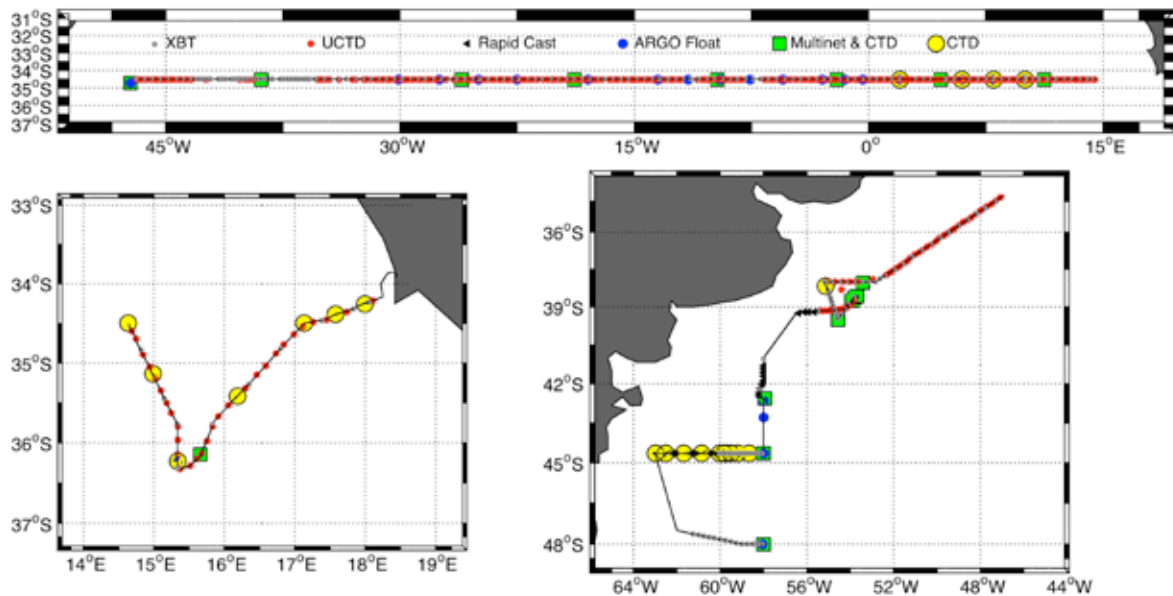


Prof. Dr. Martin Visbeck  
GEOMAR Helmholtz-Zentrum für Ozeanforschung Kiel  
Dienstgebäude Westufer  
Düsternbrooker Weg 20  
D-24105 Kiel  
Germany  
Tel.: +49 431 600 4100  
Fax: +49 431 600 4102  
E-Mail: mvisbeck@geomar.de



**Short Cruise Report**  
**R/V METEOR M133 Cape Town – Puerto Argentino (Stanley)**  
**15<sup>th</sup> Dec 2016 – 13<sup>th</sup> Jan 2017**  
**Chief Scientist: Prof. Dr. Martin Visbeck**  
**Captain: Rainer Hammacher**



## Objectives

The South Atlantic crossing is a multidisciplinary ocean survey of the South Atlantic gyre roughly along 34.5°S. This transect is covered by the international SAMOC moored array and also the path of the internationally agreed AX18 XBT line.

Most of the measurements are based on using under-way methods including near-surface water sampling for the determination of near surface temperature and salinity as well as shipboard ADCP current observations. Moreover an underway CTD will allow to sample the upper 300-400 m every hour. Chemical analysis of surface waters as well as atmospheric parameters are of scientific interest to both compare different regions with each other but also to document long term trends. At the western and eastern boundary current regime full water column water mass properties will be measured.

Upper ocean 10-700m plankton assemblages will allow to improve the calibration of sediment proxies. And water samples for later lab based biodiversity analysis will be taken. A number of smaller student projects will be carried out as part of a global ocean learning and capacity building effort.

Finally continuous swath bathymetry map-ping will occur and a profiling Argo floats were launched in support of the global ocean observing system arrays.

The cruise was very successful and all objectives were reached and the measurements were carried out as planned.



*Scientific party of the cruise M133*

## **Narrative**

R/V METEOR departed from Cape Town, South Africa on December 15, 2016 at 10:00 and sailed south to reach the starting point of the underway measurements at 34°10'S. The first goal was to survey an Agulhas Eddy southward of the crossing latitude and three floats were deployed in its center at 36°14'S and 15° 20'E. On December 12 midday we returned to the 34.5°S latitude and continued our westward survey with UCTD every hour and XBTs typically every 30nm. On January 2 2017 shortly before the Brazilian EEZ we went on a southwest course and completed the zonal crossing along 38°S until on January 4 at 16:00 we reached 38°N 55°10'W on the Patagonian shelf. Along the way we deployed Several Argo floats for WHOI and BSH.

Between January 4 and January 6 we crossed the Malvinas Currents three times and performed a MultiNet transect parallel to the shelf along the Malvinas Current across the confluence zone between 39°30'S 54°35' W and 38°35'S 53°50'W targeting a range of surface temperature conditions.

From there a survey of the Malvinas Current and its fronts followed with on shelf and off shelf transects on our transit south. On January 8 and 9 we sampled along a westward transect on 44° 39'S between 58° and 63°W towards the shelf. A final crossing of the Malvinas Current System happened on January 11 with a last Multinet And CTD station at 48°S 58°W.

We reached Puerto Argentino (Stanley) Islas Malvinas (Falkland Island) in the morning of January 13 2016.

## **Acknowledgements**

We greatly appreciate the wonderful working atmosphere as well as the professionalism and seamanship of crew, officers and Captain of R/V METEOR, which made this work a success. Financial support came from the German Science Foundation (DFG) the German Ministry of Science (BMBF, SACUS) and the EU Project AtlantOS.

## Participants

Name	Position/Discipline	Institute
1. Prof. Dr. Visbeck, Martin	Chief scientist	GEOMAR
2. Prof. Dr. Falk, Christine	Plankton imaging	MHH
3. Pinck, Andreas	Technician	GEOMAR
4. Hahn, Tobias	O <sub>2</sub> , pCO <sub>2</sub> , underway	GEOMAR
5. Canning, Anna	underway CO <sub>2</sub>	GEOMAR
6. Seelmann, Katharina	underway TA-System	GEOMAR
7. Handmann, Patricia	ADCP/(u)CTD/XBT	GEOMAR
8. Campen, Hanna	(u)CTD/XBT	UKiel/GEOMAR
9. Thölken, Elisabeth	(u)CTD/XBT	UKiel
10. Igelmann, Clara	(u)CTD/XBT	Pupil
11. Frühling, Anna	(u)CTD/XBT	Pupil
12. Dr. Siccha, Michael	MultiNet Forams	UBremen/MARUM
13. Dr. Groeneveld, Jeroen	MultiNet Forams	UBremen/MARUM
14. Dr. Johnstone, Heather	MultiNet Forams	UBremen/MARUM
15. Dr. Weinkauff, Manuel	MultiNet Forams	UBremen/MARUM
16. Papp, Maximilian	MultiNet Forams	UBremen/MARUM
17. Manta, Gastón	(u)CTD/XBT/salinometer	Uruguay
18. Olivier, Léa Lucie Alice	(u)CTD/XBT	France
19. Risaro, Daniela	(u)CTD/XBT	Argentina
20. Bonelli, Ana Gabriela	(u)CTD/XBT	Argentina
21. Trassierra, Jacqueline	(u)CTD/XBT plastics	RSA
22. Orselli, Iole	(u)CTD/XBT/salinometer	Brazil
23. Heitmann-Bacza, Carola	Weather	DWD
24. Rohleder, Christian	Weather	DWD
25.		

- GEOMAR (6)** GEOMAR Helmholtz Centre for Ocean Research Kiel, Düsternbrooker Weg 20, 24105 Kiel, Germany.
- MHH (1)** Hannover Medical School, Carl-Neuberg-Str. 1, 30625 Hannover, Germany.
- U-Kiel (2)** Kiel University, Christian-Albrechts-Platz 4, 24118 Kiel, Germany.
- U-Bremen (4)** MARUM, Center for Marine Environmental Sciences, Leobener Str. 2, 28359 Bremen, Germany.
- URU (1)** Department of Atmospheric Sciences, Institute of Physics, Faculty of Science, University of the Republic, Iguá 4225, Montevideo 11400, Uruguay.
- FURG (1)** Laboratory of Climate and Oceans Studies, Institute of Oceanography, Rio Grande Federal University (FURG), Av. Itália km 8, Rio Grande, 96203-900, RS, Brazil.
- PSL (1)** Department of Geosciences, Ecole normale supérieure, PSL research university, 24 rue Lhomond, 75231 Paris Cedex 05, France.
- U-Geneve (1)** University of Geneva, 13 Rue des Maraîchers, Geneva, Switzerland.
- U-Rhodes (1)** Rhodes University, Drosty Rd, Grahamstown 6139, South Africa.
- SHN (2)** Servicio de Hidrografía Naval, Av. Montes de Oca 2124 - C1270ABV Ciudad Autónoma de Buenos Aires, República Argentina.

Station List: of R/V METEOR cruise M133.

Stat. M133	Type	#	Date	Time UTC	Lat	Long	max. depth [m]	Parameter
1673	uCTD		2016/12/15	12:14	-35° 47'	18° 6'	~400	T,S,P
1674	XBT		2016/12/15	12:32	-35° 46'	18° 3'	~760	T, P
1675	CTD	1	2016/12/15	13:14	-35° 45'	18° 0'	258	T, S, P, Fl., TA, O2
1676	XBT		2016/12/15	14:53	-35° 41'	17° 50'	~760	T, P
1677	uCTD		2016/12/15	15:22	-35° 39'	17° 44'	~400	T,S,P
1678	CTD	2	2016/12/15	17:23	-35° 37'	17° 35'	1103	T, S, P, Fl., TA, O2, Plastic
1677	uCTD		2016/12/15	19:03	-35° 33'	17° 27'	~400	T,S,P
1679	XBT		2016/12/15	19:32	-35° 32'	17° 23'	~760	T, P
1677	uCTD		2016/12/15	20:02	-35° 31'	17° 16'	~400	T,S,P
1680	CTD	3	2016/12/15	21:02	-35° 30'	17° 8'	2762	T, S, P, Fl., TA, O2
1677	uCTD		2016/12/15	23:00	-35° 28'	17° 7'	~400	T,S,P
1677	uCTD		2016/12/15	23:54	-35° 22'	16° 59'	~400	T,S,P
1677	uCTD		2016/12/16	00:59	-35° 14'	16° 51'	~400	T,S,P
1681	XBT		2016/12/16	01:24	-35° 11'	16° 48'	~760	T, P
1677	uCTD		2016/12/16	01:54	-35° 7'	16° 44'	~400	T,S,P
1677	uCTD		2016/12/16	03:03	-36° 58'	16° 35'	~400	T,S,P
1677	uCTD		2016/12/16	04:04	-36° 51'	16° 28'	~400	T,S,P
1682	XBT		2016/12/16	04:59	-36° 44'	16° 21'	~760	T, P
1677	uCTD		2016/12/16	05:15	-36° 41'	16° 18'	~400	T,S,P
1683	CTD	4	2016/12/16	06:17	-36° 35'	16° 11'	1997	T, S, P, Fl., TA, O2
1677	uCTD		2016/12/16	08:25	-36° 28'	16° 4'	~400	T,S,P
1677	uCTD		2016/12/16	09:25	-36° 20'	15° 55'	~400	T,S,P
1684	XBT		2016/12/16	10:19	-36° 14'	15° 50'	~760	T, P
1677	uCTD		2016/12/16	10:24	-36° 12'	15° 50'	~400	T,S,P
1677	uCTD		2016/12/16	11:36	-36° 1'	15° 45'	~400	T,S,P
1677	uCTD		2016/12/16	12:36	-37° 52'	15° 41'	~400	T,S,P
1685	Multinet A,B,C	2	2016/12/16	14:23	-37° 51'	15° 40'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1685	CTD	5	2016/12/16	15:11	-37° 51'	15° 40'	2004	T, S, P, Fl., TA, O2, Plastic
1677	uCTD		2016/12/16	17:06	-37° 48'	15° 37'	~400	T,S,P
1677	uCTD		2016/12/16	17:59	-37° 43'	15° 31'	~400	T,S,P
1677	uCTD		2016/12/16	19:00	-37° 40'	15° 22'	~400	T,S,P
1686	XBT		2016/12/16	19:46	-37° 41'	15° 20'	~760	T, P

1687	CTD	6	2016/12/16	20:21	-37° 46'	15° 20'	2000	T, S, P, Fl., TA, O2
1687	ARGO-Float	1	2016/12/16	21:52	-37° 46'	15° 20'		
1677	uCTD		2016/12/16	22:36	-37° 51'	15° 20'	~400	T,S,P
1677	uCTD		2016/12/16	23:40	-36° 2'	15° 20'	~400	T,S,P
1677	uCTD		2016/12/17	00:34	-36° 12'	15° 20'	~400	T,S,P
1688	XBT		2016/12/17	00:57	-36° 14'	15° 20'	~760	T, P
1677	uCTD		2016/12/17	01:39	-36° 22'	15° 15'	~400	T,S,P
1677	uCTD		2016/12/17	02:32	-36° 30'	15° 11'	~400	T,S,P
1689	XBT		2016/12/17	02:58	-36° 33'	15° 9'	~760	T, P
1677	uCTD		2016/12/17	03:32	-36° 39'	15° 6'	~400	T,S,P
1677	uCTD		2016/12/17	04:32	-36° 49'	15° 1'	~400	T,S,P
1690	CTD	7	2016/12/17	05:05	-36° 52'	14° 59'	2000	T, S, P, Fl., TA
1677	uCTD		2016/12/17	07:00	-36° 57'	14° 56'	~400	T,S,P
1677	uCTD		2016/12/17	07:58	-35° 6'	14° 51'	~400	T,S,P
1691	XBT		2016/12/17	08:29	-35° 10'	14° 49'	~760	T, P
1677	uCTD		2016/12/17	08:57	-35° 18'	14° 45'	~400	T,S,P
1677	uCTD		2016/12/17	10:06	-35° 24'	14° 41'	~400	T,S,P
1692	CTD	8	2016/12/17	11:06	-35° 30'	14° 38'	2000	T, S, P, Fl., TA, O2
1677	uCTD		2016/12/17	13:37	-35° 30'	14° 31'	~400	T,S,P
1677	uCTD		2016/12/17	14:45	-35° 30'	14° 19'	~400	T,S,P
1693	XBT		2016/12/17	15:14	-35° 30'	14° 15'	~760	T, P
1677	uCTD		2016/12/17	16:06	-35° 30'	14° 4'	~400	T,S,P
1694	XBT		2016/12/17	17:04	-35° 30'	13° 55'	~760	T, P
1677	uCTD		2016/12/17	17:17	-35° 30'	13° 51'	~400	T,S,P
1677	uCTD		2016/12/17	18:06	-35° 30'	13° 42'	~400	T,S,P
1677	uCTD		2016/12/17	19:00	-35° 30'	13° 32'	~400	T,S,P
1695	XBT		2016/12/17	19:37	-35° 30'	13° 26'	~760	T, P
1696	XBT		2016/12/17	19:44	-35° 30'	13° 25'	~760	T, P
1677	uCTD		2016/12/17	20:00	-35° 30'	13° 20'	~400	T,S,P
1677	uCTD		2016/12/17	20:57	-35° 30'	13° 9'	~400	T,S,P
1677	uCTD		2016/12/17	22:03	-35° 30'	12° 55'	~400	T,S,P
1697	XBT		2016/12/17	22:21	-35° 30'	12° 53'	~760	T, P
1677	uCTD		2016/12/17	23:03	-35° 30'	12° 43'	~400	T,S,P
1677	uCTD		2016/12/17	23:59	-35° 30'	12° 32'	~400	T,S,P
1698	XBT		2016/12/18	00:49	-35° 30'	12° 26'	~760	T, P
1677	uCTD		2016/12/18	00:57	-35° 30'	12° 23'	~400	T,S,P
1677	uCTD		2016/12/18	02:10	-35° 30'	12° 8'	~400	T,S,P
1677	uCTD		2016/12/18	03:08	-35° 30'	11° 57'	~400	T,S,P
1699	XBT		2016/12/18	03:27	-35° 30'	11° 55'	~760	T, P
1677	uCTD		2016/12/18	04:02	-35° 30'	11° 47'	~400	T,S,P
1677	uCTD		2016/12/18	04:59	-35° 30'	11° 36'	~400	T,S,P

1677	uCTD		2016/12/18	05:25	-35° 30'	11° 31'	~400	T,S,P
1700	XBT		2016/12/18	06:05	-35° 30'	11° 24'	~760	T, P
1700	XBT		2016/12/18	06:12	-35° 30'	11° 23'	~760	T, P
1700	XBT		2016/12/18	06:16	-35° 30'	11° 22'	~760	T, P
1677	uCTD		2016/12/18	06:27	-35° 30'	11° 19'	~400	T,S,P
1701	Multinet A,B,C	3	2016/12/18	08:36	-35° 30'	11° 12'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1701	CTD	9	2016/12/18	09:22	-35° 30'	11° 12'	2000	T, S, P, Fl., TA
1677	uCTD		2016/12/18	11:19	-35° 30'	11° 5'	~400	T,S,P
1677	uCTD		2016/12/18	12:18	-35° 30'	10° 55'	~400	T,S,P
1702	XBT		2016/12/18	12:39	-35° 30'	10° 52'	~760	T, P
1702	XBT		2016/12/18	12:56	-35° 30'	10° 49'	~760	T, P
1677	uCTD		2016/12/18	13:22	-35° 30'	10° 43'	~400	T,S,P
1677	uCTD		2016/12/18	14:18	-35° 30'	10° 33'	~400	T,S,P
1703	XBT		2016/12/18	15:06	-35° 30'	10° 25'	~760	T, P
1677	uCTD		2016/12/18	15:17	-35° 30'	10° 22'	~400	T,S,P
1677	uCTD		2016/12/18	16:24	-35° 30'	10° 10'	~400	T,S,P
1704	CTD	10	2016/12/18	17:25	-35° 30'	10° 0'	2000	T, S, P, Fl., TA, O2
1704	ARGO- Float	2	2016/12/18	18:51	-35° 30'	10° 0'		
1705	XBT		2016/12/18	19:21	-35° 30'	9° 56'	~760	T, P
1677	uCTD		2016/12/18	19:32	-35° 30'	9° 52'	~400	T,S,P
1677	uCTD		2016/12/18	20:28	-35° 30'	9° 42'	~400	T,S,P
1677	uCTD		2016/12/18	21:30	-35° 30'	9° 31'	~400	T,S,P
1706	XBT		2016/12/18	22:05	-35° 30'	9° 26'	~760	T, P
1677	uCTD		2016/12/18	22:37	-35° 30'	9° 19'	~400	T,S,P
1677	uCTD		2016/12/18	23:23	-35° 30'	9° 11'	~400	T,S,P
1677	uCTD		2016/12/19	00:28	-35° 30'	8° 59'	~400	T,S,P
1707	XBT		2016/12/19	01:07	-35° 30'	8° 54'	~760	T, P
1677	uCTD		2016/12/19	01:31	-35° 30'	8° 49'	~400	T,S,P
1677	uCTD		2016/12/19	02:32	-35° 30'	8° 39'	~400	T,S,P
1677	uCTD		2016/12/19	03:31	-35° 30'	8° 29'	~400	T,S,P
1708	XBT		2016/12/19	03:57	-35° 30'	8° 26'	~760	T, P
1677	uCTD		2016/12/19	04:34	-35° 30'	8° 18'	~400	T,S,P
1677	uCTD		2016/12/19	05:28	-35° 30'	8° 8'	~400	T,S,P
1677	uCTD		2016/12/19	06:19	-35° 30'	7° 58'	~400	T,S,P
1709	CTD	11	2016/12/19	06:50	-35° 30'	8° 0'	2000	T, S, P, Fl., TA, O2
1709	ARGO- Float	3	2016/12/19	08:13	-35° 30'	8° 0'		
1710	XBT		2016/12/19	08:44	-35° 30'	7° 55'	~760	T, P
1710	XBT		2016/12/19	08:49	-35° 30'	7° 55'	~760	T, P

1710	XBT		2016/12/19	08:52	-35° 30'	7° 54'	~760	T, P
1677	uCTD		2016/12/19	09:13	-35° 30'	7°~47'	~400	T,S,P
1677	uCTD		2016/12/19	10:16	-35° 30'	7° 37'	~400	T,S,P
1677	uCTD		2016/12/19	11:15	-35° 30'	7° 28'	~400	T,S,P
1711	XBT		2016/12/19	11:45	-35° 30'	7° 26'	~760	T, P
1677	uCTD		2016/12/19	12:15	-35° 30'	7° 19'	~400	T,S,P
1677	uCTD		2016/12/19	13:11	-35° 30'	7° 9'	~400	T,S,P
1677	uCTD		2016/12/19	14:19	-35° 30'	6° 58'	~400	T,S,P
1712	XBT		2016/12/19	15:01	-35° 30'	6° 55'	~760	T, P
1677	uCTD		2016/12/19	15:25	-35° 30'	6° 48'	~400	T,S,P
1677	uCTD		2016/12/19	16:18	-35° 30'	6° 39'	~400	T,S,P
1677	uCTD		2016/12/19	17:19	-35° 30'	6° 30'	~400	T,S,P
1677	uCTD		2016/12/19	17:57	-35° 30'	6° 26'	~400	T,S,P
1677	uCTD		2016/12/19	18:24	-35° 30'	6° 21'	~400	T,S,P
1713	XBT		2016/12/19	18:30	-35° 30'	6° 23'	~760	T, P
1677	uCTD		2016/12/19	19:17	-35° 30'	6° 12'	~400	T,S,P
1677	uCTD		2016/12/19	20:07	-35° 30'	6° 1'	~400	T,S,P
1714	CTD	12	2016/12/19	21:00	-35° 30'	6° 0'	2000	T, S, P, Fl., TA
1714	ARGO-Float	4	2016/12/19	22:26	-35° 30'	6° 0'		
1677	uCTD		2016/12/19	23:16	-35° 30'	5° 49'	~400	T,S,P
1677	uCTD		2016/12/20	00:18	-35° 30'	5° 39'	~400	T,S,P
1677	uCTD		2016/12/20	01:16	-35° 30'	5° 30'	~400	T,S,P
1677	uCTD		2016/12/20	02:08	-35° 30'	5° 19'	~400	T,S,P
1715	XBT		2016/12/20	02:15	-35° 30'	5° 23'	~760	T, P
1677	uCTD		2016/12/20	03:15	-35° 30'	5° 9'	~400	T,S,P
1677	uCTD		2016/12/20	05:44	-35° 30'	4° 51'	~400	T,S,P
1716	XBT		2016/12/20	06:03	-35° 29'	4° 54'	~760	T, P
1716	XBT		2016/12/20	06:22	-35° 30'	4° 51'	~760	T, P
1677	uCTD		2016/12/20	07:16	-35° 30'	4° 36'	~400	T,S,P
1717	Multinet A,B,C	4	2016/12/20	09:18	-35° 30'	4° 35'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1717	CTD	13	2016/12/20	10:02	-35° 30'	4° 35'	1200	T, S, P, Fl., TA
1677	uCTD		2016/12/20	11:49	-35° 30'	4° 24'	~400	T,S,P
1677	uCTD		2016/12/20	12:48	-35° 30'	4° 12'	~400	T,S,P
1677	uCTD		2016/12/20	14:20	-35° 30'	3° 56'	~400	T,S,P
1718	XBT		2016/12/20	15:22	-35° 30'	3° 52'	~760	T, P
1677	uCTD		2016/12/20	15:48	-35° 30'	3° 43'	~400	T,S,P
1677	uCTD		2016/12/20	16:56	-35° 30'	3° 32'	~400	T,S,P
1677	uCTD		2016/12/20	17:49	-35° 30'	3° 20'	~400	T,S,P
1719	XBT		2016/12/20	17:54	-35° 30'	3° 26'	~760	T, P
1677	uCTD		2016/12/20	19:15	-35° 30'	3° 8'	~400	T,S,P



1677	uCTD		2016/12/20	20:09	-35° 30'	2° 58'	~400	T,S,P
1720	XBT		2016/12/20	20:46	-35° 30'	2° 56'	~760	T, P
1677	uCTD		2016/12/20	21:08	-35° 30'	2° 45'	~400	T,S,P
1677	uCTD		2016/12/20	23:42	-35° 30'	2° 32'	~400	T,S,P
1677	uCTD		2016/12/21	00:55	-35° 30'	2° 20'	~400	T,S,P
1677	uCTD		2016/12/21	02:06	-35° 30'	2° 13'	~400	T,S,P
1677	uCTD		2016/12/21	02:26	-35° 30'	2° 9'	~400	T,S,P
1677	uCTD		2016/12/21	03:10	-35° 30'	1° 58'	~400	T,S,P
1721	CTD	14	2016/12/21	03:51	-35° 30'	2° 0'	2000	T, S, P, Fl., TA, O2
1721	ARGO-Float	5	2016/12/21	05:13	-35° 30'	2° 0'		
1722	XBT		2016/12/21	06:13	-35° 30'	1° 53'	~760	T, P
1677	uCTD		2016/12/21	06:31	-35° 30'	1° 48'	~400	T,S,P
1677	uCTD		2016/12/21	07:30	-35° 30'	1° 42'	~400	T,S,P
1677	uCTD		2016/12/21	08:40	-35° 30'	1° 34'	~400	T,S,P
1677	uCTD		2016/12/21	09:38	-35° 30'	1° 26'	~400	T,S,P
1723	XBT		2016/12/21	09:57	-35° 30'	1° 24'	~760	T, P
1677	uCTD		2016/12/21	10:36	-35° 30'	1° 18'	~400	T,S,P
1677	uCTD		2016/12/21	11:29	-35° 30'	1° 10'	~400	T,S,P
1677	uCTD		2016/12/21	12:44	-35° 30'	1° 1'	~400	T,S,P
1724	XBT		2016/12/21	13:29	-35° 30'	0° 55'	~760	T, P
1724	XBT		2016/12/21	13:33	-35° 30'	0° 54'	~760	T, P
1677	uCTD		2016/12/21	13:43	-35° 30'	0° 52'	~400	T,S,P
1677	uCTD		2016/12/21	14:45	-35° 30'	0° 43'	~400	T,S,P
1677	uCTD		2016/12/21	15:55	-35° 30'	0° 32'	~400	T,S,P
1725	XBT		2016/12/21	16:41	-35° 30'	0° 26'	~760	T, P
1677	uCTD		2016/12/21	17:06	-35° 30'	0° 21'	~400	T,S,P
1677	uCTD		2016/12/21	18:10	-35° 30'	0° 11'	~400	T,S,P
1677	uCTD		2016/12/21	19:06	-35° 30'	0° 2'	~400	T,S,P
1726	XBT		2016/12/21	19:28	-35° 30'	-1° 59'	~760	T, P
1677	uCTD		2016/12/21	20:00	-35° 30'	-1° 53'	~400	T,S,P
1677	uCTD		2016/12/21	21:05	-35° 30'	-1° 43'	~400	T,S,P
1727	ARGO-Float	6	2016/12/21	21:52	-35° 30'	-1° 37'		
1728	XBT		2016/12/21	22:03	-35° 30'	-1° 35'	~760	T, P
1677	uCTD		2016/12/21	22:18	-35° 30'	-1° 31'	~400	T,S,P
1677	uCTD		2016/12/21	23:42	-35° 30'	-1° 18'	~400	T,S,P
1677	uCTD		2016/12/22	00:45	-35° 30'	-1° 6'	~400	T,S,P
1729	XBT		2016/12/22	02:02	-35° 30'	-1° 2'	~760	T, P
1677	uCTD		2016/12/22	03:07	-35° 30'	-2° 51'	~400	T,S,P
1677	uCTD		2016/12/22	04:07	-35° 30'	-2° 42'	~400	T,S,P
1730	XBT		2016/12/22	04:57	-35° 30'	-2° 35'	~760	T, P
1731	ARGO-Float	7	2016/12/22	05:32	-35° 30'	-2° 30'		

1677	uCTD		2016/12/22	05:47	-35° 30'	-2° 27'	~400	T,S,P
1677	uCTD		2016/12/22	06:50	-35° 30'	-2° 18'	~400	T,S,P
1677	uCTD		2016/12/22	08:01	-35° 30'	-2° 7'	~400	T,S,P
1732	XBT		2016/12/22	08:19	-35° 30'	-2° 5'	~760	T, P
1733	Multinet A,B,C	5	2016/12/22	10:12	-35° 30'	-2° 0'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1733	CTD	15	2016/12/22	11:04	-35° 30'	-2° 0'	1000	T, S, P, Fl., TA, O2
1677	uCTD		2016/12/22	12:54	-35° 30'	-3° 54'	~400	T,S,P
1677	uCTD		2016/12/22	13:50	-35° 30'	-3° 47'	~400	T,S,P
1677	uCTD		2016/12/22	14:53	-35° 30'	-3° 38'	~400	T,S,P
1734	XBT		2016/12/22	15:57	-35° 30'	-3° 30'	~760	T, P
1734	XBT		2016/12/22	16:04	-35° 30'	-3° 29'	~760	T, P
1677	uCTD		2016/12/22	16:15	-35° 30'	-3° 27'	~400	T,S,P
1677	uCTD		2016/12/22	17:14	-35° 30'	-3° 19'	~400	T,S,P
1677	uCTD		2016/12/22	18:19	-35° 30'	-3° 10'	~400	T,S,P
1735	XBT		2016/12/22	18:55	-35° 30'	-3° 5'	~760	T, P
1736	ARGO- Float	8	2016/12/22	19:29	-35° 30'	-3° 0'		
1677	uCTD		2016/12/22	19:35	-35° 30'	-4° 58'	~400	T,S,P
1677	uCTD		2016/12/22	20:33	-35° 30'	-4° 49'	~400	T,S,P
1677	uCTD		2016/12/22	21:33	-35° 30'	-4° 40'	~400	T,S,P
1737	XBT		2016/12/22	22:11	-35° 30'	-4° 35'	~760	T, P
1677	uCTD		2016/12/22	22:40	-35° 30'	-4° 29'	~400	T,S,P
1677	uCTD		2016/12/22	23:40	-35° 30'	-4° 19'	~400	T,S,P
1677	uCTD		2016/12/23	00:42	-35° 30'	-4° 9'	~400	T,S,P
1738	XBT		2016/12/23	01:11	-35° 30'	-4° 5'	~760	T, P
1677	uCTD		2016/12/23	01:46	-35° 30'	-5° 58'	~400	T,S,P
1677	uCTD		2016/12/23	02:55	-35° 30'	-5° 45'	~400	T,S,P
1739	XBT		2016/12/23	03:54	-35° 30'	-5° 35'	~760	T, P
1739	XBT		2016/12/23	04:01	-35° 30'	-5° 34'	~760	T, P
1677	uCTD		2016/12/23	04:13	-35° 30'	-5° 31'	~400	T,S,P
1677	uCTD		2016/12/23	05:14	-35° 30'	-5° 19'	~400	T,S,P
1740	XBT		2016/12/23	06:30	-35° 30'	-5° 5'	~760	T, P
1677	uCTD		2016/12/23	06:45	-35° 30'	-5° 1'	~400	T,S,P
1677	uCTD		2016/12/23	07:16	-35° 30'	-6° 55'	~400	T,S,P
1677	uCTD		2016/12/23	08:20	-35° 30'	-6° 42'	~400	T,S,P
1677	uCTD		2016/12/23	08:50	-35° 30'	-6° 33'	~400	T,S,P
1741	XBT		2016/12/23	09:18	-35° 30'	-6° 34'	~760	T, P
1742	ARGO- Float	9	2016/12/23	09:42	-35° 30'	-6° 30'		
1677	uCTD		2016/12/23	10:13	-35° 30'	-6° 20'	~400	T,S,P
1677	uCTD		2016/12/23	11:13	-35° 30'	-6° 12'	~400	T,S,P
1743	XBT		2016/12/23	12:00	-35° 30'	-6° 3'	~760	T, P

1677	uCTD		2016/12/23	12:07	-35° 30'	-6° 1'	~400	T,S,P
1677	uCTD		2016/12/23	13:15	-35° 30'	-7° 46'	~400	T,S,P
1677	uCTD		2016/12/23	14:15	-35° 30'	-7° 34'	~400	T,S,P
1744	XBT		2016/12/23	14:39	-35° 30'	-7° 31'	~760	T, P
1744	XBT		2016/12/23	14:44	-35° 30'	-7° 30'	~760	T, P
1677	uCTD		2016/12/23	15:16	-35° 30'	-7° 21'	~400	T,S,P
1745	XBT		2016/12/23	16:51	-35° 30'	-7° 5'	~760	T, P
1746	XBT		2016/12/23	19:18	-35° 30'	-8° 36'	~760	T, P
1747	ARGO-Float	10	2016/12/23	20:23	-35° 30'	-8° 23'		
1748	XBT		2016/12/23	21:55	-35° 30'	-8° 5'	~760	T, P
1677	uCTD		2016/12/23	22:22	-35° 30'	-9° 58'	~400	T,S,P
1677	uCTD		2016/12/23	23:13	-35° 30'	-9° 48'	~400	T,S,P
1677	uCTD		2016/12/24	00:17	-35° 30'	-9° 35'	~400	T,S,P
1749	XBT		2016/12/24	00:35	-35° 30'	-9° 32'	~760	T, P
1677	uCTD		2016/12/24	01:18	-35° 30'	-9° 23'	~400	T,S,P
1677	uCTD		2016/12/24	02:17	-35° 30'	-9° 12'	~400	T,S,P
1750	XBT		2016/12/24	02:56	-35° 30'	-9° 5'	~760	T, P
1677	uCTD		2016/12/24	03:14	-35° 30'	-9° 1'	~400	T,S,P
1677	uCTD		2016/12/24	04:36	-35° 30'	-10° 48'	~400	T,S,P
1677	uCTD		2016/12/24	05:40	-35° 30'	-10° 40'	~400	T,S,P
1751	XBT		2016/12/24	06:13	-35° 30'	-10° 36'	~760	T, P
1677	uCTD		2016/12/24	06:38	-35° 30'	-10° 32'	~400	T,S,P
1752	ARGO-Float	11	2016/12/24	06:57	-35° 30'	-10° 30'		
1677	uCTD		2016/12/24	07:29	-35° 30'	-10° 25'	~400	T,S,P
1753	Multinet A,B,C	6	2016/12/24	09:34	-35° 30'	-10° 20'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1753	CTD	16	2016/12/24	10:25	-35° 30'	-10° 20'	2000	T, S, P, Fl., TA, O2
1677	uCTD		2016/12/24	12:14	-35° 30'	-10° 15'	~400	T,S,P
1677	uCTD		2016/12/24	13:09	-35° 30'	-10° 5'	~400	T,S,P
1754	XBT		2016/12/24	13:27	-35° 30'	-10° 3'	~760	T, P
1677	uCTD		2016/12/24	14:29	-35° 30'	-11° 50'	~400	T,S,P
1677	uCTD		2016/12/24	15:18	-35° 30'	-11° 41'	~400	T,S,P
1755	XBT		2016/12/24	15:58	-35° 30'	-11° 35'	~760	T, P
1677	uCTD		2016/12/24	16:17	-35° 30'	-11° 30'	~400	T,S,P
1677	uCTD		2016/12/24	17:17	-35° 30'	-11° 20'	~400	T,S,P
1677	uCTD		2016/12/24	17:45	-35° 30'	-11° 17'	~400	T,S,P
1756	XBT		2016/12/24	18:51	-35° 30'	-11° 6'	~760	T, P
1677	uCTD		2016/12/24	19:08	-35° 30'	-11° 2'	~400	T,S,P
1757	XBT		2016/12/24	21:31	-35° 30'	-12° 37'	~760	T, P
1757	XBT		2016/12/24	21:37	-35° 30'	-12° 36'	~760	T, P
1757	XBT		2016/12/24	21:41	-35° 30'	-12° 35'	~760	T, P

1758	ARGO-Float	12	2016/12/24	22:17	-35° 30'	-12° 29'		
1759	XBT		2016/12/25	00:33	-35° 30'	-12° 5'	~760	T, P
1677	uCTD		2016/12/25	00:45	-35° 30'	-12° 2'	~400	T,S,P
1677	uCTD		2016/12/25	01:38	-35° 30'	-13° 52'	~400	T,S,P
1677	uCTD		2016/12/25	02:38	-35° 30'	-13° 41'	~400	T,S,P
1760	XBT		2016/12/25	03:15	-35° 30'	-13° 35'	~760	T, P
1677	uCTD		2016/12/25	03:51	-35° 30'	-13° 28'	~400	T,S,P
1677	uCTD		2016/12/25	04:48	-35° 30'	-13° 17'	~400	T,S,P
1761	XBT		2016/12/25	05:57	-35° 30'	-13° 6'	~760	T, P
1677	uCTD		2016/12/25	06:17	-35° 30'	-13° 1'	~400	T,S,P
1677	uCTD		2016/12/25	07:28	-35° 30'	-14° 48'	~400	T,S,P
1762	XBT		2016/12/25	08:35	-35° 30'	-14° 36'	~760	T, P
1763	ARGO-Float	13	2016/12/25	09:11	-35° 30'	-14° 30'		
1677	uCTD		2016/12/25	09:30	-35° 30'	-14° 26'	~400	T,S,P
1677	uCTD		2016/12/25	10:34	-35° 30'	-14° 14'	~400	T,S,P
1764	XBT		2016/12/25	11:26	-35° 30'	-14° 5'	~760	T, P
1677	uCTD		2016/12/25	11:38	-35° 30'	-14° 2'	~400	T,S,P
1677	uCTD		2016/12/25	12:25	-35° 30'	-15° 53'	~400	T,S,P
1677	uCTD		2016/12/25	13:28	-35° 30'	-15° 41'	~400	T,S,P
1765	XBT		2016/12/25	14:10	-35° 30'	-15° 35'	~760	T, P
1677	uCTD		2016/12/25	14:30	-35° 30'	-15° 29'	~400	T,S,P
1677	uCTD		2016/12/25	15:32	-35° 30'	-15° 18'	~400	T,S,P
1677	uCTD		2016/12/25	16:34	-35° 30'	-15° 7'	~400	T,S,P
1766	XBT		2016/12/25	16:52	-35° 30'	-15° 6'	~760	T, P
1677	uCTD		2016/12/25	17:38	-35° 30'	-16° 57'	~400	T,S,P
1677	uCTD		2016/12/25	18:28	-35° 30'	-16° 48'	~400	T,S,P
1767	XBT		2016/12/25	19:49	-35° 30'	-16° 35'	~760	T, P
1677	uCTD		2016/12/25	20:08	-35° 30'	-16° 31'	~400	T,S,P
1677	uCTD		2016/12/25	21:41	-35° 30'	-16° 14'	~400	T,S,P
1768	XBT		2016/12/25	22:39	-35° 30'	-16° 5'	~760	T, P
1768	XBT		2016/12/25	22:42	-35° 30'	-16° 4'	~760	T, P
1768	XBT		2016/12/25	22:46	-35° 30'	-16° 4'	~760	T, P
1677	uCTD		2016/12/25	22:57	-35° 30'	-16° 0'	~400	T,S,P
1677	uCTD		2016/12/25	23:53	-35° 30'	-17° 50'	~400	T,S,P
1677	uCTD		2016/12/26	00:57	-35° 30'	-17° 37'	~400	T,S,P
1769	XBT		2016/12/26	01:22	-35° 30'	-17° 33'	~760	T, P
1677	uCTD		2016/12/26	02:00	-35° 30'	-17° 25'	~400	T,S,P
1770	XBT		2016/12/26	03:52	-35° 30'	-17° 5'	~760	T, P
1677	uCTD		2016/12/26	04:35	-35° 30'	-18° 56'	~400	T,S,P
1677	uCTD		2016/12/26	05:44	-35° 30'	-18° 42'	~400	T,S,P
1771	XBT		2016/12/26	06:26	-35° 30'	-18° 35'	~760	T, P
1677	uCTD		2016/12/26	06:39	-35° 30'	-18° 31'	~400	T,S,P
1677	uCTD		2016/12/26	07:08	-35° 30'	-18° 25'	~400	T,S,P

1677	uCTD		2016/12/26	08:10	-35° 30'	-18° 12'	~400	T,S,P
1772	XBT		2016/12/26	08:53	-35° 30'	-18° 5'	~760	T, P
1773	ARGO-Float	14	2016/12/26	09:17	-35° 30'	-18° 0'		
1677	uCTD		2016/12/26	09:25	-35° 30'	-19° 57'	~400	T,S,P
1677	uCTD		2016/12/26	10:33	-35° 30'	-19° 44'	~400	T,S,P
1774	XBT		2016/12/26	11:21	-35° 30'	-19° 36'	~760	T, P
1677	uCTD		2016/12/26	11:38	-35° 30'	-19° 31'	~400	T,S,P
1677	uCTD		2016/12/26	12:00	-35° 30'	-19° 25'	~400	T,S,P
1677	uCTD		2016/12/26	12:41	-35° 30'	-19° 15'	~400	T,S,P
1775	Multinet A,B,C	7	2016/12/26	14:45	-35° 30'	-19° 12'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1775	CTD	17	2016/12/26	15:38	-35° 30'	-19° 12'	2000	T, S, P, Fl. TA, O2
1677	uCTD		2016/12/26	17:30	-35° 30'	-19° 3'	~400	T,S,P
1776	XBT		2016/12/26	17:44	-35° 30'	-19° 4'	~760	T, P
1677	uCTD		2016/12/26	18:16	-35° 30'	-20° 52'	~400	T,S,P
1677	uCTD		2016/12/26	19:29	-35° 30'	-20° 38'	~400	T,S,P
1777	XBT		2016/12/26	20:06	-35° 30'	-20° 35'	~760	T, P
1677	uCTD		2016/12/26	20:30	-35° 30'	-20° 24'	~400	T,S,P
1677	uCTD		2016/12/26	21:54	-35° 30'	-20° 11'	~400	T,S,P
1677	uCTD		2016/12/26	22:44	-35° 30'	-21° 60'	~400	T,S,P
1778	XBT		2016/12/26	22:48	-35° 30'	-20° 4'	~760	T, P
1677	uCTD		2016/12/26	23:46	-35° 30'	-21° 48'	~400	T,S,P
1677	uCTD		2016/12/27	00:45	-35° 30'	-21° 37'	~400	T,S,P
1779	XBT		2016/12/27	01:21	-35° 30'	-21° 36'	~760	T, P
1677	uCTD		2016/12/27	01:54	-35° 30'	-21° 26'	~400	T,S,P
1677	uCTD		2016/12/27	02:46	-35° 30'	-21° 10'	~400	T,S,P
1780	XBT		2016/12/27	04:19	-35° 30'	-21° 2'	~760	T, P
1780	XBT		2016/12/27	04:22	-35° 30'	-21° 1'	~760	T, P
1780	XBT		2016/12/27	04:26	-35° 30'	-21° 0'	~760	T, P
1677	uCTD		2016/12/27	04:44	-35° 30'	-22° 48'	~400	T,S,P
1677	uCTD		2016/12/27	06:24	-35° 30'	-22° 32'	~400	T,S,P
1781	XBT		2016/12/27	06:37	-35° 30'	-22° 35'	~760	T, P
1677	uCTD		2016/12/27	07:32	-35° 30'	-22° 20'	~400	T,S,P
1677	uCTD		2016/12/27	08:29	-35° 30'	-22° 8'	~400	T,S,P
1782	XBT		2016/12/27	09:06	-35° 30'	-22° 6'	~760	T, P
1677	uCTD		2016/12/27	09:35	-35° 30'	-23° 55'	~400	T,S,P
1677	uCTD		2016/12/27	10:36	-35° 30'	-23° 43'	~400	T,S,P
1677	uCTD		2016/12/27	11:39	-35° 30'	-23° 32'	~400	T,S,P
1783	XBT		2016/12/27	11:48	-35° 30'	-23° 34'	~760	T, P
1783	XBT		2016/12/27	11:55	-35° 30'	-23° 32'	~760	T, P
1784	ARGO-Float	15	2016/12/27	12:09	-35° 30'	-23° 30'		

1677	uCTD		2016/12/27	12:37	-35° 30'	-23° 20'	~400	T,S,P
1677	uCTD		2016/12/27	13:36	-35° 30'	-23° 8'	~400	T,S,P
1785	XBT		2016/12/27	14:17	-35° 30'	-23° 5'	~760	T, P
1677	uCTD		2016/12/27	14:46	-35° 30'	-24° 56'	~400	T,S,P
1677	uCTD		2016/12/27	15:36	-35° 30'	-24° 46'	~400	T,S,P
1677	uCTD		2016/12/27	16:34	-35° 30'	-24° 35'	~400	T,S,P
1786	XBT		2016/12/27	16:56	-35° 30'	-24° 35'	~760	T, P
1677	uCTD		2016/12/27	17:33	-35° 30'	-24° 24'	~400	T,S,P
1677	uCTD		2016/12/27	18:35	-35° 30'	-24° 9'	~400	T,S,P
1787	XBT		2016/12/27	19:39	-35° 30'	-24° 5'	~760	T, P
1677	uCTD		2016/12/27	20:14	-35° 30'	-25° 52'	~400	T,S,P
1677	uCTD		2016/12/27	21:38	-35° 30'	-25° 38'	~400	T,S,P
1788	XBT		2016/12/27	22:29	-35° 30'	-25° 35'	~760	T, P
1788	XBT		2016/12/27	22:36	-35° 30'	-25° 34'	~760	T, P
1677	uCTD		2016/12/27	23:00	-35° 30'	-25° 26'	~400	T,S,P
1677	uCTD		2016/12/27	23:56	-35° 30'	-25° 16'	~400	T,S,P
1677	uCTD		2016/12/28	00:54	-35° 30'	-25° 5'	~400	T,S,P
1789	XBT		2016/12/28	01:23	-35° 30'	-25° 5'	~760	T, P
1789	XBT		2016/12/28	01:26	-35° 30'	-25° 4'	~760	T, P
1790	ARGO-Float	16	2016/12/28	01:43	-35° 30'	-25° 2'		
1677	uCTD		2016/12/28	02:04	-35° 30'	-26° 54'	~400	T,S,P
1677	uCTD		2016/12/28	03:12	-35° 30'	-26° 43'	~400	T,S,P
1677	uCTD		2016/12/28	04:23	-35° 30'	-26° 33'	~400	T,S,P
1791	XBT		2016/12/28	04:34	-35° 30'	-26° 35'	~760	T, P
1677	uCTD		2016/12/28	05:25	-35° 30'	-26° 24'	~400	T,S,P
1677	uCTD		2016/12/28	06:25	-35° 30'	-26° 16'	~400	T,S,P
1677	uCTD		2016/12/28	07:28	-35° 30'	-26° 7'	~400	T,S,P
1792	XBT		2016/12/28	08:15	-35° 30'	-26° 5'	~760	T, P
1677	uCTD		2016/12/28	08:41	-35° 30'	-27° 56'	~400	T,S,P
1793	Multinet A,B,C	8	2016/12/28	10:48	-35° 30'	-27° 56'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1793	CTD	18	2016/12/28	11:45	-35° 30'	-27° 56'	2000	T, S, P, Fl., TA, O2, DIC
1677	uCTD		2016/12/28	14:42	-35° 30'	-27° 46'	~400	T,S,P
1677	uCTD		2016/12/28	15:38	-35° 30'	-27° 36'	~400	T,S,P
1794	XBT		2016/12/28	16:16	-35° 30'	-27° 34'	~760	T, P
1677	uCTD		2016/12/28	16:38	-35° 30'	-27° 26'	~400	T,S,P
1677	uCTD		2016/12/28	17:48	-35° 30'	-28° 56'	~400	T,S,P
1795	XBT		2016/12/28	19:15	-35° 30'	-27° 5'	~760	T, P
1796	XBT		2016/12/28	21:57	-35° 30'	-28° 35'	~760	T, P
1677	uCTD		2016/12/28	22:27	-35° 30'	-28° 27'	~400	T,S,P

1797	ARGO-Float	17	2016/12/28	22:32	-35° 30'	-28° 30'		
1677	uCTD		2016/12/28	23:21	-35° 30'	-28° 17'	~400	T,S,P
1677	uCTD		2016/12/29	00:30	-35° 30'	-28° 5'	~400	T,S,P
1798	XBT		2016/12/29	00:55	-35° 30'	-28° 5'	~760	T, P
1677	uCTD		2016/12/29	01:35	-35° 30'	-29° 53'	~400	T,S,P
1677	uCTD		2016/12/29	02:37	-35° 30'	-29° 42'	~400	T,S,P
1677	uCTD		2016/12/29	03:35	-35° 30'	-29° 30'	~400	T,S,P
1799	XBT		2016/12/29	03:40	-35° 30'	-29° 34'	~760	T, P
1677	uCTD		2016/12/29	04:42	-35° 30'	-29° 18'	~400	T,S,P
1677	uCTD		2016/12/29	05:45	-35° 30'	-29° 7'	~400	T,S,P
1800	XBT		2016/12/29	06:16	-35° 30'	-29° 5'	~760	T, P
1677	uCTD		2016/12/29	07:36	-35° 30'	-30° 49'	~400	T,S,P
1677	uCTD		2016/12/29	08:30	-35° 30'	-30° 39'	~400	T,S,P
1801	XBT		2016/12/29	08:51	-35° 30'	-30° 36'	~760	T, P
1677	uCTD		2016/12/29	09:30	-35° 30'	-30° 27'	~400	T,S,P
1677	uCTD		2016/12/29	10:30	-35° 30'	-30° 16'	~400	T,S,P
1802	XBT		2016/12/29	11:28	-35° 30'	-30° 6'	~760	T, P
1677	uCTD		2016/12/29	11:59	-35° 30'	-31° 59'	~400	T,S,P
1803	ARGO-Float	18	2016/12/29	12:18	-35° 30'	-31° 56'		
1677	uCTD		2016/12/29	13:07	-35° 30'	-31° 45'	~400	T,S,P
1677	uCTD		2016/12/29	13:53	-35° 30'	-31° 36'	~400	T,S,P
1804	XBT		2016/12/29	14:13	-35° 30'	-31° 34'	~760	T, P
1677	uCTD		2016/12/29	15:04	-35° 30'	-31° 22'	~400	T,S,P
1677	uCTD		2016/12/29	16:05	-35° 30'	-31° 10'	~400	T,S,P
1805	XBT		2016/12/29	16:45	-35° 30'	-31° 3'	~760	T, P
1677	uCTD		2016/12/29	17:22	-35° 30'	-32° 55'	~400	T,S,P
1677	uCTD		2016/12/29	18:25	-35° 30'	-32° 43'	~400	T,S,P
1806	XBT		2016/12/29	19:09	-35° 30'	-32° 35'	~760	T, P
1677	uCTD		2016/12/29	19:33	-35° 30'	-32° 30'	~400	T,S,P
1677	uCTD		2016/12/29	21:44	-35° 30'	-32° 6'	~400	T,S,P
1807	XBT		2016/12/29	22:00	-35° 30'	-32° 4'	~760	T, P
1677	uCTD		2016/12/29	23:09	-35° 30'	-33° 51'	~400	T,S,P
1677	uCTD		2016/12/30	00:12	-35° 30'	-33° 40'	~400	T,S,P
1808	XBT		2016/12/30	00:55	-35° 30'	-33° 35'	~760	T, P
1677	uCTD		2016/12/30	03:04	-35° 30'	-33° 10'	~400	T,S,P
1809	XBT		2016/12/30	03:40	-35° 30'	-33° 5'	~760	T, P
1677	uCTD		2016/12/30	04:11	-35° 30'	-34° 58'	~400	T,S,P
1810	XBT		2016/12/30	06:16	-35° 30'	-34° 35'	~760	T, P
1810	XBT		2016/12/30	06:22	-35° 30'	-34° 34'	~760	T, P
1677	uCTD		2016/12/30	08:47	-35° 30'	-34° 4'	~400	T,S,P
1811	XBT		2016/12/30	09:04	-35° 30'	-34° 2'	~760	T, P
1812	XBT		2016/12/30	11:12	-35° 30'	-35° 35'	~760	T, P
1677	uCTD		2016/12/30	11:36	-35° 30'	-35° 29'	~400	T,S,P

1677	uCTD		2016/12/30	12:29	-35° 30'	-35° 19'	~400	T,S,P
1677	uCTD		2016/12/30	13:35	-35° 30'	-35° 7'	~400	T,S,P
1813	XBT		2016/12/30	13:57	-35° 30'	-35° 5'	~760	T, P
1677	uCTD		2016/12/30	14:35	-35° 30'	-36° 56'	~400	T,S,P
1677	uCTD		2016/12/30	15:48	-35° 30'	-36° 43'	~400	T,S,P
1814	XBT		2016/12/30	16:34	-35° 30'	-36° 35'	~760	T, P
1814	XBT		2016/12/30	16:38	-35° 30'	-36° 34'	~760	T, P
1815	XBT		2016/12/30	18:22	-35° 30'	-36° 13'	~760	T, P
1816	XBT		2016/12/30	19:00	-35° 30'	-36° 5'	~760	T, P
1817	XBT		2016/12/30	20:13	-35° 30'	-37° 51'	~760	T, P
1818	XBT		2016/12/30	21:32	-35° 30'	-37° 35'	~760	T, P
1819	XBT		2016/12/30	22:47	-35° 30'	-37° 21'	~760	T, P
1820	XBT		2016/12/31	00:07	-35° 30'	-37° 5'	~760	T, P
1821	XBT		2016/12/31	01:24	-35° 30'	-38° 50'	~760	T, P
1821	XBT		2016/12/31	01:28	-35° 30'	-38° 49'	~760	T, P
1822	XBT		2016/12/31	02:46	-35° 30'	-38° 33'	~760	T, P
1823	XBT		2016/12/31	03:56	-35° 30'	-38° 20'	~760	T, P
1824	XBT		2016/12/31	06:21	-35° 30'	-39° 51'	~760	T, P
1824	XBT		2016/12/31	06:24	-35° 30'	-39° 50'	~760	T, P
1825	XBT		2016/12/31	07:40	-35° 30'	-39° 35'	~760	T, P
1826	XBT		2016/12/31	08:56	-35° 30'	-39° 20'	~760	T, P
1826	XBT		2016/12/31	09:05	-35° 30'	-39° 19'	~760	T, P
1827	XBT		2016/12/31	10:03	-35° 30'	-39° 7'	~760	T, P
1828	Multinet A,B,C	9	2016/12/31	11:32	-35° 30'	-39° 6'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
1828	CTD	19	2016/12/31	12:27	-35° 30'	-39° 6'	2000	T, S, P, Fl., TA, O2
1829	XBT		2016/12/31	15:58	-35° 30'	-40° 48'	~760	T, P
1677	uCTD		2016/12/31	16:50	-35° 30'	-40° 36'	~400	T,S,P
1830	XBT		2016/12/31	17:11	-35° 30'	-40° 33'	~760	T, P
1677	uCTD		2016/12/31	18:00	-35° 30'	-40° 21'	~400	T,S,P
1831	XBT		2016/12/31	18:17	-35° 30'	-40° 18'	~760	T, P
1677	uCTD		2016/12/31	19:03	-35° 30'	-40° 7'	~400	T,S,P
1832	XBT		2016/12/31	19:20	-35° 30'	-40° 5'	~760	T, P
1833	XBT		2016/12/31	20:29	-35° 30'	-41° 50'	~760	T, P
1677	uCTD		2016/12/31	20:56	-35° 30'	-41° 44'	~400	T,S,P
1834	XBT		2016/12/31	21:39	-35° 30'	-41° 36'	~760	T, P
1835	XBT		2016/12/31	22:39	-35° 30'	-41° 24'	~760	T, P
1835	XBT		2016/12/31	22:45	-35° 30'	-41° 23'	~760	T, P
1836	XBT		2016/12/31	23:47	-35° 30'	-41° 10'	~760	T, P
1837	XBT		2017/01/01	01:26	-35° 30'	-42° 50'	~760	T, P
1	XBT		2017/01/01	03:25	-35° 30'	-42° 35'	~760	T, P
2	XBT		2017/01/01	04:40	-35° 30'	-42° 22'	~760	T, P



1677	uCTD		2017/01/01	05:00	-35° 30'	-43° 33'	~400	T,S,P
3	XBT		2017/01/01	07:26	-35° 30'	-43° 53'	~760	T, P
4	XBT		2017/01/01	07:46	-35° 30'	-43° 50'	~760	T, P
5	XBT		2017/01/01	08:57	-35° 30'	-43° 36'	~760	T, P
6	XBT		2017/01/01	10:20	-35° 30'	-43° 20'	~760	T, P
7	XBT		2017/01/01	11:33	-35° 30'	-43° 6'	~760	T, P
8	XBT		2017/01/01	12:50	-35° 30'	-44° 50'	~760	T, P
1677	uCTD		2017/01/01	13:16	-35° 30'	-44° 40'	~400	T,S,P
1677	uCTD		2017/01/01	14:18	-35° 30'	-44° 28'	~400	T,S,P
9	XBT		2017/01/01	14:23	-35° 30'	-44° 32'	~760	T, P
9	XBT		2017/01/01	14:26	-35° 30'	-44° 31'	~760	T, P
1677	uCTD		2017/01/01	15:24	-35° 30'	-44° 16'	~400	T,S,P
1677	uCTD		2017/01/01	16:19	-35° 30'	-44° 4'	~400	T,S,P
10	XBT		2017/01/01	16:41	-35° 30'	-44° 5'	~760	T, P
1677	uCTD		2017/01/01	17:30	-35° 30'	-45° 52'	~400	T,S,P
1677	uCTD		2017/01/01	18:19	-35° 30'	-45° 40'	~400	T,S,P
11	XBT		2017/01/01	19:10	-35° 30'	-45° 37'	~760	T, P
1677	uCTD		2017/01/01	19:34	-35° 30'	-45° 25'	~400	T,S,P
1677	uCTD		2017/01/01	20:51	-35° 30'	-45° 13'	~400	T,S,P
1677	uCTD		2017/01/01	21:42	-35° 30'	-45° 1'	~400	T,S,P
12	XBT		2017/01/01	21:50	-35° 30'	-45° 5'	~760	T, P
1677	uCTD		2017/01/01	22:57	-35° 30'	-46° 48'	~400	T,S,P
1677	uCTD		2017/01/02	00:03	-35° 30'	-46° 36'	~400	T,S,P
13	XBT		2017/01/02	00:31	-35° 30'	-46° 35'	~760	T, P
1677	uCTD		2017/01/02	01:04	-35° 30'	-46° 26'	~400	T,S,P
1677	uCTD		2017/01/02	02:00	-35° 30'	-46° 14'	~400	T,S,P
1677	uCTD		2017/01/02	03:08	-35° 30'	-46° 1'	~400	T,S,P
14	XBT		2017/01/02	03:14	-35° 30'	-46° 5'	~760	T, P
1677	uCTD		2017/01/02	04:20	-35° 30'	-47° 47'	~400	T,S,P
1677	uCTD		2017/01/02	05:24	-35° 30'	-47° 33'	~400	T,S,P
15	XBT		2017/01/02	05:44	-35° 30'	-47° 35'	~760	T, P
1677	uCTD		2017/01/02	06:31	-35° 30'	-47° 20'	~400	T,S,P
1677	uCTD		2017/01/02	07:29	-35° 29'	-47° 7'	~400	T,S,P
16	XBT		2017/01/02	08:02	-35° 30'	-47° 5'	~760	T, P
1677	uCTD		2017/01/02	08:39	-35° 25'	-48° 56'	~400	T,S,P
1677	uCTD		2017/01/02	09:36	-35° 17'	-48° 43'	~400	T,S,P
17	Multinet A,B,C	10	2017/01/02	11:33	-35° 18'	-48° 45'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
17	CTD	20	2017/01/02	12:26	-35° 18'	-48° 44'	2000	T, S, P, Fl., TA, O2
17	ARGO- Float	19	2017/01/02	13:52	-35° 18'	-48° 44'		
18	XBT		2017/01/02	14:22	-35° 15'	-48° 40'	~760	T, P

1677	uCTD		2017/01/02	14:54	-35° 9'	-48° 29'	~400	T,S,P
1677	uCTD		2017/01/02	15:58	-35° 3'	-48° 19'	~400	T,S,P
1677	uCTD		2017/01/02	16:53	-36° 57'	-48° 8'	~400	T,S,P
19	XBT		2017/01/02	16:56	-36° 59'	-48° 12'	~760	T, P
19	XBT		2017/01/02	17:00	-36° 58'	-48° 11'	~760	T, P
19	XBT		2017/01/02	17:04	-36° 58'	-48° 10'	~760	T, P
1677	uCTD		2017/01/02	17:45	-36° 51'	-49° 58'	~400	T,S,P
1677	uCTD		2017/01/02	18:49	-36° 43'	-49° 46'	~400	T,S,P
20	XBT		2017/01/02	18:58	-36° 45'	-49° 49'	~760	T, P
1677	uCTD		2017/01/02	19:59	-36° 35'	-49° 33'	~400	T,S,P
1677	uCTD		2017/01/02	21:02	-36° 30'	-49° 24'	~400	T,S,P
21	XBT		2017/01/02	21:12	-36° 30'	-49° 24'	~760	T, P
1677	uCTD		2017/01/02	21:39	-36° 23'	-49° 12'	~400	T,S,P
1677	uCTD		2017/01/02	23:07	-36° 15'	-50° 59'	~400	T,S,P
22	XBT		2017/01/02	23:31	-36° 15'	-50° 59'	~760	T, P
1677	uCTD		2017/01/03	00:11	-36° 9'	-50° 48'	~400	T,S,P
1677	uCTD		2017/01/03	01:16	-36° 3'	-50° 38'	~400	T,S,P
1677	uCTD		2017/01/03	02:20	-37° 57'	-50° 28'	~400	T,S,P
23	XBT		2017/01/03	02:22	-37° 59'	-50° 31'	~760	T, P
1677	uCTD		2017/01/03	03:17	-37° 51'	-50° 18'	~400	T,S,P
1677	uCTD		2017/01/03	04:25	-37° 45'	-50° 8'	~400	T,S,P
24	XBT		2017/01/03	04:45	-37° 45'	-50° 8'	~760	T, P
24	XBT		2017/01/03	04:48	-37° 45'	-50° 8'	~760	T, P
1677	uCTD		2017/01/03	05:23	-37° 39'	-51° 57'	~400	T,S,P
1677	uCTD		2017/01/03	06:41	-37° 31'	-51° 44'	~400	T,S,P
25	XBT		2017/01/03	07:15	-37° 30'	-51° 42'	~760	T, P
1677	uCTD		2017/01/03	07:39	-37° 25'	-51° 33'	~400	T,S,P
1677	uCTD		2017/01/03	08:42	-37° 17'	-51° 21'	~400	T,S,P
26	XBT		2017/01/03	09:37	-37° 15'	-51° 17'	~760	T, P
1677	uCTD		2017/01/03	10:01	-37° 10'	-51° 9'	~400	T,S,P
1677	uCTD		2017/01/03	11:13	-37° 4'	-52° 58'	~400	T,S,P
1677	uCTD		2017/01/03	12:19	-38° 56'	-52° 45'	~400	T,S,P
27	XBT		2017/01/03	12:33	-38° 59'	-52° 50'	~760	T, P
1677	uCTD		2017/01/03	14:20	-38° 49'	-52° 35'	~400	T,S,P
1677	uCTD		2017/01/03	15:20	-38° 43'	-52° 27'	~400	T,S,P
28	XBT		2017/01/03	15:39	-38° 42'	-52° 25'	~760	T, P
28	XBT		2017/01/03	15:43	-38° 42'	-52° 24'	~760	T, P
1677	uCTD		2017/01/03	16:26	-38° 38'	-52° 17'	~400	T,S,P
1677	uCTD		2017/01/03	17:34	-38° 32'	-52° 7'	~400	T,S,P
1677	uCTD		2017/01/03	18:00	-38° 28'	-52° 0'	~400	T,S,P
29	XBT		2017/01/03	18:16	-38° 29'	-52° 2'	~760	T, P
1677	uCTD		2017/01/03	19:05	-38° 23'	-53° 50'	~400	T,S,P
1677	uCTD		2017/01/03	20:14	-38° 17'	-53° 39'	~400	T,S,P
30	XBT		2017/01/03	21:19	-38° 15'	-53° 35'	~760	T, P

1677	uCTD		2017/01/03	21:46	-38° 6'	-53° 3'	~400	T,S,P
31	XBT		2017/01/03	22:42	-38° 8'	-53° 23'	~760	T, P
32	XBT		2017/01/04	00:16	-38° 0'	-53° 10'	~760	T, P
33	XBT		2017/01/04	02:17	-38° 0'	-54° 50'	~760	T, P
34	Multinet A,B,C	11	2017/01/04	05:02	-39° 59'	-54° 35'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
34	CTD	21	2017/01/04	05:53	-39° 58'	-54° 36'	2000	T, S, P, Fl., TA, O2
1677	uCTD		2017/01/04	07:42	-39° 60'	-54° 27'	~400	T,S,P
35	XBT		2017/01/04	07:54	-39° 60'	-54° 31'	~760	T, P
1677	uCTD		2017/01/04	08:55	-39° 60'	-54° 12'	~400	T,S,P
36	XBT		2017/01/04	09:30	-38° 0'	-54° 10'	~760	T, P
1677	uCTD		2017/01/04	10:03	-38° 0'	-55° 57'	~400	T,S,P
1677	uCTD		2017/01/04	11:00	-38° 0'	-55° 38'	~400	T,S,P
37	XBT		2017/01/04	11:05	-39° 60'	-55° 48'	~760	T, P
38	CTD	22	2017/01/04	11:50	-38° 0'	-55° 40'	1250	T, S, P, Fl., TA, O2
39	XBT		2017/01/04	13:40	-38° 0'	-55° 30'	~760	T, P
1677	uCTD		2017/01/04	14:14	-38° 0'	-55° 17'	~400	T,S,P
1677	uCTD		2017/01/04	15:15	-38° 0'	-55° 0'	~400	T,S,P
40	XBT		2017/01/04	15:21	-38° 0'	-55° 8'	~760	T, P
1677	uCTD		2017/01/04	16:45	-39° 41'	-55° 35'	~400	T,S,P
41	XBT		2017/01/04	16:52	-38° 0'	-56° 49'	~760	T, P
42	CTD	23	2017/01/04	18:07	-39° 51'	-56° 52'	530	T, S, P, Fl. TA
43	RCast		2017/01/04	19:25	-39° 42'	-56° 57'		T,S,P
44	XBT		2017/01/04	20:08	-39° 39'	-56° 58'	~760	T, P
43	RCast		2017/01/04	20:19	-39° 33'	-55° 0'		T,S,P
45	XBT		2017/01/04	21:03	-39° 29'	-55° 2'	~760	T, P
43	RCast		2017/01/04	21:08	-39° 24'	-55° 4'		T,S,P
46	XBT		2017/01/04	22:04	-39° 20'	-55° 6'	~760	T, P
43	RCast		2017/01/04	22:20	-39° 14'	-55° 8'		T,S,P
47	XBT		2017/01/04	22:58	-39° 11'	-55° 9'	~760	T, P
43	RCast		2017/01/04	23:08	-39° 5'	-55° 11'		T,S,P
48	XBT		2017/01/05	00:03	-39° 1'	-55° 13'	~760	T, P
43	RCast		2017/01/05	00:10	-40° 56'	-55° 15'		T,S,P
49	XBT		2017/01/05	01:01	-40° 51'	-55° 17'	~760	T, P
49	XBT		2017/01/05	01:09	-40° 50'	-55° 17'	~760	T, P
43	RCast		2017/01/05	01:17	-40° 45'	-55° 19'		T,S,P
50	XBT		2017/01/05	02:02	-40° 42'	-55° 20'	~760	T, P
43	RCast		2017/01/05	02:08	-40° 36'	-55° 23'		T,S,P
51	XBT		2017/01/05	03:06	-40° 32'	-55° 24'	~760	T, P
52	Multinet A,B,C	12	2017/01/05	04:45	-40° 30'	-55° 25'	720, 110,	T, S, P, Fl., TA, Plastic,

							500	Plankton, Forams
52	CTD	24	2017/01/05	05:35	-40° 31'	-55° 25'	3000	T, S, P, Fl., TA, O2
53	XBT		2017/01/05	08:39	-40° 42'	-55° 35'	~760	T, P
54	XBT		2017/01/05	10:03	-40° 54'	-55° 45'	~760	T, P
55	XBT		2017/01/05	11:22	-39° 6'	-55° 55'	~760	T, P
56	Multinet A,B,C	13	2017/01/05	13:47	-39° 14'	-54° 4'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
56	CTD	25	2017/01/05	14:39	-39° 14'	-54° 6'	2000	T, S, P, Fl., TA
43	RCast		2017/01/05	16:13	-39° 19'	-54° 8'		T,S,P
57	XBT		2017/01/05	17:14	-39° 24'	-54° 10'	~760	T, P
58	Multinet A,B,C	14	2017/01/05	19:00	-39° 24'	-54° 12'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
58	CTD	26	2017/01/05	19:56	-39° 23'	-54° 13'	1000	T, S, P, Fl., TA, O2
43	RCast		2017/01/05	21:02	-39° 26'	-54° 15'		T,S,P
59	Multinet A,B,C	15	2017/01/05	23:03	-39° 26'	-54° 18'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
59	CTD	27	2017/01/05	23:57	-39° 25'	-54° 20'	2000	T, S, P, Fl., TA, O2
1677	uCTD		2017/01/06	02:10	-39° 17'	-54° 12'	~400	T,S,P
60	XBT		2017/01/06	03:04	-39° 20'	-54° 10'	~760	T, P
61	Multinet A,B,C	16	2017/01/06	05:07	-39° 15'	-54° 7'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
61	CTD	28	2017/01/06	06:10	-39° 14'	-54° 7'	1000	T, S, P, Fl., TA
1677	uCTD		2017/01/06	07:32	-39° 7'	-54° 2'	~400	T,S,P
1677	uCTD		2017/01/06	08:36	-39° 1'	-55° 55'	~400	T,S,P
1677	uCTD		2017/01/06	09:31	-40° 57'	-55° 48'	~400	T,S,P
1677	uCTD		2017/01/06	10:33	-40° 55'	-55° 37'	~400	T,S,P
1677	uCTD		2017/01/06	11:37	-40° 54'	-55° 26'	~400	T,S,P
1677	uCTD		2017/01/06	12:39	-40° 53'	-55° 19'	~400	T,S,P
1677	uCTD		2017/01/06	13:28	-40° 53'	-55° 12'	~400	T,S,P
1677	uCTD		2017/01/06	14:35	-40° 52'	-56° 59'	~400	T,S,P
1677	uCTD		2017/01/06	15:37	-40° 51'	-56° 47'	~400	T,S,P
1677	uCTD		2017/01/06	16:36	-40° 50'	-56° 36'	~400	T,S,P
62	XBT		2017/01/06	17:08	-40° 50'	-56° 30'	~760	T, P
43	RCast		2017/01/06	17:22	-40° 49'	-56° 21'		T,S,P
43	RCast		2017/01/06	18:32	-40° 48'	-56° 6'		T,S,P

43	RCast		2017/01/06	19:44	-40° 47'	-57° 51'		T,S,P
43	RCast		2017/01/06	20:53	-40° 46'	-57° 37'		T,S,P
63	XBT		2017/01/07	11:16	-42° 58'	-58° 0'	~760	T, P
43	RCast		2017/01/07	12:38	-42° 41'	-58° 0'		T,S,P
43	RCast		2017/01/07	13:41	-42° 33'	-58° 0'		T,S,P
43	RCast		2017/01/07	14:42	-42° 25'	-58° 0'		T,S,P
43	RCast		2017/01/07	15:34	-42° 17'	-58° 0'		T,S,P
43	RCast		2017/01/07	16:39	-42° 9'	-59° 60'		T,S,P
43	RCast		2017/01/07	17:49	-43° 59'	-59° 56'		T,S,P
43	RCast		2017/01/07	19:00	-43° 50'	-59° 51'		T,S,P
64	XBT		2017/01/07	20:13	-43° 46'	-59° 49'	~760	T, P
43	RCast		2017/01/07	20:18	-43° 40'	-59° 48'		T,S,P
43	RCast		2017/01/07	21:34	-43° 32'	-59° 49'		T,S,P
43	RCast		2017/01/07	22:47	-43° 27'	-59° 56'		T,S,P
65	Multinet A,B,C	17	2017/01/08	00:46	-43° 26'	-58° 2'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
65	CTD	29	2017/01/08	01:40	-43° 27'	-58° 3'	1000	T, S, P, Fl., TA, O2
66	ARGO- Float	20	2017/01/08	03:26	-43° 21'	-58° 1'		
67	ARGO- Float	21	2017/01/08	07:48	-44° 42'	-58° 0'		
68	Multinet A,B,C	18	2017/01/08	18:02	-45° 21'	-58° 0'	720, 110, 500	T, S, P, Fl., TA, Plastic, Plankton, Forams
68	CTD	30	2017/01/08	18:54	-45° 21'	-58° 0'	2800	T, S, P, Fl., TA, O2
69	ARGO- Float	22	2017/01/08	20:49	-45° 21'	-59° 60'		
70	XBT		2017/01/08	21:11	-45° 21'	-59° 56'	~760	T, P
71	XBT		2017/01/08	21:57	-45° 21'	-59° 45'	~760	T, P
72	XBT		2017/01/08	22:35	-45° 21'	-59° 37'	~760	T, P
73	XBT		2017/01/08	23:24	-45° 21'	-59° 26'	~760	T, P
74	CTD	31	2017/01/09	00:03	-45° 21'	-59° 20'	2000	T, S, P, Fl., TA, O2
75	XBT		2017/01/09	01:56	-45° 21'	-59° 15'	~760	T, P
76	XBT		2017/01/09	02:44	-45° 21'	-59° 5'	~760	T, P
77	XBT		2017/01/09	03:34	-45° 21'	-60° 55'	~760	T, P
77	XBT		2017/01/09	03:37	-45° 21'	-60° 55'	~760	T, P
78	CTD	32	2017/01/09	04:17	-45° 21'	-60° 50'	1500	T, S, P, Fl., TA
79	XBT		2017/01/09	05:58	-45° 21'	-60° 45'	~760	T, P
79	XBT		2017/01/09	06:01	-45° 21'	-60° 44'	~760	T, P
80	XBT		2017/01/09	06:42	-45° 21'	-60° 35'	~760	T, P
80	XBT		2017/01/09	06:46	-45° 21'	-60° 35'	~760	T, P

81	CTD	33	2017/01/09	07:12	-45° 21'	-60° 30'	1300	T, S, P, Fl., TA, O2
82	XBT		2017/01/09	08:34	-45° 21'	-60° 26'	~760	T, P
83	CTD	34	2017/01/09	09:15	-45° 21'	-60° 18'	1150	T, S, P, Fl., TA, O2
84	XBT		2017/01/09	10:22	-45° 21'	-60° 16'	~760	T, P
85	CTD	35	2017/01/09	10:56	-45° 21'	-60° 10'	750	T, S, P, Fl., TA, O2
86	XBT		2017/01/09	12:11	-45° 21'	-60° 5'	~760	T, P
87	CTD	36	2017/01/09	12:47	-45° 21'	-61° 60'	190	T, S, P, Fl., TA, O2
88	XBT		2017/01/09	13:35	-45° 21'	-61° 55'	~760	T, P
88	XBT		2017/01/09	13:38	-45° 21'	-61° 55'	~760	T, P
43	RCast		2017/01/09	13:58	-45° 21'	-61° 43'		T,S,P
43	RCast		2017/01/09	15:09	-45° 21'	-61° 33'		T,S,P
43	RCast		2017/01/09	16:40	-45° 21'	-61° 17'		T,S,P
89	CTD	37	2017/01/09	17:53	-45° 21'	-61° 10'	100	T, S, P, Fl., TA, O2
43	RCast		2017/01/09	18:23	-45° 21'	-61° 3'		T,S,P
43	RCast		2017/01/09	19:22	-45° 21'	-62° 51'		T,S,P
43	RCast		2017/01/09	20:52	-45° 20'	-62° 40'		T,S,P
43	RCast		2017/01/09	21:28	-45° 21'	-62° 28'		T,S,P
90	CTD	38	2017/01/09	22:58	-45° 21'	-62° 20'	100	T, S, P, Fl., TA, O2
43	RCast		2017/01/09	23:35	-45° 21'	-62° 12'		T,S,P
43	RCast		2017/01/10	00:34	-45° 21'	-63° 60'		T,S,P
43	RCast		2017/01/10	01:39	-45° 21'	-63° 50'		T,S,P
43	RCast		2017/01/10	02:14	-45° 21'	-63° 39'		T,S,P
91	CTD	39	2017/01/10	03:42	-45° 21'	-63° 30'	91	T, S, P, Fl., TA
43	RCast		2017/01/10	04:07	-45° 21'	-63° 24'		T,S,P
43	RCast		2017/01/10	05:02	-45° 21'	-63° 13'		T,S,P
43	RCast		2017/01/10	06:01	-45° 21'	-63° 4'		T,S,P
92	CTD	40	2017/01/10	06:48	-45° 21'	-63° 0'	76	T, S, P, Fl., TA
93	XBT		2017/01/11	05:42	-48° 22'	-62° 45'	~760	T, P
94	XBT		2017/01/11	06:42	-48° 20'	-61° 1'	~760	T, P
95	XBT		2017/01/11	07:43	-48° 17'	-61° 15'	~760	T, P
96	XBT		2017/01/11	08:49	-48° 15'	-61° 30'	~760	T, P
97	XBT		2017/01/11	09:54	-48° 13'	-61° 44'	~760	T, P
98	XBT		2017/01/11	11:03	-48° 10'	-61° 60'	~760	T, P
99	XBT		2017/01/11	12:11	-48° 8'	-60° 15'	~760	T, P
100	XBT		2017/01/11	13:19	-48° 5'	-60° 30'	~760	T, P
101	XBT		2017/01/11	14:23	-48° 2'	-60° 45'	~760	T, P
102	XBT		2017/01/11	15:29	-48° 0'	-59° 0'	~760	T, P
103	XBT		2017/01/11	16:31	-48° 0'	-59° 15'	~760	T, P
104	XBT		2017/01/11	17:30	-49° 60'	-59° 30'	~760	T, P

104	XBT		2017/01/11	17:38	-48° 0'	-59° 32'	~760	T, P
104	XBT		2017/01/11	17:44	-48° 0'	-59° 34'	~760	T, P
104	XBT		2017/01/11	17:50	-48° 0'	-59° 35'	~760	T, P
105	XBT		2017/01/11	18:30	-48° 0'	-59° 45'	~760	T, P
106	Multinet A,B,C	19	2017/01/11	21:07	-48° 0'	-59° 59'	720, 110, 500	T, S, P, Flouromete r, TA, Plastic, Plankton, Forams
106	CTD	41	2017/01/11	21:52	-48° 0'	-59° 58'	2450	T, S, P, Fl., TA, O2
107	ARGO- Float	23	2017/01/11	23:30	-49° 60'	-59° 57'		
108	XBT		2017/01/11	23:39	-49° 60'	-59° 56'	~760	T, P