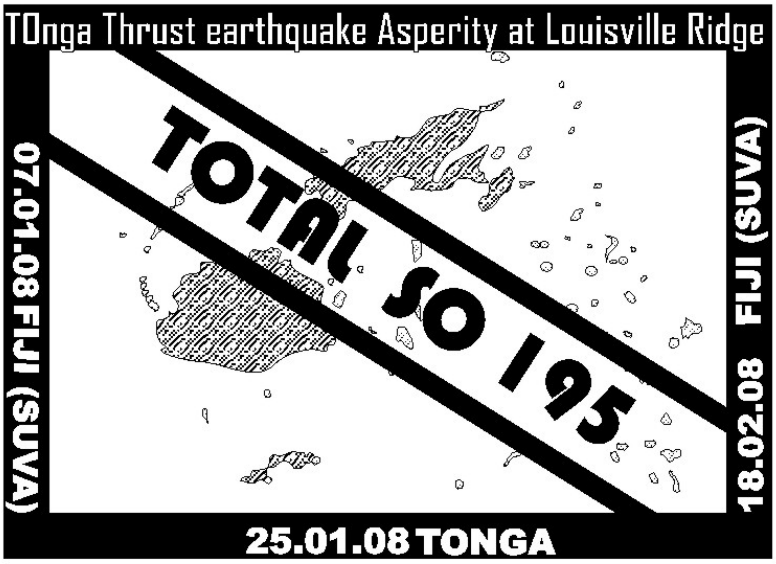
IFM-GEOMAR REPORT

IFM-GEOMAR
Leibniz-Institut für Meereswissenschaften
an der Universität Kiel

FS Sonne
Fahrtbericht / Cruise Report SO195
TOTAL

TOnga Thrust earthquake Asperity at Louisville Ridge

Suva/Fiji – Suva/Fiji
07.01. - 16.02.2008



Berichte aus dem Leibniz-Institut
für Meereswissenschaften an der
Christian-Albrechts-Universität zu Kiel

Nr. 14
August 2008

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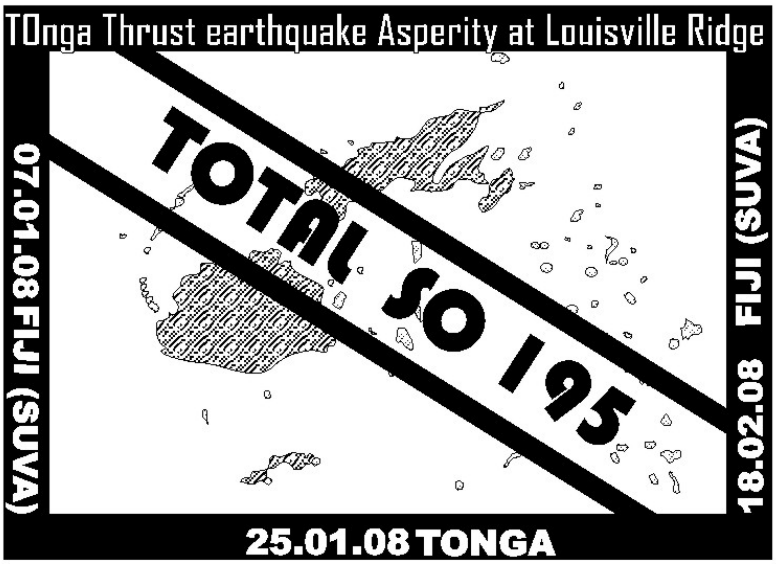

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1.1 Summary

In January and February of 2008 the research vessel *Sonne* surveyed during the cruise SO195 the Tonga subduction zone at its intersection with the subducting Louisville hotspot track. The project TOTAL (TOnga Thrust earthquake Asperity at Louisville Ridge) is an integrated approach to understand the physical nature of a seismic gap and hence potential seismogenic asperities that may cause a major future megathrust earthquake. In addition, the project investigated the interrelation between subduction erosion and seismic coupling.

During the cruise SO195 a monitoring network consisting of 23 ocean bottom seismometers and hydrophones was recovered. Instruments had been deployed in July 2007 during SO194, recording for roughly 6 month the seismic activity in the seismic gap and in the adjacent segment to the south. Preliminary inspection of the data suggest that in the order of 300 to 500 locatable local earthquakes were recorded, among them a handful of events with magnitudes larger than M=4.5 that have been recorded on the global seismic network (GSN).

Three seismic refraction and wide-angle profiles were recorded. In addition to the long-term seismological stations, 96 short-term deployments were made. As seismic source a G-gun array with a total volume of 84-liters was available. Profile P01 surveyed the structure of the marine forearc and will provide constraints on the seismic velocity structure in the area of the seismological deployment. Profile P02 surveyed the entire subduction zone system, covering the incoming plate, the trench axis, the forearc and magmatic arc. The line is roughly 400 km long and 40 stations were deployed at water depths of <1000 m to 8000 m. Data are of excellent quality and most stations recorded seismic offsets out to 80-120 km. Profile P02 is located to the north of the subducting Louisville Ridge and sampled therefore an island arc affected by vigorous tectonic erosion during the last few million years, while the Louisville Ridge was subducted. The third profile P03 runs parallel to the flexural outer rise and crossed the Louisville hotspot chain. 35 stations were deployed along the 370 km long profile. Stations provided data of excellent quality with offsets of ~100 to more than 200 km. The seismic gap is clearly related to the subducting seamount chain. The goal of the line was therefore to yield the structure of the hotspot track, evaluating features governing seismic coupling.

In addition, during the second leg of the cruise a marine gravimeter and magnetometer were available. Gravity data are available along P02 and P03 to constrain in addition to seismic data the crustal and upper mantle structure of the island arc and the Louisville seamounts. Magnetic data were used to survey magnetic spreading anomalies on the incoming plate and surveyed the collision zone of the Louisville chain with the Tonga arc.

Heat flow data were collected at a number of key locations to study the hydrogeological system at the collision zone and shear stresses acting on the subduction megathrust fault. In total 54 deployments were made; 29 sites provided crustal heat flow. Heat flow on the incoming plate was 56-60 mW/m^2. Heat flow over the forearc is generally much lower, ranging from ~8 mW/m^2 to 56 mW/m^2.

1.2 Zusammenfassung

Im Januar und Februar 2008 untersuchte die Expedition SO195 des Forschungsschiffes *Sonne* den Bereich der Subduktionszone von Tonga, wo die Vulkankette der Louisville Guyots in den Tiefseegraben abtaucht. Das Projekt TOTAL (TOnga Thrust earthquake Asperity at Louisville Ridge) verfolgt einen integrierten Ansatz, um die Steuerungsmechanismen für das Auftreten einer seismischen Lücke zu untersuchen. Diese Zone ohne global detektierbare seismische Aktivität mag in naher Zukunft von einem katastrophalen Erdbeben heimgesucht werden. Darüber hinaus untersucht das Vorhaben die Wechselwirkung zwischen tektonischer Erosion und seismischer Kopplung.

Während der Expedition SO195 wurde ein seismisches Netzwerk bestehend aus 23 Instrumenten geborgen. Das Netzwerk war im Juli 2007 auf der Reise SO194 ausgelegt worden und hat über einen Zeitraum von ca. 6 Monaten die lokale Erdbebenaktivität registriert. Eine an Bord durchgeführte Datensichtung weist darauf hin, dass wir zwischen 300 und 500 lokalisierbare Ereignisse aufgezeichnet haben, darunter einige Beben mit einer Magnitude von M>4.5, welche auch auf dem weltweiten seismologischen Netzwerk registriert wurden.

Drei refraktions- und weitwinkelseismische Profile konnten während der Reise abgeschossen werden. Als seismische Quelle wurde ein G-Gun-Array mit einem Kammervolumen von 84 Litern verwendet. Insgesamt wurden zusätzlich zu den Langzeitstationen noch 96 Instrumente ausgelegt. Das erste Profil P01 lag im Bereich des marinen Forearcs und wurde mit dem Ziel abgeschossen, die Geschwindigkeitsstruktur im Bereich des seismologischen Netzwerks zu bestimmen. Diese Informationen werden in den Lokalisierungsprozess der Lokalbeben integriert. Das Profil P02 bildet die Subduktionszone nördlich des Louisville Rückens ab und liegt in einer Region, die durch sehr hohe Raten tektonischer Erosion charakterisiert ist. Entlang des 400 km langen Profils wurden insgesamt 40 OBS und OBH in Wassertiefen von <1000 m bis 8000 m ausgelegt. Die Datenqualität ist exzellent. Die meisten Stationen konnten seismische Phasen bis in Entfernungen von 80-120 km registrieren. Das dritte Profil P03 verläuft parallel zum Tiefseegraben entlang der elastischen Aufwölbung der abtauchenden Lithosphäre und kreuzt die Hotspotspur des Louisville Rückens. Insgesamt 35 Geräte wurden entlang einer 370 km langen Linie ausgelegt. Die Datenqualität ist sehr gut. Die meisten Stationen zeigen Einsätze in Entfernungen von 100 km; Stationen am südlichen Profilende zeigen seismische Signale in über 200 km Entfernung. Ziel der Arbeiten entlang von P03 war es, die Krustenstruktur des Louisville Rückens abzubilden. Die Korrelation der Lage der seismischen Lücke mit den abtauchenden Louisville Kuppen deutet darauf hin, dass die Struktur der abtauchenden Guyots die seismogene Kopplung steuert.

Während der zweiten Hälfte der Expedition war auf Tongatapu ein Magnetometer und Gravimeter an Bord gekommen, so dass entlang aller Profile das Schwerefeld vermessen werden konnte, um in Ergänzung zu den seismischen Daten, die Struktur der Kruste und des Mantels abzubilden. Magnetische Daten wurden entlang von Schlüsselprofilen aufgenommen, um die magnetischen Spreizungsanomalien auf der hereinkommenden Platte und somit das Krustenalter zu bestimmen. Darüber hinaus wurde ein Profil über der Kollisionszone aufgenommen.

Wärmestromdaten wurden während der Expedition an Schlüssellokationen gesammelt, um das hydrogeologische System im Bereich der Kollisionszone zu untersuchen und um Scherspannungen in der Überschiebungszone zu bestimmen. An insgesamt 54 Lokationen wurden Messungen durchgeführt; 29 Messungen waren erfolgreich. Der Wärmestrom auf der subduzierenden Platte lag bei 60 mW/m^2. Werte im Bereich des marinen Forearc waren generell geringer, streuten jedoch zum Teil sehr (~8 mW/m^2 bis 56 mW/m^2).

2. Scientific Prospectus and aims

The project TOTAL (TOnga Thrust earthquake Asperity at Louisville Ridge subduction) is an integrated approach to understand the physical nature of so-called seismogenic asperities and the interrelation between subduction erosion and seismic coupling. The study area is the Tonga trench between 23°S and 28°S (Figure 2.1). Asperities are segments of the subduction megathrust fault that are expected to fail during a single earthquake (Lay and Kanamori, 1980). Their size defines the potential magnitude (or seismic moment) of an earthquake. The seismic moment M_0 is a measure of overall earthquake size, equal to the product of the rigidity, μ of the material in the fault zone, the total fault area, A, and the average displacement across the fault, D ($M_0=\mu$ AD). Thus, understanding processes governing asperities are the key for risk assessment at subdcution zones without any historic earthquake record.

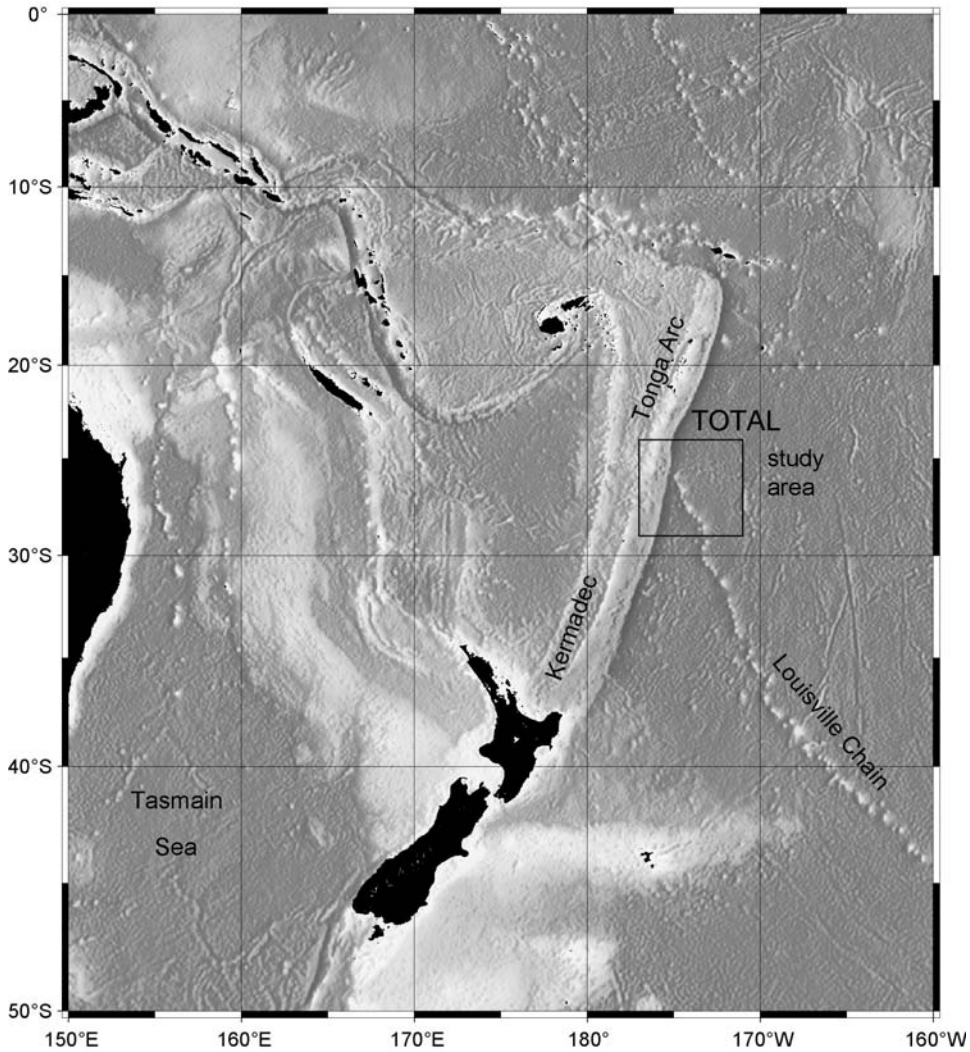

Figure 2.1: *TOTAL study area in the southwest Pacific to the north of New Zealand*

Seismic coupling

The distribution of teleseismically recorded earthquakes for the Kermadec-Tonga subduction zone reveals a major seismic gap centered at roughly 26°S. The gap parallels the trench axis and stretches for approximately 250 km. The seismic gap coincides with the area, where the Louisville hotspot chain joins the Tonga trench (Figure 2.2). Subducting seamounts may therefore control seismic coupling and hence the asperity (Lay and Kanamori, 1980; Closs, 1992).

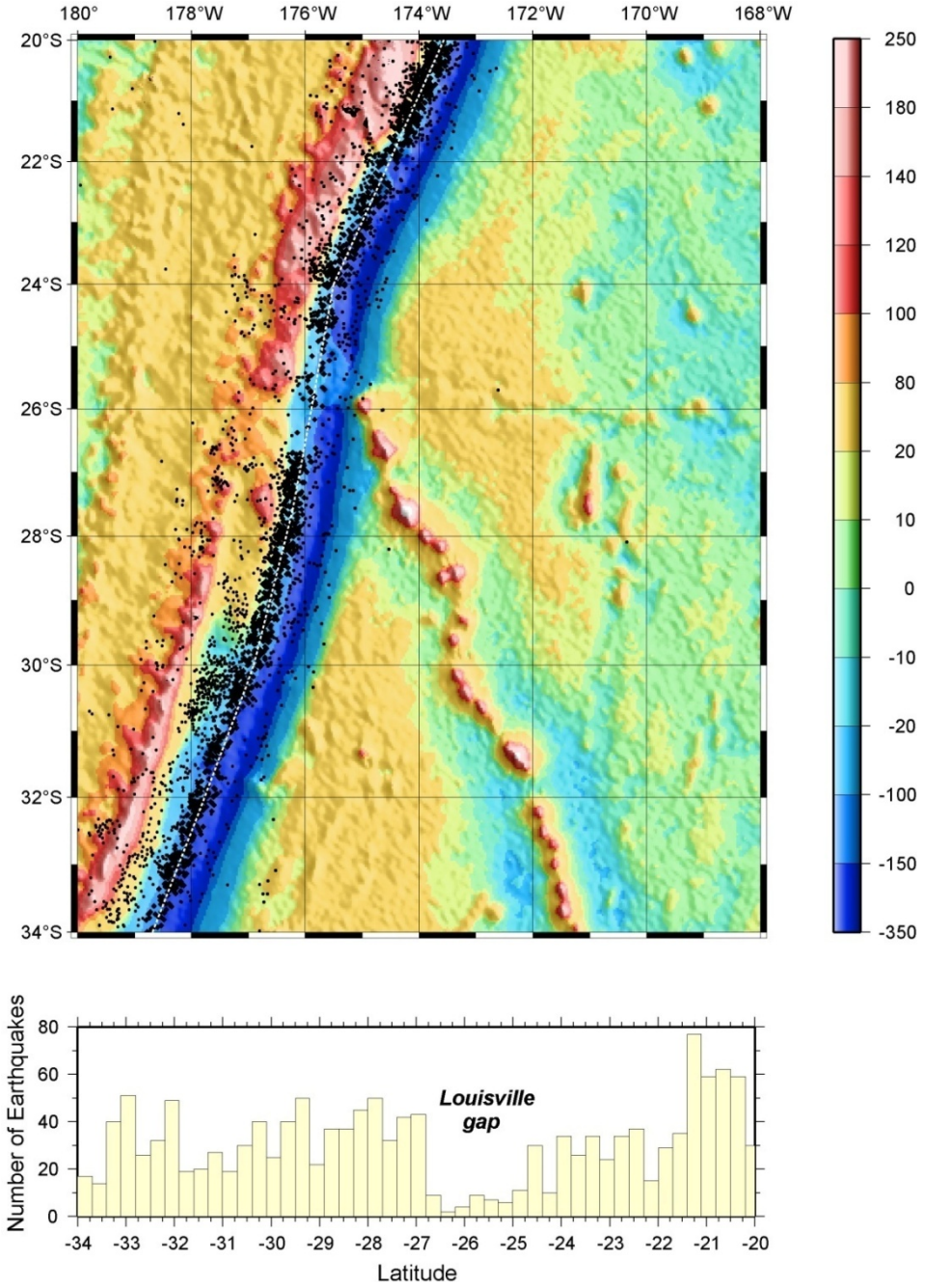

Figure 2.2: *Satellite derived gravity over the Tonga trench and the incoming Louisville chain. Dots mark epicenters from the updated EHB catalogue (Engdahl and Villasenor, 2000).*

The Louisville Ridge is a chain of northwest trending basaltic seamounts and guyots in the southwest Pacific (Figure 2.1). Both the seamounts and an underlying broad crustal swell were created at the Louisville hotspot, located roughly 4000 km to the southeast (Lonsdale, 1988; Watts et al., 1988). Subduction of the Pacific plate along the Kermadec-Tonga trench is causing the northwestern end of the chain to collide with the Tonga trench at 26°S (Londsdale, 1986). Near the Tonga trench the swell of the Louisville chain is approximately 100 km wide and is characterized by a well defined gravimetric low flanking the volcanic edifices. These features clearly indicate the isostatic response of an elastic lithosphere loaded by volcanoes (Watts et al., 1988; Lyones et al., 2000).

Louisville seamounts rise 3 to 4 km above the regional seafloor. Seamounts and Guyots are between 10 to 40 km in diameter and hence smaller than the width of the seismic gap. Osborne seamount, the northwesternmost guyot of the chain, lies immediately east of the trench axis and will

be the next to collide with the western trench slope. However, multichannel seismic reflection data (MCS) imaged a west dipping surface platform 2-3 km beneath the lower western trench slope, which is interpreted as the flat summit of a subducted guyot (Balance et al., 1989), suggesting that seamounts are subducted rather than accreted. This observation has major implications for the interpretation of seismic gaps and seismogenic asperities. Thus, seamounts seem to cause seismic locking of the megathrust fault, as for example proposed in a model from Scholz and Smal (1997), rather than suggesting that seamounts are weak and therefore sheared off in sediment-starved settings (Cloos and Shreve, 1996). However, the seismic gap is much larger than the typical size of volcanoes, suggesting that other features – like the hotspot swell, crustal underplating or the flexural bulge (e.g., Grevemeyer et al., 2001a, 2001b) – contribute or control seismic locking and hence asperities.

Subduction erosion

Seafloor mapping of the deep sediment-starved axis of the Tonga trench suggested that the subduction zone is characterized by tectonic erosion rather than by accretion (Londsdale, 1986). Multi-beam bathymetric mapping and seismic profiling revealed Host-and-Graben structures both on the western (island arc) inner trench slope and oceanic slope of the trench. Grabens of the inner trench slope are partly compensated by sediments unlike grabens of the oceanic slope which are not ponded by sediments. On both slopes faults are normal faults, indicating extension (Gnibidenko et al., 1985). Normal faulting on the incoming plate is related to plate-bending and the slap-pull force (e.g., Capple and Forsyth, 1979; Lefeldt and Grevemeyer, 2008). Normal faulting of the overriding plate indicates subduction erosion (von Huene and Ranero, 2003; Ranero et al., 2008).

Convergence between the Pacific Plate and the Kermadec-Tonga arc is approximately normal to the strike of the trench and occurs at 15 mm per year. However, the oblique NNW strike of the hotspot chain causes the collision zone to migrate southward at about 180 km/Myr (Lonsdale, 1986). Lonsdale (1986) suggested that in the wake of seamount chain subduction, tectonic erosion unroofs a wider strip of the downgoing lithosphere and thereby deepens the trench axis, causing the 10800 m deep Horizon Deep roughly 150 km to the north of the intersection between Louisville Ridge and Tonga trench. According to Balance et al. (1989; Figure 2.3), the principal effects of hotspot ridge subduction at a sediment-starved trench are: (i) impacting seamount are subducted rather than sheared off and accreted, and (ii) although some seamount rocks (and apron material) are temporarily accreted, the inner trench wall is tectonically eroded arcward at rates perhaps as high as 50 km/Myr. Accelerated tectonic erosion is related to fracturing, shearing and general weakening of the igneous arc crust as the overriding plate is uplifted by the swell, penetrated by impacting seamounts, and left to collapse as the ridge moves away. Further, the collision appears to have caused steepening and shortening of the trench slope; thus, the slope is 100 km and 180 km wide north and south, respectively, of the Louisville Ridge.

At Ocean Drilling Program (ODP) site 841, on the mid-trench slope of the Tonga forearc at ~23°S, rates of tectonic trenchward tilting and subsidence appear to be linked (Clift and MacLeod; 1999), supporting models of basal erosion focused near the trench axis. In total, 135 km of frontal erosion have occurred since 34 Ma, of which 80 km are associated with the passage of the Louisville Ridge, suggesting that the steady-state erosion rate at the Tonga trench averages <1.5 km/Myr. Thus, seamount subduction has indeed a major impact on the forearc, causing vigorous erosion within a few million years. Within this time, erosion will not be steady-state but episodic, causing disastrous earthquakes in times when the stress is released catastrophically.

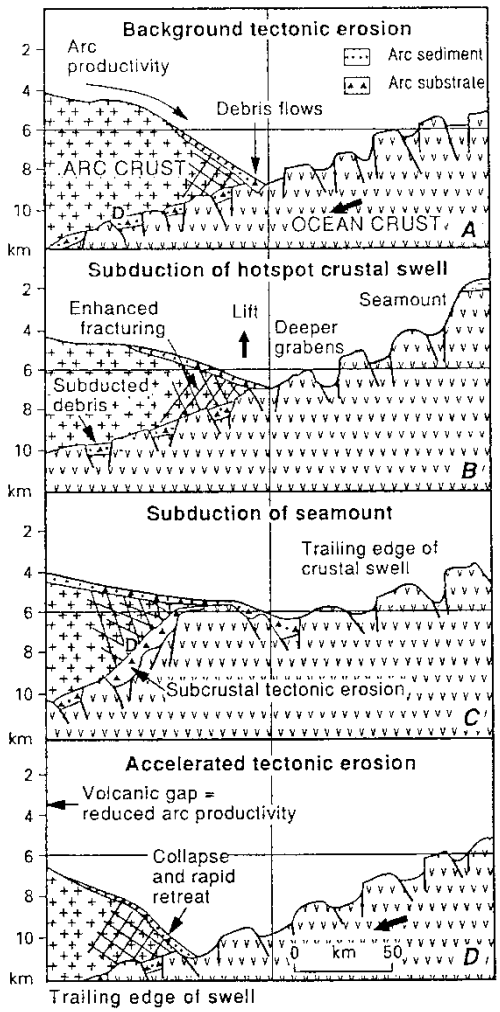

Figure 2.3: *Scenario of subduction erosion caused by the passage of the Louisville Ridge (Balance et al., 1989)*

The area of seamount subduction at the intersection of the Louisville hotspot chain with the Tonga subduction zone is therefore a natural laboratory to study a number of features associated with seamount subduction and seismogenic coupling. Main aims of the TOTAL project that have been surveyed during research vessel SONNE cruise SO195 are:

A..) What causes the seismic gaps in the vicinity of seamount subduction? Is the seismic gap a real feature or is energy released by numerous small earthquakes at magnitudes below the teleseismic detection threshold of M~4.5? The aim is to understand mirco-seismicity in seismic gaps defined by global (teleseismic) data.

A local seismic monitoring with a network of 23 ocean bottom seismometers and hydrophones was deployed for over 6 months (deployment in July 2007 during cruise SO194) to yield the distribution and mechanisms of micro-earthquakes within the southern transition zone of the seismic gap. Thus, the monitoring network covered the southern gap and the adjoining active area to the south between 25°30’S and 27°30’S. A seismic line (profile p01) with 26 OBH and OBS deployed along the line was shot along the inner trench slope through the monitoring network to yield the velocity structure in the forearc and to obtain a reference model for earthquake location.

B..) What is the structure of the Tonga forearc and arcs to the north and south of seamount subduction? The aim is to yield differences in the seismic structure that could be related to subduction erosion. A higher degree of fracturing may result in lower seismic velocities (or higher porosity). Teleseismic data suggest that large subduction zone thrust earthquakes generally occur to the south of the Louisville Ridge. Thus, forearc mantle wedge hydration may control seismic behavior, suggesting that the degree of serpentinization of the mantle wedge is related to the passage of the Louisville Ridge. Therefore, it is reasonable to suggest that mantle serpentinization is more profound to the north?

Two seismic transects extending from the incoming plate across the trench axis and across the magmatic arc were planned to test this hypothesis. However, due to two passing cyclones ship time for scientific operation was lost. During SO195 only the transect to the north could be finished (profile p02). 40 OBH and OBS covered a 350 km long seismic profile centered along Latitude 24°26'S. During SO192, however, a seismic refraction and wide-angle profile war shot to the north of Raoul Island crossing the arc at 29°S. This profile has not been affected by vigorous seamount related subduction erosion and will serve as reference profile for p02.

C..) What is the internal structure of the seamounts? Is the chain indeed surrounded by a regional hotspot swell that may control (after subduction) seismogenic coupling in addition to locking caused by the edifices? The aim is to use geophysical techniques (seismics and gravity) for imaging the internal structure of seamounts, the regional swell and/or flexural response of the lithosphere caused by seamount loading.

Along a 370 km long transect (profile p03) across the Louisville track 35 OBH and OBS were deployed to use seismic refraction and wide-angle data to study the structure of the swell and seamounts. Gravity data have been recorded for joint inversion of seismic and gravity data to yield the flexural rigidity (i.e., elastic thickness Te).

D..) Does seamount subduction change systematically the vulnerability of the forearc to fluids released from the subducting plate? Heat flow patterns are inherently related to the hydrogeological systems. If seamount related subduction erosion affects indeed fluid flow, heat flow surveys could prove this concept.

During SO195 in total 54 heat flow deployments were carried out. Stations sampled the collision zone and the area to the south. Additional stations have been surveyed across ODP site 841 and as reference site on the incoming plate.

E..) Is the subduction thrust fault a weak or strong fault? Strong faults cause shear heating, inherently affecting surface heat flow (e.g., Molnar and England, 1990; Grevemeyer et al., 2003).

Heat flow data obtained during the cruise will be used to ground truth thermal models of fault behavior.

3. Participants
3.1 Scientists - SO 195 Leg 1

Prof. Dr. Ernst R. Flüh	IFM-GEOMAR, chief scientist
Ivonne Arroyo	IFM-GEOMAR, Kiel
Christian Breuer	WWU Münster
Dr. Anne Becel	ICT, Barcelona
Wiebke Brunn	IFM-GEOMAR, Kiel
Anke Dannowski	IFM-GEOMAR, Kiel
Markus Fink	IFM-GEOMAR, Kiel
Helene Kraft	CAU Kiel
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Stefan Möller	CAU Kiel
Dr. Cord Papenberg	IFM-GEOMAR, Kiel
David Pesquer	IFM-GEOMAR, Kiel
Claudia Podolski	CAU Kiel
Klaus-Peter Steffen	IFM-GEOMAR, Kiel
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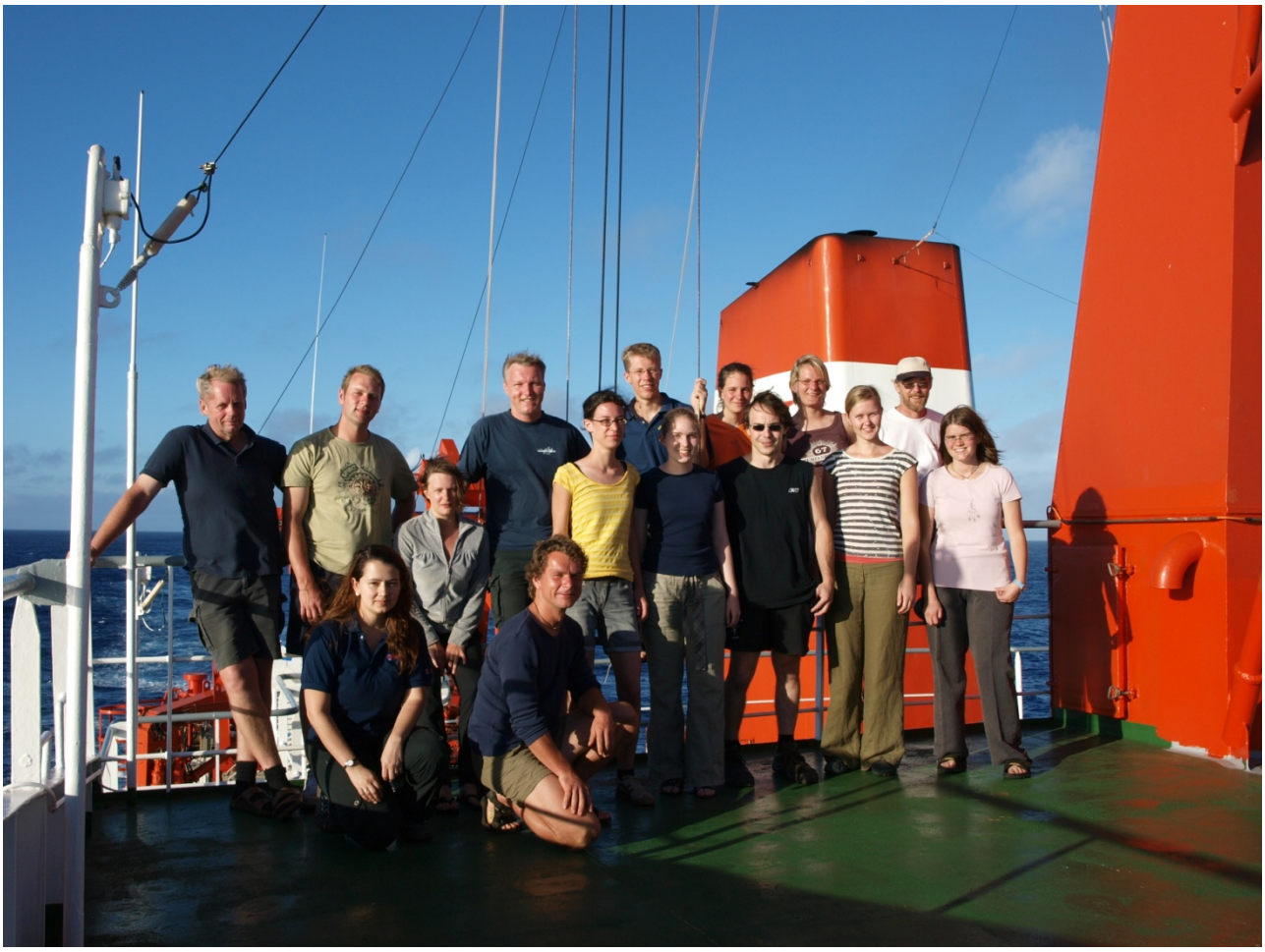

Figure 3.1.1: Participants of cruise SO195 Leg 1, Suva- Nukualofa.

3.2 Scientists - SO 195 Leg 2

PrivDoz Dr. Ingo Grevemeyer	IFM-GEOMAR, chief scientist
Ivonne Arroyo	IFM-GEOMAR, Kiel
Christian Breuer	WWU Münster
Wiebke Brunn	IFM-GEOMAR, Kiel
Markus Fabian	Univ. Bremen
Markus Fink	IFM-GEOMAR, Kiel
Tom Gemeinder	Univ. Bremen
Bernd Heesemann	Univ. Bremen
Dr. Norbert Kaul	Univ. Bremen
Helene Kraft	CAU Kiel
Tim Lennon	Univ. Otago, NZ
Kathrin Lieser	CAU Kiel
Stefan Möller	CAU Kiel
David Pesquer	IFM-GEOMAR, Kiel
Dr. Lars Planert	IFM-GEOMAR, Kiel
Andre Polster	Uni. Bremen
Claudia Podolski	CAU Kiel
Klaus-Peter Steffen	IFM-GEOMAR, Kiel
Prof. Anthony B. Watts	Univ. Oxford, UK
Dean Wilson	Univ. Durham, UK

Figure 3.1.2: Participants of cruise SO195 Leg 2, Nukualofa-Suva.

3.3 Addresses of Participating Institutions

IFM-GEOMAR	Leibniz Institut für Meereswissenschaften, Wischhofstraße 1-3, 24148 Kiel, Germany
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Univ. Oxford	Dept. Earth Sciences, University of Oxford United Kingdom
CAU	Institut für Geowissenschaften, Christian-Albrechts Universität Kiel, Otto Hahn Platz, 24108 Kiel, Germany
Univ. Bremen	Fachbereich 5 – Geowissenschaften Klagenfurter Straße, 2359 Bremen, Germany
Univ. Otago	Dept. Geology Dunedin, New Zealand
WWU	Geol.-Paläont. Inst. der Westfälischen Wilhelms-Universität Münster Correnssstr. 24, 48149 Münster, Germany
ICT	Instituto de Ciencias de la Terra, Jaume Almera, Calle Lluis Sole Sabaris, 08028 Barcelona, Spain

3.4 Crew - SO 195

Lutz Mallon	Master
Nils Aden	Chief Mate
Heinz Ulrich Büchele	2nd Mate
Björn Briesemeister	2nd Mate
Dr. Konrad Raabe	Surgeon
Normann Lindhorst	Chief Engineer
Paul Schmidtgen	2nd Engineer
Jörg Buss	2nd Engineer
Uwe Rieper	Electrician
Rudolff Angermann	Chief Electrician
Matthias Grossmann	System Operator
Andreas Ehmer	System Operator
Volker Blohm	Motorman / Fitter
Holger Zeitz	Motorman
Frank Jahnke	Motorman
Frank Tiemann	Chief Cook
Wiktor Borecki	2nd Cook
Gerlinde Grübe	Chief Steward
Andreas Pohl	2nd Steward
Peter Mucke	Bosum
Torsten Bierstedt	A. B.
Andreas Schrapel	A. B.
Henning Schnur	A. B.
Ingo Fricke	A. B.
Steffen Jescheniak	A. B.

4. Agenda of cruise SO195

4.1 SO195 - Leg 1

Cruise SO195 leg 1 "TOTAL" started on January 07, 2008, in Suva, Fiji Islands. Altogether 15 scientists embarked on research vessel *Sonne* in Suva, comprising the international group of scientists from Costa Rica, Spain, Germany and New Zealand. The main aim of the first leg was active source seismic refraction and wide-angle work. The transit from Suva to the study region started at 09:30 09.01.2008 and was intensely used for the preparation of the scientific equipment and installation of hardware. During night hours from 09.01. to10.01 a releaser test and a CTD profile were run to 3300 m depth. All units worked satisfactorily. When leaving the EEZ of Fiji Islands at 21:40 on January 10 2008, the Kongsberg EM120 system was turned on for permanent data recording. During our transit to the working area weather conditions got permanently worse. Therefore, transit speed was reduced. The tropical cyclone *Eliza* was very close to the working area, and several tropical depressions were approaching. We therefore had to go further west to wait for acceptable conditions.

Upon our second approach to the working area on 13.01.2008, a medical emergency among the crew forced us to head towards Tonga, where the nearest hospital was located. We disembarked the ill crew member on 14.01 at 13:00 at the pier of Nukualofa Harbour, and one hour later headed back to the working area that was located 360 nm to the south. We reached this location in the evening of 15.01, 15 hours after two instruments had been released by a time release, set in July 2007 upon deployment of the seismological network. One instrument was found rather soon, it had drifted for about 13 nm in 15 hours. The other instrument could not be located, despite several hours of intensive search.

A second releaser test and a CTD profile were obtained during the night hours of 16.01., again all instruments worked fine. A short seismic profile was shot during the morning to test our newly designed airgun array. Two OBH were deployed for this test, and were later recovered.

The first seismic profile to be acquired was located at the lower margin (average water depth 4500 m) through the center of the seismological network. In total 21 OBH were deployed at an average spacing of 3.5 nm, augmented by six instruments along that profile which were part of the seismological network. Shooting started at 11:00 on 17.01, the trigger interval was set to 60 sec and the ship speed was 4 kn. The profile was terminated at 12:00 the following day. Subsequently, all instruments were recovered, including several offline stations from the seismological network.

On 21.01. we started an east-west trending seismic profile reaching from the Pacific plate across the Tonga arc at 24° 30´S. In total 40 instruments were deployed, with a 17 nm gap across the trench where the water depth exceeds 8000 m. Shooting along the 175 nm long line was done at 4.5 knots with a trigger interval of 60 s, and was finished in the afternoon of January 23. Instrument recovery started soon after, but had to be interrupted at 18:00 on 24.01, when *Sonne* started her transit to Nukualofa for a planned port call. Unfortunately, a new instrument that was certified for water depth of 8000 m, imploded while being dropped to a depth of 7700 m. Luckily the remaining parts of that instrument returned to the surface, so the damage could be analyzed in detail.

Sonne reached the Pilot station of Nukualofa at 15:00 on 25.01.2008. Figure 4.1 displays the track plot of Leg 1.

4.2 SO195 - Leg 2

During a brief port call four scientists and the chief scientist from leg 1 left the vessel. Eleven additional scientists joined the cruise – among them groups that did not participate during leg 1. Five scientists came from the University of Bremen to study heat flow anomalies over the collision zone of Louisville Ridge subduction. Two scientists from the UK were in charge of recording potential field, namely the gravity and magnetic field. A Lacoste & Romberg S40 marine

gravimeter was installed in Nukualofa, providing shipboard gravity measurement during the entire second leg. The remaining four scientists joined the seismic and seismological group led by IFM-GEOMAR scientists. On January 25 *Sonne* left the Island of Tongatapu and sailed 180 sm to the south, collecting the remaining ocean bottom stations from profile p02, providing in addition the seismic data gravity data along the entire p02. On Monday 27.01. at 10 a.m. local time the remaining 22 instruments were recovered. Thus, all 40 stations returned.

During the night the first heat flow deployment was planned to be at a water depth of 5500 m. However, after 5300 m of cable had been paid out, the ship's crew recognized that the remaining cable length was too small to collect data at > 5400 m. Thus, the heat probe was brought back on deck and we run a mapping survey with EM120 and gravity to map parts of the incoming plate, until a longer cable for successful heat flow operation in deep water was available. On Tuesday at 22 h, the first seven successful heat flow determinations were obtained.

On January 29 the first magnetometer profile was recorded during a transit to the south to recover the six remaining broadband stations from long-term seismological monitoring. Three broadband stations and 13 short period seismometers and hydrophones had already been recovered during leg 1. On January 31 at 21:30 h all stations were back on deck.

In the beginning of the 4th week of SO195 four heat flow stations were obtained in the vicinity of the collision zone between the Louisville Ridge and the Tonga trench. One station sampled the collision zone itself and the other stations sampled the area further south, an area not yet affected by seamount subduction. Stations surveyed the forearc roughly 30 km westward of the trench axis. In total, 24 penetrations were made.

In the night from Saturday to Sunday *Sonne* sailed to the southeast to deploy in total 35 instruments along seismic line p03, crossing the Louisville hotspot track roughly 75 sm to the east of the trench axis. After only 20 hours all stations were deployed. The first shot was fired on Monday February 2 at 10:30 h local time. In addition to the 84-litre airgun array, a seismic streamer and the magnetometer were deployed.

At the beginning of February, the cyclone *Gene* moved from Fiji southwestward. Unfortunately, the cyclone changed its heading and moved straight eastward. Though it was downscaled from a cyclone to a tropical storm, its wind speed and associated waves would have been a thread for *Sonne*. Therefore, it was decided that shooting along p03 had to be stopped on February 5 at 16 h local time. Airguns were recovered and *Sonne* sailed away from the tropical storm on a straight course heading northward recording the gravity and magnetic field. On February 6 the center of storm passed Raoul Island, leaving the island to the south and started to move southeastward. Wind speed around *Sonne* reached 16 m/s. In the night the swell became so large that the gravimeter failed. It could be restarted the next day, though. *Sonne* sailed northward until sunrise on Thursday 07.02., recording seafloor bathymetry and the magnetic field. Wind speed dropped to 10 m/s, though a large swell remained for the next couple of days. Due to the northerly position, we decided to obtain heat flow data across ODP site 841 at 23°20'S/174°17'W. Six successful penetrations were carried out.

Sonne sailed again south to finish seismic profile p03. During the transit, seafloor bathymetry, gravity and magnetic data were obtained. On Friday 09.02. *Sonne* reached the northernmost seismic station. Due to tight time constraints, we had to recover the first six stations, before *Sonne* sailed southward to finish shooting of the remaining 130 km of the 370 km long line p03. Thus, the profile was roughly 50 km shorter than originally planned. Moreover, shooting was done with a single array and hence a volume of 42-litres instead of 84-litres. On February 9 the last shot was fired at 22 h, airguns and magnetometer were recovered and *Sonne* turned north to recover the remaining 29 stations. As most instruments were deployed at water depths of 5500 to 5800 m, the recovery took 38 h.

On Monday 11.02. a heat flow station was planned on a seamount to be drilled by the Integrated Ocean Drilling Program (IODP). Unfortunately, penetration was not possible.

A last magnetic profile was obtained along the forearc, roughly 40 km westward of the trench axis, crossing the collision zone of the Louisville Ridge with the Tonga trench.

The last 22 hours of research in the study area were dedicated to heat flow measurements along seismic profile p02. Two stations with 12 penetrations were carried out. On February 13 at 6:39 local time the heat probe was back on deck and *Sonne* started her transit to Suva, Fiji. At 22 h of Wednesday 13.02. *Sonne* reached the territorial waters of Fiji and recording had to be stopped. On Friday February 14 at 8 h local time the research vessel *Sonne* had a rendezvous with the pilot off Suva.

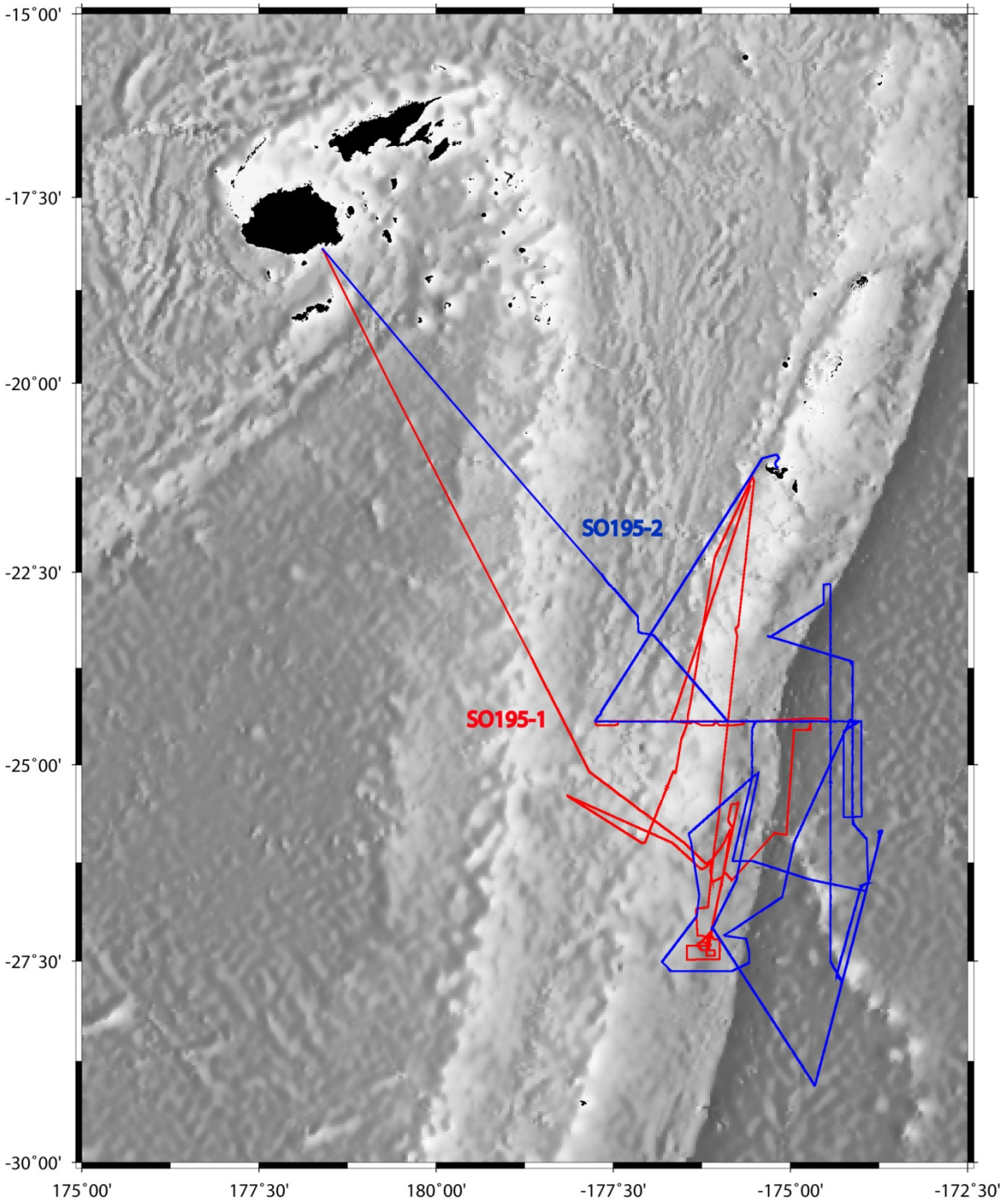


Figure 4.1: *Track chart of cruise SO195 Leg-1 and Leg-2.*

5. Scientific equipment
5.1 Shipboard equipment
5.1.1 Navigation

A crucial prerequisite for all kinds of marine surveys is the precise knowledge of position information (latitude, longitude, altitude above/below a reference level). Since 1993 the global positioning system (GPS) is commercially available and widely used for marine surveys. It operates at least 24 satellites in synchronous orbits; thus, at least 4 satellites are visible anywhere at any moment. The full precision of this originally military service yields positioning accuracies of a few meters. In the past this was restricted to military forces and inaccessible to commercial users. Since Mai 2, 2000 the full resolution is generally available (with an accuracy in the order of 10 m). During this cruise the operation of the differential (DGPS) option was not requested as standard precision coordinates are precise enough for seismological monitoring stations.

GPS-values as well as most other cruise parameters are continuously stored in the navigation database, and are distributed via the DVS ("data distribution system") on the ship's network.

5.1.2 Kongsberg EM120 swath mapping bathymetry system

The EM120 system is a multi-beam echosounder (with 191 beams) providing accurate bathymetric mapping of the deep oceans This system is composed of two transducer arrays fixed on the hull of the ship to send successive frequency coded acoustic signals (11.25 to 12.6 kHz). Data acquisition is based on successive emission-reception cycles of this signal. The emission beam is 150° wide across track, and 2° along track direction (Fig. 5.1.2.1). The reception is obtained from 191 overlapping beams, with widths of 2° across track and 20° along it (Fig. 5.1.2.1). The beam spacing can be defined as equidistant or equiangular, and the maximum seafloor coverage fixed or not. The echoes from the intersection area (2°*2°) between transmission and reception patterns (Fig. 5.1.2.1) produce a signal from which depth and reflectivity are extracted.

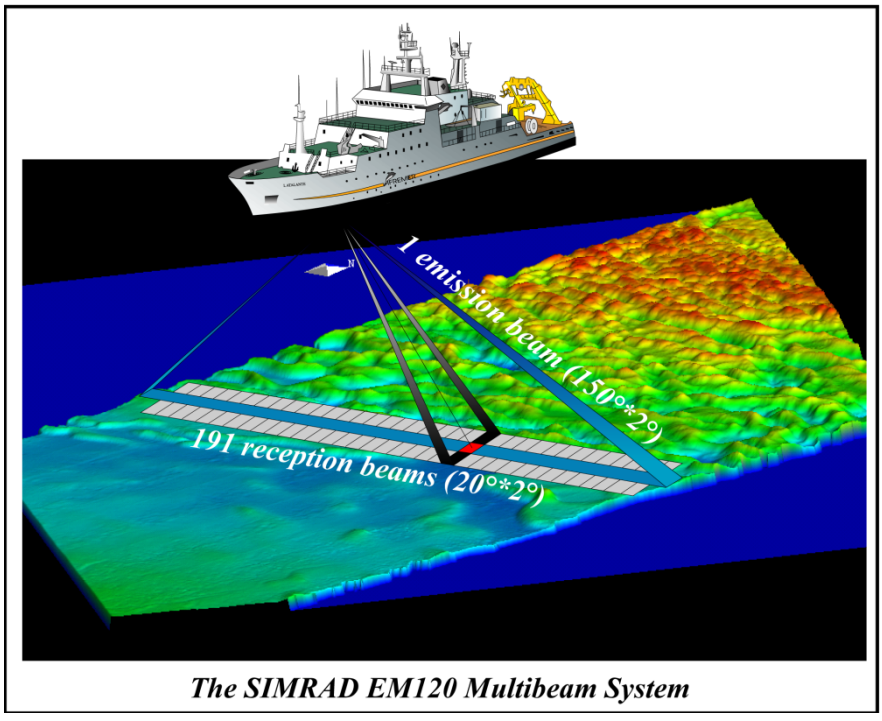


Figure 5.1.2.1: *Acquisition method for bathymetric and backscatter data from the Kongsberg EM120 system (crossed beams technique).*

For depth measurements, 191 isolated depth values are obtained perpendicular to the track for each signal. Using the 2-way-travel-time and the beam angle known for each beam, and taking into account the ray bending due to refraction in the water column by sound speed variations, depth is estimated for each beam. A combination of phase (for the central beams) and amplitude (lateral beams) is used to provide a measurement accuracy practically independent of the beam pointing angle. The raw depth data need then to be processed to obtain depth-contour maps. In the first step, the data are merged with navigation files to compute their geographic position, and the depth values are plotted on a regular grid to obtain a digital terrain model (*DTM)*. In the last stage, the grid is interpolated, and finally smoothed to obtain a better graphic representation.

Together with depth measurements, the acoustic signal is sampled at 3.2 ms and processed to obtain a cartographic representation, commonly named mosaic, where grey levels are representative of backscatter amplitudes. These data provide thus information on the seafloor nature and texture; it can be simply said that a smooth and soft seabed will backscatter little energy, whereas a rough and hard relief will return a stronger echo.

5.1.3 CTD data

The CTD rosette from R/V *Sonne* was deployed during cruise SO195-1 to measure physical oceanographic parameters. Two CTD stations were obtained, providing the water velocity down to 3500 m. For greater water depth it is generally reasonable to extrapolate the velocity gradient down to the sea bed. The sound velocity profile is shown in Figure 5.1.3.1. Accurate sound velocity profiles are needed to yield seafloor depth from echo times recorded with the Kongsberg EM120.

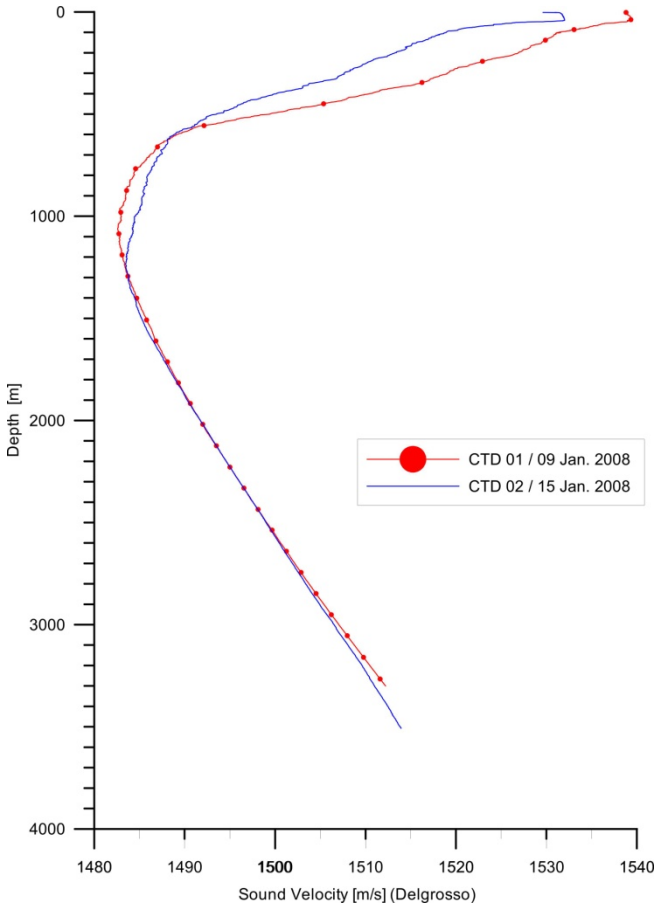


Figure 5.1.3.1: *Sound velocity profile obtained from CTD measurement during SO195-1.*

5.2 Computer facilities for bathymetry and seismic data processing

Shipboard data analyses and processing of seismic, seismological and bathymetric data requires computing facilities in addition to the existing shipboard systems. Processing and interpretation of both active source and passive seismological data is done on several Linux PCs. For programming of ocean bottom stations to be operated at the sea bed two laptops were available, connecting the laptops via RS232 interface with the seismic recorders.

IFM-GEOMAR installed its own network during SO195 comprising the following systems:

1	”paquita” (seismics)	INTEL Pentium 4 3.2 GHz	2 CPU, 1 GB memory	375 GB disks, 4x PCMCIA	Linux (Suse 10.1)
3	”potosi” (seismics)	INTEL Pentium 4 3.2 GHz	2 CPU, 1 GB memory	375 GB disks, 4x PCMCIA	Linux (Suse 10.1)
3	”caicos” (seismology)	INTEL Pentium 4 3.2 GHz	2 CPU, 1 GB memory	375 GB disks, 4x PCMCIA	Linux (Suse 10.1)
4	“caradoc” (seismology)	AMD Duron 700 MHz	1 CPU, 256 MB memory	38 GB disk + 1 TB Raid array	Linux (Suse 9.3)
5	”roorise” (bathymetry)	AMD Duron 700 MHz	1 CPU, 512 MB memory	68 GB disk + 250GB disk	Linux (Suse 9.3)

In addition to these computers, several laptops were used and two Macintosh computers were available for initial seismic data interpretation using the forward modelling code “MacRay”. For plotting and printing a Kyocera Mita FS6020 Postscript Laserprinter (papersize A3 and A4) as well as the shipboard colour plotters were available.

The network was placed in the “Magnetiklabor” and the “Reinlabor”. The huge amount of data and thus data transfer required a high-performance network, which was accomplished by a switched twisted-pair ethernet. A 24-port ethernet switching-hub (3COM-SuperstackII 3300) with an uplink connection of 100 Mbps maintained the necessary network performance. A shipboard router was used to allow for communication between the IFM-GEOMAR and the shipboard network. Therefore, all computers could use the same IP-addresses and network configuration as at IFM-GEOMAR.

My Book 300 GB usbdisks were used as backup system. They were formatted in Linux *EX3* to allow for backup of files larger than 2 GB; typical sizes of seismological raw data sampled at 50 Hz where in the order of 4 to 11 GByte. Active source data sample at 200 Hz were in the order of ~150 MByte for OBH stations and 500 MByte for OBS stations.

5.3 Potential field measurements
5.3.1 Shipboard gravity

A Lacoste & Romberg *model S* Air-Sea dynamic gravity meter (number S40) was installed in the 'gravimeter lab' on the "Kegelbahn" deck (Figure 5.3.1.1) and operated by Oxford University and University of Durham. This instrument was in almost continuous operation throughout the duration of Leg 2, except for a period of 15 hrs, while bad weather conditions resulted in a "crash" of the gravimeter. It was restarted after weather condition improved the next day. The gravimeter has a calibrated range of 12,000 mGals, reading to +/- 0.1 mGal accuracy. To correct for instrument drift over the duration of the cruise and convert relative to absolute measurements, the gravimeter was tied to absolute gravity reference stations in the ports of Nukualofa before and Suva after the cruise, respectively. A drift of ~0.04 mGal per day was observed. The data were correlated with underway navigation and bathymetry data and converted to a FAA for purposes of quality control. Figure 5.3.1.2 shows the recorded gravity as a function of ship's speed and heading and corrected values after applying the Eotvos correction.

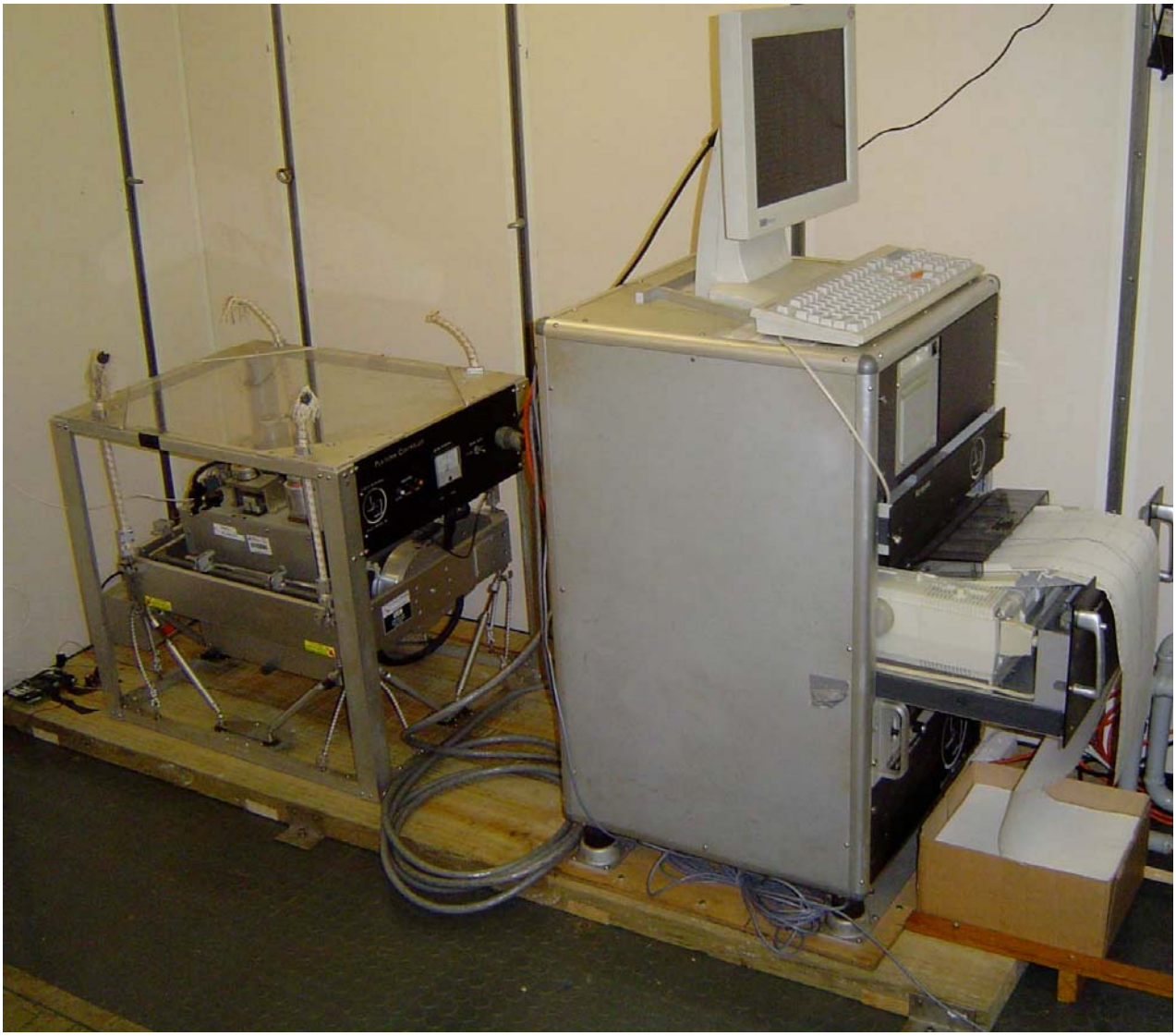


Figure 5.3.1.1: *Lacoste & Romberg marine gravimeter S40 (left) and recording unit (right)*

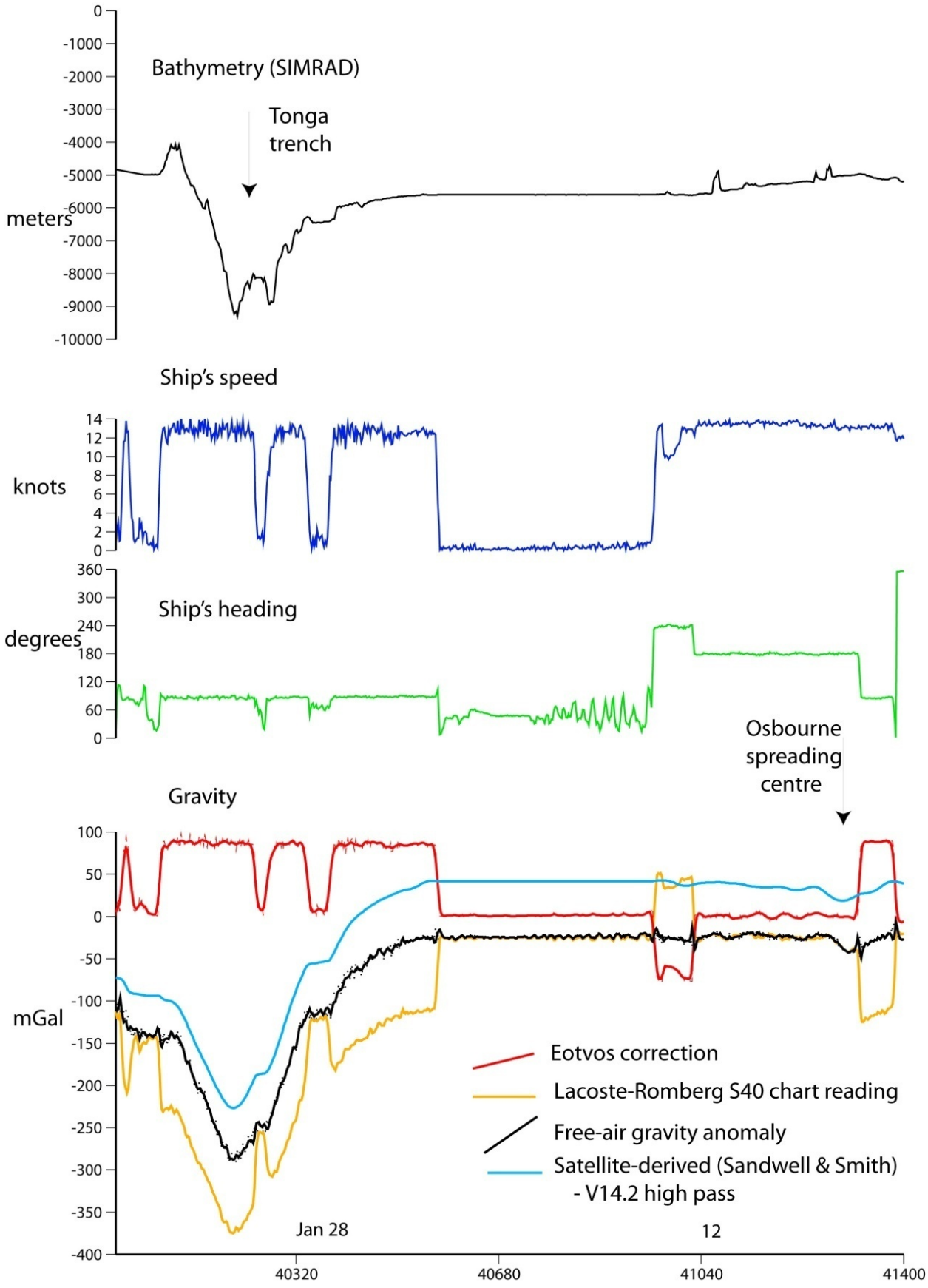


Figure 5.3.1.2: *Effect of speed and heading on marine gravity measurements.*

5.3.2 Magnetics

A SeaSPY marine Magnetometer was used to measure and record the Earth's total magnetic field intensity (Figure 5.3.2.1). It uses stable Overhauser sensors that do not degrade with time and measures the ambient magnetic field using a specialized branch of nuclear Magnetic Resonance technology, applied specifically to hydrogen nuclei. The magnetometer was towed ~200 m astern on port side of *Sonne*. The magnetometer recording PC and power supply were operated in the "Geology lab". Meter readings were recorded against GMT using a terminal logging programme installed on the PC. The magnetometer operates in a range of 18,000 – 120,000 nT, and is sensitive to +/-0.01 nT, with an absolute accuracy of 0.2 nT. The system was operated by the Universities of Oxford and Durham.

Figure 5.3.2.1: *SeaSPY Marine magnetometer*

5.4 OBH/OBS Seismic Instrumentation
5.4.1 Ocean bottom hydrophones (OBH) and seismometers (OBS)

IFM-GEOMAR has been operating Ocean Bottom Hydrophones (OBH) since January 1992. This type of instrument has proved to have a high reliability; more than 4000 successful deployments were conducted since 1992. A total of 27 OBH, 7 3-leg OBS, 6 IFM-GEOMAR LOBSTER (OBS) and 9 DEPAS OBS-Pool LOBSTER were available for SO195. Altogether 96 stations were deployed for refraction seismic profiles during the SO195 cruise. Additional 23 deployments were made during SO194 in July 2007 for long-term earthquake monitoring and were picked up during SO195.

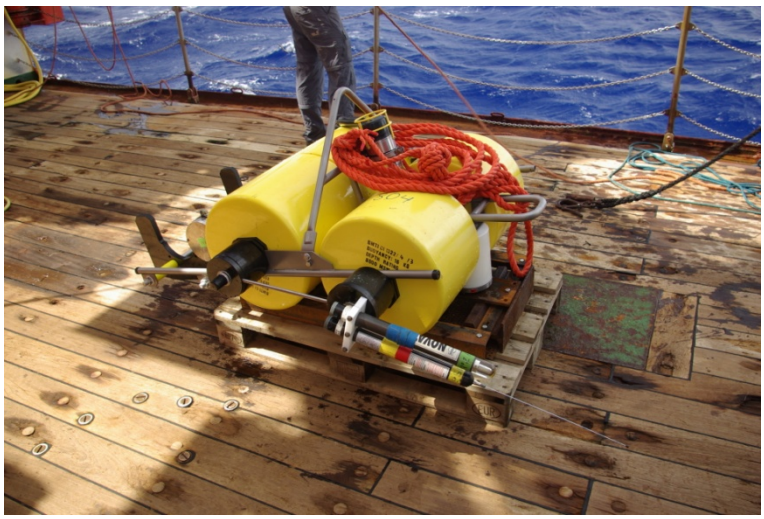
Figure 5.4.1: *a) The IFM-GEOMAR OBH ready for deployment, b) the IFM-GEOMAR 3-leg OBS after recovery*

The system components of the OBHs are mounted on a steel frame, which holds the buoyancy body on its top (Figure 5.4.1a). The buoyancy body is made of syntactic foam and is rated, as are all other components of the system, for a water depth of 6000 m. Attached to the buoyant body are a radio beacon, a flash light, a flag and a swimming line for retrieving from aboard the vessel. The hydrophone for the acoustic release is also mounted here. The release transponder is a model *RT661CE* or *RT861* made by *MORS Technology* which recently became *IXSea*, or alternatively a *K/MT562* made by *KUM GmbH*. Communication with the instrument is possible through the ship's transducer system, and even at maximum speed and ranges of 4 to 5 miles release and range commands are successful. For anchors, we use pieces of railway tracks weighing about 40 kg each. The anchors are suspended 2 to 3 m below the instrument. The sensor is an *E-2PD* hydrophone from *OAS Inc.* or the *HTI-01-PCA* hydrophone from *HIGH TECH INC;* recording devices were *MBS, MLS* or *MTS* recorder of *SEND GmbH.* Each device is fixed in a pressure tube and is mounted below the buoyant body opposite the release transponder. For more details see Flueh and Bialas (1996).

Recorder type	Internal time base drift [ppm]	No. channels	Sampling rate [Hz]	Resolution	Storage media	Power consumption [mW]	Application
MBS - Marine Broadband Seismocorder	<0.05	4	50-10k	50-500 Hz: 20 bit 0.5-10 kHz: 16 bit	PCMCIA Flash disks	1500	active seismics
MLS – Marine Longterm Seismocorder	<0.05	4	1-200	50 Hz: 19 bit 200 Hz: 15 bit	PCMCIA Flash disks	250	active seismics, seismology
MTS – Marine Tsunameter Seismocorder	<0.05	5	1-200	50 Hz: 19 bit 200 Hz: 15 bit	PCMCIA Flash disks	250	active seismics, seismology
MCS – Marine Compact Seismocorder	<0.03	4	1-1000	24 bit	20 GByte hard disc	620 + 120 for Güralb CMG40T	seismology

Table 5.4.1: *Performance of seismic recorders used during SO195.*

The seismometers had two different designs. First we used so-call 3-leg OBS (Figure 5.4.1b). Their design is similar to the OBH. However, while the OBH floats over the seabed, the OBS sitson a three star anchor on the seabed. The 4.5 Hz seismometer is deployed after touchdown as external pack next to the main frame with flotation, recording unit, hydrophone, and release unit. While the OBS sits on the seafloor, the only connection from the seismometer to the instrument is a cable and an attached wire, which retracts the seismometer during ascent to the sea surface. Like for the OBHs *IXSea* releasers are used. For more details see Bialas and Flueh (1999).



The LOBSTER is a joint IFM-GEOMAR and KUM GmbH designed OBS for long-term seismological observations. For system compatibility the acoustic release, pressure tubes, and the hydrophones are identical to those used for other IFM-GEOMAR instruments. Syntactic foam is used as floatation body but this time in a cylindrical shape. IFM-GEOMAR LOBSTERs were designed for deployments down to 8000 m, AWI LOBSTERs for 7300 m. The basic system is designed to carry a hydrophone and a seismometer for seismic profiling or earthquake monitoring. The sensitive seismometer is deployed between the anchor and the OBS frame, which allows good coupling with the seafloor. Geophones used for the IFM-GEOMAR LOBSTERs had a 4.5 Hz natural frequency. The three component seismometers (*KUM*) are housed in a titanium tube, modified from a package built by Tim Owen (Cambridge) earlier. The signal of the sensors is recorded using *Marine Longtime Seismocorder (MLS)* or *Marine Tsunameter Seismocorder (MTS)*, which are manufactured by *SEND GmbH* and specially designed for long-time recordings of low frequency bands. In addition, Güralp 3-component broadband seismometers (CMG 40T) were

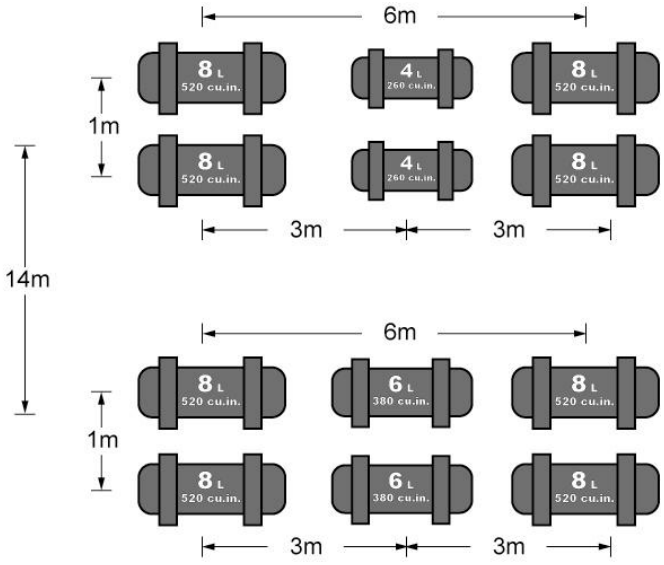
available for the 9 LOBSTERs from the DEPAS-Pool hosted at Alfred-Wegener Institute in Bremerhaven. DEPAS instruments used *Marine Compact Seismocorder (MCS)* to record seismic signals.

While deployed on the seafloor the entire system rests horizontally on the anchor frame. After releasing its anchor weight the instrument turns 90° into the vertical and ascends to the surface with the floatation on top. This ensures a maximally reduced system height and water current sensibility at the ground (during measurement). On the other hand the sensors are well protected against damage during recovery and the transponder is kept under water, allowing permanent ranging, while the instrument floats at the surface.

5.3.2 Streamer

In addition to the ocean bottom seismic stations for cruise SO195 a 4 channel mini streamer was used to characterize seafloor blanketing by sediments. The streamer was manufactured by S.I.G. *(Service et Instruments de Geophysique, France)*. The system comprises several parts: four 12 m long active sections with 24 hydrophones spaced at 0.5 m. The lead-in cable is 150 m long and directly connected to the lab. The individual hydrophones are omnidirectional and have a flat frequency response from 10 to 1000 Hz. The sensitivity is –90 dB, re 1V/µbar, +-1 dB. Two preamplifiers were available, one with 32 db and one with 35.5 db gain. They are hosted right in front of the active section of the streamer. The hydrophones are mounted in an oil-filled polyurethane pipe of 25 mm diameter, with a nominal density of 1.13 g/cm^3. The tow depth can be controlled by supplying the lead-in cable with air and the depth can be monitored at the depth monitor integrated in the system with the power supply. During the SO195 cruise it was towed at a depth of 6 m.
A four channel MBS data logger was used to record seismic signals from the streamer. Direct water wave arrivals and reflection signals could be well observed using the online display capabilities of the MBS device. The streamer was towed midships between the two G-gun arrays.

5.3.3 Airgun System G-gun Cluster



As the main seismic source G-gun clusters manufactured by *Sercel Marine Sources Division* (former *SODERA*) and *Seismograph Services Inc*. were operated in two arrays. Six guns were set up in 3 clusters. Each cluster comprises two G-guns of 4x8 liters and in the middle either 2x6 liters or 2x4 liters (see figure on the right). The cluster arrangement provides a good primary to bubble signal ratio. Operating all twelve guns provides a total volume of 84 liters (5440cu.in.). The G-guns were operated at 210 bar (300psi). For this purpose a second compressor was set up by RF onboard *Sonne* to increase the 140 bar pressure from the onboard *Leobersdorfer* compressor to 210 bar. Profiles were shot at 60s shot interval. Using this interval the pressure could be kept between 205 and 210 bar. The two

G-gun cluster arrays were deployed on port and starboard side of the *Sonne*. Guns were towed at at 8m depth during airgun operation.

Figure 5.4.2*: Picture of the 6 m long port side G-gun Cluster array*

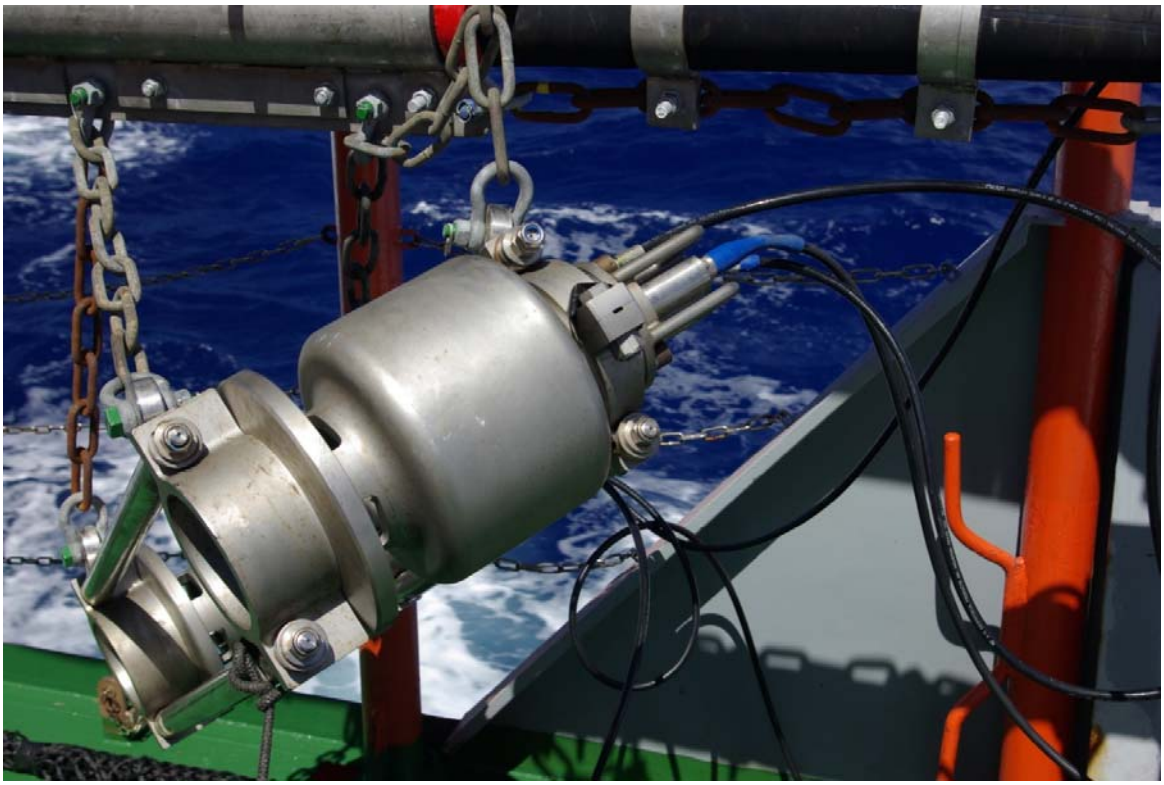


Figure 5.4.3: *6 liter (380 cu.in.) G-gun*

To trigger the airguns a time-signal was generated and fed into the *LongShot* trigger box. In addition, the trigger pulses were stored on a MBS recorder and displayed in real time to obtain shoot times. The Clock Time Break (CTB) of the *Longshot* device is a TTL pulse that is 5 ms wide and represents the aim-point or the time when the guns are fired. This aim-point was set to be 60 ms after the trigger pulse. All guns were operated in auto mode; thus, guns are automatically tuned to aiming point. Exact position calculation for each shot is done by later post-processing using shot times (stored in UTC time on the MBS recorder) and GPS coordinates from the ship's data base.

5.5 Heat flow instrumentation

Two different heat flow probes of violin bow type were employed during SO195 and operated by University of Bremen. The smaller one is capable of 3 m penetration into the seafloor, abbreviated as 3m-HF. The second one has a length of 6 m and hence is named Giant Heat Flow probe (6m-GHF). The intention of getting longer temperature gradients within the sediments is to gain reliable values of undisturbed heat flow in case of the presence of transient temperature disturbances due to mobility of water bodies. This was already observed and calculated by von Herzen et al. (2001) even in the deep sea environment up to 5000 m water depth.

Heat flow stations are clustered locations of measurement, consisting of usually 6 positions with a spacing of 0.4 km. Multi penetration mode (pogo style) is the most effective way of advancing along a station while the probe is lifted above sea floor some hundred metres. During this cruise both instruments used the same electronic package with online data transmission for operation control. The instrument is capable of independent data storage inside the instrument for double data security (Figure 5.5.1).

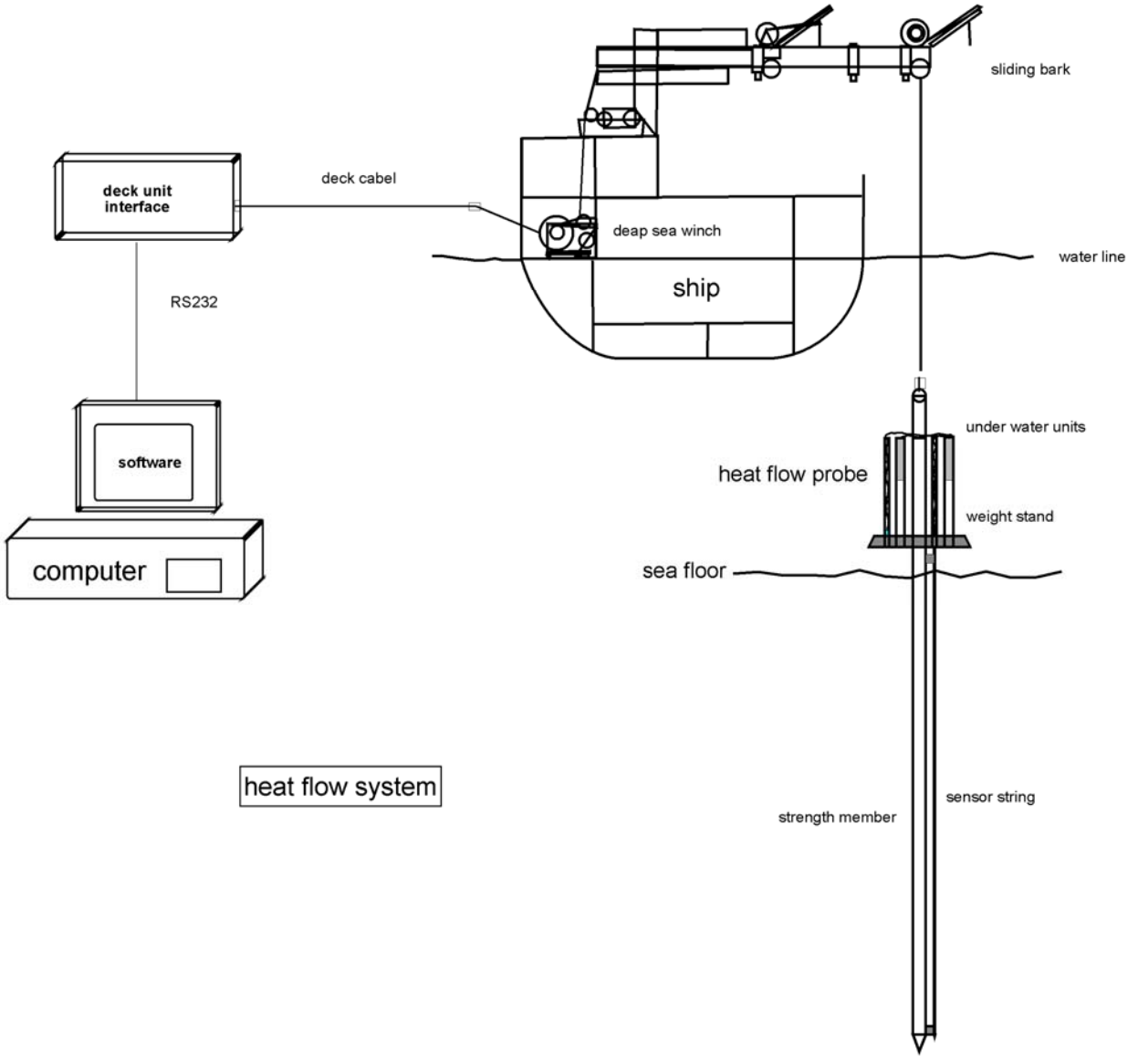


Figure 5.5.1: *Operation of HF probes on R/V Sonne*

Figure 5.5.2: *The 6m-GHF Heat Flow Probe on Deck of R/V Sonne*

5.5.1 6m-GHF probe

The mechanically robust 6 m heat probe is designed for the operation in a pogo-style mode with a wide application range from 6000 m deep sea trenches to the upper continental slope where sediments are often sandy and difficult to penetrate.

The heat probe (Figure 5.5.2) is constructed in the classical "violin bow" design (Hyndman et al., 1979), with 22 thermistors distributed over a total length of 6 m in 0.27 m intervals. The sensor tube also contains a heater wire for the generation of high energy heat pulses of typically more than 600 J/m for in situ thermal conductivity measurements (Lister, 1979).

The signal of the temperature sensors is measured with a resolution of 20-bit at a sample rate of 1 sec, resulting in a final temperature resolution of better than 1 mK at ambient sea floor temperatures. A carefully calibrated PT-100 seawater sensor on top of the weight stand allows to measure the absolute bottom water temperature and to check the calibration of the sensor string in deep water with high accuracy. Inclination and acceleration of the probe is measured also with a 1 sec sample rate to monitor the operation at the sea floor.

The complete data set is stored in the probe and also transmitted via coax cable on board in real time where the data are visualized and stored on a PC.

The heat probe can be operated in autonomous mode with internal data storage and automated heat pulses if a coax cable is not available. The battery capacity allows for 3 days continuous operation in a pogo-style mode.

5.5.2 3m-HF Probe

The 6 m HF probe was used on a regular base. However, since penetration rarely exceeded 3 m we switched to the 3 m system at the end of the cruise.

Probe #:	#34 and #39
Heat pulse	550 - 1100 J/m
Pulse duration	7 - 20 sec
Sample rate:	1 sec
Online transmission:	9600 Baud via coax cable

Technical specifications of 3-m HF probe

Winch speed during payout and retrieval is 1.0 m/s . Time to equilibrate is assumed to be 7 minutes, time for heat pulse decay observation takes another 7 minutes. Mean time consumption including transit and measurement is 1 – 1 ½ h per single point of measurement.

6. Work completed and preliminary scientific results
6.1 Maps from bathymetric mapping efforts

The EM120 was used continuously during cruise SO195. Bathymetric data were processed routinely onboard by the ship's system operators, using the NEPTUNE software from Kongsberg. These maps have been used for planning operation during the cruise. In addition, the shipboard scientific party used the academic software MB-System Software from the Lamont-Doherty Earth Observatory to generate maps for latter scientific applications. Data collected during SO195 were merged with data collected during SO194 [deployment of long-term seismological stations] (Figure 6.1.1). Data from *Sonne* cruise SO167 surveying the arc volcanoes, the extinct Osborne spreading centre and Louisville seamounts were also integrated in the final maps. In addition, mapping efforts of SO192 in the vicinity of Raoul Island were included. Maps of seafloor bathymetry (SO167, SO192, SO194 + SO195) and acoustic backscatter (SO192, SO194 + SO195) are shown in Figures 6.1.2 and 6.1.3. Detailed maps for the seismic lines are shown in Figure 6.4.1.1, 6.4.2.1, and 6.4.3.1.

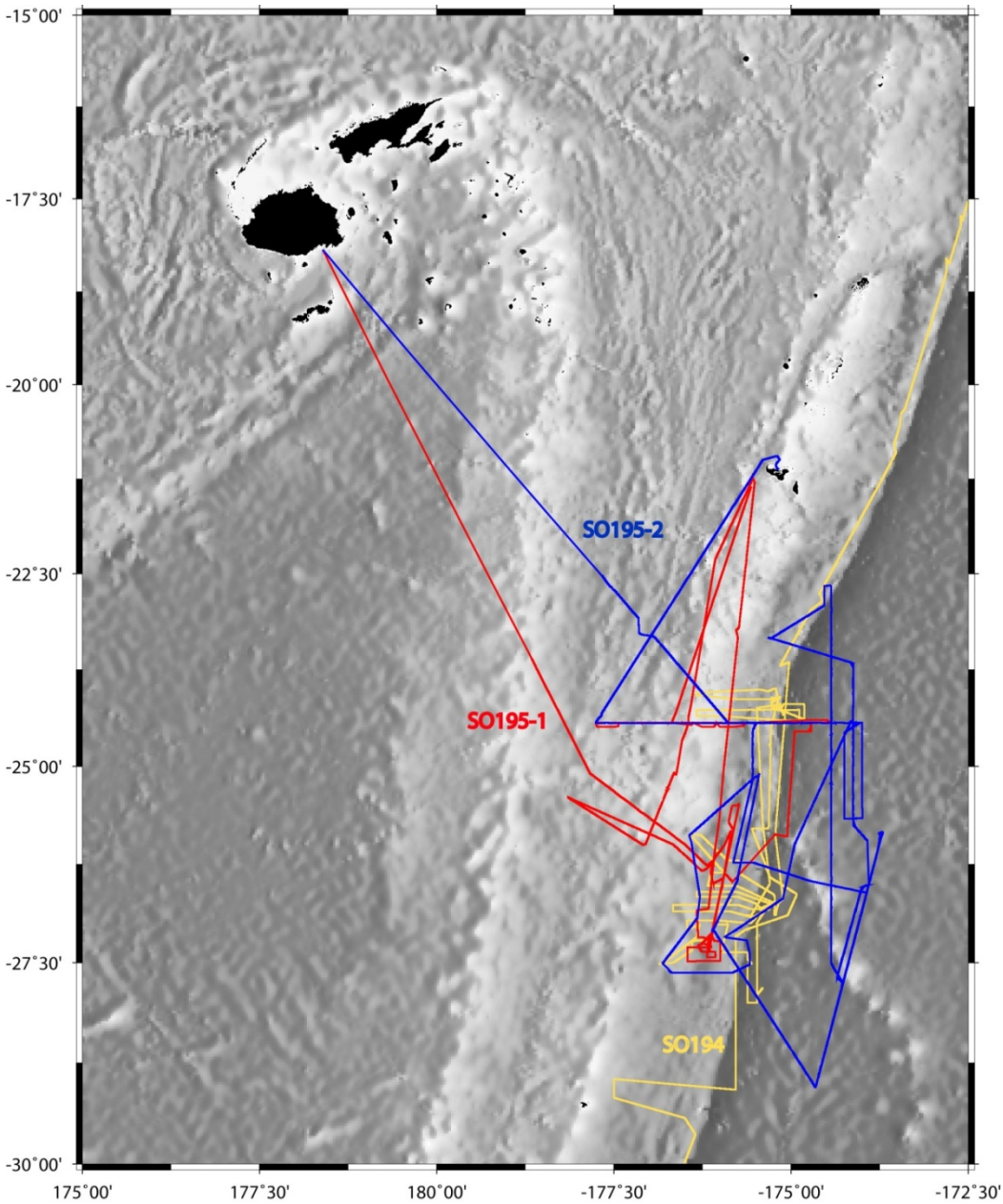


Figure 6.1.1: *Track chart of TOTAL cruises, SO194 and Legs 1 and 2 of SO195.*

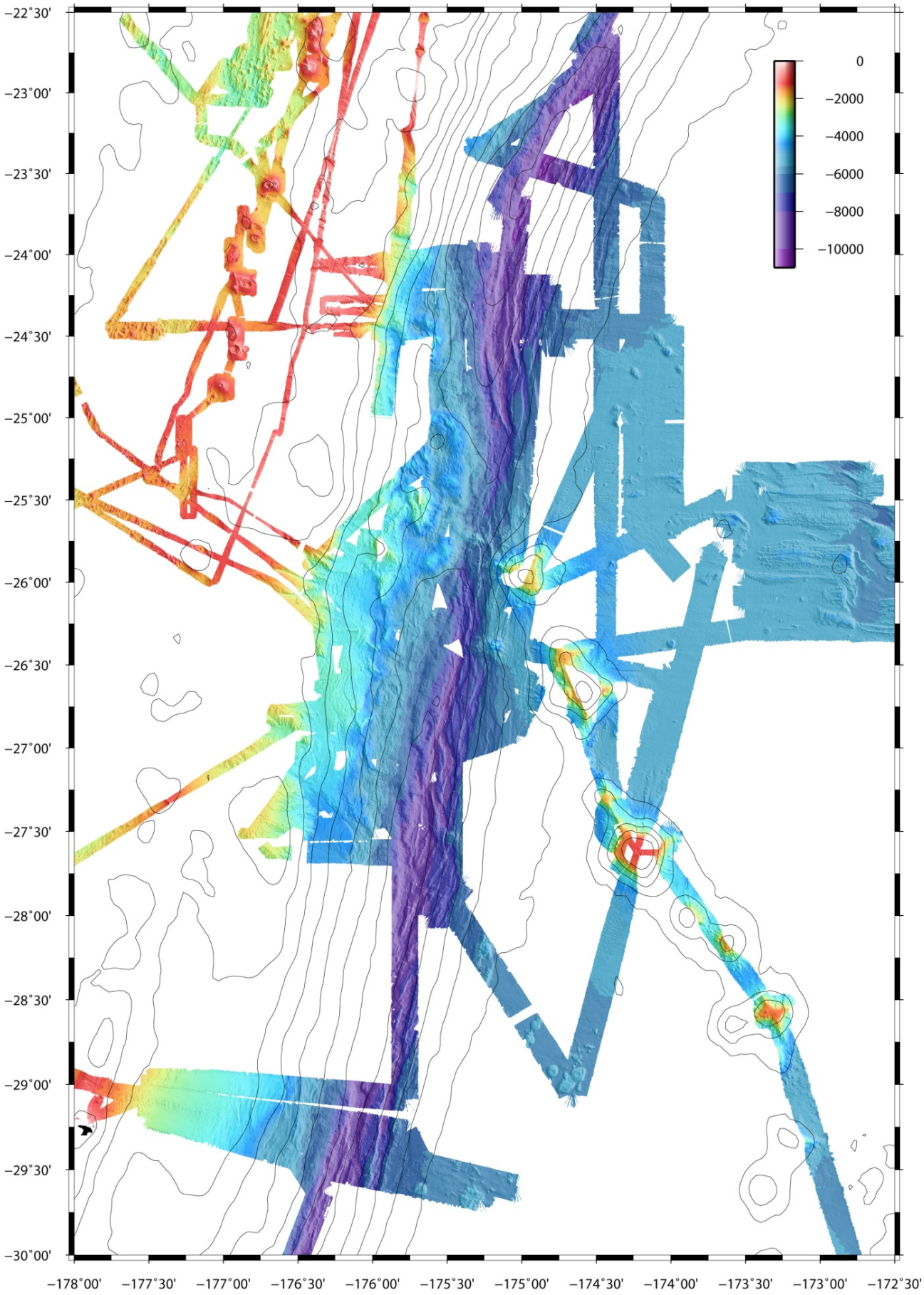


Figure 6.1.2: *Bathymetric map of the TOTAL study area (SO167, SO192, SO194 + SO195).*

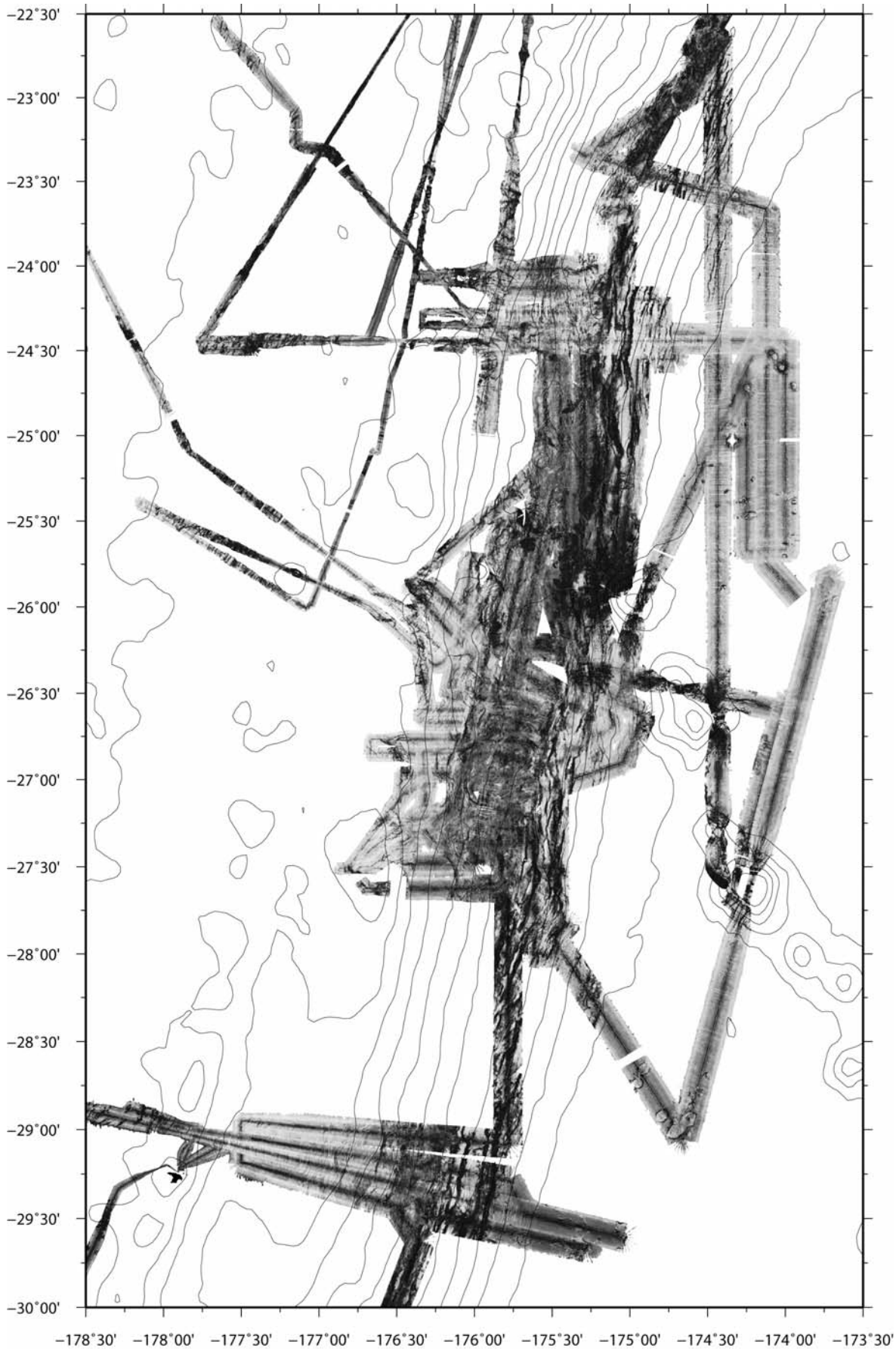


Figure 6.1.3: *Acoustic backscatter of EM120 sonar imagery in the TOTAL study area (SO192, SO194 + SO195).*

6.2 First results from potential field measurements

During SO195 Leg 2 the gravity field was continuously recorded between the port calls on Tongatapu and Fiji Island. The magnetic total field strength was obtained along a few dedicated profiles and a number of transits in the working area. The free-air anomaly over the Tonga trench shows a profound gravity low with values of ~280 mGal and >9000 m water depth. The field over the incoming plate is close to 10 mGal (Figure 5.3.1.2). The seamounts of the Louisville chain show a well developed flexural low in the free-air field flanking the crest of the chain (Figure 6.2.1 and 6.2.2). Magnetic seafloor spreading anomalies were recorded on all north-south trending lines (Figure 6.2.1 to 6.2.3). With respect to the now extinct Osborne spreading centre at ~25°30'S recorded anomalies along the "Captain's line" (obtained while *Sonne* sailed northward to escape from the tropical storm *Gene*) correlate well with anomalies obtained during the cruise V3602 (Figure 6.2.3) of the American R/V *Vema* in 1979 (Watts et al., 1988).

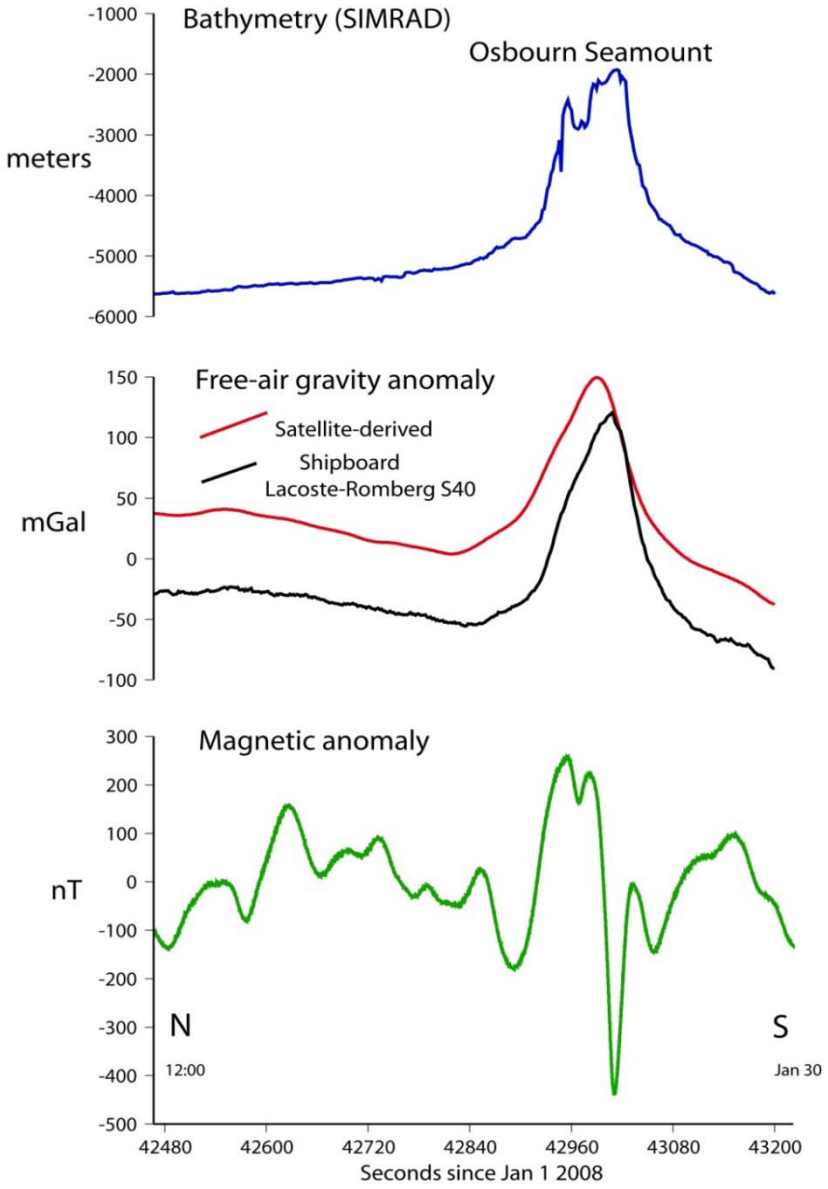


Figure 6.2.1: *Profile across Osborne seamount running roughly normal to the trend of the seamount chain*

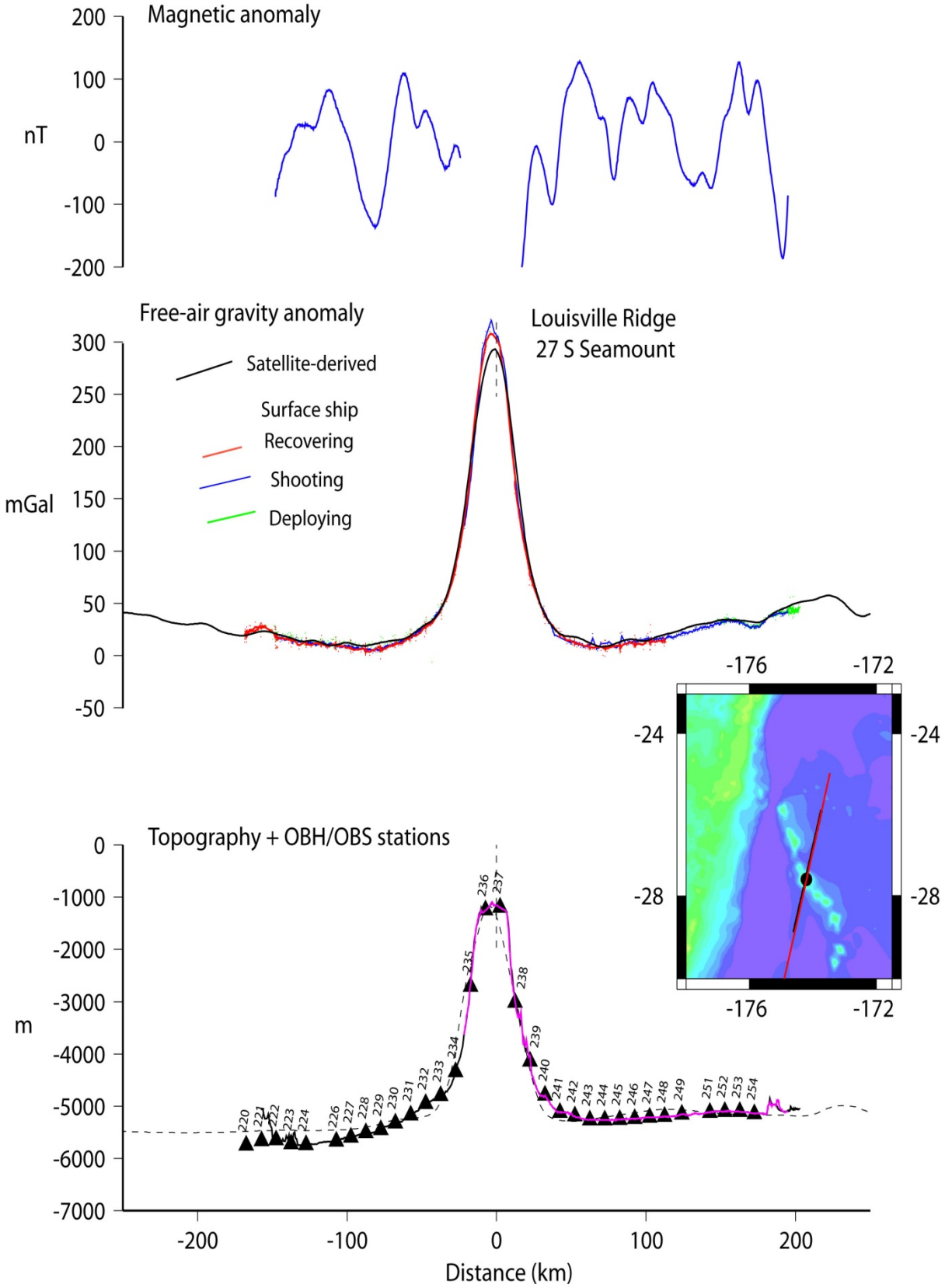


Figure 6.2.2: *Potential field data along seismic profile P03. The Lacoste & Romberg gravimeter provided excellent and reliable data. The profile was covered three times during OBS/OBH deployment, shooting and recovery of instruments. Data recorded along all three lines match very well.*

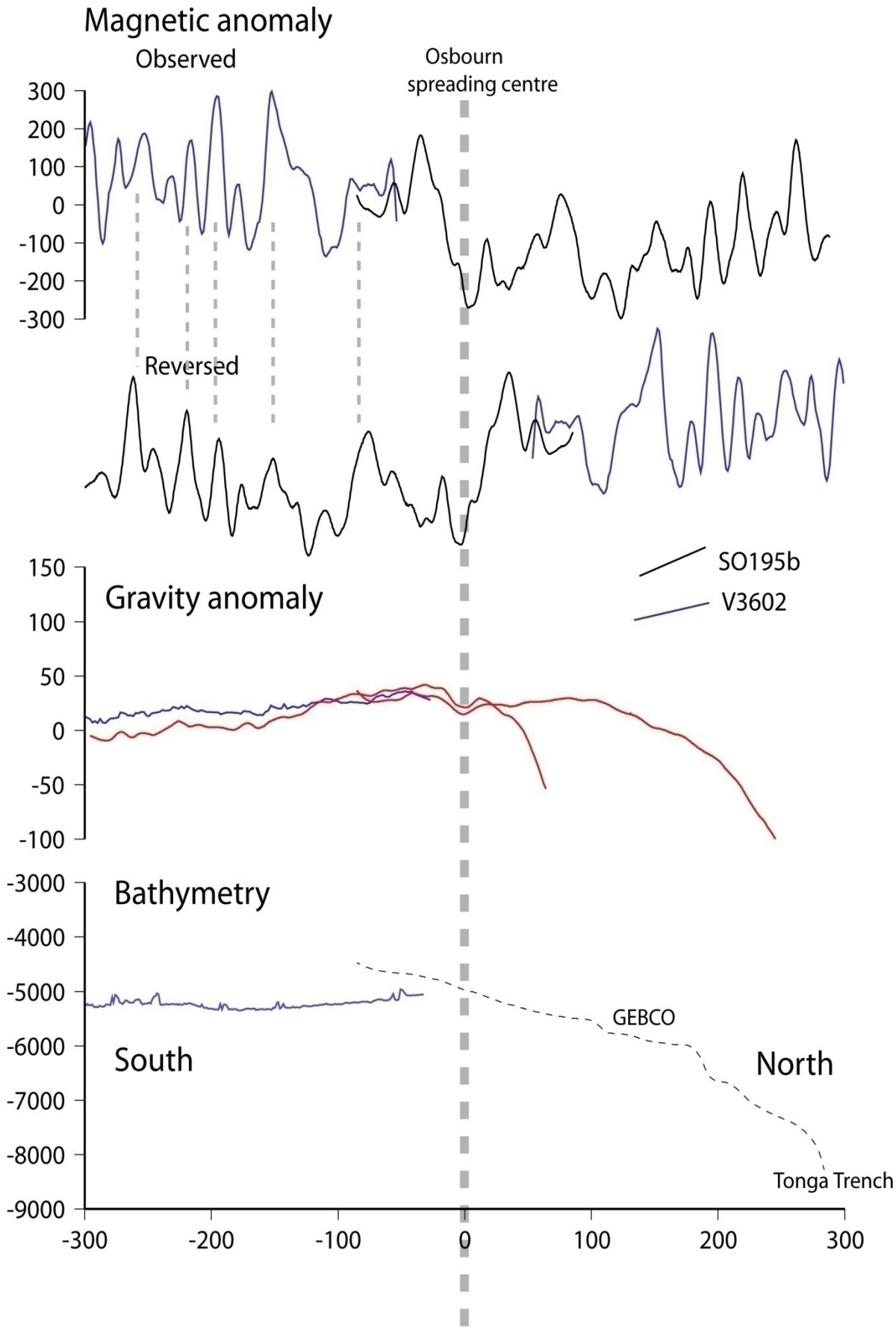


Figure 6.2.3: *The "Captain's line" across the extinct Osborne spreading axis. Data from cruise V3602 are from Watts et al. (1988).*

6.3. Seismic data processing

Standard pre-processing. Seismic active source seismic data that were recorded during SO195 have been analysed following IFM-GEOMAR standard procedures (e.g., see Flueh and Grevemeyer, 2005). Seismic raw data recorded on flash disks or internal hard drives were copied on one of the Linux computers. For data security the data were copied to a second PC. Raw data were first processed with software from the manufacturer of the seismic recordes (SEND GmbH) and internal time slips, etc were corrected. Data were than stored in PASSCAL format. Later, PASSCAL / REFTEK and IFM-GEOMAR software was used to cut out shots and data were stored in SEG-Y format.

Because of drifting of the OBH and OBS instruments during deployment and inaccuracies in the ship's GPS navigation system, the OBH positions may be mislocated by up to several 100 m. Since this error leads to asymmetry and incorrect traveltime information in the record section, it has to be corrected. The accurate seafloor position of the ocean bottom stations could be derived using the arrival time of the direct wave or water wave.

Frequency filter analysis. To determine the frequencies of the seismic energy, filter panels with narrow frequency band passes for the offset range of -45 - 70 km are shown in Figure 6.3.1. and Figure 6.3.2. The amplitude spectra of the used Butterworth frequency filter operators are characterized by linear slopes. The filter is described by four corner frequencies, i.e. lower stop/pass band boundary and upper pass/stop boundary. The main energy of the phase between 3 and 5 s is between 3-25 Hz and for the direct wave it reaches up to more than 73 Hz. As a broad frequency range is contained in the data, time and offset dependent filtering was applied (see below).

Deconvolution analysis. To improve the temporal resolution of the seismic data a deconvolution is applied to compress the basic seismic wavelet. The recorded wavelet has many components, including the source signature, recording filter, and hydrophone/geophone response. Ideally, deconvolution should compress the wavelet components and leaving only the Earth's reflectivity in the seismic trace. We applied Wiener deconvolution in successive trace segments, based on the following assumptions:

1. The Earth's reflectivity is 'white'.
2. The wavelet shows the minimum-delay phase behavior.

As in these wide-angle data the amplitude spectra of the seismic traces vary with time and offset (e.g. reflected, refracted pp phases and reflected ps and ss phases), the deconvolution must be able to follow these time and offset variations. To improve especially the spatial resolution of the seismic data a multi-trace deconvolution also called rollalong deconvolution, which uses autocorrelograms averaged over a number of traces, is performed to compress the basic seismic wavelet. Here, each trace is divided into 3-s data gates with 1-s overlaps, in which time invariant deconvolution operators are computed from the average autocorrelation function of 11 traces. The operator is recalculated for every trace in each data segment and applied. The overall deconvolved trace results from a weighted merging of the independently deconvolved gates.

Raw data are input for the deconvolution process. As several recordings were influenced by a DC shift, a 1-3-Hz high-pass minimum delay Butterworth frequency filter with 60 dB attenuation between the pass and reject zone was applied prior to deconvolution in order to center the amplitudes around zero.

The deconvolution test panels are shown in Figure 6.3.3, Figure 6.3.4 for near offset ranges and far offset ranges, respectively. Constant operator length of 1 sec (predictive lag excluded) with a variation of the prediction lag from 20 to 800 ms are displayed for a multi-trace deconvolution (avere=11). The best compromise between temporal resolution and signal-to-noise ratio is obtained for an operator length of 1 sec including a predictive length of 190 (40) ms which was chosen for the processing of the data sets of this cruise. After deconvolution, an offset- and time-variant

Butterworth filter with minimum-phase characteristic was applied. As the seafloor depth changes along the seismic lines, each trace was statically corrected to a fixed seafloor travel time of 11 s based on the water depth before filtering. This information is available in the trace headers. After this filter was applied, the data were shifted back to their original travel times.

Processed data. Comparison of the unprocessed data in Figure 6.3.5 (upper panel) to the preprocessed data in Figure 6.3.5 (lower panel) shows a clear compression of the wavelet signal and an increase in signal-to-noise ratio, especially in the far offset range. For the picking of events and model building by raytracing or tomographic inversion both sections were used to keep all available seismic information.

Final processing sequence

- Input: SEGY-data, 4 ms or 5 ms sampling rate with complete geometry information
- Tapering the first 0.5 s to zero to reduce the response of the de-bias filter operator
- Butterworth high pass (de-bias)
- Gated Wiener deconvolution: gate length 3 s, overlap 1 s, length of merge region 1 s, operator length 1 sec (prediction interval included), prediction interval 190 (40)ms
- Static correction to a fixed seafloor travel time of 11 s
- Time and offset-dependent Butterworth frequency filter

On time-shifted traces with a reduced time scale of 6 km/s the following filter parameters were used:

lower stop/pass	upper pass/stop (Hz)	offset(m)	beginfull(s)	endfull(s)
1/10	65/85	0	0	12.8
		8000	0	12.6
		48000	0	0
1/5	45/60	0	13.7	14.3
		8800	13.5	14.4
		13200	13.0	13.9
		52000	2.0	4.7
		107000	0.5	1.0
1/5	30/40	0	15.3	16.8
		11700	15.1	16.6
		19200	14.8	16.3
		61700	7.0	10.1
		114000	2.0	3.0
		152000	1.5	2.4
1/5	20/30	0	19.0	trace length
		20000	18.4	trace length
		130000	3.5	trace length

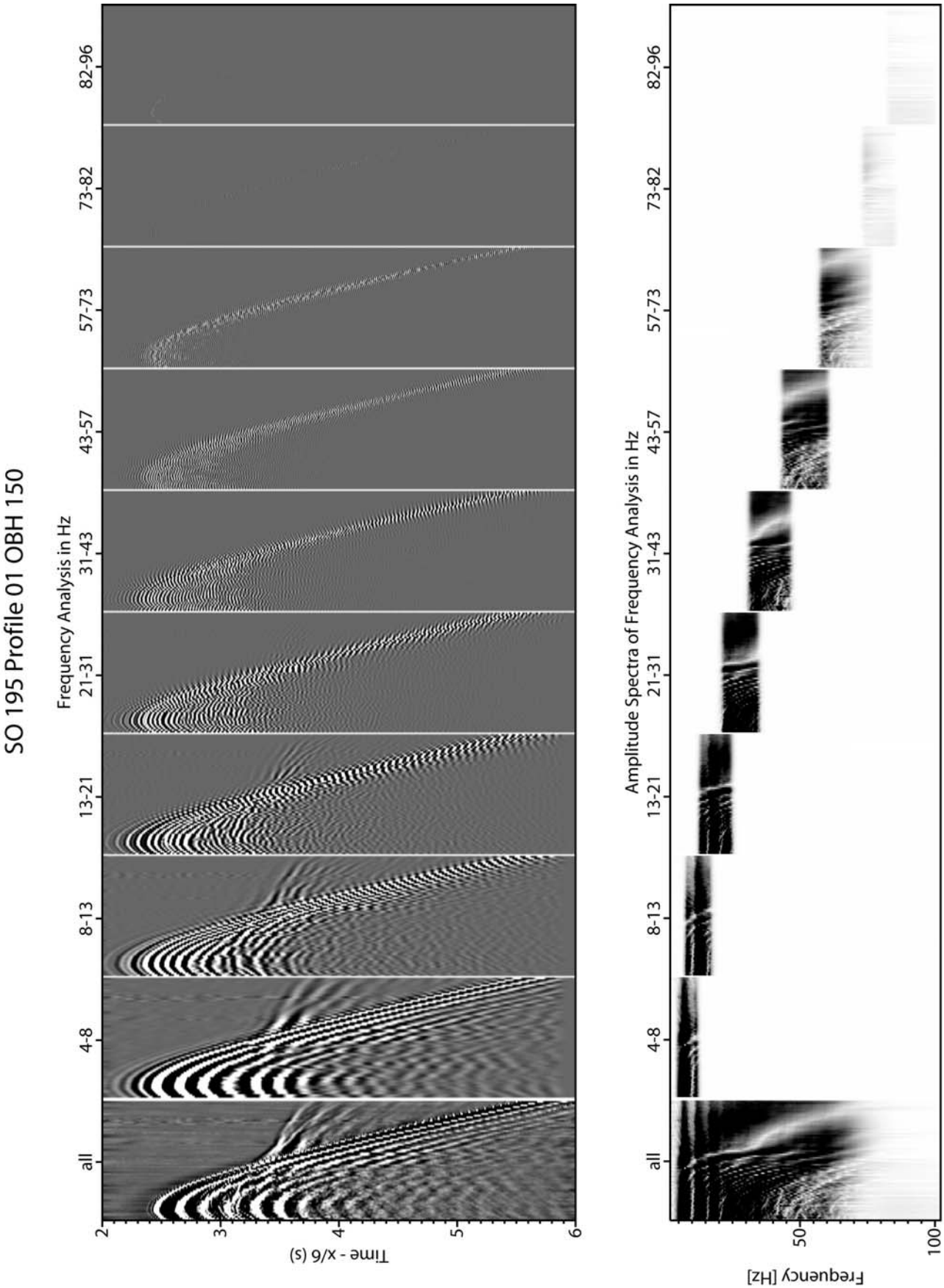


Figure 6.3.1: *Frequency analysis for near offset ranges.*

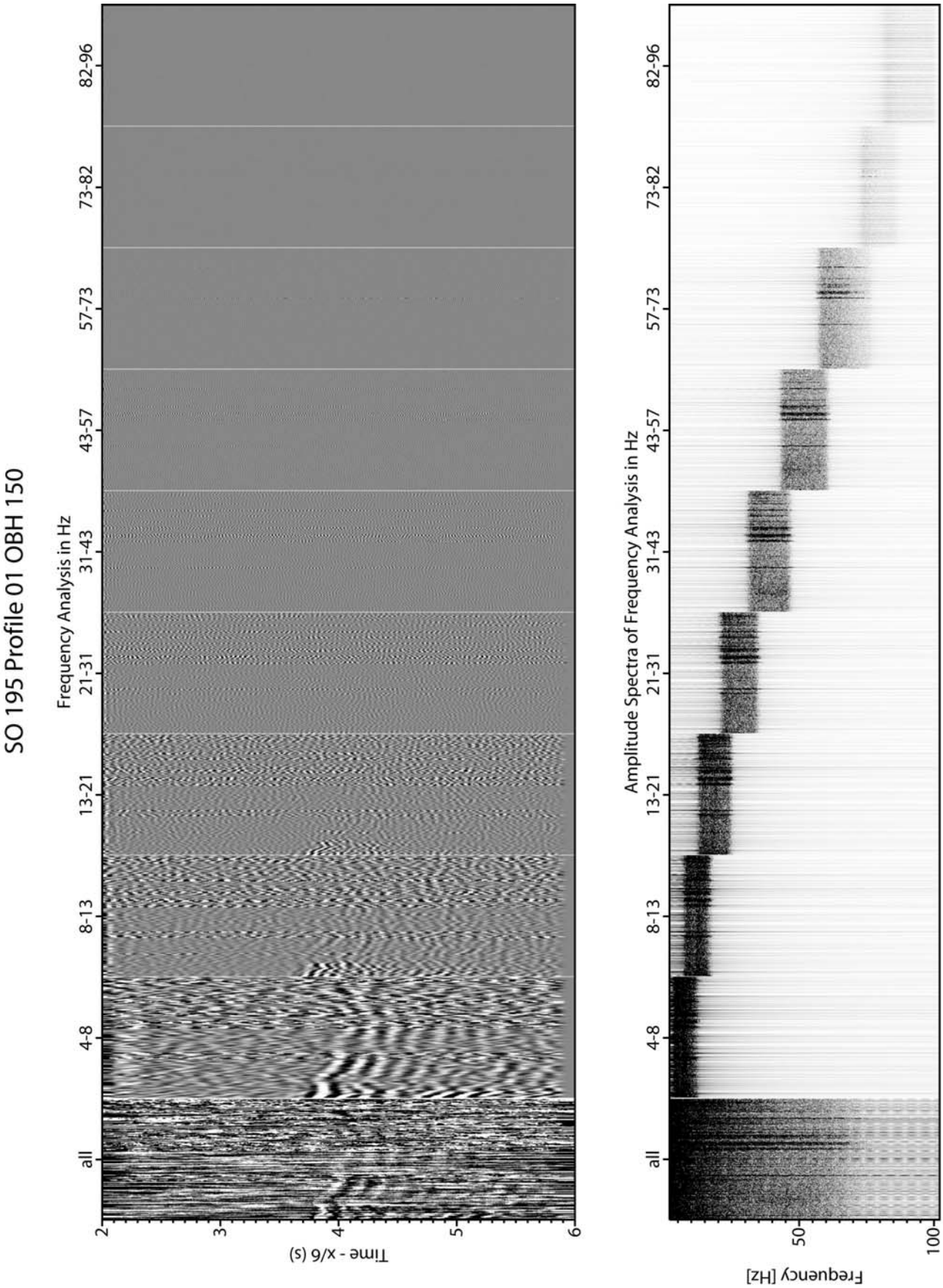


Figure 6.3.2: *Frequency analysis for far offset ranges.*

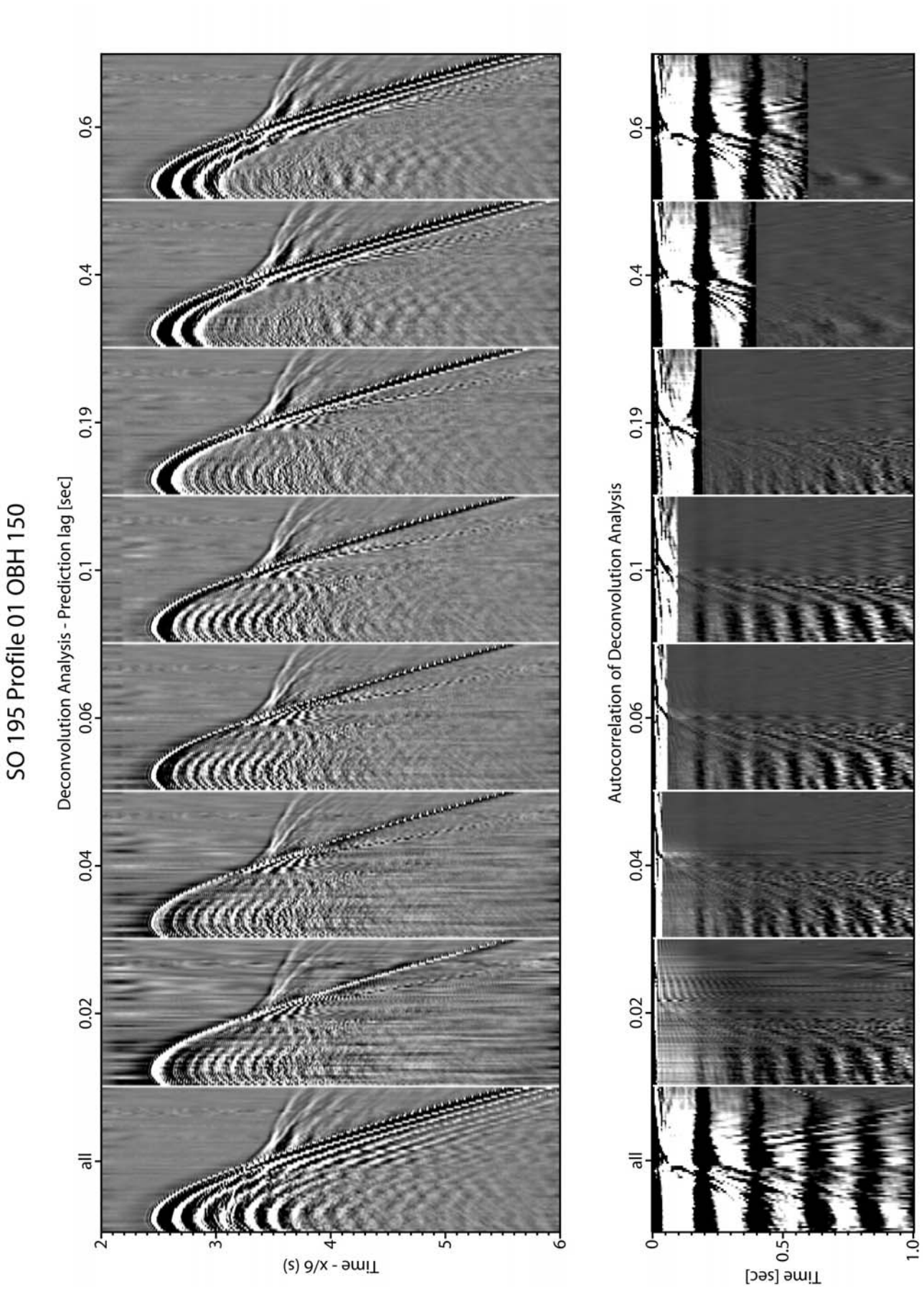


Figure 6.3.3: *Deconvolution test panels for near offset ranges.*

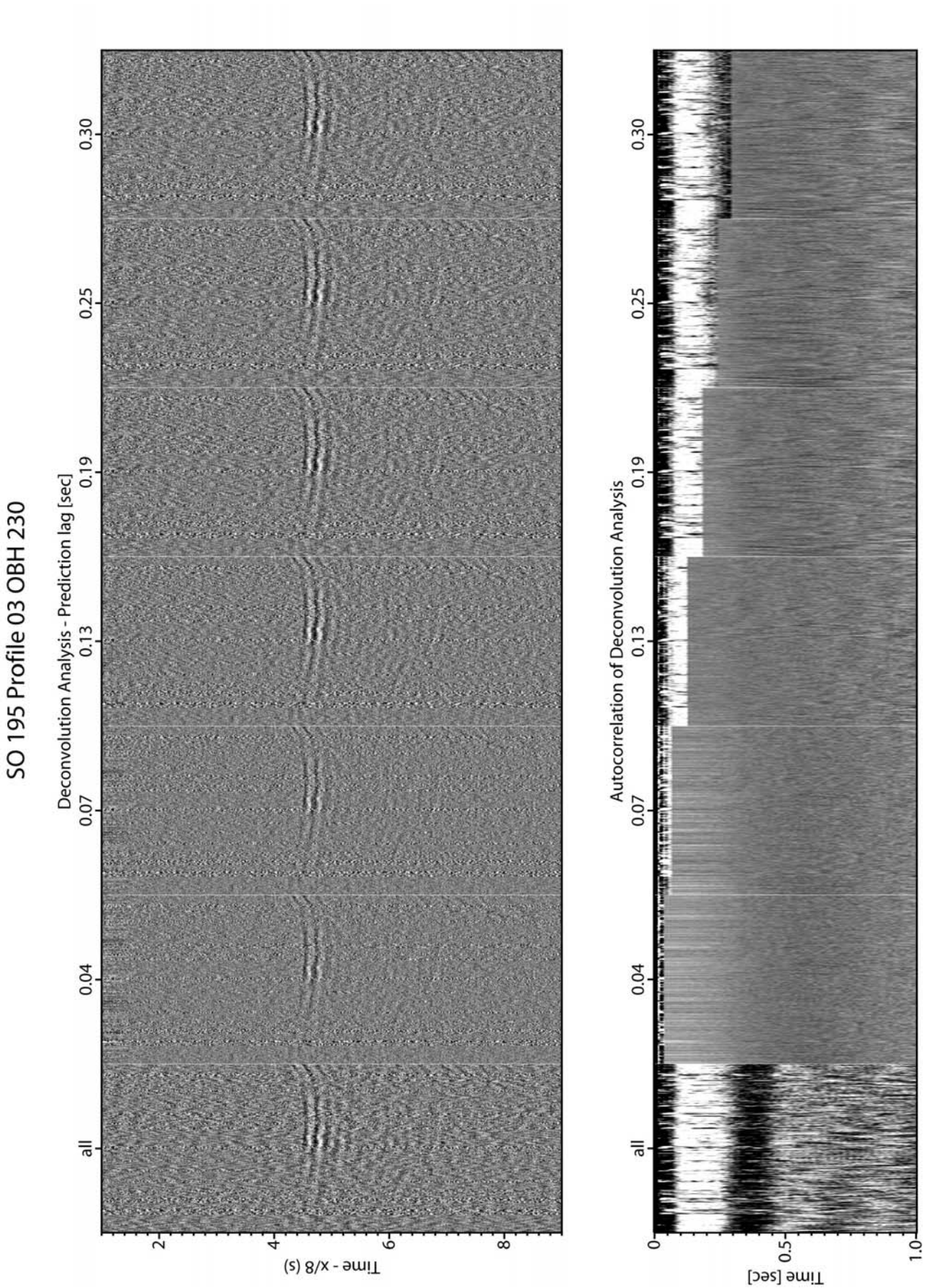


Figure 6.3.4: *Deconvolution test panels for far offset ranges (100-140km offset).*

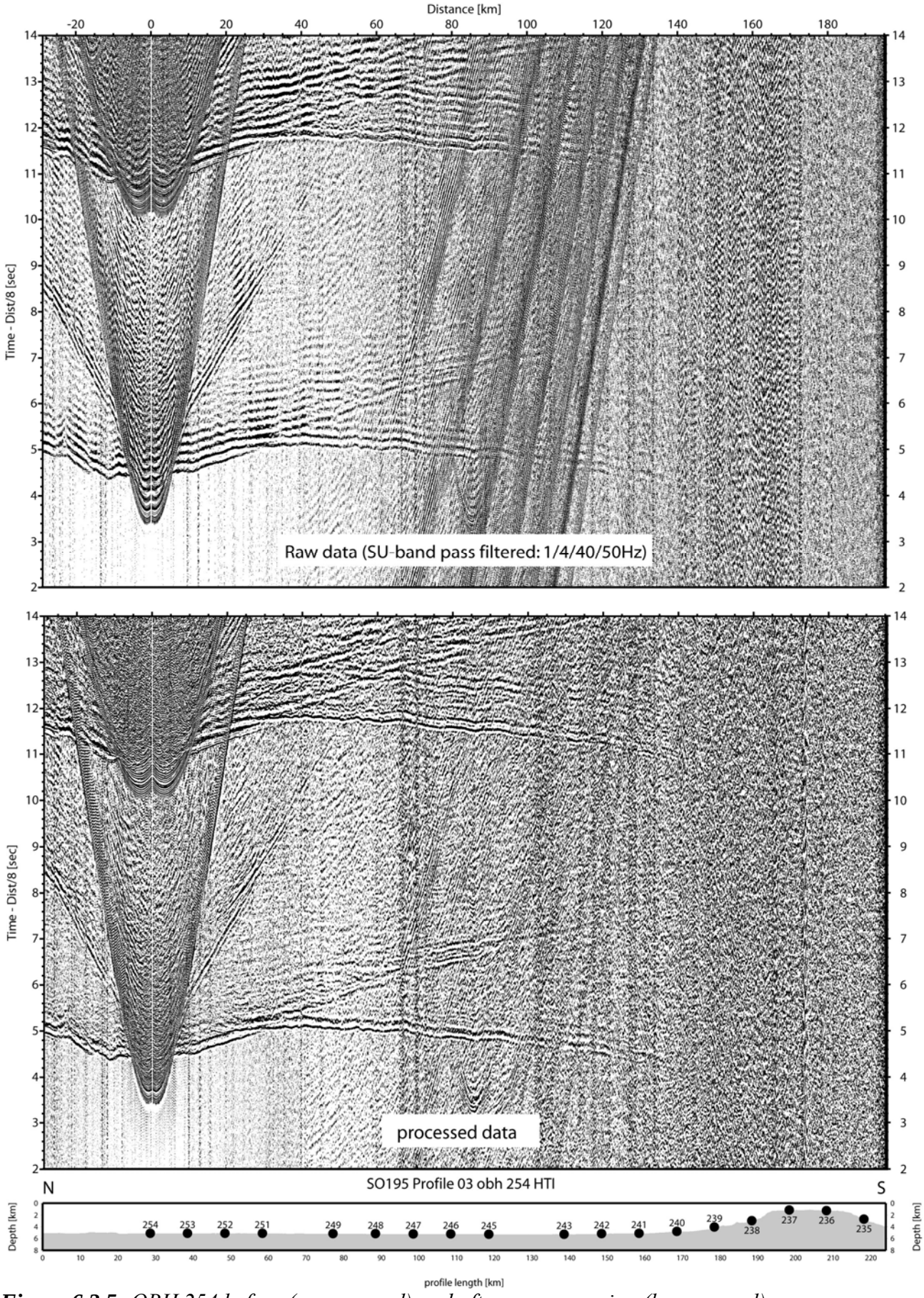


Figure 6.3.5: *OBH 254 before (upper panel) and after preprocessing (lower panel).*

6.4 First results from seismic refraction and wide-angle profiling

6.4.1 Profile P01 – North/South trending line along the forearc

During profile p01 for the first time the new seismic 84-litre airgun array was operated. In total 26 seismic OBS and OBH recorded the shots (Figure 6.4.1.1). Five stations along the profile where long-term seismological stations for the earthquake monitoring network. The data quality is rather poor. Typical offsets were between 20 and 40 km. We believe that problems with the tuning of the seismic source resulted into an incoherent source signal. Problems with the source, however, could be solved, resulting into an excellent data quality along all other profiles. Figures 6.4.1.2 to 6.4.1.5 show examples of record sections.

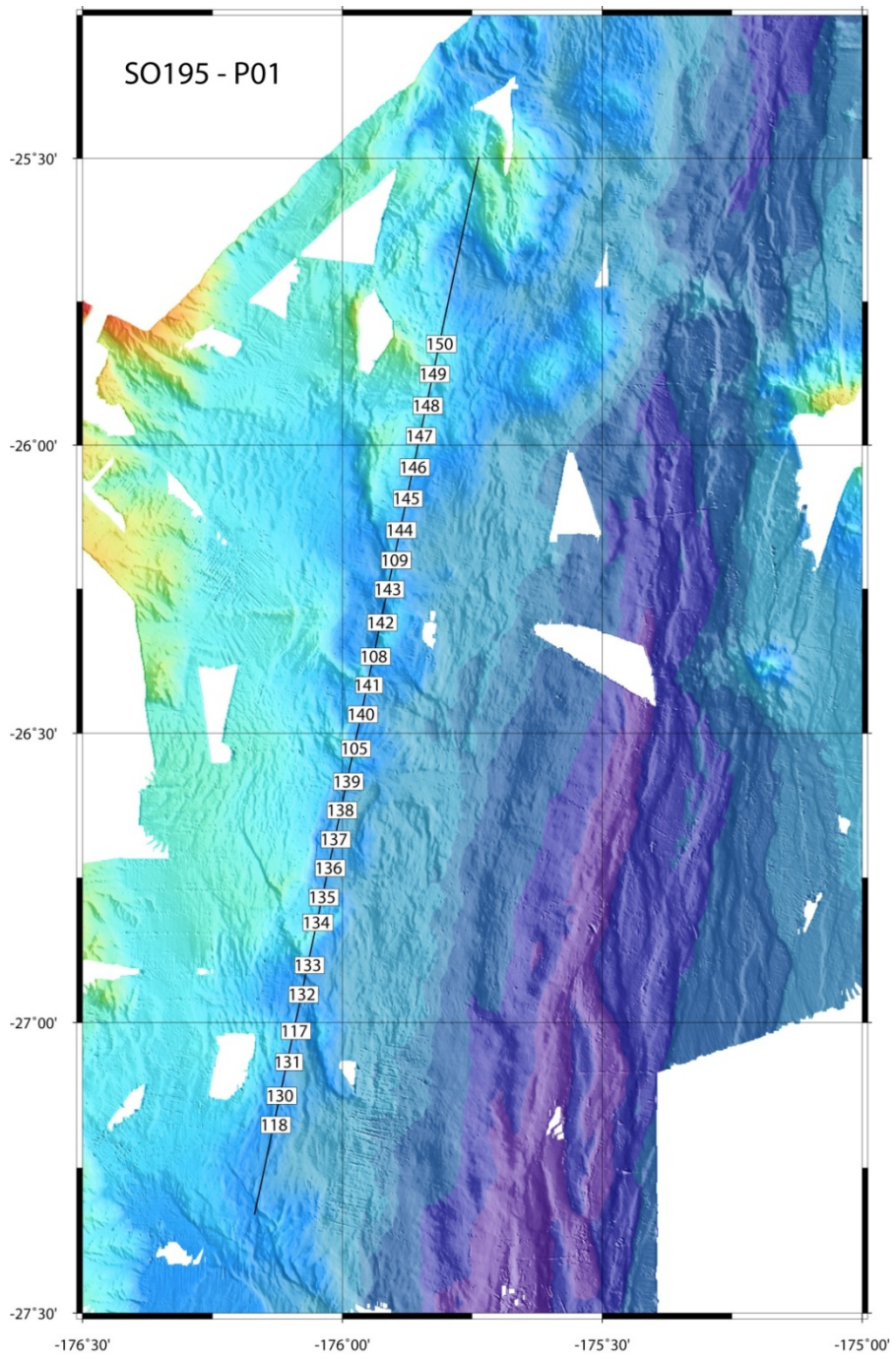


Figure 6.4.1.1: *Bathymetric map of seismic line p01*

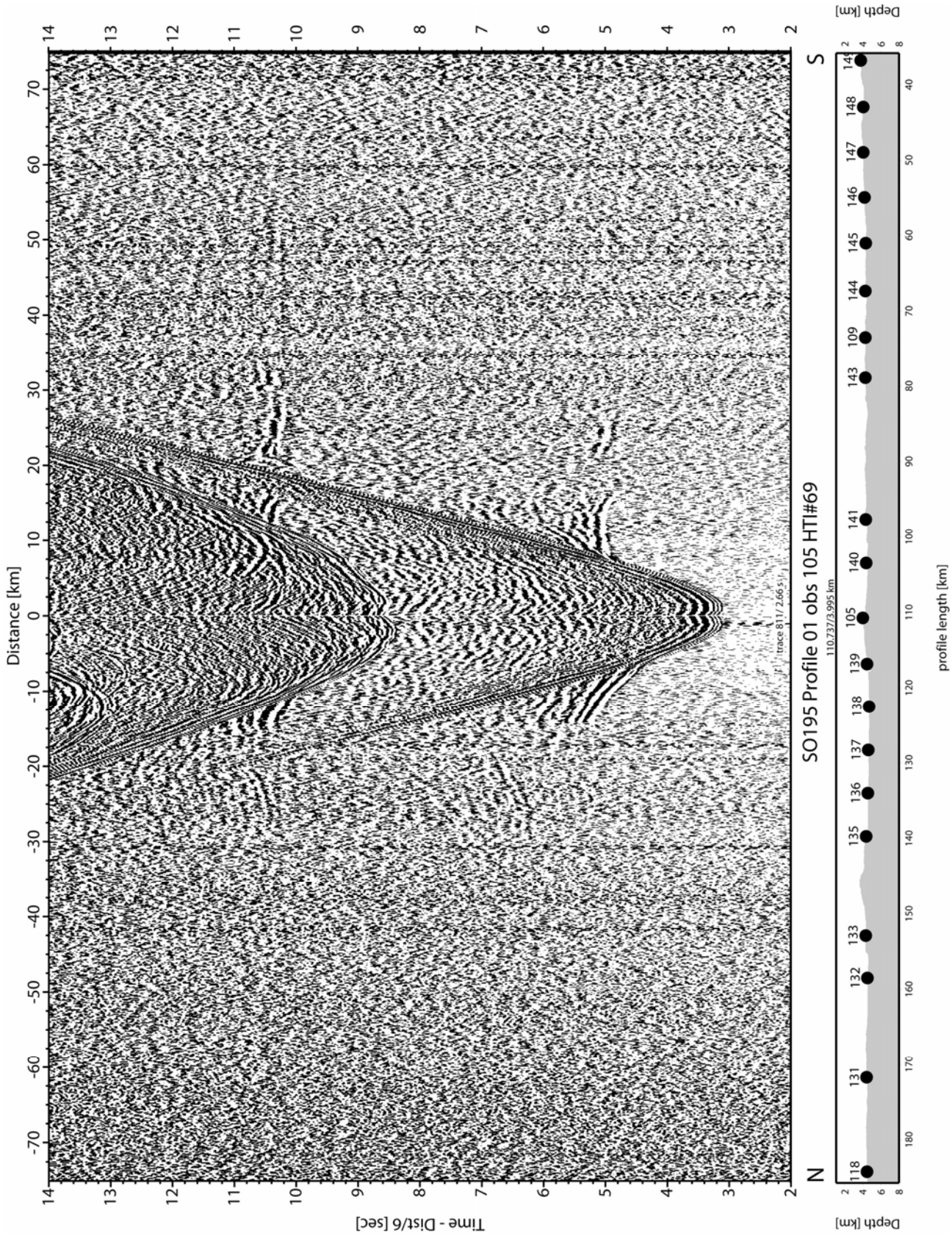


Figure 6.4.1.2: *Record section from OBS105, Hydrophone channel, Profile 01*

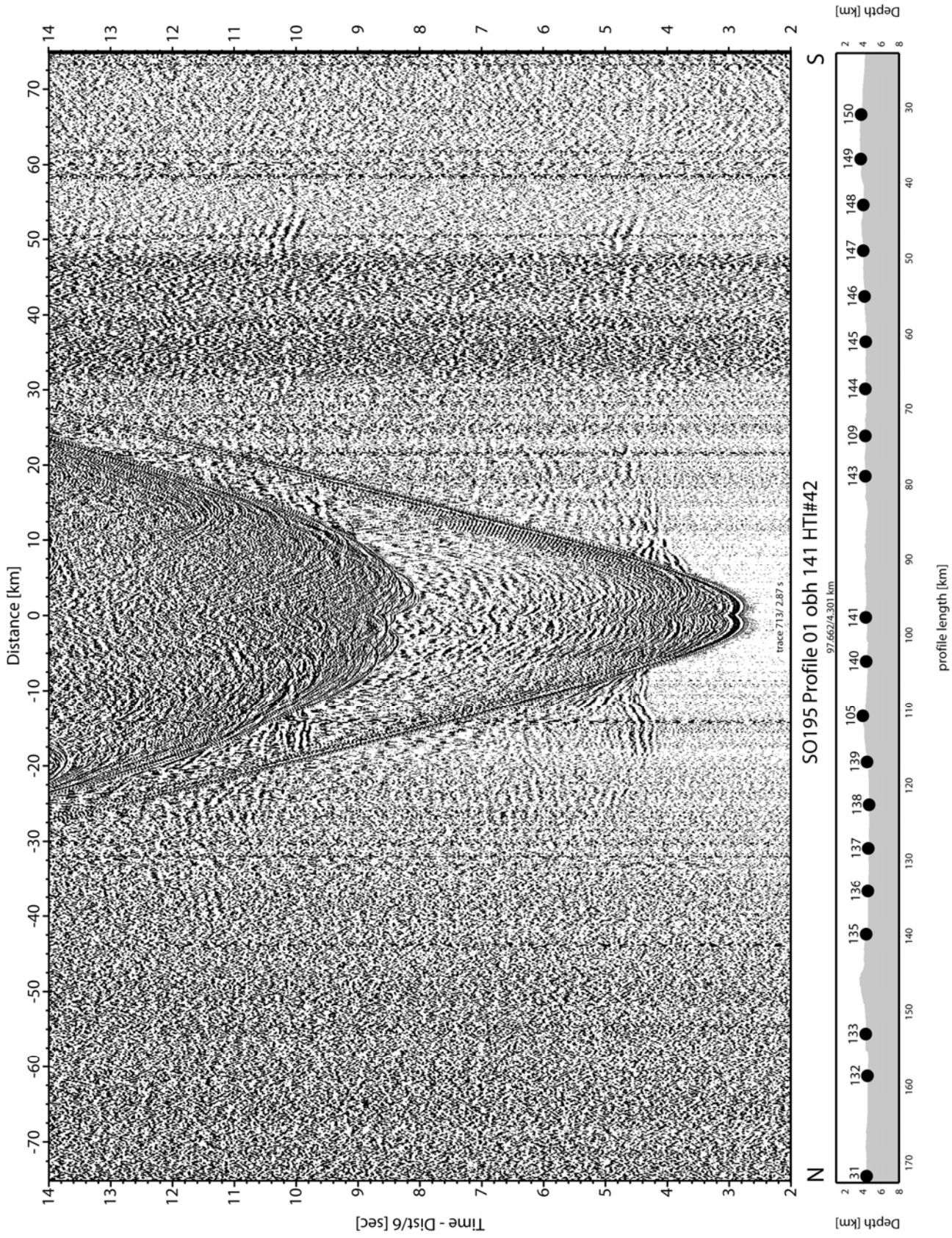


Figure 6.4.1.3: *Record section from OBH141, Hydrophone channel, Profile 01*

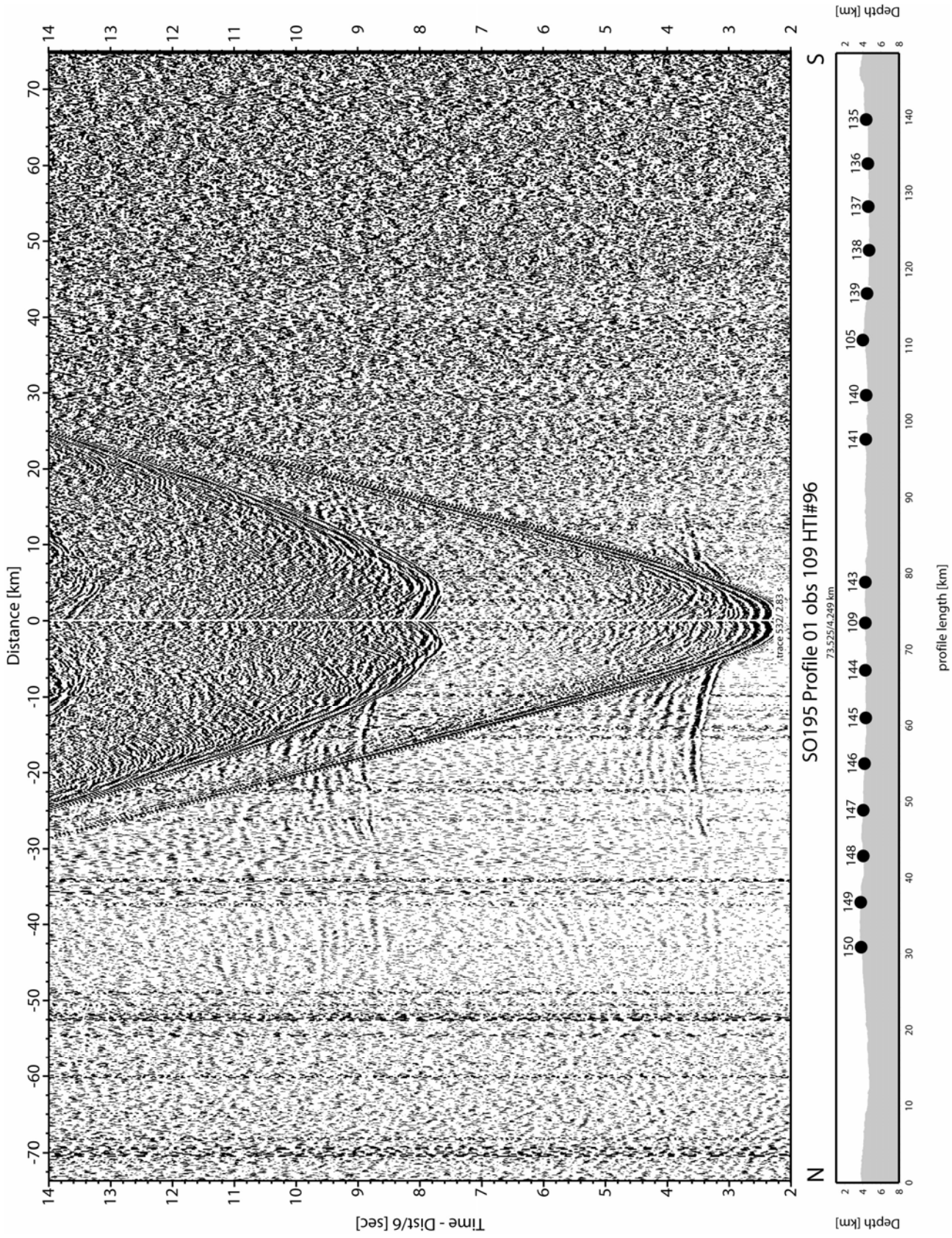


Figure 6.4.1.4: *Record section from OBS109, Hydrophone channel, Profile 01*

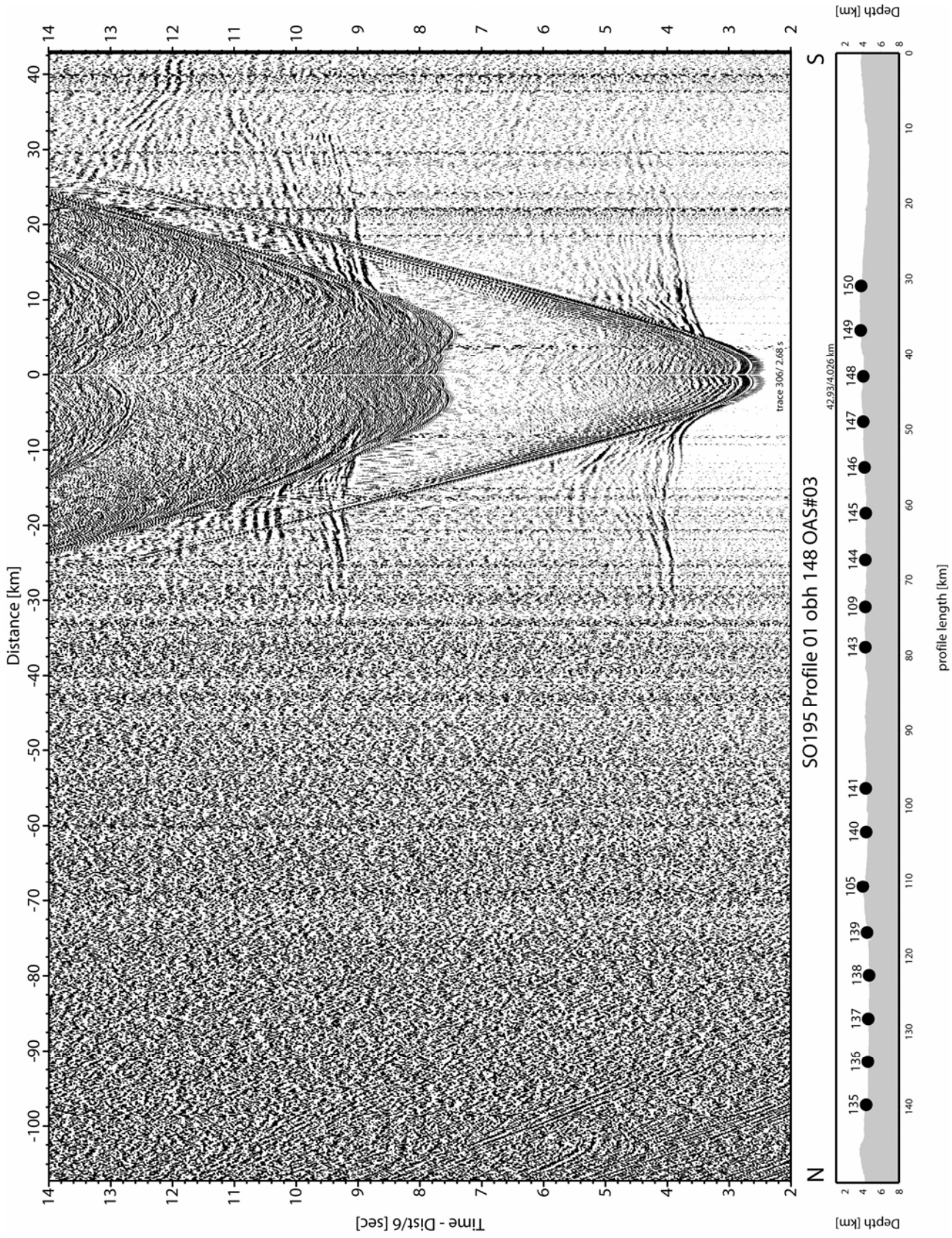


Figure 6.4.1.5: *Record section from OBH148, Hydrophone channel, Profile 01*

6.4.2 Profile P02 – West-East trending profile across the Tonga subduction zone and arc

The second seismic profile P02 was roughly 370 km long and provided excellent seismic data from a line covering the incoming plate, the trench, marine forearc and the magmatic arc of the Tonga island arc. 40 OBS and OBH were deployed along the line (Figure 6.4.2.1). Although IFM-GEOMAR built new seismic stations for deployment down to 8000 m water depth, we had to face a gap of seismic stations centered at the trench axis, as water depth reached over 9000 m. The gap was roughly 30 km wide. Four stations covered the incoming plate and 36 stations were placed on the forearc and magmatic arc. The arc was located at profile-km 70 to 90 km, roughly under station 206. Most stations provided offsets of 80-120 km. Wide-angle reflections recorded on the arc and forearc can be used to derive the thickness of the arc. High quality Pn arrivals will yield mantle structure and hence can be used studying mantle wedge hydration, a feature observed elsewhere (e.g., Grevemeyer and Tiwari, 2006). Figures 6.4.2.2 to 6.4.2.6 provide examples of record sections.

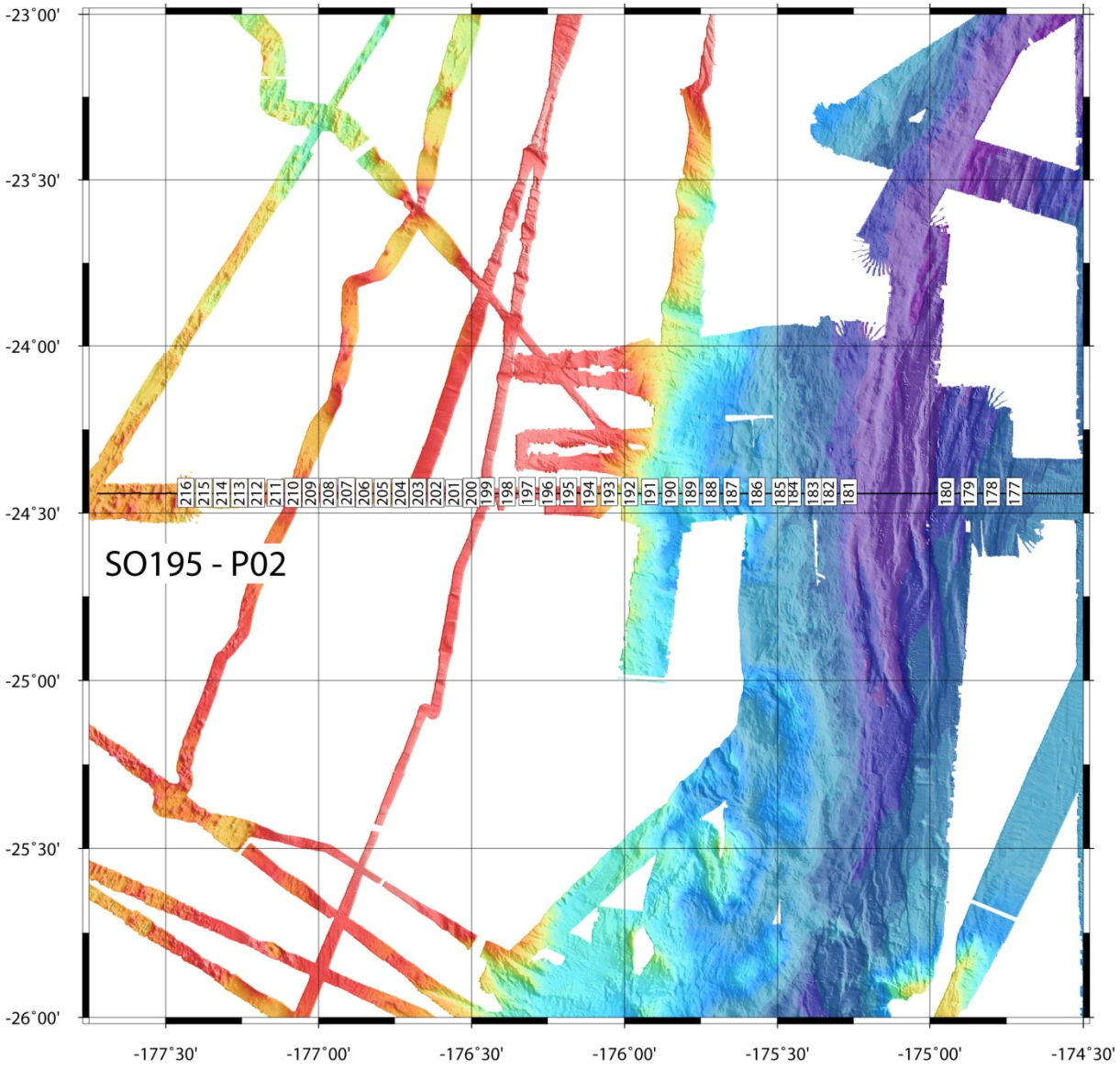


Figure 6.4.2.1: *Bathymetric map of seismic line p02*

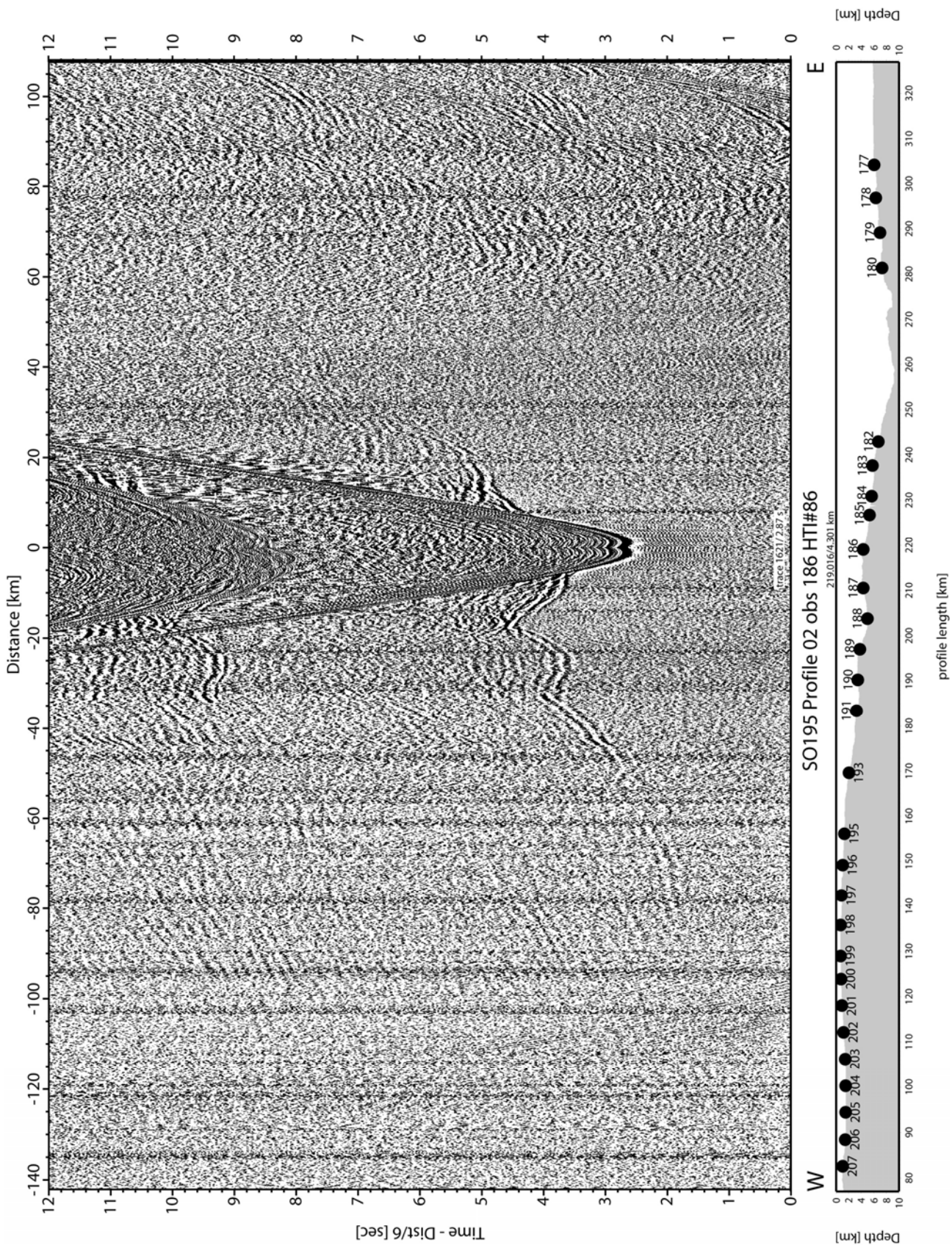


Figure 6.4.2.2: *Record section from OBS186, Hydrophone channel, Profile 02*

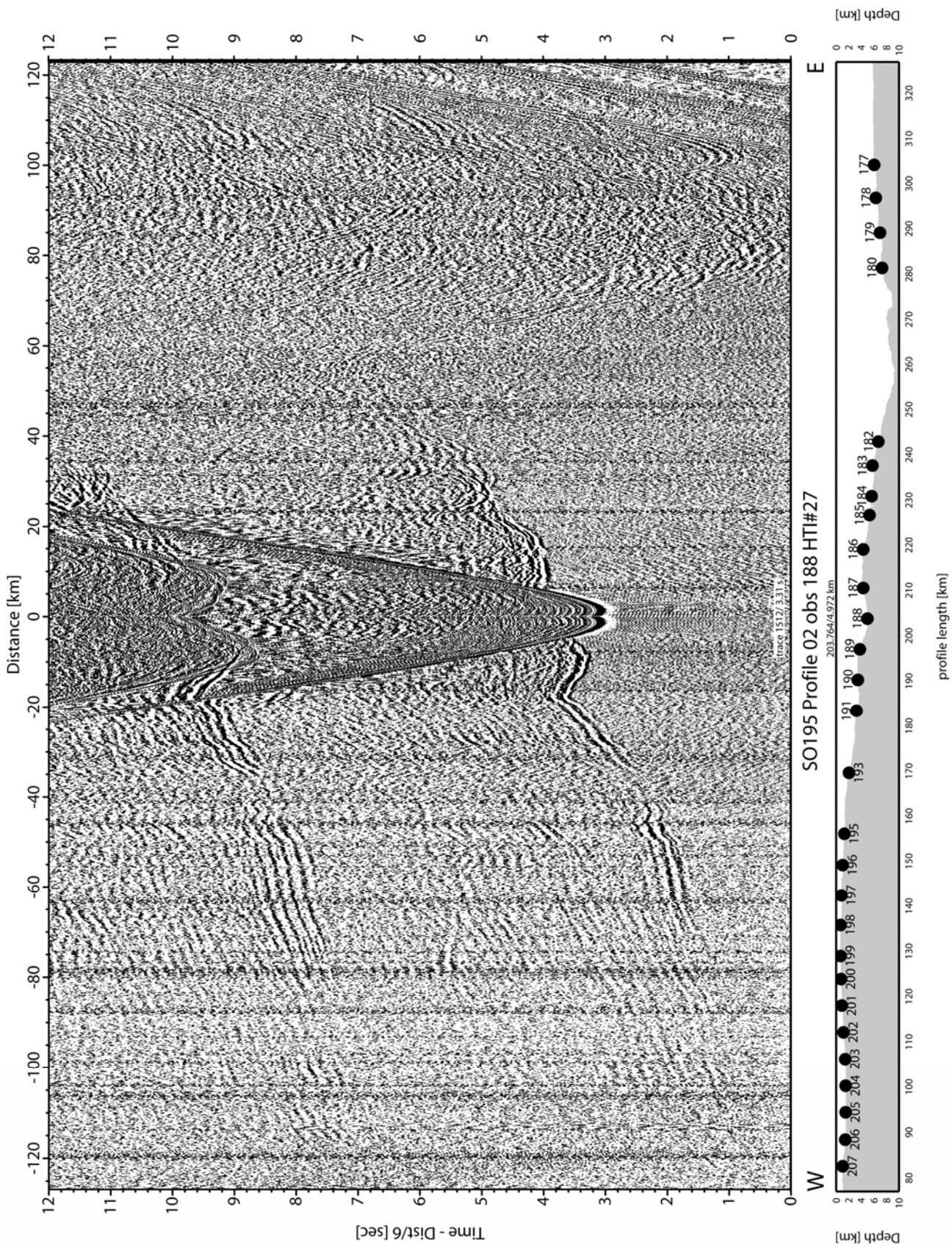


Figure 6.4.2.3: *Record section from OBS188, Hydrophone channel, Profile 02*

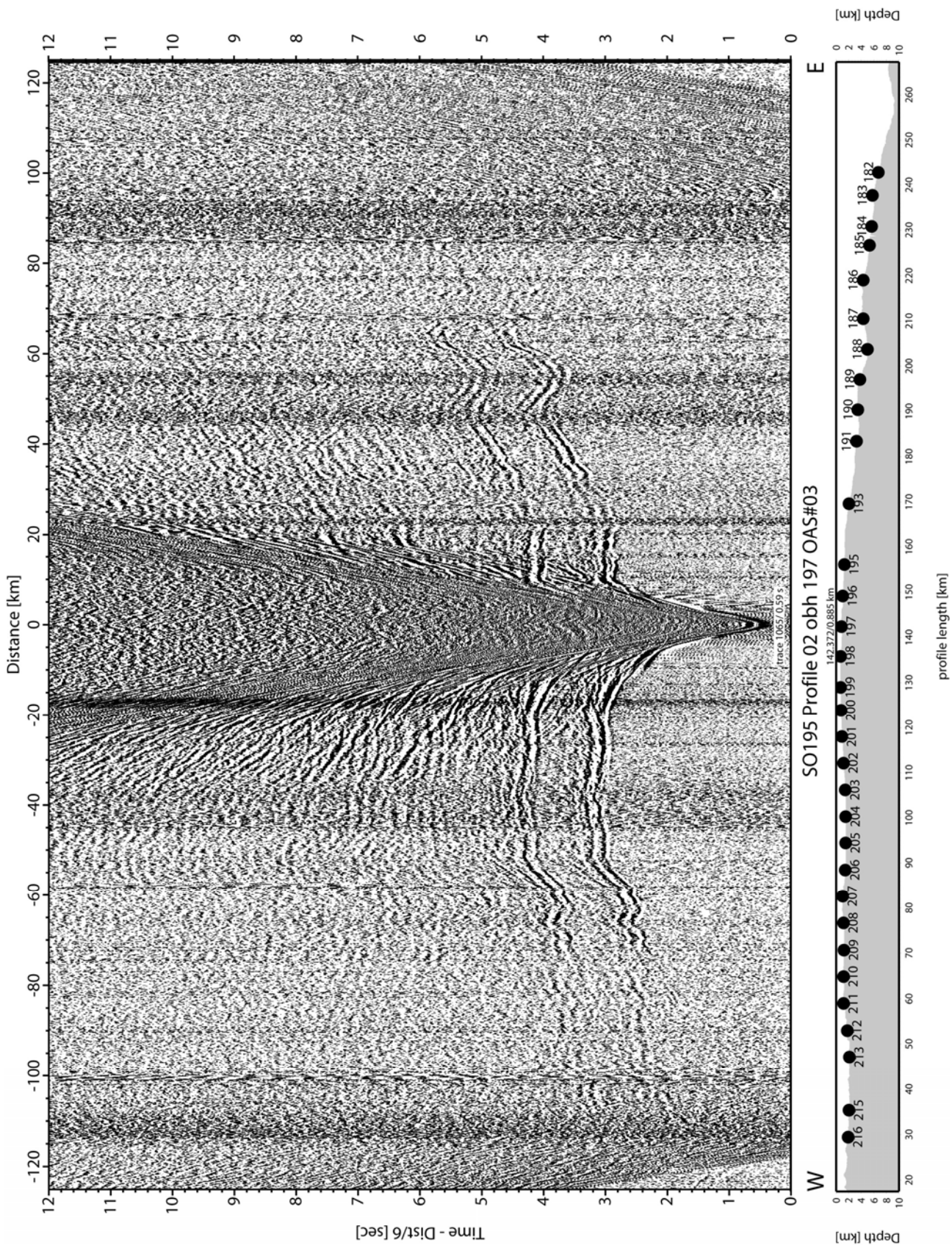


Figure 6.4.2.4: *Record section from OBH197, Hydrophone channel, Profile 02*

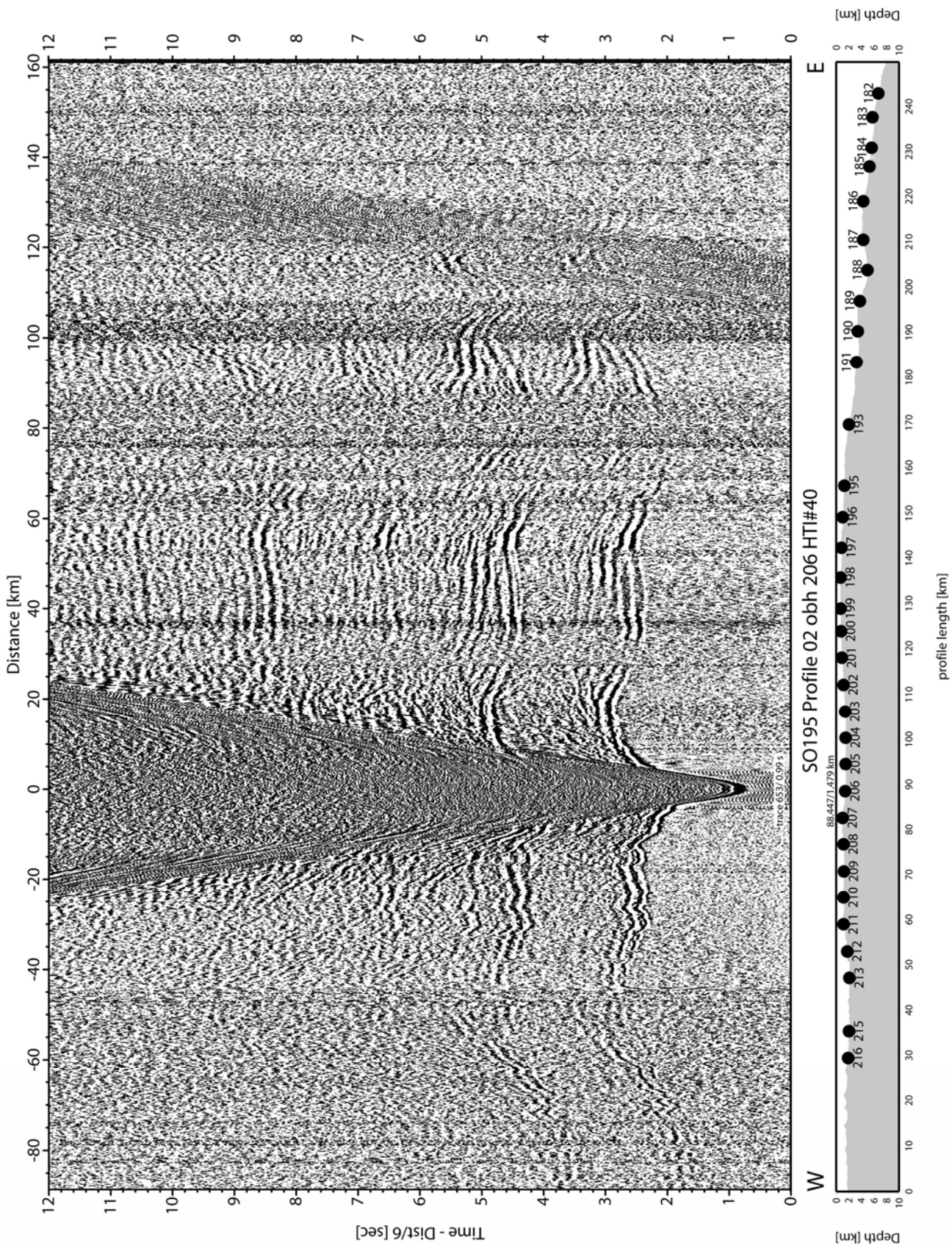


Figure 6.4.2.5: *Record section from OBH206, Hydrophone channel, Profile 02*

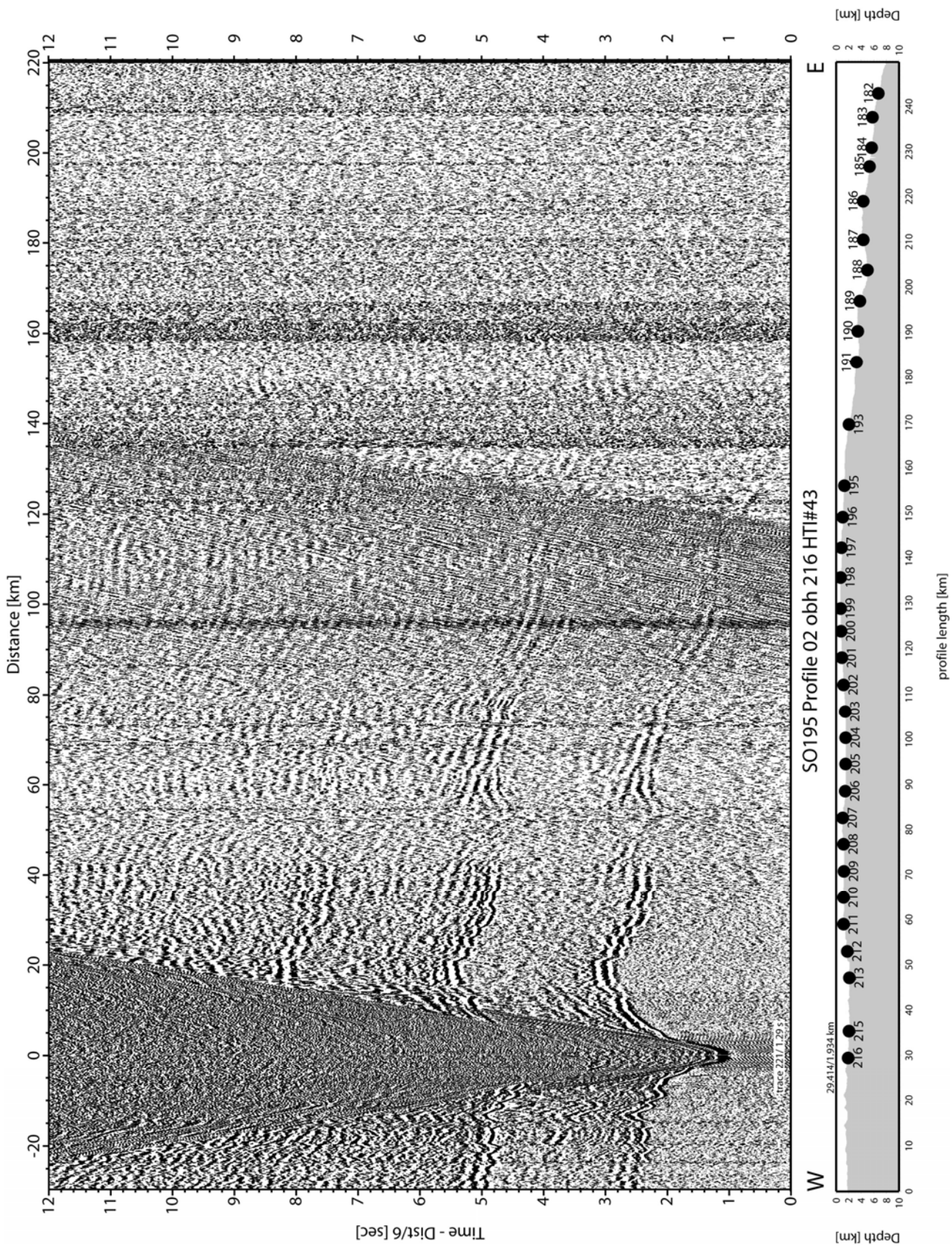


Figure 6.4.2.6: *Record section from OBH216, Hydrophone channel, Profile 02*

6.4.3 Profile P03 – Crustal and upper mantle structure of Louisville Ridge

Profile P03 runs roughly parallel to the outer rise of the Tonga subduction zone to minimize effects of subduction related plate bending. In total 35 seismic stations were placed along the line at a spacing of 5 sm, covering a roughly 370 km long line (Figure 6.4.3.1). Due to the weather constraints seismic profiling had to be stopped after 240 line-km. Three days later we resumed seismic profiling along line P03-2, being 130 km long. Unfortunately, due to time constraints, we could not over shoot the three southernmost stations. However, data quality is excellent.

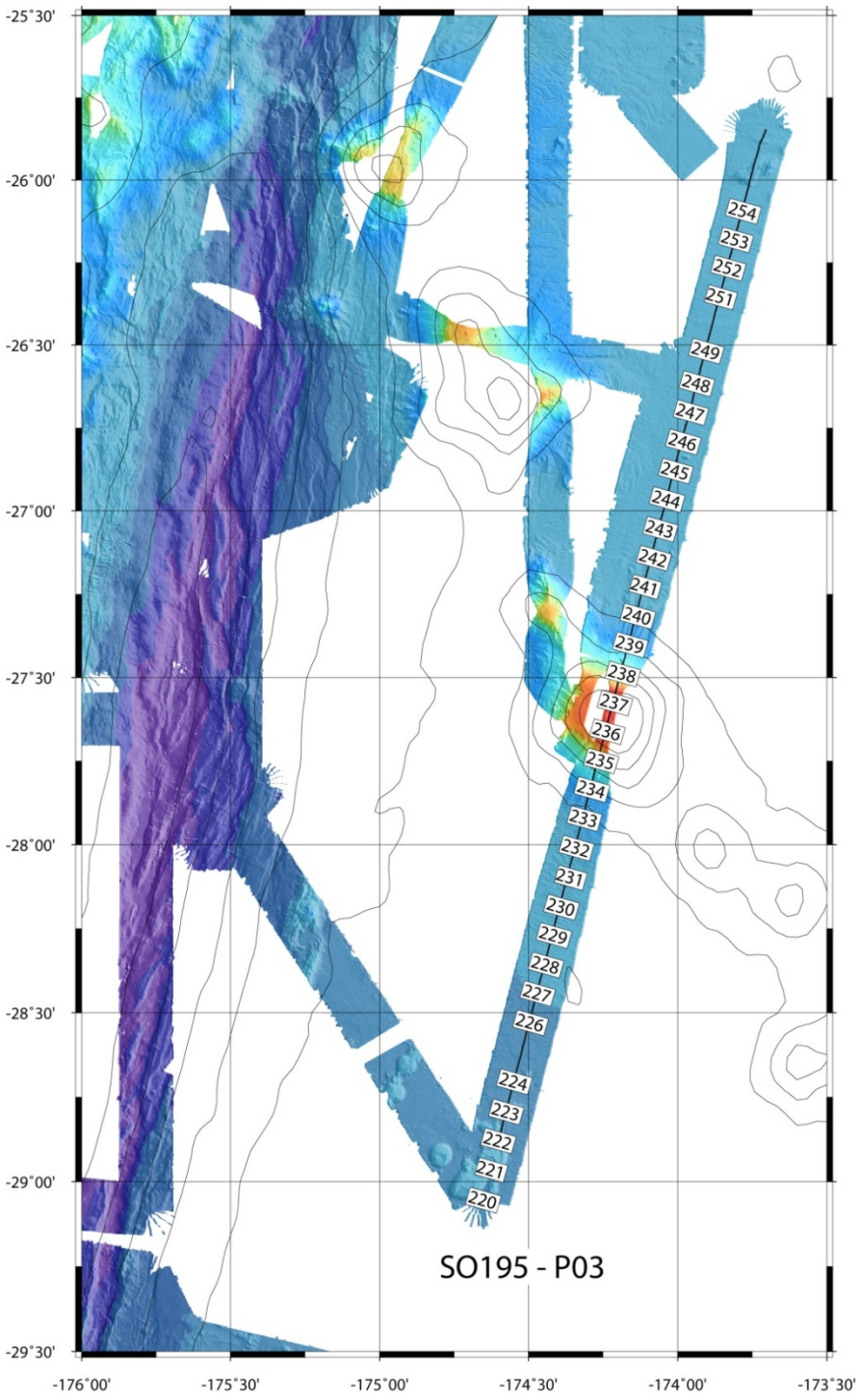


Figure 6.4.3.1: *Bathymetric map of seismic line p03*

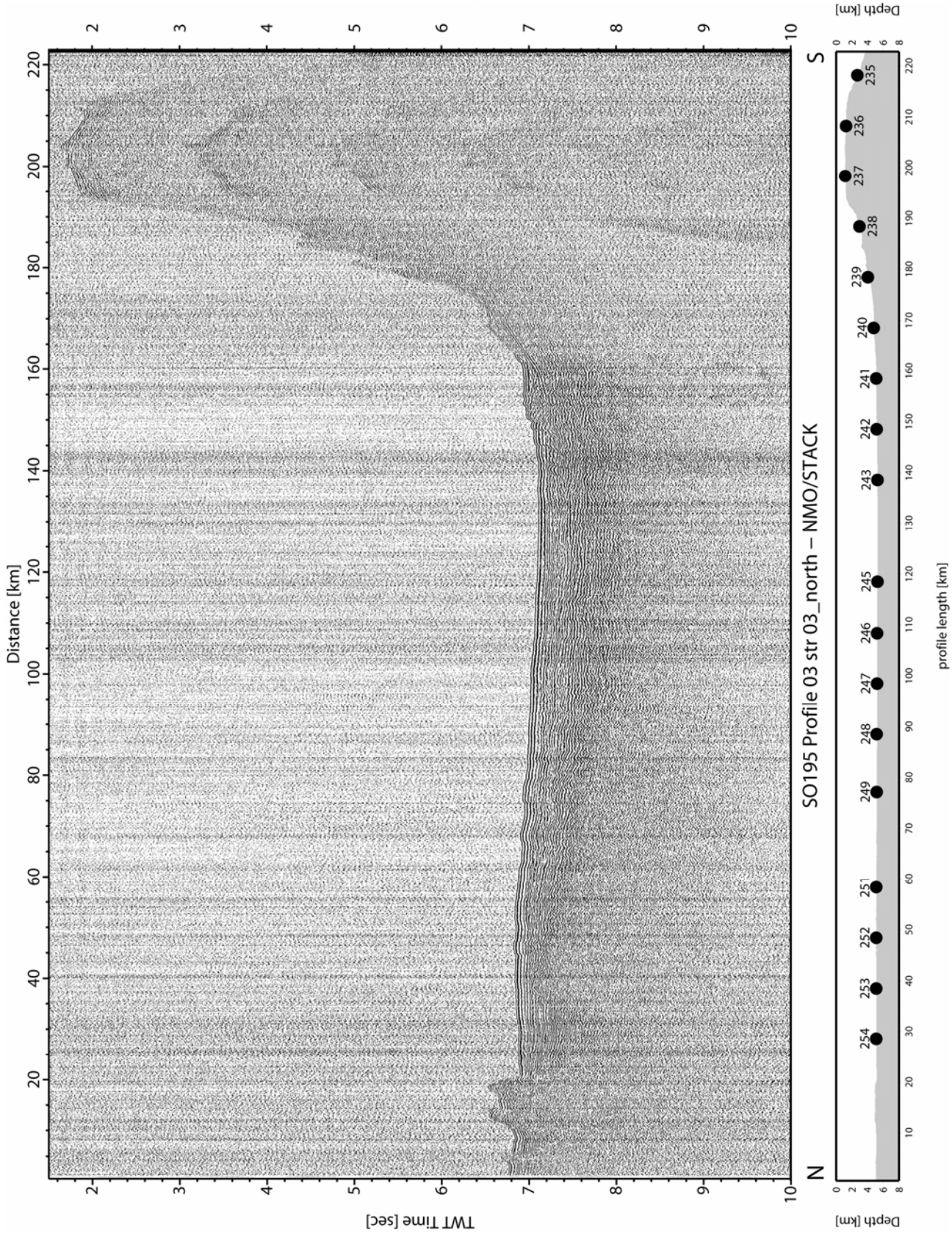


Figure 6.4.3.2: *Record section from seismic streamer, Profile 03-1*

The data are among the best ever recorded at IFM-GEOMAR. Seismic arrivals could be observed out to over 200 km on a number of stations. Typical features are a clear crustal Pg branch and a Pg-PmP-Pn triplication point. Wide-angle reflections from the crust/mantle boundary (PmP)

provide the means to yield crustal thickness and Pn arrivals will yield mantle properties. A number of stations provided excellent PS-converted seismic phases. Thus, it shall be possible to study Poisson's ratio for Cretaceous lithosphere.

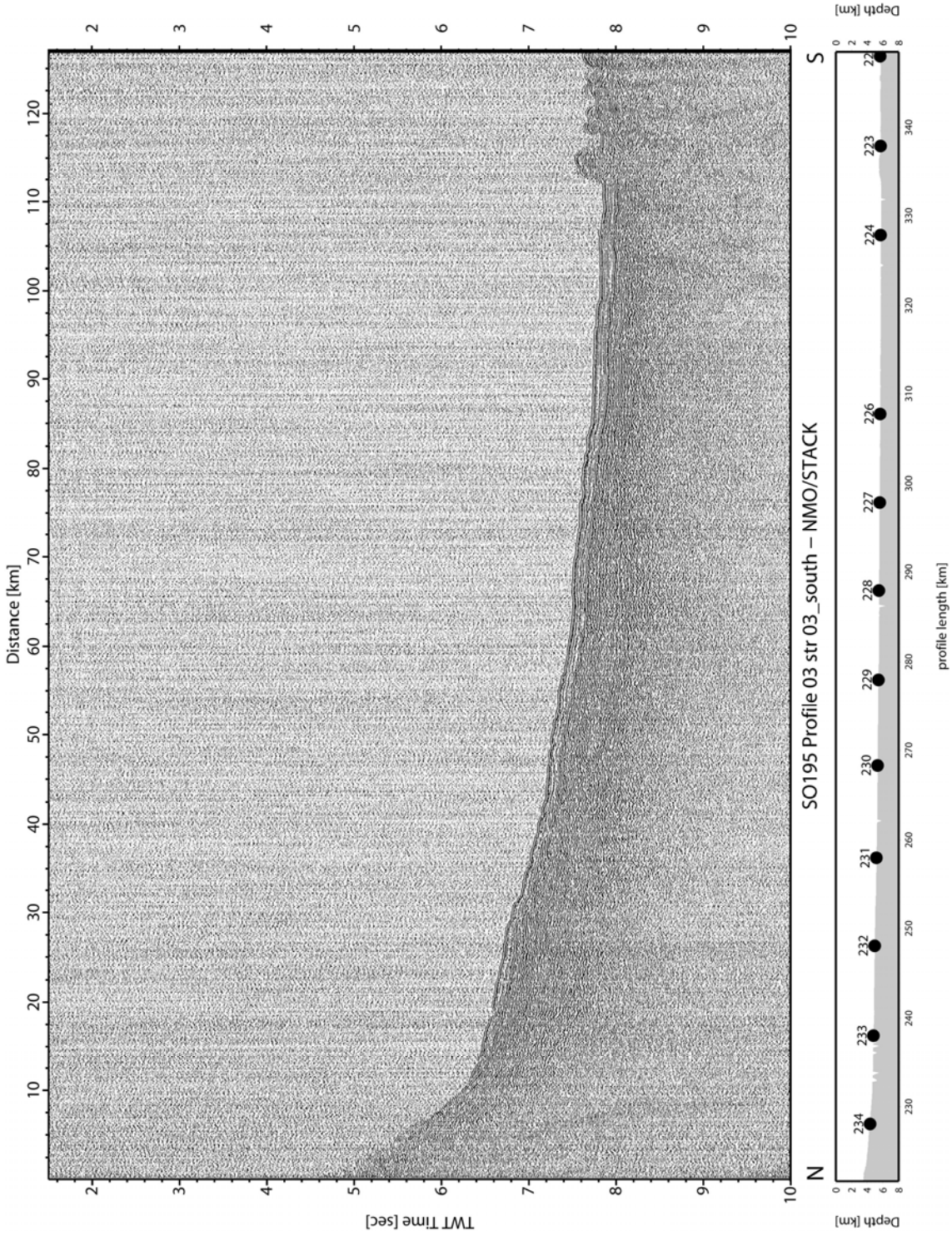


Figure 6.4.3.3: *Record section from seismic streamer, Profile 03-2*

Seismic reflection data obtained along the profile clearly indicates a flexural moat that has been filled with mass wasting products from the seamounts or islands of the Louisville Ridge (Figures 6.4.3.2 and 6.4.3.3). The moat is also clearly visible in gravity data (see Figure 6.2.2). Examples of record sections are shown in Figures 6.4.3.4 to 6.4.3.7.

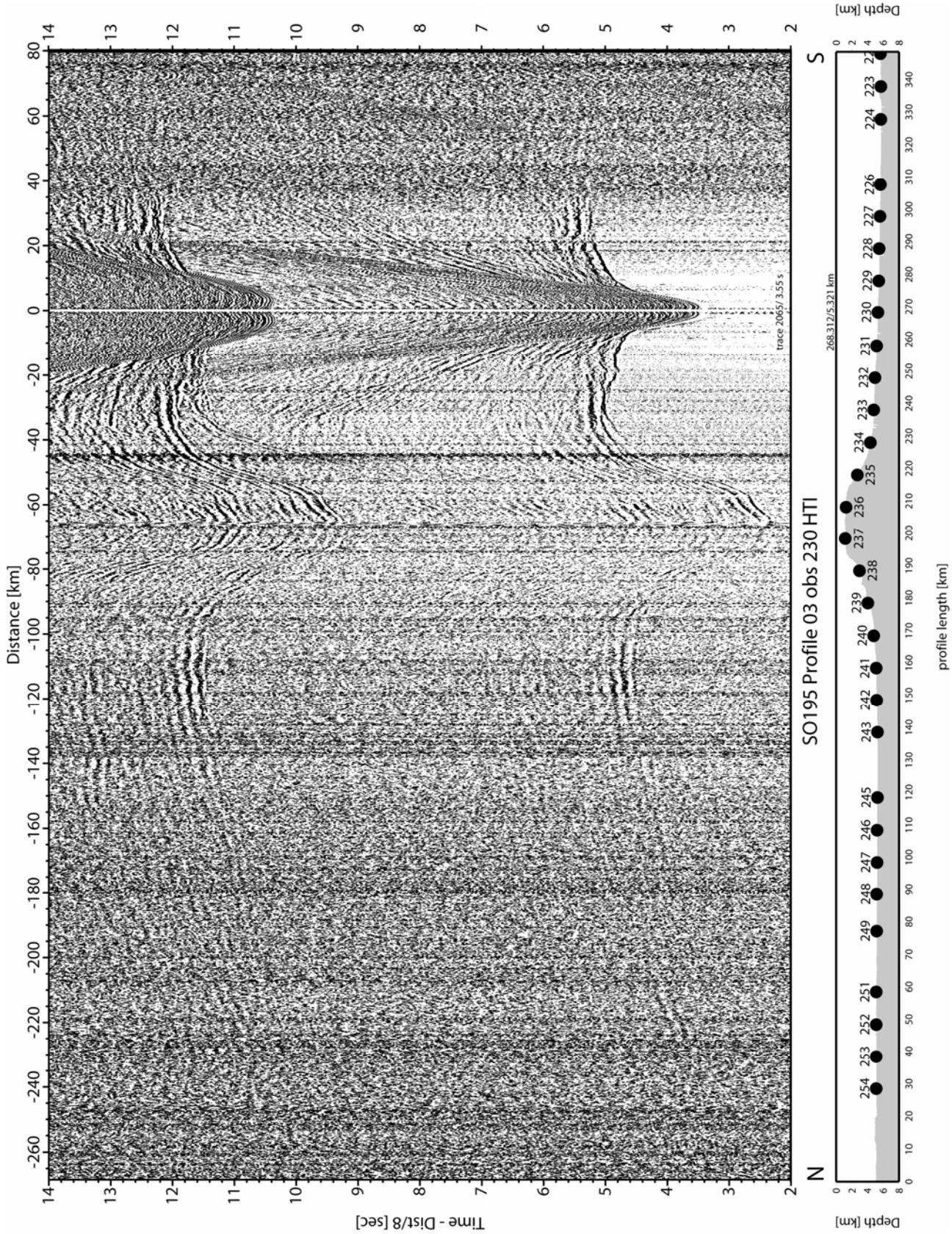


Figure 6.4.3.4: *Record section from OBS230, Profile 03*

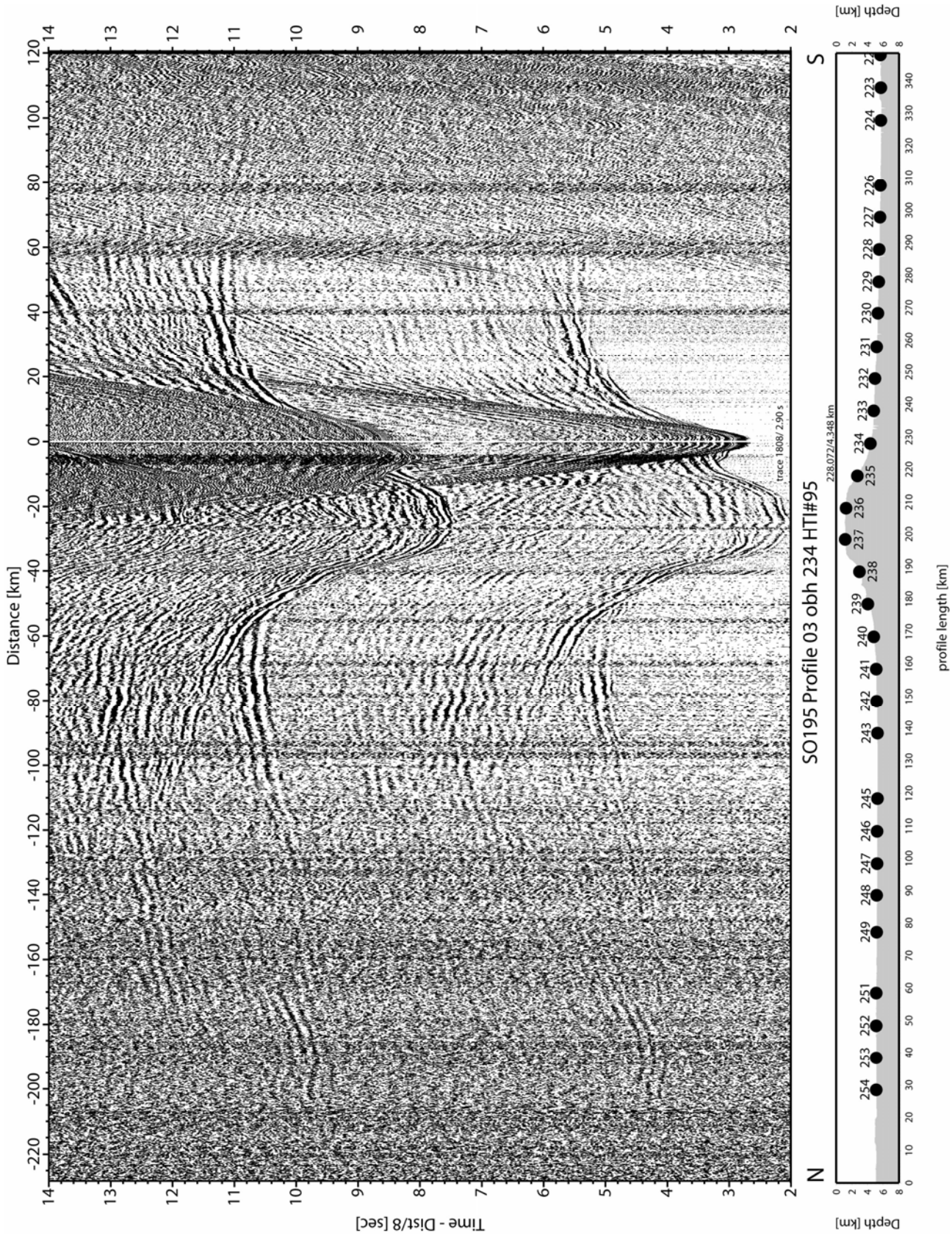


Figure 6.4.3.5: *Record section from OBH234, Profile 03*

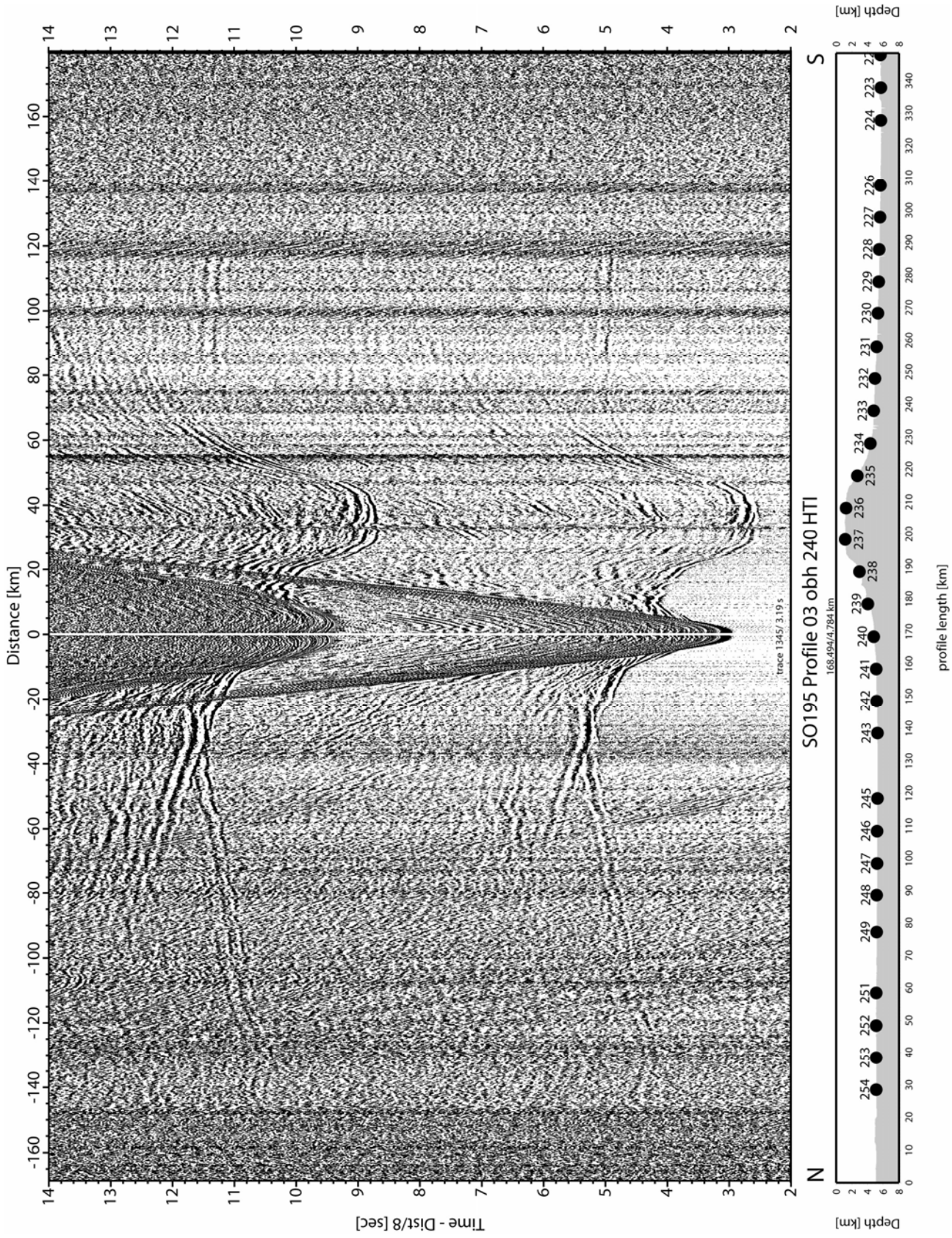


Figure 6.4.3.6: *Record section from OBH240, Profile 03*

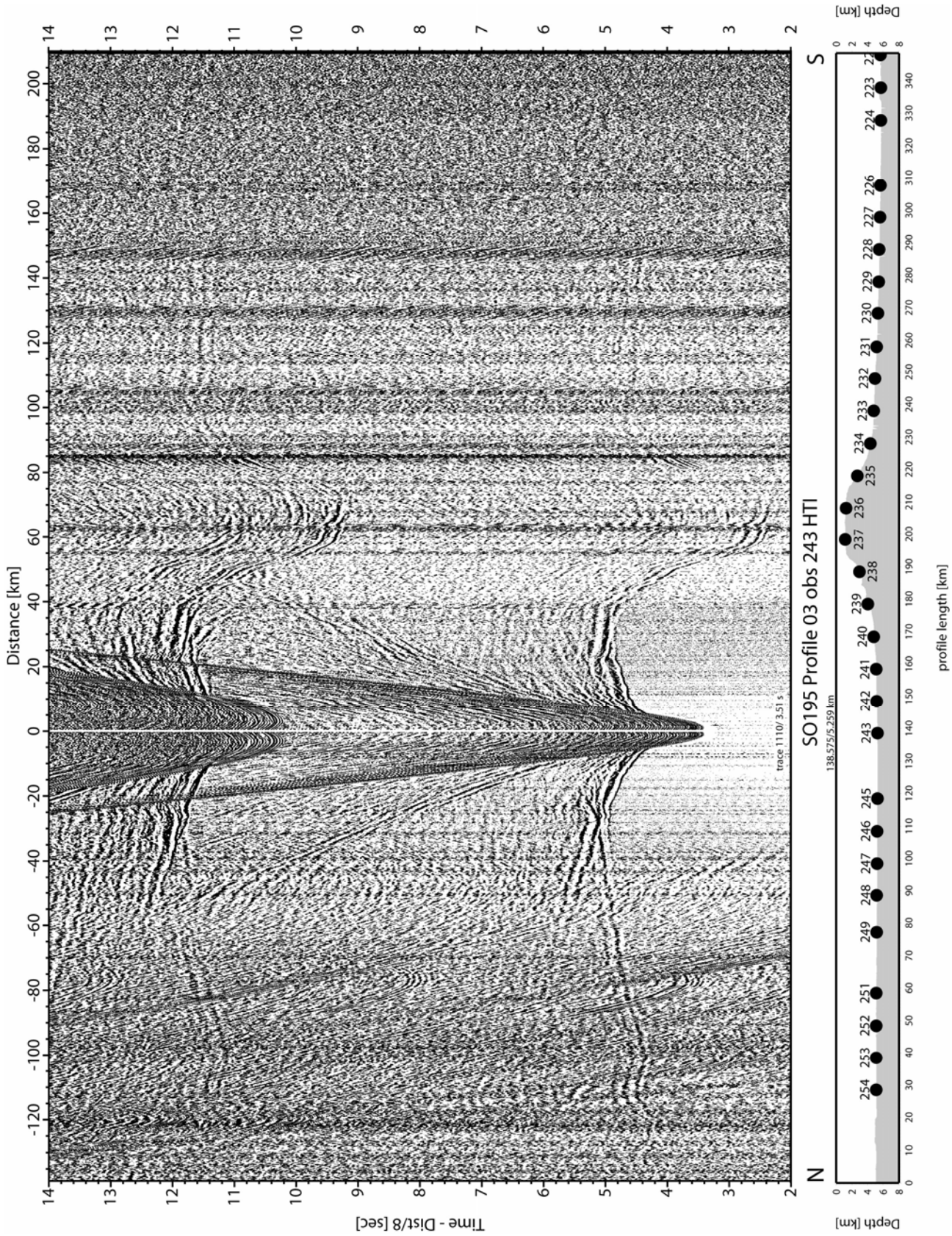


Figure 6.4.3.7: *Record section from OBS243, Profile 03*

6.5 Earthquake monitoring

6.5.1 Processing of earthquake data

The initial data processing of earthquake data is identical to the processing sequence for wide angle data. Later, however, the processing of the PASSCAL SEGY files differs from the processing of the active source data. To generate more manageable files sizes PASSCAL SEGY files are cut into 25 hours records with one hour overlap between adjacent records. Each record generally begins at 0:00:01. For all stations timing errors of the internal clock against GPS time were determined. Time corrections were applied to daily files and files were used to search automatically for seismic events.

To detect automatically seismic events in the daily records a short-term-average versus a long-term-average (STA/LTA) trigger algorithm is applied. The trigger parameters are the length of the short term (s) and long term (l) time window, the mean removal window length (m), the trigger (t) and detrigger ratio (d), minimum number of stations (S) and the network trigger time window length (M). The trigger parameters used for shipboard processing are shown in Table 6.2.1.1 and were applied to unfiltered hydrophone data of good quality. To test the trigger parameters, the 24 hours data streams were visually checked. We tested the parameters for two days and transferred the data in the SEISAN package used to analyse and locate the local earthquakes. Applying these trigger parameters we obtained less than ~10% false triggers and lost only those events that had been recorded only on a few stations, while all major events were triggered. Most false triggers were caused by S-Wave arrivals of events occurring westward in the slab at depth >100 km.

Table 6.5.1: *Trigger parameters to search the continuous recordings for seismic events (see text).*

Parameter	s	l	m	t	d	S	M
Value	0.5 s	60 s	200 s	3.0	1.8	6	20 s

After finding event triggers we cut events from the 25 hours files and stored them into subdirectories, one per event. For investigating local earthquakes the appropriate time window length for the events is 3 minutes, starting 60 s prior to trigger time. The SEGY traces in the event directories are converted first into SAC, and then into SEISAN waveform format, which makes it possible to store all traces associated with an event into a single waveform file. After conversion the data are registered into the SEISAN database (Havskov and Ottemöller, 2003). *P*-wave and *S*-wave arrival times are picked and events are preliminarily located with the program HYP, which employs an iterative solution to the nonlinear localization problem (Lienert and Havskov, 1995). Travel times are calculated using a 1-D velocity model. The velocity model consists of three layers with a velocity of 5.5 km/s in the uppermost 15 km, 6.8 km/s down to 25 km and 8.1 km/s down to 60 km. A test of several velocity models indicate that the epicentres are reasonable robust, while the depth changes significantly for different models, indicating that a refined velocity model is needed for the post-cruise data analysis.

6.5.2 First results from seismological monitoring

The 23 seismic stations of long-term deployment were deployed in 2007 between July 7 and July 11. Nine instruments were broadband instruments from the DEPAS pool located at the Alfred-Wegener-Institute in Bremerhaven. The remaining stations were 12 short period OBS (4.5 Hz geophones) and two OBH.

Unfortunately, one station was lost. Two stations were released automatically by the safety release during the time a medical emergency had forced *Sonne* to head for Tongatapu, where an ill sailor was left in medical care. One station could be tracked and was recovered. The second station OBS113, however, was lost. All other stations provided data for geophysical data analyses.

Figure 6.5.2.1 provided initial epicenters of roughly 50 events that were identified and located during the cruise. Earthquakes occur in clusters and most events seem to be main shock and aftershock sequences. A number of main shocks have also been reported in the PDE catalogue of the National Earthquake Information Center (NEIC) in Boulder, Colorado. A first inspection of the dataset suggest that we will be able to locate at least between 300-500 events over a time period of 6 month (Mid July 2007 to Early January 2008).

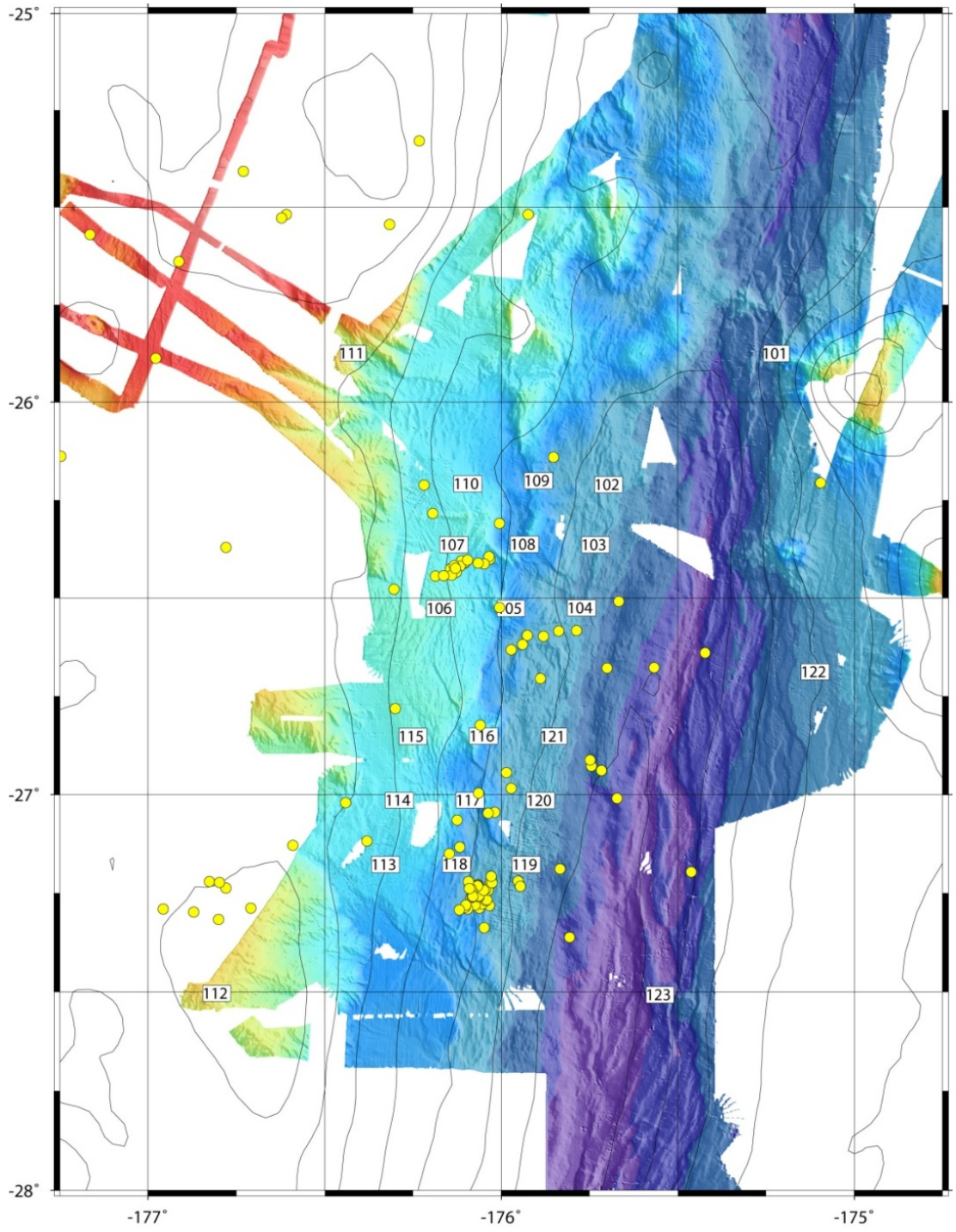


Figure 6.5.2.1: *Location map of the seismological monitoring network and preliminary epicenters of the 60 events located during the cruise.*

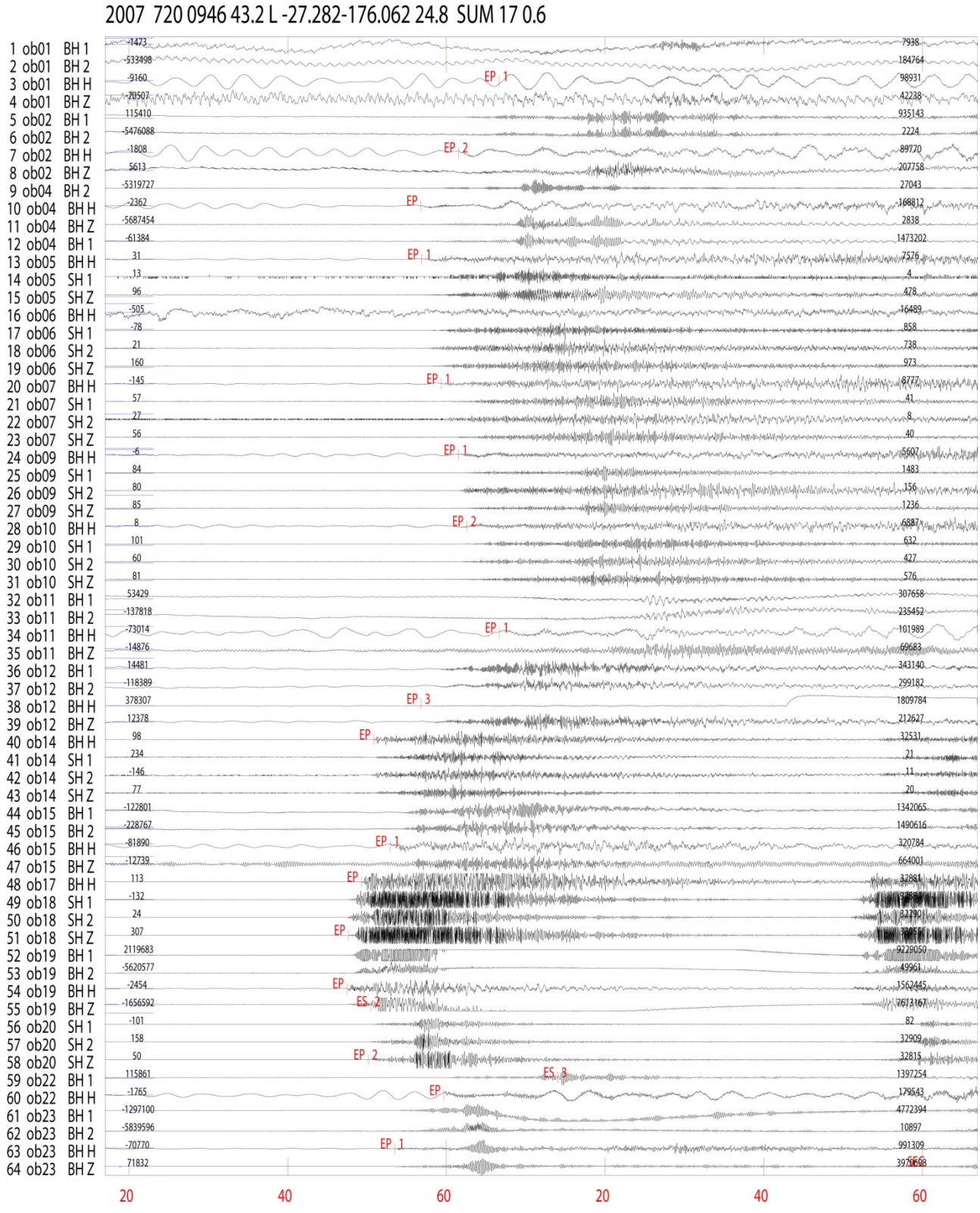


Figure 6.5.2.2: *Example of arrivals from a local event, occurring within the network*

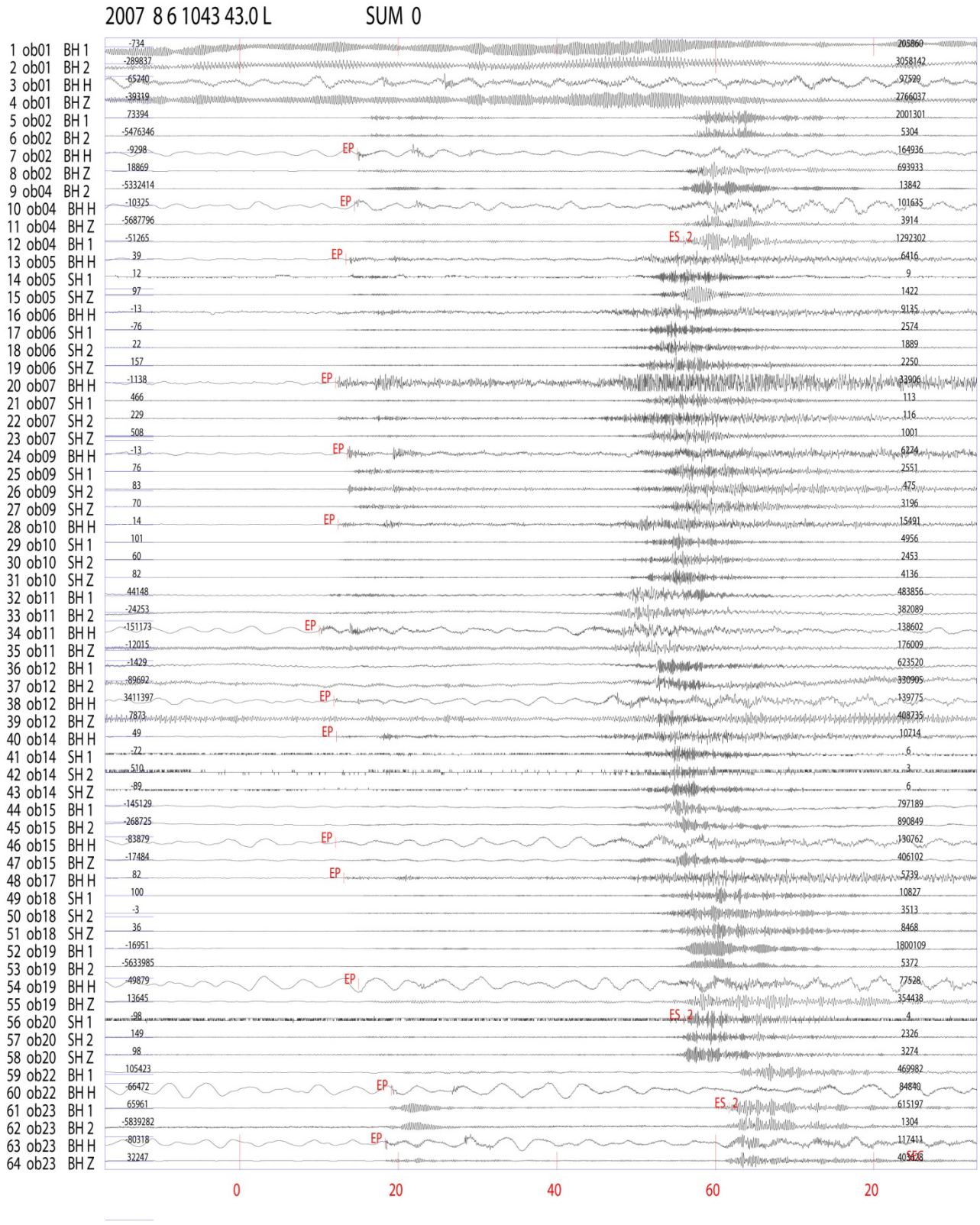


Figure 6.5.2.3: *Example of arrivals from a regional event occurring roughly 150 km to the west.*

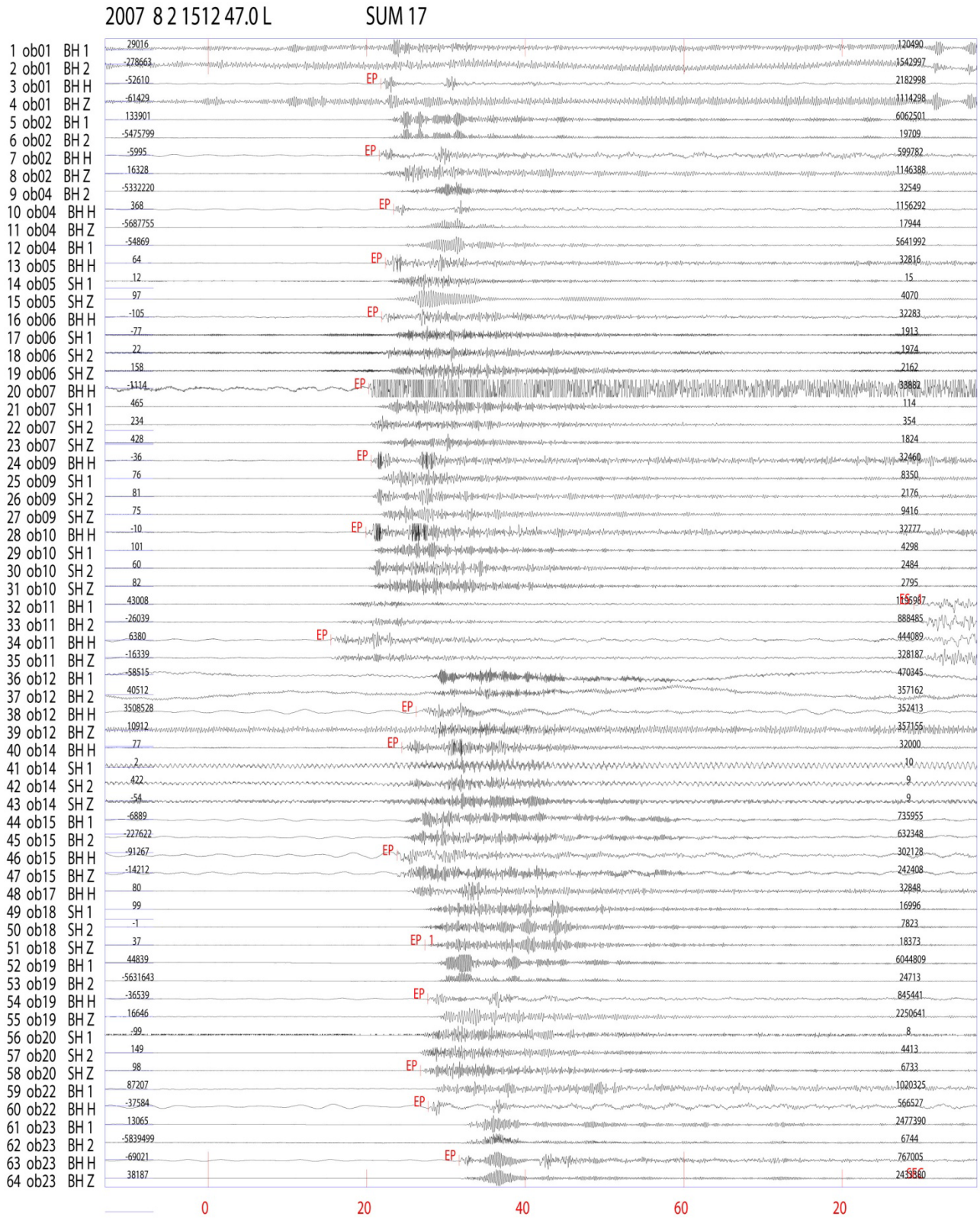


Figure 6.5.2.3: *Example of arrivals from a regional event from the Tonga slab, occurring below 200 km. Note S-wave arrivals on "ob11" (OBS111) with onset times ~80 seconds after P-wave onset. Such late S-wave onset often produced false event triggers.*

6.6. Heat flow data

6.6.1 Processing of heat flow data

In order to illustrate the steps involved to process a heat flow measurement, Figure 6.6.1.1 shows a typical unprocessed data set of the GHF probe. Determination of undisturbed sediment temperature and in situ thermal conductivity follow the pulsed needle probe method (Lister 1970). When the sensor string penetrates the sediment the friction between sensor tube and sediment creates heat resulting in a temperature rise. The following temperature decay is recorded for a preset time span (7 or 10 minutes, depending on the probe used), after which a heat pulse of known energy is fired. The heat pulse decay is monitored for at least 7 to 10 minutes until the probe is pulled out of the sediment.

The processing of the raw measurements requires three steps:

1. determine undisturbed sediment temperatures from frictional decay
2. correct heat pulse decay for the remaining effect of the frictional decay
3. calculate in situ thermal conductivities from heat pulse decay.

The basic design of the processing of heat flow measurements is outlined in Hyndman *et al.* (1979) which was based on the work of Lister (1970, 1979). The steps described here are the same for both probes.

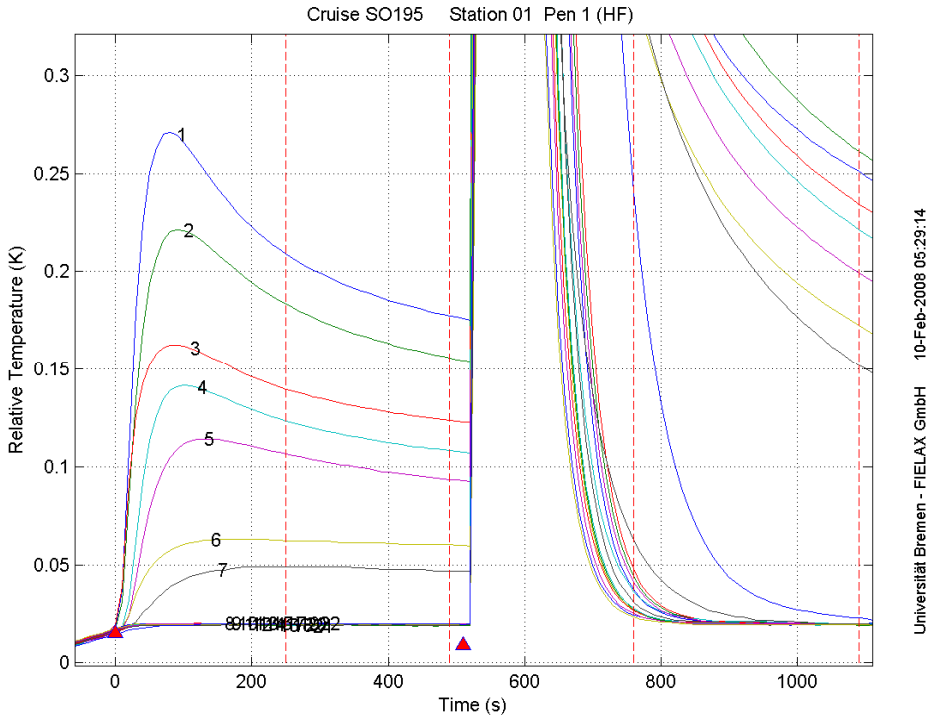


Figure 6.6.1.1: *Unprocessed temperature record of a heat flow measurement with the 6 m-long, 22 channel heat probe (GHF). Sensor '1' is the lowermost, sensor '22' the uppermost sensor; spacing between sensors is 0.27 cm. Seven Sensors penetrated into the sea floor.*

The theoretical background for the analysis of heat flow measurements is discussed in Bullard (1954), Lister (1970), Hyndman *et al.* (1979), Villinger and Davis (1987) and Hartmann and Villinger (2002). The following simplified model for the sensor string is used: a cylinder of radius a and infinite extent in the z-direction is situated in a homogenous infinite material. Whereas the material surrounding the cylinder has a finite thermal conductivity k and thermal diffusivity κ,

the cylinder itself is of infinite conductivity and diffusivity, with the constraint that $(\rho c)_c$, the product of specific heat c and density ρ of the cylinder, remains finite. At time t =0, the cylinder is at temperature T_0 and the ambient space at T_a. The temperature at the centre r =0 of the cylinder can then be described by the thermal decay curve of the cylinder, described in detail in the literature cited above.

A mathematically sound inversion scheme according to Hartmann and Villinger (2002) of observed temperature decays was implemented in a program called T2C, using Matlab®, a software package for numerical analysis.

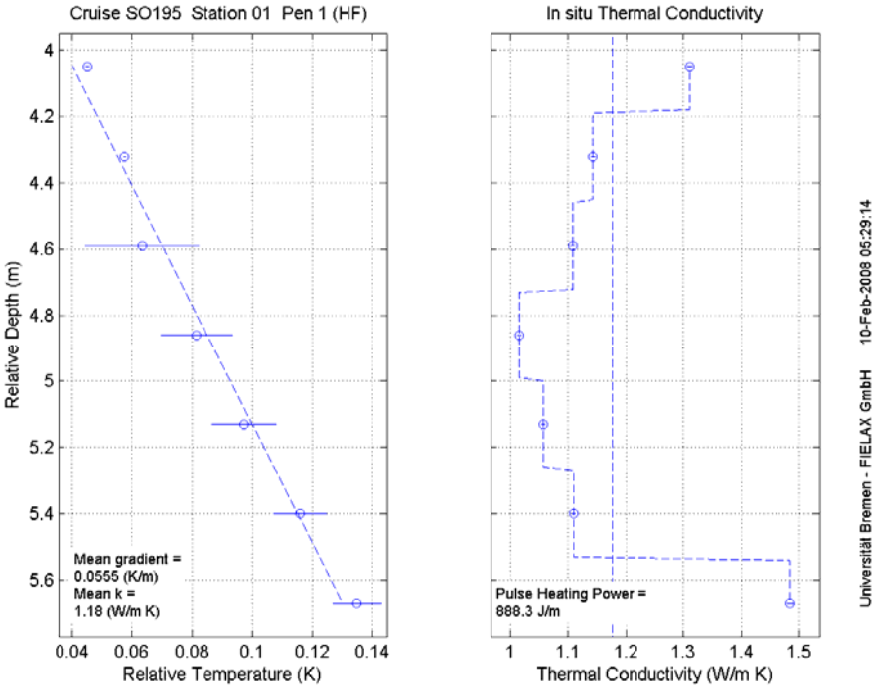


Figure 6.6.1.2: *Estimates of in situ temperatures (left) and in situ thermal conductivity (right) vs. depth, derived from the temperature measurements shown in Figure 6.6.1.1.*

A plot of the raw data (Figure 6.6.1.1) helps to identify bad temperature records or sensors which did not penetrate and therefore recorded only bottom water temperatures.

Figures 6.6.1.1to 6.6.1.3 show a sample of a temperature measurement and its inversion. In Figure 6.6.1.1, the temperature rise just after the probe has entered the sediment (t=0 sec) is caused by frictional heating, which is more pronounced at the lowermost sensors (sensors 1 and 2). The magnitude of this rise is mostly depending on the nature of the sediments and can vary substantially. After about 7 minutes the heat pulse occurs. The rate of decay after the heat pulse stops is a measure of the thermal conductivity of the sediments (Lister, 1979). The time window between the dashed vertical lines is used in the inversion with T2C. Figure 6.6.1.2 shows the basic data set which is needed to calculate the heat flow: temperature vs. depth (left) allows to calculate the temperature gradient which is combined with the in situ thermal conductivity (right) obtained from the inversion of the heat pulse decay to get the heat flow. In the case of varying thermal conductivities with depth, the so-called Bullard-Plot (Bullard, 1939) is used to calculate the heat flow by a linear regression of integrated thermal resistance vs. in situ temperatures (Figure 6.6.1.3, left). The right-hand side of Figure 6.6.1.3 shows calculated errors of in situ temperatures and thermal conductivities, based on the inversion algorithm.

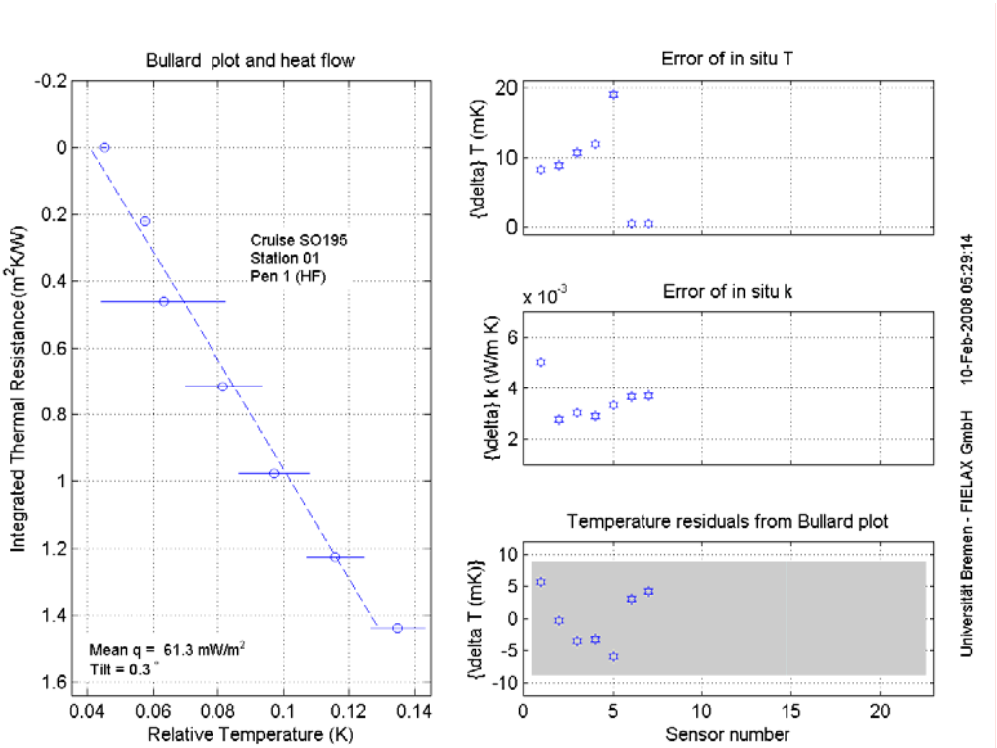


Figure 6.6.1.3: *Bullard plot (left) and errors of in situ temperature and thermal conductivity (right), calculated on the basis of the temperature and thermal conductivity profiles shown in Figure 6.6.1.2.*

6.6.2 Heat flow data – first results

During the cruise 54 heat flow deployments were made (Figure 6.6.2.1). Unfortunately, penetration was not possible at a number of locations or the probe penetrated only ~0.5 m into the seabed. At such locations data could not be inverted for heat flow. However, in total 29 penetrations provided data for geophysical data analyses.

The highest heat flow was obtained on the incoming plate. Here station H0801 provided a low degree of scatter. Values are in the order of 60 mW/m^2. On the marine forearc heat flow is generally low. Some stations, however, show a high degree of lateral variability that may indicate hydrogeological activity. Values range from 8 mW/m^2 to 58 mW/m^2.

A transect obtained across ODP site 841 (H0806) was very successful. Values are between 13 and 28 mW/m^2 and hence support low heat flow measured during the ODP leg in the drill hole.

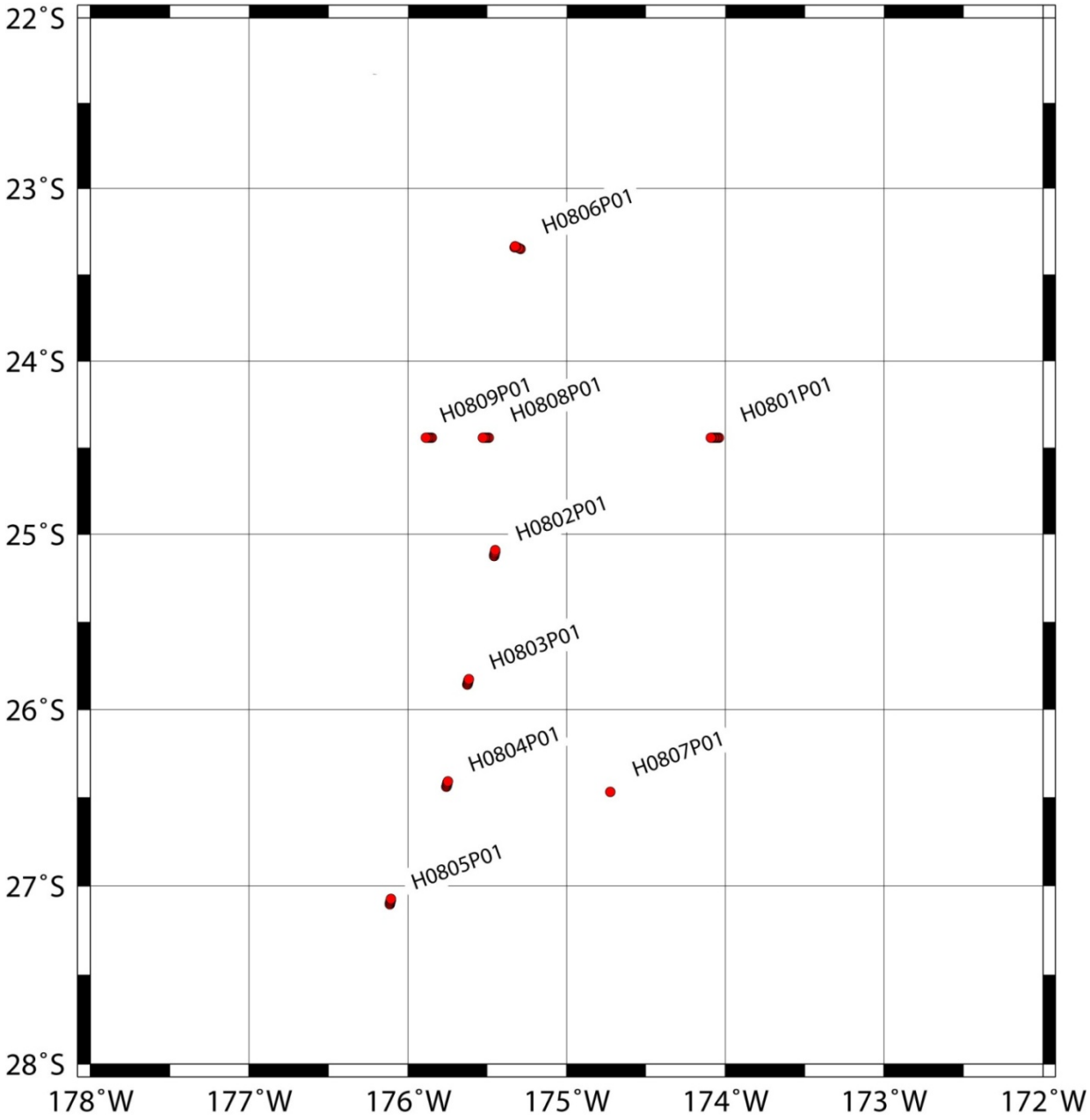


Figure 6.6.2.1: *Location map of heat flow determinations.*

7. Acknowledgement

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9. Appendix

Table 9.1 – Seismic profiling and airgun operation

Profile	Latitude	Longitude	Number of shots	Source volume
P01	*27° 07.561' S*	*176° 07.209' W*	*1488*	*84-litres*
	27° 19.263' S	*176° 10.017' W*		
P02	*24° 26.483' S*	*177° 43.354' W*	*2364*	*84-litres*
	24° 26.485' S	*174° 29.880' W*		
P03-1	*25° 50.753' S*	*173° 42.210' W*	*1760*	*84-litres*
	27° 47.884' S	*174° 17.003' W*		
P03-2	*27° 46.337' S*	*174° 16.558' W*	*829*	*42-litres*
	28° 53.055' S	*174° 36.160' W*		

Table 9.2 – Station list P01

Station	Latitude	Longitude	Depth	Deployment	Recovery	Skew	Recorder
OBS 118	27° 10,569' S	176° 07,943' W	4445	10.07.07	18.01.08	572	MLS 010407
OBH 130	27°07,561' S	176°07,209' W	4333	16.01.08	18.01.08	4	MLS 000706
OBH 131	27°04,078' S	176°06,356' W	4364	16.01.08	18.01.08	4	MLS 991257
OBH 117	27° 00,889' S	176° 05,553' W	4369	11.07.07	18.01.08	NaN	MLS 061202
OBH 132	26°57,068' S	176°04,678' W	4521	16.01.08	18.01.08	-6	MLS 991259
OBH 133	26°54,066' S	176°04,008' W	4302	16.01.08	18.01.08	2	MLS 991241
OBS 116	26° 51,087' S	176° 03,306' W	3741	09.07.07	18.01.08	NaN	MTS 041104
OBH 134	26°49,634' S	176°02,991' W	3921	16.01.08	18.01.08	0	MLS 991260
OBH 135	26°47,030' S	176°02,361' W	4379	16.01.08	18.01.08	2778	MLS 061203
OBH 136	26°44,002' S	176°01,635' W	4539	16.01.08	18.01.08	0	MLS 010406
OBH 137	26°41,012' S	176°09,943' W	4605	16.01.08	18.01.08	-7	MLS 991255
OBH 138	26°38,013' S	176°00,228 W	4690	16.01.08	18.01.08	-3	MLS 991256
OBH 139	26°35,005 S	175°59,525 W	4485	16.01.08	18.01.08	-12	MBS971202
OBS 105	26° 31,599' S	175° 58,614' W	4096	07.07.07	18.01.08	619	MLS 991233
OBH 140	26°28,017' S	175°57,842' W	4341	16.01.08	18.01.08	-1	MLS 000713
OBH 141	26°25,000' S	175°57,142' W	4379	16.01.08	18.01.08	9	MLS 040305
OBH 108	26° 21,747' S	175° 56,349' W	420	07.07.07	19.01.08	NaN	MLS 991250
OBH 142	26°18,509' S	175°55,618' W	4320	16.01.08	19.01.08	9	MBS980902
OBH 143	26°15,008' S	175°54,803' W	4257	16.01.08	19.01.08	17	MLS 991253
OBS 109	26° 11,981' S	175° 53,998' W	4251	07.07.07	19.01.08	-465	MLS 061201
OBH 144	26°08,880' S	175°53,393' W	4265	16.01.08	19.01.08	11	MLS 010404
OBH 145	26°05,542' S	175°52,590' W	4250	16.01.08	19.01.08	0	MLS 040803
OBH 146	26°02,299' S	175°51,181' W	4194	16.01.08	19.01.08	16	MLS 061204
OBH 147	25°59,029' S	175°51,094' W	4013	16.01.08	19.01.08	-3	MLS 020801
OBH 148	25°55,846' S	175°50,321' W	4038	16.01.08	19.01.08	-21	MLS 010402
OBH 149	25°52,553' S	175°49,539' W	3748	16.01.08	19.01.08	4	MLS 010403
OBH 150	25°49,405' S	175°48,808' W	3776	16.01.08	19.01.08	-2	MLS 040101

Table 9.3 – Station list P02

Station	Latitude	Longitude	Depth	Deployment	Recovery	Skew	Recorder
OBS 177	24° 26,533' S	174° 43,512' W	6092	20.01.08	23.01.08	4	MLS 991235
OBS 178	24° 26,486' S	174° 47,952' W	6359	20.01.08	23.01.08	0	MLS 991249
OBS 179	24° 26,498' S	174° 52,464' W	7056	20.01.08	23.01.08	NaN	MTS 050810
OBS 180	24° 26,510' S	174° 56,946' W	7334	20.01.08	23.01.08	NaN	MLS 991233
OBS 181	24° 26,488' S	175° 16,022 ' W	7719	20.01.08	23.01.08	imploded	MLS 010407
OBS 182	24° 26,491' S	175° 20,005' W	6663	20.01.08	23.01.08	3	MLS 991247
OBS 183	24° 26,496' S	175° 22,986' W	5758	20.01.08	23.01.08	-5	MLS 040304
OBS 184	24° 26,506' S	175° 27,003' W	5652	20.01.08	23.01.08	10	MTS 041104
OBS 185	24° 26,495' S	175° 29,460' W	5332	20.01.08	23.01.08	107	MLS 991248
OBS 186	24° 26,492' S	175° 34,023' W	4264	20.01.08	23.01.08	-8	MLS 061201
OBS 187	24° 26,499' S	175° 38,991' W	4321	20.01.08	23.01.08	-3	MLS 040101
OBS 188	24° 26,491' S	175° 42,961' W	4955	20.01.08	27.01.08	28	MLS 010404
OBS 189	24° 26,519' S	175° 46,995' W	3718	20.01.08	27.01.08	10	MLS 991241
OBH 190	24° 26,493' S	175° 51,015' W	3508	20.01.08	27.01.08	5509	MLS 010403
OBH 191	24° 26,510' S	175° 54,986' W	3219	20.01.08	27.01.08	37	MLS 061204
OBH 192	24° 26,513' S	175° 59,012' W	2902	20.01.08	27.01.08	NaN	MLS 010402
OBH 193	24° 26,519' S	176° 02,984' W	2076	21.01.08	23.01.08	86	MBS980902
OBH 194	24° 26,512' S	176° 07,008' W	1417	21.01.08	27.01.08	25	MLS 040305
OBH 195	24° 26,517' S	176° 11,026' W	1298	21.01.08	27.01.08	1	MLS 040803
OBH 196	24° 26,509' S	176° 15,133' W	1056	21.01.08	27.01.08	1	MLS 991260
OBH 197	24° 26,478' S	176° 19,107' W	873	21.01.08	27.01.08	-15	MLS 991256
OBH 198	24° 26,492' S	176° 23,017' W	1384	21.01.08	24.01.08	-121	MBS001004
OBH 199	24° 26,495' S	176° 27,042' W	1398	21.01.08	24.01.08	2	MLS 991244
OBH 200	24° 26,513' S	176° 30,043' W	1574	21.01.08	24.01.08	-5	MLS 061205
OBH 201	24° 26,530' S	176° 33,479' W	1917	21.01.08	24.01.08	-1	MLS 010406
OBH 202	24° 26,489' S	176° 37,000' W	1202	21.01.08	24.01.08	-9	MLS 991259
OBH 203	24° 26,493' S	176° 40,512' W	1486	21.01.08	24.01.08	15	MLS 991253
OBH 204	24° 26,497' S	176° 44,004' W	1521	21.01.08	27.01.08	-22	MLS 991255
OBH 205	24° 26,500' S	176° 47,473' W	1512	21.01.08	27.01.08	81	MLS 061202
OBH 206	24° 26,507' S	176° 51,061' W	1487	21.01.08	27.01.08	13	MLS 991257
OBH 207	24° 26,481' S	176° 54,493' W	1051	21.01.08	27.01.08	-4	MLS010401
OBH 208	24° 26,503' S	176° 58,009' W	1198	21.01.08	27.01.08	19	MBS980906
OBH 209	24° 26,488' S	177° 01,534' W	1236	21.01.08	27.01.08	-14	MLS 991252
OBH 210	24° 26,495' S	177° 05,019' W	1176	21.01.08	27.01.08	-14	MLS 040102
OBH 211	24° 26,495' S	177° 08,485' W	1186	21.01.08	27.01.08	NaN	MBS971202
OBH 212	24° 26,514' S	177° 12,108' W	1804	21.01.08	27.01.08	-12	MLS 991237
OBH 213	24° 26,513' S	177° 15,543' W	2113	21.01.08	27.01.08	-1	MLS 991251
OBH 214	24° 26,524' S	177° 18,988' W	1978	21.01.08	27.01.08	-2	MLS 991246
OBH 215	24° 26,516' S	177° 22,485' W	2088	21.01.08	27.01.08	26	MLS 991250
OBH216	24° 26,508' S	177° 26,019' W	1907	21.01.08	27.01.08	7024	MLS 061203

Table 9.4 – Station list P03

Station	Latitude	Longitude	Depth	Deployment	Recovery	Skew	Recorder
OBH 220	29° 3,173' S	174° 39,281' W	5750	02.02.08	09.02.08	15	MLS 991257
OBH 221	28° 57,956' S	174° 37,667' W	5062	03.02.08	09.02.08	-4	MLS 010401
OBH 222	28° 52,785' S	174° 36,255' W	5647	03.02.08	09.02.08	-15	MLS 991252
OBH 223	28° 47,565' S	174° 34,665' W	5727	03.02.08	09.02.08	-17	MLS 991237
OBS 224	28° 42,441' S	174° 33,255' W	5742	03.02.08	09.02.08	24	MLS 041104
OBH 225	28° 37,085' S	174° 31,341' W	5698	03.02.08	09.02.08	NaN	MLS 020801
OBH 226	28° 31,855' S	174° 29,796' W	5671	03.02.08	09.02.08	-14	MLS 061201
OBH 227	28° 26,673' S	174° 28,263' W	5594	03.02.08	10.02.08	7	MLS 991235
OBH 228	28° 21,457' S	174° 26,679' W	5510	03.02.08	10.02.08	20	MLS 991233
OBH 229	28° 16,225' S	174° 25,148' W	5455	03.02.08	10.02.08	-9	MLS 040304
OBS 230	28° 11,014' S	174° 23,552' W	5321	03.02.08	10.02.08	65	MTS 050810
OBH 231	28° 05,789' S	174° 22,018' W	5177	03.02.08	10.02.08	8383	MLS 061203
OBH 232	28° 00,574' S	174° 20,535' W	4951	03.02.08	10.02.08	-26	MLS 991255
OBH 233	27° 55,348' S	174° 18,974' W	4800	03.02.08	10.02.08	3	MLS 991260
OBH 234	27° 50,103' S	174° 17,432' W	4347	03.02.08	10.02.08	-12	MLS 991256
OBH 235	27° 44,924' S	174° 15,813' W	2706	03.02.08	10.02.08	-1	MLS 000713
OBS 236	27° 39,666' S	174° 14,364' W	1246	03.02.08	10.02.08	-3	MLS 991249
OBH 237	27° 34,490' S	174° 12,792' W	1197	03.02.08	10.02.08	10	MLS 991241
OBH 238	27° 29,275' S	174° 11,239' W	3013	03.02.08	10.02.08	36	MLS 991253
OBH 239	27° 24,068' S	174° 09,742' W	4143	03.02.08	10.02.08	31	MLS 991250
OBH 240	27° 18,807' S	174° 08,175' W	4788	03.02.08	10.02.08	-118	MLS 061202
OBH 241	27° 13,592' S	174° 06,646' W	5124	03.02.08	10.02.08	0	MLS 040803
OBH 242	27° 08,396' S	174° 05,100' W	5190	03.02.08	10.02.08	5	MLS 991247
OBS 243	27° 03,102' S	174° 06,604' W	5262	03.02.08	10.02.08	-9	MLS 040101
OBH 244	26 °57,891' S	174° 02,070' W	5264	03.02.08	10.02.08	42	MLS 061204
OBH 245	26 °52,690' S	174° 00,533' W	5256	03.02.08	10.02.08	14	MLS 010403
OBH 246	26 °47,400' S	173° 58,975' W	5240	03.02.08	10.02.08	-12	MLS 061205
OBH 247	26° 42,263' S	173° 57,519' W	5217	03.02.08	10.02.08	2	MLS 010406
OBH 248	26° 37,020' S	173° 56,028' W	5198	03.02.08	11.02.08	7	MLS 991244
OBH 249	26° 31,038' S	173° 54,443' W	5158	03.02.08	08.02.08	-17	MLS 991259
OBS 250	26° 26,580' S	173° 52,986' W	5136	03.02.08	08.02.08	19	MLS 010404
OBH 251	26° 21,365' S	173° 51,469' W	5122	03.02.08	08.02.08	185	MLS 991248
OBH 252	26° 16,122' S	173° 49,978' W	5101	03.02.08	08.02.08	-11	MLS 040102
OBH 253	26° 10,907' S	173° 48,464' W	5108	03.02.08	08.02.08	-27	MBS971202
OBH 254	26° 05,681' S	173° 46,925' W	5145	03.02.08	08.02.08	15	MBS980902

Table 9.5 – Seismological long-term deployment during SO194

Station	Latitude	Longitude	Depth	Deployment	Recovery	Skew	Recorder
OBS 109	26° 11,981' S	175° 53,998' W	4251	07.07.07	19.01.08	-465	MLS 061201
OBS 105	26° 31,599' S	175° 58,614' W	4096	07.07.07	18.01.08	619	MLS 991233
OBS 104	26° 31,487' S	175° 46,595' W	5666	07.07.07	19.01.08	NaN	MCS060711
OBS 122	26° 41,296' S	175° 06,972' W	5789	07.07.07	30.01.08	NaN	MCS060707
OBS 101	25° 52,485' S	175° 13,470' W	5850	06.07.07	20.01.08	408	MCS060751
OBS 111	25° 52,494' S	176° 25,444' W	2763	07.07.07	31.01.08	708	MCS060706
OBS 110	26° 12,491' S	176° 05,965' W	3733	07.07.07	19.01.08	7339	MLS 991248
OBH 108	26° 21,747' S	175° 56,349' W	4230	07.07.07	19.01.08	NaN	MLS 991250
OBS 107	26° 21,831' S	176° 08,323' W	3515	07.07.07	19.01.08	38	MLS 991249
OBS 106	26° 31,551' S	176° 10,575' W	3382	07.07.07	19.01.08	NaN	MLS 991235
OBS 102	26° 12,596' S	175° 42,057' W	5202	07.07.07	20.01.08	NaN	MCS060720
OBS 103	26° 21,811' S	175° 44,310' W	5618	07.07.07	19.01.08	NaN	MLS 000712
OBS 115	26° 51,119' S	176° 15,306' W	3348	09.07.07	31.01.08	-9055	MCS060713
OBS 116	26° 51,087' S	176° 03,306' W	3741	09.07.07	18.01.08	NaN	MTS 041104
OBS 121	26° 51,105' S	175° 51,294' W	5293	09.07.07	18.01.08	1874	MTS 050810
OBS 120	27° 00,886' S	175° 53,588' W	5295	10.07.07	18.01.08	293	MLS 991247
OBS 118	27° 10,569' S	176° 07,943' W	4445	10.07.07	18.01.08	572	MLS 010407
OBS 123	27° 30,435' S	175° 33,318' W	7669	10.07.07	31.01.08	NaN	MCS060712
OBS 119	27° 10,627' S	175° 56,021' W	5659	10.07.07	30.01.08	NaN	MCS060724
OBS 112	27° 30,220' S	176° 48,663' W	2096	11.07.07	31.01.08	-37	MCS060723
OBH 117	27° 00,889' S	176° 05,553' W	4369	11.07.07	18.01.08	NaN	MLS 061202
OBS 113	27° 10,610' S	176° 19,988' W	3958	11.07.07	*lost*		MTS 050814
OBS 114	27° 00,903' S	176° 17,583' W	3648	11.07.07	15.01.08	-235	MLS 040304

Table 9.6 – Heat flow deployments

Station	Depth	Date	Lat DD	MM.SSS	Lon DDD	MM.SSS	Penetration [m]
H0801P01	5599	29.01.08	-24	26.476	-174	2.486	1.7
H0801P02	5608	29.01.08	-24	26.501	-174	3.00	1.7
H0801P03	5607	29.01.08	-24	26.498	-174	3.502	2.1
H0801P04	5609	29.01.08	-24	26.505	-174	3.998	2.8
H0801P05	5606	29.01.08	-24	26.496	-174	4.508	1.3
H0801P06	5604	29.01.08	-24	26.495	-174	5.001	1.3
H0801P07	5604	29.01.08	-24	26.508	-174	5.487	1.8
H0802P01	4229	31.1.08	-25	7.368	-175	27.400	2.8
H0802P02	4174	31.1.08	-25	6.973	-175	27.321	3.1
H0802P03	4168	31.1.08	-25	6.582	-175	27.225	1
H0802P04	4148	31.1.08	-25	6.175	-175	27.141	1
H0802P05	4148	31.1.08	-25	5.782	-175	27.058	0.5
H0802P06	4170	31.1.08	-25	5.391	-175	26.958	2.1
H0803P01	4042	1.2.08	-25	51.506	-175	37.487	2.8
H0803P02	4073	1.2.08	-25	51.111	-175	37.403	1
H0803P03	4145	1.2.08	-25	50.707	-175	37.328	1.8
H0803P04	4233	1.2.08	-25	50.312	-175	37.241	2.1
H0803P05	4310	1.2.08	-25	49.878	-175	37.164	2.4
H0803P06	4309	1.2.08	-25	49.546	-175	36.992	2.1
H0804P01	5707	1.2.08	-26	26.332	-175	45.432	0
H0804P02	5695	1.2.08	-26	25.940	-175	45.346	0.5
H0804P03	5732	1.2.08	-26	25.548	-175	45.250	0.5
H0804P04	5734	1.2.08	-26	25.149	-175	45.158	0
H0804P05	5701	1.2.08	-26	24.761	-175	45.050	1
H0804P06	5662	1.2.08	-26	24.355	-175	44.936	1.2
H0805P01	4463	2.2.08	-27	6.298	-176	6.842	0
H0805P02	4435	2.2.08	-27	5.895	-176	6.737	0
H0805P03	4476	2.2.08	-27	5.520	-176	6.640	0
H0805P04	4563	2.2.08	-27	5.106	-176	6.516	1.8
H0805P05	4480	2.2.08	-27	4.769	-176	6.465	0
H0805P06	4470	2.2.08	-27	4.317	-176	6.326	0
H0806P01	4850	7.2.08	-23	20.963	-175	17.508	3
H0806P02	4850	7.2.08	-23	20.935	-175	17.475	1.8
H0806P03	4850	7.2.08	-23	20.943	-175	17.491	3
H0806P04	4820	7.2.08	-23	20.746	-175	17.870	2.3
H0806P05	4802	7.2.08	-23	20.538	-175	18.260	0.9
H0806P06	4650	7.2.08	-23	20.321	-175	19.621	1.5
H0806P07	4547	7.2.08	-23	20.142	-175	19.009	2.7
H0806P08	4543	7.2.08	-23	19.941	-175	19.384	3.3
H0807P01	1788	11.02.08	-26	28.054	-174	43.462	0
H0807P02	1793	11.02.08	-26	28.066	-174	43.459	0
H0807P03	1807	11.02.08	-26	28.175	-174	43.460	0
H0808P01	5332	11.02.08	-24	26.448	-175	29.435	1.5
H0808P02	5245	12.02.08	-24	26.492	-175	30.008	0.5
H0808P03	5111	12.02.08	-24	26.494	-175	30.553	0.5
H0808P04	5038	12.02.08	-24	26.490	-175	31.099	1.5
H0808P05	4956	12.02.08	-24	26.495	-175	39.644	1.2
H0809P01	3516	12.02.08	-24	26.525	-175	50.978	1.5
H0809P02	3531	12.02.08	-24	26.530	-175	50.983	1.5
H0809P03	3531	12.02.08	-24	26.501	-175	51.555	0.5
H0809P04	3529	12.02.08	-24	26.505	-175	52.105	0
H0809P05	3633	12.02.08	-24	26.502	-175	52.665	0.6
H0809P06	3627	12.02.08	-24	26.508	-175	53.227	0

9.7 Captain's Report

Abkürzungen / Abbreviation

z.W	zu Wasser
a.D.	an Deck
SL (max.)	(maximale)Seillänge
LT	Lottiefe nach Hydrosweep
W x	eingesetzte Winde
SM	Simrad - Multibeam - Lot
PS	Parasound
rwk:	Rechtweisender Kurs
d:	Distanz
v:	Geschwindigkeit in Knoten
SL:	Seillänge
KL:	Kabellänge
SZ:	Seilzug

Eingesetzte Geräte

CTD	Releasertest	
OBS / H	ausgesetzt	
OBS / H	geborgen	
Magnetometer		878 nm
Airgun		
Streamer		
Seismikprofile		504 nm
EM 120		2449 nm

Einsätze

2
98
122
5
4 + 1 x Test
4
4
33

Geräteverluste: 1 OBS konnte nicht gefunden werden

Winde	D/M	Typ	RF-Nr	SO 195 Einsatz	Gesamt Einsatz	SO 195 S`länge	Gesamt S`länge	Zust.	SO 195 gefierte max. L	jemals gefierte max. Länge
W 1	18,2	LWL	812001	0 h	1006 h	0 m	481593 m	4	0 m	8022 m
W 2	18,2	LWL	120301500	64 h	347 h	40313 m	139079 m	2	5720 m	6616 m
W 4	11	NSW	818237	0 h	237 h	0 m	241324	2	0 m	5861 m
W 5	11	NSW	814720	0 h	0 h	0 m	3000 m	2	0 m	3000 m
W 6	18,2	Koax	815286	20 h	1503 h	12322 m	1145452 m	04. Mai	5522 m	6000 m

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/001-1	09.01.08	15:10	21° 9,99' S	179° 59,99' W	3453	SSE 11	27	0,7	CTD	CTD	Beginn Station	TESTSTATION (Releasertest)
SO195/001-1	09.01.08	15:25	21° 10,02' S	179° 59,95' W	3452	S 10	180,3	0,2	CTD	CTD	zu Wasser	W6, Schiebebalken
SO195/001-1	09.01.08	16:21	21° 10,16' S	179° 59,93' E	0	SSE 9	195,1	0,2	CTD	CTD	auf Tiefe	SL: 3300m
SO195/001-1	09.01.08	17:25	21° 10,18' S	179° 59,96' E	0	SSE 8	356,3	0,2	CTD	CTD	Hieven	
SO195/001-1	09.01.08	18:27	21° 10,17' S	179° 59,94' W	0	S 8	202,3	0,2	CTD	CTD	an Deck	
SO195/001-1	09.01.08	18:35	21° 10,17' S	179° 59,93' W	3447	S 9	91,2	0,4	CTD	CTD	Ende Station	
SO195/002-1	11.01.08	17:23	26° 12,86' S	176° 5,63' W	3762	SSE 16	199	2,5	Vermessung	PROFIL	Beginn Profil	rwk: 215°, d: 11sm
SO195/002-1	11.01.08	18:26	26° 20,17' S	176° 15,24' W	3558	ESE 17	279	11,4	Vermessung	PROFIL	Kursänderung	rwk: 312°, d: 30sm
SO195/002-1	11.01.08	20:57	26° 0,11' S	176° 39,86' W	1699	SE 12	313	12,2	Vermessung	PROFIL	Kursänderung	rwk: 294°, d: 268sm
SO195/002-1	12.01.08	03:57	25° 23,88' S	178° 8,76' W	2350	SSW 10	55	4,1	Vermessung	PROFIL	Ende Profil	
SO195/003-1	15.01.08	06:40	26° 49,03' S	176° 9,73' W	3393	NW 7	300,2	0,8	OBS/OBH	OBS/OBH	Beginn Station	OBS-Suche; rwk: 264°, d: 9sm
SO195/003-1	15.01.08	07:27	26° 50,26' S	176° 19,76' W	3496	WNW 6	202,1	11,4	OBS/OBH	OBS/OBH	Kursänderung	rwk: 177°, d: 21sm
SO195/003-1	15.01.08	09:00	27° 10,54' S	176° 18,69' W	3961	NNW 7	176,3	12,9	OBS/OBH	OBS/OBH	Kursänderung	RWK: 089, d: 4 nm
SO195/003-1	15.01.08	09:20	27° 10,76' S	176° 14,54' W	4005	NNW 7	101	11,5	OBS/OBH	OBS/OBH	OBS gesichtet	
SO195/003-1	15.01.08	10:03	27° 11,96' S	176° 9,47' W	4464	NNE 7	326,6	0,6	OBS/OBH	OBS/OBH	OBS an Deck	OBS # 114
SO195/003-1	15.01.08	10:05	27° 11,97' S	176° 9,49' W	4463	N 7	256,8	0,5	OBS/OBH	OBS/OBH	Kursänderung	rwk193 d,10sm
SO195/003-1	15.01.08	11:21	27° 25,61' S	176° 11,07' W	4411	NNW 7	125,7	9,1	OBS/OBH	OBS/OBH	Kursänderung	rwK: 090°, d: 6 sm
SO195/003-1	15.01.08	12:00	27° 25,35' S	176° 4,05' W	4574	W 6	358,7	9,2	OBS/OBH	OBS/OBH	Kursänderung	rwK: 360°, d: 4 sm
SO195/003-1	15.01.08	12:22	27° 21,62' S	176° 4,14' W	4620	N 6	348,4	10,1	OBS/OBH	OBS/OBH	Kursänderung	rwK: 270° d: 10 sm
SO195/003-1	15.01.08	13:13	27° 21,49' S	176° 15,29' W	4248	NNW 6	274,3	11,6	OBS/OBH	OBS/OBH	Kursänderung	rwK: 325°, d: 5 sm

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/003-1	15.01.08	13:41	27° 17,38' S	176° 18,91' W	4148	N 4	326,9	11,7	OBS/OBH	OBS/OBH	Kursänderung	rwK: 055°, d: 4 sm
SO195/003-1	15.01.08	14:06	27° 15,21' S	176° 15,22' W	4133	N 4	64,3	4,7	OBS/OBH	OBS/OBH	Ende Station	Suche OBS 113 erfoglos.
SO195/004-1	15.01.08	14:10	27° 15,12' S	176° 15,05' W	4163	NNW 4	14,1	1,4	CTD	CTD	Beginn Station	Releasertest
SO195/004-1	15.01.08	14:16	27° 15,11' S	176° 15,09' W	4157	N 2	230	0,3	CTD	CTD	zu Wasser	Schiebeballken, W6
SO195/004-1	15.01.08	15:14	27° 15,11' S	176° 15,14' W	0	NNW 2	88,7	0,3	CTD	CTD	auf Tiefe	SL: 3500 m
SO195/004-1	15.01.08	15:47	27° 15,12' S	176° 15,16' W	0	NNW 1	287,6	0,4	CTD	CTD	Hieven	
SO195/004-1	15.01.08	16:42	27° 15,11' S	176° 15,17' W	4135	WNW 3	300,5	0,1	CTD	CTD	an Deck	
SO195/004-1	15.01.08	16:44	27° 15,12' S	176° 15,17' W	4140	W 3	226,6	0,2	CTD	CTD	Ende Station	
SO195/005-1	15.01.08	16:50	27° 15,12' S	176° 15,18' W	4134	WNW 3	302	0,2	OBS/OBH	OBS/OBH	Beginn Station	Airguntest
SO195/005-1	15.01.08	16:56	27° 15,11' S	176° 15,18' W	4131	WNW 3	260,7	0	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 126
SO195/005-1	15.01.08	17:03	27° 15,10' S	176° 15,17' W	4129	W 3	161,8	0,2	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 127
SO195/005-1	15.01.08	17:04	27° 15,11' S	176° 15,17' W	4144	W 3	234,6	0,3	OBS/OBH	OBS/OBH	Ende Station	
SO195/005-2	15.01.08	17:49	27° 16,04' S	176° 16,11' W	4078	NE 1	44,3	1,7	Profil	PR	Bb-Airgunarray zu Wasser	
SO195/005-2	15.01.08	18:51	27° 13,79' S	176° 13,71' W	4238	N 0	41,8	3,2	Profil	PR	Streamer zu Wasser	
SO195/005-2	15.01.08	20:21	27° 10,34' S	176° 9,28' W	4409	SSE 2	57,6	2,6	Profil	PR	Beginn hieven Streamer	
SO195/005-2	15.01.08	20:30	27° 10,16' S	176° 8,96' W	4443	S 4	51,8	2,2	Profil	PR	Streamer an Deck	
SO195/005-2	15.01.08	20:33	27° 10,10' S	176° 8,85' W	4448	S 3	53,9	2,4	Profil	PR	Airgun abgeschaltet	
SO195/005-2	15.01.08	21:00	27° 9,50' S	176° 7,81' W	4365	SSE 3	61	2,7	Profil	PR	Bb airgun an Deck	
SO195/005-2	15.01.08	21:00	27° 9,50' S	176° 7,81' W	4365	SSE 3	61	2,7	Profil	PR	Stationsende	
SO195/006-1	15.01.08	21:07	27° 9,33' S	176° 7,52' W	4402	SE 4	60,8	2,6	Vermessung	PROFIL	Beginn Profil	OBS Suchprofile,RWK 180°, d: 14 nm
SO195/006-1	15.01.08	23:00	27° 28,23' S	176° 0,08' W	5042	NE 13	185,1	13	Vermessung	PROFIL	Kursänderung	rwk269° d,25 sm
SO195/006-1	16.01.08	01:00	27° 28,75' S	176° 27,50' W	3611	SW 8	269,2	12,4	Vermessung	PROFIL	Kursänderung	rwK: 360°, d: 10 sm
SO195/006-1	16.01.08	01:54	27° 18,26' S	176° 27,64' W	3980	SW 8	359,8	12	Vermessung	PROFIL	Kursänderung	rrwK: 090°, d: 20 sm
SO195/006-1	16.01.08	03:20	27° 18,09' S	176° 8,05' W	4629	W 7	87,5	12,5	Vermessung	PROFIL	Ende Profil	
SO195/007-1	16.01.08	03:46	27° 16,05' S	176° 11,95' W	4437	W 6	286,6	10,6	OBS/OBH	OBS/OBH	Beginn Station	
SO195/007-1	16.01.08	03:47	27° 16,00' S	176° 12,12' W	4449	WNW 7	291,2	9,2	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 126
SO195/007-1	16.01.08	04:36	27° 15,26' S	176° 15,23' W	0	W 6	61	0,4	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 127
SO195/007-1	16.01.08	05:02	27° 15,19' S	176° 15,18' W	0	W 6	79,9	0,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 126
SO195/007-1	16.01.08	05:10	27° 15,04' S	176° 15,18' W	0	W 7	321,5	0,3	OBS/OBH	OBS/OBH	OBS an Deck	OBS 126
SO195/007-1	16.01.08	05:49	27° 15,22' S	176° 15,14' W	0	W 7	356,9	0,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 127
SO195/007-1	16.01.08	05:56	27° 15,07' S	176° 15,18' W	4120	NW 7	341,2	0,3	OBS/OBH	OBS/OBH	OBS an Deck	OBS 127
SO195/007-1	16.01.08	06:00	27° 14,97' S	176° 15,14' W	4120	NW 9	40,2	4,2	OBS/OBH	OBS/OBH	Ende Station	
SO195/008-1	16.01.08	06:53	27° 7,96' S	176° 7,48' W	4347	NW 9	46,5	8,3	OBS/OBH	OBS/OBH	Beginn Station	
SO195/008-1	16.01.08	07:00	27° 7,56' S	176° 7,21' W	4332	WNW 8	21	1	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS # 130
SO195/008-1	16.01.08	07:31	27° 4,08' S	176° 6,36' W	4364	NW 7	350,5	0,5	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS # 131
SO195/008-1	16.01.08	08:20	26° 57,06' S	176° 4,68' W	4527	NW 7	340,4	0,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH #132
SO195/008-1	16.01.08	08:48	26° 54,06' S	176° 4,01' W	4301	NNW 8	30,6	1,2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 133
SO195/008-1	16.01.08	09:24	26° 49,63' S	176° 2,99' W	3918	NNW 7	26	0,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 134
SO195/008-1	16.01.08	09:51	26° 47,02' S	176° 2,36' W	4386	NNW 6	38,8	1,2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH# 135
SO195/008-1	16.01.08	10:20	26° 43,98' S	176° 1,63' W	4551	N 8	9,6	1,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH# 136

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/008-1	16.01.08	10:45	26° 41,00' S	176° 0,94' W	4603	N 8	19,2	1,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH# 137
SO195/008-1	16.01.08	11:14	26° 38,01' S	176° 0,23' W	4691	N 9	266,1	0,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH# 138
SO195/008-1	16.01.08	11:43	26° 35,01' S	175° 59,52' W	4484	N 8	208,7	0,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OSH # 139
SO195/008-1	16.01.08	12:36	26° 28,01' S	175° 57,84' W	4343	NNE 7	105,1	0,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 140
SO195/008-1	16.01.08	13:02	26° 25,03' S	175° 57,15' W	4399	N 6	9,2	3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 141
SO195/008-1	16.01.08	13:53	26° 18,52' S	175° 55,62' W	4318	NNE 6	7,7	0,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 142
SO195/008-1	16.01.08	14:22	26° 15,00' S	175° 54,80' W	4257	NNE 5	26,8	1,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 143
SO195/008-1	16.01.08	15:08	26° 8,88' S	175° 53,39' W	4265	NE 4	352,8	1,2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 144
SO195/008-1	16.01.08	15:36	26° 5,54' S	175° 52,59' W	4251	NE 4	30,9	0,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 145
SO195/008-1	16.01.08	16:03	26° 2,30' S	175° 51,82' W	4195	NNE 2	43,7	0,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 146
SO195/008-1	16.01.08	16:29	25° 59,03' S	175° 51,09' W	4017	NE 7	336,3	0,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 147
SO195/008-1	16.01.08	16:55	25° 55,85' S	175° 50,32' W	4035	NNE 3	347,7	0,7	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 148
SO195/008-1	16.01.08	17:21	25° 52,56' S	175° 49,54' W	3736	NNE 6	8,3	1,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 149
SO195/008-1	16.01.08	17:47	25° 49,40' S	175° 48,81' W	3776	NNE 11	358,4	0,7	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH # 150
SO195/008-1	16.01.08	17:48	25° 49,40' S	175° 48,81' W	3784	NNE 11	324	0,4	OBS/OBH	OBS/OBH	Ende Station	
SO195/009-1	16.01.08	20:15	25° 30,17' S	175° 44,90' W	3262	NW 9	34,4	2,5	Profil	PR	Stationsbeginn	
SO195/009-1	16.01.08	20:30	25° 29,75' S	175° 44,78' W	3317	NNW 8	11,4	1,8	Profil	PR	Bb-Airgunarray zu Wasser	
SO195/009-1	16.01.08	20:59	25° 28,91' S	175° 44,53' W	3294	N 7	16,1	2,1	Profil	PR	Stb-Airgunarray zu Wasser	
SO195/009-1	16.01.08	21:21	25° 29,85' S	175° 44,23' W	3439	NNE 8	194,6	4,4	Profil	PR	Beginn Profil	Profil # 01, RWK: 192°, d: 112 nm
SO195/009-1	16.01.08	21:54	25° 32,34' S	175° 44,81' W	3589	NNE 8	193,2	4,5	Profil	PR	Streamer zu Wasser	SL: 350 m
SO195/009-1	17.01.08	23:00	27° 19,88' S	176° 10,15' W	4444	NE 12	185,7	3,9	Profil	PR	Ende Profil	
SO195/009-1	17.01.08	23:10	27° 20,43' S	176° 10,25' W	4446	NE 11	177,9	2,4	Profil	PR	Streamer an Deck	
SO195/009-1	17.01.08	23:44	27° 20,58' S	176° 9,49' W	4241	NE 11	60	1,6	Profil	PR	Stb-Airgunarray an Deck	
SO195/009-1	18.01.08	00:05	27° 20,44' S	176° 9,08' W	4305	ENE 11	76,8	1,3	Profil	PR	Bb-Airgunarray an Deck	
SO195/009-1	18.01.08	00:10	27° 20,37' S	176° 8,91' W	4292	ENE 10	62,3	2	Profil	PR	Stationsende	
SO195/010-1	18.01.08	00:40	27° 16,22' S	176° 8,48' W	0	ENE 15	3,2	10,3	OBS/OBH	OBS/OBH	Beginn Station	
SO195/010-1	18.01.08	00:41	27° 16,05' S	176° 8,46' W	0	ENE 14	2,9	10,1	OBS/OBH	OBS/OBH	OBS ausgelöst	OBH 118
SO195/010-1	18.01.08	01:00	27° 12,78' S	176° 8,14' W	0	ENE 14	4,5	10,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 130
SO195/010-1	18.01.08	02:10	27° 10,74' S	176° 8,13' W	0	ENE 12	23,6	1,1	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 118
SO195/010-1	18.01.08	02:25	27° 10,75' S	176° 7,86' W	0	NNE 11	186,2	0,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 118
SO195/010-1	18.01.08	02:36	27° 9,62' S	176° 7,73' W	0	ENE 14	3,9	9,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 131
SO195/010-1	18.01.08	02:46	27° 7,96' S	176° 7,61' W	0	ENE 14	8,5	7	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 130
SO195/010-1	18.01.08	02:59	27° 7,97' S	176° 7,38' W	0	NE 9	174	1,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 130
SO195/010-1	18.01.08	03:46	27° 4,16' S	176° 6,58' W	0	ENE 9	275,9	0,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 117
SO195/010-1	18.01.08	03:56	27° 4,15' S	176° 6,58' W	0	ENE 9	75,9	0,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 131
SO195/010-1	18.01.08	04:05	27° 4,12' S	176° 6,40' W	0	ENE 10	186,7	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 131
SO195/010-1	18.01.08	04:20	27° 2,95' S	176° 6,26' W	0	ENE 13	8,3	8,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 132
SO195/010-1	18.01.08	04:30	27° 1,56' S	176° 5,91' W	0	NE 13	12,4	8,1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 117
SO195/010-1	18.01.08	05:08	27° 1,60' S	176° 5,43' W	0	NE 10	164,9	1,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 117
SO195/010-1	18.01.08	05:22	27° 0,51' S	176° 5,24' W	0	ENE 13	358,5	10	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 133

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/010-1	18.01.08	06:11	26° 57,19' S	176° 4,86' W	0	NE 12	61,6	0,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 132
SO195/010-1	18.01.08	06:21	26° 57,31' S	176° 4,65' W	0	NE 9	203,2	1,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 132
SO195/010-1	18.01.08	06:42	26° 54,88' S	176° 4,31' W	0	ENE 12	10,8	10,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 133
SO195/010-1	18.01.08	06:52	26° 54,72' S	176° 4,06' W	0	ENE 8	191,1	2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 133
SO195/010-1	18.01.08	07:30	26° 58,65' S	175° 58,27' W	0	NE 7	125,5	11,9	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 120
SO195/010-1	18.01.08	07:31	26° 58,76' S	175° 58,09' W	0	NE 11	127,6	12	OBS/OBH	OBS/OBH	OBS gesichtet	OBS120
SO195/010-1	18.01.08	08:37	26° 55,87' S	175° 51,90' W	0	ENE 10	359,3	10,5	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 121
SO195/010-1	18.01.08	09:16	27° 1,13' S	175° 51,49' W	0	ENE 9	213,2	0,8	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 120
SO195/010-1	18.01.08	09:47	27° 1,65' S	175° 53,25' W	0	NE 9	218,4	1,5	OBS/OBH	OBS/OBH	OBS an Deck	OBS 120
SO195/010-1	18.01.08	10:02	27° 0,55' S	175° 53,02' W	0	ENE 10	9,1	10,8	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 121
SO195/010-1	18.01.08	11:00	26° 52,42' S	175° 51,00' W	0	NE 9	198,8	1,6	OBS/OBH	OBS/OBH	OBS an Deck	OBS 121
SO195/010-1	18.01.08	11:36	26° 52,02' S	175° 57,15' W	0	N 4	277,2	12,3	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 116
SO195/010-1	18.01.08	12:15	26° 50,63' S	176° 3,35' W	0	ESE 9	130,9	1,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 134
SO195/010-1	18.01.08	12:26	26° 51,00' S	176° 3,82' W	0	NE 10	198,1	5,4	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 116
SO195/010-1	18.01.08	13:04	26° 52,12' S	176° 3,19' W	0	ENE 8	176,9	2,2	OBS/OBH	OBS/OBH	OBS an Deck	OBS 116
SO195/010-1	18.01.08	13:17	26° 51,16' S	176° 3,28' W	0	ENE 11	354,5	8,9	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 134
SO195/010-1	18.01.08	13:25	26° 50,51' S	176° 3,29' W	0	ENE 9	46,8	2,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 135
SO195/010-1	18.01.08	13:39	26° 50,67' S	176° 3,09' W	0	NE 9	187,4	1,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 134
SO195/010-1	18.01.08	14:04	26° 47,98' S	176° 2,73' W	0	NE 14	5	10,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 136
SO195/010-1	18.01.08	14:19	26° 47,14' S	176° 2,50' W	0	E 11	85	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 135
SO195/010-1	18.01.08	14:29	26° 47,41' S	176° 2,43' W	0	ENE 8	174,6	2,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 135
SO195/010-1	18.01.08	14:42	26° 46,40' S	176° 2,36' W	0	E 11	4,3	8,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 136
SO195/010-1	18.01.08	14:59	26° 44,19' S	176° 1,95' W	0	ESE 10	74,7	1,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 137
SO195/010-1	18.01.08	15:12	26° 44,48' S	176° 1,87' W	0	ENE 8	190,8	2,2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 136
SO195/010-1	18.01.08	15:27	26° 42,93' S	176° 1,49' W	0	ENE 11	11,3	10,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 138
SO195/010-1	18.01.08	16:22	26° 38,21' S	176° 0,34' W	0	ENE 10	157,4	0,1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 138
SO195/010-1	18.01.08	16:27	26° 38,16' S	176° 0,45' W	0	ENE 8	288,8	3,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 139
SO195/010-1	18.01.08	16:38	26° 38,31' S	176° 0,55' W	0	ENE 8	185,6	2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 138
SO195/010-1	18.01.08	16:57	26° 41,23' S	176° 0,99' W	0	ENE 8	222,2	5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 137
SO195/010-1	18.01.08	17:09	26° 41,31' S	176° 1,18' W	0	ENE 6	178,4	2,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 137
SO195/010-1	18.01.08	17:45	26° 36,23' S	176° 0,02' W	0	ENE 10	10,1	10,9	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 105
SO195/010-1	18.01.08	17:46	26° 36,06' S	175° 59,98' W	0	ENE 10	9,4	10,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 139
SO195/010-1	18.01.08	18:02	26° 35,58' S	175° 59,78' W	0	NE 8	181	1,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 139
SO195/010-1	18.01.08	18:10	26° 35,06' S	175° 59,60' W	0	E 9	9,5	10,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 140
SO195/010-1	18.01.08	19:20	26° 28,85' S	175° 58,00' W	0	ENE 9	2,1	8,9	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 140
SO195/010-1	18.01.08	19:41	26° 28,56' S	175° 57,94' W	0	ENE 6	160,4	2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 140
SO195/010-1	18.01.08	20:06	26° 33,04' S	175° 58,72' W	0	ENE 9	197,4	9	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 105
SO195/010-1	18.01.08	20:20	26° 33,52' S	175° 58,51' W	0	NE 9	171,7	2,4	OBS/OBH	OBS/OBH	OBS an Deck	OBS 105
SO195/010-1	18.01.08	21:05	26° 26,70' S	175° 57,52' W	4544	ENE 10	12,2	10,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 141
SO195/010-1	18.01.08	21:54	26° 25,38' S	175° 57,09' W	0	NE 7	174,9	2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 141

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/010-1	18.01.08	22:48	26° 30,19' S	176° 6,75' W	0	E 8	246,1	12,7	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 106
SO195/010-1	18.01.08	23:31	26° 31,87' S	176° 10,73' W	0	ENE 6	194,5	1,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 106
SO195/010-1	18.01.08	23:46	26° 32,13' S	176° 10,43' W	0	ENE 7	168,6	2,4	OBS/OBH	OBS/OBH	OBS an Deck	OBS 106
SO195/010-1	19.01.08	00:16	26° 28,67' S	176° 9,67' W	0	E 9	8,2	10,8	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 107
SO195/010-1	19.01.08	00:59	26° 22,10' S	176° 8,46' W	0	ENE 7	114,9	1,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 107
SO195/010-1	19.01.08	01:14	26° 22,26' S	176° 8,21' W	0	ENE 6	161,6	2	OBS/OBH	OBS/OBH	OBS an Deck	OBS 107
SO195/010-1	19.01.08	01:43	26° 18,50' S	176° 7,47' W	3469	E 9	10,5	11,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 110
SO195/010-1	19.01.08	02:25	26° 12,82' S	176° 6,21' W	0	E 7	135,6	0,8	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 110
SO195/010-1	19.01.08	02:36	26° 12,96' S	176° 5,91' W	0	E 6	159,4	2,5	OBS/OBH	OBS/OBH	OBS an Deck	OBS 110
SO195/010-1	19.01.08	05:44	25° 52,78' S	175° 52,59' W	3385	E 10	21,5	11,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 150
SO195/010-1	19.01.08	06:12	25° 49,36' S	175° 49,30' W	0	E 8	100,4	6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 149
SO195/010-1	19.01.08	06:32	25° 49,54' S	175° 49,03' W	0	ENE 8	82,6	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 150
SO195/010-1	19.01.08	06:42	25° 49,68' S	175° 48,60' W	0	E 8	173,3	2,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 150
SO195/010-1	19.01.08	06:59	25° 52,60' S	175° 49,14' W	0	ENE 10	198,4	11	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 149
SO195/010-1	19.01.08	07:00	25° 52,76' S	175° 49,19' W	0	ENE 9	197,4	9,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 148
SO195/010-1	19.01.08	07:37	25° 53,18' S	175° 49,22' W	0	NE 8	180,6	1,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 149
SO195/010-1	19.01.08	08:09	25° 56,07' S	175° 50,01' W	0	NE 10	224,8	1,2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 148
SO195/010-1	19.01.08	08:28	25° 58,59' S	175° 50,92' W	0	ENE 10	197,7	13,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 147
SO195/010-1	19.01.08	08:51	25° 59,23' S	175° 51,49' W	0	E 11	13,9	0,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 147
SO195/010-1	19.01.08	09:25	25° 59,42' S	175° 50,69' W	0	NE 10	193,2	1,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 146
SO195/010-1	19.01.08	09:45	26° 2,52' S	175° 51,79' W	0	E 10	236,8	4,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 144
SO195/010-1	19.01.08	10:05	26° 2,38' S	175° 51,37' W	0	ENE 8	158,1	0,8	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 146
SO195/010-1	19.01.08	10:07	26° 2,42' S	175° 51,37' W	0	ENE 8	174,7	1,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 146
SO195/010-1	19.01.08	10:08	26° 2,44' S	175° 51,36' W	0	E 9	180,8	1,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 145
SO195/010-1	19.01.08	10:45	26° 5,58' S	175° 52,36' W	0	ENE 8	108,7	2,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 144
SO195/010-1	19.01.08	10:55	26° 5,80' S	175° 52,29' W	0	NE 11	224,6	1,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 145
SO195/010-1	19.01.08	10:57	26° 5,89' S	175° 52,32' W	0	ENE 11	193,3	4,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 145
SO195/010-1	19.01.08	11:18	26° 8,92' S	175° 53,12' W	0	NE 9	179,9	8,5	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 109
SO195/010-1	19.01.08	12:00	26° 9,18' S	175° 53,74' W	0	ENE 9	255,4	0,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 144
SO195/010-1	19.01.08	12:30	26° 9,20' S	175° 53,10' W	0	NE 10	181,3	1,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 144
SO195/010-1	19.01.08	12:58	26° 12,52' S	175° 54,42' W	0	ENE 11	279,1	7,7	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 109
SO195/010-1	19.01.08	13:15	26° 12,13' S	175° 53,95' W	0	E 8	157,6	1,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 109
SO195/010-1	19.01.08	13:21	26° 12,48' S	175° 53,99' W	0	E 12	204,4	6,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 143
SO195/010-1	19.01.08	13:32	26° 14,16' S	175° 54,46' W	0	NE 11	187,2	10,2	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 142
SO195/010-1	19.01.08	14:53	26° 15,45' S	175° 55,15' W	0	ENE 12	46,7	2,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 143
SO195/010-1	19.01.08	15:10	26° 15,18' S	175° 54,72' W	0	NE 11	183,9	2,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 143
SO195/010-1	19.01.08	15:26	26° 18,00' S	175° 55,34' W	0	NE 11	185,3	11,9	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 142
SO195/010-1	19.01.08	15:35	26° 19,05' S	175° 55,46' W	0	NE 12	191,6	5,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 108
SO195/010-1	19.01.08	15:57	26° 20,45' S	175° 55,60' W	0	NE 9	188,8	2,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 142
SO195/010-1	19.01.08	16:15	26° 22,05' S	175° 56,42' W	0	NE 9	270,7	4,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 108

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/010-1	19.01.08	16:24	26° 21,95' S	175° 56,44' W	4245	ENE 11	185,5	2,2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 108
SO195/010-1	19.01.08	17:05	26° 27,80' S	175° 50,33' W	5400	NE 12	139,6	12,9	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 104
SO195/010-1	19.01.08	18:50	26° 31,67' S	175° 46,79' W	0	ENE 13	123,6	0,4	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 104
SO195/010-1	19.01.08	18:59	26° 31,40' S	175° 46,66' W	0	ESE 12	166,5	2,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 104
SO195/010-1	19.01.08	19:47	26° 24,64' S	175° 44,96' W	0	ENE 14	13,7	10,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBS 103
SO195/010-1	19.01.08	21:12	26° 21,94' S	175° 44,49' W	0	ENE 12	208	1,7	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 103
SO195/010-1	19.01.08	21:27	26° 21,91' S	175° 44,44' W	0	ENE 11	195,6	1,8	OBS/OBH	OBS/OBH	OBS an Deck	OBS 103
SO195/010-1	19.01.08	22:03	26° 16,79' S	175° 43,07' W	0	ENE 15	7,7	10,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 102
SO195/010-1	19.01.08	23:42	26° 13,06' S	175° 42,25' W	0	ENE 12	19,2	2,8	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 102
SO195/010-1	19.01.08	23:58	26° 12,75' S	175° 41,94' W	0	NE 12	182,5	2,4	OBS/OBH	OBS/OBH	OBS an Deck	OBS 102
SO195/010-1	20.01.08	02:45	25° 56,06' S	175° 18,55' W	0	ENE 9	54,9	10,8	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 101
SO195/010-1	20.01.08	04:35	25° 52,57' S	175° 13,66' W	0	ENE 10	332,6	0,4	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 101
SO195/010-1	20.01.08	04:50	25° 52,97' S	175° 13,96' W	5801	NE 8	243,8	1,8	OBS/OBH	OBS/OBH	OBS an Deck	OBS 101
SO195/010-1	20.01.08	04:52	25° 52,99' S	175° 14,01' W	5794	NE 8	243,7	1,6	OBS/OBH	OBS/OBH	Ende Station	
SO195/011-1	20.01.08	05:04	25° 52,50' S	175° 13,50' W	5852	E 10	61,7	6,9	Vermessung	PROFIL	Beginn Profil	rwk: 100°, d: 9 sm
SO195/011-1	20.01.08	05:56	25° 53,91' S	175° 3,60' W	2680	ENE 7	82,1	10,6	Vermessung	PROFIL	Kursänderung	rwk: 004°, d: 81sm
SO195/011-1	20.01.08	13:12	24° 33,15' S	174° 57,00' W	7070	ENE 15	25,6	8,1	Vermessung	PROFIL	Kursänderung	rwK: 090°, d: 13 sm
SO195/011-1	20.01.08	14:25	24° 32,87' S	174° 43,12' W	6024	NE 11	27	7	Vermessung	PROFIL	Kursänderung	rwK: 356°, d: 7 sm
SO195/011-1	20.01.08	15:00	24° 26,71' S	174° 43,51' W	6040	ENE 13	333	5,8	Vermessung	PROFIL	Ende Profil	Beginn Aussetzen OBS/OBH
SO195/012-1	20.01.08	15:01	24° 26,67' S	174° 43,59' W	6137	NNE 11	286,7	4,6	OBS/OBH	OBS/OBH	Beginn Station	
SO195/012-1	20.01.08	15:09	24° 26,53' S	174° 43,51' W	6092	ENE 10	334	0,4	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 177-8000
SO195/012-1	20.01.08	15:40	24° 26,49' S	174° 47,95' W	6364	E 7	293,8	0,8	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 178-8000
SO195/012-1	20.01.08	16:11	24° 26,50' S	174° 52,47' W	7063	ESE 7	309,9	0,7	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 179-8000
SO195/012-1	20.01.08	16:39	24° 26,51' S	174° 56,94' W	7321	E 6	287,4	1,4	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 180-8000
SO195/012-1	20.01.08	18:13	24° 26,50' S	175° 15,99' W	7754	E 8	284,4	2,7	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 181-8000
SO195/012-1	20.01.08	18:39	24° 26,49' S	175° 20,01' W	6663	ESE 7	296	1,4	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 182-8000
SO195/012-1	20.01.08	19:00	24° 26,50' S	175° 22,98' W	5758	E 9	278,9	1,9	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 183
SO195/012-1	20.01.08	19:31	24° 26,51' S	175° 27,00' W	5651	ESE 7	271,9	1,5	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 184
SO195/012-1	20.01.08	19:53	24° 26,49' S	175° 29,47' W	5332	E 10	271,6	1,2	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 185
SO195/012-1	20.01.08	20:22	24° 26,49' S	175° 34,04' W	4233	ESE 11	283,8	1,5	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 186
SO195/012-1	20.01.08	20:56	24° 26,50' S	175° 39,00' W	4335	ESE 12	288,6	1,1	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 187
SO195/012-1	20.01.08	21:07	24° 26,52' S	175° 40,63' W	4723	E 9	270	12	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 188
SO195/012-1	20.01.08	21:53	24° 26,52' S	175° 46,98' W	3736	E 7	276,8	1,8	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 189
SO195/012-1	20.01.08	22:20	24° 26,49' S	175° 51,01' W	3518	E 7	293,4	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 190
SO195/012-1	20.01.08	22:49	24° 26,51' S	175° 54,97' W	3221	E 7	288,2	1,4	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 191
SO195/012-1	20.01.08	23:18	24° 26,51' S	175° 59,02' W	2901	E 6	287,6	0,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 192
SO195/012-1	20.01.08	23:46	24° 26,52' S	176° 2,98' W	2089	ENE 7	235,1	2,4	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 193
SO195/012-1	21.01.08	00:15	24° 26,51' S	176° 7,02' W	1409	ESE 7	281,7	1,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 194
SO195/012-1	21.01.08	00:41	24° 26,52' S	176° 11,02' W	1295	ENE 6	267,4	2,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 195
SO195/012-1	21.01.08	01:10	24° 26,51' S	176° 15,11' W	1037	E 7	264,3	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 196

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/012-1	21.01.08	01:35	24° 26,48' S	176° 19,11' W	873	ENE 11	269	1,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 197
SO195/012-1	21.01.08	02:00	24° 26,49' S	176° 23,01' W	1400	E 6	276,8	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 198
SO195/012-1	21.01.08	02:27	24° 26,50' S	176° 27,07' W	1416	E 7	275,3	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 199
SO195/012-1	21.01.08	02:48	24° 26,51' S	176° 30,04' W	1573	E 6	268,7	2,4	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 200
SO195/012-1	21.01.08	03:11	24° 26,53' S	176° 33,49' W	1917	E 6	251,3	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 201
SO195/012-1	21.01.08	03:32	24° 26,49' S	176° 37,01' W	1202	E 6	263,7	1,9	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 202
SO195/012-1	21.01.08	03:54	24° 26,49' S	176° 40,50' W	1488	E 7	272,4	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 203
SO195/012-1	21.01.08	04:15	24° 26,50' S	176° 44,00' W	1520	ESE 6	281,6	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 204
SO195/012-1	21.01.08	04:37	24° 26,50' S	176° 47,49' W	1512	ESE 7	272,2	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 205
SO195/012-1	21.01.08	04:59	24° 26,51' S	176° 51,04' W	1486	E 5	282	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 206
SO195/012-1	21.01.08	05:21	24° 26,48' S	176° 54,50' W	1051	ESE 7	301,2	1,7	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 207
SO195/012-1	21.01.08	05:43	24° 26,50' S	176° 57,99' W	1198	ESE 6	275,6	1,4	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 208
SO195/012-1	21.01.08	06:05	24° 26,49' S	177° 1,51' W	1240	ESE 6	262,1	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 209
SO195/012-1	21.01.08	06:27	24° 26,50' S	177° 4,98' W	1178	E 7	279,6	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 210
SO195/012-1	21.01.08	06:54	24° 26,50' S	177° 8,49' W	1180	ESE 10	173,5	1,9	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 211
SO195/012-1	21.01.08	07:20	24° 26,52' S	177° 12,09' W	1855	E 8	277,8	3,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 212
SO195/012-1	21.01.08	07:44	24° 26,52' S	177° 15,51' W	2107	E 8	265,3	2,4	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 213
SO195/012-1	21.01.08	08:11	24° 26,52' S	177° 18,98' W	1967	E 7	263,9	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 214
SO195/012-1	21.01.08	08:36	24° 26,52' S	177° 22,47' W	2086	E 7	253,3	1,9	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 215
SO195/012-1	21.01.08	09:00	24° 26,51' S	177° 26,00' W	1906	E 6	277,5	2,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 216
SO195/012-1	21.01.08	09:00	24° 26,51' S	177° 26,00' W	1906	E 6	277,5	2,6	OBS/OBH	OBS/OBH	Kursänderung	rwk: 180*
SO195/012-1	21.01.08	09:20	24° 29,13' S	177° 26,81' W	1776	SE 11	261,5	11,2	OBS/OBH	OBS/OBH	Kursänderung	rwk: 270°
SO195/012-1	21.01.08	10:37	24° 29,50' S	177° 42,84' W	1756	E 8	270,5	11,4	OBS/OBH	OBS/OBH	Kursänderung	rwk: 360°
SO195/012-1	21.01.08	11:00	24° 26,82' S	177° 45,46' W	1759	E 9	323,6	7,8	OBS/OBH	OBS/OBH	Ende Station	
SO195/013-1	21.01.08	11:06	24° 26,47' S	177° 45,41' W	1822	E 8	68,3	1,7	Profil	PR	Stationsbeginn	
SO195/013-1	21.01.08	11:28	24° 26,46' S	177° 44,68' W	1818	E 9	89,7	1,9	Profil	PR	Bb-Airgunarray zu Wasser	rwK: 090°, d: 178 sm, FdW: 4,0 kn
SO195/013-1	21.01.08	11:39	24° 26,47' S	177° 43,93' W	1802	E 9	89	4,1	Profil	PR	Streamerendboje z.W.	
SO195/013-1	21.01.08	11:46	24° 26,48' S	177° 43,44' W	1740	E 9	95,7	2,8	Profil	PR	Streamer zu Wasser	SL: 300 m
SO195/013-1	21.01.08	11:47	24° 26,48' S	177° 43,38' W	1775	E 8	88,3	3,8	Profil	PR	Beginn Profil	FüG: 4,5 kn
SO195/013-1	22.01.08	03:03	24° 26,49' S	176° 29,93' W	785	ESE 8	82,2	2,5	Profil	PR	Beginn hieven Streamer	
SO195/013-1	22.01.08	03:10	24° 26,47' S	176° 29,62' W	774	ESE 9	83,4	2,6	Profil	PR	Streamer an Deck	
SO195/013-1	22.01.08	03:32	24° 26,46' S	176° 28,85' W	746	ESE 8	87,4	2	Profil	PR	Stb-Airgunarray zu Wasser	
SO195/013-1	22.01.08	03:43	24° 26,48' S	176° 28,12' W	735	ESE 10	92,5	4,4	Profil	PR	Streamer zu Wasser	SL: 300m
SO195/013-1	23.01.08	03:00	24° 26,51' S	174° 30,18' W	5825	SSE 13	90,6	4,4	Profil	PR	Ende Profil	
SO195/013-1	23.01.08	03:02	24° 26,51' S	174° 30,08' W	5815	SSE 13	84,5	2,2	Profil	PR	Beginn hieven Streamer	
SO195/013-1	23.01.08	03:11	24° 26,49' S	174° 29,79' W	5812	SSE 12	97,7	2	Profil	PR	Streamer an Deck	
SO195/013-1	23.01.08	03:36	24° 26,56' S	174° 28,88' W	5786	SSE 13	77,9	1,9	Profil	PR	Stb-Airgunarray an Deck	
SO195/013-1	23.01.08	04:08	24° 26,62' S	174° 27,85' W	5762	SSE 11	92,8	2	Profil	PR	Bb-Airgunarray an Deck	
SO195/013-1	23.01.08	04:14	24° 26,64' S	174° 27,64' W	5759	SSE 14	102,8	2	Profil	PR	Stationsende	
SO195/014-1	23.01.08	05:10	24° 24,07' S	174° 37,99' W	5988	SE 13	271,6	12,6	OBS/OBH	OBS/OBH	Beginn Station	

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/014-1	23.01.08	05:11	24° 24,07' S	174° 38,22' W	6114	SE 12	271,3	12,8	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 177-8000
SO195/014-1	23.01.08	06:11	24° 26,37' S	174° 43,78' W	0	SSE 14	113	2,2	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 178-8000
SO195/014-1	23.01.08	07:00	24° 26,42' S	174° 43,60' W	0	SSE 11	176,4	0,5	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 177-8000
SO195/014-1	23.01.08	07:03	24° 26,49' S	174° 43,63' W	0	SSW 11	252,9	3,5	OBS/OBH	OBS/OBH	OBS an Deck	OBS 177-8000
SO195/014-1	23.01.08	08:04	24° 26,39' S	174° 48,21' W	0	SSE 14	41,1	0,4	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 179-8000
SO195/014-1	23.01.08	08:05	24° 26,38' S	174° 48,22' W	0	SE 13	314,3	0,2	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 178-8000
SO195/014-1	23.01.08	08:20	24° 26,44' S	174° 47,77' W	0	SE 11	244,2	0,7	OBS/OBH	OBS/OBH	OBS an Deck	OBS 178-8000
SO195/014-1	23.01.08	09:00	24° 26,39' S	174° 52,59' W	0	SE 14	65,6	0,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 180-8000
SO195/014-1	23.01.08	09:46	24° 26,44' S	174° 52,62' W	0	SE 10	202,7	0,8	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 179-8000
SO195/014-1	23.01.08	10:09	24° 26,59' S	174° 52,33' W	0	SE 10	225,4	2,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 179-8000
SO195/014-1	23.01.08	10:52	24° 26,35' S	174° 56,98' W	0	SE 11	335	0,4	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 180-8000
SO195/014-1	23.01.08	11:05	24° 26,56' S	174° 56,83' W	0	SE 9	157,3	1,2	OBS/OBH	OBS/OBH	OBS an Deck	OBS 180-8000
SO195/014-1	23.01.08	12:35	24° 26,72' S	175° 11,97' W	0	SSE 12	269,1	12,3	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 181-8000
SO195/014-1	23.01.08	13:55	24° 26,33' S	175° 16,13' W	0	SSE 10	282,2	0,5	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 182-8000
SO195/014-1	23.01.08	14:39	24° 26,28' S	175° 16,01' W	0	SE 9	90,2	2,2	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 181-8000
SO195/014-1	23.01.08	14:56	24° 26,46' S	175° 15,63' W	0	S 8	271	0,8	OBS/OBH	OBS/OBH	OBS an Deck	OBS 181-8000
SO195/014-1	23.01.08	15:32	24° 26,36' S	175° 20,18' W	0	SSW 10	99,1	1,2	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 183
SO195/014-1	23.01.08	15:37	24° 26,39' S	175° 20,11' W	0	S 11	25,7	0,5	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 182-8000
SO195/014-1	23.01.08	15:54	24° 26,17' S	175° 19,57' W	0	SE 10	255,8	0,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 182-8000
SO195/014-1	23.01.08	16:12	24° 26,49' S	175° 21,57' W	0	SSE 11	265,2	8,5	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 184
SO195/014-1	23.01.08	16:17	24° 26,53' S	175° 22,33' W	0	SSE 11	266,5	8	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 183
SO195/014-1	23.01.08	16:33	24° 26,39' S	175° 22,64' W	0	SSE 11	259	0,8	OBS/OBH	OBS/OBH	OBS an Deck	OBS 183
SO195/014-1	23.01.08	16:52	24° 26,51' S	175° 25,70' W	0	SSE 14	268,8	12,4	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 185
SO195/014-1	23.01.08	17:17	24° 26,24' S	175° 26,94' W	0	S 11	259,4	0,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 184
SO195/014-1	23.01.08	17:27	24° 26,45' S	175° 26,66' W	0	SSW 10	272,2	1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 184
SO195/014-1	23.01.08	17:37	24° 26,51' S	175° 27,74' W	0	SE 12	267,6	11,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 186
SO195/014-1	23.01.08	17:50	24° 26,35' S	175° 29,59' W	0	SSW 11	7	4,6	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 185
SO195/014-1	23.01.08	18:02	24° 26,59' S	175° 29,18' W	0	S 11	225,7	1,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 185
SO195/014-1	23.01.08	18:20	24° 26,49' S	175° 32,09' W	0	SSE 14	268,8	12,2	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 187
SO195/014-1	23.01.08	19:25	24° 26,43' S	175° 33,93' W	0	SSE 9	169,3	0,4	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 186
SO195/014-1	23.01.08	19:52	24° 26,72' S	175° 33,80' W	0	SSE 12	260,5	0,7	OBS/OBH	OBS/OBH	OBS an Deck	OBS 186
SO195/014-1	23.01.08	20:25	24° 26,45' S	175° 39,11' W	0	WSW 12	60,6	3,2	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 187
SO195/014-1	23.01.08	20:46	24° 26,95' S	175° 38,85' W	4426	S 10	266,4	1,2	OBS/OBH	OBS/OBH	OBS an Deck	OBS 187
SO195/014-1	23.01.08	20:54	24° 27,02' S	175° 39,06' W	4475	SE 14	226,2	5	OBS/OBH	OBS/OBH	Kursänderung	Rwk 218° d, 3sm
SO195/014-1	23.01.08	21:09	24° 28,83' S	175° 41,02' W	4849	SSE 12	265,5	10,4	OBS/OBH	OBS/OBH	Kursänderung	RWK 270° :d, 38sm
SO195/014-1	23.01.08	22:24	24° 29,59' S	175° 57,53' W	2916	SE 14	273,3	12,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH' 193
SO195/014-1	23.01.08	22:42	24° 29,46' S	176° 1,48' W	0	S 11	295,2	10,4	OBS/OBH	OBS/OBH	Kursänderung	RWK: 360°
SO195/014-1	23.01.08	23:24	24° 26,40' S	176° 2,96' W	0	S 14	143,2	0,7	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 193
SO195/014-1	23.01.08	23:30	24° 26,44' S	176° 2,94' W	0	SSW 14	269	0,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 193
SO195/014-1	24.01.08	01:21	24° 27,80' S	176° 21,73' W	0	S 11	319,1	12,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 198

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/014-1	24.01.08	01:35	24° 26,22' S	176° 23,49' W	0	SSE 7	26,5	6,9	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 198
SO195/014-1	24.01.08	01:48	24° 26,43' S	176° 23,06' W	0	S 9	335,9	0,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 198
SO195/014-1	24.01.08	02:24	24° 28,06' S	176° 25,26' W	0	S 12	300,9	8,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 199
SO195/014-1	24.01.08	02:33	24° 27,20' S	176° 26,45' W	0	S 10	314,3	10,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 199
SO195/014-1	24.01.08	02:53	24° 26,28' S	176° 27,07' W	0	SSW 9	270,8	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 199
SO195/014-1	24.01.08	03:07	24° 26,34' S	176° 28,07' W	0	S 13	274	11,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 200
SO195/014-1	24.01.08	03:20	24° 26,23' S	176° 30,09' W	0	WSW 10	29,9	3,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 200
SO195/014-1	24.01.08	03:27	24° 26,36' S	176° 30,11' W	0	SSE 9	304,8	1,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 200
SO195/014-1	24.01.08	03:35	24° 26,43' S	176° 31,05' W	0	SSE 13	268,7	12	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 201
SO195/014-1	24.01.08	03:48	24° 26,37' S	176° 33,63' W	0	SSW 13	349,5	5,7	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 201
SO195/014-1	24.01.08	03:56	24° 26,35' S	176° 33,68' W	0	S 9	304,3	2,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 201
SO195/014-1	24.01.08	04:04	24° 26,41' S	176° 34,77' W	0	SSE 12	263,3	11,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 202
SO195/014-1	24.01.08	04:21	24° 26,24' S	176° 37,03' W	0	SSW 11	186,8	1,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 202
SO195/014-1	24.01.08	04:27	24° 26,33' S	176° 37,22' W	0	S 11	297,9	1,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 202
SO195/014-1	24.01.08	04:30	24° 26,31' S	176° 37,39' W	0	S 10	272,7	5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 203
SO195/014-1	24.01.08	04:43	24° 26,55' S	176° 40,09' W	0	SSE 13	262,7	12,7	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 203
SO195/014-1	24.01.08	05:11	24° 26,37' S	176° 40,75' W	1493	S 11	300,4	1,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 203
SO195/014-1	24.01.08	05:12	24° 26,36' S	176° 40,77' W	1494	SSE 11	314,1	1,8	OBS/OBH	OBS/OBH	Ende Station	
SO195/015-1	27.01.08	00:48	24° 26,51' S	177° 31,43' W	1526	ESE 4	90,8	12,2	OBS/OBH	OBS/OBH	Beginn Station	
SO195/015-1	27.01.08	00:49	24° 26,51' S	177° 31,21' W	1466	ESE 4	87,8	12,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 216
SO195/015-1	27.01.08	01:29	24° 26,44' S	177° 26,30' W	0	SE 5	239,5	0,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 216
SO195/015-1	27.01.08	01:38	24° 26,34' S	177° 26,28' W	0	SE 6	125,5	1,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 215
SO195/015-1	27.01.08	01:52	24° 26,47' S	177° 26,30' W	0	E 8	236	2,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 216
SO195/015-1	27.01.08	02:08	24° 26,40' S	177° 24,27' W	0	ESE 7	88,3	11,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH215
SO195/015-1	27.01.08	02:28	24° 26,38' S	177° 22,65' W	0	SE 7	213,4	0,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 214
SO195/015-1	27.01.08	02:29	24° 26,39' S	177° 22,66' W	0	ESE 7	213,3	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 215
SO195/015-1	27.01.08	03:01	24° 26,34' S	177° 19,24' W	0	ESE 7	26,3	0,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 213
SO195/015-1	27.01.08	03:03	24° 26,34' S	177° 19,25' W	0	ESE 7	225,2	0,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 214
SO195/015-1	27.01.08	03:16	24° 26,37' S	177° 19,08' W	0	E 6	267,9	0,9	OBS/OBH	OBS/OBH	OBH an Deck	OBH 214
SO195/015-1	27.01.08	03:38	24° 26,42' S	177° 15,88' W	0	ESE 10	86,9	4,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 213
SO195/015-1	27.01.08	03:39	24° 26,41' S	177° 15,81' W	0	ESE 9	84,5	3,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 212
SO195/015-1	27.01.08	03:47	24° 26,37' S	177° 15,60' W	0	ESE 9	295,6	1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 213
SO195/015-1	27.01.08	04:23	24° 26,39' S	177° 12,07' W	0	ESE 8	252,8	0,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 211
SO195/015-1	27.01.08	04:30	24° 26,37' S	177° 12,09' W	0	ESE 8	18,5	0	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 212
SO195/015-1	27.01.08	04:36	24° 26,41' S	177° 12,12' W	0	ESE 10	291,3	1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 212
SO195/015-1	27.01.08	04:59	24° 26,38' S	177° 8,87' W	0	ESE 11	85,8	3,9	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 211
SO195/015-1	27.01.08	05:01	24° 26,31' S	177° 8,79' W	0	ENE 10	5,8	2,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 210
SO195/015-1	27.01.08	05:07	24° 26,27' S	177° 8,80' W	0	E 11	279	1,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 211
SO195/015-1	27.01.08	05:39	24° 26,28' S	177° 5,30' W	0	ESE 9	95,8	0,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 210
SO195/015-1	27.01.08	05:40	24° 26,28' S	177° 5,29' W	0	ESE 9	196	0	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 209

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/015-1	27.01.08	05:47	24° 26,43' S	177° 5,11' W	0	ESE 8	209,4	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 210
SO195/015-1	27.01.08	06:07	24° 26,42' S	177° 2,01' W	0	ESE 10	91,9	5,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 209
SO195/015-1	27.01.08	06:08	24° 26,41' S	177° 1,93' W	0	E 10	69,2	4,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 208
SO195/015-1	27.01.08	06:15	24° 26,40' S	177° 1,67' W	0	E 9	211,8	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 209
SO195/015-1	27.01.08	06:39	24° 26,41' S	176° 58,32' W	0	E 9	88,1	2,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 208
SO195/015-1	27.01.08	06:40	24° 26,41' S	176° 58,28' W	0	E 9	88,5	2,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 207
SO195/015-1	27.01.08	06:46	24° 26,49' S	176° 58,13' W	0	E 10	237,1	0,9	OBS/OBH	OBS/OBH	OBH an Deck	OBH 208
SO195/015-1	27.01.08	06:58	24° 26,49' S	176° 56,54' W	0	E 8	88,2	10,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 207
SO195/015-1	27.01.08	07:25	24° 26,42' S	176° 54,86' W	0	E 8	338,9	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 207
SO195/015-1	27.01.08	08:34	24° 26,43' S	176° 51,22' W	0	ENE 6	103,6	0,3	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 206
SO195/015-1	27.01.08	08:35	24° 26,43' S	176° 51,22' W	0	ENE 6	108,8	0,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 206
SO195/015-1	27.01.08	09:00	24° 26,47' S	176° 51,12' W	0	E 6	177,6	0,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 206
SO195/015-1	27.01.08	09:20	24° 26,51' S	176° 48,91' W	0	ENE 6	89	11,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 205
SO195/015-1	27.01.08	09:44	24° 26,55' S	176° 47,76' W	0	NNE 6	220,8	0,9	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 205
SO195/015-1	27.01.08	10:05	24° 26,53' S	176° 47,76' W	0	NE 6	176,5	0,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 205
SO195/015-1	27.01.08	10:11	24° 26,52' S	176° 47,46' W	0	NE 5	88,6	6,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 204
SO195/015-1	27.01.08	10:30	24° 26,40' S	176° 44,59' W	0	NE 7	101,7	2,1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 204
SO195/015-1	27.01.08	10:47	24° 26,53' S	176° 44,12' W	0	ENE 6	178,5	0,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 204
SO195/015-1	27.01.08	12:28	24° 26,46' S	176° 24,39' W	0	NNE 5	88,3	12,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 197
SO195/015-1	27.01.08	12:50	24° 26,49' S	176° 19,91' W	0	NE 6	95,2	4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 197
SO195/015-1	27.01.08	13:18	24° 26,59' S	176° 19,31' W	0	NE 5	190,4	0,6	OBS/OBH	OBS/OBH	OBH an Deck	OBH 197
SO195/015-1	27.01.08	13:19	24° 26,60' S	176° 19,31' W	0	NNE 5	170	0,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 196
SO195/015-1	27.01.08	13:45	24° 26,58' S	176° 15,52' W	0	NE 5	89,2	5,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 196
SO195/015-1	27.01.08	14:00	24° 26,48' S	176° 15,18' W	0	NE 5	192,1	0,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 196
SO195/015-1	27.01.08	14:01	24° 26,48' S	176° 15,18' W	0	NNE 5	130,6	0,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 195
SO195/015-1	27.01.08	14:20	24° 26,64' S	176° 12,45' W	0	NE 4	95,2	12,1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 195
SO195/015-1	27.01.08	14:39	24° 26,50' S	176° 11,11' W	0	NE 4	148,5	0,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 195
SO195/015-1	27.01.08	14:42	24° 26,51' S	176° 11,07' W	0	N 5	95,7	2,2	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 194
SO195/015-1	27.01.08	14:59	24° 26,66' S	176° 8,45' W	0	N 5	95,5	11,9	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 194
SO195/015-1	27.01.08	15:17	24° 26,37' S	176° 7,00' W	0	NE 5	57,7	0,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 194
SO195/015-1	27.01.08	15:25	24° 26,43' S	176° 6,15' W	0	NE 5	95,6	10,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 192
SO195/015-1	27.01.08	15:55	24° 26,58' S	175° 59,60' W	0	ENE 7	85,3	7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 191
SO195/015-1	27.01.08	16:32	24° 26,53' S	175° 59,23' W	0	ENE 6	333,8	0,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 192
SO195/015-1	27.01.08	16:42	24° 26,51' S	175° 58,94' W	0	NE 7	91,5	0,6	OBS/OBH	OBS/OBH	OBH an Deck	OBH 192
SO195/015-1	27.01.08	16:58	24° 26,53' S	175° 56,45' W	0	NE 6	88,9	14,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 191
SO195/015-1	27.01.08	17:01	24° 26,50' S	175° 55,77' W	0	NE 5	89,3	11,2	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 190
SO195/015-1	27.01.08	17:20	24° 26,77' S	175° 54,28' W	0	NNE 8	174,3	2,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 191
SO195/015-1	27.01.08	17:40	24° 26,50' S	175° 51,18' W	0	ENE 7	91,1	5,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 190
SO195/015-1	27.01.08	17:45	24° 26,60' S	175° 50,76' W	0	ENE 6	121	3,5	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 189
SO195/015-1	27.01.08	17:49	24° 26,73' S	175° 50,57' W	0	NE 7	138,2	1,6	OBS/OBH	OBS/OBH	OBH an Deck	OBH 190

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/015-1	27.01.08	18:26	24° 26,59' S	175° 46,91' W	0	NNE 7	17,2	0,5	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 188
SO195/015-1	27.01.08	18:38	24° 26,55' S	175° 46,90' W	0	NE 8	40,6	1,1	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 189
SO195/015-1	27.01.08	18:47	24° 26,58' S	175° 46,71' W	0	NNE 7	125,4	1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 189
SO195/015-1	27.01.08	19:19	24° 26,58' S	175° 43,09' W	0	NE 5	138,4	1,9	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 188
SO195/015-1	27.01.08	19:31	24° 26,63' S	175° 42,65' W	4996	ENE 6	158,2	2,2	OBS/OBH	OBS/OBH	OBS an Deck	OBS 188
SO195/015-1	27.01.08	19:34	24° 26,66' S	175° 42,57' W	4992	N 7	136,1	1,8	OBS/OBH	OBS/OBH	Ende Station	
SO195/016-1	27.01.08	19:55	24° 26,68' S	175° 42,45' W	4986	ENE 10	27,5	2,6	Vermessung	EM / PS	Beginn Profil	rwk: 090°, d: 91 nm
SO195/016-1	28.01.08	04:11	24° 26,53' S	174° 2,75' W	5602	E 7	104,7	6,5	Vermessung	EM / PS	Ende Profil	
SO195/017-1	28.01.08	04:15	24° 26,54' S	174° 2,50' W	5598	NNE 6	28,2	1,5	Wärmestromsonde 6 m	GHF	Beginn Station	
SO195/017-1	28.01.08	04:31	24° 26,52' S	174° 2,54' W	5600	ENE 5	48,5	0	Wärmestromsonde 6 m	GHF	z.W.	W6
SO195/017-1	28.01.08	06:32	24° 26,50' S	174° 2,50' W	5598	ENE 6	232,6	0,1	Wärmestromsonde 6 m	GHF	hieven	SL: 5522m
SO195/017-1	28.01.08	10:27	24° 26,50' S	174° 2,57' W	5600	E 7	185,7	1	Wärmestromsonde 6 m	GHF	a.D.	
SO195/017-1	28.01.08	10:31	24° 26,56' S	174° 2,57' W	5603	ENE 8	161,6	0,9	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/017-2	28.01.08	10:53	24° 28,50' S	174° 5,56' W	5574	ENE 9	236,6	10,4	Vermessung	EM / PS	Beginn Profil	
SO195/017-2	28.01.08	10:53	24° 28,50' S	174° 5,56' W	5574	ENE 9	236,6	10,4	Vermessung	EM / PS	Kursänderung	RWK: 237° :d, 13sm
SO195/017-2	28.01.08	11:46	24° 34,02' S	174° 14,90' W	5618	ENE 7	211,1	12,6	Vermessung	EM / PS	Kursänderung	rwk: 180°, d: 66 sm
SO195/017-2	28.01.08	16:41	25° 40,06' S	174° 14,87' W	4974	NNE 9	146,5	13,1	Vermessung	EM / PS	Kursänderung	rwk: 090°, d: 14sm
SO195/017-2	28.01.08	17:42	25° 39,95' S	174° 0,21' W	5082	NNE 9	69,3	12,6	Vermessung	EM / PS	Kursänderung	rwk: 000°, d: 73sm
SO195/017-2	29.01.08	00:07	24° 26,62' S	173° 59,97' W	5602	NE 9	354,5	10,7	Vermessung	EM / PS	Kursänderung	rwK: 270°, d: 2 sm
SO195/017-2	29.01.08	00:20	24° 26,72' S	174° 2,38' W	5595	NNE 6	238,3	8,8	Vermessung	EM / PS	Ende Profil	
SO195/018-1	29.01.08	00:30	24° 26,52' S	174° 2,48' W	5598	NNE 7	124	0,2	Wärmestromsonde 6 m	GHF	Beginn Station	
SO195/018-1	29.01.08	00:40	24° 26,50' S	174° 2,42' W	5598	NNE 8	147,1	0,4	Wärmestromsonde 6 m	GHF	z.W.	
SO195/018-1	29.01.08	02:26	24° 26,50' S	174° 2,51' W	5604	NE 3	291,5	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 5637 m
SO195/018-1	29.01.08	02:43	24° 26,51' S	174° 2,50' W	5596	NE 4	187,5	0,5	Wärmestromsonde 6 m	GHF	hieven	SZ: 74 kN
SO195/018-1	29.01.08	02:48	24° 26,51' S	174° 2,50' W	5600	NE 3	278	0,2	Wärmestromsonde 6 m	GHF	verholen	SL: 5300 m
SO195/018-1	29.01.08	03:48	24° 26,50' S	174° 3,00' W	5608	NE 3	242,4	0,4	Wärmestromsonde 6 m	GHF	Boko	SL: 5628m
SO195/018-1	29.01.08	04:05	24° 26,50' S	174° 3,00' W	5608	NE 3	288	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 71,2 kN
SO195/018-1	29.01.08	04:08	24° 26,50' S	174° 3,00' W	5609	NE 3	36,4	0,3	Wärmestromsonde 6 m	GHF	verholen	SL: 5400m
SO195/018-1	29.01.08	05:06	24° 26,50' S	174° 3,50' W	5607	NE 3	44,5	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 5631m
SO195/018-1	29.01.08	05:23	24° 26,50' S	174° 3,50' W	5607	NE 4	120,8	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 89,7 kN
SO195/018-1	29.01.08	05:26	24° 26,50' S	174° 3,50' W	5607	NE 4	63,5	0,6	Wärmestromsonde 6 m	GHF	verholen	SL: 5500m
SO195/018-1	29.01.08	06:13	24° 26,50' S	174° 4,00' W	5605	NE 3	267,9	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 5636m
SO195/018-1	29.01.08	06:23	24° 26,50' S	174° 4,00' W	5609	NE 3	87,7	0	Wärmestromsonde 6 m	GHF	hieven	SZ: 90,1 kN
SO195/018-1	29.01.08	06:27	24° 26,50' S	174° 4,01' W	5606	ENE 3	310	0,3	Wärmestromsonde 6 m	GHF	verholen	SL: 5500m
SO195/018-1	29.01.08	07:10	24° 26,50' S	174° 4,51' W	5606	NE 6	23,2	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 5638m
SO195/018-1	29.01.08	07:19	24° 26,50' S	174° 4,51' W	5608	NE 6	188,8	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 78,50kN
SO195/018-1	29.01.08	07:24	24° 26,49' S	174° 4,55' W	5603	NNE 5	280,6	1,1	Wärmestromsonde 6 m	GHF	verholen	rwk:270 :0,41sm
SO195/018-1	29.01.08	08:03	24° 26,49' S	174° 5,00' W	5605	NE 5	260,4	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 5637m
SO195/018-1	29.01.08	08:15	24° 26,49' S	174° 5,00' W	5605	NE 6	187,4	0,3	Wärmestromsonde 6 m	GHF	hieven	SZ: 78,9kN
SO195/018-1	29.01.08	08:17	24° 26,49' S	174° 5,00' W	5606	NE 7	200	0,1	Wärmestromsonde 6 m	GHF	verholen	rwk270: d,045sm

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/018-1	29.01.08	08:57	24° 26,51' S	174° 5,49' W	5604	ENE 7	348,5	0,1	Wärmestromsonde 6 m	GHF	Boko	SL:5641m
SO195/018-1	29.01.08	09:13	24° 26,50' S	174° 5,49' W	5606	ENE 7	249,5	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ:90,4kN
SO195/018-1	29.01.08	10:53	24° 26,66' S	174° 6,05' W	5609	ENE 7	240,6	1,5	Wärmestromsonde 6 m	GHF	a.D.	
SO195/018-1	29.01.08	11:06	24° 26,55' S	174° 6,36' W	5602	ENE 3	313,3	3,7	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/019-1	29.01.08	11:30	24° 25,11' S	174° 9,26' W	5634	N 6	220,4	3,2	Magnetometer	MAGN	Beginn Station	
SO195/019-1	29.01.08	11:45	24° 25,67' S	174° 9,56' W	5624	NE 8	210,8	3,2	Magnetometer	MAGN	Magnetometer zu Wasser	SL: 250 m, rwK: 204°, FdWmax: 12 kn
SO195/019-1	29.01.08	11:54	24° 26,41' S	174° 9,95' W	5628	NE 7	204,9	8,6	Magnetometer	MAGN	Beginn Profil	Passieren WP 01
SO195/019-1	29.01.08	20:52	26° 0,10' S	174° 57,01' W	1938	NNE 2	189,7	10,5	Magnetometer	MAGN	Kursänderung	Rwk: 192° :d 42sm
SO195/019-1	30.01.08	00:20	26° 35,24' S	175° 5,49' W	0	S 6	163	1,4	Magnetometer	MAGN	Ende Profil	
SO195/019-1	30.01.08	00:38	26° 35,65' S	175° 5,60' W	0	SSE 5	158,5	0,9	Magnetometer	MAGN	Magnetometer an Deck	
SO195/019-1	30.01.08	00:20	26° 35,24' S	175° 5,49' W	0	S 6	163	1,4	Magnetometer	MAGN	Ende Profil	
SO195/019-1	30.01.08	00:38	26° 35,65' S	175° 5,60' W	0	SSE 5	158,5	0,9	Magnetometer	MAGN	Magnetometer an Deck	
SO195/019-1	30.01.08	00:39	26° 35,67' S	175° 5,61' W	0	SSW 5	210,2	1,4	Magnetometer	MAGN	Ende Station	
SO195/020-1	29.01.08	23:57	26° 31,93' S	175° 4,73' W	5437	S 3	193,9	10,4	OBS/OBH	OBS/OBH	Beginn Station	
SO195/020-1	30.01.08	00:20	26° 35,24' S	175° 5,49' W	0	S 6	163	1,4	OBS/OBH	OBS/OBH	OBS ausgelöst	
SO195/020-1	30.01.08	02:09	26° 40,69' S	175° 6,78' W	0	S 5	193,6	2,3	OBS/OBH	OBS/OBH	OBS gesichtet	
SO195/020-1	30.01.08	02:24	26° 41,00' S	175° 6,92' W	5817	S 4	341,4	1,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 122
SO195/020-1	30.01.08	06:30	27° 7,04' S	175° 50,01' W	0	SSE 3	237,6	12,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 122, rwK: 236°, d: 53 sm
SO195/020-1	30.01.08	08:18	27° 10,38' S	175° 56,15' W	0	S 2	145,1	0,2	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 119
SO195/020-1	30.01.08	08:52	27° 10,60' S	175° 55,64' W	5624	SSE 2	173,1	0,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 119
SO195/020-1	30.01.08	08:56	27° 10,64' S	175° 55,53' W	5660	SE 2	100,1	3,7	OBS/OBH	OBS/OBH	Kursänderung	OBS119
SO195/020-1	30.01.08	10:17	27° 13,18' S	175° 37,48' W	8650	SSE 4	164,5	10,7	OBS/OBH	OBS/OBH	Kursänderung	Rwk 98° :d,17sm
SO195/020-1	30.01.08	11:14	27° 24,08' S	175° 34,89' W	0	SE 7	168,9	11,7	OBS/OBH	OBS/OBH	OBS ausgelöst	Rwk 168° :d,18sm
SO195/020-1	30.01.08	13:44	27° 29,90' S	175° 33,82' W	0	SE 8	199,8	0,2	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 123
SO195/020-1	30.01.08	14:10	27° 30,83' S	175° 34,17' W	0	SE 10	280,4	2,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 123
SO195/020-1	30.01.08	15:27	27° 37,49' S	175° 49,98' W	8045	SE 13	251,7	13,1	OBS/OBH	OBS/OBH	Kursänderung	OBS 123rwK 245°, d: 16 sm
SO195/020-1	30.01.08	18:50	27° 37,55' S	176° 40,57' W	2384	SE 11	273	13,7	OBS/OBH	OBS/OBH	Kursänderung	rwk: 270°, d: 45sm
SO195/020-1	30.01.08	19:14	27° 34,37' S	176° 44,40' W	0	SE 9	314,3	11,7	OBS/OBH	OBS/OBH	OBS ausgelöst	rwk: 318°, d: 10sm
SO195/020-1	30.01.08	20:08	27° 30,36' S	176° 48,85' W	0	SE 8	21,5	0,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 112
SO195/020-1	30.01.08	20:20	27° 30,72' S	176° 48,71' W	2104	SE 8	203,4	1,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 112
SO195/020-1	30.01.08	20:22	27° 30,79' S	176° 48,74' W	2099	ESE 9	205,9	2,5	OBS/OBH	OBS/OBH	Kursänderung	OBS 112
SO195/020-1	31.01.08	00:26	26° 56,23' S	176° 19,67' W	3621	ESE 12	37,7	11,6	OBS/OBH	OBS/OBH	OBS ausgelöst	rwk: 037° ,d: 49sm
SO195/020-1	31.01.08	01:33	26° 51,16' S	176° 15,79' W	0	ESE 11	75,9	0,7	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 115
SO195/020-1	31.01.08	01:50	26° 51,53' S	176° 15,54' W	0	SE 8	218,4	1,9	OBS/OBH	OBS/OBH	OBS an Deck	OBS 115
SO195/020-1	31.01.08	06:35	25° 58,68' S	176° 24,37' W	3026	ESE 9	350,7	11,7	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 115, rwK: 351°, d: 59 sm
SO195/020-1	31.01.08	07:32	25° 52,70' S	176° 25,85' W	0	ESE 11	308,3	0,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 111
SO195/020-1	31.01.08	07:58	25° 53,17' S	176° 25,84' W	0	E 8	206,1	2,4	OBS/OBH	OBS/OBH	OBS an Deck	OBS 111
SO195/020-1	31.01.08	08:00	25° 53,22' S	176° 25,89' W	0	ESE 8	223,9	1,9	OBS/OBH	OBS/OBH	Ende Station	OBS 111
SO195/020-1	31.01.08	08:00	25° 53,22' S	176° 25,89' W	0	ESE 8	223,9	1,9	OBS/OBH	OBS/OBH	Ende Station	
SO195/021-1	31.01.08	14:36	25° 7,36' S	175° 27,57' W	4227	ESE 8	355,9	0,2	Wärmestromsonde 6 m	GHF	Beginn Station	

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/021-1	31.01.08	15:17	25° 7,35' S	175° 27,53' W	4232	ESE 9	120,4	0,3	Wärmestromsonde 6 m	GHF	z.W.	GHF 02-6
SO195/021-1	31.01.08	16:42	25° 7,37' S	175° 27,40' W	4224	ESE 9	56,1	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4253m
SO195/021-1	31.01.08	16:54	25° 7,36' S	175° 27,40' W	4224	ESE 9	284,4	0	Wärmestromsonde 6 m	GHF	hieven	SZ: 63,2kN
SO195/021-1	31.01.08	16:58	25° 7,36' S	175° 27,40' W	4222	ESE 9	218,1	0,1	Wärmestromsonde 6 m	GHF	verholen	SL: 4100m
SO195/021-1	31.01.08	17:49	25° 6,97' S	175° 27,32' W	4171	ESE 10	64,9	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4269m
SO195/021-1	31.01.08	18:00	25° 6,97' S	175° 27,32' W	4147	ESE 9	1,4	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 73,6kN
SO195/021-1	31.01.08	18:04	25° 6,97' S	175° 27,32' W	4171	ESE 9	54,7	0,1	Wärmestromsonde 6 m	GHF	verholen	SL: 4000m
SO195/021-1	31.01.08	18:54	25° 6,58' S	175° 27,23' W	4168	ESE 9	25,9	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4229m
SO195/021-1	31.01.08	19:00	25° 6,58' S	175° 27,23' W	4170	ESE 9	160	0,4	Wärmestromsonde 6 m	GHF	hieven	abgebrochen
SO195/021-1	31.01.08	19:03	25° 6,58' S	175° 27,23' W	4158	ESE 10	275,9	0,3	Wärmestromsonde 6 m	GHF	verholen	SL: 4100m
SO195/021-1	31.01.08	19:50	25° 6,18' S	175° 27,15' W	4108	SE 8	283,7	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4169 m
SO195/021-1	31.01.08	20:05	25° 6,18' S	175° 27,14' W	4118	SE 8	202,4	0,4	Wärmestromsonde 6 m	GHF	hieven	SZ: 59 kn
SO195/021-1	31.01.08	20:07	25° 6,18' S	175° 27,14' W	4115	ESE 8	53,4	0,2	Wärmestromsonde 6 m	GHF	verholen	SL: 4000m
SO195/021-1	31.01.08	20:53	25° 5,78' S	175° 27,05' W	4144	ESE 9	194,9	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4201m
SO195/021-1	31.01.08	20:58	25° 5,78' S	175° 27,06' W	4150	ESE 10	291,5	0	Wärmestromsonde 6 m	GHF	hieven	SZ: 55KN
SO195/021-1	31.01.08	21:04	25° 5,78' S	175° 27,06' W	4150	ESE 10	226,6	0,2	Wärmestromsonde 6 m	GHF	hieven	umgefallen abgebrochen SZ: 57KN
SO195/021-1	31.01.08	21:05	25° 5,78' S	175° 27,06' W	4147	ESE 11	40,4	0,1	Wärmestromsonde 6 m	GHF	verholen	rwk: 012 ,d:0,4sm
SO195/021-1	31.01.08	21:50	25° 5,39' S	175° 26,96' W	4092	ESE 10	303,9	0,2	Wärmestromsonde 6 m	GHF	Boko	SL:4194m
SO195/021-1	31.01.08	22:09	25° 5,39' S	175° 26,96' W	4089	ESE 10	249	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 70,7KN
SO195/021-1	31.01.08	23:28	25° 5,39' S	175° 26,96' W	4091	ESE 11	140,3	0,1	Wärmestromsonde 6 m	GHF	a.D.	
SO195/021-1	31.01.08	23:36	25° 5,39' S	175° 26,96' W	4088	ESE 10	83,1	0,2	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/022-1	01.02.08	03:23	25° 51,54' S	175° 37,60' W	4045	ENE 9	126,6	1,5	Wärmestromsonde 6 m	GHF	Beginn Station	GHF 03-6
SO195/022-1	01.02.08	03:27	25° 51,57' S	175° 37,56' W	4029	E 10	164,4	0,6	Wärmestromsonde 6 m	GHF	z.W.	W2
SO195/022-1	01.02.08	04:41	25° 51,51' S	175° 37,49' W	4041	ESE 10	321,1	0,3	Wärmestromsonde 6 m	GHF	Boko	SL: 4058m
SO195/022-1	01.02.08	04:58	25° 51,51' S	175° 37,49' W	4048	ESE 10	235,8	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 65,1 kN
SO195/022-1	01.02.08	05:01	25° 51,51' S	175° 37,49' W	4042	ESE 11	115,2	0,1	Wärmestromsonde 6 m	GHF	verholen	
SO195/022-1	01.02.08	05:49	25° 51,10' S	175° 37,40' W	4075	ESE 10	32,8	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 4093m
SO195/022-1	01.02.08	05:57	25° 51,09' S	175° 37,41' W	4073	ESE 10	218	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 56,6 kN
SO195/022-1	01.02.08	06:01	25° 51,09' S	175° 37,41' W	4076	ESE 9	31,7	0,4	Wärmestromsonde 6 m	GHF	verholen	
SO195/022-1	01.02.08	06:43	25° 50,70' S	175° 37,34' W	4150	ESE 11	339,9	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4156m
SO195/022-1	01.02.08	06:59	25° 50,69' S	175° 37,34' W	4148	ESE 11	307,5	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ:62,7KN
SO195/022-1	01.02.08	07:44	25° 50,32' S	175° 37,25' W	4228	ESE 9	185,3	0,2	Wärmestromsonde 6 m	GHF	verholen	
SO195/022-1	01.02.08	07:47	25° 50,32' S	175° 37,24' W	4229	ESE 10	190,7	0,6	Wärmestromsonde 6 m	GHF	Boko	SL:4234m
SO195/022-1	01.02.08	08:03	25° 50,33' S	175° 37,24' W	4227	ESE 9	146,5	0,7	Wärmestromsonde 6 m	GHF	hieven	SZ:64,2
SO195/022-1	01.02.08	08:04	25° 50,35' S	175° 37,24' W	4221	E 9	165,2	0,8	Wärmestromsonde 6 m	GHF	verholen	
SO195/022-1	01.02.08	08:11	25° 50,27' S	175° 37,21' W	4237	E 10	349,1	0,7	Wärmestromsonde 6 m	GHF	Boko	SL:4292m
SO195/022-1	01.02.08	08:26	25° 50,06' S	175° 37,21' W	4271	ESE 10	24	0,9	Wärmestromsonde 6 m	GHF	hieven	
SO195/022-1	01.02.08	08:28	25° 50,03' S	175° 37,21' W	4275	ESE 11	348,7	0,9	Wärmestromsonde 6 m	GHF	verholen	
SO195/022-1	01.02.08	08:56	25° 49,88' S	175° 37,16' W	4310	ESE 8	13,4	0,1	Wärmestromsonde 6 m	GHF	Boko	SL:4309m
SO195/022-1	01.02.08	09:10	25° 49,86' S	175° 37,15' W	4317	ESE 10	219,1	0,3	Wärmestromsonde 6 m	GHF	hieven	SZ: 73,4 kN

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/022-1	01.02.08	09:12	25° 49,87' S	175° 37,16' W	4307	E 9	64,9	0,2	Wärmestromsonde 6 m	GHF	verholen	
SO195/022-1	01.02.08	09:54	25° 49,55' S	175° 36,99' W	4408	E 8	72,4	0,2	Wärmestromsonde 6 m	GHF	Boko	SL:4403m
SO195/022-1	01.02.08	10:06	25° 49,53' S	175° 36,96' W	4411	E 10	334,8	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ:64KN
SO195/022-1	01.02.08	11:33	25° 49,46' S	175° 36,94' W	4427	E 7	283	0,4	Wärmestromsonde 6 m	GHF	a.D.	
SO195/022-1	01.02.08	11:48	25° 49,64' S	175° 36,86' W	4358	ESE 9	224,2	4,4	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/023-1	01.02.08	14:54	26° 26,55' S	175° 45,75' W	5708	SE 6	334	4,5	Wärmestromsonde 6 m	GHF	Beginn Station	GHF 04-6
SO195/023-1	01.02.08	15:08	26° 26,36' S	175° 45,60' W	5714	E 7	41,4	1	Wärmestromsonde 6 m	GHF	z.W.	W2
SO195/023-1	01.02.08	16:51	26° 26,33' S	175° 45,43' W	5703	E 7	56,6	0	Wärmestromsonde 6 m	GHF	Boko	SL: 5715m
SO195/023-1	01.02.08	16:53	26° 26,34' S	175° 45,43' W	5710	E 7	189,9	0,3	Wärmestromsonde 6 m	GHF	hieven	Messpunkt abgebrochen
SO195/023-1	01.02.08	16:56	26° 26,34' S	175° 45,43' W	5666	E 6	16,1	0,3	Wärmestromsonde 6 m	GHF	verholen	
SO195/023-1	01.02.08	17:35	26° 25,94' S	175° 45,35' W	5708	ESE 7	47,1	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 5699m
SO195/023-1	01.02.08	17:48	26° 25,94' S	175° 45,35' W	5697	ESE 7	6,2	0,3	Wärmestromsonde 6 m	GHF	hieven	SZ: 70,2 kN
SO195/023-1	01.02.08	17:52	26° 25,93' S	175° 45,34' W	5691	E 7	24,6	0,5	Wärmestromsonde 6 m	GHF	verholen	
SO195/023-1	01.02.08	18:32	26° 25,55' S	175° 45,25' W	5728	ESE 8	354,2	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 5749m
SO195/023-1	01.02.08	18:35	26° 25,55' S	175° 45,25' W	5725	ESE 8	42,4	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 70,5 kN
SO195/023-1	01.02.08	18:38	26° 25,54' S	175° 45,24' W	5739	ESE 8	55	0,4	Wärmestromsonde 6 m	GHF	verholen	
SO195/023-1	01.02.08	19:16	26° 25,15' S	175° 45,16' W	5733	ESE 8	143,7	0	Wärmestromsonde 6 m	GHF	Boko	SL:5748m
SO195/023-1	01.02.08	19:25	26° 25,15' S	175° 45,16' W	5727	ESE 8	167,2	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ:74KN
SO195/023-1	01.02.08	19:26	26° 25,15' S	175° 45,16' W	5733	ESE 8	194,1	0,2	Wärmestromsonde 6 m	GHF	verholen	
SO195/023-1	01.02.08	20:04	26° 24,77' S	175° 45,04' W	5700	ESE 8	180,8	0,6	Wärmestromsonde 6 m	GHF	Boko	SL: 5720m
SO195/023-1	01.02.08	20:17	26° 24,76' S	175° 45,03' W	5696	ESE 8	159,9	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 74KN
SO195/023-1	01.02.08	20:19	26° 24,76' S	175° 45,04' W	5697	ESE 8	191,7	0,4	Wärmestromsonde 6 m	GHF	verholen	
SO195/023-1	01.02.08	21:06	26° 24,35' S	175° 44,94' W	5671	ESE 9	47,6	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 5695m
SO195/023-1	01.02.08	21:21	26° 24,36' S	175° 44,92' W	5727	ESE 8	143,4	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 70KN
SO195/023-1	01.02.08	23:10	26° 24,34' S	175° 44,89' W	5719	ESE 10	311,2	0,3	Wärmestromsonde 6 m	GHF	a.D.	
SO195/023-1	01.02.08	23:24	26° 24,68' S	175° 44,90' W	5707	E 12	196,4	6,8	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/024-1	02.02.08	03:19	27° 6,25' S	176° 6,99' W	4435	SE 13	82,6	0,8	Wärmestromsonde 6 m	GHF	Beginn Station	HF # 05
SO195/024-1	02.02.08	03:23	27° 6,26' S	176° 6,95' W	4452	ESE 12	171,1	0,6	Wärmestromsonde 6 m	GHF	z.W.	W2
SO195/024-1	02.02.08	04:59	27° 6,28' S	176° 6,84' W	4453	ESE 12	82,4	0,1	Wärmestromsonde 6 m	GHF	Boko	SL: 4463m
SO195/024-1	02.02.08	05:07	27° 6,29' S	176° 6,84' W	4454	ESE 11	9,2	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 62,5 kN
SO195/024-1	02.02.08	05:11	27° 6,28' S	176° 6,84' W	4450	ESE 11	37,6	0,3	Wärmestromsonde 6 m	GHF	verholen	
SO195/024-1	02.02.08	05:45	27° 5,89' S	176° 6,74' W	4426	ESE 12	79,7	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 4451m
SO195/024-1	02.02.08	05:46	27° 5,89' S	176° 6,74' W	4426	ESE 12	216,8	0,4	Wärmestromsonde 6 m	GHF	hieven	Messpunkt abgebrochen
SO195/024-1	02.02.08	05:49	27° 5,89' S	176° 6,74' W	4417	E 11	4,1	0,2	Wärmestromsonde 6 m	GHF	verholen	
SO195/024-1	02.02.08	06:23	27° 5,52' S	176° 6,64' W	4480	E 11	9,5	0,5	Wärmestromsonde 6 m	GHF	Boko	SL: 4482m
SO195/024-1	02.02.08	06:38	27° 5,51' S	176° 6,64' W	4486	E 11	154,5	0,1	Wärmestromsonde 6 m	GHF	hieven	SZ: 72,4 kN
SO195/024-1	02.02.08	06:43	27° 5,51' S	176° 6,64' W	4488	E 11	23,3	0,7	Wärmestromsonde 6 m	GHF	verholen	
SO195/024-1	02.02.08	07:04	27° 5,20' S	176° 6,56' W	4518	E 12	15,4	0,9	Wärmestromsonde 6 m	GHF	Boko	SL: 4560
SO195/024-1	02.02.08	07:27	27° 5,12' S	176° 6,51' W	4537	E 12	87,9	0,9	Wärmestromsonde 6 m	GHF	hieven	SZ: 65KN
SO195/024-1	02.02.08	07:33	27° 5,01' S	176° 6,44' W	4526	ENE 11	333,9	1,8	Wärmestromsonde 6 m	GHF	verholen	

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/024-1	02.02.08	08:08	27° 4,75' S	176° 6,46' W	4488	E 10	345,3	0,7	Wärmestromsonde 6 m	GHF	Boko	SL:4507m
SO195/024-1	02.02.08	08:11	27° 4,76' S	176° 6,47' W	4499	E 11	247,8	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 65KN
SO195/024-1	02.02.08	08:17	27° 4,76' S	176° 6,47' W	4477	E 9	312,7	0,2	Wärmestromsonde 6 m	GHF	hieven	SZ: 65KN
SO195/024-1	02.02.08	08:19	27° 4,75' S	176° 6,47' W	4489	E 10	354,4	0,4	Wärmestromsonde 6 m	GHF	verholen	
SO195/024-1	02.02.08	08:59	27° 4,31' S	176° 6,33' W	4399	E 11	78,7	0,2	Wärmestromsonde 6 m	GHF	Boko	SL: 4477m
SO195/024-1	02.02.08	09:04	27° 4,32' S	176° 6,33' W	4422	E 10	81,9	0,3	Wärmestromsonde 6 m	GHF	hieven	SZ:67KN
SO195/024-1	02.02.08	10:24	27° 4,26' S	176° 6,41' W	4338	ESE 10	359,8	0,6	Wärmestromsonde 6 m	GHF	a.D.	
SO195/024-1	02.02.08	10:35	27° 4,35' S	176° 6,35' W	4423	E 9	141,1	1,7	Wärmestromsonde 6 m	GHF	Beginn Station	
SO195/025-1	02.02.08	23:23	29° 3,18' S	174° 39,30' W	5750	E 10	90,3	1,9	OBS/OBH	OBS/OBH	Beginn Station	
SO195/025-1	02.02.08	23:23	29° 3,18' S	174° 39,30' W	5750	E 10	90,3	1,9	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 220
SO195/025-1	03.02.08	00:00	28° 57,96' S	174° 37,69' W	5063	ESE 12	86,2	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 221
SO195/025-1	03.02.08	00:37	28° 52,75' S	174° 36,08' W	5646	ESE 11	127,9	1,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 222
SO195/025-1	03.02.08	01:14	28° 47,52' S	174° 34,54' W	5718	E 10	79,5	1,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 223
SO195/025-1	03.02.08	01:51	28° 42,31' S	174° 33,01' W	5735	E 10	58,9	1,8	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 224
SO195/025-1	03.02.08	02:27	28° 37,09' S	174° 31,36' W	5700	E 10	68,7	1,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 225
SO195/025-1	03.02.08	03:00	28° 31,88' S	174° 29,86' W	5675	E 10	56,9	2,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 226
SO195/025-1	03.02.08	03:35	28° 26,68' S	174° 28,29' W	5592	E 9	82,8	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 227
SO195/025-1	03.02.08	04:09	28° 21,46' S	174° 26,70' W	5510	E 9	62,1	2,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 228
SO195/025-1	03.02.08	04:42	28° 16,23' S	174° 25,17' W	5456	E 10	63,5	2,9	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 229
SO195/025-1	03.02.08	05:17	28° 11,04' S	174° 23,64' W	5322	E 10	52,2	3,2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 230
SO195/025-1	03.02.08	05:51	28° 5,79' S	174° 22,01' W	5179	E 10	64,4	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 231
SO195/025-1	03.02.08	06:23	28° 0,57' S	174° 20,54' W	4944	E 11	53,4	2,2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 232
SO195/025-1	03.02.08	06:55	27° 55,35' S	174° 18,99' W	4802	E 11	53,9	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 233
SO195/025-1	03.02.08	07:31	27° 50,08' S	174° 17,43' W	4316	E 11	15,6	1,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 234
SO195/025-1	03.02.08	08:11	27° 44,92' S	174° 15,82' W	2701	E 9	111,4	0,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 235
SO195/025-1	03.02.08	08:51	27° 39,68' S	174° 14,35' W	1247	ESE 9	149,2	0,9	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 236
SO195/025-1	03.02.08	09:28	27° 34,49' S	174° 12,80' W	1197	ESE 9	75,3	1,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 237
SO195/025-1	03.02.08	10:07	27° 29,27' S	174° 11,23' W	3010	E 6	54,9	1,2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 238
SO195/025-1	03.02.08	10:43	27° 24,06' S	174° 9,74' W	4112	NNE 7	327,4	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 239
SO195/025-1	03.02.08	11:19	27° 18,81' S	174° 8,18' W	4789	NE 5	48,6	0,8	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 240
SO195/025-1	03.02.08	11:55	27° 13,60' S	174° 6,65' W	5122	ENE 6	13,5	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 241
SO195/025-1	03.02.08	12:31	27° 8,37' S	174° 5,09' W	5192	NE 5	4,4	1,6	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 242
SO195/025-1	03.02.08	13:06	27° 3,13' S	174° 3,59' W	5265	NNE 4	305	1,8	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 243
SO195/025-1	03.02.08	13:40	26° 57,90' S	174° 2,09' W	5264	NE 5	33	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 244
SO195/025-1	03.02.08	14:16	26° 52,69' S	174° 0,53' W	5256	NE 4	11,7	1,9	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 245
SO195/025-1	03.02.08	14:49	26° 47,44' S	173° 59,02' W	5241	ENE 5	23,1	2,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 246
SO195/025-1	03.02.08	15:22	26° 42,26' S	173° 57,52' W	5217	E 5	32,2	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 247
SO195/025-1	03.02.08	15:55	26° 37,02' S	173° 56,03' W	5198	ESE 5	41,1	1,5	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 248
SO195/025-1	03.02.08	16:30	26° 31,10' S	173° 54,46' W	5162	ENE 7	31,8	2	OBS/OBH	OBS/OBH	OBS zu Wasser	OBS 249
SO195/025-1	03.02.08	17:00	26° 26,57' S	173° 52,97' W	5136	E 6	40,2	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 250

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/025-1	03.02.08	17:32	26° 21,36' S	173° 51,47' W	5116	ENE 6	31,4	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 251
SO195/025-1	03.02.08	18:04	26° 16,12' S	173° 49,98' W	5102	ENE 6	31,4	2,1	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 252
SO195/025-1	03.02.08	18:36	26° 10,90' S	173° 48,46' W	5107	E 7	47,2	2,3	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 253
SO195/025-1	03.02.08	19:11	26° 5,66' S	173° 46,92' W	5143	ENE 7	21,5	2	OBS/OBH	OBS/OBH	OBH zu Wasser	OBH 254
SO195/025-1	03.02.08	19:15	26° 5,45' S	173° 46,90' W	5138	E 6	2,6	5,8	OBS/OBH	OBS/OBH	Ende Station	
SO195/026-1	03.02.08	20:00	25° 56,81' S	173° 45,30' W	5068	ENE 10	4,7	12,6	Profil	PR	Stationsbeginn	
SO195/026-1	03.02.08	20:56	25° 51,02' S	173° 44,16' W	5052	ENE 7	61,5	3,9	Profil	PR	Bb-Airgunarray zu Wasser	
SO195/026-1	03.02.08	21:22	25° 50,21' S	173° 42,49' W	5057	ENE 9	62,8	4	Profil	PR	Stb-Airgunarray zu Wasser	
SO195/026-1	03.02.08	21:38	25° 50,67' S	173° 42,20' W	5051	NE 10	189,1	2,3	Profil	PR	Beginn Profil	
SO195/026-1	03.02.08	21:52	25° 51,42' S	173° 42,45' W	5059	ENE 7	203	4,3	Profil	PR	Streamer zu Wasser	SL: 350m
SO195/026-1	03.02.08	22:26	25° 53,55' S	173° 43,51' W	5097	ENE 9	198,7	4,1	Profil	PR	Magnetometer zu Wasser	KL: 250m
SO195/026-1	05.02.08	02:42	27° 47,25' S	174° 16,81' W	3714	N 6	201,2	2,4	Profil	PR	Magnetometer an Deck	
SO195/026-1	05.02.08	02:43	27° 47,29' S	174° 16,82' W	3711	N 6	198,9	2,3	Profil	PR	Ende Profil	Profilabbruch wetterbedingt
SO195/026-1	05.02.08	02:45	27° 47,36' S	174° 16,84' W	3752	N 7	195,3	2,3	Profil	PR	Beginn hieven Streamer	
SO195/026-1	05.02.08	03:00	27° 47,91' S	174° 17,02' W	3942	N 7	191,4	2,3	Profil	PR	Streamer an Deck	
SO195/026-1	05.02.08	03:36	27° 46,98' S	174° 17,14' W	3662	N 10	7,2	2,5	Profil	PR	Stb-Airgunarray an Deck	
SO195/026-1	05.02.08	03:56	27° 46,13' S	174° 17,00' W	3401	NNE 10	3,2	2,4	Profil	PR	Bb-Airgunarray an Deck	
SO195/026-1	05.02.08	04:00	27° 45,95' S	174° 16,97' W	3278	NNE 10	12,2	2,6	Profil	PR	Stationsende	
SO195/027-1	05.02.08	04:01	27° 45,91' S	174° 16,97' W	3291	NNE 10	1,9	2,4	Magnetometer	MAGN	Beginn Station	
SO195/027-1	05.02.08	04:15	27° 44,87' S	174° 17,09' W	3039	NNE 10	345,7	7,1	Magnetometer	MAGN	Magnetometer zu Wasser	SL: 250m
SO195/027-1	05.02.08	04:17	27° 44,64' S	174° 17,14' W	2905	NNE 10	346,6	7,4	Magnetometer	MAGN	Beginn Profil	rwk: 331°, d: 17sm
SO195/027-1	05.02.08	05:53	27° 30,22' S	174° 25,96' W	3893	NNE 12	339,3	10,9	Magnetometer	MAGN	Kursänderung	rwk: 000°, d: 290sm
SO195/027-1	06.02.08	15:55	22° 40,02' S	174° 26,01' W	8411	WNW 6	0,2	9,1	Magnetometer	MAGN	Kursänderung	rwk: 270°, d: 6sm
SO195/027-1	06.02.08	16:40	22° 39,65' S	174° 31,88' W	7080	W 10	220,6	7,5	Magnetometer	MAGN	Kursänderung	rwk: 180°, d: 15sm
SO195/027-1	06.02.08	18:11	22° 54,86' S	174° 32,07' W	9810	W 11	203,9	11,3	Magnetometer	MAGN	Kursänderung	rwk: 238°, d: 39sm
SO195/027-1	06.02.08	22:07	23° 14,76' S	175° 6,73' W	5561	S 5	236,9	4,6	Magnetometer	MAGN	Ende Profil	
SO195/027-1	06.02.08	22:21	23° 15,36' S	175° 7,69' W	5552	SSW 5	237,2	4,8	Magnetometer	MAGN	Magnetometer an Deck	
SO195/027-1	06.02.08	22:22	23° 15,39' S	175° 7,77' W	5551	SSW 4	249,2	4,9	Magnetometer	MAGN	Ende Station	
SO195/028-1	06.02.08	23:30	23° 20,88' S	175° 17,49' W	4842	S 6	273,1	2,7	Wärmestromsonde 6 m	GHF	Beginn Station	
SO195/028-1	07.02.08	00:45	23° 20,92' S	175° 17,59' W	4843	SSW 4	229,7	0,8	Wärmestromsonde 6 m	GHF	z.W.	HF 6-1, W2
SO195/028-1	07.02.08	02:09	23° 20,95' S	175° 17,49' W	4853	SSW 7	163,4	0,4	Wärmestromsonde 6 m	GHF	Boko	1. Boko, SL: 4868 m
SO195/028-1	07.02.08	02:24	23° 20,94' S	175° 17,50' W	4851	S 4	353,6	1	Wärmestromsonde 6 m	GHF	hieven	
SO195/028-1	07.02.08	02:30	23° 20,94' S	175° 17,48' W	4846	SSW 4	218,7	0,4	Wärmestromsonde 6 m	GHF	Boko	2. Boko, SL: 4872 m
SO195/028-1	07.02.08	02:37	23° 20,94' S	175° 17,50' W	4850	S 6	57,7	0,6	Wärmestromsonde 6 m	GHF	hieven	
SO195/028-1	07.02.08	02:44	23° 20,94' S	175° 17,49' W	4848	S 4	178,9	0,7	Wärmestromsonde 6 m	GHF	Boko	3. Boko, SL: 4872 m
SO195/028-1	07.02.08	03:03	23° 20,95' S	175° 17,48' W	4851	S 6	5,5	0,9	Wärmestromsonde 6 m	GHF	hieven	SZ: 77,2 kN
SO195/028-1	07.02.08	03:07	23° 20,96' S	175° 17,47' W	4853	S 4	139,1	0,6	Wärmestromsonde 6 m	GHF	verholen	
SO195/028-1	07.02.08	03:51	23° 20,75' S	175° 17,87' W	4820	S 4	355,7	0,4	Wärmestromsonde 6 m	GHF	Boko	SL: 4875m
SO195/028-1	07.02.08	04:01	23° 20,75' S	175° 17,85' W	4821	S 4	85,6	0,4	Wärmestromsonde 6 m	GHF	hieven	SZ: 75,9 kN
SO195/028-1	07.02.08	04:06	23° 20,75' S	175° 17,85' W	4817	S 6	14,6	1,5	Wärmestromsonde 6 m	GHF	verholen	

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/028-1	07.02.08	04:42	23° 20,53' S	175° 18,24' W	4801	S 6	76,2	0,5	Wärmestromsonde 6 m	GHF	Boko	SL: 4863m
SO195/028-1	07.02.08	04:56	23° 20,50' S	175° 18,21' W	4803	SSE 5	82,6	0,4	Wärmestromsonde 6 m	GHF	hieven	SZ: 65,0 kN
SO195/028-1	07.02.08	05:00	23° 20,42' S	175° 18,28' W	4730	SSE 6	326,2	2,2	Wärmestromsonde 6 m	GHF	verholen	
SO195/028-1	07.02.08	05:32	23° 20,32' S	175° 18,63' W	4650	SSE 4	3,4	0,3	Wärmestromsonde 6 m	GHF	Boko	SL: 4781m
SO195/028-1	07.02.08	05:45	23° 20,32' S	175° 18,62' W	4649	SE 3	163	0	Wärmestromsonde 6 m	GHF	hieven	SZ: 75,1 kN
SO195/028-1	07.02.08	05:50	23° 20,31' S	175° 18,62' W	4646	SE 6	323,9	0,9	Wärmestromsonde 6 m	GHF	verholen	
SO195/028-1	07.02.08	06:30	23° 20,14' S	175° 19,00' W	4572	SSE 4	170,9	0,7	Wärmestromsonde 6 m	GHF	Boko	SL: 4703m
SO195/028-1	07.02.08	06:46	23° 20,14' S	175° 19,00' W	4568	SE 4	166,8	0,5	Wärmestromsonde 6 m	GHF	hieven	SZ: 85,9 kN
SO195/028-1	07.02.08	06:50	23° 20,13' S	175° 19,00' W	4584	SE 6	329,7	0,6	Wärmestromsonde 6 m	GHF	verholen	
SO195/028-1	07.02.08	07:28	23° 19,94' S	175° 19,38' W	4546	SSE 4	58,4	0,1	Wärmestromsonde 6 m	GHF	Boko	SL:4593m
SO195/028-1	07.02.08	07:43	23° 19,94' S	175° 19,39' W	4545	SE 3	320,2	0,3	Wärmestromsonde 6 m	GHF	hieven	SZ: 75KN
SO195/028-1	07.02.08	09:05	23° 20,01' S	175° 19,24' W	4548	SE 3	83,2	0,5	Wärmestromsonde 6 m	GHF	a.D.	
SO195/028-1	07.02.08	09:13	23° 20,01' S	175° 19,18' W	4545	SE 3	102,2	1,1	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/028-1	07.02.08	09:13	23° 20,01' S	175° 19,18' W	4545	SE 3	102,2	1,1	Wärmestromsonde 6 m	GHF	Ende Station	
SO195/028-2	07.02.08	09:14	23° 20,03' S	175° 19,15' W	4541	S 3	108,1	1,8	Magnetometer	MAGN	Beginn Station	
SO195/028-2	07.02.08	09:19	23° 20,08' S	175° 18,89' W	4631	SSE 4	103,4	3,5	Magnetometer	MAGN	Magnetometer zu Wasser	KL: 250m
SO195/028-2	07.02.08	15:14	23° 40,04' S	174° 7,62' W	5989	NNE 1	131,2	12,3	Magnetometer	MAGN	Kursänderung	rwk: 180°, d: 125sm
SO195/028-2	08.02.08	02:25	25° 45,03' S	174° 7,35' W	4988	SE 2	153,8	11,8	Magnetometer	MAGN	Kursänderung	rwK: 138°, d: 22 sm
SO195/028-2	08.02.08	04:05	26° 0,86' S	173° 51,74' W	5105	ESE 3	135,4	8,8	Magnetometer	MAGN	Ende Profil	
SO195/028-2	08.02.08	04:21	26° 1,74' S	173° 50,87' W	0	E 3	138,1	4	Magnetometer	MAGN	Magnetometer an Deck	
SO195/028-2	08.02.08	04:22	26° 1,79' S	173° 50,82' W	0	ENE 2	138,4	3,8	Magnetometer	MAGN	Ende Station	
SO195/029-1	08.02.08	04:23	26° 1,84' S	173° 50,77' W	0	E 3	142	4,1	OBS/OBH	OBS/OBH	Beginn Station	
SO195/029-1	08.02.08	04:24	26° 1,90' S	173° 50,72' W	0	E 3	143,6	4,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 254
SO195/029-1	08.02.08	05:19	26° 5,90' S	173° 47,00' W	0	E 3	17,4	0,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 253
SO195/029-1	08.02.08	05:27	26° 5,85' S	173° 46,96' W	0	E 4	50,3	0,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 254
SO195/029-1	08.02.08	05:37	26° 5,73' S	173° 46,56' W	0	ESE 4	112,7	1,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 254
SO195/029-1	08.02.08	06:08	26° 11,02' S	173° 47,61' W	0	ENE 4	190,4	8	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 253
SO195/029-1	08.02.08	06:09	26° 11,11' S	173° 47,66' W	0	ENE 5	233,4	5,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 252
SO195/029-1	08.02.08	06:25	26° 11,09' S	173° 47,89' W	0	E 3	191,9	1,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 253
SO195/029-1	08.02.08	06:55	26° 16,63' S	173° 49,29' W	0	ESE 3	221,5	6,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 252
SO195/029-1	08.02.08	06:56	26° 16,64' S	173° 49,37' W	0	SSE 2	303,3	3,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 251
SO195/029-1	08.02.08	07:06	26° 16,11' S	173° 49,45' W	0	E 4	59,4	1,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 252
SO195/029-1	08.02.08	07:49	26° 21,21' S	173° 50,30' W	0	SSE 4	243,8	5,8	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 250
SO195/029-1	08.02.08	07:49	26° 21,21' S	173° 50,30' W	0	SSE 4	243,8	5,8	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 251
SO195/029-1	08.02.08	08:12	26° 21,27' S	173° 51,04' W	0	E 3	54,2	0,9	OBS/OBH	OBS/OBH	OBH an Deck	OBH 251
SO195/029-1	08.02.08	09:14	26° 26,68' S	173° 52,60' W	0	ENE 3	141,7	0,5	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 250
SO195/029-1	08.02.08	09:26	26° 26,42' S	173° 52,73' W	0	NE 4	217,6	0,4	OBS/OBH	OBS/OBH	OBS an Deck	OBS 250
SO195/029-1	08.02.08	09:32	26° 26,57' S	173° 52,75' W	0	NE 4	181	4,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 249
SO195/029-1	08.02.08	09:35	26° 26,86' S	173° 52,78' W	0	ENE 5	188,2	6,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 249
SO195/029-1	08.02.08	10:15	26° 30,96' S	173° 54,36' W	5160	ENE 3	38,5	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 249

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/029-1	08.02.08	10:17	26° 30,94' S	173° 54,34' W	5160	E 3	42,8	0,6	OBS/OBH	OBS/OBH	Ende Station	
SO195/030-1	08.02.08	19:00	27° 45,13' S	174° 16,18' W	2839	SSW 3	189	1,2	Profil	PR	Stationsbeginn	
SO195/030-1	08.02.08	19:18	27° 45,57' S	174° 16,32' W	3110	SSW 3	199,7	2,1	Profil	PR	Bb-Airgunarray zu Wasser	
SO195/030-1	08.02.08	19:29	27° 46,16' S	174° 16,51' W	3286	SSW 2	193	4,4	Profil	PR	Streamer zu Wasser	KL: 300m
SO195/030-1	08.02.08	19:31	27° 46,29' S	174° 16,54' W	3374	SSW 2	196,5	3,7	Profil	PR	Beginn Profil	
SO195/030-1	08.02.08	19:49	27° 47,66' S	174° 16,92' W	3877	S 2	201,4	5	Profil	PR	Magnetometer zu Wasser	KL: 250m
SO195/030-1	09.02.08	09:16	28° 52,92' S	174° 36,14' W	5581	E 4	187,2	2,5	Profil	PR	Ende Profil	
SO195/030-1	09.02.08	09:35	28° 53,77' S	174° 36,34' W	5660	ENE 3	182,9	2,9	Profil	PR	Streamer an Deck	
SO195/030-1	09.02.08	09:37	28° 53,85' S	174° 36,36' W	5664	ENE 3	184,5	2,7	Profil	PR	Magnetometer an Deck	
SO195/030-1	09.02.08	09:58	28° 54,64' S	174° 36,48' W	5351	ENE 4	186,6	2,1	Profil	PR	Bb-Airgunarray an Deck	
SO195/030-1	09.02.08	10:03	28° 54,84' S	174° 36,52' W	5329	ENE 4	188,3	3	Profil	PR	Stationsende	
SO195/031-1	09.02.08	10:09	28° 55,26' S	174° 36,64' W	5256	NE 4	196,7	6,7	OBS/OBH	OBS/OBH	Beginn Station	
SO195/031-1	09.02.08	10:28	28° 58,38' S	174° 37,82' W	0	ENE 4	199,6	11,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 220
SO195/031-1	09.02.08	11:49	29° 3,01' S	174° 39,61' W	0	NNE 6	19,4	1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 220
SO195/031-1	09.02.08	11:50	29° 3,00' S	174° 39,61' W	0	NNE 6	26,4	0,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 221
SO195/031-1	09.02.08	12:04	29° 2,99' S	174° 39,31' W	0	NE 5	345,5	0,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 220
SO195/031-1	09.02.08	12:41	28° 58,69' S	174° 38,12' W	0	ENE 5	13,9	4,7	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 221
SO195/031-1	09.02.08	12:42	28° 58,61' S	174° 38,10' W	0	ENE 5	18,2	5,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 222
SO195/031-1	09.02.08	13:00	28° 57,79' S	174° 37,66' W	0	NE 5	24,4	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 221
SO195/031-1	09.02.08	14:00	28° 52,91' S	174° 36,40' W	0	ENE 4	322,3	0,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 223
SO195/031-1	09.02.08	14:33	28° 52,89' S	174° 36,50' W	0	ENE 2	28,8	0,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 222
SO195/031-1	09.02.08	14:57	28° 52,39' S	174° 35,96' W	0	E 5	340,1	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 222
SO195/031-1	09.02.08	15:45	28° 47,26' S	174° 34,71' W	0	ENE 5	118	0,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 224
SO195/031-1	09.02.08	15:54	28° 47,27' S	174° 34,67' W	0	ENE 5	345,1	0,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 223
SO195/031-1	09.02.08	16:04	28° 47,46' S	174° 34,44' W	0	E 5	302,1	0,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 223
SO195/031-1	09.02.08	16:52	28° 42,12' S	174° 33,12' W	0	ENE 6	292,2	0,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 225
SO195/031-1	09.02.08	17:28	28° 42,17' S	174° 33,17' W	0	ENE 6	139,3	0,1	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 224
SO195/031-1	09.02.08	17:34	28° 42,17' S	174° 33,06' W	0	ENE 6	355,2	0,7	OBS/OBH	OBS/OBH	OBS an Deck	OBS 224
SO195/031-1	09.02.08	18:26	28° 36,84' S	174° 31,66' W	0	E 6	273,7	0,3	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 226
SO195/031-1	09.02.08	19:14	28° 36,97' S	174° 31,62' W	0	E 6	190	0,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 225
SO195/031-1	09.02.08	19:24	28° 37,11' S	174° 31,50' W	0	E 6	264,9	0,5	OBS/OBH	OBS/OBH	OBH an Deck	OBH 225
SO195/031-1	09.02.08	20:29	28° 31,78' S	174° 30,24' W	0	ENE 5	260,5	0,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 227
SO195/031-1	09.02.08	20:51	28° 31,81' S	174° 30,01' W	0	ENE 5	324,7	0,1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 226
SO195/031-1	09.02.08	21:00	28° 31,75' S	174° 29,88' W	0	NE 6	280,4	0,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 226
SO195/031-1	09.02.08	21:30	28° 26,99' S	174° 28,64' W	0	ENE 8	12,6	7,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 228
SO195/031-1	09.02.08	21:30	28° 26,99' S	174° 28,64' W	0	ENE 8	12,6	7,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 227
SO195/031-1	09.02.08	21:49	28° 26,59' S	174° 28,40' W	0	ENE 5	227,4	1,2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 227
SO195/031-1	09.02.08	22:31	28° 21,38' S	174° 26,96' W	0	E 6	210,7	0,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 229
SO195/031-1	09.02.08	22:53	28° 21,43' S	174° 26,95' W	0	E 6	112,2	0,7	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 228
SO195/031-1	09.02.08	23:03	28° 21,41' S	174° 26,75' W	0	ESE 5	221,4	0,9	OBS/OBH	OBS/OBH	OBH an Deck	OBH 228

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/031-1	10.02.08	00:36	28° 16,36' S	174° 25,50' W	0	ESE 5	63,2	0,6	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 230
SO195/031-1	10.02.08	00:41	28° 16,33' S	174° 25,46' W	0	ESE 5	47,4	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 229
SO195/031-1	10.02.08	00:56	28° 16,19' S	174° 25,06' W	0	SE 6	213,2	0,3	OBS/OBH	OBS/OBH	OBH an Deck	OBH 229
SO195/031-1	10.02.08	01:57	28° 11,13' S	174° 23,86' W	0	E 8	210	0,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 231
SO195/031-1	10.02.08	02:08	28° 10,98' S	174° 23,74' W	0	E 7	51	2,7	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 230
SO195/031-1	10.02.08	02:15	28° 11,04' S	174° 23,58' W	0	E 7	163,1	1,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 230
SO195/031-1	10.02.08	02:18	28° 11,11' S	174° 23,59' W	0	ENE 6	214,2	2,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 232
SO195/031-1	10.02.08	03:08	28° 5,96' S	174° 22,26' W	0	E 6	37,4	0,5	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 232
SO195/031-1	10.02.08	03:27	28° 5,90' S	174° 22,19' W	0	E 5	178,2	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 231
SO195/031-1	10.02.08	03:39	28° 5,69' S	174° 21,75' W	0	E 7	137,6	1,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 231
SO195/031-1	10.02.08	04:08	28° 1,14' S	174° 20,78' W	0	ESE 7	3,6	8,2	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 233
SO195/031-1	10.02.08	04:28	28° 0,43' S	174° 20,66' W	0	ESE 9	203,1	0,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 232
SO195/031-1	10.02.08	04:37	28° 0,38' S	174° 20,35' W	0	ESE 8	64,8	0,6	OBS/OBH	OBS/OBH	OBH an Deck	OBH 232
SO195/031-1	10.02.08	05:05	27° 55,66' S	174° 19,29' W	0	SE 8	11,4	9,8	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 233
SO195/031-1	10.02.08	05:07	27° 55,40' S	174° 19,22' W	0	SE 7	12	6,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 234
SO195/031-1	10.02.08	05:20	27° 54,98' S	174° 18,73' W	0	ESE 11	315	0,4	OBS/OBH	OBS/OBH	OBH an Deck	OBH 233
SO195/031-1	10.02.08	06:34	27° 49,94' S	174° 17,54' W	0	SE 8	344,7	0,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 235
SO195/031-1	10.02.08	06:42	27° 49,95' S	174° 17,58' W	0	SE 9	288,4	0,1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 234
SO195/031-1	10.02.08	06:53	27° 49,95' S	174° 17,27' W	0	SE 9	242,4	0,6	OBS/OBH	OBS/OBH	OBH an Deck	OBH 234
SO195/031-1	10.02.08	07:54	27° 44,68' S	174° 15,89' W	0	SE 9	134	2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 235
SO195/031-1	10.02.08	08:05	27° 44,85' S	174° 15,62' W	0	SSE 10	129,2	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 235
SO195/031-1	10.02.08	08:07	27° 44,87' S	174° 15,61' W	0	SE 9	130,7	1,2	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 236
SO195/031-1	10.02.08	08:54	27° 39,66' S	174° 14,48' W	0	ESE 8	82,9	1,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 236
SO195/031-1	10.02.08	09:05	27° 39,65' S	174° 14,26' W	0	SE 10	272,1	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 236
SO195/031-1	10.02.08	09:06	27° 39,65' S	174° 14,27' W	0	ESE 10	285,2	0,9	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 237
SO195/031-1	10.02.08	09:40	27° 34,54' S	174° 13,12' W	0	SE 6	11,6	6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 237
SO195/031-1	10.02.08	09:41	27° 34,46' S	174° 13,10' W	0	SE 8	18,4	4,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 238
SO195/031-1	10.02.08	09:58	27° 34,49' S	174° 12,80' W	0	SSE 12	304,5	1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 237
SO195/031-1	10.02.08	10:46	27° 29,17' S	174° 11,50' W	0	SSE 8	114,8	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 238
SO195/031-1	10.02.08	10:47	27° 29,17' S	174° 11,49' W	0	SSE 8	112,2	0,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBJ 239
SO195/031-1	10.02.08	11:00	27° 29,41' S	174° 11,18' W	0	SSE 8	96,9	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 238
SO195/031-1	10.02.08	12:00	27° 24,18' S	174° 10,08' W	0	ESE 4	17,7	1,6	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 240
SO195/031-1	10.02.08	12:08	27° 24,08' S	174° 10,05' W	0	ESE 4	213,4	0,6	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 239
SO195/031-1	10.02.08	12:22	27° 24,23' S	174° 9,61' W	0	E 5	181,8	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBS 239
SO195/031-1	10.02.08	13:41	27° 19,20' S	174° 8,35' W	0	NNW 4	117,3	4,8	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 241
SO195/031-1	10.02.08	13:55	27° 19,13' S	174° 7,91' W	0	NW 3	13,6	0,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 240
SO195/031-1	10.02.08	14:08	27° 18,97' S	174° 7,94' W	0	NW 4	85,8	1,1	OBS/OBH	OBS/OBH	OBH an Deck	OBH 240
SO195/031-1	10.02.08	14:52	27° 14,00' S	174° 6,40' W	0	NW 3	0,7	2,1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 242
SO195/031-1	10.02.08	15:04	27° 13,79' S	174° 6,45' W	0	NNW 3	353,6	1,2	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 241
SO195/031-1	10.02.08	15:13	27° 13,62' S	174° 6,61' W	0	N 3	34,6	0,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 241

Station	Datum	UTC	PositionLat	PositionLon	Tiefe [m]	Windstärke [m/s]	Kurs [°]	v [kn]	Gerät	Gerätekürzel	Aktion	Bemerkung
SO195/031-1	10.02.08	15:44	27° 8,61' S	174° 5,06' W	0	NNW 4	21,3	4,4	OBS/OBH	OBS/OBH	OBS ausgelöst	OBS 243
SO195/031-1	10.02.08	16:04	27° 8,49' S	174° 4,87' W	0	NNW 4	277,9	1	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 242
SO195/031-1	10.02.08	16:15	27° 8,34' S	174° 5,16' W	0	N 3	8,3	1,2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 242
SO195/031-1	10.02.08	16:40	27° 4,24' S	174° 4,06' W	0	N 4	18,9	10	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 244
SO195/031-1	10.02.08	16:57	27° 3,27' S	174° 3,65' W	0	NNW 4	205,5	0,3	OBS/OBH	OBS/OBH	OBS gesichtet	OBS 243
SO195/031-1	10.02.08	17:09	27° 3,02' S	174° 3,76' W	0	N 4	5,7	1,1	OBS/OBH	OBS/OBH	OBS an Deck	OBS 243
SO195/031-1	10.02.08	18:16	26° 57,80' S	174° 2,32' W	0	NNW 3	346,7	1	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 245
SO195/031-1	10.02.08	18:30	26° 57,54' S	174° 2,22' W	0	NW 3	84,4	1,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 244
SO195/031-1	10.02.08	18:39	26° 57,81' S	174° 2,30' W	0	WNW 2	248,3	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 244
SO195/031-1	10.02.08	19:54	26° 52,52' S	174° 0,72' W	0	WNW 2	26,2	0,4	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 246
SO195/031-1	10.02.08	20:01	26° 52,48' S	174° 0,70' W	0	WNW 1	49,3	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 245
SO195/031-1	10.02.08	20:09	26° 52,56' S	174° 0,96' W	0	NW 3	285,8	1,6	OBS/OBH	OBS/OBH	OBH an Deck	OBH 245
SO195/031-1	10.02.08	21:25	26° 47,47' S	173° 59,24' W	0	WSW 2	119,4	0,7	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 247
SO195/031-1	10.02.08	21:40	26° 47,35' S	173° 59,19' W	0	WSW 2	317,4	0,5	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 246
SO195/031-1	10.02.08	22:05	26° 47,12' S	173° 59,68' W	0	SW 1	299,5	1,8	OBS/OBH	OBS/OBH	OBH an Deck	OBH 246
SO195/031-1	10.02.08	23:00	26° 42,00' S	173° 57,56' W	0	SW 1	334,6	0,3	OBS/OBH	OBS/OBH	OBH ausgelöst	OBH 248
SO195/031-1	10.02.08	23:15	26° 41,89' S	173° 57,60' W	0	SW 2	110,8	0,3	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 247
SO195/031-1	10.02.08	23:29	26° 42,04' S	173° 57,92' W	0	W 1	316	1,2	OBS/OBH	OBS/OBH	OBH an Deck	OBH 247
SO195/031-1	11.02.08	00:21	26° 36,94' S	173° 56,42' W	0	NW 1	349,8	0,4	OBS/OBH	OBS/OBH	OBH gesichtet	OBH 248
SO195/031-1	11.02.08	00:36	26° 36,88' S	173° 56,21' W	0	SSW 1	118,1	0,7	OBS/OBH	OBS/OBH	OBH an Deck	OBH 248
SO195/031-1	11.02.08	00:38	26° 36,86' S	173° 56,18' W	5198	SSW 2	27,2	1,7	OBS/OBH	OBS/OBH	Ende Station	
SO195/032-1	11.02.08	04:23	26° 27,96' S	174° 43,51' W	1768	SW 3	100	1	Wärmestromsonde 3 m	HF	Beginn Station	HF07
SO195/032-1	11.02.08	04:25	26° 27,97' S	174° 43,48' W	1766	SSW 4	106,6	0,5	Wärmestromsonde 3 m	HF	z.W.	W2
SO195/032-1	11.02.08	05:13	26° 28,07' S	174° 43,46' W	1791	SSW 4	140,7	0,1	Wärmestromsonde 3 m	HF	Boko	SL: 1799m
SO195/032-1	11.02.08	05:14	26° 28,07' S	174° 43,46' W	1798	S 3	209	0	Wärmestromsonde 3 m	HF	hieven	Messung abgebrochen
SO195/032-1	11.02.08	05:50	26° 28,17' S	174° 43,46' W	1808	S 3	46,6	0,1	Wärmestromsonde 3 m	HF	Boko	SL: 1817m
SO195/032-1	11.02.08	05:51	26° 28,17' S	174° 43,46' W	1808	SSW 4	99,2	0,3	Wärmestromsonde 3 m	HF	hieven	Messung abgebrochen
SO195/032-1	11.02.08	06:26	26° 28,19' S	174° 43,48' W	1809	S 3	319,6	0,2	Wärmestromsonde 3 m	HF	a.D.	
SO195/032-1	11.02.08	06:28	26° 28,18' S	174° 43,48' W	1809	S 3	16	0,2	Wärmestromsonde 3 m	HF	Ende Station	
SO195/033-1	11.02.08	06:35	26° 28,10' S	174° 43,44' W	1804	SE 4	324,1	2,1	Magnetometer	MAGN	Beginn Station	
SO195/033-1	11.02.08	06:37	26° 28,05' S	174° 43,53' W	1795	SE 4	293,3	3,1	Magnetometer	MAGN	Magnetometer zu Wasser	
SO195/033-1	11.02.08	06:54	26° 27,52' S	174° 45,30' W	1901	SSE 4	287,2	6,8	Magnetometer	MAGN	Beginn Profil	SL: 250m, rwk: 288°, d: 44sm
SO195/033-1	11.02.08	10:12	26° 14,24' S	175° 30,95' W	6804	ESE 3	286,4	13,7	Magnetometer	MAGN	Kursänderung	rwk: 270° , d: 16sm
SO195/033-1	11.02.08	11:21	26° 13,96' S	175° 48,71' W	4871	SE 3	301	13,3	Magnetometer	MAGN	Kursänderung	rwK: 013°, d: 66 sm
SO195/033-1	11.02.08	16:43	25° 10,10' S	175° 32,52' W	5292	NE 3	12	12,2	Magnetometer	MAGN	Kursänderung	rwk: 000°, d: 38sm
SO195/033-1	11.02.08	19:47	24° 32,14' S	175° 32,48' W	4228	ENE 2	360	12,7	Magnetometer	MAGN	Kursänderung	rwk: 027° , d:6sm
SO195/033-1	11.02.08	20:00	24° 30,65' S	175° 31,66' W	4453	ENE 2	31,6	4,5	Magnetometer	MAGN	Ende Profil	
SO195/033-1	11.02.08	20:18	24° 29,49' S	175° 31,06' W	4807	NE 2	24,8	4	Magnetometer	MAGN	Magnetometer an Deck	
SO195/033-1	11.02.08	20:20	24° 29,37' S	175° 31,00' W	4822	NE 2	22,3	4	Magnetometer	MAGN	Ende Station	
SO195/034-1	11.02.08	20:55	24° 26,45' S	175° 29,43' W	5329	NNE 3	115,9	0,2	Wärmestromsonde 3 m	HF	Beginn Station	

Station SO 195	CTD / Releasertest	OBH / S ausgebracht	OBH / S aufnehmen	Magnetometer	Streamer	Air-gun Array Bb	Air-gun Array Stb	Wärmestromsonde	Hilfswinden und Kräne	EM 120 / Parasound - Profil	Hilfskräne/-winden Einsatzzeit	Stationszeit	Profilzeit	W 6 Zeit	W 2 Zeit	EM 120 / Parasound- Zeit	Stationszeit in sm	Profilzeit in sm	W 2 Länge	W 6 Länge	EM 120 / Parasound-Verm. in sm	Bemerkungen
SO 195/001-1	1								1	1	3,4	3,4		3,4						3300		CTD / Releasertest
SO 195/002-1										1			10,6			10,6		130			130	EM 120 Profil
SO 195/003-1			1						1	1	0,3	7,4				7,4	73				73	OBS # 114, Suche nach OBS # 113
SO 195/004-1	1								1	1	2,5	2,5				2,5				3500		CTD / Releasertest
SO 195/005-1		2							1	1	0,6	1,2				1,2						2 x OBS zu Wasser für Airguntest
SO 195/005-2						1			1	1	3,2		3,2			3,2		10			10	Airguntest mit Bb-Array
SO 195/006-1										1			6,3			6,3		69			69	EM 120 Profil
SO 195/007-1			2							1	0,6	2,2				2,2	3					Aufnahme 2 x OBS
SO 195/008-1		21							1	1	6,3	10,9				10,9	90				90	Auslegen 21 x OBS / H
SO 195/009-1					1	1	1		1	1	27,9		27,9			27,9		120			120	Seismikprofil # 01
SO 195/010-1			38						1		38,0	52,2					286					Aufnahme OBS / H
SO 195/011-1										1			9,9			9,9		110			110	EM 120 Profil
SO 195/012-1		40							1	1	12,0	20,0				20,0	169				169	Auslegen OBS / H
SO 195/013-1					1	1	1		1	1	41,1		41,1			41,1		178			178	Seismikprofil # 02
SO 195/014-1			18						1		5,4	25,0					144					Aufnahme OBS / H
SO 195/015-1			22						1		6,6	18,8					114					Aufnahme OBS / H
SO 195/016-1										1			8,3			8,3		91			91	EM 120 Profil
SO 195/017-1								1	1	1	6,3	6,3		6,3		6,3				5522	1	Wärmestromsonde, Fehler W 6 - abgebrochen
SO 195/017-2										1			13,5			13,5		168			168	EM 120 Profil
SO 195/018-1								7	1	1	10,6	10,6		10,6		10,6	3,5		5641		4	Wärmestromsonde, GHF 01-6
SO 195/019-1				1					1	1	13,1		13,1			13,1		136			136	Magnetometerprofil
SO 195/020-1			6						1	1	1,8	32,0					267					Aufnahme OBS / H
SO 195/021-1								6	1	1	9,0	9,0			9,0	9,0	3		4269		3	Wärmestromsonde, GHF 02-6
SO 195/022-1								6	1	1	8,4	8,4			8,4	8,4	3		4403		3	Wärmestromsonde, GHF 03-6
SO 195/023-1								6	1	1	8,5	8,5			8,5	8,5	3		5720		3	Wärmestromsonde, GHF 04-6
SO 195/024-1								6	1	1	6,8	6,8			6,8	6,8	3		4560		3	Wärmestromsonde, GHF 05-6
SO 195/025-1		35							1	1	10,0	19,8				19,8	173				173	Auslegen 35 x OBH/S
SO 195/026-1				1	1	1	1		1	1	32,0		32,0			32,0		124			124	Seismikprofil # 03
SO 195/027-1				1					1	1	42,4		42,4			42,4		367			367	Magnetometerprofil
SO 195/028-1								8	1	1	9,7	9,7			9,7	9,7	3		4875		3	Wärmestromsonde, GHF 06-8
SO 195/028-2				1					1	1	19,2		19,2			19,2		169			169	Magnetometerprofil
SO 195/029-1			6						1		1,8	5,9					37					Aufnahme OBS / H
SO 195/030-1				1	1	1			1	1	15,0		15,0			15,0		82			82	Seismikprofil # 03-2
SO 195/031-1			29						1		8,7	38,5					150					Aufnahme OBS / H
SO 195/032-1								1	1	1	2,1	2,1			2,1	2,1			1817			Wärmestromsonde, GHF 07
SO 195/033-1									1	1	13,8		13,8			13,8		165			165	Magnetometerprofil
SO 195/034-1								5	1	1	11,7	11,7			11,7	11,7	3		5359		3	Wärmestromsonde, GHF 08-5
SO 195/035-1								6	1	1	7,5	7,5			7,5	7,5	3		3669		3	Wärmestromsonde, GHF 09-6
Total:	**2**	**98**	**122**	**5**	**4**	**5**	**3**	**52**	**32**	**33**	**386**	**320**	**256**	**20**	**64**	**401**	**1531**	**1919**	**40313**	**12322**	**2449**	
maximal gefierte																						
Seillänge SO 195																			5720	5522		

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2	RV Sonne Fahrtbericht / Cruise Report SO 181 TIPTEQ (from The Incoming Plate to mega Thrust EarthQuakes) 06.12.2004.-26.02.2005. Ed. by Ernst R. Flueh & Ingo Grevemeyer, 2005, 533 pp. In English
3	RV Poseidon Fahrtbericht / Cruise Report POS 316 Carbonate Mounds and Aphotic Corals in the NE-Atlantic 03.08.–17.08.2004. Ed. by Olaf Pfannkuche & Christine Utecht, 2005, 64 pp. In English
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5	RV Sonne Fahrtbericht / Cruise Report SO 186 – GITEWS (German Indonesian Tsunami Early Warning System 28.10.-13.1.2005 & 15.11.-28.11.2005 & 07.01.-20.01.2006. Ed. by Ernst R. Flueh, Tilo Schoene & Wilhelm Weinrebe, 2006, 169 pp. In English
6	RV Sonne Fahrtbericht / Cruise Report SO 186 -3 – SeaCause II, 26.02.-16.03.2006. Ed. by Heidrun Kopp & Ernst R. Flueh, 2006, 174 pp. In English
7	RV Meteor, Fahrtbericht / Cruise Report M67/1 CHILE-MARGIN-SURVEY 20.02.-13.03.2006. Ed. by Wilhelm Weinrebe und Silke Schenk, 2006, 112 pp. In English
8	RV Sonne Fahrtbericht / Cruise Report SO 190 - SINDBAD (Seismic and Geoacoustic Investigations Along The Sunda-Banda Arc Transition) 10.11.2006 - 24.12.2006. Ed. by Heidrun Kopp & Ernst R. Flueh, 2006, 193 pp. In English
9	RV Sonne Fahrtbericht / Cruise Report SO 191 - New Vents "Puaretanga Hou" 11.01. - 23.03.2007. Ed. by Jörg Bialas, Jens Greinert, Peter Linke, Olaf Pfannkuche, 2007, 190 pp. In English

10 FS ALKOR Fahrtbericht / Cruise Report AL 275 - Geobiological investigations and sampling of aphotic coral reef ecosystems in the NE-Skagerrak, 24.03. - 30.03.2006, Andres Rüggeberg & Armin Form, 39 pp.
In English

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In English

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In English

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