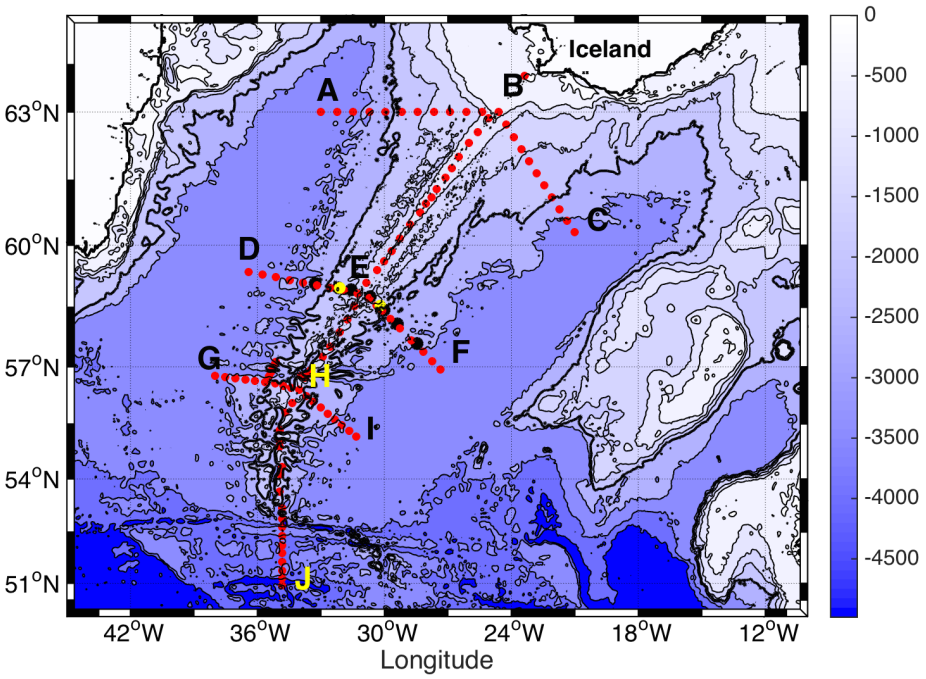
Laboratoire d'Océanographie Physique et Spatiale
UMR6523 – CNRS-IFREMER-IRD-UBO
http://www.umr-lops.fr

RREX 2015

CTD-O_2 Data report

Auteur(s) : P. Branellec, V. Thierry



Référence :Rap. Int. LOPS/16-26 (Oct. 2016)

LOPS - Campus Ifremer – ZI de la Pointe du Diable – CS10070 – 29280 Plouzané
Tél 33 (0)2 98 22 48 50 – Fax 33 (0)2 98 22 44 96
IUEM, Rue Dumont d'Urville, 29280 Plouzané

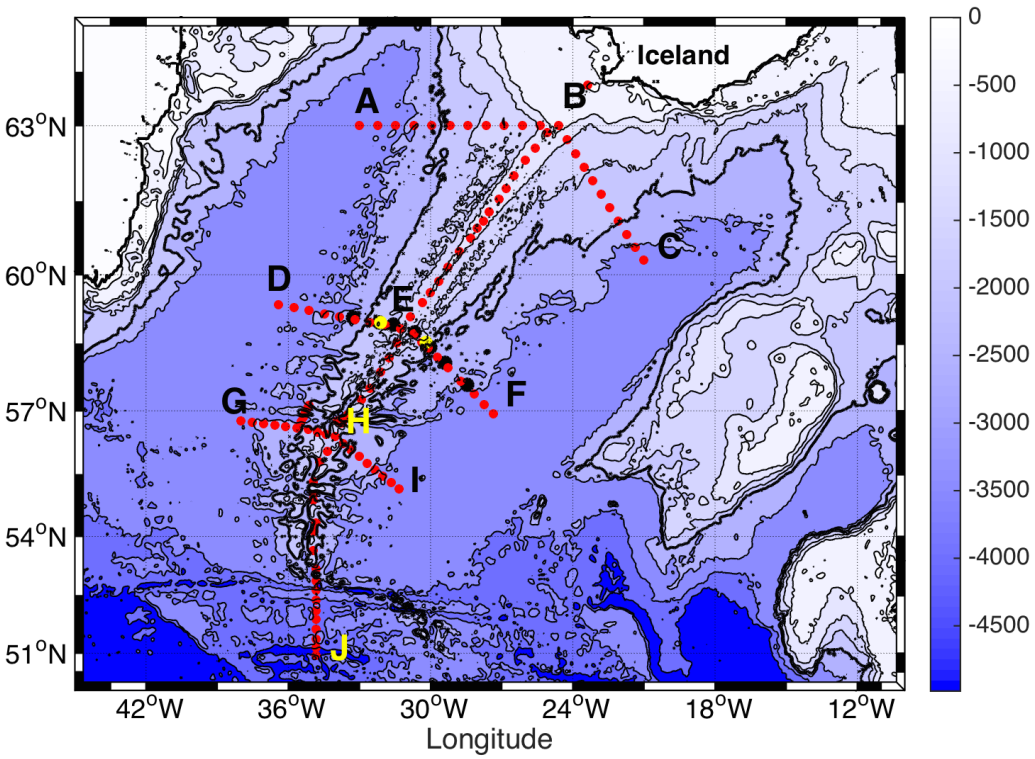
RREX 2015

CTD-O_2 Data report

05/06/2015 to 10/07/2015

On board N/O Thalassa

Brest (France) - Brest (France)



ABSTRACT

The Reykjanes Ridge is a major topographic feature of the North-Atlantic Ocean. It lies in a central position along the main paths followed by the upper and lower limbs of the Meridional Overturning Cell (MOC), which contributes at moderating the European climate in creating a transport of heat toward the North Atlantic. Our hypothesis is that the Reykjanes Ridge influences the main components of the upper and lower limbs of the MOC because it is a strong constraint on the horizontal and vertical circulation, it impacts the water mass distribution and evolution and it is a region of intense turbulent mixing. The objective of the RREX project is to conduct a process study in order to better understand the role of the Reykjanes Ridge on the dynamics and water mass transformation in the subpolar gyre and ultimately on the MOC. This project relies on two hydrographic cruises to acquire the adequate dataset to (1) provide a synoptic high-resolution and full depth survey to monitor the flow along and across the ridge, (2) to quantify the variability of the vertical and horizontal structure of the currents parallel to the ridge at daily to seasonal time-scales and (3) to provide sufficient turbulence observations to monitor the heterogeneous and intermittent mixing processes.

The RREX2015 cruise, carried out from the 5th of June to the 10th of July 2015, is the first of the two cruises of the RREX project. During this cruise, we realized 133 surface-bottom CTDO2-LADCP stations along 4 sections : the south section sud (GHI)), the so-called Ovide la section (DEF), the north section (ABC) and the main axis (BEHJ). At each station, the following measurements were carried out: (1) pressure, temperature, conductivity and dissolved oxygen measurements with a CTDO2 probe, (2) current measurements with an ADCP, (3) samples of sea water at 28 levels for salinity and oxygen calibration and for nutrients and pH measurements. On 58 of the 133 stations, microstructure measurements were also acquired from a Vertical Microstructure Profiler (VMP). We also deployed 10 Argo floats, 7 surface drifting buoys and 59 XBT.

This report details the calibration and quality control of the CTDO2 data for each surface-bottom station. Data are acquired with a SBE911+ probe and a SBE43 sensor for dissolved oxygen measurements. The software SBE data processing was used after decoding and cleaning the raw data. Then, data were binned and calibrated using on the one hand pre and post cruise calibration results for the pressure and temperature sensors and on the other hand the water samples of the 28 bottles of the rosette at each station for the salinity and dissolved oxygen data. A software, written in matlab, has been used for the data calibration. A final accuracy of 0.0013 °C, 0.0012 psu and 0.03 ml/l was obtained on final profiles of temperature, salinity and dissolved oxygen, compatible with international requirements issued from the WOCE program.

RESUME

La dorsale de Reykjanes est une structure topographique majeure de l'océan Atlantique Nord. Elle est située au cœur de la gyre subpolaire le long des chemins suivis par les branches hautes et basses de la cellule méridienne de retournement (MOC, Meridonal Overturning Cell). Cette dernière transporte de la chaleur vers le nord de l'Atlantique Nord et contribue à modérer le climat européen. Notre hypothèse est que la dorsale de Reykjanes influence les principales composantes des deux branches de la MOC. En effet, elle impose une contrainte forte sur la circulation horizontale et verticale ainsi que sur la distribution et l'évolution des masses d'eau ; c'est également une région où le mélange turbulent est très intense. L'objectif du projet RREX est de réaliser une étude de processus afin de mieux comprendre le rôle de la dorsale de Reykjanes sur la dynamique et la transformation des masses d'eau dans le gyre subpolaire et, *in fine*, sur la MOC. Ce projet s'appuie sur la réalisation de 2 campagnes océanographiques destinées à acquérir un jeu de données adéquat afin (1) de caractériser l'ensemble de la circulation autour et au-dessus de la dorsale à haute résolution et de manière synoptique, (2) de quantifier la variabilité de la structure verticale et horizontale des courants parallèles à la dorsale sur des échelles de temps journalières à saisonnières et (3) de fournir suffisamment d'observations de turbulence pour surveiller et comprendre les processus de mélange qui sont hétérogènes et intermittents.

La campagne RREX2015 réalisée du 5 juin au 10 juillet 2015 est la première des 2 campagnes prévues du projet RREX. Au cours de cette campagne, nous avons réalisé 133 stations CTDO2-LADCP le long de 4 radiales : la section sud (GHI sur la Figure de la page de garde), la section dite Ovide (DEF), la section nord (ABC) et la section le long de la dorsale (BEHJ). Les mesures effectuées à ces stations sont les suivantes : (1) des mesures de pression, température, conductivité et oxygène avec une sonde CTDO2, (2) des mesures de courant à l'aide de courantomètres acoustiques Doppler, (3) des prélèvements d'échantillons d'eau sur 28 niveaux pour l'ajustage des données sonde de salinité et d'oxygène et pour la détermination de la teneur en sels nutritifs et la détermination du pH. Pour 58 de ces 133 stations, des mesures de microstructure ont été acquises à l'aide d'un profileur de microstucture (VMP). Nous avons également mis à l'eau 10 flotteurs Argo, 7 bouées dérivantes et 59 XBT.

Ce rapport détaille le traitement des données de la sonde CTDO2 immergée jusqu'au fond de chaque station afin d'obtenir des profils continus de température, salinité et oxygène dissous. Les données hydrologiques sont acquises avec la sonde SBE911+ du LOPS, en série avec un capteur d'oxygène dissous SBE43. La chaîne de traitement "SBE data processing" a été utilisée après un premier nettoyage des données brutes. Les données ont ensuite été réduites et ajustées à l'aide d'une chaîne d'ajustage, écrite en matlab, utilisant d'une part les calibrations pré et post-campagne des capteurs de température et de pression pour corriger les mesures de température et pression de la sonde et d'autre part les prélèvements d'eau des 28 bouteilles de la rosette pour corriger les données salinité et oxygène dissous de la sonde. La précision finale respective des données de température, salinité et oxygène dissous (0.0013 °C, 0.0012 psu et 0.03 ml/l) est compatible avec les normes internationales WOCE.

SOMMAIRE

1. RREX 2015 PROGRAM 9

1.1. CRUISE OBJECTIVES 9

2. THE RREX 2015 CRUISE 11

2.1. INTRODUCTION 11

2.2. CRUISE PARTICIPANTS 13

2.3. ALL OPERATIONS TIMING 14

2.3.1. CTD and moorings 17

2.3.2. ASFAR (Autonomous System For Argos float Release) 17

2.3.3. Argo floats 19

2.3.4. VMP profiles 20

2.3.5. Weather buoys 21

2.4. DESCRIPTION OF CRUISE OPERATIONS 23

3. CTD-O_2 MEASUREMENT CALIBRATION 27

3.1. CTD-O_2 DATA ACQUISITION 27

3.1.1. Technical summary 27

3.1.2. Technical problems during the cruise 29

3.1.3. Data processing 29

3.2. SAMPLING AT THE SEA 30

3.3. ANALYSIS OF SALINITY AND DISSOLVED OXYGEN SAMPLES 32

3.3.1. Standardization of salinometers 32

3.3.2. Salinity analysis 33

3.3.3. Dissolved oxygen 36

3.4. DATA PREPARATION BEFORE CALIBRATION 40

3.4.1. Data cleaning with Hydro_nett 40

3.4.2. Correction for hysteresis 41

3.4.3. Bottle file 41

3.4.4. Processing with Seabird routines 41

3.5. CALIBRATION OF PRESSURE MEASUREMENT 43

3.5.1. Calibration of the sensor under laboratory conditions at 20 °C 43

3.5.2. Influence of the the static temperature 43

3.5.3. Influence of the dynamic temperature effect 46

3.5.4. Correction of the pressure measurement on the CTD profiles 46

3.5.5. Validation of the CTD pressure measurement 47

3.6. CALIBRATION OF THE TEMPERATURE MEASUREMENT 51
3.6.1. Calibration of the sensors at Ifremer laboratory 51
3.6.2. Calibration of the CTD measurement 51
3.6.3. Monitoring of the Temperature measurement 53

3.7. CALIBRATION OF THE CONDUCTIVITY 55
3.7.1. Operating mode 55
3.7.2. Analysis of the initial results and strategy adopted 55
3.7.3. Assessment of the calibration of the conductivity profiles 58
3.7.4. Validation of the results 62

3.8. CALIBRATION OF DISSOLVED OXYGEN PROFILES 64
3.8.1. Operating mode 64
3.8.2. Dissolved oxygen units 65
3.8.3. Analysis of the initial results and strategy adopted 65
3.8.4. Assessment of the calibration of the dissolved oxygen profiles 68
3.8.5. Validation of the results 72

3.9. DATA REDUCTION 74

3.10. VALIDATION OF THE PROFILES 75
3.10.1. Validation of the Oxygen profiles 75
3.10.2. Density inversions 76

3.11. ACCURACY OF THE RREX 2015 MEASUREMENTS 78

4. BIBLIOGRAPHY 79

5. LISTINGS AND FIGURES OF THE CTD PARAMETERS 83

5.1. REMARKS 83

5.2. SECTIONS PLOT 84
5.2.1. South section 84
5.2.2. Ovide section 86
5.2.3. North section 88
5.2.4. Ridge section 90

5.3. LISTINGS AND FIGURES 91

1. RREX 2015 Program

1.1. Cruise objectives

The Reykjanes Ridge is a major topographic feature of the North-Atlantic Ocean. It lies in a central position along the main paths followed by the upper and lower limbs of the Meridional Overturning Cell (MOC), which contributes at moderating the European climate in creating a transport of heat toward the North Atlantic. Our hypothesis is that the Reykjanes Ridge influences the main components of the upper and lower limbs of the MOC because it is a strong constraint on the horizontal and vertical circulation, it impacts the water mass distribution and evolution and it is a region of intense turbulent mixing. The objective of this project is to conduct a process study in order to better understand the role of the Reykjanes Ridge on the dynamics and water mass transformation in the subpolar gyre and ultimately on the MOC.

The questions we want to address have not been addressed yet due to a lack of an adequate dataset providing a synoptic high-resolution and full depth survey to monitor the flow along and across the ridge, providing variability of the vertical and horizontal structure of the currents parallel to the ridge at daily to seasonal time-scales and providing sufficient turbulence observations to monitor the heterogeneous and intermittent mixing processes. We thus plan to acquire such dataset during the RREX2015 cruise.

Furthermore no dedicated modeling effort had been conducted to identify the important mechanisms at play in the vicinity of the ridge and the key model parameters influencing the dynamics of the flow around and across the ridge. Models also show large discrepancies with in situ data and despite many attempts to understand the origin of those discrepancies and to resolve them the solutions have not yet been found. A dedicated modeling effort will thus be conducted by the development of laboratory experiments, idealized and high-resolution realistic numerical simulations. This modeling effort will not only help understand the mechanisms controlling the dynamics of the flow along and across the ridge but it will also help improve the realism of global ocean models.

2. The RREX 2015 Cruise

2.1. Introduction

The RREX cruise (Reykjanes Ridge EXperiment) took place on board the R/V Thalassa from 5th June to 15th July 2015, starting from Brest (France) and finishing in Brest (France).

Figure 1: R/V Thalassa in Brest

The working area is between Irminger sea and Iceland sea (fig. 2).

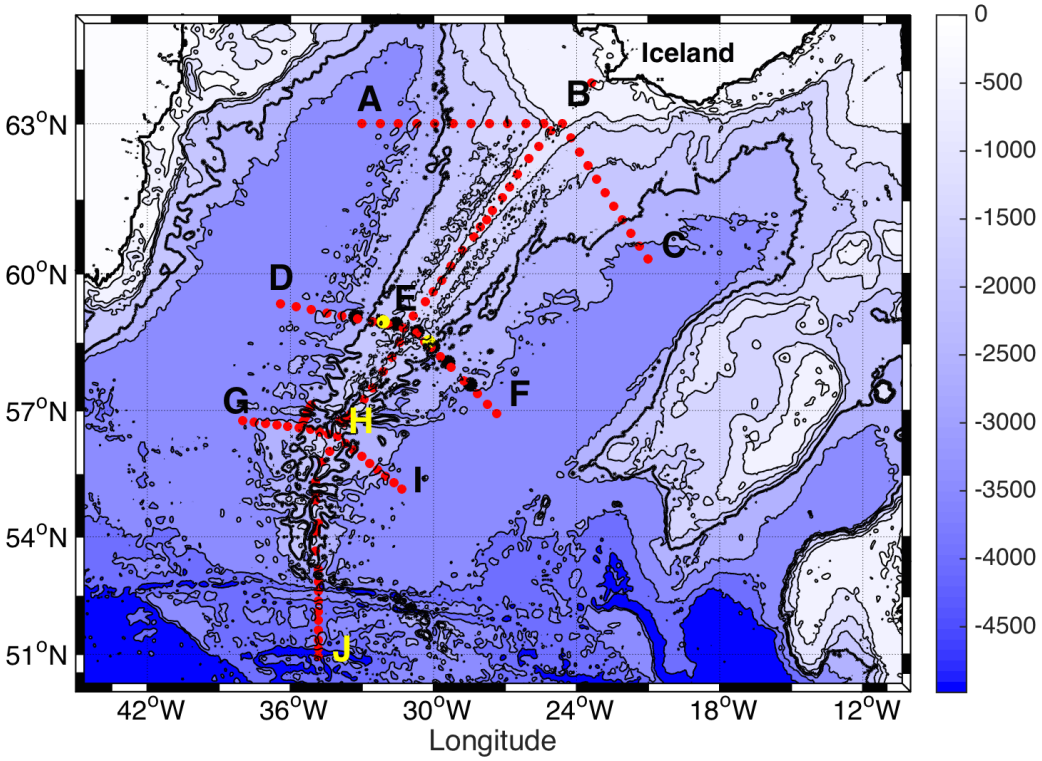


Figure 2: map of the working area

The following operations were carried out during the cruise:

- 133 CTD stations:

test stations:	st 0 and 1		
4 sections:	I-H-G	South section	(st 2 to 24)
	D-E-F	Ovide section	(st 25 to 44)
	C-B-A	North section	(st 45 to 66)
	B-E-H-J	Ridge section	(st 67 to 132)

- 58 VMP profiles.
- 10 floats launched.
- 9 moorings deployed.
- 2 ASFAR structures (with 4 floats each) deployed.
- 7 Meteo surface drifters.
- 59 XBT done.
- SADCP 38 and 150 kHZ.
- Thermosalinometer.

2.2. Cruise participants

Name	Firstname	Specialty	Responsability on board	Organism	Status
Thierry	Virginie	Physic	P.I.	Ifremer	Res
Mercier	Herlé	Physic	Data analysis, Data quality monitoring	CNRS	Res
Maze	Guillaume	Physic	CTD watch	Ifremer	Res
Lique	Camille	Physic	CTD watch	Ifremer	Res
Lagadec	Catherine	Physic	CTD watch	Ifremer	ITA
Le Reste	Serge	Mechanical, electronic	CTD watch	Ifremer	ITA
Le Bot	Philippe	Computer scientist	CTD watch	Ifremer	ITA
Peyronnet	Christophe	Mechanical, electronic	CTD watch	Ifremer	ITA
Pichavant	Pascal	Mechanical, electronic	CTD watch	Ifremer	ITA
Delavergne	Casimir	Physic	CTD watch	UPMC	PhD
Colombo	Pedro	Physic	CTD watch	Univ Joseph Fourier	PhD
Menage	Olivier	Mechanical	VMP, mooring	Ifremer	ITA
Leizour	Stéphane	Mechanical	VMP, mooring,Argo	Ifremer	ITA
Hamon	Michel	Electronic	VMP, L-ADCP, electronic, mooring	Ifremer	ITA
Ferron	Bruno	Physic	VMP	CNRS	Res
Branellec	Pierre	Chemistry	Salinity and Oxygen calibration, mooring	Ifremer	ITA
Feucher	Charlène	Physic	Salinity analysis	Ifremer	PhD
De Gesincourt	Floriane	Chemistry	Oxygen analysis	CNRS	ITA
Fernando	Alonso Perez	Chemistry	pH analysis, nutrients sampling	IIM Vigo	ITA
Marcos	Morente Fontela	Chemistry	pH analysis, nutrients sampling	IIM Vigo	PhD

Figure 3: Scientific team and crew members

2.3. All operations timing

The table below shows all the operations in chronogical order. Each color specifies a section.

Station	Date	Hour	Lat.	Lon.	Section	Comments
0	08/06/2015	15:48:55	52.104	-18.411		Test Station Deep Arvor
1	10/06/2015	01:34:21	54,261	-27,456		Island basin center
2	10/06/2015	18:28:56	55,156	-31,336	South	
3	10/06/2015	22:19:19	55,310	-31,671	South	
4	11/06/2015	01:53:06	55,468	-32,008	South	
5	11/06/2015	06:06:28	55,622	-32,344	South	VMP
6	11/06/2015	10:12:27	55,777	-32,677	South	VMP
7	11/06/2015	15:06:55	55,997	-33,215	South	VMP
8	11/06/2015	19:24:05	56,245	-33,685	South	
9	11/06/2015	22:36:06	56,400	-34,019	South	Same as station 108
10	12/06/2015	02:43:30	56,733	-33,717		Mooring BFZ-S, VMP
11	12/06/2015	08:58:49	56,940	-33,853		Mooring BFZ-N, VMP
12	12/06/2015	14:37:14	56,725	-33,759	South	VMP
13	12/06/2015	17:53:51	56,760	-33,922	South	VMP
14	12/06/2015	23:22:45	56,449	-34,421	South	VMP
15	13/06/2015	02:57:39	56,523	-34,999	South	VMP
16	13/06/2015	08:02:21	57,131	-35,121	BFZ-downstream 1	VMP
17	13/06/2015	11:40:16	57,059	-35,182	BFZ- downstream 1	VMP
18	13/06/2015	15:30:59	56,850	-35,370	BFZ- downstream 1	VMP
19	13/06/2015	19:25:39	56,749	-35,468	BFZ- downstream 1	VMP
20	13/06/2015	22:52:49	56,599	-35,629	BFZ- downstream 1 South	Provor DO
21	14/06/2015	06:12:09	56,639	-36,229	South	VMP
22	14/06/2015	10:26:27	56,687	-36,829	South	VMP
23	14/06/2015	14:53:37	56,727	-37,532	South	VMP Arvor-2DO
24	14/06/2015	19:44:13	56,770	-38,187	South	
25	15/06/2015	13:20:35	59,362	-36,399	Ovide	SVP
26	15/06/2015	18:01:21	59,299	-35,763	Ovide	
26	15/06/2015	20:25:16	59,299	-35,760	Ovide	VMP
27	15/06/2015	22:48:45	59,232	-35,116	Ovide	No bottles
no CTD	16/06/2015	09:25:00	59.091	-33,259		Mooring IRW
28	16/06/2015	14:16:46	59,164	-34,491	Ovide	
29	16/06/2015	18:15:07	59,102	-33,832	Ovide	SVP
30	16/06/2015	21:49:11	59,039	-33,189	Ovide	
30	16/06/2015	21:49:18	59,038	-33,189	Ovide	
31	17/06/2015	01:42:05	58,972	-32,548	Ovide	
32	17/06/2015	05:21:05	58,910	-31,911	Ovide	
33	17/06/2015	08:59:22	58,845	-31,269	Ovide	Same as Station 83
34	17/06/2015	12:11:24	58,727	-30,694	Ovide	
35	17/06/2015	14:58:26	58,550	-30,365	Ovide	
36	17/06/2015	18:57:39	58,410	-30,101	Ovide	
37	17/06/2015	22:19:22	58,208	-29,722	Ovide	
38	18/06/2015	01:59:34	57,970	-29,274	Ovide	Provor-DO
39	18/06/2015	05:12:47	58,092	-29,394		Mooring ICM
40	18/06/2015	13:42:45	57,586	-28,448		Mooring ICE, Provor DO, VMP
41	18/06/2015	19:27:42	57,675	-28,726	Ovide	
42	18/06/2015	23:43:45	57,379	-28,172	Ovide	

43	19/06/2015	03:46:32	57,150	-27,749	Ovide	
44	19/06/2015	08:03:26	56,930	-27,335	Ovide	
45	20/06/2015	08:52:23	60,300	-20,997	North	VMP
46	20/06/2015	13:17:57	60,570	-21,359	North	VMP
47	20/06/2015	17:29:26	60,840	-21,720	North	VMP, Provor DO
48	20/06/2015	21:29:38	61,110	-22,080	North	VMP
49	21/06/2015	01:47:49	61,380	-22,438	North	VMP
50	21/06/2015	05:43:38	61,650	-22,801	North	VMP
51	21/06/2015	09:32:18	61,919	-23,160	North	VMP
52	21/06/2015	13:15:27	62,189	-23,521	North	VMP
53	21/06/2015	16:43:13	62,460	-23,878	North	VMP
54	21/06/2015	20:18:40	62,730	-24,241	North	VMP
55	21/06/2015	23:16:08	63,000	-24,750	North	Same as station 68
56	22/06/2015	01:32:45	62,998	-25,363	North	VMP
57	22/06/2015	04:45:36	63,000	-26,127	North	VMP
58	22/06/2015	08:16:40	63,001	-26,892	North	VMP
59	22/06/2015	11:47:57	63,000	-27,656	North	VMP
60	22/06/2015	15:27:09	63,000	-28,419	North	VMP
61	22/06/2015	19:32:30	63,000	-29,182	North	VMP
62	22/06/2015	23:20:36	63,000	-29,946	North	VMP
63	23/06/2015	03:15:59	63,000	-30,709	North	VMP, SVP
64	23/06/2015	07:22:40	63,000	-31,473	North	VMP
65	23/06/2015	11:34:55	63,000	-32,237	North	VMP
66	23/06/2015	15:54:44	63,001	-33,000	North	VMP
67	24/06/2015	17:15:53	63,417	-23,917	Ridge	
68	24/06/2015	22:34:46	63,000	-24,752	Ridge	Same as Station 55
68	24/06/2015	22:34:51	63,000	-24,752	Ridge	
69	25/06/2015	01:04:19	62,699	-25,237	Ridge	
70	25/06/2015	03:50:50	62,401	-25,721	Ridge	
71	25/06/2015	06:46:10	62,099	-26,205	Ridge	
72	25/06/2015	09:39:44	61,800	-26,691	Ridge	
73	25/06/2015	12:47:58	61,500	-27,176	Ridge	
74	25/06/2015	15:34:53	61,200	-27,659	Ridge	
75	26/06/2015	12:02:17	60,903	-28,119	Ridge	
76	26/06/2015	14:51:47	60,600	-28,579	Ridge	
77	26/06/2015	17:54:57	60,300	-29,037	Ridge	SVP
78	26/06/2015	20:39:58	60,050	-29,422	Ridge	
79	26/06/2015	23:27:37	59,800	-29,805	Ridge	
80	27/06/2015	02:18:20	59,550	-30,187	Ridge	
81	27/06/2015	05:21:05	59,301	-30,570	Ridge	
82	27/06/2015	08:31:32	59,050	-30,953	Ridge	VMP
83	27/06/2015	11:33:47	58,844	-31,268	Ridge	Same as Station 33
84	27/06/2015	17:08:35	58,429	-30,025		Mooring ICW, VMP
no CTD	27/06/2015	23:21:00	58,547	-30,183		ASFAR 1
85	28/06/2015	06:40:28	58,982	-32,160		Mooring IRM, VMP
no CTD	28/06/2015	10:18:00	58,970	-32,097		ASFAR 2
86	28/06/2015	13:21:38	58,924	-31,561		Mooring IRE, VMP
87	28/06/2015	22:09:52	58,772	-30,676		Mooring RRT, VMP
88	29/06/2015	03:20:57	58,530	-31,421	Ridge	
89	29/06/2015	06:57:03	58,199	-31,751	Ridge	
90	29/06/2015	10:29:50	57,880	-32,119	Ridge	VMP
91	29/06/2015	14:02:47	57,580	-32,477	Ridge	VMP
92	29/06/2015	17:51:20	57,310	-32,821	Ridge	VMP
93	29/06/2015	21:46:35	56,950	-33,303	Ridge	BFZ North channel
94	29/06/2015	23:52:07	56,910	-33,354	Ridge	BFZ North channel, VMP

95	30/06/2015	02:15:34	56,850	-33,433	Ridge	BFZ North channel
96	30/06/2015	04:14:32	56,780	-33,524	Ridge	BFZ South channel
97	30/06/2015	05:51:26	56,768	-33,539	Ridge	BFZ South channel
98	30/06/2015	08:36:37	56,753	-33,559	Ridge	BFZ South channel, VMP
99	30/06/2015	11:01:54	56,725	-33,594	Ridge	BFZ South channel
100	30/06/2015	13:33:58	56,710	-33,616	Ridge	BFZ South channel
101	30/06/2015	16:10:35	56,702	-33,627	Ridge	BFZ South channel
102	30/06/2015	20:02:24	56,825	-34,194	BFZ Downstream 2	
103	30/06/2015	21:46:58	56,799	-34,169	BFZ Downstream 2	
104	30/06/2015	23:52:25	56,783	-34,154	BFZ Downstream 2	VMP
105	01/07/2015	03:10:12	56,773	-34,145	BFZ Downstream 2	
106	01/07/2015	05:13:43	56,749	-34,123	BFZ Downstream 2	
107	01/07/2015	06:59:50	56,735	-34,110	BFZ Downstream 2	
108	01/07/2015	11:48:11	56,400	-34,021	Ridge	VMP, same as Station 9
109	01/07/2015	15:43:57	56,050	-34,286	Ridge	SVP
110	01/07/2015	18:53:47	55,800	-34,474	Ridge	VMP
111	01/07/2015	23:38:45	55,350	-34,814	Ridge	VMP
112	02/07/2015	03:57:50	55,050	-35,001	Ridge	VMP
113	02/07/2015	08:04:09	54,649	-35,080	Ridge	
114	02/07/2015	11:11:46	54,249	-35,080	Ridge	
115	02/07/2015	14:48:31	53,949	-35,080	Ridge	
116	02/07/2015	19:03:49	53,549	-35,079	Ridge	VMP
117	02/07/2015	23:04:11	53,150	-35,080	Ridge	
118	03/07/2015	06:05:51	52,840	-35,080	Ridge	CGFZ
119	03/07/2015	08:38:30	52,745	-35,080	Ridge	CGFZ
120	03/07/2015	10:59:34	52,730	-35,079	Ridge	CGFZ, 3 Deep Arvor
121	03/07/2015	14:35:00	52,701	-35,080	Ridge	CGFZ, VMP
122	03/07/2015	18:33:09	52,664	-35,080	Ridge	CGFZ, SVP
123	03/07/2015	21:40:43	52,631	-35,080	Ridge	CGFZ
124	04/07/2015	00:35:23	52,449	-35,079	Ridge	
125	04/07/2015	04:10:19	52,350	-35,080	Ridge	VMP
126	04/07/2015	08:07:49	52,260	-35,080	Ridge	
127	04/07/2015	13:16:55	51,900	-35,080	Ridge	VMP
128	04/07/2015	18:15:09	51,550	-35,081	Ridge	
129	04/07/2015	23:51:13	51,060	-35,080	Ridge	VMP
130	05/07/2015	05:40:18	50,750	-35,080	Ridge	VMP
131	05/07/2015	11:40:55	50,348	-35,079	Ridge	
132	05/07/2015	16:51:45	49,950	-35,080	Ridge	

2.3.1. CTD and moorings

The map below shows the positions of CTD stations ● and moorings ● .

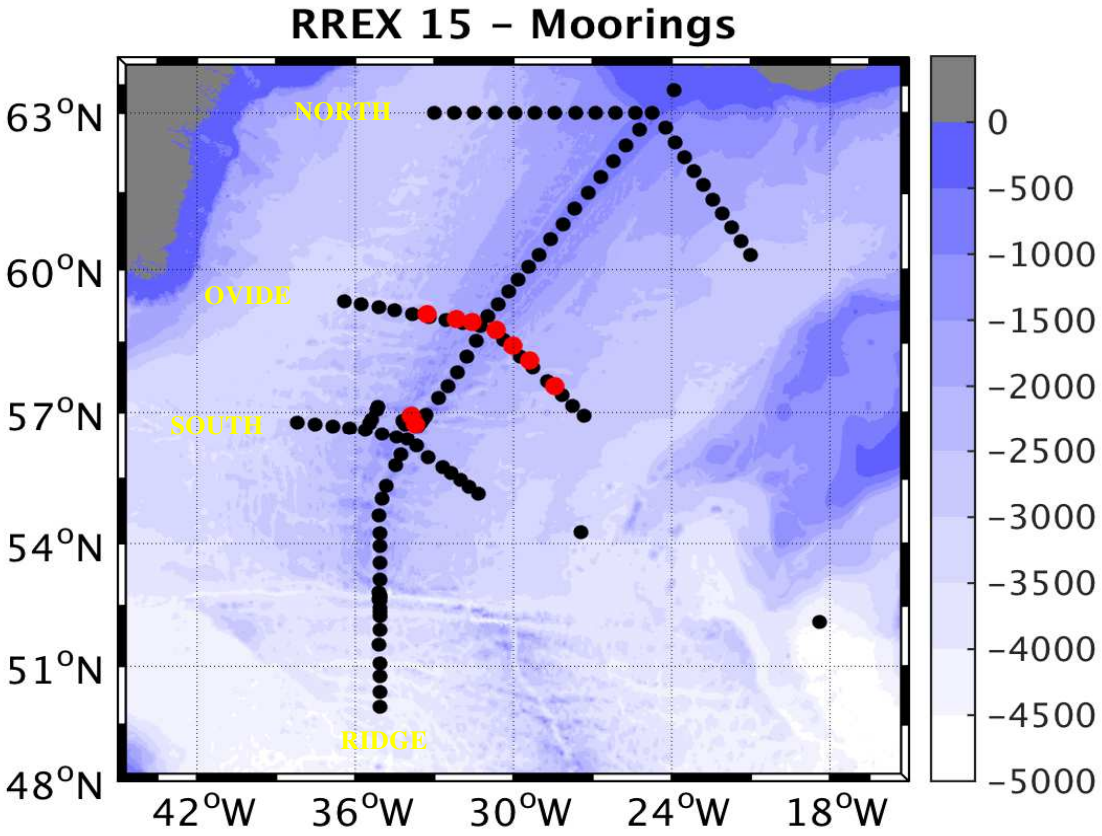


Figure 4: RREX 2015, CTD and moorings map

We realized four CTD sections: South, Ovide, North, Ridge. We deployed nine moorings, two US moorings (PI A. Bower) in the Bight Fracture Zone nearby the South section and seven LOPS moorings along the Ovide section.

2.3.2. ASFAR (Autonomous System For Argos float Release)

The ASFAR frame is used to release Argo floats at predetermined dates. Each frame is equipped with 4 Arvor floats (see figure 5).

Figure 5: ASFAR before deployment

During the cruise, two ASFAR (1 and 2) were deployed.
The map hereafter shows the position of the two Asfar frames (●), on each sides of the Reykjanes ridge.

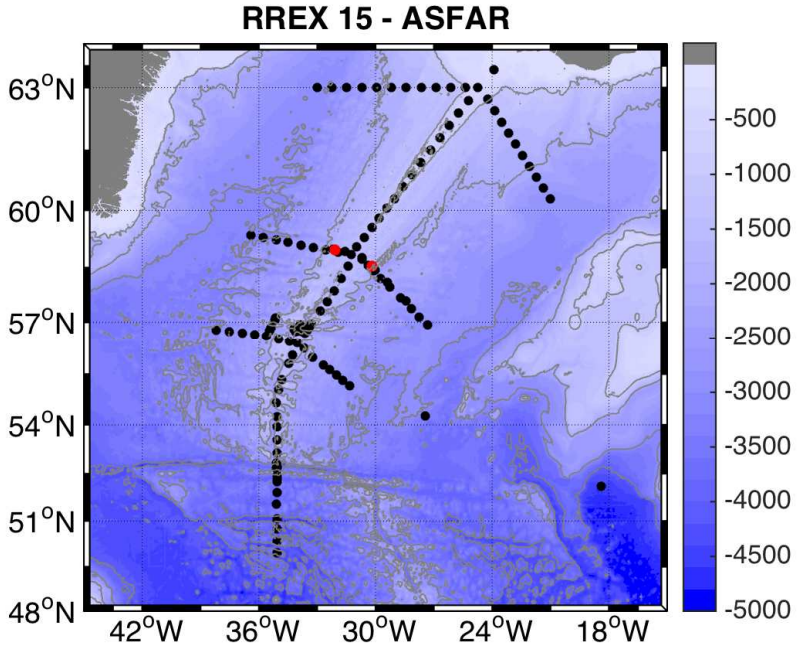


Figure 6: ASFAR map

2.3.3. Argo floats

The figure 7 and the table below show and detail the float deployment positions (4 Deep-Arvor, 5 Provor-DO, 1 Arvor).

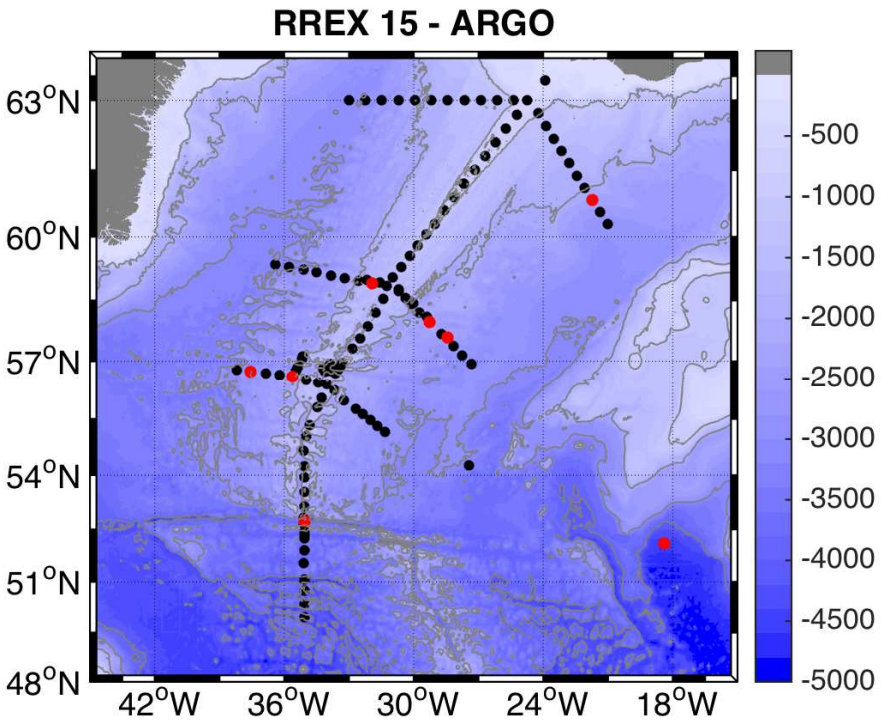


Figure 7: Positions of float deployment

WMO	Date	Hour	Latitude	Longitude	Comments
6901757	08/06/2015	19:14:13	52,109	-18,410	DEEP-ARVOR OIN-15-ARD-02
6901750	14/06/2015	00:28:06	56,599	-35,621	PROVOR OIN-014-DO-S31-01
6901628	14/06/2015	17:45:25	56,730	-37,545	ARVOR-2DO 014-ARI-2DO-02
6901751	17/06/2015	06:57:11	58,910	-31,915	PROVOR OIN-014-DO-S31-02
6901594	18/06/2015	03:56:35	57,971	-29,277	PROVOR OIN-O13-DO-S31-03
6901595	18/06/2015	18:20:03	57,589	-28,434	PROVOR OIN-013-DO-S31-04
6901752	20/06/2015	19:35:42	60,833	-21,713	PROVOR OIN-014-DO-S31-03
6901758	03/07/2015	13:31:19	52,731	-35,080	DEEP-ARVOR OIN-15-ARD-03
6901759	03/07/2015	13:32:38	52,731	-35,080	DEEP-ARVOR OIN-15-ARD-04
6901602	03/07/2015	13:33:45	52,732	-35,081	DEEP-ARVOR OIN-15-ARD-06

2.3.4. VMP profiles

The VMP (Vertical Microstructure Profiler) is a full ocean-depth profiling system for turbulence observations through microstructure measurements.
During the cruise, 58 VMP profiles were performed. Below is the list of the positions:

Profile number	Date dd/mm/yyyy	Hour (UTC)	Latitude	Longitude	Station	Comments
0	08/06/2015	10:37:11	51,9989439	-17,9958383		Surface test sensor
1	11/06/2015	05:52:00	55,6233277	-32,3362687	5	
2	11/06/2015	09:56:02	55,7768853	-32,6701774	6	
3	11/06/2015	14:48:08	55,9972211	-33,2077084	7	
4	12/06/2015	02:25:58	56,7375285	-33,7163551	10	
5	12/06/2015	08:47:18	56,9408045	-33,846306	11	
6	12/06/2015	14:23:19	56,7274167	-33,7645646	12	
7	12/06/2015	17:33:17	56,7614826	-33,9248703	13	
8	13/06/2015	07:52:13	57,1272325	-35,116687	16	
9	13/06/2015	11:29:50	57,0618146	-35,1811355	17	
10	13/06/2015	15:22:38	56,8481609	-35,3706026	18	
11	13/06/2015	19:18:22	56,7491379	-35,46784	19	
12	14/06/2015	06:04:26	56,6381814	-36,2314049	21	
13	14/06/2015	10:13:33	56,6890661	-36,8317553	22	
14	14/06/2015	14:42:43	56,7289344	-37,5323531	23	
15	15/06/2015	17:51:37	59,2964653	-35,7635989	26	
16	18/06/2015	13:31:09	57,585598	-28,4417767	40	
17	20/06/2015	08:40:38	60,2996559	-20,9927685	45	
18	20/06/2015	13:06:35	60,5702207	-21,3612355	46	
19	20/06/2015	17:19:14	60,8378142	-21,7160972	47	
20	20/06/2015	21:25:39	61,1096144	-22,0793352	48	VMP reached the bottom
21	21/06/2015	01:40:07	61,3787461	-22,4382119	48	
22	21/06/2015	05:32:16	61,6500116	-22,8063847	50	
23	21/06/2015	09:25:00	61,919591	-23,1547699	51	
24	21/06/2015	13:05:17	62,1919701	-23,5201155	53	
25	21/06/2015	16:33:18	62,457582	-23,8765713	53	
26	21/06/2015	20:08:25	62,7281018	-24,2366737	54	
27	22/06/2015	01:22:06	63,0025462	-25,3594874	56	
28	22/06/2015	04:32:20	63,0015726	-26,1246375	57	
29	22/06/2015	08:05:14	63,0028245	-26,8930888	58	
30	22/06/2015	11:39:12	62,9996774	-27,6473081	59	
31	22/06/2015	15:19:03	63,0016163	-28,4165009	60	
32	22/06/2015	19:27:20	63,0011243	-29,181761	61	
33	22/06/2015	23:13:05	63,0018619	-29,9446417	62	

34	23/06/2015	03:04:55	62,9984112	-30,7051868	63	
35	23/06/2015	07:16:48	63,0008758	-31,4746586	64	
36	23/06/2015	11:26:38	62,9976973	-32,2383039	65	
37	23/06/2015	15:46:54	63,0016334	-33,000348	66	
38	27/06/2015	08:23:34	59,0497031	-30,9499747	82	
39	27/06/2015	17:02:26	58,4278336	-30,0258096	84	
40	28/06/2015	06:35:40	58,9820079	-32,159422	85	
41	28/06/2015	13:13:43	58,9233408	-31,558132	86	
42	28/06/2015	22:01:06	58,7722649	-30,6750932	87	
43	29/06/2015	10:23:59	57,8794064	-32,1188541	90	
44	29/06/2015	13:54:44	57,5798356	-32,4790804	91	
45	29/06/2015	17:42:18	57,3106801	-32,8210555	92	
46	29/06/2015	23:39:38	56,9094002	-33,3556421	94	
47	30/06/2015	08:24:43	56,7544931	-33,557929	98	
48	30/06/2015	23:43:33	56,7818208	-34,1547013	104	
49	01/07/2015	11:40:08	56,399813	-34,0224694	108	
50	01/07/2015	18:48:48	55,7988664	-34,472446	110	
51	01/07/2015	23:32:42	55,3487313	-34,8140908	111	
52	02/07/2015	03:48:10	55,0485167	-34,9977865	112	
53	02/07/2015	18:54:19	53,551627	-35,0782333	116	
54	03/07/2015	14:22:27	52,7008021	-35,077666	121	
55	04/07/2015	03:56:53	52,3543601	-35,0806949	125	
56	04/07/2015	13:06:50	51,9009238	-35,0787022	127	
57	04/07/2015	23:40:55	51,0611748	-35,0783738	129	
58	05/07/2015	05:31:24	50,752081	-35,0801339	130	

2.3.5. Weather buoys

During the cruise, 7 weather buoys (SVP) provided by Meteo France were launched. The map shows the positions and the table below provides deployment positions and dates.

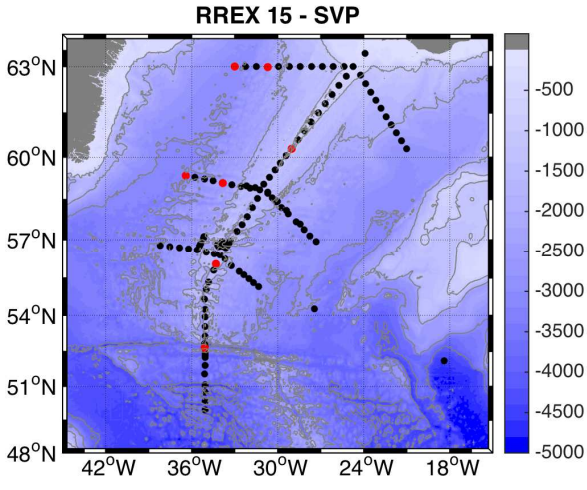


Figure 8: Map of SVP deployment

IMEI	Date (jj/mm/yy)	Heure (hh:mm UTC)	Latitude	Longitude
SVP without number	15/06/15	15:48	59° 21.681N	36° 23.840 W
3002 34011 027150	16/06/15	18:59	59° 06.053 N	33° 49.897 W
3002 34011 463700	23/06/15	05:18	62° 59.102 N	30° 41.156 W
3002 34011 795230	23/06/15	18:25	63° 00.568 N	32° 59.272 W
3002 34010822640	26/06/15	18:52	60° 18.027 N	29° 02.408 W
3002 34011 846540	01/07/15	17:12	56° 03.095 N	34° 17.226 W
SVP (black)	03/07/15	21:08	52° 39.05 N	35° 04.86°W

2.4. Description of cruise operations

The cruise started from Brest the 6th of June at 06h UTC (note that all times in this document are reported in UTC). The ship arrived the 8th of June at 10h13 by 18 °W and 52 °N for the CTD test station. During this station, we lost the CTD signal at 600 m. By changing all the CTD cables we resolved the problem and a new test station (station #0) was successfully realized.

The bottles were closed during the upcast along the water column to have a calibrated profile for the float (Deep Arvor) launched after this station.

Figure 9: Deep Arvor float

Figure 10: VMP recovery

The VMP was also successfuly tested.

The station 1 was realized in the middle of the Island basin, on Thursday the 9th of June at 01h34 by 27.45 °W and 54.26 °N. Half of the bottles was closed at the bottom to verify their sealing.
During station 0 and 1 the oxygen sensor was very noisy and the LADCP 300 kHz signal was low. We changed the oxygen sensor and the LADCP, which resolved the LADCP issue but not the oxygen noise issue.

XBT (T7 or T5) were launched every two hours between station 0 and 2.

The South section began at station 2, the 10th of June at 18h28 by 31.33 °W and 55.15 °N. The South section finished at station 24, which was realized the 14th of June at 20h38 by 38.18 °W and 56.77 °N. During this section, the VMP was deployed 14 times and two Argo floats were launched, one PROVOR DO at station 20 (14th of June at 00h28 by 35.62 °W and 56.60 °N) and one ARVOR with 2 oxygen sensor at station 23 (14th of June at 17h45 by 37.54 °W and 56.73 °N).

The section was interrupted twice:

- to deploy the two WHOI moorings in the Bight Fracture Zone (BFZ South, 12th of June at 06h33 by 33.7 °W and 56.73 °N; BFZ North, 12th of June at 12h45 by 33.85 °W and 56.93 °N). After the moorings deployment, two more CTD were realized downstream of the south channel (stations #12 and #13, VMP #6 and #7).

Figure 11: BFZ mooring deployment

- to do a CTD section downstream of the Bight fracture zone (st 16 to 20).

The South section consists of CTD stations: 2-9; 12-15; 20-24.

After station 24, we began the transit to the Ovide section that we reached the 15th of June at 13h20. This section was composed with stations 25 to 44. This last station was realized the 19th of June at 10h05 by 27.33 °W and 56.93 °N.
Along this section, only 2 VMP profiles were realized because of bad weather, we also launched two SVP buoys and three Provor floats.
During station 27 we lost the CTD signal during the upcast because the slip ring of the CTD winch was broken.
Because of bad weather, we deployed only three moorings (IRW, ICM and ICE). The mooring IRW was deployed after station 27, the 16th of June at 09h25 by 33.25 °W and 59.09 °N. The moorings ICM and ICE were deployed after station 38, the 18th of June at 05h12 by 29.39 °W and 58.09 °N and at 13h42 by 28.45 °W and 57.59 °N, respectively. A CTD profile was realized before the deployment of moorings ICM and ICE (but not IRW).

The Ovide section is composed with CTD stations: 25-38; 41:44.

The 19th of June at 10h00 we began the transit to the North section. We arrived the 20th of June at 08h52. During the transit, XBT were launched every two hours. The first station of the North section is the CTD station 45 by 21 °W and 60.3 °N, the last was station 66, which was realized the 23th of June at 18h04 by 33 °W and 63 °N.

The weather was good when realizing this section, so 21 VMP profiles were performed during the North section and 1 Argo float and 2 SVP were also deployed.

The North section is composed with CTD stations: 45-66.

After station 66, we went to the most northern point of the cruise, which was reached the 24th of June at 17h15.
We began the Ridge section with station 67. During this section, 21 VMP profiles were performed (profiles 38 to 58), three deep Avor were launched as well as three SVP.
The section was interrupted by various operations.
After CTD station 83, we deployed the 4 last moorings (ICW, IRM, IRE, RRT) and the 2 Asfar frames. Before each mooring deployment, we realized a CTD station (stations 84 to 87) and 4 VMP profiles (39 to 42).
The second break was to realize a section downstream of Bight Fracture Zone (stations 102 to 107).

Figure 12: Beginning of RREX mooring deployment

The Ridge section is composed with CTD stations: 67-83; 88-101; 108-132.

3. CTD-O_2 measurement calibration

3.1. CTD-O_2 data acquisition

For hydrology acquisition, we used our LOPS frame with 28 bottles of 8 liters and a SBE911+ CTD. The frame is also equipped with 2 LADCP 300 kHZ and electronic reversing sensors.

Figure 13: LOPS CTD frame

3.1.1. Technical summary

The same Seabird 911+ CTD probe (s/n. 813) was used throughout the cruise. It was equipped with two sets of T, C, and O2 sensors. We found also on the frame 2 LADCP and 4 SIS reversing sensors.

The CTD sensors used are as follows:

	Primary sensors	Secondary sensors
Temperature (SBE3+)	s/n 2911	s/n 4594
Conductivity (SBE4c)	s/n 3194	s/n 3166
Oxygen (SBE43)	s/n 1402	s/n 530 (st 0 à 1) s/n 526 (st 2 à 132)

Electronics mounted on the LOPS frame:

PASH 6000 Rosette, top	s/n 461	PASH 6000 Rosette, bottom	s/n 462
IXSEA Pinger	s/n 530	Benthos Altimeter PSA-916	s/n 47741
Downward-looking ADCP:	RDI 300 kHz WorkHorse (s/n 12492)		
Upward-looking ADCP:	RDI 300 kHz WorkHorse (s/n 2002)		

SIS sensors	BT3	BT5
reversing pressure meter	s/n 6660	s/n 6661
reversing thermometer	s/n 1726	s/n 1750

The CTD casts start with a round trip at a depth of 30 m to remove the air bubbles in the 2 circuits of the sensors. The CTD profile then begins from the surface to a distance of 15 meters from the bottom. At each cast, the electro-mechanical cable is unwound and wound at a speed of 1 meter per second (0.5 m/s for the first 100 meters).

The downcast of the probe is monitored on a screen with the Sepia software that traces the echoes of the pinger mounted on the frame, allowing a continuous positioning of the probe relative to the bottom. The final bottom approach is performed using the Benthos altimeter, as soon as it has 'latched' the bottom at a distance of 30-50 m.

During the upcast, the frame is stopped at predefined levels of closure of the 28 sampling bottles.

In addition to these instruments, two ADCP (Acoustic Doppler Current Profiler) 300 kHz WorkHorse are mounted on the frame to obtain vertical profiles of current velocity, a downward-looking (LOPS s/n 12492, master) and an upward-looking (LOPS s/n 2002, slave).

Figure 14: Upper LADCP on CTD frame

3.1.2. Technical problems during the cruise

08/06: Test station: we lost the CTD signal (s/n 813) after several hundred meters downcast (600 m). Another profile with only the CTD is realized without loosing the signal,so the problem didn't come from termination or electro-mechanichal cable.
By changing all the CTD cables, we resolved the problem.

10/06: During station 0 to station 1, the oxygen signal on secondary circuit was very noisy.
We changed the oxygen sensor after station 1, s/n 526 replaced s/n 530 without improvement.
After station 7 we changed the CTD pump on secondary circuit to resolve the problem.

15/06: We lost the CTD signal during the upcast of the station 27 (2248m). The slip ring of the winch was broken.

3.1.3. Data processing

The CTD-O_2 sensor signals are transmitted to the LOPS's Hydrology acquisition system. This system is designed to run on a PC running Windows 7 for acquisition, visualization and preprocessing with the manufacturer's software (SBE seasave).

This system allows the real time visualization of the different parameters measured and calculated on the profiles, while controlling the quality of the signal transmitted by the probe. All of the data transmitted by the probe, at the rate of 24 cycles per second, is saved to disk.

On board, the probe data were pre-calibrated with Seabird postprocessing software and the LOPS calibration suite developed in Matlab (CADHYAC).

3.2. Sampling at the sea

The LOPS CTD frame have 28 bottles of 8 liters when the frame is equipped with two LADCP, 32 otherwise.

The bottles are closed during the upcast of the probe after stopping at the sampling levels. We waited 30 seconds before closing the bottle and the CTD signal was recorded during 8 seconds for generate bottles files. These levels are distributed over the full height of the profile in order to sample all the water masses and the standard levels.

Figure 15 Sampling after CTD profile

As soon as they reach the surface, the samples were taken from each bottle for the numerous analyses performed on board, in the order recommended by the WOCE instructions. The bottles were sampled according to their chronology from 3 to 30.
The salinity and oxygen samples will be used to calibrate the salinity and dissolved oxygen CTD profiles.

During the cruise, 2220 bottles were closed, 2202 salinity analyzes and 2154 oxygen analyzes were performed.

To estimate the error of the analytical methods, replicates were conducted at some casts by triggering the closure of two bottles at the same sampling level. We thus have 109 salinity and 90 oxygen replicates.

The plot hereafter (fig 16) shows the sampling levels for each CTD profile section by section.

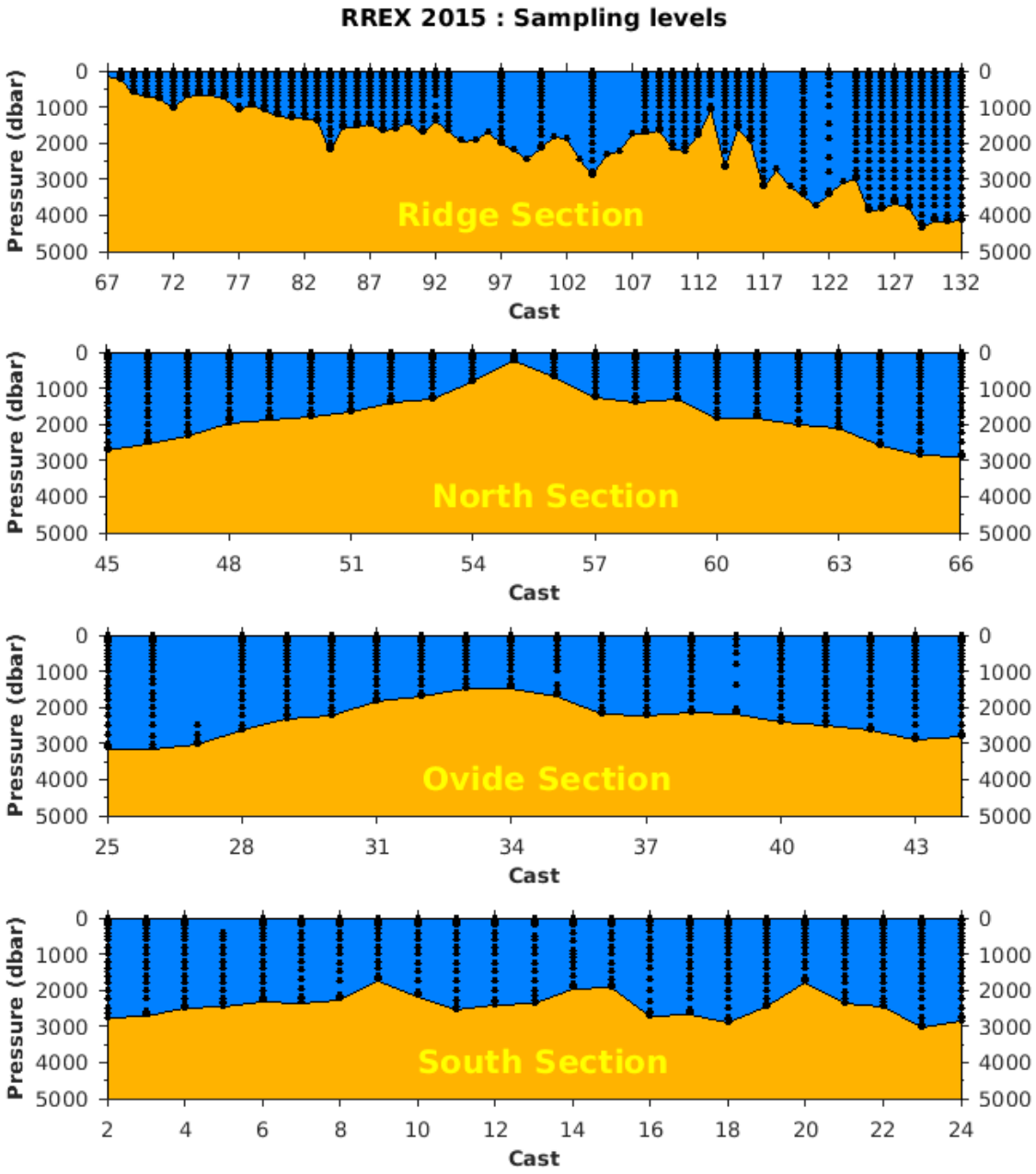


Figure 16: Synoptic chart indicating the sampling levels for CTD, (2220 bottles closed)

3.3. Analysis of salinity and dissolved oxygen samples

All the salinity and dissolved oxygen samples are analyzed on board, during the cruise, in the LOPS's chemical analysis container, which has Metrohm 798 titrinos and Guildline Portasal salinometers. Air conditioning allows regulation of the room temperature (20 °C at ± 0.5 °C).
These analysis will serve to adjust CTD salinity and oxygen profiles.

Figure 17: Salinity analysis

The daily standardization of the measuring instruments (salinometers and tritrinos) was performed by Pierre Branellec, all salinity analyzes were performed by Charlène Feucher, and oxygen analyzes by Floriane Desprez de Gesincourt.

3.3.1. Standardization of salinometers

All salinity measurements taken during the RREX cruise were performed on the same Portasal salinometer (s/n: 71420).

This salinometer was standardized using a set of standard seawater bottles (IAPSO Standard Seawater): batch P156 (K15 = 0.99984, S = 34.994, to use before 23/07/2016). The standardization was verified every morning and after analysis of two casts (56 samples). The standardization results were recorded on salinity analysis sheets.
The salinometer was very stable throughout the cruise and the standardization was adjusted only rarely.

Figure 18: Standard seawater

3.3.2. Salinity analysis

The samples are collected after three successive rinses in 125 ml bottles, which water tightness is guaranteed by a rubber seal. As soon as the collection is finished, the samples are placed in the analysis container with a controlled temperature set to 20 °C (± 0.5 °C). The samples are analyzed 20 to 30 hours after collection to allow them to achieve a thermal equilibrium.

The salinity of the samples is determined according to the equation PSS 78 (UNESCO 1981). Throughout the cruise, the temperature of the thermostat bath is fixed at 21 °C.

For each sample, three successive rinses of the cell are performed before making three readings separated each time by a rinse.

During the cruise, we analyzed 2202 salinity samples.

Figure 19 shows the differences in salinity obtained on the replicates validated by the calibration. They were performed at sampling levels between the surface and the bottom and were collected from profile 0 to profile 132. The differences between two salinity measurements were studied for 109 validated replicates: figure 20 shows the histogram.

We observe that, in 60.6 % of the cases, the difference in salinity measured on the two bottles is less than 0.001 and in 100 % of the cases it is less than 0.003.
The standard deviation is 0.0012 for all validated replicates, and considering only the replicates performed at a pressure greater than 980 dbar, the standard deviation is 0.0013.

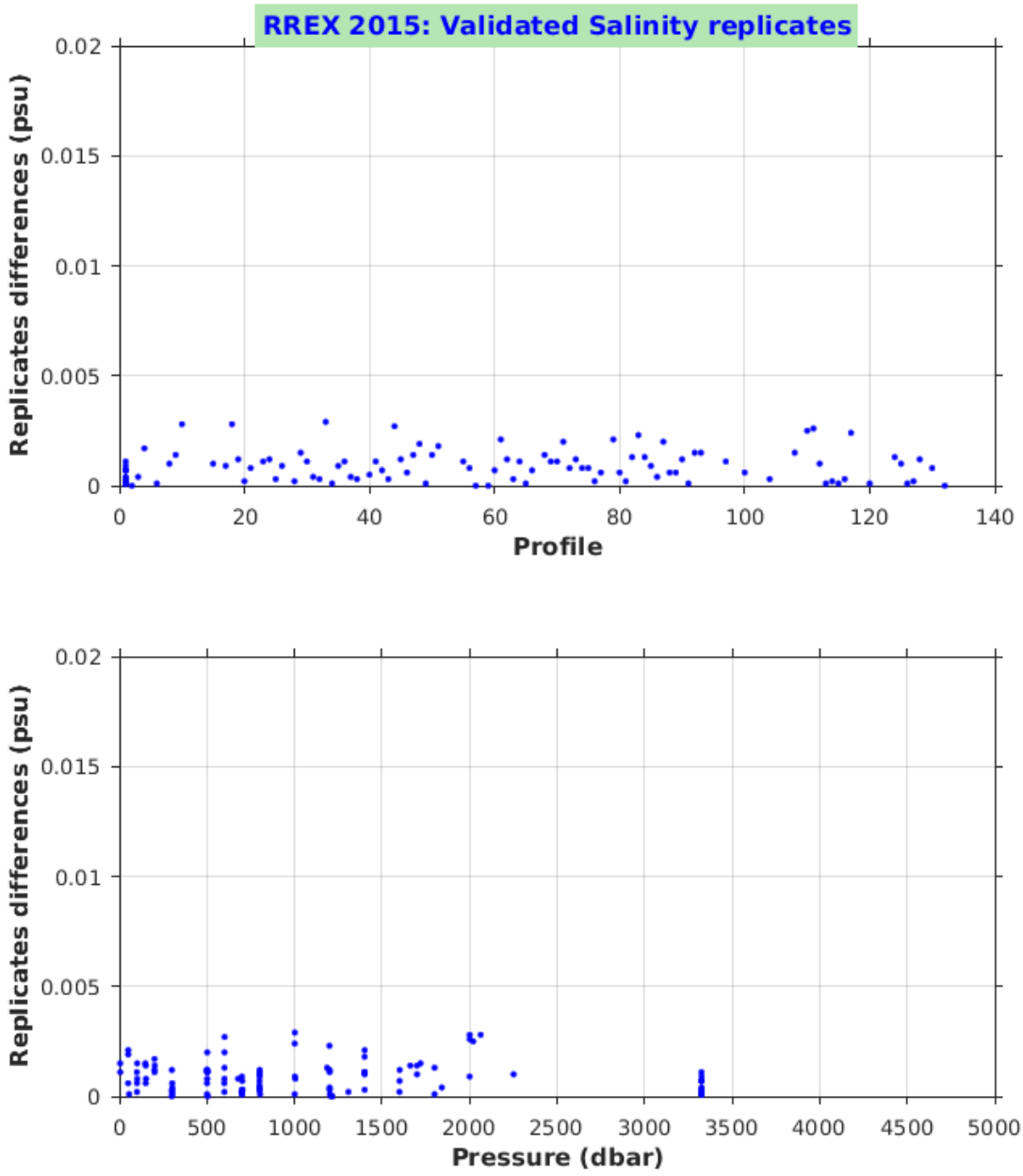


Figure 19: Differences in salinity between two bottles closed at the same level:
a) as a function of the profile number of the replicates,
b) as a function of the pressure at which the replicate was sampled.

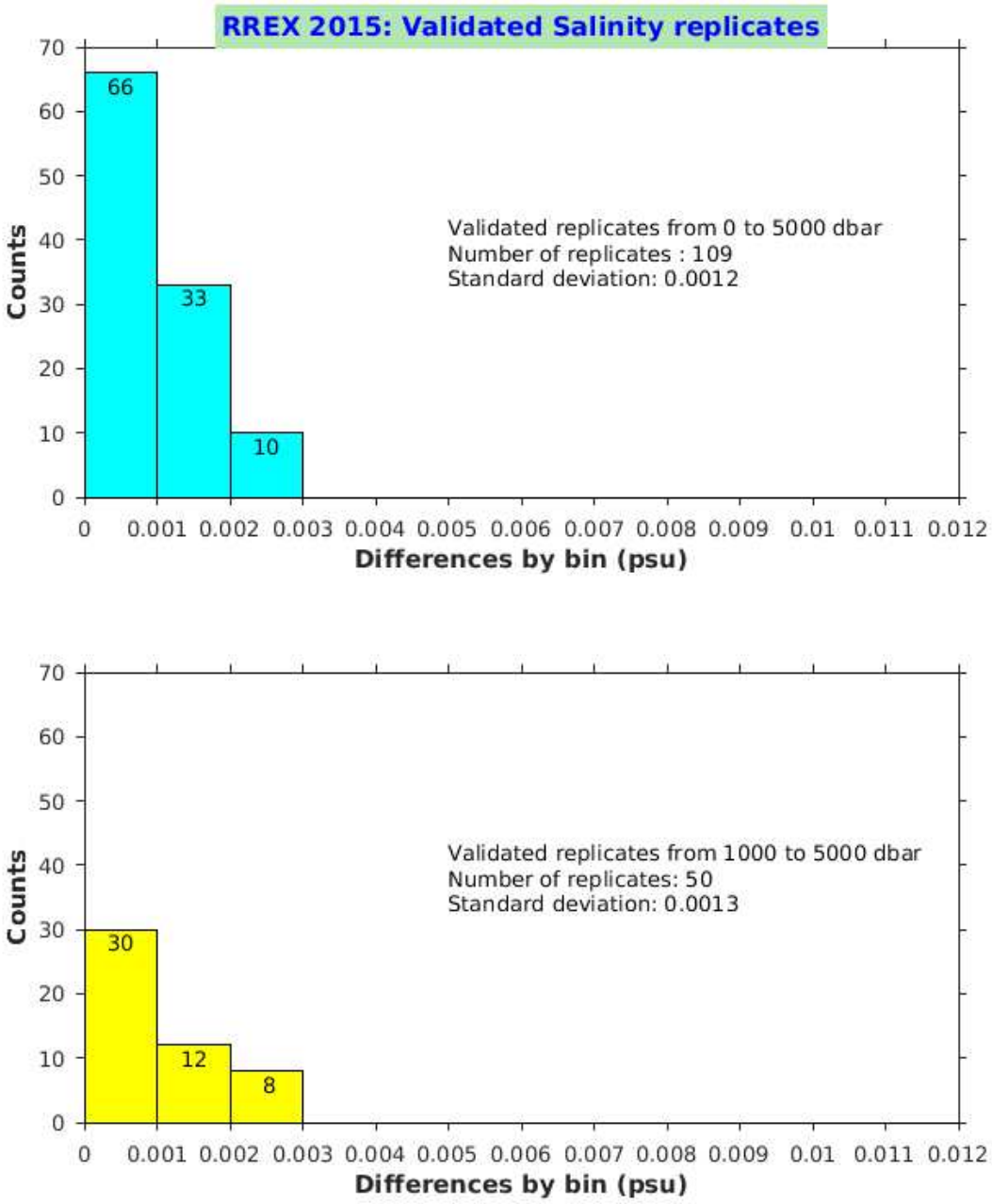


Figure 20: Histogram of the salinity differences on the replicates:
a) for the 109 validated replicates of the cruise,
b) for the 50 validated replicates sampled at a pressure greater than 980 dbar.

3.3.3. Dissolved oxygen

To analyze the dissolved oxygen, the samples are collected in 120 ml bottles with a plunger cap. After filling the bottle, the temperature of the sample is recorded during overflowing a volume of water three times equivalent of the bottle.
Two reagents ($MnCl_2$ and NaOH-NaI) are then added successively and the bottle is capped. Finally, the bottle is shaken for 30 seconds to capture the oxygen in the seawater in the precipitate. Once all the samples are taken, the bottles are turned over one by one to suspend the precipitate another time.

The samples are stored in the laboratory container at a temperature of 20 °C and analyzed within a period of 4 to 24 hours.

The operating conditions and the analysis method conform to the recommendations of WOCE (WOCE Operations Manual, 1991). After acidification in the sampling bottle, the liberated iodine is dosed with a solution of sodium thiosulphate which normality is of the order of 0.02 N. Its normality is determined daily, before the start of the analysis series, by comparison to a potassium iodate solution, which normality, obtained by weighing, is 0.020010.

The dosage is controlled by a 798 Metrohm titrino, a platinum titrode measures the reaction potential and a 20 ml burette delivers the sodium thiosulphate. The volume of thiosulphate necessary for the reduction of the iodine is subtracted from the automatic determination of the inflection point on the potential curve at equivalence.

During the cruise, we analyzed 2154 oxygen samples.

Figure 21 shows the differences obtained between the measurements performed on the 90 validated replicates and figures 22 and 23 show the histograms (ml/l and µmol/kg).
For all the replicates collected between the bottom and the surface, 56.7.% of the differences are less than 0.01 ml/l and 81.1 % are less than 0.02 ml/l for a standard deviation of 0.019 ml/l (0.81 µmol/kg). By eliminating the levels between the surface and 980 dbar, the standard deviation is 0.018 ml/l (0.81 µmol/kg).

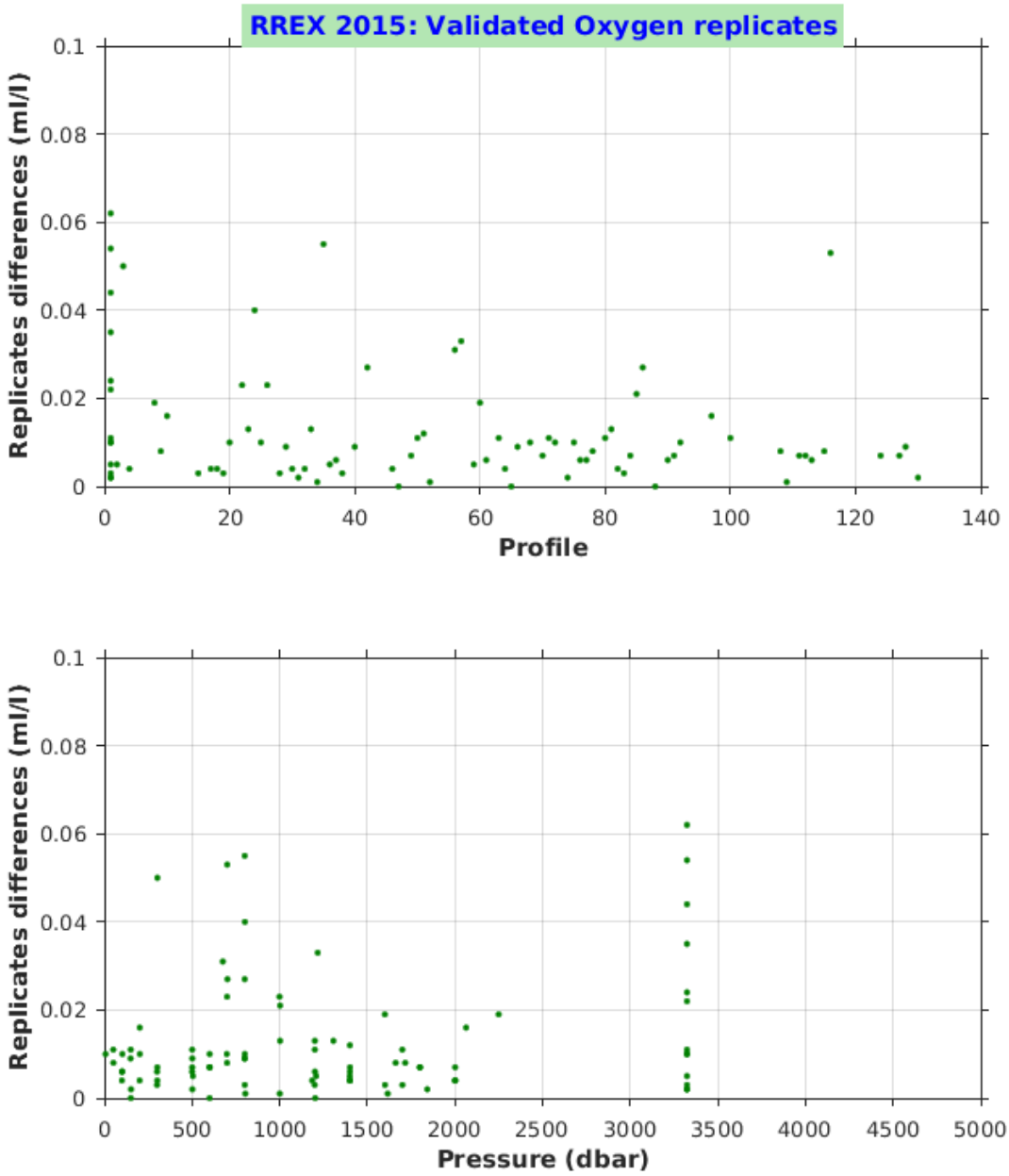


Figure 21: Differences in oxygen between two bottles closed at the same level:
a) as a function of the profile number of the replicate,
b) as a function of the pressure at which the replicate was sampled.

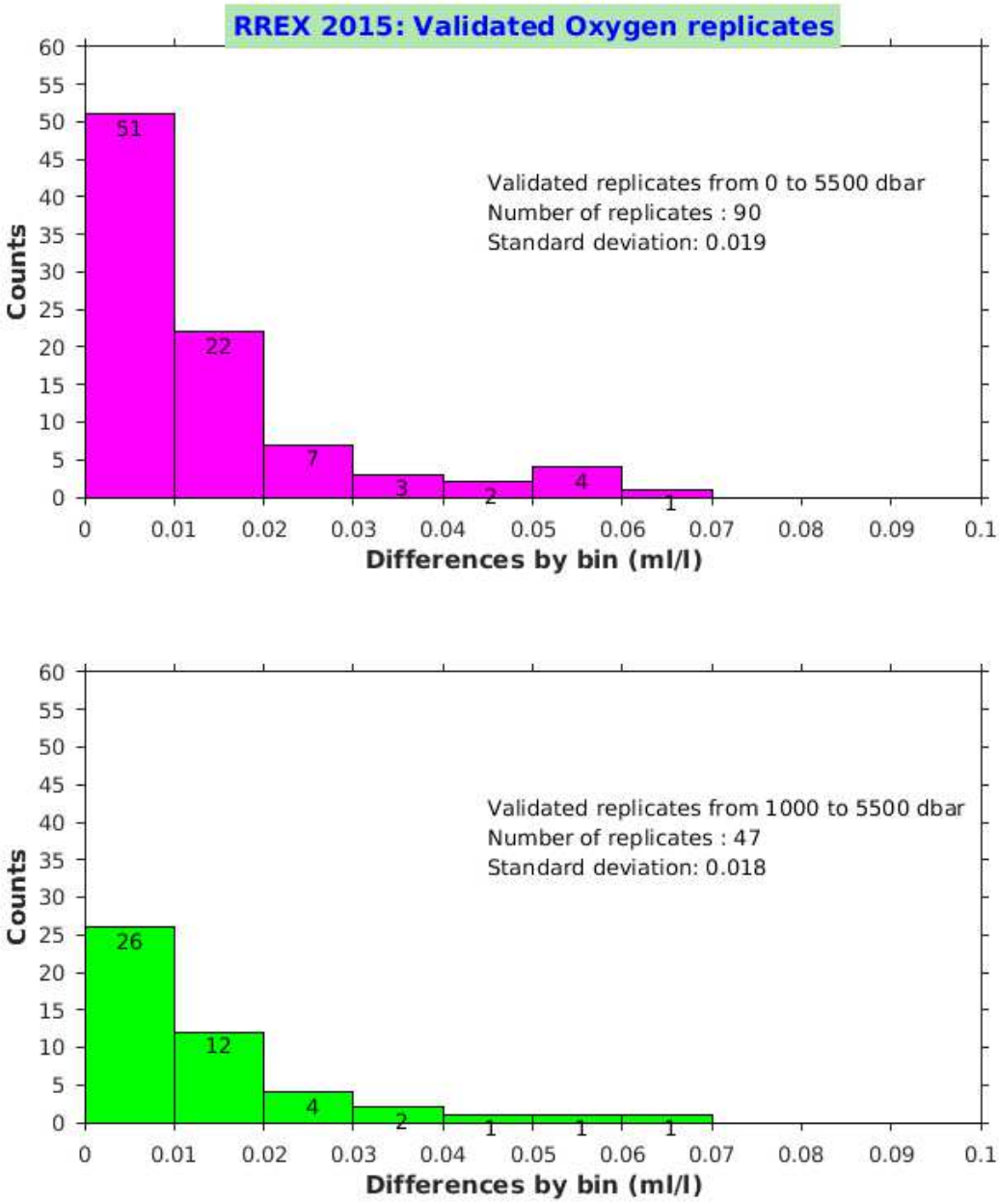


Figure 22: Histogram of the oxygen differences (ml/l) of the replicates:
a) for the 90 validated replicates of the cruise,
b) for the 47 validated replicates sampled at a pressure greater than 980 dbar.

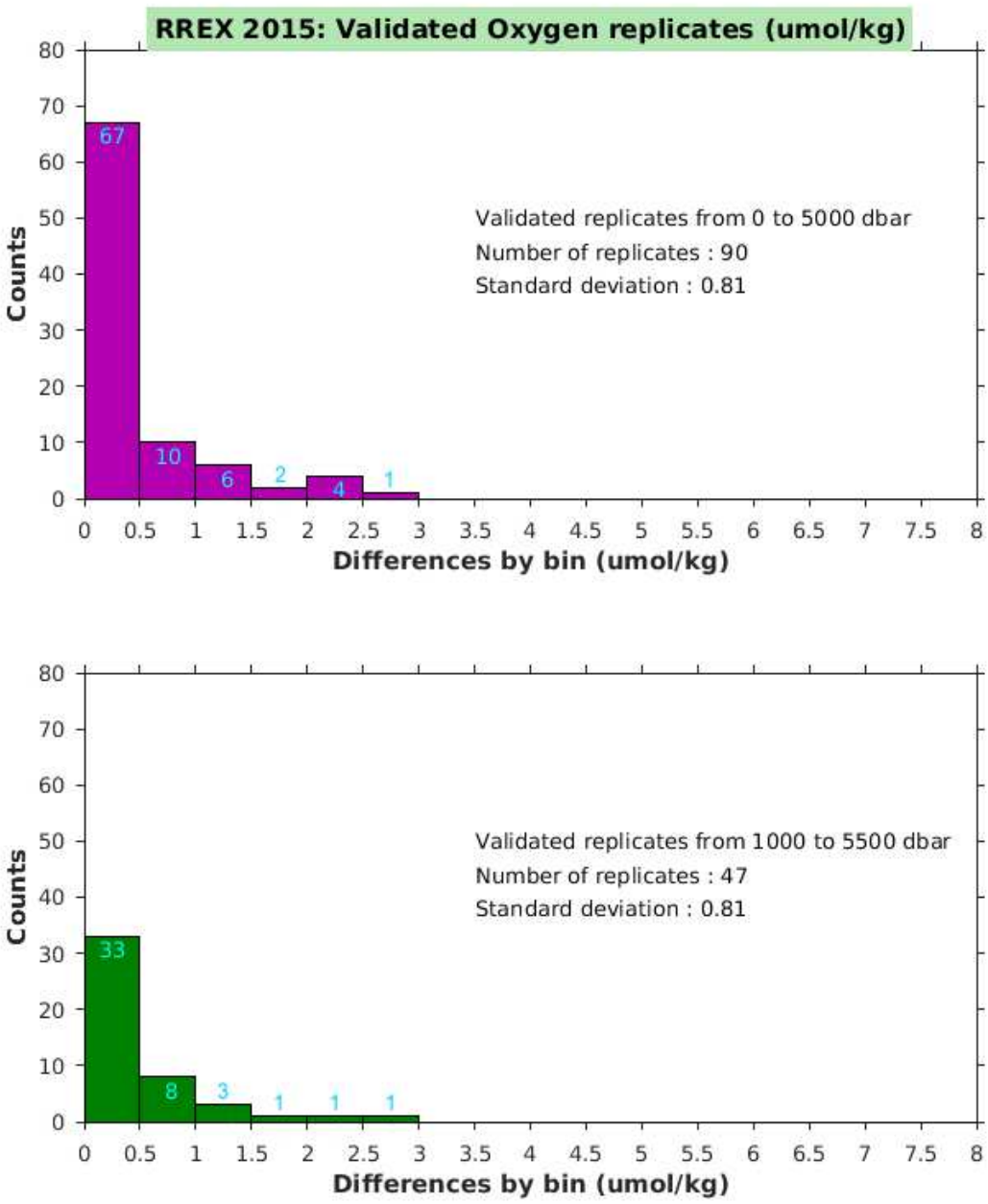


Figure 23: Histogram of the Oxygen differences (umol/kg) of the replicates:
a) for the 90 validated replicates of the cruise,
b) for the 47 validated replicates sampled at a pressure greater than 980 dbar.

3.4. Data preparation before calibration

3.4.1. Data cleaning with Hydro_nett

The Hydro_nett software is used primarily to correct aberrant pressure measurements in the .cnv files. After all measurements are cleaned with respect to thresholds, then using a median deviation test. The values chosen for RREX are shown in the following figure. Hydro_nett is applied to the probe measurements after decoding by datcnv to create rr15st*T1.cnv files.

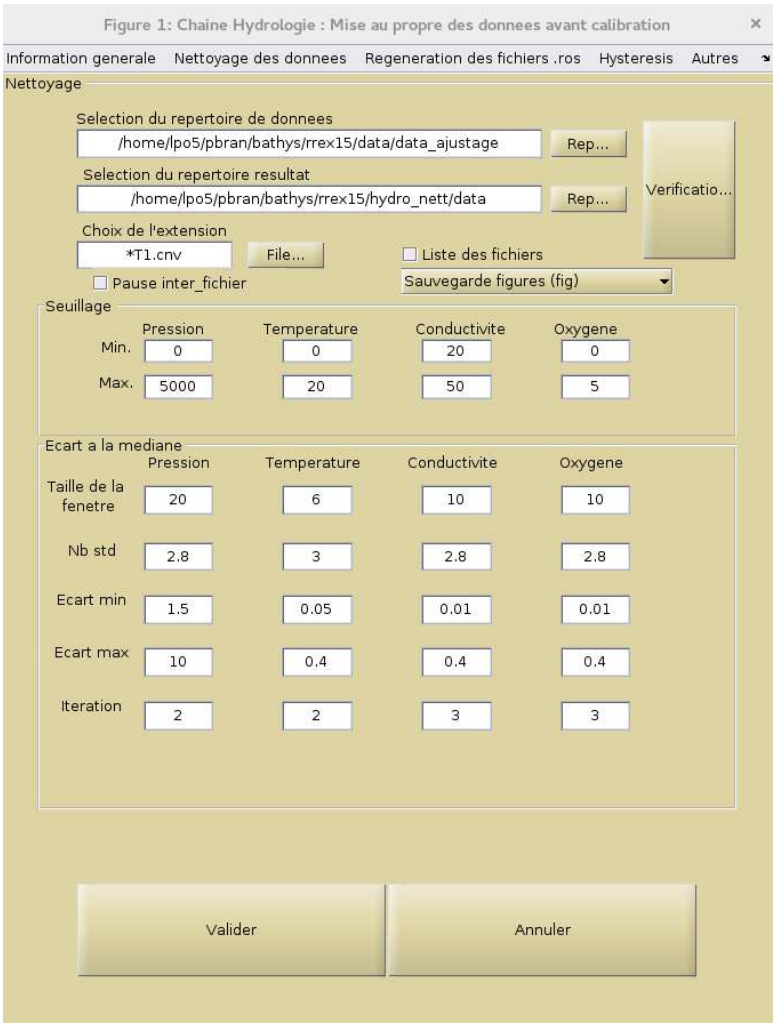


Figure 24: Hydro_nett options used for RREX

3.4.2. Correction for hysteresis

The principle of hysteresis correction on the SBE 43 sensor from Seabird is described in the application note SBE 64-3 and was coded in Matlab.
The hysteresis correction depends on three coefficients: H_1, H_2 and H_3. The default values of these coefficients are provided by Seabird. However, the coefficients H_1 and H_3 can be adjusted by minimizing the difference between the downcast and upcast profiles (see Bradley et al., 2010).

Using Hydro_nett, new coefficients were estimated for RREX:

For station 0 to 1:

	Primary sensor	Secondary sensor
H1	-0.021	-0.050
H2	5000	5000
H3	2000	2000

For station 2 to 132:

	Primary sensor	Secondary sensor
H1	-0.021	-0.034
H2	5000	5000
H3	2000	2000

The resulting files are called rr15st*T1_trait_hyst.cnv.

3.4.3. Bottle file

After cleaning and corrected the CTD profiles, we create a new bottle file with CTD values corrected. The chemical values do not change.

3.4.4. Processing with Seabird routines

Seabird developed a certain number of routines in its Seasoft V2 (SBEDataPostprocessing) software suite in order to improve the recorded probe measurements. The sequence of programs chosen by the LOPS is the result of a study performed on the 2008 CTD cruises (see C. Kermabon, M. Arhan, "*Validation et Réduction des données de la sonde 9+*", June 2008). The Seabird programs are applied on the measurements output from Hydro_nett. The input files in hydro_nett are the previously created files: rr15*.T1_trait_hyst.cnv.

Seabird processing

Filter: filters the pressure measurements.
Low pass filter B, time constant (s) = 0.15

Alignctd: applies a delay of 4 seconds on the primary and secondary oxygen measurements.

Celltm: takes into account the effect of the thermal mass of the conductivity cell using a recursive filter.

Thermal anomaly amplitude (alpha) =	0.03
Thermal anomaly time constant (1/beta) =	7

Loopedit: flags the cycles compared to the speed of the probe.

Minimum velocity type =	fixed minimum velocity
Minimum CTD velocity (m/s) =	0
Remove surface soak	not selected
Exclude scans marked bad	selected

Derive: new calculation of O2 ml/l and salinity.

At the end, the corrected files are named rr15*_T5_final.cnv.

3.5. Calibration of Pressure measurement

The SBE9+ probe is equipped with a Paroscientific digiquartz pressure sensor, which accuracy is claimed by the manufacturer to be 0.015 % of the full scale (10000 psi), or in our case ± 1.5 psi or ± 1.0 dbar, the claimed resolution being 0.001 %, i.e. 0.1 psi or 0.07 dbar.

All the sensors were calibrated by Seabird before the cruise to have new coefficients.
The pressure sensor was also calibrated before and after the cruise at the IFREMER Laboratory of Metrology, authorized by the "Bureau National de Métrologie" (B.N.M.). The sensor is connected to a Desgranges and Huot bench-top balance, which delivers a reference pressure with a maximum error of 0.75 dbar at the 6000 dbar level.

3.5.1. Calibration of the sensor under laboratory conditions at 20 °C

Three cycles of increasing and decreasing pressure, by successive increments of 600 dbar, from 0 to 6000 dbar, are performed at laboratory temperature, i.e. 20 °C (± 1 °C). The results obtained are shown in figure 25, in the form of mean differences between the reference pressure delivered by the bench-top balance and the equivalent pressure indicated by the sensor in the increasing pressure cycles (downcast profile of the probe) and decreasing pressure (upcast profile).

The distribution of points resulting from the pre- and post-cruise calibrations can be corrected by a polynomial of degree 3. These results highlight a good stability of the sensor: compared to the polynomial correction, the maximum difference observed (pre-and post-cruise; downcast and upcast) is 0.26 dbar at 20 °C.

3.5.2. Influence of the the static temperature

The response of the pressure sensor can be influenced by the outside temperature (see figure 26). The ocean temperature shows differences above 20 °C between the surface and the bottom. The static effect of the temperature on the pressure sensor is studied in the laboratory by immersing the probe in a water bath at different temperatures. After stabilization of the bath temperature, we perform a cycle of increasing then decreasing pressure, recording the indication of the pressure sensor at separate increments of 1000 dbar. This operation is repeated at four different temperature points between -1 and 20 °C.
Considering the low impact of temperature changes on the pressure sensor and the strong temperature variations between the cruise casts, we did not apply any specific static correction for RREX 2015.

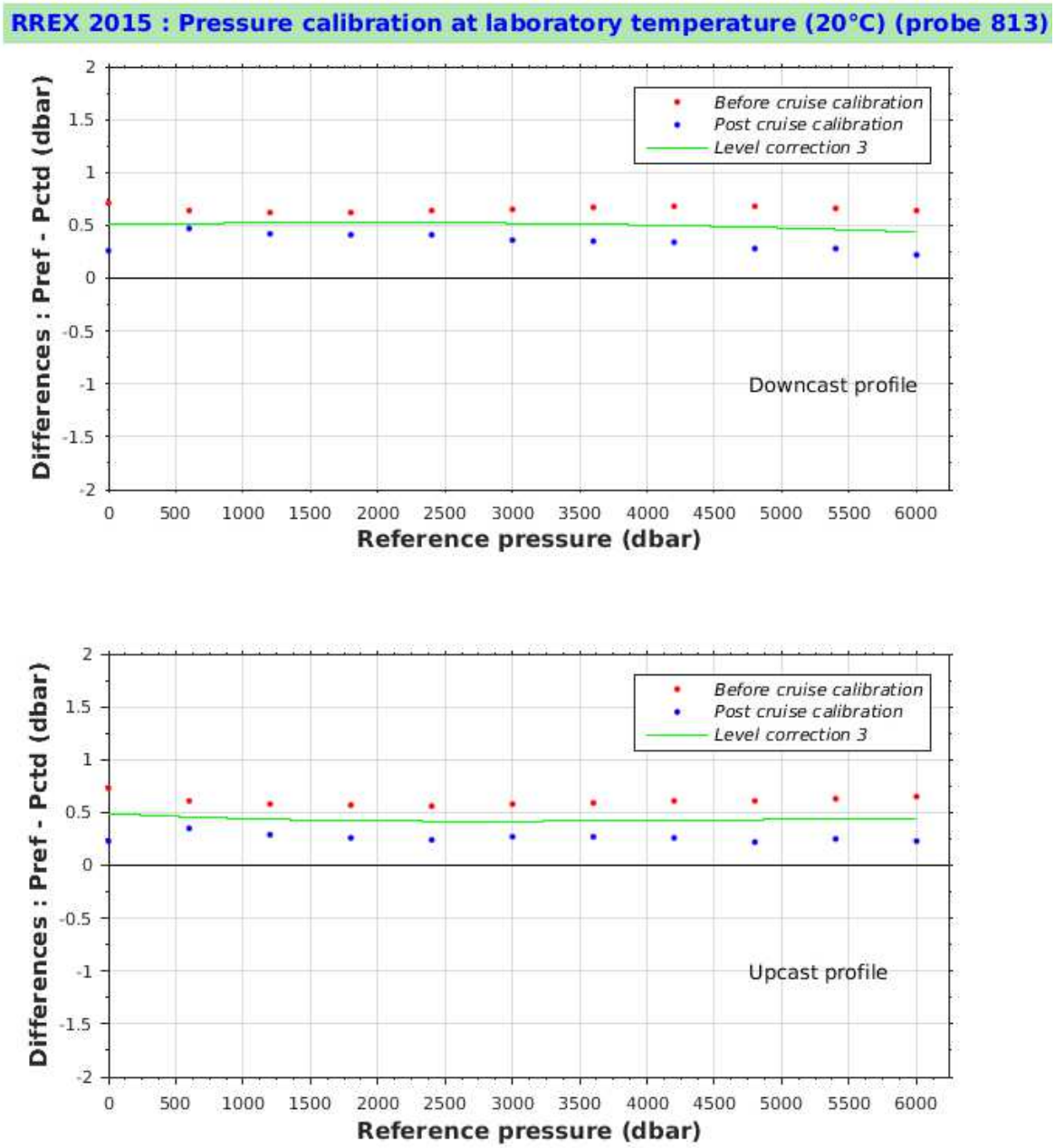


Figure 25: Pressure calibration at 20 °C

Distribution of the mean differences, every 600 dbar, between the reference pressure and the pressure indicated by the Seabird sensor during pre-and post-cruise calibrations at laboratory temperature (20 °C):

a) increasing pressure cycles (downcast profile),

b) decreasing pressure cycles (upcast profile).

The curve of degree 3 that reduces the differences is represented.

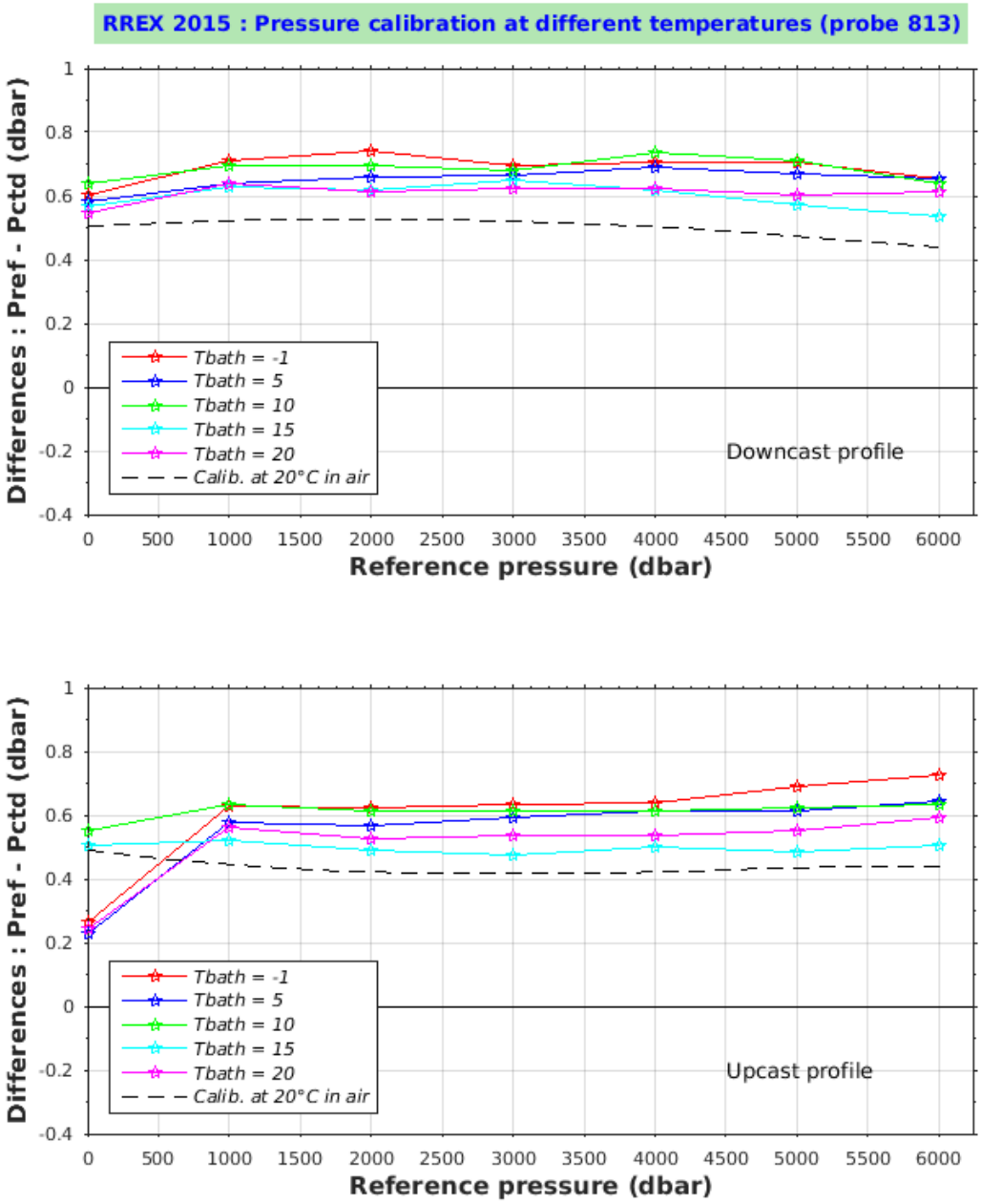


Figure 26: Response of the Paroscientific pressure sensor as a function of the temperature.

3.5.3. Influence of the dynamic temperature effect

The crossing of the thermocline, during the downcast and the upcast, causes an abrupt variation in temperature. This thermal shock, called the dynamic temperature effect, is simulated in the laboratory in order to study the behavior of the pressure sensor, which depends mainly on the quality of its insulation.

The sensor was submitted to a series of thermal shocks by suddenly immersing the probe, after a certain period at a given temperature, in a hotter or colder bath as appropriate. The parameters transmitted by the sensor (pressure, in situ temperature and internal temperature of the pressure sensor) were recorded during a time period sufficiently long to study the behavior of the sensor after this phenomenon (see Technical Note LPO-GT09-01, P. Branellec, M. Hamon).

These experiments allow us to conclude that the response of the Paroscientific pressure sensor is not influenced by this thermal shock. Consequently, no dynamic correction is made.

3.5.4. Correction of the pressure measurement on the CTD profiles

Taking into account the results of the laboratory calibrations, the pressure sensor of LOPS probe (s/n 813) is corrected by a pressure polynomial of degree 3 (fig. 25).

Finally, we can consider that the uncertainty in the pressure measurement is of the order of the sensor accuracy: 1 dbar.

3.5.5. Validation of the CTD pressure measurement

Monitoring of the pressure sensor during the cruise

On the CTD, we had only one pressure sensor, so we followed the response of the CTD pressure sensor, during the cruise, in different ways. First we noted the value of the sensor in the air before each station (see fig. 27), at the beginning of the downcast and at the end of the upcast, secondly the frame is equipped with reversing pressure meter sensor and we compared the value of the CTD sensor and SIS sensor at the bottom (see fig. 28) to detect an eventual drift.

Before each cruise, our CTD were calibrated by Seabird. Independently, before and after each cruise our CTD were calibrated in the Ifremer Metrology laboratory. We studied pressure and temperature. The plot hereafter shows this responses.

Monitoring of the pressure sensor over the time

Before and after each cruise, our pressure sensor, on the both CTD, was calibrated at Ifremer. The figure 29 shows the results of all calibrations since we acquired the CTD.

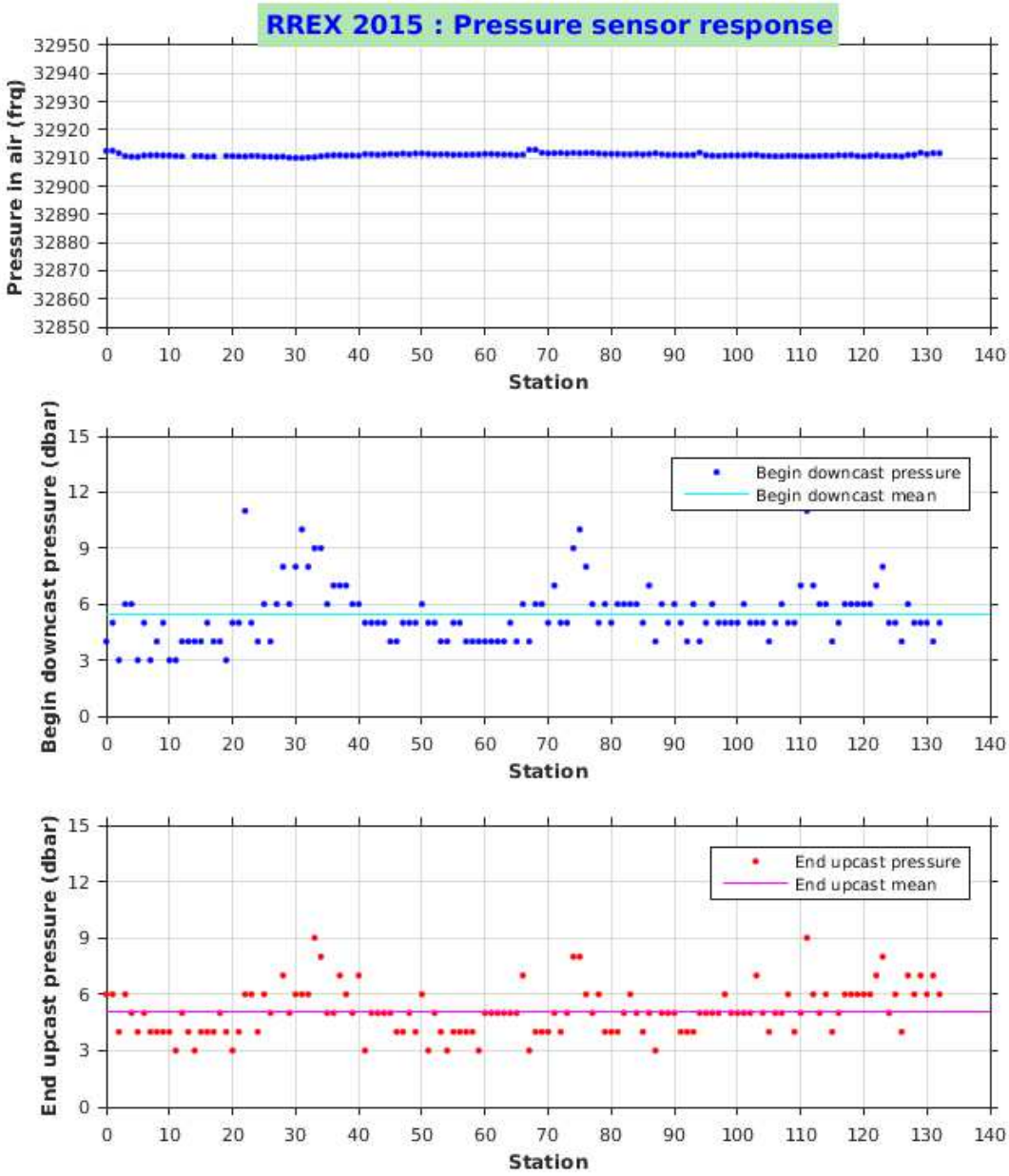


Figure 27: Monitoring of the pressure sensor readings:
a) in air at the start of the cast (value in Hertz),
b) at the start of the donwcast,
c) at the end of the downcast.
Means values are shown as solid lines.

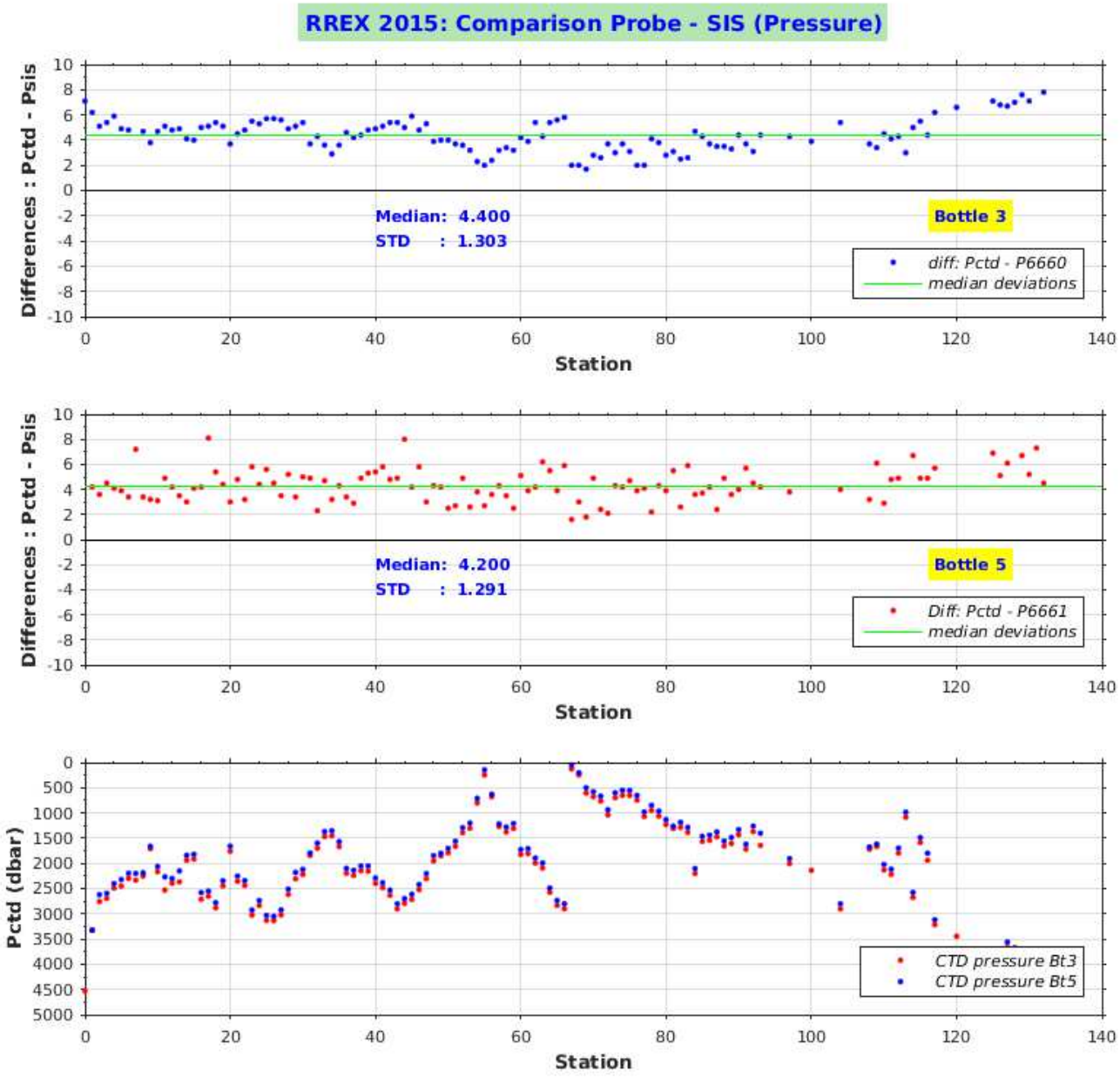


Figure 28: Comparison CTD pressure and SIS pressure

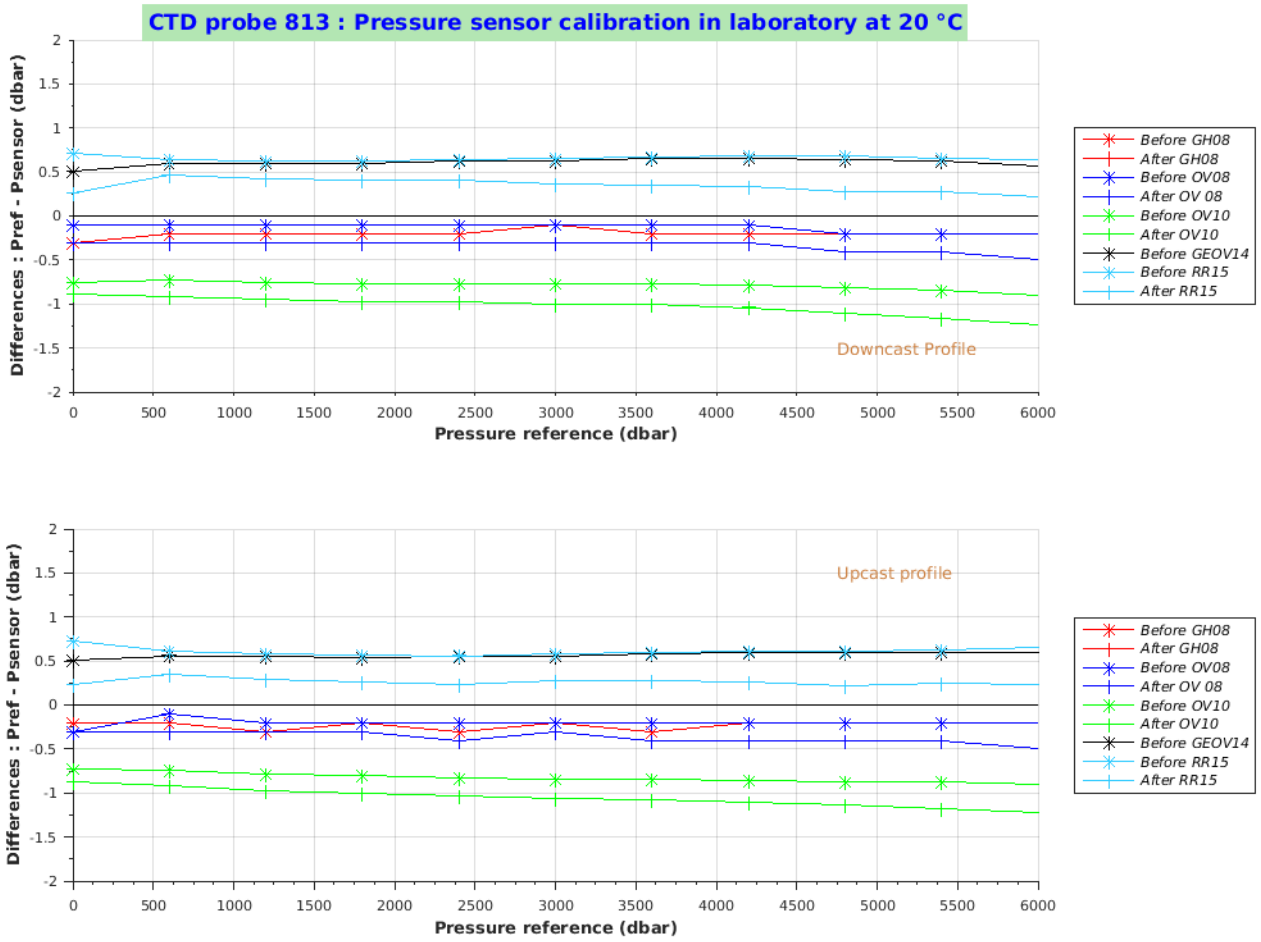


Figure 29: Monitoring of the pressure sensor over time.

3.6. Calibration of the Temperature measurement

Our SBE9+ probes are equipped with two sets of temperature (T) and conductivity (C) sensors. The temperature sensors are SBE3+ sensors from Seabird, the measurement resolution is 0.0003 °C and the accuracy claimed by the manufacturer is 0.001 °C.

The both SBE3 on each CTD was calibrated by Seabird before each cruise. We started the cruise with new coefficients.
We also calibrated the temperature sensors at Ifremer laboratory of metrology before and after the cruise.

3.6.1. Calibration of the sensors at Ifremer laboratory

The LOPS's probes are regularly calibrated in the IFREMER laboratory of metrology, before and after each cruise. The probe is fully immersed in a thermostat seawater bath which temperature stability is strictly controlled. The reference temperature of the bath is provided by a Rosemount-type platinum resistance, placed in close proximity to the CTD sensor. This thermometer is periodically checked and certified by the "*Laboratoire National de Métrologie et d'Essais*" (LNE). The measured temperature is expressed on the EIT 90 scale. Several measurement points are thus tested by recording the temperature indicated by the CTD and comparing it to the reference temperature of the bath at several points between -1 and 25 °C.

The figure 30 shows the calibration before and after cruise. The temperature measurements obtained on the cruise profiles are corrected by applying a polynomial of degree 3. This curve minimizes the differences (reference temperature - probe temperature) obtained during the calibration performed before the cruise: the maximum error on the primary sensor is ± 0.0021 °C and the standard deviation is 0.0013 °C.

Finally, we consider that the uncertainty in the temperature measurement is of the order of the sensor accuracy: 0.0013 °C.

3.6.2. Calibration of the CTD measurement

The reduced files only conserve a single dataset by sensor (T, C, O_2). The choice between the primary and secondary dataset is made by visualizing histogram of all raw measurements of the probe at 24 Hz. In the case of the RREX cruise, the choice was made to use the primary temperature (T_0) for the complete calibration phase.

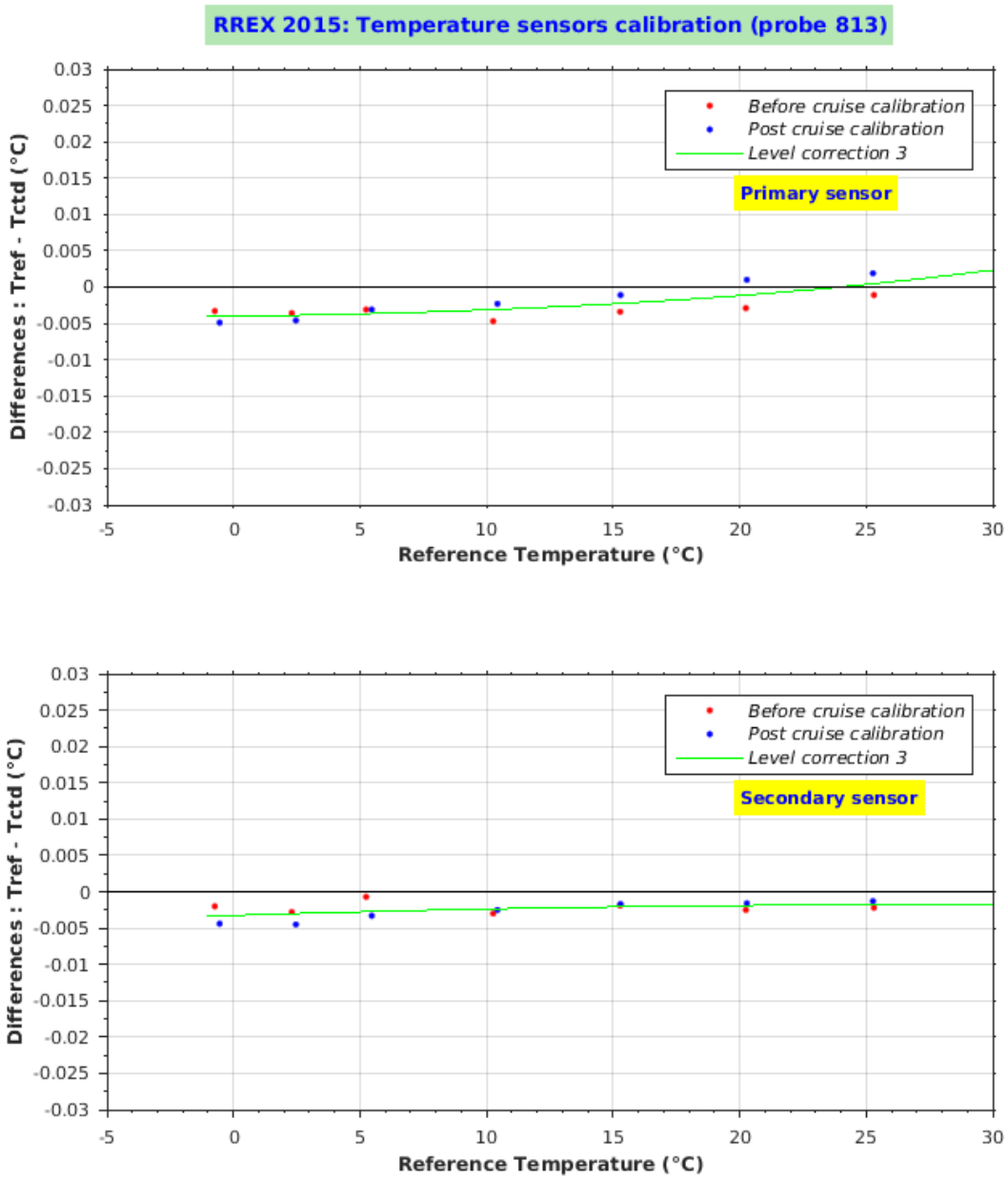


Figure 30: Final temperature calibration

3.6.3. Monitoring of the Temperature measurement

The LOPS CTD frame is equipped with two reversing thermometers (SIS RTM 4002X) on bottle 3 (T_{1751}) and bottle 5 (T_{1752}). The bottle 3 is always closed at the bottom. The SIS thermometers are not calibrated, so we followed relative relation.
During the cruise we compared the indications of the SIS thermometers with the SBE9 temperature. The figure 31 shows this comparison.

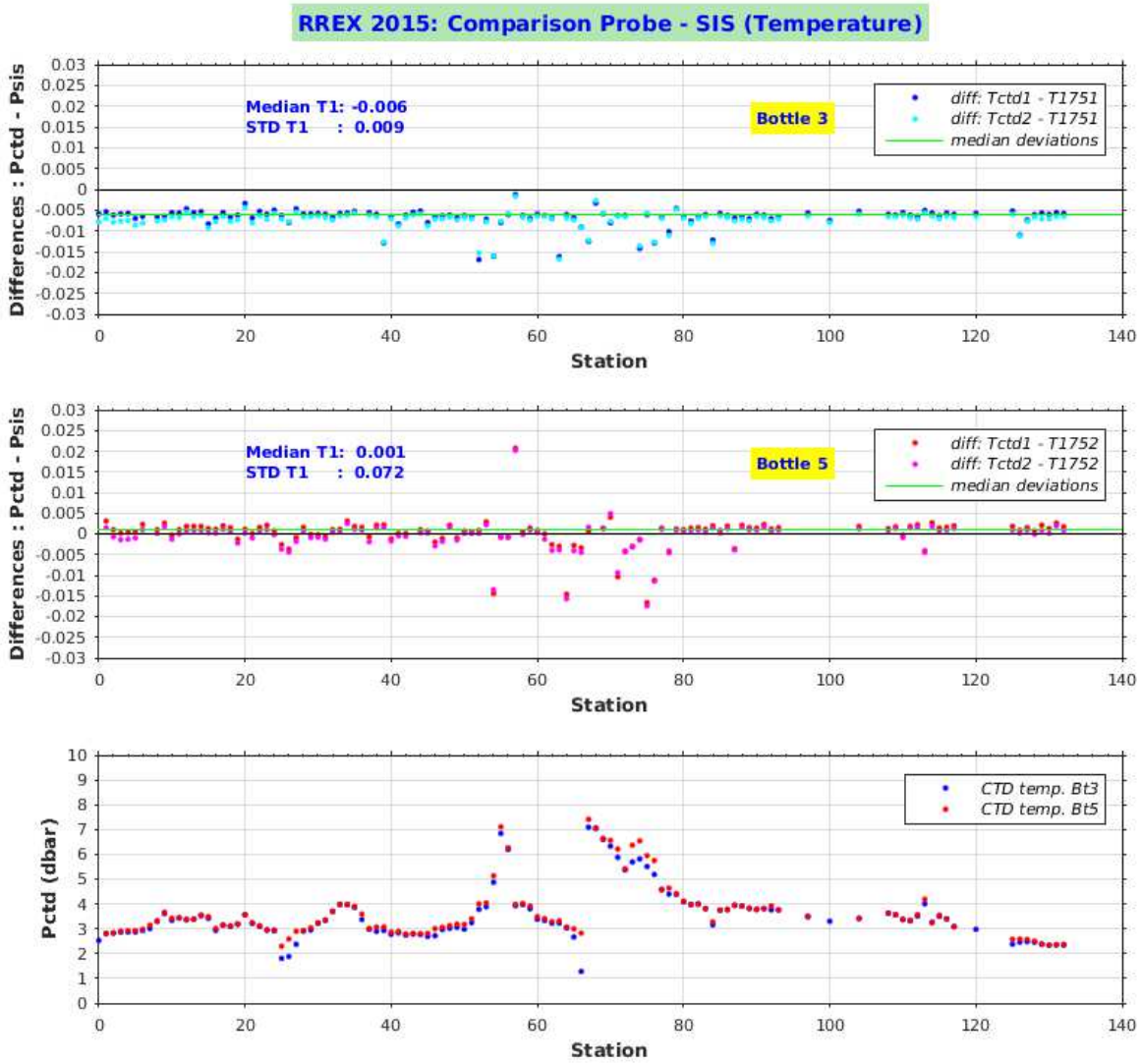


Figure 31: Temperature comparison

Before and after each cruise our CTD is calibrated at Ifremer. The plot (fig. 32) shows the monitoring over time for the probe s/n 813.

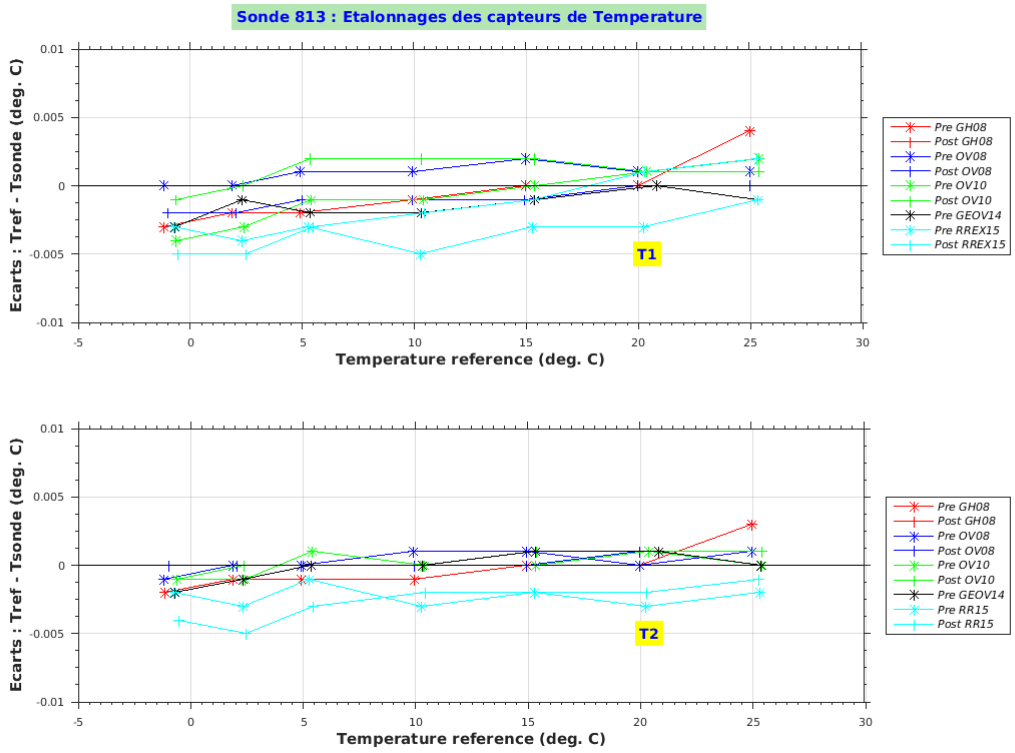


Figure 32: Monitoring of Temperature sensors of SBE 9 s/n 813

3.7. Calibration of the Conductivity

The SBE9+ probe is equipped with two SBE4 conductivity sensors (C_0, C_1), with a range of measurements from 0 to 70 mS/cm. The accuracy claimed by the manufacturer is 0.003 mS/cm and the resolution 0.0004 mS/cm. The serial numbers of the sensors, used during the cruise, are given in section 3.1.1 Technical summary.

The reduced files only conserve a single conductivity. The choice between the primary (C_0) and secondary (C_1) conductivity is made before, by visualizing histogram of the raw measurements of the probe at 24 Hz. In the case of the RREX cruise, the choice was made to use the primary conductivity (C_0).

3.7.1. Operating mode

The new calibration procedure for the conductivity measurements (COs), written according to the recommendations of the GO-SHIP group, first involves the conversion of the chemical salinity to chemical conductivity (CO_H) using the corrected values of the pressure and temperature sensors, at the sampling level.
Then, the different corrections to be applied are calculated to minimize the differences:

$$\Delta C = CO_H - CO_S$$

- Correction as a function of time to take into account a potential slow drift of the conductivity sensor.

- Correction as a function of the conductivity. The selected coefficients result from successive iterations on the considered group of samples. The process is stopped when no additional sample is removed at the end of the current iteration. It follows that, at the end of the last iteration, all the differences ΔC are lower than the value:

  $$\Delta C_{max} = 2.8 * \text{standard-deviation}$$

  for the samples used in the calculation process.

- Correction as a function of the pressure on the conductivity or the salinity.

3.7.2. Analysis of the initial results and strategy adopted

The figure 33 shows the conductivity differences between conductivity bottle and raw conductivity sensor without any correction or offset.
The figure 34 shows the results of the adjustment of the conductivity sensor for all the profiles together. All the dots are plotted (blue dots kept, red dots rejected).
The figure 33 reveals an evolution of the response of the conductivity sensor during the cruise. We conducted several tests to correct this temporal evolution:

. a linear correction as function of station number.
. correction by group of stations.

The correction by group of stations (0-26, 27-33, 34-41; 42-132) gave better results when considering the statistics and the visual control of the comparison between the corrected profiles and the salinity samples. No pressure effect correction was applied.

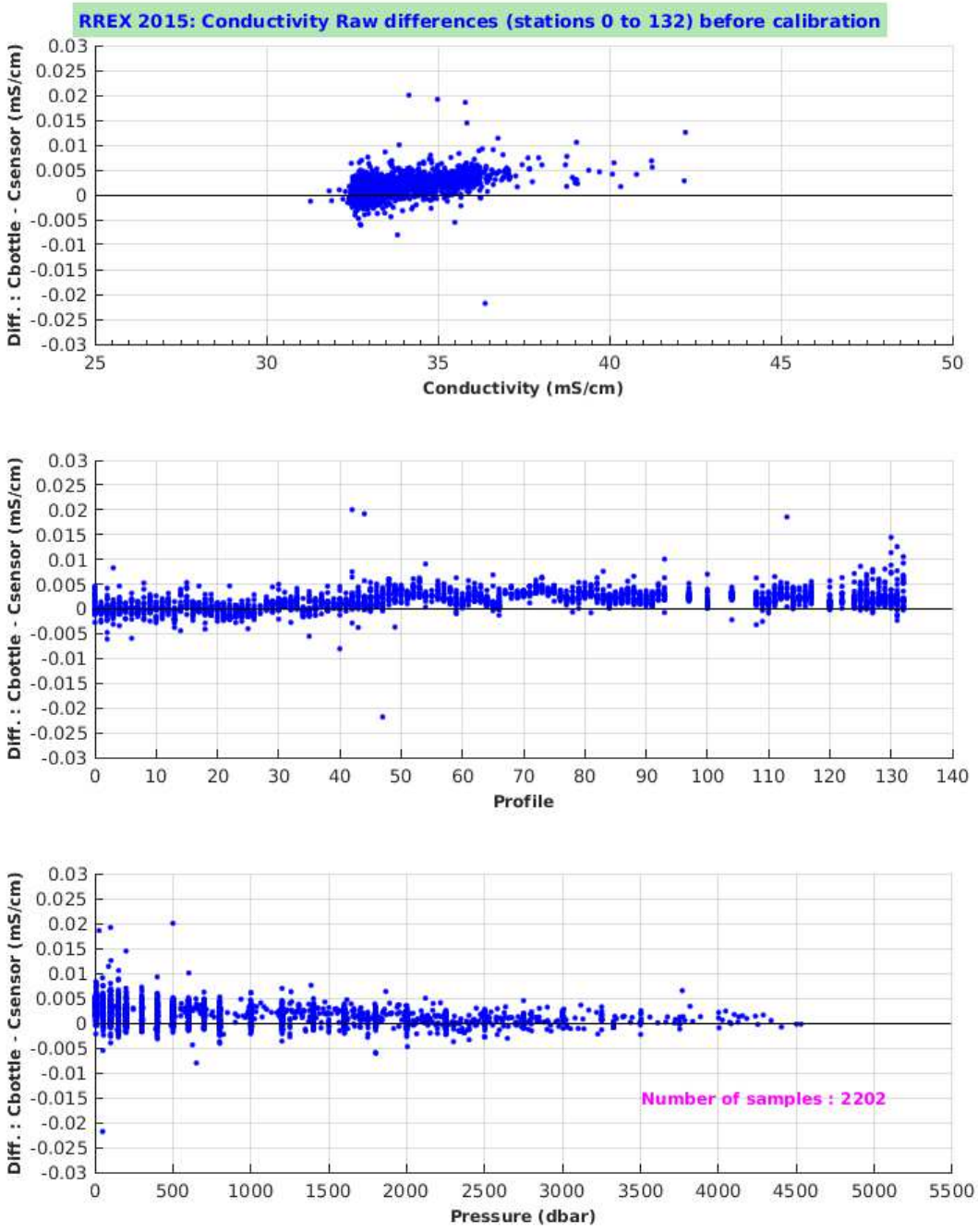


Figure 33: Conductivity raw differences

Bottle salinity is converted to bottle conductivity. The differences are the result of raw bottle conductivity minus raw sensor conductivity.

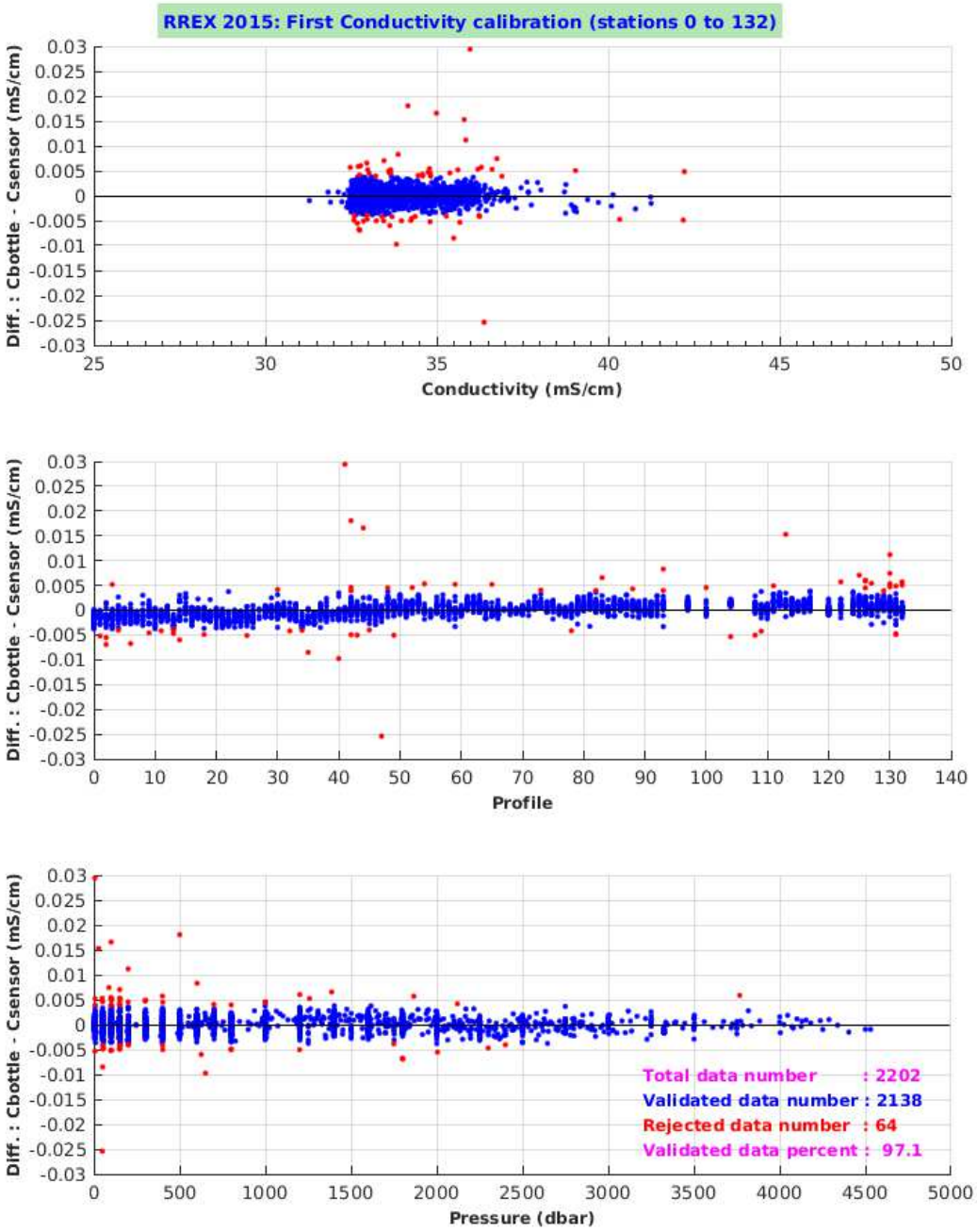


Figure 34: First conductivity calibration

Differences between the conductivity of the samples and the corrected probe conductivity at each sampling level:

a) as a function of the conductivity,
b) as a function of the profile number,
c) as a function of the pressure of the sampling level.

These differences are the result of a conductivity calibration on all the cruise samples, without temporal correction, without grouping casts and without pressure correction.
The blue dots are kept by the calculation, the red dots are rejected.

3.7.3. Assessment of the calibration of the conductivity profiles

The table below shows the results of the calibration of the conductivity measurements for the RREX 2015 cruise:

Profiles or group	Number of samples considered	Number of samples conserved in the calculation	Standard deviation (0-5500 dbar)
0 - 26	535	509 (95.1 %)	0.00101
27 - 33	122	117 (95.9 %)	0.00082
34 - 41	146	139 (95.2 %)	0.00097
42 - 132	1399	1336 (95.5 %)	0.00102
0 - 132	2202	2101 (95.4 %)	0.00101

The table shows, for all the casts, the number of samples used for the calculation, the number of samples conserved by the process, as well as the resulting standard deviation for the group considered.

During the cruise, 2202 salinity samples were measured. The calculation process validated 2101 of them, i.e. 95.4 %.

No temporal correction and no pressure effect correction were applied.

Figure 35 shows the remaining differences in conductivity after final conductivity calibration of all casts.

The histograms in figure 36 confirm that the distribution of the differences is satisfactory. In 68.4 % of cases, the differences in conductivity are lower than ± 0.001 mS/cm, while in 100.0 %, they are less than ± 0.003 mS/cm, the standard deviation in conductivity is 0.0010 mS/cm.

The overall assessment can be established as follows: the conductivity values of 2101 validated samples indicate a standard deviation between the sensor data and the chemistry data, for the whole cruise, of 0.0010 mS/cm.

The histograms of differences in salinity after optimization are shown in figure 37: the standard deviation in salinity is 0.0012 psu.

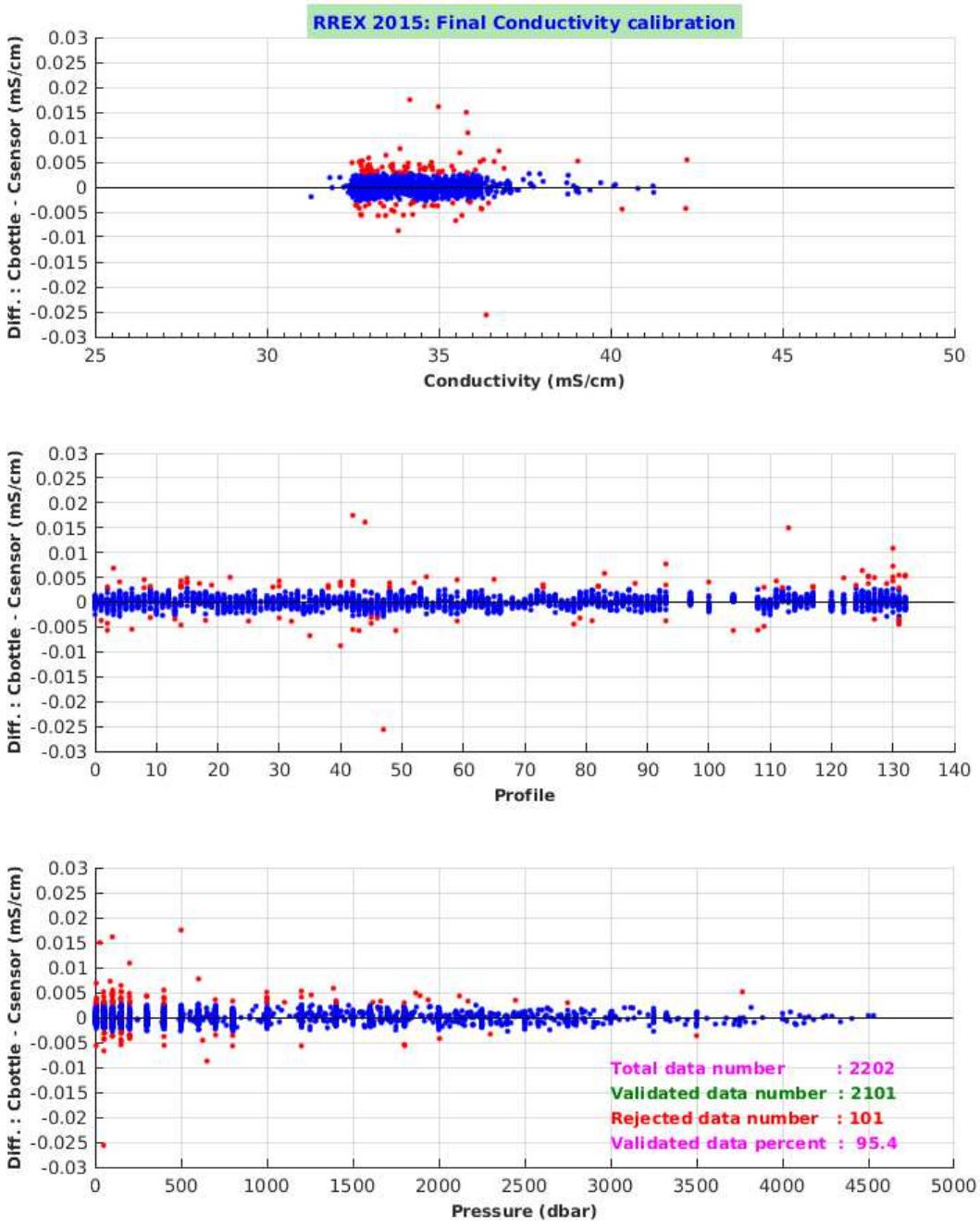


Figure 35: Final conductivity calibration for RREX

Differences between the conductivity of 2101 validated samples and the probe conductivity corrected at each sampling level:

a) as a function of the conductivity,

b) as a function of the profile number,

c) as a function of the pressure at the sampling level.

These differences are the result of a conductivity calibration on all the cruise samples, without any correction.

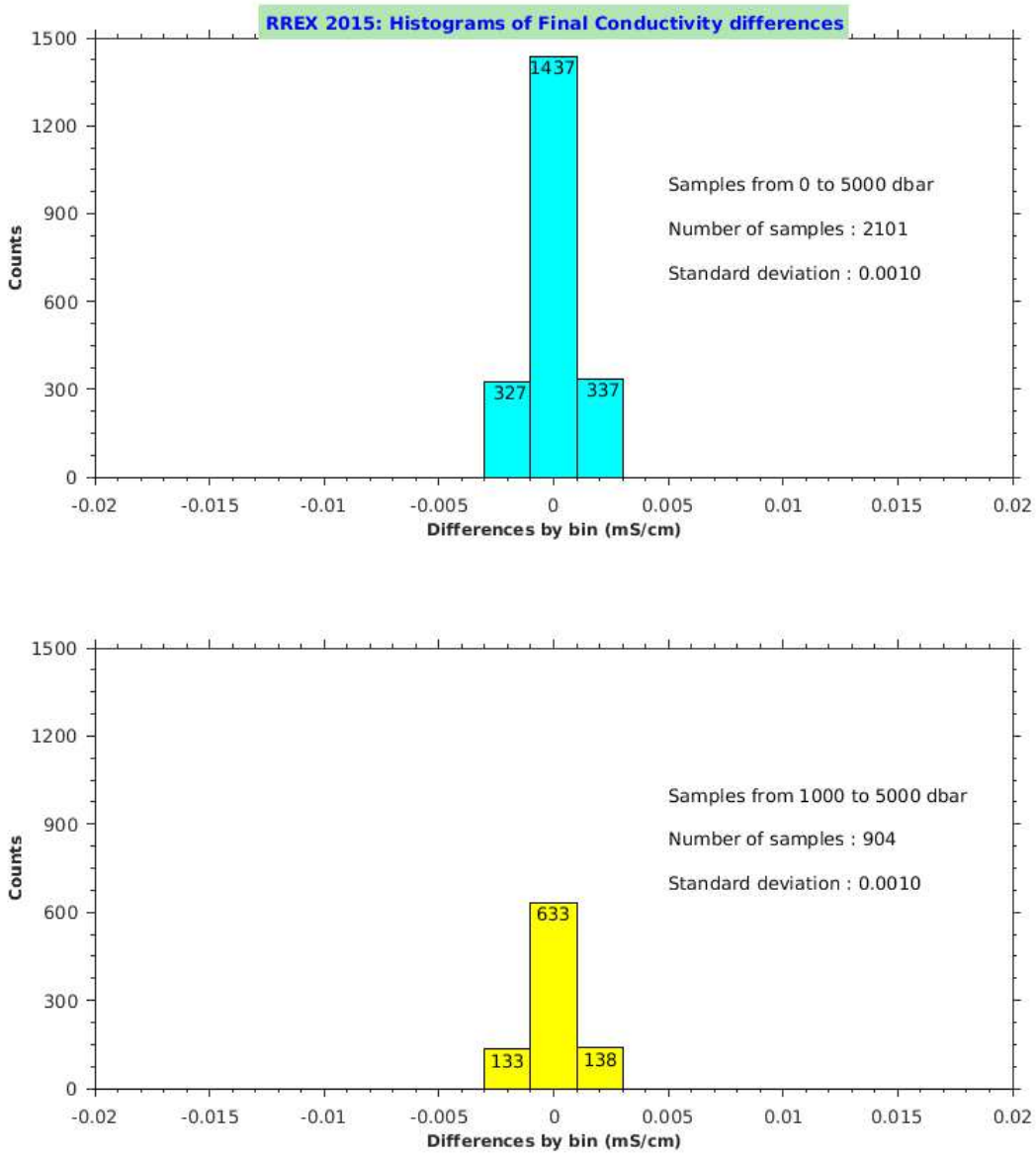


Figure 36: Histograms of final Conductivity calibration

Histograms of the differences between the conductivity of the validated samples and the CTD conductivity at the sampling level:

a) for all the 2101 validated cruise samples,

b) for the 904 validated samples collected at a pressure greater than 980 dbar.

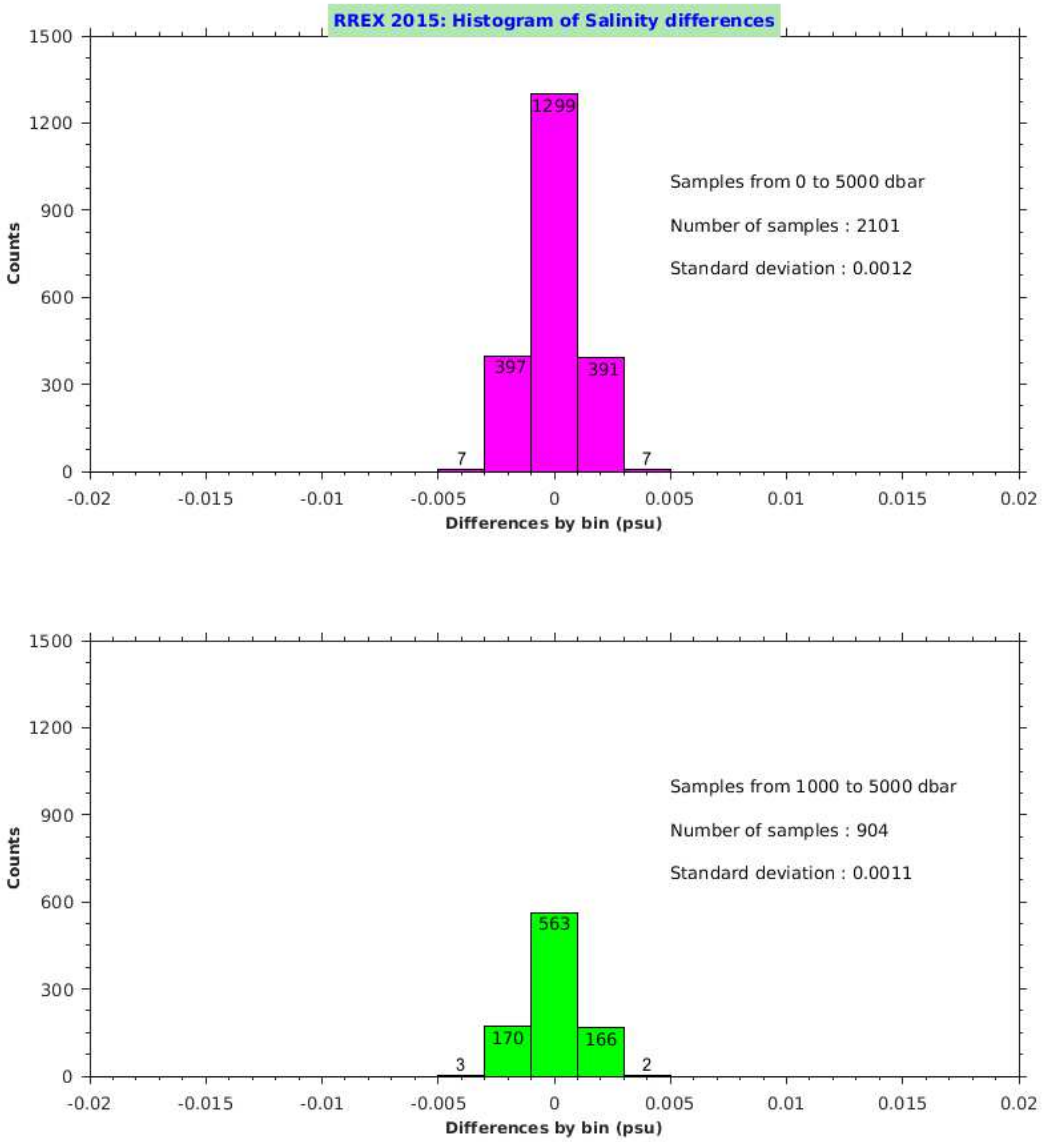
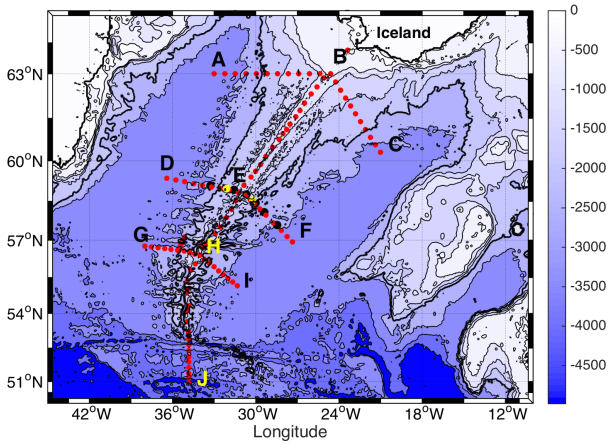


Figure 37: Histograms of final Salinity calibration

3.7.4. Validation of the results

Figure 38 compares Theta-S from different cruises (Ovide 2010, Catarina 2012, RREX 2015) made in the same area (DEF section on the map).



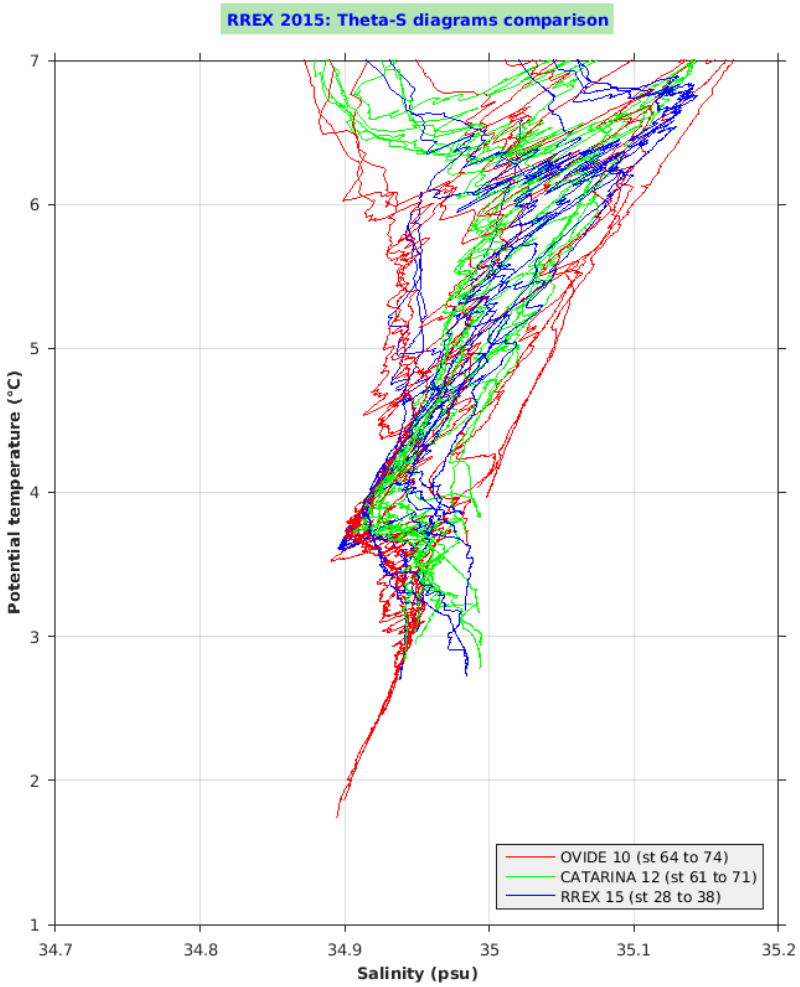


Figure 38: Theta-S comparison

Figure 39 shows all the Theta-S of the RREX cruise.

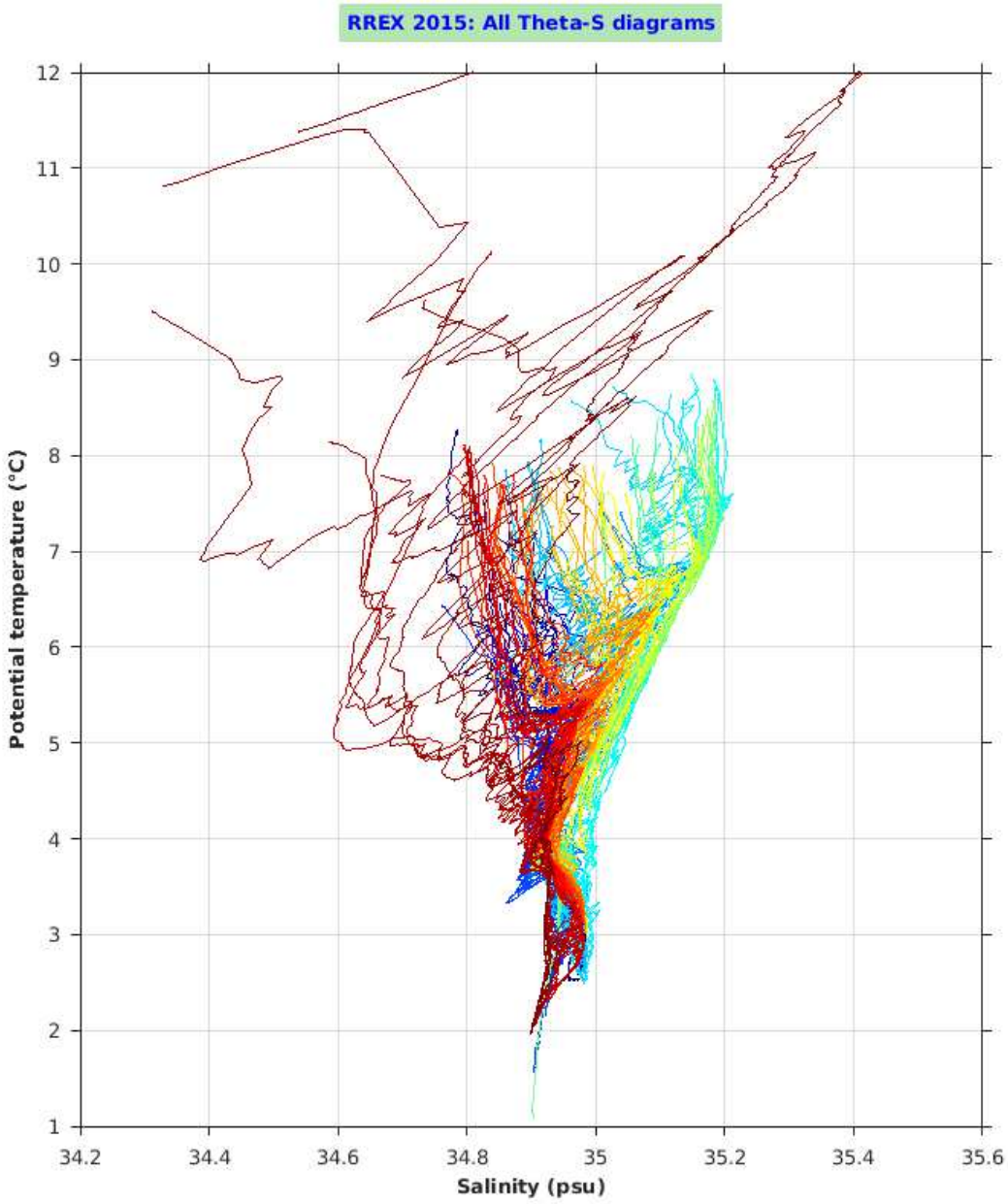


Figure 39: All Theta-S for RREX cruise

The color of the profiles changes gradually from blue to red, from profile 1 to profile 132.

3.8. Calibration of dissolved oxygen profiles

The SBE9+ probe is equipped with two SBE43 dissolved oxygen sensors with a range of measurements from 0 to 120 % of the surface saturation. The accuracy claimed by the manufacturer is 2 % of the saturation. The serial numbers of the sensors, used during the cruise, are given in the section 3.1.1 Technical summary.

The choice between the primary (Ox_0) and secondary (Ox_1) oxygen is made before calibration by visualizing (histogram) the raw measurements of the probe at 24 Hz. The reduced files only conserve a single oxygen measurement. In the case of the RREX 2015 cruise, the choice was made to use the primary oxygen (Ox_0).

3.8.1. Operating mode

The dissolved oxygen content, OXYSBE, expressed in ml/l, is calculated from the Vr information transmitted by the sensor using the formula proposed by Millard (1982).

$$OXYSBE\ (ml/l) = soc * (Vr + Voffset + tau\ (T, P) * \delta V/\delta t) * oxsol\ (T, S) * (1.0 + A*T + B*T^2 * C*T^3) * e^{(E*P/K)}$$

Vr: O_2 measurement in volts
δV/δt: derivative of the signal SBE43 (volt/sec)
Oxsol: function for the calculation of the oxygen solubility (Garcia & Gordon 1992)
P: probe pressure (dbar)
T: probe temperature (°C)
K: probe temperature (°K)
S: probe salinity (psu)
Soc, Voffset, A, B, C, E, tau: characteristics of the Seabird sensor

In practice, the term associated with tau is neglected because it adds noise when the profile is homogenous vertically (see Application note n° 64; Nov 2008). The goal of the calibration is the determination of a new Soc and Voffset.

The oxygen in volts is corrected for hysteresis by the Hydro_nett program in .cnv files (section 3.4.2).

For the calibration, the probe oxygen (OXYS) is obtained by calculating a mean on a water column of 15 dbar on the downcast profile, at the sampling level, based on the probe measurements in volts before the hysteresis correction. So we don't use the bottle files provided by SeaBird processing software for this calibration.

The method used for the calibration of the probe measurements from the chemistry measurements (OXYC in ml/l) involves the determination of the coefficients M and B of the equation below to minimize the differences between (OXYC / phi) and (OXYS * M + B).

$$OXYC\ (ml/l) / phi = OXYS\ (volt) * M + B$$

where:

. phi = Oxsol(T,S) * (1.0 + A*T +B*T^2 * C*T^3) * $e^{(E*P/K)}$

. M = soc

. B = Voffset * soc thus Voffset = B / soc

The Soc and Voffset coefficients (deduced from the values of M and B) of the Seabird sensor characteristics are determined for a set of samples, using successive iterations based on a principle similar to that for the conductivity.

3.8.2. Dissolved oxygen units

The unit used in the calibration procedure and in graphical representations of this report is the milliliter per liter (ml/l).

The water temperature, at the time of sampling from the bottles, was taken with an Ebro thermometer (accuracy = ± 0.3 °C) before fixing of the oxygen by the reagents. We then deduce the density of the seawater sample, and the dissolved oxygen content can be converted to micromoles per kilogram (µmol/kg) (see Mercier et al. 1992).

The dissolved oxygen data of the SBE43 sensor are therefore provided in both units.

3.8.3. Analysis of the initial results and strategy adopted

The figure 40 shows the oxygen raw differences between oxygen bottle and raw oxygen sensor taken on downcast. The oxygen sensor was first corrected with hydro_nett (see sections 3.4.1 and 3.4.2).

Figure 41 shows the distribution of the differences obtained after this initial global determination of Soc and Voffset coefficients.

A detailed analysis shows that dividing the casts into groups (0-45; 46-57; 58-132) would improve the distribution of differences. Also, a correction of the pressure effect with a polynomial of degree 1 improves the results. Thus, each of these phases should be considered separately. Their identification and then a specific calculation is used to obtain, for each cast, a dissolved oxygen profile that fits well on the oxygen values obtained by chemical analysis.

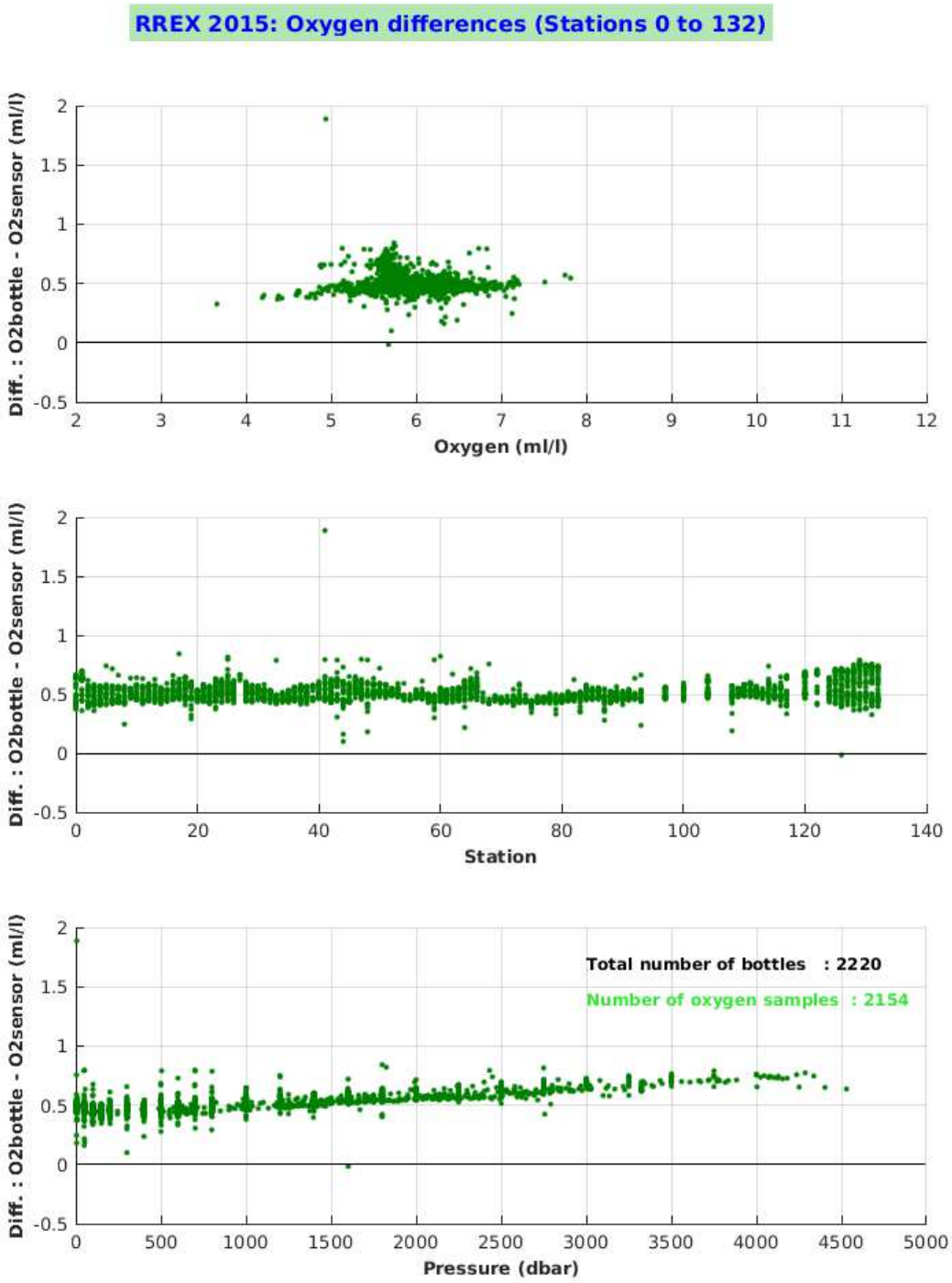


Figure 40: Oxygen raw differences

Oxygen raw differences (O_2 bottle - O_2 sensor) without calibration.

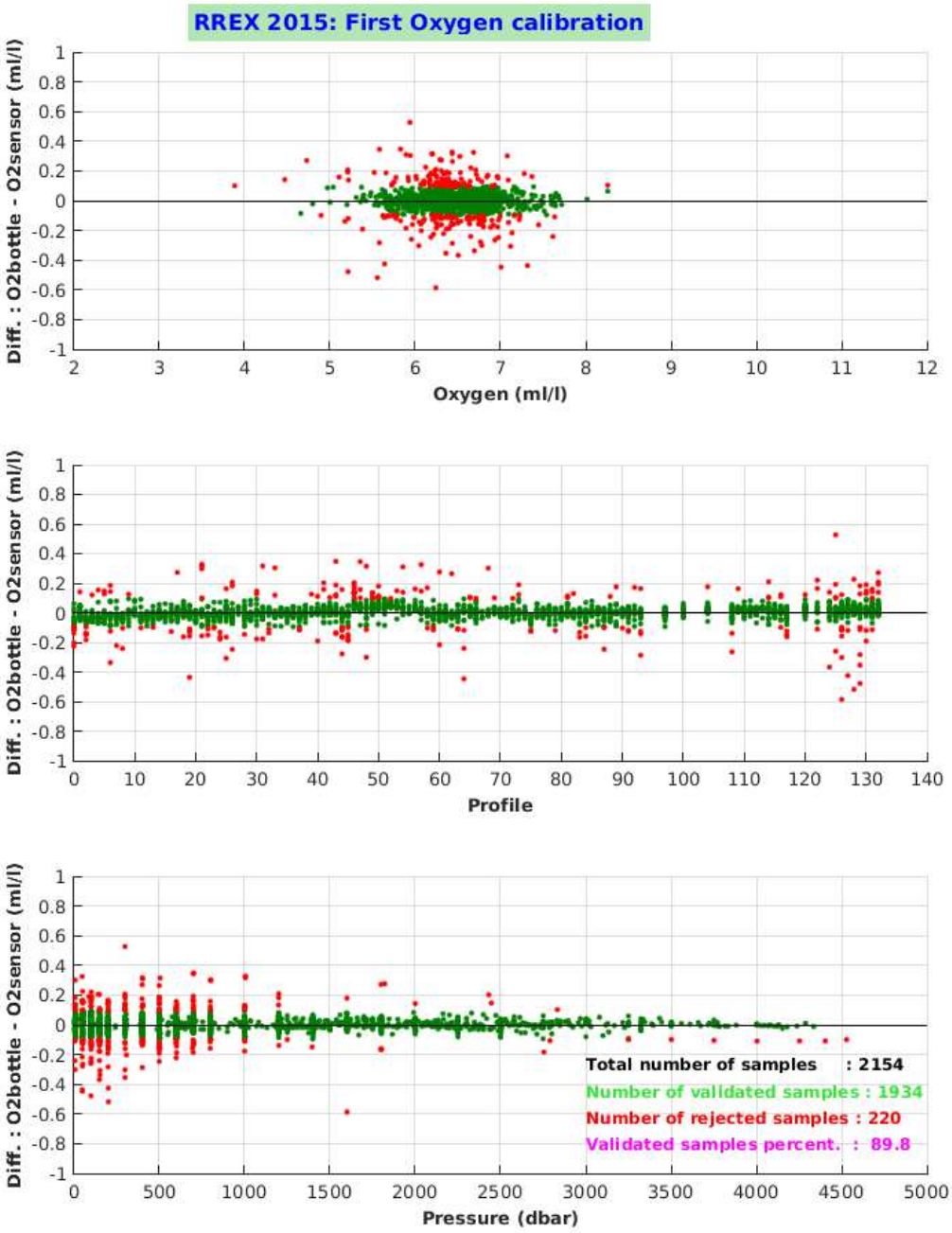


Figure 41: Fist Oxygen calibration

Differences between the oxygen values measured in the samples and that of the CTD downcast profile at the sampling pressure:

a) as a function of the oxygen,

b) as a function of the number of the profile concerned,

c) as a function of the pressure at the sampling level.

These differences are the result of a calculation performed on all the cruise samples with no grouping and no correction for a pressure effect.

3.8.4. Assessment of the calibration of the dissolved oxygen profiles

The table below shows for all casts, the number of oxygen samples considered, the number of validated samples and the standard deviation in three pressure intervals, as well as the calculated parameters of the sensor Soc and Voffset.

Assessment of the calibration of the dissolved oxygen profiles of the RREX 2015 cruise:

Profile or group of profiles	Number of samples considered	Number of samples conserved in the calculation	Standard deviation			Coefficients	
			0 à 5500	0 à 1000	1000 à 5500	Soc	Voffset
0 - 45	882	790 (89.6 %)	0.0322	0.0371	0.0269	0.420282	-0.387451
46 - 57	193	177 (91.7 %)	0.0362	0.0409	0.0251	0.429040	-0.408898
58 - 132	1079	948 (87.9 %)	0.0270	0.0307	0.0205	0.422290	-0.390899
0 - 132	2154	1915 (88.9 %)	0.0302				

Figure 42 shows the final differences, after calibration. The distribution of these differences is correctly centered and acceptable for each of the cruise profiles. The distribution of the differences presented as a function of the pressure shows that it is also acceptable for all sampling levels.

The histograms in figure 43 allow us to visualize the distribution of differences in a different way and to verify that their distribution is properly centered.

For the complete RREX 2015 cruise, 1915 samples among the 2154 analyzed, i.e. 88.9 %, were validated and used to calibrate the ctd dissolved oxygen profiles. The differences in oxygen are less than ± 0.010 ml/l in 32.4 % of cases and less than ± 0.030 ml/l for 72.4 %, giving a standard deviation of 0.030 ml/l.

Considering only the part of the oxygen profile greater than 980 dbar, i.e. 872 samples, the differences are less than ± 0.010 ml/l for 41.6 % and less than ± 0.030 ml/l for 83.0 %. The resulting standard deviation is 0.024 ml/l.

Figure 44 shows the same histograms for oxygen, in µmol/kg. The differences in oxygen are less than ± 1 µmol/kg in 62.1 % of cases and less than ± 3 µmol/kg for 96.2 %, giving a standard deviation of 1.31 µmol/kg.

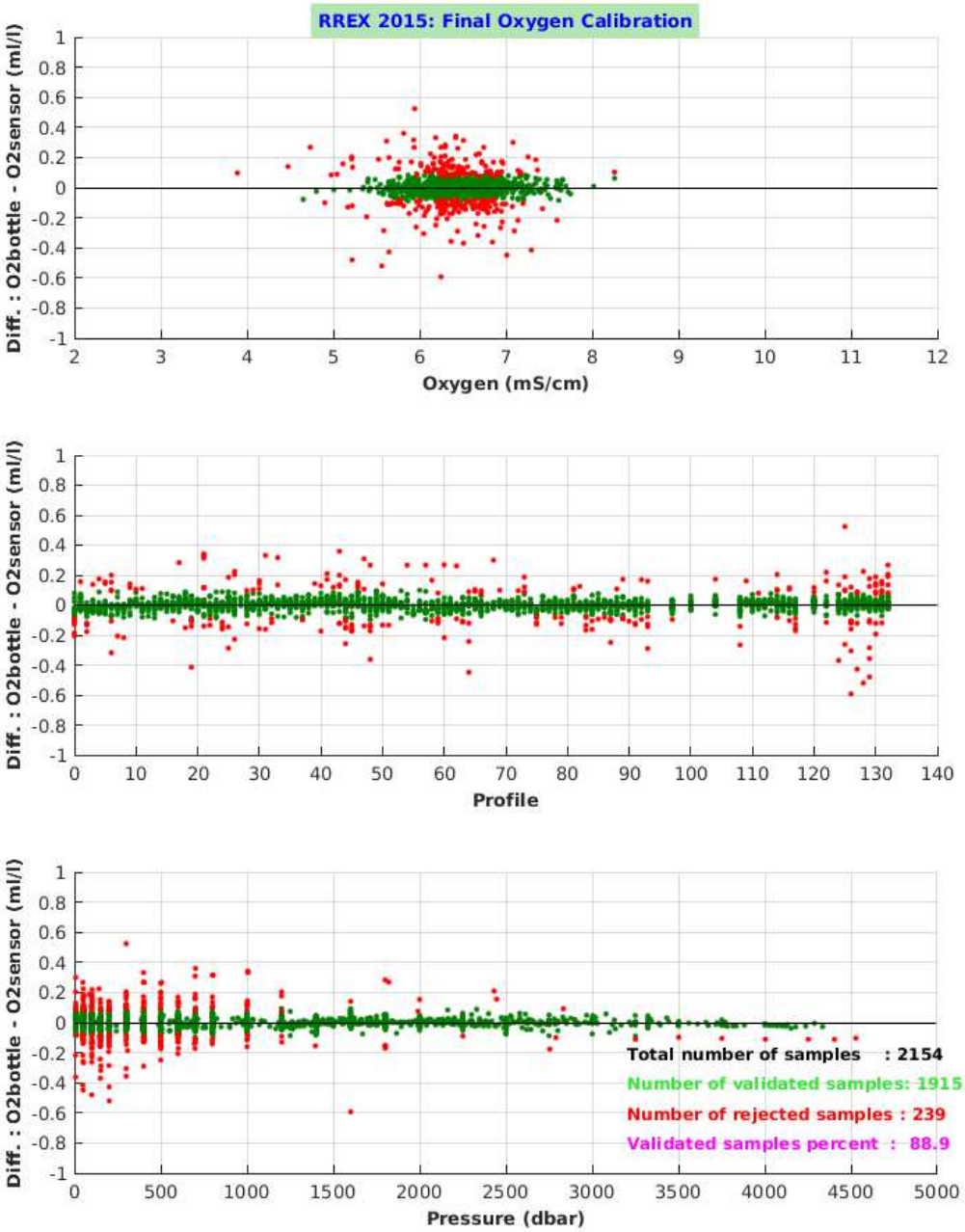


Figure 42: Final Oxygen calibration

Differences between the oxygen value measured on the 1915 validated samples and that of the CTD downcast profile around the sampling pressure (averaged over a 15 dbar interval):

a) as a function of the oxygen
b) as a function of the number of the profile concerned,
c) as a function of the pressure at the sampling level.

These differences are obtained after a specific calculation performed by group of casts. A polynomial of degree 1 eliminates the dependence of the differences on the pressure.

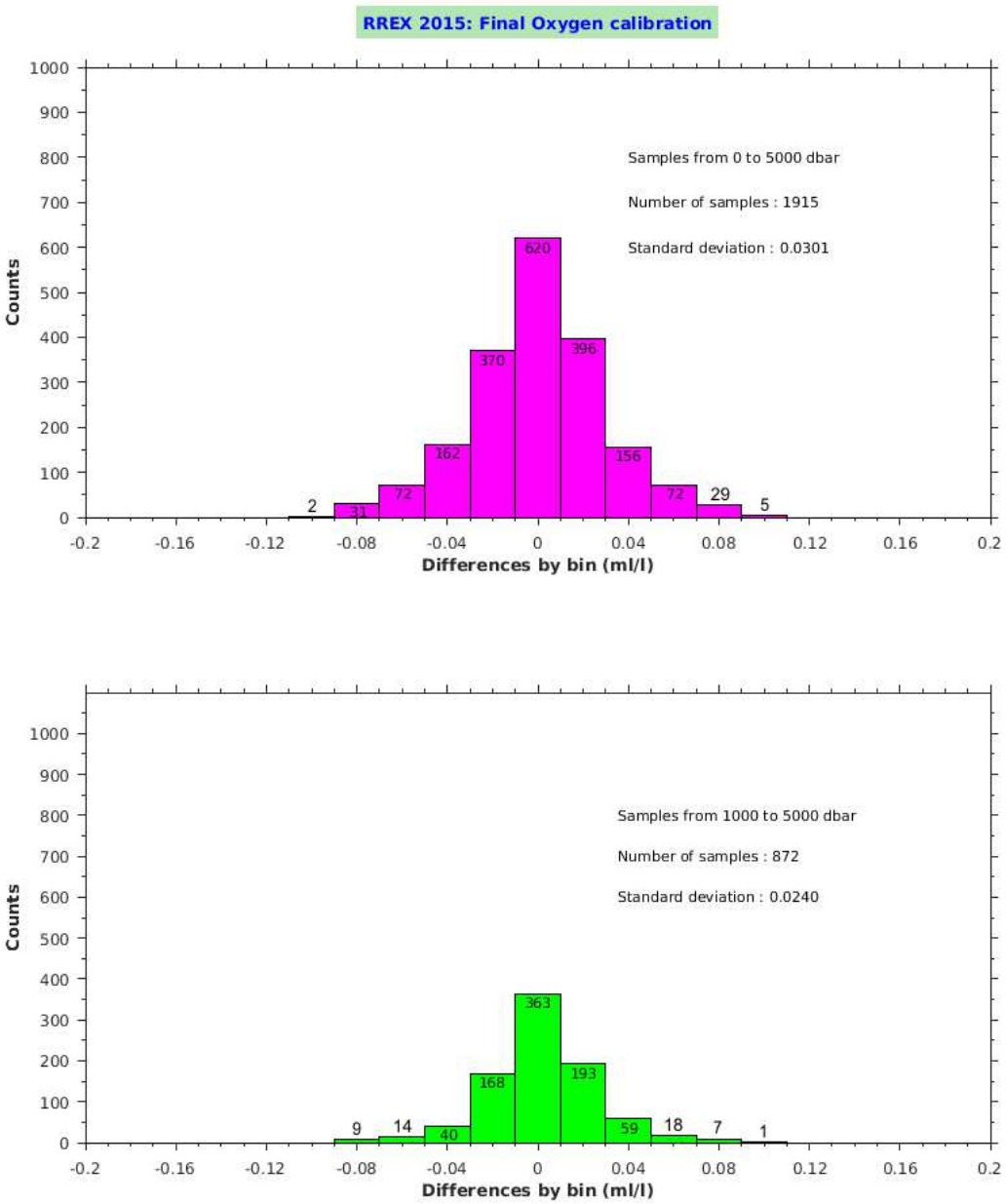


Figure 43: Histogram of the Oxygen differences

Histograms of oxygen differences (ml/l) between the value measured on the validated samples and that of the CTD downcast profile at the sampling pressure (final measurements) :

a) for all the 1915 validated samples on the cruise,

b) for the 872 validated samples collected at a pressure greater than 980 dbar.

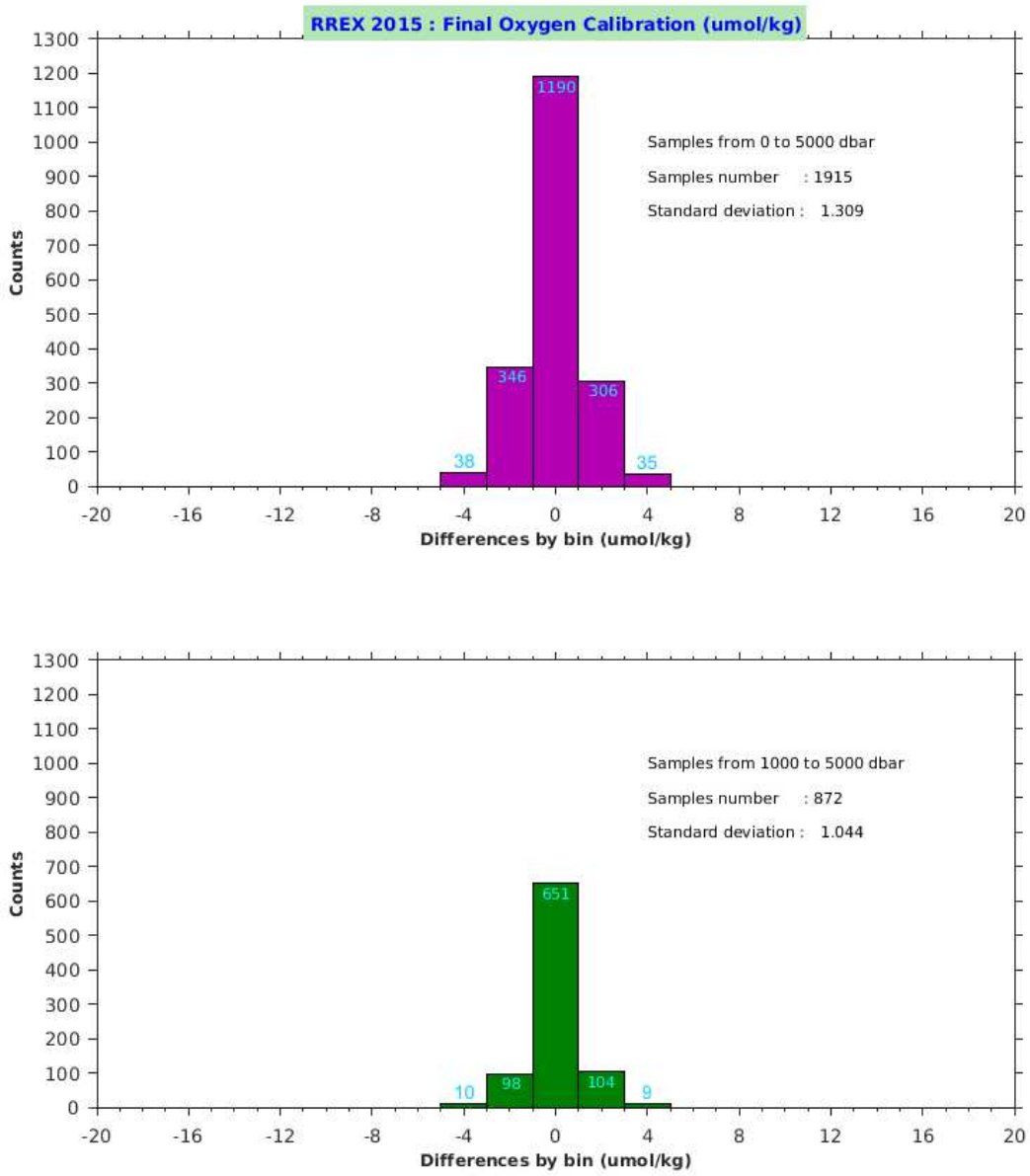


Figure 44: Histogram of the Oxygen differences (umol/kg)

Histograms of the oxygen differences (µmol/kg) between the value measured on the validated samples and that of the CTD downcast profile at the sampling pressure (final measurements):

a) for all the 1915 validated samples (µmol/kg) on the cruise,

b) for the 872 validated samples collected at a pressure greater than 980 dbar.

3.8.5. Validation of the results

Figure 45 compares Theta-O_2 from different cruises (Ovide 2010, Catarina 2012, RREX 2015) made in the same area (DEF section on the map, cf 3.7.4).
Figure 46 shows all theta-O_2 for RREX 2015.

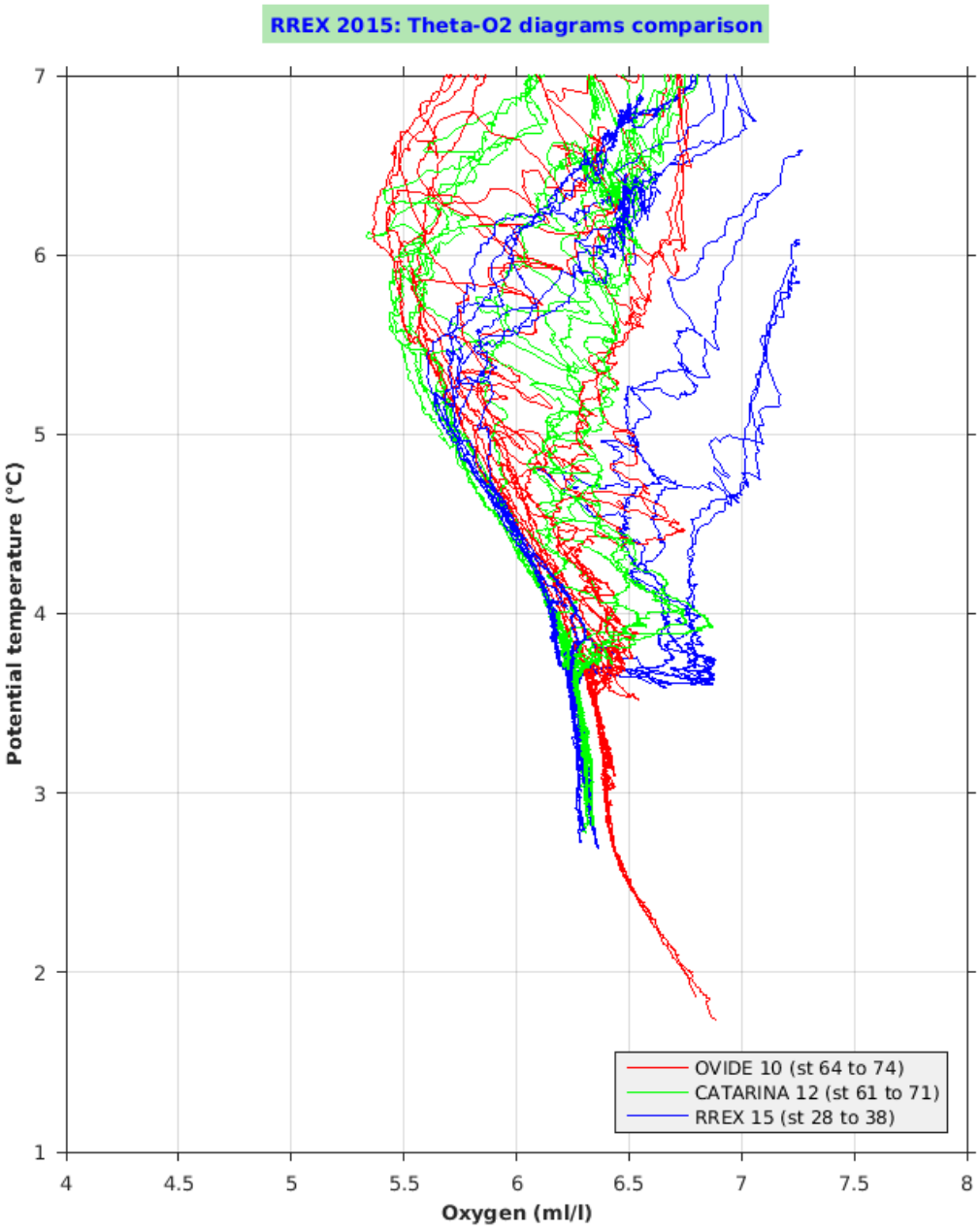


Figure 45: Theta-O_2 comparison

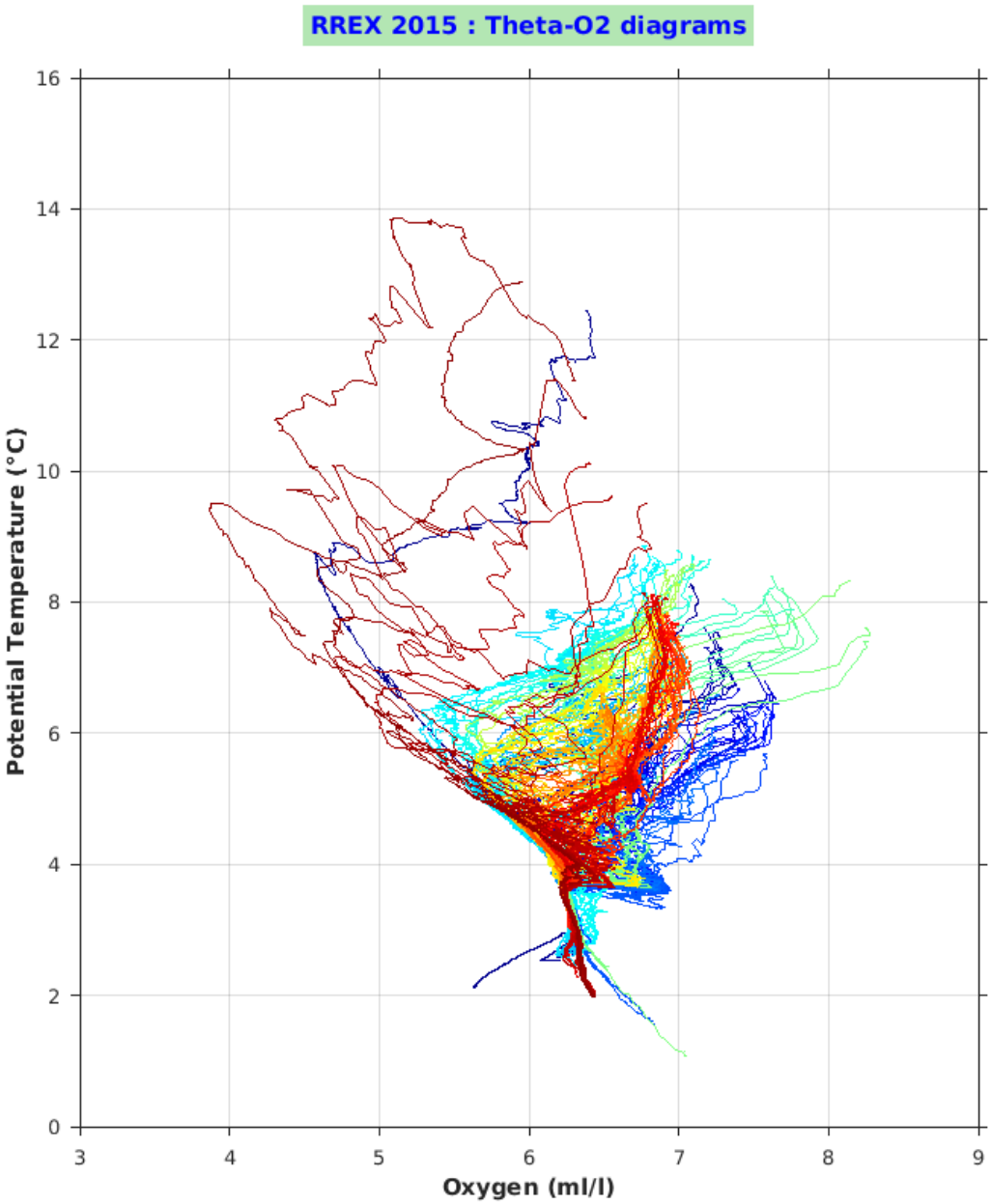


Figure 46: Theta-O_2 diagrams

Theta-O_2 diagrams for stations 0 to 132 of the RREX 2015 cruise. The color of the profiles changes gradually from blue to red.

3.9. Data reduction

All of the calibration part of the data processing is done based on the total probe measurements at 24 Hz. The data are then reduced to one measurement per decibar and we conserve only the set of sensors (primary or secondary) used during the calibration.

The elimination of non-validated cycles and the data reduction was carried out using the parameter gradients as elimination criteria:

abs((ParamCycle(N)-ParamCycle(N-1))/(PressionCycle(N)-PressionCycle(N-1)))

A cycle is validated if the values of the gradients are lower than the selected thresholds. Initially, a determination of the gradient histograms allows us to choose threshold values beyond which the parameters will be rejected. After removal of non-validated cycles, the decimation of the data is performed by calculating, for each integer pressure value, the mean of the parameters on a 1 dbar-layer centered on this value.

The set of criteria used to reduce the probe measurements is described in the document: "Validation et Réduction des données de la sonde SBE9+", C. Kermabon, M. Arhan, Nov 2008.

The options used for the RREX 2015 cruise are shown below:

primary sensors.

Threshold values for stations 0 to 132:

Echant.	1	Nb val min	6
Seuil P	0.5		
Seuil T, C surf	0.6	Seuil T,C fond	0.2
Seuil O (Volt) surf	1.8	Seuil O (Volt) fond	2.0

The downcast and upcast files were generated in netcdf format:

. rr15d*_cli.nc for the downcasts
. rr15a*_cli.nc for the upcasts

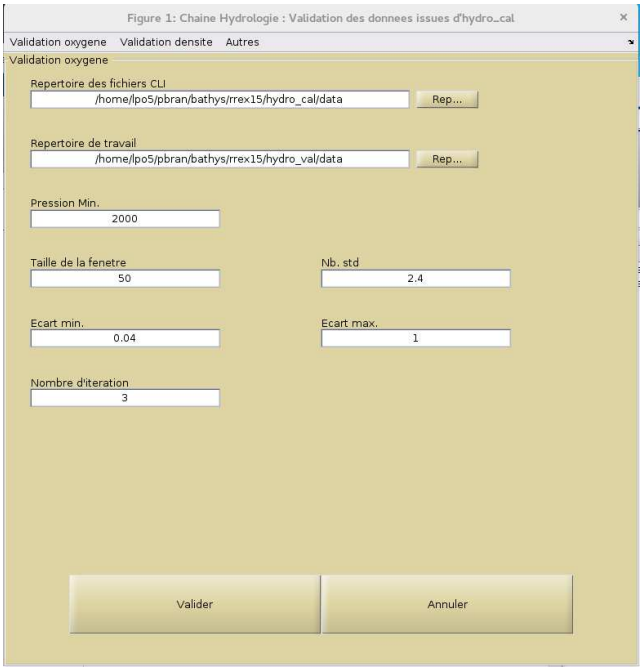
3.10. Validation of the profiles

The Hydro_val software (see Hydro_val: CTD data validation software) first flags as 'bad' (QC = 4), the small number of oxygen peaks which were not eliminated during the data reduction.

The second function of hydro_val is to analyze the density inversions in order to flag the corresponding T, S, O_2 data as bad, if necessary.

3.10.1. Validation of the Oxygen profiles

The window on the right shows the options used to validate the dissolved oxygen profiles from stationss 0 to 132. The downcasts and upcasts are corrected (cf. Cadhyac).



3.10.2. Density inversions

By superposing the reduced file, the adjusted file at 24 Hz and the file before loopedit at 24 Hz on the same graph, we can detect density inversions linked to the drag of the probe.

We can see on the graph below (figure 47) that the peak at 1971 and 1972 dbar in T and C corresponds to the measurements recorded by the probe 3.0 dbar previously. This crossed water (blue arrows) was drawn in by the frame and pollutes the sensors when the probe slows down. These inversions are not at all physical: they must be identified and the quality flag is set to 4 (QC = 4) for all the parameters. During the transfer to the.clc.nc files (intermediate format before the multi-cast format), a linear interpolation will be performed at these locations.

The reduced profile is shown in red, the adjusted data at 24 Hz in black, and the data at 24 Hz before loopedit in grey.

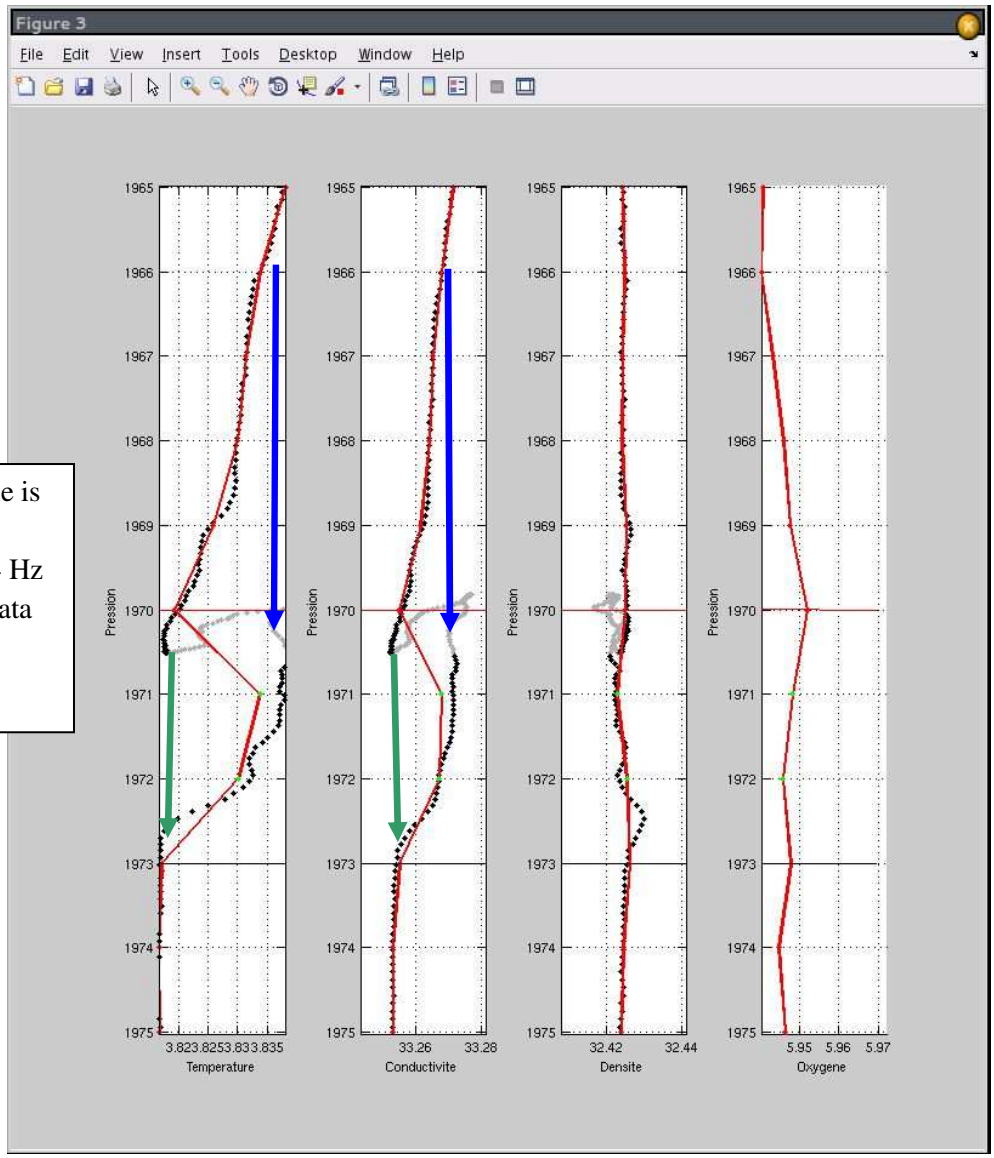


Figure 47: Exemple of invalidation of density inversions.

Hydro_val allows to remove the sensor value (T, C, O2) that will be replaced by a linear interpolation between 1970 dbar and 1973 dbar as shown by the green arrows.

3.11. Accuracy of the RREX 2015 measurements

The calibration of the CTD measurements ends with the determination of the accuracy of the different types of measurements (probe, chemistry)
The accuracy given by the manufacturer for the different CTD sensors is:

Pressure	1.0 dbar
Temperature	0.001 °C
Conductivity	0.003 mS/cm
Oxygen	± 2 % of saturation

During the calibration, we determine the accuracy for each sensor from statistical calculation between reference measurements and probe measurements.
The table below shows the accuracies obtained for RREX 2015:

Probe Param.	Value	Unit	Chemical Param.	Value	Unit
PRES	1.0	dbar			
TEMP	0.0013	°C			
COND	0.0010	mS/cm			
PSAL	0.0012	psu	CHPSALB	0.0012	psu
OXY	0.030	ml/l	CHOXYLB	0.019	ml/l
OXYK	1.31	µmol/kg	CHOXYKB	0.81	µmol/kg
			CHTMPOB	0.3	°C

4. Bibliography

Bacon, S., Snaith H., Yelland M., 1999. An evaluation of some recent batches of IAPSO standard seawater. Journal of Atmospheric and Oceanic Technology: Vol. 17, No. 6, pp. 854–861.

Benson, B.B. and D. Krause, Jr., 1984. The concentration and isotopic fractionation of oxygen dissolved in freshwater and seawater in equilibrium with the atmosphere. Limnol. Oceanogr., 29 (3), 620-632.

Branellec, P., Lherminier P. . Campagne OVIDE 2006, rapport de données CTD-O_2. Rapport interne DRO/DOPS/LPO 09-03.

Branellec, P., Ferron B., Lherminier P.. Campagne OVIDE 2008, rapport de données CTD-O_2. Rapport interne ODE/OPS/LPO 11-03.

Daniault, N., H. Mercier, P. Lherminier, **2011**: The 1992-2009 transport variability at the south east tip of Greenland from in situ measurements and altimetry. Geophysical Research Letters, 38, L07601,doi:10.1029/2011GL046863,OpenAccessVersion http://archimer.ifremer.fr/doc/00033/14467/11763.pdf. Selected as a research spotlight by AGU.

Daniault, N., P. Lherminier, H. Mercier, **2011**: Circulation and transport at the south east tip of Greenland. J. Phys. Oceanogr., 41, 437-457. doi:10.1175/2010JPO4428.1.

De Boisséson, E., V. Thierry, H. Mercier, **2010**: Mixed layer heat budget in the Iceland Basin from Argo. J. Geophys. Res. Oceans, 115, C10055, doi:10.1029/2010JC006283. Open Access Version http://archimer.ifremer.fr/doc/00017/12807/9761.pdf.

De Boisséson, E., V. Thierry, H. Mercier, G. Caniaux, and D. Desbruyères (2012), Origin, formation and variability of the Subpolar Mode Water located over the Reykjanes Ridge, J. Geophys. Res., 117, C12005, doi:10.1029/2011JC007519.

Desbruyères, D., V. Thierry, and H. Mercier (2013), Simulated decadal variability of the meridional overturning circulation across the A25-Ovide section, J. Geophys. Res. Oceans, 118, doi:10.1029/2012JC008342.

Ferron, B., **2011**: A 4D-variational approach applied to an eddy-permitting North Atlantic configuration: Synthetic and real data assimilation of altimeter observations. Ocean Modelling, 39, 370-385, doi:10.1016/j.ocemod.2011.06.001

Forget, G., B. Ferron, H. Mercier, **2008**: Combining ARGO profiles with a general circulation model in the North Atlantic. Part I: estimation of hydrography and circulation anomalies from synthetic profiles over a year. Ocean Modelling, doi:10.1016/j.ocemod.2007.06.001 or Open Access Version http://archimer.ifremer.fr/doc/2008/publication-3721.pdf.

Forget, G., B. Ferron, H. Mercier, **2008**: Combining ARGO profiles with a general circulation model in the North Atlantic. Part II: realistic transports and improved hydrography between spring 2002 and spring 2003. doi:10.1016/j.ocemod.2007.06.002 or Open Access Version http://archimer.ifremer.fr/doc/2008/publication-3920.pdf.

Forner, Sandra, 2005 : Utilisation des CFC et du CCL4 dans l'étude de la circulation profonde de l'Atlantique Nord. Manuscrit de thèse de doctorat de 3eme cycle, Université de Bretagne Occidentale, IUEM/LCM, Brest, France.

Gourcuff, C., P. Lherminier, H. Mercier, P. Y. LeTraon, **2011**: Altimetry combined with hydrography for ocean transport estimation. J. Atmosph. Ocean. Tech., 28, 1324-1337, doi: 10.1175/2011JTECHO818.1.

Huck, T., A. Billant, P. Branellec. OVIDE 2004, rapport de données CTD-O_2. Rapport interne DRO/DOPS/LPO 06-01.

Lherminier, Pascale, Herlé Mercier, Claire Gourcuff, Marta Alvarez, Sheldon Bacon, Catherine Kermabon, **2007**: Transports across the 2002 Greenland-Portugal OVIDE section and comparison with 1997. J. Geophys. Res., 112(C7), C07003, doi:10.1029/2006JC003716 or Open Access Version http://archimer.ifremer.fr/doc/2007/publication-3296.pdf.

Lherminier, Pascale, Herlé Mercier, Thierry Huck, C. Gourcuff, F. F. Perez, P. Morin, A. Sarafanov, 2010: The Atlantic meridional overturning circulation and the subpolar gyre observed at the A25-Ovide section in June 2002 and 2004. Deep Sea Res. I. Publisher's official version : http://dx.doi.org/10.1016/j.dsr.2010.07.009, Open Access Version : http://archimer.ifremer.fr/doc/00011/12272/

Mantyla, A. W., 1993. The treatment of inconsistencies in Atlantic deep water salinity data. Deep-Sea Res., 41, 1387–1405.

Mercier, H., Billant A., Branellec P., Morin P., Messias M.J., Memery L., Thomas C, Honnorez J. Campagne Romanche 1 : Données CTD-O_2, Chimie et Bathymétrie. Rapport InterneLPO 92-02.

Mercier, H., A. Billant, P. Branellec. OVIDE 2002, rapport de données CTD-O_2. Rapport interne DRO/DOPS/LPO 04-01.

Mercier, Herlé, Pascale Lherminier, Artem Sarafanov, Fabienne Gaillard, Nathalie Daniault, Damien Desbruyères, Anastasia Falina, Bruno Ferron, Claire Gourcuff, Thierry Huck, Virginie Thierry, 2015: Variability of the meridional overturning circulation at the Greenland-Portugal OVIDE section from 1993 to 2010. Progress in Oceanography, 132, 250–261, doi:10.1016/j.pocean.2013.11.001

Millard, R.C., 1982. CTD calibration and data processing techniques at WHOI using the 1978 practical salinity scale. International STD Conference and Workshop, San Diego (8-11 February 1982).

Pérez, F. F., M. Vázquez-Rodríguez, H. Mercier, A. Velo, P. Lherminier, and A. F. Ríos, **2010**: Trends of anthropogenic CO_2 storage in North Atlantic water masses. Biogeosciences, 7, 1789-1807,doi:10.5194/bg-7-1789-2010.

Pérez, F. F., M. Vazquez-Rodriguez, E. Louarn, X. A. Padin, H. Mercier, A. Rios, **2008**: Temporal trends of the anthropogenic CO_2 storage in the Irminger Sea. Biogeosciences, 5,1669-1679, doi:10.5194/bg-5-1669-2008.

Sarafanov, A. H. Mercier, A. Falina, A. Sokov, P. Lherminier, **2010**: Cessation and partial reversal of deep water freshening in the northern North Atlantic: observation-based estimates and attribution. Tellus A, 62A, 80-90, doi:10.1111/j.1600-0870.2009.00418.x.

Saout-Grit, C., A. Ganachaud, C. Maes, L. Finot, L. Jamet, F. Baurand and J. Grelet, 2015: Calibration of CTD oxygen data collected in the Coral Sea during 2012 Bifurcation cruise. Mercator Ocean–Coriolis Quartely Newsletter – Special Issue #52-May 2015, p. 34–38.

Sarafanov, A., A. Falina, P. Lherminier, H. Mercier, A. Sokov, C. Gourcuff, **2010**: Assessing decadal changes in the deep western boundary current absolute transports southeast of of Cape Farewell (Greenland) from hydrography and altimetry. J. Geophys. Res. Oceans, 115, C11003, doi:10.1029/2009JC005811 .

Sarafanov, A., A. Falina, H. Mercier, P. Lherminier, A. Sokov, **2009**: Recent changes in the Greenland-Scotland overflow-derived water transport inferred from hydrographic observations in the southern Irminger Sea. Geophysical Research Letters, 36, L13707, doi:10.1029/2009GL038041.

Sarthou, Geraldine, Lherminier Pascale, Fernandez Perez Fiz, Treguer Paul, Grossteffan Emilie, Le Goff Manon, Dehairs Frank, Achterberg Eric Pieter, La Roche Julie, Boyle Edward, Henderson Gideon, Vance Derek, Lacan Francois, Cossa Daniel, Heimbuerger Lars-Eric, Tang Yi, Stewart Gillian, Castrillejo Maxi, Roca Marti Montserrat, Masque Pere, Jeandel Catherine, Planquette Helene, Cheize Marie, Van Beek Peter, Lemaitre Nolwenn, Planchon Frederic, De La Rocha Christina, Sutton Jill, Shelley Rachel, Sanial Virginie (2015). GEOVIDE cruise report: 15 May - 30 June 2014 on board R/V Pourquoi Pas?

Saunders, P.M., 1986. The accuracy of measurement of salinity, oxygen and temperature in the deep ocean. J. Phys. Oceanogr., 16, 189-195.

The GO-SHIP Repeat Hydrography Manual : A Collection of Expert Reports and Guidelines. IOCCP Report No. 14, ICPO Publication Series No. 134, Version 1, 2010.

Thierry, Virginie, Eric de Boisséson, Herlé Mercier **2008**: Interannual variability of the Subpolar Mode Water properties over the Reykjanes Ridge during 1990-2006. J. Geophys. Res., 113, C04016, doi:10.1029/2007JC004443 or Open Access Version http://archimer.ifremer.fr/doc/2007/publication-3487.pdf.

Treguier, A. M., C. Gourcuff, P. Lherminier, H. Mercier, B. Barnier, G. Madec, J. M. Molines, T. Penduff, L. Czeschel, C. Böning, 2005 : Internal and forced variability along a section between Greenland and Portugal in the CLIPPER Atlantic model. Soumis à Ocean Dynamics.

UNESCO, 1981. Background papers and supporting data on the Practical Salinity Scale, 1978. UNESCO Technical Papers in Marine Science, n° 37, 144 p.

Väge, K., Robert S. Pickart, Artem Sarafanov, Øyvind Knutsen, Herlé Mercier, Pascale Lherminier, Hendrik M. van Aken, Jens Meincke, Detlef Quadfasel, **2011** : The Irminger gyre : circulation, convection and interannual variability. Deep Sea Res. I., 58, 590-614, doi:10.1016/j.dsr.2011.03.001.

WOCE Operations Manual - Volume 3 : The Observational Programme Section 3.1 WOCE Hydrographic Programme - Part 3.1.3 : WHP Operations and Methods. WOCE Report n° 68/91 - July 1991. Part 3.1.2 : Requirements for WHP Data Reporting – May 1994.

LOPS technical notes:

Branellec, P. M. Hamon. Etude d'un choc thermique sur le capteur de pression d'une sonde CTD SBE911+, (nov 2009).

Hamon, M., L. Marié, J.P. Gouillou. Documentation technique de la carte Rosette (janv. 2008).

Kermabon, C. : Mise en place du post-processing des données CTD (oct. 2007).

Kermabon, C., M. Arhan. Validation et réduction des données de la sonde SBE9+. Rapport interne OPS/LPO, 2008.

Kermabon, C., P. Le Bot, V. Thierry, P. Lherminier. Logiciel de nettoyage des données CTD : Hydro_nett. Rapport interne ODE/LPO, 2012.

Kermabon, C., P. Le Bot, V. Thierry, P. Lherminier, P. Branellec. Logiciel d'ajustage des données CTD : Hydro_cal. Rapport interne ODE/LPO, 2012.

Kermabon, C., P. Le Bot, V. Thierry, P. Lherminier. Logiciel de validation des données CTD : Hydro_val. Rapport interne ODE/LPO, 2012

Kermabon, P. Le Bot, V. Thierry, P. Lherminier, P. Branellec. CADHYAC: Chaîne d'ajustage des données hydrologie après campagne. Documentation utilisateur. Rapport interne ODE/LPO, 2015.

5. Listings and figures of the CTD parameters

Figures of the various sections generated from the cruise data are presented below, followed by listings and detailed figures profile by profile.

5.1. Remarks

a) Description of the profiles:

1. The latitude and longitude indicate the positioning of the ship at the beginning of the descent profile.
2. The depth indicated is a calculation obtained by summing the maximum pressure (in meters) reached by the CTD and the bottom-pinger distance.

b) The temperature, salinity and dissolved oxygen measurements come from the downcast profile of the ctd.

c) The measurements shown are extracted from the files of type **_clc.nc**, the listed levels are:
. the first level
. every 10 dbar up to 50 dbar
. every 50 dbar from 50 dbar to the bottom
. the last level

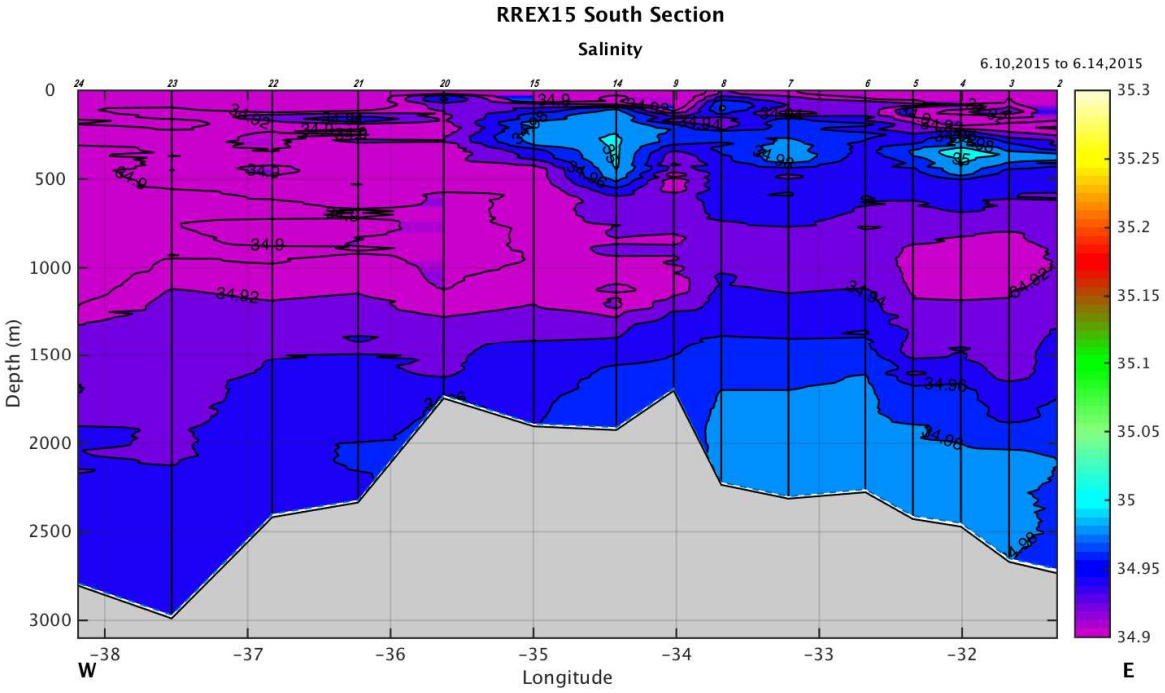
d) For the missing pressure levels (mean not calculated in the data acquisition), the measurements are interpolated. Near the surface, the measures are extrapolated up to level 1 by copying those of the first reduced level.

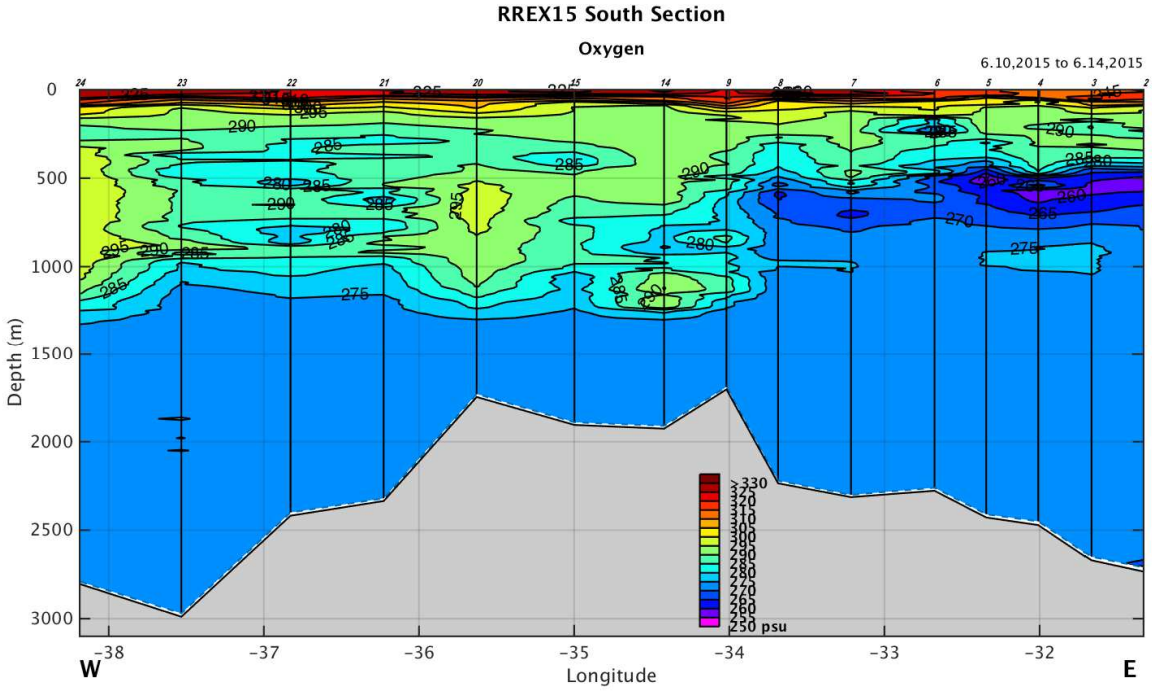
e) Listings and plots show the results as a function of the pressure (expressed in dbar).

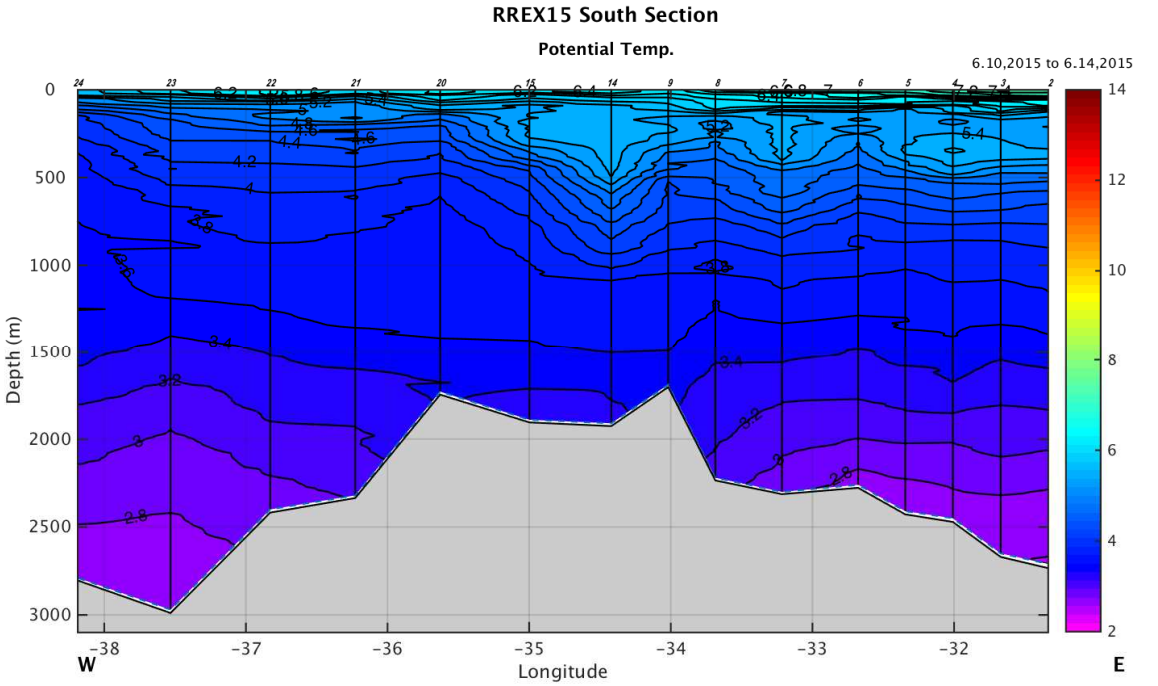
f) The profiles are numbered sequentially from 0 to 132.

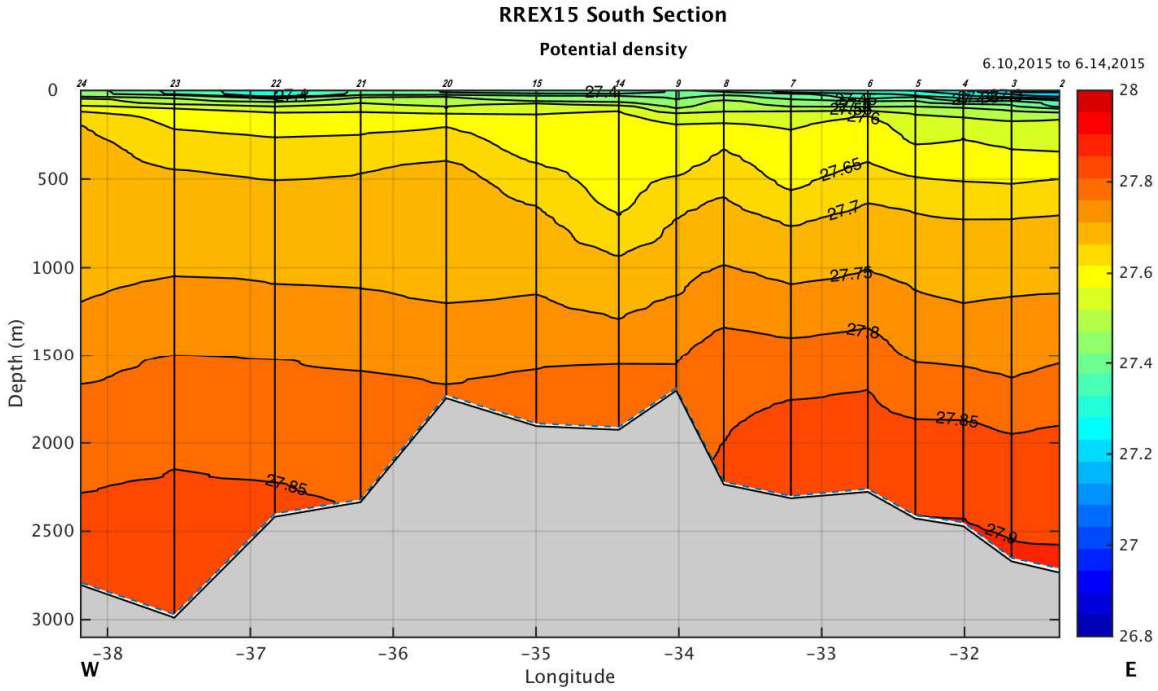
5.2. Sections plot

5.2.1. South section

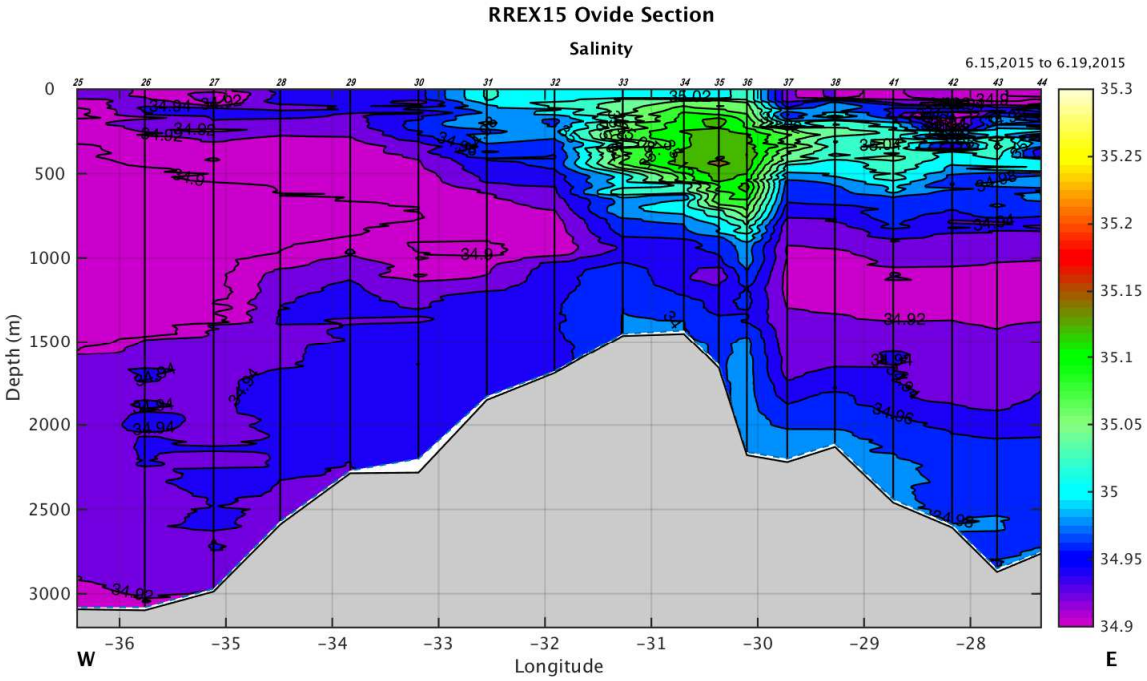


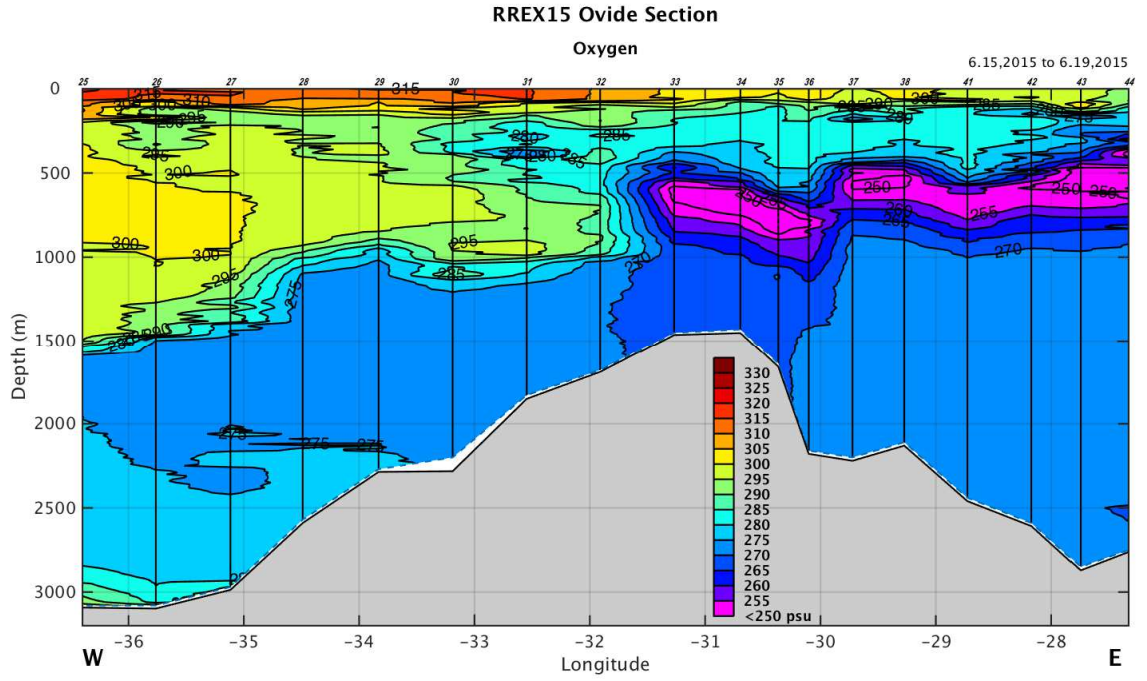


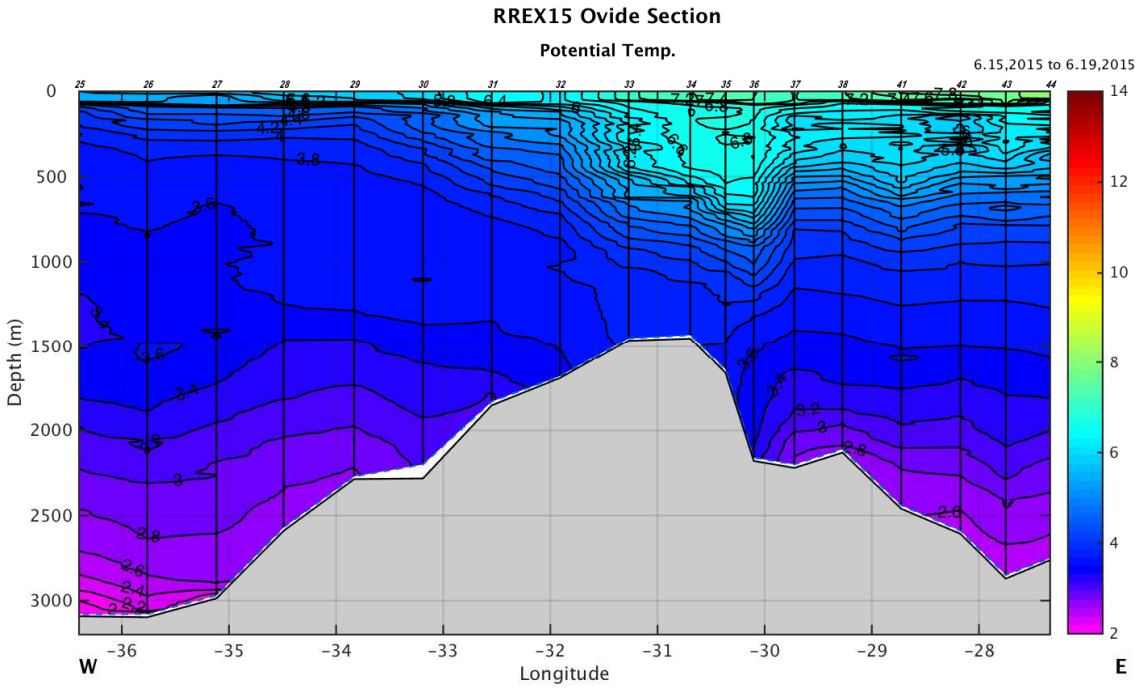

RREX15 South Section
Potential Temp.
6.10,2015 to 6.14,2015
Depth (m)
Longitude
W
E

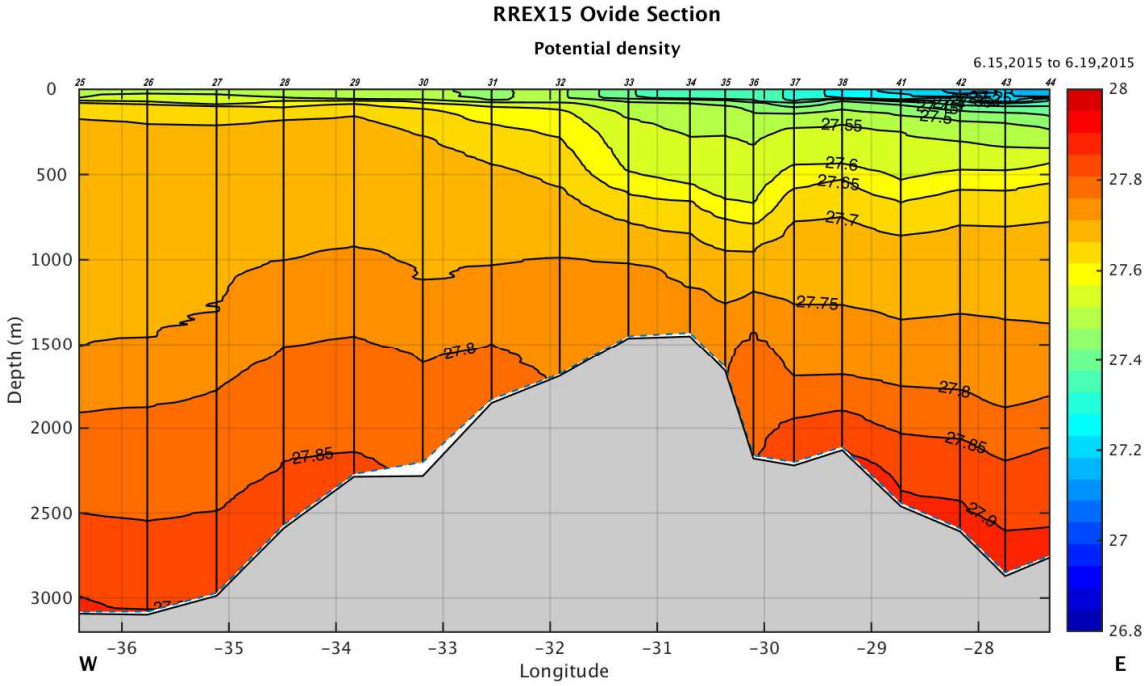

RREX15 South Section
Potential density
6.10,2015 to 6.14,2015
Depth (m)
Longitude
W
E

5.2.2. Ovide section

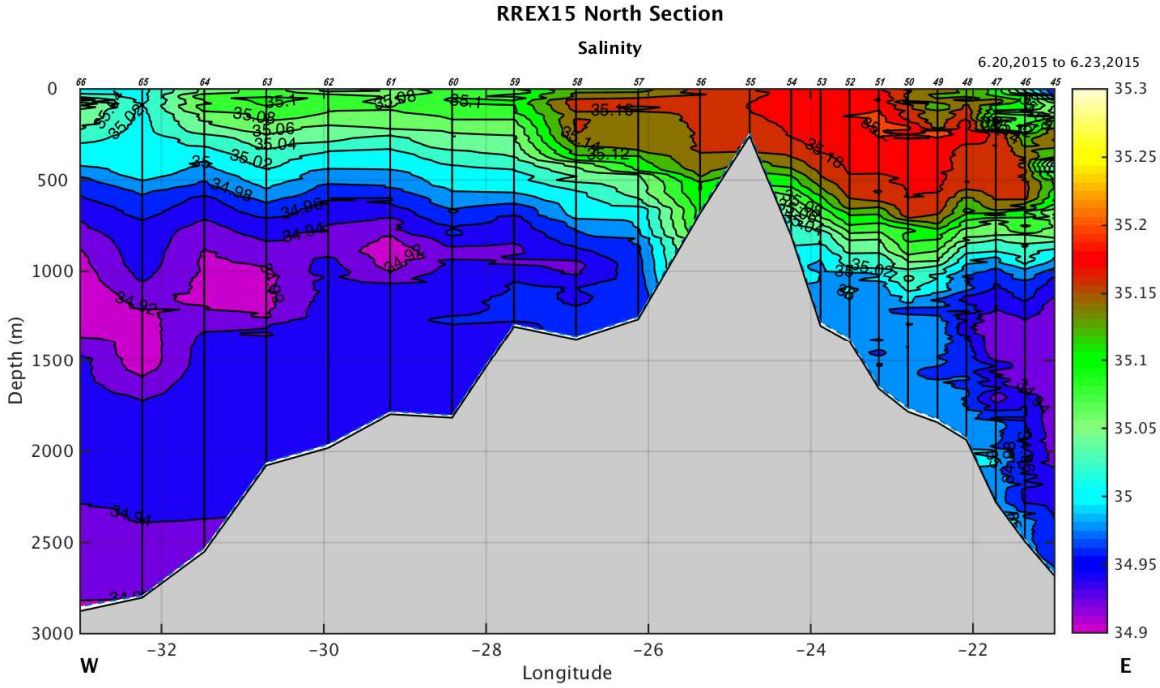


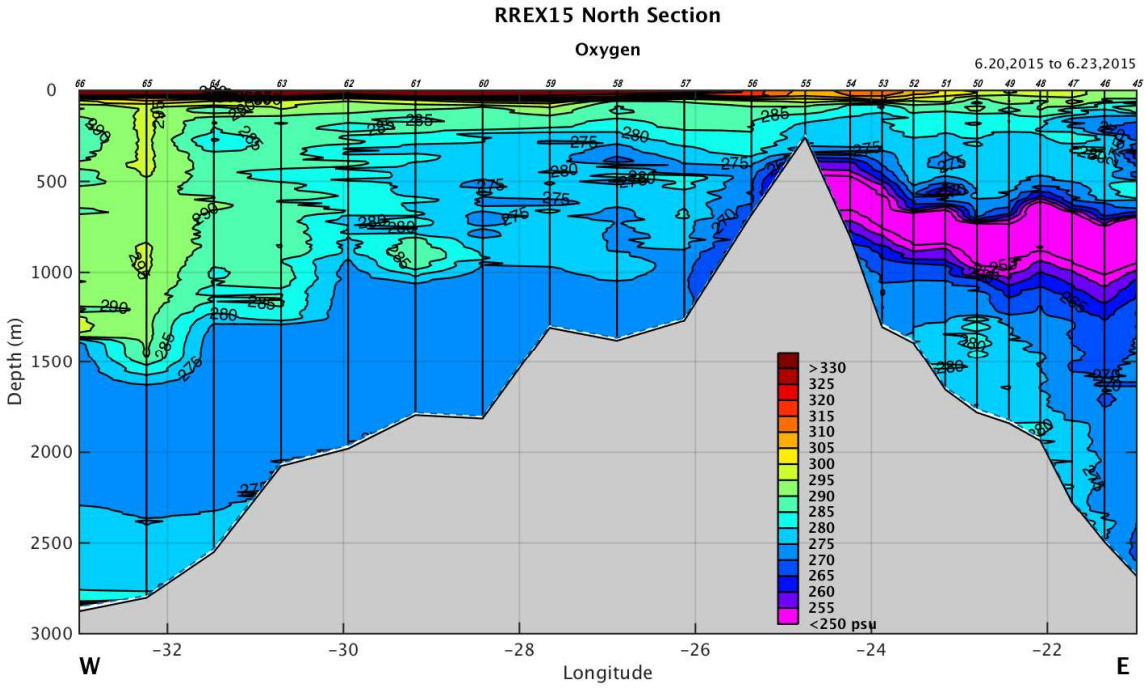


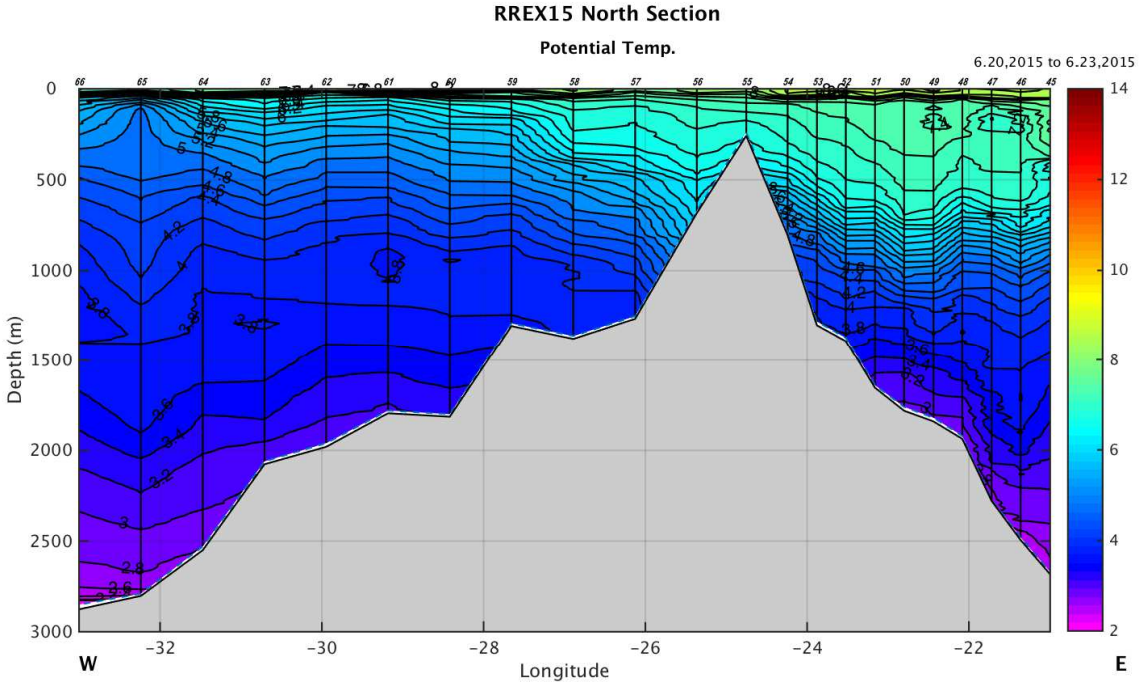

RREX15 Ovide Section
Potential Temp.
6.15,2015 to 6.19,2015
Depth (m)
Longitude
W
E

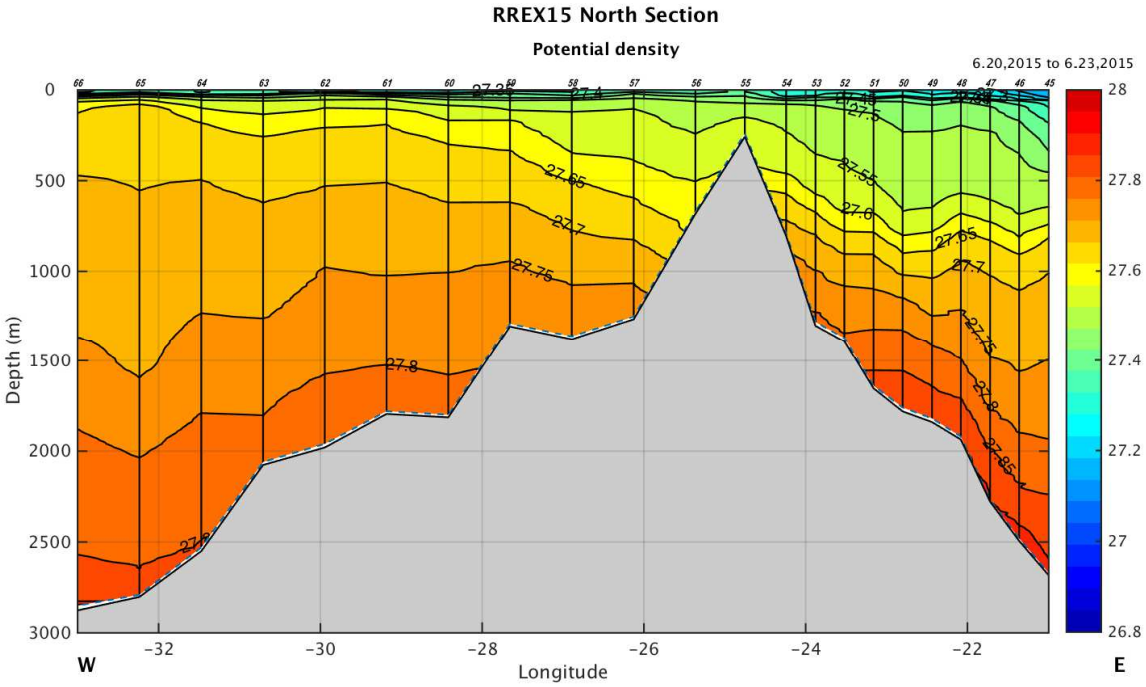

RREX15 Ovide Section
Potential density
6.15,2015 to 6.19,2015
Depth (m)
Longitude
W
E

5.2.3. North section

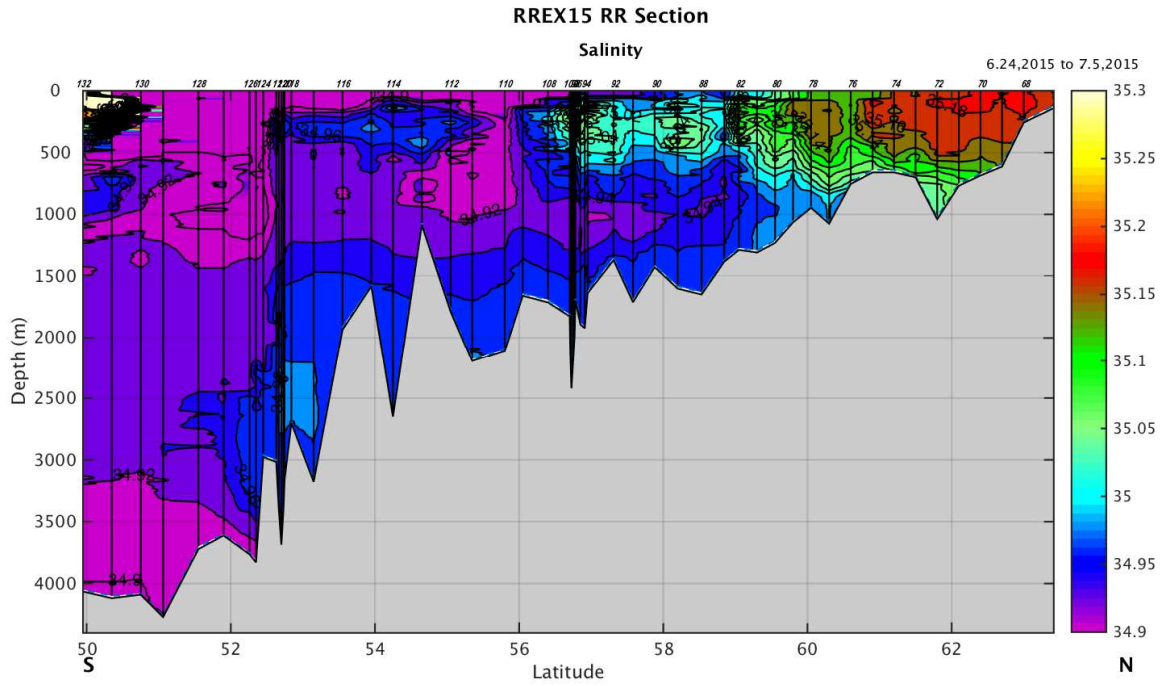


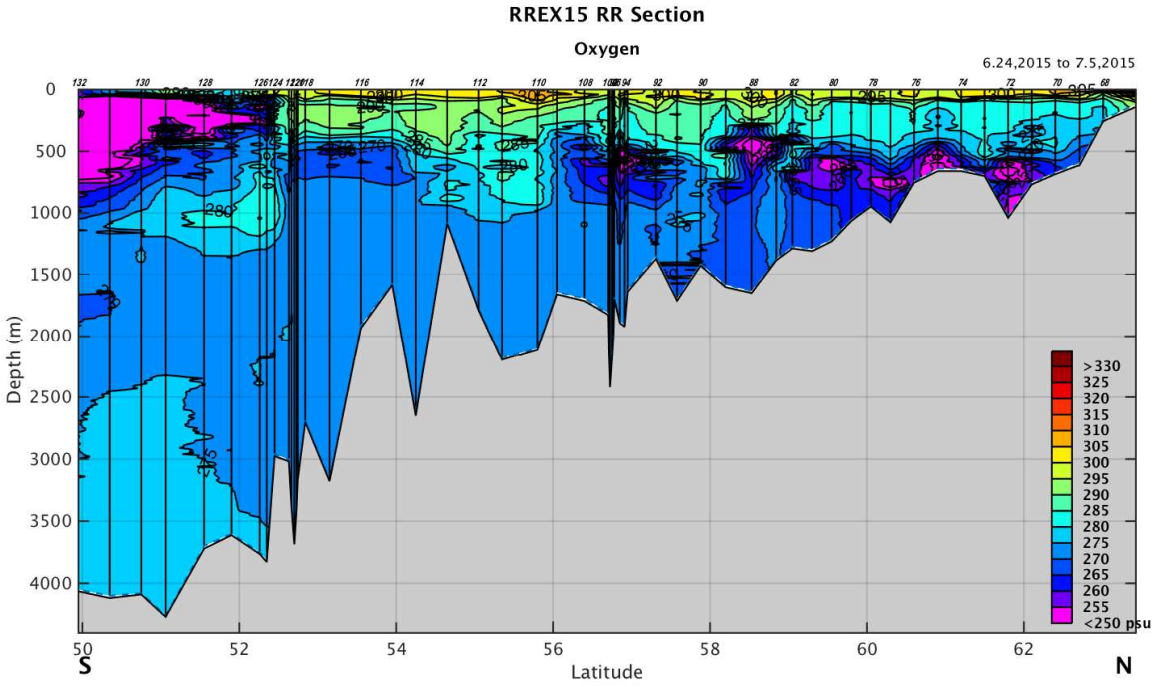


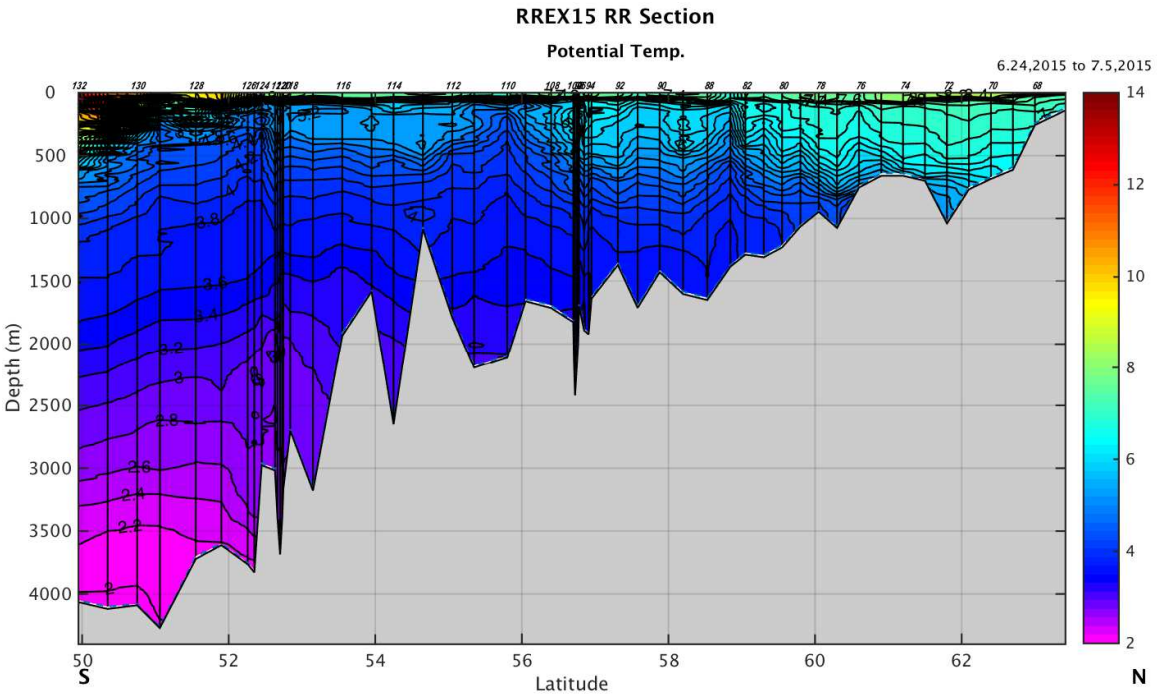

RREX15 North Section
Potential Temp.
6.20,2015 to 6.23,2015
Depth (m)
Longitude
W
E

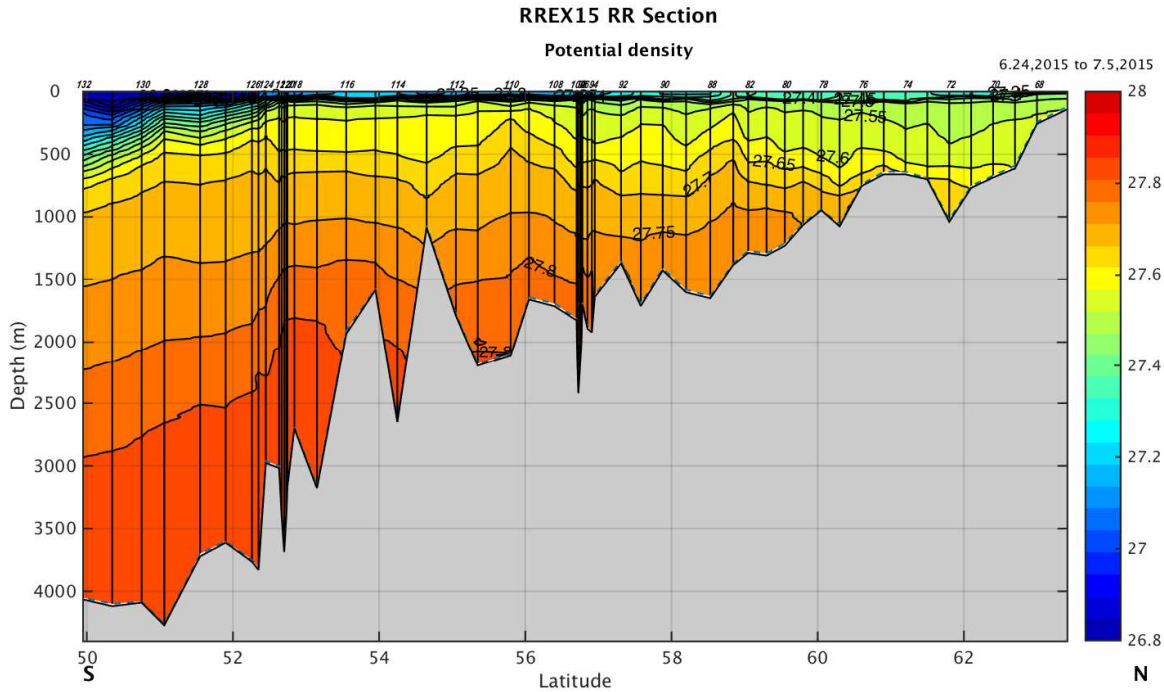

RREX15 North Section
Potential density
6.20,2015 to 6.23,2015
Depth (m)
Longitude
W
E

5.2.4. Ridge section





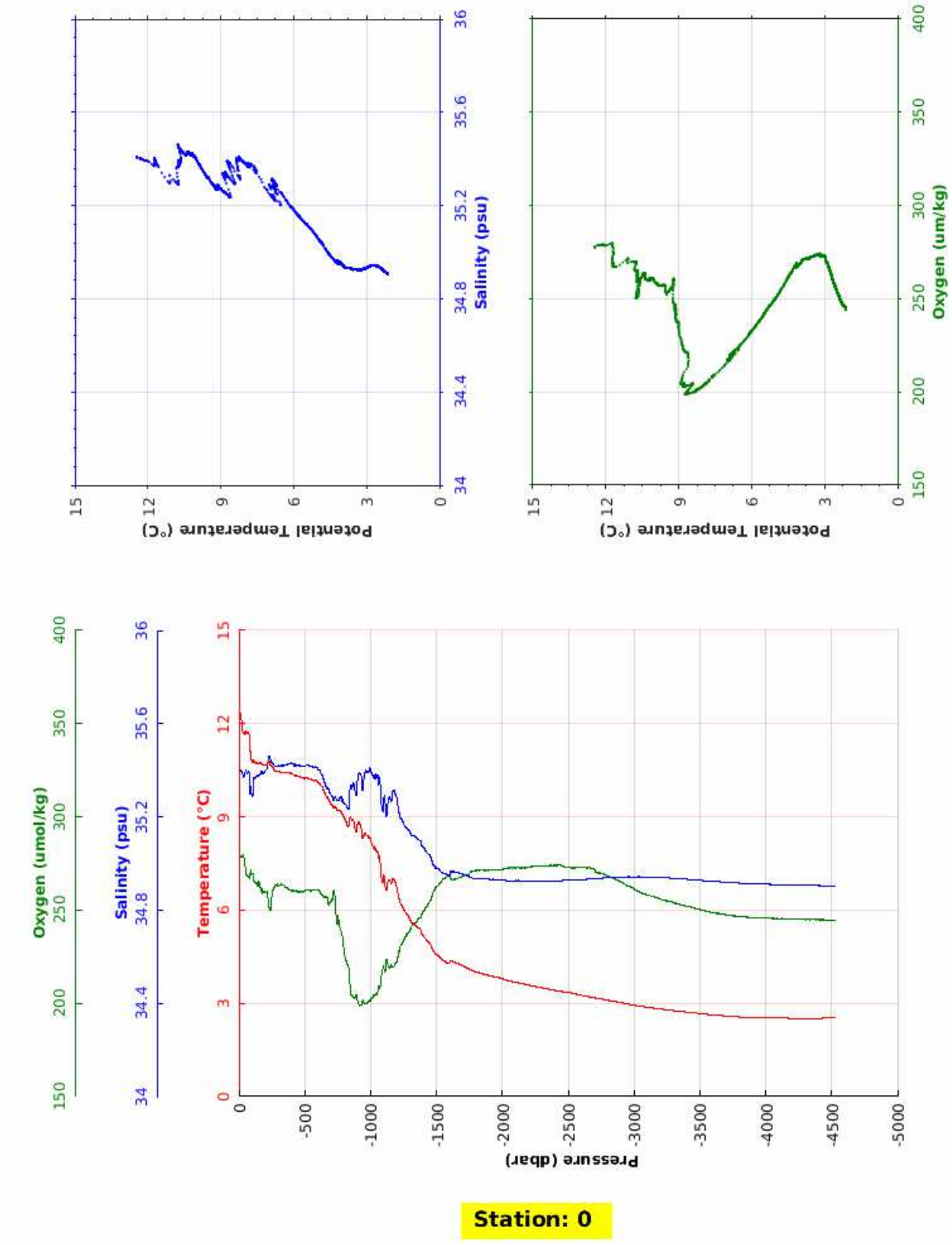




5.3. Listings and figures

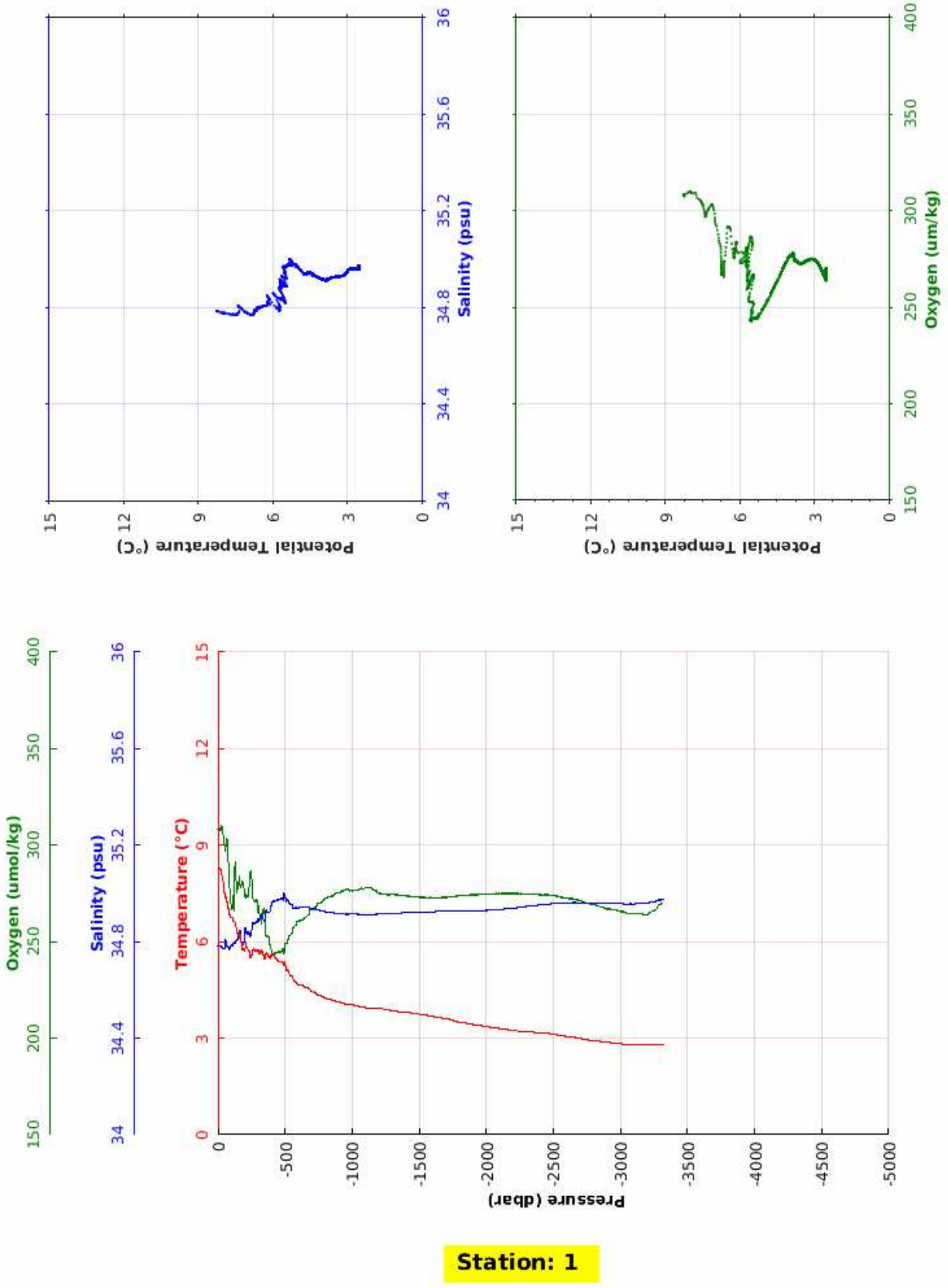
Cruise	: RREX 2015		
Station	: 0	Cast	: 1
Date	: 08/06/2015	Ship	: N/O Thalassa
Depth	: 4458 m	Organism	: IFREMER
Position	: N 52 6.21 W 018 24.52		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.447	35.407	277.7	12.447	3050.0	2.899	34.942	259.4	2.645
10.0	12.304	35.402	278.8	12.303	3100.0	2.872	34.942	258.2	2.614
20.0	12.098	35.393	279.0	12.095	3150.0	2.845	34.940	257.3	2.582
30.0	11.731	35.371	279.5	11.727	3200.0	2.816	34.940	256.1	2.548
40.0	11.674	35.375	274.3	11.669	3250.0	2.791	34.938	254.9	2.518
50.0	11.750	35.403	270.6	11.744	3300.0	2.764	34.936	254.0	2.486
100.0	10.749	35.290	269.9	10.737	3350.0	2.740	34.934	253.0	2.458
150.0	10.702	35.375	265.0	10.684	3400.0	2.719	34.932	252.2	2.432
200.0	10.676	35.399	259.4	10.651	3450.0	2.693	34.930	251.1	2.401
250.0	10.615	35.432	259.3	10.584	3500.0	2.671	34.928	250.3	2.375
300.0	10.462	35.419	262.9	10.426	3550.0	2.650	34.926	249.4	2.348
350.0	10.422	35.424	262.5	10.380	3600.0	2.623	34.923	248.6	2.316
400.0	10.405	35.431	260.5	10.356	3650.0	2.610	34.921	248.1	2.298
450.0	10.304	35.421	260.0	10.250	3700.0	2.589	34.919	247.4	2.272
500.0	10.247	35.420	260.0	10.187	3750.0	2.576	34.918	246.9	2.254
550.0	10.207	35.417	260.3	10.141	3800.0	2.561	34.916	246.5	2.234
600.0	10.111	35.404	260.8	10.039	3850.0	2.547	34.914	246.2	2.215
650.0	9.775	35.344	257.3	9.699	3900.0	2.542	34.913	246.1	2.204
700.0	9.406	35.290	255.3	9.325	3950.0	2.535	34.912	246.0	2.191
750.0	9.209	35.271	246.3	9.124	4000.0	2.531	34.911	245.6	2.182
800.0	8.961	35.259	225.6	8.871	4050.0	2.528	34.910	245.6	2.174
850.0	9.003	35.339	204.2	8.907	4100.0	2.523	34.909	245.5	2.162
900.0	8.743	35.363	200.6	8.642	4150.0	2.521	34.908	245.3	2.154
950.0	8.412	35.365	200.6	8.308	4200.0	2.519	34.908	245.1	2.147
1000.0	8.229	35.391	202.1	8.120	4250.0	2.518	34.907	245.1	2.140
1050.0	7.874	35.370	206.1	7.762	4300.0	2.516	34.906	244.9	2.132
1100.0	7.109	35.291	217.4	6.998	4350.0	2.516	34.906	245.1	2.127
1150.0	6.901	35.271	219.8	6.787	4400.0	2.520	34.905	244.8	2.124
1200.0	6.631	35.256	224.4	6.513	4450.0	2.521	34.905	244.8	2.119
1250.0	6.024	35.168	234.1	5.907	4500.0	2.524	34.904	244.6	2.115
1300.0	5.693	35.129	240.1	5.574	4533.0	2.527	34.904	244.3	2.115
1350.0	5.474	35.106	244.4	5.352					
1400.0	5.176	35.068	249.8	5.053					
1450.0	4.932	35.033	254.8	4.806					
1500.0	4.589	34.981	262.5	4.462					
1550.0	4.382	34.958	266.8	4.253					
1600.0	4.315	34.958	268.5	4.182					
1650.0	4.305	34.962	267.0	4.168					
1700.0	4.206	34.953	268.2	4.065					
1750.0	4.085	34.939	269.9	3.941					
1800.0	4.018	34.935	271.2	3.870					
1850.0	3.953	34.933	271.4	3.801					
1900.0	3.899	34.932	271.5	3.742					
1950.0	3.841	34.931	271.8	3.681					
2000.0	3.782	34.929	271.9	3.618					
2050.0	3.715	34.925	272.7	3.547					
2100.0	3.679	34.927	272.7	3.507					
2150.0	3.639	34.926	272.6	3.462					
2200.0	3.586	34.925	273.0	3.405					
2250.0	3.538	34.924	273.5	3.353					
2300.0	3.498	34.924	273.8	3.309					
2350.0	3.462	34.925	273.7	3.269					
2400.0	3.411	34.924	274.0	3.214					
2450.0	3.377	34.926	273.8	3.176					
2500.0	3.345	34.928	272.9	3.138					
2550.0	3.305	34.929	272.6	3.095					
2600.0	3.259	34.931	273.2	3.044					
2650.0	3.218	34.933	272.7	2.999					
2700.0	3.181	34.935	271.4	2.958					
2750.0	3.137	34.937	269.7	2.909					
2800.0	3.093	34.940	268.3	2.861					
2850.0	3.060	34.941	266.7	2.824					
2900.0	3.020	34.943	265.0	2.779					
2950.0	2.975	34.943	263.0	2.730					
3000.0	2.940	34.943	261.3	2.690					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 0

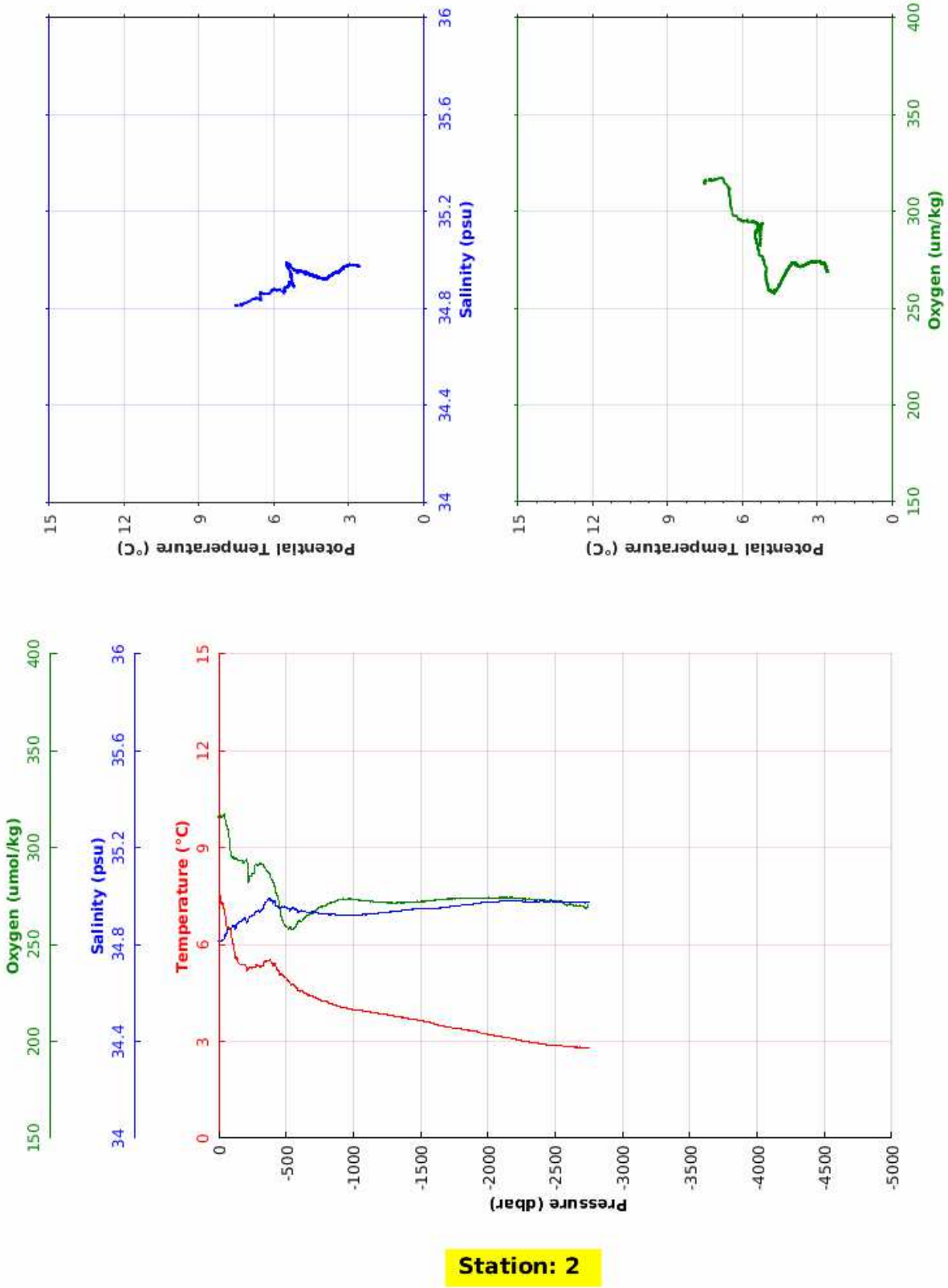
Cruise : RREX 2015			
Station : 1	Cast : 1		
Date : 10/06/2015	Ship : N/O Thalassa		
Depth : 3286 m	Organism : IFREMER		
Position : N 54 15.61 W 027 27.31			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.	PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	8.267	34.784	308.2	8.267	3050.0	2.810	34.956	264.9	2.559
10.0	8.273	34.785	307.9	8.272	3100.0	2.804	34.957	264.6	2.547
20.0	8.256	34.784	307.9	8.254	3150.0	2.804	34.960	264.8	2.542
30.0	8.018	34.777	310.0	8.015	3200.0	2.794	34.960	264.1	2.527
40.0	7.768	34.773	308.4	7.764	3250.0	2.801	34.966	266.1	2.528
50.0	7.514	34.770	303.7	7.509	3300.0	2.805	34.973	269.2	2.526
100.0	6.751	34.783	270.8	6.742	3328.0	2.808	34.975	270.3	2.526
150.0	6.239	34.812	276.7	6.226					
200.0	5.752	34.812	277.1	5.735					
250.0	5.584	34.840	286.6	5.563					
300.0	5.735	34.894	266.5	5.709					
350.0	5.466	34.887	266.5	5.437					
400.0	5.542	34.948	246.8	5.508					
450.0	5.409	34.973	244.7	5.372					
500.0	5.301	34.995	244.8	5.260					
550.0	4.927	34.955	253.7	4.883					
600.0	4.670	34.938	260.5	4.623					
650.0	4.594	34.944	262.6	4.544					
700.0	4.453	34.938	266.7	4.399					
750.0	4.340	34.930	269.7	4.282					
800.0	4.252	34.924	271.9	4.191					
850.0	4.188	34.922	273.7	4.123					
900.0	4.119	34.918	275.4	4.050					
950.0	4.064	34.915	276.8	3.991					
1000.0	4.040	34.916	276.4	3.964					
1050.0	3.996	34.914	276.9	3.915					
1100.0	3.944	34.910	277.9	3.860					
1150.0	3.926	34.911	277.7	3.837					
1200.0	3.917	34.916	275.3	3.824					
1250.0	3.894	34.917	274.5	3.797					
1300.0	3.852	34.917	274.7	3.751					
1350.0	3.826	34.919	274.2	3.721					
1400.0	3.805	34.920	273.8	3.696					
1450.0	3.779	34.922	273.3	3.666					
1500.0	3.749	34.923	273.2	3.631					
1550.0	3.720	34.923	272.8	3.599					
1600.0	3.682	34.924	272.8	3.557					
1650.0	3.644	34.926	272.8	3.514					
1700.0	3.608	34.926	273.1	3.474					
1750.0	3.555	34.927	273.3	3.417					
1800.0	3.501	34.927	273.9	3.359					
1850.0	3.472	34.927	274.0	3.326					
1900.0	3.427	34.928	274.3	3.277					
1950.0	3.401	34.929	274.4	3.248					
2000.0	3.369	34.930	274.7	3.211					
2050.0	3.333	34.932	274.8	3.171					
2100.0	3.301	34.934	275.0	3.135					
2150.0	3.271	34.937	274.9	3.100					
2200.0	3.242	34.939	275.0	3.067					
2250.0	3.220	34.942	275.0	3.041					
2300.0	3.200	34.946	274.8	3.016					
2350.0	3.188	34.949	274.6	3.000					
2400.0	3.174	34.953	274.3	2.980					
2450.0	3.153	34.956	274.2	2.955					
2500.0	3.125	34.957	273.9	2.922					
2550.0	3.084	34.958	273.3	2.878					
2600.0	3.059	34.961	272.7	2.848					
2650.0	3.034	34.962	272.3	2.819					
2700.0	2.998	34.962	271.4	2.778					
2750.0	2.954	34.959	270.0	2.730					
2800.0	2.930	34.959	269.2	2.701					
2850.0	2.903	34.959	268.2	2.669					
2900.0	2.868	34.958	267.0	2.630					
2950.0	2.856	34.959	266.8	2.614					
3000.0	2.827	34.958	265.7	2.580					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 1

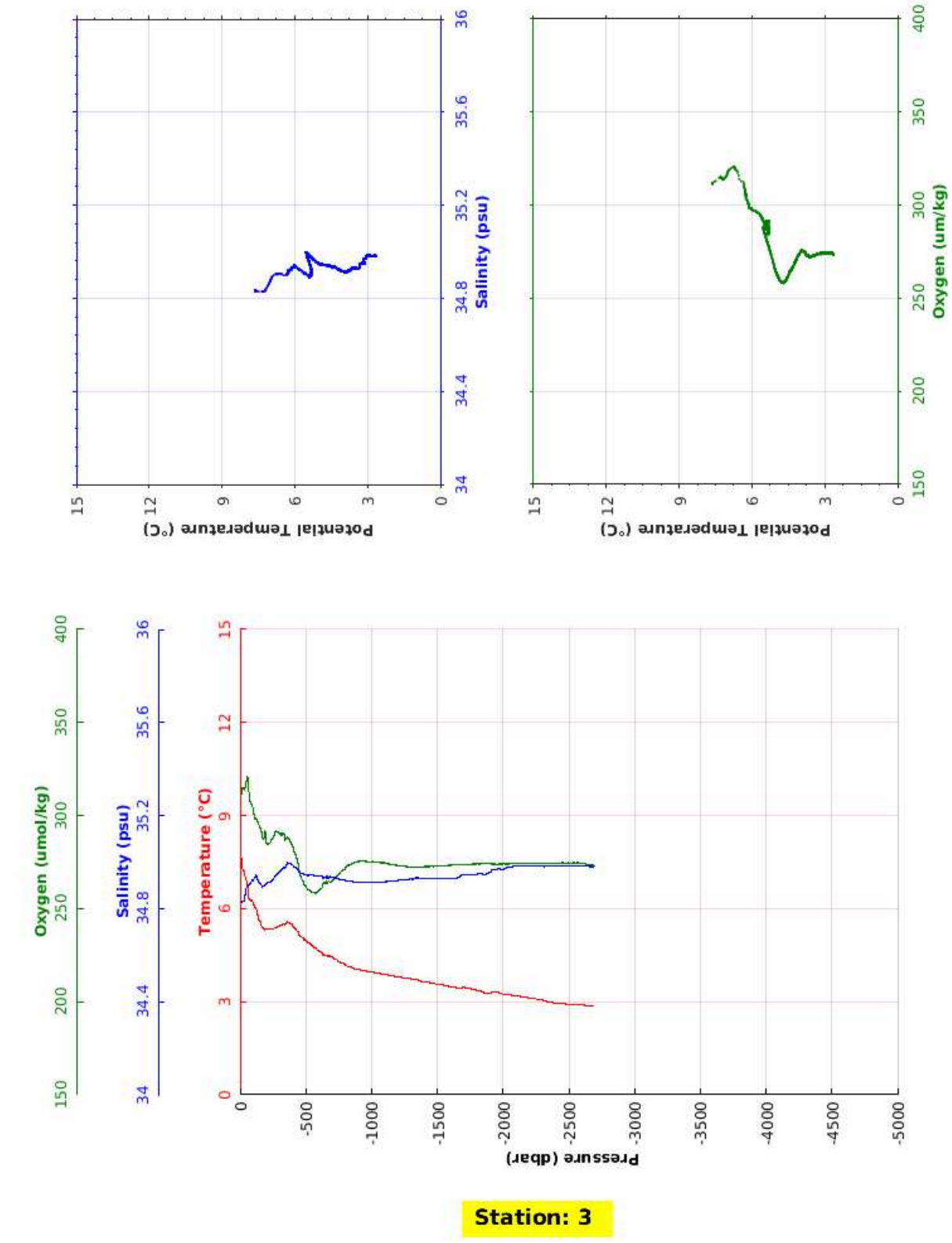
Cruise : RREX 2015			
Station : 2	Cast : 1		
Date : 10/06/2015	Ship : N/O Thalassa		
Depth : 2734 m	Organism : IFREMER		
Position : N 55 9.37 W 031 20.11			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.480	34.812	316.2	7.479
10.0	7.524	34.813	314.3	7.523
20.0	7.306	34.817	316.4	7.304
30.0	7.264	34.818	316.5	7.261
40.0	7.125	34.822	316.5	7.121
50.0	6.818	34.840	317.4	6.814
100.0	6.111	34.871	295.7	6.102
150.0	5.439	34.893	293.7	5.426
200.0	5.339	34.906	293.3	5.323
250.0	5.282	34.916	286.1	5.261
300.0	5.340	34.939	290.9	5.316
350.0	5.494	34.976	289.3	5.465
400.0	5.425	34.981	283.4	5.392
450.0	5.155	34.956	273.1	5.119
500.0	4.982	34.956	259.6	4.942
550.0	4.775	34.952	257.9	4.731
600.0	4.562	34.937	262.2	4.516
650.0	4.473	34.936	264.4	4.423
700.0	4.410	34.936	265.9	4.356
750.0	4.285	34.928	269.3	4.227
800.0	4.244	34.928	270.0	4.182
850.0	4.147	34.925	272.0	4.082
900.0	4.082	34.922	273.2	4.013
950.0	4.034	34.922	273.4	3.962
1000.0	3.982	34.921	273.6	3.906
1050.0	3.957	34.922	273.0	3.877
1100.0	3.915	34.924	272.7	3.831
1150.0	3.891	34.927	272.6	3.803
1200.0	3.856	34.931	272.0	3.764
1250.0	3.831	34.934	271.9	3.735
1300.0	3.793	34.936	271.4	3.693
1350.0	3.756	34.937	271.8	3.652
1400.0	3.718	34.943	271.9	3.610
1450.0	3.686	34.947	271.8	3.574
1500.0	3.649	34.948	272.2	3.533
1550.0	3.611	34.949	272.5	3.491
1600.0	3.557	34.951	272.8	3.433
1650.0	3.480	34.951	273.4	3.352
1700.0	3.446	34.956	273.6	3.315
1750.0	3.415	34.959	273.8	3.279
1800.0	3.390	34.962	273.8	3.250
1850.0	3.353	34.967	273.9	3.209
1900.0	3.322	34.969	274.1	3.174
1950.0	3.260	34.973	274.2	3.108
2000.0	3.220	34.976	274.2	3.064
2050.0	3.185	34.977	274.1	3.024
2100.0	3.151	34.979	274.3	2.987
2150.0	3.123	34.980	274.3	2.954
2200.0	3.071	34.979	274.2	2.899
2250.0	3.028	34.979	273.9	2.852
2300.0	2.994	34.978	273.5	2.813
2350.0	2.965	34.979	273.2	2.780
2400.0	2.927	34.979	273.3	2.738
2450.0	2.893	34.978	272.6	2.700
2500.0	2.877	34.978	272.8	2.679
2550.0	2.865	34.979	272.7	2.663
2600.0	2.840	34.976	270.9	2.633
2650.0	2.821	34.975	270.0	2.610
2700.0	2.819	34.975	270.3	2.603
2750.0	2.821	34.977	271.0	2.599
2758.0	2.822	34.977	NaN	2.600


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 2

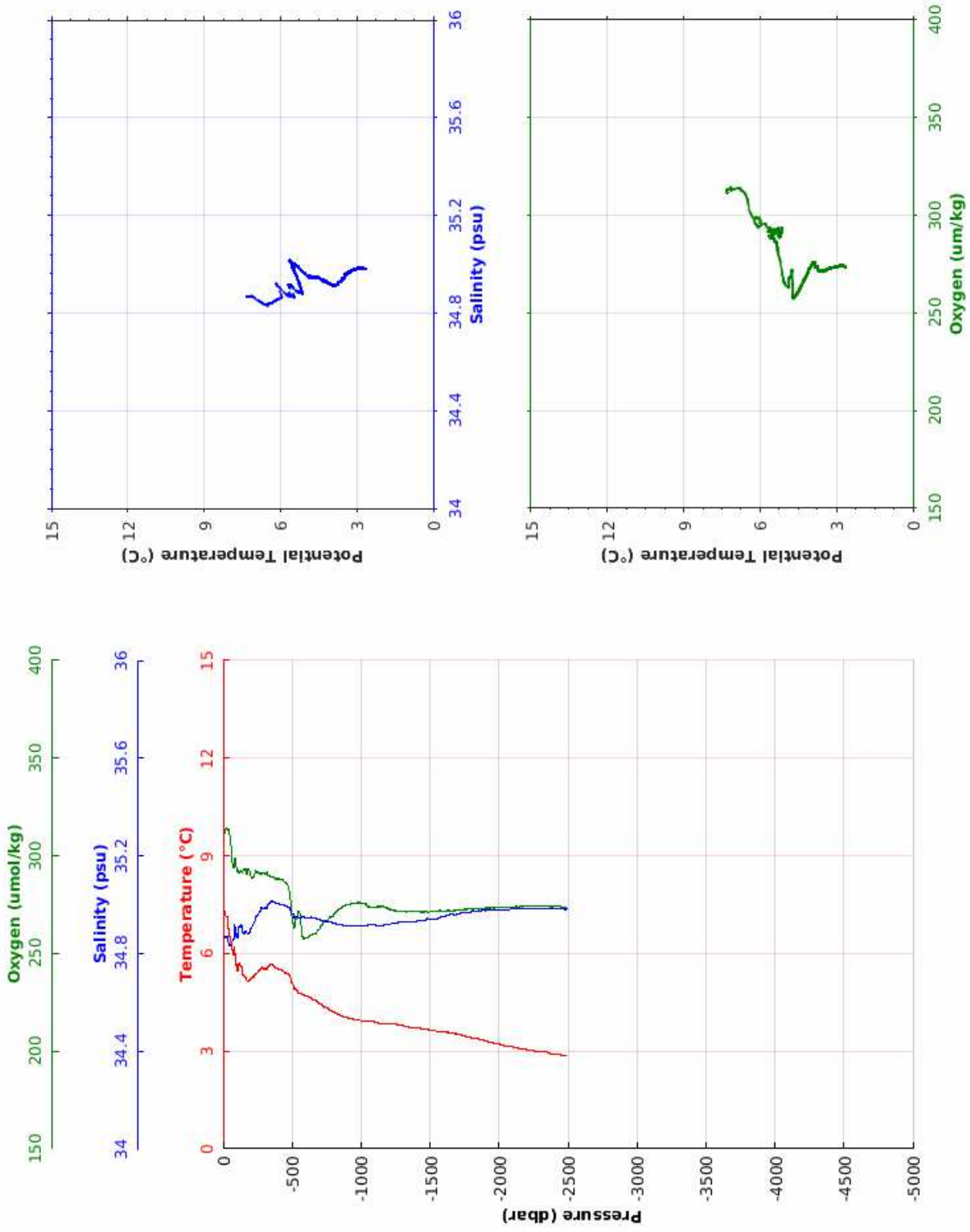
Cruise	: RREX 2015		
Station	: 3	Cast	: 1
Date	: 10/06/2015	Ship	: N/O Thalassa
Depth	: 2670 m	Organism	: IFREMER
Position	: N 55 18.56 W 031 40.25		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.630	34.832	311.8	7.630
10.0	7.614	34.832	311.9	7.613
20.0	7.273	34.830	314.7	7.271
30.0	7.216	34.835	313.9	7.213
40.0	7.023	34.873	316.9	7.019
50.0	6.757	34.903	320.6	6.753
100.0	6.185	34.925	301.1	6.176
150.0	5.597	34.906	293.3	5.584
200.0	5.340	34.908	285.2	5.324
250.0	5.344	34.927	288.4	5.323
300.0	5.447	34.961	290.2	5.422
350.0	5.534	34.987	288.2	5.504
400.0	5.461	34.987	282.7	5.428
450.0	5.162	34.957	269.3	5.126
500.0	4.974	34.946	261.6	4.934
550.0	4.806	34.944	258.6	4.762
600.0	4.635	34.941	260.0	4.588
650.0	4.485	34.933	264.5	4.435
700.0	4.441	34.937	264.9	4.386
750.0	4.300	34.926	268.8	4.242
800.0	4.193	34.921	272.1	4.132
850.0	4.098	34.917	274.2	4.033
900.0	4.035	34.914	275.5	3.967
950.0	3.995	34.915	275.3	3.923
1000.0	3.953	34.914	275.2	3.877
1050.0	3.924	34.914	275.1	3.844
1100.0	3.881	34.916	274.5	3.797
1150.0	3.840	34.919	273.5	3.752
1200.0	3.811	34.921	273.1	3.719
1250.0	3.763	34.923	272.9	3.668
1300.0	3.740	34.928	272.3	3.640
1350.0	3.714	34.934	272.1	3.610
1400.0	3.637	34.928	272.7	3.530
1450.0	3.615	34.927	272.7	3.503
1500.0	3.570	34.930	272.9	3.455
1550.0	3.528	34.928	273.0	3.409
1600.0	3.486	34.928	273.4	3.363
1650.0	3.453	34.932	273.7	3.326
1700.0	3.458	34.944	273.5	3.327
1750.0	3.431	34.948	273.9	3.295
1800.0	3.371	34.948	274.1	3.232
1850.0	3.296	34.948	274.5	3.153
1900.0	3.280	34.955	274.4	3.132
1950.0	3.309	34.970	273.7	3.157
2000.0	3.244	34.970	274.0	3.088
2050.0	3.221	34.978	274.1	3.061
2100.0	3.196	34.983	274.3	3.031
2150.0	3.161	34.984	274.3	2.992
2200.0	3.126	34.985	274.5	2.952
2250.0	3.090	34.983	274.3	2.912
2300.0	3.053	34.982	274.3	2.871
2350.0	2.987	34.982	274.4	2.802
2400.0	2.954	34.982	274.4	2.765
2450.0	2.935	34.983	274.7	2.741
2500.0	2.917	34.983	274.5	2.718
2550.0	2.906	34.983	274.6	2.702
2600.0	2.895	34.983	274.5	2.687
2650.0	2.865	34.981	273.7	2.652
2697.0	2.856	34.981	273.5	2.639


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 3

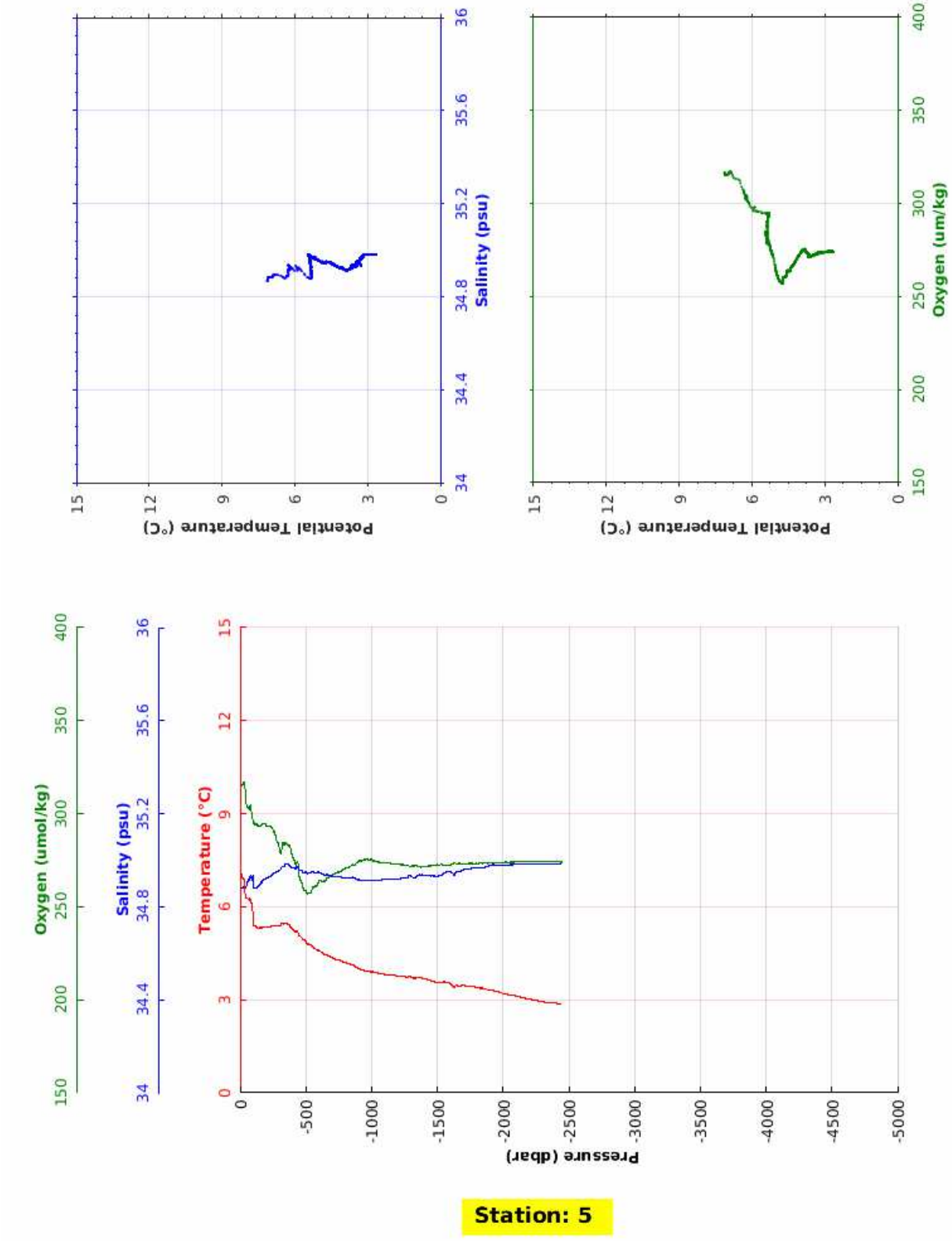
Cruise	: RREX 2015		
Station	: 4	Cast	: 1
Date	: 11/06/2015	Ship	: N/O Thalassa
Depth	: 2471 m	Organism	: IFREMER
Position	: N 55 28.03 W 032 0.53		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.299	34.867	311.7	7.299
10.0	7.304	34.867	313.2	7.303
20.0	7.151	34.866	314.0	7.149
30.0	7.063	34.865	313.4	7.061
40.0	6.718	34.840	312.7	6.714
50.0	6.486	34.835	307.5	6.481
100.0	5.658	34.881	291.8	5.650
150.0	5.305	34.883	293.1	5.293
200.0	5.207	34.900	289.6	5.191
250.0	5.411	34.956	291.6	5.391
300.0	5.541	34.988	290.3	5.516
350.0	5.664	35.016	289.5	5.635
400.0	5.530	35.003	288.8	5.497
450.0	5.406	34.993	286.4	5.369
500.0	5.115	34.964	266.3	5.074
550.0	4.789	34.945	271.6	4.745
600.0	4.712	34.948	257.9	4.665
650.0	4.593	34.947	260.0	4.542
700.0	4.459	34.938	263.3	4.404
750.0	4.340	34.933	266.3	4.282
800.0	4.197	34.924	270.4	4.136
850.0	4.102	34.918	273.0	4.038
900.0	4.027	34.914	275.0	3.959
950.0	3.972	34.911	276.0	3.900
1000.0	3.940	34.911	275.7	3.864
1050.0	3.929	34.916	273.8	3.849
1100.0	3.899	34.916	273.6	3.815
1150.0	3.852	34.915	274.0	3.764
1200.0	3.844	34.920	272.5	3.752
1250.0	3.828	34.926	271.9	3.732
1300.0	3.789	34.928	271.6	3.689
1350.0	3.736	34.929	271.5	3.632
1400.0	3.717	34.932	271.6	3.609
1450.0	3.682	34.936	271.4	3.570
1500.0	3.639	34.940	271.4	3.523
1550.0	3.606	34.942	271.8	3.486
1600.0	3.596	34.953	271.7	3.471
1650.0	3.565	34.960	271.8	3.437
1700.0	3.526	34.963	272.0	3.394
1750.0	3.482	34.968	272.6	3.345
1800.0	3.409	34.971	272.8	3.269
1850.0	3.375	34.975	273.1	3.231
1900.0	3.311	34.976	273.2	3.163
1950.0	3.271	34.978	273.4	3.119
2000.0	3.215	34.979	273.5	3.059
2050.0	3.157	34.981	273.8	2.998
2100.0	3.131	34.984	273.9	2.967
2150.0	3.082	34.984	273.9	2.914
2200.0	3.046	34.984	274.2	2.874
2250.0	3.015	34.985	274.3	2.839
2300.0	2.986	34.984	274.3	2.805
2350.0	2.959	34.983	274.1	2.774
2400.0	2.912	34.982	274.1	2.723
2450.0	2.885	34.982	273.8	2.692
2493.0	2.861	34.981	273.5	2.664


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 4

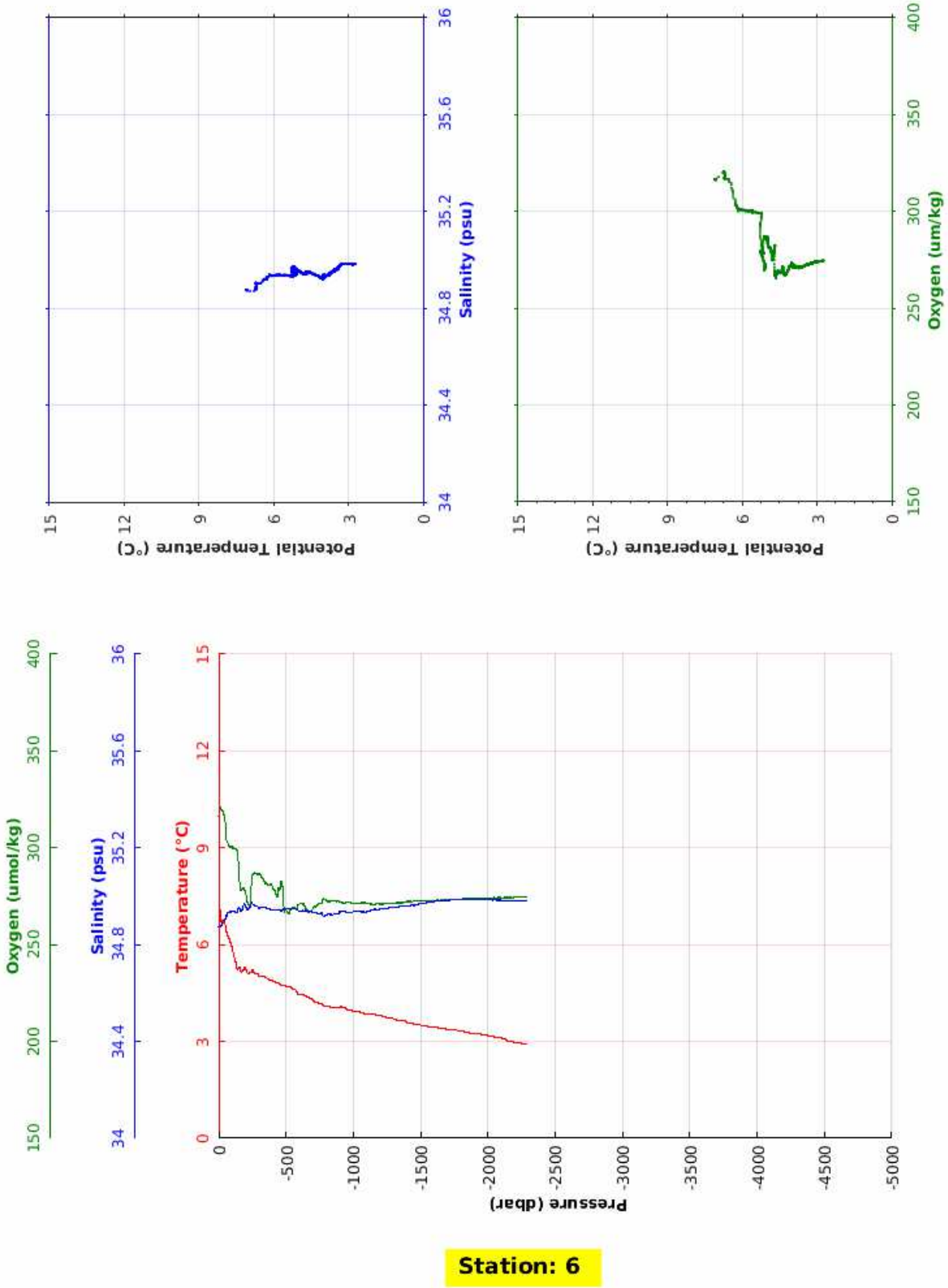
Cruise	: RREX 2015		
Station	: 5	Cast	: 1
Date	: 11/06/2015	Ship	: N/O Thalassa
Depth	: 2428 m	Organism	: IFREMER
Position	: N 55 37.31 W 032 20.66		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.130	34.868	316.4	7.130
10.0	7.068	34.883	315.7	7.067
20.0	6.929	34.885	316.7	6.927
30.0	6.875	34.894	316.8	6.872
40.0	6.355	34.885	307.1	6.351
50.0	6.277	34.890	303.7	6.273
100.0	5.619	34.898	295.4	5.611
150.0	5.333	34.897	293.1	5.321
200.0	5.343	34.926	293.4	5.327
250.0	5.378	34.941	290.4	5.358
300.0	5.398	34.958	279.3	5.373
350.0	5.461	34.982	283.8	5.432
400.0	5.272	34.967	276.0	5.239
450.0	5.075	34.956	265.3	5.039
500.0	4.863	34.946	258.1	4.823
550.0	4.734	34.951	260.6	4.691
600.0	4.592	34.948	263.8	4.545
650.0	4.454	34.937	264.5	4.404
700.0	4.350	34.931	266.9	4.296
750.0	4.281	34.928	268.7	4.224
800.0	4.199	34.925	270.8	4.138
850.0	4.118	34.922	272.6	4.053
900.0	4.015	34.916	274.5	3.947
950.0	3.939	34.913	275.2	3.867
1000.0	3.897	34.912	275.6	3.822
1050.0	3.864	34.915	273.9	3.785
1100.0	3.822	34.917	273.6	3.739
1150.0	3.800	34.918	273.1	3.712
1200.0	3.774	34.921	272.9	3.683
1250.0	3.750	34.924	272.5	3.655
1300.0	3.743	34.931	271.8	3.644
1350.0	3.717	34.932	271.8	3.613
1400.0	3.684	34.938	271.6	3.576
1450.0	3.600	34.930	272.3	3.489
1500.0	3.553	34.930	272.6	3.438
1550.0	3.578	34.946	272.3	3.458
1600.0	3.535	34.952	272.5	3.412
1650.0	3.460	34.950	273.2	3.332
1700.0	3.467	34.960	273.0	3.335
1750.0	3.417	34.964	273.3	3.281
1800.0	3.396	34.967	273.1	3.256
1850.0	3.363	34.968	273.5	3.218
1900.0	3.300	34.976	273.5	3.152
1950.0	3.272	34.981	273.6	3.120
2000.0	3.204	34.980	273.9	3.049
2050.0	3.157	34.981	273.9	2.997
2100.0	3.110	34.982	274.2	2.947
2150.0	3.065	34.982	274.2	2.898
2200.0	3.021	34.982	274.1	2.850
2250.0	2.988	34.982	274.2	2.813
2300.0	2.943	34.982	274.2	2.763
2350.0	2.907	34.982	274.3	2.723
2400.0	2.894	34.982	274.3	2.706
2450.0	2.861	34.981	274.0	2.668


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 5

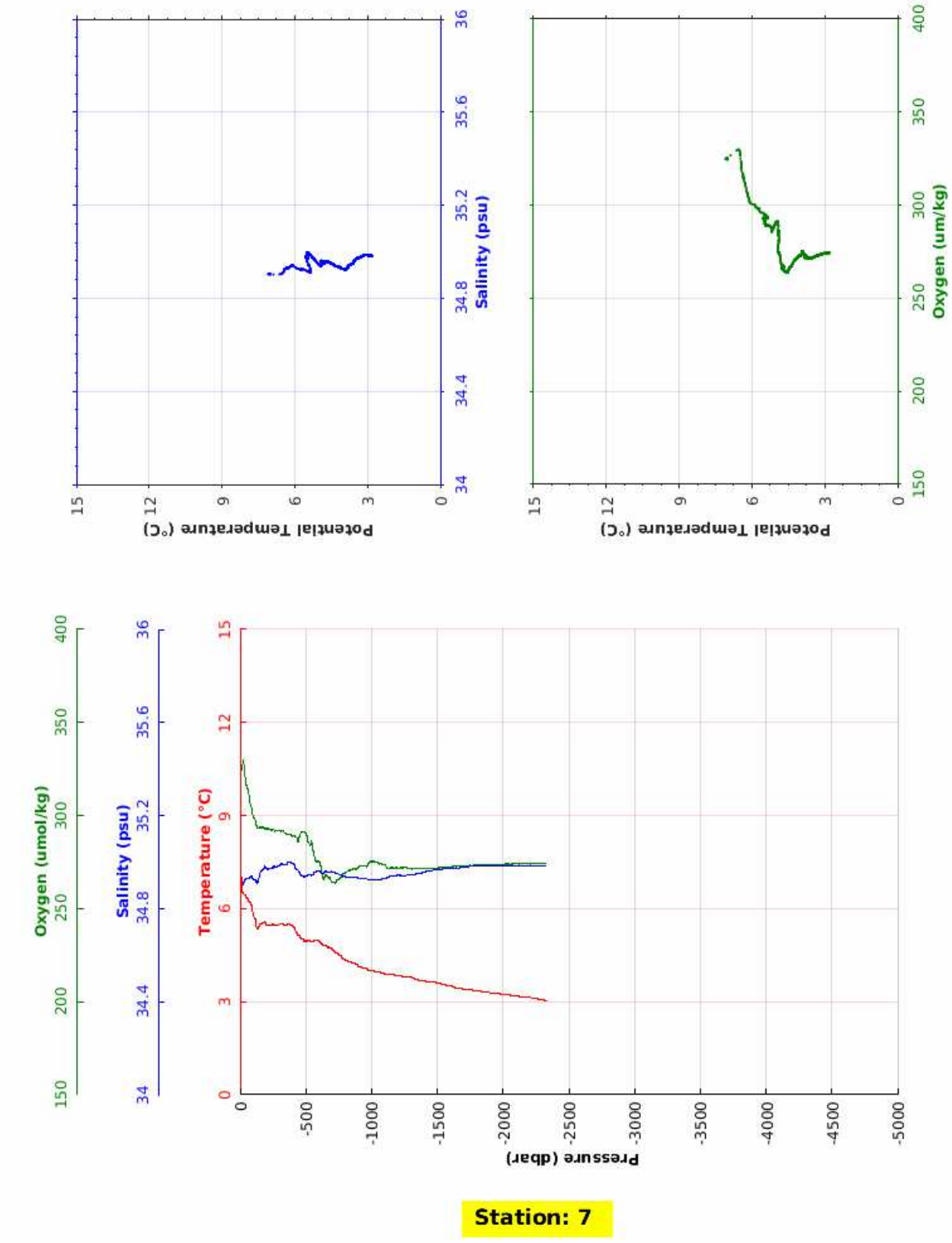
Cruise	: RREX 2015		
Station	: 6	Cast	: 1
Date	: 11/06/2015	Ship	: N/O Thalassa
Depth	: 2277 m	Organism	: IFREMER
Position	: N 55 46.62 W 032 40.64		

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.117	34.875	316.5	7.116
10.0	7.068	34.875	316.5	7.067
20.0	6.722	34.877	320.0	6.720
30.0	6.713	34.887	319.5	6.710
40.0	6.710	34.898	317.8	6.706
50.0	6.535	34.903	316.6	6.531
100.0	5.892	34.938	300.2	5.884
150.0	5.283	34.949	293.4	5.271
200.0	5.249	34.963	277.6	5.233
250.0	5.223	34.975	282.3	5.203
300.0	5.022	34.951	287.1	4.998
350.0	4.986	34.953	281.7	4.958
400.0	4.877	34.944	280.7	4.845
450.0	4.778	34.943	279.4	4.743
500.0	4.712	34.949	268.1	4.673
550.0	4.630	34.950	269.3	4.587
600.0	4.444	34.940	270.7	4.398
650.0	4.389	34.940	268.7	4.339
700.0	4.277	34.934	268.0	4.224
750.0	4.167	34.925	271.4	4.110
800.0	4.088	34.923	273.0	4.028
850.0	4.042	34.924	272.6	3.977
900.0	4.059	34.933	272.3	3.990
950.0	4.006	34.935	271.7	3.934
1000.0	3.948	34.936	271.5	3.872
1050.0	3.920	34.938	271.0	3.840
1100.0	3.850	34.936	271.4	3.766
1150.0	3.839	34.944	270.8	3.751
1200.0	3.798	34.947	271.0	3.706
1250.0	3.741	34.949	271.2	3.646
1300.0	3.694	34.953	271.3	3.595
1350.0	3.660	34.959	271.6	3.557
1400.0	3.579	34.959	272.3	3.473
1450.0	3.538	34.962	272.4	3.428
1500.0	3.508	34.968	272.6	3.393
1550.0	3.476	34.973	272.9	3.357
1600.0	3.455	34.979	272.7	3.332
1650.0	3.417	34.982	273.1	3.290
1700.0	3.379	34.984	273.2	3.248
1750.0	3.354	34.985	273.3	3.219
1800.0	3.336	34.985	273.5	3.197
1850.0	3.280	34.985	273.8	3.137
1900.0	3.251	34.985	273.8	3.104
1950.0	3.223	34.985	274.0	3.072
2000.0	3.181	34.984	274.0	3.025
2050.0	3.143	34.984	274.3	2.983
2100.0	3.108	34.984	274.2	2.945
2150.0	3.015	34.982	274.3	2.848
2200.0	2.971	34.982	274.4	2.800
2250.0	2.941	34.983	274.6	2.766
2300.0	2.926	34.983	274.5	2.746


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 6

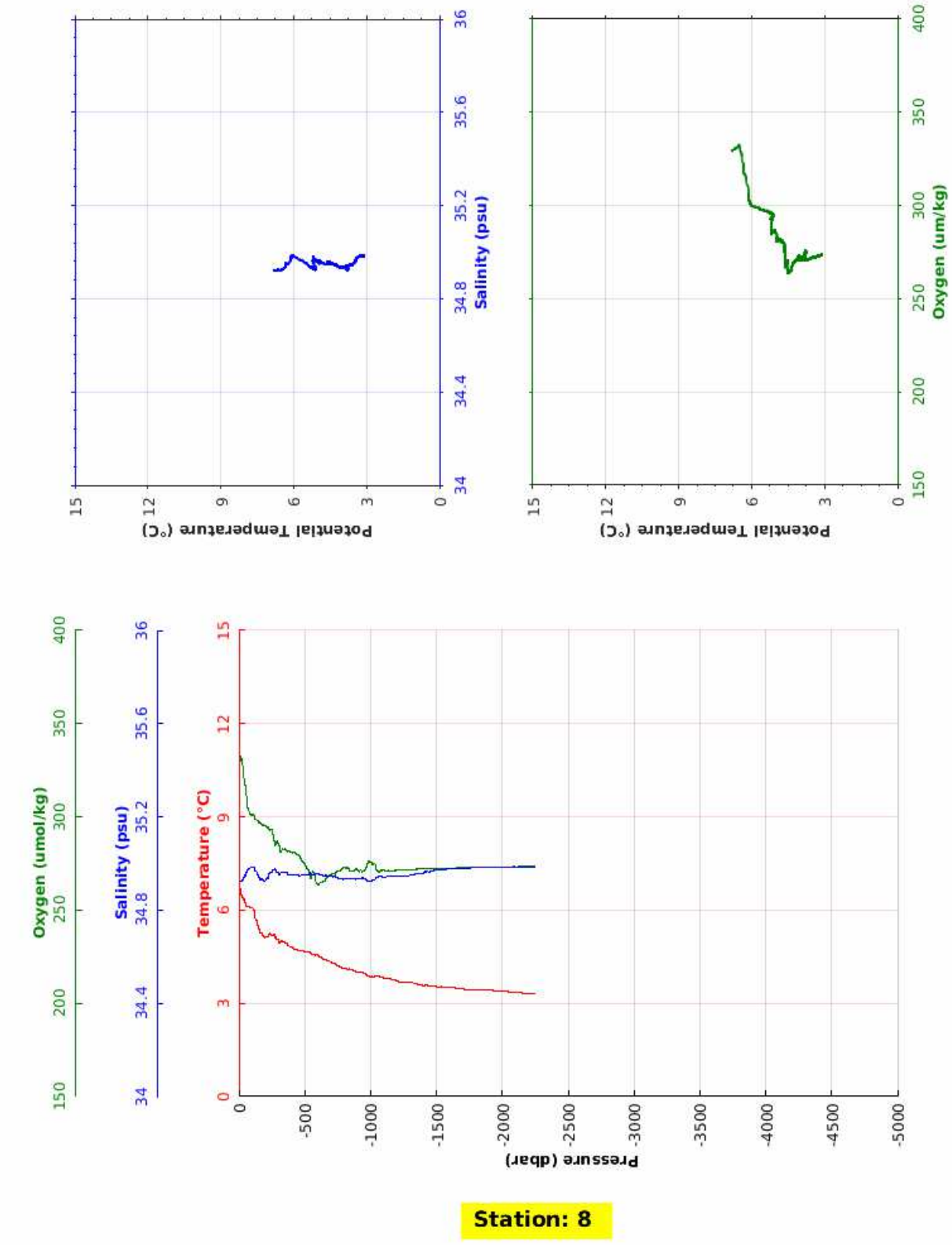
Cruise	: RREX 2015		
Station	: 7	Cast	: 1
Date	: 11/06/2015	Ship	: N/O Thalassa
Depth	: 2313 m	Organism	: IFREMER
Position	: N 55 59.81 W 033 12.93		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.056	34.903	325.1	7.056
10.0	7.026	34.904	325.4	7.025
20.0	6.514	34.907	329.1	6.512
30.0	6.446	34.917	323.1	6.443
40.0	6.433	34.924	319.2	6.430
50.0	6.356	34.929	314.6	6.352
100.0	5.839	34.926	298.7	5.830
150.0	5.448	34.945	293.8	5.436
200.0	5.503	34.972	293.0	5.486
250.0	5.470	34.977	292.4	5.450
300.0	5.492	34.987	291.9	5.467
350.0	5.472	34.991	290.0	5.443
400.0	5.433	34.992	289.2	5.400
450.0	5.128	34.955	289.2	5.092
500.0	4.959	34.939	290.2	4.919
550.0	4.940	34.946	281.7	4.896
600.0	4.940	34.960	274.8	4.892
650.0	4.826	34.961	267.9	4.774
700.0	4.688	34.958	264.3	4.633
750.0	4.511	34.948	266.1	4.452
800.0	4.349	34.938	269.5	4.287
850.0	4.271	34.935	271.0	4.205
900.0	4.144	34.929	272.7	4.075
950.0	4.081	34.928	272.7	4.008
1000.0	4.002	34.925	275.2	3.926
1050.0	3.956	34.925	274.4	3.876
1100.0	3.903	34.929	273.3	3.819
1150.0	3.887	34.939	272.0	3.799
1200.0	3.845	34.943	271.9	3.753
1250.0	3.814	34.942	272.2	3.718
1300.0	3.785	34.947	271.6	3.685
1350.0	3.700	34.951	271.4	3.597
1400.0	3.672	34.957	271.5	3.564
1450.0	3.632	34.963	271.8	3.521
1500.0	3.611	34.968	271.8	3.495
1550.0	3.551	34.971	272.3	3.431
1600.0	3.512	34.973	272.4	3.389
1650.0	3.430	34.975	272.9	3.303
1700.0	3.407	34.979	273.0	3.276
1750.0	3.378	34.981	273.2	3.243
1800.0	3.345	34.983	273.4	3.206
1850.0	3.322	34.984	273.6	3.178
1900.0	3.292	34.985	273.7	3.144
1950.0	3.261	34.986	273.7	3.109
2000.0	3.238	34.986	273.8	3.082
2050.0	3.212	34.986	274.0	3.052
2100.0	3.174	34.985	274.0	3.010
2150.0	3.162	34.985	274.0	2.993
2200.0	3.149	34.985	274.0	2.975
2250.0	3.096	34.984	274.2	2.919
2300.0	3.059	34.983	274.4	2.877
2334.0	3.007	34.983	274.5	2.823


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 7

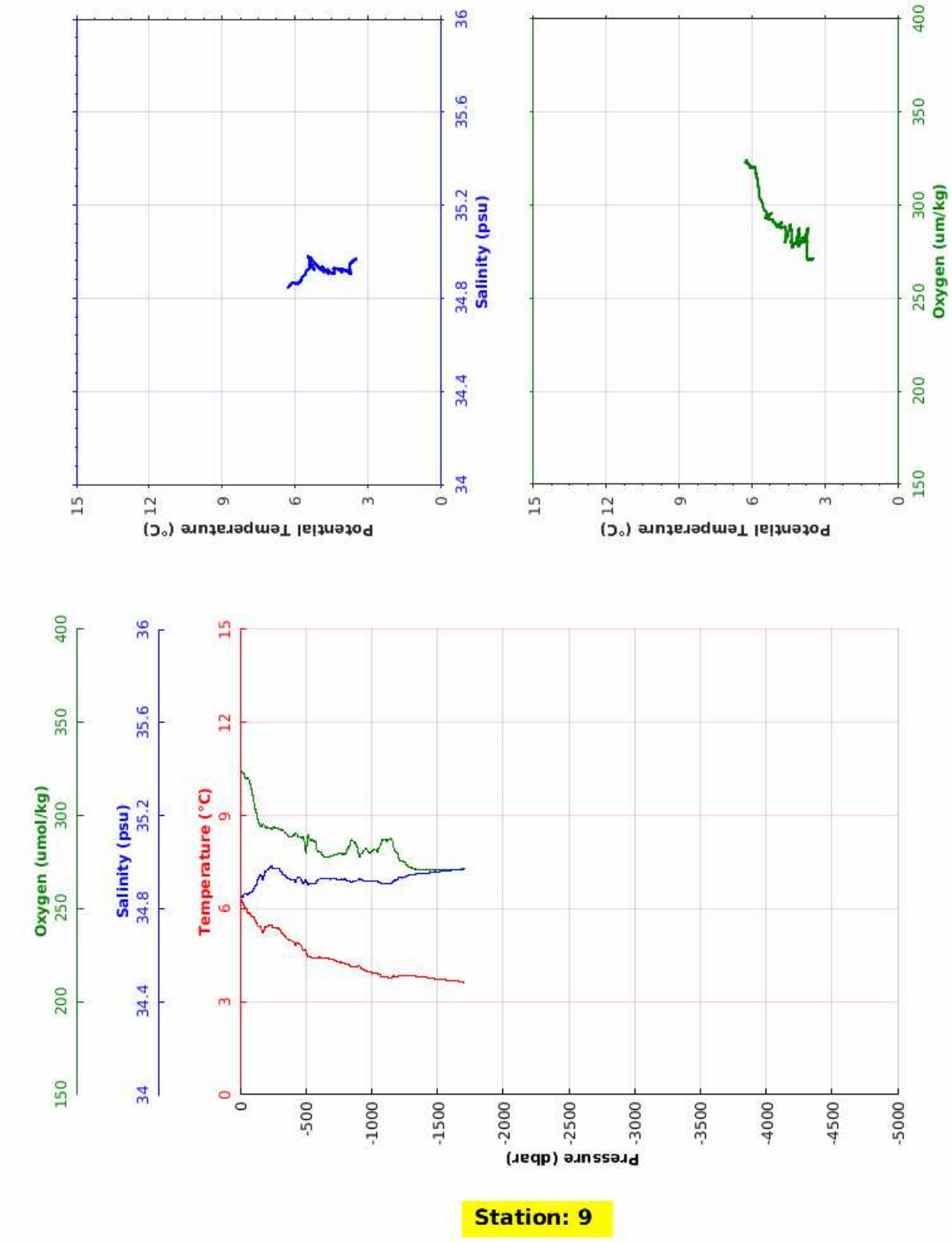
Cruise : RREX 2015			
Station : 8	Cast : 1		
Date : 11/06/2015	Ship : N/O Thalassa		
Depth : 2235 m	Organism : IFREMER		
Position : N 56 14.72 W 033 41.12			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.804	34.922	329.5	6.804
10.0	6.671	34.924	330.3	6.670
20.0	6.487	34.926	331.0	6.485
30.0	6.349	34.937	322.7	6.347
40.0	6.348	34.949	318.4	6.344
50.0	6.229	34.950	314.5	6.225
100.0	6.072	34.983	301.1	6.063
150.0	5.402	34.942	297.3	5.390
200.0	5.121	34.928	295.0	5.105
250.0	5.171	34.962	292.5	5.151
300.0	5.013	34.957	285.2	4.990
350.0	4.958	34.961	282.7	4.930
400.0	4.829	34.953	280.8	4.798
450.0	4.711	34.948	279.4	4.676
500.0	4.663	34.951	274.3	4.624
550.0	4.596	34.954	269.3	4.553
600.0	4.531	34.955	263.8	4.484
650.0	4.401	34.947	265.8	4.351
700.0	4.314	34.945	269.6	4.261
750.0	4.220	34.938	270.9	4.163
800.0	4.126	34.934	273.2	4.065
850.0	4.088	34.936	271.0	4.024
900.0	4.018	34.935	271.9	3.950
950.0	3.978	34.936	271.0	3.906
1000.0	3.848	34.926	275.7	3.773
1050.0	3.886	34.943	271.2	3.806
1100.0	3.815	34.942	271.3	3.732
1150.0	3.782	34.947	271.1	3.695
1200.0	3.712	34.944	271.3	3.621
1250.0	3.687	34.944	271.6	3.592
1300.0	3.670	34.950	271.7	3.571
1350.0	3.621	34.955	272.0	3.518
1400.0	3.567	34.959	272.3	3.460
1450.0	3.549	34.965	272.4	3.438
1500.0	3.535	34.971	272.4	3.420
1550.0	3.534	34.975	272.3	3.415
1600.0	3.512	34.976	272.4	3.388
1650.0	3.487	34.978	272.5	3.359
1700.0	3.461	34.980	272.6	3.329
1750.0	3.446	34.981	272.7	3.309
1800.0	3.435	34.982	273.0	3.294
1850.0	3.429	34.983	272.8	3.284
1900.0	3.424	34.983	272.9	3.274
1950.0	3.408	34.984	273.0	3.254
2000.0	3.400	34.984	272.9	3.241
2050.0	3.371	34.983	273.2	3.208
2100.0	3.364	34.984	273.3	3.196
2150.0	3.332	34.984	273.3	3.160
2200.0	3.311	34.983	273.4	3.135
2250.0	3.300	34.983	273.6	3.119
2253.0	3.298	34.983	273.6	3.117


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 8

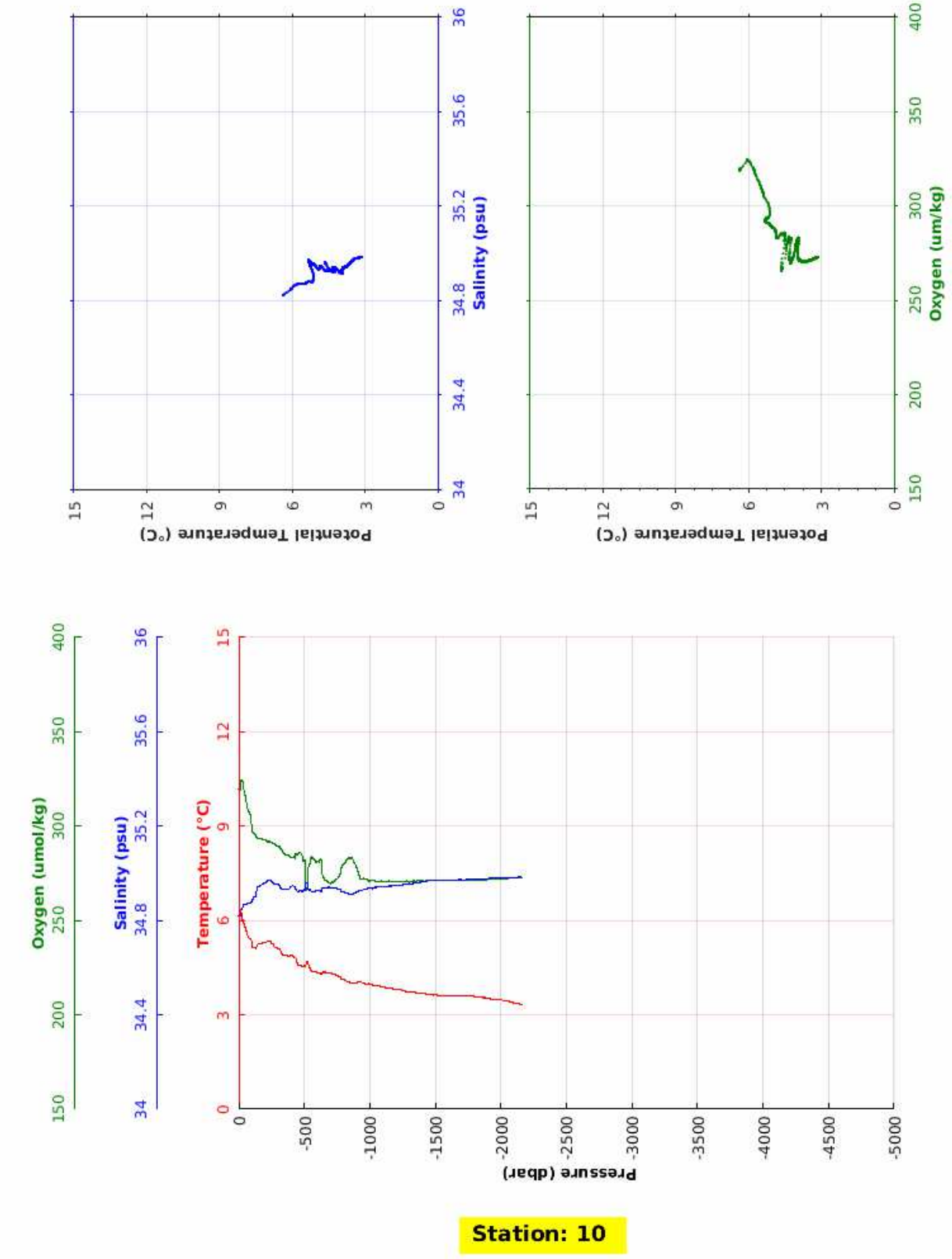
Cruise	: RREX 2015		
Station	: 9	Cast	: 1
Date	: 11/06/2015	Ship	: N/O Thalassa
Depth	: 1704 m	Organism	: IFREMER
Position	: N 56 23.96 W 034 1.10		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.220	34.853	324.3	6.220
10.0	6.217	34.854	323.6	6.216
20.0	6.215	34.854	323.1	6.213
30.0	6.104	34.866	321.6	6.102
40.0	6.032	34.866	320.2	6.029
50.0	5.965	34.864	319.9	5.960
100.0	5.710	34.884	307.8	5.702
150.0	5.425	34.946	294.7	5.413
200.0	5.419	34.967	293.6	5.403
250.0	5.401	34.973	293.7	5.381
300.0	5.328	34.967	292.8	5.303
350.0	5.067	34.936	290.4	5.039
400.0	4.944	34.924	289.4	4.912
450.0	4.874	34.933	288.7	4.839
500.0	4.645	34.921	280.4	4.606
550.0	4.424	34.909	286.6	4.382
600.0	4.432	34.926	280.7	4.386
650.0	4.397	34.928	277.7	4.347
700.0	4.359	34.928	278.4	4.305
750.0	4.286	34.926	279.6	4.228
800.0	4.239	34.926	279.7	4.178
850.0	4.136	34.916	286.5	4.072
900.0	4.150	34.926	279.2	4.081
950.0	3.995	34.919	281.9	3.923
1000.0	3.951	34.919	280.5	3.875
1050.0	3.888	34.916	282.2	3.809
1100.0	3.798	34.909	286.8	3.715
1150.0	3.778	34.909	287.1	3.691
1200.0	3.832	34.929	278.1	3.741
1250.0	3.834	34.936	275.1	3.738
1300.0	3.837	34.945	272.0	3.736
1350.0	3.813	34.949	270.9	3.709
1400.0	3.799	34.951	271.0	3.690
1450.0	3.755	34.955	270.7	3.642
1500.0	3.728	34.958	270.7	3.611
1550.0	3.703	34.962	270.9	3.582
1600.0	3.688	34.964	270.8	3.563
1650.0	3.672	34.966	270.8	3.542
1700.0	3.622	34.968	271.2	3.488
1713.0	3.608	34.968	271.5	3.473


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 9

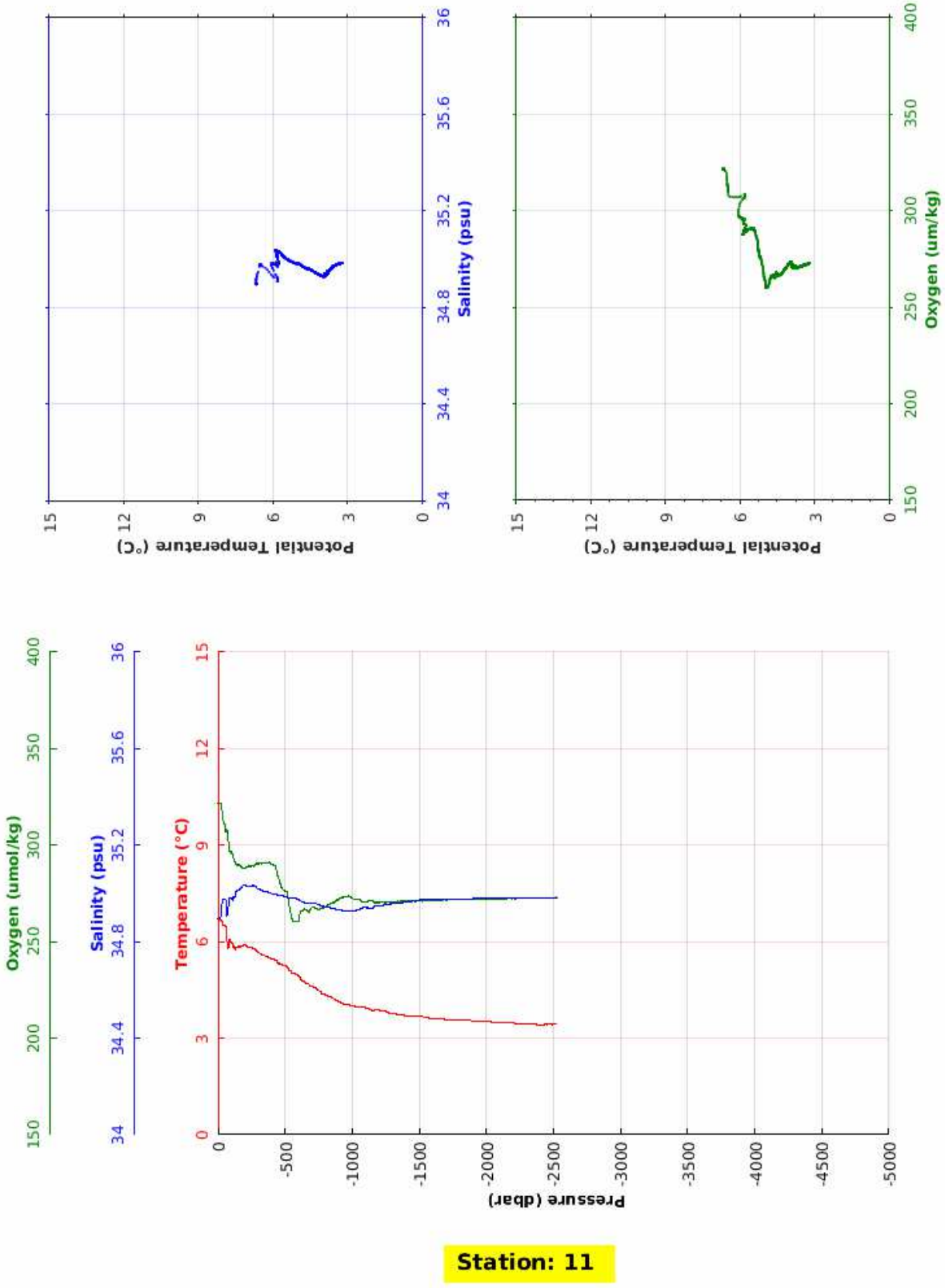
Cruise : RREX 2015			
Station : 10	Cast : 1		
Date : 12/06/2015	Ship : N/O Thalassa		
Depth : 2149 m	Organism : IFREMER		
Position : N 56 43.99 W 033 42.99			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.364	34.822	319.6	6.364
10.0	6.365	34.822	319.2	6.364
20.0	6.231	34.834	321.2	6.229
30.0	6.044	34.850	324.4	6.041
40.0	5.865	34.866	321.0	5.862
50.0	5.762	34.870	318.1	5.758
100.0	5.261	34.878	302.6	5.253
150.0	5.260	34.944	293.2	5.248
200.0	5.311	34.959	293.1	5.295
250.0	5.280	34.965	291.5	5.260
300.0	5.113	34.954	289.3	5.089
350.0	4.894	34.934	285.6	4.866
400.0	4.880	34.946	283.4	4.848
450.0	4.598	34.923	284.9	4.564
500.0	4.554	34.930	281.8	4.515
550.0	4.444	34.928	280.6	4.402
600.0	4.348	34.926	280.9	4.302
650.0	4.364	34.938	272.7	4.314
700.0	4.320	34.941	269.8	4.267
750.0	4.242	34.936	272.2	4.185
800.0	4.116	34.921	279.5	4.056
850.0	4.018	34.913	283.2	3.954
900.0	4.026	34.921	278.6	3.958
950.0	4.012	34.930	272.2	3.940
1000.0	3.979	34.939	270.9	3.903
1050.0	3.939	34.941	270.8	3.859
1100.0	3.889	34.944	270.8	3.805
1150.0	3.858	34.944	270.9	3.770
1200.0	3.807	34.949	270.5	3.715
1250.0	3.780	34.951	270.8	3.684
1300.0	3.730	34.957	270.8	3.630
1350.0	3.705	34.960	270.9	3.602
1400.0	3.679	34.963	271.0	3.572
1450.0	3.634	34.968	271.2	3.523
1500.0	3.633	34.969	271.2	3.517
1550.0	3.616	34.970	271.4	3.495
1600.0	3.608	34.971	271.2	3.483
1650.0	3.606	34.972	271.3	3.476
1700.0	3.608	34.973	271.4	3.474
1750.0	3.606	34.973	271.3	3.467
1800.0	3.585	34.975	271.5	3.443
1850.0	3.558	34.977	271.4	3.411
1900.0	3.523	34.978	271.7	3.372
1950.0	3.493	34.979	271.9	3.338
2000.0	3.470	34.980	272.4	3.311
2050.0	3.435	34.981	272.4	3.271
2100.0	3.383	34.983	272.8	3.215
2150.0	3.333	34.984	273.0	3.161
2167.0	3.336	34.984	273.2	3.162


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 10

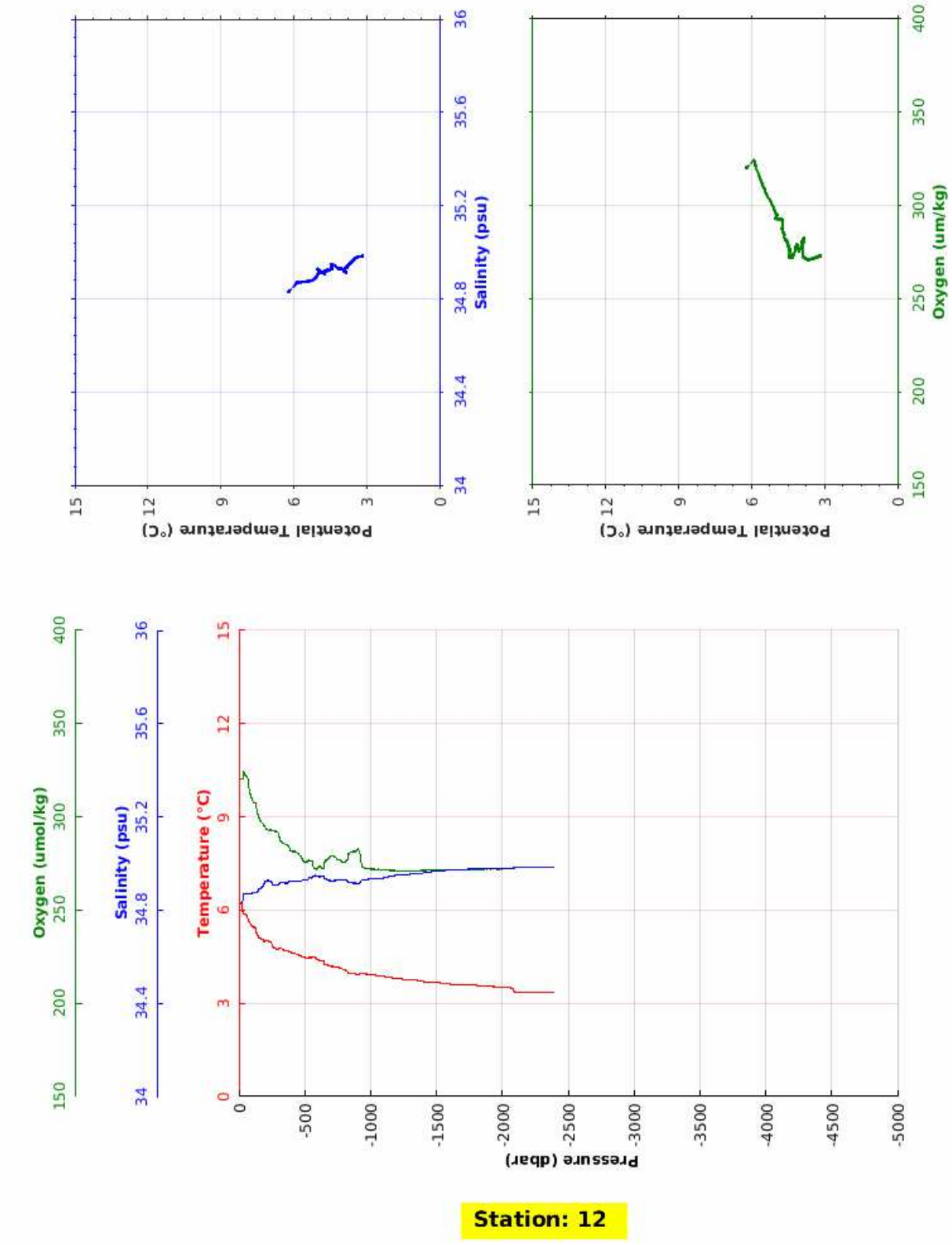
Cruise : RREX 2015			
Station : 11	Cast : 1		
Date : 12/06/2015	Ship : N/O Thalassa		
Depth : 2521 m	Organism : IFREMER		
Position : N 56 56.40 W 033 51.17			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.663	34.896	321.9	6.662
10.0	6.665	34.898	321.6	6.664
20.0	6.669	34.900	321.6	6.667
30.0	6.633	34.935	321.3	6.630
40.0	6.512	34.976	313.9	6.509
50.0	6.495	34.975	311.7	6.491
100.0	5.977	34.981	296.3	5.969
150.0	5.847	35.011	289.7	5.834
200.0	5.898	35.036	288.1	5.881
250.0	5.814	35.031	289.1	5.792
300.0	5.657	35.019	290.4	5.632
350.0	5.562	35.009	290.6	5.532
400.0	5.469	35.000	290.4	5.436
450.0	5.322	34.990	284.1	5.285
500.0	5.256	34.989	276.4	5.215
550.0	5.040	34.981	264.3	4.996
600.0	4.939	34.977	260.5	4.890
650.0	4.715	34.961	267.1	4.664
700.0	4.613	34.961	267.5	4.558
750.0	4.490	34.954	266.7	4.431
800.0	4.356	34.945	267.8	4.294
850.0	4.252	34.939	269.9	4.187
900.0	4.137	34.933	271.7	4.068
950.0	4.069	34.930	273.2	3.996
1000.0	4.012	34.928	272.9	3.935
1050.0	3.966	34.931	272.1	3.885
1100.0	3.945	34.941	270.6	3.861
1150.0	3.866	34.940	271.3	3.778
1200.0	3.885	34.950	270.2	3.793
1250.0	3.840	34.953	270.3	3.744
1300.0	3.766	34.958	270.6	3.666
1350.0	3.741	34.961	270.9	3.637
1400.0	3.704	34.964	271.1	3.596
1450.0	3.699	34.968	271.0	3.587
1500.0	3.688	34.973	271.0	3.571
1550.0	3.647	34.975	271.3	3.527
1600.0	3.622	34.974	271.5	3.497
1650.0	3.602	34.975	271.5	3.472
1700.0	3.586	34.976	271.7	3.453
1750.0	3.578	34.976	271.7	3.441
1800.0	3.572	34.976	271.8	3.429
1850.0	3.564	34.977	271.9	3.417
1900.0	3.545	34.978	271.9	3.394
1950.0	3.533	34.979	272.1	3.377
2000.0	3.525	34.980	272.1	3.364
2050.0	3.502	34.981	272.1	3.337
2100.0	3.490	34.981	272.3	3.320
2150.0	3.490	34.981	272.3	3.316
2200.0	3.470	34.981	272.3	3.291
2250.0	3.446	34.982	272.6	3.262
2300.0	3.433	34.982	272.6	3.245
2350.0	3.434	34.982	272.7	3.241
2400.0	3.424	34.983	272.8	3.227
2450.0	3.427	34.983	272.7	3.224
2500.0	3.428	34.983	272.7	3.220
2532.0	3.429	34.983	273.0	3.218


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 11

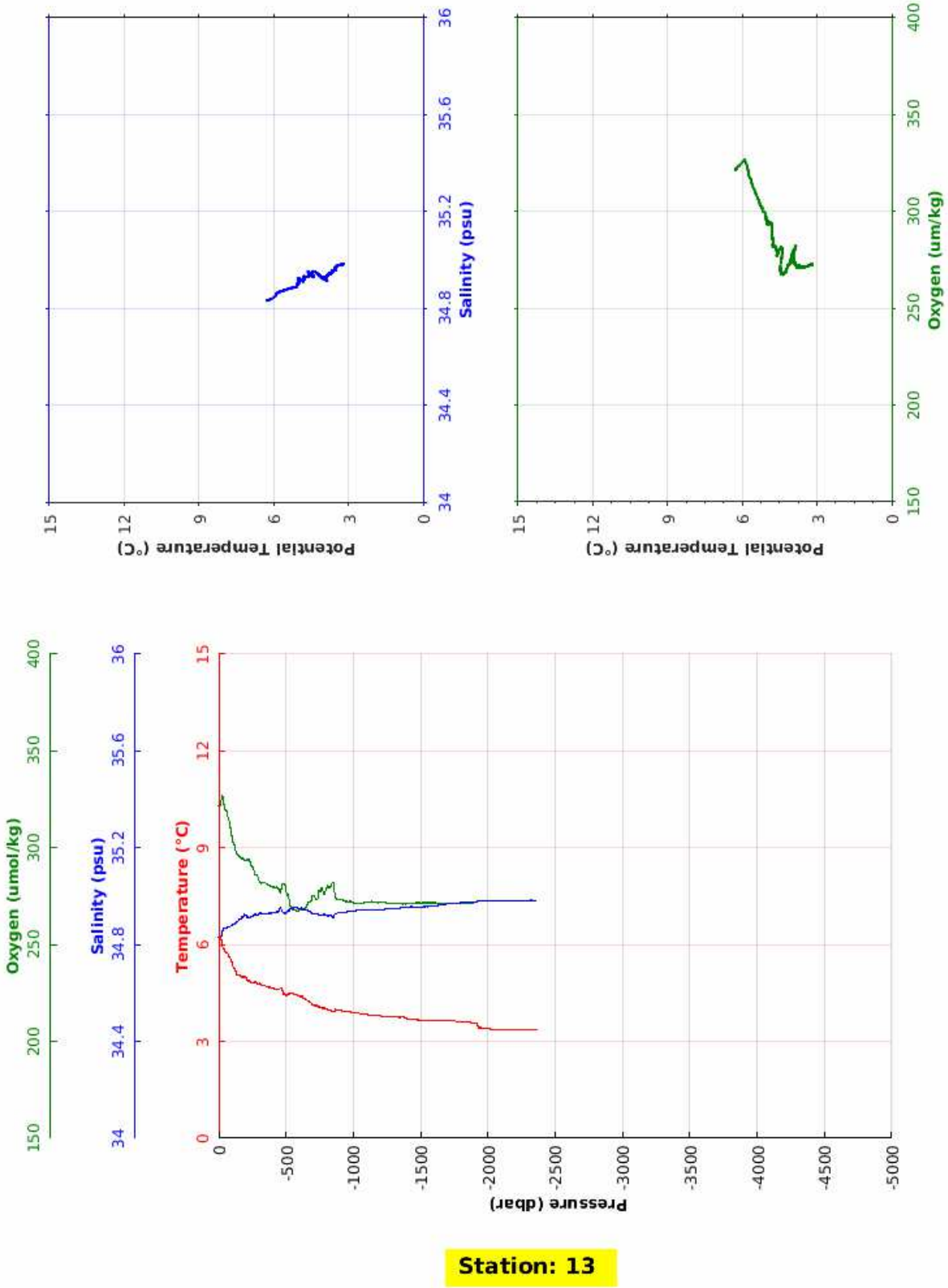
Cruise : RREX 2015			
Station : 12	Cast : 1		
Date : 12/06/2015	Ship : N/O Thalassa		
Depth : 2372 m	Organism : IFREMER		
Position : N 56 43.52 W 033 45.54			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.223	34.831	320.4	6.223
10.0	6.220	34.831	320.6	6.219
20.0	6.181	34.833	320.5	6.180
30.0	5.932	34.860	324.1	5.930
40.0	5.864	34.869	323.2	5.861
50.0	5.857	34.870	322.3	5.853
100.0	5.482	34.873	308.9	5.474
150.0	5.116	34.889	299.2	5.104
200.0	5.018	34.924	293.8	5.003
250.0	4.918	34.919	292.8	4.898
300.0	4.746	34.911	290.0	4.723
350.0	4.696	34.916	285.2	4.669
400.0	4.634	34.923	281.4	4.604
450.0	4.570	34.923	280.1	4.536
500.0	4.472	34.930	275.9	4.434
550.0	4.471	34.940	276.2	4.429
600.0	4.400	34.944	273.0	4.354
650.0	4.267	34.933	276.0	4.217
700.0	4.190	34.926	278.9	4.138
750.0	4.150	34.929	277.2	4.093
800.0	4.100	34.929	275.9	4.039
850.0	3.978	34.918	280.9	3.914
900.0	3.925	34.912	282.6	3.858
950.0	3.962	34.930	272.6	3.890
1000.0	3.916	34.934	272.0	3.841
1050.0	3.896	34.935	271.9	3.816
1100.0	3.867	34.939	271.6	3.784
1150.0	3.830	34.945	271.3	3.742
1200.0	3.787	34.950	271.1	3.696
1250.0	3.774	34.952	271.1	3.679
1300.0	3.768	34.954	270.9	3.668
1350.0	3.742	34.956	271.0	3.638
1400.0	3.704	34.960	271.3	3.596
1450.0	3.678	34.964	271.4	3.566
1500.0	3.664	34.966	271.2	3.548
1550.0	3.638	34.969	271.5	3.517
1600.0	3.621	34.972	271.5	3.496
1650.0	3.604	34.974	271.7	3.475
1700.0	3.591	34.975	271.7	3.458
1750.0	3.583	34.976	271.8	3.445
1800.0	3.578	34.977	271.9	3.436
1850.0	3.567	34.977	271.8	3.420
1900.0	3.546	34.978	272.0	3.395
1950.0	3.533	34.980	272.1	3.377
2000.0	3.521	34.980	272.0	3.361
2050.0	3.501	34.980	272.2	3.336
2100.0	3.365	34.983	273.1	3.198
2150.0	3.363	34.983	273.1	3.191
2200.0	3.367	34.983	273.0	3.190
2250.0	3.367	34.984	272.9	3.185
2300.0	3.365	34.984	273.0	3.178
2350.0	3.368	34.984	273.0	3.176
2396.0	3.366	34.984	273.2	3.169


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 12

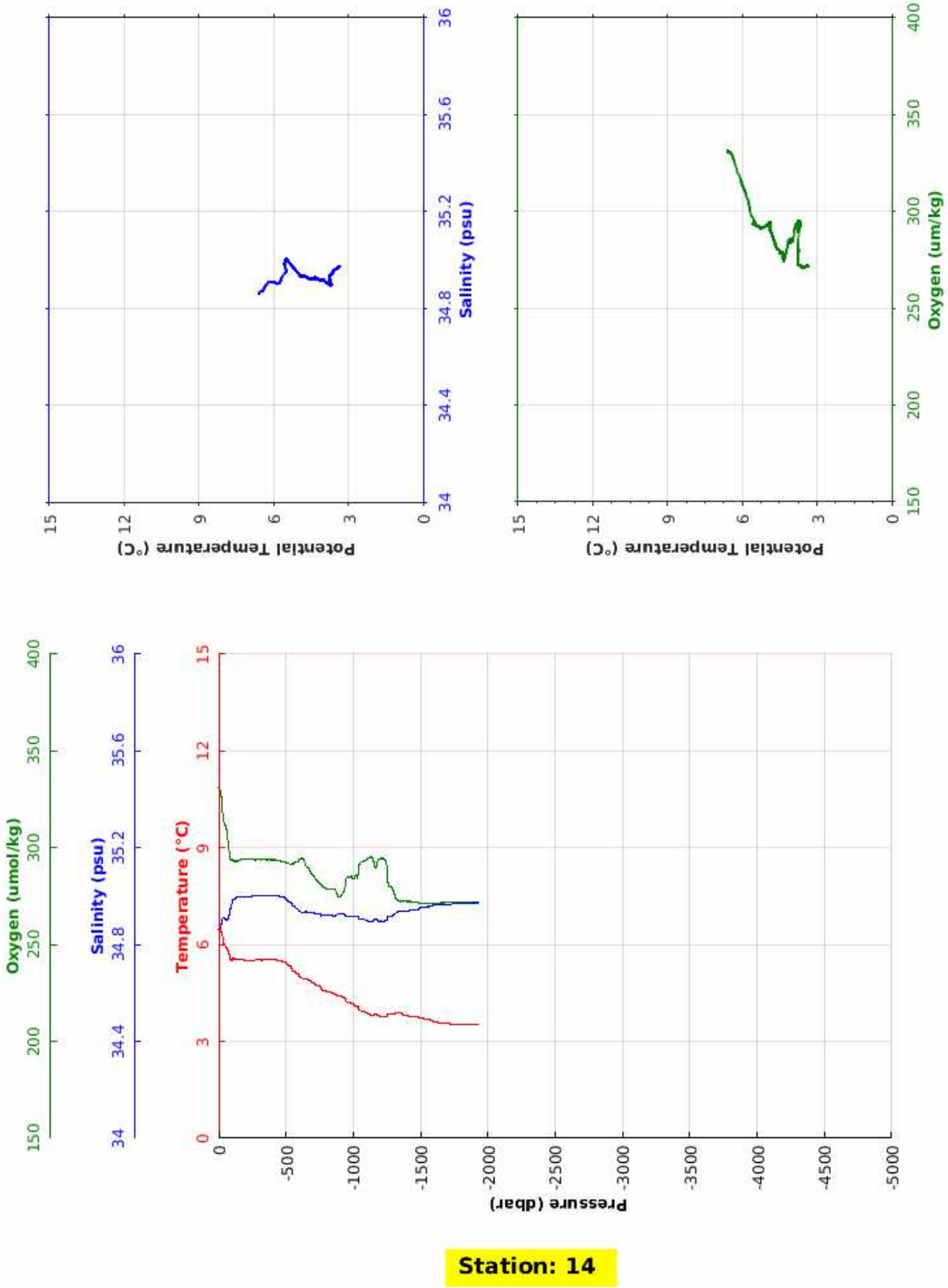
Cruise	: RREX 2015		
Station	: 13	Cast	: 1
Date	: 12/06/2015	Ship	: N/O Thalassa
Depth	: 2345 m	Organism	: IFREMER
Position	: N 56 45.59 W 033 55.38		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.274	34.832	321.8	6.274
10.0	6.253	34.833	322.0	6.252
20.0	6.122	34.837	323.7	6.121
30.0	5.920	34.854	326.6	5.917
40.0	5.831	34.866	324.2	5.828
50.0	5.770	34.869	321.2	5.766
100.0	5.397	34.881	307.3	5.389
150.0	5.059	34.898	296.3	5.047
200.0	5.002	34.924	293.4	4.986
250.0	4.821	34.916	290.8	4.801
300.0	4.782	34.926	284.5	4.759
350.0	4.712	34.929	281.8	4.685
400.0	4.656	34.932	279.8	4.625
450.0	4.615	34.940	278.7	4.580
500.0	4.433	34.930	280.3	4.395
550.0	4.506	34.949	269.1	4.464
600.0	4.405	34.950	267.7	4.359
650.0	4.297	34.943	269.1	4.248
700.0	4.117	34.927	275.1	4.064
750.0	4.069	34.923	277.9	4.013
800.0	4.014	34.923	278.0	3.955
850.0	3.921	34.914	282.0	3.858
900.0	3.968	34.930	273.4	3.901
950.0	3.934	34.935	272.5	3.862
1000.0	3.891	34.939	271.9	3.816
1050.0	3.868	34.942	271.2	3.788
1100.0	3.837	34.944	272.0	3.754
1150.0	3.808	34.944	272.2	3.720
1200.0	3.793	34.945	271.9	3.701
1250.0	3.782	34.947	271.6	3.687
1300.0	3.766	34.949	271.4	3.667
1350.0	3.750	34.952	271.4	3.646
1400.0	3.710	34.955	271.3	3.602
1450.0	3.683	34.956	271.5	3.571
1500.0	3.668	34.957	271.7	3.551
1550.0	3.657	34.957	271.4	3.536
1600.0	3.654	34.957	271.5	3.529
1650.0	3.658	34.964	271.5	3.528
1700.0	3.656	34.968	271.2	3.521
1750.0	3.644	34.970	271.4	3.505
1800.0	3.614	34.973	271.5	3.471
1850.0	3.602	34.974	271.4	3.455
1900.0	3.573	34.977	271.8	3.421
1950.0	3.426	34.981	272.4	3.272
2000.0	3.403	34.982	272.5	3.244
2050.0	3.385	34.983	272.8	3.222
2100.0	3.380	34.983	272.8	3.213
2150.0	3.383	34.983	272.8	3.210
2200.0	3.374	34.983	272.8	3.197
2250.0	3.379	34.983	272.8	3.197
2300.0	3.382	34.983	272.9	3.194
2350.0	3.386	34.983	272.8	3.194
2367.0	3.388	34.983	272.9	3.194


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 13

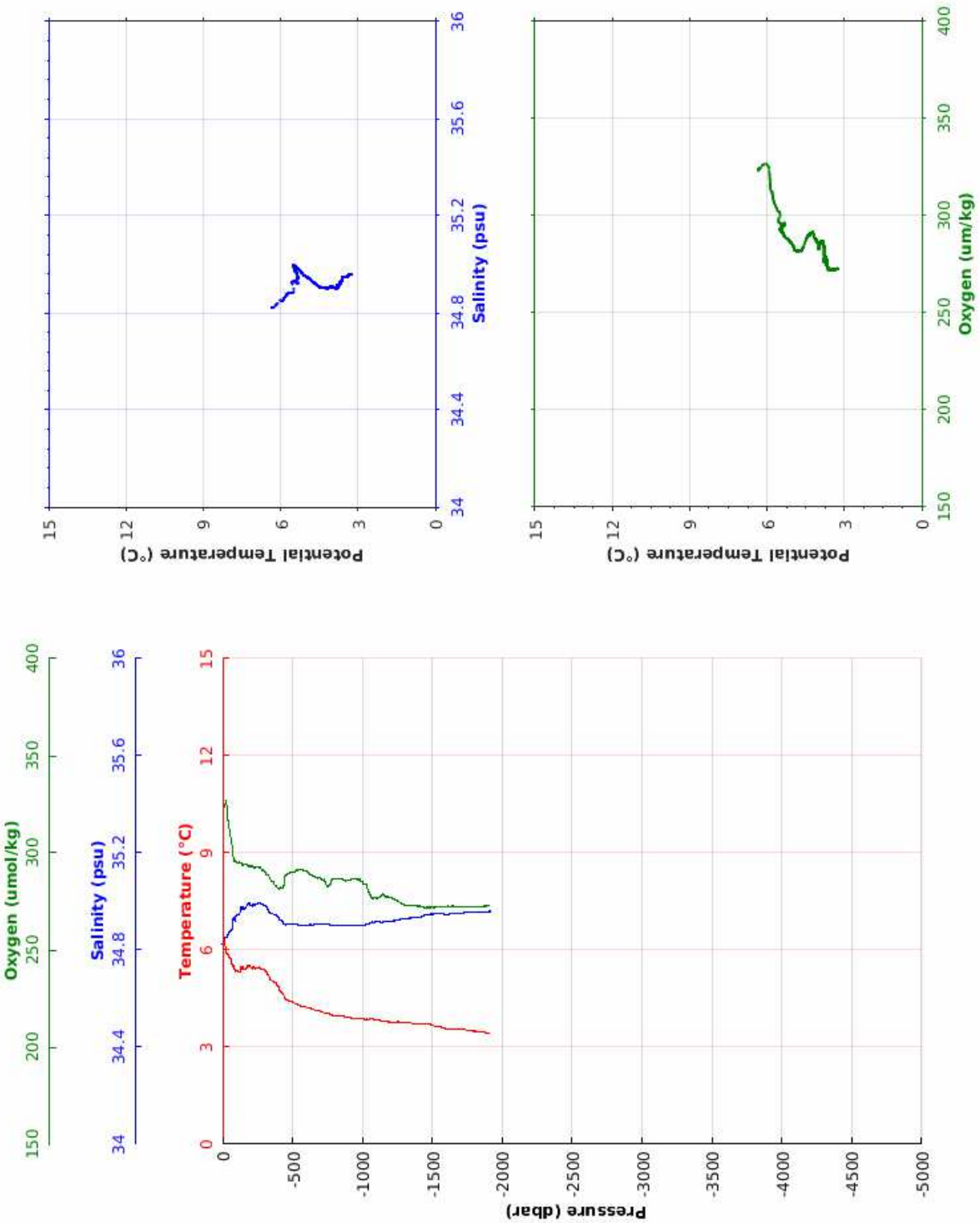
Cruise	: RREX 2015		
Station	: 14	Cast	: 1
Date	: 12/06/2015	Ship	: N/O Thalassa
Depth	: 1926 m	Organism	: IFREMER
Position	: N 56 26.94 W 034 25.23		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.601	34.861	331.3	6.601
10.0	6.596	34.863	330.4	6.595
20.0	6.394	34.880	328.6	6.392
30.0	6.238	34.904	322.3	6.236
40.0	6.032	34.909	315.1	6.029
50.0	5.959	34.907	312.4	5.955
100.0	5.546	34.971	293.8	5.538
150.0	5.545	34.996	293.1	5.533
200.0	5.522	34.998	294.0	5.505
250.0	5.517	35.001	294.2	5.497
300.0	5.525	35.003	294.1	5.500
350.0	5.528	35.004	294.1	5.498
400.0	5.528	35.004	293.7	5.495
450.0	5.507	35.001	293.3	5.469
500.0	5.426	34.990	292.7	5.384
550.0	5.206	34.962	291.6	5.161
600.0	5.011	34.939	293.4	4.963
650.0	4.941	34.936	290.7	4.889
700.0	4.821	34.932	286.2	4.765
750.0	4.719	34.927	282.1	4.659
800.0	4.556	34.922	279.0	4.493
850.0	4.484	34.920	278.7	4.417
900.0	4.416	34.928	274.5	4.345
950.0	4.225	34.916	284.0	4.152
1000.0	4.165	34.917	284.2	4.087
1050.0	3.961	34.906	291.8	3.881
1100.0	3.895	34.902	293.4	3.811
1150.0	3.804	34.897	294.7	3.716
1200.0	3.781	34.898	294.2	3.690
1250.0	3.779	34.901	292.1	3.684
1300.0	3.855	34.921	278.3	3.754
1350.0	3.874	34.936	272.5	3.769
1400.0	3.808	34.939	272.3	3.699
1450.0	3.762	34.942	272.2	3.649
1500.0	3.740	34.953	271.4	3.623
1550.0	3.705	34.956	271.3	3.583
1600.0	3.613	34.963	271.4	3.489
1650.0	3.581	34.965	271.7	3.452
1700.0	3.552	34.966	271.8	3.419
1750.0	3.541	34.968	272.0	3.404
1800.0	3.542	34.971	271.9	3.400
1850.0	3.535	34.972	271.7	3.389
1900.0	3.533	34.973	271.8	3.382
1940.0	3.531	34.974	271.7	3.376


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 14

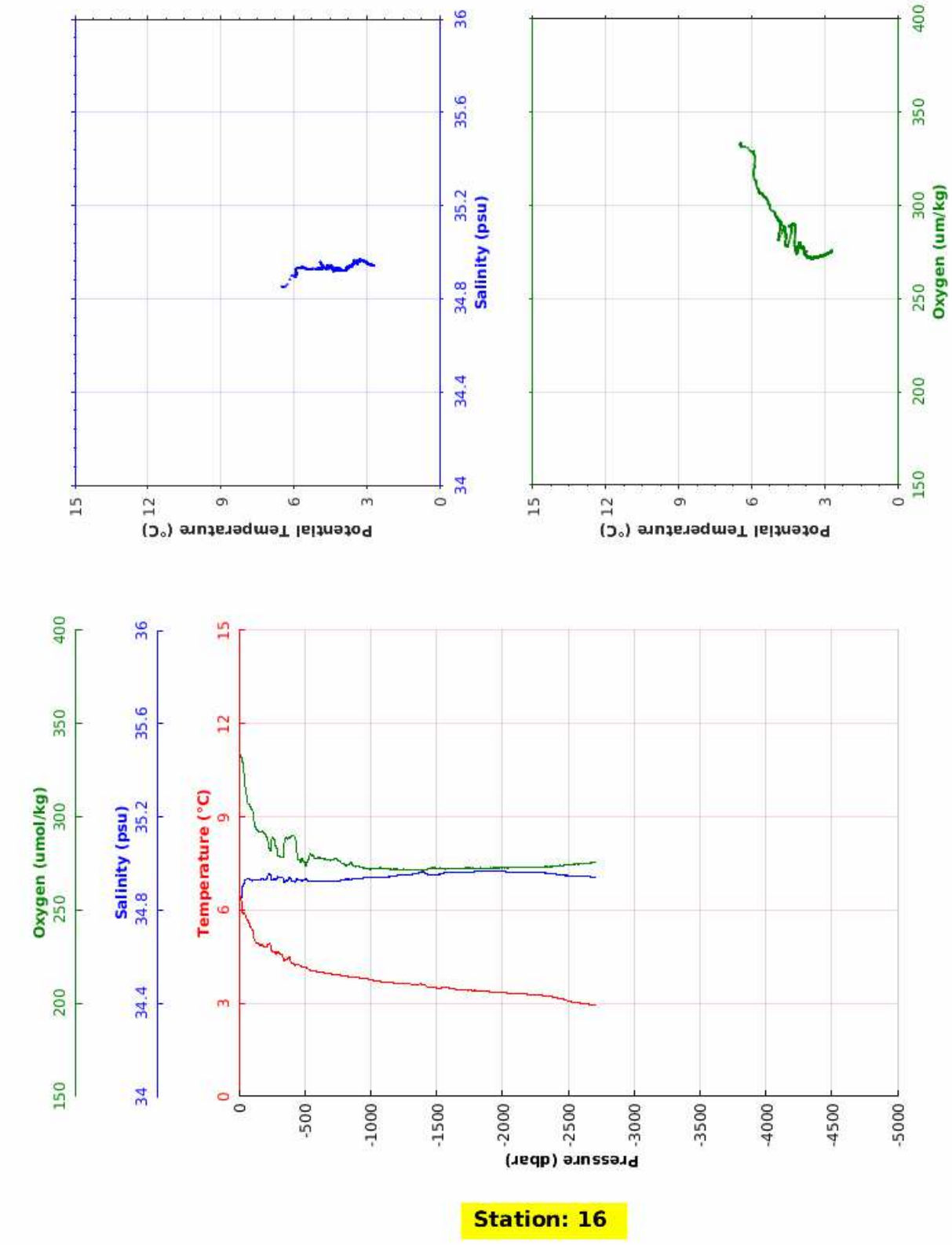
Cruise	: RREX 2015		
Station	: 15	Cast	: 1
Date	: 13/06/2015	Ship	: N/O Thalassa
Depth	: 1905 m	Organism	: IFREMER
Position	: N 56 31.41 W 034 59.89		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.312	34.823	324.4	6.311
10.0	6.327	34.822	323.8	6.326
20.0	6.115	34.840	326.5	6.113
30.0	5.898	34.854	319.7	5.896
40.0	5.869	34.862	313.9	5.866
50.0	5.780	34.875	309.4	5.776
100.0	5.378	34.943	294.7	5.370
150.0	5.441	34.973	293.9	5.429
200.0	5.463	34.985	293.3	5.447
250.0	5.449	34.991	292.9	5.428
300.0	5.363	34.984	289.8	5.339
350.0	5.065	34.951	285.6	5.037
400.0	4.866	34.937	281.6	4.834
450.0	4.510	34.906	288.5	4.475
500.0	4.404	34.906	289.9	4.366
550.0	4.288	34.903	291.4	4.247
600.0	4.231	34.901	290.5	4.186
650.0	4.167	34.903	288.0	4.118
700.0	4.109	34.907	286.9	4.056
750.0	4.052	34.907	282.7	3.995
800.0	3.966	34.903	286.6	3.907
850.0	3.960	34.903	286.7	3.896
900.0	3.927	34.902	286.1	3.860
950.0	3.896	34.901	286.6	3.824
1000.0	3.873	34.902	284.7	3.798
1050.0	3.860	34.909	278.9	3.780
1100.0	3.846	34.917	276.3	3.762
1150.0	3.802	34.915	278.2	3.715
1200.0	3.778	34.918	277.0	3.687
1250.0	3.781	34.923	275.2	3.685
1300.0	3.759	34.931	273.1	3.659
1350.0	3.738	34.932	272.8	3.634
1400.0	3.710	34.936	272.6	3.602
1450.0	3.708	34.945	271.7	3.596
1500.0	3.676	34.948	272.0	3.559
1550.0	3.633	34.948	272.2	3.512
1600.0	3.573	34.947	272.5	3.449
1650.0	3.549	34.949	272.4	3.421
1700.0	3.544	34.953	272.3	3.411
1750.0	3.519	34.956	272.4	3.382
1800.0	3.492	34.957	272.5	3.351
1850.0	3.475	34.957	272.5	3.330
1900.0	3.431	34.959	272.7	3.281
1917.0	3.419	34.959	272.9	3.268


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 15

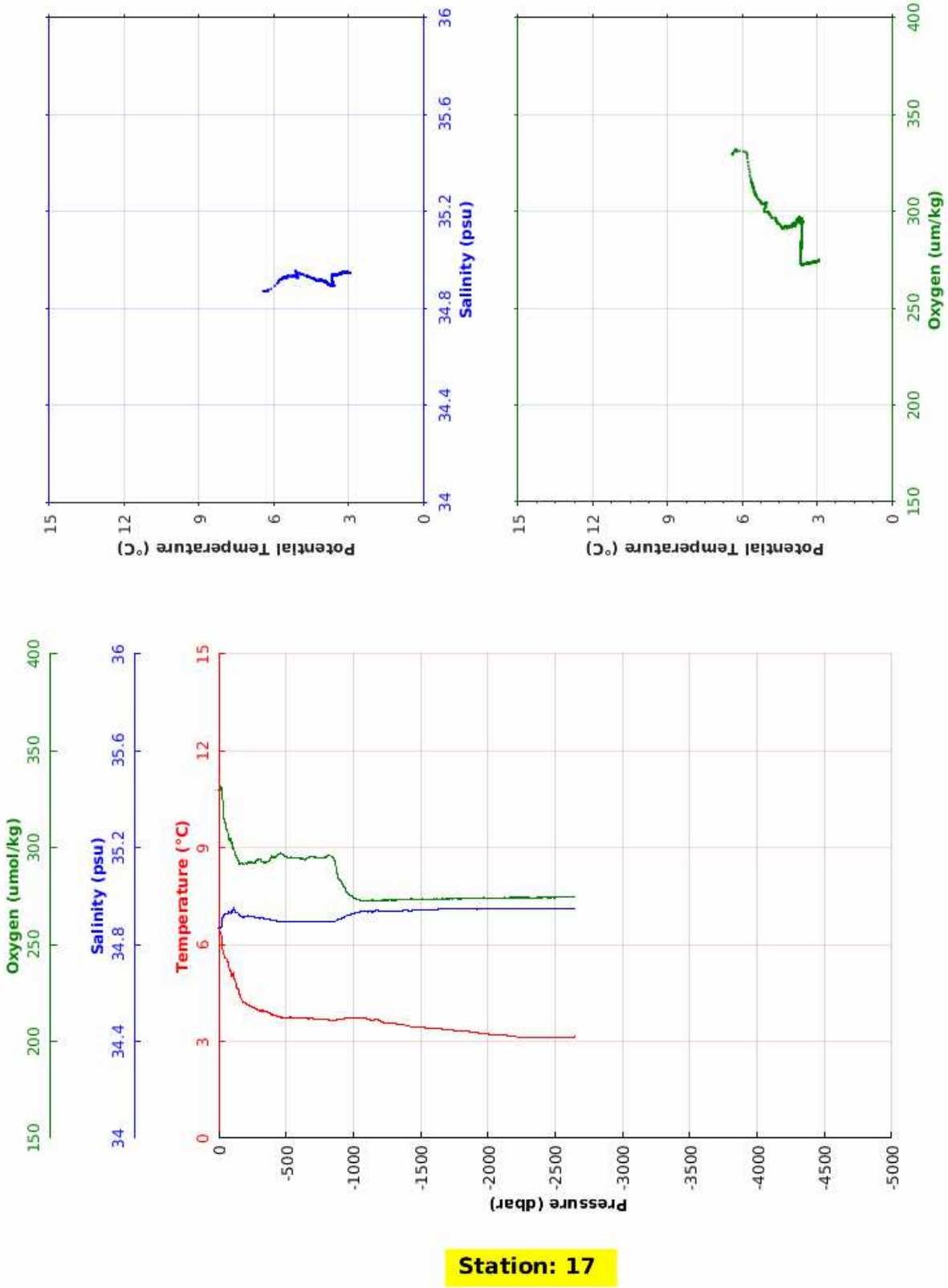
Cruise	: RREX 2015		
Station	: 16	Cast	: 1
Date	: 13/06/2015	Ship	: N/O Thalassa
Depth	: 2684 m	Organism	: IFREMER
Position	: N 57 7.88 W 035 7.26		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.454	34.852	333.3	6.454
10.0	6.457	34.852	332.3	6.456
20.0	6.263	34.861	331.4	6.262
30.0	5.893	34.904	327.1	5.890
40.0	5.909	34.918	319.4	5.905
50.0	5.829	34.932	313.0	5.825
100.0	5.394	34.928	303.6	5.386
150.0	4.889	34.930	292.2	4.878
200.0	4.816	34.932	290.1	4.801
250.0	4.683	34.930	288.9	4.664
300.0	4.625	34.941	279.1	4.602
350.0	4.399	34.923	288.7	4.373
400.0	4.317	34.926	290.1	4.288
450.0	4.238	34.930	276.9	4.204
500.0	4.179	34.932	274.7	4.142
550.0	4.051	34.922	279.5	4.011
600.0	4.015	34.922	278.0	3.971
650.0	3.973	34.922	277.3	3.925
700.0	3.951	34.923	276.8	3.899
750.0	3.918	34.924	276.8	3.863
800.0	3.883	34.932	274.1	3.824
850.0	3.825	34.929	275.4	3.762
900.0	3.823	34.935	273.4	3.757
950.0	3.801	34.938	272.6	3.730
1000.0	3.761	34.942	271.8	3.686
1050.0	3.717	34.940	272.3	3.638
1100.0	3.693	34.942	272.6	3.611
1150.0	3.667	34.944	271.9	3.581
1200.0	3.658	34.948	271.9	3.567
1250.0	3.640	34.949	271.8	3.546
1300.0	3.624	34.953	271.6	3.526
1350.0	3.599	34.955	271.8	3.496
1400.0	3.609	34.962	271.3	3.502
1450.0	3.511	34.951	272.6	3.401
1500.0	3.497	34.951	272.5	3.382
1550.0	3.500	34.959	272.4	3.381
1600.0	3.488	34.961	272.2	3.364
1650.0	3.450	34.960	272.3	3.323
1700.0	3.437	34.961	272.5	3.305
1750.0	3.418	34.964	272.5	3.283
1800.0	3.412	34.967	272.5	3.272
1850.0	3.396	34.968	272.4	3.251
1900.0	3.376	34.967	272.5	3.227
1950.0	3.357	34.966	272.6	3.204
2000.0	3.357	34.966	272.8	3.199
2050.0	3.327	34.964	273.0	3.165
2100.0	3.321	34.964	272.9	3.155
2150.0	3.302	34.963	273.0	3.131
2200.0	3.283	34.962	273.1	3.108
2250.0	3.266	34.961	273.0	3.086
2300.0	3.254	34.960	273.1	3.069
2350.0	3.246	34.959	273.2	3.056
2400.0	3.200	34.956	273.3	3.006
2450.0	3.149	34.951	273.9	2.951
2500.0	3.083	34.948	274.2	2.882
2550.0	3.028	34.946	274.6	2.823
2600.0	3.003	34.945	274.8	2.793
2650.0	2.985	34.944	275.0	2.770
2700.0	2.935	34.942	275.7	2.716
2713.0	2.928	34.942	275.6	2.708


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 16

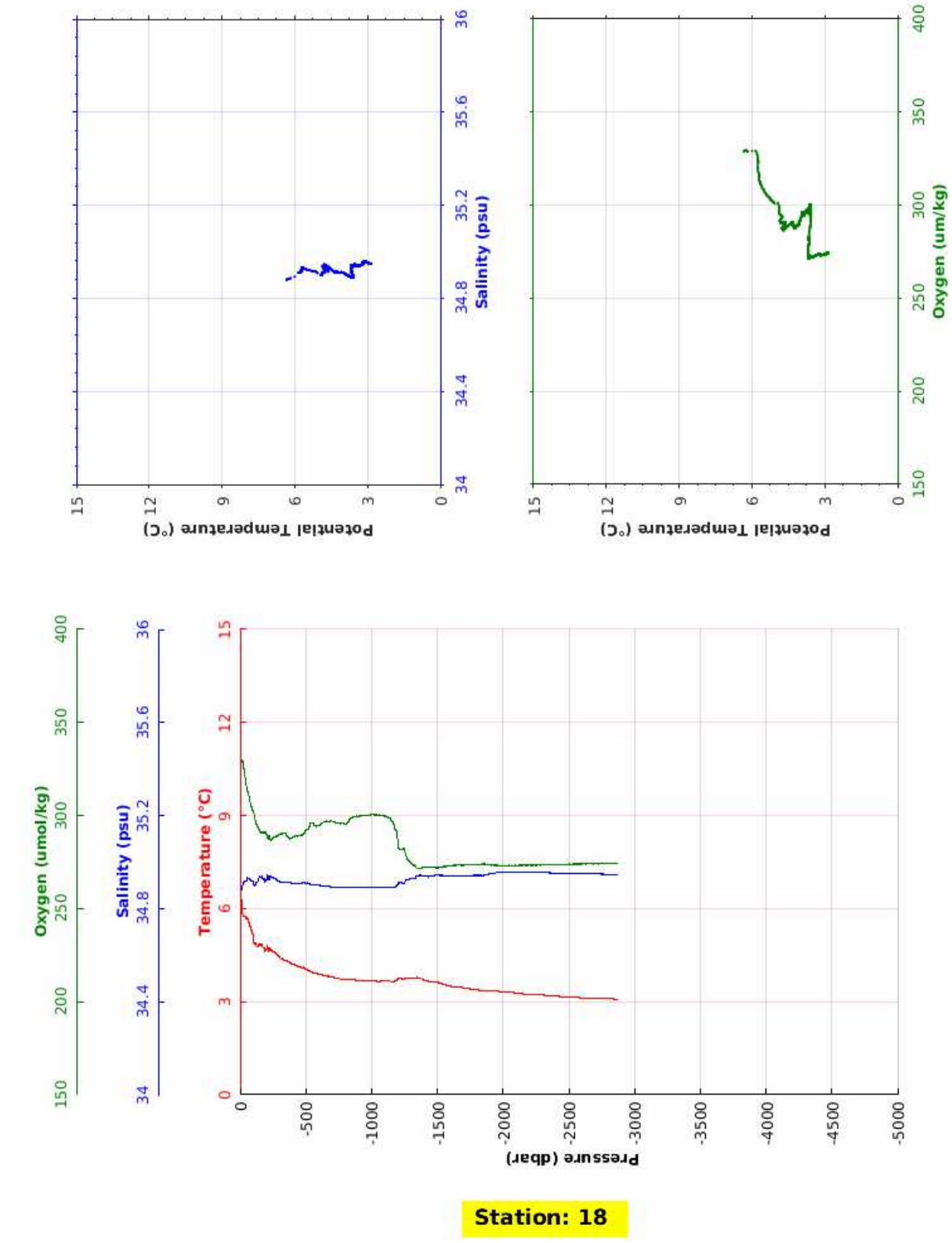
Cruise	: RREX 2015		
Station	: 17	Cast	: 1
Date	: 13/06/2015	Ship	: N/O Thalassa
Depth	: 2625 m	Organism	: IFREMER
Position	: N 57 3.58 W 035 10.80		

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.395	34.871	329.9	6.395
10.0	6.381	34.870	330.1	6.380
20.0	6.283	34.872	331.7	6.281
30.0	5.830	34.907	330.2	5.828
40.0	5.655	34.923	316.1	5.652
50.0	5.599	34.930	314.3	5.594
100.0	5.085	34.939	302.8	5.078
150.0	4.522	34.926	293.5	4.511
200.0	4.170	34.914	292.0	4.155
250.0	4.067	34.915	292.4	4.049
300.0	3.966	34.910	293.6	3.944
350.0	3.916	34.908	292.6	3.892
400.0	3.835	34.901	295.2	3.806
450.0	3.768	34.895	296.7	3.737
500.0	3.745	34.895	295.5	3.710
550.0	3.744	34.896	295.0	3.705
600.0	3.736	34.897	294.9	3.693
650.0	3.719	34.896	293.7	3.672
700.0	3.710	34.897	295.5	3.660
750.0	3.687	34.896	295.0	3.633
800.0	3.678	34.896	295.2	3.620
850.0	3.650	34.894	295.1	3.588
900.0	3.695	34.906	283.7	3.629
950.0	3.729	34.919	277.9	3.658
1000.0	3.728	34.927	274.6	3.654
1050.0	3.722	34.935	273.2	3.644
1100.0	3.701	34.937	272.6	3.618
1150.0	3.655	34.935	272.9	3.569
1200.0	3.643	34.939	272.6	3.552
1250.0	3.564	34.938	273.0	3.470
1300.0	3.558	34.939	273.0	3.460
1350.0	3.520	34.940	273.0	3.418
1400.0	3.494	34.942	273.3	3.388
1450.0	3.457	34.942	273.4	3.348
1500.0	3.453	34.943	273.5	3.339
1550.0	3.422	34.944	273.5	3.304
1600.0	3.424	34.945	273.7	3.302
1650.0	3.390	34.947	273.6	3.263
1700.0	3.369	34.947	273.6	3.238
1750.0	3.346	34.949	273.7	3.211
1800.0	3.330	34.950	273.7	3.191
1850.0	3.311	34.949	273.8	3.168
1900.0	3.270	34.946	274.2	3.123
1950.0	3.252	34.947	274.2	3.101
2000.0	3.228	34.949	274.1	3.072
2050.0	3.207	34.949	274.1	3.047
2100.0	3.190	34.949	274.1	3.026
2150.0	3.176	34.948	274.2	3.006
2200.0	3.150	34.947	274.3	2.977
2250.0	3.132	34.947	274.3	2.954
2300.0	3.126	34.948	274.3	2.943
2350.0	3.130	34.948	274.3	2.943
2400.0	3.132	34.947	274.3	2.939
2450.0	3.136	34.947	274.3	2.939
2500.0	3.138	34.947	274.4	2.936
2550.0	3.137	34.947	274.5	2.930
2600.0	3.142	34.947	274.5	2.929
2650.0	3.146	34.947	274.6	2.929
2653.0	3.146	34.946	274.7	2.928


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 17

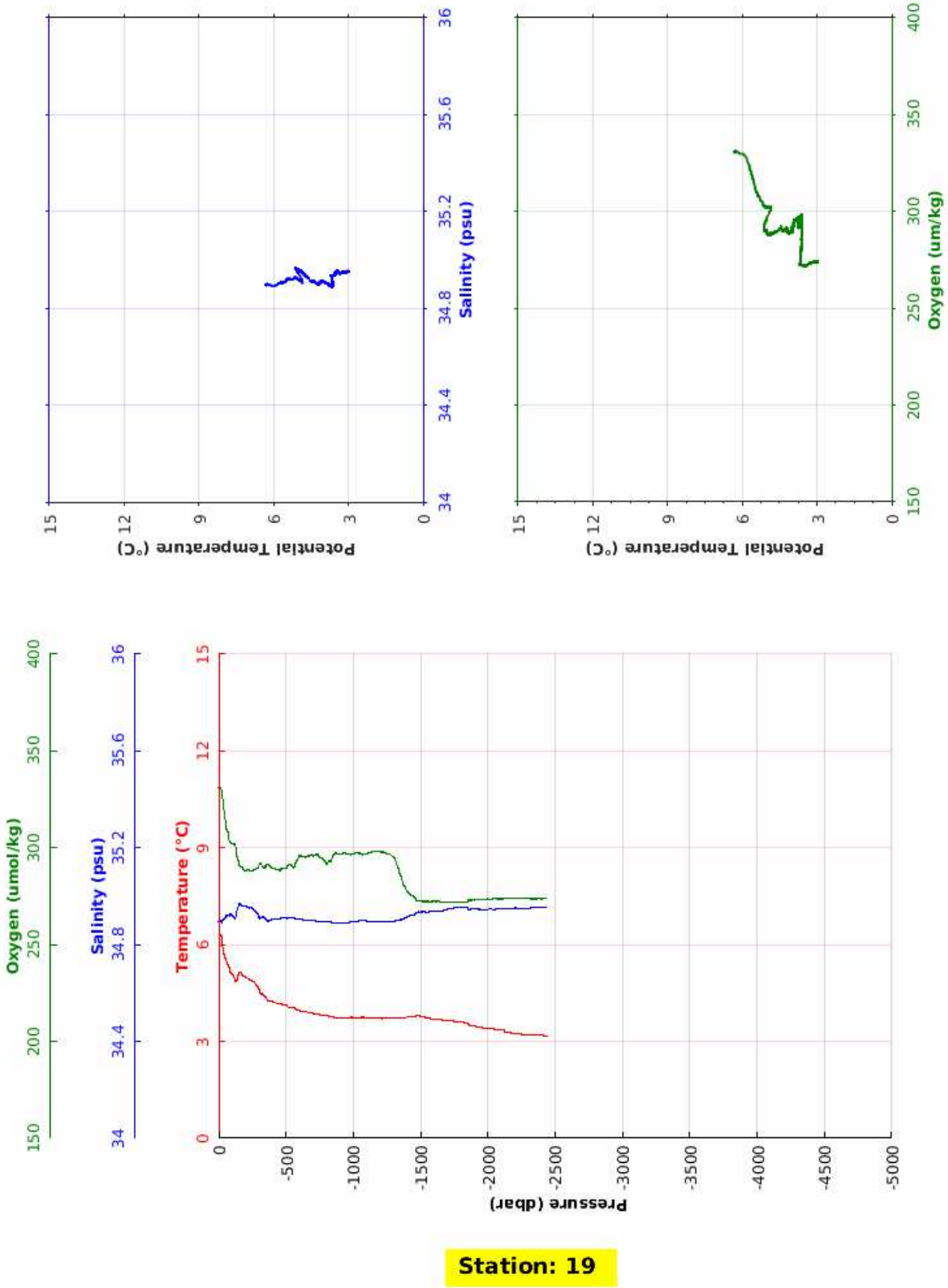
Cruise : RREX 2015			
Station : 18	Cast : 1		
Date : 13/06/2015	Ship : N/O Thalassa		
Depth : 2849 m	Organism : IFREMER		
Position : N 56 51.00 W 035 22.25			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.322	34.880	329.1	6.322
10.0	6.280	34.882	329.4	6.279
20.0	5.798	34.912	328.0	5.796
30.0	5.744	34.914	323.2	5.741
40.0	5.740	34.919	317.6	5.737
50.0	5.713	34.930	314.0	5.709
100.0	5.124	34.914	301.8	5.117
150.0	4.830	34.934	291.4	4.818
200.0	4.675	34.924	290.0	4.660
250.0	4.632	34.934	287.9	4.613
300.0	4.426	34.916	290.1	4.404
350.0	4.311	34.913	289.4	4.285
400.0	4.194	34.910	288.8	4.165
450.0	4.113	34.910	289.4	4.080
500.0	4.050	34.910	291.8	4.013
550.0	3.937	34.903	296.1	3.897
600.0	3.888	34.900	294.8	3.845
650.0	3.827	34.896	296.9	3.780
700.0	3.786	34.894	296.8	3.735
750.0	3.742	34.892	295.8	3.688
800.0	3.721	34.892	295.4	3.663
850.0	3.711	34.893	298.8	3.649
900.0	3.685	34.892	299.5	3.619
950.0	3.680	34.892	300.0	3.610
1000.0	3.661	34.890	300.5	3.587
1050.0	3.658	34.890	300.3	3.580
1100.0	3.660	34.890	299.7	3.578
1150.0	3.653	34.890	297.1	3.567
1200.0	3.745	34.911	284.3	3.654
1250.0	3.729	34.911	280.5	3.634
1300.0	3.772	34.929	274.2	3.672
1350.0	3.780	34.942	271.7	3.676
1400.0	3.696	34.938	272.2	3.588
1450.0	3.641	34.939	272.4	3.529
1500.0	3.636	34.946	272.0	3.520
1550.0	3.563	34.941	272.7	3.443
1600.0	3.504	34.940	273.0	3.381
1650.0	3.461	34.940	273.4	3.333
1700.0	3.452	34.941	273.3	3.320
1750.0	3.414	34.943	273.7	3.278
1800.0	3.386	34.943	273.7	3.246
1850.0	3.350	34.943	273.9	3.206
1900.0	3.359	34.951	273.6	3.210
1950.0	3.337	34.956	273.3	3.184
2000.0	3.315	34.958	273.2	3.157
2050.0	3.307	34.958	273.2	3.145
2100.0	3.270	34.957	273.2	3.104
2150.0	3.250	34.957	273.5	3.080
2200.0	3.236	34.956	273.4	3.061
2250.0	3.233	34.957	273.4	3.053
2300.0	3.224	34.956	273.5	3.040
2350.0	3.194	34.954	273.6	3.005
2400.0	3.174	34.952	273.7	2.981
2450.0	3.166	34.952	273.8	2.968
2500.0	3.147	34.951	273.9	2.944
2550.0	3.138	34.950	274.1	2.930
2600.0	3.127	34.949	273.9	2.915
2650.0	3.120	34.949	274.1	2.903
2700.0	3.124	34.949	274.1	2.902
2750.0	3.125	34.948	274.2	2.897
2800.0	3.110	34.948	274.2	2.878
2850.0	3.088	34.947	274.5	2.851
2881.0	3.086	34.947	274.6	2.846


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 18

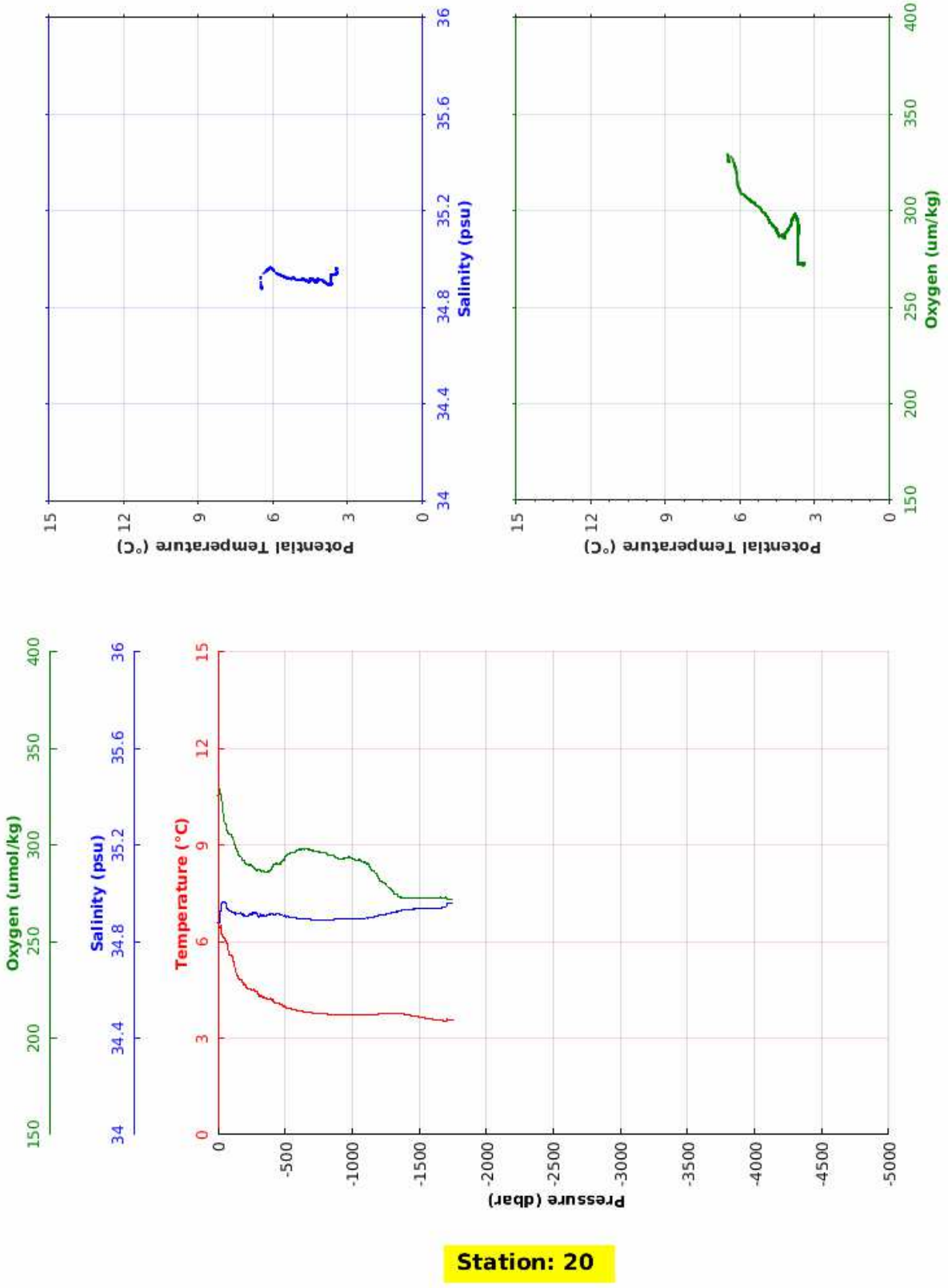
Cruise	: RREX 2015		
Station	: 19	Cast	: 1
Date	: 13/06/2015	Ship	: N/O Thalassa
Depth	: 2424 m	Organism	: IFREMER
Position	: N 56 44.92 W 035 28.15		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.303	34.897	330.9	6.303
10.0	6.297	34.897	330.6	6.296
20.0	6.279	34.898	331.0	6.277
30.0	5.905	34.896	328.7	5.902
40.0	5.706	34.906	321.7	5.703
50.0	5.576	34.909	316.8	5.572
100.0	5.081	34.925	302.4	5.073
150.0	5.113	34.960	293.8	5.102
200.0	5.002	34.960	288.2	4.986
250.0	4.887	34.950	288.1	4.867
300.0	4.611	34.923	290.0	4.588
350.0	4.363	34.908	290.3	4.337
400.0	4.233	34.904	289.7	4.203
450.0	4.165	34.907	288.7	4.132
500.0	4.130	34.911	289.4	4.093
550.0	4.055	34.912	290.3	4.014
600.0	3.954	34.904	295.7	3.911
650.0	3.916	34.903	295.2	3.868
700.0	3.865	34.899	296.4	3.814
750.0	3.829	34.897	295.3	3.774
800.0	3.798	34.895	292.4	3.740
850.0	3.758	34.891	295.3	3.695
900.0	3.731	34.890	297.1	3.665
950.0	3.729	34.890	297.0	3.659
1000.0	3.740	34.896	297.1	3.666
1050.0	3.748	34.898	297.2	3.669
1100.0	3.736	34.898	296.9	3.654
1150.0	3.716	34.896	298.2	3.629
1200.0	3.711	34.896	297.9	3.620
1250.0	3.712	34.897	297.3	3.617
1300.0	3.712	34.897	295.5	3.612
1350.0	3.722	34.902	286.5	3.619
1400.0	3.761	34.916	277.8	3.653
1450.0	3.773	34.924	274.8	3.660
1500.0	3.779	34.935	272.6	3.661
1550.0	3.727	34.935	272.4	3.606
1600.0	3.687	34.936	272.4	3.561
1650.0	3.674	34.939	272.2	3.544
1700.0	3.659	34.946	271.9	3.525
1750.0	3.619	34.952	271.9	3.480
1800.0	3.606	34.955	271.9	3.463
1850.0	3.550	34.952	272.3	3.404
1900.0	3.477	34.947	273.2	3.326
1950.0	3.428	34.945	273.4	3.273
2000.0	3.414	34.946	273.6	3.256
2050.0	3.385	34.946	273.8	3.222
2100.0	3.371	34.948	273.7	3.203
2150.0	3.293	34.948	273.8	3.122
2200.0	3.249	34.951	273.8	3.074
2250.0	3.225	34.950	273.9	3.045
2300.0	3.205	34.950	274.1	3.021
2350.0	3.191	34.953	273.6	3.002
2400.0	3.190	34.953	273.7	2.996
2447.0	3.176	34.952	274.0	2.978


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 19

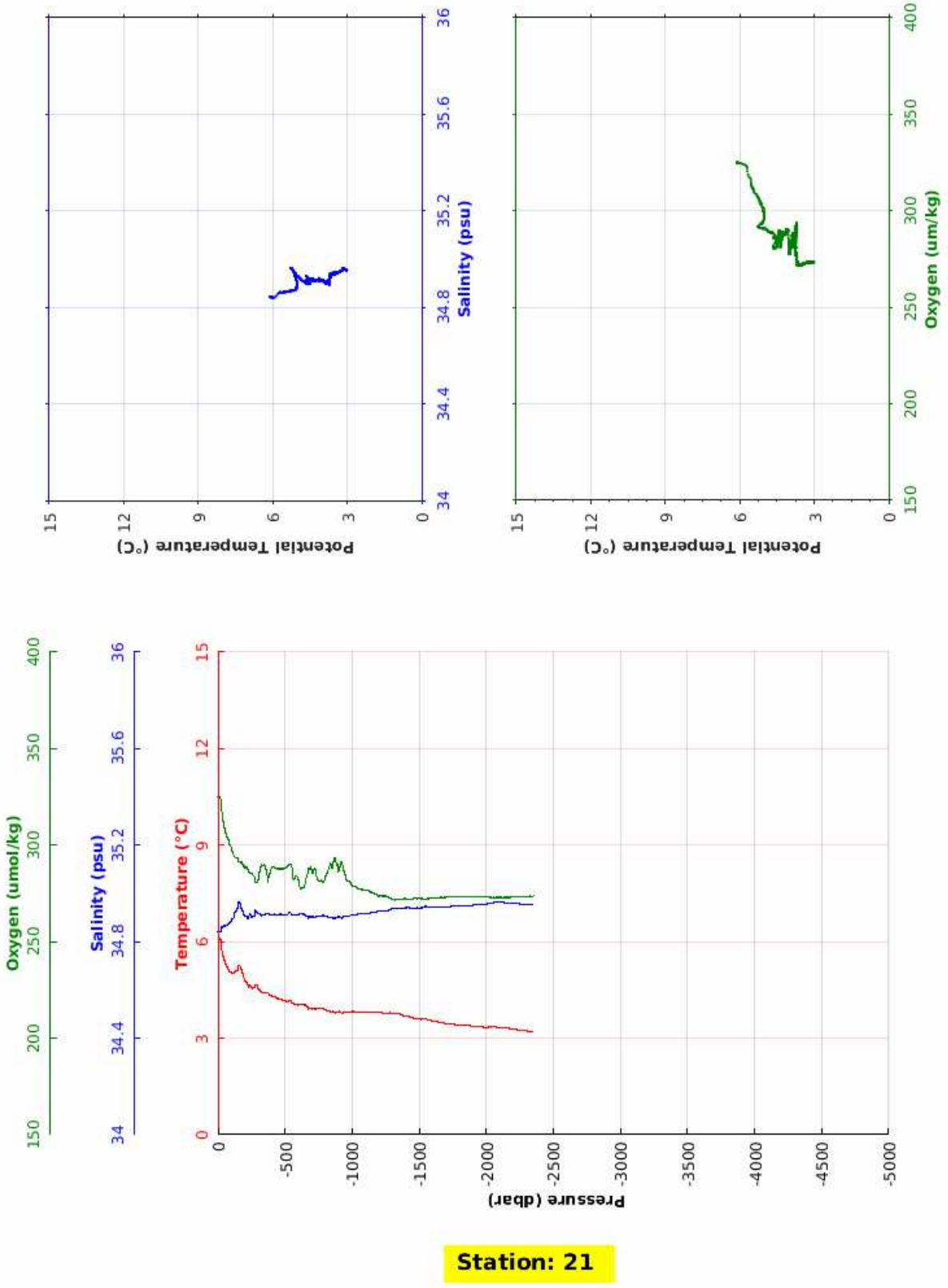
Cruise	: RREX 2015		
Station	: 20	Cast	: 1
Date	: 13/06/2015	Ship	: N/O Thalassa
Depth	: 1747 m	Organism	: IFREMER
Position	: N 56 35.95 W 035 37.72		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.448	34.879	325.5	6.448
10.0	6.449	34.879	325.6	6.448
20.0	6.478	34.904	328.9	6.476
30.0	6.212	34.955	324.0	6.209
40.0	6.139	34.962	319.8	6.135
50.0	6.092	34.965	313.6	6.088
100.0	5.579	34.929	305.6	5.571
150.0	4.900	34.915	296.9	4.889
200.0	4.659	34.913	292.2	4.644
250.0	4.506	34.913	290.1	4.487
300.0	4.355	34.909	287.3	4.333
350.0	4.244	34.907	286.5	4.218
400.0	4.207	34.916	287.6	4.178
450.0	4.080	34.914	290.4	4.048
500.0	3.997	34.909	292.5	3.960
550.0	3.907	34.902	296.5	3.868
600.0	3.851	34.897	297.7	3.808
650.0	3.826	34.895	297.8	3.779
700.0	3.792	34.892	297.4	3.742
750.0	3.776	34.892	296.8	3.721
800.0	3.753	34.891	296.0	3.695
850.0	3.742	34.892	295.0	3.680
900.0	3.738	34.894	293.2	3.672
950.0	3.730	34.894	293.4	3.660
1000.0	3.720	34.895	293.2	3.645
1050.0	3.714	34.895	292.2	3.636
1100.0	3.716	34.897	291.2	3.634
1150.0	3.731	34.902	287.1	3.644
1200.0	3.758	34.910	282.6	3.666
1250.0	3.752	34.913	280.4	3.657
1300.0	3.767	34.921	276.6	3.667
1350.0	3.756	34.927	273.5	3.652
1400.0	3.735	34.933	272.7	3.626
1450.0	3.701	34.935	272.4	3.589
1500.0	3.664	34.936	272.5	3.548
1550.0	3.629	34.937	272.5	3.508
1600.0	3.590	34.938	272.7	3.466
1650.0	3.553	34.940	272.8	3.424
1700.0	3.531	34.943	273.0	3.398
1750.0	3.575	34.960	271.9	3.437
1761.0	3.572	34.960	272.0	3.433


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 20

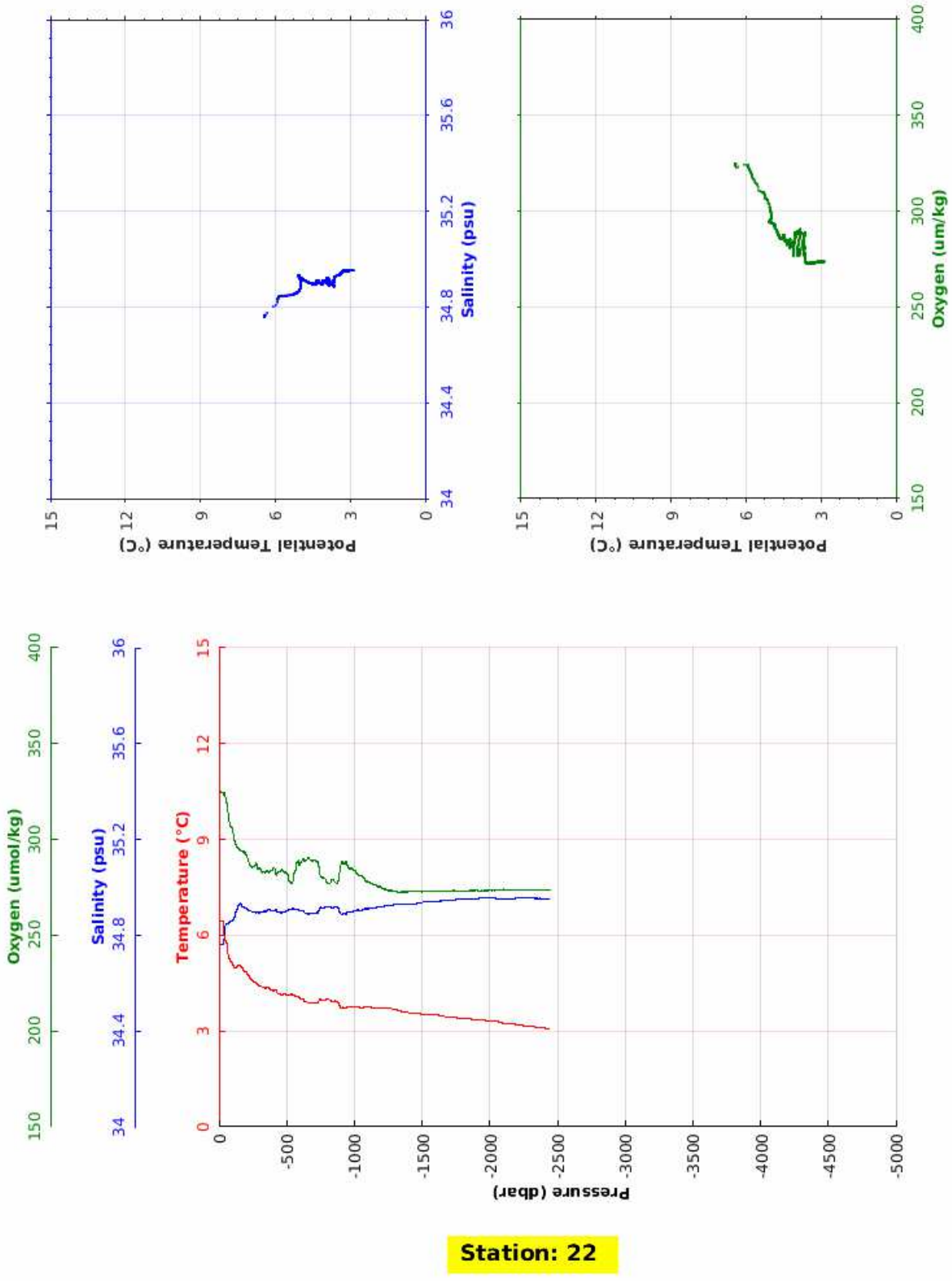
Cruise : RREX 2015			
Station : 21	Cast : 1		
Date : 14/06/2015	Ship : N/O Thalassa		
Depth : 2335 m	Organism : IFREMER		
Position : N 56 38.35 W 036 13.67			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.096	34.843	325.0	6.096
10.0	6.099	34.844	324.8	6.098
20.0	6.051	34.840	324.7	6.049
30.0	5.720	34.862	322.7	5.717
40.0	5.547	34.864	313.7	5.543
50.0	5.430	34.866	310.6	5.426
100.0	5.042	34.885	299.4	5.034
150.0	5.140	34.938	293.4	5.128
200.0	4.786	34.908	289.1	4.770
250.0	4.567	34.903	285.4	4.548
300.0	4.533	34.915	281.3	4.510
350.0	4.424	34.912	290.0	4.397
400.0	4.315	34.910	287.4	4.285
450.0	4.234	34.913	287.7	4.201
500.0	4.165	34.912	288.2	4.128
550.0	4.100	34.913	290.2	4.059
600.0	4.035	34.910	283.0	3.991
650.0	4.027	34.914	278.5	3.979
700.0	3.906	34.899	288.4	3.855
750.0	3.924	34.907	282.2	3.868
800.0	3.889	34.907	282.1	3.829
850.0	3.826	34.901	289.5	3.763
900.0	3.833	34.905	287.2	3.766
950.0	3.815	34.905	285.3	3.744
1000.0	3.832	34.912	279.6	3.757
1050.0	3.827	34.916	277.3	3.748
1100.0	3.808	34.916	276.5	3.725
1150.0	3.796	34.919	275.6	3.709
1200.0	3.815	34.928	273.6	3.723
1250.0	3.778	34.926	273.5	3.683
1300.0	3.786	34.937	272.2	3.686
1350.0	3.759	34.939	272.0	3.654
1400.0	3.683	34.939	272.1	3.576
1450.0	3.641	34.938	272.2	3.529
1500.0	3.594	34.938	272.4	3.479
1550.0	3.604	34.947	272.1	3.484
1600.0	3.544	34.942	272.7	3.420
1650.0	3.502	34.943	272.8	3.374
1700.0	3.459	34.945	273.1	3.327
1750.0	3.436	34.947	273.2	3.300
1800.0	3.420	34.948	273.1	3.280
1850.0	3.395	34.950	273.3	3.251
1900.0	3.379	34.951	273.3	3.230
1950.0	3.354	34.953	273.2	3.201
2000.0	3.332	34.954	273.3	3.174
2050.0	3.352	34.961	272.8	3.190
2100.0	3.343	34.963	272.9	3.176
2150.0	3.316	34.961	273.0	3.144
2200.0	3.279	34.958	273.4	3.103
2250.0	3.252	34.957	273.3	3.071
2300.0	3.232	34.956	273.2	3.048
2350.0	3.210	34.954	273.6	3.021
2358.0	3.201	34.954	273.6	3.012


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 21

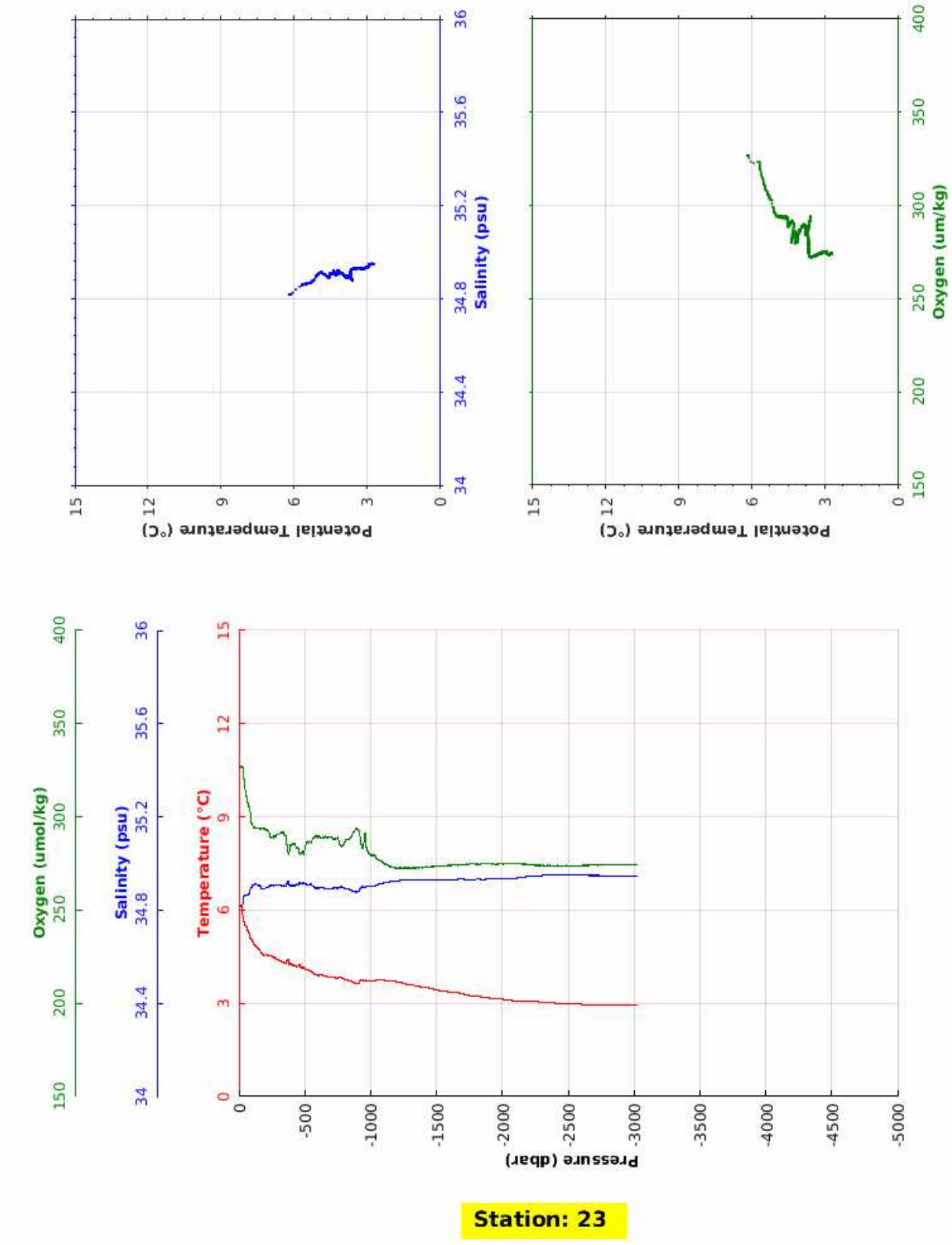
Cruise : RREX 2015			
Station : 22	Cast : 1		
Date : 14/06/2015	Ship : N/O Thalassa		
Depth : 2418 m	Organism : IFREMER		
Position : N 56 41.23 W 036 49.70			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.428	34.762	324.8	6.428
10.0	6.428	34.762	324.8	6.428
20.0	6.433	34.762	324.3	6.431
30.0	6.428	34.763	324.4	6.426
40.0	5.920	34.830	323.7	5.917
50.0	5.812	34.846	320.3	5.808
100.0	5.088	34.863	304.1	5.080
150.0	5.064	34.929	294.5	5.053
200.0	4.860	34.913	291.4	4.844
250.0	4.573	34.898	285.8	4.554
300.0	4.416	34.898	284.9	4.393
350.0	4.362	34.903	283.7	4.336
400.0	4.265	34.901	285.2	4.236
450.0	4.163	34.896	283.2	4.130
500.0	4.127	34.901	282.1	4.090
550.0	4.139	34.911	281.7	4.098
600.0	4.022	34.902	287.7	3.978
650.0	3.908	34.891	289.7	3.860
700.0	3.877	34.892	289.3	3.826
750.0	3.991	34.916	280.2	3.935
800.0	3.990	34.920	277.1	3.930
850.0	3.936	34.916	278.0	3.872
900.0	3.722	34.887	288.0	3.656
950.0	3.741	34.896	285.9	3.671
1000.0	3.758	34.902	283.7	3.684
1050.0	3.737	34.905	280.8	3.658
1100.0	3.747	34.911	277.8	3.665
1150.0	3.736	34.915	276.6	3.650
1200.0	3.732	34.920	274.5	3.641
1250.0	3.702	34.925	273.4	3.607
1300.0	3.672	34.928	272.8	3.573
1350.0	3.613	34.931	272.7	3.510
1400.0	3.574	34.931	272.9	3.467
1450.0	3.550	34.932	272.8	3.439
1500.0	3.532	34.937	272.7	3.417
1550.0	3.505	34.940	272.7	3.386
1600.0	3.504	34.941	272.8	3.381
1650.0	3.464	34.944	273.1	3.337
1700.0	3.446	34.946	273.0	3.314
1750.0	3.415	34.949	273.2	3.280
1800.0	3.407	34.950	273.2	3.267
1850.0	3.391	34.951	273.3	3.246
1900.0	3.364	34.952	273.4	3.215
1950.0	3.344	34.955	273.3	3.191
2000.0	3.320	34.954	273.5	3.163
2050.0	3.302	34.953	273.5	3.141
2100.0	3.247	34.950	274.0	3.081
2150.0	3.225	34.954	273.6	3.055
2200.0	3.188	34.954	273.7	3.014
2250.0	3.170	34.954	273.5	2.991
2300.0	3.150	34.954	273.6	2.967
2350.0	3.120	34.954	273.6	2.932
2400.0	3.092	34.953	273.6	2.900
2443.0	3.084	34.953	274.1	2.888


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 22

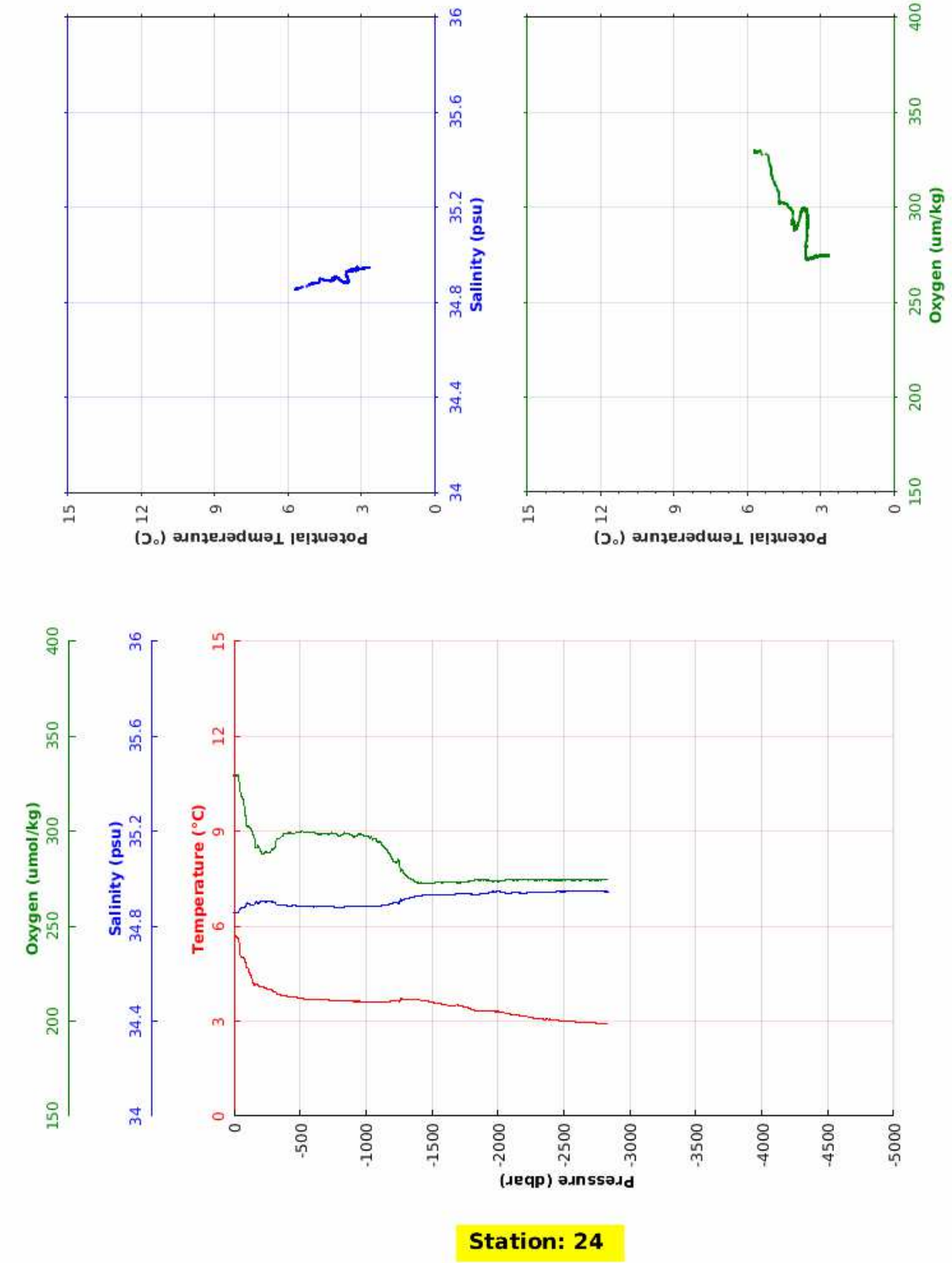
Cruise : RREX 2015			
Station : 23	Cast : 1		
Date : 14/06/2015	Ship : N/O Thalassa		
Depth : 2989 m	Organism : IFREMER		
Position : N 56 43.62 W 037 31.92			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.179	34.817	326.8	6.179	3027.0	2.950	34.947	274.6	2.697
10.0	6.159	34.817	326.7	6.158					
20.0	6.144	34.818	326.9	6.142					
30.0	5.674	34.859	323.4	5.671					
40.0	5.622	34.862	317.8	5.619					
50.0	5.502	34.864	312.0	5.498					
100.0	5.059	34.899	295.6	5.051					
150.0	4.747	34.906	293.7	4.735					
200.0	4.550	34.894	293.2	4.535					
250.0	4.524	34.908	289.0	4.506					
300.0	4.400	34.907	290.8	4.378					
350.0	4.287	34.902	289.9	4.262					
400.0	4.244	34.905	285.2	4.214					
450.0	4.177	34.909	282.7	4.144					
500.0	4.126	34.914	283.3	4.089					
550.0	4.045	34.909	286.8	4.005					
600.0	3.888	34.891	289.7	3.844					
650.0	3.872	34.893	289.4	3.825					
700.0	3.831	34.893	288.9	3.780					
750.0	3.811	34.895	288.7	3.756					
800.0	3.781	34.894	286.5	3.722					
850.0	3.720	34.889	288.9	3.658					
900.0	3.641	34.880	293.0	3.575					
950.0	3.717	34.896	289.1	3.647					
1000.0	3.729	34.904	279.2	3.655					
1050.0	3.742	34.910	277.1	3.664					
1100.0	3.742	34.916	274.9	3.659					
1150.0	3.726	34.922	273.3	3.639					
1200.0	3.695	34.926	272.6	3.604					
1250.0	3.650	34.928	272.7	3.556					
1300.0	3.616	34.930	272.4	3.518					
1350.0	3.561	34.929	272.7	3.459					
1400.0	3.519	34.930	273.1	3.413					
1450.0	3.491	34.931	273.1	3.381					
1500.0	3.444	34.931	273.7	3.330					
1550.0	3.387	34.931	273.9	3.270					
1600.0	3.357	34.930	273.9	3.235					
1650.0	3.336	34.931	274.2	3.211					
1700.0	3.315	34.933	274.3	3.185					
1750.0	3.251	34.930	274.7	3.118					
1800.0	3.235	34.932	274.4	3.098					
1850.0	3.195	34.931	275.1	3.053					
1900.0	3.173	34.933	274.9	3.027					
1950.0	3.167	34.937	274.5	3.016					
2000.0	3.140	34.935	274.9	2.985					
2050.0	3.097	34.936	274.9	2.938					
2100.0	3.073	34.937	274.9	2.911					
2150.0	3.065	34.939	274.6	2.897					
2200.0	3.060	34.944	274.4	2.888					
2250.0	3.049	34.948	273.9	2.873					
2300.0	3.044	34.949	273.9	2.863					
2350.0	3.019	34.950	273.9	2.834					
2400.0	3.008	34.950	273.9	2.818					
2450.0	2.997	34.950	273.9	2.802					
2500.0	2.988	34.950	273.8	2.788					
2550.0	2.979	34.950	273.9	2.774					
2600.0	2.971	34.949	273.9	2.761					
2650.0	2.962	34.949	274.0	2.748					
2700.0	2.958	34.948	274.2	2.739					
2750.0	2.960	34.948	274.0	2.736					
2800.0	2.953	34.948	274.3	2.724					
2850.0	2.948	34.947	274.4	2.713					
2900.0	2.943	34.947	274.5	2.703					
2950.0	2.942	34.947	274.1	2.698					
3000.0	2.947	34.947	274.4	2.697					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 23

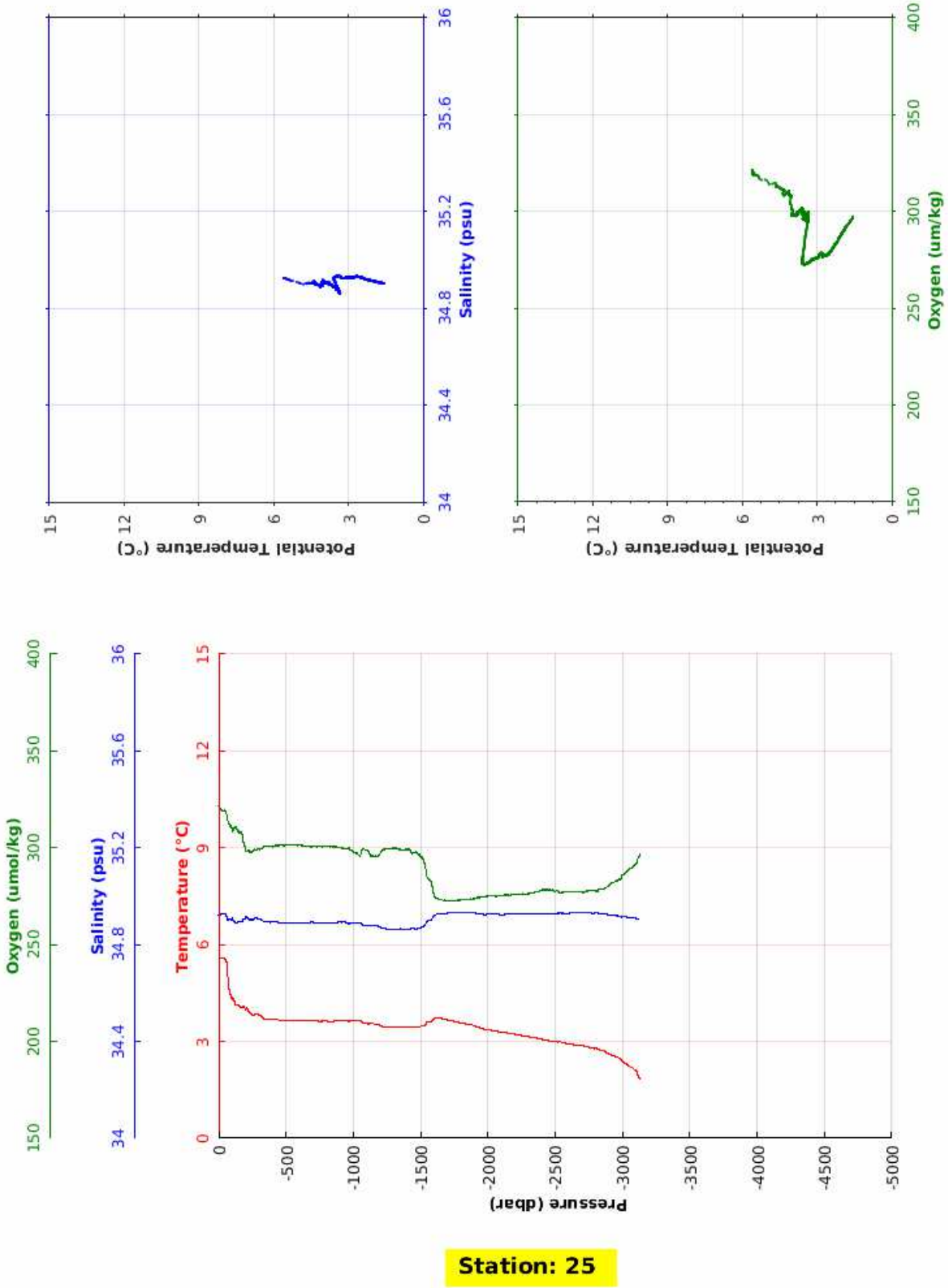
Cruise	: RREX 2015		
Station	: 24	Cast	: 1
Date	: 14/06/2015	Ship	: N/O Thalassa
Depth	: 2804 m	Organism	: IFREMER
Position	: N 56 46.20 W 038 11.22		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.694	34.856	329.8	5.694
10.0	5.682	34.857	329.3	5.682
20.0	5.666	34.857	329.0	5.664
30.0	5.629	34.857	329.5	5.626
40.0	5.446	34.863	328.9	5.443
50.0	5.065	34.875	322.3	5.061
100.0	4.690	34.897	303.5	4.683
150.0	4.182	34.891	298.4	4.171
200.0	4.101	34.904	290.4	4.086
250.0	4.030	34.903	289.5	4.012
300.0	3.948	34.902	291.0	3.927
350.0	3.833	34.891	296.1	3.808
400.0	3.790	34.888	299.0	3.762
450.0	3.776	34.888	298.9	3.745
500.0	3.733	34.885	299.6	3.697
550.0	3.704	34.882	299.5	3.665
600.0	3.692	34.882	299.6	3.650
650.0	3.705	34.886	298.8	3.659
700.0	3.679	34.884	298.9	3.629
750.0	3.658	34.882	299.1	3.604
800.0	3.638	34.881	297.7	3.581
850.0	3.635	34.882	299.0	3.573
900.0	3.631	34.883	297.8	3.566
950.0	3.629	34.884	298.8	3.560
1000.0	3.623	34.885	297.4	3.550
1050.0	3.621	34.885	296.4	3.544
1100.0	3.608	34.885	294.5	3.527
1150.0	3.613	34.889	291.0	3.527
1200.0	3.646	34.897	285.7	3.556
1250.0	3.628	34.897	285.1	3.534
1300.0	3.691	34.915	277.2	3.592
1350.0	3.697	34.922	274.8	3.593
1400.0	3.683	34.929	273.1	3.576
1450.0	3.649	34.931	272.7	3.537
1500.0	3.608	34.932	272.6	3.492
1550.0	3.554	34.932	273.1	3.435
1600.0	3.533	34.932	273.1	3.409
1650.0	3.490	34.931	273.5	3.362
1700.0	3.508	34.940	272.9	3.376
1750.0	3.451	34.940	273.4	3.314
1800.0	3.374	34.935	274.1	3.235
1850.0	3.323	34.934	274.5	3.180
1900.0	3.313	34.936	274.6	3.165
1950.0	3.327	34.946	273.7	3.174
2000.0	3.309	34.948	273.9	3.152
2050.0	3.267	34.942	274.1	3.106
2100.0	3.215	34.941	274.4	3.050
2150.0	3.201	34.942	274.4	3.031
2200.0	3.148	34.940	274.7	2.974
2250.0	3.121	34.943	274.5	2.943
2300.0	3.091	34.944	274.5	2.909
2350.0	3.061	34.944	274.6	2.875
2400.0	3.056	34.946	274.4	2.865
2450.0	3.033	34.946	274.6	2.838
2500.0	3.010	34.946	274.6	2.810
2550.0	2.999	34.947	274.6	2.794
2600.0	2.982	34.948	274.4	2.773
2650.0	2.972	34.948	274.5	2.758
2700.0	2.961	34.947	274.3	2.742
2750.0	2.940	34.948	274.4	2.716
2800.0	2.911	34.947	274.7	2.683
2838.0	2.909	34.946	274.7	2.677


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 24

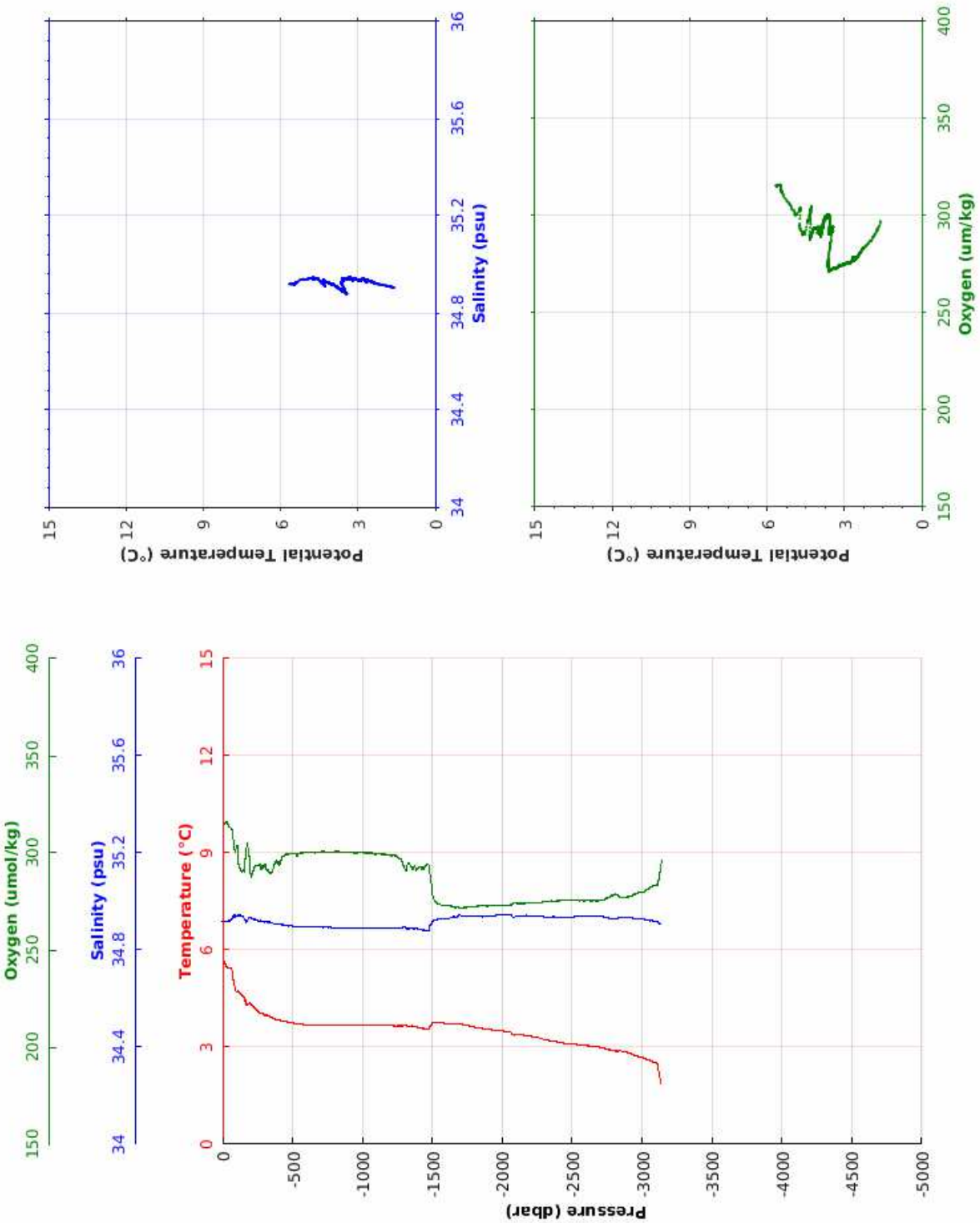
Cruise : RREX 2015			
Station : 25	Cast : 1		
Date : 15/06/2015	Ship : N/O Thalassa		
Depth : 3092 m	Organism : IFREMER		
Position : N 59 21.73 W 036 23.92			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.600	34.924	321.4	5.600	3050.0	2.238	34.913	288.6	1.999
10.0	5.590	34.924	321.2	5.590	3100.0	2.102	34.909	291.6	1.861
20.0	5.569	34.925	319.8	5.567	3132.0	1.799	34.904	297.4	1.562
30.0	5.570	34.925	319.6	5.567					
40.0	5.568	34.926	319.0	5.565					
50.0	5.554	34.925	319.4	5.550					
100.0	4.315	34.899	310.8	4.308					
150.0	4.116	34.896	308.5	4.106					
200.0	3.998	34.905	300.2	3.984					
250.0	3.809	34.900	298.2	3.792					
300.0	3.815	34.908	299.5	3.794					
350.0	3.689	34.893	301.1	3.665					
400.0	3.702	34.897	300.9	3.674					
450.0	3.663	34.892	301.1	3.631					
500.0	3.647	34.891	301.4	3.612					
550.0	3.638	34.890	301.7	3.600					
600.0	3.650	34.892	301.7	3.607					
650.0	3.649	34.892	300.9	3.603					
700.0	3.663	34.894	300.6	3.613					
750.0	3.624	34.888	301.1	3.571					
800.0	3.630	34.888	300.7	3.572					
850.0	3.625	34.888	300.5	3.564					
900.0	3.659	34.893	300.1	3.594					
950.0	3.657	34.892	299.5	3.588					
1000.0	3.647	34.891	298.4	3.573					
1050.0	3.642	34.891	295.8	3.564					
1100.0	3.553	34.878	298.9	3.472					
1150.0	3.550	34.879	295.6	3.465					
1200.0	3.504	34.873	296.9	3.415					
1250.0	3.453	34.865	299.3	3.360					
1300.0	3.433	34.862	299.8	3.336					
1350.0	3.457	34.866	299.0	3.356					
1400.0	3.434	34.863	299.4	3.329					
1450.0	3.448	34.866	297.5	3.339					
1500.0	3.471	34.870	295.9	3.357					
1550.0	3.604	34.897	285.8	3.484					
1600.0	3.703	34.920	276.5	3.577					
1650.0	3.713	34.927	273.2	3.582					
1700.0	3.661	34.930	272.7	3.526					
1750.0	3.628	34.932	272.8	3.489					
1800.0	3.575	34.931	273.1	3.433					
1850.0	3.537	34.933	273.3	3.391					
1900.0	3.485	34.932	273.5	3.335					
1950.0	3.410	34.926	274.5	3.256					
2000.0	3.359	34.925	275.0	3.201					
2050.0	3.325	34.925	275.3	3.163					
2100.0	3.284	34.924	275.5	3.118					
2150.0	3.259	34.927	275.6	3.088					
2200.0	3.227	34.927	275.8	3.053					
2250.0	3.186	34.928	276.1	3.007					
2300.0	3.152	34.928	276.2	2.969					
2350.0	3.116	34.927	277.3	2.929					
2400.0	3.065	34.926	278.0	2.874					
2450.0	3.025	34.925	278.4	2.830					
2500.0	3.000	34.928	277.5	2.800					
2550.0	2.977	34.931	276.7	2.773					
2600.0	2.926	34.930	277.6	2.718					
2650.0	2.896	34.930	277.5	2.683					
2700.0	2.872	34.933	277.2	2.654					
2750.0	2.827	34.931	277.8	2.606					
2800.0	2.784	34.931	277.9	2.558					
2850.0	2.732	34.929	278.5	2.502					
2900.0	2.614	34.923	280.6	2.382					
2950.0	2.534	34.920	282.6	2.298					
3000.0	2.381	34.916	285.9	2.144					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 25

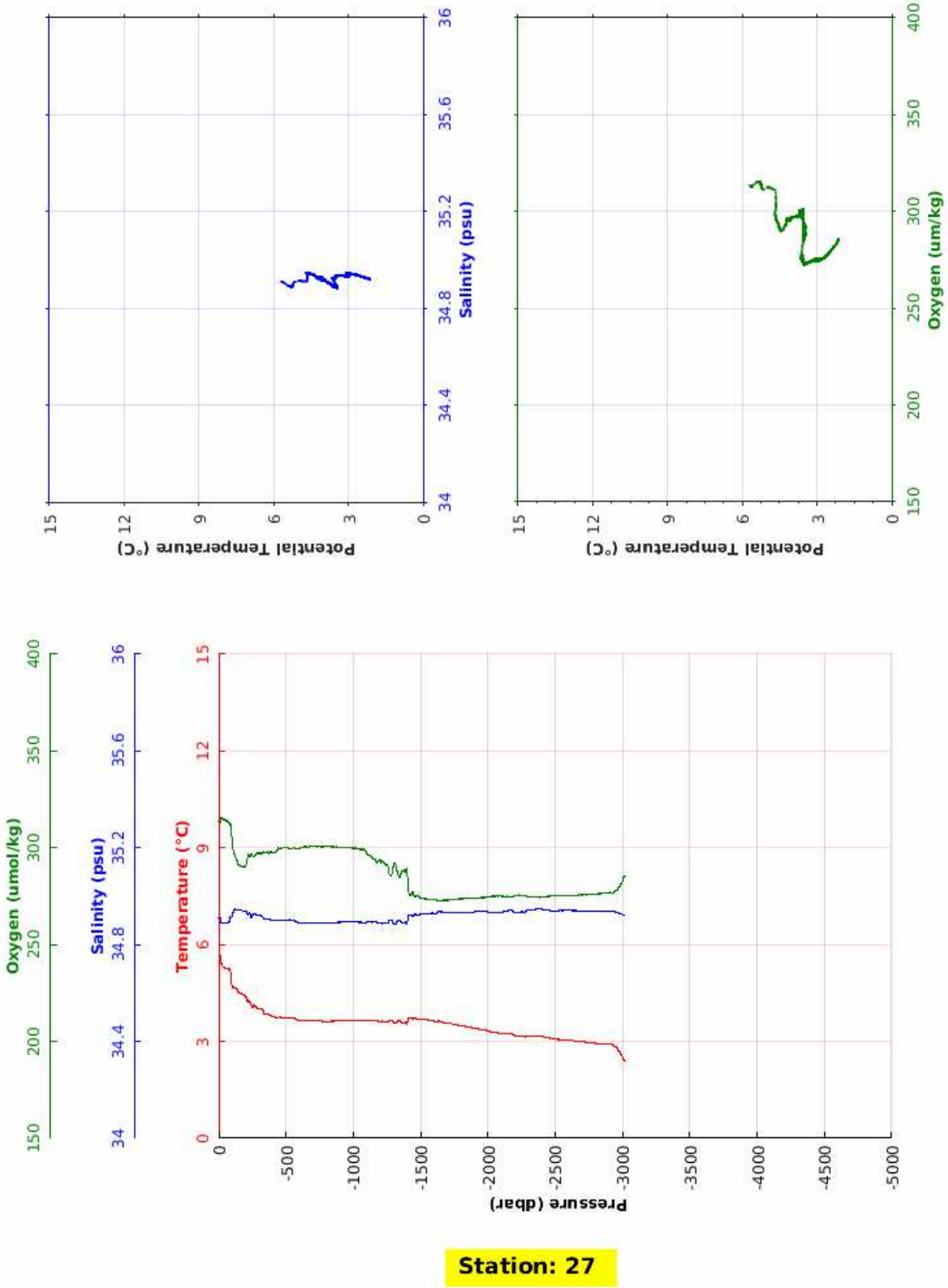
Cruise	: RREX 2015		
Station	: 26	Cast	: 1
Date	: 15/06/2015	Ship	: N/O Thalassa
Depth	: 3098 m	Organism	: IFREMER
Position	: N 59 17.97 W 035 45.76		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.638	34.919	315.6	5.638	3050.0	2.600	34.923	281.7	2.353
10.0	5.637	34.919	315.2	5.636	3100.0	2.519	34.920	283.4	2.269
20.0	5.548	34.919	315.8	5.547	3138.0	1.851	34.904	297.1	1.612
30.0	5.475	34.918	315.0	5.473					
40.0	5.453	34.918	313.8	5.450					
50.0	5.457	34.921	313.1	5.453					
100.0	4.717	34.938	303.5	4.709					
150.0	4.559	34.940	290.3	4.548					
200.0	4.346	34.935	287.8	4.331					
250.0	4.121	34.922	293.4	4.103					
300.0	3.987	34.915	294.1	3.965					
350.0	3.919	34.913	290.1	3.894					
400.0	3.837	34.906	294.9	3.809					
450.0	3.795	34.903	299.2	3.764					
500.0	3.757	34.900	299.7	3.722					
550.0	3.710	34.895	299.9	3.671					
600.0	3.686	34.893	300.5	3.644					
650.0	3.691	34.895	300.3	3.644					
700.0	3.684	34.894	300.6	3.634					
750.0	3.677	34.893	300.2	3.623					
800.0	3.669	34.892	300.7	3.611					
850.0	3.663	34.891	300.4	3.601					
900.0	3.663	34.891	300.4	3.597					
950.0	3.659	34.891	300.0	3.589					
1000.0	3.663	34.891	300.3	3.590					
1050.0	3.663	34.891	300.0	3.585					
1100.0	3.667	34.891	299.4	3.585					
1150.0	3.670	34.892	299.3	3.584					
1200.0	3.669	34.891	298.8	3.578					
1250.0	3.659	34.890	298.0	3.565					
1300.0	3.685	34.895	291.5	3.586					
1350.0	3.649	34.891	292.4	3.546					
1400.0	3.598	34.884	292.5	3.491					
1450.0	3.554	34.880	293.2	3.443					
1500.0	3.742	34.918	277.8	3.625					
1550.0	3.746	34.928	273.5	3.624					
1600.0	3.731	34.929	273.0	3.605					
1650.0	3.701	34.932	272.5	3.571					
1700.0	3.726	34.943	271.6	3.591					
1750.0	3.680	34.942	272.0	3.541					
1800.0	3.622	34.938	272.4	3.479					
1850.0	3.582	34.937	272.6	3.435					
1900.0	3.554	34.940	272.7	3.403					
1950.0	3.507	34.940	273.2	3.351					
2000.0	3.510	34.946	272.8	3.349					
2050.0	3.466	34.946	273.1	3.302					
2100.0	3.400	34.942	274.0	3.232					
2150.0	3.370	34.942	273.9	3.197					
2200.0	3.335	34.941	274.2	3.158					
2250.0	3.295	34.941	274.4	3.115					
2300.0	3.231	34.937	275.1	3.047					
2350.0	3.179	34.934	275.4	2.990					
2400.0	3.151	34.934	275.3	2.958					
2450.0	3.114	34.933	275.6	2.917					
2500.0	3.086	34.936	275.6	2.885					
2550.0	3.066	34.937	275.4	2.859					
2600.0	3.048	34.939	275.5	2.838					
2650.0	3.028	34.939	275.3	2.813					
2700.0	2.998	34.939	275.6	2.778					
2750.0	2.940	34.935	276.9	2.717					
2800.0	2.883	34.929	278.4	2.656					
2850.0	2.880	34.935	276.8	2.648					
2900.0	2.832	34.933	277.4	2.595					
2950.0	2.733	34.930	279.0	2.494					
3000.0	2.687	34.927	279.8	2.443					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 26

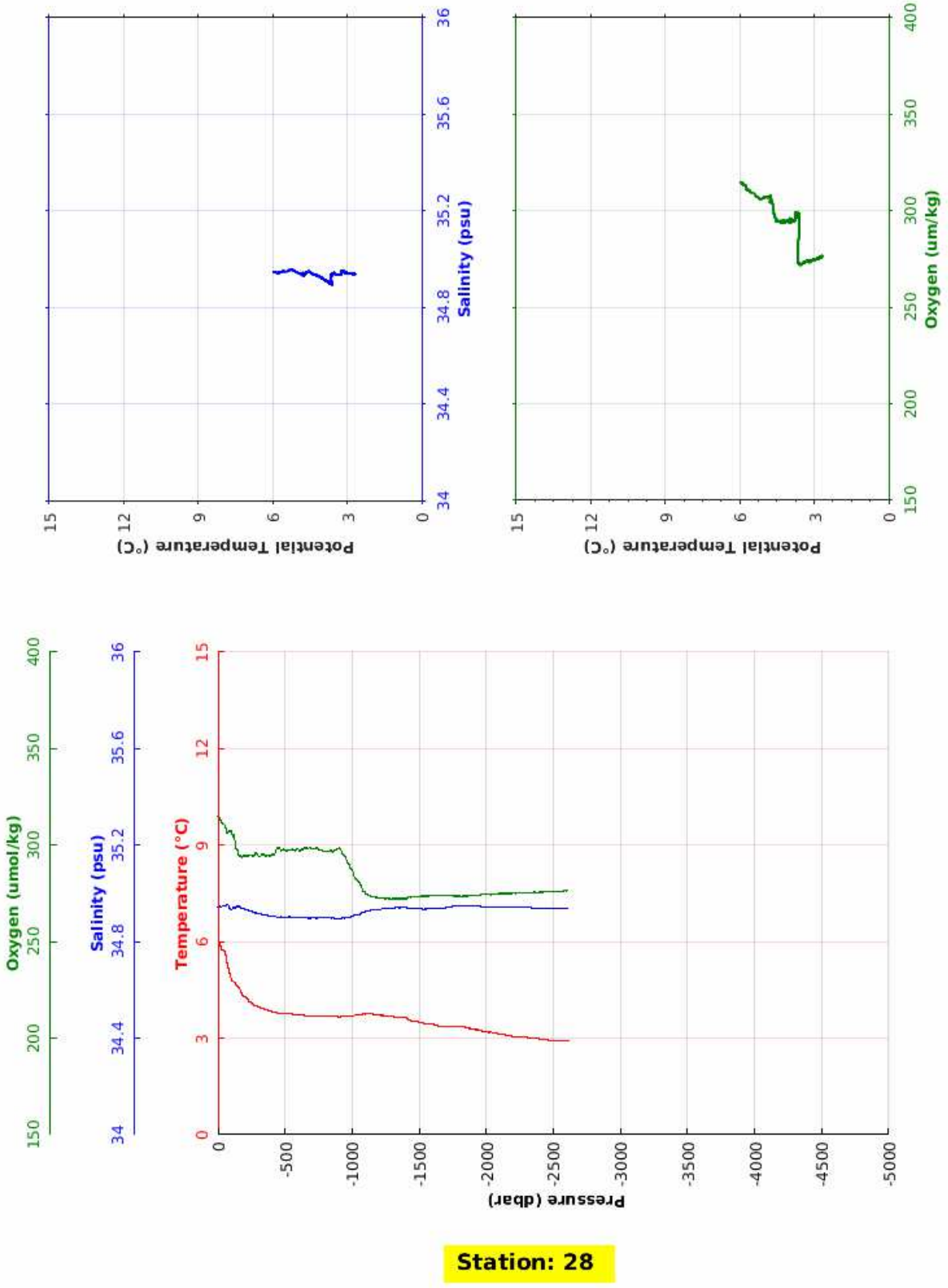
Cruise : RREX 2015			
Station : 27	Cast : 1		
Date : 15/06/2015	Ship : N/O Thalassa		
Depth : 2987 m	Organism : IFREMER		
Position : N 59 13.96 W 035 6.95			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.662	34.910	313.5	5.662	3024.0	2.375	34.921	285.8	2.135
10.0	5.664	34.910	313.0	5.663					
20.0	5.407	34.893	315.3	5.406					
30.0	5.314	34.889	315.4	5.312					
40.0	5.282	34.891	315.1	5.279					
50.0	5.272	34.891	314.5	5.268					
100.0	4.671	34.917	307.9	4.663					
150.0	4.519	34.943	291.7	4.508					
200.0	4.410	34.938	290.4	4.396					
250.0	4.072	34.918	296.7	4.054					
300.0	4.011	34.921	297.3	3.989					
350.0	3.845	34.906	297.8	3.820					
400.0	3.782	34.902	298.0	3.754					
450.0	3.753	34.902	299.9	3.721					
500.0	3.735	34.901	300.0	3.700					
550.0	3.732	34.902	299.7	3.693					
600.0	3.655	34.891	299.5	3.612					
650.0	3.649	34.891	300.5	3.602					
700.0	3.634	34.890	300.9	3.585					
750.0	3.633	34.890	300.8	3.580					
800.0	3.622	34.888	300.9	3.564					
850.0	3.629	34.889	300.6	3.568					
900.0	3.646	34.892	300.3	3.581					
950.0	3.662	34.894	300.1	3.592					
1000.0	3.668	34.895	299.9	3.595					
1050.0	3.656	34.893	299.6	3.578					
1100.0	3.652	34.892	298.3	3.571					
1150.0	3.654	34.893	294.7	3.568					
1200.0	3.612	34.888	293.9	3.522					
1250.0	3.616	34.890	291.1	3.522					
1300.0	3.586	34.887	290.1	3.488					
1350.0	3.646	34.900	284.8	3.543					
1400.0	3.565	34.891	288.5	3.459					
1450.0	3.722	34.923	275.5	3.609					
1500.0	3.691	34.925	274.2	3.574					
1550.0	3.672	34.928	273.6	3.551					
1600.0	3.631	34.929	273.2	3.506					
1650.0	3.611	34.936	272.9	3.482					
1700.0	3.574	34.935	273.0	3.441					
1750.0	3.533	34.935	273.2	3.396					
1800.0	3.492	34.934	273.7	3.350					
1850.0	3.454	34.935	273.9	3.308					
1900.0	3.416	34.935	274.1	3.266					
1950.0	3.384	34.936	274.4	3.231					
2000.0	3.334	34.936	274.5	3.176					
2050.0	3.275	34.932	275.0	3.113					
2100.0	3.251	34.934	275.1	3.085					
2150.0	3.240	34.938	275.0	3.070					
2200.0	3.189	34.934	275.3	3.015					
2250.0	3.162	34.935	275.5	2.983					
2300.0	3.182	34.944	274.7	2.999					
2350.0	3.167	34.945	274.6	2.979					
2400.0	3.154	34.946	274.4	2.961					
2450.0	3.111	34.943	275.1	2.914					
2500.0	3.081	34.940	275.3	2.880					
2550.0	3.060	34.941	275.2	2.854					
2600.0	3.042	34.941	275.4	2.831					
2650.0	3.011	34.941	275.3	2.796					
2700.0	2.986	34.940	275.8	2.767					
2750.0	2.974	34.940	275.8	2.750					
2800.0	2.942	34.939	276.2	2.713					
2850.0	2.922	34.939	276.5	2.688					
2900.0	2.910	34.939	276.6	2.671					
2950.0	2.836	34.936	277.6	2.594					
3000.0	2.511	34.924	282.4	2.271					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 27

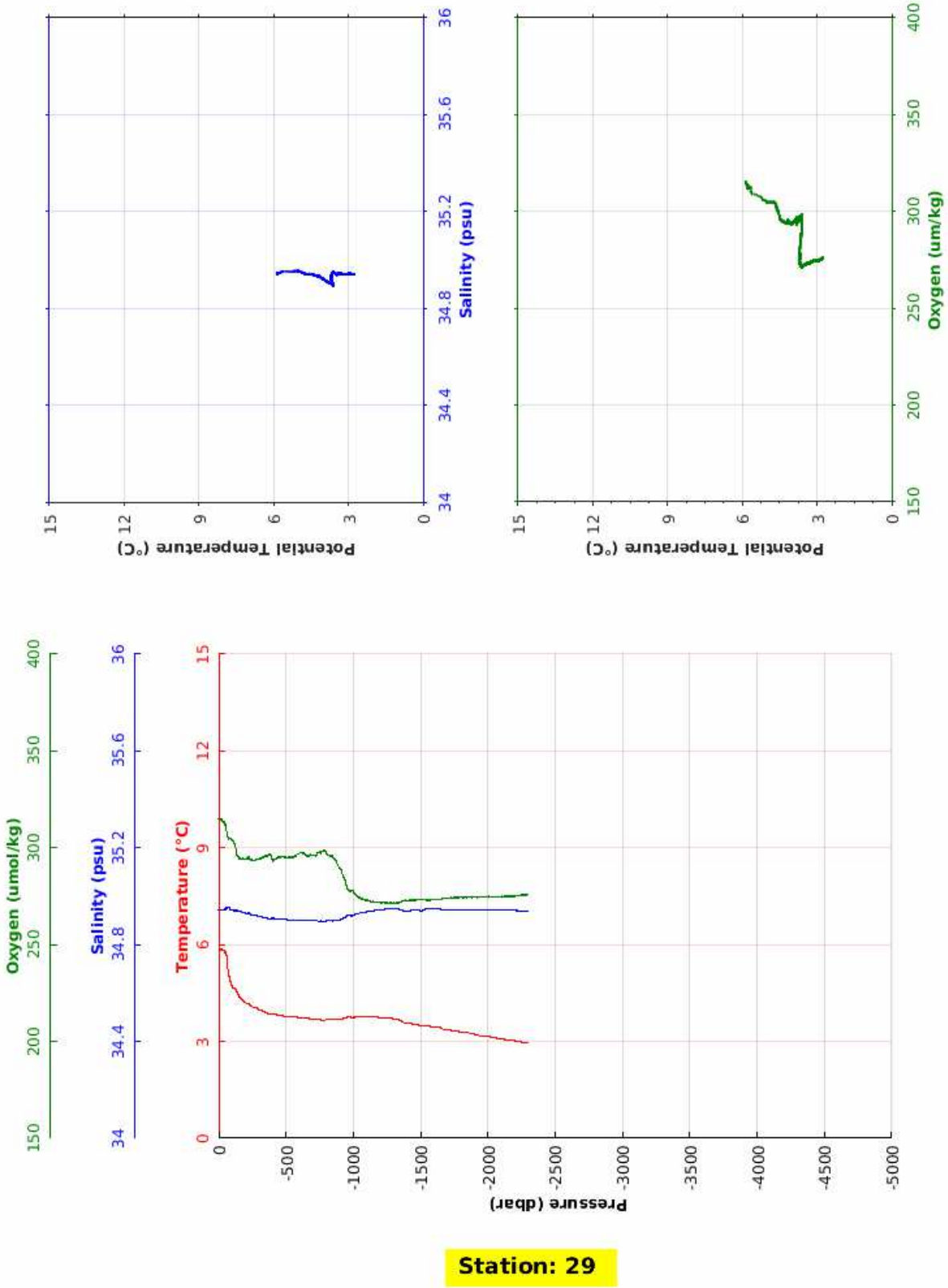
Cruise	: RREX 2015		
Station	: 28	Cast	: 1
Date	: 16/06/2015	Ship	: N/O Thalassa
Depth	: 2590 m	Organism	: IFREMER
Position	: N 59 9.89 W 034 29.38		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.937	34.946	314.7	5.937
10.0	5.910	34.946	314.7	5.909
20.0	5.833	34.943	313.7	5.831
30.0	5.753	34.944	312.1	5.751
40.0	5.738	34.947	311.1	5.734
50.0	5.683	34.947	310.7	5.679
100.0	4.807	34.933	307.6	4.799
150.0	4.597	34.946	297.8	4.586
200.0	4.300	34.935	294.4	4.286
250.0	4.104	34.926	295.0	4.086
300.0	3.983	34.918	294.9	3.961
350.0	3.909	34.912	295.1	3.884
400.0	3.834	34.907	295.0	3.806
450.0	3.784	34.902	298.8	3.752
500.0	3.767	34.903	297.2	3.732
550.0	3.753	34.902	297.7	3.714
600.0	3.729	34.900	297.9	3.687
650.0	3.706	34.899	298.7	3.659
700.0	3.693	34.899	298.5	3.643
750.0	3.690	34.899	297.9	3.636
800.0	3.693	34.899	296.9	3.636
850.0	3.683	34.898	297.3	3.621
900.0	3.669	34.896	298.2	3.604
950.0	3.678	34.898	294.3	3.608
1000.0	3.692	34.903	287.2	3.618
1050.0	3.726	34.913	281.3	3.648
1100.0	3.754	34.926	275.7	3.671
1150.0	3.750	34.931	273.6	3.663
1200.0	3.720	34.934	272.9	3.630
1250.0	3.705	34.938	272.3	3.610
1300.0	3.684	34.940	272.2	3.585
1350.0	3.641	34.941	272.3	3.538
1400.0	3.629	34.943	272.4	3.522
1450.0	3.537	34.936	273.4	3.427
1500.0	3.498	34.936	273.4	3.384
1550.0	3.464	34.936	273.6	3.346
1600.0	3.438	34.936	273.8	3.315
1650.0	3.383	34.938	274.1	3.257
1700.0	3.367	34.941	274.2	3.236
1750.0	3.369	34.945	273.9	3.234
1800.0	3.363	34.950	273.6	3.224
1850.0	3.326	34.950	273.7	3.182
1900.0	3.284	34.948	273.8	3.137
1950.0	3.256	34.946	274.2	3.104
2000.0	3.194	34.942	274.7	3.038
2050.0	3.170	34.944	274.6	3.010
2100.0	3.129	34.941	275.0	2.965
2150.0	3.098	34.942	275.1	2.930
2200.0	3.058	34.941	275.1	2.886
2250.0	3.042	34.941	275.2	2.866
2300.0	3.030	34.941	275.2	2.849
2350.0	3.003	34.940	275.4	2.818
2400.0	2.981	34.939	275.7	2.791
2450.0	2.961	34.939	276.0	2.767
2500.0	2.924	34.939	276.1	2.725
2550.0	2.924	34.939	276.2	2.721
2600.0	2.911	34.938	276.4	2.703
2619.0	2.902	34.938	276.8	2.692


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 28

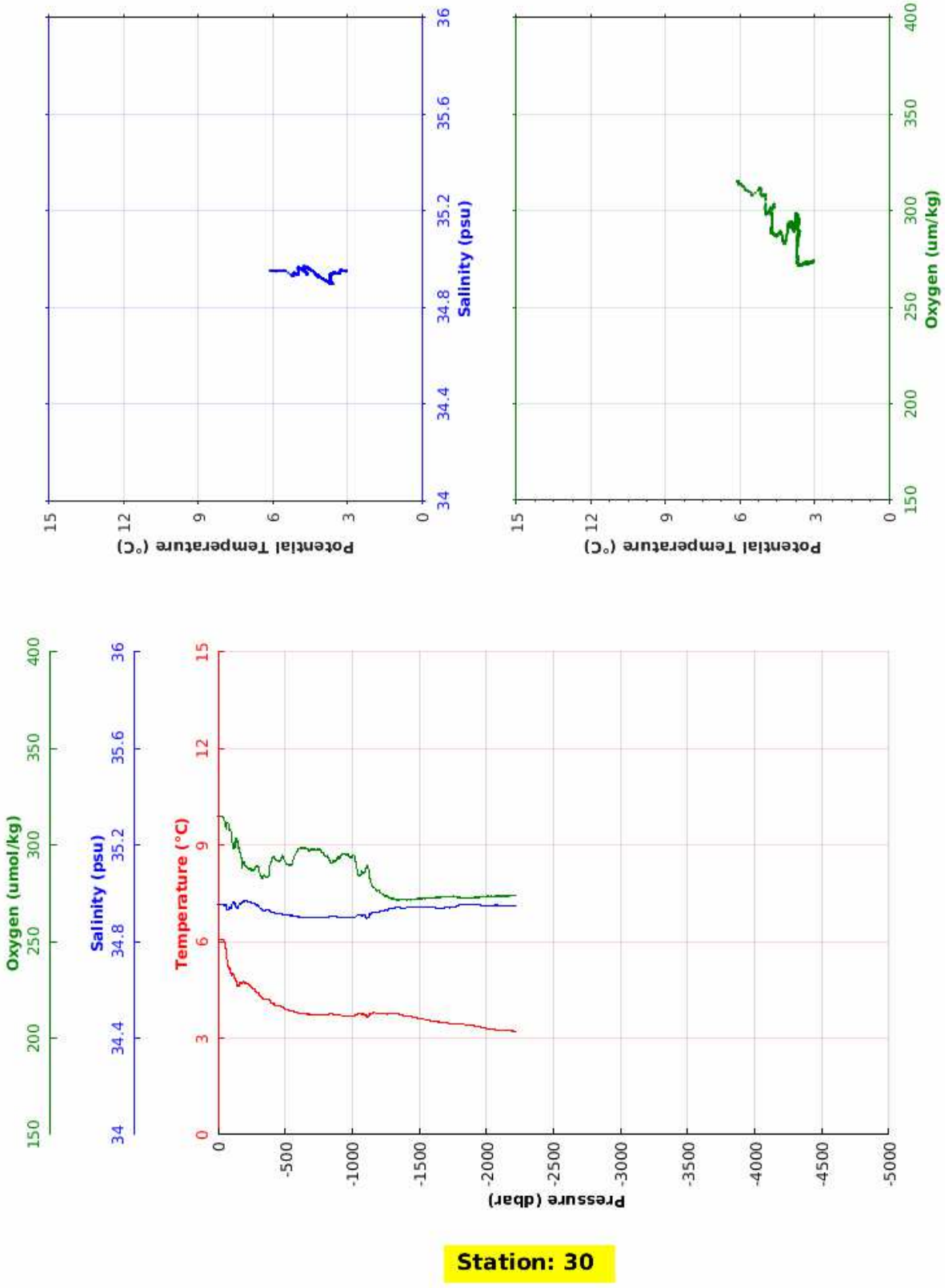
Cruise	: RREX 2015		
Station	: 29	Cast	: 1
Date	: 16/06/2015	Ship	: N/O Thalassa
Depth	: 2286 m	Organism	: IFREMER
Position	: N 59 6.05 W 033 49.88		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.852	34.943	315.2	5.851
10.0	5.850	34.943	314.8	5.849
20.0	5.848	34.944	314.8	5.846
30.0	5.841	34.944	314.3	5.838
40.0	5.806	34.945	313.8	5.803
50.0	5.797	34.946	312.7	5.793
100.0	4.719	34.942	304.7	4.711
150.0	4.419	34.938	295.4	4.409
200.0	4.202	34.930	294.0	4.188
250.0	4.077	34.923	294.0	4.060
300.0	3.986	34.918	294.5	3.965
350.0	3.900	34.911	295.8	3.875
400.0	3.861	34.909	294.0	3.833
450.0	3.807	34.905	295.3	3.775
500.0	3.782	34.904	295.4	3.747
550.0	3.760	34.903	295.3	3.721
600.0	3.744	34.902	297.1	3.701
650.0	3.719	34.900	296.1	3.673
700.0	3.703	34.900	295.9	3.653
750.0	3.676	34.897	297.8	3.622
800.0	3.679	34.898	297.8	3.621
850.0	3.677	34.898	295.8	3.615
900.0	3.684	34.902	289.9	3.618
950.0	3.756	34.917	281.5	3.686
1000.0	3.747	34.921	277.8	3.672
1050.0	3.773	34.931	274.4	3.694
1100.0	3.760	34.936	273.0	3.678
1150.0	3.760	34.940	272.3	3.673
1200.0	3.743	34.944	271.9	3.652
1250.0	3.721	34.947	271.7	3.626
1300.0	3.707	34.948	271.3	3.607
1350.0	3.647	34.945	271.9	3.544
1400.0	3.564	34.939	272.9	3.458
1450.0	3.539	34.942	272.9	3.428
1500.0	3.485	34.940	273.4	3.370
1550.0	3.485	34.947	273.0	3.366
1600.0	3.445	34.947	273.2	3.323
1650.0	3.426	34.947	273.5	3.300
1700.0	3.354	34.942	273.9	3.223
1750.0	3.343	34.942	274.1	3.208
1800.0	3.299	34.942	274.4	3.160
1850.0	3.273	34.942	274.4	3.130
1900.0	3.221	34.942	274.5	3.074
1950.0	3.178	34.943	274.8	3.028
2000.0	3.156	34.942	274.6	3.001
2050.0	3.130	34.943	274.7	2.971
2100.0	3.086	34.943	274.8	2.923
2150.0	3.059	34.942	275.1	2.891
2200.0	3.025	34.941	275.0	2.853
2250.0	2.975	34.940	275.7	2.799
2300.0	2.953	34.939	276.0	2.773
2308.0	2.947	34.939	276.0	2.767


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 29

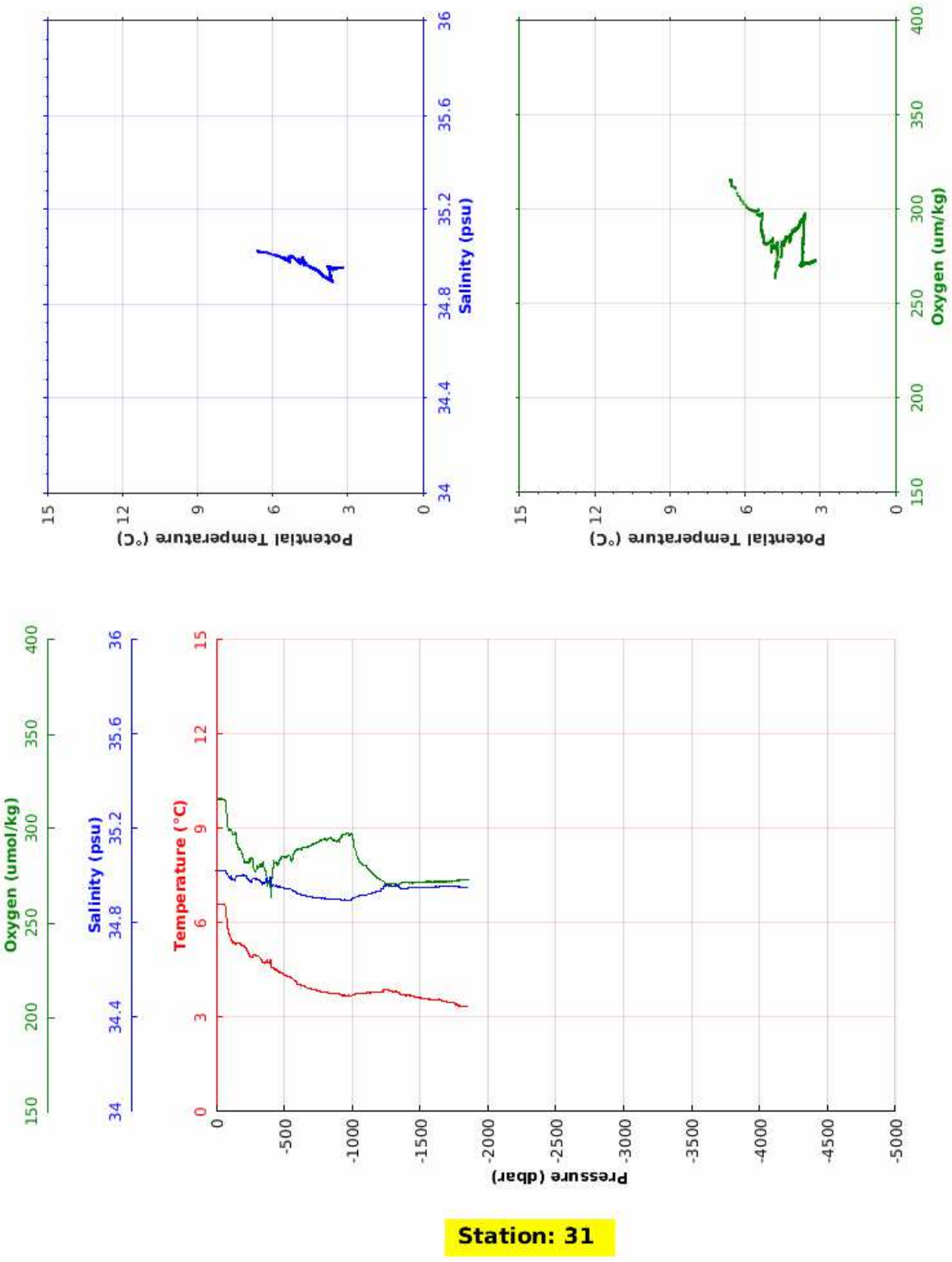
Cruise : RREX 2015			
Station : 30	Cast : 1		
Date : 16/06/2015	Ship : N/O Thalassa		
Depth : 2282 m	Organism : IFREMER		
Position : N 59 2.30 W 033 11.36			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	6.085	34.953	315.3	6.084
10.0	6.087	34.953	314.9	6.087
20.0	6.065	34.953	315.0	6.064
30.0	6.070	34.953	314.9	6.067
40.0	6.075	34.953	314.5	6.072
50.0	5.957	34.952	314.1	5.952
100.0	4.974	34.936	308.1	4.966
150.0	4.660	34.944	301.8	4.649
200.0	4.754	34.970	291.4	4.739
250.0	4.561	34.959	287.8	4.542
300.0	4.401	34.950	289.5	4.379
350.0	4.198	34.929	284.0	4.172
400.0	4.101	34.923	291.5	4.072
450.0	4.006	34.918	292.4	3.974
500.0	3.900	34.911	292.0	3.864
550.0	3.848	34.909	289.8	3.808
600.0	3.790	34.903	297.7	3.747
650.0	3.764	34.902	298.7	3.718
700.0	3.741	34.900	298.1	3.690
750.0	3.735	34.900	297.9	3.680
800.0	3.738	34.901	295.0	3.680
850.0	3.759	34.905	290.7	3.697
900.0	3.717	34.900	294.1	3.651
950.0	3.698	34.899	295.4	3.628
1000.0	3.707	34.900	294.0	3.632
1050.0	3.776	34.913	284.9	3.697
1100.0	3.719	34.905	286.5	3.637
1150.0	3.788	34.919	279.9	3.701
1200.0	3.772	34.923	276.4	3.681
1250.0	3.780	34.932	273.8	3.685
1300.0	3.767	34.937	272.4	3.668
1350.0	3.749	34.942	271.9	3.645
1400.0	3.702	34.940	272.0	3.594
1450.0	3.667	34.943	271.7	3.555
1500.0	3.618	34.942	272.3	3.503
1550.0	3.578	34.942	272.4	3.458
1600.0	3.540	34.941	272.7	3.416
1650.0	3.508	34.940	272.8	3.380
1700.0	3.477	34.941	273.2	3.345
1750.0	3.437	34.942	273.5	3.301
1800.0	3.442	34.952	272.9	3.302
1850.0	3.408	34.954	272.8	3.264
1900.0	3.392	34.954	272.8	3.243
1950.0	3.357	34.953	273.0	3.204
2000.0	3.302	34.951	273.6	3.145
2050.0	3.281	34.951	273.4	3.119
2100.0	3.244	34.951	273.6	3.078
2150.0	3.235	34.951	273.6	3.064
2200.0	3.223	34.950	274.0	3.048
2234.0	3.217	34.950	274.1	3.039


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 30

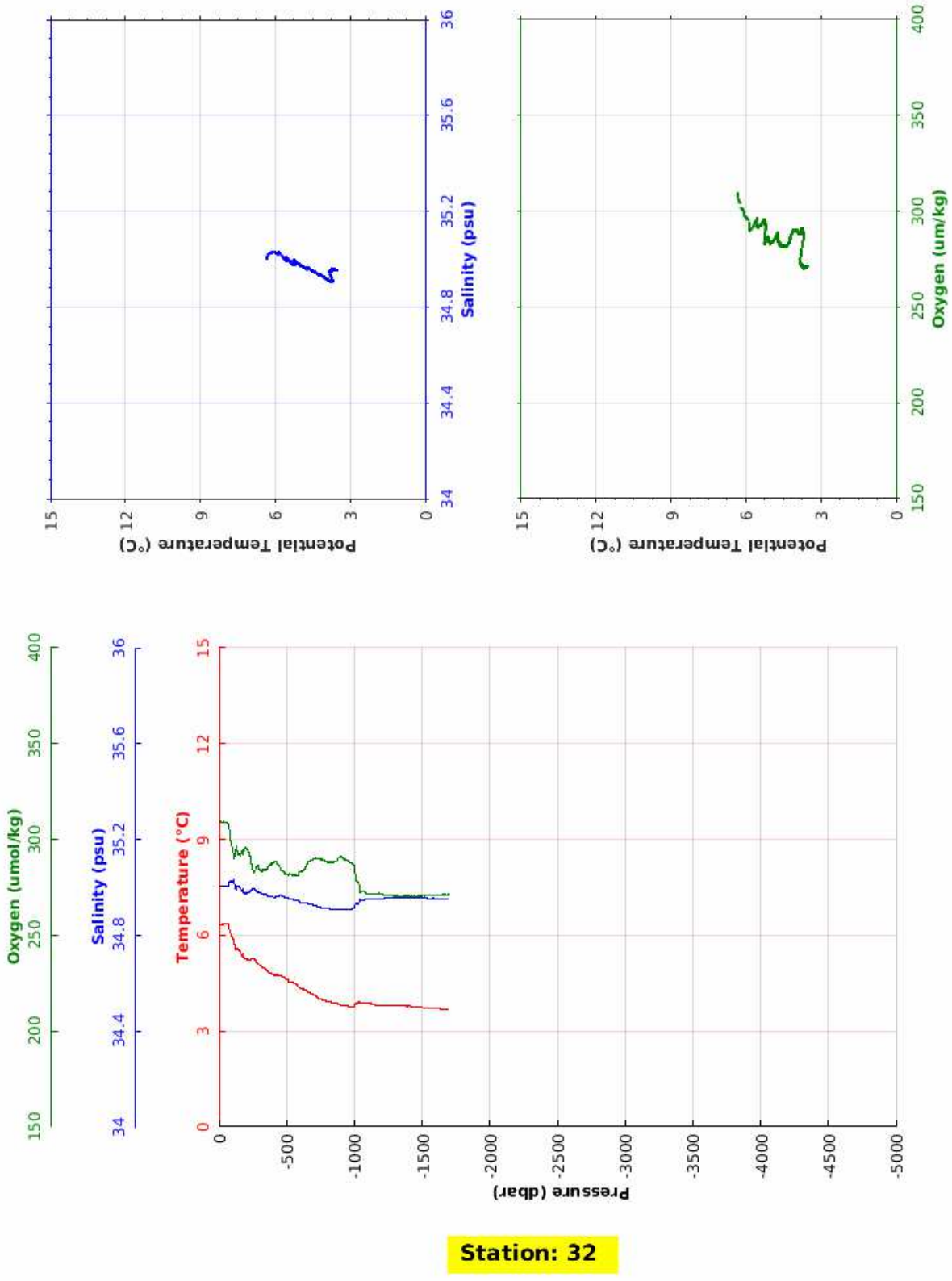
Cruise	: RREX 2015		
Station	: 31	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 1852 m	Organism	: IFREMER
Position	: N 58 58.37 W 032 32.84		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.581	35.023	315.5	6.581
10.0	6.581	35.023	315.5	6.580
20.0	6.588	35.023	315.7	6.586
30.0	6.584	35.023	315.6	6.581
40.0	6.589	35.023	315.5	6.586
50.0	6.579	35.022	315.6	6.574
100.0	5.635	34.996	299.0	5.627
150.0	5.369	34.996	291.9	5.357
200.0	5.275	35.004	283.1	5.259
250.0	4.949	34.976	283.5	4.929
300.0	4.954	34.986	280.0	4.930
350.0	4.743	34.971	278.4	4.716
400.0	4.843	34.996	264.1	4.812
450.0	4.485	34.955	281.4	4.451
500.0	4.362	34.949	284.9	4.325
550.0	4.268	34.944	282.6	4.227
600.0	4.054	34.921	289.3	4.010
650.0	3.995	34.918	290.0	3.947
700.0	3.898	34.910	291.5	3.847
750.0	3.850	34.907	293.1	3.795
800.0	3.795	34.904	294.6	3.737
850.0	3.768	34.903	294.0	3.706
900.0	3.749	34.903	293.3	3.683
950.0	3.700	34.898	297.0	3.630
1000.0	3.707	34.900	295.1	3.633
1050.0	3.770	34.916	282.6	3.691
1100.0	3.779	34.918	280.4	3.696
1150.0	3.791	34.926	276.3	3.704
1200.0	3.791	34.935	273.3	3.700
1250.0	3.883	34.959	270.2	3.787
1300.0	3.811	34.954	271.0	3.711
1350.0	3.770	34.953	270.7	3.665
1400.0	3.698	34.947	271.6	3.591
1450.0	3.691	34.951	271.1	3.578
1500.0	3.617	34.952	271.9	3.501
1550.0	3.583	34.951	271.8	3.464
1600.0	3.571	34.953	272.0	3.447
1650.0	3.561	34.954	271.7	3.432
1700.0	3.490	34.955	272.0	3.358
1750.0	3.456	34.955	272.2	3.320
1800.0	3.342	34.953	272.8	3.203
1850.0	3.332	34.953	272.8	3.188
1863.0	3.333	34.953	273.1	3.188


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 31

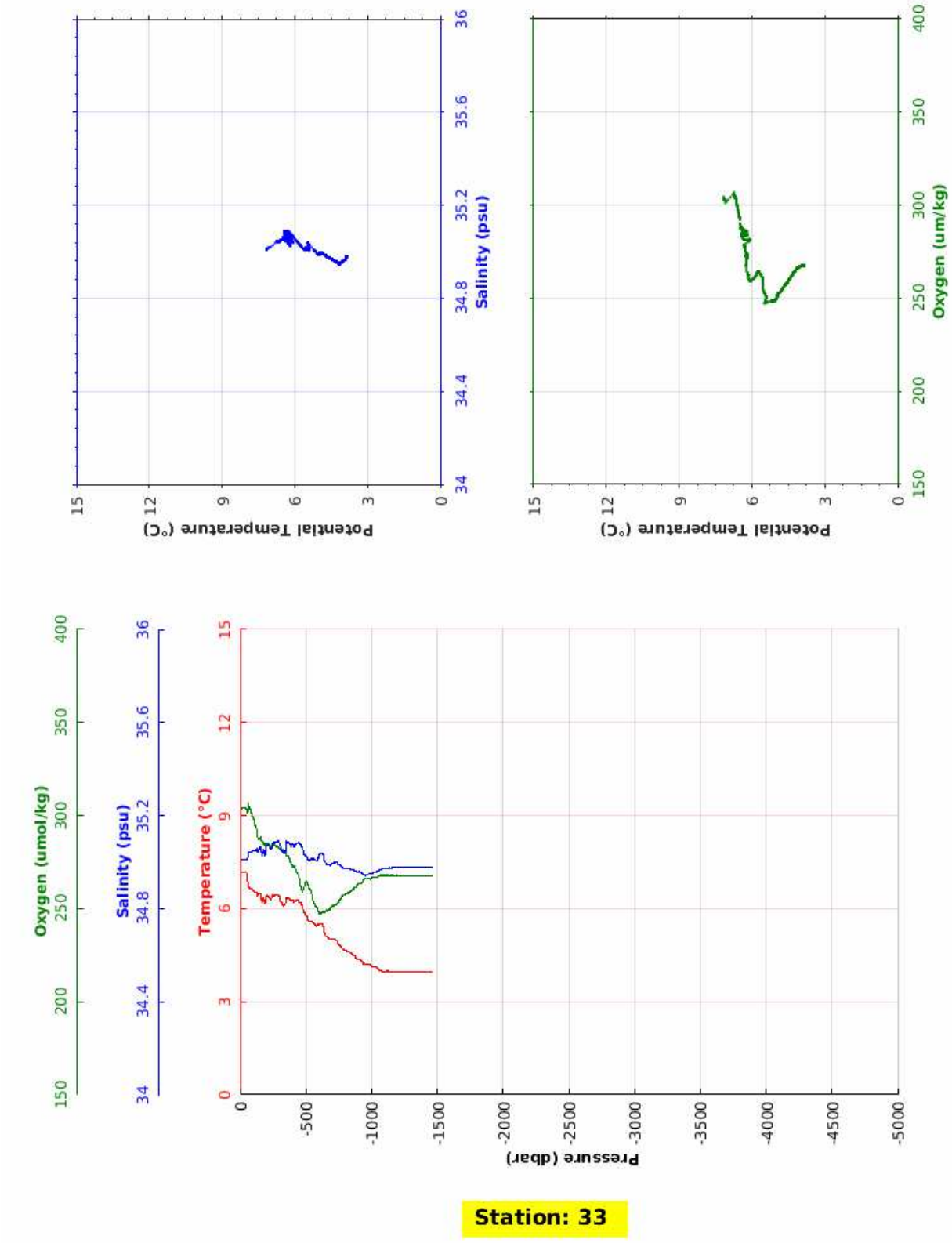
Cruise	: RREX 2015		
Station	: 32	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 1691 m	Organism	: IFREMER
Position	: N 58 54.60 W 031 54.63		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.338	35.005	309.3	6.338
10.0	6.337	35.005	309.1	6.336
20.0	6.342	35.005	309.1	6.340
30.0	6.342	35.005	309.2	6.340
40.0	6.343	35.005	308.8	6.339
50.0	6.343	35.005	308.7	6.339
100.0	5.872	35.021	293.7	5.864
150.0	5.529	35.002	291.7	5.516
200.0	5.252	34.975	295.1	5.236
250.0	5.282	34.996	283.2	5.262
300.0	5.066	34.978	283.7	5.043
350.0	4.927	34.969	284.5	4.899
400.0	4.777	34.960	288.1	4.746
450.0	4.748	34.966	285.1	4.713
500.0	4.623	34.956	281.7	4.584
550.0	4.513	34.948	281.6	4.471
600.0	4.337	34.937	283.2	4.292
650.0	4.253	34.935	287.5	4.204
700.0	4.131	34.926	290.0	4.079
750.0	4.006	34.917	289.8	3.950
800.0	3.933	34.912	288.2	3.873
850.0	3.893	34.910	288.2	3.830
900.0	3.817	34.906	290.8	3.750
950.0	3.781	34.908	288.6	3.711
1000.0	3.833	34.925	284.0	3.758
1050.0	3.896	34.947	272.7	3.816
1100.0	3.872	34.952	271.8	3.788
1150.0	3.839	34.951	271.8	3.751
1200.0	3.812	34.952	271.4	3.720
1250.0	3.812	34.956	270.9	3.716
1300.0	3.808	34.958	270.6	3.708
1350.0	3.805	34.958	270.4	3.701
1400.0	3.786	34.958	270.6	3.677
1450.0	3.774	34.958	270.5	3.661
1500.0	3.745	34.956	270.7	3.627
1550.0	3.714	34.953	271.1	3.593
1600.0	3.706	34.954	271.0	3.581
1650.0	3.694	34.953	271.1	3.564
1700.0	3.695	34.954	271.3	3.560
1703.0	3.695	34.954	271.3	3.560


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 32

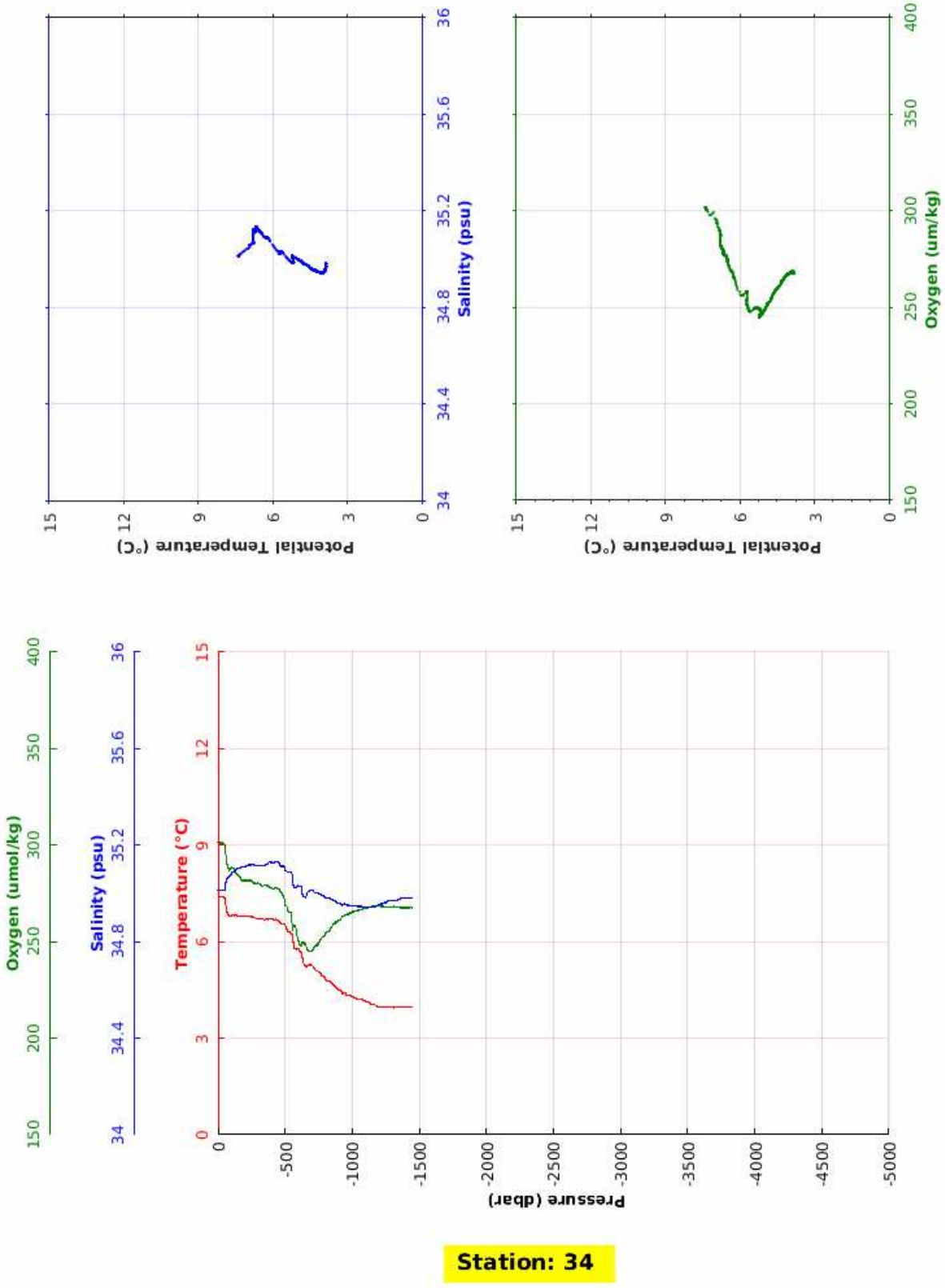
Cruise	: RREX 2015		
Station	: 33	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 1463 m	Organism	: IFREMER
Position	: N 58 50.73 W 031 16.14		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.162	35.009	304.0	7.162
10.0	7.162	35.009	304.0	7.162
20.0	7.165	35.009	303.9	7.163
30.0	7.165	35.010	304.0	7.162
40.0	7.166	35.010	303.6	7.162
50.0	7.132	35.014	303.0	7.127
100.0	6.597	35.049	298.2	6.588
150.0	6.471	35.063	287.6	6.458
200.0	6.404	35.069	285.1	6.386
250.0	6.455	35.087	283.8	6.433
300.0	6.359	35.076	281.5	6.332
350.0	6.380	35.090	278.6	6.349
400.0	6.286	35.079	272.6	6.250
450.0	6.201	35.077	263.6	6.160
500.0	5.775	35.023	264.5	5.731
550.0	5.593	35.017	255.4	5.546
600.0	5.515	35.033	247.4	5.463
650.0	5.154	34.994	248.8	5.100
700.0	5.020	34.995	251.3	4.963
750.0	4.851	34.988	254.0	4.790
800.0	4.662	34.975	257.7	4.598
850.0	4.531	34.967	260.0	4.464
900.0	4.363	34.958	263.7	4.292
950.0	4.217	34.943	266.1	4.143
1000.0	4.150	34.953	266.7	4.073
1050.0	4.046	34.962	267.6	3.965
1100.0	3.982	34.972	268.0	3.897
1150.0	3.965	34.976	267.9	3.876
1200.0	3.968	34.978	267.4	3.875
1250.0	3.968	34.979	267.6	3.870
1300.0	3.967	34.980	267.6	3.865
1350.0	3.968	34.980	267.4	3.861
1400.0	3.973	34.980	267.6	3.862
1450.0	3.976	34.980	267.4	3.861
1472.0	3.979	34.980	267.5	3.861


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 33

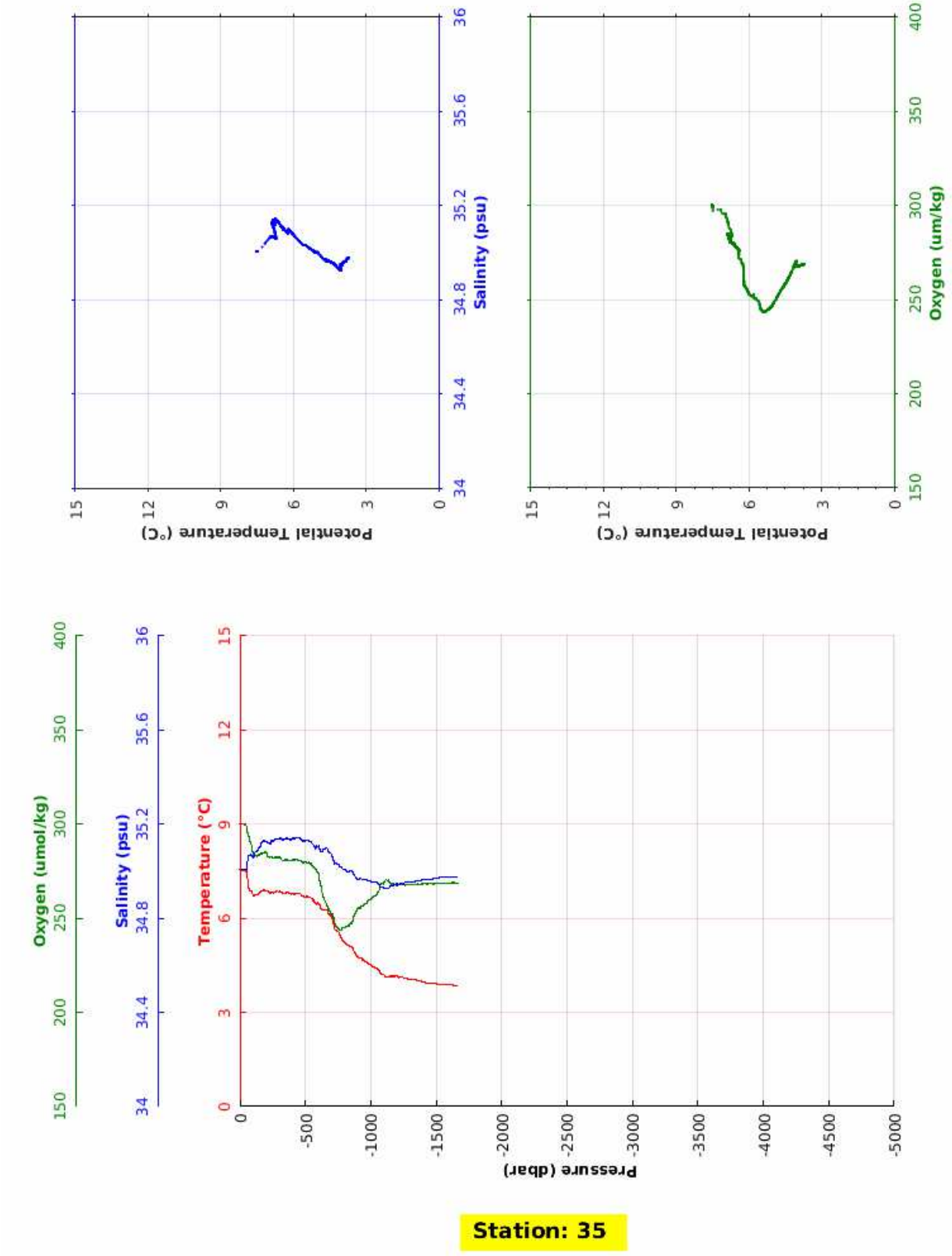
Cruise	: RREX 2015		
Station	: 34	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 1451 m	Organism	: IFREMER
Position	: N 58 43.63 W 030 41.67		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.390	35.012	301.7	7.390
10.0	7.393	35.012	301.7	7.392
20.0	7.384	35.013	301.6	7.382
30.0	7.381	35.013	301.0	7.378
40.0	7.380	35.013	301.2	7.376
50.0	7.377	35.013	300.6	7.372
100.0	6.806	35.080	287.9	6.797
150.0	6.810	35.104	285.2	6.796
200.0	6.782	35.111	281.6	6.764
250.0	6.805	35.123	281.7	6.782
300.0	6.727	35.116	280.1	6.699
350.0	6.687	35.117	279.3	6.655
400.0	6.715	35.131	278.0	6.677
450.0	6.673	35.129	277.5	6.631
500.0	6.496	35.107	271.7	6.450
550.0	6.259	35.089	264.6	6.209
600.0	5.776	35.033	251.3	5.724
650.0	5.260	34.985	249.5	5.206
700.0	5.254	35.013	245.3	5.195
750.0	5.063	35.000	248.9	5.001
800.0	4.833	34.982	253.7	4.768
850.0	4.701	34.976	257.5	4.632
900.0	4.506	34.959	260.8	4.435
950.0	4.399	34.957	263.4	4.324
1000.0	4.282	34.947	265.3	4.203
1050.0	4.216	34.947	266.3	4.133
1100.0	4.150	34.944	267.2	4.064
1150.0	4.054	34.944	268.2	3.965
1200.0	3.975	34.954	268.6	3.882
1250.0	3.982	34.962	268.0	3.885
1300.0	3.958	34.969	268.0	3.856
1350.0	3.968	34.975	268.0	3.861
1400.0	3.969	34.980	267.6	3.858
1450.0	3.961	34.982	267.6	3.846
1455.0	3.961	34.982	267.8	3.845


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 34

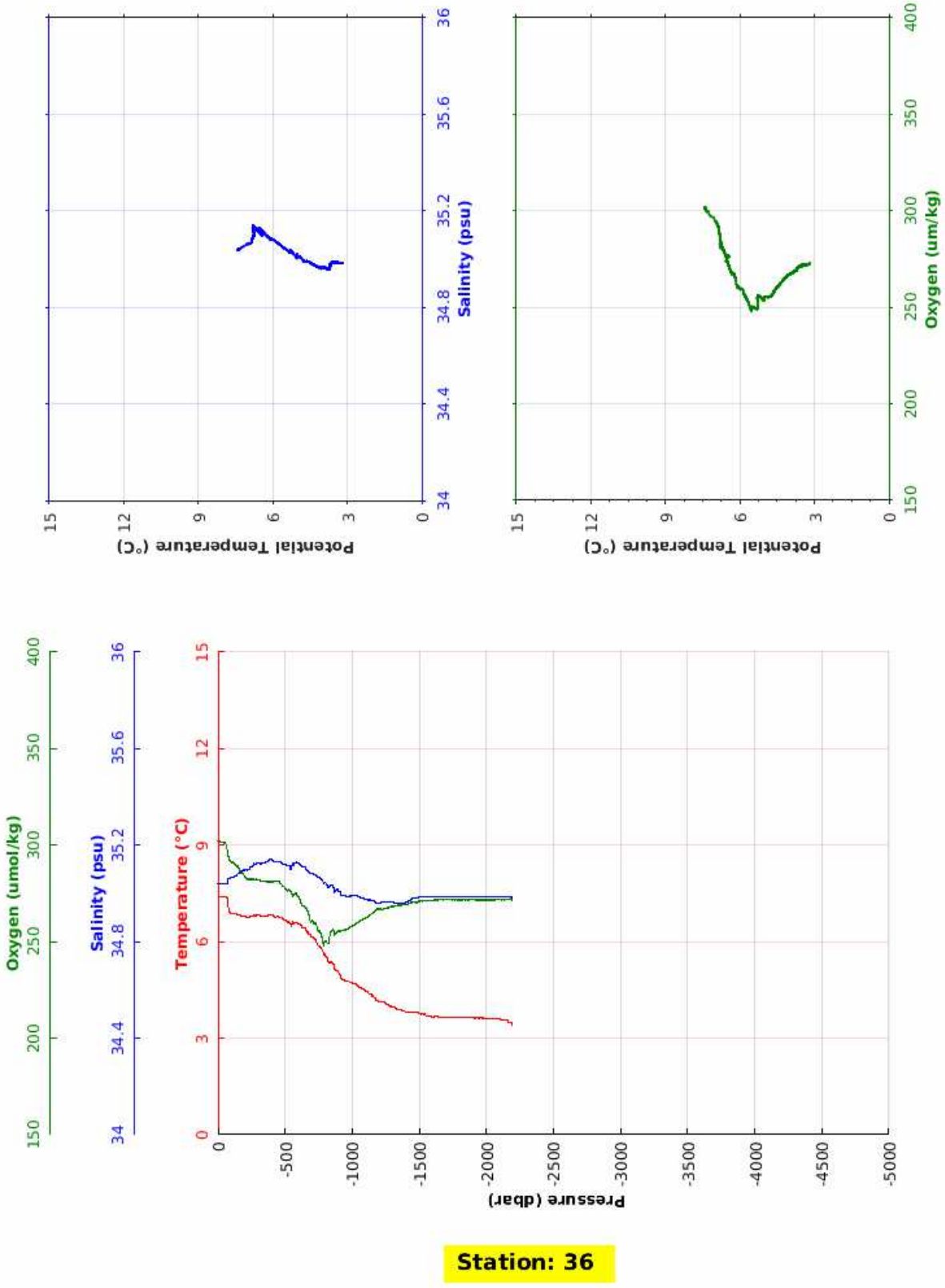
Cruise	: RREX 2015		
Station	: 35	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 1660 m	Organism	: IFREMER
Position	: N 58 33.00 W 030 21.94		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.517	35.006	300.3	7.517
10.0	7.518	35.006	300.2	7.517
20.0	7.512	35.006	300.1	7.510
30.0	7.519	35.006	299.9	7.516
40.0	7.499	35.005	299.6	7.495
50.0	7.508	35.006	299.5	7.503
100.0	6.737	35.059	285.8	6.728
150.0	6.813	35.099	283.4	6.799
200.0	6.881	35.127	285.1	6.862
250.0	6.823	35.126	282.7	6.800
300.0	6.845	35.138	282.4	6.817
350.0	6.811	35.138	281.0	6.778
400.0	6.789	35.137	281.0	6.751
450.0	6.786	35.142	280.9	6.743
500.0	6.689	35.130	279.9	6.642
550.0	6.641	35.126	279.0	6.589
600.0	6.469	35.104	274.1	6.413
650.0	6.262	35.092	260.2	6.203
700.0	6.035	35.074	252.8	5.972
750.0	5.583	35.032	245.3	5.518
800.0	5.242	35.008	245.3	5.175
850.0	5.099	35.002	247.2	5.028
900.0	4.786	34.969	254.1	4.713
950.0	4.651	34.968	256.8	4.574
1000.0	4.509	34.959	259.9	4.429
1050.0	4.402	34.952	262.7	4.318
1100.0	4.215	34.933	268.4	4.128
1150.0	4.153	34.936	268.7	4.062
1200.0	4.170	34.948	267.5	4.075
1250.0	4.090	34.946	268.2	3.992
1300.0	4.063	34.953	268.0	3.960
1350.0	4.025	34.958	268.1	3.918
1400.0	3.975	34.963	268.2	3.864
1450.0	3.935	34.965	268.3	3.820
1500.0	3.915	34.969	268.4	3.796
1550.0	3.890	34.975	268.5	3.766
1600.0	3.879	34.976	268.6	3.751
1650.0	3.857	34.977	268.9	3.725
1669.0	3.850	34.977	269.0	3.716


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 35

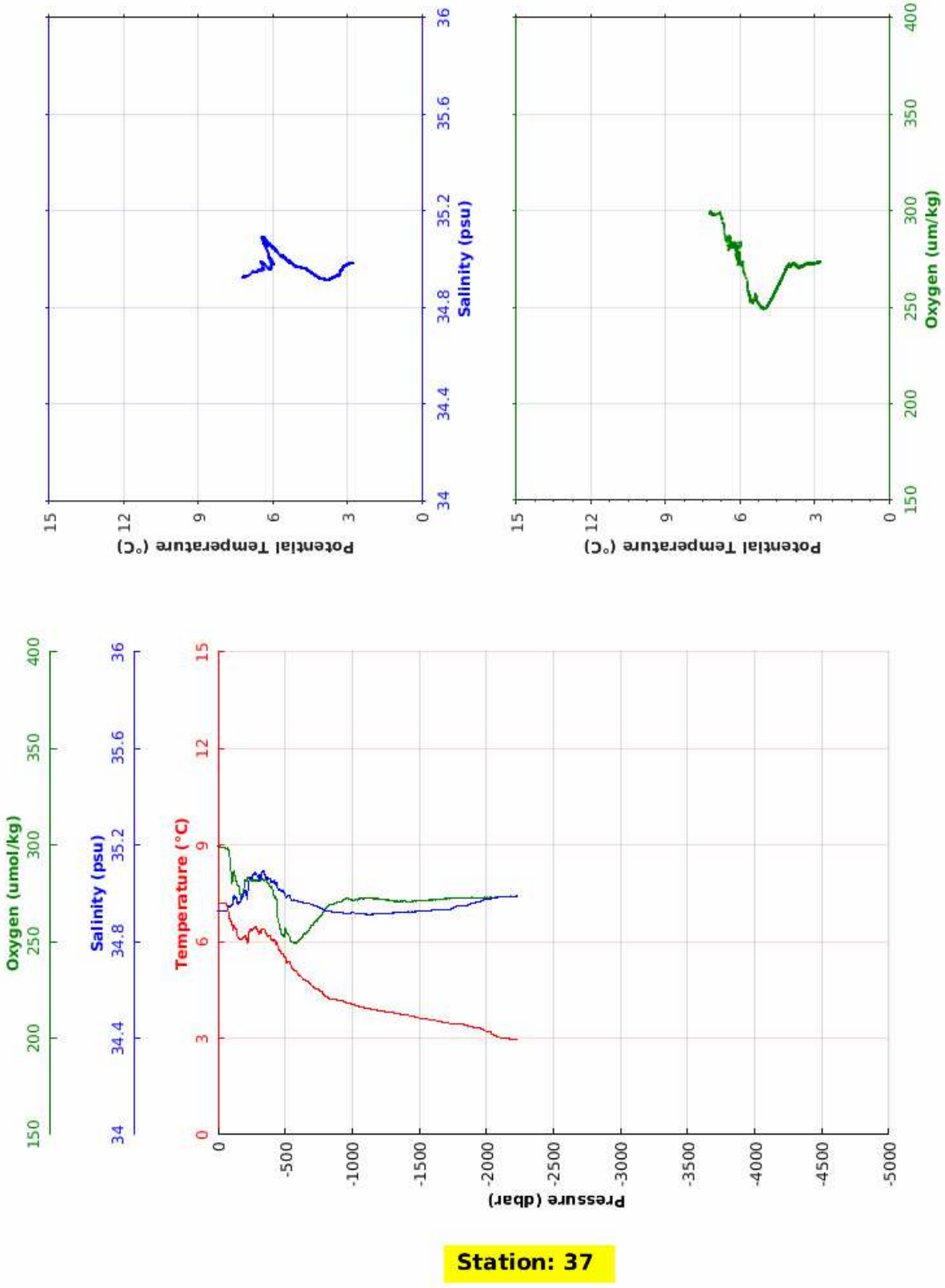
Cruise	: RREX 2015		
Station	: 36	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 2179 m	Organism	: IFREMER
Position	: N 58 24.60 W 030 6.10		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.415	35.039	301.9	7.415
10.0	7.415	35.039	302.0	7.414
20.0	7.409	35.039	301.8	7.407
30.0	7.404	35.039	301.6	7.401
40.0	7.403	35.039	301.6	7.399
50.0	7.397	35.039	301.2	7.392
100.0	6.880	35.068	291.8	6.871
150.0	6.853	35.082	289.2	6.839
200.0	6.793	35.097	284.2	6.774
250.0	6.776	35.109	282.2	6.753
300.0	6.821	35.127	282.3	6.793
350.0	6.785	35.126	281.5	6.753
400.0	6.839	35.140	281.0	6.801
450.0	6.776	35.134	281.6	6.734
500.0	6.667	35.120	278.2	6.620
550.0	6.530	35.107	275.6	6.479
600.0	6.558	35.124	273.9	6.503
650.0	6.416	35.109	268.3	6.356
700.0	6.150	35.084	260.7	6.086
750.0	5.871	35.067	255.9	5.805
800.0	5.560	35.044	250.1	5.491
850.0	5.361	35.036	255.6	5.288
900.0	5.019	35.011	255.6	4.944
950.0	4.797	34.989	256.2	4.719
1000.0	4.725	34.990	258.1	4.643
1050.0	4.609	34.987	260.1	4.523
1100.0	4.471	34.977	262.2	4.382
1150.0	4.314	34.969	264.7	4.222
1200.0	4.144	34.961	267.0	4.049
1250.0	4.075	34.965	267.4	3.977
1300.0	3.969	34.963	267.9	3.867
1350.0	3.900	34.962	269.0	3.794
1400.0	3.815	34.961	269.1	3.706
1450.0	3.794	34.979	270.4	3.680
1500.0	3.753	34.984	270.9	3.636
1550.0	3.708	34.985	271.3	3.586
1600.0	3.667	34.986	271.4	3.542
1650.0	3.667	34.989	271.8	3.537
1700.0	3.653	34.989	271.7	3.519
1750.0	3.653	34.988	271.8	3.514
1800.0	3.638	34.987	271.4	3.495
1850.0	3.638	34.987	271.7	3.490
1900.0	3.630	34.987	271.7	3.477
1950.0	3.620	34.986	271.7	3.463
2000.0	3.623	34.986	271.8	3.461
2050.0	3.625	34.986	271.7	3.458
2100.0	3.590	34.987	272.0	3.419
2150.0	3.554	34.985	271.8	3.379
2199.0	3.359	34.984	272.7	3.182


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 36

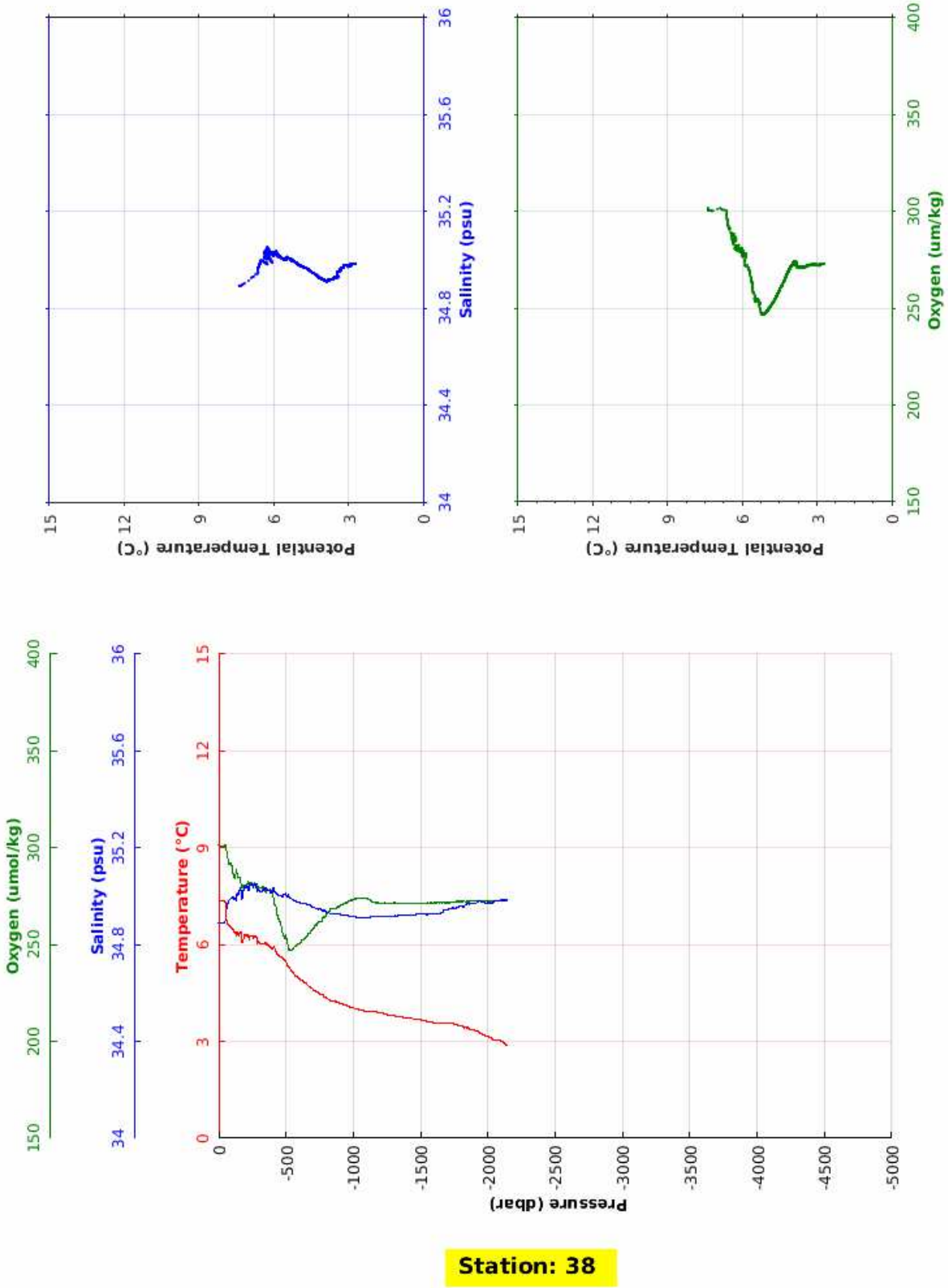
Cruise	: RREX 2015		
Station	: 37	Cast	: 1
Date	: 17/06/2015	Ship	: N/O Thalassa
Depth	: 2220 m	Organism	: IFREMER
Position	: N 58 12.47 W 029 43.33		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.185	34.927	299.6	7.185
10.0	7.187	34.927	299.3	7.186
20.0	7.194	34.926	299.1	7.192
30.0	7.194	34.926	298.9	7.191
40.0	7.197	34.926	298.7	7.193
50.0	7.198	34.926	298.9	7.193
100.0	6.630	34.951	288.3	6.621
150.0	6.112	34.957	279.8	6.099
200.0	6.166	35.006	279.4	6.149
250.0	6.369	35.064	281.8	6.347
300.0	6.322	35.067	281.6	6.295
350.0	6.335	35.083	282.0	6.303
400.0	6.051	35.047	278.5	6.016
450.0	5.739	35.015	262.3	5.701
500.0	5.514	35.001	252.6	5.471
550.0	5.198	34.976	250.4	5.153
600.0	4.989	34.967	249.8	4.940
650.0	4.793	34.962	254.3	4.741
700.0	4.626	34.953	258.5	4.571
750.0	4.492	34.943	261.8	4.433
800.0	4.324	34.930	266.7	4.262
850.0	4.227	34.925	269.3	4.161
900.0	4.186	34.922	270.5	4.117
950.0	4.116	34.919	272.1	4.043
1000.0	4.068	34.920	271.5	3.991
1050.0	3.983	34.917	271.8	3.903
1100.0	3.940	34.914	272.6	3.856
1150.0	3.902	34.914	272.6	3.814
1200.0	3.861	34.915	272.3	3.769
1250.0	3.824	34.916	272.0	3.728
1300.0	3.799	34.919	271.5	3.698
1350.0	3.759	34.921	270.8	3.655
1400.0	3.731	34.922	270.8	3.623
1450.0	3.684	34.925	270.8	3.572
1500.0	3.628	34.926	271.1	3.513
1550.0	3.597	34.928	271.3	3.477
1600.0	3.561	34.931	271.6	3.437
1650.0	3.530	34.932	271.9	3.402
1700.0	3.479	34.932	272.4	3.347
1750.0	3.443	34.938	272.7	3.307
1800.0	3.442	34.947	272.5	3.302
1850.0	3.404	34.951	272.8	3.260
1900.0	3.351	34.960	272.7	3.203
1950.0	3.312	34.966	272.6	3.160
2000.0	3.209	34.975	272.8	3.054
2050.0	3.124	34.980	273.0	2.965
2100.0	3.021	34.985	273.3	2.859
2150.0	2.990	34.985	273.4	2.824
2200.0	2.968	34.985	273.5	2.797
2241.0	2.969	34.985	273.7	2.795


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 37

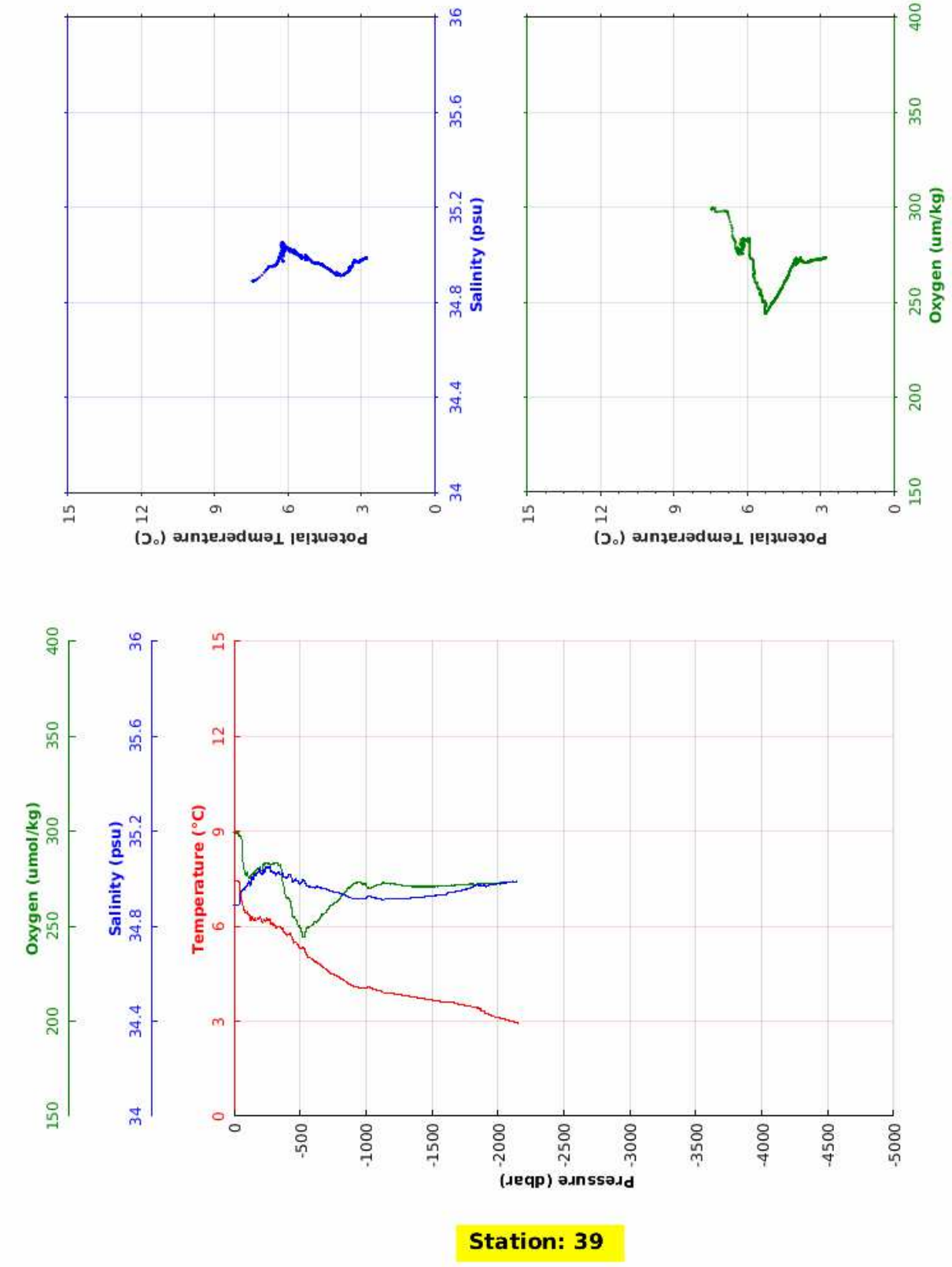
Cruise	: RREX 2015		
Station	: 38	Cast	: 1
Date	: 18/06/2015	Ship	: N/O Thalassa
Depth	: 2130 m	Organism	: IFREMER
Position	: N 57 58.22 W 029 16.42		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.377	34.891	301.5	7.377
10.0	7.377	34.891	301.3	7.377
20.0	7.378	34.891	300.8	7.376
30.0	7.373	34.892	300.9	7.371
40.0	7.371	34.892	300.7	7.367
50.0	7.276	34.896	300.6	7.271
100.0	6.513	34.995	291.1	6.504
150.0	6.288	35.008	285.0	6.275
200.0	6.278	35.037	280.4	6.260
250.0	6.278	35.048	281.8	6.256
300.0	6.081	35.026	279.7	6.054
350.0	6.044	35.032	277.9	6.013
400.0	5.897	35.021	277.4	5.863
450.0	5.643	35.002	263.5	5.605
500.0	5.498	35.012	255.1	5.456
550.0	5.138	34.988	247.3	5.093
600.0	4.935	34.974	250.7	4.886
650.0	4.799	34.969	253.5	4.747
700.0	4.611	34.957	257.9	4.555
750.0	4.481	34.946	261.7	4.422
800.0	4.344	34.937	265.1	4.282
850.0	4.242	34.927	268.7	4.176
900.0	4.188	34.926	269.8	4.118
950.0	4.122	34.921	271.5	4.049
1000.0	4.042	34.916	273.1	3.965
1050.0	3.977	34.912	273.9	3.897
1100.0	3.937	34.912	274.0	3.853
1150.0	3.924	34.916	272.1	3.836
1200.0	3.891	34.917	271.5	3.799
1250.0	3.835	34.918	271.3	3.739
1300.0	3.800	34.919	271.6	3.700
1350.0	3.761	34.920	271.4	3.657
1400.0	3.736	34.922	271.4	3.628
1450.0	3.706	34.923	271.2	3.594
1500.0	3.670	34.925	271.2	3.553
1550.0	3.615	34.925	271.3	3.495
1600.0	3.580	34.927	271.4	3.456
1650.0	3.550	34.929	271.9	3.421
1700.0	3.573	34.945	271.6	3.440
1750.0	3.539	34.951	271.9	3.401
1800.0	3.490	34.961	272.2	3.349
1850.0	3.425	34.969	272.2	3.280
1900.0	3.345	34.969	272.4	3.196
1950.0	3.246	34.979	272.7	3.094
2000.0	3.152	34.973	272.4	2.997
2050.0	3.062	34.978	272.3	2.904
2100.0	3.009	34.984	272.8	2.847
2149.0	2.892	34.984	273.2	2.728


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 38

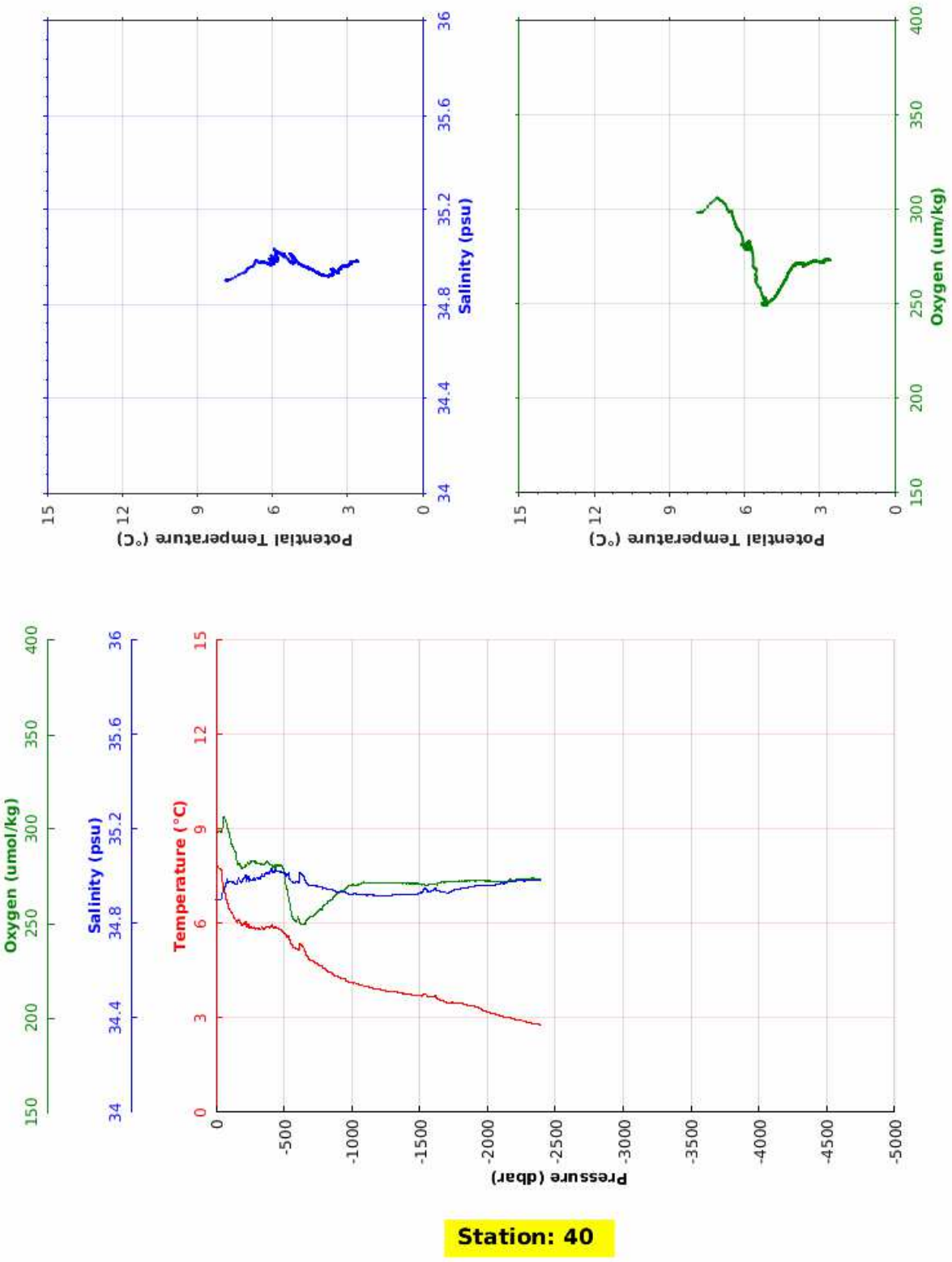
Cruise	: RREX 2015		
Station	: 39	Cast	: 1
Date	: 18/06/2015	Ship	: N/O Thalassa
Depth	: 2139 m	Organism	: IFREMER
Position	: N 58 5.55 W 029 23.62		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.439	34.889	299.4	7.439
10.0	7.439	34.889	299.1	7.439
20.0	7.441	34.890	299.1	7.439
30.0	7.441	34.889	299.1	7.438
40.0	7.371	34.891	299.1	7.368
50.0	6.924	34.933	298.1	6.919
100.0	6.452	34.973	277.0	6.443
150.0	6.208	35.005	277.8	6.195
200.0	6.305	35.042	281.3	6.288
250.0	6.209	35.045	283.4	6.187
300.0	6.056	35.030	282.8	6.030
350.0	5.955	35.022	282.3	5.925
400.0	5.727	35.004	265.0	5.693
450.0	5.487	34.985	255.4	5.449
500.0	5.321	34.980	250.2	5.279
550.0	5.123	34.978	247.6	5.078
600.0	4.931	34.965	251.1	4.883
650.0	4.811	34.967	253.7	4.759
700.0	4.638	34.958	257.5	4.582
750.0	4.494	34.947	261.3	4.436
800.0	4.381	34.940	264.1	4.319
850.0	4.256	34.930	268.3	4.191
900.0	4.119	34.918	272.1	4.051
950.0	4.071	34.916	273.2	3.998
1000.0	4.051	34.917	272.3	3.974
1050.0	4.043	34.923	270.7	3.962
1100.0	3.961	34.917	272.1	3.876
1150.0	3.909	34.914	272.6	3.820
1200.0	3.880	34.915	272.4	3.787
1250.0	3.846	34.916	271.9	3.750
1300.0	3.808	34.918	271.3	3.707
1350.0	3.779	34.920	271.1	3.675
1400.0	3.743	34.922	271.0	3.634
1450.0	3.704	34.925	271.0	3.592
1500.0	3.674	34.929	271.0	3.558
1550.0	3.634	34.931	271.0	3.513
1600.0	3.599	34.934	271.4	3.474
1650.0	3.596	34.943	271.4	3.467
1700.0	3.550	34.948	271.9	3.417
1750.0	3.508	34.953	272.0	3.371
1800.0	3.465	34.964	272.3	3.324
1850.0	3.429	34.976	272.1	3.283
1900.0	3.297	34.973	272.4	3.150
1950.0	3.180	34.975	272.6	3.030
2000.0	3.123	34.980	272.9	2.968
2050.0	3.067	34.984	272.9	2.909
2100.0	3.007	34.985	273.4	2.845
2150.0	2.945	34.986	273.7	2.780
2157.0	2.930	34.986	273.8	2.764


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 39

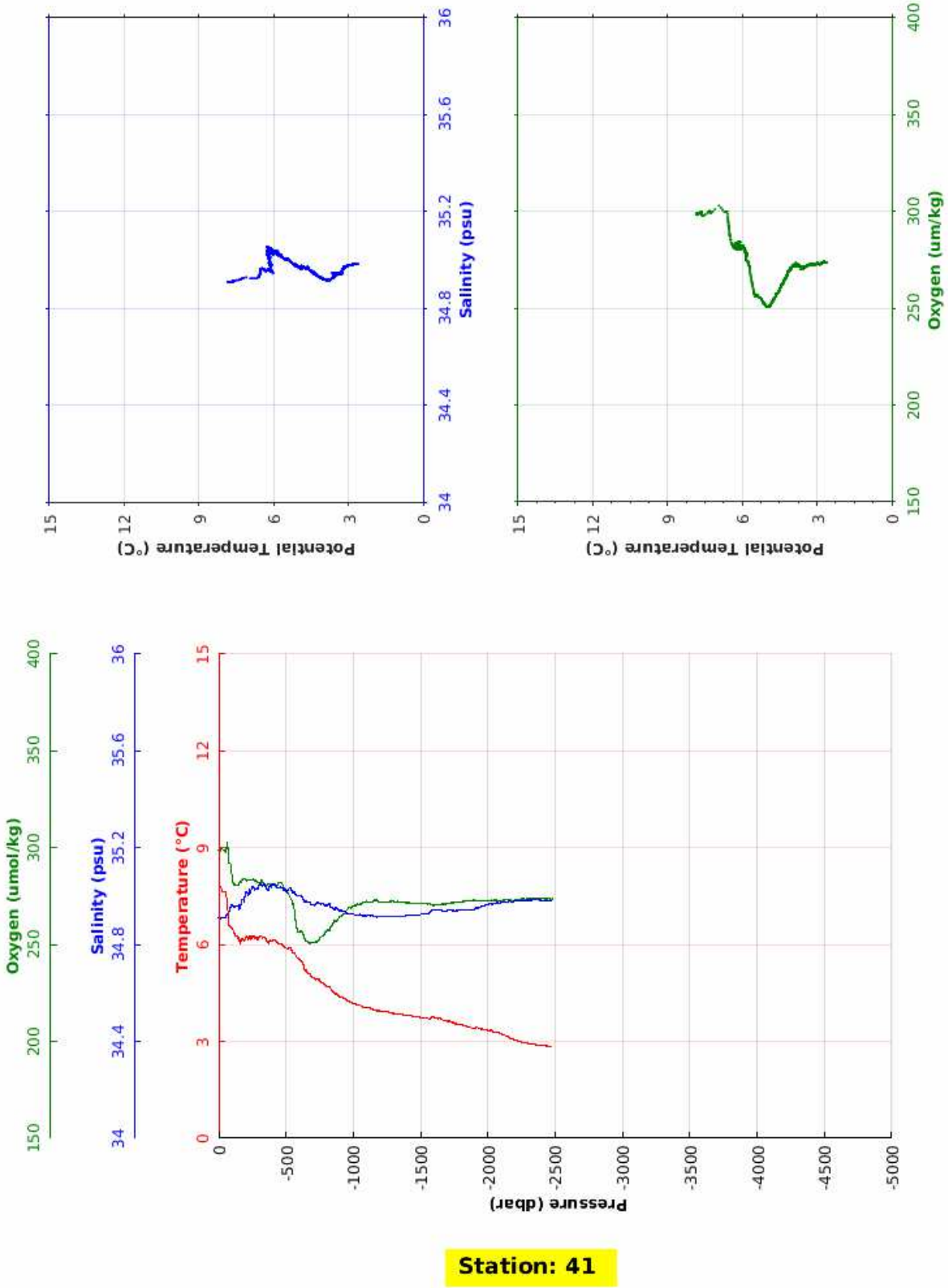
Cruise : RREX 2015			
Station : 40	Cast : 1		
Date : 18/06/2015	Ship : N/O Thalassa		
Depth : 2378 m	Organism : IFREMER		
Position : N 57 35.19 W 028 26.83			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.854	34.902	298.6	7.853
10.0	7.835	34.902	298.6	7.834
20.0	7.766	34.901	298.9	7.764
30.0	7.754	34.902	298.4	7.751
40.0	7.704	34.904	298.5	7.700
50.0	7.141	34.932	305.8	7.136
100.0	6.456	34.980	295.3	6.447
150.0	6.058	34.967	281.9	6.045
200.0	5.976	34.983	280.0	5.959
250.0	5.868	34.982	282.9	5.847
300.0	5.860	34.994	282.1	5.835
350.0	5.836	34.999	281.1	5.805
400.0	5.882	35.018	281.3	5.847
450.0	5.852	35.022	280.5	5.813
500.0	5.722	35.014	276.9	5.679
550.0	5.356	34.983	255.6	5.310
600.0	5.206	34.979	253.5	5.156
650.0	5.183	34.997	249.3	5.129
700.0	4.831	34.963	253.8	4.774
750.0	4.710	34.958	256.7	4.650
800.0	4.566	34.950	259.9	4.503
850.0	4.436	34.946	262.8	4.369
900.0	4.312	34.935	266.3	4.241
950.0	4.234	34.933	268.2	4.160
1000.0	4.122	34.924	270.7	4.045
1050.0	4.070	34.925	270.9	3.989
1100.0	4.013	34.922	271.5	3.928
1150.0	3.957	34.921	271.4	3.868
1200.0	3.911	34.920	271.6	3.818
1250.0	3.861	34.919	271.6	3.765
1300.0	3.841	34.921	271.8	3.741
1350.0	3.807	34.922	271.4	3.703
1400.0	3.767	34.922	271.4	3.659
1450.0	3.734	34.924	271.1	3.621
1500.0	3.707	34.928	271.0	3.590
1550.0	3.739	34.945	270.3	3.617
1600.0	3.681	34.942	270.9	3.556
1650.0	3.563	34.935	271.6	3.434
1700.0	3.492	34.931	272.4	3.360
1750.0	3.490	34.942	272.4	3.353
1800.0	3.461	34.947	272.5	3.320
1850.0	3.412	34.950	272.7	3.268
1900.0	3.374	34.959	272.7	3.225
1950.0	3.291	34.961	272.9	3.139
2000.0	3.191	34.960	272.6	3.035
2050.0	3.134	34.964	272.3	2.975
2100.0	3.079	34.971	272.3	2.916
2150.0	3.028	34.979	272.7	2.861
2200.0	2.956	34.979	273.1	2.785
2250.0	2.919	34.982	273.8	2.744
2300.0	2.855	34.982	273.6	2.677
2350.0	2.814	34.983	273.9	2.632
2399.0	2.776	34.981	273.2	2.590


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 40

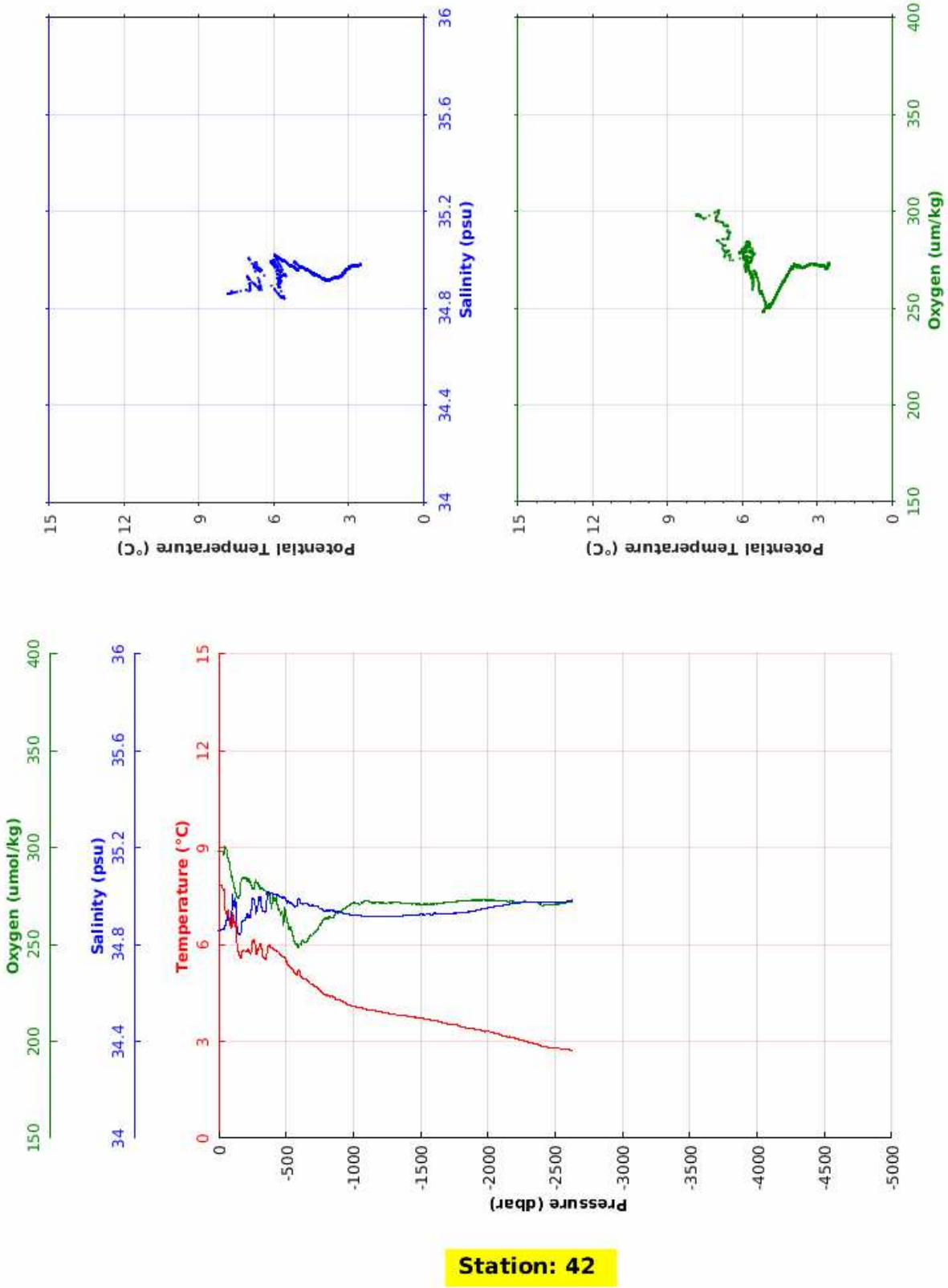
Cruise : RREX 2015			
Station : 41	Cast : 1		
Date : 18/06/2015	Ship : N/O Thalassa		
Depth : 2460 m	Organism : IFREMER		
Position : N 57 40.49 W 028 43.56			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.816	34.909	299.0	7.816
10.0	7.811	34.909	298.6	7.810
20.0	7.741	34.909	298.8	7.739
30.0	7.640	34.910	299.6	7.637
40.0	7.632	34.911	299.1	7.628
50.0	7.624	34.912	298.2	7.619
100.0	6.514	34.963	287.6	6.505
150.0	6.207	34.961	280.5	6.194
200.0	6.208	35.004	284.0	6.191
250.0	6.274	35.038	283.1	6.251
300.0	6.223	35.041	282.1	6.197
350.0	6.187	35.042	281.4	6.156
400.0	6.154	35.048	281.3	6.119
450.0	6.011	35.032	282.1	5.972
500.0	5.907	35.025	278.9	5.863
550.0	5.781	35.019	271.9	5.733
600.0	5.542	35.003	256.5	5.490
650.0	5.193	34.982	252.7	5.139
700.0	4.966	34.964	251.1	4.909
750.0	4.881	34.971	252.6	4.820
800.0	4.719	34.964	256.6	4.654
850.0	4.548	34.952	260.4	4.480
900.0	4.381	34.939	264.7	4.310
950.0	4.282	34.932	267.0	4.208
1000.0	4.181	34.925	269.6	4.103
1050.0	4.128	34.925	270.5	4.046
1100.0	4.051	34.920	272.3	3.966
1150.0	3.986	34.917	272.4	3.898
1200.0	3.948	34.918	272.1	3.856
1250.0	3.921	34.917	272.1	3.824
1300.0	3.861	34.916	272.4	3.760
1350.0	3.837	34.918	272.0	3.732
1400.0	3.812	34.920	271.6	3.703
1450.0	3.785	34.923	271.4	3.671
1500.0	3.744	34.924	271.2	3.627
1550.0	3.717	34.929	271.0	3.596
1600.0	3.746	34.944	270.2	3.620
1650.0	3.711	34.944	270.6	3.581
1700.0	3.626	34.940	271.2	3.492
1750.0	3.560	34.939	272.0	3.422
1800.0	3.523	34.942	272.0	3.381
1850.0	3.455	34.943	272.7	3.310
1900.0	3.415	34.944	273.0	3.266
1950.0	3.389	34.956	272.8	3.235
2000.0	3.336	34.963	272.9	3.178
2050.0	3.282	34.968	273.0	3.121
2100.0	3.228	34.974	272.8	3.063
2150.0	3.141	34.978	273.0	2.973
2200.0	3.054	34.980	273.0	2.882
2250.0	2.985	34.983	273.5	2.809
2300.0	2.936	34.984	273.6	2.756
2350.0	2.908	34.984	273.7	2.724
2400.0	2.874	34.983	273.8	2.686
2450.0	2.854	34.983	273.8	2.662
2483.0	2.833	34.982	273.6	2.638


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 41

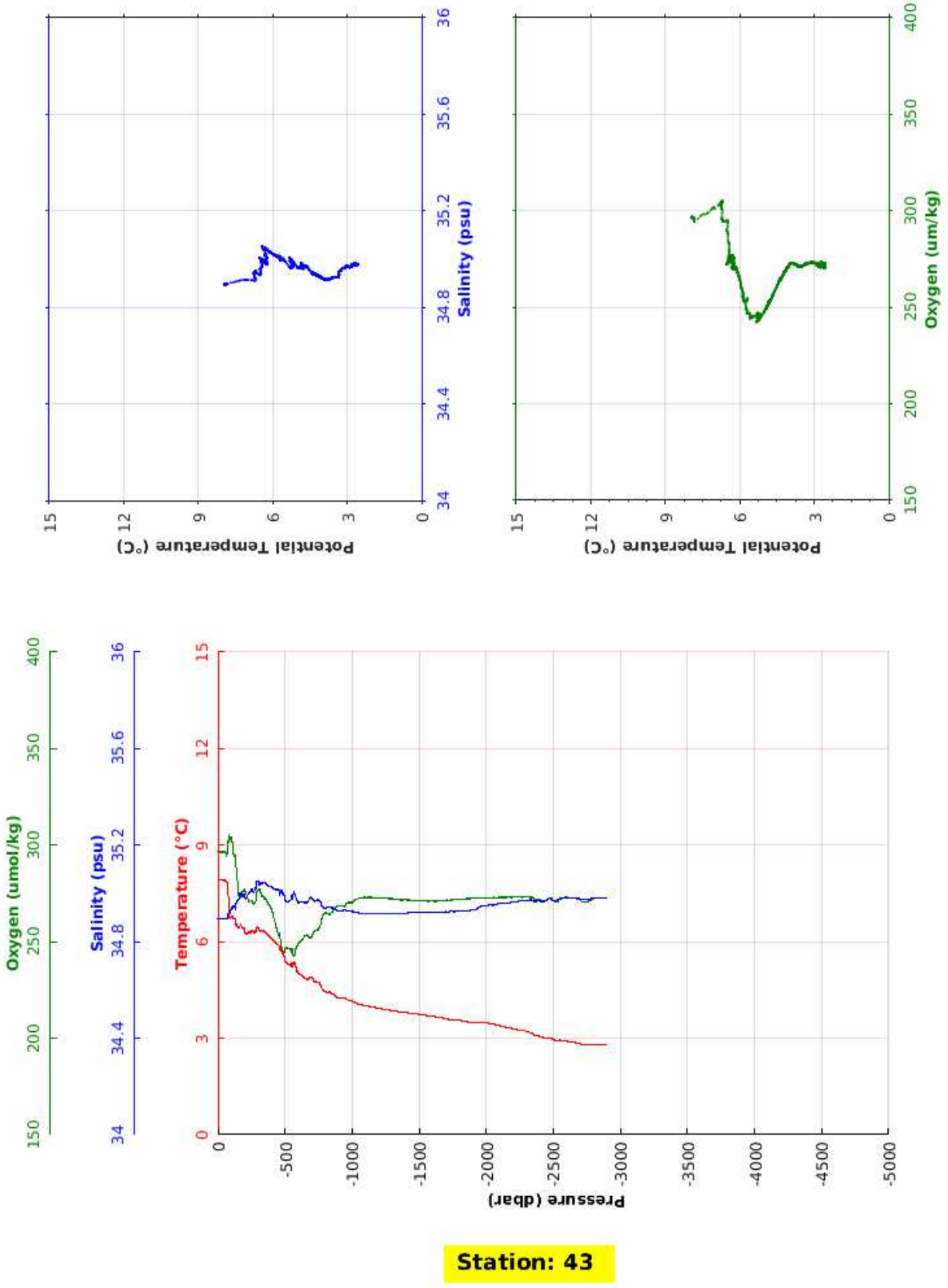
Cruise	: RREX 2015		
Station	: 42	Cast	: 1
Date	: 18/06/2015	Ship	: N/O Thalassa
Depth	: 2608 m	Organism	: IFREMER
Position	: N 57 22.73 W 028 10.31		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.848	34.860	298.4	7.848
10.0	7.835	34.860	298.4	7.834
20.0	7.836	34.860	297.9	7.834
30.0	7.706	34.863	298.1	7.703
40.0	7.705	34.869	297.7	7.701
50.0	6.936	34.874	300.8	6.932
100.0	6.755	34.952	285.7	6.746
150.0	5.713	34.848	274.0	5.701
200.0	5.782	34.902	284.6	5.766
250.0	6.107	34.989	278.6	6.085
300.0	5.978	34.987	281.0	5.952
350.0	5.545	34.935	278.0	5.515
400.0	5.898	35.014	271.0	5.863
450.0	5.734	35.001	267.9	5.696
500.0	5.488	34.984	268.0	5.446
550.0	5.227	34.971	256.8	5.182
600.0	5.174	34.990	248.4	5.124
650.0	4.919	34.970	251.3	4.866
700.0	4.769	34.963	254.6	4.713
750.0	4.581	34.950	259.6	4.522
800.0	4.433	34.939	263.9	4.371
850.0	4.396	34.942	264.1	4.329
900.0	4.281	34.935	266.4	4.211
950.0	4.173	34.927	269.2	4.099
1000.0	4.085	34.921	271.5	4.008
1050.0	4.065	34.923	270.8	3.984
1100.0	3.986	34.916	272.7	3.902
1150.0	3.966	34.919	271.5	3.878
1200.0	3.916	34.918	271.6	3.824
1250.0	3.887	34.918	271.5	3.790
1300.0	3.845	34.917	271.9	3.744
1350.0	3.813	34.919	271.8	3.708
1400.0	3.785	34.920	271.3	3.677
1450.0	3.754	34.922	271.0	3.641
1500.0	3.728	34.925	270.9	3.611
1550.0	3.686	34.926	271.0	3.565
1600.0	3.655	34.930	270.9	3.530
1650.0	3.599	34.927	271.4	3.470
1700.0	3.541	34.926	271.9	3.409
1750.0	3.524	34.930	271.9	3.387
1800.0	3.458	34.932	272.6	3.318
1850.0	3.419	34.935	272.8	3.274
1900.0	3.394	34.940	273.0	3.245
1950.0	3.346	34.946	272.9	3.192
2000.0	3.310	34.952	273.0	3.152
2050.0	3.262	34.958	272.9	3.101
2100.0	3.195	34.962	272.7	3.030
2150.0	3.131	34.964	272.3	2.962
2200.0	3.103	34.971	272.2	2.930
2250.0	3.043	34.973	272.0	2.866
2300.0	2.981	34.974	272.0	2.800
2350.0	2.927	34.977	272.1	2.743
2400.0	2.849	34.973	270.5	2.661
2450.0	2.815	34.975	270.5	2.623
2500.0	2.797	34.976	270.8	2.600
2550.0	2.769	34.978	271.4	2.569
2600.0	2.746	34.979	272.3	2.540
2636.0	2.739	34.982	273.6	2.531


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 42

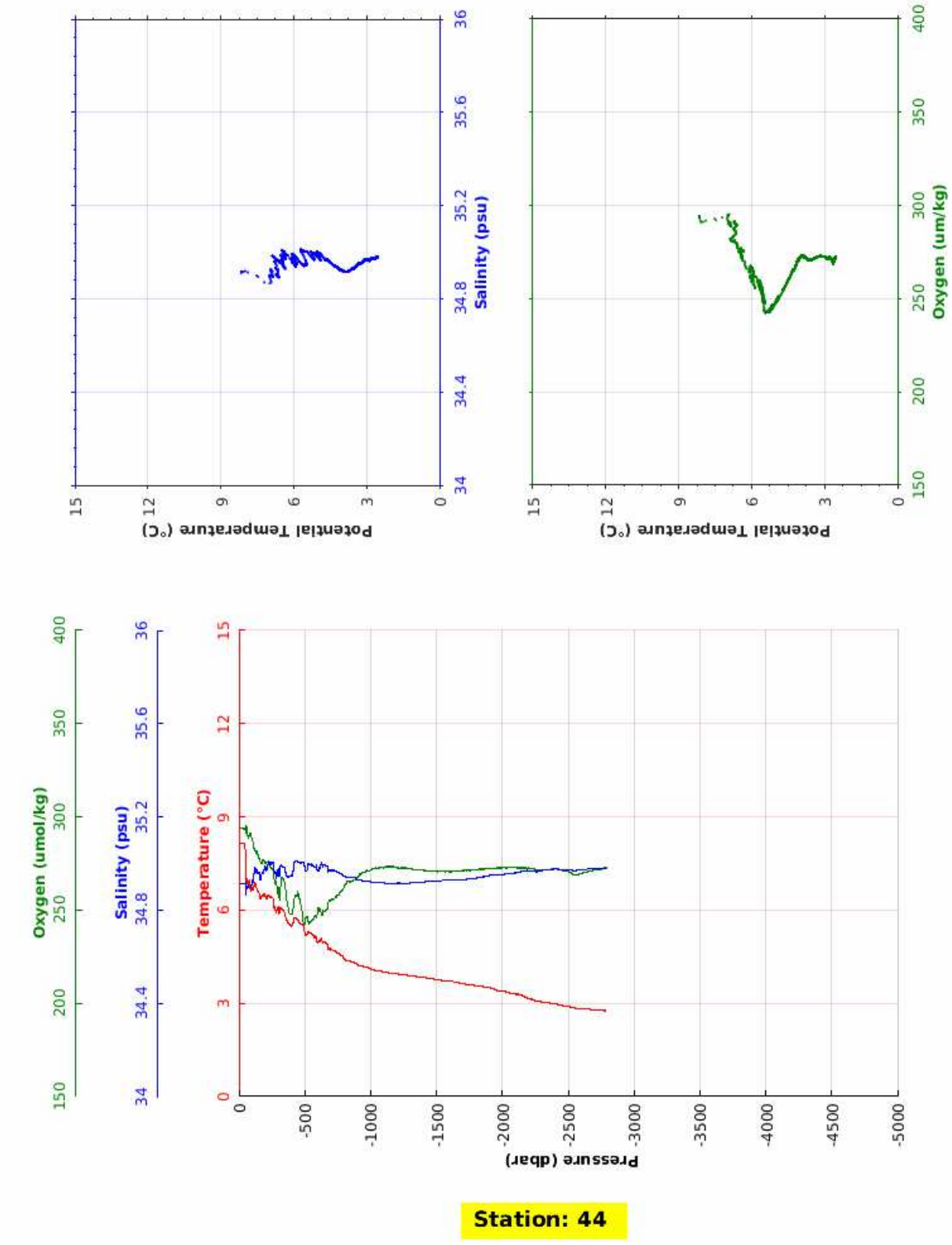
Cruise	: RREX 2015		
Station	: 43	Cast	: 1
Date	: 19/06/2015	Ship	: N/O Thalassa
Depth	: 2871 m	Organism	: IFREMER
Position	: N 57 9.03 W 027 44.99		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.928	34.896	296.8	7.928
10.0	7.928	34.896	296.7	7.927
20.0	7.931	34.895	296.4	7.929
30.0	7.926	34.896	296.6	7.923
40.0	7.923	34.895	296.4	7.919
50.0	7.899	34.895	296.6	7.894
100.0	6.752	34.931	302.8	6.743
150.0	6.448	34.972	282.0	6.435
200.0	6.358	34.991	276.2	6.340
250.0	6.327	35.014	271.1	6.305
300.0	6.449	35.050	276.3	6.422
350.0	6.309	35.044	272.8	6.278
400.0	6.106	35.027	267.4	6.071
450.0	5.903	35.016	255.0	5.864
500.0	5.522	34.988	244.8	5.480
550.0	5.357	34.993	244.5	5.311
600.0	5.031	34.963	248.6	4.982
650.0	4.870	34.962	252.6	4.818
700.0	4.886	34.981	252.5	4.830
750.0	4.742	34.974	256.1	4.682
800.0	4.439	34.939	264.9	4.376
850.0	4.392	34.940	265.2	4.326
900.0	4.261	34.929	268.7	4.191
950.0	4.241	34.932	268.4	4.167
1000.0	4.160	34.927	270.2	4.082
1050.0	4.060	34.919	272.4	3.979
1100.0	4.009	34.917	273.1	3.924
1150.0	3.973	34.916	272.9	3.885
1200.0	3.933	34.915	272.7	3.840
1250.0	3.890	34.915	272.5	3.793
1300.0	3.853	34.916	272.1	3.752
1350.0	3.827	34.917	271.9	3.722
1400.0	3.798	34.919	271.7	3.690
1450.0	3.773	34.920	271.5	3.660
1500.0	3.742	34.922	271.3	3.624
1550.0	3.710	34.922	271.2	3.589
1600.0	3.680	34.923	271.1	3.554
1650.0	3.650	34.924	271.0	3.521
1700.0	3.608	34.925	271.4	3.474
1750.0	3.573	34.925	271.7	3.435
1800.0	3.550	34.925	272.0	3.408
1850.0	3.516	34.926	272.3	3.369
1900.0	3.485	34.932	272.6	3.335
1950.0	3.488	34.942	272.6	3.333
2000.0	3.478	34.949	272.6	3.318
2050.0	3.433	34.951	272.9	3.270
2100.0	3.389	34.959	272.8	3.221
2150.0	3.342	34.961	273.0	3.170
2200.0	3.292	34.964	273.1	3.116
2250.0	3.246	34.968	273.2	3.066
2300.0	3.213	34.971	273.1	3.029
2350.0	3.129	34.969	272.8	2.941
2400.0	3.061	34.968	271.7	2.870
2450.0	3.007	34.973	271.6	2.811
2500.0	2.953	34.972	271.3	2.754
2550.0	2.944	34.978	272.2	2.740
2600.0	2.919	34.982	273.2	2.711
2650.0	2.875	34.981	272.7	2.663
2700.0	2.834	34.978	271.8	2.618
2750.0	2.806	34.976	270.9	2.585
2800.0	2.805	34.979	272.3	2.579
2850.0	2.786	34.980	272.9	2.555
2900.0	2.783	34.980	272.8	2.548
2905.0	2.782	34.980	272.9	2.546


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 43

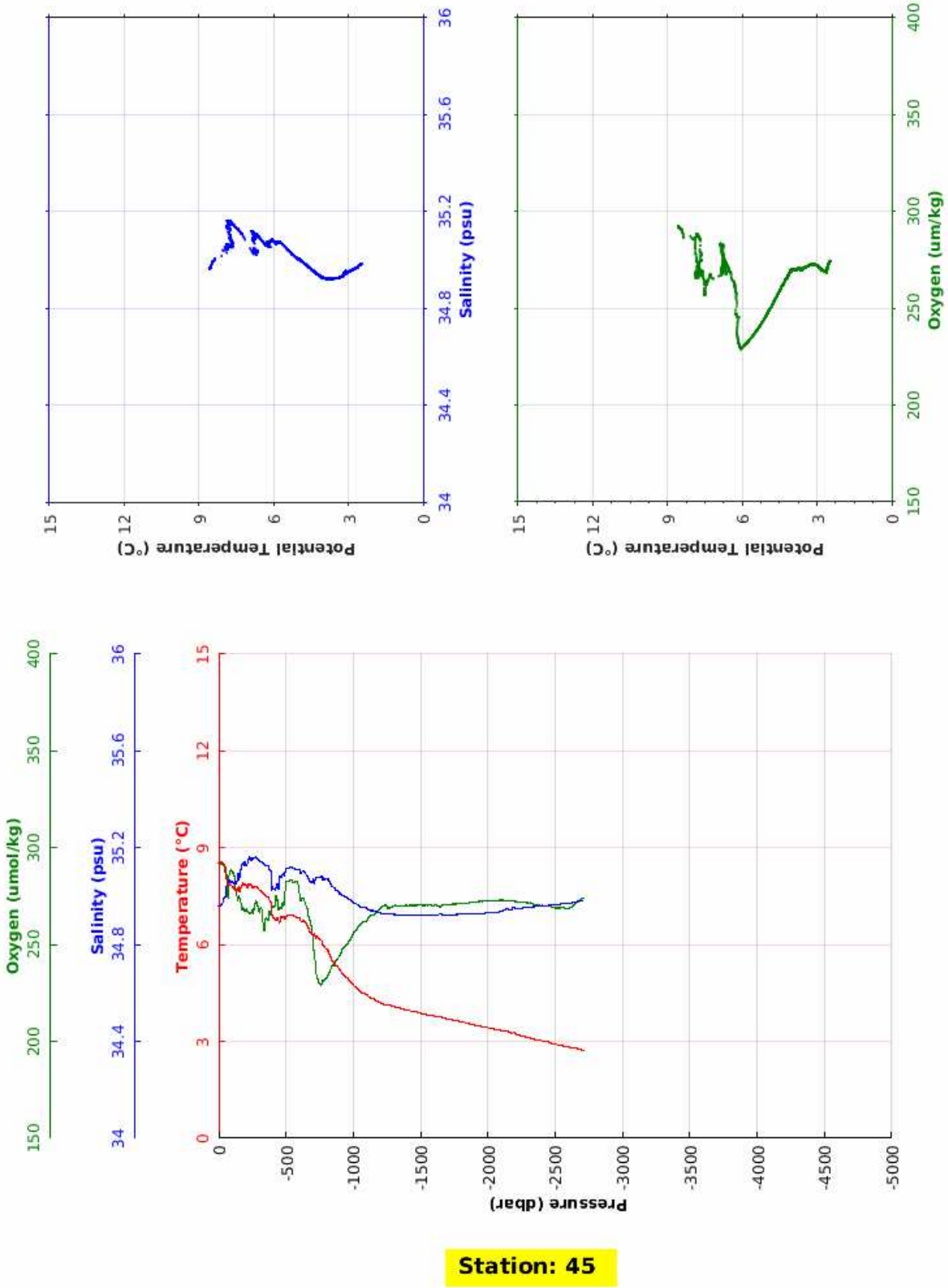
Cruise	: RREX 2015		
Station	: 44	Cast	: 1
Date	: 19/06/2015	Ship	: N/O Thalassa
Depth	: 2762 m	Organism	: IFREMER
Position	: N 56 55.80 W 027 20.12		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.163	34.914	294.2	8.162
10.0	8.163	34.915	293.7	8.162
20.0	8.163	34.915	293.7	8.161
30.0	8.161	34.914	293.8	8.158
40.0	8.155	34.914	293.8	8.150
50.0	7.462	34.894	292.0	7.457
100.0	6.741	34.931	287.1	6.732
150.0	6.601	34.963	277.7	6.587
200.0	6.469	34.982	275.0	6.451
250.0	6.415	35.001	271.9	6.392
300.0	6.026	34.970	259.8	6.000
350.0	5.828	34.964	261.4	5.798
400.0	5.491	34.949	248.3	5.458
450.0	5.666	35.007	257.6	5.628
500.0	5.270	34.974	245.0	5.228
550.0	5.219	34.991	244.5	5.173
600.0	4.948	34.967	251.1	4.900
650.0	4.999	34.995	249.3	4.946
700.0	4.733	34.970	255.8	4.677
750.0	4.621	34.963	258.3	4.562
800.0	4.427	34.943	263.5	4.365
850.0	4.349	34.940	265.5	4.283
900.0	4.252	34.932	267.9	4.182
950.0	4.186	34.926	270.3	4.112
1000.0	4.111	34.922	271.6	4.034
1050.0	4.057	34.919	272.3	3.976
1100.0	4.011	34.916	273.0	3.926
1150.0	3.975	34.915	273.3	3.886
1200.0	3.952	34.916	272.5	3.859
1250.0	3.914	34.915	272.7	3.817
1300.0	3.888	34.916	272.2	3.787
1350.0	3.862	34.918	271.6	3.756
1400.0	3.833	34.921	271.3	3.724
1450.0	3.804	34.923	270.9	3.690
1500.0	3.766	34.925	270.7	3.649
1550.0	3.733	34.927	270.8	3.612
1600.0	3.719	34.929	270.6	3.593
1650.0	3.681	34.930	270.9	3.551
1700.0	3.641	34.930	271.3	3.507
1750.0	3.603	34.936	271.2	3.465
1800.0	3.564	34.938	271.7	3.422
1850.0	3.536	34.943	272.0	3.389
1900.0	3.498	34.950	272.3	3.348
1950.0	3.429	34.950	272.5	3.275
2000.0	3.383	34.952	272.8	3.225
2050.0	3.343	34.956	272.6	3.181
2100.0	3.291	34.959	272.8	3.125
2150.0	3.253	34.968	272.6	3.082
2200.0	3.159	34.968	272.6	2.985
2250.0	3.087	34.965	271.8	2.909
2300.0	3.031	34.969	271.6	2.850
2350.0	3.018	34.972	271.9	2.832
2400.0	2.987	34.976	272.2	2.797
2450.0	2.930	34.974	271.4	2.736
2500.0	2.894	34.973	270.6	2.696
2550.0	2.845	34.970	268.8	2.643
2600.0	2.833	34.974	269.7	2.626
2650.0	2.809	34.976	270.7	2.598
2700.0	2.794	34.978	271.6	2.578
2750.0	2.776	34.979	271.8	2.555
2794.0	2.765	34.981	272.8	2.540


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 44

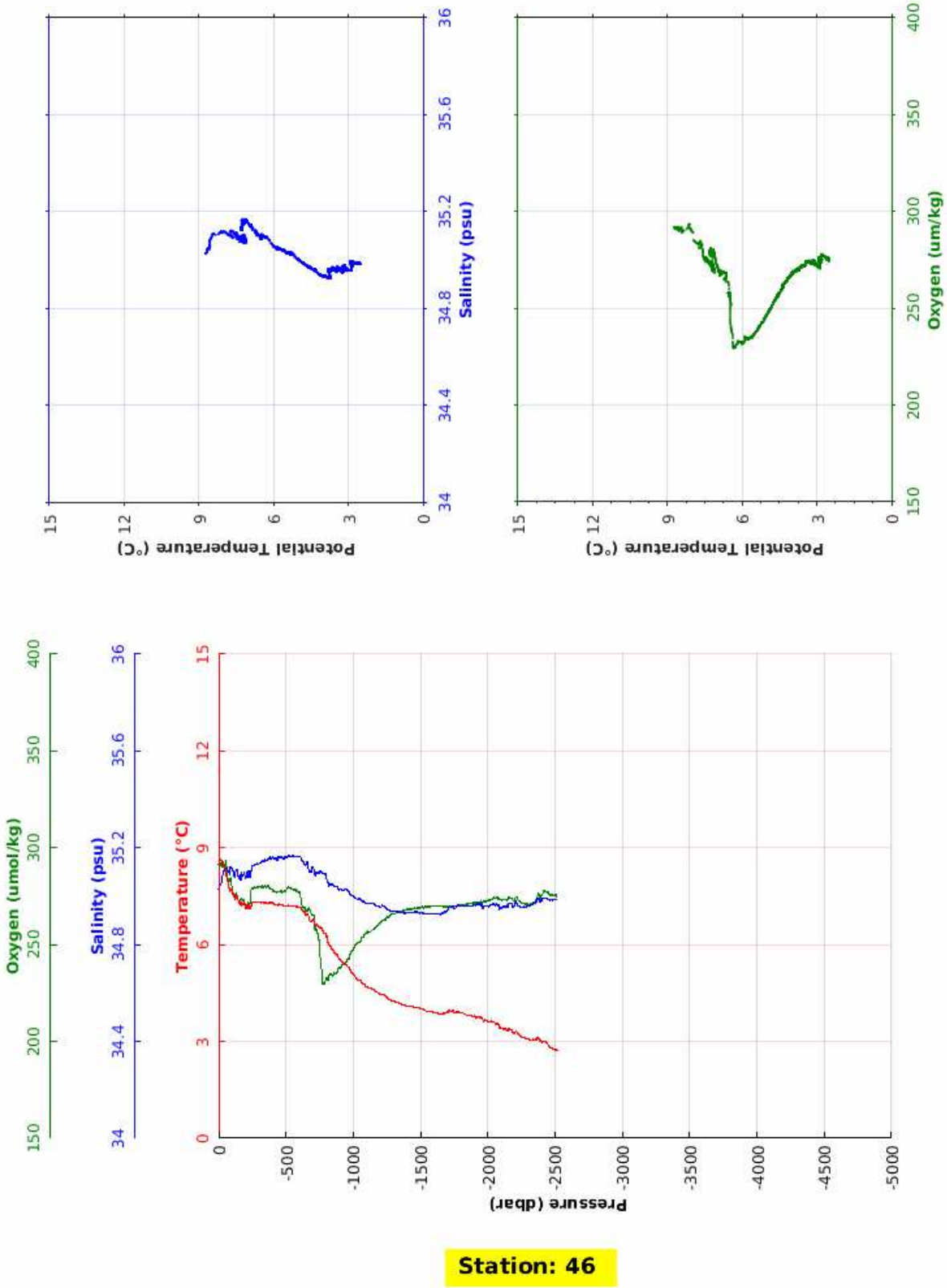
Cruise	: RREX 2015		
Station	: 45	Cast	: 1
Date	: 20/06/2015	Ship	: N/O Thalassa
Depth	: 2683 m	Organism	: IFREMER
Position	: N 60 17.98 W 020 59.70		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.562	34.962	292.3	8.562
10.0	8.563	34.962	292.1	8.562
20.0	8.553	34.964	292.2	8.551
30.0	8.540	34.970	291.9	8.537
40.0	8.473	34.992	290.9	8.469
50.0	8.403	34.997	289.2	8.398
100.0	7.791	35.056	287.8	7.781
150.0	7.764	35.088	273.1	7.749
200.0	7.837	35.131	268.0	7.817
250.0	7.764	35.145	267.7	7.739
300.0	7.701	35.150	268.5	7.671
350.0	7.499	35.128	261.5	7.464
400.0	6.870	35.031	268.5	6.832
450.0	6.702	35.039	268.2	6.660
500.0	6.877	35.108	278.8	6.829
550.0	6.920	35.119	283.1	6.868
600.0	6.818	35.109	277.8	6.761
650.0	6.637	35.092	271.5	6.576
700.0	6.311	35.058	256.3	6.246
750.0	6.177	35.079	230.3	6.108
800.0	5.858	35.073	232.4	5.787
850.0	5.469	35.038	239.2	5.395
900.0	5.206	35.011	244.1	5.130
950.0	4.980	34.997	249.5	4.901
1000.0	4.754	34.978	255.0	4.671
1050.0	4.535	34.957	260.1	4.450
1100.0	4.449	34.951	262.2	4.360
1150.0	4.325	34.941	265.2	4.233
1200.0	4.195	34.931	268.4	4.100
1250.0	4.127	34.926	269.8	4.028
1300.0	4.081	34.925	270.1	3.979
1350.0	4.028	34.923	269.9	3.921
1400.0	3.968	34.921	270.3	3.857
1450.0	3.927	34.921	270.3	3.812
1500.0	3.882	34.921	270.4	3.763
1550.0	3.824	34.921	270.4	3.701
1600.0	3.792	34.922	270.1	3.665
1650.0	3.766	34.926	269.7	3.635
1700.0	3.705	34.924	270.5	3.570
1750.0	3.656	34.924	270.9	3.517
1800.0	3.609	34.925	271.1	3.467
1850.0	3.570	34.926	271.4	3.423
1900.0	3.513	34.927	272.1	3.363
1950.0	3.460	34.929	272.4	3.305
2000.0	3.429	34.931	272.5	3.270
2050.0	3.382	34.933	272.9	3.219
2100.0	3.347	34.937	272.9	3.180
2150.0	3.330	34.948	272.8	3.158
2200.0	3.242	34.950	272.4	3.067
2250.0	3.178	34.950	272.1	2.999
2300.0	3.120	34.955	271.6	2.937
2350.0	3.063	34.957	270.9	2.876
2400.0	3.023	34.960	270.2	2.833
2450.0	2.983	34.962	269.9	2.788
2500.0	2.916	34.965	268.9	2.717
2550.0	2.874	34.968	269.2	2.672
2600.0	2.826	34.970	268.8	2.620
2650.0	2.795	34.976	271.1	2.584
2700.0	2.712	34.982	273.9	2.498
2717.0	2.685	34.982	274.6	2.469


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 45

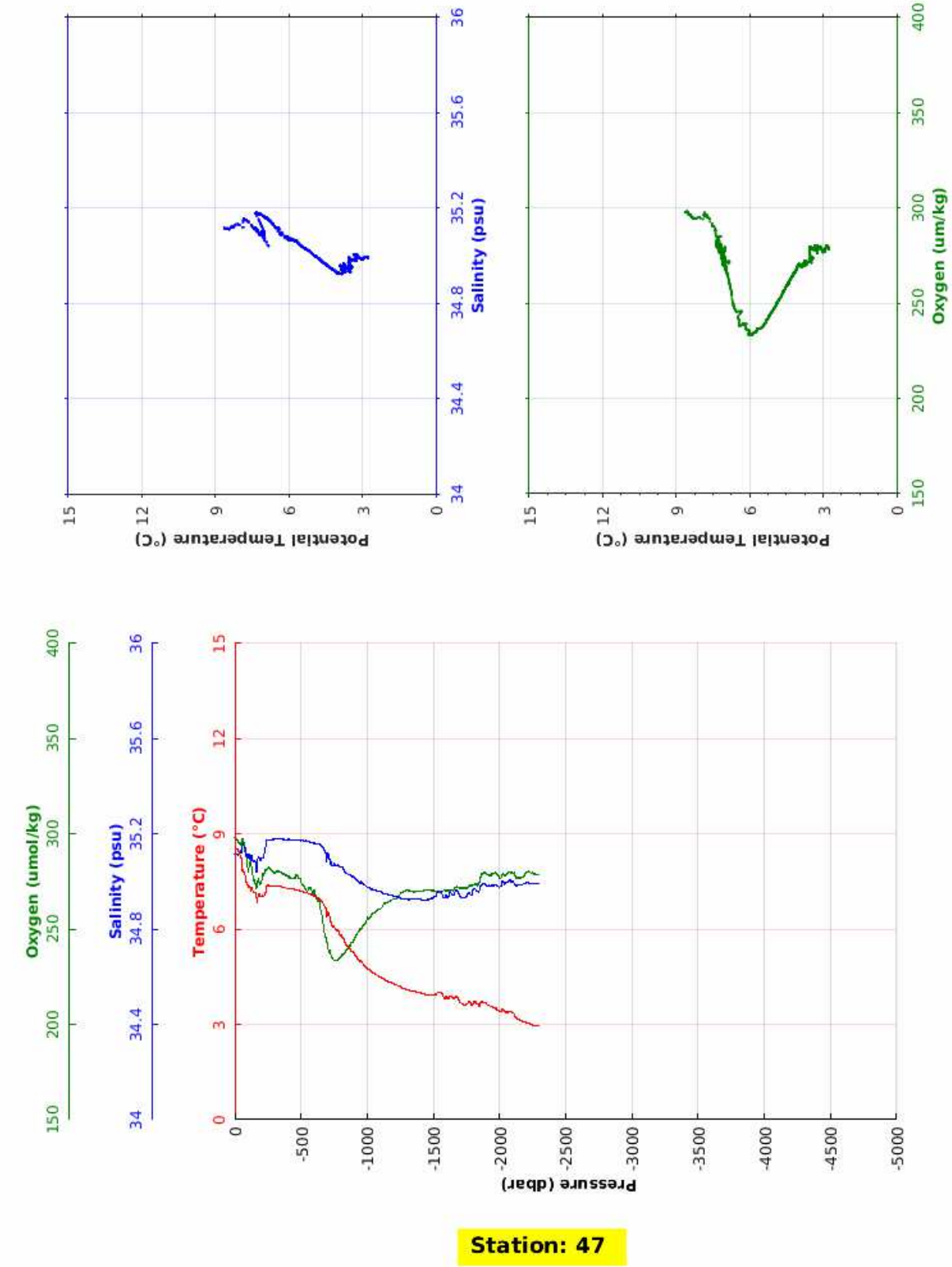
Cruise	: RREX 2015		
Station	: 46	Cast	: 1
Date	: 20/06/2015	Ship	: N/O Thalassa
Depth	: 2494 m	Organism	: IFREMER
Position	: N 60 34.22 W 021 21.62		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.706	35.029	291.7	8.706
10.0	8.658	35.040	290.9	8.657
20.0	8.583	35.045	291.7	8.581
30.0	8.569	35.078	290.8	8.566
40.0	8.438	35.107	290.5	8.434
50.0	8.412	35.107	289.4	8.407
100.0	7.623	35.114	282.5	7.613
150.0	7.324	35.083	273.0	7.309
200.0	7.162	35.078	270.0	7.143
250.0	7.327	35.127	279.0	7.302
300.0	7.299	35.134	279.3	7.270
350.0	7.298	35.150	280.7	7.264
400.0	7.290	35.160	279.0	7.251
450.0	7.263	35.164	277.1	7.219
500.0	7.210	35.161	277.4	7.161
550.0	7.201	35.167	278.8	7.148
600.0	7.158	35.164	277.4	7.100
650.0	6.943	35.134	267.3	6.880
700.0	6.758	35.116	265.2	6.691
750.0	6.527	35.093	252.2	6.456
800.0	6.249	35.081	232.6	6.175
850.0	5.836	35.048	234.1	5.760
900.0	5.523	35.026	238.1	5.445
950.0	5.379	35.030	240.6	5.297
1000.0	5.080	35.001	247.0	4.995
1050.0	4.900	34.990	251.2	4.812
1100.0	4.696	34.971	256.1	4.605
1150.0	4.625	34.971	257.9	4.530
1200.0	4.459	34.956	260.9	4.362
1250.0	4.350	34.948	263.7	4.249
1300.0	4.248	34.939	265.9	4.143
1350.0	4.165	34.933	266.9	4.057
1400.0	4.100	34.931	268.0	3.988
1450.0	4.071	34.934	268.3	3.954
1500.0	4.008	34.930	269.0	3.888
1550.0	3.945	34.926	269.7	3.821
1600.0	3.897	34.927	269.8	3.769
1650.0	3.853	34.925	269.9	3.721
1700.0	3.909	34.944	269.7	3.771
1750.0	3.903	34.951	269.6	3.761
1800.0	3.900	34.962	270.6	3.754
1850.0	3.823	34.959	270.8	3.672
1900.0	3.795	34.966	271.3	3.640
1950.0	3.730	34.965	271.8	3.571
2000.0	3.627	34.959	272.7	3.465
2050.0	3.604	34.969	274.1	3.438
2100.0	3.403	34.950	273.2	3.235
2150.0	3.338	34.955	273.6	3.167
2200.0	3.262	34.961	272.9	3.087
2250.0	3.142	34.956	271.8	2.964
2300.0	3.075	34.958	271.0	2.893
2350.0	3.048	34.970	271.7	2.862
2400.0	3.011	34.985	274.9	2.821
2450.0	2.886	34.987	277.0	2.693
2500.0	2.748	34.986	275.6	2.553
2525.0	2.718	34.984	274.7	2.520


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 46

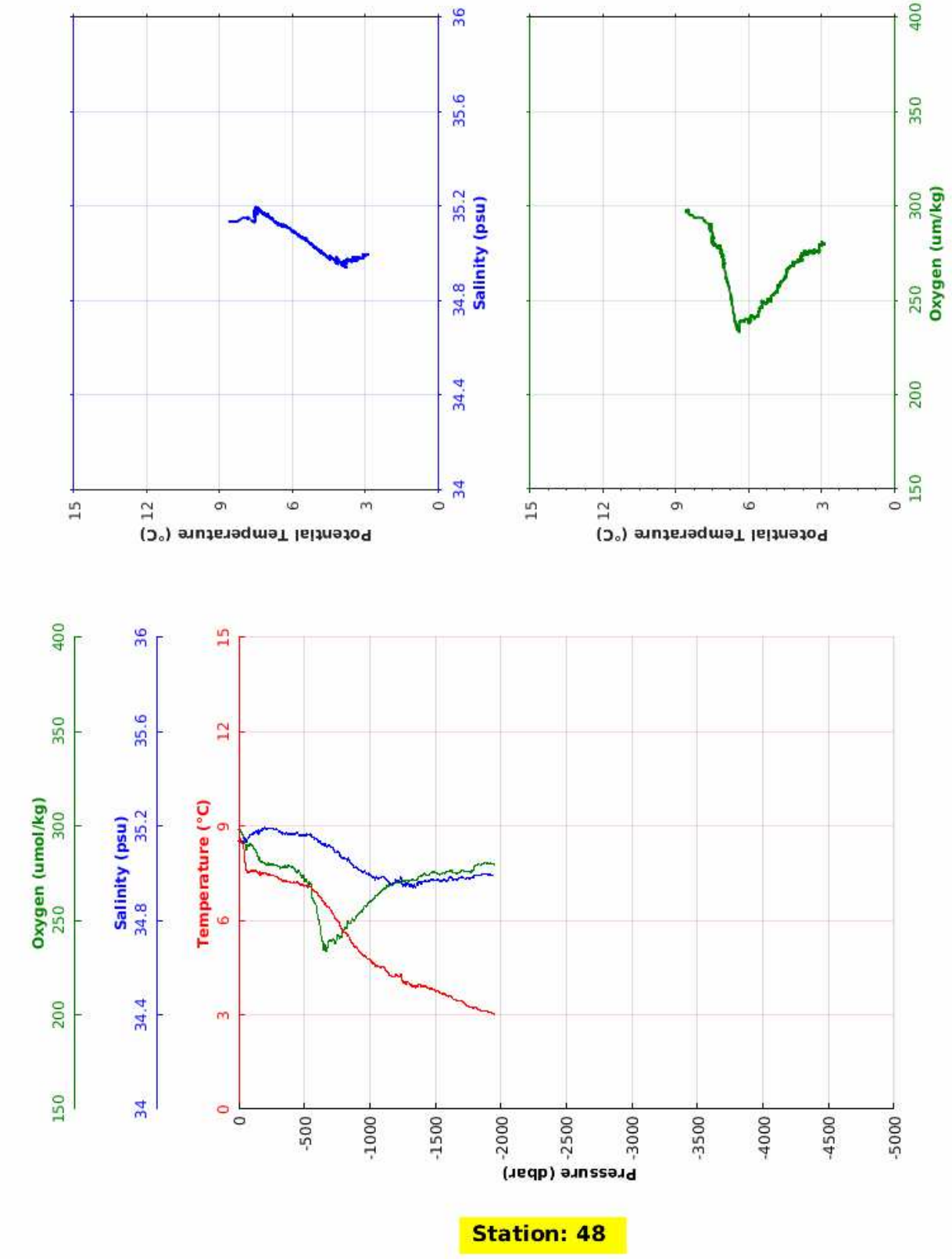
Cruise	: RREX 2015		
Station	: 47	Cast	: 1
Date	: 20/06/2015	Ship	: N/O Thalassa
Depth	: 2278 m	Organism	: IFREMER
Position	: N 60 50.39 W 021 43.16		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.639	35.115	298.0	8.639
10.0	8.542	35.114	297.8	8.541
20.0	8.512	35.115	297.7	8.510
30.0	8.432	35.112	296.2	8.428
40.0	8.323	35.120	294.8	8.319
50.0	8.208	35.128	294.4	8.203
100.0	7.305	35.100	284.7	7.296
150.0	7.145	35.086	275.1	7.130
200.0	7.034	35.092	273.9	7.015
250.0	7.384	35.177	281.9	7.359
300.0	7.358	35.177	279.3	7.329
350.0	7.342	35.180	279.9	7.308
400.0	7.292	35.177	278.1	7.253
450.0	7.257	35.177	276.8	7.213
500.0	7.195	35.171	276.3	7.146
550.0	7.144	35.171	270.0	7.091
600.0	7.056	35.163	269.4	6.998
650.0	6.908	35.152	261.4	6.845
700.0	6.476	35.104	244.1	6.411
750.0	6.119	35.080	233.7	6.051
800.0	5.807	35.060	235.3	5.736
850.0	5.480	35.035	239.0	5.406
900.0	5.249	35.020	244.0	5.172
950.0	4.968	34.994	250.3	4.888
1000.0	4.757	34.977	254.8	4.674
1050.0	4.612	34.966	258.6	4.526
1100.0	4.513	34.959	260.5	4.424
1150.0	4.377	34.947	263.8	4.285
1200.0	4.282	34.940	266.0	4.186
1250.0	4.192	34.933	268.0	4.093
1300.0	4.094	34.925	270.6	3.990
1350.0	4.053	34.927	269.7	3.946
1400.0	4.001	34.925	269.9	3.889
1450.0	3.939	34.923	270.5	3.824
1500.0	3.930	34.930	270.3	3.811
1550.0	4.026	34.960	269.4	3.901
1600.0	3.878	34.945	270.1	3.750
1650.0	3.824	34.945	270.3	3.692
1700.0	3.702	34.940	271.9	3.567
1750.0	3.638	34.937	271.7	3.500
1800.0	3.702	34.966	272.9	3.558
1850.0	3.652	34.972	274.2	3.504
1900.0	3.642	34.986	279.3	3.489
1950.0	3.521	34.983	278.7	3.365
2000.0	3.409	34.978	277.3	3.250
2050.0	3.393	34.996	278.7	3.230
2100.0	3.368	35.001	279.7	3.200
2150.0	3.147	34.986	276.9	2.978
2200.0	3.065	34.994	279.1	2.893
2250.0	2.977	34.993	279.6	2.801
2300.0	2.961	34.991	278.5	2.781
2306.0	2.961	34.991	278.6	2.780


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 47

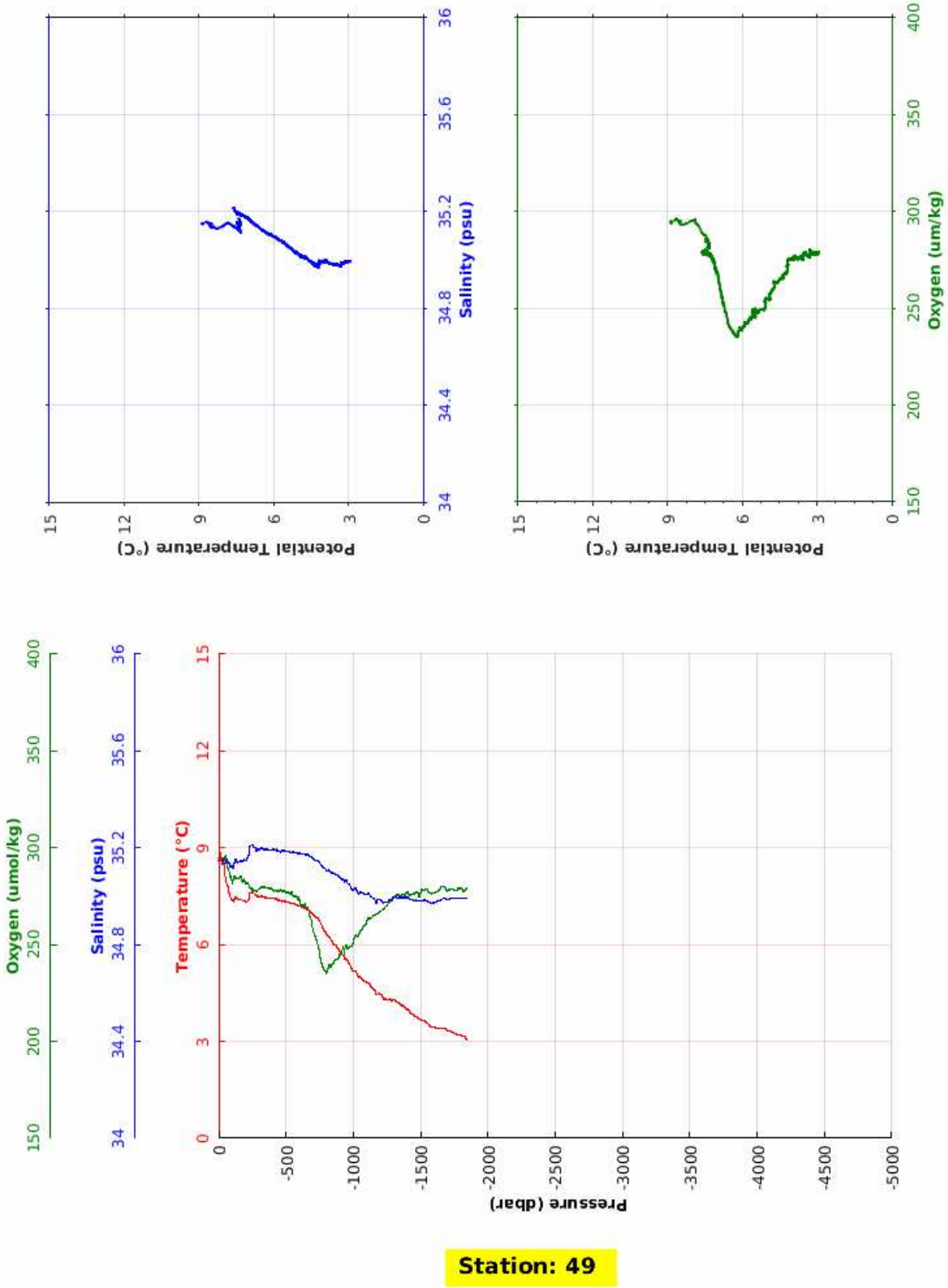
Cruise	: RREX 2015		
Station	: 48	Cast	: 1
Date	: 20/06/2015	Ship	: N/O Thalassa
Depth	: 1936 m	Organism	: IFREMER
Position	: N 61 6.66 W 022 4.88		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.573	35.135	297.9	8.573
10.0	8.579	35.136	297.5	8.578
20.0	8.477	35.136	297.5	8.475
30.0	8.450	35.136	295.7	8.447
40.0	8.228	35.138	293.7	8.224
50.0	7.814	35.146	292.6	7.809
100.0	7.570	35.164	290.4	7.560
150.0	7.462	35.165	284.2	7.448
200.0	7.503	35.191	280.6	7.484
250.0	7.455	35.192	279.9	7.430
300.0	7.375	35.184	279.0	7.346
350.0	7.257	35.170	278.6	7.223
400.0	7.208	35.166	278.5	7.169
450.0	7.217	35.173	275.0	7.173
500.0	7.083	35.157	273.6	7.034
550.0	7.076	35.166	269.7	7.023
600.0	6.859	35.144	256.9	6.802
650.0	6.569	35.119	236.0	6.508
700.0	6.346	35.116	239.3	6.281
750.0	5.986	35.089	239.6	5.918
800.0	5.648	35.066	244.2	5.577
850.0	5.379	35.045	248.5	5.306
900.0	5.126	35.025	252.3	5.050
950.0	4.878	35.001	255.2	4.799
1000.0	4.756	34.997	259.9	4.674
1050.0	4.567	34.982	263.1	4.482
1100.0	4.524	34.987	266.0	4.434
1150.0	4.261	34.959	268.3	4.170
1200.0	4.283	34.977	269.9	4.187
1250.0	4.060	34.952	270.6	3.962
1300.0	4.004	34.952	270.8	3.901
1350.0	3.892	34.943	271.1	3.787
1400.0	3.875	34.957	273.7	3.765
1450.0	3.858	34.972	273.8	3.744
1500.0	3.759	34.968	275.7	3.642
1550.0	3.672	34.970	274.9	3.551
1600.0	3.590	34.972	275.9	3.466
1650.0	3.491	34.976	275.1	3.363
1700.0	3.442	34.982	276.1	3.310
1750.0	3.285	34.980	276.0	3.151
1800.0	3.234	34.990	277.9	3.096
1850.0	3.122	34.991	279.2	2.981
1900.0	3.114	34.995	280.4	2.969
1950.0	3.016	34.993	279.7	2.868
1954.0	3.016	34.993	279.6	2.868


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 48

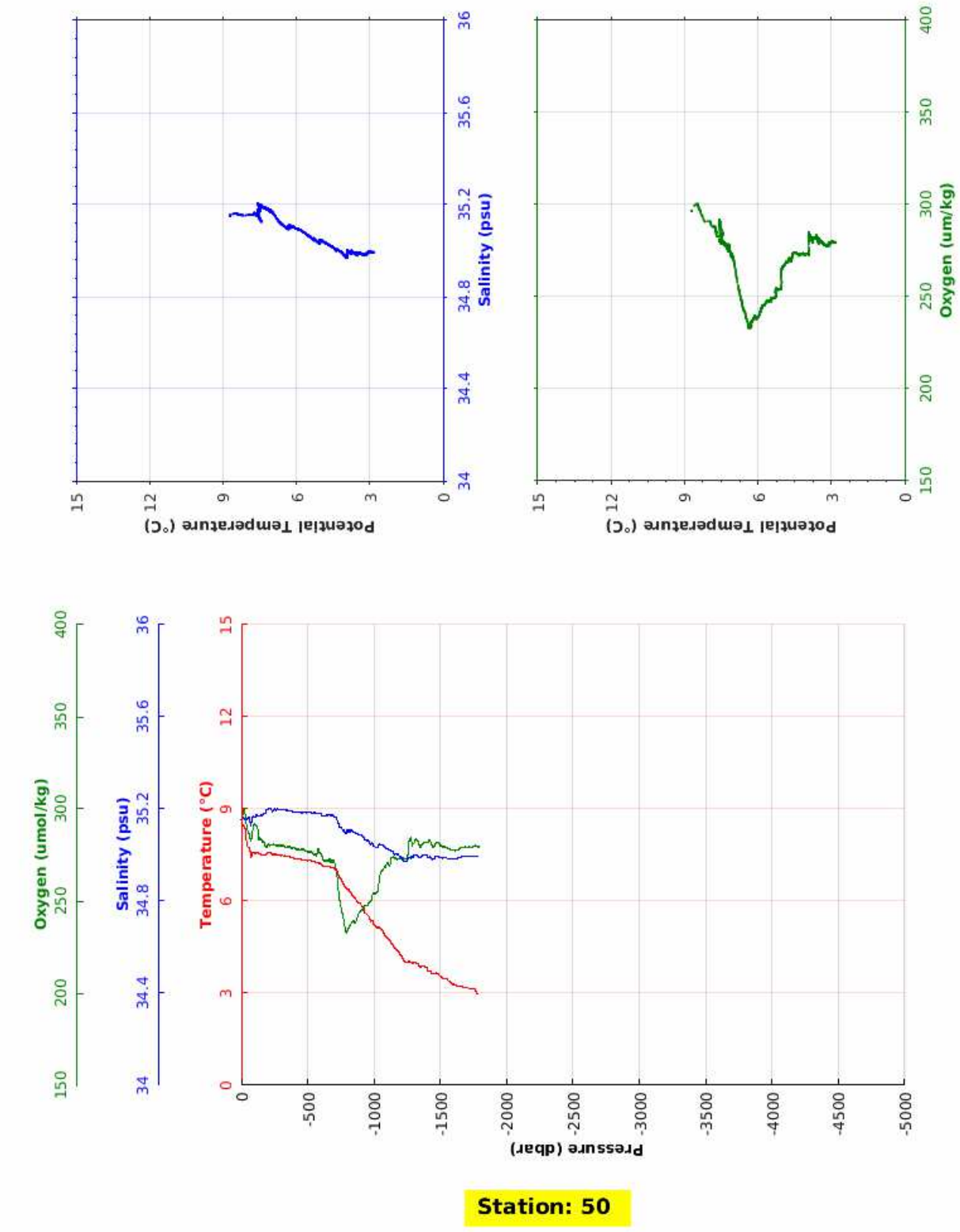
Cruise	: RREX 2015		
Station	: 49	Cast	: 1
Date	: 21/06/2015	Ship	: N/O Thalassa
Depth	: 1840 m	Organism	: IFREMER
Position	: N 61 22.77 W 022 26.24		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.859	35.149	294.7	8.859
10.0	8.857	35.149	294.2	8.856
20.0	8.641	35.154	295.9	8.639
30.0	8.504	35.134	294.1	8.501
40.0	8.417	35.137	293.3	8.413
50.0	8.072	35.138	295.0	8.067
100.0	7.395	35.123	284.3	7.385
150.0	7.381	35.140	283.9	7.366
200.0	7.332	35.146	282.6	7.313
250.0	7.629	35.213	278.8	7.604
300.0	7.483	35.192	278.6	7.453
350.0	7.478	35.197	279.4	7.444
400.0	7.424	35.191	279.0	7.384
450.0	7.364	35.185	278.1	7.319
500.0	7.326	35.185	277.1	7.277
550.0	7.268	35.182	276.6	7.214
600.0	7.198	35.179	274.1	7.139
650.0	7.094	35.170	268.4	7.031
700.0	6.942	35.156	259.4	6.874
750.0	6.729	35.141	247.9	6.657
800.0	6.334	35.110	236.2	6.260
850.0	6.056	35.096	240.1	5.978
900.0	5.793	35.080	244.7	5.713
950.0	5.551	35.062	249.3	5.467
1000.0	5.174	35.025	250.2	5.089
1050.0	4.982	35.015	256.0	4.893
1100.0	4.822	35.007	260.6	4.731
1150.0	4.610	34.994	264.6	4.515
1200.0	4.466	34.986	266.9	4.368
1250.0	4.290	34.975	270.0	4.189
1300.0	4.289	34.995	274.0	4.184
1350.0	4.151	34.994	275.6	4.043
1400.0	3.991	34.992	276.8	3.880
1450.0	3.809	34.984	276.4	3.695
1500.0	3.673	34.980	275.8	3.556
1550.0	3.576	34.981	278.7	3.456
1600.0	3.435	34.973	276.6	3.313
1650.0	3.403	34.985	279.2	3.276
1700.0	3.337	34.986	277.7	3.206
1750.0	3.261	34.991	278.7	3.127
1800.0	3.191	34.993	279.1	3.054
1850.0	3.054	34.993	279.1	2.914
1852.0	3.054	34.993	279.2	2.914


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 49

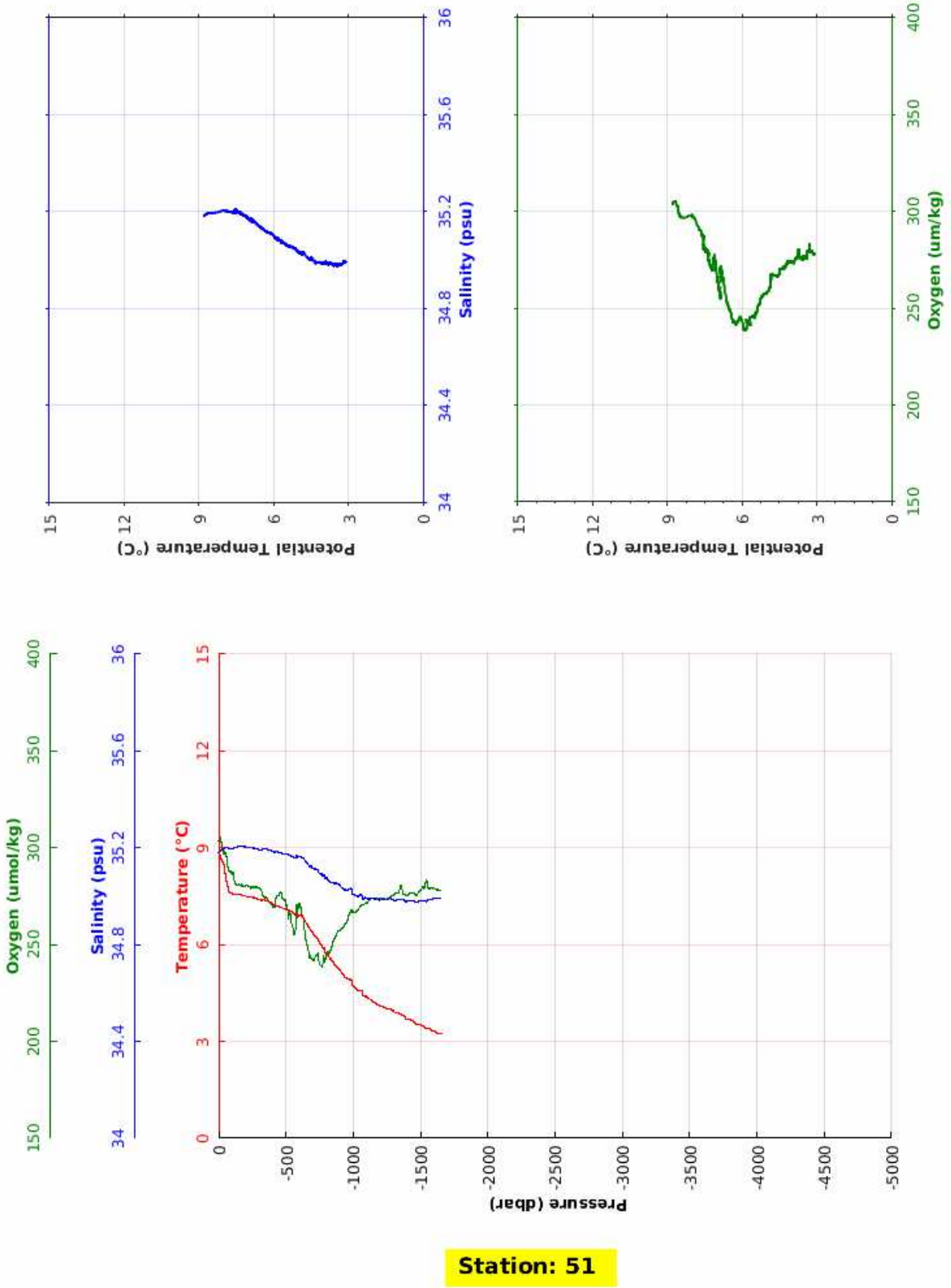
Cruise	: RREX 2015		
Station	: 50	Cast	: 1
Date	: 21/06/2015	Ship	: N/O Thalassa
Depth	: 1781 m	Organism	: IFREMER
Position	: N 61 39.02 W 022 48.06		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.705	35.153	296.6	8.705
10.0	8.496	35.162	300.2	8.495
20.0	8.432	35.160	299.1	8.430
30.0	8.318	35.155	294.9	8.315
40.0	7.938	35.155	290.4	7.934
50.0	7.762	35.159	287.2	7.757
100.0	7.584	35.166	291.7	7.574
150.0	7.511	35.172	282.7	7.496
200.0	7.580	35.200	280.9	7.560
250.0	7.531	35.200	280.6	7.506
300.0	7.482	35.196	280.2	7.452
350.0	7.448	35.194	279.4	7.414
400.0	7.392	35.187	278.9	7.353
450.0	7.359	35.186	278.4	7.315
500.0	7.321	35.185	276.6	7.272
550.0	7.291	35.185	275.8	7.237
600.0	7.218	35.181	275.5	7.159
650.0	7.114	35.172	271.6	7.050
700.0	7.083	35.173	270.9	7.014
750.0	6.719	35.120	245.8	6.647
800.0	6.358	35.098	234.1	6.284
850.0	6.147	35.099	238.0	6.069
900.0	5.886	35.088	245.2	5.805
950.0	5.558	35.063	247.9	5.474
1000.0	5.235	35.040	254.0	5.149
1050.0	5.081	35.045	266.1	4.992
1100.0	4.804	35.028	270.8	4.712
1150.0	4.500	35.004	273.6	4.406
1200.0	4.251	34.994	273.6	4.155
1250.0	4.004	34.974	274.5	3.906
1300.0	3.997	34.996	281.5	3.894
1350.0	3.860	34.987	279.3	3.755
1400.0	3.817	34.997	282.1	3.708
1450.0	3.630	34.982	280.1	3.518
1500.0	3.554	34.990	280.0	3.439
1550.0	3.452	34.986	278.8	3.334
1600.0	3.281	34.984	277.7	3.160
1650.0	3.223	34.991	278.6	3.099
1700.0	3.173	34.993	278.9	3.045
1750.0	3.136	34.995	279.6	3.004
1793.0	2.976	34.993	279.6	2.842


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 50

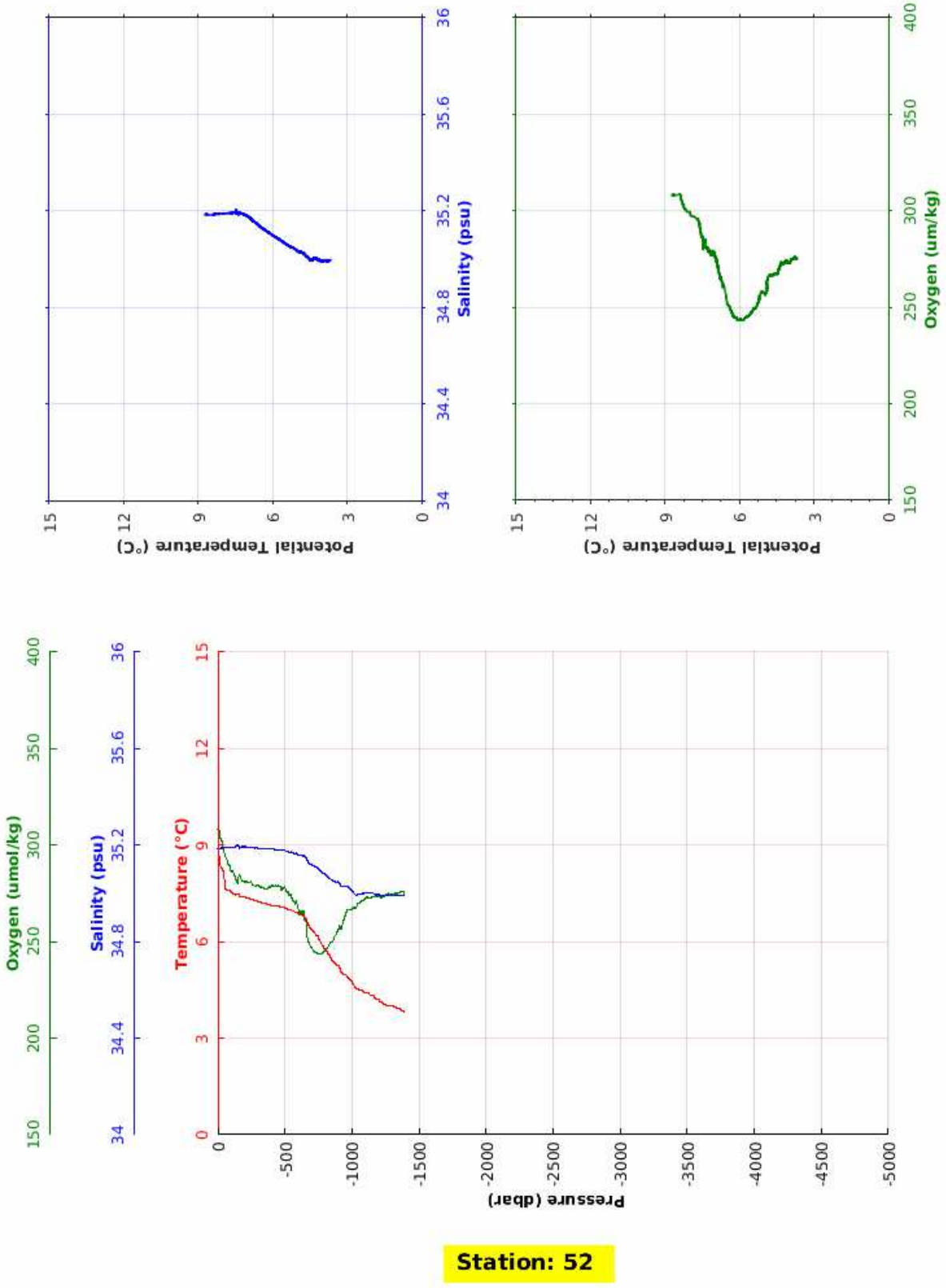
Cruise	: RREX 2015		
Station	: 51	Cast	: 1
Date	: 21/06/2015	Ship	: N/O Thalassa
Depth	: 1654 m	Organism	: IFREMER
Position	: N 61 55.17 W 023 9.63		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.790	35.183	303.8	8.790
10.0	8.783	35.184	304.2	8.782
20.0	8.658	35.192	304.5	8.655
30.0	8.567	35.193	300.4	8.564
40.0	8.494	35.194	297.2	8.490
50.0	8.186	35.199	297.5	8.181
100.0	7.581	35.197	286.7	7.571
150.0	7.569	35.207	280.7	7.554
200.0	7.507	35.203	280.3	7.488
250.0	7.477	35.202	279.6	7.452
300.0	7.404	35.193	279.1	7.374
350.0	7.368	35.196	274.5	7.334
400.0	7.259	35.185	270.5	7.220
450.0	7.179	35.182	275.2	7.135
500.0	7.100	35.175	272.9	7.052
550.0	6.979	35.163	260.0	6.926
600.0	6.914	35.166	271.0	6.856
650.0	6.670	35.142	253.5	6.608
700.0	6.349	35.117	243.1	6.284
750.0	6.016	35.093	241.1	5.949
800.0	5.762	35.079	243.8	5.691
850.0	5.460	35.058	250.0	5.387
900.0	5.223	35.047	257.2	5.147
950.0	4.952	35.025	260.9	4.873
1000.0	4.710	35.008	267.0	4.628
1050.0	4.570	35.003	269.0	4.485
1100.0	4.373	34.990	271.3	4.285
1150.0	4.233	34.990	274.0	4.141
1200.0	4.109	34.984	274.2	4.015
1250.0	4.026	34.987	273.3	3.928
1300.0	3.946	34.987	275.7	3.844
1350.0	3.855	34.988	278.8	3.750
1400.0	3.685	34.977	275.0	3.577
1450.0	3.623	34.981	276.7	3.511
1500.0	3.518	34.982	277.9	3.404
1550.0	3.398	34.980	283.0	3.281
1600.0	3.317	34.990	279.1	3.196
1650.0	3.239	34.992	278.2	3.114
1664.0	3.240	34.991	277.8	3.114


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 51

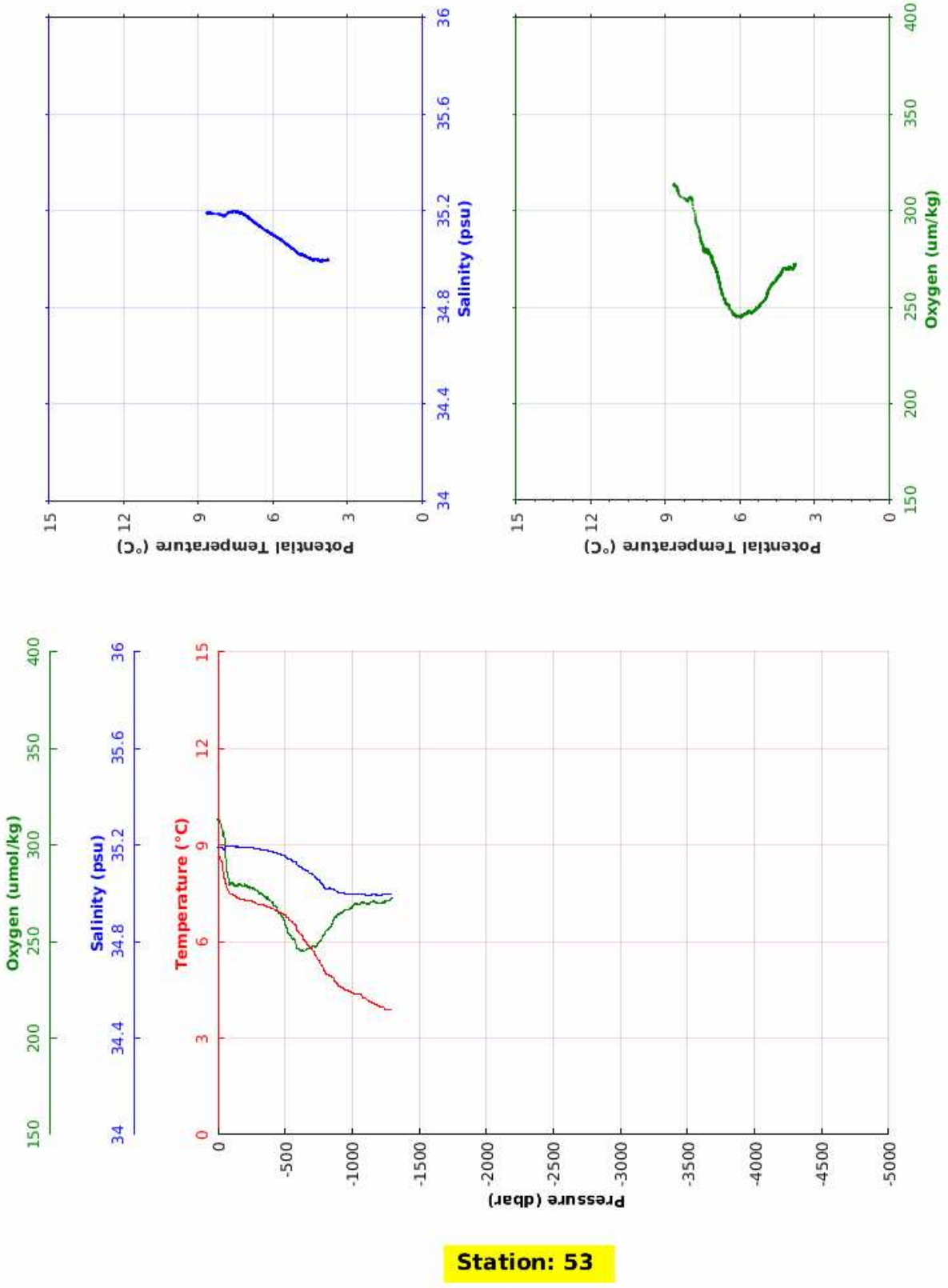
Cruise	: RREX 2015		
Station	: 52	Cast	: 1
Date	: 21/06/2015	Ship	: N/O Thalassa
Depth	: 1389 m	Organism	: IFREMER
Position	: N 62 11.35 W 023 31.32		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.645	35.185	308.2	8.645
10.0	8.637	35.186	308.1	8.636
20.0	8.342	35.186	305.4	8.339
30.0	8.269	35.189	303.2	8.265
40.0	8.171	35.187	300.6	8.167
50.0	7.829	35.190	297.0	7.824
100.0	7.544	35.193	287.1	7.534
150.0	7.489	35.202	280.7	7.474
200.0	7.379	35.192	281.4	7.360
250.0	7.323	35.191	281.0	7.299
300.0	7.248	35.187	279.5	7.219
350.0	7.185	35.185	277.5	7.151
400.0	7.135	35.183	278.4	7.097
450.0	7.104	35.182	279.0	7.061
500.0	7.053	35.178	278.3	7.005
550.0	6.980	35.172	274.7	6.927
600.0	6.882	35.162	268.0	6.825
650.0	6.763	35.152	262.8	6.701
700.0	6.357	35.120	246.9	6.292
750.0	6.152	35.105	243.6	6.083
800.0	5.782	35.081	245.1	5.711
850.0	5.445	35.057	249.7	5.372
900.0	5.269	35.048	256.1	5.192
950.0	4.974	35.031	262.7	4.895
1000.0	4.728	35.012	266.7	4.646
1050.0	4.497	34.996	269.8	4.413
1100.0	4.421	35.001	272.0	4.333
1150.0	4.319	35.001	272.7	4.227
1200.0	4.200	34.996	274.2	4.105
1250.0	4.033	34.993	274.3	3.935
1300.0	3.998	34.993	274.8	3.895
1350.0	3.940	34.993	275.2	3.834
1393.0	3.785	34.996	275.2	3.677


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 52

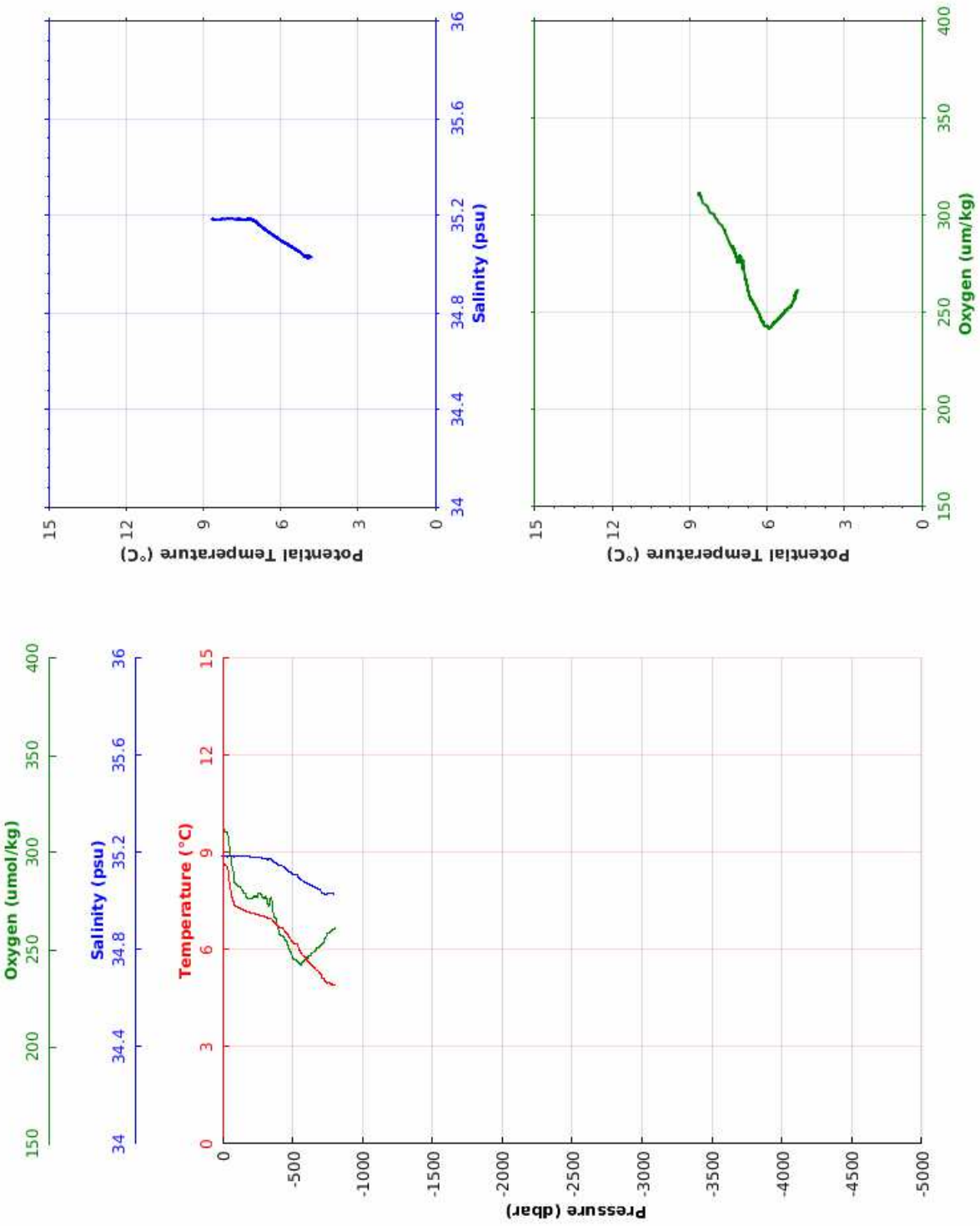
Cruise	: RREX 2015		
Station	: 53	Cast	: 1
Date	: 21/06/2015	Ship	: N/O Thalassa
Depth	: 1301 m	Organism	: IFREMER
Position	: N 62 27.60 W 023 52.71		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.643	35.191	313.6	8.643
10.0	8.640	35.191	313.6	8.639
20.0	8.543	35.190	312.5	8.541
30.0	8.496	35.191	310.7	8.493
40.0	8.149	35.186	305.5	8.145
50.0	7.951	35.180	306.4	7.946
100.0	7.482	35.197	279.7	7.473
150.0	7.372	35.194	278.7	7.358
200.0	7.301	35.191	279.0	7.282
250.0	7.261	35.190	277.9	7.237
300.0	7.168	35.184	276.5	7.139
350.0	7.114	35.180	273.1	7.081
400.0	7.041	35.174	271.4	7.003
450.0	6.920	35.164	266.2	6.877
500.0	6.833	35.156	261.5	6.786
550.0	6.634	35.140	252.6	6.582
600.0	6.293	35.116	246.4	6.238
650.0	6.016	35.098	244.9	5.958
700.0	5.764	35.083	247.2	5.702
750.0	5.415	35.056	249.1	5.351
800.0	5.038	35.023	254.2	4.972
850.0	4.919	35.020	258.1	4.849
900.0	4.615	35.004	264.0	4.543
950.0	4.496	35.000	266.5	4.420
1000.0	4.420	34.998	267.1	4.340
1050.0	4.359	35.000	269.6	4.276
1100.0	4.247	34.996	270.1	4.160
1150.0	4.111	34.995	270.6	4.021
1200.0	3.995	34.994	270.2	3.902
1250.0	3.909	34.996	271.0	3.812
1300.0	3.886	34.997	272.2	3.785
1305.0	3.886	34.997	272.2	3.784


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 53

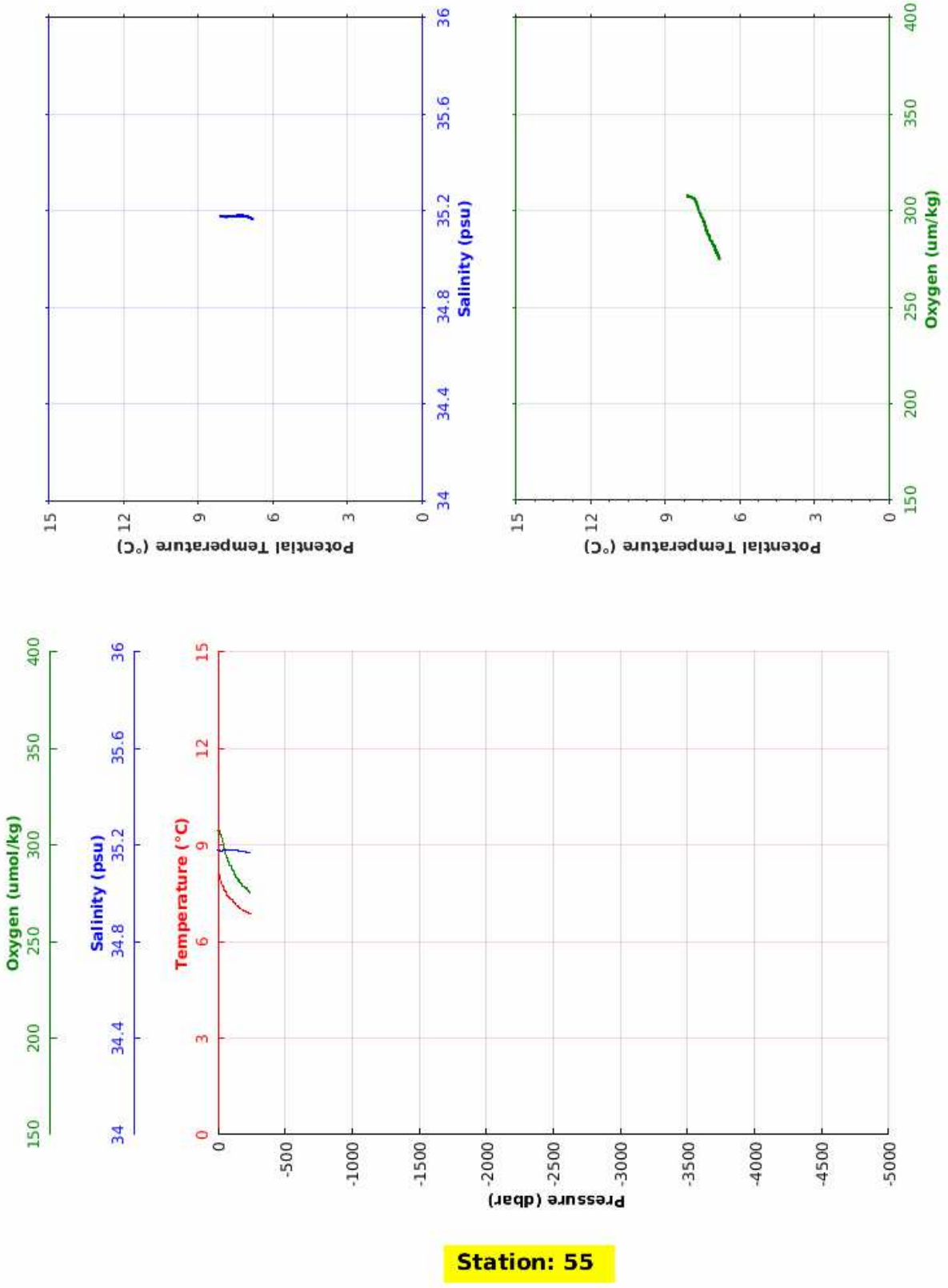
Cruise	: RREX 2015
Station	: 54
Cast	: 1
Date	: 21/06/2015
Ship	: N/O Thalassa
Depth	: 805 m
Organism	: IFREMER
Position	: N 62 43.80 W 024 14.48

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.631	35.186	311.4	8.631
10.0	8.632	35.185	311.1	8.631
20.0	8.628	35.185	310.6	8.626
30.0	8.581	35.184	310.0	8.578
40.0	8.350	35.185	305.2	8.345
50.0	8.059	35.187	300.4	8.054
100.0	7.349	35.185	283.5	7.340
150.0	7.214	35.186	279.2	7.199
200.0	7.148	35.183	276.3	7.129
250.0	7.085	35.181	278.2	7.061
300.0	7.025	35.177	277.2	6.997
350.0	6.952	35.172	274.1	6.919
400.0	6.729	35.151	258.9	6.691
450.0	6.545	35.136	254.4	6.504
500.0	6.237	35.112	245.5	6.192
550.0	5.998	35.095	242.6	5.950
600.0	5.692	35.076	245.6	5.640
650.0	5.461	35.060	249.2	5.406
700.0	5.252	35.045	252.0	5.193
750.0	4.983	35.032	258.5	4.921
800.0	4.887	35.030	261.6	4.822
801.0	4.880	35.030	261.5	4.815


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 54

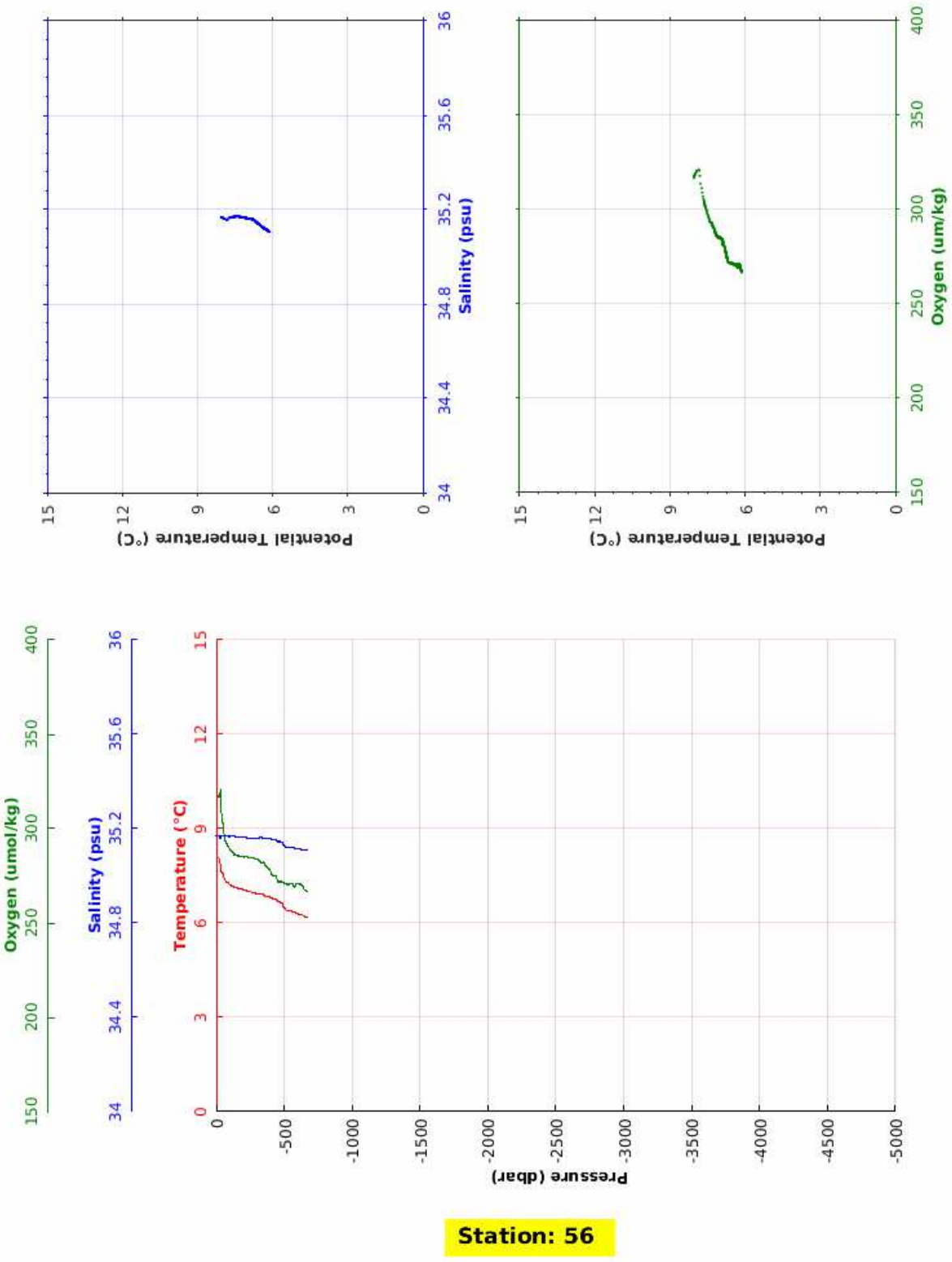
Cruise	: RREX 2015		
Station	: 55	Cast	: 1
Date	: 21/06/2015	Ship	: N/O Thalassa
Depth	: 258 m	Organism	: IFREMER
Position	: N 63 0.02 W 024 45.14		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.085	35.179	307.8	8.085
10.0	8.087	35.179	307.4	8.086
20.0	7.900	35.175	306.7	7.898
30.0	7.782	35.177	305.0	7.779
40.0	7.698	35.177	302.0	7.694
50.0	7.577	35.178	298.4	7.572
100.0	7.326	35.181	289.5	7.317
150.0	7.078	35.177	282.5	7.064
200.0	6.947	35.173	278.6	6.929
247.0	6.841	35.166	274.9	6.818


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 55

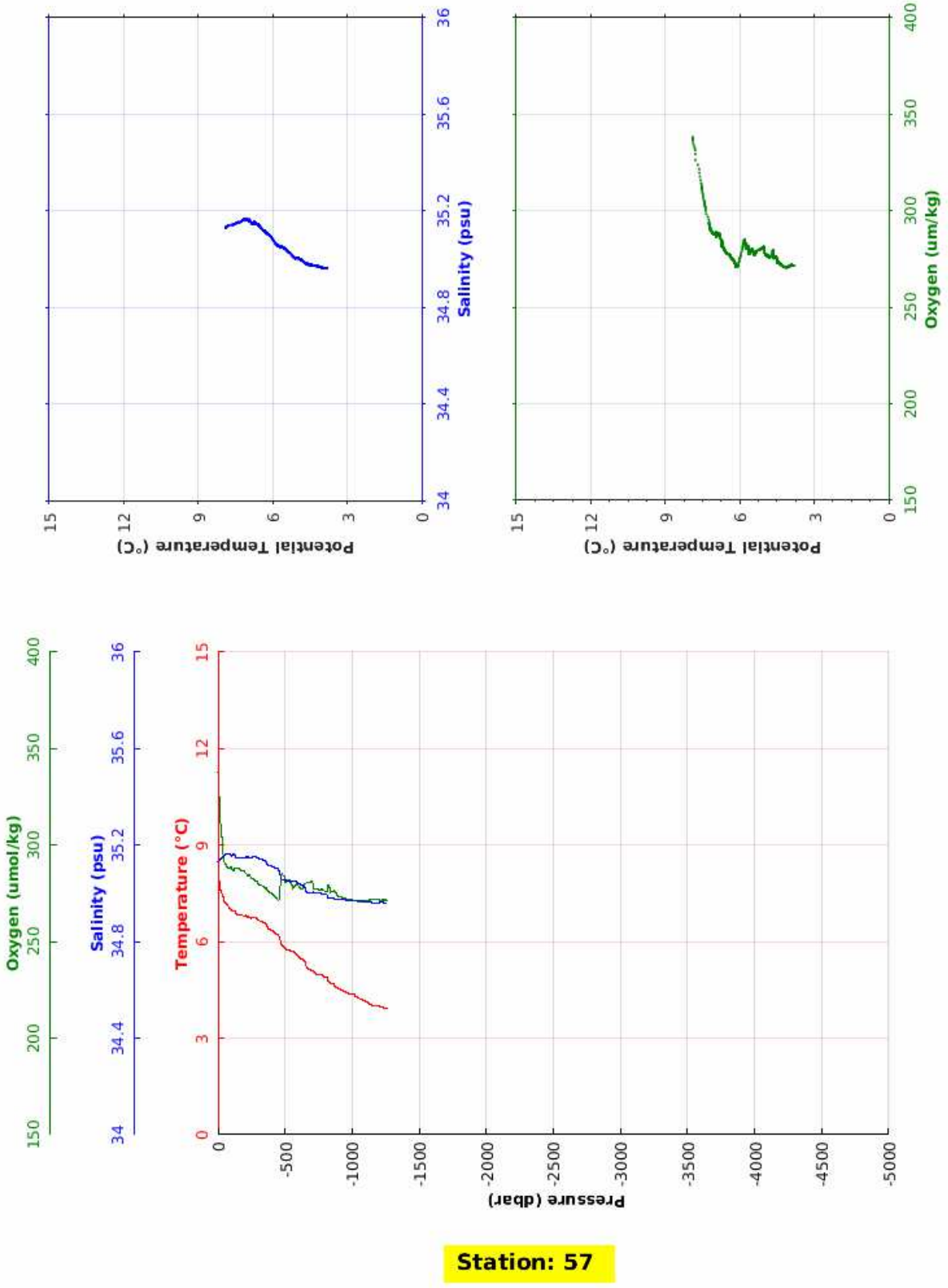
Cruise	: RREX 2015		
Station	: 56	Cast	: 1
Date	: 22/06/2015	Ship	: N/O Thalassa
Depth	: 683 m	Organism	: IFREMER
Position	: N 62 59.93 W 025 21.81		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.055	35.168	317.5	8.055
10.0	8.057	35.168	317.3	8.056
20.0	8.051	35.168	317.1	8.049
30.0	7.828	35.158	320.7	7.825
40.0	7.631	35.168	303.3	7.627
50.0	7.547	35.170	299.7	7.542
100.0	7.209	35.167	288.5	7.200
150.0	7.124	35.165	285.8	7.110
200.0	7.063	35.163	285.1	7.044
250.0	6.992	35.161	284.4	6.969
300.0	6.939	35.161	284.0	6.911
350.0	6.891	35.160	282.0	6.858
400.0	6.804	35.157	276.3	6.767
450.0	6.697	35.148	271.8	6.655
500.0	6.475	35.128	270.9	6.430
550.0	6.381	35.121	270.7	6.331
600.0	6.309	35.115	271.1	6.254
650.0	6.207	35.108	267.5	6.148
679.0	6.195	35.107	NaN	6.133


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 56

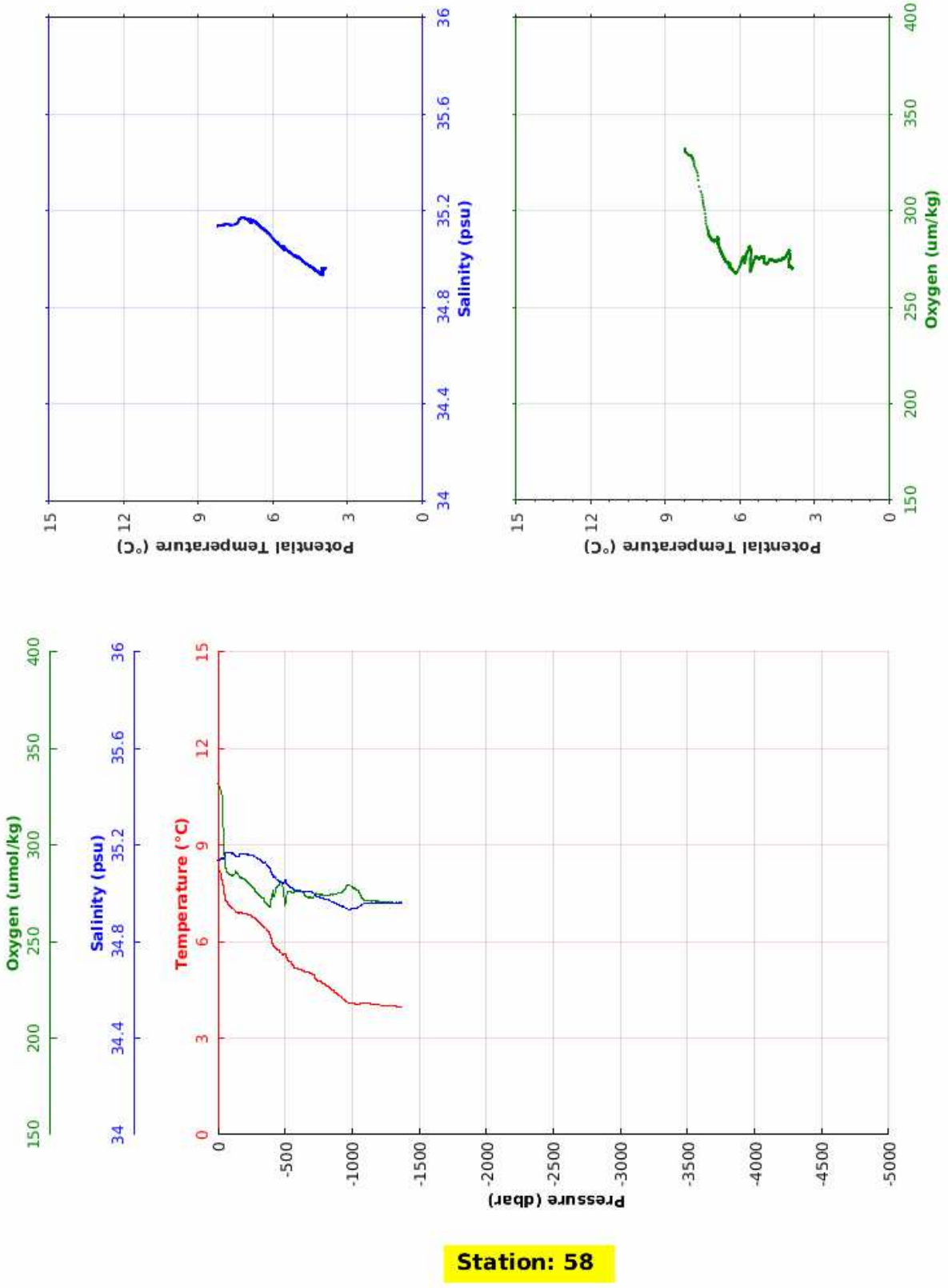
Cruise	: RREX 2015		
Station	: 57	Cast	: 1
Date	: 22/06/2015	Ship	: N/O Thalassa
Depth	: 1265 m	Organism	: IFREMER
Position	: N 62 59.99 W 026 7.60		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.885	35.130	337.8	7.885
10.0	7.878	35.133	334.9	7.877
20.0	7.584	35.142	315.8	7.582
30.0	7.490	35.148	308.0	7.487
40.0	7.381	35.152	301.1	7.377
50.0	7.225	35.160	292.7	7.220
100.0	6.958	35.156	288.9	6.949
150.0	6.831	35.147	287.9	6.817
200.0	6.812	35.148	286.8	6.794
250.0	6.735	35.149	283.4	6.712
300.0	6.687	35.147	280.8	6.659
350.0	6.574	35.137	278.3	6.542
400.0	6.348	35.113	275.5	6.312
450.0	6.217	35.104	272.0	6.176
500.0	5.819	35.054	283.6	5.776
550.0	5.704	35.049	280.2	5.657
600.0	5.557	35.043	280.1	5.506
650.0	5.368	35.026	279.2	5.313
700.0	5.095	35.005	281.4	5.037
750.0	4.986	35.001	277.0	4.924
800.0	4.909	34.996	276.3	4.843
850.0	4.693	34.981	275.9	4.625
900.0	4.552	34.977	273.3	4.480
950.0	4.431	34.974	272.4	4.356
1000.0	4.374	34.973	271.8	4.294
1050.0	4.260	34.970	270.8	4.178
1100.0	4.152	34.967	271.0	4.066
1150.0	4.024	34.962	271.9	3.935
1200.0	3.993	34.962	271.8	3.900
1250.0	3.939	34.962	271.6	3.842
1268.0	3.928	34.962	271.8	3.830


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 57

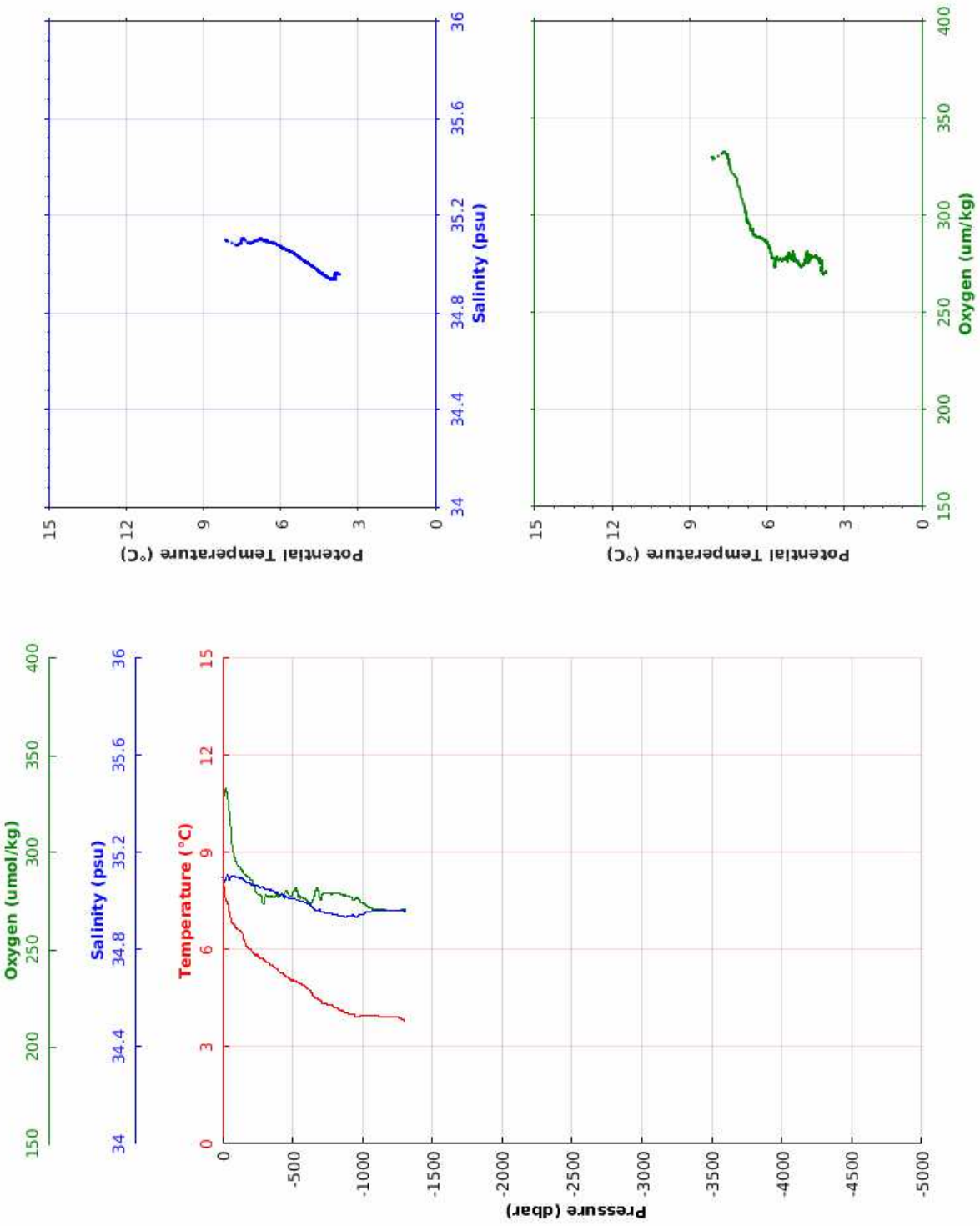
Cruise	: RREX 2015		
Station	: 58	Cast	: 1
Date	: 22/06/2015	Ship	: N/O Thalassa
Depth	: 1376 m	Organism	: IFREMER
Position	: N 63 0.06 W 026 53.51		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.221	35.138	332.0	8.221
10.0	8.221	35.138	331.8	8.220
20.0	8.141	35.140	329.9	8.139
30.0	7.923	35.144	327.6	7.920
40.0	7.713	35.141	319.7	7.709
50.0	7.451	35.149	301.9	7.446
100.0	7.085	35.168	284.8	7.076
150.0	6.898	35.154	285.4	6.884
200.0	6.878	35.162	282.7	6.859
250.0	6.799	35.159	279.2	6.776
300.0	6.636	35.146	274.8	6.609
350.0	6.435	35.126	271.9	6.404
400.0	6.033	35.086	271.2	5.998
450.0	5.740	35.055	278.8	5.702
500.0	5.613	35.050	272.0	5.571
550.0	5.295	35.023	275.6	5.249
600.0	5.149	35.015	276.1	5.099
650.0	5.069	35.010	274.6	5.016
700.0	4.994	35.006	272.6	4.937
750.0	4.779	34.986	274.7	4.719
800.0	4.673	34.978	273.9	4.609
850.0	4.501	34.967	274.4	4.434
900.0	4.340	34.954	275.4	4.269
950.0	4.168	34.941	277.6	4.095
1000.0	4.096	34.936	278.8	4.019
1050.0	4.059	34.942	276.4	3.978
1100.0	4.102	34.960	271.4	4.016
1150.0	4.061	34.959	271.2	3.972
1200.0	4.043	34.960	270.9	3.949
1250.0	4.027	34.960	270.8	3.928
1300.0	4.004	34.962	270.4	3.902
1350.0	3.981	34.962	270.3	3.875
1380.0	3.966	34.962	270.2	3.857


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 58

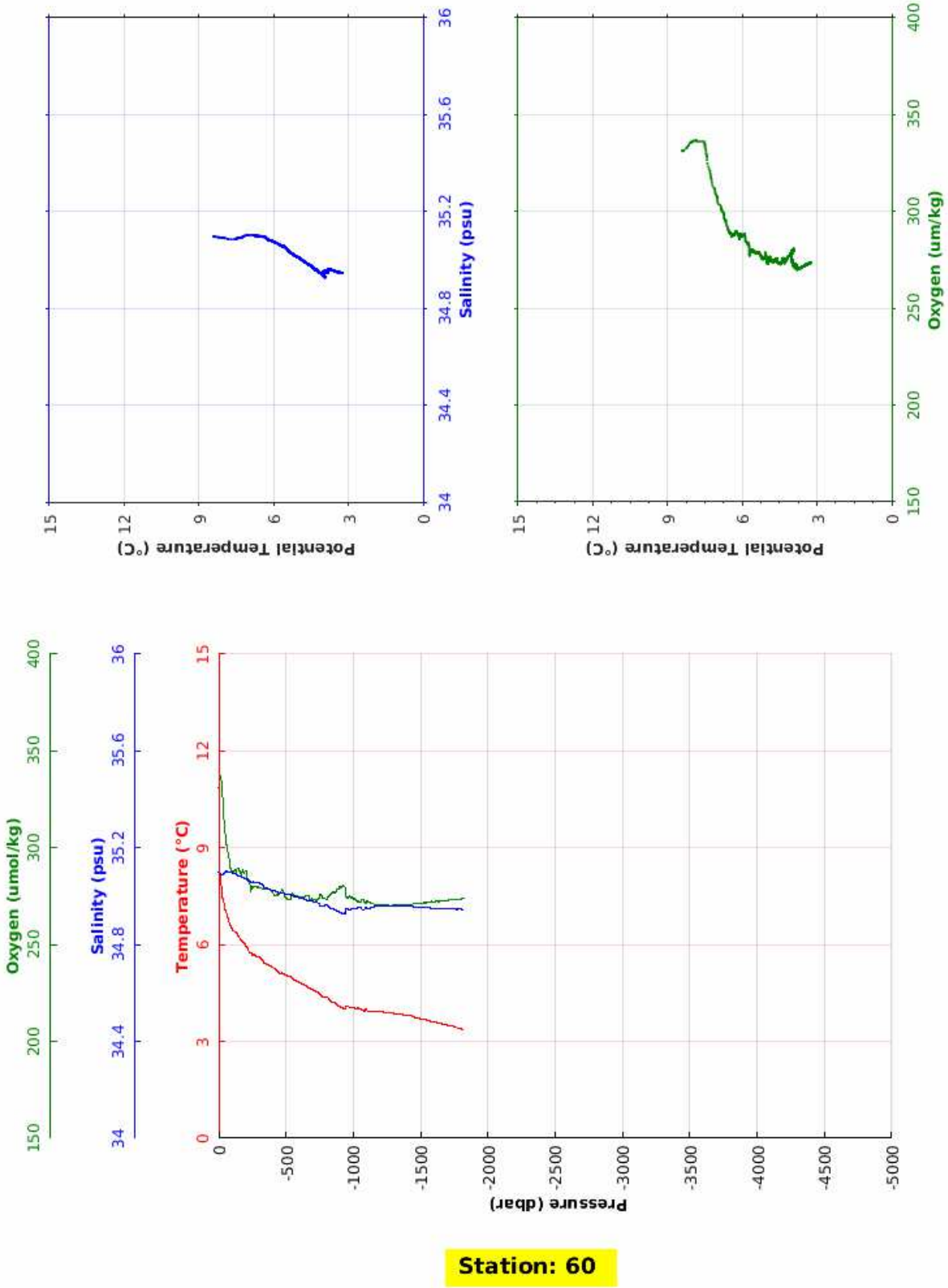
Cruise	: RREX 2015		
Station	: 59	Cast	: 1
Date	: 22/06/2015	Ship	: N/O Thalassa
Depth	: 1305 m	Organism	: IFREMER
Position	: N 62 59.95 W 027 39.38		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.114	35.099	330.3	8.114
10.0	7.894	35.088	330.7	7.893
20.0	7.592	35.085	331.9	7.590
30.0	7.507	35.101	329.2	7.505
40.0	7.426	35.107	323.9	7.422
50.0	7.159	35.088	317.0	7.154
100.0	6.650	35.098	293.9	6.641
150.0	6.343	35.090	288.9	6.330
200.0	6.012	35.072	286.1	5.995
250.0	5.836	35.064	278.5	5.815
300.0	5.683	35.056	276.8	5.658
350.0	5.523	35.047	277.3	5.494
400.0	5.336	35.031	277.7	5.303
450.0	5.197	35.019	280.4	5.160
500.0	5.070	35.011	279.6	5.029
550.0	4.965	35.003	277.0	4.921
600.0	4.820	34.992	275.1	4.772
650.0	4.584	34.972	276.9	4.533
700.0	4.438	34.963	275.8	4.383
750.0	4.306	34.951	278.9	4.248
800.0	4.194	34.943	279.0	4.133
850.0	4.132	34.940	278.2	4.067
900.0	4.024	34.937	277.4	3.956
950.0	3.945	34.937	276.5	3.873
1000.0	3.954	34.946	274.0	3.878
1050.0	3.970	34.957	271.6	3.890
1100.0	3.950	34.961	270.7	3.865
1150.0	3.932	34.962	270.6	3.844
1200.0	3.920	34.962	270.3	3.827
1250.0	3.906	34.962	270.2	3.809
1300.0	3.810	34.959	270.8	3.710
1309.0	3.803	34.959	271.0	3.702


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 59

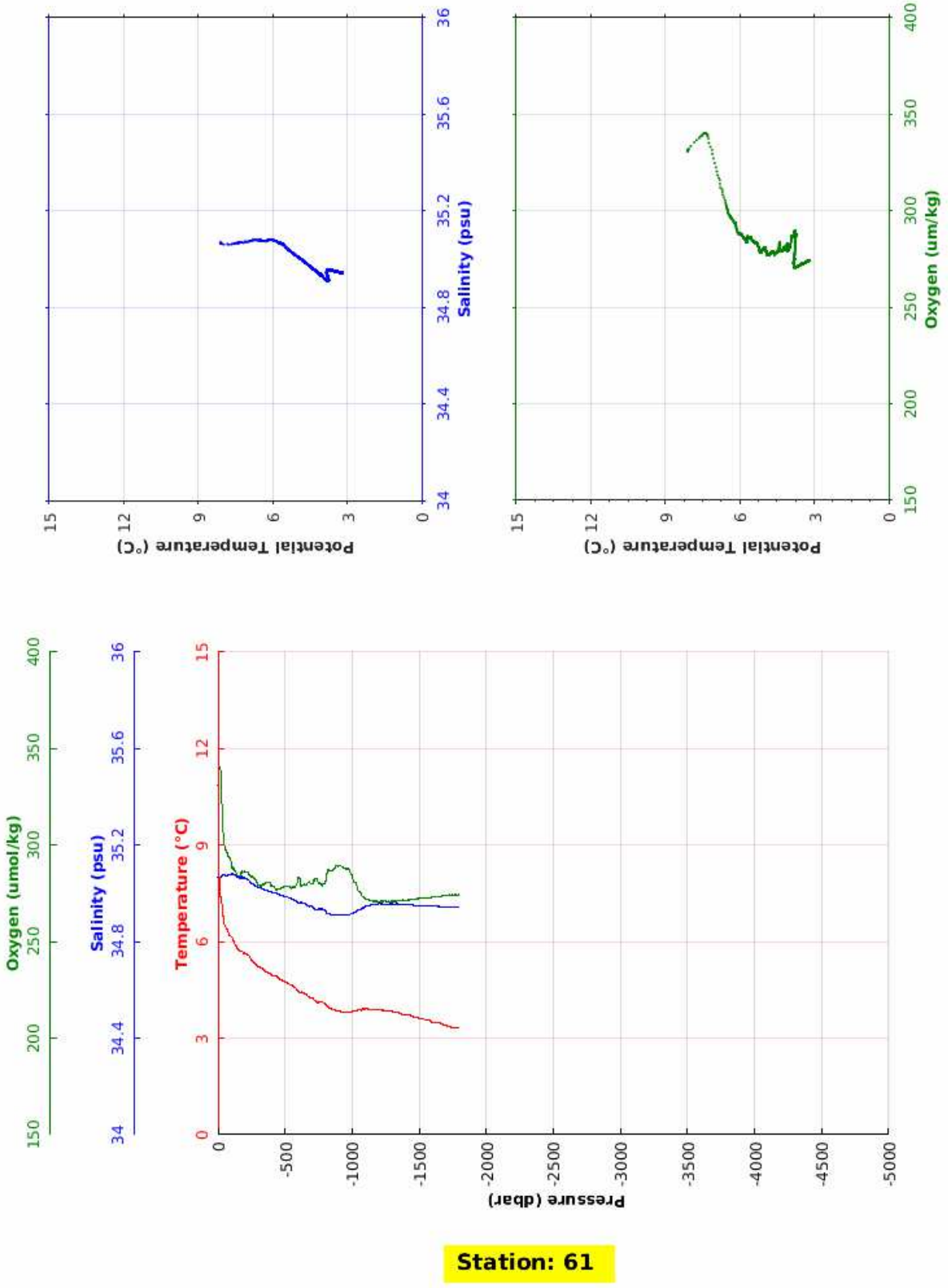
Cruise : RREX 2015			
Station : 60	Cast : 1		
Date : 22/06/2015	Ship : N/O Thalassa		
Depth : 1814 m	Organism : IFREMER		
Position : N 63 0.03 W 028 25.11			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	8.389	35.097	331.4	8.389
10.0	8.138	35.093	334.5	8.137
20.0	7.814	35.086	336.1	7.812
30.0	7.455	35.090	330.1	7.452
40.0	7.284	35.093	318.8	7.280
50.0	7.081	35.101	309.2	7.076
100.0	6.485	35.097	288.7	6.476
150.0	6.240	35.084	289.5	6.227
200.0	5.981	35.073	287.8	5.964
250.0	5.674	35.055	279.5	5.653
300.0	5.612	35.056	279.7	5.587
350.0	5.418	35.036	278.9	5.389
400.0	5.304	35.026	277.6	5.271
450.0	5.129	35.013	275.9	5.093
500.0	5.060	35.010	274.2	5.019
550.0	4.939	35.002	276.6	4.895
600.0	4.833	34.995	274.0	4.785
650.0	4.718	34.986	275.2	4.667
700.0	4.602	34.978	273.5	4.546
750.0	4.473	34.968	274.2	4.415
800.0	4.373	34.963	273.4	4.311
850.0	4.214	34.947	277.0	4.148
900.0	4.076	34.933	279.6	4.008
950.0	4.099	34.948	275.4	4.026
1000.0	4.048	34.948	273.9	3.972
1050.0	4.026	34.953	272.1	3.945
1100.0	3.988	34.954	271.3	3.903
1150.0	3.945	34.956	271.1	3.856
1200.0	3.925	34.958	270.4	3.832
1250.0	3.902	34.959	270.3	3.805
1300.0	3.871	34.960	270.3	3.770
1350.0	3.840	34.960	270.5	3.735
1400.0	3.814	34.960	270.6	3.705
1450.0	3.752	34.956	271.2	3.639
1500.0	3.706	34.955	271.5	3.589
1550.0	3.662	34.954	271.7	3.542
1600.0	3.604	34.951	272.2	3.479
1650.0	3.562	34.950	272.5	3.433
1700.0	3.508	34.949	272.8	3.376
1750.0	3.464	34.948	273.0	3.328
1800.0	3.404	34.947	273.4	3.264
1826.0	3.375	34.945	273.6	3.233


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 60

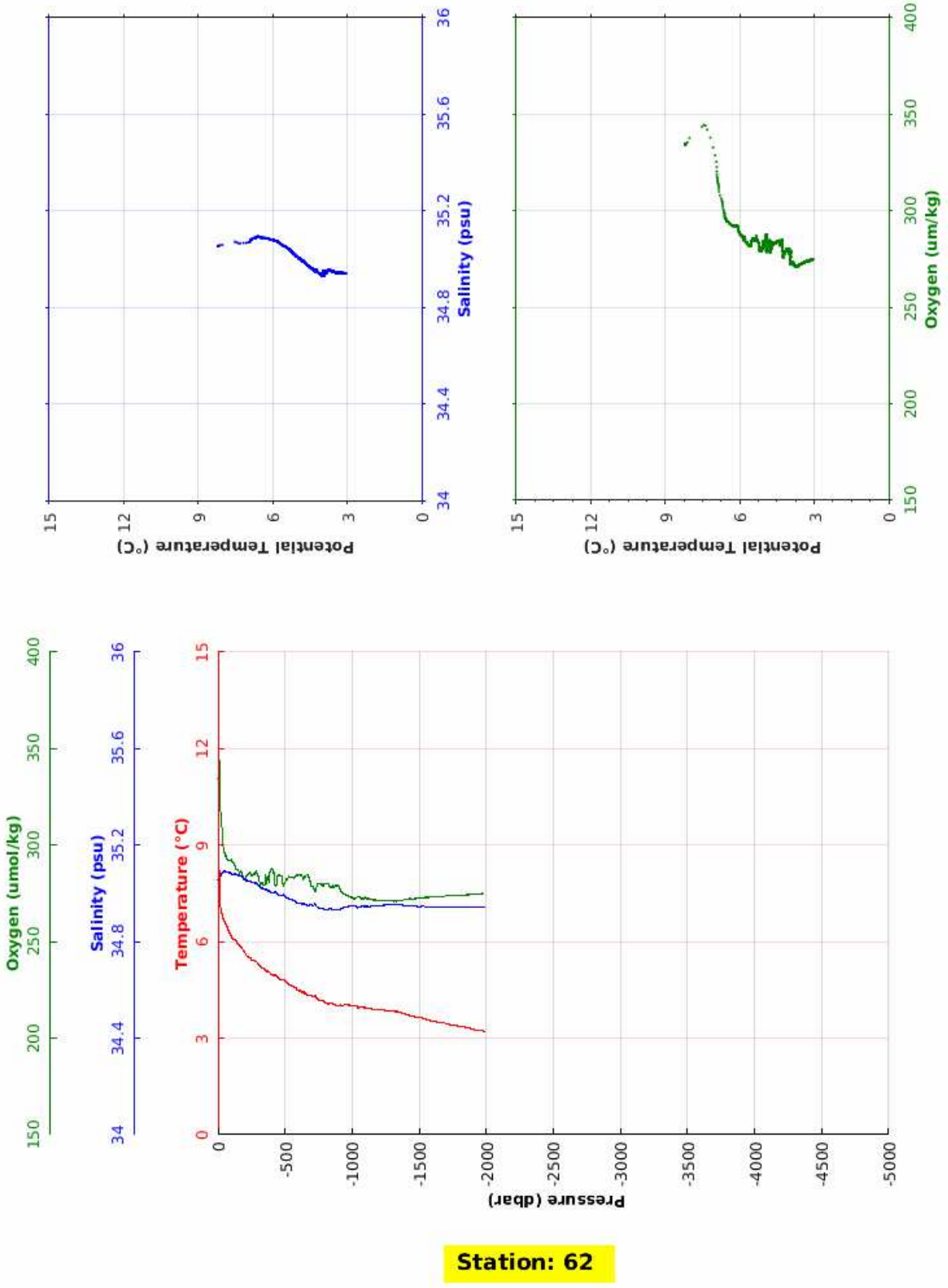
Cruise	: RREX 2015		
Station	: 61	Cast	: 1
Date	: 22/06/2015	Ship	: N/O Thalassa
Depth	: 1795 m	Organism	: IFREMER
Position	: N 62 59.99 W 029 10.91		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.109	35.067	331.1	8.109
10.0	7.977	35.061	333.6	7.976
20.0	7.400	35.067	340.2	7.398
30.0	7.125	35.072	331.6	7.122
40.0	6.789	35.078	312.2	6.785
50.0	6.520	35.078	301.5	6.516
100.0	6.165	35.080	292.4	6.156
150.0	5.767	35.067	284.4	5.754
200.0	5.639	35.065	286.4	5.623
250.0	5.436	35.042	283.7	5.415
300.0	5.233	35.026	279.6	5.208
350.0	5.102	35.016	279.9	5.074
400.0	4.980	35.007	279.0	4.948
450.0	4.864	34.997	277.4	4.829
500.0	4.759	34.988	278.8	4.719
550.0	4.646	34.980	277.4	4.603
600.0	4.454	34.961	283.1	4.408
650.0	4.391	34.958	279.4	4.341
700.0	4.253	34.947	279.7	4.200
750.0	4.136	34.936	281.0	4.079
800.0	4.073	34.931	280.1	4.013
850.0	3.910	34.914	286.9	3.847
900.0	3.845	34.910	289.4	3.778
950.0	3.819	34.911	287.9	3.748
1000.0	3.828	34.916	284.6	3.753
1050.0	3.879	34.933	276.2	3.800
1100.0	3.918	34.946	272.6	3.834
1150.0	3.911	34.954	271.3	3.822
1200.0	3.898	34.957	270.8	3.805
1250.0	3.852	34.954	271.0	3.755
1300.0	3.829	34.957	271.0	3.728
1350.0	3.782	34.955	271.2	3.678
1400.0	3.734	34.954	271.5	3.626
1450.0	3.675	34.952	272.0	3.563
1500.0	3.608	34.948	272.6	3.492
1550.0	3.572	34.949	272.7	3.453
1600.0	3.499	34.947	273.2	3.376
1650.0	3.481	34.946	273.2	3.354
1700.0	3.403	34.944	273.9	3.272
1750.0	3.339	34.944	274.3	3.204
1800.0	3.328	34.944	274.4	3.189
1807.0	3.326	34.943	274.4	3.186


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 61

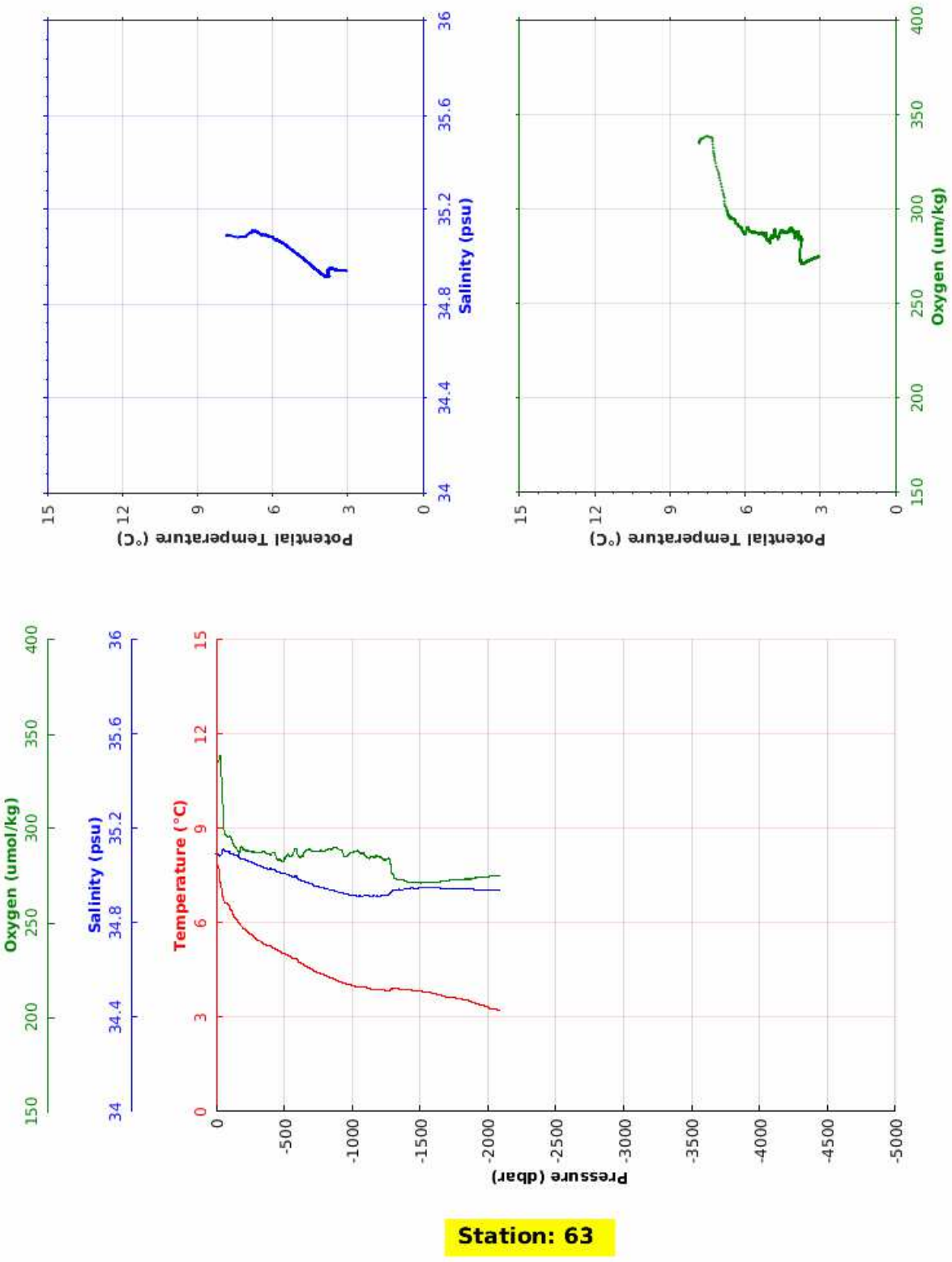
Cruise	: RREX 2015		
Station	: 62	Cast	: 1
Date	: 22/06/2015	Ship	: N/O Thalassa
Depth	: 1980 m	Organism	: IFREMER
Position	: N 63 0.04 W 029 56.78		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.203	35.054	334.5	8.203
10.0	8.190	35.055	334.5	8.189
20.0	6.991	35.068	328.7	6.989
30.0	6.871	35.081	313.9	6.869
40.0	6.696	35.088	303.1	6.693
50.0	6.611	35.094	296.5	6.607
100.0	6.149	35.083	292.2	6.140
150.0	5.945	35.077	287.2	5.932
200.0	5.649	35.060	282.2	5.632
250.0	5.455	35.048	285.0	5.434
300.0	5.298	35.034	284.1	5.274
350.0	5.143	35.019	279.3	5.115
400.0	4.982	35.003	287.4	4.950
450.0	4.877	34.995	283.9	4.841
500.0	4.776	34.988	280.2	4.737
550.0	4.637	34.974	283.5	4.594
600.0	4.491	34.962	284.2	4.444
650.0	4.398	34.954	284.0	4.348
700.0	4.325	34.953	278.9	4.271
750.0	4.196	34.941	280.0	4.139
800.0	4.091	34.932	280.3	4.031
850.0	4.090	34.937	278.2	4.025
900.0	4.000	34.931	279.1	3.932
950.0	4.042	34.945	274.4	3.969
1000.0	4.027	34.950	272.9	3.950
1050.0	3.955	34.943	273.6	3.875
1100.0	3.924	34.943	272.9	3.840
1150.0	3.910	34.947	272.2	3.821
1200.0	3.890	34.951	271.5	3.797
1250.0	3.866	34.952	271.1	3.769
1300.0	3.843	34.954	271.2	3.743
1350.0	3.810	34.955	271.2	3.706
1400.0	3.738	34.949	271.9	3.629
1450.0	3.689	34.949	272.3	3.577
1500.0	3.638	34.946	272.6	3.522
1550.0	3.593	34.944	273.0	3.473
1600.0	3.539	34.943	273.2	3.415
1650.0	3.501	34.944	273.4	3.373
1700.0	3.461	34.945	273.7	3.329
1750.0	3.414	34.944	273.9	3.279
1800.0	3.382	34.945	273.9	3.242
1850.0	3.335	34.943	274.1	3.192
1900.0	3.284	34.942	274.6	3.137
1950.0	3.256	34.942	274.6	3.104
1995.0	3.215	34.942	274.9	3.060


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 62

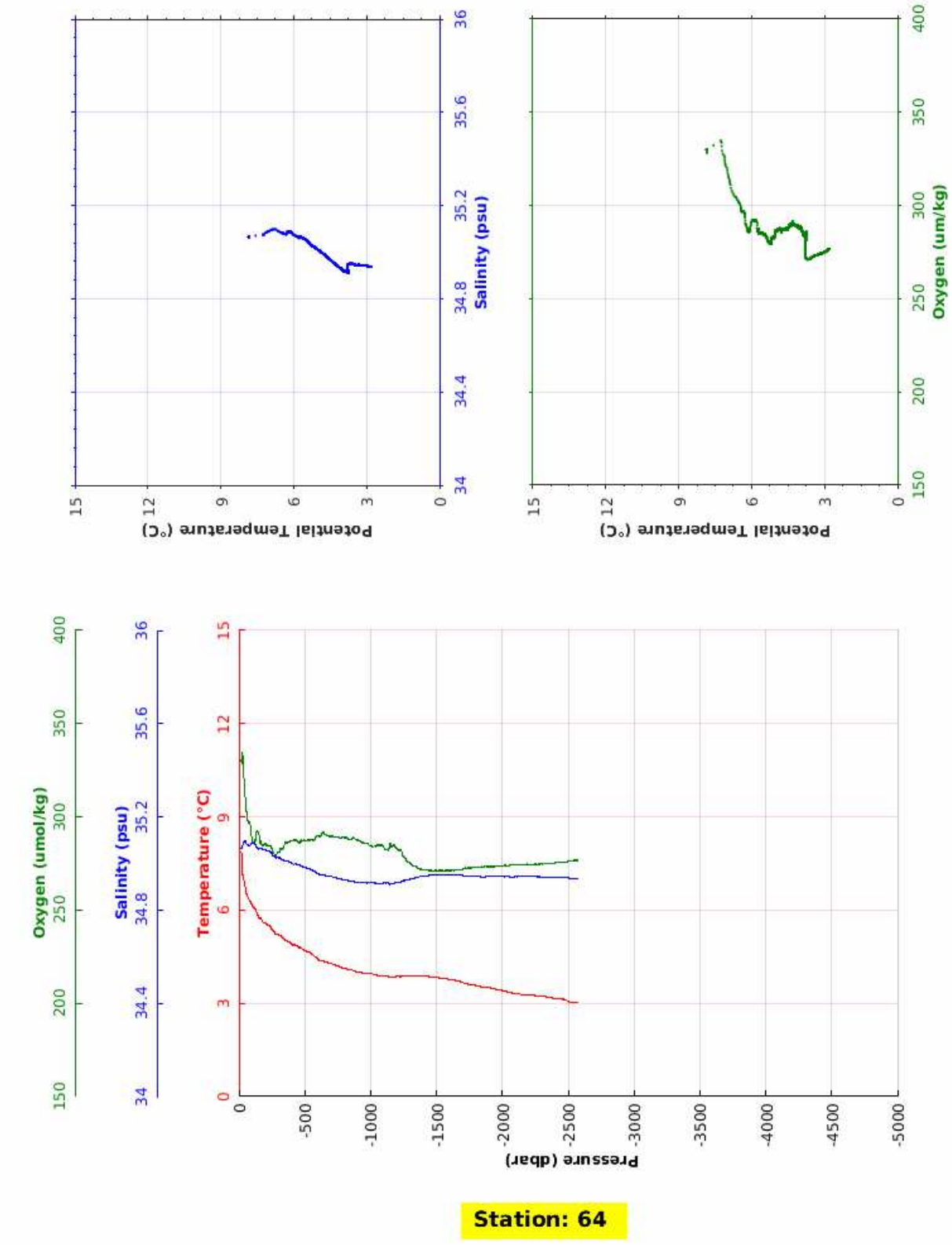
Cruise	: RREX 2015		
Station	: 63	Cast	: 1
Date	: 23/06/2015	Ship	: N/O Thalassa
Depth	: 2076 m	Organism	: IFREMER
Position	: N 62 60.00 W 030 42.51		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.824	35.092	335.6	7.824
10.0	7.826	35.092	335.5	7.825
20.0	7.710	35.092	337.8	7.708
30.0	7.275	35.085	332.6	7.272
40.0	7.044	35.088	318.5	7.041
50.0	6.827	35.111	302.9	6.822
100.0	6.538	35.100	295.2	6.529
150.0	6.120	35.086	288.8	6.107
200.0	5.829	35.071	288.9	5.812
250.0	5.651	35.060	288.2	5.630
300.0	5.470	35.046	287.3	5.445
350.0	5.343	35.035	287.8	5.314
400.0	5.264	35.030	286.3	5.232
450.0	5.134	35.018	283.4	5.097
500.0	5.040	35.011	284.4	4.999
550.0	4.917	35.000	285.7	4.873
600.0	4.800	34.991	285.9	4.752
650.0	4.651	34.977	287.7	4.600
700.0	4.533	34.965	288.3	4.479
750.0	4.422	34.954	288.2	4.364
800.0	4.344	34.948	288.2	4.282
850.0	4.249	34.939	289.3	4.184
900.0	4.150	34.930	289.0	4.081
950.0	4.080	34.925	285.2	4.007
1000.0	4.013	34.918	287.3	3.937
1050.0	3.958	34.915	287.8	3.878
1100.0	3.956	34.918	285.0	3.872
1150.0	3.898	34.915	285.1	3.810
1200.0	3.868	34.914	285.4	3.776
1250.0	3.854	34.918	283.5	3.758
1300.0	3.919	34.937	275.6	3.818
1350.0	3.891	34.940	272.9	3.785
1400.0	3.880	34.945	272.0	3.770
1450.0	3.859	34.948	271.6	3.745
1500.0	3.839	34.949	271.3	3.721
1550.0	3.803	34.950	271.6	3.681
1600.0	3.766	34.952	271.6	3.639
1650.0	3.704	34.948	272.1	3.574
1700.0	3.649	34.946	272.6	3.515
1750.0	3.622	34.946	272.7	3.484
1800.0	3.592	34.945	272.9	3.449
1850.0	3.549	34.944	273.3	3.402
1900.0	3.470	34.942	273.8	3.320
1950.0	3.391	34.942	274.3	3.238
2000.0	3.328	34.942	274.6	3.170
2050.0	3.269	34.942	274.7	3.107
2094.0	3.219	34.940	275.1	3.055


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 63

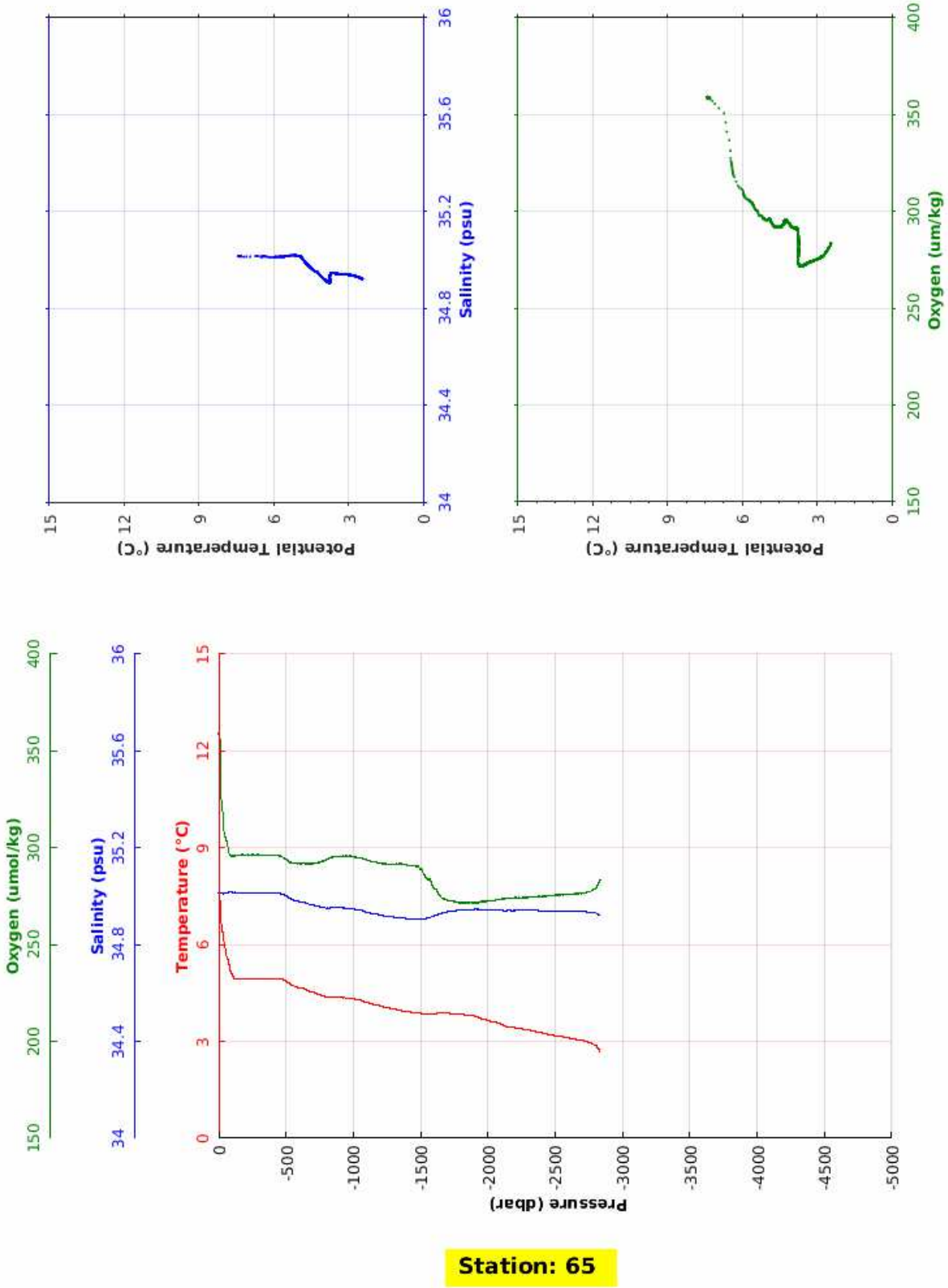
Cruise	: RREX 2015		
Station	: 64	Cast	: 1
Date	: 23/06/2015	Ship	: N/O Thalassa
Depth	: 2550 m	Organism	: IFREMER
Position	: N 62 59.99 W 031 28.36		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.855	35.065	330.3	7.855
10.0	7.858	35.065	330.0	7.857
20.0	7.841	35.065	329.4	7.839
30.0	7.105	35.085	324.7	7.102
40.0	6.927	35.096	314.2	6.924
50.0	6.652	35.091	304.6	6.648
100.0	6.181	35.089	286.9	6.172
150.0	5.767	35.060	289.4	5.754
200.0	5.579	35.058	285.1	5.563
250.0	5.393	35.041	282.9	5.372
300.0	5.207	35.024	280.8	5.183
350.0	5.055	35.013	286.5	5.027
400.0	4.921	35.001	287.5	4.890
450.0	4.823	34.993	286.3	4.788
500.0	4.698	34.982	287.3	4.659
550.0	4.594	34.973	288.0	4.551
600.0	4.429	34.957	289.9	4.383
650.0	4.342	34.949	290.9	4.292
700.0	4.278	34.944	289.4	4.224
750.0	4.195	34.936	289.0	4.138
800.0	4.129	34.930	288.4	4.069
850.0	4.079	34.925	287.9	4.014
900.0	4.016	34.919	287.4	3.948
950.0	3.974	34.917	285.8	3.902
1000.0	3.954	34.918	284.5	3.878
1050.0	3.893	34.913	285.4	3.814
1100.0	3.890	34.916	283.3	3.806
1150.0	3.849	34.912	285.5	3.761
1200.0	3.869	34.919	282.7	3.777
1250.0	3.879	34.927	278.6	3.783
1300.0	3.876	34.933	274.9	3.775
1350.0	3.890	34.940	272.8	3.785
1400.0	3.877	34.946	271.7	3.767
1450.0	3.857	34.949	271.3	3.743
1500.0	3.833	34.950	271.2	3.714
1550.0	3.810	34.950	271.2	3.687
1600.0	3.776	34.951	271.3	3.649
1650.0	3.730	34.951	271.5	3.599
1700.0	3.669	34.948	271.9	3.535
1750.0	3.614	34.945	272.6	3.476
1800.0	3.577	34.944	273.0	3.434
1850.0	3.531	34.943	273.2	3.384
1900.0	3.500	34.945	273.3	3.349
1950.0	3.462	34.946	273.4	3.307
2000.0	3.413	34.944	273.7	3.254
2050.0	3.361	34.943	274.0	3.199
2100.0	3.312	34.944	274.4	3.145
2150.0	3.290	34.944	274.5	3.119
2200.0	3.268	34.944	274.6	3.092
2250.0	3.245	34.944	274.7	3.065
2300.0	3.216	34.943	274.6	3.032
2350.0	3.197	34.942	274.9	3.008
2400.0	3.148	34.940	275.3	2.955
2450.0	3.132	34.939	275.5	2.934
2500.0	3.060	34.938	276.1	2.859
2550.0	3.029	34.937	276.7	2.824
2578.0	3.025	34.937	276.7	2.817


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 64

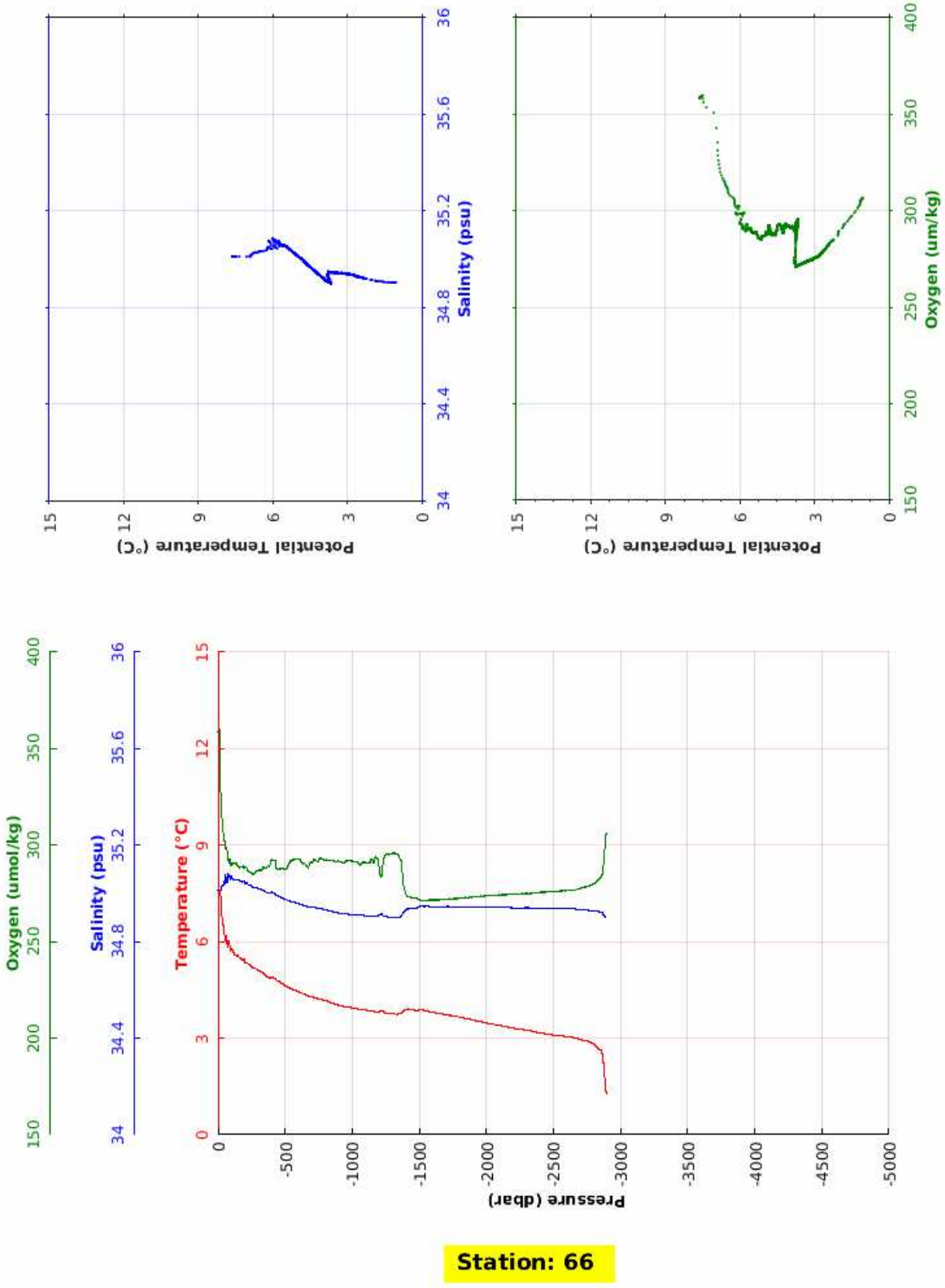
Cruise : RREX 2015			
Station : 65	Cast : 1		
Date : 23/06/2015	Ship : N/O Thalassa		
Depth : 2802 m	Organism : IFREMER		
Position : N 63 0.01 W 032 14.25			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.405	35.014	359.0	7.405
10.0	7.349	35.014	358.5	7.348
20.0	6.621	35.015	341.2	6.619
30.0	6.399	35.015	321.0	6.396
40.0	5.988	35.011	311.0	5.984
50.0	5.816	35.013	306.4	5.812
100.0	5.092	35.018	295.5	5.084
150.0	4.932	35.014	296.1	4.920
200.0	4.926	35.013	296.4	4.911
250.0	4.927	35.013	296.5	4.908
300.0	4.930	35.013	296.2	4.906
350.0	4.931	35.012	296.3	4.904
400.0	4.932	35.012	296.2	4.900
450.0	4.931	35.011	295.9	4.896
500.0	4.870	35.003	294.2	4.830
550.0	4.742	34.987	292.2	4.699
600.0	4.660	34.978	291.9	4.613
650.0	4.597	34.972	291.8	4.546
700.0	4.531	34.965	291.9	4.476
750.0	4.455	34.957	292.3	4.396
800.0	4.384	34.951	293.4	4.321
850.0	4.369	34.952	295.1	4.303
900.0	4.359	34.952	295.6	4.288
950.0	4.349	34.951	295.7	4.274
1000.0	4.323	34.948	295.6	4.244
1050.0	4.287	34.944	294.9	4.204
1100.0	4.211	34.935	293.6	4.124
1150.0	4.149	34.928	293.0	4.059
1200.0	4.099	34.923	292.2	4.005
1250.0	4.049	34.918	291.7	3.950
1300.0	4.007	34.914	291.5	3.905
1350.0	3.960	34.911	291.8	3.854
1400.0	3.927	34.908	291.2	3.817
1450.0	3.895	34.907	290.9	3.780
1500.0	3.871	34.906	289.3	3.753
1550.0	3.864	34.909	284.3	3.741
1600.0	3.870	34.919	279.5	3.742
1650.0	3.882	34.928	275.1	3.749
1700.0	3.881	34.936	272.9	3.744
1750.0	3.866	34.940	272.3	3.725
1800.0	3.842	34.944	271.7	3.696
1850.0	3.819	34.945	271.6	3.668
1900.0	3.791	34.946	271.6	3.637
1950.0	3.705	34.945	272.1	3.547
2000.0	3.659	34.944	272.6	3.496
2050.0	3.602	34.943	272.9	3.436
2100.0	3.538	34.942	273.5	3.368
2150.0	3.459	34.941	273.8	3.285
2200.0	3.427	34.941	274.2	3.249
2250.0	3.392	34.942	274.1	3.210
2300.0	3.358	34.942	274.4	3.171
2350.0	3.312	34.941	274.6	3.122
2400.0	3.267	34.940	274.8	3.072
2450.0	3.214	34.939	275.2	3.016
2500.0	3.179	34.938	275.5	2.975
2550.0	3.154	34.938	275.8	2.946
2600.0	3.111	34.937	275.8	2.899
2650.0	3.066	34.936	276.3	2.850
2700.0	3.041	34.936	276.6	2.820
2750.0	2.976	34.935	277.3	2.752
2800.0	2.890	34.931	279.0	2.663
2838.0	2.664	34.922	283.8	2.437


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 65

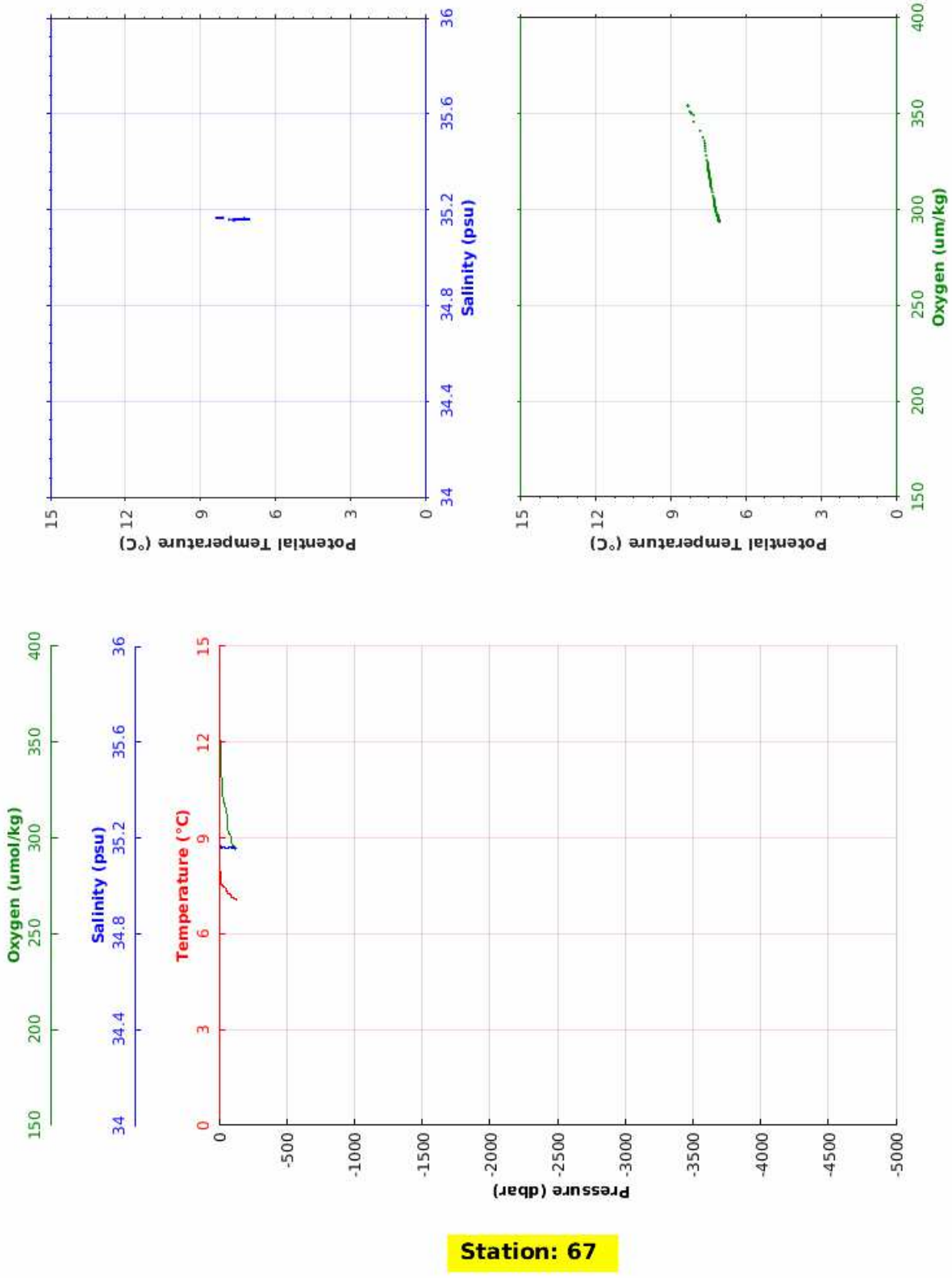
Cruise	: RREX 2015		
Station	: 66	Cast	: 1
Date	: 23/06/2015	Ship	: N/O Thalassa
Depth	: 2876 m	Organism	: IFREMER
Position	: N 63 0.04 W 033 0.10		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.610	35.011	358.6	7.610
10.0	7.599	35.011	359.0	7.598
20.0	7.350	35.011	353.6	7.348
30.0	6.754	35.026	318.4	6.751
40.0	6.491	35.033	310.0	6.488
50.0	6.190	35.049	302.5	6.186
100.0	5.785	35.075	289.7	5.777
150.0	5.556	35.057	289.4	5.544
200.0	5.366	35.042	288.1	5.350
250.0	5.242	35.032	286.1	5.222
300.0	5.102	35.020	287.1	5.078
350.0	4.968	35.008	287.9	4.940
400.0	4.897	35.005	292.0	4.866
450.0	4.773	34.990	287.7	4.738
500.0	4.617	34.975	287.7	4.578
550.0	4.525	34.966	291.9	4.483
600.0	4.449	34.959	292.9	4.403
650.0	4.354	34.950	290.8	4.304
700.0	4.294	34.944	291.0	4.240
750.0	4.223	34.938	291.7	4.166
800.0	4.171	34.933	292.4	4.110
850.0	4.098	34.926	292.4	4.034
900.0	4.026	34.919	291.9	3.957
950.0	3.977	34.915	291.3	3.905
1000.0	3.939	34.912	291.8	3.863
1050.0	3.905	34.909	290.9	3.825
1100.0	3.876	34.908	291.5	3.792
1150.0	3.841	34.906	292.9	3.753
1200.0	3.830	34.909	291.5	3.738
1250.0	3.786	34.904	294.8	3.690
1300.0	3.760	34.902	295.6	3.660
1350.0	3.757	34.902	294.3	3.653
1400.0	3.896	34.930	275.9	3.786
1450.0	3.879	34.938	272.8	3.765
1500.0	3.872	34.943	271.9	3.754
1550.0	3.854	34.947	271.4	3.731
1600.0	3.809	34.945	271.7	3.682
1650.0	3.776	34.945	271.7	3.645
1700.0	3.731	34.945	272.0	3.596
1750.0	3.700	34.946	272.2	3.561
1800.0	3.661	34.944	272.6	3.518
1850.0	3.616	34.943	272.9	3.468
1900.0	3.565	34.942	273.1	3.414
1950.0	3.529	34.943	273.5	3.373
2000.0	3.478	34.942	273.7	3.318
2050.0	3.435	34.942	274.0	3.272
2100.0	3.404	34.943	274.1	3.236
2150.0	3.353	34.941	274.4	3.181
2200.0	3.319	34.941	274.7	3.143
2250.0	3.274	34.940	274.9	3.093
2300.0	3.253	34.941	274.8	3.068
2350.0	3.211	34.939	275.2	3.022
2400.0	3.172	34.938	275.6	2.978
2450.0	3.135	34.938	275.8	2.937
2500.0	3.101	34.937	276.1	2.899
2550.0	3.076	34.937	276.4	2.870
2600.0	3.049	34.936	276.5	2.839
2650.0	3.019	34.936	276.7	2.804
2700.0	2.969	34.935	277.5	2.750
2750.0	2.911	34.931	278.6	2.688
2800.0	2.826	34.927	279.9	2.599
2850.0	2.627	34.923	283.2	2.400
2900.0	1.270	34.903	306.2	1.066
2902.0	1.269	34.902	306.8	1.065


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 66

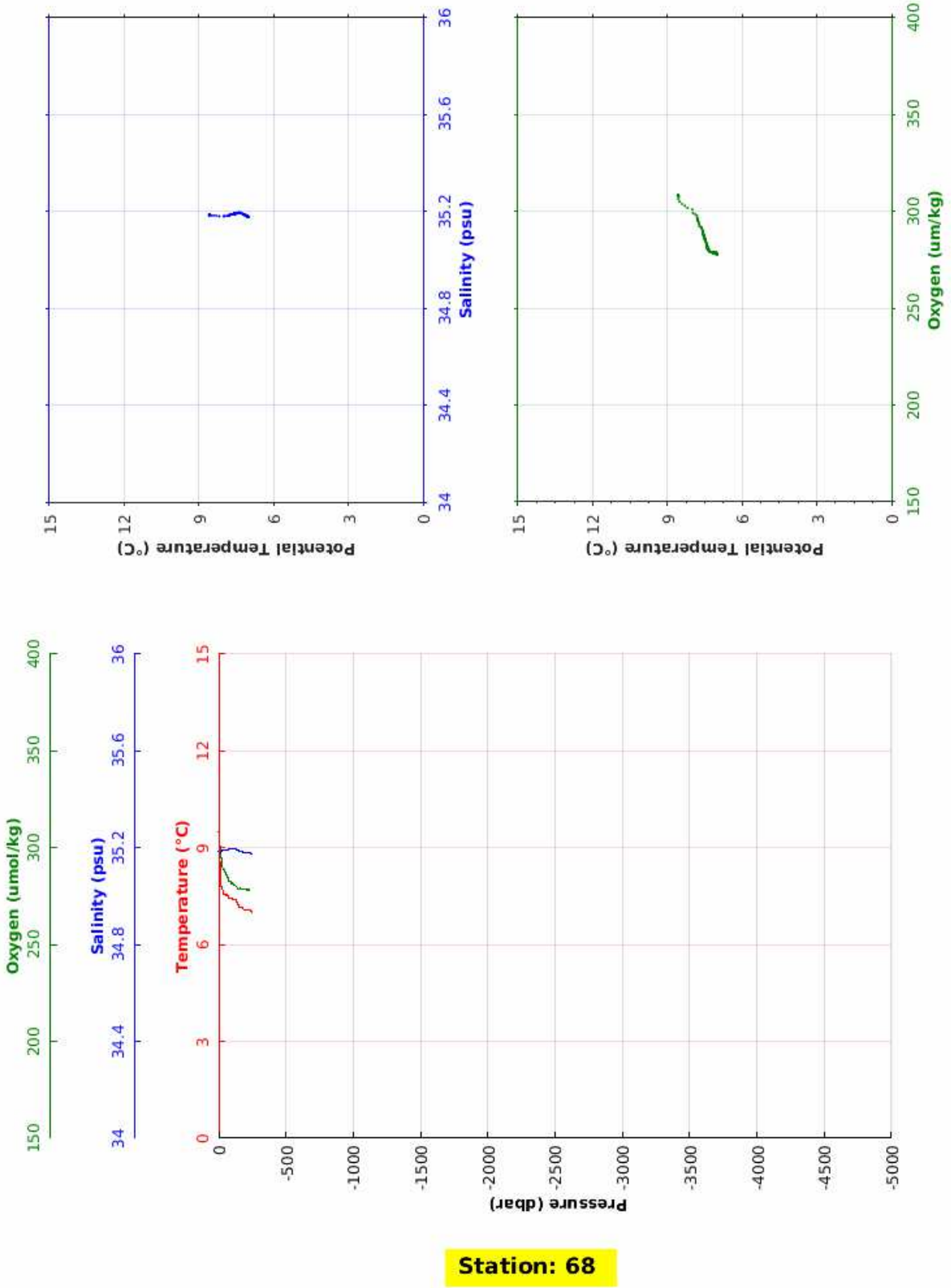
Cruise	: RREX 2015		
Station	: 67	Cast	: 1
Date	: 24/06/2015	Ship	: N/O Thalassa
Depth	: 140 m	Organism	: IFREMER
Position	: N 63 25.03 W 023 55.03		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.329	35.167	354.2	8.328
10.0	7.843	35.158	341.2	7.842
20.0	7.535	35.159	324.0	7.533
30.0	7.496	35.160	319.9	7.493
40.0	7.474	35.160	317.1	7.470
50.0	7.423	35.159	313.7	7.418
100.0	7.123	35.160	295.6	7.114
128.0	7.078	35.159	294.1	7.066


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 67

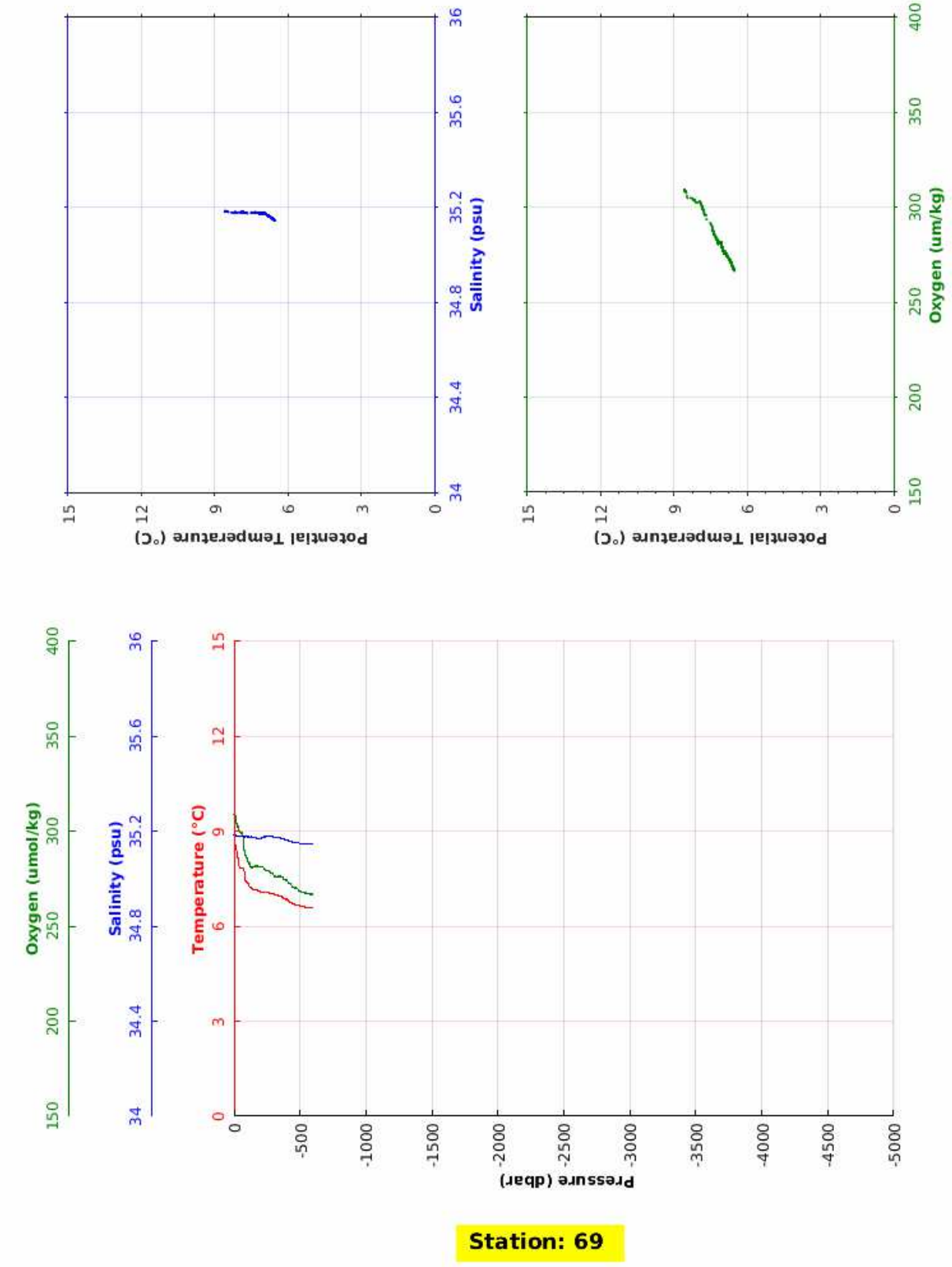
Cruise	: RREX 2015		
Station	: 68	Cast	: 1
Date	: 24/06/2015	Ship	: N/O Thalassa
Depth	: 257 m	Organism	: IFREMER
Position	: N 63 0.02 W 024 45.10		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.587	35.186	308.4	8.587
10.0	8.544	35.186	307.9	8.543
20.0	7.810	35.182	296.7	7.808
30.0	7.660	35.188	292.0	7.657
40.0	7.575	35.191	289.3	7.571
50.0	7.562	35.191	288.5	7.557
100.0	7.414	35.195	281.9	7.404
150.0	7.222	35.189	278.9	7.207
200.0	7.091	35.182	278.4	7.072
247.0	7.038	35.179	278.2	7.015


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 68

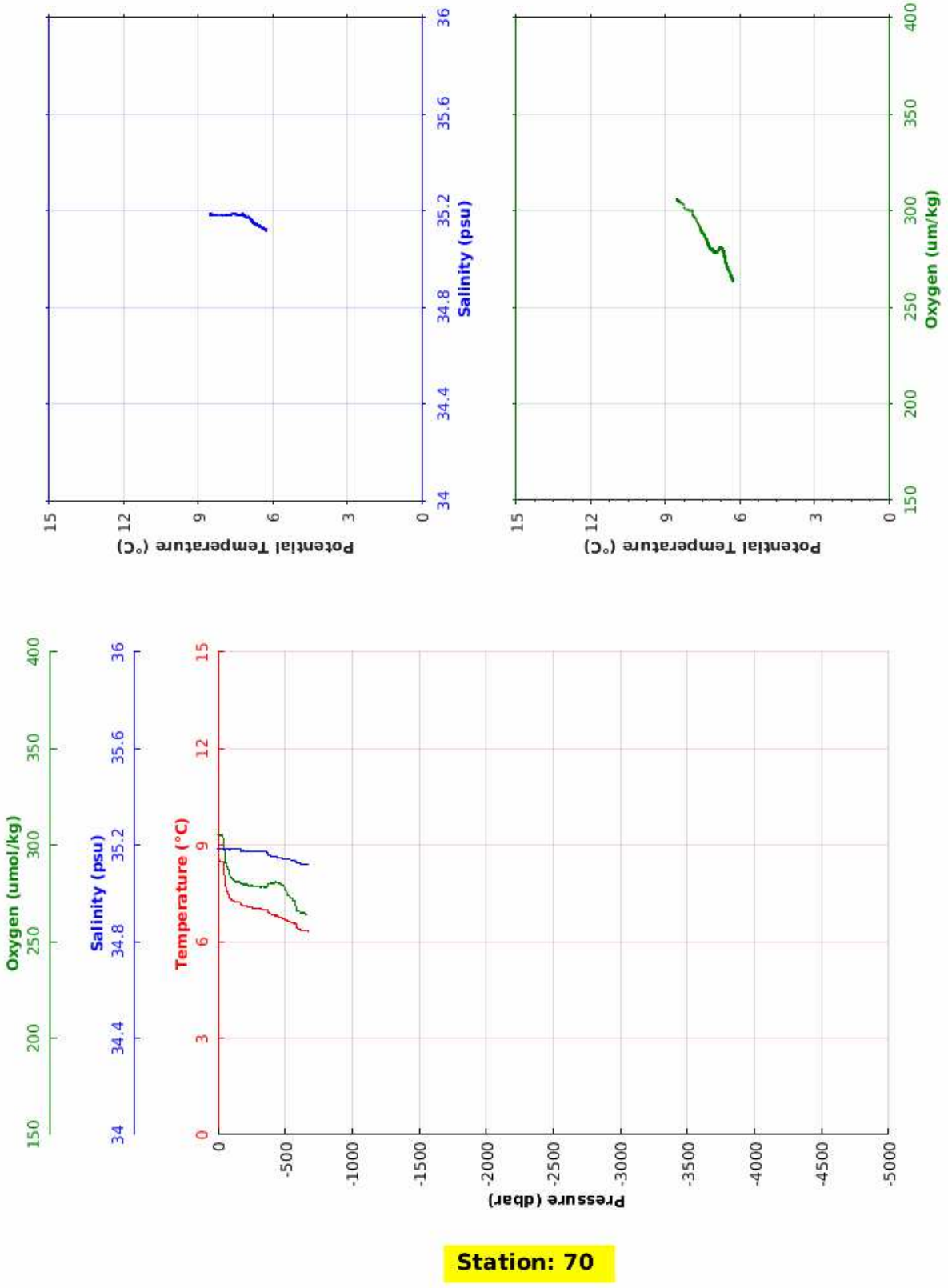
Cruise	: RREX 2015		
Station	: 69	Cast	: 1
Date	: 25/06/2015	Ship	: N/O Thalassa
Depth	: 613 m	Organism	: IFREMER
Position	: N 62 41.97 W 025 14.20		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.562	35.184	309.0	8.561
10.0	8.560	35.184	308.7	8.559
20.0	8.314	35.179	305.0	8.312
30.0	8.159	35.180	304.0	8.156
40.0	7.897	35.180	301.8	7.893
50.0	7.849	35.180	299.9	7.844
100.0	7.370	35.179	286.3	7.361
150.0	7.168	35.175	281.2	7.154
200.0	7.098	35.171	281.4	7.079
250.0	7.066	35.179	279.5	7.042
300.0	7.020	35.177	277.9	6.992
350.0	6.950	35.172	276.4	6.917
400.0	6.854	35.166	274.3	6.816
450.0	6.704	35.155	270.8	6.662
500.0	6.637	35.150	268.6	6.591
550.0	6.601	35.147	267.3	6.550
600.0	6.593	35.146	266.7	6.537
606.0	6.596	35.146	267.1	6.539


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 69

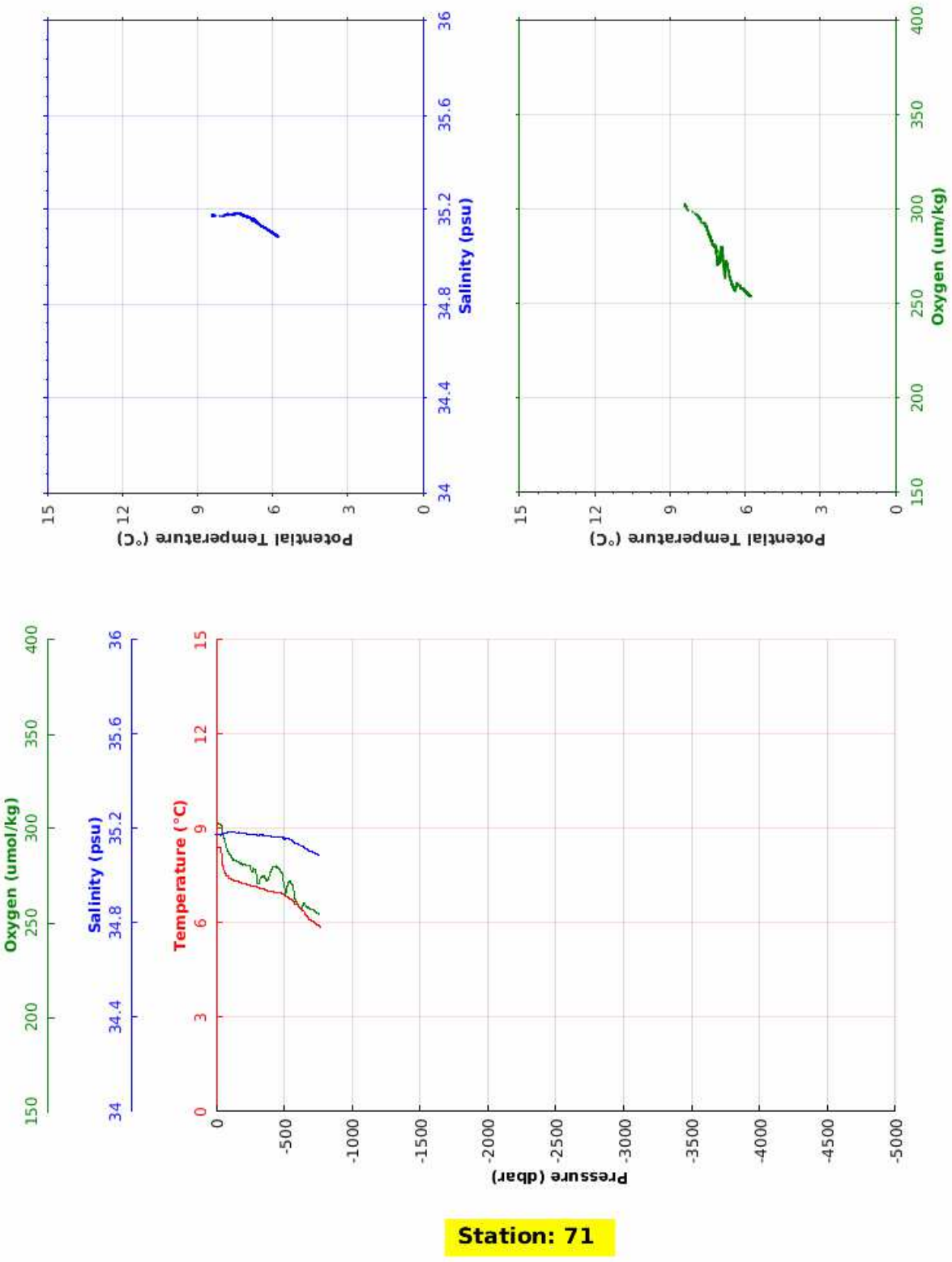
Cruise	: RREX 2015		
Station	: 70	Cast	: 1
Date	: 25/06/2015	Ship	: N/O Thalassa
Depth	: 685 m	Organism	: IFREMER
Position	: N 62 24.04 W 025 43.30		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.511	35.185	305.8	8.511
10.0	8.513	35.185	305.8	8.512
20.0	8.504	35.184	305.6	8.502
30.0	8.495	35.185	305.4	8.492
40.0	8.451	35.185	305.1	8.447
50.0	7.932	35.181	300.2	7.927
100.0	7.303	35.183	283.4	7.293
150.0	7.229	35.185	281.0	7.215
200.0	7.116	35.176	279.9	7.097
250.0	7.066	35.172	278.8	7.042
300.0	7.027	35.173	278.7	6.998
350.0	7.000	35.174	278.4	6.967
400.0	6.832	35.154	280.5	6.794
450.0	6.769	35.148	280.6	6.727
500.0	6.698	35.144	278.2	6.651
550.0	6.596	35.139	272.6	6.545
600.0	6.399	35.126	265.9	6.344
650.0	6.357	35.122	264.3	6.297
680.0	6.324	35.120	263.8	6.261


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 70

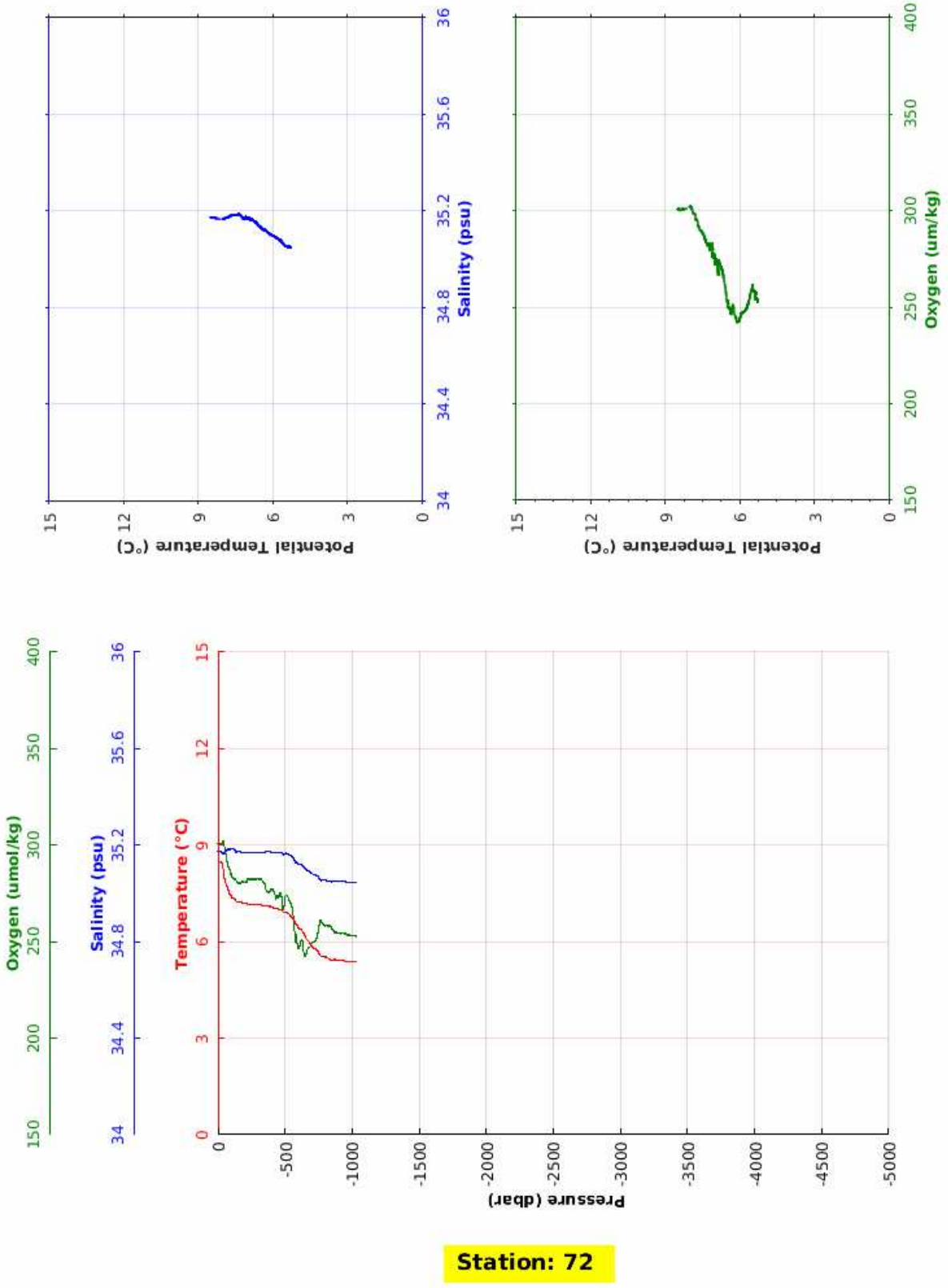
Cruise	: RREX 2015		
Station	: 71	Cast	: 1
Date	: 25/06/2015	Ship	: N/O Thalassa
Depth	: 768 m	Organism	: IFREMER
Position	: N 62 5.99 W 026 12.33		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.408	35.174	302.8	8.408
10.0	8.406	35.176	302.5	8.405
20.0	8.407	35.176	302.6	8.405
30.0	8.409	35.176	302.4	8.406
40.0	8.000	35.171	297.8	7.996
50.0	7.829	35.180	295.3	7.824
100.0	7.425	35.184	285.7	7.415
150.0	7.329	35.183	282.7	7.314
200.0	7.248	35.179	280.9	7.229
250.0	7.189	35.175	280.1	7.165
300.0	7.141	35.173	271.2	7.112
350.0	7.070	35.173	274.9	7.036
400.0	7.015	35.167	277.6	6.977
450.0	6.969	35.166	279.5	6.926
500.0	6.900	35.160	268.5	6.853
550.0	6.773	35.156	271.2	6.721
600.0	6.575	35.137	259.9	6.519
650.0	6.306	35.119	260.0	6.246
700.0	6.080	35.103	257.1	6.017
750.0	5.924	35.091	255.0	5.857
765.0	5.856	35.086	254.3	5.788


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 71

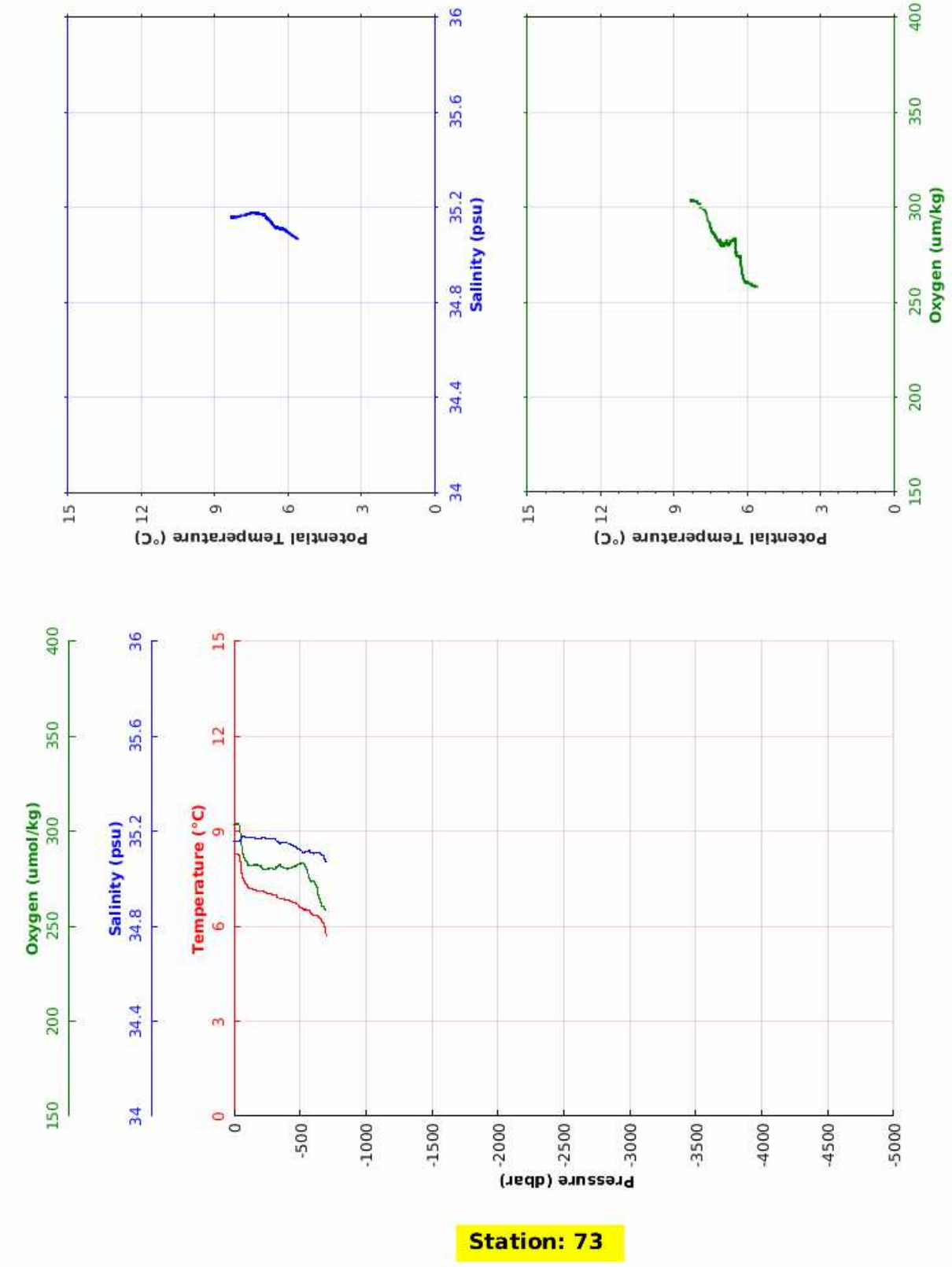
Cruise	: RREX 2015		
Station	: 72	Cast	: 1
Date	: 25/06/2015	Ship	: N/O Thalassa
Depth	: 1039 m	Organism	: IFREMER
Position	: N 61 47.99 W 026 41.49		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.482	35.173	301.0	8.482
10.0	8.483	35.174	300.7	8.482
20.0	8.485	35.173	300.7	8.483
30.0	8.429	35.172	300.8	8.426
40.0	8.158	35.166	301.1	8.154
50.0	7.952	35.168	301.4	7.947
100.0	7.404	35.185	285.2	7.394
150.0	7.227	35.173	280.5	7.212
200.0	7.187	35.170	280.8	7.168
250.0	7.150	35.169	282.2	7.127
300.0	7.139	35.169	282.7	7.110
350.0	7.126	35.171	280.3	7.092
400.0	7.058	35.168	277.2	7.020
450.0	7.021	35.170	273.7	6.978
500.0	6.912	35.163	268.9	6.864
550.0	6.757	35.154	269.2	6.705
600.0	6.424	35.122	247.9	6.369
650.0	6.173	35.103	242.4	6.115
700.0	5.839	35.083	248.5	5.777
750.0	5.674	35.068	254.7	5.608
800.0	5.529	35.055	258.7	5.459
850.0	5.434	35.050	257.4	5.360
900.0	5.435	35.052	254.5	5.356
950.0	5.390	35.048	254.1	5.307
1000.0	5.365	35.047	253.0	5.278
1040.0	5.367	35.047	253.0	5.276


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 72

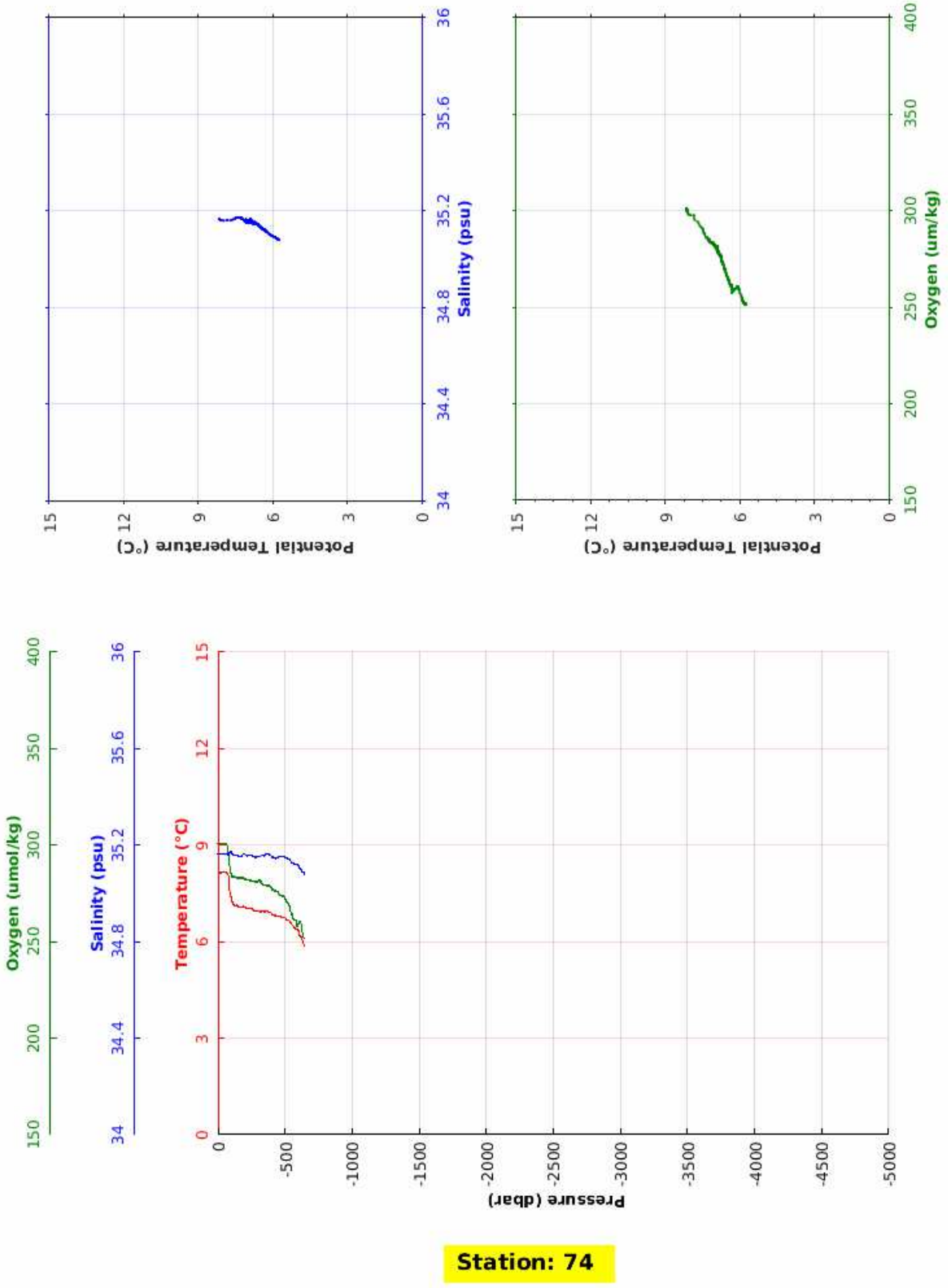
Cruise	: RREX 2015		
Station	: 73	Cast	: 1
Date	: 25/06/2015	Ship	: N/O Thalassa
Depth	: 700 m	Organism	: IFREMER
Position	: N 61 29.97 W 027 10.54		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.301	35.159	303.8	8.301
10.0	8.301	35.159	303.5	8.300
20.0	8.298	35.159	303.8	8.296
30.0	8.280	35.159	304.0	8.277
40.0	8.251	35.158	303.5	8.247
50.0	8.030	35.161	302.2	8.025
100.0	7.293	35.175	284.3	7.284
150.0	7.160	35.173	282.3	7.146
200.0	7.111	35.172	281.9	7.092
250.0	7.050	35.168	280.2	7.026
300.0	7.004	35.169	280.4	6.976
350.0	6.868	35.150	282.0	6.835
400.0	6.850	35.153	280.6	6.813
450.0	6.767	35.143	281.2	6.725
500.0	6.609	35.121	282.7	6.562
550.0	6.525	35.113	281.5	6.474
600.0	6.352	35.108	274.1	6.297
650.0	6.274	35.112	265.1	6.214
700.0	5.726	35.072	258.5	5.665
701.0	5.663	35.068	258.3	5.602


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 73

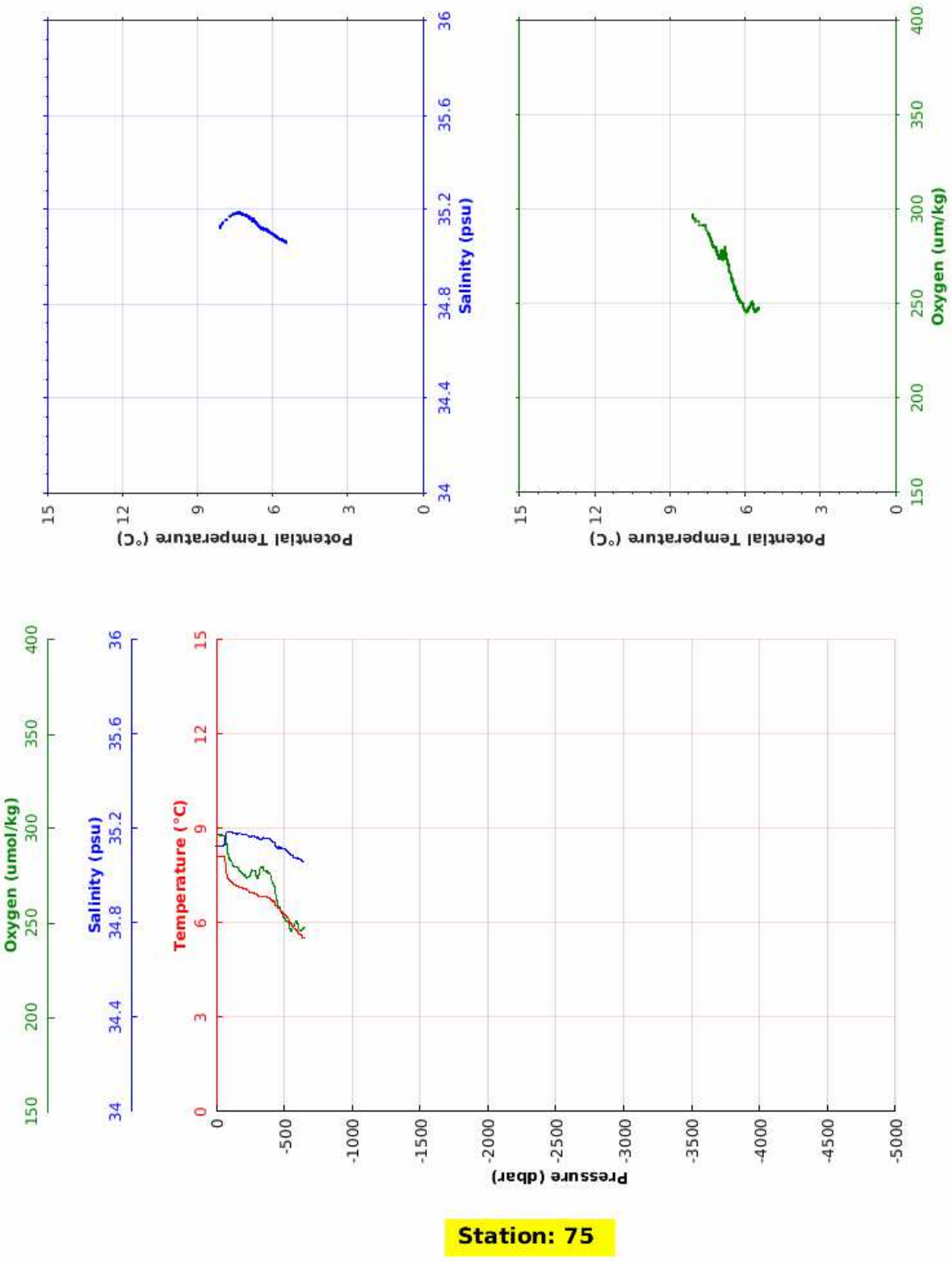
Cruise	: RREX 2015		
Station	: 74	Cast	: 1
Date	: 25/06/2015	Ship	: N/O Thalassa
Depth	: 660 m	Organism	: IFREMER
Position	: N 61 12.02 W 027 39.53		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.145	35.165	301.0	8.145
10.0	8.145	35.165	300.9	8.144
20.0	8.151	35.166	300.8	8.149
30.0	8.149	35.166	300.8	8.146
40.0	8.148	35.166	300.5	8.144
50.0	8.149	35.165	300.6	8.144
100.0	7.304	35.171	286.1	7.294
150.0	7.093	35.156	283.2	7.079
200.0	7.082	35.162	282.8	7.063
250.0	7.029	35.160	281.7	7.005
300.0	6.955	35.154	281.5	6.926
350.0	6.911	35.154	279.3	6.878
400.0	6.876	35.155	277.9	6.838
450.0	6.780	35.147	276.0	6.738
500.0	6.737	35.151	273.3	6.690
550.0	6.538	35.132	265.1	6.487
600.0	6.342	35.117	258.5	6.287
650.0	5.820	35.080	251.5	5.763
655.0	5.808	35.079	252.0	5.750


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 74

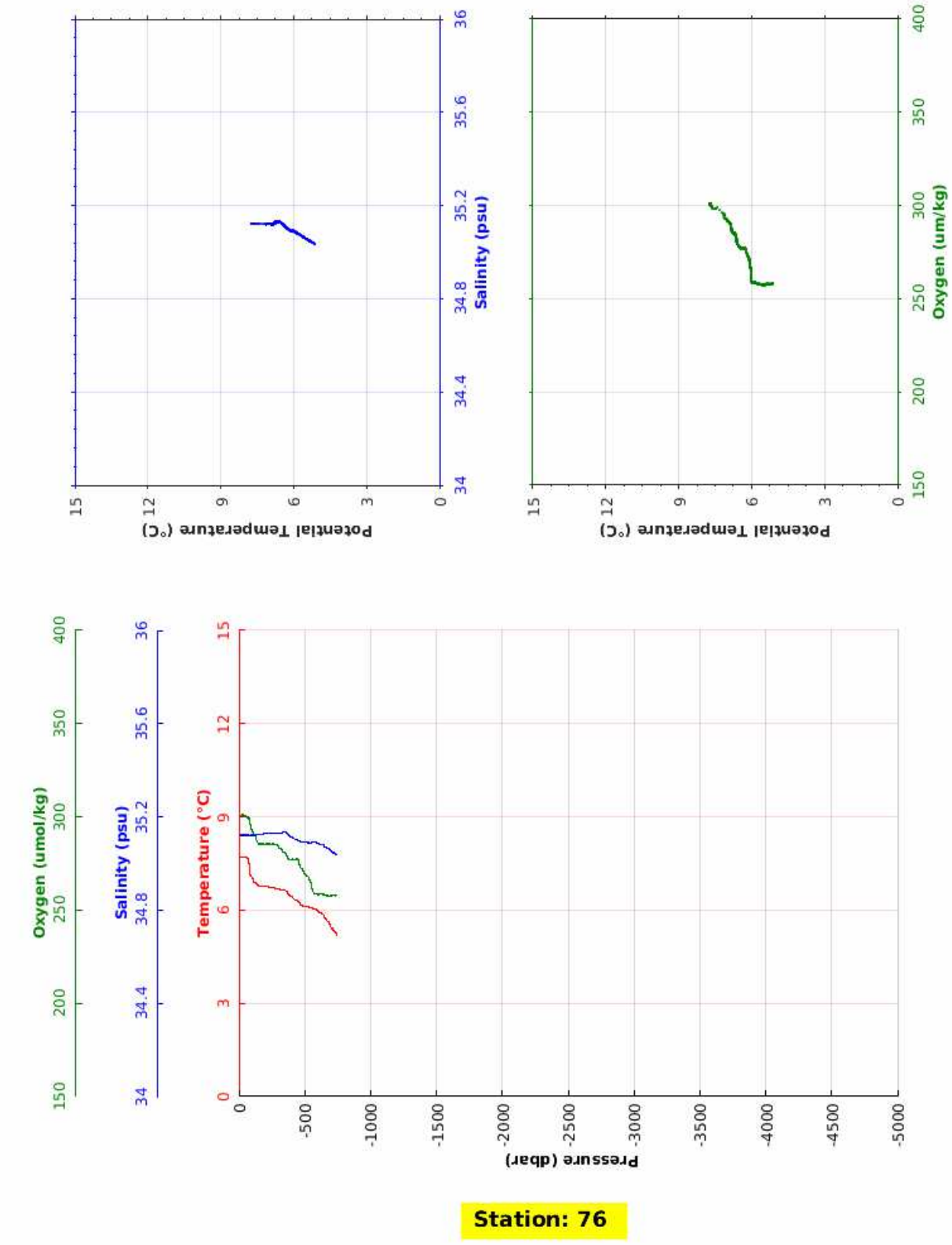
Cruise	: RREX 2015		
Station	: 75	Cast	: 1
Date	: 26/06/2015	Ship	: N/O Thalassa
Depth	: 660 m	Organism	: IFREMER
Position	: N 60 54.20 W 028 7.09		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.107	35.125	297.1	8.107
10.0	8.107	35.125	297.1	8.106
20.0	8.106	35.125	296.8	8.104
30.0	8.107	35.125	296.6	8.104
40.0	8.103	35.126	296.5	8.099
50.0	8.105	35.126	296.3	8.100
100.0	7.355	35.187	283.0	7.345
150.0	7.177	35.178	279.8	7.163
200.0	7.095	35.176	275.9	7.076
250.0	6.977	35.166	276.5	6.954
300.0	6.894	35.162	274.9	6.866
350.0	6.845	35.161	278.0	6.812
400.0	6.773	35.155	273.9	6.736
450.0	6.487	35.119	259.1	6.446
500.0	6.291	35.115	252.2	6.246
550.0	5.971	35.092	245.6	5.922
600.0	5.726	35.074	247.7	5.673
650.0	5.515	35.061	247.7	5.459
656.0	5.516	35.061	248.1	5.459


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 75

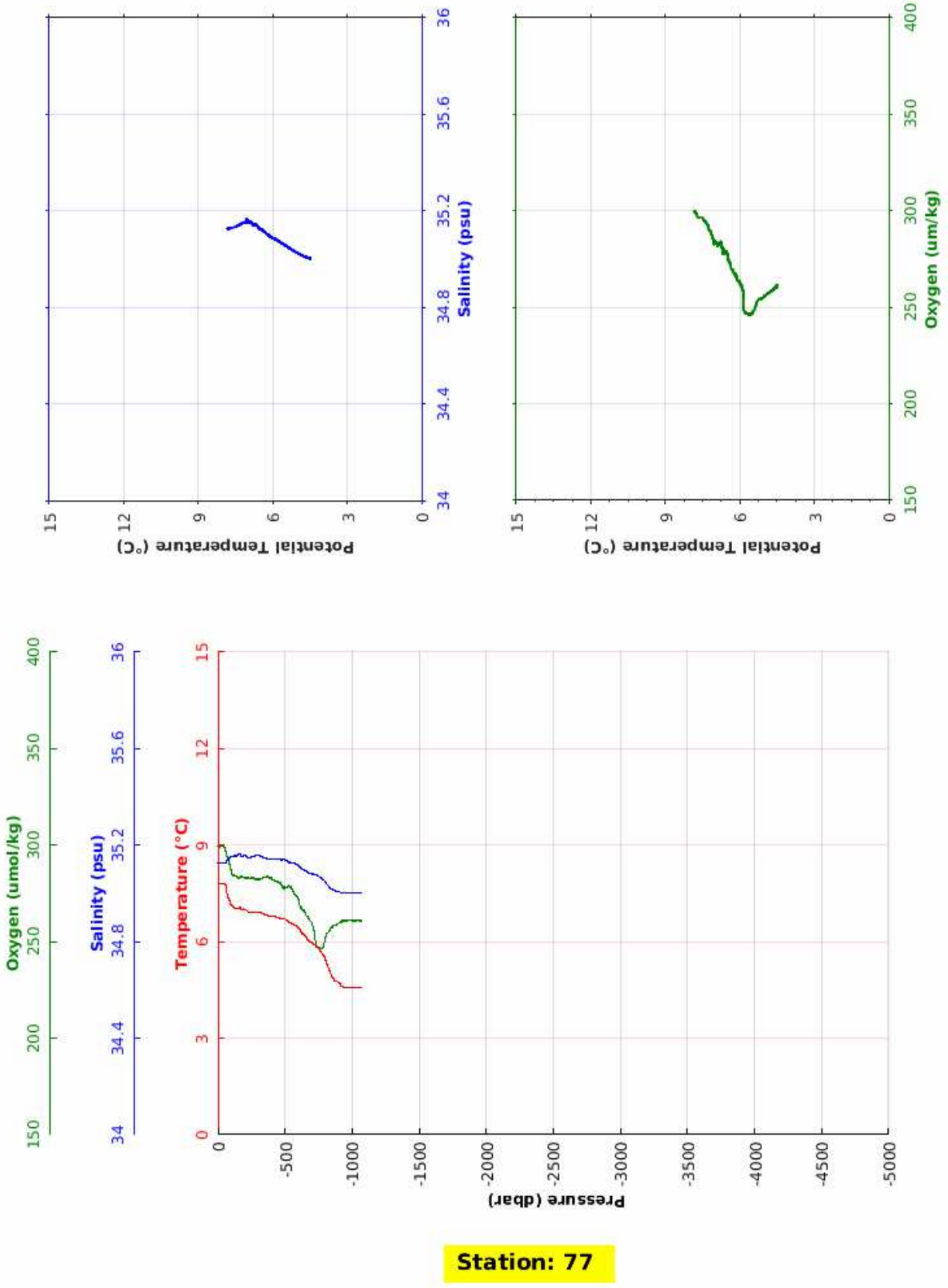
Cruise	: RREX 2015		
Station	: 76	Cast	: 1
Date	: 26/06/2015	Ship	: N/O Thalassa
Depth	: 754 m	Organism	: IFREMER
Position	: N 60 35.99 W 028 34.72		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.714	35.122	301.0	7.714
10.0	7.711	35.122	300.7	7.710
20.0	7.713	35.122	300.8	7.711
30.0	7.714	35.122	300.8	7.711
40.0	7.713	35.122	300.4	7.709
50.0	7.702	35.122	300.6	7.697
100.0	7.013	35.123	291.9	7.004
150.0	6.800	35.124	285.4	6.786
200.0	6.758	35.129	285.5	6.740
250.0	6.728	35.130	285.4	6.705
300.0	6.688	35.131	283.7	6.660
350.0	6.644	35.134	280.4	6.612
400.0	6.435	35.114	277.2	6.399
450.0	6.283	35.099	276.4	6.242
500.0	6.128	35.091	268.7	6.084
550.0	6.061	35.090	262.2	6.012
600.0	5.968	35.086	258.4	5.915
650.0	5.750	35.071	257.9	5.693
700.0	5.432	35.050	257.8	5.372
749.0	5.206	35.037	258.2	5.143


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 76

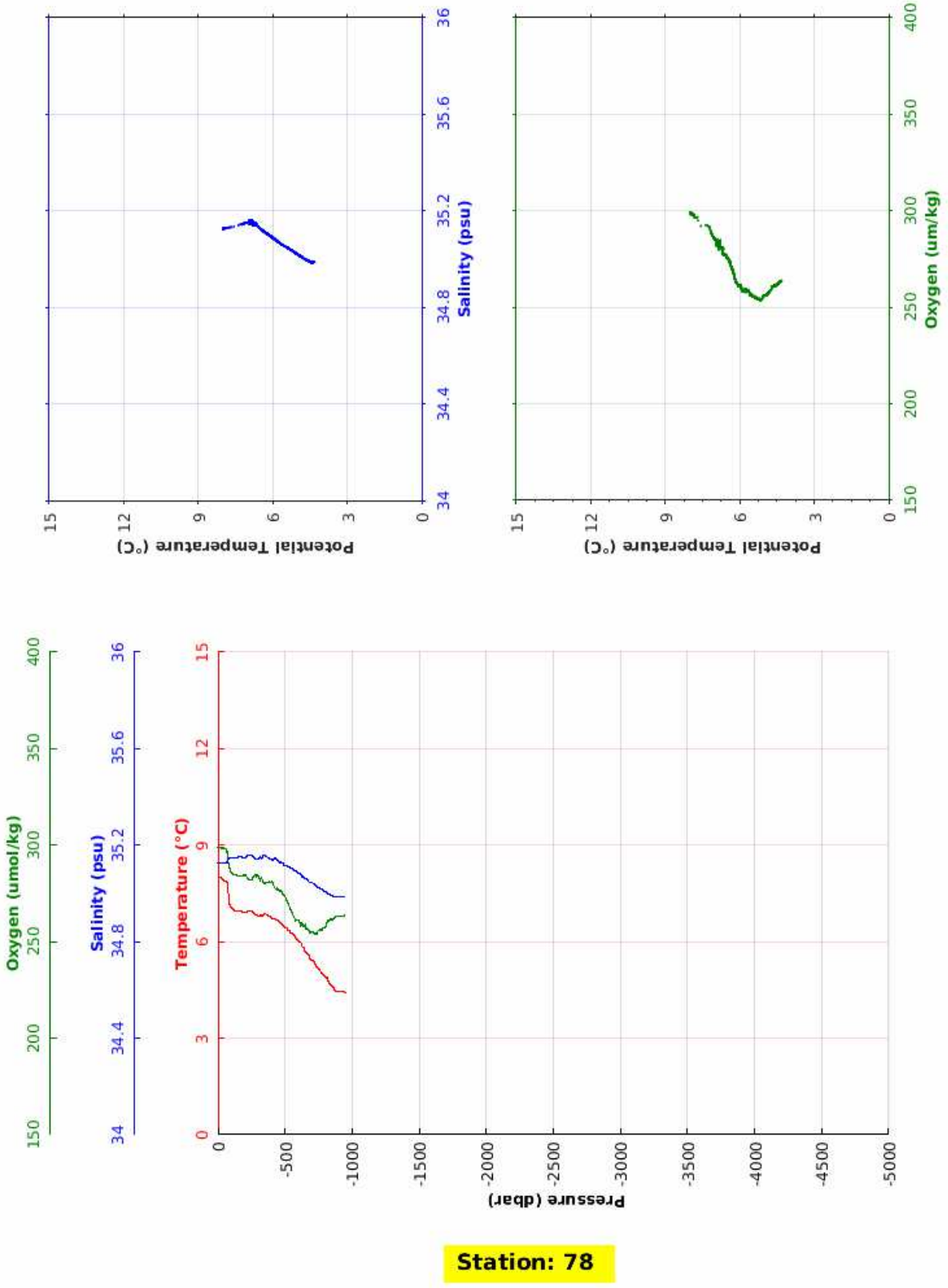
Cruise	: RREX 2015
Station	: 77
Cast	: 1
Date	: 26/06/2015
Ship	: N/O Thalassa
Depth	: 1075 m
Organism	: IFREMER
Position	: N 60 18.01 W 029 2.23

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.807	35.125	299.3	7.807
10.0	7.804	35.126	299.6	7.803
20.0	7.806	35.126	299.3	7.804
30.0	7.808	35.126	299.6	7.805
40.0	7.810	35.126	299.7	7.806
50.0	7.790	35.126	299.4	7.786
100.0	7.145	35.151	287.5	7.136
150.0	7.044	35.162	283.7	7.030
200.0	6.996	35.158	283.2	6.977
250.0	6.916	35.151	283.1	6.892
300.0	6.924	35.156	282.2	6.896
350.0	6.845	35.146	283.3	6.812
400.0	6.807	35.144	282.7	6.769
450.0	6.746	35.142	281.2	6.704
500.0	6.710	35.143	277.7	6.663
550.0	6.564	35.125	278.2	6.513
600.0	6.434	35.117	272.2	6.379
650.0	6.182	35.095	266.3	6.123
700.0	5.975	35.083	260.4	5.913
750.0	5.805	35.073	247.1	5.738
800.0	5.428	35.047	250.5	5.359
850.0	4.922	35.018	257.3	4.852
900.0	4.722	35.008	259.3	4.649
950.0	4.590	35.003	260.8	4.514
1000.0	4.570	35.002	261.1	4.489
1050.0	4.576	35.002	261.1	4.491
1077.0	4.579	35.002	260.9	4.492


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 77

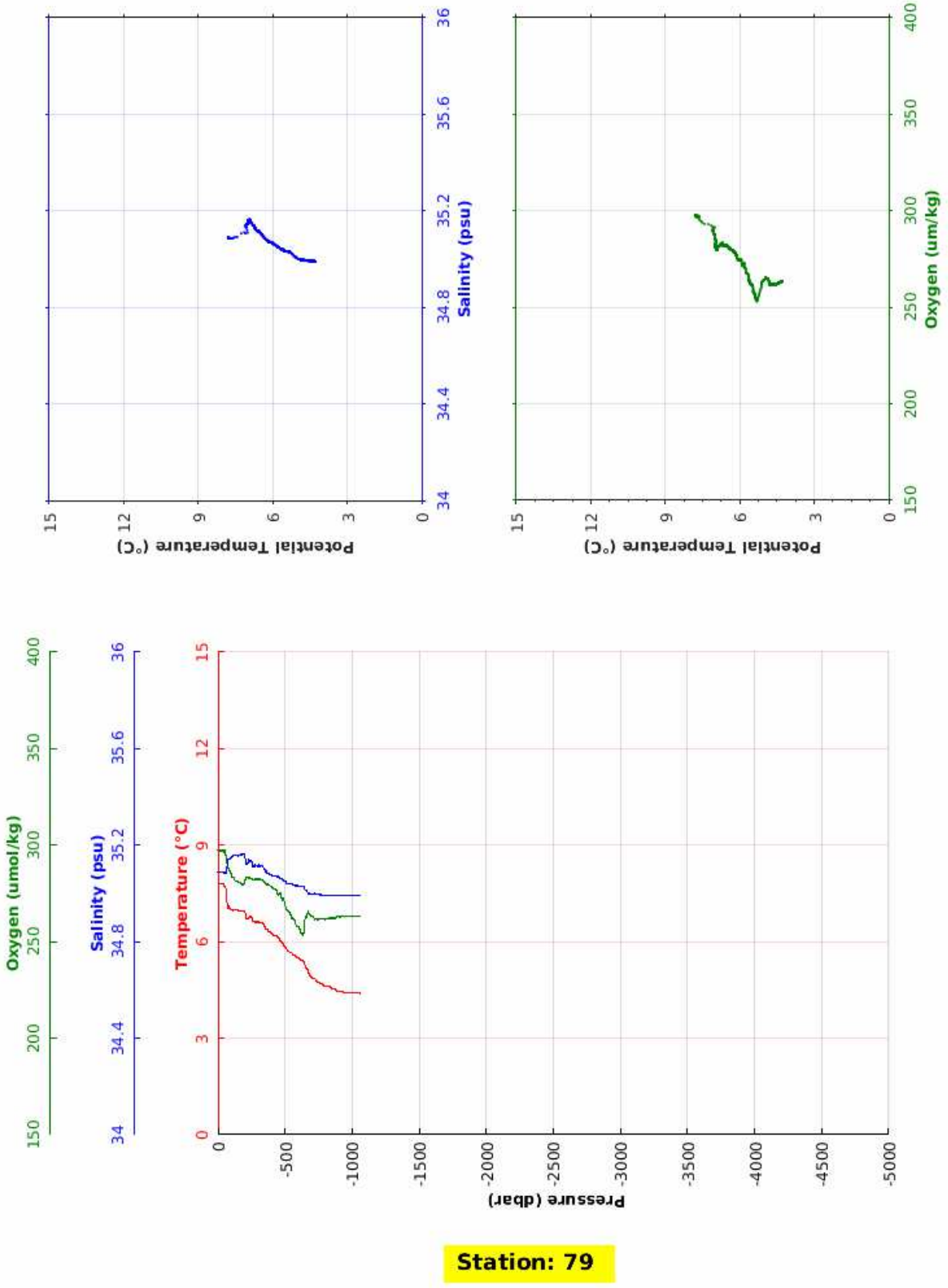
Cruise	: RREX 2015		
Station	: 78	Cast	: 1
Date	: 26/06/2015	Ship	: N/O Thalassa
Depth	: 947 m	Organism	: IFREMER
Position	: N 60 2.99 W 029 25.30		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.994	35.126	298.9	7.994
10.0	7.997	35.126	299.1	7.996
20.0	7.986	35.126	299.0	7.984
30.0	7.983	35.127	298.6	7.980
40.0	7.911	35.128	298.7	7.907
50.0	7.881	35.128	298.4	7.876
100.0	7.059	35.150	286.4	7.049
150.0	6.940	35.150	284.1	6.926
200.0	6.910	35.147	284.4	6.892
250.0	6.952	35.159	282.0	6.928
300.0	6.809	35.141	284.2	6.781
350.0	6.884	35.160	280.1	6.851
400.0	6.733	35.142	280.7	6.695
450.0	6.633	35.135	277.2	6.591
500.0	6.444	35.117	273.7	6.398
550.0	6.275	35.105	266.2	6.225
600.0	6.022	35.086	261.0	5.969
650.0	5.707	35.061	258.8	5.650
700.0	5.421	35.044	255.1	5.361
750.0	5.127	35.024	255.6	5.065
800.0	4.911	35.009	257.7	4.846
850.0	4.617	34.991	261.4	4.549
900.0	4.446	34.988	263.1	4.374
950.0	4.425	34.988	263.6	4.350
952.0	4.392	34.988	263.9	4.317


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 78

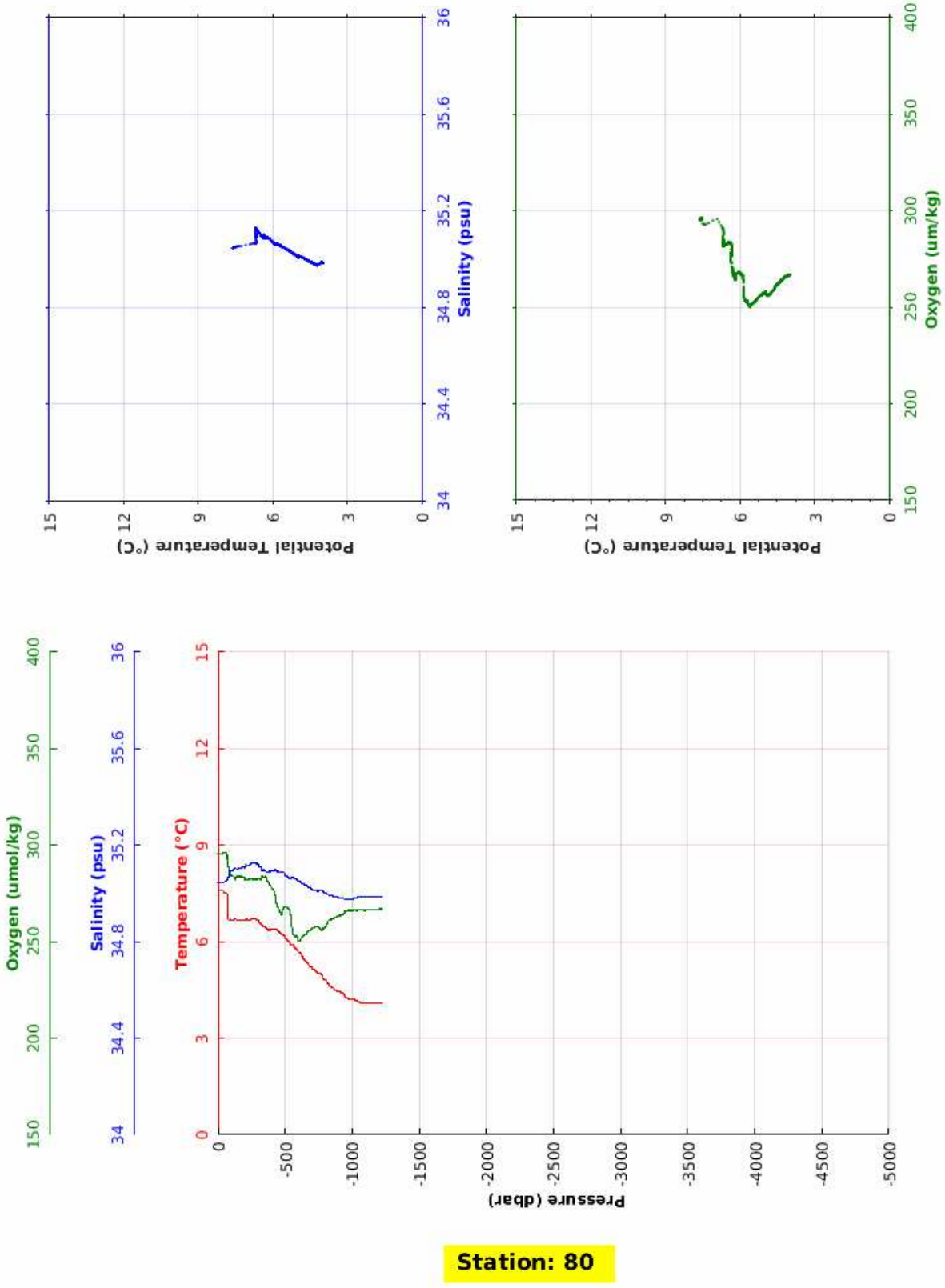
Cruise	: RREX 2015
Station	: 79
Cast	: 1
Date	: 26/06/2015
Ship	: N/O Thalassa
Depth	: 1064 m
Organism	: IFREMER
Position	: N 59 48.01 W 029 48.32

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.804	35.088	297.6	7.804
10.0	7.804	35.089	297.5	7.803
20.0	7.806	35.089	297.1	7.804
30.0	7.802	35.088	297.2	7.799
40.0	7.778	35.087	297.0	7.774
50.0	7.714	35.085	297.3	7.709
100.0	6.996	35.149	285.4	6.987
150.0	6.965	35.158	281.6	6.951
200.0	6.924	35.159	280.6	6.906
250.0	6.758	35.135	282.9	6.735
300.0	6.585	35.112	282.1	6.558
350.0	6.468	35.101	280.6	6.436
400.0	6.249	35.075	279.0	6.213
450.0	6.130	35.070	275.0	6.090
500.0	5.839	35.051	270.5	5.796
550.0	5.659	35.041	263.0	5.612
600.0	5.497	35.033	257.7	5.446
650.0	5.238	35.017	258.6	5.184
700.0	4.877	34.998	263.5	4.821
750.0	4.743	34.995	261.5	4.683
800.0	4.628	34.994	261.7	4.564
850.0	4.549	34.992	262.4	4.481
900.0	4.447	34.992	263.2	4.376
950.0	4.418	34.992	263.4	4.343
1000.0	4.422	34.992	263.1	4.343
1050.0	4.401	34.991	263.5	4.317
1067.0	4.389	34.991	263.7	4.304


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 79

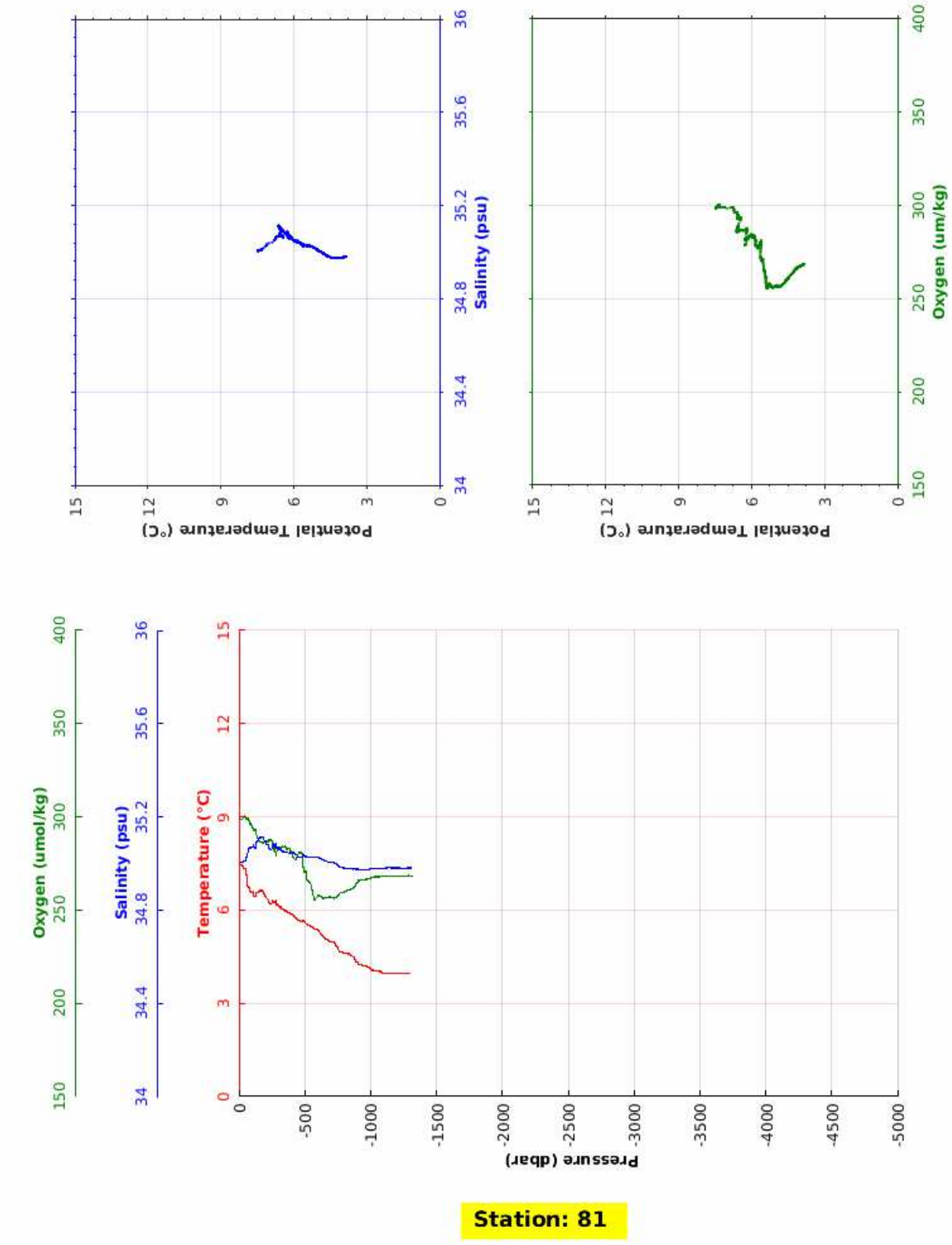
Cruise	: RREX 2015		
Station	: 80	Cast	: 1
Date	: 27/06/2015	Ship	: N/O Thalassa
Depth	: 1230 m	Organism	: IFREMER
Position	: N 59 33.00 W 030 11.25		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.598	35.046	295.2	7.598
10.0	7.600	35.047	295.9	7.599
20.0	7.602	35.047	295.7	7.600
30.0	7.593	35.047	295.5	7.591
40.0	7.570	35.047	295.9	7.566
50.0	7.534	35.048	296.1	7.529
100.0	6.671	35.093	284.5	6.662
150.0	6.671	35.102	283.4	6.658
200.0	6.669	35.109	283.4	6.650
250.0	6.694	35.124	282.7	6.671
300.0	6.658	35.121	282.2	6.630
350.0	6.471	35.097	283.6	6.439
400.0	6.380	35.093	278.5	6.344
450.0	6.328	35.092	268.1	6.287
500.0	6.178	35.085	267.8	6.133
550.0	5.907	35.062	260.7	5.859
600.0	5.679	35.051	251.4	5.628
650.0	5.422	35.037	253.5	5.367
700.0	5.186	35.020	256.1	5.128
750.0	5.016	35.010	258.1	4.954
800.0	4.809	35.004	257.7	4.744
850.0	4.591	34.991	261.7	4.523
900.0	4.445	34.983	263.4	4.374
950.0	4.280	34.976	265.7	4.205
1000.0	4.206	34.978	266.3	4.128
1050.0	4.118	34.985	266.4	4.036
1100.0	4.109	34.986	266.5	4.024
1150.0	4.103	34.986	266.4	4.013
1200.0	4.091	34.986	266.8	3.996
1232.0	4.078	34.985	267.0	3.981


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 80

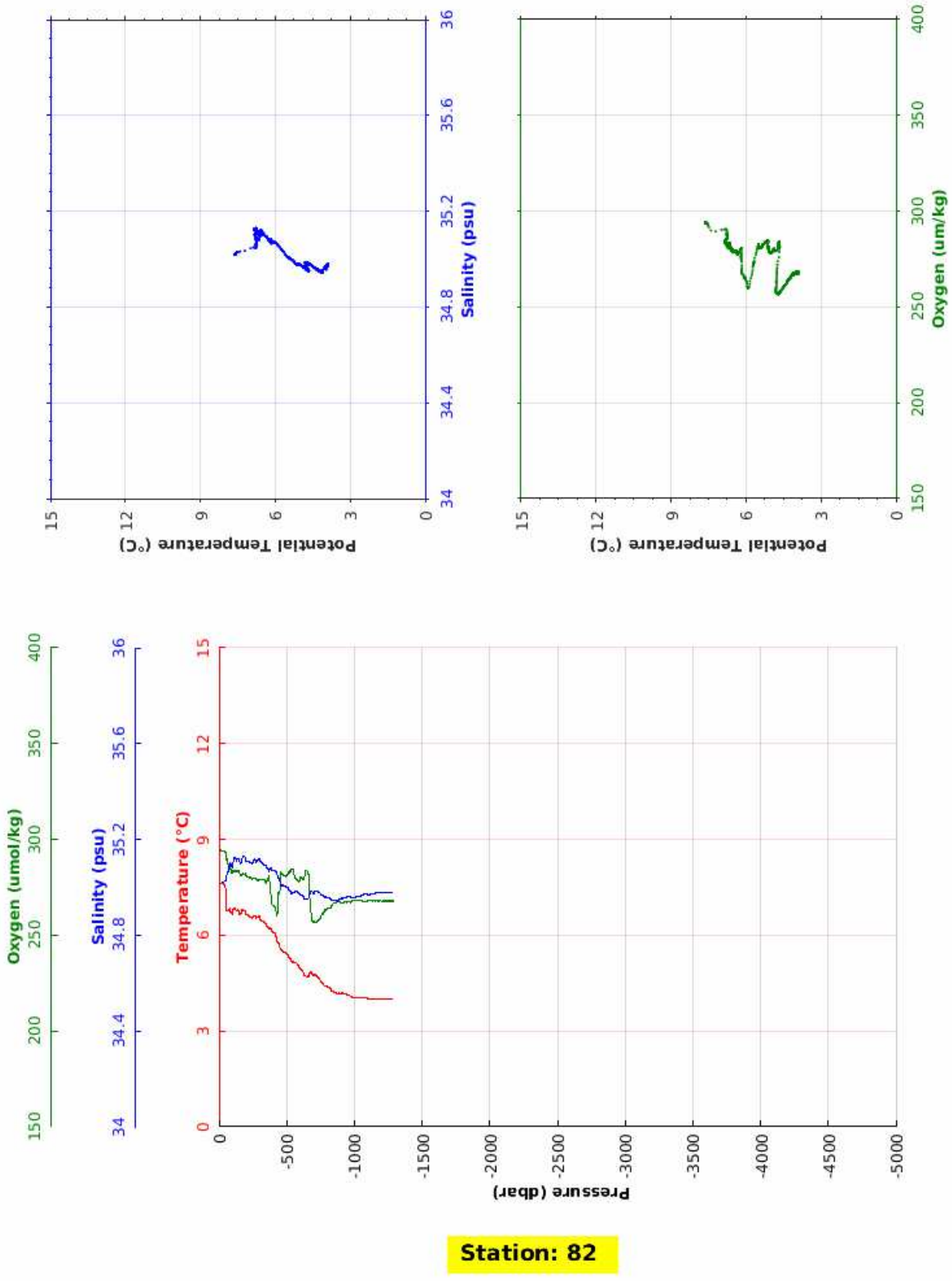
Cruise	: RREX 2015		
Station	: 81	Cast	: 1
Date	: 27/06/2015	Ship	: N/O Thalassa
Depth	: 1308 m	Organism	: IFREMER
Position	: N 59 18.01 W 030 34.21		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.456	35.006	298.8	7.456
10.0	7.457	35.006	298.7	7.456
20.0	7.458	35.006	298.8	7.456
30.0	7.409	35.008	299.8	7.406
40.0	7.353	35.010	300.5	7.349
50.0	7.319	35.012	299.2	7.314
100.0	6.563	35.070	294.4	6.554
150.0	6.602	35.106	287.2	6.588
200.0	6.477	35.094	286.6	6.459
250.0	6.224	35.067	285.8	6.202
300.0	6.146	35.066	282.8	6.120
350.0	5.974	35.047	284.2	5.943
400.0	5.872	35.045	280.0	5.837
450.0	5.671	35.029	280.3	5.633
500.0	5.597	35.029	270.9	5.554
550.0	5.461	35.025	261.2	5.415
600.0	5.353	35.026	257.9	5.303
650.0	5.110	35.012	256.4	5.056
700.0	4.986	35.004	256.7	4.928
750.0	4.804	34.993	257.6	4.743
800.0	4.611	34.981	260.3	4.547
850.0	4.547	34.977	261.4	4.479
900.0	4.334	34.976	264.9	4.264
950.0	4.216	34.975	266.3	4.142
1000.0	4.116	34.976	267.4	4.039
1050.0	4.049	34.978	267.9	3.968
1100.0	3.981	34.981	268.1	3.896
1150.0	3.970	34.981	268.2	3.881
1200.0	3.973	34.981	268.3	3.880
1250.0	3.973	34.981	268.3	3.875
1300.0	3.974	34.981	268.4	3.872
1311.0	3.965	34.981	268.6	3.862


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 81

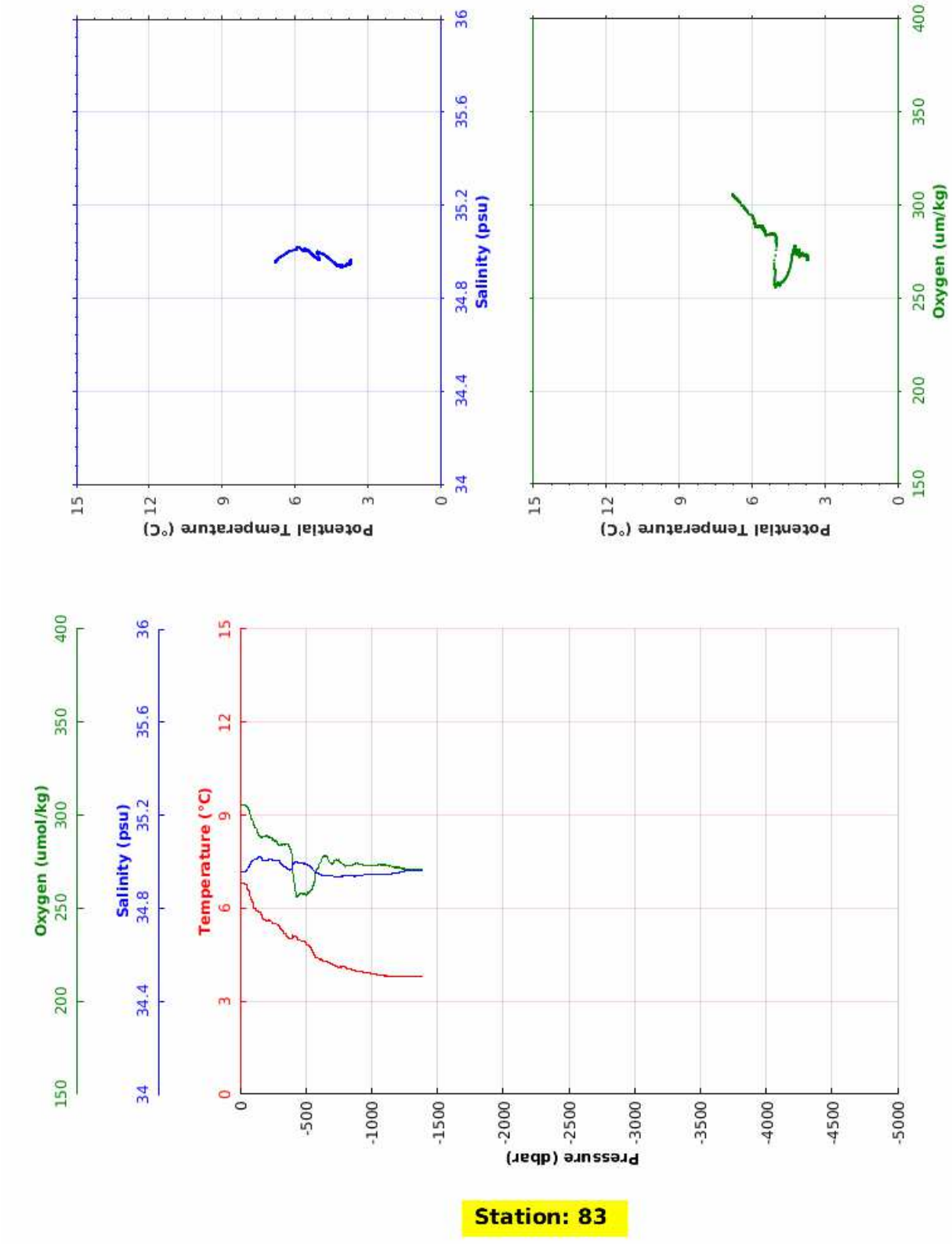
Cruise	: RREX 2015		
Station	: 82	Cast	: 1
Date	: 27/06/2015	Ship	: N/O Thalassa
Depth	: 1287 m	Organism	: IFREMER
Position	: N 59 2.99 W 030 57.18		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.621	35.017	294.3	7.621
10.0	7.622	35.018	293.9	7.621
20.0	7.614	35.019	294.2	7.613
30.0	7.616	35.019	294.0	7.613
40.0	7.566	35.026	293.5	7.562
50.0	6.986	35.045	290.3	6.982
100.0	6.652	35.081	283.1	6.643
150.0	6.705	35.108	281.9	6.691
200.0	6.643	35.108	281.1	6.624
250.0	6.564	35.105	279.6	6.541
300.0	6.574	35.117	278.9	6.547
350.0	6.301	35.081	278.7	6.270
400.0	6.084	35.070	265.1	6.049
450.0	5.628	35.019	278.3	5.590
500.0	5.412	34.999	281.5	5.370
550.0	5.158	34.980	281.7	5.113
600.0	4.945	34.968	280.1	4.897
650.0	4.709	34.951	283.0	4.658
700.0	4.750	34.977	257.0	4.694
750.0	4.570	34.970	260.3	4.511
800.0	4.389	34.957	263.7	4.327
850.0	4.218	34.946	266.7	4.153
900.0	4.185	34.953	266.8	4.116
950.0	4.131	34.960	267.3	4.058
1000.0	4.050	34.958	268.4	3.973
1050.0	4.047	34.966	267.9	3.966
1100.0	4.006	34.969	268.2	3.921
1150.0	3.995	34.975	267.9	3.906
1200.0	3.995	34.978	267.9	3.902
1250.0	3.998	34.977	268.0	3.901
1290.0	4.001	34.977	267.9	3.900


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 82

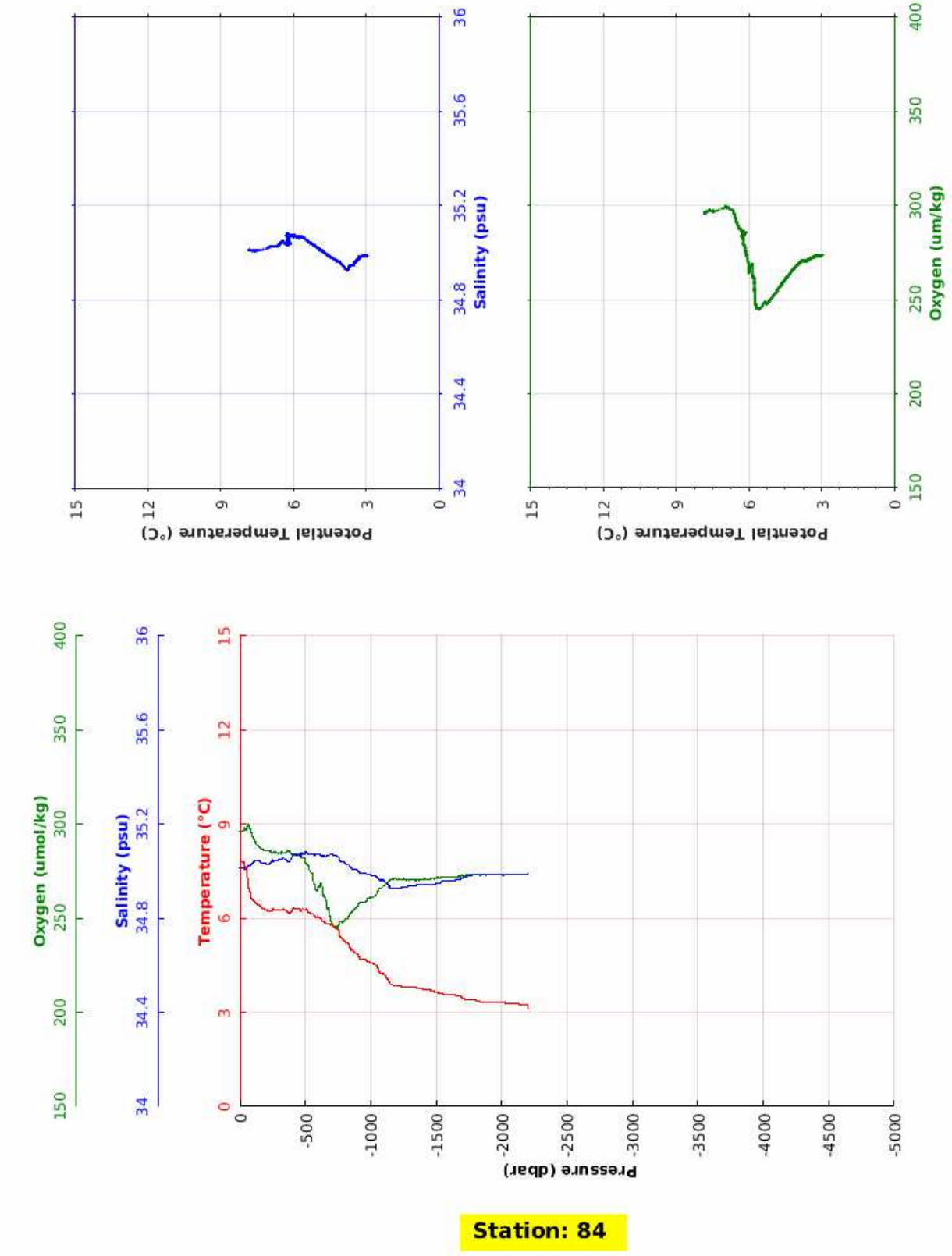
Cruise	: RREX 2015
Station	: 83
Cast	: 1
Date	: 27/06/2015
Ship	: N/O Thalassa
Depth	: 1383 m
Organism	: IFREMER
Position	: N 58 50.67 W 031 16.04

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.814	34.956	305.5	6.814
10.0	6.802	34.956	305.4	6.801
20.0	6.802	34.956	305.3	6.800
30.0	6.809	34.956	305.5	6.806
40.0	6.787	34.957	305.4	6.783
50.0	6.730	34.964	304.6	6.726
100.0	6.159	35.003	295.3	6.150
150.0	5.866	35.020	288.8	5.854
200.0	5.605	35.004	288.7	5.588
250.0	5.523	35.006	286.7	5.503
300.0	5.423	35.000	283.8	5.399
350.0	5.130	34.972	284.6	5.102
400.0	5.103	34.991	266.8	5.071
450.0	4.987	34.993	257.6	4.951
500.0	4.897	34.991	256.9	4.857
550.0	4.629	34.970	261.2	4.586
600.0	4.364	34.947	274.0	4.318
650.0	4.280	34.940	278.2	4.230
700.0	4.218	34.940	273.8	4.165
750.0	4.103	34.935	275.6	4.046
800.0	4.083	34.940	272.5	4.023
850.0	4.024	34.939	273.1	3.960
900.0	3.958	34.941	273.9	3.890
950.0	3.933	34.945	273.0	3.862
1000.0	3.898	34.946	273.1	3.822
1050.0	3.849	34.945	273.4	3.770
1100.0	3.818	34.944	273.4	3.735
1150.0	3.795	34.948	272.4	3.707
1200.0	3.807	34.953	271.8	3.715
1250.0	3.819	34.960	271.1	3.723
1300.0	3.811	34.962	270.7	3.711
1350.0	3.804	34.962	270.6	3.700
1389.0	3.805	34.962	270.8	3.697


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 83

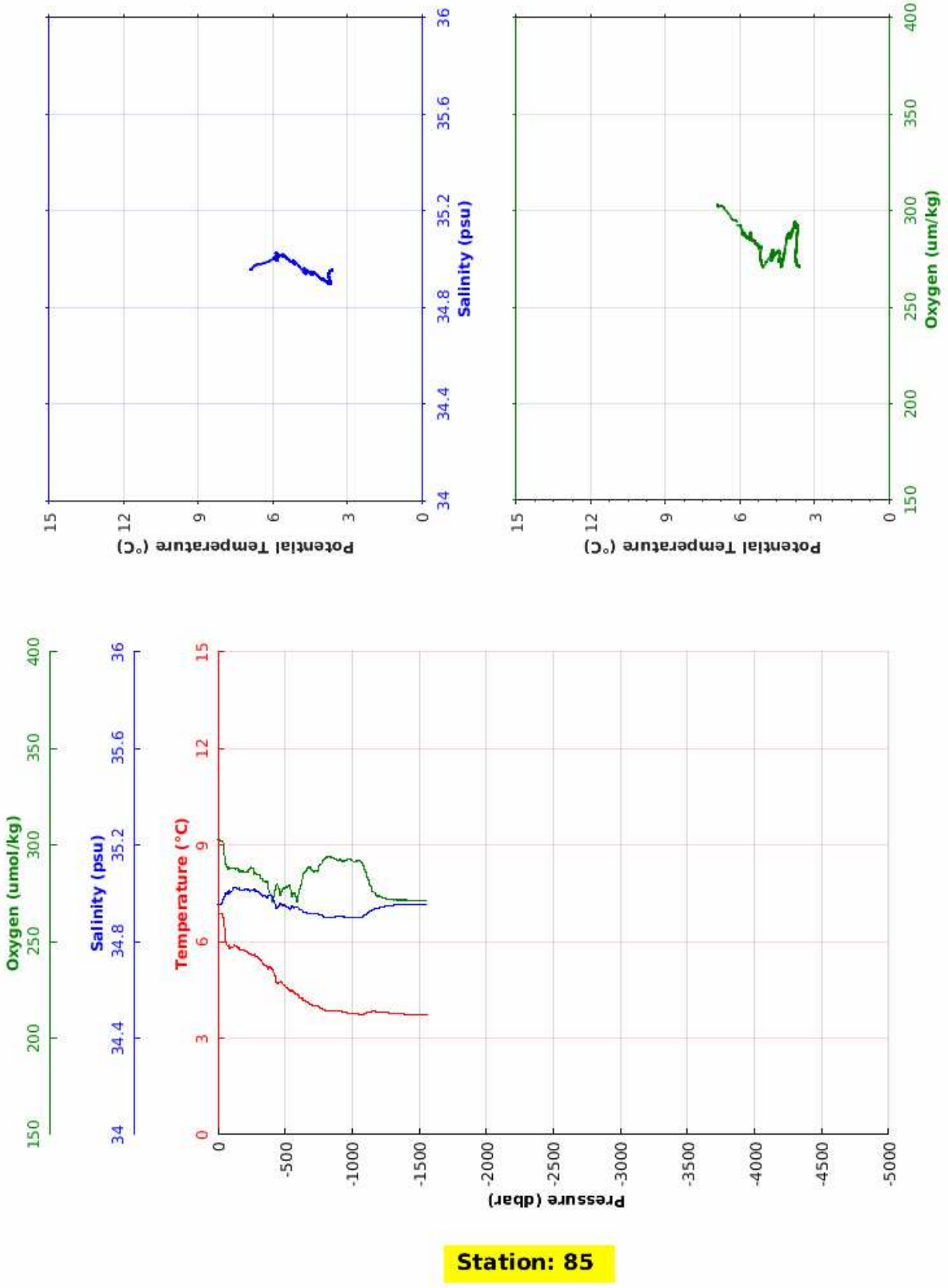
Cruise : RREX 2015			
Station : 84	Cast : 1		
Date : 27/06/2015	Ship : N/O Thalassa		
Depth : 2184 m	Organism : IFREMER		
Position : N 58 25.73 W 030 1.51			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.822	35.012	296.2	7.822
10.0	7.820	35.012	296.0	7.819
20.0	7.818	35.012	296.2	7.816
30.0	7.783	35.012	296.6	7.780
40.0	7.620	35.009	297.3	7.616
50.0	7.528	35.008	297.2	7.523
100.0	6.582	35.037	294.1	6.573
150.0	6.428	35.045	287.9	6.415
200.0	6.265	35.032	286.1	6.247
250.0	6.291	35.047	285.0	6.269
300.0	6.273	35.049	284.5	6.247
350.0	6.262	35.050	284.7	6.231
400.0	6.290	35.065	284.2	6.254
450.0	6.318	35.073	283.9	6.278
500.0	6.272	35.075	281.8	6.227
550.0	6.146	35.073	274.0	6.097
600.0	6.033	35.074	265.5	5.979
650.0	5.843	35.062	262.1	5.786
700.0	5.803	35.071	248.7	5.741
750.0	5.644	35.064	245.5	5.578
800.0	5.267	35.035	248.7	5.199
850.0	5.001	35.016	253.4	4.930
900.0	4.840	35.004	256.2	4.766
950.0	4.704	34.992	258.7	4.626
1000.0	4.579	34.984	260.8	4.498
1050.0	4.444	34.975	263.0	4.360
1100.0	4.200	34.962	267.1	4.114
1150.0	3.921	34.930	270.5	3.833
1200.0	3.843	34.928	270.9	3.751
1250.0	3.823	34.931	270.7	3.727
1300.0	3.808	34.938	270.4	3.708
1350.0	3.788	34.939	270.3	3.684
1400.0	3.734	34.944	270.8	3.626
1450.0	3.715	34.945	270.8	3.602
1500.0	3.632	34.947	271.5	3.516
1550.0	3.607	34.958	271.7	3.486
1600.0	3.567	34.960	272.1	3.443
1650.0	3.547	34.963	272.2	3.419
1700.0	3.479	34.972	272.5	3.347
1750.0	3.403	34.980	272.9	3.267
1800.0	3.389	34.985	273.4	3.249
1850.0	3.343	34.984	273.2	3.199
1900.0	3.331	34.984	273.1	3.183
1950.0	3.317	34.985	273.3	3.164
2000.0	3.314	34.986	273.3	3.156
2050.0	3.296	34.986	273.2	3.135
2100.0	3.286	34.986	273.3	3.120
2150.0	3.229	34.986	273.2	3.059
2200.0	3.156	34.986	273.9	2.982
2206.0	3.124	34.987	273.8	2.951


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 84

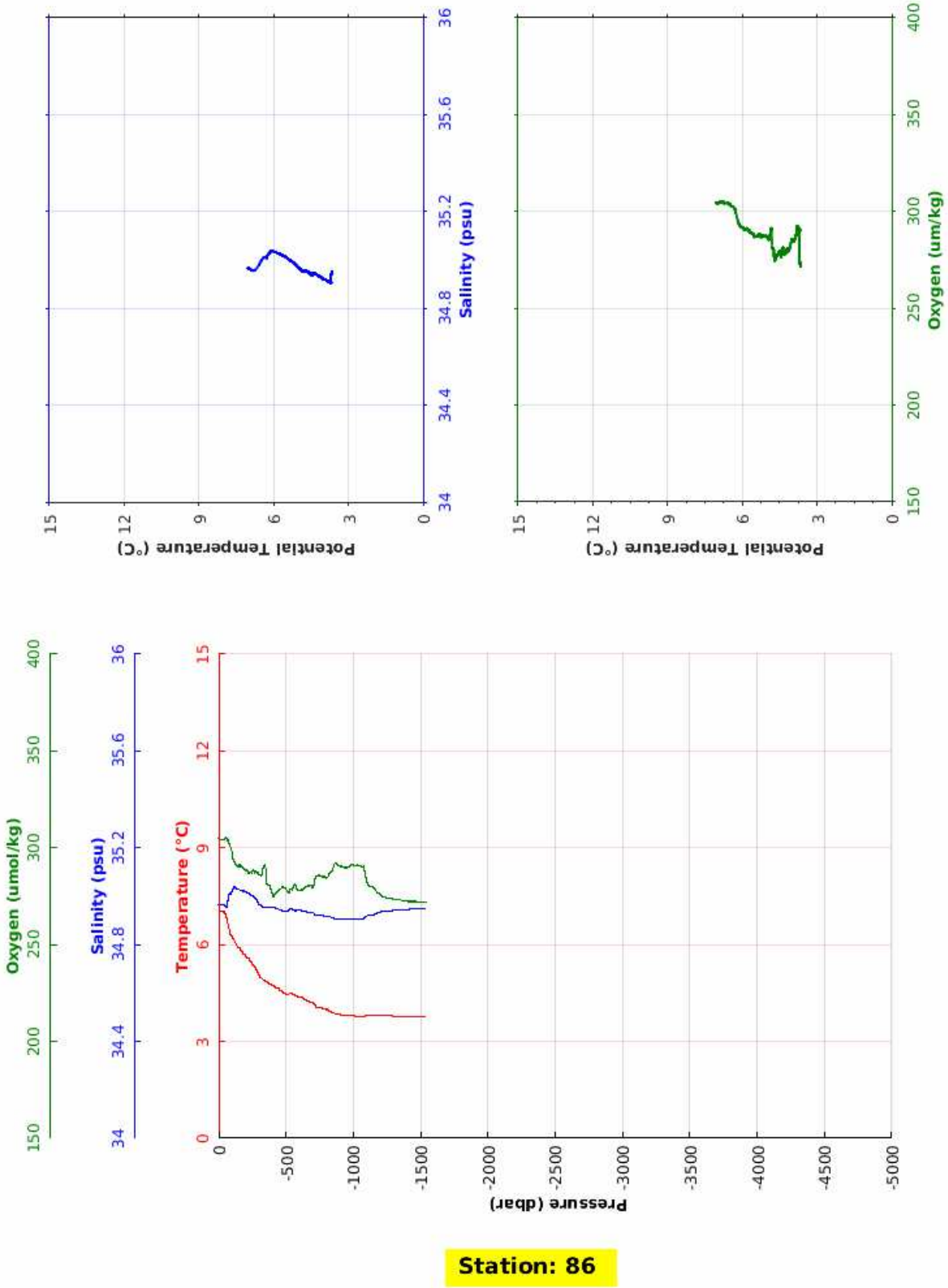
Cruise	: RREX 2015		
Station	: 85	Cast	: 1
Date	: 28/06/2015	Ship	: N/O Thalassa
Depth	: 1558 m	Organism	: IFREMER
Position	: N 58 58.95 W 032 9.59		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.887	34.956	303.0	6.887
10.0	6.887	34.956	302.9	6.886
20.0	6.889	34.956	302.6	6.887
30.0	6.884	34.956	302.4	6.881
40.0	6.726	34.972	302.5	6.723
50.0	6.349	34.983	296.4	6.345
100.0	5.826	35.006	288.0	5.817
150.0	5.826	35.021	287.8	5.814
200.0	5.716	35.016	286.1	5.700
250.0	5.592	35.012	288.8	5.571
300.0	5.508	35.009	284.7	5.484
350.0	5.268	34.990	281.1	5.239
400.0	5.180	34.991	274.0	5.147
450.0	4.715	34.944	279.0	4.680
500.0	4.629	34.951	277.3	4.590
550.0	4.495	34.948	274.3	4.452
600.0	4.349	34.943	271.8	4.304
650.0	4.155	34.923	285.7	4.106
700.0	4.028	34.916	287.9	3.976
750.0	4.009	34.917	286.5	3.953
800.0	3.866	34.902	293.0	3.807
850.0	3.842	34.900	293.6	3.779
900.0	3.847	34.904	292.4	3.780
950.0	3.803	34.903	291.9	3.733
1000.0	3.776	34.901	292.0	3.702
1050.0	3.747	34.901	292.2	3.668
1100.0	3.777	34.912	287.0	3.694
1150.0	3.833	34.929	277.8	3.745
1200.0	3.818	34.940	273.8	3.726
1250.0	3.795	34.948	272.4	3.700
1300.0	3.778	34.951	271.9	3.678
1350.0	3.760	34.953	271.8	3.656
1400.0	3.743	34.954	271.6	3.635
1450.0	3.743	34.954	271.5	3.630
1500.0	3.745	34.954	271.2	3.628
1550.0	3.745	34.954	271.3	3.624
1567.0	3.747	34.954	271.3	3.624


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 85

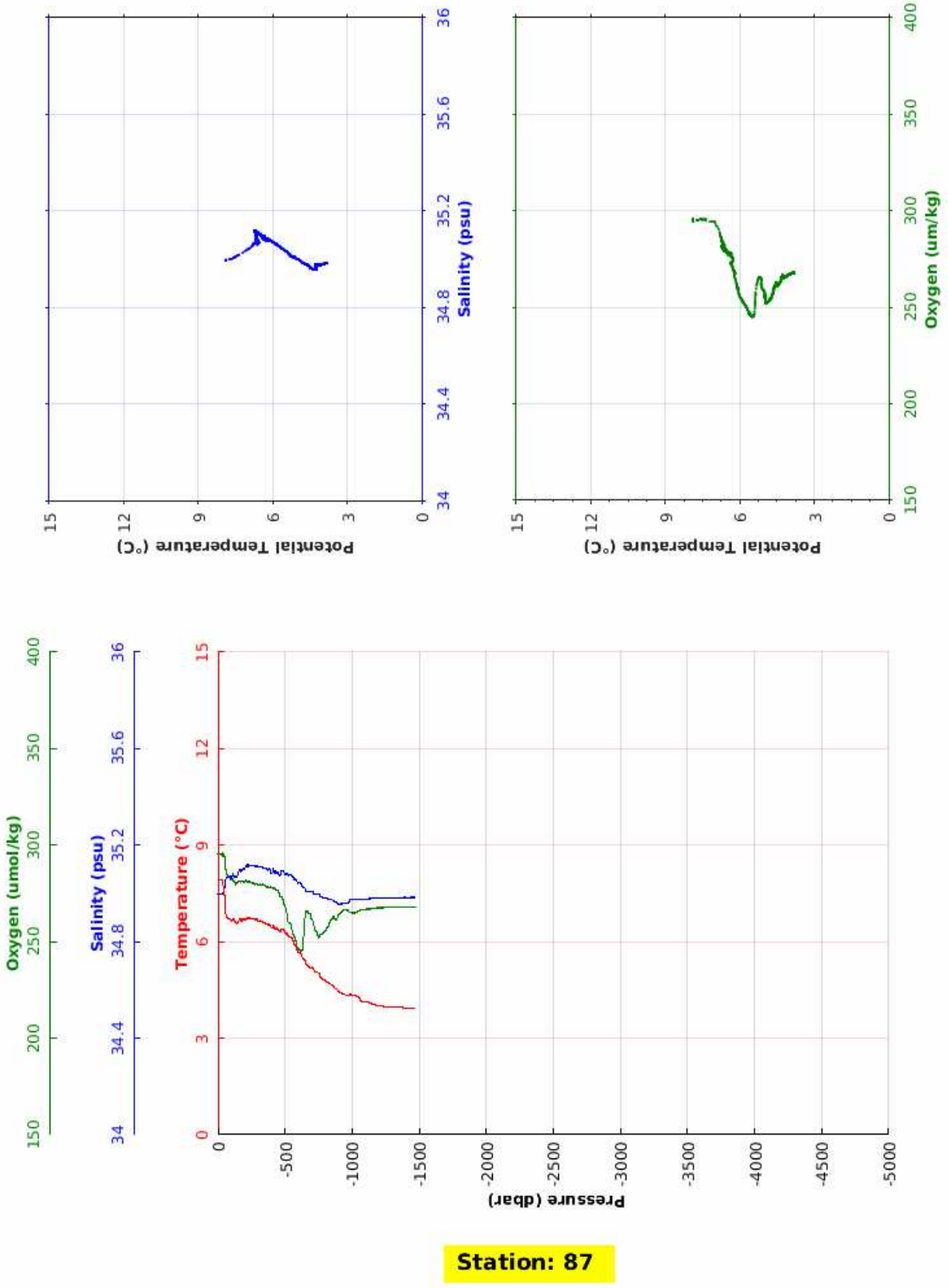
Cruise	: RREX 2015		
Station	: 86	Cast	: 1
Date	: 28/06/2015	Ship	: N/O Thalassa
Depth	: 1536 m	Organism	: IFREMER
Position	: N 58 55.42 W 031 33.66		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.029	34.966	304.6	7.029
10.0	7.025	34.965	304.5	7.025
20.0	7.030	34.965	304.3	7.028
30.0	7.025	34.966	304.2	7.022
40.0	7.018	34.966	304.3	7.014
50.0	6.927	34.960	304.5	6.922
100.0	6.278	35.017	299.3	6.270
150.0	5.914	35.032	290.4	5.901
200.0	5.646	35.017	288.9	5.629
250.0	5.402	35.002	287.1	5.382
300.0	5.046	34.970	287.4	5.022
350.0	4.852	34.953	291.0	4.824
400.0	4.756	34.955	276.9	4.725
450.0	4.604	34.944	277.9	4.569
500.0	4.474	34.936	279.2	4.436
550.0	4.475	34.945	278.4	4.433
600.0	4.384	34.943	278.1	4.338
650.0	4.280	34.936	279.7	4.230
700.0	4.204	34.933	279.3	4.151
750.0	4.048	34.921	285.8	3.992
800.0	3.997	34.919	284.6	3.938
850.0	3.888	34.911	288.8	3.824
900.0	3.836	34.908	290.6	3.769
950.0	3.816	34.908	290.0	3.745
1000.0	3.795	34.905	291.4	3.721
1050.0	3.781	34.906	290.7	3.702
1100.0	3.801	34.917	284.4	3.718
1150.0	3.803	34.924	279.7	3.716
1200.0	3.813	34.933	276.4	3.721
1250.0	3.798	34.939	274.4	3.702
1300.0	3.783	34.942	273.4	3.683
1350.0	3.785	34.944	273.5	3.681
1400.0	3.771	34.946	272.7	3.662
1450.0	3.763	34.947	272.4	3.650
1500.0	3.766	34.949	272.0	3.648
1544.0	3.767	34.949	272.3	3.646


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 86

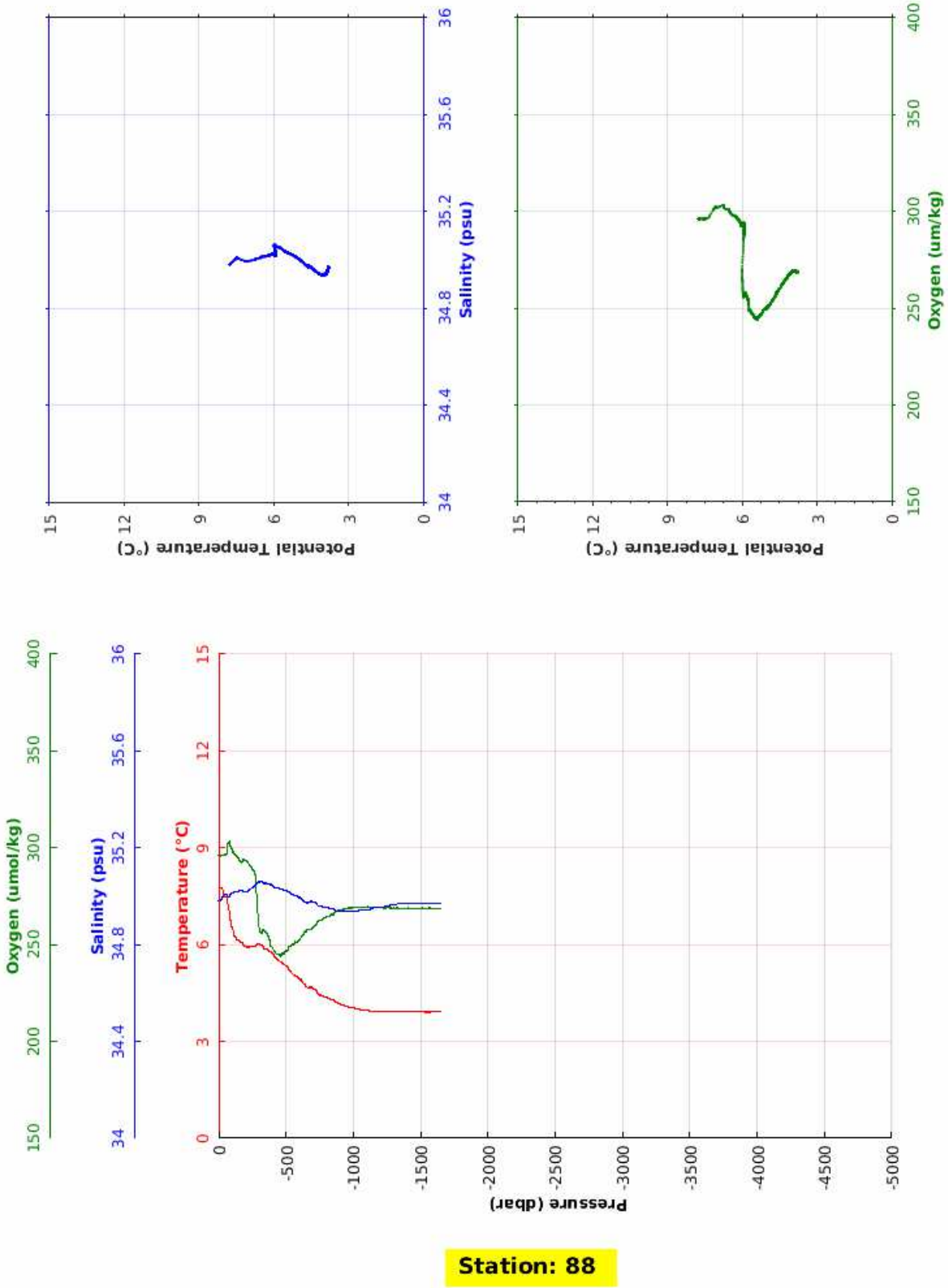
Cruise	: RREX 2015
Station	: 87
Cast	: 1
Date	: 28/06/2015
Ship	: N/O Thalassa
Depth	: 1460 m
Organism	: IFREMER
Position	: N 58 46.34 W 030 40.54

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.904	34.996	295.5	7.904
10.0	7.904	34.996	295.5	7.903
20.0	7.905	34.996	295.5	7.903
30.0	7.907	34.996	295.2	7.904
40.0	7.700	35.001	295.2	7.696
50.0	7.379	35.017	295.8	7.374
100.0	6.659	35.064	282.4	6.650
150.0	6.619	35.080	280.6	6.605
200.0	6.695	35.103	280.9	6.677
250.0	6.706	35.114	280.7	6.683
300.0	6.649	35.109	279.4	6.621
350.0	6.577	35.104	279.1	6.545
400.0	6.432	35.085	278.5	6.396
450.0	6.385	35.084	276.4	6.344
500.0	6.289	35.083	269.0	6.243
550.0	6.105	35.077	259.0	6.056
600.0	5.666	35.043	247.1	5.614
650.0	5.416	35.023	257.8	5.361
700.0	5.203	35.010	261.9	5.145
750.0	5.030	35.000	252.9	4.968
800.0	4.774	34.980	255.5	4.709
850.0	4.643	34.974	261.3	4.575
900.0	4.436	34.957	263.3	4.364
950.0	4.340	34.958	266.5	4.265
1000.0	4.350	34.976	265.2	4.271
1050.0	4.262	34.975	265.7	4.180
1100.0	4.140	34.976	266.8	4.054
1150.0	4.068	34.980	267.2	3.978
1200.0	4.017	34.982	267.6	3.923
1250.0	3.974	34.983	267.9	3.876
1300.0	3.960	34.983	268.1	3.858
1350.0	3.962	34.983	267.9	3.856
1400.0	3.937	34.984	268.1	3.826
1450.0	3.935	34.984	268.1	3.820
1477.0	3.943	34.984	268.3	3.825


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 87

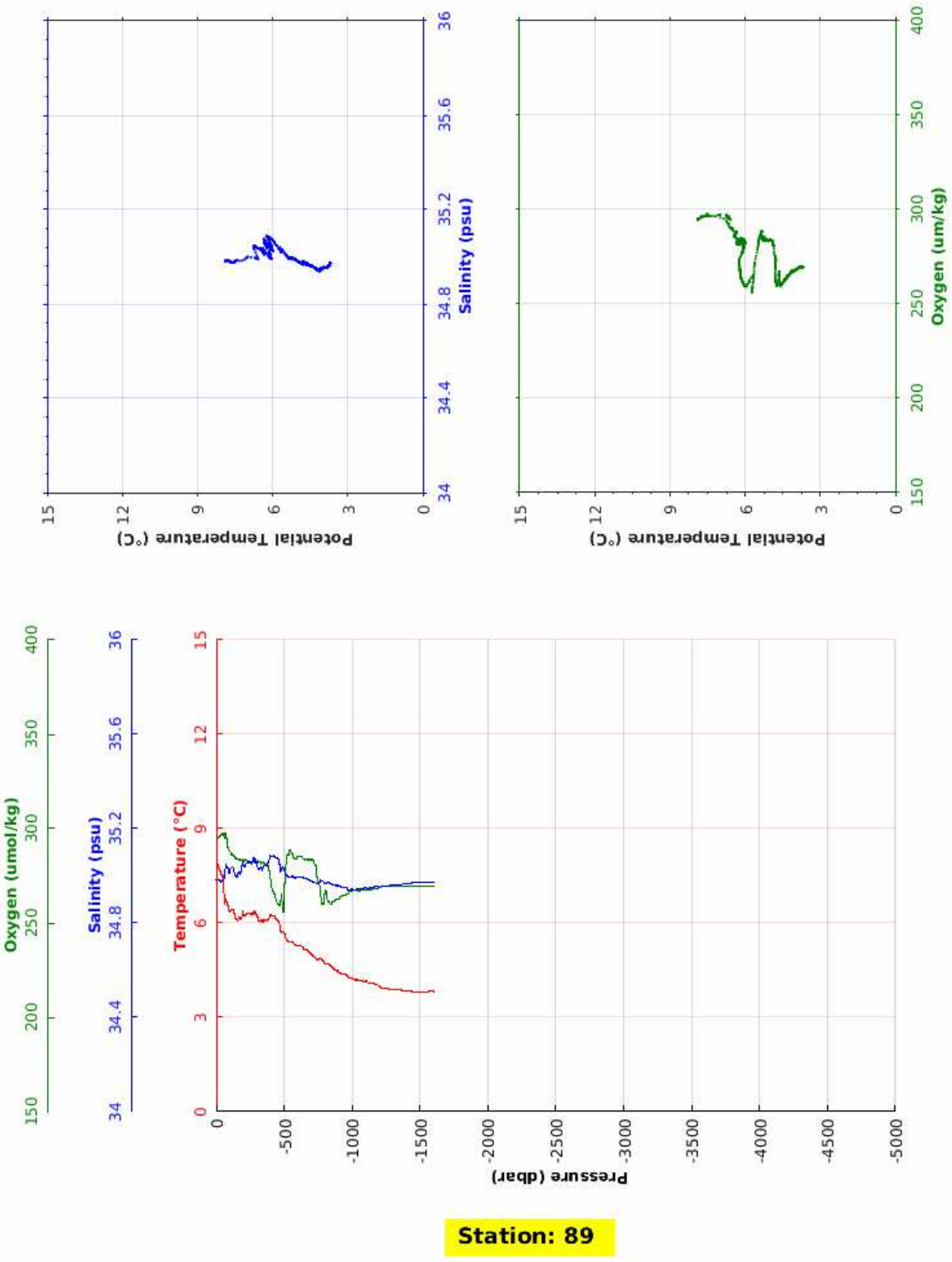
Cruise	: RREX 2015		
Station	: 88	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1648 m	Organism	: IFREMER
Position	: N 58 31.82 W 031 25.23		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.754	34.981	296.3	7.754
10.0	7.754	34.982	296.3	7.753
20.0	7.746	34.984	296.2	7.744
30.0	7.687	34.990	296.3	7.684
40.0	7.523	35.006	296.5	7.519
50.0	7.480	35.009	296.4	7.475
100.0	6.509	35.012	299.8	6.500
150.0	6.116	35.020	295.0	6.103
200.0	5.946	35.019	293.5	5.929
250.0	5.952	35.035	289.8	5.930
300.0	6.016	35.059	263.7	5.990
350.0	5.870	35.054	256.8	5.840
400.0	5.735	35.047	249.2	5.701
450.0	5.499	35.033	245.3	5.461
500.0	5.343	35.024	246.4	5.301
550.0	5.085	35.007	250.4	5.041
600.0	4.919	34.993	252.2	4.870
650.0	4.707	34.974	256.9	4.656
700.0	4.640	34.976	258.6	4.585
750.0	4.449	34.961	262.4	4.390
800.0	4.376	34.955	263.9	4.314
850.0	4.287	34.947	265.6	4.221
900.0	4.161	34.939	267.9	4.091
950.0	4.090	34.938	268.4	4.018
1000.0	4.037	34.938	269.0	3.960
1050.0	3.986	34.943	269.2	3.905
1100.0	3.960	34.944	269.2	3.876
1150.0	3.937	34.952	269.2	3.848
1200.0	3.939	34.955	269.3	3.846
1250.0	3.927	34.959	269.1	3.830
1300.0	3.918	34.965	268.9	3.817
1350.0	3.920	34.969	268.8	3.814
1400.0	3.915	34.970	268.8	3.805
1450.0	3.920	34.971	268.5	3.805
1500.0	3.914	34.970	268.7	3.795
1550.0	3.913	34.970	268.8	3.789
1600.0	3.916	34.970	268.6	3.787
1650.0	3.917	34.970	268.9	3.784
1658.0	3.918	34.970	268.9	3.784


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 88

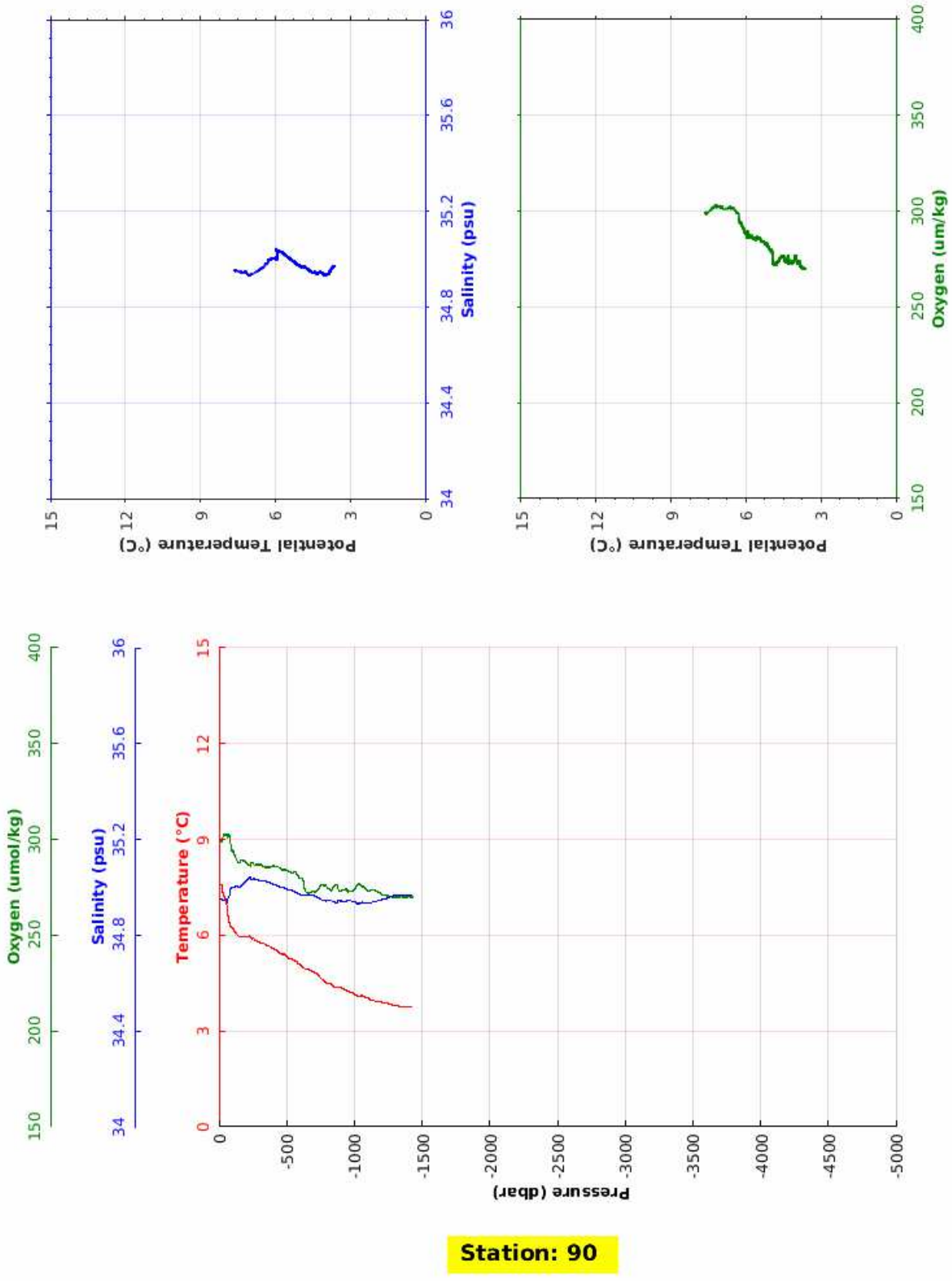
Cruise	: RREX 2015		
Station	: 89	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1600 m	Organism	: IFREMER
Position	: N 58 11.98 W 031 45.06		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.884	34.982	295.2	7.884
10.0	7.884	34.983	295.0	7.883
20.0	7.763	34.984	296.2	7.761
30.0	7.652	34.977	296.5	7.649
40.0	7.536	34.979	297.5	7.533
50.0	7.345	34.983	296.6	7.340
100.0	6.346	35.013	287.8	6.338
150.0	6.084	34.993	284.2	6.071
200.0	6.261	35.043	283.1	6.243
250.0	6.325	35.063	282.2	6.302
300.0	6.261	35.059	281.9	6.234
350.0	6.073	35.038	281.5	6.042
400.0	6.268	35.085	271.0	6.232
450.0	6.081	35.073	260.3	6.041
500.0	5.664	35.029	270.9	5.622
550.0	5.393	34.997	287.1	5.347
600.0	5.295	34.997	285.3	5.245
650.0	5.157	34.989	283.7	5.103
700.0	5.007	34.979	283.3	4.949
750.0	4.844	34.971	271.7	4.783
800.0	4.703	34.966	266.6	4.638
850.0	4.596	34.966	261.0	4.528
900.0	4.469	34.960	262.9	4.398
950.0	4.370	34.952	264.9	4.295
1000.0	4.241	34.943	266.9	4.163
1050.0	4.183	34.946	267.1	4.101
1100.0	4.152	34.950	267.2	4.066
1150.0	4.079	34.951	268.0	3.989
1200.0	3.992	34.953	268.8	3.899
1250.0	3.923	34.956	269.6	3.826
1300.0	3.895	34.959	269.6	3.794
1350.0	3.878	34.961	269.8	3.772
1400.0	3.836	34.967	269.6	3.727
1450.0	3.821	34.970	269.7	3.707
1500.0	3.814	34.972	269.5	3.696
1550.0	3.817	34.973	269.5	3.694
1600.0	3.823	34.972	269.5	3.696
1608.0	3.822	34.973	269.7	3.694


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 89

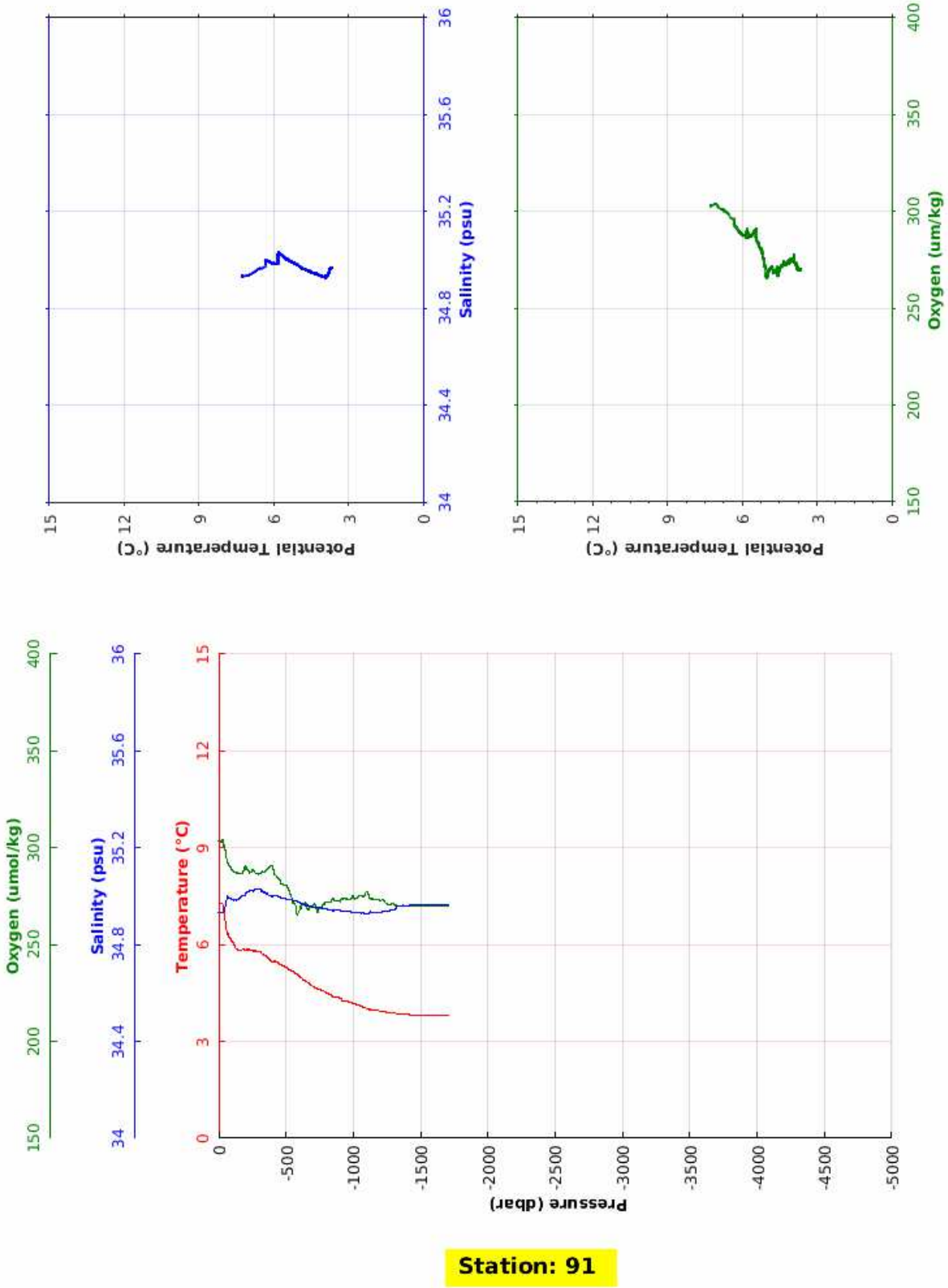
Cruise	: RREX 2015		
Station	: 90	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1427 m	Organism	: IFREMER
Position	: N 57 52.79 W 032 7.11		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.605	34.952	299.2	7.605
10.0	7.600	34.952	299.2	7.599
20.0	7.600	34.952	298.5	7.598
30.0	7.343	34.946	301.7	7.340
40.0	7.203	34.948	302.8	7.199
50.0	7.073	34.933	302.4	7.068
100.0	6.209	34.999	294.1	6.201
150.0	5.956	35.000	287.9	5.943
200.0	5.945	35.028	287.4	5.927
250.0	5.902	35.035	287.3	5.880
300.0	5.778	35.028	286.9	5.753
350.0	5.693	35.024	285.5	5.663
400.0	5.584	35.013	286.2	5.551
450.0	5.443	35.001	284.7	5.406
500.0	5.345	34.992	283.9	5.304
550.0	5.229	34.984	282.9	5.183
600.0	5.052	34.970	279.7	5.003
650.0	4.955	34.969	272.2	4.902
700.0	4.840	34.965	272.3	4.783
750.0	4.668	34.950	276.1	4.608
800.0	4.498	34.944	274.7	4.435
850.0	4.385	34.938	275.8	4.318
900.0	4.363	34.943	273.4	4.293
950.0	4.253	34.944	272.6	4.179
1000.0	4.161	34.939	274.0	4.084
1050.0	4.098	34.935	275.5	4.017
1100.0	4.033	34.937	273.0	3.948
1150.0	3.941	34.940	273.5	3.852
1200.0	3.903	34.949	271.0	3.811
1250.0	3.865	34.957	270.7	3.769
1300.0	3.796	34.966	269.8	3.696
1350.0	3.775	34.969	270.1	3.671
1400.0	3.775	34.969	269.9	3.666
1432.0	3.776	34.969	270.2	3.665


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 90

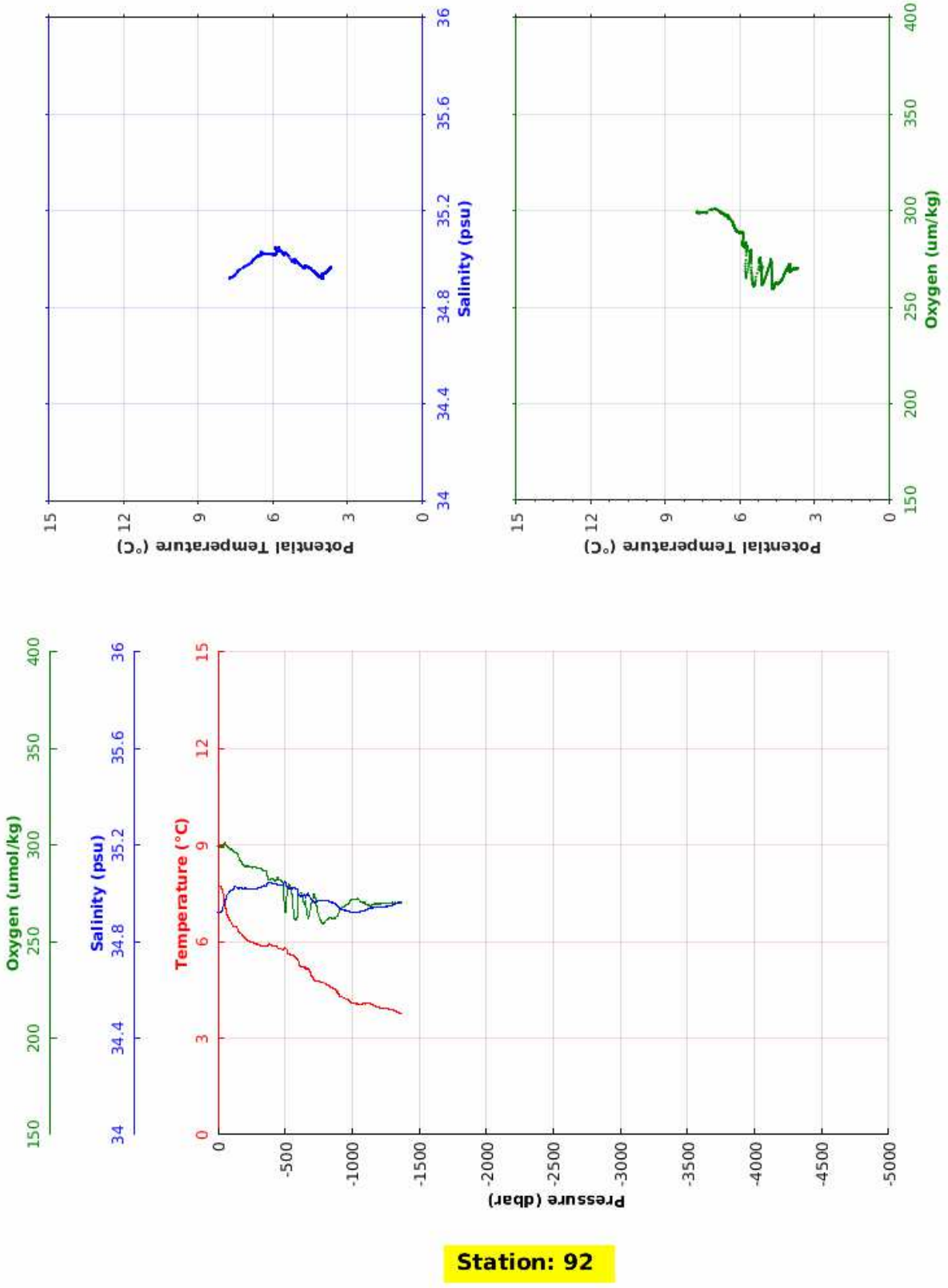
Cruise	: RREX 2015		
Station	: 91	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1710 m	Organism	: IFREMER
Position	: N 57 34.76 W 032 28.62		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.268	34.933	303.3	7.268
10.0	7.268	34.933	303.1	7.268
20.0	7.263	34.933	303.3	7.261
30.0	7.243	34.933	302.9	7.240
40.0	6.983	34.938	302.9	6.979
50.0	6.690	34.956	300.2	6.686
100.0	6.103	34.988	289.1	6.095
150.0	5.838	34.987	286.9	5.825
200.0	5.814	35.003	291.0	5.798
250.0	5.829	35.024	287.8	5.808
300.0	5.779	35.027	286.4	5.753
350.0	5.645	35.014	287.7	5.615
400.0	5.478	34.999	291.0	5.444
450.0	5.424	34.999	284.0	5.387
500.0	5.295	34.990	280.8	5.254
550.0	5.170	34.984	272.4	5.124
600.0	5.036	34.976	266.5	4.987
650.0	4.847	34.962	271.7	4.795
700.0	4.706	34.956	269.8	4.650
750.0	4.609	34.953	268.5	4.549
800.0	4.501	34.946	271.9	4.438
850.0	4.394	34.940	273.9	4.328
900.0	4.341	34.942	272.4	4.271
950.0	4.245	34.937	273.6	4.171
1000.0	4.175	34.933	275.2	4.098
1050.0	4.104	34.931	275.4	4.023
1100.0	4.010	34.926	277.4	3.925
1150.0	3.983	34.935	273.7	3.894
1200.0	3.944	34.934	272.9	3.851
1250.0	3.908	34.941	271.1	3.811
1300.0	3.887	34.945	271.0	3.786
1350.0	3.862	34.958	270.3	3.757
1400.0	3.849	34.961	270.1	3.740
1450.0	3.812	34.965	270.0	3.698
1500.0	3.803	34.966	269.9	3.685
1550.0	3.802	34.967	269.9	3.680
1600.0	3.804	34.967	269.8	3.677
1650.0	3.808	34.967	269.8	3.677
1700.0	3.812	34.967	269.9	3.675
1719.0	3.812	34.968	270.1	3.674


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 91

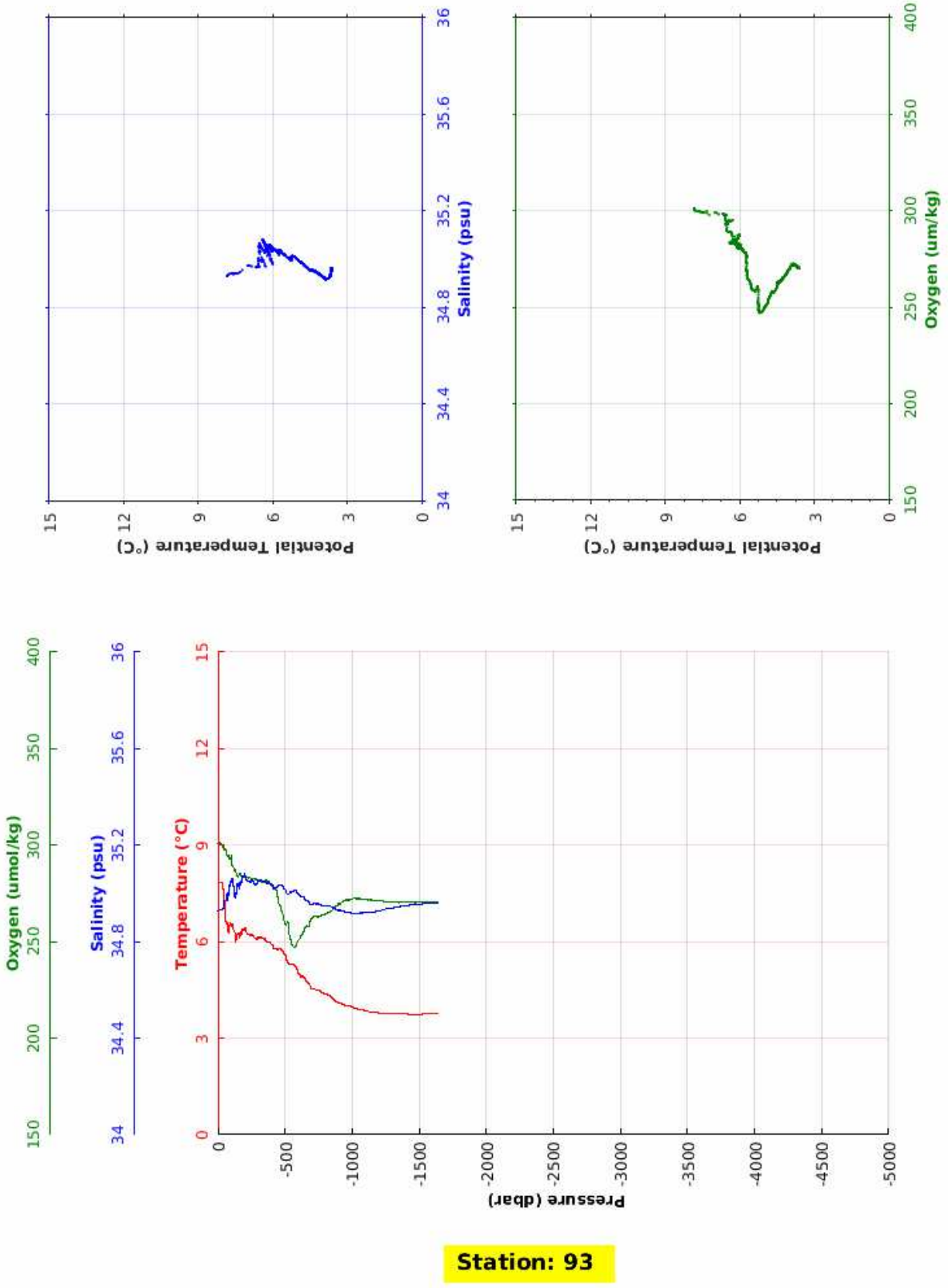
Cruise	: RREX 2015		
Station	: 92	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1370 m	Organism	: IFREMER
Position	: N 57 18.61 W 032 49.30		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.724	34.922	299.4	7.724
10.0	7.720	34.922	299.4	7.720
20.0	7.702	34.922	299.1	7.700
30.0	7.633	34.926	299.0	7.630
40.0	7.440	34.945	299.2	7.436
50.0	7.172	34.966	300.5	7.167
100.0	6.594	35.013	297.8	6.585
150.0	6.385	35.023	295.7	6.371
200.0	6.134	35.021	289.5	6.116
250.0	5.985	35.020	288.8	5.964
300.0	5.909	35.023	288.2	5.883
350.0	5.883	35.033	286.6	5.852
400.0	5.890	35.044	282.5	5.855
450.0	5.791	35.035	283.4	5.752
500.0	5.820	35.049	268.8	5.777
550.0	5.594	35.021	277.1	5.547
600.0	5.355	35.003	267.7	5.305
650.0	5.225	34.996	269.2	5.171
700.0	4.923	34.973	269.4	4.866
750.0	4.768	34.969	264.6	4.707
800.0	4.698	34.970	260.0	4.634
850.0	4.561	34.962	262.2	4.493
900.0	4.377	34.945	264.3	4.307
950.0	4.220	34.930	268.8	4.146
1000.0	4.086	34.921	271.9	4.009
1050.0	4.060	34.920	272.2	3.979
1100.0	4.069	34.929	270.2	3.984
1150.0	4.047	34.941	268.9	3.957
1200.0	3.955	34.944	269.7	3.862
1250.0	3.927	34.946	270.0	3.830
1300.0	3.893	34.949	270.2	3.792
1350.0	3.792	34.962	270.1	3.687
1374.0	3.760	34.966	270.4	3.654


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 92

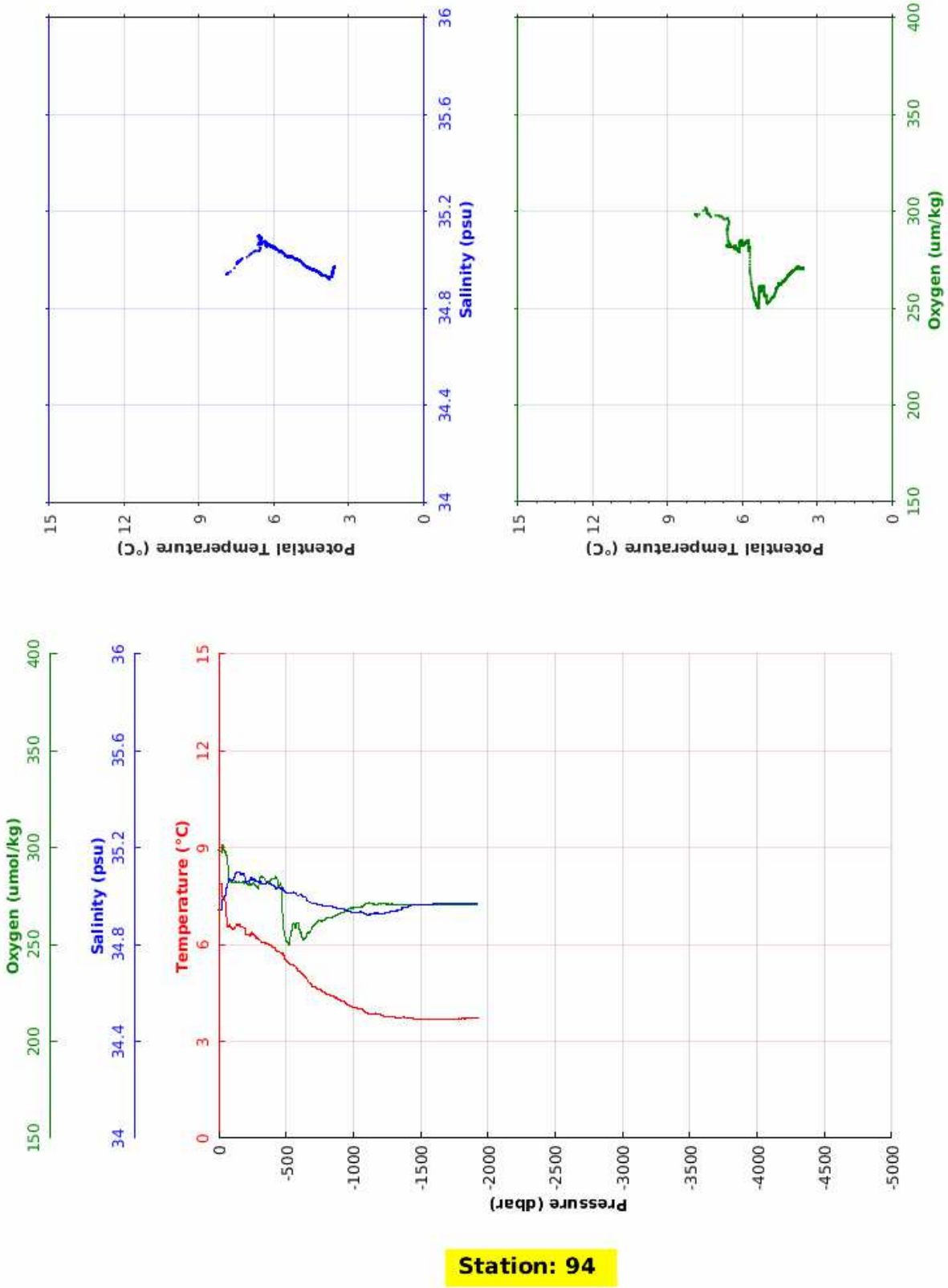
Cruise	: RREX 2015		
Station	: 93	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1637 m	Organism	: IFREMER
Position	: N 56 57.01 W 033 18.16		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.830	34.930	300.7	7.830
10.0	7.830	34.929	301.0	7.829
20.0	7.831	34.930	301.1	7.829
30.0	7.832	34.931	301.2	7.829
40.0	7.607	34.939	299.6	7.603
50.0	7.022	34.972	299.0	7.018
100.0	6.531	35.050	293.6	6.522
150.0	6.261	35.038	284.1	6.248
200.0	6.409	35.077	283.7	6.391
250.0	6.228	35.055	282.9	6.206
300.0	6.143	35.053	282.2	6.117
350.0	6.085	35.051	280.6	6.055
400.0	5.920	35.037	279.9	5.886
450.0	5.766	35.030	273.3	5.727
500.0	5.590	35.020	260.5	5.547
550.0	5.289	35.006	250.8	5.244
600.0	5.033	34.996	250.5	4.984
650.0	4.808	34.977	256.3	4.756
700.0	4.540	34.955	261.6	4.486
750.0	4.498	34.957	262.8	4.440
800.0	4.378	34.951	264.3	4.316
850.0	4.275	34.943	266.0	4.210
900.0	4.106	34.930	269.5	4.037
950.0	4.021	34.923	271.2	3.949
1000.0	3.958	34.919	272.1	3.882
1050.0	3.897	34.918	272.4	3.818
1100.0	3.854	34.920	271.9	3.771
1150.0	3.812	34.923	271.4	3.724
1200.0	3.782	34.928	271.5	3.691
1250.0	3.771	34.936	270.7	3.675
1300.0	3.766	34.941	270.6	3.666
1350.0	3.764	34.944	270.6	3.660
1400.0	3.755	34.948	270.4	3.647
1450.0	3.737	34.953	270.3	3.624
1500.0	3.747	34.956	270.5	3.630
1550.0	3.764	34.960	270.4	3.642
1600.0	3.765	34.962	270.2	3.638
1646.0	3.763	34.963	270.5	3.632


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 93

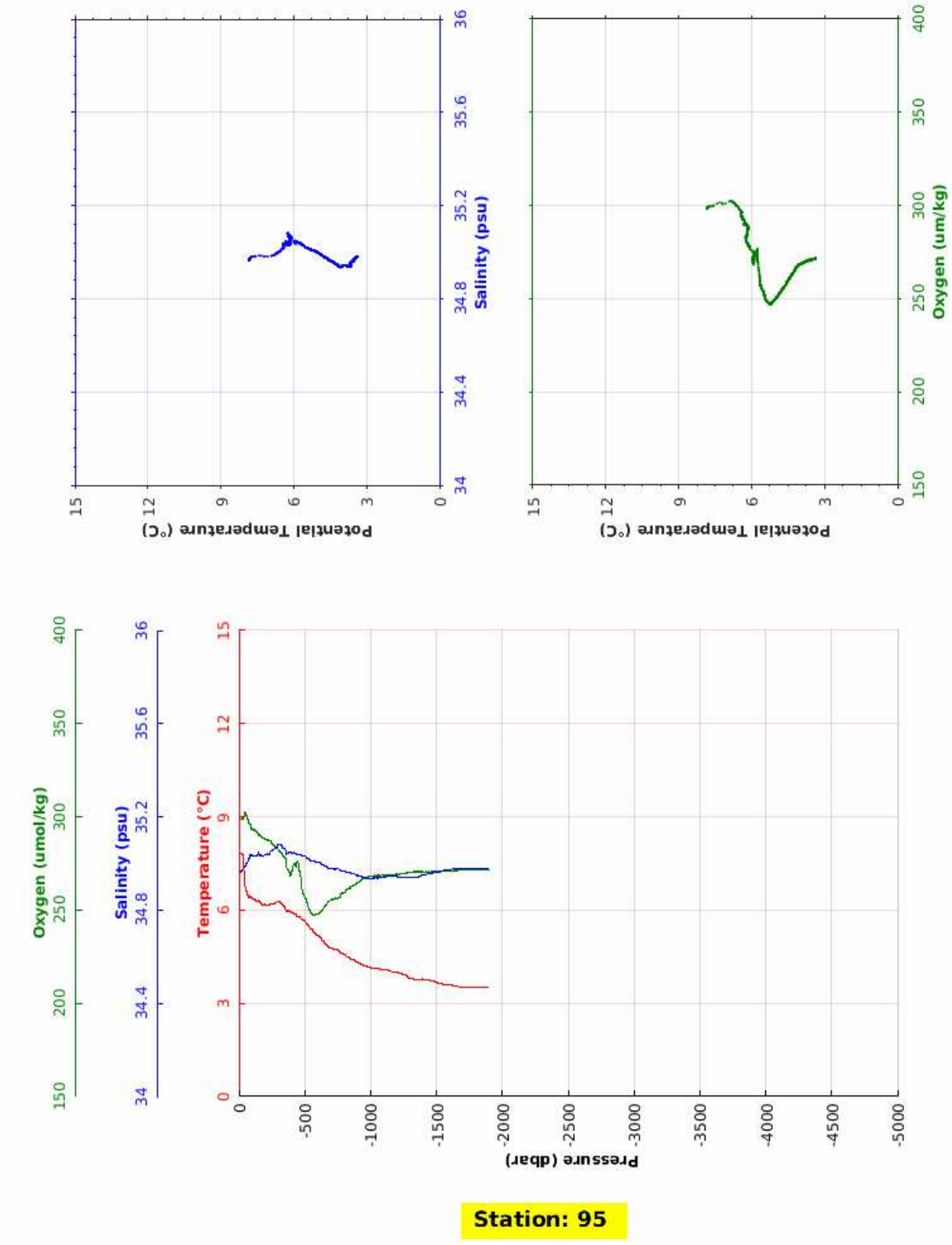
Cruise	: RREX 2015		
Station	: 94	Cast	: 1
Date	: 29/06/2015	Ship	: N/O Thalassa
Depth	: 1921 m	Organism	: IFREMER
Position	: N 56 54.60 W 033 21.25		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.874	34.942	298.6	7.874
10.0	7.872	34.942	298.4	7.871
20.0	7.870	34.943	298.3	7.868
30.0	7.473	34.986	301.6	7.470
40.0	7.439	34.992	300.3	7.436
50.0	7.319	35.001	298.5	7.314
100.0	6.495	35.066	282.8	6.486
150.0	6.614	35.099	282.4	6.600
200.0	6.356	35.065	282.1	6.339
250.0	6.327	35.070	281.0	6.304
300.0	6.139	35.056	278.9	6.113
350.0	6.032	35.051	283.6	6.001
400.0	5.926	35.045	283.8	5.892
450.0	5.789	35.037	279.9	5.750
500.0	5.520	35.014	253.8	5.478
550.0	5.368	35.014	258.6	5.322
600.0	5.161	35.003	260.9	5.111
650.0	4.980	34.995	253.5	4.927
700.0	4.712	34.971	259.4	4.656
750.0	4.610	34.966	262.5	4.550
800.0	4.470	34.959	263.6	4.407
850.0	4.401	34.957	264.1	4.335
900.0	4.298	34.951	265.8	4.228
950.0	4.166	34.941	267.8	4.093
1000.0	4.068	34.935	269.1	3.991
1050.0	4.021	34.936	269.3	3.941
1100.0	3.900	34.926	271.1	3.816
1150.0	3.867	34.928	271.0	3.779
1200.0	3.846	34.930	271.1	3.753
1250.0	3.776	34.932	270.9	3.680
1300.0	3.758	34.938	270.9	3.659
1350.0	3.736	34.943	270.8	3.632
1400.0	3.728	34.953	270.7	3.620
1450.0	3.703	34.967	270.6	3.590
1500.0	3.696	34.967	270.7	3.579
1550.0	3.702	34.967	270.4	3.580
1600.0	3.702	34.968	270.6	3.576
1650.0	3.706	34.968	270.3	3.576
1700.0	3.706	34.969	270.6	3.571
1750.0	3.708	34.970	270.7	3.568
1800.0	3.709	34.970	270.7	3.565
1850.0	3.713	34.970	270.5	3.564
1900.0	3.720	34.970	270.6	3.567
1936.0	3.721	34.970	270.8	3.564


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 94

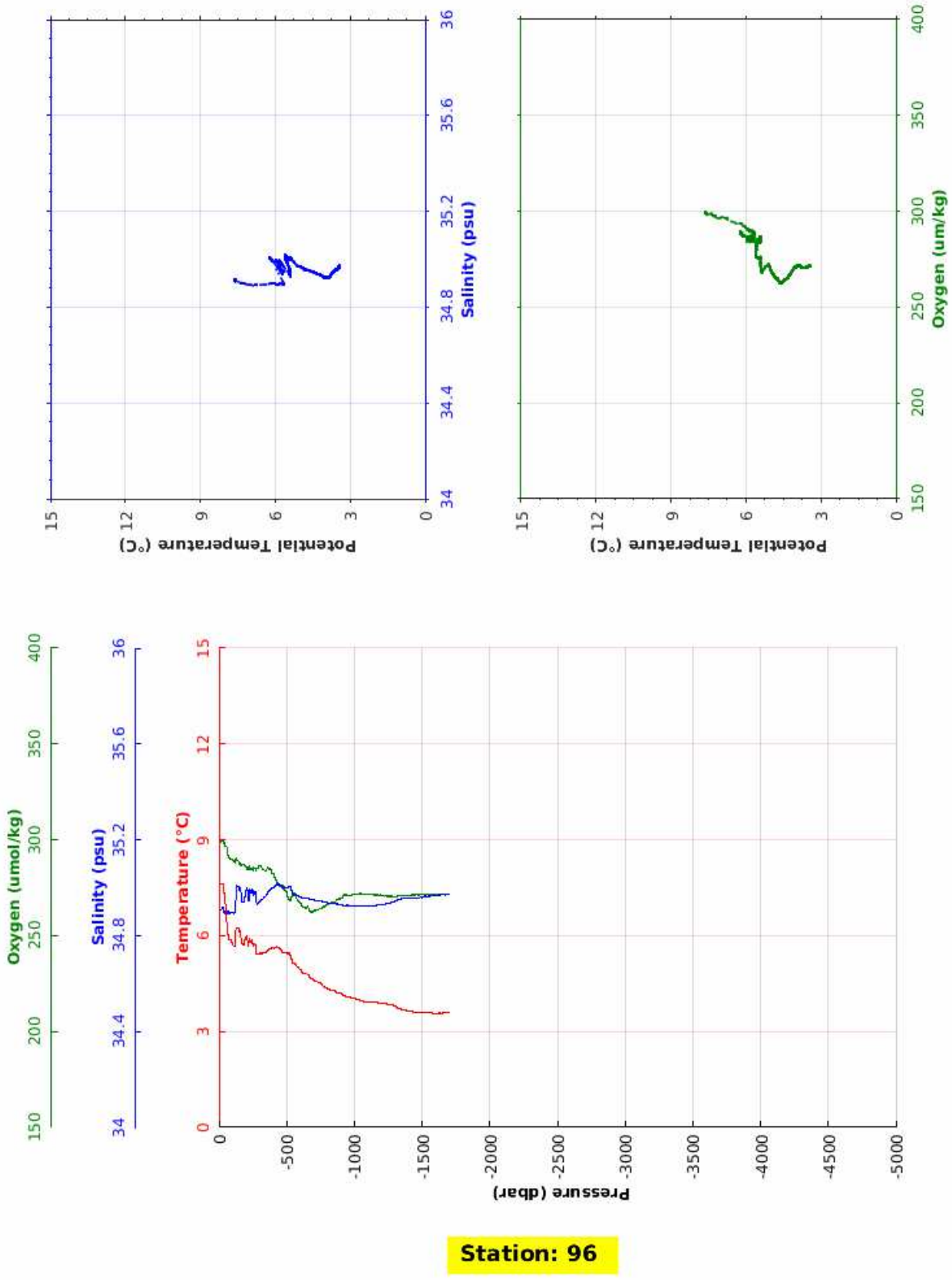
Cruise	: RREX 2015		
Station	: 95	Cast	: 1
Date	: 30/06/2015	Ship	: N/O Thalassa
Depth	: 1891 m	Organism	: IFREMER
Position	: N 56 50.98 W 033 25.95		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.835	34.964	298.9	7.834
10.0	7.836	34.965	298.5	7.835
20.0	7.814	34.970	298.8	7.812
30.0	7.787	34.976	299.1	7.784
40.0	7.184	34.983	300.7	7.181
50.0	6.719	34.994	301.1	6.715
100.0	6.395	35.036	293.4	6.386
150.0	6.304	35.044	289.7	6.291
200.0	6.171	35.037	288.1	6.153
250.0	6.207	35.057	285.7	6.185
300.0	6.262	35.080	282.0	6.235
350.0	6.126	35.062	277.7	6.096
400.0	5.932	35.046	271.0	5.897
450.0	5.799	35.040	272.9	5.760
500.0	5.666	35.031	256.6	5.623
550.0	5.387	35.013	248.2	5.341
600.0	5.180	35.005	248.2	5.131
650.0	4.949	34.991	252.0	4.896
700.0	4.767	34.978	255.5	4.711
750.0	4.724	34.976	256.4	4.664
800.0	4.586	34.965	259.3	4.523
850.0	4.421	34.955	262.9	4.354
900.0	4.321	34.949	265.0	4.250
950.0	4.218	34.941	267.0	4.144
1000.0	4.150	34.936	268.1	4.072
1050.0	4.116	34.937	268.6	4.034
1100.0	4.091	34.940	268.7	4.006
1150.0	4.040	34.944	268.9	3.950
1200.0	4.004	34.943	269.0	3.911
1250.0	3.937	34.942	269.6	3.839
1300.0	3.816	34.940	270.5	3.716
1350.0	3.753	34.941	270.7	3.649
1400.0	3.770	34.950	270.5	3.661
1450.0	3.740	34.957	270.4	3.627
1500.0	3.684	34.962	270.8	3.567
1550.0	3.620	34.970	271.1	3.500
1600.0	3.585	34.975	271.2	3.461
1650.0	3.554	34.978	271.3	3.426
1700.0	3.519	34.979	271.6	3.386
1750.0	3.509	34.980	271.6	3.372
1800.0	3.509	34.980	271.8	3.368
1850.0	3.507	34.980	271.7	3.361
1900.0	3.509	34.980	271.8	3.359
1904.0	3.510	34.980	272.0	3.359


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 95

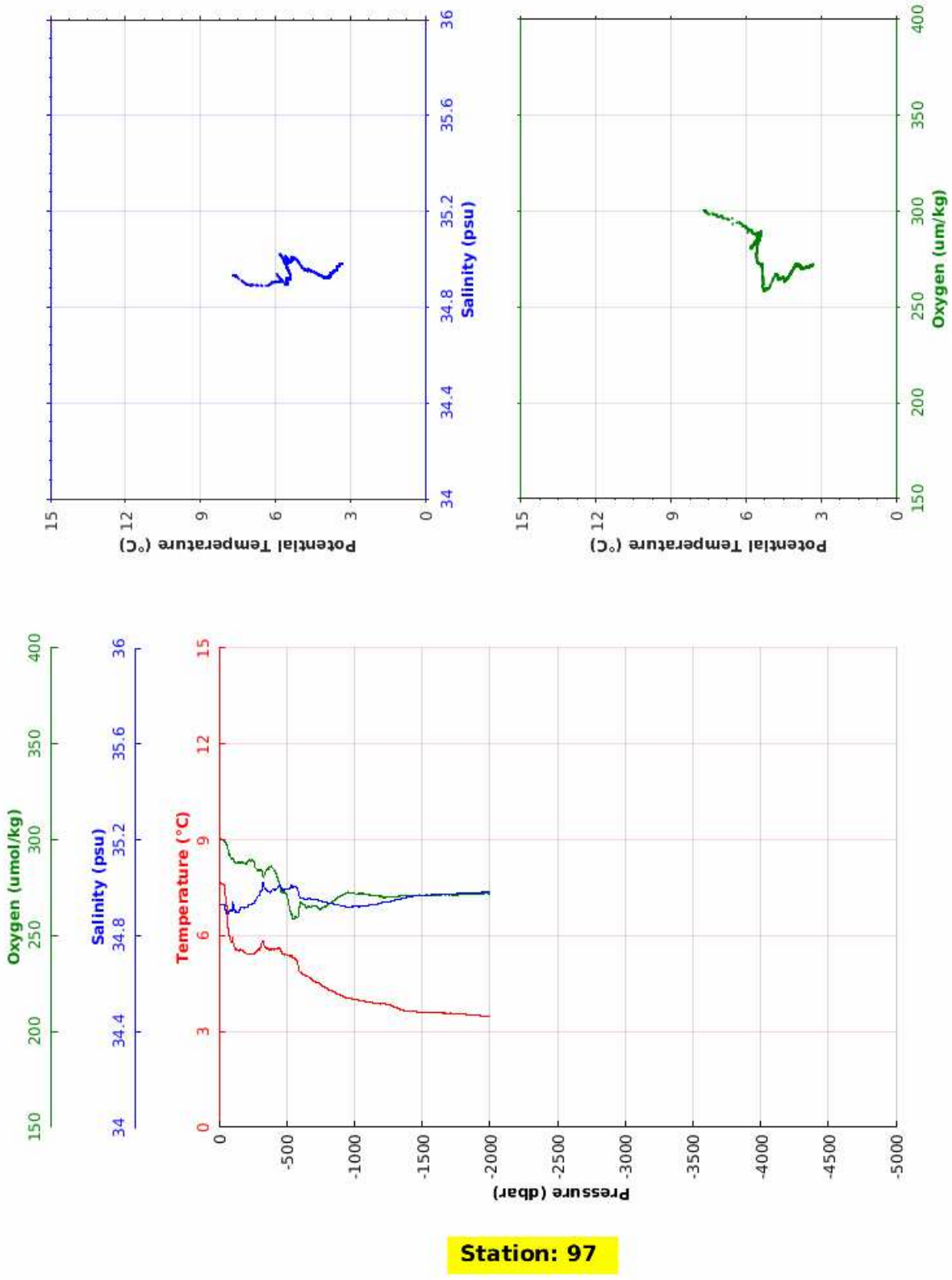
Cruise : RREX 2015			
Station : 96	Cast : 1		
Date : 30/06/2015	Ship : N/O Thalassa		
Depth : 1697 m	Organism : IFREMER		
Position : N 56 46.83 W 033 31.45			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.609	34.908	299.4	7.609
10.0	7.609	34.908	299.0	7.608
20.0	7.619	34.912	299.6	7.617
30.0	7.601	34.916	299.2	7.598
40.0	7.311	34.900	297.4	7.307
50.0	6.813	34.894	296.4	6.808
100.0	5.701	34.897	289.0	5.692
150.0	6.121	34.992	287.6	6.108
200.0	5.961	34.989	285.4	5.944
250.0	5.722	34.973	285.1	5.701
300.0	5.438	34.943	286.6	5.413
350.0	5.503	34.972	284.8	5.473
400.0	5.612	35.000	282.0	5.579
450.0	5.587	35.011	276.2	5.548
500.0	5.463	35.001	271.3	5.421
550.0	5.136	34.970	272.1	5.091
600.0	4.949	34.963	266.7	4.900
650.0	4.798	34.956	265.3	4.746
700.0	4.615	34.949	262.6	4.560
750.0	4.502	34.945	264.2	4.444
800.0	4.347	34.938	266.2	4.285
850.0	4.281	34.935	267.4	4.216
900.0	4.190	34.930	269.7	4.120
950.0	4.085	34.927	270.9	4.012
1000.0	4.032	34.924	271.6	3.956
1050.0	3.956	34.924	271.6	3.876
1100.0	3.932	34.925	271.6	3.848
1150.0	3.915	34.926	271.5	3.827
1200.0	3.889	34.930	271.0	3.796
1250.0	3.858	34.936	270.6	3.761
1300.0	3.788	34.945	270.6	3.688
1350.0	3.699	34.954	270.7	3.595
1400.0	3.647	34.958	271.1	3.539
1450.0	3.614	34.958	271.4	3.503
1500.0	3.582	34.959	271.6	3.466
1550.0	3.583	34.965	271.4	3.463
1600.0	3.572	34.966	271.5	3.447
1650.0	3.577	34.971	271.3	3.448
1700.0	3.579	34.973	271.4	3.446
1707.0	3.580	34.973	271.6	3.446


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 96

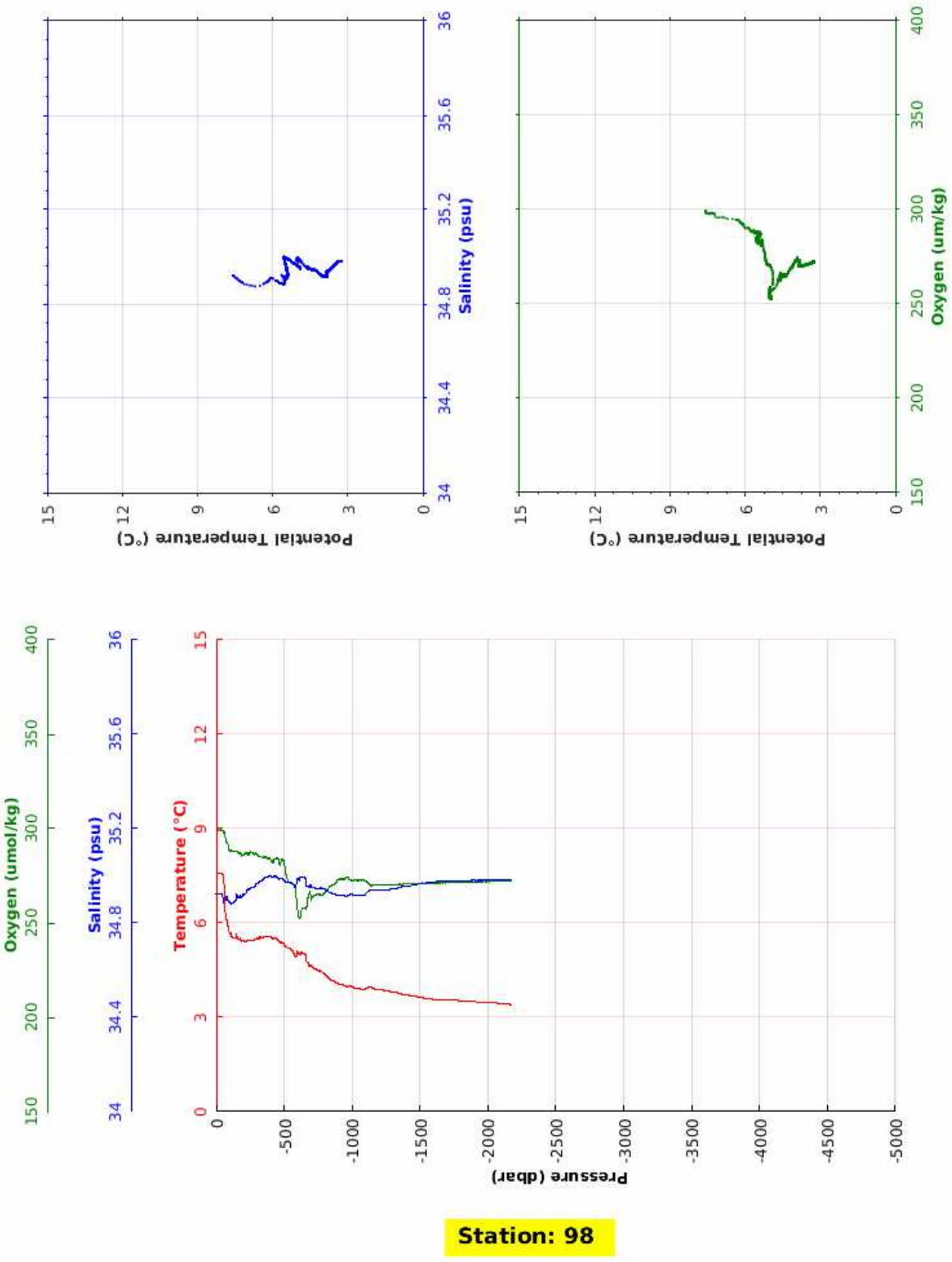
Cruise	: RREX 2015		
Station	: 97	Cast	: 1
Date	: 30/06/2015	Ship	: N/O Thalassa
Depth	: 1991 m	Organism	: IFREMER
Position	: N 56 46.11 W 033 32.36		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.657	34.932	300.5	7.657
10.0	7.656	34.932	300.1	7.655
20.0	7.633	34.931	299.8	7.631
30.0	7.607	34.931	299.9	7.604
40.0	7.574	34.928	299.1	7.570
50.0	7.158	34.896	297.3	7.154
100.0	5.862	34.924	290.1	5.853
150.0	5.532	34.905	288.7	5.520
200.0	5.460	34.918	287.4	5.444
250.0	5.421	34.936	288.7	5.401
300.0	5.594	34.975	284.4	5.569
350.0	5.613	34.989	284.5	5.584
400.0	5.593	34.992	284.7	5.560
450.0	5.607	35.010	274.0	5.569
500.0	5.405	34.994	270.7	5.363
550.0	5.316	35.004	258.7	5.270
600.0	4.852	34.956	267.2	4.804
650.0	4.724	34.952	265.3	4.672
700.0	4.582	34.949	265.4	4.527
750.0	4.475	34.945	264.1	4.416
800.0	4.327	34.936	266.4	4.265
850.0	4.240	34.932	268.4	4.175
900.0	4.133	34.925	271.1	4.064
950.0	4.041	34.921	272.7	3.968
1000.0	4.009	34.922	272.3	3.933
1050.0	3.955	34.922	272.1	3.875
1100.0	3.919	34.927	271.4	3.835
1150.0	3.881	34.929	271.1	3.793
1200.0	3.877	34.939	270.2	3.784
1250.0	3.828	34.939	270.2	3.732
1300.0	3.779	34.950	270.4	3.679
1350.0	3.687	34.955	270.7	3.584
1400.0	3.633	34.962	271.1	3.526
1450.0	3.632	34.968	271.0	3.520
1500.0	3.610	34.970	271.1	3.494
1550.0	3.613	34.970	270.9	3.493
1600.0	3.592	34.972	271.1	3.467
1650.0	3.580	34.973	271.5	3.451
1700.0	3.577	34.973	271.3	3.444
1750.0	3.568	34.975	271.4	3.430
1800.0	3.546	34.978	271.6	3.404
1850.0	3.524	34.980	271.7	3.378
1900.0	3.508	34.980	271.8	3.357
1950.0	3.485	34.981	271.8	3.329
2000.0	3.477	34.981	272.2	3.318
2006.0	3.477	34.981	272.1	3.316


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 97

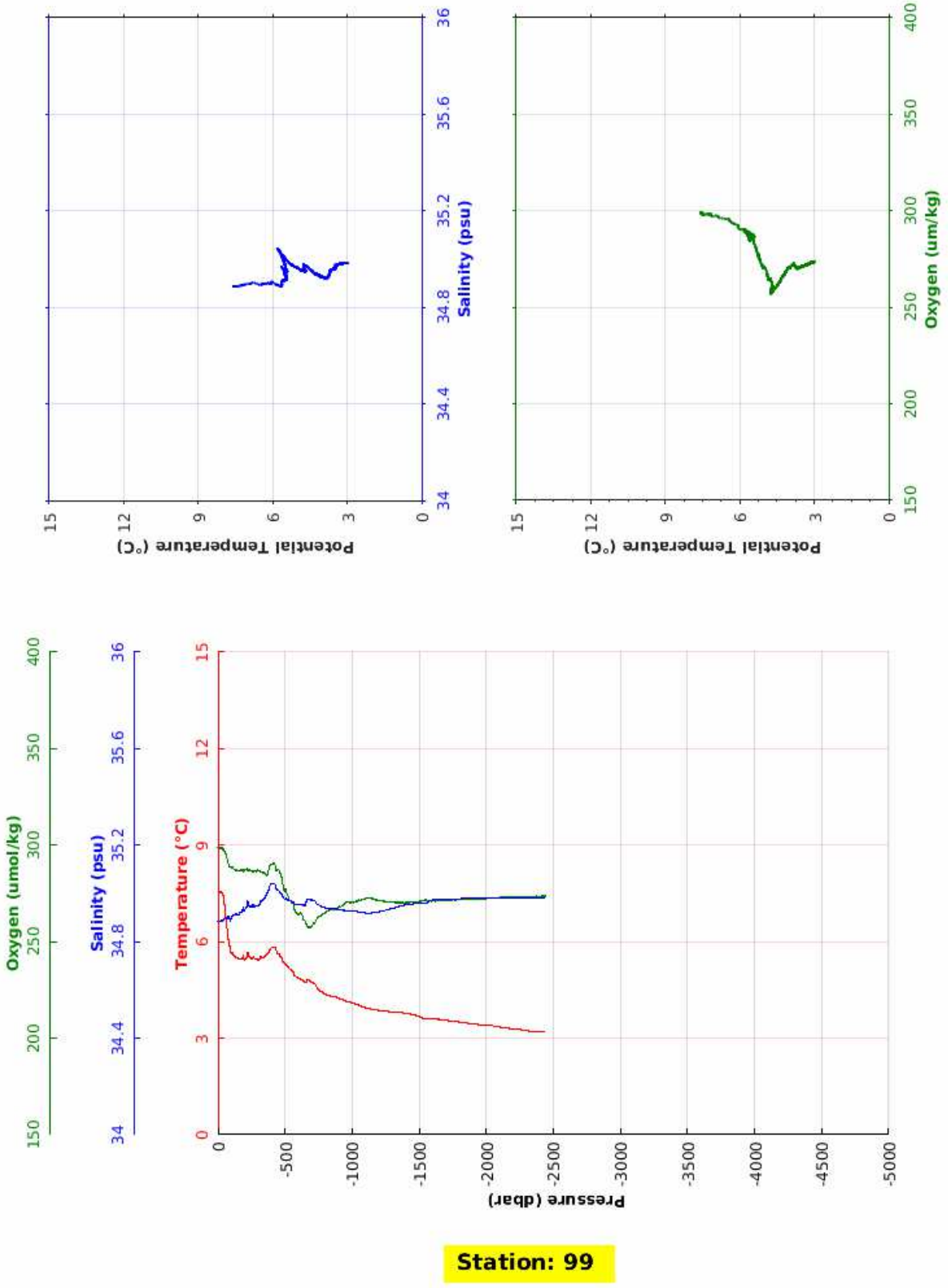
Cruise : RREX 2015			
Station : 98	Cast : 1		
Date : 30/06/2015	Ship : N/O Thalassa		
Depth : 2159 m	Organism : IFREMER		
Position : N 56 45.15 W 033 33.52			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.574	34.922	299.2	7.573
10.0	7.572	34.922	299.2	7.571
20.0	7.572	34.921	298.8	7.570
30.0	7.574	34.922	299.3	7.571
40.0	7.573	34.921	299.1	7.569
50.0	7.446	34.909	298.1	7.441
100.0	5.678	34.886	288.4	5.669
150.0	5.633	34.918	287.5	5.620
200.0	5.442	34.920	286.4	5.425
250.0	5.441	34.944	287.8	5.420
300.0	5.501	34.965	286.0	5.476
350.0	5.559	34.988	285.4	5.530
400.0	5.557	34.999	282.6	5.523
450.0	5.491	34.997	284.1	5.453
500.0	5.324	34.983	280.2	5.282
550.0	5.149	34.969	271.0	5.104
600.0	5.084	34.987	253.9	5.034
650.0	5.011	34.992	257.8	4.958
700.0	4.638	34.954	262.9	4.582
750.0	4.488	34.945	265.4	4.430
800.0	4.366	34.943	266.1	4.304
850.0	4.179	34.926	270.0	4.114
900.0	4.059	34.917	273.1	3.990
950.0	4.002	34.915	273.9	3.930
1000.0	3.977	34.921	272.6	3.900
1050.0	3.917	34.919	272.8	3.837
1100.0	3.900	34.923	272.3	3.816
1150.0	3.937	34.938	270.2	3.849
1200.0	3.881	34.940	270.0	3.789
1250.0	3.841	34.940	270.3	3.745
1300.0	3.808	34.945	270.4	3.707
1350.0	3.754	34.952	270.5	3.650
1400.0	3.709	34.956	270.8	3.601
1450.0	3.681	34.961	270.8	3.569
1500.0	3.639	34.966	271.2	3.523
1550.0	3.606	34.970	271.2	3.485
1600.0	3.571	34.975	271.3	3.447
1650.0	3.571	34.976	271.3	3.442
1700.0	3.550	34.977	271.6	3.417
1750.0	3.544	34.978	271.6	3.406
1800.0	3.521	34.979	271.5	3.379
1850.0	3.513	34.980	271.8	3.367
1900.0	3.501	34.981	271.8	3.350
1950.0	3.487	34.981	272.0	3.331
2000.0	3.465	34.981	272.1	3.305
2050.0	3.454	34.981	272.3	3.290
2100.0	3.440	34.982	272.1	3.271
2150.0	3.413	34.982	272.5	3.240
2177.0	3.407	34.982	272.7	3.232


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 98

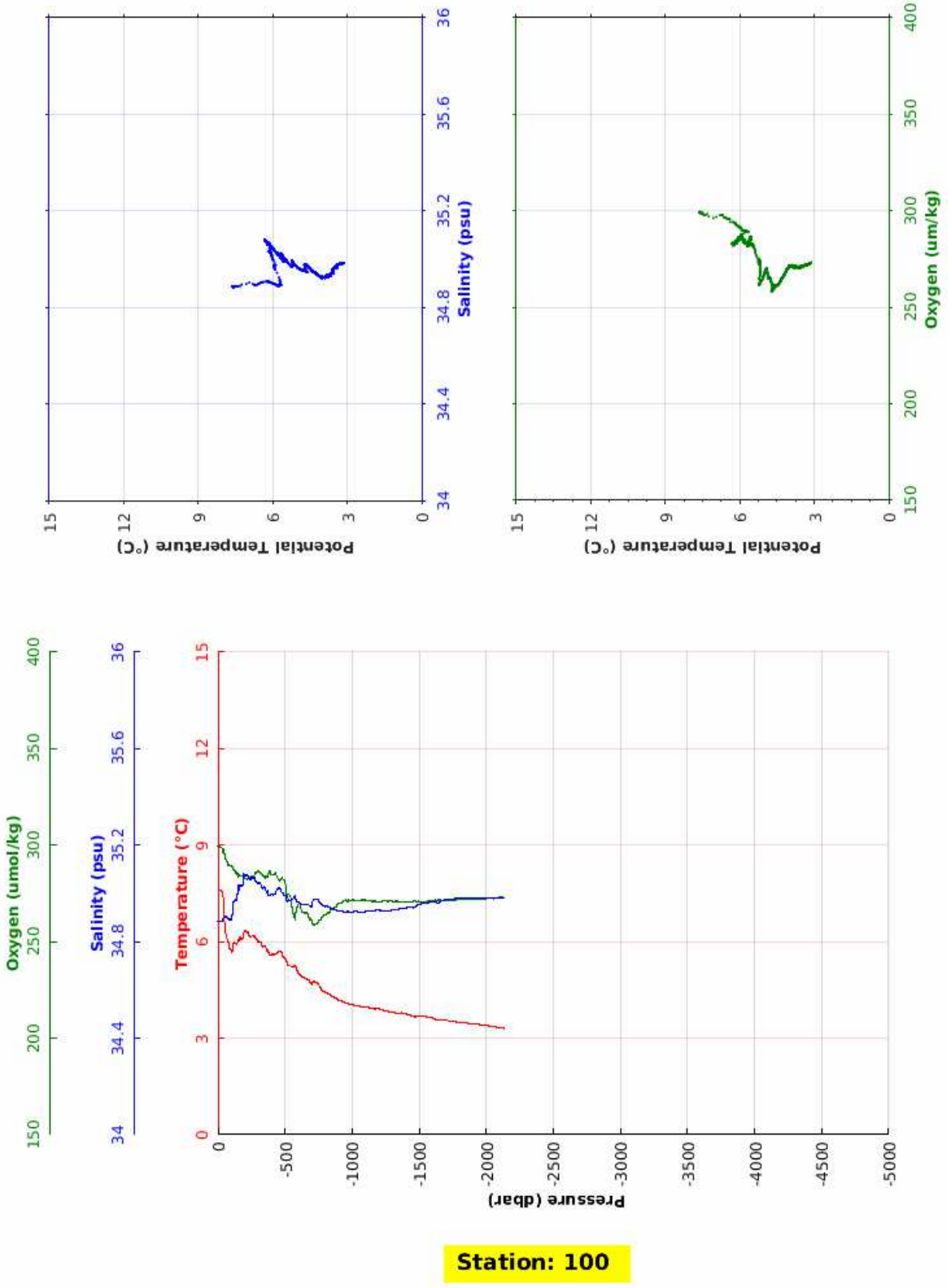
Cruise	: RREX 2015		
Station	: 99	Cast	: 1
Date	: 30/06/2015	Ship	: N/O Thalassa
Depth	: 2421 m	Organism	: IFREMER
Position	: N 56 43.51 W 033 35.65		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.554	34.887	299.2	7.554
10.0	7.550	34.887	298.8	7.549
20.0	7.538	34.886	298.7	7.536
30.0	7.535	34.887	298.2	7.532
40.0	7.304	34.891	298.5	7.300
50.0	7.136	34.894	297.0	7.131
100.0	5.643	34.893	288.5	5.635
150.0	5.470	34.913	287.0	5.458
200.0	5.444	34.927	287.1	5.428
250.0	5.486	34.945	286.6	5.465
300.0	5.442	34.949	286.7	5.417
350.0	5.553	34.980	285.7	5.524
400.0	5.812	35.040	290.1	5.778
450.0	5.624	35.014	287.7	5.586
500.0	5.284	34.974	276.3	5.243
550.0	5.105	34.967	270.8	5.061
600.0	4.863	34.954	264.1	4.815
650.0	4.728	34.951	261.1	4.676
700.0	4.735	34.972	257.9	4.680
750.0	4.502	34.953	262.3	4.443
800.0	4.388	34.941	264.8	4.326
850.0	4.304	34.937	266.7	4.238
900.0	4.244	34.934	267.7	4.174
950.0	4.153	34.928	270.0	4.080
1000.0	4.101	34.928	270.4	4.024
1050.0	4.016	34.924	271.5	3.935
1100.0	3.938	34.920	272.0	3.854
1150.0	3.904	34.919	272.3	3.816
1200.0	3.869	34.925	271.4	3.777
1250.0	3.843	34.930	270.9	3.747
1300.0	3.815	34.937	270.5	3.715
1350.0	3.799	34.945	270.3	3.694
1400.0	3.780	34.953	270.2	3.671
1450.0	3.726	34.956	270.7	3.613
1500.0	3.684	34.960	270.6	3.568
1550.0	3.597	34.960	271.7	3.477
1600.0	3.607	34.972	271.0	3.482
1650.0	3.584	34.975	271.3	3.455
1700.0	3.570	34.976	271.4	3.437
1750.0	3.525	34.976	271.7	3.387
1800.0	3.502	34.977	271.8	3.360
1850.0	3.475	34.980	272.0	3.329
1900.0	3.440	34.982	272.2	3.290
1950.0	3.417	34.982	272.2	3.263
2000.0	3.399	34.982	272.3	3.240
2050.0	3.388	34.983	272.5	3.224
2100.0	3.348	34.981	272.8	3.181
2150.0	3.323	34.982	273.0	3.151
2200.0	3.297	34.983	273.2	3.121
2250.0	3.269	34.983	273.2	3.089
2300.0	3.247	34.983	273.4	3.062
2350.0	3.214	34.983	273.4	3.024
2400.0	3.212	34.983	273.5	3.018
2445.0	3.211	34.983	273.8	3.012


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 99

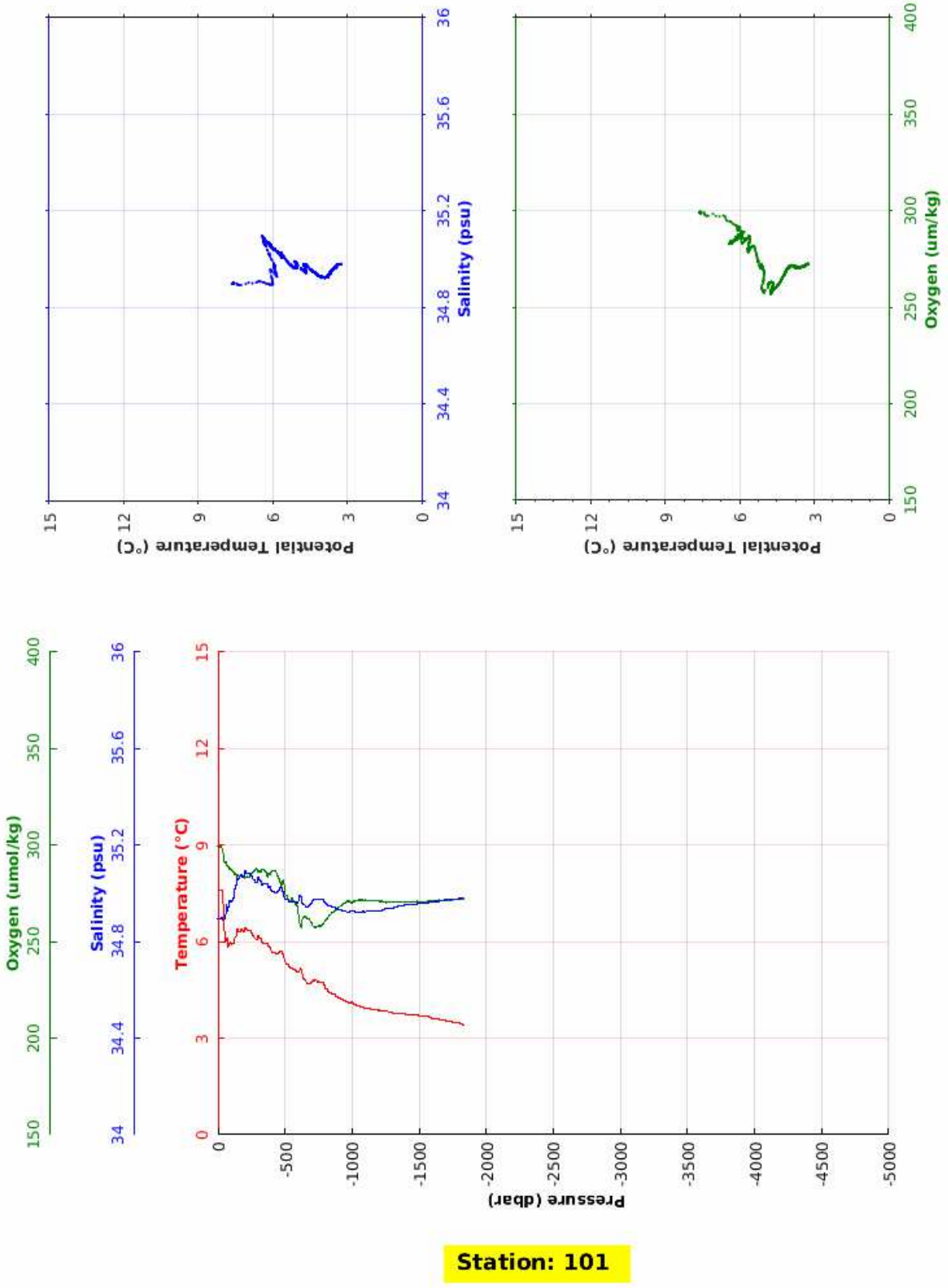
Cruise	: RREX 2015		
Station	: 100	Cast :	1
Date	: 30/06/2015	Ship :	N/O Thalassa
Depth	: 2125 m	Organism :	IFREMER
Position	: N 56 42.62 W 033 36.98		

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.606	34.885	299.3	7.606
10.0	7.605	34.886	299.0	7.604
20.0	7.603	34.886	299.1	7.601
30.0	7.569	34.885	298.9	7.566
40.0	7.253	34.895	297.1	7.249
50.0	6.557	34.899	296.4	6.553
100.0	5.682	34.892	289.4	5.674
150.0	6.019	35.001	284.9	6.006
200.0	6.352	35.080	283.2	6.335
250.0	6.151	35.058	283.3	6.129
300.0	5.987	35.039	286.4	5.961
350.0	5.855	35.027	283.5	5.825
400.0	5.616	34.996	285.2	5.582
450.0	5.691	35.019	283.1	5.652
500.0	5.481	34.992	282.0	5.439
550.0	5.220	34.972	271.2	5.175
600.0	5.035	34.964	268.5	4.986
650.0	4.875	34.955	265.1	4.822
700.0	4.672	34.945	261.6	4.617
750.0	4.672	34.972	259.8	4.612
800.0	4.409	34.946	263.9	4.347
850.0	4.298	34.938	266.6	4.233
900.0	4.174	34.928	269.6	4.105
950.0	4.093	34.923	271.5	4.020
1000.0	4.044	34.924	271.6	3.967
1050.0	4.008	34.925	271.2	3.927
1100.0	3.953	34.924	271.5	3.869
1150.0	3.934	34.929	270.8	3.845
1200.0	3.915	34.933	270.9	3.823
1250.0	3.865	34.929	271.1	3.769
1300.0	3.807	34.932	271.1	3.707
1350.0	3.773	34.935	270.8	3.669
1400.0	3.762	34.939	270.5	3.653
1450.0	3.708	34.943	270.7	3.595
1500.0	3.682	34.953	271.0	3.566
1550.0	3.671	34.960	270.7	3.550
1600.0	3.629	34.967	271.1	3.504
1650.0	3.559	34.963	271.6	3.431
1700.0	3.561	34.975	271.3	3.428
1750.0	3.518	34.977	271.8	3.381
1800.0	3.489	34.979	271.9	3.348
1850.0	3.478	34.980	271.9	3.332
1900.0	3.446	34.982	272.1	3.296
1950.0	3.427	34.982	272.1	3.273
2000.0	3.412	34.982	272.2	3.253
2050.0	3.379	34.982	272.5	3.216
2100.0	3.331	34.982	272.9	3.163
2140.0	3.293	34.982	273.2	3.122


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 100

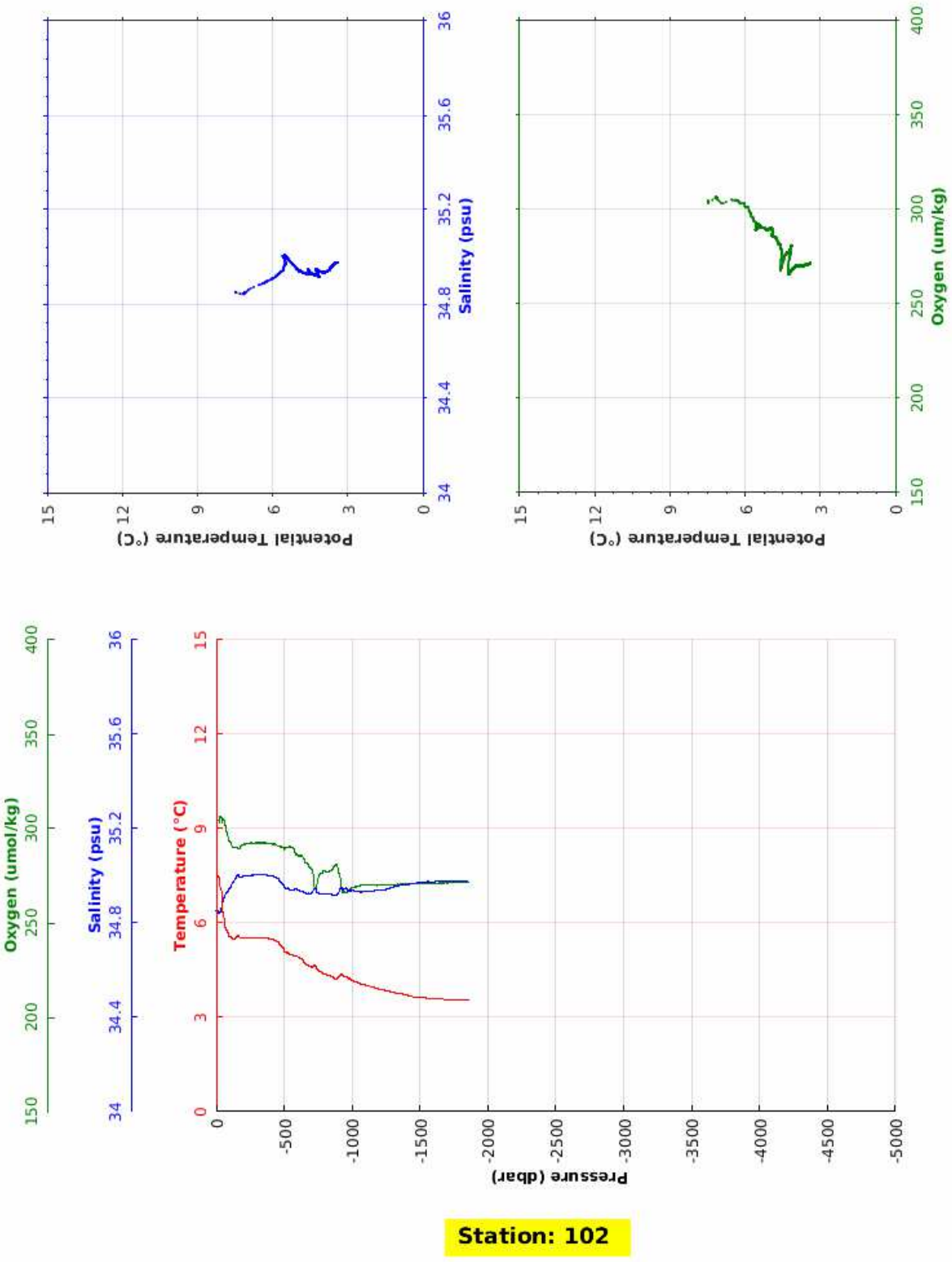
Cruise : RREX 2015			
Station : 101	Cast : 1		
Date : 30/06/2015	Ship : N/O Thalassa		
Depth : 1825 m	Organism : IFREMER		
Position : N 56 42.10 W 033 37.57			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.604	34.897	299.5	7.604
10.0	7.604	34.898	299.2	7.603
20.0	7.606	34.897	299.1	7.604
30.0	7.587	34.901	298.7	7.584
40.0	6.974	34.903	297.3	6.970
50.0	6.259	34.898	293.1	6.255
100.0	5.921	34.967	287.5	5.913
150.0	6.321	35.059	284.4	6.307
200.0	6.372	35.080	283.6	6.354
250.0	6.270	35.073	284.5	6.248
300.0	6.178	35.069	286.2	6.151
350.0	5.959	35.040	286.9	5.928
400.0	5.716	35.013	285.8	5.681
450.0	5.633	35.008	284.4	5.595
500.0	5.402	34.983	278.8	5.360
550.0	5.175	34.964	271.3	5.130
600.0	5.065	34.962	267.6	5.016
650.0	4.823	34.952	262.8	4.771
700.0	4.755	34.962	260.3	4.699
750.0	4.759	34.975	258.0	4.699
800.0	4.559	34.958	260.9	4.495
850.0	4.369	34.944	265.0	4.302
900.0	4.255	34.934	267.6	4.185
950.0	4.158	34.926	270.3	4.085
1000.0	4.114	34.929	270.1	4.036
1050.0	3.999	34.923	271.7	3.918
1100.0	3.929	34.924	271.5	3.845
1150.0	3.889	34.928	271.2	3.801
1200.0	3.865	34.927	271.1	3.773
1250.0	3.856	34.937	270.4	3.759
1300.0	3.781	34.938	270.8	3.681
1350.0	3.776	34.947	270.7	3.671
1400.0	3.749	34.952	270.7	3.641
1450.0	3.725	34.955	270.9	3.612
1500.0	3.701	34.958	270.8	3.585
1550.0	3.680	34.960	270.7	3.559
1600.0	3.620	34.967	271.1	3.495
1650.0	3.568	34.965	271.5	3.439
1700.0	3.553	34.976	271.4	3.420
1750.0	3.502	34.977	271.7	3.365
1800.0	3.480	34.978	271.9	3.338
1839.0	3.395	34.980	272.8	3.252


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 101

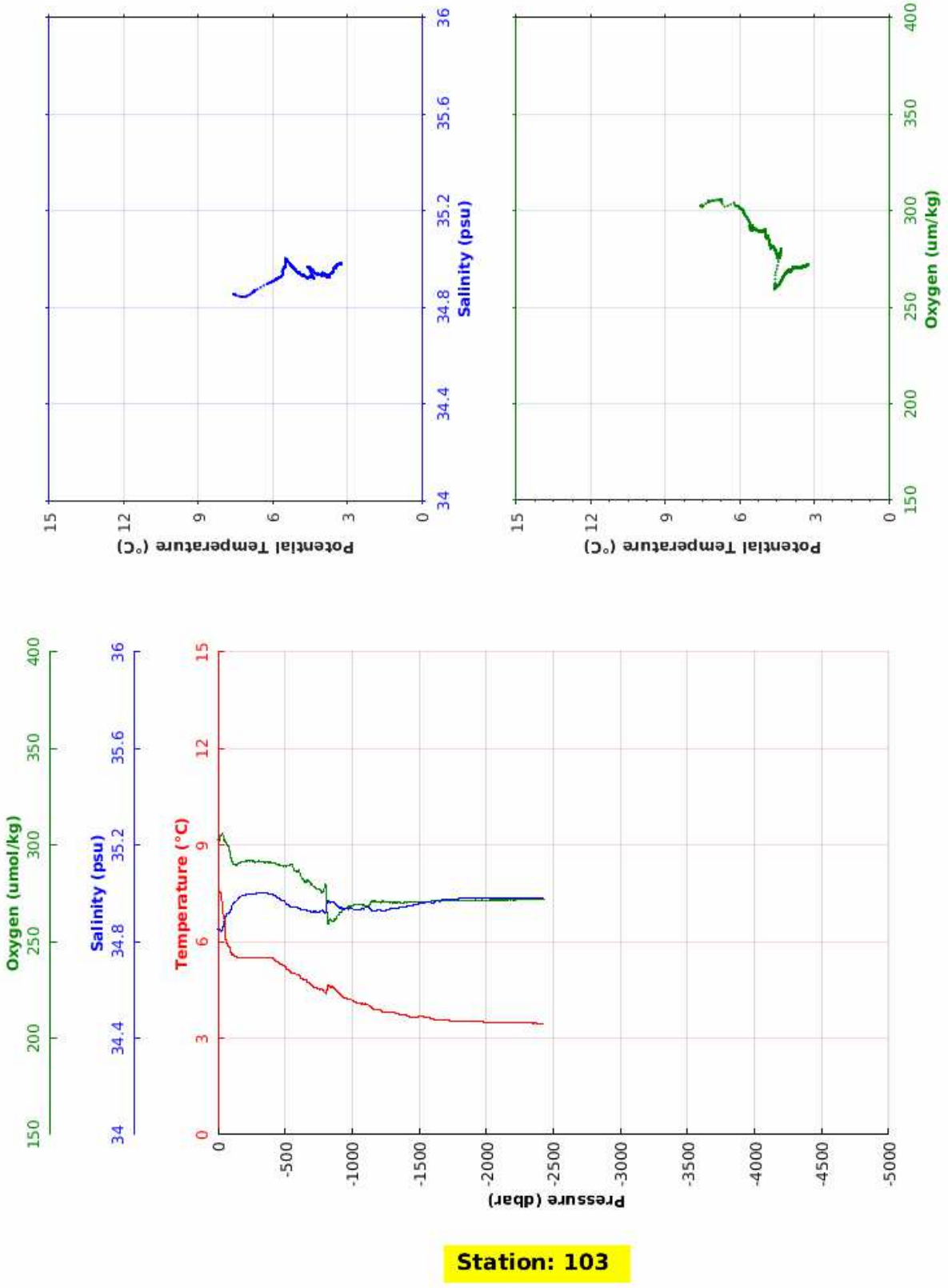
Cruise	: RREX 2015		
Station	: 102	Cast	: 1
Date	: 30/06/2015	Ship	: N/O Thalassa
Depth	: 1851 m	Organism	: IFREMER
Position	: N 56 49.49 W 034 11.60		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.474	34.850	304.2	7.474
10.0	7.483	34.850	304.5	7.482
20.0	7.450	34.848	303.9	7.448
30.0	7.146	34.845	306.4	7.143
40.0	6.946	34.862	303.4	6.942
50.0	6.286	34.891	304.9	6.282
100.0	5.581	34.947	292.5	5.573
150.0	5.563	34.996	289.8	5.551
200.0	5.522	34.997	291.8	5.505
250.0	5.526	35.002	292.3	5.506
300.0	5.534	35.004	292.5	5.509
350.0	5.528	35.004	292.3	5.498
400.0	5.499	35.000	291.8	5.466
450.0	5.398	34.987	290.9	5.361
500.0	5.120	34.955	289.1	5.080
550.0	4.992	34.940	290.3	4.948
600.0	4.929	34.940	285.9	4.881
650.0	4.749	34.930	282.7	4.698
700.0	4.581	34.926	278.5	4.526
750.0	4.513	34.930	274.4	4.454
800.0	4.380	34.923	277.1	4.318
850.0	4.301	34.921	277.7	4.235
900.0	4.270	34.927	276.4	4.201
950.0	4.312	34.947	266.1	4.238
1000.0	4.179	34.937	268.7	4.101
1050.0	4.101	34.936	269.6	4.019
1100.0	4.020	34.934	270.3	3.935
1150.0	3.954	34.936	270.2	3.866
1200.0	3.894	34.939	270.1	3.802
1250.0	3.854	34.943	270.2	3.758
1300.0	3.799	34.952	270.1	3.699
1350.0	3.746	34.959	270.6	3.642
1400.0	3.709	34.963	270.8	3.601
1450.0	3.653	34.967	270.9	3.541
1500.0	3.622	34.971	271.1	3.506
1550.0	3.607	34.975	271.1	3.487
1600.0	3.587	34.975	271.2	3.463
1650.0	3.579	34.976	271.3	3.450
1700.0	3.566	34.976	271.2	3.433
1750.0	3.561	34.976	271.3	3.423
1800.0	3.547	34.977	271.4	3.405
1850.0	3.546	34.977	271.7	3.400
1864.0	3.549	34.977	271.6	3.401


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 102

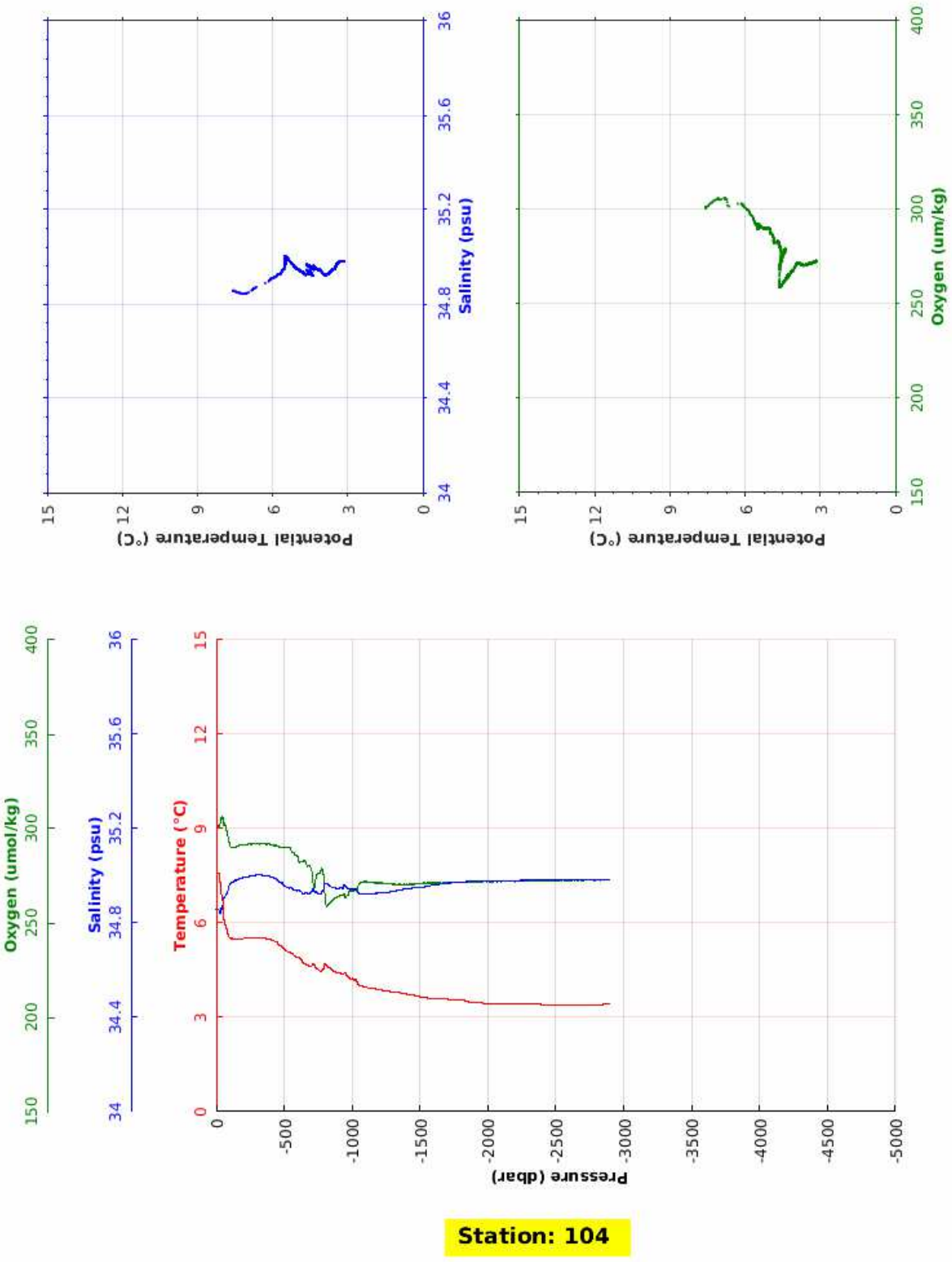
Cruise : RREX 2015			
Station : 103	Cast : 1		
Date : 30/06/2015	Ship : N/O Thalassa		
Depth : 2412 m	Organism : IFREMER		
Position : N 56 47.93 W 034 10.18			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.566	34.854	302.6	7.566
10.0	7.563	34.854	302.6	7.562
20.0	7.515	34.852	302.0	7.513
30.0	7.253	34.845	304.7	7.250
40.0	6.802	34.863	305.6	6.798
50.0	6.616	34.875	302.2	6.612
100.0	5.619	34.933	294.2	5.610
150.0	5.499	34.976	289.9	5.487
200.0	5.506	34.994	291.4	5.490
250.0	5.513	34.998	292.0	5.493
300.0	5.520	35.001	291.3	5.495
350.0	5.519	35.002	290.8	5.490
400.0	5.487	34.998	290.9	5.454
450.0	5.357	34.982	289.8	5.320
500.0	5.231	34.967	289.5	5.190
550.0	5.029	34.943	290.3	4.984
600.0	4.968	34.942	285.8	4.919
650.0	4.808	34.932	281.2	4.756
700.0	4.640	34.923	279.5	4.585
750.0	4.533	34.924	277.2	4.474
800.0	4.401	34.919	279.2	4.338
850.0	4.599	34.965	260.8	4.531
900.0	4.398	34.946	263.8	4.327
950.0	4.251	34.936	267.4	4.177
1000.0	4.185	34.936	268.3	4.107
1050.0	4.097	34.933	269.4	4.016
1100.0	4.080	34.944	268.4	3.995
1150.0	3.926	34.929	271.0	3.838
1200.0	3.888	34.931	270.8	3.795
1250.0	3.818	34.929	270.5	3.722
1300.0	3.797	34.937	270.4	3.697
1350.0	3.747	34.941	270.4	3.643
1400.0	3.722	34.944	270.4	3.614
1450.0	3.660	34.950	270.6	3.548
1500.0	3.674	34.960	270.6	3.558
1550.0	3.652	34.963	270.4	3.531
1600.0	3.600	34.961	271.1	3.476
1650.0	3.574	34.972	271.1	3.445
1700.0	3.563	34.974	271.3	3.430
1750.0	3.543	34.977	271.3	3.405
1800.0	3.514	34.979	271.5	3.372
1850.0	3.514	34.979	271.4	3.368
1900.0	3.514	34.979	271.4	3.363
1950.0	3.513	34.979	271.5	3.357
2000.0	3.505	34.980	271.5	3.345
2050.0	3.497	34.980	271.6	3.332
2100.0	3.498	34.981	271.4	3.328
2150.0	3.500	34.981	271.7	3.325
2200.0	3.499	34.981	271.7	3.319
2250.0	3.489	34.980	271.9	3.305
2300.0	3.483	34.980	272.0	3.294
2350.0	3.466	34.980	272.1	3.272
2400.0	3.450	34.981	272.1	3.252
2435.0	3.454	34.981	272.5	3.252


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 103

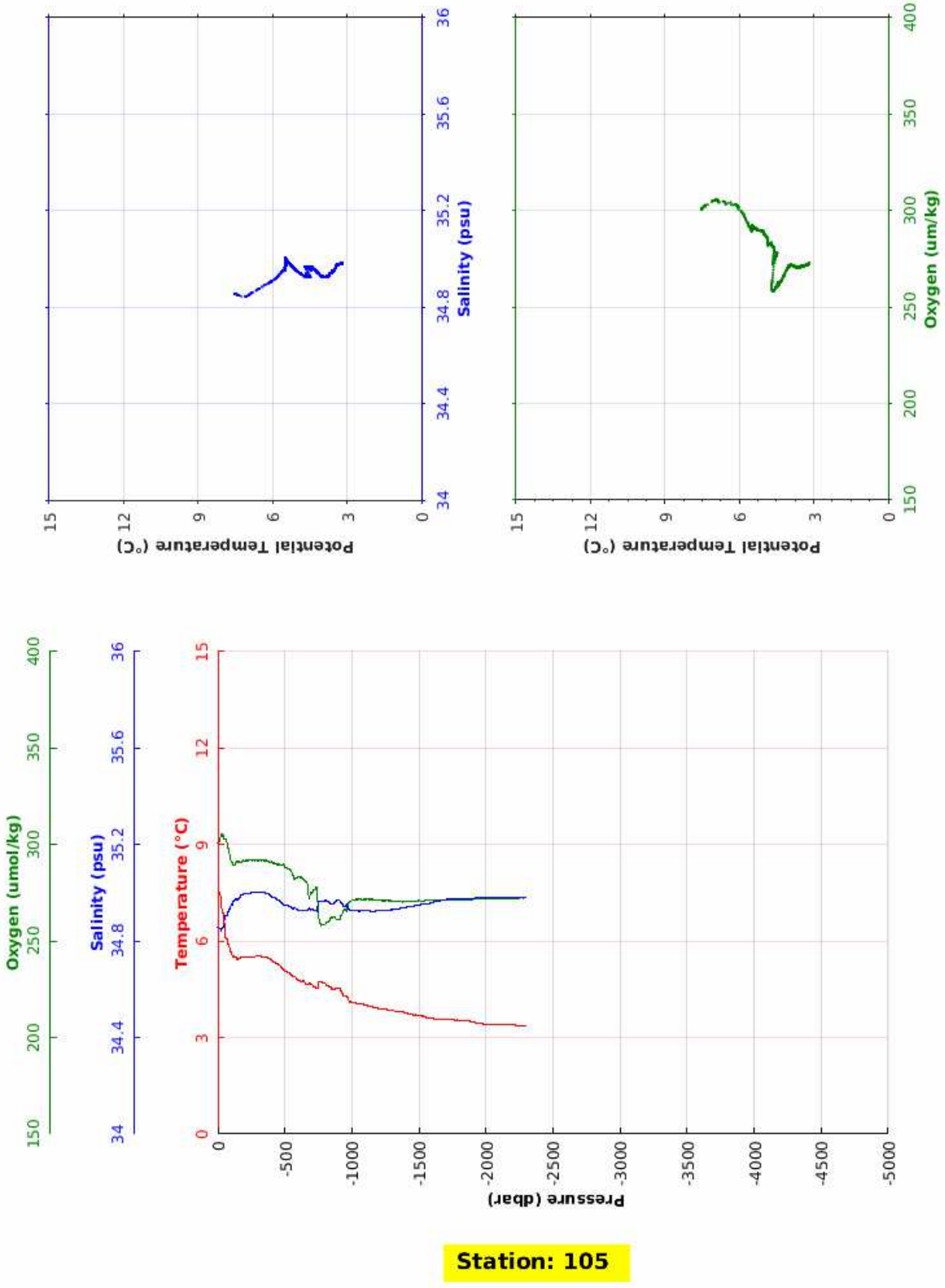
Cruise	: RREX 2015		
Station	: 104	Cast :	1
Date	: 30/06/2015	Ship :	N/O Thalassa
Depth	: 2873 m	Organism :	IFREMER
Position	: N 56 46.97 W 034 9.24		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.569	34.856	301.5	7.569
10.0	7.571	34.856	301.2	7.570
20.0	7.572	34.857	301.0	7.570
30.0	7.218	34.843	304.8	7.216
40.0	6.809	34.860	306.2	6.806
50.0	6.303	34.888	303.1	6.299
100.0	5.532	34.961	290.6	5.524
150.0	5.493	34.983	290.5	5.481
200.0	5.508	34.993	291.3	5.491
250.0	5.515	34.998	291.9	5.494
300.0	5.531	35.004	292.1	5.506
350.0	5.516	35.002	292.4	5.487
400.0	5.469	34.996	291.5	5.435
450.0	5.363	34.983	290.6	5.325
500.0	5.176	34.960	289.8	5.135
550.0	5.047	34.949	288.2	5.002
600.0	4.915	34.939	283.5	4.866
650.0	4.720	34.925	282.7	4.668
700.0	4.612	34.927	277.6	4.557
750.0	4.521	34.926	276.4	4.462
800.0	4.700	34.967	261.2	4.636
850.0	4.514	34.953	261.8	4.446
900.0	4.414	34.947	264.1	4.343
950.0	4.412	34.960	263.4	4.337
1000.0	4.232	34.944	267.0	4.154
1050.0	4.044	34.927	270.7	3.964
1100.0	3.961	34.921	272.0	3.877
1150.0	3.917	34.925	271.6	3.828
1200.0	3.886	34.927	271.1	3.794
1250.0	3.837	34.930	271.0	3.741
1300.0	3.815	34.935	270.5	3.715
1350.0	3.803	34.938	270.6	3.698
1400.0	3.741	34.944	270.3	3.632
1450.0	3.709	34.949	270.7	3.597
1500.0	3.647	34.949	270.9	3.531
1550.0	3.618	34.955	271.1	3.498
1600.0	3.600	34.959	271.3	3.476
1650.0	3.590	34.966	271.3	3.461
1700.0	3.581	34.969	271.3	3.448
1750.0	3.557	34.970	271.6	3.420
1800.0	3.541	34.973	271.4	3.399
1850.0	3.518	34.976	271.6	3.371
1900.0	3.478	34.978	271.8	3.327
1950.0	3.459	34.979	271.9	3.305
2000.0	3.443	34.980	271.9	3.284
2050.0	3.435	34.980	272.1	3.271
2100.0	3.440	34.980	272.0	3.272
2150.0	3.433	34.980	272.0	3.259
2200.0	3.425	34.981	272.1	3.247
2250.0	3.423	34.981	272.2	3.240
2300.0	3.422	34.981	272.2	3.234
2350.0	3.422	34.981	272.3	3.229
2400.0	3.410	34.981	272.5	3.212
2450.0	3.407	34.982	272.4	3.205
2500.0	3.400	34.982	272.7	3.192
2550.0	3.393	34.982	272.8	3.181
2600.0	3.393	34.982	272.8	3.176
2650.0	3.398	34.982	272.6	3.175
2700.0	3.395	34.982	272.5	3.167
2750.0	3.400	34.982	272.8	3.167
2800.0	3.405	34.982	272.8	3.167
2850.0	3.411	34.982	272.8	3.167
2900.0	3.416	34.982	272.9	3.167
2905.0	3.417	34.982	273.0	3.167


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 104

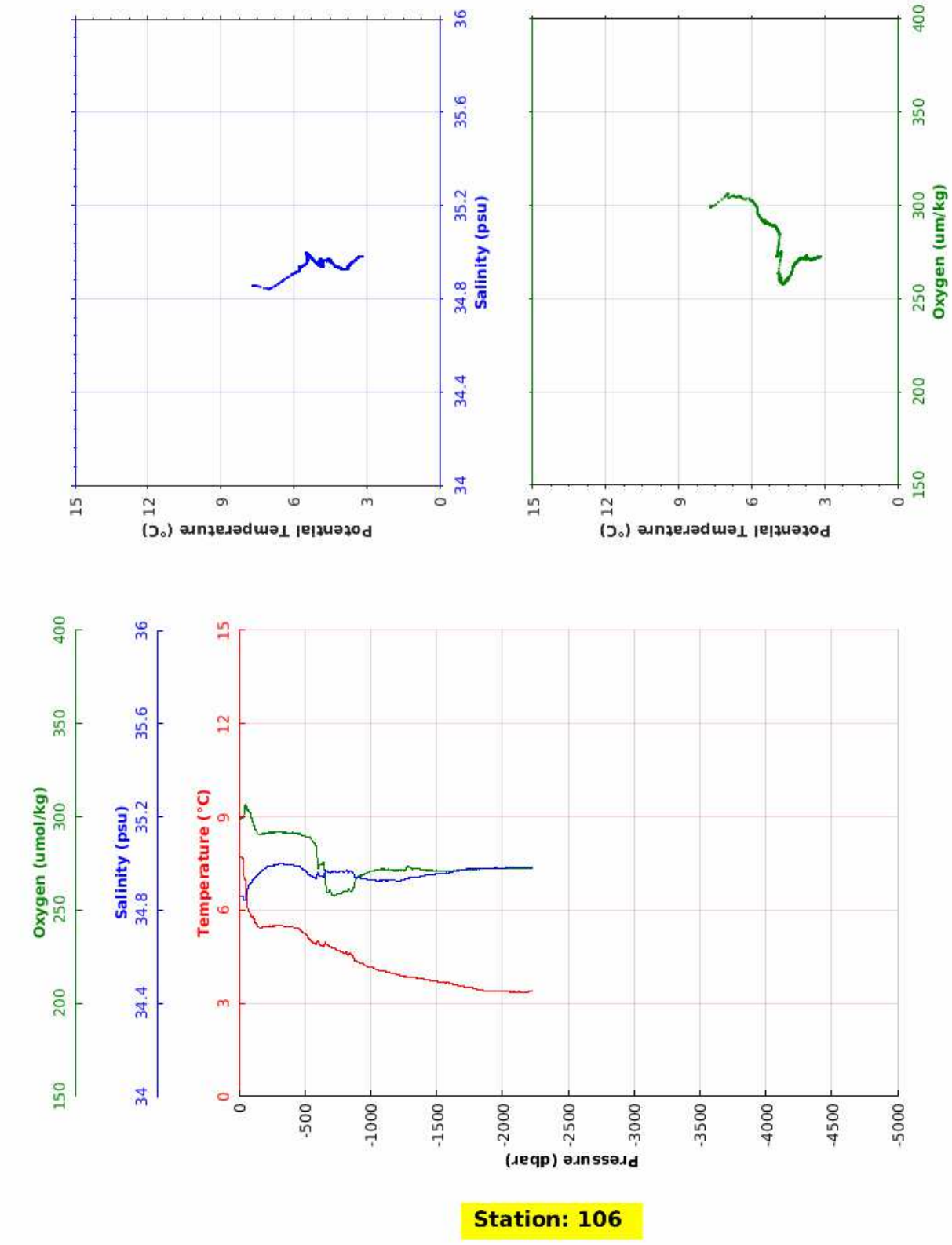
Cruise : RREX 2015			
Station : 105	Cast : 1		
Date : 01/07/2015	Ship : N/O Thalassa		
Depth : 2289 m	Organism : IFREMER		
Position : N 56 46.38 W 034 8.71			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.529	34.855	300.8	7.529
10.0	7.530	34.855	300.9	7.529
20.0	7.410	34.851	302.3	7.408
30.0	7.003	34.848	305.4	7.000
40.0	6.865	34.858	305.1	6.861
50.0	6.532	34.878	303.4	6.527
100.0	5.635	34.947	292.4	5.627
150.0	5.440	34.973	291.2	5.428
200.0	5.512	34.995	291.5	5.496
250.0	5.516	34.999	292.0	5.496
300.0	5.528	35.003	291.9	5.503
350.0	5.502	35.000	291.8	5.472
400.0	5.412	34.989	290.7	5.378
450.0	5.267	34.971	289.7	5.230
500.0	5.083	34.951	289.3	5.043
550.0	4.941	34.939	286.3	4.897
600.0	4.788	34.928	283.0	4.740
650.0	4.702	34.926	281.5	4.651
700.0	4.641	34.930	275.2	4.585
750.0	4.689	34.956	269.4	4.629
800.0	4.681	34.969	258.5	4.616
850.0	4.522	34.955	261.9	4.455
900.0	4.534	34.969	261.2	4.462
950.0	4.290	34.945	266.2	4.215
1000.0	4.103	34.926	270.8	4.026
1050.0	4.058	34.925	271.8	3.977
1100.0	4.015	34.926	271.7	3.930
1150.0	3.959	34.924	271.6	3.871
1200.0	3.900	34.927	271.0	3.808
1250.0	3.881	34.926	271.1	3.785
1300.0	3.834	34.930	270.8	3.734
1350.0	3.817	34.935	270.6	3.712
1400.0	3.767	34.940	270.5	3.658
1450.0	3.711	34.943	270.7	3.598
1500.0	3.678	34.947	270.8	3.562
1550.0	3.625	34.954	271.2	3.505
1600.0	3.595	34.960	271.4	3.470
1650.0	3.571	34.967	271.4	3.442
1700.0	3.557	34.971	271.5	3.424
1750.0	3.551	34.976	271.4	3.414
1800.0	3.545	34.976	271.3	3.403
1850.0	3.531	34.978	271.4	3.385
1900.0	3.497	34.977	271.6	3.346
1950.0	3.430	34.980	272.1	3.276
2000.0	3.421	34.980	272.1	3.262
2050.0	3.417	34.980	272.0	3.254
2100.0	3.417	34.980	272.1	3.248
2150.0	3.401	34.981	272.4	3.228
2200.0	3.392	34.981	272.4	3.214
2250.0	3.383	34.982	272.4	3.201
2300.0	3.365	34.982	272.5	3.178
2309.0	3.366	34.982	272.7	3.178


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 105

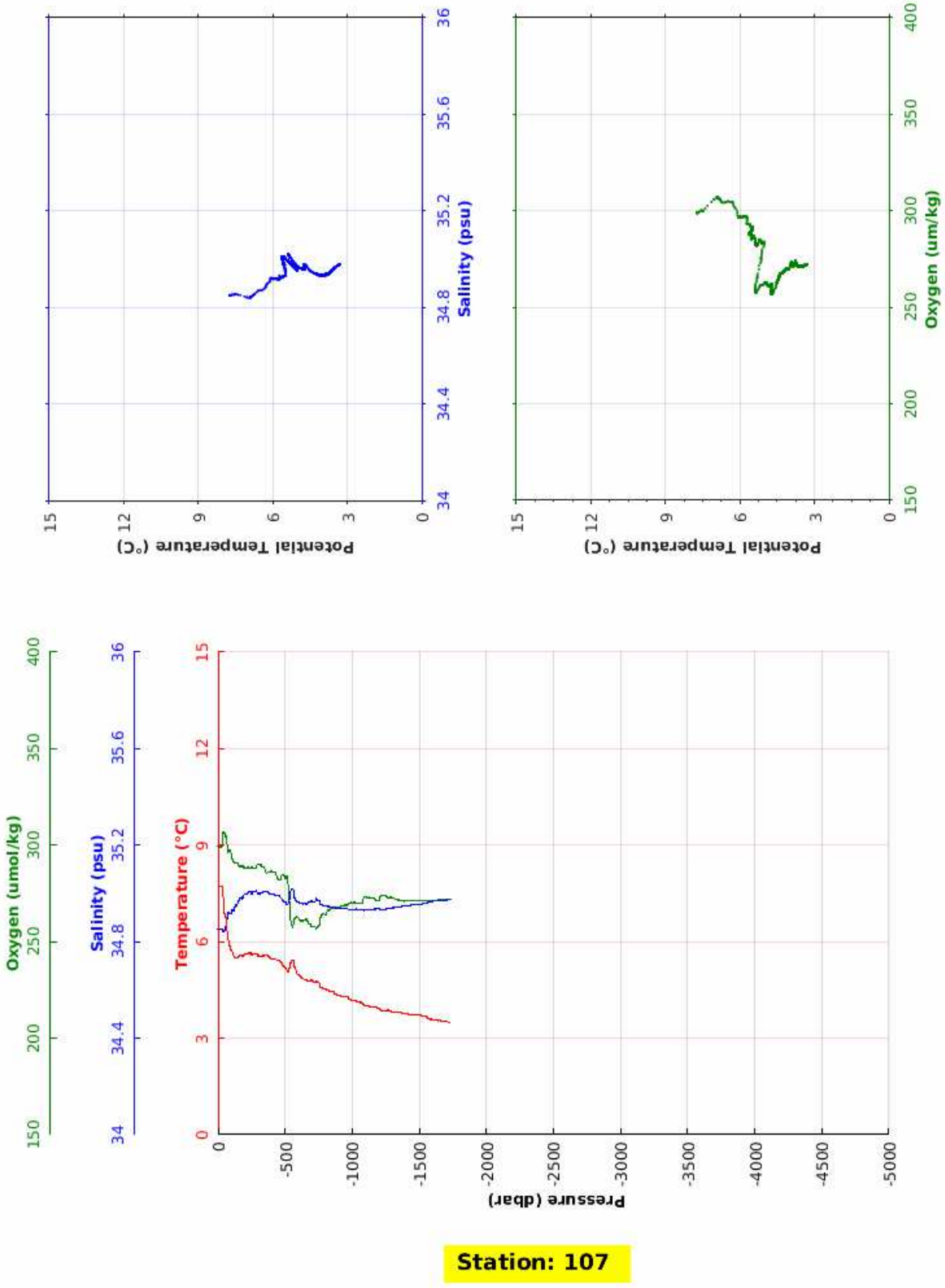
Cruise	: RREX 2015		
Station	: 106	Cast :	1
Date	: 01/07/2015	Ship :	N/O Thalassa
Depth	: 2213 m	Organism :	IFREMER
Position	: N 56 44.93 W 034 7.39		

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.694	34.857	299.5	7.694
10.0	7.698	34.857	299.1	7.697
20.0	7.680	34.858	299.5	7.678
30.0	7.654	34.857	299.5	7.651
40.0	6.995	34.841	306.1	6.991
50.0	6.787	34.854	305.1	6.782
100.0	5.768	34.925	297.9	5.759
150.0	5.454	34.958	290.5	5.442
200.0	5.460	34.978	291.2	5.443
250.0	5.481	34.990	291.6	5.461
300.0	5.496	34.997	291.8	5.471
350.0	5.479	34.996	291.7	5.450
400.0	5.472	34.995	291.6	5.439
450.0	5.421	34.989	290.9	5.383
500.0	5.271	34.971	289.7	5.230
550.0	5.010	34.944	287.7	4.965
600.0	5.019	34.962	272.4	4.970
650.0	4.889	34.956	269.7	4.836
700.0	4.813	34.963	259.3	4.756
750.0	4.700	34.962	258.5	4.640
800.0	4.627	34.964	260.2	4.563
850.0	4.570	34.966	260.4	4.502
900.0	4.329	34.938	268.0	4.259
950.0	4.241	34.935	269.3	4.167
1000.0	4.158	34.930	270.8	4.080
1050.0	4.082	34.926	271.5	4.001
1100.0	4.033	34.927	271.8	3.948
1150.0	3.981	34.928	271.5	3.892
1200.0	3.930	34.925	271.3	3.838
1250.0	3.853	34.930	271.0	3.756
1300.0	3.842	34.938	272.7	3.741
1350.0	3.823	34.941	272.4	3.718
1400.0	3.783	34.946	271.7	3.674
1450.0	3.736	34.952	271.2	3.623
1500.0	3.712	34.954	271.1	3.595
1550.0	3.685	34.957	271.1	3.564
1600.0	3.623	34.963	271.0	3.498
1650.0	3.596	34.966	271.3	3.467
1700.0	3.550	34.972	271.6	3.417
1750.0	3.499	34.977	271.9	3.362
1800.0	3.456	34.978	272.0	3.315
1850.0	3.412	34.980	272.3	3.267
1900.0	3.394	34.981	272.4	3.245
1950.0	3.382	34.981	272.4	3.228
2000.0	3.394	34.981	272.3	3.236
2050.0	3.376	34.981	272.6	3.213
2100.0	3.373	34.982	272.5	3.206
2150.0	3.371	34.982	272.6	3.199
2200.0	3.375	34.982	272.6	3.197
2235.0	3.378	34.982	272.7	3.197


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 106

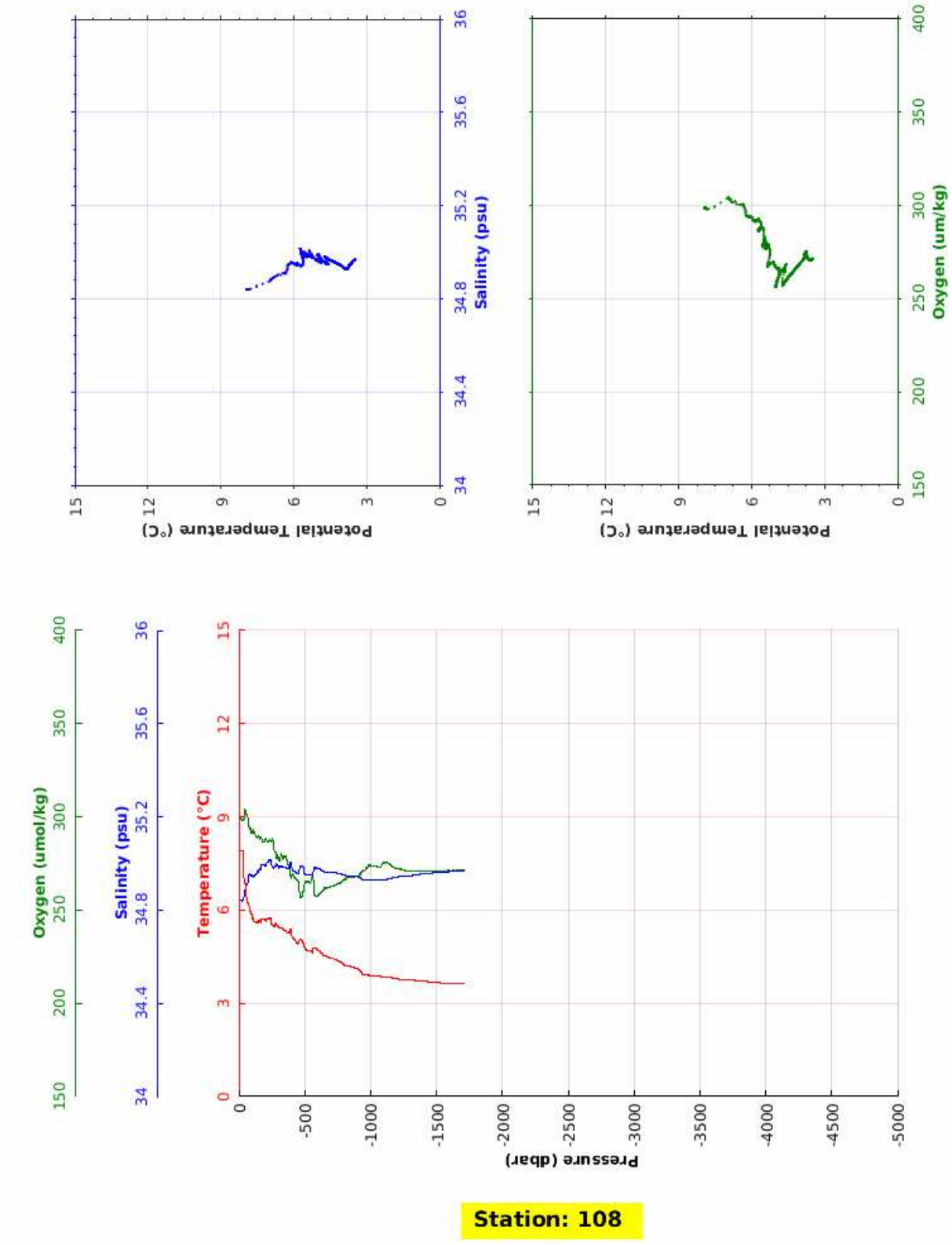
Cruise : RREX 2015			
Station : 107	Cast : 1		
Date : 01/07/2015	Ship : N/O Thalassa		
Depth : 1730 m	Organism : IFREMER		
Position : N 56 44.09 W 034 6.55			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.715	34.851	299.3	7.714
10.0	7.717	34.851	299.1	7.716
20.0	7.718	34.851	299.1	7.716
30.0	7.718	34.851	298.7	7.715
40.0	7.147	34.846	304.6	7.143
50.0	6.882	34.844	306.4	6.878
100.0	5.731	34.919	296.6	5.723
150.0	5.513	34.958	290.5	5.501
200.0	5.628	34.996	288.2	5.611
250.0	5.593	34.998	288.6	5.573
300.0	5.562	35.000	290.2	5.537
350.0	5.577	35.006	288.5	5.548
400.0	5.467	34.995	286.7	5.434
450.0	5.416	34.991	283.0	5.378
500.0	5.167	34.963	283.9	5.126
550.0	5.436	35.020	259.3	5.389
600.0	4.971	34.964	262.4	4.922
650.0	4.822	34.957	261.0	4.770
700.0	4.797	34.969	257.7	4.741
750.0	4.727	34.972	258.0	4.667
800.0	4.528	34.949	264.1	4.464
850.0	4.448	34.944	267.6	4.381
900.0	4.333	34.940	268.2	4.262
950.0	4.285	34.937	268.9	4.211
1000.0	4.176	34.932	270.3	4.099
1050.0	4.122	34.934	270.1	4.040
1100.0	4.017	34.932	273.3	3.932
1150.0	3.968	34.934	272.8	3.879
1200.0	3.923	34.939	271.4	3.831
1250.0	3.866	34.935	273.8	3.769
1300.0	3.829	34.940	272.9	3.729
1350.0	3.796	34.946	271.6	3.692
1400.0	3.761	34.948	271.1	3.653
1450.0	3.722	34.953	271.3	3.610
1500.0	3.720	34.954	271.2	3.603
1550.0	3.669	34.959	271.1	3.548
1600.0	3.577	34.968	271.6	3.453
1650.0	3.551	34.971	271.4	3.422
1700.0	3.534	34.973	271.7	3.401
1739.0	3.445	34.978	272.4	3.310


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 107

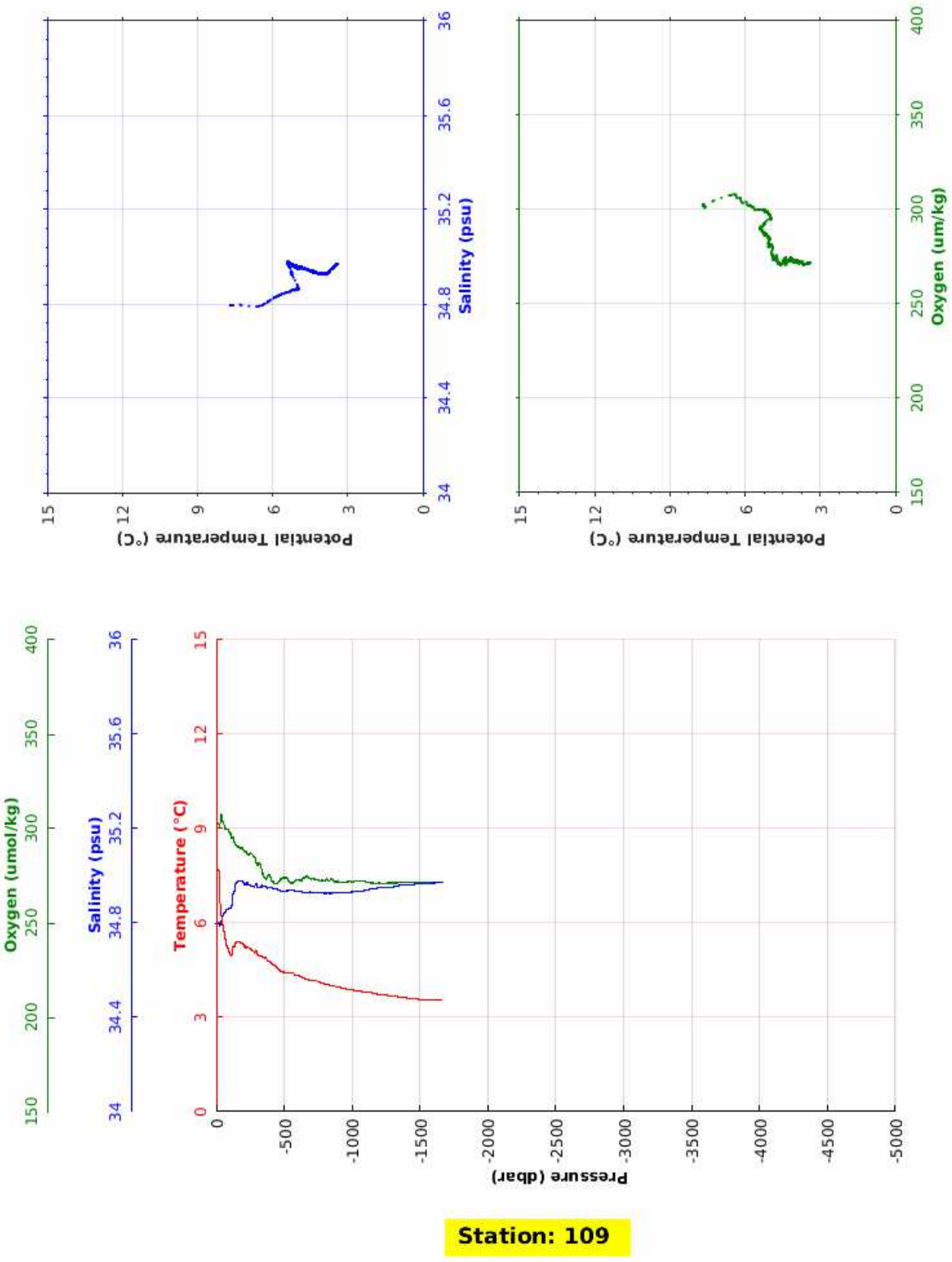
Cruise : RREX 2015			
Station : 108	Cast : 1		
Date : 01/07/2015	Ship : N/O Thalassa		
Depth : 1712 m	Organism : IFREMER		
Position : N 56 23.98 W 034 1.26			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.919	34.840	298.9	7.919
10.0	7.907	34.841	298.8	7.906
20.0	7.909	34.840	298.5	7.907
30.0	7.885	34.841	298.3	7.882
40.0	6.965	34.879	304.4	6.961
50.0	6.794	34.893	301.7	6.790
100.0	5.863	34.954	291.4	5.854
150.0	5.612	34.969	289.3	5.600
200.0	5.669	34.992	287.7	5.652
250.0	5.563	34.987	288.0	5.542
300.0	5.413	34.979	276.5	5.389
350.0	5.350	34.983	278.9	5.321
400.0	5.258	34.985	269.0	5.225
450.0	4.920	34.960	263.7	4.884
500.0	4.801	34.959	265.5	4.762
550.0	4.678	34.953	267.0	4.635
600.0	4.718	34.977	258.2	4.670
650.0	4.534	34.964	261.8	4.484
700.0	4.449	34.962	262.9	4.394
750.0	4.382	34.958	264.0	4.323
800.0	4.227	34.949	266.8	4.165
850.0	4.183	34.947	267.5	4.117
900.0	4.122	34.944	268.3	4.053
950.0	3.932	34.929	271.3	3.860
1000.0	3.898	34.929	273.9	3.822
1050.0	3.898	34.931	273.2	3.818
1100.0	3.837	34.930	275.3	3.754
1150.0	3.828	34.935	274.2	3.740
1200.0	3.801	34.942	272.1	3.710
1250.0	3.773	34.946	271.4	3.677
1300.0	3.755	34.948	271.2	3.655
1350.0	3.733	34.952	271.2	3.629
1400.0	3.716	34.955	271.0	3.608
1450.0	3.698	34.959	271.0	3.586
1500.0	3.670	34.962	271.1	3.554
1550.0	3.651	34.964	271.2	3.530
1600.0	3.637	34.965	271.2	3.512
1650.0	3.628	34.966	271.3	3.499
1700.0	3.621	34.967	271.4	3.487
1721.0	3.620	34.968	271.5	3.484


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 108

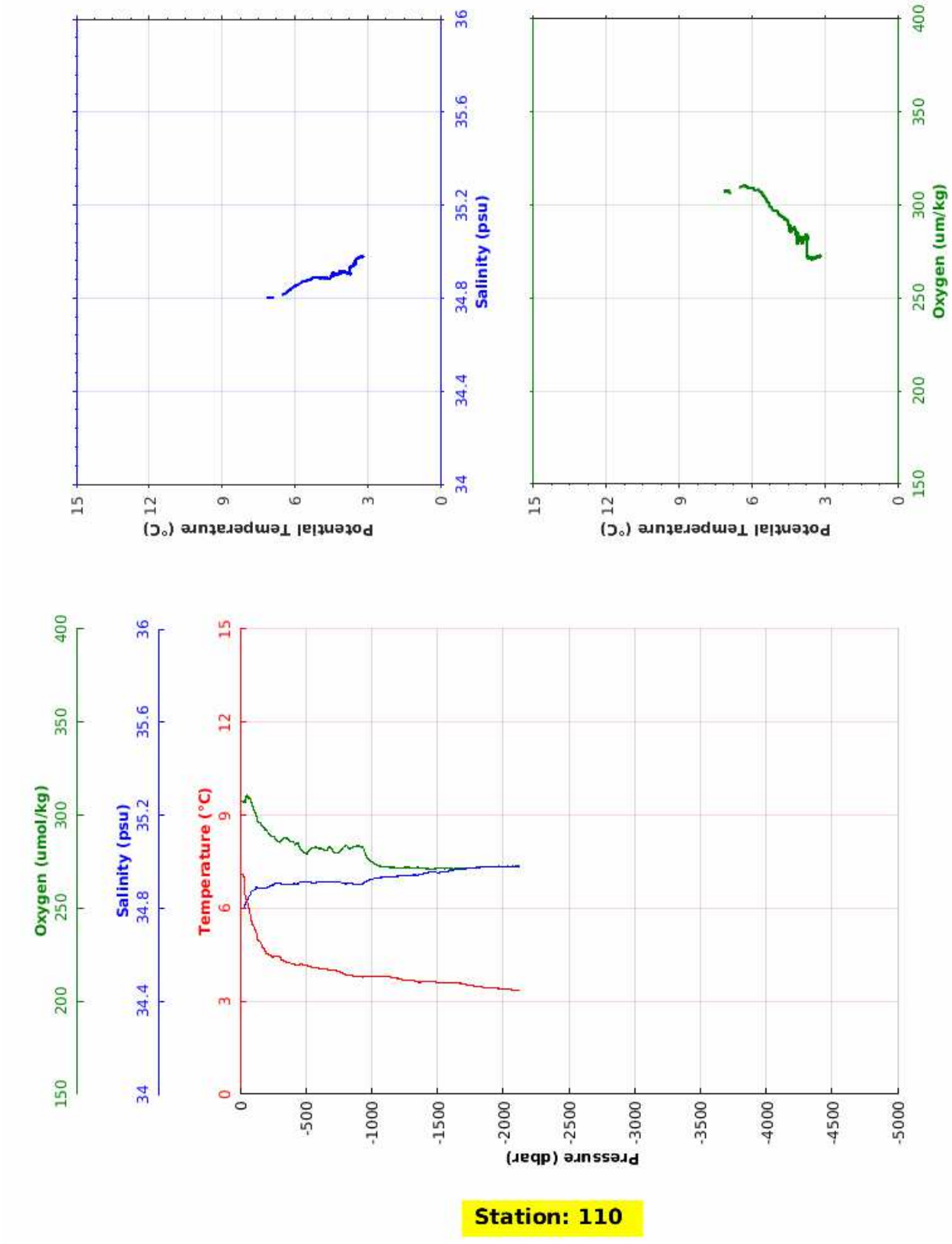
Cruise	: RREX 2015		
Station	: 109	Cast	: 1
Date	: 01/07/2015	Ship	: N/O Thalassa
Depth	: 1658 m	Organism	: IFREMER
Position	: N 56 3.01 W 034 17.14		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.686	34.795	302.8	7.686
10.0	7.686	34.796	302.9	7.685
20.0	7.657	34.795	302.5	7.655
30.0	6.572	34.791	307.7	6.569
40.0	6.190	34.809	305.9	6.187
50.0	5.876	34.830	302.2	5.871
100.0	5.031	34.862	297.3	5.023
150.0	5.422	34.970	290.5	5.410
200.0	5.313	34.973	288.1	5.297
250.0	5.177	34.961	286.8	5.157
300.0	5.061	34.960	280.8	5.037
350.0	4.900	34.957	273.9	4.872
400.0	4.753	34.950	273.2	4.722
450.0	4.566	34.943	271.1	4.531
500.0	4.428	34.935	273.9	4.390
550.0	4.430	34.941	270.9	4.388
600.0	4.323	34.934	273.1	4.277
650.0	4.229	34.930	274.3	4.180
700.0	4.173	34.930	273.4	4.120
750.0	4.120	34.929	272.6	4.063
800.0	4.056	34.926	273.1	3.996
850.0	3.989	34.926	273.0	3.925
900.0	3.975	34.930	271.7	3.907
950.0	3.907	34.929	271.7	3.836
1000.0	3.876	34.932	271.8	3.800
1050.0	3.829	34.933	272.3	3.750
1100.0	3.801	34.939	271.8	3.718
1150.0	3.771	34.945	271.0	3.684
1200.0	3.719	34.949	271.2	3.628
1250.0	3.708	34.950	271.1	3.613
1300.0	3.693	34.953	271.2	3.594
1350.0	3.635	34.959	271.4	3.532
1400.0	3.618	34.961	271.4	3.511
1450.0	3.589	34.964	271.4	3.478
1500.0	3.573	34.967	271.6	3.458
1550.0	3.564	34.969	271.8	3.444
1600.0	3.566	34.970	271.6	3.442
1650.0	3.560	34.970	271.8	3.432
1669.0	3.556	34.971	272.0	3.426


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 109

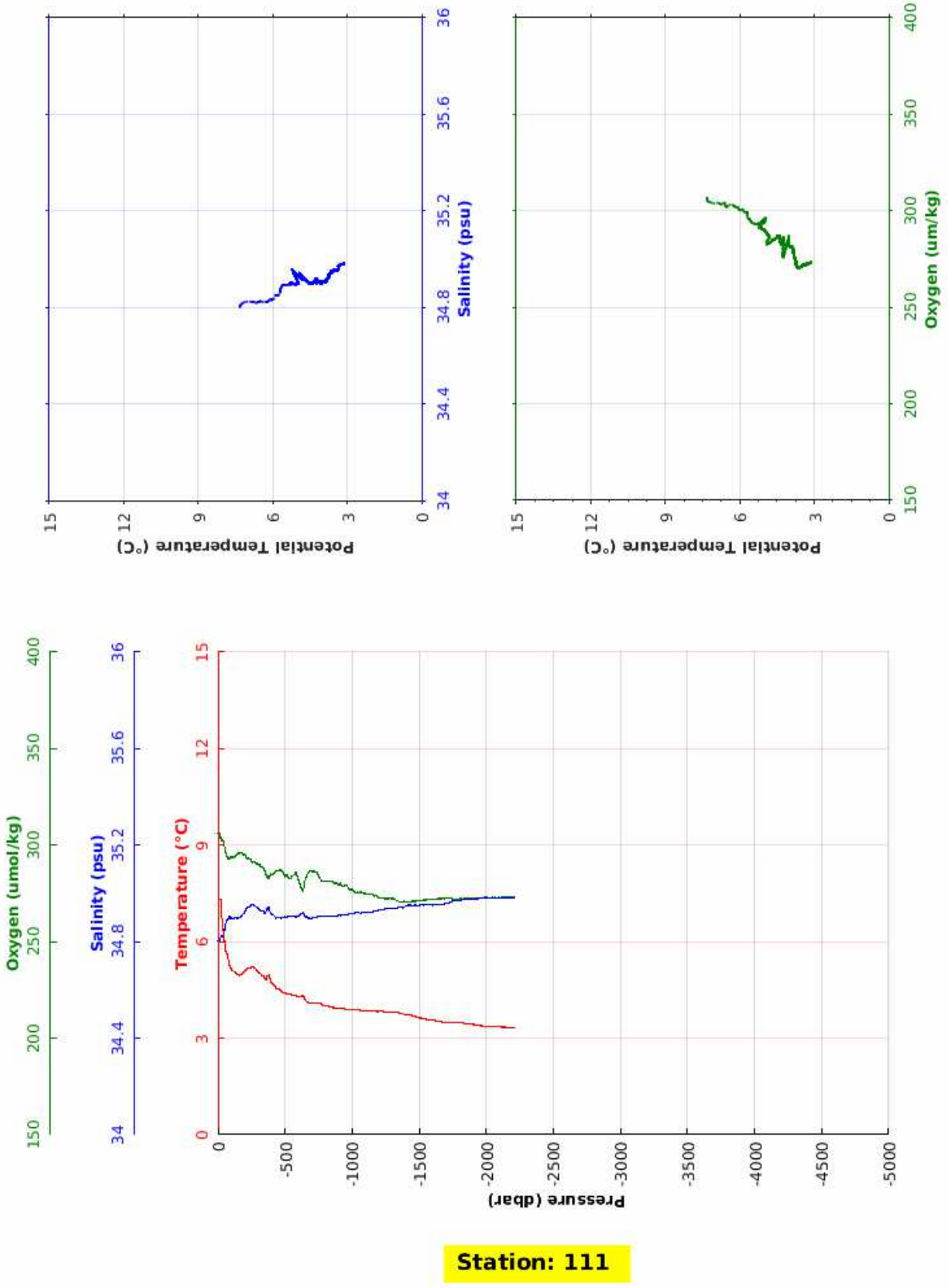
Cruise	: RREX 2015		
Station	: 110	Cast :	1
Date	: 01/07/2015	Ship :	N/O Thalassa
Depth	: 2113 m	Organism :	IFREMER
Position	: N 55 48.00 W 034 28.44		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.109	34.802	307.5	7.109
10.0	7.103	34.802	307.6	7.102
20.0	7.106	34.802	307.3	7.104
30.0	6.991	34.802	307.5	6.988
40.0	6.378	34.821	310.3	6.375
50.0	6.268	34.832	310.3	6.263
100.0	5.418	34.878	303.0	5.410
150.0	4.942	34.887	295.6	4.931
200.0	4.554	34.886	291.5	4.539
250.0	4.430	34.896	288.5	4.412
300.0	4.438	34.910	285.4	4.416
350.0	4.270	34.903	287.5	4.244
400.0	4.210	34.905	285.5	4.181
450.0	4.186	34.911	282.7	4.152
500.0	4.168	34.915	279.1	4.131
550.0	4.098	34.910	282.4	4.058
600.0	4.067	34.912	281.9	4.022
650.0	4.048	34.914	281.1	4.000
700.0	4.011	34.912	281.5	3.960
750.0	3.959	34.912	280.2	3.903
800.0	3.856	34.904	283.8	3.797
850.0	3.829	34.906	282.9	3.767
900.0	3.787	34.904	283.5	3.721
950.0	3.799	34.914	279.2	3.728
1000.0	3.808	34.923	274.9	3.733
1050.0	3.802	34.931	272.7	3.723
1100.0	3.794	34.934	272.3	3.710
1150.0	3.779	34.936	272.0	3.691
1200.0	3.735	34.938	271.7	3.644
1250.0	3.678	34.938	272.0	3.584
1300.0	3.673	34.943	271.7	3.574
1350.0	3.621	34.942	271.9	3.518
1400.0	3.634	34.950	271.6	3.527
1450.0	3.649	34.957	271.0	3.537
1500.0	3.596	34.951	271.7	3.481
1550.0	3.591	34.956	271.5	3.471
1600.0	3.594	34.961	271.2	3.470
1650.0	3.596	34.967	271.2	3.467
1700.0	3.557	34.969	271.5	3.424
1750.0	3.528	34.971	271.9	3.390
1800.0	3.479	34.975	272.0	3.338
1850.0	3.452	34.976	272.3	3.307
1900.0	3.434	34.977	272.4	3.285
1950.0	3.419	34.978	272.4	3.264
2000.0	3.385	34.978	272.4	3.227
2050.0	3.375	34.978	272.4	3.212
2100.0	3.370	34.978	272.7	3.203
2132.0	3.366	34.979	272.9	3.195


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 110

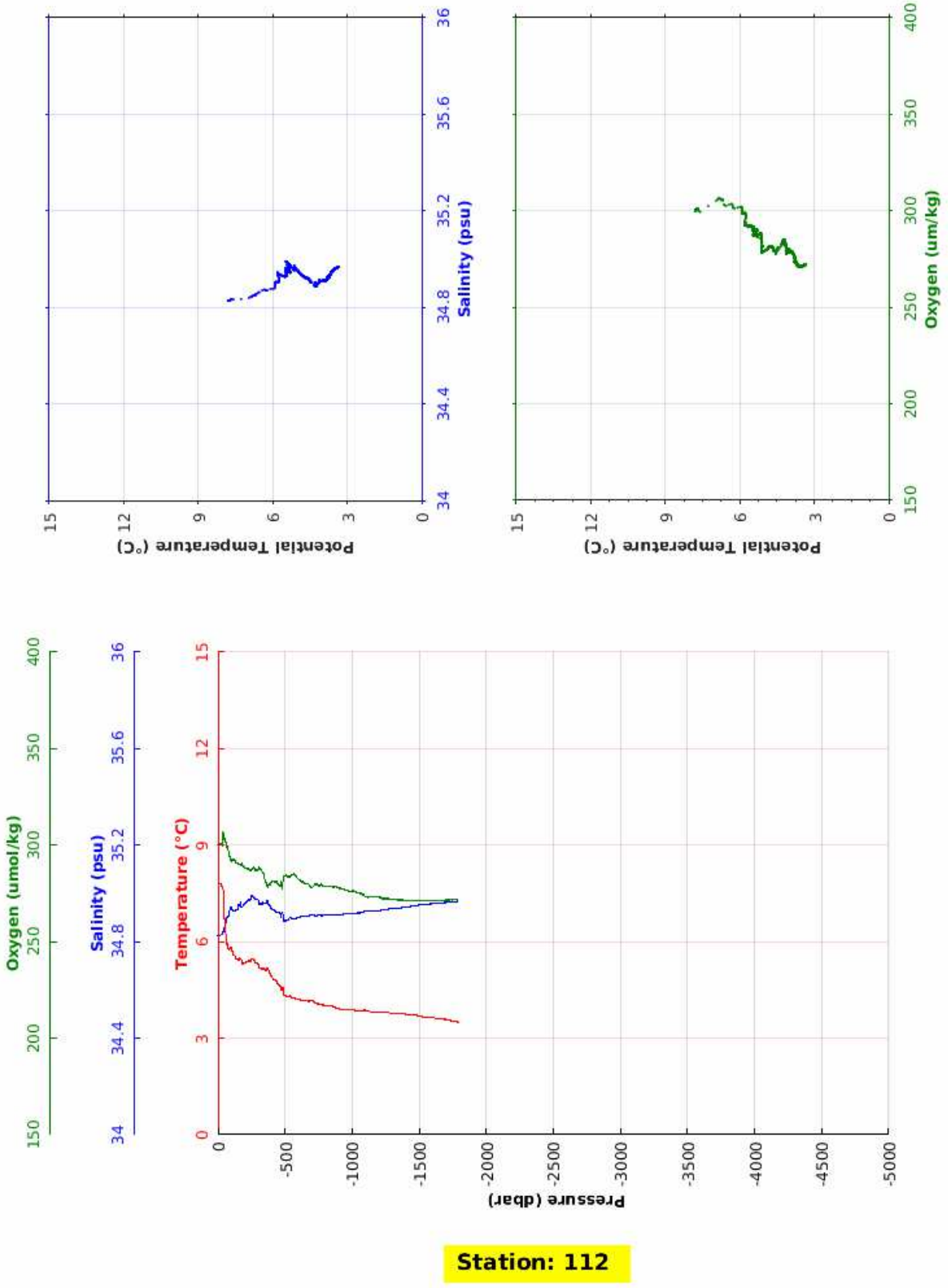
Cruise	: RREX 2015		
Station	: 111	Cast	: 1
Date	: 01/07/2015	Ship	: N/O Thalassa
Depth	: 2197 m	Organism	: IFREMER
Position	: N 55 20.96 W 034 48.87		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.321	34.805	306.2	7.321
10.0	7.321	34.805	306.2	7.320
20.0	7.318	34.806	305.6	7.316
30.0	6.679	34.819	303.8	6.676
40.0	6.253	34.822	302.4	6.250
50.0	5.962	34.836	300.5	5.958
100.0	5.126	34.895	294.0	5.118
150.0	4.969	34.897	295.4	4.958
200.0	5.079	34.922	295.2	5.063
250.0	5.203	34.950	292.5	5.183
300.0	5.051	34.937	290.4	5.027
350.0	4.862	34.919	286.9	4.834
400.0	4.734	34.917	284.5	4.703
450.0	4.529	34.900	287.0	4.495
500.0	4.432	34.903	284.5	4.394
550.0	4.348	34.906	283.0	4.307
600.0	4.295	34.906	282.8	4.250
650.0	4.203	34.908	280.5	4.155
700.0	4.077	34.898	286.6	4.025
750.0	4.076	34.906	284.9	4.020
800.0	4.005	34.905	281.2	3.945
850.0	3.960	34.905	281.3	3.896
900.0	3.943	34.909	280.0	3.876
950.0	3.899	34.910	279.2	3.828
1000.0	3.893	34.916	277.0	3.818
1050.0	3.881	34.920	275.6	3.802
1100.0	3.846	34.922	274.8	3.763
1150.0	3.838	34.923	274.5	3.750
1200.0	3.836	34.933	273.0	3.744
1250.0	3.820	34.936	272.3	3.724
1300.0	3.813	34.937	272.1	3.713
1350.0	3.790	34.942	270.8	3.686
1400.0	3.737	34.950	270.9	3.629
1450.0	3.690	34.949	271.0	3.578
1500.0	3.634	34.951	271.3	3.518
1550.0	3.589	34.952	271.7	3.469
1600.0	3.557	34.952	272.1	3.433
1650.0	3.521	34.953	272.3	3.393
1700.0	3.503	34.958	272.5	3.371
1750.0	3.499	34.968	272.4	3.362
1800.0	3.479	34.973	272.0	3.338
1850.0	3.455	34.974	272.2	3.310
1900.0	3.434	34.976	272.3	3.284
1950.0	3.400	34.979	272.6	3.246
2000.0	3.363	34.980	272.9	3.205
2050.0	3.361	34.979	272.9	3.198
2100.0	3.374	34.979	272.9	3.207
2150.0	3.331	34.980	273.1	3.159
2200.0	3.318	34.981	273.2	3.142
2219.0	3.315	34.981	273.3	3.137


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 111

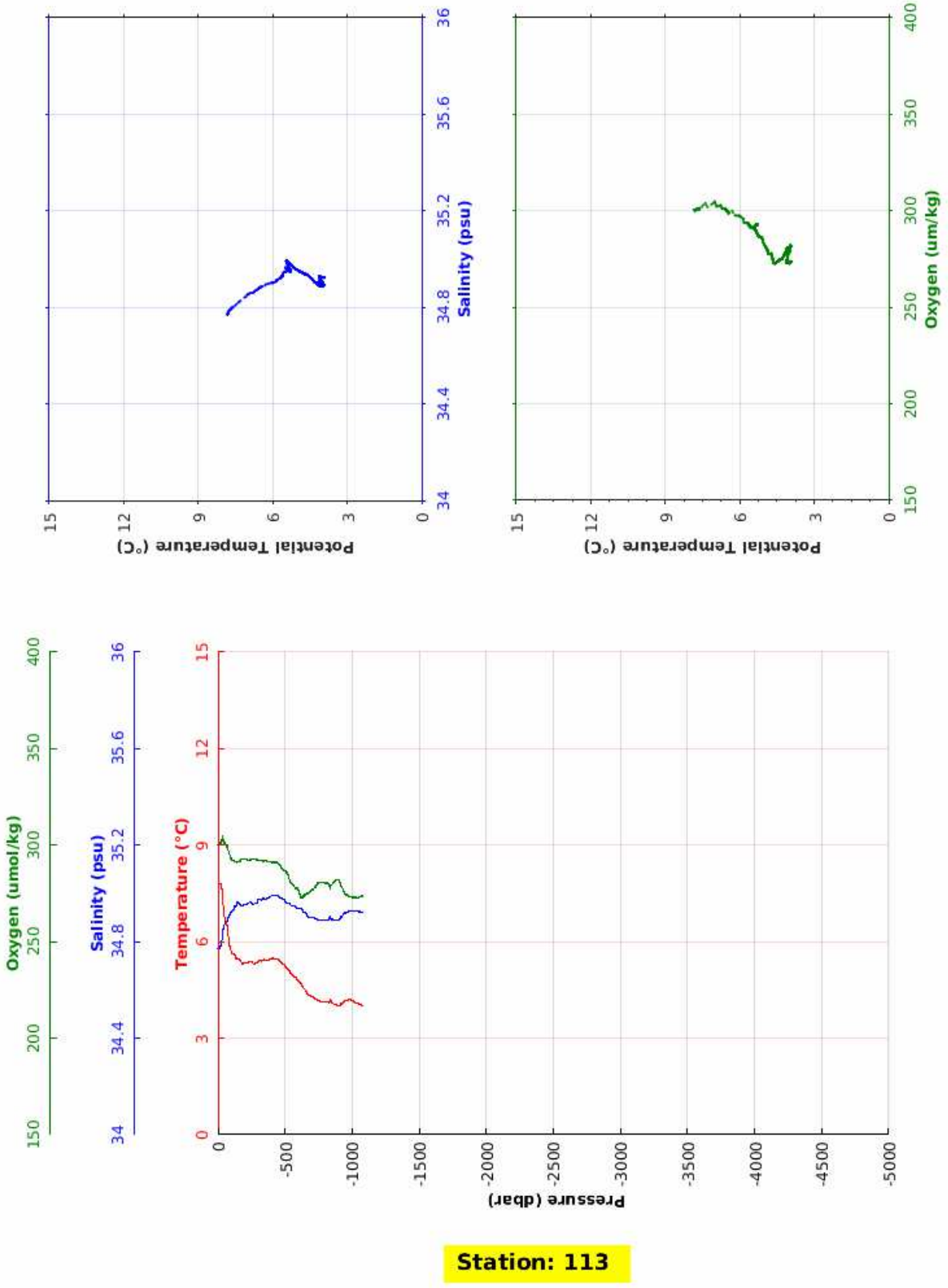
Cruise	: RREX 2015		
Station	: 112	Cast	: 1
Date	: 02/07/2015	Ship	: N/O Thalassa
Depth	: 1787 m	Organism	: IFREMER
Position	: N 55 2.98 W 035 0.02		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.784	34.827	300.5	7.784
10.0	7.796	34.827	300.3	7.795
20.0	7.795	34.827	300.4	7.793
30.0	7.715	34.830	300.9	7.712
40.0	7.283	34.835	302.4	7.279
50.0	6.682	34.852	305.3	6.678
100.0	5.815	34.944	292.6	5.806
150.0	5.443	34.934	291.0	5.431
200.0	5.342	34.955	288.7	5.326
250.0	5.473	34.990	287.2	5.453
300.0	5.320	34.975	286.6	5.295
350.0	5.133	34.960	283.6	5.105
400.0	4.915	34.939	280.3	4.884
450.0	4.692	34.923	280.3	4.657
500.0	4.322	34.887	284.1	4.284
550.0	4.273	34.897	284.5	4.231
600.0	4.205	34.900	282.6	4.160
650.0	4.172	34.906	280.5	4.123
700.0	4.167	34.913	278.0	4.114
750.0	4.065	34.910	279.4	4.009
800.0	4.026	34.911	278.7	3.966
850.0	3.996	34.911	278.9	3.932
900.0	3.918	34.913	278.0	3.850
950.0	3.901	34.916	276.8	3.829
1000.0	3.878	34.916	276.3	3.802
1050.0	3.865	34.919	275.2	3.785
1100.0	3.868	34.925	273.5	3.784
1150.0	3.824	34.927	273.4	3.737
1200.0	3.822	34.929	273.0	3.730
1250.0	3.795	34.934	272.4	3.700
1300.0	3.787	34.937	272.2	3.687
1350.0	3.779	34.939	271.8	3.675
1400.0	3.746	34.946	271.4	3.637
1450.0	3.733	34.947	271.3	3.620
1500.0	3.683	34.953	271.1	3.567
1550.0	3.653	34.956	271.4	3.532
1600.0	3.641	34.957	271.3	3.515
1650.0	3.619	34.960	271.3	3.490
1700.0	3.586	34.962	271.8	3.453
1750.0	3.529	34.966	271.9	3.391
1799.0	3.506	34.968	272.3	3.365


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 112

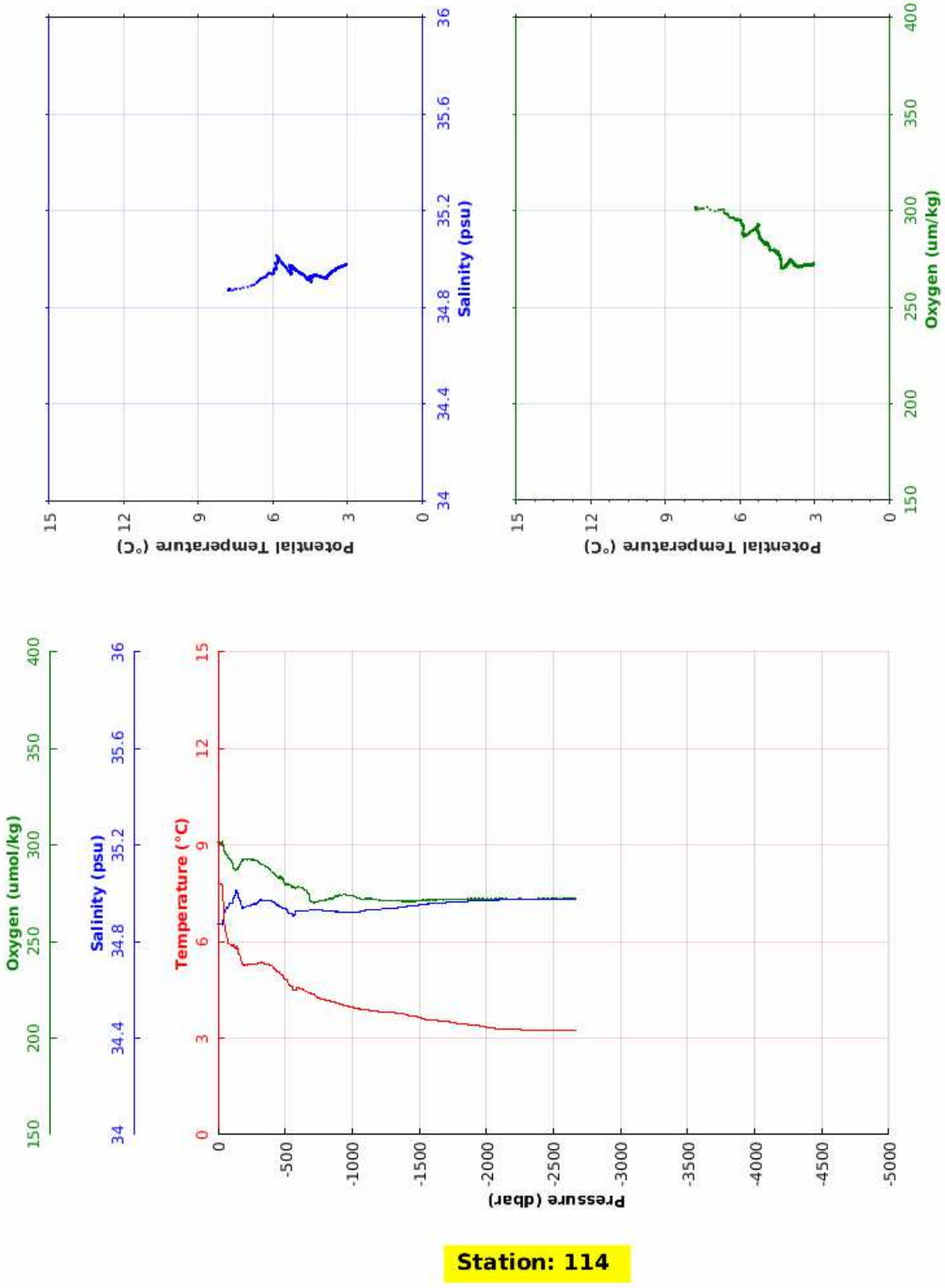
Cruise	: RREX 2015		
Station	: 113	Cast :	1
Date	: 02/07/2015	Ship :	N/O Thalassa
Depth	: 1085 m	Organism :	IFREMER
Position	: N 54 38.99 W 035 4.81		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.819	34.772	300.3	7.819
10.0	7.818	34.771	300.5	7.817
20.0	7.802	34.777	300.1	7.801
30.0	7.623	34.800	300.8	7.620
40.0	7.031	34.853	304.4	7.027
50.0	6.749	34.864	302.2	6.745
100.0	5.674	34.924	293.1	5.665
150.0	5.461	34.962	291.2	5.449
200.0	5.331	34.953	292.8	5.315
250.0	5.379	34.963	292.3	5.359
300.0	5.384	34.968	292.3	5.359
350.0	5.416	34.977	291.8	5.387
400.0	5.476	34.990	291.4	5.443
450.0	5.455	34.990	291.0	5.418
500.0	5.262	34.973	286.5	5.221
550.0	4.976	34.951	280.8	4.932
600.0	4.778	34.939	278.0	4.730
650.0	4.513	34.922	274.1	4.463
700.0	4.300	34.902	276.6	4.246
750.0	4.161	34.889	280.5	4.104
800.0	4.127	34.890	280.4	4.066
850.0	4.100	34.894	279.7	4.035
900.0	4.020	34.891	281.8	3.951
950.0	4.182	34.922	274.7	4.109
1000.0	4.169	34.927	273.4	4.091
1050.0	4.077	34.925	272.7	3.996
1087.0	4.001	34.924	273.7	3.917


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 113

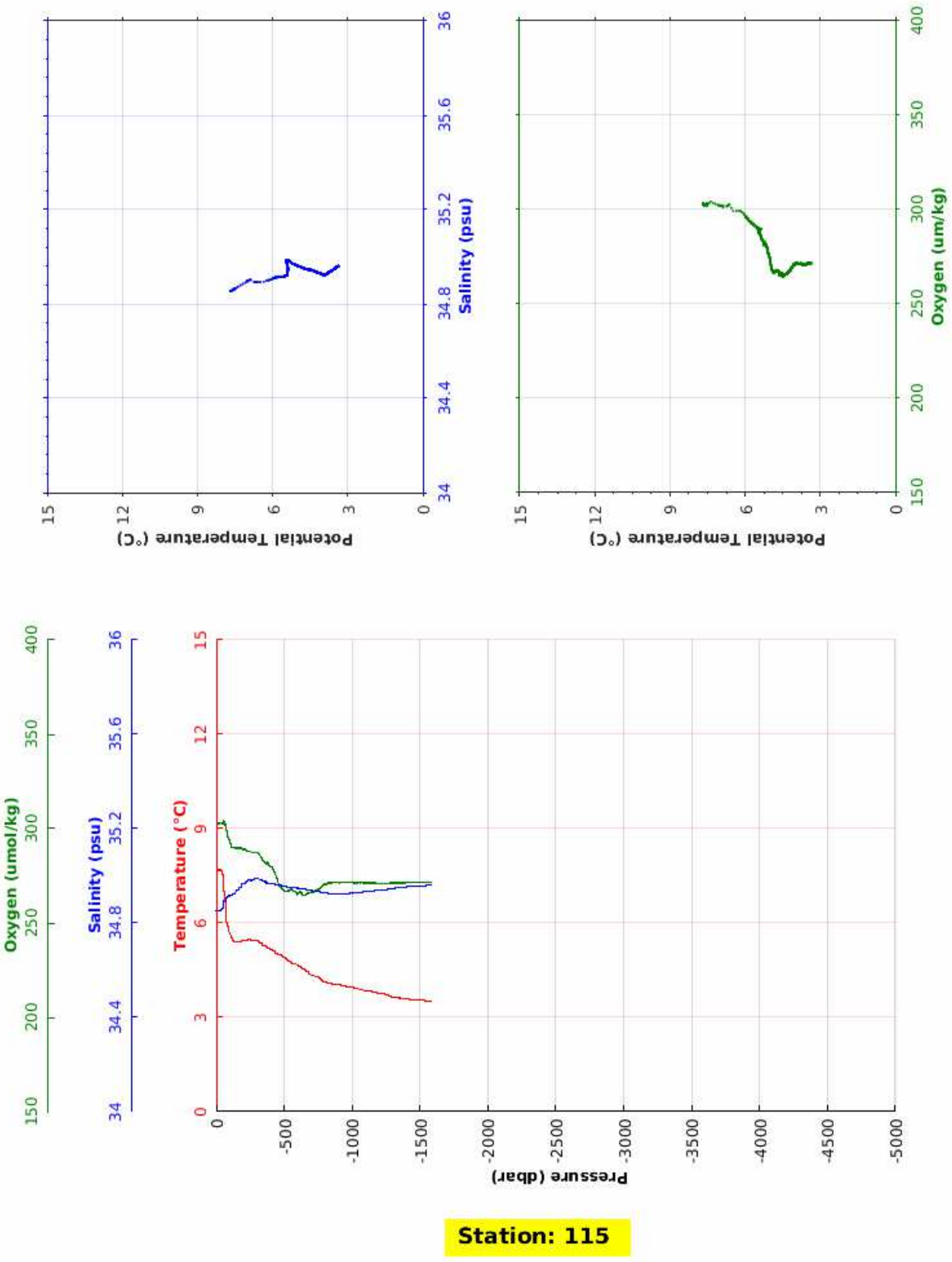
Cruise	: RREX 2015		
Station	: 114	Cast :	1
Date	: 02/07/2015	Ship :	N/O Thalassa
Depth	: 2650 m	Organism :	IFREMER
Position	: N 54 14.96 W 035 4.82		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.790	34.872	301.5	7.789
10.0	7.785	34.872	301.4	7.784
20.0	7.781	34.872	301.3	7.779
30.0	7.749	34.874	301.4	7.746
40.0	7.020	34.884	299.7	7.017
50.0	6.512	34.916	298.1	6.507
100.0	5.892	34.960	292.6	5.884
150.0	5.751	35.000	287.3	5.738
200.0	5.283	34.943	292.6	5.267
250.0	5.295	34.953	292.6	5.275
300.0	5.327	34.965	291.8	5.302
350.0	5.318	34.971	289.5	5.289
400.0	5.274	34.972	286.5	5.241
450.0	5.070	34.952	283.2	5.034
500.0	4.831	34.937	279.7	4.792
550.0	4.612	34.918	279.1	4.570
600.0	4.564	34.928	278.4	4.517
650.0	4.468	34.927	276.9	4.418
700.0	4.379	34.935	270.5	4.325
750.0	4.244	34.931	271.0	4.187
800.0	4.188	34.929	271.5	4.127
850.0	4.151	34.927	272.2	4.086
900.0	4.077	34.924	273.8	4.008
950.0	4.016	34.923	274.7	3.943
1000.0	3.987	34.922	274.2	3.910
1050.0	3.911	34.922	272.4	3.831
1100.0	3.892	34.930	272.1	3.808
1150.0	3.860	34.933	272.2	3.772
1200.0	3.830	34.935	271.5	3.738
1250.0	3.813	34.937	271.1	3.716
1300.0	3.798	34.939	271.3	3.698
1350.0	3.776	34.941	271.0	3.671
1400.0	3.744	34.946	271.0	3.636
1450.0	3.701	34.949	271.2	3.588
1500.0	3.650	34.952	271.3	3.533
1550.0	3.585	34.955	271.6	3.465
1600.0	3.567	34.960	271.8	3.442
1650.0	3.540	34.961	271.9	3.411
1700.0	3.522	34.962	271.9	3.389
1750.0	3.493	34.965	271.9	3.356
1800.0	3.459	34.966	272.2	3.318
1850.0	3.432	34.967	272.1	3.287
1900.0	3.411	34.968	272.2	3.261
1950.0	3.381	34.970	272.3	3.227
2000.0	3.348	34.971	272.0	3.190
2050.0	3.320	34.973	272.2	3.158
2100.0	3.292	34.973	272.4	3.125
2150.0	3.281	34.974	272.3	3.110
2200.0	3.274	34.974	272.1	3.098
2250.0	3.269	34.975	272.2	3.089
2300.0	3.261	34.975	272.2	3.076
2350.0	3.262	34.976	272.2	3.072
2400.0	3.262	34.976	272.2	3.067
2450.0	3.262	34.976	272.2	3.062
2500.0	3.253	34.977	272.4	3.048
2550.0	3.251	34.978	272.3	3.041
2600.0	3.251	34.978	272.5	3.036
2650.0	3.251	34.978	272.2	3.031
2678.0	3.252	34.978	272.7	3.029


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 114

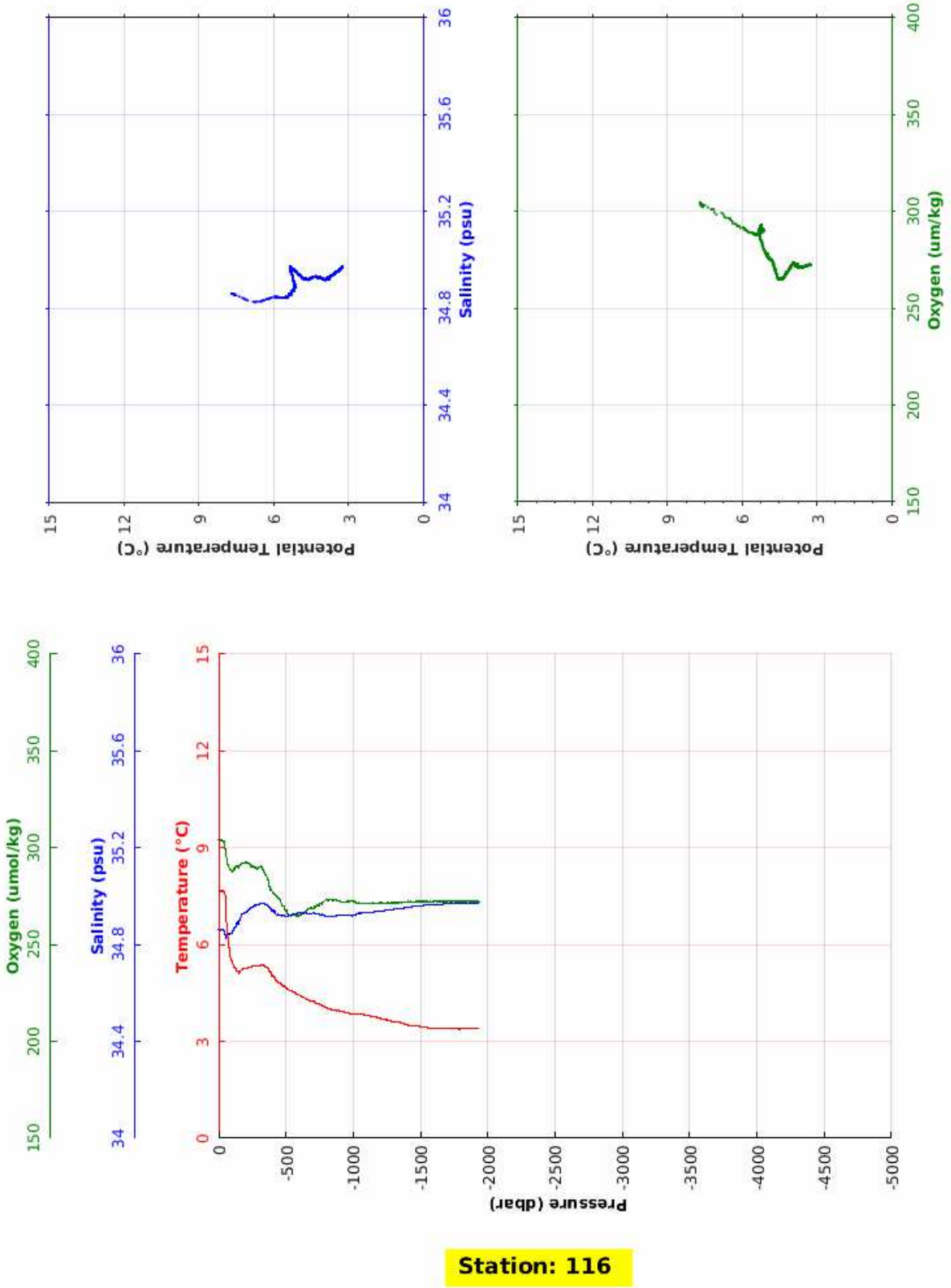
Cruise	: RREX 2015		
Station	: 115	Cast :	1
Date	: 02/07/2015	Ship	: N/O Thalassa
Depth	: 1581 m	Organism	: IFREMER
Position	: N 53 56.96 W 035 4.75		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.681	34.854	303.5	7.680
10.0	7.682	34.854	303.2	7.681
20.0	7.688	34.854	302.7	7.686
30.0	7.684	34.854	303.0	7.681
40.0	7.651	34.856	302.5	7.647
50.0	7.527	34.864	302.3	7.522
100.0	5.681	34.916	292.1	5.673
150.0	5.416	34.936	289.7	5.404
200.0	5.434	34.965	288.9	5.417
250.0	5.481	34.984	287.8	5.460
300.0	5.439	34.987	287.5	5.415
350.0	5.296	34.977	282.3	5.267
400.0	5.166	34.968	280.0	5.134
450.0	5.024	34.961	271.8	4.987
500.0	4.916	34.957	266.7	4.876
550.0	4.760	34.949	267.8	4.716
600.0	4.657	34.948	265.8	4.610
650.0	4.527	34.945	264.9	4.476
700.0	4.353	34.938	266.6	4.299
750.0	4.286	34.935	267.4	4.229
800.0	4.136	34.928	270.4	4.075
850.0	4.078	34.925	271.2	4.013
900.0	4.051	34.924	271.3	3.982
950.0	3.989	34.924	271.8	3.917
1000.0	3.957	34.926	271.5	3.881
1050.0	3.904	34.929	271.3	3.824
1100.0	3.850	34.933	271.3	3.767
1150.0	3.814	34.936	271.4	3.726
1200.0	3.767	34.940	270.8	3.676
1250.0	3.729	34.942	271.0	3.633
1300.0	3.651	34.947	271.3	3.552
1350.0	3.617	34.951	271.4	3.514
1400.0	3.587	34.953	271.6	3.480
1450.0	3.554	34.956	271.6	3.444
1500.0	3.538	34.958	271.5	3.423
1550.0	3.520	34.959	271.3	3.401
1591.0	3.497	34.961	271.9	3.375


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 115

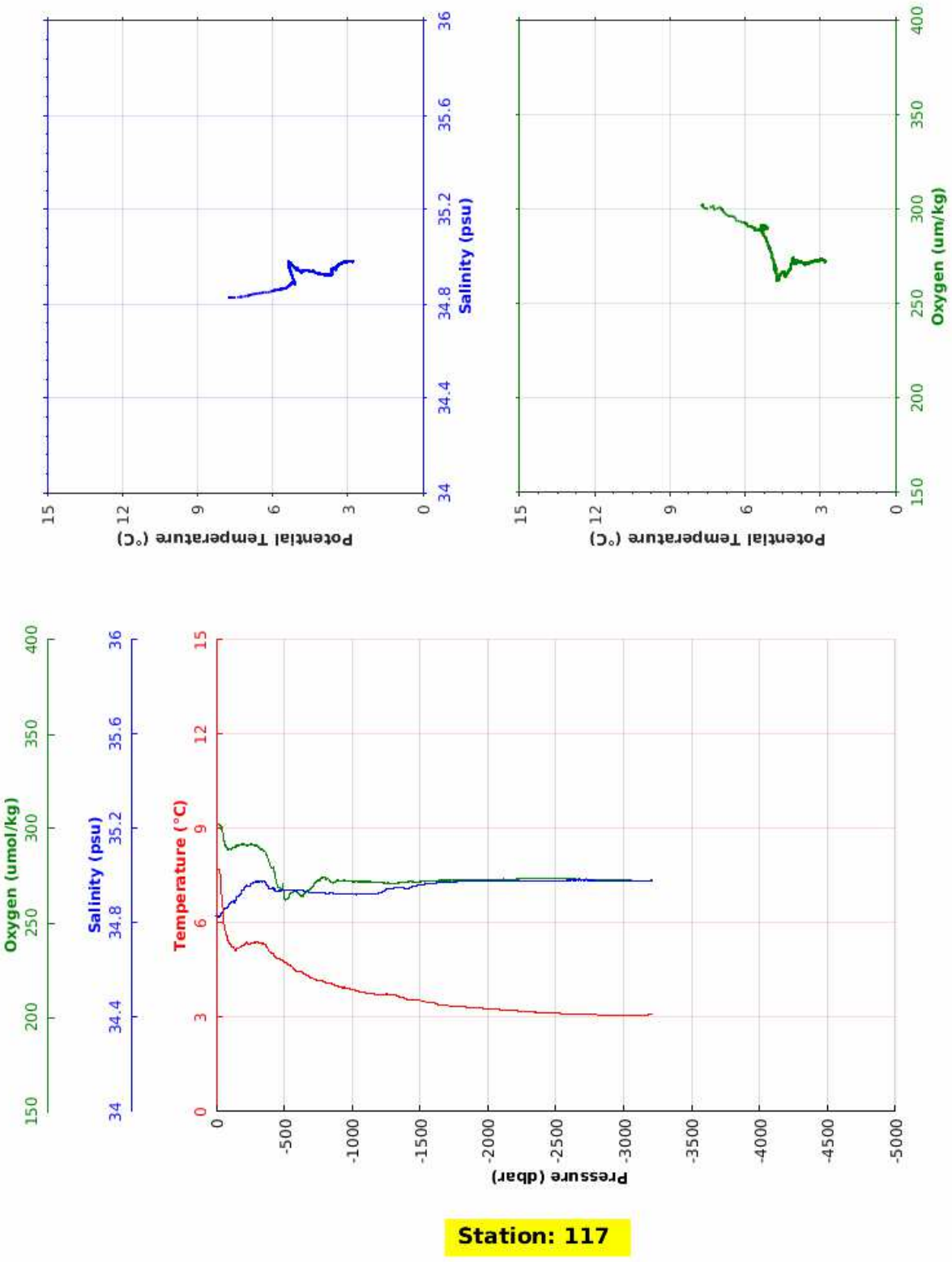
Cruise : RREX 2015			
Station : 116	Cast : 1		
Date : 02/07/2015	Ship : N/O Thalassa		
Depth : 1934 m	Organism : IFREMER		
Position : N 53 32.98 W 035 4.80			

PRESSURE dbar	TEMPERATURE deg.cels.	SALINITY psu	DISSOLV. OXYGEN umol/kg	POTENT. TEMP. deg.cels.
1.0	7.676	34.860	304.3	7.676
10.0	7.677	34.860	303.9	7.676
20.0	7.659	34.861	304.1	7.657
30.0	7.671	34.861	303.9	7.668
40.0	7.639	34.859	303.3	7.635
50.0	7.381	34.848	302.2	7.376
100.0	5.494	34.847	287.9	5.486
150.0	5.124	34.888	290.1	5.112
200.0	5.245	34.931	292.5	5.229
250.0	5.323	34.954	290.6	5.302
300.0	5.353	34.967	289.9	5.328
350.0	5.307	34.966	286.2	5.279
400.0	5.031	34.940	278.0	4.999
450.0	4.812	34.923	273.8	4.777
500.0	4.671	34.918	267.9	4.632
550.0	4.558	34.924	265.1	4.515
600.0	4.434	34.931	265.1	4.388
650.0	4.331	34.932	267.0	4.282
700.0	4.246	34.931	268.7	4.192
750.0	4.163	34.926	270.3	4.106
800.0	4.044	34.918	273.1	3.984
850.0	3.981	34.919	273.1	3.917
900.0	3.941	34.921	272.4	3.874
950.0	3.893	34.922	272.3	3.822
1000.0	3.837	34.919	272.4	3.762
1050.0	3.849	34.930	271.5	3.770
1100.0	3.814	34.932	271.5	3.730
1150.0	3.771	34.935	271.3	3.684
1200.0	3.714	34.939	271.2	3.623
1250.0	3.670	34.942	271.6	3.575
1300.0	3.624	34.946	271.6	3.525
1350.0	3.588	34.949	271.8	3.486
1400.0	3.525	34.954	272.2	3.419
1450.0	3.477	34.958	272.2	3.367
1500.0	3.461	34.960	272.2	3.347
1550.0	3.429	34.965	272.1	3.311
1600.0	3.414	34.967	272.3	3.292
1650.0	3.408	34.967	272.5	3.281
1700.0	3.403	34.969	272.2	3.272
1750.0	3.395	34.971	272.4	3.259
1800.0	3.388	34.972	272.3	3.248
1850.0	3.393	34.972	272.2	3.248
1900.0	3.396	34.972	272.4	3.247
1943.0	3.400	34.972	272.4	3.247


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 116

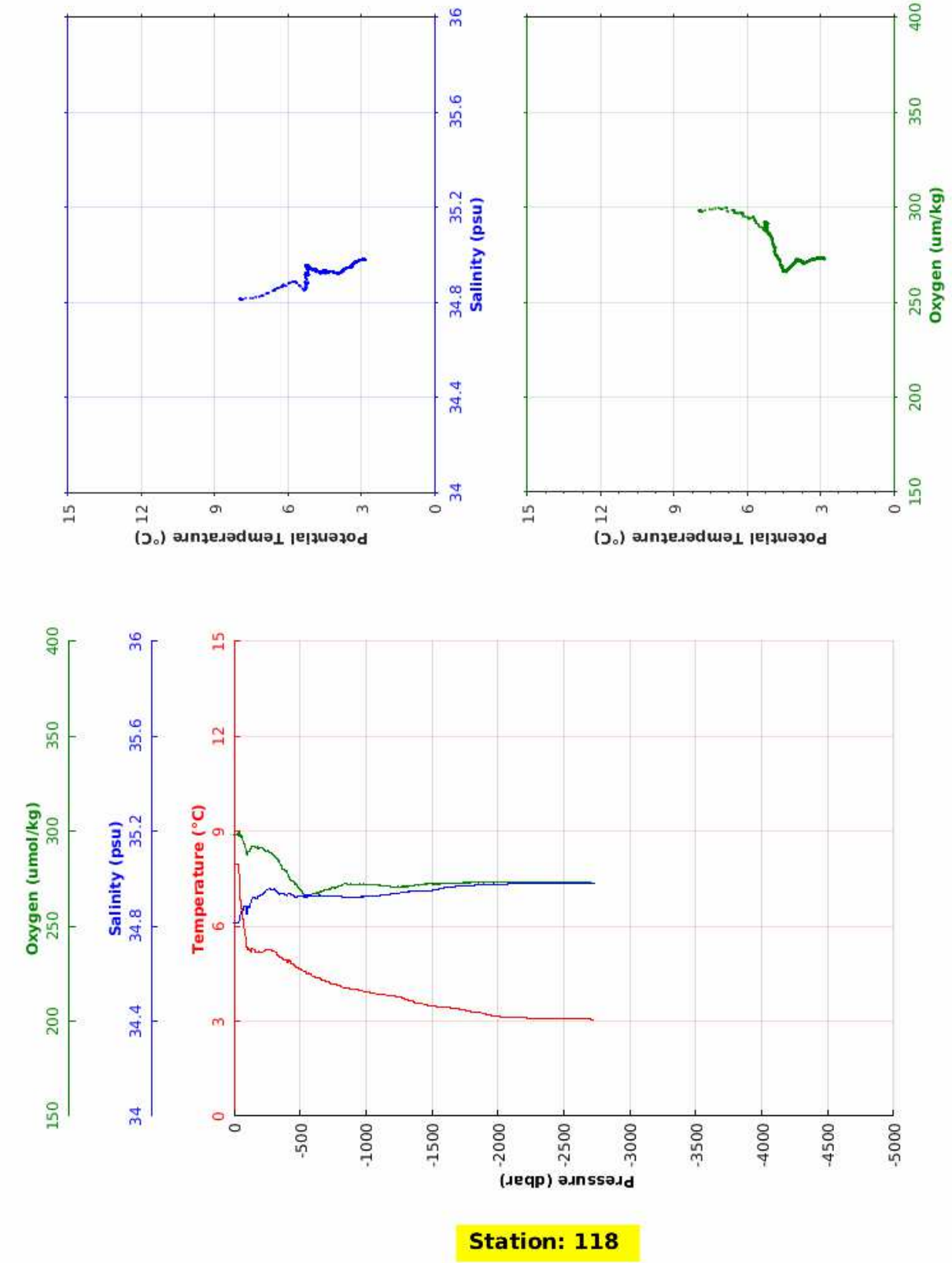
Cruise : RREX 2015			
Station : 117	Cast : 1		
Date : 02/07/2015	Ship : N/O Thalassa		
Depth : 3178 m	Organism : IFREMER		
Position : N 53 8.98 W 035 4.77			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.703	34.827	302.4	7.703	3050.0	3.077	34.980	272.7	2.819
10.0	7.703	34.827	302.4	7.702	3100.0	3.073	34.979	272.2	2.810
20.0	7.695	34.827	302.3	7.693	3150.0	3.079	34.979	272.5	2.810
30.0	7.373	34.829	301.3	7.370	3200.0	3.084	34.979	272.6	2.810
40.0	6.902	34.839	299.8	6.898	3220.0	3.085	34.979	272.6	2.809
50.0	6.357	34.849	294.2	6.353					
100.0	5.326	34.881	289.1	5.318					
150.0	5.207	34.910	291.0	5.195					
200.0	5.300	34.940	291.8	5.283					
250.0	5.336	34.958	291.7	5.316					
300.0	5.396	34.976	290.6	5.372					
350.0	5.342	34.976	287.8	5.314					
400.0	5.060	34.945	279.5	5.028					
450.0	4.874	34.935	269.5	4.838					
500.0	4.766	34.942	262.5	4.727					
550.0	4.625	34.941	266.0	4.583					
600.0	4.458	34.937	265.2	4.412					
650.0	4.377	34.936	266.2	4.327					
700.0	4.252	34.930	268.8	4.199					
750.0	4.178	34.928	272.6	4.121					
800.0	4.123	34.927	273.8	4.062					
850.0	4.067	34.927	271.4	4.002					
900.0	3.977	34.923	272.5	3.909					
950.0	3.934	34.922	272.3	3.863					
1000.0	3.886	34.923	272.1	3.810					
1050.0	3.819	34.923	271.9	3.739					
1100.0	3.761	34.923	272.0	3.678					
1150.0	3.741	34.925	271.7	3.654					
1200.0	3.722	34.926	271.6	3.631					
1250.0	3.735	34.942	271.1	3.639					
1300.0	3.729	34.947	270.9	3.630					
1350.0	3.654	34.949	271.4	3.551					
1400.0	3.579	34.945	271.7	3.472					
1450.0	3.566	34.955	271.8	3.455					
1500.0	3.539	34.960	271.8	3.424					
1550.0	3.486	34.966	272.1	3.367					
1600.0	3.459	34.969	272.3	3.336					
1650.0	3.390	34.972	272.7	3.264					
1700.0	3.379	34.974	272.7	3.248					
1750.0	3.359	34.975	272.6	3.224					
1800.0	3.338	34.976	272.8	3.198					
1850.0	3.321	34.977	272.8	3.177					
1900.0	3.290	34.978	273.1	3.143					
1950.0	3.292	34.978	273.1	3.140					
2000.0	3.279	34.978	273.0	3.122					
2050.0	3.265	34.979	273.0	3.103					
2100.0	3.237	34.978	273.1	3.071					
2150.0	3.221	34.978	273.0	3.051					
2200.0	3.222	34.979	273.0	3.047					
2250.0	3.174	34.980	273.5	2.995					
2300.0	3.170	34.980	273.4	2.987					
2350.0	3.164	34.981	273.6	2.975					
2400.0	3.161	34.981	273.6	2.968					
2450.0	3.148	34.980	273.5	2.950					
2500.0	3.137	34.980	273.5	2.935					
2550.0	3.122	34.981	273.5	2.915					
2600.0	3.113	34.981	273.5	2.900					
2650.0	3.095	34.981	273.2	2.878					
2700.0	3.091	34.981	273.2	2.869					
2750.0	3.088	34.981	273.0	2.861					
2800.0	3.088	34.981	273.0	2.856					
2850.0	3.077	34.980	272.9	2.840					
2900.0	3.070	34.980	272.9	2.828					
2950.0	3.074	34.980	272.8	2.826					
3000.0	3.075	34.980	272.6	2.822					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 117

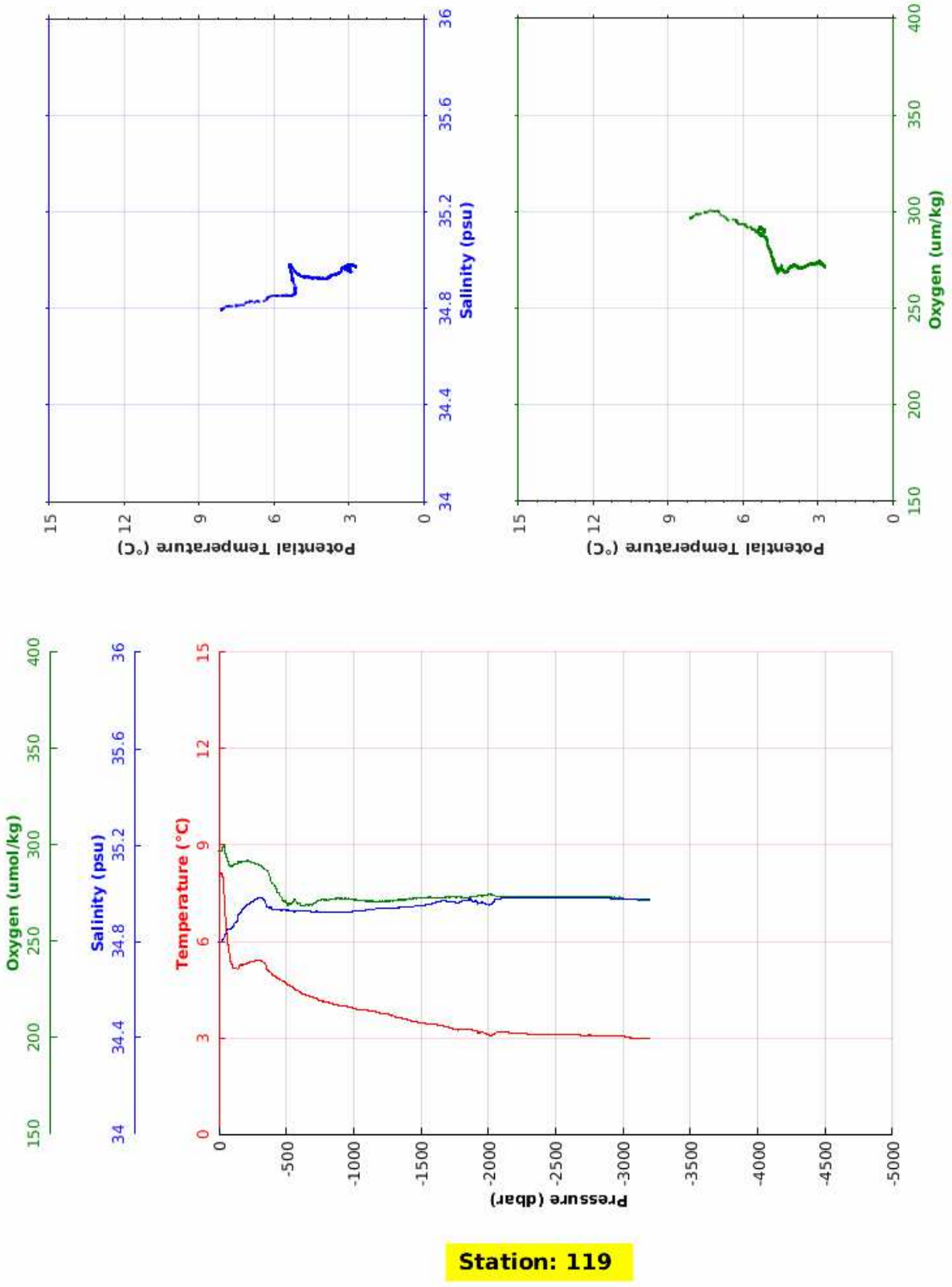
Cruise	: RREX 2015		
Station	: 118	Cast	: 1
Date	: 03/07/2015	Ship	: N/O Thalassa
Depth	: 2702 m	Organism	: IFREMER
Position	: N 52 50.42 W 035 4.83		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.960	34.813	298.4	7.959
10.0	7.965	34.814	298.4	7.964
20.0	7.956	34.814	298.5	7.954
30.0	7.954	34.814	298.4	7.951
40.0	7.436	34.818	298.9	7.432
50.0	6.792	34.840	297.8	6.787
100.0	5.300	34.854	288.1	5.292
150.0	5.273	34.921	292.2	5.261
200.0	5.192	34.930	291.6	5.176
250.0	5.274	34.953	289.6	5.254
300.0	5.223	34.956	287.6	5.199
350.0	5.005	34.935	283.6	4.978
400.0	4.918	34.934	279.1	4.887
450.0	4.796	34.930	274.1	4.760
500.0	4.661	34.928	269.7	4.622
550.0	4.506	34.923	266.8	4.464
600.0	4.402	34.928	267.2	4.357
650.0	4.361	34.931	267.6	4.311
700.0	4.262	34.929	269.2	4.209
750.0	4.178	34.927	270.4	4.121
800.0	4.116	34.926	271.1	4.055
850.0	4.049	34.921	272.5	3.985
900.0	4.025	34.924	271.9	3.957
950.0	3.986	34.924	272.2	3.914
1000.0	3.932	34.925	272.0	3.856
1050.0	3.893	34.928	271.7	3.814
1100.0	3.840	34.930	271.6	3.756
1150.0	3.833	34.934	271.3	3.745
1200.0	3.804	34.937	270.8	3.713
1250.0	3.765	34.941	270.8	3.670
1300.0	3.707	34.945	270.9	3.608
1350.0	3.643	34.947	271.0	3.540
1400.0	3.575	34.949	271.7	3.469
1450.0	3.526	34.948	272.3	3.416
1500.0	3.483	34.951	272.5	3.369
1550.0	3.456	34.956	272.4	3.337
1600.0	3.439	34.963	272.6	3.316
1650.0	3.421	34.965	272.5	3.294
1700.0	3.391	34.969	272.7	3.260
1750.0	3.350	34.972	273.0	3.215
1800.0	3.302	34.972	273.1	3.163
1850.0	3.285	34.974	273.1	3.142
1900.0	3.235	34.977	273.2	3.088
1950.0	3.191	34.978	273.3	3.040
2000.0	3.156	34.978	273.3	3.001
2050.0	3.140	34.978	273.5	2.980
2100.0	3.122	34.979	273.3	2.958
2150.0	3.111	34.979	273.3	2.943
2200.0	3.106	34.979	273.3	2.933
2250.0	3.100	34.981	273.3	2.922
2300.0	3.096	34.981	273.2	2.913
2350.0	3.088	34.981	273.2	2.901
2400.0	3.086	34.981	273.2	2.894
2450.0	3.082	34.981	273.4	2.886
2500.0	3.080	34.981	273.5	2.879
2550.0	3.079	34.981	273.4	2.872
2600.0	3.076	34.981	273.2	2.864
2650.0	3.076	34.981	273.0	2.860
2700.0	3.067	34.980	272.8	2.846
2731.0	3.060	34.980	273.0	2.835


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 118

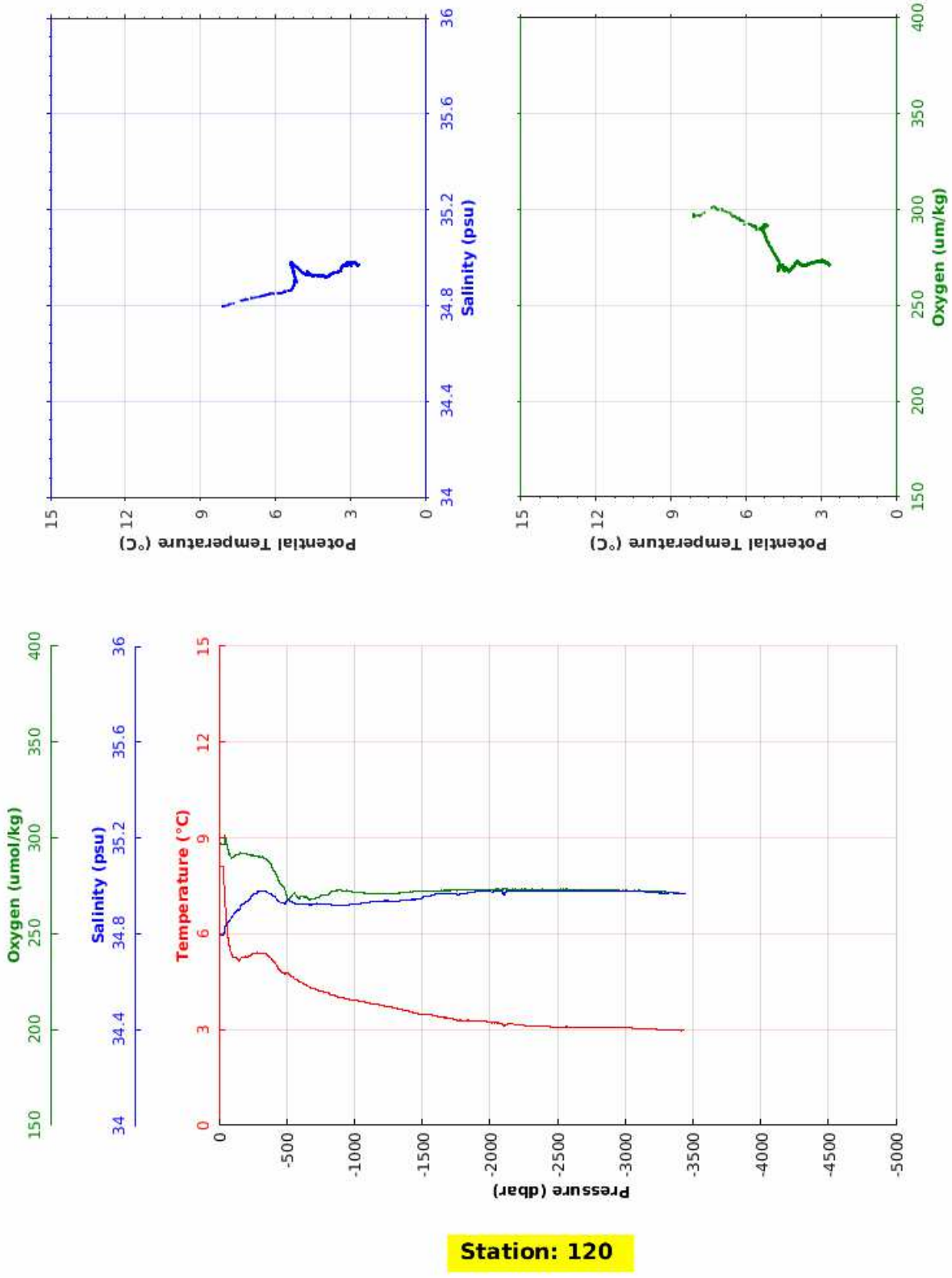
Cruise : RREX 2015			
Station : 119	Cast : 1		
Date : 03/07/2015	Ship : N/O Thalassa		
Depth : 3163 m	Organism : IFREMER		
Position : N 52 44.72 W 035 4.80			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.107	34.796	297.0	8.107	3050.0	3.005	34.975	271.9	2.748
10.0	8.107	34.796	296.8	8.106	3100.0	2.992	34.974	272.0	2.731
20.0	8.109	34.796	296.7	8.107	3150.0	2.973	34.974	271.4	2.707
30.0	7.994	34.802	297.7	7.991	3200.0	2.974	34.974	271.5	2.702
40.0	7.316	34.814	300.6	7.312	3204.0	2.974	34.974	271.5	2.702
50.0	6.654	34.829	296.1	6.649					
100.0	5.216	34.857	289.1	5.208					
150.0	5.255	34.912	291.3	5.243					
200.0	5.303	34.944	291.3	5.287					
250.0	5.360	34.966	291.1	5.340					
300.0	5.402	34.980	290.0	5.377					
350.0	5.239	34.961	287.6	5.211					
400.0	4.937	34.933	280.2	4.905					
450.0	4.822	34.930	275.3	4.787					
500.0	4.698	34.931	270.9	4.659					
550.0	4.577	34.928	270.3	4.534					
600.0	4.425	34.926	269.9	4.379					
650.0	4.336	34.927	268.9	4.287					
700.0	4.256	34.923	269.2	4.203					
750.0	4.158	34.922	271.2	4.102					
800.0	4.105	34.923	271.6	4.044					
850.0	4.054	34.923	271.9	3.990					
900.0	4.002	34.922	272.3	3.934					
950.0	3.974	34.922	272.2	3.902					
1000.0	3.924	34.925	271.7	3.848					
1050.0	3.879	34.927	271.4	3.800					
1100.0	3.870	34.931	271.0	3.786					
1150.0	3.820	34.935	270.7	3.733					
1200.0	3.768	34.936	270.8	3.677					
1250.0	3.733	34.938	270.9	3.638					
1300.0	3.669	34.939	271.1	3.570					
1350.0	3.615	34.941	271.7	3.512					
1400.0	3.563	34.942	271.8	3.457					
1450.0	3.515	34.946	272.3	3.404					
1500.0	3.465	34.948	272.6	3.351					
1550.0	3.425	34.952	272.9	3.307					
1600.0	3.424	34.961	272.8	3.301					
1650.0	3.377	34.969	272.8	3.250					
1700.0	3.328	34.967	273.1	3.198					
1750.0	3.267	34.962	273.1	3.134					
1800.0	3.261	34.965	273.0	3.123					
1850.0	3.275	34.973	272.8	3.132					
1900.0	3.212	34.965	273.4	3.065					
1950.0	3.178	34.963	273.8	3.028					
2000.0	3.110	34.956	274.2	2.955					
2050.0	3.153	34.974	273.7	2.993					
2100.0	3.173	34.979	273.4	3.008					
2150.0	3.161	34.980	273.3	2.992					
2200.0	3.146	34.980	273.2	2.973					
2250.0	3.137	34.980	273.3	2.958					
2300.0	3.120	34.980	273.2	2.937					
2350.0	3.099	34.980	273.3	2.912					
2400.0	3.091	34.980	273.4	2.899					
2450.0	3.090	34.981	273.3	2.893					
2500.0	3.088	34.981	273.1	2.887					
2550.0	3.090	34.981	273.3	2.883					
2600.0	3.090	34.981	273.3	2.878					
2650.0	3.089	34.981	273.3	2.872					
2700.0	3.080	34.981	273.2	2.858					
2750.0	3.081	34.980	273.1	2.854					
2800.0	3.077	34.980	273.1	2.845					
2850.0	3.066	34.979	273.1	2.829					
2900.0	3.065	34.979	273.1	2.823					
2950.0	3.056	34.978	272.8	2.809					
3000.0	3.053	34.978	272.3	2.800					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 119

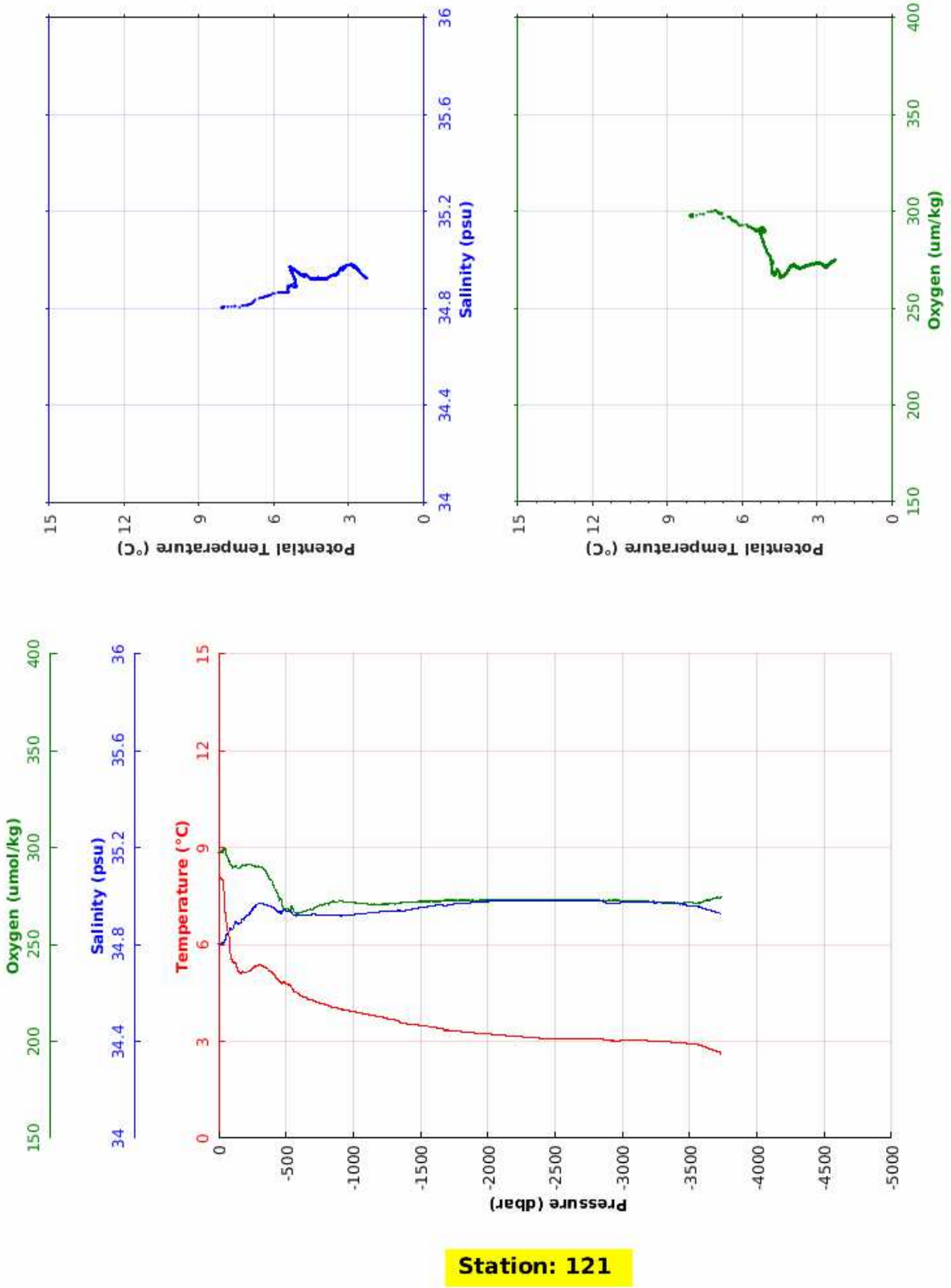
Cruise : RREX 2015			
Station : 120	Cast : 1		
Date : 03/07/2015	Ship : N/O Thalassa		
Depth : 3401 m	Organism : IFREMER		
Position : N 52 43.80 W 035 4.77			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.109	34.796	297.3	8.109	3050.0	3.053	34.979	272.4	2.796
10.0	8.105	34.796	297.1	8.104	3100.0	3.041	34.977	272.6	2.779
20.0	8.108	34.796	296.8	8.106	3150.0	3.024	34.975	272.4	2.757
30.0	8.097	34.796	296.9	8.094	3200.0	3.023	34.974	272.3	2.751
40.0	7.307	34.821	301.5	7.303	3250.0	2.998	34.970	272.1	2.721
50.0	6.590	34.838	297.3	6.585	3300.0	2.972	34.967	271.7	2.690
100.0	5.294	34.876	290.1	5.286	3350.0	2.983	34.971	271.5	2.695
150.0	5.171	34.903	291.8	5.159	3400.0	2.969	34.969	271.0	2.676
200.0	5.282	34.937	291.6	5.266	3448.0	2.969	34.970	271.1	2.670
250.0	5.374	34.964	290.8	5.353					
300.0	5.403	34.976	290.2	5.379					
350.0	5.348	34.974	288.6	5.319					
400.0	5.158	34.959	282.8	5.126					
450.0	4.850	34.931	276.2	4.815					
500.0	4.770	34.938	268.8	4.731					
550.0	4.624	34.929	270.8	4.581					
600.0	4.479	34.925	269.5	4.433					
650.0	4.387	34.926	268.6	4.337					
700.0	4.280	34.926	268.2	4.227					
750.0	4.191	34.923	270.3	4.134					
800.0	4.167	34.926	270.3	4.106					
850.0	4.073	34.920	272.0	4.009					
900.0	4.013	34.920	272.7	3.945					
950.0	3.955	34.920	272.4	3.883					
1000.0	3.919	34.925	271.6	3.843					
1050.0	3.882	34.927	271.4	3.803					
1100.0	3.848	34.931	271.0	3.764					
1150.0	3.795	34.935	270.7	3.708					
1200.0	3.766	34.937	270.6	3.674					
1250.0	3.728	34.938	271.0	3.633					
1300.0	3.680	34.937	271.0	3.581					
1350.0	3.619	34.938	271.6	3.516					
1400.0	3.577	34.939	271.9	3.470					
1450.0	3.516	34.944	272.2	3.405					
1500.0	3.472	34.949	272.5	3.358					
1550.0	3.462	34.957	272.4	3.344					
1600.0	3.427	34.966	272.4	3.305					
1650.0	3.391	34.969	272.4	3.264					
1700.0	3.359	34.968	272.5	3.229					
1750.0	3.318	34.966	272.9	3.184					
1800.0	3.284	34.966	273.1	3.145					
1850.0	3.289	34.974	273.1	3.146					
1900.0	3.284	34.977	272.7	3.137					
1950.0	3.266	34.978	273.0	3.114					
2000.0	3.241	34.977	272.9	3.085					
2050.0	3.213	34.977	273.4	3.053					
2100.0	3.158	34.969	273.6	2.993					
2150.0	3.175	34.979	273.2	3.006					
2200.0	3.158	34.979	273.3	2.984					
2250.0	3.137	34.979	273.2	2.959					
2300.0	3.108	34.979	273.2	2.925					
2350.0	3.092	34.980	273.2	2.905					
2400.0	3.093	34.980	273.2	2.901					
2450.0	3.092	34.980	273.2	2.895					
2500.0	3.087	34.981	273.1	2.885					
2550.0	3.088	34.981	273.3	2.881					
2600.0	3.087	34.981	273.0	2.875					
2650.0	3.086	34.981	273.0	2.869					
2700.0	3.084	34.981	273.0	2.862					
2750.0	3.082	34.981	272.9	2.855					
2800.0	3.080	34.981	273.0	2.848					
2850.0	3.082	34.981	273.0	2.845					
2900.0	3.073	34.980	272.9	2.831					
2950.0	3.068	34.980	272.6	2.821					
3000.0	3.061	34.979	272.5	2.809					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 120

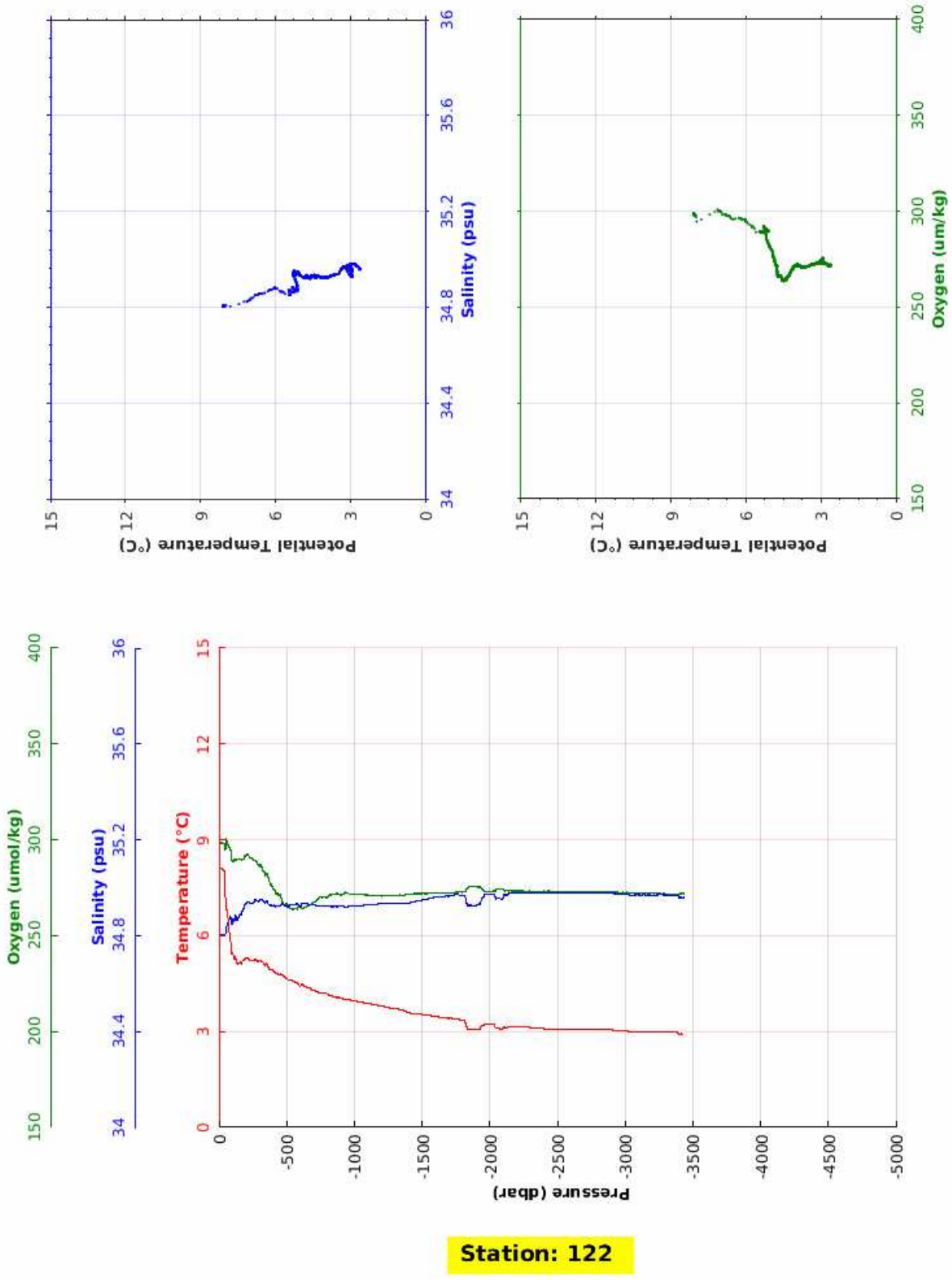
Cruise : RREX 2015			
Station : 121	Cast : 1		
Date : 03/07/2015	Ship : N/O Thalassa		
Depth : 3686 m	Organism : IFREMER		
Position : N 52 42.08 W 035 4.78			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.076	34.803	297.8	8.075	3050.0	3.042	34.977	272.7	2.785
10.0	8.072	34.803	297.6	8.071	3100.0	3.041	34.978	272.5	2.778
20.0	8.044	34.804	297.9	8.042	3150.0	3.031	34.976	272.5	2.763
30.0	7.999	34.807	298.5	7.996	3200.0	3.017	34.975	272.3	2.745
40.0	7.548	34.808	298.6	7.545	3250.0	3.004	34.973	272.1	2.726
50.0	6.969	34.817	299.6	6.964	3300.0	2.994	34.971	271.9	2.711
100.0	5.523	34.865	290.8	5.515	3350.0	2.988	34.971	271.6	2.700
150.0	5.130	34.886	289.6	5.118	3400.0	2.981	34.971	271.4	2.688
200.0	5.135	34.910	291.1	5.119	3450.0	2.972	34.968	271.4	2.673
250.0	5.260	34.941	291.4	5.240	3500.0	2.931	34.961	272.0	2.627
300.0	5.376	34.970	290.5	5.352	3550.0	2.909	34.959	271.4	2.600
350.0	5.285	34.965	288.6	5.256	3600.0	2.861	34.951	272.3	2.549
400.0	5.142	34.955	283.1	5.110	3650.0	2.771	34.941	273.1	2.455
450.0	4.874	34.935	274.9	4.839	3700.0	2.701	34.934	274.2	2.381
500.0	4.776	34.938	268.3	4.736	3740.0	2.598	34.925	275.3	2.276
550.0	4.629	34.928	270.0	4.586					
600.0	4.454	34.923	266.1	4.407					
650.0	4.361	34.924	267.1	4.311					
700.0	4.280	34.927	268.1	4.227					
750.0	4.195	34.922	270.1	4.138					
800.0	4.134	34.922	271.4	4.073					
850.0	4.065	34.920	272.4	4.001					
900.0	4.011	34.920	272.5	3.943					
950.0	3.964	34.922	272.2	3.892					
1000.0	3.936	34.923	271.9	3.860					
1050.0	3.880	34.927	271.4	3.801					
1100.0	3.851	34.930	271.1	3.768					
1150.0	3.797	34.934	270.8	3.710					
1200.0	3.778	34.936	270.6	3.686					
1250.0	3.723	34.936	270.9	3.628					
1300.0	3.679	34.939	271.1	3.580					
1350.0	3.611	34.941	271.3	3.508					
1400.0	3.541	34.941	271.9	3.435					
1450.0	3.528	34.948	272.0	3.418					
1500.0	3.494	34.953	272.3	3.379					
1550.0	3.473	34.956	272.4	3.354					
1600.0	3.440	34.962	272.3	3.318					
1650.0	3.411	34.967	272.4	3.284					
1700.0	3.354	34.962	272.8	3.224					
1750.0	3.338	34.968	273.0	3.203					
1800.0	3.311	34.968	273.1	3.172					
1850.0	3.280	34.972	273.0	3.137					
1900.0	3.269	34.975	272.7	3.121					
1950.0	3.250	34.978	273.0	3.099					
2000.0	3.236	34.978	272.9	3.080					
2050.0	3.223	34.979	273.0	3.062					
2100.0	3.196	34.979	273.1	3.032					
2150.0	3.185	34.980	273.1	3.016					
2200.0	3.168	34.980	273.1	2.994					
2250.0	3.145	34.980	273.2	2.967					
2300.0	3.134	34.980	273.3	2.951					
2350.0	3.118	34.980	273.2	2.930					
2400.0	3.102	34.980	273.1	2.910					
2450.0	3.090	34.980	273.3	2.894					
2500.0	3.082	34.980	273.1	2.880					
2550.0	3.079	34.980	273.2	2.872					
2600.0	3.082	34.981	273.1	2.870					
2650.0	3.080	34.980	273.0	2.864					
2700.0	3.078	34.981	273.1	2.856					
2750.0	3.078	34.981	273.1	2.851					
2800.0	3.075	34.980	272.9	2.844					
2850.0	3.069	34.979	272.8	2.832					
2900.0	3.027	34.971	272.9	2.786					
2950.0	3.014	34.969	273.0	2.768					
3000.0	3.046	34.977	272.8	2.794					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 121

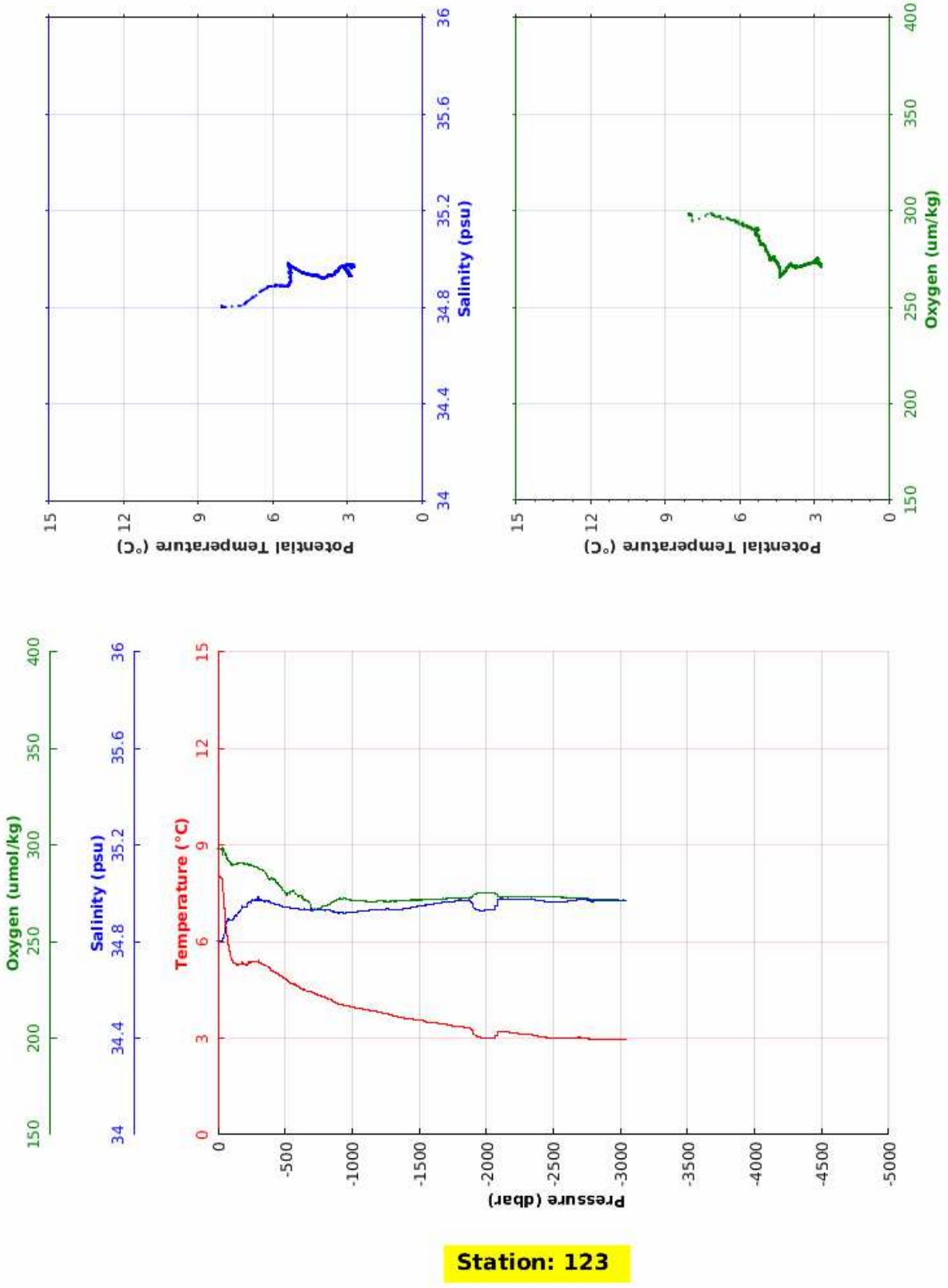
Cruise : RREX 2015			
Station : 122	Cast : 1		
Date : 03/07/2015	Ship : N/O Thalassa		
Depth : 3390 m	Organism : IFREMER		
Position : N 52 39.91 W 035 4.81			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.096	34.804	298.7	8.096	3050.0	2.996	34.969	272.5	2.740
10.0	8.093	34.804	298.6	8.092	3100.0	2.994	34.970	272.3	2.733
20.0	8.090	34.804	298.7	8.088	3150.0	2.987	34.970	272.2	2.721
30.0	8.075	34.804	298.3	8.072	3200.0	2.988	34.970	272.1	2.716
40.0	8.035	34.805	298.0	8.031	3250.0	2.989	34.971	271.9	2.712
50.0	7.122	34.824	299.9	7.118	3300.0	2.984	34.970	271.9	2.702
100.0	5.417	34.853	288.8	5.409	3350.0	2.973	34.969	271.6	2.685
150.0	5.152	34.883	289.9	5.140	3400.0	2.898	34.957	271.9	2.606
200.0	5.299	34.938	292.0	5.283	3437.0	2.924	34.960	272.0	2.628
250.0	5.218	34.938	289.5	5.197					
300.0	5.220	34.947	287.1	5.196					
350.0	5.129	34.947	282.7	5.101					
400.0	4.892	34.924	274.7	4.860					
450.0	4.797	34.926	271.2	4.761					
500.0	4.645	34.919	266.4	4.606					
550.0	4.567	34.930	264.2	4.524					
600.0	4.421	34.921	265.6	4.375					
650.0	4.390	34.932	265.4	4.341					
700.0	4.299	34.928	267.7	4.246					
750.0	4.210	34.923	270.0	4.152					
800.0	4.175	34.924	270.4	4.114					
850.0	4.096	34.922	271.6	4.032					
900.0	4.057	34.925	271.2	3.989					
950.0	4.002	34.922	272.3	3.930					
1000.0	3.957	34.924	271.5	3.881					
1050.0	3.907	34.926	271.3	3.827					
1100.0	3.876	34.929	271.1	3.792					
1150.0	3.845	34.930	270.7	3.757					
1200.0	3.802	34.934	270.8	3.710					
1250.0	3.747	34.935	270.8	3.652					
1300.0	3.721	34.935	271.0	3.621					
1350.0	3.673	34.937	271.2	3.570					
1400.0	3.595	34.937	271.7	3.488					
1450.0	3.548	34.943	272.0	3.438					
1500.0	3.539	34.948	272.0	3.424					
1550.0	3.506	34.955	272.0	3.387					
1600.0	3.471	34.961	272.3	3.348					
1650.0	3.445	34.964	272.1	3.318					
1700.0	3.415	34.967	272.4	3.284					
1750.0	3.397	34.970	272.7	3.262					
1800.0	3.357	34.970	272.8	3.218					
1850.0	3.084	34.927	275.5	2.944					
1900.0	3.055	34.928	275.6	2.911					
1950.0	3.190	34.960	273.8	3.040					
2000.0	3.241	34.974	273.0	3.084					
2050.0	3.118	34.957	274.2	2.959					
2100.0	3.106	34.962	274.2	2.942					
2150.0	3.159	34.978	273.3	2.990					
2200.0	3.162	34.980	273.3	2.988					
2250.0	3.149	34.980	273.1	2.971					
2300.0	3.128	34.980	273.2	2.945					
2350.0	3.107	34.980	273.2	2.920					
2400.0	3.091	34.980	273.3	2.899					
2450.0	3.085	34.981	273.1	2.888					
2500.0	3.083	34.981	273.1	2.881					
2550.0	3.079	34.981	273.1	2.873					
2600.0	3.078	34.981	273.1	2.867					
2650.0	3.077	34.981	273.1	2.860					
2700.0	3.076	34.981	273.1	2.854					
2750.0	3.072	34.980	273.0	2.846					
2800.0	3.068	34.980	273.0	2.836					
2850.0	3.063	34.980	272.8	2.827					
2900.0	3.054	34.978	272.8	2.812					
2950.0	3.028	34.975	272.5	2.782					
3000.0	3.027	34.974	272.6	2.775					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 122

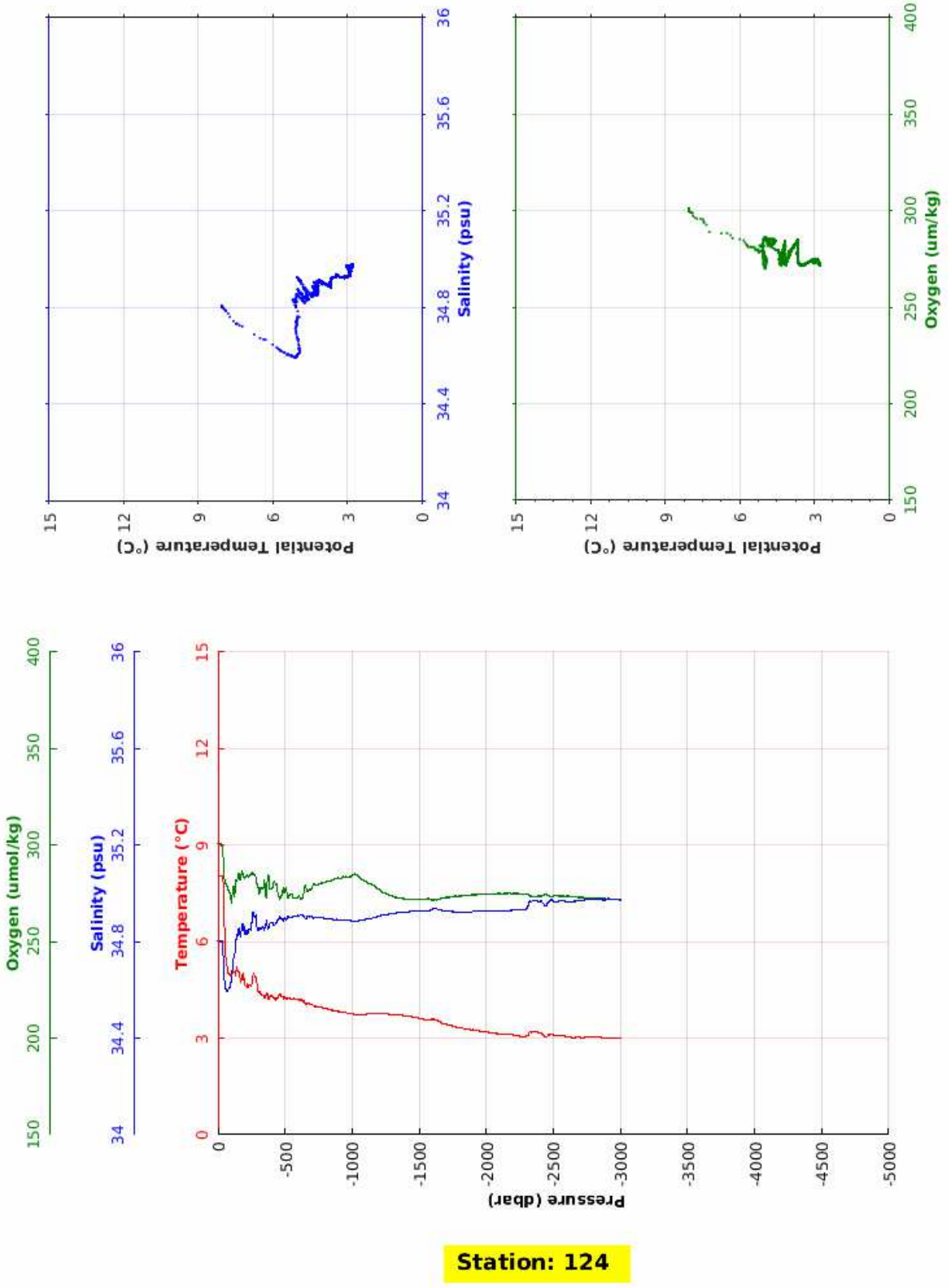
Cruise : RREX 2015			
Station : 123	Cast : 1		
Date : 03/07/2015	Ship : N/O Thalassa		
Depth : 3018 m	Organism : IFREMER		
Position : N 52 37.89 W 035 4.78			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.060	34.803	298.3	8.060	3050.0	2.966	34.970	271.3	2.710
10.0	8.058	34.804	298.3	8.057	3054.0	2.966	34.970	271.4	2.711
20.0	8.015	34.802	298.1	8.013					
30.0	7.980	34.801	297.9	7.977					
40.0	7.297	34.806	298.3	7.293					
50.0	7.001	34.826	297.0	6.997					
100.0	5.485	34.889	290.3	5.476					
150.0	5.292	34.916	290.4	5.280					
200.0	5.304	34.944	290.5	5.287					
250.0	5.343	34.962	289.9	5.323					
300.0	5.366	34.974	288.7	5.342					
350.0	5.258	34.966	286.7	5.230					
400.0	5.094	34.959	282.5	5.061					
450.0	4.999	34.953	280.6	4.963					
500.0	4.847	34.943	276.2	4.807					
550.0	4.694	34.939	276.1	4.651					
600.0	4.607	34.939	273.4	4.560					
650.0	4.496	34.934	271.5	4.445					
700.0	4.444	34.936	265.9	4.390					
750.0	4.345	34.934	266.8	4.287					
800.0	4.246	34.928	268.9	4.184					
850.0	4.181	34.928	270.0	4.116					
900.0	4.058	34.919	272.1	3.990					
950.0	4.009	34.919	272.6	3.937					
1000.0	3.965	34.924	271.5	3.889					
1050.0	3.929	34.925	271.5	3.849					
1100.0	3.892	34.928	271.1	3.808					
1150.0	3.855	34.931	270.7	3.767					
1200.0	3.801	34.932	271.3	3.710					
1250.0	3.759	34.935	271.0	3.664					
1300.0	3.705	34.934	270.9	3.606					
1350.0	3.658	34.935	271.3	3.555					
1400.0	3.624	34.937	271.3	3.517					
1450.0	3.600	34.943	271.5	3.489					
1500.0	3.558	34.948	271.6	3.443					
1550.0	3.505	34.951	271.9	3.386					
1600.0	3.479	34.957	272.1	3.356					
1650.0	3.465	34.960	272.3	3.338					
1700.0	3.438	34.964	272.2	3.306					
1750.0	3.385	34.966	272.5	3.250					
1800.0	3.359	34.969	272.3	3.220					
1850.0	3.335	34.971	272.8	3.191					
1900.0	3.205	34.954	273.4	3.059					
1950.0	3.035	34.930	275.3	2.886					
2000.0	3.009	34.930	275.3	2.856					
2050.0	3.014	34.934	275.2	2.856					
2100.0	3.211	34.975	273.1	3.046					
2150.0	3.193	34.978	273.1	3.023					
2200.0	3.161	34.977	273.1	2.987					
2250.0	3.141	34.977	273.2	2.963					
2300.0	3.131	34.977	273.2	2.948					
2350.0	3.096	34.974	273.3	2.909					
2400.0	3.061	34.971	273.4	2.869					
2450.0	3.024	34.966	273.4	2.829					
2500.0	3.005	34.966	273.3	2.805					
2550.0	2.995	34.966	273.1	2.790					
2600.0	2.994	34.967	273.0	2.784					
2650.0	2.992	34.969	272.7	2.777					
2700.0	3.024	34.978	272.5	2.804					
2750.0	3.010	34.976	272.5	2.785					
2800.0	2.967	34.968	271.7	2.737					
2850.0	2.964	34.970	271.8	2.730					
2900.0	2.968	34.971	271.9	2.728					
2950.0	2.968	34.972	271.8	2.723					
3000.0	2.969	34.971	271.6	2.719					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 123

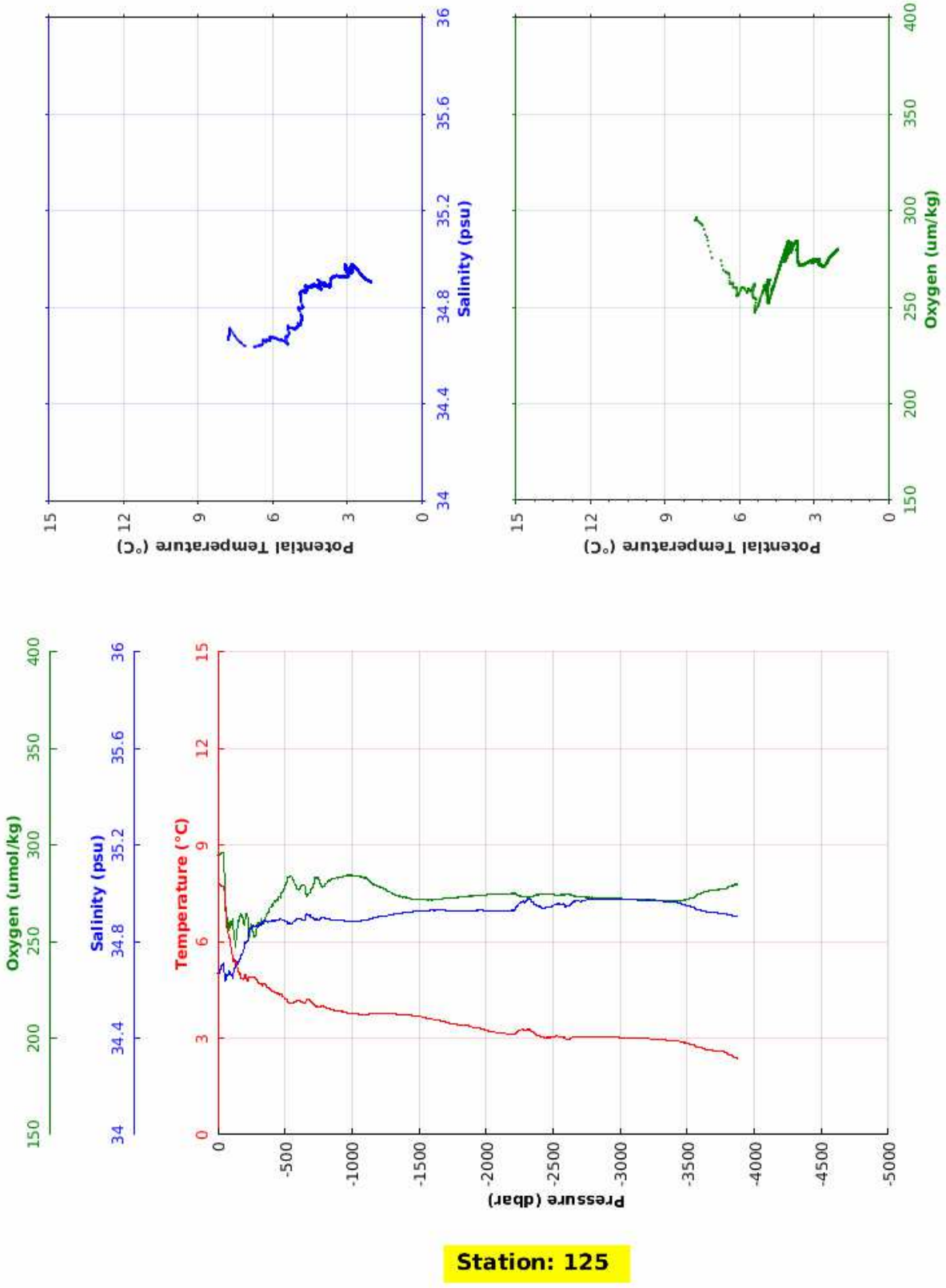
Cruise : RREX 2015			
Station : 124	Cast : 1		
Date : 04/07/2015	Ship : N/O Thalassa		
Depth : 2976 m	Organism : IFREMER		
Position : N 52 26.97 W 035 4.74			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.058	34.803	301.1	8.058	3010.0	3.005	34.975	271.7	2.753
10.0	8.061	34.803	300.7	8.060					
20.0	8.060	34.804	300.6	8.058					
30.0	8.051	34.803	300.5	8.048					
40.0	7.726	34.761	296.0	7.722					
50.0	6.296	34.665	285.9	6.291					
100.0	4.946	34.630	273.3	4.939					
150.0	5.073	34.831	282.3	5.061					
200.0	4.719	34.841	282.7	4.704					
250.0	4.667	34.859	285.2	4.648					
300.0	4.461	34.848	279.1	4.439					
350.0	4.251	34.852	282.2	4.225					
400.0	4.319	34.880	277.2	4.289					
450.0	4.297	34.891	275.8	4.264					
500.0	4.251	34.895	275.5	4.214					
550.0	4.209	34.900	274.9	4.168					
600.0	4.203	34.909	272.7	4.158					
650.0	4.069	34.898	277.6	4.021					
700.0	4.047	34.904	277.3	3.995					
750.0	3.973	34.899	279.6	3.918					
800.0	3.933	34.897	280.6	3.874					
850.0	3.872	34.893	282.0	3.809					
900.0	3.828	34.890	283.0	3.761					
950.0	3.793	34.888	283.6	3.723					
1000.0	3.754	34.885	284.4	3.680					
1050.0	3.730	34.886	284.1	3.651					
1100.0	3.749	34.893	281.6	3.666					
1150.0	3.760	34.897	279.8	3.673					
1200.0	3.766	34.906	277.3	3.675					
1250.0	3.757	34.912	275.1	3.661					
1300.0	3.744	34.916	273.8	3.644					
1350.0	3.725	34.921	272.7	3.621					
1400.0	3.705	34.924	272.2	3.597					
1450.0	3.669	34.926	271.9	3.557					
1500.0	3.622	34.926	272.0	3.506					
1550.0	3.580	34.927	272.0	3.460					
1600.0	3.588	34.935	271.6	3.464					
1650.0	3.521	34.934	272.2	3.393					
1700.0	3.431	34.926	272.9	3.299					
1750.0	3.384	34.924	273.5	3.249					
1800.0	3.333	34.924	273.8	3.194					
1850.0	3.285	34.924	274.1	3.142					
1900.0	3.268	34.928	274.1	3.121					
1950.0	3.224	34.926	274.4	3.072					
2000.0	3.197	34.926	274.5	3.041					
2050.0	3.165	34.927	274.8	3.005					
2100.0	3.131	34.927	274.9	2.968					
2150.0	3.115	34.929	275.0	2.947					
2200.0	3.105	34.930	275.1	2.933					
2250.0	3.069	34.931	274.9	2.892					
2300.0	3.064	34.936	274.8	2.882					
2350.0	3.211	34.971	273.4	3.022					
2400.0	3.161	34.965	273.8	2.968					
2450.0	3.045	34.950	274.6	2.849					
2500.0	3.117	34.970	273.5	2.915					
2550.0	3.091	34.969	273.8	2.884					
2600.0	3.054	34.966	273.5	2.843					
2650.0	3.019	34.967	273.3	2.804					
2700.0	3.026	34.970	273.0	2.805					
2750.0	3.035	34.976	272.8	2.809					
2800.0	3.038	34.976	272.7	2.807					
2850.0	3.039	34.977	272.7	2.803					
2900.0	3.010	34.974	272.2	2.769					
2950.0	3.000	34.975	272.0	2.754					
3000.0	3.005	34.975	271.6	2.753					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 124

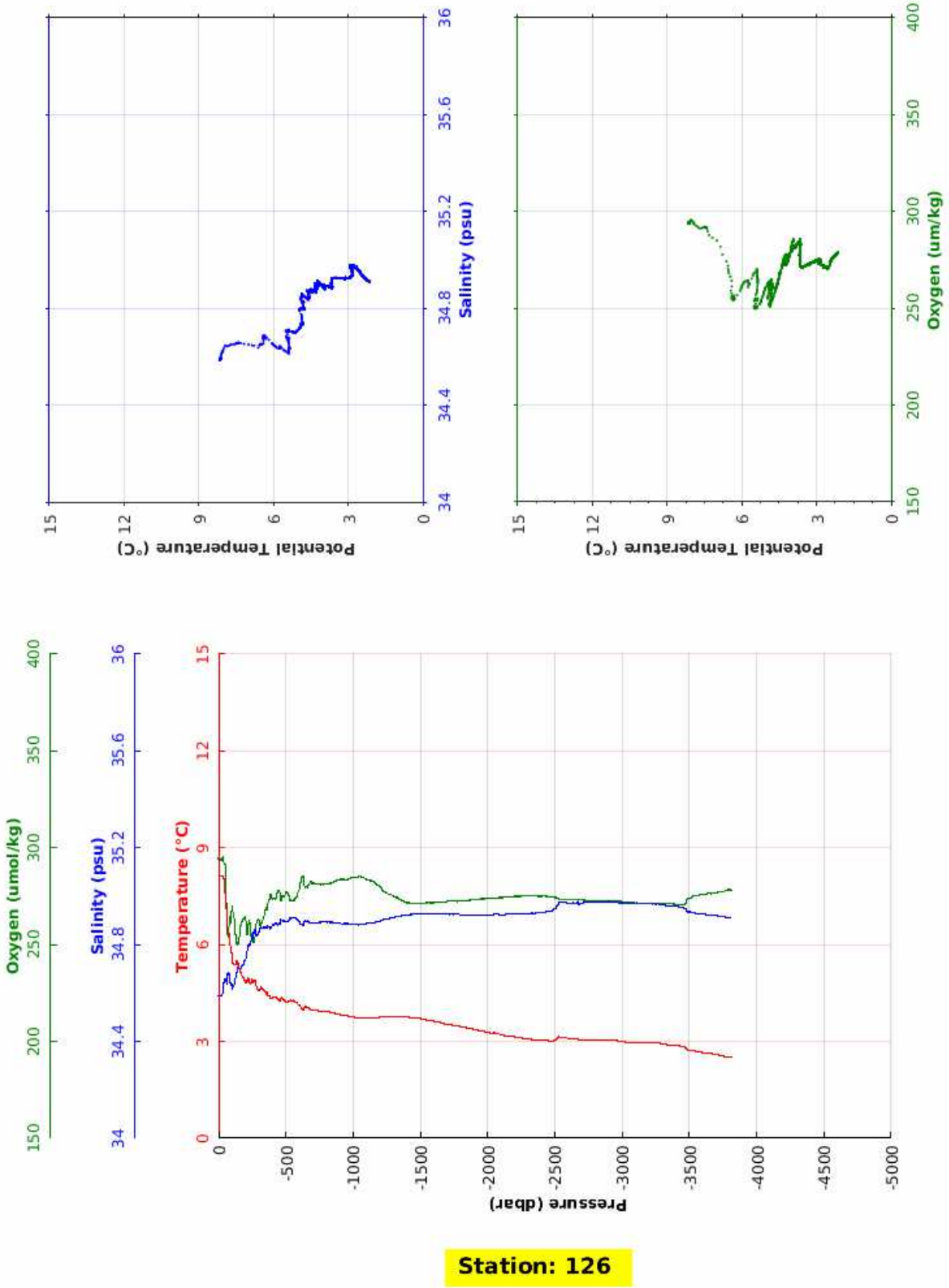
Cruise : RREX 2015			
Station : 125	Cast : 1		
Date : 04/07/2015	Ship : N/O Thalassa		
Depth : 3829 m	Organism : IFREMER		
Position : N 52 20.98 W 035 4.80			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.789	34.668	295.1	7.789	3050.0	3.015	34.977	272.0	2.759
10.0	7.789	34.669	295.1	7.788	3100.0	3.002	34.975	271.9	2.741
20.0	7.769	34.680	295.1	7.767	3150.0	2.990	34.973	272.0	2.724
30.0	7.736	34.698	296.0	7.733	3200.0	2.993	34.973	272.0	2.721
40.0	7.740	34.709	296.1	7.736	3250.0	2.966	34.969	271.6	2.689
50.0	7.524	34.681	293.0	7.519	3300.0	2.961	34.969	271.3	2.678
100.0	5.711	34.663	258.1	5.703	3350.0	2.942	34.966	271.3	2.655
150.0	5.112	34.708	256.8	5.100	3400.0	2.925	34.963	271.1	2.633
200.0	4.959	34.791	258.8	4.944	3450.0	2.899	34.959	271.2	2.602
250.0	4.906	34.857	258.1	4.887	3500.0	2.842	34.950	271.9	2.541
300.0	4.726	34.862	258.3	4.703	3550.0	2.791	34.943	272.8	2.486
350.0	4.677	34.888	259.8	4.650	3600.0	2.715	34.932	274.9	2.406
400.0	4.487	34.888	268.1	4.457	3650.0	2.650	34.924	276.3	2.337
450.0	4.398	34.892	271.3	4.364	3700.0	2.611	34.921	276.9	2.293
500.0	4.238	34.887	277.9	4.201	3750.0	2.588	34.918	277.2	2.266
550.0	4.080	34.875	284.3	4.039	3800.0	2.514	34.913	278.0	2.188
600.0	4.165	34.894	277.5	4.120	3850.0	2.413	34.907	279.5	2.084
650.0	4.100	34.891	279.5	4.052	3885.0	2.374	34.905	280.2	2.042
700.0	4.110	34.902	277.1	4.057					
750.0	3.968	34.890	283.2	3.912					
800.0	3.978	34.899	278.8	3.918					
850.0	3.887	34.891	282.5	3.824					
900.0	3.847	34.889	283.3	3.780					
950.0	3.802	34.886	284.2	3.731					
1000.0	3.770	34.885	284.4	3.696					
1050.0	3.750	34.886	284.0	3.671					
1100.0	3.744	34.889	283.0	3.661					
1150.0	3.763	34.897	280.5	3.676					
1200.0	3.761	34.903	278.6	3.670					
1250.0	3.757	34.906	277.2	3.661					
1300.0	3.760	34.912	275.3	3.660					
1350.0	3.746	34.918	273.7	3.642					
1400.0	3.729	34.920	272.9	3.621					
1450.0	3.708	34.924	272.2	3.595					
1500.0	3.678	34.926	271.7	3.562					
1550.0	3.631	34.927	271.9	3.511					
1600.0	3.603	34.931	271.6	3.479					
1650.0	3.553	34.932	272.0	3.425					
1700.0	3.501	34.930	272.5	3.369					
1750.0	3.452	34.927	272.9	3.316					
1800.0	3.414	34.928	273.1	3.273					
1850.0	3.401	34.929	273.4	3.257					
1900.0	3.329	34.926	273.7	3.180					
1950.0	3.309	34.931	273.8	3.157					
2000.0	3.244	34.927	274.2	3.088					
2050.0	3.209	34.927	274.6	3.048					
2100.0	3.169	34.927	274.8	3.005					
2150.0	3.142	34.927	274.7	2.973					
2200.0	3.137	34.931	275.0	2.964					
2250.0	3.245	34.959	273.6	3.065					
2300.0	3.237	34.966	273.4	3.052					
2350.0	3.193	34.965	273.6	3.004					
2400.0	3.074	34.946	274.5	2.883					
2450.0	3.022	34.942	274.9	2.827					
2500.0	3.038	34.948	274.5	2.838					
2550.0	3.058	34.959	274.1	2.852					
2600.0	2.967	34.945	274.6	2.758					
2650.0	3.052	34.967	273.8	2.836					
2700.0	3.036	34.967	273.3	2.815					
2750.0	3.043	34.974	272.9	2.817					
2800.0	3.038	34.974	272.8	2.808					
2850.0	3.035	34.977	272.6	2.799					
2900.0	3.028	34.977	272.5	2.787					
2950.0	3.028	34.977	272.4	2.781					
3000.0	3.020	34.977	272.3	2.769					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 125

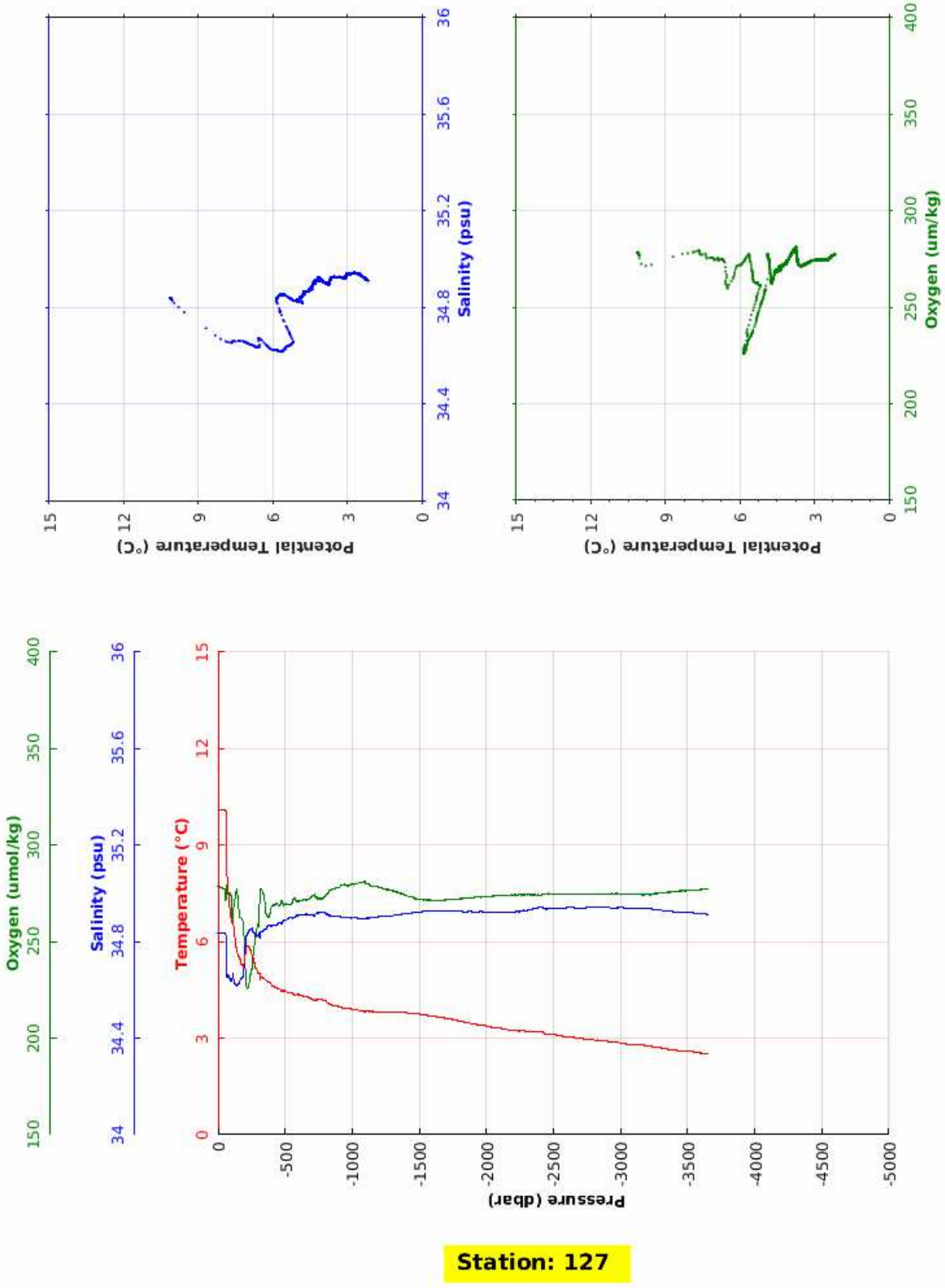
Cruise : RREX 2015			
Station : 126	Cast : 1		
Date : 04/07/2015	Ship : N/O Thalassa		
Depth : 3764 m	Organism : IFREMER		
Position : N 52 15.59 W 035 4.79			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.134	34.588	294.5	8.134	3050.0	2.974	34.970	272.0	2.719
10.0	8.137	34.587	294.0	8.136	3100.0	2.962	34.970	271.6	2.702
20.0	8.138	34.588	293.9	8.136	3150.0	2.963	34.970	271.3	2.697
30.0	8.134	34.593	293.9	8.131	3200.0	2.962	34.970	271.3	2.690
40.0	8.010	34.633	295.0	8.006	3250.0	2.970	34.972	271.0	2.693
50.0	7.502	34.655	292.0	7.497	3300.0	2.926	34.965	271.1	2.644
100.0	5.686	34.637	262.9	5.678	3350.0	2.894	34.959	271.3	2.608
150.0	5.405	34.709	250.5	5.393	3400.0	2.887	34.959	270.8	2.596
200.0	4.895	34.737	263.8	4.880	3450.0	2.840	34.952	270.8	2.544
250.0	4.915	34.838	251.9	4.896	3500.0	2.737	34.936	274.3	2.439
300.0	4.574	34.843	263.1	4.551	3550.0	2.696	34.930	275.3	2.394
350.0	4.510	34.871	267.0	4.484	3600.0	2.661	34.926	276.1	2.353
400.0	4.365	34.878	274.5	4.335	3650.0	2.640	34.924	276.4	2.327
450.0	4.291	34.887	276.9	4.257	3700.0	2.596	34.919	276.8	2.279
500.0	4.225	34.894	276.5	4.187	3750.0	2.553	34.916	277.4	2.231
550.0	4.272	34.911	272.7	4.231	3800.0	2.512	34.913	278.2	2.186
600.0	4.127	34.898	277.8	4.082	3819.0	2.463	34.910	279.0	2.136
650.0	4.069	34.897	279.5	4.021					
700.0	3.969	34.890	281.8	3.918					
750.0	3.945	34.892	281.4	3.890					
800.0	3.927	34.893	281.3	3.868					
850.0	3.891	34.892	281.8	3.828					
900.0	3.836	34.888	283.4	3.769					
950.0	3.799	34.887	283.5	3.728					
1000.0	3.755	34.884	284.7	3.681					
1050.0	3.722	34.882	285.5	3.644					
1100.0	3.727	34.886	283.8	3.645					
1150.0	3.731	34.890	282.6	3.645					
1200.0	3.753	34.897	279.9	3.662					
1250.0	3.771	34.906	276.9	3.675					
1300.0	3.766	34.912	275.3	3.666					
1350.0	3.754	34.919	273.5	3.650					
1400.0	3.757	34.924	271.7	3.649					
1450.0	3.736	34.925	271.4	3.623					
1500.0	3.712	34.926	271.1	3.595					
1550.0	3.660	34.926	271.8	3.540					
1600.0	3.632	34.927	271.5	3.507					
1650.0	3.587	34.926	271.8	3.458					
1700.0	3.532	34.925	272.4	3.400					
1750.0	3.503	34.925	272.6	3.367					
1800.0	3.462	34.924	272.4	3.321					
1850.0	3.425	34.924	272.8	3.280					
1900.0	3.375	34.924	273.3	3.226					
1950.0	3.328	34.923	273.6	3.176					
2000.0	3.292	34.922	273.8	3.135					
2050.0	3.269	34.927	274.1	3.108					
2100.0	3.210	34.924	274.4	3.045					
2150.0	3.176	34.925	274.6	3.007					
2200.0	3.146	34.926	274.7	2.973					
2250.0	3.116	34.927	275.0	2.938					
2300.0	3.073	34.929	275.3	2.891					
2350.0	3.057	34.930	275.2	2.871					
2400.0	3.053	34.932	275.0	2.862					
2450.0	3.024	34.938	274.8	2.829					
2500.0	3.035	34.947	274.4	2.835					
2550.0	3.141	34.975	273.2	2.934					
2600.0	3.095	34.972	273.1	2.883					
2650.0	3.077	34.972	273.1	2.860					
2700.0	3.050	34.972	273.2	2.829					
2750.0	3.052	34.975	272.7	2.826					
2800.0	3.054	34.978	272.5	2.823					
2850.0	3.043	34.978	272.5	2.807					
2900.0	3.041	34.979	272.3	2.800					
2950.0	3.027	34.977	272.4	2.781					
3000.0	2.998	34.973	272.2	2.747					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 126

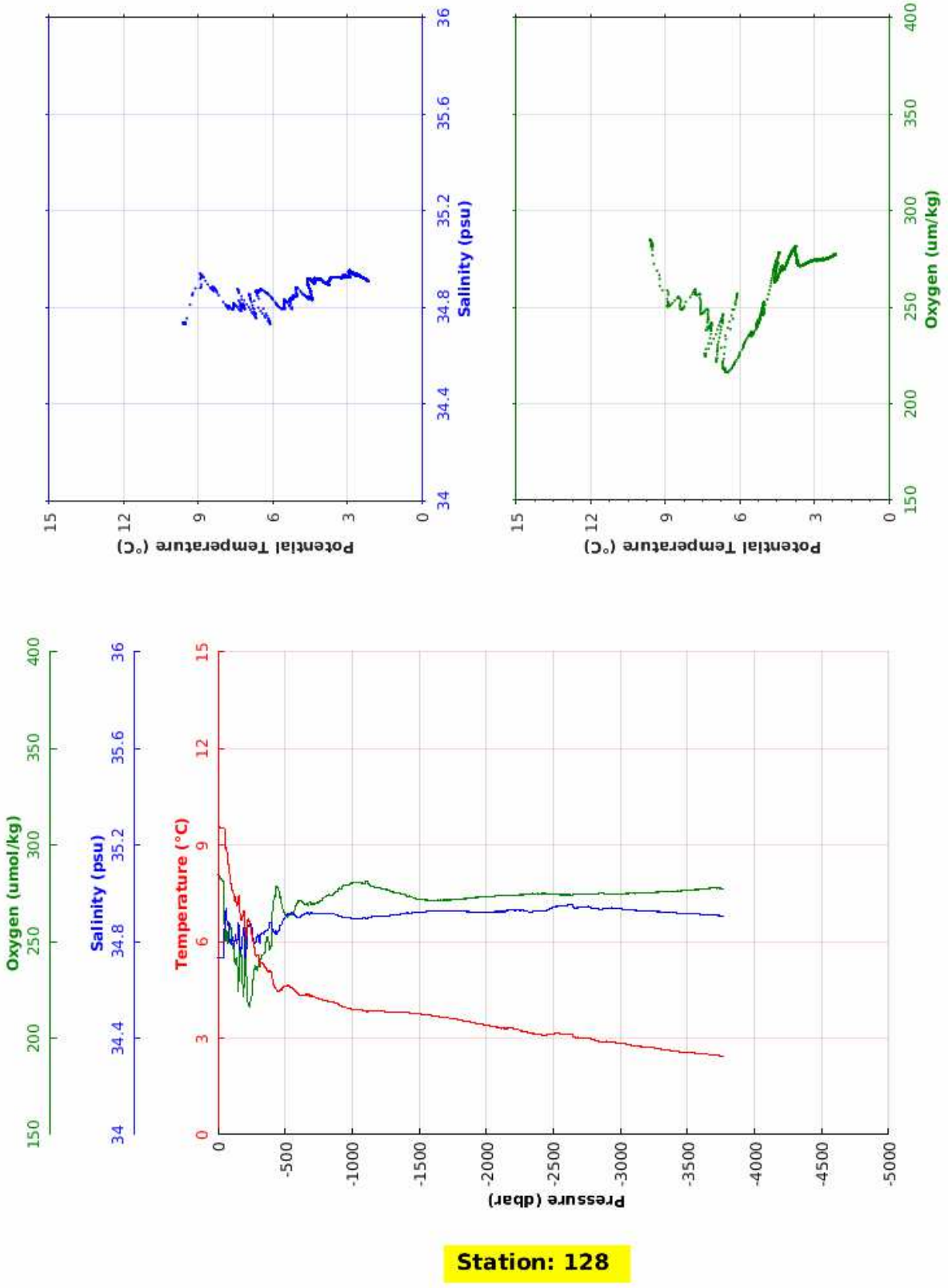
Cruise	: RREX 2015		
Station	: 127	Cast : 1	
Date	: 04/07/2015	Ship : N/O Thalassa	
Depth	: 3612 m	Organism : IFREMER	
Position	: N 51 54.02 W 035 4.77		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	10.122	34.838	278.5	10.122	3050.0	2.816	34.939	274.6	2.564
10.0	10.118	34.837	278.3	10.117	3100.0	2.794	34.937	274.6	2.537
20.0	10.104	34.836	278.5	10.102	3150.0	2.796	34.940	274.6	2.534
30.0	10.104	34.836	278.0	10.101	3200.0	2.766	34.937	274.6	2.500
40.0	10.101	34.836	277.6	10.096	3250.0	2.732	34.933	274.9	2.461
50.0	10.100	34.836	277.5	10.094	3300.0	2.702	34.931	275.1	2.426
100.0	6.730	34.639	275.1	6.721	3350.0	2.664	34.928	275.7	2.384
150.0	5.620	34.620	274.7	5.608	3400.0	2.634	34.924	276.0	2.349
200.0	5.454	34.717	249.9	5.438	3450.0	2.614	34.923	276.4	2.324
250.0	5.644	34.854	233.7	5.623	3500.0	2.610	34.922	276.4	2.314
300.0	5.003	34.825	258.9	4.979	3550.0	2.574	34.919	276.7	2.274
350.0	4.837	34.848	273.1	4.809	3600.0	2.539	34.916	277.1	2.235
400.0	4.639	34.865	267.1	4.608	3650.0	2.509	34.914	277.3	2.200
450.0	4.549	34.876	269.0	4.515	3663.0	2.480	34.911	277.4	2.171
500.0	4.463	34.889	269.1	4.425					
550.0	4.408	34.902	269.2	4.366					
600.0	4.354	34.908	271.0	4.308					
650.0	4.299	34.912	272.0	4.249					
700.0	4.217	34.912	273.0	4.164					
750.0	4.214	34.921	272.3	4.157					
800.0	4.157	34.918	273.6	4.096					
850.0	4.033	34.907	276.9	3.969					
900.0	3.987	34.904	278.0	3.919					
950.0	3.926	34.899	279.7	3.854					
1000.0	3.901	34.898	279.9	3.826					
1050.0	3.867	34.897	280.4	3.788					
1100.0	3.828	34.895	281.0	3.744					
1150.0	3.835	34.901	278.9	3.747					
1200.0	3.820	34.903	278.2	3.729					
1250.0	3.812	34.906	277.3	3.716					
1300.0	3.811	34.908	276.7	3.711					
1350.0	3.799	34.912	275.6	3.695					
1400.0	3.792	34.917	274.2	3.684					
1450.0	3.769	34.920	273.3	3.656					
1500.0	3.753	34.923	272.0	3.636					
1550.0	3.719	34.925	271.7	3.598					
1600.0	3.687	34.926	271.5	3.562					
1650.0	3.665	34.927	271.5	3.535					
1700.0	3.622	34.926	271.5	3.488					
1750.0	3.581	34.925	271.9	3.443					
1800.0	3.533	34.925	272.1	3.391					
1850.0	3.488	34.924	272.6	3.342					
1900.0	3.451	34.924	272.8	3.301					
1950.0	3.418	34.924	273.1	3.264					
2000.0	3.386	34.924	273.2	3.227					
2050.0	3.336	34.922	273.7	3.174					
2100.0	3.312	34.923	273.9	3.146					
2150.0	3.271	34.922	274.2	3.100					
2200.0	3.249	34.923	274.2	3.074					
2250.0	3.222	34.924	274.5	3.043					
2300.0	3.218	34.929	274.4	3.034					
2350.0	3.215	34.938	274.2	3.026					
2400.0	3.202	34.941	274.2	3.008					
2450.0	3.115	34.935	274.8	2.918					
2500.0	3.122	34.940	274.6	2.920					
2550.0	3.070	34.938	274.9	2.864					
2600.0	3.057	34.941	274.9	2.846					
2650.0	3.031	34.941	274.9	2.816					
2700.0	2.996	34.940	274.7	2.776					
2750.0	2.970	34.941	274.7	2.746					
2800.0	2.948	34.942	274.7	2.719					
2850.0	2.929	34.943	274.6	2.696					
2900.0	2.905	34.942	274.8	2.667					
2950.0	2.878	34.941	274.9	2.635					
3000.0	2.860	34.941	274.9	2.612					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 127

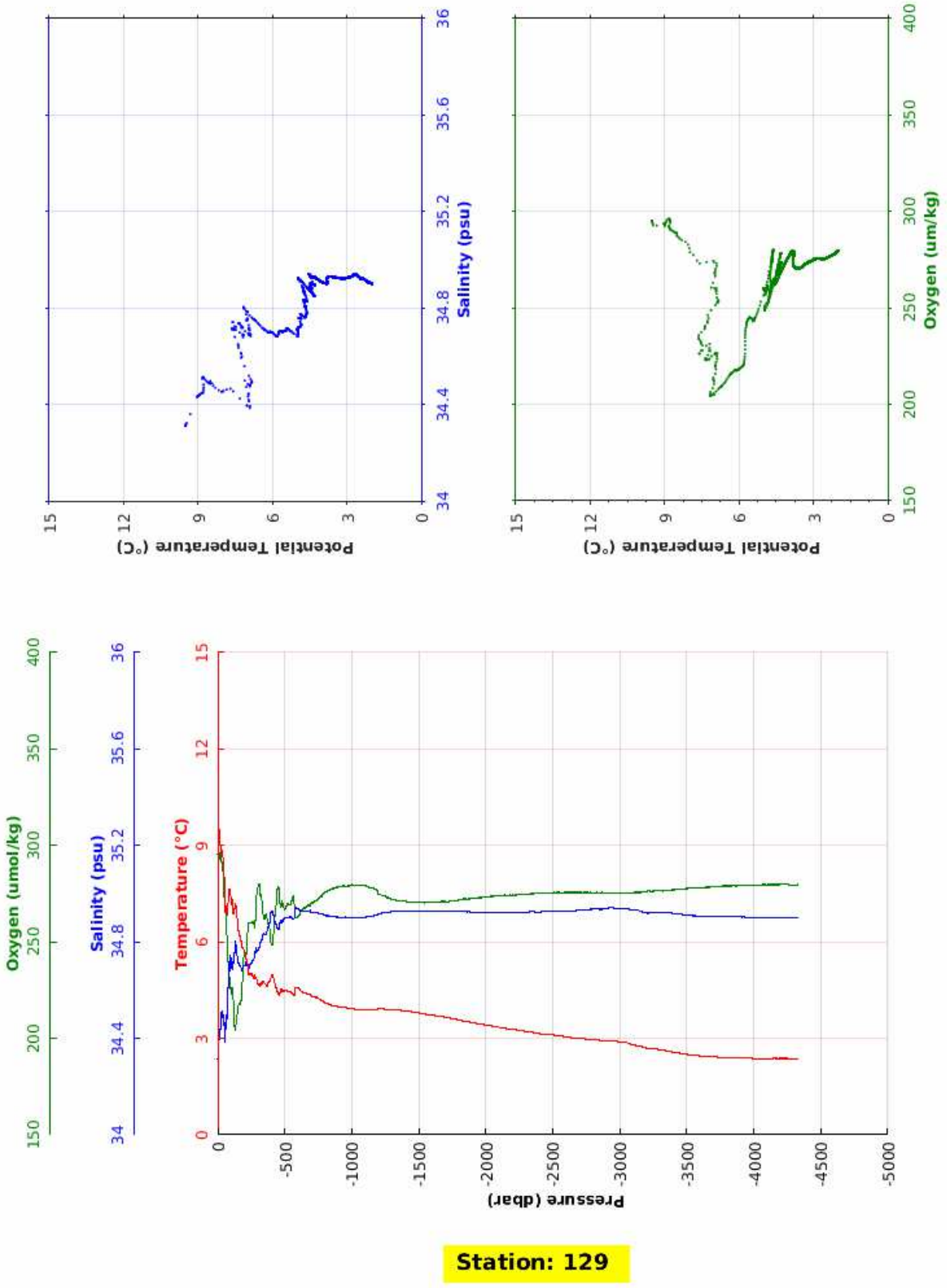
Cruise : RREX 2015			
Station : 128	Cast : 1		
Date : 04/07/2015	Ship : N/O Thalassa		
Depth : 3721 m	Organism : IFREMER		
Position : N 51 33.07 W 035 4.90			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.605	34.734	285.0	9.605	3050.0	2.817	34.934	275.0	2.565
10.0	9.580	34.733	284.4	9.579	3100.0	2.768	34.931	275.2	2.512
20.0	9.551	34.733	283.5	9.548	3150.0	2.744	34.929	275.3	2.483
30.0	9.542	34.732	281.9	9.538	3200.0	2.715	34.927	275.5	2.449
40.0	9.540	34.732	281.9	9.535	3250.0	2.704	34.927	275.5	2.434
50.0	9.337	34.811	269.0	9.332	3300.0	2.663	34.924	275.9	2.389
100.0	7.770	34.806	256.5	7.761	3350.0	2.625	34.922	275.9	2.346
150.0	7.175	34.807	237.8	7.160	3400.0	2.602	34.920	276.3	2.318
200.0	6.593	34.798	235.4	6.575	3450.0	2.578	34.918	276.4	2.289
250.0	6.253	34.859	220.4	6.231	3500.0	2.563	34.917	276.6	2.269
300.0	5.568	34.831	235.1	5.543	3550.0	2.545	34.916	276.9	2.246
350.0	5.219	34.841	244.0	5.191	3600.0	2.523	34.914	277.2	2.219
400.0	5.067	34.880	247.4	5.035	3650.0	2.503	34.912	277.6	2.194
450.0	4.462	34.844	278.0	4.428	3700.0	2.477	34.910	277.8	2.163
500.0	4.619	34.897	265.0	4.580	3750.0	2.457	34.908	277.6	2.138
550.0	4.577	34.919	264.0	4.534	3774.0	2.452	34.908	277.5	2.131
600.0	4.372	34.901	270.5	4.326					
650.0	4.358	34.916	269.5	4.309					
700.0	4.328	34.920	269.6	4.274					
750.0	4.249	34.917	270.1	4.192					
800.0	4.172	34.915	273.2	4.111					
850.0	4.134	34.916	274.3	4.070					
900.0	4.039	34.907	276.8	3.970					
950.0	3.955	34.900	279.3	3.883					
1000.0	3.905	34.897	280.4	3.829					
1050.0	3.881	34.897	280.6	3.802					
1100.0	3.857	34.898	280.2	3.773					
1150.0	3.855	34.903	278.7	3.767					
1200.0	3.845	34.904	278.0	3.753					
1250.0	3.827	34.907	277.3	3.731					
1300.0	3.816	34.911	276.0	3.716					
1350.0	3.813	34.914	275.1	3.709					
1400.0	3.802	34.917	274.1	3.693					
1450.0	3.778	34.920	273.3	3.664					
1500.0	3.757	34.923	271.9	3.640					
1550.0	3.731	34.925	271.8	3.610					
1600.0	3.702	34.925	271.4	3.576					
1650.0	3.670	34.925	271.5	3.540					
1700.0	3.638	34.926	271.6	3.504					
1750.0	3.608	34.926	271.8	3.469					
1800.0	3.561	34.925	272.2	3.419					
1850.0	3.525	34.925	272.2	3.378					
1900.0	3.492	34.924	272.7	3.341					
1950.0	3.442	34.925	273.2	3.288					
2000.0	3.400	34.923	273.2	3.242					
2050.0	3.369	34.923	273.4	3.206					
2100.0	3.334	34.925	273.7	3.167					
2150.0	3.296	34.925	274.2	3.125					
2200.0	3.304	34.932	273.8	3.128					
2250.0	3.241	34.928	274.2	3.061					
2300.0	3.195	34.928	274.5	3.011					
2350.0	3.145	34.925	274.9	2.957					
2400.0	3.120	34.925	274.7	2.928					
2450.0	3.104	34.929	274.9	2.907					
2500.0	3.139	34.942	274.6	2.936					
2550.0	3.145	34.949	274.4	2.938					
2600.0	3.123	34.951	274.4	2.911					
2650.0	3.060	34.944	274.7	2.844					
2700.0	3.010	34.943	274.6	2.790					
2750.0	3.001	34.945	274.6	2.776					
2800.0	2.953	34.939	274.8	2.724					
2850.0	2.893	34.932	275.1	2.660					
2900.0	2.898	34.938	274.8	2.660					
2950.0	2.884	34.940	274.6	2.641					
3000.0	2.845	34.936	274.9	2.597					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 128

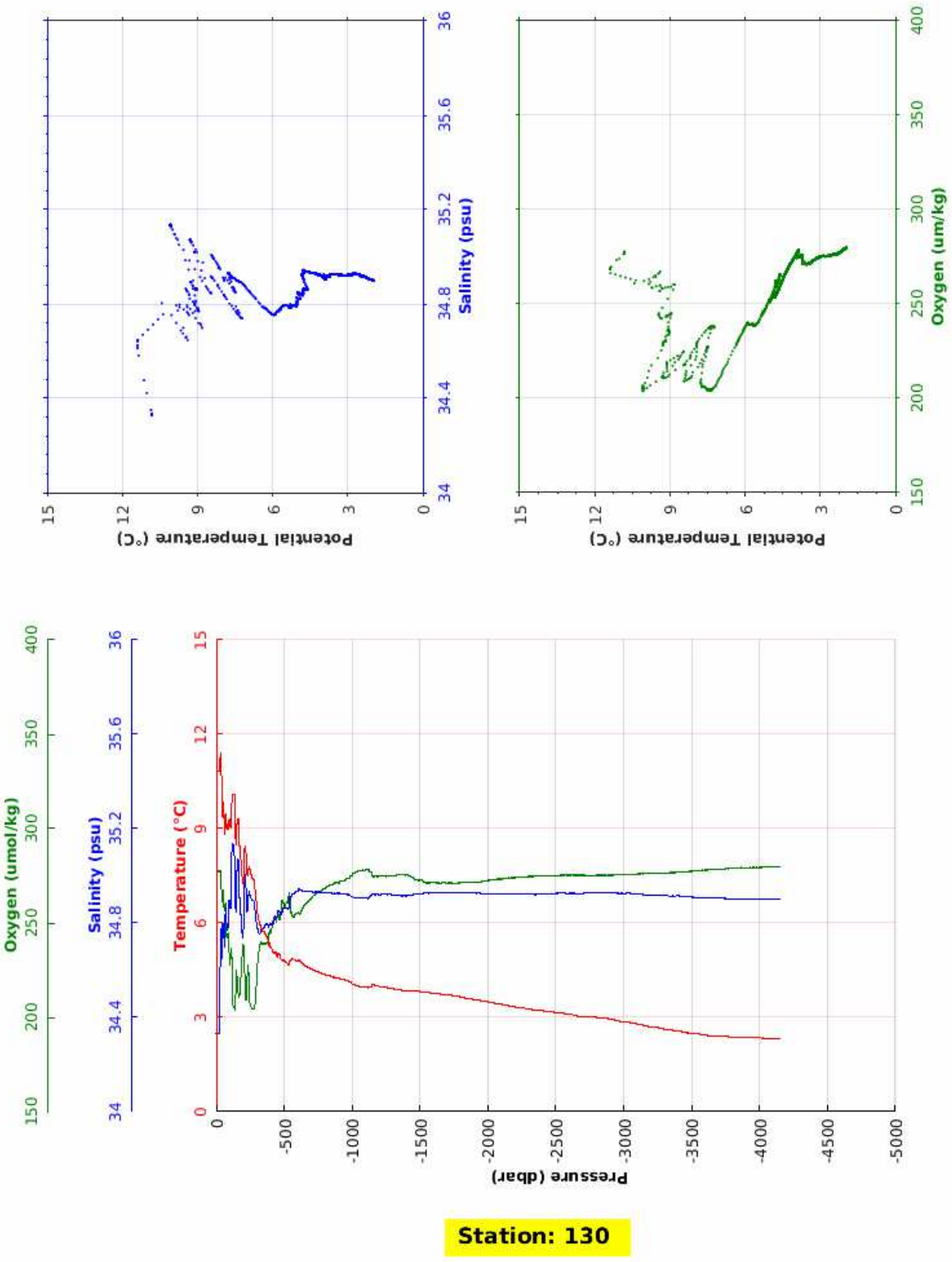
Cruise	: RREX 2015		
Station	: 129	Cast	: 1
Date	: 04/07/2015	Ship	: N/O Thalassa
Depth	: 4271 m	Organism	: IFREMER
Position	: N 51 3.64 W 035 4.74		

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.498	34.313	295.3	9.498	3050.0	2.867	34.939	275.3	2.614
10.0	9.487	34.317	293.9	9.486	3100.0	2.811	34.934	275.5	2.554
20.0	9.003	34.436	292.8	9.001	3150.0	2.762	34.929	275.8	2.501
30.0	8.770	34.470	295.1	8.767	3200.0	2.697	34.921	276.3	2.432
40.0	8.563	34.488	289.2	8.559	3250.0	2.672	34.922	276.4	2.402
50.0	7.981	34.457	278.9	7.976	3300.0	2.645	34.920	276.5	2.371
100.0	7.208	34.691	227.9	7.198	3350.0	2.617	34.922	276.8	2.338
150.0	6.553	34.732	212.0	6.540	3400.0	2.576	34.919	277.0	2.293
200.0	5.695	34.703	242.9	5.678	3450.0	2.538	34.915	277.3	2.250
250.0	5.013	34.711	259.9	4.993	3500.0	2.503	34.912	277.7	2.210
300.0	4.689	34.765	276.8	4.667	3550.0	2.468	34.908	277.8	2.171
350.0	4.710	34.832	262.2	4.683	3600.0	2.458	34.908	277.9	2.156
400.0	4.992	34.920	250.0	4.961	3650.0	2.436	34.906	278.4	2.129
450.0	4.373	34.852	277.1	4.339	3700.0	2.426	34.906	278.6	2.113
500.0	4.508	34.899	267.2	4.469	3750.0	2.414	34.906	278.8	2.097
550.0	4.432	34.904	269.6	4.390	3800.0	2.410	34.905	279.0	2.087
600.0	4.575	34.940	263.0	4.528	3850.0	2.406	34.904	279.1	2.077
650.0	4.412	34.930	267.5	4.362	3900.0	2.393	34.903	279.1	2.059
700.0	4.310	34.923	269.9	4.257	3950.0	2.386	34.903	279.4	2.047
750.0	4.236	34.920	272.2	4.179	4000.0	2.378	34.902	279.5	2.033
800.0	4.105	34.909	275.7	4.044	4050.0	2.376	34.902	279.6	2.026
850.0	4.032	34.905	277.3	3.968	4100.0	2.376	34.902	279.7	2.020
900.0	3.987	34.903	278.3	3.919	4150.0	2.379	34.901	279.7	2.017
950.0	3.952	34.902	279.0	3.880	4200.0	2.379	34.901	279.7	2.011
1000.0	3.926	34.902	279.3	3.850	4250.0	2.379	34.901	279.8	2.005
1050.0	3.901	34.902	279.5	3.821	4300.0	2.371	34.900	279.5	1.992
1100.0	3.880	34.902	279.3	3.796	4339.0	2.373	34.900	279.7	1.989
1150.0	3.882	34.907	277.8	3.794					
1200.0	3.923	34.918	275.0	3.831					
1250.0	3.908	34.920	273.9	3.811					
1300.0	3.906	34.926	272.1	3.805					
1350.0	3.875	34.928	271.3	3.770					
1400.0	3.857	34.929	271.0	3.748					
1450.0	3.817	34.929	270.7	3.703					
1500.0	3.795	34.930	270.6	3.677					
1550.0	3.756	34.929	270.3	3.634					
1600.0	3.721	34.929	270.8	3.595					
1650.0	3.691	34.929	270.8	3.561					
1700.0	3.656	34.928	270.9	3.522					
1750.0	3.616	34.927	271.1	3.478					
1800.0	3.577	34.926	271.8	3.435					
1850.0	3.535	34.925	272.3	3.389					
1900.0	3.493	34.924	272.4	3.342					
1950.0	3.455	34.923	272.8	3.301					
2000.0	3.419	34.923	273.2	3.261					
2050.0	3.381	34.923	273.7	3.218					
2100.0	3.342	34.923	273.9	3.175					
2150.0	3.310	34.923	274.3	3.139					
2200.0	3.280	34.923	274.3	3.105					
2250.0	3.256	34.923	274.5	3.076					
2300.0	3.213	34.924	274.8	3.028					
2350.0	3.188	34.925	275.0	3.000					
2400.0	3.148	34.924	275.3	2.955					
2450.0	3.121	34.925	275.5	2.924					
2500.0	3.107	34.927	275.5	2.906					
2550.0	3.083	34.928	275.7	2.877					
2600.0	3.045	34.928	275.8	2.835					
2650.0	3.017	34.929	275.7	2.802					
2700.0	2.999	34.931	275.8	2.779					
2750.0	2.977	34.933	275.7	2.753					
2800.0	2.967	34.936	275.5	2.738					
2850.0	2.945	34.936	275.6	2.711					
2900.0	2.930	34.938	275.5	2.691					
2950.0	2.925	34.941	275.2	2.681					
3000.0	2.900	34.940	275.3	2.651					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 129

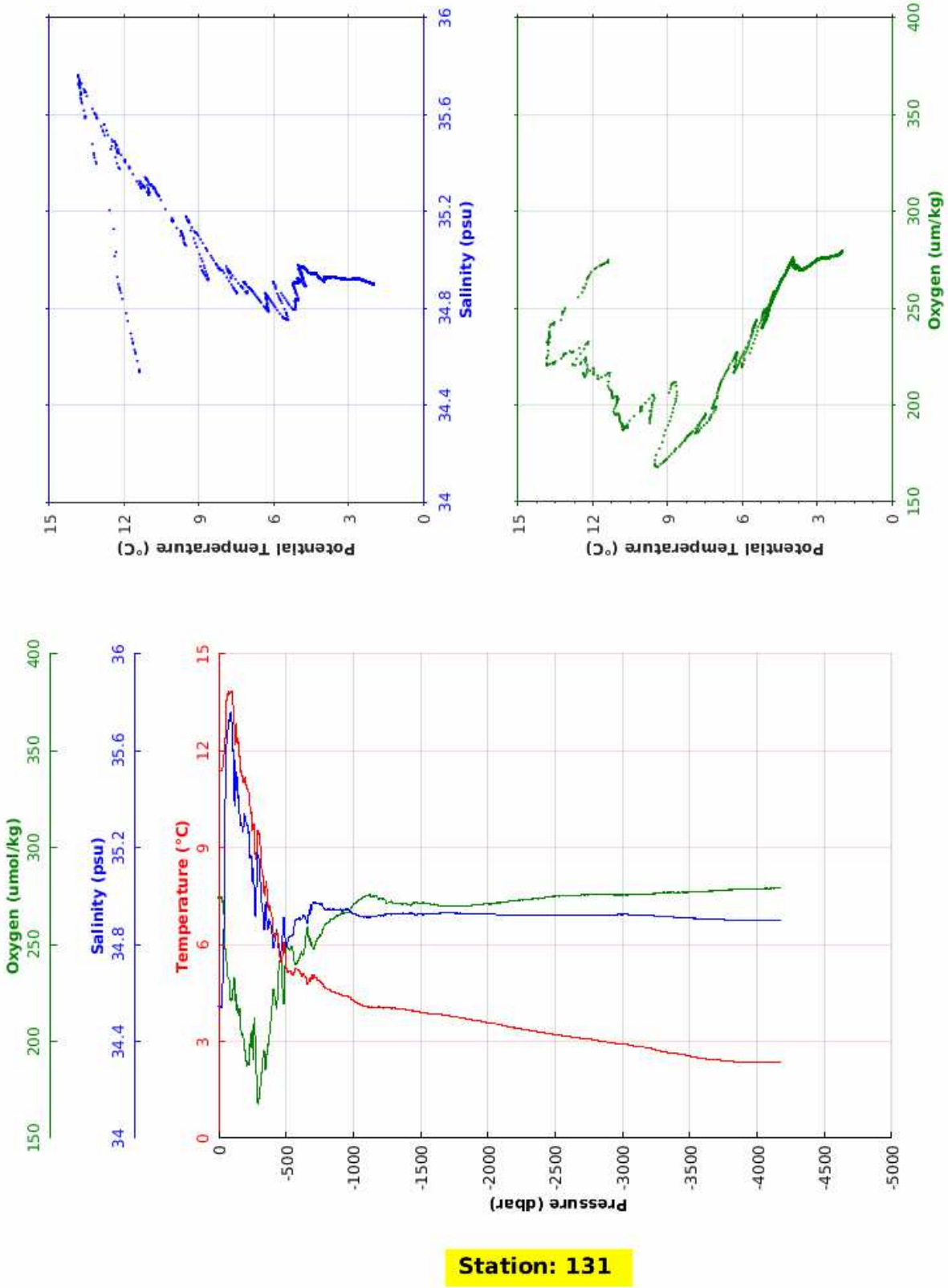
Cruise : RREX 2015			
Station : 130	Cast : 1		
Date : 05/07/2015	Ship : N/O Thalassa		
Depth : 4090 m	Organism : IFREMER		
Position : N 50 45.05 W 035 4.81			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	10.811	34.331	277.6	10.811	3050.0	2.833	34.926	275.7	2.580
10.0	10.810	34.330	277.4	10.808	3100.0	2.788	34.922	275.9	2.532
20.0	10.814	34.331	277.4	10.812	3150.0	2.743	34.920	276.2	2.482
30.0	11.399	34.612	268.8	11.395	3200.0	2.693	34.917	276.5	2.428
40.0	10.382	34.756	262.5	10.377	3250.0	2.679	34.919	276.2	2.409
50.0	9.783	34.772	261.7	9.777	3300.0	2.629	34.918	276.3	2.355
100.0	9.207	34.879	230.3	9.196	3350.0	2.590	34.914	276.7	2.312
150.0	9.006	34.981	220.1	8.990	3400.0	2.575	34.916	276.9	2.292
200.0	7.351	34.762	237.1	7.332	3450.0	2.515	34.911	277.3	2.228
250.0	7.672	34.917	206.1	7.648	3500.0	2.498	34.910	277.4	2.206
300.0	6.380	34.787	228.6	6.353	3550.0	2.474	34.908	277.7	2.177
350.0	5.722	34.778	238.7	5.692	3600.0	2.436	34.906	278.0	2.134
400.0	5.245	34.792	246.8	5.212	3650.0	2.415	34.905	278.5	2.109
450.0	4.927	34.823	255.8	4.891	3700.0	2.413	34.905	278.5	2.101
500.0	4.812	34.864	258.7	4.773	3750.0	2.392	34.904	278.8	2.075
550.0	4.796	34.904	256.0	4.752	3800.0	2.368	34.902	279.0	2.046
600.0	4.804	34.936	255.1	4.756	3850.0	2.359	34.902	279.2	2.031
650.0	4.653	34.936	259.8	4.602	3900.0	2.349	34.901	279.2	2.016
700.0	4.534	34.932	263.6	4.480	3950.0	2.348	34.901	279.2	2.010
750.0	4.443	34.933	266.6	4.385	4000.0	2.345	34.901	279.4	2.001
800.0	4.360	34.929	268.6	4.298	4050.0	2.338	34.900	279.6	1.989
850.0	4.303	34.928	270.2	4.237	4100.0	2.333	34.900	279.7	1.978
900.0	4.254	34.927	271.2	4.185	4150.0	2.332	34.899	279.7	1.971
950.0	4.180	34.923	273.0	4.107	4156.0	2.331	34.899	279.6	1.970
1000.0	4.061	34.911	276.0	3.984					
1050.0	3.992	34.906	277.8	3.912					
1100.0	3.959	34.905	278.4	3.874					
1150.0	4.036	34.924	274.5	3.947					
1200.0	3.983	34.920	275.0	3.890					
1250.0	3.966	34.922	274.7	3.868					
1300.0	3.919	34.920	274.9	3.818					
1350.0	3.873	34.917	275.5	3.768					
1400.0	3.835	34.915	275.7	3.726					
1450.0	3.839	34.921	273.6	3.726					
1500.0	3.812	34.921	273.0	3.694					
1550.0	3.809	34.927	271.2	3.687					
1600.0	3.768	34.927	271.5	3.641					
1650.0	3.743	34.927	271.1	3.612					
1700.0	3.716	34.927	271.2	3.581					
1750.0	3.692	34.927	271.0	3.552					
1800.0	3.644	34.927	271.3	3.501					
1850.0	3.601	34.927	271.4	3.454					
1900.0	3.571	34.927	271.5	3.419					
1950.0	3.526	34.925	271.9	3.370					
2000.0	3.496	34.924	272.6	3.336					
2050.0	3.452	34.923	273.0	3.288					
2100.0	3.413	34.923	273.3	3.244					
2150.0	3.374	34.922	273.8	3.201					
2200.0	3.330	34.921	274.0	3.153					
2250.0	3.305	34.921	274.3	3.124					
2300.0	3.267	34.921	274.8	3.082					
2350.0	3.233	34.921	274.9	3.043					
2400.0	3.209	34.922	275.0	3.016					
2450.0	3.186	34.924	275.1	2.987					
2500.0	3.160	34.926	275.2	2.957					
2550.0	3.132	34.927	275.3	2.925					
2600.0	3.089	34.925	275.5	2.877					
2650.0	3.043	34.923	275.4	2.827					
2700.0	3.029	34.926	275.2	2.809					
2750.0	3.020	34.929	275.2	2.795					
2800.0	2.996	34.928	275.3	2.766					
2850.0	2.979	34.930	275.2	2.744					
2900.0	2.949	34.929	275.4	2.710					
2950.0	2.902	34.926	275.5	2.658					
3000.0	2.866	34.926	275.6	2.618					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 130

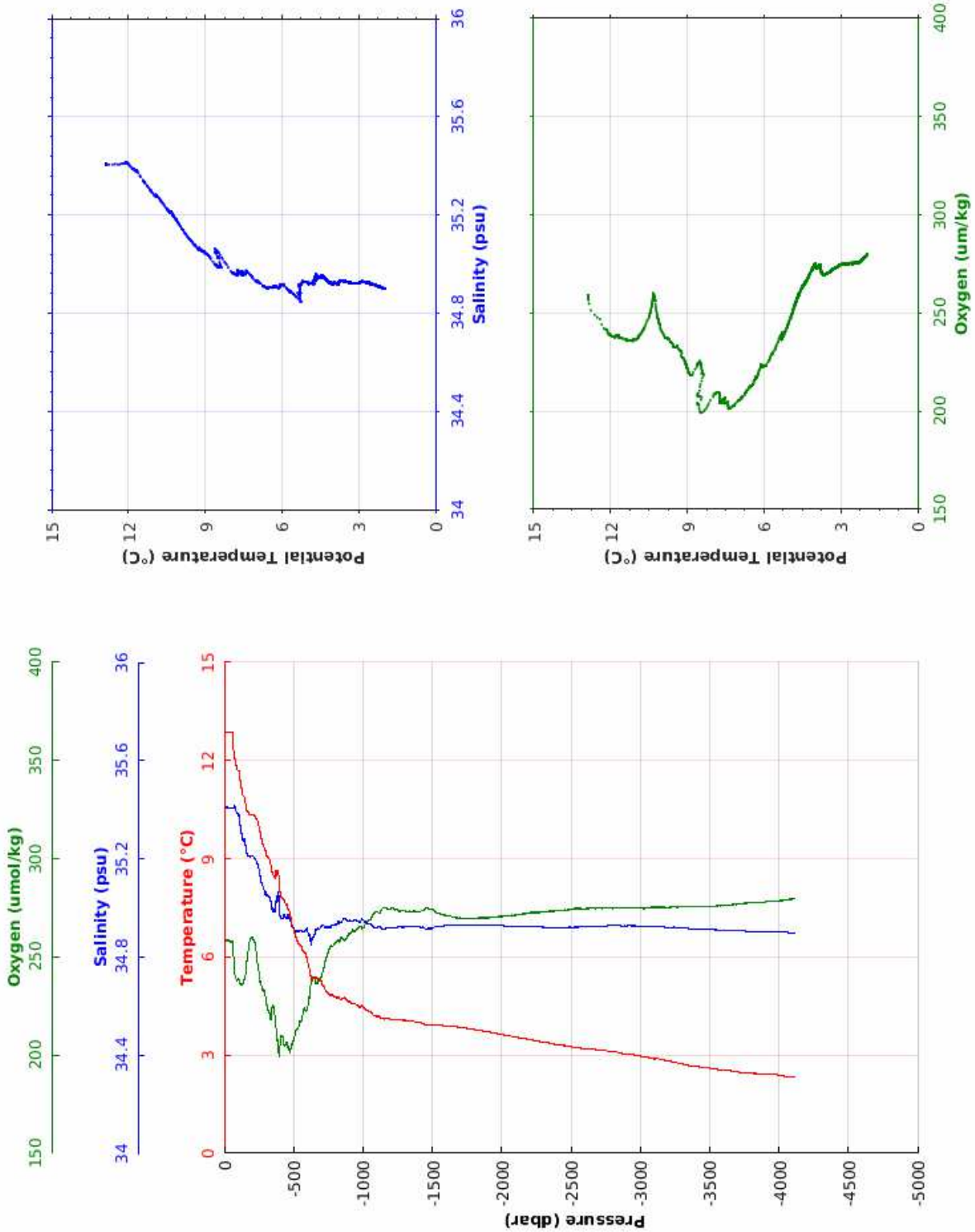
Cruise : RREX 2015			
Station : 131	Cast : 1		
Date : 05/07/2015	Ship : N/O Thalassa		
Depth : 4119 m	Organism : IFREMER		
Position : N 50 20.88 W 035 4.81			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	11.388	34.543	274.2	11.388	3050.0	2.893	34.924	275.8	2.640
10.0	11.388	34.543	274.2	11.387	3100.0	2.843	34.920	276.2	2.586
20.0	11.384	34.541	274.6	11.382	3150.0	2.837	34.923	276.0	2.574
30.0	11.546	34.613	273.1	11.542	3200.0	2.792	34.921	276.0	2.525
40.0	12.077	34.839	268.6	12.072	3250.0	2.740	34.918	276.5	2.469
50.0	12.588	35.206	255.8	12.582	3300.0	2.689	34.916	276.9	2.413
100.0	13.633	35.705	221.6	13.619	3350.0	2.651	34.915	277.0	2.371
150.0	11.995	35.407	217.4	11.976	3400.0	2.628	34.913	277.0	2.343
200.0	10.987	35.312	195.4	10.962	3450.0	2.594	34.912	277.2	2.305
250.0	9.577	35.063	204.5	9.548	3500.0	2.543	34.910	277.3	2.249
300.0	9.435	35.158	168.1	9.401	3550.0	2.511	34.908	277.1	2.213
350.0	7.868	34.953	186.1	7.833	3600.0	2.478	34.907	277.4	2.175
400.0	6.685	34.843	217.2	6.648	3650.0	2.445	34.905	277.6	2.138
450.0	5.655	34.762	236.2	5.617	3700.0	2.435	34.905	277.7	2.122
500.0	5.336	34.804	242.3	5.295	3750.0	2.407	34.903	278.0	2.089
550.0	5.050	34.837	249.1	5.006	3800.0	2.384	34.903	278.4	2.061
600.0	5.175	34.909	242.2	5.125	3850.0	2.371	34.902	278.6	2.043
650.0	4.928	34.908	251.7	4.876	3900.0	2.356	34.901	278.7	2.023
700.0	5.035	34.969	249.2	4.977	3950.0	2.357	34.901	278.8	2.018
750.0	4.868	34.970	253.7	4.807	4000.0	2.348	34.900	278.8	2.004
800.0	4.639	34.946	260.4	4.575	4050.0	2.349	34.900	279.0	1.999
850.0	4.549	34.946	263.3	4.482	4100.0	2.351	34.900	279.1	1.996
900.0	4.461	34.944	265.4	4.390	4150.0	2.351	34.900	279.1	1.989
950.0	4.406	34.946	266.4	4.331	4183.0	2.348	34.899	279.6	1.983
1000.0	4.262	34.929	270.2	4.183					
1050.0	4.150	34.918	273.2	4.068					
1100.0	4.088	34.915	275.1	4.002					
1150.0	4.064	34.917	274.9	3.974					
1200.0	4.066	34.922	273.8	3.972					
1250.0	4.072	34.930	271.7	3.974					
1300.0	4.037	34.929	271.4	3.934					
1350.0	4.013	34.929	271.3	3.907					
1400.0	3.982	34.928	271.1	3.871					
1450.0	3.935	34.925	271.5	3.820					
1500.0	3.905	34.926	271.4	3.786					
1550.0	3.872	34.926	271.5	3.749					
1600.0	3.848	34.926	271.0	3.721					
1650.0	3.835	34.930	270.0	3.703					
1700.0	3.802	34.930	269.8	3.666					
1750.0	3.771	34.930	269.8	3.630					
1800.0	3.733	34.930	270.0	3.588					
1850.0	3.695	34.928	270.1	3.546					
1900.0	3.657	34.927	270.3	3.504					
1950.0	3.626	34.926	270.8	3.469					
2000.0	3.585	34.926	271.2	3.424					
2050.0	3.559	34.925	271.1	3.393					
2100.0	3.510	34.924	271.8	3.340					
2150.0	3.463	34.923	272.2	3.289					
2200.0	3.426	34.923	272.7	3.248					
2250.0	3.387	34.922	273.2	3.204					
2300.0	3.353	34.922	273.4	3.167					
2350.0	3.312	34.921	273.7	3.122					
2400.0	3.284	34.921	274.2	3.089					
2450.0	3.247	34.920	274.8	3.047					
2500.0	3.214	34.920	275.0	3.010					
2550.0	3.184	34.920	275.2	2.976					
2600.0	3.153	34.920	275.4	2.941					
2650.0	3.123	34.921	275.5	2.906					
2700.0	3.091	34.921	275.8	2.870					
2750.0	3.072	34.921	275.8	2.846					
2800.0	3.037	34.921	275.9	2.806					
2850.0	3.004	34.922	275.9	2.769					
2900.0	2.964	34.921	275.9	2.725					
2950.0	2.941	34.924	275.8	2.697					
3000.0	2.922	34.924	275.8	2.673					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 131

Cruise : RREX 2015			
Station : 132	Cast : 1		
Date : 05/07/2015	Ship : N/O Thalassa		
Depth : 4065 m	Organism : IFREMER		
Position : N 49 57.01 W 035 4.71			

PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.	PRESSURE	TEMPERATURE	SALINITY	DISSOLV. OXYGEN	POTENT. TEMP.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.877	35.408	258.8	12.877	3050.0	2.934	34.925	275.1	2.680
10.0	12.876	35.409	258.3	12.875	3100.0	2.885	34.923	275.4	2.626
20.0	12.878	35.409	258.3	12.875	3150.0	2.865	34.923	275.4	2.602
30.0	12.879	35.409	258.2	12.875	3200.0	2.816	34.920	274.9	2.548
40.0	12.872	35.406	257.9	12.866	3250.0	2.786	34.920	275.6	2.513
50.0	12.865	35.406	257.6	12.858	3300.0	2.737	34.917	275.4	2.460
100.0	11.695	35.379	238.5	11.683	3350.0	2.687	34.916	275.5	2.406
150.0	10.768	35.259	241.1	10.750	3400.0	2.648	34.914	275.4	2.363
200.0	10.359	35.213	260.0	10.336	3450.0	2.627	34.913	275.6	2.337
250.0	9.995	35.153	239.8	9.966	3500.0	2.601	34.912	275.8	2.306
300.0	9.172	35.052	226.9	9.139	3550.0	2.569	34.910	276.1	2.269
350.0	8.541	34.988	225.5	8.503	3600.0	2.541	34.909	276.3	2.236
400.0	8.031	34.970	207.4	7.990	3650.0	2.523	34.908	276.6	2.214
450.0	7.595	34.963	205.0	7.550	3700.0	2.492	34.907	276.9	2.178
500.0	6.792	34.912	208.7	6.745	3750.0	2.468	34.906	277.3	2.148
550.0	6.356	34.910	217.0	6.306	3800.0	2.447	34.905	277.6	2.123
600.0	5.896	34.905	224.9	5.843	3850.0	2.430	34.904	278.0	2.101
650.0	5.343	34.893	239.0	5.288	3900.0	2.424	34.903	278.1	2.089
700.0	5.245	34.930	240.3	5.186	3950.0	2.410	34.903	278.2	2.070
750.0	4.858	34.919	253.9	4.797	4000.0	2.393	34.902	278.5	2.047
800.0	4.787	34.933	257.1	4.722	4050.0	2.354	34.900	279.1	2.004
850.0	4.716	34.946	259.6	4.647	4100.0	2.334	34.899	279.5	1.979
900.0	4.638	34.948	262.0	4.565	4127.0	2.334	34.899	279.8	1.976
950.0	4.547	34.948	263.7	4.471					
1000.0	4.486	34.952	264.9	4.406					
1050.0	4.327	34.934	269.0	4.244					
1100.0	4.187	34.921	272.9	4.101					
1150.0	4.107	34.915	275.1	4.017					
1200.0	4.090	34.916	274.7	3.996					
1250.0	4.093	34.922	273.8	3.994					
1300.0	4.066	34.923	273.5	3.963					
1350.0	4.037	34.923	273.2	3.930					
1400.0	4.007	34.923	273.1	3.895					
1450.0	3.938	34.916	274.7	3.823					
1500.0	3.907	34.917	274.2	3.788					
1550.0	3.917	34.925	271.9	3.793					
1600.0	3.896	34.928	271.1	3.768					
1650.0	3.876	34.929	270.2	3.744					
1700.0	3.851	34.931	269.7	3.714					
1750.0	3.820	34.931	269.8	3.679					
1800.0	3.785	34.931	269.6	3.640					
1850.0	3.751	34.930	269.8	3.601					
1900.0	3.721	34.930	269.9	3.568					
1950.0	3.675	34.928	270.2	3.517					
2000.0	3.628	34.927	270.5	3.466					
2050.0	3.595	34.926	270.9	3.429					
2100.0	3.556	34.925	271.3	3.386					
2150.0	3.524	34.924	271.8	3.350					
2200.0	3.476	34.923	272.4	3.298					
2250.0	3.444	34.922	272.6	3.261					
2300.0	3.393	34.921	272.8	3.206					
2350.0	3.365	34.921	273.1	3.174					
2400.0	3.327	34.921	273.6	3.131					
2450.0	3.292	34.921	274.0	3.092					
2500.0	3.257	34.921	274.3	3.052					
2550.0	3.223	34.921	274.6	3.014					
2600.0	3.201	34.923	274.6	2.987					
2650.0	3.188	34.923	274.8	2.970					
2700.0	3.167	34.924	274.9	2.944					
2750.0	3.137	34.926	274.9	2.909					
2800.0	3.113	34.929	274.6	2.881					
2850.0	3.073	34.927	275.0	2.836					
2900.0	3.030	34.926	275.1	2.789					
2950.0	3.011	34.927	275.1	2.765					
3000.0	2.970	34.926	274.8	2.719					


Potential Temperature (°C)
Salinity (psu)
Potential Temperature (°C)
Oxygen (um/kg)
Oxygen (umol/kg)
Salinity (psu)
Temperature (°C)
Pressure (dbar)
Station: 132