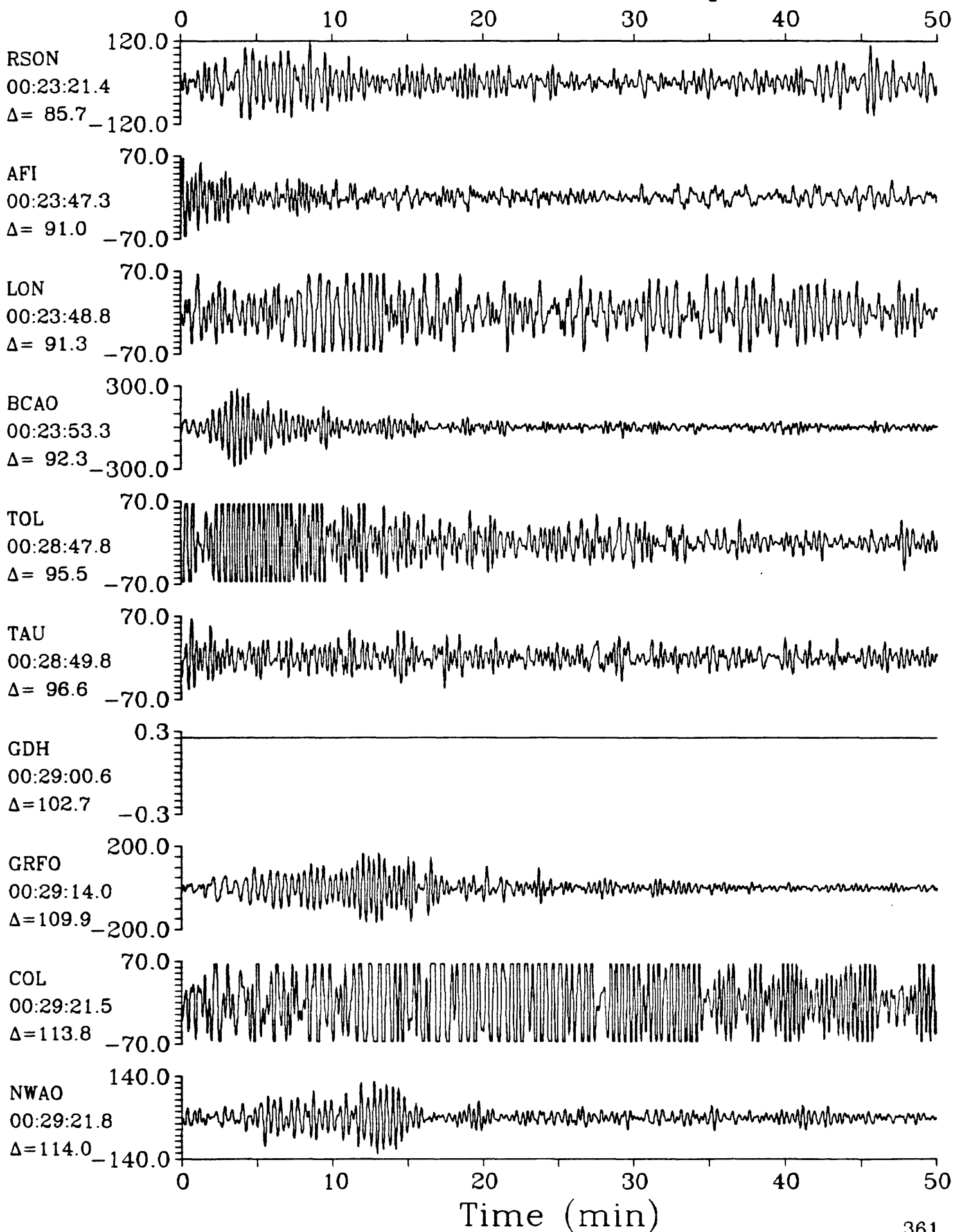
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.7$ 

LPZ

04 March 1985 00:11:45.31

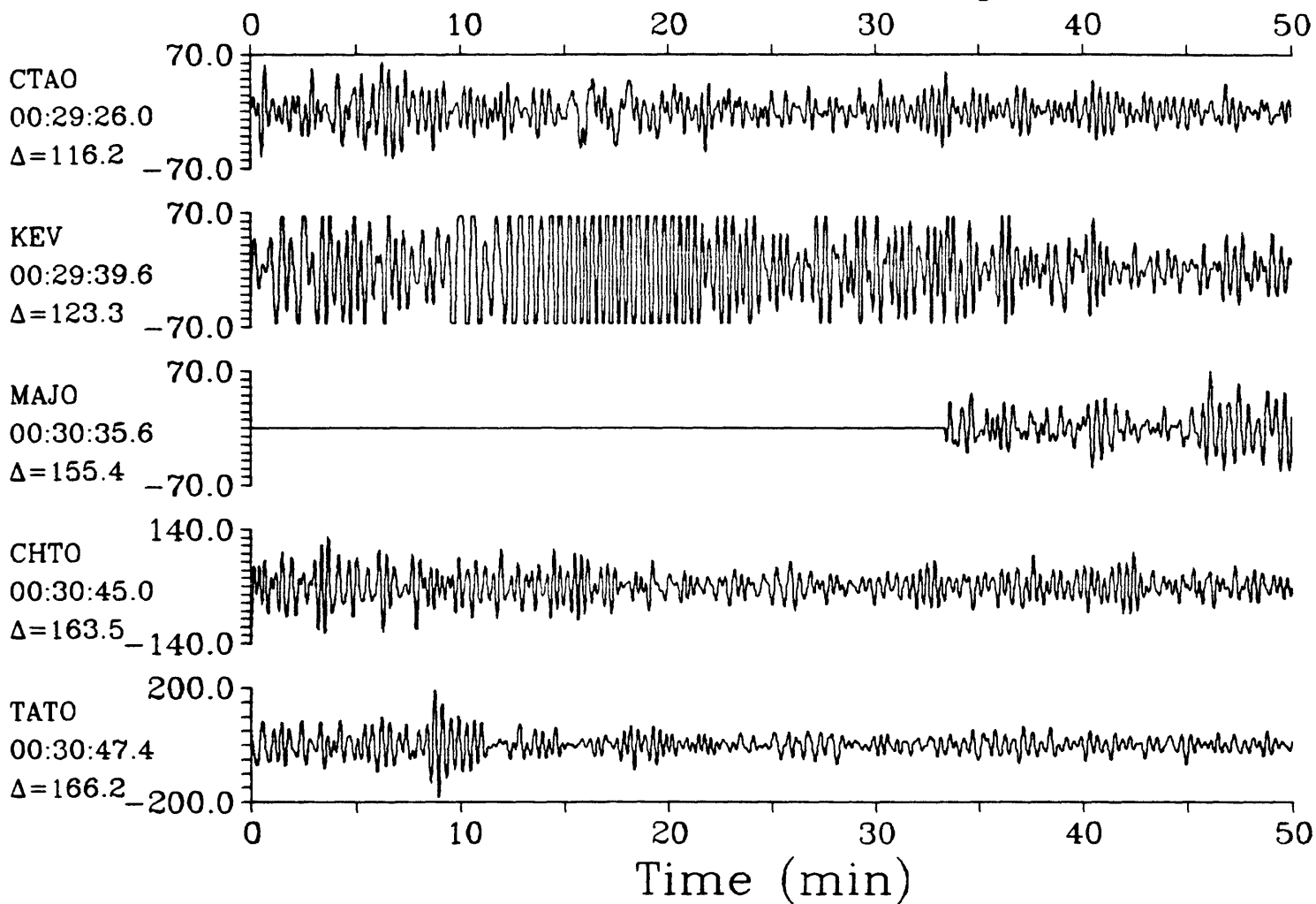
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.7$ 

LPZ

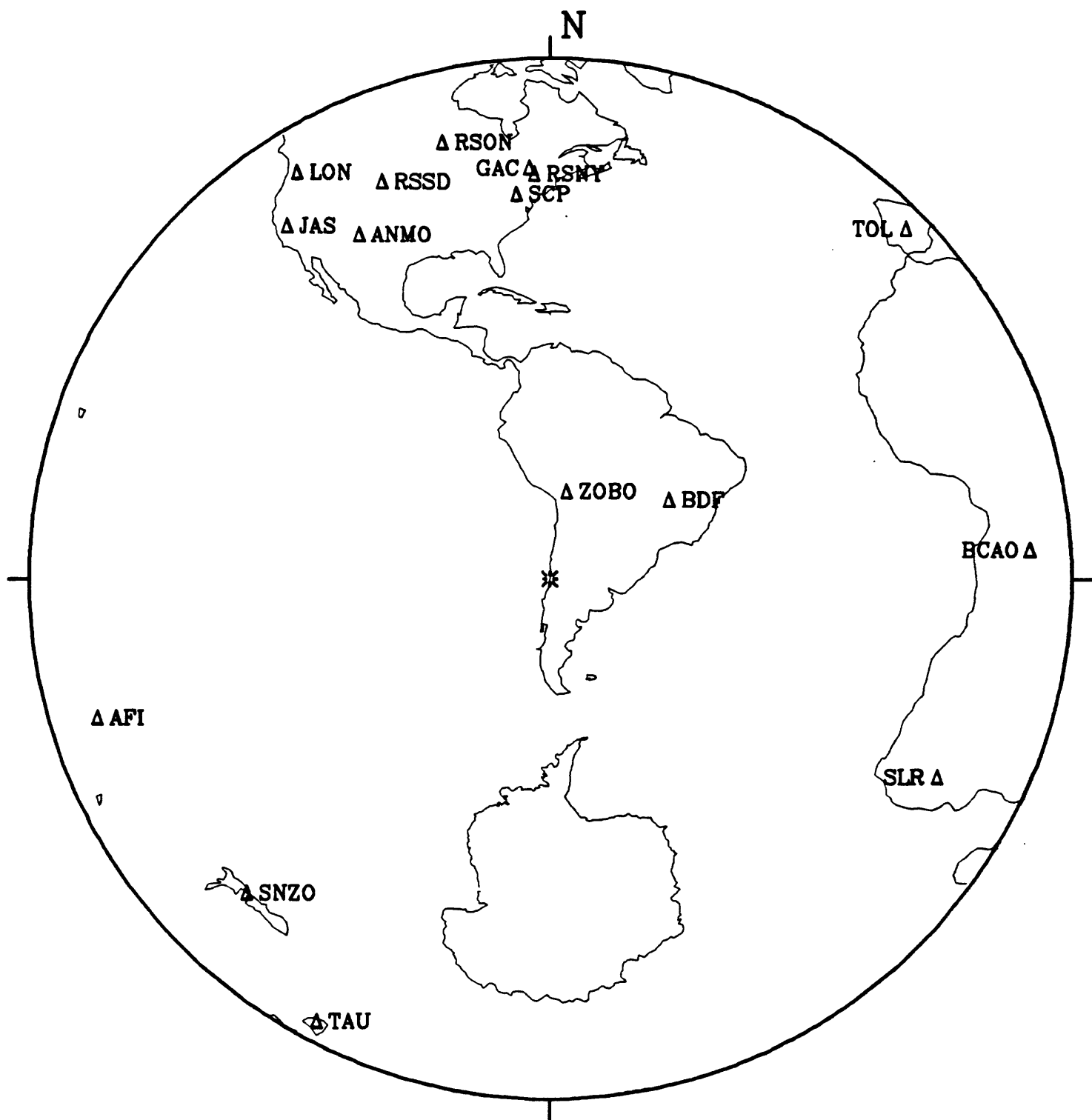
04 March 1985 00:11:45.31

LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.7$ 

04 March 1985 00:32:21.46

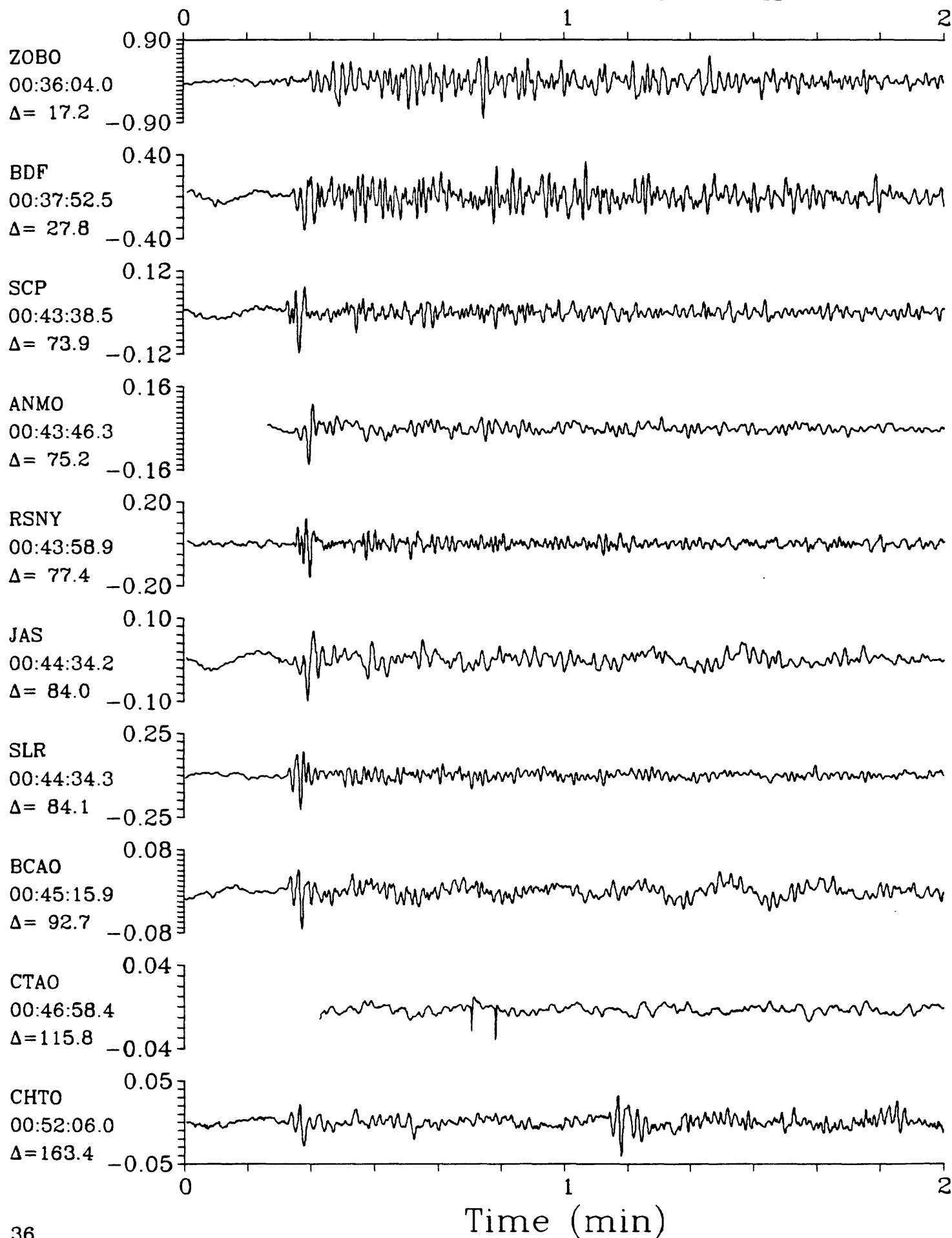
Near Coast of Central Chile



SPZ

04 March 1985 00:32:21.46

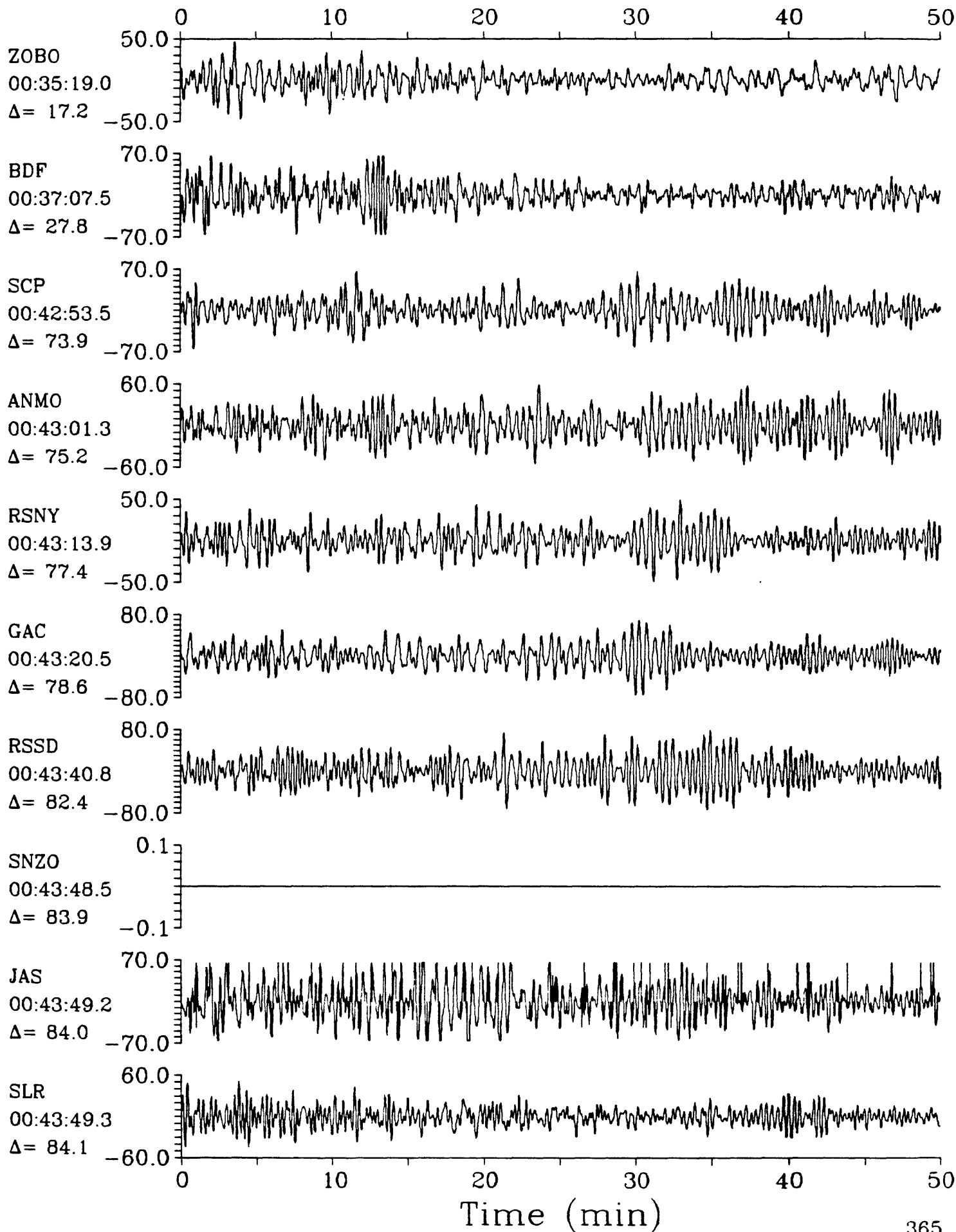
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.0$   $M_{sz}=6.7$ 

LPZ

04 March 1985 00:32:21.46

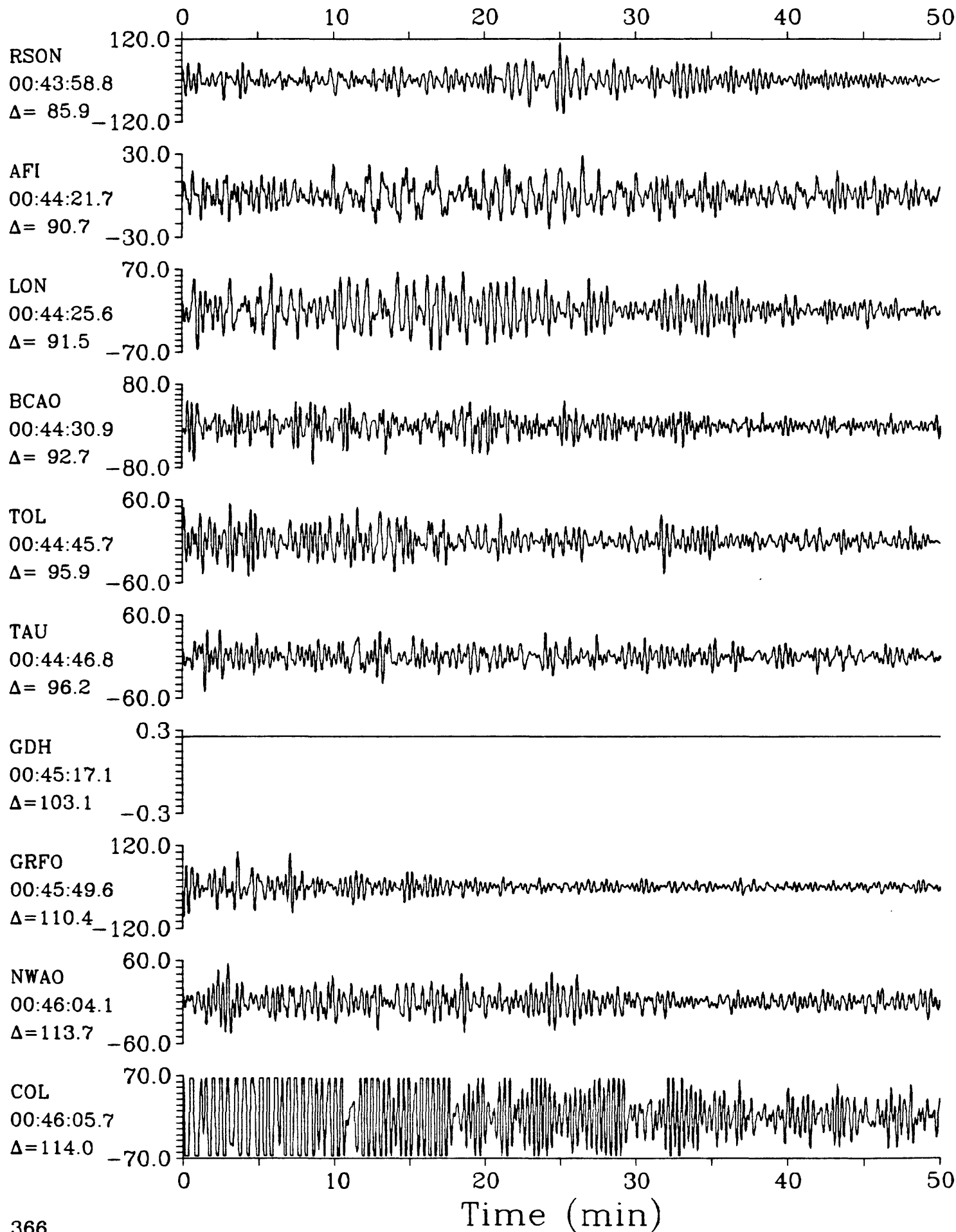
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.0$   $M_{sz}=6.7$ 

LPZ

04 March 1985 00:32:21.46

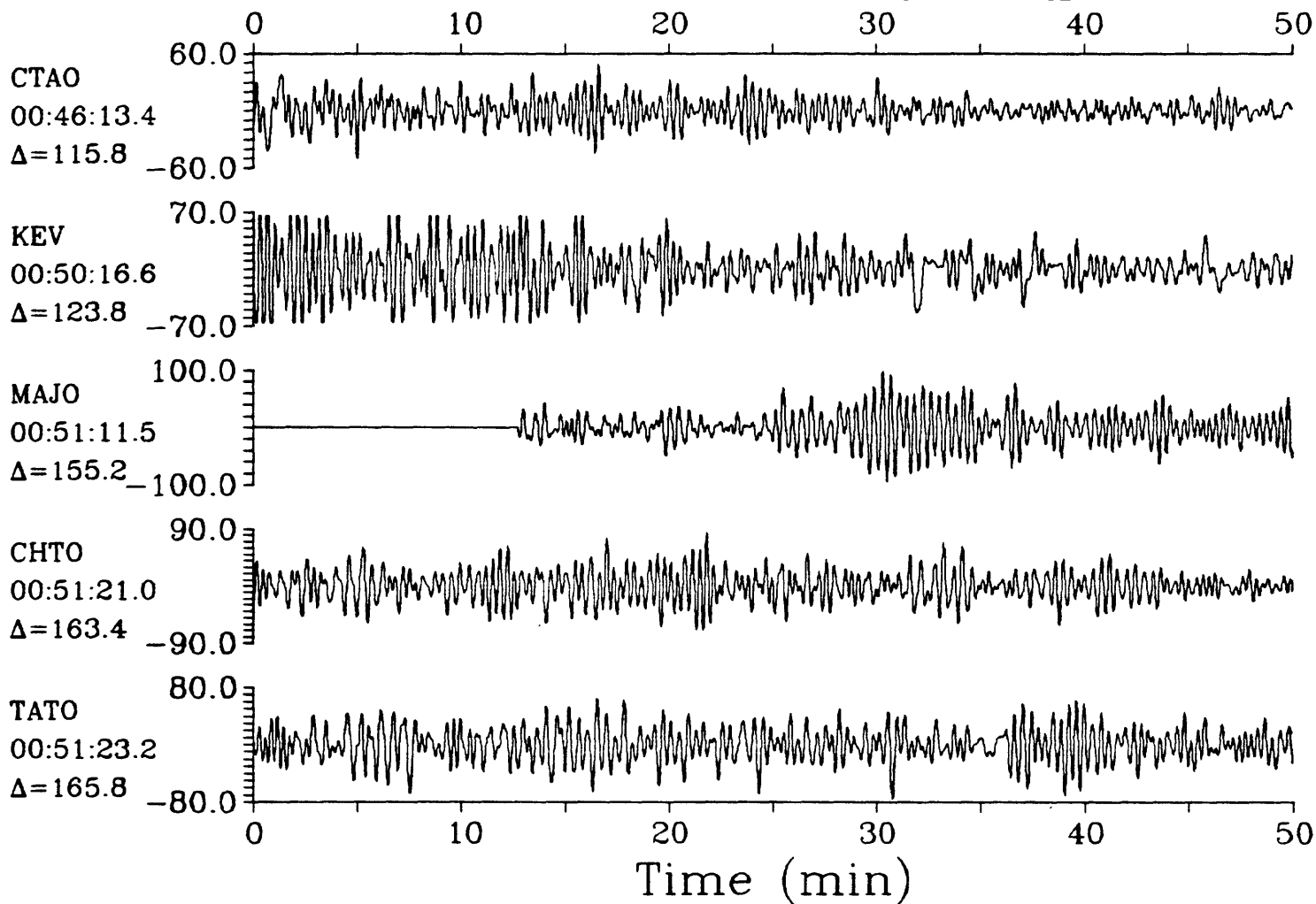
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.0$   $M_{sz}=6.7$ 

LPZ

04 March 1985 00:32:21.46

LPZ

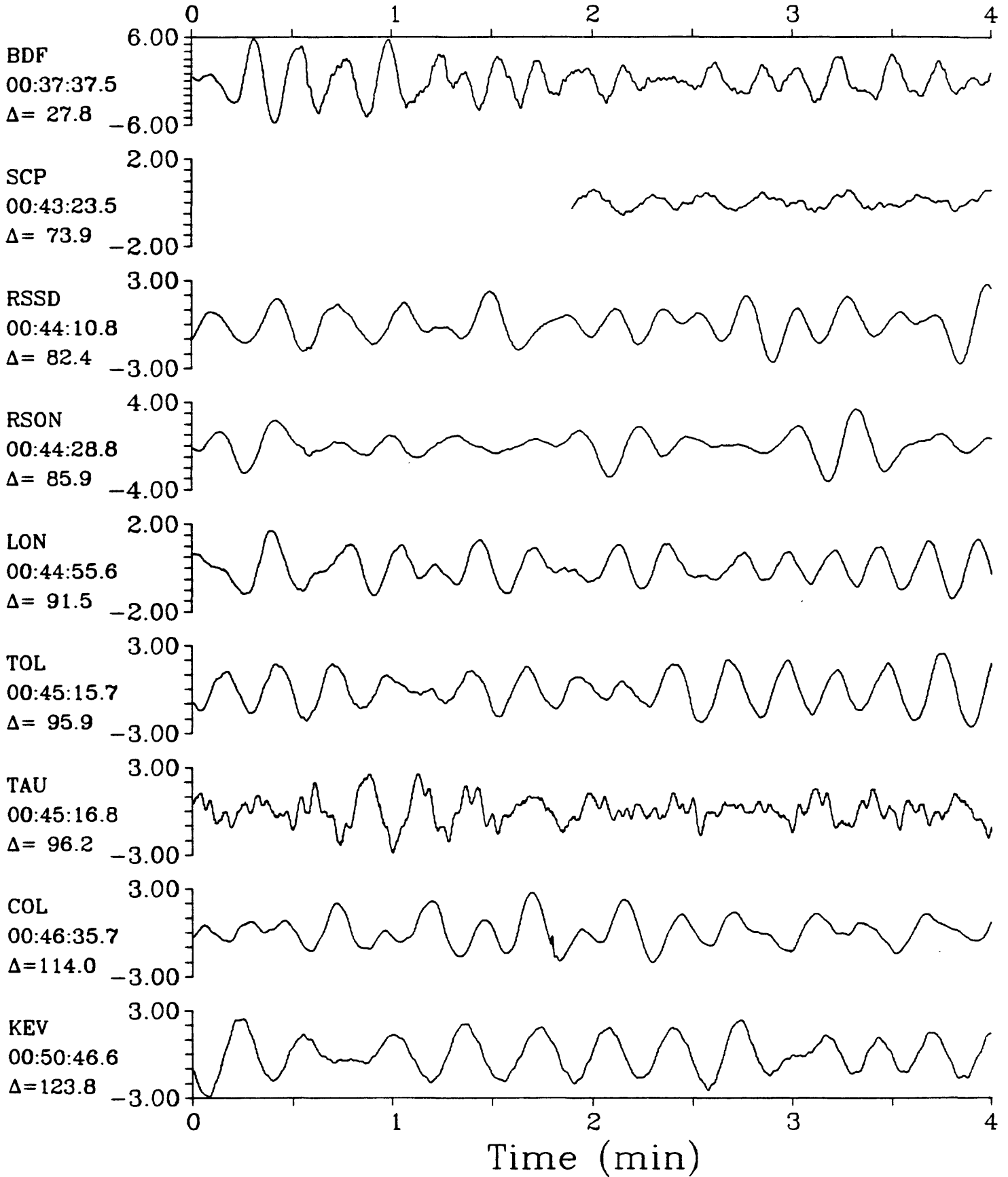
Near Coast of Central Chile  $h=33.0$   $m_b=6.0$   $M_{sz}=6.7$ 



IPZ

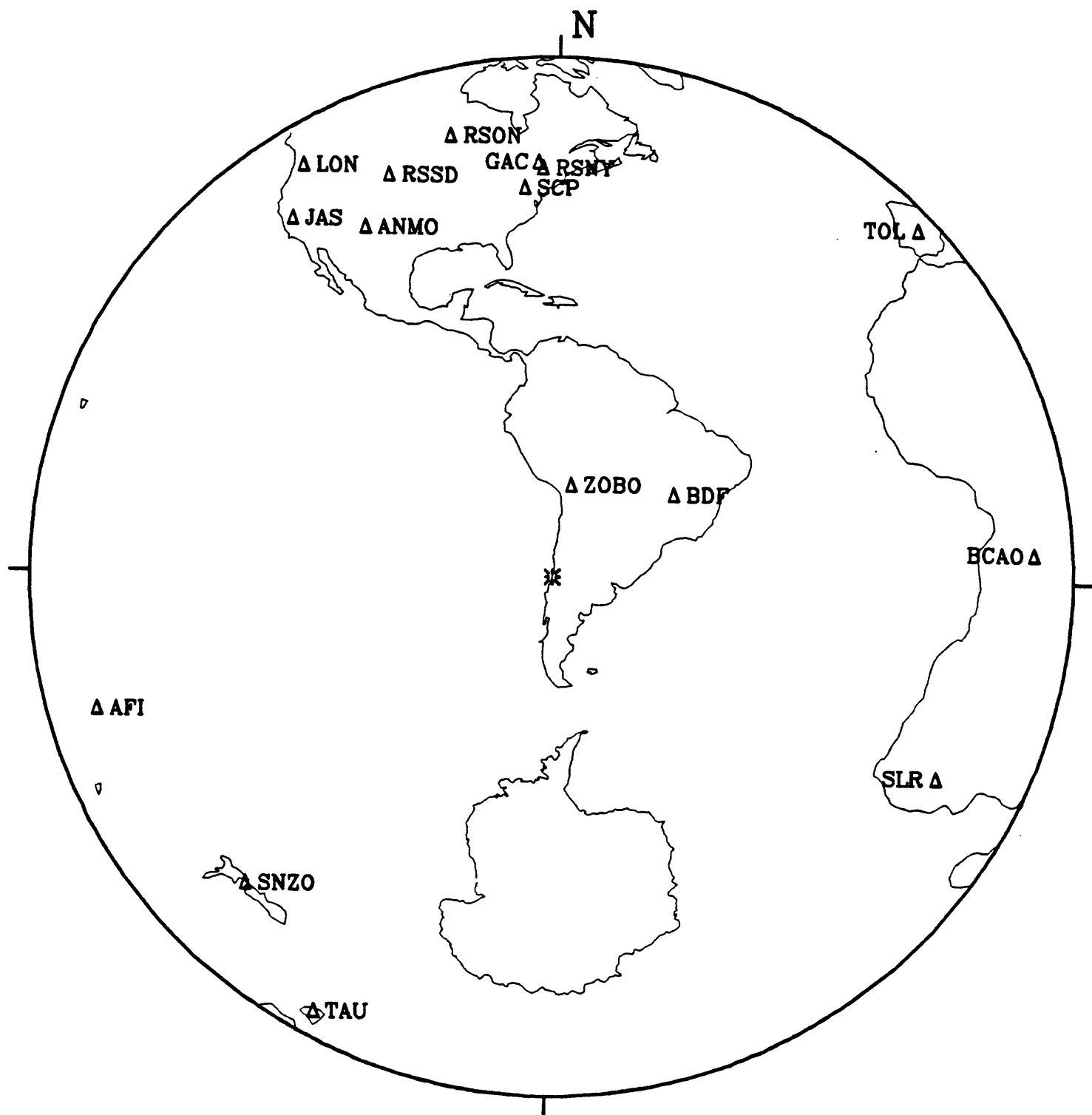
04 March 1985 00:32:21.46

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.0$   $M_{sz}=6.7$ 

04 March 1985 03:17:54.15

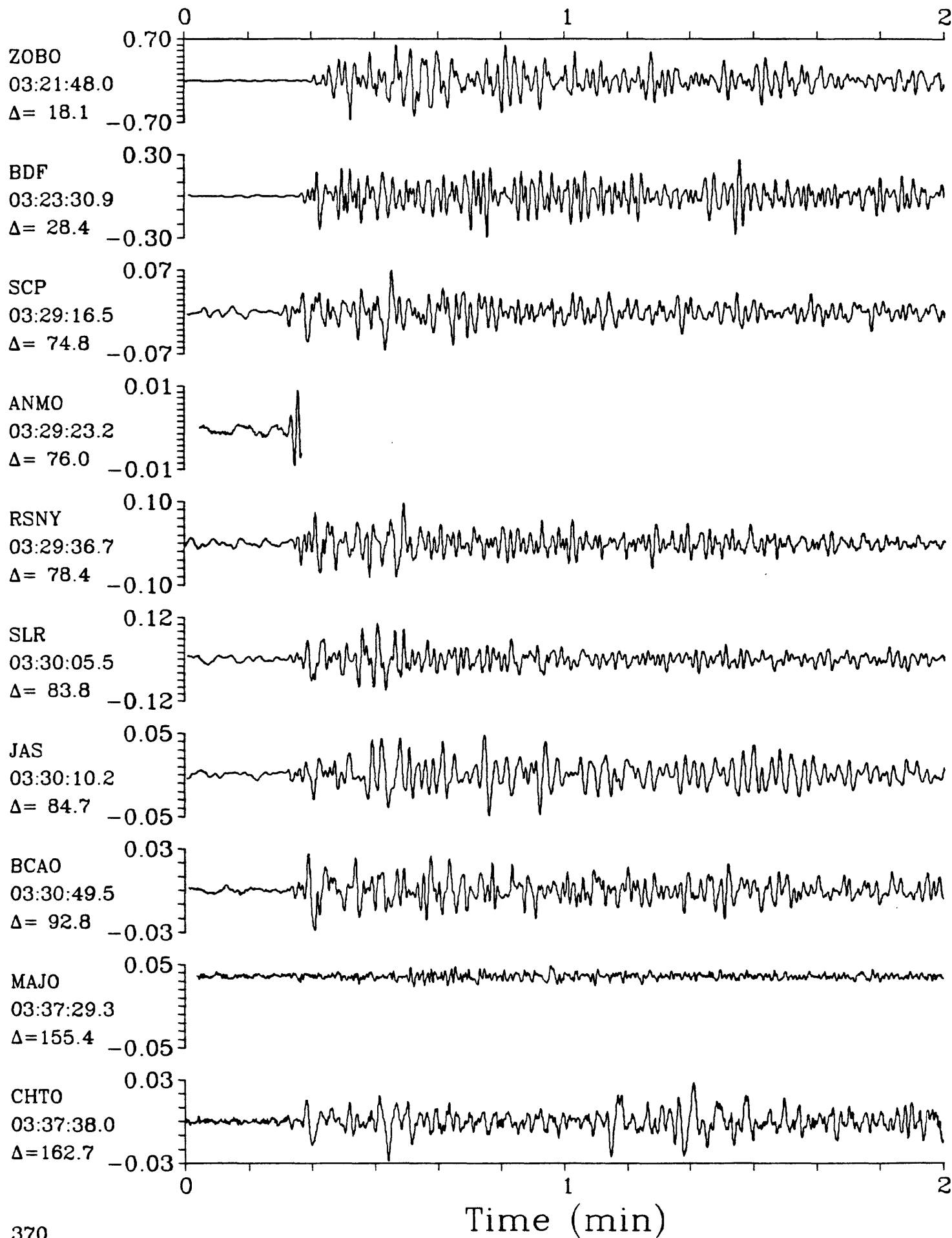
Near Coast of Central Chile



SPZ

04 March 1985 03:17:54.15

SPZ

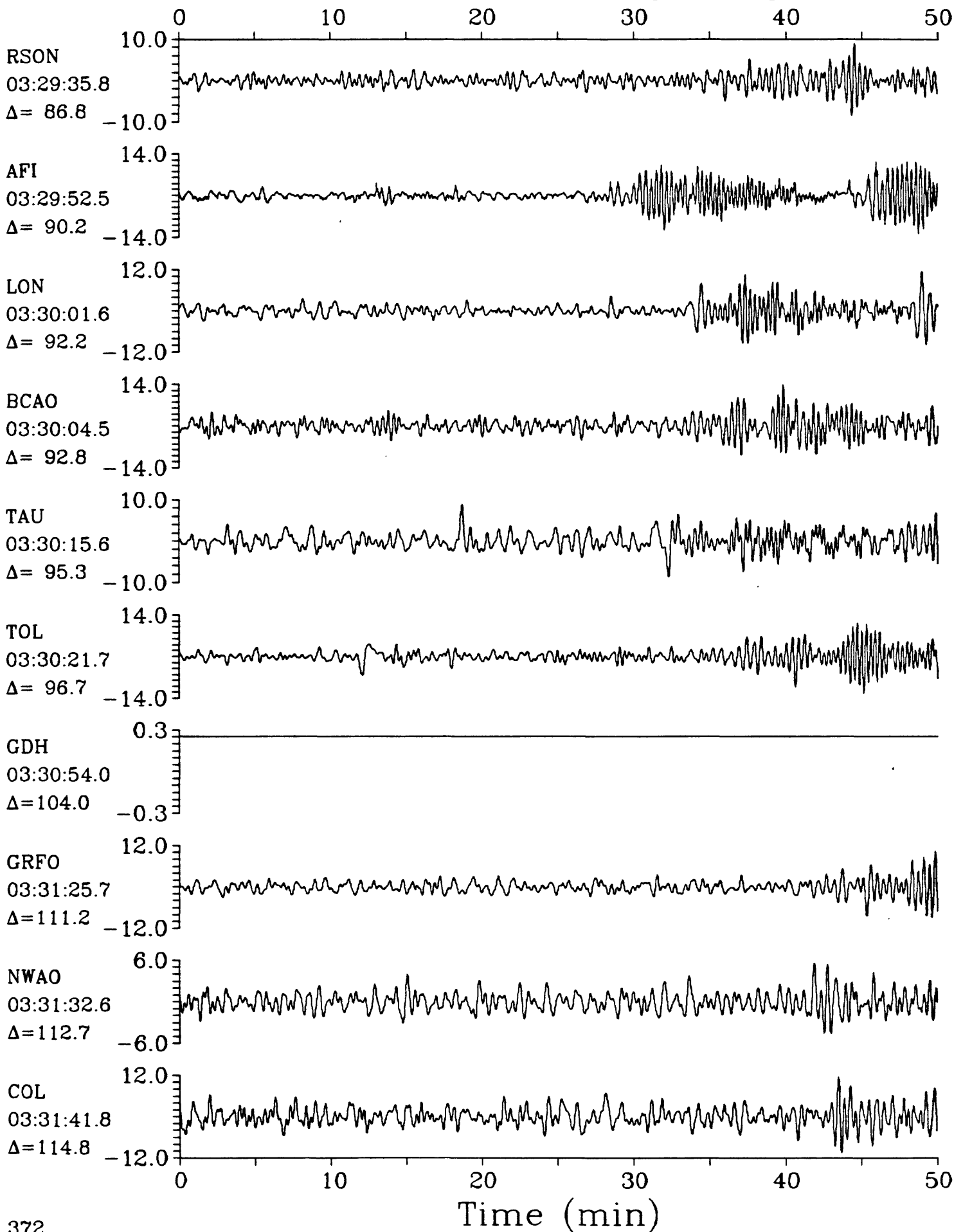
Near Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=6.2$ 



LPZ

04 March 1985 03:17:54.15

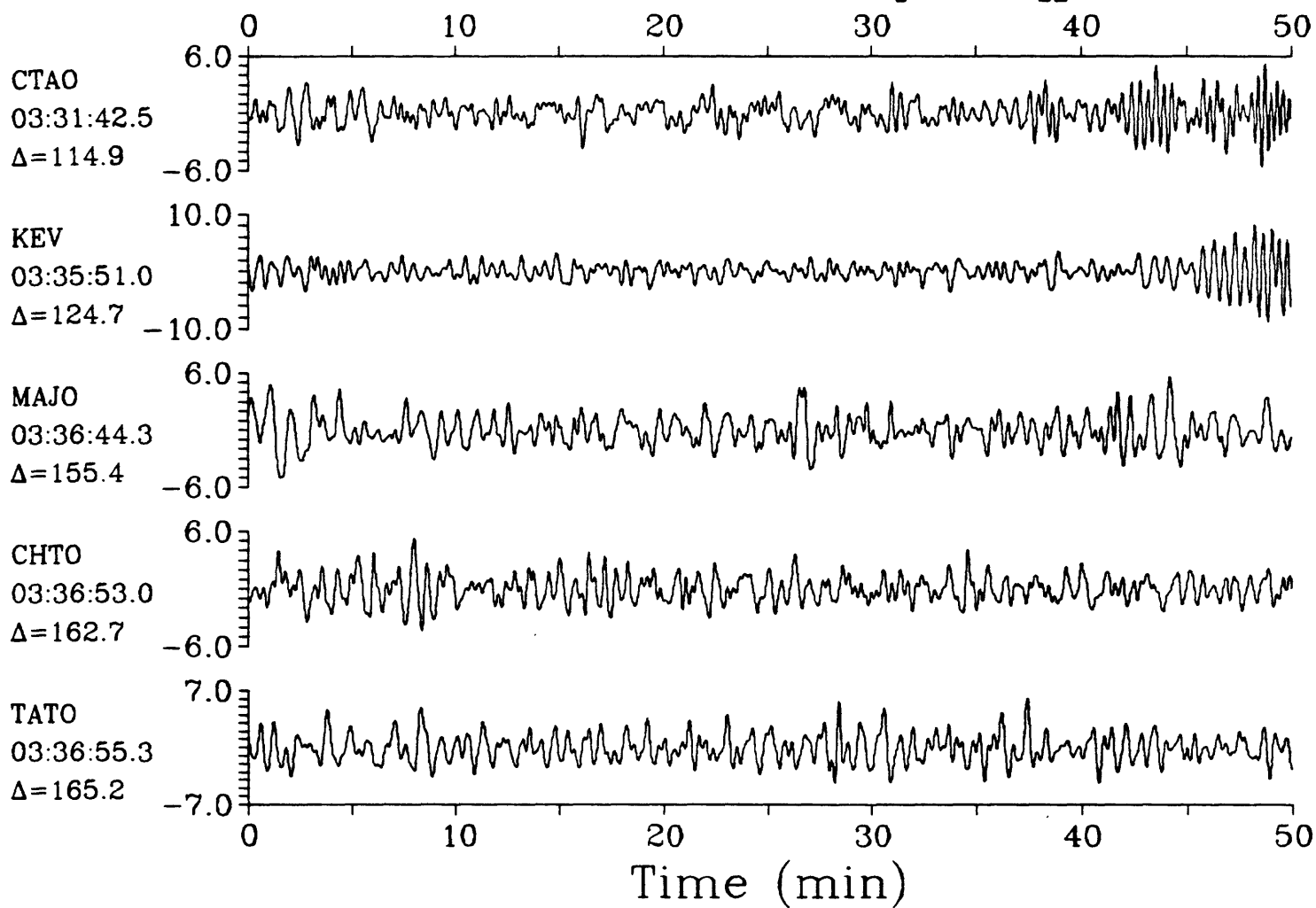
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{SZ}=6.2$ 

LPZ

04 March 1985 03:17:54.15

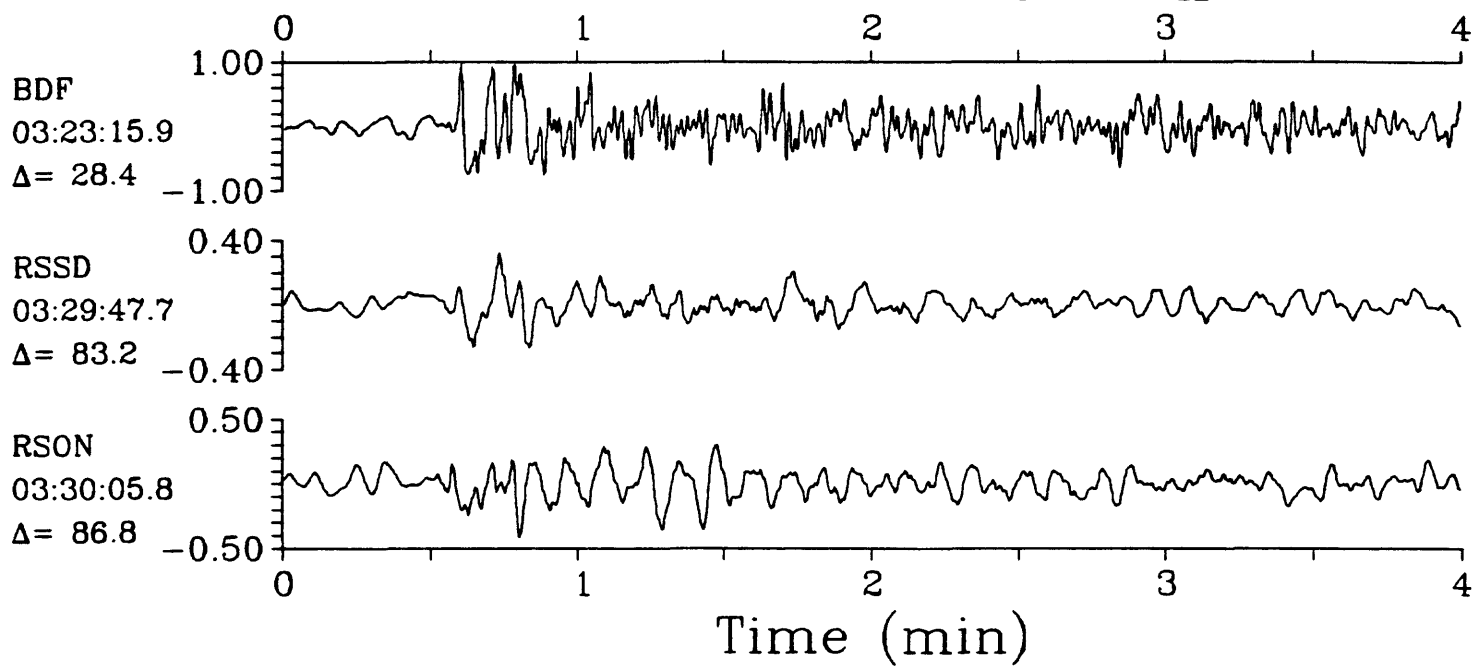
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=6.2$ 

IPZ

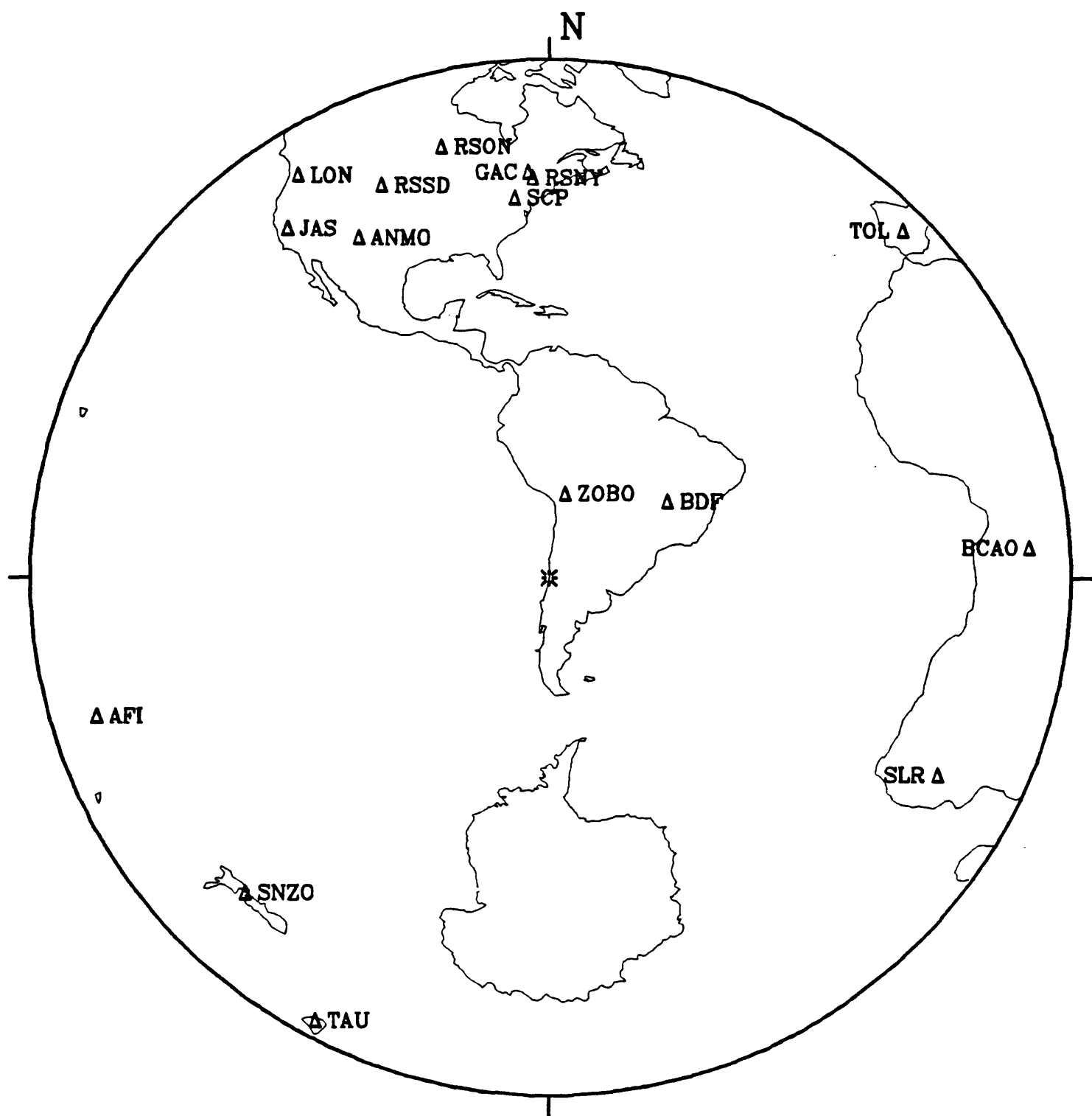
04 March 1985 03:17:54.15

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=6.2$ 

04 March 1985 03:32:49.86

Near Coast of Central Chile

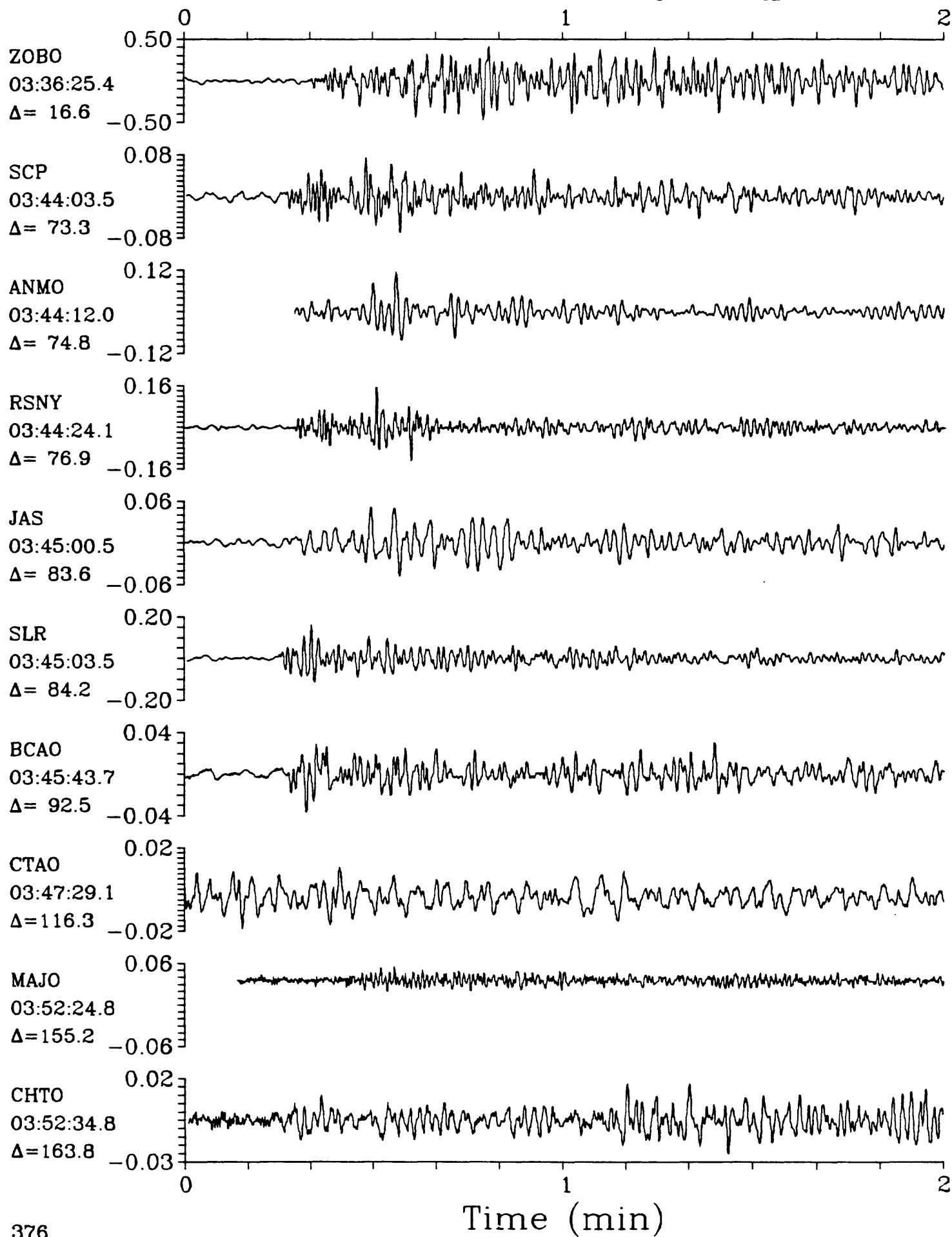




SPZ

04 March 1985 03:32:49.86

SPZ

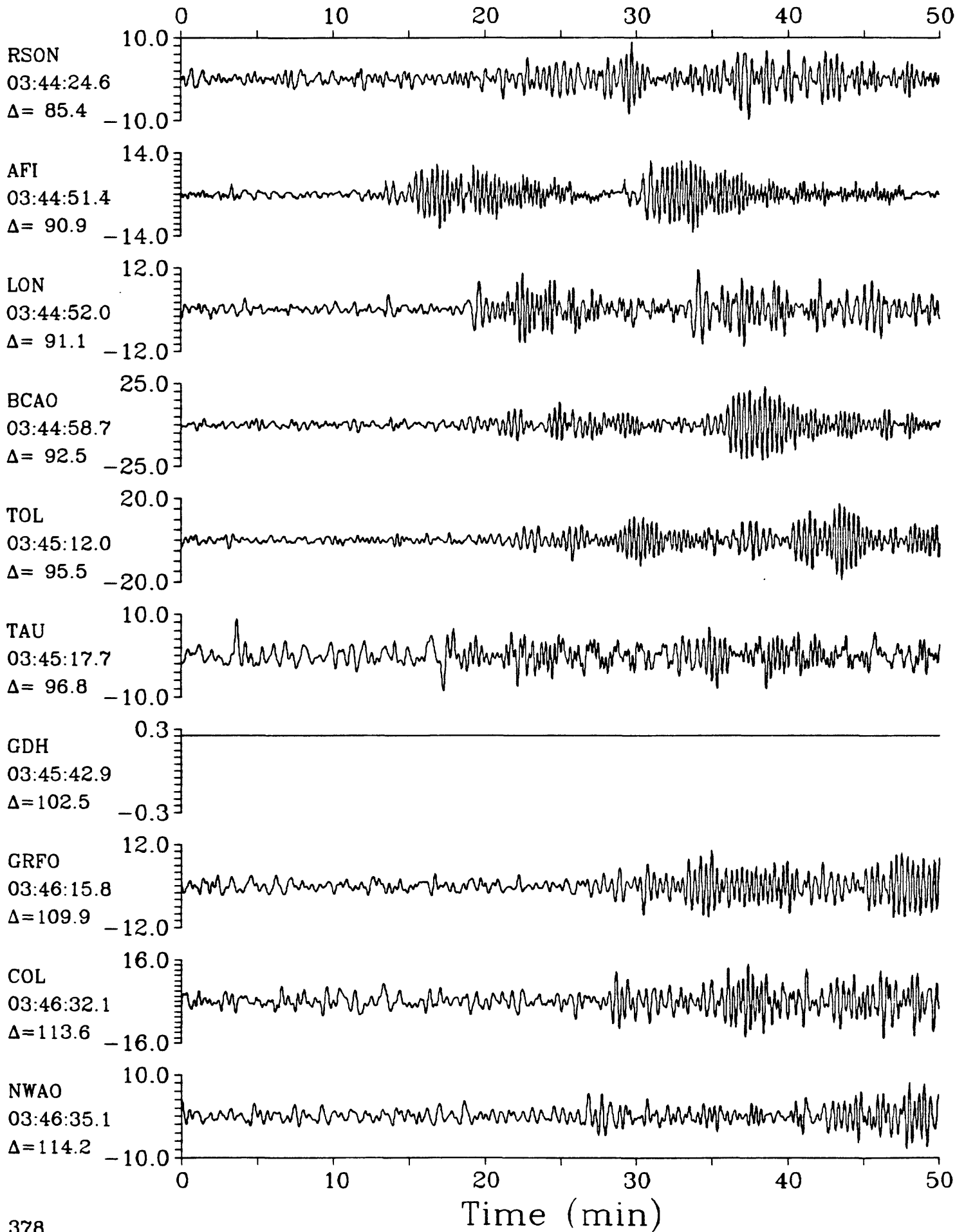
Near Coast of Central Chile  $h=33.0$   $m_b=5.7$   $M_{sz}=6.6$ 



LPZ

04 March 1985 03:32:49.86

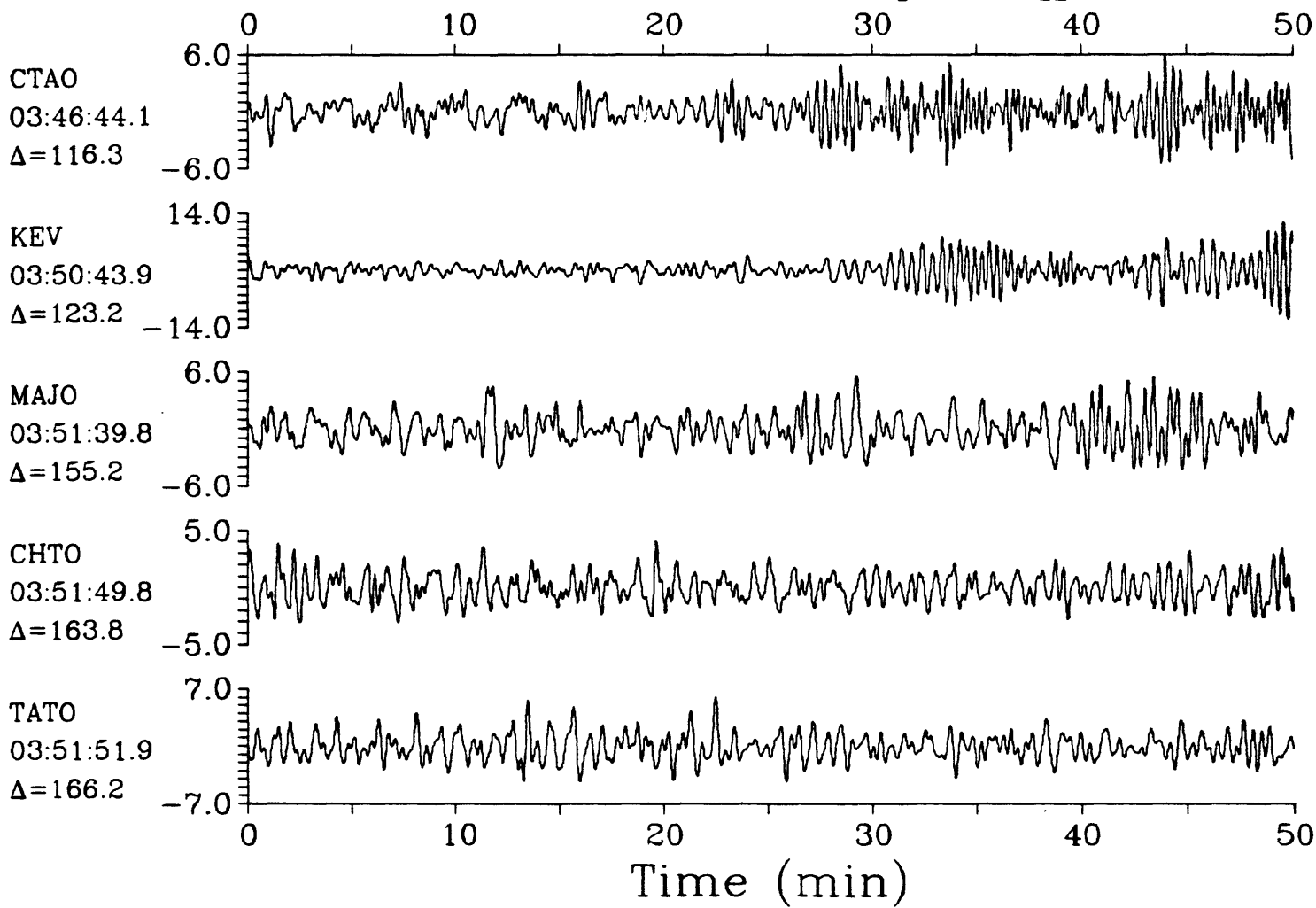
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.7$   $M_{sz}=6.6$ 

LPZ

04 March 1985 03:32:49.86

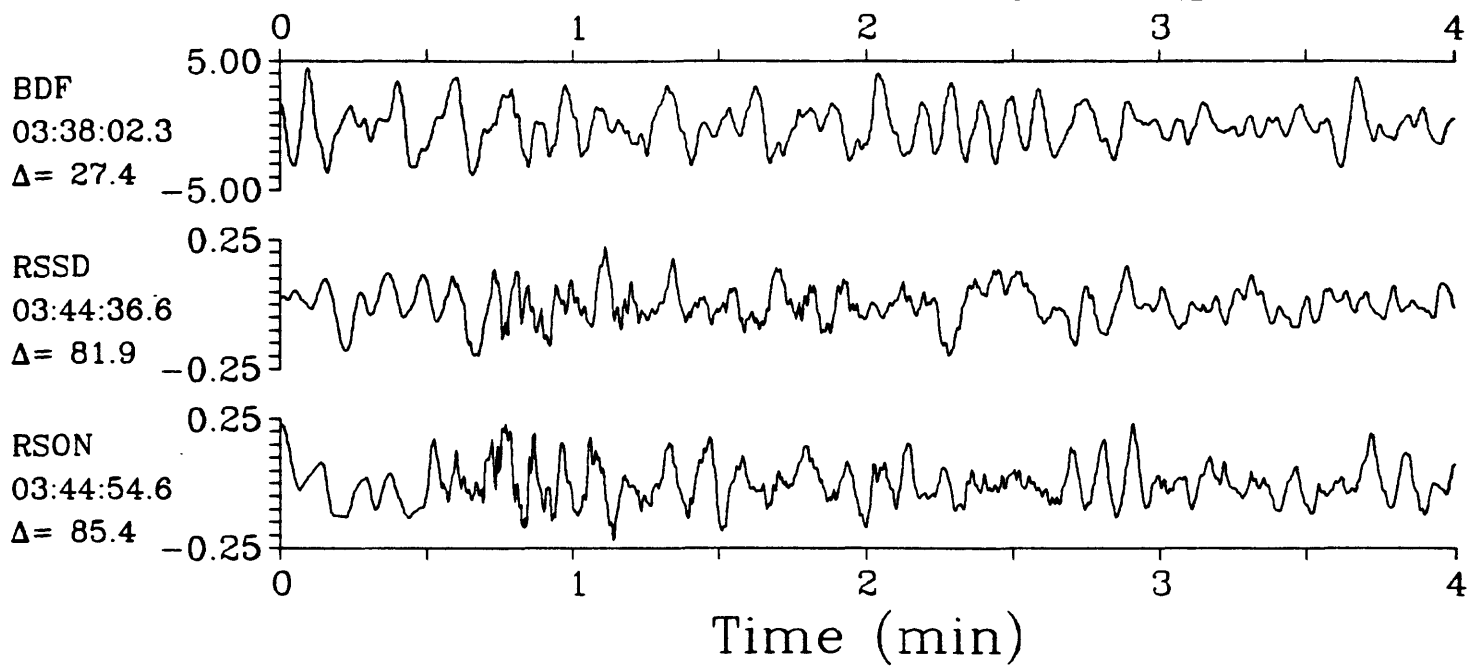
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.7$   $M_{sz}=6.6$ 

IPZ

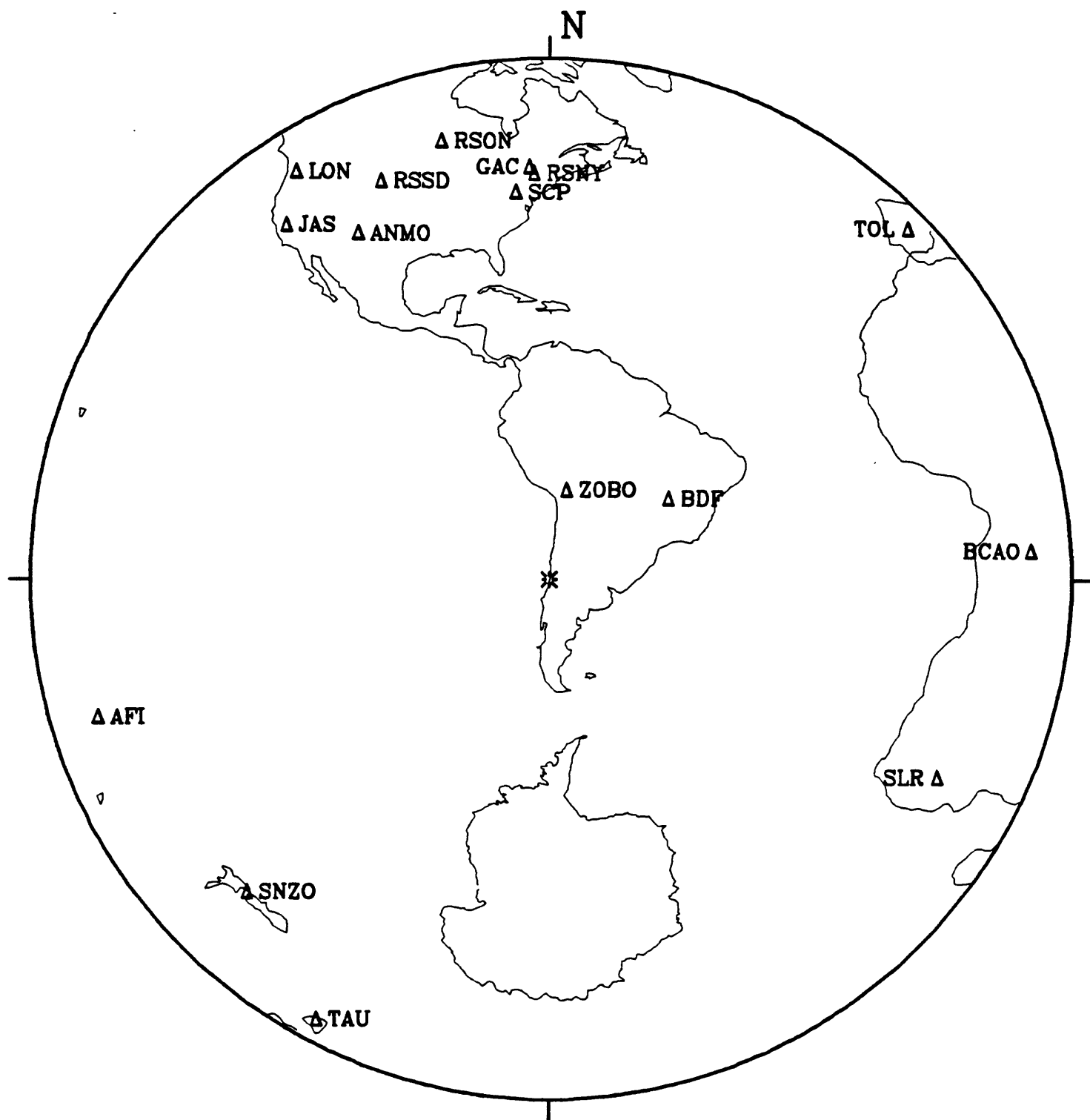
04 March 1985 03:32:49.86

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.7$   $M_{sz}=6.6$ 

04 March 1985 06:06:57.80

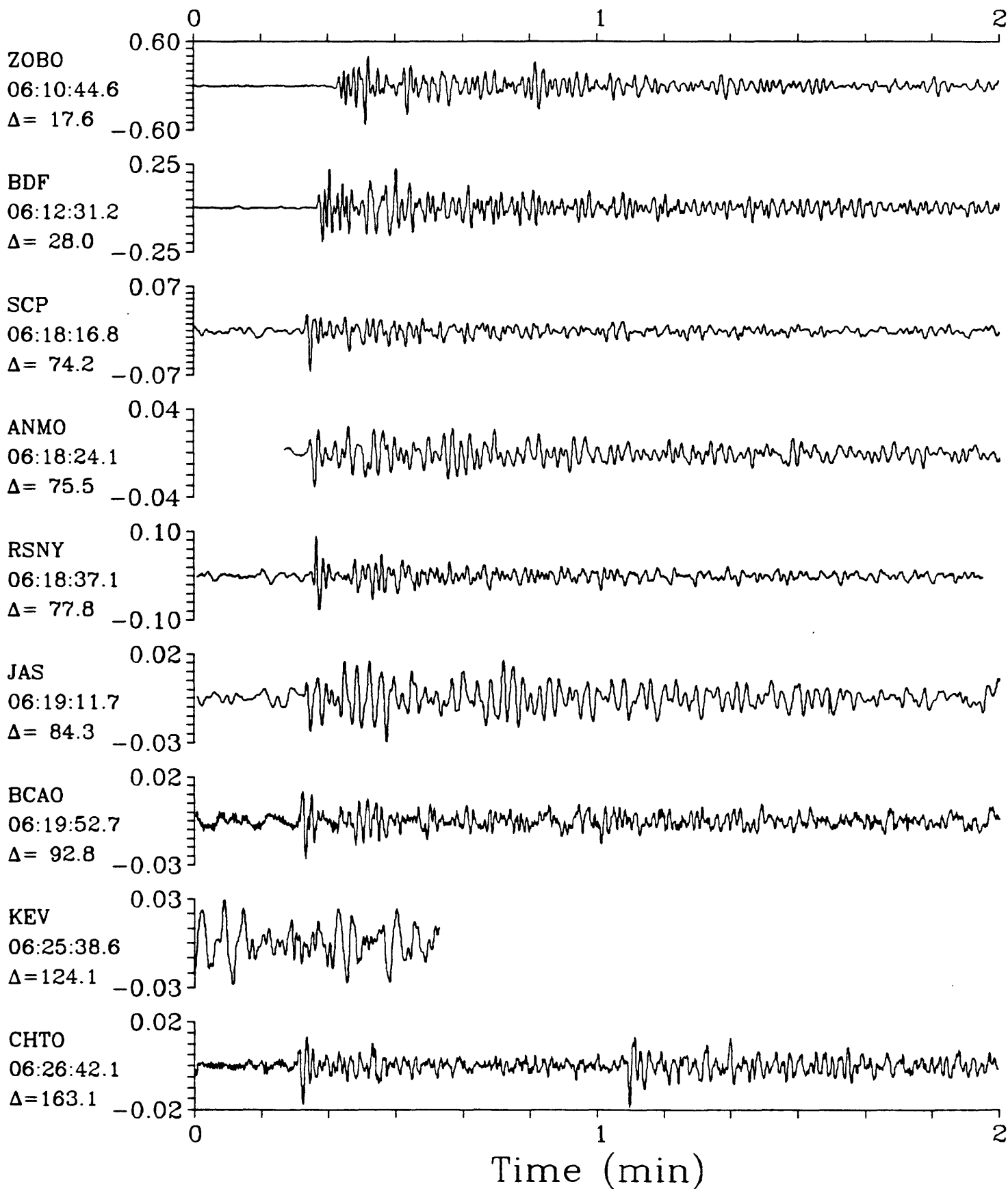
Near Coast of Central Chile



SPZ

04 March 1985 06:06:57.80

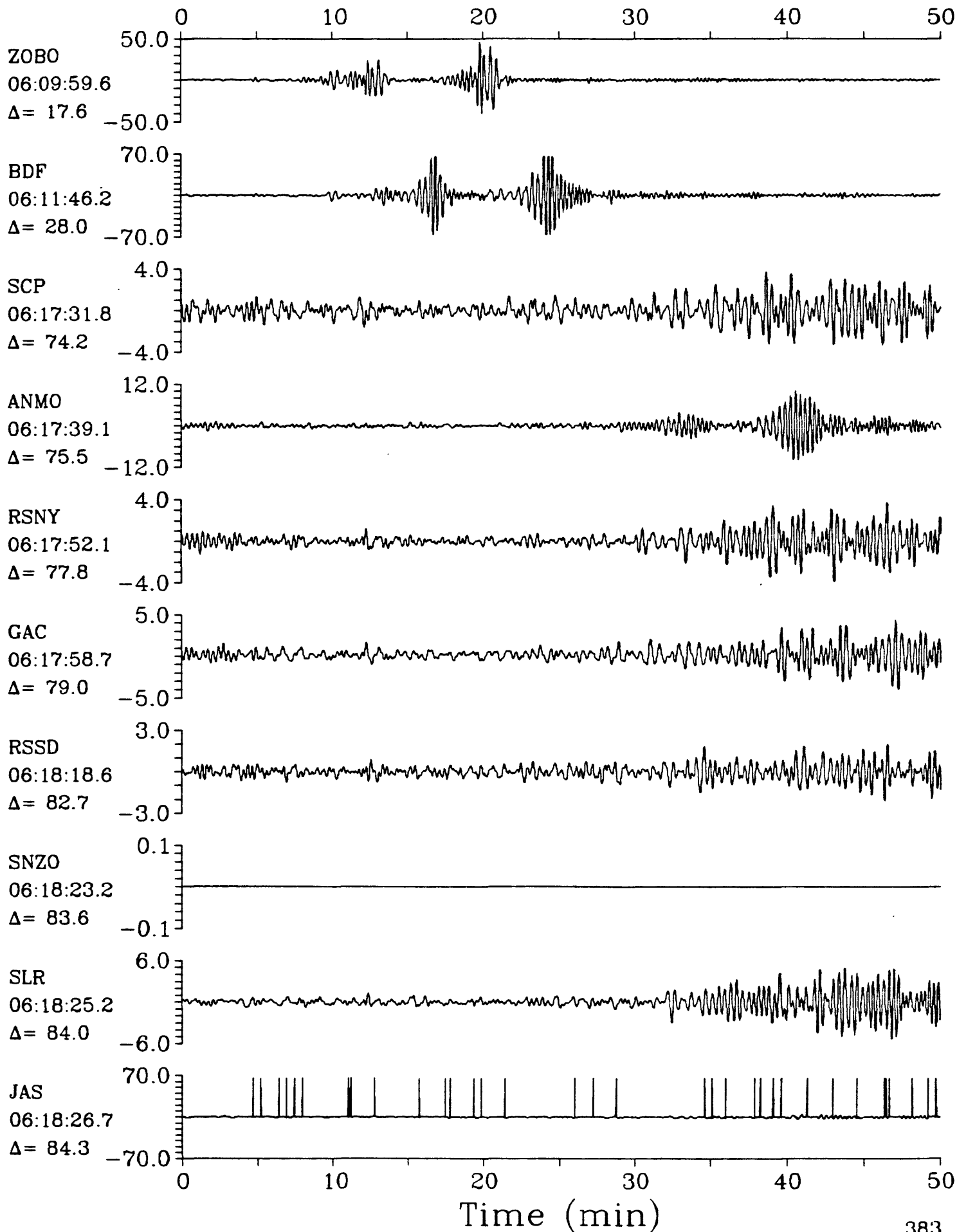
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=6.0$ 

LPZ

04 March 1985 06:06:57.80

LPZ

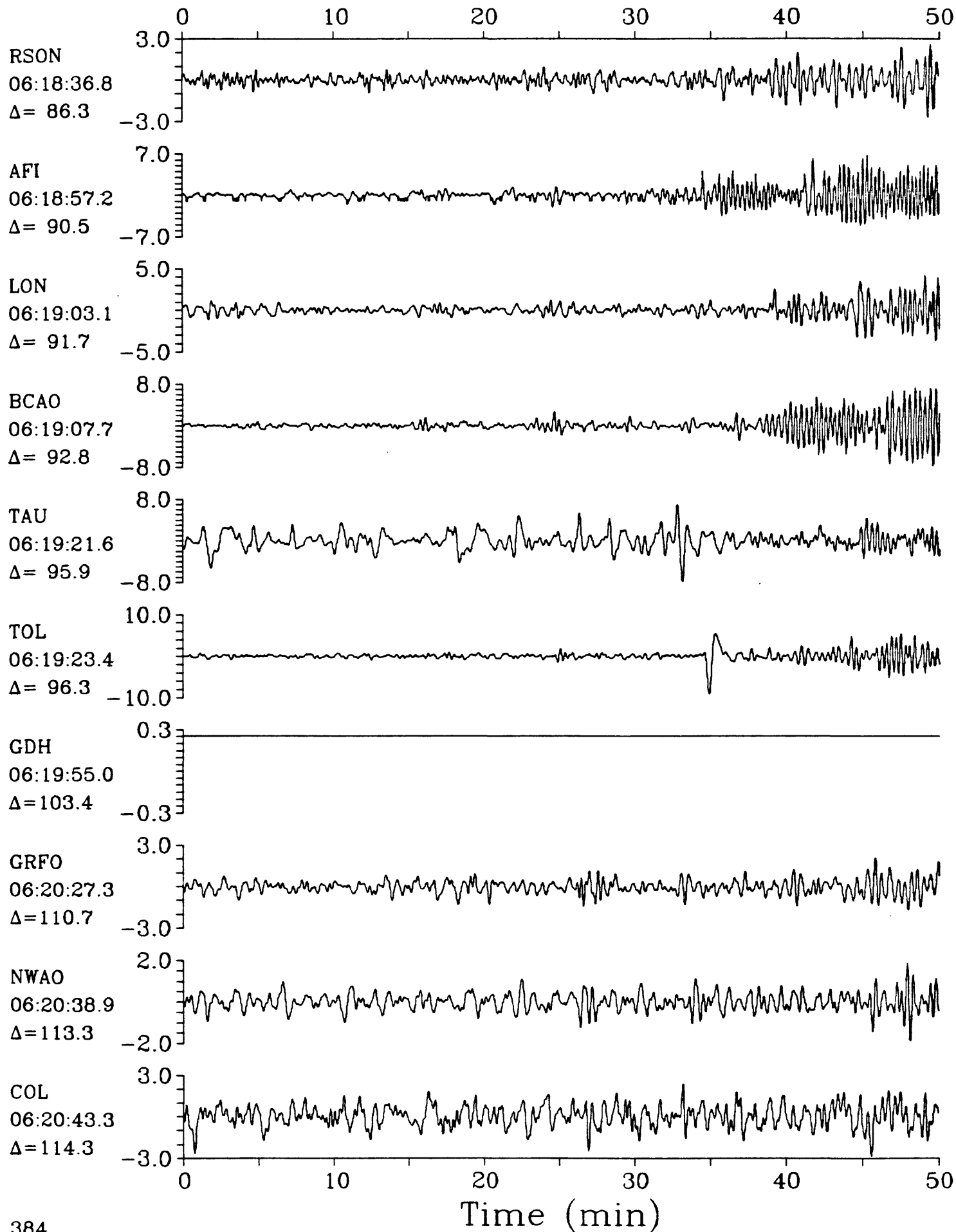
Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=6.0$ 



LPZ

04 March 1985 06:06:57.80

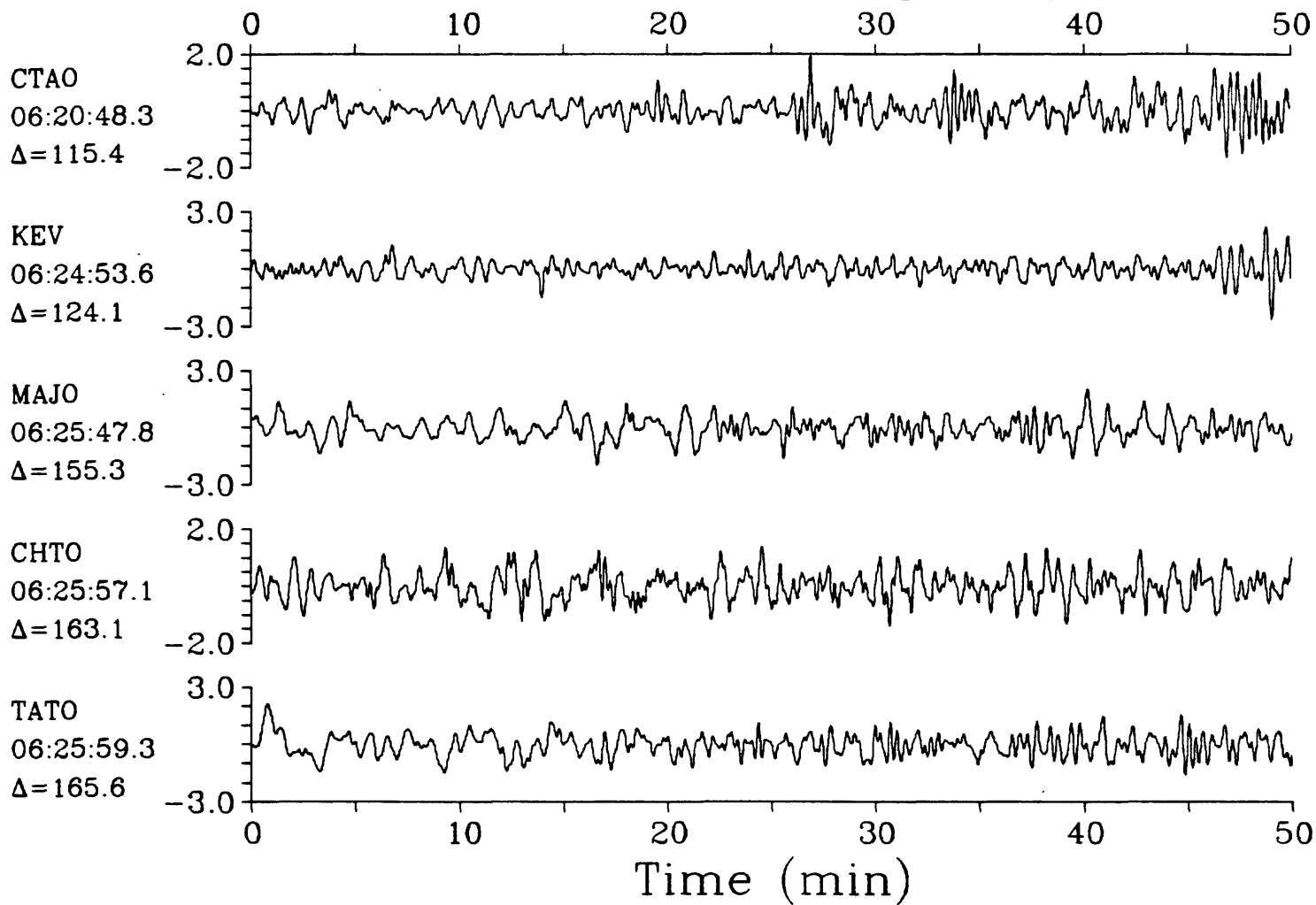
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=6.0$ 

LPZ

04 March 1985 06:06:57.80

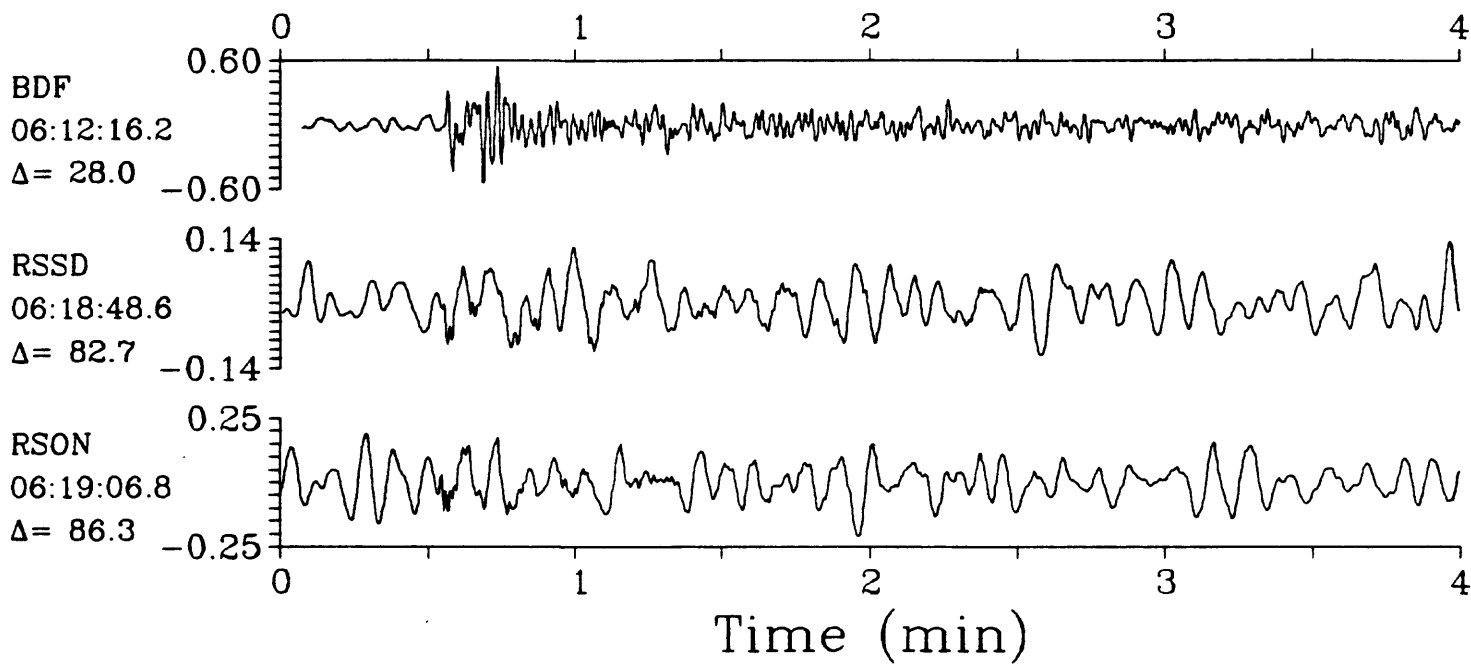
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=6.0$ 

IPZ

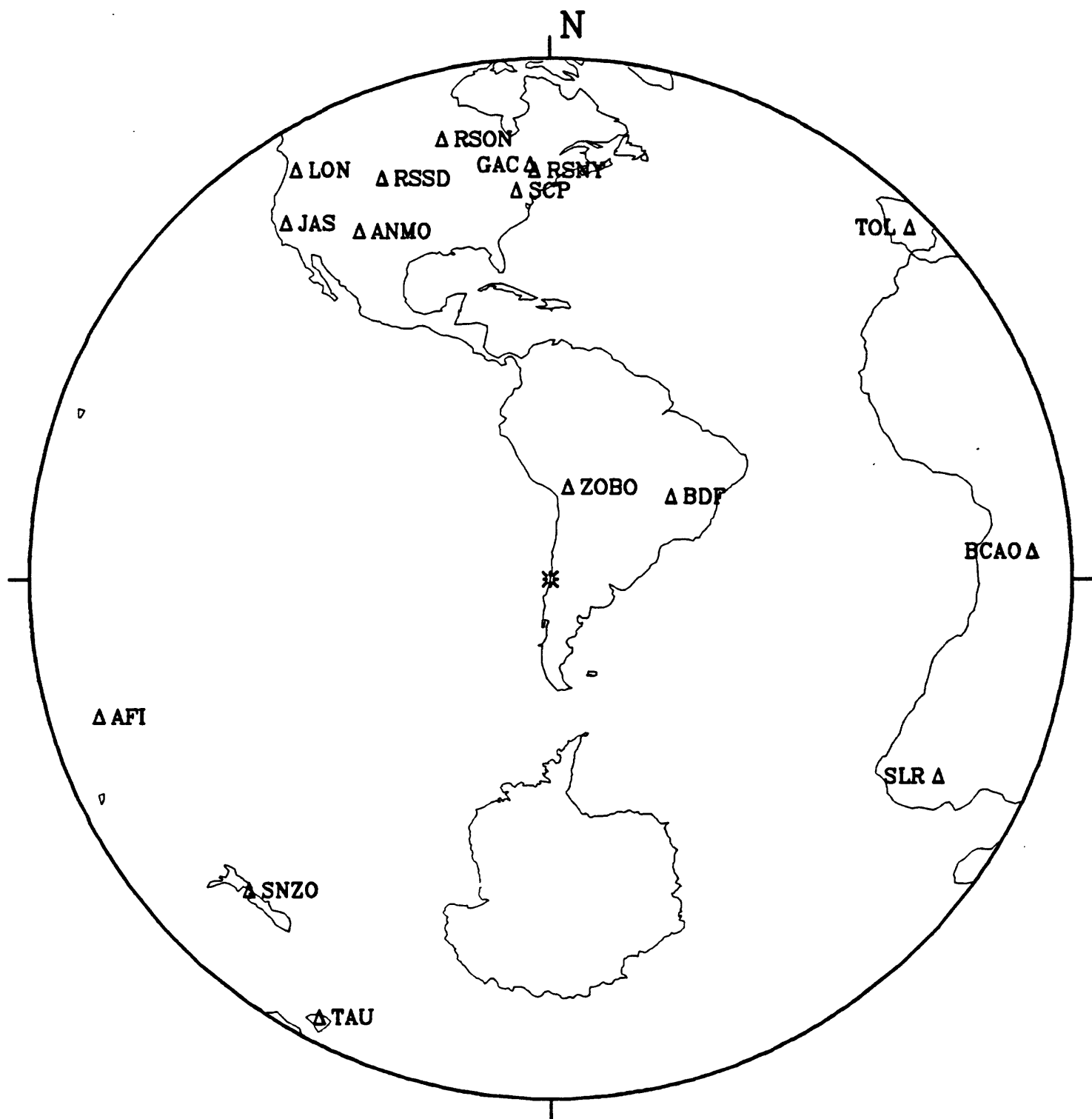
04 March 1985 06:06:57.80

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=6.0$ 

04 March 1985 13:49:29.67

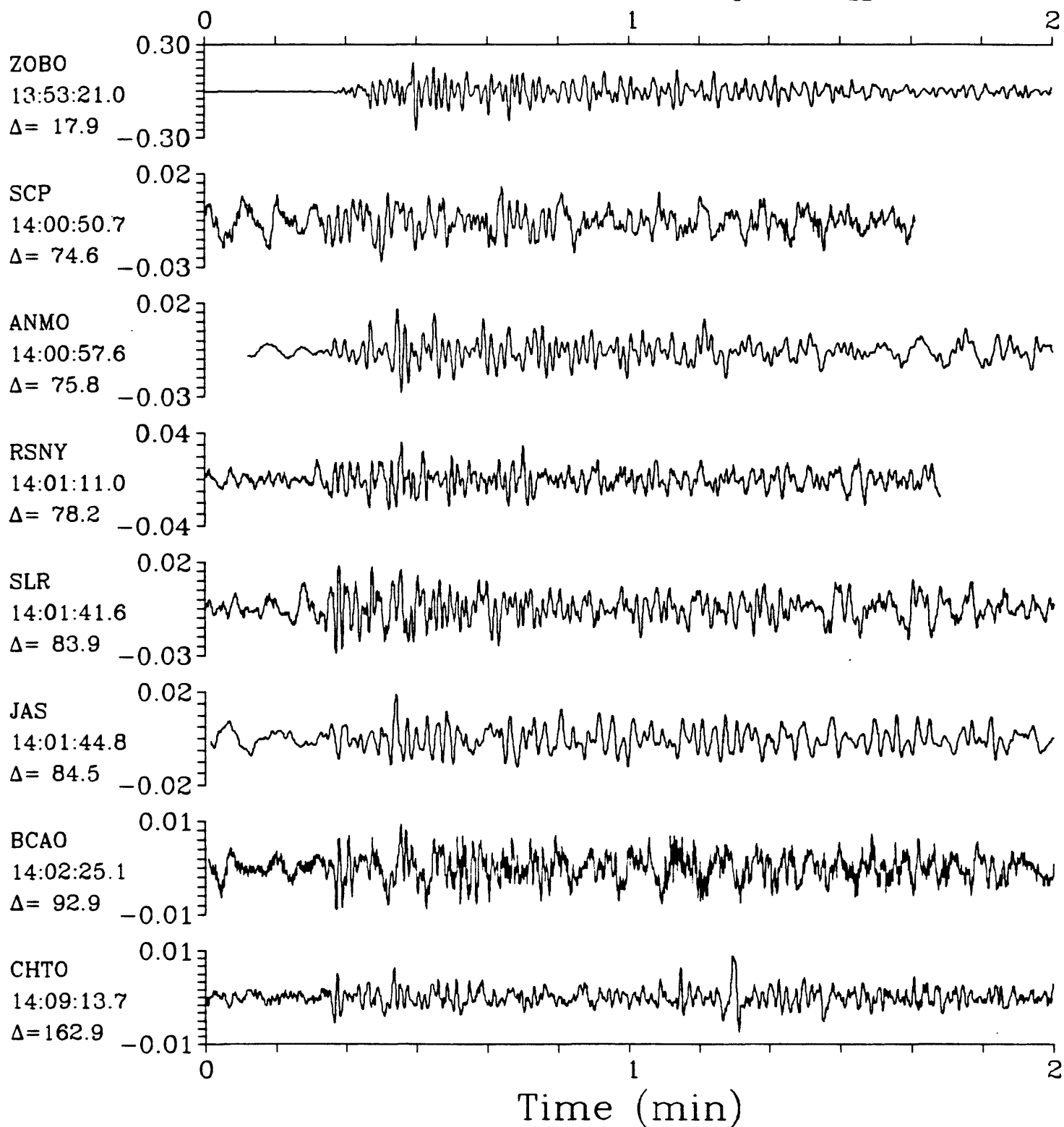
Near Coast of Central Chile



SPZ

04 March 1985 13:49:29.67

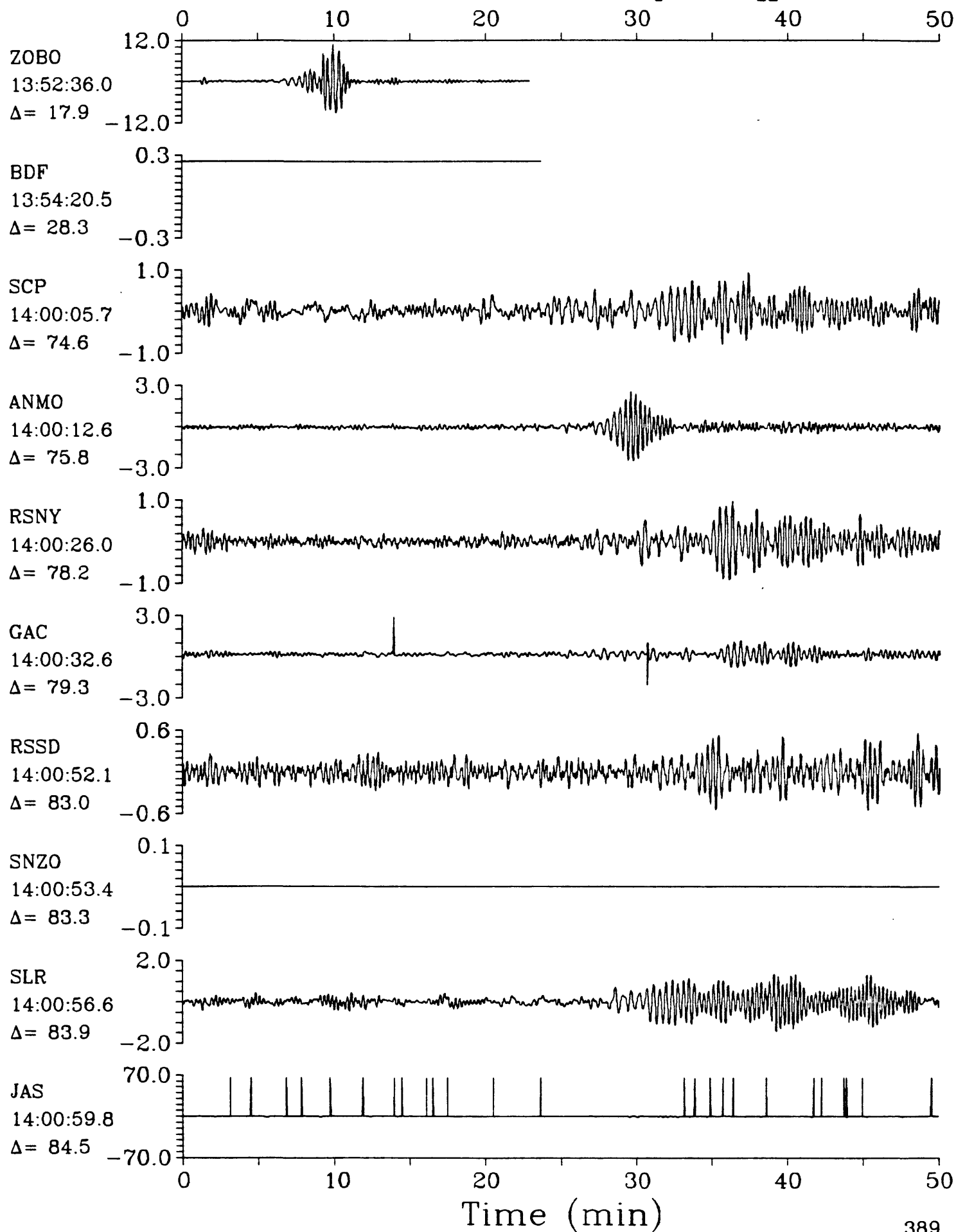
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=4.9$   $M_{sz}=5.5$ 

LPZ

04 March 1985 13:49:29.67

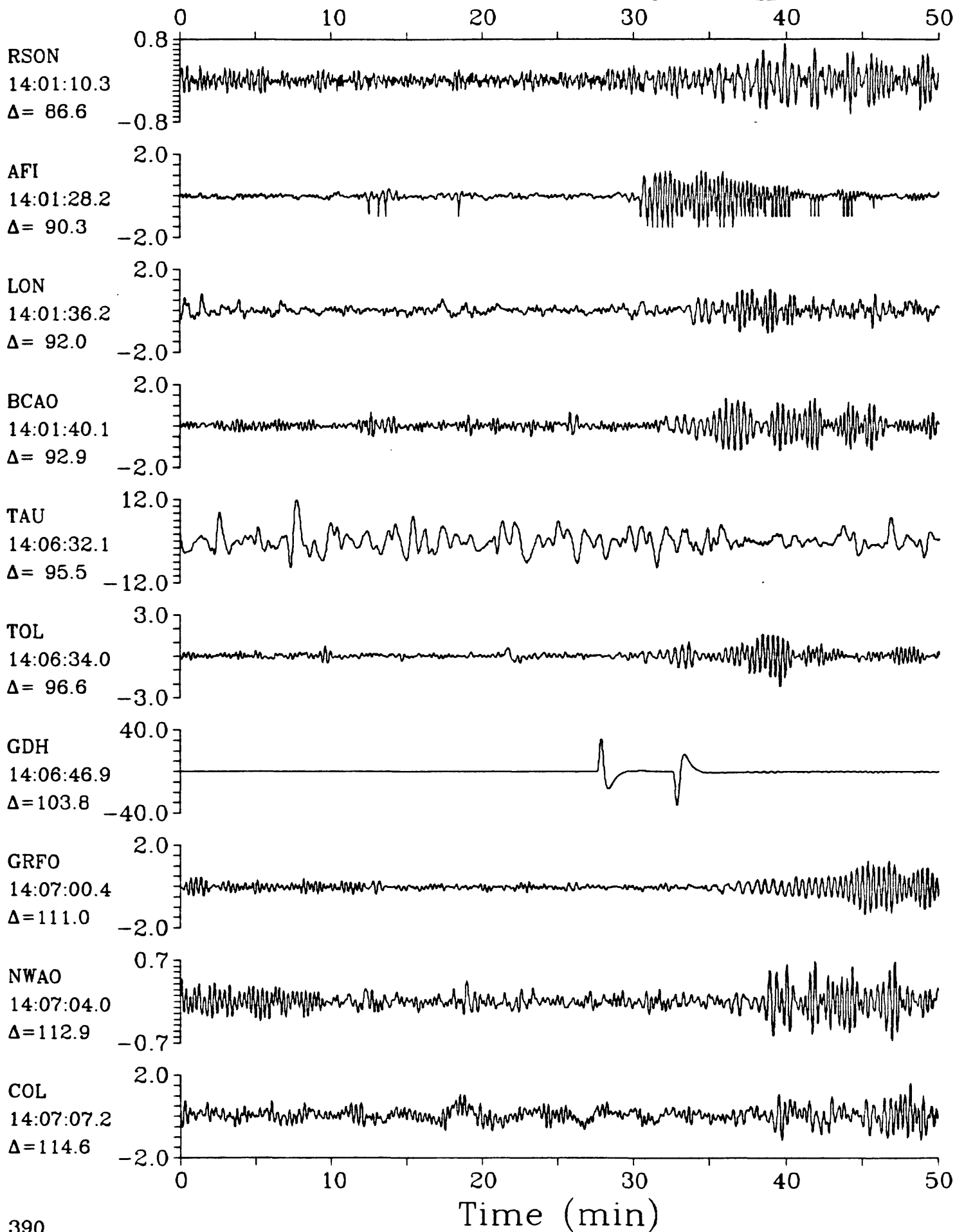
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=4.9$   $M_{SZ}=5.5$ 

LPZ

04 March 1985 13:49:29.67

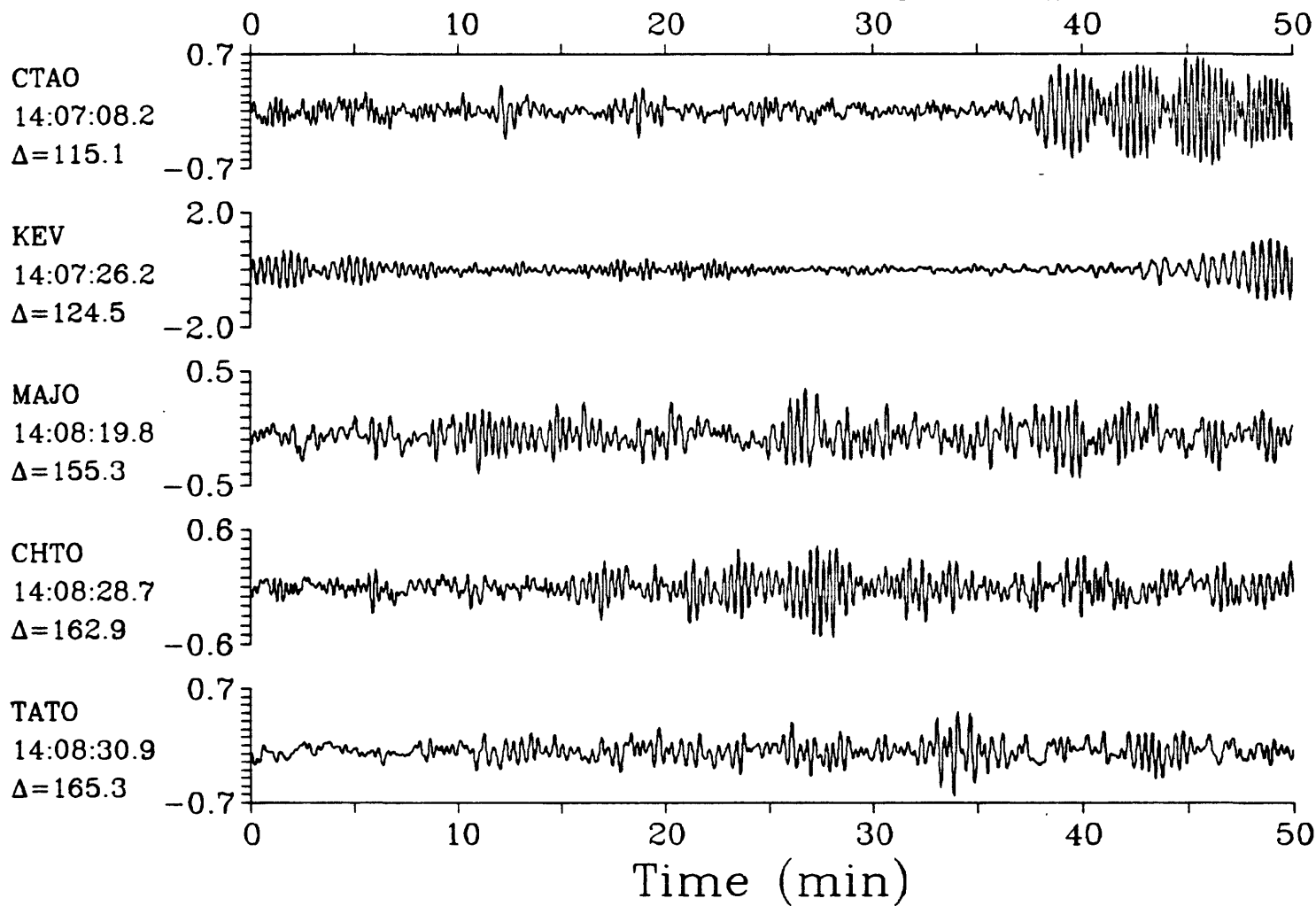
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=4.9$   $M_{sz}=5.5$ 

LPZ

04 March 1985 13:49:29.67

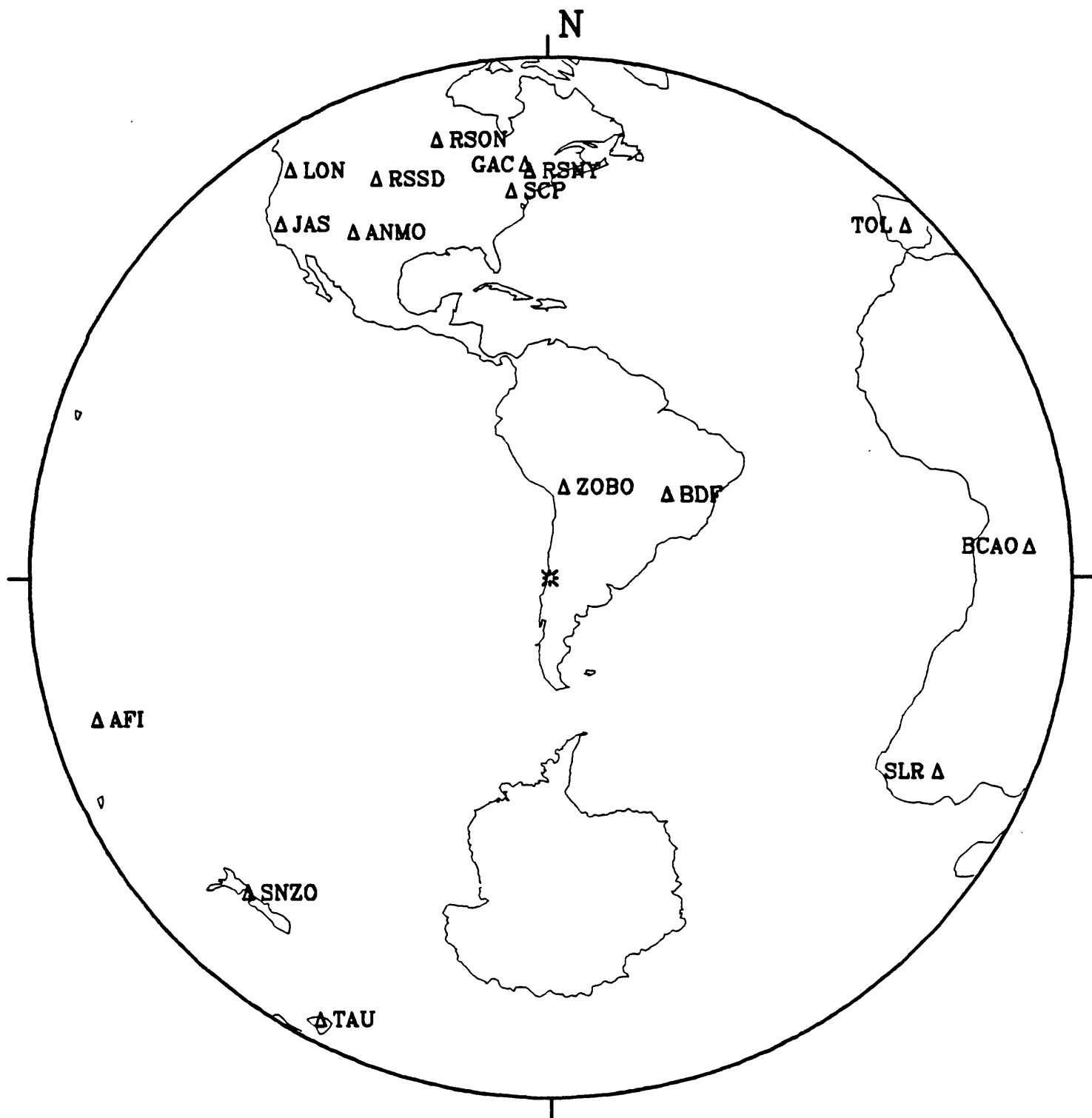
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=4.9$   $M_{sz}=5.5$ 



04 March 1985 15:01:06.27

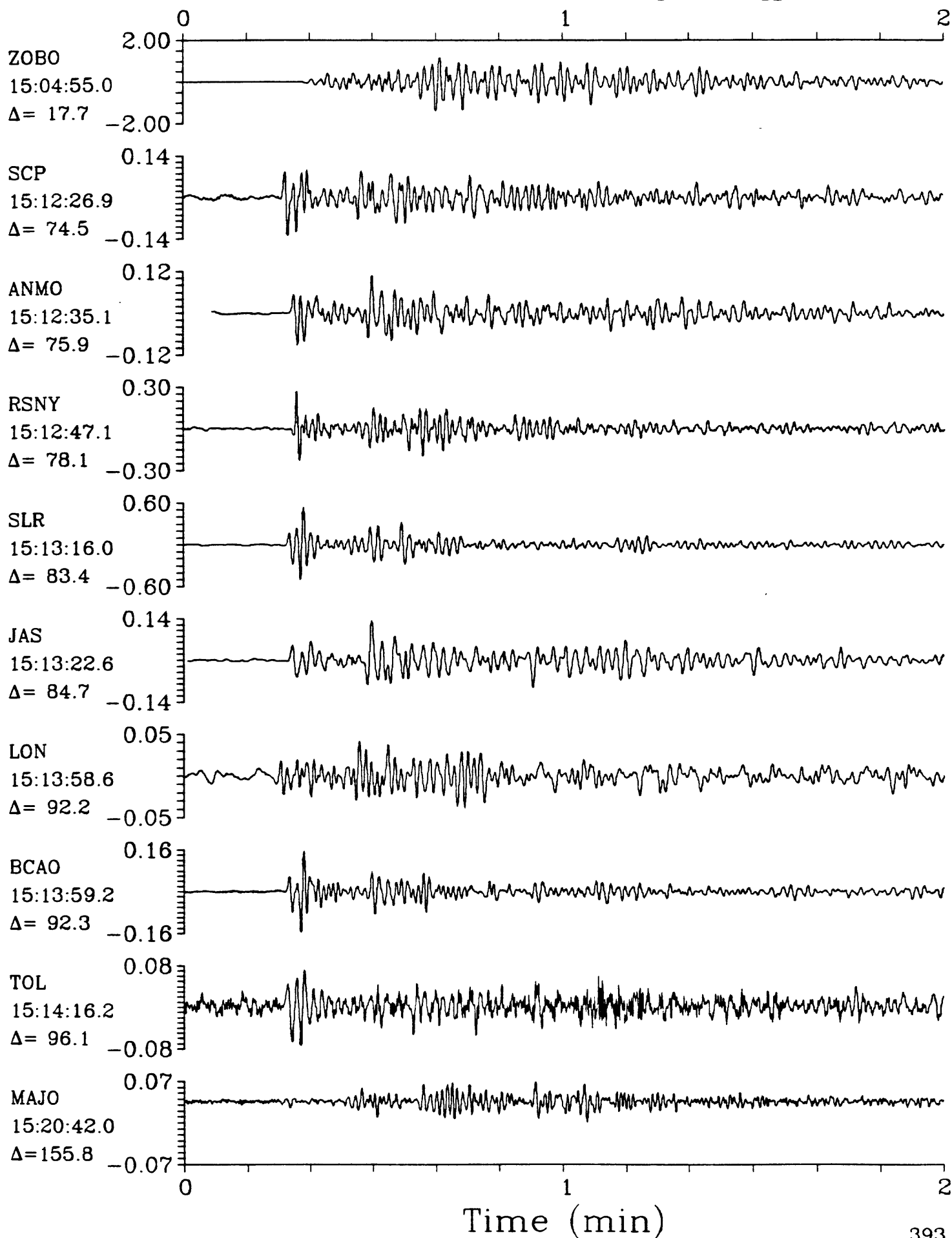
Near Coast of Central Chile



SPZ

04 March 1985 15:01:06.27

SPZ

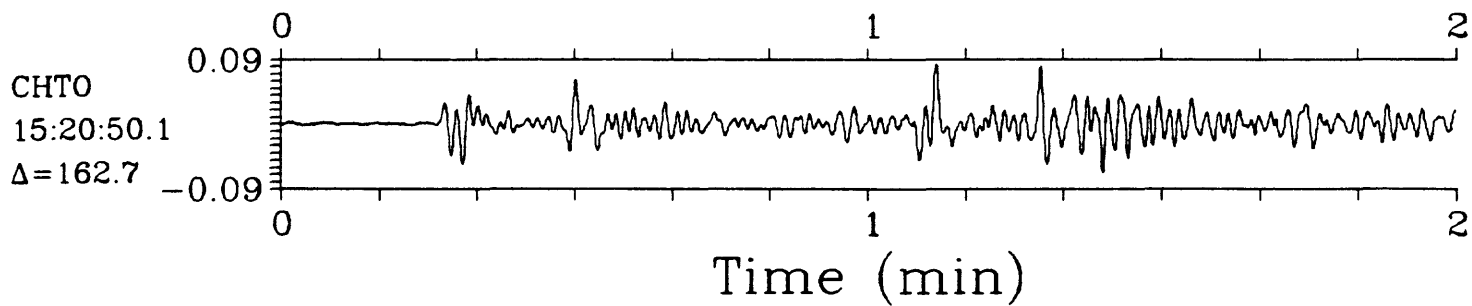
Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.1$ 

SPZ

04 March 1985 15:01:06.27

SPZ

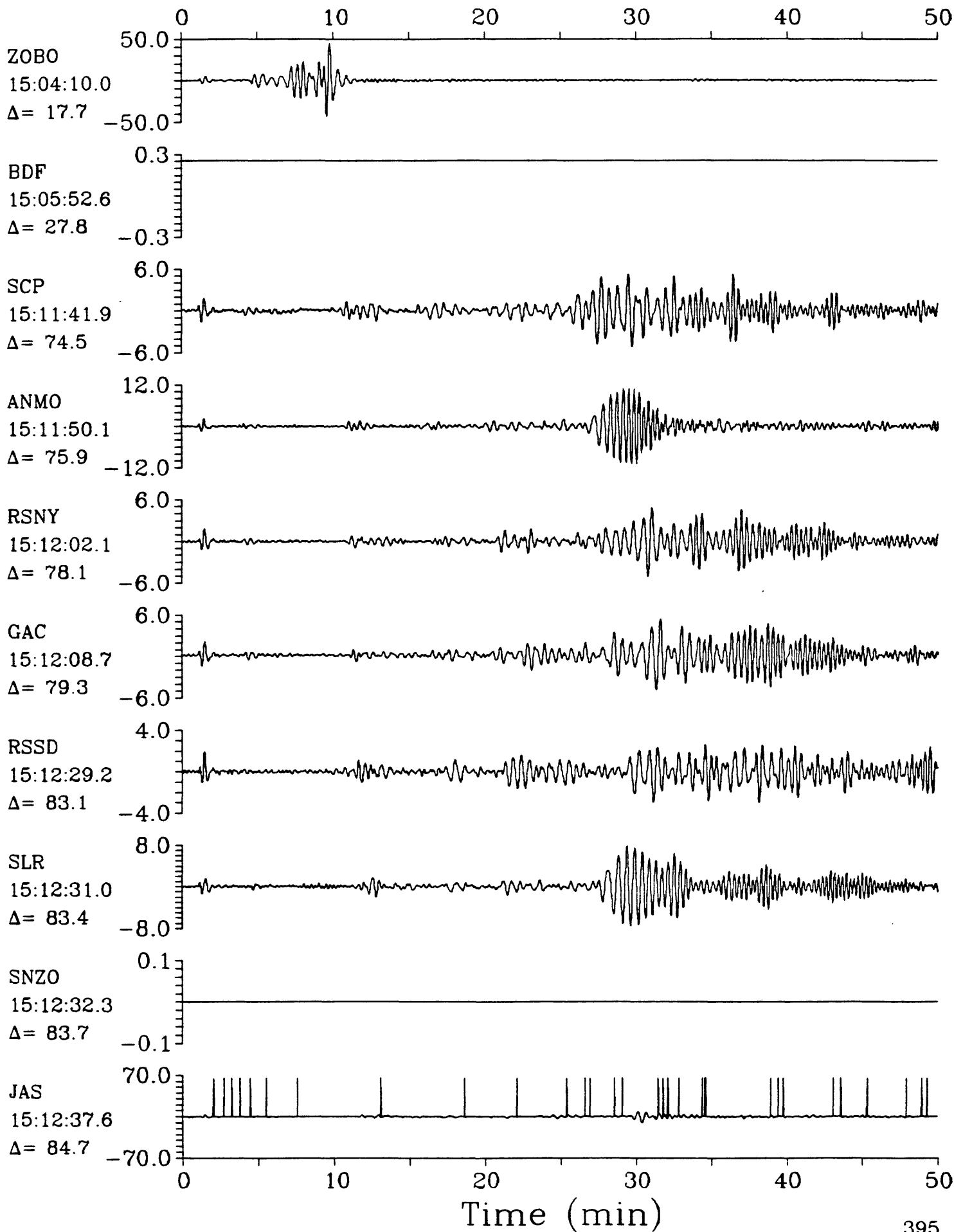
Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.1$



LPZ

04 March 1985 15:01:06.27

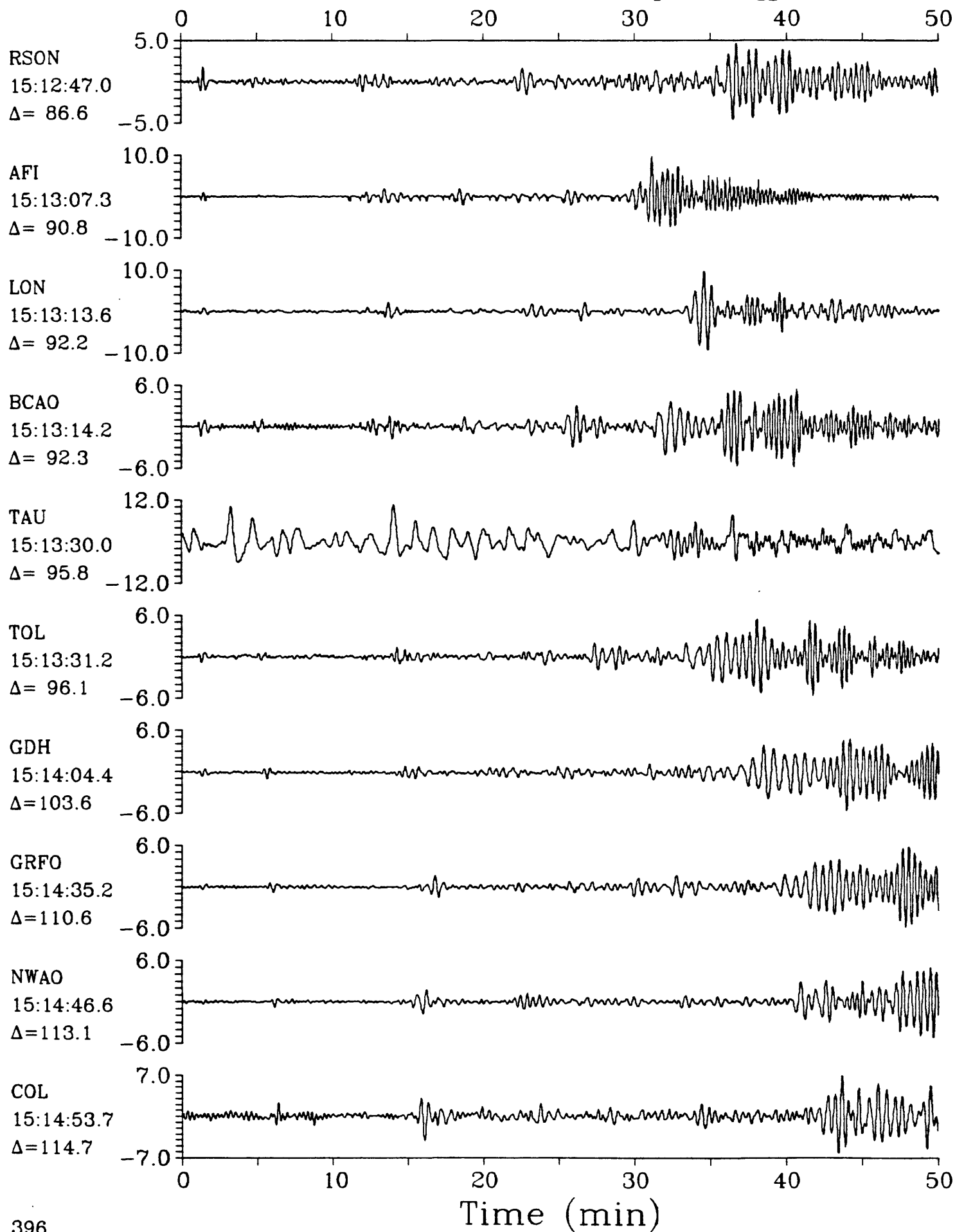
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.1$ 

LPZ

04 March 1985 15:01:06.27

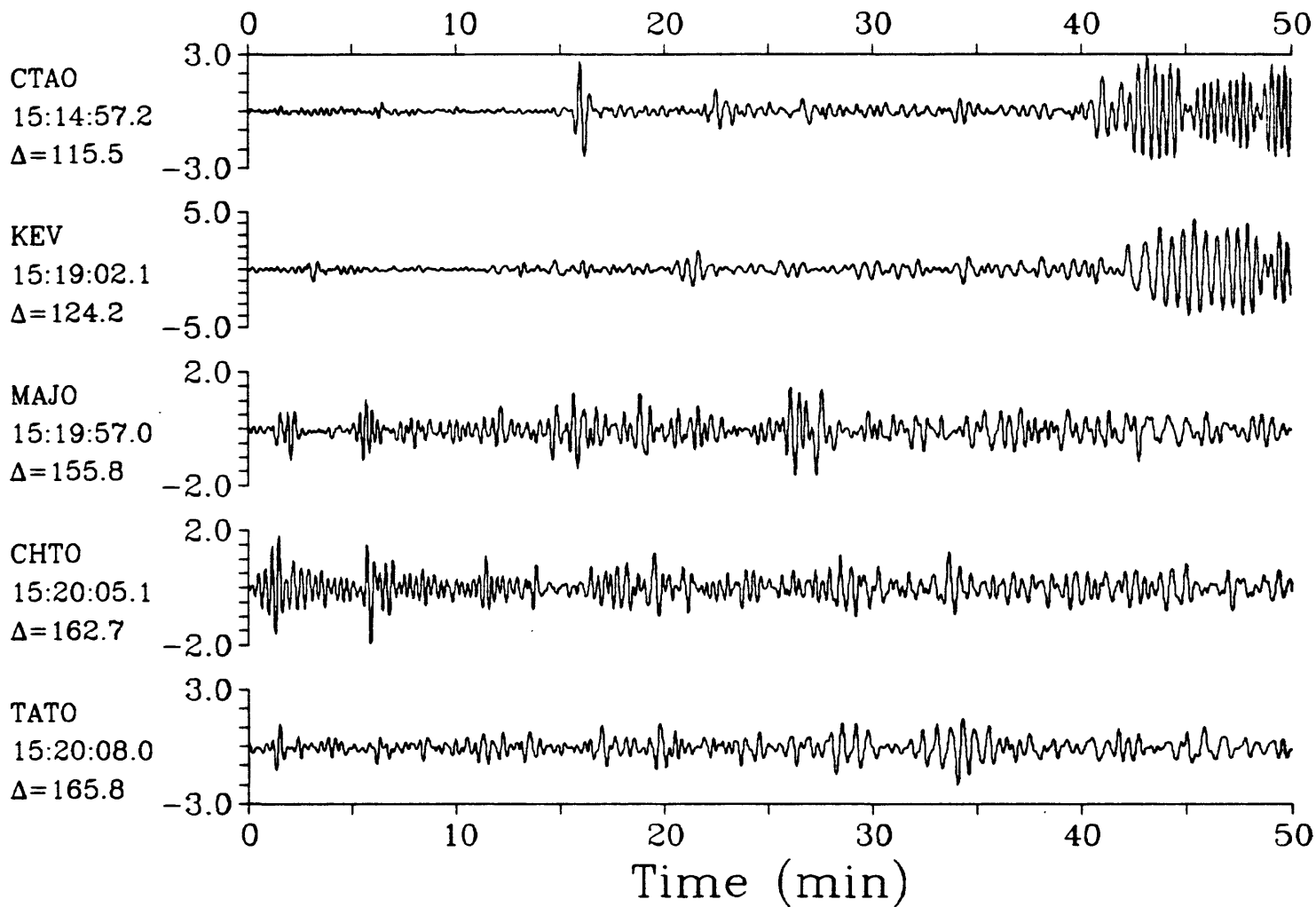
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.1$ 

LPZ

04 March 1985 15:01:06.27

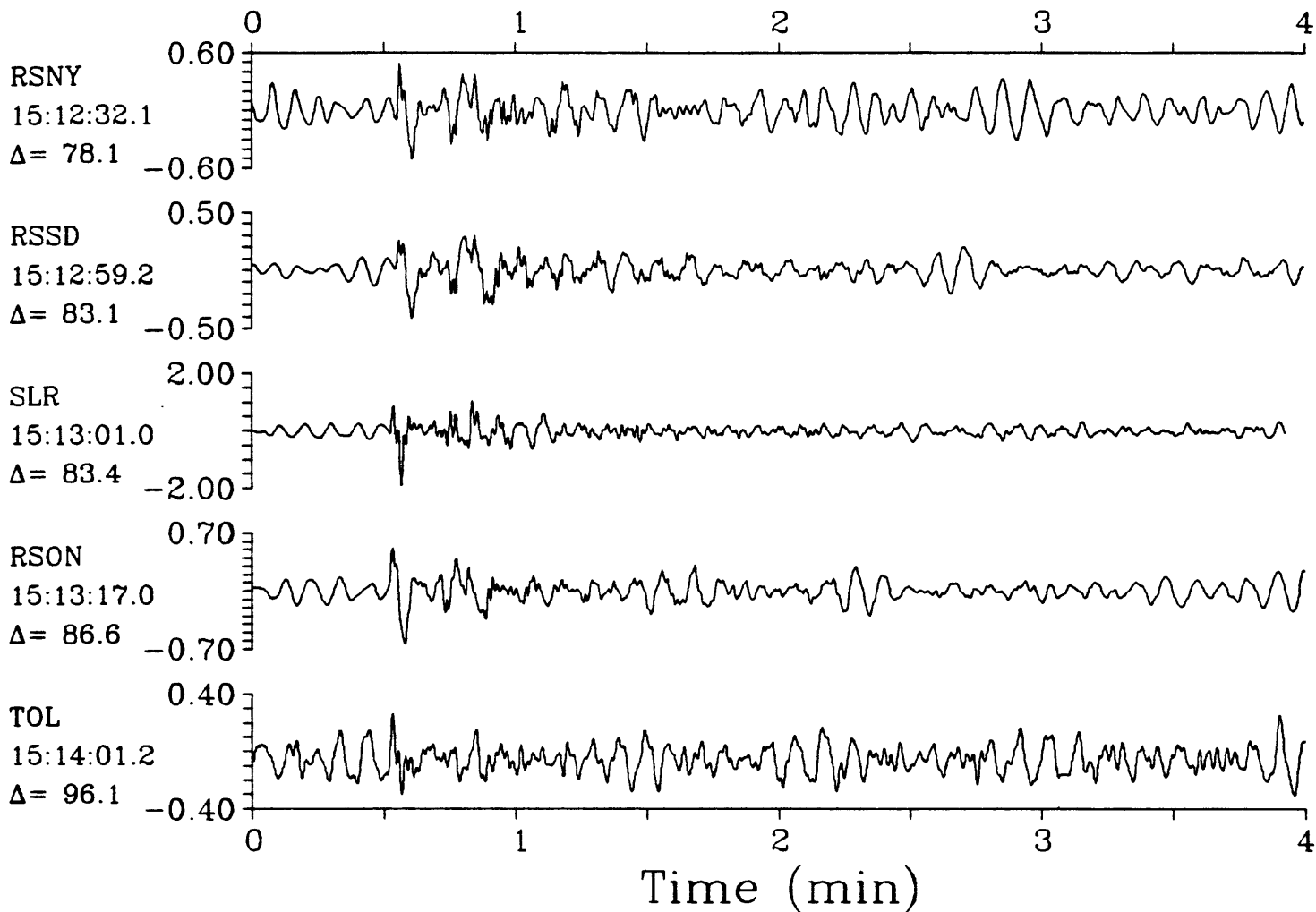
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{SZ}=6.1$ 

IPZ

04 March 1985 15:01:06.27

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.1$ 

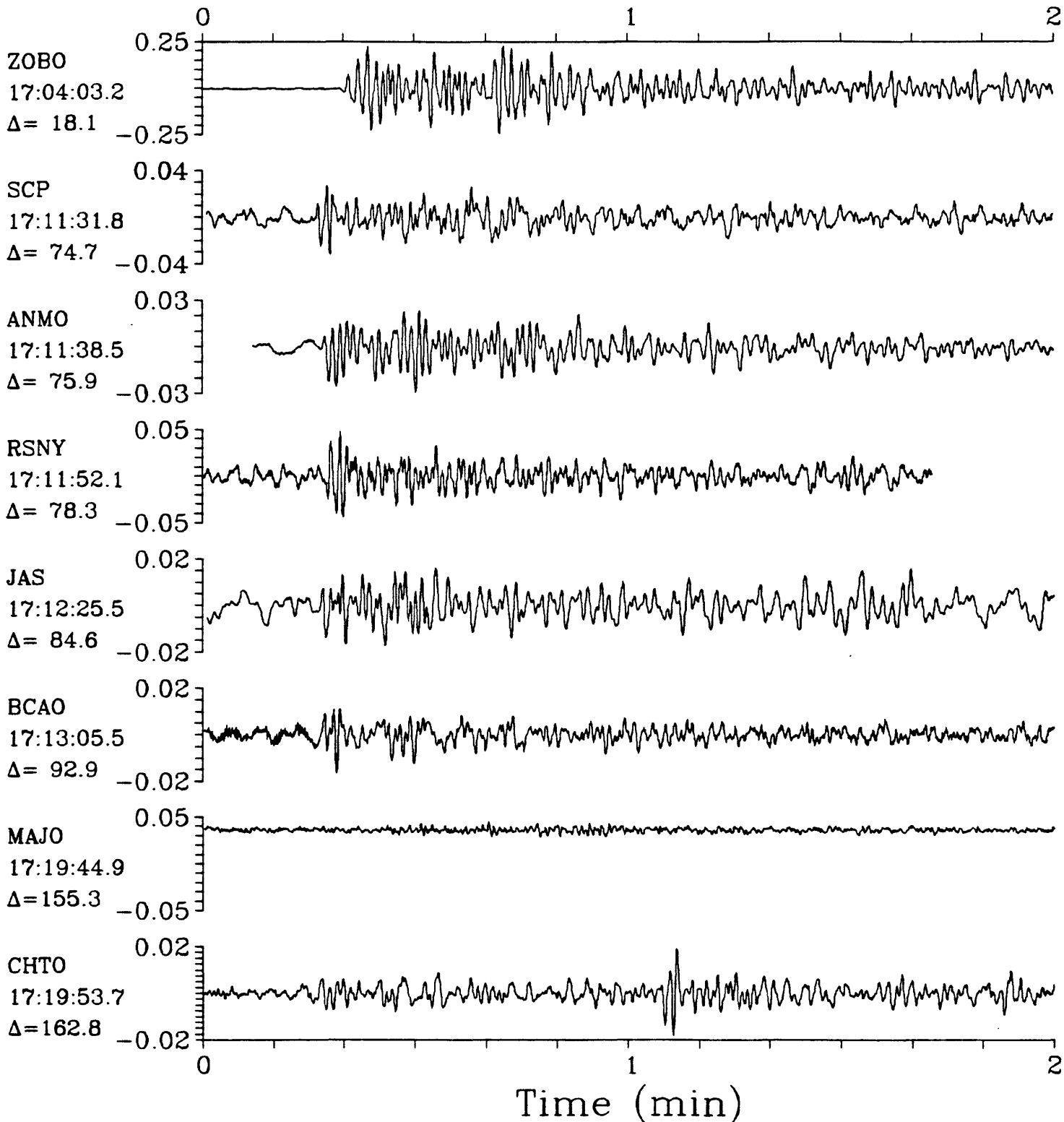
04 March 1985 17:00:09.80

Near Coast of Central Chile





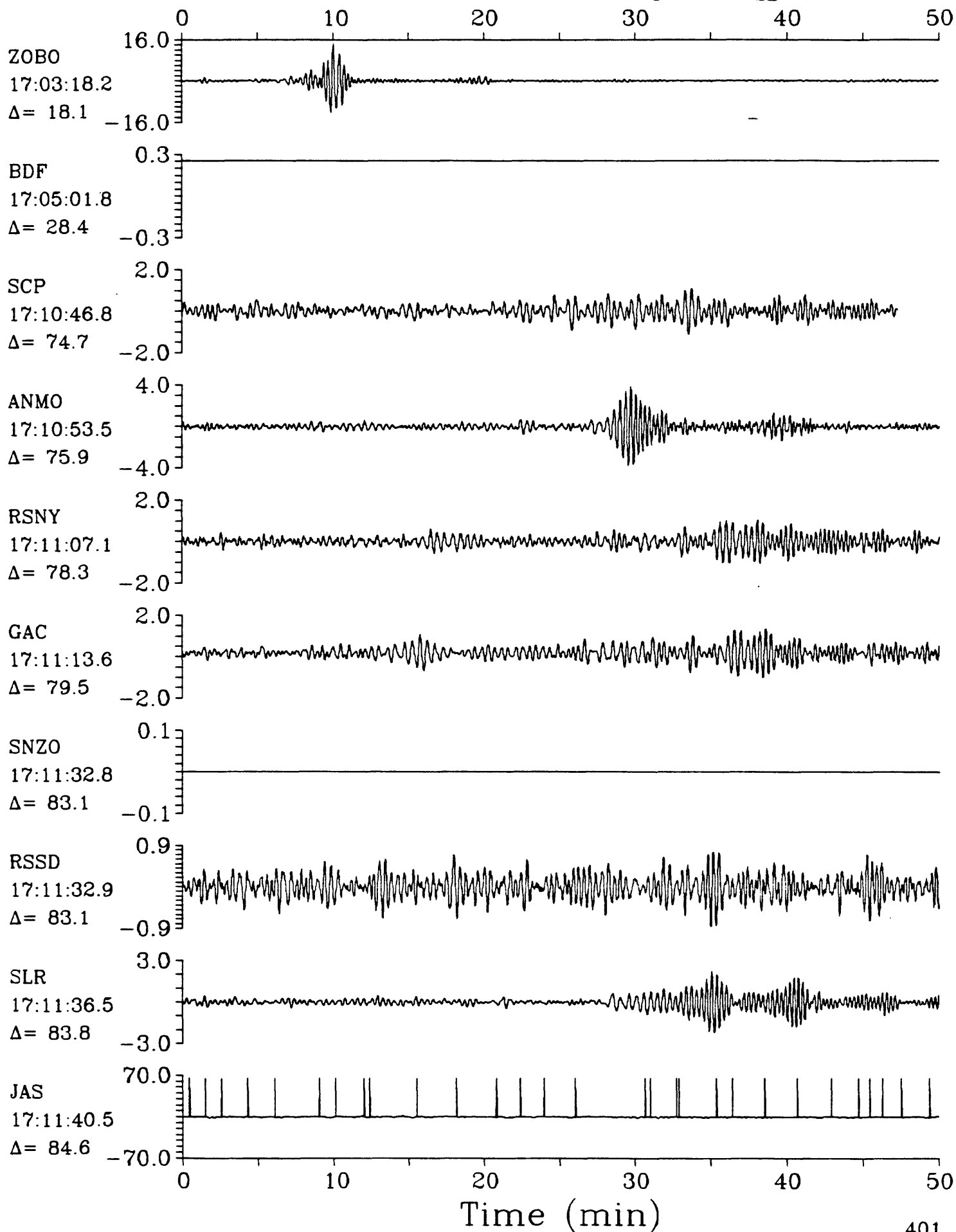
Near Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$



LPZ

04 March 1985 17:00:09.80

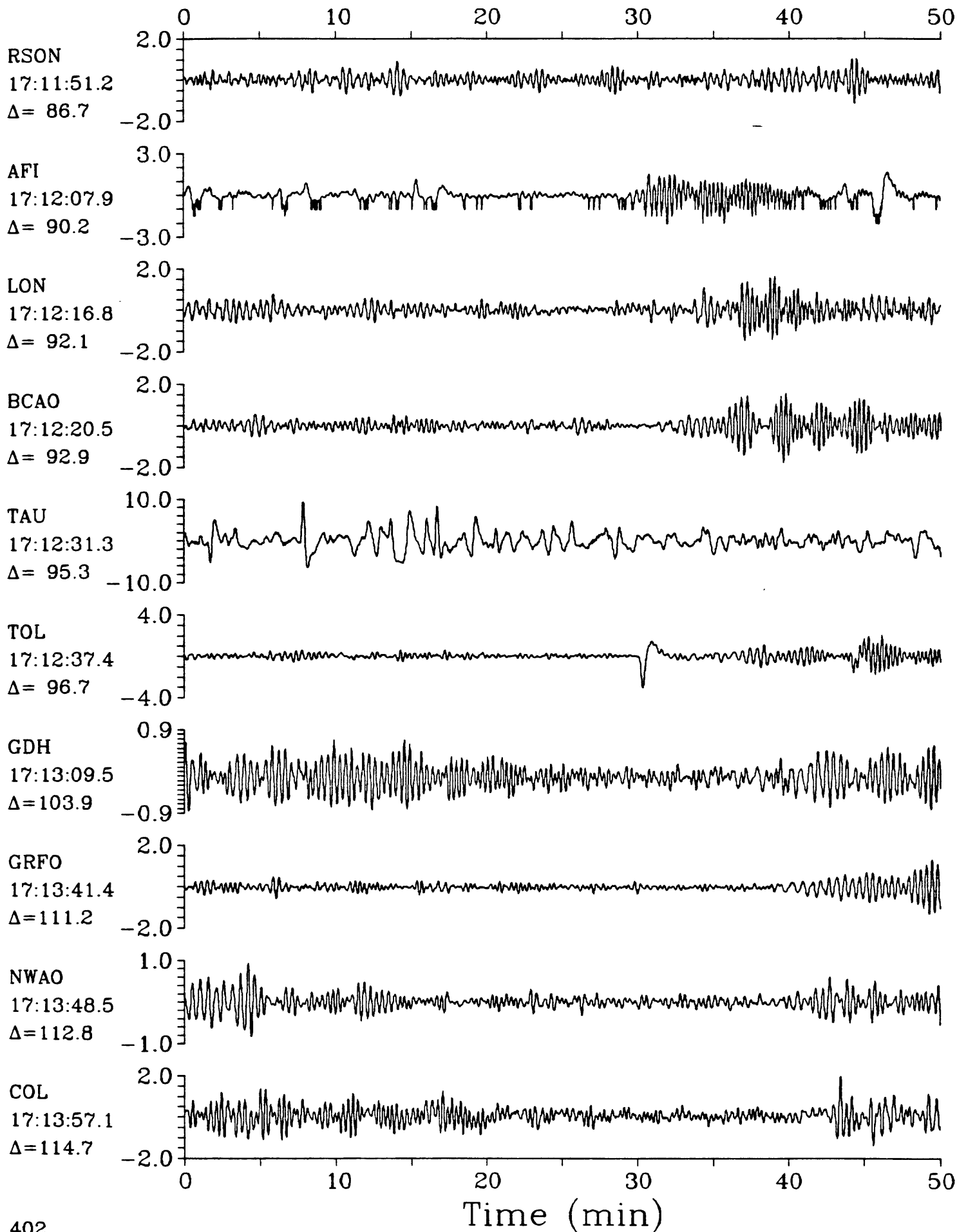
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

LPZ

04 March 1985 17:00:09.80

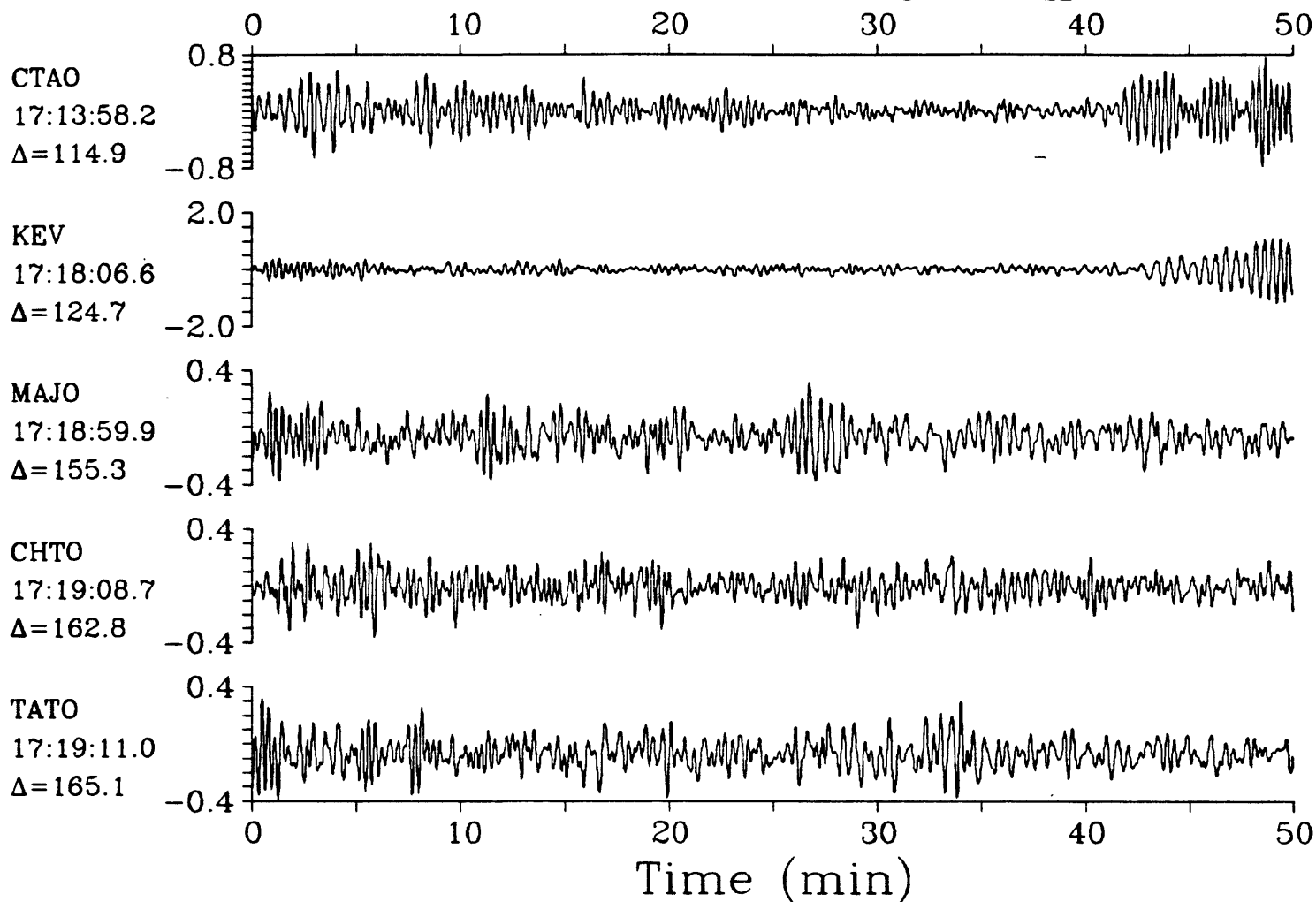
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

LPZ

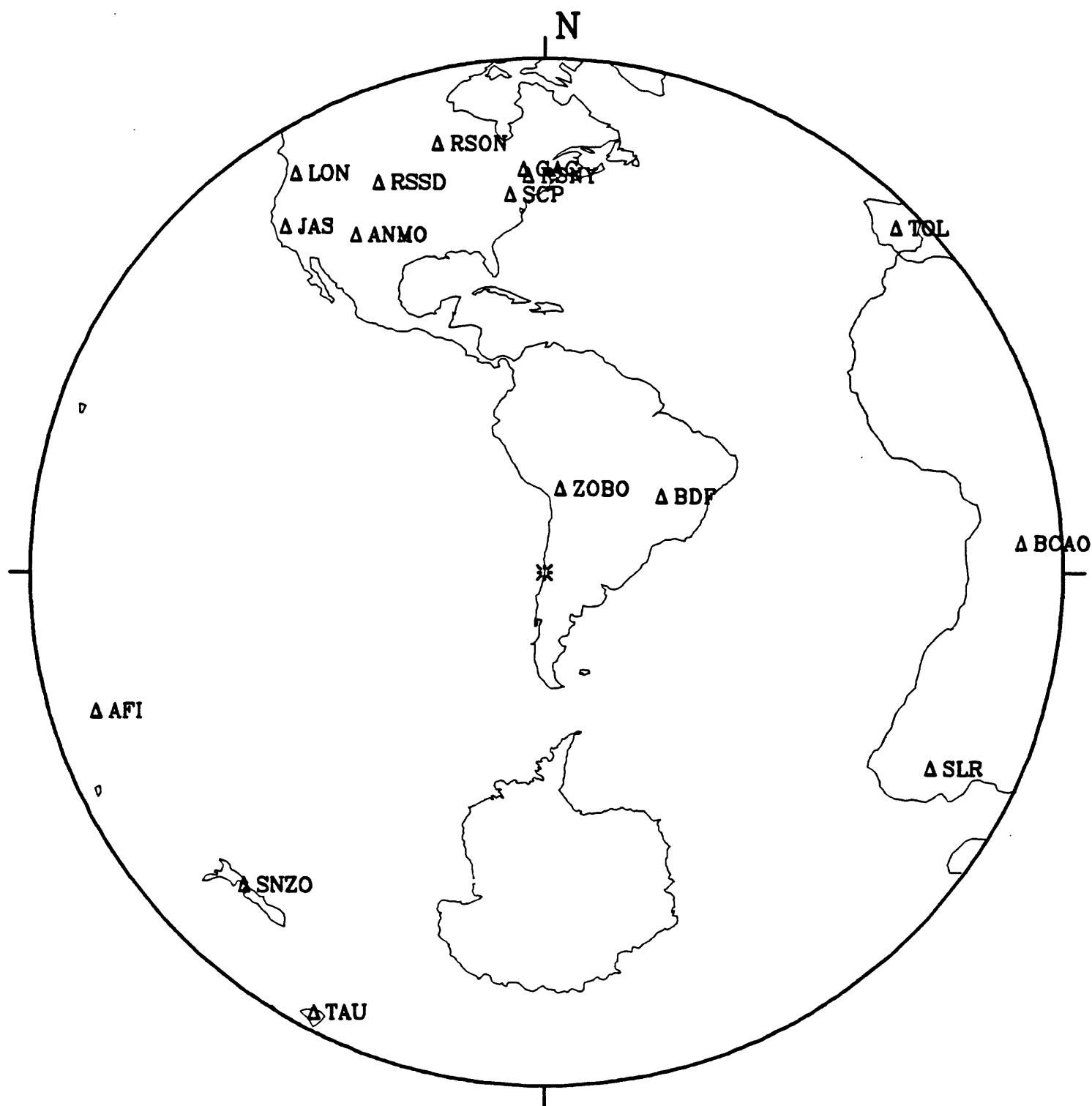
04 March 1985 17:00:09.80

LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

04 March 1985 19:03:07.28

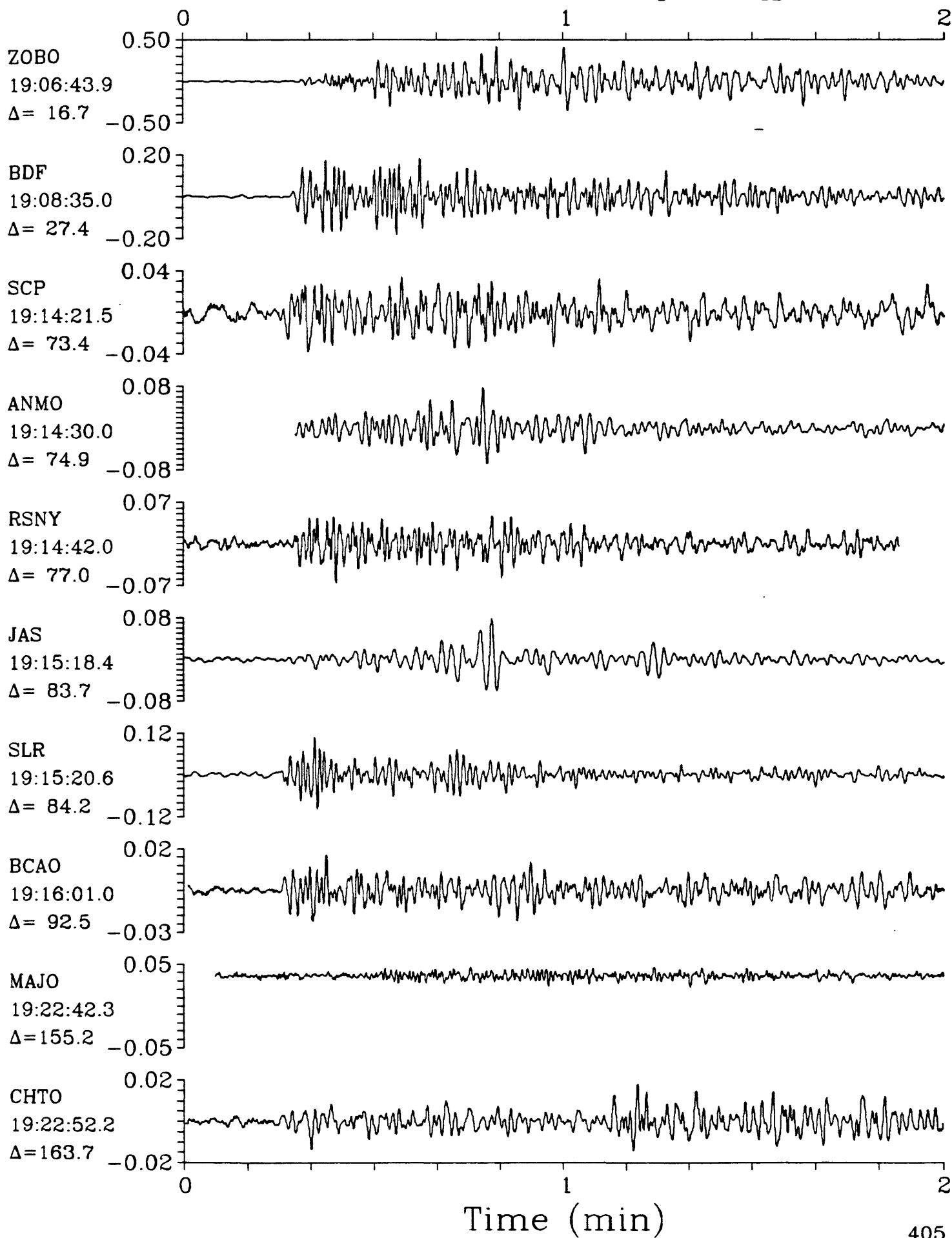
Near Coast of Central Chile



SPZ

04 March 1985 19:03:07.28

SPZ

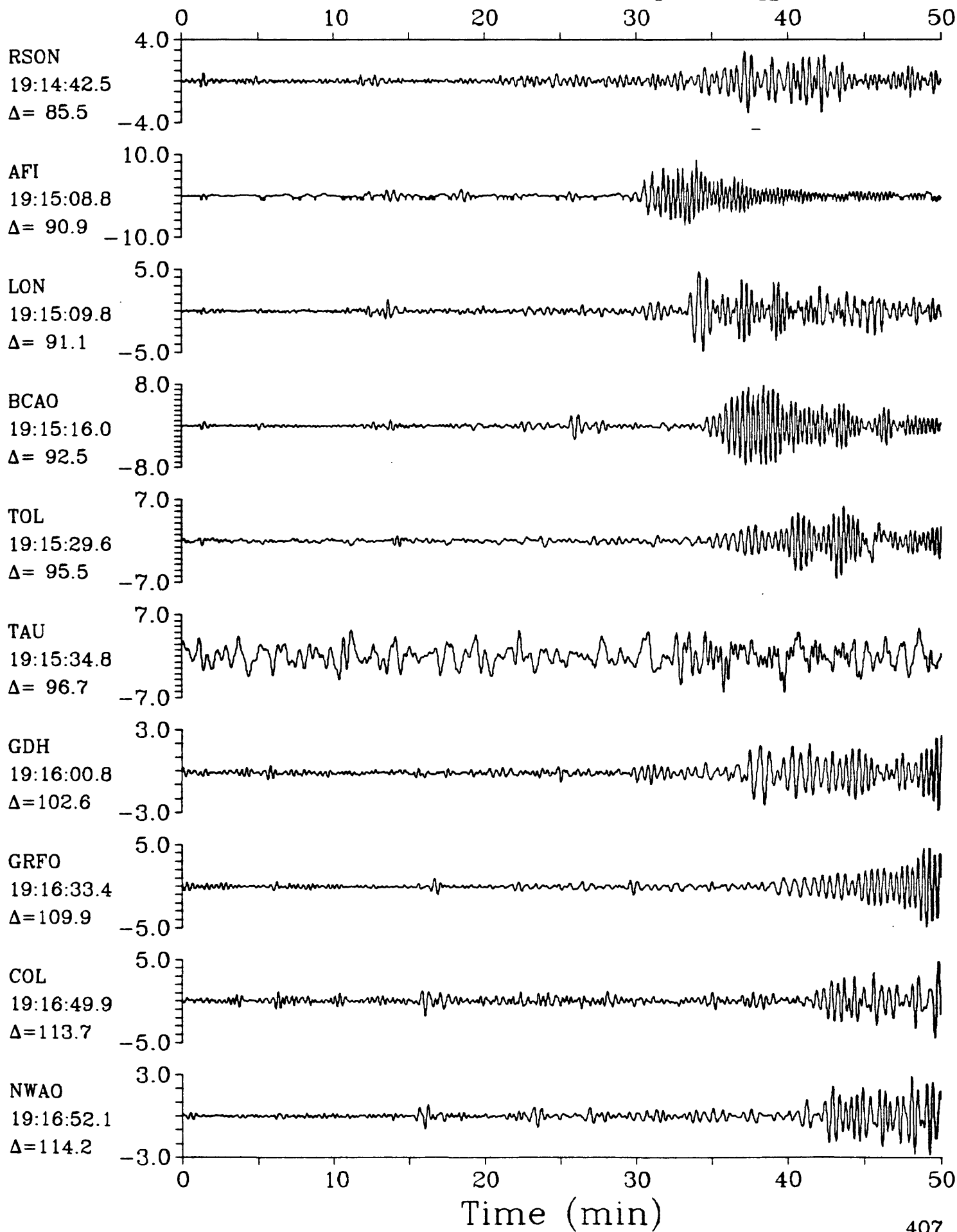
Near Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=6.1$ 



LPZ

04 March 1985 19:03:07.28

LPZ

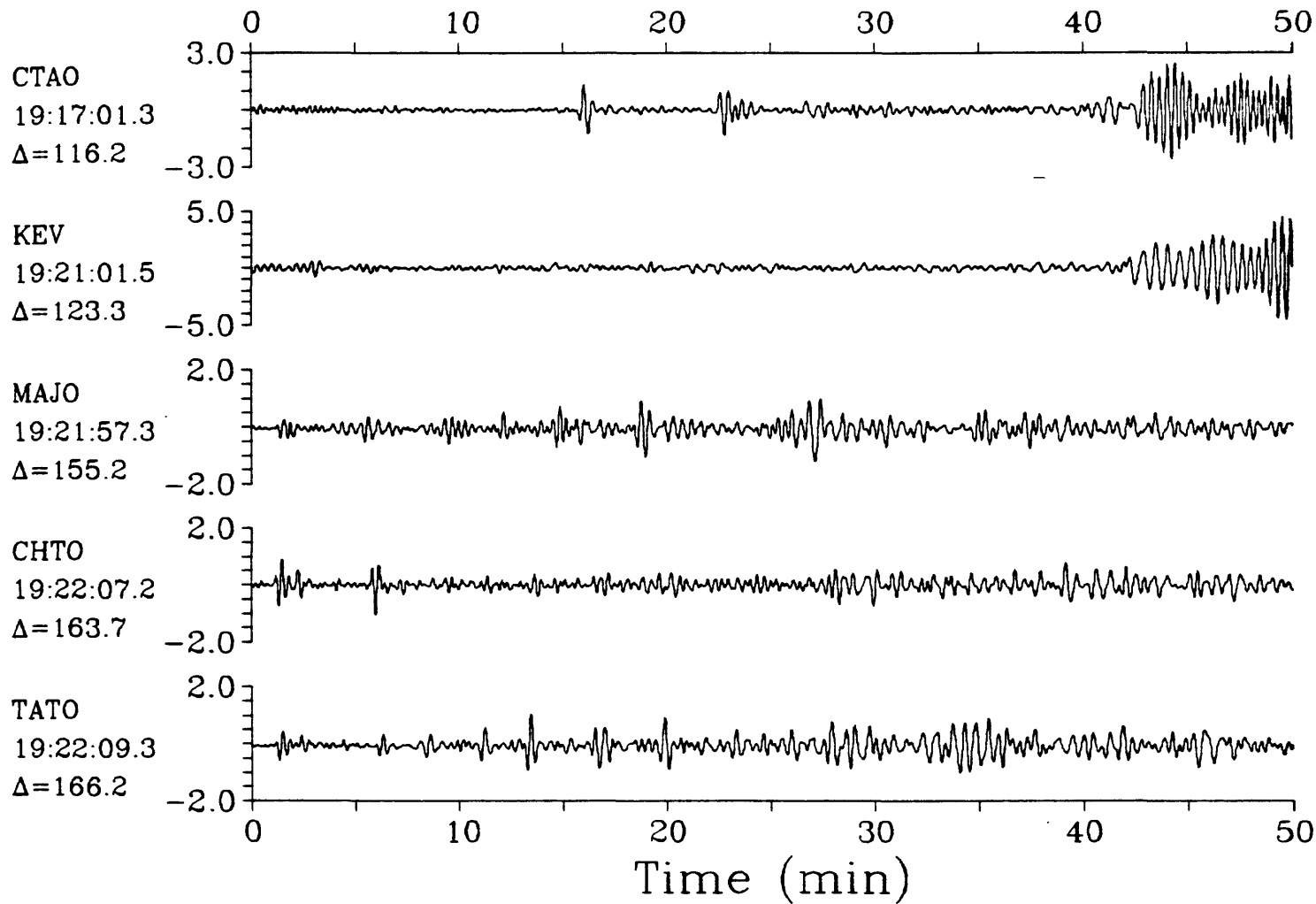
Near Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=6.1$ 



LPZ

04 March 1985 19:03:07.28

LPZ

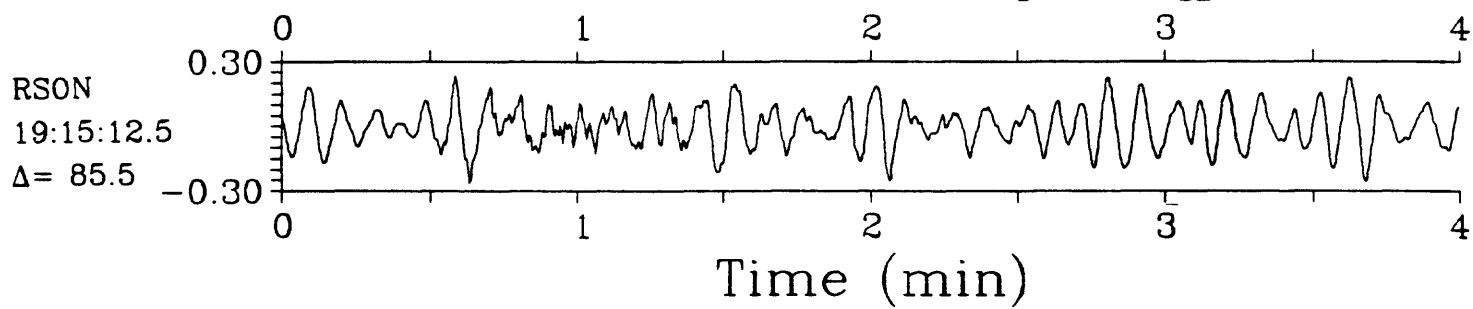
Near Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=6.1$ 

IPZ

04 March 1985 19:03:07.28

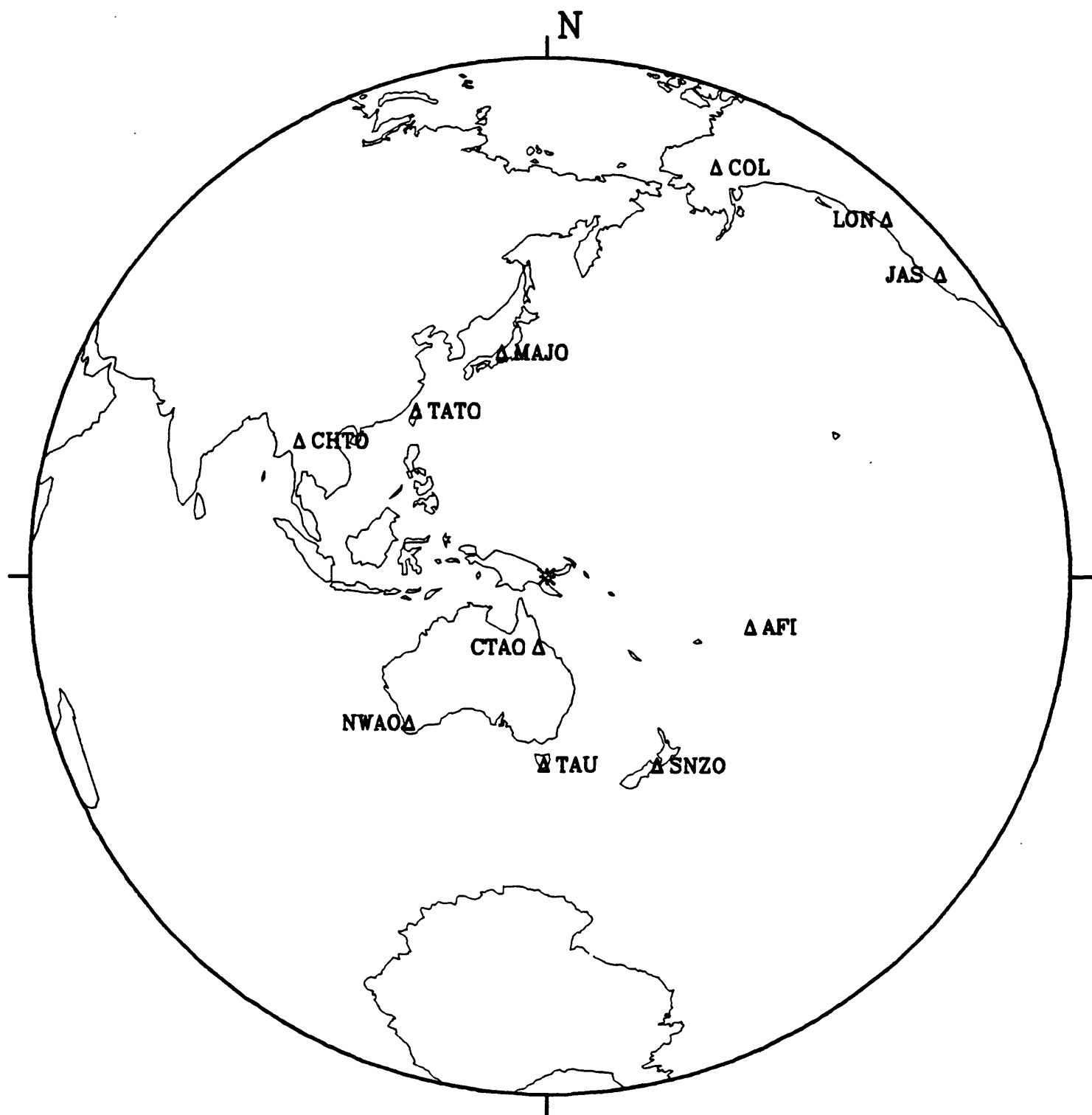
IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=6.1$



05 March 1985 08:15:14.22

## East Papua New Guinea Region

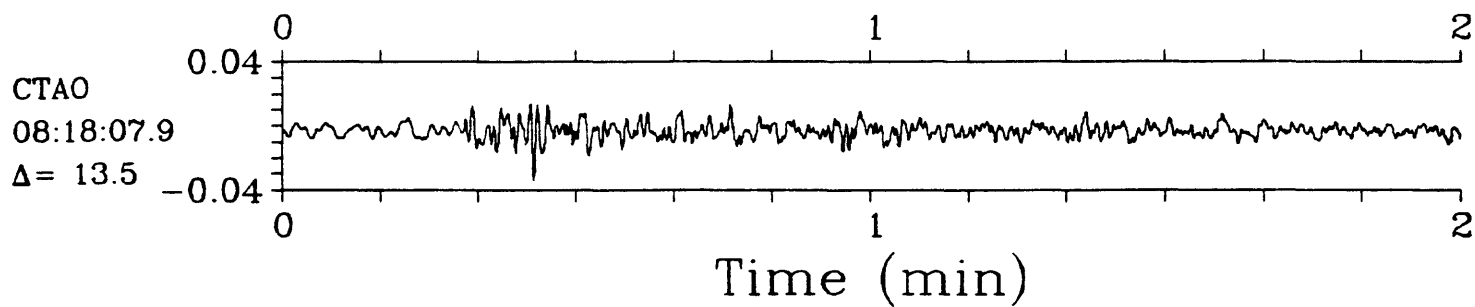


SPZ

05 March 1985 08:15:14.22

SPZ

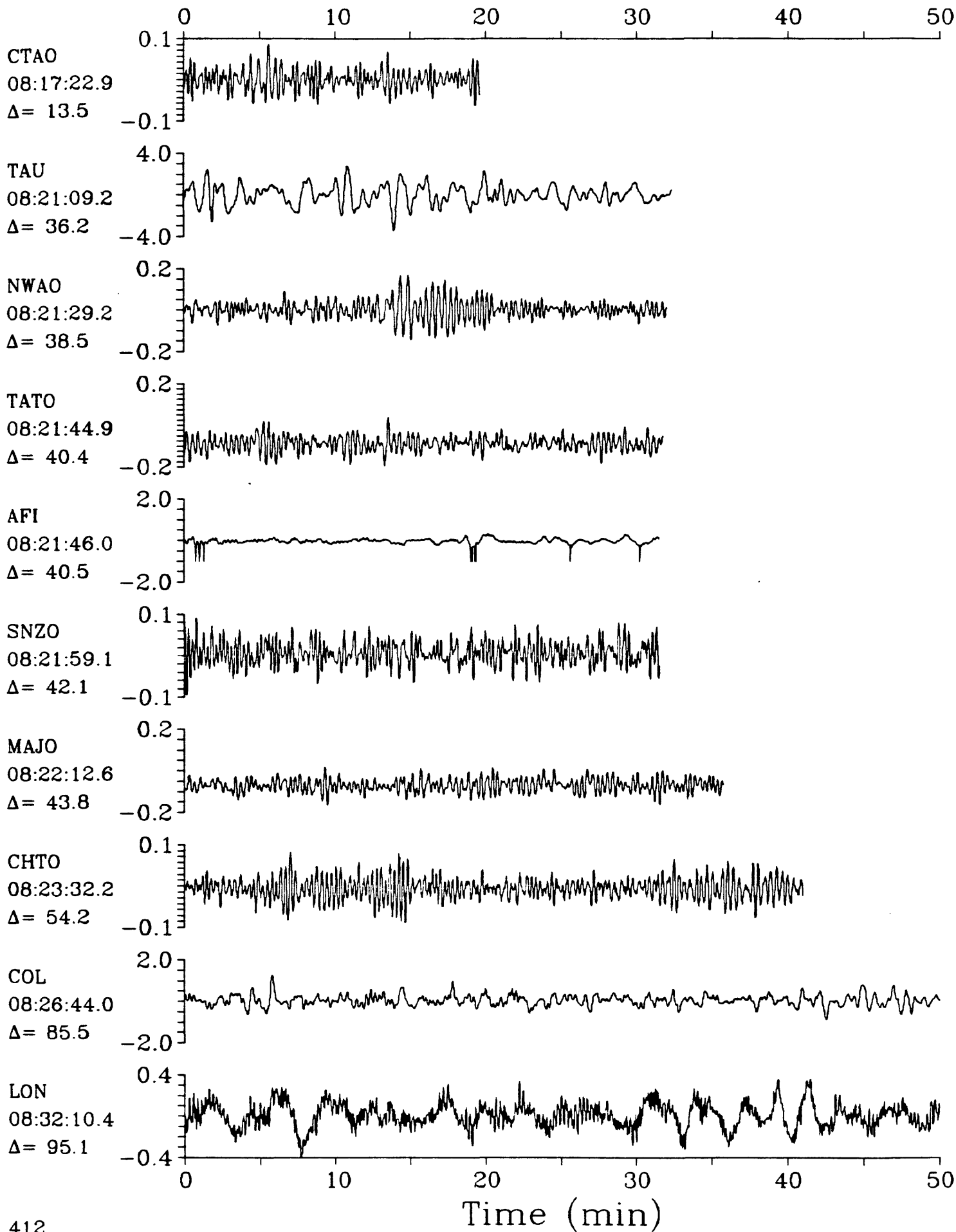
East Papua New Guinea Region  $h=78.4$   $m_b=5.6$



LPZ

05 March 1985 08:15:14.22

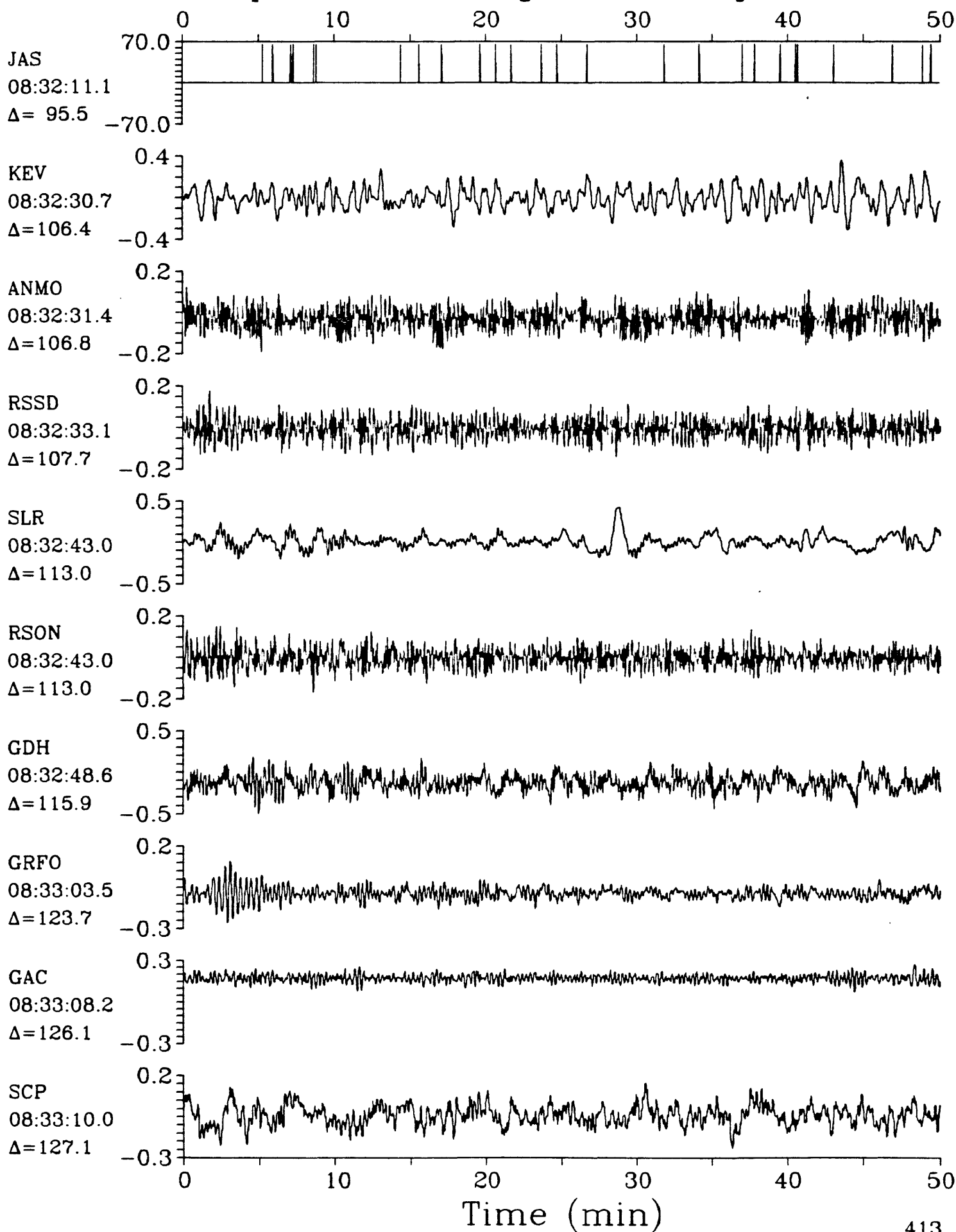
LPZ

East Papua New Guinea Region  $h=78.4$   $m_b=5.6$ 

LPZ

05 March 1985 08:15:14.22

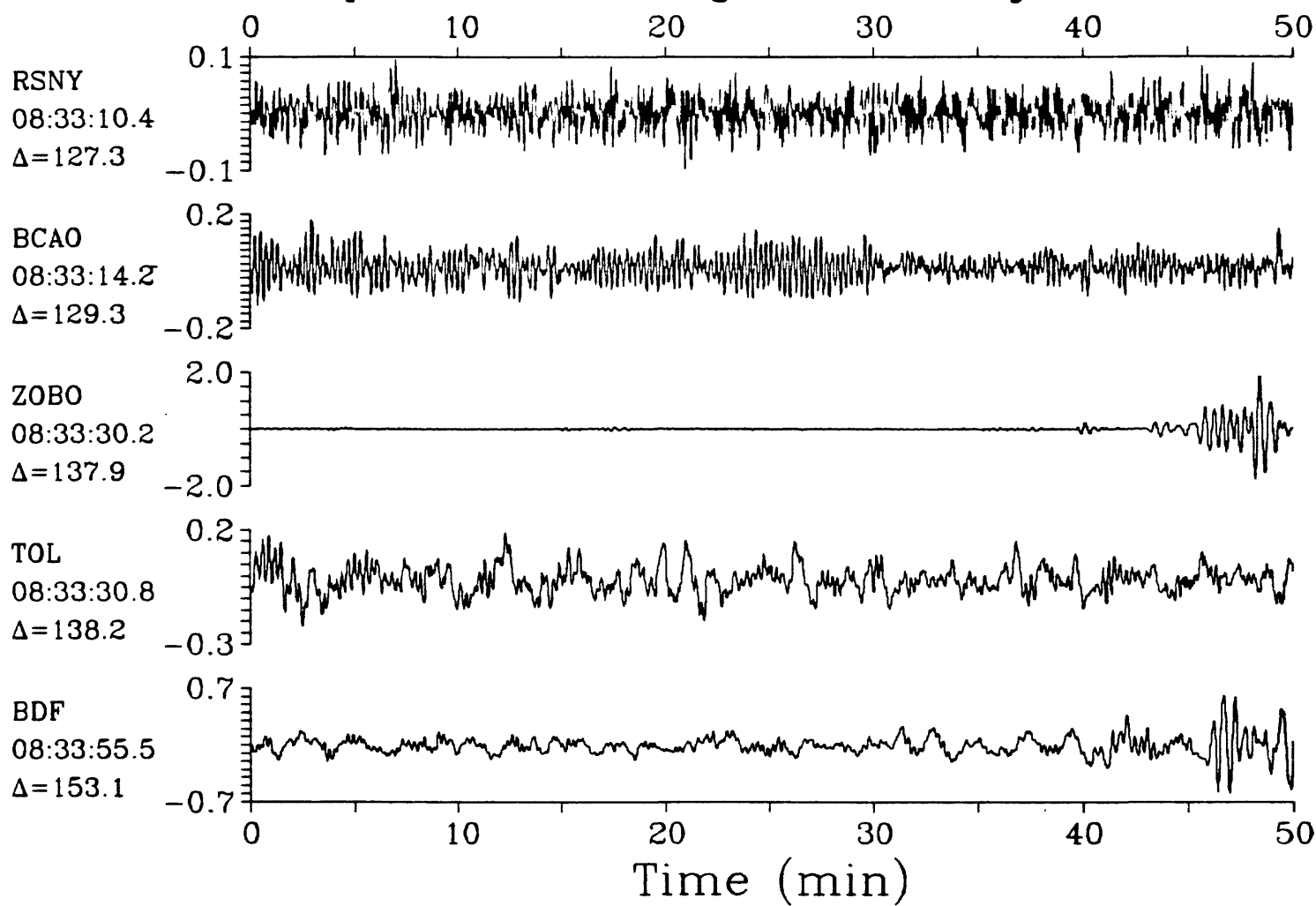
LPZ

East Papua New Guinea Region  $h=78.4$   $m_b=5.6$ 

LPZ

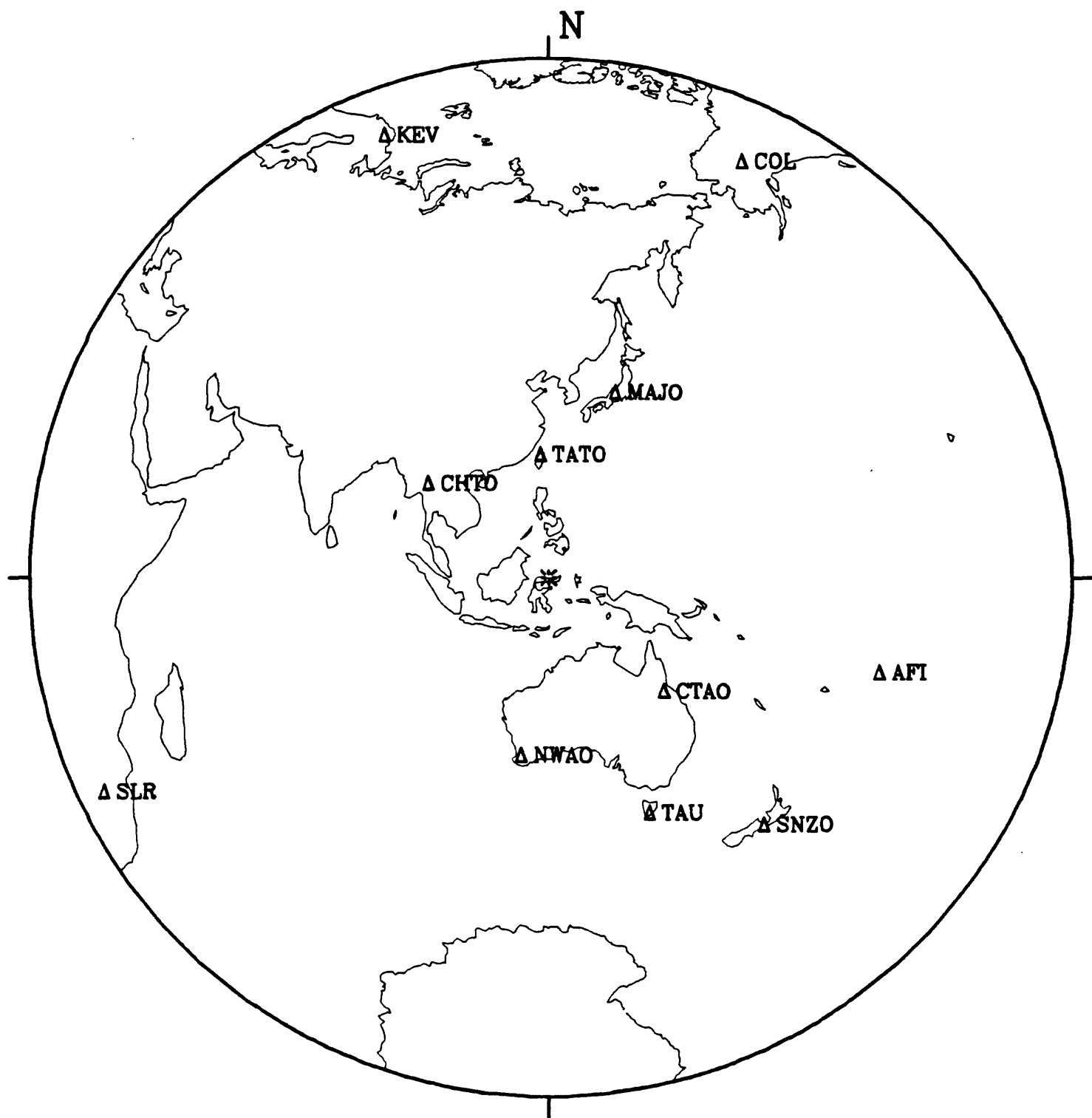
05 March 1985 08:15:14.22

LPZ

East Papua New Guinea Region  $h=78.4$   $m_b=5.6$ 

05 March 1985 13:40:10.16

## Minahassa Peninsula

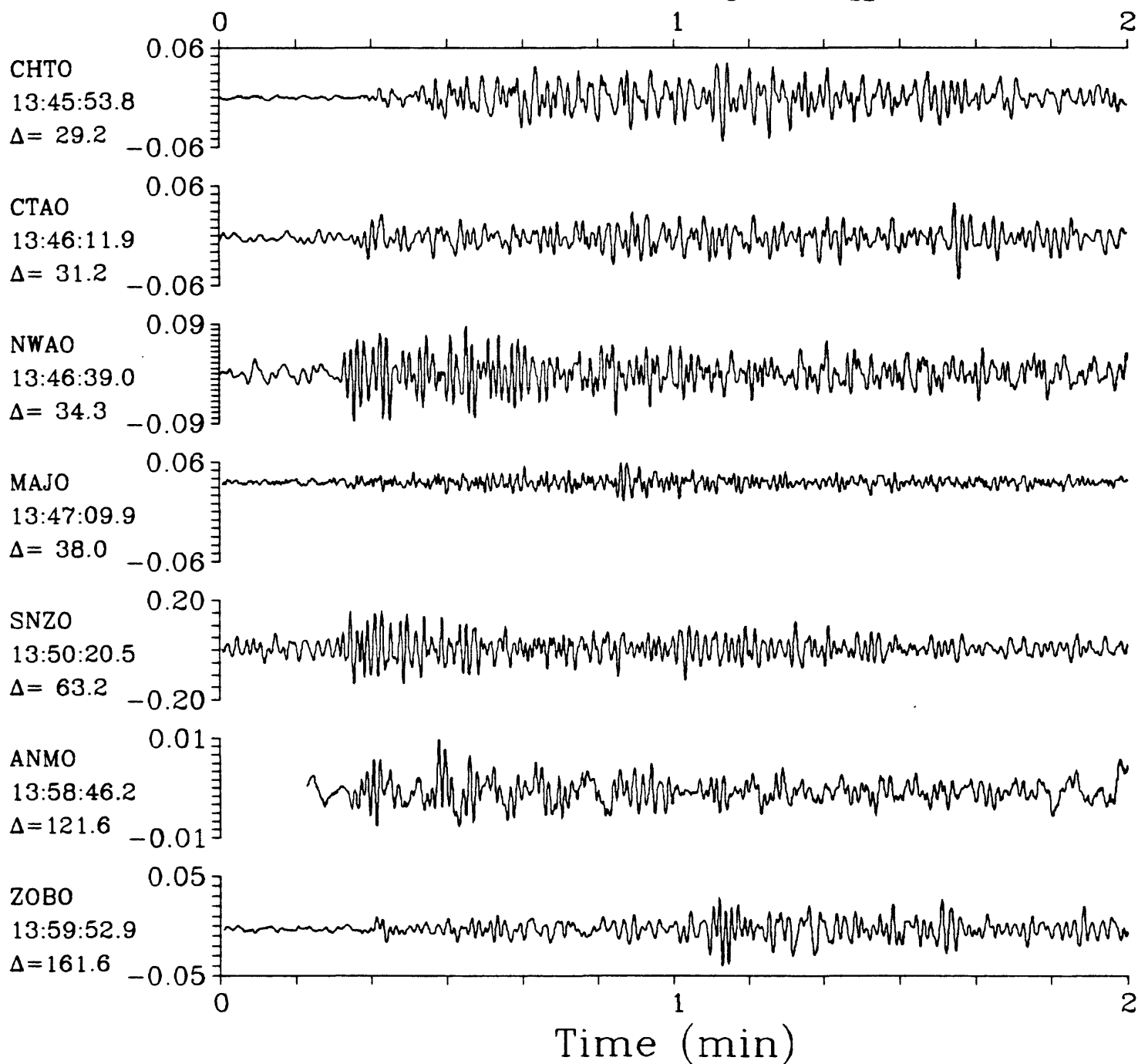




SPZ

05 March 1985 13:40:10.16

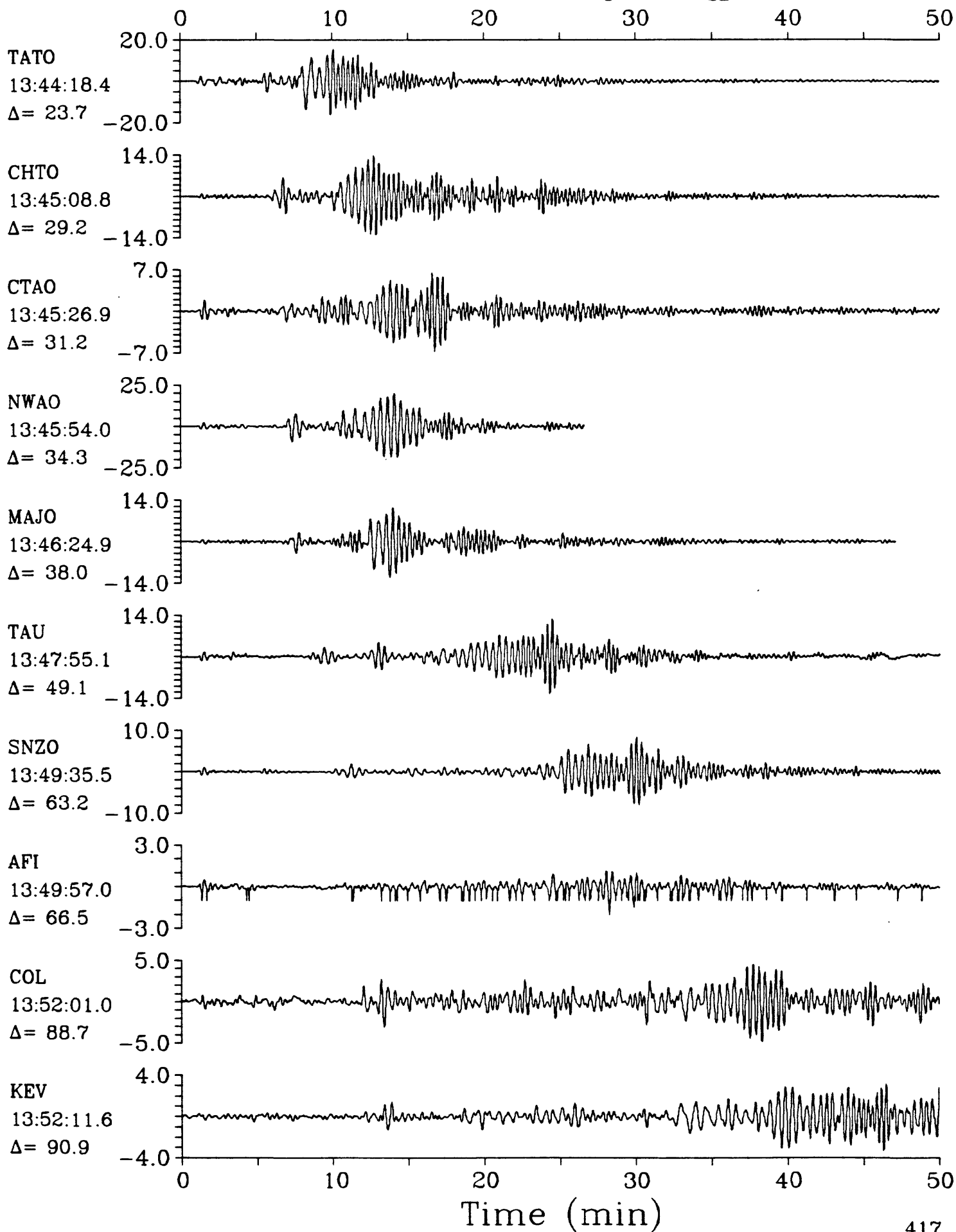
SPZ

Minahassa Peninsula  $h=33.0$   $m_b=5.5$   $M_{sz}=5.9$ 

LPZ

05 March 1985 13:40:10.16

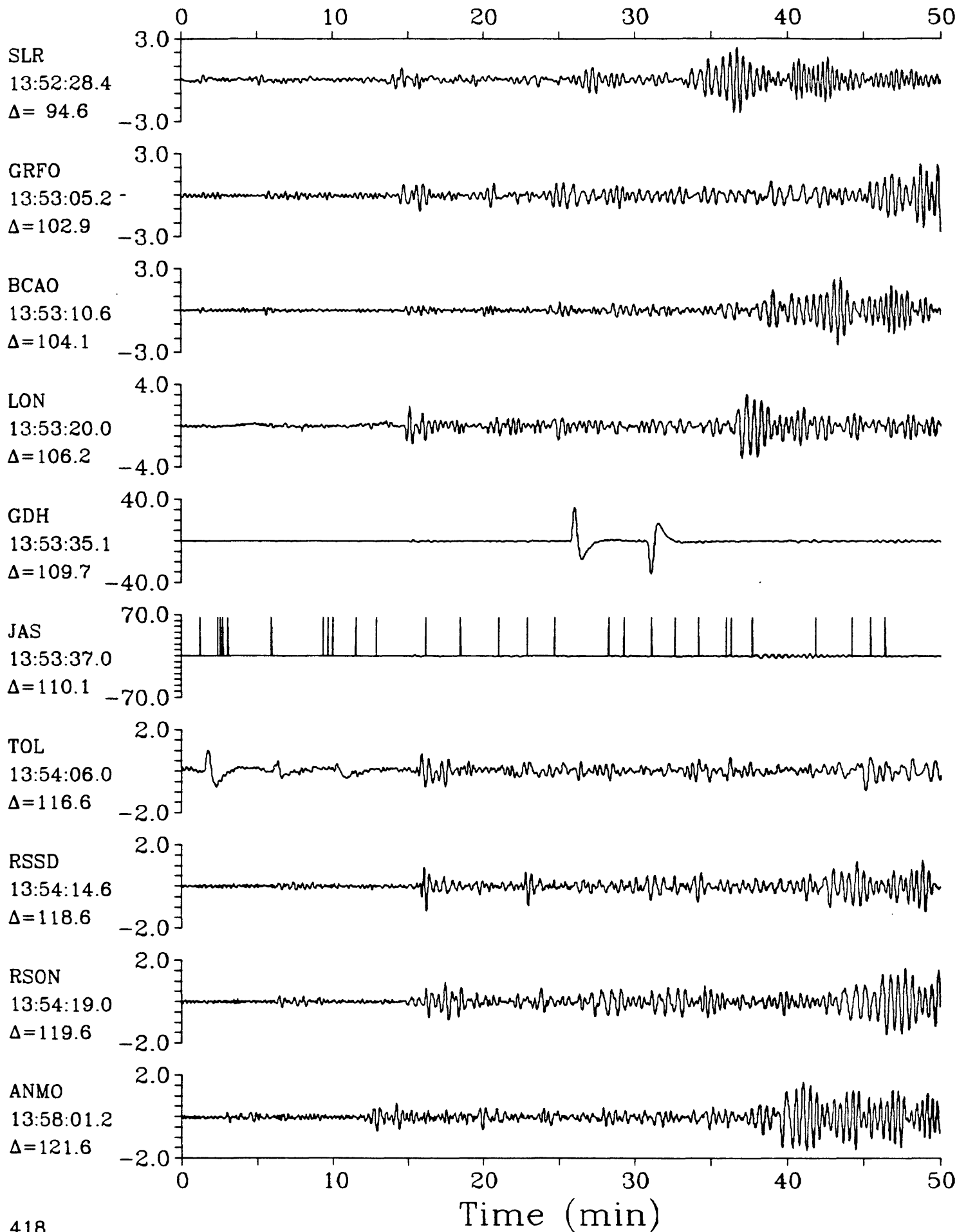
LPZ

Minahassa Peninsula  $h=33.0$   $m_b=5.5$   $M_{SZ}=5.9$ 

LPZ

05 March 1985 13:40:10.16

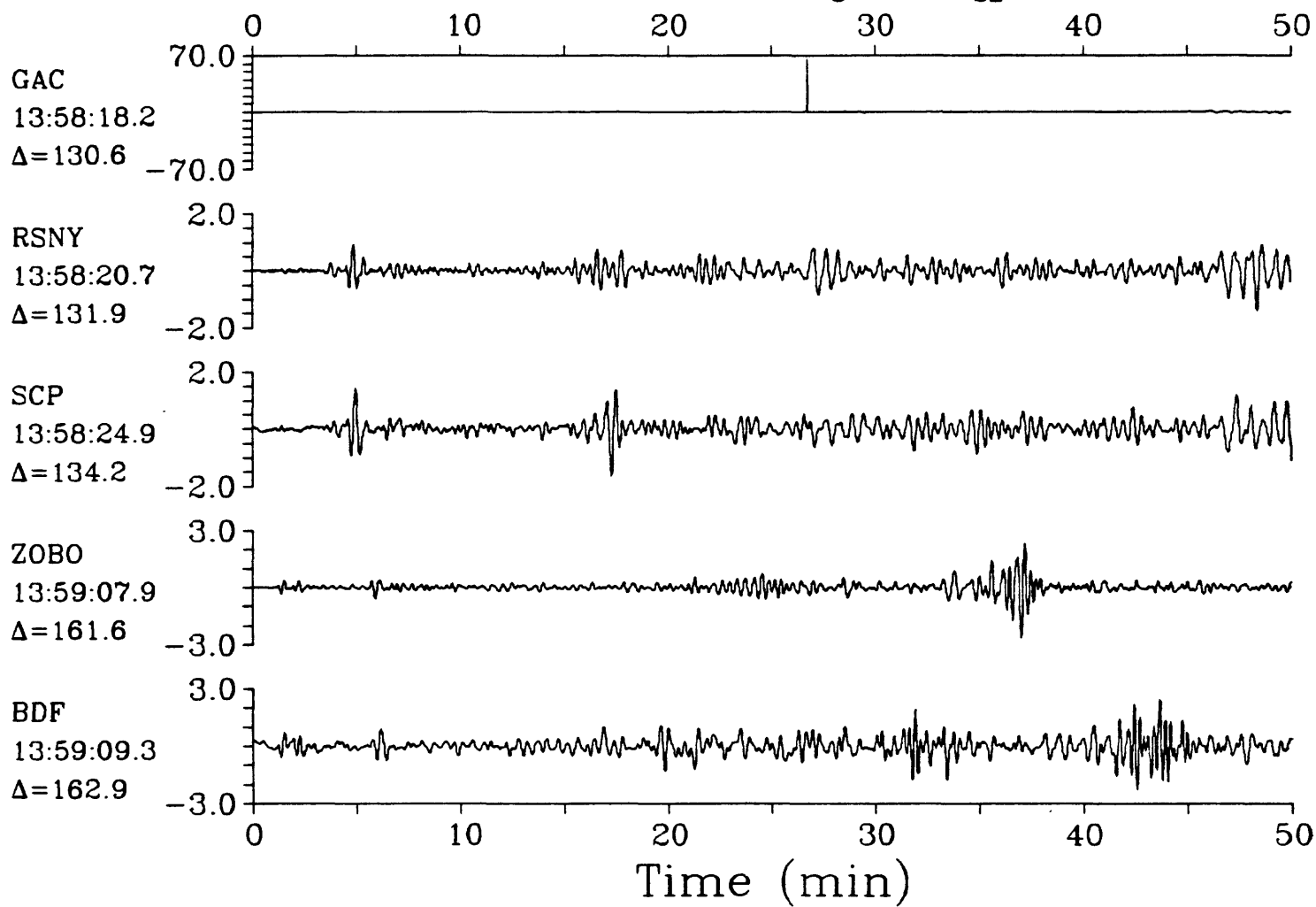
LPZ

Minahassa Peninsula  $h=33.0$   $m_b=5.5$   $M_{sz}=5.9$ 

LPZ

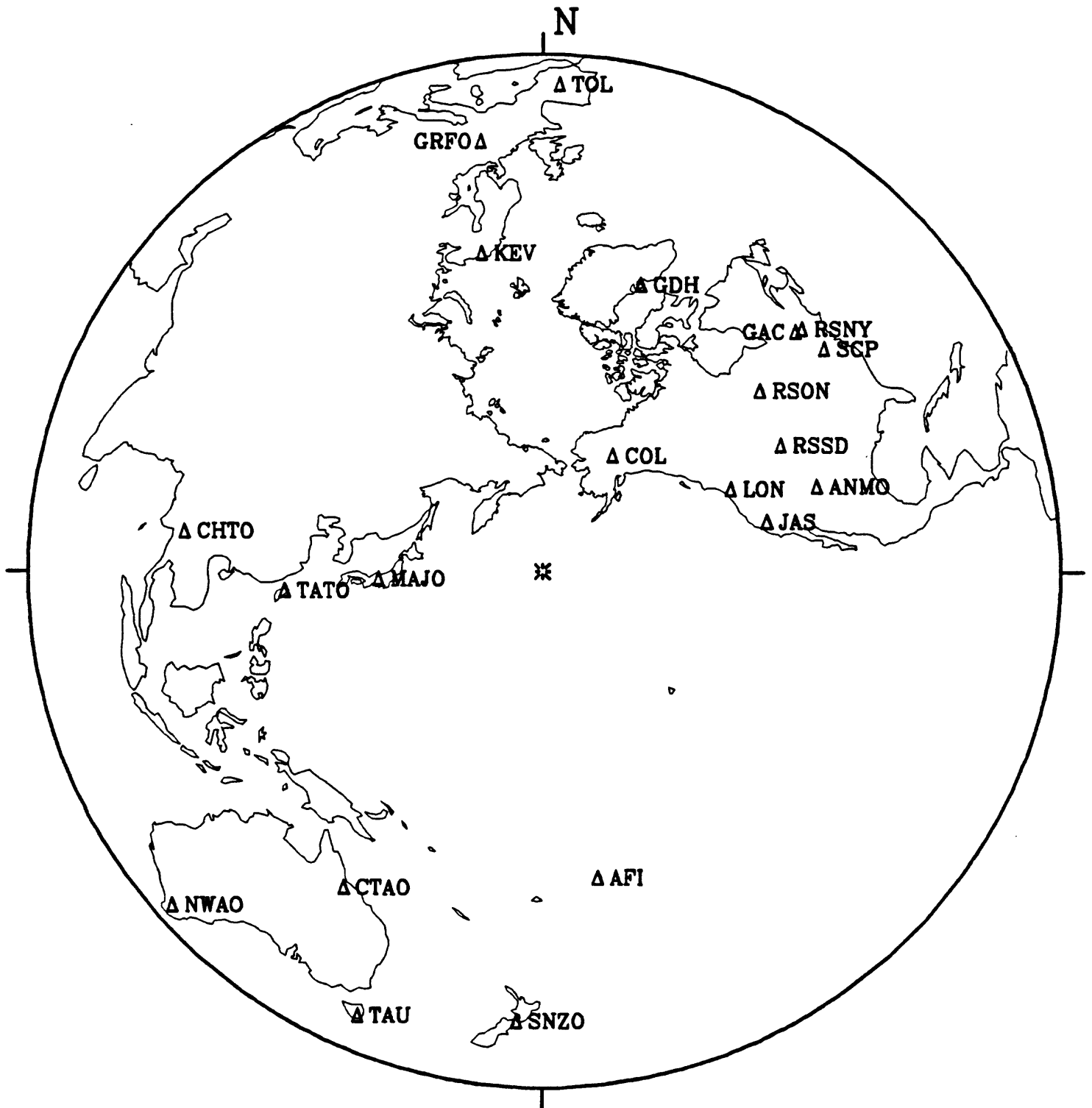
05 March 1985 13:40:10.16

LPZ

Minahassa Peninsula  $h=33.0$   $m_b=5.5$   $M_{sz}=5.9$ 

05 March 1985 14:01:02.13

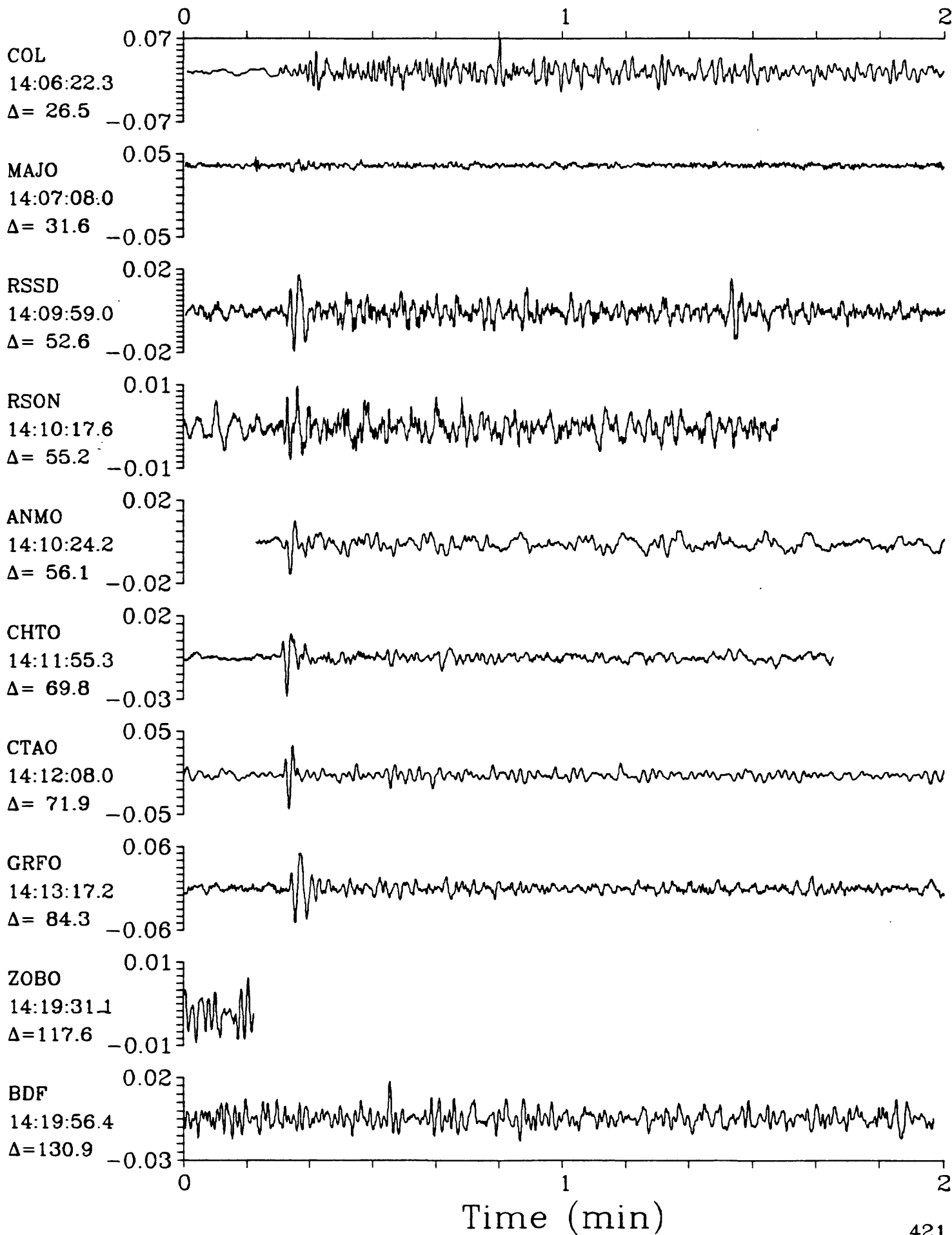
## Aleutian Islands Region



SPZ

05 March 1985 14:01:02.13

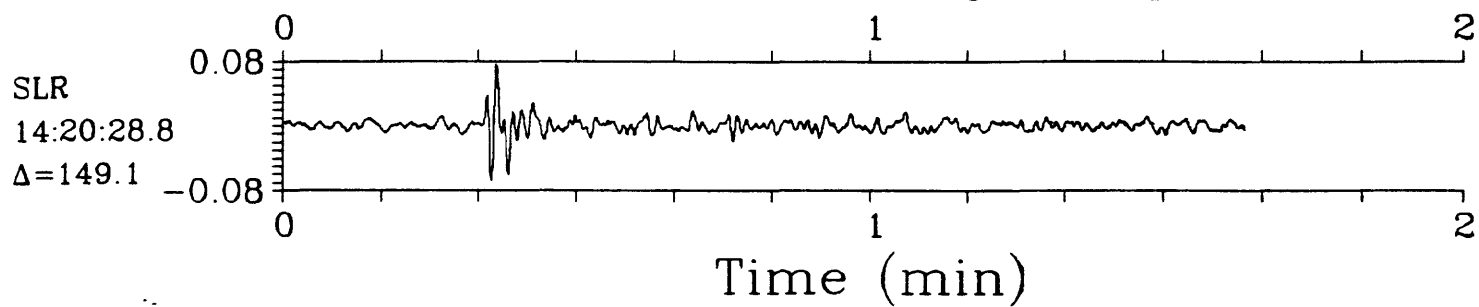
SPZ

Aleutian Islands Region  $h=28.1$   $m_b=5.3$   $M_{sz}=5.7$ 

SPZ

05 March 1985 14:01:02.13

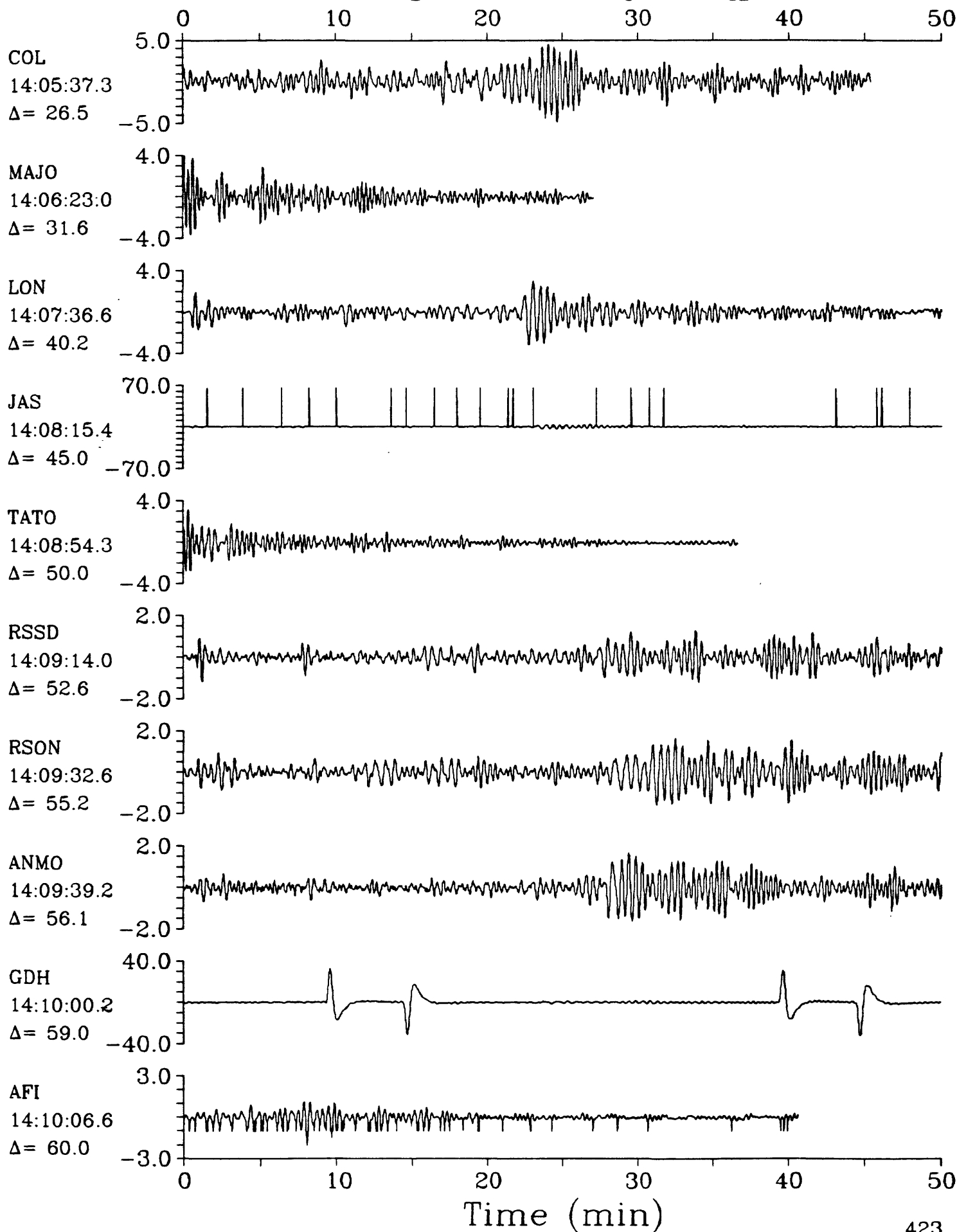
SPZ

Aleutian Islands Region  $h=28.1$   $m_b=5.3$   $M_{sz}=5.7$ 

LPZ

05 March 1985 14:01:02.13

LPZ

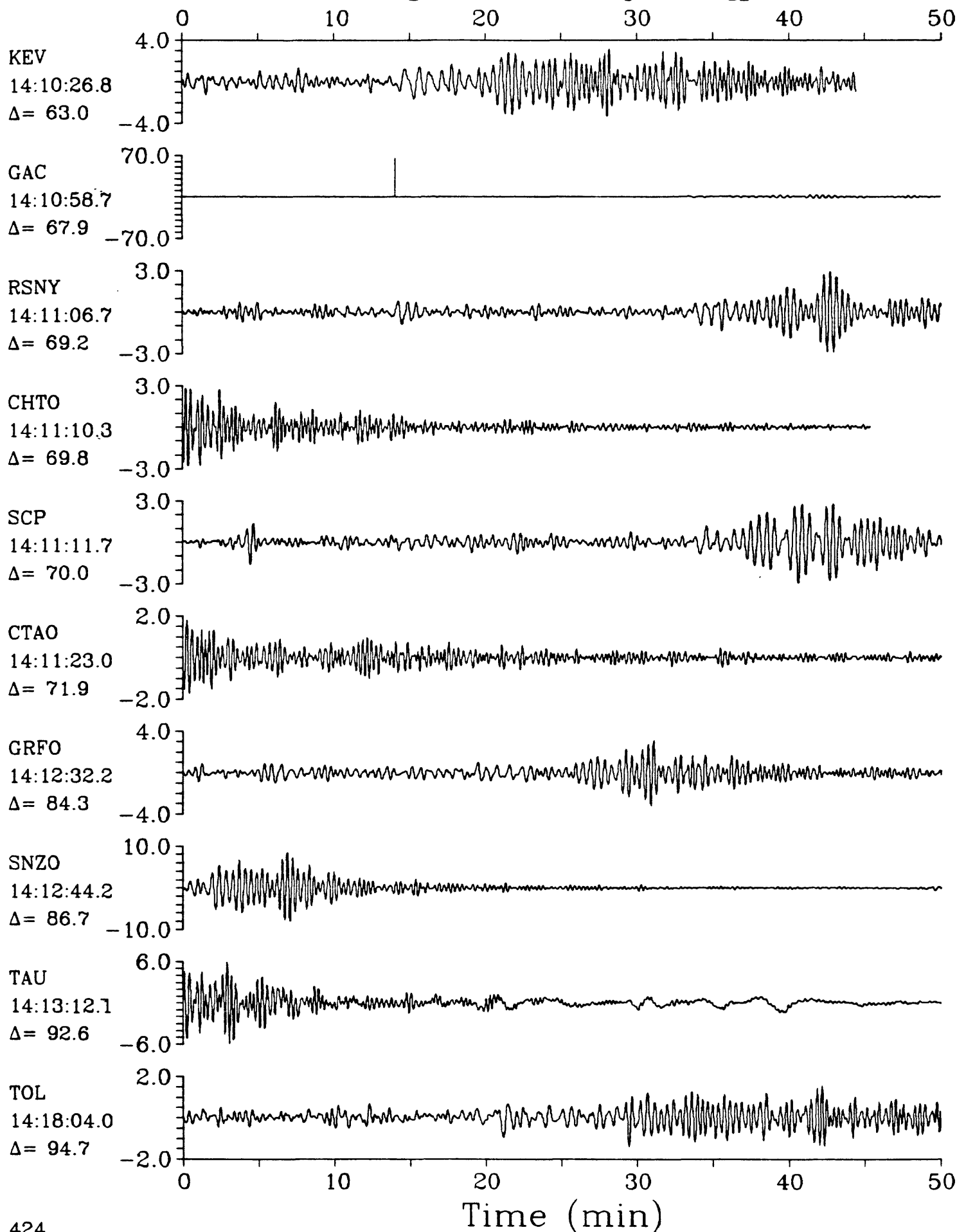
Aleutian Islands Region  $h=28.1$   $m_b=5.3$   $M_{sz}=5.7$ 



LPZ

05 March 1985 14:01:02.13

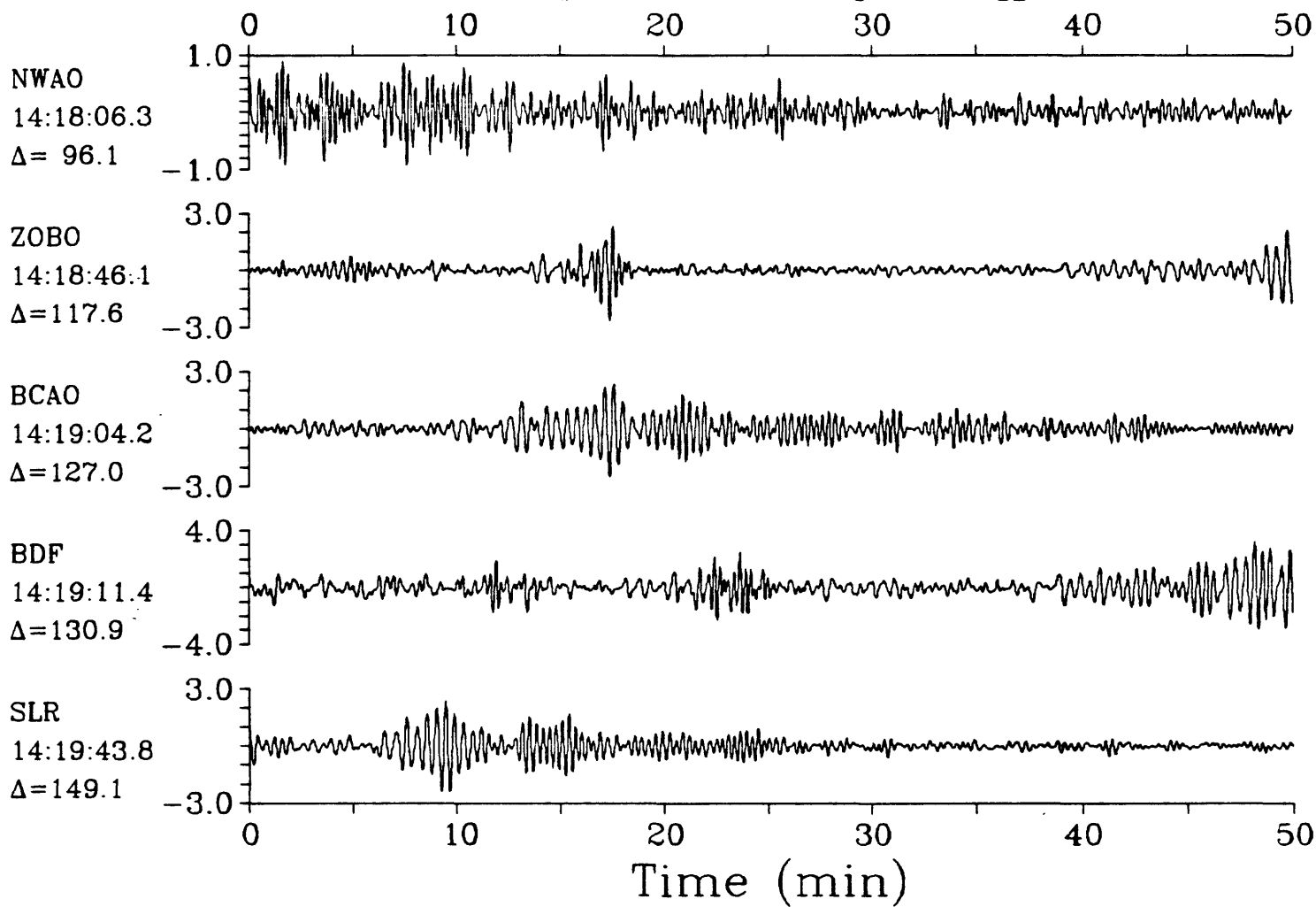
LPZ

Aleutian Islands Region  $h=28.1$   $m_b=5.3$   $M_{sz}=5.7$ 

LPZ

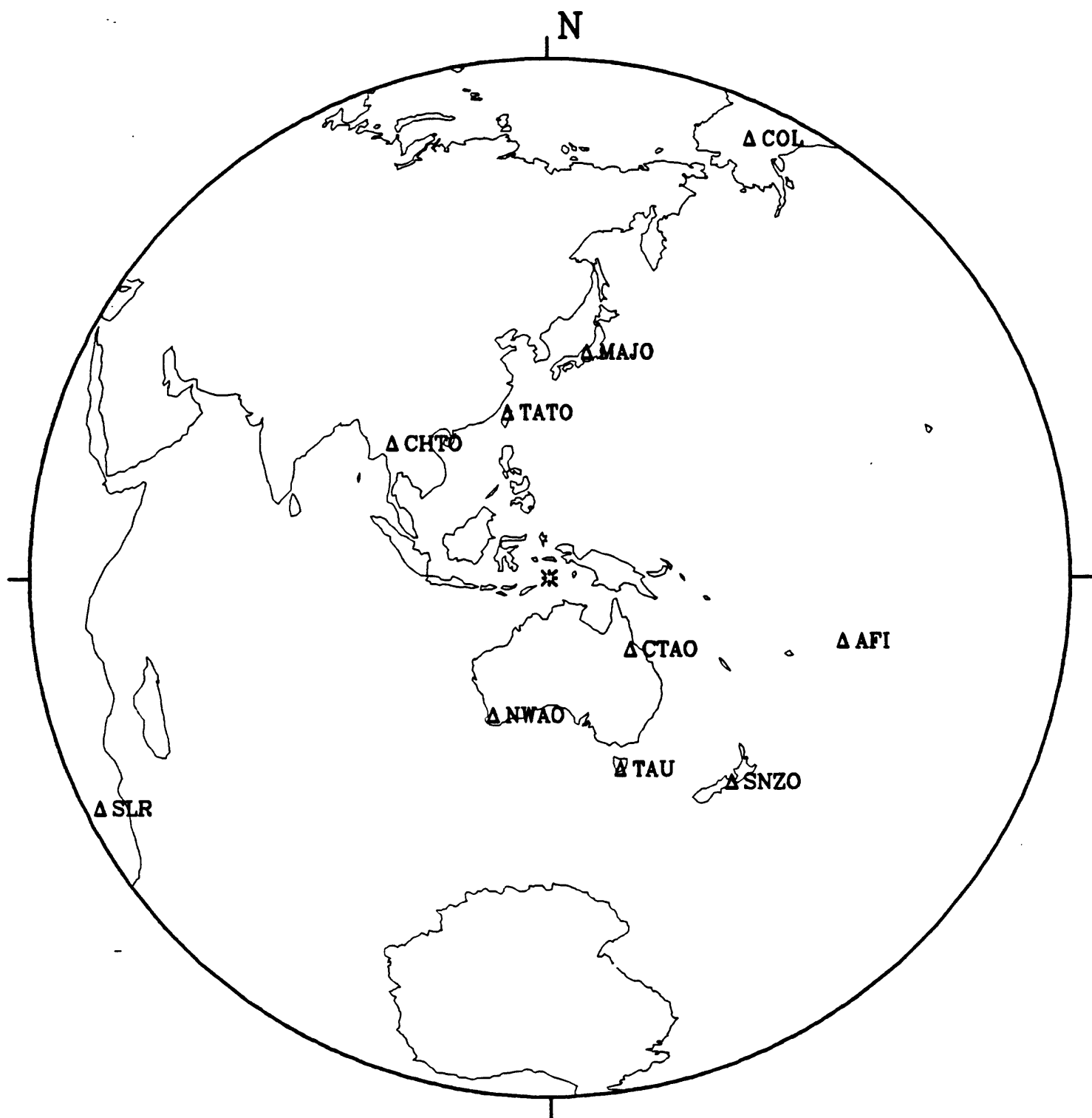
05 March 1985 14:01:02.13

LPZ

Aleutian Islands Region  $h=28.1$   $m_b=5.3$   $M_{sz}=5.7$ 

05 March 1985 21:06:57.72

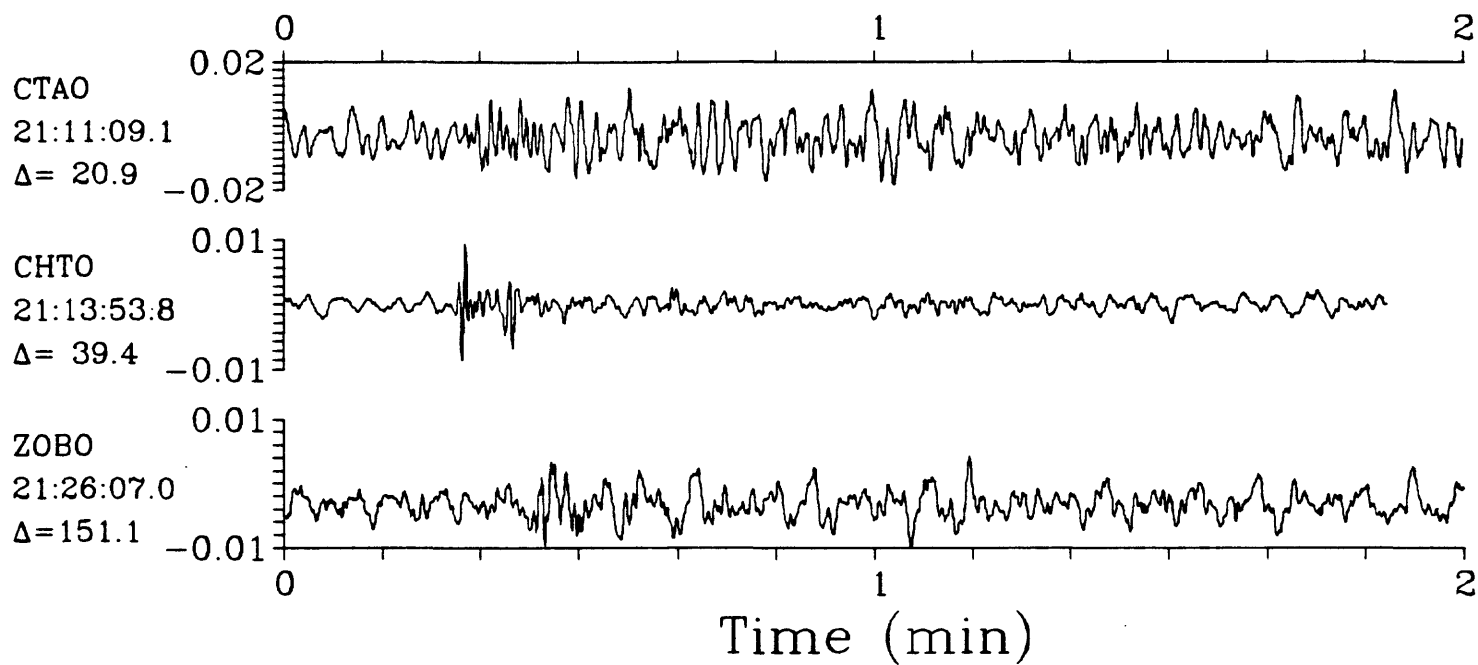
## Banda Sea



SPZ

05 March 1985 21:06:57.72  
Banda Sea  $h=191.2$   $m_b=5.7$ 

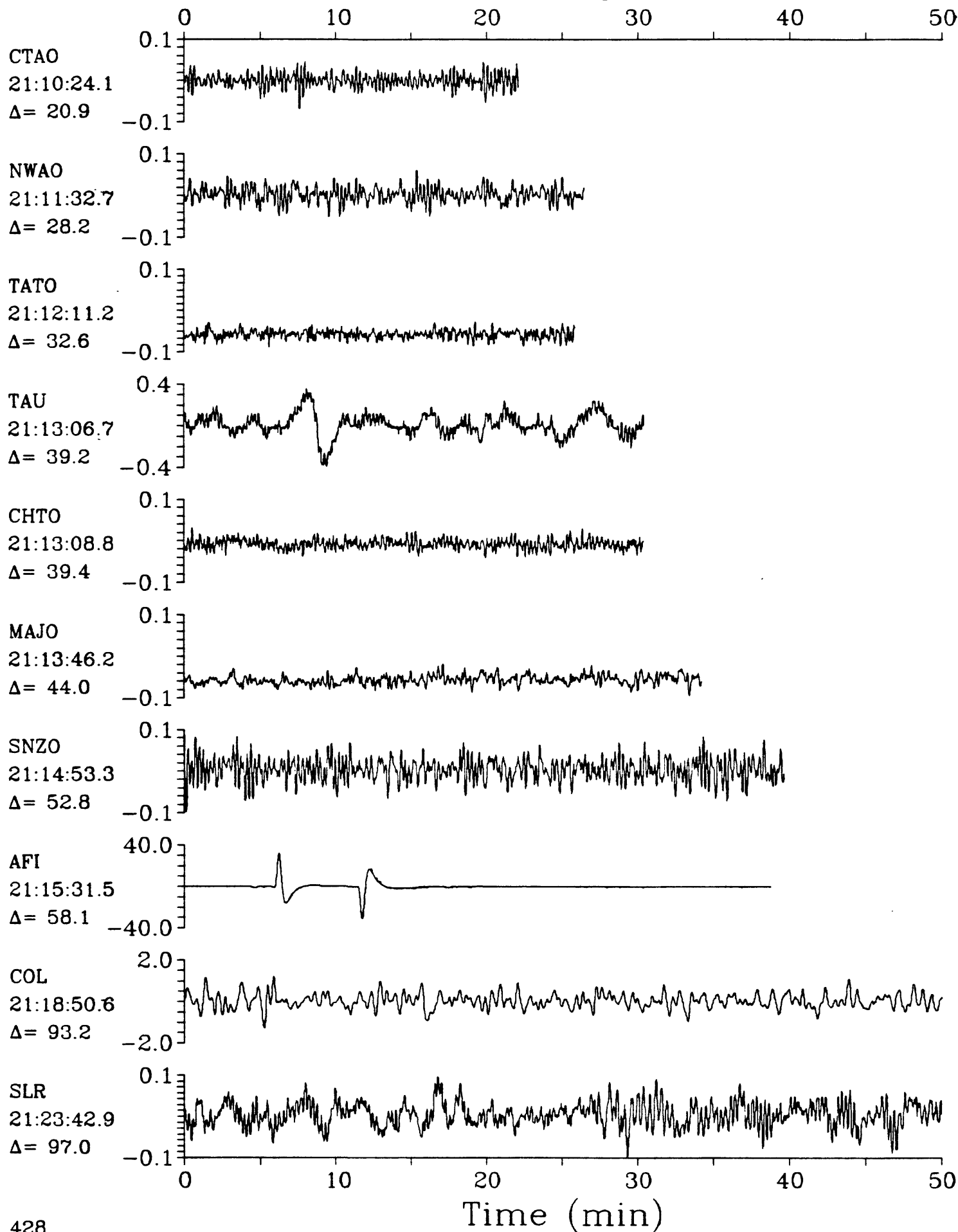
SPZ



LPZ

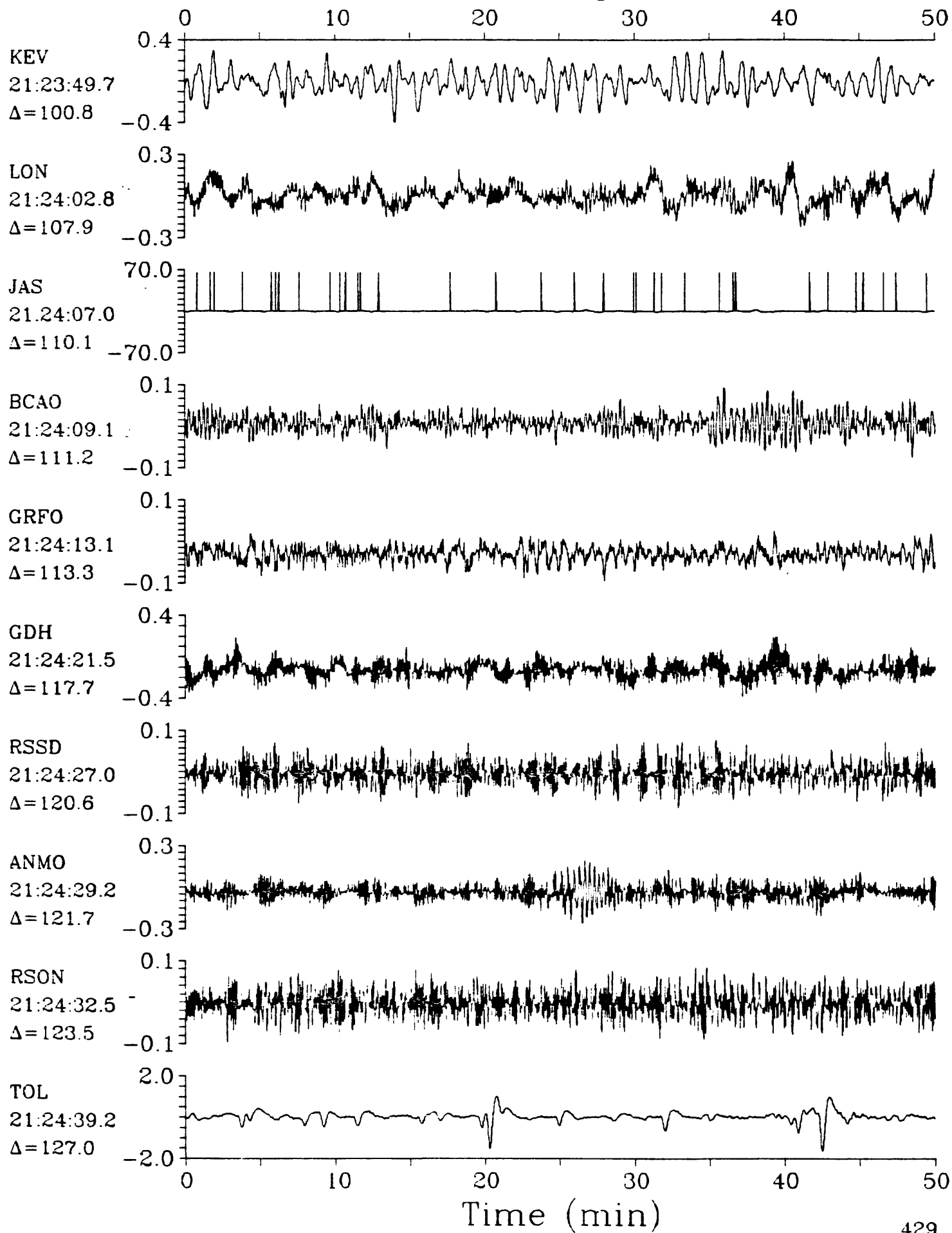
05 March 1985 21:06:57.72  
Banda Sea  $h=191.2$   $m_b=5.7$ 

LPZ



LPZ 05 March 1985 21:06:57.72  
Banda Sea  $h=191.2$   $m_b=5.7$

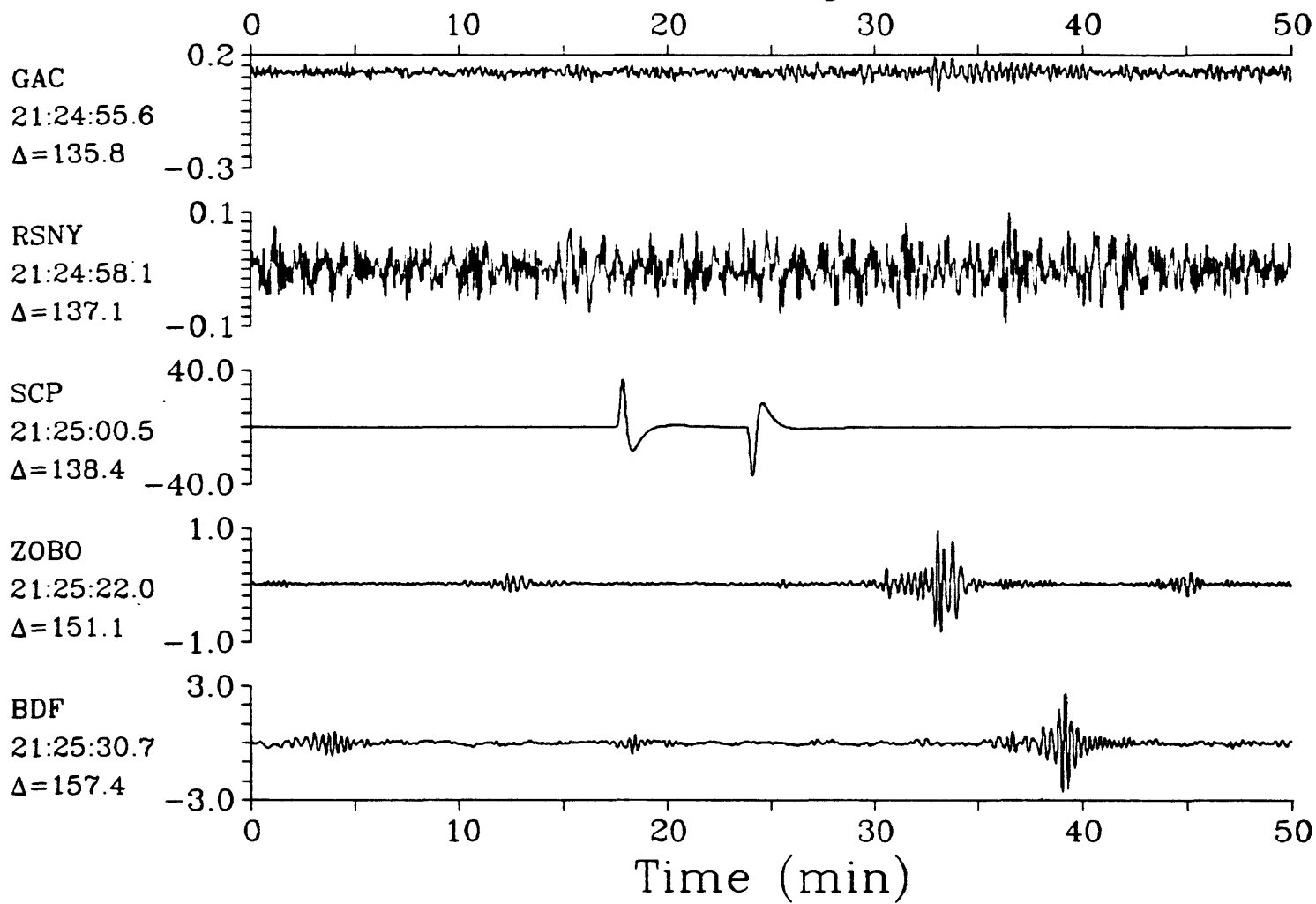
LPZ



LPZ

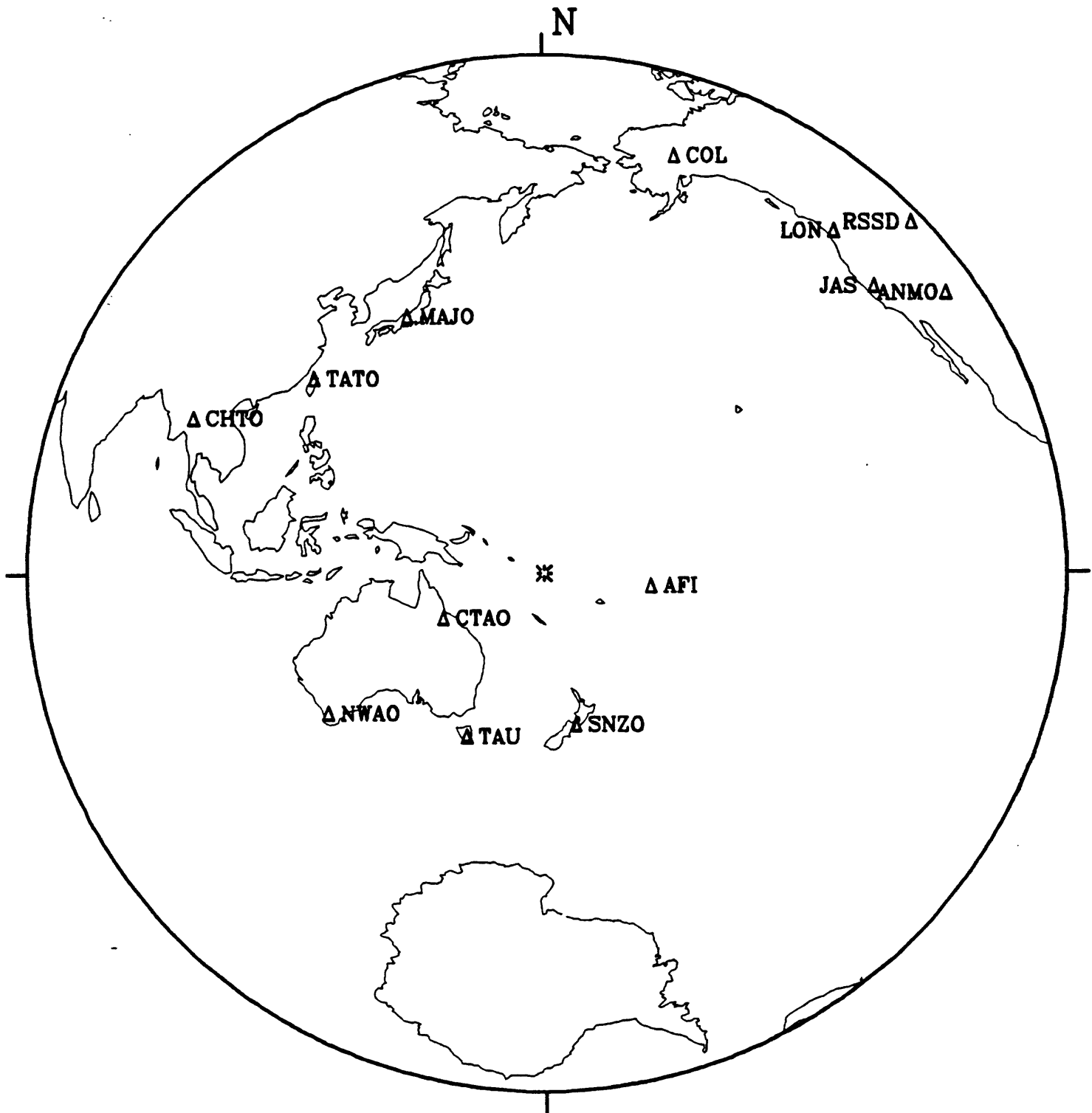
05 March 1985 21:06:57.72  
Banda Sea  $h=191.2$   $m_b=5.7$ 

LPZ



06 March 1985 04:34:57.79

## Santa Cruz Islands

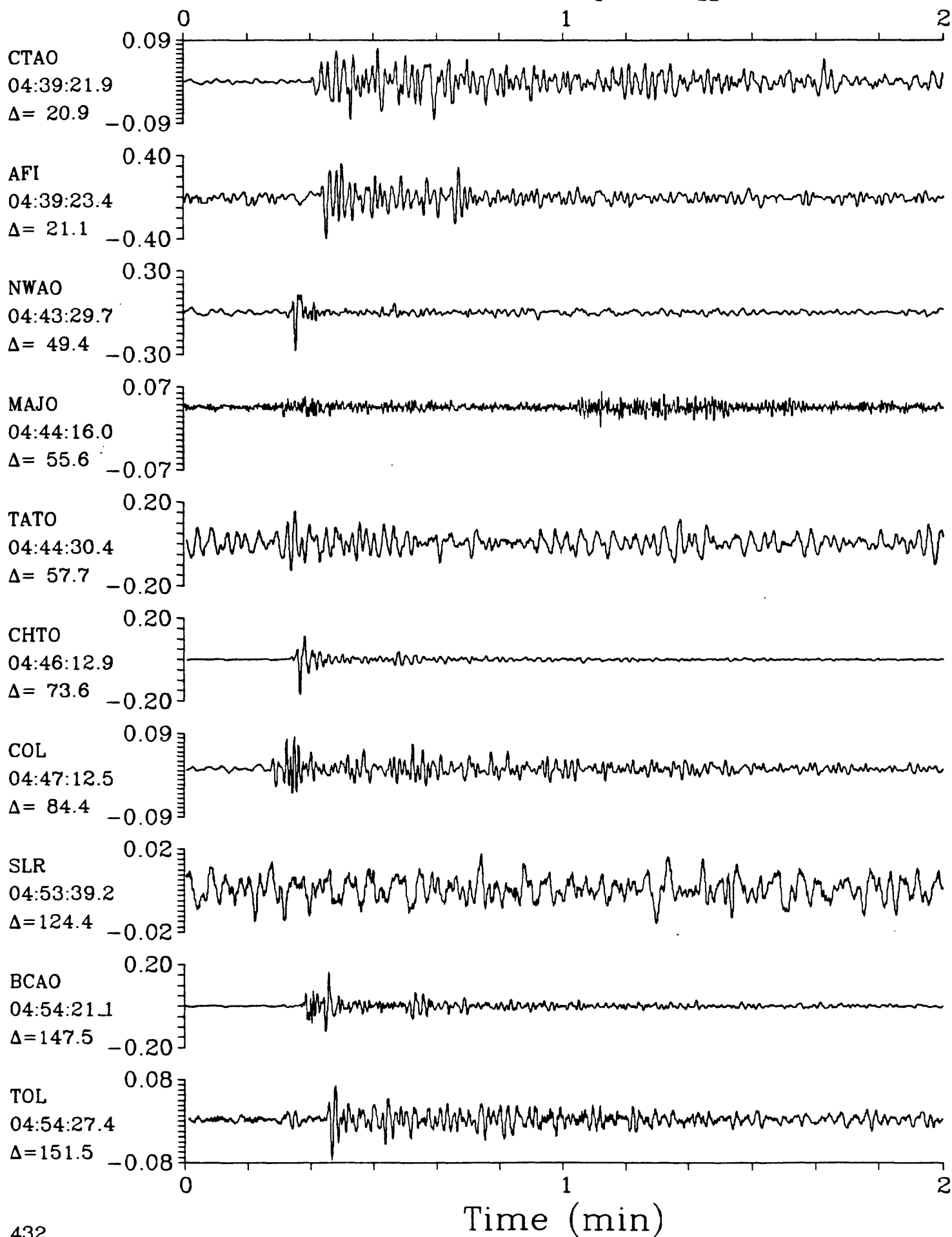




SPZ

06 March 1985 04:34:57.79

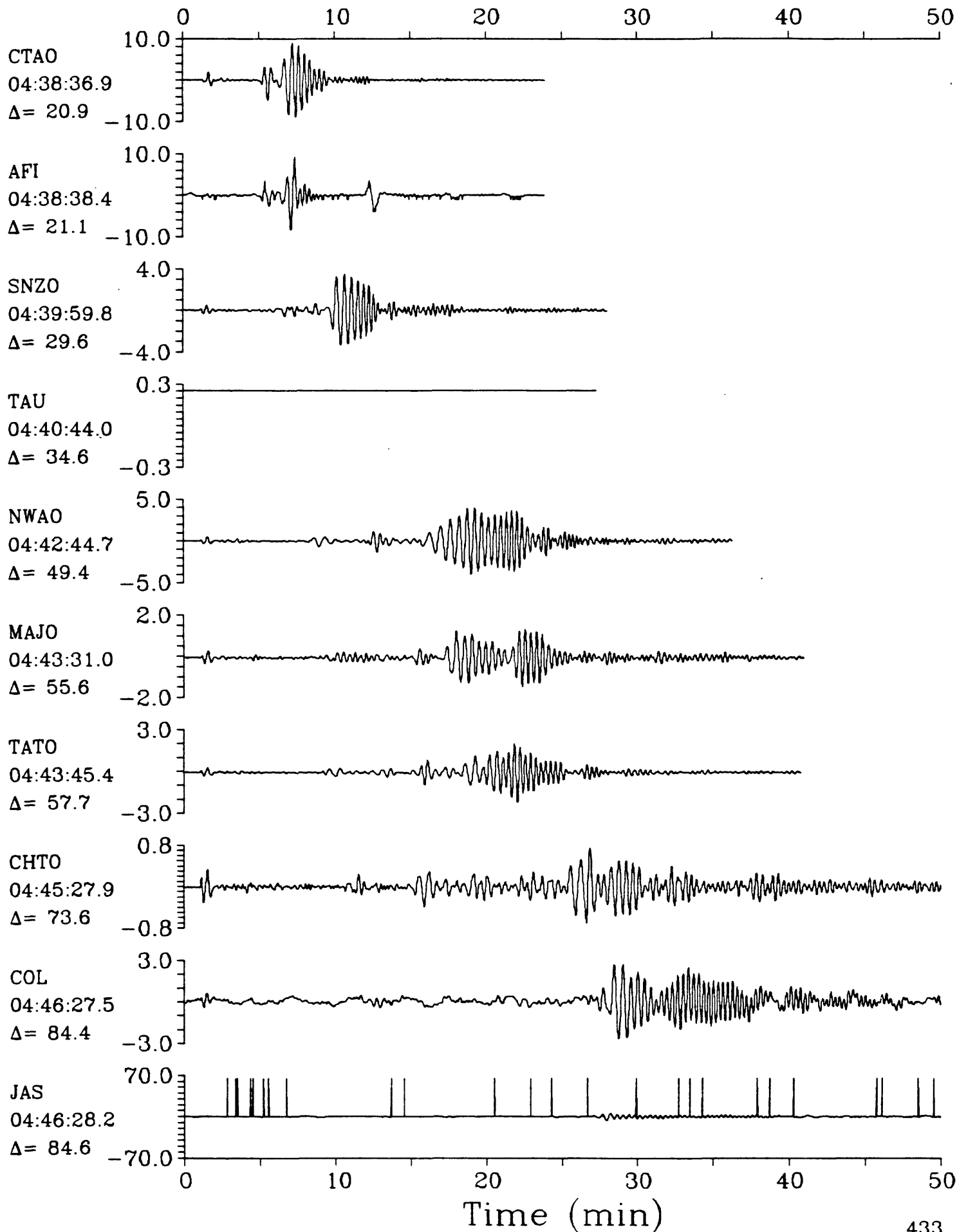
SPZ

Santa Cruz Islands  $h=33.0$   $m_b=5.7$   $M_{sz}=5.3$ 

LPZ

06 March 1985 04:34:57.79

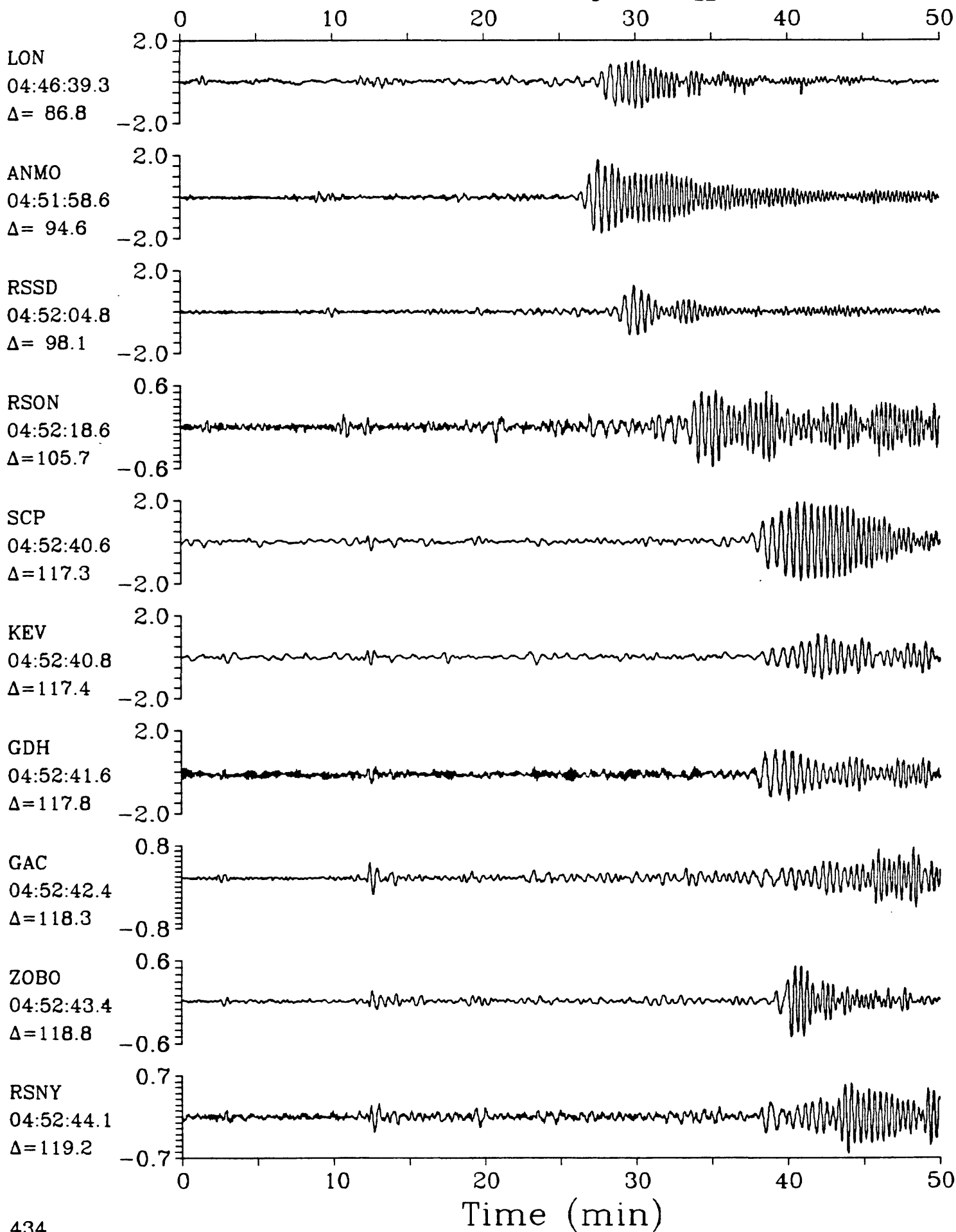
LPZ

Santa Cruz Islands  $h=33.0$   $m_b=5.7$   $M_{sz}=5.3$ 

LPZ

06 March 1985 04:34:57.79

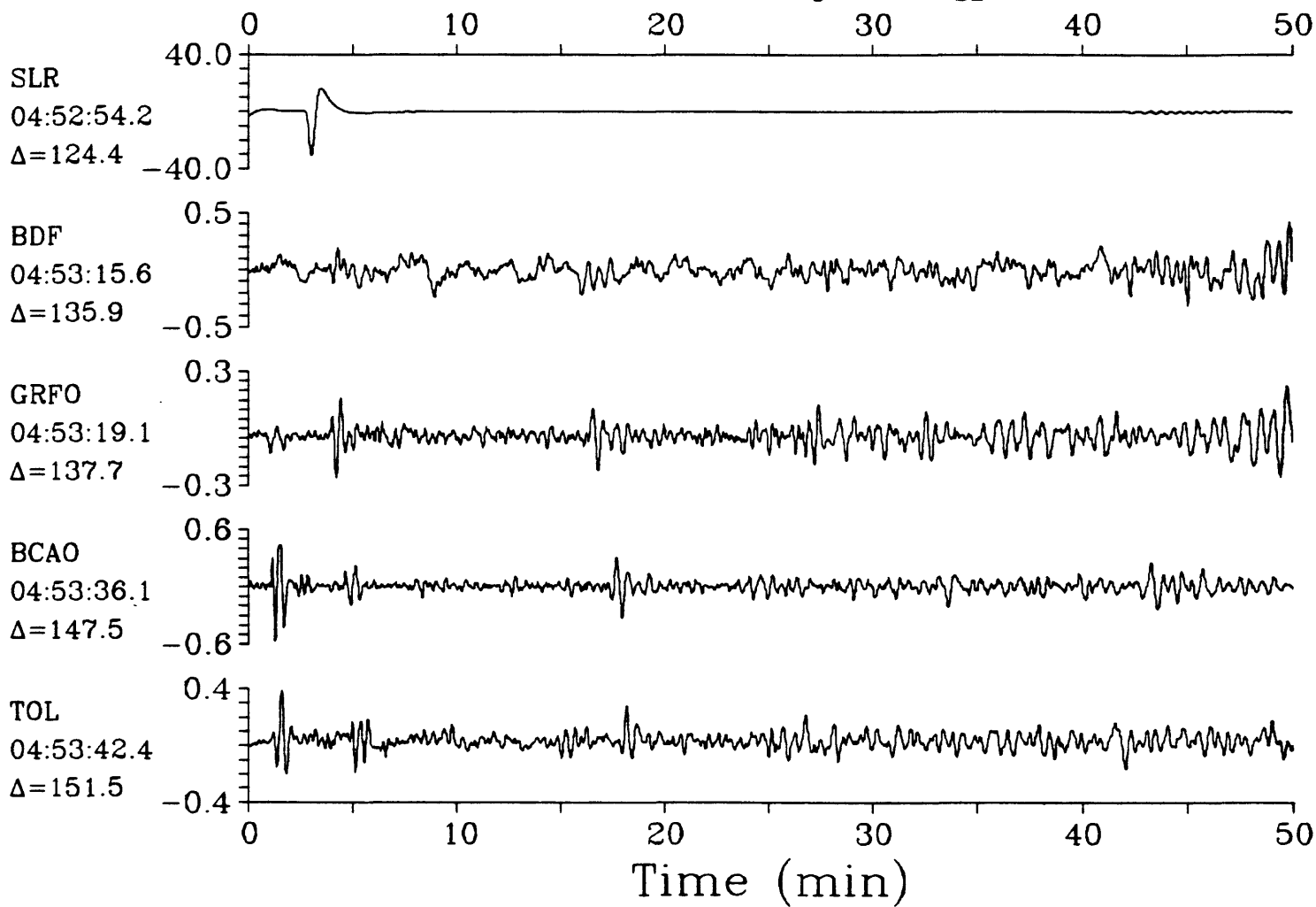
LPZ

Santa Cruz Islands  $h=33.0$   $m_b=5.7$   $M_{sz}=5.3$ 

LPZ

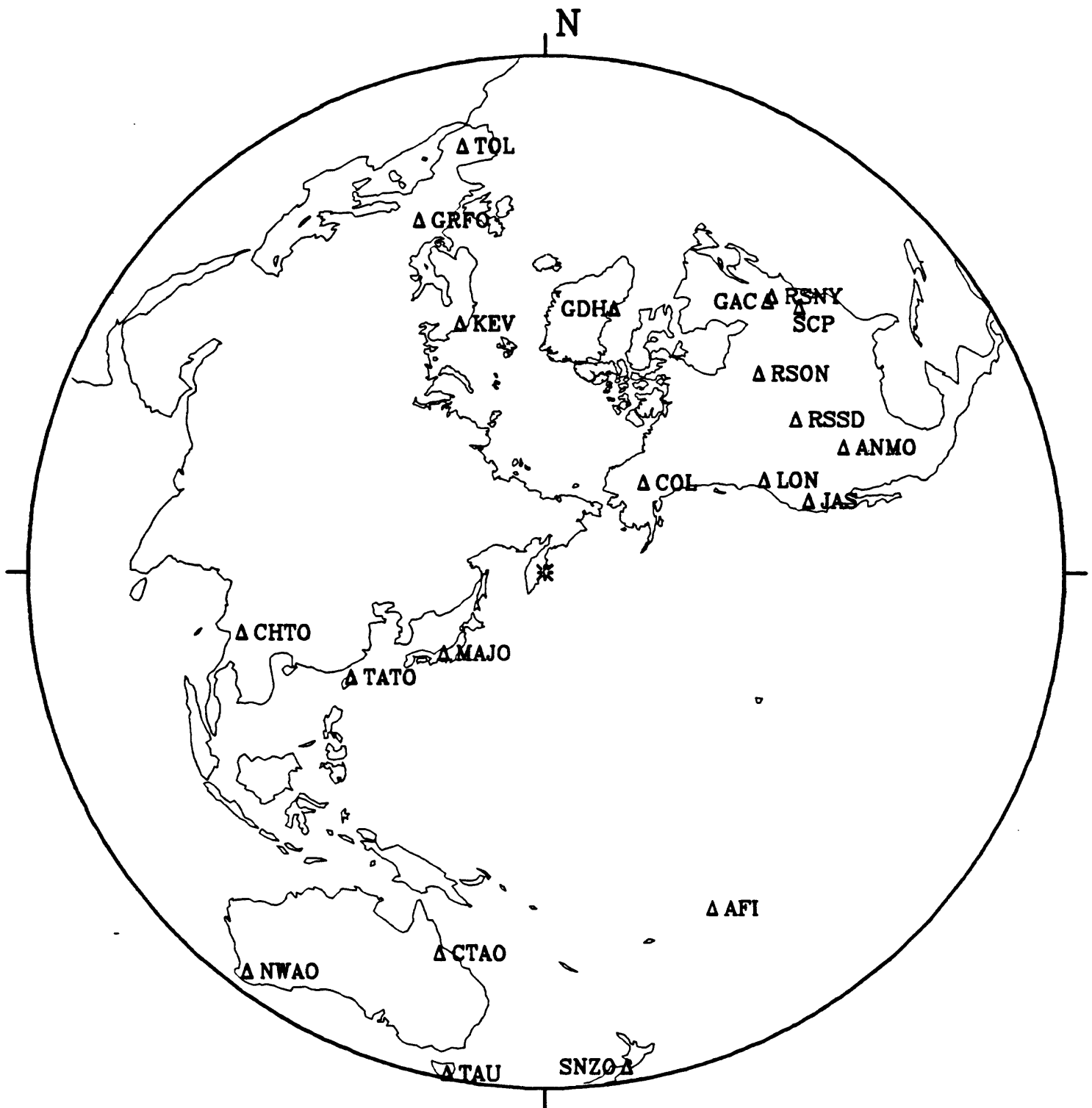
06 March 1985 04:34:57.79

LPZ

Santa Cruz Islands  $h=33.0$   $m_b=5.7$   $M_{sz}=5.3$ 

06 March 1985 22:31:51.78

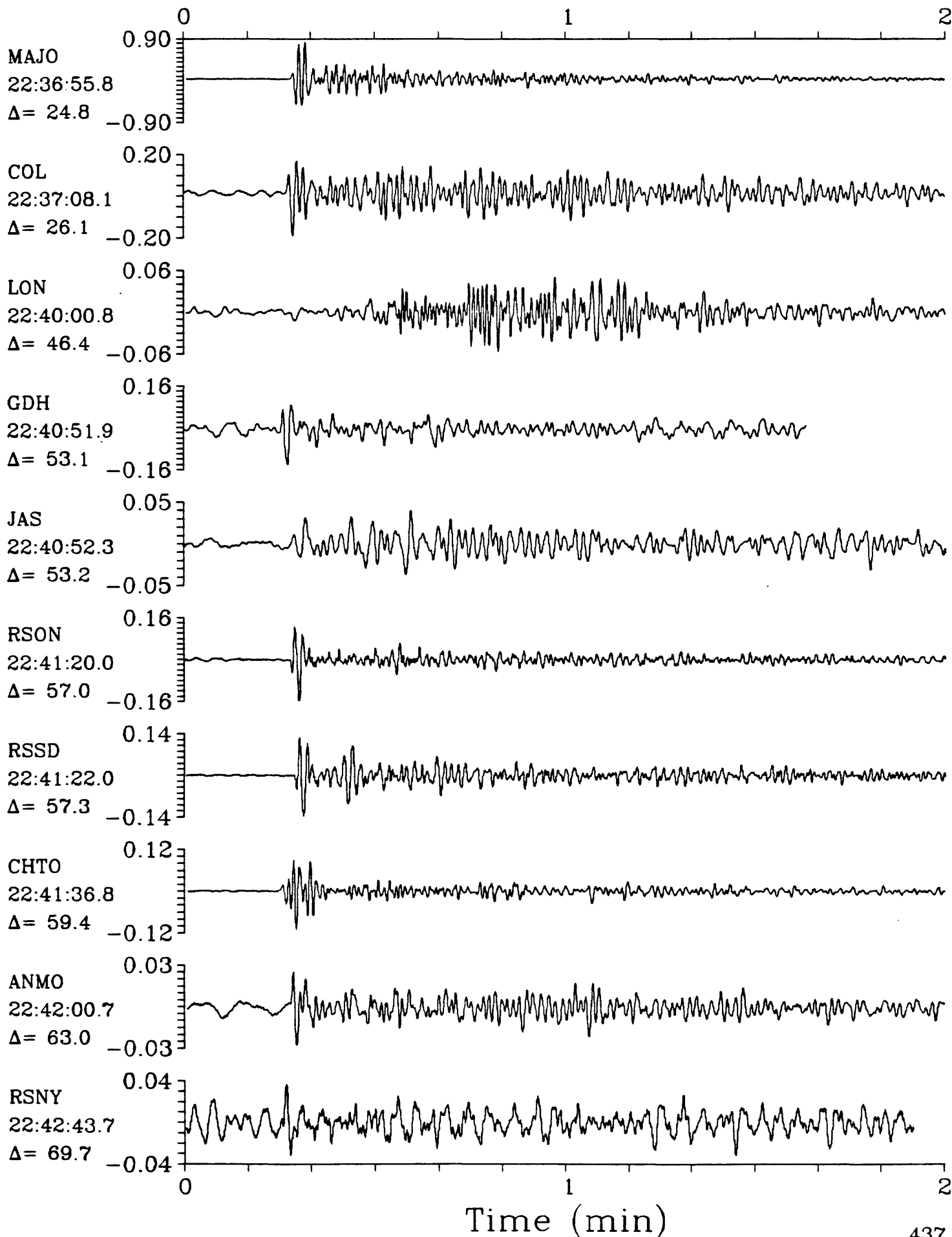
## Near East Coast of Kamchatka



SPZ

06 March 1985 22:31:51.78

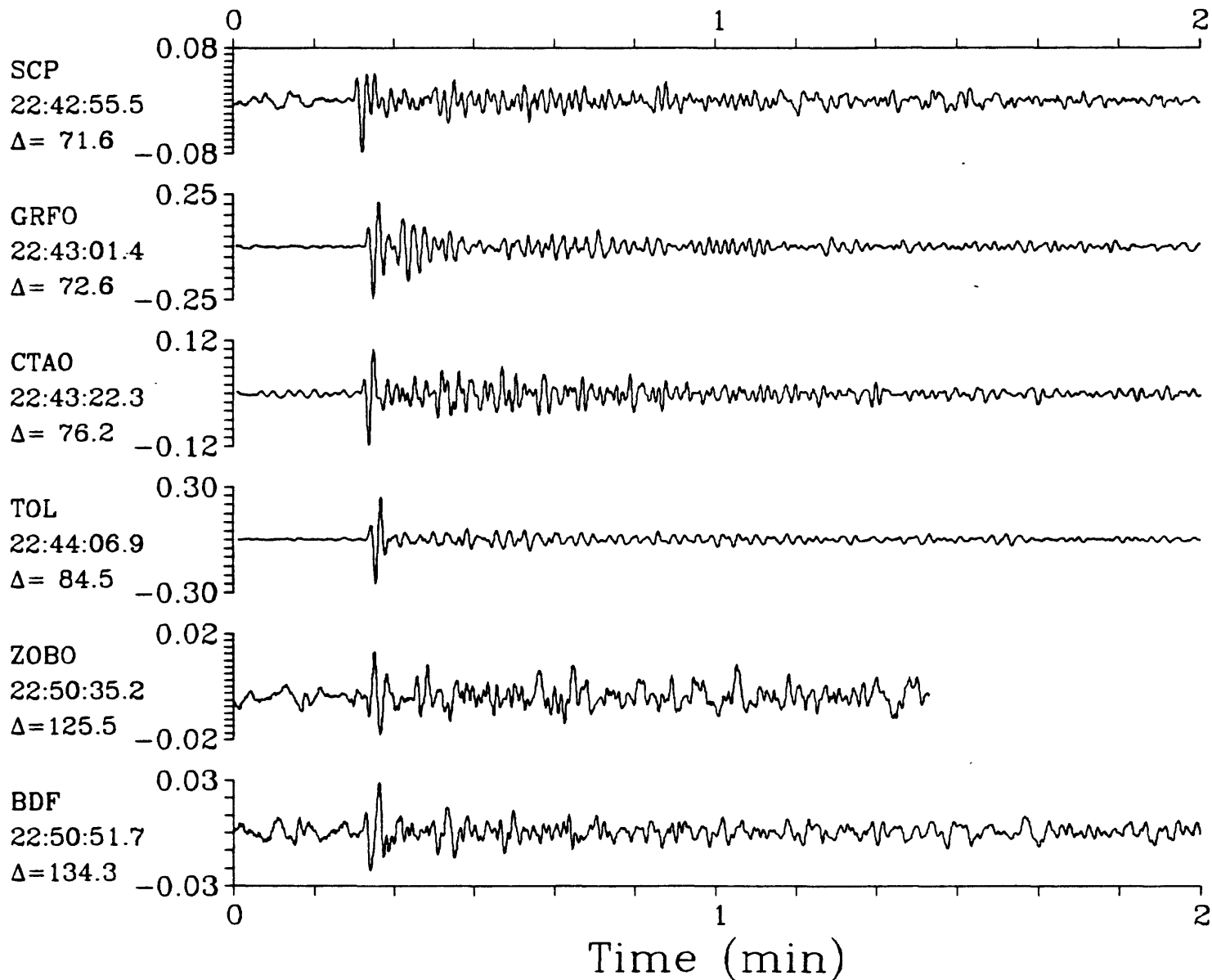
SPZ

Near East Coast of Kamchatka  $h=33.0$   $m_b=5.8$   $M_{sz}=5.4$ 

SPZ

06 March 1985 22:31:51.78

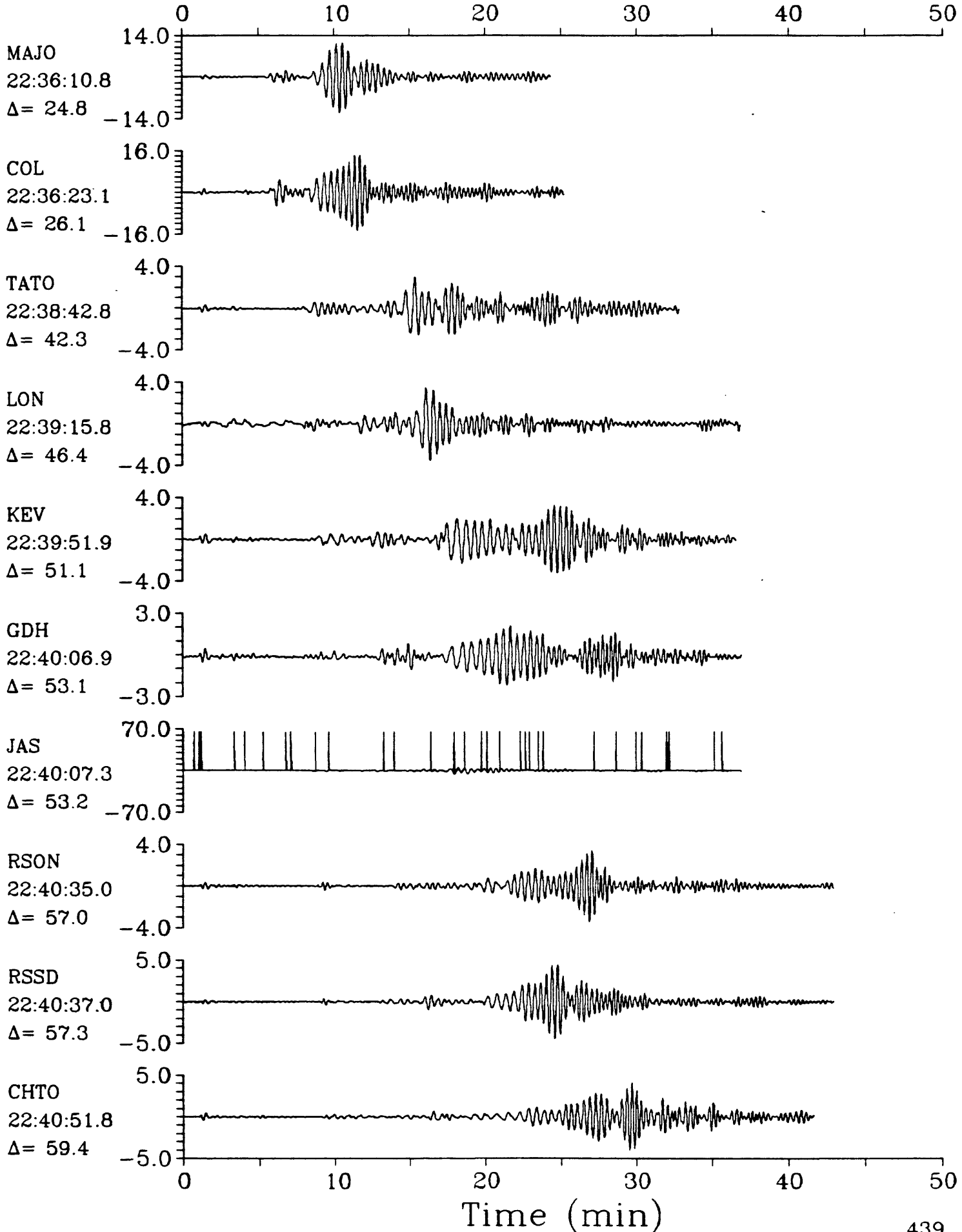
SPZ

Near East Coast of Kamchatka  $h=33.0$   $m_b=5.8$   $M_{sz}=5.4$ 

LPZ

06 March 1985 22:31:51.78

LPZ

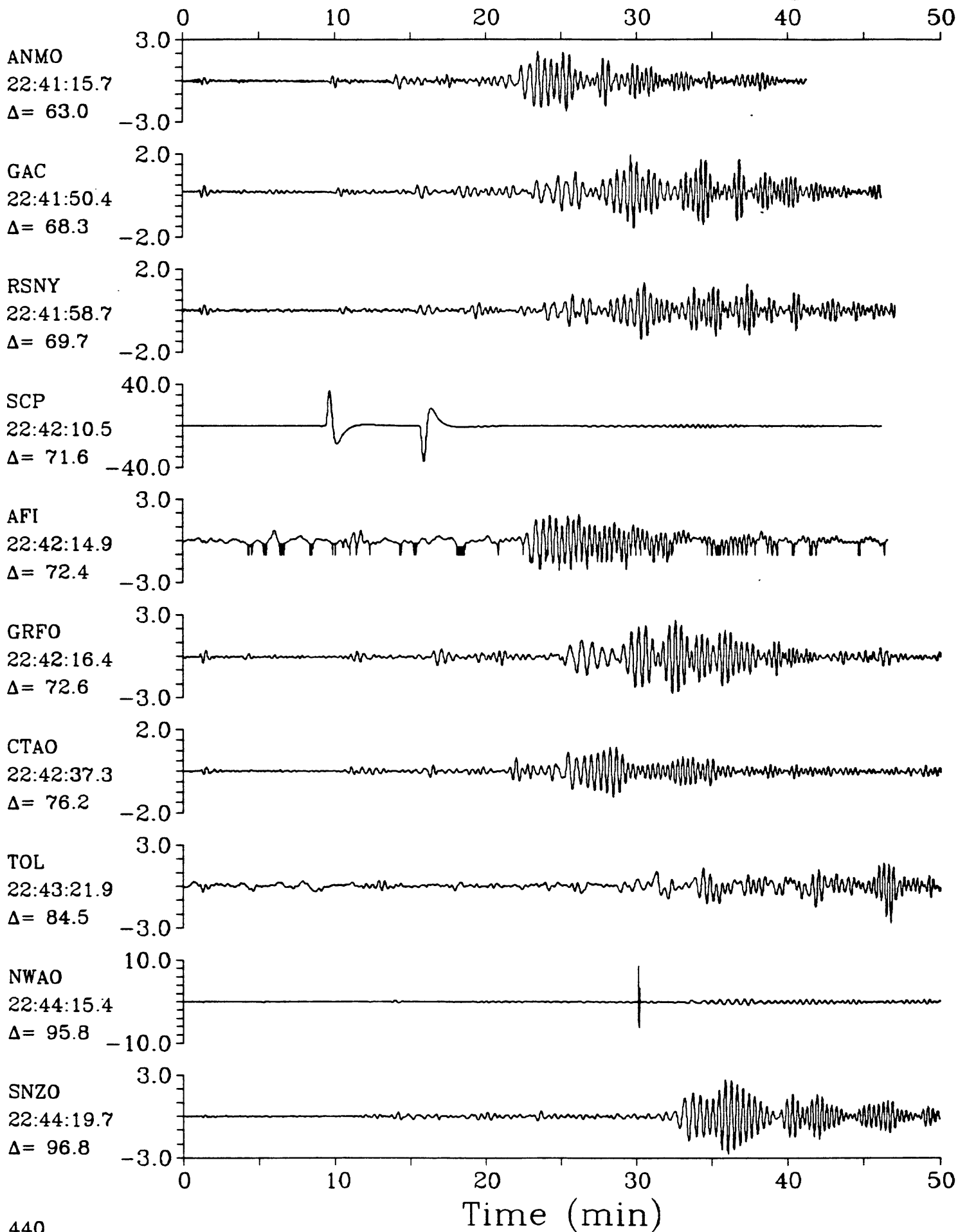
Near East Coast of Kamchatka  $h=33.0$   $m_b=5.8$   $M_{sz}=5.4$ 



LPZ

06 March 1985 22:31:51.78

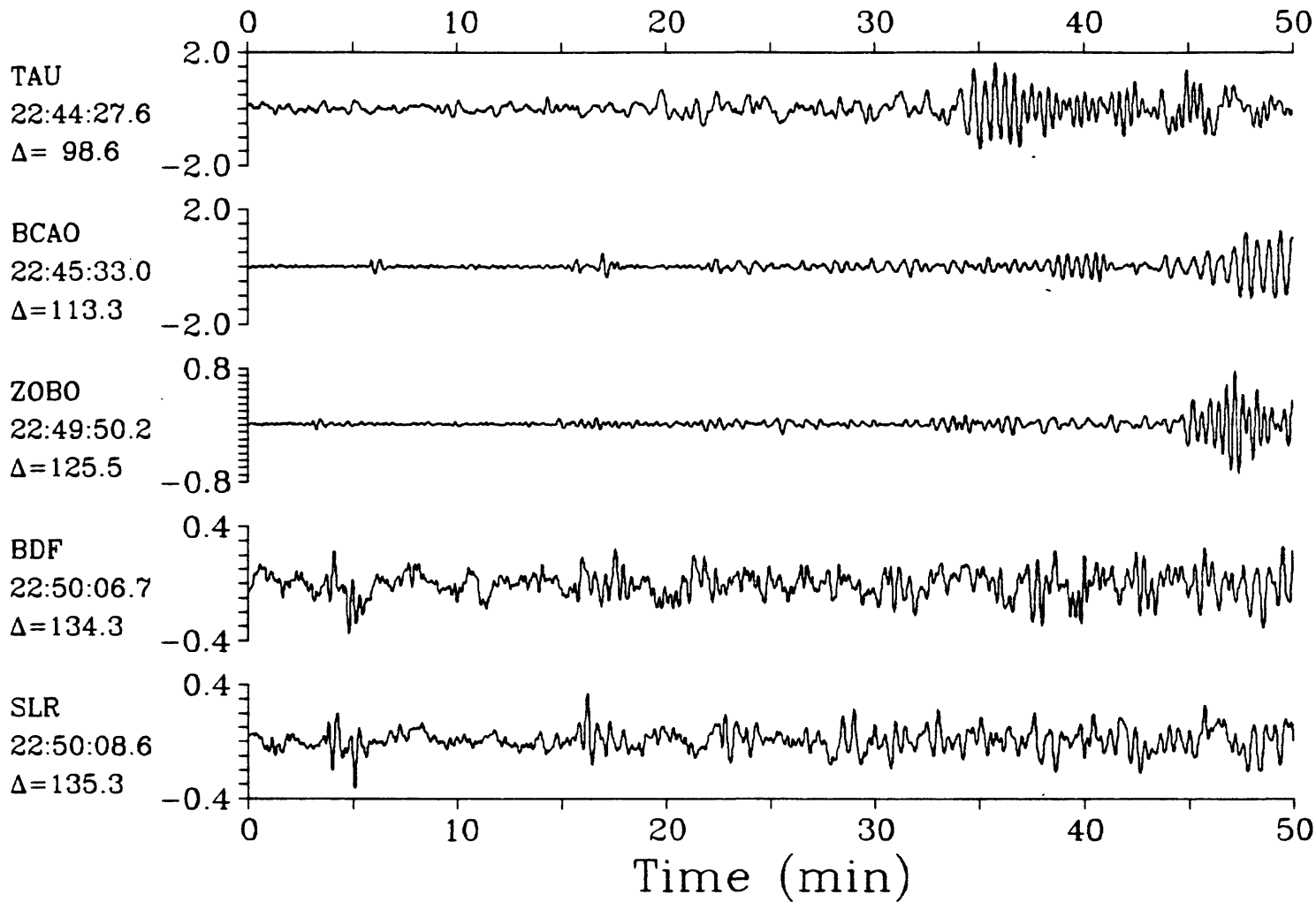
LPZ

Near East Coast of Kamchatka  $h=33.0$   $m_b=5.8$   $M_{sz}=5.4$ 

LPZ

06 March 1985 22:31:51.78

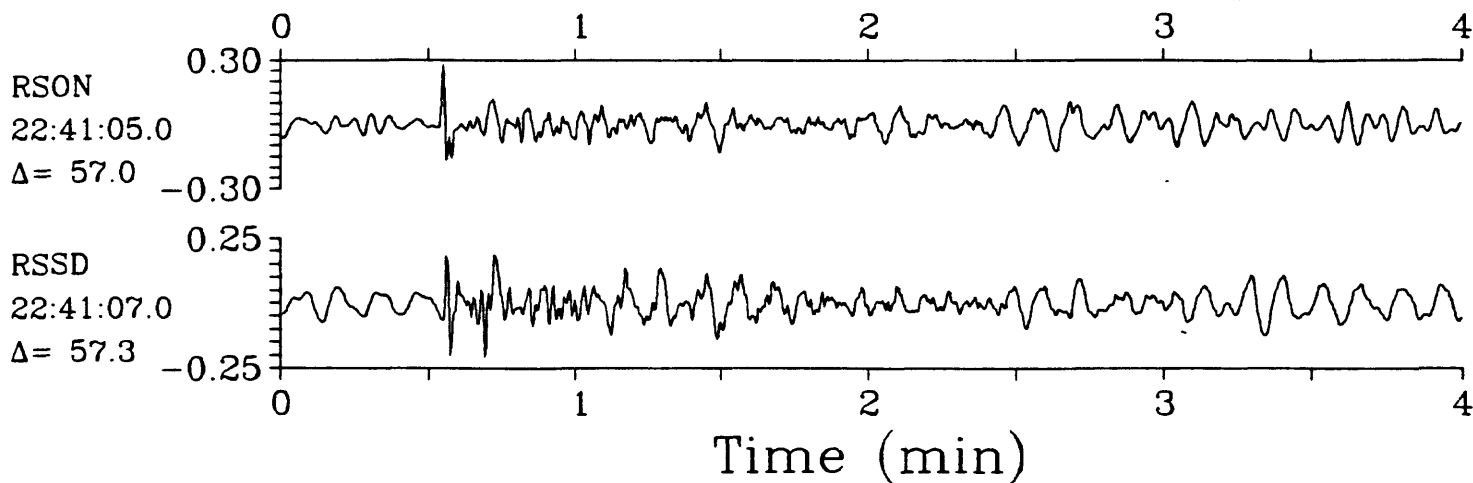
LPZ

Near East Coast of Kamchatka  $h=33.0$   $m_b=5.8$   $M_{sz}=5.4$ 

IPZ

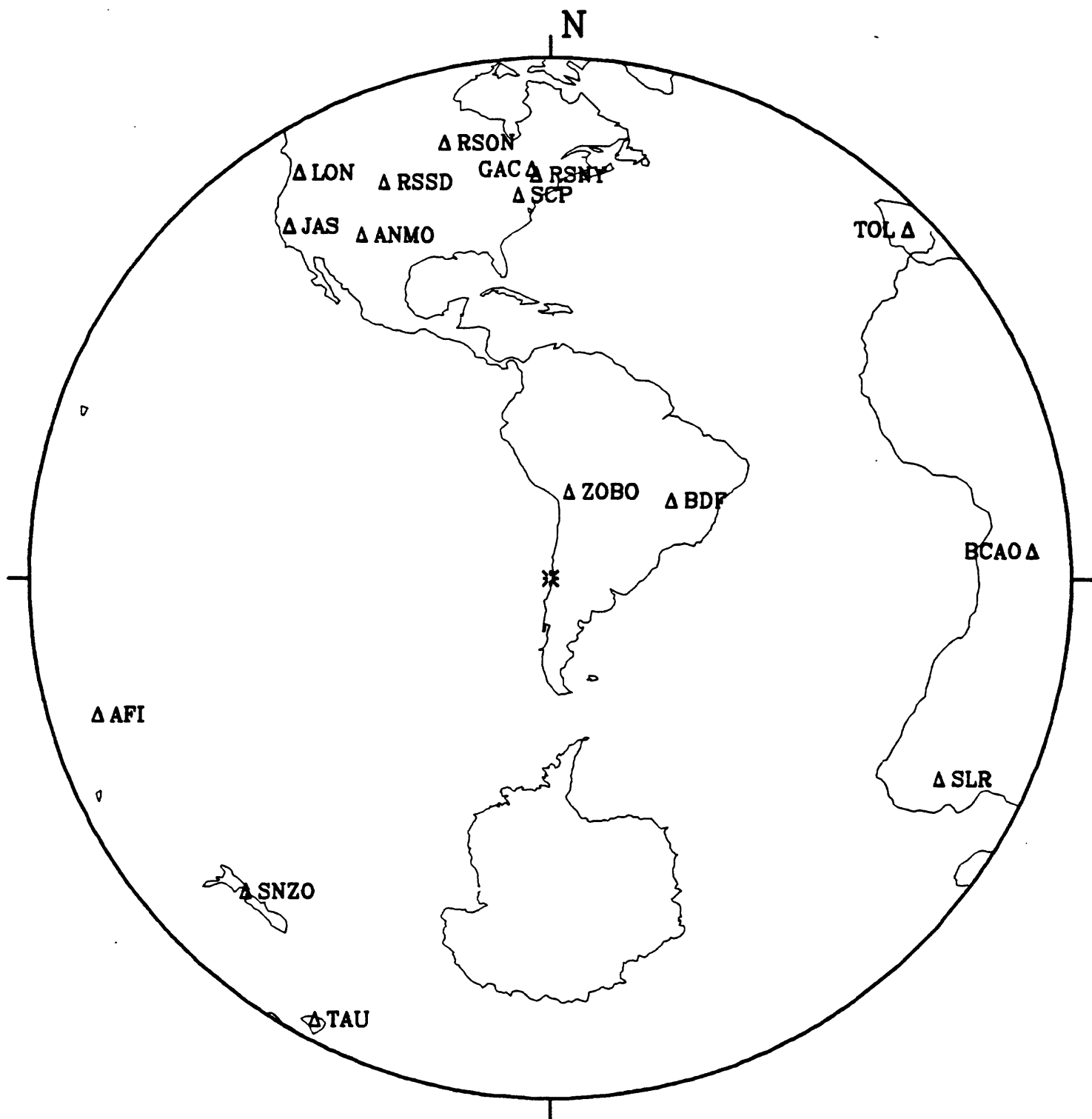
06 March 1985 22:31:51.78

IPZ

Near East Coast of Kamchatka  $h=33.0$   $m_b=5.8$   $M_{sz}=5.4$ 

07 March 1985 00:54:56.96

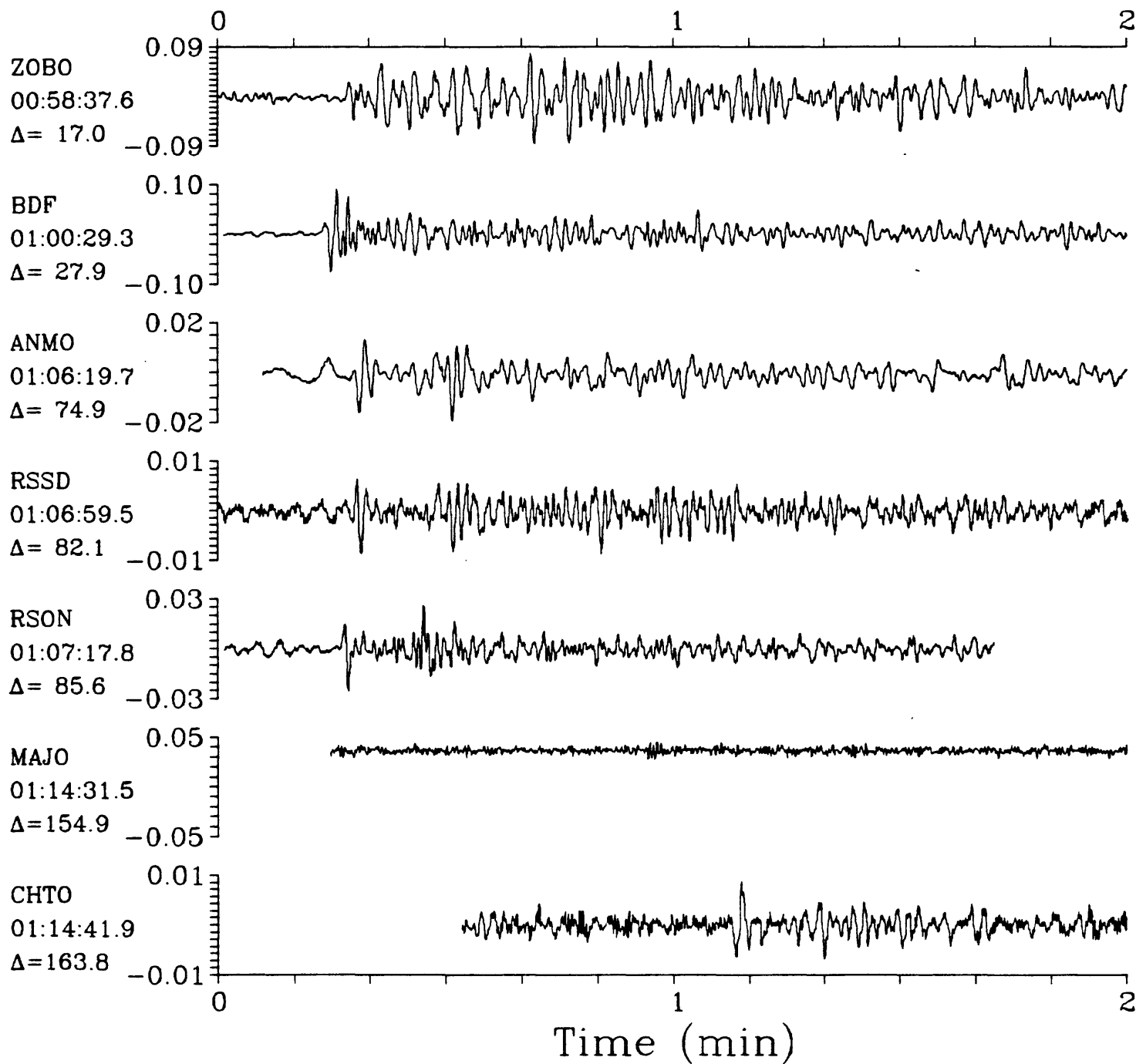
Off Coast of Central Chile



SPZ

07 March 1985 00:54:56.96

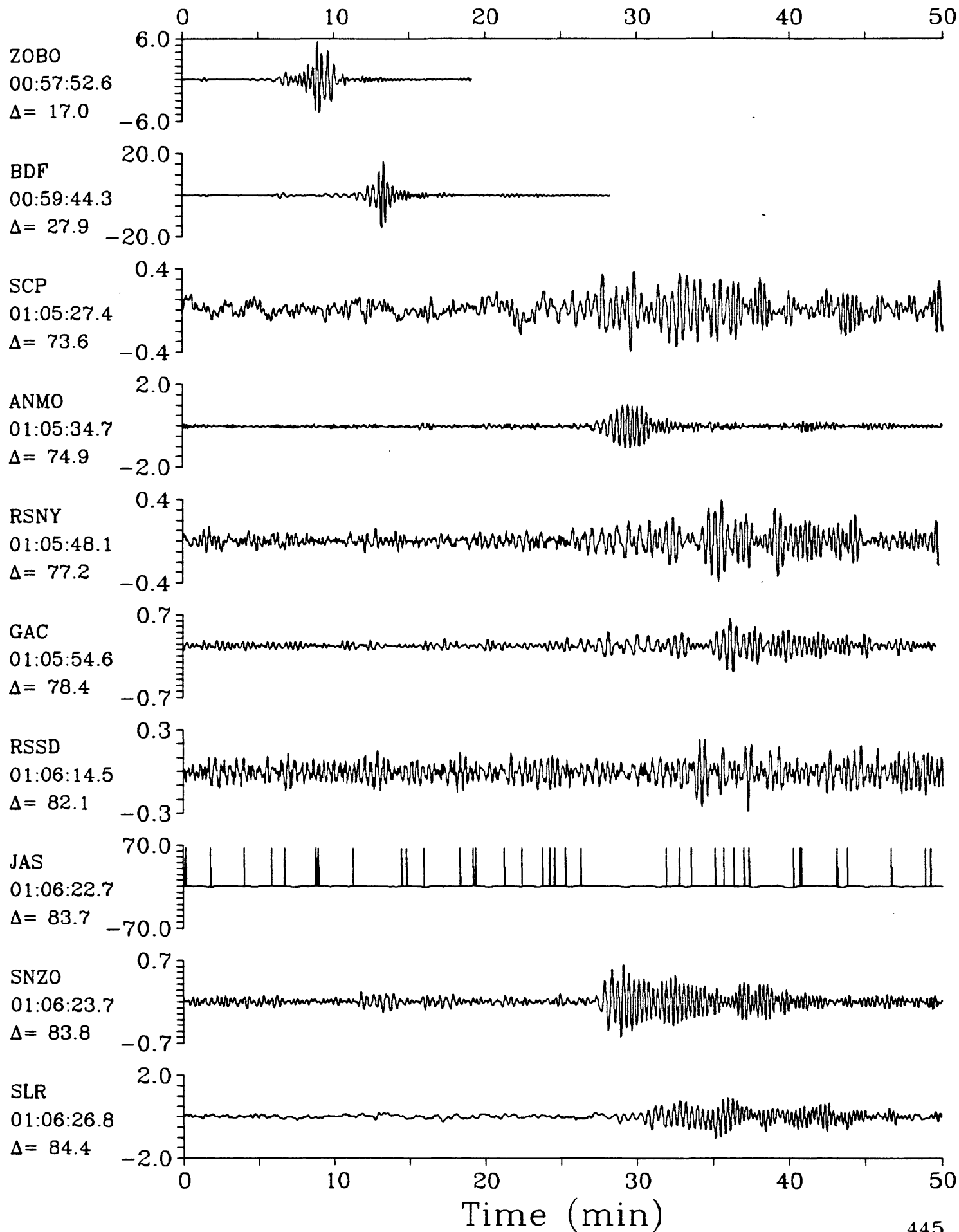
SPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=5.3$ 

LPZ

07 March 1985 00:54:56.96

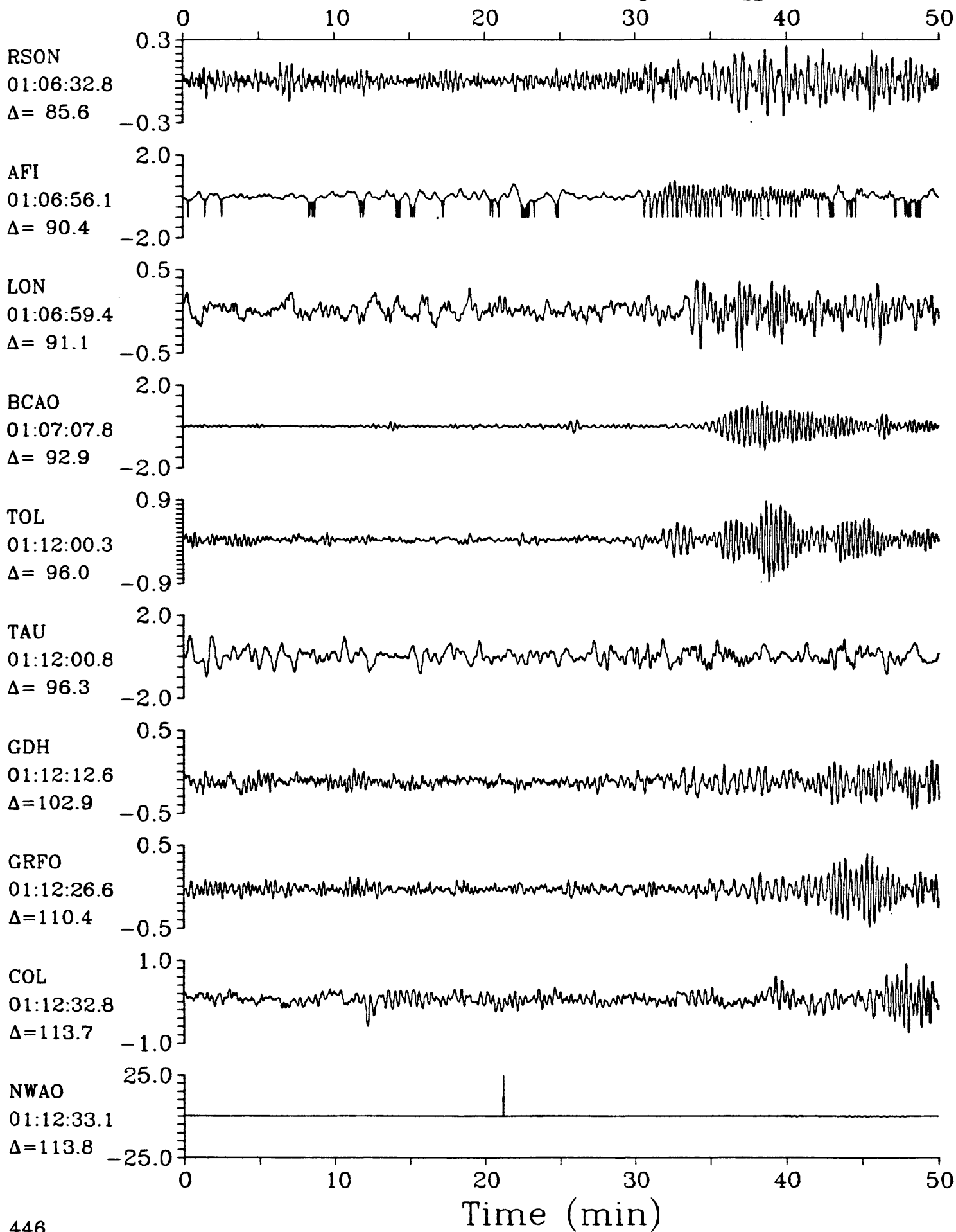
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=5.3$ 

LPZ

07 March 1985 00:54:56.96

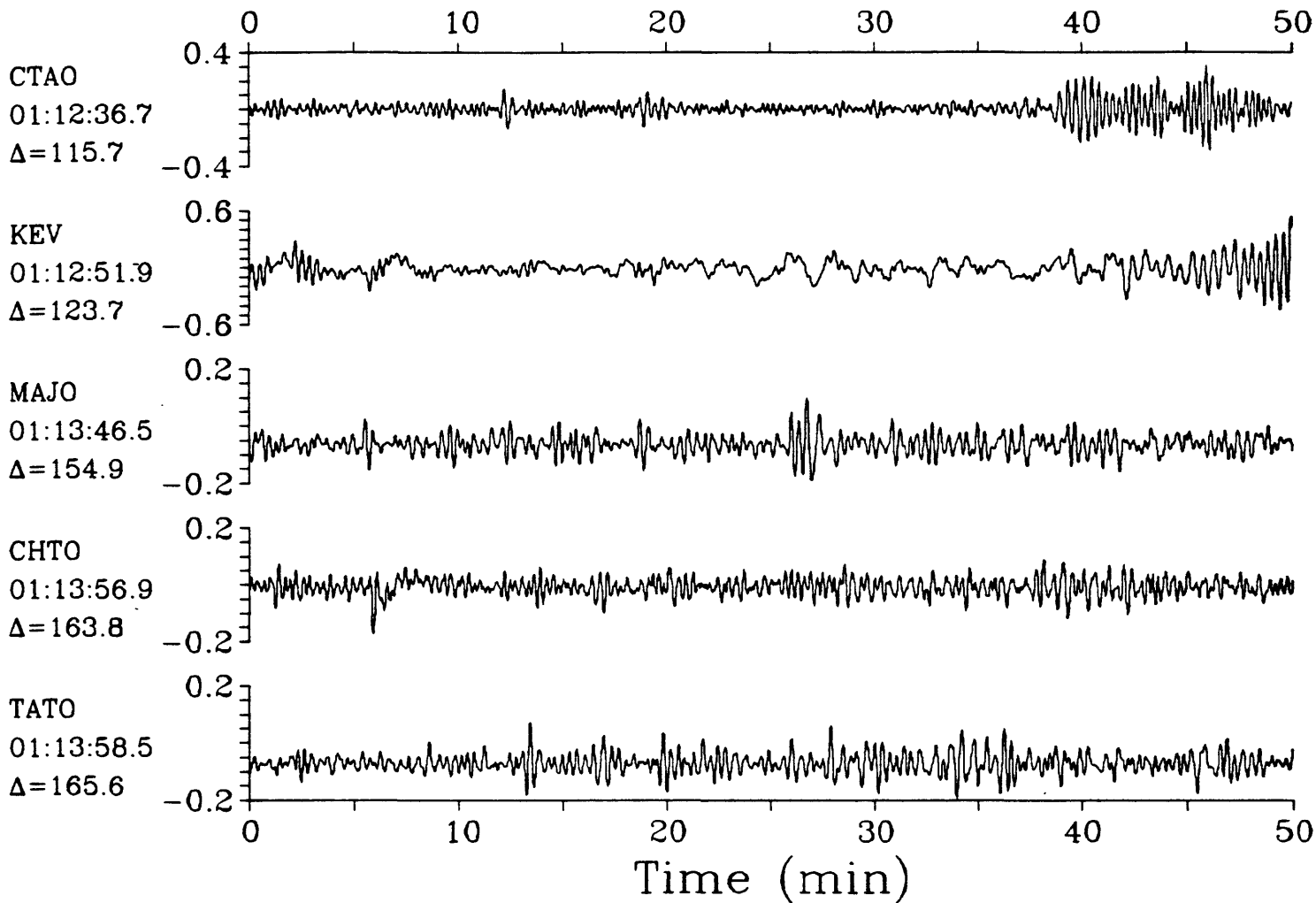
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=5.3$ 

LPZ

07 March 1985 00:54:56.96

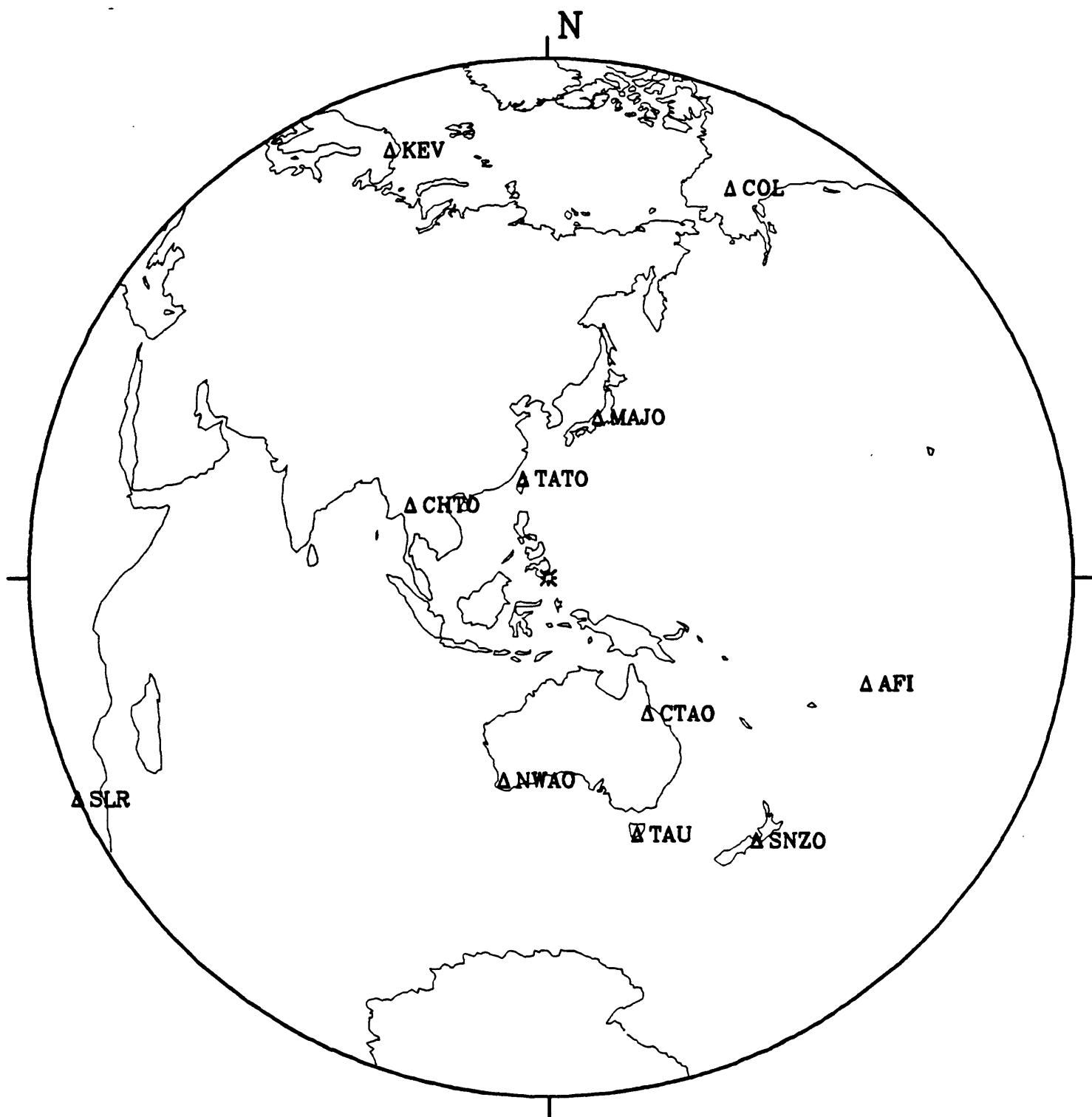
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.5$   $M_{sz}=5.3$ 



07 March 1985 11:19:42.19

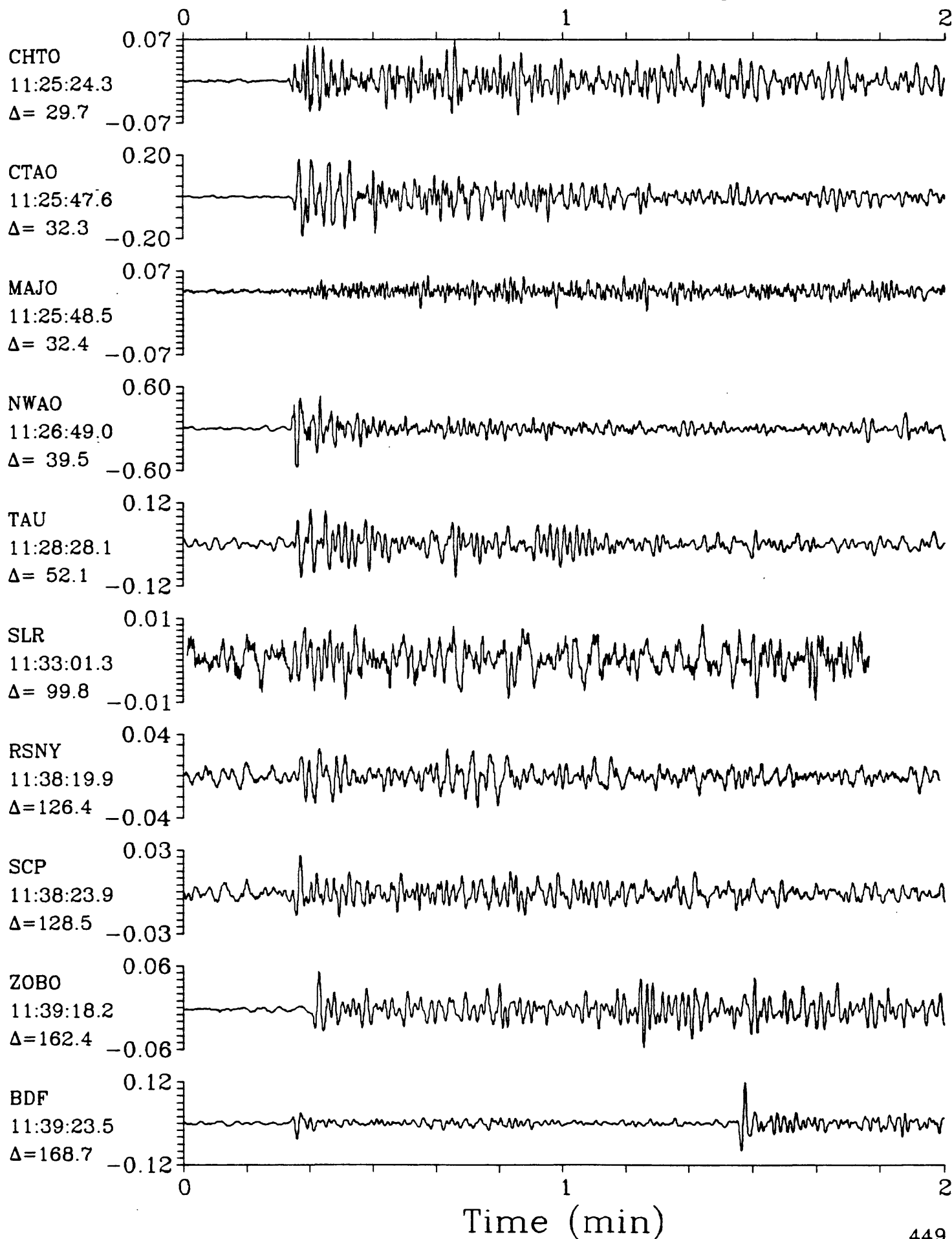
## Mindanao, Philippine Islands



SPZ

07 March 1985 11:19:42.19

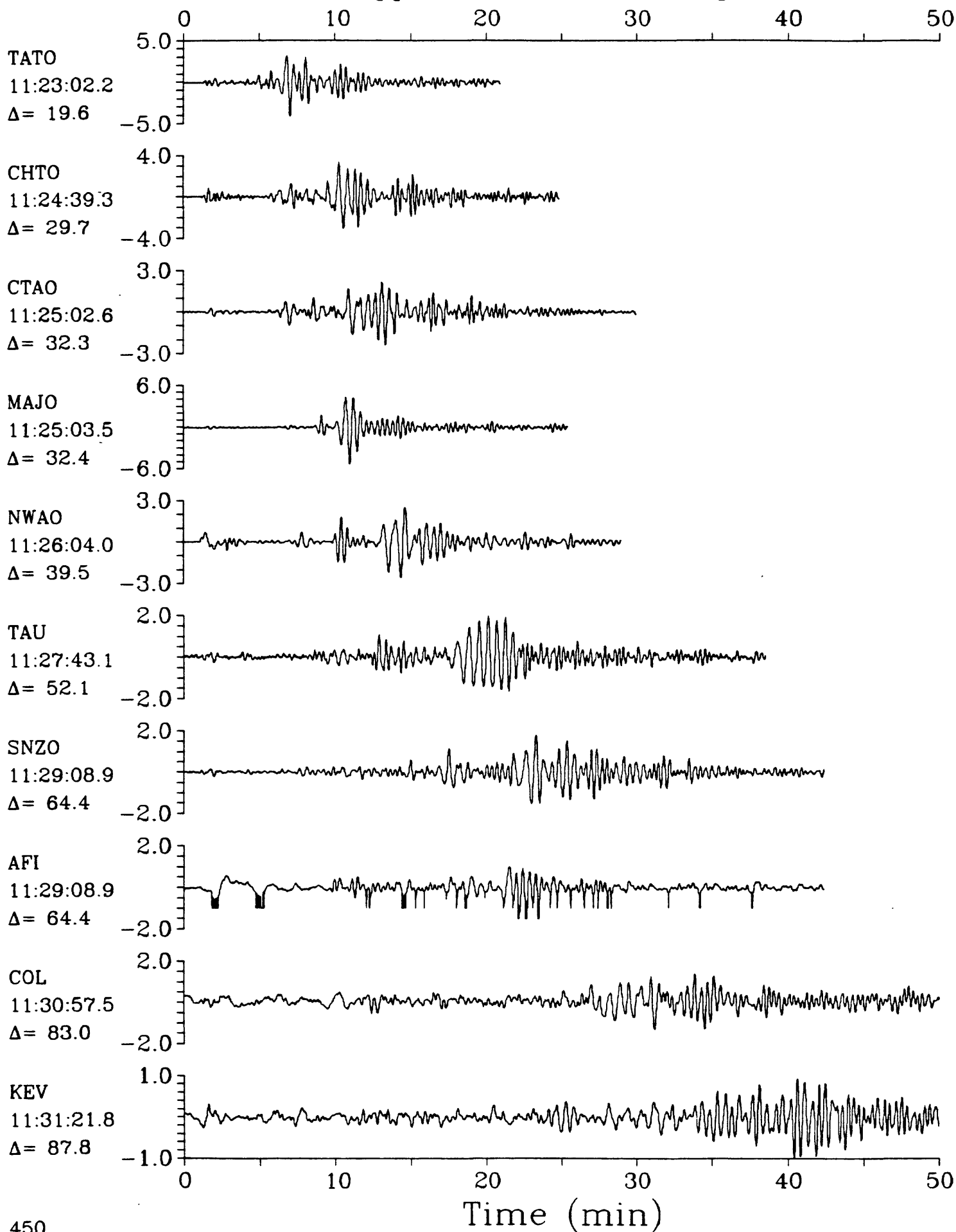
SPZ

Mindanao, Philippine Islands  $h=93.2$   $m_b=5.8$ 

LPZ

07 March 1985 11:19:42.19

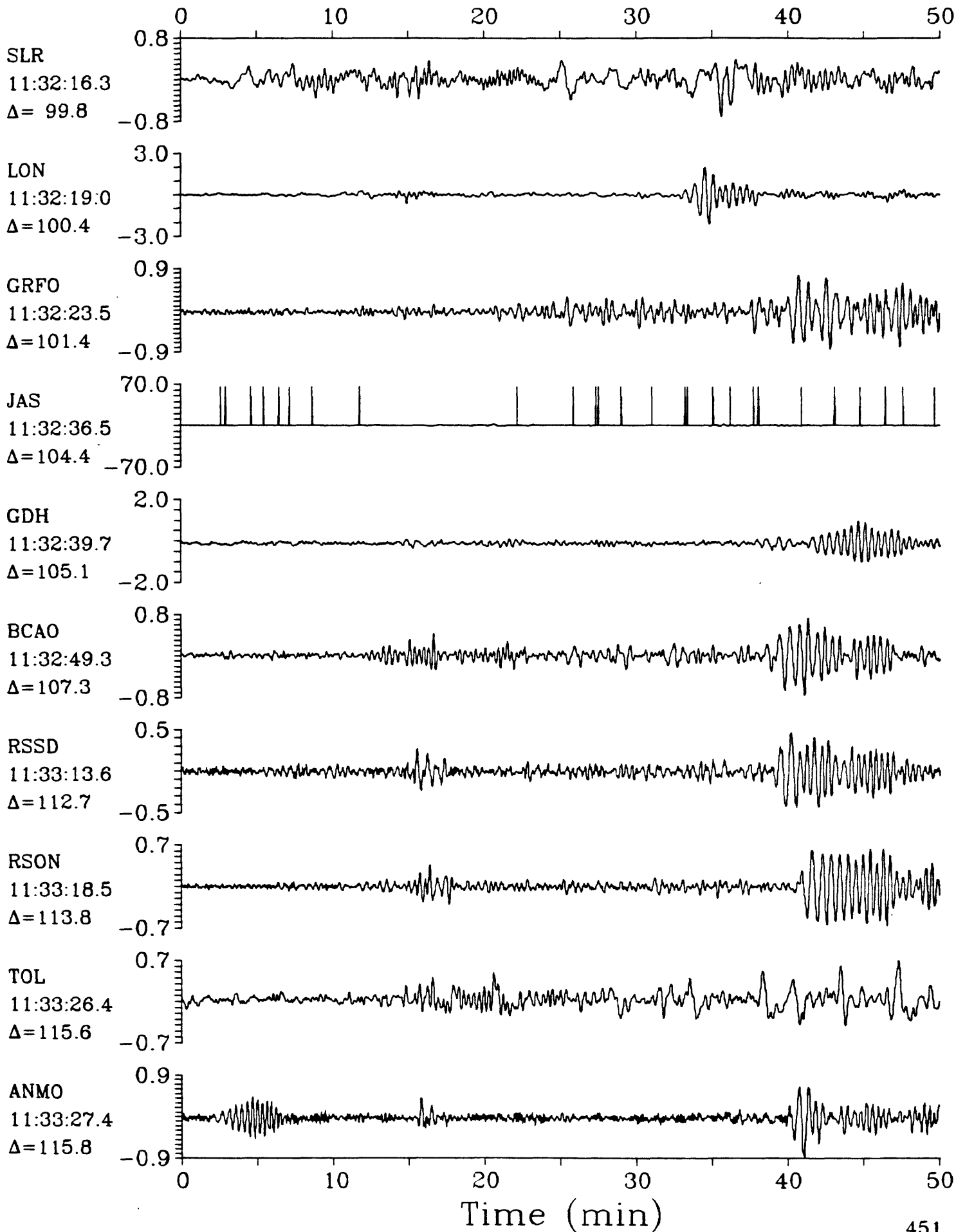
LPZ

Mindanao, Philippine Islands  $h=93.2$   $m_b=5.8$ 

LPZ

07 March 1985 11:19:42.19

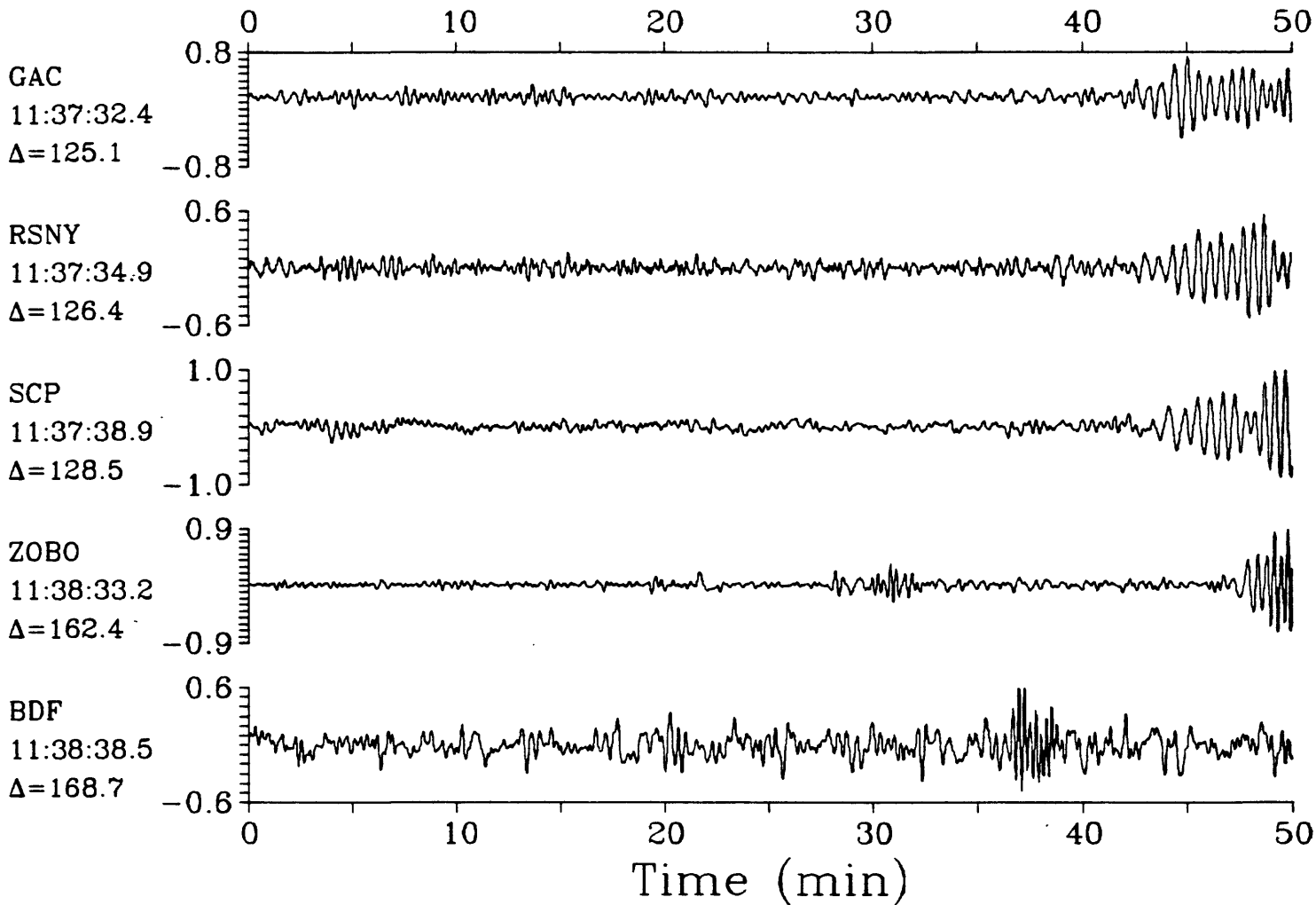
LPZ

Mindanao, Philippine Islands  $h=93.2$   $m_b=5.8$ 

LPZ

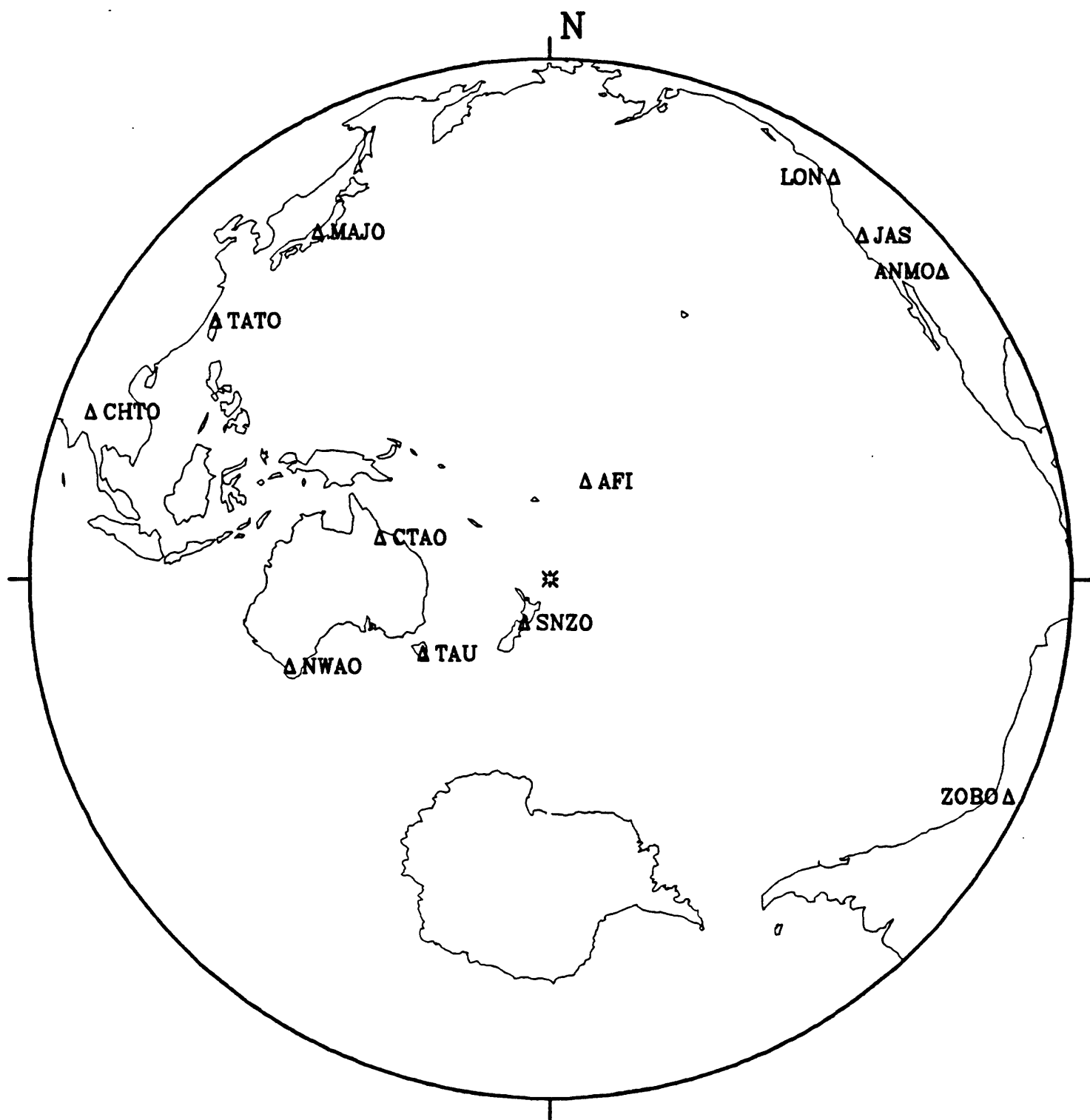
07 March 1985 11:19:42.19

LPZ

Mindanao, Philippine Islands  $h=93.2$   $m_b=5.8$ 

09 March 1985 01:21:12.68

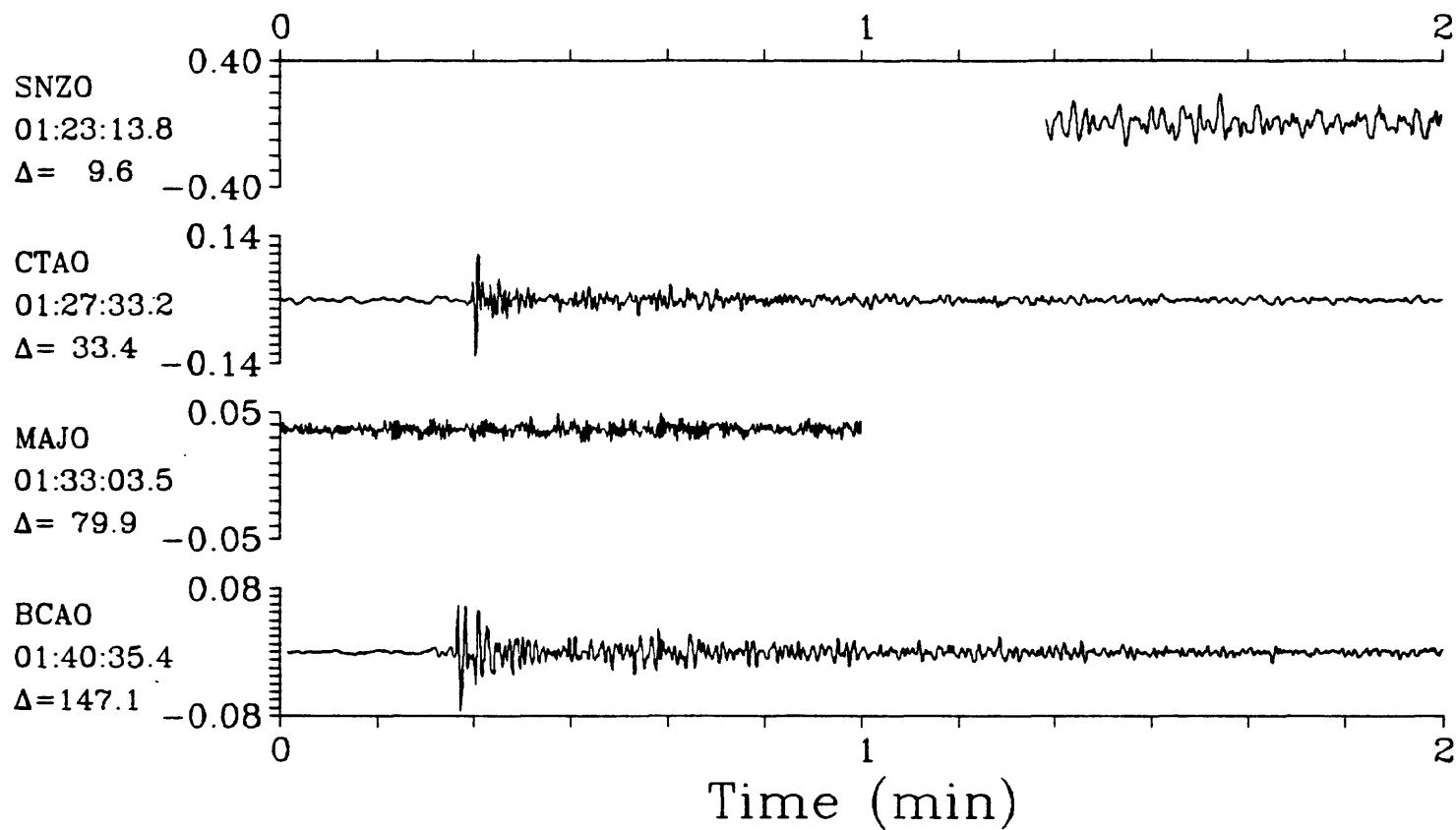
## South of Kermadec Islands



SPZ

09 March 1985 01:21:12.68

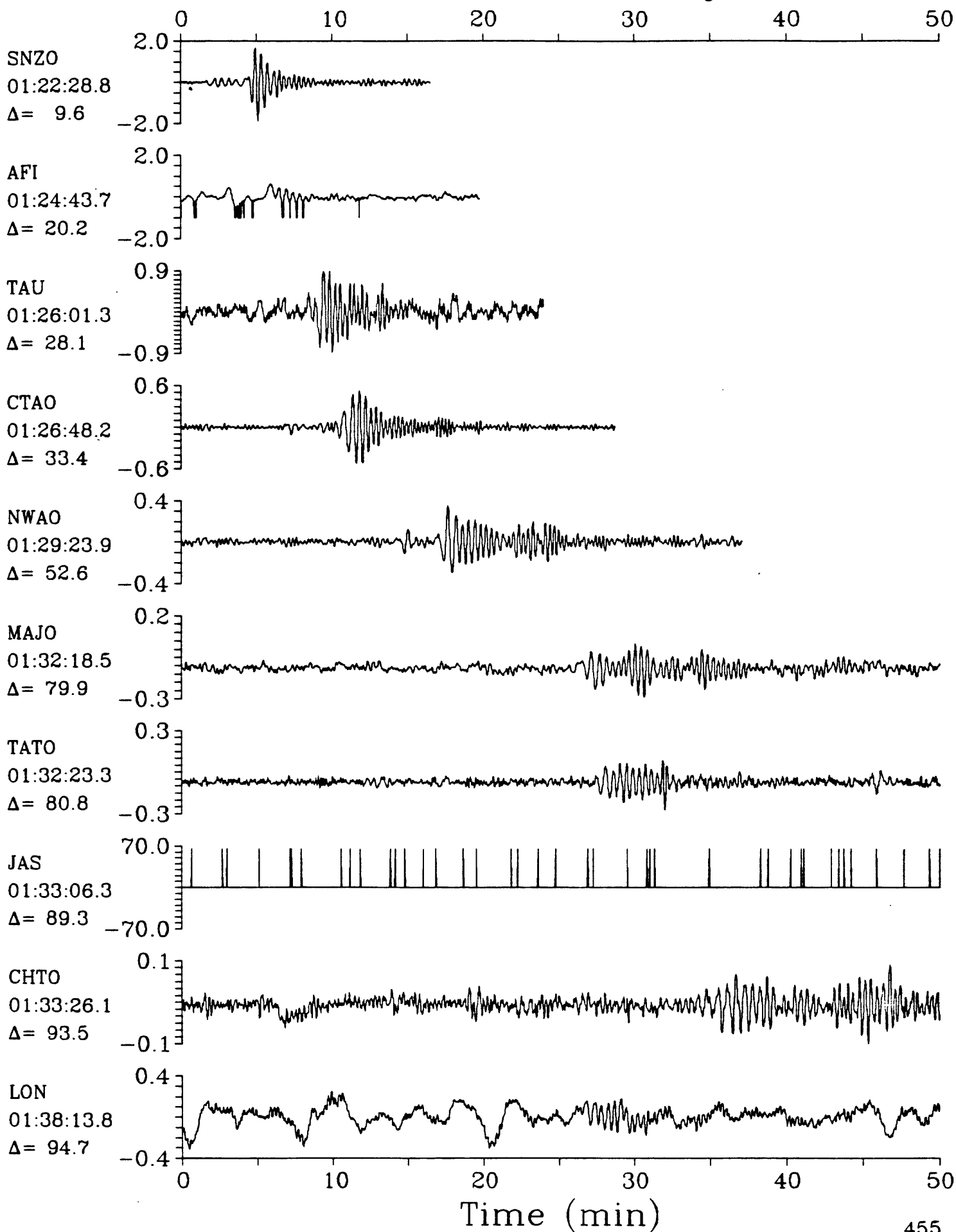
SPZ

South of Kermadec Islands  $h=33.0$   $m_b=5.5$ 

LPZ

09 March 1985 01:21:12.68

LPZ

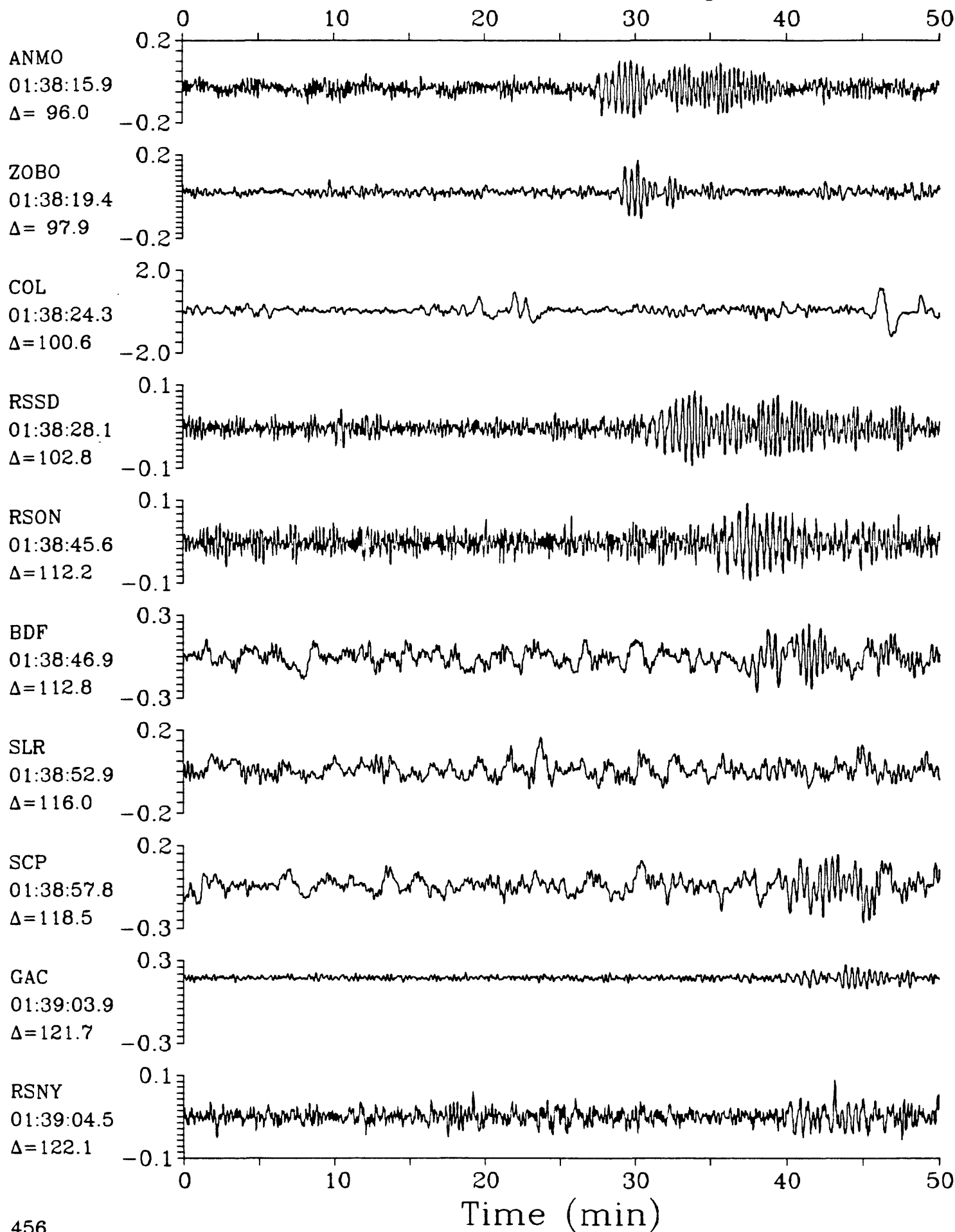
South of Kermadec Islands  $h=33.0$   $m_b=5.5$ 



LPZ

09 March 1985 01:21:12.68

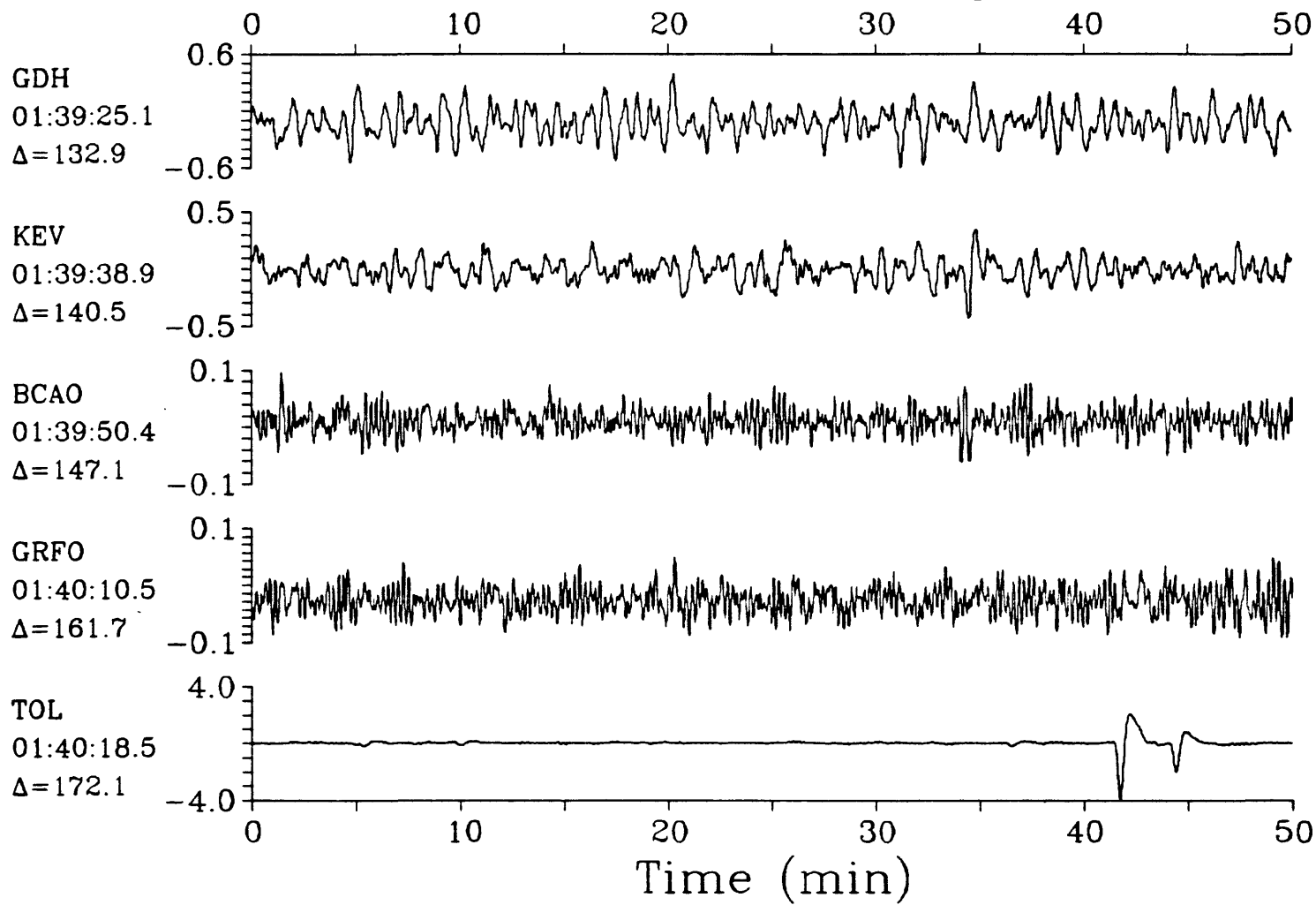
LPZ

South of Kermadec Islands  $h=33.0$   $m_b=5.5$ 

LPZ

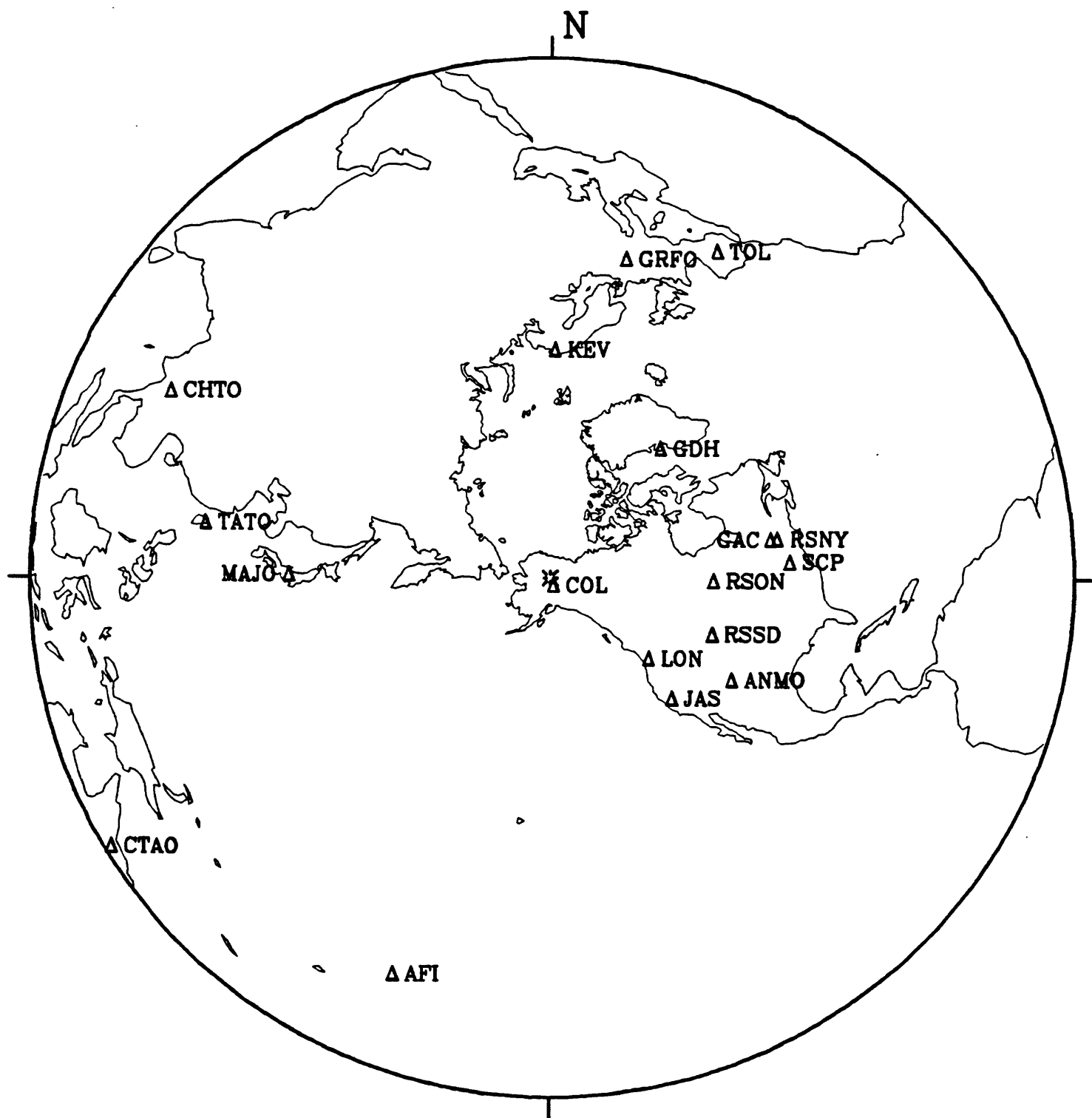
09 March 1985 01:21:12.68

LPZ

South of Kermadec Islands  $h=33.0$   $m_b=5.5$ 

09 March 1985 14:08:04.11

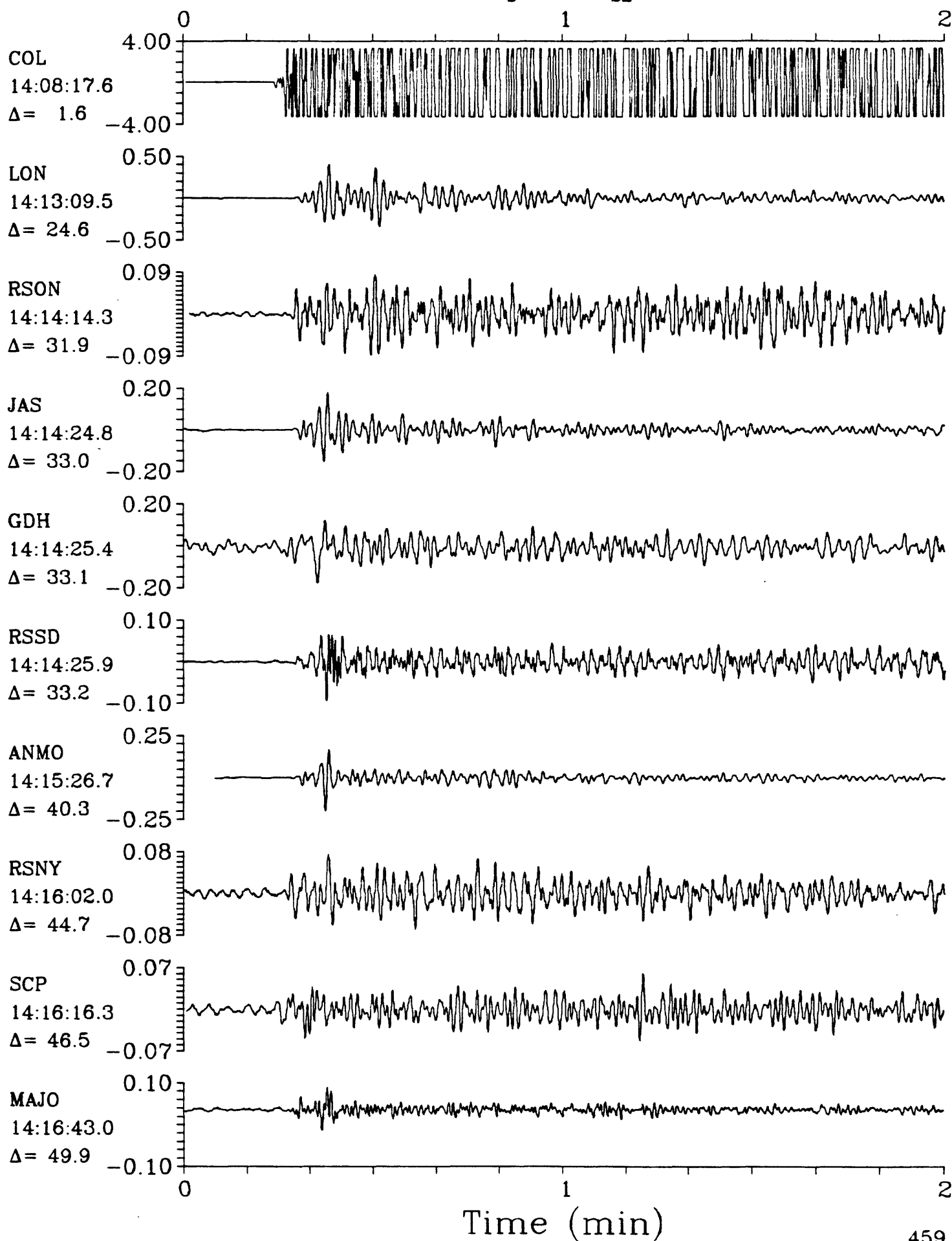
# Alaska



SPZ

09 March 1985 14:08:04.11  
Alaska  $h=11.5$   $m_b=5.9$   $M_{sz}=6.0$ 

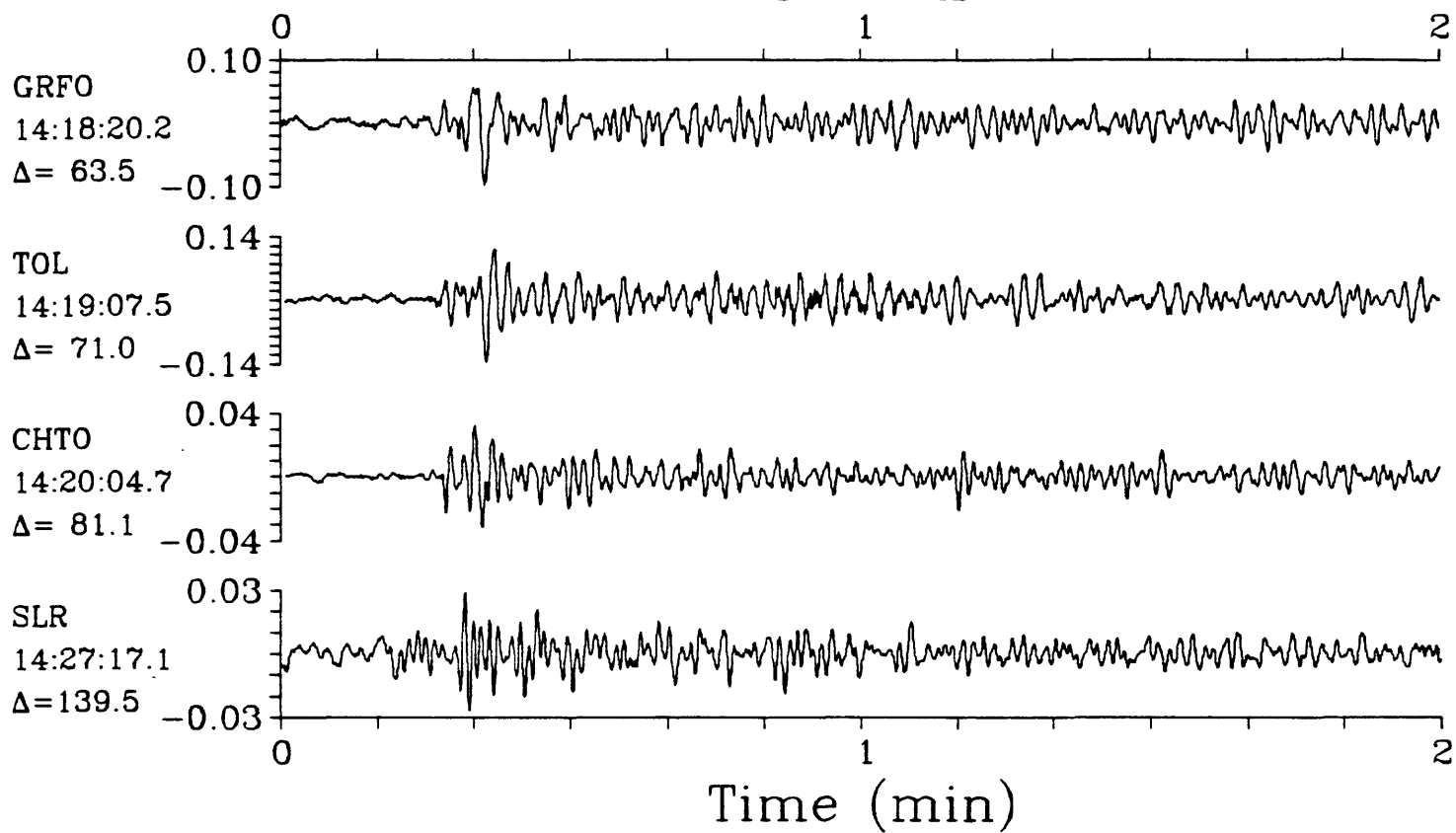
SPZ



SPZ

09 March 1985 14:08:04.11  
Alaska  $h=11.5$   $m_b=5.9$   $M_{sz}=6.0$

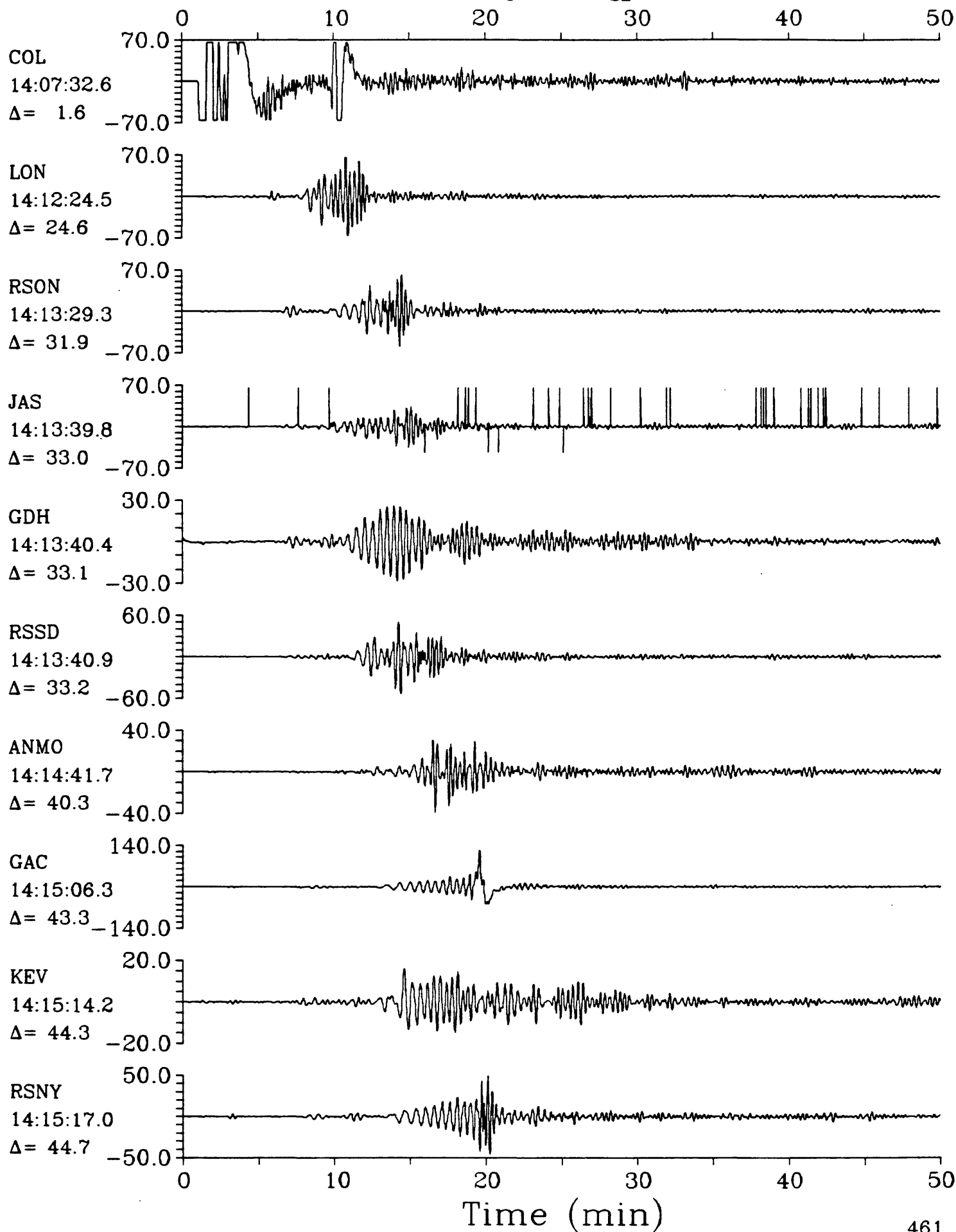
SPZ



LPZ

09 March 1985 14:08:04.11  
Alaska  $h=11.5$   $m_b=5.9$   $M_{sz}=6.0$ 

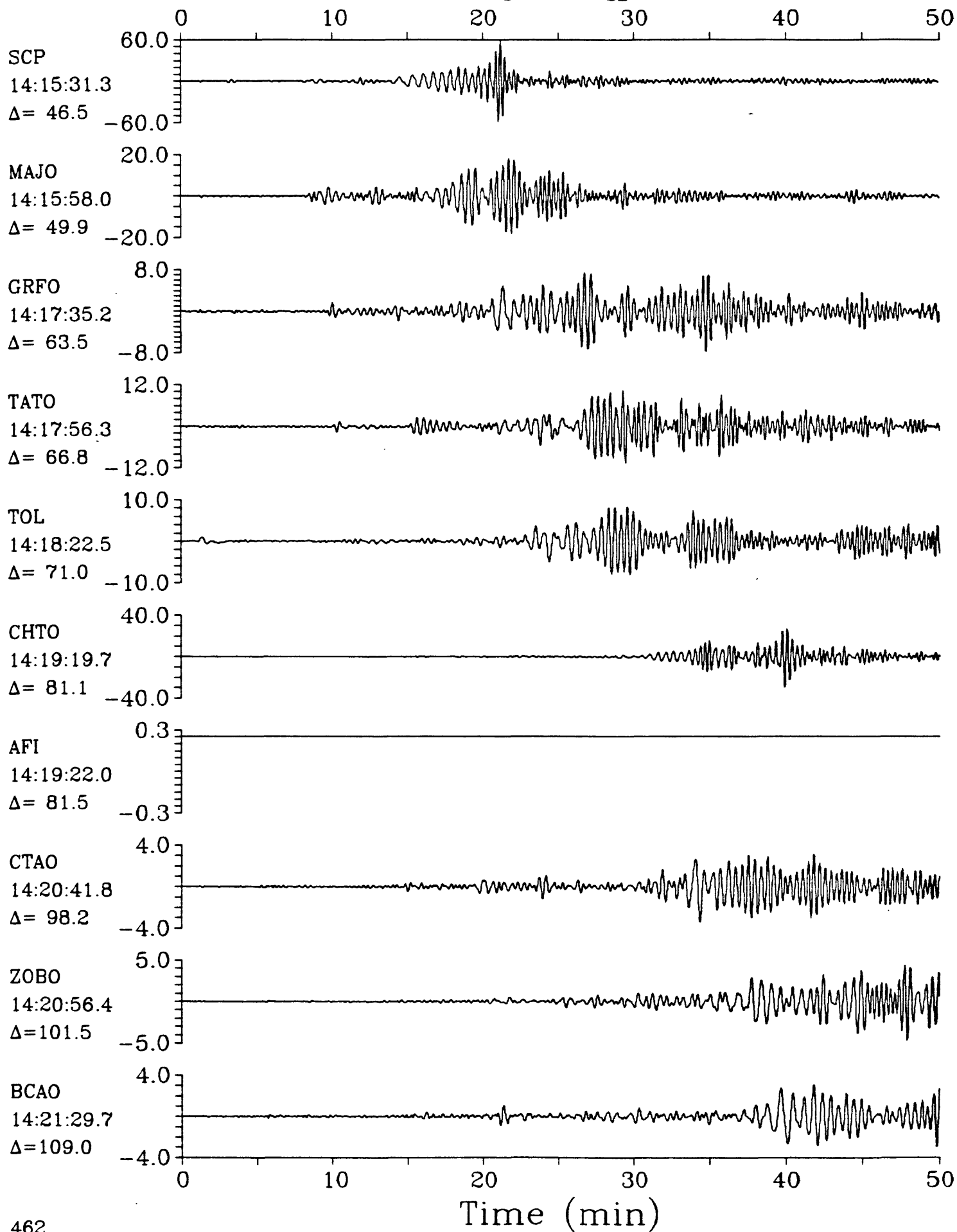
LPZ



LPZ

09 March 1985 14:08:04.11  
Alaska  $h=11.5$   $m_b=5.9$   $M_{sz}=6.0$ 

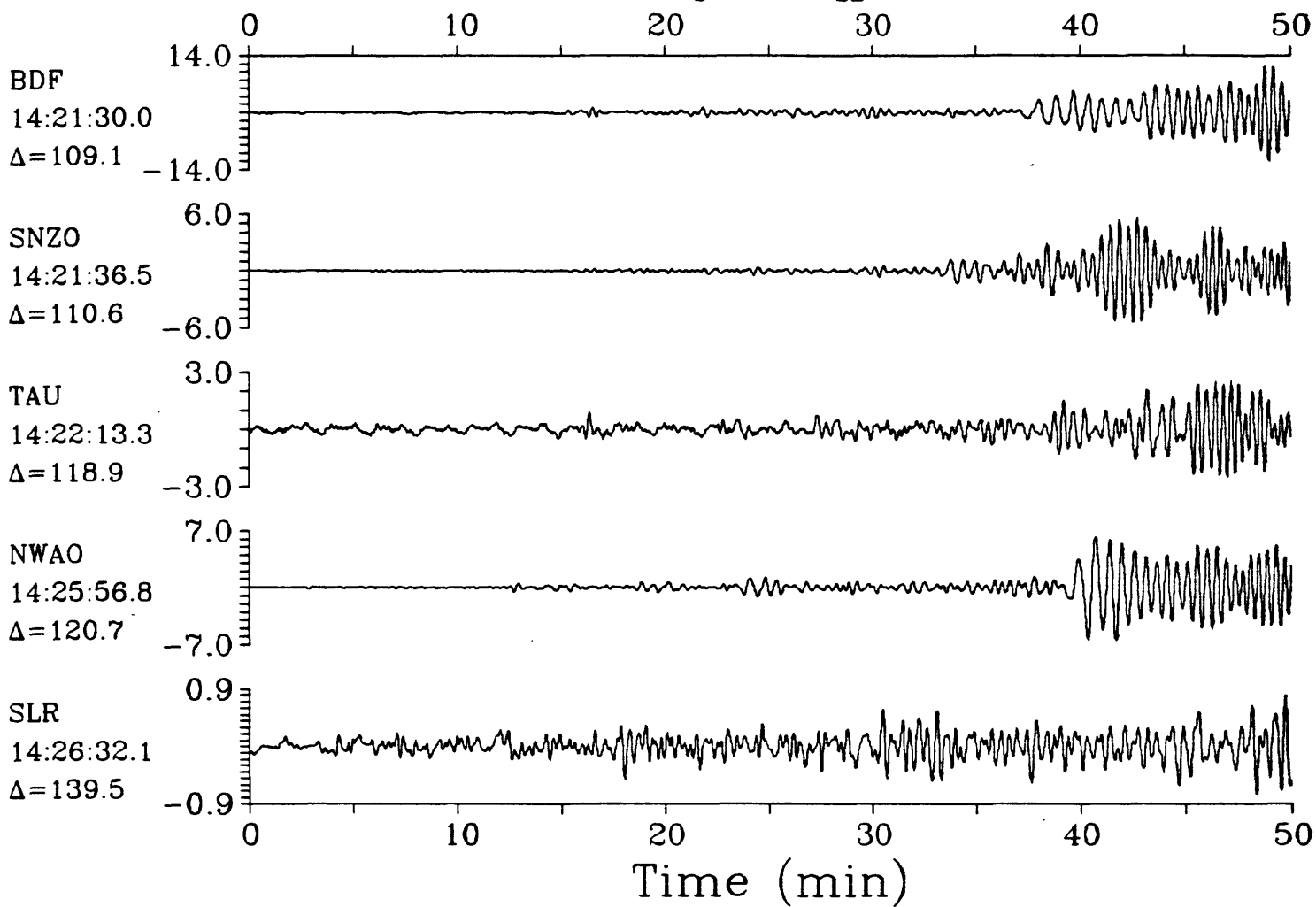
LPZ



LPZ

09 March 1985 14:08:04.11  
Alaska  $h=11.5$   $m_b=5.9$   $M_{sz}=6.0$ 

LPZ

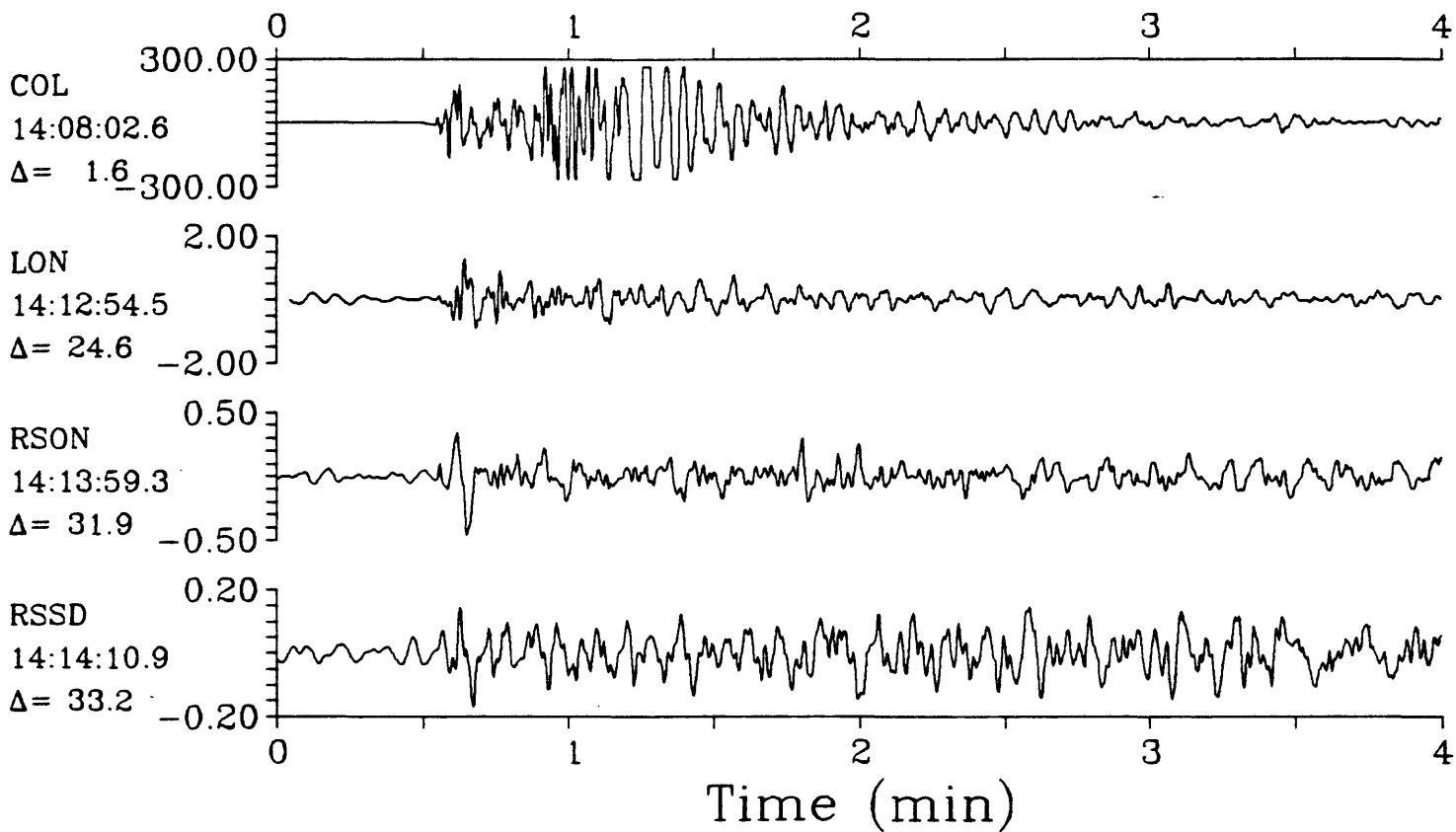




IPZ

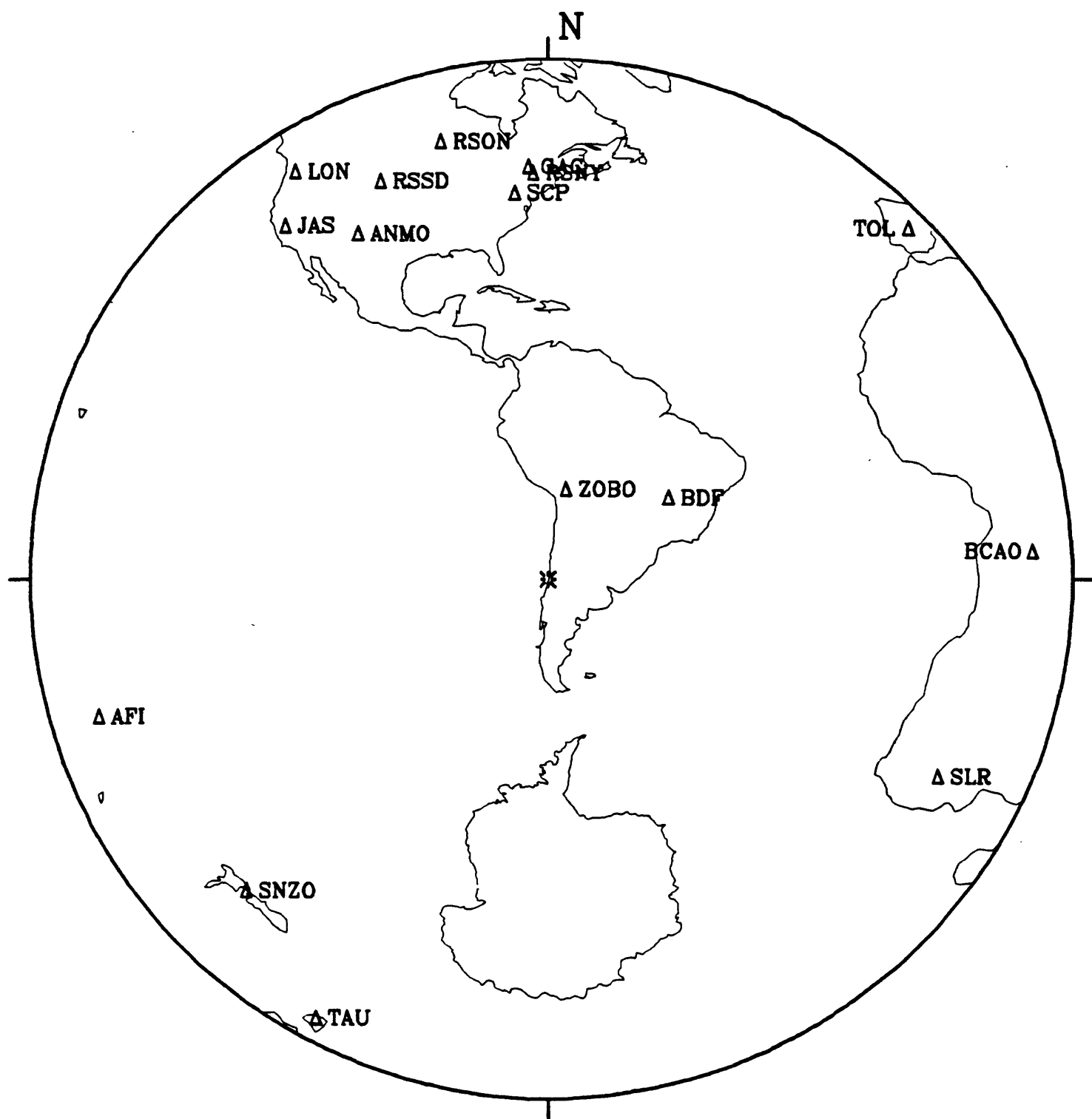
09 March 1985 14:08:04.11  
Alaska  $h=11.5$   $m_b=5.9$   $M_{sz}=6.0$ 

IPZ



09 March 1985 15:11:43.13

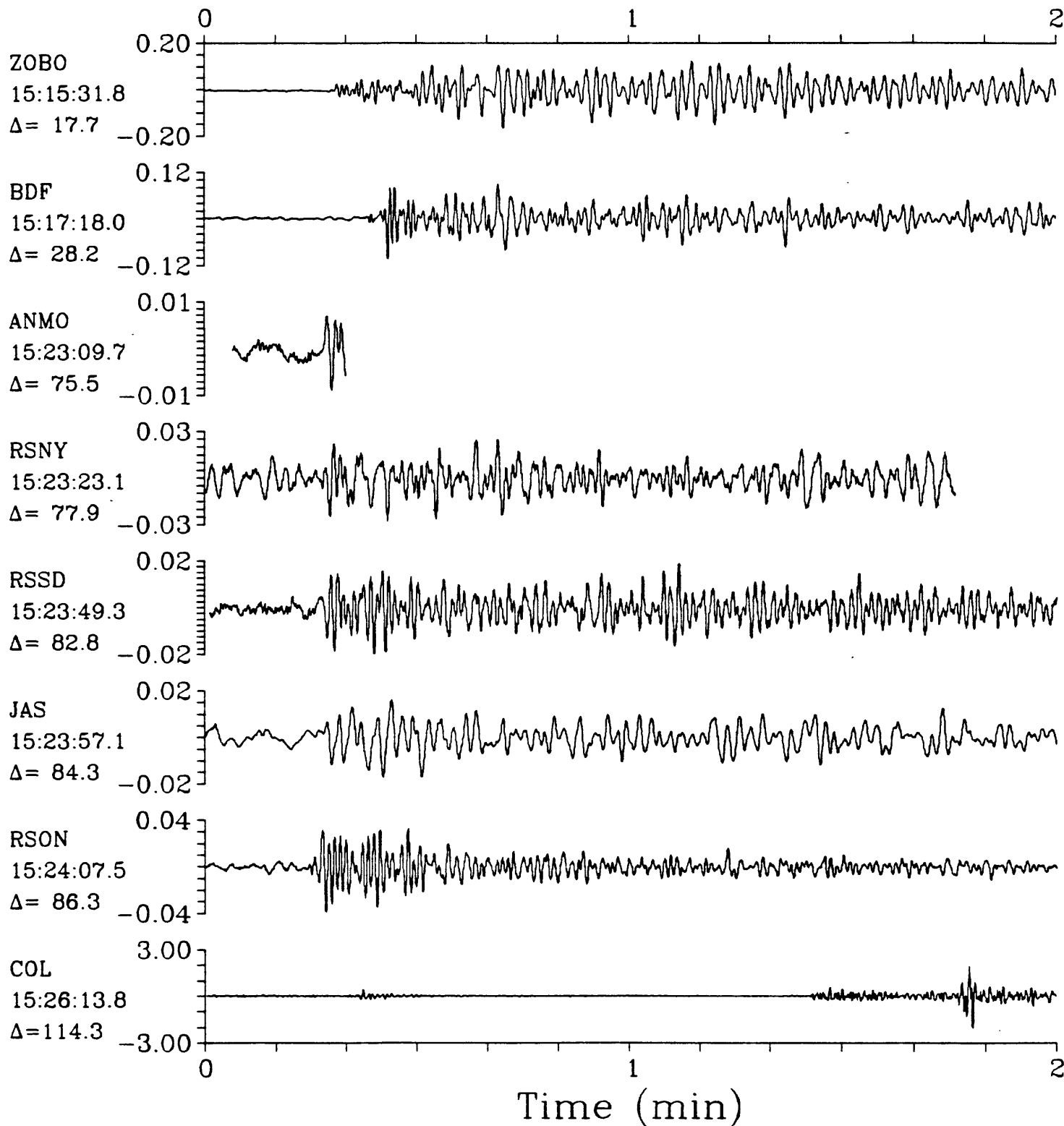
Off Coast of Central Chile



SPZ

09 March 1985 15:11:43.13

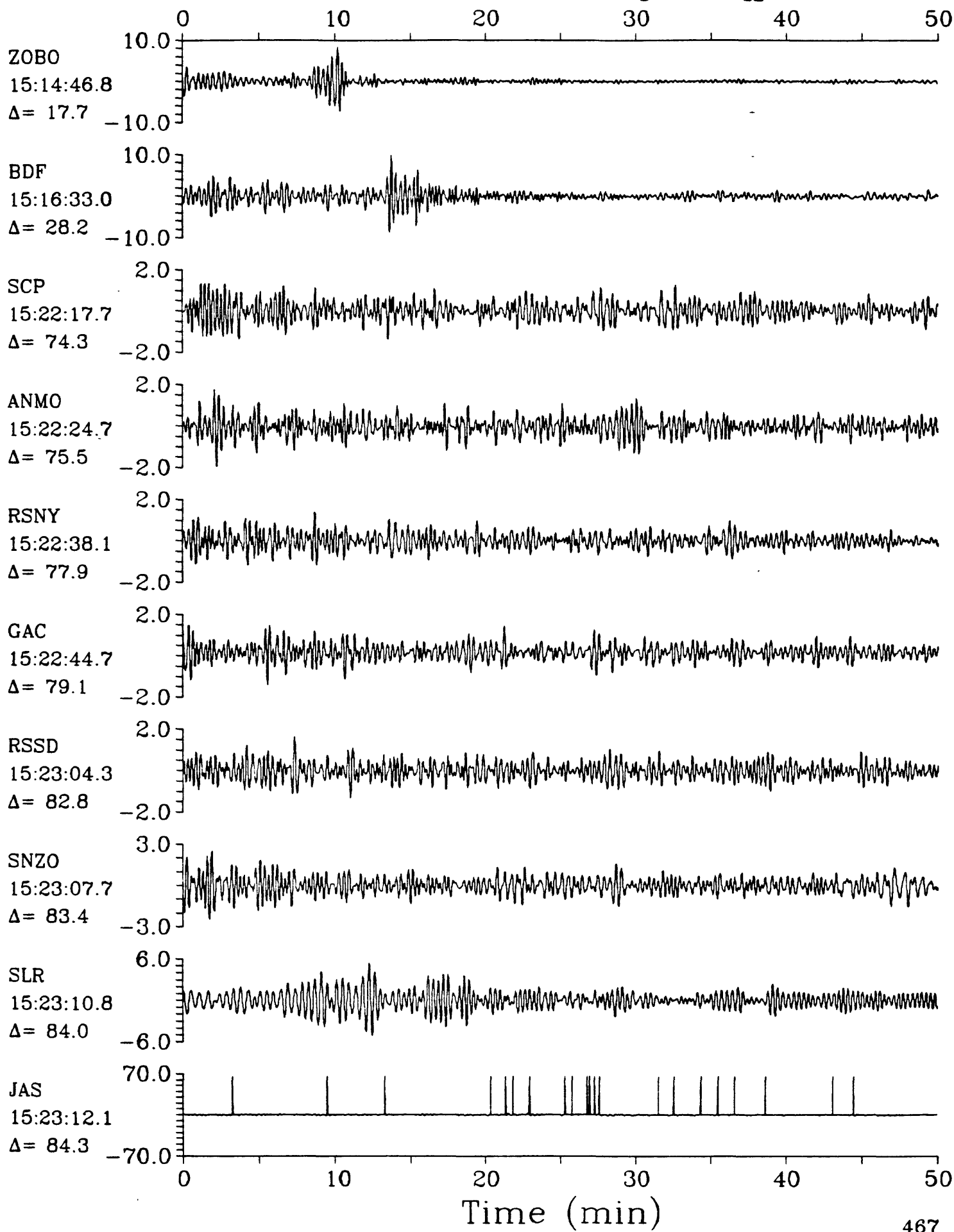
SPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

LPZ

09 March 1985 15:11:43.13

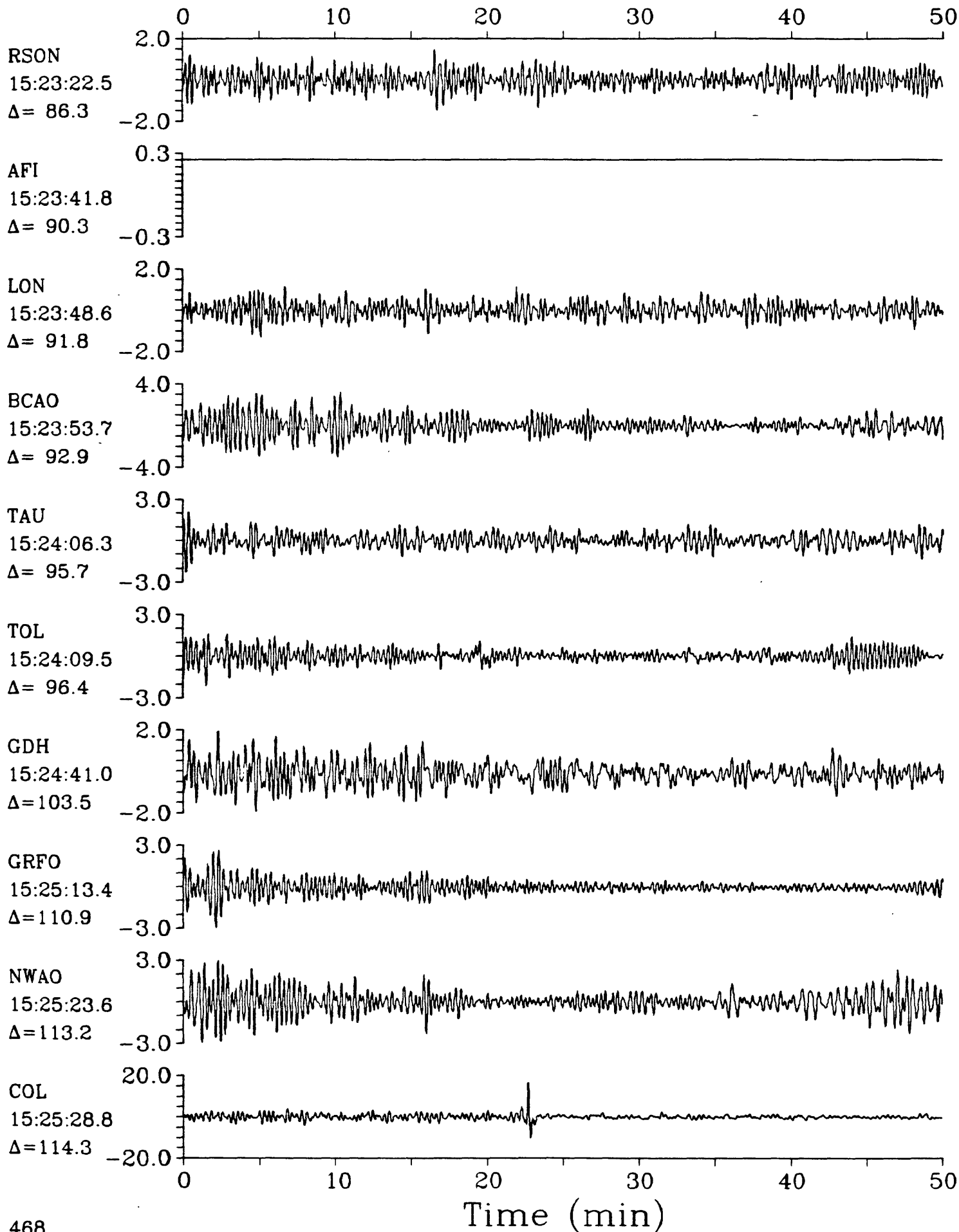
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

LPZ

09 March 1985 15:11:43.13

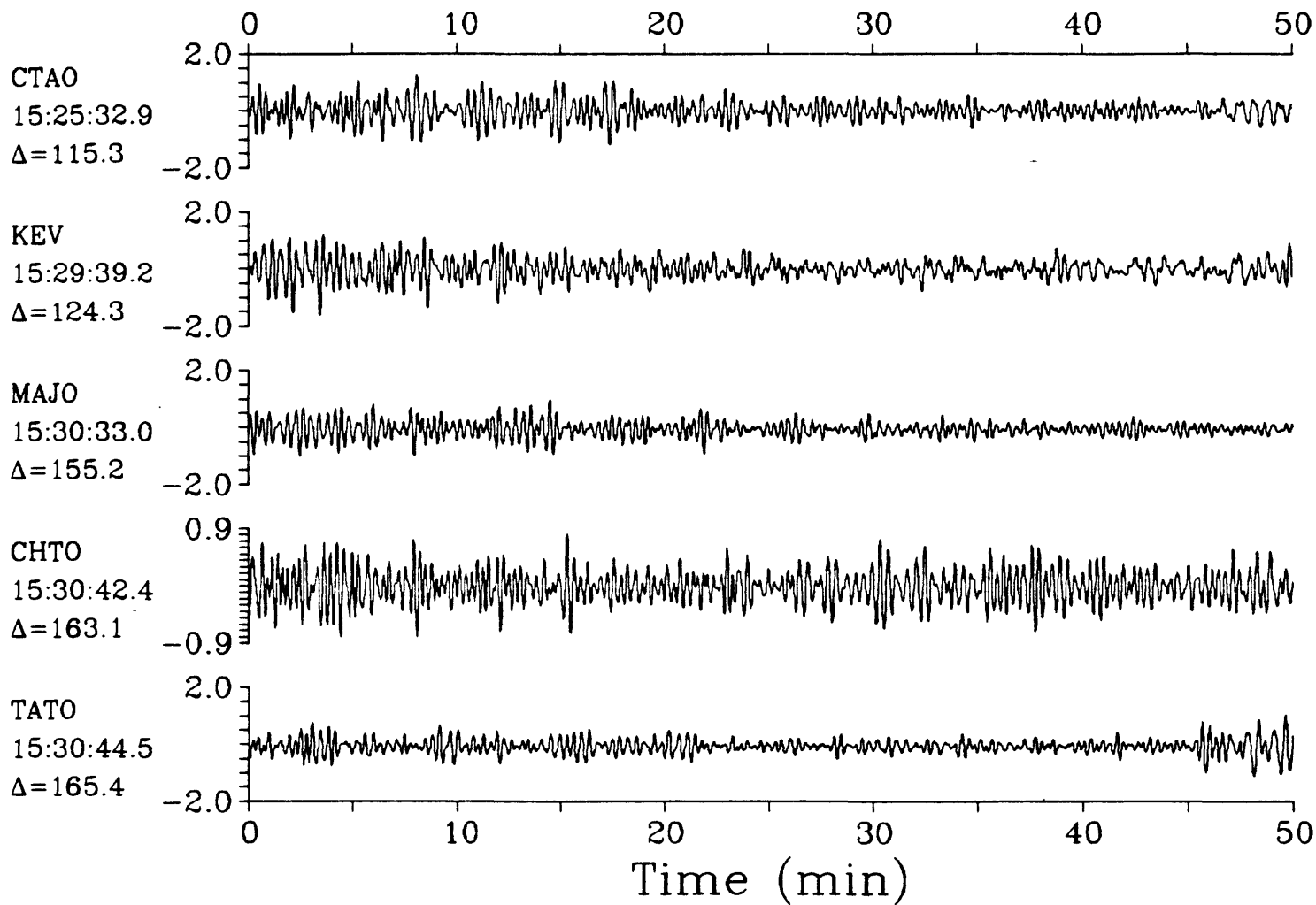
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

LPZ

09 March 1985 15:11:43.13

LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$ 

IPZ

09 March 1985 15:11:43.13

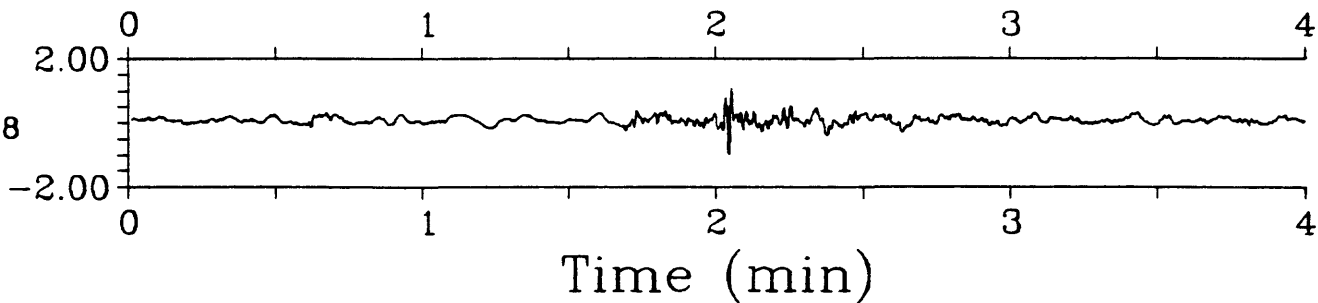
IPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.0$   $M_{sz}=5.8$

COL

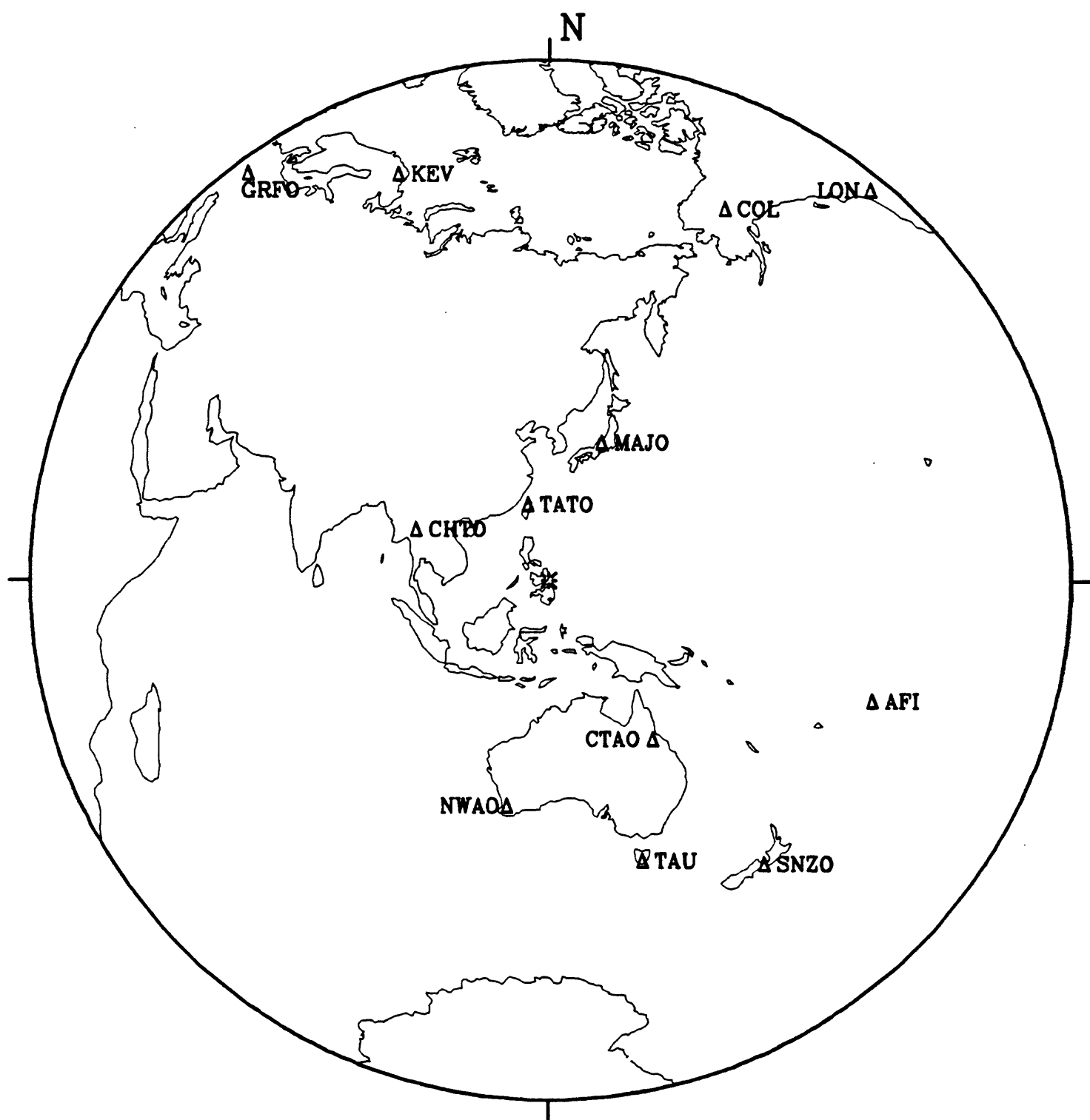
15:25:58.8

$\Delta=114.3$



11 March 1985 12:26:09.72

# Leyte, Philippine Islands

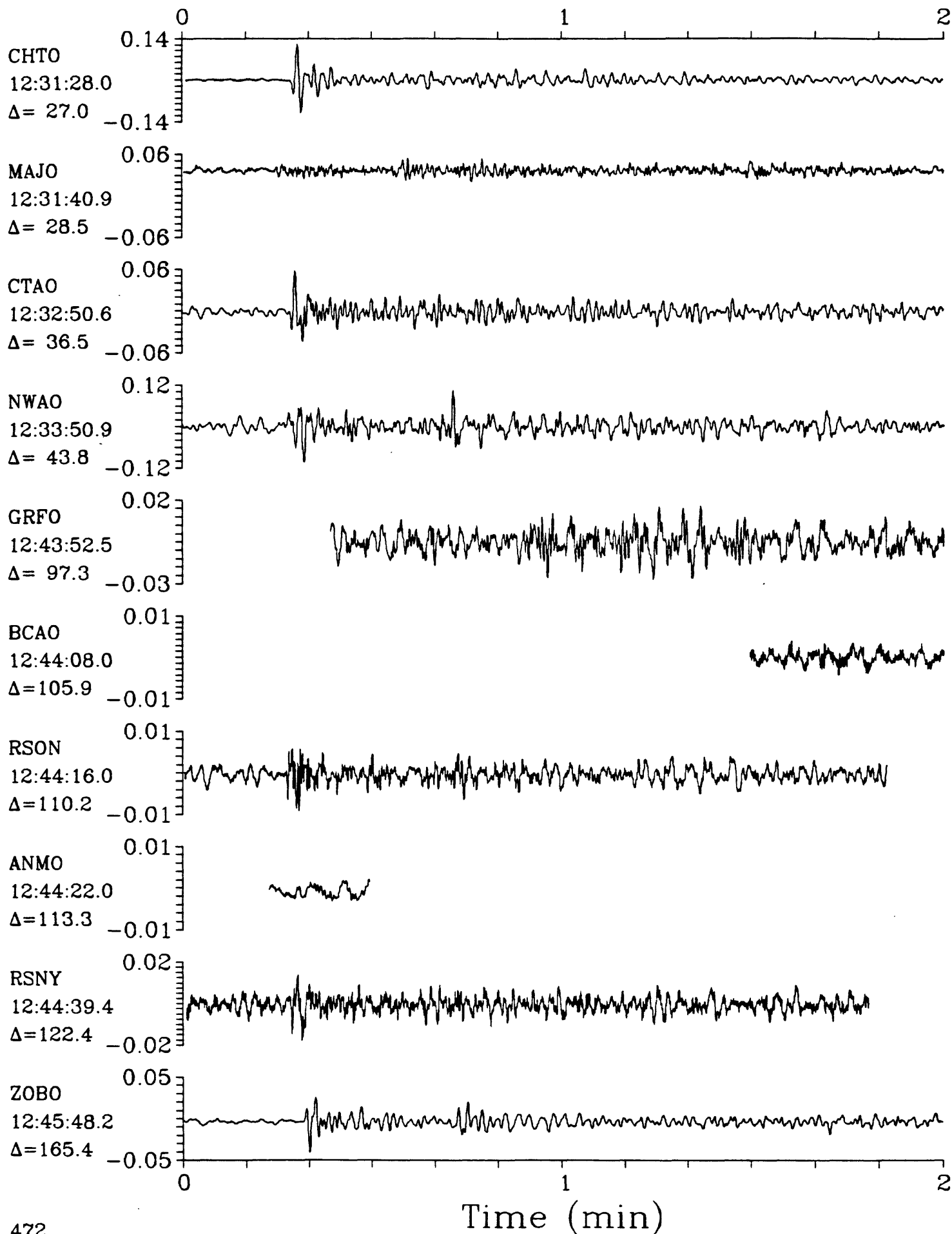




SPZ

11 March 1985 12:26:09.72

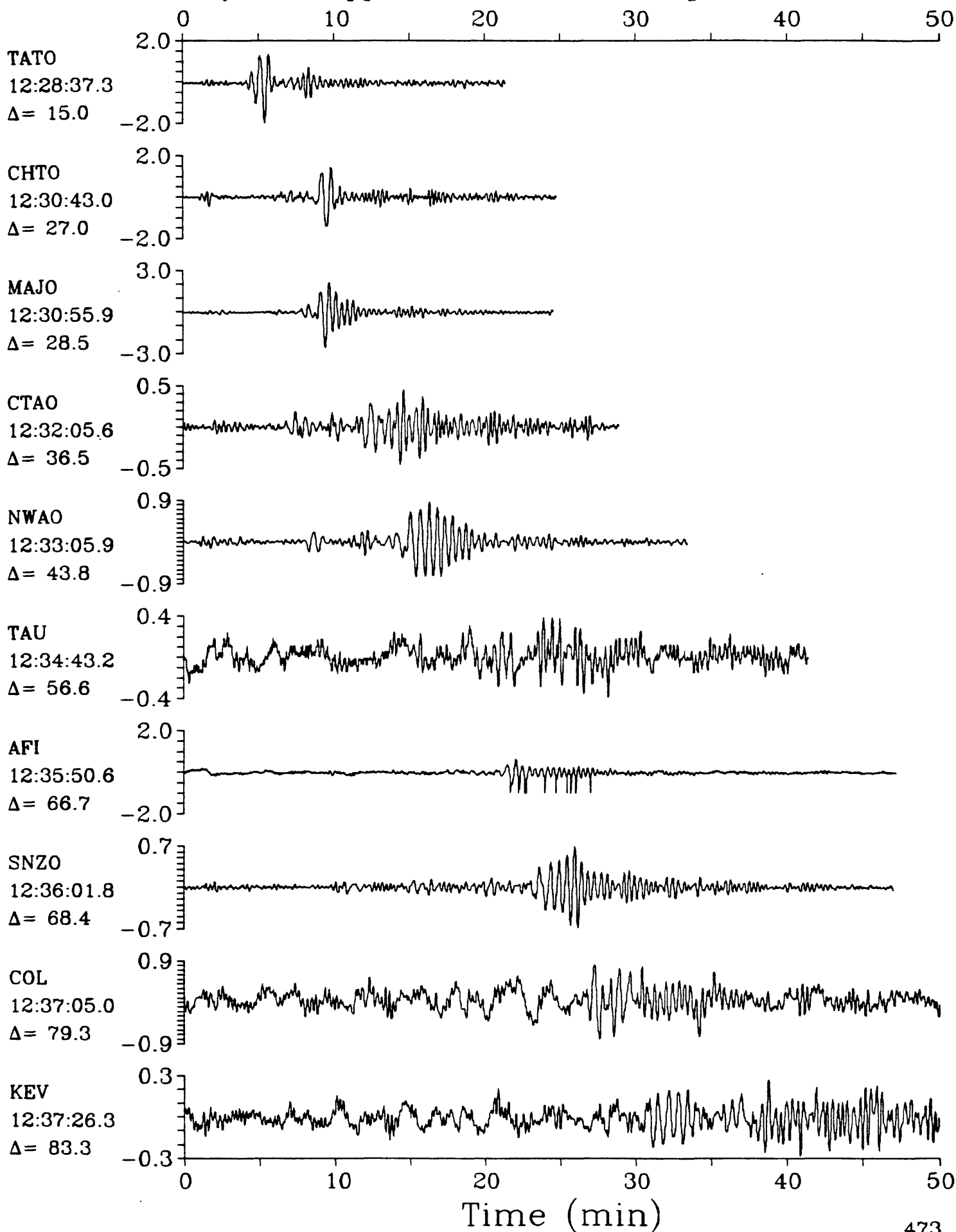
SPZ

Leyte, Philippine Islands  $h=96.4$   $m_b=5.5$ 

LPZ

11 March 1985 12:26:09.72

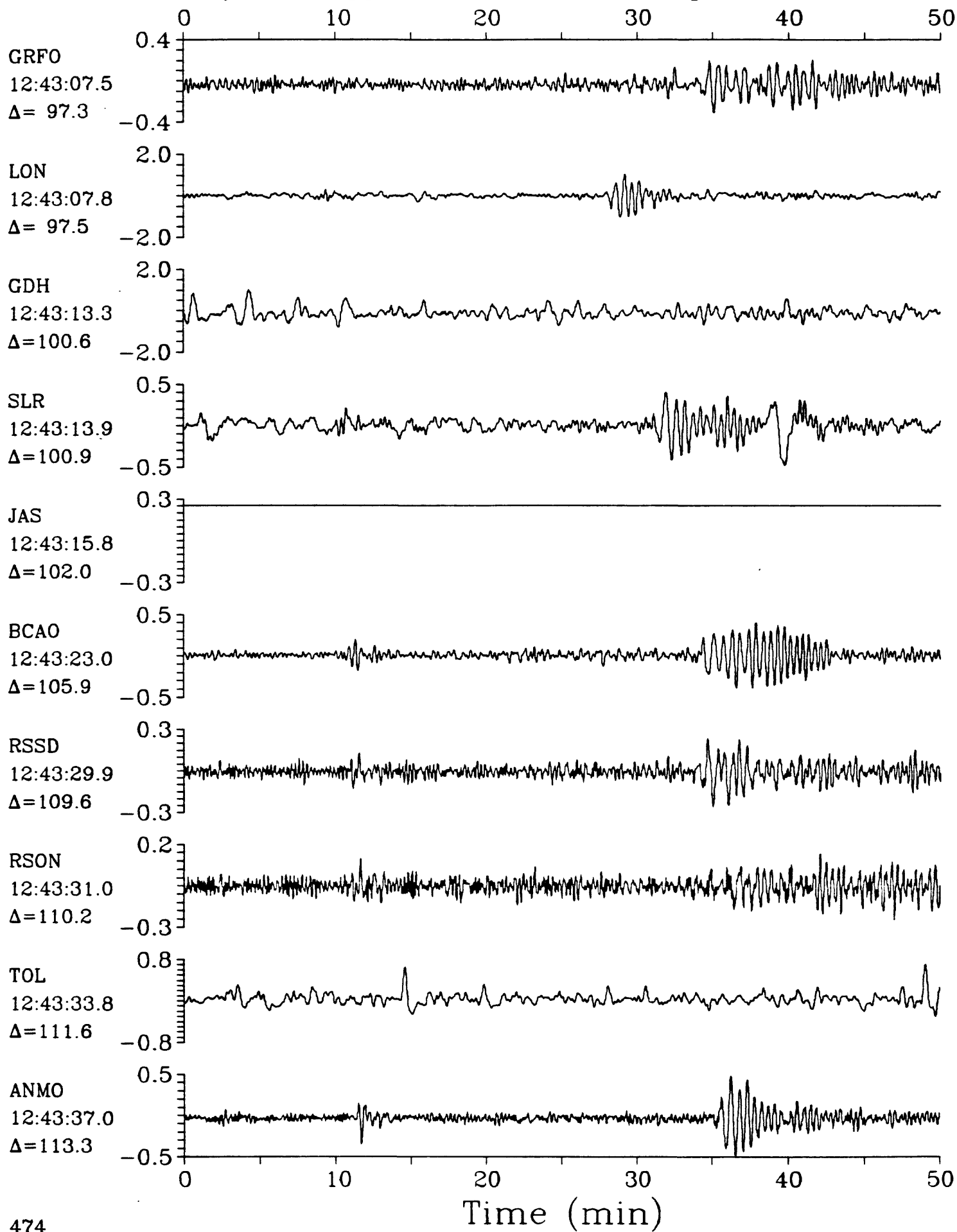
LPZ

Leyte, Philippine Islands  $h=96.4$   $m_b=5.5$ 

LPZ

11 March 1985 12:26:09.72

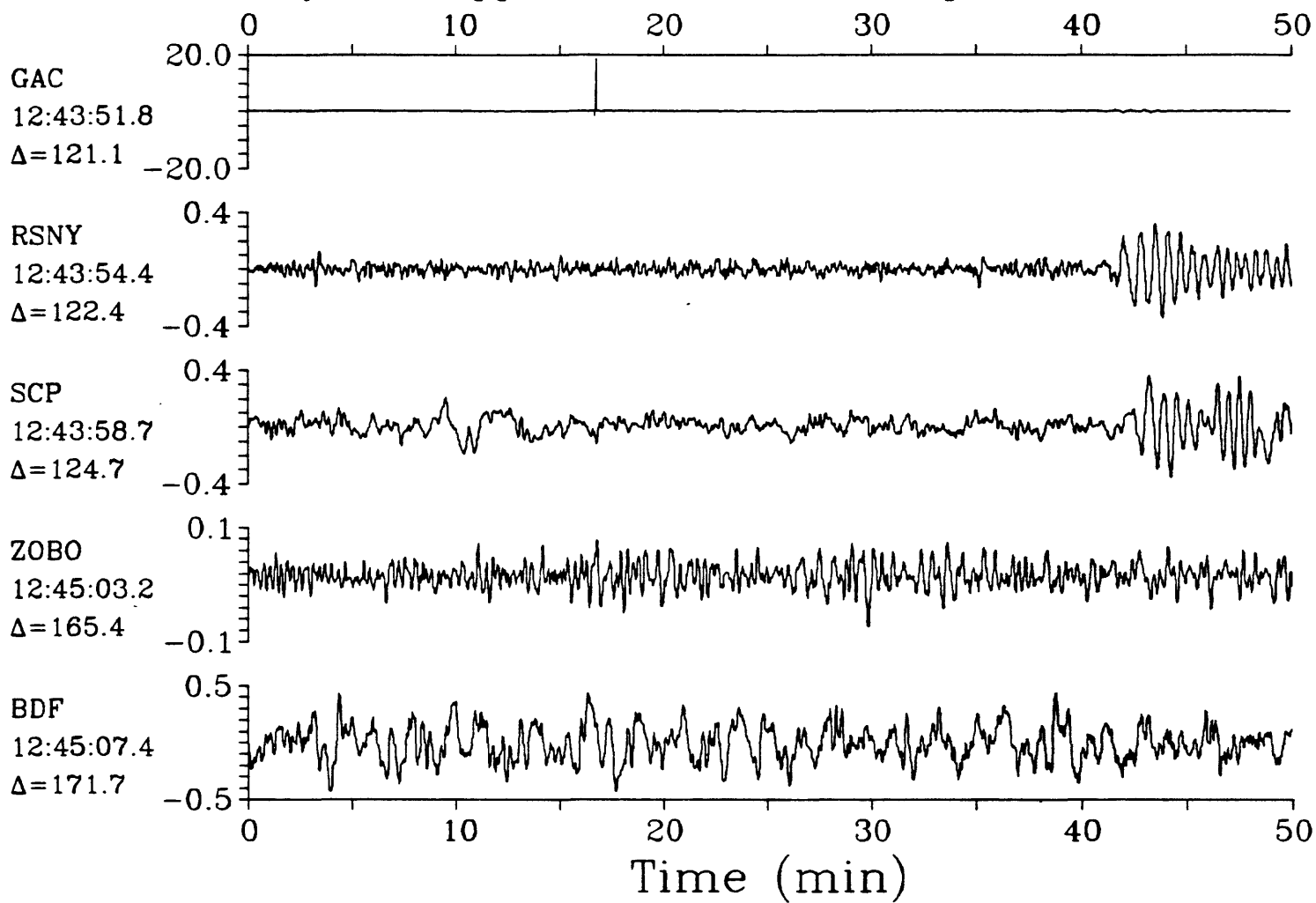
LPZ

Leyte, Philippine Islands  $h=96.4$   $m_b=5.5$ 

LPZ

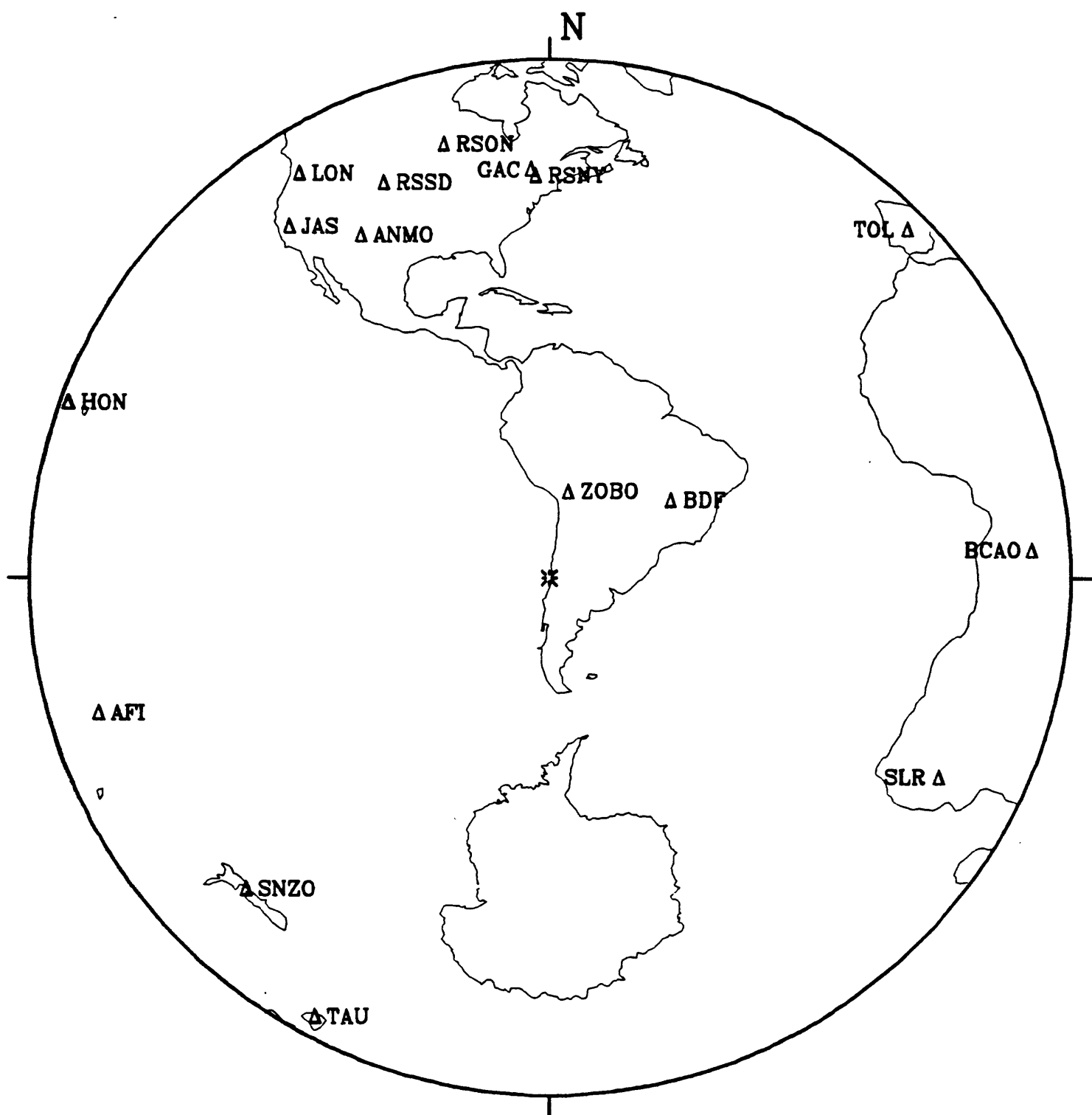
11 March 1985 12:26:09.72

LPZ

Leyte, Philippine Islands  $h=96.4$   $m_b=5.5$ 

12 March 1985 08:23:15.36

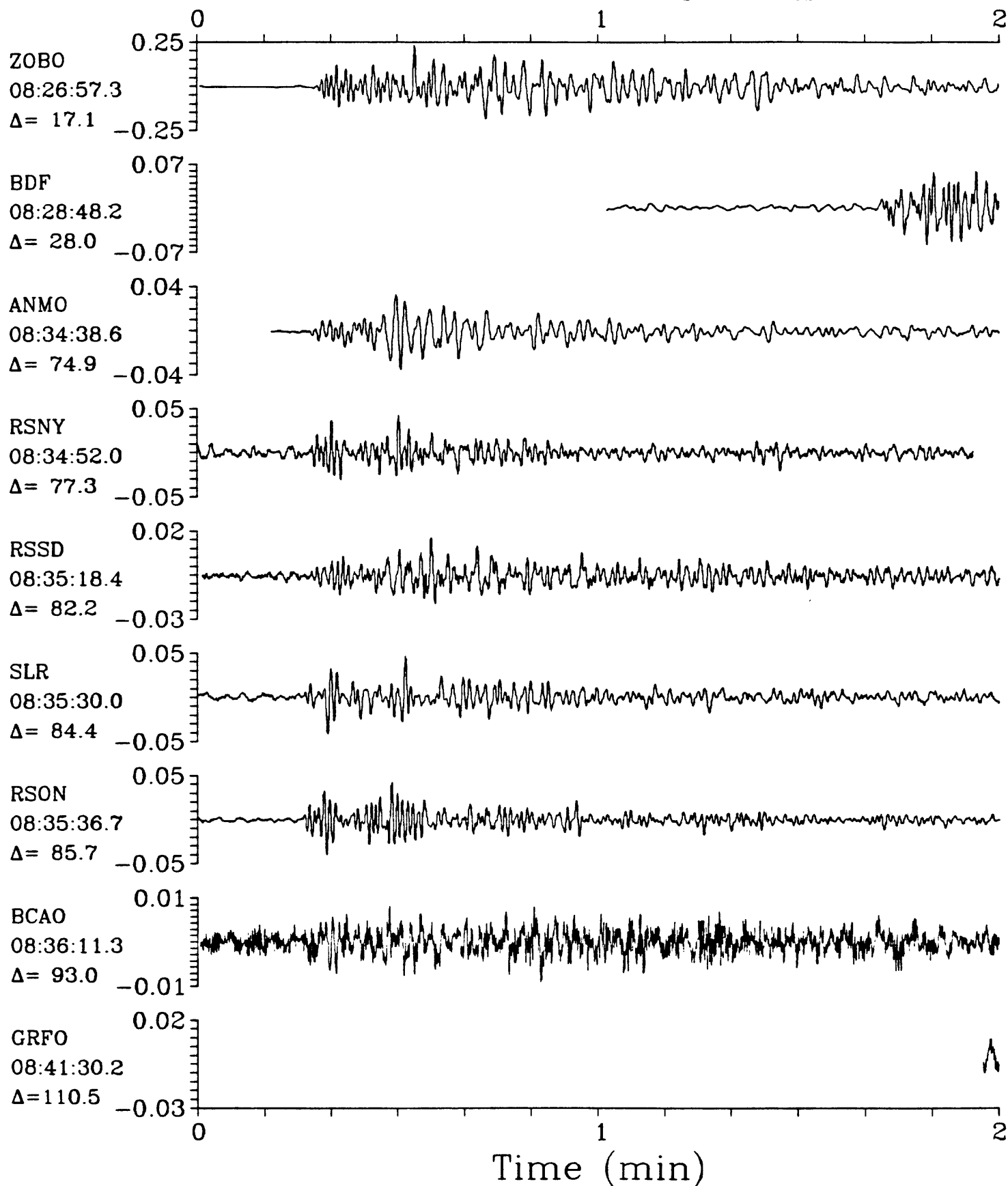
Off Coast of Central Chile



SPZ

12 March 1985 08:23:15.36

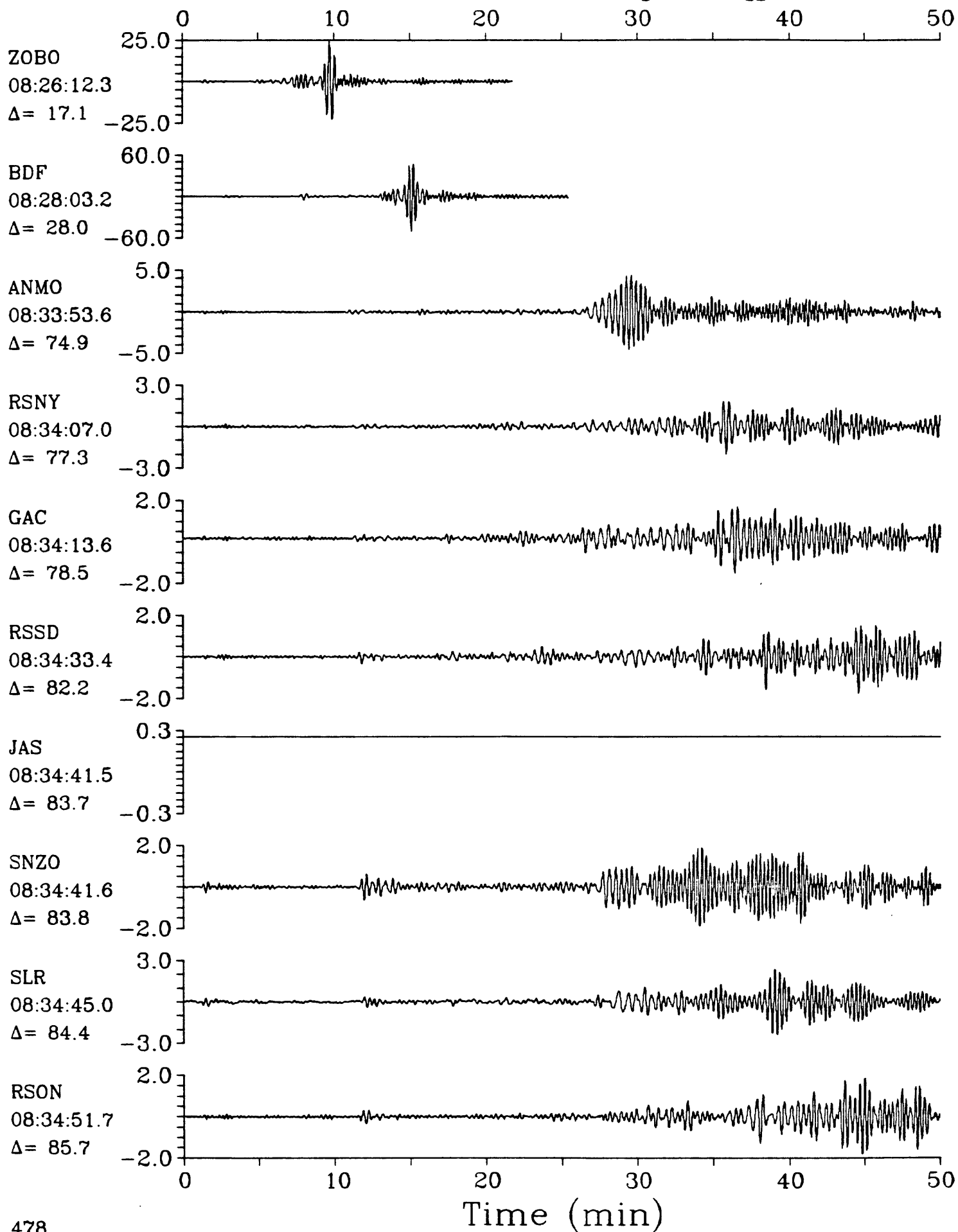
SPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=5.5$ 

LPZ

12 March 1985 08:23:15.36

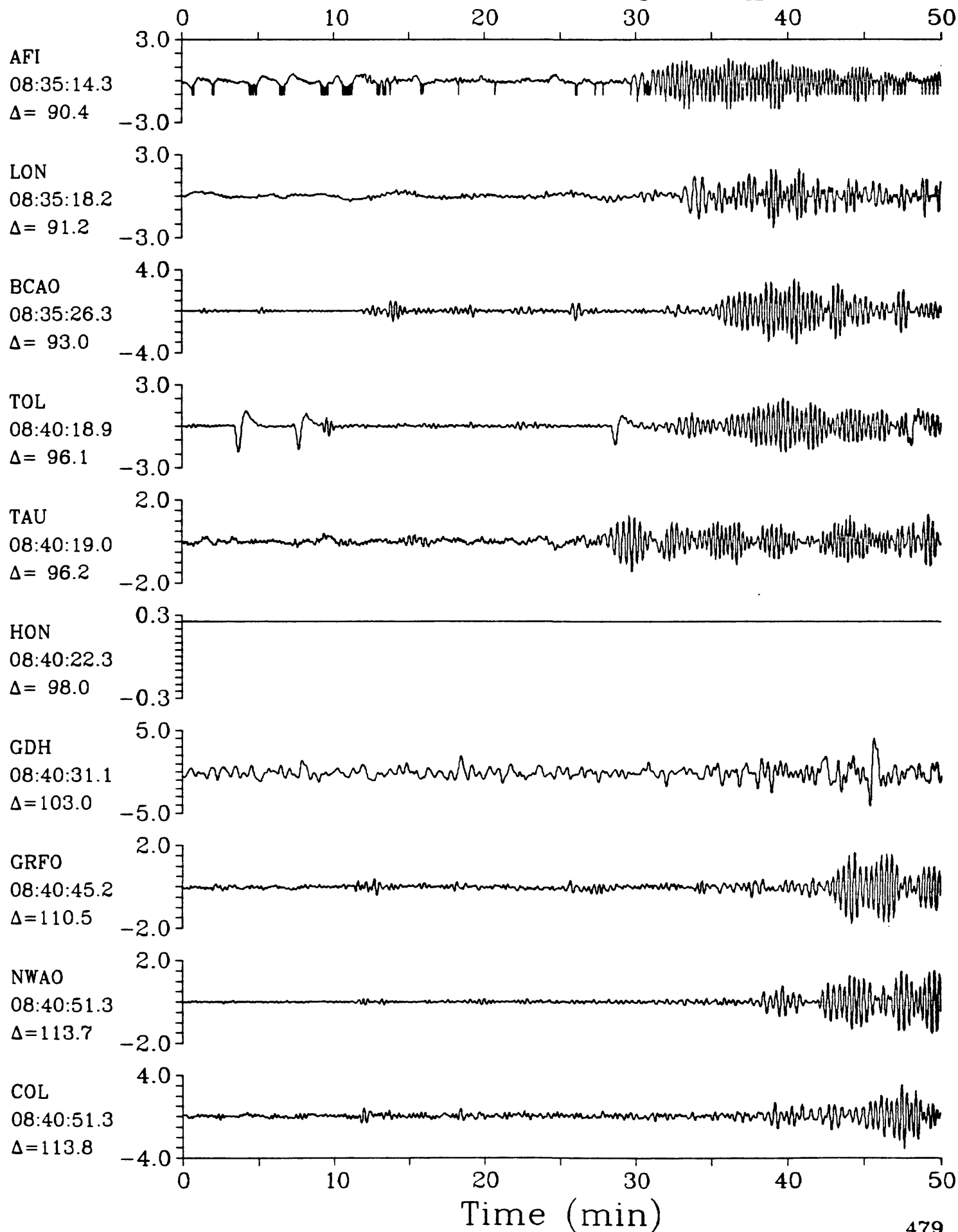
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=5.5$ 

LPZ

12 March 1985 08:23:15.36

LPZ

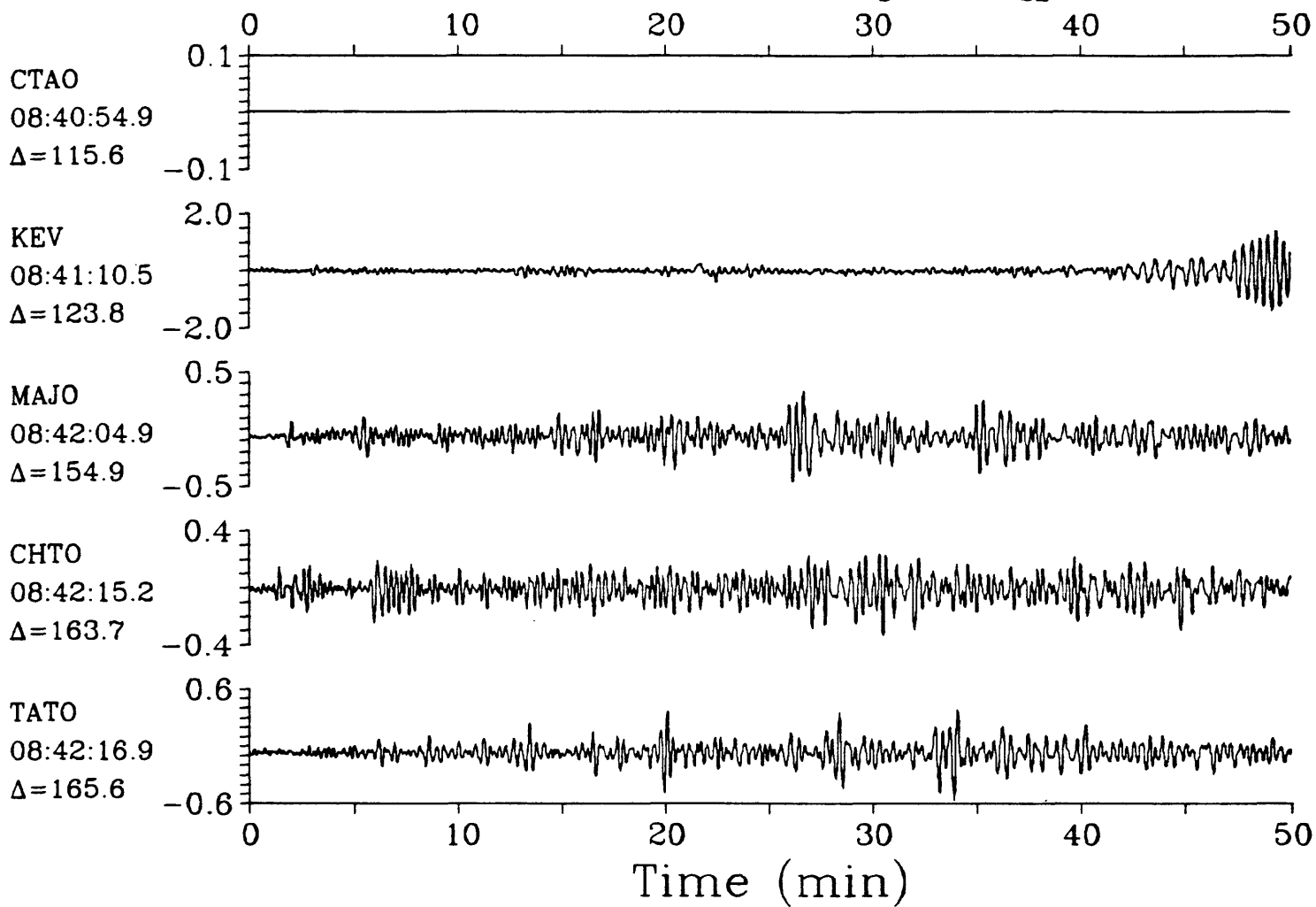
Off Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=5.5$ 



LPZ

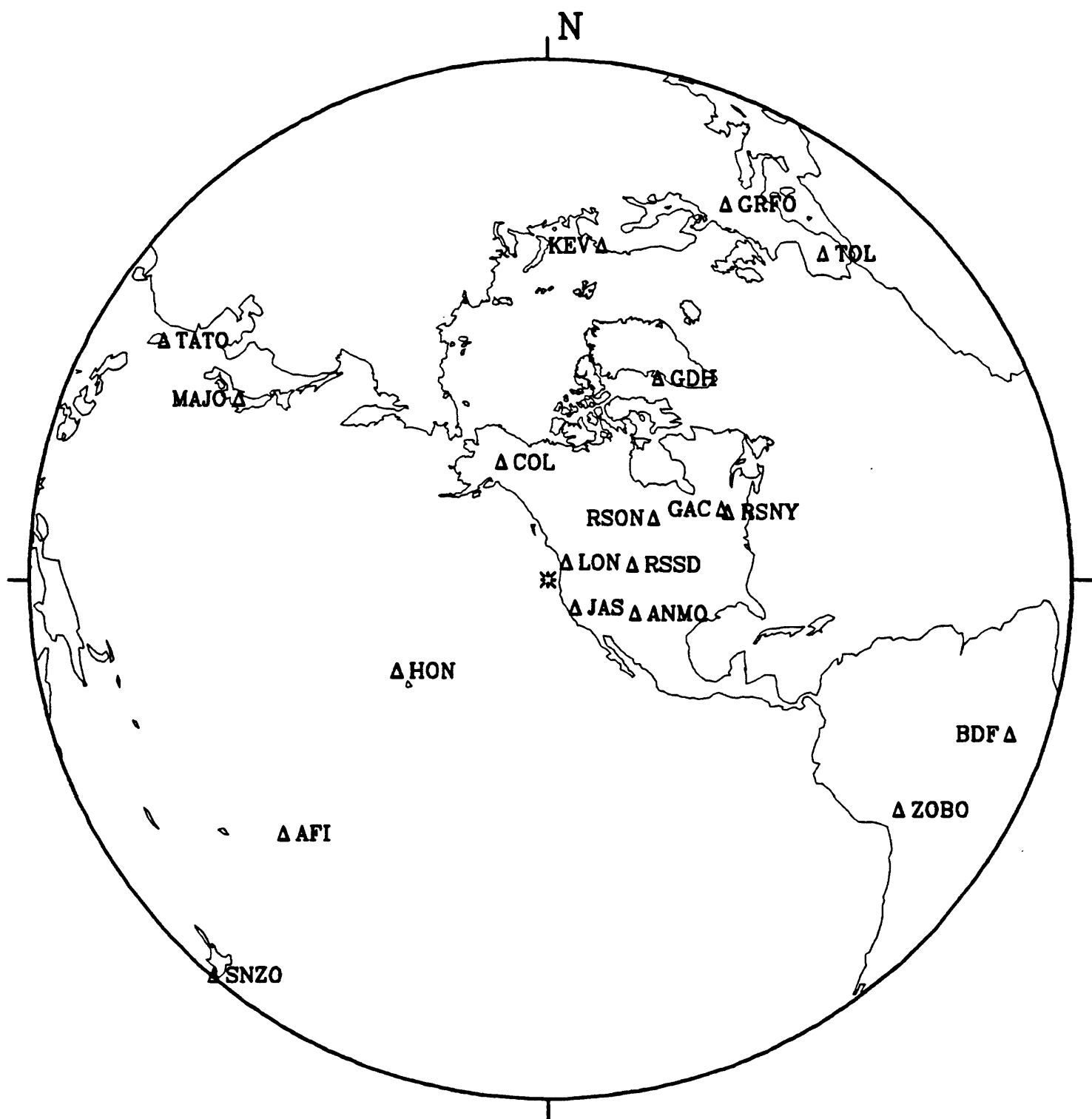
12 March 1985 08:23:15.36

LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.3$   $M_{sz}=5.5$ 

13 March 1985 19:34:57.81

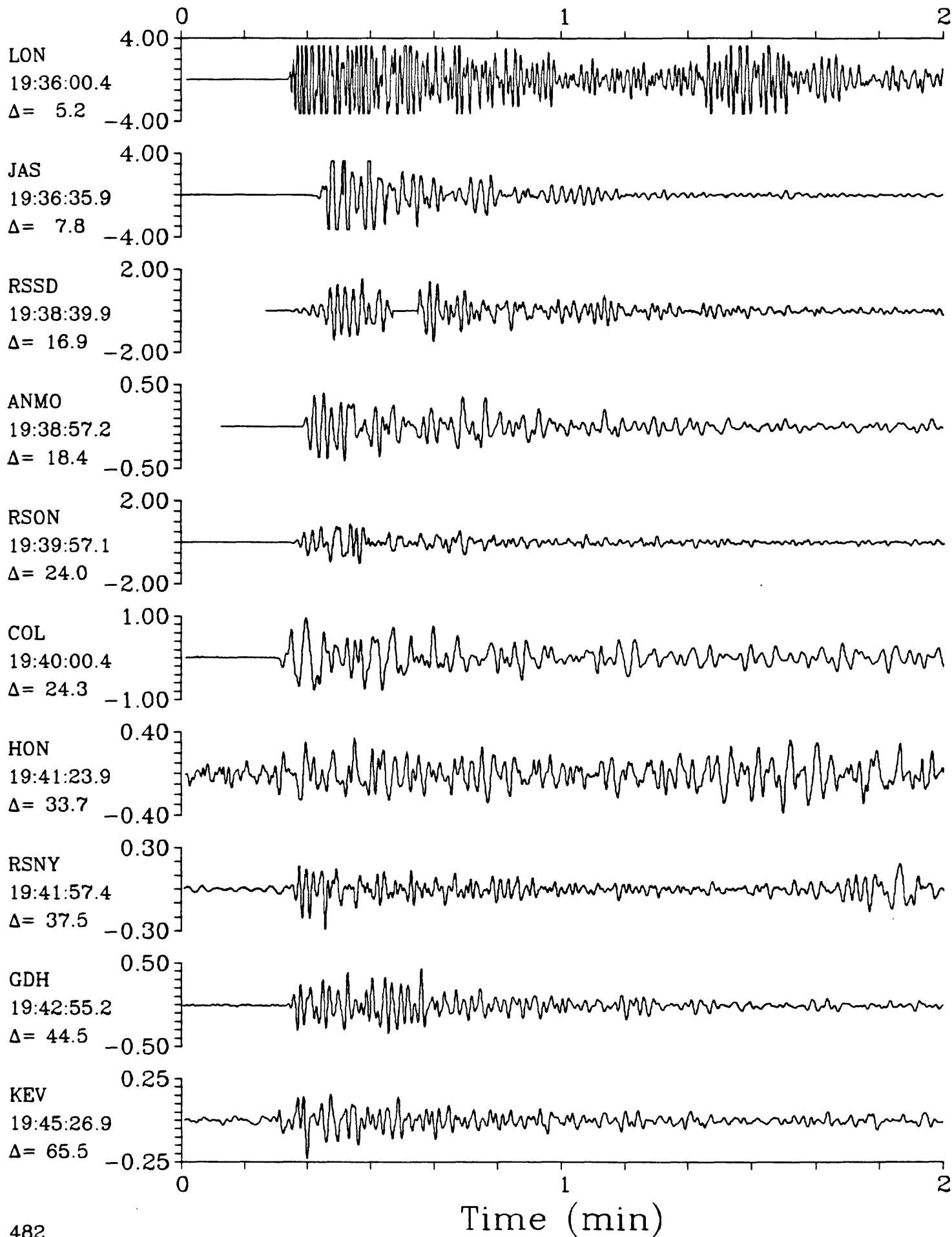
## Off Coast of Oregon

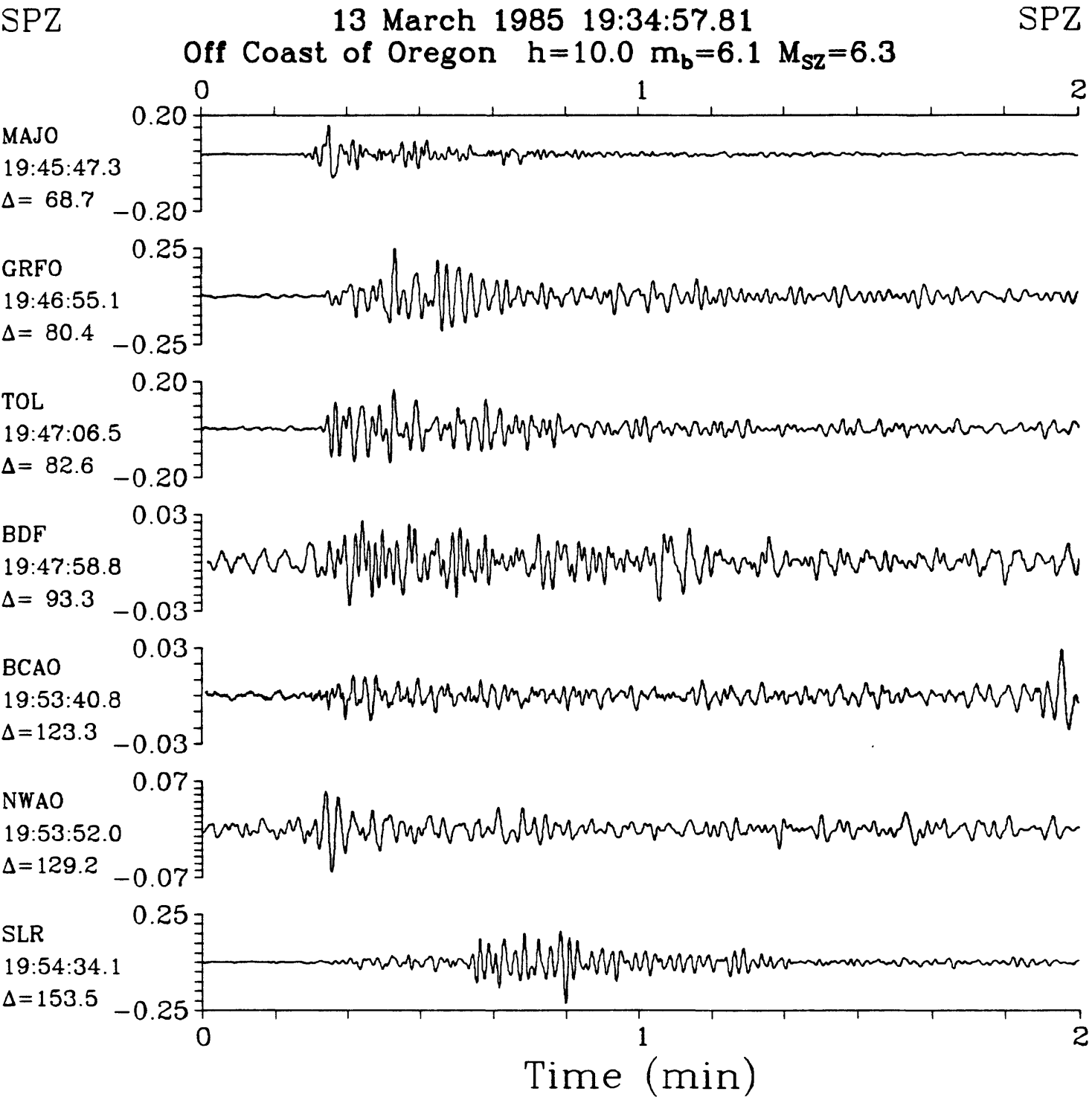


SPZ

13 March 1985 19:34:57.81

SPZ

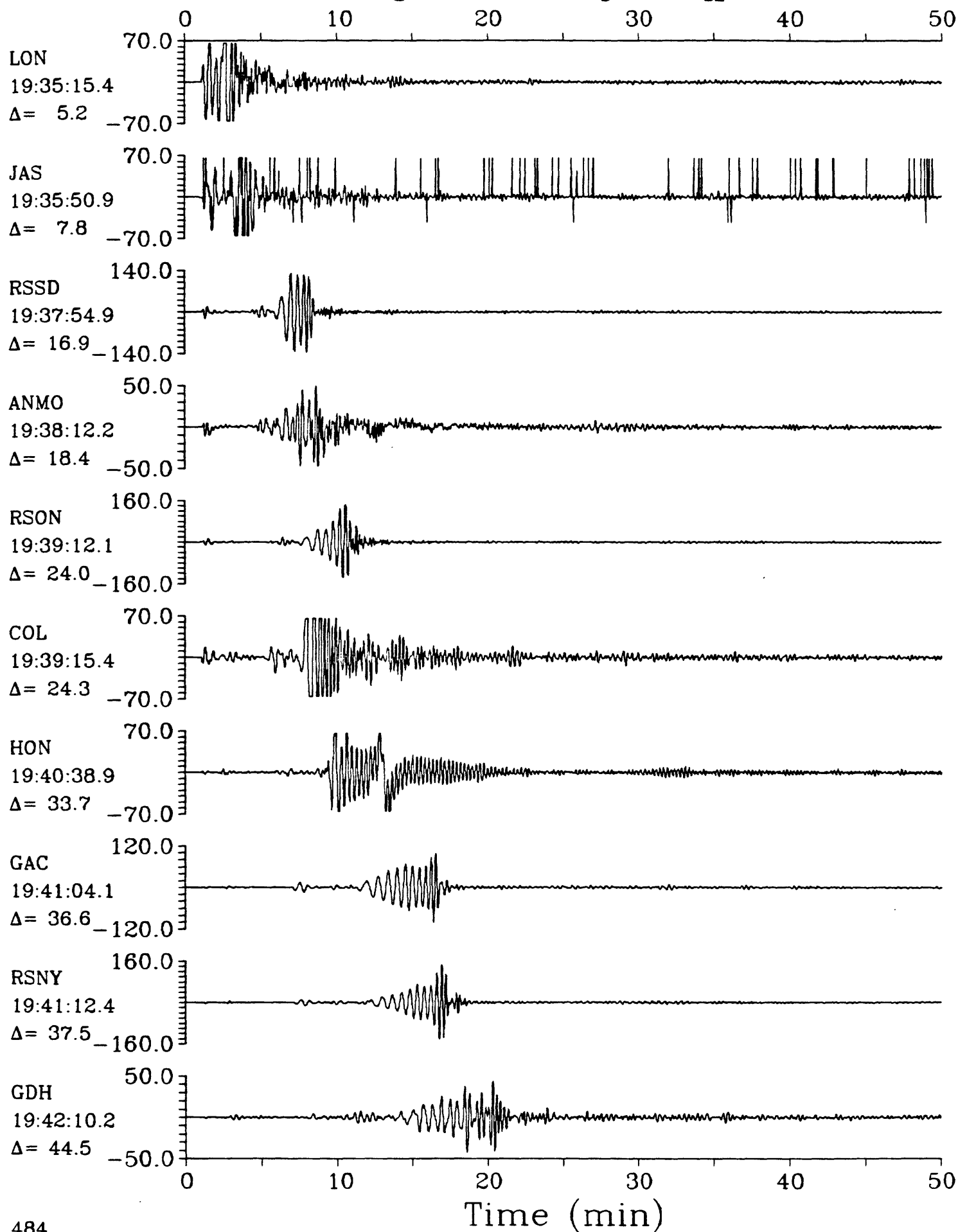
Off Coast of Oregon  $h=10.0$   $m_b=6.1$   $M_{sz}=6.3$ 



LPZ

13 March 1985 19:34:57.81

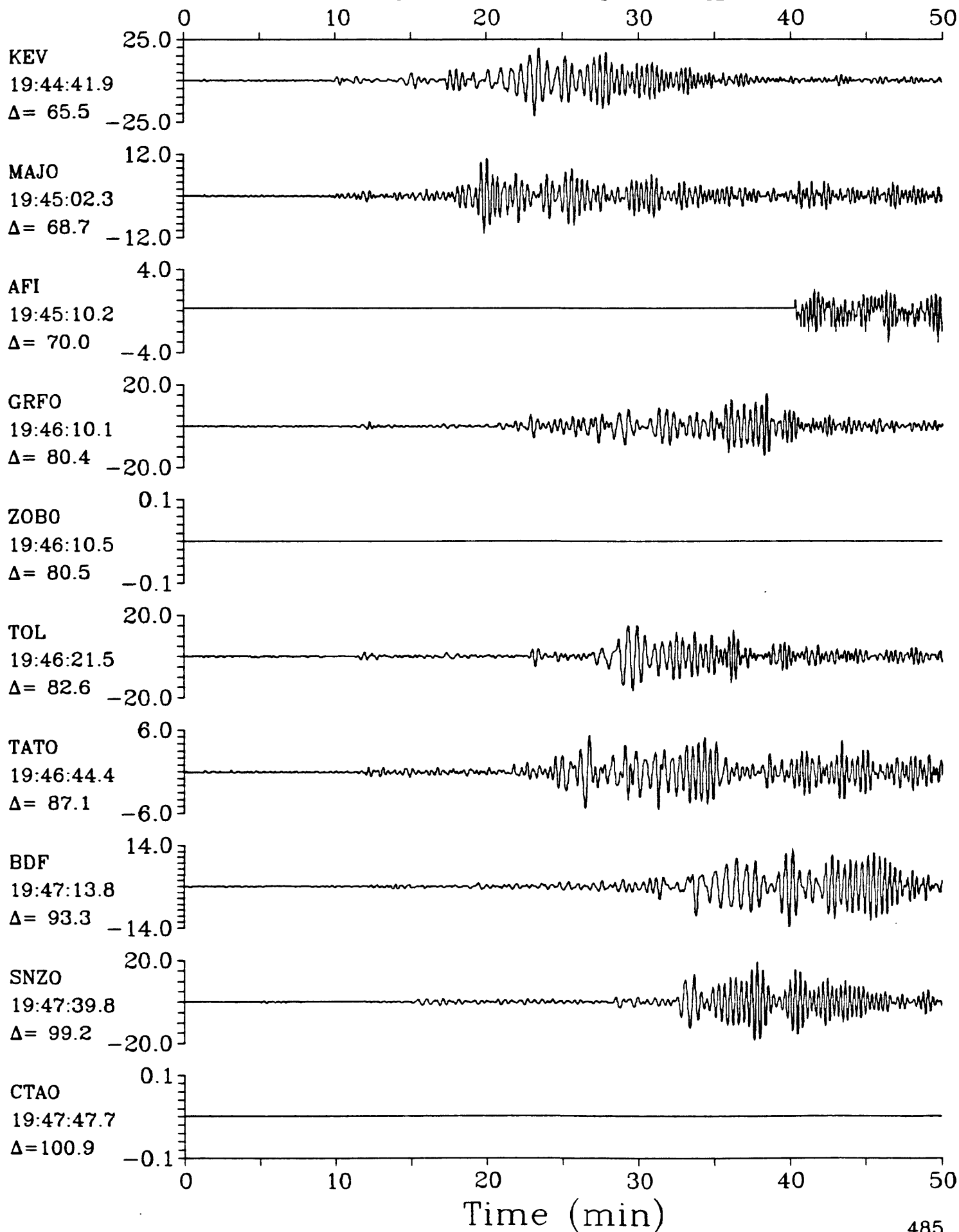
LPZ

Off Coast of Oregon  $h=10.0$   $m_b=6.1$   $M_{sz}=6.3$ 

LPZ

13 March 1985 19:34:57.81

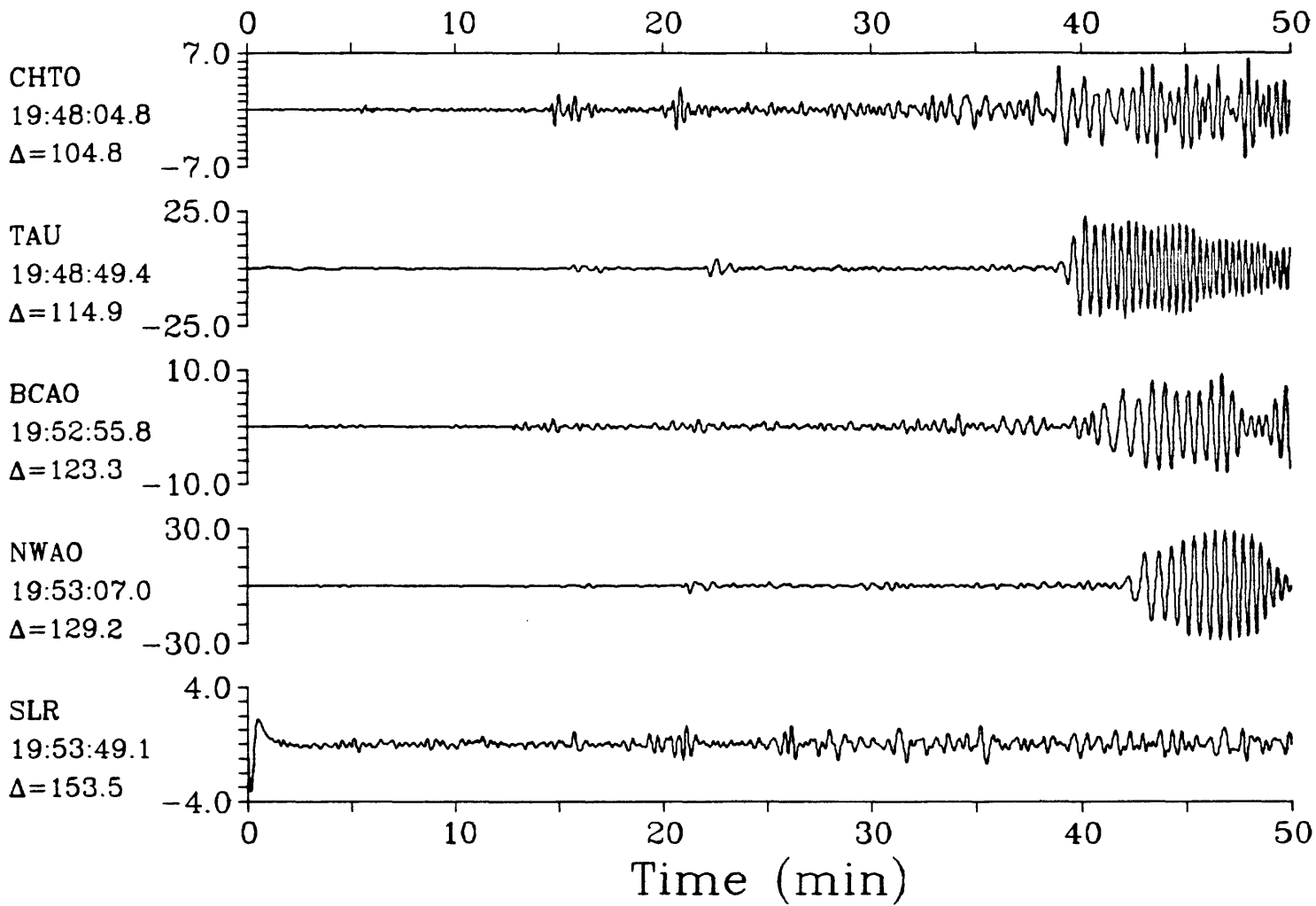
LPZ

Off Coast of Oregon  $h=10.0$   $m_b=6.1$   $M_{sz}=6.3$ 

LPZ

13 March 1985 19:34:57.81

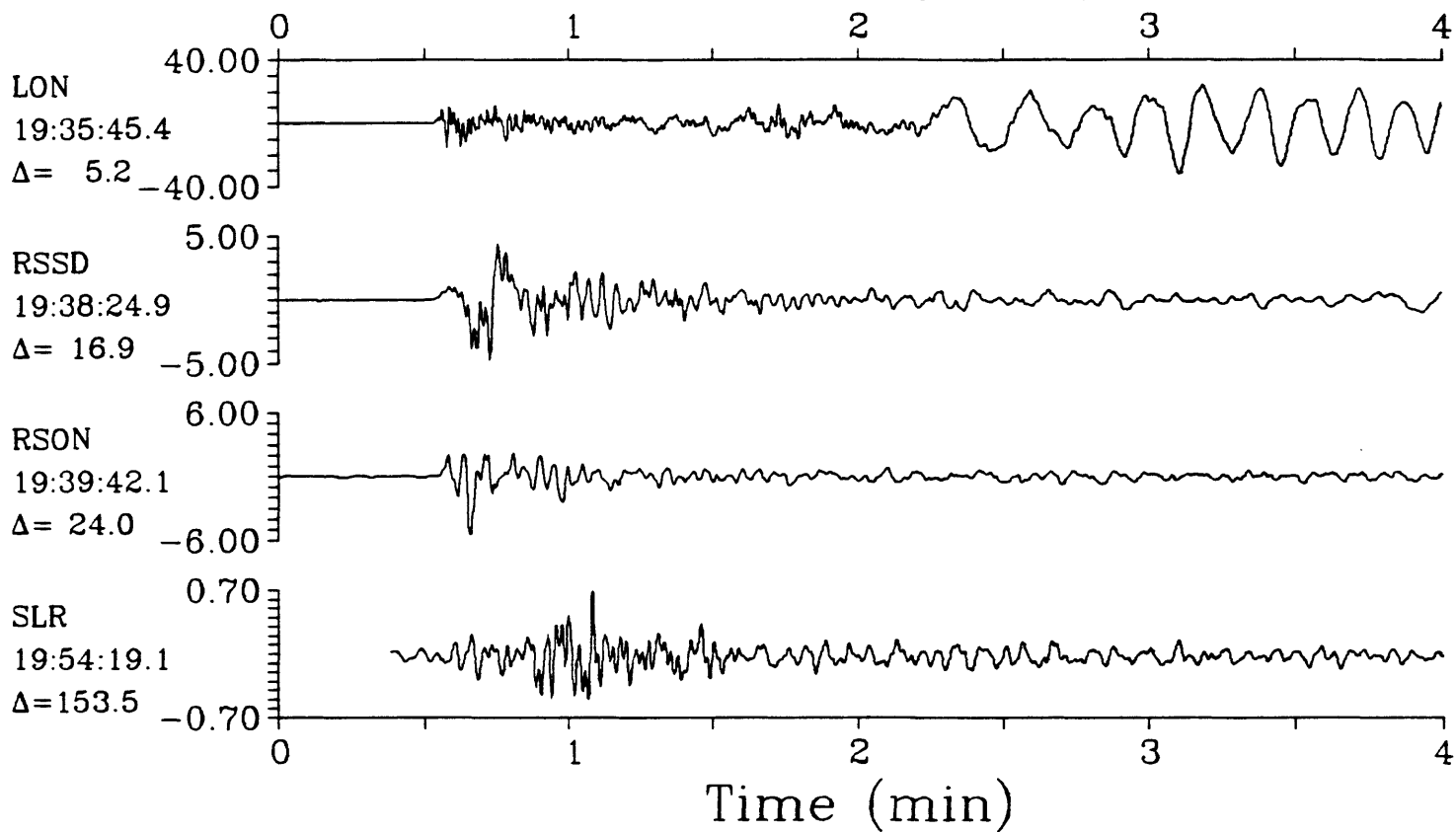
LPZ

Off Coast of Oregon  $h=10.0$   $m_b=6.1$   $M_{sz}=6.3$ 

IPZ

13 March 1985 19:34:57.81

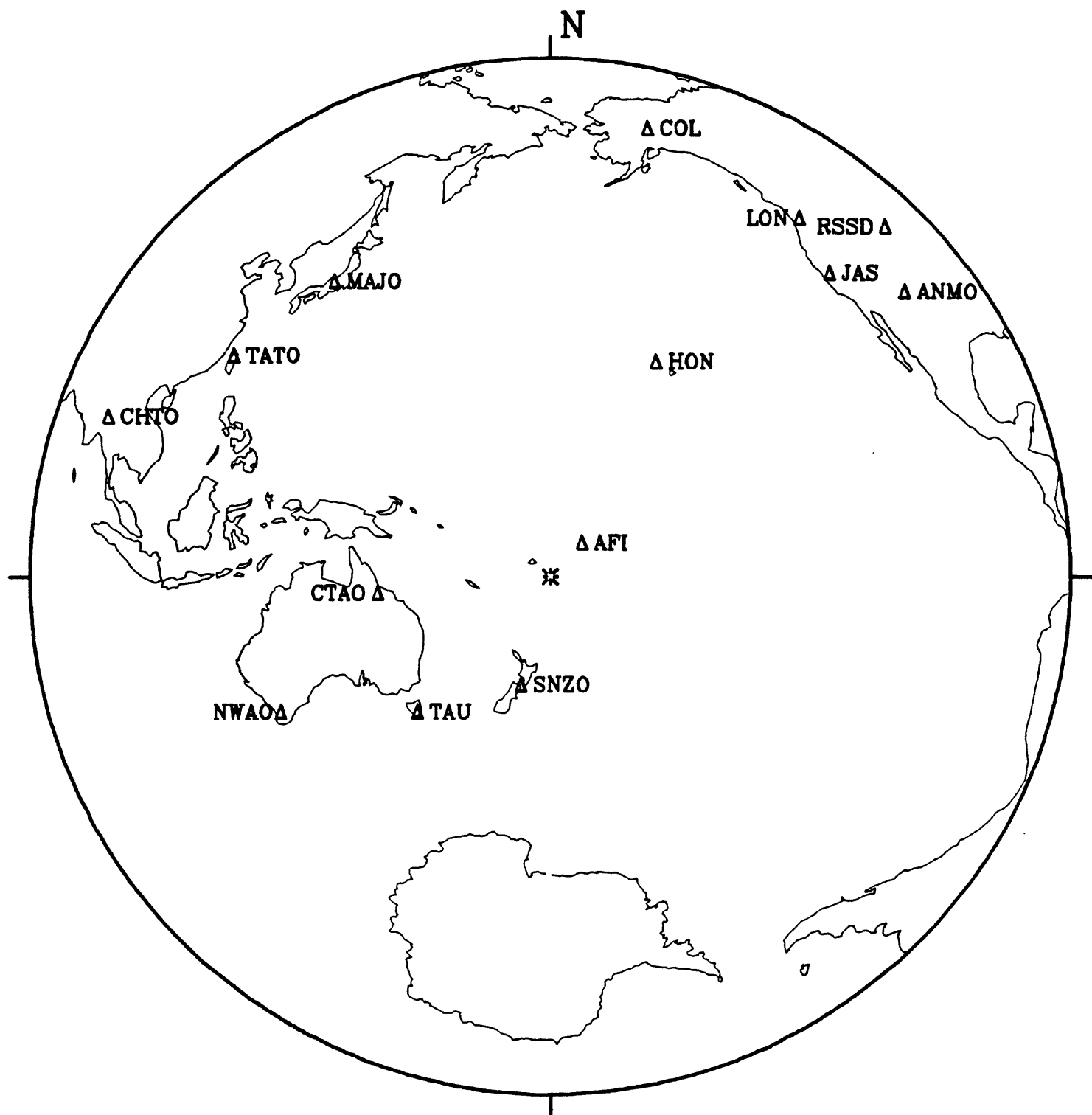
IPZ

Off Coast of Oregon  $h=10.0$   $m_b=6.1$   $M_{sz}=6.3$ 



15 March 1985 00:16:03.49

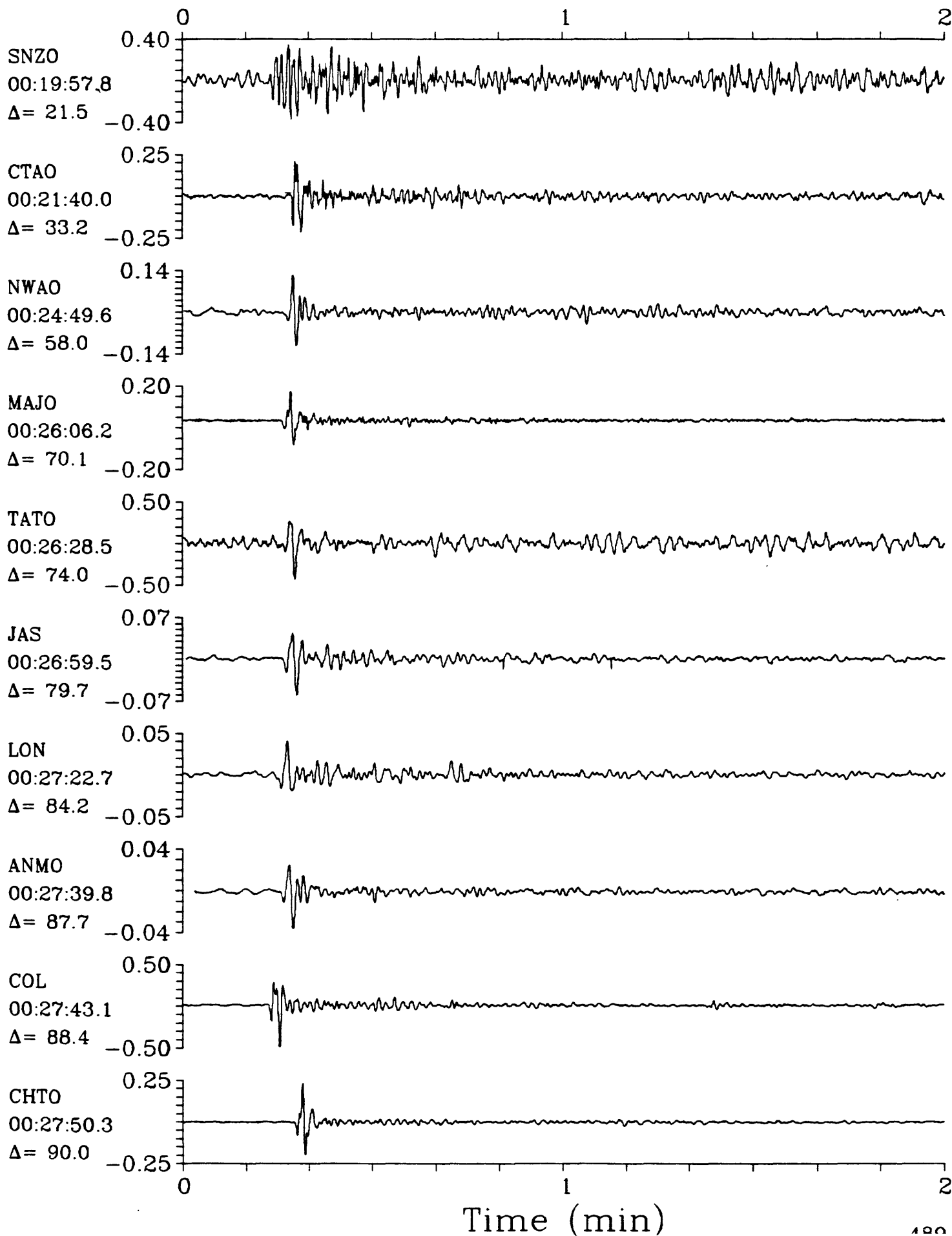
## Fiji Islands Region



SPZ

15 March 1985 00:16:03.49  
Fiji Islands Region  $h=551.2$   $m_b=5.5$ 

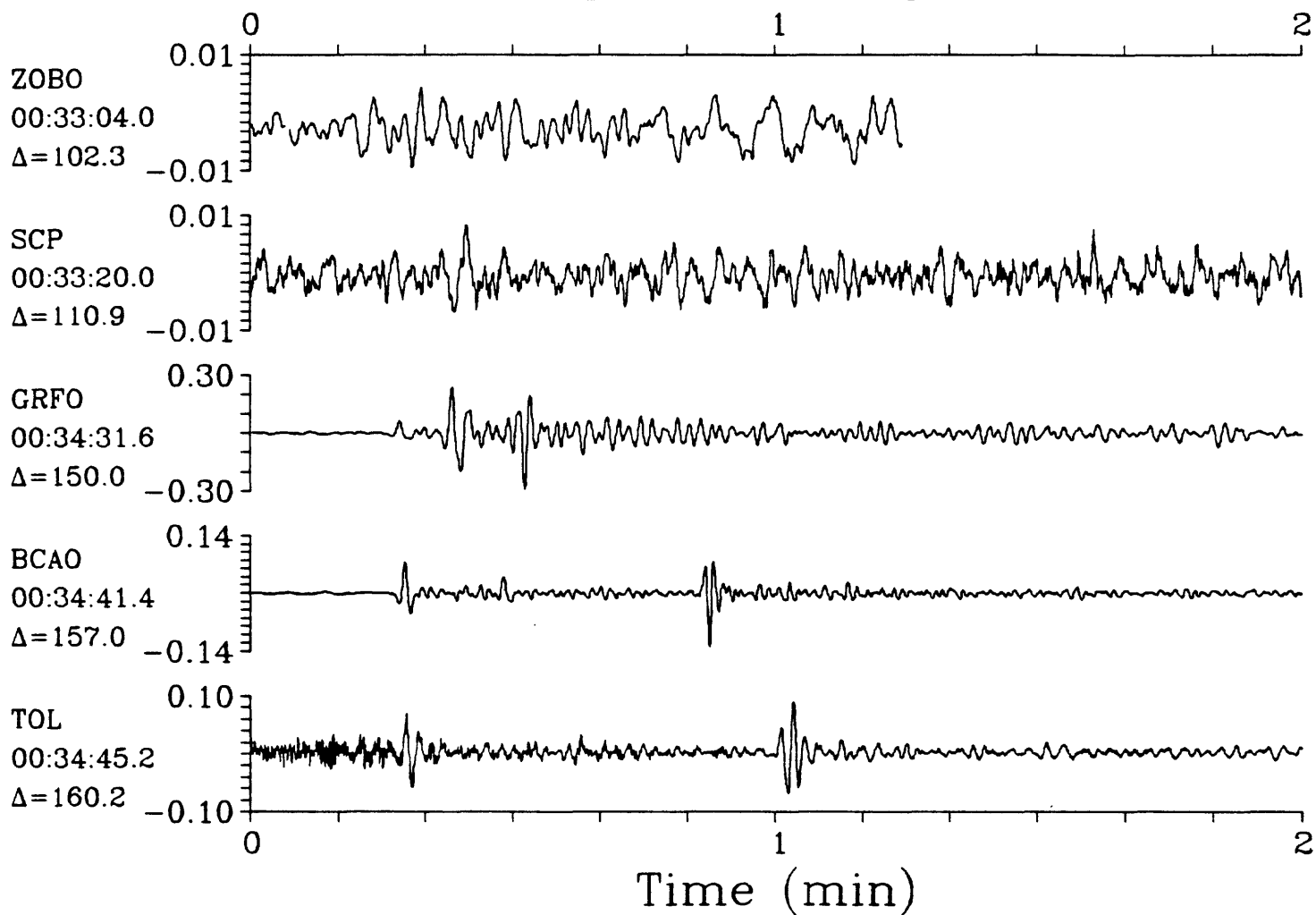
SPZ



SPZ

15 March 1985 00:16:03.49  
Fiji Islands Region  $h=551.2$   $m_b=5.5$ 

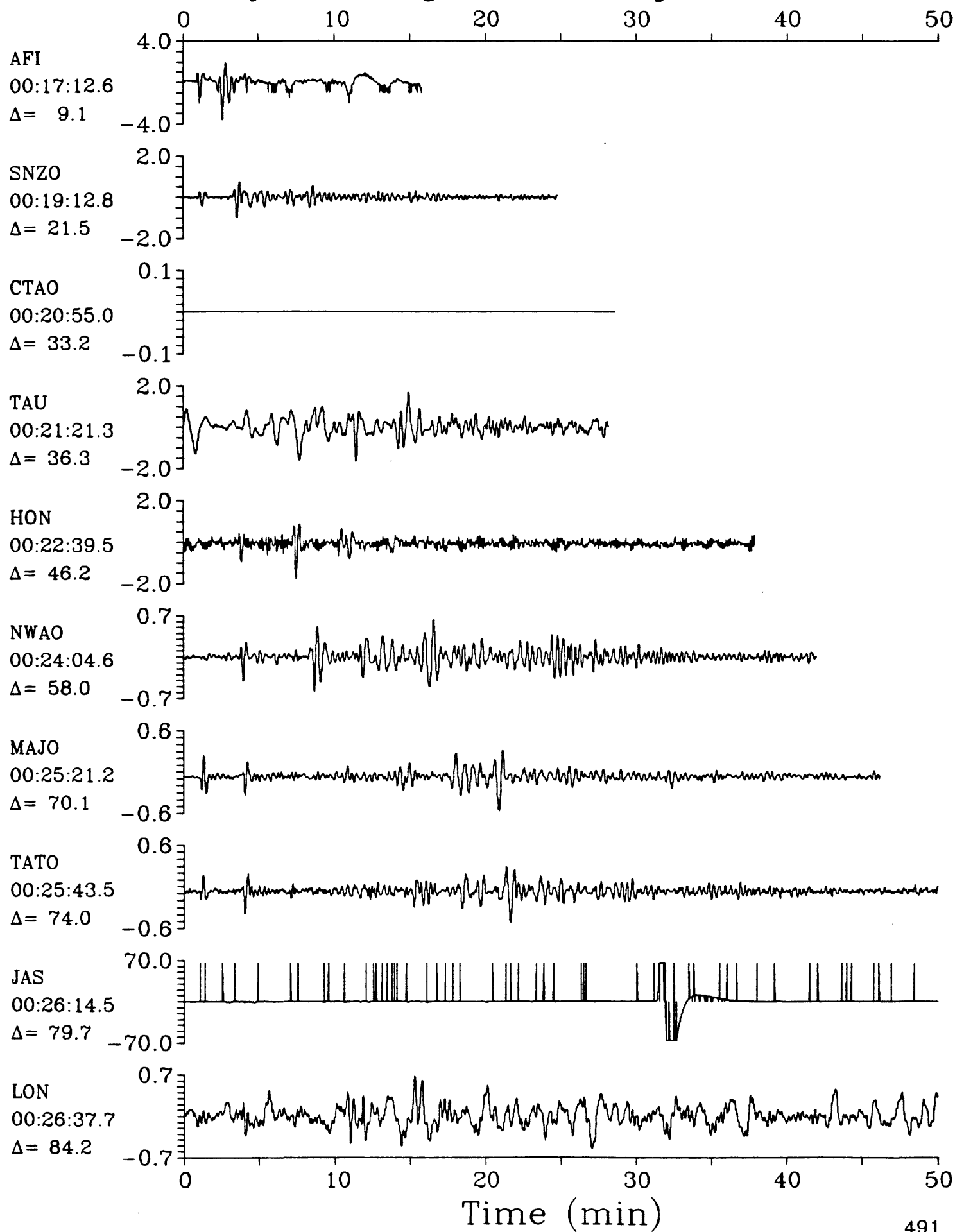
SPZ



LPZ

15 March 1985 00:16:03.49  
Fiji Islands Region  $h=551.2$   $m_b=5.5$ 

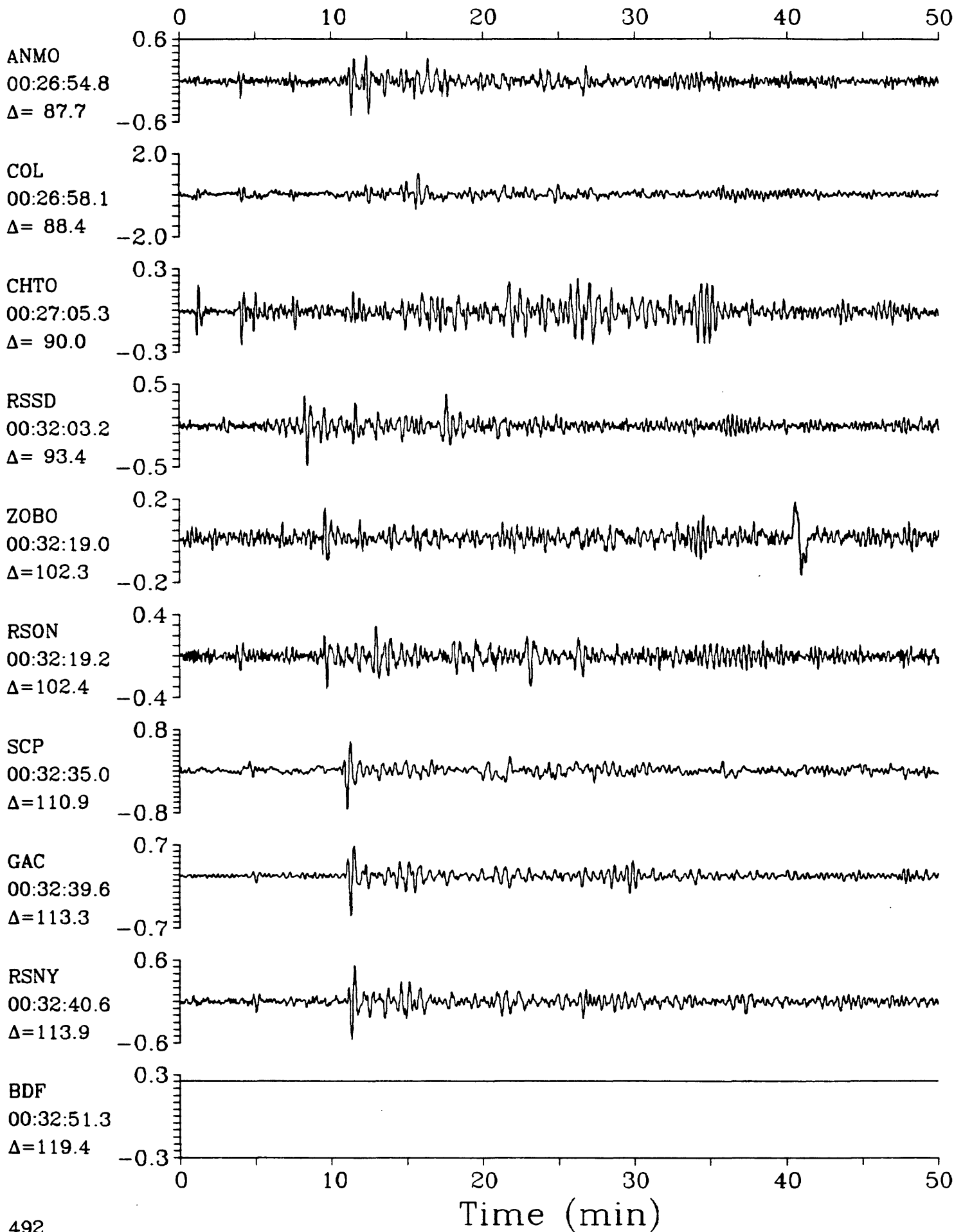
LPZ



LPZ

15 March 1985 00:16:03.49  
Fiji Islands Region  $h=551.2$   $m_b=5.5$ 

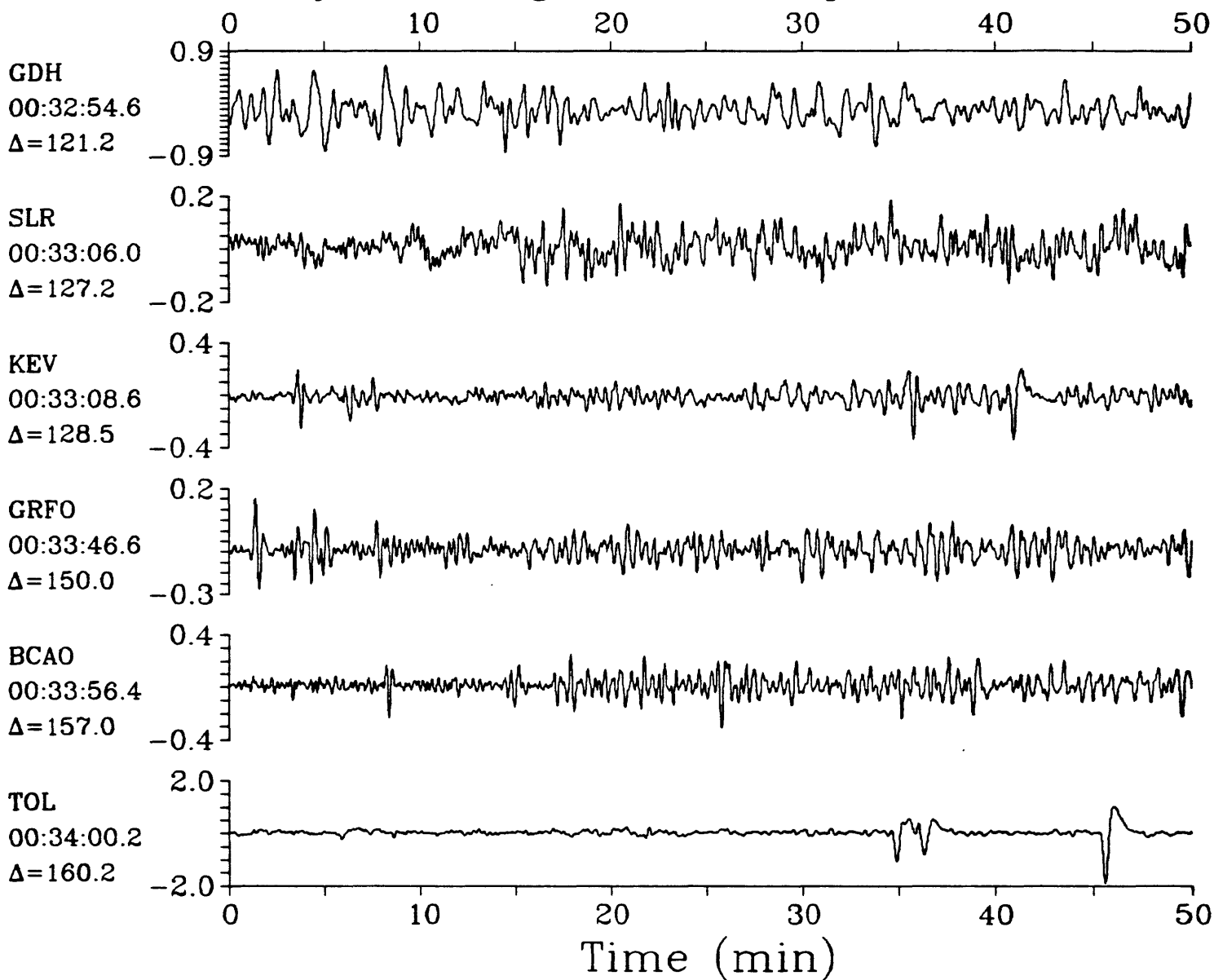
LPZ



LPZ

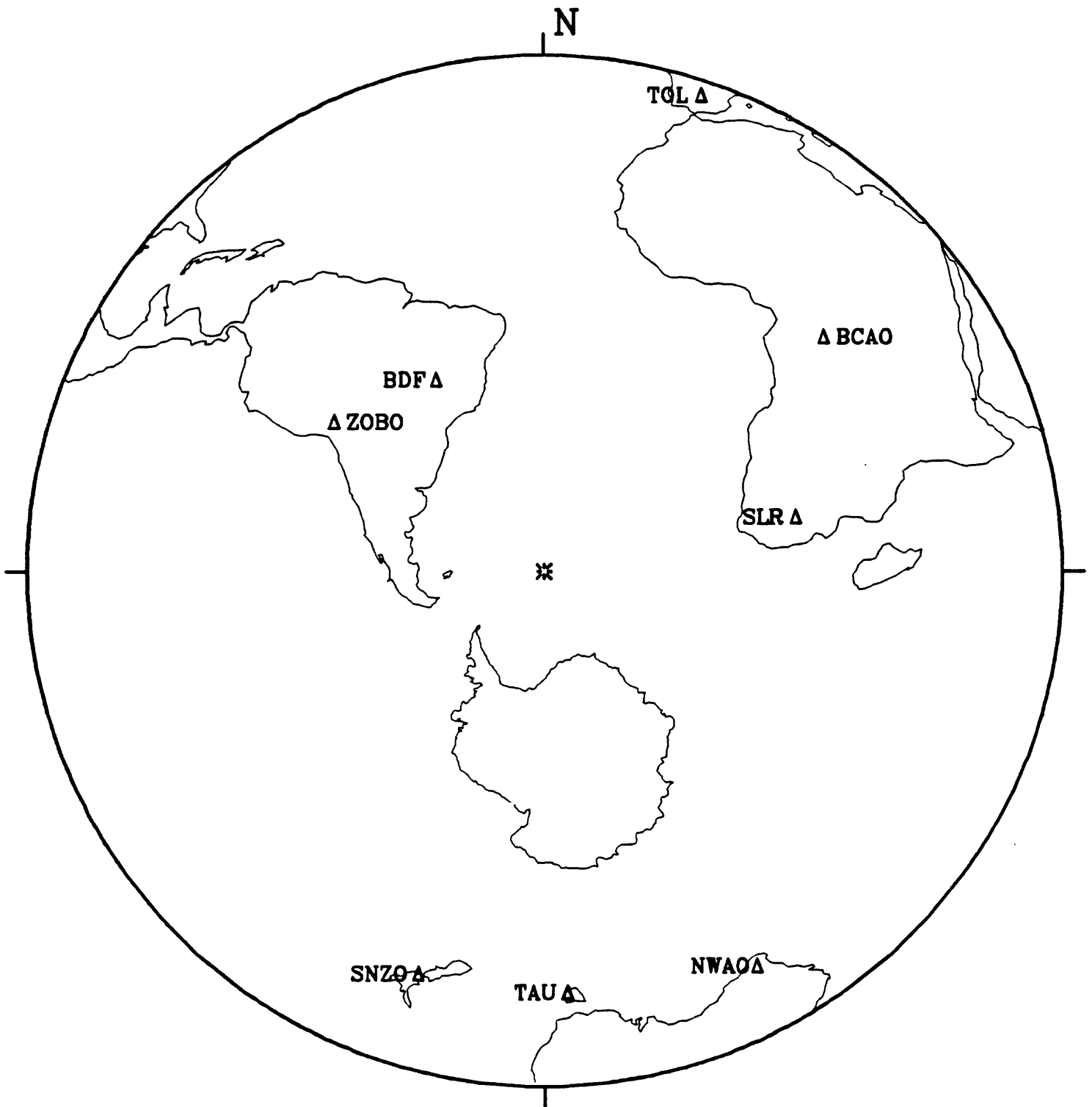
15 March 1985 00:16:03.49  
Fiji Islands Region  $h=551.2$   $m_b=5.5$ 

LPZ



16 March 1985 08:19:11.01

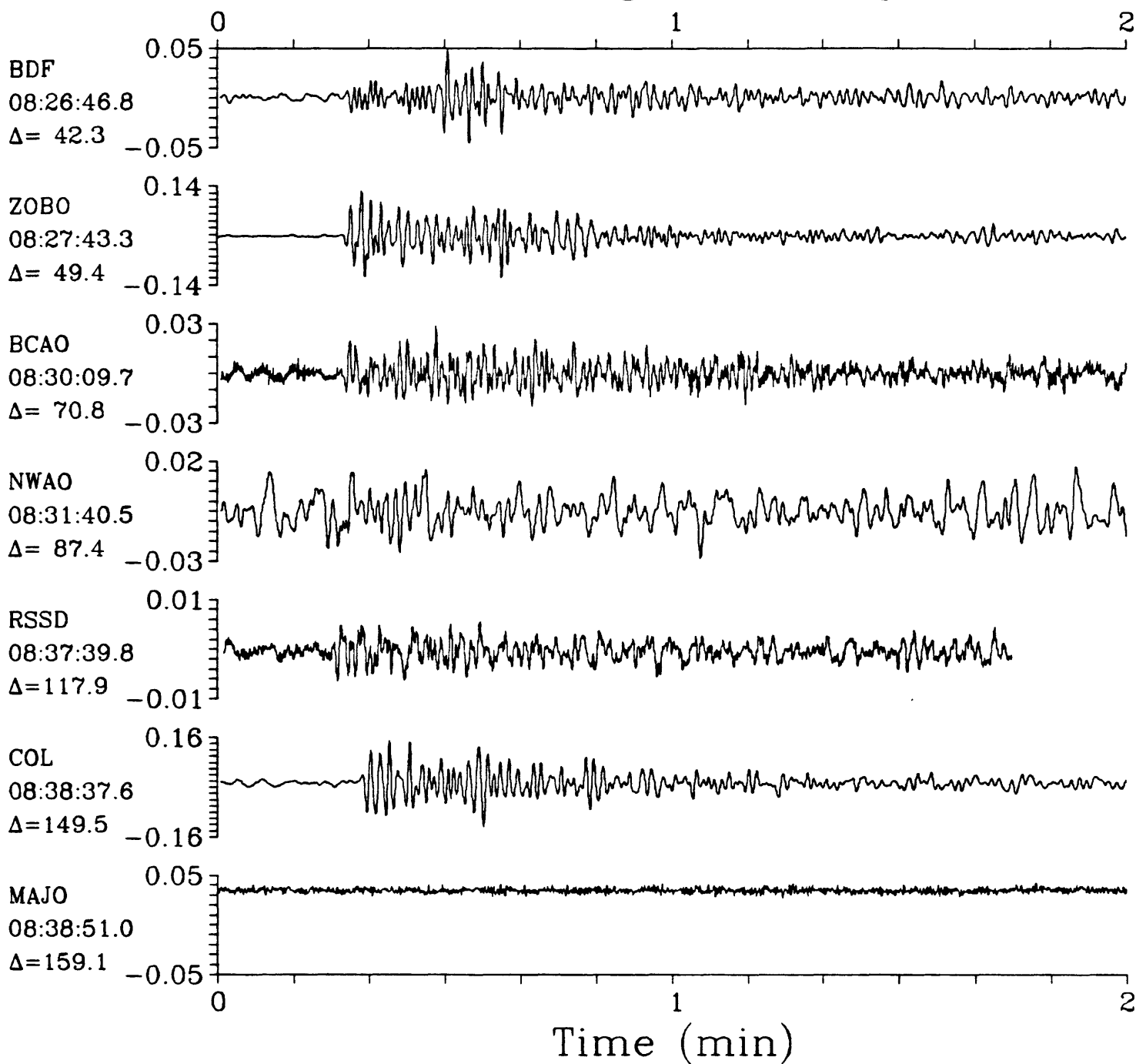
## South Sandwich Islands Region



SPZ

16 March 1985 08:19:11.01

SPZ

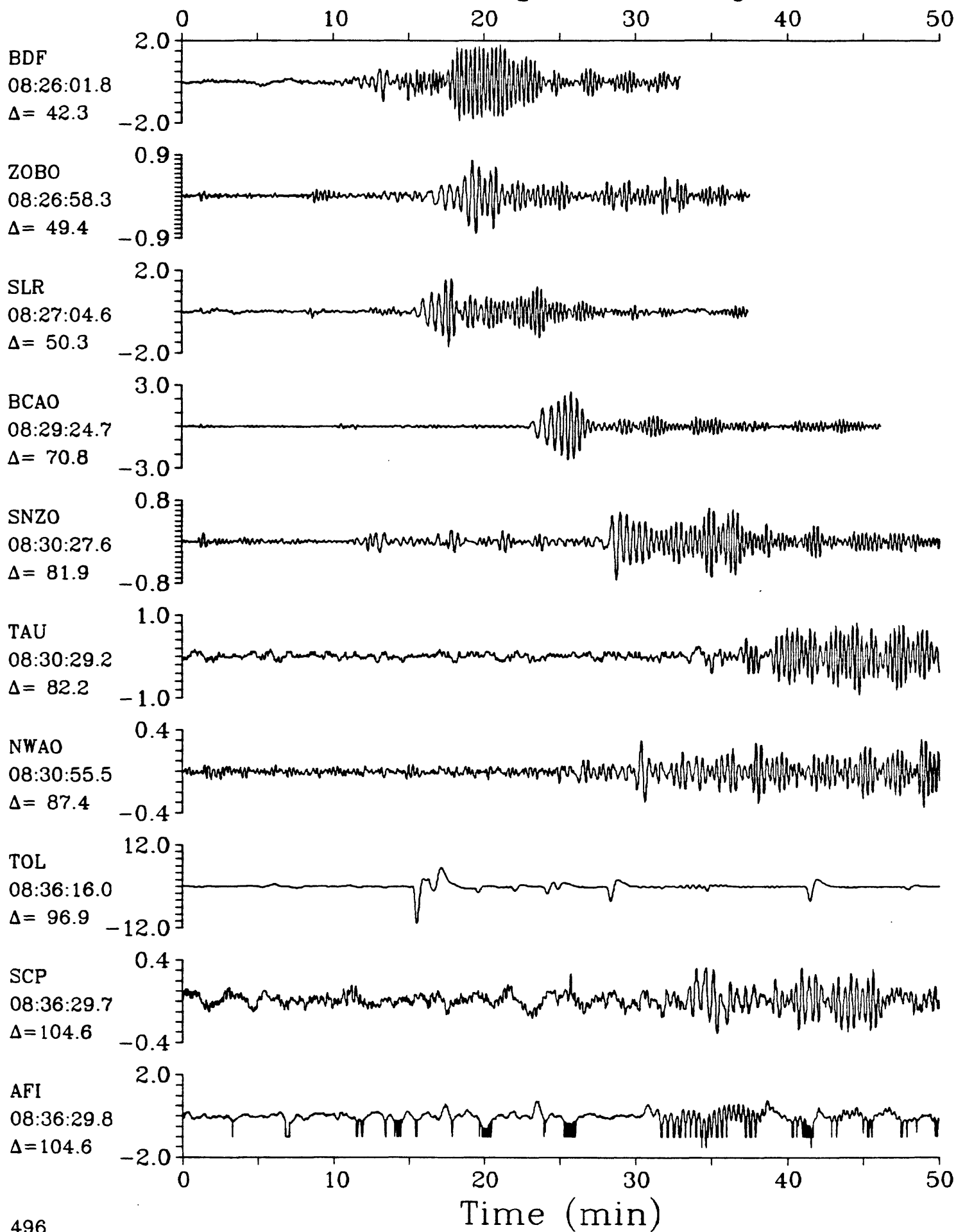
South Sandwich Islands Region  $h=33.0$   $m_b=5.6$ 



LPZ

16 March 1985 08:19:11.01

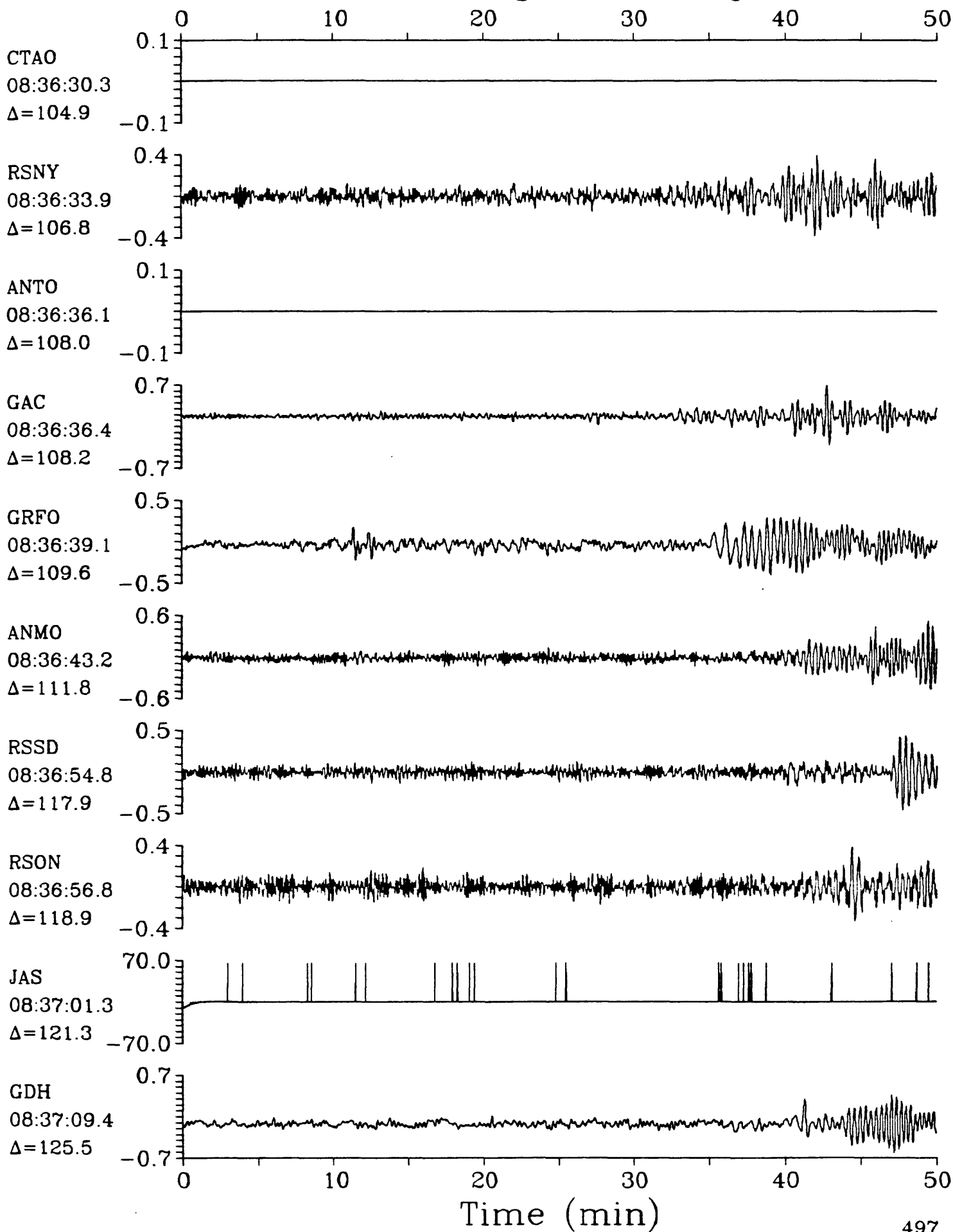
LPZ

South Sandwich Islands Region  $h=33.0$   $m_b=5.6$ 

LPZ

16 March 1985 08:19:11.01

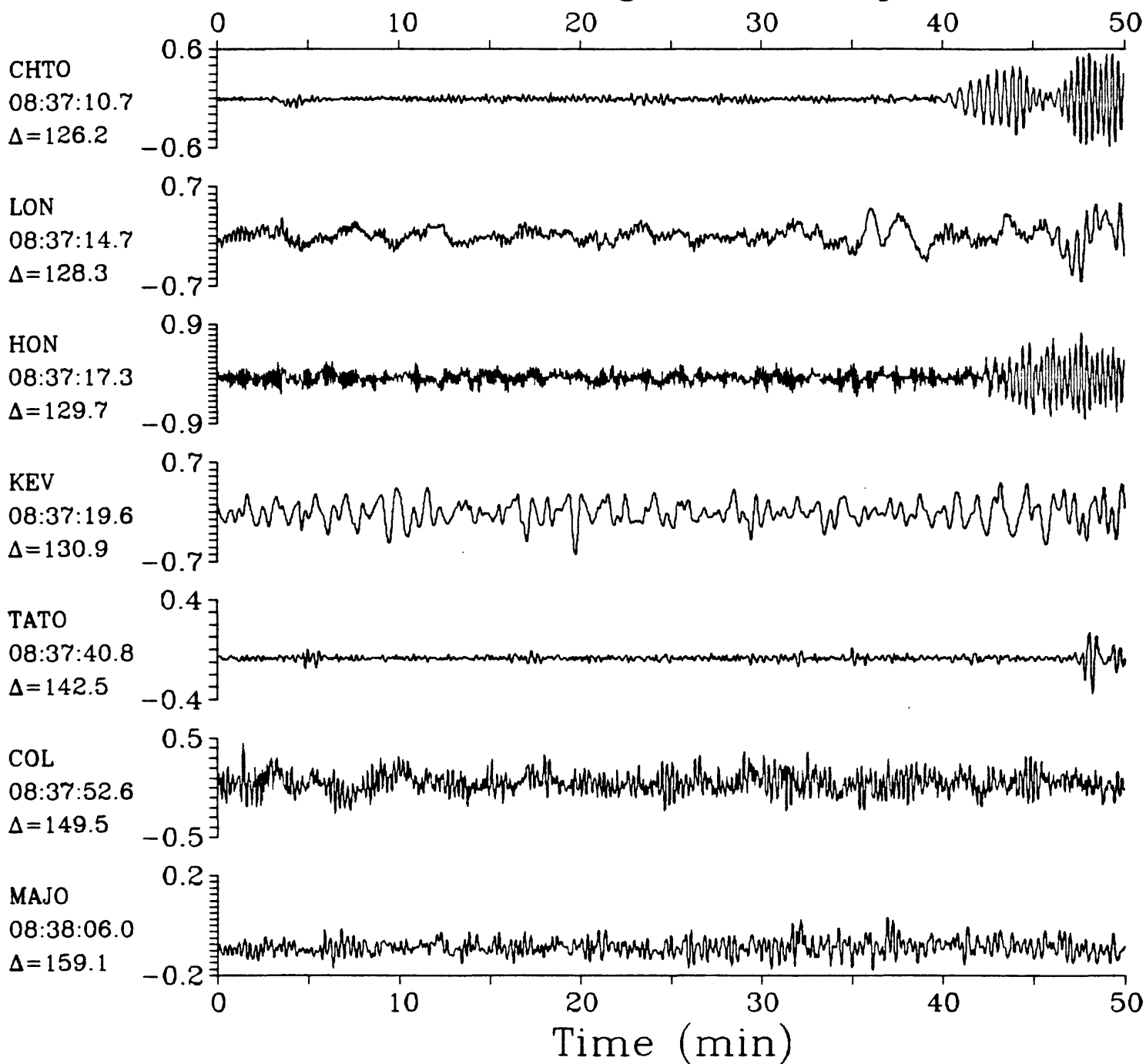
LPZ

South Sandwich Islands Region  $h=33.0$   $m_b=5.6$ 

LPZ

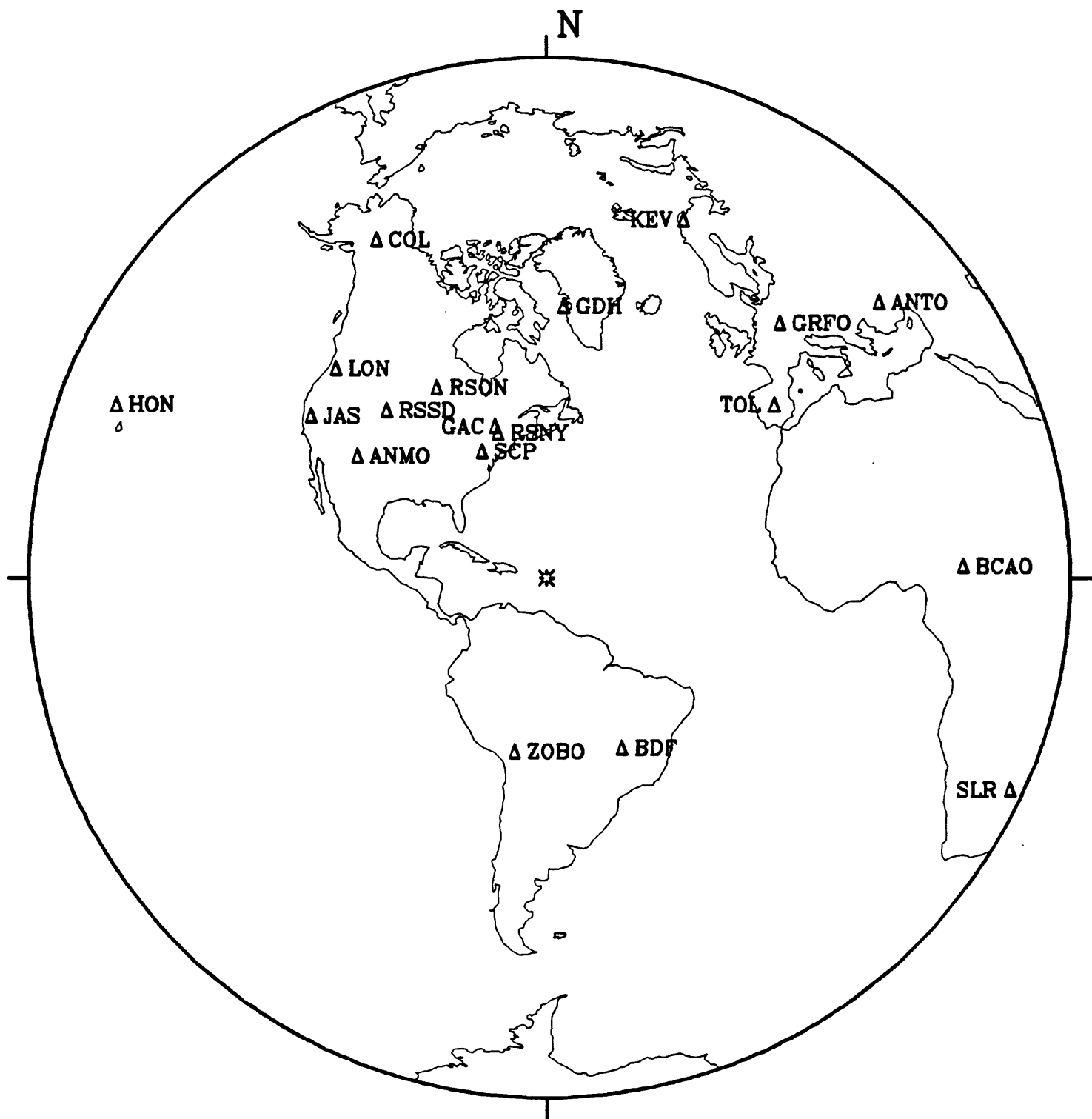
16 March 1985 08:19:11.01

LPZ

South Sandwich Islands Region  $h=33.0$   $m_b=5.6$ 

16 March 1985 14:54:01.10

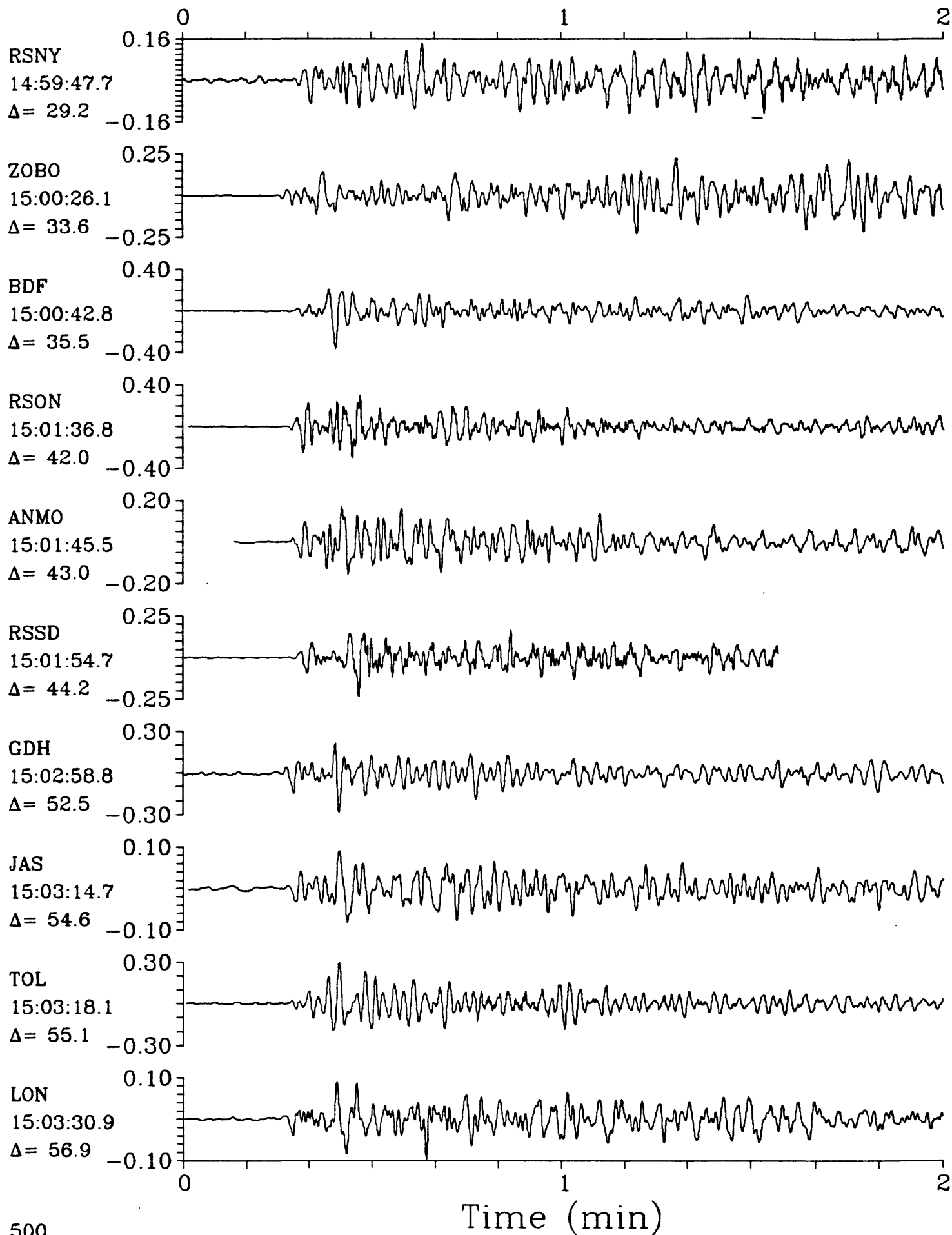
## Leeward Islands



SPZ

16 March 1985 14:54:01.10

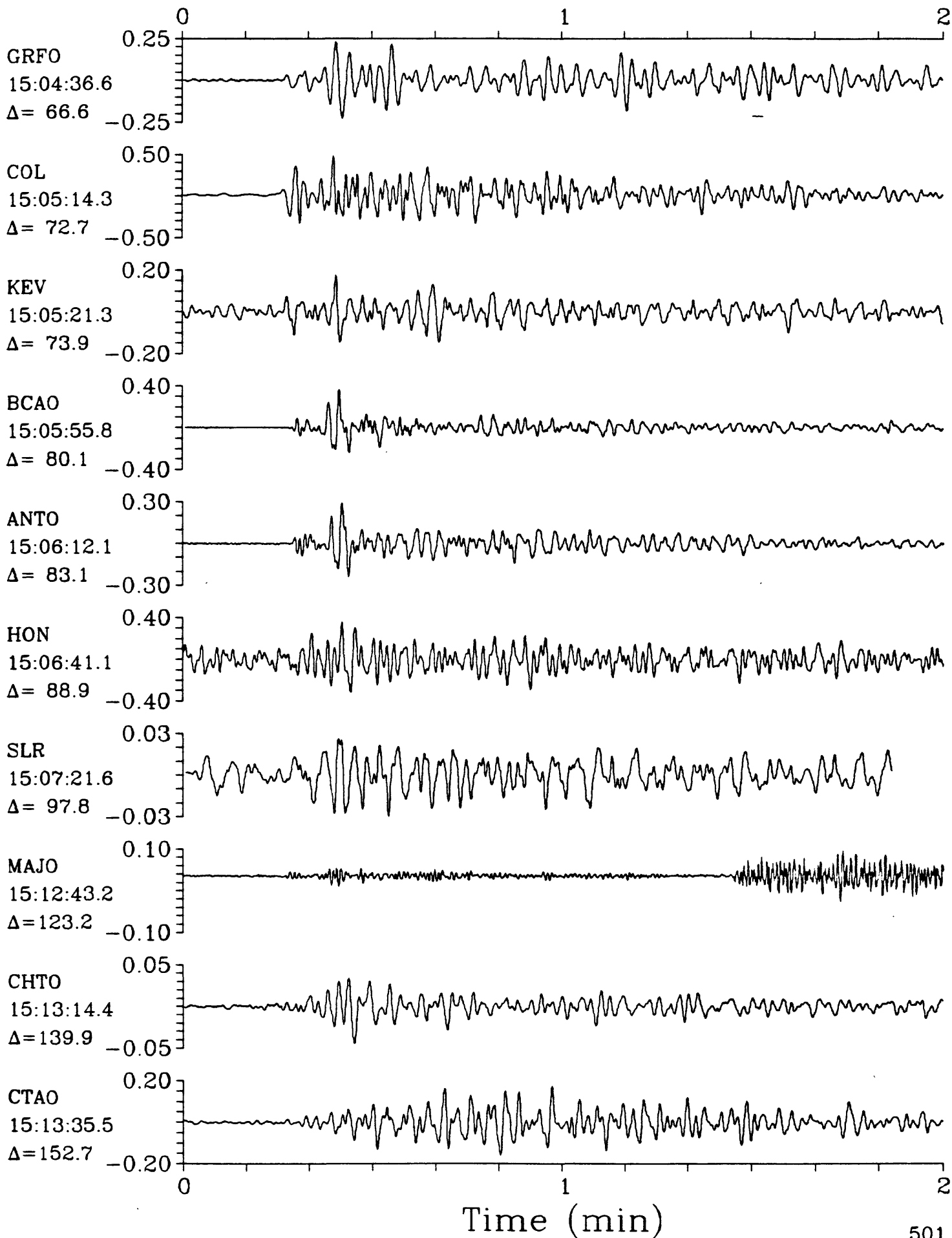
SPZ

Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{sz}=6.3$ 

SPZ

16 March 1985 14:54:01.10

SPZ

Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{sz}=6.3$ 

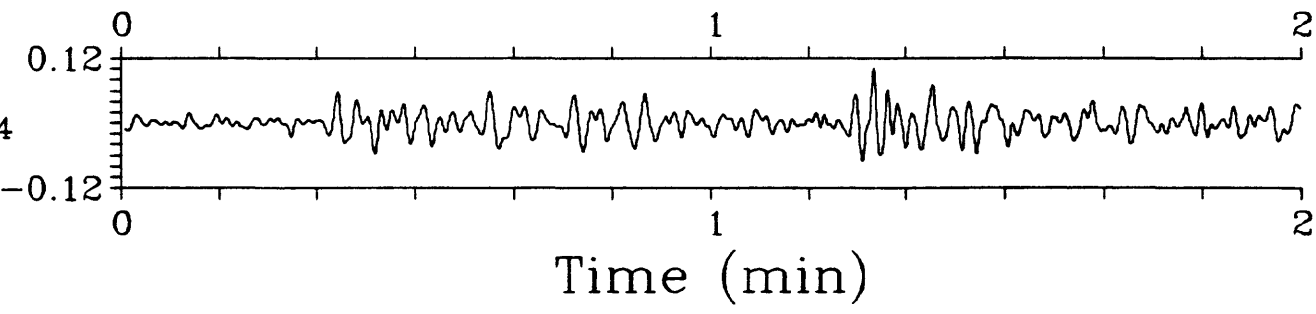
SPZ

16 March 1985 14:54:01.10

SPZ

Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{sz}=6.3$

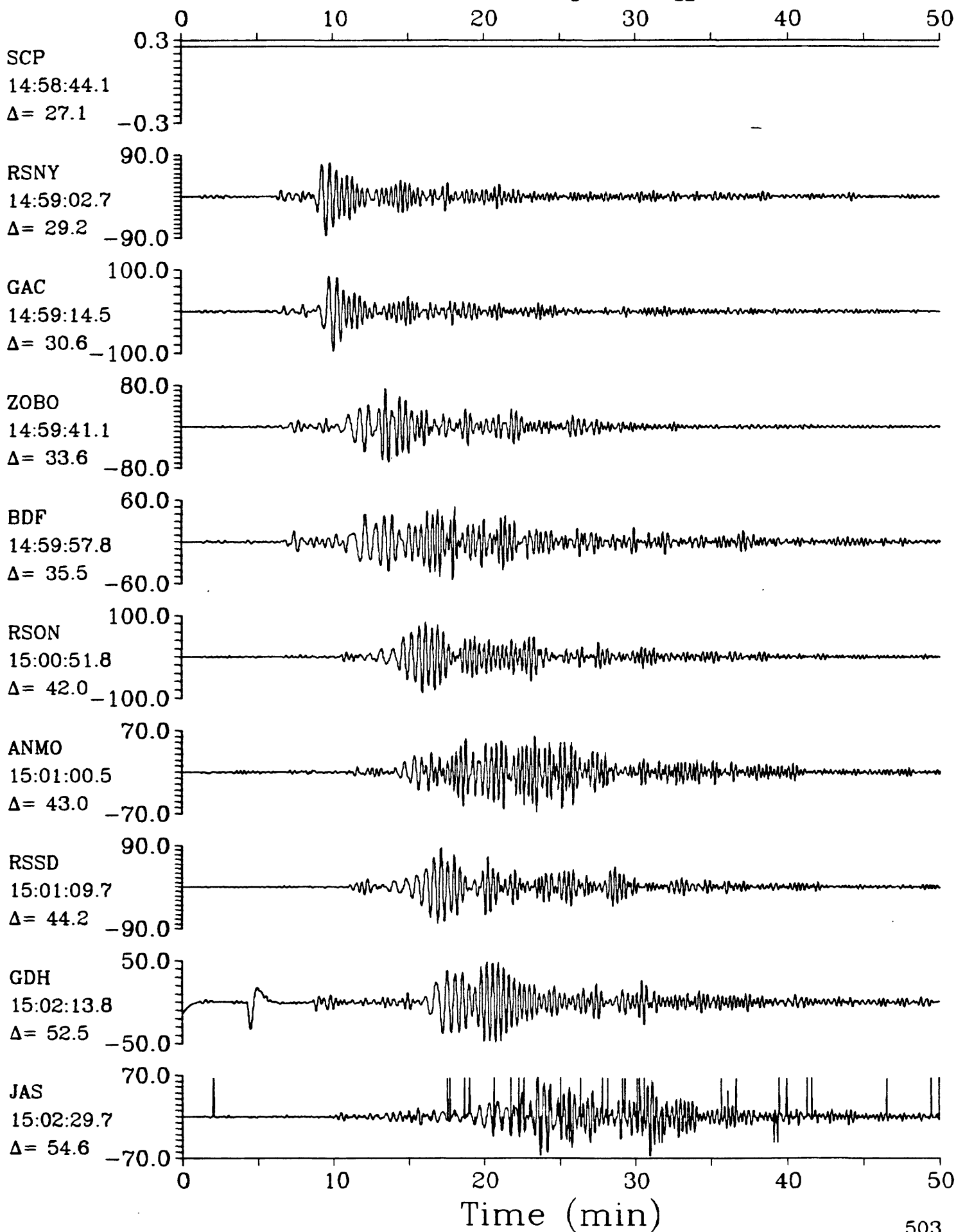
NWAO  
15:13:49.4  
 $\Delta=164.2$



LPZ

16 March 1985 14:54:01.10

LPZ

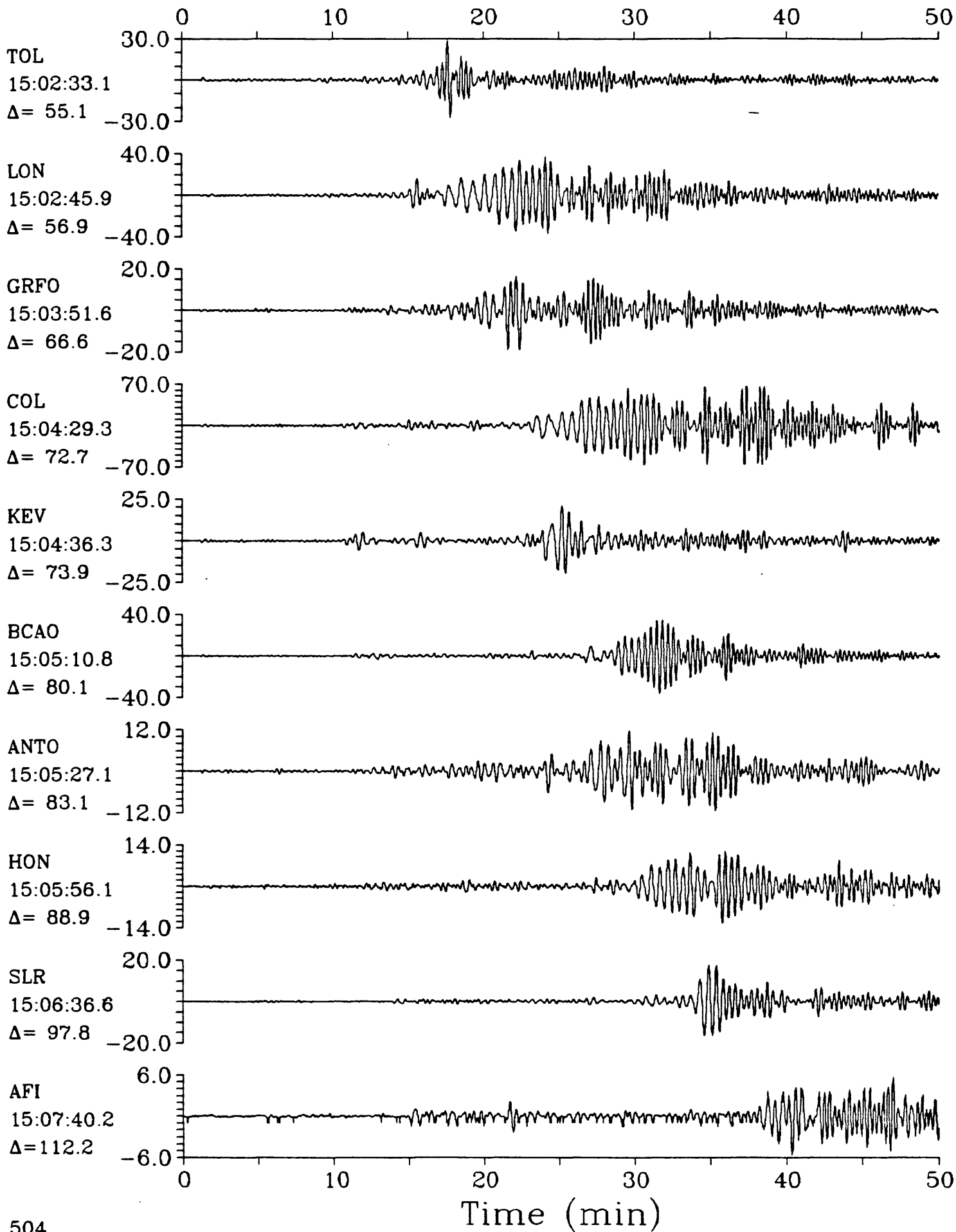
Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{sz}=6.3$ 



LPZ

16 March 1985 14:54:01.10

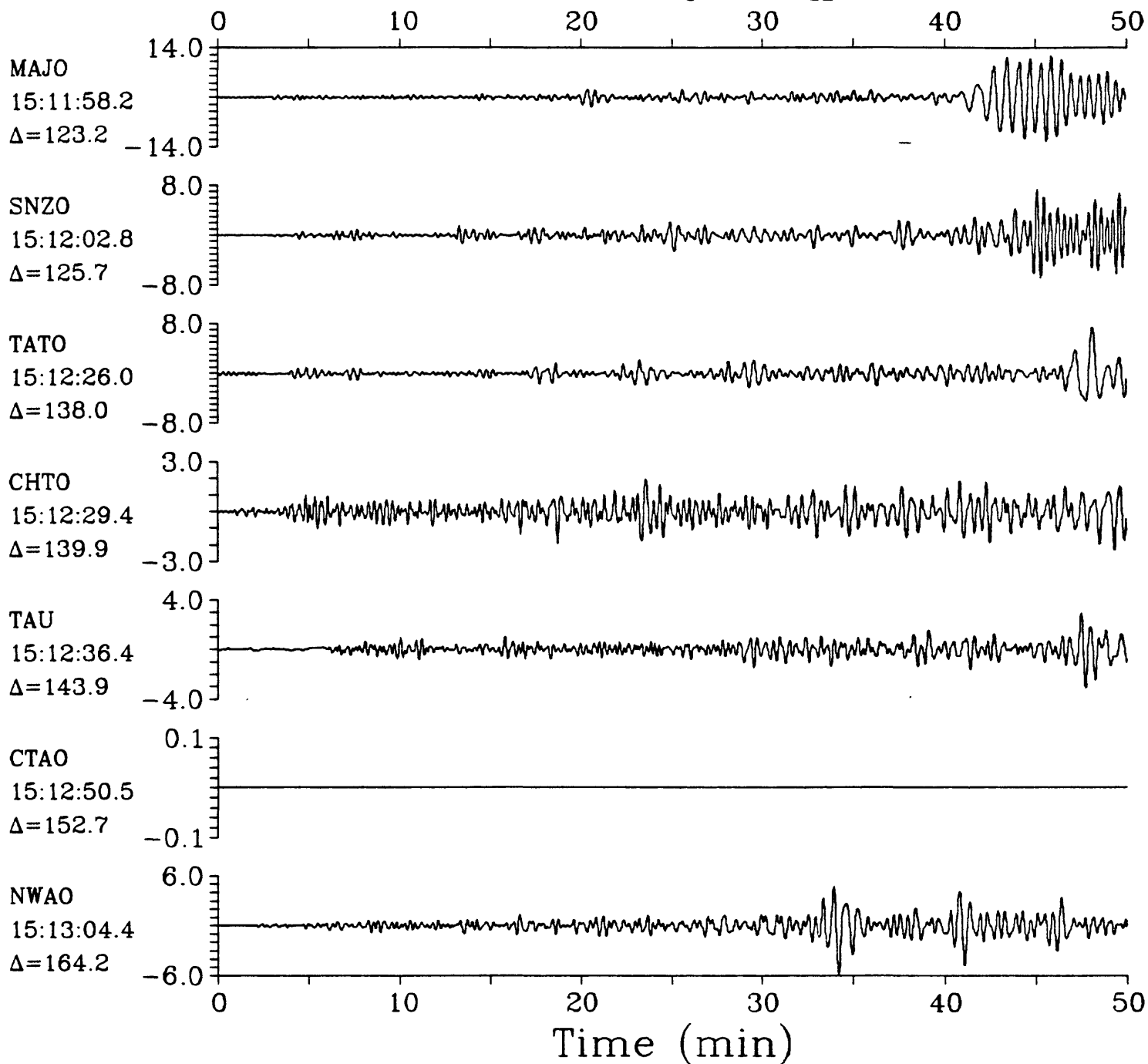
LPZ

Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{SZ}=6.3$ 

LPZ

16 March 1985 14:54:01.10

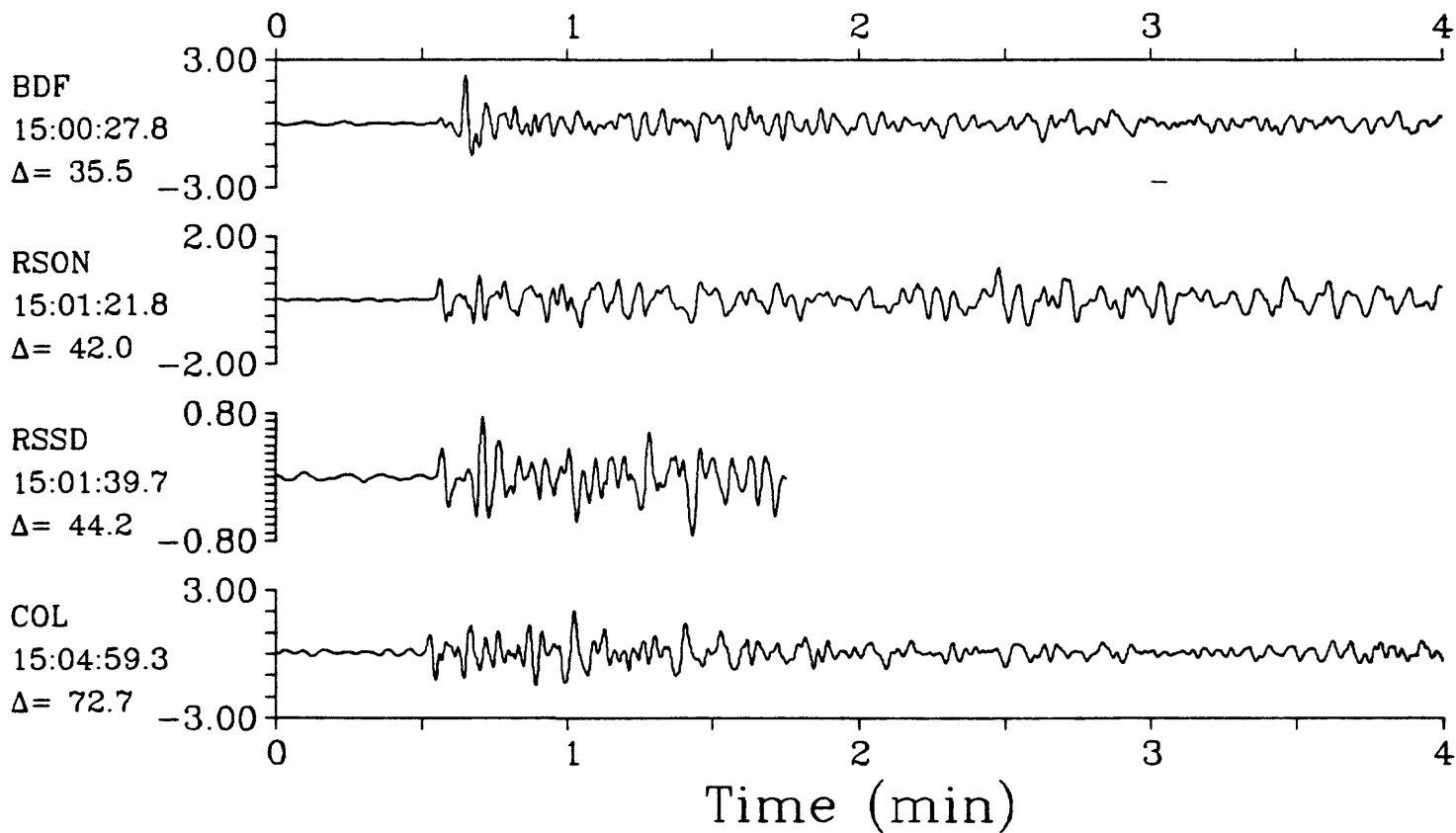
LPZ

Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{sz}=6.3$ 

IPZ

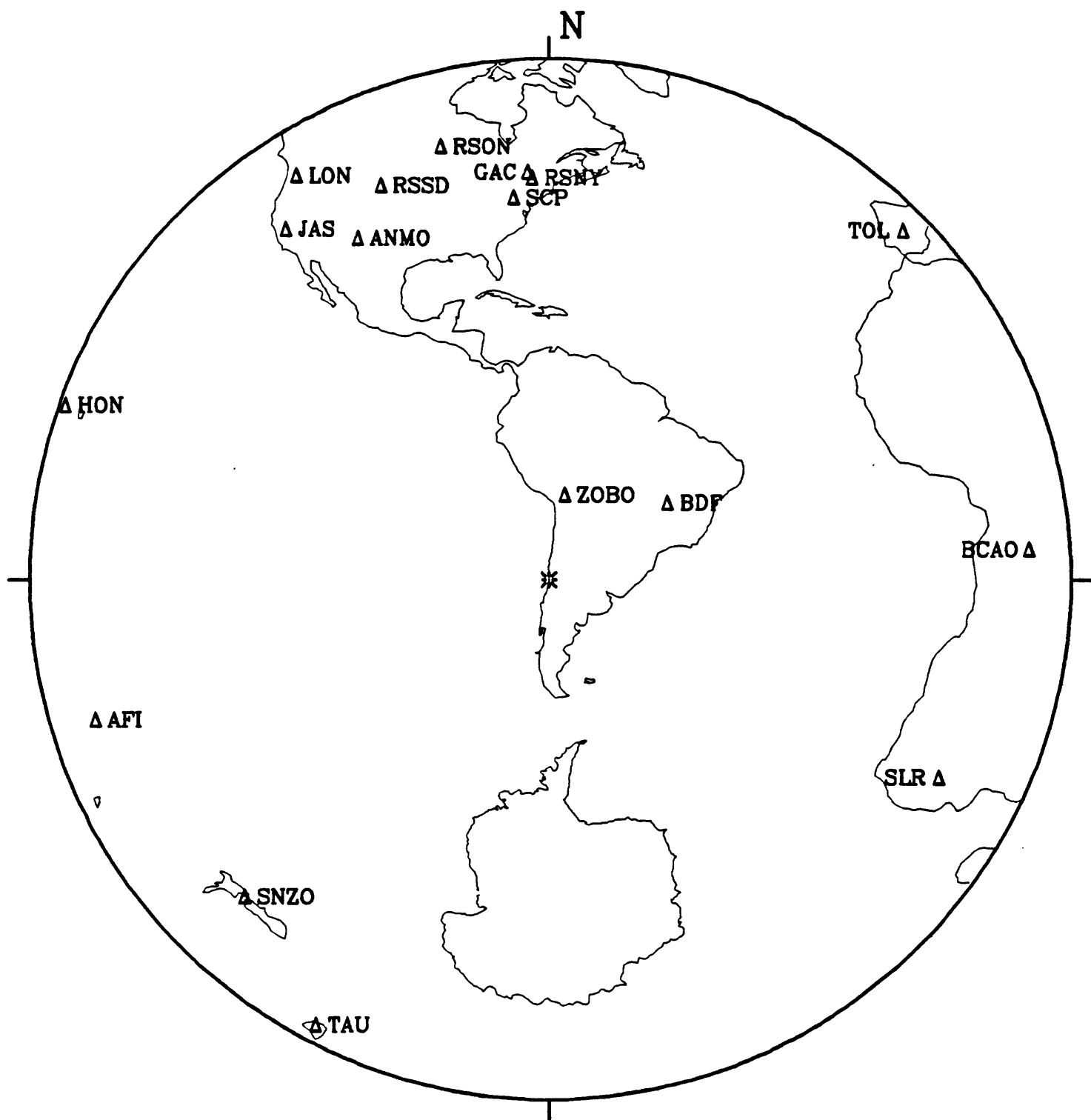
16 March 1985 14:54:01.10

IPZ

Leeward Islands  $h=14.1$   $m_b=6.2$   $M_{sz}=6.3$ 

17 March 1985 10:41:37.91

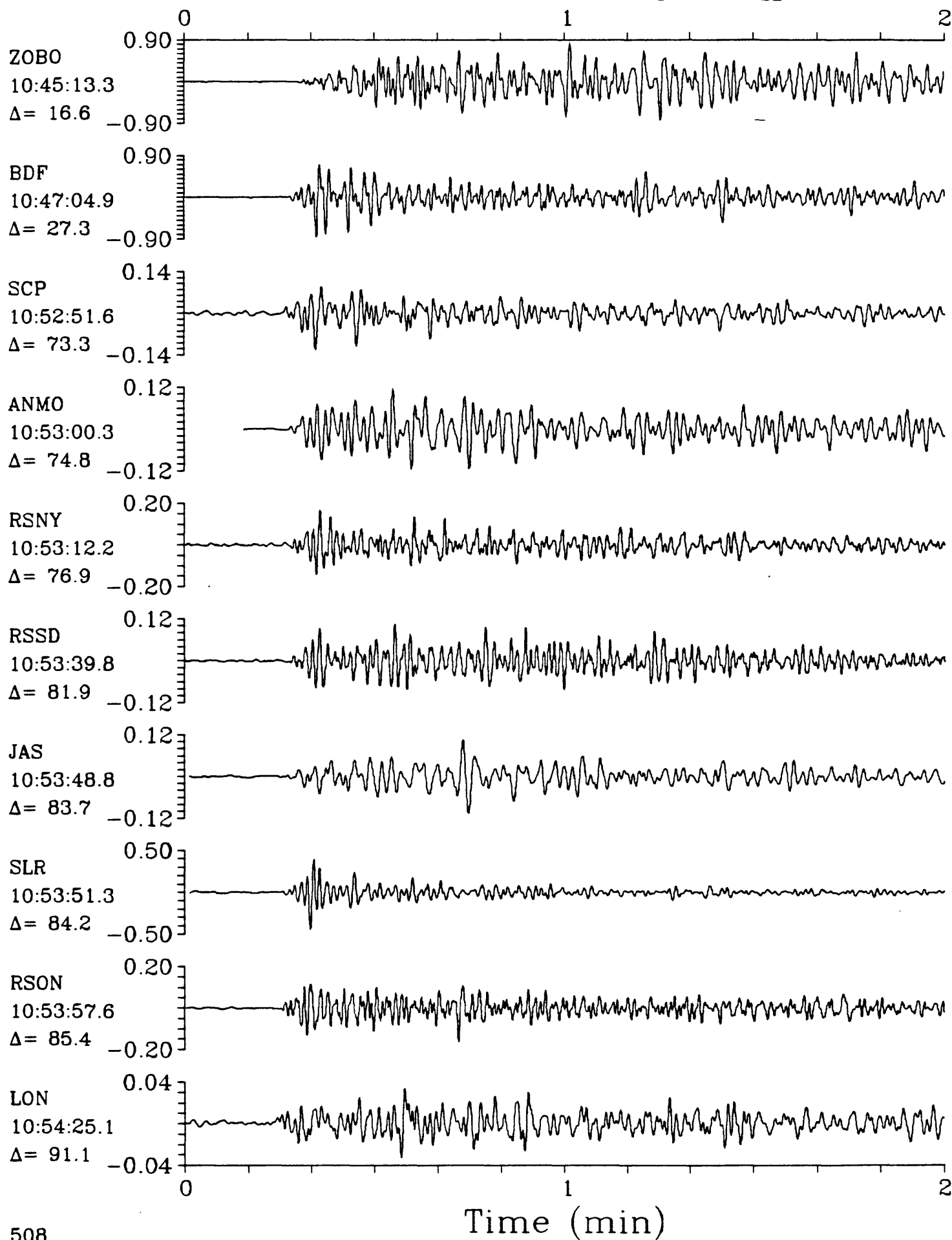
Near Coast of Central Chile



SPZ

17 March 1985 10:41:37.91

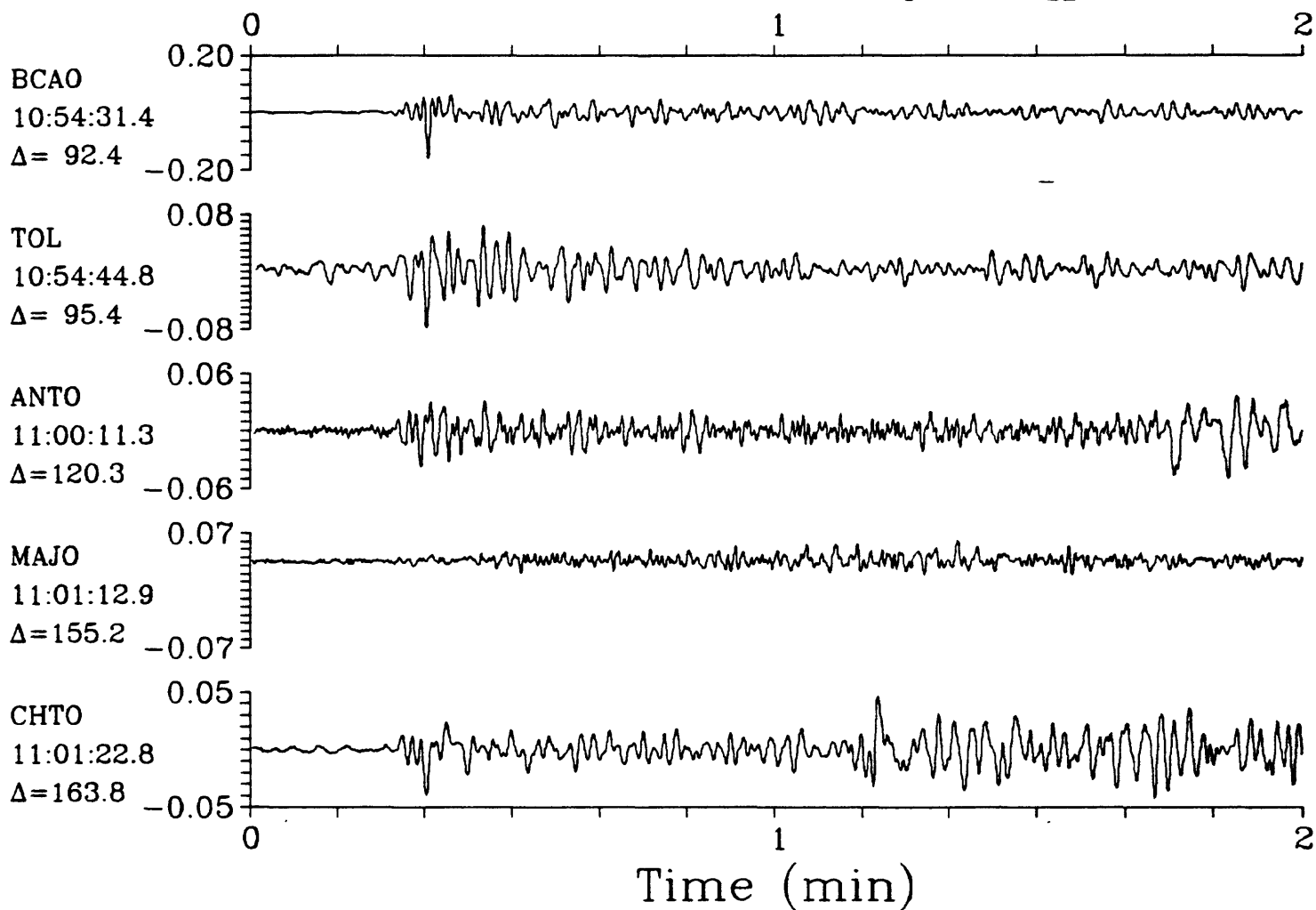
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.6$ 

SPZ

17 March 1985 10:41:37.91

SPZ

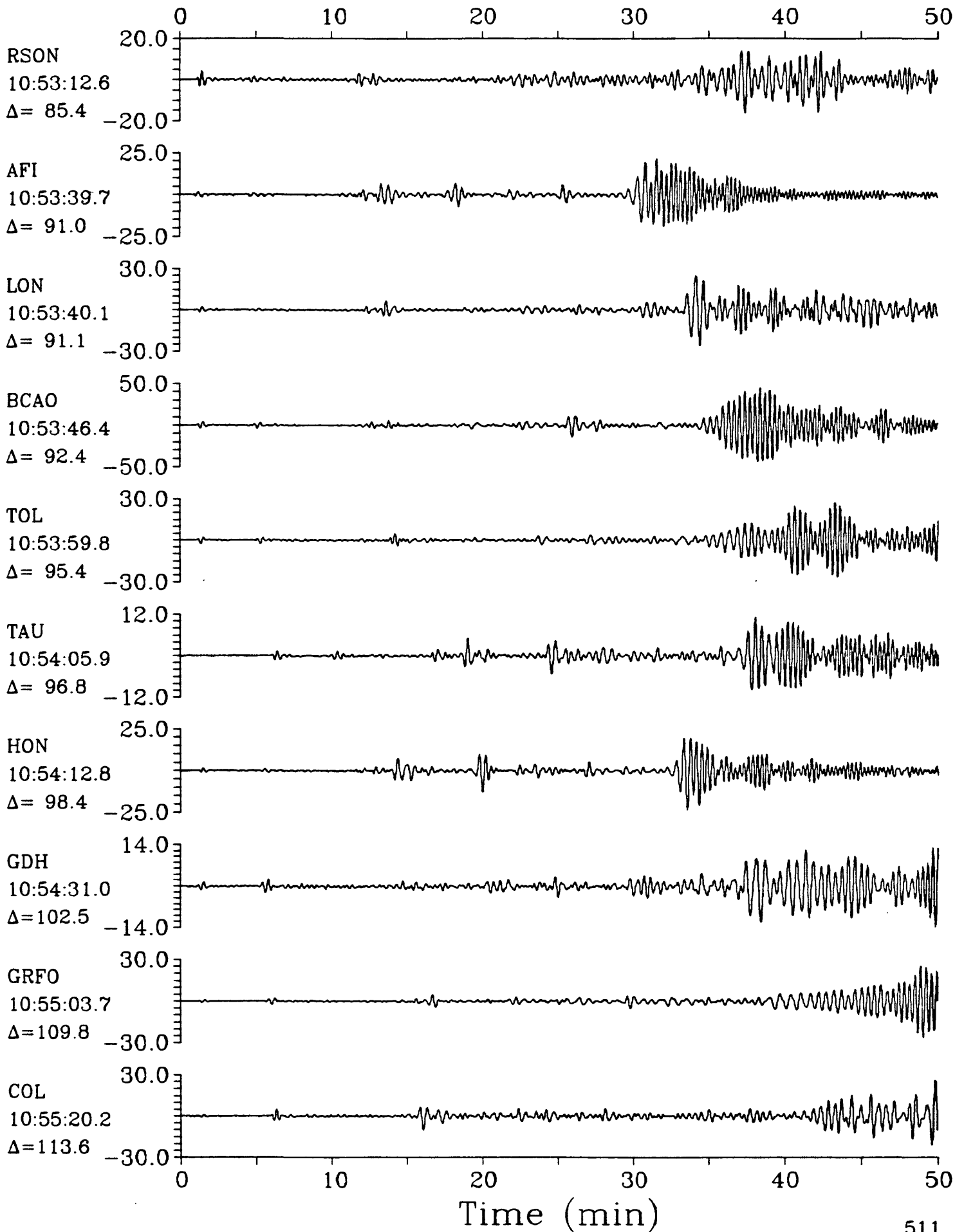
Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.6$ 



LPZ

17 March 1985 10:41:37.91

LPZ

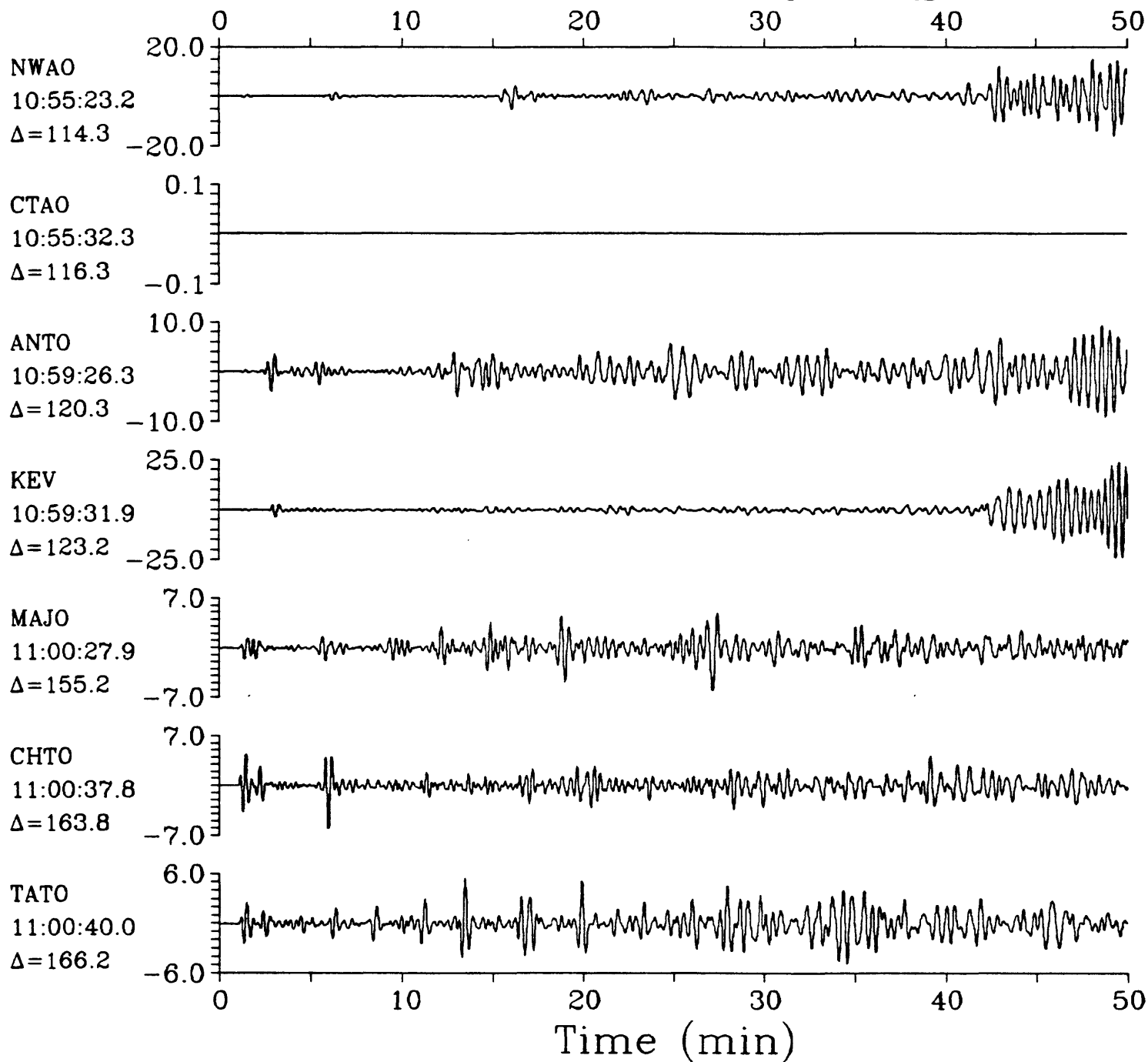
Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.6$ 



LPZ

17 March 1985 10:41:37.91

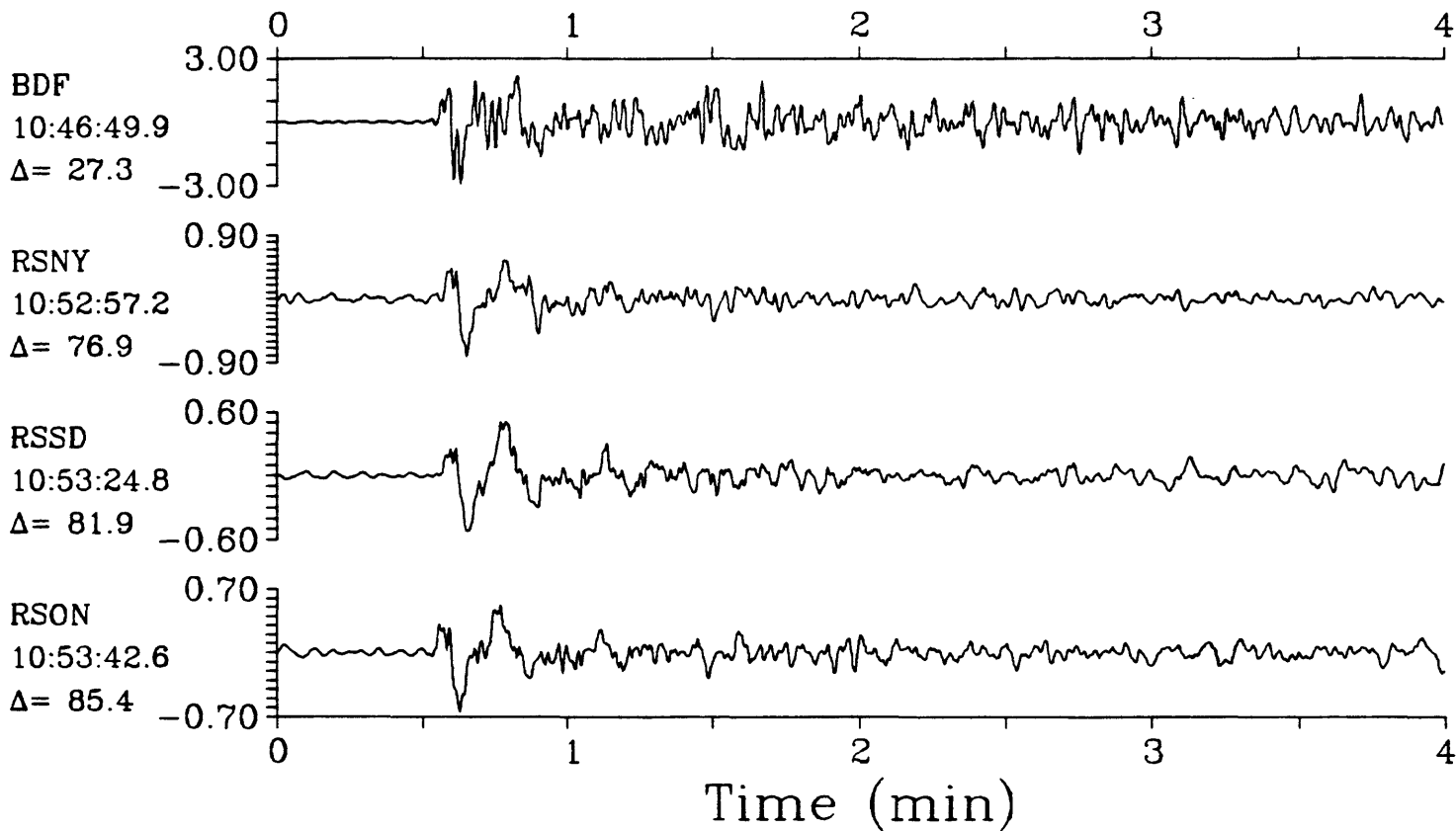
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.6$ 

IPZ

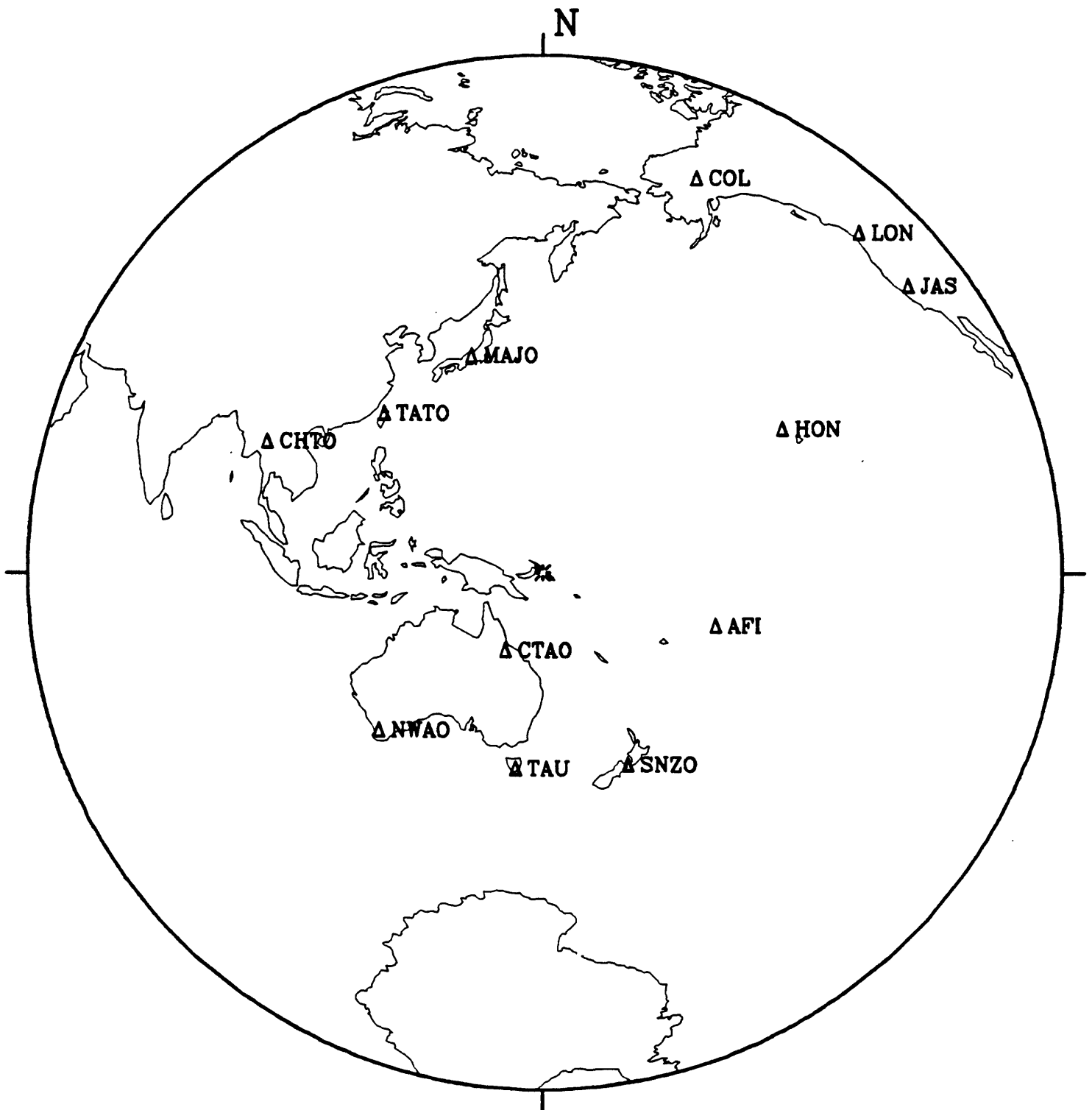
17 March 1985 10:41:37.91

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.6$ 

18 March 1985 16:09:32.96

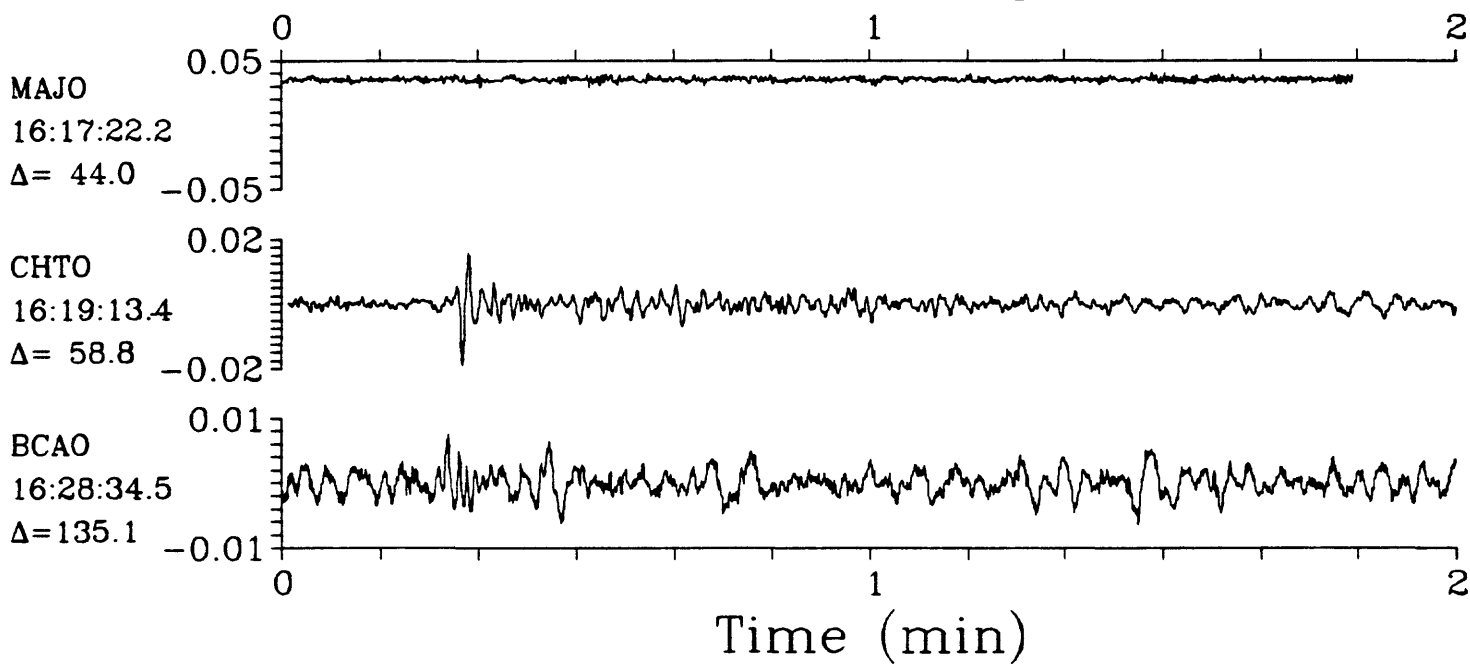
## New Ireland Region



SPZ

18 March 1985 16:09:32.96  
New Ireland Region  $h=33.0$   $m_b=5.5$ 

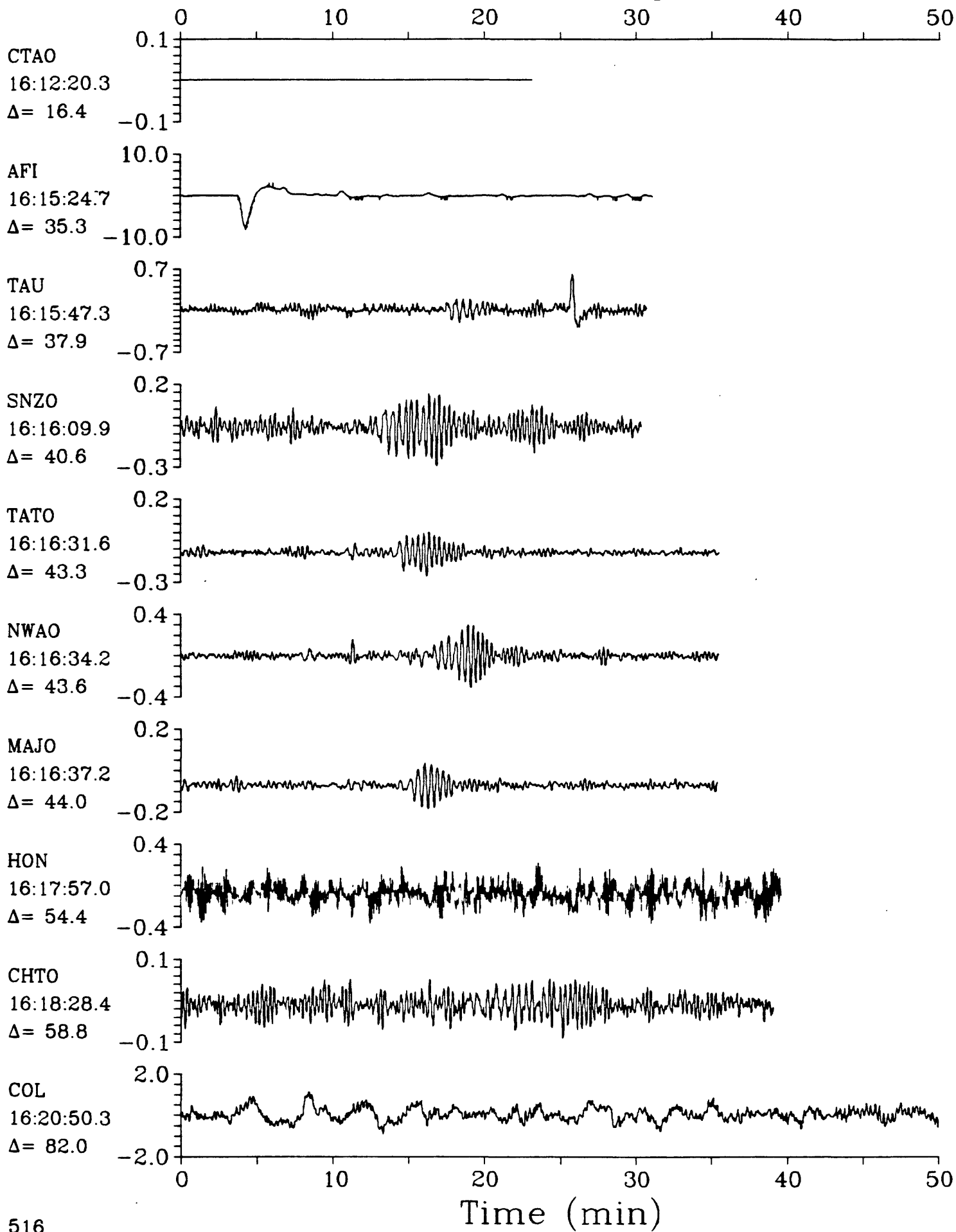
SPZ



LPZ

18 March 1985 16:09:32.96  
New Ireland Region  $h=33.0$   $m_b=5.5$ 

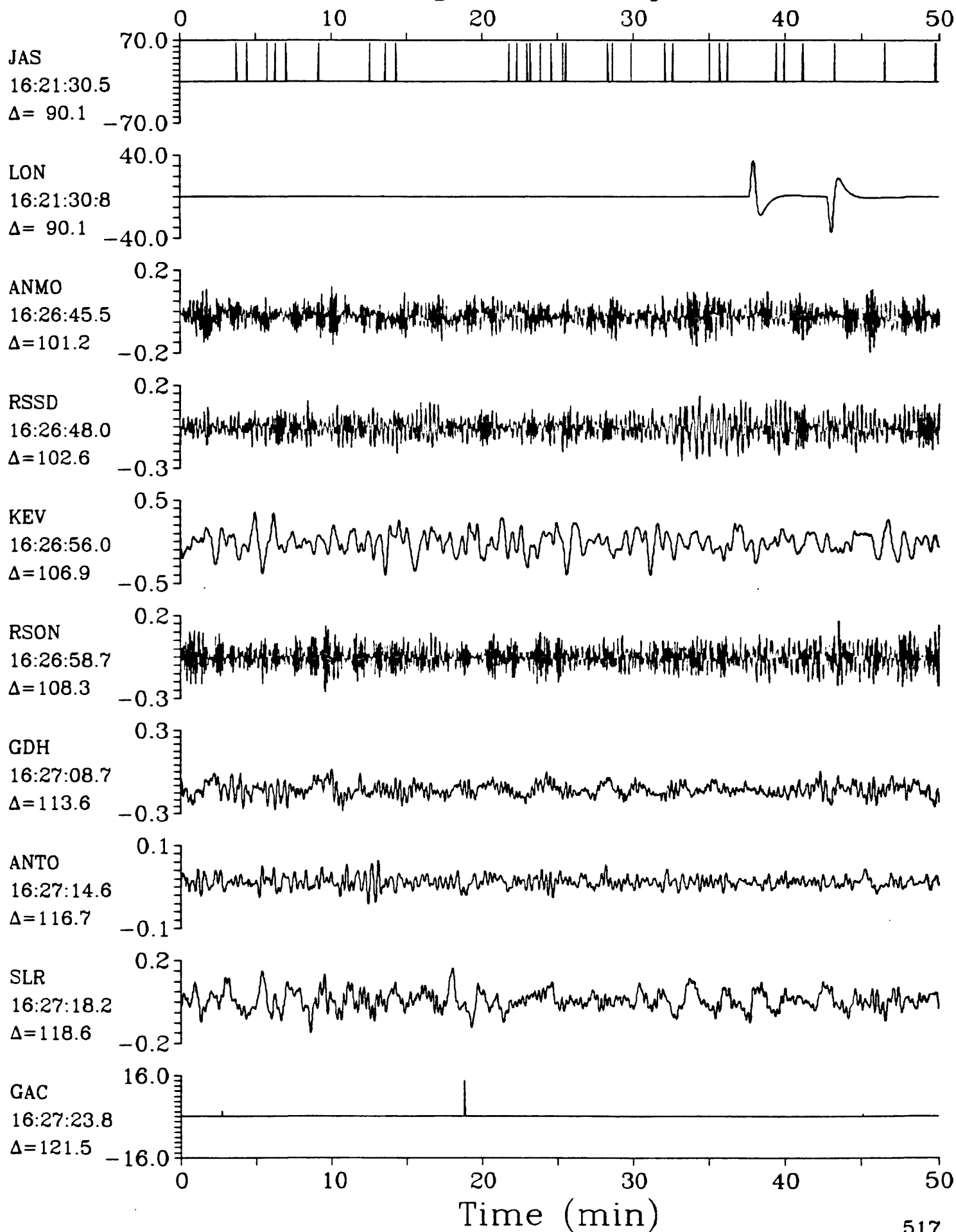
LPZ



LPZ

18 March 1985 16:09:32.96  
New Ireland Region  $h=33.0$   $m_b=5.5$ 

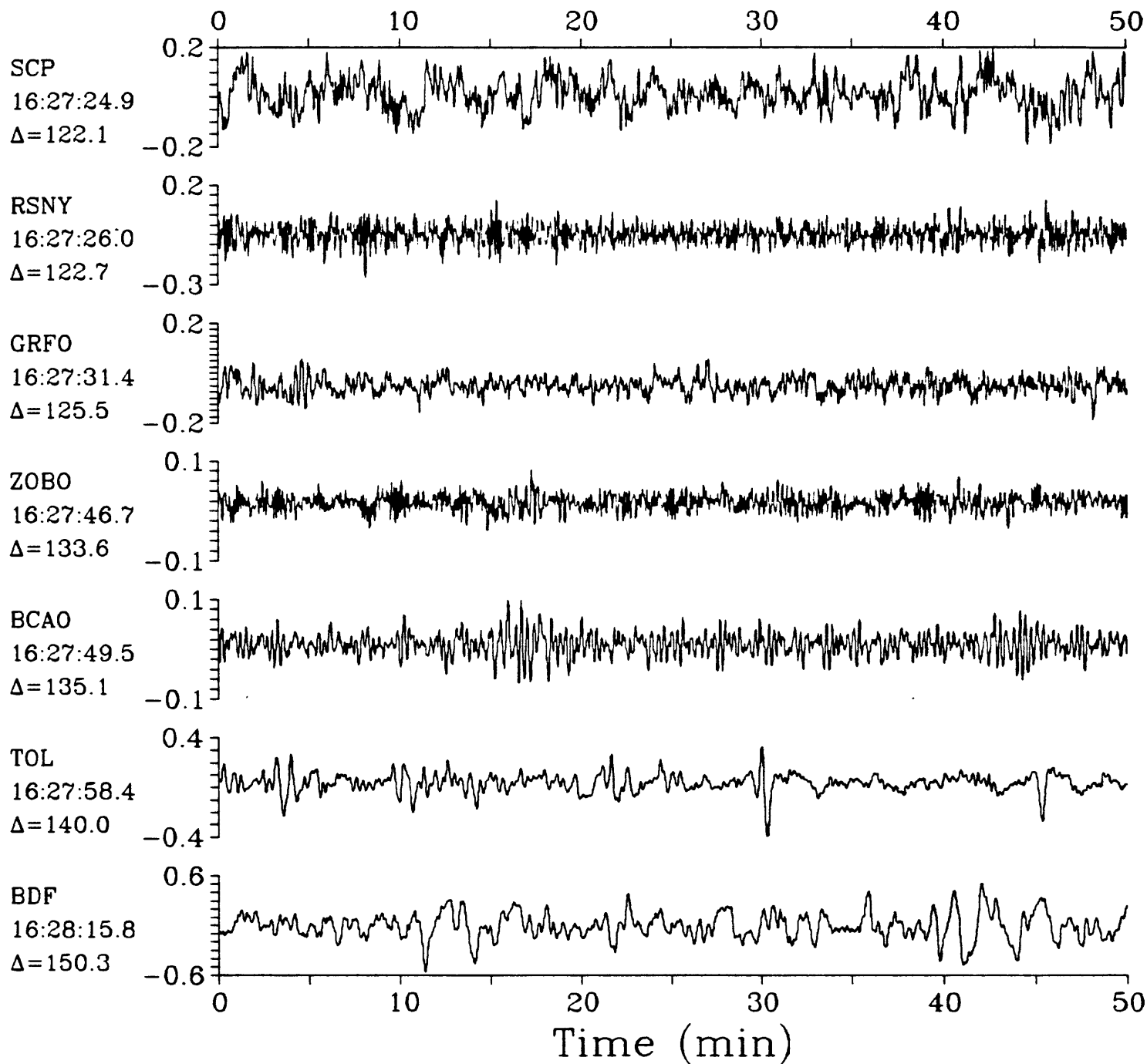
LPZ



LPZ

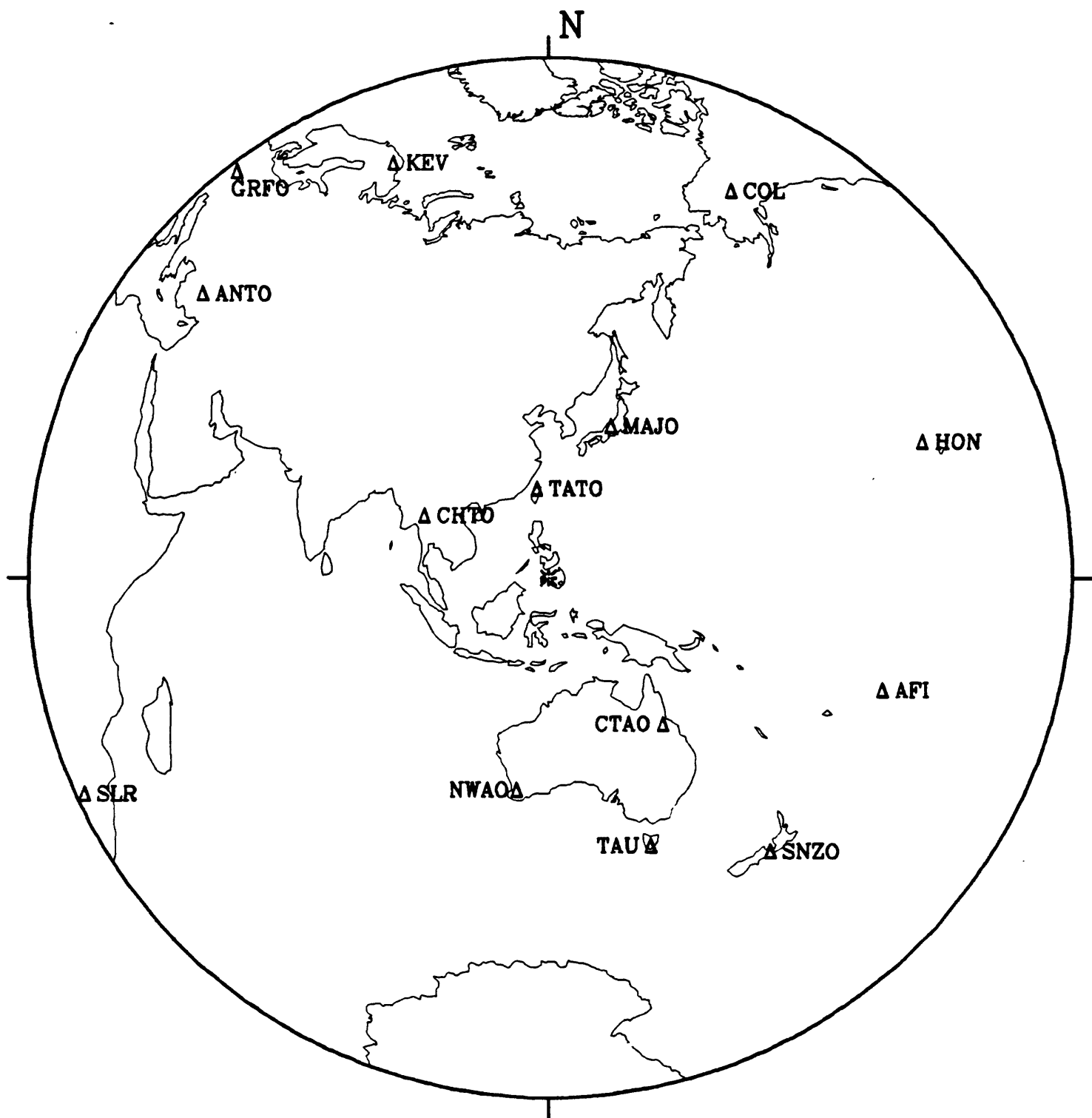
18 March 1985 16:09:32.96  
New Ireland Region  $h=33.0$   $m_b=5.5$ 

LPZ



18 March 1985 19:49:45.56

# Mindanao, Philippine Islands

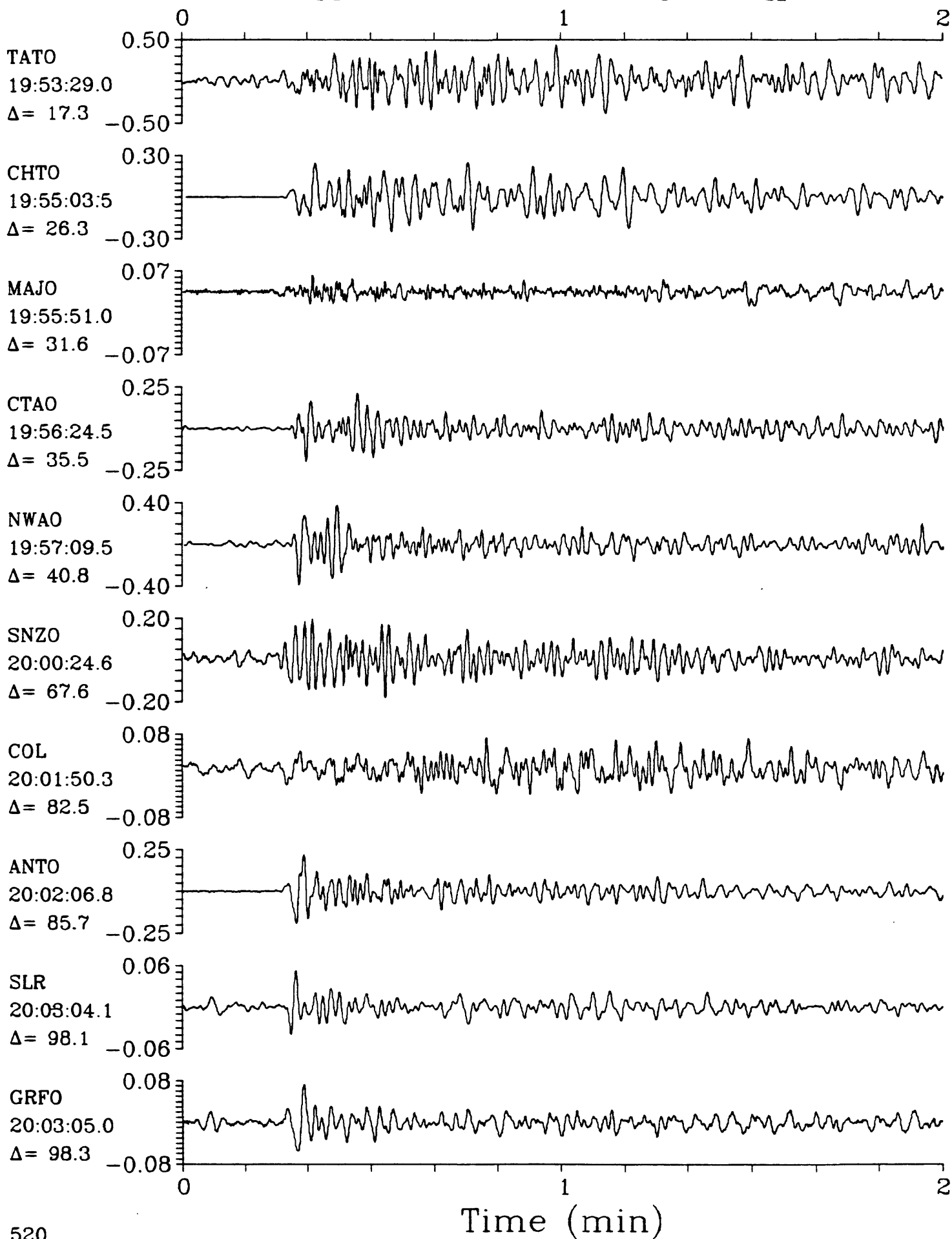




SPZ

18 March 1985 19:49:45.56

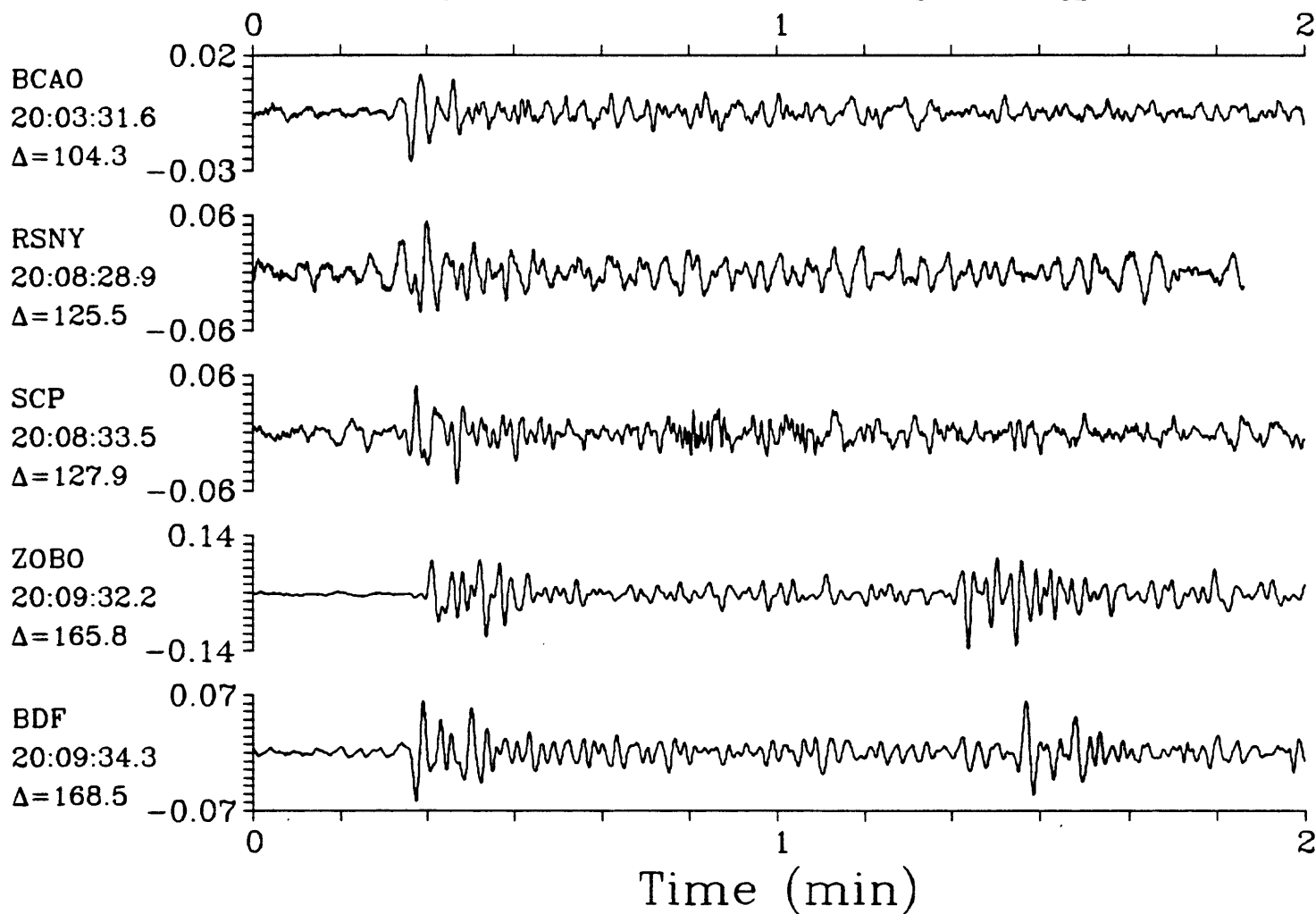
SPZ

Mindanao, Philippine Islands  $h=33.0$   $m_b=6.0$   $M_{sz}=6.5$ 

SPZ

18 March 1985 19:49:45.56

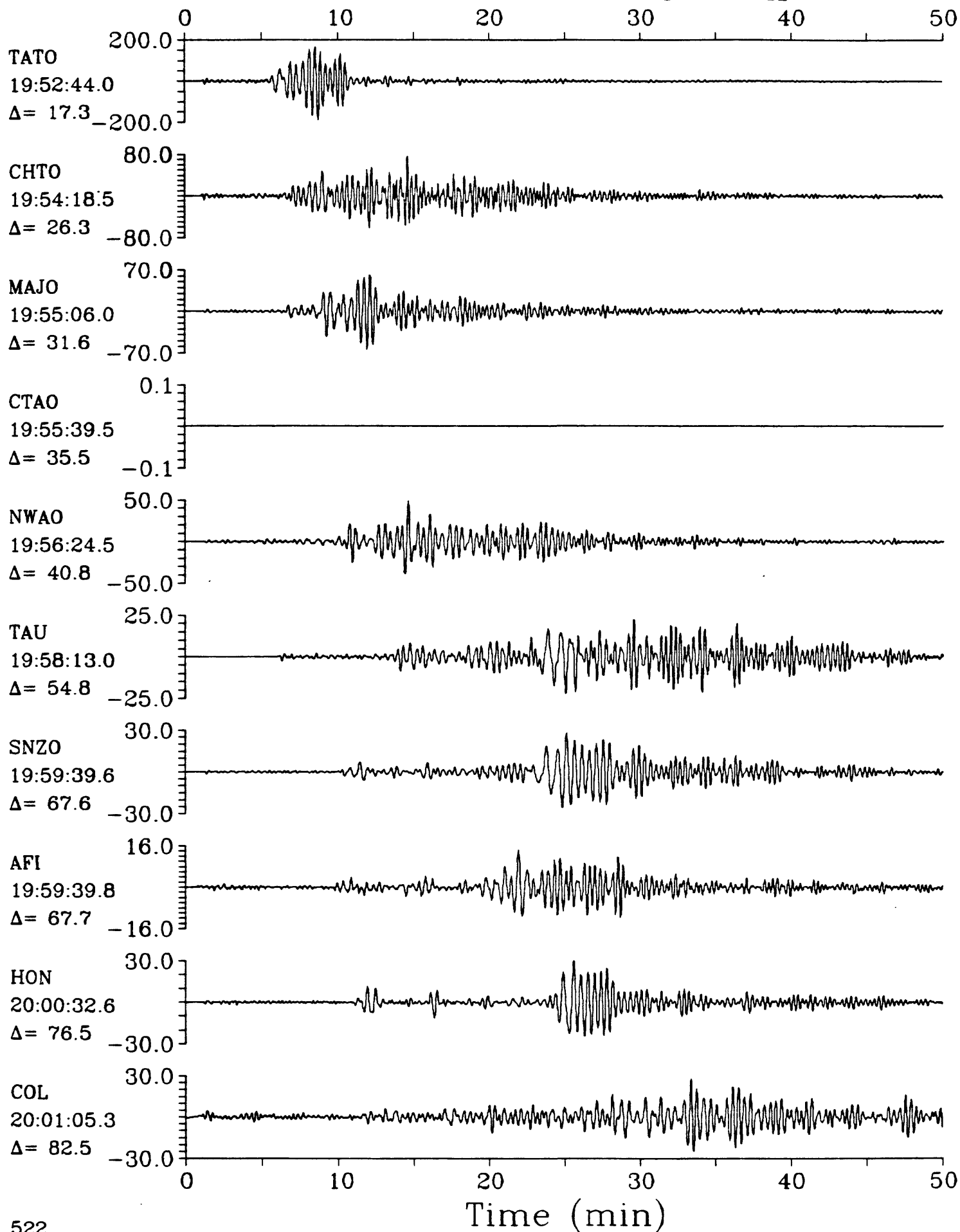
SPZ

Mindanao, Philippine Islands  $h=33.0$   $m_b=6.0$   $M_{sz}=6.5$ 

LPZ

18 March 1985 19:49:45.56

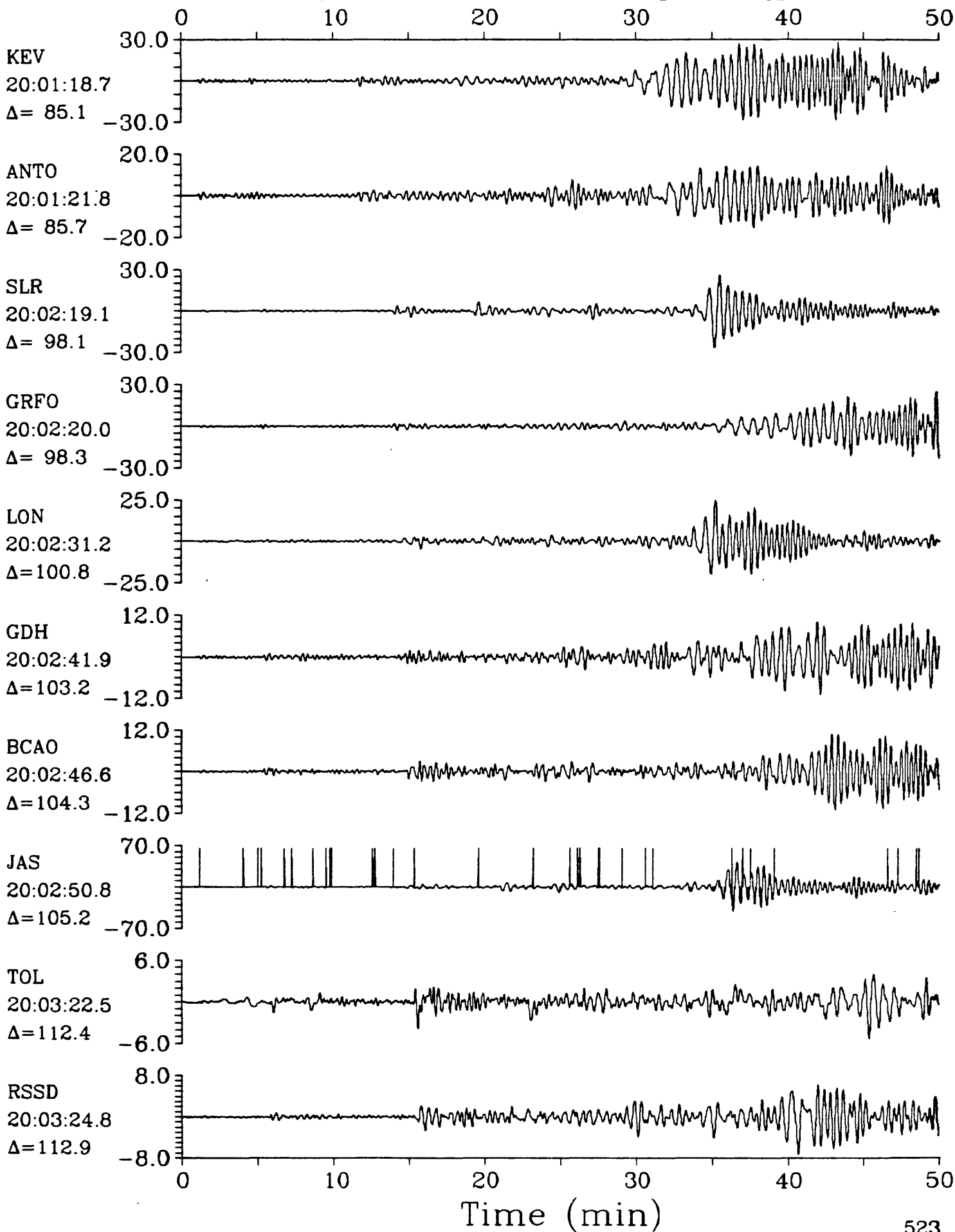
LPZ

Mindanao, Philippine Islands  $h=33.0$   $m_b=6.0$   $M_{sz}=6.5$ 

LPZ

18 March 1985 19:49:45.56

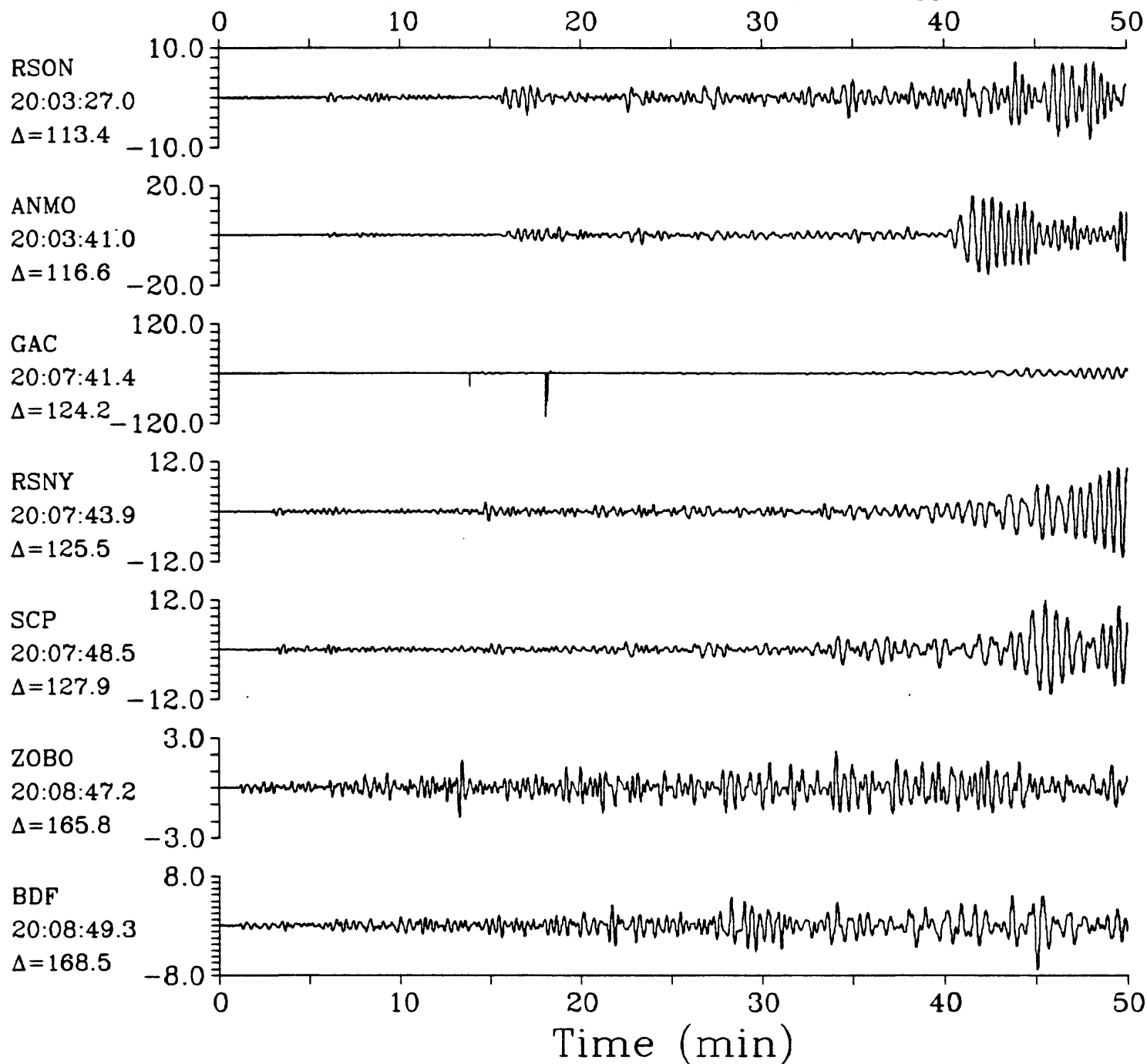
LPZ

Mindanao, Philippine Islands  $h=33.0$   $m_b=6.0$   $M_{sz}=6.5$ 

LPZ

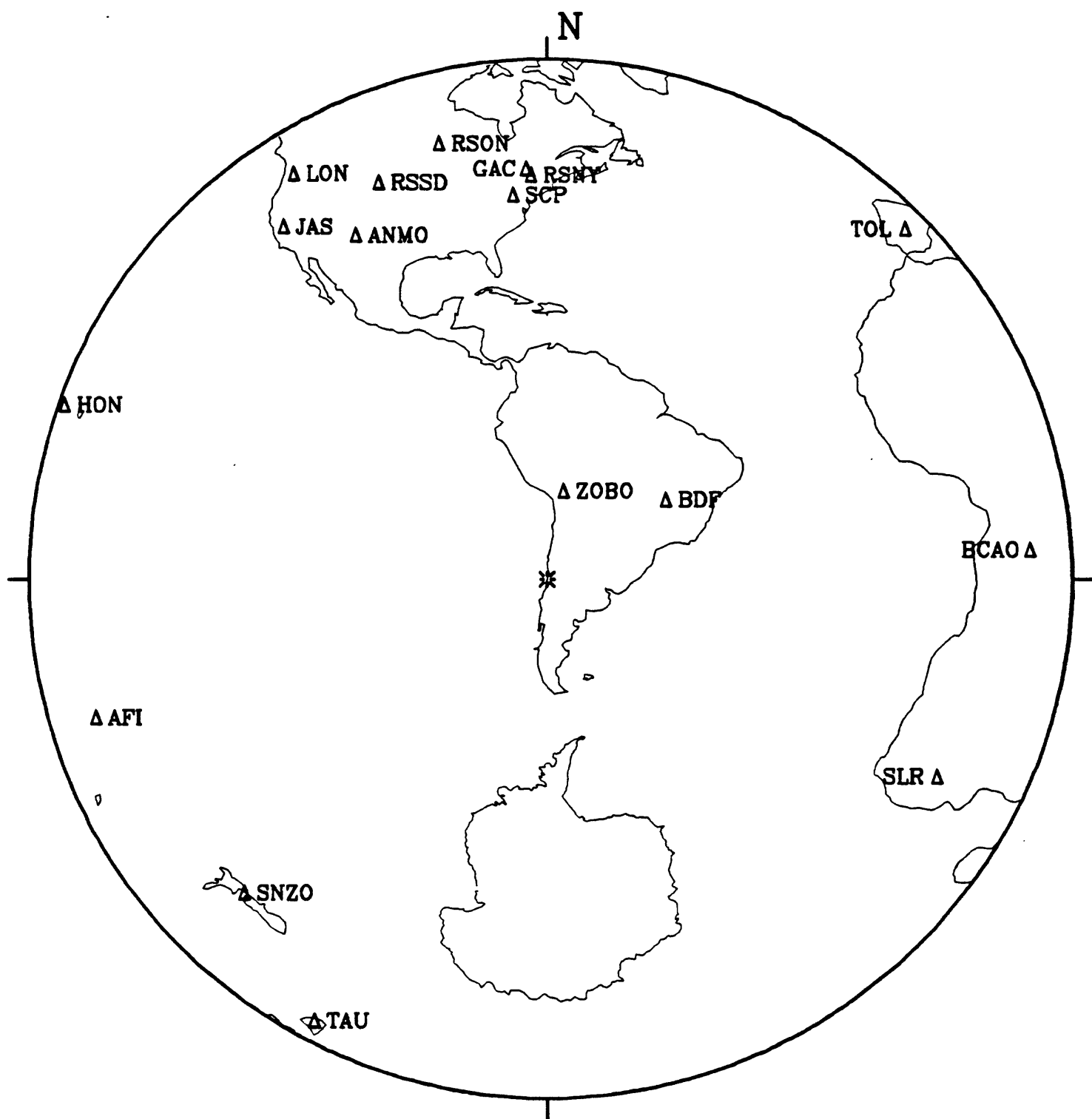
18 March 1985 19:49:45.56

LPZ

Mindanao, Philippine Islands  $h=33.0$   $m_b=6.0$   $M_{sz}=6.5$ 

19 March 1985 04:01:06.57

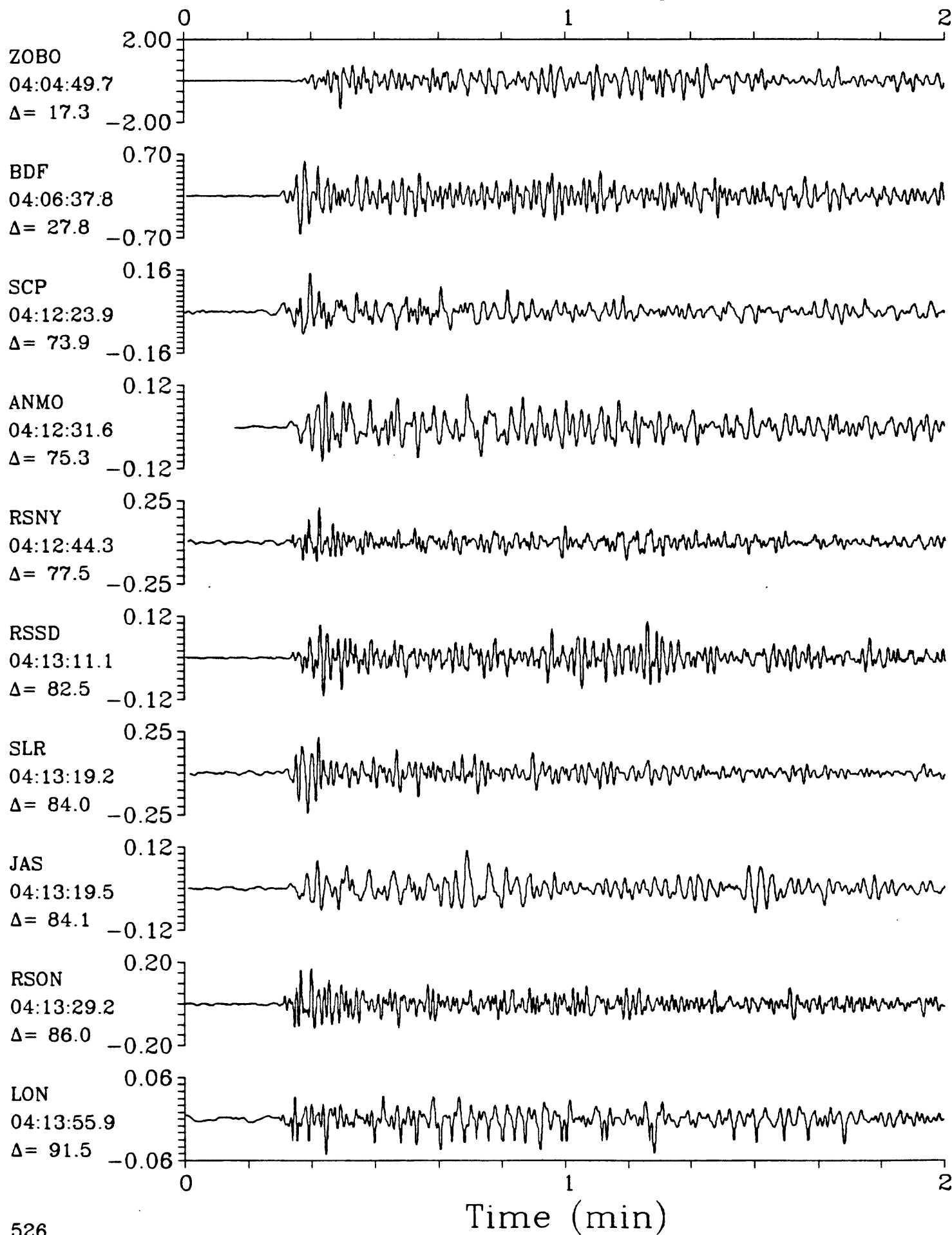
Near Coast of Central Chile



SPZ

19 March 1985 04:01:06.57

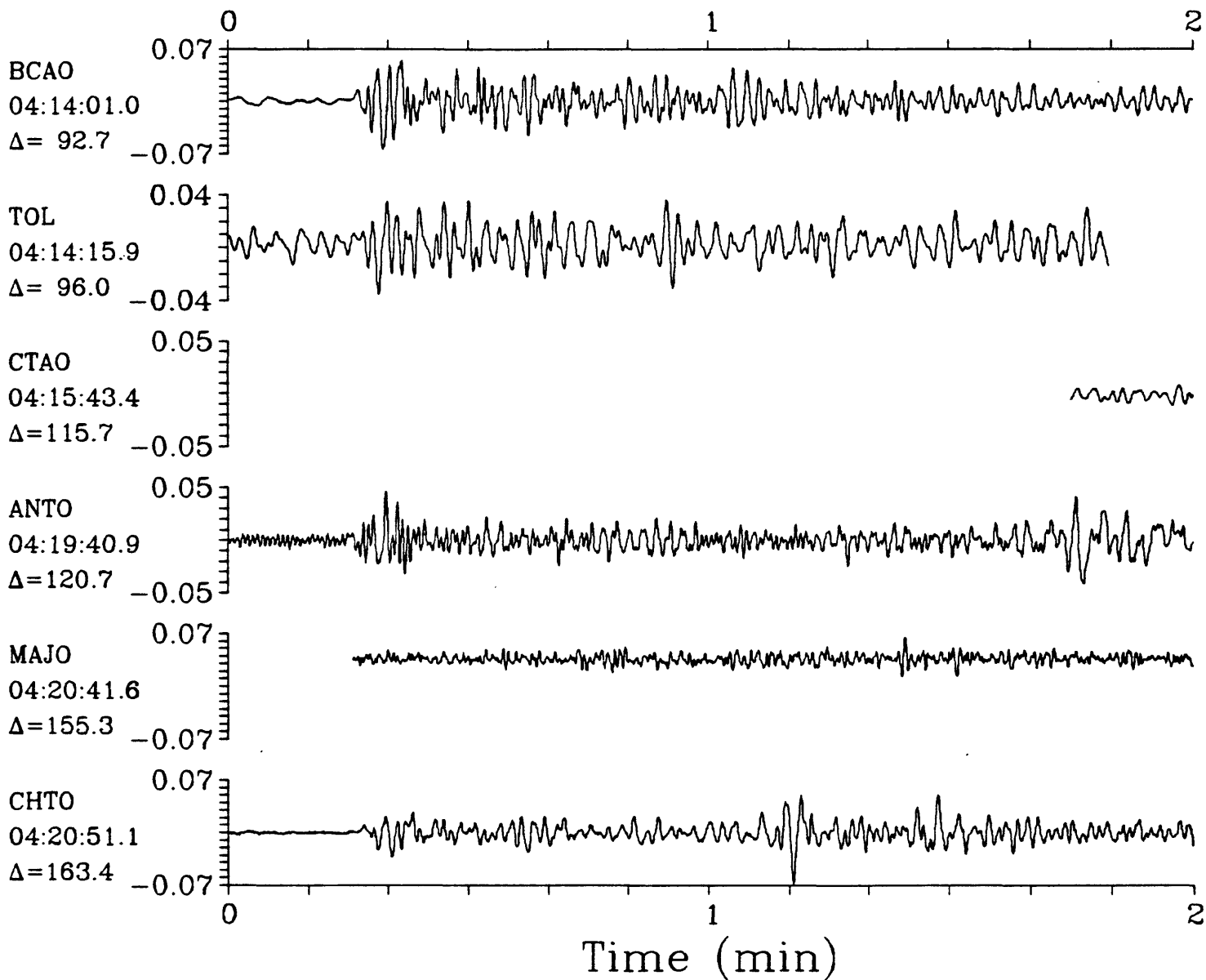
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{SZ}=6.7$ 

SPZ

19 March 1985 04:01:06.57

SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.7$ 

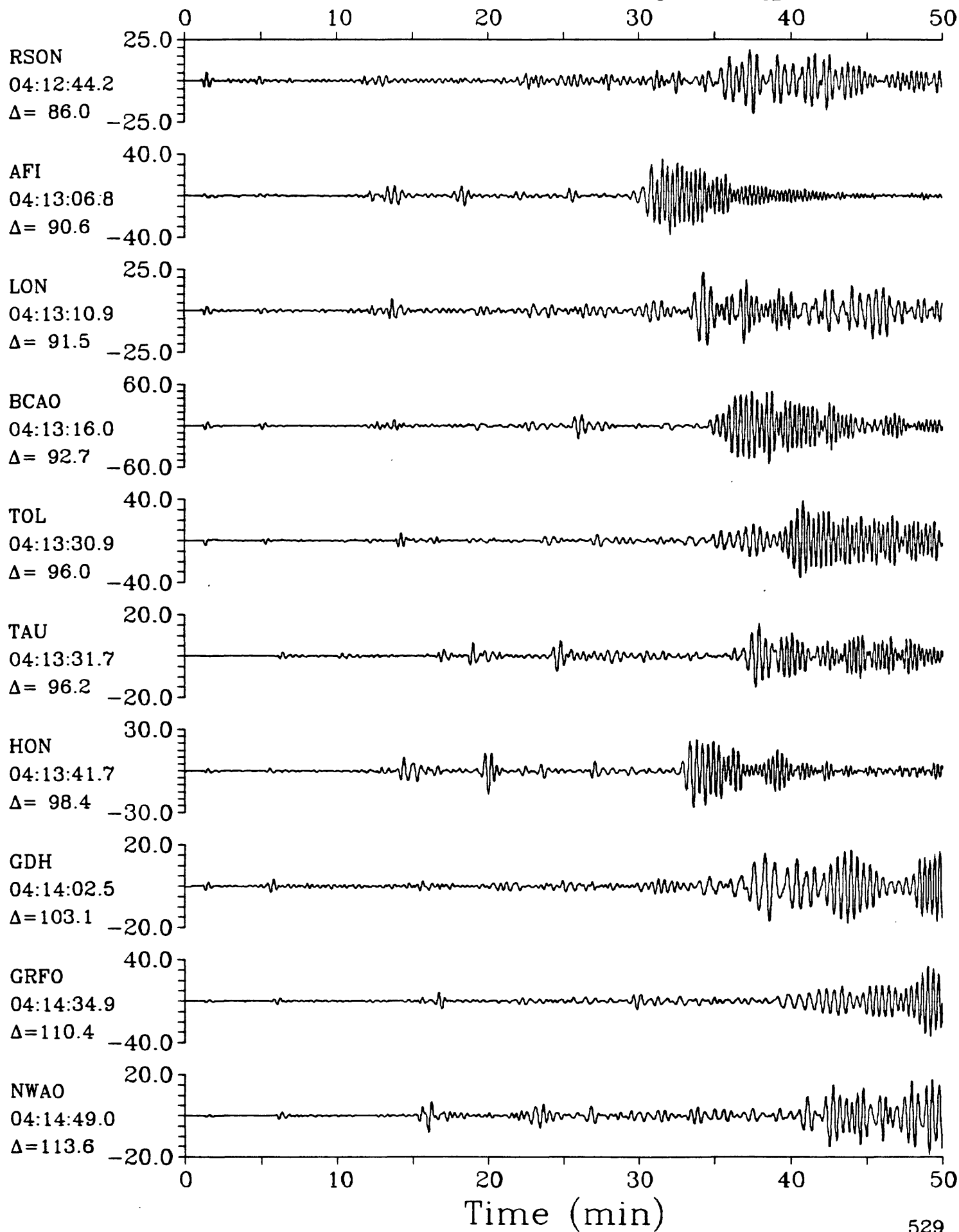




LPZ

19 March 1985 04:01:06.57

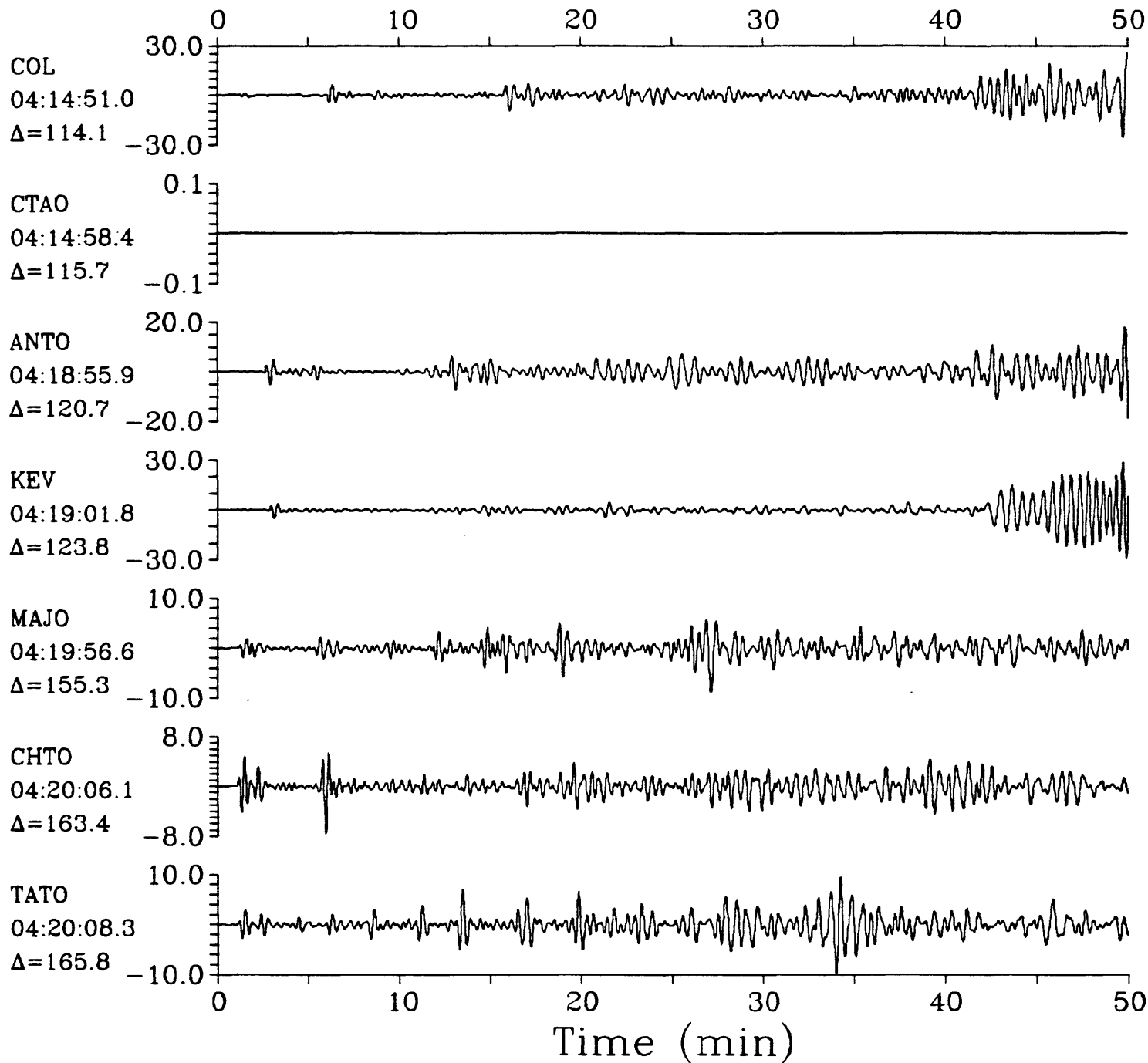
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.7$ 

LPZ

19 March 1985 04:01:06.57

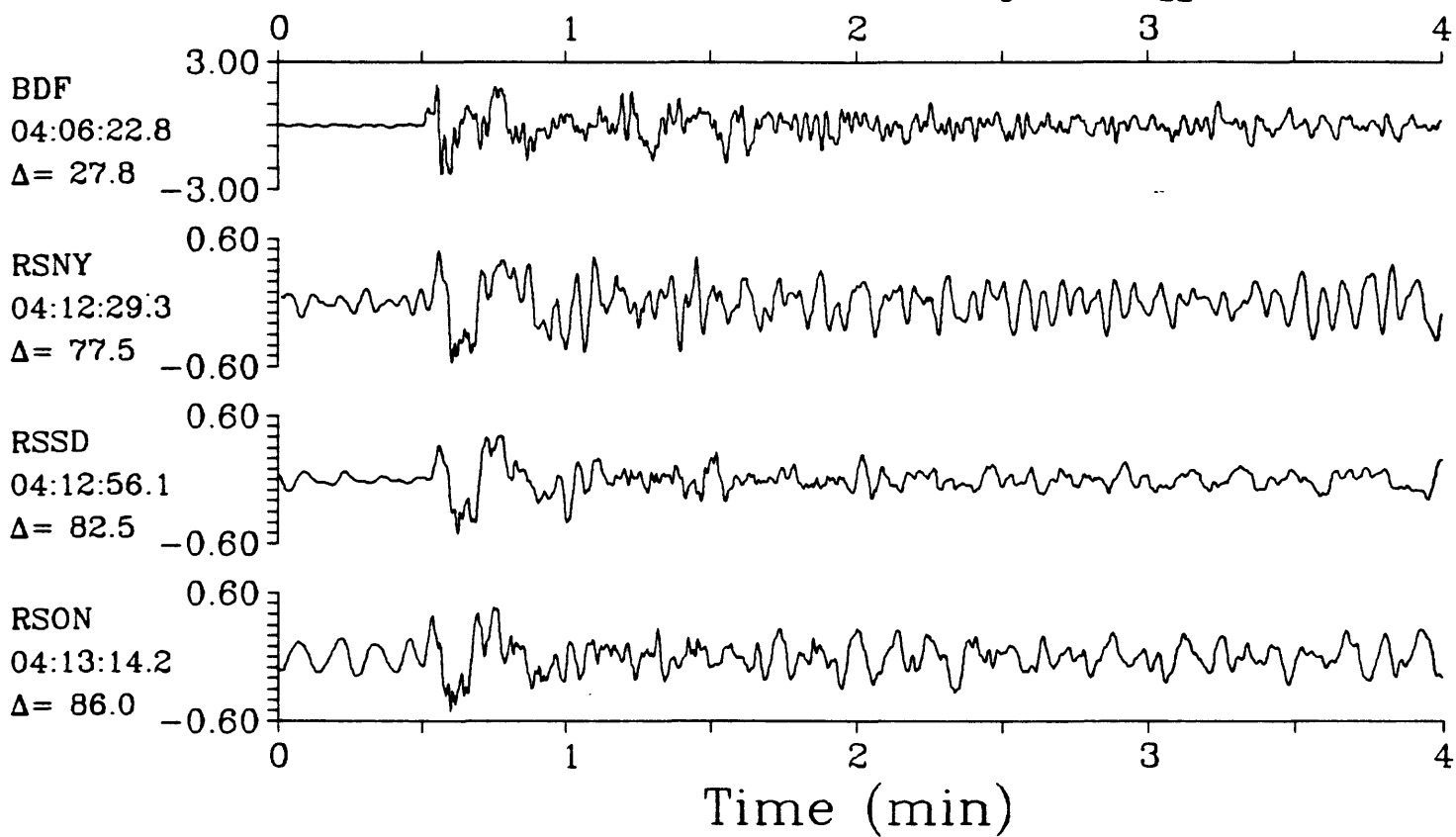
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.7$ 

IPZ

19 March 1985 04:01:06.57

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.9$   $M_{sz}=6.7$ 

19 March 1985 10:28:36.59

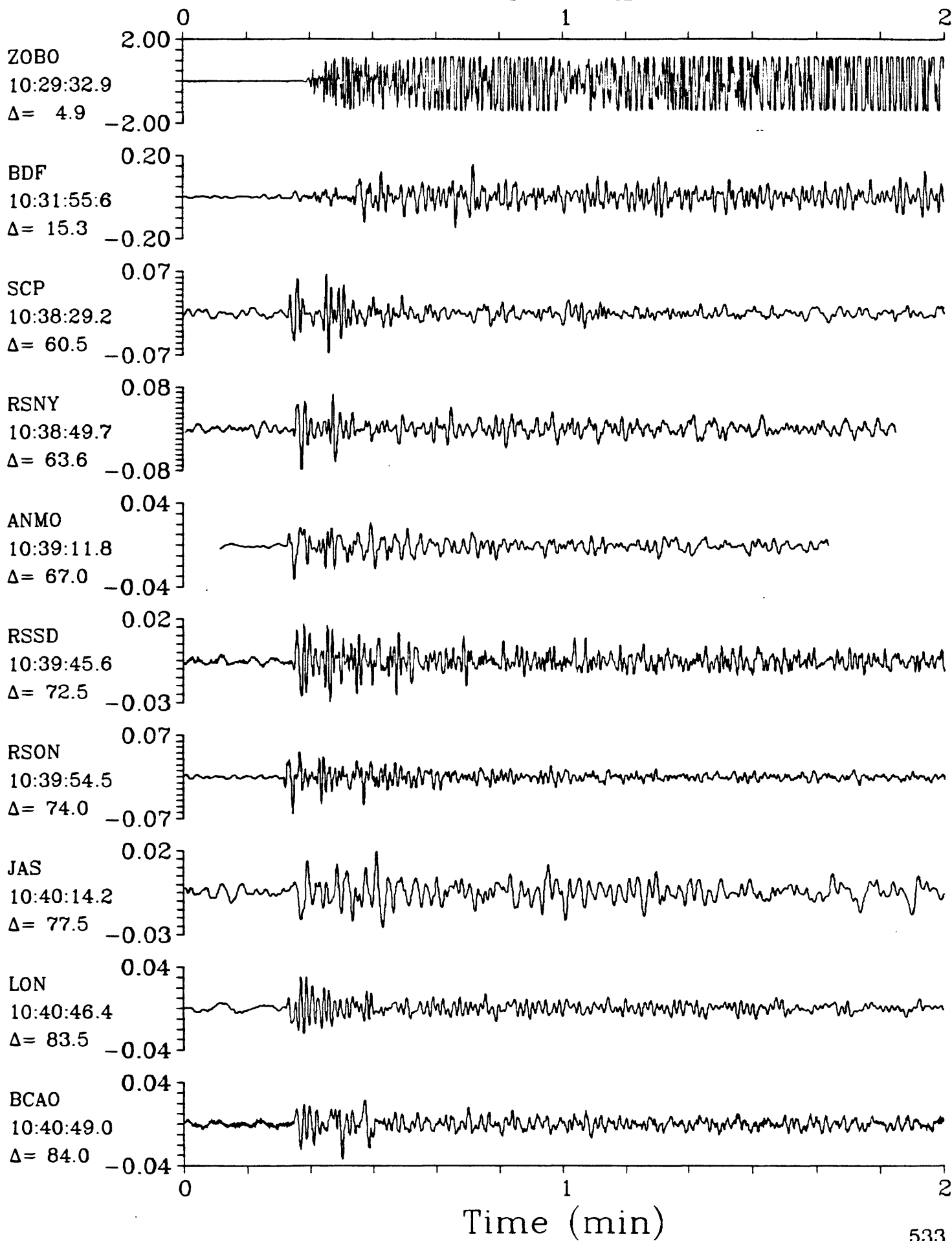
## Bolivia



SPZ

19 March 1985 10:28:36.59  
Bolivia  $h=33.0$   $m_b=5.5$   $M_{sz}=5.2$ 

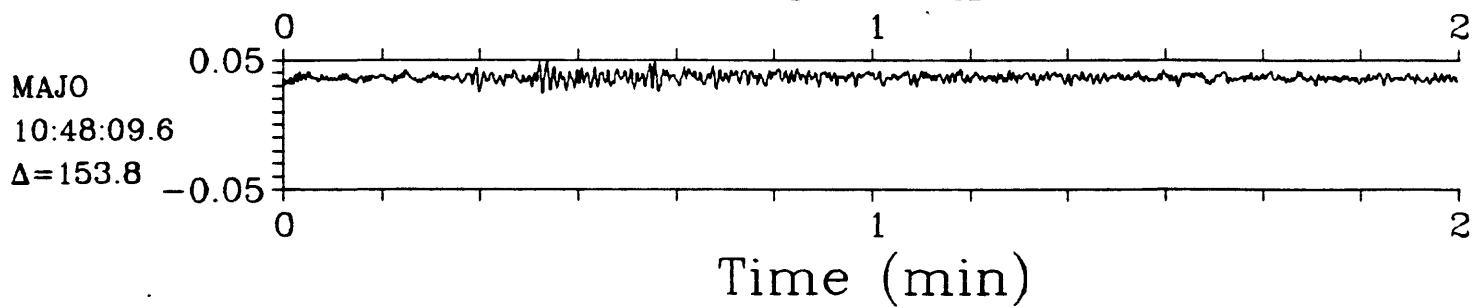
SPZ



SPZ

19 March 1985 10:28:36.59  
Bolivia  $h=33.0$   $m_b=5.5$   $M_{SZ}=5.2$

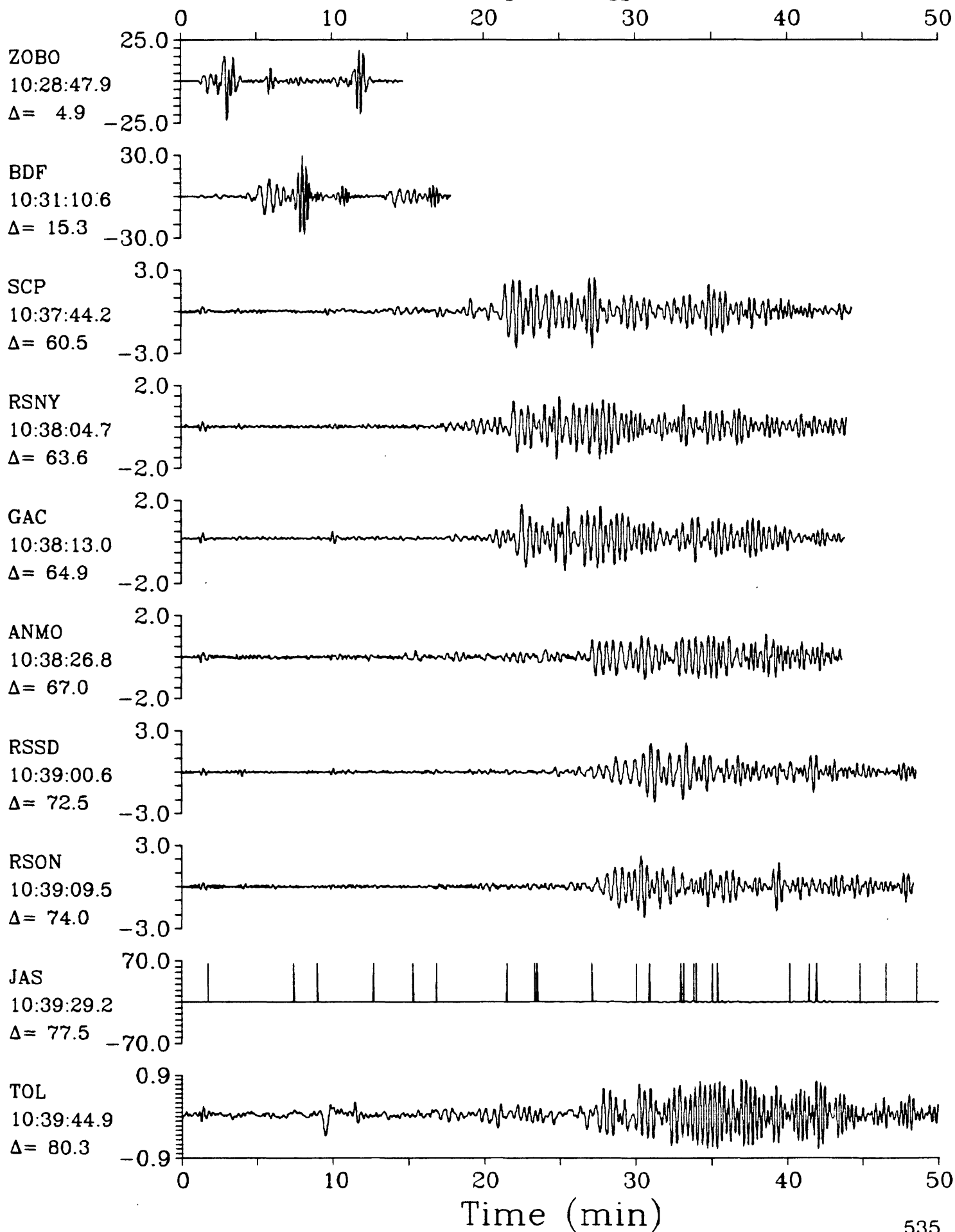
SPZ



LPZ

19 March 1985 10:28:36.59  
Bolivia  $h=33.0$   $m_b=5.5$   $M_{sz}=5.2$ 

LPZ

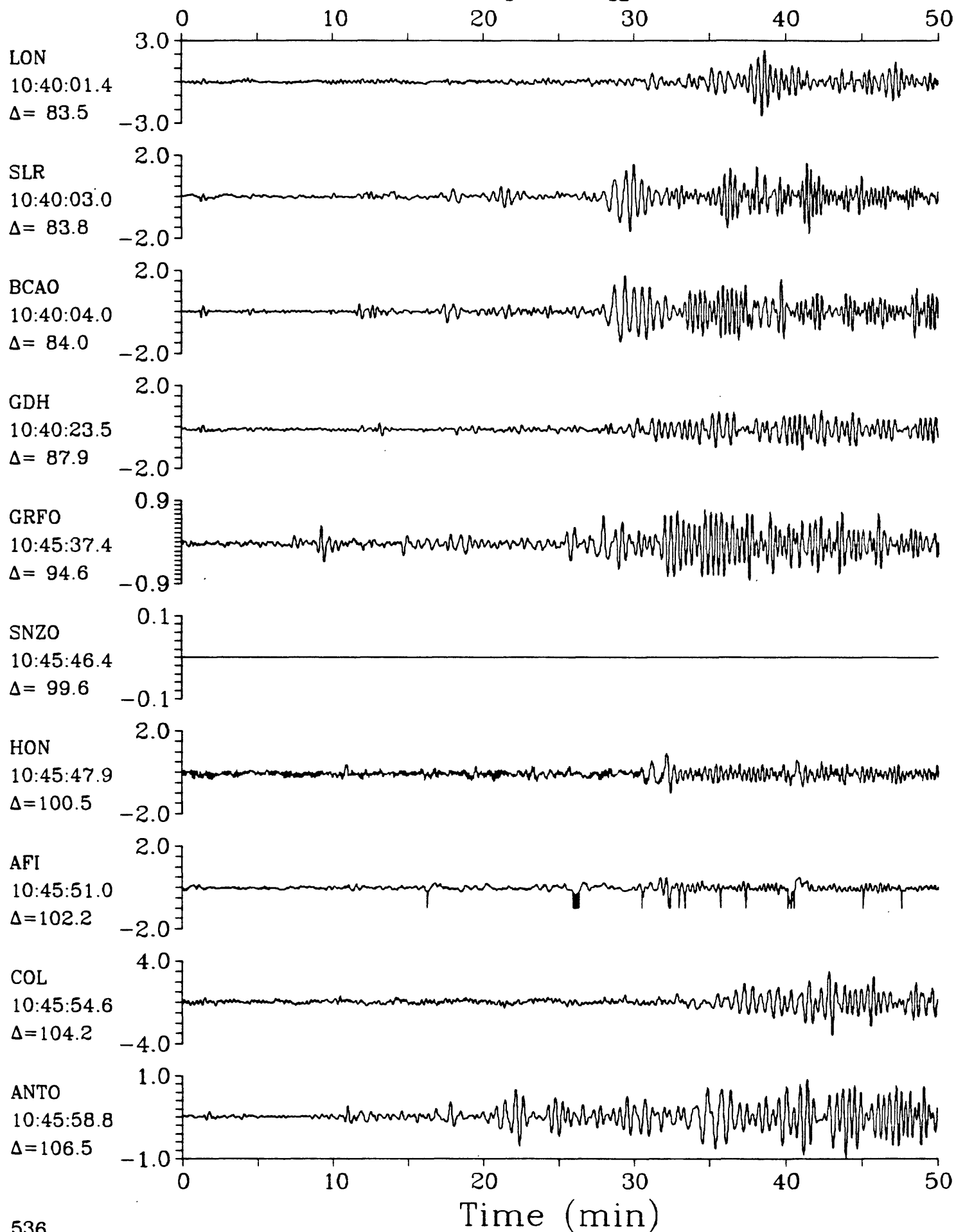




LPZ

19 March 1985 10:28:36.59  
Bolivia  $h=33.0$   $m_b=5.5$   $M_{sz}=5.2$ 

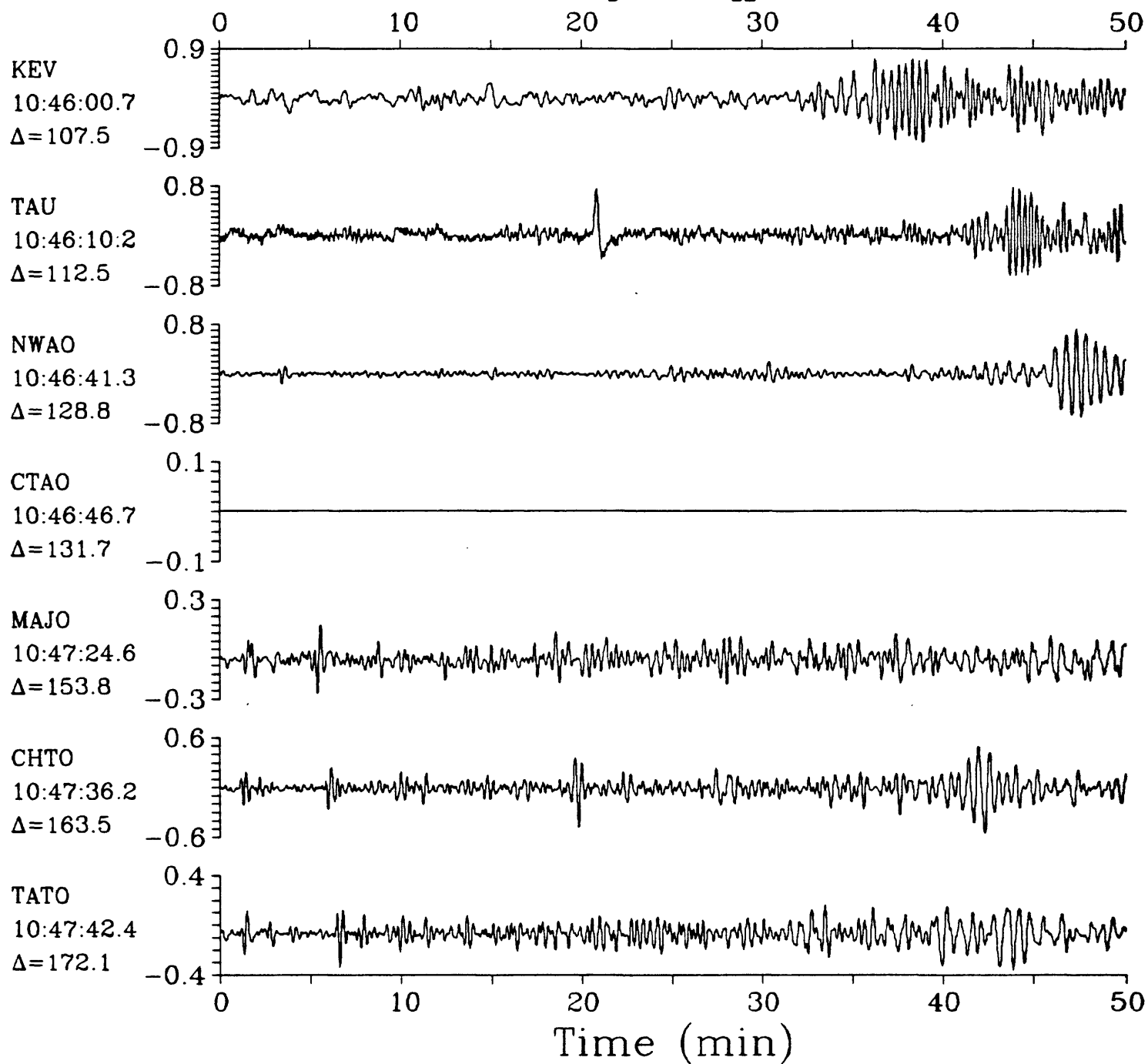
LPZ



LPZ

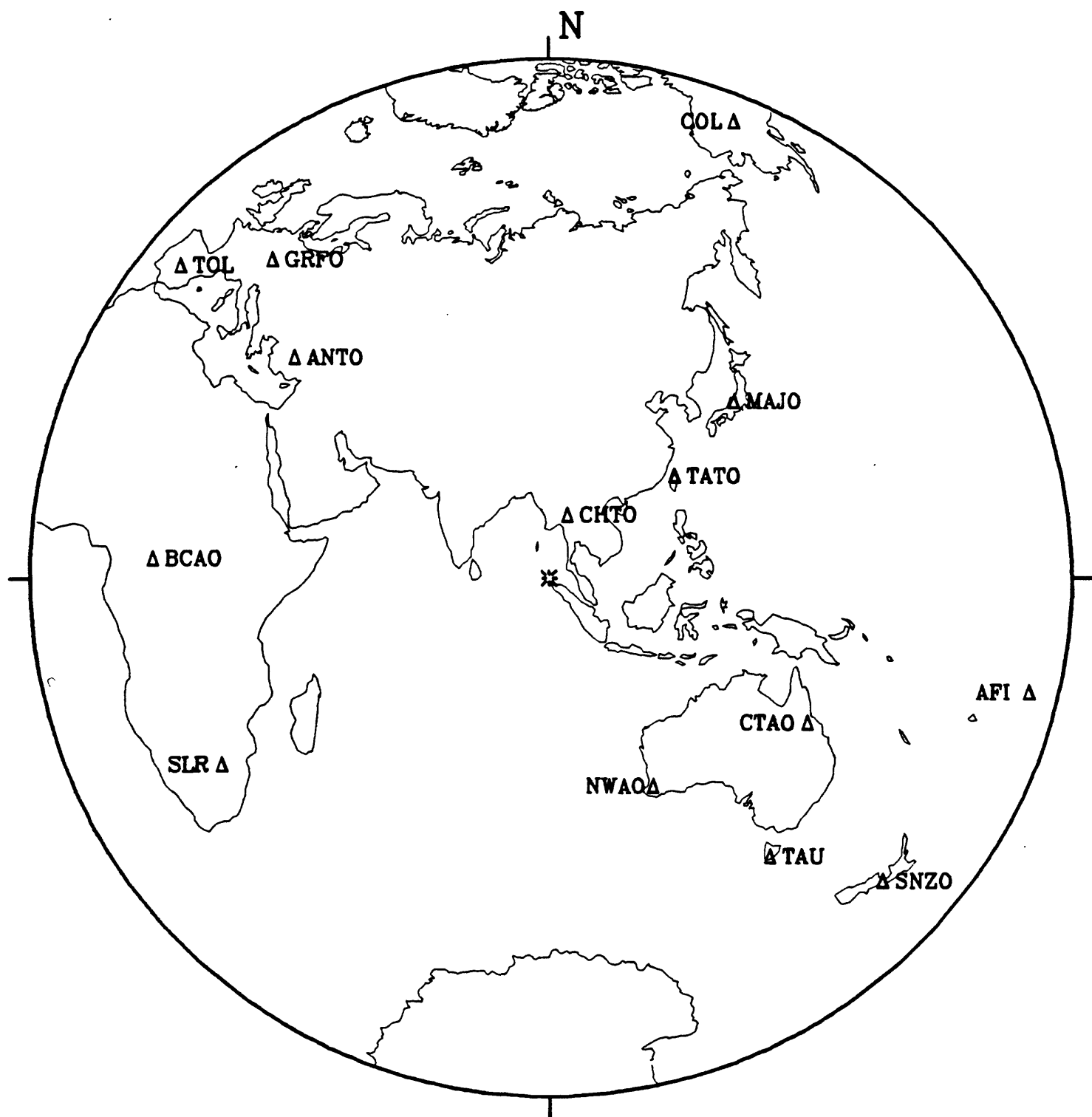
19 March 1985 10:28:36.59  
Bolivia  $h=33.0$   $m_b=5.5$   $M_{sz}=5.2$ 

LPZ



21 March 1985 08:18:39.21

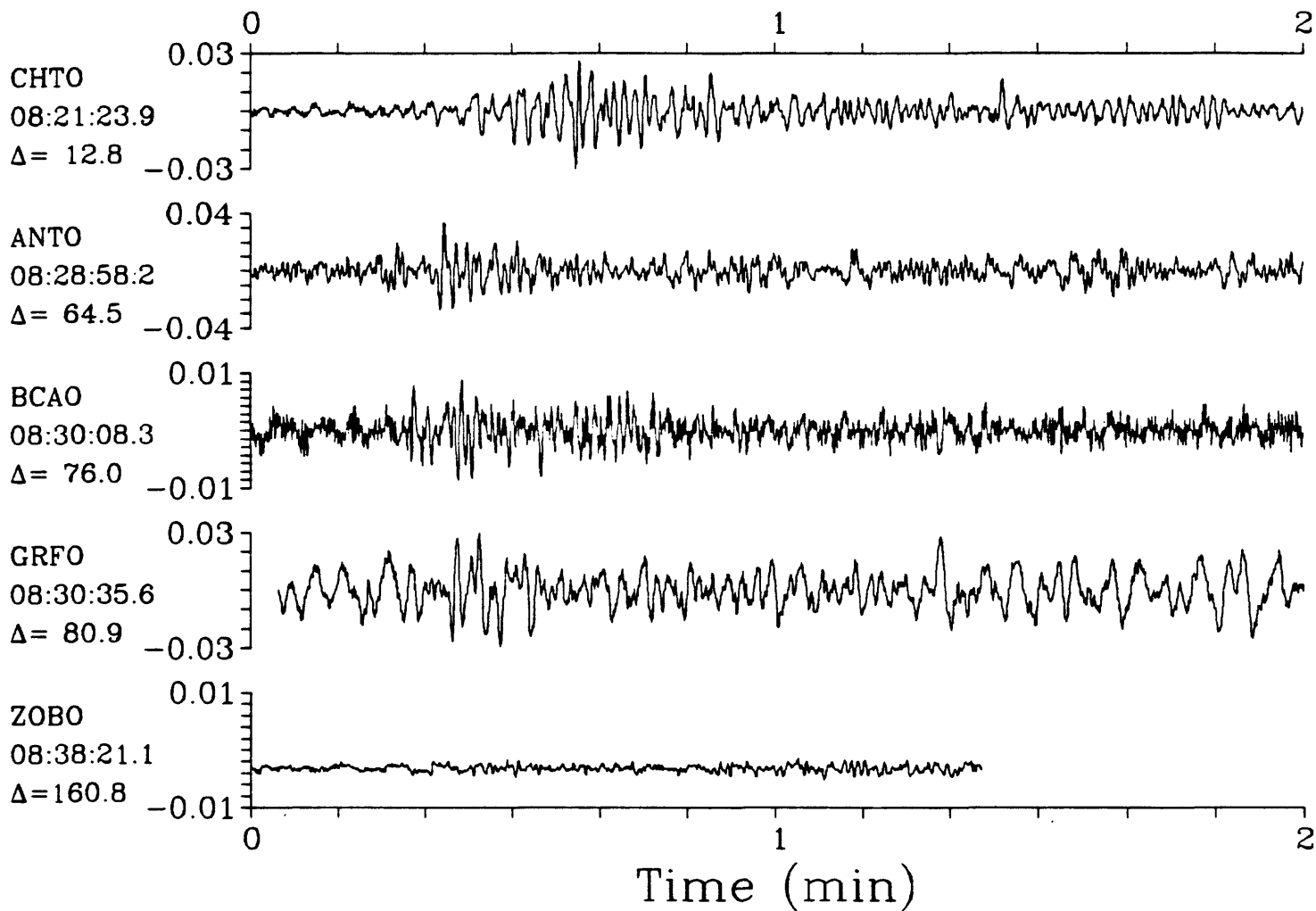
## Nicobar Islands Region



SPZ

21 March 1985 08:18:39.21

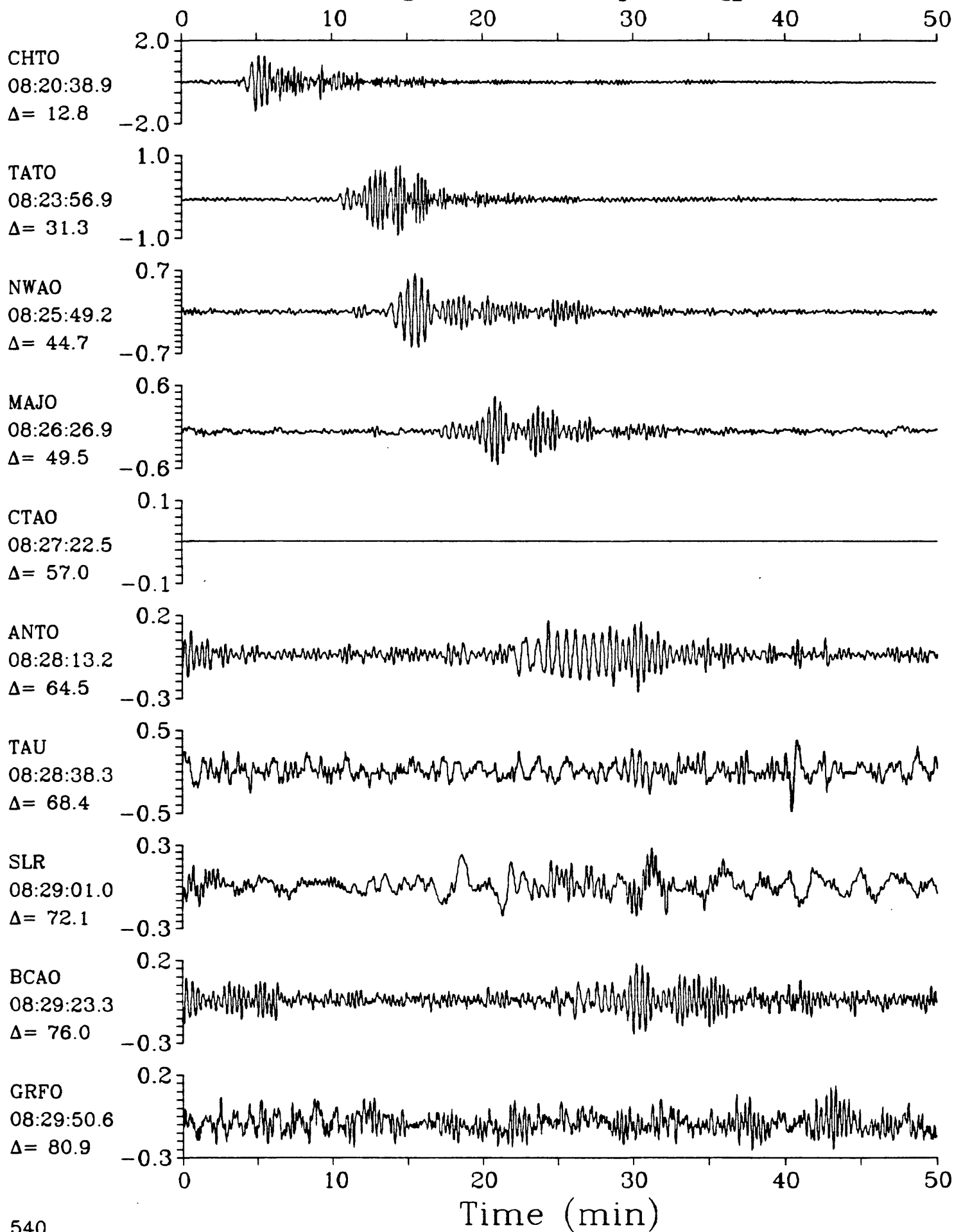
SPZ

Nicobar Islands Region  $h=33.0$   $m_b=5.2$   $M_{sz}=7.1$ 

LPZ

21 March 1985 08:18:39.21

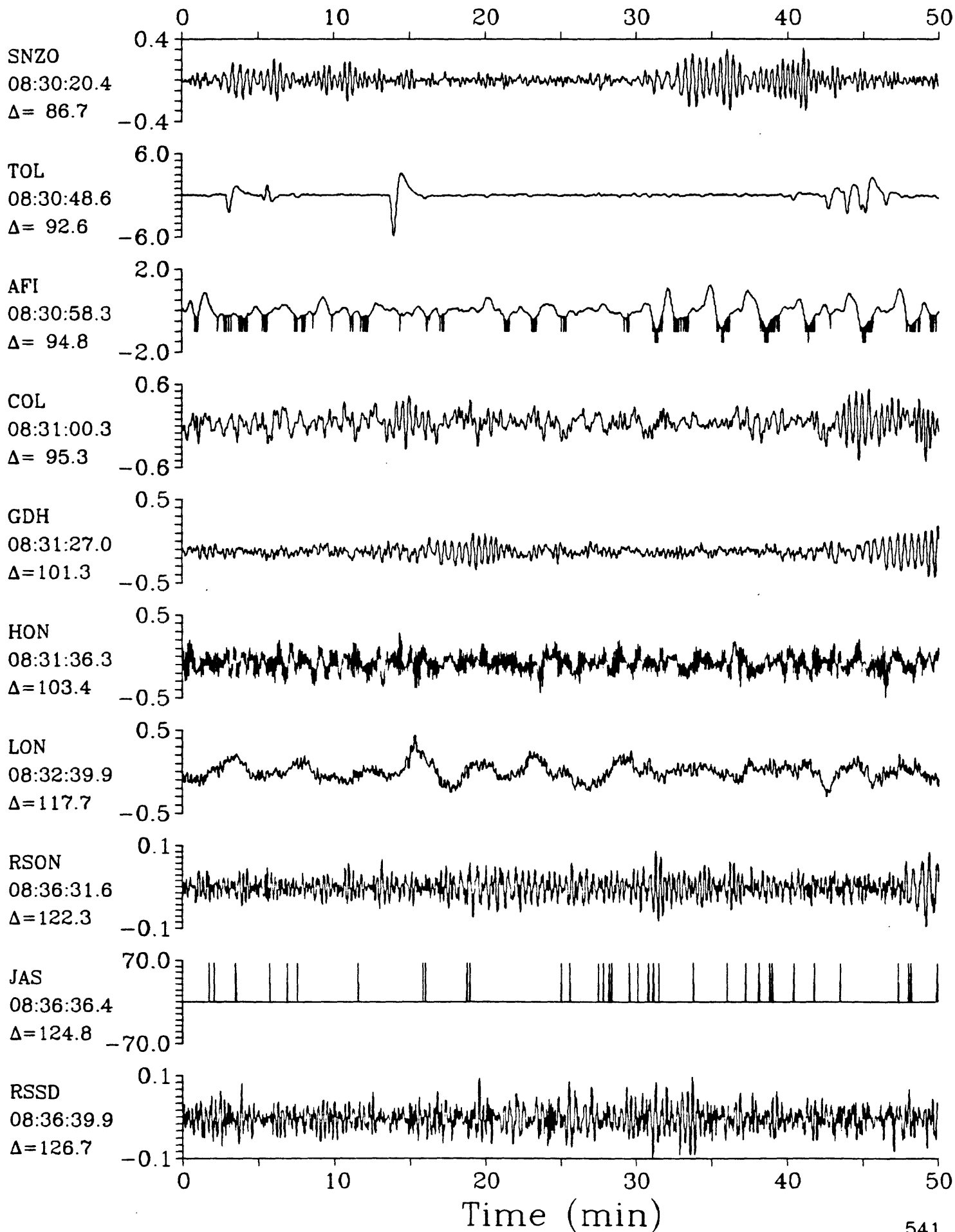
LPZ

Nicobar Islands Region  $h=33.0$   $m_b=5.2$   $M_{sz}=7.1$ 

LPZ

21 March 1985 08:18:39.21

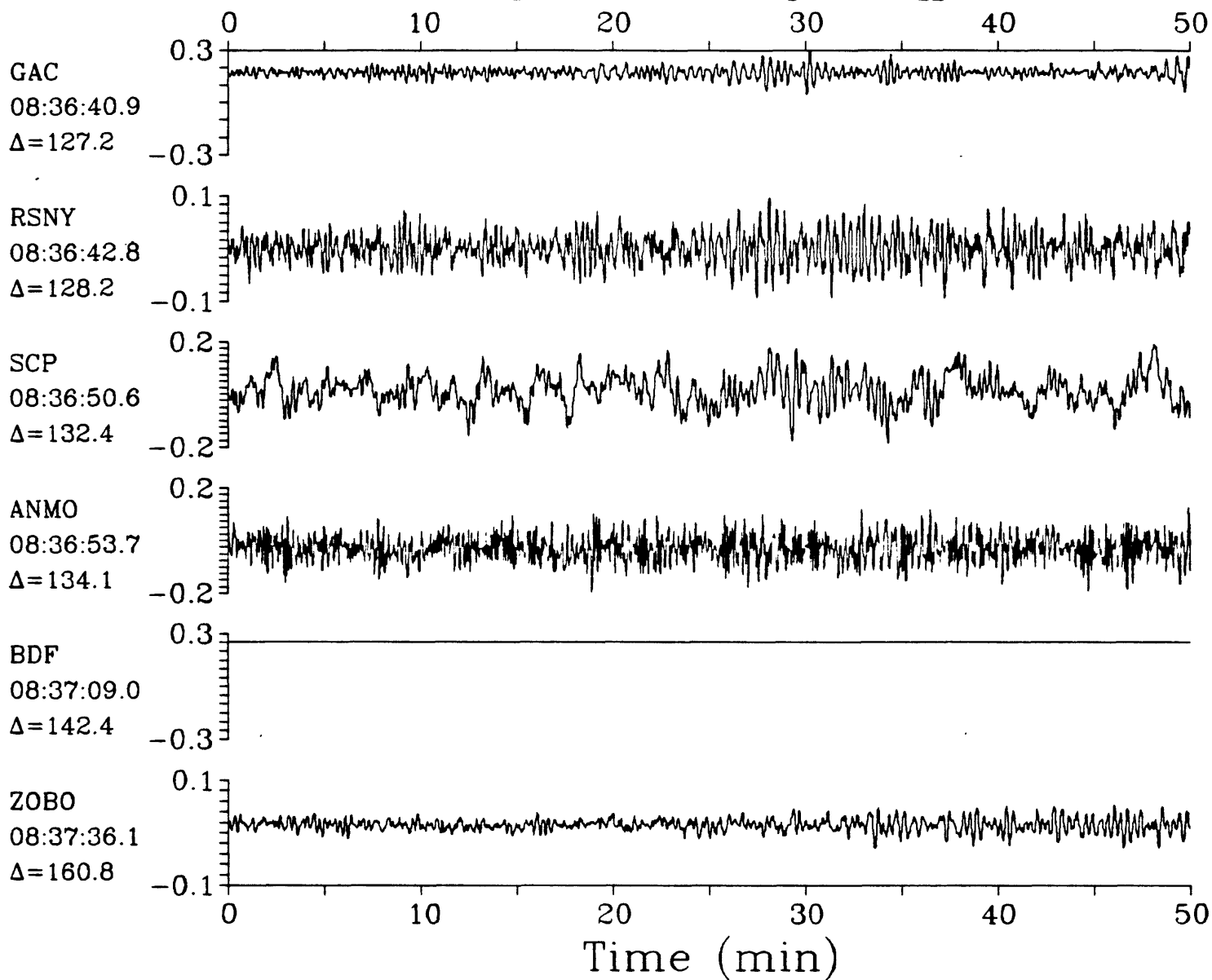
LPZ

Nicobar Islands Region  $h=33.0$   $m_b=5.2$   $M_{sz}=7.1$ 

LPZ

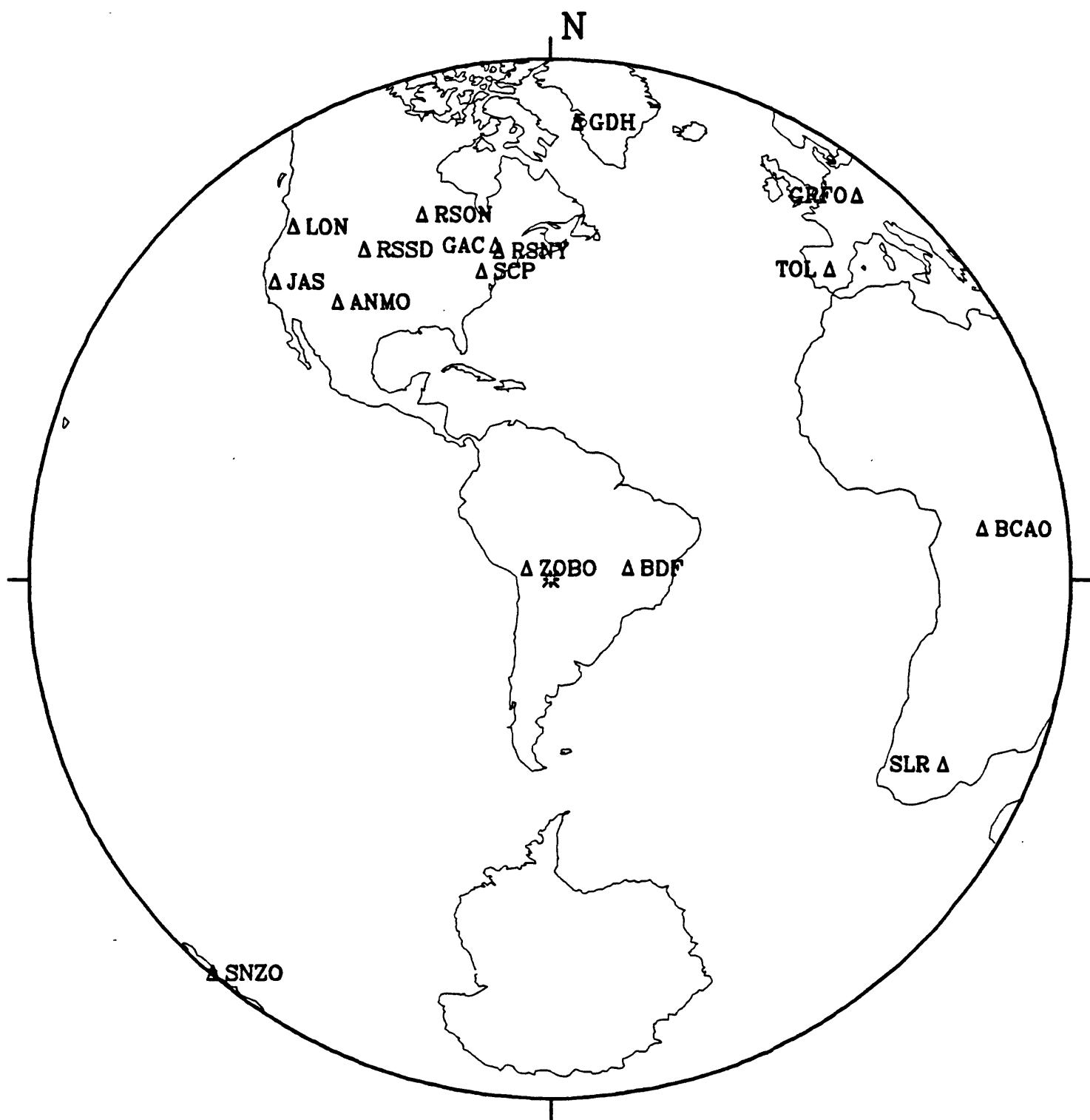
21 March 1985 08:18:39.21

LPZ

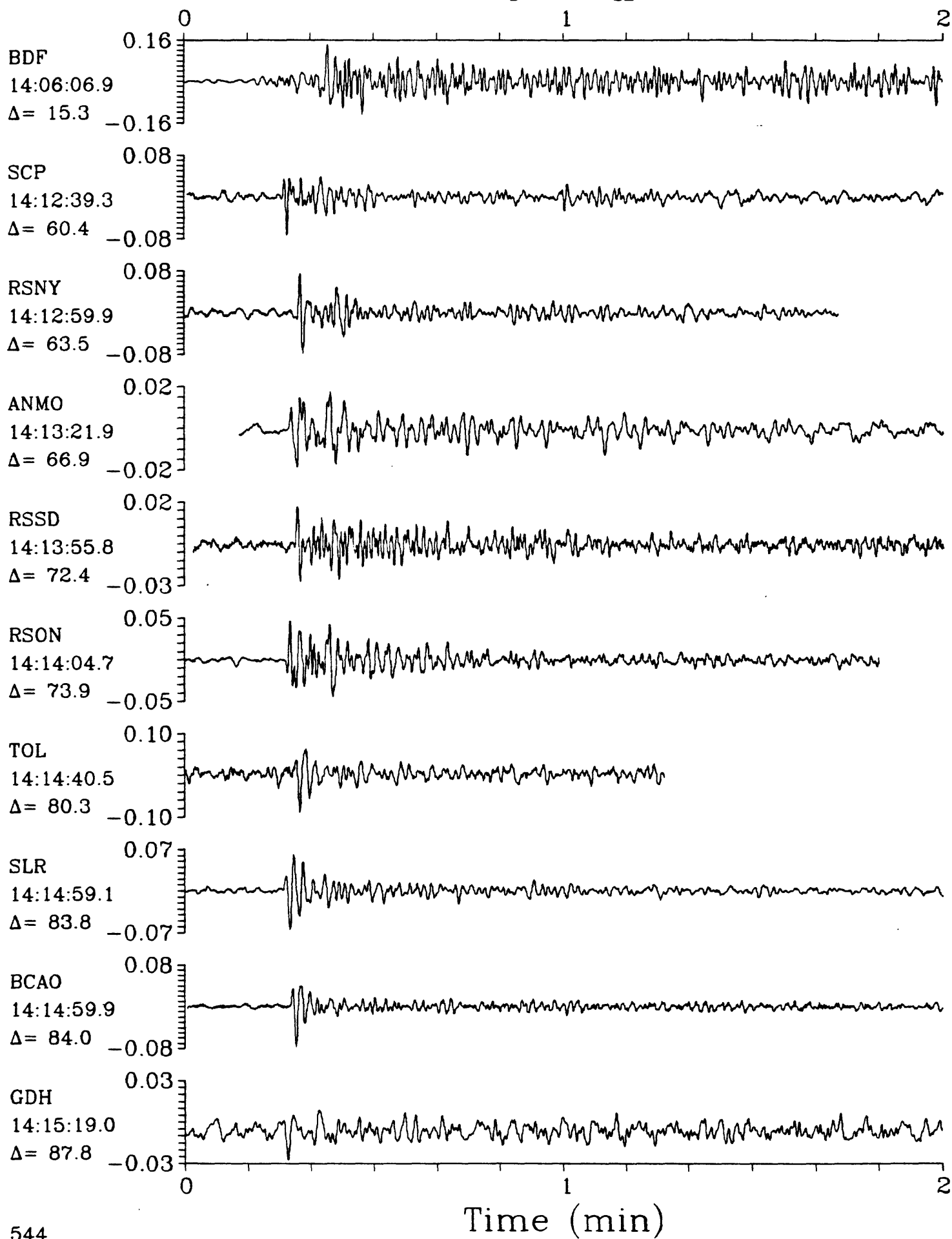
Nicobar Islands Region  $h=33.0$   $m_b=5.2$   $M_{sz}=7.1$ 

22 March 1985 14:02:47.36

## Bolivia



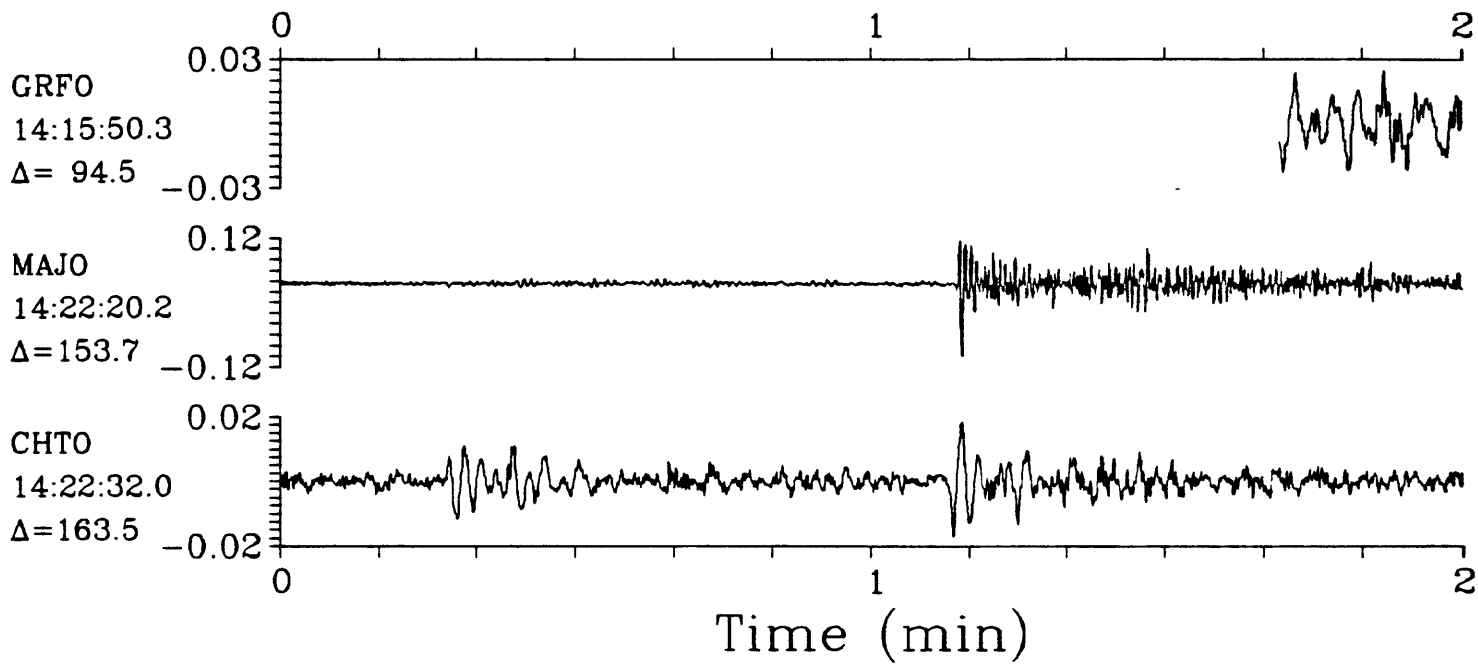




SPZ

22 March 1985 14:02:47.36  
Bolivia  $h=33.0$   $m_b=5.4$   $M_{sz}=5.7$

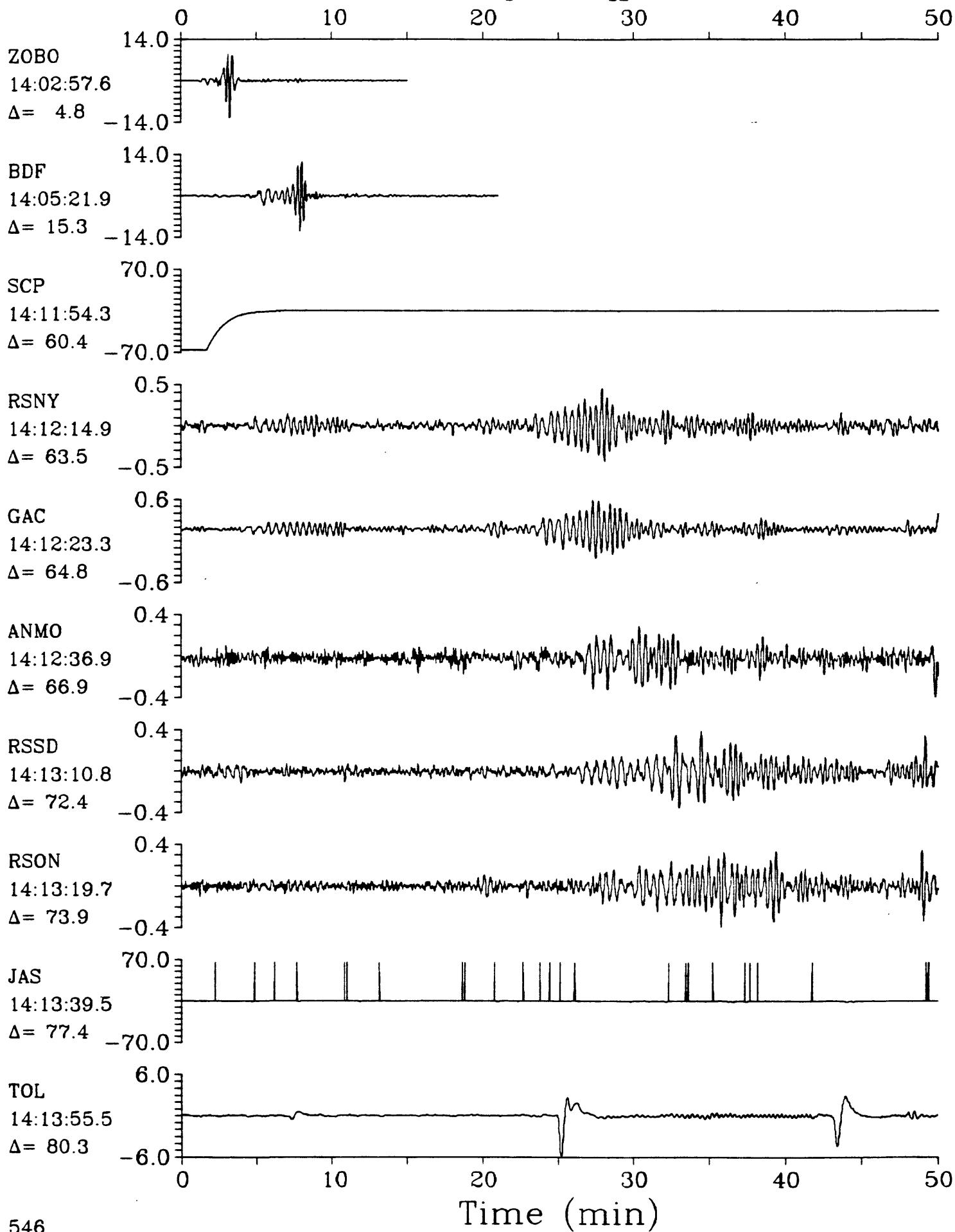
SPZ



LPZ

22 March 1985 14:02:47.36  
Bolivia  $h=33.0$   $m_b=5.4$   $M_{sz}=5.7$ 

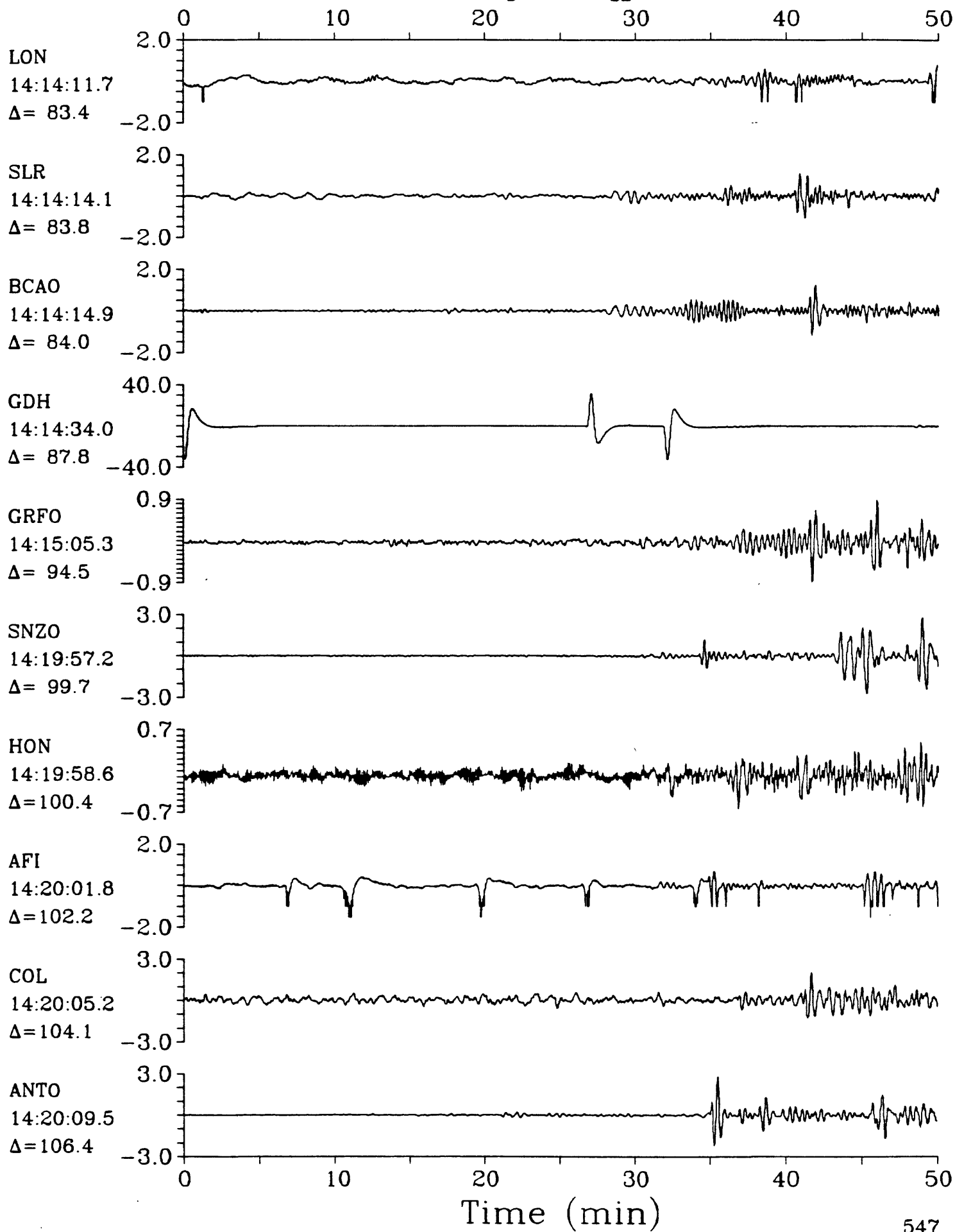
LPZ



LPZ

22 March 1985 14:02:47.36  
Bolivia  $h=33.0$   $m_b=5.4$   $M_{sz}=5.7$ 

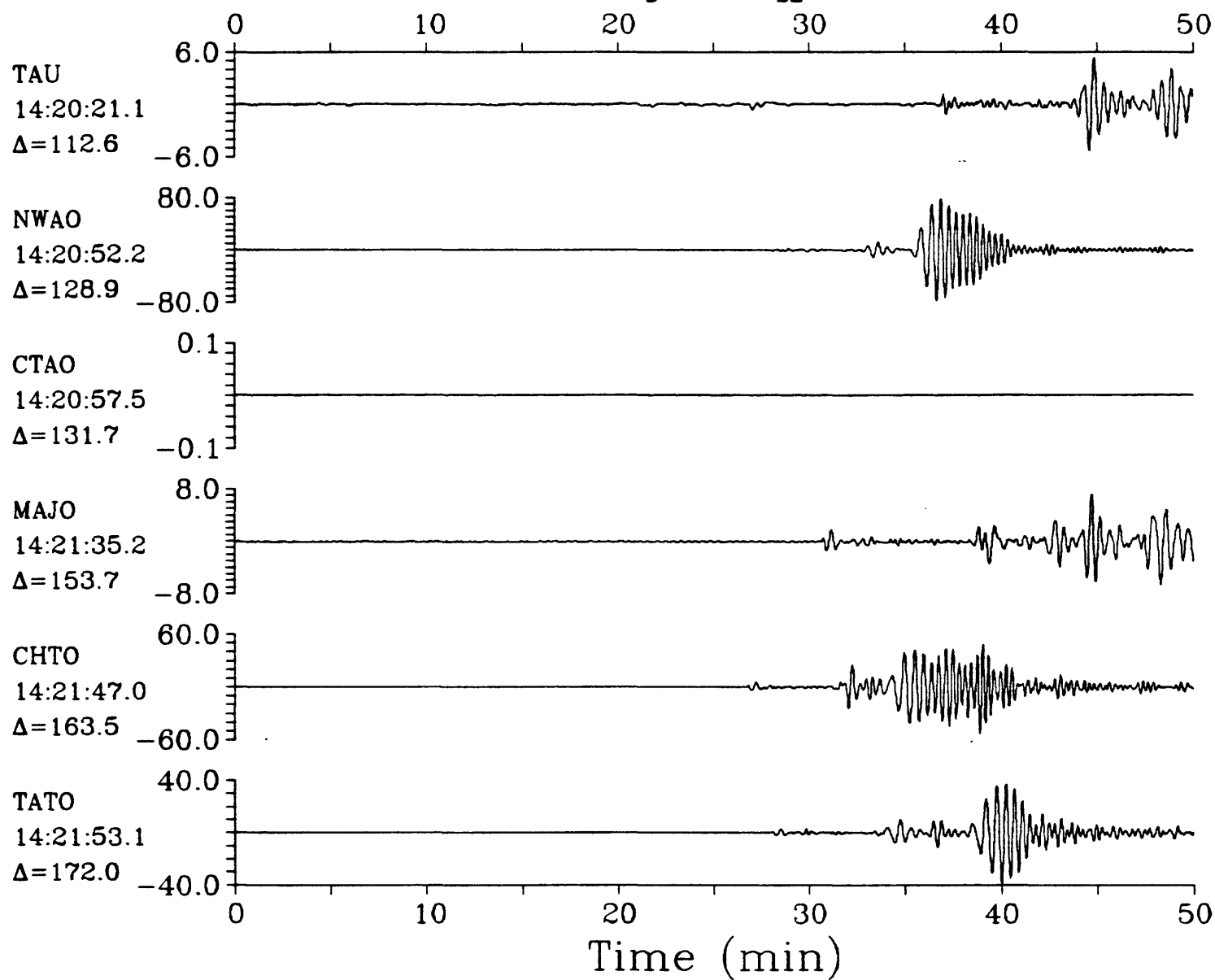
LPZ



LPZ

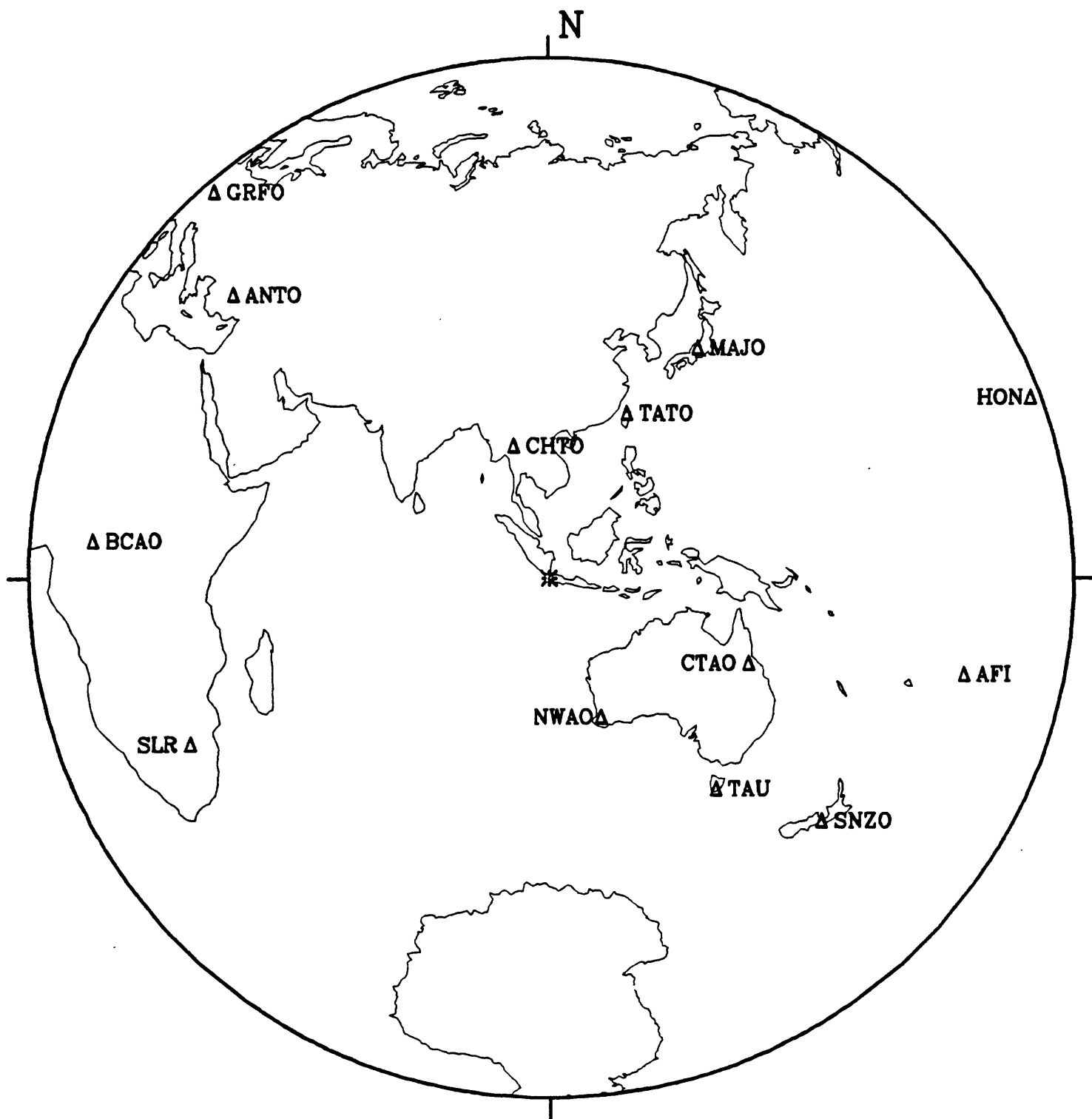
22 March 1985 14:02:47.36  
Bolivia  $h=33.0$   $m_b=5.4$   $M_{SZ}=5.7$ 

LPZ



22 March 1985 14:42:58.97

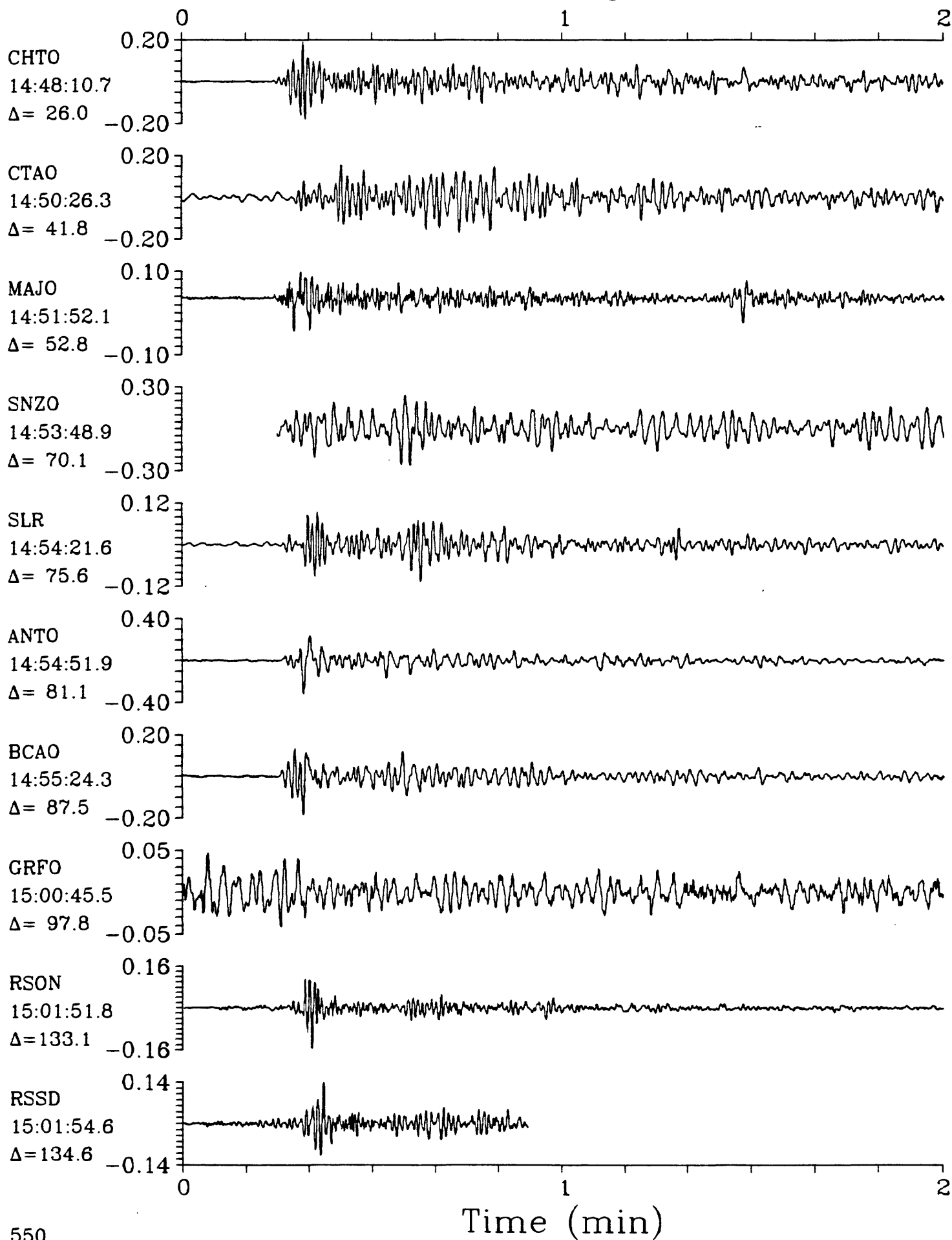
## Sunda Strait



SPZ

22 March 1985 14:42:58.97  
Sunda Strait  $h=72.0$   $m_b=5.7$ 

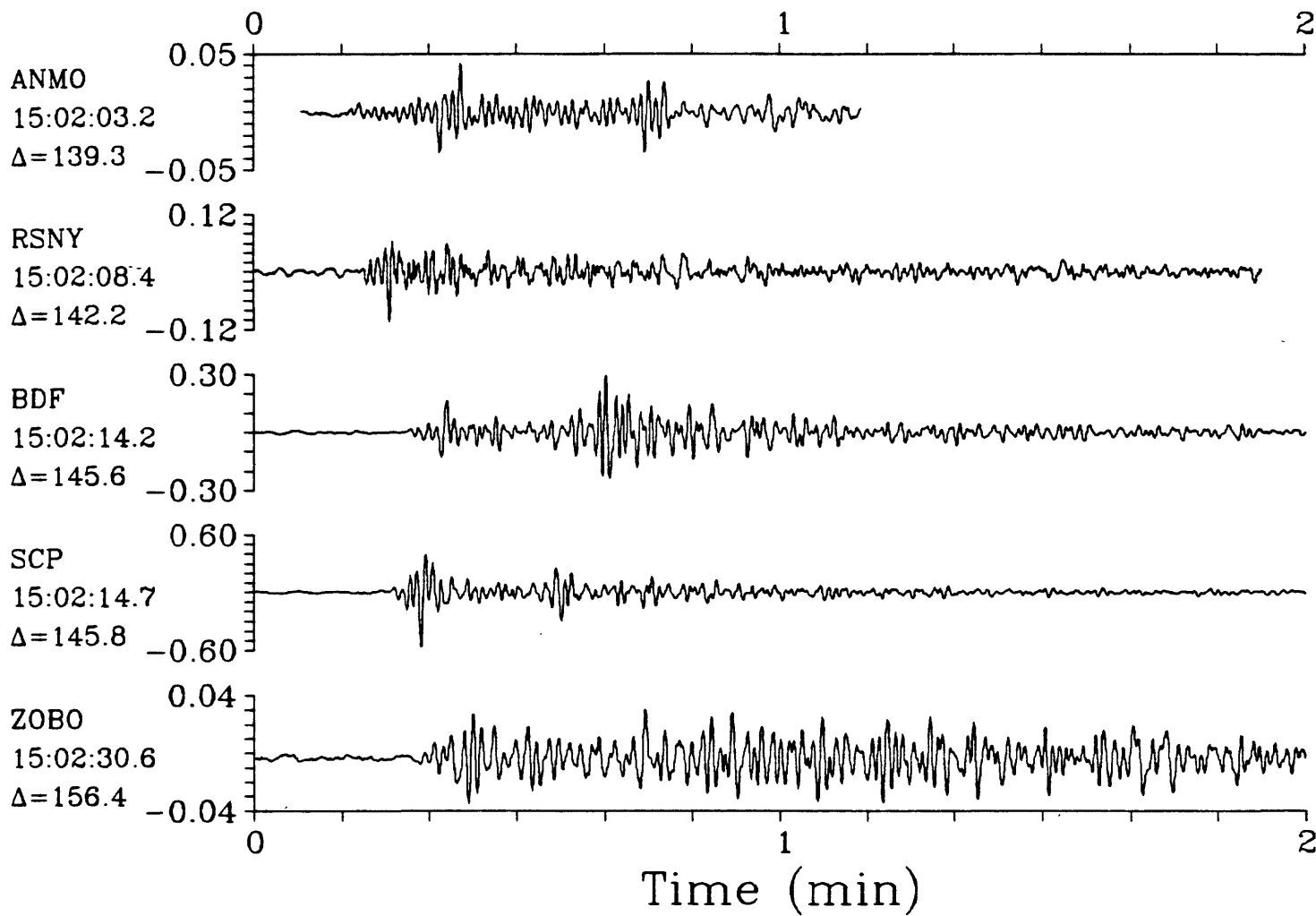
SPZ



SPZ

22 March 1985 14:42:58.97  
Sunda Strait  $h=72.0$   $m_b=5.7$ 

SPZ

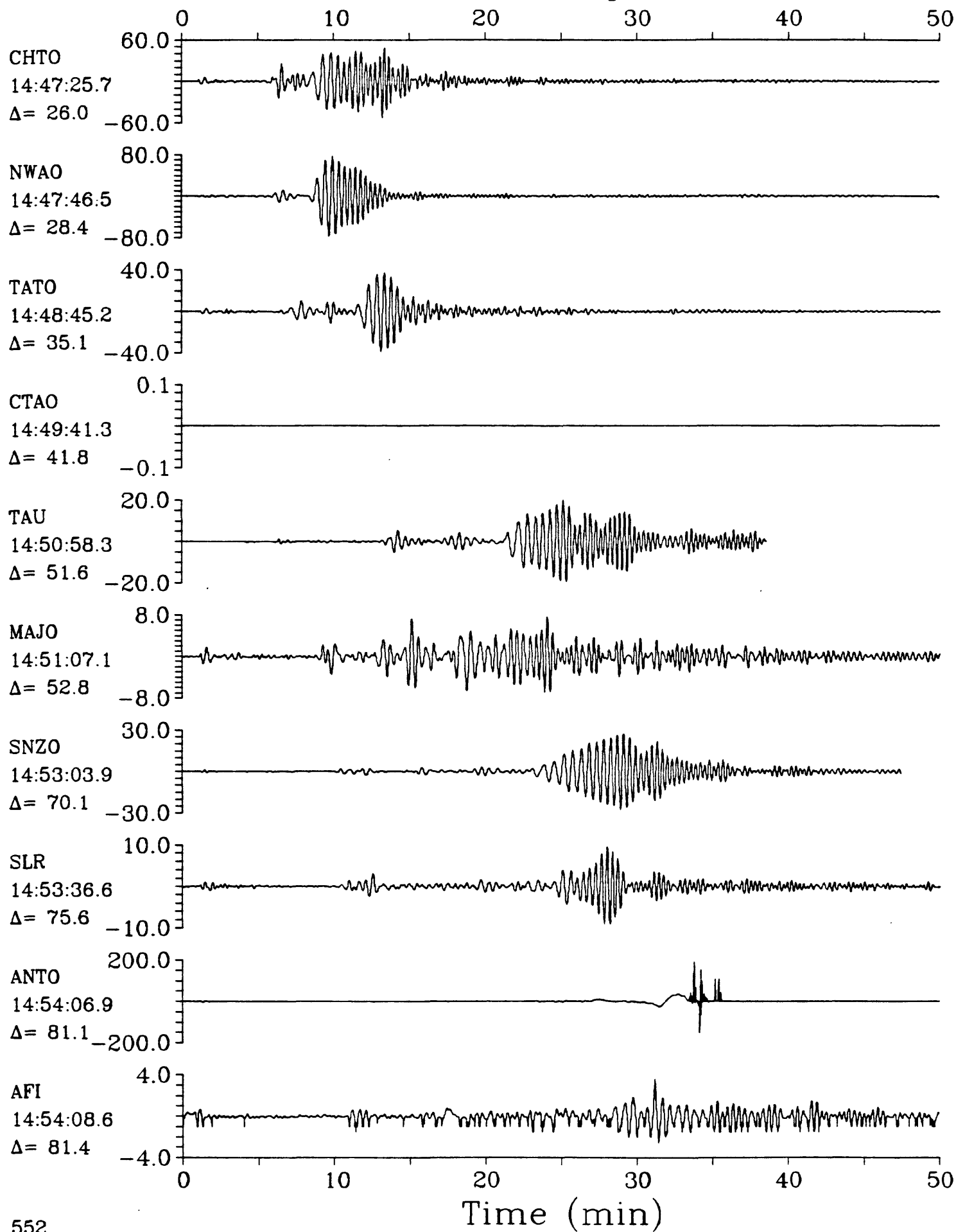




LPZ

22 March 1985 14:42:58.97  
Sunda Strait  $h=72.0$   $m_b=5.7$ 

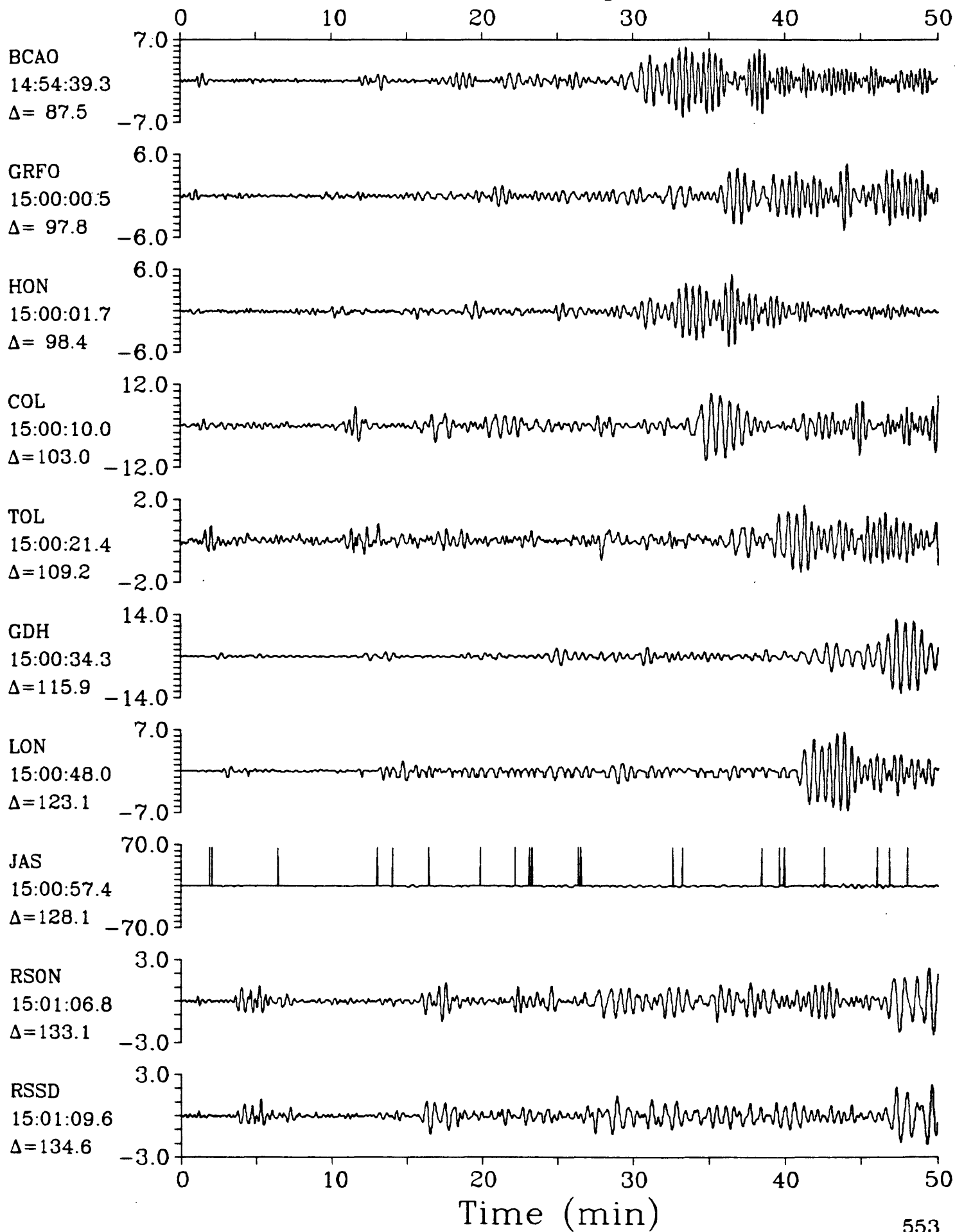
LPZ



LPZ

22 March 1985 14:42:58.97  
Sunda Strait  $h=72.0$   $m_b=5.7$ 

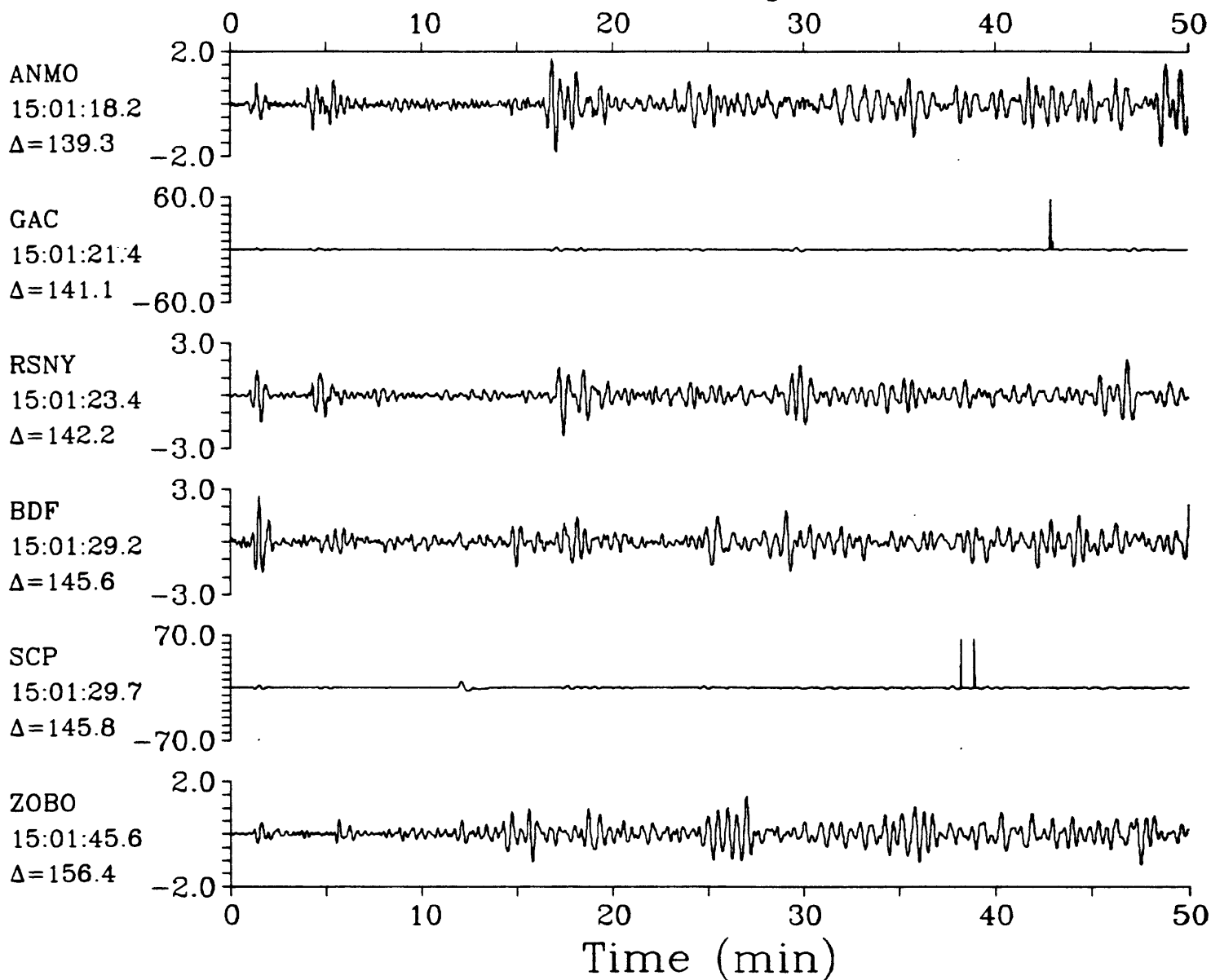
LPZ



LPZ

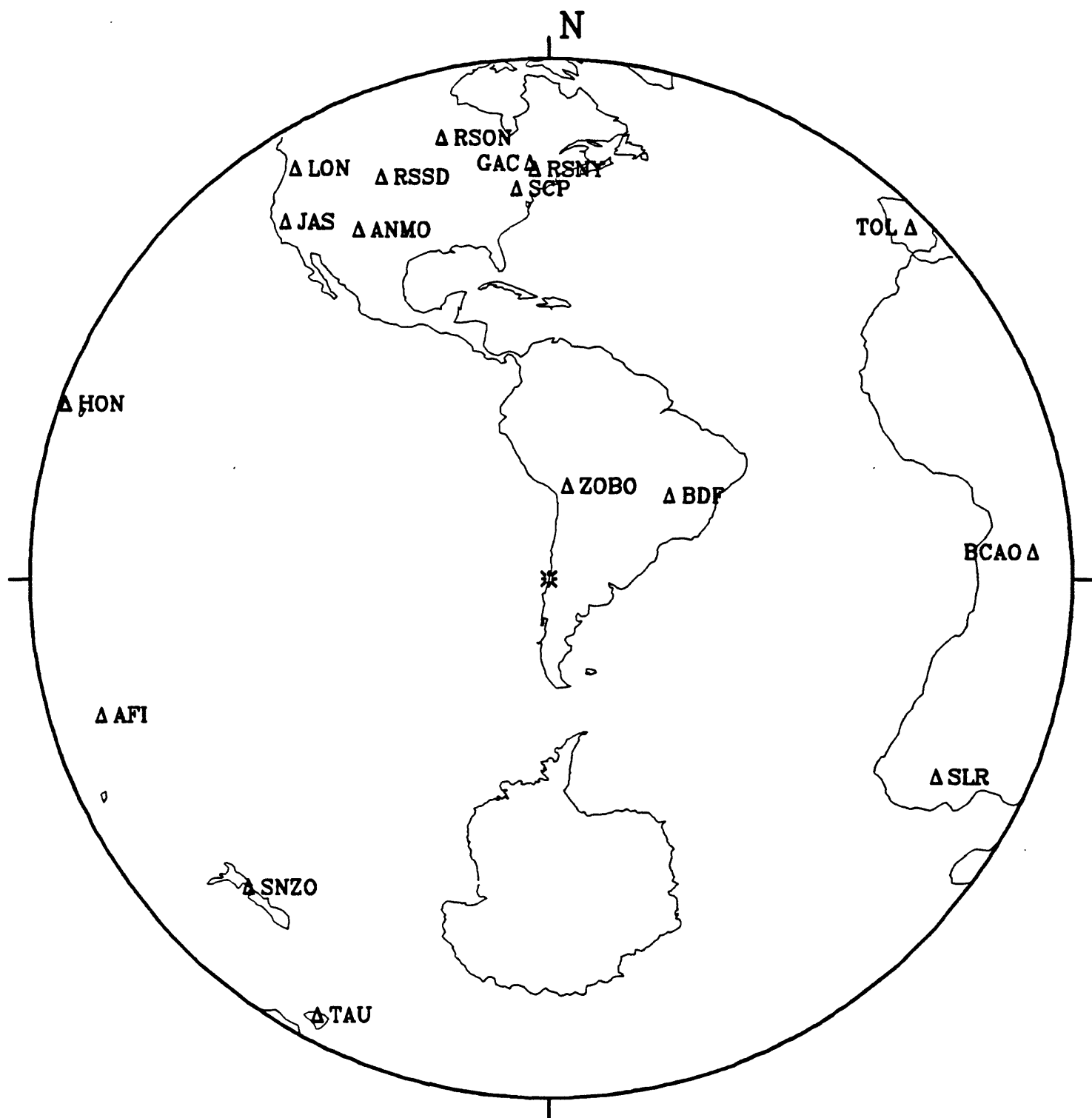
22 March 1985 14:42:58.97  
Sunda Strait  $h=72.0$   $m_b=5.7$ 

LPZ



23 March 1985 13:45:19.36

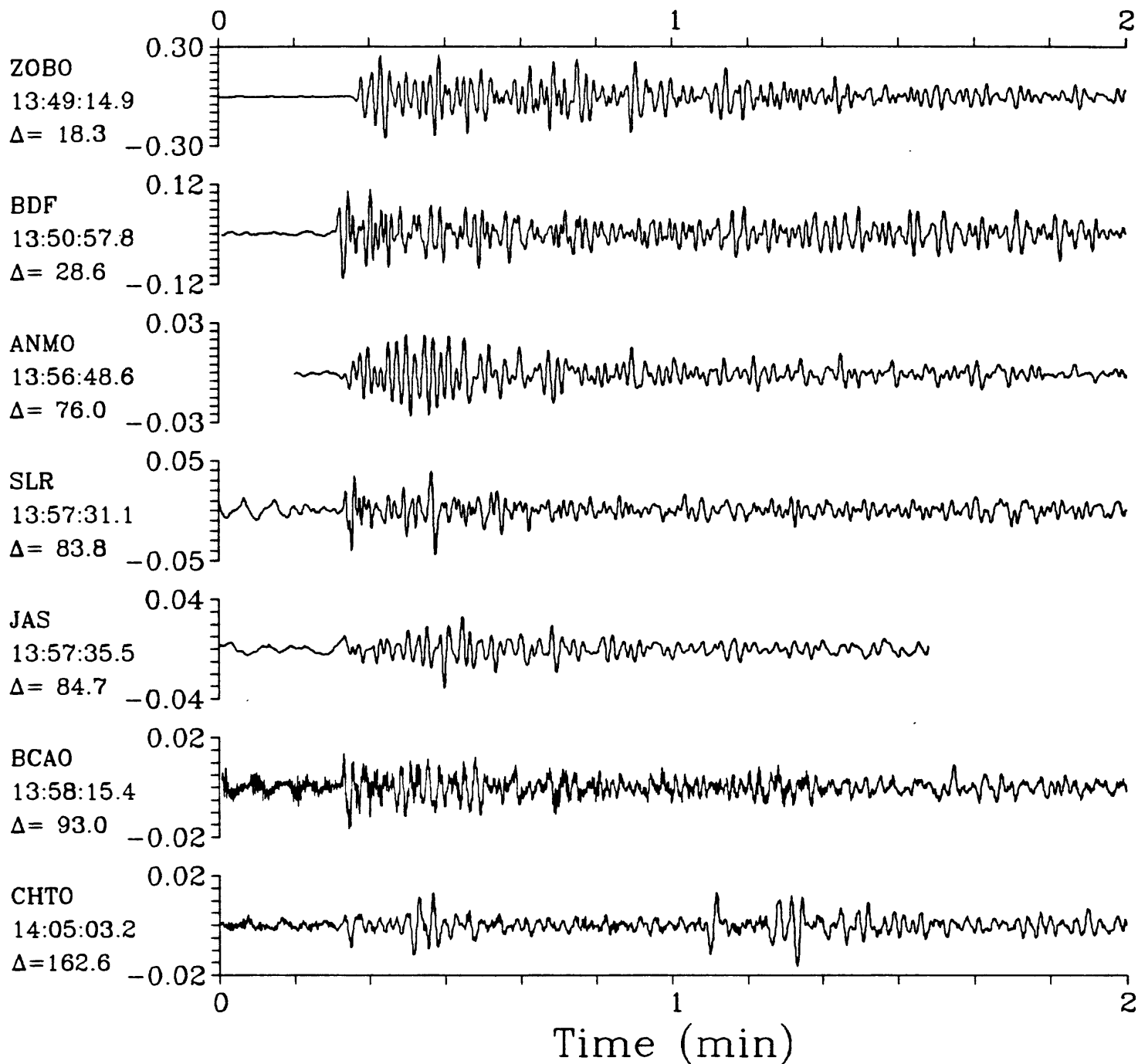
Near Coast of Central Chile



SPZ

23 March 1985 13:45:19.36

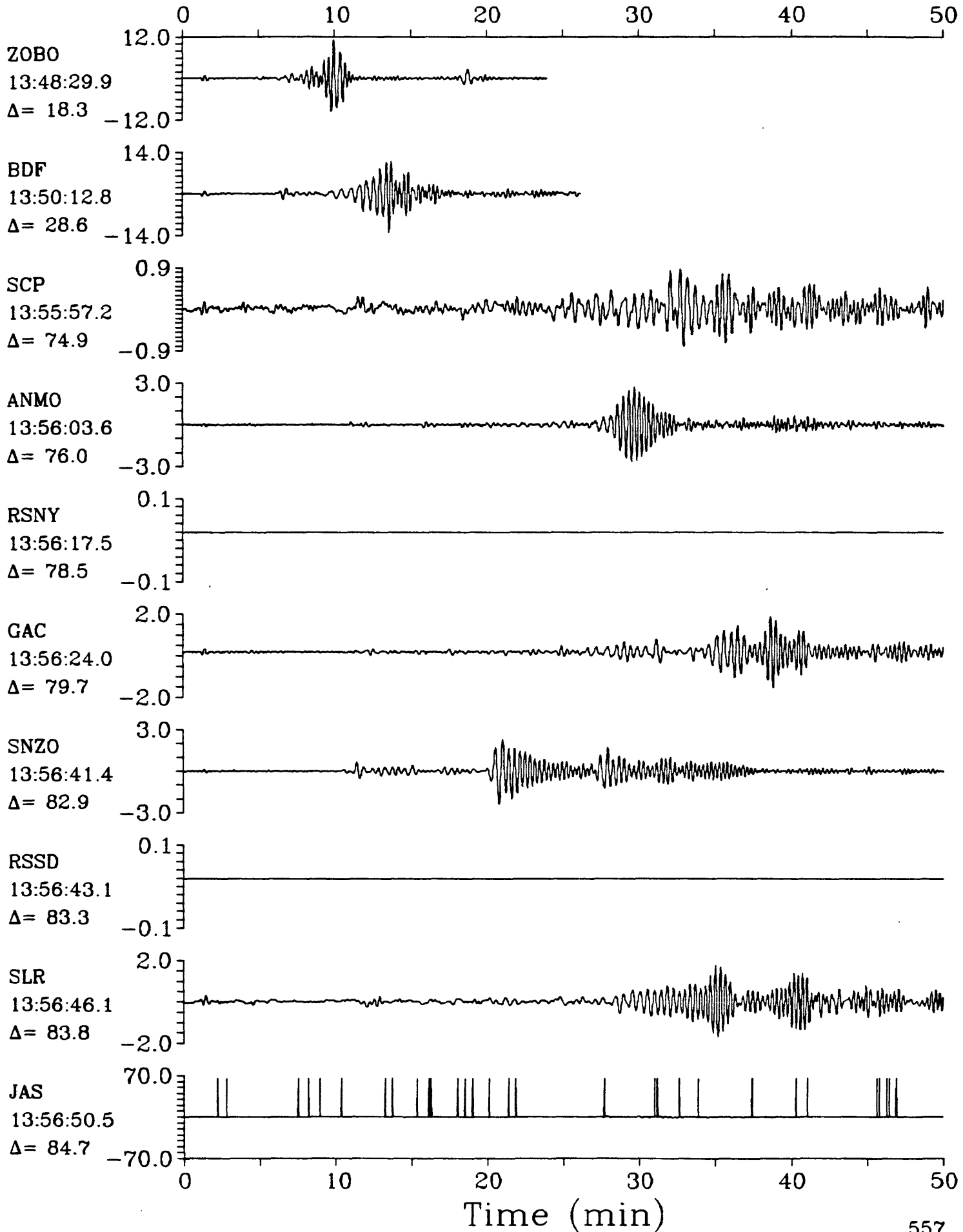
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 

LPZ

23 March 1985 13:45:19.36

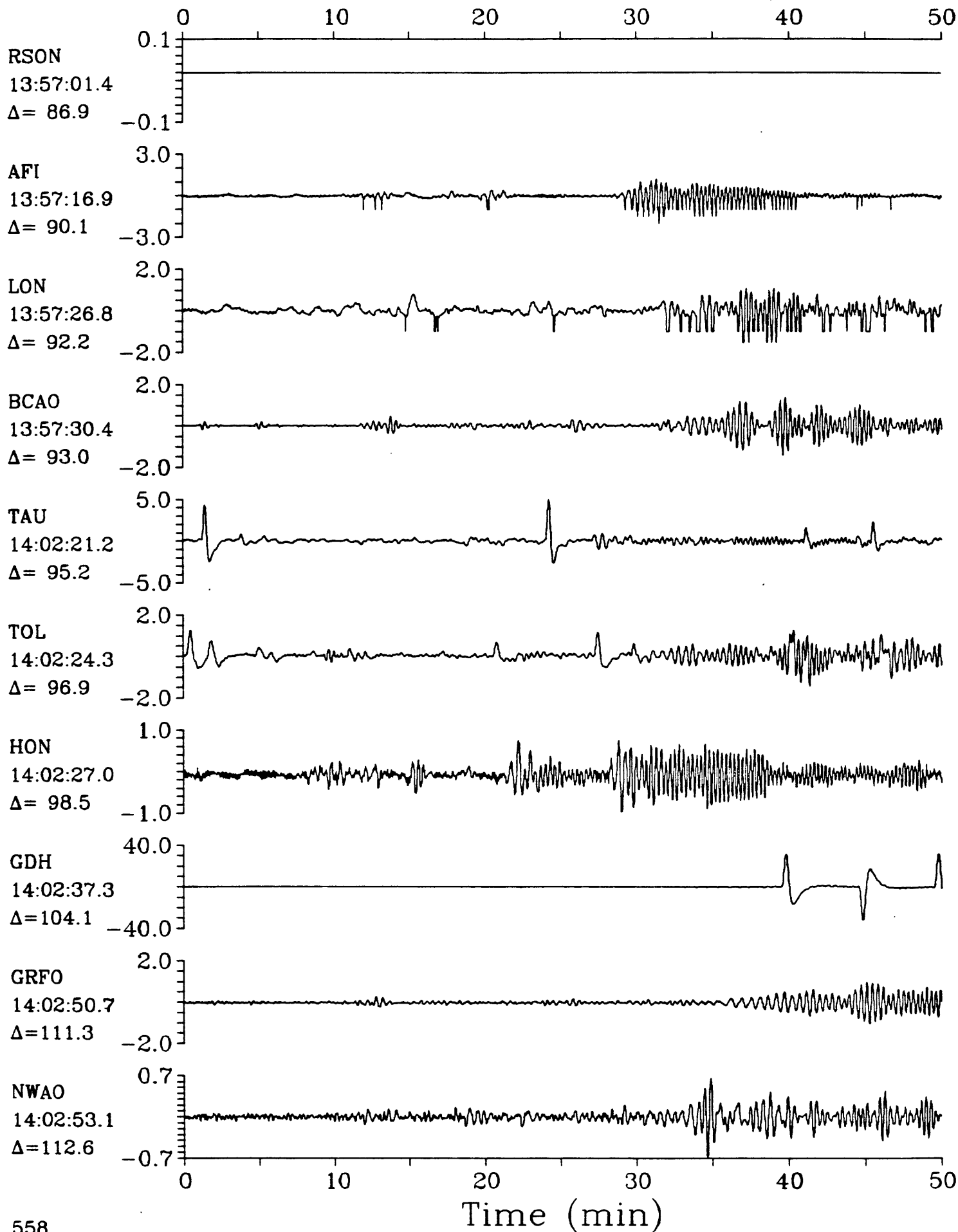
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 

LPZ

23 March 1985 13:45:19.36

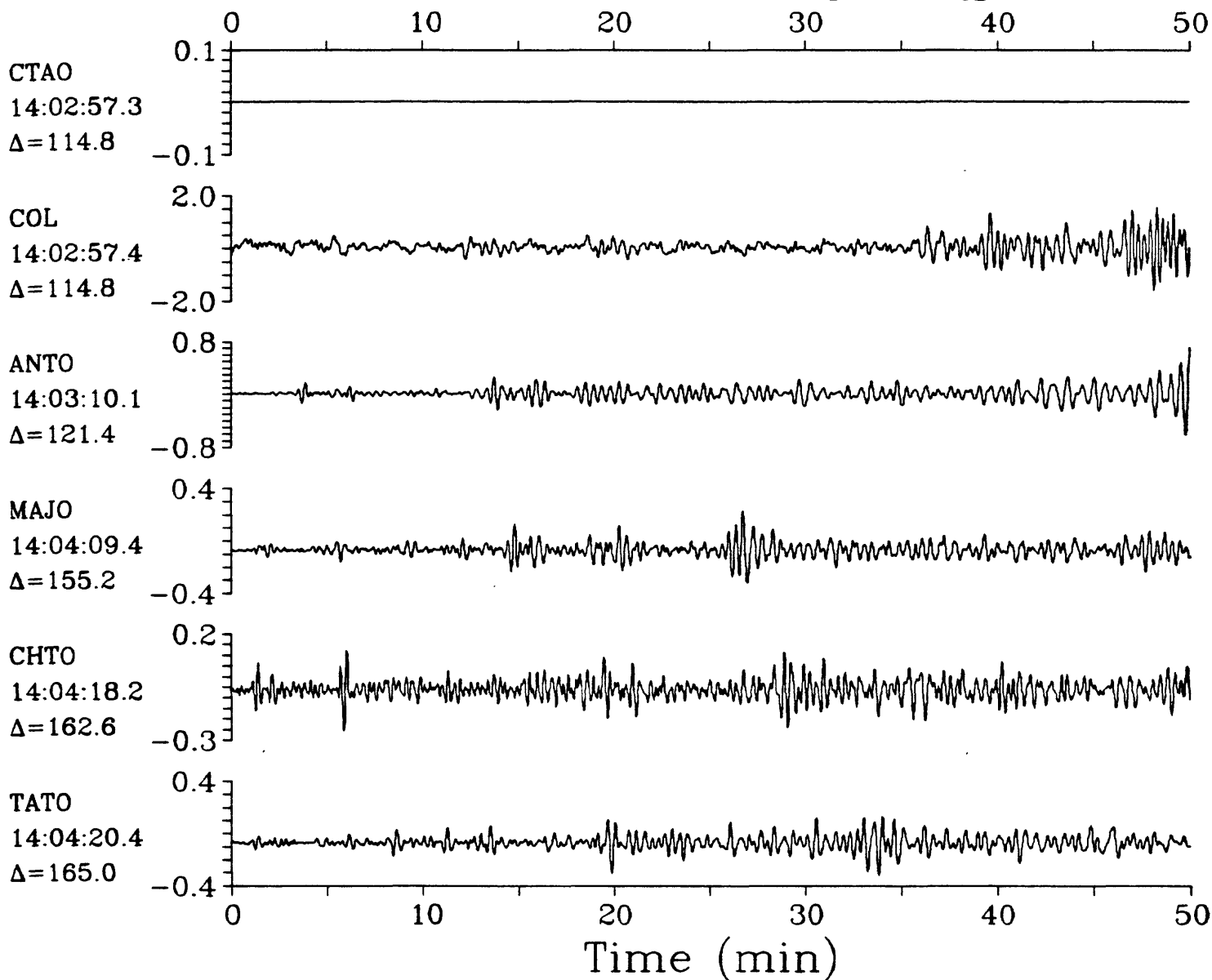
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 

LPZ

23 March 1985 13:45:19.36

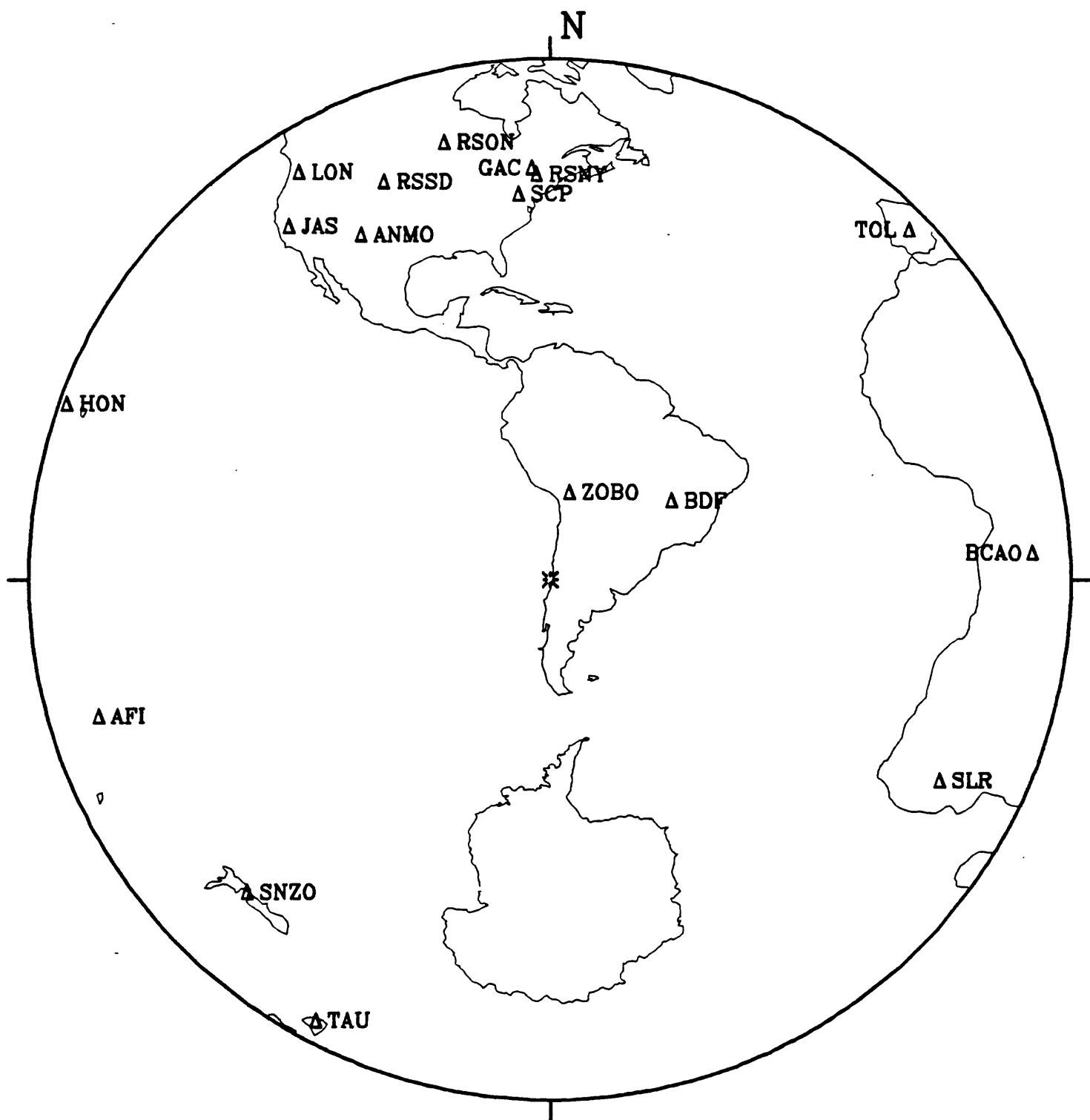
LPZ

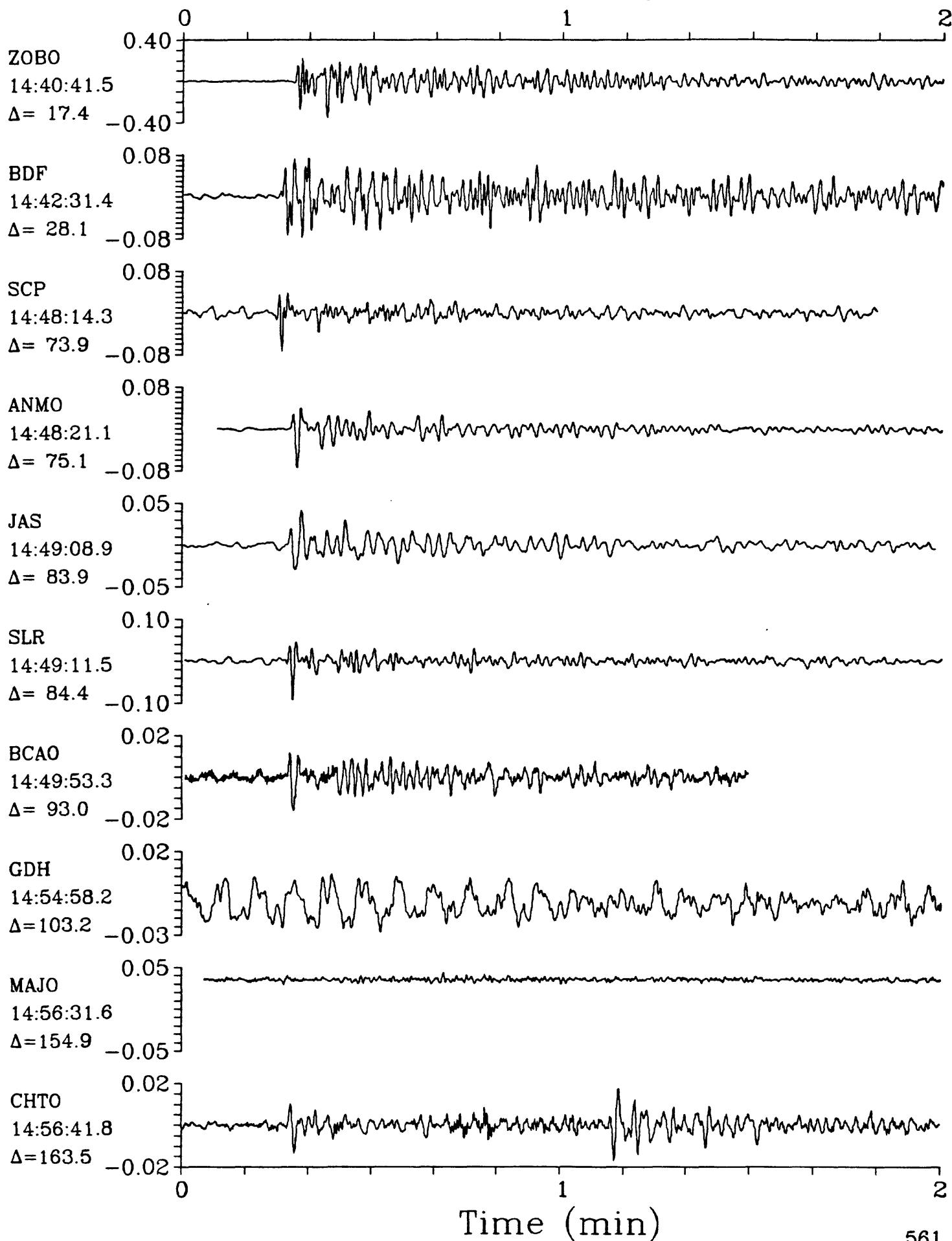
Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 



23 March 1985 14:36:57.06

Off Coast of Central Chile

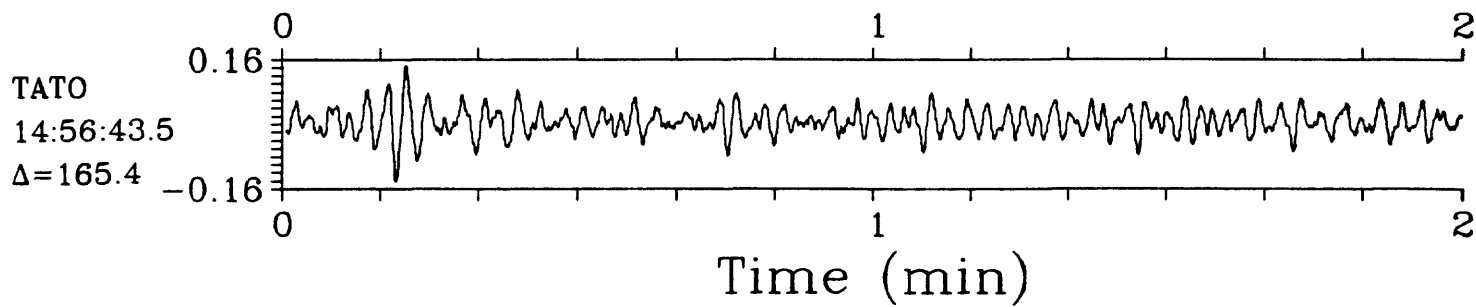


Off Coast of Central Chile  $h=33.0$   $m_b=5.6$   $M_{sz}=5.2$ 

SPZ

23 March 1985 14:36:57.06

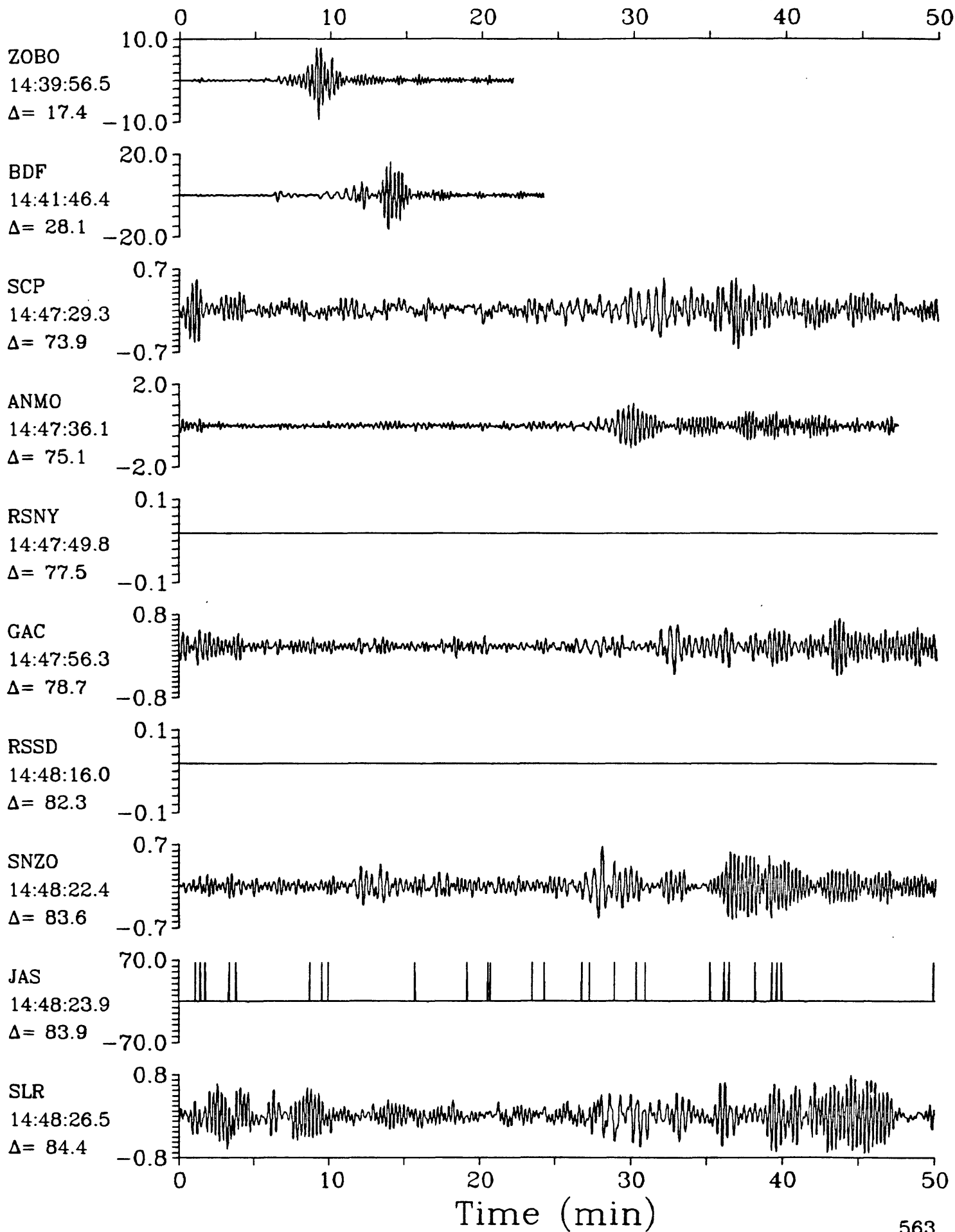
SPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.6$   $M_{sz}=5.2$ 

LPZ

23 March 1985 14:36:57.06

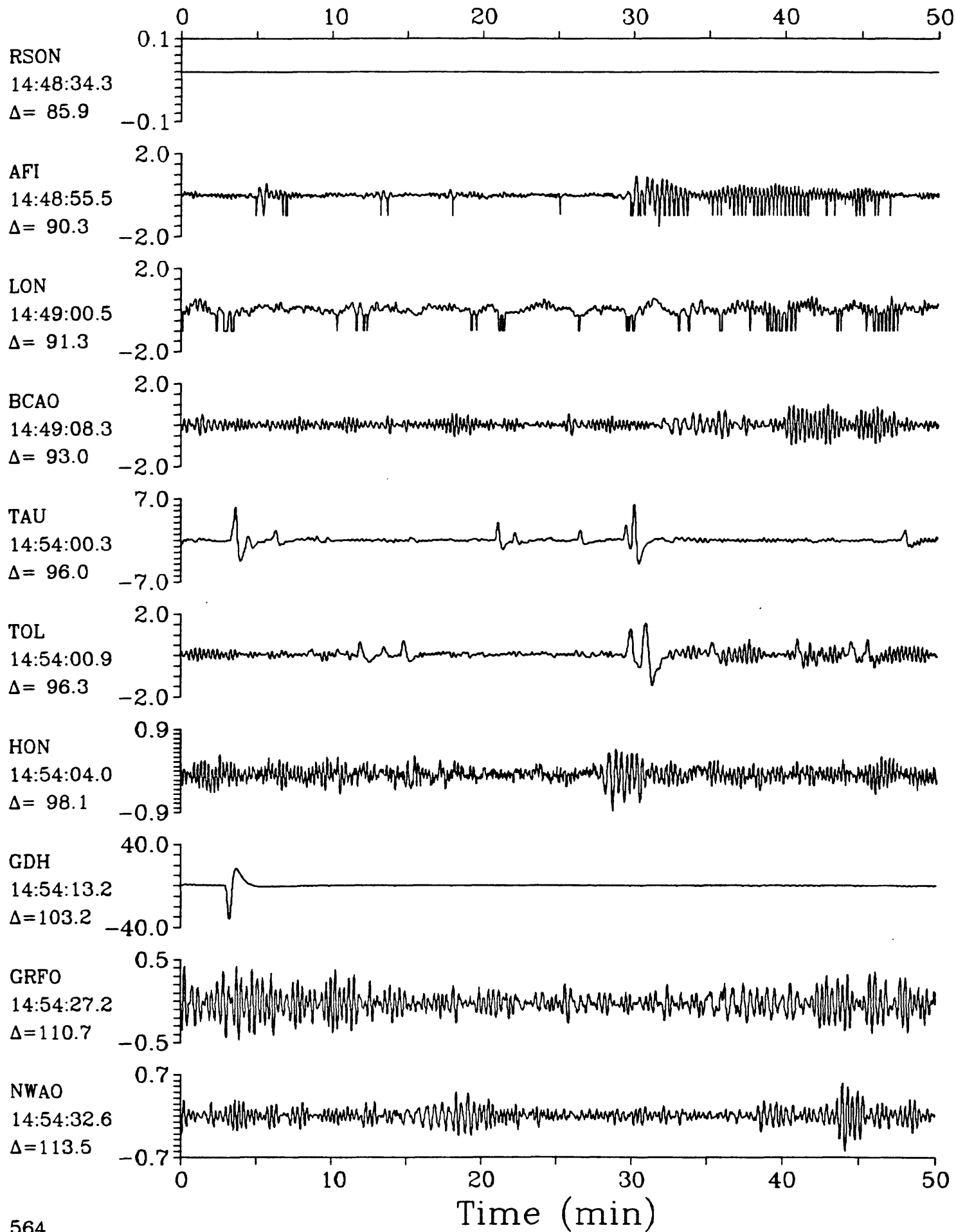
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.6$   $M_{sz}=5.2$ 

LPZ

23 March 1985 14:36:57.06

LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.6$   $M_{sz}=5.2$ 

LPZ

23 March 1985 14:36:57.06

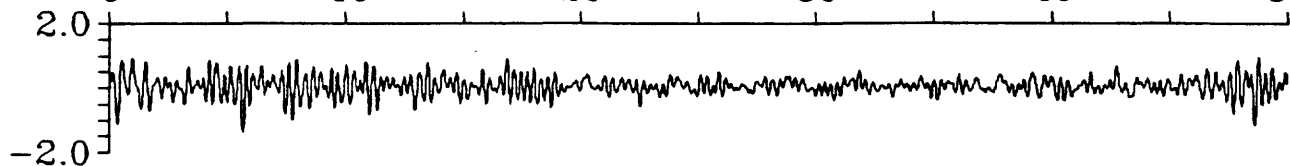
LPZ

Off Coast of Central Chile  $h=33.0$   $m_b=5.6$   $M_{sz}=5.2$ 

0 10 20 30 40 50

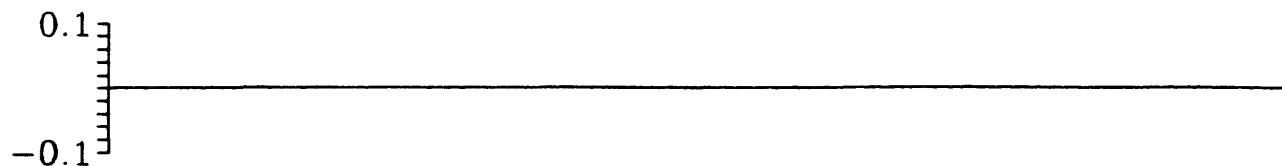
COL

14:54:33.3

 $\Delta=113.9$ 

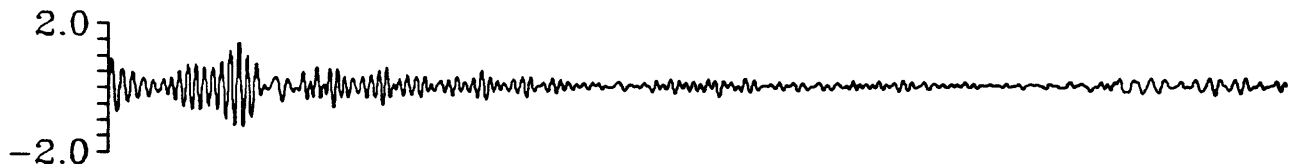
CTAO

14:54:36.3

 $\Delta=115.4$ 

ANTO

14:54:47.0

 $\Delta=121.1$ 

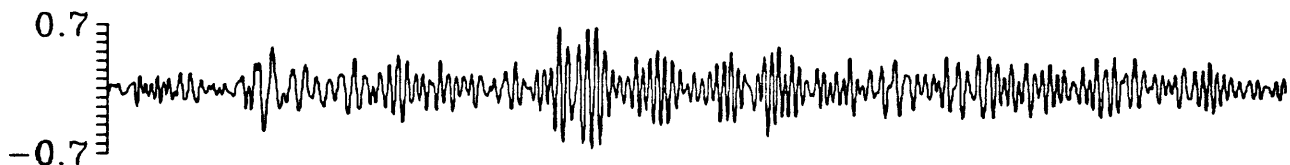
MAJO

14:55:46.6

 $\Delta=154.9$ 

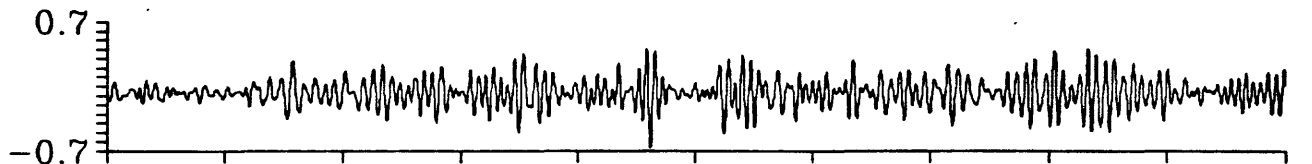
CHTO

14:55:56.8

 $\Delta=163.5$ 

TATO

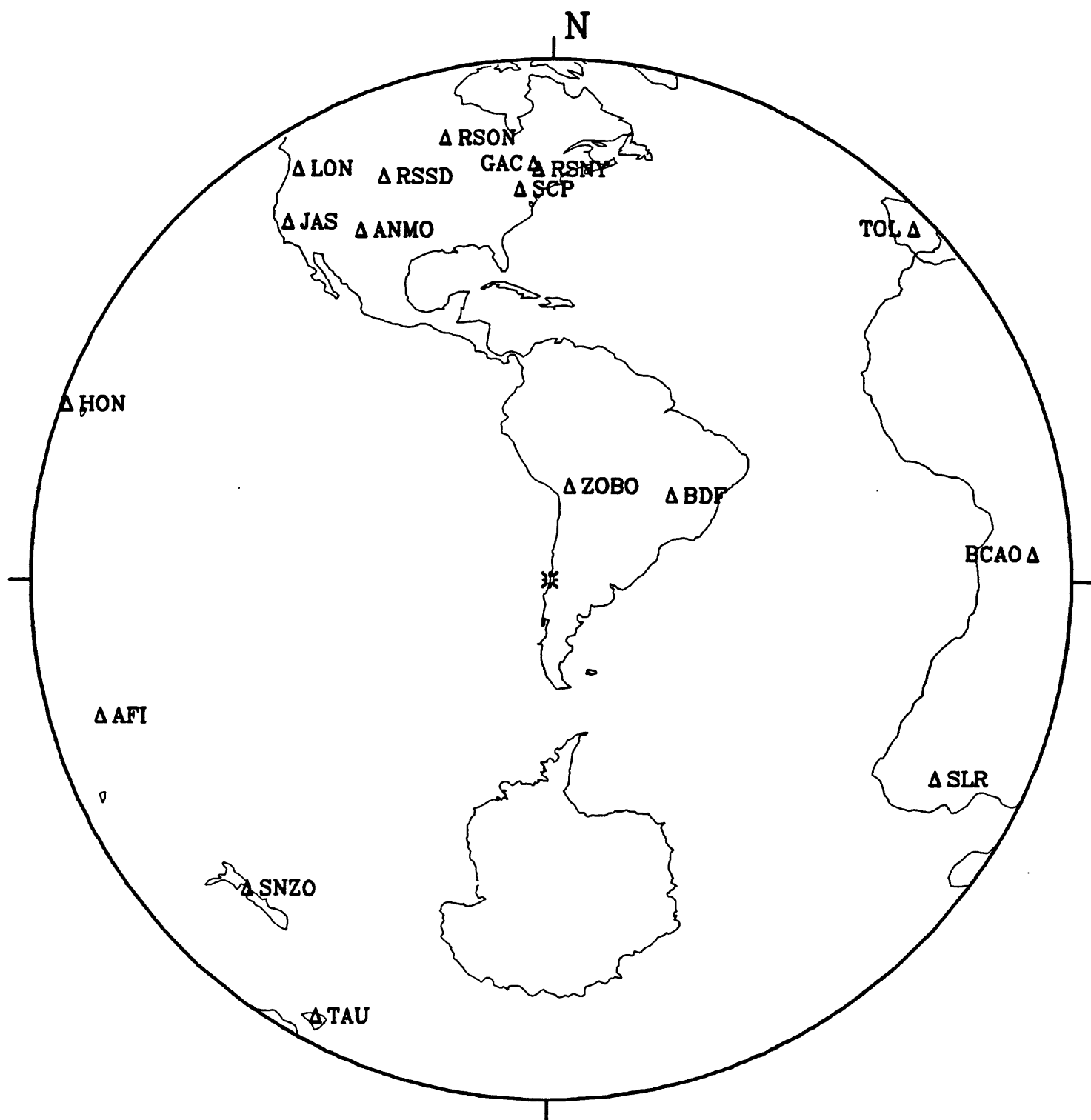
14:55:58.5

 $\Delta=165.4$ 

Time (min)

24 March 1985 16:16:33.09

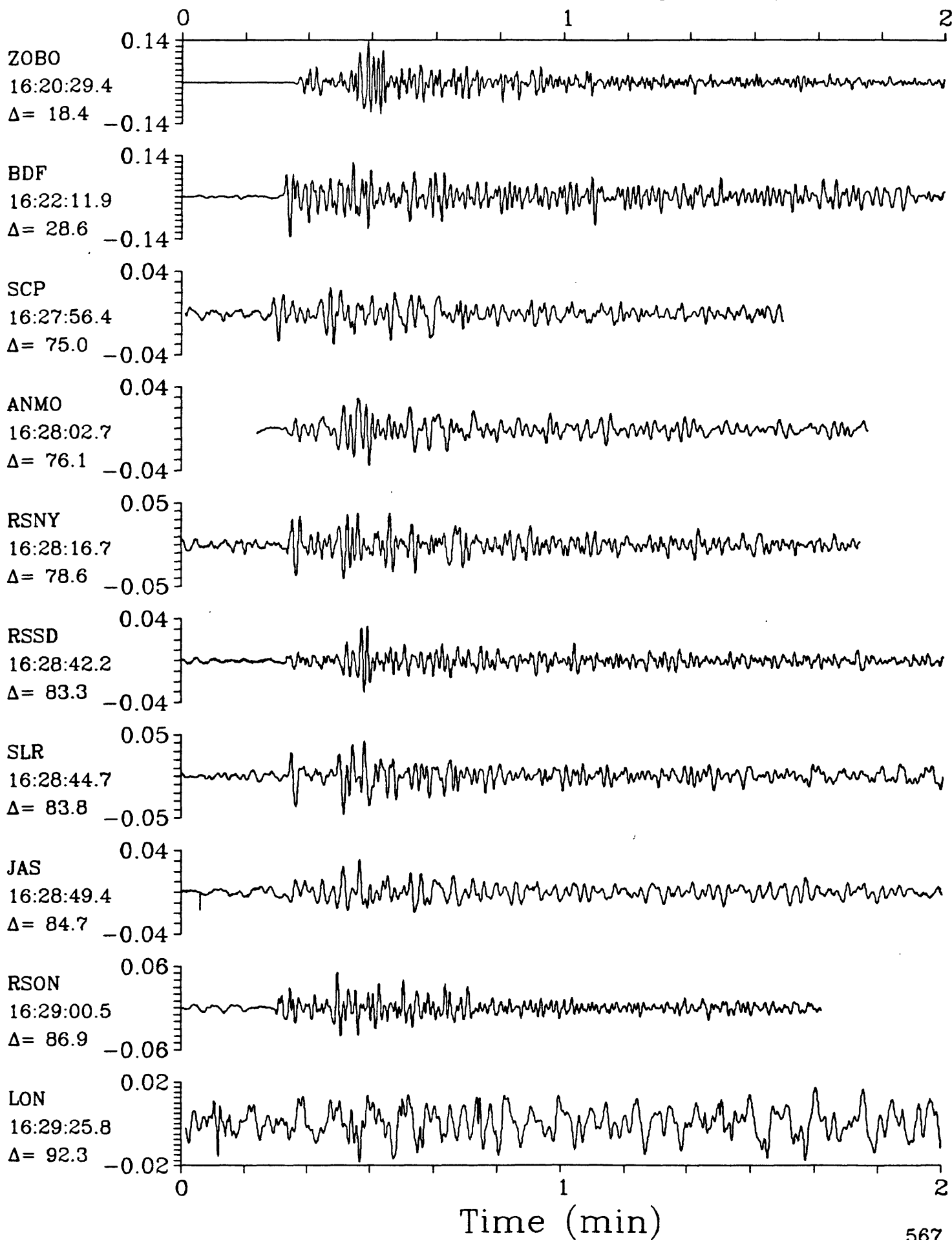
Near Coast of Central Chile



SPZ

24 March 1985 16:16:33.09

SPZ

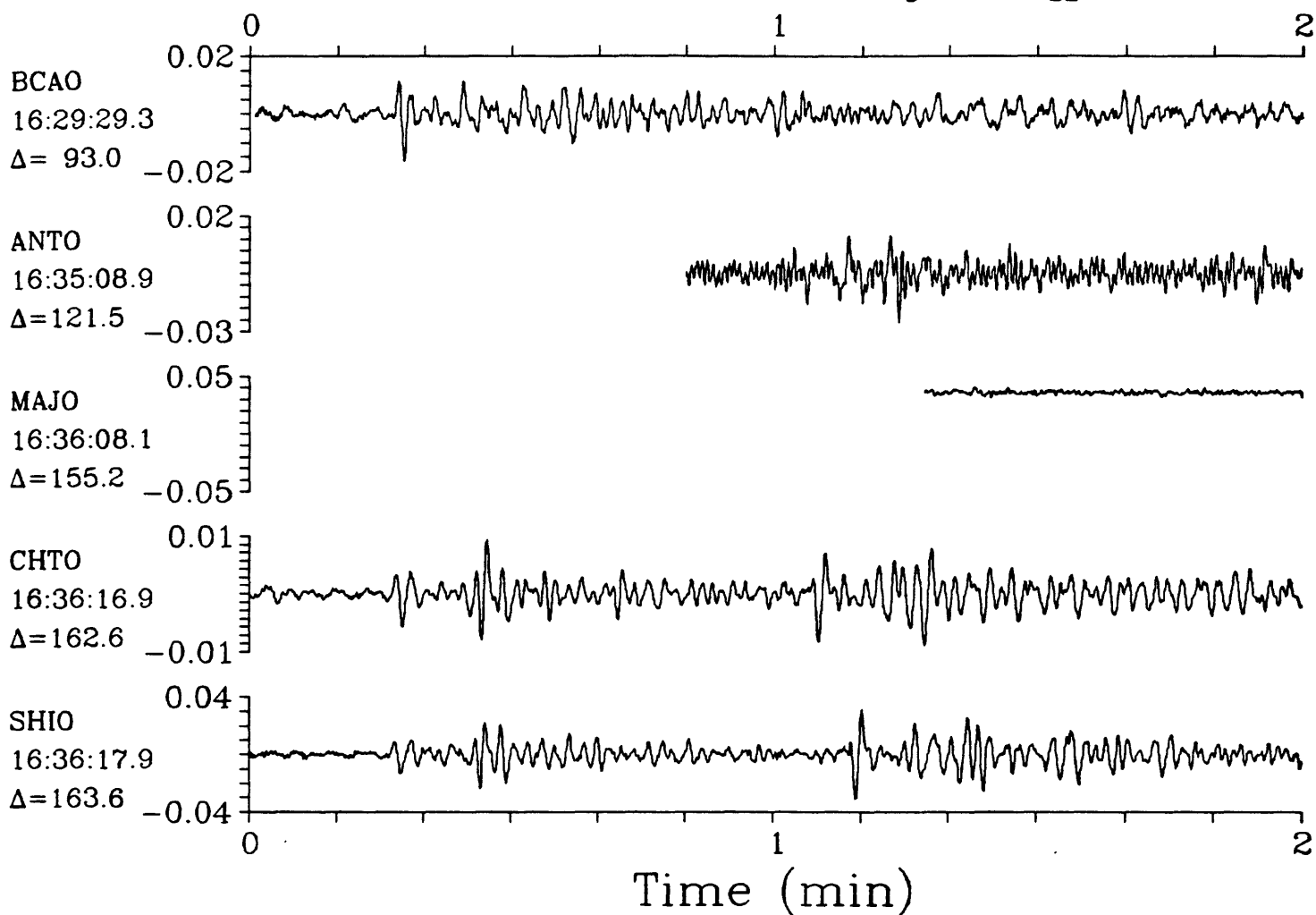
Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 



SPZ

24 March 1985 16:16:33.09

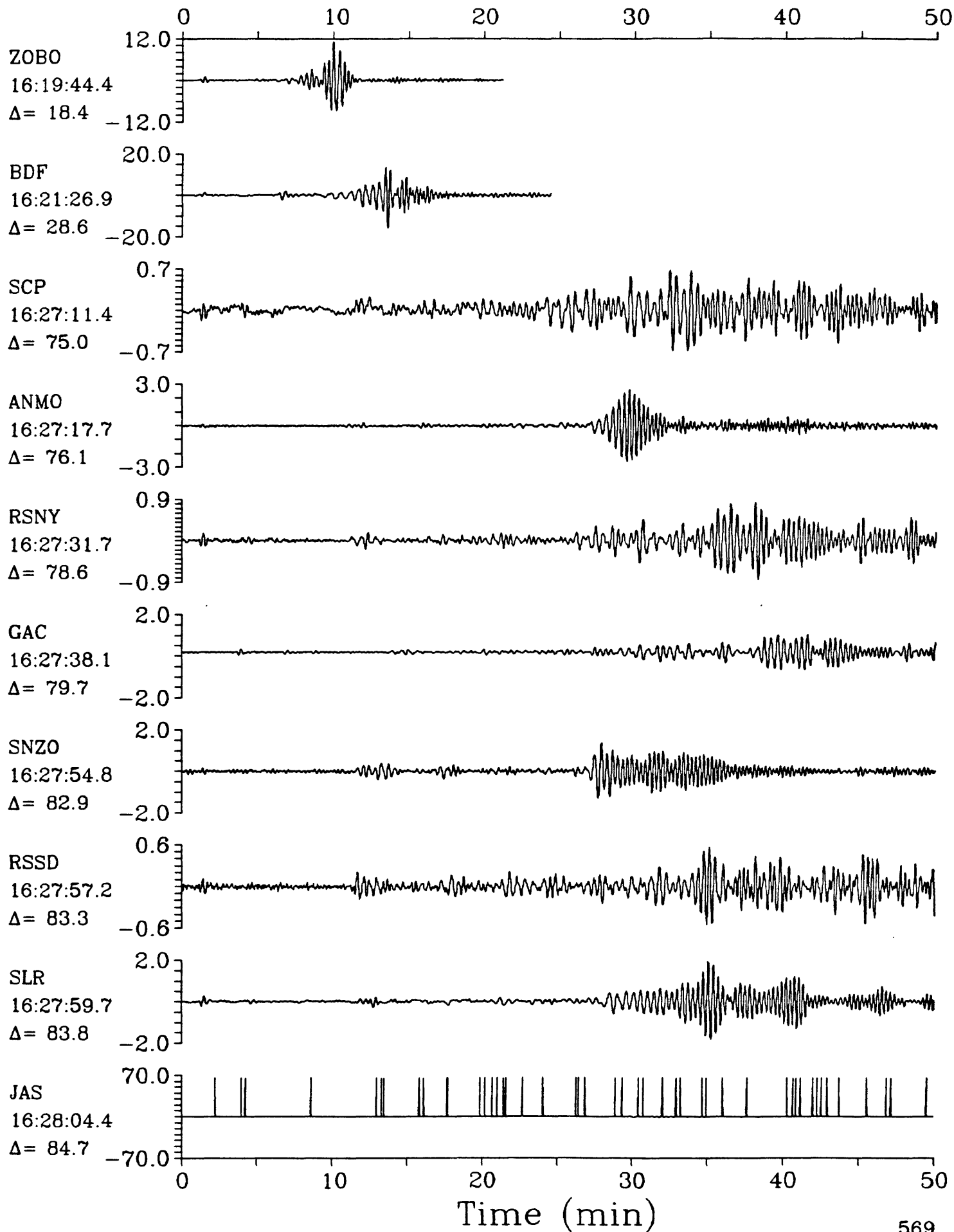
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{SZ}=5.5$ 

LPZ

24 March 1985 16:16:33.09

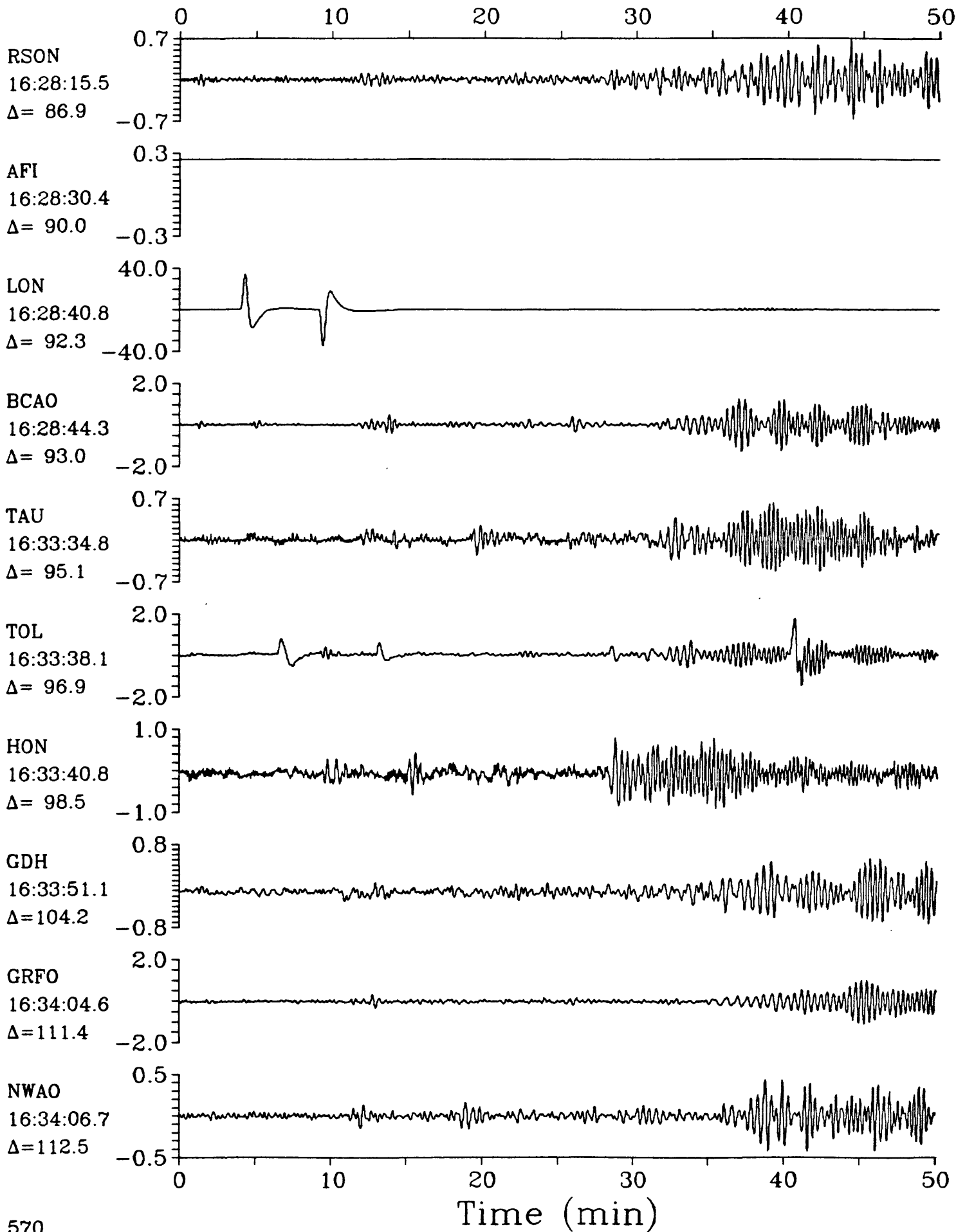
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{SZ}=5.5$ 

LPZ

24 March 1985 16:16:33.09

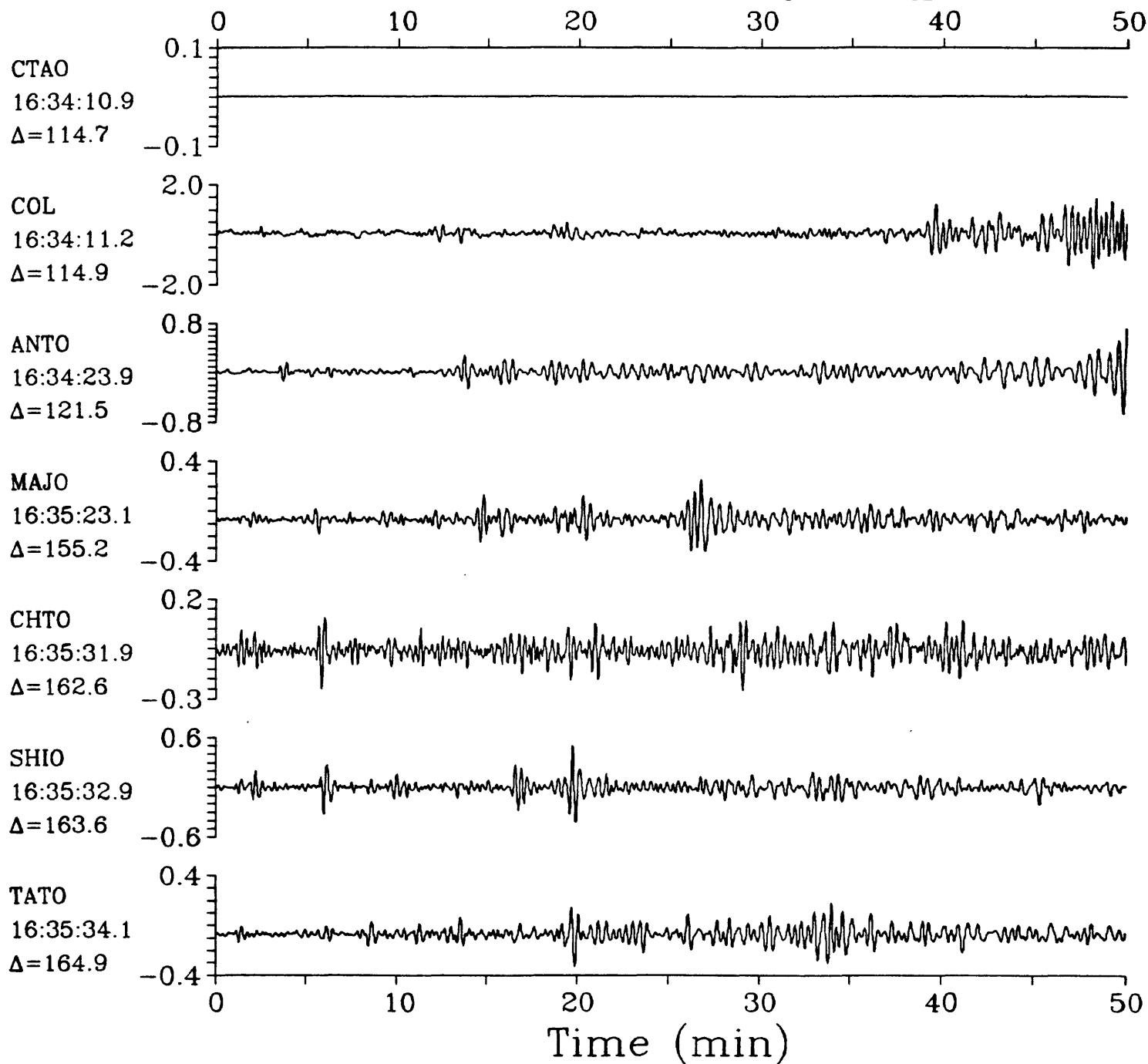
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 

LPZ

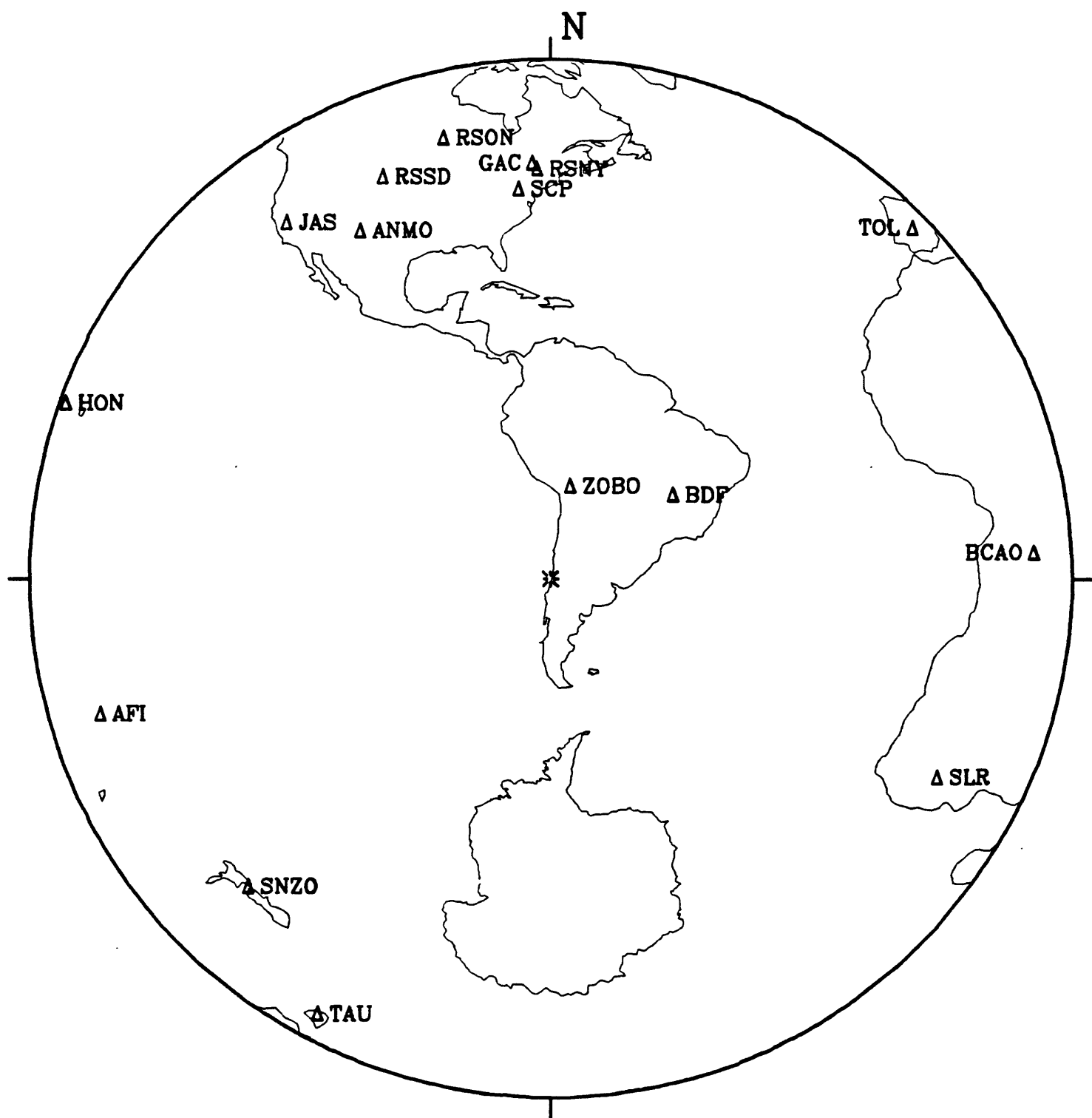
24 March 1985 16:16:33.09

LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=5.4$   $M_{sz}=5.5$ 

25 March 1985 05:14:33.20

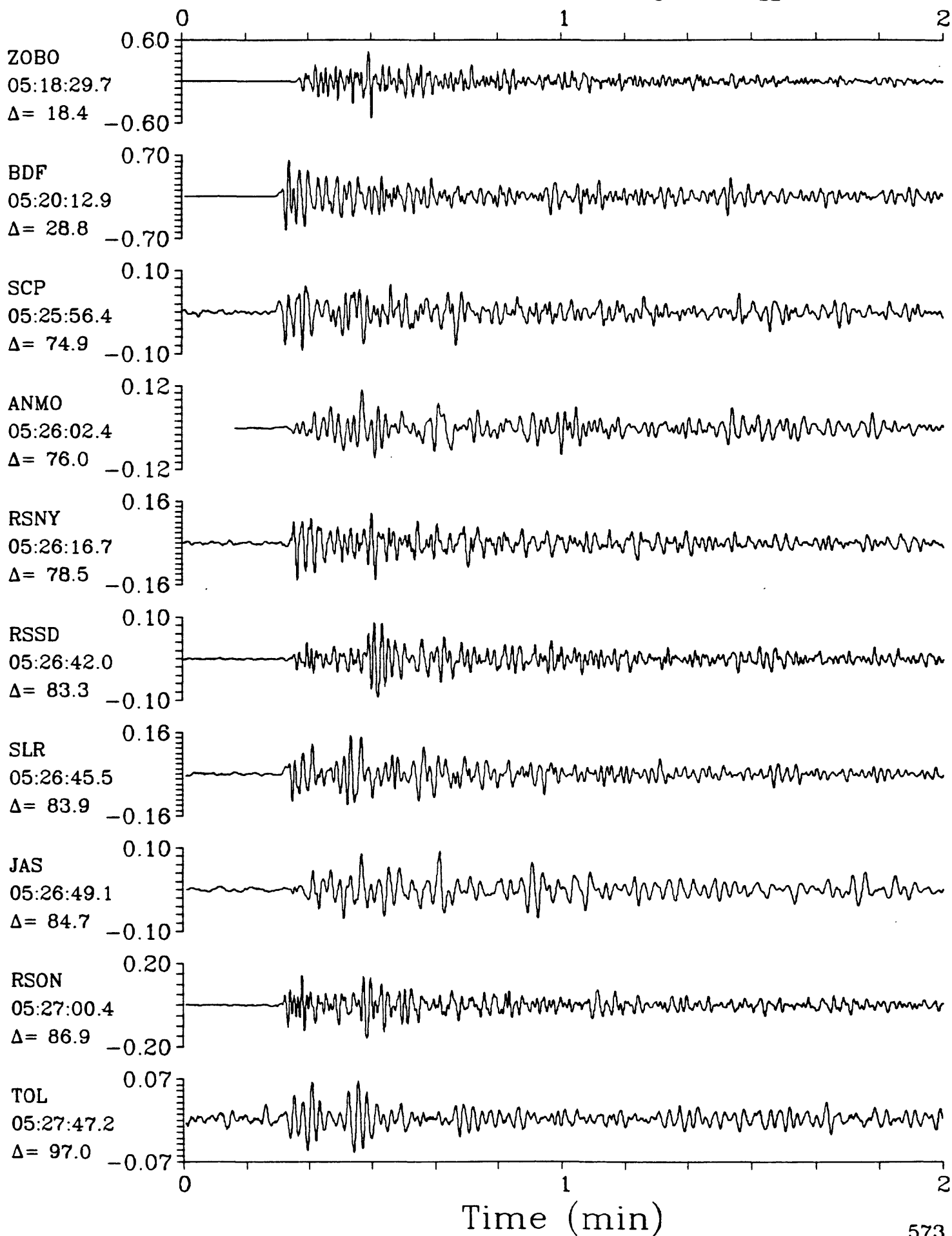
Near Coast of Central Chile



SPZ

25 March 1985 05:14:33.20

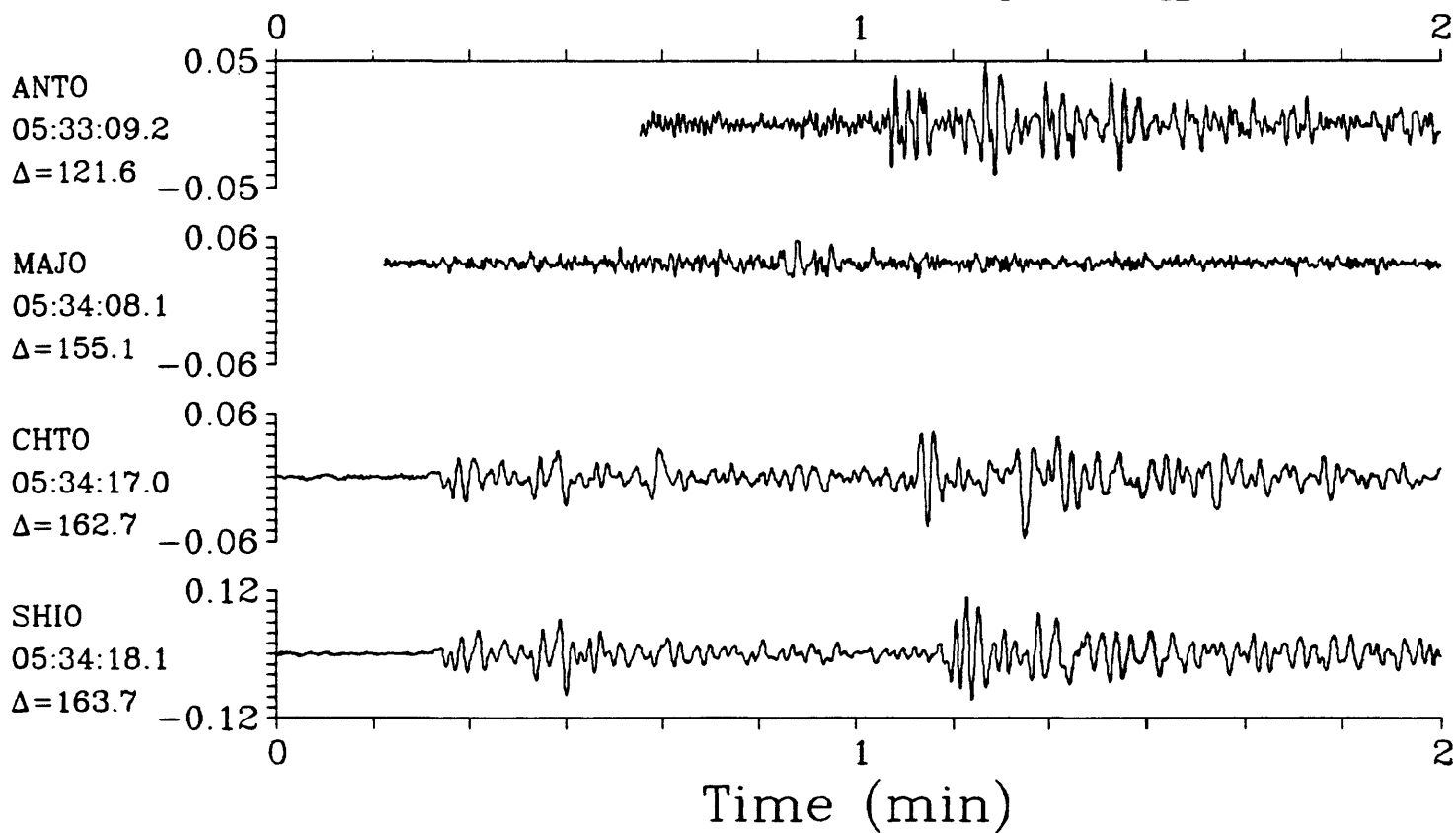
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.5$ 

SPZ

25 March 1985 05:14:33.20

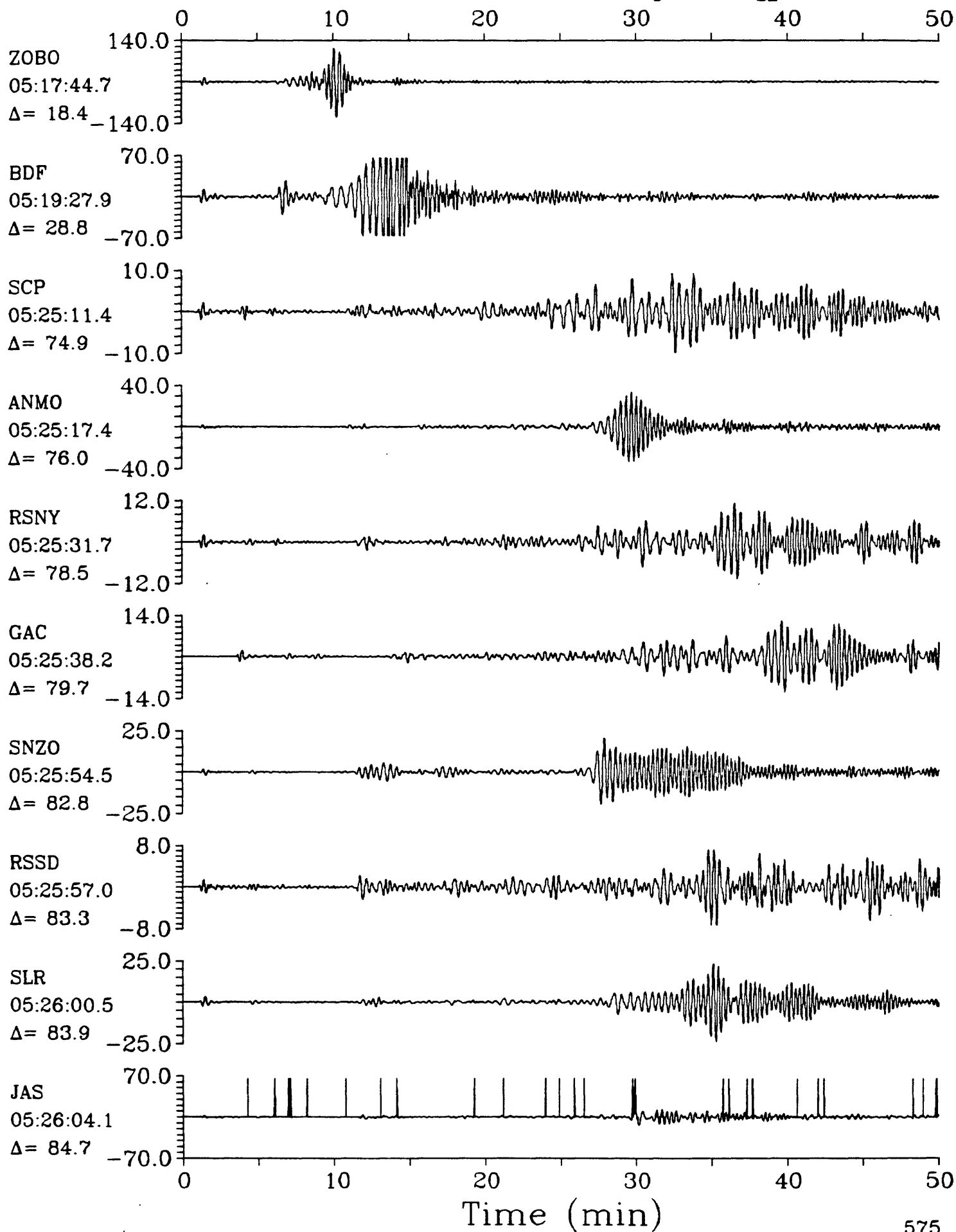
SPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.5$ 

LPZ

25 March 1985 05:14:33.20

LPZ

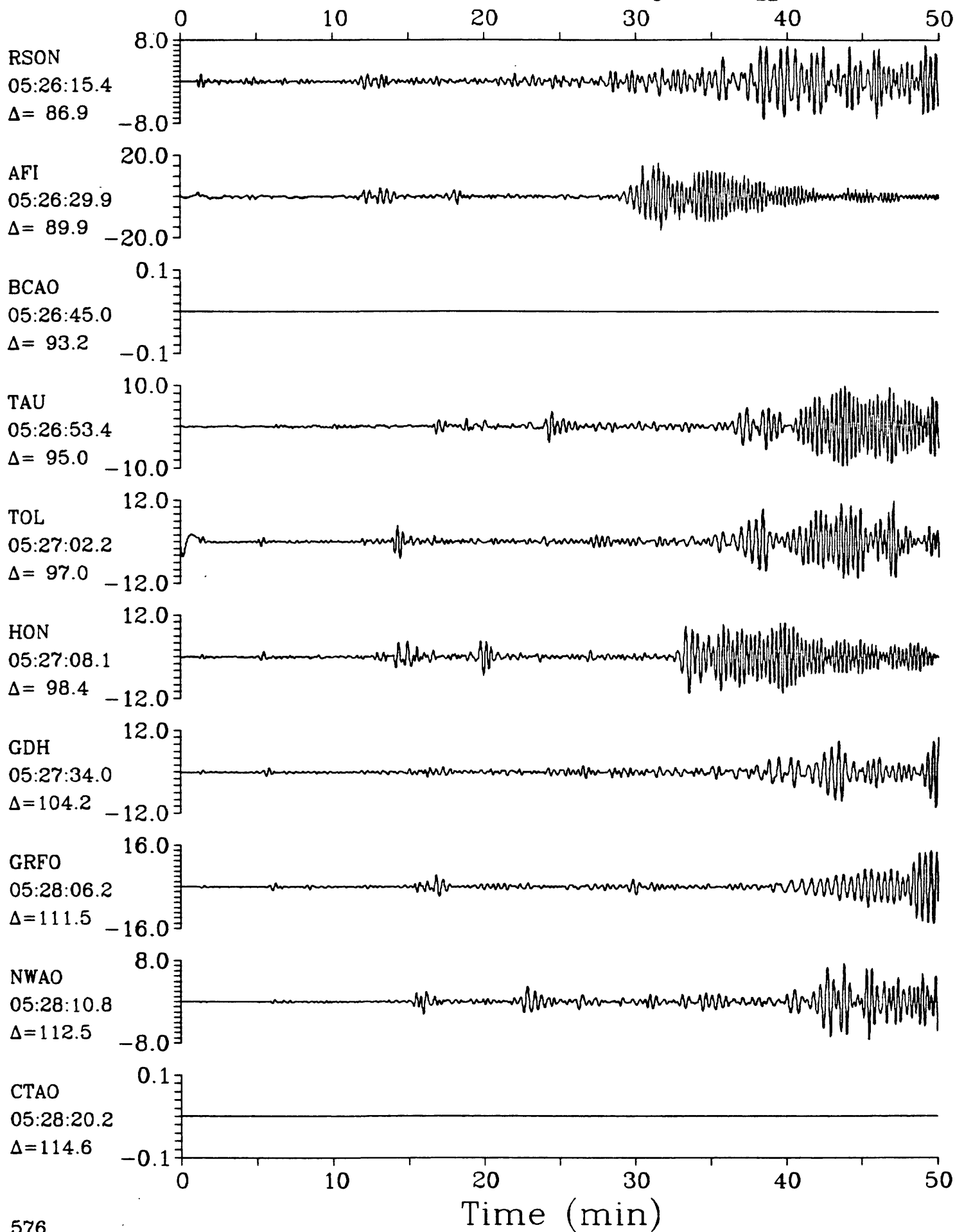
Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.5$ 



LPZ

25 March 1985 05:14:33.20

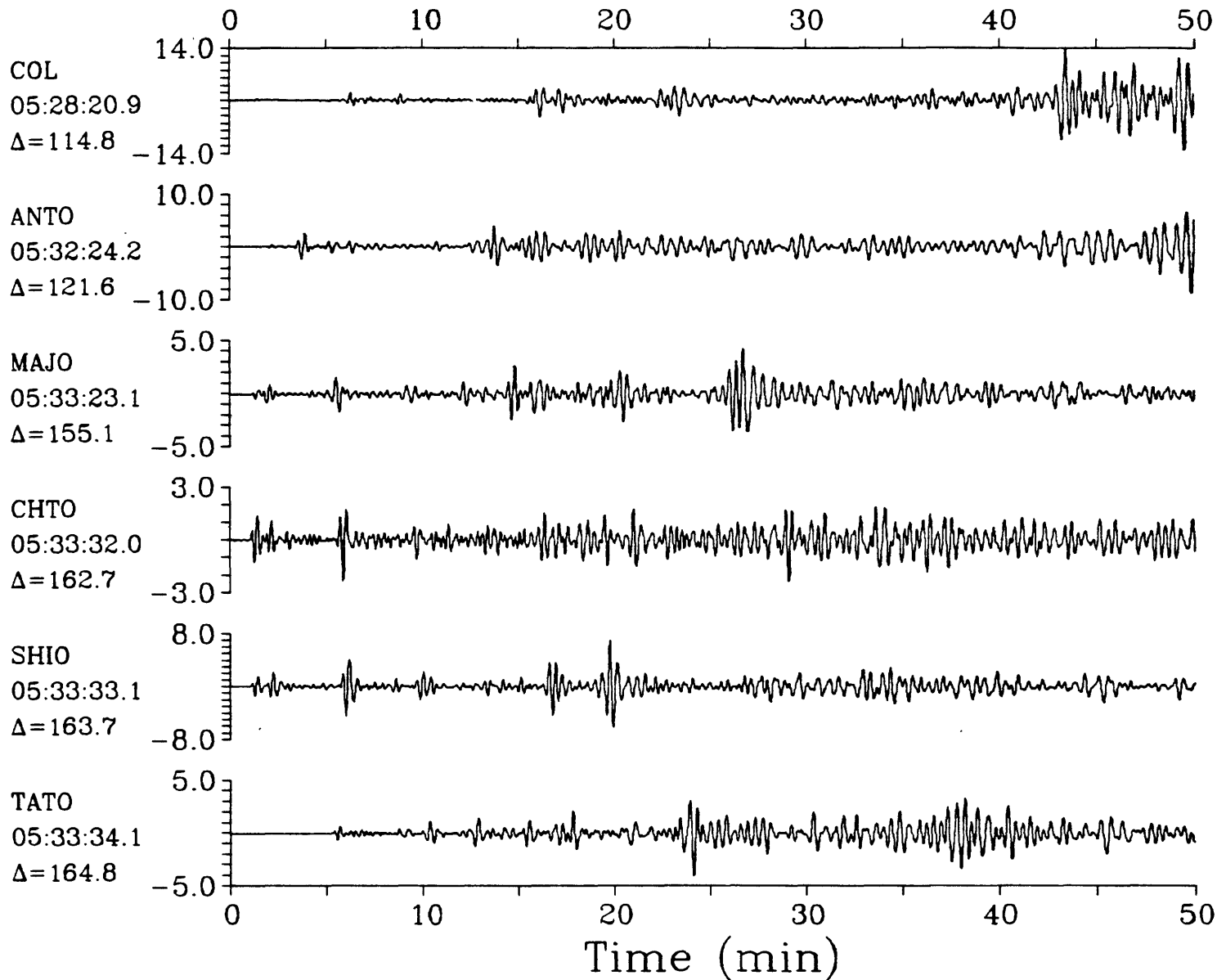
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.5$ 

LPZ

25 March 1985 05:14:33.20

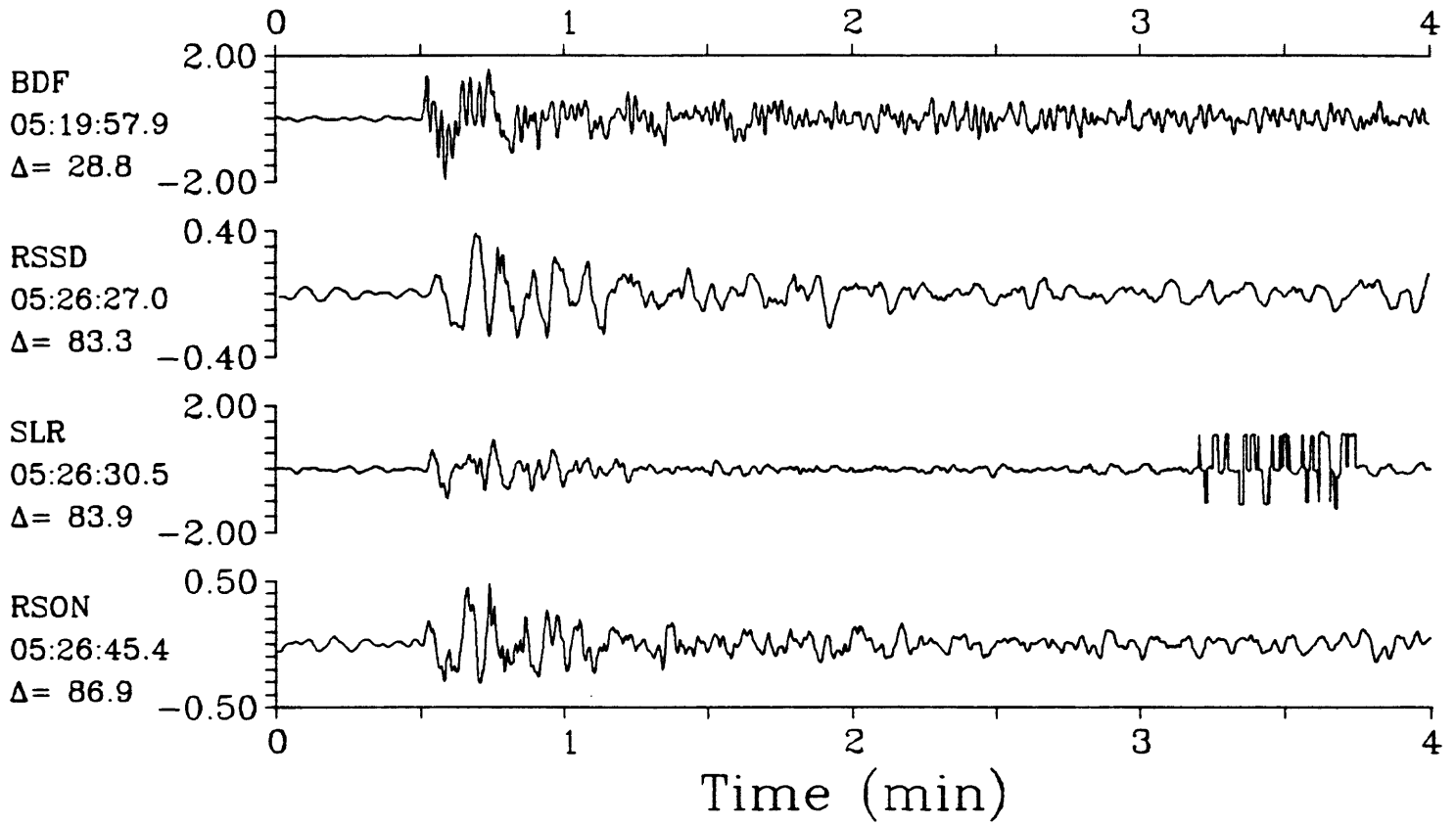
LPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{sz}=6.5$ 

IPZ

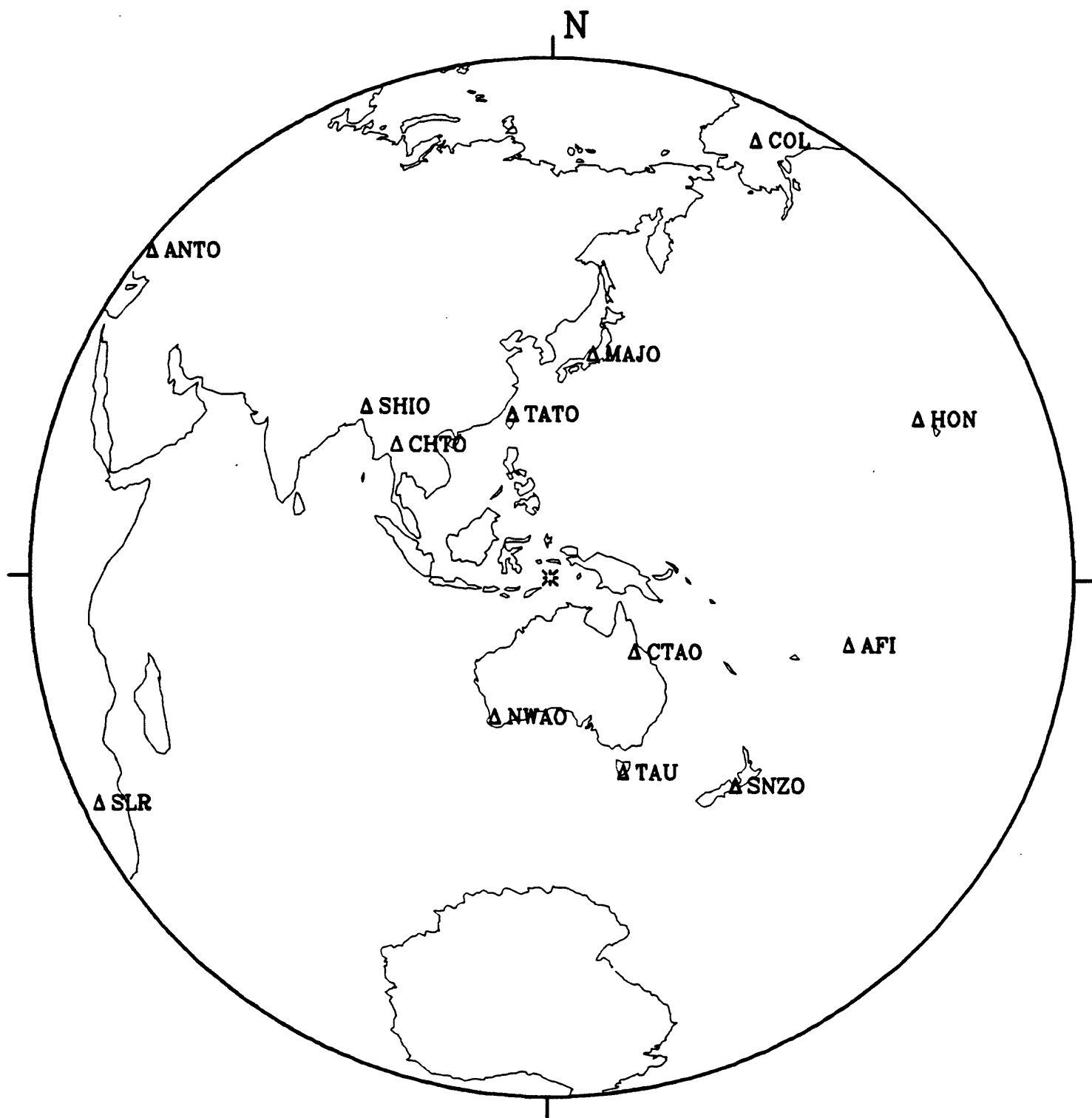
25 March 1985 05:14:33.20

IPZ

Near Coast of Central Chile  $h=33.0$   $m_b=6.1$   $M_{SZ}=6.5$ 

25 March 1985 11:07:19.11

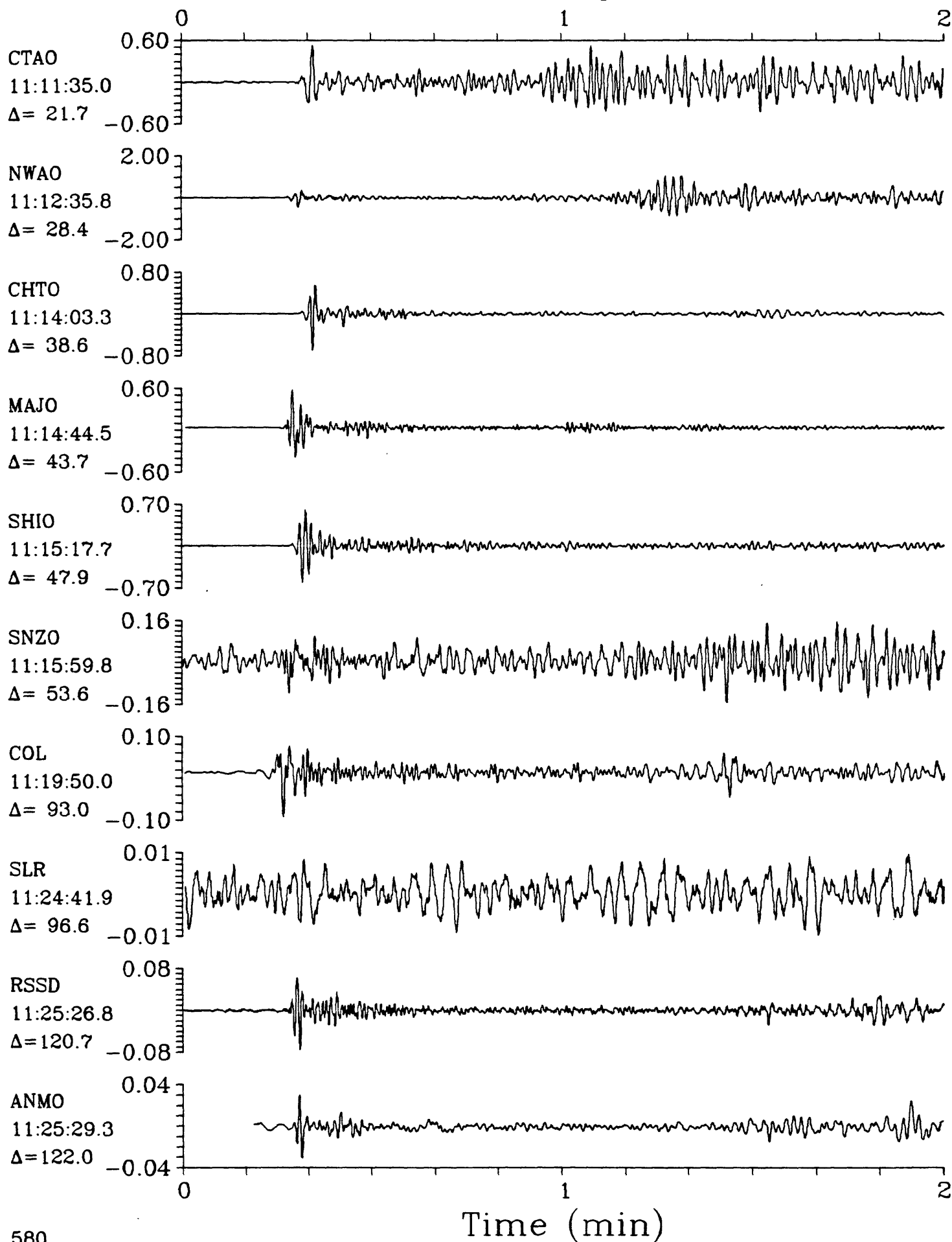
## Banda Sea



SPZ

25 March 1985 11:07:19.11  
Banda Sea  $h=246.8$   $m_b=5.7$ 

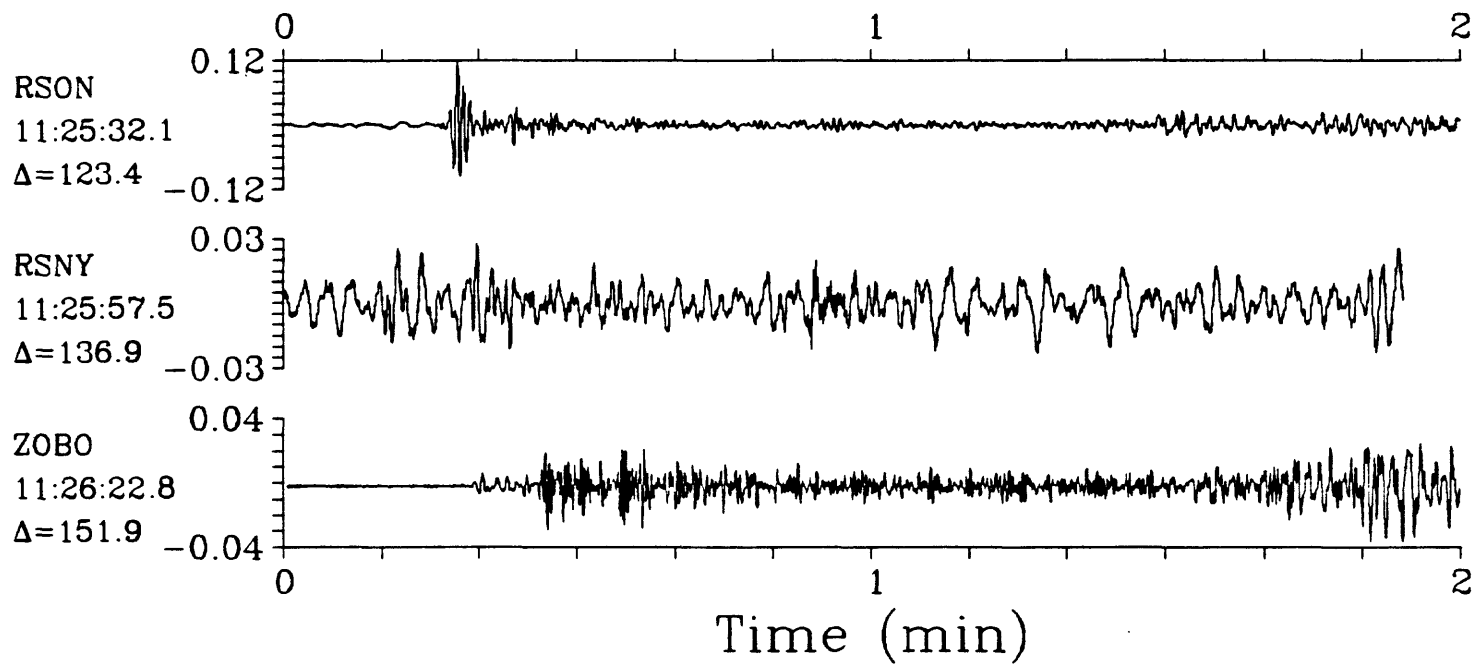
SPZ



SPZ

25 March 1985 11:07:19.11  
Banda Sea  $h=246.8$   $m_b=5.7$ 

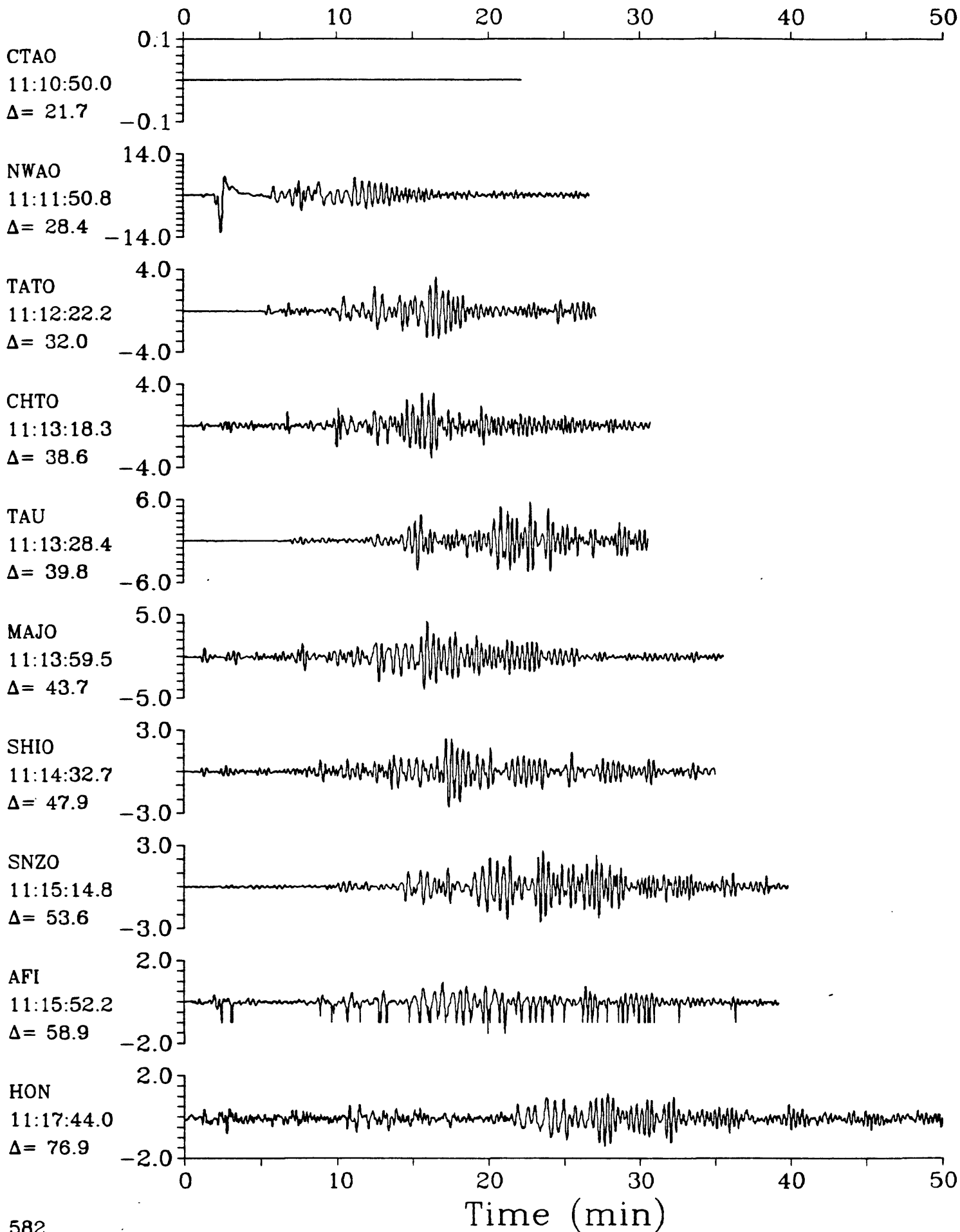
SPZ



LPZ

25 March 1985 11:07:19.11  
Banda Sea  $h=246.8$   $m_b=5.7$ 

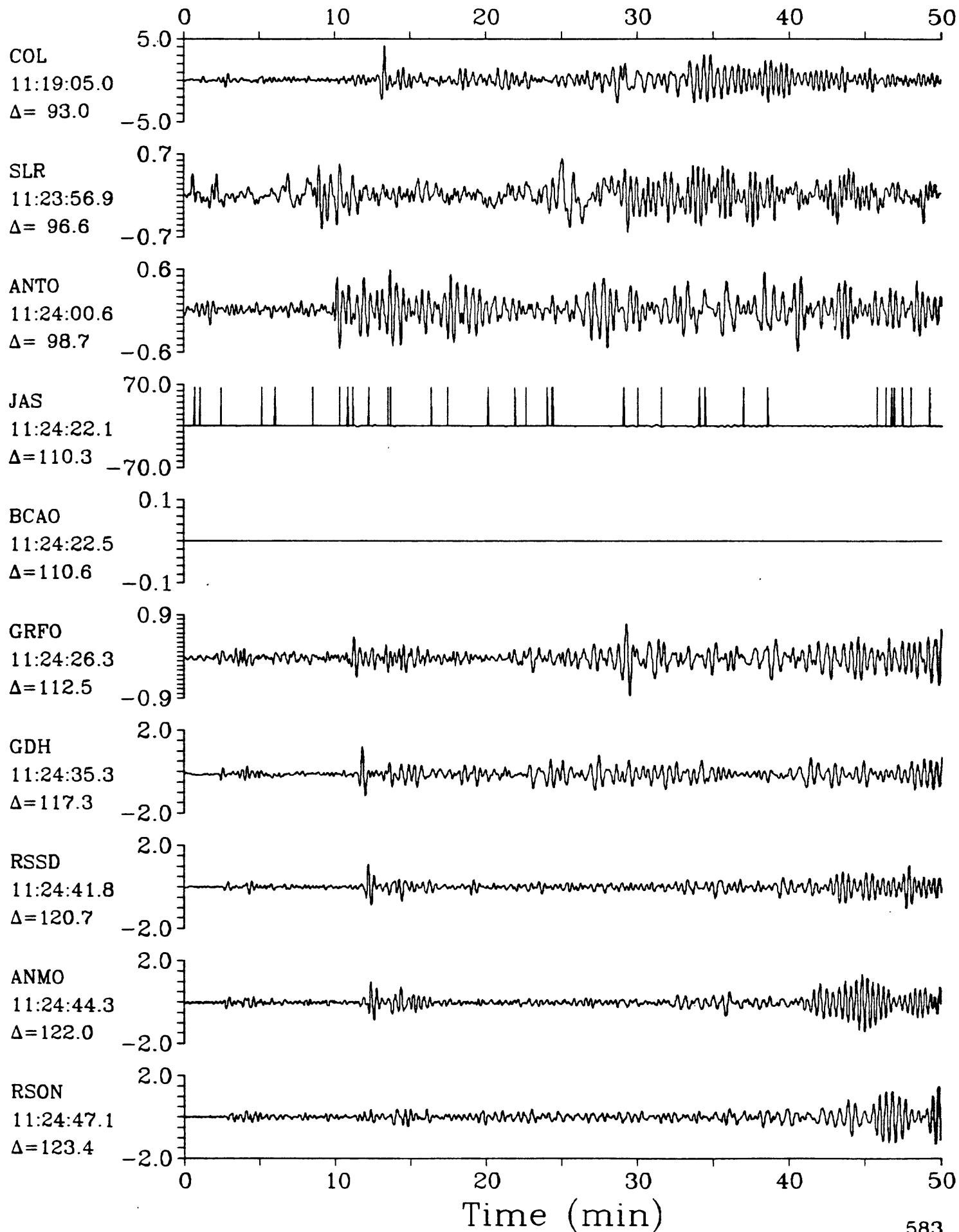
LPZ



LPZ

25 March 1985 11:07:19.11  
Banda Sea  $h=246.8$   $m_b=5.7$ 

LPZ

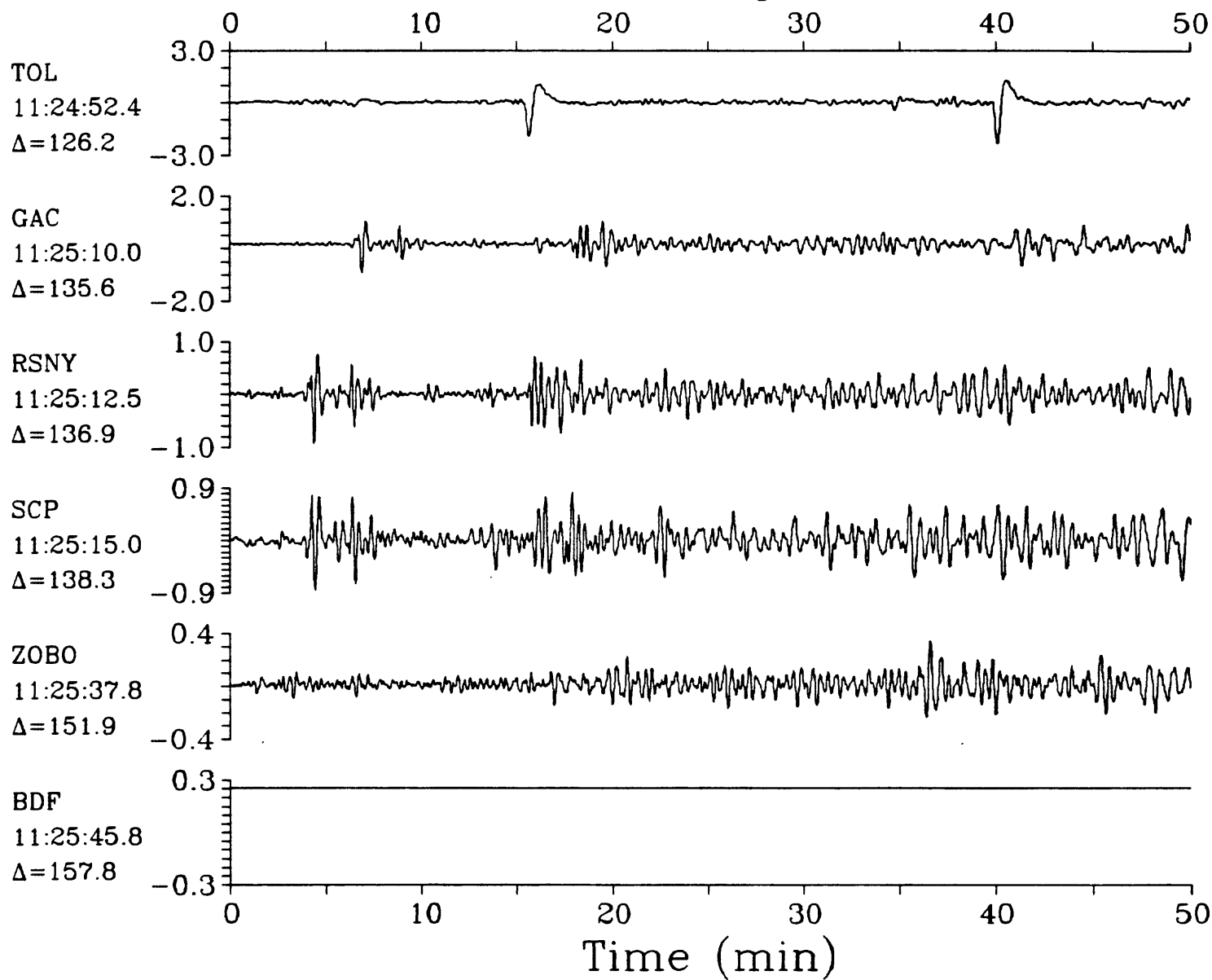




LPZ

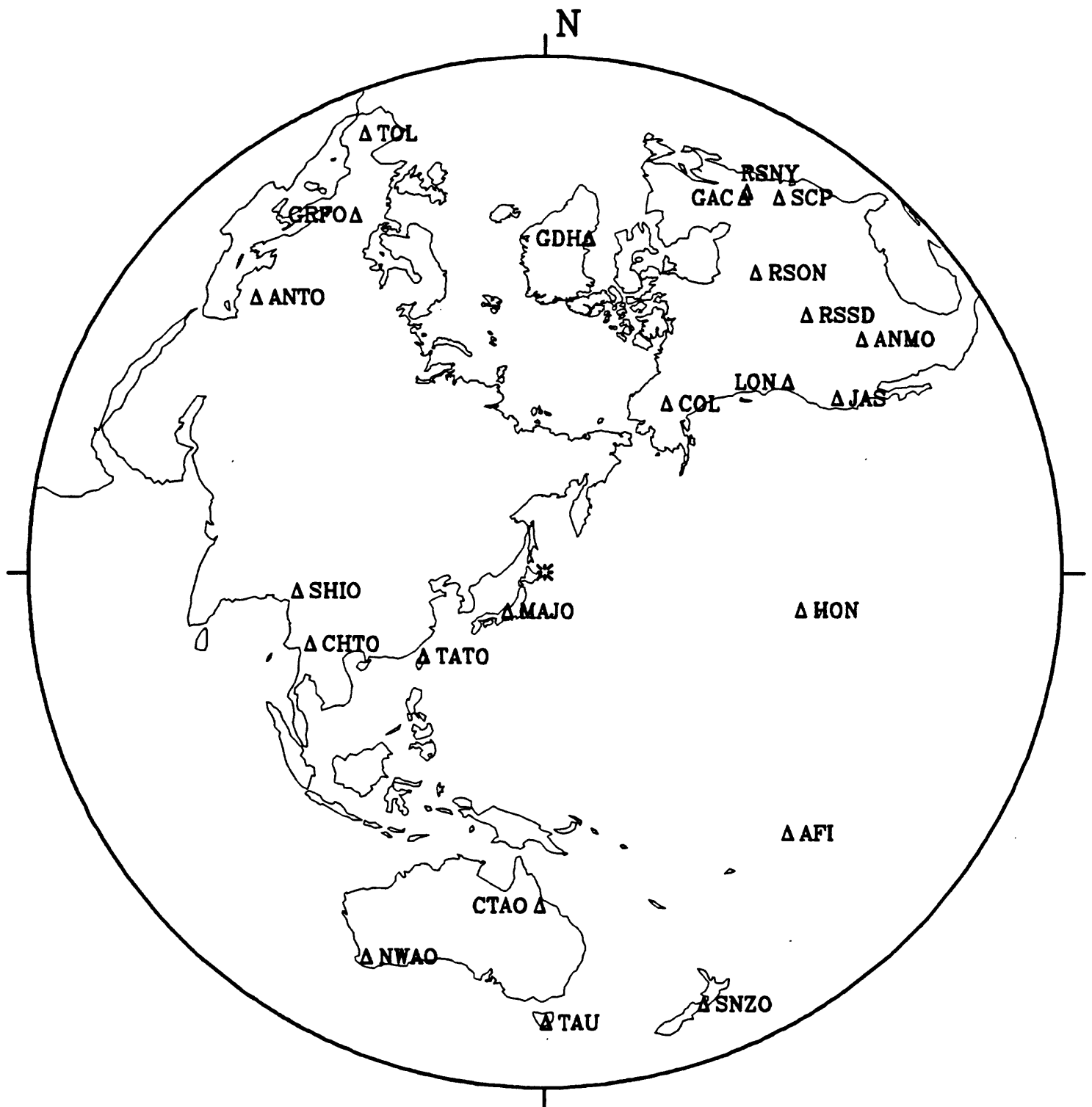
25 March 1985 11:07:19.11  
Banda Sea  $h=246.8$   $m_b=5.7$ 

LPZ



27 March 1985 12:48:12.48

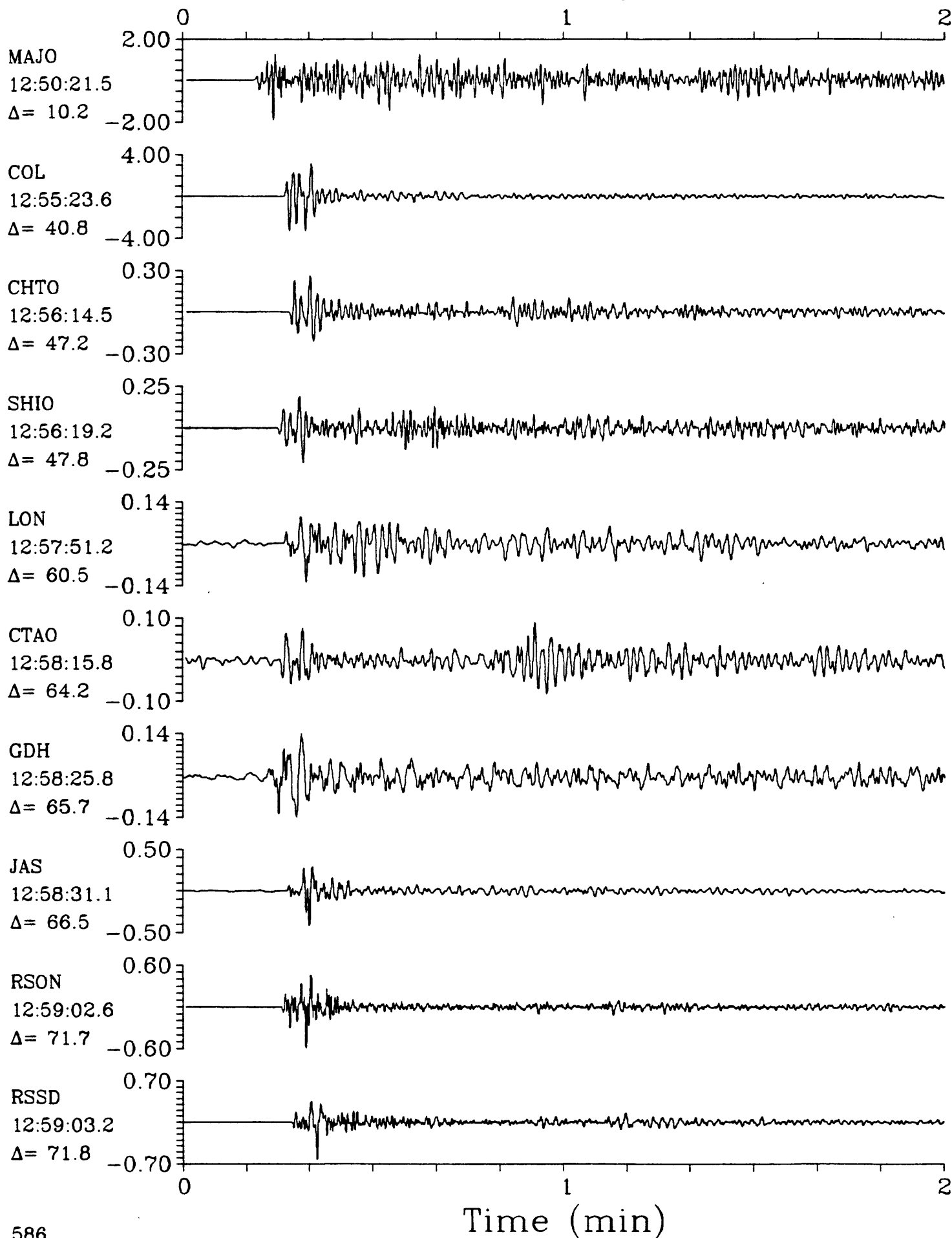
## Kuril Islands



SPZ

27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$ 

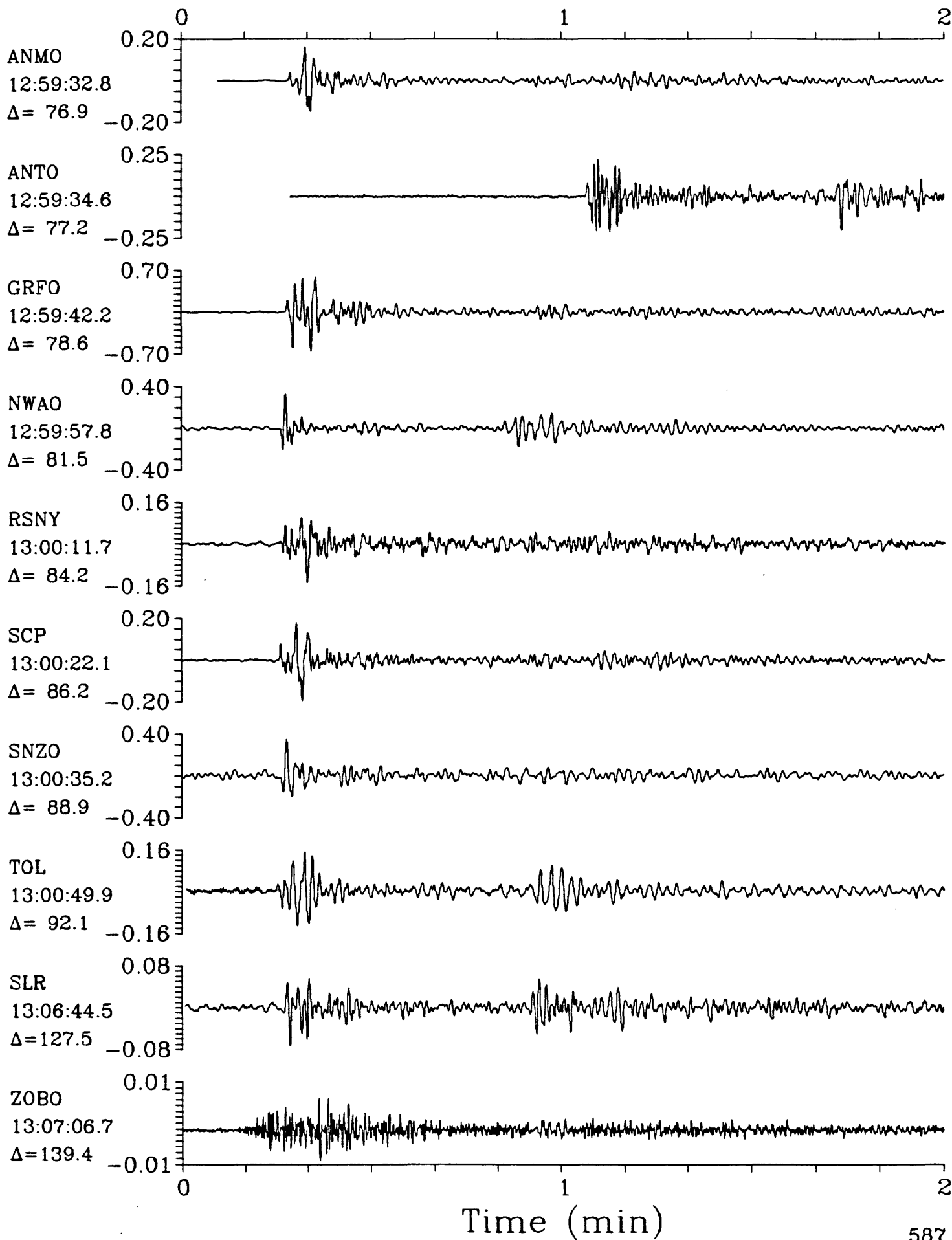
SPZ



SPZ

27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$ 

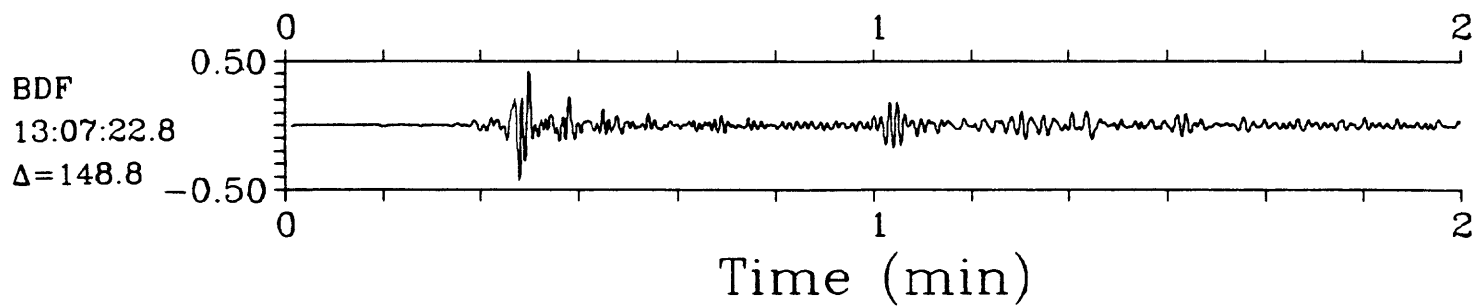
SPZ



SPZ

27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$

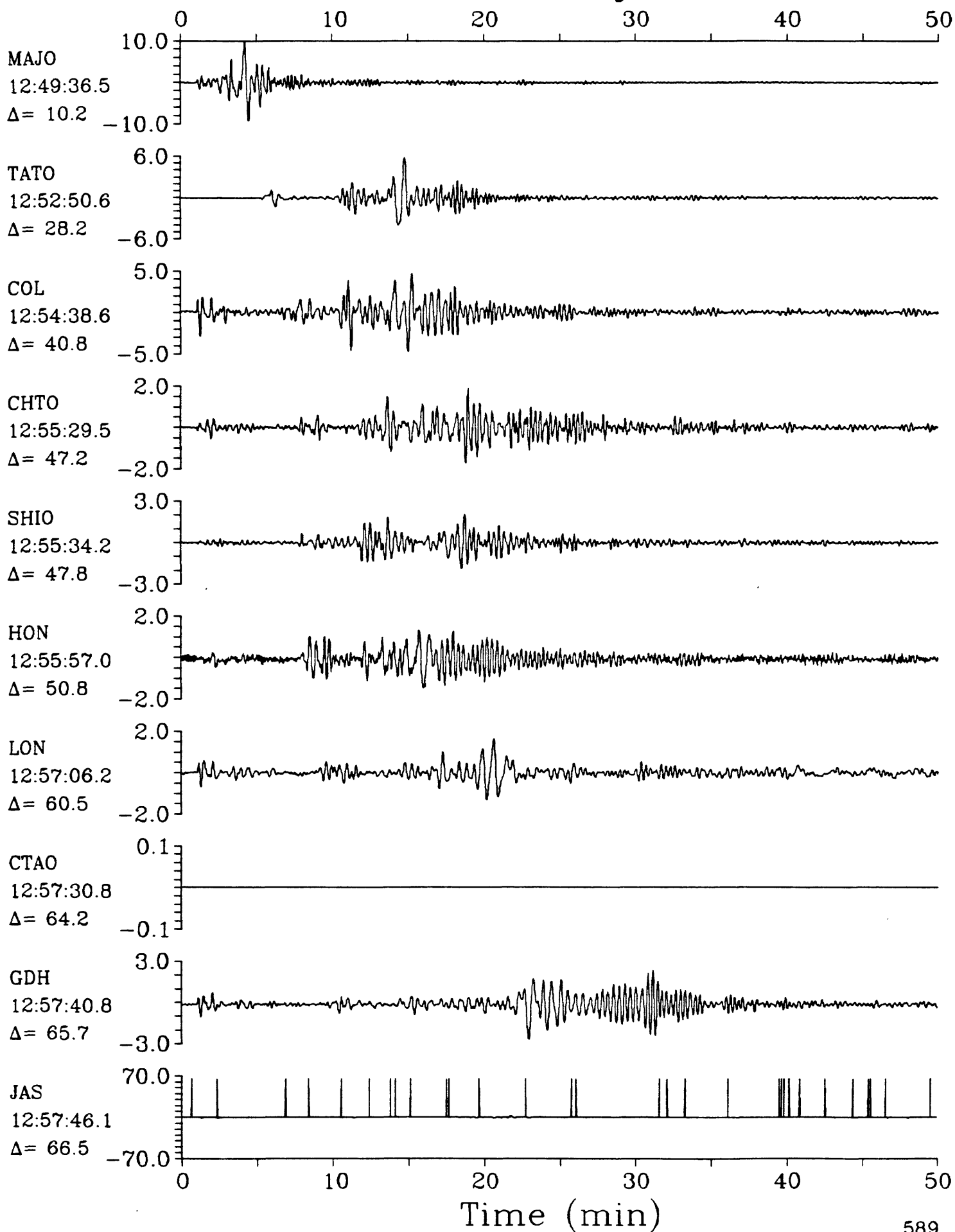
SPZ



LPZ

27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$ 

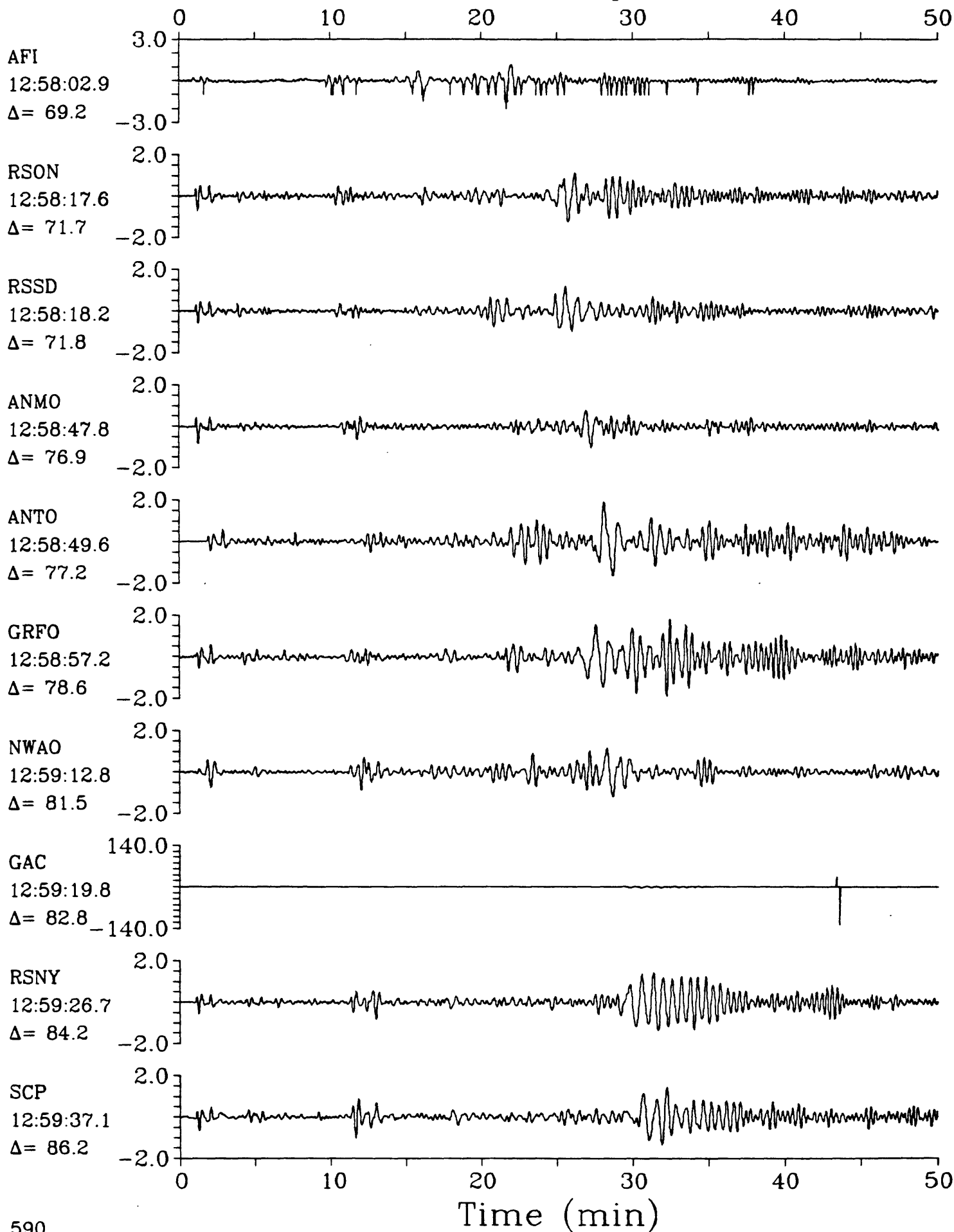
LPZ



LPZ

27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$ 

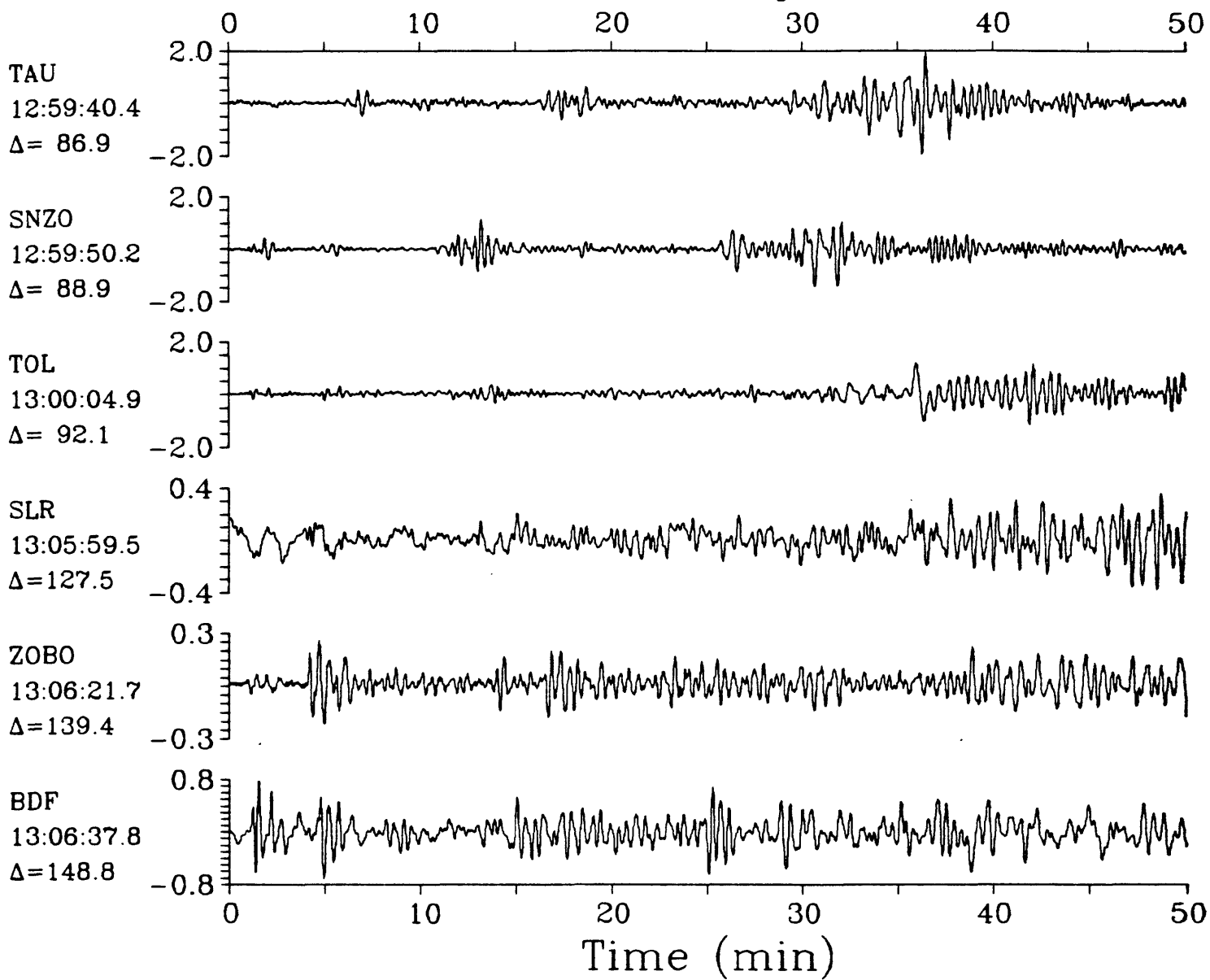
LPZ



LPZ

27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$ 

LPZ

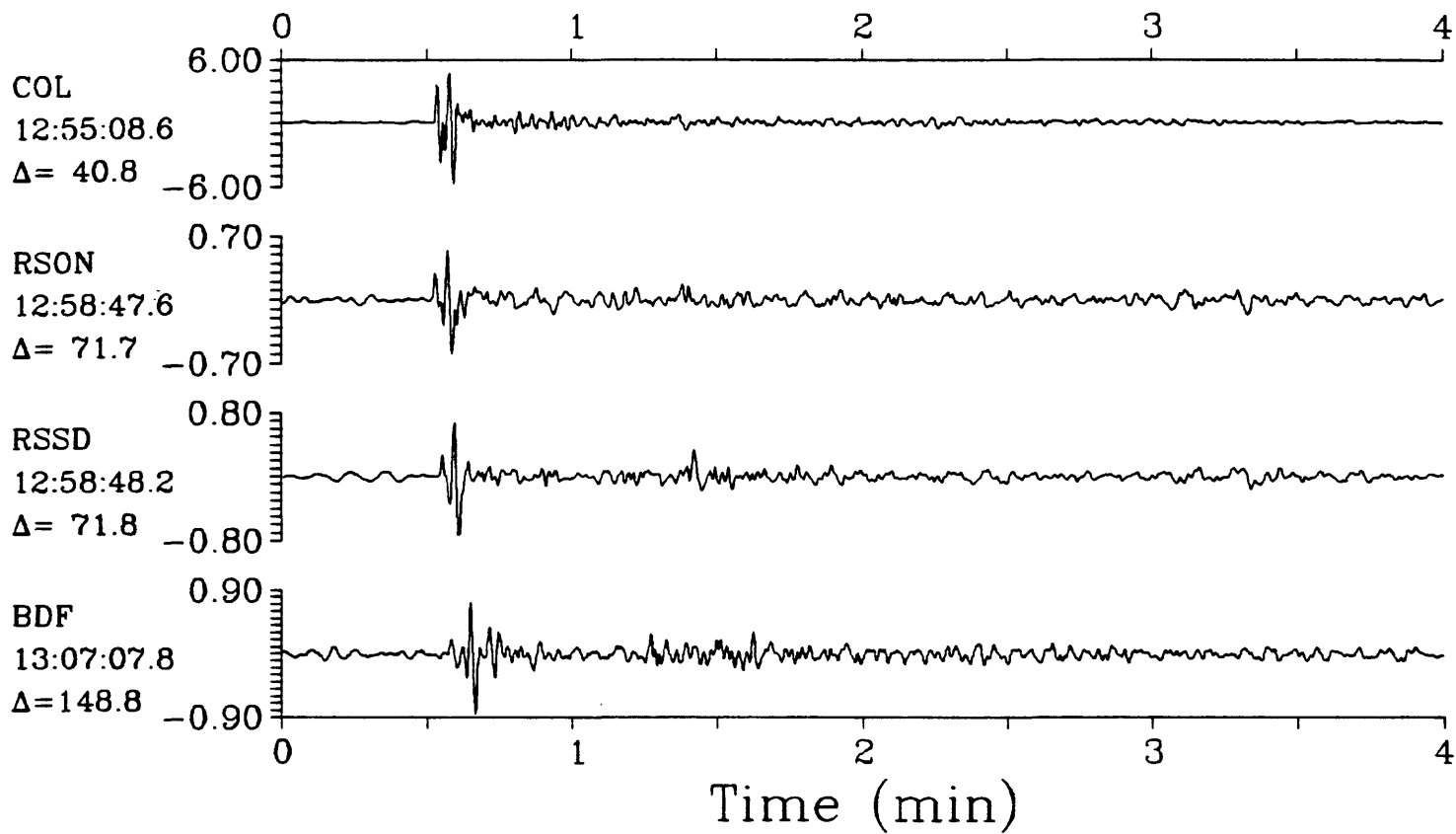




IPZ

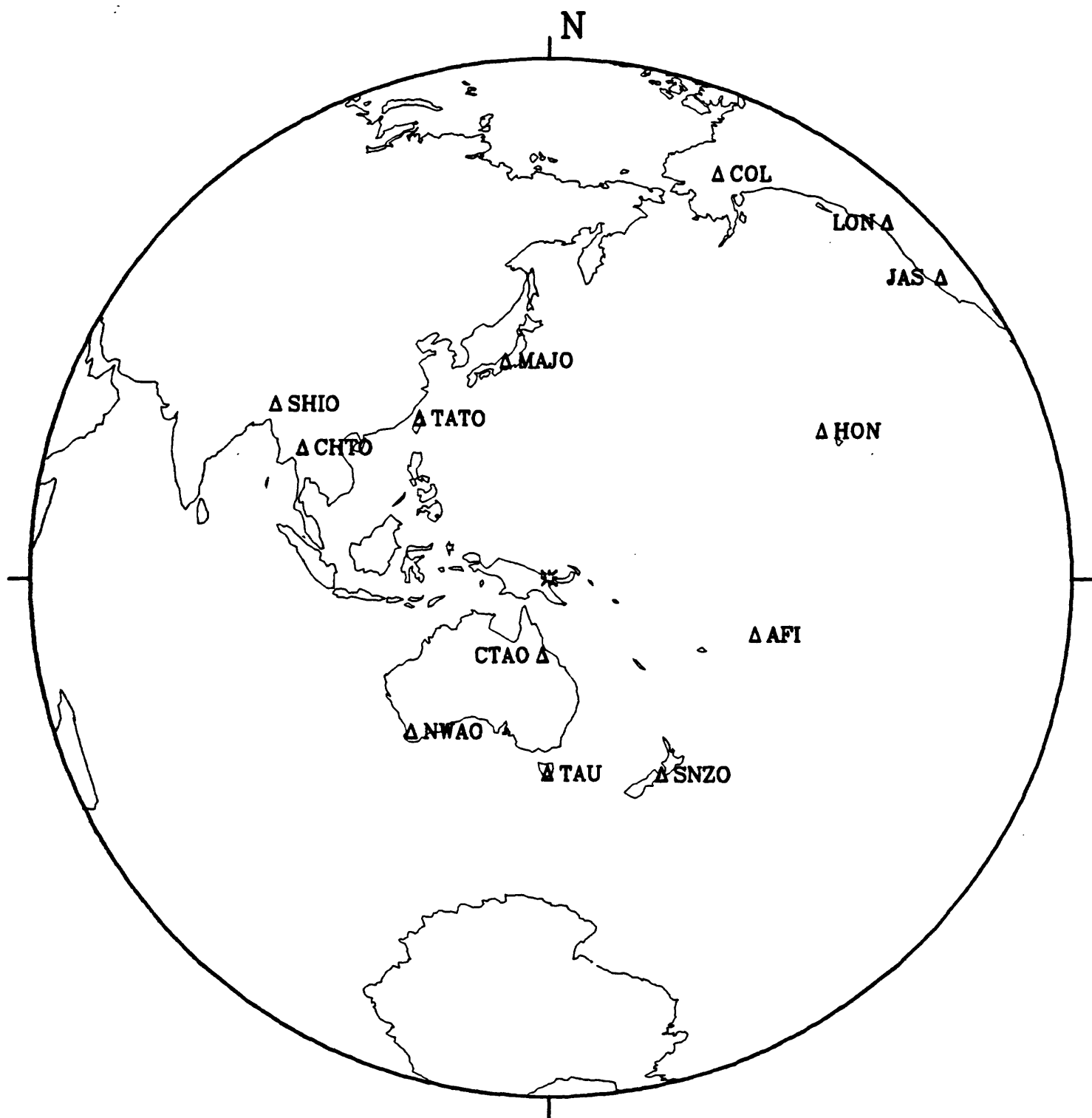
27 March 1985 12:48:12.48  
Kuril Islands  $h=154.4$   $m_b=6.0$ 

IPZ



28 March 1985 01:48:38.55

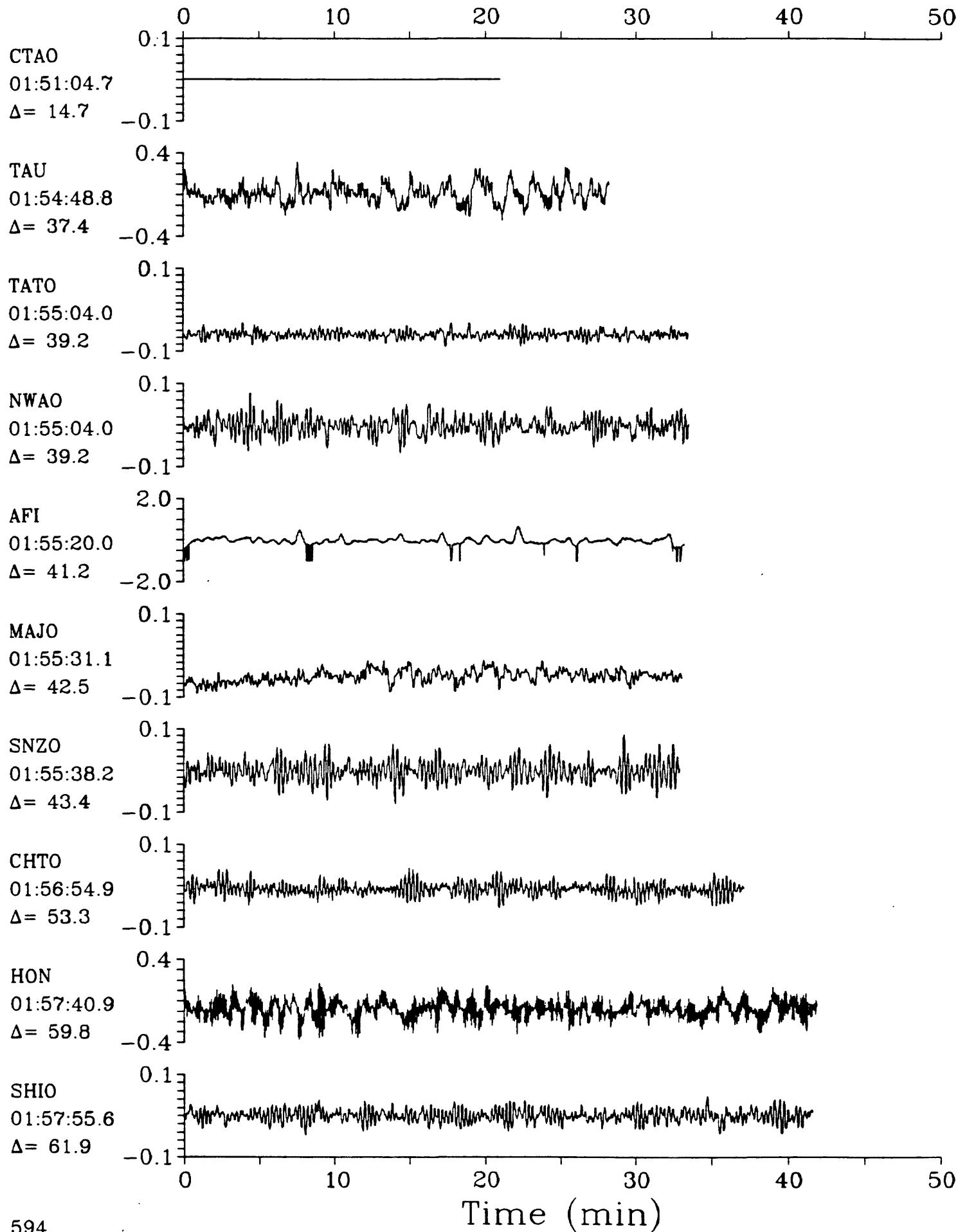
# East Papua New Guinea Region



LPZ

28 March 1985 01:48:38.55

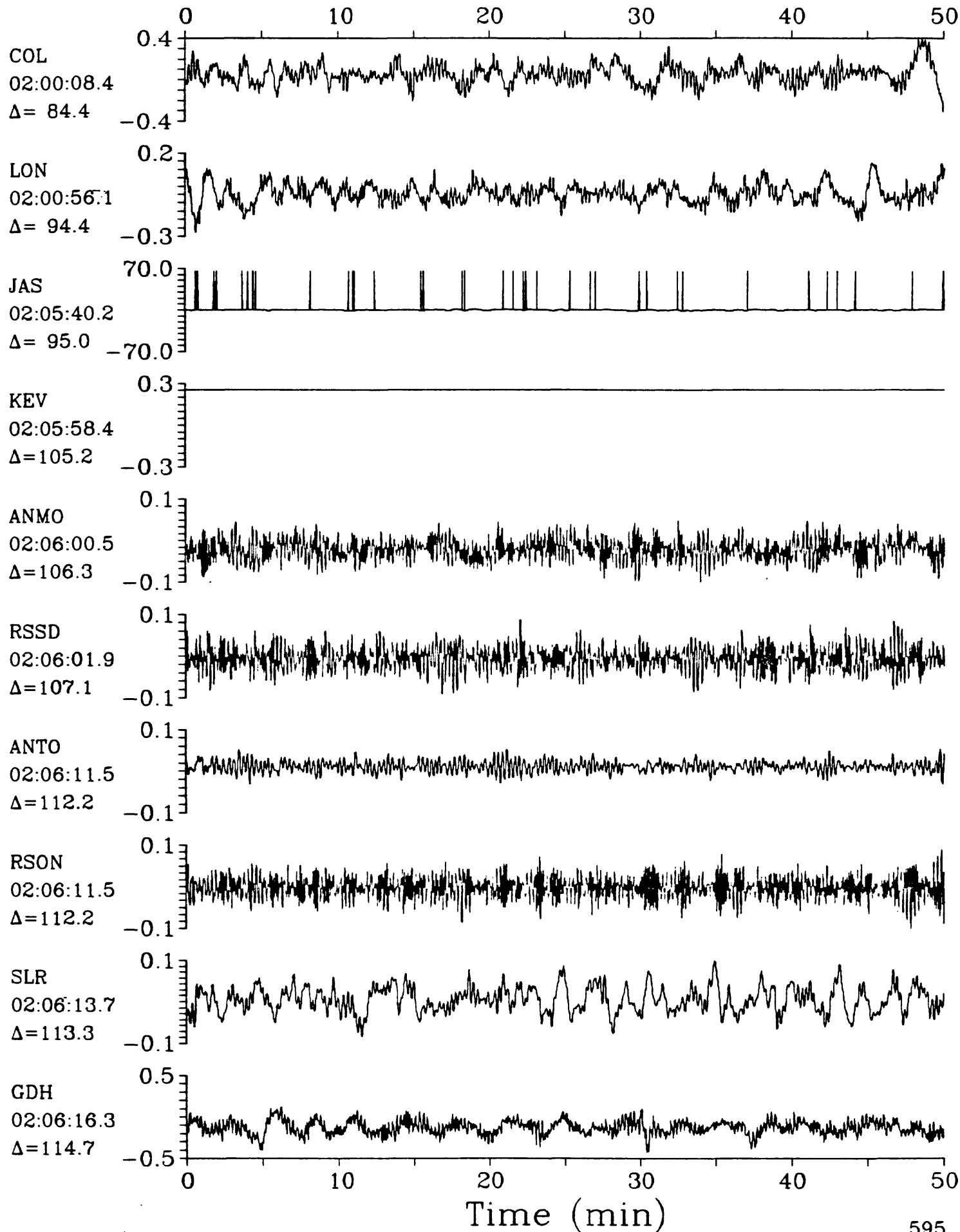
LPZ

East Papua New Guinea Region  $h=33.0$   $m_b=5.5$ 

LPZ

28 March 1985 01:48:38.55

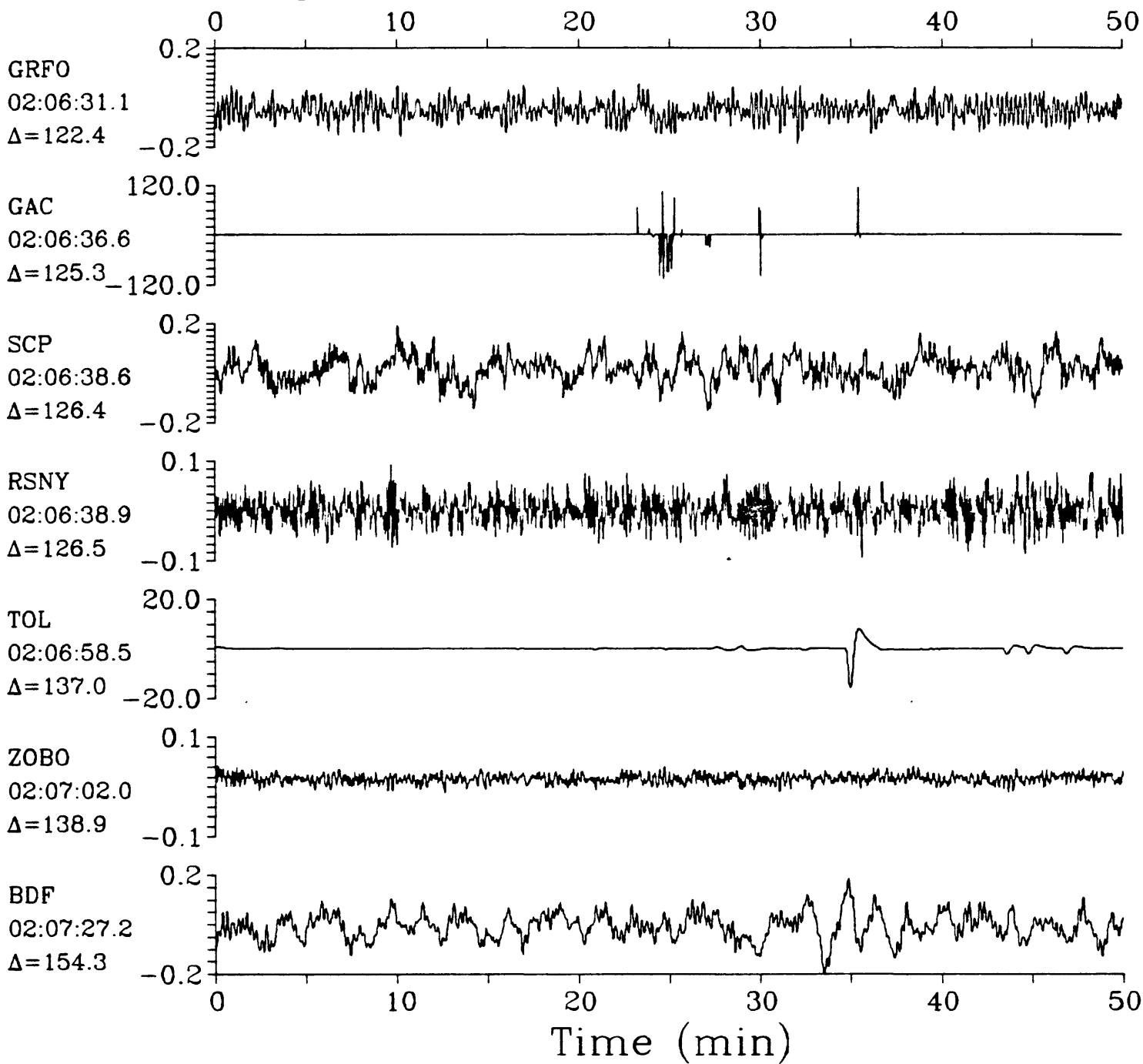
LPZ

East Papua New Guinea Region  $h=33.0$   $m_b=5.5$ 

LPZ

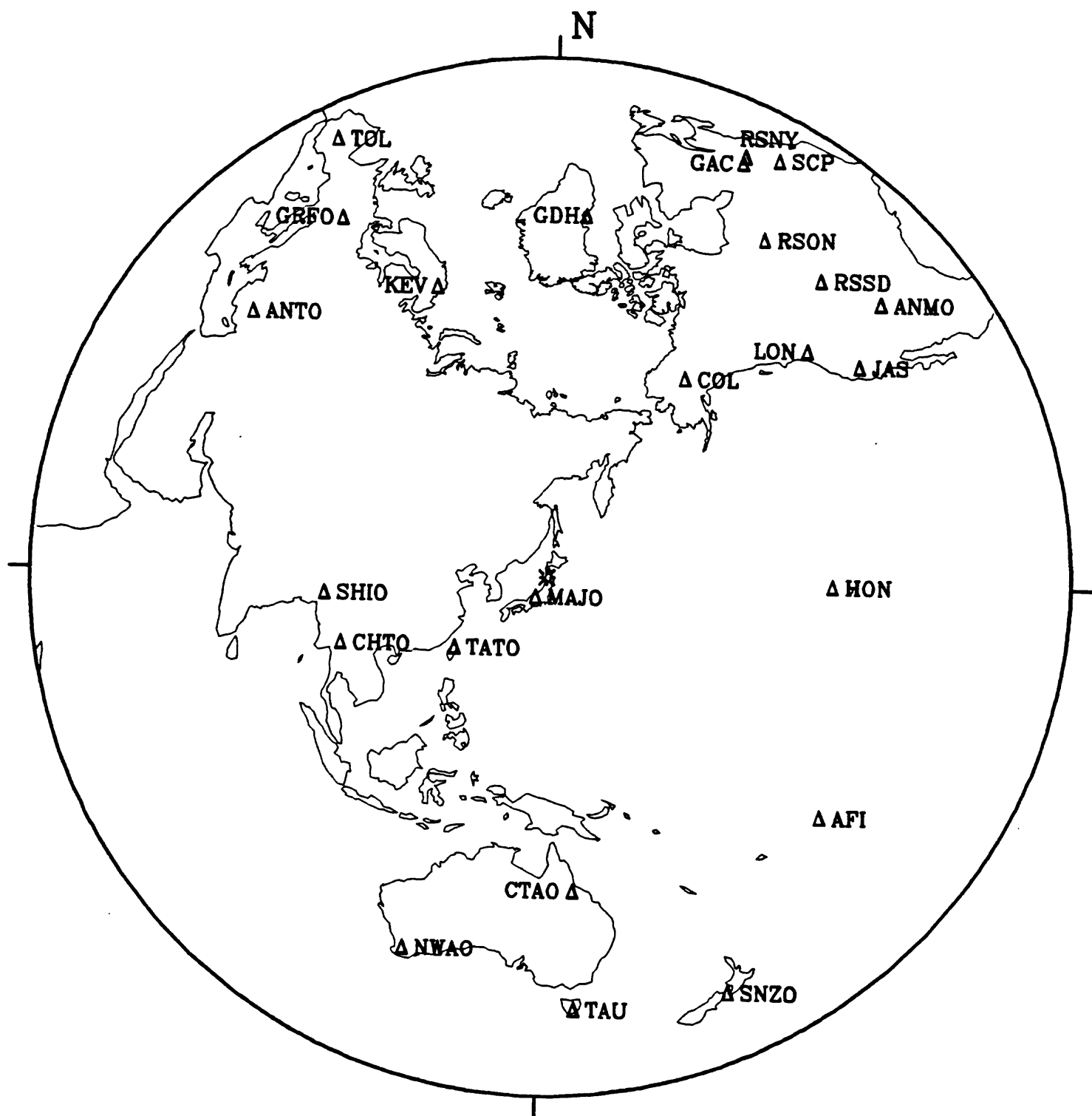
28 March 1985 01:48:38.55

LPZ

East Papua New Guinea Region  $h=33.0$   $m_b=5.5$ 

28 March 1985 16:07:06.68

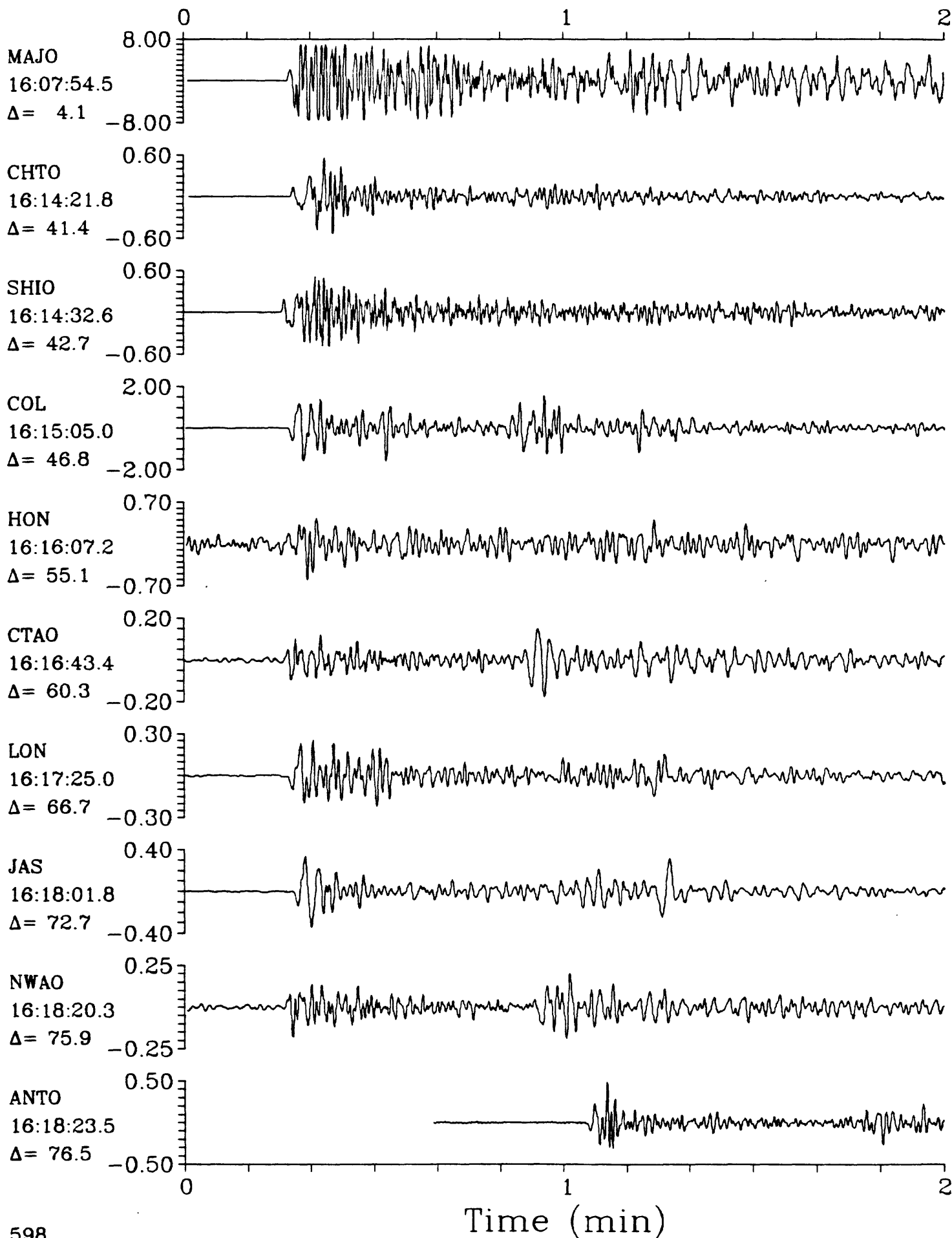
## Honshu, Japan



SPZ

28 March 1985 16:07:06.68  
Honshu, Japan  $h=165.1$   $m_b=6.1$ 

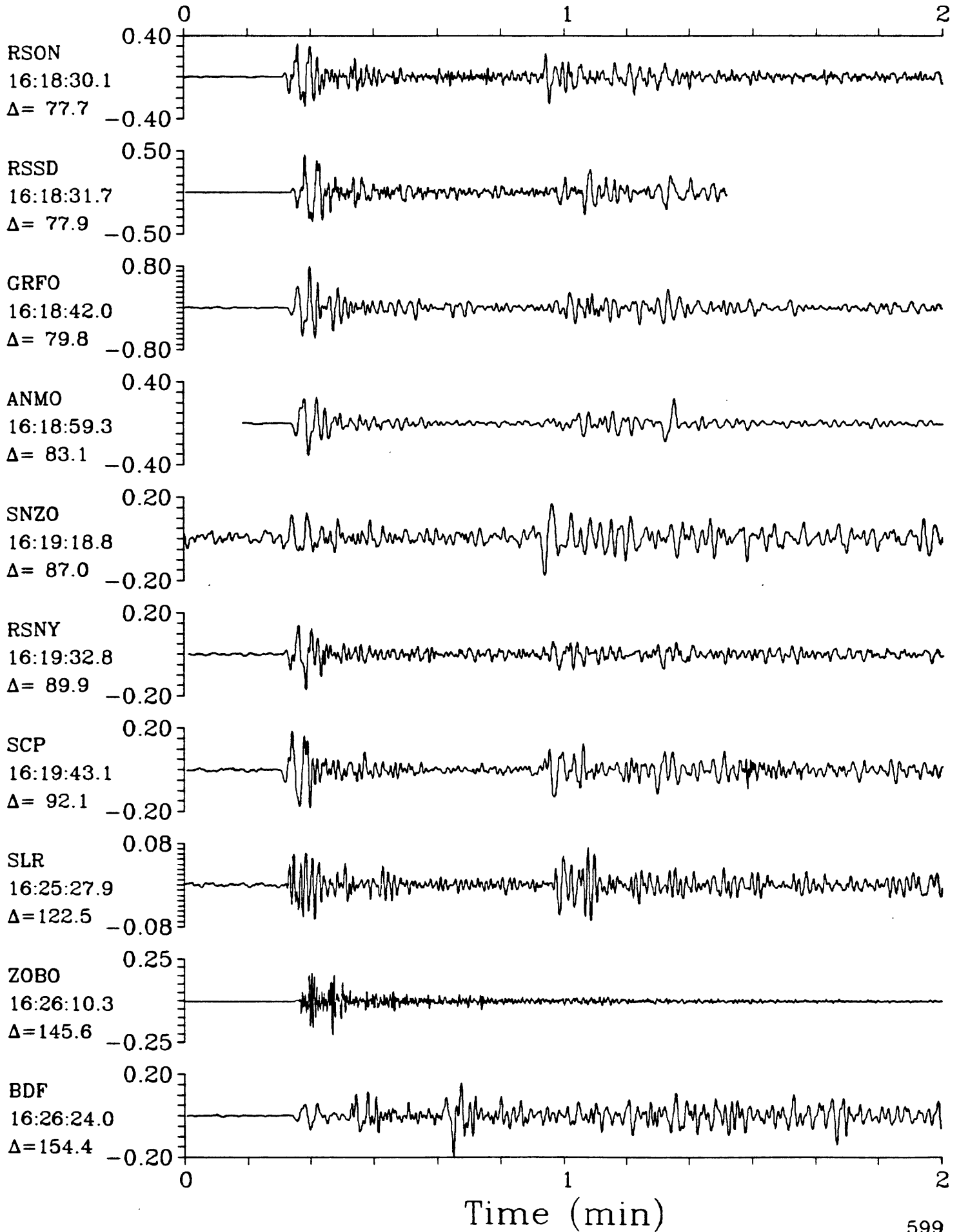
SPZ



SPZ

28 March 1985 16:07:06.68  
Honshu, Japan  $h=165.1$   $m_b=6.1$ 

SPZ

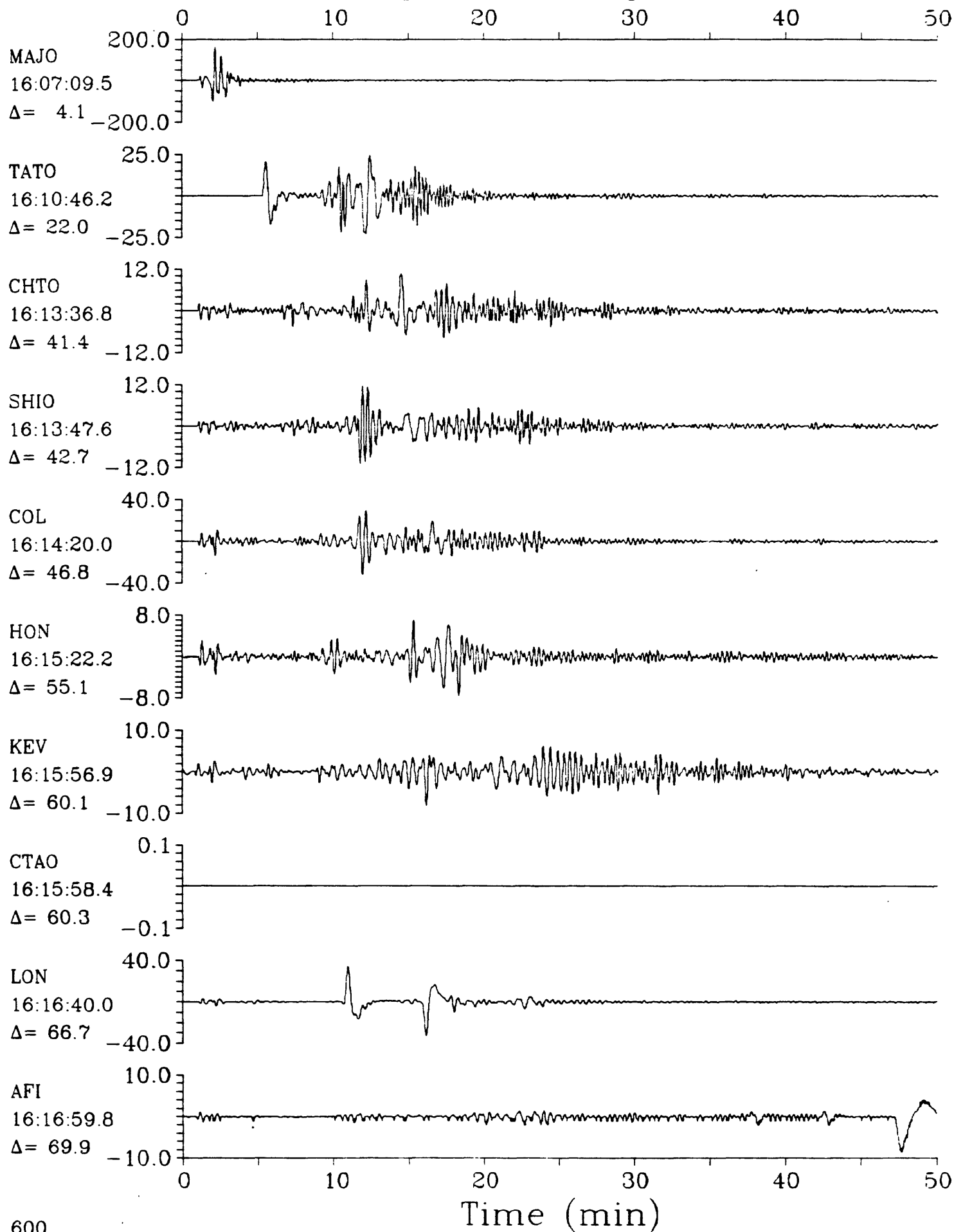




LPZ

28 March 1985 16:07:06.68  
Honshu, Japan  $h=165.1$   $m_b=6.1$ 

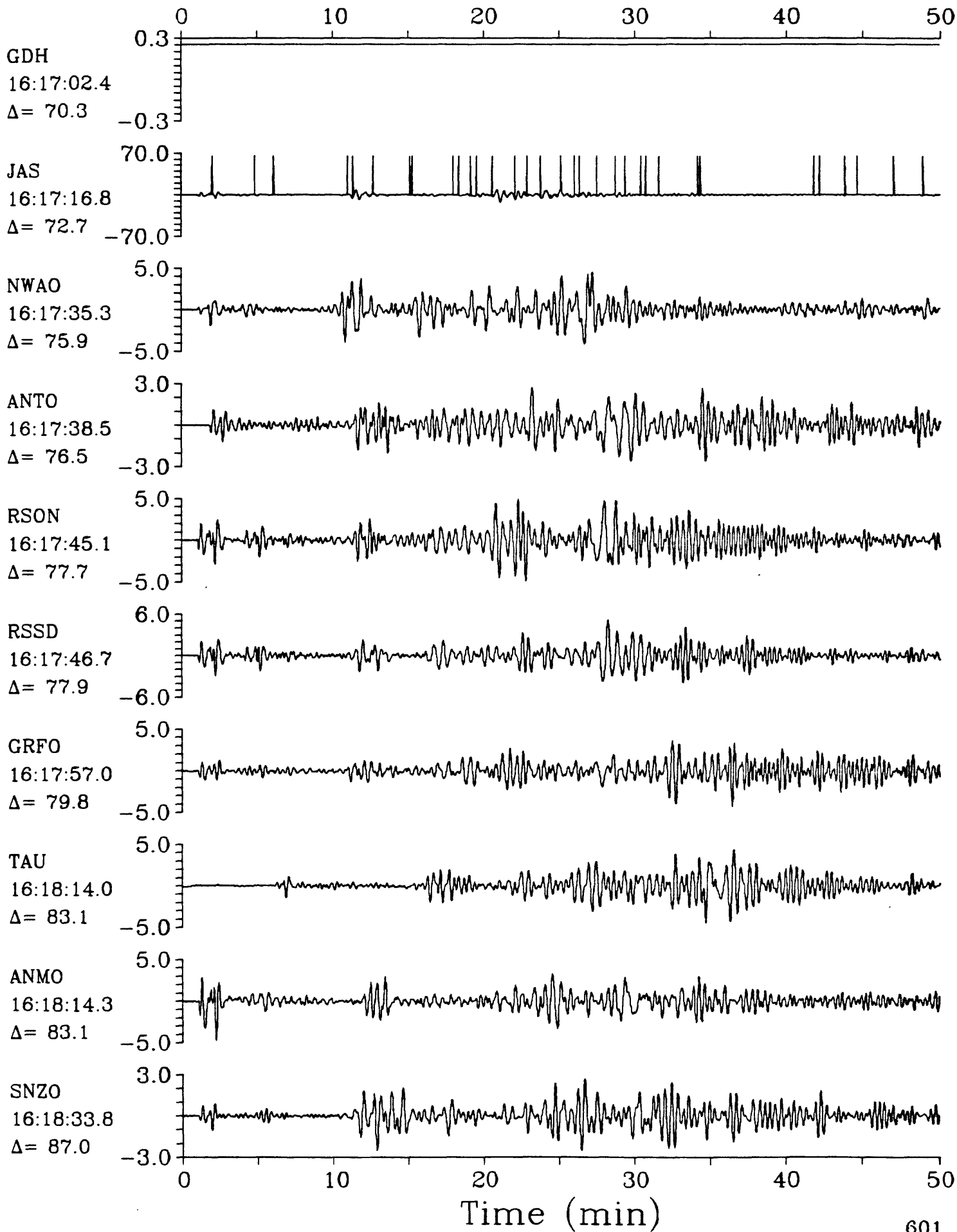
LPZ



LPZ

28 March 1985 16:07:06.68  
Honshu, Japan  $h=165.1$   $m_b=6.1$ 

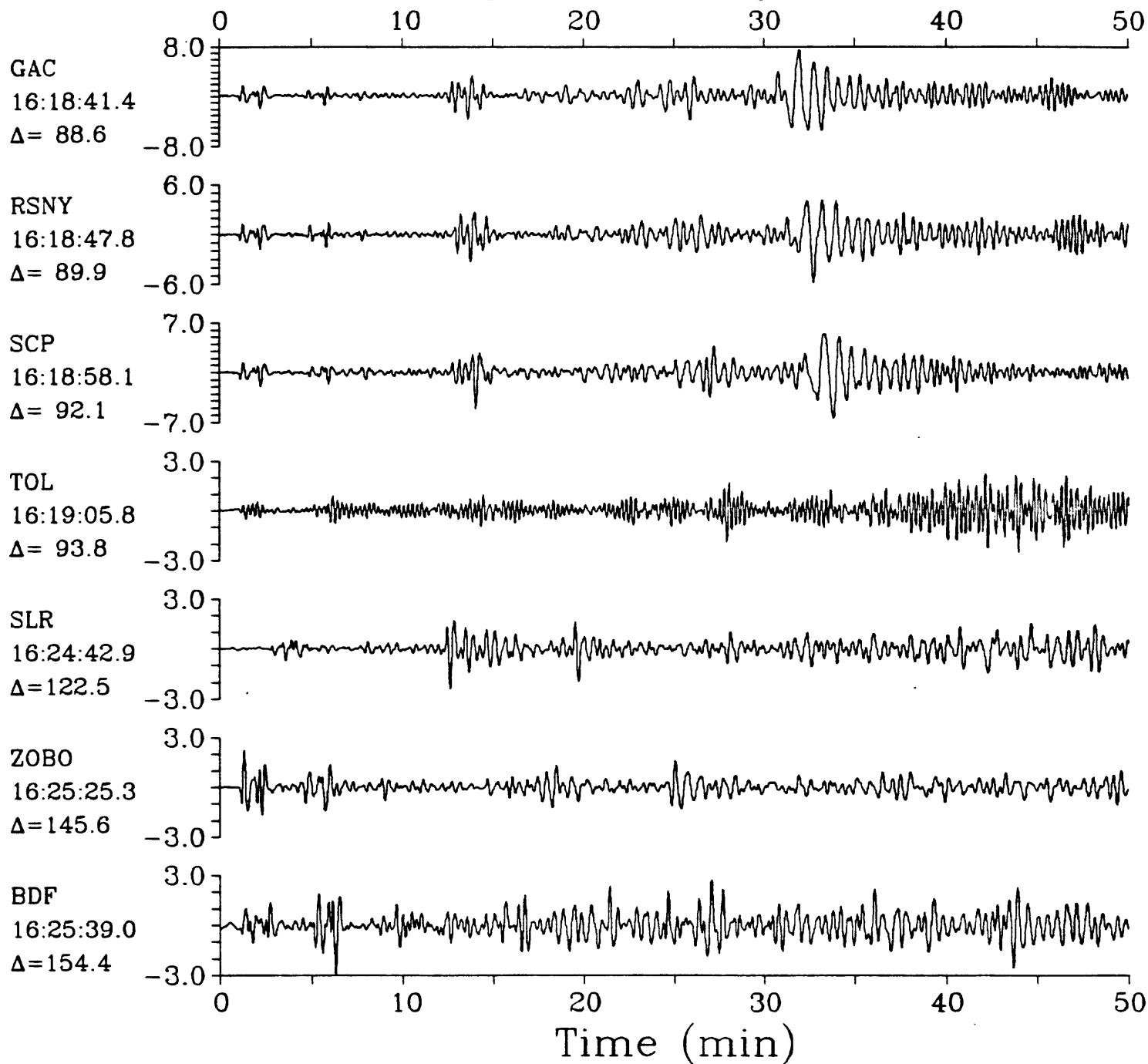
LPZ



LPZ

28 March 1985 16:07:06.68  
Honshu, Japan  $h=165.1$   $m_b=6.1$ 

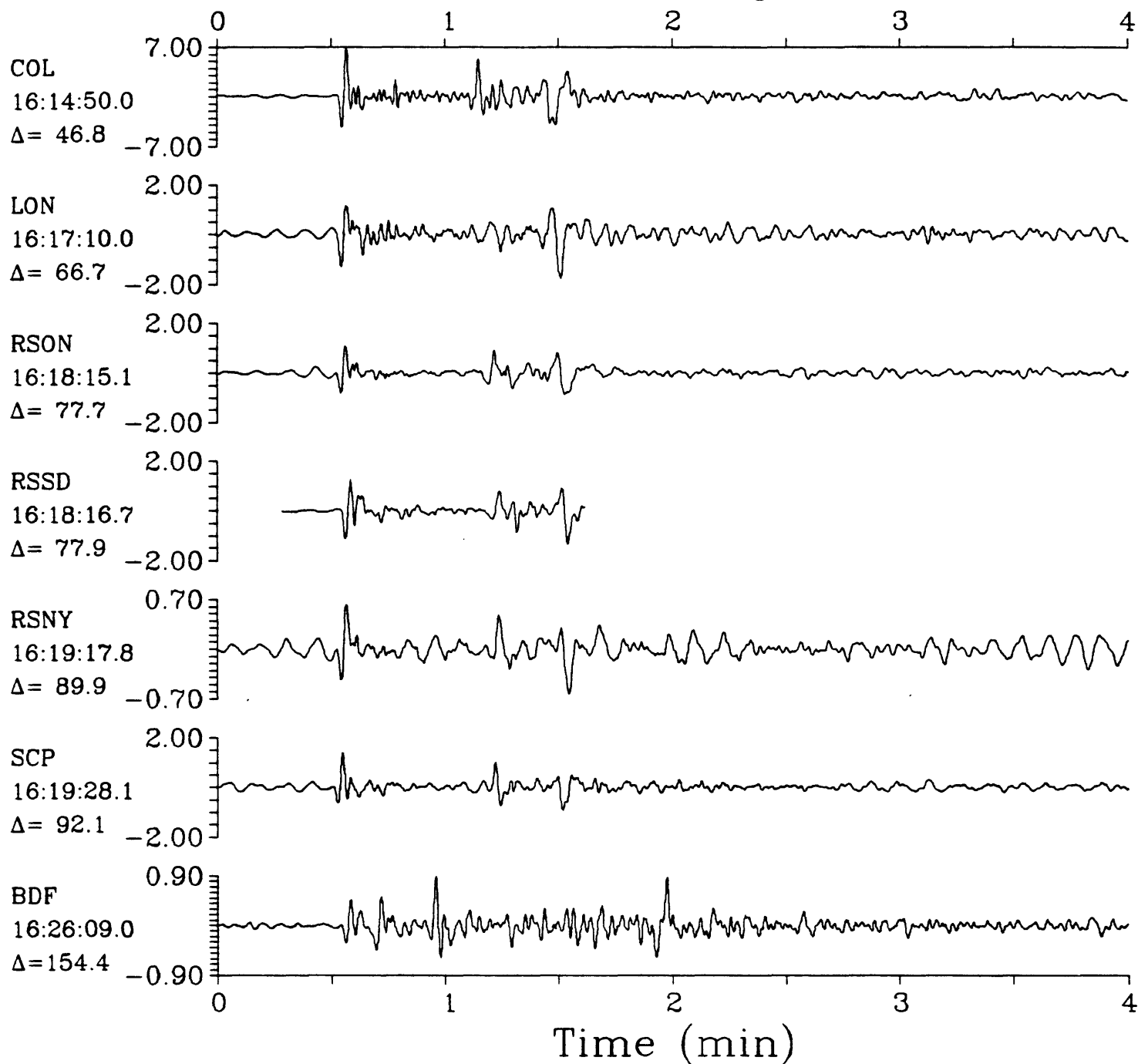
LPZ



IPZ

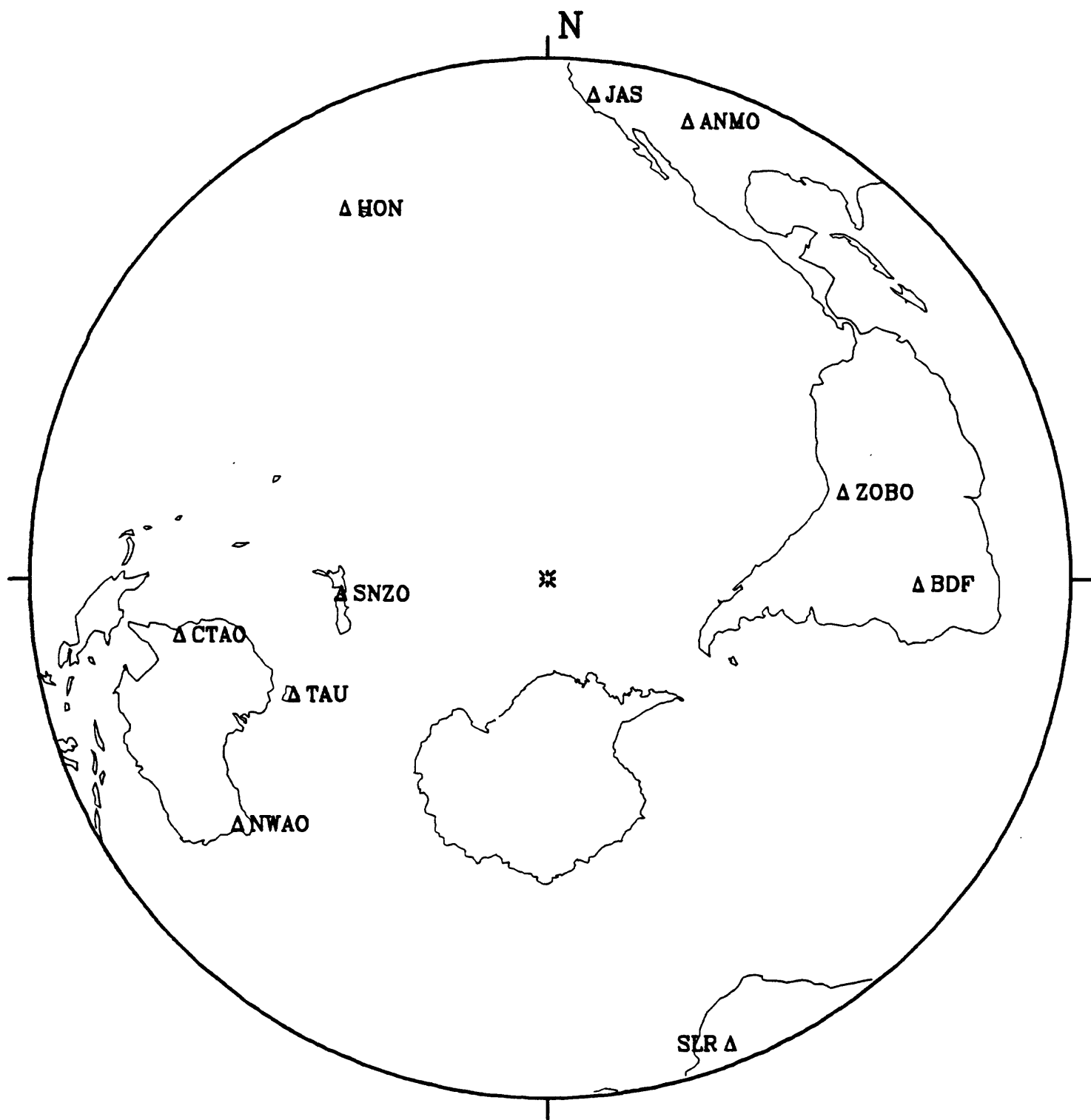
28 March 1985 16:07:06.68  
Honshu, Japan  $h=165.1$   $m_b=6.1$ 

IPZ



30 March 1985 15:39:27.66

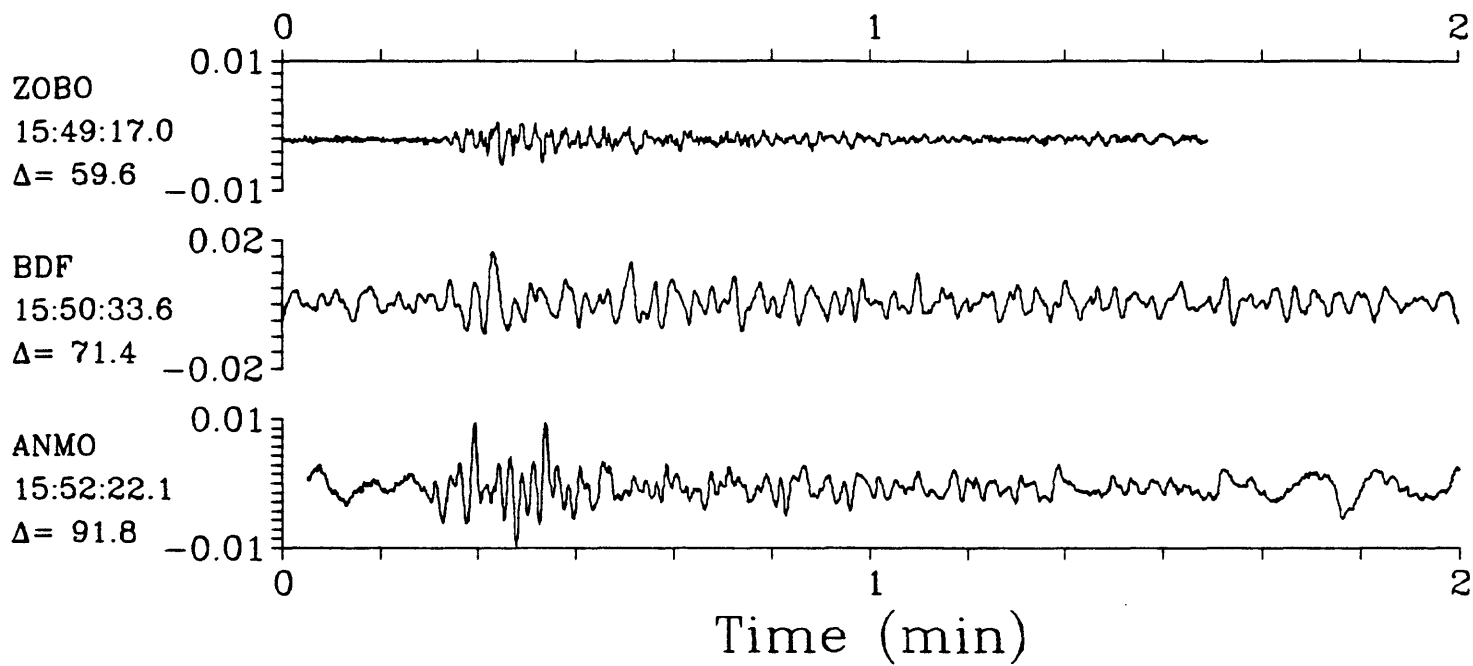
## South Pacific Cordillera



SPZ

30 March 1985 15:39:27.66

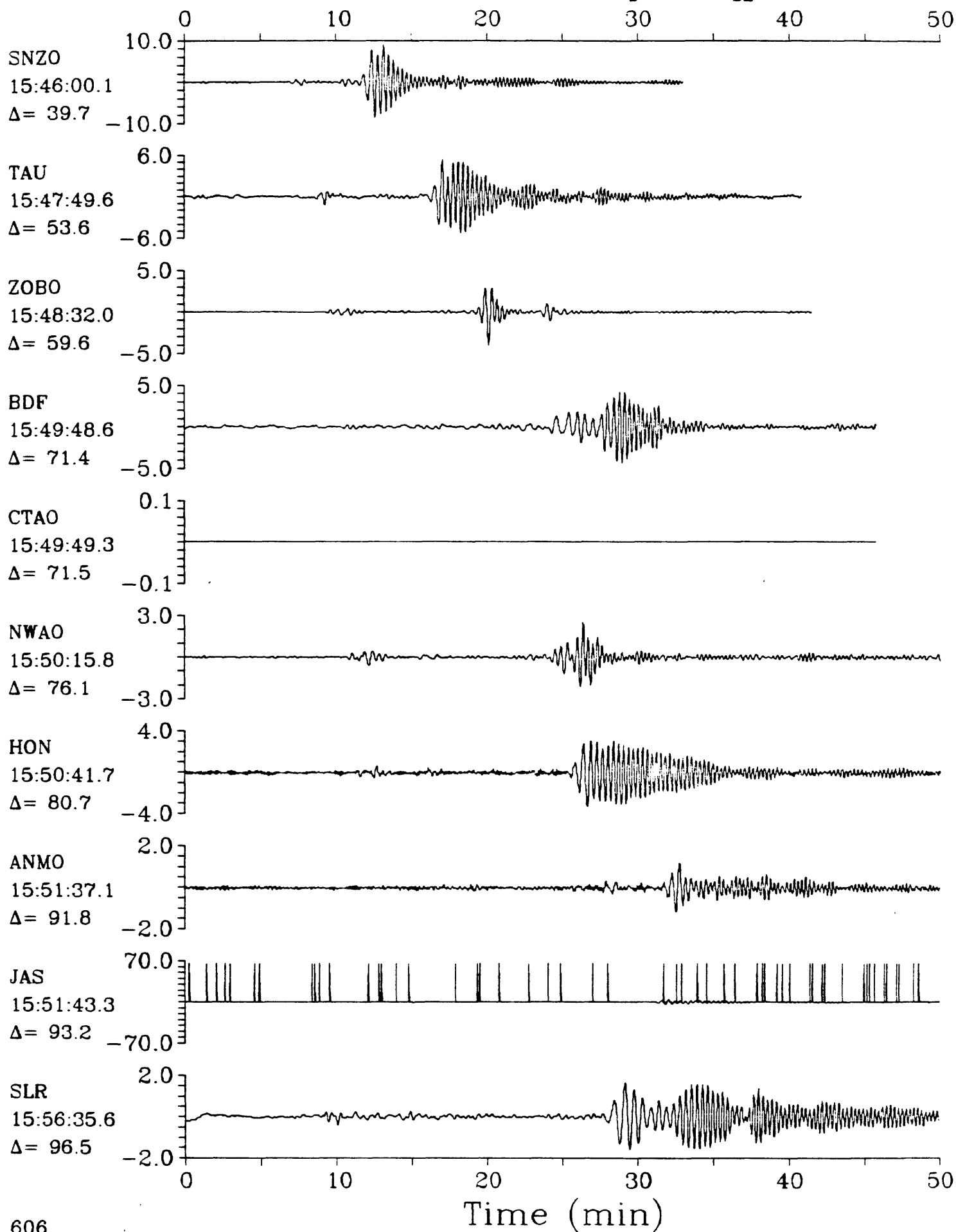
SPZ

South Pacific Cordillera  $h=10.0$   $m_b=5.3$   $M_{sz}=5.6$ 

LPZ

30 March 1985 15:39:27.66

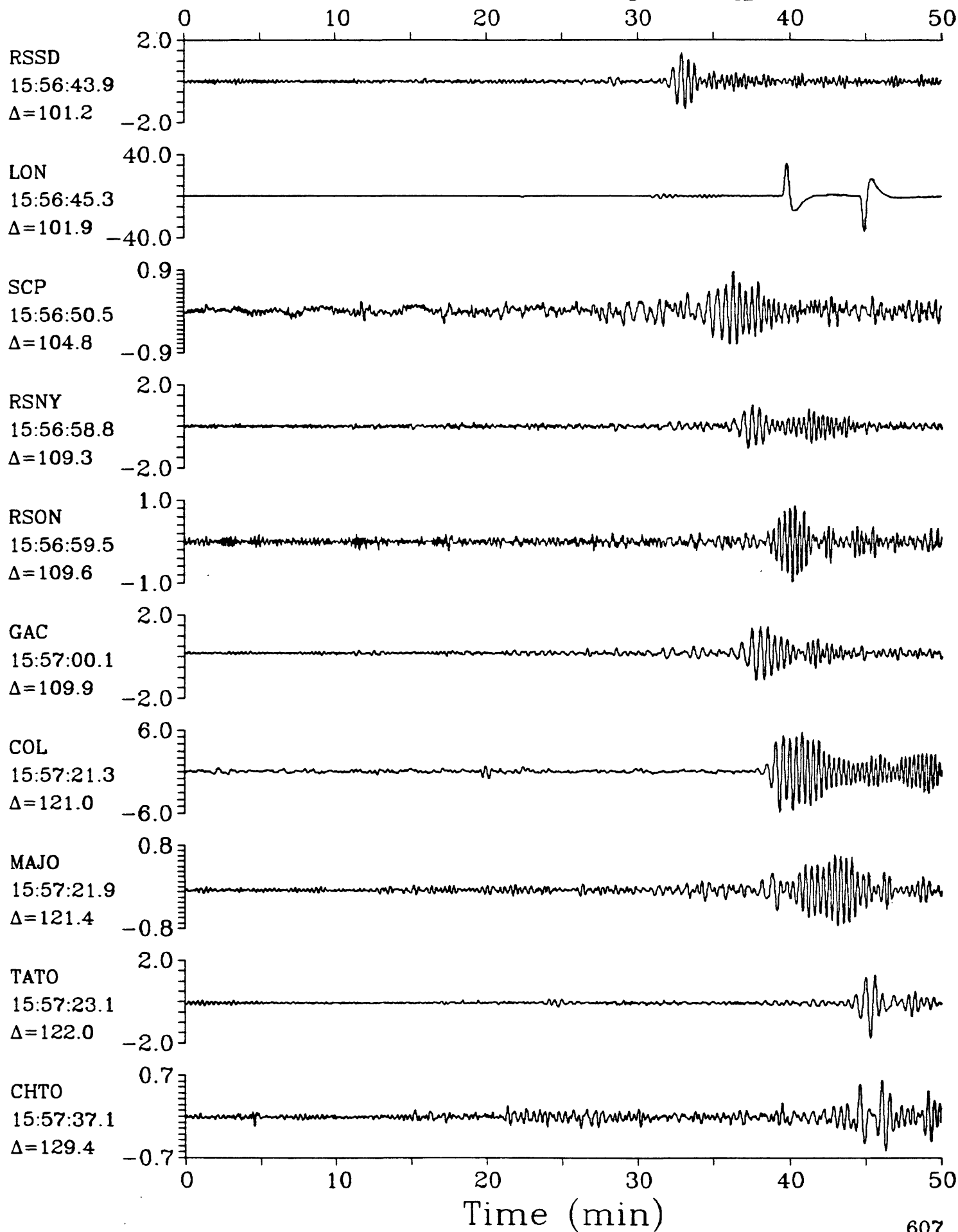
LPZ

South Pacific Cordillera  $h=10.0$   $m_b=5.3$   $M_{sz}=5.6$ 

LPZ

30 March 1985 15:39:27.66

LPZ

South Pacific Cordillera  $h=10.0$   $m_b=5.3$   $M_{sz}=5.6$ 



LPZ

30 March 1985 15:39:27.66

LPZ

South Pacific Cordillera  $h=10.0$   $m_b=5.3$   $M_{sz}=5.6$ 