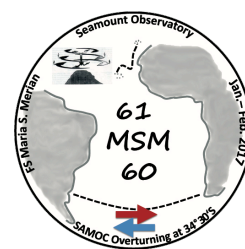
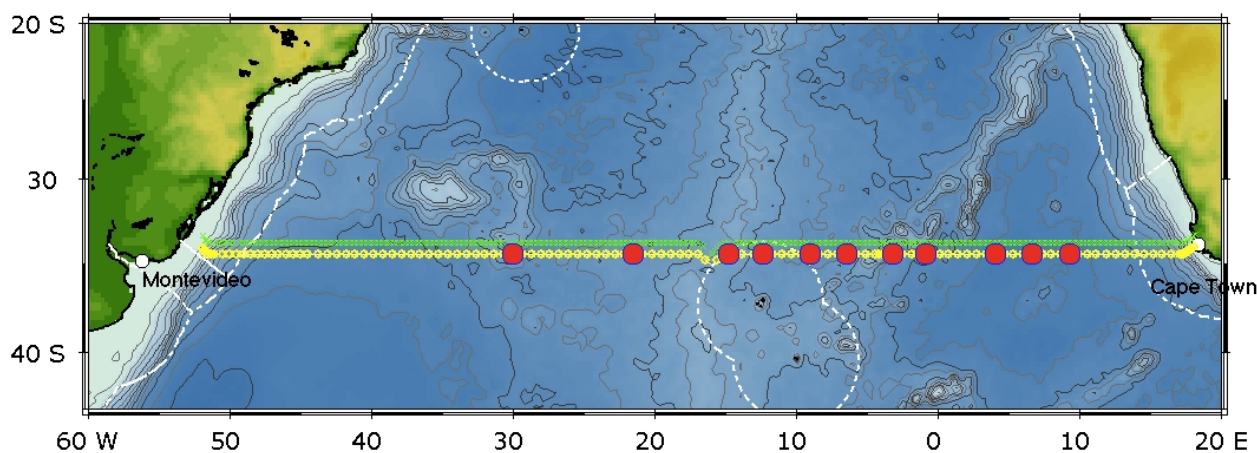


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Short Cruise Report RV Maria S Merian MSM60

Cape Town, South Africa – Montevideo, Uruguay
04. January – 01. February 2017
Chief scientist: Johannes Karstensen
Captain: Ralf Schmidt



RV Maria S. Merian MSM60 cruise track from Cape Town to Montevideo. Yellow dots indicate CTD/IADCP/UVP casts, red circles indicate Argo float deployments, XBT data (green cross) are shown with an latitude offset.

Objectives

The Maria S Merian MSM60 expedition was the first basin-wide section across the South Atlantic following the SAMBA/SAMOC line at 34°30'S. The scientific program consisted of full water depth sampling (up to 5300m) using the CTD/O2/IADCP rosette system. The water samples have been analysed on board for oxygen, dissolved inorganic carbon, alkalinity, salinity, CFC12, and SF6. In addition samples have been taken for later analysis of nutrients, chlorophyll structure (HPLC), POC, and nitrogen isotope analysis. The sampling and measurements were performed against highest standards defined in the GO-SHIP cruise recommendations (<http://www.go-ship.org/>). An Underwater Vision Profiler (UVP) was mounted on the CTD for full depth particle photography. Underway measurements included hull mounted ADCPs (75kHz and 38kHz) and high resolution (11nm) XBT probes. The data will be analysed for multiple purposes including calculation of the meridional volume, heat, and freshwater transport across the SAMBA/SAMOC line. The biogeochemical data will be compared to historical data acquired at neighbouring sections, e.g. along the WOCE/GO-SHIP A10 section (30°S) occupied by RV Meteor in 1993 as part of the WOCE program. The MSM60 expedition is a contribution to the EU H-2020 AtlantOS project.

Narrative

Preparatory work for Maria S Merian started in Cape Town, South Africa, on January 2nd, early morning. In the late afternoon of January 3rd all science crew member (22), incl. one Navy observer from Brazil, were on board the ship. Departure was planned January 4th, 08:00, but was delayed because of bunkering was delayed and a dog-squad search of the ship for blind passengers. Finally we left harbour for the expedition MSM60 on January 4th, 2017 at 14:50 (Local Time).

We headed southwest for a first XBT launch at the 100 m isobaths and a first CTD test station at the 150 m isobath. Unfortunately the CTD at the first test station failed because of a hose that was not removed. We worked our way westward and down the continental slope with XBTs' launched every 10 nm (later stretched to 11 nm). The CTD sampling was at the boundary about 20 nm, to resolve the more complex current structure we expected here, and later stretched to 33 nm. The first CTD profiles were done with a PAR sensor mounted, but the sensor was removed after the water depth exceeded 2400 m (January 5th). During the first days the CTD cable termination had to be renewed a few times (after CTD st # 13 and #15) because of an unfortunate combination of wind, currents and waves all coming from different directions the tension cycling was too extreme.

On January 07th we used changed the winch to see if maybe the wire itself was the problem – but that didn't help much. However, the CTD/IADCP/UVP package could be operated at almost all casts and returned good data. On January 7th we started with sending the XBT and CTD cast data on a daily basis to Coriolis data centre (France) and to NOAA (USA). We have been approached by a UK group from NOC-Southampton (Brian King) and by EuroArgo to launch a couple of floats along our track. The first of these floats was launched on the January 8th in the Cape Basin. A few minor problems occurred (ship ADCP communication error, low voltage IADCP) and the seminar talks started on the 9th. On January 10th we had serious problem during CTD #30 – first a shortage at about 600m, followed by a total stop of the system at 3600 m. We tried to restart the application but it failed and we recovered the system and changed the winch (from #2 to #1) again. A shortage in ship winch cable was detected and a new termination of cable prepared. On January 11th the CTD data acquisition stopped at about 5000 m (upcast). Besides a shortcut in the

wire, the data acquisition PC was malfunctioning. Fortunately the WTD team setup a spare PC for us and the system could be used again. We crossed the Greenwich Meridian (January 12th) all systems running, except of a few problems with the CTD release pylon that controls the bottle sampling. Again the WTD/electronics help us by trying to exchange our with the Maria S Merian own pylon – however, that did not work at all and we changed back to the old (malfunctioned) system.

We crossed the Walvis Ridge (14th), which separates the Cape Basin from the Angola Basin, and water depth changed drastically by more than 3000 m over a distance of 15 km only. On January 17th we headed to more than half a degree south in order to recover a BioArgo float owned by French colleagues from Villefranche. The float was drifting since October 2016 (shortly after deployment) for unknown reasons. Because it was to rough seas or a Zodica recovery, the crew designed a recovery tool that proved to work well and the float was on board at 18:40 LT. We then headed back to the nominal latitude 34.5°S of our SAMBA/SAMOC section. A short report was written about the recovery (incl. the tool) and send to JCOMM. Because Argo drifter are nowadays more frequently equipped with additional (expensive) sensors it is getting increasingly attractive to recover floats to re-use and recalibrate the sensors.

A topographic survey of the Ridge system close to the Rio Grande Rise was performed on January 22nd. The Ridge is an important obstacle for the flow of Antarctic Bottom Water. Towards the end of the MSM60 expedition we started with preparations not only for the leaving the ship but for the reception that was kindly arranged by the captain and the German embassy in Montevideo on February 1st. All groups on board prepared a poster presentation. On January 30th we entered into Brazilian EEZ and the EM122 was stopped because we did not apply for permission to use the device in Brazilian waters. On January 31st the last CTD station (#128) was done at 130 m water depth and a last XBT (#331) at 100 m. We stopped underway data acquisition when entering the Uruguayan EEZ. The reception took place a couple of hours after we moored in Montevideo old town harbour.

Acknowledgement

We thank Captain Ralf Schmidt, his officers and the crew of RV Maria S. Merian for their support of our observational program and the hospitality on board. The ship time was provided by the Deutsche Forschungsgemeinschaft within the METEOR/MERIAN core program. Financial support for the different work carried out during the expedition was provided by the H2020 Project AtlantOS. We also benefited from financial contributions by the research institutions involved.

Cruise participants science:

| Name | Institute | Responsibility |
|----------------------------|-----------|--|
| Johannes Karstensen | GEOMAR | Chiefscientist |
| Rebecca Hummels | GEOMAR | CTD (processing responsible) |
| Tim Stöven | GEOMAR | CFC/SF6 data Quality Control |
| Julia Schrandt | CAU Kiel | CFC/SF6 helper |
| Caroline Edsgren | GEOMAR | CFC/SF6 helper |
| Andreas Rogge | AWI | UVP (processing responsible), helper CFC |
| Sabrina Speich | ENS | CTD helper; Salinometer (processing responsible), supervision training |
| Sarah Asdar | UCT | CTD Helper & station list responsible |
| Maria Paz Chidichimo | SHN | CTD; Argo floats responsible |
| Raul Guerrero | INIDEP | CTD/ADCP/IADCP (incl. quality control) |
| Louise Branlard | UCT | CTD helper & Responsible Real-time data submission |
| Marion Kersale | UCT | CTD helper; ADCP (processing responsible) |
| Ngwako Mohale | UCT | CTD helper; TSG/Underway (processing responsible) |
| Tanya Marshall | UCT | CTD helper; XBT (processing responsible) |
| Leticia Cotrim da Cunha | UERJ | Carbon Helper; POC responsible |
| Olga Tiemi Sato | USP | CTD helper; Salinometer |
| Glauca B. Benedetti Berbel | IFSP | Nutrient/oxygen sampling; Oxygen processing resp. |
| Bruno Sutti Otera | IFSP | Nutrient and oxygen sampling |
| Andréa Carvalho | FURG | Carbon helper, Phytoplankton (HPLC) responsible |
| Steve Jones | U Exeter | Carbon (processing responsible) |
| Alice Lebehot | U Exeter | Carbon data Quality Control |
| Aline da Silva Calixto | Navy | Observer |

GEOMAR: Helmholtz-Zentrum für Ozeanforschung Kiel, Kiel, Germany

CAU Kiel: Christian Albers Universität, Kiel, Germany

ENS: École normale supérieure; 45, rue d'Ulm, Paris /France

FURG: Universidade Federal do Rio Grande, Rio Grande – RS, Brasil

IFSP: Instituto Federal de Ciência e Tecnologia de São Paulo, São Paulo, Brasil

UERJ: Universidade do Estado do Rio de Janeiro, Rio de Janeiro, Brasil

INIDEP: National Institute for Fishery Research & Development, Mar del Plata, Argentina

SHN: Servicio de Hidrografía Naval, Buenos Aires, Argentina

UCT: University of Cape Town, University Avenue, Rondebosch, South Africa

AWI: Alfred-Wegener-Institut, Am Handelshafen 12, Bremerhaven, Germany

U Exeter: University of Exeter, College of Life and Environmental Sciences, Exeter, Devon, Great Britain



Science crew participants Maria S Merian MSM6 expedition

Station list Maria S Merian MSM60

Gear coding

CTD/RO: CTD/lowered Acoustic Doppler Current Profiler/and rosette sampler

XBT: Expandabel Bathythermograph

ARGO: Float operation (deployment/recovery)

| Ship Station # | Gear St. # | Date | Time (UTC) | Latitude | Longitude | Depth [m] | Gear code |
|----------------|------------|------------|------------|-------------|-------------|-----------|-----------|
| MSM60/001-1 | 1 XBT | 04.01.2017 | 14:38 | 34°0.34' S | 18°11.81' E | 94.7 | XBT |
| MSM60/002-1 | 1 CTD | 04.01.2017 | 15:34 | 34°2.30' S | 18°8.75' E | 159.7 | CTD/RO |
| MSM60/003-1 | 2 XBT | 04.01.2017 | 16:24 | 34°6.47' S | 18°2.06' E | 221.5 | XBT |
| MSM60/004-1 | 3 XBT | 04.01.2017 | 17:17 | 34°12.71' S | 17°52.09' E | 298.5 | XBT |
| MSM60/005-1 | 2 CTD | 04.01.2017 | 17:48 | 34°13.04' S | 17°51.31' E | 306.6 | CTD/RO |
| MSM60/006-1 | 4 XBT | 04.01.2017 | 19:00 | 34°18.48' S | 17°42.86' E | 433.3 | XBT |
| MSM60/007-1 | 3 CTD | 04.01.2017 | 19:52 | 34°20.69' S | 17°39.52' E | 651.8 | CTD/RO |
| MSM60/008-1 | 4 CTD | 04.01.2017 | 21:33 | 34°21.56' S | 17°37.77' E | 822.7 | CTD/RO |
| MSM60/009-1 | 5 CTD | 04.01.2017 | 23:50 | 34°22.64' S | 17°36.00' E | nan | CTD/RO |
| MSM60/010-1 | 5 XBT | 05.01.2017 | 00:25 | 34°23.45' S | 17°34.91' E | nan | XBT |
| MSM60/011-1 | 6 CTD | 05.01.2017 | 01:57 | 34°24.34' S | 17°33.42' E | nan | CTD/RO |
| MSM60/012-1 | 7 CTD | 05.01.2017 | 04:51 | 34°26.19' S | 17°28.18' E | 1605.4 | CTD/RO |
| MSM60/013-1 | 8 CTD | 05.01.2017 | 07:19 | 34°28.22' S | 17°22.90' E | 1864 | CTD/RO |
| MSM60/014-1 | 6 XBT | 05.01.2017 | 08:18 | 34°29.01' S | 17°20.84' E | 2010.6 | XBT |
| MSM60/015-1 | 9 CTD | 05.01.2017 | 10:05 | 34°29.81' S | 17°18.05' E | 2130.1 | CTD/RO |
| MSM60/016-1 | 10 CTD | 05.01.2017 | 12:47 | 34°29.89' S | 17°13.21' E | 2440.2 | CTD/RO |
| MSM60/017-1 | 7 XBT | 05.01.2017 | 13:53 | 34°29.96' S | 17°9.66' E | 2629.5 | XBT |
| MSM60/018-1 | 11 CTD | 05.01.2017 | 15:16 | 34°29.98' S | 17°8.30' E | 2864.2 | CTD/RO |
| MSM60/019-1 | 8 XBT | 05.01.2017 | 17:20 | 34°30.01' S | 16°58.49' E | 3270.4 | XBT |
| MSM60/020-1 | 9 XBT | 05.01.2017 | 18:17 | 34°29.99' S | 16°45.75' E | 3250.9 | XBT |
| MSM60/021-1 | 10 XBT | 05.01.2017 | 18:35 | 34°29.99' S | 16°41.90' E | 3357.7 | XBT |
| MSM60/022-1 | 11 XBT | 05.01.2017 | 19:10 | 34°29.99' S | 16°34.47' E | 3550 | XBT |
| MSM60/023-1 | 12 CTD | 05.01.2017 | 20:44 | 34°29.95' S | 16°30.94' E | 3663.7 | CTD/RO |
| MSM60/024-1 | 12 XBT | 05.01.2017 | 22:41 | 34°29.99' S | 16°21.53' E | 3916.1 | XBT |
| MSM60/025-1 | 13 XBT | 05.01.2017 | 23:36 | 34°29.98' S | 16°9.26' E | 4056.7 | XBT |
| MSM60/026-1 | 14 XBT | 06.01.2017 | 00:27 | 34°30.00' S | 15°57.69' E | 4161.1 | XBT |
| MSM60/027-1 | 13 CTD | 06.01.2017 | 02:22 | 34°29.96' S | 15°53.38' E | 4200.4 | CTD/RO |
| MSM60/028-1 | 15 XBT | 06.01.2017 | 04:20 | 34°29.99' S | 15°46.02' E | 4265.4 | XBT |
| MSM60/029-1 | 16 XBT | 06.01.2017 | 05:14 | 34°29.99' S | 15°33.81' E | 4369.1 | XBT |
| MSM60/030-1 | 17 XBT | 06.01.2017 | 06:10 | 34°29.99' S | 15°21.48' E | 4443.1 | XBT |
| MSM60/031-1 | 14 CTD | 06.01.2017 | 08:08 | 34°29.96' S | 15°15.93' E | 4462.5 | CTD/RO |
| MSM60/032-1 | 18 XBT | 06.01.2017 | 10:21 | 34°29.99' S | 15°6.10' E | 4485.9 | XBT |
| MSM60/033-1 | 19 XBT | 06.01.2017 | 11:19 | 34°29.99' S | 14°52.94' E | 4495.9 | XBT |
| MSM60/034-1 | 20 XBT | 06.01.2017 | 12:14 | 34°29.99' S | 14°40.24' E | 4528.5 | XBT |
| MSM60/035-1 | 15 CTD | 06.01.2017 | 14:08 | 34°30.11' S | 14°38.32' E | 4151.6 | CTD/RO |
| MSM60/036-1 | 21 XBT | 06.01.2017 | 16:28 | 34°29.99' S | 14°27.26' E | 4558.1 | XBT |
| MSM60/037-1 | 22 XBT | 06.01.2017 | 17:28 | 34°30.00' S | 14°13.37' E | 4566.5 | XBT |
| MSM60/038-1 | 23 XBT | 06.01.2017 | 18:20 | 34°29.99' S | 14°1.13' E | 4575.8 | XBT |
| MSM60/039-1 | 16 CTD | 06.01.2017 | 20:26 | 34°30.09' S | 13°55.43' E | 4576.9 | CTD/RO |

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|-------------|--------|------------|-------|-------------|-------------|--------|--------|
| MSM60/040-1 | 24 XBT | 06.01.2017 | 22:31 | 34°29.99' S | 13°46.91' E | 4581.2 | XBT |
| MSM60/041-1 | 25 XBT | 06.01.2017 | 23:20 | 34°29.99' S | 13°35.08' E | 4619.3 | XBT |
| MSM60/042-1 | 26 XBT | 07.01.2017 | 00:12 | 34°29.99' S | 13°22.15' E | 4646 | XBT |
| MSM60/043-1 | 17 CTD | 07.01.2017 | 02:08 | 34°29.73' S | 13°16.14' E | 3490.6 | CTD/RO |
| MSM60/044-1 | 27 XBT | 07.01.2017 | 04:23 | 34°29.98' S | 13°7.09' E | 4663.5 | XBT |
| MSM60/045-1 | 28 XBT | 07.01.2017 | 05:12 | 34°29.99' S | 12°55.24' E | 4696.5 | XBT |
| MSM60/046-1 | 29 XBT | 07.01.2017 | 05:17 | 34°29.99' S | 12°54.02' E | 4706.7 | XBT |
| MSM60/047-1 | 30 XBT | 07.01.2017 | 06:03 | 34°29.99' S | 12°42.71' E | 4739 | XBT |
| MSM60/048-1 | 18 CTD | 07.01.2017 | 08:09 | 34°29.49' S | 12°36.66' E | 3857.6 | CTD/RO |
| MSM60/049-1 | 31 XBT | 07.01.2017 | 10:14 | 34°29.99' S | 12°29.15' E | 4775.4 | XBT |
| MSM60/050-1 | 32 XBT | 07.01.2017 | 11:06 | 34°29.99' S | 12°16.30' E | 4801.9 | XBT |
| MSM60/051-1 | 33 XBT | 07.01.2017 | 12:03 | 34°29.99' S | 12°2.11' E | 4835.9 | XBT |
| MSM60/052-1 | 19 CTD | 07.01.2017 | 14:06 | 34°29.92' S | 11°57.57' E | 4556.2 | CTD/RO |
| MSM60/053-1 | 34 XBT | 07.01.2017 | 16:10 | 34°29.99' S | 11°49.22' E | 4874.7 | XBT |
| MSM60/054-1 | 35 XBT | 07.01.2017 | 16:55 | 34°29.99' S | 11°37.52' E | 4896 | XBT |
| MSM60/055-1 | 36 XBT | 07.01.2017 | 17:53 | 34°29.99' S | 11°22.54' E | 4939.4 | XBT |
| MSM60/056-1 | 20 CTD | 07.01.2017 | 20:13 | 34°30.22' S | 11°11.95' E | 4990.7 | CTD/RO |
| MSM60/057-1 | 37 XBT | 07.01.2017 | 21:51 | 34°30.01' S | 11°11.03' E | 4985.2 | XBT |
| MSM60/058-1 | 38 XBT | 07.01.2017 | 22:45 | 34°29.99' S | 10°57.96' E | 4978.7 | XBT |
| MSM60/059-1 | 39 XBT | 07.01.2017 | 23:39 | 34°29.99' S | 10°45.00' E | 5013.6 | XBT |
| MSM60/060-1 | 21 CTD | 08.01.2017 | 01:44 | 34°29.92' S | 10°39.00' E | 5018.1 | CTD/RO |
| MSM60/061-1 | 40 XBT | 08.01.2017 | 03:55 | 34°29.99' S | 10°31.51' E | 5017.9 | XBT |
| MSM60/062-1 | 41 XBT | 08.01.2017 | 04:56 | 34°29.99' S | 10°16.30' E | 5025.4 | XBT |
| MSM60/063-1 | 42 XBT | 08.01.2017 | 05:45 | 34°29.99' S | 10°4.10' E | 5031.4 | XBT |
| MSM60/064-1 | 22 CTD | 08.01.2017 | 07:44 | 34°29.97' S | 9°59.76' E | 5032.8 | CTD/RO |
| MSM60/065-1 | 43 XBT | 08.01.2017 | 09:56 | 34°29.99' S | 9°52.50' E | 5066.8 | XBT |
| MSM60/066-1 | 44 XBT | 08.01.2017 | 10:52 | 34°29.99' S | 9°38.98' E | 5075.6 | XBT |
| MSM60/067-1 | 45 XBT | 08.01.2017 | 11:47 | 34°29.99' S | 9°25.86' E | 5060 | XBT |
| MSM60/068-1 | 23 CTD | 08.01.2017 | 13:53 | 34°29.98' S | 9°20.48' E | 5048 | CTD/RO |
| MSM60/068-2 | 1 ARGO | 08.01.2017 | 15:44 | 34°30.10' S | 9°20.15' E | 5049.6 | ARGOFL |
| MSM60/069-1 | 46 XBT | 08.01.2017 | 16:18 | 34°29.99' S | 9°12.95' E | 5054.5 | XBT |
| MSM60/070-1 | 47 XBT | 08.01.2017 | 17:12 | 34°29.99' S | 9°0.10' E | 5035.1 | XBT |
| MSM60/071-1 | 48 XBT | 08.01.2017 | 18:07 | 34°29.99' S | 8°46.98' E | 5089 | XBT |
| MSM60/072-1 | 24 CTD | 08.01.2017 | 20:07 | 34°29.98' S | 8°41.19' E | 5103.6 | CTD/RO |
| MSM60/073-1 | 49 XBT | 08.01.2017 | 22:12 | 34°29.99' S | 8°33.61' E | 5115.9 | XBT |
| MSM60/074-1 | 50 XBT | 08.01.2017 | 23:06 | 34°29.99' S | 8°20.36' E | 5151.5 | XBT |
| MSM60/075-1 | 51 XBT | 08.01.2017 | 23:55 | 34°29.99' S | 8°7.98' E | 5165 | XBT |
| MSM60/076-1 | 25 CTD | 09.01.2017 | 02:03 | 34°29.91' S | 8°1.78' E | 5179.9 | CTD/RO |
| MSM60/077-1 | 52 XBT | 09.01.2017 | 04:10 | 34°29.99' S | 7°54.41' E | 5189.6 | XBT |
| MSM60/078-1 | 53 XBT | 09.01.2017 | 04:11 | 34°29.99' S | 7°54.17' E | 5193.4 | XBT |
| MSM60/079-1 | 54 XBT | 09.01.2017 | 05:57 | 34°30.09' S | 7°28.09' E | 5224 | XBT |
| MSM60/080-1 | 26 CTD | 09.01.2017 | 07:41 | 34°30.48' S | 7°26.90' E | 5219.5 | CTD/RO |
| MSM60/081-1 | 55 XBT | 09.01.2017 | 10:12 | 34°30.00' S | 7°15.28' E | 5171.8 | XBT |
| MSM60/082-1 | 56 XBT | 09.01.2017 | 11:08 | 34°29.99' S | 7°2.13' E | 5278.2 | XBT |
| MSM60/083-1 | 57 XBT | 09.01.2017 | 12:04 | 34°29.99' S | 6°48.87' E | 5312 | XBT |
| MSM60/084-1 | 27 CTD | 09.01.2017 | 14:14 | 34°29.95' S | 6°43.28' E | 5177.2 | CTD/RO |

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|-------------|--------|------------|-------|-------------|------------|--------|--------|
| MSM60/084-2 | 2 ARGO | 09.01.2017 | 16:06 | 34°29.95' S | 6°43.27' E | 5354.3 | ARGOFL |
| MSM60/085-1 | 58 XBT | 09.01.2017 | 16:41 | 34°29.99' S | 6°35.72' E | 5327.6 | XBT |
| MSM60/086-1 | 59 XBT | 09.01.2017 | 17:35 | 34°29.99' S | 6°22.83' E | 5317.9 | XBT |
| MSM60/087-1 | 60 XBT | 09.01.2017 | 18:31 | 34°29.99' S | 6°9.37' E | 5310.4 | XBT |
| MSM60/088-1 | 28 CTD | 09.01.2017 | 20:31 | 34°29.98' S | 6°3.99' E | 5271.8 | CTD/RO |
| MSM60/089-1 | 61 XBT | 09.01.2017 | 22:43 | 34°29.99' S | 5°56.53' E | 5298.2 | XBT |
| MSM60/090-1 | 62 XBT | 09.01.2017 | 23:38 | 34°29.99' S | 5°43.64' E | 5215.1 | XBT |
| MSM60/091-1 | 63 XBT | 10.01.2017 | 00:35 | 34°29.99' S | 5°30.71' E | 5253.1 | XBT |
| MSM60/092-1 | 29 CTD | 10.01.2017 | 02:41 | 34°29.98' S | 5°24.77' E | 5219.9 | CTD/RO |
| MSM60/093-1 | 64 XBT | 10.01.2017 | 04:50 | 34°29.99' S | 5°17.09' E | 5270.4 | XBT |
| MSM60/094-1 | 65 XBT | 10.01.2017 | 05:48 | 34°29.99' S | 5°3.72' E | 5212 | XBT |
| MSM60/095-1 | 66 XBT | 10.01.2017 | 06:42 | 34°29.99' S | 4°51.09' E | 5186.5 | XBT |
| MSM60/096-1 | 30 CTD | 10.01.2017 | 08:31 | 34°29.98' S | 4°45.43' E | 5250.1 | CTD/RO |
| MSM60/096-2 | 31 CTD | 10.01.2017 | 12:29 | 34°29.97' S | 4°45.41' E | 5259 | CTD/RO |
| MSM60/097-1 | 67 XBT | 10.01.2017 | 14:36 | 34°29.99' S | 4°38.56' E | 5218.1 | XBT |
| MSM60/098-1 | 68 XBT | 10.01.2017 | 15:33 | 34°29.99' S | 4°24.54' E | 5178.6 | XBT |
| MSM60/099-1 | 69 XBT | 10.01.2017 | 16:24 | 34°29.99' S | 4°11.97' E | 5255.3 | XBT |
| MSM60/100-1 | 32 CTD | 10.01.2017 | 18:37 | 34°29.99' S | 4°6.12' E | 5344 | CTD/RO |
| MSM60/100-2 | 3 ARGO | 10.01.2017 | 20:37 | 34°30.02' S | 4°6.09' E | 5351.2 | ARGOFL |
| MSM60/101-1 | 70 XBT | 10.01.2017 | 21:12 | 34°29.99' S | 3°58.81' E | 5250.3 | XBT |
| MSM60/102-1 | 71 XBT | 10.01.2017 | 22:08 | 34°29.99' S | 3°45.69' E | 5073.1 | XBT |
| MSM60/103-1 | 72 XBT | 10.01.2017 | 23:05 | 34°29.99' S | 3°32.46' E | 5027.9 | XBT |
| MSM60/104-1 | 33 CTD | 11.01.2017 | 01:03 | 34°29.93' S | 3°26.79' E | 5002.4 | CTD/RO |
| MSM60/105-1 | 73 XBT | 11.01.2017 | 02:45 | 34°29.99' S | 3°19.49' E | 4965 | XBT |
| MSM60/106-1 | 74 XBT | 11.01.2017 | 03:41 | 34°29.99' S | 3°6.33' E | 4986.8 | XBT |
| MSM60/107-1 | 75 XBT | 11.01.2017 | 04:38 | 34°29.99' S | 2°52.83' E | 4938.2 | XBT |
| MSM60/108-1 | 34 CTD | 11.01.2017 | 06:58 | 34°29.98' S | 2°47.54' E | 4930 | CTD/RO |
| MSM60/109-1 | 76 XBT | 11.01.2017 | 09:05 | 34°29.99' S | 2°40.03' E | 4883.8 | XBT |
| MSM60/110-1 | 77 XBT | 11.01.2017 | 10:00 | 34°29.99' S | 2°26.76' E | 4887.1 | XBT |
| MSM60/111-1 | 78 XBT | 11.01.2017 | 10:52 | 34°29.99' S | 2°13.92' E | 4897.5 | XBT |
| MSM60/112-1 | 35 CTD | 11.01.2017 | 12:54 | 34°30.00' S | 2°8.25' E | 4931.9 | CTD |
| MSM60/113-1 | 79 XBT | 11.01.2017 | 14:58 | 34°29.99' S | 2°1.36' E | 4879 | XBT |
| MSM60/114-1 | 80 XBT | 11.01.2017 | 15:59 | 34°30.00' S | 1°47.58' E | 4920.2 | XBT |
| MSM60/115-1 | 81 XBT | 11.01.2017 | 16:57 | 34°30.00' S | 1°34.59' E | 4853 | XBT |
| MSM60/116-1 | 36 CTD | 11.01.2017 | 18:59 | 34°29.99' S | 1°28.97' E | 4873.1 | CTD/RO |
| MSM60/117-1 | 82 XBT | 11.01.2017 | 20:59 | 34°29.99' S | 1°21.95' E | 4909.1 | XBT |
| MSM60/118-1 | 83 XBT | 11.01.2017 | 21:58 | 34°30.00' S | 1°8.31' E | 4927.4 | XBT |
| MSM60/119-1 | 84 XBT | 11.01.2017 | 22:57 | 34°29.99' S | 0°55.04' E | 4787.7 | XBT |
| MSM60/120-1 | 37 CTD | 12.01.2017 | 00:49 | 34°29.99' S | 0°49.69' E | 4480.7 | CTD/RO |
| MSM60/120-2 | 4 ARGO | 12.01.2017 | 02:16 | 34°29.99' S | 0°49.68' E | 4421.5 | ARGOFL |
| MSM60/121-1 | 85 XBT | 12.01.2017 | 02:47 | 34°29.99' S | 0°42.54' E | 3076.6 | XBT |
| MSM60/122-1 | 86 XBT | 12.01.2017 | 03:41 | 34°29.99' S | 0°28.97' E | 3194.9 | XBT |
| MSM60/123-1 | 87 XBT | 12.01.2017 | 04:32 | 34°29.99' S | 0°15.94' E | 3922.1 | XBT |
| MSM60/124-1 | 38 CTD | 12.01.2017 | 06:22 | 34°29.98' S | 0°10.34' E | 4614.2 | CTD/RO |
| MSM60/125-1 | 88 XBT | 12.01.2017 | 08:34 | 34°30.00' S | 0°0.06' E | 4617.1 | XBT |
| MSM60/126-1 | 89 XBT | 12.01.2017 | 09:19 | 34°29.99' S | 0°10.46' W | 4609 | XBT |

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| MSM60/127-1 | 90 XBT | 12.01.2017 | 10:15 | 34°29.99' S | 0°23.36' W | 4587.1 | XBT |
| MSM60/128-1 | 39 CTD | 12.01.2017 | 12:07 | 34°30.00' S | 0°28.95' W | 4545.8 | CTD/RO |
| MSM60/129-1 | 91 XBT | 12.01.2017 | 14:04 | 34°30.00' S | 0°36.53' W | 4517.2 | XBT |
| MSM60/130-1 | 92 XBT | 12.01.2017 | 14:55 | 34°30.00' S | 0°48.89' W | 3663.7 | XBT |
| MSM60/131-1 | 93 XBT | 12.01.2017 | 15:53 | 34°29.99' S | 1°2.70' W | 3029.1 | XBT |
| MSM60/132-1 | 40 CTD | 12.01.2017 | 17:24 | 34°29.98' S | 1°8.23' W | 3442.9 | CTD/RO |
| MSM60/133-1 | 94 XBT | 12.01.2017 | 19:07 | 34°29.99' S | 1°15.65' W | 4442.3 | XBT |
| MSM60/134-1 | 95 XBT | 12.01.2017 | 20:03 | 34°30.00' S | 1°28.85' W | 4301.4 | XBT |
| MSM60/135-1 | 96 XBT | 12.01.2017 | 20:58 | 34°29.98' S | 1°42.11' W | 4478.9 | XBT |
| MSM60/136-1 | 41 CTD | 12.01.2017 | 22:53 | 34°29.98' S | 1°47.54' W | 4495.3 | CTD/RO |
| MSM60/137-1 | 97 XBT | 13.01.2017 | 00:45 | 34°29.99' S | 1°54.80' W | 4488.1 | XBT |
| MSM60/138-1 | 98 XBT | 13.01.2017 | 01:38 | 34°29.99' S | 2°8.11' W | 4278.3 | XBT |
| MSM60/139-1 | 99 XBT | 13.01.2017 | 02:29 | 34°29.99' S | 2°20.84' W | 4060.1 | XBT |
| MSM60/140-1 | 42 CTD | 13.01.2017 | 04:16 | 34°29.98' S | 2°26.80' W | 4111.7 | CTD/RO |
| MSM60/141-1 | 100 XBT | 13.01.2017 | 06:06 | 34°29.99' S | 2°34.40' W | 4106.5 | XBT |
| MSM60/142-1 | 101 XBT | 13.01.2017 | 07:03 | 34°29.99' S | 2°48.06' W | 4135 | XBT |
| MSM60/143-1 | 102 XBT | 13.01.2017 | 07:57 | 34°29.99' S | 3°0.75' W | 4176.6 | XBT |
| MSM60/144-1 | 43 CTD | 13.01.2017 | 09:44 | 34°29.98' S | 3°6.11' W | 4162.9 | CTD/RO |
| MSM60/144-2 | 5 ARGO | 13.01.2017 | 11:03 | 34°30.00' S | 3°6.12' W | 4164.2 | ARGOFL |
| MSM60/145-1 | 103 XBT | 13.01.2017 | 11:45 | 34°29.99' S | 3°14.31' W | 4074.1 | XBT |
| MSM60/146-1 | 104 XBT | 13.01.2017 | 12:39 | 34°29.99' S | 3°26.89' W | 2578 | XBT |
| MSM60/147-1 | 105 XBT | 13.01.2017 | 13:30 | 34°29.99' S | 3°39.11' W | 1206.3 | XBT |
| MSM60/148-1 | 44 CTD | 13.01.2017 | 14:46 | 34°29.99' S | 3°51.00' W | 941 | CTD/RO |
| MSM60/149-1 | 106 XBT | 13.01.2017 | 15:17 | 34°29.98' S | 3°53.19' W | 911 | XBT |
| MSM60/150-1 | 45 CTD | 13.01.2017 | 17:17 | 34°29.94' S | 4°6.23' W | 2204.6 | CTD/RO |
| MSM60/151-1 | 107 XBT | 13.01.2017 | 18:11 | 34°29.98' S | 4°7.08' W | 2511.1 | XBT |
| MSM60/152-1 | 108 XBT | 13.01.2017 | 18:58 | 34°30.00' S | 4°18.99' W | 3610 | XBT |
| MSM60/153-1 | 46 CTD | 13.01.2017 | 20:09 | 34°29.98' S | 4°24.71' W | 3661.9 | CTD/RO |
| MSM60/153-2 | 47 CTD | 13.01.2017 | 22:30 | 34°29.98' S | 4°24.71' W | 3660.3 | CTD/RO |
| MSM60/154-1 | 109 XBT | 14.01.2017 | 00:32 | 34°29.99' S | 4°31.73' W | 3659.6 | XBT |
| MSM60/155-1 | 110 XBT | 14.01.2017 | 01:25 | 34°29.98' S | 4°44.80' W | 2848.5 | XBT |
| MSM60/156-1 | 111 XBT | 14.01.2017 | 02:20 | 34°29.98' S | 4°58.36' W | 2104.1 | XBT |
| MSM60/157-1 | 48 CTD | 14.01.2017 | 03:19 | 34°30.01' S | 5°4.03' W | 2160 | CTD/RO |
| MSM60/158-1 | 112 XBT | 14.01.2017 | 04:26 | 34°29.99' S | 5°11.56' W | 2402 | XBT |
| MSM60/159-1 | 113 XBT | 14.01.2017 | 05:21 | 34°29.99' S | 5°25.03' W | 3934.1 | XBT |
| MSM60/160-1 | 114 XBT | 14.01.2017 | 06:14 | 34°29.98' S | 5°37.75' W | 3992 | XBT |
| MSM60/161-1 | 49 CTD | 14.01.2017 | 07:58 | 34°29.98' S | 5°43.28' W | 4017.7 | CTD/RO |
| MSM60/162-1 | 115 XBT | 14.01.2017 | 09:46 | 34°30.00' S | 5°50.81' W | 4030.9 | XBT |
| MSM60/163-1 | 116 XBT | 14.01.2017 | 10:37 | 34°29.99' S | 6°3.49' W | 4140.9 | XBT |
| MSM60/164-1 | 117 XBT | 14.01.2017 | 11:30 | 34°29.99' S | 6°16.79' W | 4238.5 | XBT |
| MSM60/165-1 | 50 CTD | 14.01.2017 | 13:19 | 34°29.98' S | 6°22.60' W | 4125.7 | CTD/RO |
| MSM60/165-2 | 6 ARGO | 14.01.2017 | 14:47 | 34°30.04' S | 6°22.64' W | 4128.9 | ARGOFL |
| MSM60/166-1 | 118 XBT | 14.01.2017 | 15:19 | 34°29.99' S | 6°29.68' W | 4208.7 | XBT |
| MSM60/167-1 | 119 XBT | 14.01.2017 | 16:15 | 34°29.99' S | 6°43.86' W | 4104.2 | XBT |
| MSM60/168-1 | 120 XBT | 14.01.2017 | 17:07 | 34°29.99' S | 6°56.54' W | 4224.6 | XBT |
| MSM60/169-1 | 121 XBT | 14.01.2017 | 17:13 | 34°29.99' S | 6°58.02' W | 4234.8 | XBT |

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| MSM60/170-1 | 51 CTD | 14.01.2017 | 18:51 | 34°29.99' S | 7°1.88' W | 4271.9 | CTD/RO |
| MSM60/171-1 | 122 XBT | 14.01.2017 | 20:43 | 34°29.99' S | 7°8.97' W | 4261.1 | XBT |
| MSM60/172-1 | 123 XBT | 14.01.2017 | 21:36 | 34°30.01' S | 7°22.33' W | 4247.7 | XBT |
| MSM60/173-1 | 124 XBT | 14.01.2017 | 22:29 | 34°29.98' S | 7°35.47' W | 4227 | XBT |
| MSM60/174-1 | 52 CTD | 15.01.2017 | 00:15 | 34°29.97' S | 7°41.18' W | 4332 | CTD/RO |
| MSM60/175-1 | 125 XBT | 15.01.2017 | 02:05 | 34°29.99' S | 7°48.49' W | 3912.3 | XBT |
| MSM60/176-1 | 126 XBT | 15.01.2017 | 02:56 | 34°30.00' S | 8°1.93' W | 4057.3 | XBT |
| MSM60/177-1 | 127 XBT | 15.01.2017 | 03:45 | 34°29.99' S | 8°14.80' W | 4072.7 | XBT |
| MSM60/178-1 | 53 CTD | 15.01.2017 | 05:28 | 34°29.99' S | 8°20.47' W | 4057.2 | CTD/RO |
| MSM60/179-1 | 128 XBT | 15.01.2017 | 07:13 | 34°29.99' S | 8°27.83' W | 4251 | XBT |
| MSM60/180-1 | 129 XBT | 15.01.2017 | 08:05 | 34°29.99' S | 8°40.99' W | 3949.7 | XBT |
| MSM60/181-1 | 130 XBT | 15.01.2017 | 08:55 | 34°29.99' S | 8°53.84' W | 3999.4 | XBT |
| MSM60/182-1 | 54 CTD | 15.01.2017 | 10:42 | 34°29.99' S | 8°59.77' W | 4025 | CTD/RO |
| MSM60/182-2 | 7 ARGO | 15.01.2017 | 12:00 | 34°30.00' S | 8°59.77' W | 4027.8 | ARGOFL |
| MSM60/183-1 | 131 XBT | 15.01.2017 | 12:38 | 34°29.99' S | 9°8.037' W | 4162.2 | XBT |
| MSM60/183-2 | 132 XBT | 15.01.2017 | 13:08 | 34°29.99' S | 9°15.18' W | 4162.2 | XBT |
| MSM60/184-1 | 133 XBT | 15.01.2017 | 13:29 | 34°29.99' S | 9°20.35' W | 4182.2 | XBT |
| MSM60/185-1 | 134 XBT | 15.01.2017 | 14:21 | 34°29.99' S | 9°33.04' W | 4448.4 | XBT |
| MSM60/186-1 | 55 CTD | 15.01.2017 | 16:20 | 34°29.99' S | 9°39.06' W | 4483.4 | CTD/RO |
| MSM60/187-1 | 135 XBT | 15.01.2017 | 18:08 | 34°29.99' S | 9°45.99' W | 4407.7 | XBT |
| MSM60/188-1 | 136 XBT | 15.01.2017 | 19:00 | 34°29.99' S | 9°59.65' W | 4343.2 | XBT |
| MSM60/189-1 | 137 XBT | 15.01.2017 | 19:47 | 34°29.99' S | 10°12.07' W | 4073.1 | XBT |
| MSM60/190-1 | 56 CTD | 15.01.2017 | 21:31 | 34°30.00' S | 10°18.35' W | 4138.5 | CTD/RO |
| MSM60/191-1 | 138 XBT | 15.01.2017 | 23:19 | 34°29.99' S | 10°25.70' W | 3712.2 | XBT |
| MSM60/192-1 | 139 XBT | 16.01.2017 | 00:12 | 34°29.99' S | 10°38.95' W | 3772.1 | XBT |
| MSM60/193-1 | 140 XBT | 16.01.2017 | 01:04 | 34°29.98' S | 10°52.18' W | 3851.5 | XBT |
| MSM60/194-1 | 57 CTD | 16.01.2017 | 02:46 | 34°29.98' S | 10°57.64' W | 3925.2 | CTD/RO |
| MSM60/195-1 | 141 XBT | 16.01.2017 | 04:30 | 34°29.99' S | 11°4.96' W | 4405.8 | XBT |
| MSM60/196-1 | 142 XBT | 16.01.2017 | 05:21 | 34°29.98' S | 11°18.25' W | 4286.6 | XBT |
| MSM60/197-1 | 143 XBT | 16.01.2017 | 06:12 | 34°29.99' S | 11°31.59' W | 3996.3 | XBT |
| MSM60/198-1 | 58 CTD | 16.01.2017 | 07:54 | 34°29.98' S | 11°36.95' W | 4005.6 | CTD/RO |
| MSM60/199-1 | 144 XBT | 16.01.2017 | 09:43 | 34°29.99' S | 11°44.18' W | 3653.9 | XBT |
| MSM60/200-1 | 145 XBT | 16.01.2017 | 10:35 | 34°29.99' S | 11°57.53' W | 3947.3 | XBT |
| MSM60/201-1 | 146 XBT | 16.01.2017 | 11:25 | 34°29.99' S | 12°10.20' W | 3953.9 | XBT |
| MSM60/202-1 | 59 CTD | 16.01.2017 | 13:11 | 34°30.00' S | 12°16.22' W | 3914.7 | CTD/RO |
| MSM60/202-2 | 8 ARGO | 16.01.2017 | 14:30 | 34°30.00' S | 12°16.22' W | 3922.4 | ARGOFL |
| MSM60/203-1 | 147 XBT | 16.01.2017 | 15:03 | 34°29.99' S | 12°23.31' W | 3814.6 | XBT |
| MSM60/204-1 | 148 XBT | 16.01.2017 | 15:55 | 34°29.99' S | 12°36.33' W | 3816.5 | XBT |
| MSM60/205-1 | 149 XBT | 16.01.2017 | 16:49 | 34°29.99' S | 12°49.94' W | 3669.9 | XBT |
| MSM60/206-1 | 60 CTD | 16.01.2017 | 18:22 | 34°30.00' S | 12°55.52' W | 3716 | CTD/RO |
| MSM60/207-1 | 150 XBT | 16.01.2017 | 20:09 | 34°30.00' S | 13°4.10' W | 3570.3 | XBT |
| MSM60/208-1 | 151 XBT | 16.01.2017 | 20:57 | 34°29.99' S | 13°8.82' W | 3480.4 | XBT |
| MSM60/209-1 | 152 XBT | 16.01.2017 | 21:52 | 34°29.99' S | 13°29.15' W | 3372.5 | XBT |
| MSM60/210-1 | 153 XBT | 16.01.2017 | 22:44 | 34°29.99' S | 13°41.99' W | 3331 | XBT |
| MSM60/211-1 | 61 CTD | 17.01.2017 | 00:29 | 34°30.00' S | 13°49.98' W | 3584.7 | CTD/RO |
| MSM60/212-1 | 154 XBT | 17.01.2017 | 01:59 | 34°29.98' S | 13°55.84' W | 3067.5 | XBT |

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| MSM60/213-1 | 155 XBT | 17.01.2017 | 02:50 | 34°29.98' S | 14°8.52' W | 3167.1 | XBT |
| MSM60/214-1 | 62 CTD | 17.01.2017 | 04:21 | 34°29.98' S | 14°14.08' W | 3200.2 | CTD/RO |
| MSM60/215-1 | 156 XBT | 17.01.2017 | 05:52 | 34°30.01' S | 14°21.90' W | 2958.3 | XBT |
| MSM60/216-1 | 157 XBT | 17.01.2017 | 06:53 | 34°29.99' S | 14°37.30' W | 3083.9 | XBT |
| MSM60/217-1 | 158 XBT | 17.01.2017 | 07:35 | 34°29.99' S | 14°47.79' W | 2789.6 | XBT |
| MSM60/218-1 | 159 XBT | 17.01.2017 | 08:27 | 34°29.98' S | 15°0.68' W | 3062.9 | XBT |
| MSM60/219-1 | 63 CTD | 17.01.2017 | 09:52 | 34°29.97' S | 15°5.44' W | 3171.6 | CTD/RO |
| MSM60/219-2 | 9 ARGO | 17.01.2017 | 10:59 | 34°30.01' S | 15°5.42' W | 3173.2 | ARGOFL |
| MSM60/220-1 | 160 XBT | 17.01.2017 | 11:45 | 34°36.20' S | 15°12.05' W | 2231.9 | XBT |
| MSM60/221-1 | 161 XBT | 17.01.2017 | 12:42 | 34°44.22' S | 15°21.91' W | 2476.9 | XBT |
| MSM60/222-1 | 64 CTD | 17.01.2017 | 14:33 | 34°49.95' S | 15°30.08' W | 3221.7 | CTD/RO |
| MSM60/223-1 | 162 XBT | 17.01.2017 | 15:45 | 34°51.04' S | 15°31.47' W | 3338.3 | XBT |
| MSM60/224-1 | 163 XBT | 17.01.2017 | 16:46 | 34°59.32' S | 15°41.49' W | 2612.7 | XBT |
| MSM60/225-1 | 164 XBT | 17.01.2017 | 17:43 | 35°7.53' S | 15°50.27' W | 2856.1 | XBT |
| MSM60/226-1 | 10 ARGO | 17.01.2017 | 18:37 | 35°11.09' S | 15°53.69' W | 2467 | ARGOFL |
| MSM60/227-1 | 165 XBT | 17.01.2017 | 19:00 | 35°8.83' S | 15°57.11' W | 3013.2 | XBT |
| MSM60/228-1 | 65 CTD | 17.01.2017 | 22:25 | 34°49.97' S | 16°21.53' W | 3210 | CTD/RO |
| MSM60/229-1 | 166 XBT | 18.01.2017 | 00:37 | 34°41.69' S | 16°33.74' W | 3396.3 | XBT |
| MSM60/230-1 | 167 XBT | 18.01.2017 | 01:26 | 34°35.43' S | 16°43.13' W | 3767.6 | XBT |
| MSM60/231-1 | 66 CTD | 18.01.2017 | 03:32 | 34°29.88' S | 16°51.34' W | 3860.3 | CTD/RO |
| MSM60/232-1 | 168 XBT | 18.01.2017 | 05:12 | 34°30.00' S | 16°58.35' W | 3576.2 | XBT |
| MSM60/233-1 | 169 XBT | 18.01.2017 | 05:15 | 34°29.99' S | 16°59.12' W | 3505.7 | XBT |
| MSM60/234-1 | 170 XBT | 18.01.2017 | 06:07 | 34°29.99' S | 17°12.30' W | 3237.7 | XBT |
| MSM60/235-1 | 171 XBT | 18.01.2017 | 06:58 | 34°29.99' S | 17°25.13' W | 3592 | XBT |
| MSM60/236-1 | 67 CTD | 18.01.2017 | 08:31 | 34°29.98' S | 17°30.57' W | 3607 | CTD/RO |
| MSM60/237-1 | 172 XBT | 18.01.2017 | 10:12 | 34°29.99' S | 17°37.81' W | 3652.8 | XBT |
| MSM60/238-1 | 173 XBT | 18.01.2017 | 11:05 | 34°29.99' S | 17°50.92' W | 3445.7 | XBT |
| MSM60/239-1 | 174 XBT | 18.01.2017 | 11:58 | 34°30.00' S | 18°4.12' W | 3331.7 | XBT |
| MSM60/240-1 | 68 CTD | 18.01.2017 | 13:33 | 34°29.99' S | 18°9.86' W | 3417.1 | CTD/RO |
| MSM60/241-1 | 175 XBT | 18.01.2017 | 15:08 | 34°29.99' S | 18°17.43' W | 3561 | XBT |
| MSM60/242-1 | 176 XBT | 18.01.2017 | 16:01 | 34°29.98' S | 18°30.64' W | 3489.6 | XBT |
| MSM60/243-1 | 177 XBT | 18.01.2017 | 16:57 | 34°29.99' S | 18°43.81' W | 3384.4 | XBT |
| MSM60/244-1 | 69 CTD | 18.01.2017 | 18:28 | 34°29.98' S | 18°49.16' W | 3312.4 | CTD/RO |
| MSM60/245-1 | 178 XBT | 18.01.2017 | 20:03 | 34°29.98' S | 18°56.54' W | 3902 | XBT |
| MSM60/246-1 | 179 XBT | 18.01.2017 | 20:58 | 34°29.99' S | 19°9.55' W | 3766.7 | XBT |
| MSM60/247-1 | 180 XBT | 18.01.2017 | 21:53 | 34°29.99' S | 19°22.59' W | 3691.2 | XBT |
| MSM60/248-1 | 70 CTD | 18.01.2017 | 23:31 | 34°29.99' S | 19°28.46' W | 3420.2 | CTD/RO |
| MSM60/249-1 | 181 XBT | 19.01.2017 | 01:07 | 34°29.99' S | 19°35.91' W | 3684 | XBT |
| MSM60/250-1 | 182 XBT | 19.01.2017 | 02:01 | 34°29.99' S | 19°48.99' W | 3394.5 | XBT |
| MSM60/251-1 | 183 XBT | 19.01.2017 | 02:53 | 34°29.99' S | 20°2.10' W | 3691.4 | XBT |
| MSM60/252-1 | 71 CTD | 19.01.2017 | 04:28 | 34°29.99' S | 20°7.73' W | 3610.6 | CTD/RO |
| MSM60/253-1 | 184 XBT | 19.01.2017 | 06:08 | 34°30.00' S | 20°15.21' W | 3680 | XBT |
| MSM60/254-1 | 185 XBT | 19.01.2017 | 07:00 | 34°29.99' S | 20°28.06' W | 3788.7 | XBT |
| MSM60/255-1 | 186 XBT | 19.01.2017 | 07:56 | 34°29.99' S | 20°41.76' W | 4021.9 | XBT |
| MSM60/256-1 | 72 CTD | 19.01.2017 | 09:38 | 34°29.98' S | 20°47.04' W | 3986.9 | CTD/RO |
| MSM60/257-1 | 187 XBT | 19.01.2017 | 11:26 | 34°29.99' S | 20°54.40' W | 3960.3 | XBT |

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| MSM60/258-1 | 188 XBT | 19.01.2017 | 12:18 | 34°29.98' S | 21°7.58' W | 3809.7 | XBT |
| MSM60/259-1 | 189 XBT | 19.01.2017 | 13:09 | 34°29.99' S | 21°20.38' W | 3864.4 | XBT |
| MSM60/260-1 | 73 CTD | 19.01.2017 | 14:57 | 34°30.02' S | 21°26.33' W | 3904.2 | CTD/RO |
| MSM60/260-2 | 11 ARGO | 19.01.2017 | 16:20 | 34°30.04' S | 21°26.34' W | 3924.6 | ARGOFL |
| MSM60/261-1 | 190 XBT | 19.01.2017 | 16:54 | 34°29.99' S | 21°33.90' W | 3914.6 | XBT |
| MSM60/262-1 | 191 XBT | 19.01.2017 | 17:45 | 34°29.99' S | 21°46.49' W | 3950.1 | XBT |
| MSM60/263-1 | 192 XBT | 19.01.2017 | 18:38 | 34°29.99' S | 21°59.91' W | 3953.4 | XBT |
| MSM60/264-1 | 74 CTD | 19.01.2017 | 20:17 | 34°29.99' S | 22°5.62' W | 3956.9 | CTD/RO |
| MSM60/265-1 | 193 XBT | 19.01.2017 | 22:01 | 34°29.99' S | 22°13.28' W | 3911.8 | XBT |
| MSM60/266-1 | 194 XBT | 19.01.2017 | 22:52 | 34°29.99' S | 22°26.21' W | 3997.4 | XBT |
| MSM60/267-1 | 195 XBT | 19.01.2017 | 22:56 | 34°29.99' S | 22°27.22' W | 4005.7 | XBT |
| MSM60/268-1 | 196 XBT | 19.01.2017 | 23:45 | 34°29.99' S | 22°39.44' W | 3757.3 | XBT |
| MSM60/269-1 | 75 CTD | 20.01.2017 | 01:29 | 34°30.00' S | 22°44.94' W | 3945.9 | CTD/RO |
| MSM60/270-1 | 197 XBT | 20.01.2017 | 03:16 | 34°29.99' S | 22°52.77' W | 3900.4 | XBT |
| MSM60/271-1 | 198 XBT | 20.01.2017 | 04:07 | 34°29.99' S | 23°5.43' W | 3869 | XBT |
| MSM60/272-1 | 199 XBT | 20.01.2017 | 04:59 | 34°29.99' S | 23°18.39' W | 3969.4 | XBT |
| MSM60/273-1 | 76 CTD | 20.01.2017 | 06:42 | 34°30.00' S | 23°24.20' W | 3909.4 | CTD/RO |
| MSM60/274-1 | 200 XBT | 20.01.2017 | 08:22 | 34°29.99' S | 23°31.42' W | 4042.8 | XBT |
| MSM60/275-1 | 201 XBT | 20.01.2017 | 09:13 | 34°29.99' S | 23°44.65' W | 3906.1 | XBT |
| MSM60/276-1 | 202 XBT | 20.01.2017 | 10:05 | 34°30.00' S | 23°57.71' W | 3997.8 | XBT |
| MSM60/277-1 | 77 CTD | 20.01.2017 | 11:50 | 34°29.97' S | 24°3.53' W | 4022.9 | CTD/RO |
| MSM60/278-1 | 203 XBT | 20.01.2017 | 13:33 | 34°29.99' S | 24°11.08' W | 4000.7 | XBT |
| MSM60/279-1 | 204 XBT | 20.01.2017 | 14:23 | 34°29.99' S | 24°24.04' W | 3938.8 | XBT |
| MSM60/280-1 | 205 XBT | 20.01.2017 | 15:12 | 34°29.99' S | 24°36.65' W | 3996 | XBT |
| MSM60/281-1 | 78 CTD | 20.01.2017 | 16:58 | 34°29.99' S | 24°42.84' W | 3997.1 | CTD/RO |
| MSM60/282-1 | 206 XBT | 20.01.2017 | 18:44 | 34°29.99' S | 24°50.42' W | 4030.9 | XBT |
| MSM60/283-1 | 207 XBT | 20.01.2017 | 19:34 | 34°29.99' S | 25°3.03' W | 3938.5 | XBT |
| MSM60/284-1 | 208 XBT | 20.01.2017 | 20:27 | 34°29.99' S | 25°16.35' W | 3698.9 | XBT |
| MSM60/285-1 | 209 XBT | 20.01.2017 | 20:30 | 34°29.99' S | 25°17.11' W | 3740 | XBT |
| MSM60/286-1 | 79 CTD | 20.01.2017 | 22:08 | 34°29.96' S | 25°22.05' W | 3853.9 | CTD/RO |
| MSM60/287-1 | 210 XBT | 20.01.2017 | 23:53 | 34°29.99' S | 25°29.35' W | 3972.6 | XBT |
| MSM60/288-1 | 211 XBT | 21.01.2017 | 00:45 | 34°29.99' S | 25°42.80' W | 3940.7 | XBT |
| MSM60/289-1 | 212 XBT | 21.01.2017 | 01:37 | 34°29.99' S | 25°55.91' W | 3849.9 | XBT |
| MSM60/290-1 | 80 CTD | 21.01.2017 | 03:21 | 34°29.97' S | 26°1.41' W | 4018.3 | CTD/RO |
| MSM60/291-1 | 213 XBT | 21.01.2017 | 05:09 | 34°29.99' S | 26°8.92' W | 3771.6 | XBT |
| MSM60/292-1 | 214 XBT | 21.01.2017 | 05:59 | 34°29.99' S | 26°21.31' W | 3709.6 | XBT |
| MSM60/293-1 | 215 XBT | 21.01.2017 | 06:53 | 34°29.99' S | 26°34.71' W | 4009.6 | XBT |
| MSM60/294-1 | 81 CTD | 21.01.2017 | 08:38 | 34°29.98' S | 26°40.75' W | 4074.3 | CTD/RO |
| MSM60/295-1 | 216 XBT | 21.01.2017 | 10:25 | 34°29.99' S | 26°48.00' W | 4324.7 | XBT |
| MSM60/296-1 | 217 XBT | 21.01.2017 | 11:20 | 34°29.99' S | 27°1.37' W | 4180.6 | XBT |
| MSM60/297-1 | 218 XBT | 21.01.2017 | 12:14 | 34°29.99' S | 27°14.53' W | 4309.7 | XBT |
| MSM60/298-1 | 82 CTD | 21.01.2017 | 14:16 | 34°29.96' S | 27°20.07' W | 4092 | CTD/RO |
| MSM60/299-1 | 219 XBT | 21.01.2017 | 16:17 | 34°29.99' S | 27°27.60' W | 4218.6 | XBT |
| MSM60/300-1 | 220 XBT | 21.01.2017 | 17:12 | 34°29.99' S | 27°40.76' W | 4493.3 | XBT |
| MSM60/301-1 | 221 XBT | 21.01.2017 | 18:04 | 34°29.99' S | 27°53.43' W | 4711.1 | XBT |
| MSM60/302-1 | 83 CTD | 21.01.2017 | 19:57 | 34°29.97' S | 27°59.30' W | 4470.4 | CTD/RO |

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| MSM60/303-1 | 222 XBT | 21.01.2017 | 21:51 | 34°30.00' S | 28°6.46' W | 4584.6 | XBT |
| MSM60/304-1 | 223 XBT | 21.01.2017 | 22:42 | 34°29.99' S | 28°19.46' W | 4763 | XBT |
| MSM60/305-1 | 224 XBT | 21.01.2017 | 23:34 | 34°29.99' S | 28°32.63' W | 4918.6 | XBT |
| MSM60/306-1 | 84 CTD | 22.01.2017 | 01:34 | 34°29.96' S | 28°38.62' W | 4969.1 | CTD/RO |
| MSM60/307-1 | 225 XBT | 22.01.2017 | 03:33 | 34°29.99' S | 28°45.93' W | 5305 | XBT |
| MSM60/308-1 | 226 XBT | 22.01.2017 | 04:25 | 34°29.99' S | 28°59.05' W | 5385.7 | XBT |
| MSM60/309-1 | 227 XBT | 22.01.2017 | 05:21 | 34°29.99' S | 29°12.74' W | 5366.8 | XBT |
| MSM60/310-1 | 85 CTD | 22.01.2017 | 07:23 | 34°29.97' S | 29°17.87' W | 5373.5 | CTD/RO |
| MSM60/311-1 | 228 XBT | 22.01.2017 | 09:34 | 34°29.99' S | 29°25.06' W | 5277.4 | XBT |
| MSM60/312-1 | 229 XBT | 22.01.2017 | 10:28 | 34°29.99' S | 29°38.29' W | 5262.4 | XBT |
| MSM60/313-1 | 230 XBT | 22.01.2017 | 11:20 | 34°29.99' S | 29°51.19' W | 4452.7 | XBT |
| MSM60/314-1 | 231 XBT | 22.01.2017 | 11:24 | 34°29.99' S | 29°52.18' W | 4436 | XBT |
| MSM60/315-1 | 86 CTD | 22.01.2017 | 13:09 | 34°31.48' S | 29°57.17' W | 4003.4 | CTD/RO |
| MSM60/315-2 | 12 ARGO | 22.01.2017 | 14:30 | 34°31.42' S | 29°57.08' W | 3998.5 | ARGOFL |
| MSM60/316-1 | 87 CTD | 22.01.2017 | 17:05 | 34°23.22' S | 29°57.19' W | 5294.3 | CTD/RO |
| MSM60/318-1 | 232 XBT | 22.01.2017 | 22:57 | 34°29.70' S | 30°11.82' W | 3270.6 | XBT |
| MSM60/319-1 | 88 CTD | 23.01.2017 | 05:49 | 34°29.98' S | 30°36.46' W | 2402.3 | CTD/RO |
| MSM60/320-1 | 233 XBT | 23.01.2017 | 07:03 | 34°29.99' S | 30°43.63' W | 2586.2 | XBT |
| MSM60/321-1 | 234 XBT | 23.01.2017 | 07:52 | 34°29.99' S | 30°56.75' W | 3524.8 | XBT |
| MSM60/322-1 | 235 XBT | 23.01.2017 | 08:43 | 34°29.99' S | 31°10.01' W | 4020 | XBT |
| MSM60/323-1 | 89 CTD | 23.01.2017 | 10:31 | 34°29.97' S | 31°15.79' W | 4121.3 | CTD/RO |
| MSM60/324-1 | 236 XBT | 23.01.2017 | 12:15 | 34°29.99' S | 31°22.99' W | 4237.5 | XBT |
| MSM60/325-1 | 237 XBT | 23.01.2017 | 13:07 | 34°29.99' S | 31°36.42' W | 4355.9 | XBT |
| MSM60/326-1 | 238 XBT | 23.01.2017 | 13:54 | 34°30.00' S | 31°49.02' W | 4401 | XBT |
| MSM60/327-1 | 90 CTD | 23.01.2017 | 15:47 | 34°29.99' S | 31°55.06' W | 4400.3 | CTD/RO |
| MSM60/328-1 | 239 XBT | 23.01.2017 | 17:38 | 34°29.99' S | 32°1.92' W | 4435.5 | XBT |
| MSM60/329-1 | 240 XBT | 23.01.2017 | 18:31 | 34°29.98' S | 32°15.47' W | 4408.5 | XBT |
| MSM60/330-1 | 241 XBT | 23.01.2017 | 19:21 | 34°29.99' S | 32°28.34' W | 4413 | XBT |
| MSM60/331-1 | 91 CTD | 23.01.2017 | 21:10 | 34°29.96' S | 32°34.37' W | 4489.9 | CTD/RO |
| MSM60/332-1 | 242 XBT | 23.01.2017 | 23:04 | 34°29.99' S | 32°41.65' W | 4544.7 | XBT |
| MSM60/333-1 | 243 XBT | 23.01.2017 | 23:57 | 34°29.99' S | 32°54.82' W | 4554.5 | XBT |
| MSM60/333-2 | 244 XBT | 24.01.2017 | 00:48 | 34°29.99' S | 33°7.84' W | 4539.4 | XBT |
| MSM60/334-1 | 92 CTD | 24.01.2017 | 02:36 | 34°29.99' S | 33°13.66' W | 4508.4 | CTD/RO |
| MSM60/334-2 | 13 ARGO | 24.01.2017 | 04:21 | 34°30.00' S | 33°13.69' W | 4498 | ARGOFL |
| MSM60/335-1 | 245 XBT | 24.01.2017 | 04:54 | 34°29.99' S | 33°22.10' W | 4505.1 | XBT |
| MSM60/336-1 | 246 XBT | 24.01.2017 | 05:39 | 34°29.99' S | 33°33.87' W | 4527.9 | XBT |
| MSM60/337-1 | 247 XBT | 24.01.2017 | 06:29 | 34°29.99' S | 33°47.06' W | 3039.8 | XBT |
| MSM60/338-1 | 93 CTD | 24.01.2017 | 07:48 | 34°30.00' S | 33°52.92' W | 2431.5 | CTD/RO |
| MSM60/339-1 | 248 XBT | 24.01.2017 | 09:07 | 34°29.99' S | 34°0.51' W | 3258.4 | XBT |
| MSM60/340-1 | 249 XBT | 24.01.2017 | 09:57 | 34°29.99' S | 34°13.48' W | 4605.8 | XBT |
| MSM60/341-1 | 250 XBT | 24.01.2017 | 10:47 | 34°29.99' S | 34°26.45' W | 4474.8 | XBT |
| MSM60/342-1 | 94 CTD | 24.01.2017 | 12:38 | 34°29.99' S | 34°32.28' W | 4446.1 | CTD/RO |
| MSM60/343-1 | 251 XBT | 24.01.2017 | 14:28 | 34°29.99' S | 34°39.51' W | 4440.2 | XBT |
| MSM60/344-1 | 252 XBT | 24.01.2017 | 15:15 | 34°29.99' S | 34°52.45' W | 4433.6 | XBT |
| MSM60/345-1 | 253 XBT | 24.01.2017 | 16:05 | 34°29.99' S | 35°6.18' W | 4419.4 | XBT |
| MSM60/346-1 | 95 CTD | 24.01.2017 | 17:51 | 34°29.98' S | 35°11.53' W | 4377.5 | CTD/RO |

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| MSM60/347-1 | 254 XBT | 24.01.2017 | 19:48 | 34°29.99' S | 35°18.43' W | 4321 | XBT |
| MSM60/348-1 | 255 XBT | 24.01.2017 | 20:41 | 34°29.99' S | 35°31.78' W | 4321 | XBT |
| MSM60/349-1 | 256 XBT | 24.01.2017 | 21:34 | 34°29.99' S | 35°45.07' W | 4531.5 | XBT |
| MSM60/350-1 | 96 CTD | 24.01.2017 | 23:24 | 34°30.00' S | 35°50.86' W | 4581.4 | CTD/RO |
| MSM60/351-1 | 257 XBT | 25.01.2017 | 01:19 | 34°29.99' S | 35°58.38' W | 4651.6 | XBT |
| MSM60/352-1 | 258 XBT | 25.01.2017 | 02:11 | 34°30.00' S | 36°11.39' W | 4738.8 | XBT |
| MSM60/353-1 | 259 XBT | 25.01.2017 | 03:08 | 34°29.99' S | 36°24.92' W | 4627.6 | XBT |
| MSM60/354-1 | 97 CTD | 25.01.2017 | 05:05 | 34°30.00' S | 36°30.13' W | 4546.7 | CTD/RO |
| MSM60/355-1 | 260 XBT | 25.01.2017 | 07:01 | 34°29.99' S | 36°37.32' W | 4711.2 | XBT |
| MSM60/356-1 | 261 XBT | 25.01.2017 | 07:55 | 34°29.99' S | 36°51.07' W | 4659 | XBT |
| MSM60/357-1 | 262 XBT | 25.01.2017 | 08:45 | 34°29.99' S | 37°4.00' W | 4489.2 | XBT |
| MSM60/358-1 | 98 CTD | 25.01.2017 | 10:37 | 34°29.99' S | 37°9.46' W | 4474.3 | CTD/RO |
| MSM60/359-1 | 263 XBT | 25.01.2017 | 12:30 | 34°29.99' S | 37°16.60' W | 4501.4 | XBT |
| MSM60/360-1 | 264 XBT | 25.01.2017 | 13:23 | 34°29.99' S | 37°30.65' W | 4599.8 | XBT |
| MSM60/361-1 | 265 XBT | 25.01.2017 | 14:12 | 34° 29.99' S | 37° 43.05' W | 4627.6 | XBT |
| MSM60/362-1 | 99 CTD | 25.01.2017 | 16:08 | 34° 29.99' S | 37° 48.71' W | 4622 | CTD/RO |
| MSM60/363-1 | 266 XBT | 25.01.2017 | 18:08 | 34° 29.99' S | 37° 55.68' W | 4610.1 | XBT |
| MSM60/364-1 | 267 XBT | 25.01.2017 | 18:09 | 34° 29.99' S | 37° 55.91' W | 4612.3 | XBT |
| MSM60/365-1 | 268 XBT | 25.01.2017 | 19:07 | 34° 29.99' S | 38° 8.89' W | 4626.7 | XBT |
| MSM60/366-1 | 269 XBT | 25.01.2017 | 20:07 | 34° 29.99' S | 38° 21.96' W | 4731.8 | XBT |
| MSM60/367-1 | 100 CTD | 25.01.2017 | 22:23 | 34° 29.96' S | 38° 27.96' W | 4797.2 | CTD/RO |
| MSM60/368-1 | 270 XBT | 26.01.2017 | 00:35 | 34° 29.99' S | 38° 35.09' W | 4831.6 | XBT |
| MSM60/369-1 | 271 XBT | 26.01.2017 | 01:33 | 34° 29.99' S | 38° 47.86' W | 4822.5 | XBT |
| MSM60/370-1 | 272 XBT | 26.01.2017 | 02:32 | 34° 29.99' S | 39° 0.76' W | 4891.8 | XBT |
| MSM60/371-1 | 101 CTD | 26.01.2017 | 04:31 | 34° 30.01' S | 39° 7.27' W | 4893 | CTD/RO |
| MSM60/372-1 | 273 XBT | 26.01.2017 | 06:30 | 34° 29.99' S | 39° 14.42' W | 4874.1 | XBT |
| MSM60/373-1 | 274 XBT | 26.01.2017 | 07:23 | 34° 29.99' S | 39° 27.48' W | 4894 | XBT |
| MSM60/374-1 | 275 XBT | 26.01.2017 | 08:20 | 34° 29.99' S | 39° 41.09' W | 4834.5 | XBT |
| MSM60/375-1 | 102 CTD | 26.01.2017 | 10:17 | 34° 30.01' S | 39° 46.59' W | 4841.9 | CTD/RO |
| MSM60/376-1 | 276 XBT | 26.01.2017 | 12:21 | 34° 29.99' S | 39° 53.71' W | 4844.1 | XBT |
| MSM60/377-1 | 277 XBT | 26.01.2017 | 13:17 | 34° 29.99' S | 40° 6.93' W | 4819.7 | XBT |
| MSM60/378-1 | 278 XBT | 26.01.2017 | 14:12 | 34° 29.99' S | 40° 19.93' W | 4777.8 | XBT |
| MSM60/379-1 | 103 CTD | 26.01.2017 | 16:10 | 34° 29.97' S | 40° 25.85' W | 4737.4 | CTD/RO |
| MSM60/380-1 | 279 XBT | 26.01.2017 | 18:10 | 34° 29.99' S | 40° 32.71' W | 4687.3 | XBT |
| MSM60/381-1 | 280 XBT | 26.01.2017 | 19:05 | 34° 29.99' S | 40° 45.83' W | 4494.3 | XBT |
| MSM60/382-1 | 281 XBT | 26.01.2017 | 20:02 | 34° 29.99' S | 40° 59.43' W | 4613.4 | XBT |
| MSM60/383-1 | 104 CTD | 26.01.2017 | 21:57 | 34° 30.00' S | 41° 5.16' W | 4665.6 | CTD/RO |
| MSM60/384-1 | 282 XBT | 27.01.2017 | 00:07 | 34° 30.00' S | 41° 12.46' W | 4679.2 | XBT |
| MSM60/385-1 | 283 XBT | 27.01.2017 | 01:03 | 34° 29.99' S | 41° 25.45' W | 4694.6 | XBT |
| MSM60/386-1 | 284 XBT | 27.01.2017 | 02:01 | 34° 29.99' S | 41° 38.32' W | 4686.3 | XBT |
| MSM60/387-1 | 105 CTD | 27.01.2017 | 04:00 | 34° 30.02' S | 41° 44.41' W | 4681.7 | CTD/RO |
| MSM60/388-1 | 285 XBT | 27.01.2017 | 06:04 | 34° 29.99' S | 41° 52.88' W | 4681.1 | XBT |
| MSM60/389-1 | 286 XBT | 27.01.2017 | 06:56 | 34° 29.99' S | 42° 4.81' W | 4675.4 | XBT |
| MSM60/390-1 | 287 XBT | 27.01.2017 | 07:51 | 34° 29.99' S | 42° 17.67' W | 4670.7 | XBT |
| MSM60/391-1 | 106 CTD | 27.01.2017 | 09:45 | 34° 30.00' S | 42° 23.76' W | 4670.2 | CTD/RO |
| MSM60/392-1 | 288 XBT | 27.01.2017 | 11:46 | 34° 29.99' S | 42° 31.03' W | 4668.2 | XBT |

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| MSM60/393-1 | 289 XBT | 27.01.2017 | 12:43 | 34° 29.99' S | 42° 44.07' W | 4675.9 | XBT |
| MSM60/394-1 | 290 XBT | 27.01.2017 | 13:41 | 34° 29.99' S | 42° 57.26' W | 4680.4 | XBT |
| MSM60/395-1 | 107 CTD | 27.01.2017 | 15:39 | 34° 30.03' S | 43° 3.04' W | 4685.4 | CTD/RO |
| MSM60/396-1 | 291 XBT | 27.01.2017 | 17:47 | 34° 29.99' S | 43° 10.22' W | 4704.2 | XBT |
| MSM60/397-1 | 292 XBT | 27.01.2017 | 18:43 | 34° 29.99' S | 43° 23.48' W | 4719.4 | XBT |
| MSM60/398-1 | 293 XBT | 27.01.2017 | 19:39 | 34° 29.99' S | 43° 36.59' W | 4728 | XBT |
| MSM60/399-1 | 108 CTD | 27.01.2017 | 21:35 | 34° 29.98' S | 43° 42.32' W | 4732.5 | CTD/RO |
| MSM60/400-1 | 294 XBT | 27.01.2017 | 23:40 | 34° 29.99' S | 43° 49.68' W | 4746.2 | XBT |
| MSM60/401-1 | 295 XBT | 28.01.2017 | 00:34 | 34° 29.99' S | 44° 2.69' W | 4751.8 | XBT |
| MSM60/402-1 | 296 XBT | 28.01.2017 | 01:27 | 34° 30.00' S | 44° 15.63' W | 4765.2 | XBT |
| MSM60/403-1 | 297 XBT | 28.01.2017 | 02:22 | 34° 29.99' S | 44° 29.16' W | 4772 | XBT |
| MSM60/404-1 | 109 CTD | 28.01.2017 | 03:59 | 34° 30.02' S | 44° 30.00' W | 4769.9 | CTD/RO |
| MSM60/405-1 | 298 XBT | 28.01.2017 | 06:19 | 34° 29.99' S | 44° 42.31' W | 4780.4 | XBT |
| MSM60/406-1 | 299 XBT | 28.01.2017 | 07:11 | 34° 29.99' S | 44° 54.79' W | 4778.9 | XBT |
| MSM60/407-1 | 110 CTD | 28.01.2017 | 09:09 | 34° 29.99' S | 44° 59.98' W | 4784.5 | CTD/RO |
| MSM60/408-1 | 300 XBT | 28.01.2017 | 11:24 | 34° 29.99' S | 45° 8.10' W | 4774.1 | XBT |
| MSM60/409-1 | 301 XBT | 28.01.2017 | 12:22 | 34° 29.99' S | 45° 21.35' W | 4771.5 | XBT |
| MSM60/410-1 | 111 CTD | 28.01.2017 | 14:33 | 34° 29.98' S | 45° 29.96' W | 4768.9 | CTD/RO |
| MSM60/411-1 | 302 XBT | 28.01.2017 | 16:33 | 34° 30.00' S | 45° 34.06' W | 4771.9 | XBT |
| MSM60/412-1 | 303 XBT | 28.01.2017 | 17:33 | 34° 29.99' S | 45° 47.99' W | 4768.9 | XBT |
| MSM60/413-1 | 112 CTD | 28.01.2017 | 19:56 | 34° 29.97' S | 45° 59.96' W | 4753.7 | CTD/RO |
| MSM60/414-1 | 304 XBT | 28.01.2017 | 21:32 | 34° 29.99' S | 46° 1.15' W | 4760 | XBT |
| MSM60/415-1 | 305 XBT | 28.01.2017 | 22:21 | 34° 29.99' S | 46° 13.56' W | 4726.5 | XBT |
| MSM60/416-1 | 306 XBT | 28.01.2017 | 23:13 | 34° 29.99' S | 46° 26.89' W | 4665.7 | XBT |
| MSM60/417-1 | 113 CTD | 29.01.2017 | 00:55 | 34° 29.95' S | 46° 30.03' W | 4651.9 | CTD/RO |
| MSM60/418-1 | 307 XBT | 29.01.2017 | 03:08 | 34° 29.99' S | 46° 40.03' W | 4605 | XBT |
| MSM60/419-1 | 308 XBT | 29.01.2017 | 03:59 | 34° 29.99' S | 46° 53.22' W | 4608.6 | XBT |
| MSM60/420-1 | 114 CTD | 29.01.2017 | 05:52 | 34° 30.11' S | 47° 0.16' W | 4617 | CTD/RO |
| MSM60/421-1 | 309 XBT | 29.01.2017 | 07:44 | 34° 29.99' S | 47° 6.27' W | 4608.5 | XBT |
| MSM60/422-1 | 310 XBT | 29.01.2017 | 08:36 | 34° 29.99' S | 47° 19.46' W | 4589.5 | XBT |
| MSM60/423-1 | 115 CTD | 29.01.2017 | 10:46 | 34° 29.99' S | 47° 30.00' W | 4564.6 | CTD/RO |
| MSM60/424-1 | 311 XBT | 29.01.2017 | 12:20 | 34° 29.98' S | 47° 32.33' W | 4555.7 | XBT |
| MSM60/425-1 | 312 XBT | 29.01.2017 | 14:51 | 34° 29.99' S | 47° 45.31' W | 4495.1 | XBT |
| MSM60/426-1 | 313 XBT | 29.01.2017 | 19:02 | 34° 29.98' S | 47° 58.35' W | 4382.5 | XBT |
| MSM60/427-1 | 116 CTD | 29.01.2017 | 20:38 | 34° 29.98' S | 48° 0.01' W | 4370.8 | CTD/RO |
| MSM60/428-1 | 314 XBT | 29.01.2017 | 22:59 | 34° 29.98' S | 48° 11.07' W | 4259.3 | XBT |
| MSM60/429-1 | 315 XBT | 29.01.2017 | 23:50 | 34° 30.00' S | 48° 24.54' W | 4136 | XBT |
| MSM60/430-1 | 117 CTD | 30.01.2017 | 01:33 | 34° 29.97' S | 48° 29.99' W | 4161 | CTD/RO |
| MSM60/431-1 | 316 XBT | 30.01.2017 | 03:25 | 34° 29.99' S | 48° 38.01' W | 4081.6 | XBT |
| MSM60/432-1 | 317 XBT | 30.01.2017 | 04:13 | 34° 29.99' S | 48° 50.73' W | 3953 | XBT |
| MSM60/433-1 | 118 CTD | 30.01.2017 | 06:30 | 34° 29.98' S | 48° 59.96' W | 3832.9 | CTD/RO |
| MSM60/434-1 | 318 XBT | 30.01.2017 | 08:17 | 34° 29.99' S | 49° 5.14' W | 3764.7 | XBT |
| MSM60/435-1 | 319 XBT | 30.01.2017 | 09:04 | 34° 29.99' S | 49° 16.73' W | 3623.6 | XBT |
| MSM60/436-1 | 119 CTD | 30.01.2017 | 11:12 | 34° 30.01' S | 49° 29.99' W | 3516.8 | CTD/RO |
| MSM60/437-1 | 320 XBT | 30.01.2017 | 13:30 | 34° 29.98' S | 49° 42.71' W | 3377.3 | XBT |
| MSM60/438-1 | 321 XBT | 30.01.2017 | 14:27 | 34° 30.00' S | 49° 56.53' W | 3258 | XBT |

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|-------------|---------|------------|-------|--------------|--------------|--------|--------|
| MSM60/439-1 | 120 CTD | 30.01.2017 | 15:48 | 34° 30.35' S | 50° 0.02' W | 3159.2 | CTD/RO |
| MSM60/440-1 | 322 XBT | 30.01.2017 | 17:54 | 34° 30.00' S | 50° 10.21' W | 3056.6 | XBT |
| MSM60/441-1 | 323 XBT | 30.01.2017 | 18:41 | 34° 29.99' S | 50° 22.14' W | 2942 | XBT |
| MSM60/442-1 | 121 CTD | 30.01.2017 | 20:12 | 34° 30.00' S | 50° 30.01' W | 2900.1 | CTD/RO |
| MSM60/443-1 | 324 XBT | 30.01.2017 | 21:38 | 34° 29.99' S | 50° 35.90' W | 2815.5 | XBT |
| MSM60/444-1 | 325 XBT | 30.01.2017 | 22:27 | 34° 29.98' S | 50° 48.68' W | 2783.3 | XBT |
| MSM60/445-1 | 122 CTD | 31.01.2017 | 00:07 | 34° 30.02' S | 51° 0.02' W | 2560.4 | CTD/RO |
| MSM60/446-1 | 326 XBT | 31.01.2017 | 01:11 | 34° 29.98' S | 51° 1.75' W | 2523.2 | XBT |
| MSM60/447-1 | 123 CTD | 31.01.2017 | 02:46 | 34° 30.01' S | 51° 15.06' W | 1896.2 | CTD/RO |
| MSM60/448-1 | 327 XBT | 31.01.2017 | 04:30 | 34° 30.00' S | 51° 27.95' W | 1460.9 | XBT |
| MSM60/449-1 | 124 CTD | 31.01.2017 | 05:11 | 34° 30.02' S | 51° 30.04' W | 1366.2 | CTD/RO |
| MSM60/450-1 | 328 XBT | 31.01.2017 | 05:50 | 34° 29.99' S | 51° 32.49' W | 1273 | XBT |
| MSM60/451-1 | 125 CTD | 31.01.2017 | 06:42 | 34° 30.03' S | 51° 34.79' W | 1194.6 | CTD/RO |
| MSM60/452-1 | 126 CTD | 31.01.2017 | 08:35 | 34° 18.01' S | 51° 41.99' W | 176.3 | CTD/RO |
| MSM60/453-1 | 127 CTD | 31.01.2017 | 11:14 | 34° 18.93' S | 51° 41.45' W | 326.8 | CTD/RO |
| MSM60/454-1 | 329 XBT | 31.01.2017 | 12:32 | 34° 23.21' S | 51° 39.62' W | 761.1 | XBT |
| MSM60/455-1 | 330 XBT | 31.01.2017 | 12:47 | 34° 20.80' S | 51° 41.52' W | 470.4 | XBT |
| MSM60/456-1 | 128 CTD | 31.01.2017 | 14:06 | 34° 10.00' S | 51° 50.01' W | 129.1 | CTD/RO |
| MSM60/457-1 | 331 XBT | 31.01.2017 | 14:59 | 34° 5.53' S | 51° 52.71' W | 97.4 | XBT |