

Dr Frank Wenzhöfer
HGF-MPG Brückengruppe für
Tiefsee-Ökologie und - Technologie
Max-Planck Institute for Marine Microbiology
Celsisusstr. 1
D-28359 Bremen, Germany

+49 (0)421 2028-862
frank.wenzhoefer@awi.de



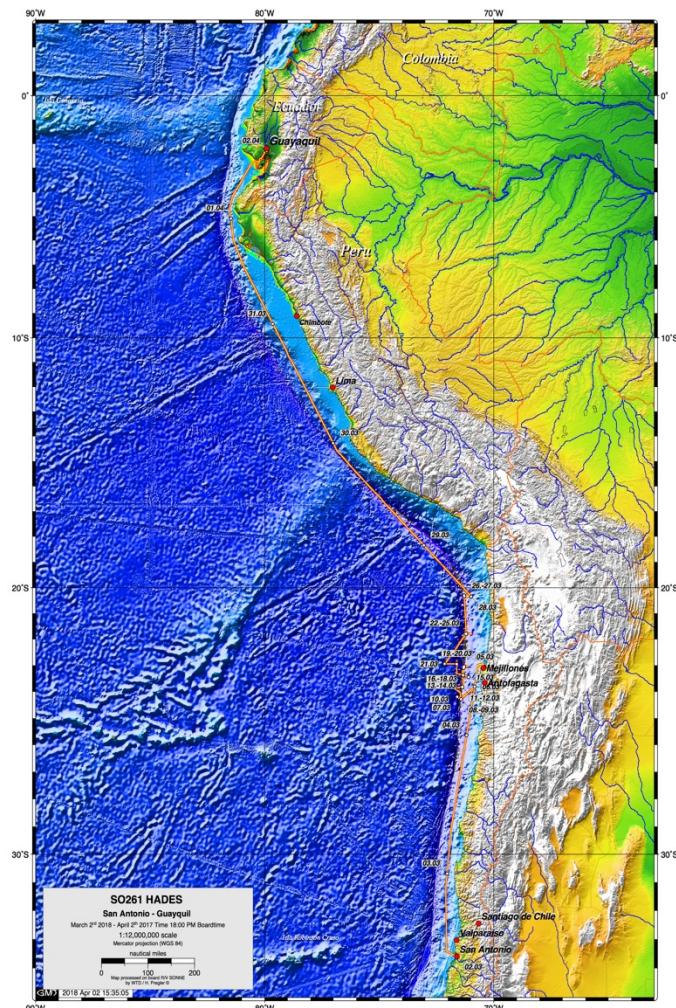
Short Cruise Report Sonne So261 "HADES"

San Antonio (Chile) – Guayaquil (Ecuador)

02.03.18 – 02.04.18

Chief Scientist: Dr. Frank Wenzhöfer

Captain: Lutz Mallon



Trackplot So261

Objectives

The major goal of expedition So261 was to get a better understanding in biogeochemical processes and community structure of the Atacama trench system in highly productive surface waters. Detailed understanding of benthic biogeochemistry requires insight to the processes conveying sediment deposition, the nature of settling material, and the aerobic and anaerobic microbial-driven mineralization processes in the seafloor, all of which was explored during the cruise.

Two main processes contribute to the funneling of particulate matter towards the trench-axis seafloor: i) transport through rare but catastrophic mass-wasting events of material deposited on the trench slopes and ii) continuous transport through gravitational processes, consisting of the quasi-vertical primary flux from the directly overlying water column and quasi-lateral down-slope transport. The importance of the respective processes was quantified as well as the organic carbon and nitrogen, phototrophic pigments, and $d^{13}C$ signatures of organic carbon to assess ‘freshness’ and provenance (terrestrial vs. marine) of sedimentary organic material. Combined this work will provide new and detailed insight in the sedimentary processes sustaining the hadal community in the Atacama Trench. The sediment O₂ uptake provides an excellent proxy for the total turnover of organic material in marine sediments. The in situ O₂ consumption was determined from numerous O₂ microprofiles, which will also provide important information on microscale variations in the diagenetic activity driven by inhomogenous distribution of organic material and electron donors. The role of hadal sediments as sinks for bioavailable nitrogen was determined by quantifying the down-core distribution of nitrate reduction and N₂ production rates. These measurements yielded the first in situ determinations of these processes in abyssal and hadal sediments and will provide novel insight into their regulation and importance, and the extent that hadal trenches can act as sinks in the marine nitrogen cycle. The phylogenetic diversity and quantitative composition of hadal benthic microbial communities will be described on retrieved samples. Comparison of these results between trench and nearby abyssal locations will illuminate the effects of extreme pressure and availability of organic material on benthic microbial ecology and community composition and will provide clues to ecophysiological effects on hadal biogeochemistry.

Overall the investigations will provide the first detailed quantitative description of carbon and nitrogen diagenesis in hadal trench systems. Results will be compared to conditions at the adjacent abyssal plains and other trench systems with different carbon export regimes, but also to the global data bases on benthic carbon mineralization and nitrogen cycling. This will provide novel conceptual insight in deep sea ecosystem functioning and allow us to establish quantitative relationships on deep-sea diagenesis for use in oceanic models, and to identify potential functional differences to more well-studied marine settings.

Specific questions addressed during this cruise were:

- What are the sedimentary processes sustaining the hadal community in the Atacama Trench?
- How do abundance, diversity and community structure of microorganisms, meio- and macrofauna organisms in the Atacama Trench differ from those in less productive trenches and nearby abyssal and shelf sites?
- What are the general biogeochemical characteristics of the surface and deep sediment, bottom water and water column in the eutrophic Atacama Trench?
- Which mineralization pathways are responsible for the organic matter break down in the eutrophic Atacama Trench?
- How efficient are microbial communities operating at extreme hydrostatic pressures in mineralizing organic material as compared to their shallower counterparts? And to what extent do specialized unknown extremophile microbial communities mediate these processes?

Narrative

The cruise So261 started on the 2nd of March 2018 in San Antonio (Chile) with the goal to investigate the Atacama Trench (Fig. 1), located off the coast of Chile. It is one of the deepest ocean trenches in the world and has a maximum depth of 8065m. An international team of 40 scientist from 17 different nations was on board to study the biogeochemical processes and biology from the water surface down to the seafloor of the trench system.

In the evening of March 4 we reached our first site at 2550m water depth, which we used as reference to compare to the later deep trench sites. We started the research program with the deployment of a bottom lander system ('Riever') capable to take images of the seafloor. We used this information to get a fist impression of the seafloor and to decide if our other instruments can be deployed there. Images from this 2500-site showed a nice plain seafloor ideal to perform our further measurements. Our station work at the shallow site 1 was completed with sediment sampling and in situ flux measurements. We then moved to the first trench site (site 6; S 24° 15.96' W 71° 25.38' at 7830m water depth) at the southern end of our working area (Fig. 1). At March 6 we started the sampling program with a camera-lander (Riever) deployment to get some pictures of the sediment structure. During the lander deployment we collected water samples down to 6000m at intervals of 1000m for various analyses of geochemical and biological parameter. During the night, an OFOBS (Ocean Floor Observation and Bathymetry System) transect of the seaward trench slope was performed to get some impressions of the change in seafloor structure, habitats and fauna with depth. We observed several cliffs and areas of bare rock seafloor but also basins with sediment cover and abundant benthic organisms. The most abundant animal types included various holothurians, some of which were very colourful and also surprisingly good at rock climbing, with several spotted on narrow ledges on the sides of steep cliffs. During a second transect further north similar geological structures were observed, but also large fields of broken rock boulders were flown over, and sediments which were quite brown in appearance, perhaps indicating a different composition to those observed during the first dive. Our trench program was then continued with the deployment of several lander systems: Nano-Lander, Profiler-Lander and 2 Camera- /fish trap-Lander. During the time the lander systems performed their measurements at the trench bottom an intensive sediment sampling program was accomplished followed by water sampling from hadal depth (>6000m) using the Hadal-Rosette system, which is winched down to the trench bottom. The mounted Niskin bottles are triggered autonomously by a pressure sensor at defined water depth. The MOCNESS net was deployed during our transit from site 6 to site 5 (S 23° 49.02' W 71° 22.32'), our second trench site at 7890m water depth (Fig. 1). It collected a depth-integrated zooplankton and fish sample on its way down to a maximum depth of 4200m, but it failed to open and close on its way up. After arriving at site 5 on March 10 our general set up of instrument operations was performed: Riever-Camera-Lander, CTD/Rosette water sampling 6000m, Nano-Lander, Profiler-Lander, Sediment-Lander, Camera/fish trap-Lander 1 & 2, Hadal-Rosette, MUC and gravity corer. We finished our Lander program at our second site at 7890m with the successful recovery of all our lander systems in the morning of Monday March 12. Some of these lander systems are used to perform measurements directly at the seafloor. They are part of our subproject to quantify and characterize the diagenesis along the trench axis versus the abyssal plain. Recent investigations have shown that hadal trenches act as hotspots for deposition and turnover of organic material and therefore are more important for regional element cycling than previously anticipated. The activity is presumably driven by specialized microbial communities that are adapted to the extreme hydrostatic pressures in the trench – communities that are unknown to science. The Atacama Trench is underlying one of the most productive water columns in the world and is situated in a very seismic active region - we thus hypothesize that this trench in particular, due to elevated delivery of food, will host

enhanced diagenetic activity. Our next targeted site was Richards Deep (site 4), the deepest point in the Atacama Trench with a water depth of 8065m. Here we performed an intensive water column and seafloor program for almost three days. The last gears recovered were the two camera-baited-trap lander systems to study hadal fishes. During our transit from Richards Deep to our next trench station (site 3 at 7994m) further north we used the MOCNESS net to collect zooplankton. In the morning of March 16, the 14-hour deployment brought huge amounts of samples to the surface. All nets worked perfectly and the samples will be used to discriminate the zooplankton communities collected in different water depth (5000-4000m, 4000-3000m, 3000-2000m, 2000-1000m, 1000-0m). On March 19 we started our usual station program at another reference site (4000m water depth) with the Riever camera system to get pictures of the seafloor, subsequently the other instruments followed. After retrieving all instruments back on deck and checking the first data a clear difference between hadal and abyssal sites could be observed. This was most obvious when looking at the in situ oxygen microprofiles. Here an oxygen penetration depth of > 20 cm could be observed at the 4000m site which is 4-times deeper than at the hadales sites. So, this is the first evidence that sediments at the bottom of the Atacama Trench show elevated rates of organic matter mineralization. On our expedition along the Atacamca Trench we continued the work with the fifth hadal station further north at 21° 46.86' S with our entire sampling program. Our sampling activities were finished with the third MOCCNESS net haul, sampling zooplankton at different water depth. We continued our station work with another hadal site further north to finish our transect of sampling sites along the trench axis. On Tuesday 26 we reached our northern most site. During the next two days we performed our water column and sediment sampling at this site and deployed our different lander system for the last time at hadal depth. In total we have investigated the Atacama-Trench axis along a ca 450 km long transect (Fig. 1). This allows us to assess the biological activity in the hadal Atacama Trench sediment and to evaluate local variability in the benthic mineralization activity and microbial processes in one of the deepest trenches on Earth. On March 28 we completed our work at the northern reference site at 4050m water depth with the recovery of our lander systems. In total we have managed to sample, besides the hadal sites, at three reference sites; two in the south of our transect and one in the north (Fig. 1). In the evening of March 28 we left our working area towards Guayaquil. During the four days of transit we were able to finalize all onboard analyses. In the morning of April 2 we entered the port in Guayaquil. Overall So261 was a very successful expedition bringing 40 scientists from 17 nations together to work concerted on the diversity and functioning of the Atacama Trench ecosystems. Using this multidisciplinary approach in comparing carbon and nutrient fluxes, the connection, composition and structure of communities from the water column to the seafloor using up-to-date methods and technologies, we will improve our knowledge on hadal ecosystems in general.

Acknowledgements

We thank the Captain and crew of the SONNE expedition So26 for their excellent support of our work at sea. Many thanks go to the German Embassy in Chile, and to the SONNE coordination office (Leitstelle) for their help with the permissions and the harbour logistics. The ship time was provided by the BMBF. Financial support was provided through the ERC project HADES (European Research Council Advanced Investigator Grant-Nr. 669947; Benthic diagenesis and microbiology of hadal trenches”), the University of Southern Denmark and Max Planck Society. We gratefully acknowledge this support.

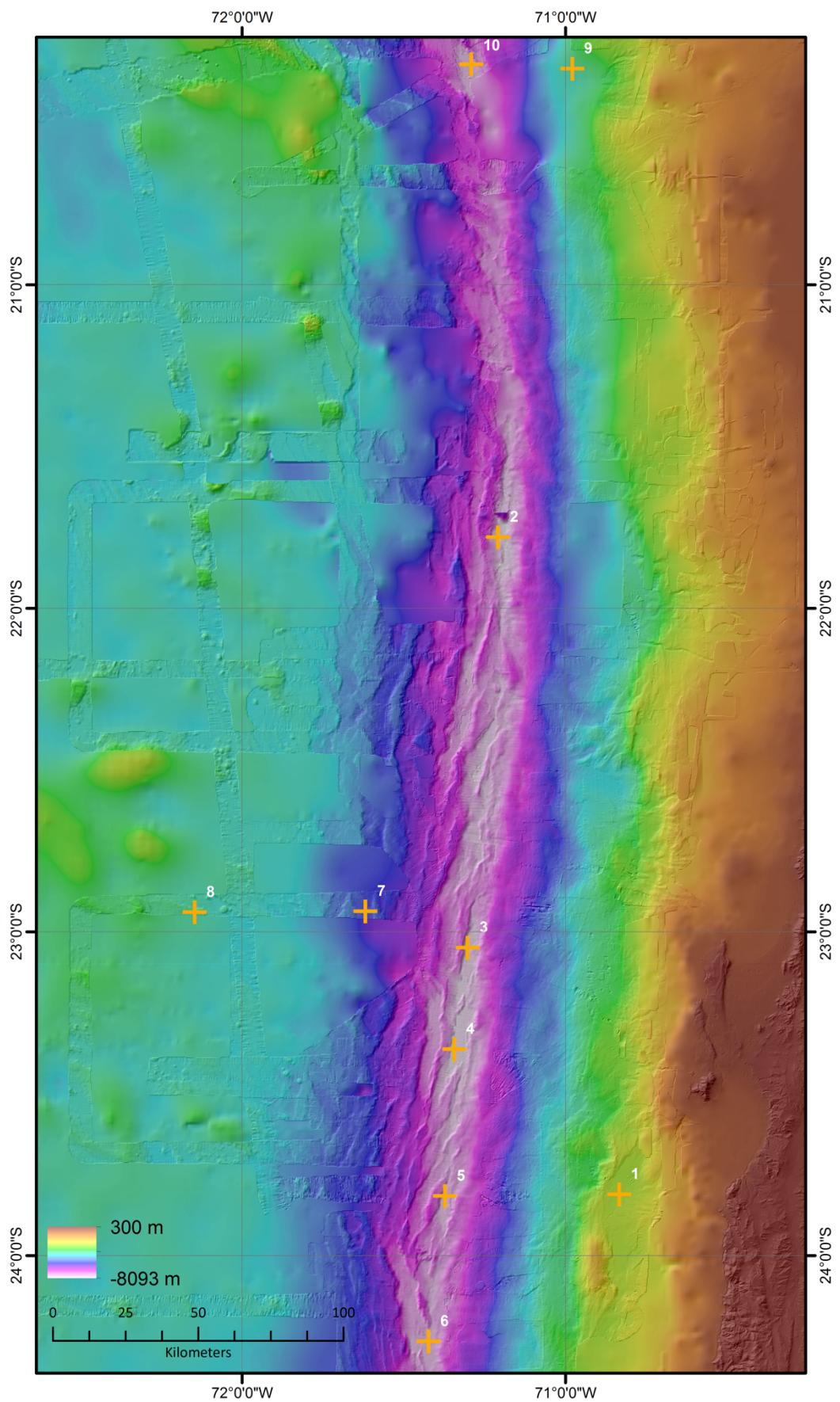


Fig. 1 Sampling sites along the transect of the Atacama Trench system off Chile

Teilnehmerliste

1. Frank Wenzhöfer	Fahrtleiter / <i>Chief Scientist</i>	MPI/AWI
2. Ronnie N Glud	Biogeochemistry/Lander	SDU
3. Morten Larsen	Biogeochemistry/Lander	SDU
4. Anni Glud	Sensors	SDU
5. Manfred Schlosser	Isotops	AWI
6. Bo Thamdrup	Biogeochemistry	SDU
7. Clemens Schauberger	Molecular Microbiology	SDU
8. Axel Nordhausen	Lander	MPI
9. Volker Asendorf	Lander	MPI
10. Autun Purser	OFOBS/Macrofauna	AWI
11. Laura Hehemann	OFOBS/Bathymetry	AWI
12. Ulrich Hope	OFOBS	AWI
13. Robert Turnewitsch	Radionuclides	SAMS
14. Kazumasa Oguri	Ultra-Camera	JAMSTEC
15. Matthias Zabel	Geochemistry	UB/Marum
16. Pei-Chuan Chuang	Geochemistry	UB/Marum
17. Emmanuel Okuma	Geochemistry	UB/Marum
18. Alan Jamieson	Megafauna	NCU
19. Thomas Linley	Megafauna	NCU
20. Stewart Heather	Geology/Bathymetry	BGS
21. Mackenzie Gerringer	Megafauna	UW
22. Osvaldo Ulloa	Pelagic Microbiology	UDEC/IMO
23. Ramirez Nadin	Pelagic Microbiology	UDEC
24. Flores Rafael Edgart	Pelagic Microbiology	UDEC
25. Fernandez Igor	Zooplankton	IMO
26. Gadiel Alarcon	Nanolander	IMO
27. Ruben Escribano	Moccness/Zooplankton	UDEC/IMO
28. Daniel Toledo	Zooplankton	IMO
29. Lorena Arias	Carbon Geochemistry	IMO
30. Wolfgang Schneider	Phys. Oceanography	UDEC
31. Eduardo Navarro	Phys. Oceanography	UDEC
32. Sophie Arnaoud-Hoand	E-DNA	Ifremer
33. Blandine Touche	Extracellular DNA	Ifremer
34. Daniela Zeppilli	Meio- & Marcofauna	Ifremer
35. Brandt Miriam	Meio- & Marcofauna	Ifremer
36. Xin Xin Li	Org. Biogeochemistry	SUSTech
37. Xin Zhao	Org. Biogeochemistry	SUSTech
38. Logan Peoples	Microbial genetics	Scripps
39. Romero Dennis	Foraminifera	UPCH
40. Figueroa Yanara	Observer	

Institute

AWI

Alfred-Wegener Institute Helmholtz Center for Polar and Marine Research
Handelshafen 12
27570 Bremerhaven, Germany
www.awi.de

BGS

British Geological Survey
The Lyell Centre
Research Avenue South
Edinburgh, EH14 4AP, UK
www.bgs.ac.uk

Ifremer

French Research Institute for Exploitation of the Sea
Centre Bretagne - ZI de la Pointe du Diable - CS 10070
29280 Plouzané, France
wwz.ifremer.fr

IMO

Millenium Institute of Oceanography
University of Concepcion
4070386 Concepción, Chile
www.imo-chile.cl

JAMSTEC

Japan Agency for Marine-Earth Science and Technology
Kanagawa 237-0061
Yokosuka, Japan
www.jamstec.go.jp

MPI

Max Planck Institute for Marine Microbiology
Celsiusstr. 1
28359 Bremen, Germany
www.mpi-bremen.de

NCU

Newcastle University
School of natural and Environmental Science
Ridley Building
NE17RU Newcastle, UK
www.ncl.ac.uk

SAMS

Scottish Association for Marine Science
Argyll, PA37 1QA Oben, Scotland
www.sams.ac.uk

Scripps
Scripps Institution of Oceanography
9500 Gilman Drive La Jolla, CA 92093
San Diego, USA
scripps.ucsd.edu

SDU
University of Southern Denmark
Campusvej 55
5230 Odense M, Denmark
www.sdu.dk

SUSTech
Southern University of Science and Technology
1088 Xueyuan Blvd, Nanshan District
Shen Zhen, Guangdong, China
www.sustc.edu.cn/en

UDEC
University of Concepcion
Campus Concepción Víctor Lamas 1290
4070386 Concepcion, Chile
www.udec.cl

UB/Marum
University Bremen/Marum
Leobener Str. 8
28359 Bremen, Germany
www.marum.de

UPCH
Universidad Peruana Cayetano Heredia
Av. Honorio Delgado 430, Urb Ingeniería,
Lima, Perú
www.cayetano.edu.pe

UW
University of Washington
620 University Rd, Friday Harbor
WA 98250, USA
www.washington.edu

Stationlist

Station - Device Operation	date time	Device Code	Action	Comment (Device Operation)	Latitude	Longitude	Depth (m)
SO261_1-1	04.03.18 21:07	LANDER	station start	Riever	23° 48.744' S	070° 50.043' W	2577.8
SO261_1-1	04.03.18 21:08	LANDER	in the water	Riever	23° 48.747' S	070° 50.048' W	2551.7
SO261_1-1	04.03.18 21:13	LANDER	deployed	Riever	23° 48.744' S	070° 50.051' W	2549.7
SO261_1-1	05.03.18 00:37	LANDER	information	Riever	23° 48.156' S	070° 50.025' W	2559.6
SO261_1-1	05.03.18 01:14	LANDER	at surface	Riever	23° 48.302' S	070° 50.039' W	0.0
SO261_1-1	05.03.18 01:50	LANDER	on deck	Riever	23° 48.363' S	070° 49.966' W	0.0
SO261_1-1	05.03.18 02:00	LANDER	station end	Riever	23° 48.366' S	070° 49.969' W	2559.4
SO261_2-1	04.03.18 21:34	CTD	station start		23° 49.001' S	070° 50.116' W	2545.0
SO261_2-1	04.03.18 21:35	CTD	in the water		23° 49.001' S	070° 50.116' W	2545.4
SO261_2-1	04.03.18 22:45	CTD	max depth/ on ground		23° 49.000' S	070° 50.121' W	2544.6
SO261_2-1	04.03.18 23:46	CTD	on deck		23° 49.003' S	070° 50.115' W	2544.1
SO261_2-1	04.03.18 23:54	CTD	station end		23° 48.999' S	070° 50.119' W	2544.5
SO261_3-1	05.03.18 02:06	OFOS	station start	OFOBS	23° 48.362' S	070° 49.970' W	2558.2
SO261_3-1	05.03.18 02:34	OFOS	in the water	OFOBS	23° 48.368' S	070° 49.965' W	2559.8
SO261_3-1	05.03.18 03:17	OFOS	information	OFOBS	23° 48.376' S	070° 49.966' W	2557.6
SO261_3-1	05.03.18 03:29	OFOS	information	OFOBS	23° 48.473' S	070° 50.032' W	2560.2
SO261_3-1	05.03.18 03:58	OFOS	information	OFOBS	23° 48.485' S	070° 50.326' W	2554.5
SO261_3-1	05.03.18 04:07	OFOS	information	OFOBS	23° 48.486' S	070° 50.432' W	2552.8
SO261_3-1	05.03.18 04:29	OFOS	hoisting	OFOBS	23° 48.488' S	070° 50.668' W	2550.8
SO261_3-1	05.03.18 04:48	OFOS	on deck	OFOBS	23° 48.496' S	070° 50.727' W	2551.2
SO261_3-1	05.03.18 04:55	OFOS	station end	OFOBS	23° 48.494' S	070° 50.731' W	2550.4
SO261_4-1	05.03.18 23:56	LANDER	station start	FLUX-	23° 48.714' S	070° 50.050' W	2560.2
SO261_4-1	06.03.18 00:31	LANDER	in the water	FLUX-	23° 48.719' S	070° 50.036' W	2559.7
SO261_4-1	06.03.18 14:15	LANDER	information	FLUX-	23° 47.944' S	070° 49.885' W	0.0
SO261_4-1	06.03.18 14:31	LANDER	information	FLUX-	23° 47.953' S	070° 49.886' W	0.0
SO261_4-1	06.03.18 14:36	LANDER	information	FLUX-	23° 47.956' S	070° 49.884' W	0.0
SO261_4-1	06.03.18 15:55	LANDER	at surface	FLUX-	23° 48.025' S	070° 49.853' W	0.0
SO261_4-1	06.03.18 16:07	LANDER	on deck	FLUX-	23° 48.326' S	070° 50.047' W	0.0
SO261_4-1	06.03.18 16:13	LANDER	station end	FLUX-	23° 48.329' S	070° 50.048' W	2566.9
SO261_5-1	06.03.18 00:45	LANDER	station start	Camera-LANDER !	23° 48.971' S	070° 50.097' W	2555.3
SO261_5-1	06.03.18 00:57	LANDER	in the water	Camera-LANDER !	23° 48.980' S	070° 50.100' W	2554.1
SO261_5-1	06.03.18 01:07	LANDER	in the water	Camera-LANDER !	23° 48.981' S	070° 50.100' W	2553.3
SO261_5-1	06.03.18 11:00	LANDER	information	Camera-LANDER !	23° 49.243' S	070° 50.285' W	2545.8
SO261_5-1	06.03.18 11:06	LANDER	information	Camera-LANDER !	23° 49.245' S	070° 50.287' W	0.0
SO261_5-1	06.03.18 11:12	LANDER	information	Camera-LANDER !	23° 49.377' S	070° 50.429' W	0.0
SO261_5-1	06.03.18 11:52	LANDER	at surface	Camera-LANDER !	23° 48.507' S	070° 49.999' W	0.0
SO261_5-1	06.03.18 12:10	LANDER	on deck	Camera-LANDER !	23° 48.612' S	070° 50.073' W	0.0

SO261_5-1	06.03.18 12:12	LANDER	station end	Camera-LANDER !	23° 48.612' S	070° 50.073' W	0.0
SO261_6-1	06.03.18 01:24	LANDER	station start	Camera-LANDER 2	23° 49.247' S	070° 50.167' W	2547.6
SO261_6-1	06.03.18 01:27	LANDER	in the water	Camera-LANDER 2	23° 49.245' S	070° 50.167' W	2545.0
SO261_6-1	06.03.18 01:35	LANDER	in the water	Camera-LANDER 2	23° 49.250' S	070° 50.168' W	2548.3
SO261_6-1	06.03.18 12:14	LANDER	information	Camera-LANDER 2	23° 48.612' S	070° 50.074' W	0.0
SO261_6-1	06.03.18 12:20	LANDER	information	Camera-LANDER 2	23° 48.640' S	070° 50.068' W	0.0
SO261_6-1	06.03.18 12:25	LANDER	information	Camera-LANDER 2	23° 48.641' S	070° 50.065' W	0.0
SO261_6-1	06.03.18 13:17	LANDER	at surface	Camera-LANDER 2	23° 48.725' S	070° 50.049' W	0.0
SO261_6-1	06.03.18 13:37	LANDER	on deck	Camera-LANDER 2	23° 48.968' S	070° 50.142' W	0.0
SO261_6-1	06.03.18 13:40	LANDER	station end	Camera-LANDER 2	23° 48.967' S	070° 50.142' W	0.0
SO261_7-2	06.03.18 01:50	CTD	station start		23° 49.244' S	070° 50.168' W	2548.0
SO261_7-2	06.03.18 01:53	CTD	in the water		23° 49.244' S	070° 50.167' W	2548.0
SO261_7-2	06.03.18 03:01	CTD	max depth/ on ground		23° 49.248' S	070° 50.164' W	2549.1
SO261_7-2	06.03.18 03:02	CTD	information		23° 49.248' S	070° 50.165' W	2548.2
SO261_7-2	06.03.18 04:10	CTD	on deck		23° 49.249' S	070° 50.161' W	2548.6
SO261_7-2	06.03.18 04:12	CTD	station end		23° 49.249' S	070° 50.160' W	2547.1
SO261_8-2	06.03.18 04:30	MUC	station start		23° 49.246' S	070° 50.283' W	2548.8
SO261_8-2	06.03.18 04:31	MUC	in the water		23° 49.244' S	070° 50.284' W	2548.7
SO261_8-2	06.03.18 05:19	MUC	max depth/ on ground		23° 49.242' S	070° 50.282' W	2547.8
SO261_8-2	06.03.18 05:19	MUC	hoisting		23° 49.243' S	070° 50.283' W	2546.5
SO261_8-2	06.03.18 06:19	MUC	on deck		23° 49.244' S	070° 50.287' W	2546.2
SO261_8-2	06.03.18 06:20	MUC	station end		23° 49.243' S	070° 50.287' W	2546.6
SO261_9-1	06.03.18 06:50	MUC	station start		23° 49.249' S	070° 50.286' W	2546.9
SO261_9-1	06.03.18 06:52	MUC	in the water		23° 49.250' S	070° 50.285' W	2548.5
SO261_9-1	06.03.18 07:41	MUC	max depth/ on ground		23° 49.250' S	070° 50.283' W	2544.6
SO261_9-1	06.03.18 07:42	MUC	hoisting		23° 49.250' S	070° 50.283' W	2547.2
SO261_9-1	06.03.18 08:43	MUC	on deck		23° 49.248' S	070° 50.283' W	2545.5
SO261_9-1	06.03.18 08:46	MUC	station end		23° 49.248' S	070° 50.283' W	2548.6
SO261_10-1	06.03.18 08:47	GC	station start	6m	23° 49.248' S	070° 50.283' W	2546.5
SO261_10-1	06.03.18 08:52	GC	in the water	6m	23° 49.248' S	070° 50.283' W	2545.7
SO261_10-1	06.03.18 09:35	GC	max depth/ on ground	6m	23° 49.246' S	070° 50.284' W	2547.6
SO261_10-1	06.03.18 09:35	GC	hoisting	6m	23° 49.246' S	070° 50.284' W	2546.8
SO261_10-1	06.03.18 10:32	GC	on deck	6m	23° 49.250' S	070° 50.283' W	2545.9
SO261_10-1	06.03.18 10:53	GC	station end	6m	23° 49.245' S	070° 50.283' W	2546.3
SO261_11-1	06.03.18 16:26	CTD	station start		23° 48.325' S	070° 50.047' W	2565.0
SO261_11-1	06.03.18 16:31	CTD	in the water		23° 48.326' S	070° 50.048' W	2566.4
SO261_11-1	06.03.18 17:02	CTD	max depth/ on ground		23° 48.328' S	070° 50.047' W	2567.4

SO261_11-1	06.03.18 17:04	CTD	hoisting		23° 48.329'S	070° 50.047'W	2566.7
SO261_11-1	06.03.18 17:36	CTD	on deck		23° 48.330'S	070° 50.049'W	2567.6
SO261_11-1	06.03.18 17:38	CTD	station end		23° 48.328'S	070° 50.049'W	2567.5
SO261_12-1	06.03.18 22:12	LANDER	station start	Riever	24° 15.964'S	071° 25.381'W	7834.9
SO261_12-1	06.03.18 22:15	LANDER	in the water	Riever	24° 15.959'S	071° 25.381'W	7834.0
SO261_12-1	06.03.18 22:24	LANDER	deployed	Riever	24° 15.963'S	071° 25.380'W	7804.0
SO261_12-1	07.03.18 01:44	LANDER	information	Riever	24° 16.081'S	071° 25.414'W	7835.7
SO261_12-1	07.03.18 02:16	LANDER	information	Riever	24° 16.082'S	071° 25.418'W	0.0
SO261_12-1	07.03.18 04:31	LANDER	information	Riever	24° 16.152'S	071° 25.697'W	7835.4
SO261_12-1	07.03.18 06:36	LANDER	on deck	Riever	24° 16.568'S	071° 26.300'W	7835.9
SO261_12-1	07.03.18 06:42	LANDER	station end	Riever	24° 16.598'S	071° 26.323'W	7834.0
SO261_13-1	06.03.18 22:35	CTD	station start		24° 16.085'S	071° 25.418'W	7803.8
SO261_13-1	06.03.18 22:37	CTD	in the water		24° 16.086'S	071° 25.421'W	7807.3
SO261_13-1	07.03.18 01:15	CTD	max depth/ on ground		24° 16.082'S	071° 25.414'W	7837.8
SO261_13-1	07.03.18 01:18	CTD	hoisting		24° 16.080'S	071° 25.414'W	7837.2
SO261_13-1	07.03.18 04:19	CTD	on deck		24° 16.083'S	071° 25.417'W	7836.5
SO261_13-1	07.03.18 04:20	CTD	station end		24° 16.085'S	071° 25.418'W	7836.5
SO261_14-1	07.03.18 08:06	OFOS	information	OFOBS	24° 11.793'S	071° 37.958'W	5726.1
SO261_14-1	07.03.18 08:09	OFOS	in the water	OFOBS	24° 11.799'S	071° 37.961'W	5724.2
SO261_14-1	07.03.18 10:25	OFOS	max depth/ on ground	OFOBS	24° 11.834'S	071° 36.961'W	5638.6
SO261_14-1	07.03.18 14:05	OFOS	profile end	OFOBS	24° 11.769'S	071° 34.785'W	5751.2
SO261_14-1	07.03.18 14:07	OFOS	hoisting	OFOBS	24° 11.767'S	071° 34.781'W	5763.6
SO261_14-1	07.03.18 15:58	OFOS	on deck	OFOBS	24° 11.769'S	071° 34.787'W	5754.5
SO261_14-1	07.03.18 16:02	OFOS	station end	OFOBS	24° 11.770'S	071° 34.784'W	5752.8
SO261_15-1	07.03.18 17:08	LANDER	station start		24° 15.962'S	071° 25.388'W	7838.2
SO261_15-1	07.03.18 17:10	LANDER	in the water		24° 15.963'S	071° 25.385'W	7818.2
SO261_15-1	08.03.18 07:21	LANDER	information		24° 16.841'S	071° 25.562'W	7833.2
SO261_15-1	08.03.18 07:36	LANDER	information		24° 16.843'S	071° 25.565'W	7834.7
SO261_15-1	08.03.18 08:06	LANDER	information		24° 15.897'S	071° 25.533'W	7836.7
SO261_15-1	08.03.18 08:35	LANDER	information		24° 15.898'S	071° 25.534'W	7834.7
SO261_15-1	08.03.18 14:39	LANDER	information		24° 16.855'S	071° 25.721'W	7834.5
SO261_15-1	08.03.18 15:15	LANDER	on deck		24° 16.533'S	071° 25.389'W	7834.9
SO261_15-1	08.03.18 15:20	LANDER	station end		24° 16.585'S	071° 25.401'W	7835.7
SO261_16-1	07.03.18 17:37	LANDER	station start		24° 16.234'S	071° 25.385'W	7833.7
SO261_16-1	07.03.18 17:39	LANDER	in the water		24° 16.233'S	071° 25.386'W	7835.8
SO261_16-1	08.03.18 21:24	LANDER	information		24° 17.100'S	071° 25.438'W	7832.8
SO261_16-1	09.03.18 00:06	LANDER	information		24° 16.833'S	071° 25.132'W	0.0
SO261_16-1	09.03.18 00:49	LANDER	on deck		24° 16.471'S	071° 25.258'W	0.0
SO261_16-1	09.03.18 00:55	LANDER	station end		24° 16.471'S	071° 25.256'W	0.0
SO261_17-1	07.03.18 18:01	LANDER	station start	Camera- Lander-1	24° 16.499'S	071° 25.392'W	7835.4
SO261_17-1	07.03.18 18:12	LANDER	in the water	Camera- Lander-1	24° 16.504'S	071° 25.388'W	7835.9
SO261_17-1	08.03.18 20:34	LANDER	information	Camera- Lander-1	24° 17.095'S	071° 25.444'W	0.0
SO261_17-1	08.03.18 23:23	LANDER	at surface	Camera- Lander-1	24° 16.081'S	071° 25.201'W	0.0

SO261_17-1	08.03.18 23:56	LANDER	on deck	Camera-Lander-1	24° 16.744'S	071° 25.121'W	0.0
SO261_17-1	08.03.18 23:56	LANDER	station end	Camera-Lander-1	24° 16.747'S	071° 25.121'W	0.0
SO261_18-1	07.03.18 18:28	LANDER	station start	Camera-Lander-2	24° 16.779'S	071° 25.393'W	7834.2
SO261_18-1	07.03.18 18:37	LANDER	in the water	Camera-Lander-2	24° 16.777'S	071° 25.389'W	7834.5
SO261_18-1	08.03.18 22:57	LANDER	information	Camera-Lander-2	24° 16.081'S	071° 25.204'W	0.0
SO261_18-1	09.03.18 00:56	LANDER	at surface	Camera-Lander-2	24° 16.471'S	071° 25.254'W	0.0
SO261_18-1	09.03.18 02:19	LANDER	on deck	Camera-Lander-2	24° 16.812'S	071° 25.248'W	7832.9
SO261_18-1	09.03.18 02:25	LANDER	station end	Camera-Lander-2	24° 16.828'S	071° 25.259'W	7835.0
SO261_19-1	07.03.18 19:03	CTD	station start	Hadal-	24° 17.045'S	071° 25.396'W	7831.4
SO261_19-1	07.03.18 19:05	CTD	in the water	Hadal-	24° 17.044'S	071° 25.396'W	7833.6
SO261_19-1	07.03.18 23:38	CTD	max depth/on ground	Hadal-Rosette	24° 17.042'S	071° 25.401'W	7830.4
SO261_19-1	07.03.18 23:55	CTD	hoisting	Hadal-	24° 17.045'S	071° 25.396'W	7832.2
SO261_19-1	08.03.18 02:20	CTD	on deck	Hadal-	24° 17.040'S	071° 25.402'W	7831.4
SO261_19-1	08.03.18 02:21	CTD	information	Hadal-	24° 17.040'S	071° 25.401'W	7831.4
SO261_19-1	08.03.18 02:26	CTD	station end	Hadal-	24° 17.046'S	071° 25.404'W	7832.3
SO261_20-1	08.03.18 02:34	GC	information	GC 6 m	24° 17.045'S	071° 25.403'W	7834.0
SO261_20-1	08.03.18 02:35	GC	in the water	GC 6 m	24° 17.045'S	071° 25.404'W	7833.8
SO261_20-1	08.03.18 04:35	GC	max depth/on ground	GC 6 m	24° 17.044'S	071° 25.403'W	7832.0
SO261_20-1	08.03.18 04:35	GC	hoisting	GC 6 m	24° 17.044'S	071° 25.403'W	7832.0
SO261_20-1	08.03.18 07:04	GC	on deck	GC 6 m	24° 17.047'S	071° 25.403'W	7833.3
SO261_20-1	08.03.18 07:06	GC	station end	GC 6 m	24° 17.045'S	071° 25.400'W	7831.8
SO261_21-1	08.03.18 08:57	MUC	station start		24° 17.110'S	071° 25.435'W	7831.3
SO261_21-1	08.03.18 08:58	MUC	in the water		24° 17.110'S	071° 25.442'W	7832.7
SO261_21-1	08.03.18 11:22	MUC	max depth/on ground		24° 17.099'S	071° 25.440'W	7831.3
SO261_21-1	08.03.18 11:22	MUC	hoisting		24° 17.099'S	071° 25.441'W	7831.3
SO261_21-1	08.03.18 14:24	MUC	on deck		24° 17.096'S	071° 25.441'W	7832.9
SO261_21-1	08.03.18 14:27	MUC	station end		24° 17.099'S	071° 25.444'W	7832.3
SO261_22-1	08.03.18 15:31	MUC	station start		24° 16.790'S	071° 25.390'W	7833.0
SO261_22-1	08.03.18 15:34	MUC	in the water		24° 16.785'S	071° 25.389'W	7834.9
SO261_22-1	08.03.18 16:02	MUC	information		24° 16.790'S	071° 25.391'W	7833.1
SO261_22-1	08.03.18 16:36	MUC	information		24° 17.097'S	071° 25.441'W	7834.0
SO261_22-1	08.03.18 18:36	MUC	max depth/on ground		24° 17.100'S	071° 25.440'W	7831.5
SO261_22-1	08.03.18 18:36	MUC	hoisting		24° 17.100'S	071° 25.440'W	7831.5
SO261_22-1	08.03.18 21:48	MUC	on deck		24° 17.099'S	071° 25.440'W	7831.1
SO261_22-1	08.03.18 21:51	MUC	station end		24° 17.100'S	071° 25.443'W	7831.9
SO261_23-1	09.03.18 02:30	CTD	station start		24° 16.825'S	071° 25.249'W	7833.5
SO261_23-1	09.03.18 02:34	CTD	in the water		24° 16.828'S	071° 25.236'W	7834.1
SO261_23-1	09.03.18 05:10	CTD	max depth/on ground		24° 16.771'S	071° 25.394'W	7832.7
SO261_23-1	09.03.18 05:11	CTD	hoisting		24° 16.772'S	071° 25.394'W	7833.3

SO261_23-1	09.03.18 07:45	CTD	on deck		24° 16.773'S	071° 25.389'W	7832.3
SO261_23-1	09.03.18 07:47	CTD	station end		24° 16.774'S	071° 25.390'W	7835.3
SO261_24-1	09.03.18 07:50	CTD	station start	Hadal-	24° 16.773'S	071° 25.392'W	7834.9
SO261_24-1	09.03.18 07:58	CTD	in the water	Hadal-	24° 16.771'S	071° 25.388'W	7834.0
SO261_24-1	09.03.18 12:17	CTD	max depth/ on ground	Hadal- Rosette	24° 16.773'S	071° 25.390'W	7834.1
SO261_24-1	09.03.18 12:33	CTD	hoisting	Hadal-	24° 16.777'S	071° 25.391'W	7832.9
SO261_24-1	09.03.18 15:06	CTD	on deck	Hadal-	24° 16.767'S	071° 25.394'W	7834.2
SO261_24-1	09.03.18 15:14	CTD	station end	Hadal-	24° 16.771'S	071° 25.389'W	0.0
SO261_25-1	09.03.18 15:15	NET	station start	MOCNESSn	24° 16.769'S	071° 25.389'W	7832.6
SO261_25-1	09.03.18 15:50	NET	information	MOCNESSn	24° 16.775'S	071° 25.385'W	7832.0
SO261_25-1	09.03.18 16:01	NET	information	MOCNESSn	24° 17.015'S	071° 25.436'W	7833.0
SO261_25-1	09.03.18 21:30	NET	information	MOCNESSn	24° 11.300'S	071° 27.985'W	7645.6
SO261_25-1	10.03.18 02:15	NET	information	MOCNESSn	24° 02.684'S	071° 27.987'W	6983.5
SO261_25-1	10.03.18 02:23	NET	information	MOCNESSn	24° 02.469'S	071° 27.986'W	7003.0
SO261_25-1	10.03.18 02:30	NET	station end	MOCNESSn	24° 02.264'S	071° 27.989'W	6976.6
SO261_26-1	10.03.18 04:11	OFOS	station start	OFOBS	23° 52.126'S	071° 42.288'W	5353.3
SO261_26-1	10.03.18 04:15	OFOS	in the water	OFOBS	23° 52.120'S	071° 42.289'W	5359.5
SO261_26-1	10.03.18 04:42	OFOS	lowering	OFOBS	23° 52.126'S	071° 42.294'W	5358.4
SO261_26-1	10.03.18 04:56	OFOS	information	OFOBS	23° 52.124'S	071° 42.295'W	5338.0
SO261_26-1	10.03.18 05:08	OFOS	information	OFOBS	23° 52.131'S	071° 42.285'W	5349.9
SO261_26-1	10.03.18 05:39	OFOS	information	OFOBS	23° 52.146'S	071° 42.297'W	5345.0
SO261_26-1	10.03.18 06:14	OFOS	information	OFOBS	23° 52.530'S	071° 42.340'W	6126.8
SO261_26-1	10.03.18 07:02	OFOS	information	OFOBS	23° 52.642'S	071° 42.353'W	6035.4
SO261_26-1	10.03.18 07:03	OFOS	information	OFOBS	23° 52.641'S	071° 42.354'W	5458.6
SO261_26-1	10.03.18 07:25	OFOS	information	OFOBS	23° 52.641'S	071° 42.346'W	6164.8
SO261_26-1	10.03.18 07:38	OFOS	information	OFOBS	23° 52.641'S	071° 42.349'W	0.0
SO261_26-1	10.03.18 08:50	OFOS	information	OFOBS	23° 52.806'S	071° 42.116'W	0.0
SO261_26-1	10.03.18 11:14	OFOS	hoisting	OFOBS	23° 52.884'S	071° 40.811'W	5654.6
SO261_26-1	10.03.18 13:56	OFOS	on deck	OFOBS	23° 52.887'S	071° 40.756'W	5740.7
SO261_26-1	10.03.18 14:00	OFOS	station end	OFOBS	23° 52.882'S	071° 40.753'W	5729.4
SO261_27-1	10.03.18 15:50	LANDER	station start	Riever- LANDER	23° 49.018'S	071° 22.317'W	7873.2
SO261_27-1	10.03.18 15:58	LANDER	in the water	Riever- LANDER	23° 49.017'S	071° 22.322'W	7873.0
SO261_27-1	10.03.18 20:00	LANDER	information	Riever- LANDER	23° 49.124'S	071° 22.344'W	7874.2
SO261_27-1	10.03.18 22:29	LANDER	at surface	Riever- LANDER	23° 48.602'S	071° 22.107'W	7892.3
SO261_27-1	10.03.18 22:53	LANDER	on deck	Riever- LANDER	23° 48.921'S	071° 22.301'W	7892.7
SO261_27-1	10.03.18 22:54	LANDER	station end	Riever- LANDER	23° 48.918'S	071° 22.306'W	7892.4
SO261_28-1	10.03.18 16:10	CTD	station start		23° 49.123'S	071° 22.353'W	7887.3
SO261_28-1	10.03.18 16:14	CTD	in the water		23° 49.118'S	071° 22.354'W	7868.1
SO261_28-1	10.03.18 18:15	CTD	information		23° 49.123'S	071° 22.348'W	7873.3
SO261_28-1	10.03.18 18:17	CTD	information		23° 49.124'S	071° 22.351'W	7887.3
SO261_28-1	10.03.18 18:42	CTD	max depth/ on ground		23° 49.121'S	071° 22.351'W	7873.6
SO261_28-1	10.03.18 18:43	CTD	hoisting		23° 49.121'S	071° 22.351'W	7871.0

SO261_28-1	10.03.18 21:00	CTD	on deck		23° 49.122'S	071° 22.350'W	7873.3
SO261_28-1	10.03.18 21:01	CTD	station end		23° 49.123'S	071° 22.350'W	7871.9
SO261_29-1	10.03.18 23:30	LANDER	station start	Profiler	23° 49.023'S	071° 22.313'W	7892.0
SO261_29-1	10.03.18 23:31	LANDER	deployed	Profiler	23° 49.023'S	071° 22.314'W	7893.3
SO261_29-1	12.03.18 01:00	LANDER	information	Profiler	23° 49.838'S	071° 22.525'W	0.0
SO261_29-1	12.03.18 03:44	LANDER	at surface	Profiler	23° 48.141'S	071° 22.081'W	7872.6
SO261_29-1	12.03.18 04:04	LANDER	on deck	Profiler	23° 48.701'S	071° 22.255'W	7892.6
SO261_29-1	12.03.18 04:07	LANDER	station end	Profiler	23° 48.698'S	071° 22.256'W	7893.4
SO261_30-1	10.03.18 23:53	LANDER	station start	Sediment	23° 49.278'S	071° 22.389'W	7893.7
SO261_30-1	11.03.18 00:19	LANDER	deployed	Sediment	23° 49.281'S	071° 22.385'W	7894.9
SO261_30-1	12.03.18 09:30	LANDER	information	Sediment	23° 48.703'S	071° 22.253'W	0.0
SO261_30-1	12.03.18 12:02	LANDER	at surface	Sediment	23° 48.702'S	071° 22.254'W	7893.4
SO261_30-1	12.03.18 12:28	LANDER	on deck	Sediment	23° 49.058'S	071° 22.214'W	7892.5
SO261_30-1	12.03.18 12:30	LANDER	station end	Sediment	23° 49.058'S	071° 22.218'W	7895.8
SO261_31-1	11.03.18 00:53	LANDER	station start	Camera 1 - LANDER	23° 49.720'S	071° 20.768'W	7614.3
SO261_31-1	11.03.18 01:01	LANDER	deployed	Camera 1 - LANDER	23° 49.739'S	071° 20.780'W	7615.6
SO261_31-1	12.03.18 13:16	LANDER	information	Camera 1 - LANDER	23° 48.955'S	071° 20.717'W	0.0
SO261_31-1	12.03.18 16:02	LANDER	at surface	Camera 1 - LANDER	23° 49.071'S	071° 20.718'W	7783.5
SO261_31-1	12.03.18 16:20	LANDER	information	Camera 1 - LANDER	23° 49.429'S	071° 20.709'W	7649.4
SO261_31-1	12.03.18 16:25	LANDER	information	Camera 1 - LANDER	23° 49.433'S	071° 20.845'W	7775.0
SO261_31-1	12.03.18 18:01	LANDER	information	Camera 1 - LANDER	23° 48.416'S	071° 21.206'W	7731.2
SO261_31-1	12.03.18 18:07	LANDER	information	Camera 1 - LANDER	23° 48.419'S	071° 21.205'W	7729.9
SO261_31-1	12.03.18 18:25	LANDER	on deck	Camera 1 - LANDER	23° 48.416'S	071° 21.209'W	7729.7
SO261_31-1	12.03.18 18:28	LANDER	information	Camera 1 - LANDER	23° 48.416'S	071° 21.207'W	7729.5
SO261_31-1	12.03.18 18:29	LANDER	station end	Camera 1 - LANDER	23° 48.415'S	071° 21.207'W	7731.0
SO261_32-1	11.03.18 01:16	LANDER	station start	Camera 2 - LANDER	23° 49.973'S	071° 20.644'W	7524.3
SO261_32-1	11.03.18 01:26	LANDER	deployed	Camera 2 - LANDER	23° 49.981'S	071° 20.635'W	7480.1
SO261_32-1	12.03.18 18:00	LANDER	at surface	Camera 2 - LANDER	23° 48.421'S	071° 21.211'W	7730.5
SO261_32-1	12.03.18 18:51	LANDER	information	Camera 2 - LANDER	23° 49.465'S	071° 20.199'W	7235.8
SO261_32-1	12.03.18 19:01	LANDER	on deck	Camera 2 - LANDER	23° 49.211'S	071° 20.247'W	0.0
SO261_32-1	12.03.18 19:09	LANDER	station end	Camera 2 - LANDER	23° 49.087'S	071° 20.255'W	7575.9
SO261_33-1	11.03.18 01:27	LANDER	information	Nano-	23° 49.980'S	071° 20.634'W	7479.0
SO261_33-1	11.03.18 02:08	LANDER	deployed	Nano-	23° 49.569'S	071° 22.452'W	7893.8
SO261_33-1	11.03.18 05:18	LANDER	information	Nano-	23° 49.837'S	071° 22.519'W	7890.1
SO261_33-1	11.03.18 05:54	LANDER	information	Nano-	23° 49.837'S	071° 22.519'W	7889.1
SO261_33-1	12.03.18 00:00	LANDER	information	Nano-	23° 49.833'S	071° 22.532'W	0.0

SO261_33-1	12.03.18 02:05	LANDER	at surface	Nano-	23° 49.832'S	071° 22.530'W	7893.0
SO261_33-1	12.03.18 02:54	LANDER	on deck	Nano-	23° 48.905'S	071° 22.283'W	7894.3
SO261_33-1	12.03.18 03:12	LANDER	station end	Nano-	23° 48.915'S	071° 22.280'W	7891.3
SO261_34-1	11.03.18 02:22	WS	station start	Hadal-	23° 49.803'S	071° 22.517'W	7872.6
SO261_34-1	11.03.18 02:37	WS	in the water	Hadal-	23° 49.838'S	071° 22.521'W	7890.7
SO261_34-1	11.03.18 05:33	WS	max depth/ on ground	Hadal-Rosette	23° 49.836'S	071° 22.534'W	7894.0
SO261_34-1	11.03.18 05:43	WS	hoisting	Hadal-	23° 49.832'S	071° 22.528'W	0.0
SO261_34-1	11.03.18 08:37	WS	on deck	Hadal-	23° 49.834'S	071° 22.528'W	7892.3
SO261_34-1	11.03.18 08:53	WS	station end	Hadal-	23° 49.833'S	071° 22.532'W	7890.9
SO261_35-1	11.03.18 08:54	MUC	station start		23° 49.833'S	071° 22.533'W	7893.9
SO261_35-1	11.03.18 08:55	MUC	in the water		23° 49.833'S	071° 22.533'W	7891.1
SO261_35-1	11.03.18 11:13	MUC	max depth/ on ground		23° 49.834'S	071° 22.521'W	7890.2
SO261_35-1	11.03.18 11:13	MUC	hoisting		23° 49.834'S	071° 22.521'W	0.0
SO261_35-1	11.03.18 14:22	MUC	on deck		23° 49.839'S	071° 22.524'W	7891.4
SO261_35-1	11.03.18 14:30	MUC	station end		23° 49.840'S	071° 22.522'W	7891.9
SO261_36-1	11.03.18 15:27	MUC	station start	MUC-2	23° 49.834'S	071° 22.531'W	7894.8
SO261_36-1	11.03.18 15:29	MUC	in the water	MUC-2	23° 49.833'S	071° 22.531'W	7891.5
SO261_36-1	11.03.18 17:54	MUC	max depth/ on ground	MUC-2	23° 49.839'S	071° 22.527'W	7894.0
SO261_36-1	11.03.18 17:55	MUC	hoisting	MUC-2	23° 49.839'S	071° 22.527'W	7892.1
SO261_36-1	11.03.18 21:06	MUC	on deck	MUC-2	23° 49.834'S	071° 22.529'W	0.0
SO261_36-1	11.03.18 21:10	MUC	station end	MUC-2	23° 49.834'S	071° 22.529'W	7893.0
SO261_37-1	11.03.18 21:10	GC	station start		23° 49.834'S	071° 22.529'W	7892.8
SO261_37-1	11.03.18 21:19	GC	in the water		23° 49.838'S	071° 22.524'W	7892.2
SO261_37-1	11.03.18 23:12	GC	max depth/ on ground		23° 49.834'S	071° 22.524'W	7894.6
SO261_37-1	11.03.18 23:13	GC	hoisting		23° 49.834'S	071° 22.524'W	0.0
SO261_37-1	12.03.18 01:55	GC	information		23° 49.833'S	071° 22.533'W	7892.0
SO261_37-1	12.03.18 02:04	GC	station end		23° 49.831'S	071° 22.530'W	7891.2
SO261_38-1	12.03.18 21:47	LANDER	station start	Riever	23° 21.758'S	071° 20.590'W	8064.2
SO261_38-1	12.03.18 21:48	LANDER	in the water	Riever	23° 21.762'S	071° 20.592'W	8063.1
SO261_38-1	12.03.18 21:53	LANDER	deployed	Riever	23° 21.763'S	071° 20.600'W	8065.5
SO261_38-1	13.03.18 01:27	LANDER	information	Riever	23° 21.967'S	071° 20.644'W	0.0
SO261_38-1	13.03.18 03:27	LANDER	at surface	Riever	23° 21.075'S	071° 21.048'W	8060.1
SO261_38-1	13.03.18 04:04	LANDER	on deck	Riever	23° 21.444'S	071° 20.650'W	8062.0
SO261_38-1	13.03.18 04:07	LANDER	station end	Riever	23° 21.441'S	071° 20.653'W	8064.0
SO261_39-1	12.03.18 22:06	CTD	station start		23° 21.965'S	071° 20.646'W	8063.2
SO261_39-1	12.03.18 22:07	CTD	in the water		23° 21.967'S	071° 20.646'W	8062.5
SO261_39-1	13.03.18 00:44	CTD	max depth/ on ground		23° 21.965'S	071° 20.654'W	8061.3
SO261_39-1	13.03.18 00:45	CTD	hoisting		23° 21.965'S	071° 20.654'W	8061.7
SO261_39-1	13.03.18 02:59	CTD	on deck		23° 21.971'S	071° 20.652'W	8063.1
SO261_39-1	13.03.18 03:06	CTD	station end		23° 21.966'S	071° 20.648'W	8060.8
SO261_40-1	13.03.18 04:34	CTD	station start		23° 21.715'S	071° 20.612'W	8062.0
SO261_40-1	13.03.18 04:43	CTD	in the water		23° 21.709'S	071° 20.614'W	0.0
SO261_40-1	13.03.18 07:42	CTD	max depth/ on ground		23° 21.716'S	071° 20.614'W	8063.7
SO261_40-1	13.03.18 07:58	CTD	hoisting		23° 21.712'S	071° 20.615'W	8061.6

SO261_40-1	13.03.18 10:28	CTD	on deck		23° 21.711'S	071° 20.627'W	8063.0
SO261_40-1	13.03.18 10:32	CTD	station end		23° 21.713'S	071° 20.627'W	8062.3
SO261_41-1	13.03.18 10:33	CTD	station start		23° 21.713'S	071° 20.627'W	8061.4
SO261_41-1	13.03.18 10:40	CTD	in the water		23° 21.714'S	071° 20.627'W	8061.9
SO261_41-1	13.03.18 13:16	CTD	max depth/ on ground		23° 21.713'S	071° 20.633'W	8062.7
SO261_41-1	13.03.18 13:18	CTD	hoisting		23° 21.713'S	071° 20.634'W	8063.1
SO261_41-1	13.03.18 15:42	CTD	on deck		23° 21.712'S	071° 20.633'W	8061.7
SO261_41-1	13.03.18 15:44	CTD	station end		23° 21.711'S	071° 20.633'W	8062.6
SO261_42-1	13.03.18 16:29	LANDER	station start	Nano-	23° 21.981'S	071° 20.651'W	8065.0
SO261_42-1	13.03.18 16:32	LANDER	in the water	Nano-	23° 21.980'S	071° 20.652'W	8062.7
SO261_42-1	14.03.18 02:54	LANDER	information	Nano-	23° 21.861'S	071° 20.930'W	0.0
SO261_42-1	14.03.18 03:14	LANDER	at surface	Nano-	23° 21.131'S	071° 20.624'W	0.0
SO261_42-1	14.03.18 03:36	LANDER	on deck	Nano-	23° 21.539'S	071° 20.708'W	0.0
SO261_42-1	14.03.18 03:41	LANDER	station end	Nano-	23° 21.542'S	071° 20.708'W	0.0
SO261_43-1	13.03.18 16:50	LANDER	station start	Profiler-	23° 22.250'S	071° 20.662'W	8063.9
SO261_43-1	13.03.18 16:56	LANDER	in the water	Profiler-	23° 22.248'S	071° 20.662'W	8063.3
SO261_43-1	14.03.18 20:44	LANDER	information	Profiler-	23° 23.013'S	071° 20.696'W	0.0
SO261_43-1	14.03.18 23:21	LANDER	at surface	Profiler-	23° 23.113'S	071° 20.733'W	0.0
SO261_43-1	15.03.18 00:30	LANDER	on deck	Profiler-	23° 21.176'S	071° 21.013'W	8062.7
SO261_43-1	15.03.18 00:32	LANDER	station end	Profiler-	23° 21.179'S	071° 21.012'W	8062.6
SO261_44-1	13.03.18 17:55	LANDER	in the water	Sediment- Lander	23° 22.506'S	071° 20.679'W	8061.5
SO261_44-1	14.03.18 22:06	LANDER	information	Sediment- Lander	23° 23.124'S	071° 20.723'W	0.0
SO261_44-1	15.03.18 01:35	LANDER	at surface	Sediment- Lander	23° 21.744'S	071° 20.565'W	0.0
SO261_44-1	15.03.18 01:52	LANDER	on deck	Sediment- Lander	23° 22.149'S	071° 20.759'W	0.0
SO261_44-1	15.03.18 01:54	LANDER	station end	Sediment- Lander	23° 22.152'S	071° 20.751'W	0.0
SO261_45-1	13.03.18 18:13	LANDER	station start	Camera- Lander-1	23° 22.772'S	071° 20.684'W	8062.7
SO261_45-1	13.03.18 18:19	LANDER	in the water	Camera- Lander-1	23° 22.774'S	071° 20.683'W	8063.9
SO261_45-1	14.03.18 23:15	LANDER	information	Camera- Lander-1	23° 23.115'S	071° 20.732'W	0.0
SO261_45-1	15.03.18 02:15	LANDER	at surface	Camera- Lander-1	23° 22.203'S	071° 20.548'W	0.0
SO261_45-1	15.03.18 03:00	LANDER	on deck	Camera- Lander-1	23° 22.289'S	071° 20.724'W	0.0
SO261_45-1	15.03.18 03:06	LANDER	station end	Camera- Lander-1	23° 22.286'S	071° 20.746'W	0.0
SO261_46-1	13.03.18 18:53	LANDER	station start	Camera- Lander-2	23° 22.379'S	071° 23.576'W	7209.5
SO261_46-1	13.03.18 19:00	LANDER	in the water	Camera- Lander-2	23° 22.384'S	071° 23.577'W	7205.8
SO261_46-1	15.03.18 04:03	LANDER	information	Camera- Lander-2	23° 21.622'S	071° 23.371'W	0.0
SO261_46-1	15.03.18 04:11	LANDER	information	Camera- Lander-2	23° 21.617'S	071° 23.375'W	0.0
SO261_46-1	15.03.18 06:36	LANDER	at surface	Camera- Lander-2	23° 21.621'S	071° 23.372'W	7418.5

SO261_46-1	15.03.18 07:09	LANDER	on deck	Camera-Lander-2	23° 21.888' S	071° 23.594' W	7302.8
SO261_46-1	15.03.18 07:15	LANDER	station end	Camera-Lander-2	23° 21.803' S	071° 23.591' W	0.0
SO261_47-1	13.03.18 20:45	WS	station start	Hadal-	23° 23.013' S	071° 20.702' W	8064.6
SO261_47-1	13.03.18 20:46	WS	in the water	Hadal-	23° 23.016' S	071° 20.703' W	0.0
SO261_47-1	13.03.18 23:22	WS	max depth/on ground	Hadal-Rosette	23° 23.017' S	071° 20.699' W	8066.5
SO261_47-1	13.03.18 23:32	WS	hoisting	Hadal-	23° 23.018' S	071° 20.704' W	8063.6
SO261_47-1	14.03.18 01:50	WS	on deck	Hadal-	23° 23.018' S	071° 20.699' W	8064.4
SO261_47-1	14.03.18 01:54	WS	station end	Hadal-	23° 23.018' S	071° 20.702' W	8064.6
SO261_48-1	14.03.18 04:20	MUC	station start	MUC-1	23° 23.013' S	071° 20.697' W	0.0
SO261_48-1	14.03.18 04:28	MUC	in the water	MUC-1	23° 23.011' S	071° 20.700' W	0.0
SO261_48-1	14.03.18 06:52	MUC	max depth/on ground	MUC-1	23° 23.012' S	071° 20.703' W	0.0
SO261_48-1	14.03.18 06:52	MUC	hoisting	MUC-1	23° 23.013' S	071° 20.703' W	0.0
SO261_48-1	14.03.18 10:07	MUC	on deck	MUC-1	23° 23.017' S	071° 20.696' W	0.0
SO261_48-1	14.03.18 10:27	MUC	station end	MUC-1	23° 23.014' S	071° 20.696' W	0.0
SO261_49-1	14.03.18 10:28	MUC	station start		23° 23.014' S	071° 20.696' W	0.0
SO261_49-1	14.03.18 10:29	MUC	in the water		23° 23.014' S	071° 20.696' W	0.0
SO261_49-1	14.03.18 12:55	MUC	max depth/on ground		23° 23.020' S	071° 20.700' W	8063.3
SO261_49-1	14.03.18 12:56	MUC	hoisting		23° 23.020' S	071° 20.700' W	8063.1
SO261_49-1	14.03.18 16:06	MUC	on deck		23° 23.013' S	071° 20.696' W	8064.6
SO261_49-1	14.03.18 16:07	MUC	station end		23° 23.015' S	071° 20.696' W	8064.2
SO261_50-1	14.03.18 16:12	GC	station start		23° 23.014' S	071° 20.694' W	8064.0
SO261_50-1	14.03.18 16:17	GC	in the water		23° 23.015' S	071° 20.691' W	8063.5
SO261_50-1	14.03.18 18:16	GC	max depth/on ground		23° 23.011' S	071° 20.703' W	8066.6
SO261_50-1	14.03.18 18:16	GC	hoisting		23° 23.011' S	071° 20.703' W	8066.6
SO261_50-1	14.03.18 20:55	GC	on deck		23° 23.017' S	071° 20.695' W	0.0
SO261_50-1	14.03.18 21:00	GC	station end		23° 23.017' S	071° 20.694' W	0.0
SO261_51-1	14.03.18 21:17	LANDER	station start	Nano	23° 23.114' S	071° 20.721' W	0.0
SO261_51-1	14.03.18 21:20	LANDER	deployed	Nano	23° 23.118' S	071° 20.722' W	0.0
SO261_51-1	15.03.18 17:48	LANDER	information	Nano	23° 21.780' S	071° 20.605' W	8062.2
SO261_51-1	15.03.18 18:31	LANDER	information	Nano	23° 21.788' S	071° 20.595' W	0.0
SO261_51-1	15.03.18 20:30	LANDER	information	Nano	23° 22.987' S	071° 20.683' W	8062.2
SO261_51-1	15.03.18 23:00	LANDER	at surface	Nano	23° 22.601' S	071° 20.493' W	8064.7
SO261_51-1	15.03.18 23:16	LANDER	on deck	Nano	23° 22.723' S	071° 20.725' W	8066.1
SO261_51-1	15.03.18 23:17	LANDER	station end	Nano	23° 22.708' S	071° 20.721' W	8063.4
SO261_52-1	14.03.18 21:41	PLA	station start	Multinet	23° 23.122' S	071° 20.722' W	0.0
SO261_52-1	14.03.18 21:53	PLA	information	Multinet	23° 23.121' S	071° 20.719' W	0.0
SO261_52-1	14.03.18 22:30	PLA	information	Multinet	23° 23.123' S	071° 20.721' W	0.0
SO261_52-1	14.03.18 22:31	PLA	information	Multinet	23° 23.124' S	071° 20.722' W	0.0
SO261_52-1	14.03.18 23:04	PLA	information	Multinet	23° 23.121' S	071° 20.727' W	8064.1
SO261_52-1	14.03.18 23:17	PLA	station end	Multinet	23° 23.115' S	071° 20.733' W	0.0
SO261_53-1	15.03.18 08:57	OFOS	station start	OFOBS	23° 26.813' S	071° 06.019' W	5038.6
SO261_53-1	15.03.18 09:01	OFOS	in the water	OFOBS	23° 26.815' S	071° 06.020' W	5045.2
SO261_53-1	15.03.18 11:04	OFOS	information	OFOBS	23° 26.814' S	071° 06.016' W	5043.5
SO261_53-1	15.03.18 11:07	OFOS	profile start	OFOBS	23° 26.814' S	071° 06.020' W	5040.7

SO261_53-1	15.03.18 11:13	OFOS	information	OFOBS	23° 26.826'S	071° 06.076'W	5042.4
SO261_53-1	15.03.18 11:29	OFOS	hoisting	OFOBS	23° 26.829'S	071° 06.082'W	5048.8
SO261_53-1	15.03.18 13:03	OFOS	on deck	OFOBS	23° 26.830'S	071° 06.081'W	5050.5
SO261_53-1	15.03.18 13:05	OFOS	station end	OFOBS	23° 26.830'S	071° 06.080'W	5048.1
SO261_54-1	15.03.18 14:40	CTD	station start	CTD_6000	23° 21.772'S	071° 20.597'W	8065.1
SO261_54-1	15.03.18 14:42	CTD	in the water	CTD_6000	23° 21.782'S	071° 20.599'W	8061.7
SO261_54-1	15.03.18 17:16	CTD	max depth/ on ground	CTD_6000 (3)	23° 21.782'S	071° 20.592'W	8063.4
SO261_54-1	15.03.18 17:17	CTD	hoisting	CTD_6000	23° 21.783'S	071° 20.592'W	8063.8
SO261_54-1	15.03.18 19:31	CTD	on deck	CTD_6000	23° 21.783'S	071° 20.595'W	8060.4
SO261_54-1	15.03.18 19:32	CTD	station end	CTD_6000	23° 21.786'S	071° 20.595'W	8061.9
SO261_55-1	15.03.18 23:18	NET	station start	MOCNESS	23° 22.709'S	071° 20.722'W	8059.1
SO261_55-1	15.03.18 23:39	NET	information	MOCNESS	23° 22.729'S	071° 20.730'W	8062.9
SO261_55-1	15.03.18 23:50	NET	information	MOCNESS	23° 22.854'S	071° 20.771'W	8062.5
SO261_55-1	16.03.18 00:00	NET	information	MOCNESS	23° 22.939'S	071° 20.799'W	8065.6
SO261_55-1	16.03.18 00:03	NET	information	MOCNESS	23° 22.959'S	071° 20.806'W	8061.9
SO261_55-1	16.03.18 00:44	NET	information	MOCNESS	23° 23.512'S	071° 21.000'W	8063.4
SO261_55-1	16.03.18 07:59	NET	information	MOCNESS	23° 12.433'S	071° 20.772'W	7754.1
SO261_55-1	16.03.18 08:15	NET	information	MOCNESS	23° 11.928'S	071° 20.631'W	7815.7
SO261_55-1	16.03.18 14:13	NET	information	MOCNESS	23° 02.273'S	071° 17.920'W	7988.2
SO261_55-1	16.03.18 14:27	NET	information	MOCNESS	23° 01.972'S	071° 17.830'W	7985.0
SO261_55-1	16.03.18 14:35	NET	station end	MOCNESS	23° 01.788'S	071° 17.779'W	7984.5
SO261_56-1	16.03.18 15:13	LANDER	station start	Riever- LANDER	23° 02.956'S	071° 18.120'W	7995.1
SO261_56-1	16.03.18 15:21	LANDER	deployed	Riever- LANDER	23° 02.962'S	071° 18.124'W	7994.9
SO261_56-1	16.03.18 19:00	LANDER	information	Riever- LANDER	23° 03.065'S	071° 18.153'W	7992.9
SO261_56-1	16.03.18 19:06	LANDER	information	Riever- LANDER	23° 03.064'S	071° 18.151'W	0.0
SO261_56-1	16.03.18 21:27	LANDER	at surface	Riever- LANDER	23° 02.527'S	071° 17.958'W	7989.8
SO261_56-1	16.03.18 21:40	LANDER	on deck	Riever- LANDER	23° 02.612'S	071° 18.015'W	7992.6
SO261_56-1	16.03.18 21:41	LANDER	station end	Riever- LANDER	23° 02.611'S	071° 18.017'W	7993.3
SO261_57-1	16.03.18 15:32	CTD	station start	CTD_6000	23° 03.027'S	071° 18.144'W	7994.2
SO261_57-1	16.03.18 15:38	CTD	in the water	CTD_6000	23° 03.065'S	071° 18.154'W	7994.6
SO261_57-1	16.03.18 18:12	CTD	max depth/ on ground	CTD_6000	23° 03.065'S	071° 18.159'W	7992.1
SO261_57-1	16.03.18 18:13	CTD	hoisting	CTD_6000	23° 03.065'S	071° 18.156'W	7992.7
SO261_57-1	16.03.18 20:31	CTD	on deck	CTD_6000	23° 03.067'S	071° 18.163'W	7994.0
SO261_57-1	16.03.18 20:36	CTD	station end	CTD_6000	23° 03.066'S	071° 18.163'W	7994.6
SO261_58-1	16.03.18 22:11	LANDER	station start	Profiler	23° 02.605'S	071° 18.034'W	7991.8
SO261_58-1	16.03.18 22:12	LANDER	deployed	Profiler	23° 02.605'S	071° 18.034'W	7991.7
SO261_58-1	18.03.18 11:57	LANDER	information	Profiler	23° 02.607'S	071° 18.031'W	7964.5
SO261_58-1	18.03.18 14:25	LANDER	at surface	Profiler	23° 01.969'S	071° 17.972'W	0.0
SO261_58-1	18.03.18 14:44	LANDER	on deck	Profiler	23° 02.247'S	071° 18.162'W	0.0
SO261_58-1	18.03.18 14:47	LANDER	station end	Profiler	23° 02.244'S	071° 18.170'W	0.0
SO261_58-1	18.03.18 14:48	LANDER	information	Profiler	23° 02.243'S	071° 18.171'W	0.0
SO261_59-1	16.03.18 23:02	LANDER	station start	Sediment	23° 02.873'S	071° 18.096'W	7994.4

SO261_59-1	16.03.18 23:04	LANDER	deployed	Sediment	23° 02.874'S	071° 18.097'W	7991.7
SO261_59-1	18.03.18 13:14	LANDER	information	Sediment	23° 02.606'S	071° 18.026'W	7961.9
SO261_59-1	18.03.18 16:38	LANDER	at surface	Sediment	23° 02.244'S	071° 17.885'W	0.0
SO261_59-1	18.03.18 16:56	LANDER	on deck	Sediment	23° 02.508'S	071° 18.173'W	0.0
SO261_59-1	18.03.18 17:02	LANDER	station end	Sediment	23° 02.507'S	071° 18.166'W	0.0
SO261_60-1	16.03.18 23:39	LANDER	station start	Camera 1	23° 02.999'S	071° 15.050'W	7178.4
SO261_60-1	16.03.18 23:48	LANDER	deployed	Camera 1	23° 02.998'S	071° 15.044'W	7179.0
SO261_60-1	18.03.18 17:33	LANDER	information	Camera 1	23° 02.114'S	071° 15.042'W	0.0
SO261_60-1	18.03.18 17:43	LANDER	information	Camera 1	23° 02.121'S	071° 15.044'W	0.0
SO261_60-1	18.03.18 20:00	LANDER	at surface	Camera 1	23° 02.119'S	071° 15.046'W	0.0
SO261_60-1	18.03.18 20:47	LANDER	on deck	Camera 1	23° 02.321'S	071° 15.362'W	0.0
SO261_60-1	18.03.18 20:51	LANDER	station end	Camera 1	23° 02.252'S	071° 15.412'W	0.0
SO261_61-1	17.03.18 00:12	LANDER	station start	Camera 2	23° 03.004'S	071° 13.992'W	6961.7
SO261_61-1	17.03.18 00:20	LANDER	deployed	Camera 2	23° 03.015'S	071° 13.993'W	6980.0
SO261_61-1	18.03.18 18:30	LANDER	information	Camera 2	23° 02.116'S	071° 15.037'W	0.0
SO261_61-1	18.03.18 18:37	LANDER	information	Camera 2	23° 02.112'S	071° 15.037'W	0.0
SO261_61-1	18.03.18 21:20	LANDER	at surface	Camera 2	23° 02.318'S	071° 14.163'W	0.0
SO261_61-1	18.03.18 21:48	LANDER	on deck	Camera 2	23° 02.622'S	071° 14.188'W	6980.7
SO261_61-1	18.03.18 21:51	LANDER	station end	Camera 2	23° 02.623'S	071° 14.177'W	6983.2
SO261_62-1	17.03.18 01:13	WS	station start	HADAL-Rosette	23° 03.136'S	071° 18.180'W	7991.1
SO261_62-1	17.03.18 01:18	WS	in the water	HADAL-Rosette	23° 03.139'S	071° 18.178'W	7995.2
SO261_62-1	17.03.18 03:36	WS	max depth/on ground	HADAL-Rosette	23° 03.142'S	071° 18.176'W	7995.4
SO261_62-1	17.03.18 03:55	WS	hoisting	HADAL-Rosette	23° 03.142'S	071° 18.172'W	7995.2
SO261_62-1	17.03.18 06:24	WS	on deck	HADAL-Rosette	23° 03.141'S	071° 18.177'W	7992.5
SO261_62-1	17.03.18 06:35	WS	station end	HADAL-Rosette	23° 03.141'S	071° 18.166'W	7996.3
SO261_63-1	17.03.18 06:44	MUC	station start	MUC 1	23° 03.135'S	071° 18.168'W	7994.6
SO261_63-1	17.03.18 06:46	MUC	in the water	MUC 1	23° 03.136'S	071° 18.167'W	7994.1
SO261_63-1	17.03.18 09:09	MUC	max depth/on ground	MUC 1	23° 03.131'S	071° 18.180'W	7994.6
SO261_63-1	17.03.18 09:09	MUC	hoisting	MUC 1	23° 03.131'S	071° 18.180'W	7997.9
SO261_63-1	17.03.18 12:17	MUC	on deck	MUC 1	23° 03.114'S	071° 18.185'W	7993.4
SO261_63-1	17.03.18 12:30	MUC	station end	MUC 1	23° 03.136'S	071° 18.176'W	7994.1
SO261_64-1	17.03.18 12:38	MUC	station start		23° 03.136'S	071° 18.176'W	7995.5
SO261_64-1	17.03.18 12:40	MUC	in the water		23° 03.136'S	071° 18.178'W	7994.5
SO261_64-1	17.03.18 15:03	MUC	max depth/on ground		23° 03.139'S	071° 18.171'W	7994.0
SO261_64-1	17.03.18 15:04	MUC	hoisting		23° 03.139'S	071° 18.171'W	7995.7
SO261_64-1	17.03.18 18:09	MUC	on deck		23° 03.135'S	071° 18.169'W	7996.8
SO261_64-1	17.03.18 18:10	MUC	station end		23° 03.134'S	071° 18.170'W	7996.2
SO261_65-1	17.03.18 18:39	GC	station start		23° 03.137'S	071° 18.173'W	7994.1
SO261_65-1	17.03.18 18:45	GC	in the water		23° 03.134'S	071° 18.175'W	7997.6
SO261_65-1	17.03.18 20:42	GC	max depth/on ground		23° 03.140'S	071° 18.165'W	7995.6
SO261_65-1	17.03.18 20:42	GC	hoisting		23° 03.141'S	071° 18.165'W	7995.3
SO261_65-1	18.03.18 00:00	GC	on deck		23° 03.136'S	071° 18.172'W	7995.4

SO261_65-1	18.03.18 00:10	GC	station end		23° 03.135'S	071° 18.178'W	7994.1
SO261_66-1	18.03.18 01:00	OFOS	station start	OFOBS	23° 02.270'S	071° 10.321'W	6138.9
SO261_66-1	18.03.18 01:40	OFOS	in the water	OFOBS	23° 02.229'S	071° 05.235'W	5170.8
SO261_66-1	18.03.18 03:54	OFOS	max depth/ on ground	OFOBS	23° 02.230'S	071° 05.232'W	5155.0
SO261_66-1	18.03.18 04:00	OFOS	profile start	OFOBS	23° 02.229'S	071° 05.233'W	5167.5
SO261_66-1	18.03.18 04:06	OFOS	information	OFOBS	23° 02.257'S	071° 05.275'W	5170.6
SO261_66-1	18.03.18 04:13	OFOS	hoisting	OFOBS	23° 02.266'S	071° 05.301'W	5173.4
SO261_66-1	18.03.18 05:53	OFOS	on deck	OFOBS	23° 02.267'S	071° 05.304'W	5166.6
SO261_66-1	18.03.18 05:54	OFOS	station end	OFOBS	23° 02.265'S	071° 05.303'W	5164.5
SO261_67-1	18.03.18 22:30	PS	station start		23° 02.878'S	071° 18.128'W	7992.3
SO261_67-1	18.03.18 22:30	PS	profile start		23° 02.912'S	071° 18.131'W	7992.3
SO261_67-1	19.03.18 02:11	PS	profile end		23° 21.586'S	071° 20.575'W	8064.5
SO261_67-2	19.03.18 02:12	PS	profile start		23° 21.618'S	071° 20.578'W	0.0
SO261_67-2	19.03.18 06:42	PS	profile end		23° 18.990'S	071° 36.649'W	5589.1
SO261_67-3	19.03.18 06:43	PS	profile start		23° 18.983'S	071° 36.700'W	5594.9
SO261_67-3	19.03.18 13:24	PS	profile end		22° 48.498'S	071° 36.841'W	5488.9
SO261_67-3	19.03.18 13:25	PS	station end		22° 48.391'S	071° 36.833'W	5488.9
SO261_68-1	19.03.18 14:26	LANDER	station start	Riever- LANDER	22° 56.218'S	071° 37.075'W	5505.8
SO261_68-1	19.03.18 14:27	LANDER	information	Riever- LANDER	22° 56.221'S	071° 37.077'W	5530.0
SO261_68-1	19.03.18 14:32	LANDER	deployed	Riever- LANDER	22° 56.267'S	071° 37.080'W	5532.3
SO261_68-1	19.03.18 16:00	LANDER	information	Riever- LANDER	22° 56.563'S	071° 37.084'W	5539.0
SO261_68-1	19.03.18 16:07	LANDER	information	Riever- LANDER	22° 56.559'S	071° 37.084'W	0.0
SO261_68-1	19.03.18 16:10	LANDER	information	Riever- LANDER	22° 56.556'S	071° 37.079'W	0.0
SO261_68-1	19.03.18 16:14	LANDER	information	Riever- LANDER	22° 56.557'S	071° 37.075'W	0.0
SO261_68-1	19.03.18 17:27	LANDER	at surface	Riever- LANDER	22° 55.631'S	071° 37.075'W	5535.1
SO261_68-1	19.03.18 17:54	LANDER	on deck	Riever- LANDER	22° 56.134'S	071° 37.197'W	5512.2
SO261_68-1	19.03.18 17:57	LANDER	station end	Riever- LANDER	22° 56.136'S	071° 37.210'W	5508.8
SO261_69-1	19.03.18 18:52	LANDER	station start	Profiler-	22° 56.131'S	071° 37.190'W	5505.6
SO261_69-1	19.03.18 18:57	LANDER	in the water	Profiler-	22° 56.131'S	071° 37.187'W	6032.8
SO261_69-1	20.03.18 20:53	LANDER	information	Profiler-	22° 56.233'S	071° 37.222'W	0.0
SO261_69-1	20.03.18 22:34	LANDER	at surface	Profiler-	22° 55.528'S	071° 37.601'W	0.0
SO261_69-1	20.03.18 23:21	LANDER	on deck	Profiler-	22° 55.438'S	071° 37.784'W	0.0
SO261_69-1	20.03.18 23:22	LANDER	station end	Profiler-	22° 55.426'S	071° 37.823'W	0.0
SO261_70-1	19.03.18 20:37	LANDER	station start	Flux	22° 56.403'S	071° 37.195'W	0.0
SO261_70-1	19.03.18 20:38	LANDER	deployed	Flux	22° 56.403'S	071° 37.196'W	5551.3
SO261_70-1	20.03.18 21:40	LANDER	information	Flux	22° 56.231'S	071° 37.225'W	0.0
SO261_70-1	21.03.18 00:35	LANDER	at surface	Flux	22° 55.546'S	071° 37.283'W	0.0
SO261_70-1	21.03.18 01:05	LANDER	on deck	Flux	22° 55.835'S	071° 37.587'W	0.0
SO261_70-1	21.03.18 01:10	LANDER	station end	Flux	22° 55.831'S	071° 37.598'W	0.0
SO261_71-1	19.03.18 20:55	LANDER	station start	Sediment	22° 56.679'S	071° 37.202'W	5571.1

SO261_71-1	19.03.18 20:57	LANDER	deployed	Sediment	22° 56.677'S	071° 37.202'W	5569.4
SO261_71-1	20.03.18 23:37	LANDER	information	Sediment	22° 55.439'S	071° 37.897'W	0.0
SO261_71-1	21.03.18 02:02	LANDER	at surface	Sediment	22° 56.226'S	071° 37.171'W	0.0
SO261_71-1	21.03.18 02:17	LANDER	on deck	Sediment	22° 56.335'S	071° 37.320'W	0.0
SO261_71-1	21.03.18 02:20	LANDER	station end	Sediment	22° 56.334'S	071° 37.320'W	0.0
SO261_72-1	19.03.18 21:15	LANDER	station start	Camera 1	22° 56.950'S	071° 37.201'W	5557.2
SO261_72-1	19.03.18 21:23	LANDER	deployed	Camera 1	22° 56.948'S	071° 37.197'W	5563.3
SO261_72-1	20.03.18 19:41	LANDER	information	Camera 1	22° 56.198'S	071° 37.189'W	0.0
SO261_72-1	20.03.18 19:45	LANDER	information	Camera 1	22° 56.198'S	071° 37.199'W	0.0
SO261_72-1	20.03.18 21:39	LANDER	at surface	Camera 1	22° 56.233'S	071° 37.223'W	0.0
SO261_72-1	20.03.18 22:09	LANDER	on deck	Camera 1	22° 56.510'S	071° 37.223'W	0.0
SO261_72-1	20.03.18 22:10	LANDER	station end	Camera 1	22° 56.512'S	071° 37.224'W	0.0
SO261_73-1	19.03.18 22:03	LANDER	station start	Camera 2	22° 56.271'S	071° 40.676'W	4979.9
SO261_73-1	19.03.18 22:12	LANDER	deployed	Camera 2	22° 56.282'S	071° 40.686'W	4971.7
SO261_73-1	20.03.18 16:37	LANDER	information	Camera 2	22° 55.666'S	071° 40.638'W	4965.9
SO261_73-1	20.03.18 16:44	LANDER	information	Camera 2	22° 55.656'S	071° 40.647'W	0.0
SO261_73-1	20.03.18 18:30	LANDER	at surface	Camera 2	22° 55.649'S	071° 40.639'W	0.0
SO261_73-1	20.03.18 18:59	LANDER	on deck	Camera 2	22° 55.640'S	071° 40.687'W	0.0
SO261_73-1	20.03.18 19:01	LANDER	station end	Camera 2	22° 55.580'S	071° 40.673'W	0.0
SO261_74-1	19.03.18 22:52	CTD	station start		22° 57.264'S	071° 37.239'W	5536.0
SO261_74-1	19.03.18 22:55	CTD	in the water		22° 57.262'S	071° 37.238'W	5533.9
SO261_74-1	20.03.18 01:17	CTD	max depth/ on ground		22° 57.269'S	071° 37.243'W	5534.0
SO261_74-1	20.03.18 01:50	CTD	hoisting		22° 57.261'S	071° 37.228'W	5536.5
SO261_74-1	20.03.18 03:56	CTD	on deck		22° 57.263'S	071° 37.241'W	5534.5
SO261_74-1	20.03.18 03:58	CTD	station end		22° 57.262'S	071° 37.245'W	6054.9
SO261_75-1	20.03.18 04:12	MUC	station start		22° 57.267'S	071° 37.242'W	5539.3
SO261_75-1	20.03.18 04:14	MUC	in the water		22° 57.263'S	071° 37.246'W	5534.3
SO261_75-1	20.03.18 05:51	MUC	max depth/ on ground		22° 57.266'S	071° 37.246'W	6064.1
SO261_75-1	20.03.18 05:51	MUC	hoisting		22° 57.265'S	071° 37.245'W	6064.1
SO261_75-1	20.03.18 08:04	MUC	on deck		22° 57.265'S	071° 37.234'W	5534.6
SO261_75-1	20.03.18 08:05	MUC	station end		22° 57.265'S	071° 37.233'W	5535.1
SO261_76-1	20.03.18 08:06	MUC	station start		22° 57.265'S	071° 37.233'W	5532.7
SO261_76-1	20.03.18 08:28	MUC	in the water		22° 57.261'S	071° 37.247'W	5518.9
SO261_76-1	20.03.18 10:06	MUC	max depth/ on ground		22° 57.266'S	071° 37.242'W	5535.8
SO261_76-1	20.03.18 10:07	MUC	hoisting		22° 57.266'S	071° 37.242'W	5535.2
SO261_76-1	20.03.18 12:15	MUC	on deck		22° 57.263'S	071° 37.226'W	5544.8
SO261_76-1	20.03.18 12:24	MUC	station end		22° 57.269'S	071° 37.231'W	5537.9
SO261_77-1	20.03.18 12:25	GC	station start	GC 9 m	22° 57.270'S	071° 37.231'W	5555.0
SO261_77-1	20.03.18 12:30	GC	in the water	GC 9 m	22° 57.266'S	071° 37.235'W	5540.5
SO261_77-1	20.03.18 13:50	GC	max depth/ on ground	GC 9 m	22° 57.259'S	071° 37.245'W	5532.4
SO261_77-1	20.03.18 13:51	GC	hoisting	GC 9 m	22° 57.260'S	071° 37.245'W	5540.2
SO261_77-1	20.03.18 15:47	GC	on deck	GC 9 m	22° 57.261'S	071° 37.246'W	5536.0
SO261_77-1	20.03.18 16:00	GC	station end	GC 9 m	22° 57.261'S	071° 37.245'W	5529.7
SO261_78-1	21.03.18 02:57	OFOS	station start	OFOBS	22° 56.197'S	071° 36.510'W	5557.6
SO261_78-1	21.03.18 03:00	OFOS	in the water	OFOBS	22° 56.193'S	071° 36.510'W	5565.7

SO261_78-1	21.03.18 05:16	OFOS	information	OFOBS	22° 56.232' S	071° 36.468' W	5568.3
SO261_78-1	21.03.18 05:23	OFOS	information	OFOBS	22° 56.247' S	071° 36.447' W	5575.7
SO261_78-1	21.03.18 05:40	OFOS	hoisting	OFOBS	22° 56.243' S	071° 36.452' W	5572.0
SO261_78-1	21.03.18 07:36	OFOS	on deck	OFOBS	22° 56.254' S	071° 36.452' W	5586.8
SO261_78-1	21.03.18 07:39	OFOS	station end	OFOBS	22° 56.256' S	071° 36.448' W	5568.2
SO261_79-1	21.03.18 12:14	LANDER	station start	Riever-LANDER	22° 56.401' S	072° 08.762' W	4057.3
SO261_79-1	21.03.18 12:31	LANDER	in the water	Riever-LANDER	22° 56.475' S	072° 08.755' W	4008.0
SO261_79-1	21.03.18 15:38	LANDER	information	Riever-LANDER	22° 56.797' S	072° 08.747' W	0.0
SO261_79-1	21.03.18 17:00	LANDER	at surface	Riever-LANDER	22° 55.714' S	072° 08.852' W	0.0
SO261_79-1	21.03.18 17:41	LANDER	on deck	Riever-LANDER	22° 56.978' S	072° 08.629' W	4122.4
SO261_79-1	21.03.18 17:43	LANDER	station end	Riever-LANDER	22° 56.972' S	072° 08.587' W	4117.2
SO261_80-1	21.03.18 12:50	CTD	station start	CTD_4000	22° 56.798' S	072° 08.753' W	4120.5
SO261_80-1	21.03.18 13:16	CTD	in the water	CTD_4000	22° 56.798' S	072° 08.750' W	4119.5
SO261_80-1	21.03.18 15:01	CTD	max depth/ on ground	CTD_4000	22° 56.803' S	072° 08.759' W	4118.1
SO261_80-1	21.03.18 15:02	CTD	hoisting	CTD_4000	22° 56.805' S	072° 08.759' W	4122.7
SO261_80-1	21.03.18 16:37	CTD	on deck	CTD_4000	22° 56.800' S	072° 08.751' W	4118.8
SO261_80-1	21.03.18 16:39	CTD	station end	CTD_4000	22° 56.802' S	072° 08.750' W	4121.2
SO261_81-1	22.03.18 01:30	LANDER	station start	Riever-LANDER	21° 46.828' S	071° 12.477' W	7916.6
SO261_81-1	22.03.18 01:40	LANDER	deployed	Riever-LANDER	21° 46.858' S	071° 12.476' W	7904.6
SO261_81-1	22.03.18 05:35	LANDER	information	Riever-LANDER	21° 47.125' S	071° 12.478' W	7858.1
SO261_81-1	22.03.18 05:51	LANDER	information	Riever-LANDER	21° 47.123' S	071° 12.477' W	7853.0
SO261_81-1	22.03.18 07:59	LANDER	at surface	Riever-LANDER	21° 46.170' S	071° 12.514' W	7905.1
SO261_81-1	22.03.18 08:40	LANDER	on deck	Riever-LANDER	21° 46.543' S	071° 12.363' W	7938.2
SO261_81-1	22.03.18 08:41	LANDER	station end	Riever-LANDER	21° 46.541' S	071° 12.357' W	7937.5
SO261_82-1	22.03.18 01:40	CTD	station start	CTD_6000	21° 46.858' S	071° 12.476' W	7904.6
SO261_82-1	22.03.18 01:46	CTD	in the water	CTD_6000	21° 46.942' S	071° 12.477' W	7894.1
SO261_82-1	22.03.18 04:29	CTD	max depth/ on ground	CTD_6000 (1)	21° 47.129' S	071° 12.482' W	7853.2
SO261_82-1	22.03.18 05:15	CTD	hoisting	CTD_6000	21° 47.129' S	071° 12.473' W	7852.8
SO261_82-1	22.03.18 07:31	CTD	on deck	CTD_6000	21° 47.128' S	071° 12.469' W	7855.8
SO261_82-1	22.03.18 07:34	CTD	station end	CTD_6000	21° 47.129' S	071° 12.472' W	7855.1
SO261_83-1	22.03.18 08:56	WS	station start	Hadal	21° 46.503' S	071° 12.267' W	7937.7
SO261_83-1	22.03.18 08:58	WS	in the water	Hadal	21° 46.502' S	071° 12.267' W	7938.8
SO261_83-1	22.03.18 11:54	WS	max depth/ on ground	Hadal Rosette	21° 46.500' S	071° 12.272' W	7937.3
SO261_83-1	22.03.18 14:29	WS	on deck	Hadal	21° 46.508' S	071° 12.261' W	0.0
SO261_83-1	22.03.18 14:32	WS	station end	Hadal	21° 46.510' S	071° 12.260' W	7937.7
SO261_84-1	22.03.18 14:33	LANDER	station start	Profiler-LANDER	21° 46.510' S	071° 12.260' W	7937.8

SO261_84-1	22.03.18 14:43	LANDER	deployed	Profiler-LANDER	21° 46.505'S	071° 12.269'W	7940.0
SO261_84-1	24.03.18 06:50	LANDER	at surface	Profiler-LANDER	21° 47.313'S	071° 12.277'W	7907.9
SO261_84-1	24.03.18 07:25	LANDER	on deck	Profiler-LANDER	21° 46.221'S	071° 13.157'W	7847.7
SO261_84-1	24.03.18 07:28	LANDER	station end	Profiler-LANDER	21° 46.188'S	071° 13.158'W	7824.0
SO261_85-1	22.03.18 14:56	LANDER	station start	Sediment-LANDER	21° 46.778'S	071° 12.260'W	7940.9
SO261_85-1	22.03.18 15:04	LANDER	deployed	Sediment-LANDER	21° 46.780'S	071° 12.262'W	0.0
SO261_85-1	24.03.18 14:10	LANDER	at surface	Sediment-LANDER	21° 47.887'S	071° 12.276'W	7885.2
SO261_85-1	24.03.18 19:50	LANDER	on deck	Sediment-LANDER	21° 46.934'S	071° 17.099'W	7148.8
SO261_85-1	24.03.18 19:53	LANDER	station end	Sediment-LANDER	21° 46.892'S	071° 17.102'W	7145.4
SO261_86-1	22.03.18 15:17	LANDER	station start	Nano-	21° 47.047'S	071° 12.259'W	7926.1
SO261_86-1	22.03.18 15:46	LANDER	deployed	Nano-	21° 47.051'S	071° 12.256'W	7928.3
SO261_86-1	23.03.18 17:17	LANDER	information	Nano-	21° 47.322'S	071° 12.262'W	0.0
SO261_86-1	23.03.18 17:59	LANDER	information	Nano-	21° 47.324'S	071° 12.262'W	0.0
SO261_86-1	23.03.18 18:35	LANDER	information	Nano-	21° 47.323'S	071° 12.264'W	0.0
SO261_86-1	23.03.18 20:00	LANDER	information	Nano-	21° 47.323'S	071° 12.268'W	0.0
SO261_86-1	23.03.18 21:33	LANDER	information	Nano-	21° 46.208'S	071° 12.267'W	0.0
SO261_86-1	23.03.18 23:42	LANDER	at surface	Nano-	21° 46.203'S	071° 12.266'W	7938.1
SO261_86-1	24.03.18 00:09	LANDER	on deck	Nano-	21° 46.636'S	071° 12.584'W	7909.2
SO261_86-1	24.03.18 00:25	LANDER	station end	Nano-	21° 46.731'S	071° 12.556'W	7909.4
SO261_87-1	22.03.18 16:35	LANDER	station start	Camera-LANDER 1	21° 44.488'S	071° 15.473'W	6766.8
SO261_87-1	22.03.18 16:45	LANDER	deployed	Camera-LANDER 1	21° 44.497'S	071° 15.465'W	6738.3
SO261_87-1	25.03.18 02:52	LANDER	information	Camera-LANDER 1	21° 43.677'S	071° 15.448'W	0.0
SO261_87-1	25.03.18 03:36	LANDER	at surface	Camera-LANDER 1	21° 43.670'S	071° 15.454'W	0.0
SO261_87-1	25.03.18 04:11	LANDER	on deck	Camera-LANDER 1	21° 44.303'S	071° 15.488'W	0.0
SO261_87-1	25.03.18 04:16	LANDER	station end	Camera-LANDER 1	21° 44.307'S	071° 15.483'W	0.0
SO261_88-1	22.03.18 17:20	LANDER	station start		21° 43.215'S	071° 15.806'W	6547.5
SO261_88-1	22.03.18 17:28	LANDER	deployed		21° 43.220'S	071° 15.813'W	0.0
SO261_88-1	25.03.18 03:40	LANDER	information		21° 43.673'S	071° 15.452'W	0.0
SO261_88-1	25.03.18 05:53	LANDER	at surface		21° 44.258'S	071° 15.858'W	0.0
SO261_88-1	25.03.18 06:44	LANDER	on deck		21° 42.638'S	071° 15.946'W	0.0
SO261_88-1	25.03.18 06:51	LANDER	station end		21° 42.609'S	071° 15.952'W	0.0
SO261_89-1	22.03.18 18:22	CTD	station start		21° 47.274'S	071° 12.281'W	7901.2
SO261_89-1	22.03.18 18:24	CTD	in the water		21° 47.277'S	071° 12.284'W	7904.8
SO261_89-1	22.03.18 21:03	CTD	max depth/on ground		21° 47.269'S	071° 12.279'W	7908.4
SO261_89-1	22.03.18 23:15	CTD	on deck		21° 47.280'S	071° 12.285'W	7906.3
SO261_89-1	22.03.18 23:15	CTD	station end		21° 47.280'S	071° 12.285'W	7896.6
SO261_90-1	23.03.18 00:52	OFOS	station start	OFOBS	21° 47.576'S	070° 58.235'W	4851.3

SO261_90-1	23.03.18 00:56	OFOS	in the water	OFOBS	21° 47.581'S	070° 58.228'W	4851.7
SO261_90-1	23.03.18 02:23	OFOS	profile start	OFOBS	21° 47.581'S	070° 58.233'W	4852.3
SO261_90-1	23.03.18 02:41	OFOS	max depth/ on ground	OFOBS	21° 47.581'S	070° 58.327'W	4863.0
SO261_90-1	23.03.18 03:56	OFOS	profile end	OFOBS	21° 47.581'S	070° 58.895'W	4837.1
SO261_90-1	23.03.18 03:57	OFOS	hoisting	OFOBS	21° 47.581'S	070° 58.897'W	4839.1
SO261_90-1	23.03.18 05:29	OFOS	on deck	OFOBS	21° 47.580'S	070° 58.898'W	4846.5
SO261_90-1	23.03.18 05:29	OFOS	station end	OFOBS	21° 47.580'S	070° 58.898'W	4846.5
SO261_90-1	23.03.18 05:31	OFOS	information	OFOBS	21° 47.580'S	070° 58.898'W	4850.8
SO261_91-1	23.03.18 06:49	WS	station start	H-CTD	21° 47.245'S	071° 12.342'W	6403.8
SO261_91-1	23.03.18 06:51	WS	in the water	H-CTD	21° 47.245'S	071° 12.351'W	7892.0
SO261_91-1	23.03.18 09:37	WS	max depth/ on ground	H-CTD	21° 47.329'S	071° 12.337'W	7888.1
SO261_91-1	23.03.18 09:53	WS	hoisting	H-CTD	21° 47.329'S	071° 12.338'W	7879.6
SO261_91-1	23.03.18 12:50	WS	on deck	H-CTD	21° 47.329'S	071° 12.343'W	7870.1
SO261_91-1	23.03.18 12:55	WS	station end	H-CTD	21° 47.326'S	071° 12.339'W	7862.7
SO261_92-1	23.03.18 13:50	MUC	station start		21° 47.320'S	071° 12.260'W	7939.8
SO261_92-1	23.03.18 14:13	MUC	in the water		21° 47.316'S	071° 12.264'W	7906.8
SO261_92-1	23.03.18 16:33	MUC	max depth/ on ground		21° 47.317'S	071° 12.259'W	7927.5
SO261_92-1	23.03.18 16:33	MUC	hoisting		21° 47.317'S	071° 12.259'W	7927.5
SO261_92-1	23.03.18 20:11	MUC	on deck		21° 47.322'S	071° 12.268'W	0.0
SO261_92-1	23.03.18 20:15	MUC	station end		21° 47.323'S	071° 12.271'W	0.0
SO261_93-1	24.03.18 00:42	MUC	station start	MUC 2	21° 47.319'S	071° 12.272'W	7896.5
SO261_93-1	24.03.18 00:48	MUC	in the water	MUC 2	21° 47.316'S	071° 12.256'W	7917.6
SO261_93-1	24.03.18 03:10	MUC	max depth/ on ground	MUC 2	21° 47.319'S	071° 12.261'W	7911.9
SO261_93-1	24.03.18 03:11	MUC	hoisting	MUC 2	21° 47.318'S	071° 12.260'W	7938.0
SO261_93-1	24.03.18 06:56	MUC	on deck	MUC 2	21° 47.314'S	071° 12.278'W	7905.6
SO261_93-1	24.03.18 06:58	MUC	station end	MUC 2	21° 47.316'S	071° 12.279'W	7904.7
SO261_94-1	24.03.18 07:53	GC	station start		21° 47.309'S	071° 12.273'W	7904.3
SO261_94-1	24.03.18 08:01	GC	in the water		21° 47.313'S	071° 12.279'W	7903.5
SO261_94-1	24.03.18 09:57	GC	max depth/ on ground		21° 47.311'S	071° 12.275'W	7898.3
SO261_94-1	24.03.18 09:58	GC	hoisting		21° 47.311'S	071° 12.276'W	7898.3
SO261_94-1	24.03.18 13:14	GC	on deck		21° 47.309'S	071° 12.275'W	7899.8
SO261_94-1	24.03.18 13:15	GC	station end		21° 47.310'S	071° 12.275'W	7914.9
SO261_95-1	24.03.18 13:34	CTD	information	CTD_6000	21° 47.881'S	071° 12.287'W	7878.8
SO261_95-1	24.03.18 13:37	CTD	in the water	CTD_6000	21° 47.882'S	071° 12.274'W	7882.0
SO261_95-1	24.03.18 16:12	CTD	max depth/ on ground	CTD_6000 (3)	21° 47.880'S	071° 12.276'W	7879.9
SO261_95-1	24.03.18 16:55	CTD	hoisting	CTD_6000	21° 47.880'S	071° 12.271'W	7881.8
SO261_95-1	24.03.18 19:07	CTD	on deck	CTD_6000	21° 47.878'S	071° 12.272'W	7880.7
SO261_95-1	24.03.18 19:09	CTD	station end	CTD_6000	21° 47.879'S	071° 12.272'W	7883.7
SO261_96-1	24.03.18 20:29	WS	station start	Hadal-	21° 46.785'S	071° 12.293'W	7938.8
SO261_96-1	24.03.18 20:33	WS	in the water	Hadal-	21° 46.785'S	071° 12.292'W	7941.1
SO261_96-1	24.03.18 23:05	WS	max depth/ on ground	Hadal- Rosette	21° 46.779'S	071° 12.299'W	7939.0
SO261_96-1	24.03.18 23:21	WS	hoisting	Hadal-	21° 46.783'S	071° 12.294'W	7940.5
SO261_96-1	25.03.18 01:47	WS	on deck	Hadal-	21° 46.779'S	071° 12.295'W	7937.8

SO261_96-1	25.03.18 01:59	WS	station end	Hadal-	21° 46.779'S	071° 12.294'W	7938.5
SO261_97-1	25.03.18 04:24	NET	station start	Multinet	21° 44.308'S	071° 15.484'W	0.0
SO261_97-1	25.03.18 04:27	NET	information	Multinet	21° 44.312'S	071° 15.483'W	0.0
SO261_97-1	25.03.18 05:02	NET	information	Multinet	21° 44.306'S	071° 15.493'W	0.0
SO261_97-1	25.03.18 05:03	NET	information	Multinet	21° 44.307'S	071° 15.493'W	0.0
SO261_97-1	25.03.18 05:38	NET	information	Multinet	21° 44.303'S	071° 15.477'W	0.0
SO261_97-1	25.03.18 05:44	NET	station end	Multinet	21° 44.302'S	071° 15.482'W	0.0
SO261_98-1	25.03.18 07:19	NET	station start		21° 42.606'S	071° 15.961'W	0.0
SO261_98-1	25.03.18 07:23	NET	information		21° 42.608'S	071° 15.972'W	0.0
SO261_98-1	25.03.18 07:34	NET	information		21° 42.734'S	071° 15.918'W	0.0
SO261_98-1	25.03.18 11:20	NET	information		21° 46.677'S	071° 13.983'W	7281.9
SO261_98-1	25.03.18 11:21	NET	information		21° 46.703'S	071° 13.969'W	7283.1
SO261_98-1	25.03.18 16:45	NET	information		21° 52.050'S	071° 12.015'W	7913.3
SO261_98-1	25.03.18 16:48	NET	station end		21° 52.079'S	071° 12.015'W	7912.5
SO261_99-1	25.03.18 23:48	LANDER	station start	Riever	20° 19.142'S	071° 17.461'W	7737.9
SO261_99-1	25.03.18 23:57	LANDER	deployed	Riever	20° 19.143'S	071° 17.462'W	7737.5
SO261_99-1	26.03.18 04:34	LANDER	information	Riever	20° 19.276'S	071° 17.451'W	7741.7
SO261_99-1	26.03.18 04:40	LANDER	information	Riever	20° 19.283'S	071° 17.456'W	0.0
SO261_99-1	26.03.18 06:40	LANDER	at surface	Riever	20° 18.482'S	071° 17.482'W	0.0
SO261_99-1	26.03.18 07:17	LANDER	on deck	Riever	20° 19.003'S	071° 17.549'W	7735.4
SO261_99-1	26.03.18 07:28	LANDER	station end	Riever	20° 19.012'S	071° 17.546'W	7736.1
SO261_100-1	26.03.18 00:10	CTD	station start	CTD_6000	20° 19.279'S	071° 17.463'W	7740.0
SO261_100-1	26.03.18 00:56	CTD	in the water	CTD_6000	20° 19.278'S	071° 17.457'W	7738.5
SO261_100-1	26.03.18 03:27	CTD	max depth/ on ground	CTD_6000	20° 19.279'S	071° 17.463'W	7742.0
SO261_100-1	26.03.18 03:52	CTD	hoisting	CTD_6000	20° 19.281'S	071° 17.454'W	7739.5
SO261_100-1	26.03.18 06:11	CTD	on deck	CTD_6000	20° 19.278'S	071° 17.468'W	0.0
SO261_100-1	26.03.18 06:12	CTD	station end	CTD_6000	20° 19.279'S	071° 17.468'W	0.0
SO261_101-1	26.03.18 07:37	LANDER	station start	Profiler-	20° 19.009'S	071° 17.547'W	7735.8
SO261_101-1	26.03.18 07:39	LANDER	deployed	Profiler-	20° 19.008'S	071° 17.543'W	7735.3
SO261_101-1	27.03.18 13:15	LANDER	information	Profiler-	20° 18.297'S	071° 17.541'W	0.0
SO261_101-1	27.03.18 15:15	LANDER	at surface	Profiler-	20° 18.305'S	071° 17.530'W	7734.6
SO261_101-1	27.03.18 16:57	LANDER	on deck	Profiler-	20° 18.510'S	071° 17.700'W	7733.3
SO261_101-1	27.03.18 16:58	LANDER	station end	Profiler-	20° 18.513'S	071° 17.695'W	7732.5
SO261_102-1	26.03.18 08:05	LANDER	station start	Sediment- Lander	20° 19.275'S	071° 17.541'W	7739.2
SO261_102-1	26.03.18 08:08	LANDER	deployed	Sediment- Lander	20° 19.276'S	071° 17.543'W	7741.5
SO261_102-1	27.03.18 14:04	LANDER	information	Sediment- Lander	20° 18.300'S	071° 17.537'W	0.0
SO261_102-1	27.03.18 17:24	LANDER	information	Sediment- Lander	20° 18.516'S	071° 17.629'W	7734.6
SO261_102-1	27.03.18 17:28	LANDER	information	Sediment- Lander	20° 18.517'S	071° 17.628'W	7734.1
SO261_102-1	27.03.18 17:31	LANDER	at surface	Sediment- Lander	20° 18.516'S	071° 17.618'W	7735.0
SO261_102-1	27.03.18 17:58	LANDER	on deck	Sediment- Lander	20° 19.036'S	071° 17.553'W	7740.7
SO261_102-1	27.03.18 18:00	LANDER	station end	Sediment- Lander	20° 19.035'S	071° 17.553'W	7739.3
SO261_103-1	26.03.18 09:19	LANDER	station start	Camera 1	20° 20.614'S	071° 07.285'W	5912.7

SO261_103-1	26.03.18 09:27	LANDER	deployed	Camera 1	20° 20.608'S	071° 07.281'W	5913.2
SO261_103-1	27.03.18 05:45	LANDER	information	Camera 1	20° 19.933'S	071° 07.351'W	0.0
SO261_103-1	27.03.18 05:50	LANDER	information	Camera 1	20° 19.929'S	071° 07.347'W	0.0
SO261_103-1	27.03.18 07:59	LANDER	at surface	Camera 1	20° 19.931'S	071° 07.204'W	0.0
SO261_103-1	27.03.18 08:38	LANDER	on deck	Camera 1	20° 20.788'S	071° 07.310'W	5934.7
SO261_103-1	27.03.18 08:41	LANDER	station end	Camera 1	20° 20.820'S	071° 07.315'W	5944.6
SO261_104-1	26.03.18 09:49	LANDER	station start	Camera 2	20° 20.614'S	071° 07.828'W	6036.1
SO261_104-1	26.03.18 09:55	LANDER	deployed	Camera 2	20° 20.610'S	071° 07.824'W	6034.5
SO261_104-1	27.03.18 06:45	LANDER	information	Camera 2	20° 19.934'S	071° 07.297'W	0.0
SO261_104-1	27.03.18 06:51	LANDER	information	Camera 2	20° 19.932'S	071° 07.288'W	0.0
SO261_104-1	27.03.18 08:55	LANDER	at surface	Camera 2	20° 20.453'S	071° 07.459'W	5921.9
SO261_104-1	27.03.18 09:24	LANDER	on deck	Camera 2	20° 20.783'S	071° 07.882'W	6015.7
SO261_104-1	27.03.18 09:27	LANDER	station end	Camera 2	20° 20.816'S	071° 07.893'W	6012.0
SO261_105-1	26.03.18 11:02	MUC	station start		20° 19.578'S	071° 17.546'W	7737.0
SO261_105-1	26.03.18 11:05	MUC	in the water		20° 19.577'S	071° 17.544'W	7736.2
SO261_105-1	26.03.18 13:23	MUC	max depth/ on ground		20° 19.572'S	071° 17.549'W	7734.4
SO261_105-1	26.03.18 13:24	MUC	hoisting		20° 19.573'S	071° 17.551'W	7737.8
SO261_105-1	26.03.18 17:01	MUC	on deck		20° 19.573'S	071° 17.543'W	7738.4
SO261_105-1	26.03.18 17:04	MUC	station end		20° 19.575'S	071° 17.541'W	7737.0
SO261_106-1	26.03.18 17:28	MUC	station start	MUC 2	20° 19.573'S	071° 17.548'W	7739.5
SO261_106-1	26.03.18 17:30	MUC	in the water	MUC 2	20° 19.573'S	071° 17.552'W	7737.4
SO261_106-1	26.03.18 19:54	MUC	max depth/ on ground	MUC 2	20° 19.572'S	071° 17.551'W	7746.0
SO261_106-1	26.03.18 19:54	MUC	hoisting	MUC 2	20° 19.572'S	071° 17.552'W	7746.0
SO261_106-1	26.03.18 23:21	MUC	on deck	MUC 2	20° 19.577'S	071° 17.543'W	7742.2
SO261_106-1	26.03.18 23:33	MUC	station end	MUC 2	20° 19.577'S	071° 17.546'W	7742.5
SO261_107-1	26.03.18 23:34	GC	station start		20° 19.578'S	071° 17.546'W	7742.1
SO261_107-1	26.03.18 23:40	GC	in the water		20° 19.580'S	071° 17.546'W	7742.6
SO261_107-1	27.03.18 01:36	GC	max depth/ on ground		20° 19.574'S	071° 17.551'W	7743.3
SO261_107-1	27.03.18 01:37	GC	information		20° 19.574'S	071° 17.551'W	7743.6
SO261_107-1	27.03.18 04:29	GC	on deck		20° 19.578'S	071° 17.537'W	7741.3
SO261_107-1	27.03.18 04:33	GC	station end		20° 19.580'S	071° 17.544'W	7740.1
SO261_108-1	27.03.18 10:31	WS	station start	Hadal-	20° 18.305'S	071° 17.534'W	7732.7
SO261_108-1	27.03.18 10:34	WS	in the water	Hadal-	20° 18.311'S	071° 17.533'W	7724.3
SO261_108-1	27.03.18 13:28	WS	max depth/ on ground	Hadal-Rosette	20° 18.298'S	071° 17.537'W	7729.9
SO261_108-1	27.03.18 13:48	WS	hoisting	Hadal-	20° 18.306'S	071° 17.537'W	7731.8
SO261_108-1	27.03.18 16:35	WS	on deck	Hadal-	20° 18.263'S	071° 17.626'W	7734.5
SO261_108-1	27.03.18 16:37	WS	station end	Hadal-	20° 18.265'S	071° 17.626'W	7732.8
SO261_109-1	27.03.18 20:05	OFOS	station start		20° 19.956'S	070° 58.701'W	3924.7
SO261_109-1	27.03.18 20:06	OFOS	in the water		20° 19.956'S	070° 58.703'W	3924.1
SO261_109-1	27.03.18 20:15	OFOS	on deck		20° 19.945'S	070° 58.708'W	3923.4
SO261_109-1	27.03.18 20:50	OFOS	in the water		20° 19.962'S	070° 58.695'W	3924.5
SO261_109-1	27.03.18 22:23	OFOS	max depth/ on ground		20° 19.964'S	070° 58.744'W	3931.4
SO261_109-1	28.03.18 02:30	OFOS	hoisting		20° 20.015'S	071° 00.893'W	4203.5
SO261_109-1	28.03.18 03:52	OFOS	on deck		20° 20.011'S	071° 00.919'W	4213.2
SO261_109-1	28.03.18 03:53	OFOS	station end		20° 20.009'S	071° 00.918'W	4214.8

SO261_110-1	28.03.18 04:30	CTD	station start	CTD_4000	20° 20.000'S	070° 59.399'W	4018.6
SO261_110-1	28.03.18 04:34	CTD	in the water	CTD_4000	20° 20.003'S	070° 59.400'W	4021.6
SO261_110-1	28.03.18 06:23	CTD	max depth/ on ground	CTD_4000	20° 20.008'S	070° 59.395'W	4021.2
SO261_110-1	28.03.18 06:24	CTD	hoisting	CTD_4000	20° 20.009'S	070° 59.395'W	4022.8
SO261_110-1	28.03.18 08:21	CTD	on deck	CTD_4000	20° 20.008'S	070° 59.404'W	4020.0
SO261_110-1	28.03.18 08:25	CTD	station end	CTD_4000	20° 20.008'S	070° 59.407'W	4024.3
SO261_111-1	28.03.18 08:26	LANDER	station start	Profiler	20° 20.007'S	070° 59.407'W	4024.3
SO261_111-1	28.03.18 08:29	LANDER	deployed	Profiler	20° 20.005'S	070° 59.408'W	4021.7
SO261_111-1	28.03.18 19:54	LANDER	information	Profiler	20° 20.227'S	070° 59.370'W	0.0
SO261_111-1	28.03.18 19:59	LANDER	information	Profiler	20° 20.218'S	070° 59.374'W	0.0
SO261_111-1	28.03.18 21:18	LANDER	at surface	Profiler	20° 19.380'S	070° 59.309'W	0.0
SO261_111-1	28.03.18 21:40	LANDER	on deck	Profiler	20° 19.947'S	070° 59.461'W	0.0
SO261_111-1	28.03.18 21:43	LANDER	station end	Profiler	20° 19.926'S	070° 59.459'W	0.0
SO261_112-1	28.03.18 08:45	LANDER	station start	Sediment	20° 20.273'S	070° 59.405'W	4050.3
SO261_112-1	28.03.18 08:46	LANDER	deployed	Sediment	20° 20.272'S	070° 59.405'W	4040.3
SO261_112-1	28.03.18 21:20	LANDER	information	Sediment	20° 19.381'S	070° 59.311'W	0.0
SO261_112-1	28.03.18 23:23	LANDER	at surface	Sediment	20° 19.657'S	070° 59.351'W	0.0
SO261_112-1	28.03.18 23:47	LANDER	on deck	Sediment	20° 20.176'S	070° 59.498'W	0.0
SO261_112-1	28.03.18 23:54	LANDER	station end	Sediment	20° 20.217'S	070° 59.665'W	0.0
SO261_113-1	28.03.18 08:59	LANDER	station start	Camera 1	20° 20.541'S	070° 59.405'W	4061.2
SO261_113-1	28.03.18 09:05	LANDER	deployed	Camera 1	20° 20.546'S	070° 59.406'W	4052.6
SO261_113-1	28.03.18 17:21	LANDER	information	Camera 1	20° 21.087'S	070° 59.406'W	4133.9
SO261_113-1	28.03.18 17:27	LANDER	information	Camera 1	20° 21.086'S	070° 59.407'W	0.0
SO261_113-1	28.03.18 18:59	LANDER	information	Camera 1	20° 21.089'S	070° 59.408'W	0.0
SO261_113-1	28.03.18 19:45	LANDER	on deck	Camera 1	20° 20.244'S	070° 59.379'W	0.0
SO261_113-1	28.03.18 19:47	LANDER	station end	Camera 1	20° 20.220'S	070° 59.368'W	0.0
SO261_114-1	28.03.18 09:21	LANDER	station start	Camera 2	20° 20.814'S	070° 59.407'W	4087.9
SO261_114-1	28.03.18 09:28	LANDER	deployed	Camera 2	20° 20.816'S	070° 59.406'W	4087.4
SO261_114-1	28.03.18 18:19	LANDER	information	Camera 2	20° 21.087'S	070° 59.404'W	0.0
SO261_114-1	28.03.18 18:24	LANDER	information	Camera 2	20° 21.088'S	070° 59.404'W	0.0
SO261_114-1	28.03.18 20:17	LANDER	at surface	Camera 2	20° 20.227'S	070° 59.380'W	0.0
SO261_114-1	28.03.18 20:39	LANDER	on deck	Camera 2	20° 20.743'S	070° 59.365'W	0.0
SO261_114-1	28.03.18 20:41	LANDER	station end	Camera 2	20° 20.743'S	070° 59.339'W	0.0
SO261_115-1	28.03.18 09:42	GC	station start		20° 21.085'S	070° 59.405'W	4142.1
SO261_115-1	28.03.18 09:50	GC	in the water		20° 21.090'S	070° 59.403'W	4128.7
SO261_115-1	28.03.18 10:50	GC	max depth/ on ground		20° 21.090'S	070° 59.399'W	4128.1
SO261_115-1	28.03.18 10:50	GC	hoisting		20° 21.090'S	070° 59.400'W	4130.6
SO261_115-1	28.03.18 12:36	GC	on deck		20° 21.089'S	070° 59.404'W	4134.9
SO261_115-1	28.03.18 12:46	GC	station end		20° 21.091'S	070° 59.406'W	4139.2
SO261_116-1	28.03.18 12:47	MUC	station start	MUC (1)	20° 21.090'S	070° 59.405'W	4137.4
SO261_116-1	28.03.18 12:50	MUC	in the water	MUC (1)	20° 21.089'S	070° 59.402'W	4132.9
SO261_116-1	28.03.18 14:02	MUC	max depth/ on ground	MUC (1)	20° 21.089'S	070° 59.401'W	4134.0
SO261_116-1	28.03.18 14:03	MUC	hoisting	MUC (1)	20° 21.089'S	070° 59.400'W	4131.4
SO261_116-1	28.03.18 15:41	MUC	on deck	MUC (1)	20° 21.090'S	070° 59.403'W	4133.4
SO261_116-1	28.03.18 15:57	MUC	station end	MUC (1)	20° 21.087'S	070° 59.409'W	4135.1
SO261_117-1	28.03.18 15:58	MUC	station start	MUC (2)	20° 21.087'S	070° 59.409'W	4131.0

SO261_117-1	28.03.18 16:00	MUC	in the water	MUC (2)	20° 21.086' S	070° 59.407' W	4134.5
SO261_117-1	28.03.18 17:17	MUC	max depth/ on ground	MUC (2)	20° 21.087' S	070° 59.411' W	4139.8
SO261_117-1	28.03.18 17:18	MUC	hoisting	MUC (2)	20° 21.087' S	070° 59.410' W	4137.8
SO261_117-1	28.03.18 19:11	MUC	on deck	MUC (2)	20° 21.085' S	070° 59.415' W	0.0
SO261_117-1	28.03.18 19:12	MUC	station end	MUC (2)	20° 21.085' S	070° 59.415' W	0.0