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1986 ICE ISLAND REFRACTION SURVEY
PHASE I REPORT

by

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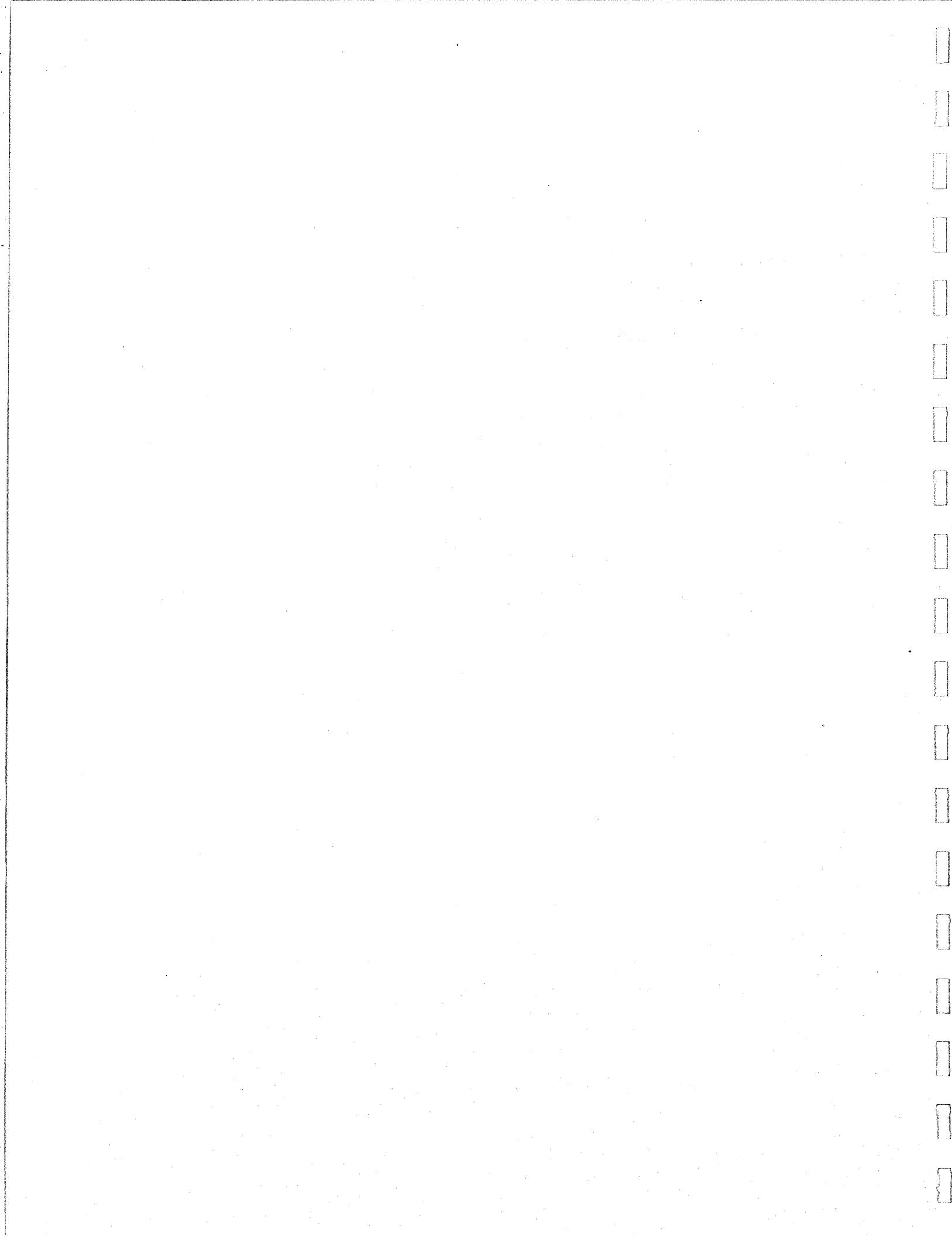
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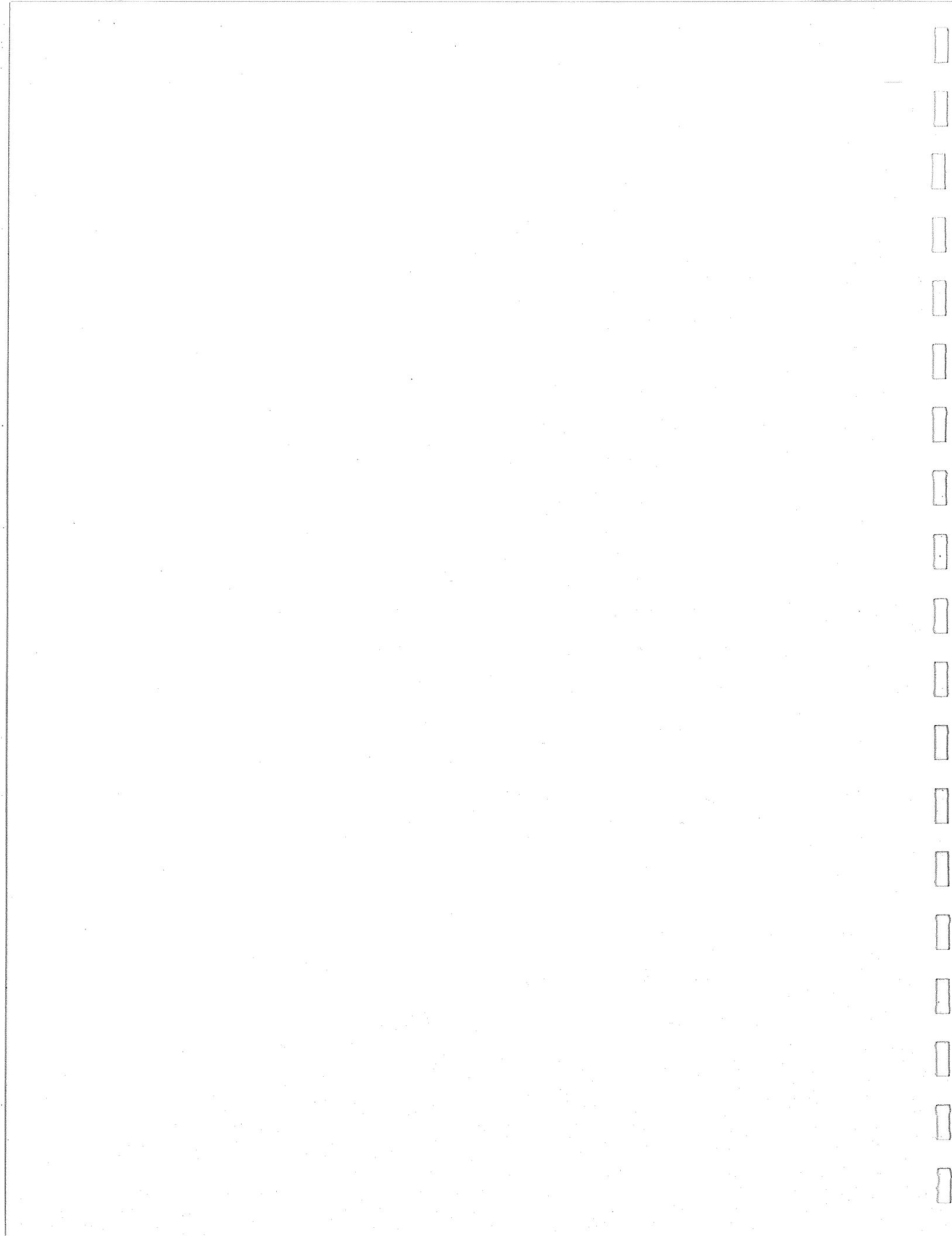


Résumé

Pendant le levé de sismique réfraction effectué en avril 1986 dans le cadre du projet de l'île de glace, quatre et demi profils inverses parallèles à la marge continentale polaire au nord-ouest des îles Ellesmere et Axel Heiberg furent enregistrés. Un total de 35 tirs enregistrés par un total de 850 receveurs ont fourni 540 km de profils de réfraction avec un espacement effectif de 2.5 km.

La transcription et l'arrangement de données de terrain sont maintenant terminées et les profils présentant les données de l'onde directe (dans l'eau) et de la sismique crustale sont présentés dans ce volume.

Une étude de tirs d'essai enregistrés par différentes configurations de réseaux de géophones suggère aucun effet d'importance sur le signal sismique.

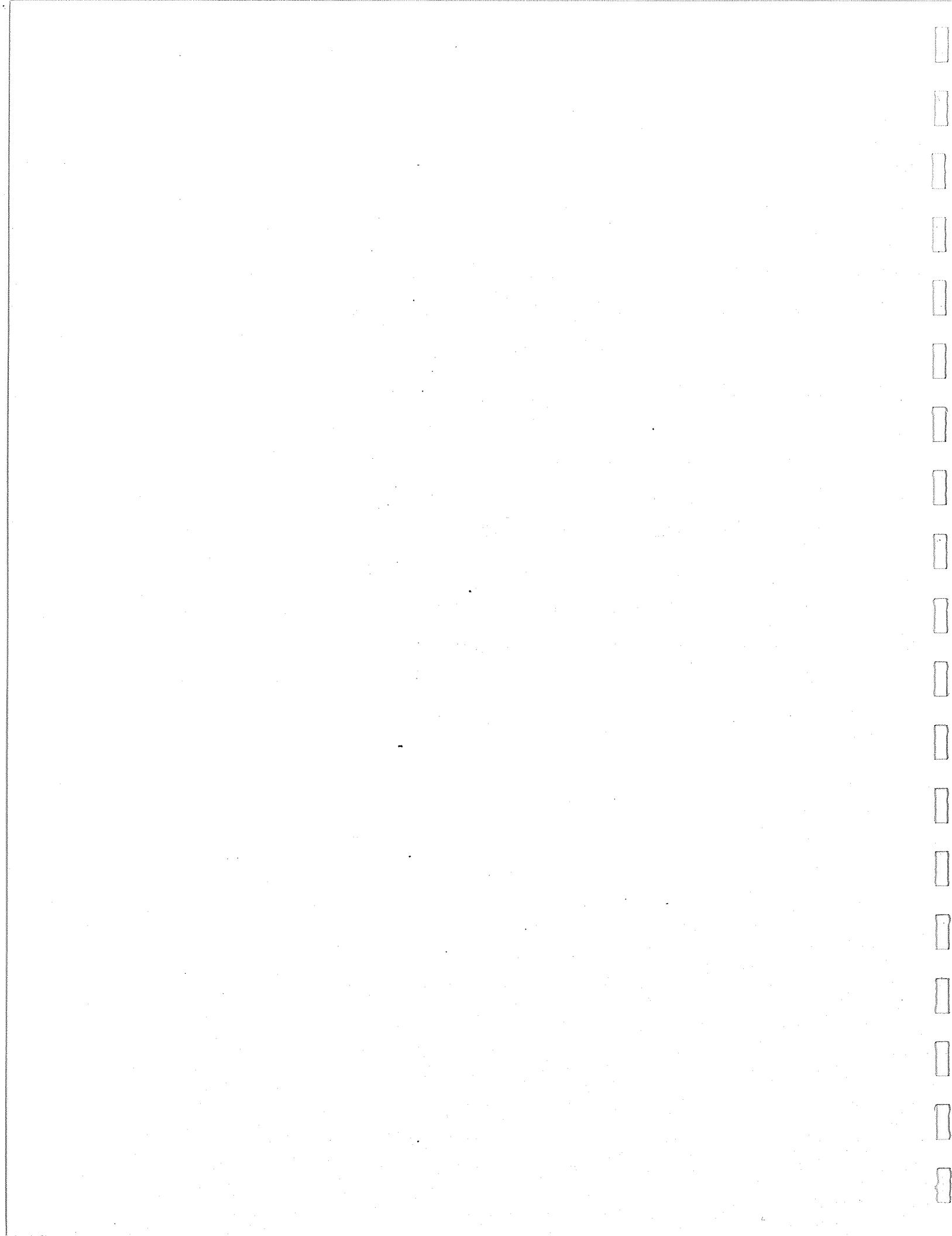


Abstract

The April 1986 Ice Island seismic refraction survey included four and one half reversed 120 km long profiles parallel and perpendicular to the polar continental margin northwest of Ellesmere and Axel Heiberg Islands. A total of 35 shots into 850 deployments of recorders yielded 540 km of refraction line with an effective receiver spacing of 2.5 km.

Transformation of the field data to workable formats is now completed and plots of the water wave and crustal seismic data are presented in this volume.

Test shots fired into different configurations of geophone arrays suggest no significant difference in signal response for high signal to noise environments.

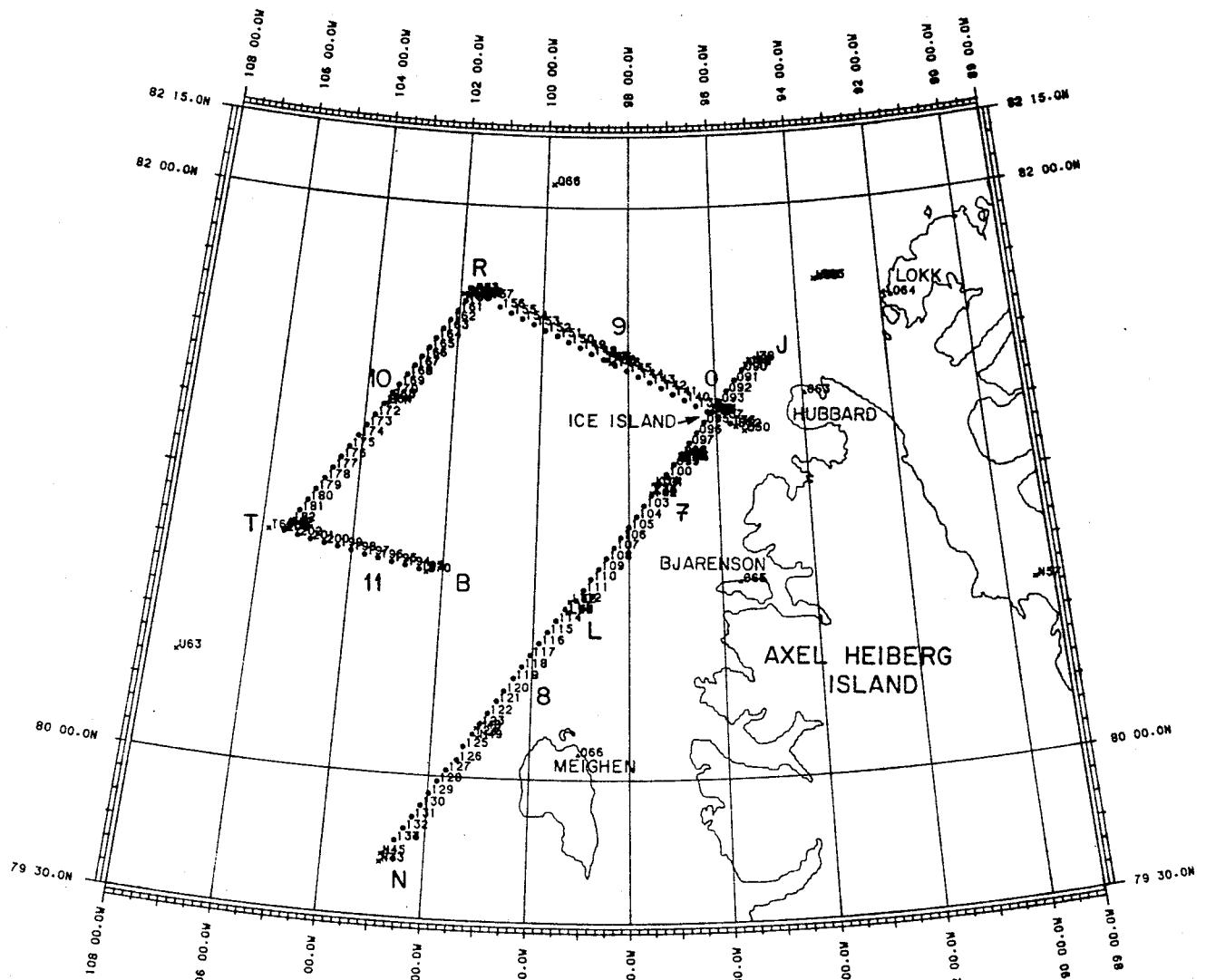


1- Introduction

The Ice Island seismic refraction surveys started in 1985 as part of the Frontier Geoscience Program to increase our understanding of the Canadian Polar margin. The first refraction survey was carried out in April 1985 and was described in Geological Survey of Canada Open file Report 1196. The second Ice Island refraction survey was carried out in April 1986 and is reported here.

The major participating institutes in the 1986 survey were the Lithosphere and Canadian Shield Division (Ottawa), the Institute of Sedimentary and Petroleum Geology (Calgary), the Atlantic Geoscience Centre (Dartmouth), Pacific Geoscience Centre (Sidney) and the Geophysics Division (Ottawa). Many other Arctic professionals assisted in the field (see list, Appendix A).

The site of the survey was limited to an operational range of about 300 km from the new location of the Ice Island off Cape Hubbard northwest of Ellesmere and Axel Heiberg Islands. Refraction profiles were collected along and across the Polar margin (see Fig. 1). The basic refraction spreads were 120 km long consisting of two 60 km sections along which the old "Backpack" and the new "Lunchbox" seismic



recorders were deployed respectively. The seismometer spacing of 5 km was effectively reduced to 2.5 by shots offset by 2.5 km at both ends of the profiles. Large offset shots at 60 and 120 km from the ends of the profile and fan shots provided additional information down to the crust-mantle boundary. Shots were constructed of units of seven or eight 27.2 kg Geogel 60% charges composited to make explosive sources of from 190 to 900 kg. The units were lowered on a rope to a depth of 100 m below sea level and detonated electronically from a safe distance.

A total of 35 shots were fired into 850 deployments of seismic recorders covering 540 km of reversed refraction lines. Using resources similar to the 1985 survey, the 1986 refraction team succeeded in increasing the volume of collected data by about 100 per cent by deploying 11 more seismic recorders than in 1985 and using more working hours from the 24 hours of daylight available in the Arctic.

This report is a summary of the field operations and initial data reformatting. The field data are transformed into workable formats and is presented in this volume. Special consideration has been given to the continuity of the data formats such that all Ice Island refraction data could be readily merged in future interpretations. The same naming conventions as the 1985 survey are used for shot points and recording stations.

2- Field procedures

2.1 Logistics

The 1986 refraction survey was carried out from the Ice Camp established by the Polar Continental Shelf Project using a Twin Otter fixed wing aircraft, a Bell 205A and a Bell 206L Helicopter. Twelve old Backpacks and eleven new Lunchbox seismic recorders were used during the survey. The new prototype single channel Lunchbox recorders were employed for the first time in the Arctic environment and performed well. They feature all-solid state digital recording with 1 Megabyte of memory capable of storing 72 minutes of seismic data at a rate of 120 samples per second. Compaq Portable 286 microcomputers were used to load shot windows and retrieve recorded data from the Lunchboxes. Details of the new recording schemes are beyond the scope of this report and will appear in future GSC reports.

2.2 Navigation

The 1986 refraction survey was supported by three

independent navigation systems. Dynamic navigation was achieved using a Sercel U.H.F. Syledis system. Four transmitter stations located on shore at Lokk, Hubbard, Bjarenson and Meighen (see Fig. 1) and two mobile units aboard the Helicopters were used in navigating to projected shot and recording sites. A Global Positioning System (GPS) was used to accurately position the Syledis transmitting stations. A Marconi 761 doppler receiver system was used to position shot points N1, H1, Q1, U1 and NS which could not be covered by the Syledis system. The three navigation systems were cross-checked when possible and showed remarkable internal consistency.

2.3 Data processing on the Ice

Compaq 286 portable microcomputers were used to load shot windows into the new Lunchbox recorders and retrieve recorded data. The Lunchbox data were stored on 1/4 inch DC-1000 cartridges as well as floppy diskettes and other media. The Backpack data were recorded on cassettes. Special software written for the microcomputers was used to project field parameters routinely and provided the field crew with updated shot and recorder locations before each deployment. The field data were logged to shot and receiver logs daily

and were printed and distributed on the Ice Island at the end of the experiment.

2.4 Instrument malfunctions

The 1986 survey experienced far fewer instrument malfunctions than in 1985. The shooting systems worked flawlessly and all of the shots were detonated electronically on the minute marks. The Backpack recorders worked much better than the previous year and only one system failed to record during two of the deployments. Backpack number 22 had to be repaired in the field and missed one deployment totally. The Lunchbox recorders performed well and there were only two cases of data loss due to hardware problems, which were identified and corrected in the field. Although both types of recorder were deployed inside thermally insulated boxes, the Lunchboxes were deployed without insulation in a test deployment and survived with recorded data after about 8 hours of Arctic conditions, with temperatures falling to about -30 degrees centigrade. The overall recording performance as shown in Table 1 was excellent with a success rate of nearly 95 per cent which is unmatched to date for Arctic experiments.

3. Data processing in Ottawa

The refraction processing systems implemented on the VAX 11/750 minicomputer and the Compaq microcomputers were used to transform the field data to workable formats ready for interpretations. The "Toronto" format was used to store the final waveform and header data (details of this format are available from the Lithosphere and Canadian Shield Division). Problems were encountered recovering the data recorded on some of the Backpacks (due primarily to the old Cassette recorders used in these instruments) but the Lunchbox data were easily transferred from the Compaq to the VAX on the Ethernet link. In a few cases, small errors were found in the field location of some recorders by examining the water wave arrivals, and some traces had small timing problems. These problems demonstrate again that recording of the water waves is essential for a final quality check on the integrity of the Ice Island data. Details of data transformation procedures are given below.

3.1 Timing corrections

A satellite clock receiving information from the

Geocentric Orbiting Earth Satellite with an accuracy of 1 ms was used as a master clock in the field, and both the recording and the shooting instruments were synchronized to it. The timing errors were therefore restricted to the drift of the internal clocks in the shooter boxes and the recording instruments over periods of up to about 10 hours.

The shooter box time corrections were all in the range of 10 ms but were not properly logged for individual shots and are therefore not available for timing corrections.

The Backpack and Lunchbox time corrections are given in Tables 2 and 3. The average corrections are about 10 ms.

An additional 16.1 ms delay must be applied to all shot times to account for the travel time of the shock waves through the 100 meters of primacord that was used to detonate the charges.

These time corrections have not been incorporated in the refraction data analysis yet, however they will be applied to the final composite seismic sections.

3.2 Water wave data

To provide a quality check on navigation, the recording windows were set in order to record several seconds of the slow water wave data from each shot. Since the velocity of the water waves through the top layers of the ocean water is

about 1440 m/s, and the impulsive water wave arrivals can usually be picked to better than 100 ms, it was often possible to identify and correct errors in the order of 150 m in the positions of shots or recorders by using the reversed water wave arrival times. Six recorder locations (126, 131, 147, 169, 170, and 201) were found to be in error by about one km probably due to Syledis system reading errors. The positions of these recorders have been adjusted such that their water wave arrivals match others in the same sections. The water wave sections also showed that the recorder clock for site 148 had erratic jumps during the recording of shots L54, R53 and R51 and a correction of -8 seconds had to be applied to align water wave arrivals. These seismograms must be regarded as less reliable in the determination of details of the seismic structure in the final interpretations.

Tables 4 and 5 show shot and receiver locations after all water wave corrections. Using the data in these tables, shot to receiver distances and azimuths were calculated and both the water wave and seismic sections were plotted in Figures 2A through 39B (Appendix B). Some of the traces appear (e.g. trace 102 of shot J38, Fig. 3A) to lack water wave or seismic signal in the plotted windows but the entire recording windows of these traces have been searched and no appreciable signal energy could be identified. The data

presented in this volume is therefore all of the available recorded data for the 1986 refraction survey.

The water wave data show remarkable dispersive features on some of the sections and the first arrivals do not line up as expected (see, for example, Fig. 15A). In these cases only the regular move out of the water wave could be used as a quality check on the navigation.

3.3 Test shot

To test the recording and shooting procedures and optimize geophone configurations, a test shot was fired into groups of recorders sited at the edge of the Ice Island and at one remote site 25 km from the Ice Island. Each of the Backpack recorders were attached to a string of four geophones, with the phones set at the corners of a square array. The Lunchboxes were connected to strings of four geophones in linear, cross and square shaped arrays. The initial analysis of data recorded from the test shot did not show any substantial signal improvement between various forms of geophone layouts. A square shaped geophone configuration was used for the 1986 survey for ease of field deployment.

Fig. 1A shows both the seismic and water wave data from the test shot at some of the recorders.

4- Summary

The phase I of the 1986 Ice Island seismic refraction data presented in this report is a natural continuation of the 1985 Open File Report. The data is prepared such that the two refraction experiments can be interpreted together or individually.

Adequate navigating systems were important in proper positioning of the shot and recorder sites and water wave data provided an additional quality check on the positions. Reformating of Backpack data was slow and troublesome while transformation of Lunchbox data was straightforward after the necessary software systems were developed.

Table - 1
Recording Instrument Performance Log

ICE ISLAND REFRACTION SURVEY 1986		APRIL 19-30, 1986
Isa Asudeh and Larry Johnston		April 30, 1986
Statistics:		
Total number of possible recordings		
Total number of successful recordings	849	805 %94.8
Number of Backpacks failed to record due to:		
dead backpacks	17	
backpacks not deployed	9	
Number of Lunchboxes failed to record due to:		
dead lunch boxes	18	
Total number of unsuccessful recordings	44	% 5.2
Backpack and Lunchbox codes:		
*	recorded data	
n	not deployed	
d	dead Backpack or Lunchbox	
Navigation codes:		
N	NAVSAT fix	
S	SYLEDIS fix	
Other codes:		
st	shot number	
sn	refraction section	
sp	shot point	
window	start time of recording	
dur	length of recording	

Backpack Performance Log

st	date	day	sn	sp	window	dur	backpacks:	10	11	12	13	14	16	17	18	19	20	21	22	
					hr:mn	sec		*	*	*	*	*	*	*	*	*	*	*	*	*
32	19	109	TS	J2	00:30	120		*	*	*	*	*	*	*	*	*	*	*	*	*
33	21	111	JL	N1	21:30	180		*	*	*	*	*	*	*	*	*	*	*	*	*
34	21	111	JL	k1	22:16	150		*	*	*	*	*	*	*	*	*	*	*	*	*
35	21	111	JL	L1N	22:31	150		*	*	*	*	*	*	*	*	*	*	*	*	*
36	21	111	JL	K2	22:46	150		*	*	*	*	*	*	*	*	*	*	*	*	*
37	21	111	JL	L2	23:01	150		*	*	*	*	*	*	*	*	*	*	*	*	*
38	21	111	JL	J1	23:45	150		*	*	*	*	*	*	*	*	*	*	*	*	*
39	21	112	JL	H1	00:00	126		*	*	*	*	*	*	*	*	*	*	*	*	*
40	21	112	JL	J2	00:20	126		*	*	*	*	*	*	*	*	*	*	*	*	*
41	24	114	LN	L1N	19:15	180		*	*	*	*	*	*	*	*	*	*	*	*	n
42	24	114	LN	L2	19:30	150		*	*	*	*	*	*	*	*	*	*	*	*	n
43	24	114	LN	N1	20:01	150		*	*	*	*	*	*	*	*	*	*	*	*	n
44	24	114	LN	K2	20:15	150		*	*	*	*	*	*	*	*	*	*	*	*	n
45	24	114	LN	N2	20:31	150		*	*	*	*	*	*	*	*	*	*	*	*	n
46	24	114	LN	J2	21:00	150		*	*	*	*	*	*	*	*	*	*	*	*	n
47	24	114	LN	H1	21:30	200		*	*	*	*	*	*	*	*	*	*	*	*	n
48	24	114	LN	M1	21:46	200		*	*	*	*	*	*	*	*	*	*	*	*	n
49	24	114	LN	M2	22:31	175		*	*	*	*	*	*	*	*	*	*	*	*	n
50	25	115	OR	O1	19:15	180		*	*	*	*	*	*	d	*	*	*	*	*	*
51	25	115	OR	R1	19:31	150		*	*	*	*	*	*	d	*	*	*	*	*	*
52	25	115	OR	O2	19:45	150		*	*	*	*	*	*	d	*	*	*	*	*	*
53	25	115	OR	R2	20:01	150		*	*	*	*	*	*	d	*	*	*	*	*	*
54	25	115	OR	L1N	20:15	150		*	*	*	*	*	*	d	*	*	*	*	*	*
55	25	115	OR	P1	20:46	150		*	*	*	*	*	*	d	*	*	*	*	*	*
56	25	115	OR	P2	21:01	150		*	*	*	*	*	*	d	*	*	*	*	*	*
57	25	115	OR	NS	21:45	180		*	*	*	*	*	*	d	*	*	*	*	*	*
58	28	118	RT	L1N	19:00	150		*	*	*	*	*	*	d	*	*	*	*	*	*
59	28	118	RT	R3	19:21	150		*	*	*	*	*	*	d	*	*	*	*	*	*
60	28	118	RT	T1	19:41	150		*	*	*	*	*	*	d	*	*	*	*	*	*
61	28	118	RT	R2	20:00	150		*	*	*	*	*	*	d	*	*	*	*	*	*
62	28	118	RT	T2	20:21	150		*	*	*	*	*	*	d	*	*	*	*	*	*
63	28	118	RT	U1	20:40	150		*	*	*	*	*	*	d	*	*	*	*	*	*
64	28	118	RT	S1	21:21	150		*	*	*	*	*	*	d	*	*	*	*	*	*
65	28	118	RT	S2	22:01	150		*	*	*	*	*	*	d	*	*	*	*	*	*
66	28	118	RT	Q1	22:20	150		*	*	*	*	*	*	d	*	*	*	*	*	*

Lunch Box Performance Log

st	date	day	sn	sp	window	dur	lunch boxes:												
							hr:mn	sec	01	02	03	04	05	06	08	09	0A	0C	OE
Apr.							*	*	*	*	*	*	*	*	*	d	*	*	
32	19	109	TS	J2	00:30	120	*	*	*	*	*	*	*	*	*	*	d	*	*
33	21	111	JL	N1	21:30	120	*	*	*	*	*	*	*	*	*	d	*	*	
34	21	111	JL	k1	22:16	120	*	*	*	*	*	*	*	*	*	d	*	*	
35	21	111	JL	L1N	22:31	120	*	*	*	*	*	*	*	*	*	d	*	*	
36	21	111	JL	K2	22:46	120	*	*	*	*	*	*	*	*	*	d	*	*	
37	21	111	JL	L2	23:01	120	*	*	*	*	*	*	*	*	*	d	*	*	
38	21	111	JL	J1	23:45	120	*	*	*	*	*	*	*	*	*	d	*	*	
39	21	112	JL	H1	00:00	120	*	*	*	*	*	*	*	*	*	d	*	*	
40	21	112	JL	J2	00:20	120	*	*	*	*	*	*	*	*	*	d	*	*	
41	24	114	LN	L1N	19:15	180	*	*	*	d	*	*	*	*	*	*	*	*	
42	24	114	LN	L2	19:30	150	*	*	*	d	*	*	*	*	*	*	*	*	
43	24	114	LN	N1	20:01	150	*	*	*	d	*	*	*	*	*	*	*	*	
44	24	114	LN	K2	20:15	150	*	*	*	d	*	*	*	*	*	*	*	*	
45	24	114	LN	N2	20:31	150	*	*	*	d	*	*	*	*	*	*	*	*	
46	24	114	LN	J2	21:00	150	*	*	*	d	*	*	*	*	*	*	*	*	
47	24	114	LN	H	21:30	180	*	*	*	d	*	*	*	*	*	*	*	*	
48	24	114	LN	M1	21:46	180	*	*	*	d	*	*	*	*	*	*	*	*	
49	24	114	LN	M2	22:31	180	*	*	*	d	*	*	*	*	*	*	*	*	
50	25	115	OR	O1	19:15	180	*	*	*	*	*	*	*	*	*	*	*	*	
51	25	115	OR	R1	19:31	150	*	*	*	*	*	*	*	*	*	*	*	*	
52	25	115	OR	O2	19:45	150	*	*	*	*	*	*	*	*	*	*	*	*	
53	25	115	OR	R2	20:01	150	*	*	*	*	*	*	*	*	*	*	*	*	
54	25	115	OR	L1N	20:15	150	*	*	*	*	*	*	*	*	*	*	*	*	
55	25	115	OR	P1	20:46	150	*	*	*	*	*	*	*	*	*	*	*	*	
56	25	115	OR	P2	21:01	150	*	*	*	*	*	*	*	*	*	*	*	*	
57	25	115	OR	NS	21:45	180	*	*	*	*	*	*	*	*	*	*	*	*	
58	28	118	RT	L1N	19:00	150	*	*	*	*	*	*	*	*	*	*	*	*	
59	28	118	RT	R3	19:21	150	*	*	*	*	*	*	*	*	*	*	*	*	
60	28	118	RT	T1	19:41	150	*	*	*	*	*	*	*	*	*	*	*	*	
61	28	118	RT	R2	20:00	150	*	*	*	*	*	*	*	*	*	*	*	*	
62	28	118	RT	T2	20:21	150	*	*	*	*	*	*	*	*	*	*	*	*	
63	28	118	RT	U1	20:40	150	*	*	*	*	*	*	*	*	*	*	*	*	
64	28	118	RT	S1	21:21	150	*	*	*	*	*	*	*	*	*	*	*	*	
65	28	118	RT	S2	22:01	150	*	*	*	*	*	*	*	*	*	*	*	*	
66	28	118	RT	Q1	22:20	150	*	*	*	*	*	*	*	*	*	*	*	*	
67	29	119	LT	L1N	22:20	150	*	*	*	*	*	*	*	*	*	*	*	*	
68	29	119	LT	I4	22:40	150	*	*	*	*	*	*	*	*	*	*	*	*	
69	29	119	LT	T0	23:40	150	*	*	*	*	*	*	*	*	*	*	*	*	
70	30	119	LT	B4	00:01	150	*	*	*	*	*	*	*	*	*	*	*	*	

Table - 2
Backpack Clock Corrections

bp10

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 16:46	109 2:14	9.5	-0.002	-0.21
111 15:20	112 18:20	27.0	0.007	0.26
114 13:44	115 3:54	14.2	0.002	0.14
115 13:47	116 2:12	12.4	0.001	0.08
118 12:37	119 4:54	16.3	0.001	0.06

bp11

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 17: 6	109 2:18	9.2	-0.009	-0.98
111 15:30	112 17:53	26.4	0.009	0.34
114 13:50	115 3:47	14.0	0.007	0.50
115 13:52	116 2:18	12.4	0.066	5.31
118 12:42	119 4:23	15.7	0.008	0.51

bp12

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 17:16	109 1:43	8.4	0.000	0.00
111 15:38	112 17:30	25.9	0.001	0.04
114 13:56	115 3:38	13.7	0.001	0.07
115 13:59	116 1:46	11.8	0.001	0.08
118 12:46	119 4:55	16.2	0.000	0.00

bp13

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
114 14: 5	115 3:43	13.6	0.012	0.88
115 14: 5	116 1:50	11.8	0.011	0.94

bp14

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 17:35	109 1:32	8.0	-0.003	-0.38
111 15:51	112 17:49	26.0	0.010	0.39
114 14:10	115 3:34	13.4	0.007	0.52
115 14:10	116 1:39	11.5	0.005	0.44
118 12:55	119 4:16	15.3	0.007	0.46

bp16

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 17:46	109 12:54	19.1	-0.006	-0.31
111 15:56	112 2:51	10.9	0.007	0.64
114 14:16	115 3:25	13.2	0.010	0.76
115 14:15	116 1:33	11.3	0.007	0.62
118 13: 0	119 4:33	15.6	0.011	0.71

bp17

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 17:53	109 2: 4	8.2	0.005	0.61
111 16: 2	112 3:39	11.6	0.008	0.69

bp18

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 18: 3	109 2:30	8.4	0.000	0.00
111 16: 6	112 3: 2	10.9	0.003	0.27
114 15: 9	115 3:14	12.1	0.004	0.33
115 14:27	116 2: 3	11.6	0.002	0.17
118 13:10	119 4:30	15.3	0.004	0.26

bp19

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 18: 8	109 1:57	7.8	-0.007	-0.90
111 16:13	112 3:31	11.3	0.008	0.71
114 14:36	115 3:58	13.4	0.012	0.90
115 14:36	116 2: 8	11.5	0.008	0.69
118 13:14	119 4:43	15.5	0.012	0.78

bp20

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
108 18:15	109 2: 1	7.8	-0.006	-0.77
114 14:45	115 3: 9	12.4	0.004	0.32

bp21

From	To	Hours	Correction	Rate/hour
day hr:mn	day hr:mn		sec	ms
114 14:50	115 3:20	12.5	0.017	1.36
115 14:49	116 1:58	11.1	0.017	1.52
118 13:28	119 4:27	15.0	0.021	1.40

bp22

From day hr:mn	To day hr:mn	Hours	Correction sec	Rate/hour ms
108 18:30	109 1:39	7.1	-0.003	-0.42
111 16:27	112 2:57	10.5	0.004	0.38
115 14:54	116 1:27	10.6	0.005	0.47
118 13:47	119 4: 0	14.2	-0.007	-0.49

Table - 3
Lunchbox Clock Corrections

Dep. Code	Lunchbox Name	Site Name	Date Start Time April UT	Stop Time UT	Time Corr. ms
** Deployment: TEST					
TEST	0001	074	18 108:15:29:23	109:05:10:03	-1
TEST	0002	068	18 108:15:32:15	109:02:42:12	1
TEST	0003	071	18 108:15:35:00	109:02:57:11	11
TEST	0004	067	18 108:15:40:32	109:02:23:55	1
TEST	0005	070	18 108:15:43:20	109:03:51:07	-3
TEST	0006	073	18 108:15:46:02	109:03:19:37	4
TEST	0008	076	18 108:15:48:36	109:05:18:39	4
TEST	0009	069	18 108:15:51:21	109:02:48:22	2
TEST	000A	077	18 108:15:53:50		0
TEST	000C	072	18 108:15:56:27	109:05:05:42	8
TEST	000E	075	18 108:15:59:06	109:05:14:22	9
** Deployment: JL					
JL	0001	091	21 111:04:18:00	112:06:11:00	16
JL	0002	100	21 111:04:13:00	112:03:48:45	3
JL	0003	096	21 111:04:09:00	112:05:55:00	6
JL	0004	094	21 111:04:22:00	112:03:05:50	3
JL	0005	097	21 111:04:26:00	112:04:13:20	9
JL	0006	099	21 111:04:30:00	112:06:52:00	8
JL	0008	095	21 111:04:35:00	112:06:35:00	11
JL	0009	090	21 111:04:39:00	112:04:49:00	11
JL	000A		21 111:04:43:00		0
JL	000E	093	21 111:04:48:00	112:05:34:00	8
JL	000C	092	21 111:04:55:00	112:07:10:00	4
** Deployment: LN					
LN	0001	115	24 114:03:16:21	115:02:17:55	1
LN	0002	116	24 114:03:18:57	115:03:23:46	3
LN	0003	120	24 114:03:21:31	115:01:45:49	19
LN	0004		24 114:03:24:05		0
LN	0005	122	24 114:03:26:42	115:06:49:59	6
LN	0006	123	24 114:03:29:22	115:05:55:04	6
LN	0008	121	24 114:03:33:31	115:05:16:06	3
LN	0009	119	24 114:03:36:10	115:04:38:50	4
LN	000A	114	24 114:03:38:43	115:04:59:46	9
LN	000E	113	24 114:03:42:04	115:02:57:02	6
LN	000C	118	24 114:03:51:50	115:06:11:10	15
** Deployment: OR					
OR	0001	145	25 115:13:10:47	116:03:13:19	0
OR	000A	138	25 115:13:13:32	116:05:42:54	6
OR	0005	139	25 115:13:16:09	116:04:10:22	3
OR	0002	141	25 115:13:18:38	116:03:27:52	2

Dep. Code	Lunchbox Name	Site Name	Date Start Time April UT	Stop Time UT	Time Corr. ms
OR	000C	136	25 115:13:21:11	116:14:27:56	14
OR	0006	140	25 115:13:24:08	116:04:25:43	8
OR	0003	146	25 115:13:26:34	116:03:42:15	13
OR	000E	144	25 115:13:29:00	116:06:42:57	5
OR	0004	143	25 115:13:31:33	116:03:56:22	2
OR	0009	137	25 115:13:34:30	116:05:29:32	3
OR	0008	142	25 115:13:36:57	116:04:39:08	2
 ** Deployment: RT					
RT	0001	167	28 118:11:46:42	119:07:48:09	0
RT	0002	169	28 118:11:54:05	119:07:32:51	4
RT	0003	170	28 118:11:57:02	119:08:04:13	17
RT	0004	165	28 118:11:59:35	119:06:04:12	3
RT	0005	164	28 118:12:02:06	119:06:51:15	4
RT	0006	161	28 118:12:04:43	119:06:19:16	13
RT	0008	168	28 118:12:07:22	119:07:18:53	2
RT	0009	166	28 118:12:10:04	119:08:34:09	3
RT	000C	162	28 118:12:13:00	119:07:05:01	12
RT	000E	163	28 118:12:16:36	119:06:37:00	6
RT	000A	160	28 118:12:19:12	119:08:18:58	8
 ** Deployment: LT					
LT	0001	202	29 119:14:38:47	120:04:58:38	0
LT	0002	196	29 119:14:42:11	120:04:25:32	4
LT	0003	197	29 119:14:44:44	120:04:33:57	14
LT	0004	203	29 119:14:47:27	120:05:22:23	3
LT	0005	199	29 119:14:49:57	120:04:17:54	5
LT	0006	195	29 119:14:52:33	120:04:42:06	10
LT	0008	198	29 119:14:55:01	120:05:14:10	2
LT	0009	193	29 119:14:57:40	120:05:36:01	2
LT	000A	194	29 119:15:00:11	120:04:06:59	10
LT	000C	200	29 119:15:02:49	120:05:05:47	11
LT	000E	201	29 119:15:05:38	120:04:50:09	5
LT	0001	202	29 119:14:38:47	120:16:36:37	0
LT	0002	196	29 119:14:42:11	120:17:00:55	8
LT	0003	197	29 119:14:44:44	120:17:34:08	25
LT	0004	203	29 119:14:47:27	120:17:54:58	5
LT	0005	199	29 119:14:49:57	120:18:16:30	10
LT	0006	195	29 119:14:52:33	120:18:37:34	18
LT	0008	198	29 119:14:55:01	120:19:16:42	3
LT	0009	193	29 119:14:57:40	120:19:44:34	4
LT	000A	194	29 119:15:00:11	120:20:07:24	17
LT	000C	200	29 119:15:02:49	120:20:31:22	22
LT	000E	201	29 119:15:05:38	120:21:22:00	10

Table - 4
Shot Data Summary

#	Fix	Line	Section	Shot	Shot	Lat.	N	Long.	W	Date	Time	UT	Depth	Charges
										April	hr:mn:sec	m	#	Kg
32	12	I06	TE	J32	J2	81.443817	95.277803	19	00:30:00.0	100		4	108.8	
33	0	I07	JL	N33	N1	79.689667	102.863778	21	21:30:00.0	100		18	489.6	
34	27	I07	JL	K34	K1	81.034303	97.462722	21	22:16:00.0	100		6	163.2	
35	17	I07	JL	L35	L1N	80.585844	99.305664	21	22:31:00.0	100		8	217.6	
36	29	I07	JL	L36	K2	81.002114	97.506197	21	22:46:00.0	100		6	163.2	
37	19	I07	JL	L37	L2	80.622561	99.259339	21	23:01:00.0	100		8	217.6	
38	24	I07	JL	J38	J1	81.459589	95.192867	21	23:45:00.0	100		6	163.2	
39	0	I07	JL	H39	H1	81.727750	93.541500	22	00:00:00.0	100		27	734.4	
40	13	I07	JL	J40	J2	81.444039	95.276614	22	00:20:00.0	100		6	163.2	
41	17	I08	LN	L41	L1N	80.585844	99.305664	24	19:15:00.0	100		8	217.6	
42	20	I08	LN	L42	L2	80.622656	99.260372	24	19:30:00.0	100		8	217.6	
43	6	I08	LN	N43	N1	79.690722	102.866889	24	20:01:00.0	100		8	217.6	
44	30	I08	LN	K44	K2	81.002161	97.505969	24	20:15:00.0	100		18	489.6	
45	7	I08	LN	N45	N2	79.717622	102.849142	24	20:31:00.0	100		8	217.6	
46	13	I08	LN	J46	J2	81.444039	95.276614	24	21:00:00.0	100		27	734.4	
47	0	I08	LN	H47	H1	81.727750	93.541500	24	21:30:00.0	100		33	897.6	
48	21	I08	LN	M48	M1	80.173658	101.111825	24	21:46:00.0	100		17	462.4	
49	22	I08	LN	M49	M2	80.140464	101.077517	24	22:31:00.0	100		6	163.2	
50	55	I09	OR	O50	O1	81.211428	95.374661	25	19:15:00.0	100		8	217.6	
51	60	I09	OR	R51	R1	81.687089	101.916211	25	19:31:00.0	100		8	217.6	
52	57	I09	OR	O52	O2	81.227692	95.570169	25	19:45:00.0	100		8	217.6	
53	61	I09	OR	R53	R2	81.697386	101.712494	25	20:01:00.0	100		8	217.6	
54	17	I09	OR	L54	L1N	80.585844	99.305664	25	20:15:00.0	100		18	489.6	
55	62	I09	OR	P55	P1	81.469522	98.532414	25	20:46:00.0	100		6	163.2	
56	63	I09	OR	P56	P2	81.458842	98.408511	25	21:01:00.0	100		6	163.2	
57	0	I09	OR	N57	NS	80.602278	89.390083	25	21:45:00.0	100		26	707.2	
58	17	I10	RT	L58	L1N	80.585844	99.305664	28	19:00:00.0	100		20	544.0	
59	61	I10	RT	R59	R3	81.680436	101.819564	28	19:20:00.0	100		11	299.2	
60	113	I10	RT	T60	T1	80.809528	105.524397	28	19:41:00.0	100		9	244.8	
61	60	I10	RT	R61	R2	81.695694	101.710214	28	20:00:00.0	100		9	244.8	
62	114	I10	RT	T62	T2	80.822636	105.443686	28	20:21:00.0	100		9	244.8	
63	0	I10	RT	U63	U1	80.345139	107.427083	28	20:40:00.0	100		18	489.6	
64	115	I10	RT	S64	S1	81.285542	103.551578	28	21:21:00.0	100		7	190.4	
65	116	I10	RT	S65	S2	81.304478	103.482069	28	22:01:00.0	100		5	136.0	
66	0	I10	RT	Q66	Q1	82.082028	99.841194	28	22:20:00.0	100		18	489.6	
67	17	I11	LT	L67	L1N	80.585844	99.305664	29	22:20:00.0	100		9	244.8	
68	140	I11	LT	I68	I4	81.133994	96.844800	29	22:40:00.0	100		9	244.8	
69	112	I11	LT	T69	T0	80.805081	105.871353	29	23:40:00.0	100		7	190.4	
70	139	I11	LT	B70	B4	80.708381	102.370517	30	00:01:00.0	100		6	163.2	

Table - 5
Recording and Navigation Sites Summary

#	Fix Line	Site No.	Site Name	Lat.	N Long.	W Navig. System	Date April	Time UT
1	1		ICE CAMP	81.119167	96.791111	NAV		18
2	2		SYL BJARN	80.685667	95.623306	NAV		18
3	3		SYL MEIGN	80.087722	99.045389	NAV		18
4	4		SYL HUBB	81.330944	93.965528	NAV		18
5	5		SYL LOKK	81.641550	91.744339	NAV		18
6	9	I06	067 LB04	81.278133	96.171736	SYL	18	00:00
7	9	I06	068 LB02	81.278133	96.171736	SYL	18	00:00
8	9	I06	070 LB05	81.278133	96.171736	SYL	18	00:00
9	9	I06	083 BP16	81.278133	96.171736	SYL	18	00:00
10	9	I06	086 BP18	81.278133	96.171736	SYL	18	00:00
11	23	I06	074 LB01	81.122000	96.828297	SYL	19	15:08
12	23	I06	071 LB03	81.122000	96.828297	SYL	19	15:08
13	23	I06	073 LB06	81.122000	96.828297	SYL	19	15:08
14	23	I06	076 LB08	81.122000	96.828297	SYL	19	15:08
15	23	I06	069 LB09	81.122000	96.828297	SYL	19	15:08
16	23	I06	077 LBOA	81.122000	96.828297	SYL	19	15:08
17	23	I06	072 LBOC	81.122000	96.828297	SYL	19	15:08
18	23	I06	075 LBOE	81.122000	96.828297	SYL	19	15:08
19	23	I06	084 BP10	81.122000	96.828297	SYL	19	15:08
20	23	I06	088 BP11	81.122000	96.828297	SYL	19	15:08
21	23	I06	082 BP12	81.122000	96.828297	SYL	19	15:08
22	23	I06	089 BP13	81.122000	96.828297	SYL	19	15:08
23	23	I06	085 BP14	81.122000	96.828297	SYL	19	15:08
24	23	I06	087 BP17	81.122000	96.828297	SYL	19	15:08
25	23	I06	080 BP19	81.122000	96.828297	SYL	19	15:08
26	23	I06	079 BP20	81.122000	96.828297	SYL	19	15:08
27	23	I06	078 BP21	81.122000	96.828297	SYL	19	15:08
28	23	I06	081 BP22	81.122000	96.828297	SYL	19	15:08
29	31	I07	090 LB09	81.424081	95.376689	SYL	21	18:07
30	32	I07	091 LB01	81.388850	95.566650	SYL	21	18:16
31	33	I07	092 LBOC	81.352764	95.758178	SYL	21	18:25
32	34	I07	093 LBOE	81.317994	95.932086	SYL	21	18:35
33	35	I07	094 LB04	81.281350	96.116281	SYL	21	18:43
34	36	I07	095 LB08	81.246856	96.296186	SYL	21	18:53
35	37	I07	096 LB03	81.210961	96.473075	SYL	21	19:02
36	38	I07	097 LB05	81.174722	96.650192	SYL	21	19:40
37	39	I07	098 LBOA	81.139153	96.826950	SYL	21	19:48
38	40	I07	099 LB06	81.102006	97.004158	SYL	21	19:57
39	41	I07	100 LB02	81.067158	97.172786	SYL	21	20:05
40	42	I07	101 BP17	81.030558	97.353183	SYL	21	17:54
41	43	I07	102 BP12	80.994403	97.512419	SYL	21	18:11
42	44	I07	103 BP22	80.958472	97.685047	SYL	21	18:23
43	45	I07	104 BP21	80.920411	97.851103	SYL	21	18:34

#	Fix	Line	Site	Site	Lat.	N	Long.	W	Navig.	Date	Time
No.	Name	Code	Name						System	April	UT
44	46	I07	105	BP16	80.883317	98.020347	SYL	21	18:43		
45	47	I07	106	BP19	80.847378	98.193911	SYL	21	18:52		
46	48	I07	107	BP18	80.812217	98.338503	SYL	21	19:02		
47	49	I07	108	BP11	80.775022	98.501014	SYL	21	20:49		
48	50	I07	109	BP14	80.738414	98.664083	SYL	21	20:58		
49	51	I07	110	BP20	80.702644	98.830131	SYL	21	21:07		
50	52	I07	111	BP13	80.664536	98.981544	SYL	21	21:14		
51	53	I07	112	BP10	80.627889	99.137106	SYL	21	21:21		
52	64	I08	113	LB0E	80.597119	99.366169	SYL	24	16:44		
53	65	I08	114	LBOA	80.556444	99.549117	SYL	24	16:52		
54	66	I08	115	LB01	80.515625	99.719369	SYL	24	16:59		
55	67	I08	116	LB02	80.475950	99.888031	SYL	24	17:06		
56	68	I08	117	LB04	80.433994	100.060056	SYL	24	17:13		
57	69	I08	118	LB0C	80.393175	100.227708	SYL	24	17:22		
58	70	I08	119	LB09	80.352283	100.396261	SYL	24	17:28		
59	71	I08	120	LB03	80.306381	100.582944	SYL	24	18:06		
60	72	I08	121	LB08	80.270367	100.724953	SYL	24	18:09		
61	73	I08	122	LB05	80.227603	100.896256	SYL	24	18:15		
62	74	I08	123	LB06	80.188053	101.046481	SYL	24	18:23		
63	75	I09	142	LB08	81.368650	97.252236	SYL	25	15:43		
64	76	I09	141	LB02	81.346678	96.991061	SYL	25	15:52		
65	77	I09	140	LB06	81.325111	96.726775	SYL	25	15:55		
66	78	I09	139	LB05	81.303297	96.471183	SYL	25	16:03		
67	79	I09	138	LBOA	81.282575	96.214789	SYL	25	16:10		
68	80	I09	137	LB09	81.260472	95.956256	SYL	25	16:15		
69	81	I09	136	LB0C	81.238286	95.694864	SYL	25	16:22		
70	82	I09	146	LB03	81.450064	98.311897	SYL	25	17:05		
71	83	I09	145	LB01	81.430678	98.050594	SYL	25	17:13		
72	84	I09	144	LB0E	81.409825	97.781653	SYL	25	17:19		
73	85	I09	143	LB04	81.389267	97.515603	SYL	25	17:27		
74	89	I08	124	BP19	80.152478	101.182597	SYL	24	17:28		
75	90	I08	125	BP18	80.108111	101.355108	SYL	24	17:36		
76	91	I08	126	BP20	80.060000	101.466667	SYL	24	17:43		
77	92	I08	127	BP17	80.022556	101.669200	SYL	24	17:51		
78	93	I08	128	BP21	79.982231	101.839150	SYL	24	18:02		
79	94	I08	129	BP16	79.938492	101.991797	SYL	24	18:10		
80	95	I08	134	BP13	79.768381	102.609558	SYL	24	18:44		
81	96	I08	133	BP14	79.767772	102.601106	SYL	24	18:58		
82	97	I08	132	BP11	79.811428	102.445600	SYL	24	19:08		
83	98	I08	131	BP10	79.852778	102.294444	SYL	24	19:18		
84	99	I08	130	BP12	79.894725	102.144447	SYL	24	19:32		
85	100	I09	147	BP22	81.470944	98.585278	SYL	25	22:11		
86	101	I09	148	BP14	81.490833	98.865094	SYL	25	22:18		
87	102	I09	149	BP18	81.511314	99.126500	SYL	25	22:24		
88	103	I09	150	BP11	81.530292	99.400269	SYL	25	22:31		
89	104	I09	151	BP21	81.550792	99.665678	SYL	25	22:37		
90	105	I09	152	BP12	81.568578	99.950422	SYL	25	22:44		

#	Fix Line	Site No.	Site Name	Lat. Code	N Long. Name	W Navig. System	Date Time	
							April	UT
91	106	I09	153	BP16	81.589864	100.221375	SYL	25 22:49
92	107	I09	154	BP13	81.607836	100.501039	SYL	25 22:56
93	108	I09	155	BP20	81.627017	100.776700	SYL	25 23:27
94	109	I09	156	BP10	81.646586	101.052703	SYL	25 23:34
95	110	I09	157	BP17	81.676711	101.336847	SYL	25 23:42
96	111	I09	158	BP19	81.681397	101.617181	SYL	25 23:49
97	117	I10	170	LB03	81.323417	103.437792	SYL	28 16:02
98	118	I10	169	LB02	81.353889	103.302878	SYL	28 16:13
99	119	I10	168	LB08	81.391108	103.132514	SYL	28 16:22
100	120	I10	167	LB01	81.424850	102.979486	SYL	28 16:32
101	121	I10	166	LB09	81.458744	102.828406	SYL	28 16:41
102	122	I10	165	LB04	81.491631	102.668356	SYL	28 16:50
103	123	I10	164	LB05	81.526542	102.524642	SYL	28 16:58
104	124	I10	163	LB0E	81.560603	102.367486	SYL	28 18:00
105	125	I10	162	LB0C	81.593172	102.213636	SYL	28 18:08
106	126	I10	161	LB06	81.626908	102.048531	SYL	28 18:17
107	127	I10	160	LB0A	81.662433	101.881853	SYL	28 18:26
108	128	I11	193	LB09	80.715436	102.527475	SYL	29 16:22
109	129	I11	194	LB0A	80.725542	102.831528	SYL	29 16:31
110	130	I11	195	LB06	80.734072	103.125281	SYL	29 16:38
111	131	I11	196	LB02	80.743072	103.423144	SYL	29 17:09
112	132	I11	197	LB03	80.751067	103.723458	SYL	29 17:18
113	133	I11	198	LB08	80.761392	104.021719	SYL	29 17:26
114	134	I11	199	LB05	80.770778	104.323392	SYL	29 17:32
115	135	I11	200	LB0C	80.778225	104.625156	SYL	29 17:48
116	136	I11	201	LB0E	80.784883	104.935833	SYL	29 17:57
117	137	I11	202	LB01	80.793778	105.226933	SYL	30 18:06
118	138	I11	203	LB04	80.802572	105.537311	SYL	29 18:33
119	141	I10	171	BP22	81.281553	103.616533	SYL	28 23:07
120	142	I10	172	BP19	81.241153	103.785275	SYL	28 23:14
121	143	I10	173	BP20	81.202094	103.954656	SYL	28 23:21
122	144	I10	174	BP16	81.163750	104.115197	SYL	28 23:30
123	145	I10	175	BP17	81.121839	104.290094	SYL	28 23:38
124	146	I10	176	BP21	81.082467	104.455942	SYL	29 01:18
125	147	I10	177	BP18	81.042631	104.613664	SYL	29 01:34
126	148	I10	178	BP11	81.002831	104.764792	SYL	29 01:37
127	149	I10	179	BP12	80.961764	104.936292	SYL	29 01:44
128	150	I10	180	BP14	80.921433	105.087989	SYL	29 01:51
129	151	I10	181	BP13	80.881708	105.246067	SYL	29 01:58
130	152	I10	182	BP10	80.840572	105.413322	SYL	29 02:07

Appendix A - Participants List

Scientific Staff

Jay Ardaï	Lamont Doherty Geological Observatory
Isa Asudeh	Lithosphere and Canadian Shield Division
Jack Davidson	Bedford Institute of Oceanography
Dave Forsyth	Lithosphere and Canadian Shield Division
Mike Gorveatt	Atlantic Geoscience Centre
Ruth Jackson	Atlantic Geoscience Centre
Larry Johnson	Atlantic Geoscience Centre
Robert Morris	Geodetic Survey of Canada
Robert Schiemann	Geophysics Division
Larry Sobczak	Lithosphere and Canadian Shield Division
Randell Stephenson	Institute of Sedimentary and Petroleum Geology
Hans Weber	Geophysics Division
Don White	Pacific Geoscience Centre
Morley Wright	Bedford Institute of Oceanography

Air Crews

Twin Otter (Bradley 24) Helicopters (Quasar MQN, PDU)

Duncan Grant	Jim Feaver
Doug McLeod	Marc Hutcheson
Richard Campbell	Richard Rondeau
Mike Eddings	Jody McCrae

Appendix B - Water Wave and Crustal Sections

The Seismic Refraction Sections are arranged as follows:

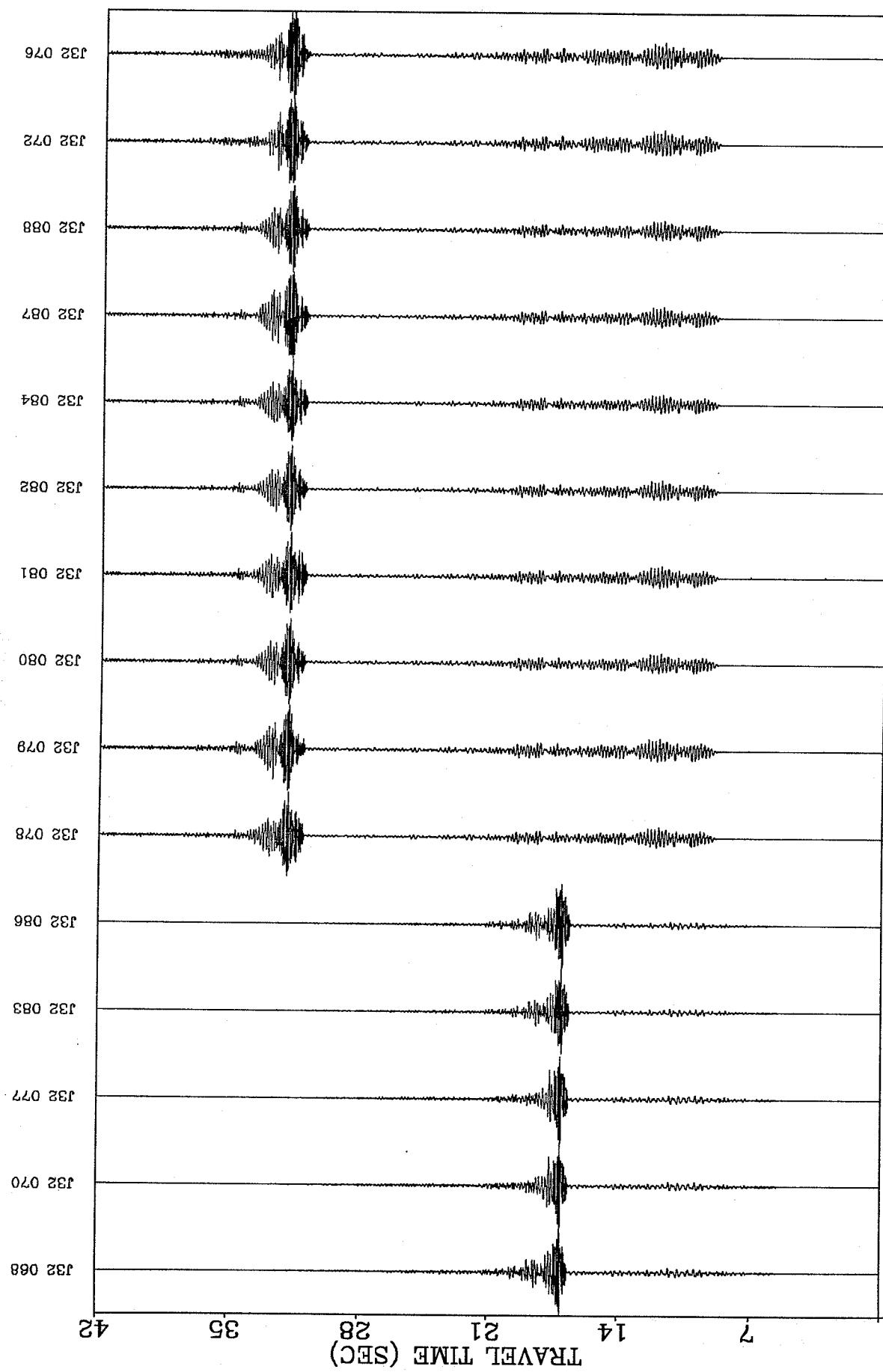
- a) A table of section specifications with all available header information sorted on distances between shots and recorders,
- b) A second table with header information sorted on azimuth of recorders for the fan shots only,
- c) Water wave sections plotted with reduction velocity of 1.44 km/s,
- d) Crustal seismic sections with reduction velocity of 6.00 km/s.

Note that the traces in all sections are normalized by arbitrary scales and do not reflect true amplitudes. No clock corrections or water depth static corrections have been applied to the plotted data.

Line: I06 Shot: J32
 ** Ice Island 86 ** Field shot point: J2 Section: TE
 Shot time: 1986 APR. 19 0:30: 0.00
 Lat.: 81.44382 N, Long.: 95.27780 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 108.8 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
068	81.27813		96.17174		0.0	23.82	219.47	0:29:58.00	0.100	spz	LB02	120	
083	81.27813		96.17174		0.0	23.82	219.47	0:29:59.17	0.100	spz	BP16	120	
070	81.27813		96.17174		0.0	23.82	219.47	0:29:58.00	0.100	spz	LB05	120	
086	81.27813		96.17174		0.0	23.82	219.47	0:29:59.19	0.100	spz	BP18	120	
077	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LBOA	120	
075	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LBOE	120	
069	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LB09	120	
082	81.12200		96.82830		0.0	44.50	216.91	0:29:59.18	0.100	spz	BP12	120	
088	81.12200		96.82830		0.0	44.50	216.91	0:29:59.19	0.100	spz	BP11	120	
081	81.12200		96.82830		0.0	44.50	216.91	0:29:59.17	0.100	spz	BP22	120	
076	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LB08	120	
085	81.12200		96.82830		0.0	44.50	216.91	0:30: 7.17	0.100	spz	BP14	120	
078	81.12200		96.82830		0.0	44.50	216.91	0:29:59.17	0.100	spz	BP21	120	
087	81.12200		96.82830		0.0	44.50	216.91	0:29:59.18	0.100	spz	BP17	120	
071	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LB03	120	
084	81.12200		96.82830		0.0	44.50	216.91	0:29:59.19	0.100	spz	BP10	120	
079	81.12200		96.82830		0.0	44.50	216.91	0:29:59.17	0.100	spz	BP20	120	
080	81.12200		96.82830		0.0	44.50	216.91	0:29:59.18	0.100	spz	BP19	120	
072	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LBOC	120	
074	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LB01	120	
073	81.12200		96.82830		0.0	44.50	216.91	0:29:58.00	0.100	spz	LB06	120	

Fig. 1A — Seismic & water waves shot J32



Line: I07 Shot: H39
 ** Ice Island 86 ** Field shot point: H1 Section: JL
 Shot time: 1986 APR. 22 0: 0: 0.00
 Lat.: 81.72775 N, Long.: 93.54150 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 734.4 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
090	81.42408		95.37669		0.0	45.29	222.43	23:59:58.00	0.100	spz	LB09	120	
091	81.38885		95.56665		0.0	50.34	222.27	23:59:58.00	0.100	spz	LB01	120	
092	81.35276		95.75818		0.0	55.49	222.12	23:59:58.00	0.100	spz	LBOC	120	
093	81.31799		95.93208		0.0	60.35	221.89	23:59:58.00	0.100	spz	LBOE	120	
095	81.24686		96.29619		0.0	70.40	221.67	23:59:58.00	0.100	spz	LB08	120	
096	81.21096		96.47308		0.0	75.41	221.54	23:59:58.00	0.100	spz	LB03	120	
097	81.17472		96.65019		0.0	80.47	221.43	23:59:58.00	0.100	spz	LB05	120	
099	81.10201		97.00416		0.0	90.61	221.28	23:59:58.00	0.100	spz	LB06	120	
100	81.06716		97.17278		0.0	95.48	221.24	23:59:58.00	0.100	spz	LB02	120	
101	81.03056		97.35318		0.0	100.63	221.23	23:59:59.17	0.100	spz	BP17	120	
102	80.99440		97.51242		0.0	105.52	221.10	23:59:59.17	0.100	spz	BP12	120	
103	80.95847		97.68504		0.0	110.55	221.10	23:59:59.17	0.100	spz	BP22	120	
104	80.92041		97.85110		0.0	115.70	220.99	23:59:59.17	0.100	spz	BP21	120	
105	80.88332		98.02035		0.0	120.81	220.95	23:59:59.17	0.100	spz	BP16	120	
106	80.84738		98.19391		0.0	125.87	221.00	23:59:59.17	0.100	spz	BP19	120	
107	80.81222		98.33850		0.0	130.55	220.89	23:59:59.17	0.100	spz	BP18	120	
108	80.77502		98.50101		0.0	135.62	220.84	23:59:59.18	0.100	spz	BP11	120	
109	80.73841		98.66409		0.0	140.65	220.83	23:59:59.18	0.100	spz	BP14	120	
110	80.70264		98.83013		0.0	145.64	220.87	23:59:59.17	0.100	spz	BP20	120	
111	80.66454		98.98154		0.0	150.69	220.78	23:59:59.17	0.100	spz	BP13	120	
112	80.62789		99.13711		0.0	155.66	220.76	23:59:59.17	0.100	spz	BP10	120	

Fig. 2A - Water wave section JL shot H39

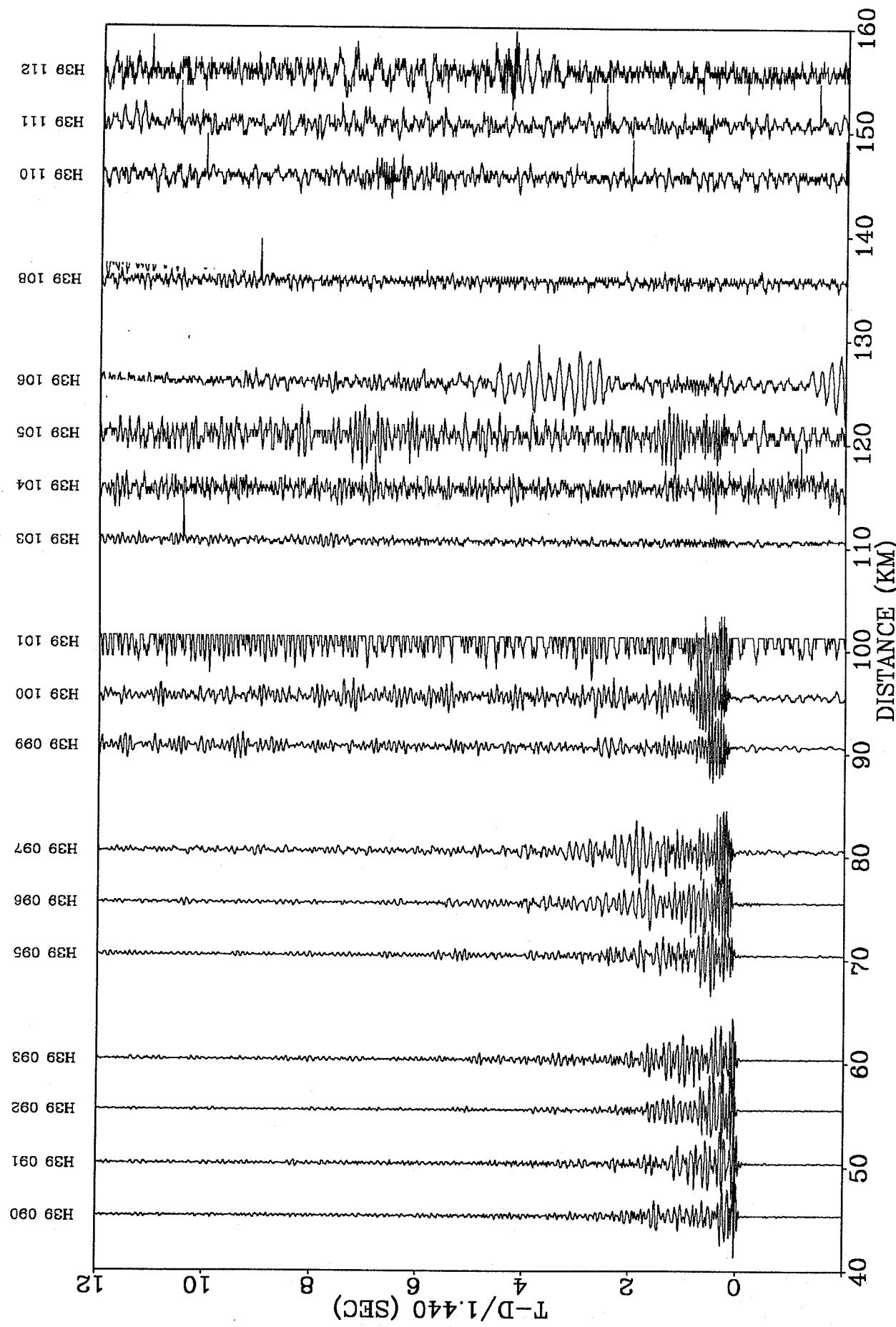
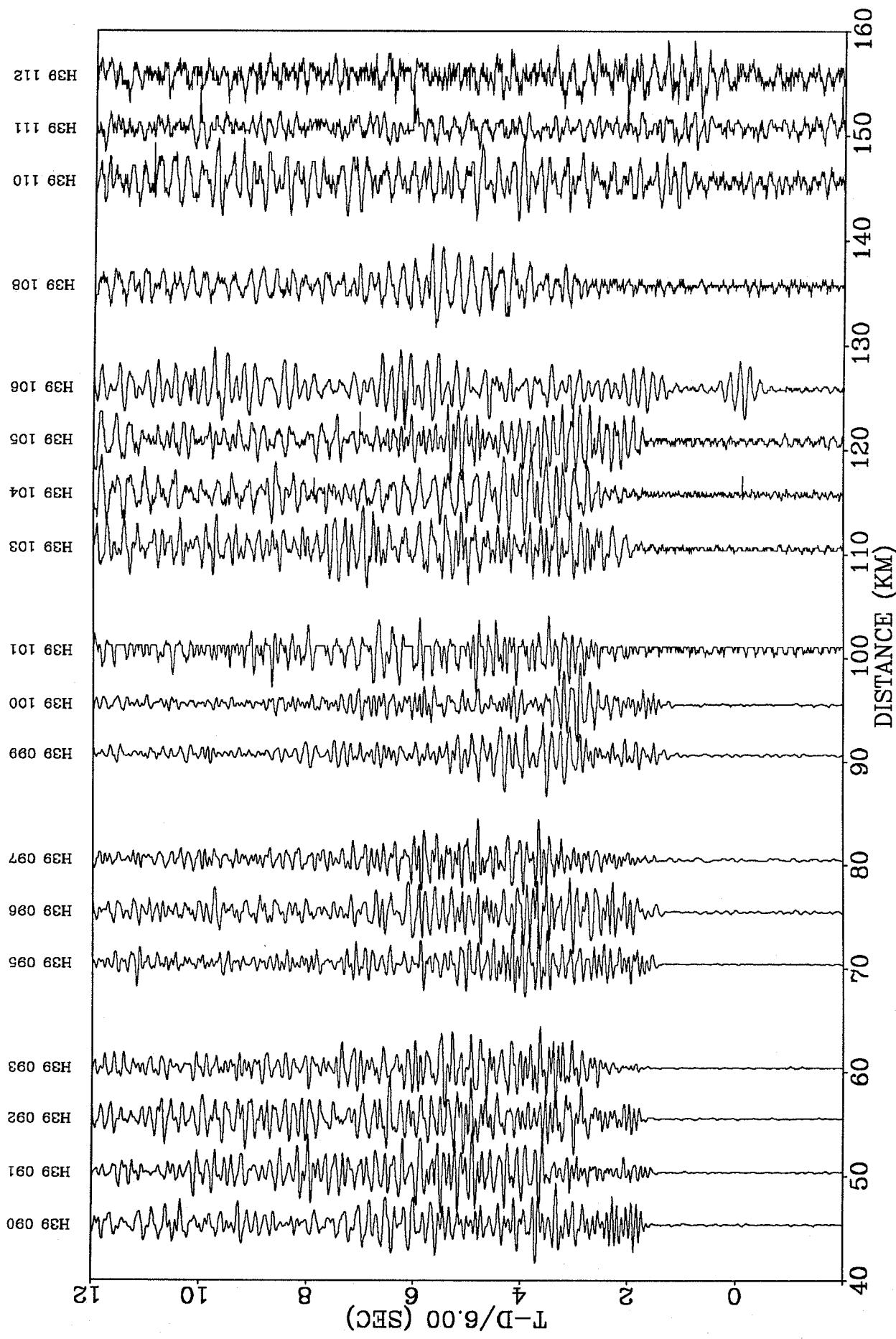


Fig. 2B - Seismic section JL shot H39



Line: I07 Shot: J38

** Ice Island 86 ** Field shot point: J1 Section: JL

Shot time: 1986 APR. 21 23:45: 0.00

Lat.: 81.45959 N, Long.: 95.19286 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
090	81.42408		95.37669		0.0	5.01	217.71	23:44:58.00	0.100	spz	LB09	120	
091	81.38885		95.56665		0.0	10.06	218.42	23:44:58.00	0.100	spz	LB01	120	
092	81.35276		95.75818		0.0	15.21	218.62	23:44:58.00	0.100	spz	LBOC	120	
093	81.31799		95.93208		0.0	20.07	218.38	23:44:58.00	0.100	spz	LBOE	120	
095	81.24686		96.29619		0.0	30.13	218.50	23:44:58.00	0.100	spz	LB08	120	
096	81.21096		96.47308		0.0	35.14	218.44	23:44:58.00	0.100	spz	LB03	120	
097	81.17472		96.65019		0.0	40.19	218.41	23:44:58.00	0.100	spz	LB05	120	
099	81.10201		97.00416		0.0	50.35	218.42	23:44:58.00	0.100	spz	LB06	120	
100	81.06716		97.17278		0.0	55.21	218.45	23:44:58.00	0.100	spz	LB02	120	
101	81.03056		97.35318		0.0	60.36	218.54	23:44:59.18	0.100	spz	BP17	120	
102	80.99440		97.51242		0.0	65.26	218.41	23:44:59.19	0.100	spz	BP12	120	
103	80.95847		97.68504		0.0	70.28	218.48	23:44:59.17	0.100	spz	BP22	120	
104	80.92041		97.85110		0.0	75.44	218.38	23:44:59.17	0.100	spz	BP21	120	
105	80.88332		98.02035		0.0	80.55	218.39	23:44:59.17	0.100	spz	BP16	120	
106	80.84738		98.19391		0.0	85.60	218.51	23:44:59.19	0.100	spz	BP19	120	
107	80.81222		98.33850		0.0	90.29	218.39	23:44:59.17	0.100	spz	BP18	120	
108	80.77502		98.50101		0.0	95.36	218.38	23:44:59.17	0.100	spz	BP11	120	
109	80.73841		98.66409		0.0	100.39	218.40	23:44:59.17	0.100	spz	BP14	120	
110	80.70264		98.83013		0.0	105.37	218.50	23:44:59.19	0.100	spz	BP20	120	
111	80.66454		98.98154		0.0	110.43	218.40	23:44:59.18	0.100	spz	BP13	120	
112	80.62789		99.13711		0.0	115.40	218.40	23:44:59.17	0.100	spz	BP10	120	

Fig. 3A - Water wave section JL shot J38

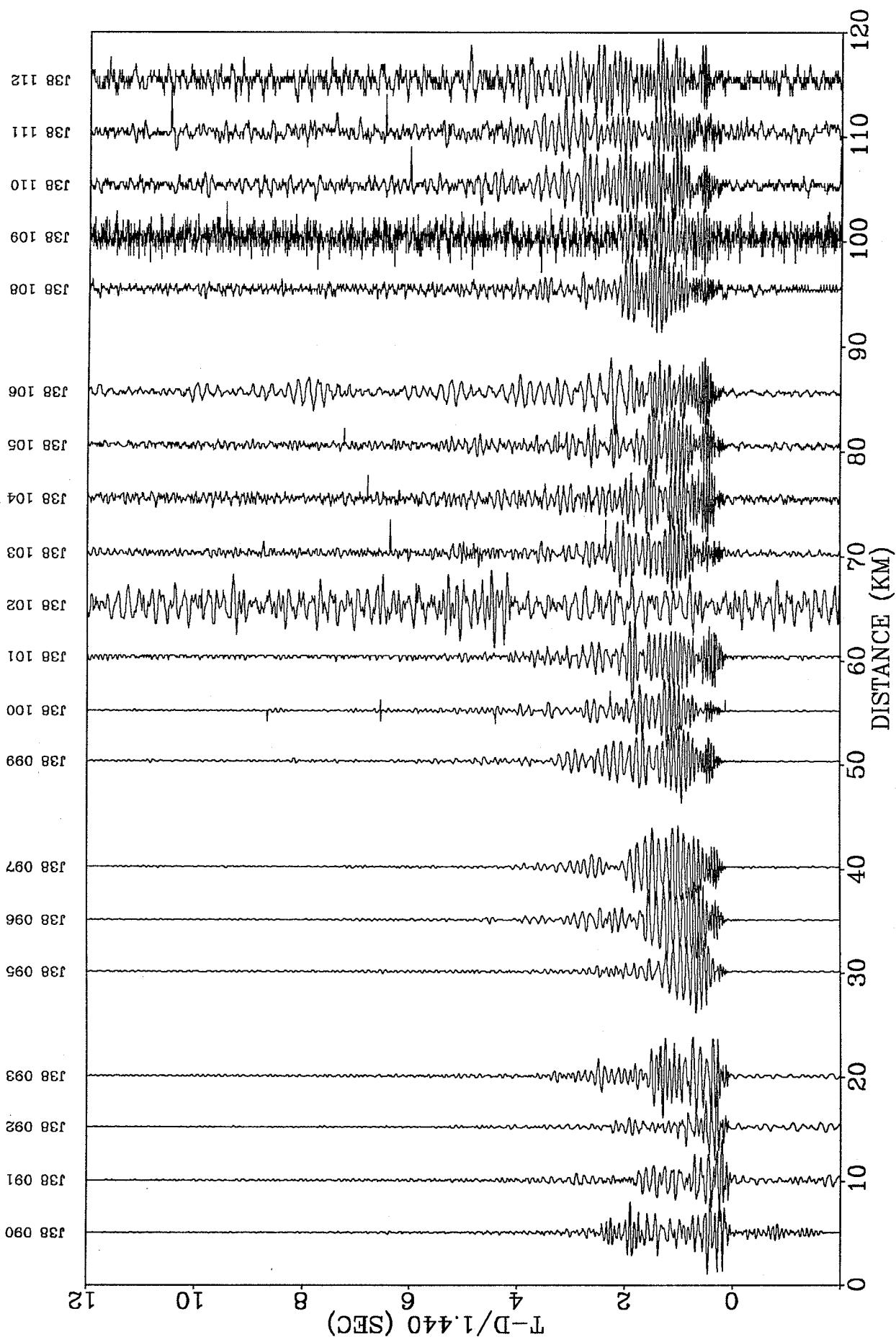
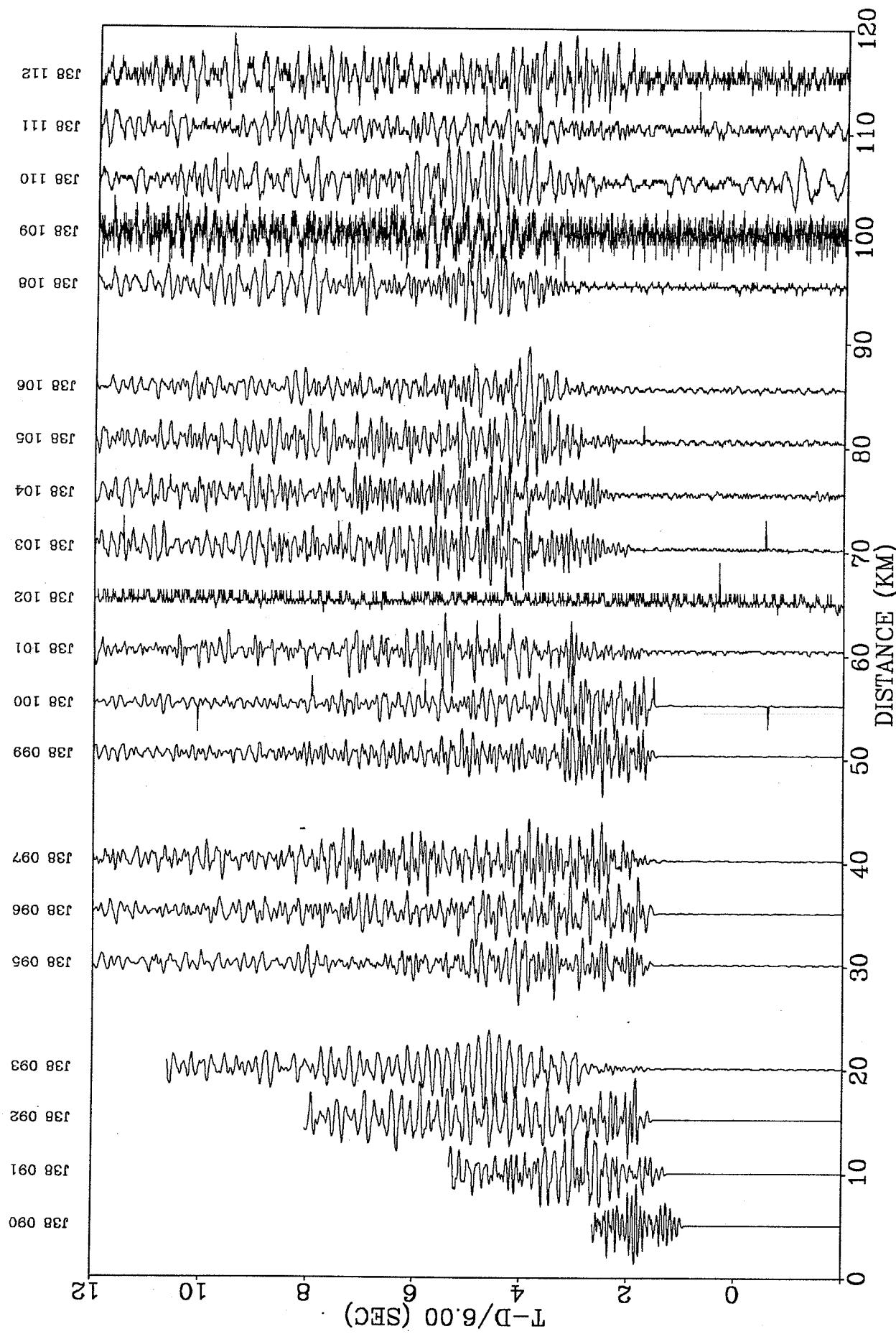


Fig. 3B – Seismic section JL shot J38



33

Line: I07 Shot: J40

** Ice Island 86 ** Field shot point: J2 Section: JL

Shot time: 1986 APR. 22 0:20: 0.00

Lat.: 81.44404 N, Long.: 95.27661 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
090	81.42408		95.37669		0.0	2.78	216.81	0:19:58.00	0.100	spz	LB09	120	
091	81.38885		95.56665		0.0	7.83	218.26	0:19:58.00	0.100	spz	LB01	120	
092	81.35276		95.75818		0.0	12.99	218.52	0:19:58.00	0.100	spz	LBOC	120	
093	81.31799		95.93208		0.0	17.85	218.26	0:19:58.00	0.100	spz	LBOE	120	
095	81.24686		96.29619		0.0	27.90	218.39	0:19:58.00	0.100	spz	LB08	120	
096	81.21096		96.47308		0.0	32.92	218.34	0:19:58.00	0.100	spz	LB03	120	
097	81.17472		96.65019		0.0	37.97	218.30	0:19:58.00	0.100	spz	LB05	120	
099	81.10201		97.00416		0.0	48.12	218.32	0:19:58.00	0.100	spz	LB06	120	
100	81.06716		97.17278		0.0	52.98	218.36	0:19:58.00	0.100	spz	LB02	120	
101	81.03056		97.35318		0.0	58.14	218.45	0:19:59.17	0.100	spz	BP17	120	
102	80.99440		97.51242		0.0	63.03	218.31	0:19:59.17	0.100	spz	BP12	120	
103	80.95847		97.68504		0.0	68.06	218.39	0:19:59.18	0.100	spz	BP22	120	
104	80.92041		97.85110		0.0	73.21	218.29	0:19:59.18	0.100	spz	BP21	120	
105	80.88332		98.02035		0.0	78.32	218.30	0:19:59.18	0.100	spz	BP16	120	
106	80.84738		98.19391		0.0	83.38	218.42	0:19:59.18	0.100	spz	BP19	120	
107	80.81222		98.33850		0.0	88.07	218.30	0:19:59.18	0.100	spz	BP18	120	
108	80.77502		98.50101		0.0	93.14	218.29	0:19:59.17	0.100	spz	BP11	120	
109	80.73841		98.66409		0.0	98.16	218.31	0:19:59.18	0.100	spz	BP14	120	
110	80.70264		98.83013		0.0	103.15	218.41	0:19:59.18	0.100	spz	BP20	120	
111	80.66454		98.98154		0.0	108.21	218.31	0:19:59.17	0.100	spz	BP13	120	
112	80.62789		99.13711		0.0	113.18	218.31	0:19:59.19	0.100	spz	BP10	120	

Fig. 4A - Water wave section JL shot J40

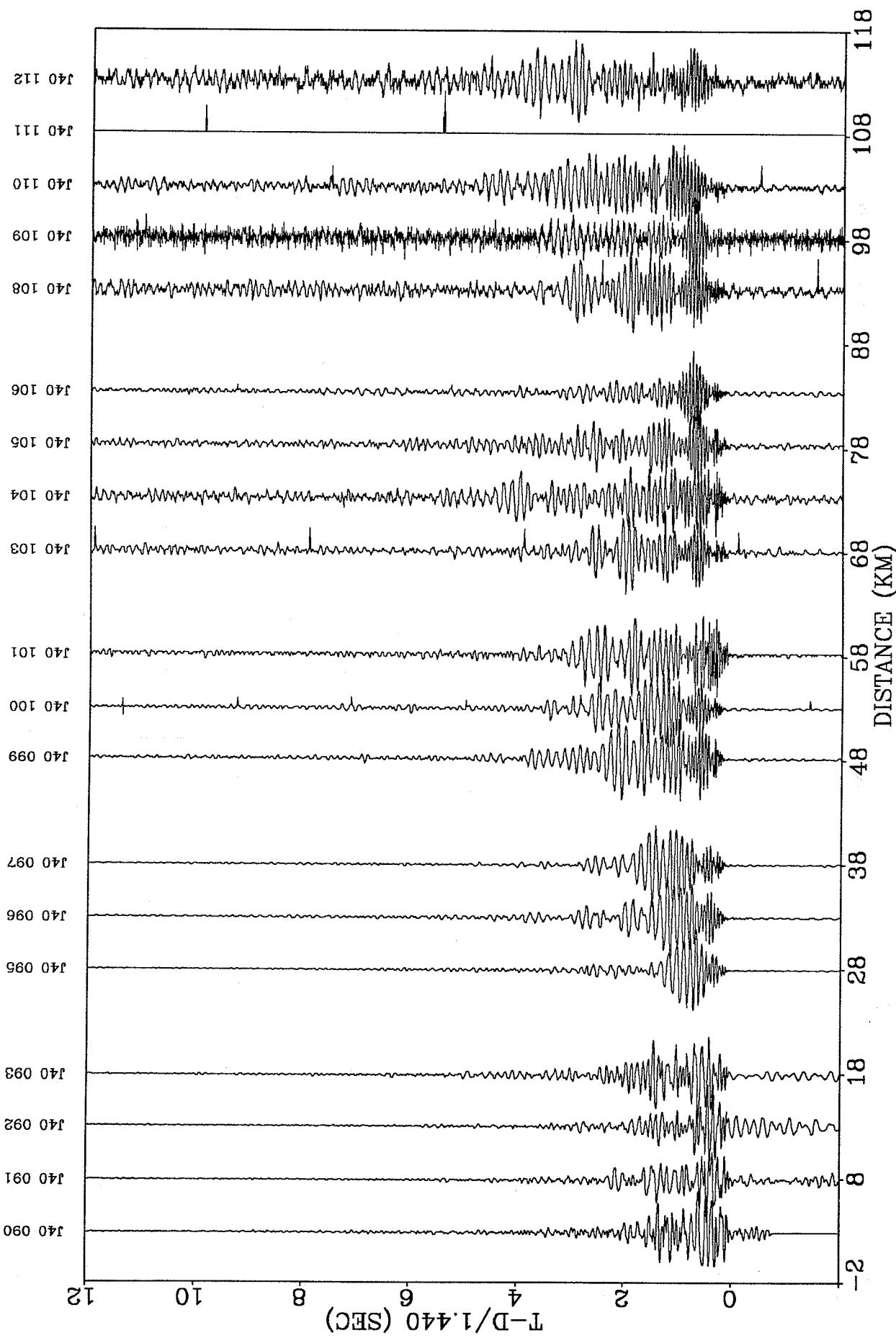
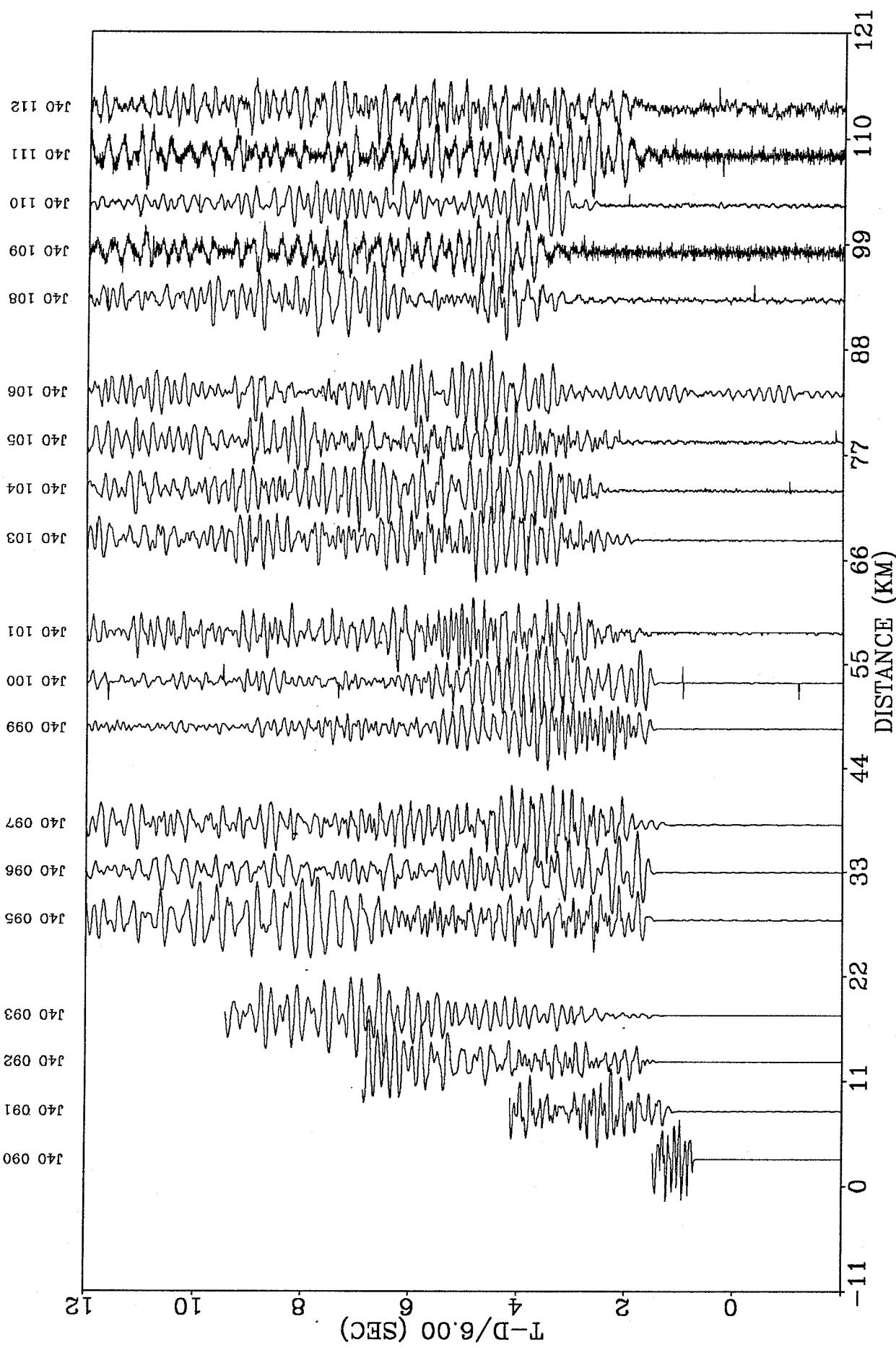


Fig. 4B – Seismic section JL shot J40



Line: I07 Shot: K34
 ** Ice Island 86 ** Field shot point: K1 Section: JL
 Shot time: 1986 APR. 21 22:16: 0.00
 Lat.: 81.03430 N, Long.: 97.46272 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
090	81.42408		95.37669		0.0	56.18	38.19	22:14:58.00	0.100	spz	LB09	120	
091	81.38885		95.56665		0.0	51.13	38.32	22:14:58.00	0.100	spz	LB01	120	
092	81.35276		95.75818		0.0	45.98	38.50	22:14:58.00	0.100	spz	LBOC	120	
093	81.31799		95.93208		0.0	41.12	38.86	22:14:58.00	0.100	spz	LBOE	120	
095	81.24686		96.29619		0.0	31.08	39.63	22:14:58.00	0.100	spz	LB08	120	
096	81.21096		96.47308		0.0	26.08	40.36	22:14:58.00	0.100	spz	LB03	120	
097	81.17472		96.65019		0.0	21.04	41.43	22:14:58.00	0.100	spz	LB05	120	
099	81.10201		97.00416		0.0	10.97	46.22	22:14:58.00	0.100	spz	LB06	120	
100	81.06716		97.17278		0.0	6.23	53.79	22:14:58.00	0.100	spz	LB02	120	
101	81.03056		97.35318		0.0	1.95	102.32	22:14:59.18	0.100	spz	BP17	120	
102	80.99440		97.51242		0.0	4.54	191.03	22:14:59.17	0.100	spz	BP12	120	
103	80.95847		97.68504		0.0	9.32	204.76	22:14:59.17	0.100	spz	BP22	120	
104	80.92041		97.85110		0.0	14.42	208.33	22:14:59.19	0.100	spz	BP21	120	
105	80.88332		98.02035		0.0	19.50	210.41	22:14:59.17	0.100	spz	BP16	120	
106	80.84738		98.19391		0.0	24.52	212.00	22:14:59.18	0.100	spz	BP19	120	
107	80.81222		98.33850		0.0	29.21	212.32	22:14:59.19	0.100	spz	BP18	120	
108	80.77502		98.50101		0.0	34.27	212.85	22:14:59.17	0.100	spz	BP11	120	
109	80.73841		98.66409		0.0	39.29	213.34	22:14:59.18	0.100	spz	BP14	120	
110	80.70264		98.83013		0.0	44.26	213.88	22:14:59.18	0.100	spz	BP20	120	
111	80.66454		98.98154		0.0	49.32	213.91	22:14:59.19	0.100	spz	BP13	120	
112	80.62789		99.13711		0.0	54.29	214.12	22:14:59.18	0.100	spz	BP10	120	

Line: I07 Shot: K34
 ** Ice Island 86 ** Field shot point: K1 Section: JL
 Shot time: 1986 APR. 21 22:16: 0.00
 Lat.: 81.03430 N, Long.: 97.46272 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
101	81.03056		97.35318		0.0	1.95	102.32	22:14:59.18	0.100	spz	BP17	120	
102	80.99440		97.51242		0.0	4.54	191.03	22:14:59.17	0.100	spz	BP12	120	
100	81.06716		97.17278		0.0	6.23	53.79	22:14:58.00	0.100	spz	LB02	120	
103	80.95847		97.68504		0.0	9.32	204.76	22:14:59.17	0.100	spz	BP22	120	
099	81.10201		97.00416		0.0	10.97	46.22	22:14:58.00	0.100	spz	LB06	120	
104	80.92041		97.85110		0.0	14.42	208.33	22:14:59.19	0.100	spz	BP21	120	
105	80.88332		98.02035		0.0	19.50	210.41	22:14:59.17	0.100	spz	BP16	120	
097	81.17472		96.65019		0.0	21.04	41.43	22:14:58.00	0.100	spz	LB05	120	
106	80.84738		98.19391		0.0	24.52	212.00	22:14:59.18	0.100	spz	BP19	120	
096	81.21096		96.47308		0.0	26.08	40.36	22:14:58.00	0.100	spz	LB03	120	
107	80.81222		98.33850		0.0	29.21	212.32	22:14:59.19	0.100	spz	BP18	120	
095	81.24686		96.29619		0.0	31.08	39.63	22:14:58.00	0.100	spz	LB08	120	
108	80.77502		98.50101		0.0	34.27	212.85	22:14:59.17	0.100	spz	BP11	120	
109	80.73841		98.66409		0.0	39.29	213.34	22:14:59.18	0.100	spz	BP14	120	
093	81.31799		95.93208		0.0	41.12	38.86	22:14:58.00	0.100	spz	LB0E	120	
110	80.70264		98.83013		0.0	44.26	213.88	22:14:59.18	0.100	spz	BP20	120	
092	81.35276		95.75818		0.0	45.98	38.50	22:14:58.00	0.100	spz	LBOC	120	
111	80.66454		98.98154		0.0	49.32	213.91	22:14:59.19	0.100	spz	BP13	120	
091	81.38885		95.56665		0.0	51.13	38.32	22:14:58.00	0.100	spz	LB01	120	
112	80.62789		99.13711		0.0	54.29	214.12	22:14:59.18	0.100	spz	BP10	120	
090	81.42408		95.37669		0.0	56.18	38.19	22:14:58.00	0.100	spz	LB09	120	

Fig. 5A - Water wave section JL shot K34

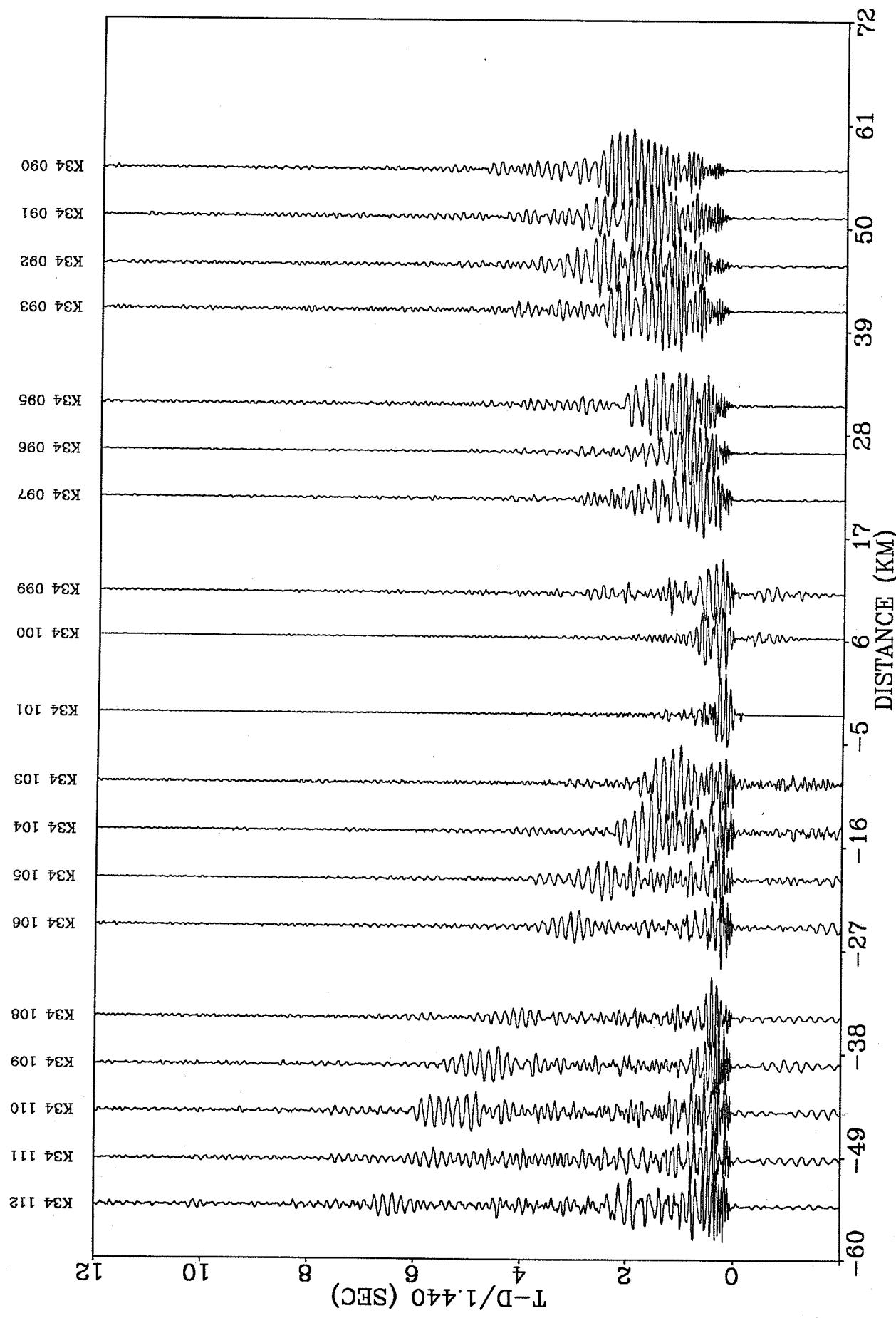
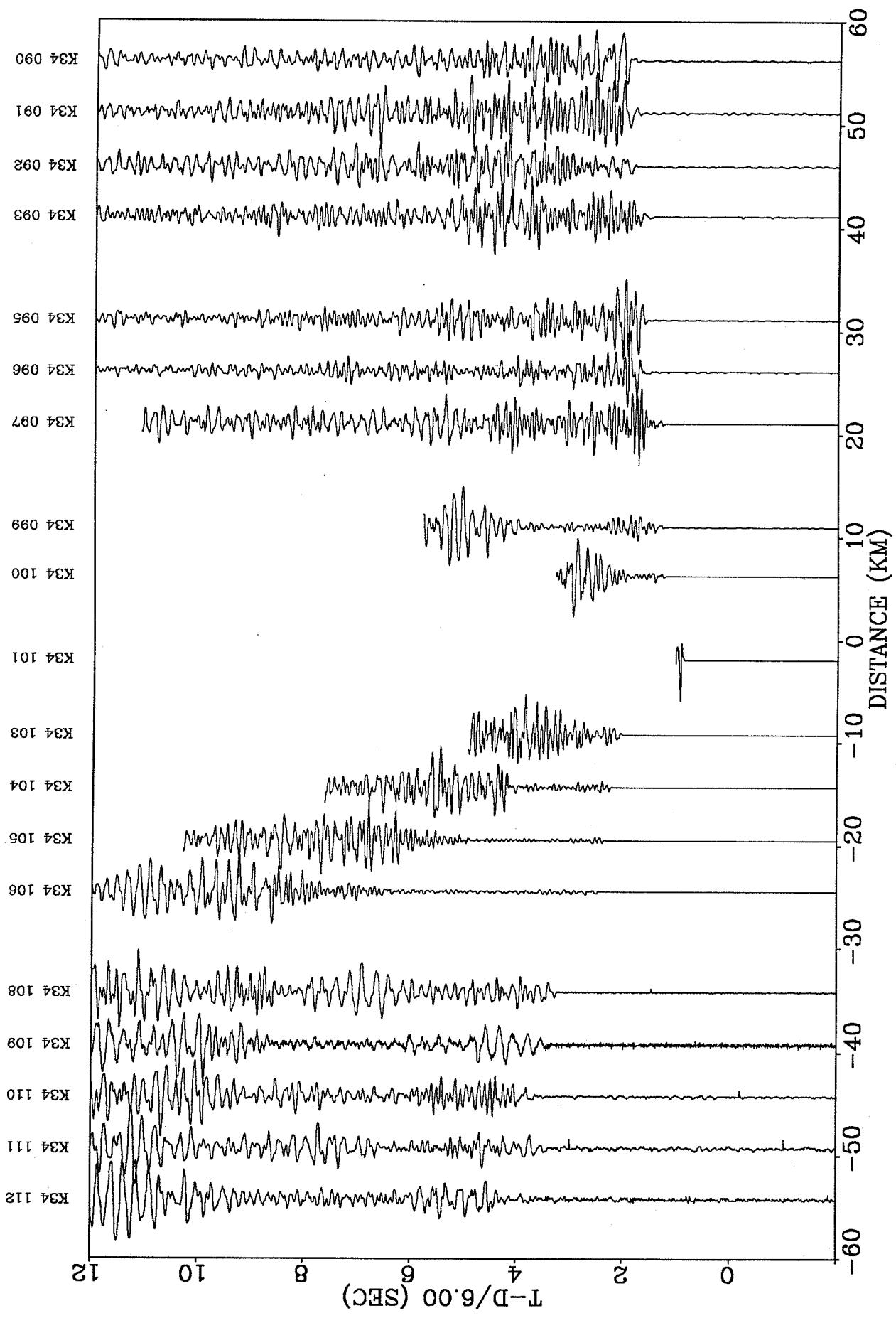


Fig. 5B – Seismic section JL shot K34



Line: I07 Shot: L35
 ** Ice Island 86 ** Field shot point: L1N Section: JL
 Shot time: 1986 APR. 21 22:31: 0.00
 Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
112	80.62789		99.13711		0.0	5.61	33.12	22:29:59.19	0.100	spz	BP10	120	
111	80.66454		98.98154		0.0	10.58	33.70	22:29:59.17	0.100	spz	BP13	240	
110	80.70264		98.83013		0.0	15.64	33.27	22:29:59.19	0.100	spz	BP20	120	
109	80.73841		98.66409		0.0	20.63	34.00	22:29:59.17	0.100	spz	BP14	120	
108	80.77502		98.50101		0.0	25.65	34.17	22:29:59.18	0.100	spz	BP11	120	
107	80.81222		98.33850		0.0	30.72	34.15	22:29:59.17	0.100	spz	BP18	120	
106	80.84738		98.19391		0.0	35.41	33.90	22:29:59.19	0.100	spz	BP19	120	
105	80.88332		98.02035		0.0	40.47	34.20	22:29:59.18	0.100	spz	BP16	120	
104	80.92041		97.85110		0.0	45.57	34.23	22:29:59.17	0.100	spz	BP21	120	
103	80.95847		97.68504		0.0	50.73	34.10	22:29:59.17	0.100	spz	BP22	120	
102	80.99440		97.51242		0.0	55.75	34.21	22:29:59.16	0.100	spz	BP12	120	
101	81.03056		97.35318		0.0	60.65	34.09	22:29:59.18	0.100	spz	BP17	120	
100	81.06716		97.17278		0.0	65.80	34.20	22:29:58.00	0.100	spz	LB02	120	
099	81.10201		97.00416		0.0	70.67	34.23	22:29:58.00	0.100	spz	LB06	120	
097	81.17472		96.65019		0.0	80.82	34.25	22:29:58.00	0.100	spz	LB05	120	
096	81.21096		96.47308		0.0	85.87	34.24	22:29:58.00	0.100	spz	LB03	120	
095	81.24686		96.29619		0.0	90.89	34.23	22:29:58.00	0.100	spz	LB08	120	
093	81.31799		95.93208		0.0	100.94	34.28	22:29:58.00	0.100	spz	LBOE	120	
092	81.35276		95.75818		0.0	105.80	34.24	22:29:58.00	0.100	spz	LB0C	120	
091	81.38885		95.56665		0.0	110.95	34.28	22:29:58.00	0.100	spz	LB01	120	
090	81.42408		95.37669		0.0	116.01	34.31	22:29:58.00	0.100	spz	LB09	120	

Fig. 6A — Water wave section JL shot L35

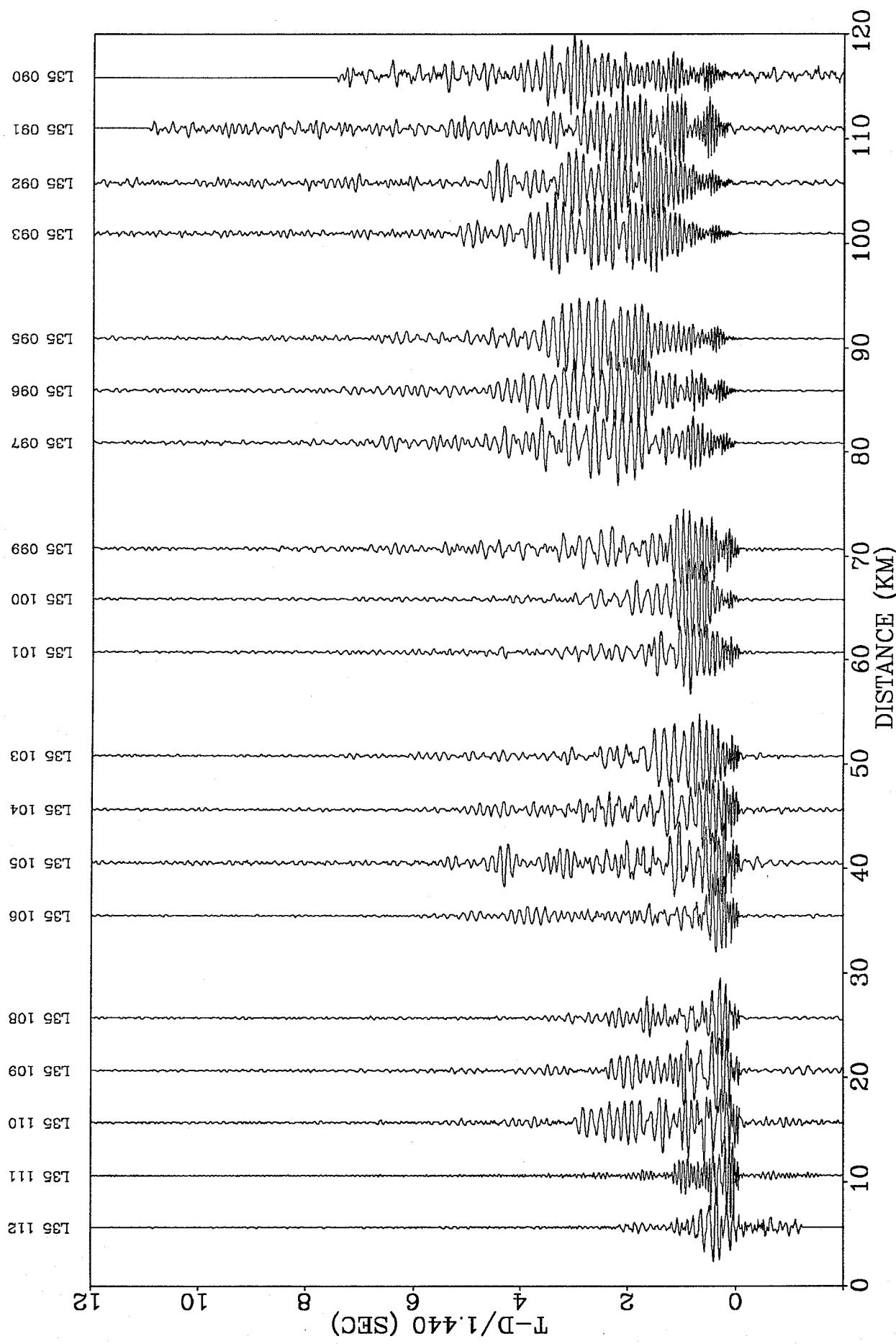
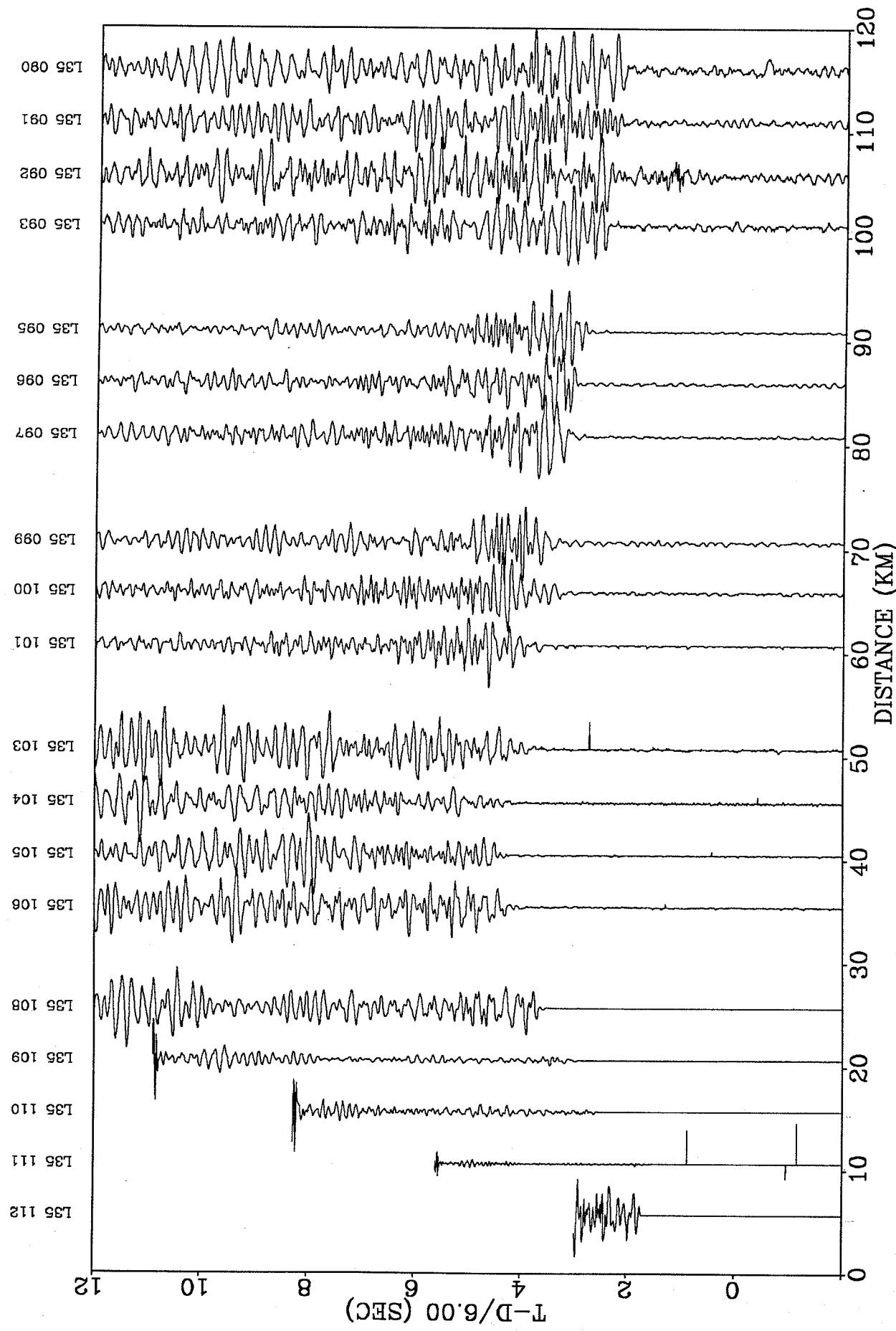


Fig. 6B – Seismic section JL shot L35



Line: I07 Shot: L36
** Ice Island 86 ** Field shot point: K2 Section: JL
Shot time: 1986 APR. 21 22:46: 0.00
Lat.: 81.00211 N, Long.: 97.50620 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
090	81.42408		95.37669		0.0	59.50	36.58	22:44:58.00	0.100	spz	LB09	120	
091	81.38885		95.56665		0.0	54.44	36.56	22:44:58.00	0.100	spz	LB01	120	
092	81.35276		95.75818		0.0	49.29	36.54	22:44:58.00	0.100	spz	LBOC	120	
093	81.31799		95.93208		0.0	44.43	36.67	22:44:58.00	0.100	spz	LBOE	120	
095	81.24686		96.29619		0.0	34.38	36.74	22:44:58.00	0.100	spz	LB08	120	
096	81.21096		96.47308		0.0	29.36	36.90	22:44:58.00	0.100	spz	LB03	120	
097	81.17472		96.65019		0.0	24.31	37.12	22:44:58.00	0.100	spz	LB05	120	
099	81.10201		97.00416		0.0	14.16	37.77	22:44:58.00	0.100	spz	LB06	120	
100	81.06716		97.17278		0.0	9.30	38.46	22:44:58.00	0.100	spz	LB02	120	
101	81.03056		97.35318		0.0	4.15	39.96	22:44:59.18	0.100	spz	BP17	120	
102	80.99440		97.51242		0.0	0.87	187.20	22:44:59.18	0.100	spz	BP12	120	
103	80.95847		97.68504		0.0	5.79	212.81	22:44:59.17	0.100	spz	BP22	120	
104	80.92041		97.85110		0.0	10.95	213.73	22:44:59.18	0.100	spz	BP21	120	
105	80.88332		98.02035		0.0	16.05	214.53	22:44:59.17	0.100	spz	BP16	120	
107	80.81222		98.33850		0.0	25.80	215.12	22:44:59.18	0.100	spz	BP18	120	
108	80.77502		98.50101		0.0	30.86	215.25	22:44:59.17	0.100	spz	BP11	120	
106	80.84738		98.19391		0.0	21.10	215.38	22:44:59.18	0.100	spz	BP19	120	
109	80.73841		98.66409		0.0	35.89	215.44	22:44:59.18	0.100	spz	BP14	120	
111	80.66454		98.98154		0.0	45.93	215.58	22:44:59.19	0.100	spz	BP13	120	
112	80.62789		99.13711		0.0	50.91	215.64	22:44:59.18	0.100	spz	BP10	120	
110	80.70264		98.83013		0.0	40.88	215.76	22:44:59.18	0.100	spz	BP20	120	

Line: I07 Shot: L36
** Ice Island 86 ** Field shot point: K2 Section: JL
Shot time: 1986 APR. 21 22:46: 0.00
Lat.: 81.00211 N, Long.: 97.50620 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
102	80.99440		97.51242		0.0	0.87	187.20	22:44:59.18	0.100	spz	BP12	120	
101	81.03056		97.35318		0.0	4.15	39.96	22:44:59.18	0.100	spz	BP17	120	
103	80.95847		97.68504		0.0	5.79	212.81	22:44:59.17	0.100	spz	BP22	120	
100	81.06716		97.17278		0.0	9.30	38.46	22:44:58.00	0.100	spz	LB02	120	
104	80.92041		97.85110		0.0	10.95	213.73	22:44:59.18	0.100	spz	BP21	120	
099	81.10201		97.00416		0.0	14.16	37.77	22:44:58.00	0.100	spz	LB06	120	
105	80.88332		98.02035		0.0	16.05	214.53	22:44:59.17	0.100	spz	BP16	120	
106	80.84738		98.19391		0.0	21.10	215.38	22:44:59.18	0.100	spz	BP19	120	
097	81.17472		96.65019		0.0	24.31	37.12	22:44:58.00	0.100	spz	LB05	120	
107	80.81222		98.33850		0.0	25.80	215.12	22:44:59.18	0.100	spz	BP18	120	
096	81.21096		96.47308		0.0	29.36	36.90	22:44:58.00	0.100	spz	LB03	120	
108	80.77502		98.50101		0.0	30.86	215.25	22:44:59.17	0.100	spz	BP11	120	
095	81.24686		96.29619		0.0	34.38	36.74	22:44:58.00	0.100	spz	LB08	120	
109	80.73841		98.66409		0.0	35.89	215.44	22:44:59.18	0.100	spz	BP14	120	
110	80.70264		98.83013		0.0	40.88	215.76	22:44:59.18	0.100	spz	BP20	120	
093	81.31799		95.93208		0.0	44.43	36.67	22:44:58.00	0.100	spz	LB0E	120	
111	80.66454		98.98154		0.0	45.93	215.58	22:44:59.19	0.100	spz	BP13	120	
092	81.35276		95.75818		0.0	49.29	36.54	22:44:58.00	0.100	spz	LB0C	120	
112	80.62789		99.13711		0.0	50.91	215.64	22:44:59.18	0.100	spz	BP10	120	
091	81.38885		95.56665		-0.0	54.44	36.56	22:44:58.00	0.100	spz	LB01	120	
090	81.42408		95.37669		0.0	59.50	36.58	22:44:58.00	0.100	spz	LB09	120	

Fig. 7A - Water wave section JL shot L36

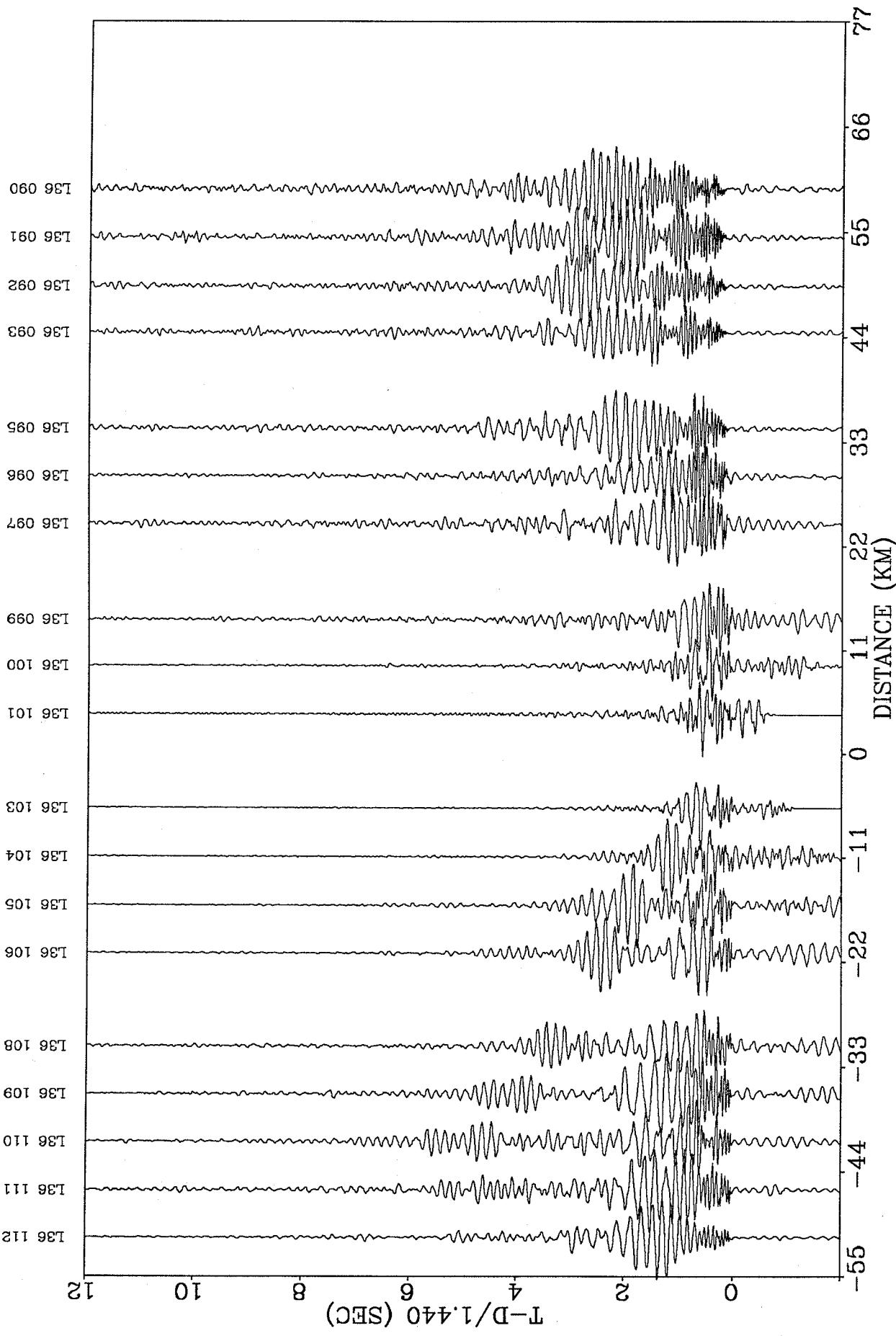
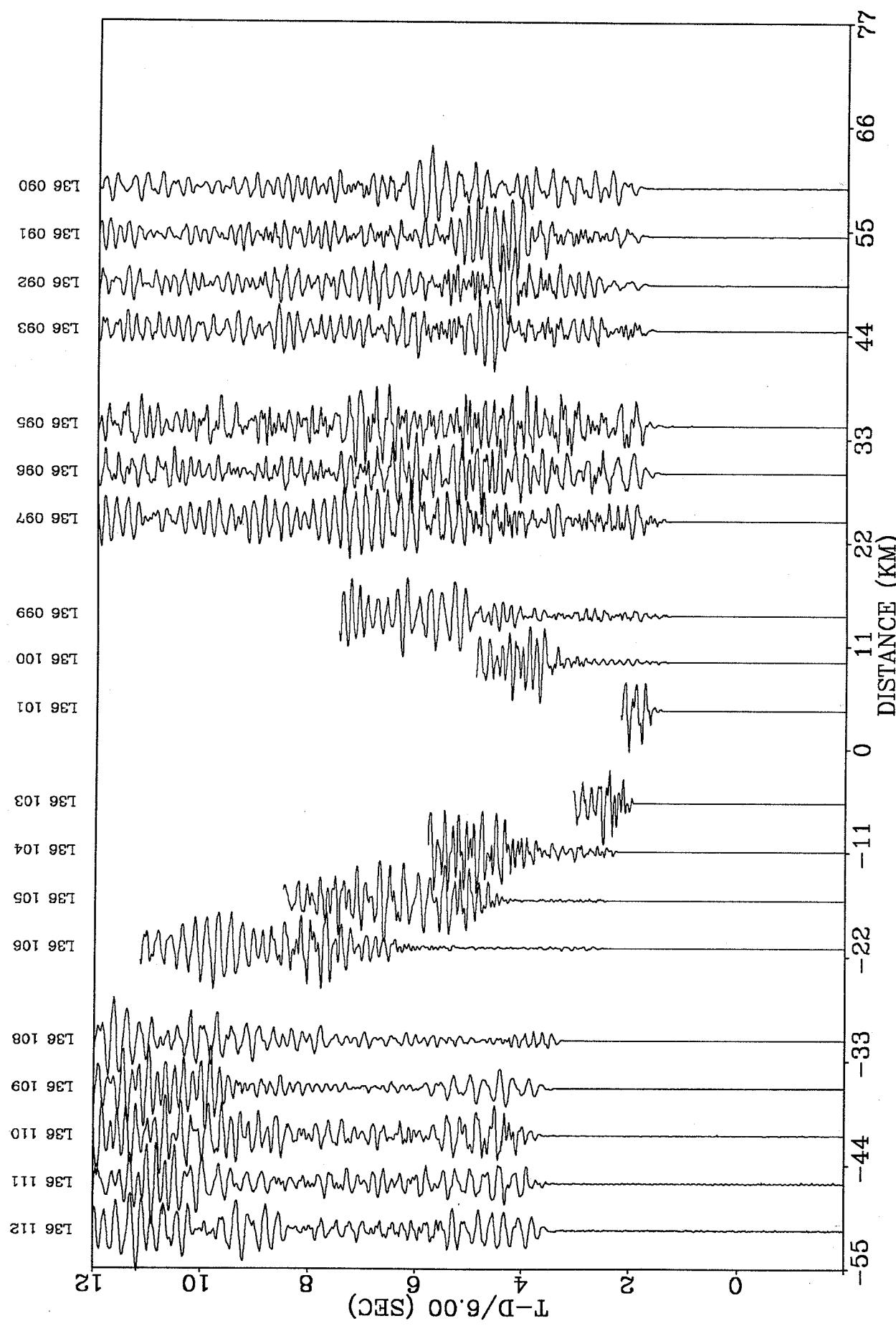


Fig. 7B - Seismic section JL shot L36



Line: I07 Shot: L37
 ** Ice Island 86 ** Field shot point: L2 Section: JL
 Shot time: 1986 APR. 21 23: 1: 0.00
 Lat.: 80.62256 N, Long.: 99.25934 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
112	80.62789		99.13711		0.0	2.30	74.95	22:59:59.17	0.100	spz	BP10	120	
111	80.66454		98.98154		0.0	6.89	46.96	22:59:59.18	0.100	spz	BP13	120	
110	80.70264		98.83013		0.0	11.85	40.80	22:59:59.19	0.100	spz	BP20	120	
109	80.73841		98.66409		0.0	16.83	39.47	22:59:59.17	0.100	spz	BP14	120	
108	80.77502		98.50101		0.0	21.85	38.43	22:59:59.18	0.100	spz	BP11	120	
107	80.81222		98.33850		0.0	26.90	37.62	22:59:59.18	0.100	spz	BP18	120	
106	80.84738		98.19391		0.0	31.58	36.82	22:59:59.18	0.100	spz	BP19	120	
105	80.88332		98.02035		0.0	36.64	36.76	22:59:59.18	0.100	spz	BP16	120	
104	80.92041		97.85110		0.0	41.74	36.48	22:59:59.18	0.100	spz	BP21	120	
103	80.95847		97.68504		0.0	46.89	36.10	22:59:59.17	0.100	spz	BP22	120	
102	80.99440		97.51242		0.0	51.91	36.03	22:59:59.19	0.100	spz	BP12	120	
101	81.03056		97.35318		0.0	56.81	35.75	22:59:59.17	0.100	spz	BP17	120	
100	81.06716		97.17278		0.0	61.96	35.73	22:59:58.00	0.100	spz	LB02	120	
099	81.10201		97.00416		0.0	66.82	35.65	22:59:58.00	0.100	spz	LB06	120	
097	81.17472		96.65019		0.0	76.97	35.50	22:59:58.00	0.100	spz	LB05	120	
096	81.21096		96.47308		0.0	82.02	35.41	22:59:58.00	0.100	spz	LB03	120	
095	81.24686		96.29619		0.0	87.04	35.34	22:59:58.00	0.100	spz	LB08	120	
093	81.31799	-95.93208			0.0	97.09	35.27	22:59:58.00	0.100	spz	LBOE	120	
092	81.35276		95.75818		0.0	101.95	35.19	22:59:58.00	0.100	spz	LBOC	120	
091	81.38885		95.56665		-0.0	107.10	35.18	22:59:58.00	0.100	spz	LB01	120	
090	81.42408		95.37669		0.0	112.16	35.18	22:59:58.00	0.100	spz	LB09	120	

Fig. 8A - Water wave section JL shot L37

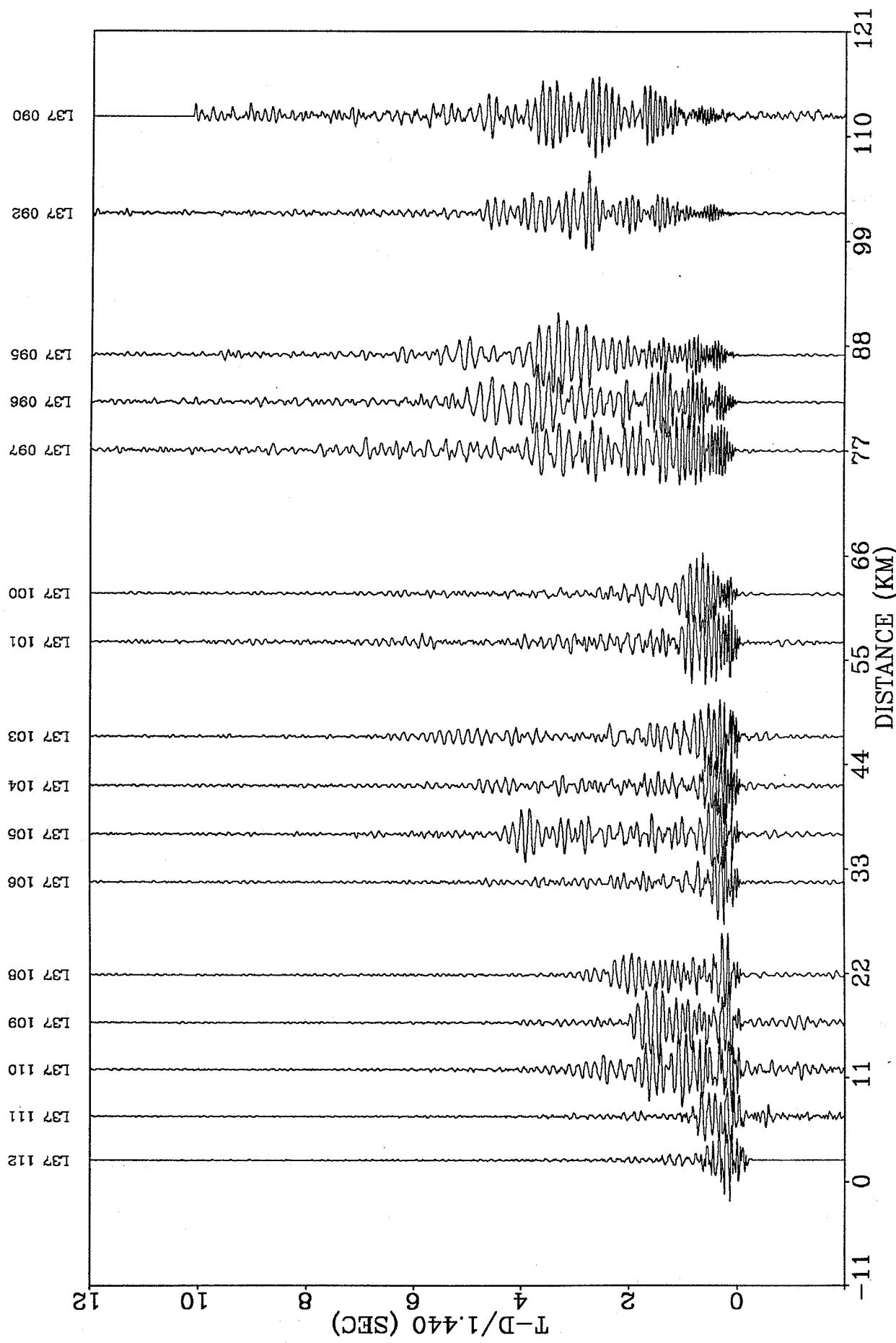
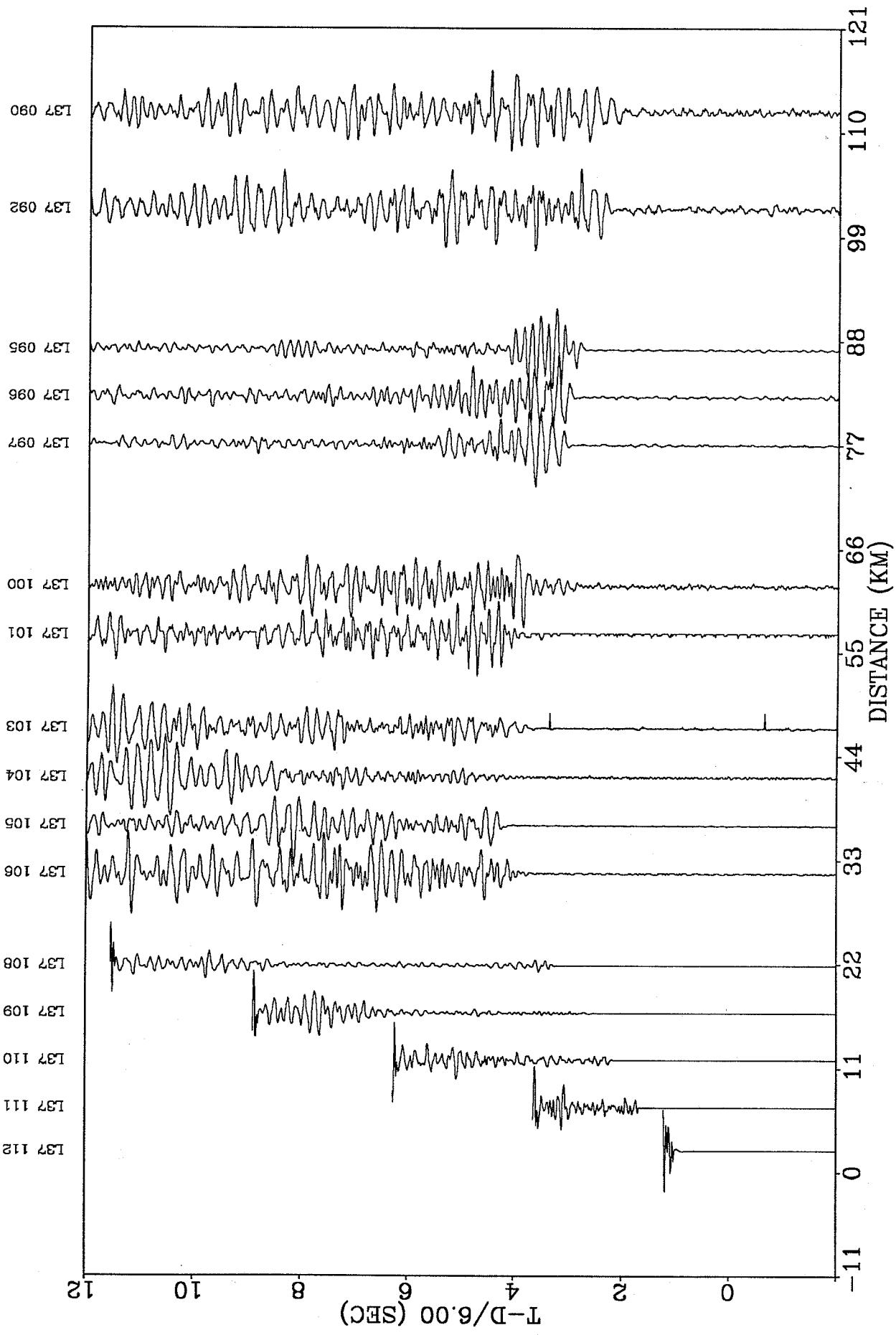


Fig. 8B – Seismic section JL shot L37



Line: I07 Shot: N33
** Ice Island 86 ** Field shot point: N1 Section: JL
Shot time: 1986 APR. 21 21:30: 0.00
Lat.: 79.68967 N, Long.: 102.86378 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 489.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
112	80.62789		99.13711		0.0	126.59	32.35	21:29:59.18	0.100	spz	BP10	120	
111	80.66454		98.98154		0.0	131.56	32.30	21:29:59.18	0.100	spz	BP13	120	
110	80.70264		98.83013		0.0	136.61	32.17	21:30: 7.18	0.100	spz	BP20	120	
109	80.73841		98.66409		0.0	141.60	32.19	21:29:59.17	0.100	spz	BP14	120	
108	80.77502		98.50101		0.0	146.62	32.16	21:29:59.18	0.100	spz	BP11	120	
107	80.81222		98.33850		0.0	151.69	32.11	21:29:59.17	0.100	spz	BP18	120	
106	80.84738		98.19391		0.0	156.38	32.01	21:29:59.17	0.100	spz	BP19	120	
105	80.88332		98.02035		0.0	161.43	32.03	21:29:59.17	0.100	spz	BP16	120	
104	80.92041		97.85110		0.0	166.54	32.00	21:29:59.17	0.100	spz	BP21	120	
103	80.95847		97.68504		0.0	171.69	31.92	21:29:59.17	0.100	spz	BP22	120	
102	80.99440		97.51242		0.0	176.72	31.92	21:29:59.17	0.100	spz	BP12	120	
101	81.03056		97.35318		0.0	181.61	31.84	21:29:59.17	0.100	spz	BP17	120	
100	81.06716		97.17278		0.0	186.76	31.85	21:29:58.00	0.100	spz	LB02	120	
099	81.10201		97.00416		0.0	191.63	31.83	21:29:58.00	0.100	spz	LB06	120	
097	81.17472		96.65019		0.0	201.78	31.79	21:29:58.00	0.100	spz	LB05	120	
096	81.21096		96.47308		0.0	206.83	31.76	21:29:58.00	0.100	spz	LB03	120	
095	81.24686		96.29619		0.0	211.85	31.73	21:29:58.00	0.100	spz	LB08	120	
093	81.31799		95.93208		0.0	221.90	31.70	21:29:58.00	0.100	spz	LB0E	120	
092	81.35276		95.75818		0.0	226.76	31.67	21:29:58.00	0.100	spz	LB0C	120	
091	81.38885		95.56665		0.0	231.91	31.66	21:29:58.00	0.100	spz	LB01	120	
090	81.42408		95.37669		0.0	236.96	31.66	21:29:58.00	0.100	spz	LB09	120	

Fig. 9A - Water wave section JL shot N33

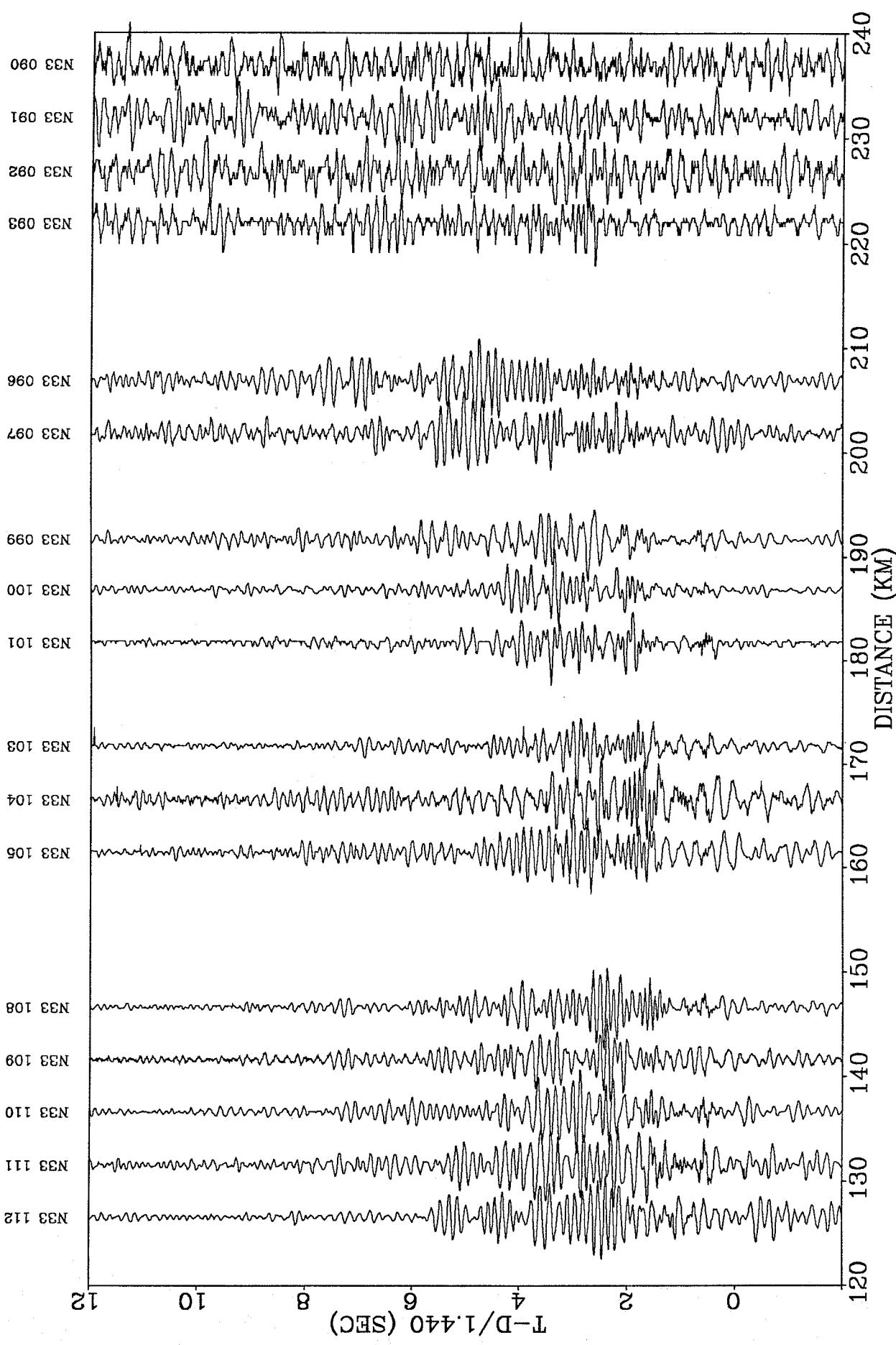
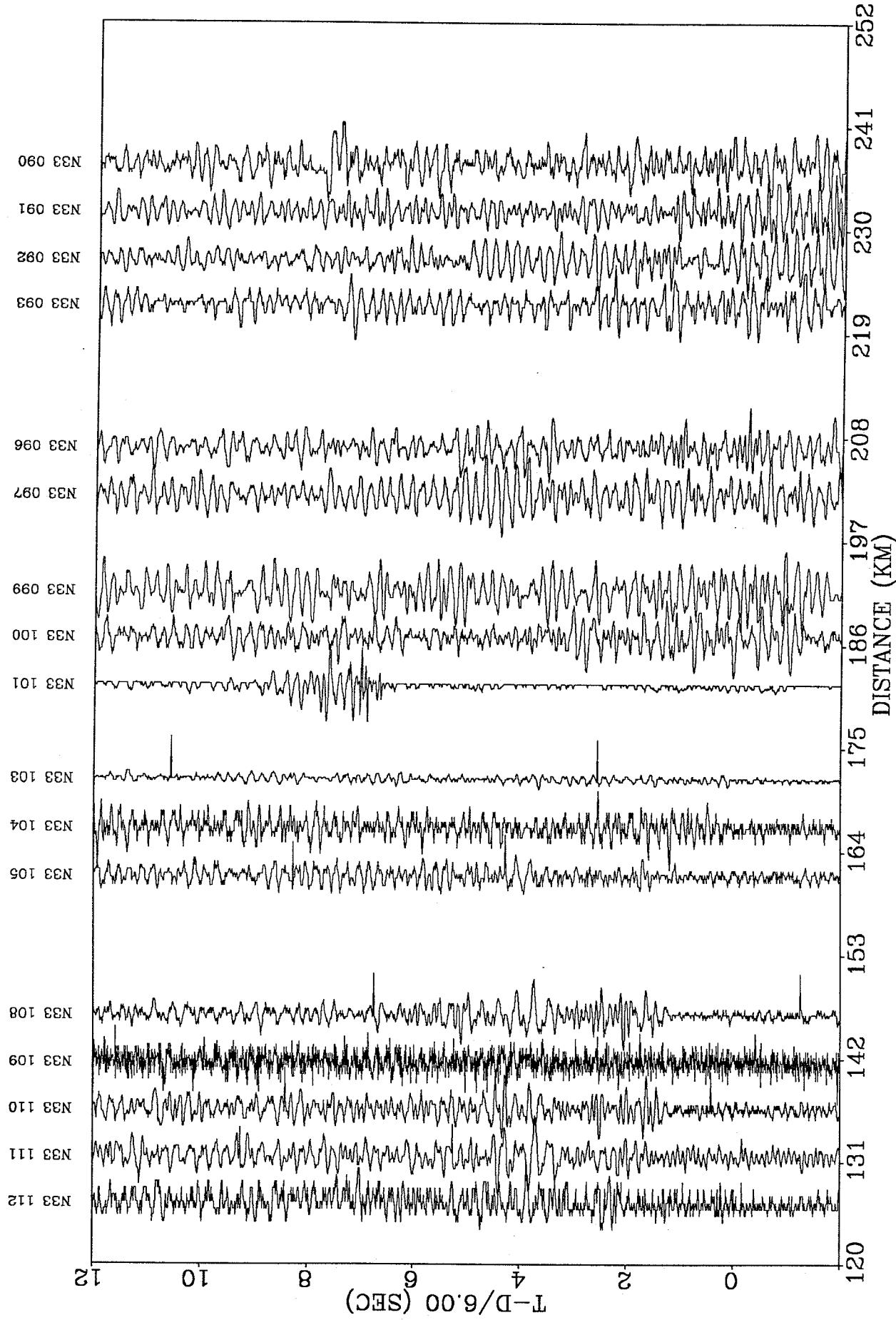


Fig. 9B – Seismic section JL shot N33



Line: I08 Shot: H47

** Ice Island 86 ** Field shot point: H1 Section: LN

Shot time: 1986 APR. 24 21:30: 0.00

Lat.: 81.72775 N, Long.: 93.54150 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 897.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
113	80.59712		99.36617		0.0	160.88	221.27	21:29:58.00	0.100	spz	LBOE	120	
114	80.55644		99.54912		0.0	166.52	221.30	21:29:58.00	0.100	spz	LBOA	120	
115	80.51563		99.71937		0.0	172.05	221.27	21:29:58.00	0.100	spz	LB01	120	
116	80.47595		99.88803		0.0	177.46	221.27	21:29:58.00	0.100	spz	LB02	120	
118	80.39317		100.22771		0.0	188.65	221.24	21:29:58.00	0.100	spz	LB0C	120	
119	80.35228		100.39626		0.0	194.20	221.24	21:29:58.00	0.100	spz	LB09	120	
120	80.30638		100.58295		0.0	200.40	221.24	21:29:58.00	0.100	spz	LB03	120	
121	80.27037		100.72495		0.0	205.23	221.23	21:29:58.00	0.100	spz	LB08	120	
122	80.22760		100.89626		0.0	211.00	221.23	21:29:58.00	0.100	spz	LB05	120	
123	80.18805		101.04648		0.0	216.26	221.21	21:29:58.00	0.100	spz	LB06	120	
124	80.15248		101.18259		0.0	221.01	221.19	21:29:59.16	0.100	spz	BP19	120	
125	80.10811		101.35511		0.0	226.96	221.20	21:29:59.19	0.100	spz	BP18	120	
126	80.06000		101.46667		0.0	232.63	220.91	21:29:59.17	0.100	spz	BP20	120	
127	80.02255		101.66920		0.0	238.27	221.15	21:29:59.18	0.100	spz	BP17	120	
128	79.98223		101.83915		0.0	243.84	221.22	21:29:59.17	0.100	spz	BP21	120	
129	79.93849		101.99180		0.0	249.56	221.19	21:29:59.17	0.100	spz	BP16	120	
130	79.89472		102.14445		0.0	255.28	221.15	21:29:59.18	0.100	spz	BP12	120	
131	79.85278		102.29444		0.0	260.81	221.15	21:29:59.17	0.100	spz	BP10	120	
132	79.81142		102.44560		0.0	266.31	221.15	21:29:59.17	0.100	spz	BP11	120	
133	79.76777		102.60110		0.0	272.07	221.15	21:29:59.17	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	272.11	221.19	21:29:59.16	0.100	spz	BP13	120	

Fig. 10A - Water wave section LN shot H47

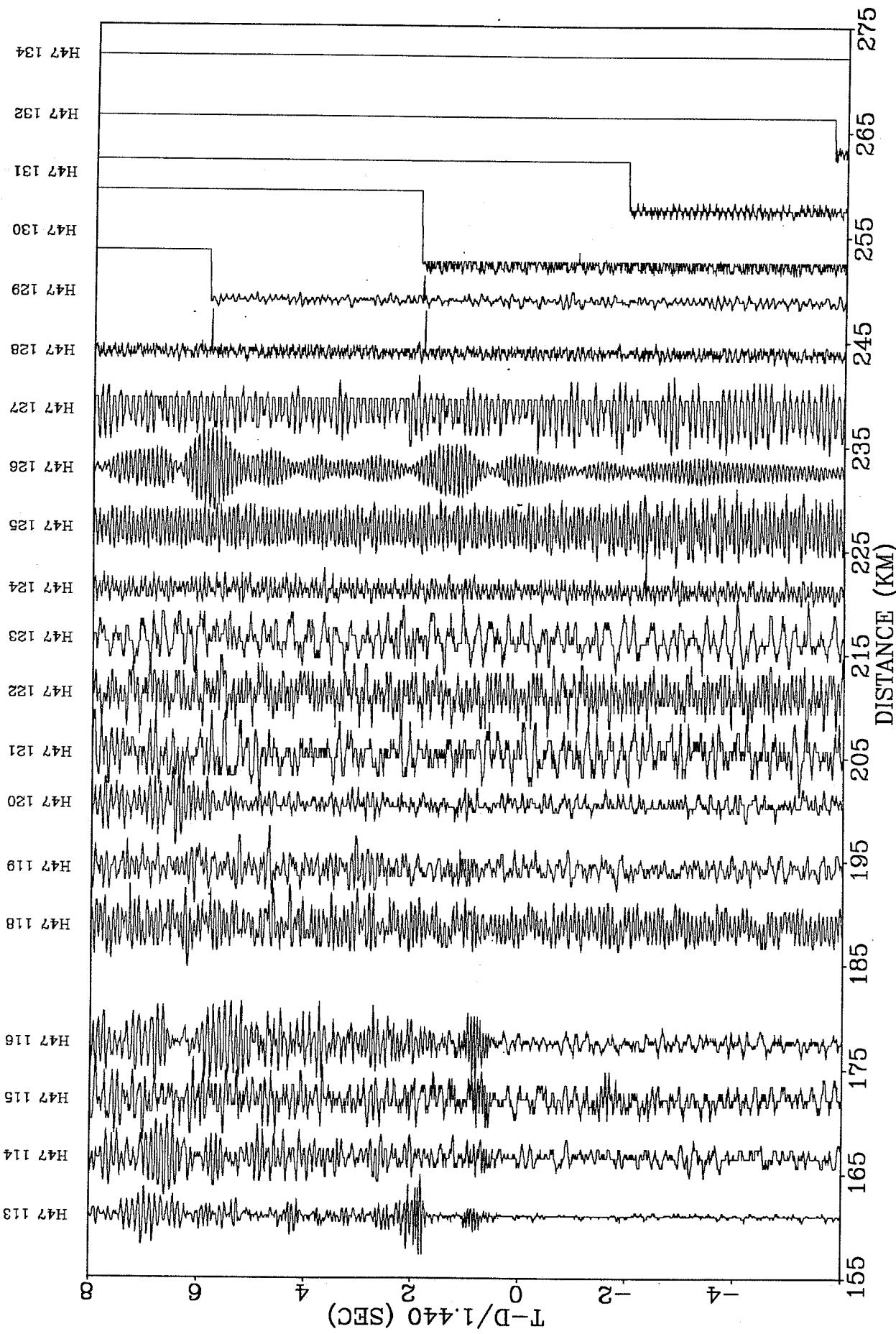
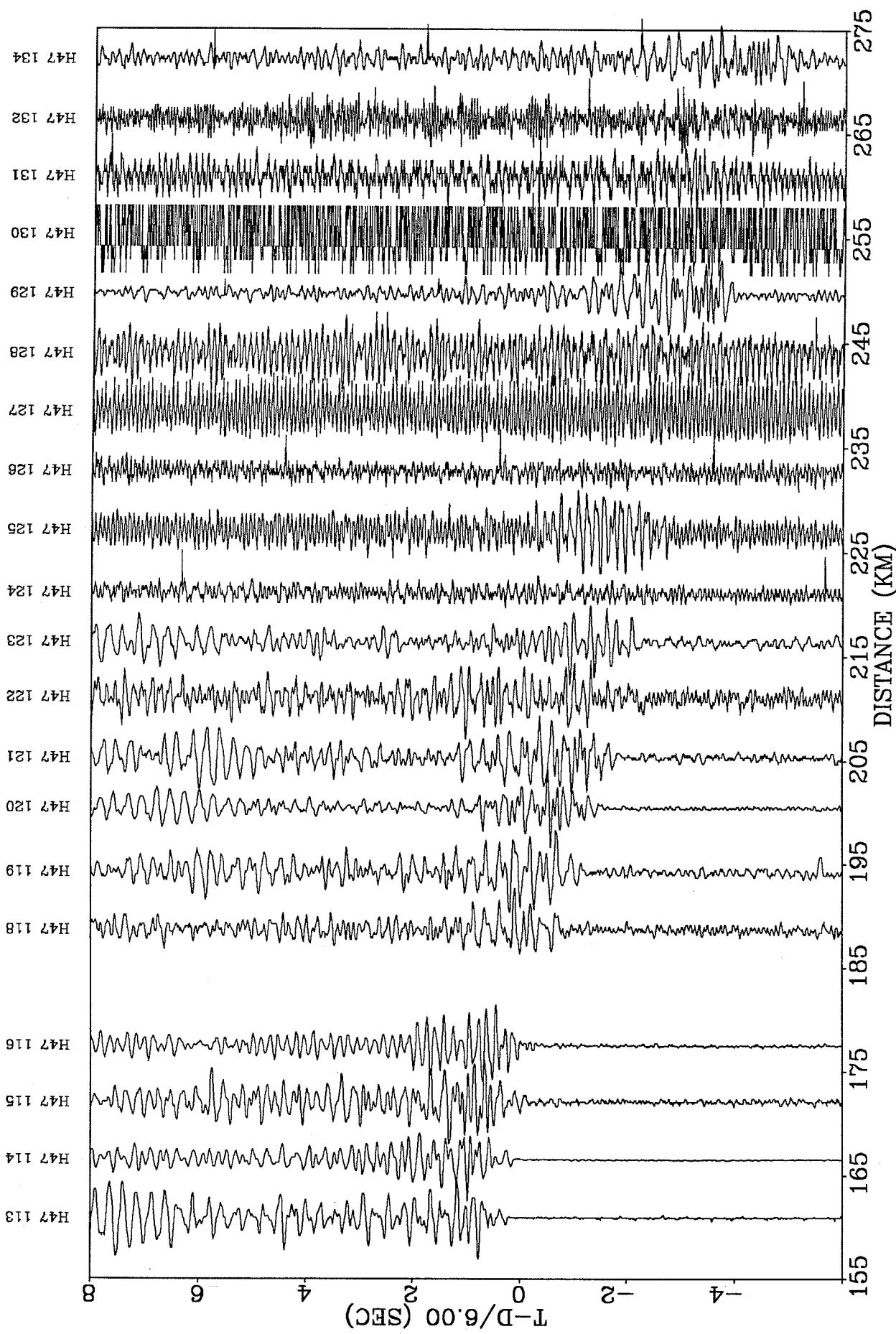


Fig. 10B – Seismic section LN shot H47



Line: I08 Shot: J46
 ** Ice Island 86 ** Field shot point: J2 Section: LN
 Shot time: 1986 APR. 24 21: 0: 0.00
 Lat.: 81.44404 N, Long.: 95.27661 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 734.4 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
113	80.59712		99.36617		0.0	118.38	219.04	20:59:58.00	0.100	spz	LBOE	120	
114	80.55644		99.54912		0.0	124.02	219.11	20:59:58.00	0.100	spz	LBOA	120	
115	80.51563		99.71937		0.0	129.55	219.09	20:59:58.00	0.100	spz	LBO1	120	
116	80.47595		99.88803		0.0	134.96	219.11	20:59:58.00	0.100	spz	LBO2	120	
118	80.39317		100.22771		0.0	146.15	219.10	20:59:58.00	0.100	spz	LBOC	120	
119	80.35228		100.39626		0.0	151.70	219.12	20:59:58.00	0.100	spz	LB09	120	
120	80.30638		100.58295		0.0	157.90	219.13	20:59:58.00	0.100	spz	LB03	120	
121	80.27037		100.72495		0.0	162.73	219.13	20:59:58.00	0.100	spz	LB08	120	
122	80.22760		100.89626		0.0	168.50	219.15	20:59:58.00	0.100	spz	LB05	120	
123	80.18805		101.04648		0.0	173.76	219.13	20:59:58.00	0.100	spz	LB06	120	
124	80.15248		101.18259		0.0	178.51	219.12	20:59:59.18	0.100	spz	BP19	120	
125	80.10811		101.35511		0.0	184.46	219.14	20:59:59.17	0.100	spz	BP18	120	
126	80.06000		101.46667		0.0	190.14	218.79	20:59:59.16	0.100	spz	BP20	120	
127	80.02255		101.66920		0.0	195.77	219.10	20:59:59.19	0.100	spz	BP17	120	
128	79.98223		101.83915		0.0	201.34	219.20	20:59:59.18	0.100	spz	BP21	120	
129	79.93849		101.99180		0.0	207.06	219.16	20:59:59.17	0.100	spz	BP16	120	
130	79.89472		102.14445		0.0	212.78	219.13	20:59:59.18	0.100	spz	BP12	120	
131	79.85278		102.29444		0.0	218.31	219.13	20:59:59.17	0.100	spz	BP10	120	
132	79.81142		102.44560		0.0	223.81	219.15	20:59:59.18	0.100	spz	BP11	120	
133	79.76777		102.60110		0.0	229.58	219.15	20:59:59.18	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	229.61	219.20	20:59:59.19	0.100	spz	BP13	120	

Fig. 11A - Water wave section LN shot J46

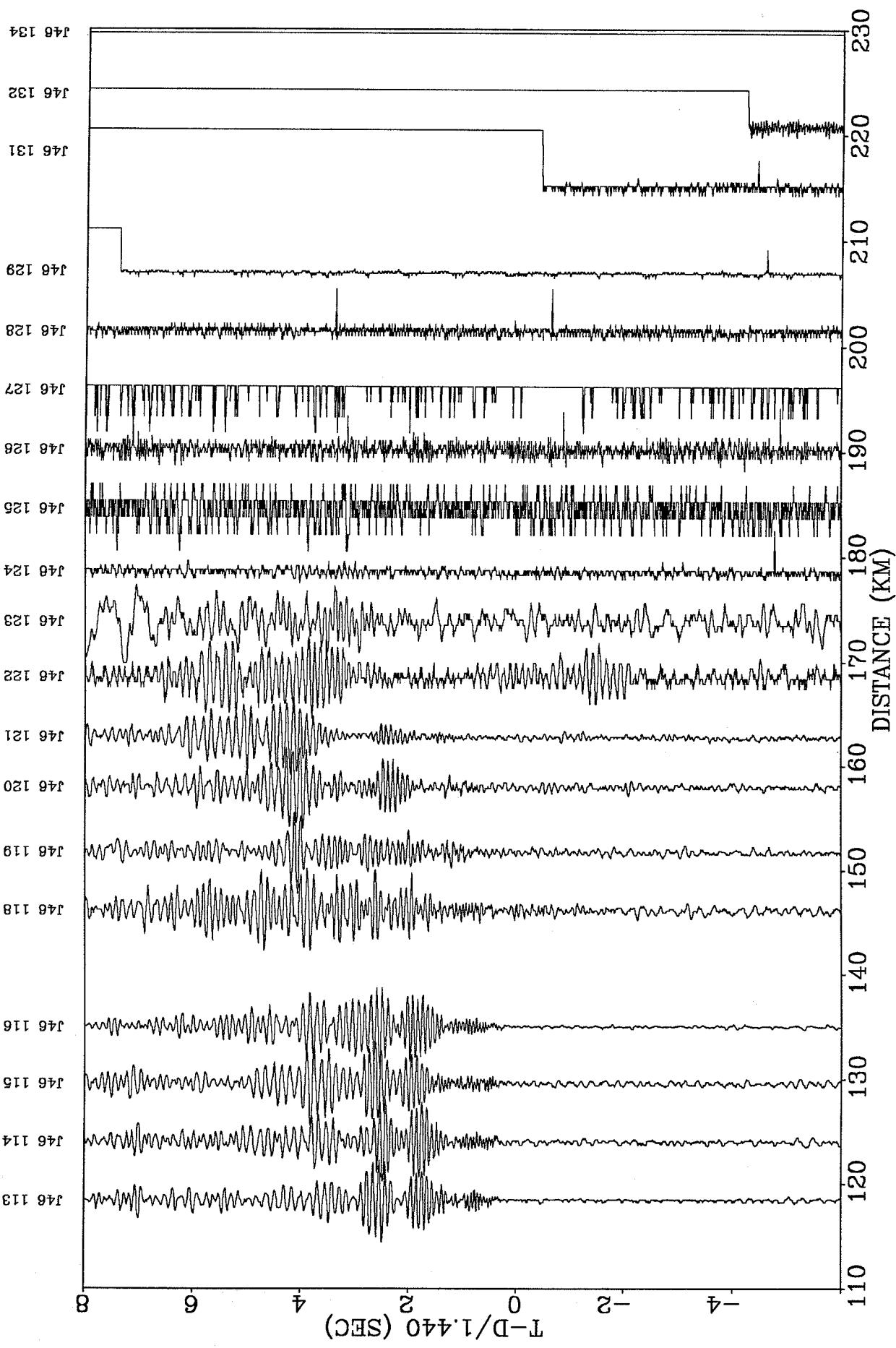
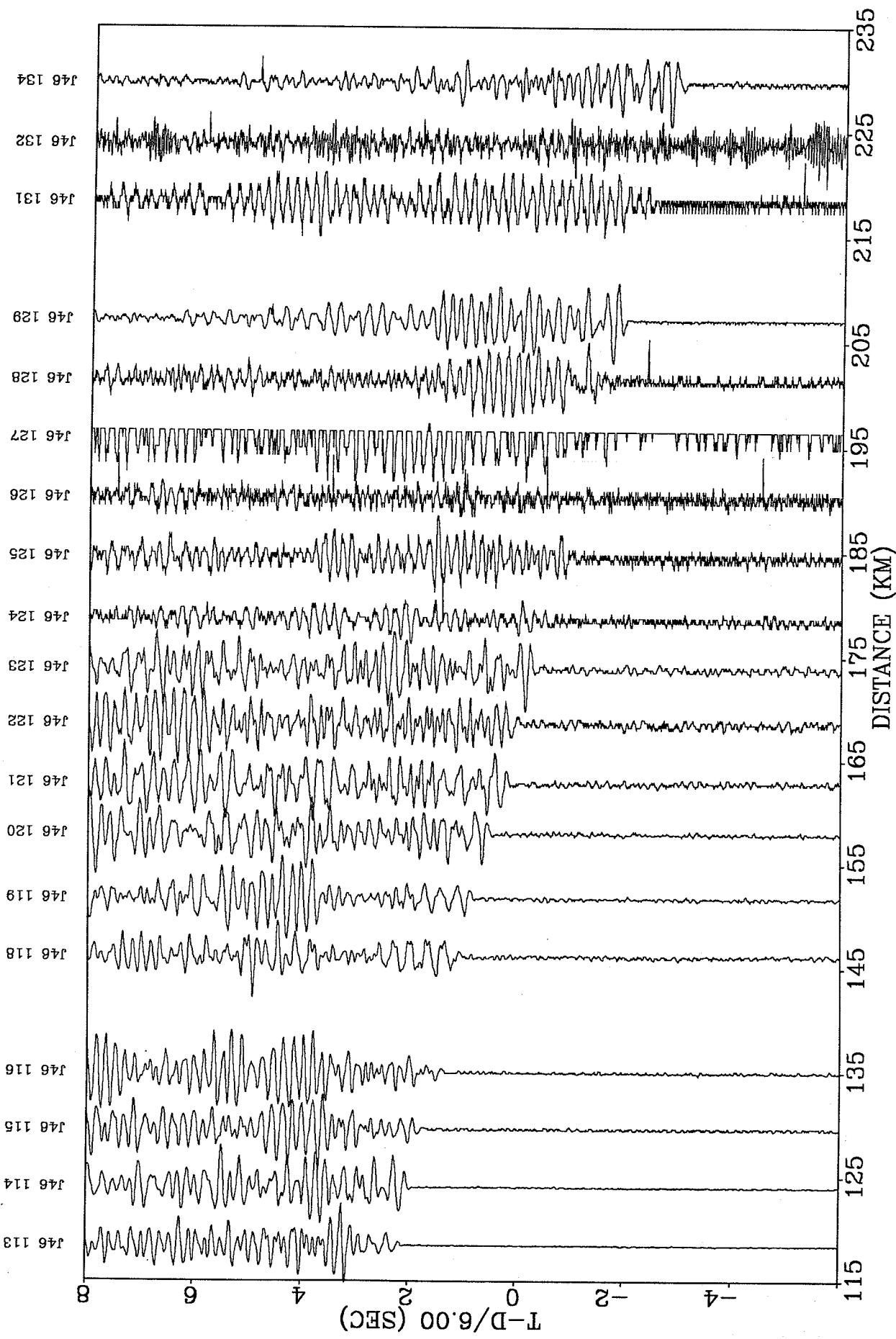


Fig. 11B – Seismic section LN shot J46



Line: I08 Shot: K44
 ** Ice Island 86 ** Field shot point: K2 Section: LN
 Shot time: 1986 APR. 24 20:15: 0.00
 Lat.: 81.00216 N, Long.: 97.50597 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 489.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
113	80.59712		99.36617		0.0	56.11	217.22	20:14:58.00	0.100	spz	LBOE	120	
114	80.55644		99.54912		0.0	61.75	217.31	20:14:58.00	0.100	spz	LB0A	120	
115	80.51563		99.71937		0.0	67.28	217.25	20:14:58.00	0.100	spz	LB01	120	
116	80.47595		99.88803		0.0	72.69	217.26	20:14:58.00	0.100	spz	LB02	120	
118	80.39317		100.22771		0.0	83.88	217.20	20:14:58.00	0.100	spz	LB0C	120	
119	80.35228		100.39626		0.0	89.43	217.21	20:14:58.00	0.100	spz	LB09	120	
120	80.30638		100.58295		0.0	95.64	217.21	20:14:58.00	0.100	spz	LB03	120	
121	80.27037		100.72495		0.0	100.47	217.19	20:14:58.00	0.100	spz	LB08	120	
122	80.22760		100.89626		0.0	106.24	217.20	20:14:58.00	0.100	spz	LB05	120	
123	80.18805		101.04648		0.0	111.50	217.16	20:14:58.00	0.100	spz	LB06	120	
124	80.15248		101.18259		0.0	116.24	217.14	20:14:59.17	0.100	spz	BP19	120	
125	80.10811		101.35511		0.0	122.19	217.15	20:14:59.17	0.100	spz	BP18	120	
126	80.06000		101.46667		0.0	127.87	216.64	20:14:59.17	0.100	spz	BP20	120	
127	80.02255		101.66920		0.0	133.50	217.08	20:14:59.19	0.100	spz	BP17	120	
128	79.98223		101.83915		0.0	139.07	217.22	20:14:59.17	0.100	spz	BP21	120	
129	79.93849		101.99180		0.0	144.79	217.15	20:14:59.17	0.100	spz	BP16	120	
130	79.89472		102.14445		0.0	150.51	217.11	20:14:59.17	0.100	spz	BP12	120	
131	79.85278		102.29444		0.0	156.05	217.10	20:14:59.19	0.100	spz	BP10	120	
132	79.81142		102.44560		0.0	161.54	217.12	20:14:59.17	0.100	spz	BP11	120	
133	79.76777		102.60110		0.0	167.31	217.12	20:14:59.18	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	167.34	217.18	20:14:59.18	0.100	spz	BP13	120	

Fig. 12A - Water wave section LN shot K44

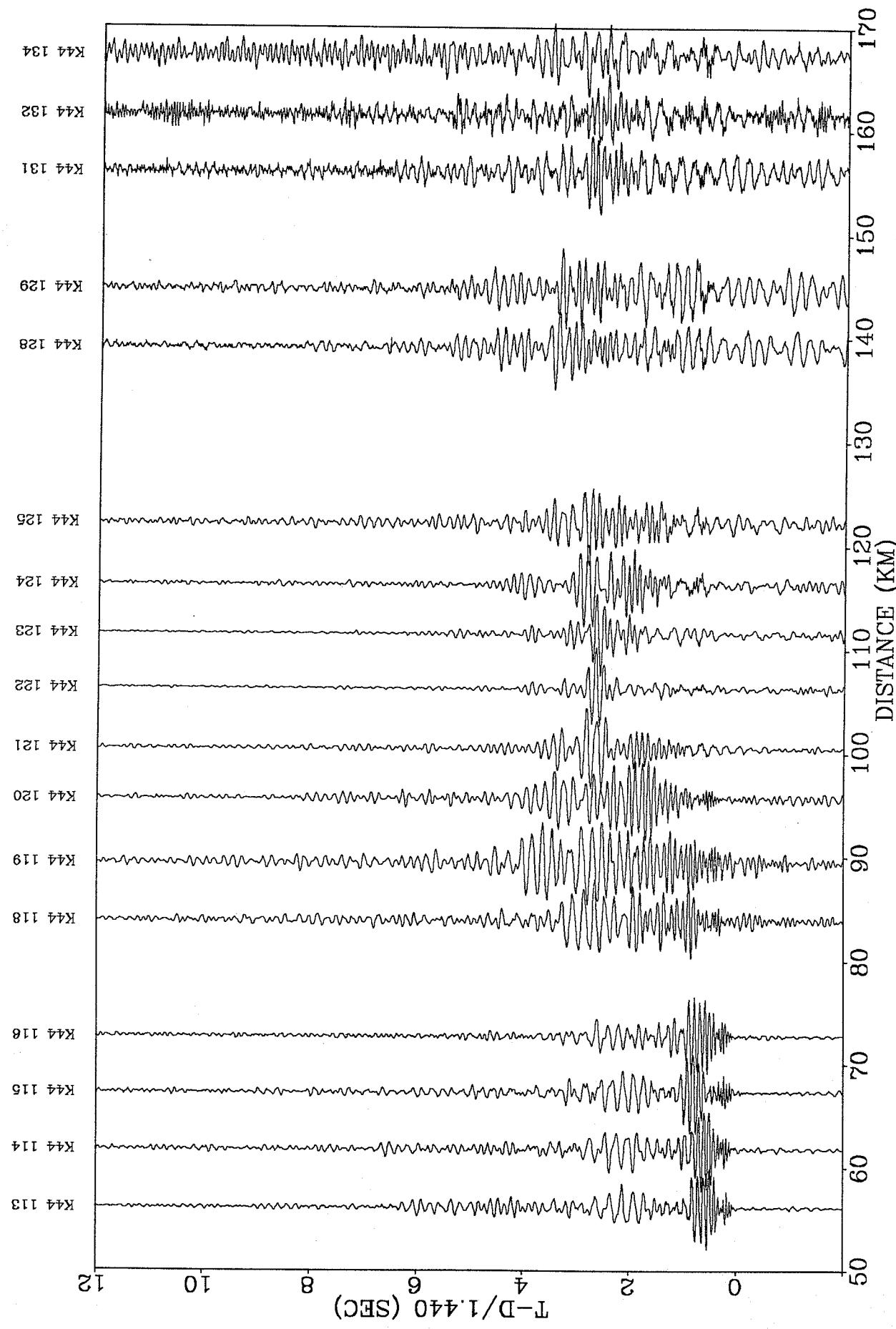
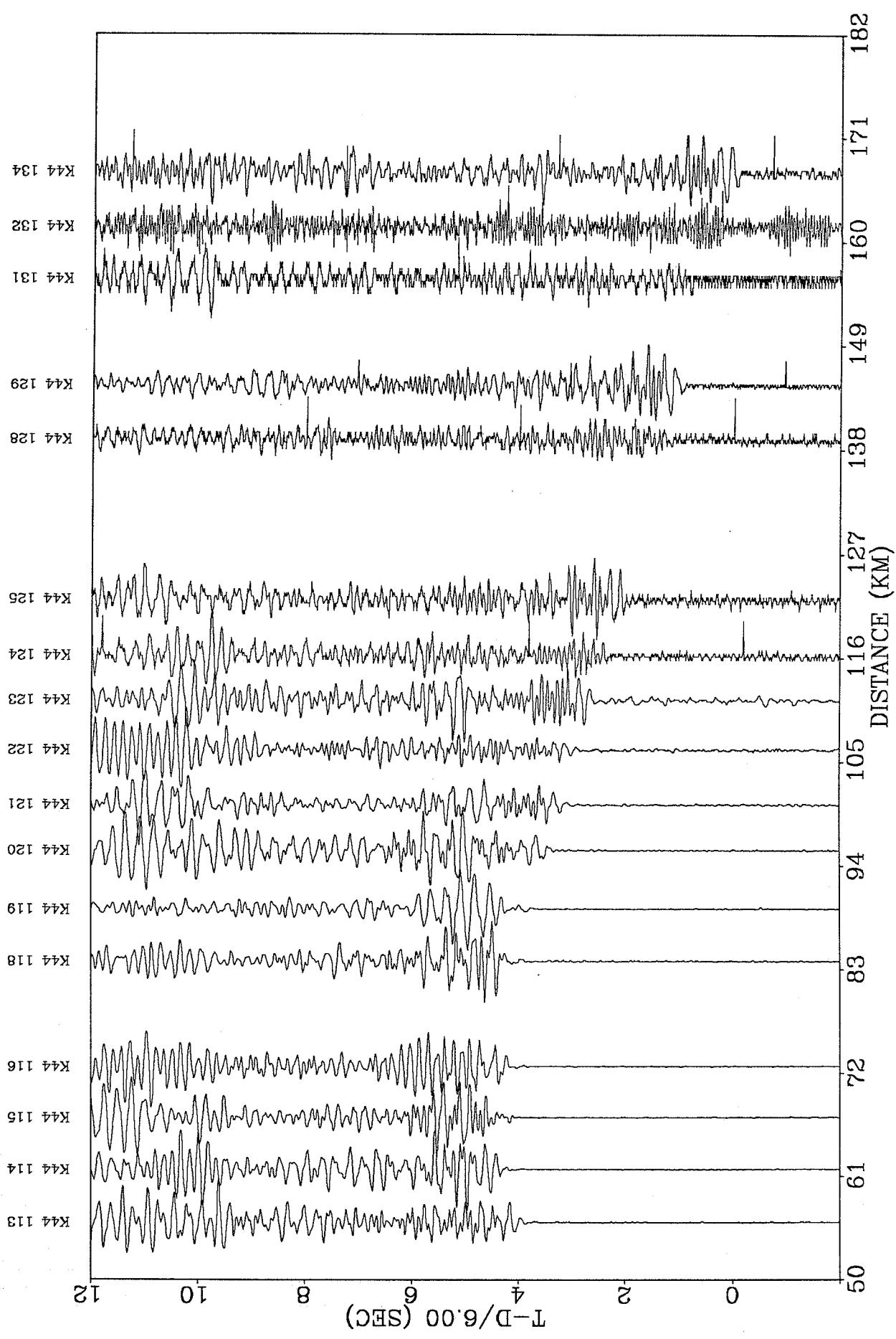


Fig. 12B. – Seismic section LN shot K44



Line: I08 Shot: L41

** Ice Island 86 ** Field shot point: L1N Section: LN

Shot time: 1986 APR. 24 19:15: 0.00

Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
113	80.59712		99.36617		0.0	1.68	318.77	19:14:58.00	0.100	spz	LBOE	120	
114	80.55644		99.54912		0.0	5.53	233.73	19:14:58.00	0.100	spz	LB0A	120	
115	80.51563		99.71937		0.0	10.91	224.25	19:14:58.00	0.100	spz	LB01	120	
116	80.47595		99.88803		0.0	16.28	221.38	19:14:58.00	0.100	spz	LB02	120	
118	80.39317		100.22771		0.0	27.43	218.79	19:14:58.00	0.100	spz	LB0C	120	
119	80.35228		100.39626		0.0	32.97	218.25	19:14:58.00	0.100	spz	LB09	120	
120	80.30638		100.58295		0.0	39.17	217.82	19:14:58.00	0.100	spz	LB03	120	
121	80.27037		100.72495		0.0	44.00	217.51	19:14:58.00	0.100	spz	LB08	120	
122	80.22760		100.89626		0.0	49.76	217.29	19:14:58.00	0.100	spz	LB05	120	
123	80.18805		101.04648		0.0	55.02	217.02	19:14:58.00	0.100	spz	LB06	120	
124	80.15248		101.18259		0.0	59.76	216.86	19:14:59.19	0.100	spz	BP19	120	
125	80.10811		101.35511		0.0	65.71	216.75	19:14:59.18	0.100	spz	BP18	120	
126	80.06000		101.46667		0.0	71.36	215.71	19:14:59.17	0.100	spz	BP20	120	
127	80.02255		101.66920		0.0	77.01	216.42	19:14:59.19	0.100	spz	BP17	120	
128	79.98223		101.83915		0.0	82.59	216.57	19:14:59.18	0.100	spz	BP21	120	
129	79.93849		101.99180		0.0	88.30	216.40	19:14:59.19	0.100	spz	BP16	120	
130	79.89472		102.14445		0.0	94.02	216.26	19:14:59.16	0.100	spz	BP12	120	
131	79.85278		102.29444		0.0	99.56	216.19	19:14:59.17	0.100	spz	BP10	120	
132	79.81142		102.44560		0.0	105.05	216.17	19:14:59.17	0.100	spz	BP11	120	
133	79.76777		102.60110		0.0	110.82	216.14	19:14:59.17	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	110.85	216.23	19:14:59.17	0.100	spz	BP13	120	

Fig. 13A – Water wave section LN shot L41

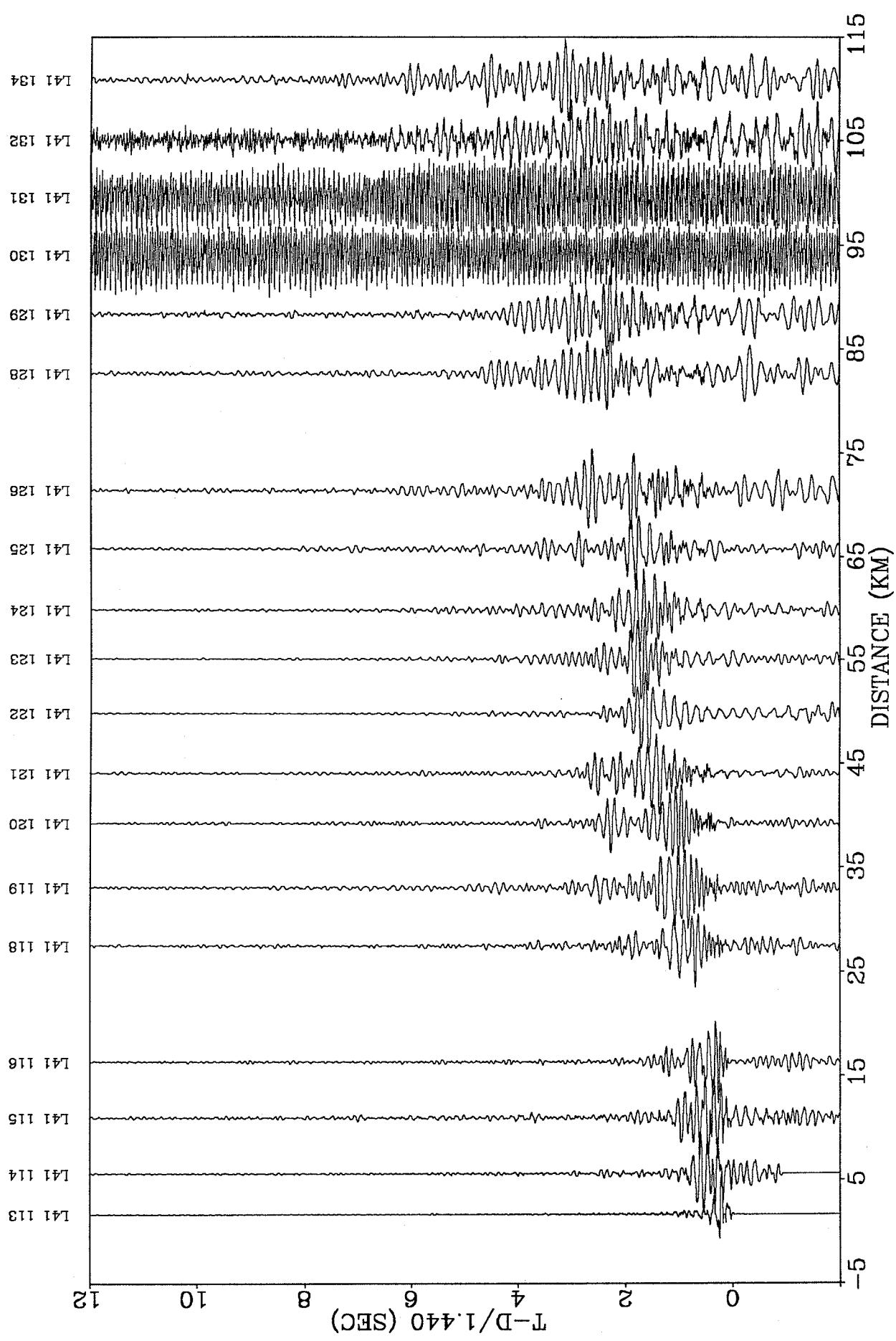
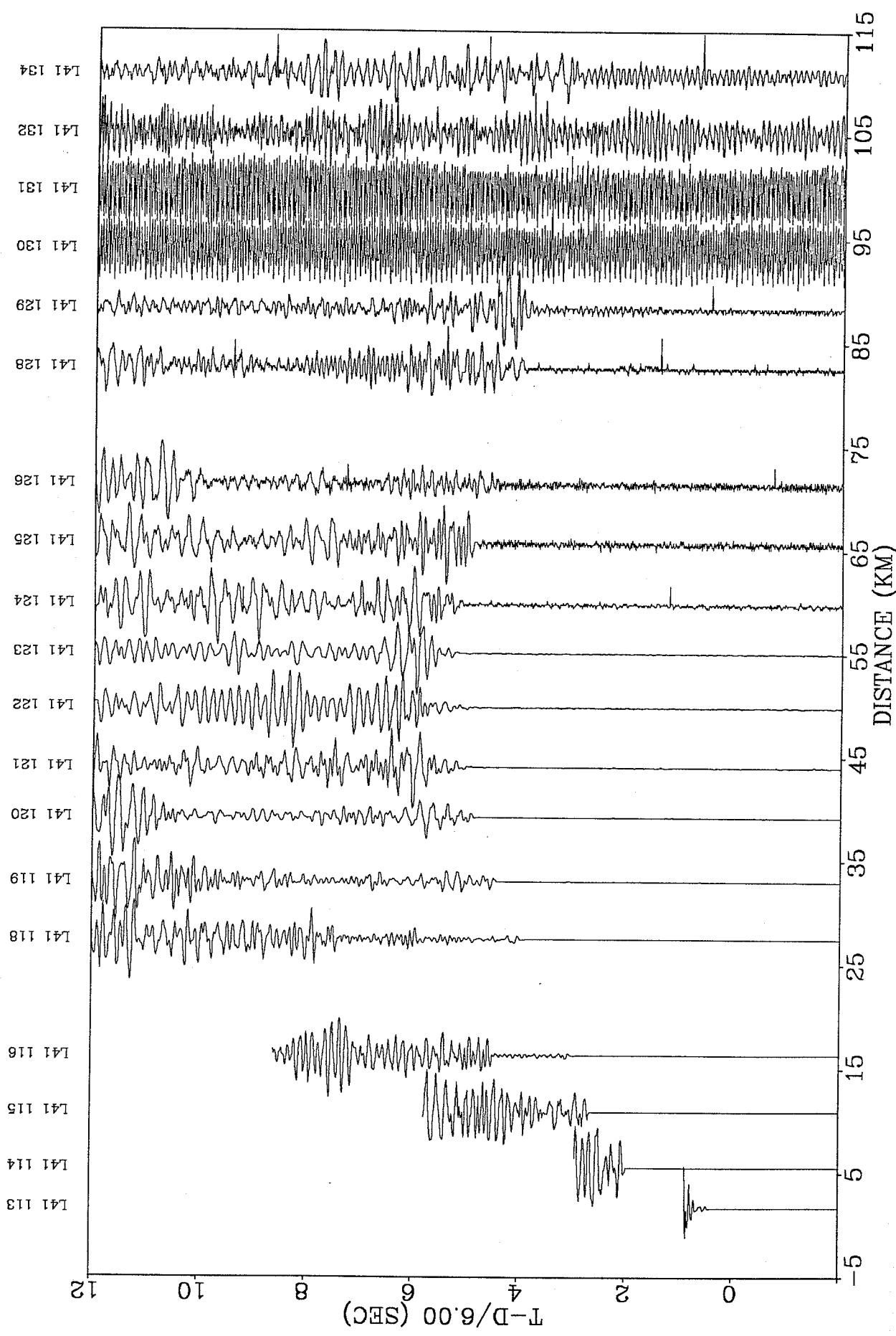


Fig. 13B – Seismic section LN shot L41



Line: I08 Shot: L42
** Ice Island 86 ** Field shot point: L2 Section: LN

Shot time: 1986 APR. 24 19:30: 0.00

Lat.: 80.62266 N, Long.: 99.26037 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
113	80.59712		99.36617		0.0	3.44	214.12	19:29:58.00	0.100	spz	LBOE	120	
114	80.55644		99.54912		0.0	9.08	215.64	19:29:58.00	0.100	spz	LBOA	120	
115	80.51563		99.71937		0.0	14.61	215.33	19:29:58.00	0.100	spz	LB01	120	
116	80.47595		99.88803		0.0	20.02	215.40	19:29:58.00	0.100	spz	LB02	120	
118	80.39317		100.22771		0.0	31.21	215.29	19:29:58.00	0.100	spz	LB0C	120	
119	80.35228		100.39626		0.0	36.76	215.34	19:29:58.00	0.100	spz	LB09	120	
120	80.30638		100.58295		0.0	42.96	215.37	19:29:58.00	0.100	spz	LB03	120	
121	80.27037		100.72495		0.0	47.79	215.33	19:29:58.00	0.100	spz	LB08	120	
122	80.22760		100.89626		0.0	53.57	215.37	19:29:58.00	0.100	spz	LB05	120	
123	80.18805		101.04648		0.0	58.82	215.30	19:29:58.00	0.100	spz	LB06	120	
124	80.15248		101.18259		0.0	63.57	215.28	19:29:59.17	0.100	spz	BP19	120	
125	80.10811		101.35511		0.0	69.52	215.31	19:29:59.18	0.100	spz	BP18	120	
126	80.06000		101.46667		0.0	75.20	214.44	19:29:59.18	0.100	spz	BP20	120	
127	80.02255		101.66920		0.0	80.83	215.21	19:29:59.17	0.100	spz	BP17	120	
128	79.98223		101.83915		0.0	86.40	215.43	19:29:59.17	0.100	spz	BP21	120	
129	79.93849		101.99180		0.0	92.12	215.34	19:29:59.19	0.100	spz	BP16	120	
130	79.89472		102.14445		0.0	97.84	215.27	19:29:59.17	0.100	spz	BP12	120	
131	79.85278		102.29444		0.0	103.38	215.26	19:29:59.17	0.100	spz	BP10	120	
132	79.81142		102.44560		0.0	108.87	215.29	19:29:59.19	0.100	spz	BP11	120	
133	79.76777		102.60110		0.0	114.64	215.30	19:29:59.18	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	114.67	215.39	19:29:59.19	0.100	spz	BP13	120	

Fig. 14A – Water wave section LN shot L42

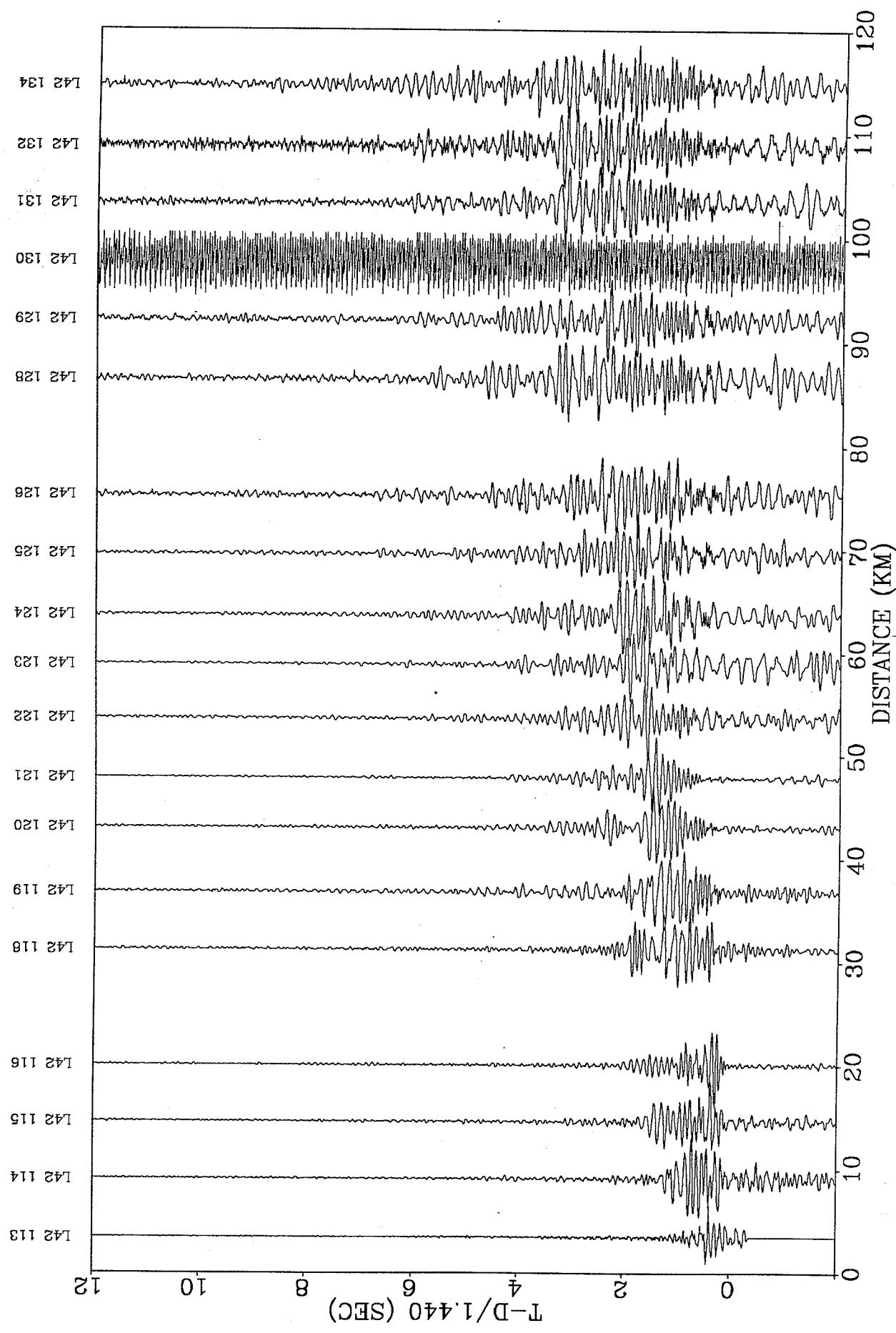
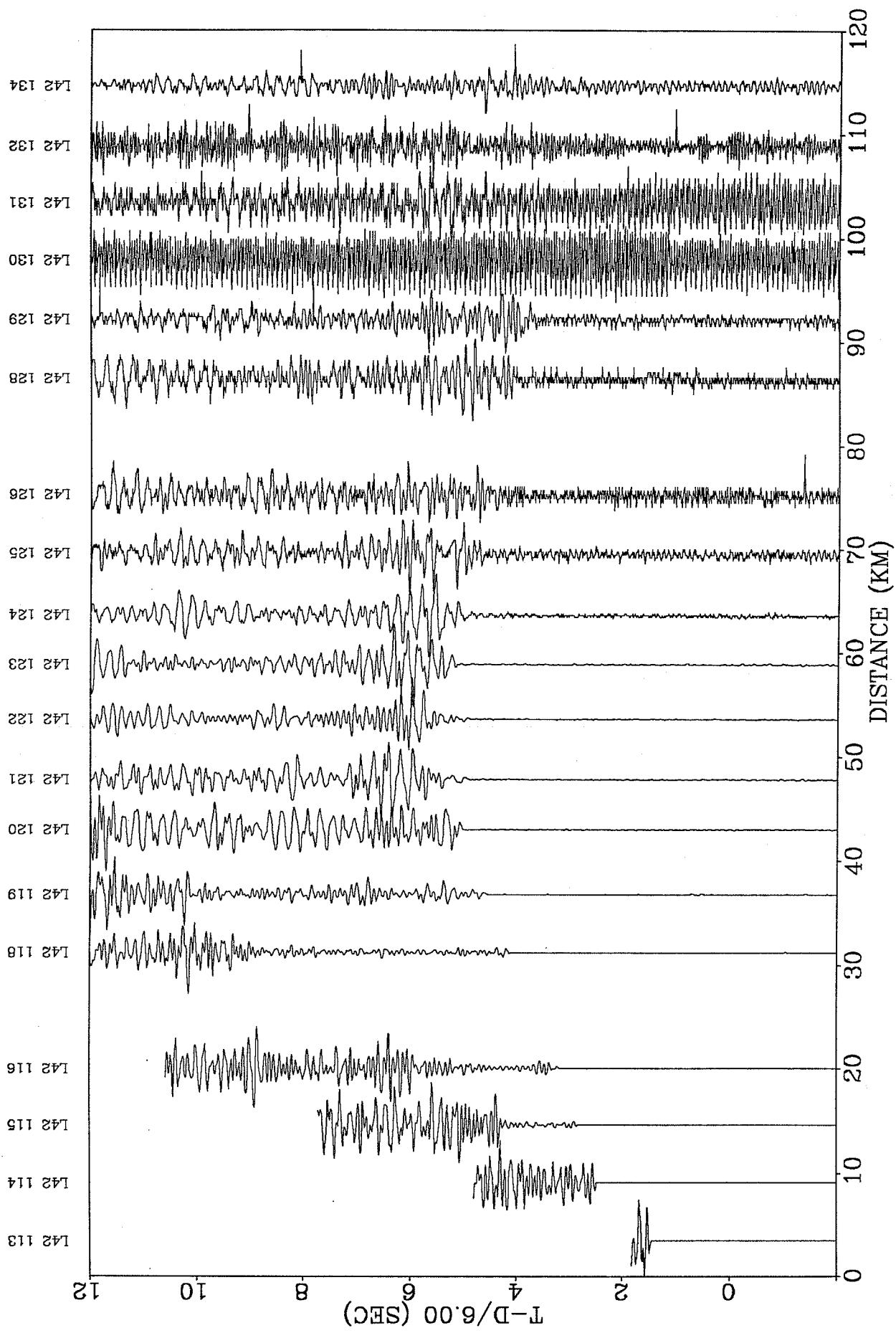


Fig. 14B – Seismic section LN shot L42



Line: I08 Shot: M48
** Ice Island 86 ** Field shot point: M1 Section: LN
Shot time: 1986 APR. 24 21:46: 0.00
Lat.: 80.17366 N, Long.: 101.11182 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 462.4 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
114	80.55644		99.54912		0.0	51.77	33.58	21:44:58.00	0.100	spz	LB0A	120	
115	80.51563		99.71937		0.0	46.24	33.65	21:44:58.00	0.100	spz	LB01	120	
113	80.59712		99.36617		0.0	57.41	33.69	21:44:58.00	0.100	spz	LB0E	120	
116	80.47595		99.88803		0.0	40.83	33.63	21:44:58.00	0.100	spz	LB02	120	
118	80.39317		100.22771		0.0	29.64	33.78	21:44:58.00	0.100	spz	LB0C	120	
120	80.30638		100.58295		0.0	17.89	33.78	21:44:58.00	0.100	spz	LB03	120	
119	80.35228		100.39626		0.0	24.09	33.77	21:44:58.00	0.100	spz	LB09	120	
121	80.27037		100.72495		0.0	13.06	34.01	21:44:58.00	0.100	spz	LB08	120	
122	80.22760		100.89626		0.0	7.29	34.12	21:44:58.00	0.100	spz	LB05	120	
123	80.18805		101.04648		0.0	2.03	37.73	21:44:58.00	0.100	spz	LB06	120	
126	80.06000		101.46667		0.0	14.40	208.36	21:44:59.16	0.100	spz	BP20	120	
124	80.15248		101.18259		0.0	2.72	209.76	21:44:59.18	0.100	spz	BP19	120	
125	80.10811		101.35511		0.0	8.67	212.56	21:44:59.18	0.100	spz	BP18	120	
127	80.02255		101.66920		0.0	19.98	212.67	21:44:59.18	0.100	spz	BP17	120	
131	79.85278		102.29444		0.0	42.53	213.17	21:44:59.19	0.100	spz	BP10	120	
130	79.89472		102.14445		0.0	36.99	213.16	21:44:59.17	0.100	spz	BP12	120	
132	79.81142		102.44560		0.0	48.02	213.28	21:44:59.19	0.100	spz	BP11	120	
133	79.76777		102.60110		0.0	53.79	213.32	21:44:59.19	0.100	spz	BP14	120	
129	79.93849		101.99180		0.0	31.27	213.31	21:44:59.18	0.100	spz	BP16	120	
128	79.98223		101.83915		0.0	25.55	213.58	21:44:59.17	0.100	spz	BP21	120	
134	79.76838		102.60956		0.0	53.82	213.51	21:44:59.18	0.100	spz	BP13	120	

Line: I08 Shot: M48
 ** Ice Island 86 ** Field shot point: M1 Section: LN
 Shot time: 1986 APR. 24 21:46: 0.00
 Lat.: 80.17366 N, Long.: 101.11182 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 462.4 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
123	80.18805		101.04648		0.0	2.03	37.73	21:44:58.00	0.100	spz	LB06	120	
124	80.15248		101.18259		0.0	2.72	209.76	21:44:59.18	0.100	spz	BP19	120	
122	80.22760		100.89626		0.0	7.29	34.12	21:44:58.00	0.100	spz	LB05	120	
125	80.10811		101.35511		0.0	8.67	212.56	21:44:59.18	0.100	spz	BP18	120	
121	80.27037		100.72495		0.0	13.06	34.01	21:44:58.00	0.100	spz	LB08	120	
126	80.06000		101.46667		0.0	14.40	208.36	21:44:59.16	0.100	spz	BP20	120	
120	80.30638		100.58295		0.0	17.89	33.78	21:44:58.00	0.100	spz	LB03	120	
127	80.02255		101.66920		0.0	19.98	212.67	21:44:59.18	0.100	spz	BP17	120	
119	80.35228		100.39626		0.0	24.09	33.77	21:44:58.00	0.100	spz	LB09	120	
128	79.98223		101.83915		0.0	25.55	213.58	21:44:59.17	0.100	spz	BP21	120	
118	80.39317		100.22771		0.0	29.64	33.78	21:44:58.00	0.100	spz	LB0C	120	
129	79.93849		101.99180		0.0	31.27	213.31	21:44:59.18	0.100	spz	BP16	120	
130	79.89472		102.14445		0.0	36.99	213.16	21:44:59.17	0.100	spz	BP12	120	
116	80.47595		99.88803		0.0	40.83	33.63	21:44:58.00	0.100	spz	LB02	120	
131	79.85278		102.29444		0.0	42.53	213.17	21:44:59.19	0.100	spz	BP10	120	
115	80.51563		99.71937		0.0	46.24	33.65	21:44:58.00	0.100	spz	LB01	120	
132	79.81142		102.44560		0.0	48.02	213.28	21:44:59.19	0.100	spz	BP11	120	
114	80.55644		99.54912		0.0	51.77	33.58	21:44:58.00	0.100	spz	LB0A	120	
133	79.76777		102.60110		0.0	53.79	213.32	21:44:59.19	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	53.82	213.51	21:44:59.18	0.100	spz	BP13	120	
113	80.59712		99.36617		0.0	57.41	33.69	21:44:58.00	0.100	spz	LBOE	120	

Fig. 15A - Water wave section LN shot M48

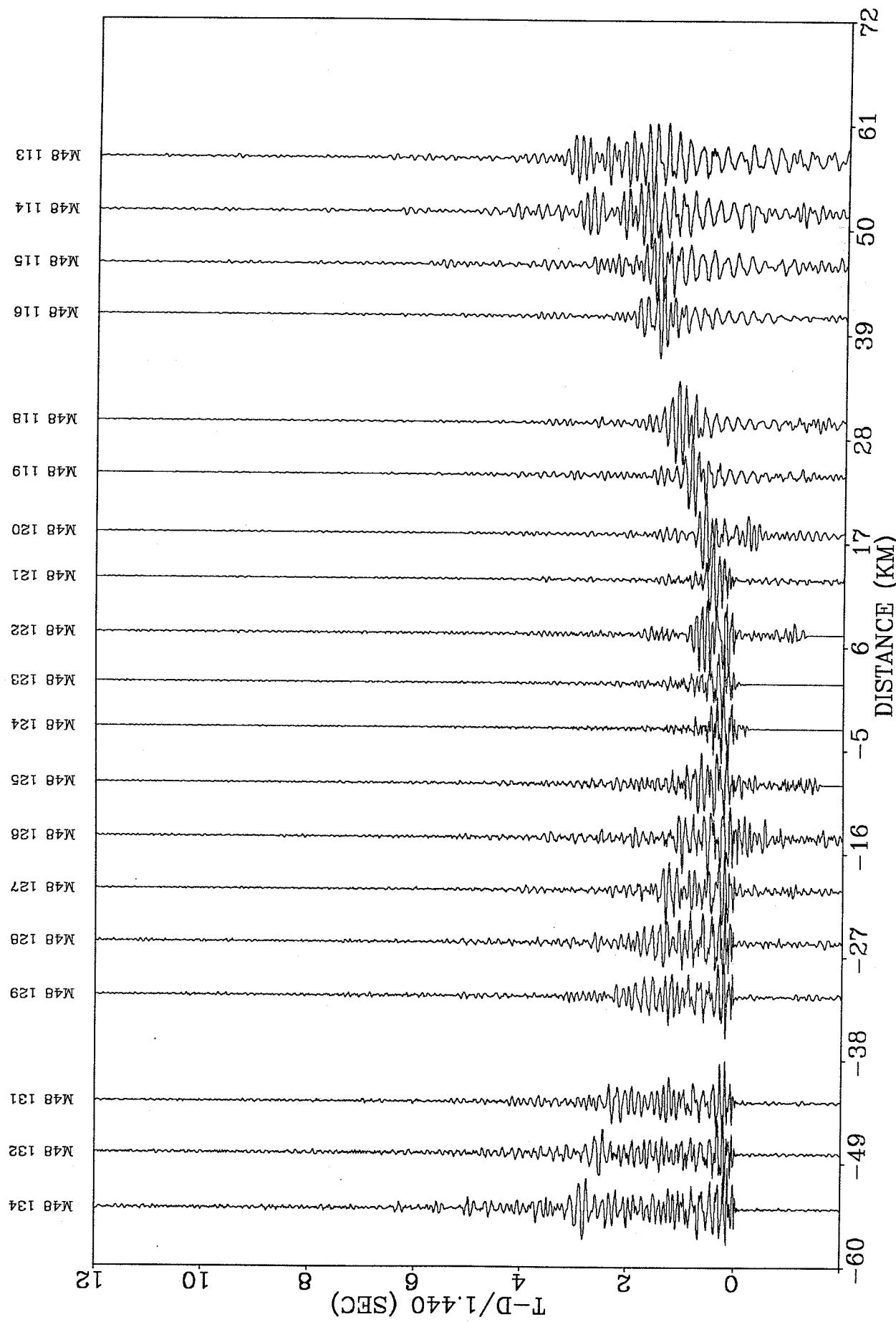
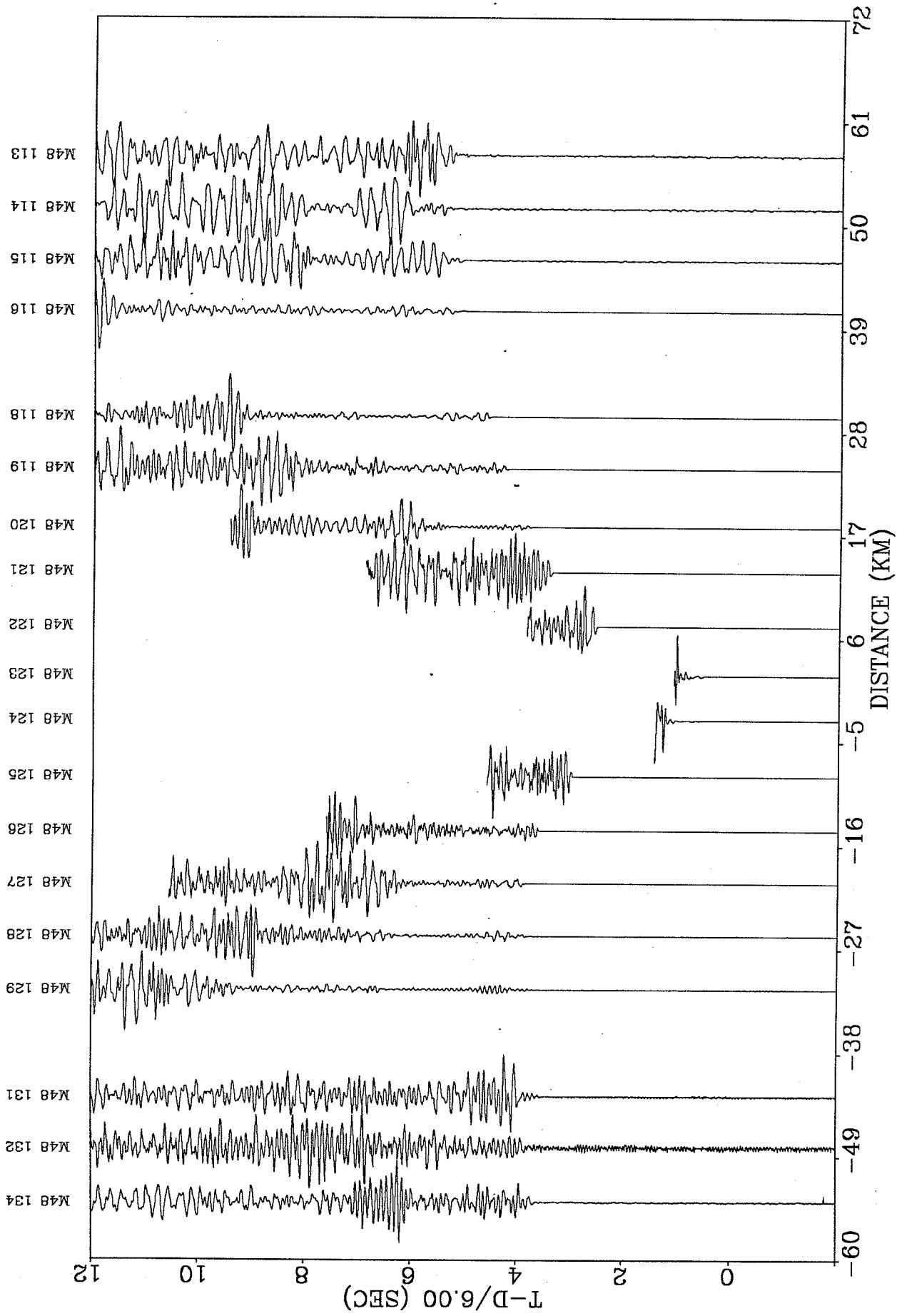


Fig. 15B – Seismic section LN shot M48



Line: I08 Shot: M49
** Ice Island 86 ** Field shot point: M2 Section: LN
Shot time: 1986 APR. 24 22:31: 0.00
Lat.: 80.14046 N, Long.: 101.07751 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
123	80.18805		101.04648		0.0	5.35	6.34	22:29:58.00	0.100	spz	LB06	120	
122	80.22760		100.89626		0.0	10.32	19.44	22:29:58.00	0.100	spz	LB05	120	
121	80.27037		100.72495		0.0	15.98	24.61	22:29:58.00	0.100	spz	LB08	120	
120	80.30638		100.58295		0.0	20.77	26.61	22:29:58.00	0.100	spz	LB03	120	
119	80.35228		100.39626		0.0	26.94	28.25	22:29:58.00	0.100	spz	LB09	120	
118	80.39317		100.22771		0.0	32.46	29.21	22:29:58.00	0.100	spz	LB0C	120	
116	80.47595		99.88803		0.0	43.63	30.25	22:29:58.00	0.100	spz	LB02	120	
115	80.51563		99.71937		0.0	49.03	30.65	22:29:58.00	0.100	spz	LB01	120	
114	80.55644		99.54912		0.0	54.56	30.89	22:29:58.00	0.100	spz	LBOA	120	
113	80.59712		99.36617		0.0	60.19	31.25	22:29:58.00	0.100	spz	LBOE	120	
133	79.76777		102.60110		0.0	51.11	216.25	22:29:59.18	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	51.15	216.45	22:29:59.19	0.100	spz	BP13	120	
132	79.81142		102.44560		0.0	45.36	216.57	22:29:59.18	0.100	spz	BP11	120	
131	79.85278		102.29444		0.0	39.87	216.91	22:29:59.19	0.100	spz	BP10	120	
130	79.89472		102.14445		0.0	34.35	217.50	22:29:59.17	0.100	spz	BP12	120	
129	79.93849		101.99180		0.0	28.65	218.52	22:29:59.17	0.100	spz	BP16	120	
126	80.06000		101.46667		0.0	11.69	219.94	22:29:59.17	0.100	spz	BP20	120	
128	79.98223		101.83915		0.0	22.97	220.10	22:29:59.18	0.100	spz	BP21	120	
127	80.02255		101.66920		0.0	17.40	221.14	22:29:59.18	0.100	spz	BP17	120	
125	80.10811		101.35511		0.0	6.43	235.94	22:29:59.18	0.100	spz	BP18	120	
124	80.15248		101.18259		0.0	2.42	303.80	22:29:59.19	0.100	spz	BP19	120	

Line: I08 Shot: M49

** Ice Island 86 ** Field shot point: M2 Section: LN

Shot time: 1986 APR. 24 22:31: 0.00

Lat.: 80.14046 N, Long.: 101.07751 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
124	80.15248		101.18259		0.0	2.42	303.80	22:29:59.19	0.100	spz	BP19	120	
123	80.18805		101.04648		0.0	5.35	6.34	22:29:58.00	0.100	spz	LB06	120	
125	80.10811		101.35511		0.0	6.43	235.94	22:29:59.18	0.100	spz	BP18	120	
122	80.22760		100.89626		0.0	10.32	19.44	22:29:58.00	0.100	spz	LB05	120	
126	80.06000		101.46667		0.0	11.69	219.94	22:29:59.17	0.100	spz	BP20	120	
121	80.27037		100.72495		0.0	15.98	24.61	22:29:58.00	0.100	spz	LB08	120	
127	80.02255		101.66920		0.0	17.40	221.14	22:29:59.18	0.100	spz	BP17	120	
120	80.30638		100.58295		0.0	20.77	26.61	22:29:58.00	0.100	spz	LB03	120	
128	79.98223		101.83915		0.0	22.97	220.10	22:29:59.18	0.100	spz	BP21	120	
119	80.35228		100.39626		0.0	26.94	28.25	22:29:58.00	0.100	spz	LB09	120	
129	79.93849		101.99180		0.0	28.65	218.52	22:29:59.17	0.100	spz	BP16	120	
118	80.39317		100.22771		0.0	32.46	29.21	22:29:58.00	0.100	spz	LB0C	120	
130	79.89472		102.14445		0.0	34.35	217.50	22:29:59.17	0.100	spz	BP12	120	
131	79.85278		102.29444		0.0	39.87	216.91	22:29:59.19	0.100	spz	BP10	120	
116	80.47595		99.88803		0.0	43.63	30.25	22:29:58.00	0.100	spz	LB02	120	
132	79.81142		102.44560		0.0	45.36	216.57	22:29:59.18	0.100	spz	BP11	120	
115	80.51563		99.71937		0.0	49.03	30.65	22:29:58.00	0.100	spz	LB01	120	
133	79.76777		102.60110		0.0	51.11	216.25	22:29:59.18	0.100	spz	BP14	120	
134	79.76838		102.60956		0.0	51.15	216.45	22:29:59.19	0.100	spz	BP13	120	
114	80.55644		99.54912		0.0	54.56	30.89	22:29:58.00	0.100	spz	LB0A	120	
113	80.59712		99.36617		0.0	60.19	31.25	22:29:58.00	0.100	spz	LB0E	120	

Fig. 16A - Water wave section LN shot M49

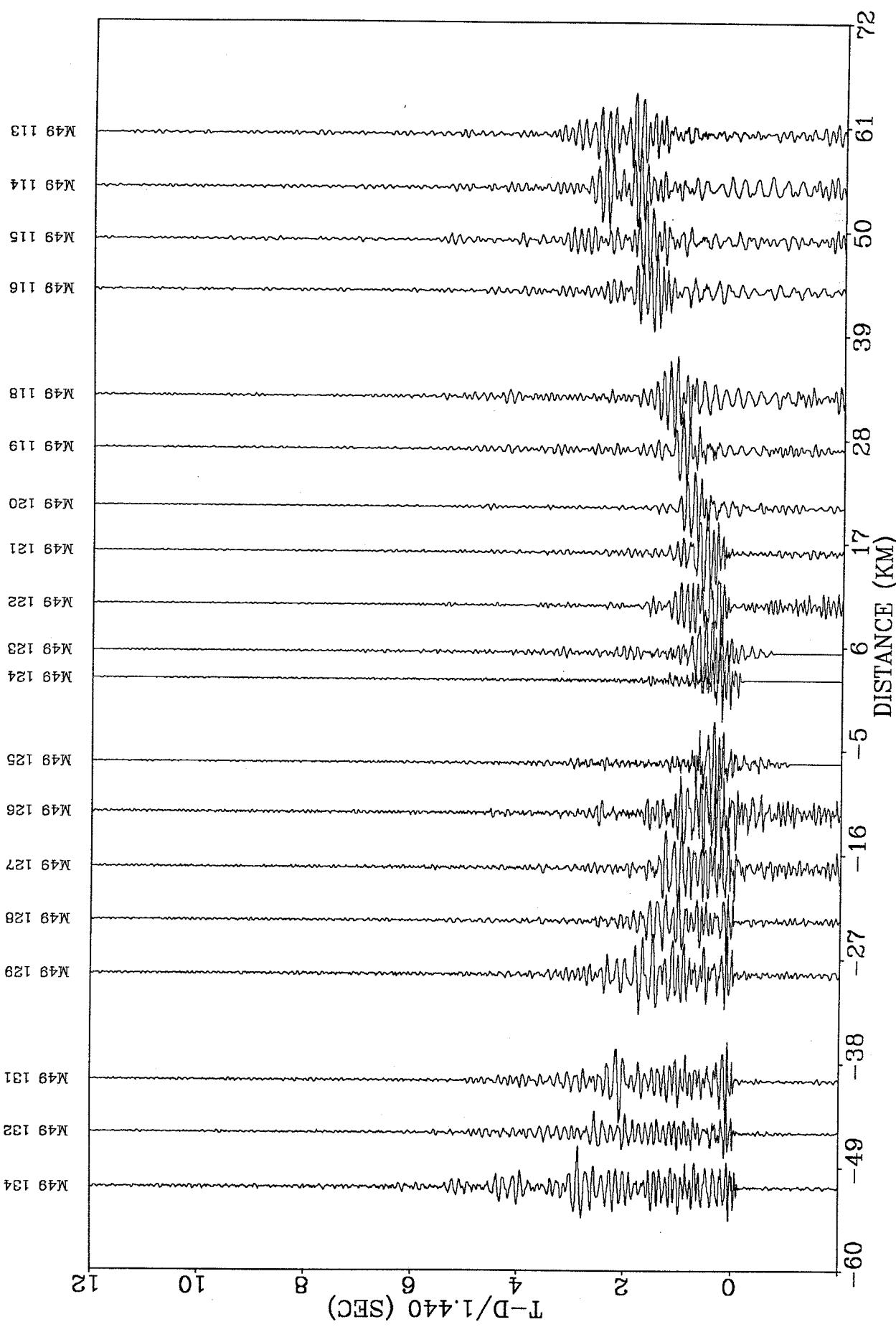
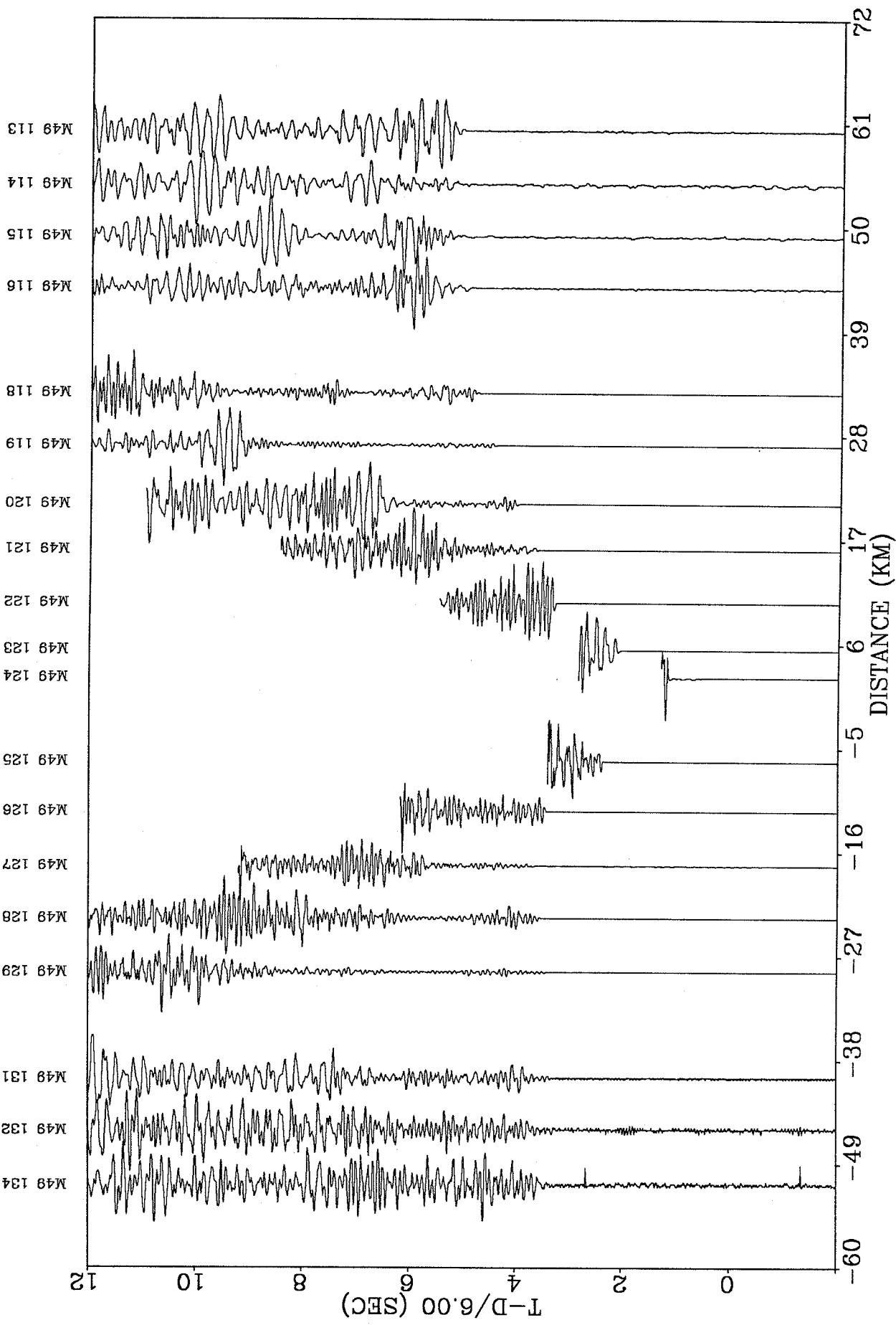


Fig. 16B – Seismic section LN shot M49



Line: I08 Shot: N43

** Ice Island 86 ** Field shot point: N1 Section: LN

Shot time: 1986 APR. 24 20: 1: 0.00

Lat.: 79.69072 N, Long.: 102.86689 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
134	79.76838		102.60956		0.0	10.07	30.45	19:59:59.18	0.100	spz	BP13	120	
133	79.76777		102.60110		0.0	10.10	31.47	19:59:59.19	0.100	spz	BP14	120	
132	79.81142		102.44560		0.0	15.87	31.64	19:59:59.19	0.100	spz	BP11	120	
131	79.85278		102.29444		0.0	21.36	31.82	19:59:59.17	0.100	spz	BP10	120	
130	79.89472		102.14445		0.0	26.89	31.76	19:59:59.19	0.100	spz	BP12	120	
129	79.93849		101.99180		0.0	32.62	31.56	19:59:59.18	0.100	spz	BP16	120	
128	79.98223		101.83915		0.0	38.34	31.39	19:59:59.19	0.100	spz	BP21	120	
127	80.02255		101.66920		0.0	43.91	31.86	19:59:59.19	0.100	spz	BP17	120	
126	80.06000		101.46667		0.0	49.56	33.00	19:59:59.19	0.100	spz	BP20	120	
125	80.10811		101.35511		0.0	55.21	31.69	19:59:59.19	0.100	spz	BP18	120	
124	80.15248		101.18259		0.0	61.17	31.73	19:59:59.18	0.100	spz	BP19	120	
123	80.18805		101.04648		0.0	65.91	31.71	19:59:58.00	0.100	spz	LB06	120	
122	80.22760		100.89626		0.0	71.17	31.66	19:59:58.00	0.100	spz	LB05	120	
121	80.27037		100.72495		0.0	76.94	31.69	19:59:58.00	0.100	spz	LB08	120	
120	80.30638		100.58295		0.0	81.77	31.68	19:59:58.00	0.100	spz	LB03	120	
119	80.35228		100.39626		0.0	87.98	31.70	19:59:58.00	0.100	spz	LB09	120	
118	80.39317		100.22771		0.0	93.53	31.72	19:59:58.00	0.100	spz	LB0C	120	
116	80.47595		99.88803		0.0	104.72	31.70	19:59:58.00	0.100	spz	LB02	120	
115	80.51563		99.71937		0.0	110.13	31.72	19:59:58.00	0.100	spz	LB01	120	
114	80.55644		99.54912		0.0	115.66	31.70	19:59:58.00	0.100	spz	LBOA	120	
113	80.59712		99.36617		0.0	121.30	31.76	19:59:58.00	0.100	spz	LBOE	120	

Fig. 17A - Water wave section LN shot N43

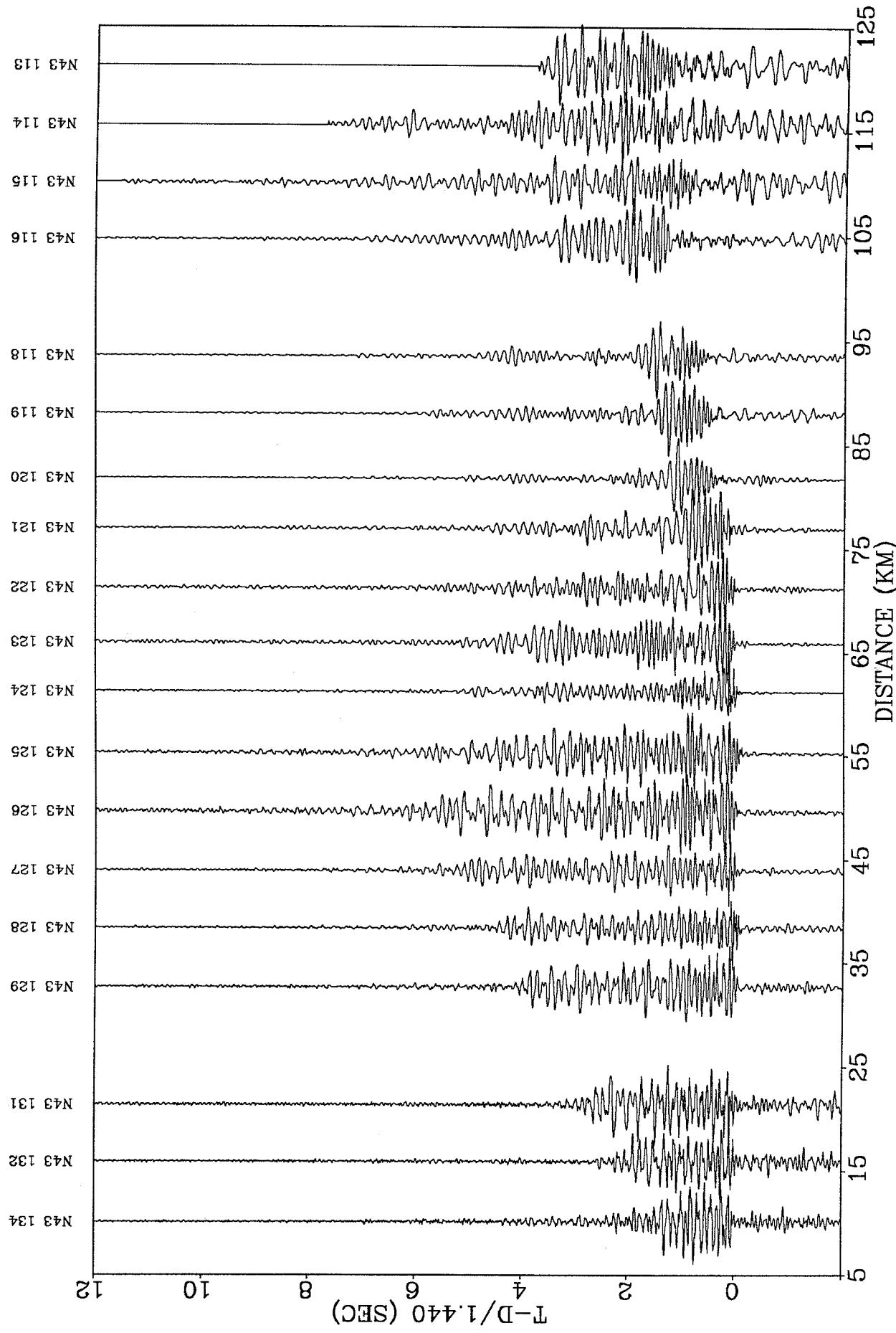
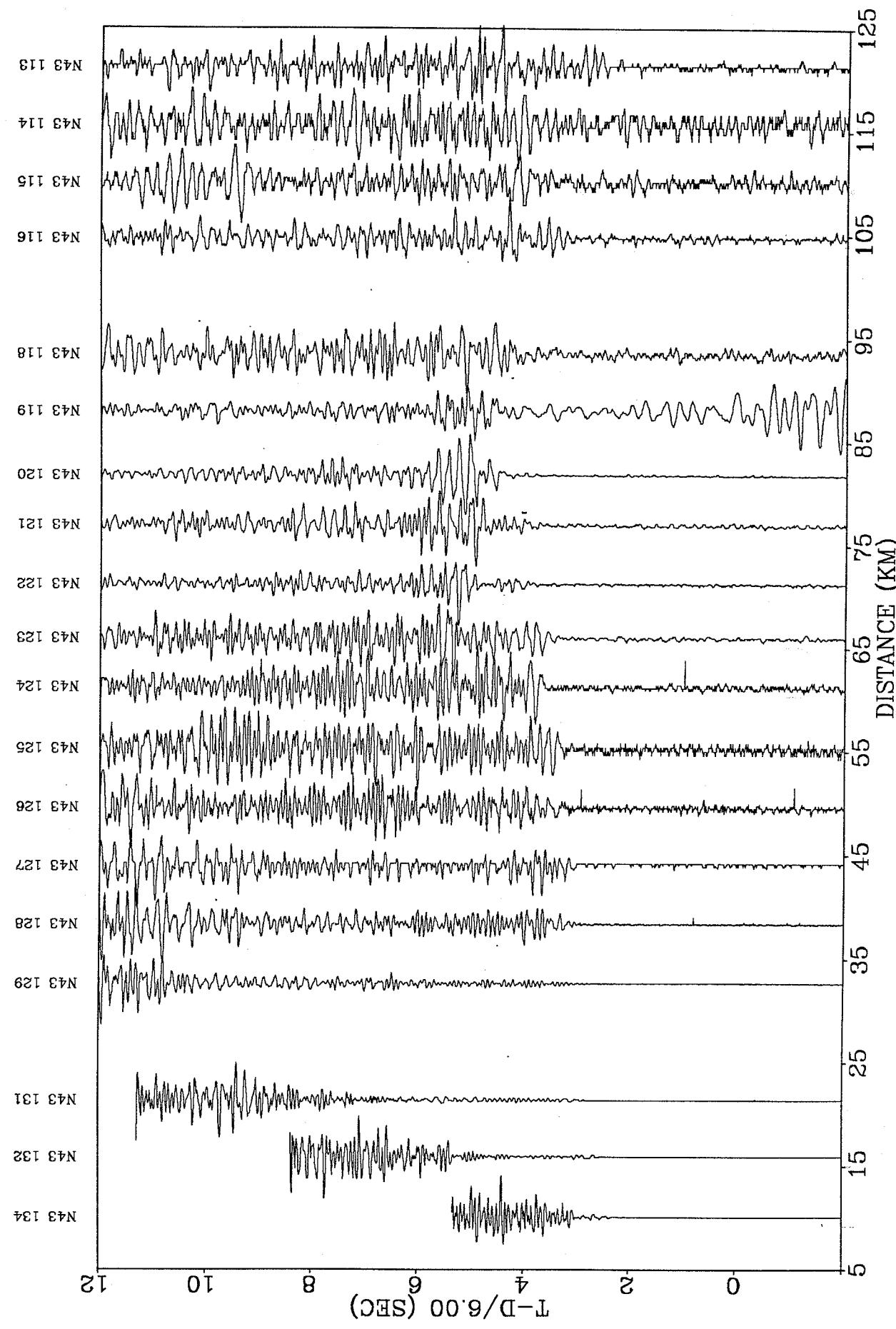


Fig. 17B – Seismic section LN shot N43



Line: I08 Shot: N45
 ** Ice Island 86 ** Field shot point: N2 Section: LN
 Shot time: 1986 APR. 24 20:31: 0.00
 Lat.: 79.71762 N, Long.: 102.84914 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
134	79.76838		102.60956		0.0	7.40	39.93	20:29:59.18	0.100	spz	BP13	120	
133	79.76777		102.60110		0.0	7.46	41.26	20:29:59.19	0.100	spz	BP14	120	
132	79.81142		102.44560		0.0	13.19	37.20	20:29:59.18	0.100	spz	BP11	120	
131	79.85278		102.29444		0.0	18.67	35.78	20:29:59.17	0.100	spz	BP10	120	
130	79.89472		102.14445		0.0	24.19	34.81	20:29:59.19	0.100	spz	BP12	120	
129	79.93849		101.99180		0.0	29.90	34.02	20:29:59.17	0.100	spz	BP16	120	
128	79.98223		101.83915		0.0	35.61	33.44	20:29:59.18	0.100	spz	BP21	120	
127	80.02255		101.66920		0.0	41.19	33.66	20:29:59.18	0.100	spz	BP17	120	
126	80.06000		101.46667		0.0	46.86	34.66	20:29:59.17	0.100	spz	BP20	120	
125	80.10811		101.35511		0.0	52.49	33.10	20:29:59.18	0.100	spz	BP18	120	
124	80.15248		101.18259		0.0	58.44	33.00	20:29:59.19	0.100	spz	BP19	120	
123	80.18805		101.04648		0.0	63.19	32.88	20:29:58.00	0.100	spz	LB06	120	
122	80.22760		100.89626		0.0	68.44	32.74	20:29:58.00	0.100	spz	LB05	120	
121	80.27037		100.72495		0.0	74.21	32.69	20:29:58.00	0.100	spz	LB08	120	
120	80.30638		100.58295		0.0	79.04	32.62	20:29:58.00	0.100	spz	LB03	120	
119	80.35228		100.39626		0.0	85.25	32.58	20:29:58.00	0.100	spz	LB09	120	
118	80.39317		100.22771		0.0	90.80	32.55	20:29:58.00	0.100	spz	LB0C	120	
116	80.47595		99.88803		0.0	101.98	32.44	20:29:58.00	0.100	spz	LB02	120	
115	80.51563		99.71937		0.0	107.40	32.42	20:29:58.00	0.100	spz	LB01	120	
114	80.55644		99.54912		0.0	112.92	32.36	20:29:58.00	0.100	spz	LBOA	120	
113	80.59712		99.36617		0.0	118.56	32.39	20:29:58.00	0.100	spz	LBOE	120	

Fig. 18A - Water wave section LN shot N45

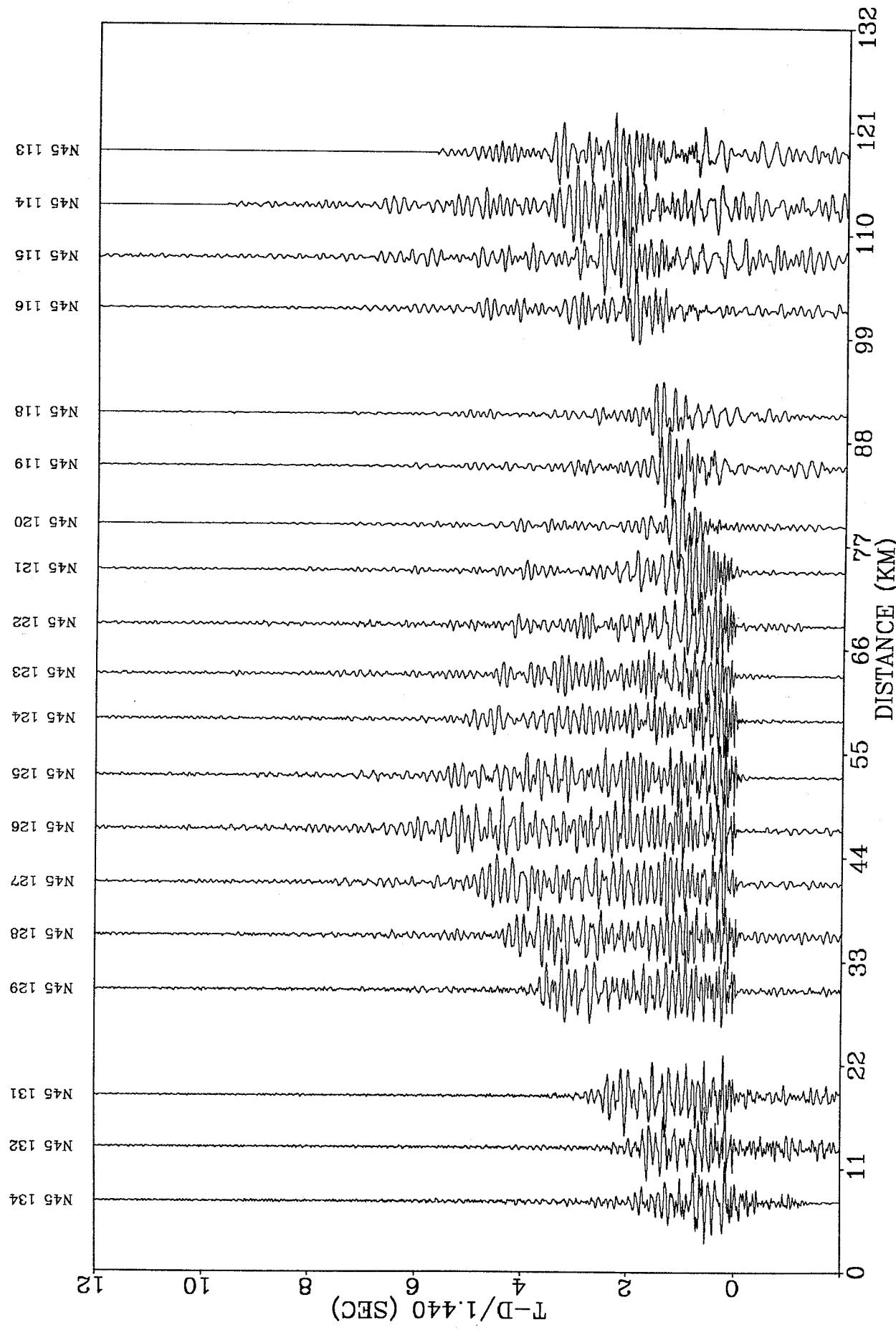
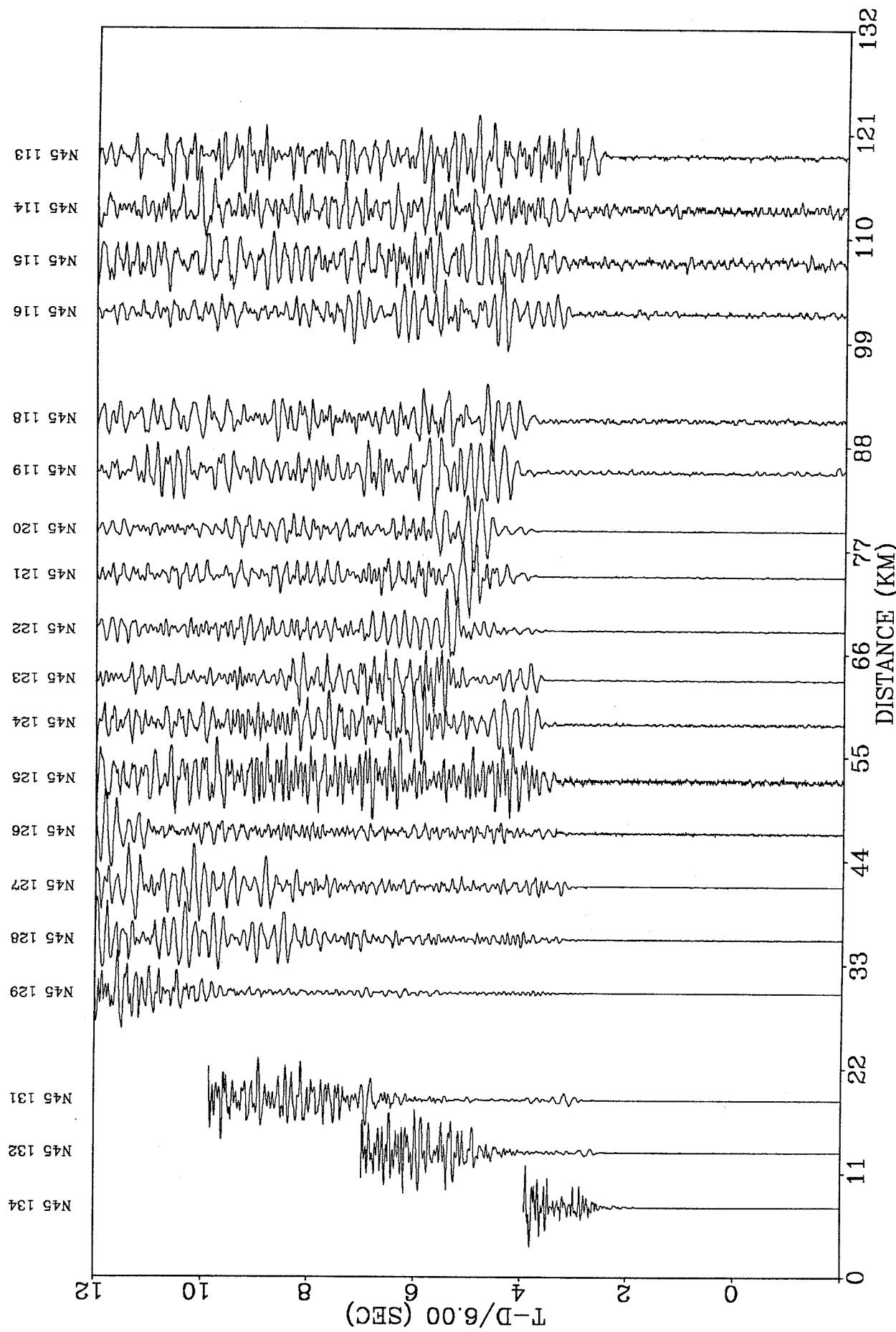


Fig. 18B – Seismic section LN shot N45



Line: I09 Shot: L54

** Ice Island 86 ** Field shot point: L1N Section: OR

Shot time: 1986 APR. 25 20:15: 0.00

Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 489.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
149	81.51131		99.12650		0.0	103.40	1.64	20:14:59.18	0.100	spz	BP18	120	
148	81.49083		98.86510		0.0	101.35	4.12	20:15: 7.18	0.100	spz	BP14	120	
147	81.47095		98.58528		0.0	99.63	6.88	20:14:59.17	0.100	spz	BP22	120	
146	81.45007		98.31190		0.0	98.05	9.69	20:14:58.00	0.100	spz	LB03	120	
145	81.43068		98.05059		0.0	96.85	12.45	20:14:58.00	0.100	spz	LB01	120	
144	81.40983		97.78165		0.0	95.78	15.39	20:14:58.00	0.100	spz	LBOE	120	
143	81.38927		97.51560		0.0	95.02	18.36	20:14:58.00	0.100	spz	LB04	120	
142	81.36865		97.25224		0.0	94.51	21.35	20:14:58.00	0.100	spz	LB08	120	
141	81.34668		96.99106		0.0	94.15	24.40	20:14:58.00	0.100	spz	LB02	120	
140	81.32511		96.72678		0.0	94.14	27.47	20:14:58.00	0.100	spz	LB06	120	
139	81.30330		96.47118		0.0	94.33	30.48	20:14:58.00	0.100	spz	LB05	120	
138	81.28258		96.21479		0.0	94.91	33.44	20:14:58.00	0.100	spz	LBOA	120	
137	81.26048		95.95625		0.0	95.67	36.43	20:14:58.00	0.100	spz	LB09	120	
136	81.23829		95.69486		0.0	96.74	39.39	20:14:58.00	0.100	spz	LB0C	120	
158	81.68140	101.61718			0.0	128.63	343.12	20:14:59.18	0.100	spz	BP19	120	
156	81.64658	101.05270			0.0	122.21	346.59	20:14:59.16	0.100	spz	BP10	120	
155	81.62701	100.77670			0.0	119.00	348.40	20:14:59.17	0.100	spz	BP20	120	
154	81.60783	100.50104			0.0	115.98	350.33	20:14:59.17	0.100	spz	BP13	120	
153	81.58987	100.22137			0.0	113.23	352.41	20:14:59.19	0.100	spz	BP16	120	
152	81.56858	99.95042			0.0	110.31	354.51	20:14:59.19	0.100	spz	BP12	120	
151	81.55079	99.66568			0.0	107.94	356.86	20:14:59.18	0.100	spz	BP21	120	
150	81.53029	99.40027			0.0	105.48	359.15	20:14:59.17	0.100	spz	BP11	120	

Line: I09 Shot: L54

** Ice Island 86 ** Field shot point: L1N Section: OR

Shot time: 1986 APR. 25 20:15: 0.00

Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 489.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
140	81.32511		96.72678		0.0	94.14	27.47	20:14:58.00	0.100	spz	LB06	120	
141	81.34668		96.99106		0.0	94.15	24.40	20:14:58.00	0.100	spz	LB02	120	
139	81.30330		96.47118		0.0	94.33	30.48	20:14:58.00	0.100	spz	LB05	120	
142	81.36865		97.25224		0.0	94.51	21.35	20:14:58.00	0.100	spz	LB08	120	
138	81.28258		96.21479		0.0	94.91	33.44	20:14:58.00	0.100	spz	LBOA	120	
143	81.38927		97.51560		0.0	95.02	18.36	20:14:58.00	0.100	spz	LB04	120	
137	81.26048		95.95625		0.0	95.67	36.43	20:14:58.00	0.100	spz	LB09	120	
144	81.40983		97.78165		0.0	95.78	15.39	20:14:58.00	0.100	spz	LBOE	120	
136	81.23829		95.69486		0.0	96.74	39.39	20:14:58.00	0.100	spz	LBOC	120	
145	81.43068		98.05059		0.0	96.85	12.45	20:14:58.00	0.100	spz	LB01	120	
146	81.45007		98.31190		0.0	98.05	9.69	20:14:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	99.63	6.88	20:14:59.17	0.100	spz	BP22	120	
148	81.49083		98.86510		0.0	101.35	4.12	20:15: 7.18	0.100	spz	BP14	120	
149	81.51131		99.12650		0.0	103.40	1.64	20:14:59.18	0.100	spz	BP18	120	
150	81.53029		99.40027		0.0	105.48	359.15	20:14:59.17	0.100	spz	BP11	120	
151	81.55079		99.66568		0.0	107.94	356.86	20:14:59.18	0.100	spz	BP21	120	
152	81.56858		99.95042		0.0	110.31	354.51	20:14:59.19	0.100	spz	BP12	120	
153	81.58987	100.22137			0.0	113.23	352.41	20:14:59.19	0.100	spz	BP16	120	
154	81.60783	100.50104			0.0	115.98	350.33	20:14:59.17	0.100	spz	BP13	120	
155	81.62701	100.77670			0.0	119.00	348.40	20:14:59.17	0.100	spz	BP20	120	
156	81.64658	101.05270			0.0	122.21	346.59	20:14:59.16	0.100	spz	BP10	120	
158	81.68140	101.61718			0.0	128.63	343.12	20:14:59.18	0.100	spz	BP19	120	

Fig. 19A – Water wave section OR shot L54

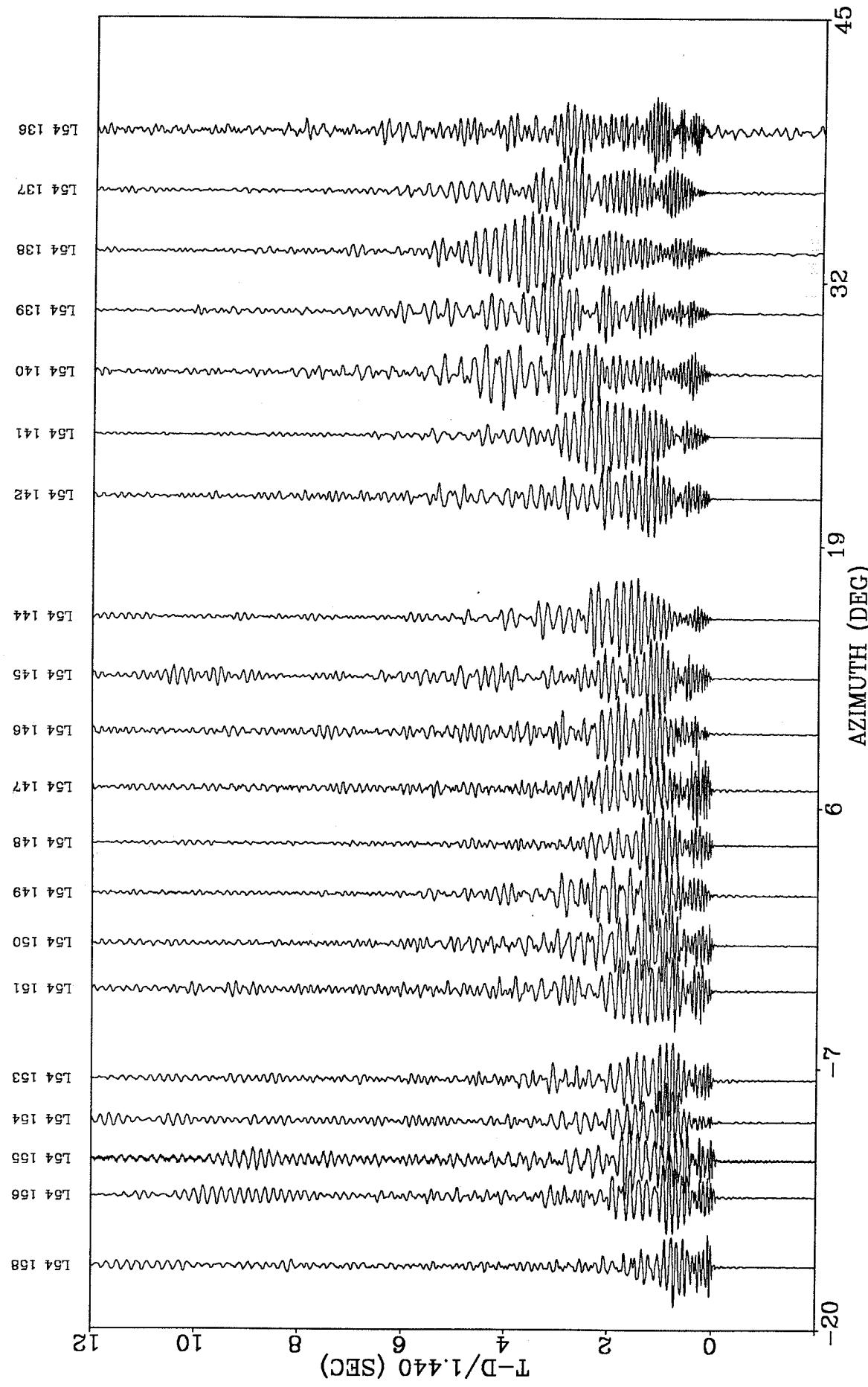
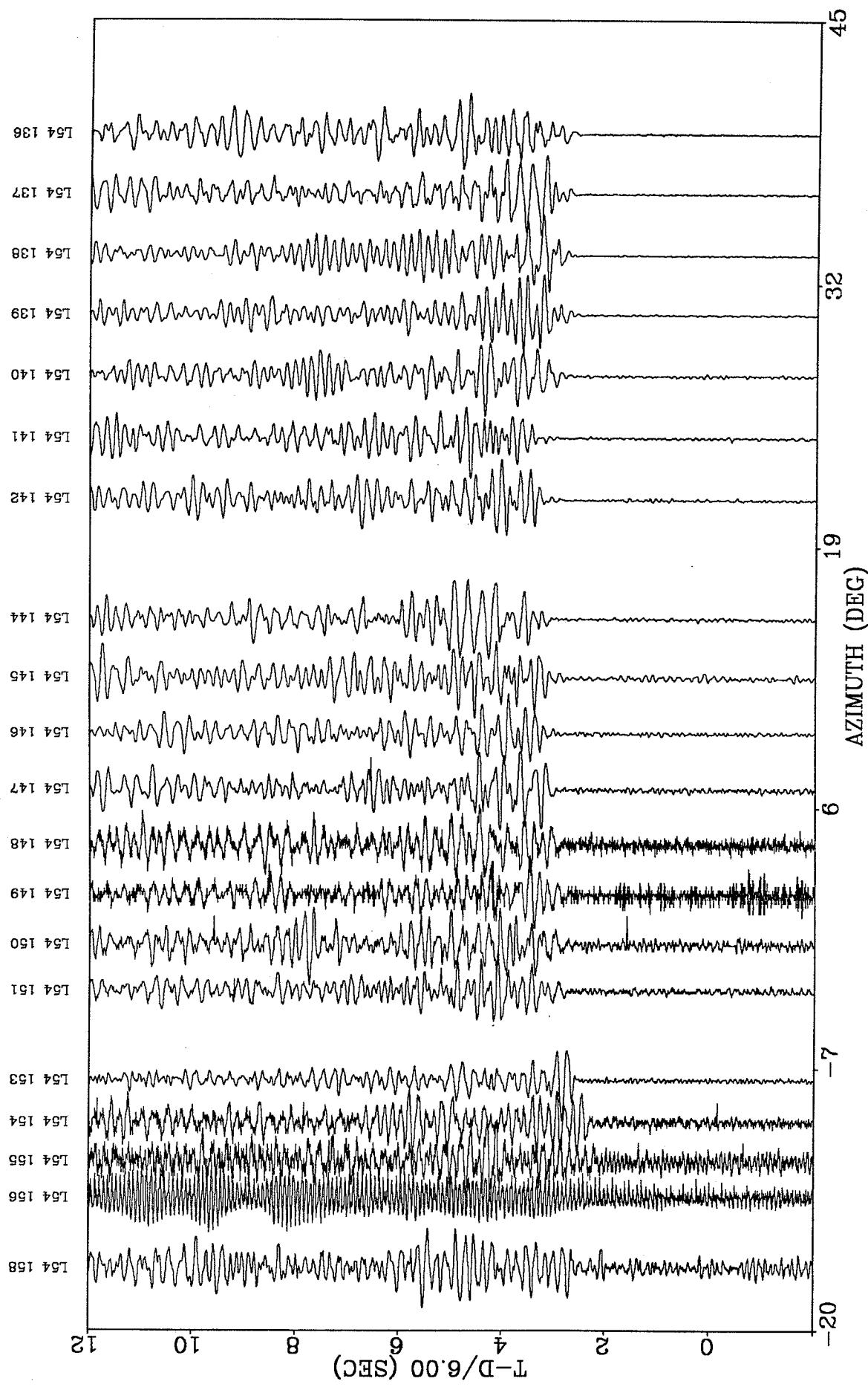


Fig. 19B – Seismic section OR shot 154



Line: I09 Shot: N57
** Ice Island 86 ** Field shot point: NS Section: OR
Shot time: 1986 APR. 25 21:45: 0.00
Lat.: 80.60228 N, Long.: 89.39008 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 707.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
136	81.23829		95.69486		0.0	131.78	305.67	21:44:58.00	0.100	spz	LBOC	120	
137	81.26048		95.95625		0.0	136.87	305.66	21:44:58.00	0.100	spz	LB09	120	
138	81.28258		96.21479		0.0	141.90	305.68	21:44:58.00	0.100	spz	LBOA	120	
139	81.30330		96.47118		0.0	146.81	305.65	21:44:58.00	0.100	spz	LB05	120	
140	81.32511		96.72678		0.0	151.76	305.68	21:44:58.00	0.100	spz	LB06	120	
141	81.34668		96.99106		0.0	156.82	305.69	21:44:58.00	0.100	spz	LB02	120	
142	81.36865		97.25224		0.0	161.84	305.72	21:44:58.00	0.100	spz	LB08	120	
143	81.38927		97.51560		0.0	166.81	305.72	21:44:58.00	0.100	spz	LB04	120	
144	81.40983		97.78165		0.0	171.82	305.71	21:44:58.00	0.100	spz	LBOE	120	
145	81.43068		98.05059		0.0	176.87	305.71	21:44:58.00	0.100	spz	LB01	120	
146	81.45007		98.31190		0.0	181.72	305.70	21:44:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	186.82	305.71	21:44:59.17	0.100	spz	BP22	120	
148	81.49083		98.86510		0.0	191.95	305.69	21:45: 3.18	0.100	spz	BP14	120	
149	81.51131		99.12650		0.0	196.83	305.73	21:44:59.18	0.100	spz	BP18	120	
150	81.53029		99.40027		0.0	201.81	305.71	21:44:59.19	0.100	spz	BP11	120	
151	81.55079		99.66568		0.0	206.74	305.76	21:44:59.18	0.100	spz	BP21	120	
152	81.56858		99.95042		0.0	211.81	305.70	21:44:59.17	0.100	spz	BP12	120	
153	81.58987		100.22137		0.0	216.83	305.77	21:44:59.19	0.100	spz	BP16	120	
154	81.60783		100.50104		0.0	221.81	305.75	21:44:59.18	0.100	spz	BP13	120	
155	81.62701		100.77670		0.0	226.78	305.77	21:44:59.17	0.100	spz	BP20	120	
156	81.64658		101.05270		0.0	231.77	305.80	21:44:59.18	0.100	spz	BP10	120	
158	81.68140		101.61718		0.0	241.70	305.76	21:44:59.17	0.100	spz	BP19	120	

Fig. 20A - Water wave section OR shot N57

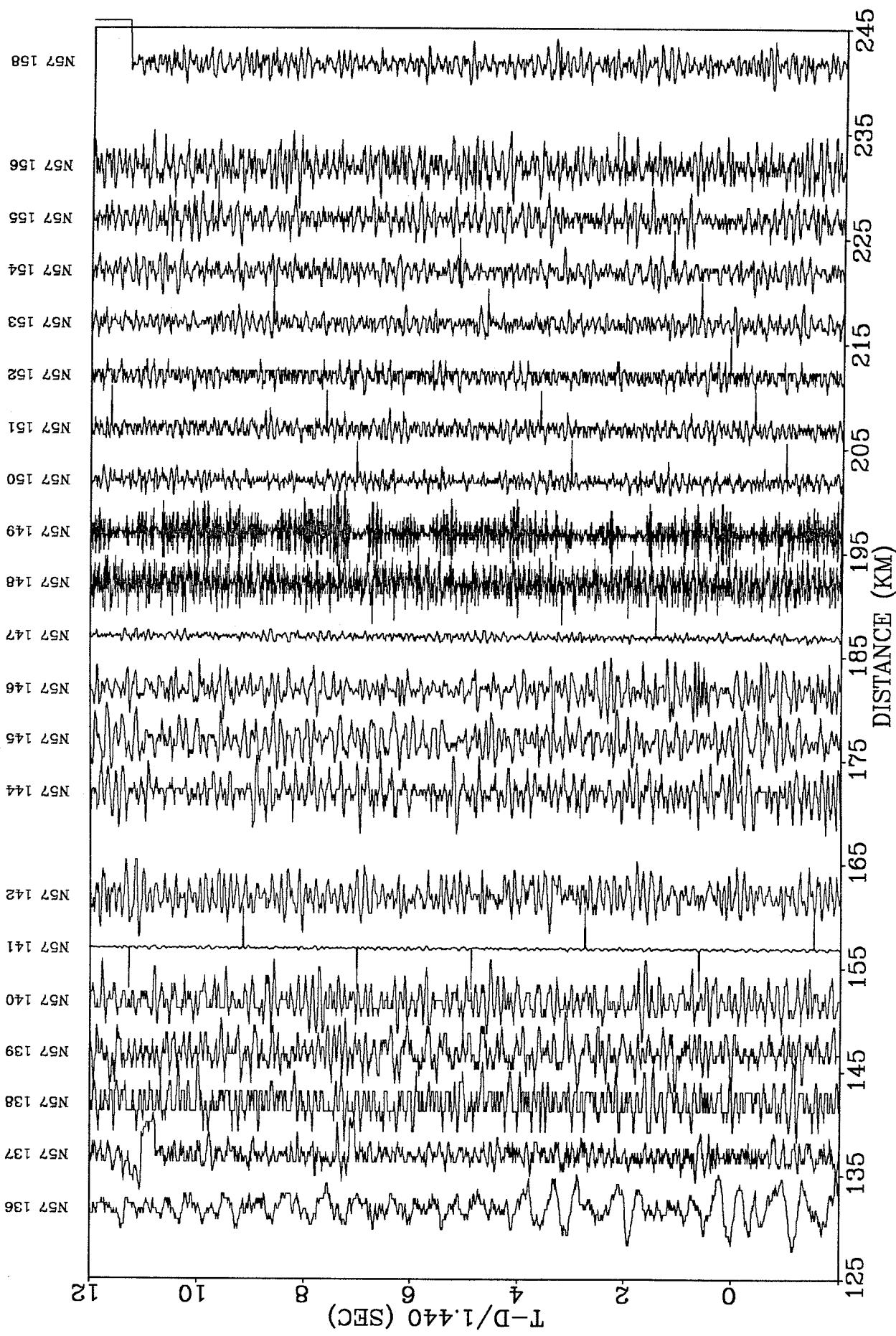
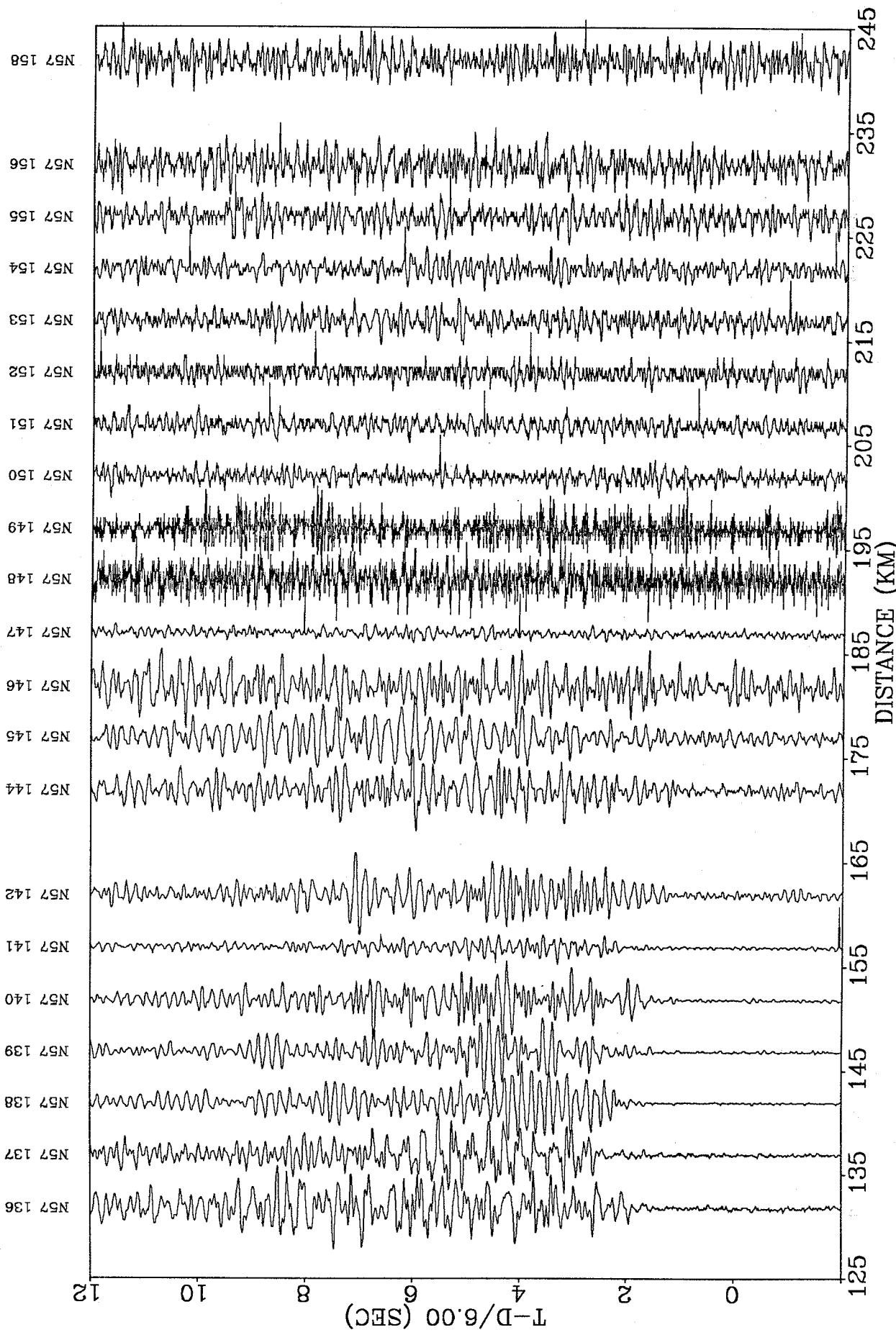


Fig. 20B – Seismic section OR shot N57



Line: I09 Shot: 050
 ** Ice Island 86 ** Field shot point: 01 Section: OR
 Shot time: 1986 APR. 25 19:15: 0.00
 Lat.: 81.21143 N, Long.: 95.37466 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
136	81.23829		95.69486		0.0	6.23	298.96	19:14:58.00	0.100	spz	LBOC	120	
137	81.26048		95.95625		0.0	11.31	299.25	19:14:58.00	0.100	spz	LB09	120	
138	81.28258		96.21479		0.0	16.34	299.51	19:14:58.00	0.100	spz	LB0A	120	
139	81.30330		96.47118		0.0	21.25	299.40	19:14:58.00	0.100	spz	LB05	120	
140	81.32511		96.72678		0.0	26.21	299.64	19:14:58.00	0.100	spz	LB06	120	
141	81.34668		96.99106		0.0	31.26	299.69	19:14:58.00	0.100	spz	LB02	120	
142	81.36865		97.25224		0.0	36.28	299.86	19:14:58.00	0.100	spz	LB08	120	
143	81.38927		97.51560		0.0	41.26	299.83	19:14:58.00	0.100	spz	LB04	120	
144	81.40983		97.78165		0.0	46.26	299.80	19:14:58.00	0.100	spz	LBOE	120	
145	81.43068		98.05059		0.0	51.31	299.82	19:14:58.00	0.100	spz	LB01	120	
146	81.45007		98.31190		0.0	56.16	299.77	19:14:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	61.26	299.81	19:15: 7.17	0.100	spz	BP22	120	
148	81.49083		98.86510		0.0	66.40	299.74	19:14:59.19	0.100	spz	BP14	120	
149	81.51131		99.12650		0.0	71.28	299.86	19:14:59.17	0.100	spz	BP18	120	
150	81.53029		99.40027		0.0	76.26	299.81	19:14:59.17	0.100	spz	BP11	120	
151	81.55079		99.66568		0.0	81.18	299.93	19:14:59.19	0.100	spz	BP21	120	
152	81.56858		99.95042		0.0	86.25	299.78	19:14:59.18	0.100	spz	BP12	120	
153	81.58987		100.22137		0.0	91.27	299.95	19:14:59.18	0.100	spz	BP16	120	
154	81.60783		100.50104		0.0	96.26	299.89	19:14:59.19	0.100	spz	BP13	120	
155	81.62701		100.77670		0.0	101.23	299.93	19:14:59.17	0.100	spz	BP20	120	
156	81.64658		101.05270		0.0	106.22	300.00	19:14:59.17	0.100	spz	BP10	120	
158	81.68140		101.61718		0.0	116.15	299.91	19:14:59.17	0.100	spz	BP19	120	

Fig. 21A - Water wave section OR shot 050

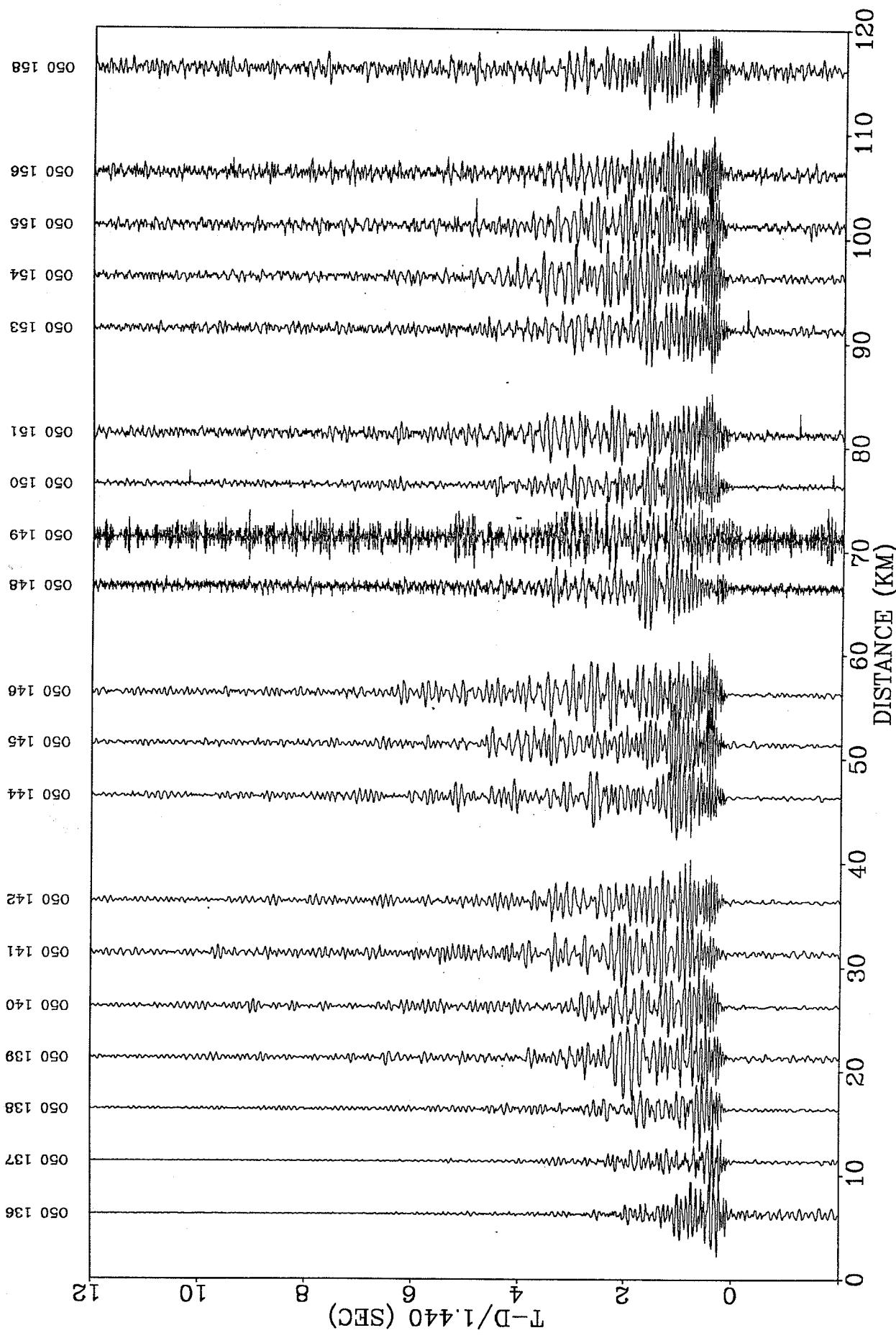
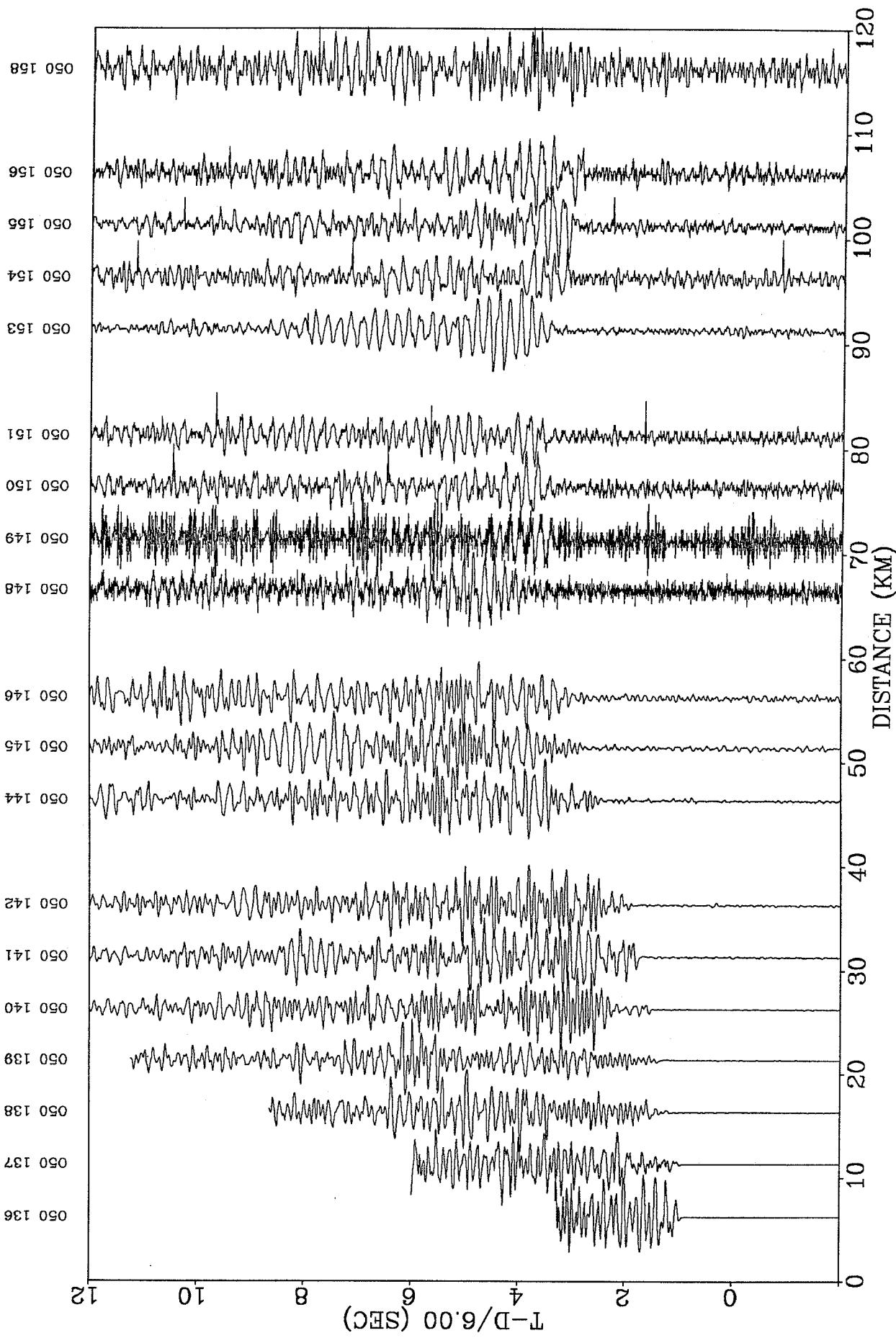


Fig. 21B – Seismic section OR shot 050



Line: I09 Shot: 052

** Ice Island 86 ** Field shot point: 02 Section: OR

Shot time: 1986 APR. 25 19:45: 0.00

Lat.: 81.22769 N, Long.: 95.57017 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
136	81.23829		95.69486		0.0	2.43	299.20	19:44:58.00	0.100	spz	LBOC	120	
137	81.26048		95.95625		0.0	7.52	299.34	19:44:58.00	0.100	spz	LB09	120	
138	81.28258		96.21479		0.0	12.55	299.56	19:44:58.00	0.100	spz	LB0A	120	
139	81.30330		96.47118		0.0	17.46	299.37	19:44:58.00	0.100	spz	LB05	120	
140	81.32511		96.72678		0.0	22.41	299.61	19:44:58.00	0.100	spz	LB06	120	
141	81.34668		96.99106		0.0	27.47	299.63	19:44:58.00	0.100	spz	LB02	120	
142	81.36865		97.25224		0.0	32.49	299.81	19:44:58.00	0.100	spz	LB08	120	
143	81.38927		97.51560		0.0	37.46	299.75	19:44:58.00	0.100	spz	LB04	120	
144	81.40983		97.78165		0.0	42.47	299.71	19:44:58.00	0.100	spz	LB0E	120	
145	81.43068		98.05059		0.0	47.52	299.71	19:44:58.00	0.100	spz	LB01	120	
146	81.45007		98.31190		0.0	52.37	299.65	19:44:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	57.47	299.69	19:44:59.17	0.100	spz	BP22	120	
148	81.49083		98.86510		0.0	62.60	299.61	19:45: 7.18	0.100	spz	BP14	120	
149	81.51131		99.12650		0.0	67.48	299.74	19:44:59.18	0.100	spz	BP18	120	
150	81.53029		99.40027		0.0	72.46	299.67	19:44:59.19	0.100	spz	BP11	120	
151	81.55079		99.66568		0.0	77.39	299.80	19:44:59.18	0.100	spz	BP21	120	
152	81.56858		99.95042		0.0	82.46	299.64	19:44:59.18	0.100	spz	BP12	120	
153	81.58987	100.	22137		0.0	87.48	299.81	19:44:59.17	0.100	spz	BP16	120	
154	81.60783	100.	50104		0.0	92.46	299.74	19:44:59.17	0.100	spz	BP13	120	
155	81.62701	100.	77670		0.0	97.44	299.78	19:44:59.19	0.100	spz	BP20	120	
156	81.64658	101.	05270		0.0	102.42	299.85	19:44:59.17	0.100	spz	BP10	120	
158	81.68140	101.	61718		0.0	112.35	299.76	19:44:59.18	0.100	spz	BP19	120	

Fig. 22A - Water wave section OR shot 052

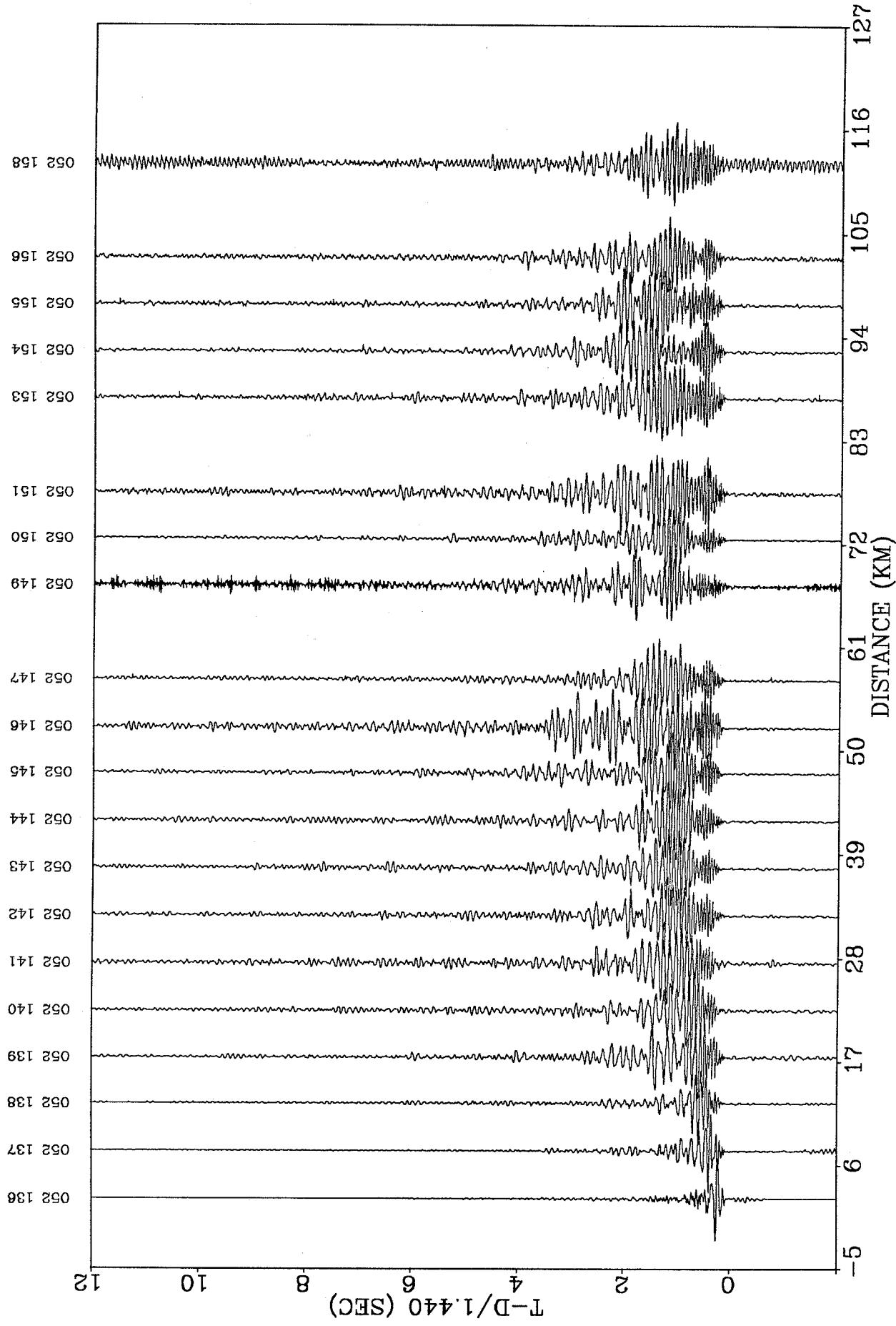
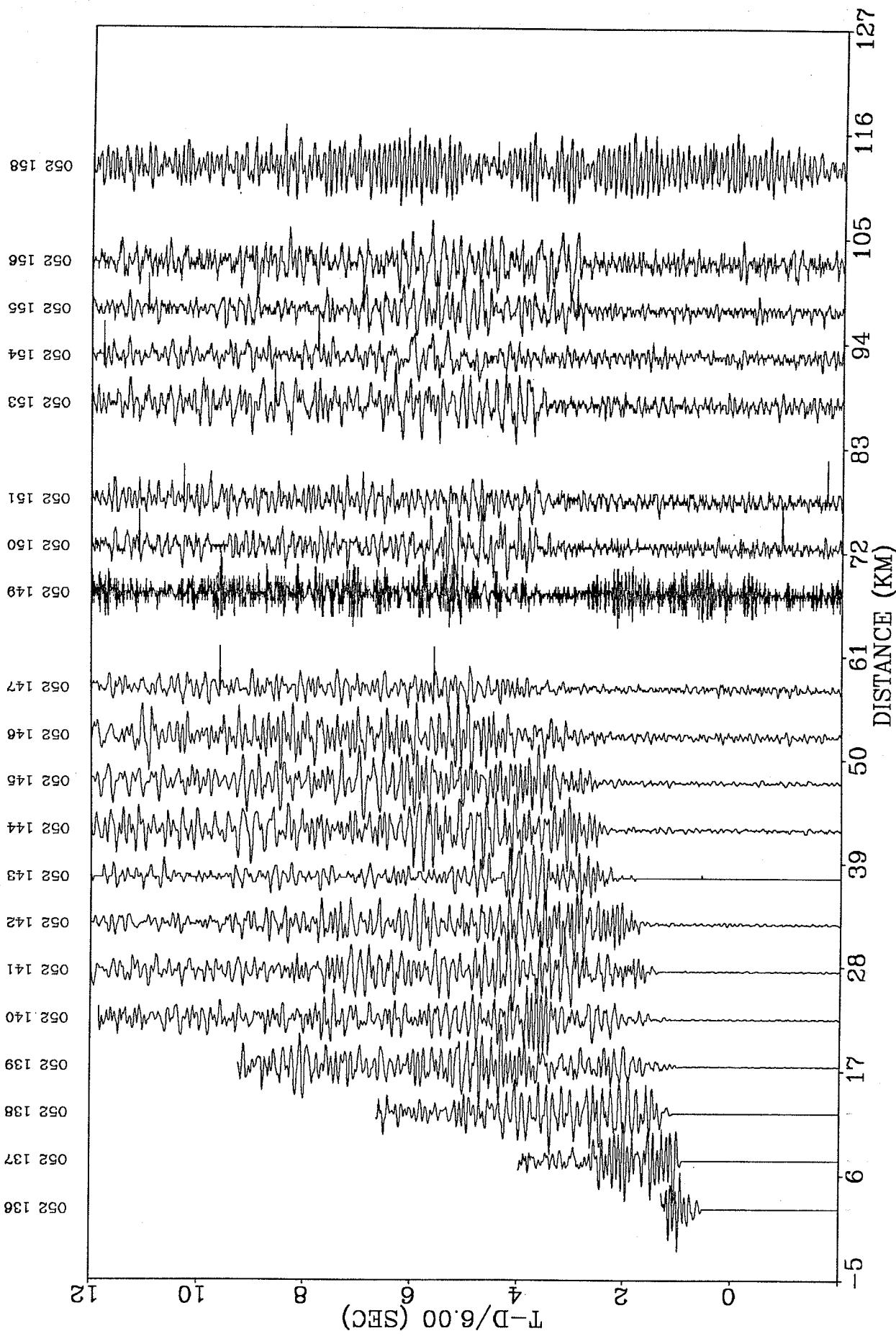


Fig. 22B - Seismic section OR shot 052



Line: I09 Shot: P55

** Ice Island 86 ** Field shot point: P1 Section: OR

Shot time: 1986 APR. 25 20:46: 0.00

Lat.: 81.46952 N, Long.: 98.53242 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
136	81.23829		95.69486		0.0	54.18	117.05	20:44:58.00	0.100	spz	LB0C	120	
137	81.26048		95.95625		0.0	49.10	117.11	20:44:58.00	0.100	spz	LB09	120	
138	81.28258		96.21479		0.0	44.07	117.12	20:44:58.00	0.100	spz	LB0A	120	
140	81.32511		96.72678		0.0	34.20	117.23	20:44:58.00	0.100	spz	LB06	120	
142	81.36865		97.25224		0.0	24.12	117.20	20:44:58.00	0.100	spz	LB08	120	
139	81.30330		96.47118		0.0	39.16	117.27	20:44:58.00	0.100	spz	LB05	120	
141	81.34668		96.99106		0.0	29.15	117.31	20:44:58.00	0.100	spz	LB02	120	
143	81.38927		97.51560		0.0	19.15	117.40	20:44:58.00	0.100	spz	LB04	120	
144	81.40983		97.78165		0.0	14.15	117.73	20:44:58.00	0.100	spz	LBOE	120	
145	81.43068		98.05059		0.0	9.10	118.23	20:44:58.00	0.100	spz	LB01	120	
146	81.45007		98.31190		0.0	4.25	120.60	20:44:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	0.89	280.34	20:44:59.17	0.100	spz	BP22	120	
148	81.49083		98.86510		0.0	6.00	293.54	20:44:59.17	0.100	spz	BP14	120	
150	81.53029		99.40027		0.0	15.85	295.77	20:44:59.17	0.100	spz	BP11	120	
149	81.51131		99.12650		0.0	10.87	295.72	20:44:59.19	0.100	spz	BP18	120	
152	81.56858		99.95042		0.0	25.84	296.04	20:44:59.17	0.100	spz	BP12	120	
151	81.55079		99.66568		0.0	20.77	296.46	20:44:59.18	0.100	spz	BP21	120	
154	81.60783	100.50104			0.0	35.85	296.49	20:44:59.17	0.100	spz	BP13	120	
158	81.68140	101.61718			0.0	55.74	296.64	20:44:59.17	0.100	spz	BP19	120	
153	81.58987	100.22137			0.0	30.86	296.65	20:44:59.17	0.100	spz	BP16	120	
155	81.62701	100.77670			0.0	40.82	296.63	20:44:59.19	0.100	spz	BP20	120	
156	81.64658	101.05270			0.0	45.81	296.81	20:44:59.19	0.100	spz	BP10	120	

Line: I09 Shot: P55

** Ice Island 86 ** Field shot point: P1 Section: OR

Shot time: 1986 APR. 25 20:46: 0.00

Lat.: 81.46952 N, Long.: 98.53242 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
147	81.47095		98.58528		0.0	0.89	280.34	20:44:59.17	0.100	spz	BP22	120	
146	81.45007		98.31190		0.0	4.25	120.60	20:44:58.00	0.100	spz	LB03	120	
148	81.49083		98.86510		0.0	6.00	293.54	20:44:59.17	0.100	spz	BP14	120	
145	81.43068		98.05059		0.0	9.10	118.23	20:44:58.00	0.100	spz	LB01	120	
149	81.51131		99.12650		0.0	10.87	295.72	20:44:59.19	0.100	spz	BP18	120	
144	81.40983		97.78165		0.0	14.15	117.73	20:44:58.00	0.100	spz	LB0E	120	
150	81.53029		99.40027		0.0	15.85	295.77	20:44:59.17	0.100	spz	BP11	120	
143	81.38927		97.51560		0.0	19.15	117.40	20:44:58.00	0.100	spz	LB04	120	
151	81.55079		99.66568		0.0	20.77	296.46	20:44:59.18	0.100	spz	BP21	120	
142	81.36865		97.25224		0.0	24.12	117.20	20:44:58.00	0.100	spz	LB08	120	
152	81.56858		99.95042		0.0	25.84	296.04	20:44:59.17	0.100	spz	BP12	120	
141	81.34668		96.99106		0.0	29.15	117.31	20:44:58.00	0.100	spz	LB02	120	
153	81.58987		100.22137		0.0	30.86	296.65	20:44:59.17	0.100	spz	BP16	120	
140	81.32511		96.72678		0.0	34.20	117.23	20:44:58.00	0.100	spz	LB06	120	
154	81.60783		100.50104		0.0	35.85	296.49	20:44:59.17	0.100	spz	BP13	120	
139	81.30330		96.47118		0.0	39.16	117.27	20:44:58.00	0.100	spz	LB05	120	
155	81.62701		100.77670		0.0	40.82	296.63	20:44:59.19	0.100	spz	BP20	120	
138	81.28258		96.21479		0.0	44.07	117.12	20:44:58.00	0.100	spz	LB0A	120	
156	81.64658		101.05270		0.0	45.81	296.81	20:44:59.19	0.100	spz	BP10	120	
137	81.26048		95.95625		0.0	49.10	117.11	20:44:58.00	0.100	spz	LB09	120	
136	81.23829		95.69486		0.0	54.18	117.05	20:44:58.00	0.100	spz	LB0C	120	
158	81.68140		101.61718		0.0	55.74	296.64	20:44:59.17	0.100	spz	BP19	120	

Fig. 23A - Water wave section OR shot P55

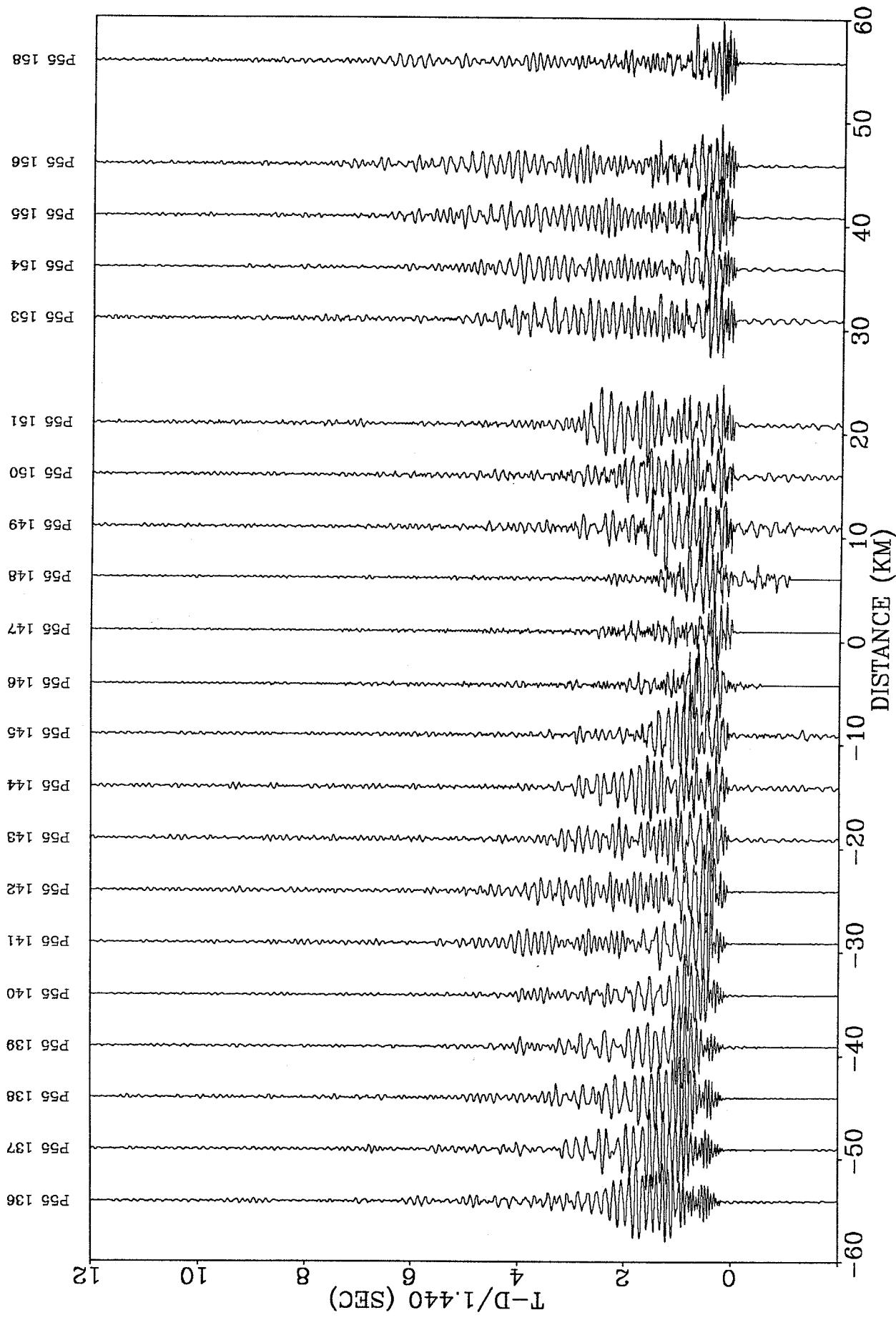
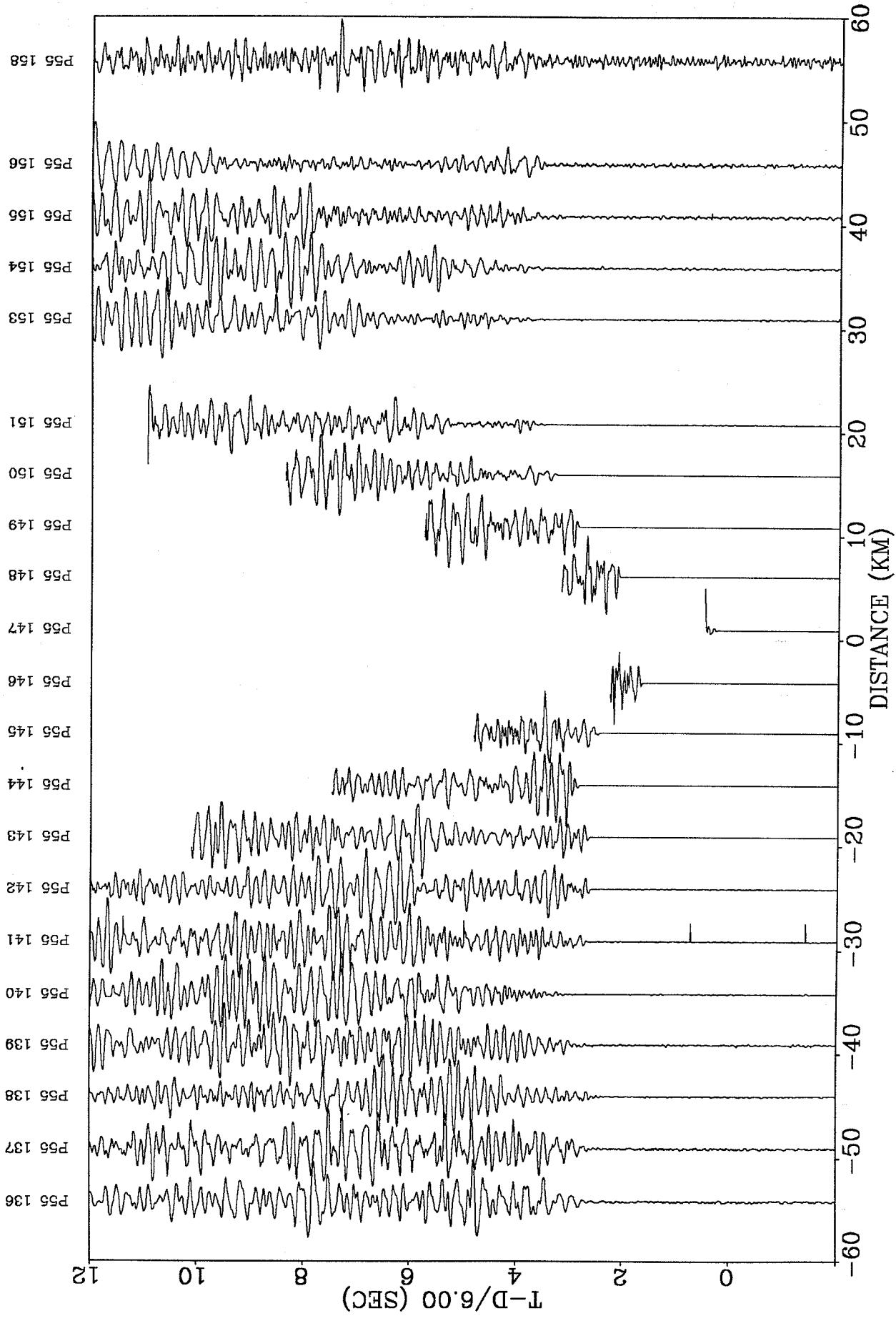


Fig. 23B – Seismic section OR shot P55



Line: I09 Shot: P56

** Ice Island 86 ** Field shot point: P2 Section: OR

Shot time: 1986 APR. 25 21: 1: 0.00

Lat.: 81.45884 N, Long.: 98.40851 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
136	81.23829		95.69486		0.0	51.81	117.03	20:59:58.00	0.100	spz	LB0C	120	
142	81.36865		97.25224		0.0	21.75	117.01	20:59:58.00	0.100	spz	LB08	120	
137	81.26048		95.95625		0.0	46.73	117.08	20:59:58.00	0.100	spz	LB09	120	
138	81.28258		96.21479		0.0	41.70	117.08	20:59:58.00	0.100	spz	LB0A	120	
143	81.38927		97.51560		0.0	16.78	117.14	20:59:58.00	0.100	spz	LB04	120	
141	81.34668		96.99106		0.0	26.78	117.19	20:59:58.00	0.100	spz	LB02	120	
140	81.32511		96.72678		0.0	31.83	117.14	20:59:58.00	0.100	spz	LB06	120	
139	81.30330		96.47118		0.0	36.78	117.22	20:59:58.00	0.100	spz	LB05	120	
144	81.40983		97.78165		0.0	11.78	117.38	20:59:58.00	0.100	spz	LB0E	120	
145	81.43068		98.05059		0.0	6.73	117.69	20:59:58.00	0.100	spz	LB01	120	
146	81.45007		98.31190		0.0	1.88	121.38	20:59:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	3.23	294.86	20:59:59.18	0.100	spz	BP22	120	
148	81.49083		98.86510		0.0	8.36	295.52	20:59:59.17	0.100	spz	BP14	120	
150	81.53029		99.40027		0.0	18.22	296.46	20:59:59.18	0.100	spz	BP11	120	
152	81.56858		99.95042		0.0	28.21	296.51	20:59:59.17	0.100	spz	BP12	120	
149	81.51131		99.12650		0.0	13.24	296.62	20:59:59.19	0.100	spz	BP18	120	
154	81.60783		100.50104		0.0	38.22	296.84	20:59:59.18	0.100	spz	BP13	120	
158	81.68140		101.61718		0.0	58.11	296.90	20:59:59.17	0.100	spz	BP19	120	
155	81.62701		100.77670		0.0	43.19	296.94	20:59:59.17	0.100	spz	BP20	120	
151	81.55079		99.66568		0.0	23.14	296.96	20:59:59.18	0.100	spz	BP21	120	
153	81.58987		100.22137		0.0	33.24	297.01	20:59:59.18	0.100	spz	BP16	120	
156	81.64658		101.05270		0.0	48.18	297.10	20:59:59.17	0.100	spz	BP10	120	

Line: I09 Shot: P56

** Ice Island 86 ** Field shot point: P2 Section: OR

Shot time: 1986 APR. 25 21: 1: 0.00

Lat.: 81.45884 N, Long.: 98.40851 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
146	81.45007		98.31190		0.0	1.88	121.38	20:59:58.00	0.100	spz	LB03	120	
147	81.47095		98.58528		0.0	3.23	294.86	20:59:59.18	0.100	spz	BP22	120	
145	81.43068		98.05059		0.0	6.73	117.69	20:59:58.00	0.100	spz	LB01	120	
148	81.49083		98.86510		0.0	8.36	295.52	20:59:59.17	0.100	spz	BP14	120	
144	81.40983		97.78165		0.0	11.78	117.38	20:59:58.00	0.100	spz	LBOE	120	
149	81.51131		99.12650		0.0	13.24	296.62	20:59:59.19	0.100	spz	BP18	120	
143	81.38927		97.51560		0.0	16.78	117.14	20:59:58.00	0.100	spz	LB04	120	
150	81.53029		99.40027		0.0	18.22	296.46	20:59:59.18	0.100	spz	BP11	120	
142	81.36865		97.25224		0.0	21.75	117.01	20:59:58.00	0.100	spz	LB08	120	
151	81.55079		99.66568		0.0	23.14	296.96	20:59:59.18	0.100	spz	BP21	120	
141	81.34668		96.99106		0.0	26.78	117.19	20:59:58.00	0.100	spz	LB02	120	
152	81.56858		99.95042		0.0	28.21	296.51	20:59:59.17	0.100	spz	BP12	120	
140	81.32511		96.72678		0.0	31.83	117.14	20:59:58.00	0.100	spz	LB06	120	
153	81.58987	100.22137			0.0	33.24	297.01	20:59:59.18	0.100	spz	BP16	120	
139	81.30330	96.47118			0.0	36.78	117.22	20:59:58.00	0.100	spz	LB05	120	
154	81.60783	100.50104			0.0	38.22	296.84	20:59:59.18	0.100	spz	BP13	120	
138	81.28258	96.21479			0.0	41.70	117.08	20:59:58.00	0.100	spz	LBOA	120	
155	81.62701	100.77670			0.0	43.19	296.94	20:59:59.17	0.100	spz	BP20	120	
137	81.26048	95.95625			0.0	46.73	117.08	20:59:58.00	0.100	spz	LB09	120	
156	81.64658	101.05270			0.0	48.18	297.10	20:59:59.17	0.100	spz	BP10	120	
136	81.23829	95.69486			0.0	51.81	117.03	20:59:58.00	0.100	spz	LB0C	120	
158	81.68140	101.61718			0.0	58.11	296.90	20:59:59.17	0.100	spz	BP19	120	

Fig. 24A – Water wave section OR shot P56

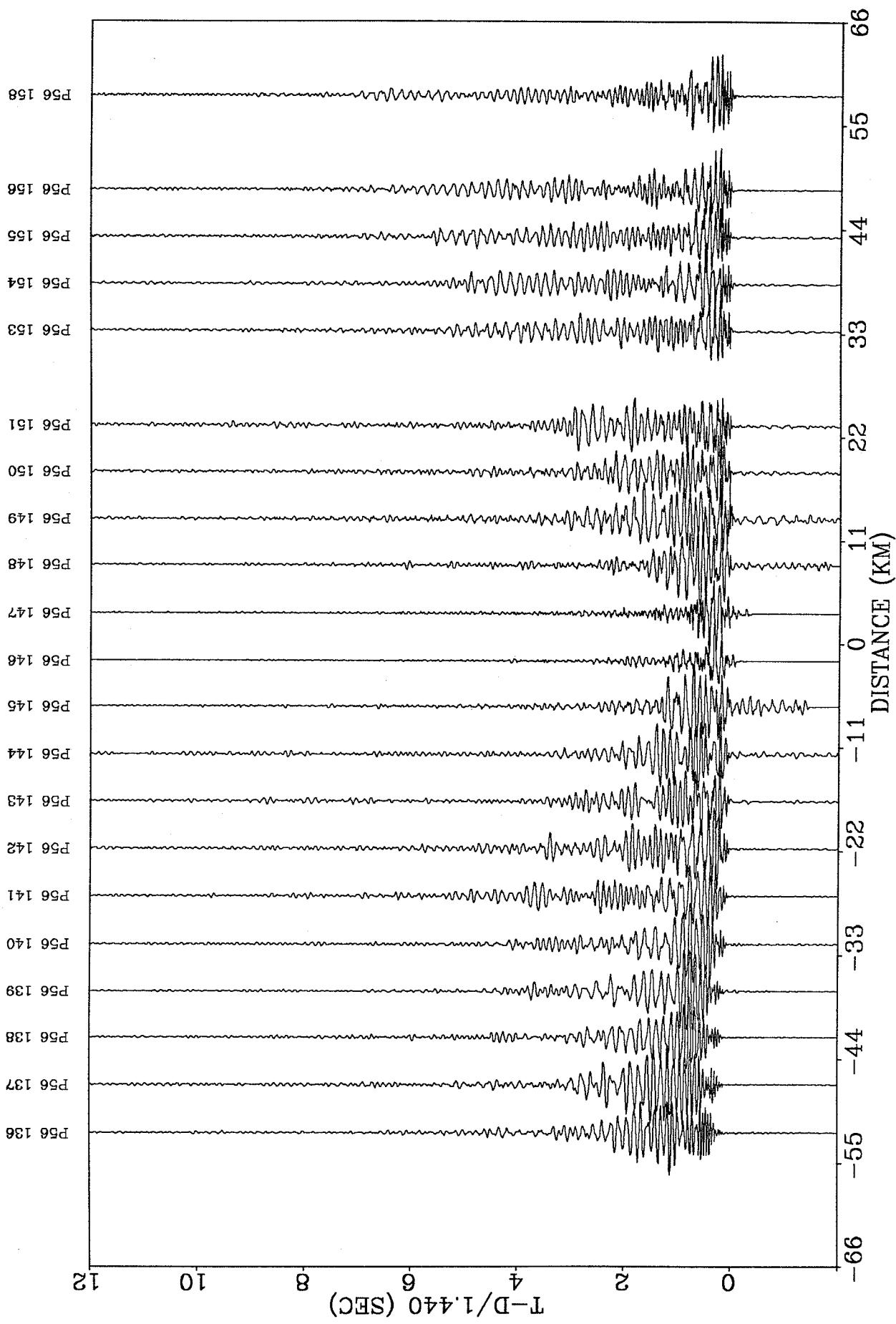
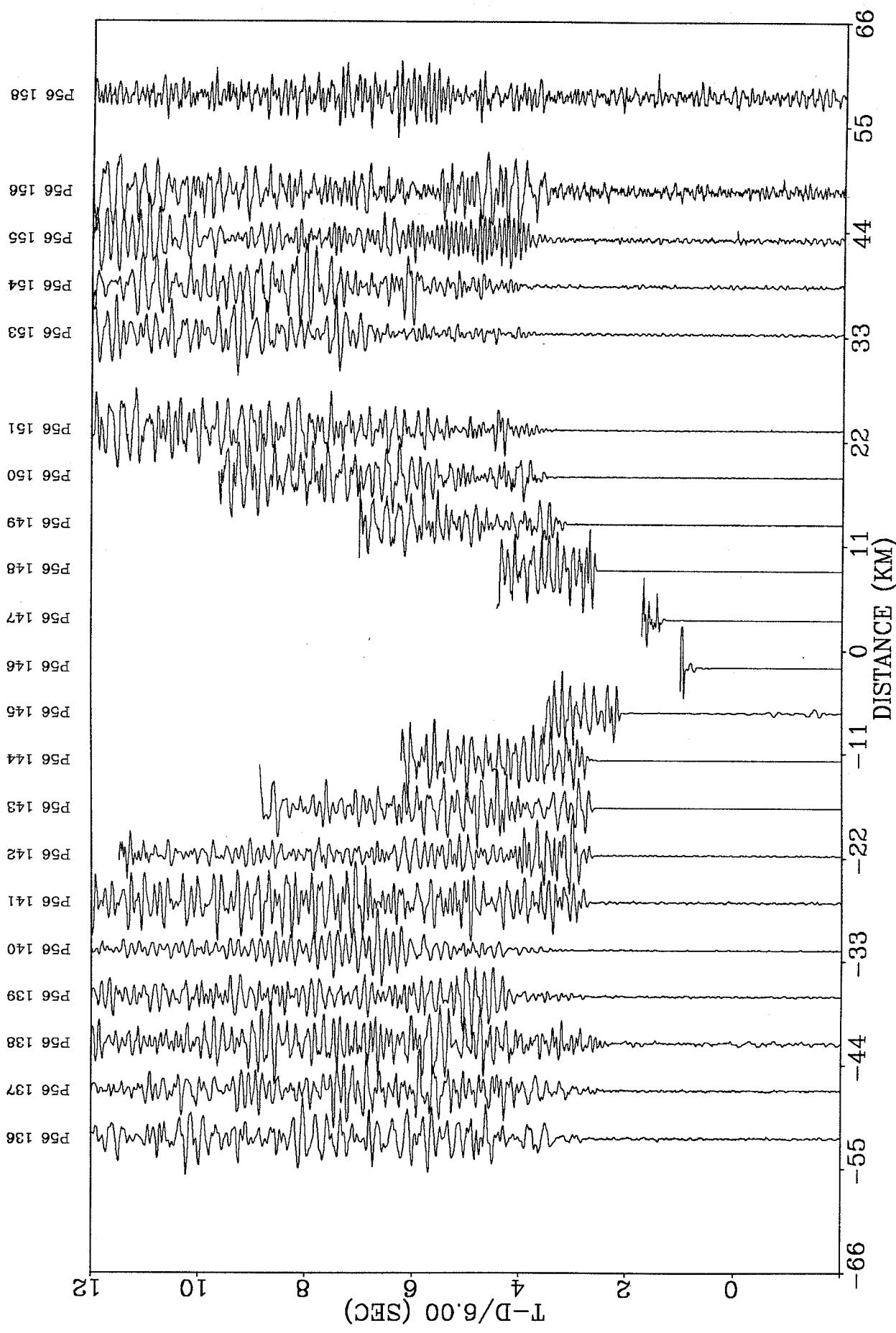


Fig. 24B – Seismic section OR shot P56



Line: I09 Shot: R51

** Ice Island 86 ** Field shot point: R1 Section: OR

Shot time: 1986 APR. 25 19:31: 0.00

Lat.: 81.68709 N, Long.: 101.91621 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
158	81.68140		101.61718		0.0	4.87	97.35	19:29:59.19	0.100	spz	BP19	120	
156	81.64658		101.05270		0.0	14.69	107.50	19:29:59.18	0.100	spz	BP10	120	
155	81.62701		100.77670		0.0	19.65	109.40	19:29:59.18	0.100	spz	BP20	120	
154	81.60783		100.50104		0.0	24.61	110.38	19:29:59.18	0.100	spz	BP13	120	
153	81.58987		100.22137		0.0	29.59	110.69	19:29:59.17	0.100	spz	BP16	120	
152	81.56858		99.95042		0.0	34.60	111.51	19:29:59.18	0.100	spz	BP12	120	
151	81.55079		99.66568		0.0	39.67	111.44	19:29:59.19	0.100	spz	BP21	120	
150	81.53029		99.40027		0.0	44.59	111.87	19:29:59.17	0.100	spz	BP11	120	
149	81.51131		99.12650		0.0	49.57	111.94	19:29:59.19	0.100	spz	BP18	120	
148	81.49083		98.86510		0.0	54.44	112.22	19:30:	7.18	0.100	spz	BP14	120
147	81.47095		98.58528		0.0	59.58	112.24	19:29:59.19	0.100	spz	BP22	120	
146	81.45007		98.31190		0.0	64.68	112.36	19:29:58.00	0.100	spz	LB03	120	
145	81.43068		98.05059		0.0	69.53	112.39	19:29:58.00	0.100	spz	LB01	120	
144	81.40983		97.78165		0.0	74.58	112.47	19:29:58.00	0.100	spz	LB0E	120	
143	81.38927		97.51560		0.0	79.58	112.51	19:29:58.00	0.100	spz	LB04	120	
142	81.36865		97.25224		0.0	84.55	112.54	19:29:58.00	0.100	spz	LB08	120	
141	81.34668		96.99106		0.0	89.58	112.65	19:29:58.00	0.100	spz	LB02	120	
140	81.32511		96.72678		0.0	94.63	112.69	19:29:58.00	0.100	spz	LB06	120	
139	81.30330		96.47118		0.0	99.58	112.77	19:29:58.00	0.100	spz	LB05	120	
138	81.28258		96.21479		0.0	104.50	112.76	19:29:58.00	0.100	spz	LB0A	120	
137	81.26048		95.95625		0.0	109.52	112.80	19:29:58.00	0.100	spz	LB09	120	
136	81.23829		95.69486		0.0	114.61	112.81	19:29:58.00	0.100	spz	LB0C	120	

Fig. 25A - Water wave section OR shot R51

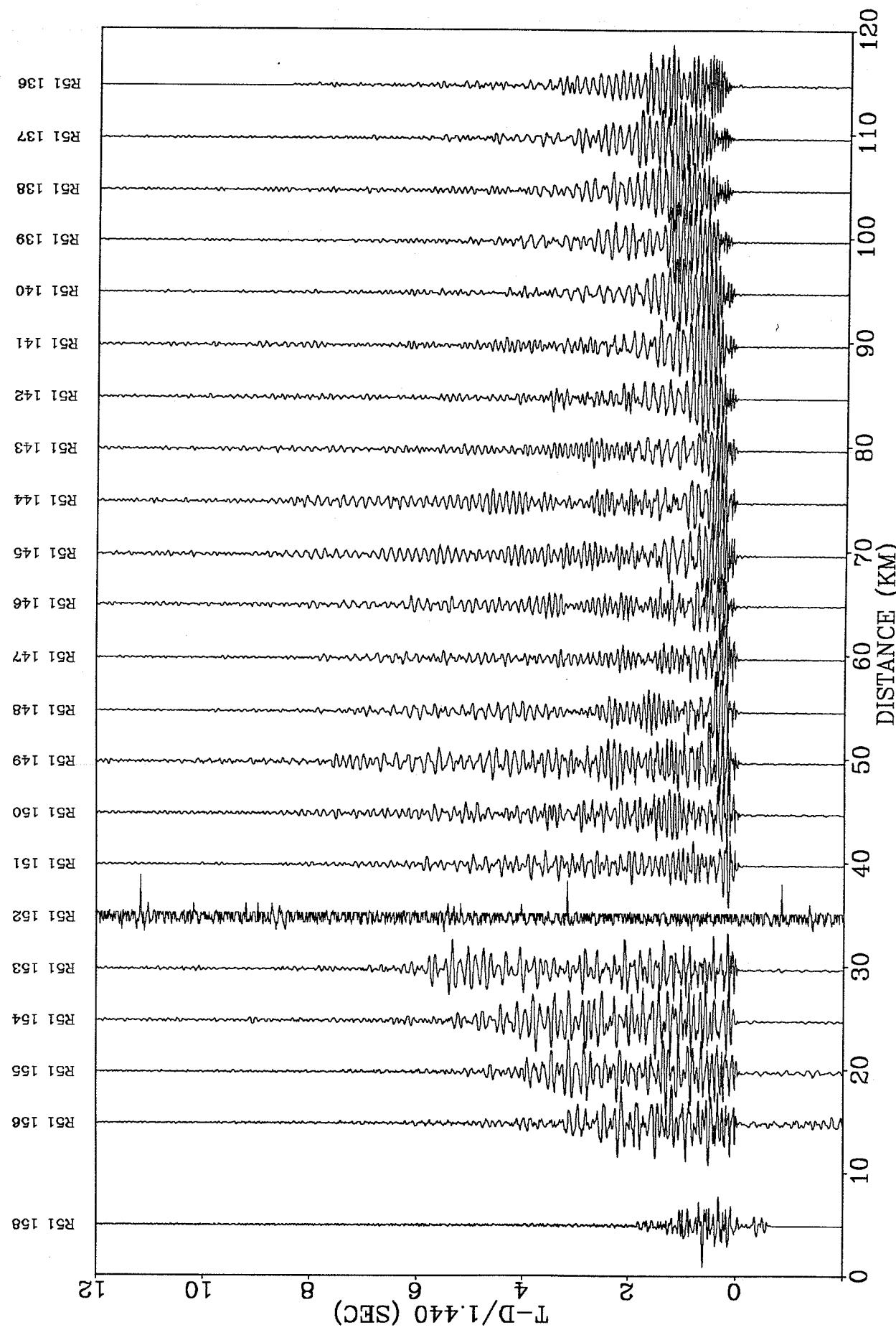
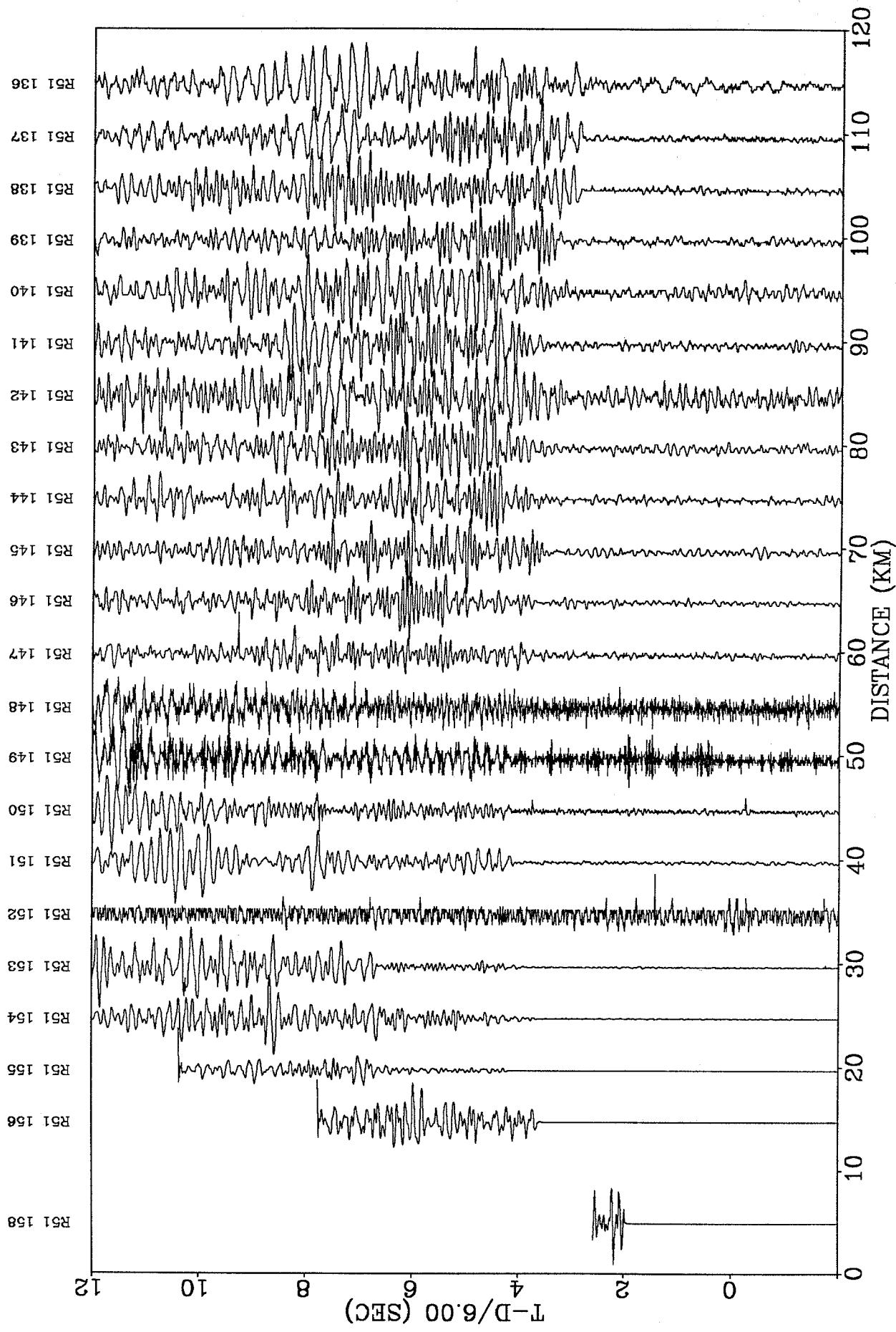


Fig. 25B – Seismic section OR shot R51



Line: I09 Shot: R53
** Ice Island 86 ** Field shot point: R2 Section: OR
Shot time: 1986 APR. 25 20: 1: 0.00
Lat.: 81.69739 N, Long.: 101.71249 W, Elev.: 0.0 m.
Depth: 100.0 m, Size: 217.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
158	81.68140		101.61718		0.0	2.36	139.20	19:59:59.18	0.100	spz	BP19	120	
156	81.64658		101.05270		0.0	12.09	117.67	19:59:59.17	0.100	spz	BP10	120	
155	81.62701		100.77670		0.0	17.07	116.94	19:59:59.17	0.100	spz	BP20	120	
154	81.60783		100.50104		0.0	22.04	116.38	19:59:59.19	0.100	spz	BP13	120	
153	81.58987		100.22137		0.0	27.02	115.65	19:59:59.17	0.100	spz	BP16	120	
152	81.56858		99.95042		0.0	32.05	115.80	19:59:59.17	0.100	spz	BP12	120	
151	81.55079		99.66568		0.0	37.11	115.16	19:59:59.18	0.100	spz	BP21	120	
150	81.53029		99.40027		0.0	42.03	115.21	19:59:59.18	0.100	spz	BP11	120	
149	81.51131		99.12650		0.0	47.01	114.95	19:59:59.18	0.100	spz	BP18	120	
148	81.49083		98.86510		0.0	51.89	114.98	20: 0: 7.19	0.100	spz	BP14	120	
147	81.47095		98.58528		0.0	57.02	114.77	19:59:59.17	0.100	spz	BP22	120	
146	81.45007		98.31190		0.0	62.12	114.70	19:59:58.00	0.100	spz	LB03	120	
145	81.43068		98.05059		0.0	66.97	114.58	19:59:58.00	0.100	spz	LB01	120	
144	81.40983		97.78165		0.0	72.02	114.52	19:59:58.00	0.100	spz	LB0E	120	
143	81.38927		97.51560		0.0	77.02	114.44	19:59:58.00	0.100	spz	LB04	120	
142	81.36865		97.25224		0.0	82.00	114.37	19:59:58.00	0.100	spz	LB08	120	
141	81.34668		96.99106		0.0	87.02	114.39	19:59:58.00	0.100	spz	LB02	120	
140	81.32511		96.72678		0.0	92.08	114.35	19:59:58.00	0.100	spz	LB06	120	
139	81.30330		96.47118		0.0	97.03	114.35	19:59:58.00	0.100	spz	LB05	120	
138	81.28258		96.21479		0.0	101.94	114.28	19:59:58.00	0.100	spz	LB0A	120	
137	81.26048		95.95625		0.0	106.97	114.25	19:59:58.00	0.100	spz	LB09	120	
136	81.23829		95.69486		0.0	112.05	114.21	19:59:58.00	0.100	spz	LB0C	120	

Fig. 26A - Water wave section OR shot R53

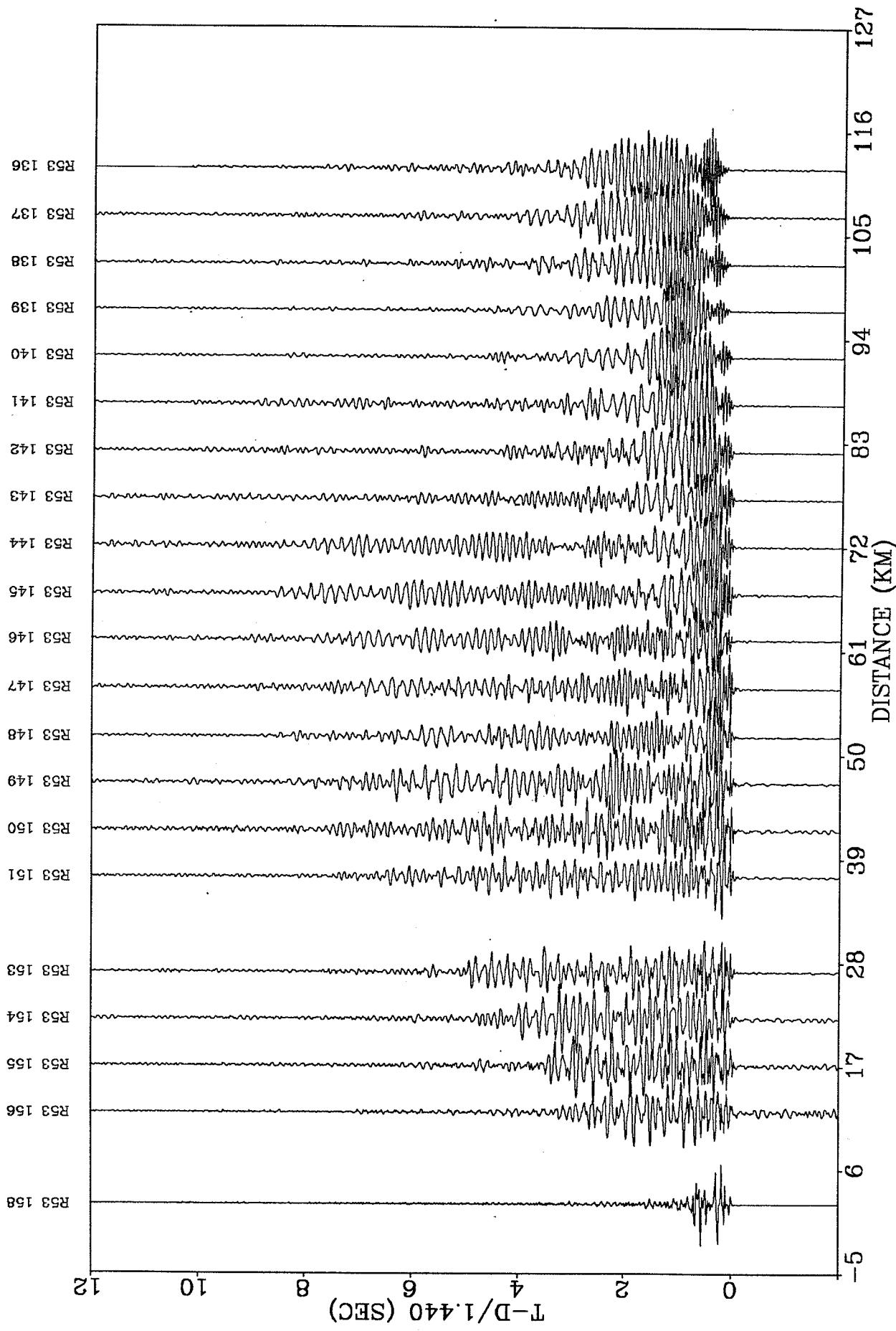
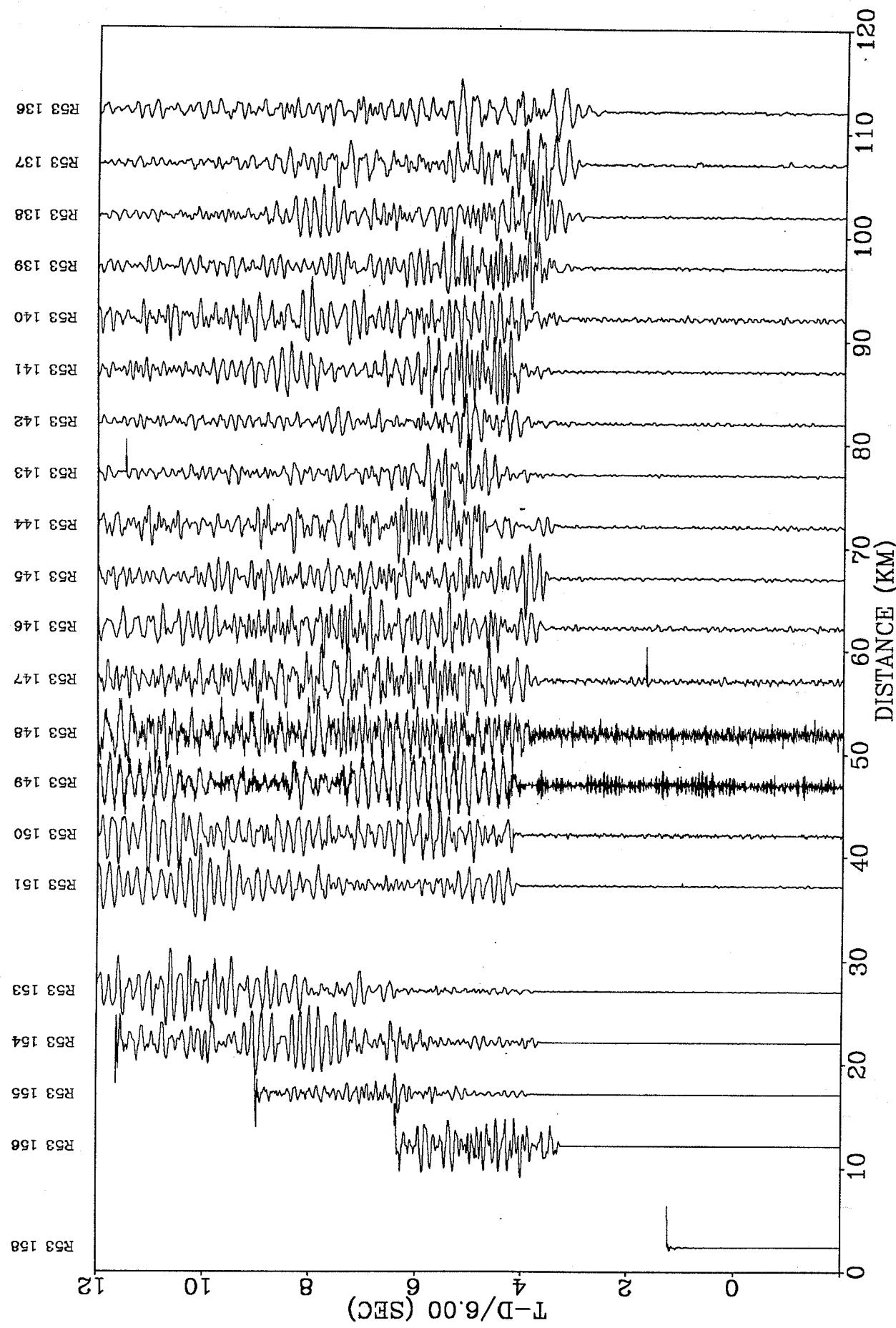


Fig. 26B – Seismic section OR shot R53



Line: I10 Shot: L58

** Ice Island 86 ** Field shot point: LiN Section: RT

Shot time: 1986 APR. 28 19: 0: 0.00

Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 544.0 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
182	80.84057		105.41332		0.0	113.64	287.49	18:59:59.18	0.100	spz	BP10	120	
181	80.88171		105.24606		0.0	111.77	290.10	18:59:59.17	0.100	spz	BP13	120	
180	80.92143		105.08799		0.0	110.27	292.69	18:59:59.17	0.100	spz	BP14	120	
179	80.96176		104.93629		0.0	109.16	295.37	18:59:59.17	0.100	spz	BP12	120	
178	81.00283		104.76479		0.0	108.03	298.20	18:59:59.18	0.100	spz	BP11	120	
177	81.04263		104.61366		0.0	107.46	300.93	18:59:59.19	0.100	spz	BP18	120	
176	81.08247		104.45594		0.0	107.05	303.71	18:59:59.19	0.100	spz	BP21	120	
174	81.16375		104.11520		0.0	106.82	309.50	18:59:59.19	0.100	spz	BP16	120	
173	81.20210		103.95466		0.0	107.13	312.22	18:59:59.19	0.100	spz	BP20	120	
172	81.24115		103.78528		0.0	107.64	315.00	18:59:59.18	0.100	spz	BP19	120	
171	81.28156		103.61653		0.0	108.54	317.79	18:59:59.17	0.100	spz	BP22	120	
170	81.32342		103.43779		0.0	109.72	320.65	18:59:58.00	0.100	spz	LB03	120	
169	81.35389		103.30288		0.0	110.70	322.71	18:59:58.00	0.100	spz	LB02	120	
168	81.39111		103.13251		0.0	112.06	325.21	18:59:58.00	0.100	spz	LB08	120	
167	81.42485		102.97948		0.0	113.51	327.41	18:59:58.00	0.100	spz	LB01	120	
166	81.45874		102.82841		0.0	115.16	329.53	18:59:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	116.81	331.61	18:59:58.00	0.100	spz	LB04	120	
164	81.52654		102.52464		0.0	118.95	333.57	18:59:58.00	0.100	spz	LB05	120	
163	81.56060		102.36749		0.0	121.06	335.52	18:59:58.00	0.100	spz	LBOE	120	
162	81.59317		102.21364		0.0	123.19	337.34	18:59:58.00	0.100	spz	LBOC	120	
161	81.62691		102.04853		0.0	125.50	339.19	18:59:58.00	0.100	spz	LB06	120	
160	81.66243		101.88185		0.0	128.13	341.00	18:59:58.00	0.100	spz	LBOA	120	

Line: I10 Shot: L58

** Ice Island 86 ** Field shot point: L1N Section: RT

Shot time: 1986 APR. 28 19: 0: 0.00

Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 544.0 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
174	81.16375		104.11520		0.0	106.82	309.50	18:59:59.19	0.100	spz	BP16	120	
176	81.08247		104.45594		0.0	107.05	303.71	18:59:59.19	0.100	spz	BP21	120	
173	81.20210		103.95466		0.0	107.13	312.22	18:59:59.19	0.100	spz	BP20	120	
177	81.04263		104.61366		0.0	107.46	300.93	18:59:59.19	0.100	spz	BP18	120	
172	81.24115		103.78528		0.0	107.64	315.00	18:59:59.18	0.100	spz	BP19	120	
178	81.00283		104.76479		0.0	108.03	298.20	18:59:59.18	0.100	spz	BP11	120	
171	81.28156		103.61653		0.0	108.54	317.79	18:59:59.17	0.100	spz	BP22	120	
179	80.96176		104.93629		0.0	109.16	295.37	18:59:59.17	0.100	spz	BP12	120	
170	81.32342		103.43779		0.0	109.72	320.65	18:59:58.00	0.100	spz	LB03	120	
180	80.92143		105.08799		0.0	110.27	292.69	18:59:59.17	0.100	spz	BP14	120	
169	81.35389		103.30288		0.0	110.70	322.71	18:59:58.00	0.100	spz	LB02	120	
181	80.88171		105.24606		0.0	111.77	290.10	18:59:59.17	0.100	spz	BP13	120	
168	81.39111		103.13251		0.0	112.06	325.21	18:59:58.00	0.100	spz	LB08	120	
167	81.42485		102.97948		0.0	113.51	327.41	18:59:58.00	0.100	spz	LB01	120	
182	80.84057		105.41332		0.0	113.64	287.49	18:59:59.18	0.100	spz	BP10	120	
166	81.45874		102.82841		0.0	115.16	329.53	18:59:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	116.81	331.61	18:59:58.00	0.100	spz	LB04	120	
164	81.52654		102.52464		0.0	118.95	333.57	18:59:58.00	0.100	spz	LB05	120	
163	81.56060		102.36749		0.0	121.06	335.52	18:59:58.00	0.100	spz	LBOE	120	
162	81.59317		102.21364		0.0	123.19	337.34	18:59:58.00	0.100	spz	LBOC	120	
161	81.62691		102.04853		0.0	125.50	339.19	18:59:58.00	0.100	spz	LB06	120	
160	81.66243		101.88185		0.0	128.13	341.00	18:59:58.00	0.100	spz	LB0A	120	

Fig. 27A - Water wave section RT shot L58

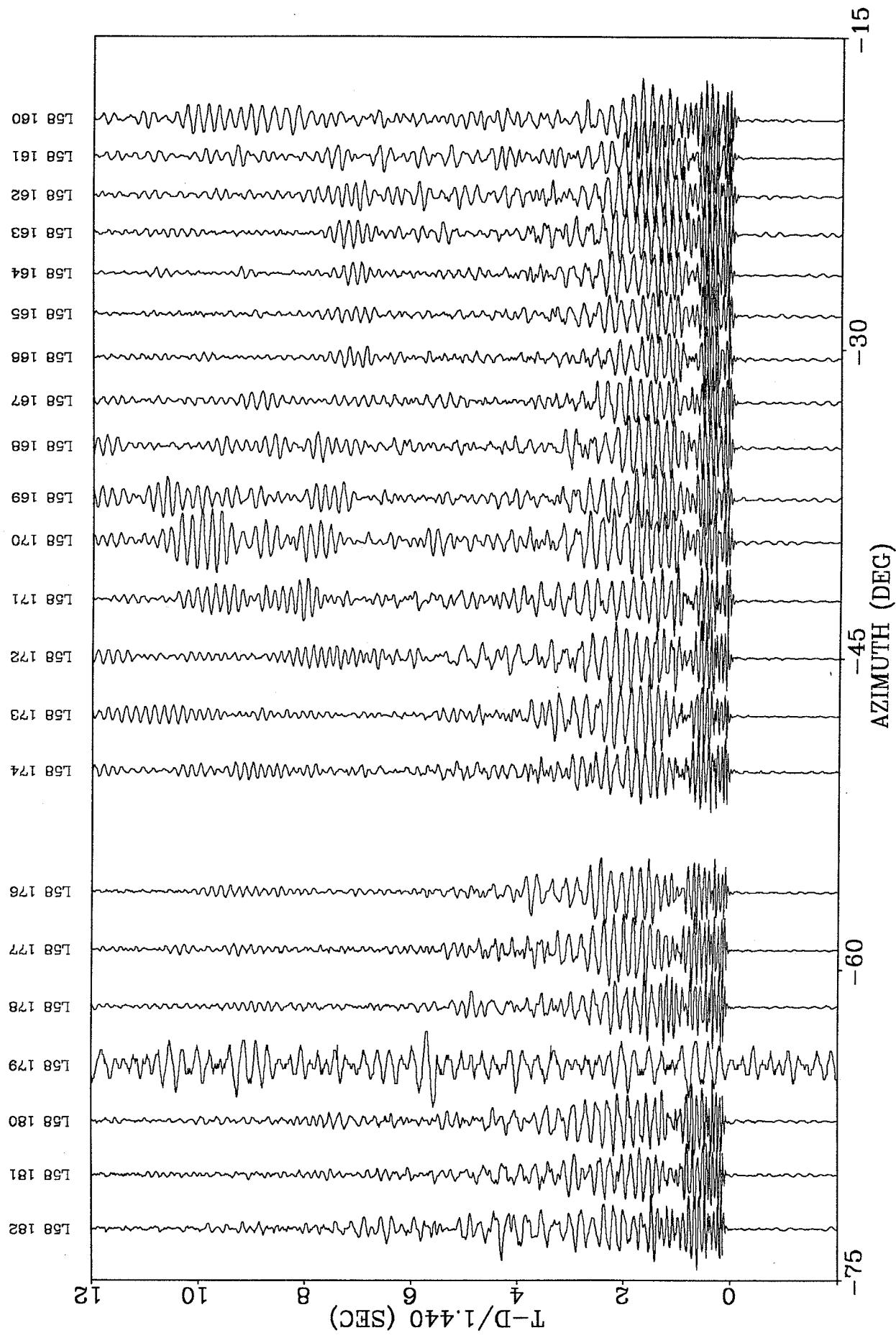
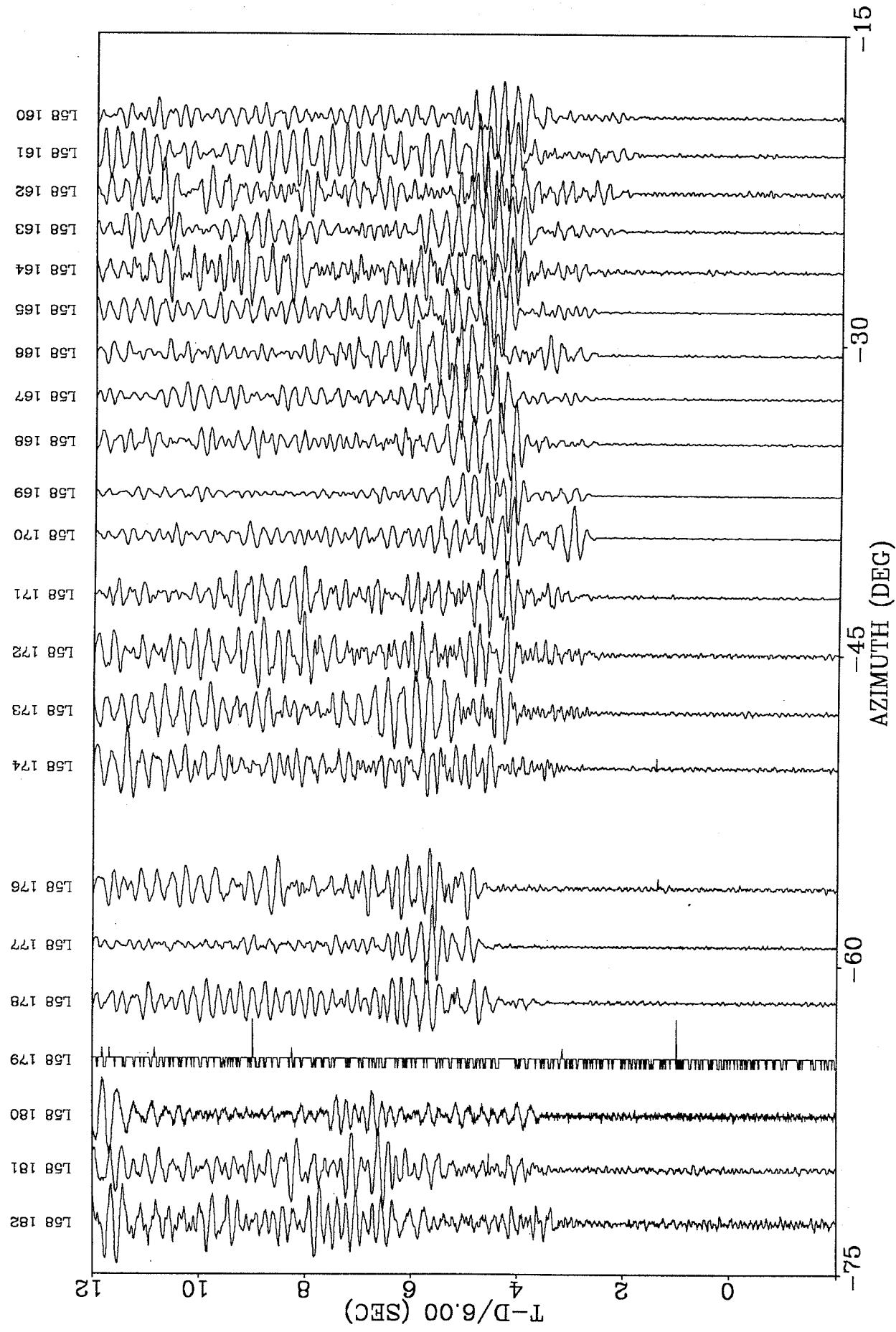


Fig. 27B – Seismic section RT shot L58



Line: I10 Shot: Q66
 ** Ice Island 86 ** Field shot point: Q1 Section: RT
 Shot time: 1986 APR. 28 22:20: 0.00
 Lat.: 82.08203 N, Long.: 99.84119 W, Elev.: 0.0 m
 Depth: 100.0 m, Size: 489.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
160	81.66243		101.88185		0.0	56.86	215.53	22:19:58.00	0.100	spz	LBOA	120	
161	81.62691		102.04853		0.0	61.66	215.60	22:19:58.00	0.100	spz	LB06	120	
162	81.59317		102.21364		0.0	66.29	215.75	22:19:58.00	0.100	spz	LB0C	120	
163	81.56060		102.36749		0.0	70.71	215.83	22:19:58.00	0.100	spz	LB0E	120	
164	81.52654		102.52464		0.0	75.31	215.89	22:19:58.00	0.100	spz	LB05	120	
165	81.49163		102.66836		0.0	79.87	215.78	22:19:58.00	0.100	spz	LB04	120	
166	81.45874		102.82841		0.0	84.39	215.94	22:19:58.00	0.100	spz	LB09	120	
167	81.42485		102.97948		0.0	88.93	215.97	22:19:58.00	0.100	spz	LB01	120	
168	81.39111		103.13251		0.0	93.49	216.04	22:19:58.00	0.100	spz	LB08	120	
169	81.35389		103.30288		0.0	98.53	216.13	22:19:58.00	0.100	spz	LB02	120	
170	81.32342		103.43779		0.0	102.61	216.17	22:19:58.00	0.100	spz	LB03	120	
171	81.28156		103.61653		0.0	108.18	216.19	22:19:59.18	0.100	spz	BP22	120	
172	81.24115		103.78528		0.0	113.52	216.19	22:19:59.18	0.100	spz	BP19	120	
173	81.20210		103.95466		0.0	118.75	216.25	22:19:59.17	0.100	spz	BP20	120	
174	81.16375		104.11520		0.0	123.84	216.27	22:19:59.16	0.100	spz	BP16	120	
176	81.08247		104.45594		0.0	134.65	216.35	22:19:59.17	0.100	spz	BP21	120	
177	81.04263		104.61366		0.0	139.87	216.35	22:19:59.18	0.100	spz	BP18	120	
178	81.00283		104.76479		0.0	145.04	216.32	22:19:59.17	0.100	spz	BP11	120	
179	80.96176		104.93629		0.0	150.52	216.38	22:19:59.18	0.100	spz	BP12	120	
180	80.92143		105.08799		0.0	155.75	216.36	22:19:59.17	0.100	spz	BP14	120	
181	80.88171		105.24606		0.0	160.99	216.40	22:19:59.19	0.100	spz	BP13	120	
182	80.84057		105.41332		0.0	166.46	216.46	22:19:59.19	0.100	spz	BP10	120	

Fig. 28A - Water wave section RT shot Q66

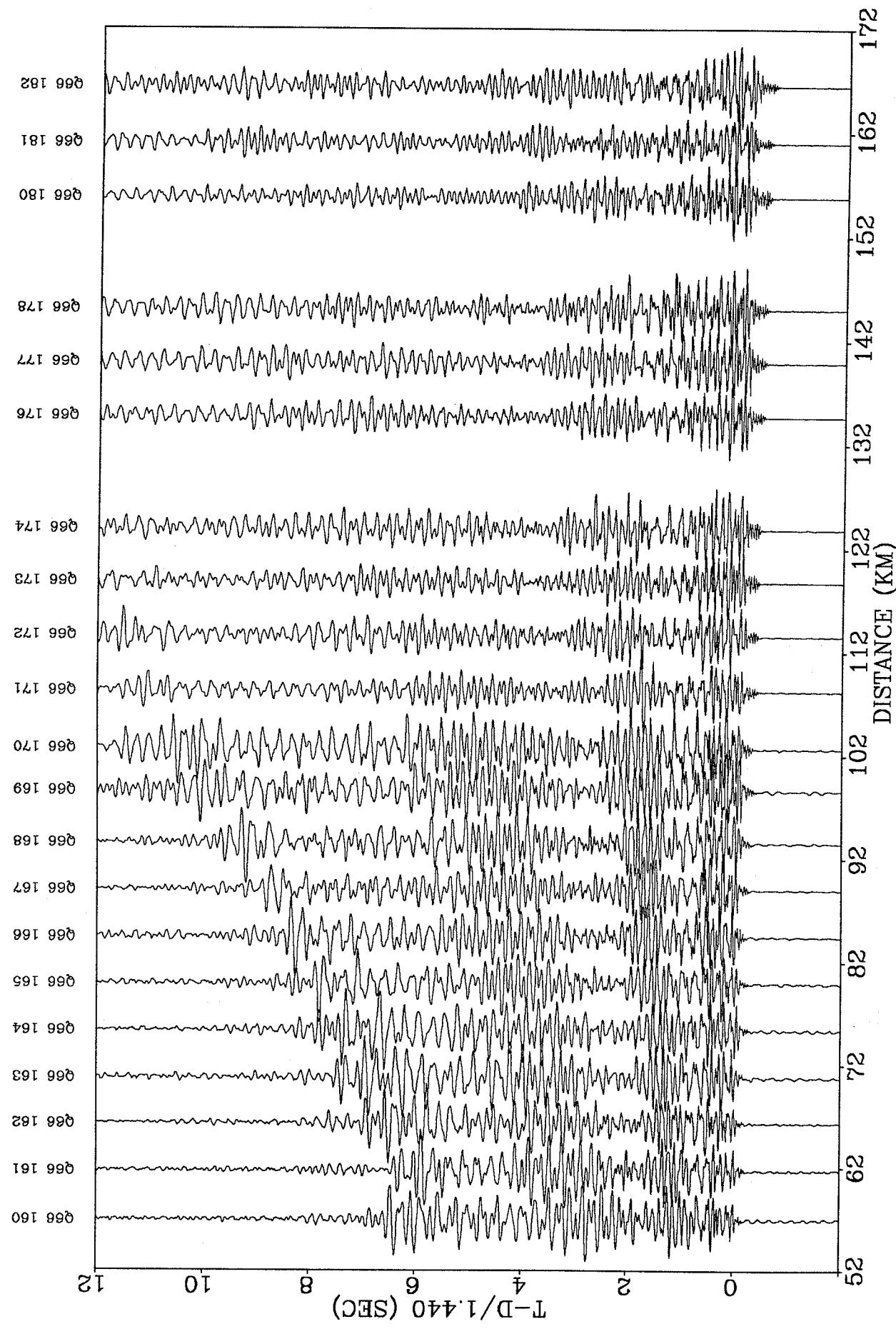
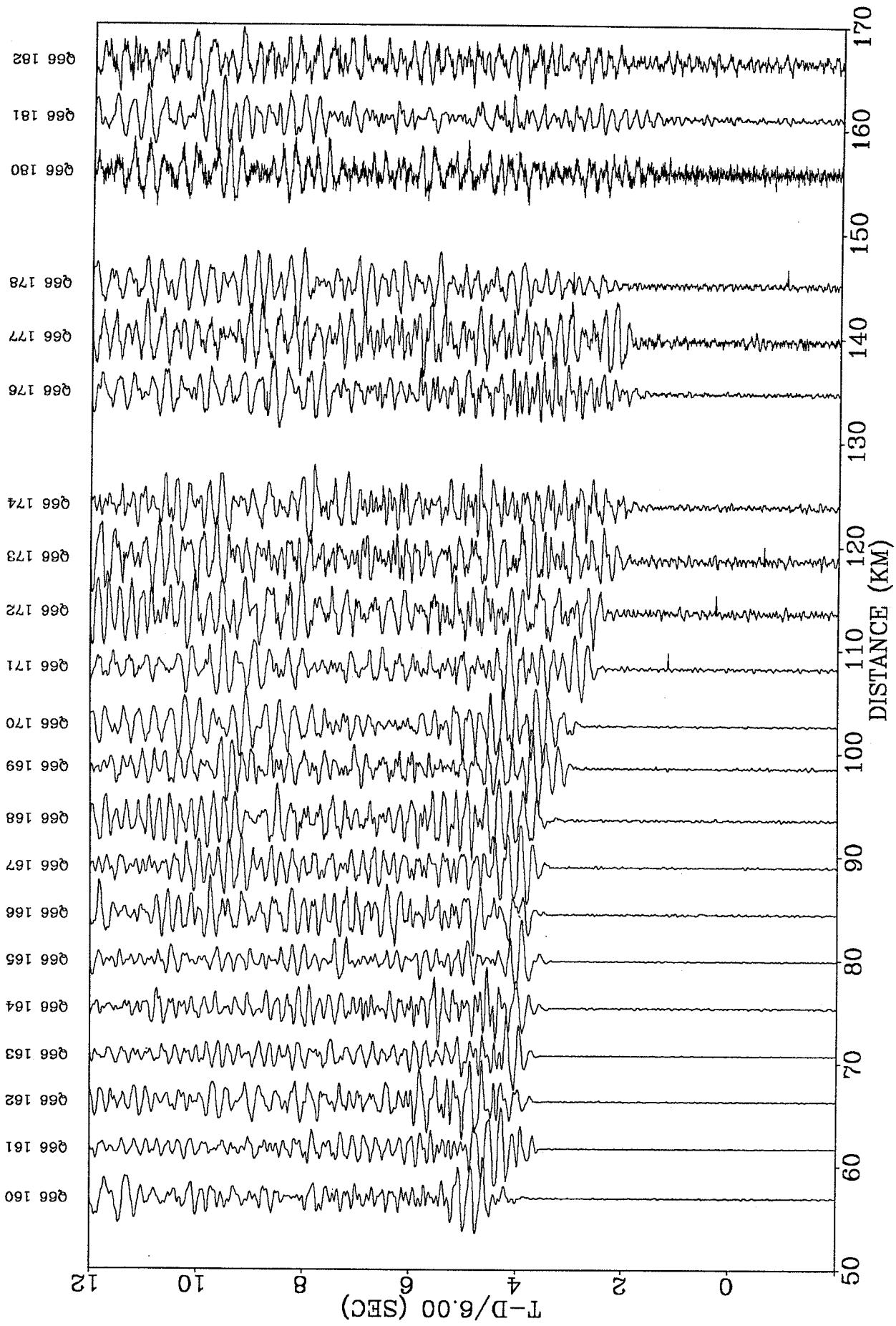


Fig. 28B – Seismic section RT shot Q66



Line: 10 Shot: R59
** Ice Island 86 ** Field shot point: R3 Section: RT
Shot time: 1986 APR. 28 19:20: 0.00
Lat.: 81.68044 N, Long.: 101.81956 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 299.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
160	81.66243		101.88185		0.0	2.25	206.65	19:19:58	00	0.000	LBOA	120	
161	81.62691		102.04853		0.0	7.04	211.95	19:19:58	00	0.000	LB06	120	
162	81.59317		102.21364		0.0	11.66	213.50	19:19:58	00	0.000	LB0C	120	
165	81.49163		102.66836		0.0	25.24	213.76	19:19:58	00	0.000	LB04	120	
163	81.56060		102.36749		0.0	16.08	213.95	19:19:58	00	0.000	LB0E	120	
164	81.52654		102.52464		0.0	20.68	214.14	19:19:58	00	0.000	LB05	120	
166	81.45874		102.82841		0.0	29.76	214.21	19:19:58	00	0.000	LB09	120	
167	81.42485		102.97948		0.0	34.30	214.27	19:19:58	00	0.000	LB01	120	
168	81.39111		103.13251		0.0	38.86	214.40	19:19:58	00	0.000	LB08	120	
169	81.35389		103.30288		0.0	43.90	214.56	19:19:58	00	0.000	LB02	120	
172	81.24115		103.78528		0.0	58.89	214.58	19:19:59	.17	0.000	BP19	120	
171	81.28156		103.61653		0.0	53.55	214.61	19:19:59	.17	0.000	BP22	120	
170	81.32342		103.43779		0.0	47.99	214.62	19:19:58	00	0.000	LB03	120	
174	81.16375		104.11520		0.0	69.21	214.67	19:19:59	.18	0.000	BP16	120	
178	81.00283		104.76479		0.0	90.41	214.66	19:19:59	.17	0.000	BP11	120	
173	81.20210		103.95466		0.0	64.12	214.66	19:19:59	.18	0.000	BP20	120	
181	80.88171		105.24606		0.0	106.37	214.74	19:19:59	.18	0.000	BP13	120	
179	80.96176		104.93629		0.0	95.89	214.75	19:19:59	.18	0.000	BP12	120	
176	81.08247		104.45594		0.0	80.02	214.76	19:19:59	.18	0.000	BP21	120	
177	81.04263		104.61366		0.0	85.25	214.74	19:19:59	.17	0.000	BP18	120	
180	80.92143		105.08799		0.0	101.12	214.70	19:19:59	.18	0.000	BP14	120	
182	80.84057		105.41332		0.0	111.83	214.82	19:19:59	.18	0.000	BP10	120	

Fig. 29A - Water wave section RT shot R59

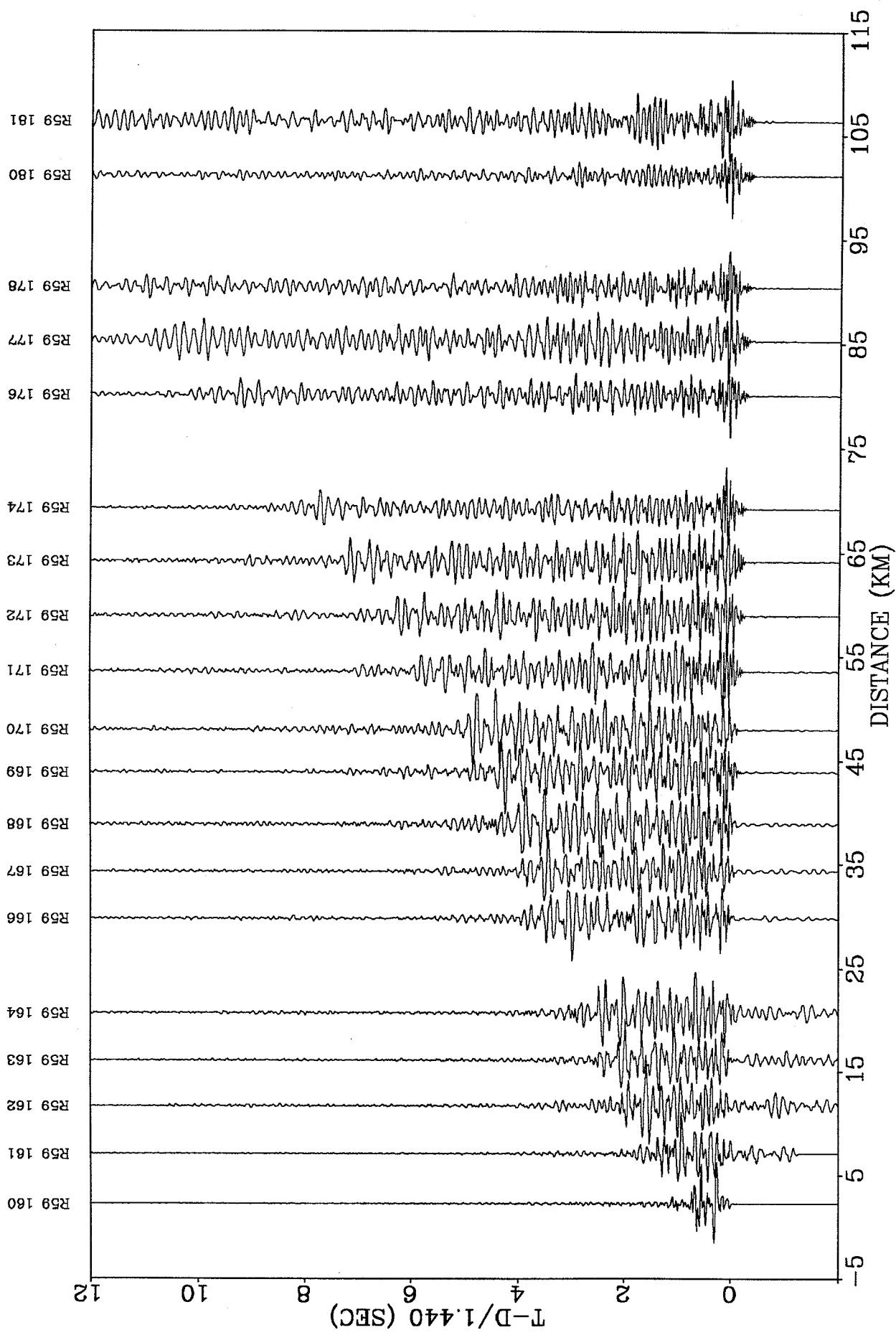
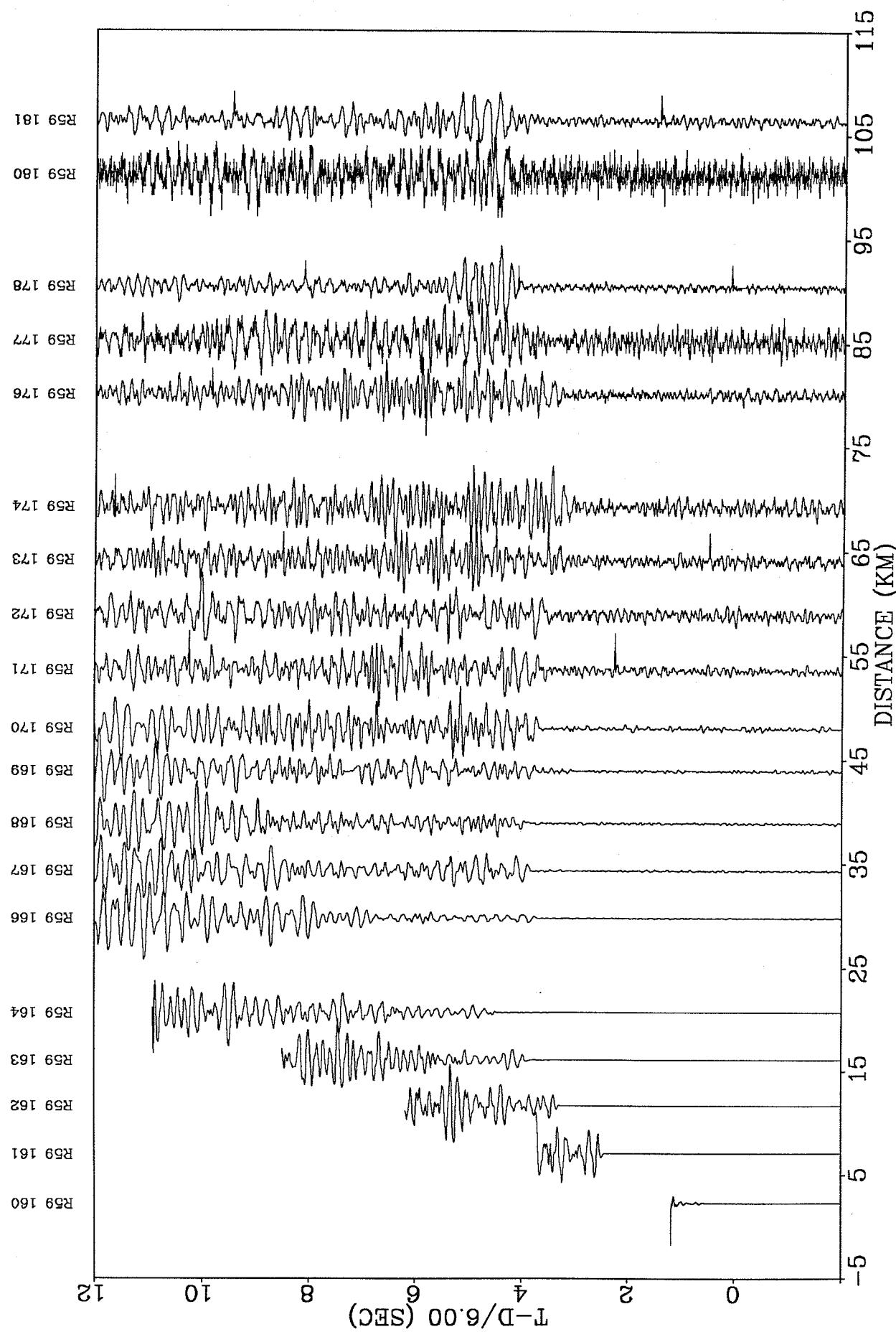


Fig. 29B – Seismic section RT shot R59



Line: I10 Shot: R61

** Ice Island 86 ** Field shot point: R2 Section: RT

Shot time: 1986 APR. 28 20: 0: 0.00

Lat.: 81.69569 N, Long.: 101.71021 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 244.8 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
160	81.66243		101.88185		0.0	4.64	216.84	19:59:58.00	0.100	spz	LBOA	120	
161	81.62691		102.04853		0.0	9.44	215.67	19:59:58.00	0.100	spz	LB06	120	
162	81.59317		102.21364		0.0	14.07	215.76	19:59:58.00	0.100	spz	LB0C	120	
163	81.56060		102.36749		0.0	18.49	215.64	19:59:58.00	0.100	spz	LB0E	120	
164	81.52654		102.52464		0.0	23.09	215.49	19:59:58.00	0.100	spz	LB05	120	
165	81.49163		102.66836		0.0	27.64	214.95	19:59:58.00	0.100	spz	LB04	120	
166	81.45874		102.82841		0.0	32.17	215.21	19:59:58.00	0.100	spz	LB09	120	
167	81.42485		102.97948		0.0	36.71	215.15	19:59:58.00	0.100	spz	LB01	120	
168	81.39111		103.13251		0.0	41.26	215.19	19:59:58.00	0.100	spz	LB08	120	
169	81.35389		103.30288		0.0	46.30	215.27	19:59:58.00	0.100	spz	LB02	120	
170	81.32342		103.43779		0.0	50.39	215.28	19:59:58.00	0.100	spz	LB03	120	
171	81.28156		103.61653		0.0	55.96	215.22	19:59:59.19	0.100	spz	BP22	120	
172	81.24115		103.78528		0.0	61.30	215.14	19:59:59.18	0.100	spz	BP19	120	
173	81.20210		103.95466		0.0	66.53	215.18	19:59:59.17	0.100	spz	BP20	120	
174	81.16375		104.11520		0.0	71.62	215.17	19:59:59.19	0.100	spz	BP16	120	
176	81.08247		104.45594		0.0	82.43	215.20	19:59:59.17	0.100	spz	BP21	120	
177	81.04263		104.61366		0.0	87.65	215.16	19:59:59.17	0.100	spz	BP18	120	
178	81.00283		104.76479		0.0	92.82	215.07	19:59:59.17	0.100	spz	BP11	120	
179	80.96176		104.93629		0.0	98.30	215.14	19:59:59.17	0.100	spz	BP12	120	
180	80.92143		105.08799		0.0	103.53	215.08	19:59:59.17	0.100	spz	BP14	120	
181	80.88171		105.24606		0.0	108.77	215.10	19:59:59.17	0.100	spz	BP13	120	
182	80.84057		105.41332		0.0	114.24	215.17	19:59:59.18	0.100	spz	BP10	120	

Fig. 30A - Water wave section RT shot R61

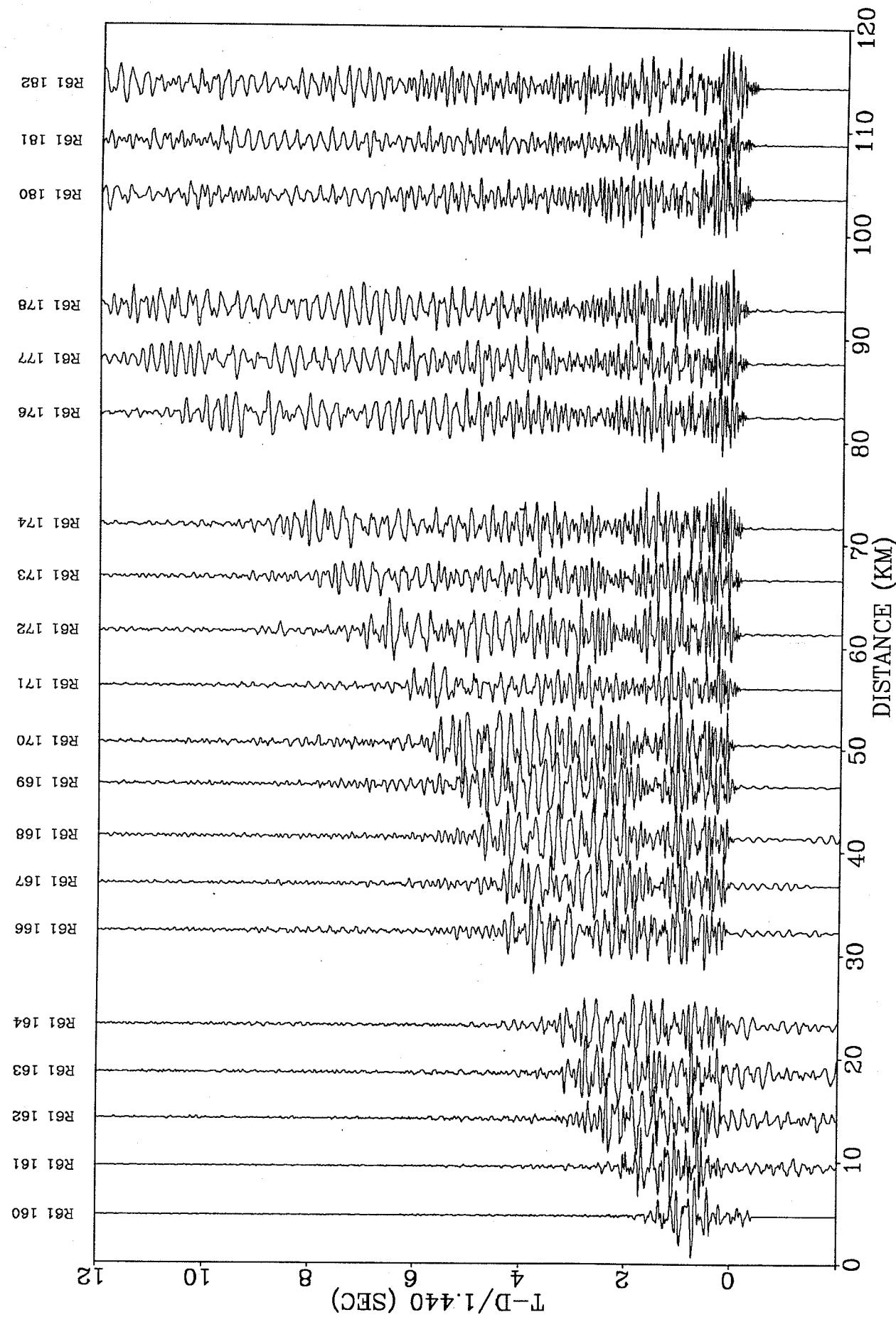
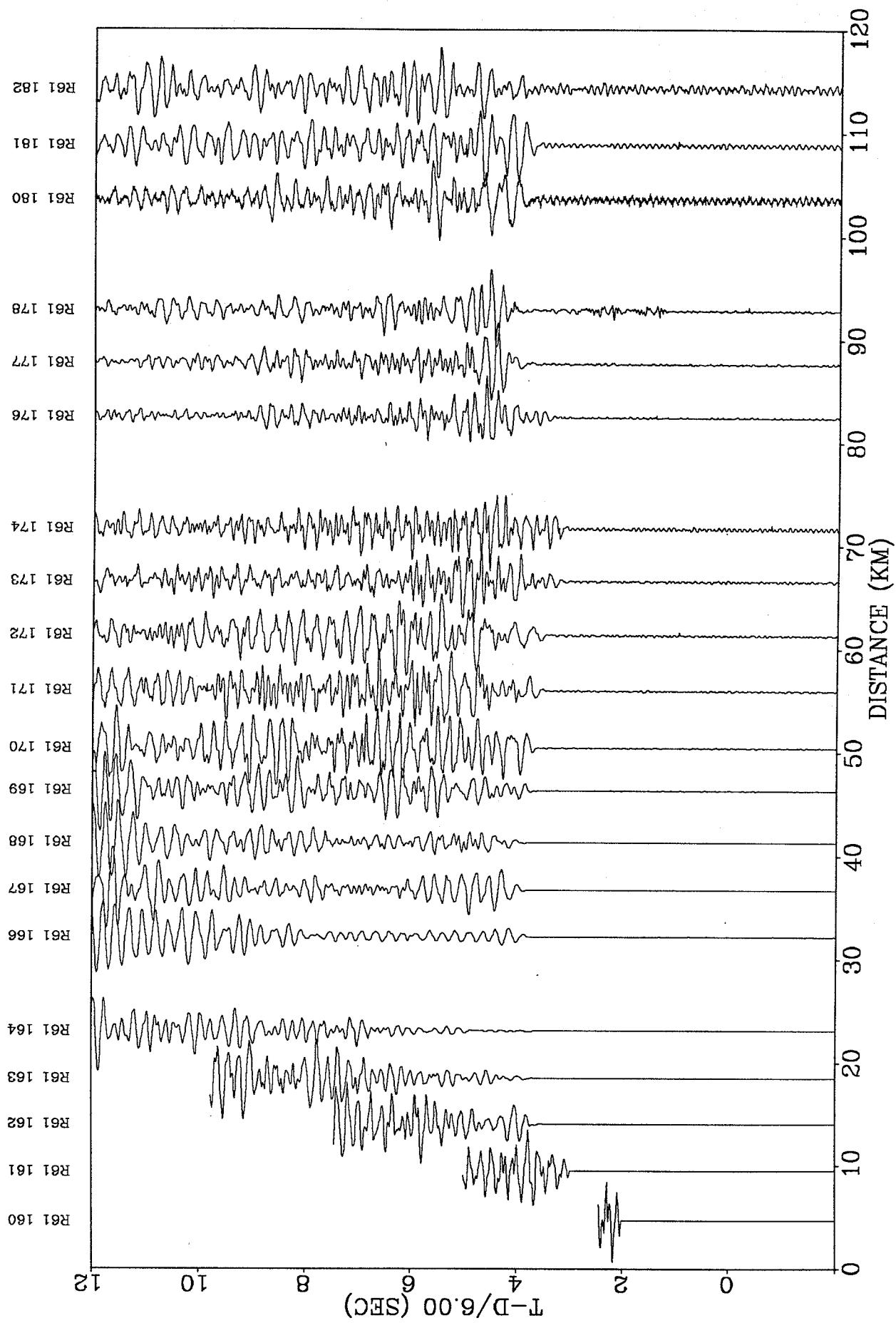


Fig. 30B – Seismic section RT shot R61



Line: I10 Shot: S64

** Ice Island 86 ** Field shot point: S1 Section: RT

Shot time: 1986 APR. 28 21:21: 0.00

Lat.: 81.28555 N, Long.: 103.55157 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 190.4 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
171	81.28156		103.61653		0.0	1.19	247.97	21:19:59.18	0.100	spz	BP22	120	
170	81.32342		103.43779		0.0	4.65	24.38	21:19:58.00	0.100	spz	LB03	120	
172	81.24115		103.78528		0.0	6.35	218.77	21:19:59.17	0.100	spz	BP19	120	
169	81.35389		103.30288		0.0	8.71	28.66	21:19:58.00	0.100	spz	LB02	120	
173	81.20210		103.95466		0.0	11.57	216.53	21:19:59.18	0.100	spz	BP20	120	
168	81.39111		103.13251		0.0	13.73	30.67	21:19:58.00	0.100	spz	LB08	120	
174	81.16375		104.11520		0.0	16.65	215.50	21:19:59.17	0.100	spz	BP16	120	
167	81.42485		102.97948		0.0	18.28	31.41	21:19:58.00	0.100	spz	LB01	120	
166	81.45874		102.82841		0.0	22.82	31.71	21:19:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	27.35	32.26	21:19:58.00	0.100	spz	LB04	120	
176	81.08247		104.45594		0.0	27.46	214.77	21:19:59.17	0.100	spz	BP21	120	
164	81.52654		102.52464		0.0	31.91	31.98	21:19:58.00	0.100	spz	LB05	120	
177	81.04263		104.61366		0.0	32.68	214.42	21:19:59.17	0.100	spz	BP18	120	
163	81.56060		102.36749		0.0	36.50	32.12	21:19:58.00	0.100	spz	LB0E	120	
178	81.00283		104.76479		0.0	37.84	214.06	21:19:59.17	0.100	spz	BP11	120	
162	81.59317		102.21364		0.0	40.92	32.26	21:19:58.00	0.100	spz	LB0C	120	
179	80.96176		104.93629		0.0	43.32	214.11	21:19:59.18	0.100	spz	BP12	120	
161	81.62691		102.04853		0.0	45.55	32.45	21:19:58.00	0.100	spz	LB06	120	
180	80.92143		105.08799		0.0	48.55	213.89	21:19:59.19	0.100	spz	BP14	120	
160	81.66243		101.88185		0.0	50.35	32.48	21:19:58.00	0.100	spz	LB0A	120	
181	80.88171		105.24606		0.0	53.79	213.88	21:19:59.18	0.100	spz	BP13	120	
182	80.84057		105.41332		0.0	59.26	213.95	21:19:59.19	0.100	spz	BP10	120	

Fig. 31A - Water wave section RT shot S64

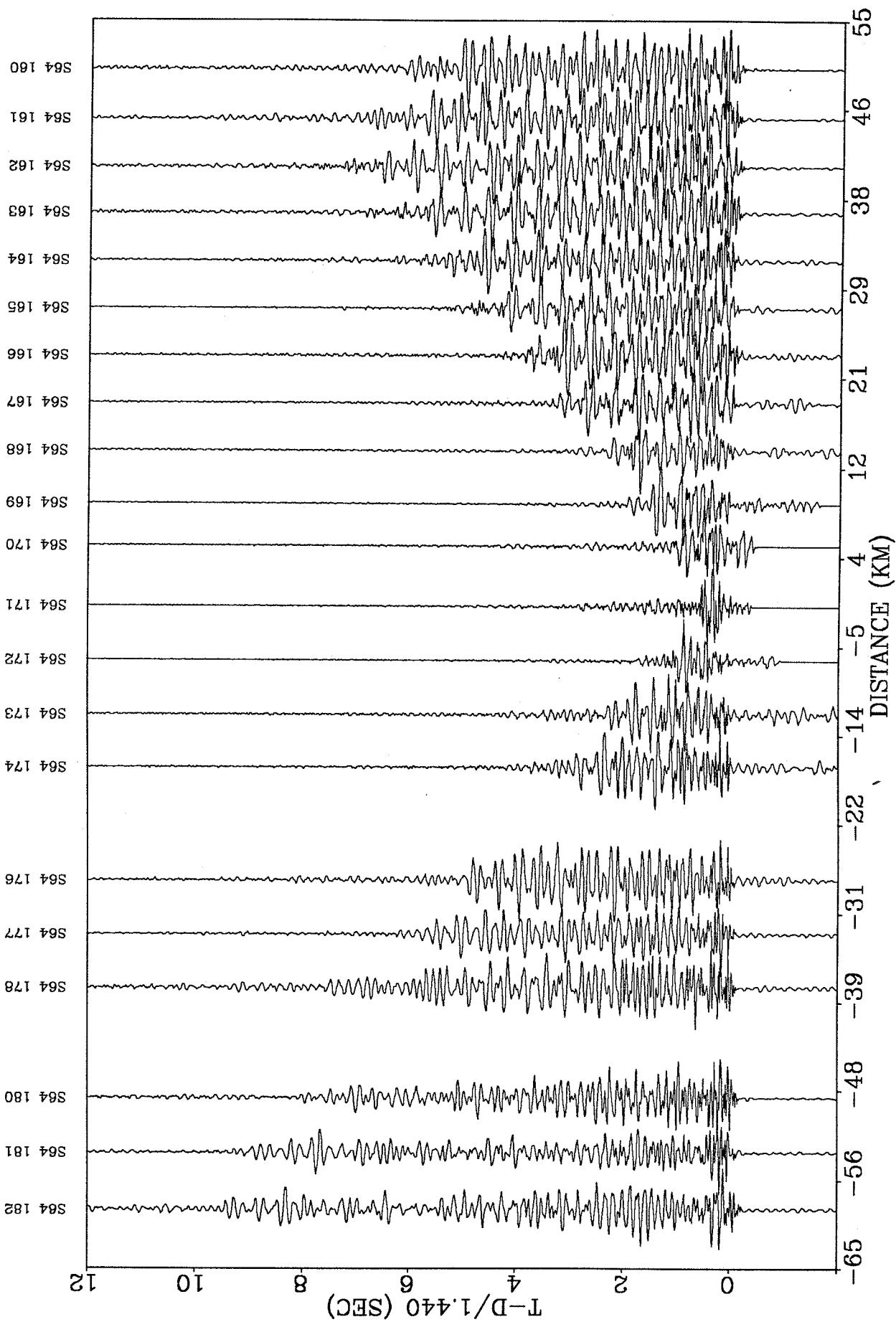
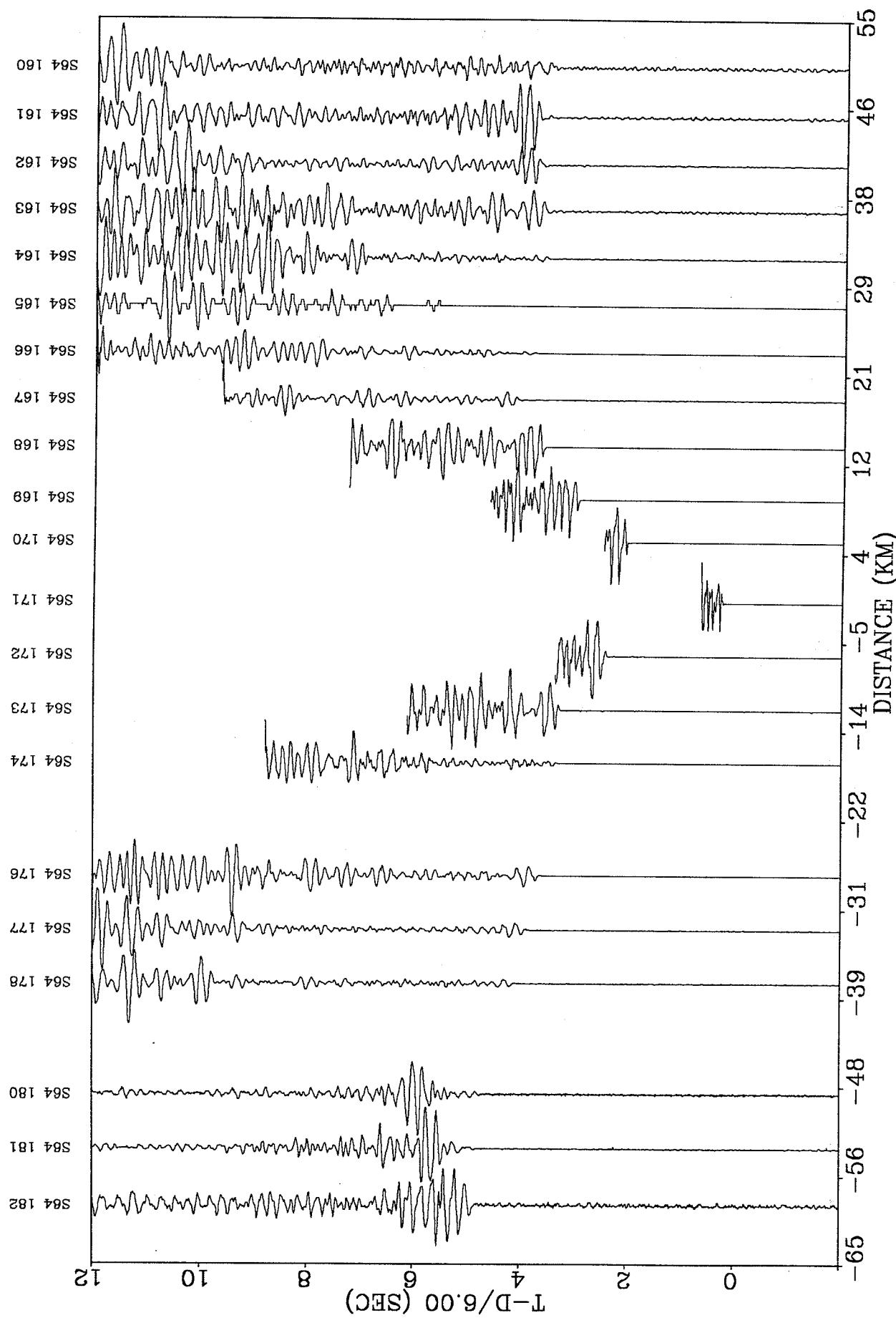


Fig. 31B – Seismic section RT shot S64



Line: I10 Shot: S65

** Ice Island 86 ** Field shot point: S2 Section: RT

Shot time: 1986 APR. 28 22: 1: 0.00

Lat.: 81.30448 N, Long.: 103.48207 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 136.0 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
170	81.32342		103.43779		0.0	2.24	19.43	21:59:58.00	0.100	spz	LB03	120	
171	81.28156		103.61653		0.0	3.42	221.67	21:59:59.18	0.100	spz	BP22	120	
169	81.35389		103.30288		0.0	6.29	28.58	21:59:58.00	0.100	spz	LB02	120	
172	81.24115		103.78528		0.0	8.74	216.15	21:59:59.17	0.100	spz	BP19	120	
168	81.39111		103.13251		0.0	11.32	31.09	21:59:58.00	0.100	spz	LB08	120	
173	81.20210		103.95466		0.0	13.97	215.30	21:59:59.19	0.100	spz	BP20	120	
167	81.42485		102.97948		0.0	15.87	31.84	21:59:58.00	0.100	spz	LB01	120	
174	81.16375		104.11520		0.0	19.06	214.75	21:59:59.19	0.100	spz	BP16	120	
166	81.45874		102.82841		0.0	20.41	32.10	21:59:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	24.93	32.64	21:59:58.00	0.100	spz	LB04	120	
164	81.52654		102.52464		0.0	29.49	32.30	21:59:58.00	0.100	spz	LB05	120	
176	81.08247		104.45594		0.0	29.87	214.37	21:59:59.17	0.100	spz	BP21	120	
163	81.56060		102.36749		0.0	34.09	32.41	21:59:58.00	0.100	spz	LBOE	120	
177	81.04263		104.61366		0.0	35.09	214.11	21:59:59.18	0.100	spz	BP18	120	
162	81.59317		102.21364		0.0	38.51	32.54	21:59:58.00	0.100	spz	LBOC	120	
178	81.00283		104.76479		0.0	40.25	213.82	21:59:59.18	0.100	spz	BP11	120	
161	81.62691		102.04853		0.0	43.14	32.71	21:59:58.00	0.100	spz	LB06	120	
179	80.96176		104.93629		0.0	45.73	213.91	21:59:59.17	0.100	spz	BP12	120	
160	81.66243		101.88185		0.0	47.94	32.72	21:59:58.00	0.100	spz	LBOA	120	
180	80.92143		105.08799		0.0	50.96	213.73	21:59:59.19	0.100	spz	BP14	120	
181	80.88171		105.24606		0.0	56.20	213.74	21:59:59.19	0.100	spz	BP13	120	
182	80.84057		105.41332		0.0	61.67	213.82	21:59:59.17	0.100	spz	BP10	120	

Fig. 32A - Water wave section RT shot S65

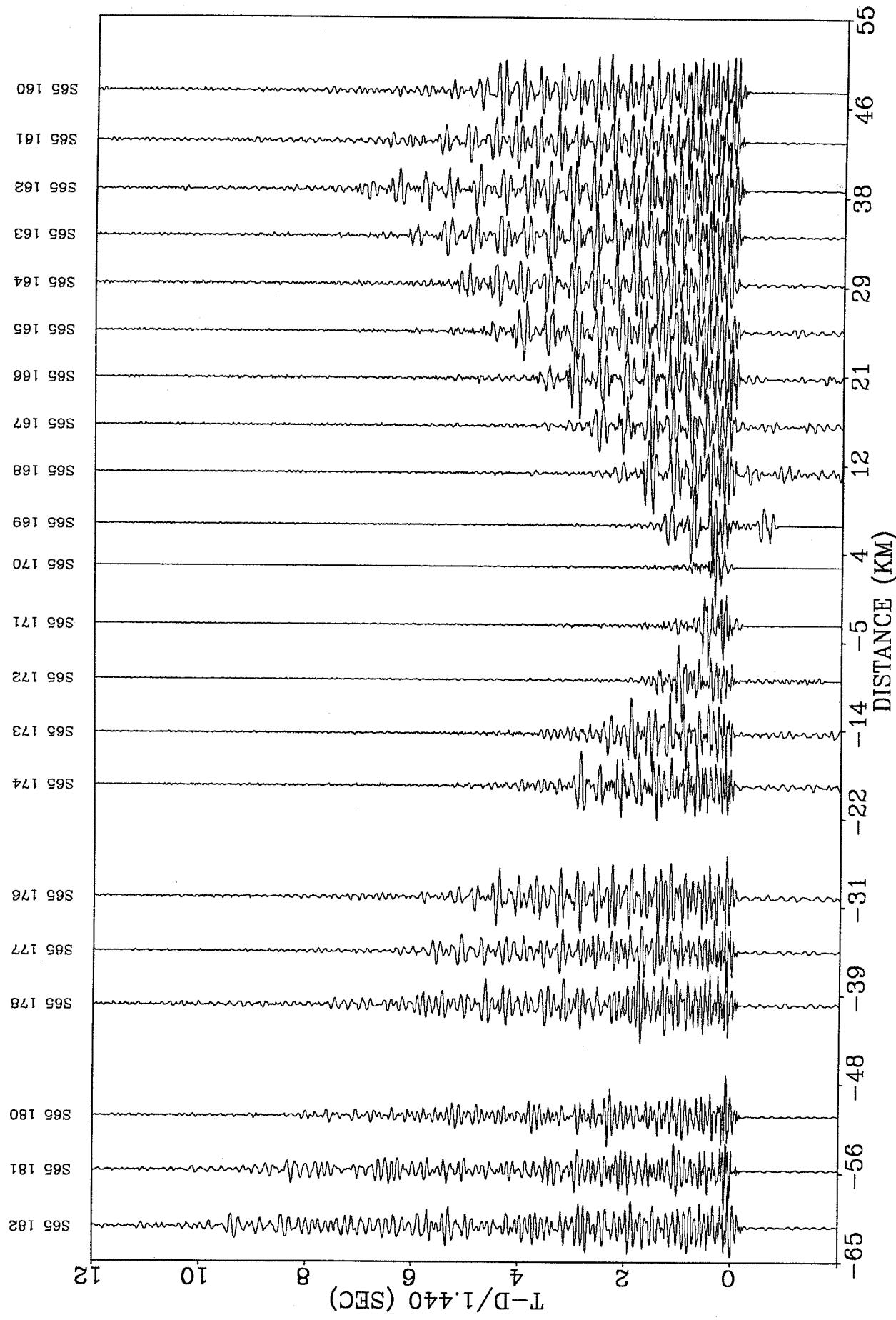
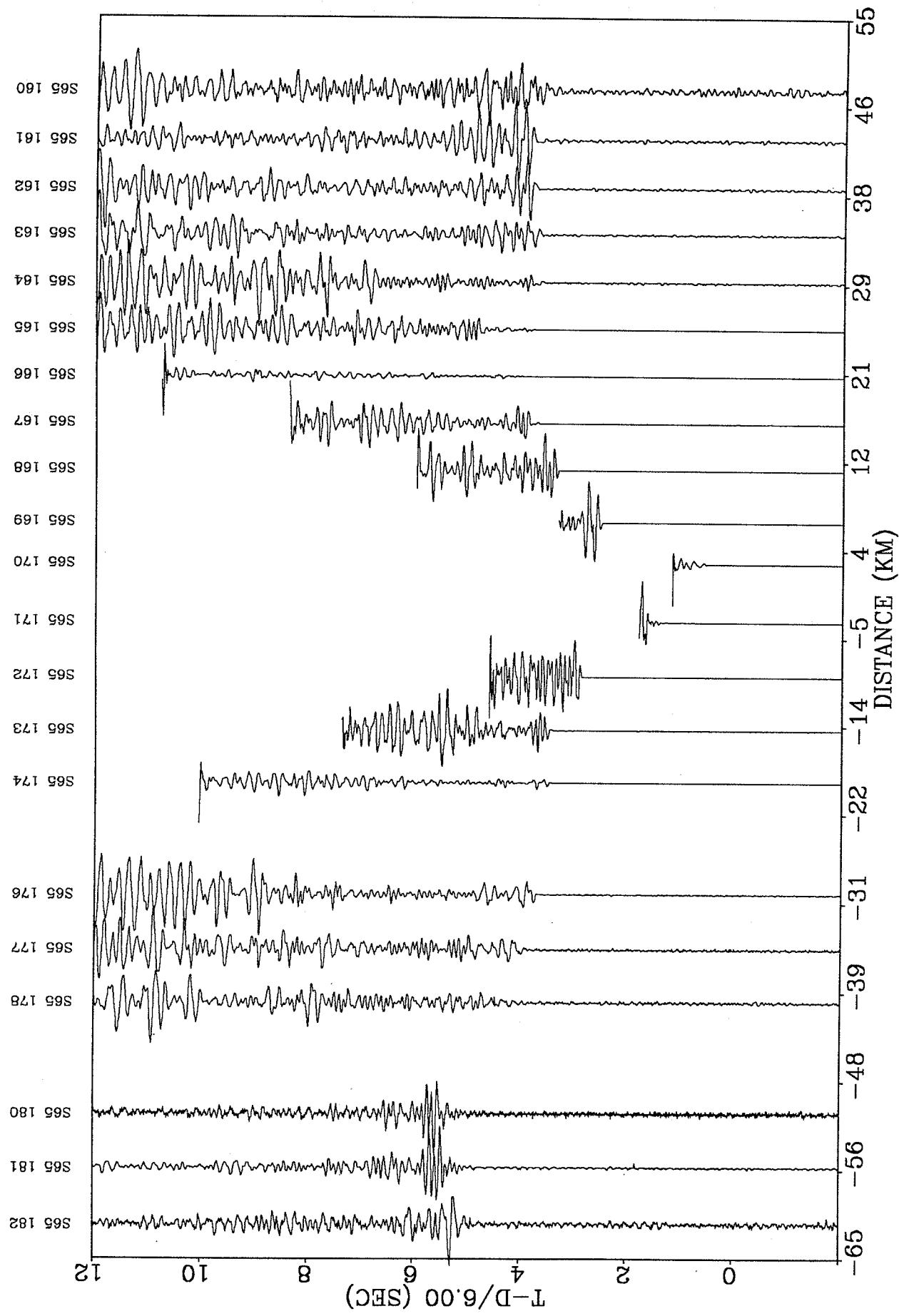


Fig. 32B – Seismic section RT shot S65



Line: I10 Shot: T60
** Ice Island 86 ** Field shot point: T1 Section: RT
Shot time: 1986 APR. 28 19:41: 0.00
Lat.: 80.80952 N, Long.: 105.52440 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 244.8 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
182	80.84057		105.41332		0.0	3.99	29.65	19:39:59.17	0.100	spz	BP10	120	
181	80.88171		105.24606		0.0	9.46	31.40	19:39:59.19	0.100	spz	BP13	120	
180	80.92143		105.08799		0.0	14.70	31.55	19:39:59.18	0.100	spz	BP14	120	
179	80.96176		104.93629		0.0	19.93	31.18	19:39:59.17	0.100	spz	BP12	120	
178	81.00283		104.76479		0.0	25.41	31.47	19:39:59.19	0.100	spz	BP11	120	
177	81.04263		104.61366		0.0	30.58	31.19	19:39:59.17	0.100	spz	BP18	120	
176	81.08247		104.45594		0.0	35.80	31.11	19:39:59.17	0.100	spz	BP21	120	
174	81.16375		104.11520		0.0	46.61	31.24	19:39:59.18	0.100	spz	BP16	120	
173	81.20210		103.95466		0.0	51.70	31.24	19:39:59.17	0.100	spz	BP20	120	
172	81.24115		103.78528		0.0	56.93	31.30	19:39:59.19	0.100	spz	BP19	120	
171	81.28156		103.61653		0.0	62.27	31.24	19:39:59.17	0.100	spz	BP22	120	
170	81.32342		103.43779		0.0	67.84	31.21	19:39:58.00	0.100	spz	LB03	120	
169	81.35389		103.30288		0.0	71.93	31.23	19:39:58.00	0.100	spz	LB02	120	
168	81.39111		103.13251		0.0	76.97	31.29	19:39:58.00	0.100	spz	LB08	120	
167	81.42485		102.97948		0.0	81.52	31.32	19:39:58.00	0.100	spz	LB01	120	
166	81.45874		102.82841		0.0	86.06	31.30	19:39:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	90.59	31.39	19:39:58.00	0.100	spz	LB04	120	
164	81.52654		102.52464		0.0	95.15	31.24	19:39:58.00	0.100	spz	LB05	120	
163	81.56060		102.36749		0.0	99.74	31.24	19:39:58.00	0.100	spz	LB0E	120	
162	81.59317		102.21364		0.0	104.17	31.25	19:39:58.00	0.100	spz	LB0C	120	
161	81.62691		102.04853		0.0	108.79	31.29	19:39:58.00	0.100	spz	LB06	120	
160	81.66243		101.88185		0.0	113.60	31.27	19:39:58.00	0.100	spz	LB0A	120	

Fig. 33A - Water wave section RT shot T60

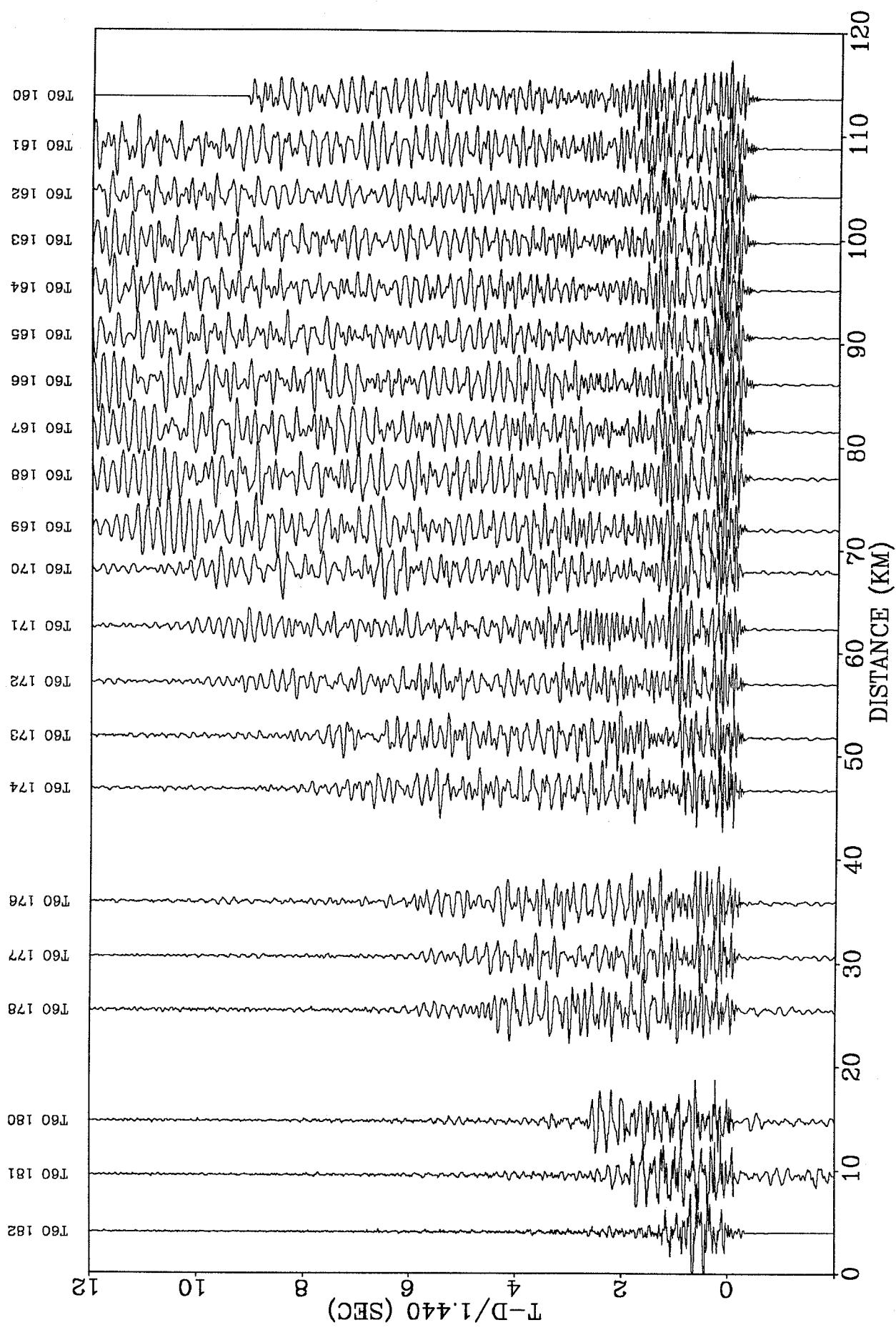
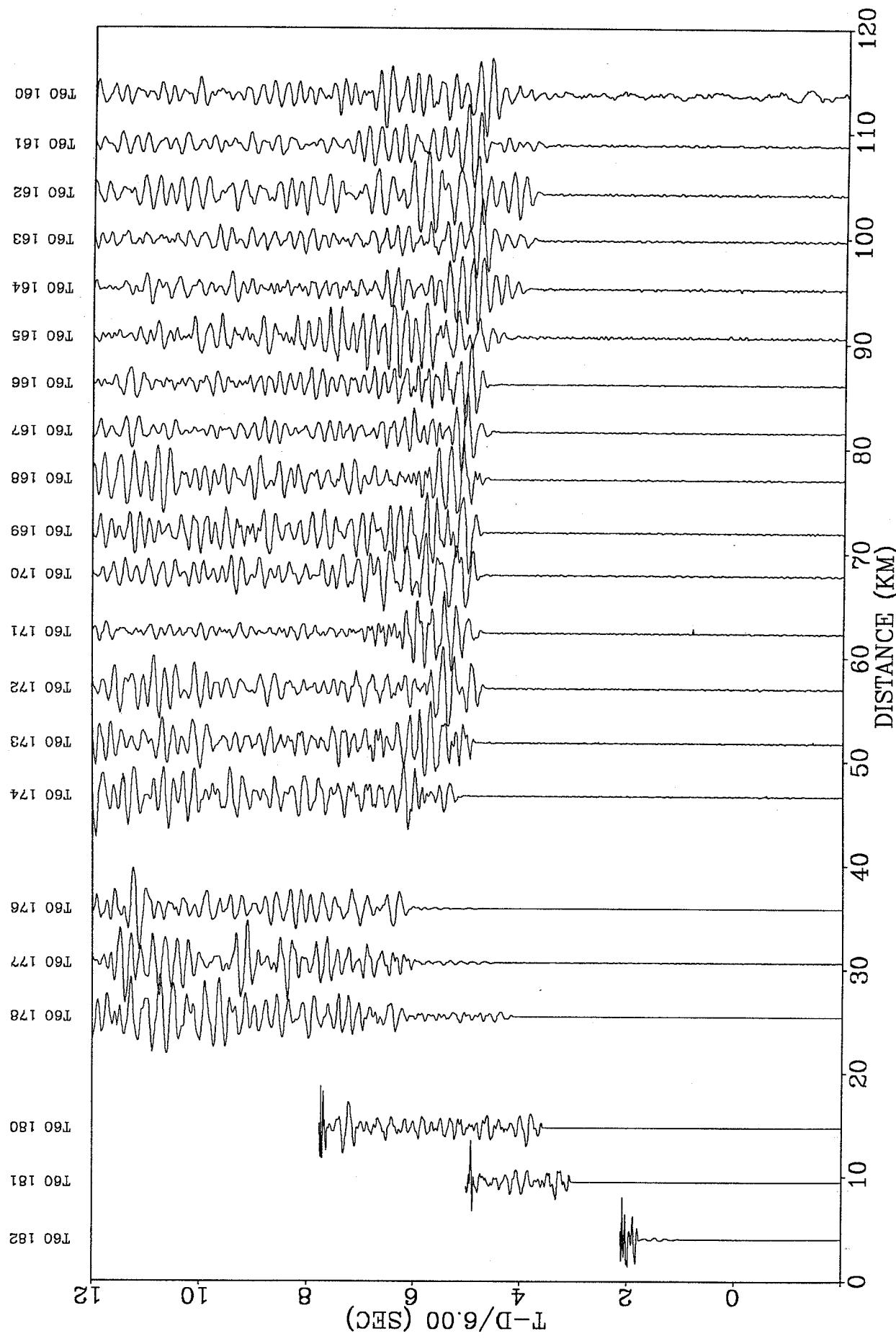


Fig. 33B – Seismic section RT shot T60



Line: I10 Shot: T62

** Ice Island 86 ** Field shot point: T2 Section: RT

Shot time: 1986 APR. 28 20:21: 0.00

Lat.: 80.82264 N, Long.: 105.44369 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 244.8 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
182	80.84057		105.41332		0.0	2.07	15.09	20:19:59.17	0.100	spz	BP10	120	
181	80.88171		105.24606		0.0	7.47	27.92	20:19:59.18	0.100	spz	BP13	120	
180	80.92143		105.08799		0.0	12.71	29.56	20:19:59.17	0.100	spz	BP14	120	
179	80.96176		104.93629		0.0	17.94	29.75	20:19:59.19	0.100	spz	BP12	120	
178	81.00283		104.76479		0.0	23.42	30.42	20:19:59.19	0.100	spz	BP11	120	
177	81.04263		104.61366		0.0	28.58	30.33	20:19:59.17	0.100	spz	BP18	120	
176	81.08247		104.45594		0.0	33.80	30.39	20:19:59.18	0.100	spz	BP21	120	
174	81.16375		104.11520		0.0	44.61	30.72	20:19:59.17	0.100	spz	BP16	120	
173	81.20210		103.95466		0.0	49.70	30.78	20:19:59.17	0.100	spz	BP20	120	
172	81.24115		103.78528		0.0	54.93	30.89	20:19:59.17	0.100	spz	BP19	120	
171	81.28156		103.61653		0.0	60.28	30.87	20:19:59.17	0.100	spz	BP22	120	
170	81.32342		103.43779		0.0	65.84	30.88	20:19:58.00	0.100	spz	LB03	120	
169	81.35389		103.30288		0.0	69.93	30.92	20:19:58.00	0.100	spz	LB02	120	
168	81.39111		103.13251		0.0	74.97	31.02	20:19:58.00	0.100	spz	LB08	120	
167	81.42485		102.97948		0.0	79.52	31.06	20:19:58.00	0.100	spz	LB01	120	
166	81.45874		102.82841		0.0	84.06	31.06	20:19:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	88.59	31.17	20:19:58.00	0.100	spz	LB04	120	
164	81.52654		102.52464		0.0	93.15	31.03	20:19:58.00	0.100	spz	LB05	120	
163	81.56060		102.36749		0.0	97.74	31.04	20:19:58.00	0.100	spz	LB0E	120	
162	81.59317		102.21364		0.0	102.17	31.06	20:19:58.00	0.100	spz	LB0C	120	
161	81.62691		102.04853		0.0	106.80	31.12	20:19:58.00	0.100	spz	LB06	120	
160	81.66243		101.88185		0.0	111.60	31.11	20:19:58.00	0.100	spz	LB0A	120	

Fig. 34A - Water wave section RT shot T62

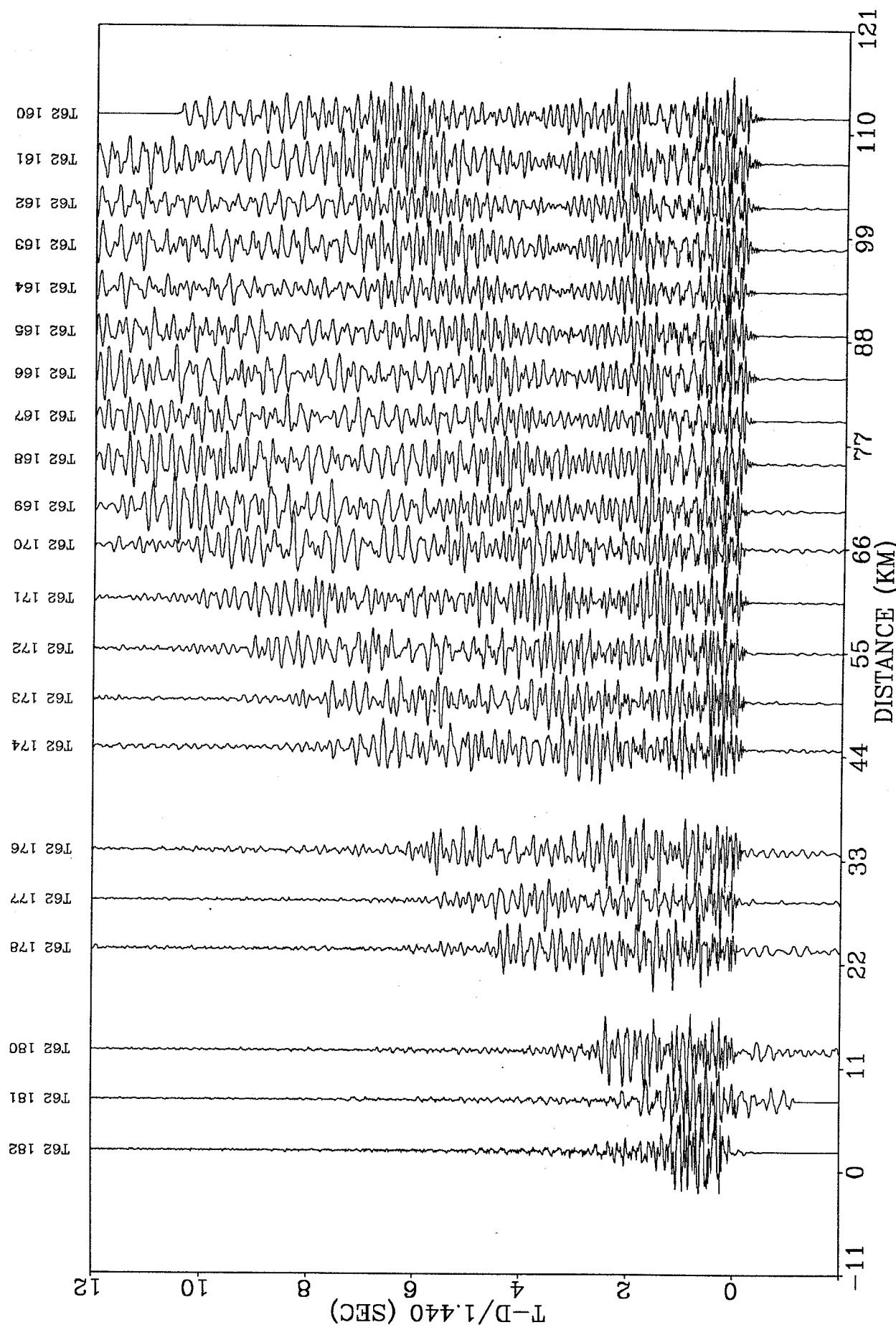
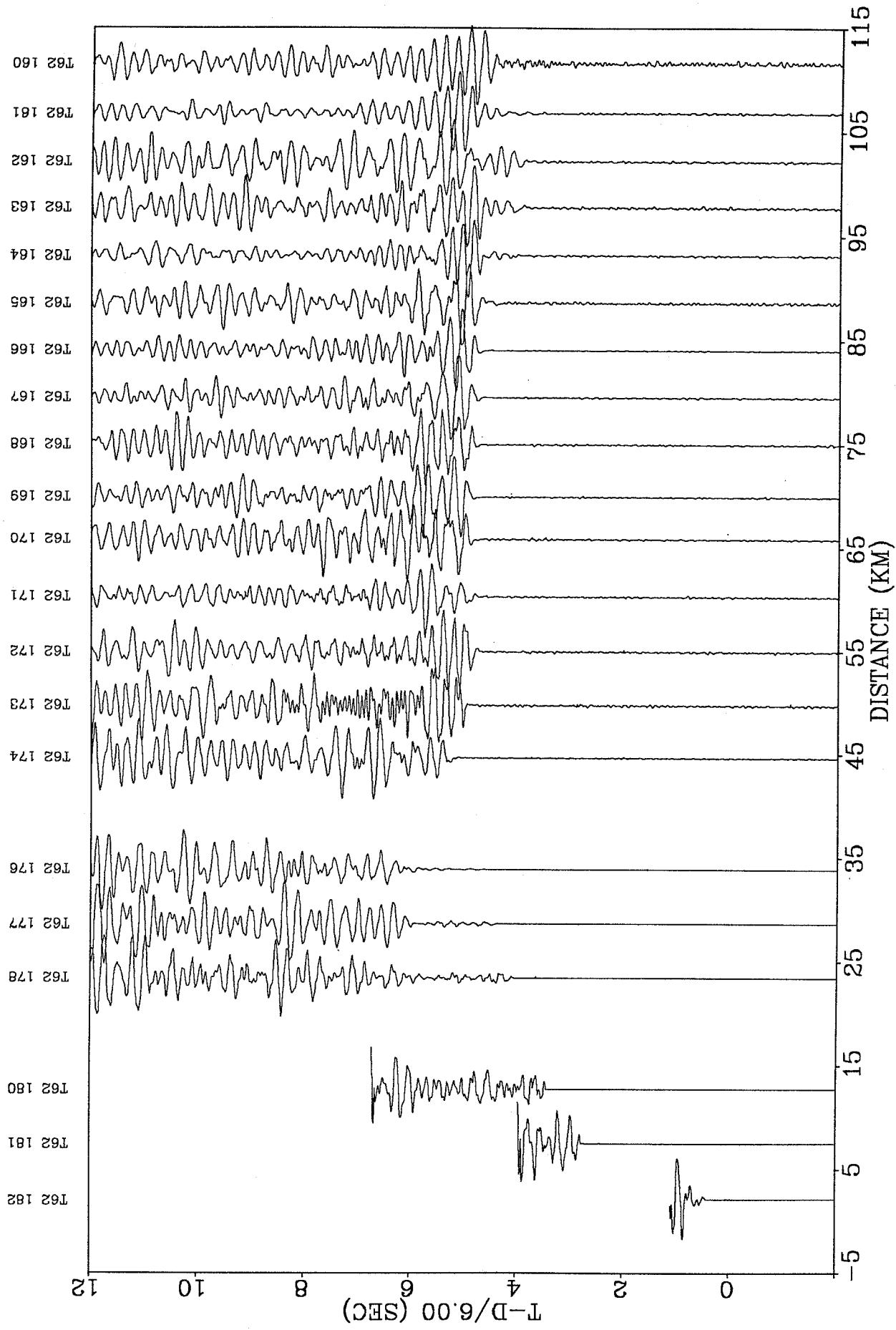


Fig. 34B – Seismic section RT shot T62



Line: I10 Shot: U63

** Ice Island 86 ** Field shot point: U1 Section: RT

Shot time: 1986 APR. 28 20:40: 0.00

Lat.: 80.34514 N, Long.: 107.42709 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 489.6 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
182	80.84057		105.41332		0.0	66.42	32.61	20:39:59.19	0.100	spz	BP10	120	
181	80.88171		105.24606		0.0	71.88	32.47	20:39:59.17	0.100	spz	BP13	120	
180	80.92143		105.08799		0.0	77.12	32.30	20:39:59.17	0.100	spz	BP14	120	
179	80.96176		104.93629		0.0	82.34	32.05	20:39:59.17	0.100	spz	BP12	120	
178	81.00283		104.76479		0.0	87.82	31.96	20:39:59.18	0.100	spz	BP11	120	
177	81.04263		104.61366		0.0	92.98	31.74	20:39:59.18	0.100	spz	BP18	120	
176	81.08247		104.45594		0.0	98.19	31.58	20:39:59.17	0.100	spz	BP21	120	
174	81.16375		104.11520		0.0	109.00	31.40	20:39:59.17	0.100	spz	BP16	120	
173	81.20210		103.95466		0.0	114.08	31.31	20:39:59.18	0.100	spz	BP20	120	
172	81.24115		103.78528		0.0	119.31	31.25	20:39:59.18	0.100	spz	BP19	120	
171	81.28156		103.61653		0.0	124.65	31.14	20:39:59.18	0.100	spz	BP22	120	
170	81.32342		103.43779		0.0	130.21	31.05	20:39:58.00	0.100	spz	LB03	120	
169	81.35389		103.30288		0.0	134.30	31.01	20:39:58.00	0.100	spz	LB02	120	
168	81.39111		103.13251		0.0	139.34	30.99	20:39:58.00	0.100	spz	LB08	120	
167	81.42485		102.97948		0.0	143.90	30.95	20:39:58.00	0.100	spz	LB01	120	
166	81.45874		102.82841		0.0	148.43	30.89	20:39:58.00	0.100	spz	LB09	120	
165	81.49163		102.66836		0.0	152.96	30.90	20:39:58.00	0.100	spz	LB04	120	
164	81.52654		102.52464		0.0	157.51	30.77	20:39:58.00	0.100	spz	LB05	120	
163	81.56060		102.36749		0.0	162.11	30.73	20:39:58.00	0.100	spz	LB0E	120	
162	81.59317		102.21364		0.0	166.53	30.70	20:39:58.00	0.100	spz	LB0C	120	
161	81.62691		102.04853		0.0	171.16	30.69	20:39:58.00	0.100	spz	LB06	120	
160	81.66243		101.88185		0.0	175.96	30.64	20:39:58.00	0.100	spz	LB0A	120	

Fig. 35A - Water wave section RT shot U63

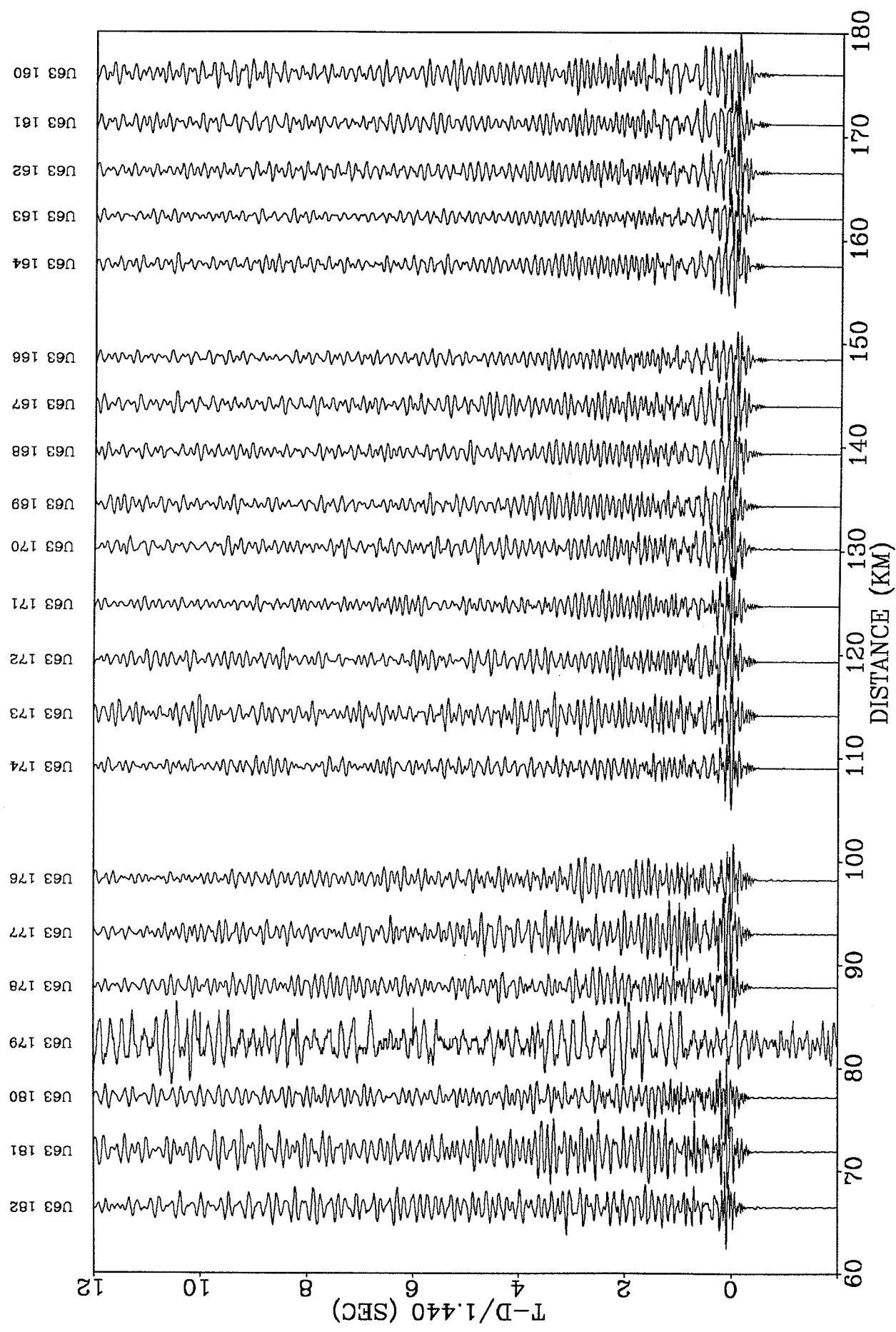
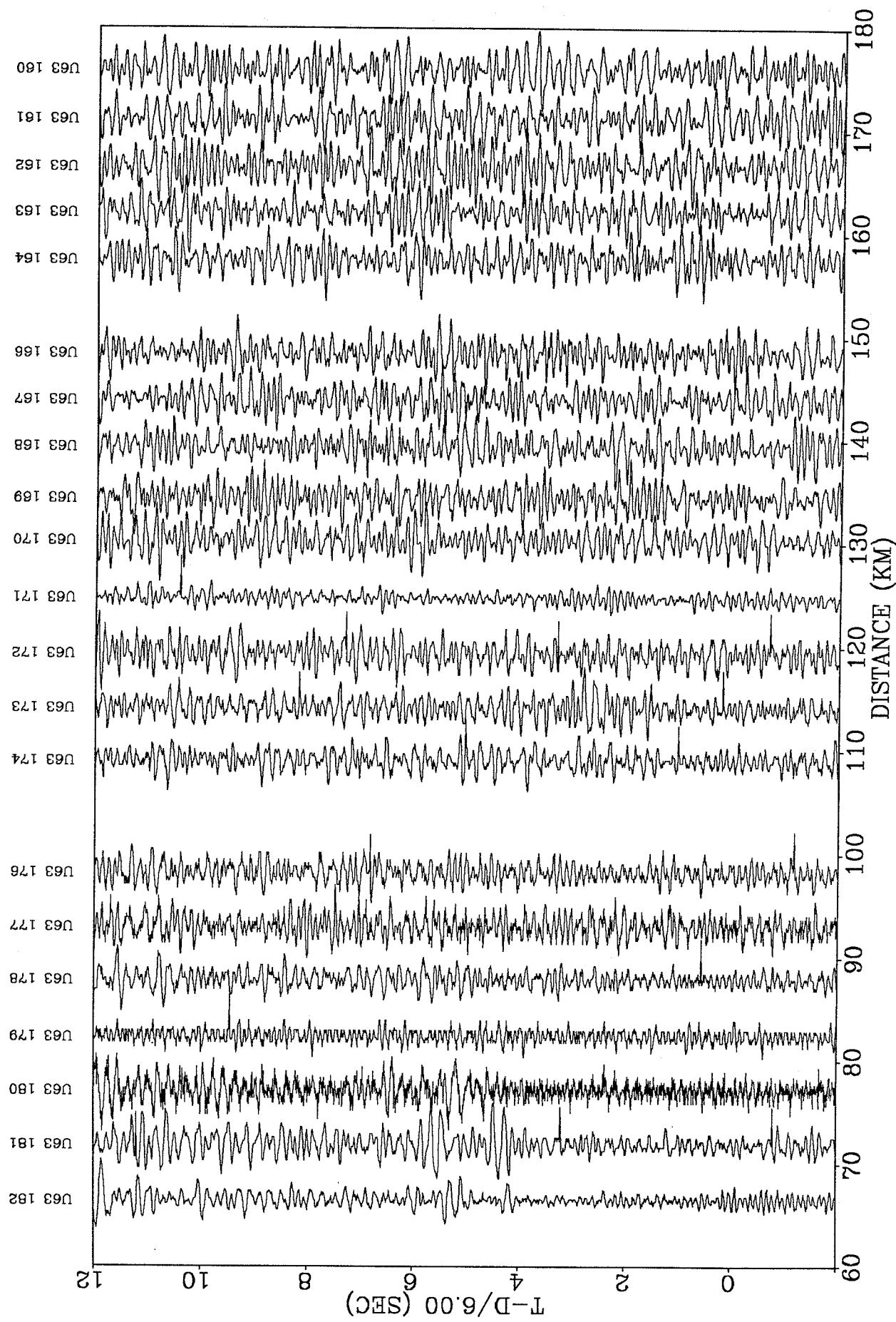


Fig. 35B – Seismic section RT shot U63



Line: I11 Shot: B70

** Ice Island 86 ** Field shot point: B4 Section: LT

Shot time: 1986 APR. 30 0: 1: 0.00

Lat.: 80.70838 N, Long.: 102.37051 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 163.2 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
193	80.71544		102.52747		0.0	2.94	285.64	23:59:58.00	0.100	spz	LB09	120	
194	80.72554		102.83153		0.0	8.52	283.22	23:59:58.00	0.100	spz	LB0A	120	
195	80.73407		103.12528		0.0	13.89	282.29	23:59:58.00	0.100	spz	LB06	120	
196	80.74307		103.42314		0.0	19.34	282.07	23:59:58.00	0.100	spz	LB02	120	
197	80.75107		103.72346		0.0	24.80	281.75	23:59:58.00	0.100	spz	LB03	120	
198	80.76139		104.02172		0.0	30.28	282.09	23:59:58.00	0.100	spz	LB08	120	
199	80.77077		104.32339		0.0	35.78	282.19	23:59:58.00	0.100	spz	LB05	120	
200	80.77823		104.62515		0.0	41.25	282.01	23:59:58.00	0.100	spz	LB0C	120	
201	80.78488		104.93584		0.0	46.85	281.77	23:59:58.00	0.100	spz	LB0E	120	
202	80.79378		105.22694		0.0	52.15	281.94	23:59:58.00	0.100	spz	LB01	120	
203	80.80257		105.53731		0.0	57.78	282.05	23:59:58.00	0.100	spz	LB04	120	

Fig. 36A - Water wave section LT shot B70

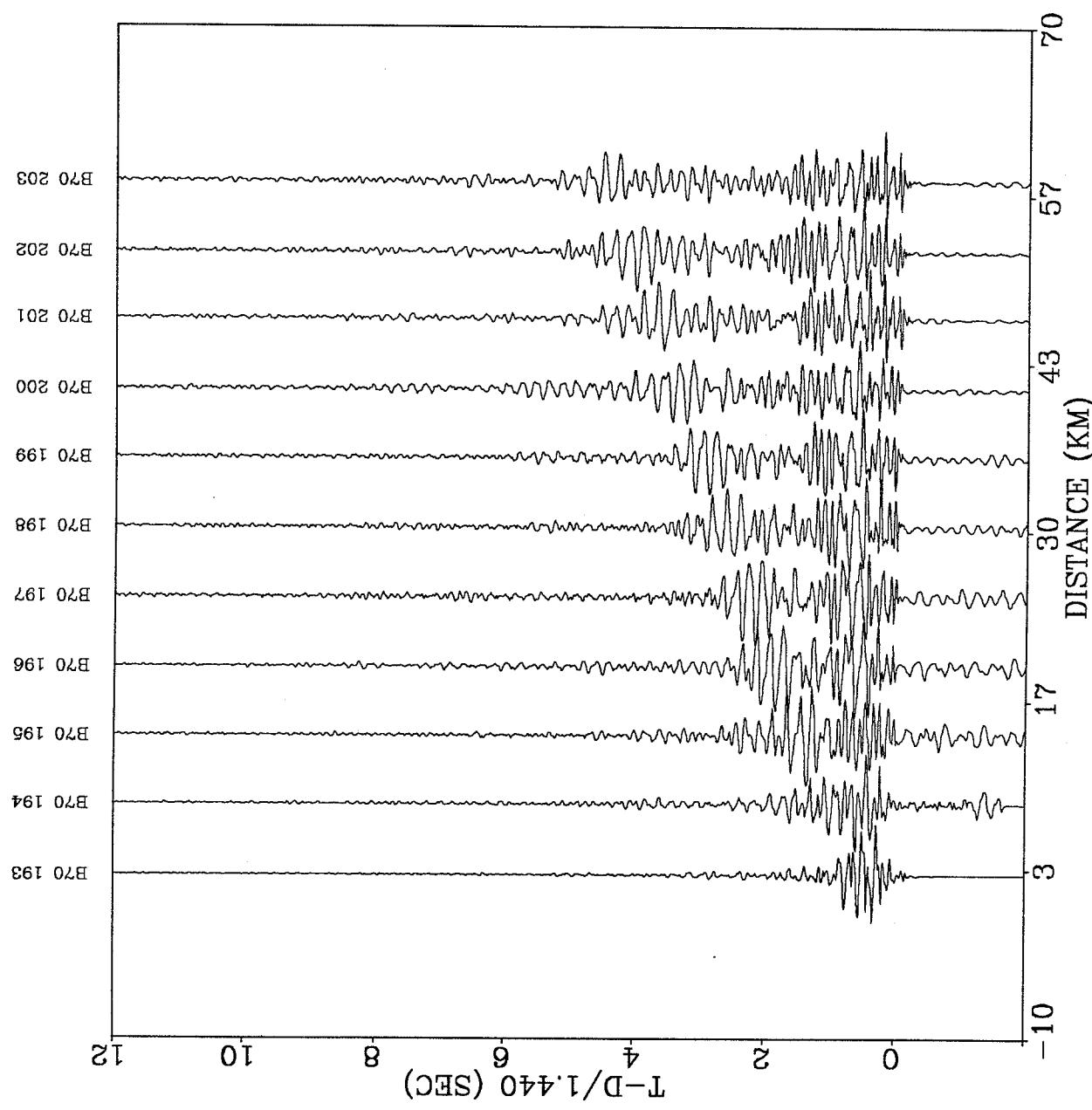
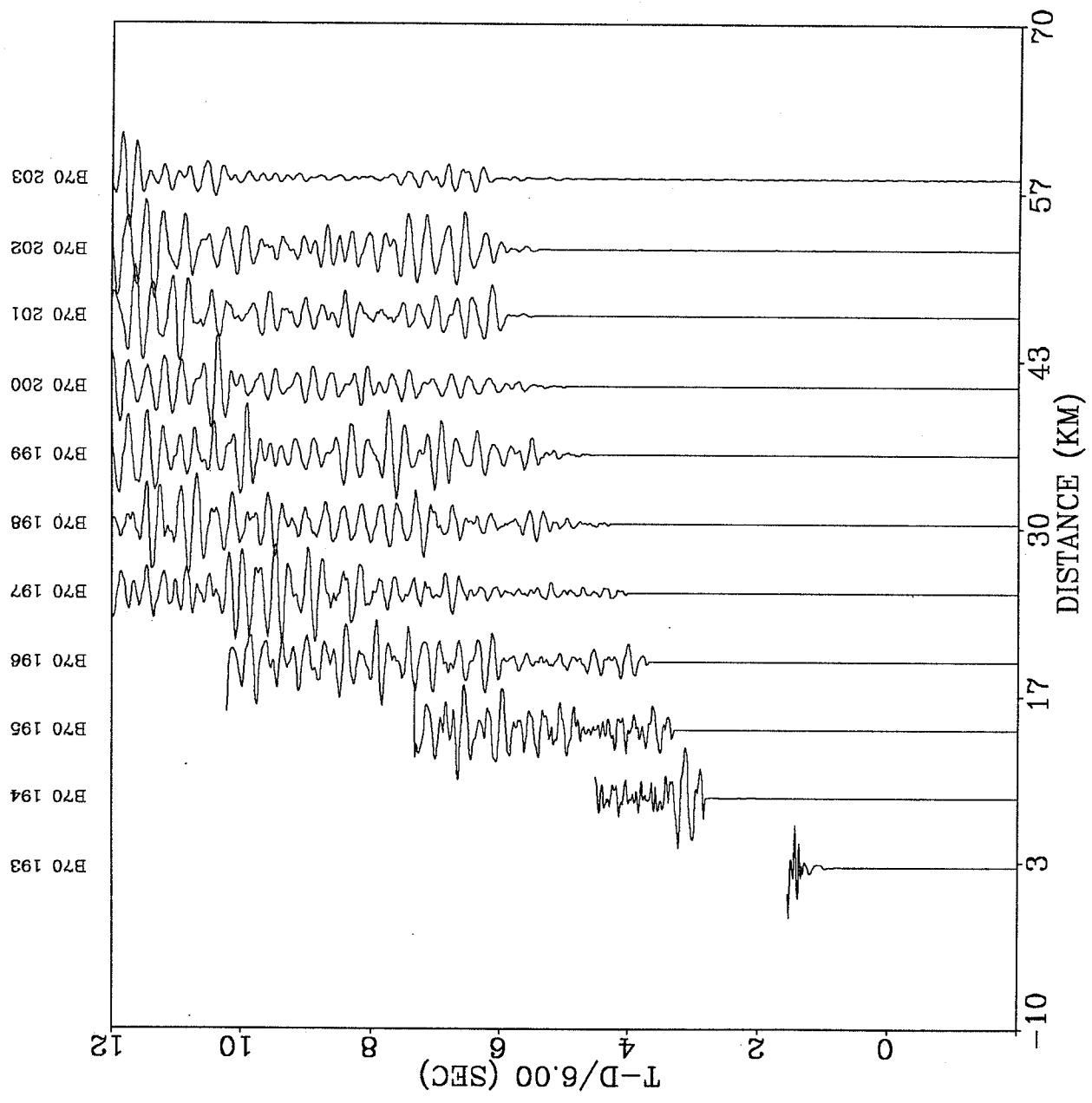


Fig. 36B – Seismic section LT shot B70



Line: I11 Shot: I68

** Ice Island 86 ** Field shot point: I4 Section: LT

Shot time: 1986 APR. 29 22:40: 0.00

Lat.: 81.13400 N, Long.: 96.84480 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 244.8 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
193	80.71544		102.52747		0.0	110.43	247.80	22:39:58.00	0.100	spz	LB09	120	
194	80.72554		102.83153		0.0	114.79	249.58	22:39:58.00	0.100	spz	LBOA	120	
195	80.73407		103.12528		0.0	119.14	251.12	22:39:58.00	0.100	spz	LB06	120	
196	80.74307		103.42314		0.0	123.59	252.60	22:39:58.00	0.100	spz	LB02	120	
197	80.75107		103.72346		0.0	128.19	253.95	22:39:58.00	0.100	spz	LB03	120	
198	80.76139		104.02172		0.0	132.70	255.31	22:39:58.00	0.100	spz	LB08	120	
199	80.77077		104.32339		0.0	137.36	256.56	22:39:58.00	0.100	spz	LB05	120	
200	80.77823		104.62515		0.0	142.13	257.65	22:39:58.00	0.100	spz	LB0C	120	
201	80.78488		104.93584		0.0	147.12	258.67	22:39:58.00	0.100	spz	LBOE	120	
202	80.79378		105.22694		0.0	151.72	259.68	22:39:58.00	0.100	spz	LB01	120	
203	80.80257		105.53731		0.0	156.67	260.67	22:39:58.00	0.100	spz	LB04	120	

Fig. 37A - Water wave section LT shot 168

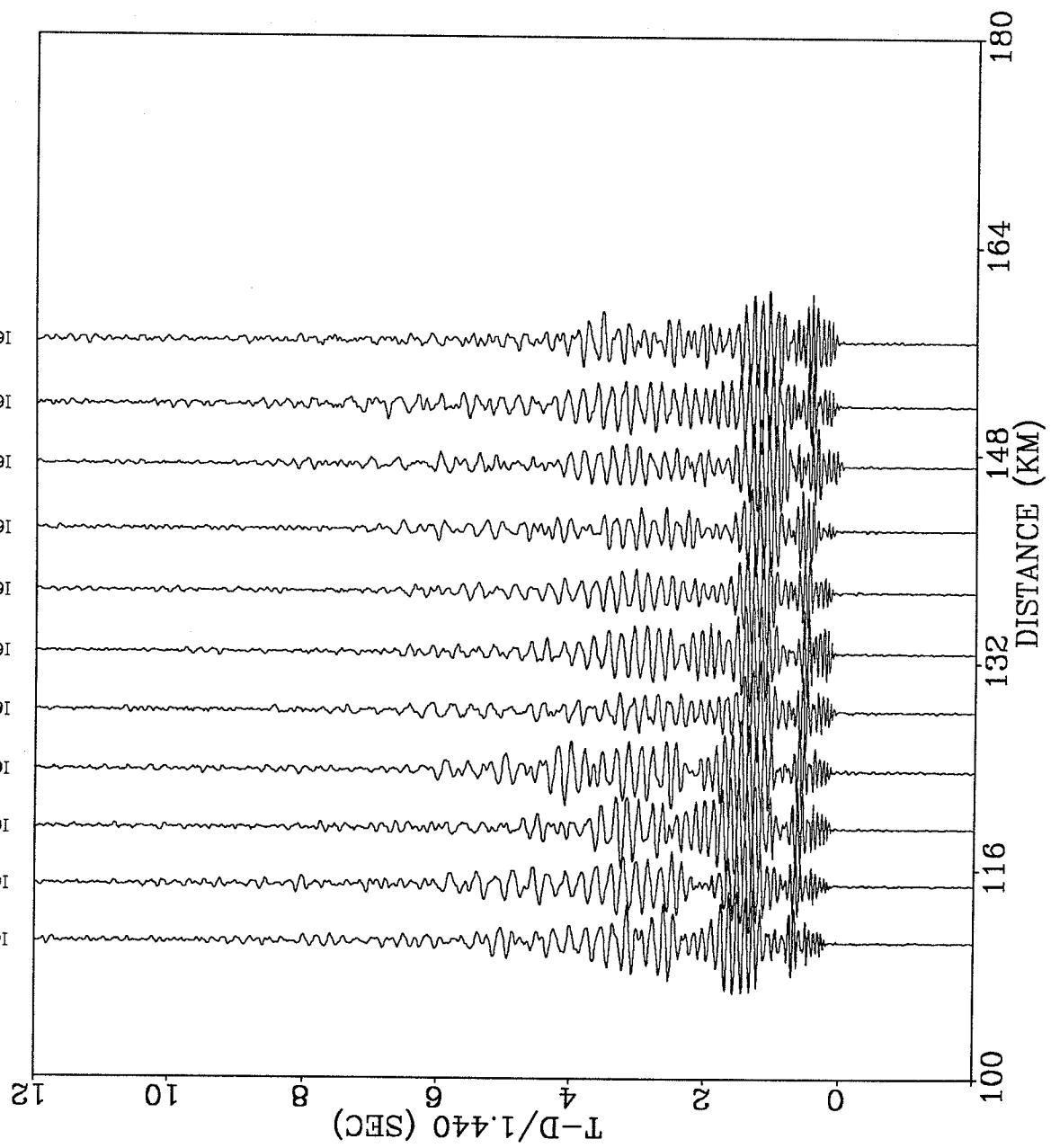
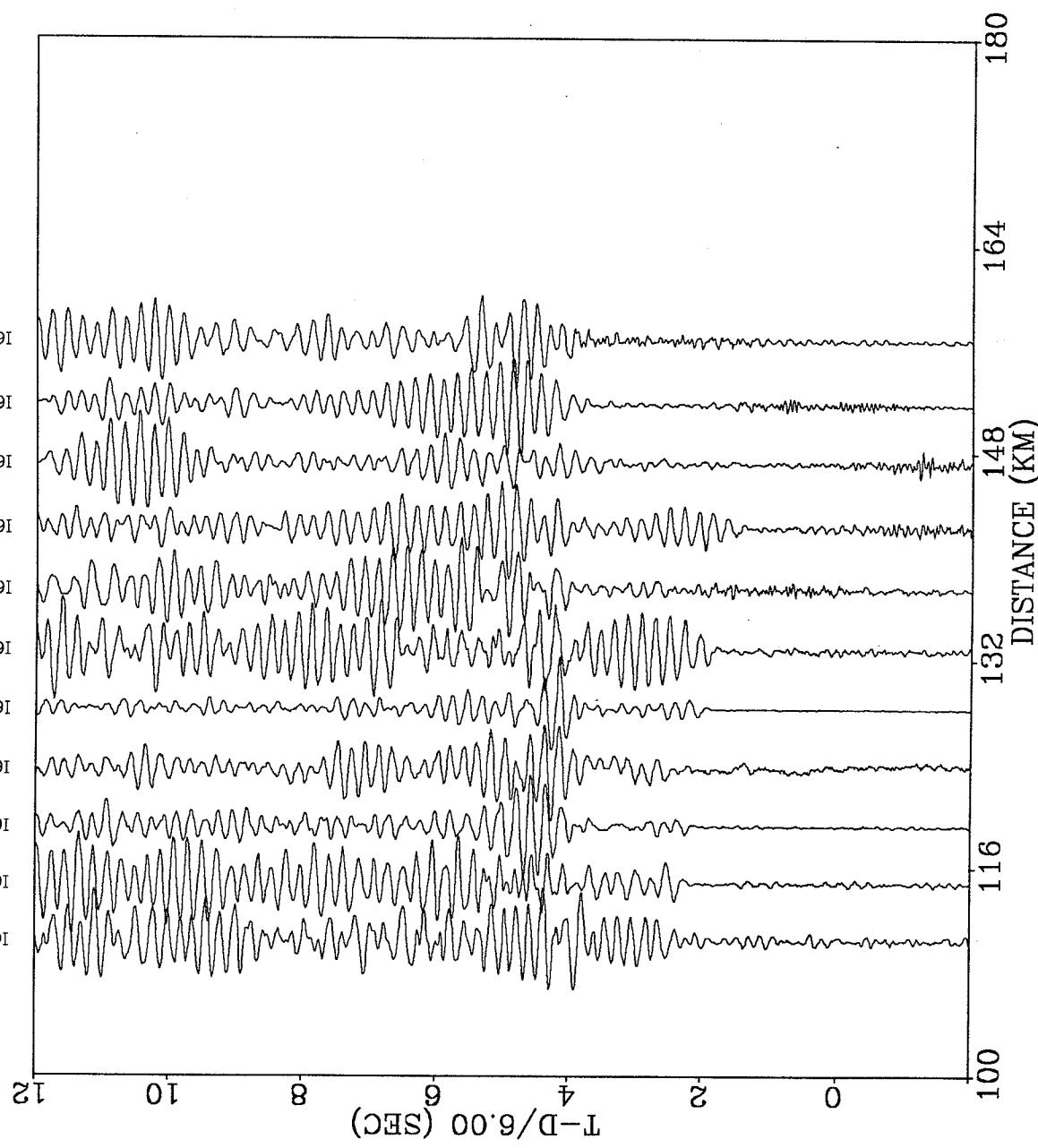


Fig. 37B – Seismic section LT shot 168



Line: I11 Shot: L67

** Ice Island 86 ** Field shot point: L1N Section: LT

Shot time: 1986 APR. 29 22:20: 0.00

Lat.: 80.58585 N, Long.: 99.30566 W, Elev.: 0.0 m

Depth: 100.0 m, Size: 244.8 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
193	80.71544		102.52747		0.0	60.21	285.49	22:19:58.00	0.100	spz	LB09	120	
194	80.72554		102.83153		0.0	65.80	285.45	22:19:58.00	0.100	spz	LB0A	120	
195	80.73407		103.12528		0.0	71.17	285.32	22:19:58.00	0.100	spz	LB06	120	
196	80.74307		103.42314		0.0	76.62	285.27	22:19:58.00	0.100	spz	LB02	120	
197	80.75107		103.72346		0.0	82.08	285.16	22:19:58.00	0.100	spz	LB03	120	
198	80.76139		104.02172		0.0	87.56	285.25	22:19:58.00	0.100	spz	LB08	120	
199	80.77077		104.32339		0.0	93.06	285.28	22:19:58.00	0.100	spz	LB05	120	
200	80.77823		104.62515		0.0	98.53	285.20	22:19:58.00	0.100	spz	LB0C	120	
201	80.78488		104.93584		0.0	104.13	285.09	22:19:58.00	0.100	spz	LB0E	120	
202	80.79378		105.22694		0.0	109.43	285.16	22:19:58.00	0.100	spz	LB01	120	
203	80.80257		105.53731		0.0	115.06	285.20	22:19:58.00	0.100	spz	LB04	120	

Fig. 38A - Water wave section LT shot L67

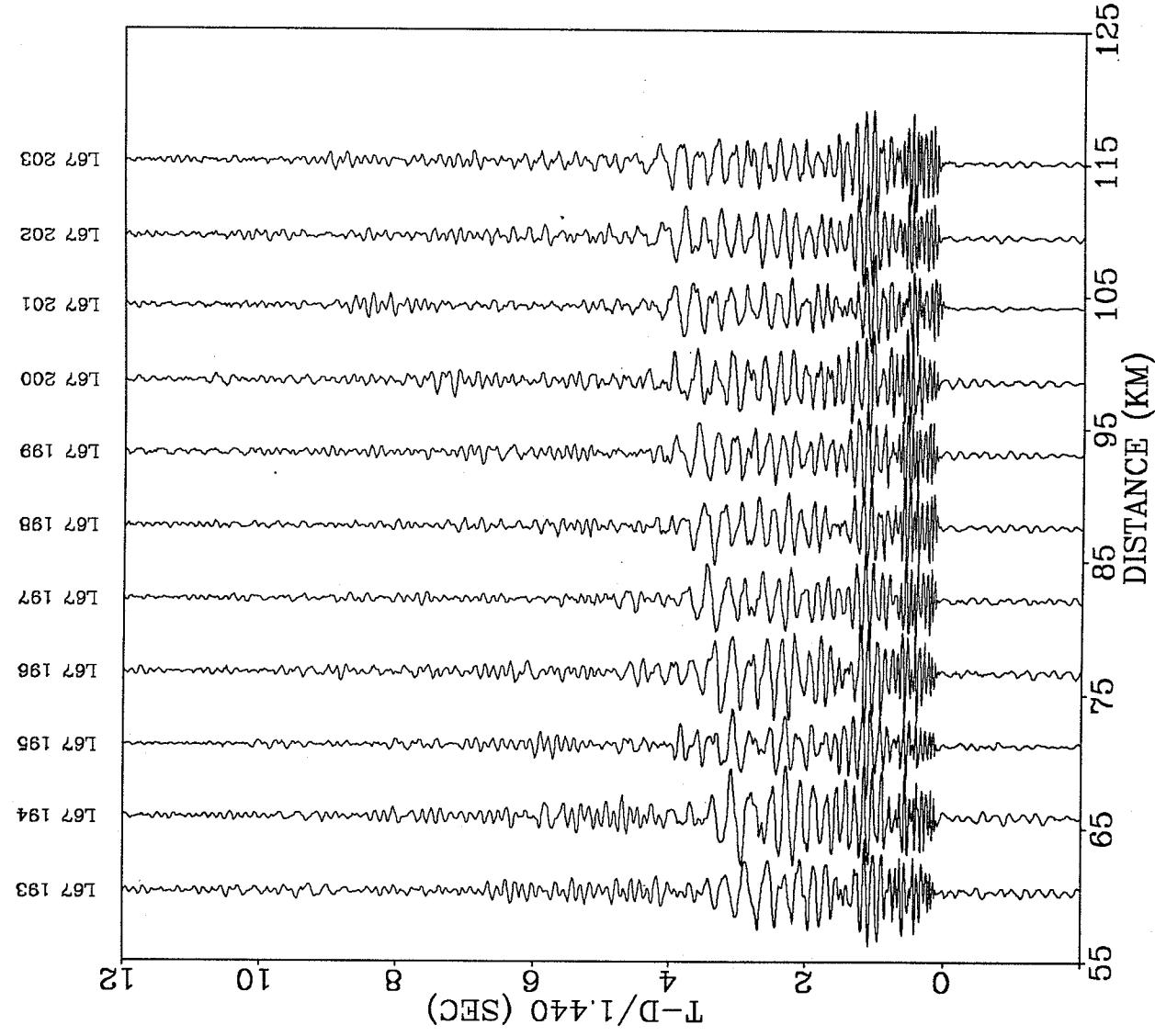
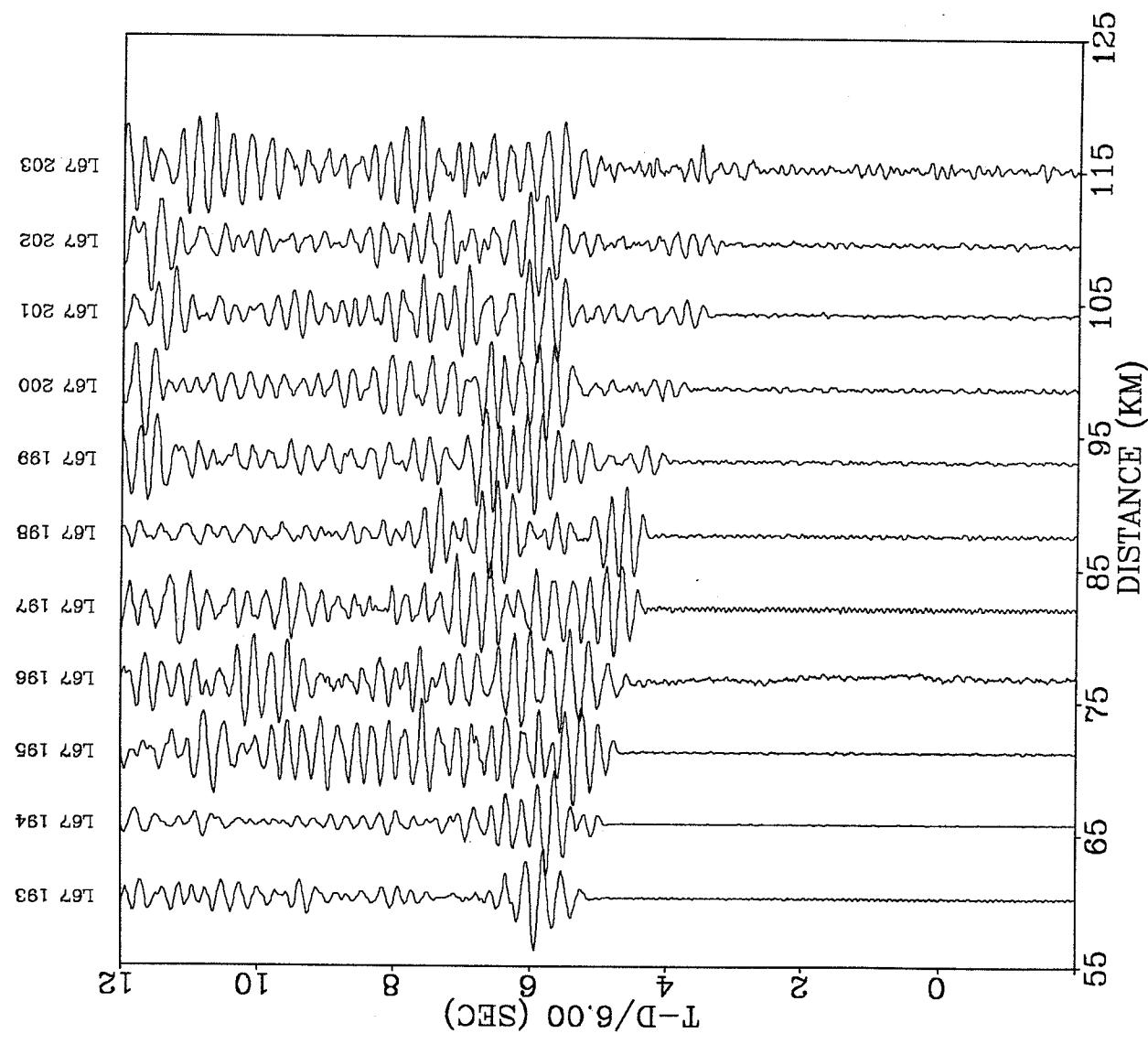


Fig. 38B – Seismic section LT shot L67



Line: I11 Shot: T69
** Ice Island 86 ** Field shot point: T0 Section: LT
Shot time: 1986 APR. 29 23:40: 0.00
Lat.: 80.80508 N, Long.: 105.87135 W, Elev.: 0.0 m
Depth: 100.0 m, Size: 190.4 kg.

Site	Lat.	N	Long.	W	Elev.	Dist.	Az.	Time	UT	GN	CMP	Ins.	SR
203	80.80257		105.53731		0.0	5.97	92.53	23:39:58.00	0.100	spz	LB04	120	
202	80.79378		105.22694		0.0	11.58	95.94	23:39:58.00	0.100	spz	LB01	120	
201	80.78488		104.93584		0.0	16.87	97.23	23:39:58.00	0.100	spz	LBOE	120	
200	80.77823		104.62515		0.0	22.47	97.05	23:39:58.00	0.100	spz	LBOC	120	
199	80.77077		104.32339		0.0	27.94	97.12	23:39:58.00	0.100	spz	LB05	120	
198	80.76139		104.02172		0.0	33.45	97.47	23:39:58.00	0.100	spz	LB08	120	
197	80.75107		103.72346		0.0	38.91	97.86	23:39:58.00	0.100	spz	LB03	120	
196	80.74307		103.42314		0.0	44.38	97.77	23:39:58.00	0.100	spz	LB02	120	
195	80.73407		103.12528		0.0	49.83	97.80	23:39:58.00	0.100	spz	LB06	120	
194	80.72554		102.83153		0.0	55.20	97.76	23:39:58.00	0.100	spz	LBOA	120	
193	80.71544		102.52747		0.0	60.79	97.82	23:39:58.00	0.100	spz	LB09	120	

Fig. 39A - Water wave section LT shot T69

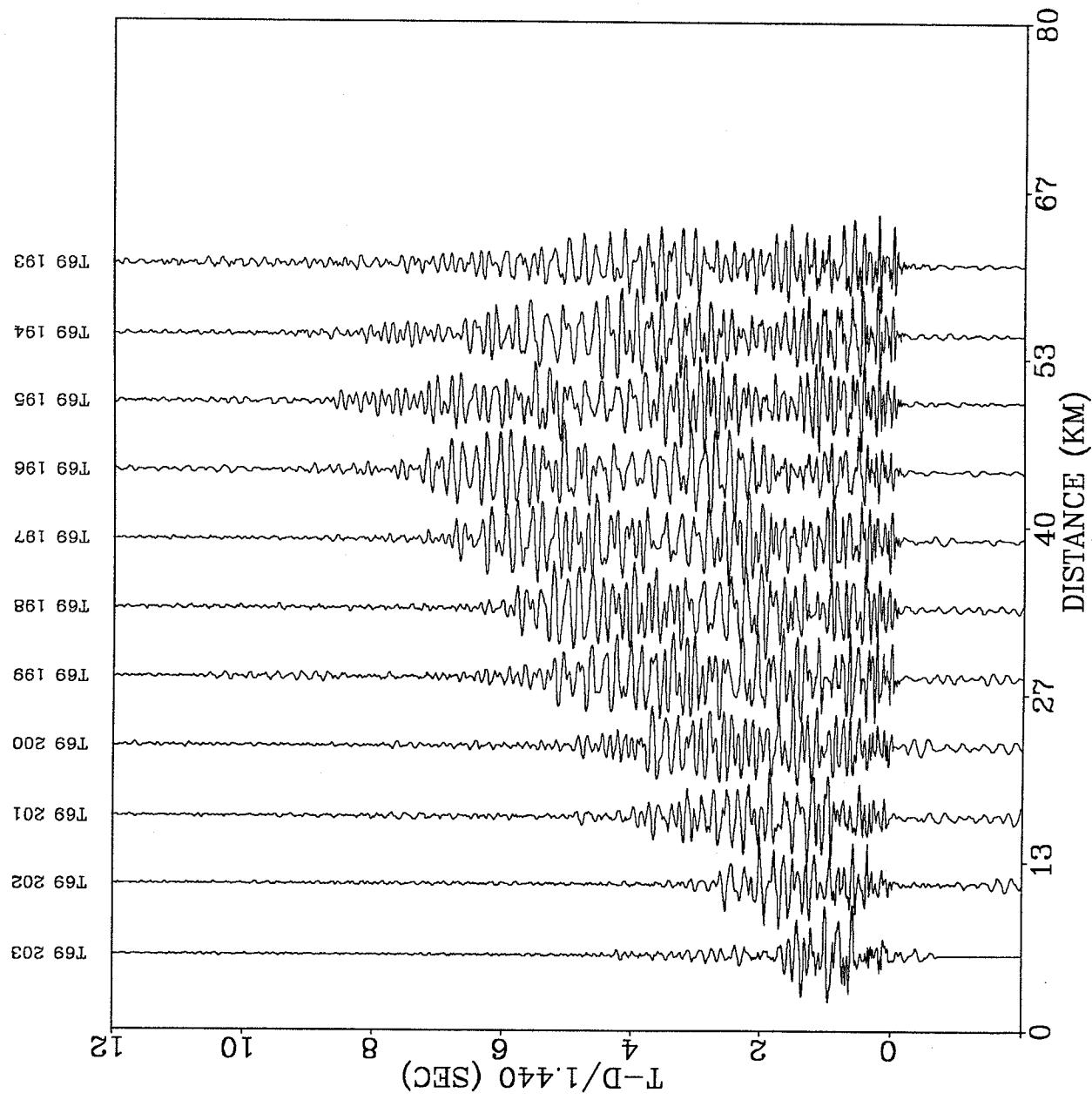


Fig. 39B – Seismic section RT shot T69

