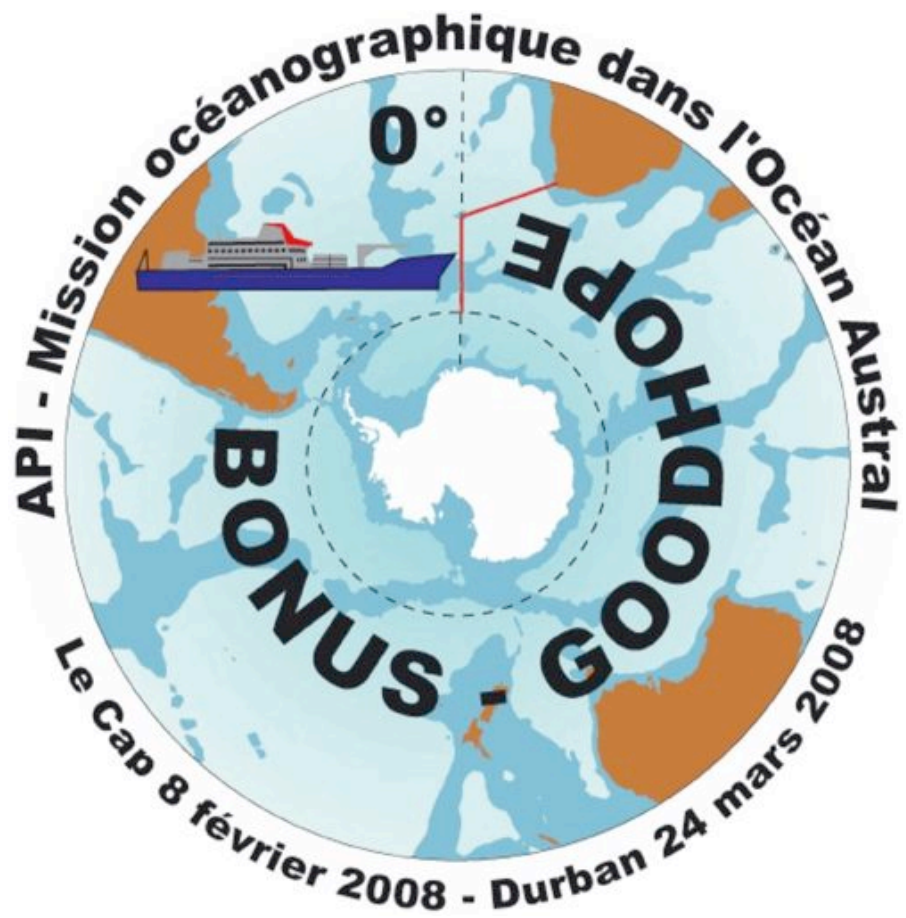


Projet GoodHope  
Campagne BONUS / GOODHOPE

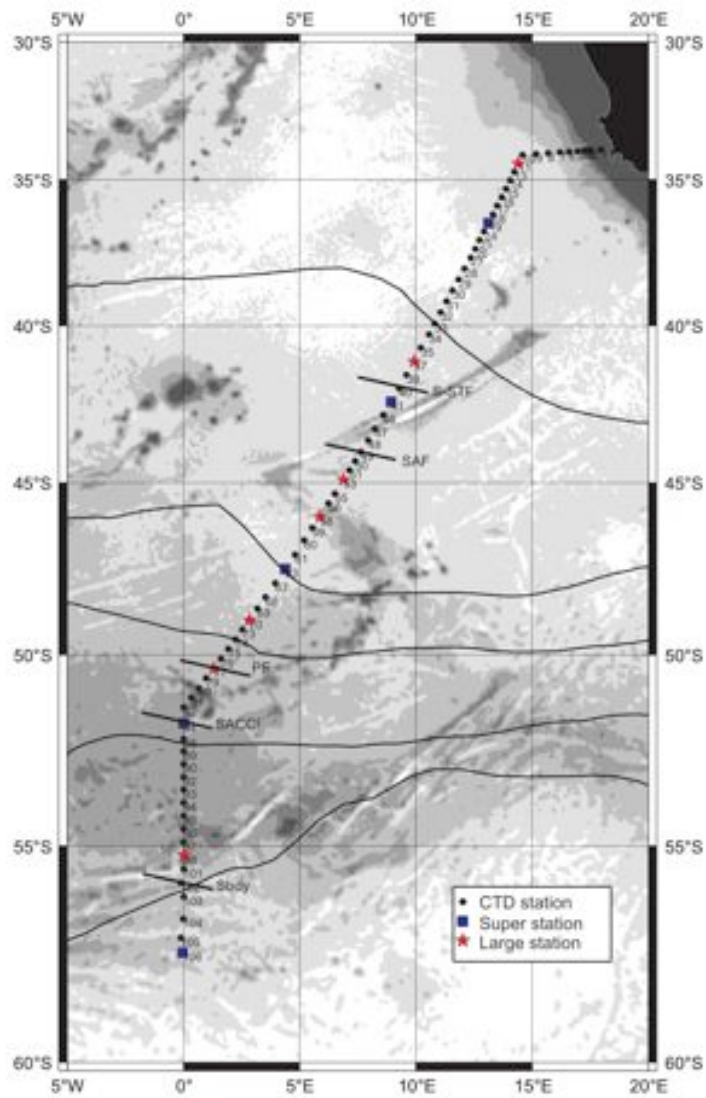
Rapport de données CTD-O<sub>2</sub>





# Campagne GOODHOPE 2008

R/V Marion Dufresne du 08/02/2008 au 24/03/2008







## **RESUME**

Du 7 février au 24 mars 2008, du Cap à Durban (Afrique du Sud), s'est déroulée la campagne BONUS-GoodHope, dans le but d'étudier les transferts d'eau entre océans Atlantique et Indien, et les distributions et cycles d'éléments traces, isotopes et paramètres du système du carbone. La description des opérations à la mer et de l'ensemble des mesures peut être trouvée dans le rapport de campagne (Speich et Dehairs, 2008) et son annexe. Le présent rapport décrit les mesures des paramètres physiques de la bathysonde (pression, température, salinité et oxygène dissous), obtenus lors de 111 stations réalisées entre l'Afrique du sud et la limite sud du Courant Circumpolaire sur le méridien de Greenwich. Cette campagne constituait la quatrième réalisation d'un échantillonnage pluriannuel d'hydrologie le long de cette ligne, entrepris depuis 2004 dans le cadre du projet GoodHope.

## **ABSTRACT**

Between February 7<sup>th</sup> and March 24<sup>th</sup>, 2008, from Cape Town to Durban (South Africa), the BONUS-GoodHope cruise was realized with the purpose of studying the water transfers between the Atlantic and Indian oceans, and the distributions and cycles of trace elements, isotopes, and parameters of the carbon system. A description of operations at sea and of all measurements may be found in the cruise report (Speich and Dehairs, 2008), and its annex. The present data report describes the physical measurements obtained using the CTD-O<sub>2</sub> probe (pressure, temperature, salinity and dissolved oxygen) at 111 stations between South Africa and the southern limit of the Antarctic Circumpolar Current at the Greenwich meridian. The BONUS-GoodHope cruise provided the fourth realization of a pluri-annual hydrological sampling along this line, undertaken in 2004 in the framework of the GoodHope program.

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## I. Le programme GoodHope et la campagne BONUS/GoodHope 2008

### Thème scientifique et objectifs du projet GoodHope

Dans le cadre du programme international CLIVAR (*CLImate VARIability*), le projet GoodHope, dont la phase expérimentale a démarré en 2004, vise à étudier la variabilité inter-annuelle des échanges entre les océans Indien et Atlantique. Ce projet, coordonné au LPO, a pour objectif de mettre en place un réseau de mesures à long terme dans l'Océan Austral, le long d'une radiale reliant les continents Africain et Antarctique (Fig.1).

Tandis qu'on suspecte la dynamique de l'Océan Austral d'être importante pour la circulation océanique globale, notre compréhension de sa dynamique tridimensionnelle et de sa variabilité est rudimentaire. Ceci est d'autant plus vrai pour le passage au sud de l'Afrique. Ce passage est le plus vaste. Il est aussi le moins exploré, bien que d'importance capitale pour la circulation de l'Océan Austral et donc dans l'impact de celle-ci sur la circulation de l'océan global et le climat. Le projet GoodHope a comme ambition de combler partiellement ces lacunes en établissant un programme d'observations périodiques à travers une radiale entre les continents Africain et Antarctique.

Le principal dispositif de l'expérience comprend la « radiale » répétitive de mesures de température (annuelle au minimum) et de paramètres hydrologiques et géochimie légère (fréquence bi-annuelle environ) représentée sur la Figure 1. Afin de pouvoir utiliser une couverture altimétrique de longue durée, cette ligne de mesures suit, partiellement, une trace au sol du satellite Jason. Des profileurs dérivants CTD (Conductivity-Temperature-Depth) y sont également déployés dans le cadre du projet national CORIOLIS et international ARGO.

L'Océan Austral étant très pauvre en observations, de nombreuses questions concernant son état "moyen", sa variabilité et son rôle dans la circulation océanique globale et l'état du climat actuel restent ouvertes. Les mesures permettent de quantifier et suivre l'évolution de différentes structures dynamiques (régions frontales influant sur les échanges indo-atlantiques) et thermohalines (structure et variations des eaux de la thermocline) de cette région. La radiale GoodHope, à l'époque de sa définition, s'appuyait sur deux réseaux courantométriques déployés dans le cadre des projets américain ASTTEX (au nord) et allemand WECCON (au sud).

Outre ses objectifs scientifiques, ce projet contribue au réseau mondial d'observations dans cette région faiblement échantillonnée, dont la connaissance est cependant cruciale dans un contexte d'étude de la variabilité climatique et dans le contexte de modélisation prédictive.

Les mesures d'hydrologie de GoodHope échantillonnent deux domaines océaniques distincts : le sud de la région subtropicale où les transports (dans les deux directions) sont influencés par une forte activité de moyenne échelle, et le Courant Circumpolaire limité au sud à environ 57°S le long du méridien de Greenwich. Les lâchers de profileurs ARGO sont également effectués au nord de cette latitude, libre de glace tout au long de l'année. L'échantillonnage régulier de température intersecte, en outre, la Mer de Weddell, située plus au sud, jusqu'au continent Antarctique.

Le projet GoodHope est mené en coopération avec l'Université de Cape-Town, responsable des échantillonnages de température, l'Institut Shirshov de Moscou, qui a réalisé plusieurs échantillonnages d'hydrologie, et le Laboratoire AOML de la NOAA (Miami). Outre la coordination et l'animation scientifique, la contribution française a concerné la mise en œuvre des profileurs ARGO, et la réalisation de la campagne d'hydrologie BONUS/GoodHope de 2008. Le projet GoodHope est soutenu par le programme international CLIVAR (*CLimate VARIability and predictability* : <http://www.clivar.org/>). La participation française à GoodHope a été soutenue par le Programme National d'Etude de la Dynamique du Climat – PNEDC, le programme LEFE, et le programme Circulation Océanique de l'IFREMER. La campagne BONUS/Goodhope, objet d'un projet spécifique décrit ci-après, a assuré l'un des échantillonnages d'hydrologie de GoodHope.

### **La campagne BONUS/GoodHope**

Après les campagnes d'hydrologie de l'Institut SHIRSHOV, réalisées en 2004, 2005 et 2006, la campagne BONUS/GoodHope a constitué le quatrième échantillonnage d'hydrologie le long de la radiale GoodHope. Cette campagne, et le projet BONUS/GoodHope correspondant, dépassaient cependant largement le cadre du projet initial GoodHope, par ses objectifs et les mesures réalisées. La thématique centrale du projet GoodHope, consacrée aux transferts inter-océaniques, y était enrichie d'un volet relatif aux échanges air-mer, et bénéficiait des mesures de bio-géochimie permettant de recouper les résultats obtenus par les paramètres de physique. Mais surtout, une composante importante de la campagne était consacrée à l'étude des distributions,

sources et puits d'éléments traces et isotopes, et aux processus biochimiques impliqués dans le cycle de ces éléments et du carbone. La description de l'ensemble de ces mesures bio-géochimiques « hors GoodHope » peut être trouvée dans le rapport de campagne BONUS/GoodHope (Speich et Dehairs, 2008) et son annexe. Le présent rapport est consacré à la calibration des mesures d'hydrologie obtenues par la bathysonde. Il est à noter, que sur un total de 111 stations bathysonde, 32 furent des stations répétées en des positions déjà échantillonnées, pour des besoins de prélèvements bio-géochimiques (dans le cadre des stations « Larges » et « Super » définies ci-dessous).

Le projet BONUS/GoodHope a été initié conjointement par des scientifiques du Laboratoire d'Environnement Marin (LEMAR; L. Mémery, G. Sarthou), le Laboratoire d'Etudes en Géophysique et Océanographie Spatiale (LEGOS; C. Jeandel), et le Laboratoire de Physique des Océans (S. Speich). La proposition scientifique, ainsi que les demandes de financement et de temps de bateau, ont été préparées par M. Boyé (LEMAR) et S. Speich. Ce projet, et la campagne, ont été soutenus principalement par les organismes français suivants : Institut National des Sciences de l'Univers (INSU), Institut Français pour l'Exploitation de la Mer (IFREMER), Institut Polaire français Paul Emile Victor (IPEV), l'Agence Nationale pour la Recherche (ANR), l'Institut pour la Recherche et le Développement (IRD), et l'Institut Universitaire Européen de la Mer (IUEM) de l'Université de Bretagne Occidentale (UBO). Toutes les équipes étrangères ont par ailleurs reçu un soutien de leurs programmes nationaux.

## II. La campagne GOODHOPE 2008

### II.1. Contributions aux mesures

La campagne BONUS/GoodHope a été réalisée à bord du R/V Marion Dufresne, navire de la compagnie CMA-CGM affrété par l'Institut Paul Emile Victor (IPEV Brest), et placé sous la responsabilité du Commandant Pierre Courtès. Cette campagne pluridisciplinaire a bénéficié d'une coopération étroite entre plusieurs Laboratoires, décrite dans le rapport de campagne (Speich et Dehairs, 2008). Dans la liste des participants du tableau ci-dessous sont seulement indiquées les fonctions des scientifiques ayant contribué aux mesures faisant l'objet de ce rapport (surlignés). Outre ce personnel embarqué, nous devons souligner la contribution de J.P. Guillou (du Groupe Technique du Laboratoire de Physique des Océans) à la préparation technique de la campagne.

Un total de 111 profils bathysonde a été réalisé, en 79 positions géographiques. En chaque position était systématiquement réalisé un profil de la surface au fond. En certaines positions, des profils supplémentaires ont été réalisés (surface-fond ou échantillonnage vertical partiel) avec l'objectif principal de prélèvement d'eau pour des analyses bio-géochimiques. Les stations ne comprenant qu'un profil surface-fond ont été nommées stations « Normales ». Les positions lieux de plusieurs profils bathysondes (et d'autres types de mesures) constituaient les stations « Larges » ou « Super ».

En plus des opérations de stations bathysonde, les opérations de physique ont concerné :

- Le déploiement de deux mouillages CPIES (écho-sondeurs inversés).
- Le lâcher de 17 profileurs PROVOR dans le cadre du programme ARGO.
- Diverses mesures en route : ADCP de coque, thermosalinomètre, XBT (142), paramètres atmosphériques.

Les mesures XBT étaient sous la responsabilité de l'Université de Cape town (S. Swart, I. Halo), et certaines mesures atmosphériques sous celle de E. Key (CETP). Les autres mesures de paramètres de physique étaient sous la responsabilité du Laboratoire de Physique des Océans (Brest), avec une contribution importante de la DT/INSU (Brest), par la participation de C. Guillermin et L. Scouarnec, et la fourniture du châssis bathysonde et du système de prélèvement. S. Gladyshev, de l'Institut SHIRSHOV de Moscou, responsable des autres campagnes



d'hydrologie du projet GoodHope, participait également à l'acquisition des mesures d'hydrologie.



*L'équipe scientifique participant à la campagne GOODHOPE 2008*

**Participants à la campagne :** (les contributeurs aux mesures d'hydrologie sont surlignés)

**Scientifiques :**

<b>Nom</b>	<b>Institut</b>	<b>Fonction</b>	<b>Nationalité</b>
Amado José Luis	UAC Barcelone		Espagne
<b>Arhan Michel</b>	<b>Ifremer /LPO</b>	<b>Responsable CTD</b>	<b>France</b>
Arsouze Thomas	LEGOS		France
Barnes Kirsten	UCT		Afrique du Sud
Bown Johan	UBO/LEMAR		France
Boye Marie	UBO/LEMAR		France
<b>Branellec Pierre</b>	<b>Ifremer /LPO</b>	<b>Responsable S et O<sub>2</sub></b>	<b>France</b>
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Cardinal Damien	Africamuseum Tervuren		France
Casacuberta Nùria	UAC Barcelone		Espagne
Cavagna Anne-Julie	Université Bruxelles		France
Chever Fanny	UBO/LEMAR		France
<b>Cortès Norbert</b>	<b>Ifremer /LPO</b>	<b>Quart CTD</b>	<b>France</b>
Corvaisier Rudolph	UBO/LEMAR		France
Dehairs Frank	VUB	Chef de mission	Belgique
Dellile Bruno	Université Liège		France
Eztat Ullah	LSCE		France
Fripiat François	Africamuseum Tervuren		Belgique
<b>Gladyshev Sergey</b>	<b>SIO Moscou</b>	<b>Quart CTD</b>	<b>Russie</b>
Geilfus Nicolas-Xavier	Université de Liège		Belgique
Gonzalez-Davila Melchior	ULPGC		Espagne
Gelay Amélie	LOV		France
Guenneugues Audrey	IUEM		France
Grossteffan Emilie	OSU-IUEM		France
<b>Guillerm Christophe</b>	<b>DT/INSU</b>	<b>Quart CTD</b>	<b>France</b>
Halo Issufo	UCT		Afrique du Sud
<b>Hamon Michel</b>	<b>Ifremer /LPO</b>	<b>Quart CTD</b>	<b>France</b>
Joubert Warren	CSIR		Afrique du Sud
<b>Kermabon Catherine</b>	<b>Ifremer /LPO</b>	<b>Quart CTD</b>	<b>France</b>
Kestenare Elodie	LEGOS		France
Key Erika	CETP		Etats-Unis
<b>Lagadec Catherine</b>	<b>Ifremer /LPO</b>	<b>Quart CTD</b>	<b>France</b>
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Lacan François	LEGOS		France
<b>Le Bot Philippe</b>	<b>Ifremer /LPO</b>	<b>Analyses O<sub>2</sub></b>	<b>France</b>
<b>Le Boyer Arnaud</b>	<b>UBO/LPO</b>	<b>Quart CTD</b>	<b>France</b>
<b>Leizour Stéphane</b>	<b>Ifremer /LPO</b>	<b>Quart CTD</b>	<b>France</b>
Le Moigne Frédéric	UBO		France
Masson Annick	UBO		France
Messageur Christophe	Ifremer /LPO		France
Monteiro Pedro	CSIR		Afrique du Sud
Pasquero Vincent	Université de Paris 7		France
Pastor Lucie	IPGP Univ. Paris 7		France
Perrot Xavier	UBO /LPO		France
Perruche Coralie	UBO		France
Planchon Frédéric	Africamuseum Tervuren		France
Radic Amandine	LEGOS Univ. Toulouse		France
Richard Maxime	UBO /LPO		France
<b>Ruppolo Volfrango</b>	<b>ENEA</b>	<b>Analyses S</b>	<b>Italie</b>
Santana-Casiano Magdalena	ULPGC		Espagne
Sarthou Géraldine	LEMAR		France

Scouarnec Lionel	DT/INSU	Quart CTD	France
Speich Sabrina	Ifremer /LPO	Chef de mission	Italie
Swart Neil	UCT		Afrique du Sud
Swart Sebastiaan	UCT		Afrique du Sud
Thomalla Sandy	UCT		Afrique du Sud
Verdeny Elisabet	UAC		Espagne
Viollier Eric	IPGP Univ. Paris 7		France
Wake Bronwyn	LEMAR		Australie
Waldron Howard	UCT		Afrique du Sud
Zeppa Pierre	IPGP Univ. Paris 7		France

### Personnel IPEV :

Nom	Institut	Fonction	Nationalité
Léau Hélène	IPEV	Responsable	France
Millet Martin	IPEV	Informaticien	France
Rigaud Frédéric	IPEV	Resp. Informatique	France
Reaud Yvan	IPEV	Logistique	France
Sangiardi Pierre	IPEV	Resp. Equipement	France

### Instituts :

Africamuseum : Musée Royal d'Afrique Centrale, Tervuren (Belgique)

CETP : Centre d'Etudes des Environnements Terrestres et Planétaires, Guyancourt

CSIR : Council for Scientific and Industrial Research (Afrique du Sud)

ENEA : Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile, Rome (Italie)

INSU : Institut National des Sciences de l'Univers, Brest

IPEV : Institut Paul Emile Victor, Brest

IPGP : Institut de Physique du Globe de Paris

IUEM : Institut Universitaire Européen de la Mer, Brest

LEGOS : Laboratoire d'Etudes en Géophysique et Océanographie Spatiale, Toulouse

LEMAR : Laboratoire des Sciences de L'Environnement Marin, UBO, Brest

LOV : Laboratoire d'Océanographie de Villefranche

LPO : Laboratoire de Physique des Océans, UMR 6523 (CNRS, Ifremer, UBO) Brest

LSCE : Laboratoire des Sciences du Climat et de l'Environnement, Gif sur Yvette

OSU-IUEM : Observatoire des Sciences de l'Univers, IUEM, Brest

UAC: Université autonome de Catalogne, Barcelone (Espagne)

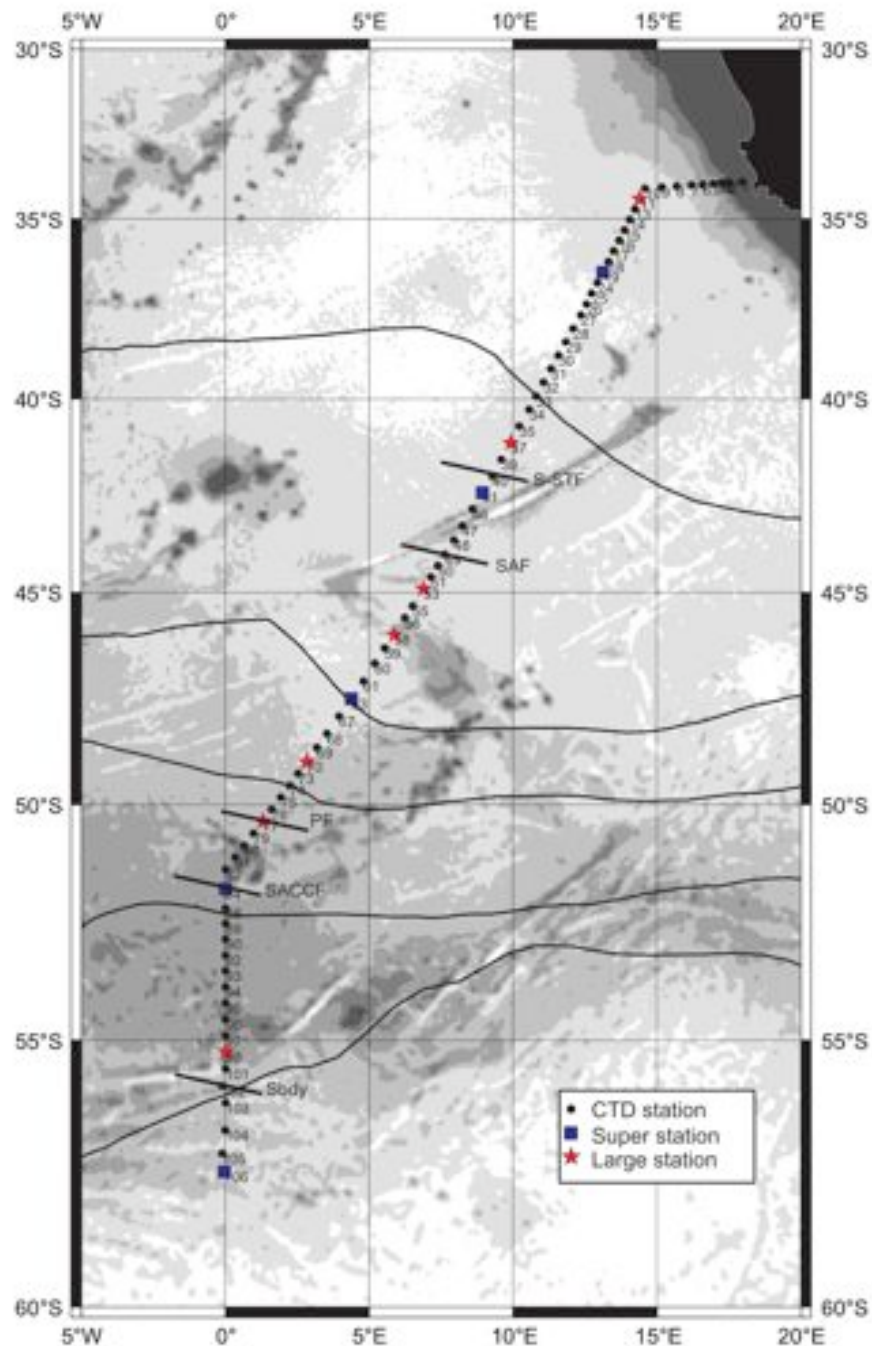
UBO : Université de Bretagne Occidentale, Brest

UCT : Université de Cape Town (Afrique du Sud)

ULPGC : Universidad de Las Palmas de Gran Canaria, Iles Canaries (Espagne)

VUB : Vrije Universiteit, Bruxelles (Belgique)

## II.2. Liste des stations



**Fig. 1 : Positions des Stations**

Le tableau, ci-dessous, indique la date et la position du début de chaque station CTD, la concordance avec les stations géographiques, et différencie les stations CTD « Normales » (noir), « Grandes » (bleu), et « Super » (vert). Les deux profils surlignés en jaune correspondent à une station d'inter-comparaison avec des profils réalisés lors d'une campagne allemande.

Station CTD GH	Station Géogra.	Date	Heure	Latitude	Longitude	Sonde (m)	Pres. Max (dbar)
0	0	13/02/08	18-18-00	S 33 58.63	E 17 13.58	1840	1860
1	1	13/02/08	23-45-00	S 33 56.35	E 17 57.36	185	177
2	2	14/02/08	02-50-00	S 33 57.63	E 17 31.23	371	367
3	3	14/02/08	05-52-00	S 33 58.13	E 17 24.59	1072	982
4	4	14/02/08	09-55-00	S 33 58.50	E 17 18.33	1380	1364
5	5	14/02/08	13-51-00	S 33 59.70	E 16 57.12	2526	2543
6	6	14/02/08	18-06-00	S 34 0.80	E 16 35.24	3026	3061
7	7	14/02/08	23-10-00	S 34 1.99	E 16 12.00	3593	3635
8	8	15/02/08	05-03-00	S 34 3.68	E 15 41.21	4039	4103
9	9	16/02/08	08-11-00	S 34 5.55	E 15 9.77	4296	4319
10	10	16/02/08	19-26-00	S 34 7.44	E 14 35.00	4407	4483
<b>11</b>	<b>11 L1</b>	<b>17/02/08</b>	<b>04-44-00</b>	<b>S 34 25.44</b>	<b>E 14 24.30</b>	<b>4506</b>	<b>4587</b>
<b>12</b>	<b>11 L1</b>	<b>17/02/08</b>	<b>13-40-00</b>	<b>S 34 25.63</b>	<b>E 14 24.56</b>	<b>4510</b>	<b>252</b>
13	12	17/02/08	16-32-00	S 34 43.56	E 14 13.60	4598	4636
14	13	17/02/08	23-01-00	S 35 1.57	E 14 2.83	4691	4764
15	14	18/02/08	06-35-00	S 35 19.59	E 13 51.93	4710	4784
16	15	18/02/08	12-27-00	S 35 37.53	E 13 40.97	4496	4546
17	16	18/02/08	18-09-00	S 35 55.53	E 13 29.82	4842	4923
18	17	19/02/08	02-52-00	S 36 13.44	E 13 18.58	4842	4933
<b>19</b>	<b>18 S1</b>	<b>19/02/08</b>	<b>17-59-00</b>	<b>S 36 31.40</b>	<b>E 13 7.26</b>	<b>4912</b>	<b>5001</b>
<b>20</b>	<b>18 S1</b>	<b>20/02/08</b>	<b>02-16-00</b>	<b>S 36 31.48</b>	<b>E 13 7.26</b>	<b>4915</b>	<b>1766</b>
<b>21</b>	<b>18 S1</b>	<b>20/02/08</b>	<b>12-09-00</b>	<b>S 36 31.26</b>	<b>E 13 7.09</b>	<b>4923</b>	<b>5002</b>
<b>22</b>	<b>18 S1</b>	<b>21/02/08</b>	<b>07-31-00</b>	<b>S 36 30.42</b>	<b>E 13 7.14</b>	<b>4927</b>	<b>1007</b>
<b>23</b>	<b>18 S1</b>	<b>21/02/08</b>	<b>11-07-00</b>	<b>S 36 27.00</b>	<b>E 13 6.00</b>	<b>4941</b>	<b>1002</b>
24	19	22/02/08	08-23-00	S 36 49.54	E 12 55.98	4980	5064
25	20	22/02/08	15-59-00	S 37 7.09	E 12 44.33	5068	5157
26	21	22/02/08	23-04-00	S 37 25.04	E 12 32.78	5071	5124
27	22	23/02/08	05-14-00	S 37 42.95	E 12 21.13	5046	5094
28	23	23/02/08	12-07-00	S 38 5.51	E 12 5.11	5178	5222
29	24	23/02/08	19-15-00	S 38 27.53	E 11 49.80	5044	5097
30	25	24/02/08	02-30-00	S 38 49.57	E 11 34.40	5175	5222
31	26	24/02/08	08-59-00	S 39 11.49	E 11 19.14	5160	5173
32	27	24/02/08	15-54-00	S 39 33.54	E 11 3.73	4990	5040
33	28	24/02/08	22-37-00	S 39 55.54	E 10 48.37	4780	4825
34	29	25/02/08	05-07-00	S 40 17.47	E 10 33.04	4729	4778
35	30	25/02/08	11-35-00	S 40 43.42	E 10 12.91	4510	4568
<b>36</b>	<b>31 L2</b>	<b>25/02/08</b>	<b>17-45-00</b>	<b>S 41 10.60</b>	<b>E 9 55.04</b>	<b>4521</b>	<b>141</b>
<b>37</b>	<b>31 L2</b>	<b>25/02/08</b>	<b>18-09-00</b>	<b>S 41 10.60</b>	<b>E 9 55.03</b>	<b>4525</b>	<b>4572</b>
<b>38</b>	<b>31 L2</b>	<b>26/02/08</b>	<b>00-53-00</b>	<b>S 41 11.40</b>	<b>E 9 55.31</b>	<b>4500</b>	<b>304</b>
39	32	26/02/08	04-08-00	S 41 36.52	E 9 35.00	4643	4697
40	33	26/02/08	10-37-00	S 42 2.00	E 9 16.27	4628	4669
<b>41</b>	<b>34 S2</b>	<b>26/02/08</b>	<b>20-32-00</b>	<b>S 42 28.14</b>	<b>E 8 55.68</b>	<b>4070</b>	<b>4059</b>
<b>42</b>	<b>34 S2</b>	<b>27/02/08</b>	<b>14-55-00</b>	<b>S 42 28.20</b>	<b>E 8 55.85</b>	<b>4070</b>	<b>4095</b>
<b>43</b>	<b>34 S2</b>	<b>27/02/08</b>	<b>19-24-00</b>	<b>S 42 28.29</b>	<b>E 8 56.01</b>	<b>4070</b>	<b>1000</b>
<b>44</b>	<b>34 S2</b>	<b>27/02/08</b>	<b>22-27-00</b>	<b>S 42 28.13</b>	<b>E 8 55.92</b>	<b>3846</b>	<b>1504</b>
<b>45</b>	<b>34 S2</b>	<b>28/02/08</b>	<b>08-37-00</b>	<b>S 42 28.12</b>	<b>E 8 56.03</b>	<b>4070</b>	<b>352</b>
46	35	28/02/08	13-08-00	S 42 53.60	E 8 34.90	3261	3227
47	36	28/02/08	18-45-00	S 43 19.48	E 8 14.19	2700	2713
48	37	29/02/08	00-01-00	S 43 40.95	E 7 56.09	4657	4700
49	38	29/02/08	06-55-00	S 44 2.44	E 7 37.81	4432	4479
50	39	29/02/08	16-33-00	S 44 19.82	E 7 23.17	3625	3607
51	40	29/02/08	23-23-00	S 44 36.70	E 7 8.06	4649	4692
<b>52</b>	<b>41 L3</b>	<b>01/03/08</b>	<b>15-03-00</b>	<b>S 44 53.87</b>	<b>E 6 53.09</b>	<b>4315</b>	<b>310</b>
<b>53</b>	<b>41 L3</b>	<b>01/03/08</b>	<b>19-56-00</b>	<b>S 44 53.77</b>	<b>E 6 53.14</b>	<b>4328</b>	<b>4371</b>
<b>54</b>	<b>41 L3</b>	<b>02/03/08</b>	<b>01-02-00</b>	<b>S 44 53.72</b>	<b>E 6 53.04</b>	<b>4328</b>	<b>1004</b>
55	42	02/03/08	05-42-00	S 45 19.77	E 6 30.09	4380	4442
56	43	02/03/08	15-27-00	S 45 36.70	E 6 13.89	4280	4336
<b>57</b>	<b>44 L4</b>	<b>02/03/08</b>	<b>23-46-00</b>	<b>S 46 1.47</b>	<b>E 5 51.84</b>	<b>4100</b>	<b>4151</b>
<b>58</b>	<b>44 L4</b>	<b>03/03/08</b>	<b>07-37-00</b>	<b>S 46 1.01</b>	<b>E 5 52.39</b>	<b>4100</b>	<b>305</b>
59	45	03/03/08	11-44-00	S 46 21.39	E 5 32.65	4282	4321
60	46	03/03/08	18-35-00	S 46 43.32	E 5 11.79	4278	4316

Station CTD GH	Station Géogra.	Date	Heure	Latitude	Longitude	Sonde (m)	Pres. Max (dbar)
61	47	04/03/08	01-32-00	S 47 8.33	E 4 47.44	4684	4716
<b>62</b>	<b>48 S3</b>	<b>04/03/08</b>	<b>12-38-00</b>	<b>S 47 33.25</b>	<b>E 4 22.57</b>	<b>4489</b>	<b>269</b>
<b>63</b>	<b>48 S3</b>	<b>04/03/08</b>	<b>15-04-00</b>	<b>S 47 33.25</b>	<b>E 4 22.56</b>	<b>4480</b>	<b>4537</b>
<b>64</b>	<b>48 S3</b>	<b>05/03/08</b>	<b>11-11-00</b>	<b>S 47 32.72</b>	<b>E 4 22.10</b>	<b>4479</b>	<b>4527</b>
<b>65</b>	<b>48 S3</b>	<b>05/03/08</b>	<b>16-44-00</b>	<b>S 47 33.23</b>	<b>E 4 22.45</b>	<b>4490</b>	<b>1021</b>
<b>66</b>	<b>48 S3</b>	<b>06/03/08</b>	<b>04-32-00</b>	<b>S 47 33.28</b>	<b>E 4 22.48</b>	<b>4490</b>	<b>1003</b>
67	49	06/03/08	10-43-00	S 47 58.24	E 3 57.42	4391	4432
68	50	06/03/08	20-35-00	S 48 22.73	E 3 31.46	4056	4090
69	51	07/03/08	02-57-00	S 48 42.08	E 3 10.70	3900	3943
<b>70</b>	<b>52 L5</b>	<b>07/03/08</b>	<b>08-58-00</b>	<b>S 49 1.69</b>	<b>E 2 49.89</b>	<b>4002</b>	<b>4083</b>
<b>71</b>	<b>52 L5</b>	<b>07/03/08</b>	<b>14-03-00</b>	<b>S 49 1.68</b>	<b>E 2 49.92</b>	<b>4025</b>	<b>317</b>
<b>72</b>	<b>52 L5</b>	<b>07/03/08</b>	<b>18-28-00</b>	<b>S 49 1.67</b>	<b>E 2 49.88</b>	<b>4025</b>	<b>1003</b>
73	53	07/03/08	22-15-00	S 49 17.96	E 2 31.81	4025	4057
74	54	08/03/08	04-10-00	S 49 34.08	E 2 14.07	3794	3814
75	55	08/03/08	09-47-00	S 49 50.05	E 1 55.51	3719	3743
76	56	08/03/08	17-42-00	S 50 6.37	E 1 36.46	3622	3647
<b>77</b>	<b>57 L6</b>	<b>08/03/08</b>	<b>23-12-00</b>	<b>S 50 22.38</b>	<b>E 1 18.09</b>	<b>3576</b>	<b>3598</b>
<b>78</b>	<b>57 L6</b>	<b>09/03/08</b>	<b>05-42-00</b>	<b>S 50 22.50</b>	<b>E 1 18.91</b>	<b>3506</b>	<b>309</b>
79	58	09/03/08	08-37-00	S 50 38.37	E 0 58.49	3504	3510
80	59	09/03/08	14-29-00	S 50 54.26	E 0 39.40	2400	2385
81	60	09/03/08	18-56-00	S 51 10.08	E 0 19.84	2396	2388
82	61	09/03/08	23-47-00	S 51 25.87	E 0 0.60	2674	2669
<b>83</b>	<b>62 S4</b>	<b>10/03/08</b>	<b>05-57-00</b>	<b>S 51 50.97</b>	<b>W 0 0.00</b>	<b>2640</b>	<b>310</b>
<b>84</b>	<b>62 S4</b>	<b>10/03/08</b>	<b>08-33-00</b>	<b>S 51 51.61</b>	<b>E 0 0.42</b>	<b>2632</b>	<b>2556</b>
<b>85</b>	<b>62 S4</b>	<b>10/03/08</b>	<b>20-42-00</b>	<b>S 51 51.36</b>	<b>W 0 0.49</b>	<b>2568</b>	<b>2541</b>
<b>86</b>	<b>62 S4</b>	<b>11/03/08</b>	<b>01-32-00</b>	<b>S 51 51.90</b>	<b>W 0 0.14</b>	<b>2568</b>	<b>1003</b>
<b>87</b>	<b>62 S4</b>	<b>11/03/08</b>	<b>04-33-00</b>	<b>S 51 52.60</b>	<b>E 0 0.38</b>	<b>2554</b>	<b>1006</b>
88	63	11/03/08	22-52-00	S 52 16.37	E 0 0.10	2715	2704
89	64	12/03/08	04-02-00	S 52 36.06	E 0 0.03	2701	2693
<b>90</b>	<b>65 IN</b>	<b>12/03/08</b>	<b>08-39-00</b>	<b>S 52 55.83</b>	<b>W 0 0.01</b>	<b>2624</b>	<b>2613</b>
<b>91</b>	<b>65 IN</b>	<b>12/03/08</b>	<b>12-25-00</b>	<b>S 52 58.92</b>	<b>E 0 0.02</b>	<b>2624</b>	<b>1122</b>
92	66	12/03/08	15-55-00	S 53 15.65	E 0 0.05	2190	2181
93	67	12/03/08	19-54-00	S 53 35.51	E 0 0.01	2693	2671
94	68	13/03/08	00-49-00	S 53 55.16	E 0 0.04	2460	2448
95	69	13/03/08	05-31-00	S 54 15.05	W 0 0.00	2640	2622
96	70	13/03/08	09-35-00	S 54 34.83	W 0 0.04	1234	1232
97	71	13/03/08	13-02-00	S 54 54.79	E 0 0.25	1433	1410
<b>98</b>	<b>72 L7</b>	<b>13/03/08</b>	<b>18-41-00</b>	<b>S 55 13.85</b>	<b>E 0 1.38</b>	<b>2770</b>	<b>2770</b>
<b>99</b>	<b>72 L7</b>	<b>14/03/08</b>	<b>00-13-00</b>	<b>S 55 13.95</b>	<b>E 0 2.60</b>	<b>2770</b>	<b>1002</b>
<b>100</b>	<b>72 L7</b>	<b>14/03/08</b>	<b>06-09-00</b>	<b>S 55 34.14</b>	<b>E 0 0.21</b>	<b>3600</b>	<b>303</b>
101	73	14/03/08	08-14-00	S 55 34.22	E 0 0.27	3584	3513
102	74	14/03/08	13-54-00	S 55 54.24	W 0 6.84	3695	3653
103	75	14/03/08	19-42-00	S 56 13.97	W 0 0.09	3650	3669
104	76	15/03/08	06-20-00	S 56 45.73	W 0 0.85	3867	3896
105	77	15/03/08	11-45-00	S 57 12.70	W 0 6.86	4364	4401
<b>106</b>	<b>78 S5</b>	<b>15/03/08</b>	<b>16-58-00</b>	<b>S 57 33.13</b>	<b>W 0 2.26</b>	<b>3932</b>	<b>3980</b>
<b>107</b>	<b>78 S5</b>	<b>16/03/08</b>	<b>00-07-00</b>	<b>S 57 33.14</b>	<b>W 0 2.26</b>	<b>3932</b>	<b>3989</b>
<b>108</b>	<b>78 S5</b>	<b>16/03/08</b>	<b>07-27-00</b>	<b>S 57 33.16</b>	<b>W 0 2.25</b>	<b>3940</b>	<b>305</b>
<b>109</b>	<b>78 S5</b>	<b>16/03/08</b>	<b>17-40-00</b>	<b>S 57 33.17</b>	<b>W 0 2.27</b>	<b>3940</b>	<b>1005</b>
<b>110</b>	<b>78 S5</b>	<b>16/03/08</b>	<b>21-57-00</b>	<b>S 57 33.15</b>	<b>W 0 2.27</b>	<b>3950</b>	<b>1004</b>



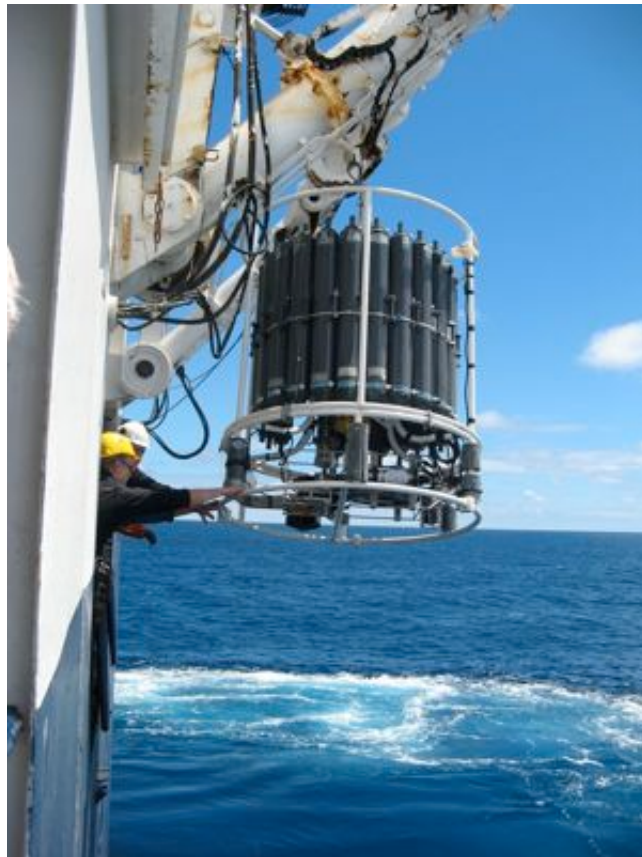
### III. CALIBRATION DES MESURES CTD-O<sub>2</sub>

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#### III.1. Acquisition des données CTD-O<sub>2</sub>

##### III.1.1. Matériel utilisé

L'ensemble bathysonde utilisé pendant la campagne BONUS-GoodHope était composé d'un châssis Seabird SBE32 avec 22 bouteilles de prélèvements de 12 litres (cet ensemble était prêté par l'INSU Brest), d'une sonde SBE 911+ et de deux LADCP appartenant au LPO (après la station 5, le WH300 IRD remplace le WH300 slave LPO).



*Le châssis CTD tel que gréé pendant la campagne*

Des capteurs supplémentaires (INSU) étaient également installés sur ce châssis : transmissomètre Chelsea, fluorimètre Chelsea et un capteur de rayonnement PAR.

La descente de la sonde à une vitesse de 1m/sec et l'approche du fond étaient suivies sur la table EDO du navire grâce aux émissions acoustiques d'un pinger.

Pour cette campagne, les besoins en eau de mer des différents laboratoires nécessitaient des bouteilles de prélèvements de forte capacité. Pour cette raison, nous n'avons pu utiliser le châssis CTD du LPO équipé de 28 bouteilles de 8 litres et avons utilisé le châssis Seabird de l'antenne INSU de Brest équipé de 22 bouteilles de 12 litres. La bathysonde était la nouvelle sonde CTD SBE911+ du LPO, utilisée pour la première fois en remplacement de l'ancienne sonde CTD Neil-Brown Mark III B.

### **III.1.2. Traitement des données**

Les signaux de la sonde CTD-O<sub>2</sub> sont transmis au système d'acquisition d'hydrologie du LPO. Ce système, également nouveau, est conçu autour de PC sous Windows XP pour l'acquisition, la visualisation, le pré-traitement avec les logiciels constructeurs et de PC Linux pour la réduction, le traitement des données avec les logiciels LPO (cf. Refonte de l'hydrologie. C. Kermabon, rapport interne OPS/LPO 08-04) et les sauvegardes.

Ce système permet de visualiser en temps réel les différents paramètres mesurés et calculés sur les profils tout en contrôlant la qualité du signal transmis par la sonde. L'ensemble des données transmises par la sonde, à la cadence de 24 cycles par seconde, est sauvegardé sur disque.

La validation et la réduction des données (à un pas d'échantillonnage de 1 décibar) ont été effectués après la campagne conformément à la procédure décrite dans Kermabon et Arhan (2008). Une première étape, utilisant le logiciel SBEData Processing de SeaBird, a permis d'effectuer les traitements de base suivants : Conversion des données en ASCII, filtrage de la pression, alignement des paramètres, prise en compte de l'effet de masse thermique pour la cellule de conductivité, et flaggage des cycles relativement à la vitesse de la sonde.

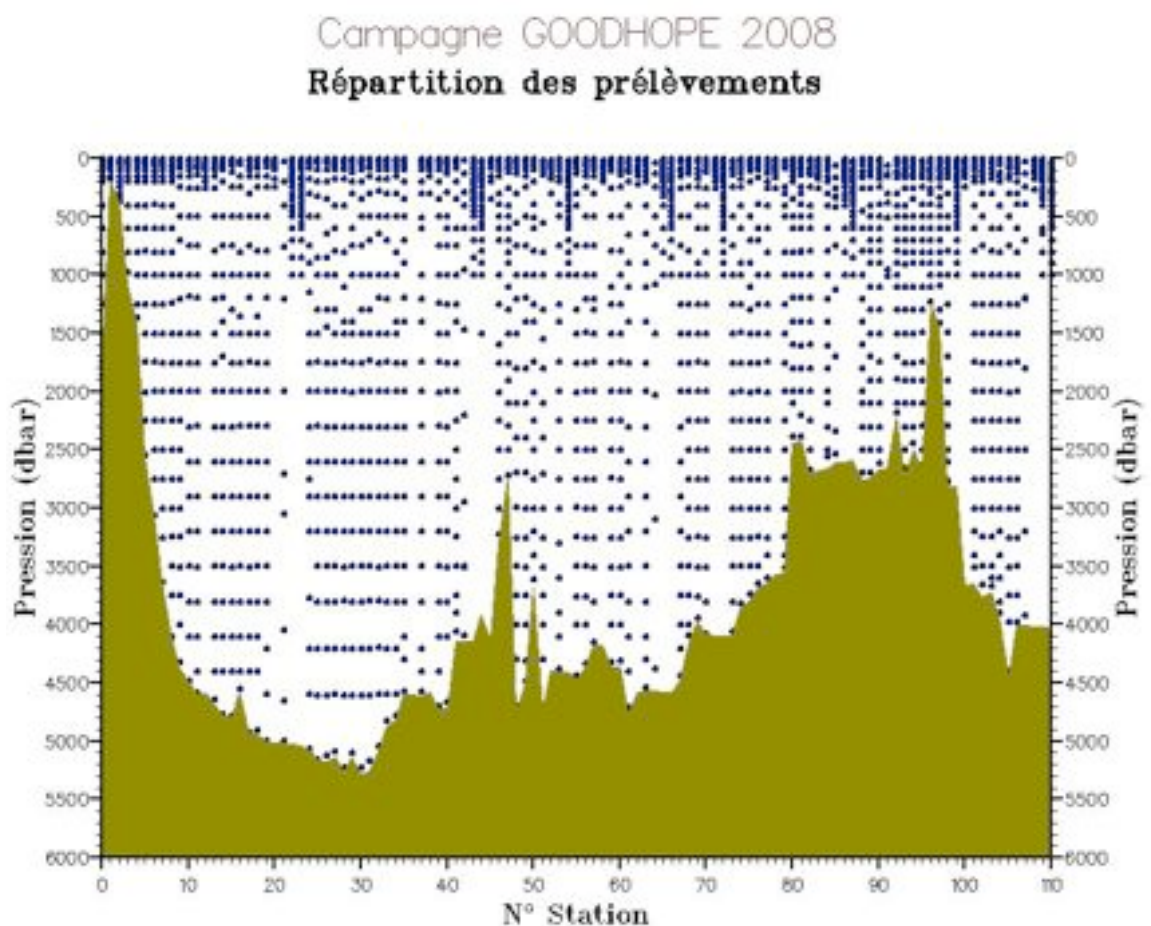
Dans une deuxième étape, l'élimination des cycles non valides, et la réduction des données, a été effectuée en utilisant un logiciel LPO utilisant les gradients de paramètres comme critères d'élimination. Dans un premier temps, une détermination des histogrammes des gradients permet de choisir les valeurs-seuil au-delà desquelles les paramètres seront rejetés. Les valeurs applicables à la campagne BONUS-GoodHope sont indiquées dans le rapport interne



Kermabon et Arhan (2008). Après élimination des cycles non valides, la décimation des données a été effectuée en calculant, pour chaque valeur entière de pression, la moyenne des paramètres sur l'intervalle de largeur 1 dbar centré sur cette valeur.

## III.2. Échantillonnage en mer

Le Carousel Water Sampler SBE 32 de chez Seabird permet de déclencher la fermeture des bouteilles lors de la remontée de la sonde, aux niveaux choisis par l'utilisateur. Les niveaux de prélèvement sont répartis sur toute la hauteur du profil de manière à échantillonner toutes les masses d'eau. La figure 2 présente l'ensemble des niveaux auxquels salinité et oxygène dissous ont été mesurés. Au cours de la campagne, 2378 bouteilles ont été fermées, 1725 mesures de salinité et 1763 mesures d'oxygène dissous ont été effectuées à bord.



**Fig. 2 : Section verticale Nord-Sud indiquant le niveau des prélèvements à chaque station de la campagne GOODHOPE 2008.**

Dès la remontée en surface, les échantillons sont prélevés dans chaque bouteille suivant l'ordre préconisé par les instructions de WOCE. Les bouteilles sont échantillonnées suivant leur chronologie de 1 à 24 (les bouteilles 22 et 23 sont manquantes à cause de la présence du LADCP

regardant vers le haut). Pour estimer l'erreur sur les méthodes analytiques, des doublets ont été effectués à quelques stations en déclenchant la fermeture de deux bouteilles au même niveau de prélèvement. Nous disposons ainsi de 39 doublets validés en salinité et de 51 doublets validés en oxygène.

### **III.3. Analyse des échantillons de salinité et d'oxygène dissous**

La campagne BONUS-GoodHope était également la première campagne utilisatrice du nouveau conteneur d'analyses chimiques du LPO, acheté en 2007 et aménagé par la société Bizien – Groupe Hoet SA à Saint Pol de Léon.

L'appareillage pour les mesures d'Oxygène a été renouvelé (Titrimo Metrohm 798) ainsi que l'usine d'eau distillée (Super Q 3 bols et Milli Q Academic). La climatisation, élément important pour la qualité des mesures, a été dimensionnée spécialement pour ce conteneur. De nombreux séchoirs pour la verrerie ont été installés.



*Vue intérieure du nouveau conteneur d'analyses chimiques LPO*

#### **III.3.1. Salinité**

Les échantillons sont recueillis après trois rinçages successifs dans des flacons de 125 ml dont l'étanchéité est assurée par un joint en caoutchouc. Dès la fin des prélèvements, les échantillons sont placés dans le conteneur d'analyses dont la température contrôlée est fixée à 20 °C ( $\pm 1$  °C). Les échantillons sont analysés 20 à 30 heures après le prélèvement pour leur permettre d'atteindre un équilibre thermique.

La salinité des échantillons est déterminée d'après l'équation PSS 78 (UNESCO, 1981). Le salinomètre est standardisé en utilisant des flacons d'eau normale du lot P 148 ( $K_{15} = 0.99982$ ,

S = 34.993) fabriquées par l'OSIL (UK), le 12 octobre 2006. Pendant toute la campagne, la température du bain thermostaté est fixée à 21 °C.

Tous les jours, avant chaque série d'analyses, la standardisation de l'appareil est vérifiée puis ajustée si nécessaire. Ce suivi a été réalisé par P. Branellec. Après l'analyse des échantillons d'une station, la standardisation est vérifiée par une nouvelle ampoule d'eau normale puis consignée sur la fiche d'analyses. Pour chaque échantillon, trois rinçages successifs de la cellule sont effectués avant de faire deux ou trois lectures séparées à chaque fois par un rinçage.

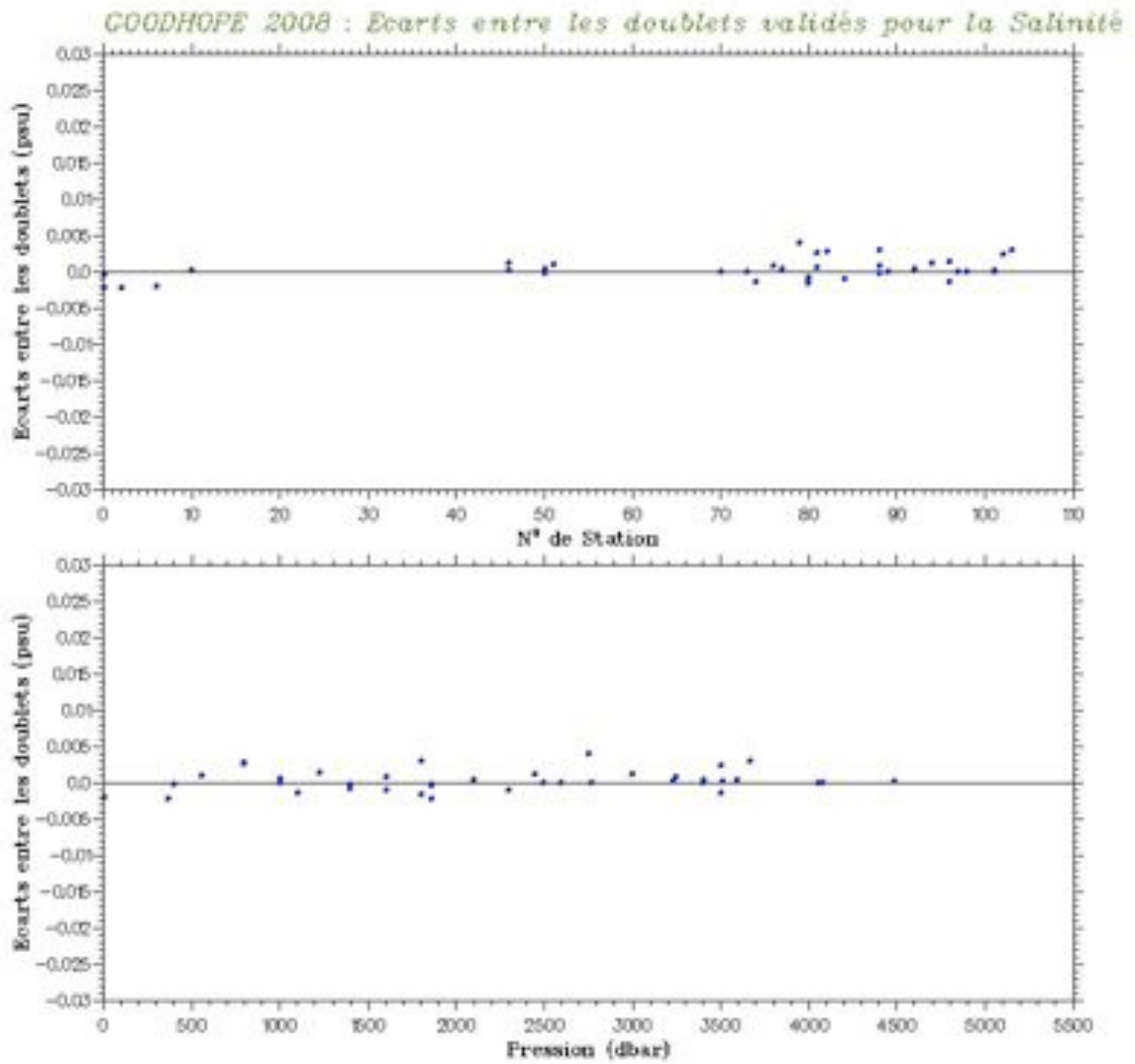
Tous les échantillons de salinité ont été analysés sur le salinomètre n° 62302 de type PORTASAL de chez Guildline. Les deux appareils (62302 et 68625) ont été vérifiés par l'OSIL (Ocean Scientific International Ltd.) avant la campagne. La stabilité des salinomètres a été très satisfaisante pendant la durée de la campagne. Les mesures de salinité ont été réalisées par Volfango Ruppolo.

La figure 3 montre les écarts de salinité obtenus sur les doublets validés par la calibration : ils ont été réalisés à des niveaux de prélèvement compris entre la surface et le fond et ont été recueillis à des stations réparties sur toute la durée de la campagne.

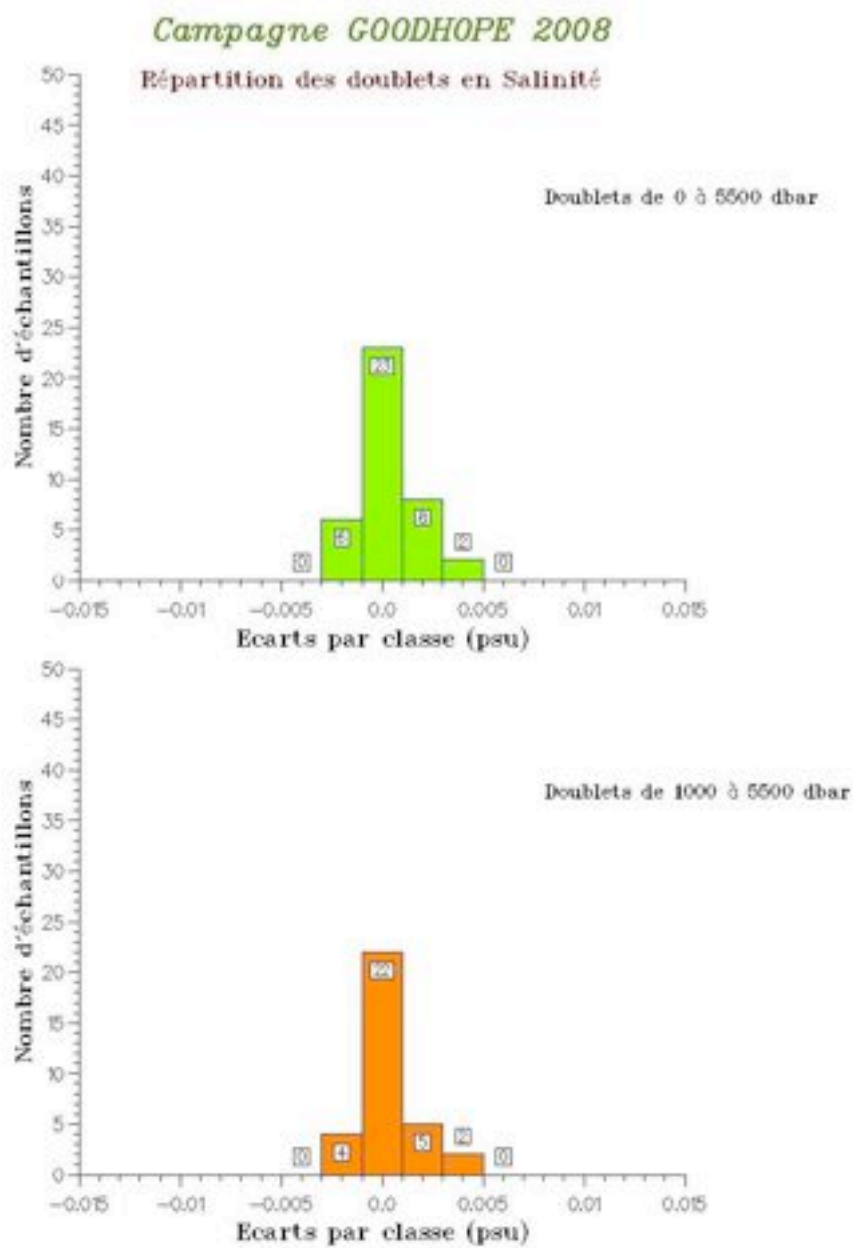


*Poste d'analyse de la Salinité*

Les écarts entre deux mesures de salinité ont été étudiés pour 39 doublets validés : la figure 4 en présente l'histogramme. On observe que dans 59 % des cas l'écart de salinité mesurée sur les deux bouteilles est inférieur à 0.001 et dans 95 % des cas il est inférieur à 0.003. L'écart type est de 0.0014, et en ne considérant que les doublets effectués à pression supérieure à 980 dbar, l'écart type est de 0.0013.



**Fig. 3 :** Ecart de salinité entre deux bouteilles fermées au même niveau :  
a) en fonction du numéro de station à laquelle a été réalisé le doublet,  
b) en fonction de la pression à laquelle a été réalisé le doublet.



**Fig. 4 :** Histogramme des écarts de salinité sur les doublets :  
 a) pour les 39 doublets validés de la campagne,  
 b) pour les 33 doublets réalisés à pression supérieure à 980 dbar.



### III.3.2. Oxygène dissous

Pour analyser l'oxygène dissous, les échantillons sont recueillis dans des flacons à bouchon plongeur de 120 ml. Après remplissage du flacon, la température de l'échantillon est notée avant de laisser déborder trois fois l'équivalent de volume du flacon. Après addition successive des deux réactifs ( $\text{MnCl}_2$  et  $\text{NaOH-NaI}$ ) et bouchage, une agitation est pratiquée pendant 30 secondes. Dès que tous les prélèvements sont terminés, les flacons sont retournés un à un pour remettre en suspension le précipité. Les échantillons sont entreposés dans le conteneur laboratoire à la température de  $20\text{ }^\circ\text{C}$  ( $\pm 1\text{ }^\circ\text{C}$ ) puis analysés dans un délai de 4 à 24 heures. Le nouveau capteur d'oxygène Seabird monté sur la sonde est rincé après chaque station avec une solution de Triton XT100 diluée (0.1 %) comme préconisé par le constructeur (Seabird Application Note n° 64).

Les conditions opératoires et la méthode d'analyse sont conformes aux recommandations de WOCE (WOCE Operations Manual, 1991). Après acidification dans le flacon de prélèvement, l'iode libéré est dosé par une solution de thiosulfate de sodium dont la normalité est de l'ordre de 0.02 N. Celle-ci est préparée en quantité suffisante pour analyser une centaine de stations : sa normalité est déterminée tous les jours, avant le début des séries d'analyses, comparativement à une solution d'iodate de potassium dont la normalité, obtenue par pesée, est 0.019994. Cette calibration journalière a été réalisée par P. Branellec.

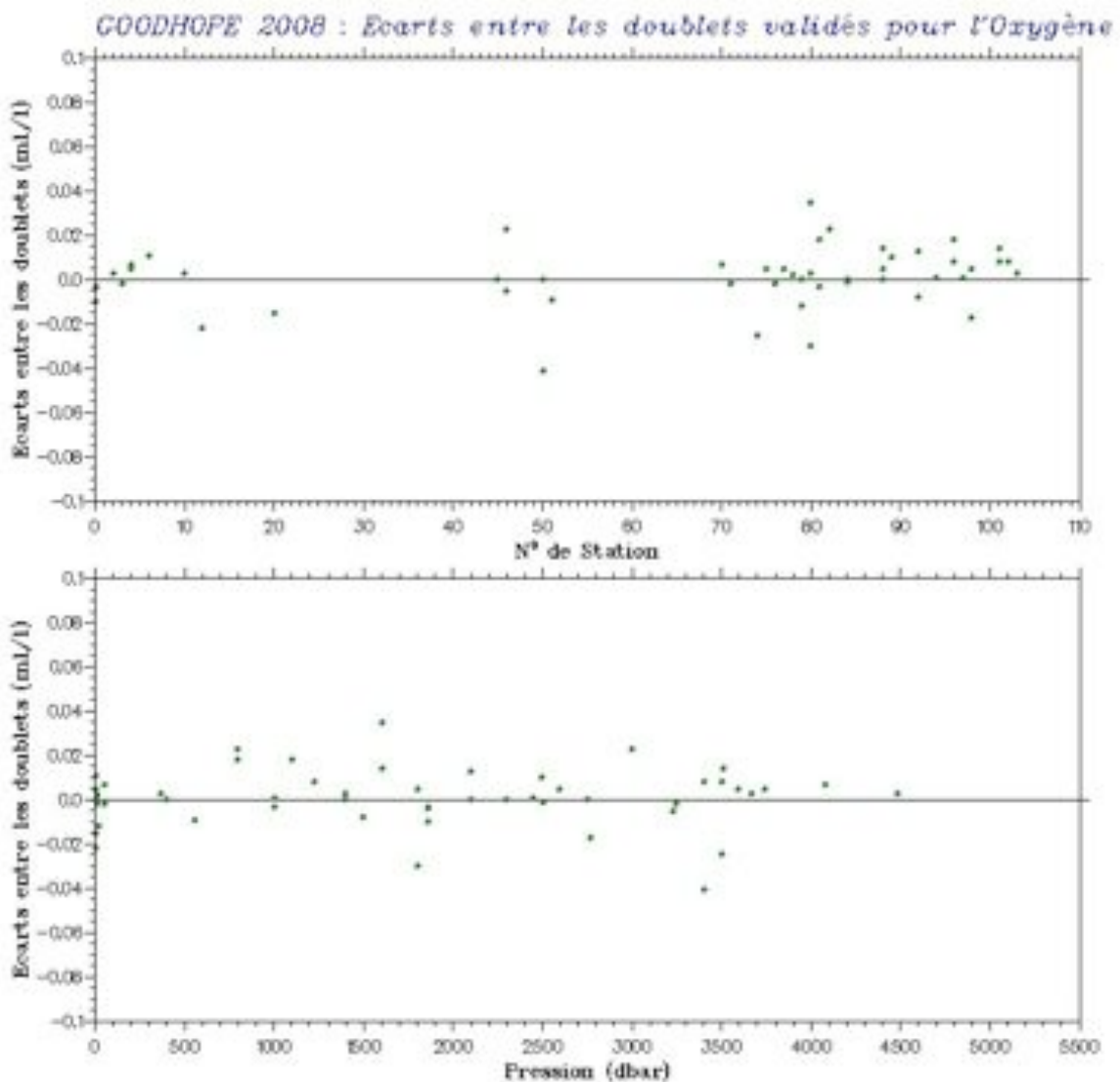


Le dosage est piloté par un titrino (Metrohm 798) associé à une électrode de platine qui mesure le potentiel de la réaction et contrôle la burette de thiosulfate de sodium. Le volume de thiosulfate nécessaire à la réduction de l'iode est déduit de la détermination automatique du point d'inflexion sur la courbe de potentiel à l'équivalence. Les mesures d'oxygène ont été réalisées par Philippe Le Bot.

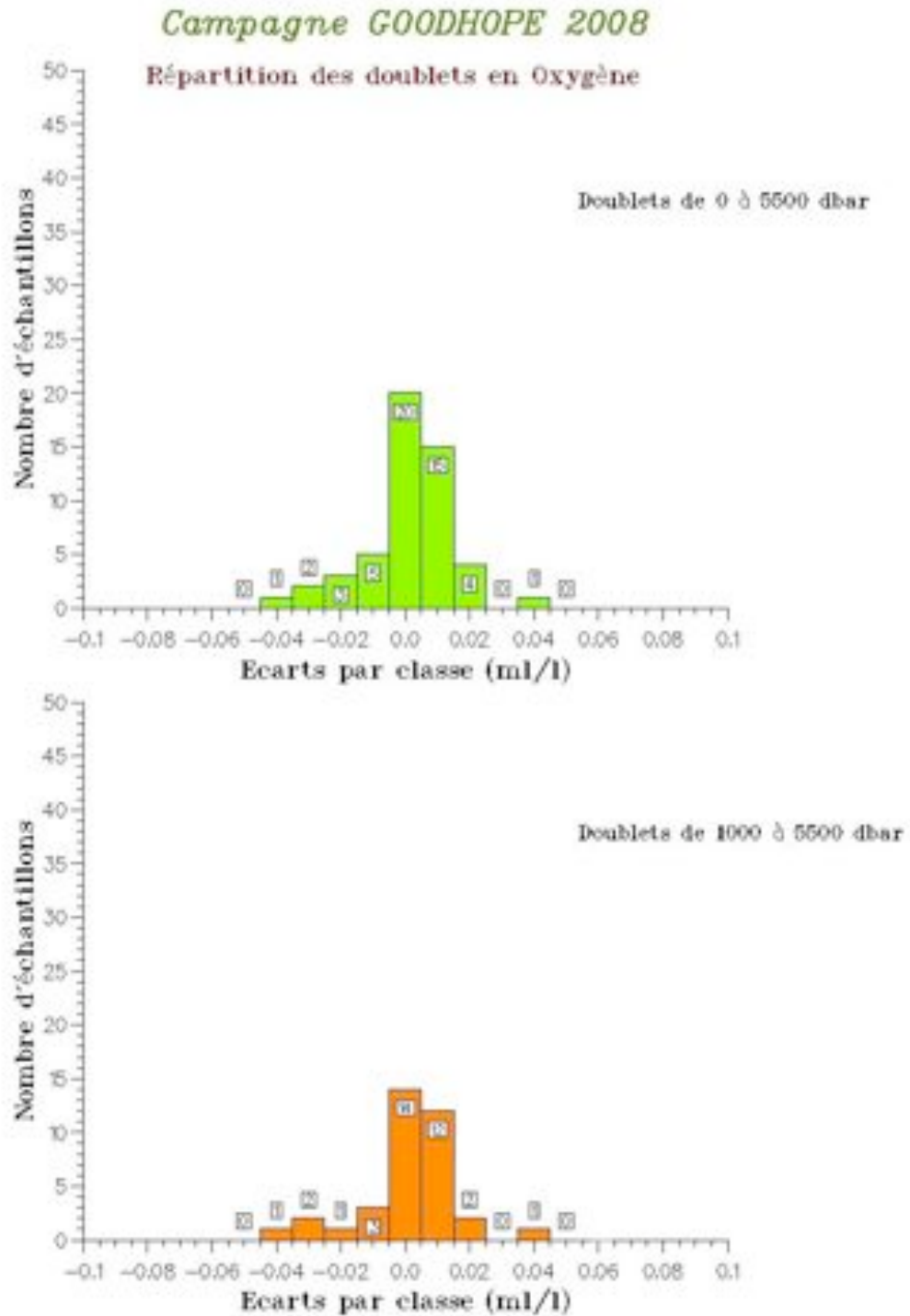
*Poste d'analyse de l'Oxygène dissous*



La figure 5 montre les écarts obtenus entre les mesures effectuées sur les 51 doublets validés : la figure 6 en présente des histogrammes. Pour l'ensemble des doublets prélevés entre le fond et la surface, 39 % des écarts sont inférieurs à 0.005 ml/l et 68 % sont inférieurs à 0.015 ml/l pour un écart type de 0.013 ml/l. En éliminant les niveaux compris entre la surface et 980 dbar, où la variabilité en oxygène est plus importante, l'écart type est de 0.014 ml/l.



**Fig. 5 :** Ecart en oxygène entre deux bouteilles fermées au même niveau :  
 a) en fonction du numéro de station à laquelle a été réalisé le doublet,  
 b) en fonction de la pression à laquelle a été réalisé le doublet.



**Fig. 6 :** Histogramme des écarts en oxygène sur les doublets :  
 a) pour les 51 doublets validés de la campagne,  
 b) pour les 36 doublets réalisés à pression supérieure à 980 dbar.

### **III.4. Étalonnage de la mesure de pression sur les profils CTD**

La sonde SBE9+ est équipée d'un capteur de pression Paroscientific à digiquartz dont la précision annoncée par le constructeur est de 0.015% de la pleine échelle (10000 psi), soit dans notre cas  $\pm 1.5$  psi ou  $\pm 1.0$  dbar, la résolution annoncée étant de 0.001%, soit 0.1 psi ou 0.07 dbar.

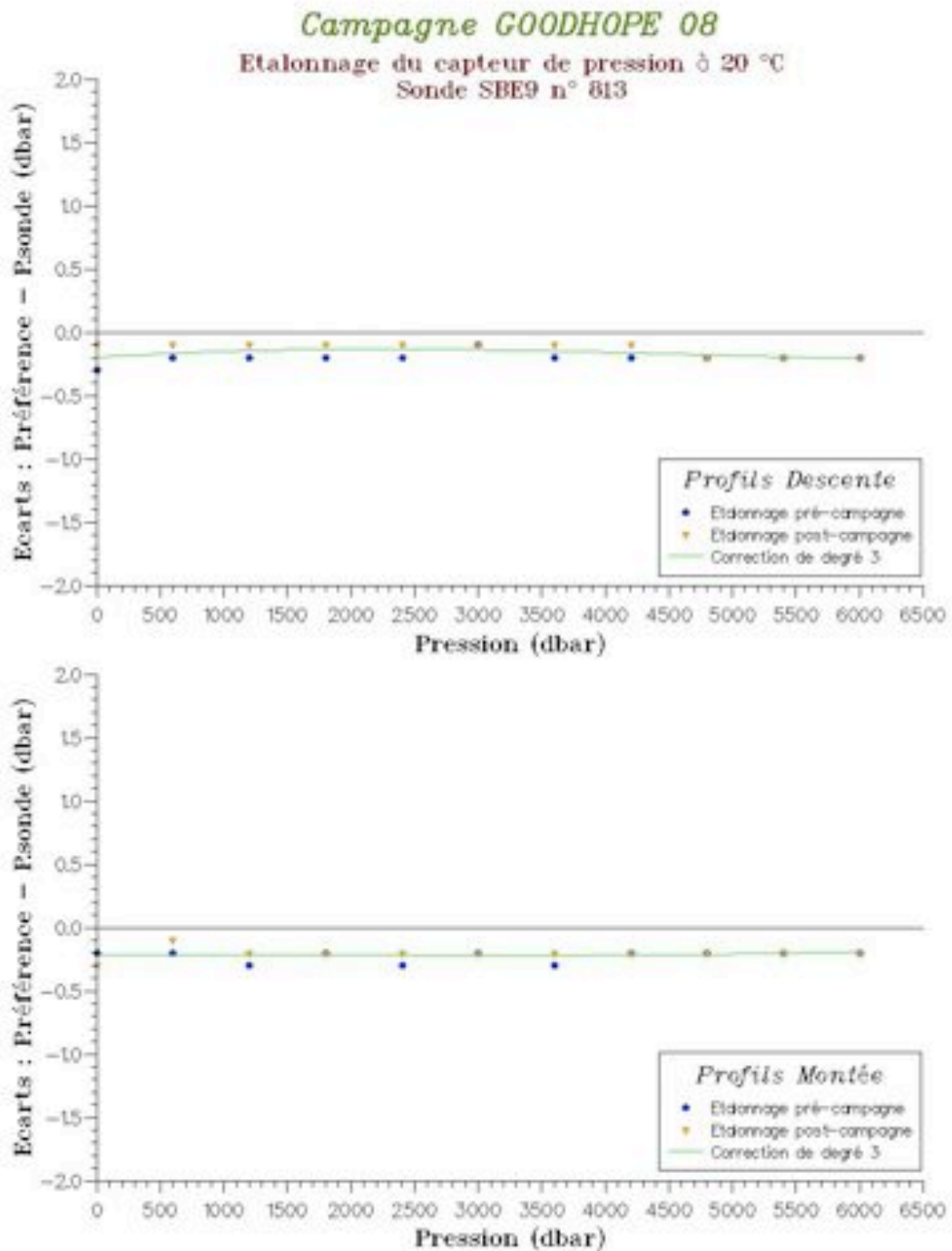
De manière habituelle, les capteurs sont étalonnés avant et après la campagne au laboratoire de métrologie de l'IFREMER, qui est accrédité par le Cofrac. Le capteur est branché sur un banc balance Desgranges et Huot qui délivre une pression référence avec une erreur maximale de  $\pm 0.75$  dbar au niveau 6000 dbar.

#### **III.4.1. Etalonnage du capteur dans les conditions du laboratoire à 20°C**

Trois cycles de montée et descente en pression, par paliers successifs de 600 dbar, de 0 à 6000 dbar, sont réalisés à la température du laboratoire soit 20 °C ( $\pm 1$  °C). Les résultats obtenus sont présentés sur la figure 7 sous forme d'écarts moyens entre la pression référence délivrée par le banc balance et la pression équivalente indiquée par le capteur sur les cycles montée en pression (profil descente de la sonde) et descente en pression (profil montée). La répartition des points résultant des étalonnages pré- et post-campagnes, peut être corrigée par un polynôme de degré 3. Ces résultats mettent en évidence une excellente stabilité du capteur : tous les points d'étalonnage sont situés à moins de 0.1 dbar de la courbe de correction.

#### **III.4.2. Influence de la température statique**

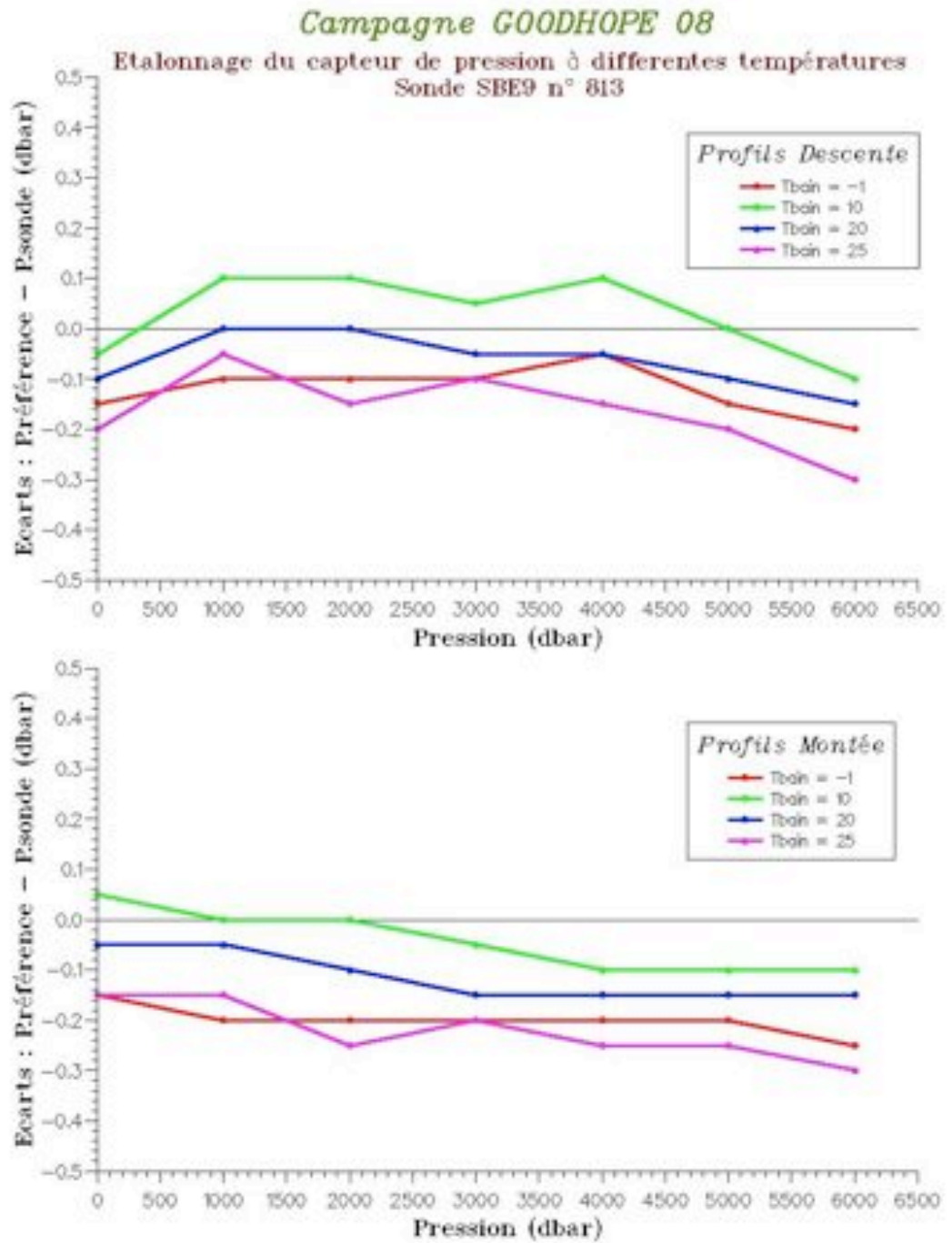
La réponse du capteur de pression est influencée par la température extérieure (voir figure 8). La température océanique présente des écarts supérieurs à 20 °C entre la surface et le fond. L'influence statique de la température sur le capteur de pression est étudiée au laboratoire en immergeant la sonde dans un bain d'eau à différentes températures. Après stabilisation de la température du bain, on effectue un cycle de montée puis de descente en pression en relevant l'indication du capteur de pression à des paliers séparés de 1000 dbar. Cette opération est répétée en cinq différents points de température compris entre 0 et 30 °C.



**Fig. 7 :** Répartition des écarts moyens, tous les 600 dbar, entre la pression de référence et la pression indiquée pour le capteur Paroscientific lors des étalonnages pré et post-campagne à la température du laboratoire (20 °C) :

- a) cycles montée en pression (profils descente),
- b) cycles descente en pression (profils montée).

La courbe de degré 3 qui réduit les écarts est représentée.



**Fig 8** : Réponse du capteur de pression en fonction de la température

La série d'essais montre qu'une différence de température de 26 °C provoque un décalage moyen de l'indication de pression de l'ordre de 0.2 dbar à toutes les pressions expérimentales. Ce décalage est minime comparé à notre ancienne sonde Neil Brown où ce décalage atteignait 6 dbar.

La température extérieure à un niveau de pression donné (profil descente ou montée) est déterminée pour l'ensemble des stations de la campagne en utilisant un profil moyen. La correction de température statique est ainsi obtenue à chaque niveau de pression. L'erreur maximum d'une telle correction (0.06 dbar) est obtenue entre 0 et 3000 dbar. L'erreur est inférieure à 0.03 dbar lorsque la pression est supérieure à 3000 dbar.

La correction de température statique appliquée aux pressions obtenues à la température de 20 °C est de 0.05 dbar en surface (à la pression zéro) et de 0.03 dbar à la profondeur de 6000 mètres dans le cas d'un profil montée en pression.

### **III.4.3. Influence de l'effet dynamique de température**

Le passage de la thermocline, à la descente et à la montée, provoque une variation brutale de température. Ce choc thermique, appelé influence de température dynamique, est simulé en laboratoire afin d'étudier le comportement du capteur qui dépend essentiellement de la qualité de son isolation.

Le capteur a été soumis à une série de chocs thermiques en immergeant brutalement la sonde après un séjour à une température donnée dans un bain plus chaud ou plus froid suivant le cas. Les paramètres transmis par la sonde (pression, température in situ et température interne du capteur de pression) sont enregistrés pendant un temps suffisamment long pour étudier le comportement du capteur après ce phénomène (cf. Note Technique LPO-GT09-01, P. Branellec, M. Hamon).

Ces expériences permettent de constater que la réponse du capteur de pression Paroscientific n'est pas influencée par ce choc thermique. En conséquence aucune correction dynamique n'a été apportée.

#### **III.4.4. Correction de la mesure de pression sur les profils CTD et au niveau des prélèvements**

Après correction de l'indication du capteur de pression à la température du laboratoire soit 20 °C (paragraphe 4.1), on ajoute la correction liée à l'effet statique (paragraphe 4.2).

Ces corrections sont appliquées à chaque type de profil (descente ou montée). Le résultat de ces deux corrections fournit une série de points expérimentaux, séparés de 200 dbar, qui permettent d'appliquer une correction globale à l'indication du capteur de pression enregistrée sur les profils CTD. Ces points expérimentaux, présentés à la figure 9, permettent de calculer les coefficients d'un polynôme de degré 5 qui corrige la valeur de la pression enregistrée en temps réel sur les deux types de profil.

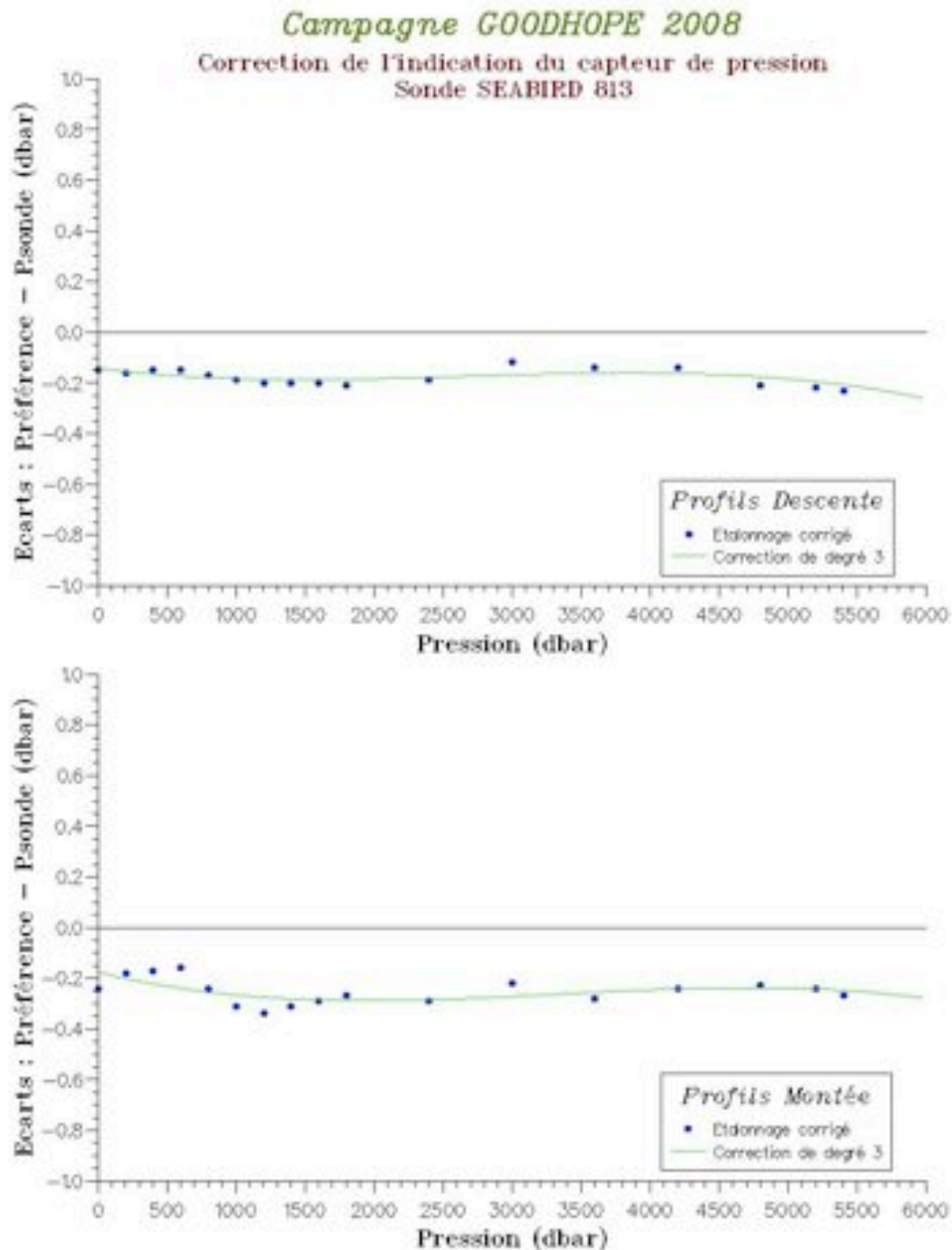
On constate que la correction globale de l'indication du capteur reste inférieure à 0.3 dbar.

#### **III.4.5. Vérifications de la mesure de pression CTD**

L'indication du capteur de pression CTD était relevée à différents niveaux, à chaque station, de manière à établir des comparaisons avec d'autres types de mesures.

##### ***III.4.5.1. Suivi du capteur de pression en surface***

Les niveaux de pression obtenus en surface (en sortie du programme de réduction des données), au début du profil descente et à la fin du profil montée, sont portés au fil des stations sur la figure 10. La grande dispersion sur les pressions surface en début de profil après la station 50 est due aux consignes du bord qui ne voulaient pas garder la CTD près de la surface en raison des mauvaises conditions de mer.

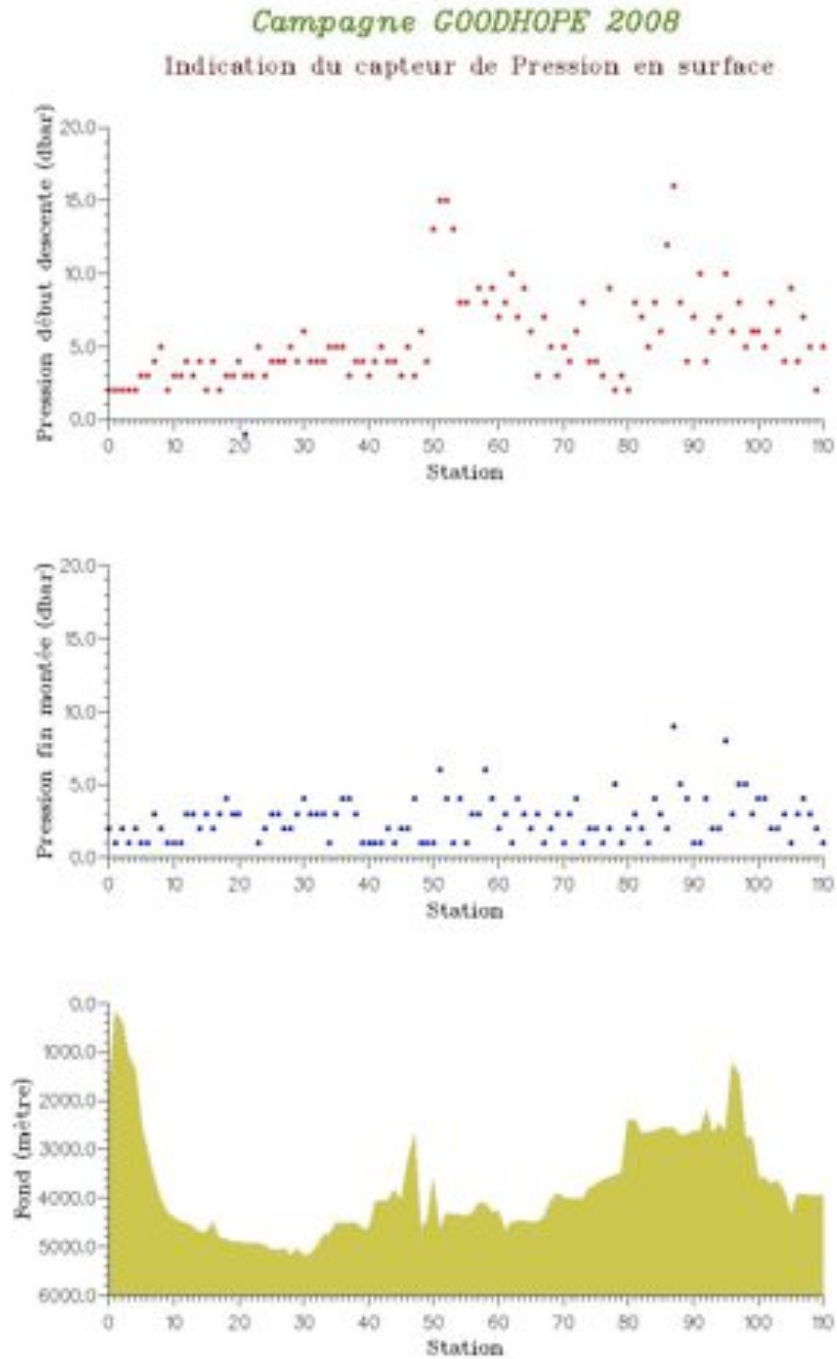


**Figure 9 :** Répartition des écarts entre la pression de référence et la pression indiquée par le capteur Paroscientific après correction, de la linéarité du capteur à 20°C et de l'influence de la température statique :

- a) cycles montée en pression (profils descente),
- b) cycles descente en pression (profils montée).

La courbe de degré 3 qui corrige la pression sur les profils est représentée.





**Fig. 10 :** Suivi de l'indication du capteur de pression en surface :  
 a) au début du profil descente  
 b) à la fin du profil montée

### **III.5. Etalonnage de la mesure de température sur les profils CTD**

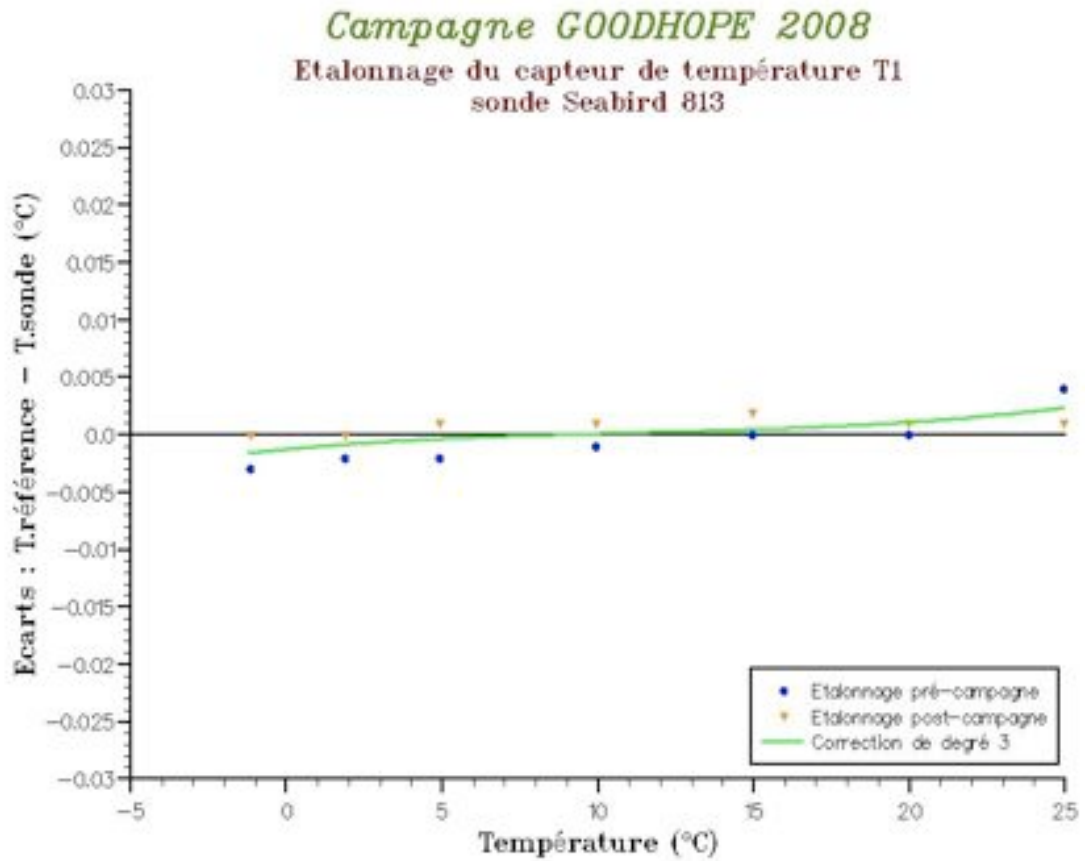
Notre sonde SBE9+ est équipée de deux jeux de capteurs T et C. Le choix entre la température primaire et secondaire est effectué avant la réduction des données en visualisant les mesures brutes sonde à 24 Hz. Les fichiers réduits ne conservent qu'une seule température. Dans la cas de la campagne BONUS-GoodHope, le choix a été fait d'utiliser la température primaire.

Les capteurs de température sont des capteurs SBE3+ de chez Seabird, la résolution de la mesure est de 0.0003 °C et la précision annoncée par le constructeur est de 0.001 °C.

#### **III.5.1. Mode opératoire**

Les sondes du LPO sont régulièrement étalonnées au laboratoire de métrologie de l'IFREMER avant et après chaque campagne. La sonde est totalement immergée dans un bain d'eau thermostaté dont la stabilité en température est strictement contrôlée. La température référence du bain est fournie par un thermomètre à résistance de platine de type Rosemount placé à proximité immédiate du capteur CTD. Ce thermomètre est périodiquement contrôlé et l'agrément fourni par le Laboratoire National de Métrologie et d'Essais (LNE). La température mesurée est exprimée dans l'échelle EIT 90. Plusieurs points de mesure sont ainsi contrôlés en relevant l'indication de température CTD pour la comparer à la température référence du bain en plusieurs points compris entre 0 et 30 °C.

Les mesures de température obtenues sur les profils de la campagne sont corrigées en appliquant un polynôme de degré 3, dont la courbe est présentée sur la figure 11. Cette courbe minimise les écarts obtenus avant et après la campagne : l'erreur maximale est de  $\pm 0.0017$  °C.



**Figure 11:** Ecart entre la température de référence et la température indiquée par le capteur SBE3+ lors des étalonnages pré et post-campagne. La courbe de degré 3 qui corrige la température sur les profils est représentée.

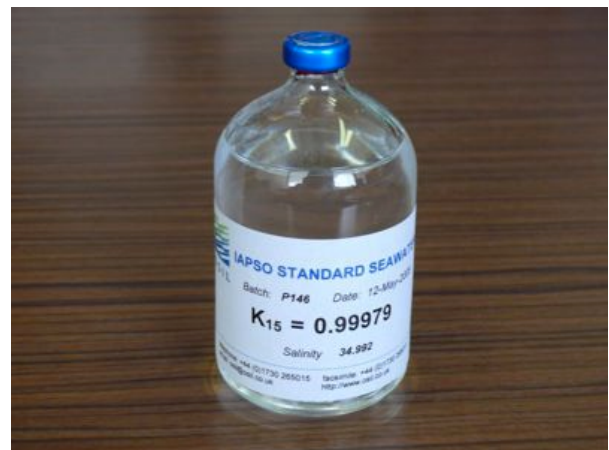
### **III.6. Calibration de la conductivité sur les profils CTD**

La sonde SBE9+ est équipée d'un capteur de conductivité SBE4 dont la gamme de mesures va de 0 à 70 mS/cm. La précision annoncée par le constructeur est de 0.003 mS/cm et la résolution de 0.0004 mS/cm.

#### **III.6.1 Standardisation des salinomètres**

Toutes les mesures de salinité réalisées pendant la campagne GOODHOPE, ont été effectuées sur le même salinomètre Portasal de chez Guildline (n° série : 62302).

Ce salinomètre a été standardisé grâce au lot de flacons d'eau normale : lot P148 fabriqué le 10/10/2006,  $K_{15} = 0.99982$ ,  $S = 34.993$ . La standardisation est vérifiée tous les matins et après analyse de 2 stations (56 échantillons).



*Flacon d'eau normale*

#### **III.6.2. Mode opératoire**

La procédure de calibration, décrite dans Billant (1985), consiste à comparer la conductivité  $CO_S$  indiquée par la sonde au niveau du prélèvement à la conductivité in situ  $CO_H$  déterminée sur les échantillons. La conductivité  $CO_S$  est obtenue en calculant une moyenne sur les valeurs transmises par la sonde au niveau de fermeture de la bouteille et en appliquant à cette moyenne la correction de l'effet de pression et de température sur la cellule. La salinité de l'échantillon est transformée en conductivité in situ  $CO_H$  en utilisant les valeurs de pression et de température corrigées de la sonde au niveau du prélèvement.

Les valeurs de conductivité d'un profil sont corrigées en déterminant les coefficients  $C_1$  et  $C_0$  d'un polynôme de degré 1 pour une station, ou un groupe de stations, qui minimisent les écarts  $\Delta C = CO_H - CO_S$ . Le polynôme est de la forme :

$$CO_R = C_1 * CO_S + C_0$$

Les coefficients retenus résultent d'itérations successives sur le groupe d'échantillons considéré. Le processus est stoppé lorsqu'aucun échantillon supplémentaire n'est éliminé à la sortie de l'itération en cours. Il en résulte que, à la sortie de la dernière itération, tous les écarts  $\Delta C$  sont inférieurs à la valeur  $\Delta C_{max} = 2.8 * \text{écart type}$ , pour les échantillons retenus dans le processus de calcul.

Un premier calcul est ainsi effectué sur l'ensemble des 1725 échantillons prélevés aux stations 0 à 110.

### **III.6.3. Analyse des premiers résultats et stratégie adoptée**

Pour maintenir une bonne stabilité de la mesure de conductivité pendant la durée de la campagne, un nettoyage périodique de la cellule a été effectué pour éliminer les dépôts, conformément à la note d'application Seabird n°2D.

Une observation détaillée de la distribution des ces écarts montre qu'un découpage par groupe de stations doit mieux centrer leur répartition.

### III.6.4. Bilan de la calibration des profils

Le tableau, ci-dessous, indique les regroupements de stations finalement retenus et les coefficients  $C_1$  et  $C_0$  utilisés pour corriger les valeurs de conductivité dans chaque groupe :

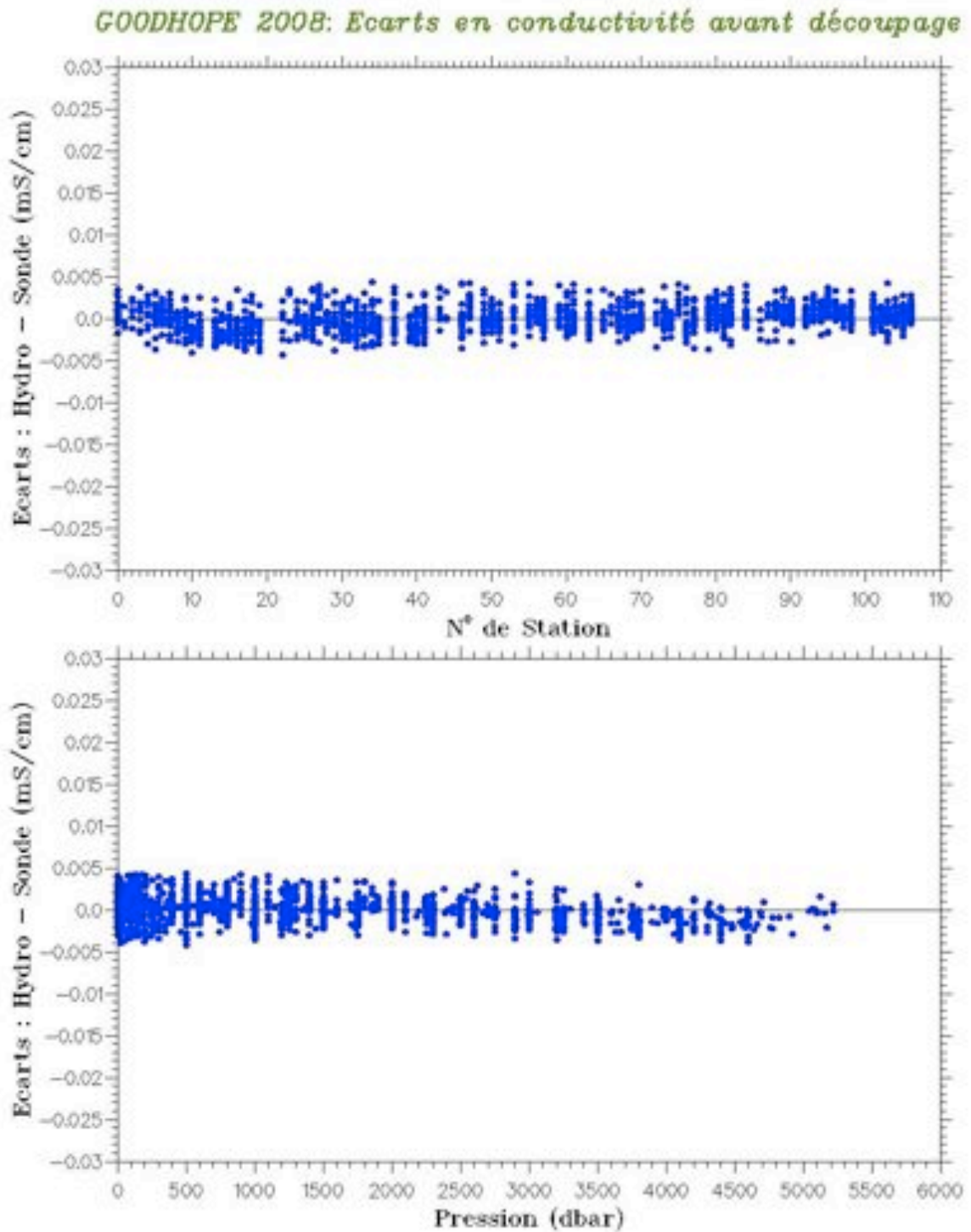
Station ou groupe	Nombre d'échantillons considérés	Nombre d'échantillons retenus par le calcul	Déviation standard (0-5500 dbar)	Coefficients	
				$C_1$	$C_0$
0 - 6	101	82	0.00124	1.00058	-0.00785108
7 - 22	266	230	0.00143	1.00053	-0.00784579
23 - 110	1358	1187	0.00147	1.00046	-0.00422783
0- 110	1725	1499(86.9 %)	0.001450		

Le tableau indique également pour chaque groupe de stations, le nombre d'échantillons considérés pour le calcul, le nombre de ceux retenus par le processus ainsi que la déviation standard en conductivité (mS/cm) qui en résulte pour le groupe considéré.

Pendant la campagne, la salinité a été mesurée sur 1725 échantillons. Le processus de calcul en a validé 1499, soit 86.9 % d'entre eux. Ceci revient à dire que, au niveau des prélèvements, l'écart entre la conductivité de l'échantillon et la conductivité corrigée sur le profil est inférieur à  $2.8 \times$  écart type pour le groupe de stations considéré.

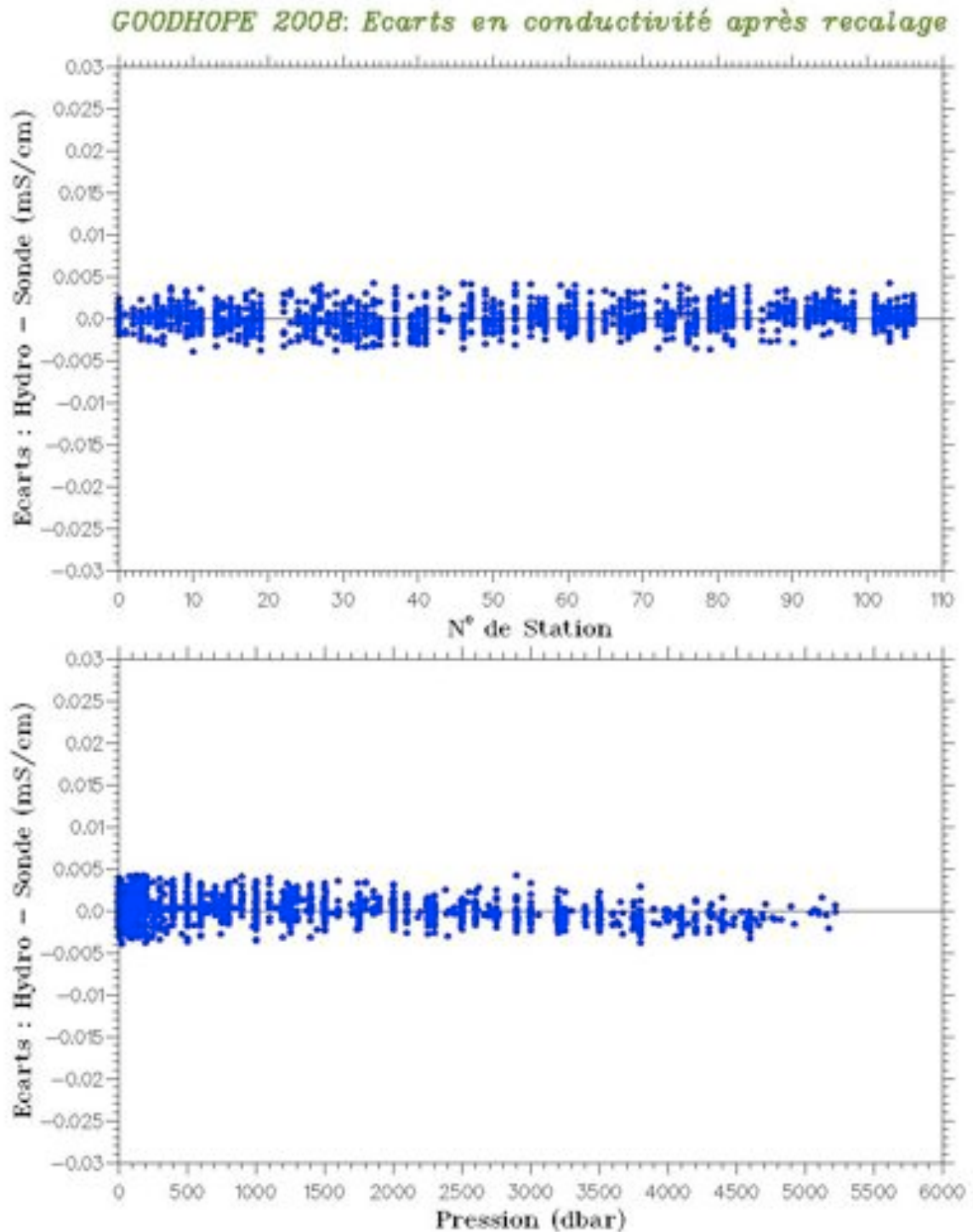
La figure 12 présente les écarts en conductivité qui subsistent, au niveau de chaque prélèvement, station par station et en fonction de la pression avant « découpage » de la campagne en groupe de stations. La figure 13 présente les écarts en conductivité subsistants après découpage et calibration par groupe de stations.

On remarque cependant sur les graphes en fonction de la pression sur les figures 12 et 13 qu'il subsiste un effet de pression sur les mesures de conductivité. Après différents tests, il a été décidé d'appliquer une correction de degré 5 en fonction de la pression sur les mesures de salinité pour corriger ce léger biais. La figure 14 montre le résultat final obtenu après cette « optimisation ». On notera la meilleure répartition des écarts autour de zéro à toutes les pressions.



**Fig. 12 :** Résultat d'une calibration d'essai sur l'ensemble des échantillons de la campagne (sans découpage en groupes de stations). Les figures montrent les écarts entre la conductivité des échantillons et la conductivité « bathysonde » corrigée au niveau de chaque prélèvement :

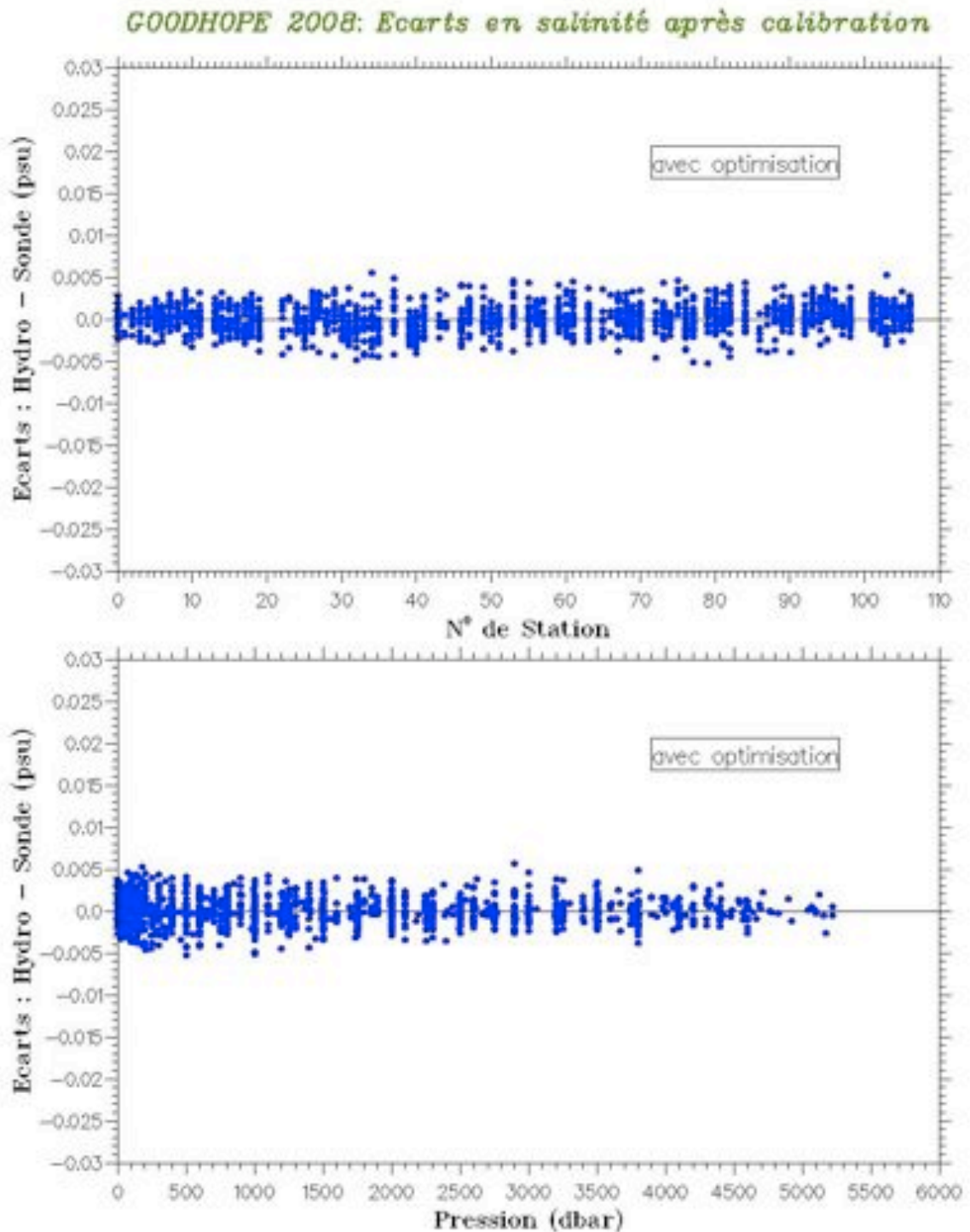
- en fonction du numéro de la station concernée,
- en fonction de la pression au niveau de prélèvement.



**Fig. 13 :** Résultats de la calibration par groupes de stations. Les figures montrent les écarts entre la conductivité des 1499 échantillons validés et la conductivité « bathysonde » corrigée au niveau de chaque prélèvement :

- a) en fonction du numéro de la station concernée,
- b) en fonction de la pression au niveau de prélèvement.





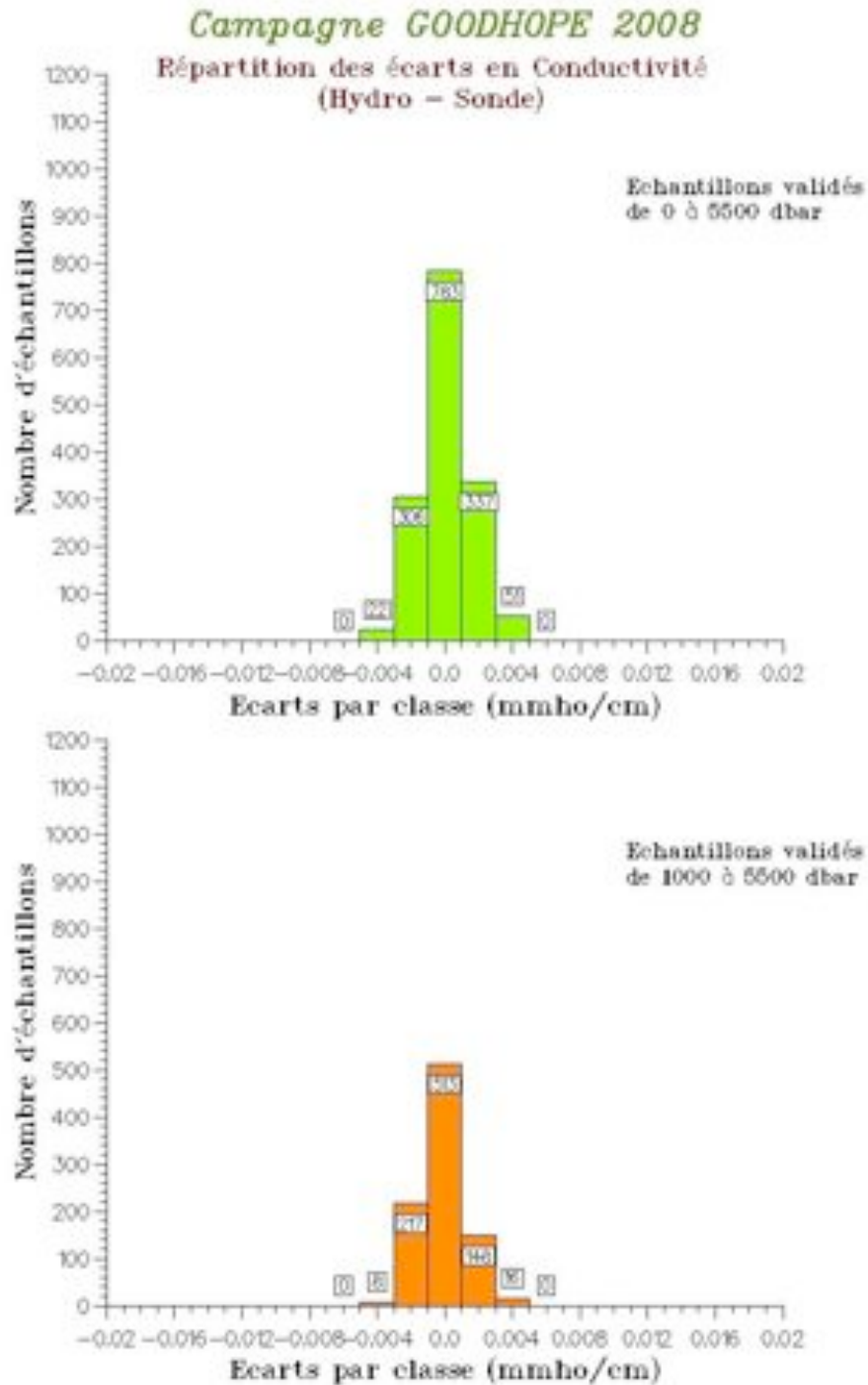
**Fig. 14 :** Résultat final de la calibration de la salinité. Les figures montrent les écarts entre la salinité des 1499 échantillons validés et la salinité « bathysonde » corrigée et optimisée au niveau de chaque prélèvement :

- a) en fonction du numéro de la station concernée,
- b) en fonction de la pression au niveau de prélèvement.

Les histogrammes de la figure 15 confirment que la distribution des écarts est satisfaisante. Dans 52.0 % des cas les écarts en conductivité sont inférieurs à 0.001 mS/cm tandis que dans 95.1 %, ils sont inférieurs à 0.003 mS/cm.

Le bilan d'ensemble peut être établi comme suit : les valeurs de conductivité des 1499 échantillons validés indiquent un écart quadratique moyen pour l'ensemble de la campagne de 0.0014 mS/cm.

Les histogrammes d'écarts en salinité après optimisation sont présentés à la figure 16 : l'écart type en salinité est de 0.0016 psu.



**Fig. 15 :** Histogramme des écarts entre la conductivité des échantillons validés et la conductivité « bathysonde » au niveau du prélèvement (mesures finales sur les profils montée) :

- a) pour la totalité des 1499 échantillons validés sur la campagne,
- b) pour les 902 échantillons validés et prélevés à pression supérieure à 980 dbar.

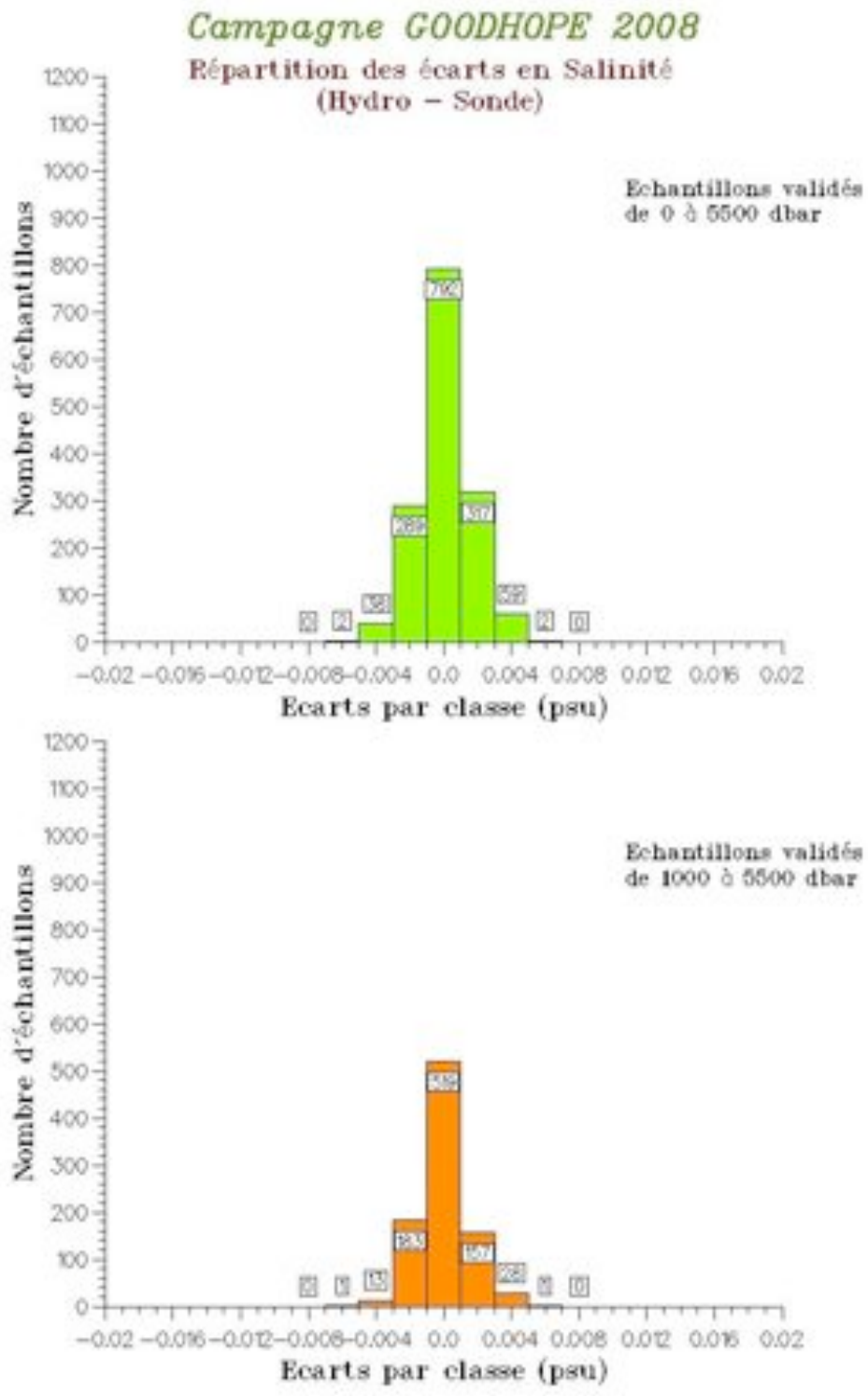
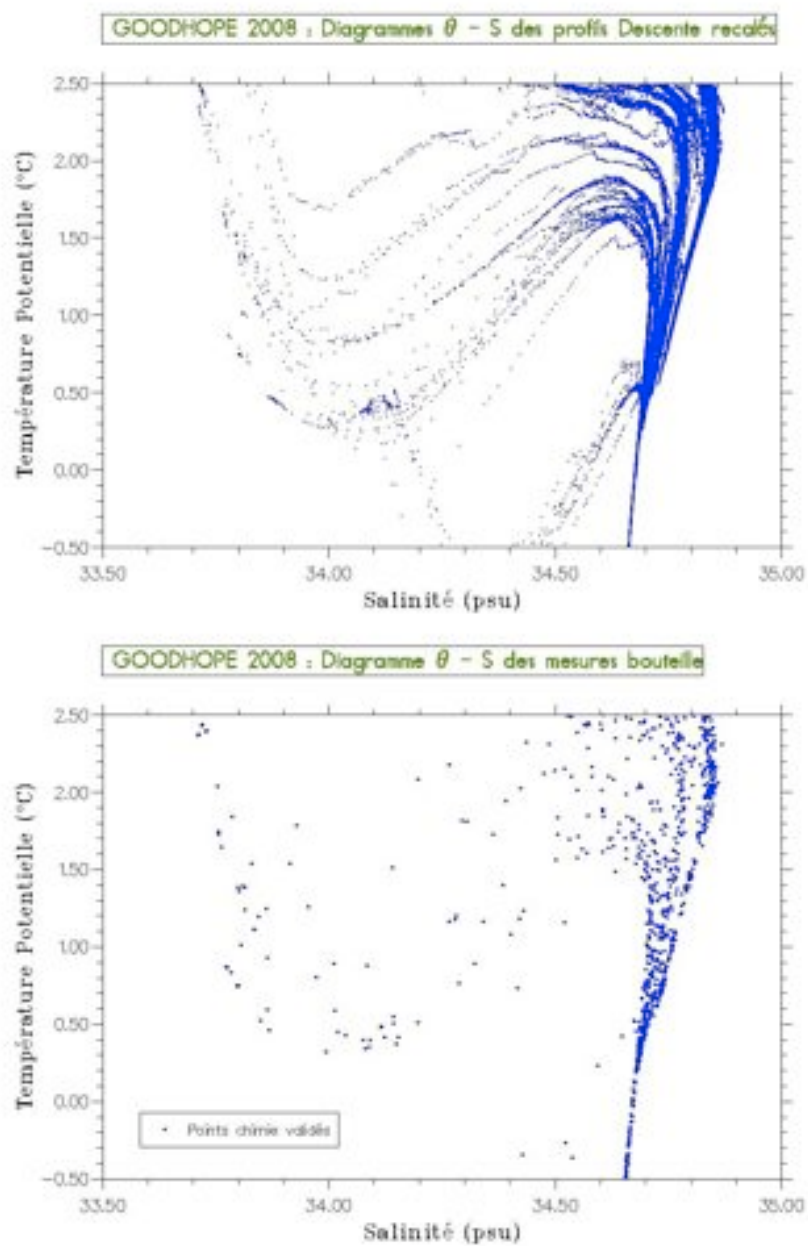


Fig. 16 : Même légende que figure 15 pour les écarts en salinité.

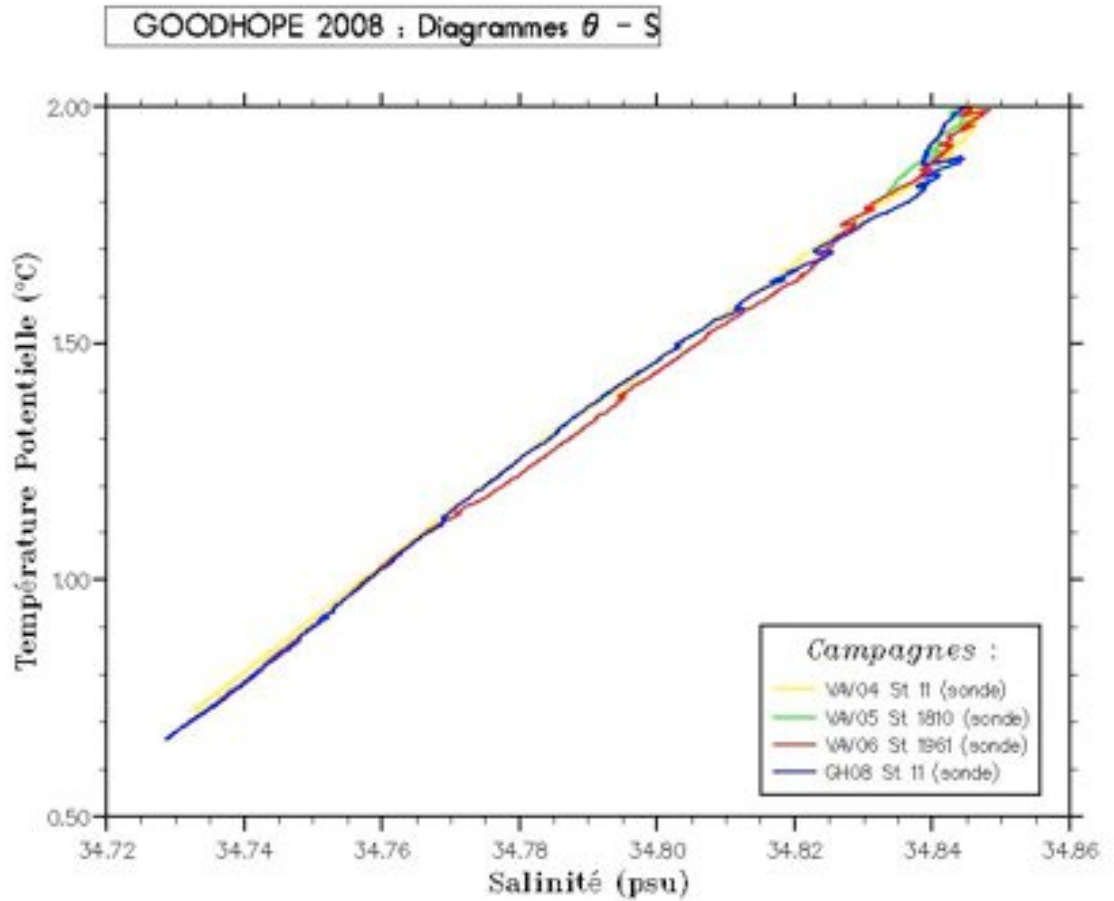
### III.6.5.Vérification des résultats

La figure 17 présente l'ensemble des diagrammes  $\theta$ -S qui sont l'image des profils de descente de la campagne GOODHOPE 2008 à grande profondeur. On observe une bonne répétabilité des diagrammes qui se superposent aux températures les plus basses. A une température potentielle inférieure à 2.5 °C correspond une salinité connue avec une incertitude inférieure à 0.003 psu.



**Fig. 17 :** Ensemble des diagrammes  $\theta$ -S des 111 stations de la campagne GOODHOPE 08 :  
 a) mesures en continu sur les profils de descente,  
 b) salinité « bouteille » combinée à la température potentielle CTD.

La figure 18 présente les diagrammes  $\theta / S$  de stations CTD réalisées au même point lors des différentes campagnes GOODHOPE.



**Fig. 18** : Intercomparaison de diagrammes  $\theta / S$  entre les différentes campagnes du programme GoodHope.

## **III.7. Calibration des profils d'oxygène dissous**

### **III.7.1. Nouveau capteur d'Oxygène Seabird**

La nouvelle sonde SBE9+ est équipé d'un capteur d'Oxygène dissous SBE43. Pour cette campagne, nous avons installé tout d'abord le capteur n° 526 qui nous avait donné entière satisfaction lors de la campagne Ovide 2006. Ce capteur a été utilisé de la station 0 à la station 19, où il a montré des signes de faiblesse et après laquelle il a été remplacé par le capteur n° 530, utilisé jusqu'à la fin de la campagne.

Pour améliorer la réponse de ce capteur, le constructeur a défini en avril 2008, un nouveau polynôme transformant l'oxygène mesuré en volt en oxygène en ml/l. Ce nouveau polynôme a été appliqué lors de cette calibration.

### **III.7.2. Mode opératoire**

La teneur en oxygène dissous OXYSBE, exprimée en ml/l, est calculée à partir de l'information Vr transmise par le capteur en utilisant la formule préconisée par Millard (1982).

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

Vr : mesure O<sub>2</sub> en volt

δV/δt : dérive du signal SBE43 (volt/sec)

Oxsol : fonction de calcul de la solubilité de l'oxygène (Garcia & Gordon 1992)

P : pression sonde (dbar)

T : température sonde (°C)

K : température sonde (°K)

S : salinité sonde (psu)

Soc, Voffset, A, B, C, E, tau : caractéristiques du capteur Seabird

La méthode de calibration utilisée, décrite dans Billant (1985), consiste à ajuster les valeurs d'oxygène dissous (OXYC), calculées par la méthode précédente sur le profil descente,

sur la valeur d'oxygène déterminée par voie chimique sur les échantillons (OH) prélevés au cours de la montée. Les mesures de la sonde, en cours de descente, sont moyennées dans une tranche d'eau de 15 dbar centrée sur la valeur de pression au niveau du prélèvement.

Les coefficients caractéristiques du capteur Seabird sont déterminés pour un ensemble d'échantillons, en utilisant des itérations successives basées sur un principe similaire à celui de la conductivité. Les caractéristiques du capteur sont ainsi déterminées pour une station ou un groupe de stations. Seuls Soc et Voffset varient d'un groupe de stations à l'autre.

### **III.7.3. Unités d'oxygène dissous**

L'unité utilisée dans la procédure de calibration et dans les représentations graphiques de ce rapport est le millilitre par litre (ml/l). La température de l'eau dans les bouteilles a été relevée lors de la fixation de l'oxygène par les réactifs. On en déduit la densité de l'échantillon d'eau de mer, et la teneur en oxygène dissous peut être convertie en micromole par kilogramme ( $\mu$  mol/kg). Les profils de la campagne sont également recalés dans cette unité en utilisant le même découpage par station ou groupe de stations. Les données d'oxygène dissous du capteur "bathysonde" sont donc produites dans les deux unités.

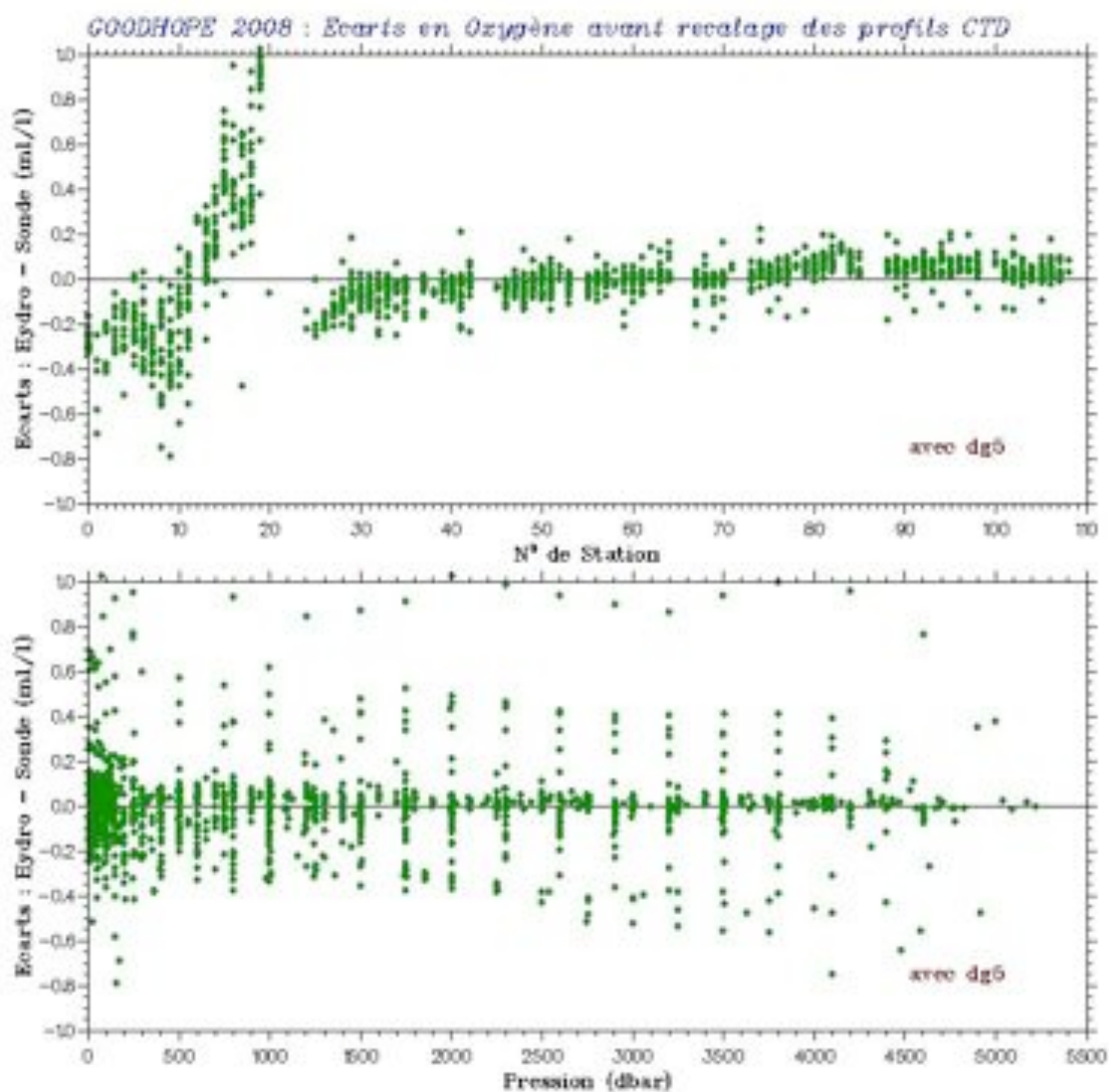
### **III.7.3. Stratégie de regroupement des stations**

Une première détermination des « caractéristiques » du capteur sur l'ensemble des échantillons de la campagne permet d'observer les différentes phases de son comportement. La figure 19 montre la distribution des écarts obtenus après cette première détermination globale. Chacune de ces phases doit donc être considérée séparément. Leur identification puis un calcul spécifique à chaque groupe de stations permet d'obtenir pour chaque station, un profil d'oxygène dissous bien recalé sur les valeurs d'oxygène fournies par analyse chimique.

### **III.7.4. Bilan de la calibration des profils**

Le tableau suivant indique les regroupements par groupe de stations finalement retenus, et les valeurs des coefficients utilisés pour recalcr les profils de la campagne. Ce tableau indique aussi pour chaque groupe de stations, le nombre d'échantillons considérés, le nombre de ceux qui sont validés et la déviation standard dans trois intervalles de pression ainsi que les paramètres caractéristiques du capteur.





**Figure 19 :** Résultat d'un calcul d'essai effectué sur l'ensemble des échantillons de la campagne, sans découpage par groupes de stations. Les Figures montrent les écarts entre la valeur d'oxygène mesurée sur les échantillons et celle du profil descente « bathysonde » à la pression du prélèvement :

- a) en fonction du numéro de la station concernée,
- b) en fonction de la pression au niveau du prélèvement.

### Bilan de la calibration des profils d'oxygène dissous de la campagne GOODHOPE 2008 :

(NB : les déviations standards sont données en ml/l pour 3 gammes de pression)

	Station ou groupe de stations	Nb d'échant. considérés	Nb d'échant. retenus par le calcul	Déviation standard (avec dg 5)		
				0 à 5500	0 à 1000	1000 à 5500
Capteur 526	0 - 2	35	33	0.061	0.078	0.029
	3 - 4	27	26	0.044	0.048	0.010
	5 - 6	39	38	0.062	0.079	0.026
	7	19	18	0.033	0.047	0.017
	8	22	21	0.067	0.090	0.046
	9	22	21	0.066	0.105	0.039
	10	22	22	0.083	0.139	0.028
	11	21	21	0.027	0.034	0.023
	12 - 13	27	27	0.040	0.058	0.011
	14	22	22	0.064	0.107	0.021
	15	22	22	0.053	0.085	0.026
	16	21	20	0.077	0.141	0.032
	17	22	22	0.048	0.076	0.025
	18	22	22	0.134	0.221	0.052
	19	22	22	0.147	0.213	0.103
	<b>0 - 19</b>	<b>365</b>	<b>357</b>	<b>0.072</b>		<b>0.039</b>
Capteur 530	20 - 23	17	17	0.159	0.206	0.057
	24	22	21	0.046	0.065	0.033
	25	22	20	0.034	0.047	0.029
	26	22	21	0.040	0.065	0.022
	27 - 28	44	43	0.048	0.074	0.026
	29 - 40	215	211	0.045	0.055	0.037
	41 - 51	166	159	0.036	0.046	0.025
	52 - 72	287	273	0.027	0.039	0.015
	73 - 110	603	542	0.032	0.041	0.021
		<b>20 - 110</b>	<b>1398</b>	<b>1307</b>	<b>0.039</b>	
	<b>0- 110</b>	<b>1763</b>	<b>1664 (94.4 %)</b>	<b>0.048</b>		<b>0.028</b>

La figure 20 présente les écarts finaux, après recalage des profils et application d'un facteur correctif complémentaire de degré 5, entre les valeurs d'oxygène obtenues par l'analyse des échantillons et celles fournies par le profil descente au niveau du prélèvement. La distribution de ces écarts est correctement centrée et acceptable pour chacune des stations de la campagne. La répartition des écarts présentée en fonction de la pression montre qu'elle est aussi acceptable à tous les niveaux de prélèvement.

Les histogrammes de la figure 21 permettent de visualiser de manière différente la distribution des écarts et de vérifier que leur distribution est correctement centrée.

Pour l'ensemble de la campagne GOODHOPE 2008, 1664 échantillons parmi les 1763 analysés, soit 94.4 %, ont été validés et utilisés pour recalculer les profils « bathysonde » d'oxygène dissous. Les écarts en oxygène sont inférieurs à 0.025 ml/l dans 63.8 % des cas et inférieurs à 0.075 ml/l pour 91.9 %, ceci donne une déviation standard de 0.048 ml/l.

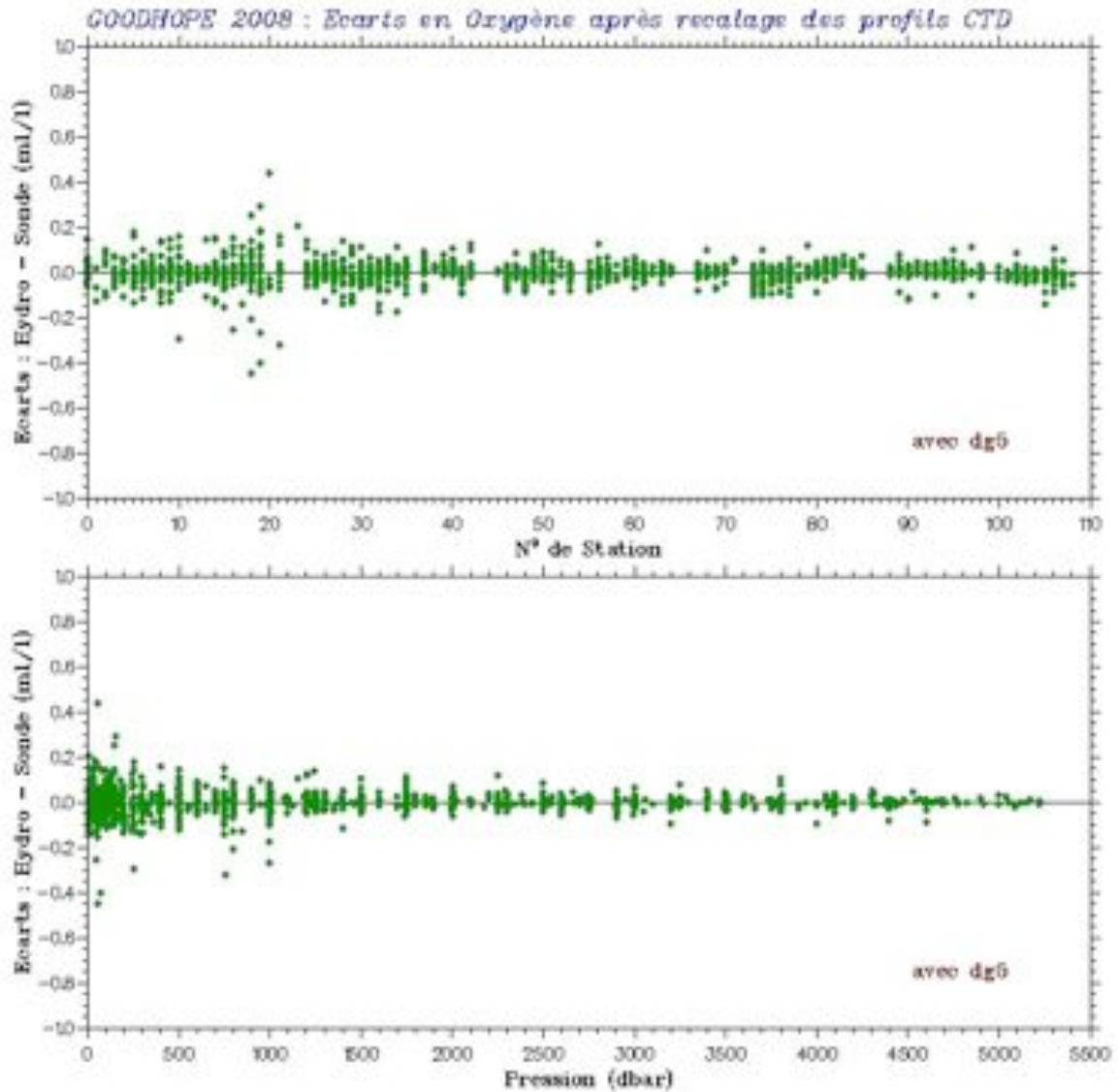
En ne considérant que la partie de profil d'oxygène supérieur à 980 dbar, soit 949 échantillons, les écarts sont inférieurs à 0.025 ml/l pour 77.8 % et inférieurs à 0.075 ml/l pour 97.1 %. L'écart quadratique moyen est réduit à 0.028 ml/l.

L'histogramme des écarts finaux exprimés en  $\mu\text{mol/kg}$  est présenté sur la figure 22. Dans cette unité, la déviation standard est de 2.1  $\mu\text{mol/kg}$  pour la totalité du profil, elle est réduite à 1.2  $\mu\text{mol/kg}$  pour la partie profonde des profils, au-delà de 980 dbar.

### III.7.5. Profils d'oxygène incomplets

Le problème rencontré sur le capteur 526 utilisé au démarrage de la campagne a conduit à changer de capteur après la station 19. Il a également perturbé certaines parties profondes des stations précédentes, nous conduisant à supprimer ces parties de profils. Ces portions supprimées des profils d'oxygène dissous, qui affectent 5 stations, sont répertoriées dans le tableau ci-dessous.

Station	Début correction (pression)	Fin correction (pression)	Paramètres concernés	Type de correction
7	3251	3635	O <sub>2</sub>	On met la valeur erreur (1.e+36)
8	3801	4103	O <sub>2</sub>	On met la valeur erreur (1.e+36)
9	3761	4319	O <sub>2</sub>	On met la valeur erreur (1.e+36)
18	3511	4933	O <sub>2</sub>	On met la valeur erreur (1.e+36)
19	2611	5001	O <sub>2</sub>	On met la valeur erreur (1.e+36)

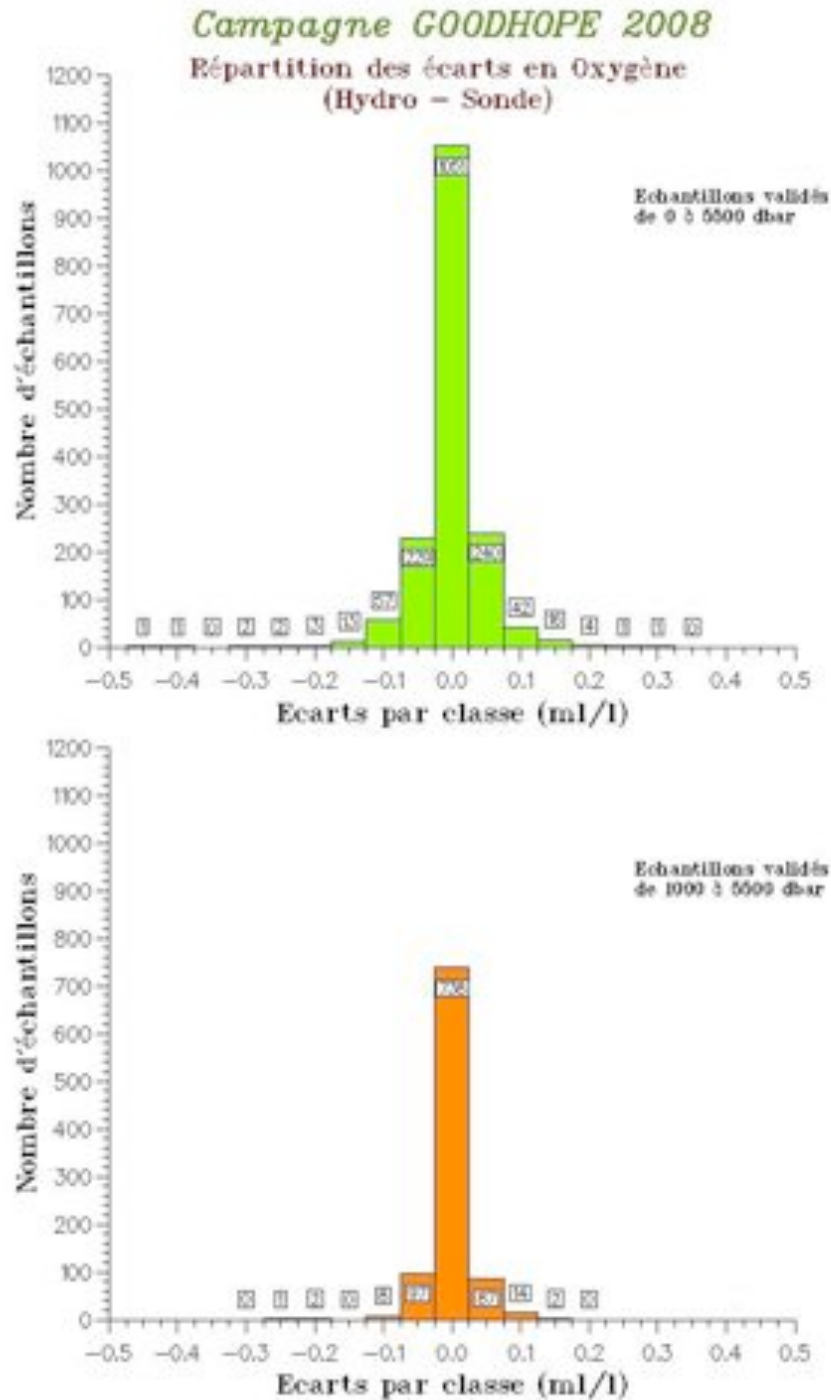


**Fig. 20 :** Résultat final de la calibration de l'oxygène dissous. Ecartis entre la valeur d'oxygène mesurée sur les 2570 échantillons validés et celle du profil descente « bathysonde » à la pression du prélèvement :

- a) en fonction du numéro de la station concernée,
- b) en fonction de la pression au niveau du prélèvement.

Ces écarts sont obtenus après un découpage par stations ou groupes de stations (un polynôme de degré 5 élimine la dépendance des écarts à la pression).

Les mesures « bathysonde » sont moyennées sur une tranche d'eau de 15 dbar.



**Fig. 21** : Histogramme des écarts en oxygène (ml/l) entre la valeur mesurée sur les échantillons validés et celle du profil descente « bathysonde » à la pression du prélèvement (mesures finales) :

- pour la totalité des 1664 échantillons validés sur la campagne,
- pour les 949 échantillons validés et prélevés à pression supérieure à 980 dbar.

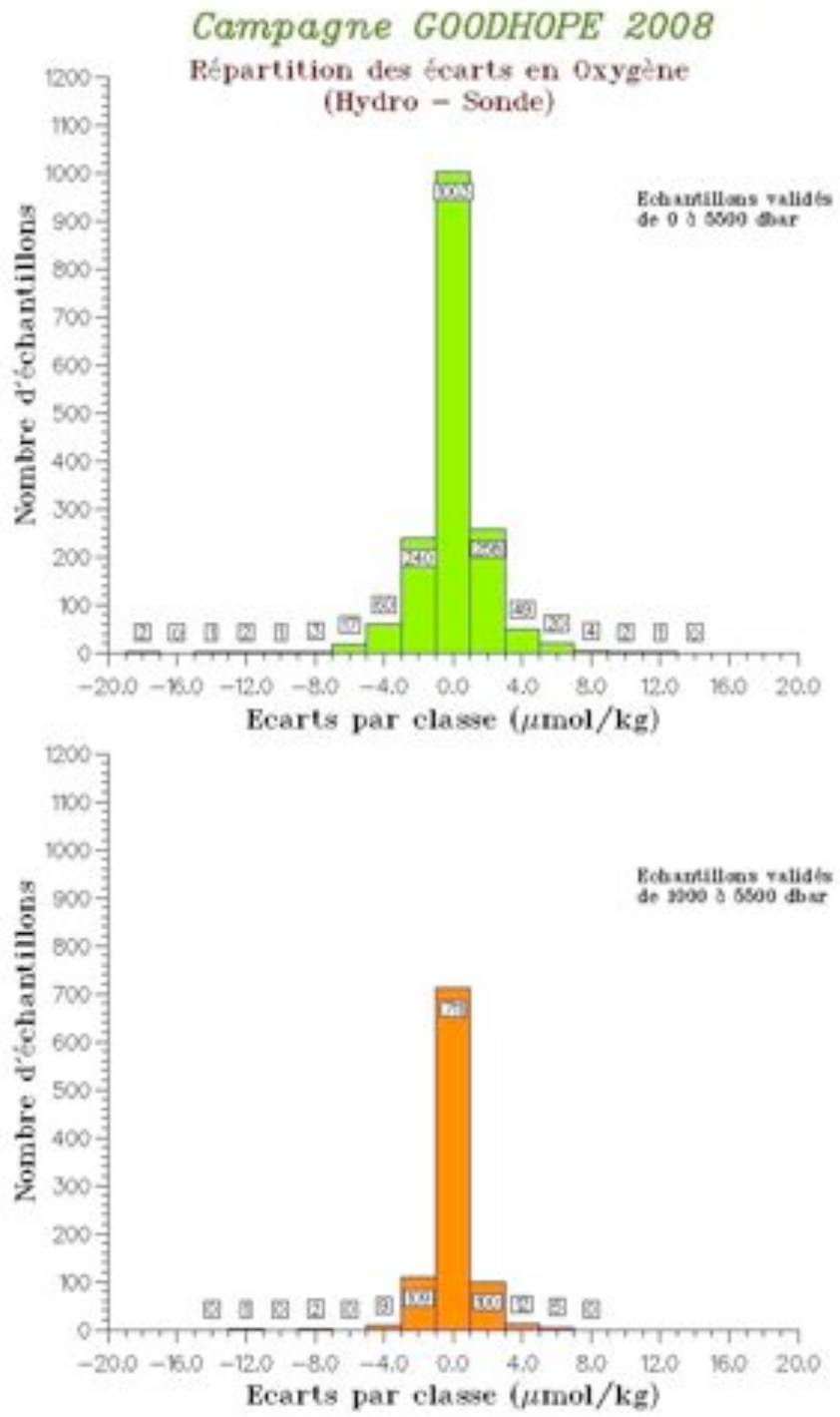


Figure 22 : Même légende que figure 21 pour les écarts exprimés dans l'unité µmol/kg.

## IV - BIBLIOGRAPHIE

- Billant A., 1985 : Calibration des mesures d'une sonde CTD-O2 Neil-Brown. Rapport Scientifique et Technique de l'IFREMER, n°1.
- Branellec P., Hamon M. : Note technique LPO-GT09-01, Etude d'un choc thermique sur le capteur de pression d'une sonde CTD SBE911+
- Kermabon C. : Refonte de l'hydrologie. Conteneur Informatique. Rapport interne OPS/LPO 08-04
- Kermabon C. et M. Arhan : SBE9+, Validation et réduction des données. Rapport interne OPS/LPO 08-08.
- 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).
- Speich S. et F. Dehairs, 2008: Cruise Report MD166 BONUS-GOODHOPE. Rapport Interne, 245pp.
- UNESCO, 1981. Background papers and supporting data on the Practical Salinity Scale, 1978. UNESCO Technical Papers in Marine Science, n° 37, 144 p.
- 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.

## V - LISTINGS ET FIGURES DES PARAMÈTRES BATHYSONDE

### Remarques :

**a)** Descriptif des stations :

1. La latitude et la longitude indiquent le positionnement du navire en station au début du profil descente.
2. La profondeur est la mesure brute du sondeur multifaisceaux au début du profil descente pour une vitesse du son à 1500 m/s (pas de correction sur cette indication).

**b)** Les mesures de température, salinité et oxygène dissous sont celles du profil descente de la bathysonde.

**c)** Les mesures présentées sont extraites des fichiers de type **.clc**, les niveaux listés sont :

- . le premier niveau
- . tous les 10 dbar jusqu'à 50 dbar
- . tous les 50 dbar de 50 dbar jusqu'au fond
- . le dernier niveau

**d)** Aux niveaux de pression absents (moyenne non calculée dans l'acquisition des données), les mesures sont interpolées. Près de la surface, les mesures sont extrapolées jusqu'au niveau 1 en recopiant celles du premier niveau réduit.

**e)** Les listings et tracés présentent les résultats en fonction de la pression (exprimée en dbar).

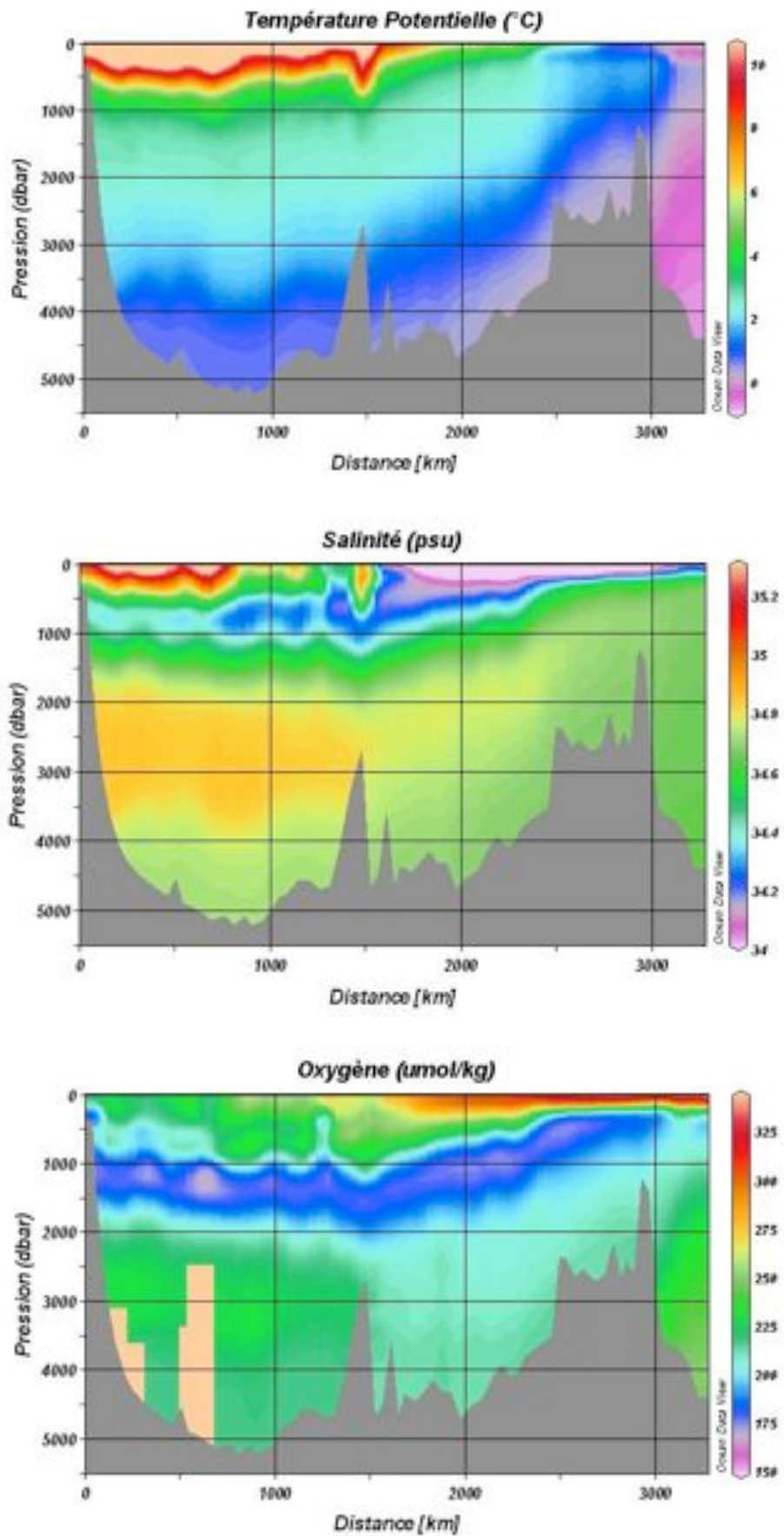
**f)** les stations sont numérotées séquentiellement de 0 à 110 et la radiale d'hydrologie correspond aux stations 1 à 106.

**g)** les profils d'oxygène des stations (7, 8, 9, 18, 19) ont été tronqués (cf Paragraphe III.7.5).

**h)** Suite à des problèmes techniques, le profil de la station 56 ne commence qu'à 35 dbar. Une extrapolation jusqu'en surface a été réalisée.

Sur la page suivante sont représentées les coupes verticales de température, salinité et oxygène dissous obtenues à l'issue de la calibration.



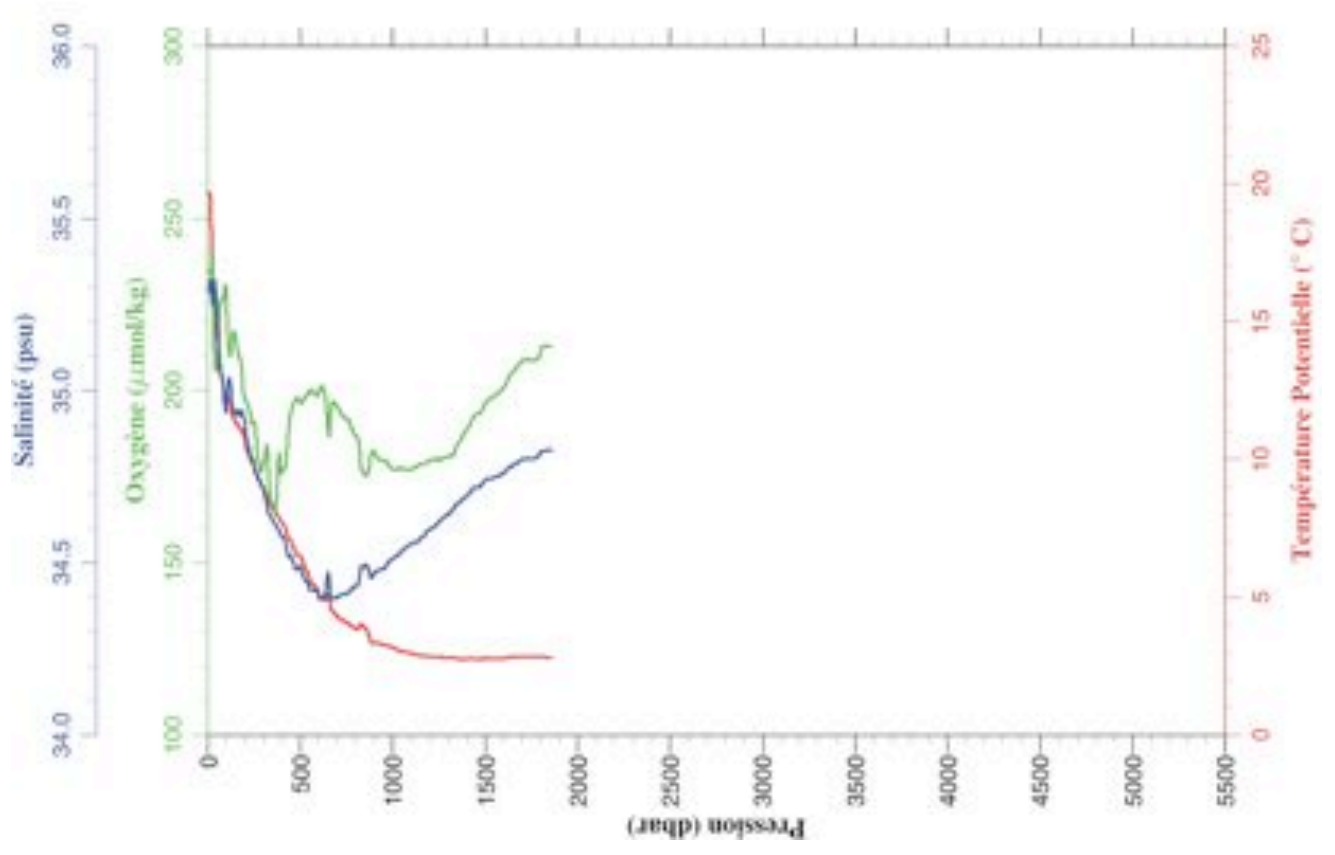
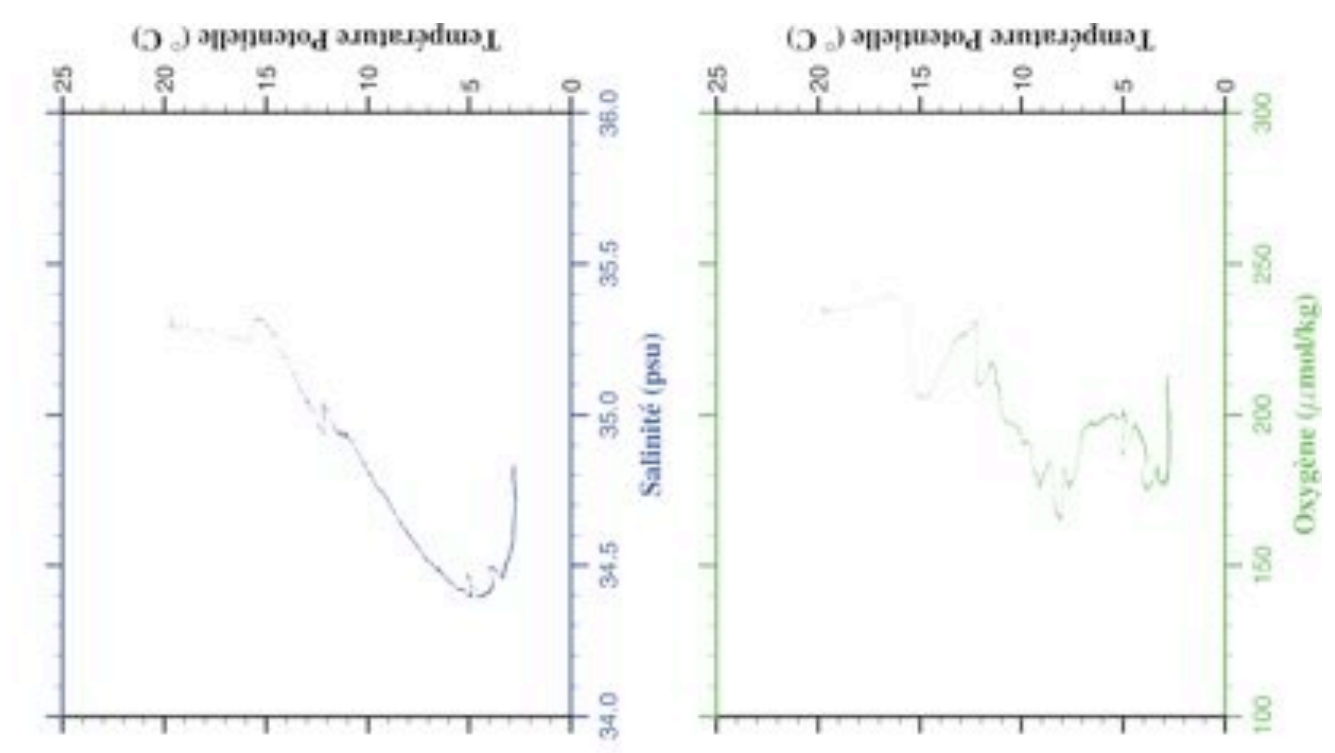


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| Station   :    0           Campagne  : GOODHOPE 2008 |
| Date      : 13-02-08     Navire    : R/V Marion Dufresne |
| Profondeur : 1840        Organisme : IFREMER          |
| Position  : S 33 58.71   |
|           : E 17 13.58   |
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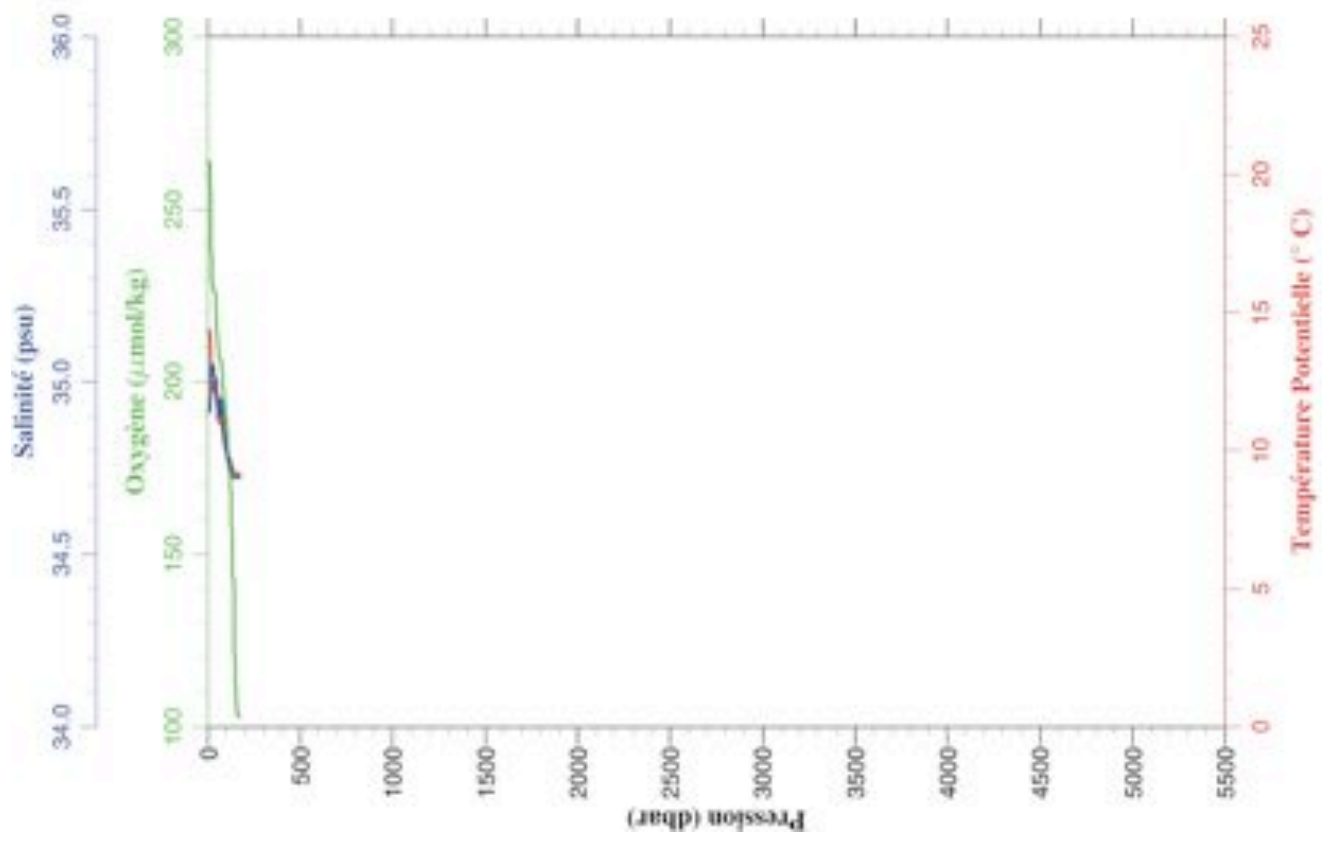
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	19.659	35.290	234.1	19.659
10.0	19.683	35.293	234.6	19.681
20.0	18.256	35.279	235.7	18.252
30.0	15.613	35.310	225.6	15.609
40.0	15.060	35.301	206.0	15.054
50.0	14.360	35.224	209.0	14.353
100.0	12.166	34.957	227.2	12.153
150.0	11.338	34.931	215.2	11.319
200.0	10.758	34.905	197.3	10.734
250.0	9.756	34.781	190.9	9.727
300.0	9.044	34.715	178.6	9.011
350.0	8.242	34.623	166.9	8.206
400.0	7.735	34.575	176.2	7.695
450.0	7.097	34.518	193.6	7.054
500.0	6.557	34.490	196.3	6.511
550.0	5.699	34.426	199.7	5.652
600.0	5.152	34.401	199.1	5.103
650.0	5.149	34.471	188.0	5.096
700.0	4.358	34.400	195.2	4.304
750.0	4.134	34.410	191.7	4.078
800.0	3.925	34.431	186.8	3.866
850.0	3.962	34.493	175.4	3.899
900.0	3.402	34.469	182.1	3.339
950.0	3.339	34.483	179.9	3.272
1000.0	3.232	34.512	177.3	3.163
1050.0	3.097	34.533	177.4	3.025
1100.0	3.038	34.555	177.0	2.962
1150.0	2.963	34.573	178.7	2.883
1200.0	2.930	34.598	179.8	2.847
1250.0	2.926	34.619	179.7	2.839
1300.0	2.903	34.642	180.9	2.813
1350.0	2.869	34.672	184.5	2.775
1400.0	2.856	34.693	188.6	2.757
1450.0	2.881	34.720	193.2	2.778
1500.0	2.899	34.740	196.2	2.792
1550.0	2.887	34.749	198.5	2.776
1600.0	2.904	34.762	201.0	2.788
1650.0	2.956	34.783	205.2	2.835
1700.0	2.978	34.801	208.6	2.853
1750.0	2.972	34.802	208.8	2.843
1800.0	2.971	34.822	211.4	2.838
1850.0	2.951	34.828	212.9	2.813
1859.0	2.951	34.827	212.6	2.813



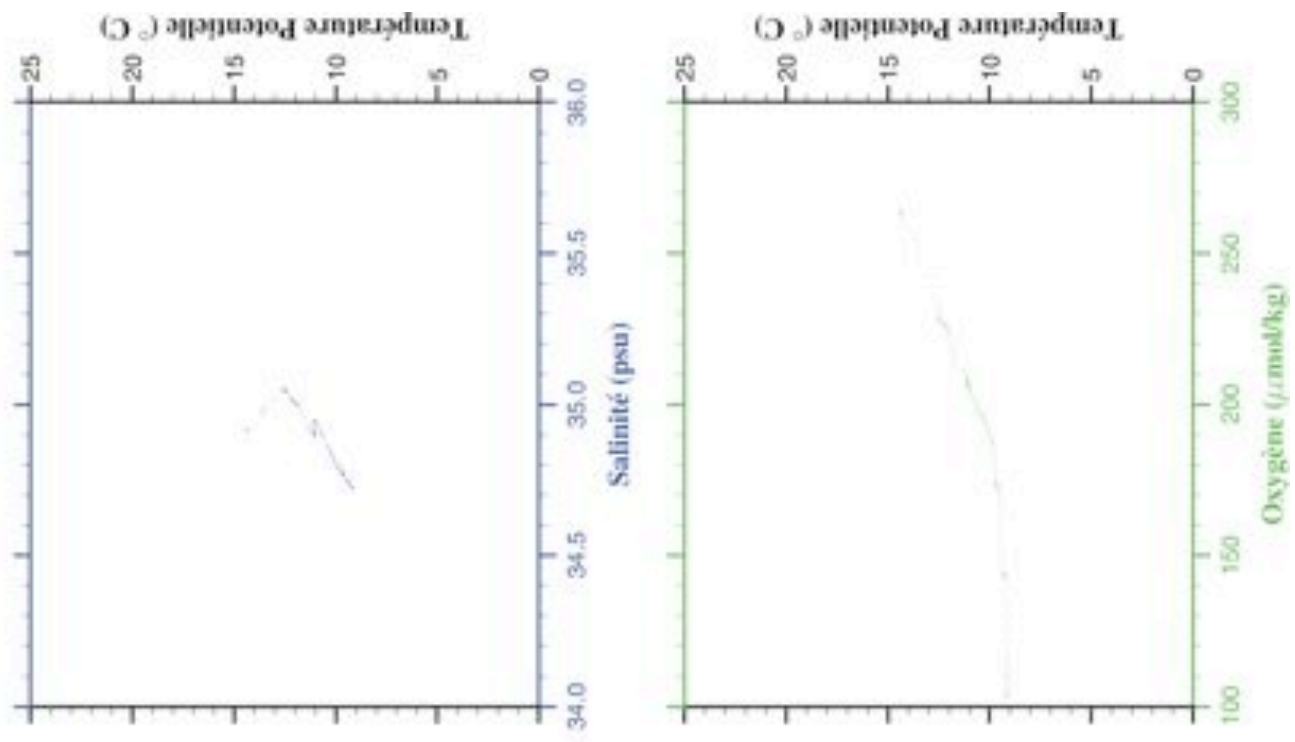
**STATION 0**

Station	: 1	Campagne	: GOODHOPE 2008
Date	: 13-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 185	Organisme	: IFREMER
Position	: S 33 56.35		
	E 17 57.35		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	14.362	34.913	263.3	14.362
10.0	14.346	34.915	262.7	14.345
20.0	12.596	35.047	235.8	12.593
30.0	12.446	35.044	227.1	12.442
40.0	12.153	35.015	225.7	12.148
50.0	11.672	34.976	213.7	11.666
100.0	9.932	34.796	188.3	9.920
150.0	9.179	34.723	112.1	9.162
176.0	9.173	34.723	103.1	9.153

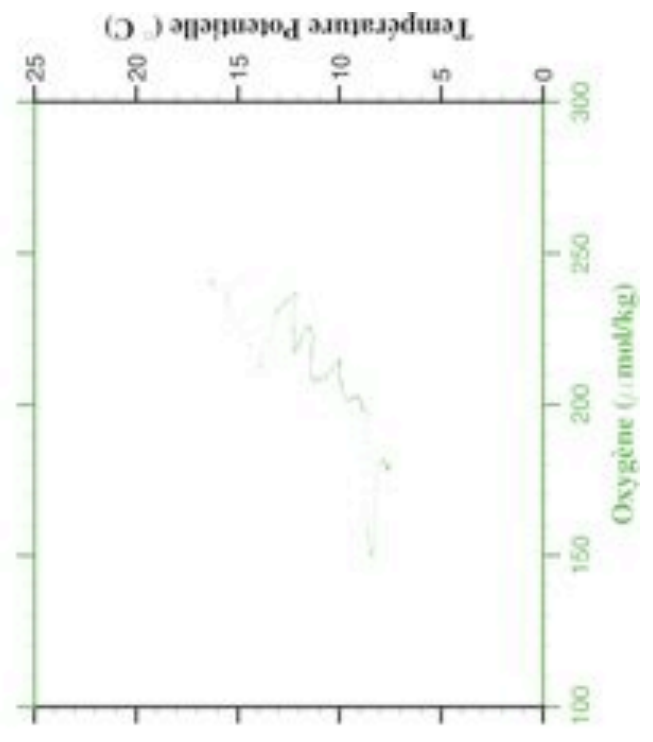
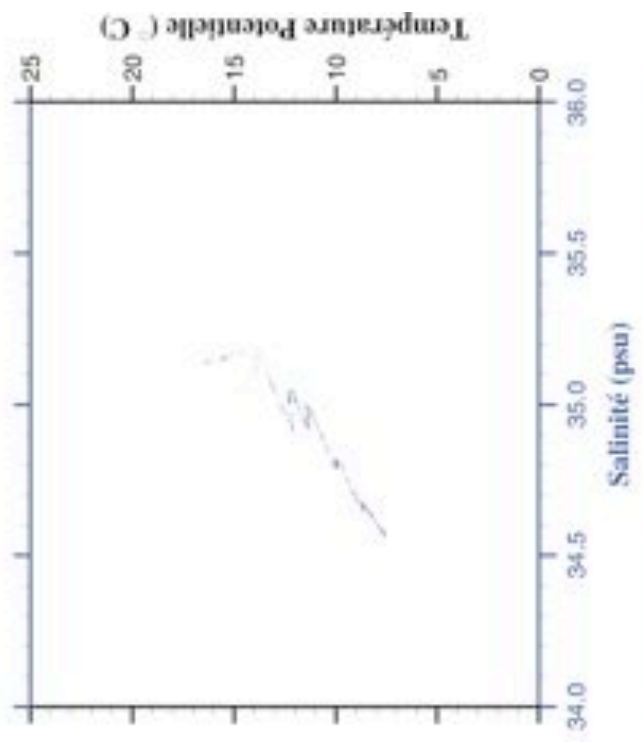
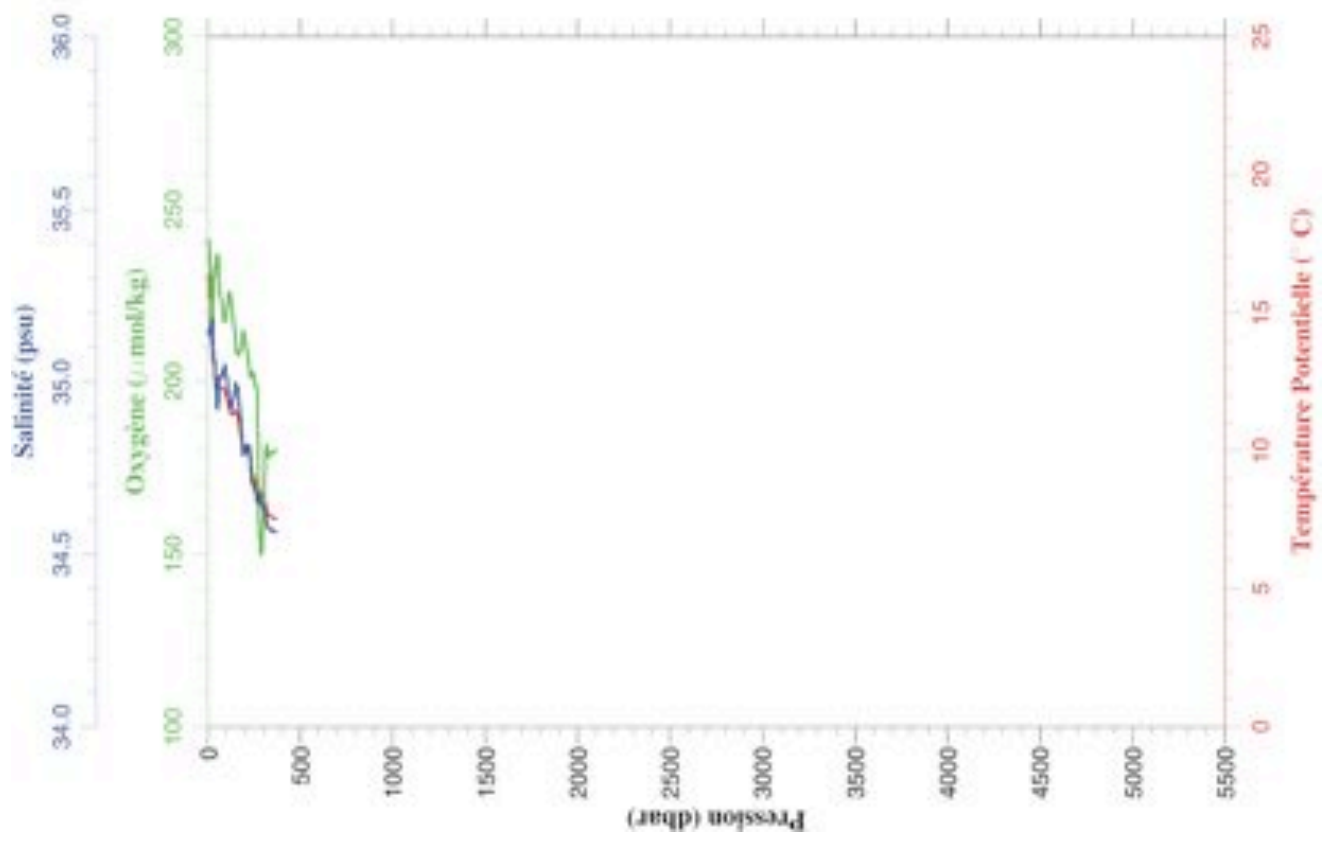


**STATION 1**



Station	: 2	Campagne	: GOODHOPE 2008
Date	: 14-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 371	Organisme	: IFREMER
Position	: S 33 57.59		
	E 17 31.25		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	16.330	35.140	241.2	16.330
10.0	15.564	35.150	236.2	15.563
20.0	13.974	35.107	216.9	13.971
30.0	13.283	35.089	225.7	13.279
40.0	12.803	35.009	232.6	12.798
50.0	12.235	34.932	236.5	12.229
100.0	12.019	35.017	220.0	12.006
150.0	11.463	34.996	211.1	11.444
200.0	10.021	34.799	212.8	9.998
250.0	8.974	34.686	201.1	8.947
300.0	8.316	34.635	160.3	8.285
350.0	7.613	34.568	179.3	7.579
366.0	7.605	34.566	180.1	7.569



**STATION 2**

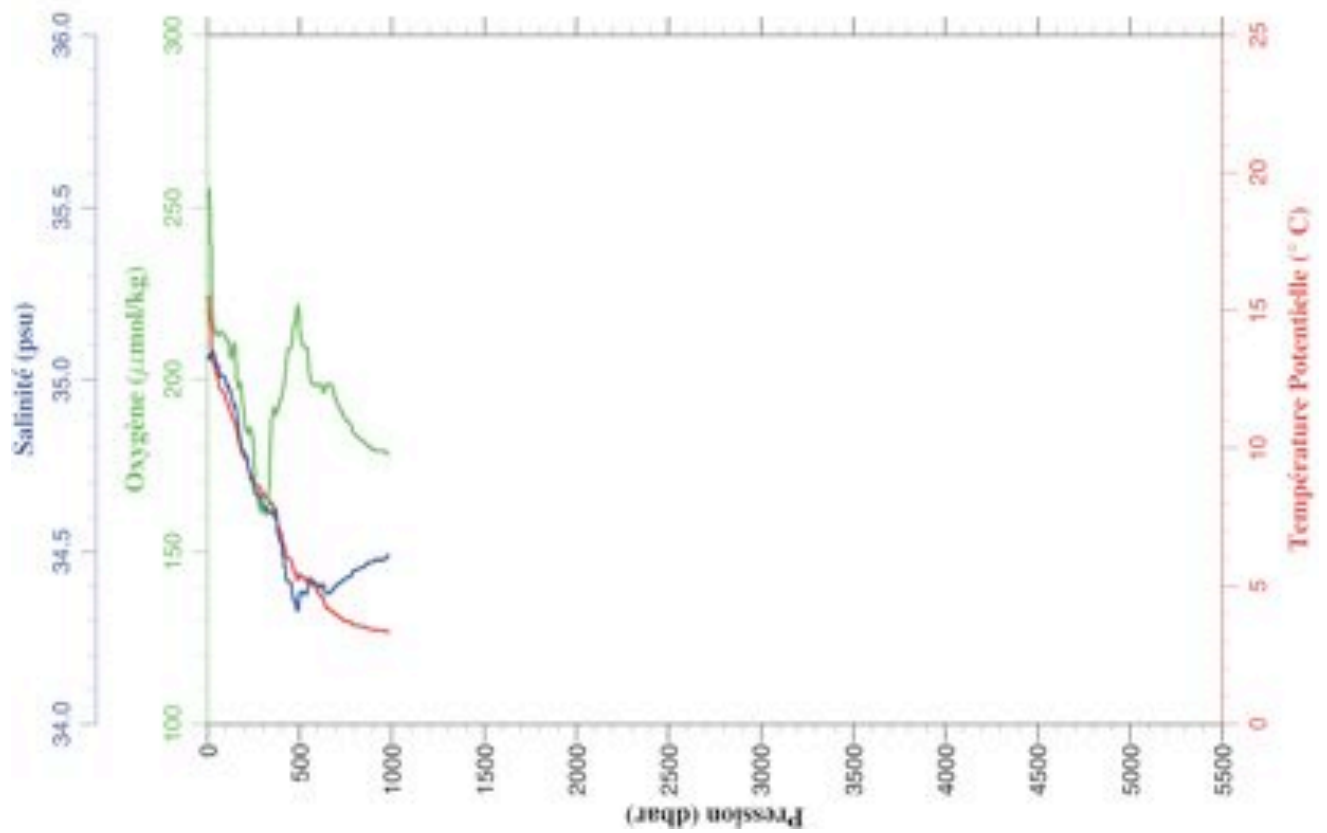
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| Date      : 14-02-08     Navire    : R/V Marion Dufresne |
| Profondeur : 1020        Organisme  : IFREMER           |
| Position  : S 33 58.15   |
|           : E 17 24.64   |
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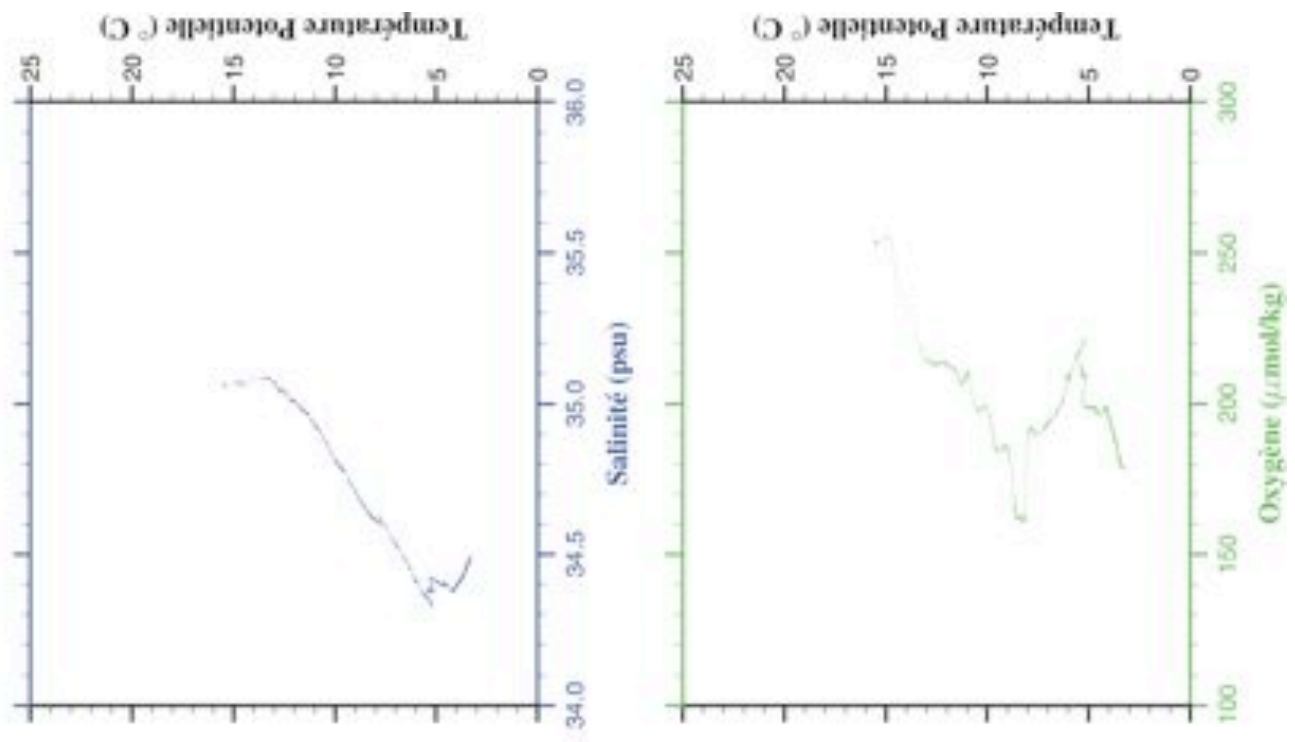
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	15.402	35.063	253.5	15.401
10.0	14.872	35.069	255.0	14.870
20.0	14.358	35.068	238.2	14.355
30.0	13.269	35.082	218.6	13.265
40.0	12.953	35.064	213.9	12.948
50.0	12.677	35.046	213.2	12.670
100.0	11.816	34.994	211.9	11.803
150.0	10.939	34.926	209.6	10.921
200.0	9.726	34.786	189.0	9.704
250.0	8.852	34.687	179.8	8.825
300.0	8.388	34.638	162.6	8.357
350.0	8.001	34.616	189.2	7.966
400.0	6.964	34.526	194.6	6.927
450.0	6.004	34.410	209.0	5.965
500.0	5.487	34.383	215.2	5.446
550.0	5.338	34.411	204.1	5.292
600.0	4.808	34.401	198.7	4.761
650.0	4.252	34.379	198.5	4.204
700.0	3.994	34.401	193.5	3.943
750.0	3.786	34.423	188.5	3.732
800.0	3.642	34.446	183.9	3.585
850.0	3.585	34.455	182.1	3.524
900.0	3.489	34.473	179.8	3.426
950.0	3.473	34.476	179.2	3.405
981.0	3.401	34.489	178.5	3.331



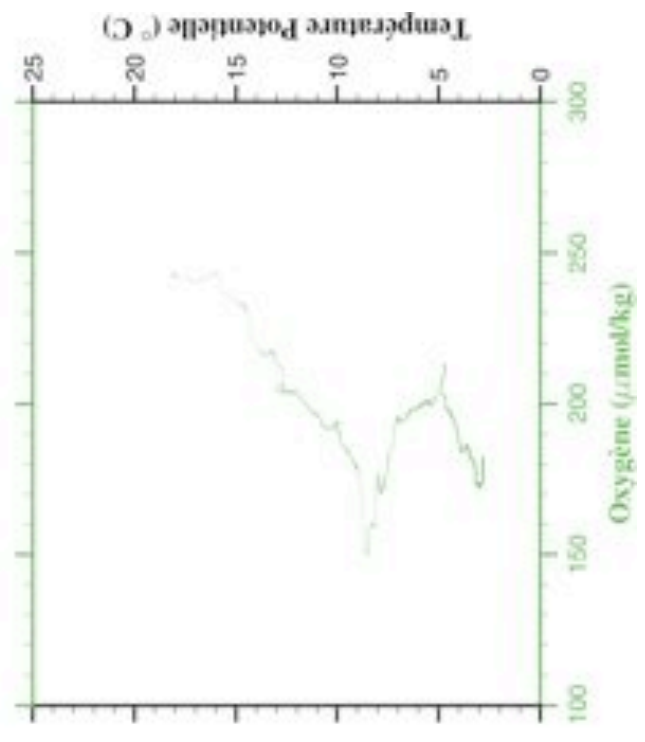
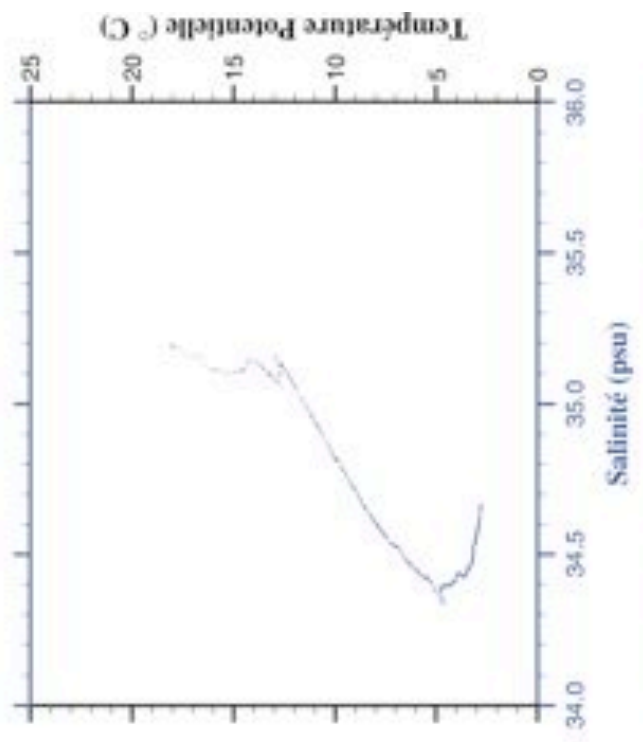
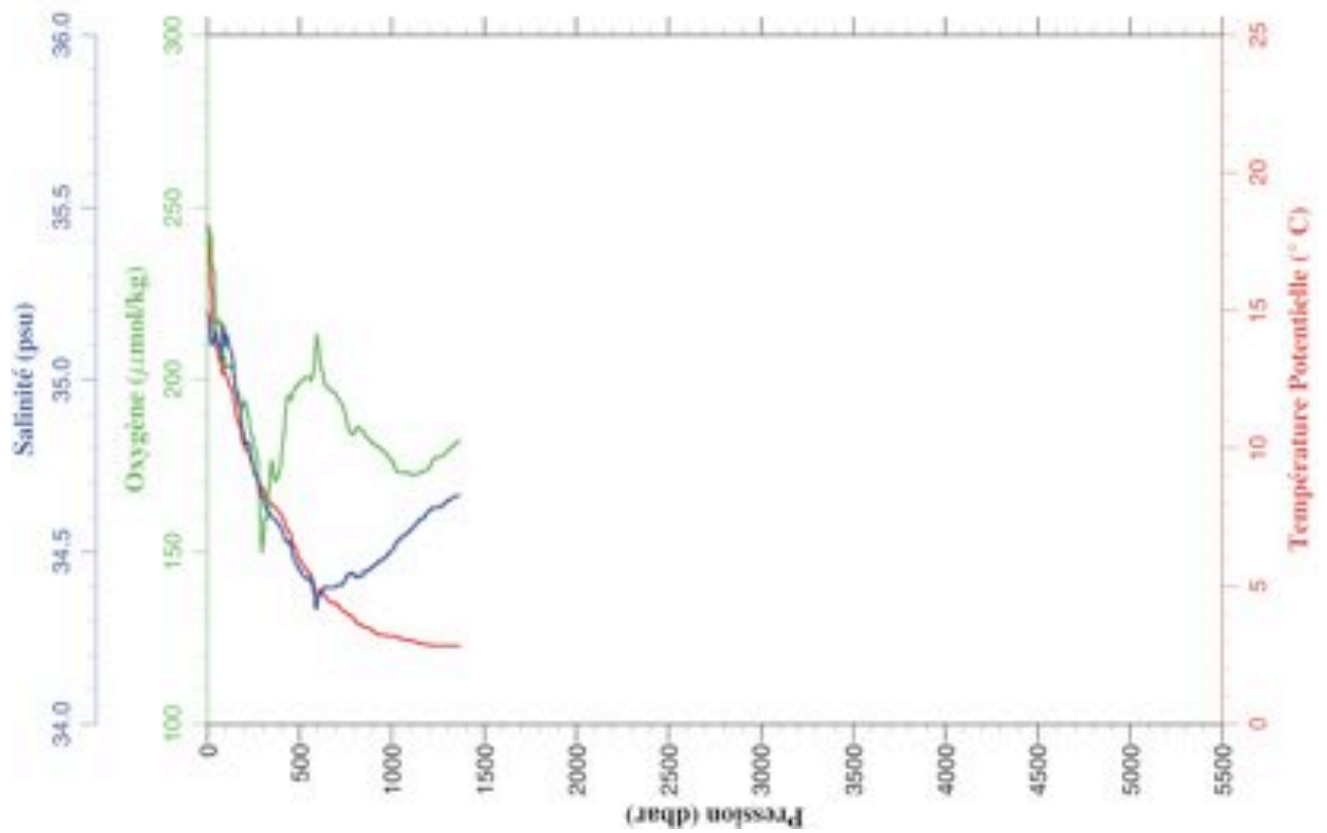


**STATION 3**



Station	: 4	Campagne	: GOODHOPE 2008
Date	: 14-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 1380	Organisme	: IFREMER
Position	: S 33 58.52		
	E 17 18.28		

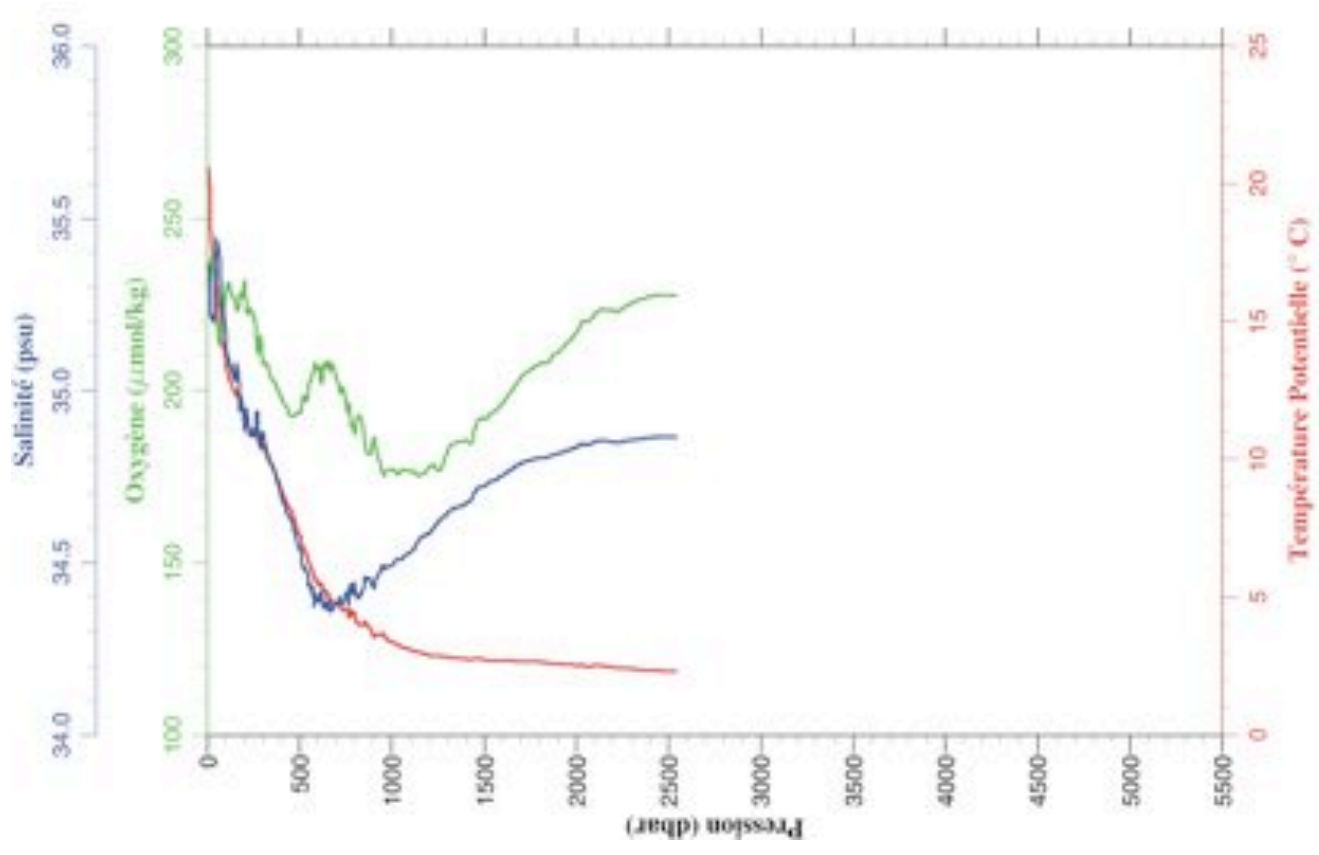
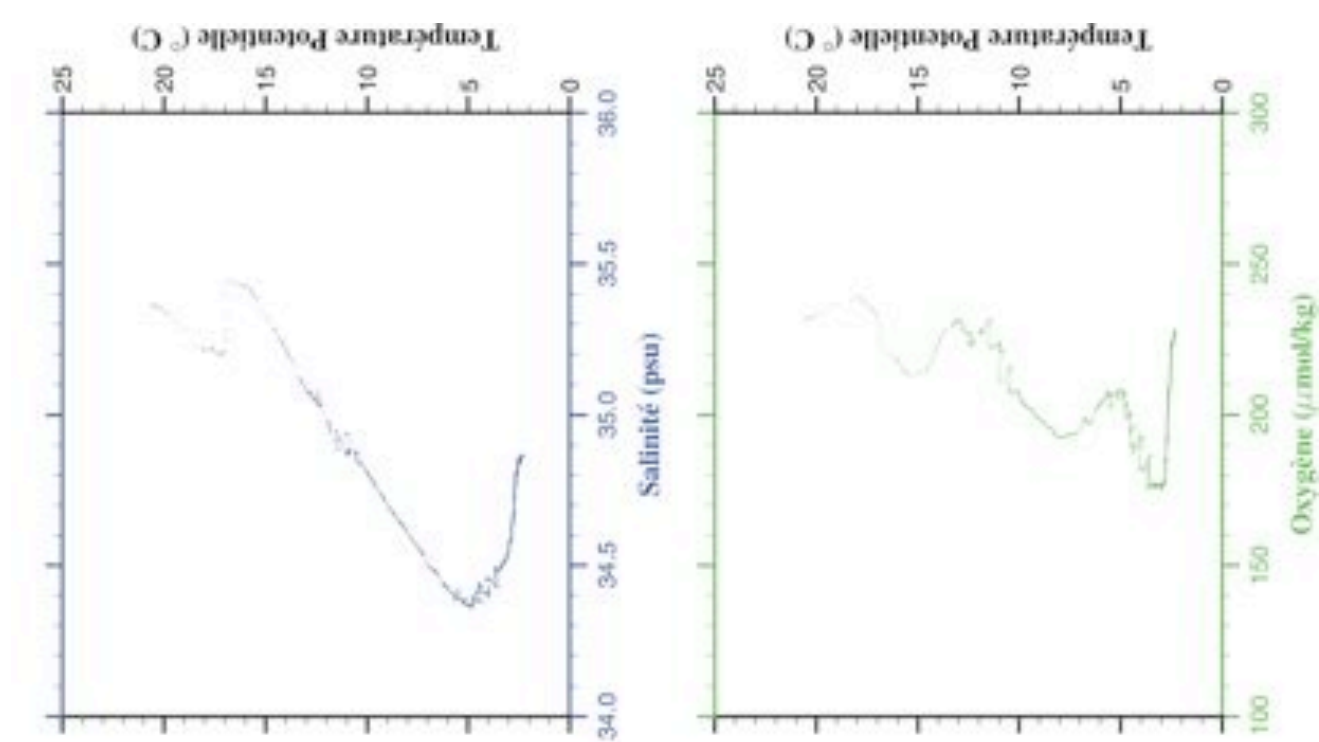
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	18.048	35.194	243.1	18.047
10.0	17.201	35.159	241.0	17.199
20.0	15.844	35.112	240.8	15.841
30.0	14.654	35.108	232.4	14.650
40.0	14.303	35.138	226.0	14.297
50.0	13.646	35.127	216.4	13.639
100.0	12.691	35.132	204.0	12.678
150.0	11.430	34.988	198.5	11.411
200.0	10.086	34.826	193.3	10.063
250.0	9.285	34.741	181.6	9.257
300.0	8.575	34.658	150.8	8.543
350.0	7.980	34.600	176.2	7.945
400.0	7.619	34.566	177.0	7.580
450.0	6.973	34.529	194.4	6.930
500.0	6.021	34.446	199.0	5.977
550.0	5.535	34.418	200.7	5.489
600.0	4.775	34.357	210.6	4.728
650.0	4.591	34.396	197.7	4.540
700.0	4.377	34.400	195.4	4.324
750.0	4.104	34.424	189.0	4.048
800.0	3.793	34.427	185.0	3.735
850.0	3.558	34.442	184.2	3.498
900.0	3.431	34.458	181.3	3.367
950.0	3.295	34.478	179.3	3.229
1000.0	3.253	34.504	176.6	3.184
1050.0	3.169	34.541	173.1	3.096
1100.0	3.105	34.563	172.6	3.028
1150.0	3.011	34.594	172.9	2.931
1200.0	2.949	34.620	174.3	2.865
1250.0	2.939	34.630	177.5	2.852
1300.0	2.928	34.650	179.4	2.837
1350.0	2.925	34.663	181.7	2.830
1363.0	2.926	34.664	182.1	2.830



**STATION 4**

Station	: 5	Campagne	: GOODHOPE 2008
Date	: 14-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 2526	Organisme	: IFREMER
Position	: S 33 59.69		
	E 16 57.17		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.530	35.363	231.7	20.529
10.0	20.248	35.354	232.4	20.246
20.0	18.101	35.209	238.4	18.097
30.0	17.425	35.207	236.2	17.420
40.0	17.023	35.204	232.6	17.016
50.0	16.480	35.434	219.9	16.472
100.0	13.380	35.127	228.8	13.366
150.0	12.401	35.031	226.5	12.381
200.0	11.444	34.883	231.7	11.419
250.0	10.944	34.885	220.7	10.914
300.0	10.562	34.879	208.7	10.525
350.0	9.788	34.783	203.4	9.748
400.0	8.921	34.688	198.1	8.878
450.0	8.218	34.627	192.9	8.171
500.0	7.303	34.539	193.9	7.255
550.0	6.263	34.432	201.8	6.214
600.0	5.499	34.384	207.0	5.449
650.0	5.101	34.368	208.0	5.049
700.0	4.811	34.382	203.2	4.755
750.0	4.618	34.406	196.5	4.560
800.0	4.410	34.430	187.5	4.348
850.0	4.143	34.447	186.8	4.078
900.0	3.664	34.427	185.8	3.599
950.0	3.760	34.493	175.7	3.691
1000.0	3.449	34.493	177.2	3.378
1050.0	3.271	34.511	176.8	3.197
1100.0	3.186	34.530	176.6	3.108
1150.0	3.087	34.569	175.2	3.006
1200.0	2.966	34.583	177.8	2.883
1250.0	2.977	34.619	176.9	2.889
1300.0	2.919	34.644	182.2	2.828
1350.0	2.890	34.660	185.0	2.795
1400.0	2.858	34.673	185.6	2.759
1450.0	2.861	34.704	189.0	2.758
1500.0	2.843	34.723	191.7	2.736
1550.0	2.816	34.739	193.7	2.706
1600.0	2.824	34.753	196.2	2.709
1650.0	2.809	34.773	200.2	2.690
1700.0	2.792	34.788	203.8	2.670
1750.0	2.791	34.797	205.9	2.664
1800.0	2.779	34.804	207.7	2.648
1850.0	2.746	34.806	208.4	2.611
1900.0	2.721	34.817	211.0	2.581
1950.0	2.702	34.826	213.9	2.559
2000.0	2.676	34.835	216.9	2.529
2050.0	2.656	34.842	219.9	2.505
2100.0	2.668	34.852	222.1	2.512
2150.0	2.668	34.854	223.5	2.507
2200.0	2.621	34.850	223.2	2.456
2250.0	2.590	34.853	223.8	2.421
2300.0	2.579	34.857	225.5	2.406
2350.0	2.549	34.859	226.4	2.372
2400.0	2.535	34.863	227.3	2.353
2450.0	2.520	34.865	227.8	2.334
2500.0	2.516	34.866	227.6	2.325
2542.0	2.504	34.867	227.7	2.310



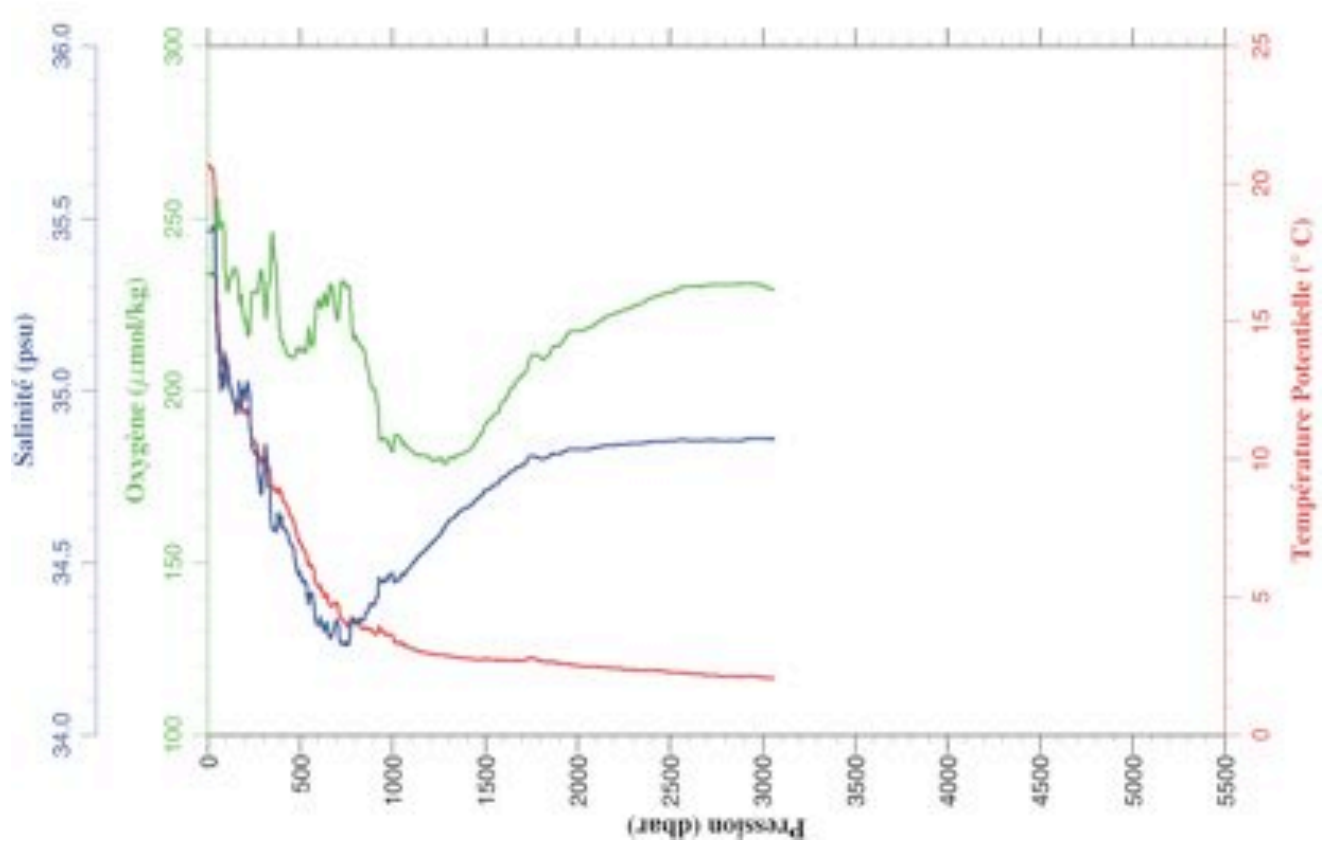
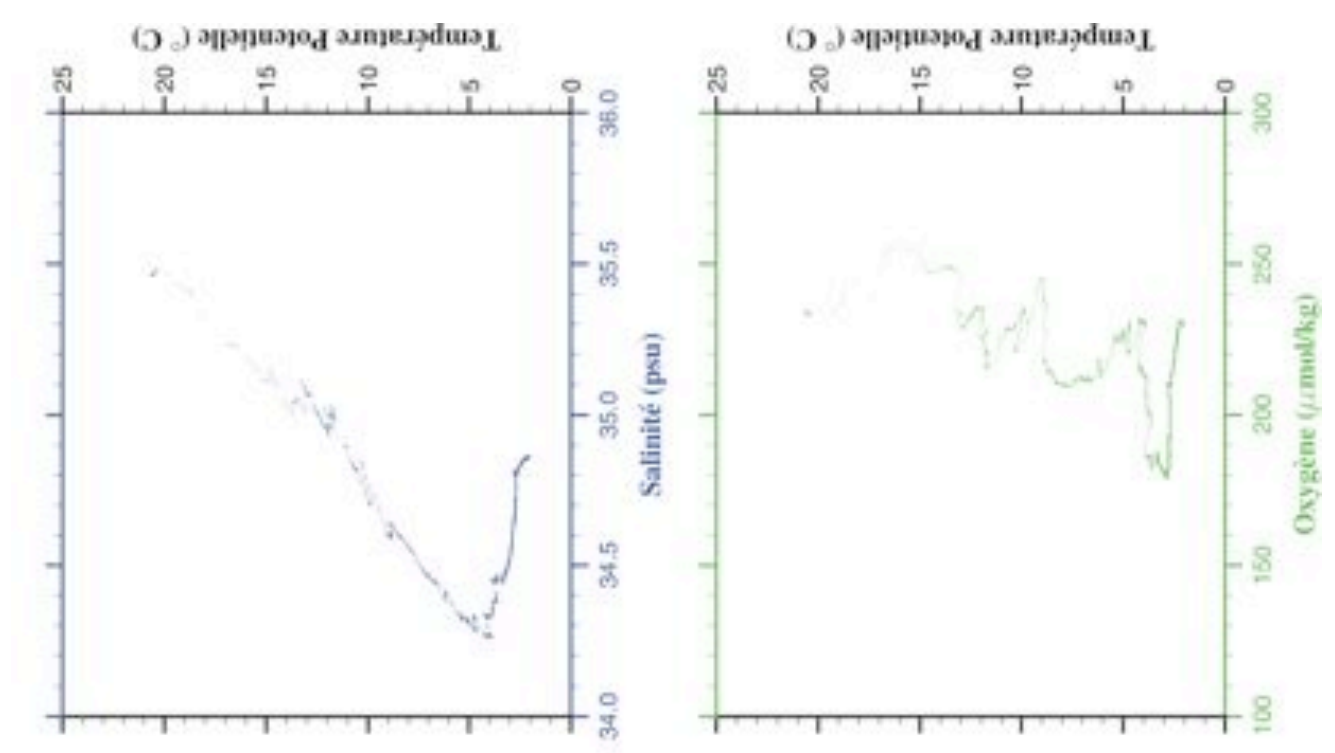
**STATION 5**

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| Station   :    6           Campagne  : GOODHOPE 2008 |
| Date     : 14-02-08      Navire    : R/V Marion Dufresne |
| Profondeur : 3026        Organisme  : IFREMER |
| Position  : S 34 0.80 |
|           : E 16 35.27 |
|           :           |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.664	35.463	234.0	20.664	3050.0	2.304	34.859	229.5	2.064
10.0	20.661	35.463	233.9	20.660	3060.0	2.306	34.859	229.4	2.065
20.0	20.535	35.464	234.1	20.531					
30.0	20.490	35.475	233.1	20.484					
40.0	18.757	35.408	239.7	18.750					
50.0	15.807	35.176	255.6	15.799					
100.0	12.991	35.063	232.6	12.977					
150.0	12.003	34.943	235.2	11.984					
200.0	11.783	34.999	219.9	11.757					
250.0	10.667	34.822	228.5	10.637					
300.0	10.064	34.756	229.5	10.029					
350.0	9.021	34.597	245.3	8.983					
400.0	8.738	34.622	213.9	8.695					
450.0	7.944	34.552	209.8	7.898					
500.0	7.057	34.470	211.0	7.009					
550.0	6.256	34.408	216.3	6.207					
600.0	5.415	34.320	226.2	5.365					
650.0	4.985	34.306	225.5	4.933					
700.0	4.794	34.327	220.4	4.738					
750.0	4.034	34.264	230.0	3.979					
800.0	4.166	34.326	215.8	4.106					
850.0	3.934	34.345	210.4	3.871					
900.0	3.741	34.378	200.5	3.676					
950.0	3.813	34.448	185.8	3.743					
1000.0	3.695	34.469	182.4	3.622					
1050.0	3.433	34.469	184.5	3.358					
1100.0	3.215	34.493	182.6	3.137					
1150.0	3.097	34.525	181.3	3.017					
1200.0	3.040	34.550	180.7	2.956					
1250.0	2.989	34.577	180.2	2.901					
1300.0	2.966	34.620	180.2	2.875					
1350.0	2.912	34.643	181.2	2.818					
1400.0	2.881	34.661	182.3	2.782					
1450.0	2.849	34.682	185.1	2.747					
1500.0	2.871	34.712	190.2	2.765					
1550.0	2.845	34.728	193.1	2.735					
1600.0	2.840	34.746	196.9	2.725					
1650.0	2.828	34.767	201.0	2.709					
1700.0	2.830	34.783	204.4	2.707					
1750.0	2.924	34.810	210.2	2.795					
1800.0	2.813	34.802	209.4	2.681					
1850.0	2.792	34.811	210.8	2.657					
1900.0	2.740	34.816	213.0	2.600					
1950.0	2.717	34.829	216.7	2.573					
2000.0	2.667	34.828	217.2	2.520					
2050.0	2.637	34.830	218.1	2.486					
2100.0	2.630	34.835	219.7	2.474					
2150.0	2.611	34.840	221.4	2.451					
2200.0	2.586	34.842	222.3	2.422					
2250.0	2.565	34.843	223.4	2.397					
2300.0	2.550	34.845	224.3	2.377					
2350.0	2.531	34.847	225.4	2.354					
2400.0	2.526	34.851	226.9	2.344					
2450.0	2.504	34.852	228.0	2.318					
2500.0	2.481	34.854	228.8	2.291					
2550.0	2.471	34.856	229.7	2.276					
2600.0	2.438	34.856	230.2	2.239					
2650.0	2.409	34.855	230.4	2.206					
2700.0	2.392	34.856	230.5	2.184					
2750.0	2.374	34.855	230.8	2.162					
2800.0	2.360	34.855	230.8	2.144					
2850.0	2.353	34.854	230.8	2.132					
2900.0	2.350	34.857	231.0	2.124					
2950.0	2.360	34.860	230.8	2.129					
3000.0	2.337	34.860	230.6	2.101					



**STATION 6**

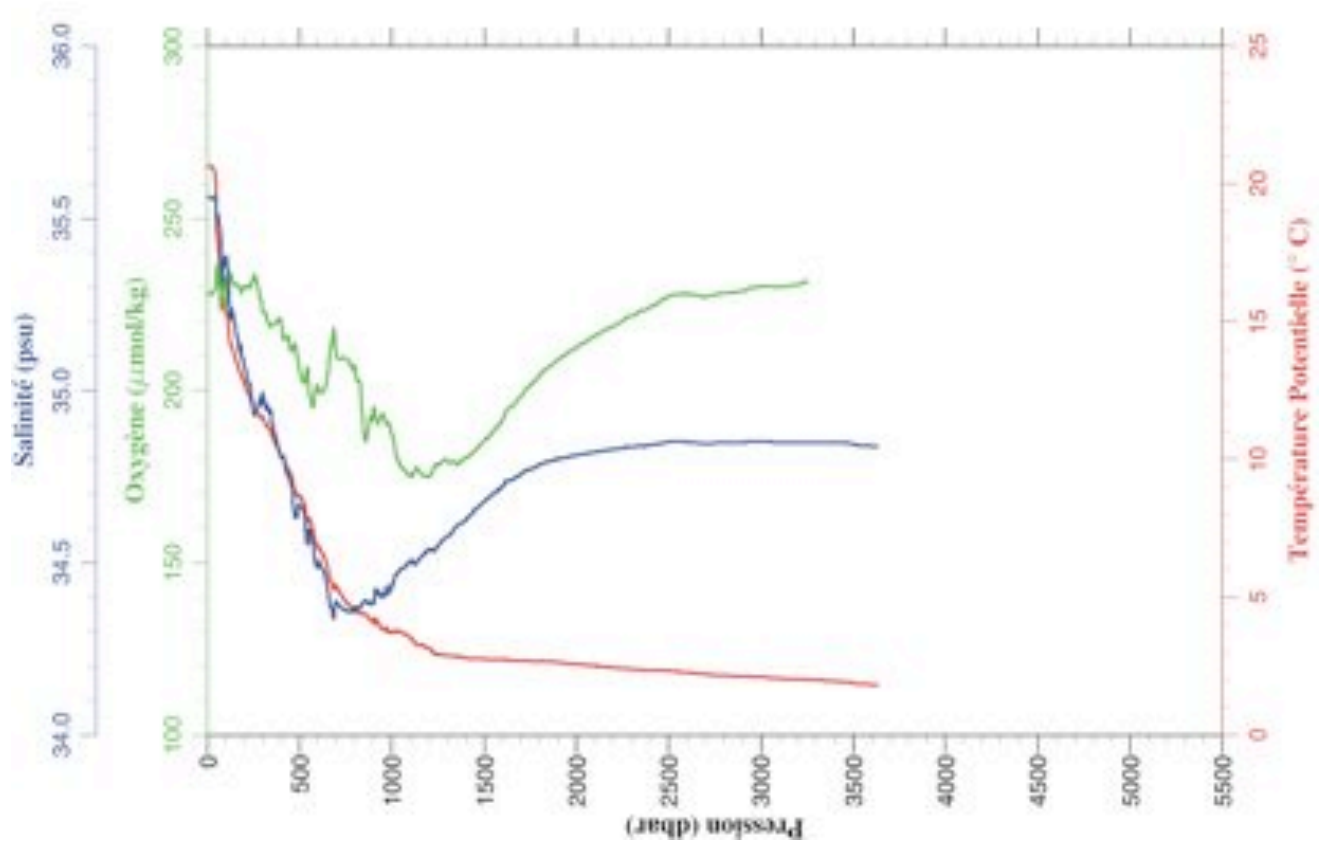
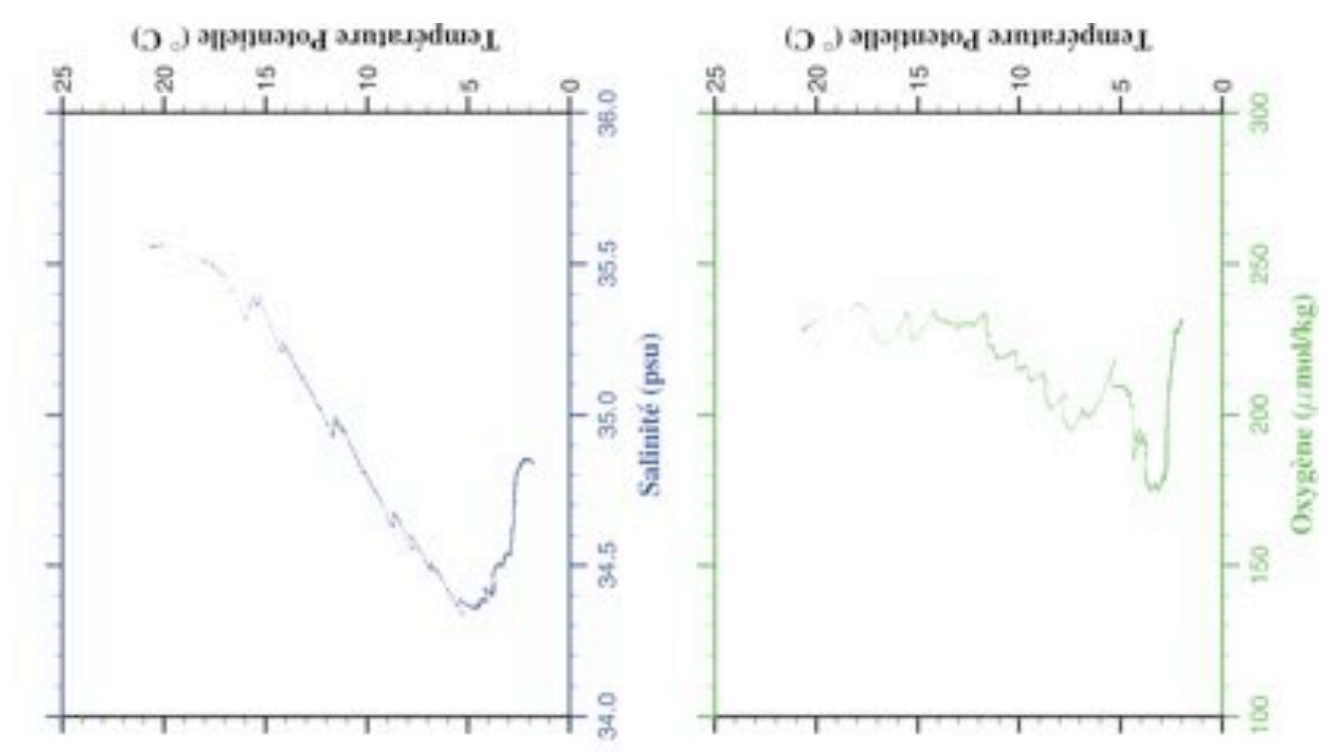
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| Station   :    7           Campagne  : GOODHOPE 2008 |
| Date      : 14-02-08     Navire    : R/V Marion Dufresne |
| Profondeur : 3593        Organisme : IFREMER |
| Position  : S 34 2.00    |
|            E 16 11.00    |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.637	35.560	228.6	20.637	3050.0	2.320	34.851	230.2	2.079
10.0	20.637	35.561	227.8	20.635	3100.0	2.299	34.850	230.1	2.054
20.0	20.642	35.561	227.9	20.638	3150.0	2.289	34.849	230.4	2.039
30.0	20.584	35.556	228.3	20.578	3200.0	2.283	34.850	230.7	2.027
40.0	20.417	35.556	229.4	20.409	3250.0	2.268	34.850	9.0	2.008
50.0	18.342	35.504	235.0	18.333	3300.0	2.260	34.850	9.0	1.995
100.0	15.373	35.387	228.7	15.357	3350.0	2.246	34.850	9.0	1.976
150.0	13.750	35.192	230.9	13.728	3400.0	2.226	34.849	9.0	1.952
200.0	12.798	35.074	230.0	12.770	3450.0	2.222	34.848	9.0	1.942
250.0	11.792	34.938	233.2	11.760	3500.0	2.171	34.844	9.0	1.887
300.0	11.607	34.994	222.9	11.569	3550.0	2.140	34.841	9.0	1.851
350.0	10.903	34.905	219.1	10.860	3600.0	2.115	34.838	9.0	1.821
400.0	10.185	34.806	219.6	10.137	3634.0	2.113	34.838	9.0	1.816
450.0	9.549	34.738	211.6	9.497					
500.0	8.732	34.668	205.6	8.678					
550.0	7.915	34.598	201.5	7.859					
600.0	6.856	34.486	201.3	6.799					
650.0	6.104	34.422	204.0	6.046					
700.0	5.441	34.384	209.8	5.382					
750.0	4.912	34.361	209.2	4.852					
800.0	4.583	34.361	206.9	4.520					
850.0	4.464	34.389	187.1	4.398					
900.0	4.112	34.380	194.8	4.044					
950.0	3.897	34.398	193.4	3.826					
1000.0	3.817	34.432	187.5	3.743					
1050.0	3.812	34.483	177.8	3.734					
1100.0	3.602	34.501	175.6	3.521					
1150.0	3.357	34.512	176.5	3.275					
1200.0	3.257	34.539	174.9	3.171					
1250.0	3.022	34.550	178.3	2.934					
1300.0	2.978	34.578	179.8	2.887					
1350.0	2.964	34.607	178.8	2.869					
1400.0	2.904	34.623	180.3	2.805					
1450.0	2.876	34.655	182.7	2.773					
1500.0	2.863	34.679	185.4	2.757					
1550.0	2.853	34.701	188.3	2.742					
1600.0	2.861	34.725	191.5	2.746					
1650.0	2.827	34.741	195.4	2.708					
1700.0	2.825	34.758	198.3	2.702					
1750.0	2.811	34.772	201.5	2.684					
1800.0	2.824	34.786	204.3	2.692					
1850.0	2.807	34.794	206.7	2.671					
1900.0	2.774	34.802	209.0	2.635					
1950.0	2.747	34.807	210.7	2.603					
2000.0	2.717	34.812	212.4	2.569					
2050.0	2.696	34.816	213.9	2.544					
2100.0	2.664	34.821	215.8	2.508					
2150.0	2.640	34.827	217.4	2.480					
2200.0	2.620	34.829	218.6	2.455					
2250.0	2.585	34.833	220.3	2.417					
2300.0	2.567	34.836	221.6	2.394					
2350.0	2.553	34.840	223.1	2.375					
2400.0	2.528	34.842	224.3	2.347					
2450.0	2.525	34.847	225.8	2.339					
2500.0	2.521	34.851	227.3	2.330					
2550.0	2.496	34.851	227.9	2.301					
2600.0	2.475	34.850	228.1	2.275					
2650.0	2.440	34.848	227.8	2.237					
2700.0	2.409	34.846	227.2	2.201					
2750.0	2.391	34.847	227.7	2.178					
2800.0	2.383	34.848	228.3	2.166					
2850.0	2.366	34.848	228.4	2.144					
2900.0	2.351	34.849	228.8	2.125					
2950.0	2.350	34.852	229.9	2.119					
3000.0	2.335	34.852	230.1	2.099					





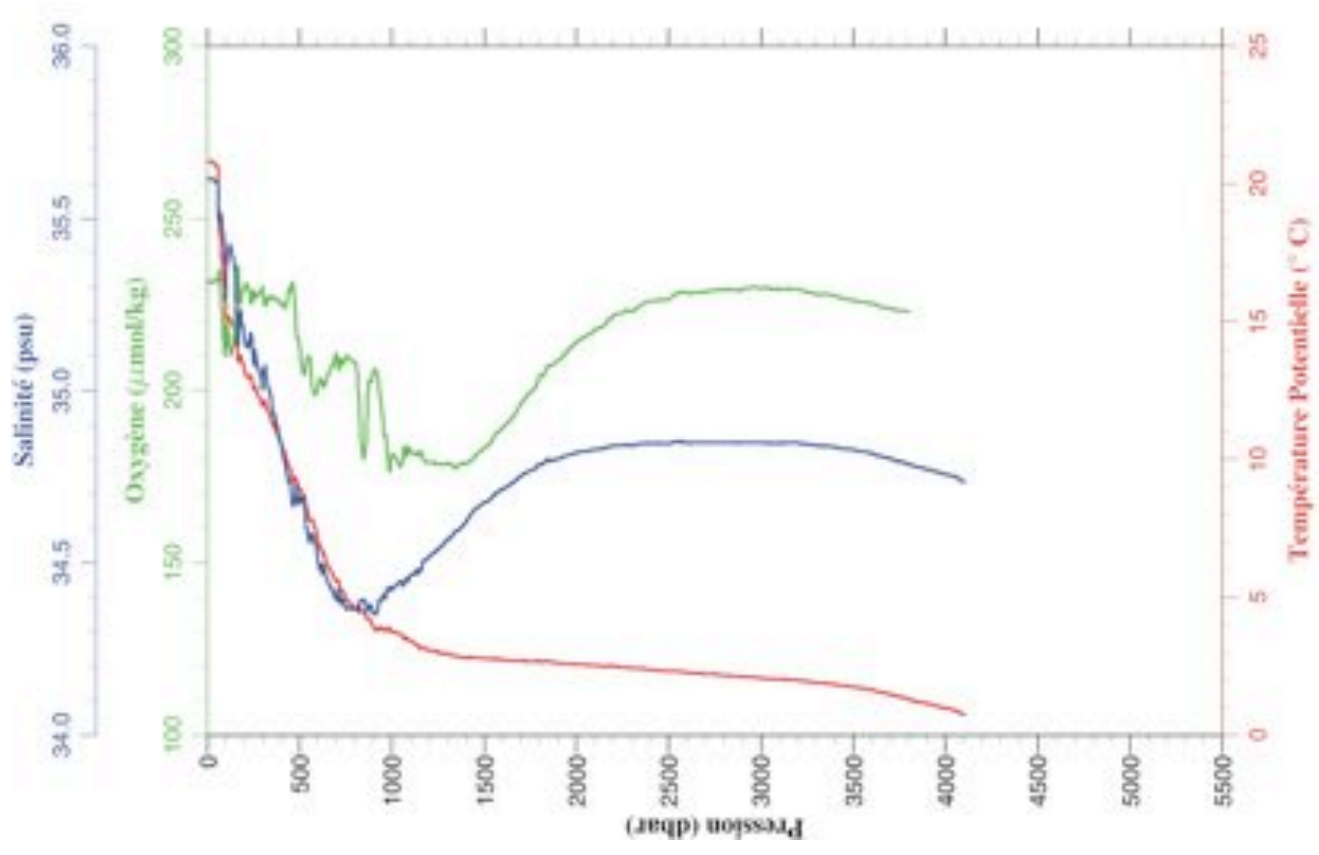
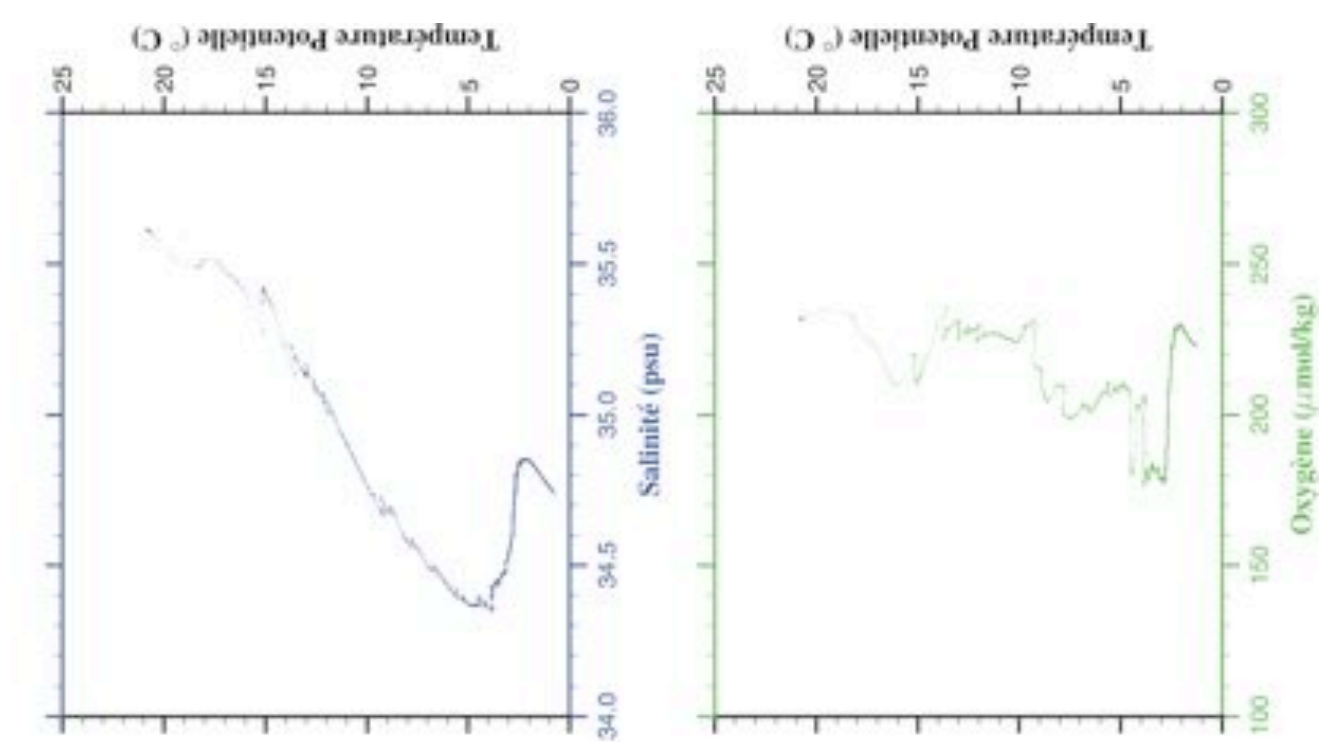
**STATION 7**

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| Station   : 8          Campagne  : GOODHOPE 2008 |
| Date      : 15-02-08   Navire    : R/V Marion Dufresne |
| Profondeur : 4039      Organisme  : IFREMER |
| Position  : S 34 3.59 |
|           : E 15 41.48 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.826	35.613	231.7	20.826	3050.0	2.289	34.849	229.4	2.049
10.0	20.828	35.613	231.4	20.826	3100.0	2.269	34.847	229.5	2.025
20.0	20.829	35.613	231.2	20.825	3150.0	2.265	34.849	229.7	2.015
30.0	20.817	35.613	231.7	20.812	3200.0	2.243	34.848	229.3	1.989
40.0	20.721	35.609	232.1	20.714	3250.0	2.208	34.844	228.6	1.949
50.0	20.680	35.607	231.8	20.670	3300.0	2.170	34.840	227.9	1.907
100.0	15.205	35.280	216.0	15.189	3350.0	2.146	34.839	227.9	1.879
150.0	14.638	35.346	218.3	14.615	3400.0	2.111	34.837	227.6	1.840
200.0	13.276	35.150	229.8	13.249	3450.0	2.066	34.831	226.7	1.790
250.0	12.599	35.083	228.9	12.565	3500.0	2.032	34.828	226.1	1.752
300.0	11.975	35.006	229.5	11.936	3550.0	1.985	34.824	225.6	1.701
350.0	11.417	34.951	227.0	11.372	3600.0	1.927	34.818	225.2	1.639
400.0	10.589	34.838	225.3	10.540	3650.0	1.842	34.809	224.2	1.550
450.0	9.692	34.730	229.0	9.641	3700.0	1.769	34.802	223.9	1.475
500.0	8.972	34.689	212.6	8.917	3750.0	1.686	34.794	223.1	1.388
550.0	7.931	34.566	209.5	7.875	3800.0	1.595	34.785	9.0	1.294
600.0	7.115	34.507	201.3	7.057	3850.0	1.511	34.777	9.0	1.207
650.0	6.249	34.447	204.1	6.191	3900.0	1.449	34.772	9.0	1.141
700.0	5.615	34.391	210.7	5.555	3950.0	1.366	34.764	9.0	1.056
750.0	5.022	34.369	209.6	4.961	4000.0	1.297	34.757	9.0	0.983
800.0	4.674	34.369	207.8	4.611	4050.0	1.223	34.751	9.0	0.906
850.0	4.529	34.394	180.2	4.462	4100.0	1.081	34.737	9.0	0.763
900.0	3.963	34.351	205.5	3.896	4102.0	1.081	34.737	9.0	0.763
950.0	3.924	34.400	192.1	3.853					
1000.0	3.832	34.422	181.6	3.758					
1050.0	3.723	34.446	178.1	3.646					
1100.0	3.514	34.461	182.5	3.434					
1150.0	3.222	34.474	182.2	3.140					
1200.0	3.143	34.516	179.0	3.059					
1250.0	3.086	34.537	178.7	2.998					
1300.0	3.045	34.569	178.7	2.953					
1350.0	2.948	34.592	177.8	2.853					
1400.0	2.909	34.617	178.9	2.810					
1450.0	2.927	34.656	180.9	2.824					
1500.0	2.887	34.675	183.3	2.780					
1550.0	2.856	34.692	186.3	2.745					
1600.0	2.844	34.713	189.3	2.729					
1650.0	2.829	34.731	192.0	2.710					
1700.0	2.819	34.752	196.2	2.696					
1750.0	2.795	34.767	199.6	2.668					
1800.0	2.809	34.786	203.9	2.678					
1850.0	2.799	34.796	207.3	2.663					
1900.0	2.755	34.801	208.7	2.616					
1950.0	2.738	34.811	211.4	2.594					
2000.0	2.711	34.819	214.1	2.564					
2050.0	2.702	34.824	215.7	2.550					
2100.0	2.685	34.830	217.6	2.529					
2150.0	2.654	34.831	218.9	2.494					
2200.0	2.675	34.841	221.8	2.510					
2250.0	2.633	34.841	222.7	2.463					
2300.0	2.597	34.840	222.9	2.423					
2350.0	2.593	34.846	224.8	2.415					
2400.0	2.567	34.848	226.1	2.385					
2450.0	2.544	34.848	226.3	2.358					
2500.0	2.512	34.847	226.6	2.321					
2550.0	2.509	34.851	228.4	2.314					
2600.0	2.470	34.849	228.4	2.271					
2650.0	2.452	34.849	228.4	2.248					
2700.0	2.426	34.848	228.6	2.218					
2750.0	2.409	34.849	229.1	2.196					
2800.0	2.389	34.849	229.2	2.171					
2850.0	2.365	34.849	229.3	2.143					
2900.0	2.345	34.849	229.4	2.119					
2950.0	2.331	34.849	229.9	2.100					
3000.0	2.305	34.848	229.7	2.069					



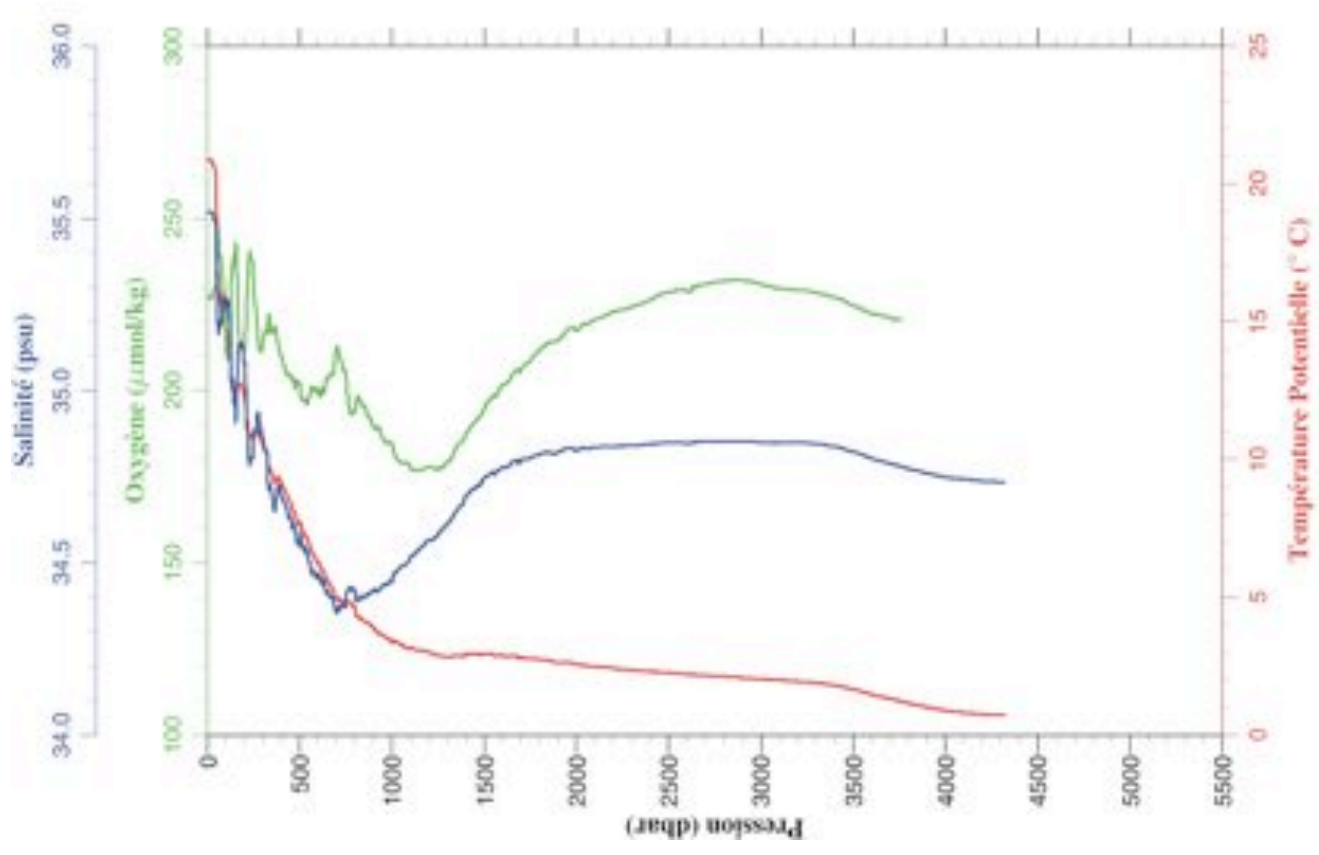
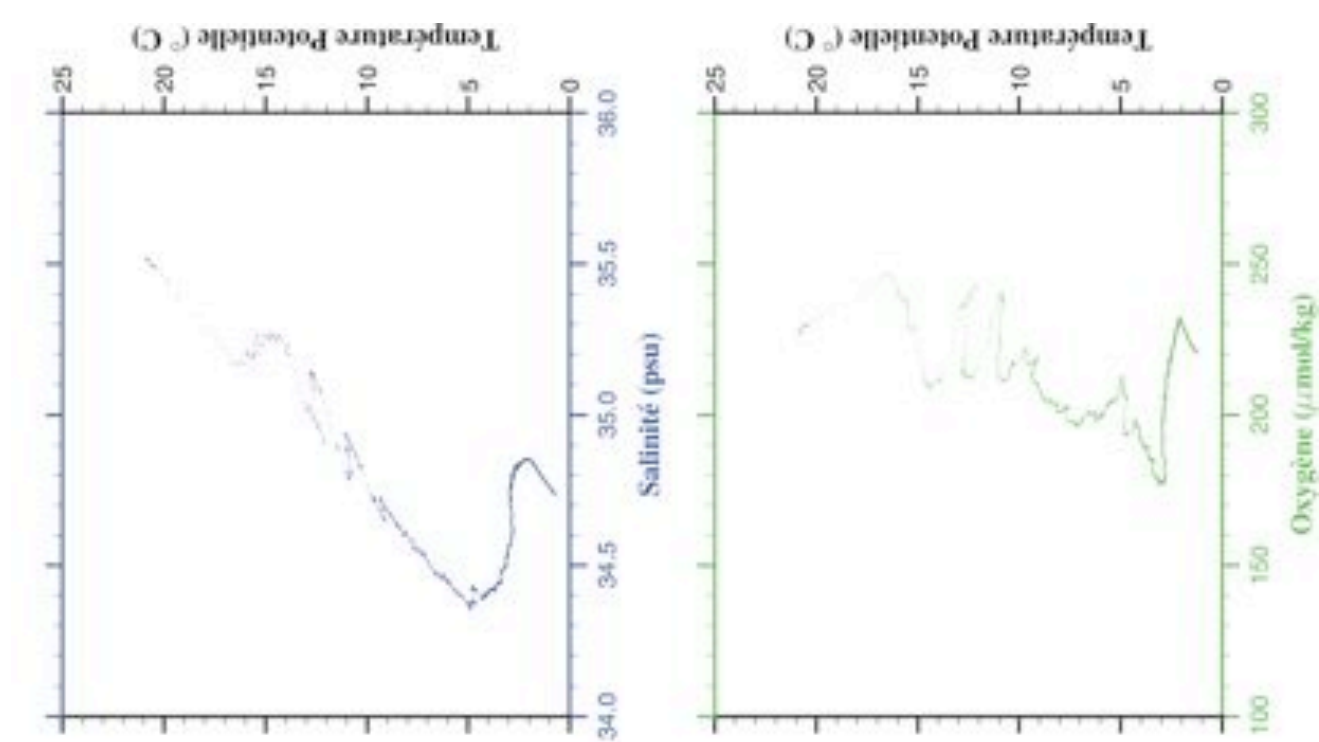
**STATION 8**

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| Station   : 9           Campagne  : GOODHOPE 2008 |
| Date      : 16-02-08   Navire    : R/V Marion Dufresne |
| Profondeur : 4296      Organisme  : IFREMER |
| Position  : S 34 5.51 |
|           : E 15 9.87 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.870	35.517	227.2	20.870	3050.0	2.250	34.849	230.4	2.011
10.0	20.866	35.518	227.3	20.864	3100.0	2.234	34.849	229.7	1.990
20.0	20.836	35.517	226.9	20.832	3150.0	2.219	34.849	229.4	1.971
30.0	20.773	35.509	227.8	20.767	3200.0	2.199	34.848	229.1	1.946
40.0	20.559	35.494	229.4	20.552	3250.0	2.182	34.848	229.0	1.924
50.0	19.314	35.392	234.6	19.305	3300.0	2.154	34.845	228.4	1.892
100.0	14.761	35.264	213.7	14.746	3350.0	2.114	34.842	227.8	1.847
150.0	12.426	34.959	240.0	12.406	3400.0	2.073	34.837	227.0	1.802
200.0	12.312	35.077	212.1	12.286	3450.0	2.020	34.831	226.0	1.746
250.0	10.955	34.855	232.5	10.925	3500.0	1.936	34.822	224.7	1.658
300.0	10.566	34.863	213.4	10.530	3550.0	1.854	34.813	223.5	1.573
350.0	9.471	34.690	216.8	9.432	3600.0	1.755	34.803	222.4	1.471
400.0	9.163	34.693	210.0	9.118	3650.0	1.676	34.795	221.8	1.389
450.0	8.493	34.631	204.2	8.445	3700.0	1.612	34.788	221.2	1.322
500.0	7.638	34.544	202.4	7.588	3750.0	1.533	34.780	220.5	1.240
550.0	7.005	34.507	197.9	6.952	3800.0	1.453	34.773	9.0	1.157
600.0	6.279	34.459	199.6	6.225	3850.0	1.384	34.767	9.0	1.083
650.0	5.690	34.418	203.4	5.634	3900.0	1.314	34.760	9.0	1.011
700.0	4.963	34.355	212.3	4.907	3950.0	1.247	34.754	9.0	0.940
750.0	4.733	34.377	205.5	4.674	4000.0	1.204	34.749	9.0	0.893
800.0	4.661	34.418	193.8	4.598	4050.0	1.166	34.746	9.0	0.850
850.0	4.182	34.399	195.2	4.117	4100.0	1.133	34.743	9.0	0.813
900.0	3.956	34.419	189.7	3.889	4150.0	1.103	34.740	9.0	0.779
950.0	3.695	34.433	186.2	3.626	4200.0	1.083	34.737	9.0	0.754
1000.0	3.429	34.444	184.6	3.357	4250.0	1.069	34.736	9.0	0.735
1050.0	3.356	34.488	179.0	3.281	4300.0	1.067	34.735	9.0	0.728
1100.0	3.249	34.518	178.0	3.171	4318.0	1.069	34.734	9.0	0.727
1150.0	3.155	34.541	177.2	3.074					
1200.0	3.108	34.565	177.9	3.024					
1250.0	2.975	34.582	177.3	2.888					
1300.0	2.925	34.613	179.2	2.834					
1350.0	2.965	34.649	183.5	2.870					
1400.0	3.032	34.695	187.3	2.932					
1450.0	3.033	34.715	190.9	2.929					
1500.0	3.050	34.744	194.8	2.941					
1550.0	3.037	34.763	198.5	2.924					
1600.0	3.013	34.776	201.5	2.896					
1650.0	3.000	34.792	204.4	2.879					
1700.0	2.939	34.799	205.7	2.814					
1750.0	2.886	34.803	208.4	2.758					
1800.0	2.876	34.813	211.6	2.743					
1850.0	2.848	34.820	214.0	2.711					
1900.0	2.769	34.820	214.5	2.629					
1950.0	2.792	34.833	217.7	2.647					
2000.0	2.692	34.826	217.4	2.545					
2050.0	2.669	34.832	219.4	2.517					
2100.0	2.633	34.834	220.6	2.477					
2150.0	2.621	34.837	221.6	2.461					
2200.0	2.582	34.839	222.8	2.418					
2250.0	2.551	34.839	223.4	2.383					
2300.0	2.535	34.841	224.3	2.363					
2350.0	2.508	34.841	225.1	2.332					
2400.0	2.489	34.844	226.3	2.308					
2450.0	2.467	34.847	227.8	2.282					
2500.0	2.458	34.849	228.5	2.268					
2550.0	2.426	34.849	229.1	2.233					
2600.0	2.393	34.847	228.9	2.195					
2650.0	2.381	34.849	229.9	2.179					
2700.0	2.371	34.851	230.9	2.164					
2750.0	2.360	34.852	231.5	2.149					
2800.0	2.341	34.852	231.7	2.124					
2850.0	2.324	34.852	232.0	2.103					
2900.0	2.304	34.851	232.0	2.078					
2950.0	2.289	34.851	231.6	2.059					
3000.0	2.261	34.849	230.9	2.026					



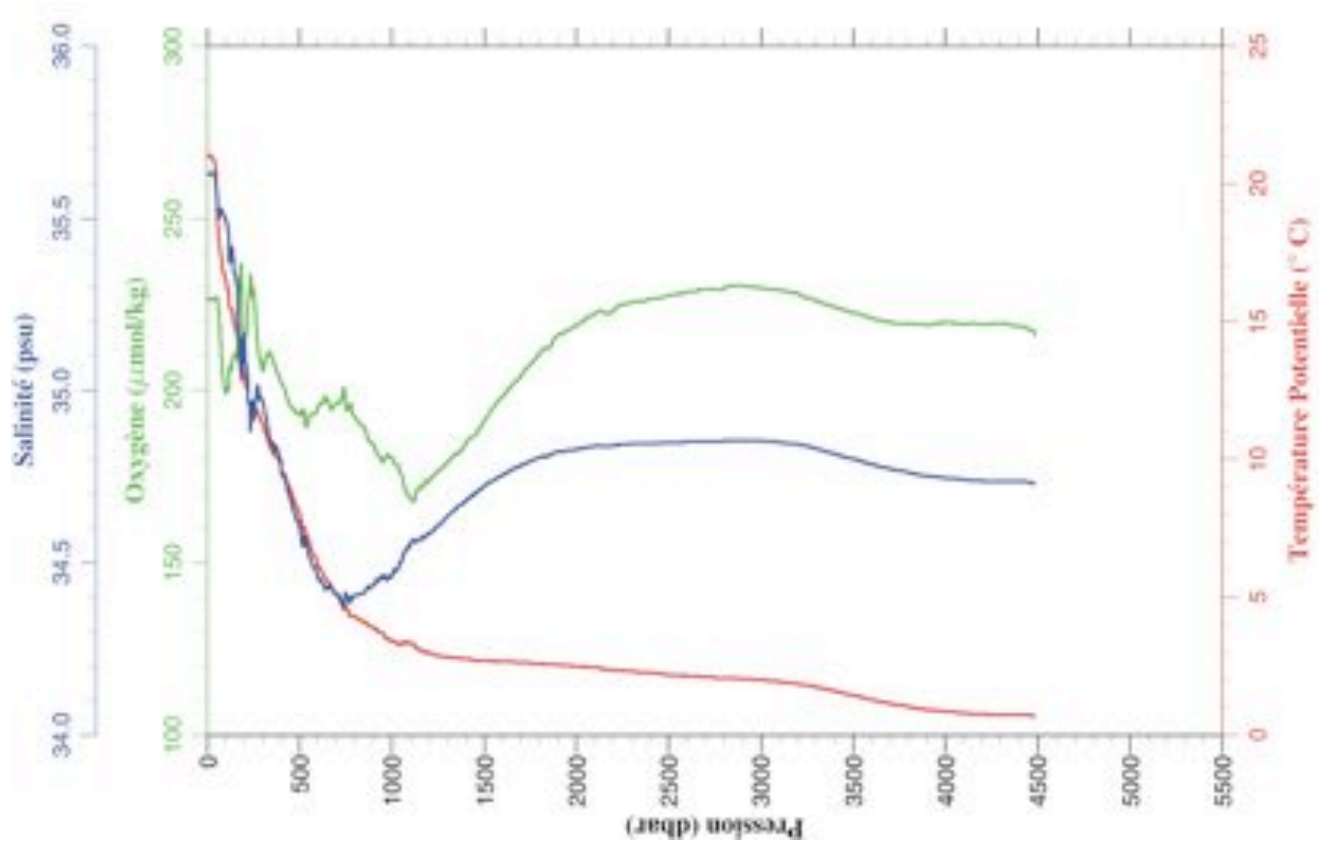
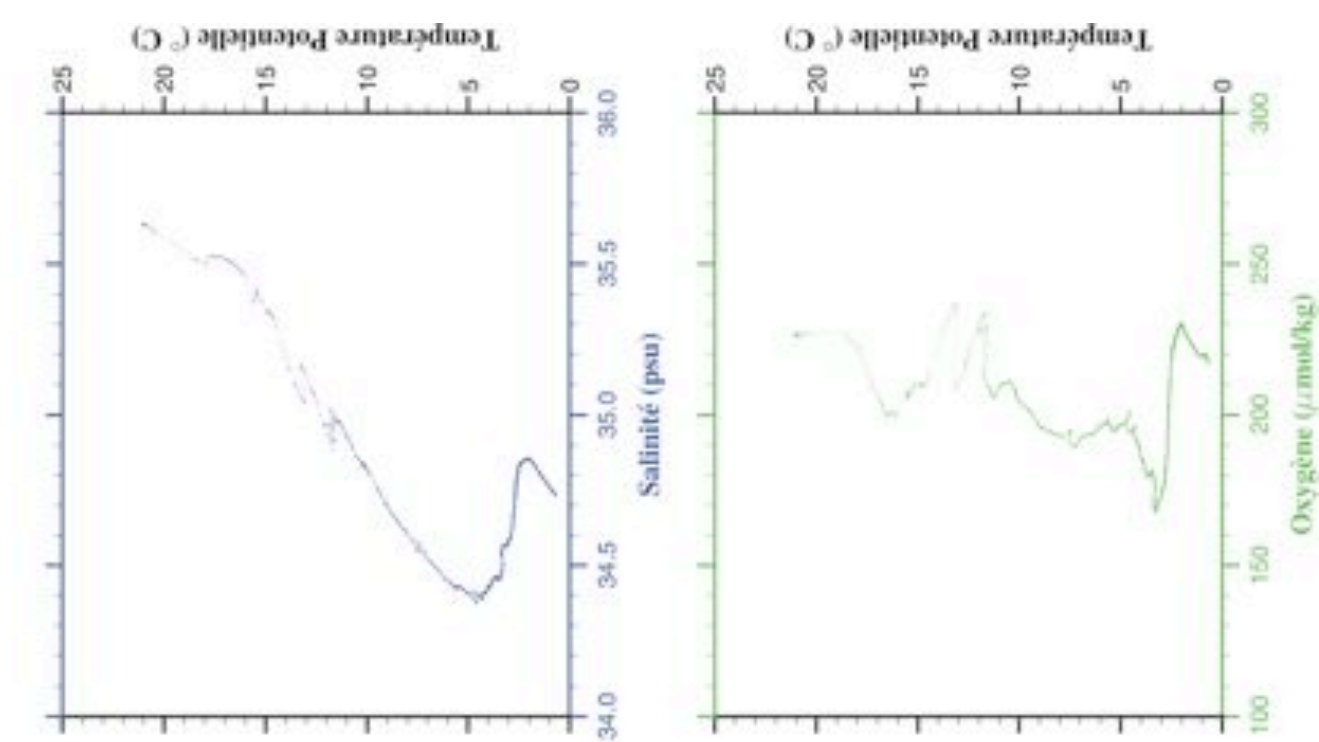
**STATION 9**

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| Station   : 10           Campagne  : GOODHOPE 2008
| Date     : 16-02-08    Navire    : R/V Marion Dufresne
| Profondeur : 4407      Organisme : IFREMER
| Position  : S 34 7.42
|            E 14 34.98
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.978	35.629	226.8	20.978	3050.0	2.207	34.852	229.4	1.969
10.0	21.049	35.629	226.4	21.047	3100.0	2.177	34.849	229.0	1.934
20.0	20.976	35.629	226.2	20.972	3150.0	2.145	34.847	228.7	1.898
30.0	20.923	35.630	226.5	20.917	3200.0	2.106	34.843	228.1	1.855
40.0	20.764	35.624	226.4	20.757	3250.0	2.069	34.839	227.0	1.813
50.0	19.733	35.579	226.8	19.724	3300.0	2.000	34.831	225.9	1.741
100.0	16.479	35.493	199.9	16.463	3350.0	1.933	34.824	225.1	1.671
150.0	14.837	35.340	209.5	14.815	3400.0	1.879	34.817	224.3	1.613
200.0	13.119	35.143	209.3	13.091	3450.0	1.781	34.808	223.3	1.512
250.0	11.643	34.917	229.3	11.611	3500.0	1.715	34.801	222.6	1.443
300.0	11.322	34.968	205.7	11.284	3550.0	1.643	34.794	221.9	1.368
350.0	10.428	34.851	209.6	10.386	3600.0	1.566	34.786	220.9	1.288
400.0	9.700	34.774	202.1	9.654	3650.0	1.496	34.779	220.3	1.214
450.0	8.906	34.680	195.5	8.856	3700.0	1.430	34.773	219.8	1.145
500.0	8.078	34.605	193.0	8.026	3750.0	1.385	34.768	219.5	1.096
550.0	7.068	34.523	191.8	7.016	3800.0	1.316	34.761	219.3	1.023
600.0	6.209	34.455	195.1	6.155	3850.0	1.258	34.756	219.3	0.961
650.0	5.634	34.425	197.1	5.579	3900.0	1.217	34.752	219.0	0.916
700.0	5.109	34.409	196.2	5.052	3950.0	1.197	34.750	219.4	0.892
750.0	4.746	34.413	195.0	4.687	4000.0	1.163	34.746	219.7	0.853
800.0	4.363	34.404	192.2	4.301	4050.0	1.145	34.744	219.5	0.830
850.0	4.157	34.414	189.3	4.092	4100.0	1.114	34.741	219.4	0.795
900.0	3.961	34.435	184.2	3.894	4150.0	1.097	34.739	219.5	0.773
950.0	3.772	34.463	179.2	3.702	4200.0	1.087	34.738	219.3	0.758
1000.0	3.488	34.465	180.6	3.416	4250.0	1.074	34.736	219.4	0.740
1050.0	3.356	34.500	175.9	3.281	4300.0	1.079	34.736	219.5	0.739
1100.0	3.423	34.553	168.9	3.344	4350.0	1.083	34.736	219.1	0.737
1150.0	3.167	34.567	171.8	3.086	4400.0	1.087	34.736	218.7	0.735
1200.0	3.081	34.587	173.4	2.997	4450.0	1.082	34.735	217.8	0.726
1250.0	2.959	34.608	176.7	2.871	4482.0	1.049	34.731	216.2	0.690
1300.0	2.918	34.636	179.1	2.827					
1350.0	2.894	34.657	181.9	2.799					
1400.0	2.864	34.679	184.8	2.766					
1450.0	2.817	34.701	186.9	2.715					
1500.0	2.805	34.723	191.3	2.699					
1550.0	2.793	34.740	195.0	2.683					
1600.0	2.785	34.754	198.2	2.671					
1650.0	2.772	34.769	201.4	2.654					
1700.0	2.753	34.782	204.0	2.631					
1750.0	2.743	34.796	207.7	2.617					
1800.0	2.727	34.807	210.8	2.597					
1850.0	2.686	34.810	212.4	2.552					
1900.0	2.696	34.822	216.0	2.557					
1950.0	2.662	34.825	217.5	2.519					
2000.0	2.642	34.829	218.8	2.495					
2050.0	2.634	34.836	220.9	2.483					
2100.0	2.602	34.838	222.5	2.446					
2150.0	2.556	34.838	222.5	2.397					
2200.0	2.526	34.840	223.2	2.363					
2250.0	2.500	34.843	224.9	2.333					
2300.0	2.478	34.845	225.7	2.307					
2350.0	2.455	34.845	225.8	2.279					
2400.0	2.441	34.847	226.6	2.261					
2450.0	2.410	34.847	226.8	2.226					
2500.0	2.377	34.848	227.6	2.189					
2550.0	2.368	34.850	228.2	2.175					
2600.0	2.350	34.851	228.6	2.153					
2650.0	2.333	34.851	228.8	2.131					
2700.0	2.312	34.851	229.3	2.106					
2750.0	2.294	34.851	229.4	2.084					
2800.0	2.290	34.854	229.7	2.075					
2850.0	2.282	34.856	230.4	2.062					
2900.0	2.268	34.855	230.3	2.043					
2950.0	2.249	34.854	230.1	2.020					
3000.0	2.230	34.854	229.8	1.996					



**STATION 10**

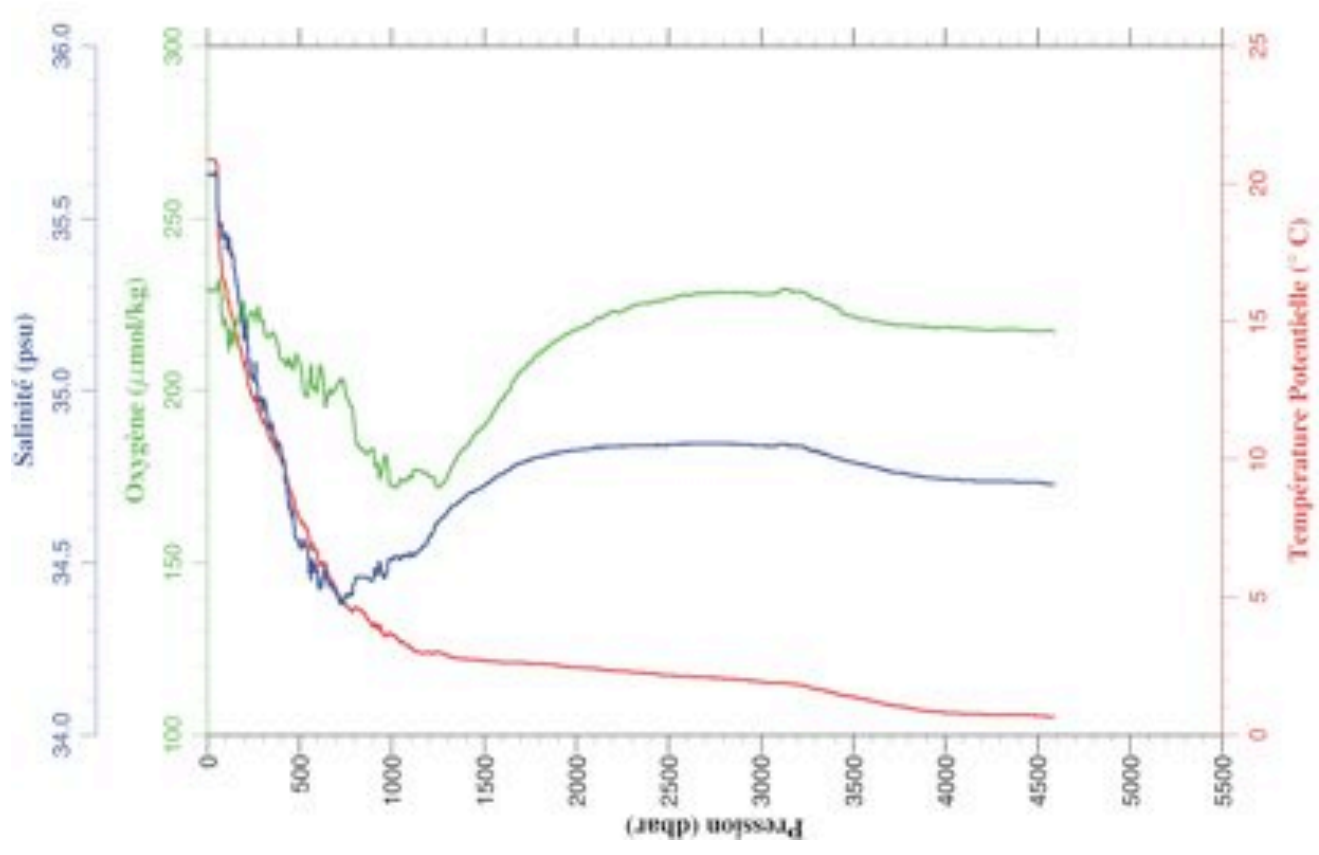
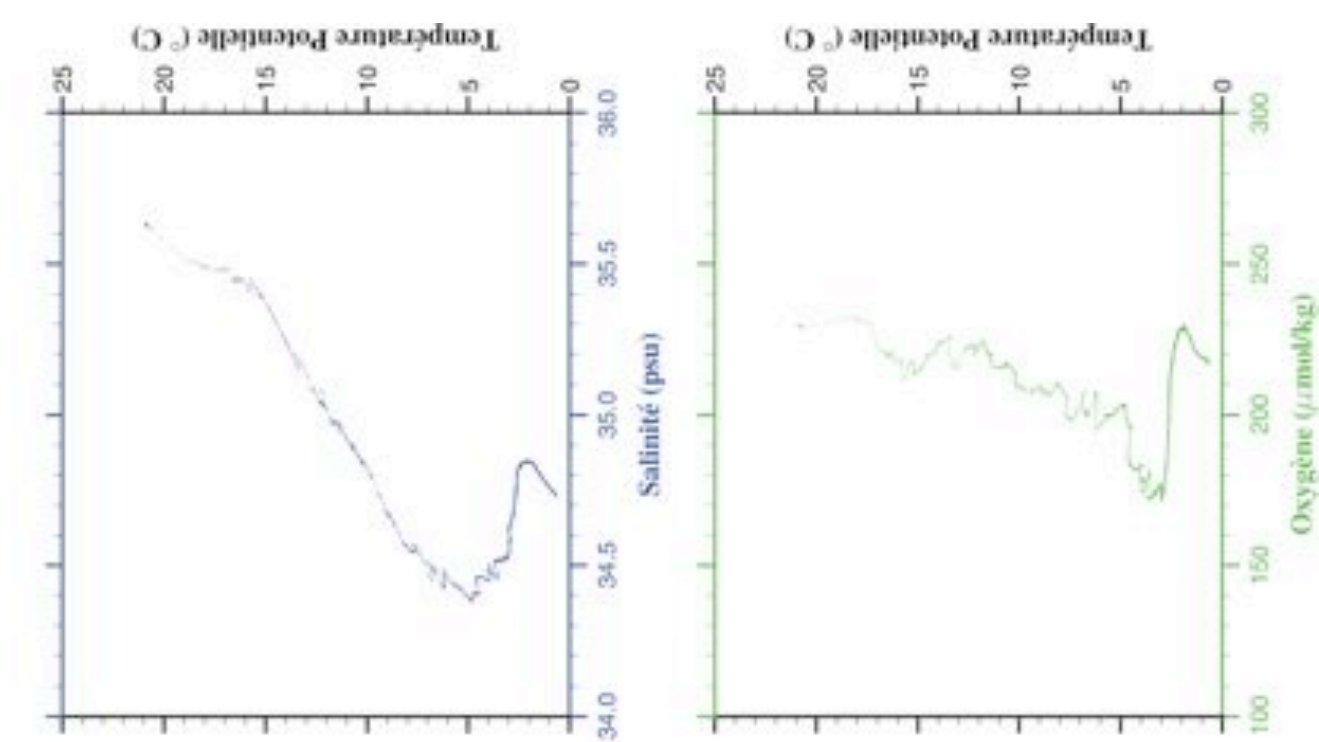
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| Station   : 11           Campagne  : GOODHOPE 2008 |
| Date      : 17-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4506       Organisme : IFREMER |
| Position  : S 34 25.59 |
|           : E 14 24.30 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.890	35.627	229.0	20.889	3050.0	2.131	34.839	228.1	1.894
10.0	20.891	35.627	229.2	20.889	3100.0	2.135	34.844	228.8	1.894
20.0	20.890	35.627	229.2	20.886	3150.0	2.103	34.840	229.3	1.857
30.0	20.894	35.627	229.0	20.888	3200.0	2.082	34.838	228.7	1.832
40.0	20.877	35.632	228.9	20.869	3250.0	2.008	34.830	227.9	1.754
50.0	20.707	35.619	229.0	20.697	3300.0	1.946	34.825	226.6	1.688
100.0	16.261	35.446	219.8	16.245	3350.0	1.868	34.815	225.7	1.608
150.0	14.764	35.342	216.7	14.742	3400.0	1.770	34.804	224.2	1.507
200.0	13.487	35.176	223.5	13.459	3450.0	1.705	34.797	222.2	1.438
250.0	12.221	35.030	222.3	12.188	3500.0	1.655	34.792	221.4	1.384
300.0	11.376	34.945	220.4	11.338	3550.0	1.587	34.786	220.7	1.313
350.0	10.742	34.902	216.8	10.700	3600.0	1.515	34.779	220.3	1.238
400.0	10.036	34.821	209.0	9.989	3650.0	1.449	34.772	219.7	1.169
450.0	8.906	34.663	207.1	8.857	3700.0	1.371	34.765	219.4	1.087
500.0	7.893	34.545	208.1	7.842	3750.0	1.327	34.762	219.0	1.039
550.0	7.244	34.512	200.6	7.191	3800.0	1.276	34.757	218.8	0.984
600.0	6.503	34.459	202.4	6.448	3850.0	1.213	34.751	218.6	0.918
650.0	5.946	34.445	197.5	5.889	3900.0	1.170	34.748	218.4	0.871
700.0	5.323	34.412	201.1	5.265	3950.0	1.145	34.745	218.2	0.841
750.0	4.819	34.407	199.0	4.759	4000.0	1.121	34.743	218.3	0.812
800.0	4.674	34.447	188.0	4.610	4050.0	1.112	34.742	218.2	0.798
850.0	4.484	34.459	182.7	4.418	4100.0	1.094	34.740	218.0	0.775
900.0	4.012	34.452	182.8	3.945	4150.0	1.084	34.738	217.9	0.760
950.0	3.792	34.468	178.0	3.722	4200.0	1.079	34.737	217.7	0.750
1000.0	3.723	34.512	172.3	3.650	4250.0	1.076	34.737	217.6	0.742
1050.0	3.439	34.514	174.4	3.363	4300.0	1.075	34.736	217.7	0.736
1100.0	3.296	34.530	174.8	3.218	4350.0	1.075	34.735	217.7	0.730
1150.0	3.085	34.535	176.8	3.004	4400.0	1.072	34.734	217.7	0.721
1200.0	3.066	34.573	175.3	2.982	4450.0	1.074	34.734	217.3	0.718
1250.0	3.096	34.619	172.0	3.007	4500.0	1.068	34.733	217.2	0.706
1300.0	2.988	34.647	174.8	2.896	4550.0	1.042	34.730	217.5	0.675
1350.0	2.888	34.671	180.2	2.793	4586.0	1.034	34.729	216.9	0.664
1400.0	2.852	34.692	183.5	2.754					
1450.0	2.831	34.708	187.3	2.729					
1500.0	2.812	34.723	189.6	2.706					
1550.0	2.774	34.744	193.7	2.665					
1600.0	2.756	34.758	197.5	2.643					
1650.0	2.757	34.779	202.0	2.639					
1700.0	2.742	34.791	205.7	2.619					
1750.0	2.725	34.798	208.3	2.598					
1800.0	2.729	34.807	210.7	2.598					
1850.0	2.693	34.813	212.8	2.558					
1900.0	2.665	34.819	214.8	2.526					
1950.0	2.621	34.824	216.4	2.479					
2000.0	2.603	34.827	217.8	2.457					
2050.0	2.584	34.830	218.9	2.433					
2100.0	2.572	34.836	220.6	2.417					
2150.0	2.528	34.837	221.6	2.370					
2200.0	2.508	34.839	223.0	2.345					
2250.0	2.481	34.838	223.2	2.314					
2300.0	2.463	34.841	224.5	2.292					
2350.0	2.440	34.841	225.2	2.265					
2400.0	2.420	34.842	225.4	2.240					
2450.0	2.382	34.842	226.1	2.199					
2500.0	2.355	34.842	226.6	2.167					
2550.0	2.341	34.844	227.3	2.149					
2600.0	2.328	34.845	227.8	2.132					
2650.0	2.317	34.846	228.2	2.116					
2700.0	2.301	34.846	228.3	2.095					
2750.0	2.293	34.847	228.5	2.083					
2800.0	2.263	34.845	228.5	2.049					
2850.0	2.243	34.844	228.4	2.024					
2900.0	2.222	34.844	228.6	1.998					
2950.0	2.192	34.842	228.3	1.964					
3000.0	2.166	34.841	228.0	1.934					

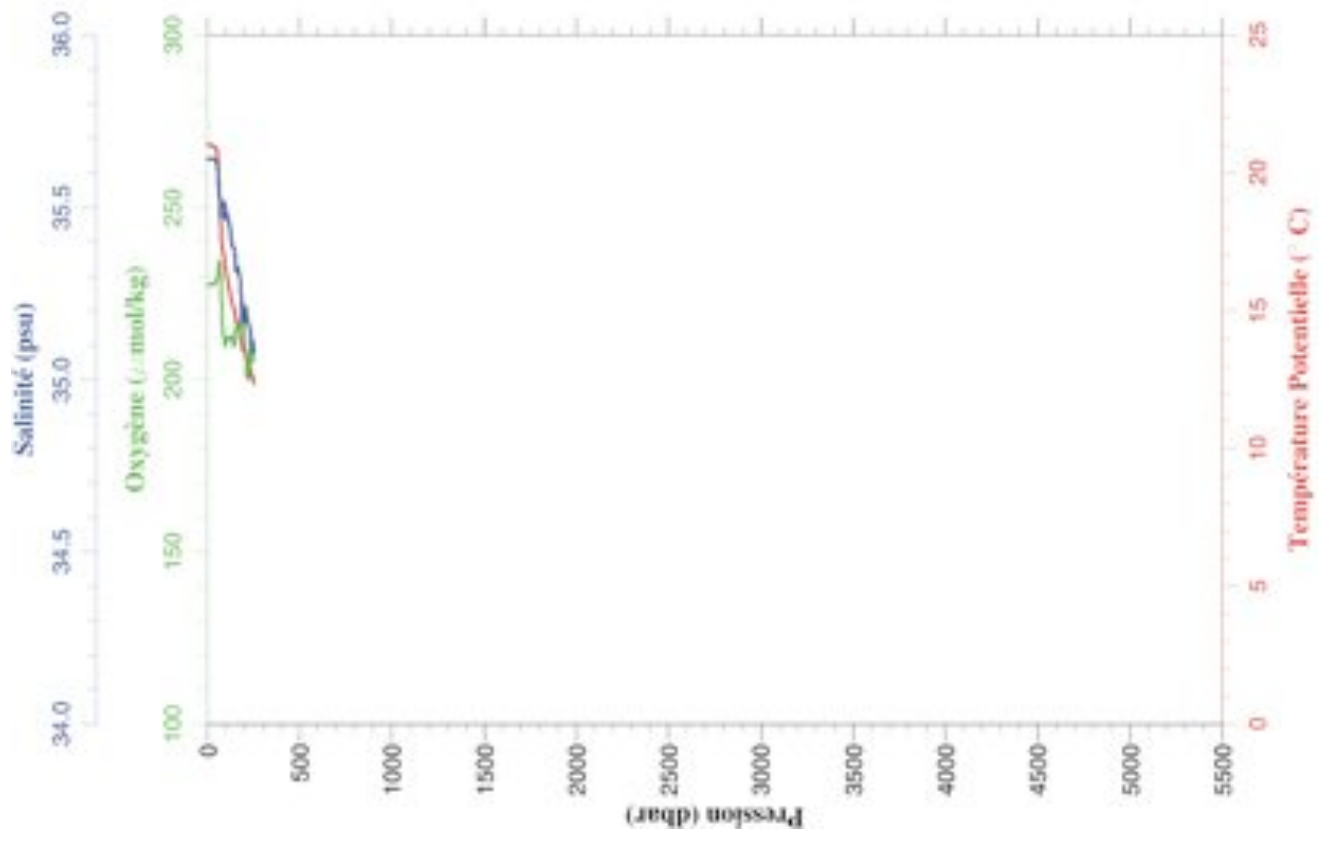
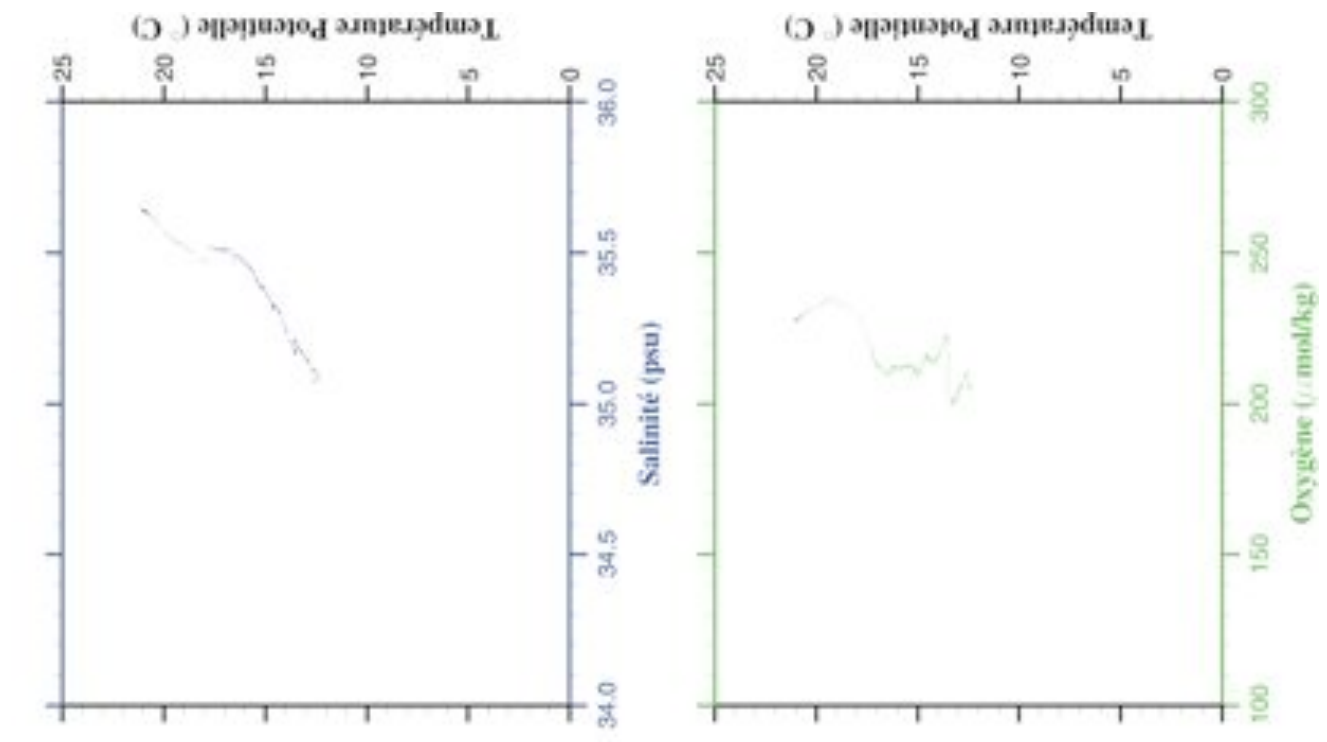




**STATION 11**

Station	: 12	Campagne	: GOODHOPE 2008
Date	: 17-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 4510	Organisme	: IFREMER
Position	: S 34 25.63		
	E 14 24.56		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.021	35.640	227.4	21.021
10.0	21.022	35.640	227.4	21.020
20.0	20.996	35.641	227.7	20.992
30.0	20.974	35.640	227.6	20.968
40.0	20.950	35.639	227.8	20.942
50.0	20.828	35.631	228.8	20.818
100.0	16.461	35.495	209.8	16.445
150.0	14.915	35.356	211.3	14.893
200.0	13.545	35.179	217.7	13.517
250.0	12.412	35.087	205.3	12.379
251.0	12.357	35.078	205.6	12.323



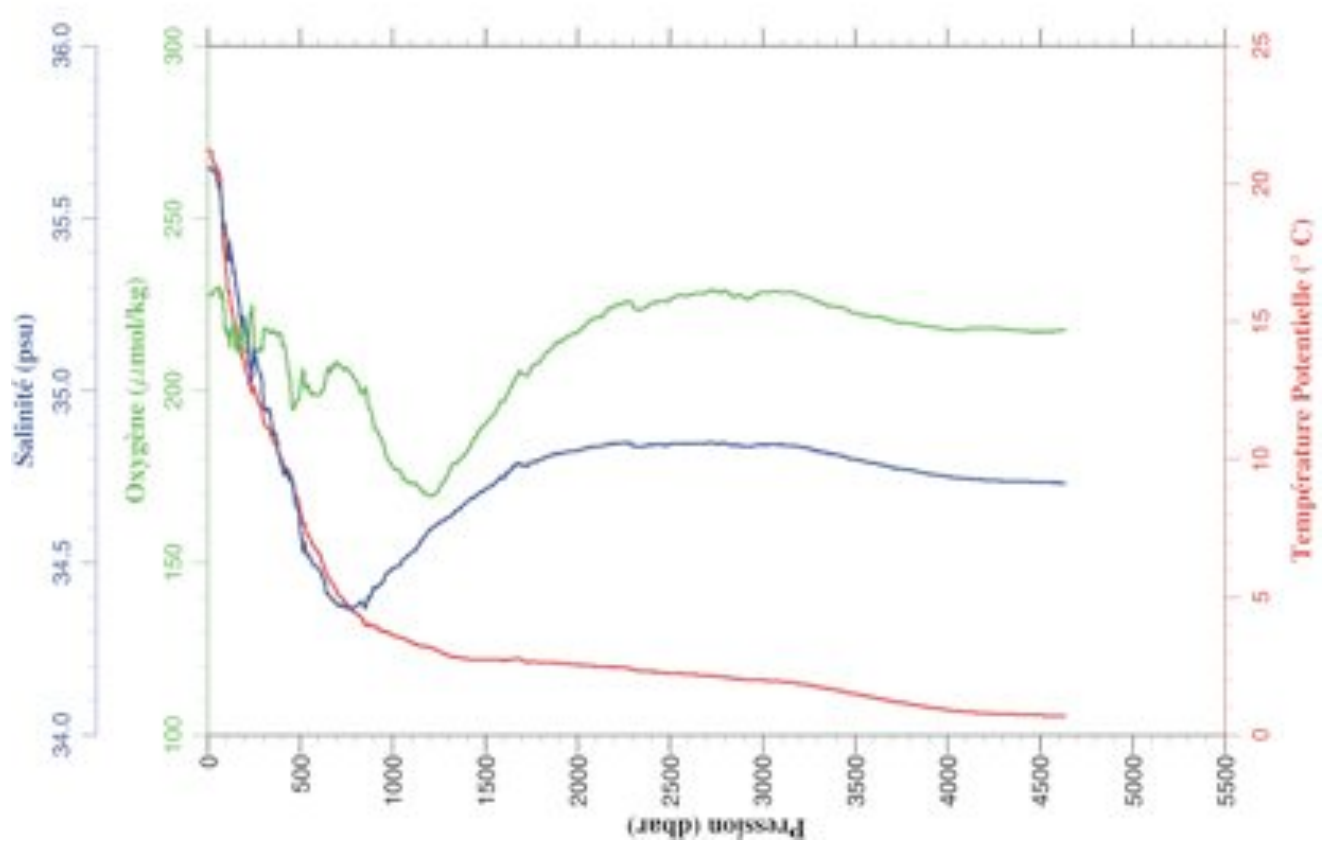
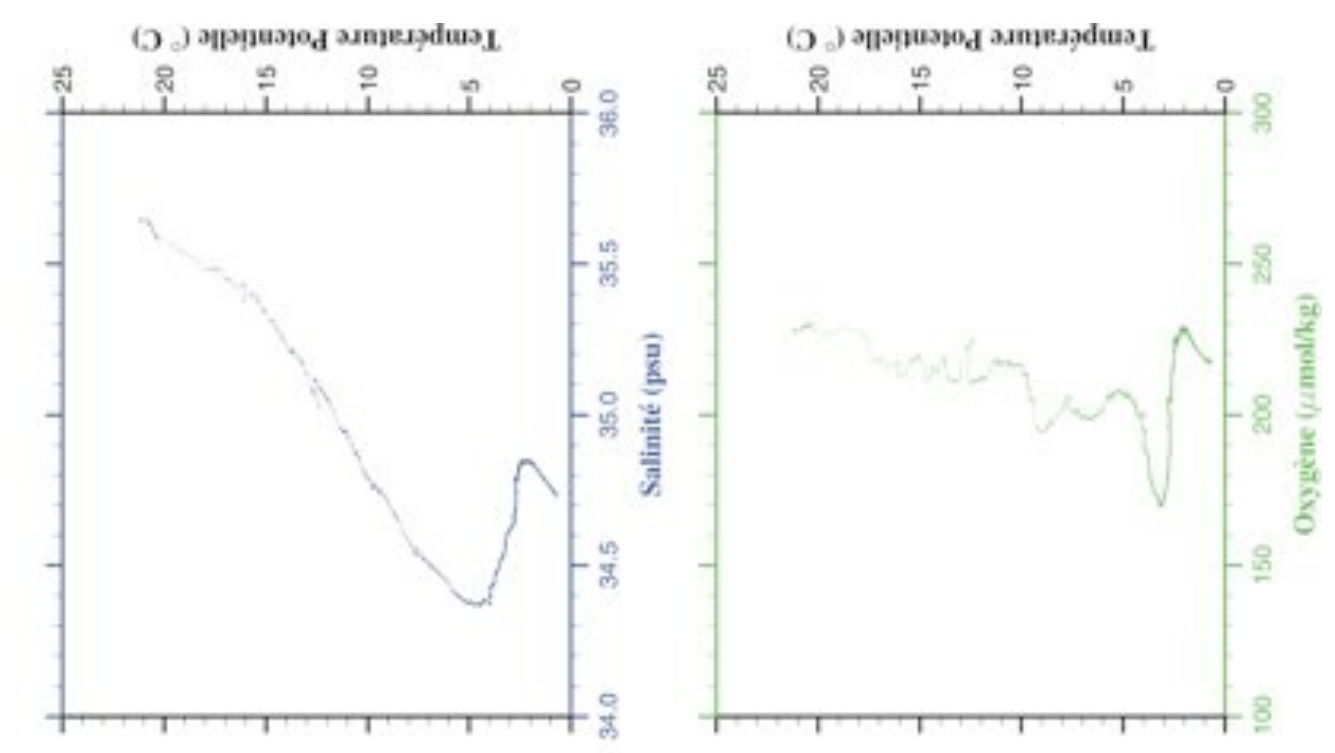
**STATION 12**

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| Station   : 13           Campagne  : GOODHOPE 2008 |
| Date      : 17-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4598      Organisme  : IFREMER |
| Position  : S 34 43.44 |
|            : E 14 13.45 |
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PRESSION	TEMPERA-TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA-TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.194	35.643	227.6	21.194	3050.0	2.208	34.843	228.8	1.970
10.0	21.194	35.644	227.6	21.192	3100.0	2.190	34.842	228.6	1.947
20.0	21.163	35.644	227.7	21.159	3150.0	2.164	34.841	228.5	1.917
30.0	20.797	35.640	228.5	20.792	3200.0	2.123	34.837	227.8	1.871
40.0	20.713	35.634	229.2	20.706	3250.0	2.086	34.833	227.0	1.831
50.0	20.565	35.610	229.5	20.555	3300.0	2.024	34.827	225.7	1.765
100.0	16.889	35.448	217.7	16.873	3350.0	1.943	34.816	224.6	1.680
150.0	14.760	35.314	213.0	14.737	3400.0	1.894	34.813	224.3	1.628
200.0	13.359	35.180	211.2	13.331	3450.0	1.829	34.807	223.7	1.559
250.0	12.614	35.116	211.9	12.580	3500.0	1.773	34.801	222.6	1.499
300.0	11.463	34.961	216.3	11.425	3550.0	1.710	34.794	222.0	1.433
350.0	10.736	34.888	217.0	10.694	3600.0	1.648	34.790	221.6	1.367
400.0	10.061	34.795	214.2	10.014	3650.0	1.584	34.784	221.1	1.300
450.0	9.465	34.751	198.9	9.414	3700.0	1.512	34.777	220.2	1.224
500.0	8.160	34.595	200.9	8.108	3750.0	1.463	34.772	219.8	1.171
550.0	7.252	34.521	200.1	7.198	3800.0	1.420	34.770	219.5	1.124
600.0	6.654	34.482	198.7	6.598	3850.0	1.361	34.763	219.0	1.062
650.0	5.826	34.411	206.3	5.769	3900.0	1.310	34.758	218.6	1.007
700.0	5.222	34.379	208.0	5.164	3950.0	1.264	34.754	218.2	0.957
750.0	4.793	34.368	206.7	4.734	4000.0	1.224	34.750	217.8	0.913
800.0	4.506	34.374	202.9	4.444	4050.0	1.187	34.747	217.5	0.871
850.0	4.048	34.368	200.7	3.984	4100.0	1.166	34.745	217.9	0.845
900.0	4.050	34.429	189.4	3.982	4150.0	1.144	34.742	218.1	0.819
950.0	3.845	34.453	184.1	3.775	4200.0	1.127	34.740	218.2	0.797
1000.0	3.701	34.483	177.9	3.628	4250.0	1.113	34.739	218.1	0.778
1050.0	3.620	34.504	175.5	3.543	4300.0	1.104	34.738	217.9	0.764
1100.0	3.438	34.527	173.2	3.358	4350.0	1.098	34.737	217.6	0.752
1150.0	3.319	34.561	171.2	3.237	4400.0	1.093	34.736	217.3	0.741
1200.0	3.276	34.597	169.3	3.190	4450.0	1.089	34.735	217.1	0.732
1250.0	3.114	34.616	171.5	3.025	4500.0	1.079	34.734	217.1	0.717
1300.0	2.970	34.630	175.8	2.879	4550.0	1.073	34.733	217.1	0.706
1350.0	2.915	34.653	179.2	2.820	4600.0	1.073	34.732	217.3	0.700
1400.0	2.872	34.677	182.2	2.773	4635.0	1.067	34.731	217.4	0.690
1450.0	2.839	34.693	186.6	2.736					
1500.0	2.840	34.713	190.2	2.733					
1550.0	2.839	34.730	193.3	2.728					
1600.0	2.806	34.747	196.6	2.692					
1650.0	2.890	34.780	202.0	2.771					
1700.0	2.836	34.784	204.8	2.712					
1750.0	2.805	34.793	206.8	2.678					
1800.0	2.757	34.800	208.8	2.626					
1850.0	2.756	34.810	211.8	2.621					
1900.0	2.738	34.816	214.0	2.599					
1950.0	2.724	34.823	215.7	2.580					
2000.0	2.697	34.827	217.0	2.549					
2050.0	2.680	34.833	219.3	2.528					
2100.0	2.654	34.837	221.0	2.498					
2150.0	2.653	34.843	222.8	2.492					
2200.0	2.643	34.848	224.4	2.478					
2250.0	2.619	34.849	225.5	2.450					
2300.0	2.532	34.839	224.5	2.360					
2350.0	2.497	34.838	223.7	2.321					
2400.0	2.480	34.841	225.4	2.299					
2450.0	2.456	34.842	225.9	2.271					
2500.0	2.440	34.844	226.5	2.251					
2550.0	2.426	34.846	227.7	2.232					
2600.0	2.401	34.845	227.6	2.203					
2650.0	2.385	34.846	228.3	2.182					
2700.0	2.368	34.848	228.6	2.161					
2750.0	2.348	34.847	229.0	2.136					
2800.0	2.326	34.847	229.0	2.110					
2850.0	2.280	34.842	227.3	2.060					
2900.0	2.239	34.838	227.0	2.015					
2950.0	2.229	34.840	227.4	2.000					
3000.0	2.222	34.843	228.6	1.989					



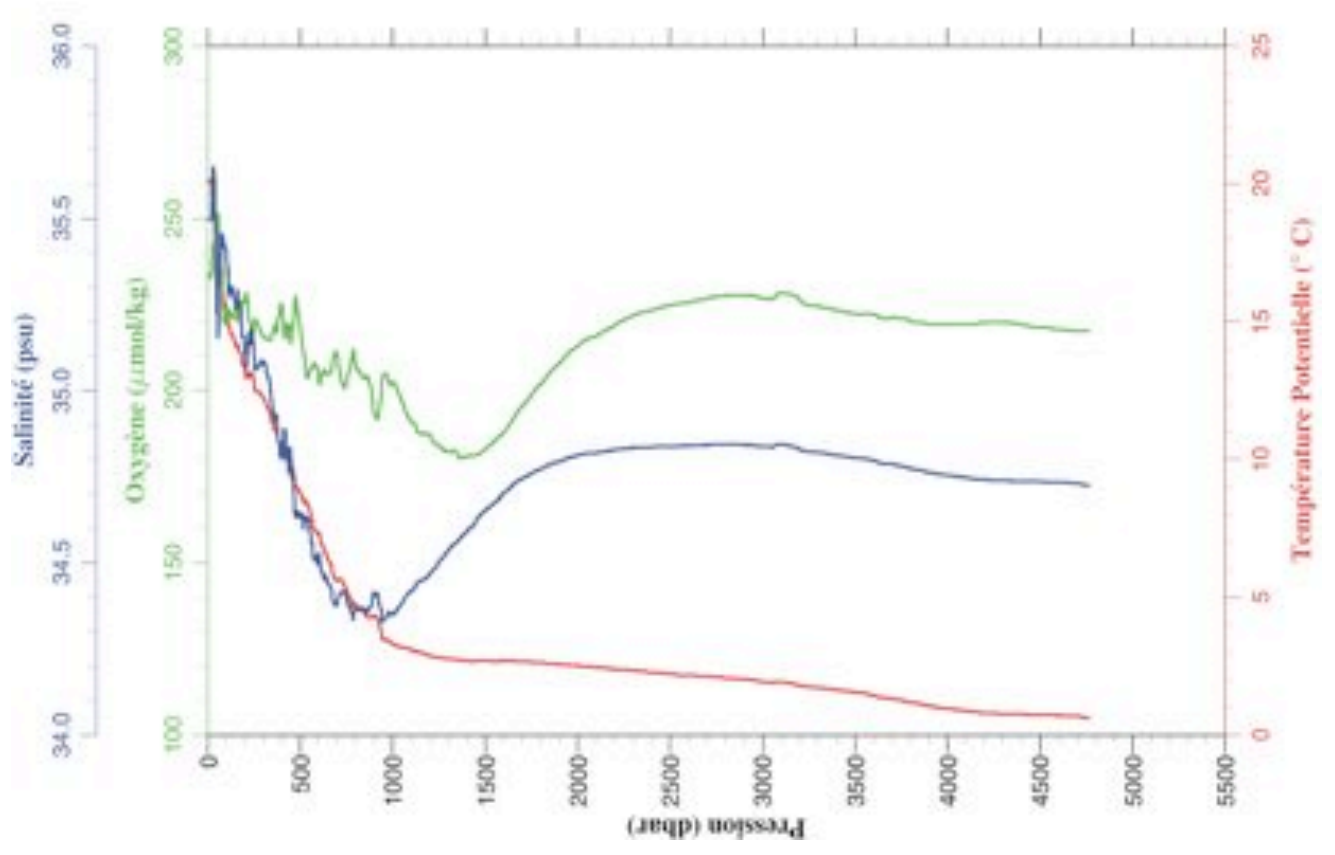
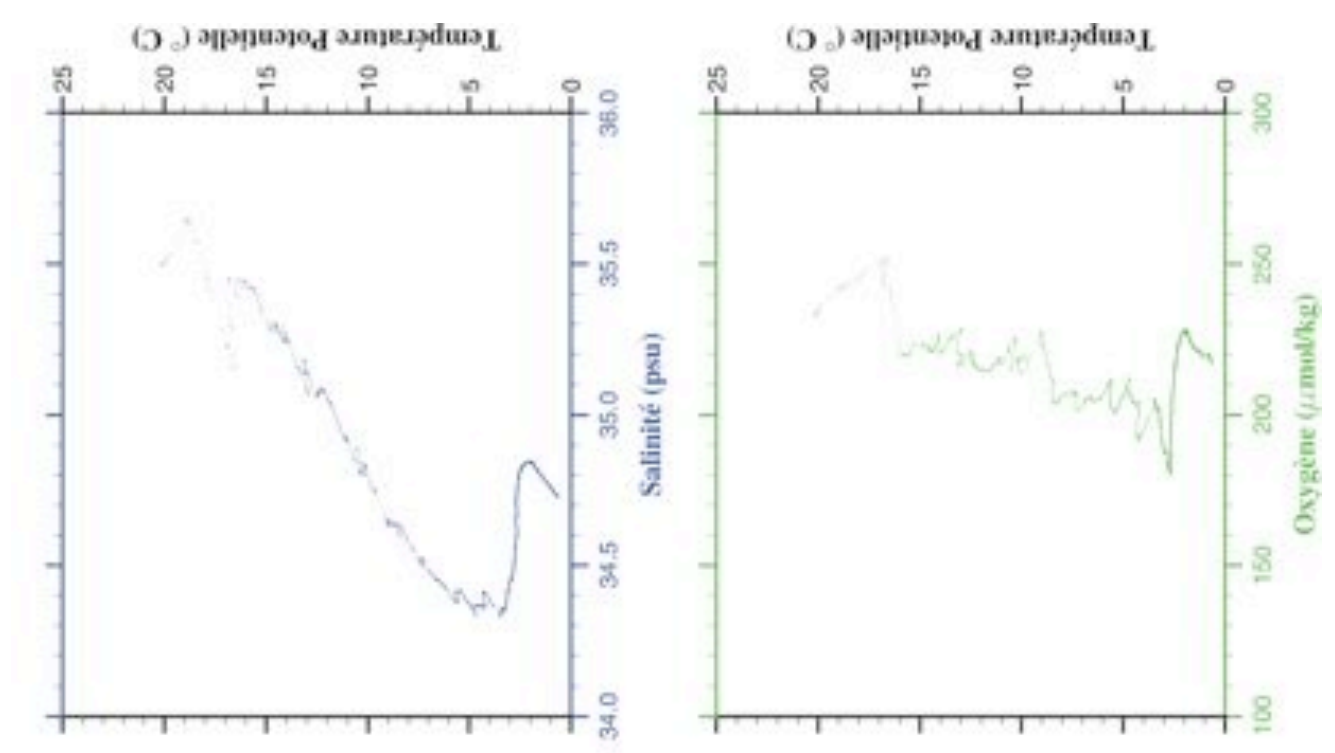
**STATION 13**

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| Station   : 14           Campagne  : GOODHOPE 2008 |
| Date     : 17-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4691      Organisme  : IFREMER |
| Position  : S 35 1.65 |
|           : E 14 2.98 |
|           :           |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.121	35.496	233.6	20.121	3050.0	2.144	34.836	226.6	1.907
10.0	20.134	35.496	232.6	20.132	3100.0	2.163	34.843	228.3	1.920
20.0	19.984	35.500	234.4	19.980	3150.0	2.123	34.839	227.9	1.877
30.0	18.921	35.647	242.3	18.916	3200.0	2.049	34.828	226.3	1.799
40.0	17.976	35.471	245.2	17.969	3250.0	2.002	34.823	224.7	1.749
50.0	16.898	35.226	251.0	16.889	3300.0	1.974	34.820	224.5	1.716
100.0	15.512	35.397	220.6	15.496	3350.0	1.945	34.817	223.9	1.682
150.0	14.142	35.242	225.0	14.120	3400.0	1.899	34.811	223.3	1.633
200.0	13.319	35.135	226.0	13.291	3450.0	1.872	34.808	222.8	1.601
250.0	12.799	35.096	219.0	12.765	3500.0	1.829	34.804	222.3	1.554
300.0	12.240	35.080	215.8	12.200	3550.0	1.797	34.802	222.2	1.518
350.0	11.354	34.947	216.7	11.310	3600.0	1.719	34.796	222.0	1.437
400.0	10.330	34.798	224.8	10.283	3650.0	1.657	34.789	220.9	1.370
450.0	9.960	34.786	214.3	9.907	3700.0	1.617	34.786	221.1	1.327
500.0	8.823	34.639	217.8	8.768	3750.0	1.550	34.780	220.8	1.256
550.0	8.232	34.601	205.1	8.174	3800.0	1.489	34.774	220.0	1.191
600.0	7.392	34.527	203.2	7.333	3850.0	1.434	34.769	219.6	1.132
650.0	6.390	34.436	204.6	6.330	3900.0	1.360	34.762	219.2	1.055
700.0	5.649	34.387	210.1	5.589	3950.0	1.302	34.757	219.2	0.993
750.0	5.346	34.397	202.3	5.283	4000.0	1.275	34.754	219.3	0.962
800.0	4.786	34.365	207.1	4.722	4050.0	1.237	34.750	219.3	0.920
850.0	4.495	34.367	203.4	4.428	4100.0	1.199	34.747	219.2	0.878
900.0	4.408	34.410	193.0	4.338	4150.0	1.163	34.743	219.3	0.837
950.0	3.556	34.338	204.8	3.488	4200.0	1.139	34.741	219.8	0.808
1000.0	3.365	34.348	202.6	3.294	4250.0	1.127	34.740	219.8	0.791
1050.0	3.254	34.384	196.8	3.181	4300.0	1.117	34.739	219.8	0.776
1100.0	3.166	34.418	190.8	3.089	4350.0	1.108	34.737	219.5	0.761
1150.0	3.075	34.448	187.4	2.995	4400.0	1.105	34.737	219.2	0.753
1200.0	2.954	34.467	187.3	2.871	4450.0	1.101	34.736	218.6	0.744
1250.0	2.893	34.505	184.0	2.807	4500.0	1.098	34.735	218.5	0.735
1300.0	2.859	34.535	182.2	2.769	4550.0	1.094	34.734	218.1	0.725
1350.0	2.837	34.560	181.4	2.743	4600.0	1.089	34.734	217.7	0.715
1400.0	2.793	34.590	180.8	2.696	4650.0	1.085	34.733	217.5	0.706
1450.0	2.785	34.620	181.2	2.684	4700.0	1.079	34.732	217.3	0.694
1500.0	2.805	34.651	182.9	2.700	4750.0	1.012	34.725	217.4	0.623
1550.0	2.788	34.673	185.4	2.678	4763.0	1.010	34.725	217.3	0.620
1600.0	2.819	34.703	187.7	2.705					
1650.0	2.808	34.727	191.6	2.689					
1700.0	2.787	34.744	195.4	2.665					
1750.0	2.774	34.760	198.7	2.647					
1800.0	2.755	34.772	201.7	2.624					
1850.0	2.737	34.786	205.3	2.602					
1900.0	2.710	34.793	208.0	2.572					
1950.0	2.683	34.805	210.9	2.540					
2000.0	2.663	34.812	213.0	2.516					
2050.0	2.640	34.818	215.0	2.489					
2100.0	2.607	34.818	215.6	2.452					
2150.0	2.591	34.823	217.5	2.432					
2200.0	2.557	34.827	218.9	2.393					
2250.0	2.549	34.832	220.3	2.381					
2300.0	2.515	34.833	221.6	2.344					
2350.0	2.490	34.836	222.8	2.314					
2400.0	2.460	34.836	223.2	2.279					
2450.0	2.437	34.837	224.1	2.252					
2500.0	2.405	34.839	224.8	2.216					
2550.0	2.380	34.839	225.2	2.187					
2600.0	2.368	34.839	225.5	2.170					
2650.0	2.349	34.841	226.3	2.147					
2700.0	2.341	34.842	226.7	2.134					
2750.0	2.322	34.843	227.2	2.112					
2800.0	2.290	34.843	227.5	2.074					
2850.0	2.267	34.843	227.7	2.048					
2900.0	2.251	34.842	227.7	2.027					
2950.0	2.220	34.841	227.4	1.991					
3000.0	2.172	34.837	226.7	1.939					



**STATION 14**

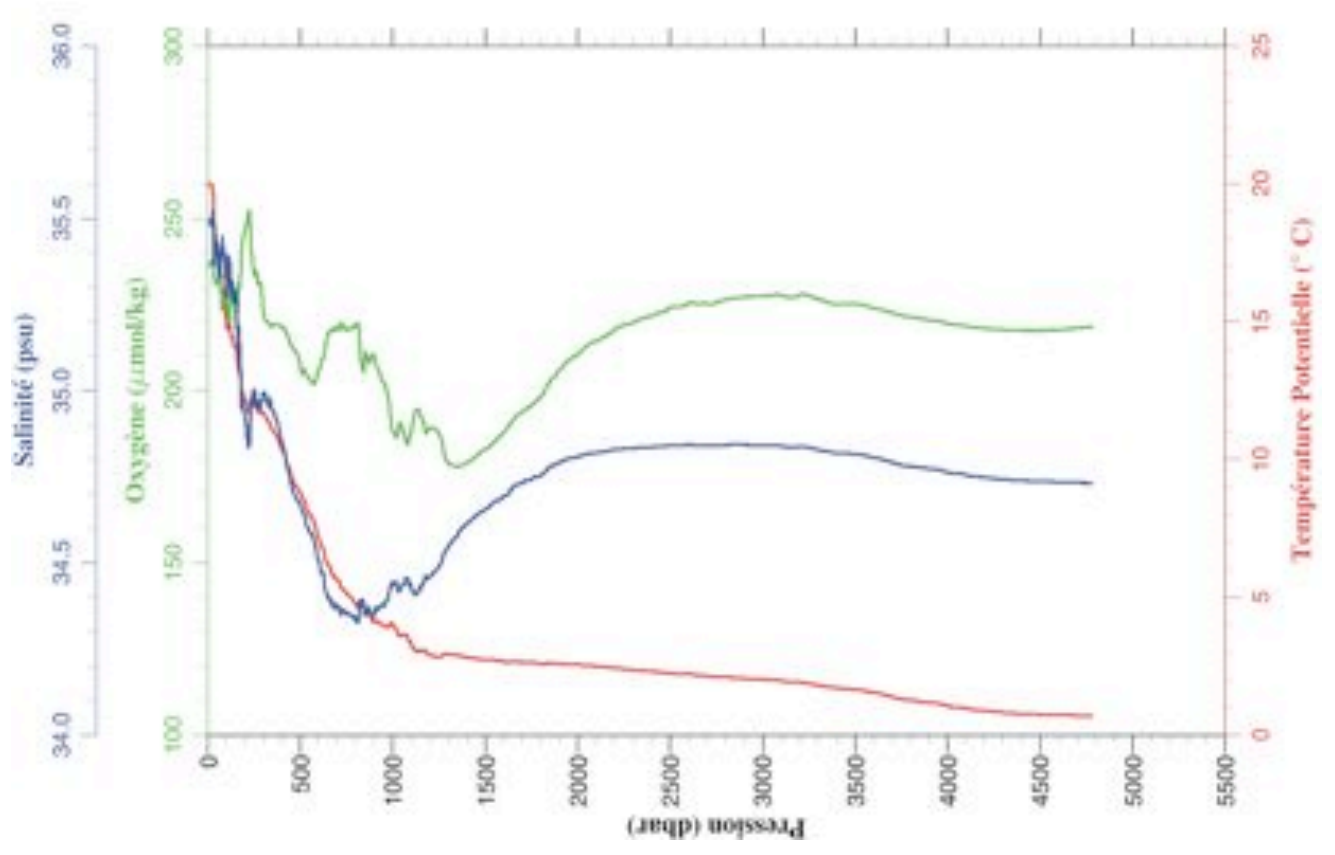
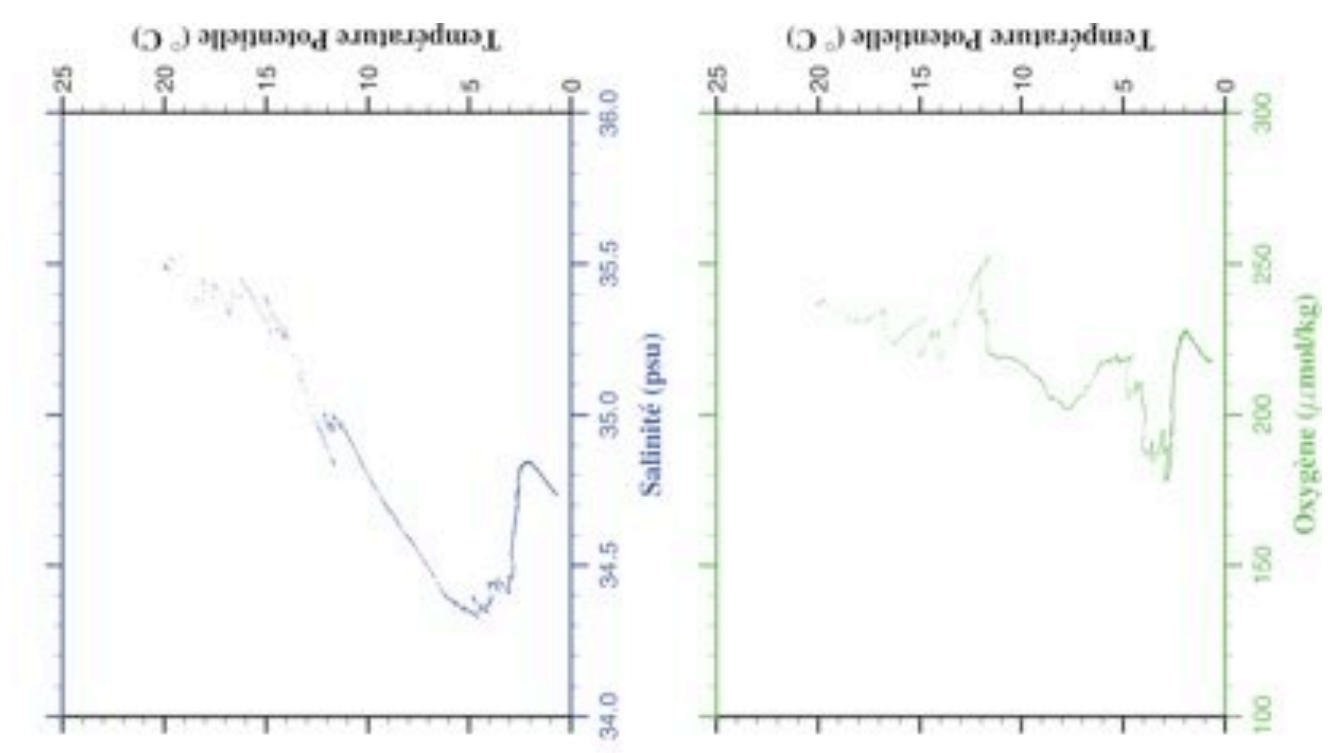
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| Station   : 15           Campagne  : GOODHOPE 2008 |
| Date     : 18-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4710      Organisme  : IFREMER          |
| Position  : S 35 19.59 |
|           : E 13 51.93 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	19.980	35.485	236.3	19.980	3050.0	2.237	34.841	227.6	1.998
10.0	19.990	35.484	236.5	19.988	3100.0	2.209	34.838	227.6	1.966
20.0	19.970	35.499	237.1	19.966	3150.0	2.175	34.836	227.0	1.928
30.0	19.663	35.521	237.1	19.657	3200.0	2.168	34.838	227.7	1.916
40.0	18.062	35.406	231.3	18.055	3250.0	2.127	34.834	227.5	1.871
50.0	17.577	35.429	231.4	17.569	3300.0	2.078	34.828	226.6	1.817
100.0	15.058	35.313	230.9	15.043	3350.0	2.021	34.823	225.5	1.757
150.0	14.114	35.263	223.2	14.092	3400.0	1.981	34.819	225.1	1.713
200.0	12.204	34.919	246.1	12.178	3450.0	1.951	34.818	225.1	1.678
250.0	12.137	34.999	233.6	12.104	3500.0	1.936	34.817	225.1	1.658
300.0	11.714	34.988	223.1	11.675	3550.0	1.889	34.812	224.7	1.608
350.0	11.124	34.943	218.8	11.080	3600.0	1.822	34.805	223.8	1.537
400.0	10.433	34.849	218.3	10.385	3650.0	1.764	34.799	223.3	1.475
450.0	9.420	34.726	213.1	9.369	3700.0	1.679	34.791	222.5	1.387
500.0	8.842	34.672	207.1	8.788	3750.0	1.586	34.783	221.8	1.291
550.0	8.041	34.590	203.3	7.985	3800.0	1.555	34.780	221.2	1.256
600.0	7.215	34.507	206.0	7.157	3850.0	1.517	34.776	220.9	1.213
650.0	6.205	34.393	216.6	6.147	3900.0	1.482	34.773	220.4	1.174
700.0	5.704	34.375	217.7	5.643	3950.0	1.461	34.770	220.1	1.148
750.0	5.186	34.351	217.9	5.124	4000.0	1.371	34.762	219.5	1.055
800.0	4.782	34.335	218.4	4.718	4050.0	1.323	34.758	218.9	1.003
850.0	4.482	34.346	210.0	4.415	4100.0	1.292	34.755	218.7	0.968
900.0	4.175	34.349	210.3	4.106	4150.0	1.242	34.750	218.3	0.914
950.0	4.025	34.374	202.3	3.954	4200.0	1.215	34.748	218.0	0.882
1000.0	4.058	34.435	188.2	3.982	4250.0	1.190	34.745	217.9	0.852
1050.0	3.724	34.435	189.2	3.647	4300.0	1.158	34.742	217.6	0.816
1100.0	3.409	34.433	187.9	3.330	4350.0	1.138	34.740	217.4	0.791
1150.0	3.123	34.425	192.7	3.043	4400.0	1.125	34.738	217.4	0.773
1200.0	2.994	34.460	189.2	2.910	4450.0	1.114	34.737	217.4	0.757
1250.0	2.923	34.489	187.4	2.837	4500.0	1.110	34.736	217.4	0.747
1300.0	3.017	34.547	179.0	2.925	4550.0	1.113	34.736	217.6	0.744
1350.0	2.987	34.577	178.0	2.892	4600.0	1.101	34.734	217.7	0.727
1400.0	2.918	34.614	179.0	2.819	4650.0	1.097	34.734	217.8	0.717
1450.0	2.868	34.638	181.0	2.765	4700.0	1.090	34.733	218.0	0.704
1500.0	2.850	34.655	182.9	2.744	4750.0	1.092	34.732	218.4	0.701
1550.0	2.835	34.677	185.0	2.725	4783.0	1.095	34.732	218.6	0.700
1600.0	2.792	34.692	187.8	2.678					
1650.0	2.778	34.720	191.3	2.660					
1700.0	2.761	34.732	193.7	2.639					
1750.0	2.756	34.742	195.5	2.629					
1800.0	2.714	34.753	198.2	2.584					
1850.0	2.749	34.780	202.5	2.614					
1900.0	2.732	34.792	205.9	2.593					
1950.0	2.707	34.802	208.8	2.564					
2000.0	2.697	34.808	210.4	2.549					
2050.0	2.674	34.816	213.0	2.522					
2100.0	2.650	34.819	214.3	2.494					
2150.0	2.630	34.824	215.9	2.470					
2200.0	2.597	34.828	217.8	2.433					
2250.0	2.565	34.831	219.1	2.397					
2300.0	2.533	34.832	219.7	2.360					
2350.0	2.507	34.834	221.0	2.331					
2400.0	2.480	34.836	221.7	2.299					
2450.0	2.466	34.838	222.7	2.281					
2500.0	2.432	34.841	224.1	2.243					
2550.0	2.411	34.840	224.3	2.218					
2600.0	2.411	34.844	225.5	2.213					
2650.0	2.372	34.841	225.1	2.170					
2700.0	2.343	34.840	225.2	2.136					
2750.0	2.327	34.841	225.6	2.116					
2800.0	2.311	34.842	226.4	2.095					
2850.0	2.299	34.842	226.9	2.079					
2900.0	2.280	34.842	227.2	2.055					
2950.0	2.267	34.842	227.4	2.038					
3000.0	2.251	34.841	227.5	2.017					





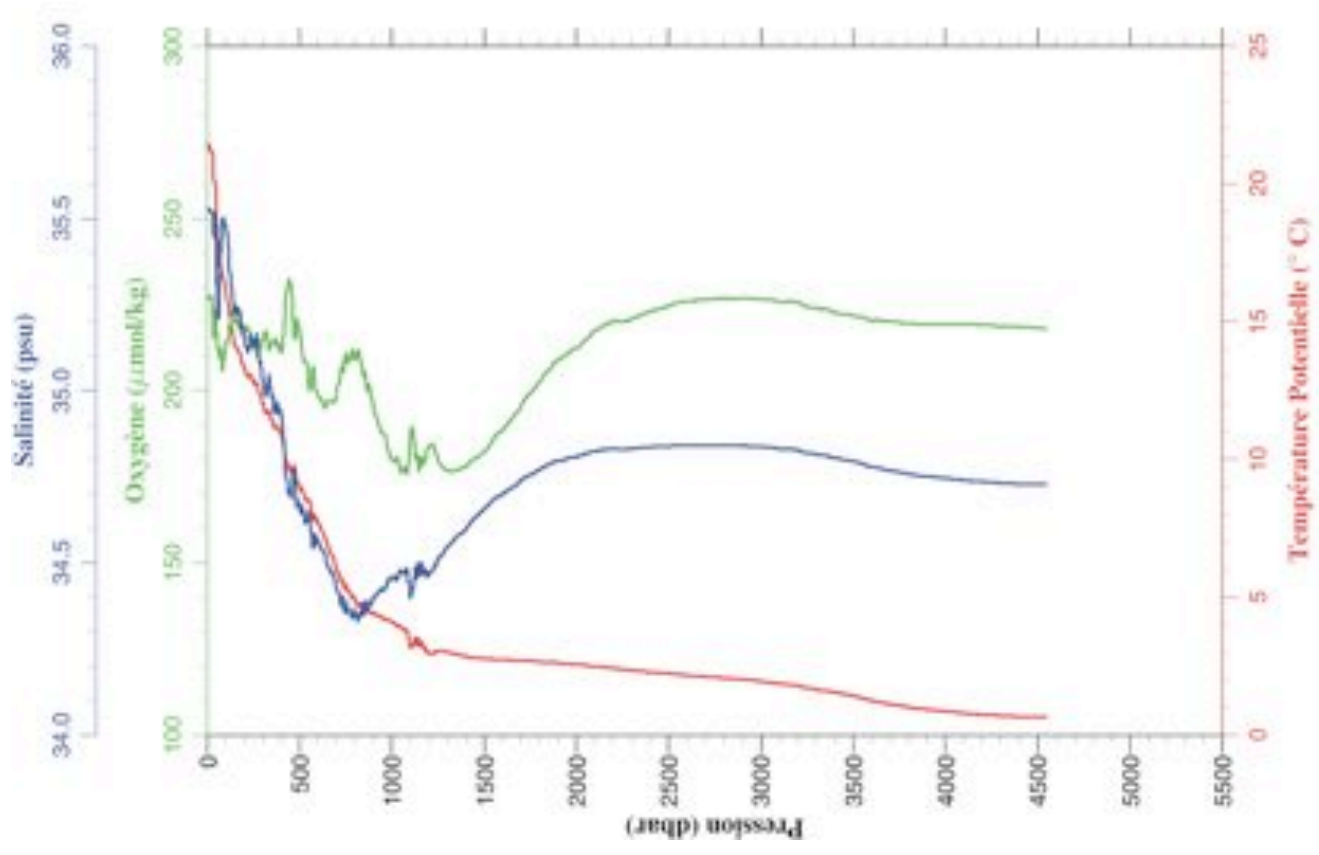
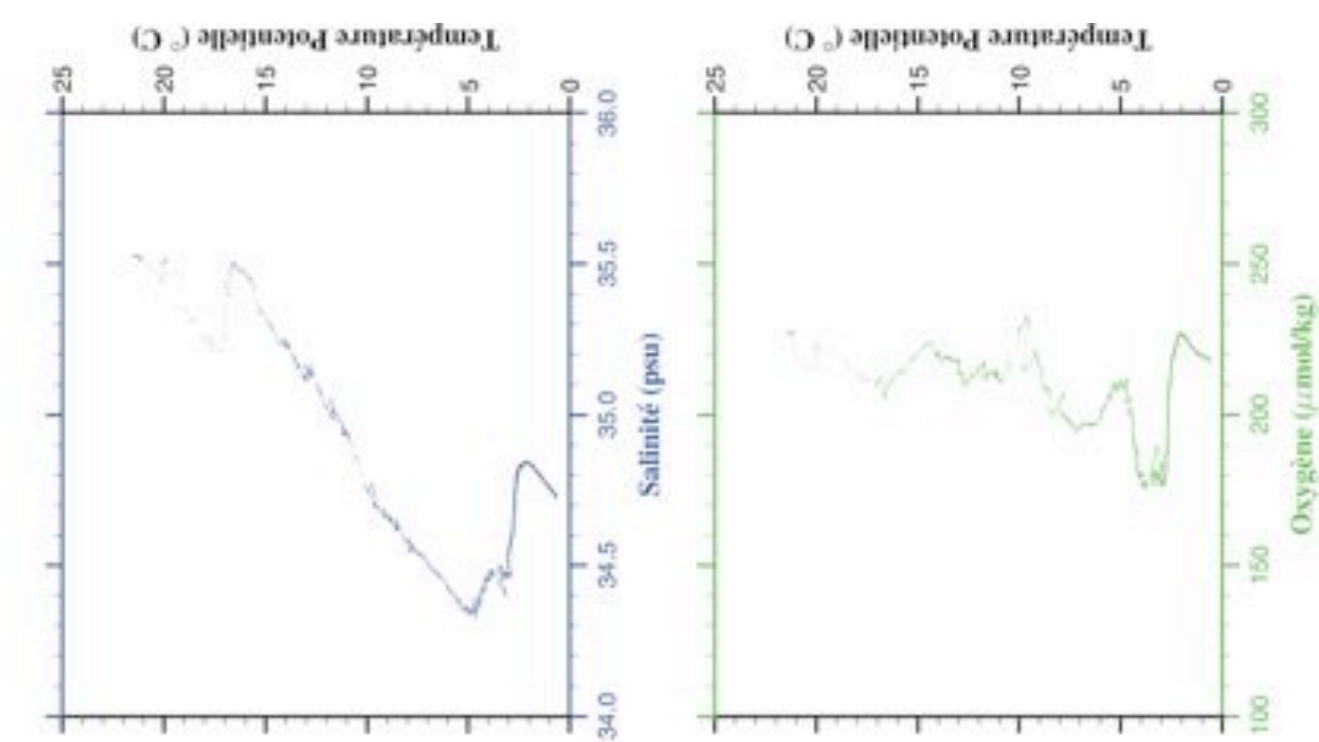
**STATION 15**

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| Station   : 16           Campagne  : GOODHOPE 2008 |
| Date      : 18-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4496       Organisme  : IFREMER |
| Position  : S 35 37.54 |
|           : E 13 40.97 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.438	35.527	227.0	21.437	3050.0	2.147	34.835	226.3	1.910
10.0	21.358	35.525	227.0	21.356	3100.0	2.107	34.831	225.7	1.866
20.0	21.186	35.519	227.3	21.182	3150.0	2.077	34.830	225.9	1.832
30.0	21.113	35.514	221.0	21.107	3200.0	2.039	34.827	225.5	1.790
40.0	20.059	35.497	222.2	20.052	3250.0	1.966	34.819	224.3	1.713
50.0	18.507	35.311	217.4	18.498	3300.0	1.913	34.815	224.0	1.656
100.0	16.124	35.472	212.6	16.108	3350.0	1.869	34.811	223.6	1.609
150.0	14.135	35.244	219.9	14.113	3400.0	1.807	34.804	222.6	1.543
200.0	13.355	35.155	218.3	13.327	3450.0	1.756	34.800	222.1	1.488
250.0	12.907	35.150	213.1	12.873	3500.0	1.689	34.793	221.7	1.417
300.0	12.053	35.028	214.8	12.014	3550.0	1.613	34.787	221.3	1.338
350.0	11.435	34.980	214.0	11.390	3600.0	1.529	34.778	220.2	1.251
400.0	10.961	34.925	210.9	10.912	3650.0	1.477	34.774	220.3	1.196
450.0	9.631	34.694	230.7	9.580	3700.0	1.413	34.768	220.1	1.128
500.0	9.112	34.670	217.0	9.057	3750.0	1.363	34.763	219.9	1.074
550.0	8.592	34.644	201.2	8.533	3800.0	1.301	34.758	219.5	1.009
600.0	7.769	34.561	198.5	7.708	3850.0	1.256	34.754	219.3	0.959
650.0	6.967	34.494	196.8	6.904	3900.0	1.227	34.751	219.3	0.927
700.0	6.039	34.423	199.6	5.977	3950.0	1.200	34.748	219.2	0.894
750.0	5.345	34.353	210.9	5.282	4000.0	1.173	34.745	219.2	0.863
800.0	4.994	34.352	208.9	4.929	4050.0	1.141	34.742	219.1	0.827
850.0	4.614	34.350	205.6	4.546	4100.0	1.115	34.740	219.2	0.796
900.0	4.514	34.400	195.3	4.443	4150.0	1.091	34.738	219.2	0.767
950.0	4.342	34.425	187.5	4.268	4200.0	1.073	34.735	218.9	0.745
1000.0	4.205	34.457	179.9	4.128	4250.0	1.058	34.734	218.8	0.724
1050.0	3.996	34.477	176.1	3.917	4300.0	1.041	34.732	218.7	0.702
1100.0	3.239	34.400	186.5	3.161	4350.0	1.031	34.730	218.7	0.687
1150.0	3.334	34.467	177.6	3.252	4400.0	1.021	34.729	218.5	0.672
1200.0	3.046	34.464	183.6	2.962	4450.0	1.020	34.728	218.3	0.665
1250.0	3.147	34.511	179.7	3.059	4500.0	1.016	34.727	218.1	0.656
1300.0	3.102	34.546	176.7	3.010	4545.0	1.020	34.727	217.9	0.655
1350.0	3.026	34.574	176.8	2.931					
1400.0	2.955	34.597	178.0	2.856					
1450.0	2.908	34.631	180.3	2.805					
1500.0	2.888	34.655	182.1	2.782					
1550.0	2.853	34.683	185.9	2.742					
1600.0	2.850	34.699	188.4	2.735					
1650.0	2.833	34.717	191.8	2.714					
1700.0	2.830	34.740	195.6	2.707					
1750.0	2.815	34.755	199.2	2.688					
1800.0	2.792	34.770	202.5	2.661					
1850.0	2.770	34.784	206.1	2.635					
1900.0	2.770	34.797	208.8	2.631					
1950.0	2.737	34.802	210.6	2.593					
2000.0	2.724	34.808	212.1	2.576					
2050.0	2.673	34.817	214.8	2.521					
2100.0	2.659	34.824	217.4	2.503					
2150.0	2.621	34.828	218.9	2.461					
2200.0	2.594	34.831	220.0	2.430					
2250.0	2.558	34.830	220.0	2.390					
2300.0	2.528	34.832	220.7	2.356					
2350.0	2.497	34.834	222.0	2.321					
2400.0	2.471	34.836	222.9	2.291					
2450.0	2.441	34.837	223.8	2.257					
2500.0	2.420	34.839	224.5	2.231					
2550.0	2.393	34.841	225.5	2.200					
2600.0	2.363	34.840	225.9	2.165					
2650.0	2.342	34.841	226.1	2.141					
2700.0	2.322	34.840	226.4	2.116					
2750.0	2.308	34.841	226.6	2.098					
2800.0	2.282	34.841	226.7	2.067					
2850.0	2.263	34.840	226.7	2.043					
2900.0	2.243	34.839	226.8	2.019					
2950.0	2.216	34.838	226.8	1.987					
3000.0	2.180	34.837	226.6	1.948					



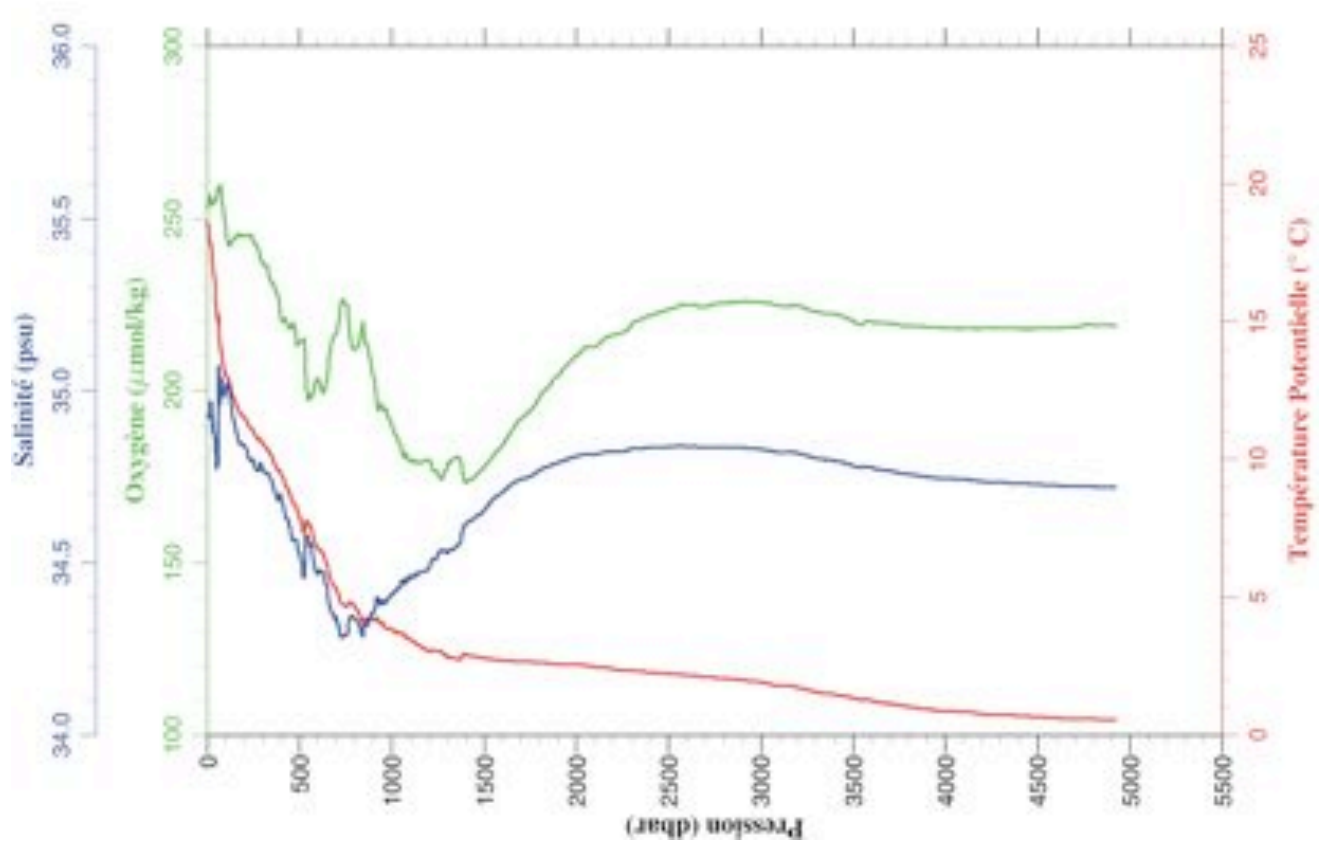
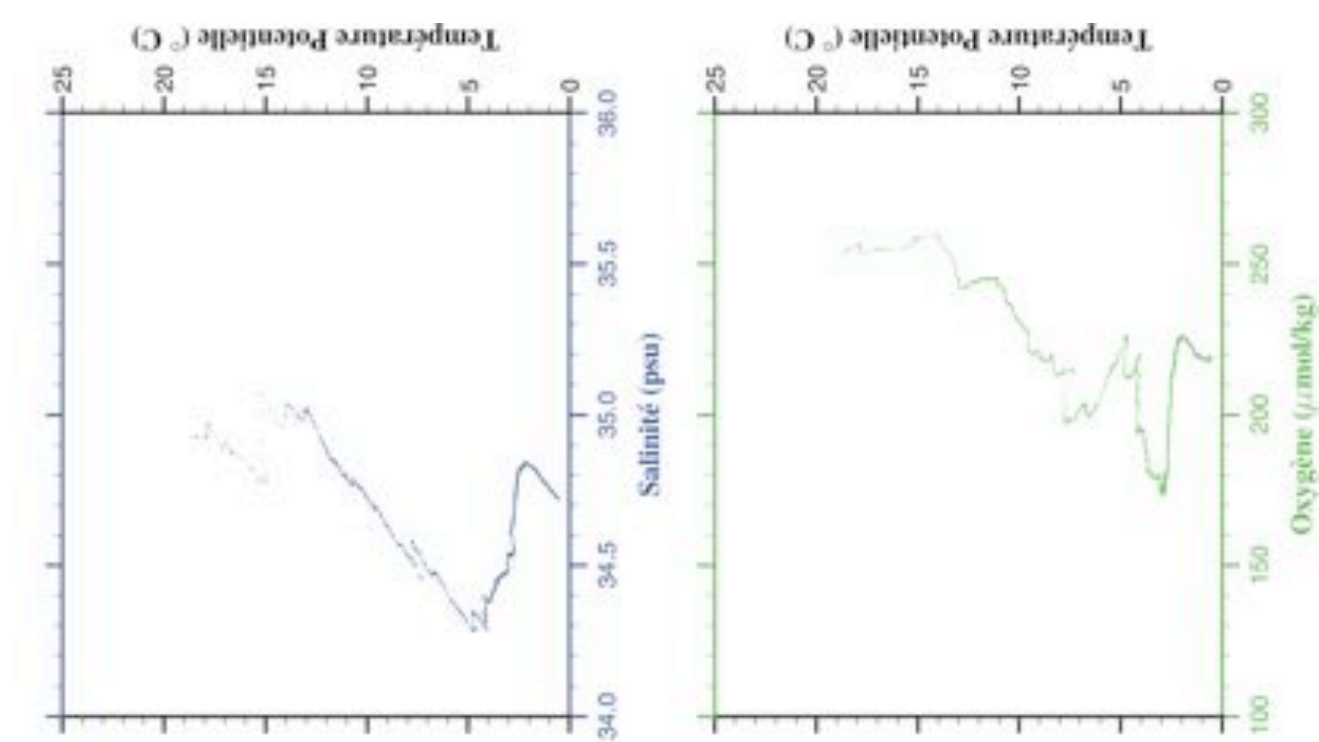
**STATION 16**

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| Station   : 17           Campagne  : GOODHOPE 2008 |
| Date     : 18-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4842      Organisme  : IFREMER |
| Position  : S 35 55.40 |
|           : E 13 30.11 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	18.622	34.927	252.9	18.622	3050.0	2.093	34.826	225.3	1.857
10.0	17.940	34.927	256.1	17.939	3100.0	2.024	34.821	224.6	1.785
20.0	17.832	34.964	254.4	17.828	3150.0	2.021	34.821	224.4	1.778
30.0	17.040	34.902	254.5	17.035	3200.0	1.978	34.819	224.6	1.730
40.0	16.551	34.868	254.6	16.544	3250.0	1.885	34.810	223.6	1.635
50.0	15.285	34.772	256.1	15.277	3300.0	1.811	34.803	222.9	1.557
100.0	13.156	35.016	246.4	13.142	3350.0	1.777	34.800	222.4	1.518
150.0	12.128	34.897	244.0	12.108	3400.0	1.737	34.796	222.1	1.475
200.0	11.536	34.840	244.8	11.511	3450.0	1.687	34.790	221.5	1.421
250.0	11.071	34.798	242.8	11.040	3500.0	1.600	34.780	220.2	1.331
300.0	10.624	34.776	236.7	10.588	3550.0	1.551	34.777	219.3	1.277
350.0	10.138	34.734	231.4	10.097	3600.0	1.527	34.776	220.0	1.250
400.0	9.486	34.684	220.4	9.440	3650.0	1.466	34.771	219.7	1.184
450.0	8.733	34.595	217.7	8.685	3700.0	1.423	34.767	219.3	1.138
500.0	7.882	34.519	214.1	7.831	3750.0	1.360	34.760	218.9	1.072
550.0	7.732	34.561	197.4	7.677	3800.0	1.324	34.757	218.7	1.031
600.0	6.807	34.468	203.4	6.750	3850.0	1.284	34.753	218.6	0.987
650.0	6.189	34.421	203.7	6.131	3900.0	1.243	34.750	218.4	0.941
700.0	5.346	34.339	216.6	5.288	3950.0	1.203	34.746	218.3	0.897
750.0	4.737	34.290	225.1	4.678	4000.0	1.186	34.745	218.2	0.876
800.0	4.707	34.338	212.1	4.644	4050.0	1.168	34.742	218.1	0.853
850.0	4.273	34.320	216.4	4.208	4100.0	1.160	34.742	218.1	0.839
900.0	4.241	34.356	204.0	4.172	4150.0	1.138	34.740	218.0	0.813
950.0	4.139	34.391	194.7	4.067	4200.0	1.100	34.736	218.1	0.770
1000.0	3.899	34.411	189.8	3.824	4250.0	1.076	34.734	218.1	0.742
1050.0	3.781	34.443	183.5	3.703	4300.0	1.067	34.733	218.1	0.727
1100.0	3.548	34.458	179.8	3.468	4350.0	1.062	34.732	218.0	0.717
1150.0	3.310	34.471	179.1	3.228	4400.0	1.046	34.730	218.0	0.696
1200.0	3.126	34.482	179.9	3.042	4450.0	1.043	34.730	217.9	0.688
1250.0	3.136	34.524	175.6	3.047	4500.0	1.025	34.728	218.0	0.665
1300.0	2.910	34.528	178.4	2.820	4550.0	1.007	34.726	218.1	0.641
1350.0	2.854	34.548	180.6	2.760	4600.0	0.996	34.725	218.1	0.625
1400.0	3.028	34.610	173.2	2.928	4650.0	0.977	34.723	218.5	0.601
1450.0	2.952	34.632	175.0	2.848	4700.0	0.979	34.722	218.5	0.597
1500.0	2.892	34.652	177.8	2.785	4750.0	0.979	34.722	219.1	0.591
1550.0	2.852	34.687	181.2	2.741	4800.0	0.972	34.721	219.1	0.579
1600.0	2.822	34.705	184.2	2.708	4850.0	0.962	34.720	219.0	0.563
1650.0	2.806	34.728	188.4	2.687	4900.0	0.959	34.719	218.9	0.555
1700.0	2.793	34.742	191.7	2.670	4922.0	0.960	34.719	218.6	0.553
1750.0	2.781	34.751	194.2	2.654					
1800.0	2.752	34.769	198.2	2.621					
1850.0	2.745	34.779	201.1	2.610					
1900.0	2.708	34.790	204.3	2.570					
1950.0	2.700	34.801	207.4	2.557					
2000.0	2.694	34.809	210.0	2.546					
2050.0	2.687	34.816	212.6	2.535					
2100.0	2.628	34.815	212.8	2.473					
2150.0	2.601	34.821	214.8	2.441					
2200.0	2.564	34.823	216.0	2.400					
2250.0	2.519	34.824	216.9	2.352					
2300.0	2.510	34.831	219.3	2.338					
2350.0	2.483	34.833	220.6	2.307					
2400.0	2.452	34.834	221.8	2.272					
2450.0	2.439	34.835	222.6	2.255					
2500.0	2.408	34.836	223.4	2.220					
2550.0	2.404	34.839	224.3	2.211					
2600.0	2.378	34.838	224.9	2.180					
2650.0	2.347	34.836	224.7	2.146					
2700.0	2.310	34.835	224.4	2.105					
2750.0	2.292	34.836	225.1	2.082					
2800.0	2.274	34.835	225.4	2.059					
2850.0	2.243	34.834	225.6	2.024					
2900.0	2.226	34.834	225.8	2.002					
2950.0	2.188	34.832	225.8	1.960					
3000.0	2.154	34.830	225.6	1.922					



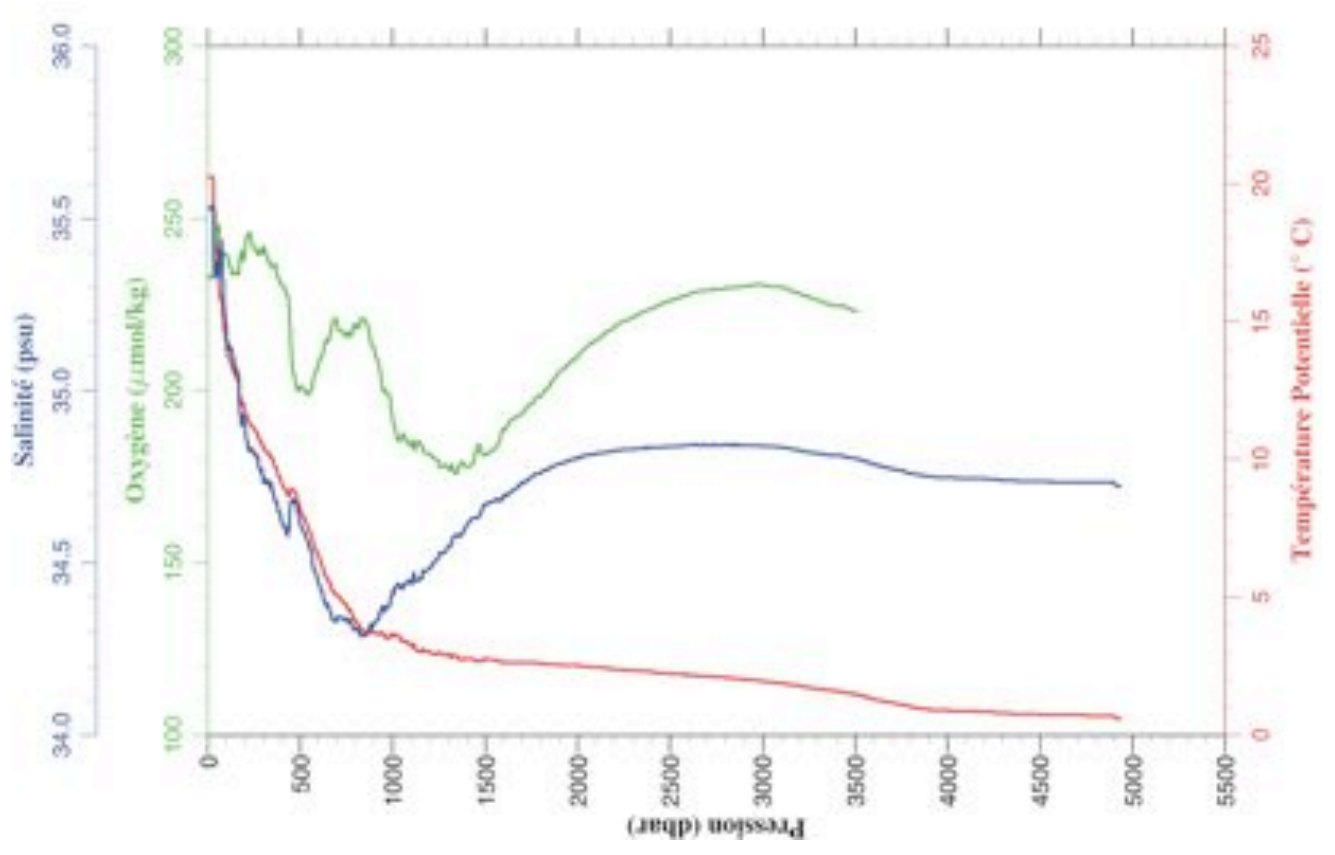
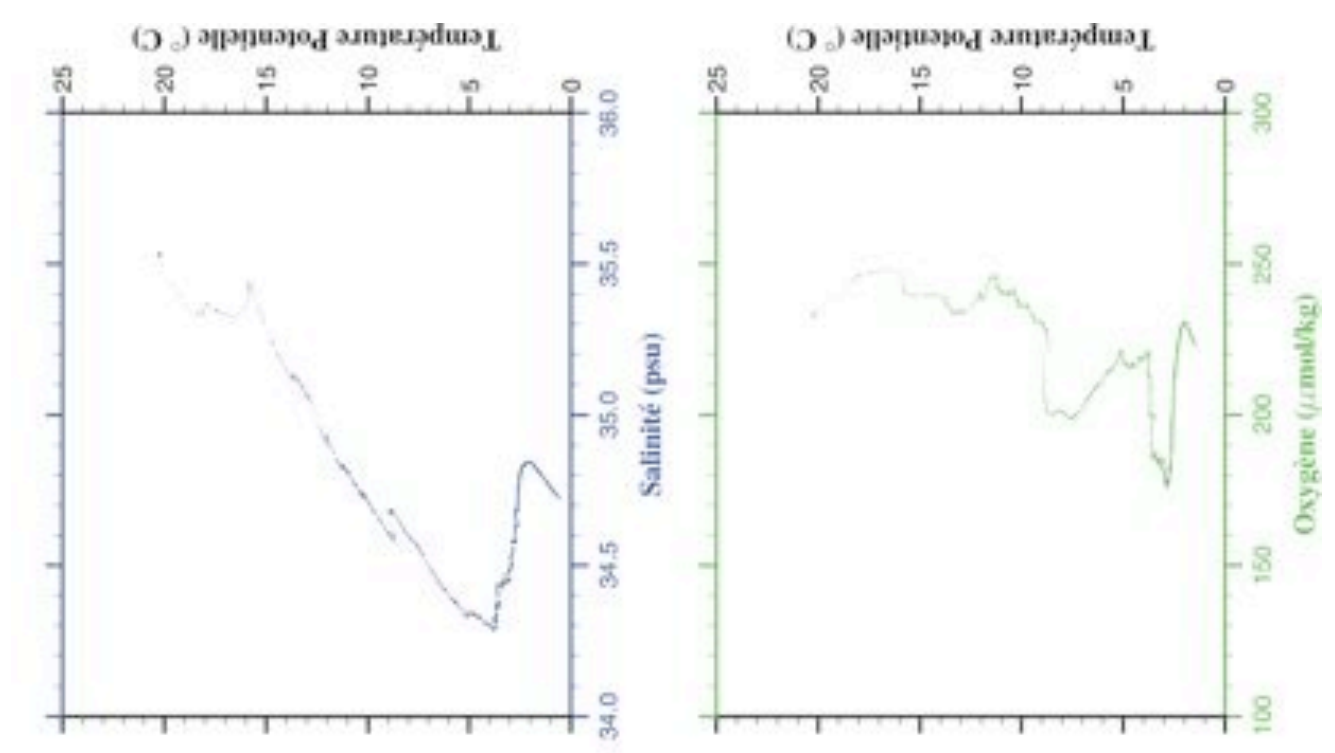
**STATION 17**

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| Station   : 18           Campagne  : GOODHOPE 2008 |
| Date      : 19-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4842       Organisme  : IFREMER |
| Position  : S 36 13.09 |
|           : E 13 18.83 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.248	35.527	233.3	20.248	3050.0	2.153	34.837	230.2	1.916
10.0	20.249	35.529	232.8	20.247	3100.0	2.124	34.836	230.0	1.883
20.0	20.248	35.531	232.9	20.245	3150.0	2.080	34.831	229.1	1.835
30.0	20.194	35.528	233.5	20.188	3200.0	2.026	34.826	228.1	1.777
40.0	18.154	35.336	245.2	18.147	3250.0	1.983	34.822	227.1	1.730
50.0	17.466	35.343	247.1	17.458	3300.0	1.942	34.818	226.2	1.684
100.0	14.230	35.174	239.6	14.216	3350.0	1.894	34.813	225.2	1.633
150.0	13.047	35.068	234.4	13.026	3400.0	1.861	34.813	224.5	1.595
200.0	11.840	34.895	239.4	11.814	3450.0	1.805	34.808	224.2	1.536
250.0	11.130	34.819	241.5	11.099	3500.0	1.743	34.801	223.1	1.471
300.0	10.423	34.733	241.2	10.388	3550.0	1.671	34.794	9.0	1.395
350.0	10.007	34.709	235.7	9.966	3600.0	1.582	34.786	9.0	1.303
400.0	9.178	34.621	230.7	9.134	3650.0	1.525	34.780	9.0	1.242
450.0	8.977	34.672	212.1	8.928	3700.0	1.460	34.773	9.0	1.174
500.0	8.210	34.612	201.2	8.158	3750.0	1.395	34.767	9.0	1.106
550.0	7.408	34.541	199.7	7.354	3800.0	1.325	34.759	9.0	1.032
600.0	6.530	34.441	208.1	6.475	3850.0	1.268	34.755	9.0	0.971
650.0	5.709	34.379	214.1	5.653	3900.0	1.230	34.751	9.0	0.929
700.0	5.112	34.342	219.1	5.055	3950.0	1.210	34.749	9.0	0.904
750.0	4.787	34.339	215.4	4.728	4000.0	1.204	34.748	9.0	0.893
800.0	4.203	34.306	218.9	4.143	4050.0	1.195	34.746	9.0	0.879
850.0	3.817	34.291	220.1	3.755	4100.0	1.187	34.745	9.0	0.866
900.0	3.797	34.324	211.9	3.732	4150.0	1.183	34.745	9.0	0.856
950.0	3.735	34.370	199.6	3.666	4200.0	1.183	34.744	9.0	0.851
1000.0	3.745	34.418	191.1	3.671	4250.0	1.156	34.742	9.0	0.820
1050.0	3.485	34.425	187.1	3.410	4300.0	1.132	34.740	9.0	0.791
1100.0	3.338	34.443	184.4	3.260	4350.0	1.126	34.739	9.0	0.779
1150.0	3.123	34.456	184.3	3.043	4400.0	1.115	34.737	9.0	0.763
1200.0	3.071	34.487	181.3	2.987	4450.0	1.114	34.737	9.0	0.756
1250.0	3.100	34.528	178.8	3.012	4500.0	1.112	34.736	9.0	0.749
1300.0	3.004	34.549	177.3	2.913	4550.0	1.108	34.735	9.0	0.739
1350.0	2.931	34.580	176.3	2.836	4600.0	1.106	34.735	9.0	0.731
1400.0	2.864	34.608	177.8	2.766	4650.0	1.105	34.734	9.0	0.725
1450.0	2.792	34.629	182.1	2.691	4700.0	1.106	34.734	9.0	0.720
1500.0	2.840	34.665	181.4	2.734	4750.0	1.106	34.733	9.0	0.714
1550.0	2.845	34.681	183.1	2.734	4800.0	1.110	34.733	9.0	0.712
1600.0	2.787	34.696	188.5	2.673	4850.0	1.116	34.733	9.0	0.712
1650.0	2.736	34.710	191.8	2.619	4900.0	1.094	34.731	9.0	0.685
1700.0	2.748	34.731	193.5	2.626	4932.0	0.991	34.722	9.0	0.581
1750.0	2.762	34.747	196.0	2.636					
1800.0	2.720	34.760	198.3	2.590					
1850.0	2.705	34.776	201.5	2.571					
1900.0	2.686	34.787	205.2	2.547					
1950.0	2.671	34.797	207.8	2.528					
2000.0	2.667	34.805	209.9	2.520					
2050.0	2.644	34.813	212.9	2.493					
2100.0	2.612	34.816	214.6	2.457					
2150.0	2.585	34.821	216.7	2.426					
2200.0	2.554	34.825	218.5	2.391					
2250.0	2.536	34.828	220.2	2.369					
2300.0	2.516	34.830	221.2	2.344					
2350.0	2.499	34.833	222.7	2.322					
2400.0	2.474	34.834	223.8	2.294					
2450.0	2.439	34.836	225.0	2.255					
2500.0	2.413	34.837	226.0	2.224					
2550.0	2.391	34.838	227.0	2.198					
2600.0	2.386	34.841	227.9	2.188					
2650.0	2.358	34.842	228.8	2.156					
2700.0	2.338	34.842	229.1	2.132					
2750.0	2.320	34.842	229.5	2.109					
2800.0	2.299	34.842	229.7	2.084					
2850.0	2.270	34.842	230.0	2.050					
2900.0	2.241	34.841	230.2	2.017					
2950.0	2.216	34.840	230.7	1.988					
3000.0	2.190	34.839	230.6	1.957					



**STATION 18**

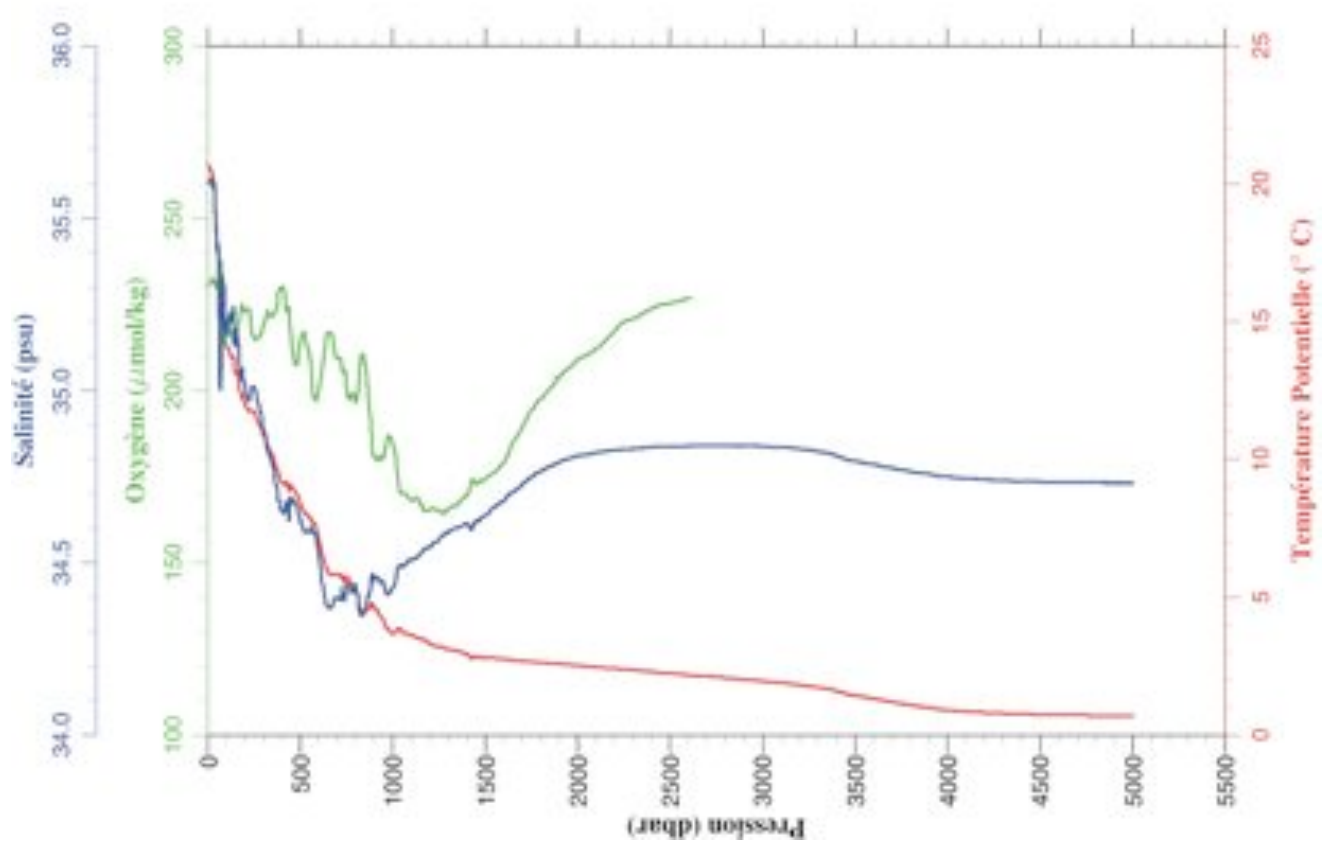
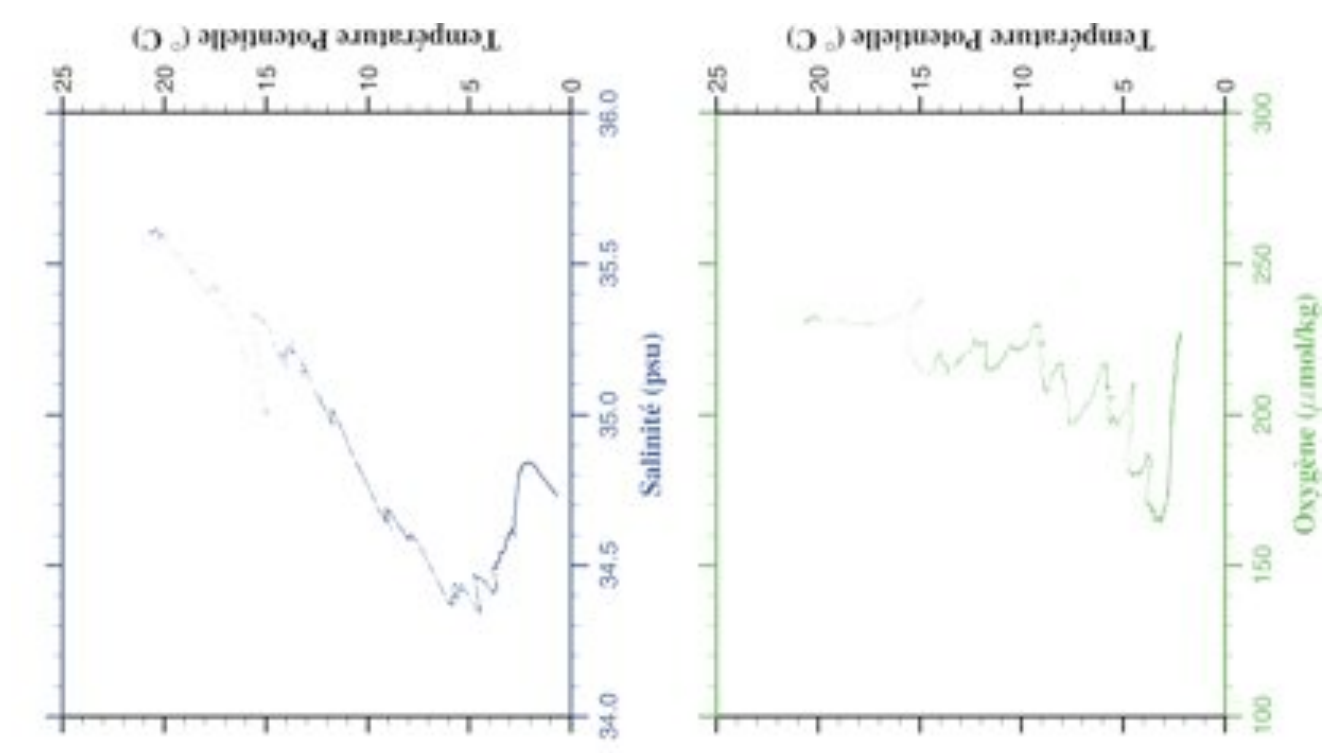
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| Station   : 19           Campagne  : GOODHOPE 2008 |
| Date      : 19-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4912       Organisme : IFREMER |
| Position  : S 36 31.24 |
|            : E 13 7.22 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.688	35.605	230.9	20.688	3050.0	2.159	34.836	9.0	1.922
10.0	20.543	35.603	231.0	20.541	3100.0	2.138	34.835	9.0	1.897
20.0	20.445	35.617	231.4	20.441	3150.0	2.109	34.834	9.0	1.863
30.0	20.177	35.598	232.6	20.172	3200.0	2.075	34.831	9.0	1.825
40.0	19.149	35.519	231.4	19.142	3250.0	2.037	34.828	9.0	1.782
50.0	17.772	35.413	230.1	17.764	3300.0	1.997	34.824	9.0	1.738
100.0	14.211	35.198	218.5	14.196	3350.0	1.948	34.819	9.0	1.686
150.0	13.151	35.142	217.8	13.130	3400.0	1.853	34.809	9.0	1.588
200.0	12.103	35.018	222.9	12.076	3450.0	1.763	34.800	9.0	1.495
250.0	11.753	35.010	215.2	11.721	3500.0	1.710	34.795	9.0	1.438
300.0	10.921	34.886	218.9	10.884	3550.0	1.660	34.790	9.0	1.384
350.0	10.178	34.783	221.7	10.137	3600.0	1.604	34.786	9.0	1.324
400.0	9.200	34.650	230.0	9.156	3650.0	1.539	34.779	9.0	1.256
450.0	9.042	34.673	215.7	8.992	3700.0	1.492	34.775	9.0	1.205
500.0	8.433	34.626	213.9	8.380	3750.0	1.434	34.770	9.0	1.144
550.0	7.932	34.588	210.7	7.876	3800.0	1.376	34.764	9.0	1.082
600.0	7.182	34.523	200.1	7.124	3850.0	1.341	34.761	9.0	1.042
650.0	5.979	34.373	216.8	5.922	3900.0	1.308	34.758	9.0	1.005
700.0	5.895	34.399	209.1	5.834	3950.0	1.246	34.752	9.0	0.939
750.0	5.780	34.435	200.1	5.714	4000.0	1.224	34.750	9.0	0.912
800.0	5.399	34.434	196.4	5.331	4050.0	1.200	34.748	9.0	0.883
850.0	4.572	34.361	208.0	4.505	4100.0	1.178	34.745	9.0	0.857
900.0	4.716	34.458	181.0	4.644	4150.0	1.165	34.744	9.0	0.839
950.0	4.225	34.439	180.7	4.152	4200.0	1.148	34.742	9.0	0.817
1000.0	3.762	34.427	184.5	3.689	4250.0	1.137	34.740	9.0	0.801
1050.0	3.810	34.487	170.3	3.732	4300.0	1.133	34.739	9.0	0.791
1100.0	3.686	34.510	168.1	3.605	4350.0	1.117	34.738	9.0	0.770
1150.0	3.573	34.524	167.2	3.488	4400.0	1.114	34.737	9.0	0.762
1200.0	3.409	34.546	165.5	3.321	4450.0	1.110	34.736	9.0	0.753
1250.0	3.304	34.566	165.1	3.214	4500.0	1.103	34.735	9.0	0.740
1300.0	3.205	34.589	165.5	3.112	4550.0	1.101	34.734	9.0	0.733
1350.0	3.153	34.603	166.7	3.056	4600.0	1.099	34.734	9.0	0.725
1400.0	3.055	34.614	169.3	2.955	4650.0	1.100	34.733	9.0	0.720
1450.0	2.951	34.620	172.9	2.847	4700.0	1.103	34.733	9.0	0.717
1500.0	2.906	34.637	174.4	2.799	4750.0	1.107	34.733	9.0	0.715
1550.0	2.902	34.661	176.3	2.791	4800.0	1.110	34.733	9.0	0.712
1600.0	2.877	34.679	179.1	2.762	4850.0	1.110	34.732	9.0	0.706
1650.0	2.838	34.706	185.0	2.719	4900.0	1.113	34.732	9.0	0.704
1700.0	2.809	34.729	189.1	2.686	4950.0	1.118	34.732	9.0	0.703
1750.0	2.786	34.749	194.3	2.659	5000.0	1.125	34.732	9.0	0.703
1800.0	2.768	34.765	197.5	2.637					
1850.0	2.745	34.780	200.7	2.610					
1900.0	2.723	34.792	203.8	2.584					
1950.0	2.700	34.801	206.3	2.556					
2000.0	2.671	34.810	209.1	2.524					
2050.0	2.653	34.814	210.3	2.502					
2100.0	2.622	34.820	212.3	2.467					
2150.0	2.595	34.824	214.4	2.435					
2200.0	2.585	34.826	217.4	2.421					
2250.0	2.551	34.829	220.1	2.383					
2300.0	2.536	34.831	220.9	2.364					
2350.0	2.500	34.834	222.4	2.324					
2400.0	2.477	34.836	223.7	2.296					
2450.0	2.450	34.837	224.8	2.265					
2500.0	2.427	34.838	225.3	2.238					
2550.0	2.400	34.839	225.9	2.207					
2600.0	2.373	34.839	226.7	2.176					
2650.0	2.347	34.840	9.0	2.146					
2700.0	2.345	34.841	9.0	2.138					
2750.0	2.317	34.840	9.0	2.106					
2800.0	2.295	34.840	9.0	2.080					
2850.0	2.262	34.839	9.0	2.042					
2900.0	2.236	34.840	9.0	2.012					
2950.0	2.217	34.840	9.0	1.988					
3000.0	2.187	34.838	9.0	1.954					





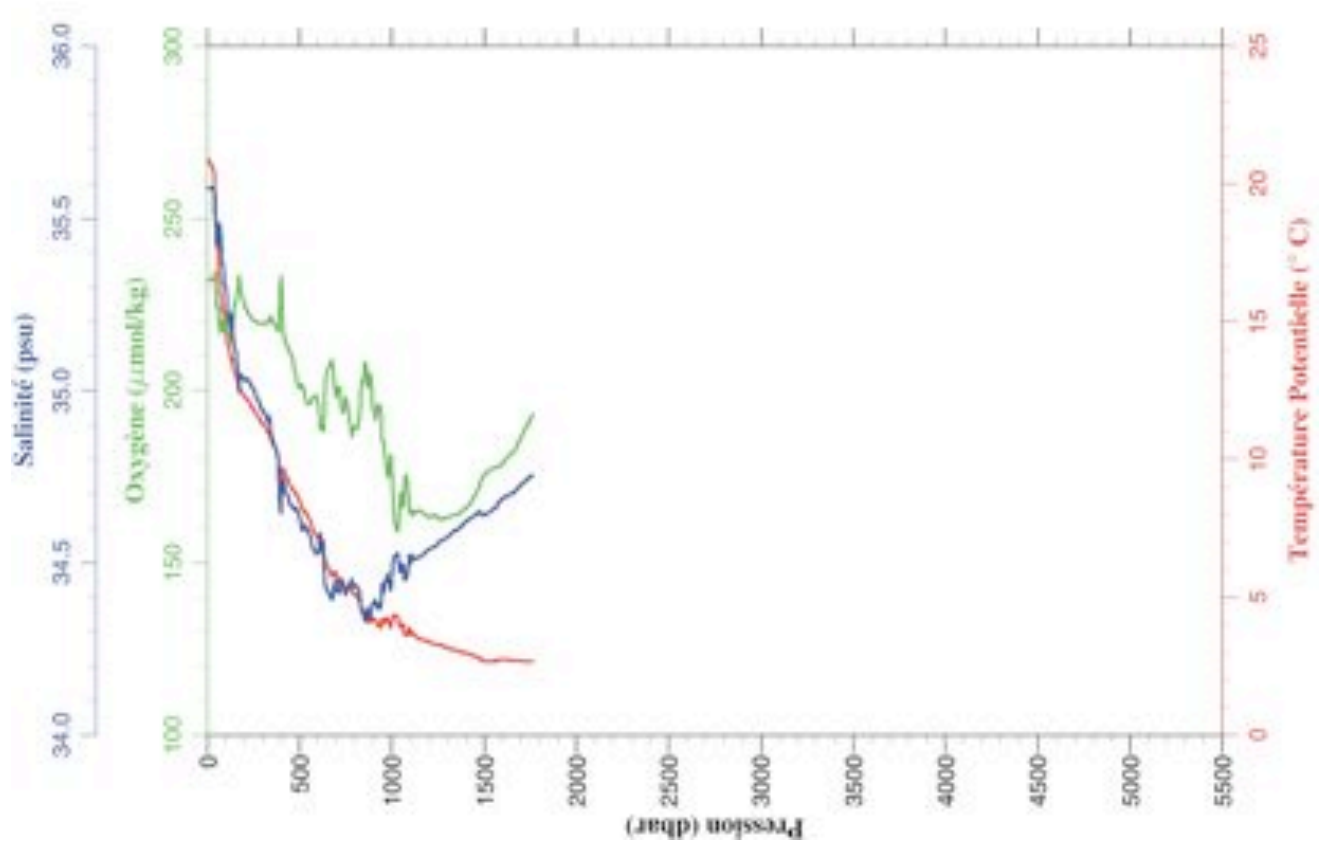
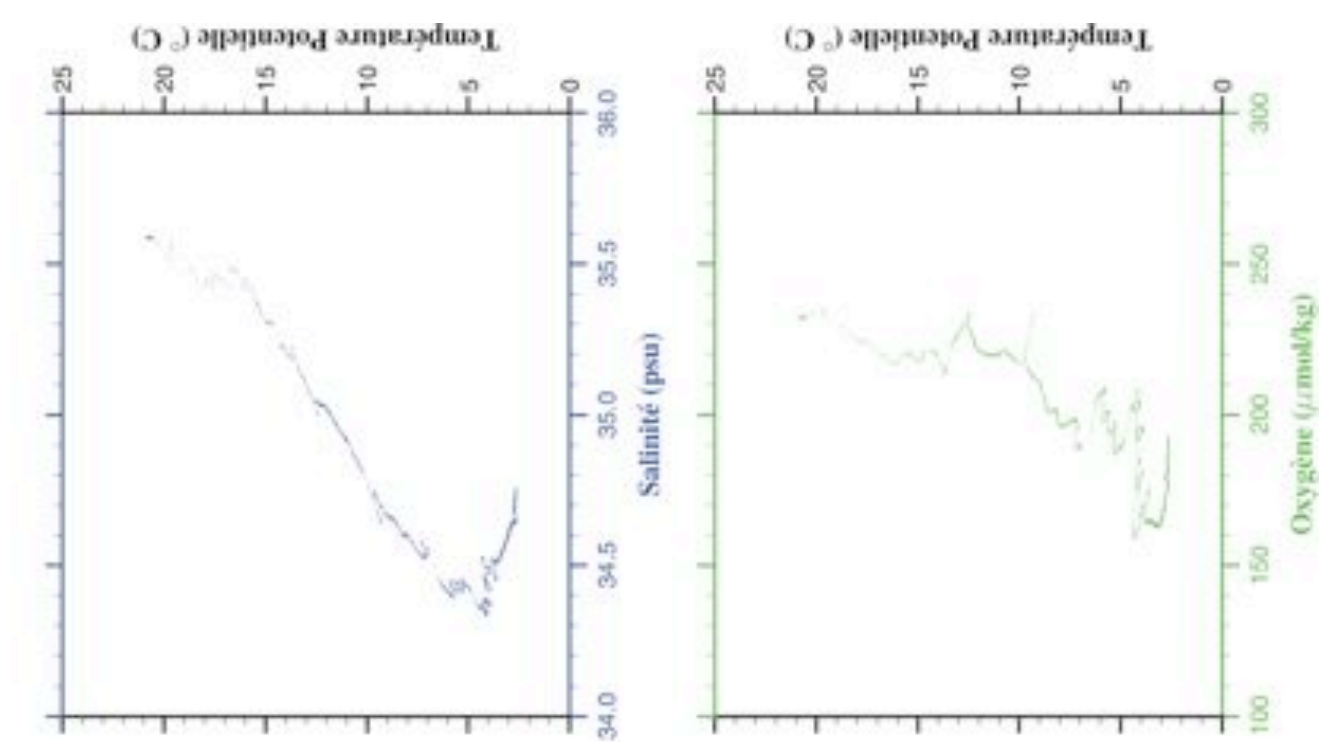
**STATION 19**

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| Station   : 20           Campagne  : GOODHOPE 2008 |
| Date      : 20-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4915       Organisme : IFREMER |
| Position  : S 36 31.46 |
|            : E 13  7.21 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.871	35.589	231.9	20.871
10.0	20.755	35.586	232.2	20.753
20.0	20.711	35.586	232.1	20.707
30.0	20.577	35.589	232.1	20.572
40.0	19.634	35.544	234.3	19.626
50.0	17.957	35.441	224.2	17.948
100.0	14.760	35.305	220.0	14.745
150.0	13.138	35.122	225.1	13.118
200.0	12.294	35.030	225.2	12.267
250.0	11.862	35.003	220.4	11.830
300.0	11.311	34.941	219.2	11.273
350.0	10.681	34.863	220.6	10.638
400.0	9.349	34.644	233.0	9.304
450.0	9.092	34.667	210.8	9.042
500.0	8.544	34.634	200.7	8.491
550.0	7.904	34.584	196.1	7.848
600.0	7.183	34.528	196.5	7.125
650.0	6.147	34.417	206.0	6.089
700.0	5.774	34.421	198.8	5.713
750.0	5.340	34.407	197.7	5.277
800.0	5.157	34.433	189.4	5.091
850.0	4.329	34.346	205.3	4.264
900.0	4.277	34.382	194.1	4.208
950.0	4.166	34.420	184.5	4.094
1000.0	4.227	34.474	176.7	4.150
1050.0	4.045	34.483	169.6	3.965
1100.0	3.837	34.506	164.4	3.754
1150.0	3.583	34.517	165.1	3.499
1200.0	3.484	34.539	163.1	3.396
1250.0	3.377	34.558	163.0	3.286
1300.0	3.273	34.572	163.0	3.178
1350.0	3.177	34.596	163.9	3.079
1400.0	3.078	34.618	165.9	2.977
1450.0	2.962	34.638	169.6	2.858
1500.0	2.797	34.640	175.4	2.691
1550.0	2.790	34.656	177.3	2.681
1600.0	2.856	34.685	178.8	2.741
1650.0	2.836	34.700	181.8	2.717
1700.0	2.815	34.725	186.4	2.692
1750.0	2.781	34.751	191.8	2.654
1765.0	2.778	34.755	193.0	2.650



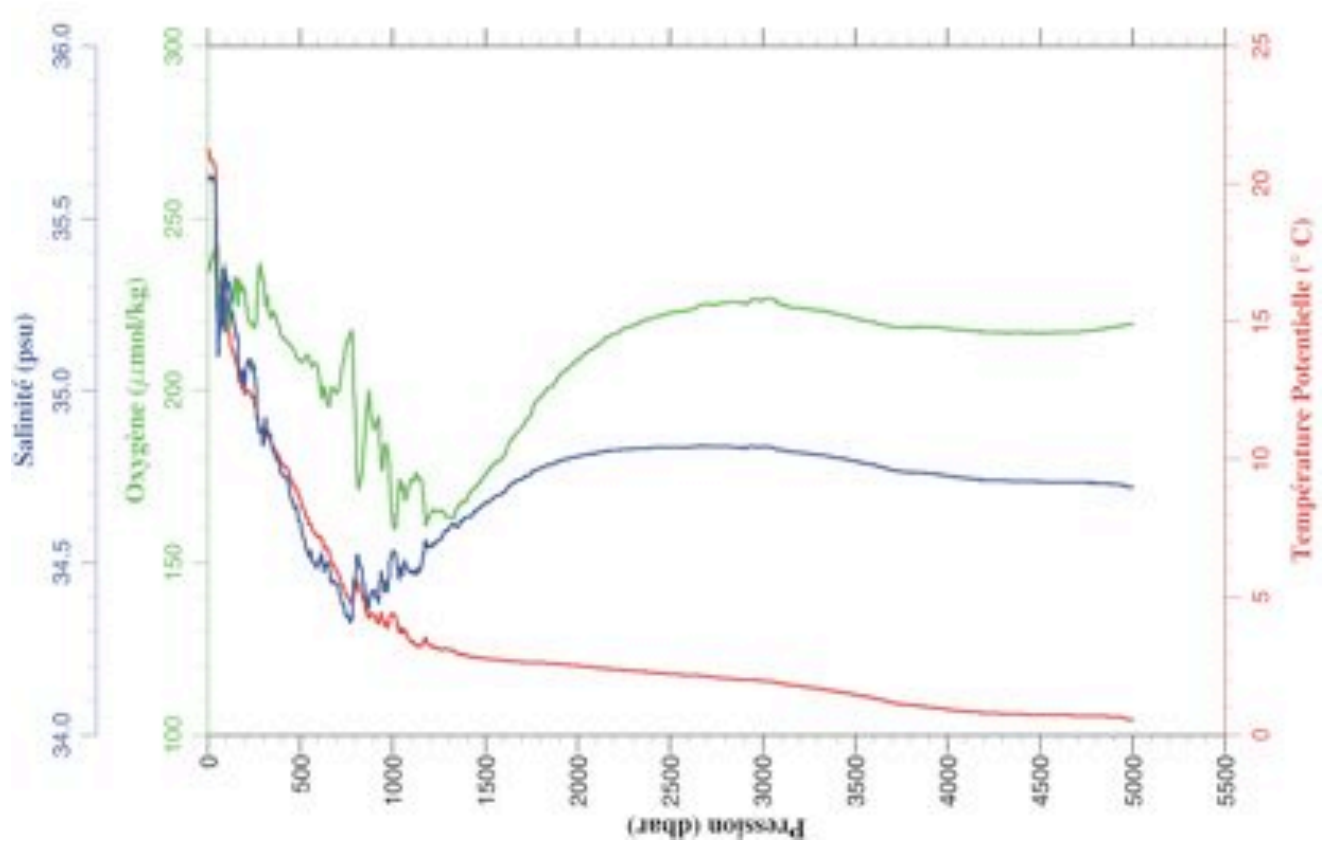
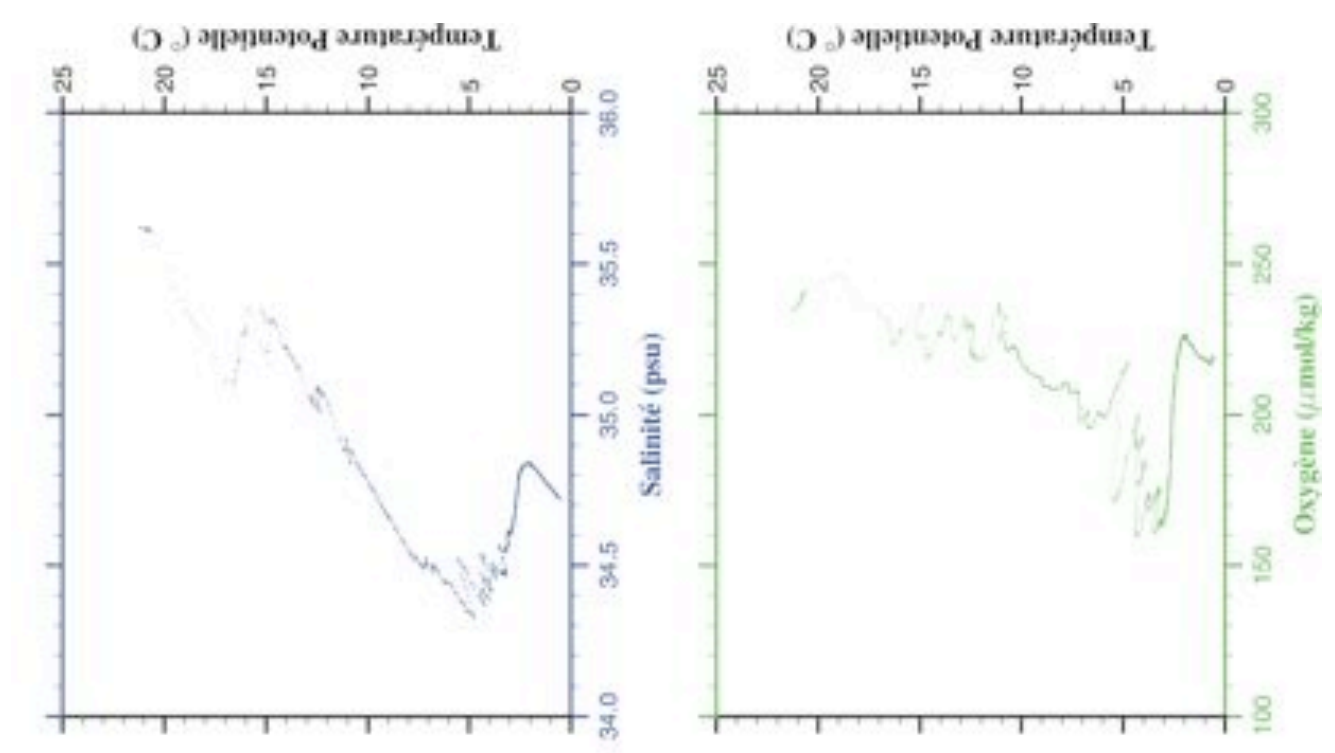
**STATION 20**

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| Station   : 21           Campagne  : GOODHOPE 2008 |
| Date      : 20-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4923       Organisme : IFREMER |
| Position  : S 36 31.26 |
|           : E 13 7.09  |
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PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.200	35.621	234.5	21.200	3050.0	2.181	34.835	226.6	1.944
10.0	20.979	35.614	235.8	20.977	3100.0	2.118	34.827	224.9	1.877
20.0	20.861	35.614	238.0	20.857	3150.0	2.066	34.823	224.2	1.821
30.0	20.784	35.616	239.5	20.778	3200.0	2.033	34.821	224.0	1.784
40.0	20.612	35.602	241.4	20.604	3250.0	1.984	34.816	223.5	1.730
50.0	17.978	35.249	237.2	17.970	3300.0	1.949	34.814	223.3	1.692
100.0	14.953	35.321	226.0	14.938	3350.0	1.903	34.810	222.9	1.641
150.0	13.634	35.173	232.8	13.613	3400.0	1.842	34.805	222.3	1.577
200.0	12.391	35.014	229.3	12.364	3450.0	1.805	34.801	221.7	1.535
250.0	12.206	35.067	218.2	12.173	3500.0	1.734	34.794	220.9	1.461
300.0	10.884	34.842	232.4	10.847	3550.0	1.676	34.789	220.3	1.399
350.0	10.527	34.831	222.5	10.485	3600.0	1.627	34.785	219.9	1.347
400.0	9.870	34.757	215.5	9.824	3650.0	1.562	34.778	219.1	1.278
450.0	9.286	34.687	212.8	9.235	3700.0	1.454	34.769	218.6	1.168
500.0	8.647	34.619	208.5	8.593	3750.0	1.404	34.765	218.3	1.114
550.0	7.700	34.520	209.2	7.645	3800.0	1.374	34.762	218.2	1.079
600.0	7.269	34.508	204.4	7.211	3850.0	1.350	34.762	218.5	1.051
650.0	6.777	34.497	195.6	6.716	3900.0	1.315	34.759	218.5	1.011
700.0	5.967	34.435	199.4	5.905	3950.0	1.297	34.757	218.4	0.989
750.0	5.119	34.345	214.3	5.057	4000.0	1.247	34.753	218.0	0.935
800.0	5.416	34.469	188.6	5.348	4050.0	1.208	34.749	217.7	0.892
850.0	4.779	34.415	187.6	4.711	4100.0	1.183	34.746	217.4	0.862
900.0	4.443	34.421	188.7	4.372	4150.0	1.158	34.743	217.3	0.832
950.0	4.234	34.441	178.8	4.161	4200.0	1.131	34.739	217.0	0.800
1000.0	4.488	34.533	161.4	4.409	4250.0	1.124	34.739	217.0	0.788
1050.0	3.748	34.464	172.0	3.670	4300.0	1.118	34.738	216.9	0.777
1100.0	3.466	34.475	174.1	3.387	4350.0	1.110	34.737	216.8	0.764
1150.0	3.306	34.485	174.3	3.224	4400.0	1.105	34.736	216.9	0.753
1200.0	3.366	34.551	163.7	3.279	4450.0	1.101	34.735	216.8	0.744
1250.0	3.209	34.565	165.0	3.119	4500.0	1.101	34.735	216.8	0.738
1300.0	3.201	34.595	163.3	3.107	4550.0	1.100	34.734	216.8	0.732
1350.0	3.063	34.605	166.0	2.967	4600.0	1.096	34.734	216.9	0.722
1400.0	2.986	34.633	168.5	2.886	4650.0	1.096	34.733	216.8	0.716
1450.0	2.920	34.650	172.1	2.817	4700.0	1.098	34.733	217.1	0.712
1500.0	2.890	34.671	175.4	2.783	4750.0	1.099	34.732	217.3	0.707
1550.0	2.858	34.689	178.7	2.748	4800.0	1.102	34.732	217.5	0.704
1600.0	2.832	34.703	181.0	2.717	4850.0	1.087	34.730	218.1	0.684
1650.0	2.792	34.731	186.3	2.673	4900.0	1.070	34.728	218.5	0.661
1700.0	2.770	34.744	189.4	2.648	4950.0	1.030	34.725	218.8	0.618
1750.0	2.769	34.762	193.5	2.642	5000.0	0.985	34.720	219.3	0.568
1800.0	2.756	34.775	198.2	2.625	5001.0	0.985	34.720	219.3	0.568
1850.0	2.740	34.784	201.0	2.605					
1900.0	2.719	34.795	204.3	2.580					
1950.0	2.687	34.801	206.4	2.544					
2000.0	2.663	34.809	208.6	2.516					
2050.0	2.636	34.815	211.2	2.485					
2100.0	2.606	34.819	212.9	2.451					
2150.0	2.581	34.825	215.2	2.422					
2200.0	2.550	34.826	216.4	2.386					
2250.0	2.527	34.830	218.0	2.359					
2300.0	2.500	34.831	218.8	2.328					
2350.0	2.477	34.833	220.0	2.301					
2400.0	2.452	34.834	221.0	2.272					
2450.0	2.428	34.835	221.7	2.243					
2500.0	2.406	34.835	222.5	2.218					
2550.0	2.389	34.835	222.8	2.196					
2600.0	2.377	34.836	223.3	2.180					
2650.0	2.368	34.839	224.4	2.165					
2700.0	2.340	34.839	225.2	2.133					
2750.0	2.299	34.837	224.9	2.089					
2800.0	2.272	34.837	225.5	2.057					
2850.0	2.247	34.836	225.6	2.028					
2900.0	2.218	34.834	225.1	1.994					
2950.0	2.220	34.837	226.4	1.991					
3000.0	2.208	34.837	226.4	1.975					



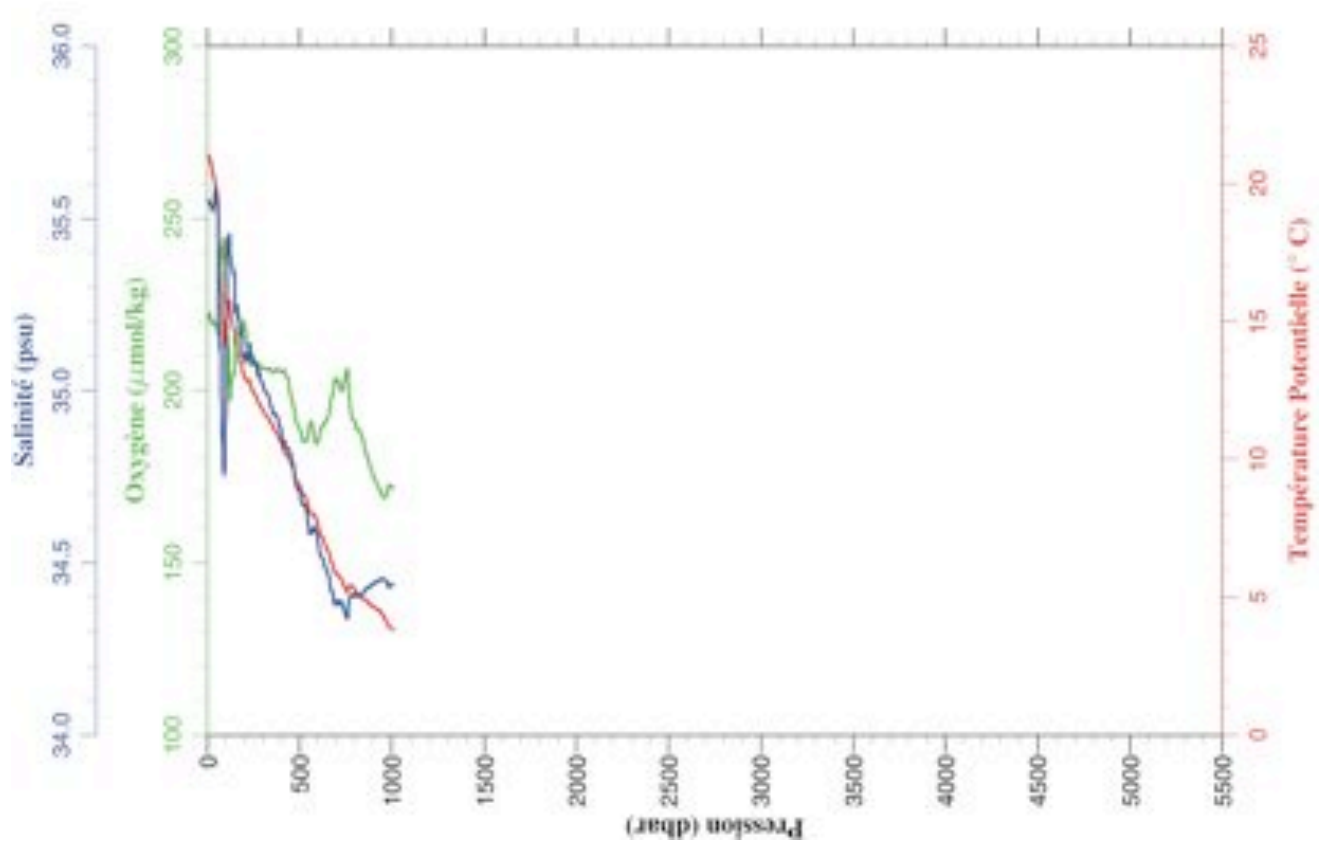
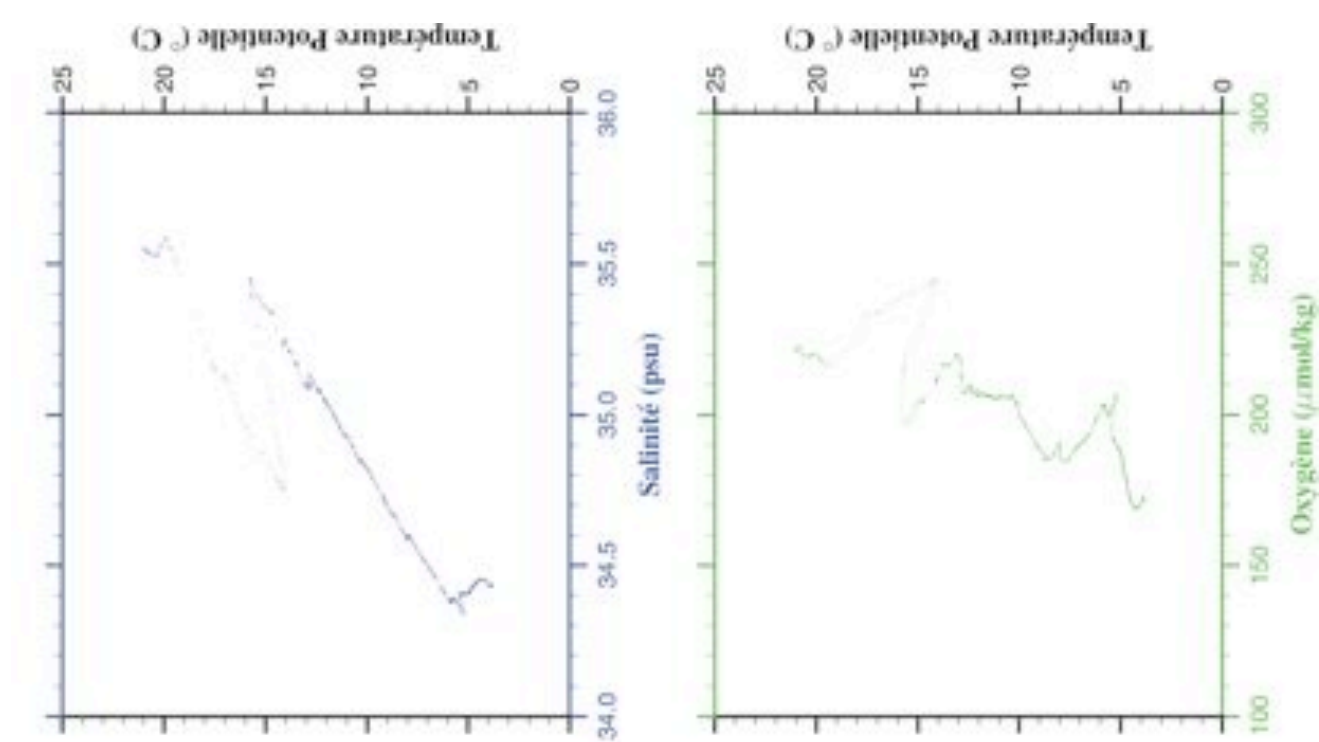
**STATION 21**

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| Station   : 22           Campagne  : GOODHOPE 2008 |
| Date      : 21-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4927       Organisme  : IFREMER |
| Position  : S 36 30.25 |
|            : E 13  7.11 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.025	35.552	221.0	21.025
10.0	20.935	35.542	222.1	20.933
20.0	20.727	35.538	220.5	20.723
30.0	20.355	35.526	219.2	20.350
40.0	20.089	35.566	219.9	20.082
50.0	19.742	35.554	218.1	19.733
100.0	14.760	35.042	231.9	14.745
150.0	14.170	35.228	210.0	14.148
200.0	13.059	35.093	219.7	13.031
250.0	12.463	35.080	209.5	12.429
300.0	11.855	35.021	206.6	11.816
350.0	11.312	34.949	205.3	11.268
400.0	10.703	34.887	205.6	10.655
450.0	9.996	34.815	199.0	9.943
500.0	9.139	34.708	188.9	9.084
550.0	8.266	34.604	188.2	8.208
600.0	7.653	34.560	185.1	7.593
650.0	6.793	34.472	191.8	6.732
700.0	5.963	34.391	202.6	5.902
750.0	5.351	34.347	205.2	5.289
800.0	5.326	34.408	190.8	5.259
850.0	4.999	34.418	184.1	4.929
900.0	4.723	34.441	174.9	4.651
950.0	4.463	34.453	169.3	4.388
1000.0	3.925	34.434	171.8	3.850
1006.0	3.909	34.435	171.9	3.833



**STATION 22**

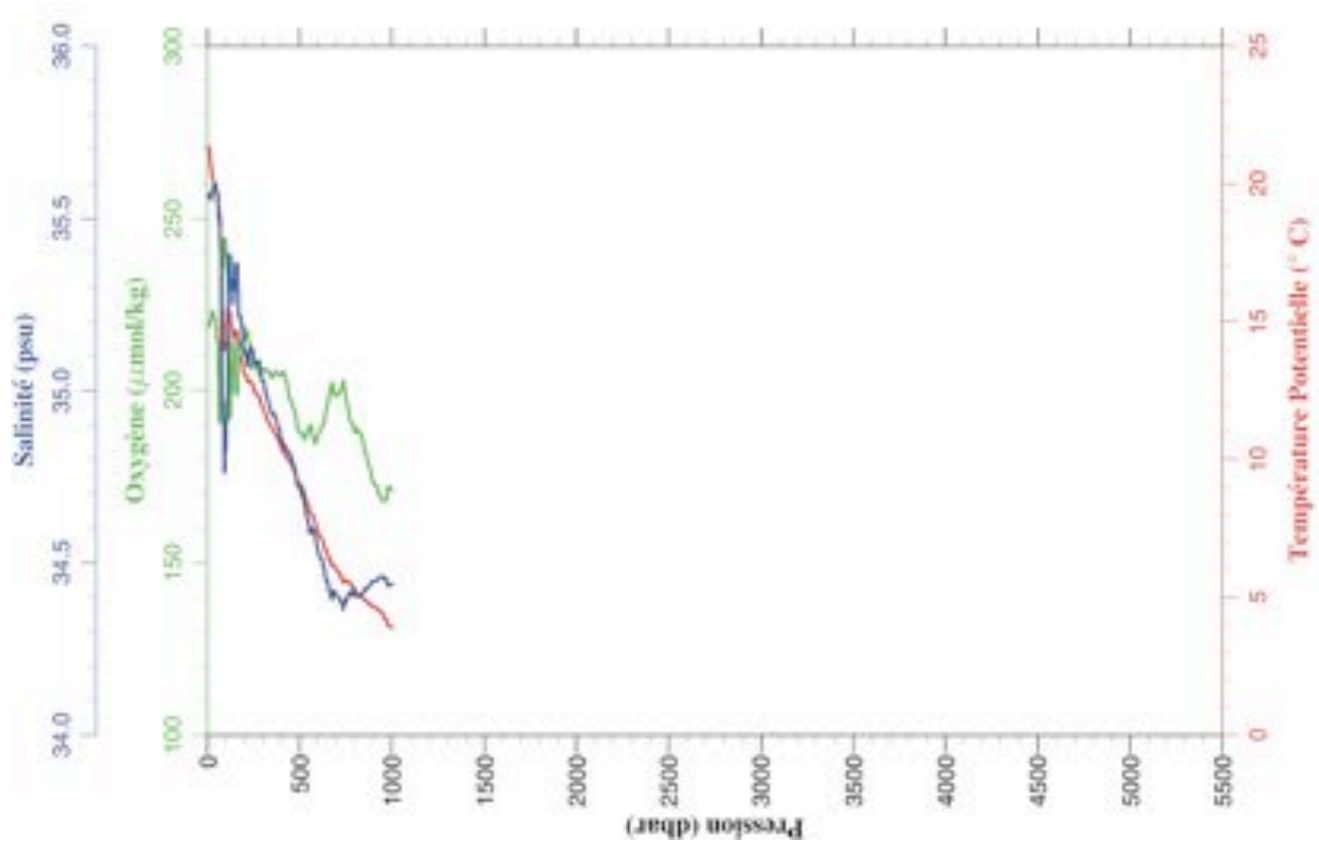
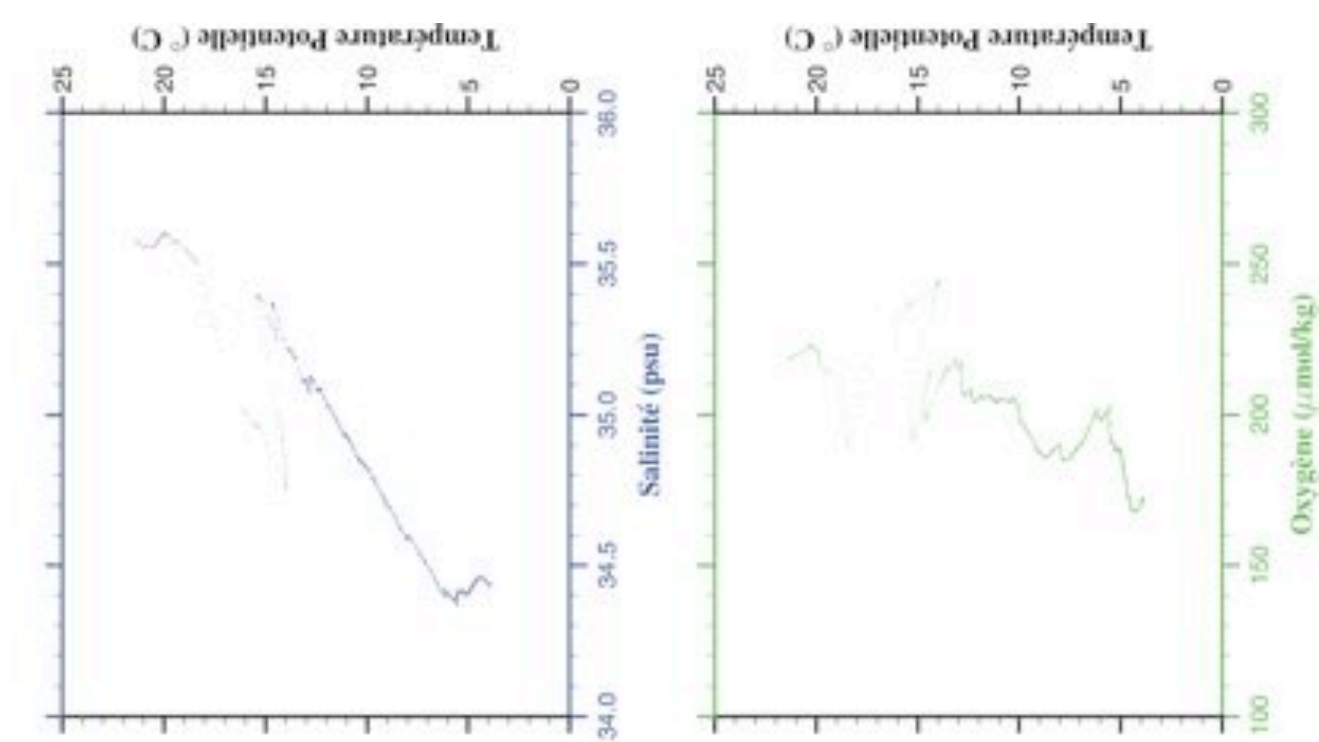
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| Station   : 23           Campagne  : GOODHOPE 2008 |
| Date      : 21-02-08    Navire     : R/V Marion Dufresne |
| Profondeur : 4941       Organisme  : IFREMER |
| Position  : S 36 27.00 |
|            E 13  6.00 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.324	35.570	218.6	21.324
10.0	21.264	35.569	218.9	21.262
20.0	20.628	35.558	220.9	20.624
30.0	20.228	35.584	222.8	20.222
40.0	19.943	35.600	220.9	19.936
50.0	19.719	35.584	215.4	19.709
100.0	14.102	34.855	243.0	14.088
150.0	14.685	35.359	205.0	14.662
200.0	13.202	35.118	218.3	13.174
250.0	12.673	35.109	207.0	12.639
300.0	11.937	35.027	206.1	11.897
350.0	11.172	34.932	203.7	11.128
400.0	10.460	34.851	204.5	10.412
450.0	9.957	34.814	197.3	9.905
500.0	9.184	34.717	187.7	9.129
550.0	8.341	34.614	188.4	8.283
600.0	7.420	34.535	187.1	7.361
650.0	6.634	34.442	195.8	6.574
700.0	6.037	34.405	198.6	5.975
750.0	5.627	34.391	198.0	5.563
800.0	5.288	34.410	187.8	5.221
850.0	4.988	34.421	183.5	4.919
900.0	4.740	34.447	173.3	4.668
950.0	4.472	34.460	168.0	4.397
1000.0	3.979	34.438	171.1	3.904
1001.0	3.978	34.439	171.0	3.902





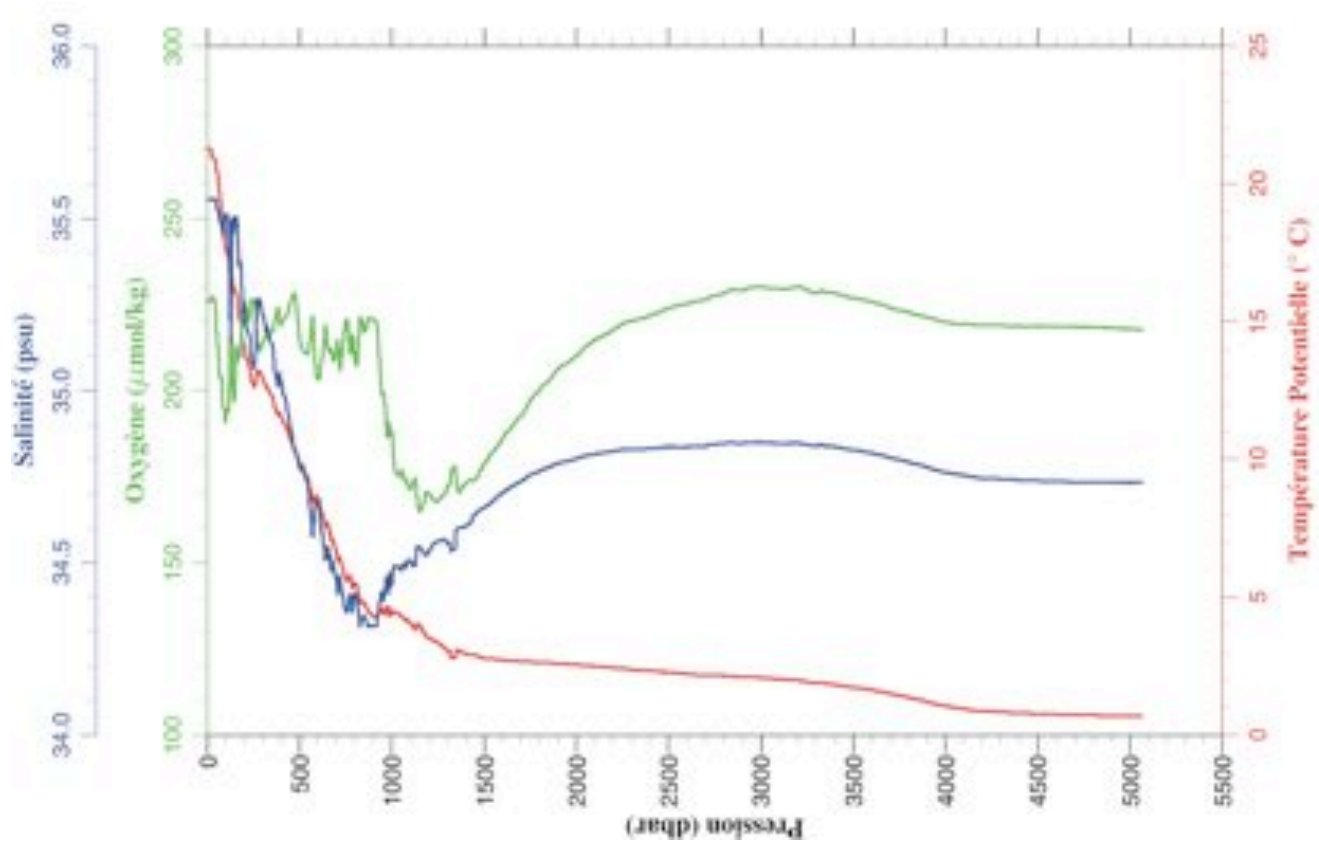
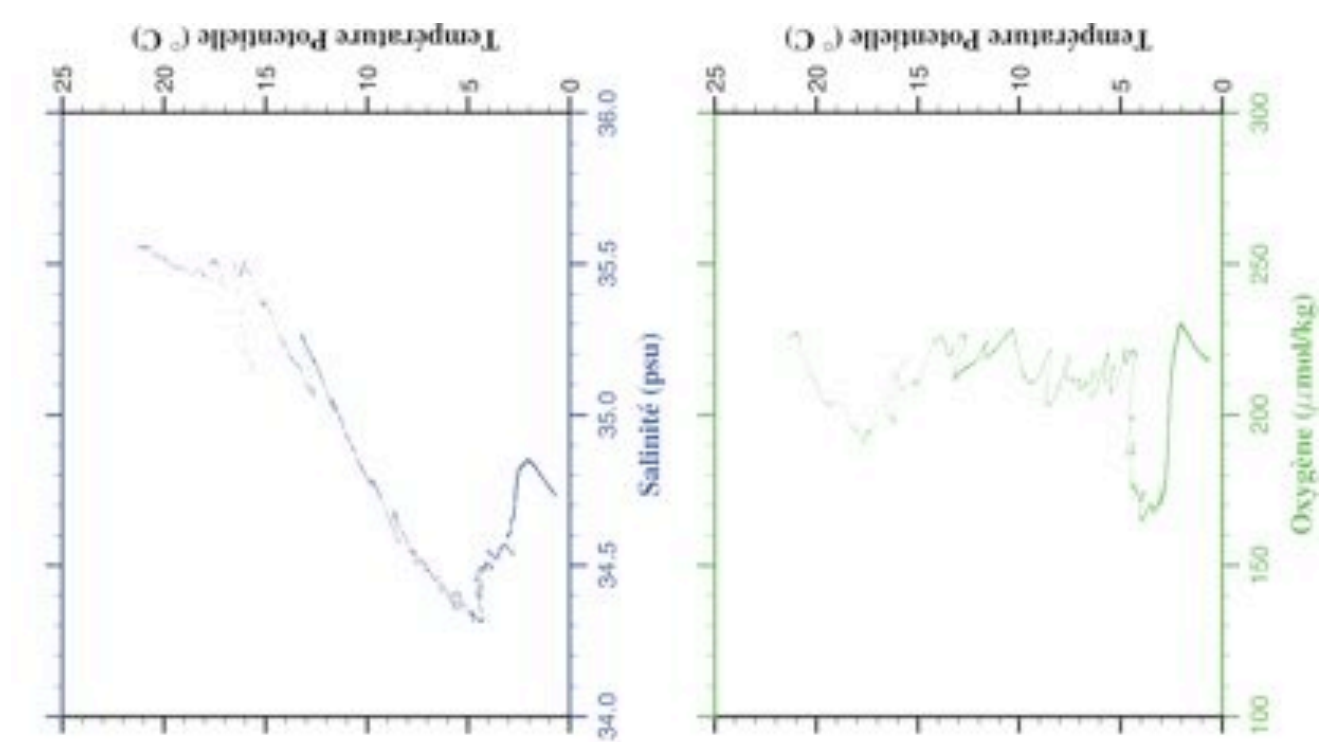
**STATION 21**

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| Station   : 24           Campagne  : GOODHOPE 2008 |
| Date      : 22-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4980       Organisme  : IFREMER |
| Position  : S 36 48.98 |
|           : E 12 56.18 |
|           : |
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PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.287	35.556	226.2	21.287	3050.0	2.294	34.848	229.7	2.054
10.0	21.277	35.555	225.7	21.275	3100.0	2.271	34.846	229.6	2.026
20.0	21.252	35.555	226.1	21.248	3150.0	2.258	34.847	229.6	2.008
30.0	20.957	35.554	226.9	20.951	3200.0	2.246	34.849	230.1	1.992
40.0	20.888	35.555	226.2	20.881	3250.0	2.191	34.842	229.1	1.933
50.0	20.486	35.536	217.4	20.477	3300.0	2.155	34.839	228.2	1.893
100.0	17.647	35.511	191.7	17.630	3350.0	2.140	34.839	228.5	1.873
150.0	16.121	35.481	202.1	16.097	3400.0	2.100	34.837	228.3	1.828
200.0	14.038	35.229	225.2	14.009	3450.0	2.057	34.833	227.7	1.781
250.0	12.683	35.067	226.1	12.649	3500.0	2.012	34.828	226.8	1.732
300.0	12.974	35.217	214.3	12.932	3550.0	1.967	34.823	226.4	1.683
350.0	12.345	35.133	217.0	12.298	3600.0	1.925	34.819	225.8	1.636
400.0	11.577	35.023	219.1	11.526	3650.0	1.875	34.813	225.1	1.583
450.0	10.756	34.888	225.6	10.701	3700.0	1.795	34.805	224.0	1.500
500.0	9.909	34.775	214.5	9.851	3750.0	1.743	34.800	223.3	1.444
550.0	9.241	34.700	211.6	9.179	3800.0	1.674	34.793	222.6	1.371
600.0	8.648	34.666	203.1	8.584	3850.0	1.596	34.785	222.0	1.290
650.0	7.740	34.545	212.9	7.674	3900.0	1.518	34.778	221.4	1.209
700.0	6.717	34.451	211.1	6.651	3950.0	1.429	34.769	220.5	1.117
750.0	5.721	34.359	220.3	5.656	4000.0	1.368	34.763	219.8	1.052
800.0	5.582	34.409	208.7	5.513	4050.0	1.318	34.758	219.4	0.999
850.0	4.887	34.347	217.2	4.818	4100.0	1.277	34.754	219.3	0.953
900.0	4.406	34.316	220.5	4.336	4150.0	1.222	34.749	219.1	0.895
950.0	4.519	34.395	198.9	4.444	4200.0	1.193	34.746	218.9	0.860
1000.0	4.425	34.436	188.0	4.346	4250.0	1.193	34.745	218.8	0.855
1050.0	4.378	34.477	176.7	4.295	4300.0	1.173	34.743	218.8	0.831
1100.0	4.153	34.506	171.4	4.068	4350.0	1.159	34.742	218.7	0.811
1150.0	4.058	34.544	164.9	3.969	4400.0	1.146	34.740	218.8	0.793
1200.0	3.604	34.535	169.9	3.515	4450.0	1.146	34.740	218.7	0.788
1250.0	3.439	34.563	168.0	3.347	4500.0	1.135	34.738	218.7	0.771
1300.0	3.133	34.556	172.0	3.041	4550.0	1.128	34.737	218.6	0.758
1350.0	3.176	34.598	173.2	3.078	4600.0	1.127	34.737	218.7	0.752
1400.0	3.048	34.607	172.9	2.948	4650.0	1.116	34.735	218.6	0.736
1450.0	3.012	34.639	174.0	2.908	4700.0	1.111	34.735	218.6	0.724
1500.0	2.896	34.658	178.7	2.789	4750.0	1.111	34.734	218.5	0.719
1550.0	2.866	34.679	182.3	2.755	4800.0	1.113	34.734	218.4	0.715
1600.0	2.834	34.702	186.1	2.720	4850.0	1.113	34.733	218.3	0.709
1650.0	2.815	34.721	189.4	2.696	4900.0	1.108	34.733	218.2	0.698
1700.0	2.797	34.736	192.7	2.674	4950.0	1.110	34.732	218.0	0.695
1750.0	2.777	34.756	197.3	2.650	5000.0	1.114	34.732	218.0	0.693
1800.0	2.767	34.767	200.0	2.636	5050.0	1.120	34.732	217.7	0.693
1850.0	2.750	34.777	202.8	2.615	5063.0	1.122	34.732	217.6	0.693
1900.0	2.749	34.788	206.1	2.609					
1950.0	2.722	34.794	207.9	2.579					
2000.0	2.696	34.802	210.1	2.549					
2050.0	2.671	34.811	212.9	2.520					
2100.0	2.654	34.816	214.6	2.498					
2150.0	2.639	34.820	216.1	2.479					
2200.0	2.608	34.824	217.6	2.444					
2250.0	2.580	34.828	219.4	2.411					
2300.0	2.567	34.830	220.3	2.394					
2350.0	2.535	34.830	221.0	2.358					
2400.0	2.510	34.832	221.8	2.329					
2450.0	2.488	34.834	222.5	2.303					
2500.0	2.470	34.836	224.0	2.280					
2550.0	2.437	34.835	224.6	2.243					
2600.0	2.415	34.836	225.2	2.217					
2650.0	2.392	34.838	225.9	2.190					
2700.0	2.378	34.839	226.2	2.171					
2750.0	2.389	34.844	227.4	2.177					
2800.0	2.375	34.846	228.2	2.158					
2850.0	2.366	34.848	229.3	2.144					
2900.0	2.336	34.847	229.2	2.110					
2950.0	2.327	34.849	230.0	2.096					
3000.0	2.316	34.850	230.2	2.081					



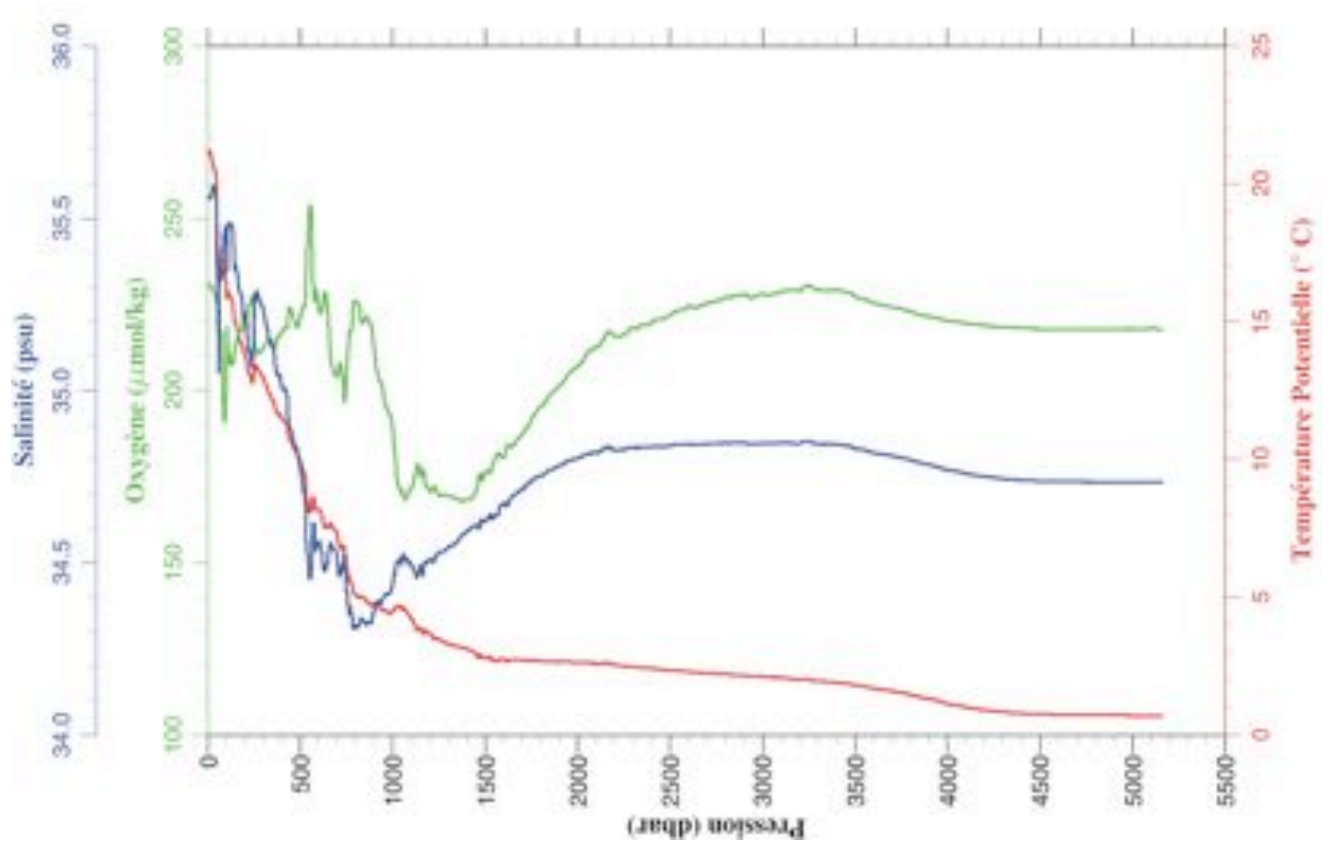
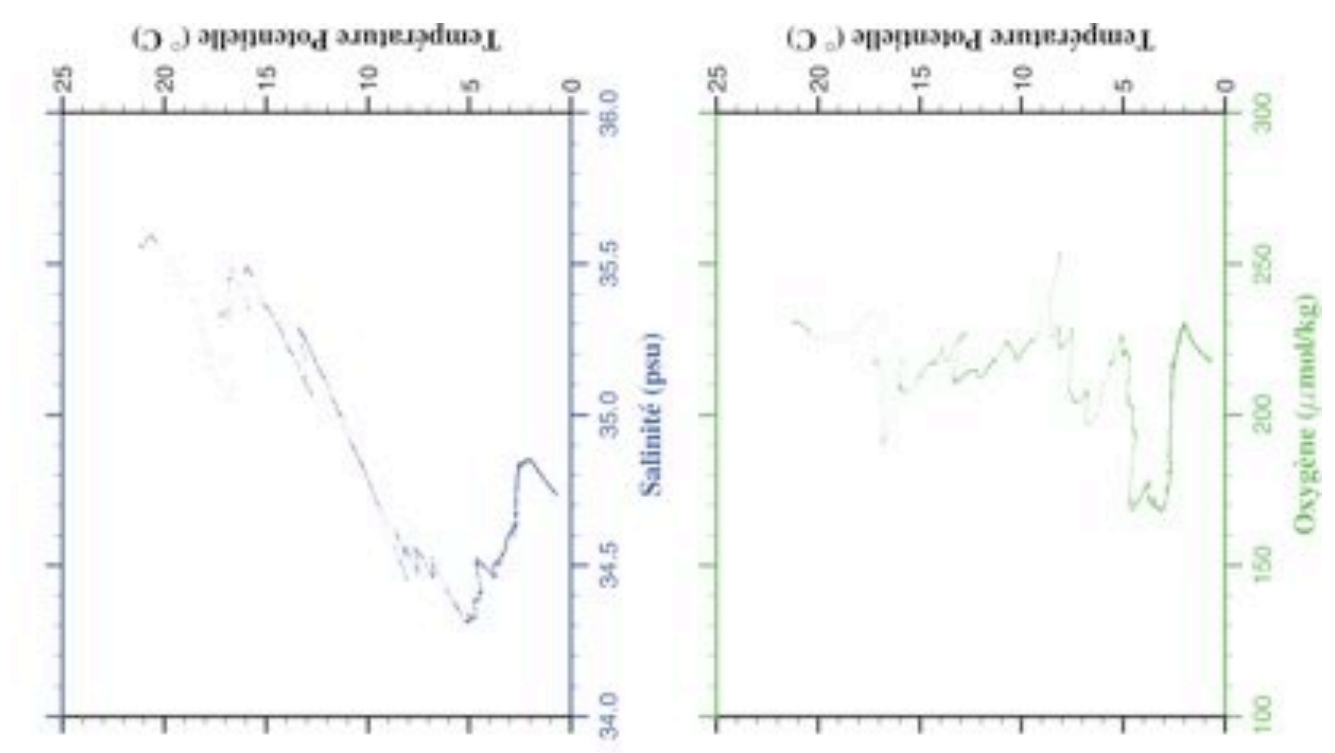
**STATION 24**

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| Station   : 25           Campagne  : GOODHOPE 2008 |
| Date      : 22-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 5068       Organisme  : IFREMER |
| Position  : S 37 7.08 |
|            : E 12 44.32 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.093	35.558	231.0	21.093	3050.0	2.330	34.846	228.1	2.089
10.0	21.216	35.559	230.4	21.214	3100.0	2.333	34.849	228.9	2.087
20.0	20.919	35.570	230.5	20.915	3150.0	2.298	34.848	229.0	2.047
30.0	20.654	35.595	228.9	20.649	3200.0	2.262	34.846	228.9	2.008
40.0	20.480	35.577	227.8	20.472	3250.0	2.271	34.851	230.4	2.011
50.0	18.629	35.376	226.3	18.621	3300.0	2.227	34.845	229.1	1.962
100.0	16.142	35.395	205.7	16.126	3350.0	2.207	34.845	229.0	1.938
150.0	15.035	35.361	213.0	15.012	3400.0	2.183	34.843	229.0	1.909
200.0	13.901	35.217	220.1	13.872	3450.0	2.151	34.840	228.6	1.873
250.0	13.236	35.212	218.3	13.201	3500.0	2.089	34.831	227.3	1.807
300.0	13.051	35.241	212.2	13.009	3550.0	2.046	34.827	226.6	1.760
350.0	12.209	35.124	213.7	12.162	3600.0	1.985	34.820	225.4	1.696
400.0	11.514	35.012	217.1	11.462	3650.0	1.934	34.815	224.7	1.641
450.0	10.708	34.884	223.4	10.653	3700.0	1.894	34.811	224.2	1.596
500.0	9.981	34.772	221.5	9.923	3750.0	1.830	34.805	223.8	1.528
550.0	8.139	34.453	252.8	8.082	3800.0	1.759	34.797	222.9	1.454
600.0	8.258	34.563	223.8	8.195	3850.0	1.692	34.791	222.0	1.384
650.0	7.608	34.511	221.4	7.543	3900.0	1.621	34.784	221.5	1.309
700.0	7.285	34.509	204.1	7.216	3950.0	1.547	34.778	220.9	1.232
750.0	6.157	34.413	205.5	6.090	4000.0	1.447	34.769	220.4	1.129
800.0	5.124	34.313	225.6	5.058	4050.0	1.413	34.766	219.9	1.091
850.0	5.017	34.328	220.8	4.947	4100.0	1.333	34.759	219.5	1.007
900.0	4.814	34.359	211.9	4.741	4150.0	1.288	34.754	219.2	0.958
950.0	4.617	34.403	198.9	4.541	4200.0	1.247	34.751	218.9	0.913
1000.0	4.563	34.441	188.6	4.483	4250.0	1.205	34.747	218.6	0.867
1050.0	4.635	34.500	171.0	4.550	4300.0	1.174	34.744	218.3	0.831
1100.0	4.323	34.496	171.5	4.236	4350.0	1.163	34.742	218.3	0.815
1150.0	3.954	34.487	175.2	3.866	4400.0	1.142	34.740	218.1	0.789
1200.0	3.777	34.510	170.8	3.686	4450.0	1.126	34.738	218.0	0.768
1250.0	3.564	34.530	169.4	3.471	4500.0	1.121	34.737	217.9	0.757
1300.0	3.405	34.545	169.4	3.310	4550.0	1.121	34.737	217.9	0.752
1350.0	3.327	34.562	168.5	3.228	4600.0	1.113	34.736	217.8	0.739
1400.0	3.228	34.590	168.2	3.126	4650.0	1.114	34.735	217.8	0.734
1450.0	3.041	34.610	170.6	2.937	4700.0	1.121	34.736	217.8	0.734
1500.0	2.901	34.621	176.3	2.795	4750.0	1.120	34.735	217.7	0.728
1550.0	2.806	34.634	179.6	2.696	4800.0	1.123	34.735	217.7	0.724
1600.0	2.862	34.674	180.6	2.747	4850.0	1.126	34.735	217.9	0.722
1650.0	2.852	34.695	184.0	2.733	4900.0	1.128	34.735	217.9	0.718
1700.0	2.849	34.713	187.3	2.726	4950.0	1.133	34.735	217.9	0.717
1750.0	2.842	34.739	191.7	2.714	5000.0	1.136	34.734	217.9	0.714
1800.0	2.827	34.754	195.5	2.695	5050.0	1.137	34.734	217.9	0.709
1850.0	2.792	34.770	198.8	2.656	5100.0	1.141	34.734	218.0	0.707
1900.0	2.791	34.782	201.4	2.651	5150.0	1.146	34.734	217.8	0.706
1950.0	2.801	34.796	204.9	2.657	5156.0	1.147	34.734	217.6	0.706
2000.0	2.794	34.804	206.8	2.645					
2050.0	2.791	34.817	210.8	2.637					
2100.0	2.752	34.819	212.6	2.594					
2150.0	2.790	34.836	215.9	2.628					
2200.0	2.705	34.827	215.7	2.539					
2250.0	2.664	34.828	216.1	2.494					
2300.0	2.651	34.834	218.2	2.476					
2350.0	2.630	34.836	219.1	2.451					
2400.0	2.605	34.838	219.9	2.422					
2450.0	2.559	34.836	220.5	2.372					
2500.0	2.543	34.839	221.7	2.352					
2550.0	2.524	34.843	223.4	2.329					
2600.0	2.511	34.846	224.5	2.310					
2650.0	2.476	34.843	224.2	2.272					
2700.0	2.453	34.845	225.3	2.244					
2750.0	2.437	34.846	226.0	2.223					
2800.0	2.427	34.848	227.1	2.209					
2850.0	2.412	34.849	227.4	2.190					
2900.0	2.394	34.848	228.0	2.167					
2950.0	2.365	34.846	227.1	2.134					
3000.0	2.358	34.847	228.0	2.121					



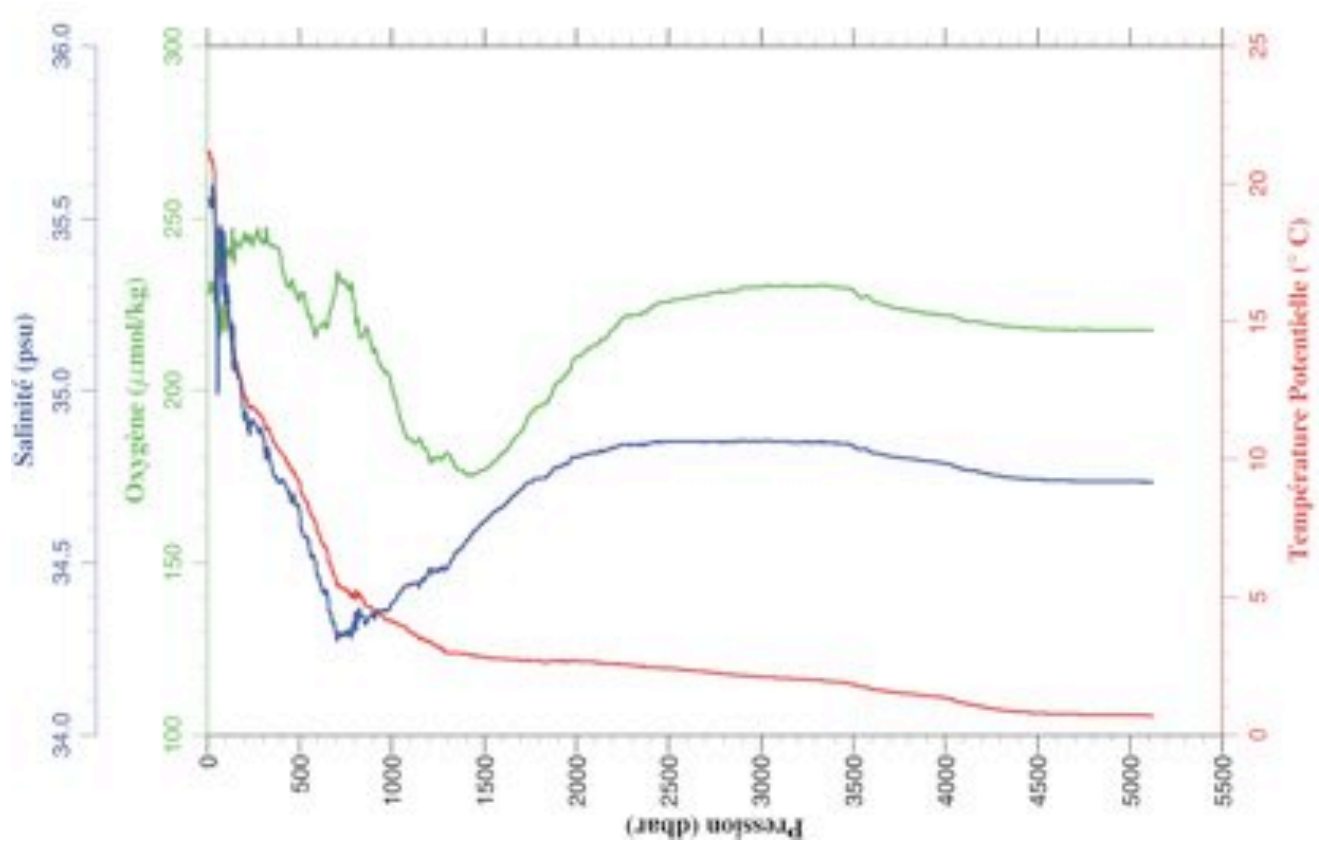
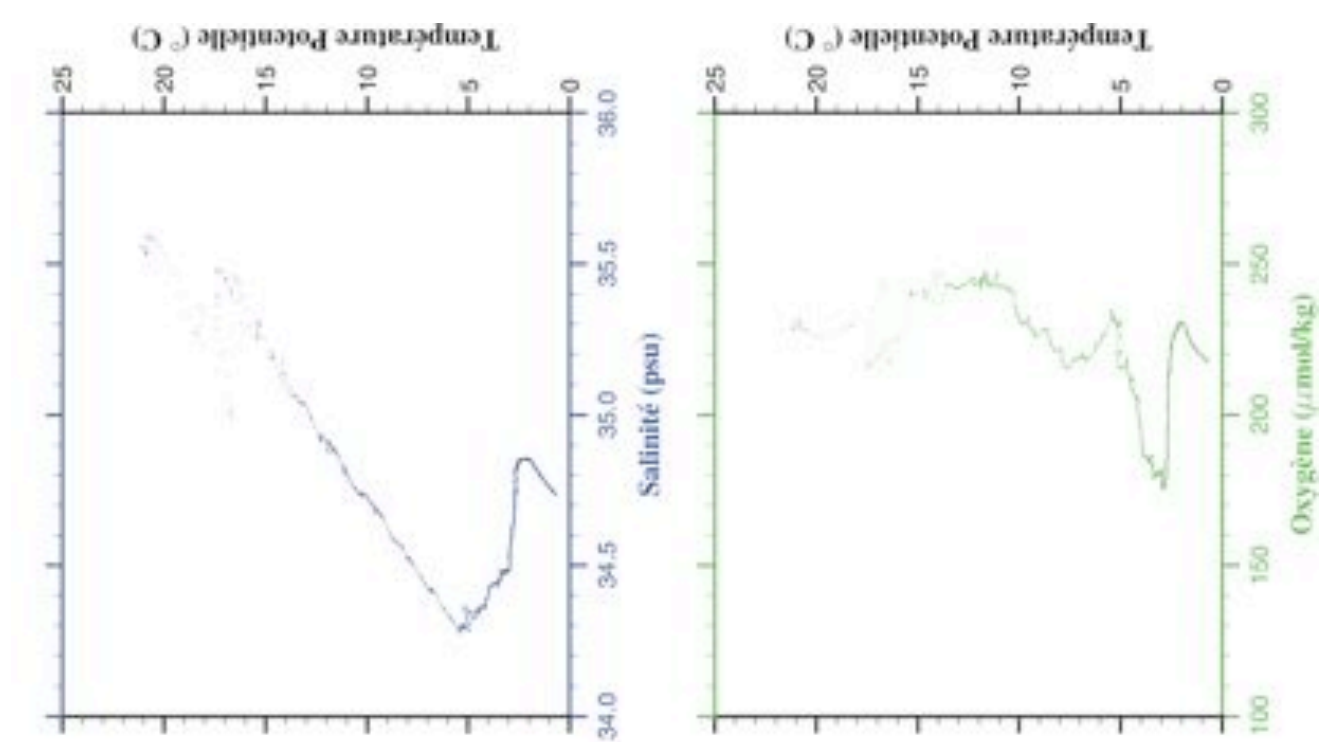
**STATION 25**

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| Station   : 26           Campagne  : GOODHOPE 2008
| Date      : 22-02-08    Navire    : R/V Marion Dufresne
| Profondeur : 5071       Organisme : IFREMER
| Position  : S 37 25.00
|           : E 12 32.77
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PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	21.144	35.554	228.2	21.144	3050.0	2.345	34.854	230.3	2.103
10.0	21.144	35.554	228.6	21.142	3100.0	2.327	34.853	230.2	2.081
20.0	20.877	35.533	231.5	20.873	3150.0	2.310	34.852	230.3	2.060
30.0	20.798	35.594	228.9	20.792	3200.0	2.287	34.850	230.1	2.032
40.0	19.731	35.513	225.8	19.724	3250.0	2.280	34.851	230.4	2.020
50.0	18.118	35.342	232.6	18.109	3300.0	2.263	34.851	230.3	1.998
100.0	15.425	35.269	238.5	15.409	3350.0	2.238	34.850	230.4	1.968
150.0	13.622	35.059	242.7	13.600	3400.0	2.203	34.848	230.0	1.929
200.0	12.293	34.913	245.6	12.267	3450.0	2.187	34.846	229.8	1.908
250.0	11.887	34.903	243.5	11.855	3500.0	2.123	34.838	229.1	1.840
300.0	11.525	34.872	242.8	11.487	3550.0	2.042	34.829	227.0	1.756
350.0	10.831	34.775	242.4	10.788	3600.0	1.952	34.819	226.3	1.664
400.0	10.307	34.742	237.3	10.259	3650.0	1.912	34.815	225.1	1.619
450.0	9.715	34.682	231.1	9.663	3700.0	1.865	34.810	224.3	1.568
500.0	9.201	34.647	226.2	9.145	3750.0	1.827	34.805	223.6	1.526
550.0	8.354	34.564	221.1	8.296	3800.0	1.805	34.803	223.3	1.499
600.0	7.413	34.461	218.1	7.353	3850.0	1.772	34.799	222.9	1.462
650.0	6.698	34.406	218.3	6.637	3900.0	1.740	34.795	222.4	1.425
700.0	5.511	34.277	233.4	5.451	3950.0	1.723	34.793	222.1	1.402
750.0	5.325	34.297	230.8	5.263	4000.0	1.674	34.789	221.8	1.350
800.0	5.280	34.351	222.6	5.213	4050.0	1.569	34.779	221.4	1.242
850.0	4.945	34.341	216.2	4.875	4100.0	1.488	34.771	220.3	1.158
900.0	4.633	34.353	211.1	4.561	4150.0	1.425	34.767	220.0	1.091
950.0	4.363	34.361	206.3	4.289	4200.0	1.363	34.761	219.7	1.025
1000.0	4.236	34.382	201.0	4.159	4250.0	1.296	34.755	219.3	0.955
1050.0	4.057	34.417	191.0	3.977	4300.0	1.261	34.752	218.8	0.916
1100.0	3.837	34.437	185.6	3.754	4350.0	1.229	34.748	218.5	0.879
1150.0	3.601	34.438	186.3	3.516	4400.0	1.196	34.745	218.4	0.841
1200.0	3.491	34.475	180.6	3.403	4450.0	1.179	34.743	218.1	0.819
1250.0	3.262	34.476	180.8	3.172	4500.0	1.162	34.741	218.0	0.797
1300.0	3.081	34.485	181.8	2.989	4550.0	1.153	34.740	217.8	0.782
1350.0	3.081	34.533	177.6	2.985	4600.0	1.146	34.739	217.7	0.770
1400.0	3.054	34.562	175.9	2.954	4650.0	1.143	34.738	217.6	0.761
1450.0	2.982	34.592	175.7	2.878	4700.0	1.141	34.738	217.6	0.754
1500.0	2.946	34.620	177.0	2.839	4750.0	1.137	34.737	217.7	0.745
1550.0	2.887	34.645	179.1	2.776	4800.0	1.139	34.737	217.6	0.740
1600.0	2.881	34.662	181.7	2.766	4850.0	1.140	34.736	217.6	0.735
1650.0	2.855	34.691	185.0	2.736	4900.0	1.141	34.736	217.6	0.730
1700.0	2.838	34.713	188.0	2.715	4950.0	1.142	34.736	217.6	0.726
1750.0	2.834	34.735	193.3	2.707	5000.0	1.145	34.736	217.6	0.722
1800.0	2.823	34.745	195.6	2.691	5050.0	1.147	34.735	217.6	0.719
1850.0	2.793	34.757	197.6	2.657	5100.0	1.149	34.735	217.6	0.714
1900.0	2.834	34.778	202.4	2.693	5123.0	1.151	34.735	217.5	0.713
1950.0	2.802	34.788	205.2	2.658					
2000.0	2.836	34.807	209.8	2.687					
2050.0	2.829	34.817	211.7	2.675					
2100.0	2.806	34.821	213.3	2.647					
2150.0	2.753	34.823	214.7	2.591					
2200.0	2.750	34.833	217.9	2.583					
2250.0	2.738	34.843	220.9	2.567					
2300.0	2.699	34.843	221.7	2.524					
2350.0	2.686	34.844	222.1	2.507					
2400.0	2.651	34.848	223.9	2.467					
2450.0	2.632	34.851	225.4	2.444					
2500.0	2.617	34.851	225.9	2.424					
2550.0	2.587	34.851	226.5	2.390					
2600.0	2.562	34.852	226.9	2.361					
2650.0	2.531	34.852	227.3	2.326					
2700.0	2.509	34.852	227.7	2.299					
2750.0	2.479	34.852	228.4	2.265					
2800.0	2.430	34.851	228.5	2.212					
2850.0	2.410	34.851	228.9	2.188					
2900.0	2.400	34.854	229.7	2.173					
2950.0	2.375	34.853	229.9	2.143					
3000.0	2.350	34.852	230.0	2.114					



**STATION 26**

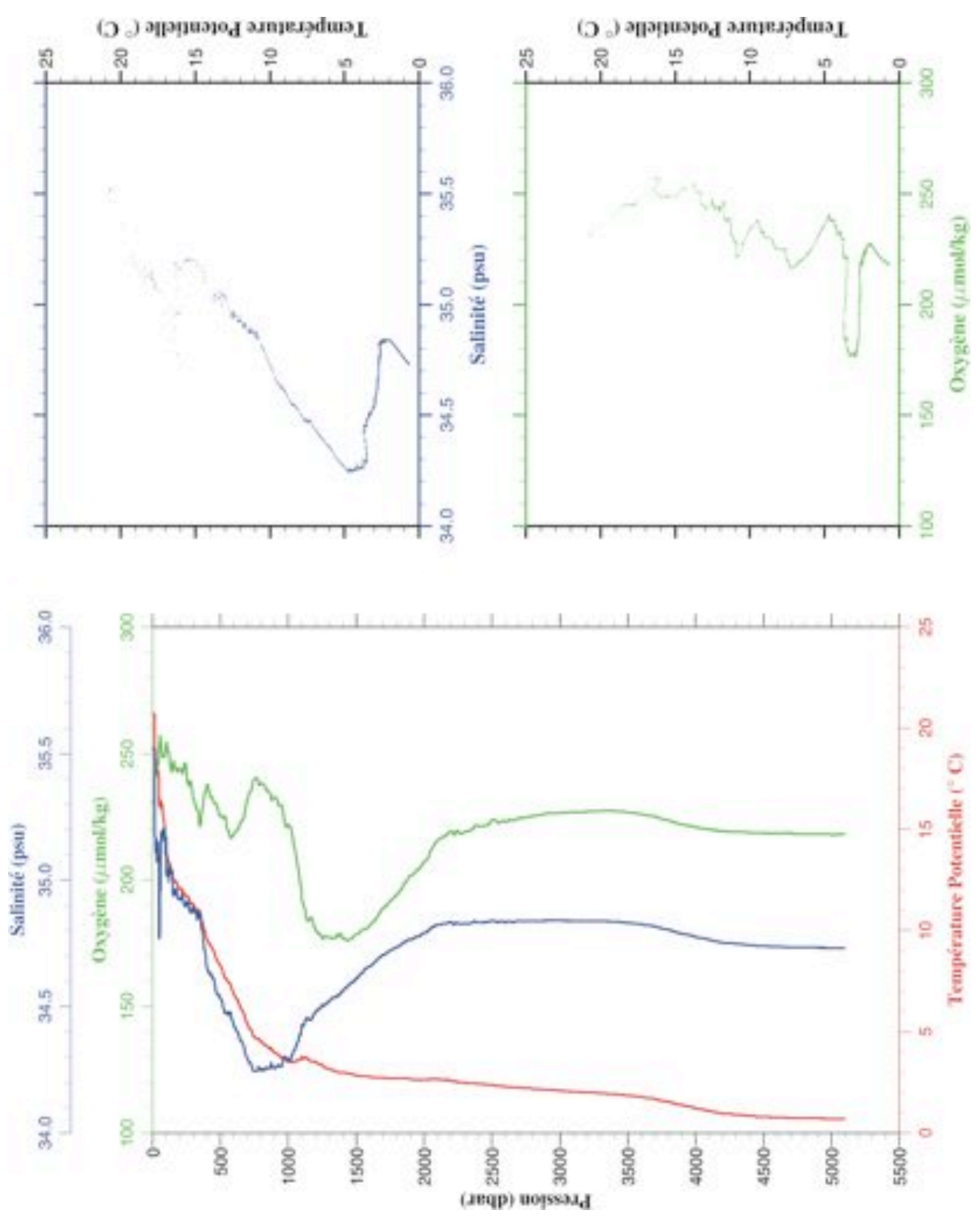
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| Station   : 27           Campagne  : GOODHOPE 2008 |
| Date      : 23-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 5046       Organisme  : IFREMER |
| Position  : S 37 42.95 |
|            E 12 21.13 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	20.708	35.518	231.2	20.708	3050.0	2.304	34.839	226.7	2.063
10.0	20.718	35.519	231.1	20.716	3100.0	2.281	34.839	227.0	2.036
20.0	18.903	35.167	242.0	18.899	3150.0	2.268	34.838	226.9	2.019
30.0	18.020	35.115	245.1	18.015	3200.0	2.259	34.838	227.1	2.004
40.0	17.918	35.146	245.0	17.911	3250.0	2.246	34.838	227.2	1.986
50.0	16.186	34.766	253.8	16.178	3300.0	2.233	34.838	227.2	1.969
100.0	14.423	35.144	252.6	14.408	3350.0	2.211	34.837	227.4	1.942
150.0	12.626	34.950	245.8	12.605	3400.0	2.190	34.835	227.2	1.916
200.0	12.127	34.926	243.6	12.100	3450.0	2.168	34.833	227.1	1.890
250.0	11.783	34.916	241.6	11.751	3500.0	2.136	34.831	226.7	1.853
300.0	11.348	34.892	232.5	11.310	3550.0	2.103	34.828	226.4	1.816
350.0	10.920	34.867	221.3	10.877	3600.0	2.074	34.825	226.0	1.782
400.0	9.610	34.656	237.5	9.564	3650.0	2.019	34.820	225.5	1.723
450.0	9.062	34.609	230.7	9.012	3700.0	1.983	34.817	225.0	1.683
500.0	8.267	34.530	225.2	8.214	3750.0	1.888	34.808	224.1	1.585
550.0	7.604	34.478	220.1	7.549	3800.0	1.844	34.804	223.5	1.536
600.0	6.889	34.422	218.0	6.832	3850.0	1.744	34.794	222.6	1.434
650.0	6.215	34.364	222.9	6.157	3900.0	1.685	34.788	221.9	1.371
700.0	5.425	34.291	231.9	5.366	3950.0	1.626	34.783	221.4	1.308
750.0	4.785	34.244	240.0	4.726	4000.0	1.534	34.774	220.9	1.214
800.0	4.560	34.248	238.5	4.497	4050.0	1.478	34.769	220.3	1.153
850.0	4.309	34.255	235.4	4.244	4100.0	1.422	34.764	220.1	1.094
900.0	4.036	34.255	232.8	3.968	4150.0	1.337	34.756	219.6	1.006
950.0	3.768	34.262	229.6	3.699	4200.0	1.288	34.752	219.4	0.953
1000.0	3.623	34.288	221.9	3.550	4250.0	1.272	34.750	219.1	0.932
1050.0	3.593	34.330	211.8	3.517	4300.0	1.256	34.748	219.1	0.910
1100.0	3.846	34.425	192.6	3.764	4350.0	1.221	34.745	218.9	0.871
1150.0	3.709	34.450	183.8	3.623	4400.0	1.197	34.743	218.8	0.842
1200.0	3.590	34.477	180.4	3.501	4450.0	1.173	34.740	218.6	0.813
1250.0	3.455	34.505	176.9	3.363	4500.0	1.158	34.739	218.5	0.793
1300.0	3.247	34.521	177.3	3.153	4550.0	1.153	34.738	218.5	0.783
1350.0	3.132	34.536	177.4	3.035	4600.0	1.141	34.736	218.5	0.766
1400.0	3.079	34.562	176.9	2.978	4650.0	1.139	34.735	218.5	0.758
1450.0	3.033	34.587	176.4	2.929	4700.0	1.128	34.734	218.5	0.742
1500.0	2.953	34.611	178.5	2.846	4750.0	1.126	34.733	218.0	0.734
1550.0	2.925	34.635	180.3	2.813	4800.0	1.127	34.733	218.0	0.728
1600.0	2.895	34.659	181.9	2.780	4850.0	1.127	34.733	218.0	0.723
1650.0	2.856	34.682	185.0	2.737	4900.0	1.127	34.732	218.1	0.717
1700.0	2.843	34.703	188.9	2.720	4950.0	1.130	34.732	218.0	0.714
1750.0	2.836	34.721	191.6	2.708	5000.0	1.130	34.732	218.0	0.708
1800.0	2.831	34.734	194.3	2.699	5050.0	1.122	34.731	217.9	0.694
1850.0	2.845	34.753	198.5	2.708	5093.0	1.118	34.730	218.0	0.685
1900.0	2.799	34.765	201.7	2.659					
1950.0	2.761	34.775	204.1	2.617					
2000.0	2.769	34.790	207.2	2.620					
2050.0	2.801	34.809	211.6	2.648					
2100.0	2.809	34.823	215.7	2.651					
2150.0	2.777	34.826	217.2	2.615					
2200.0	2.754	34.831	219.3	2.587					
2250.0	2.686	34.828	219.3	2.516					
2300.0	2.655	34.828	219.0	2.481					
2350.0	2.625	34.830	219.8	2.447					
2400.0	2.610	34.833	221.4	2.427					
2450.0	2.582	34.833	221.6	2.395					
2500.0	2.586	34.841	223.8	2.394					
2550.0	2.519	34.834	222.5	2.323					
2600.0	2.481	34.832	222.9	2.281					
2650.0	2.458	34.833	223.5	2.254					
2700.0	2.449	34.837	224.4	2.241					
2750.0	2.428	34.837	224.6	2.215					
2800.0	2.403	34.838	225.2	2.186					
2850.0	2.383	34.839	225.7	2.161					
2900.0	2.361	34.839	226.2	2.134					
2950.0	2.351	34.839	226.3	2.120					
3000.0	2.323	34.840	226.5	2.088					

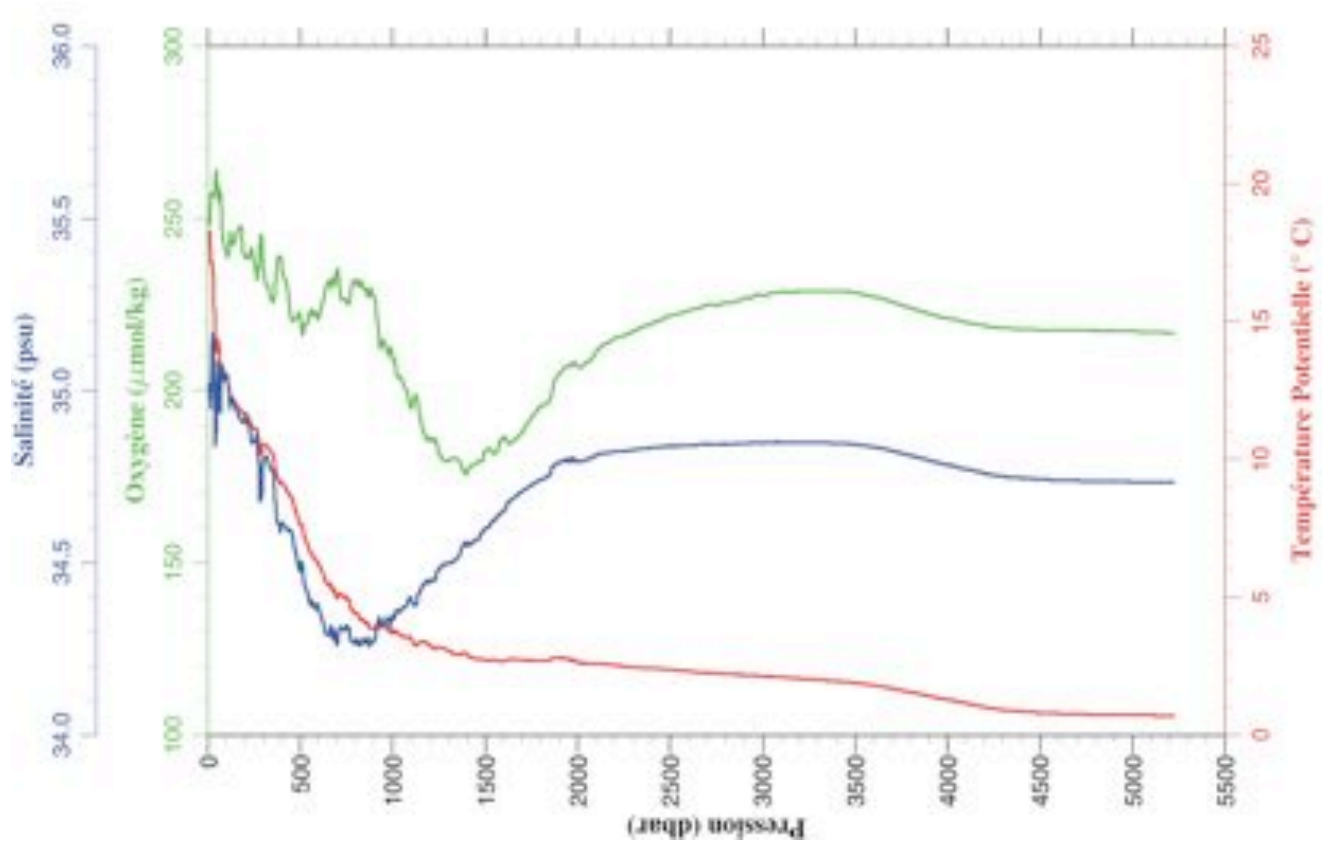
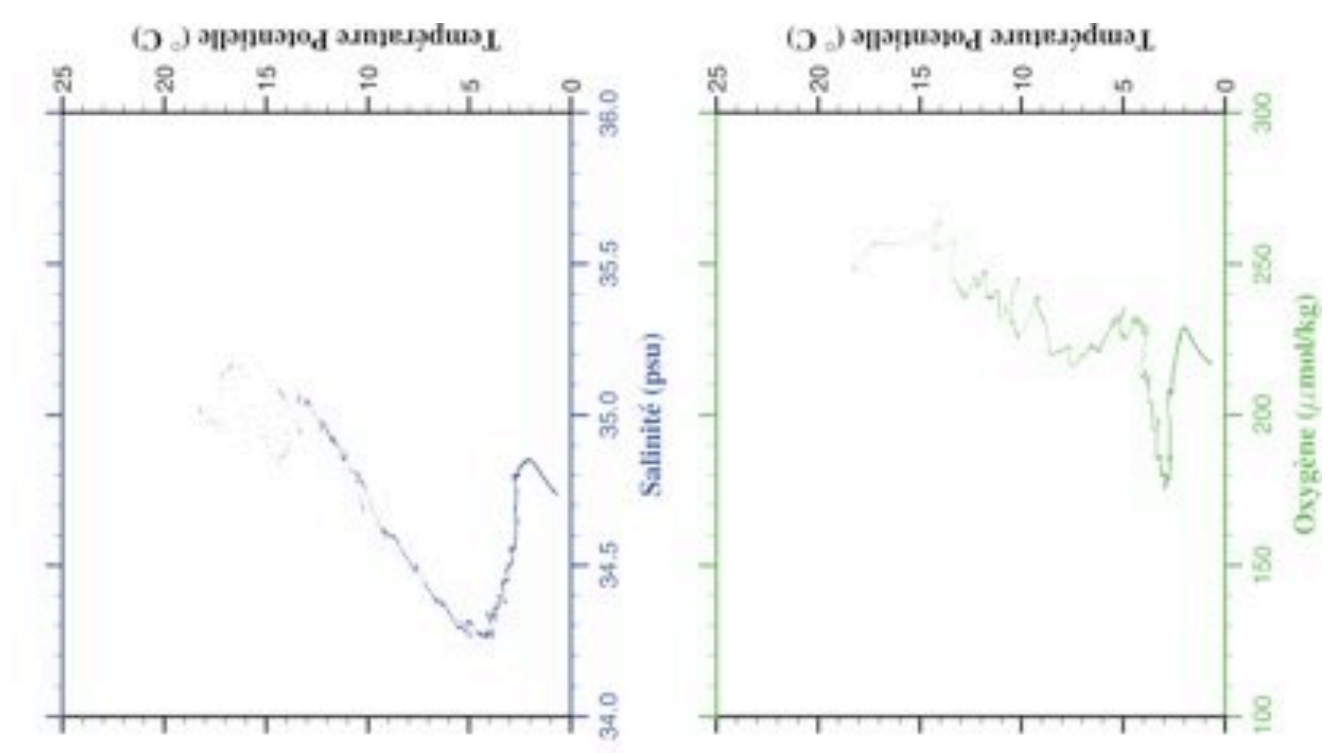




**STATION 27**

Station	: 28	Campagne	: GOODHOPE 2008
Date	: 23-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 5178	Organisme	: IFREMER
Position	: S 38 5.51		
	E 12 5.12		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	18.216	35.012	248.5	18.216	3050.0	2.363	34.850	228.3	2.121
10.0	18.222	35.013	249.2	18.221	3100.0	2.345	34.850	228.6	2.099
20.0	17.197	35.082	257.1	17.194	3150.0	2.321	34.849	228.6	2.070
30.0	16.655	35.161	256.3	16.650	3200.0	2.308	34.849	228.7	2.052
40.0	14.298	34.848	261.7	14.292	3250.0	2.291	34.849	228.8	2.030
50.0	14.169	35.003	261.0	14.162	3300.0	2.268	34.848	228.8	2.003
100.0	12.923	35.042	239.9	12.910	3350.0	2.249	34.848	228.8	1.979
150.0	12.042	34.953	244.1	12.022	3400.0	2.230	34.847	228.8	1.955
200.0	11.692	34.913	238.8	11.666	3450.0	2.211	34.846	228.7	1.931
250.0	11.152	34.853	237.4	11.121	3500.0	2.179	34.844	228.4	1.895
300.0	10.537	34.784	236.1	10.501	3550.0	2.141	34.840	227.9	1.853
350.0	10.245	34.767	225.9	10.204	3600.0	2.099	34.836	227.2	1.806
400.0	9.221	34.619	235.5	9.177	3650.0	2.055	34.831	226.5	1.758
450.0	8.703	34.592	220.9	8.655	3700.0	1.992	34.825	225.7	1.691
500.0	7.699	34.490	221.3	7.649	3750.0	1.924	34.817	224.8	1.620
550.0	6.746	34.387	222.2	6.695	3800.0	1.863	34.811	224.0	1.555
600.0	6.232	34.366	221.0	6.179	3850.0	1.800	34.804	223.1	1.489
650.0	5.505	34.294	231.1	5.450	3900.0	1.738	34.798	222.3	1.422
700.0	5.013	34.265	235.4	4.956	3950.0	1.668	34.791	221.6	1.349
750.0	5.078	34.318	225.3	5.017	4000.0	1.610	34.785	220.9	1.288
800.0	4.487	34.276	231.9	4.425	4050.0	1.553	34.779	220.4	1.226
850.0	4.148	34.270	229.5	4.084	4100.0	1.481	34.772	219.8	1.151
900.0	3.922	34.274	227.1	3.855	4150.0	1.413	34.766	219.3	1.079
950.0	3.988	34.328	214.4	3.917	4200.0	1.345	34.759	218.9	1.009
1000.0	3.869	34.346	208.9	3.795	4250.0	1.299	34.754	218.4	0.958
1050.0	3.663	34.365	203.0	3.586	4300.0	1.253	34.750	218.2	0.908
1100.0	3.599	34.398	194.7	3.519	4350.0	1.230	34.748	218.0	0.880
1150.0	3.469	34.422	191.5	3.386	4400.0	1.208	34.746	217.8	0.853
1200.0	3.332	34.444	186.4	3.246	4450.0	1.193	34.744	217.8	0.833
1250.0	3.247	34.480	181.9	3.158	4500.0	1.178	34.742	217.6	0.813
1300.0	3.171	34.499	179.7	3.078	4550.0	1.167	34.741	217.6	0.796
1350.0	3.019	34.514	180.0	2.923	4600.0	1.161	34.740	217.5	0.785
1400.0	3.039	34.556	175.8	2.939	4650.0	1.151	34.739	217.6	0.770
1450.0	2.874	34.566	178.9	2.771	4700.0	1.151	34.738	217.5	0.763
1500.0	2.824	34.600	182.4	2.719	4750.0	1.143	34.737	217.5	0.750
1550.0	2.829	34.624	181.7	2.719	4800.0	1.145	34.737	217.4	0.746
1600.0	2.785	34.649	186.4	2.671	4850.0	1.146	34.736	217.4	0.741
1650.0	2.874	34.687	185.2	2.755	4900.0	1.145	34.736	217.4	0.734
1700.0	2.851	34.708	188.1	2.728	4950.0	1.144	34.735	217.3	0.728
1750.0	2.843	34.726	192.2	2.716	5000.0	1.144	34.735	217.2	0.722
1800.0	2.835	34.741	195.4	2.703	5050.0	1.147	34.735	217.0	0.718
1850.0	2.854	34.758	197.4	2.717	5100.0	1.150	34.735	217.0	0.716
1900.0	2.929	34.789	204.9	2.787	5150.0	1.153	34.735	217.0	0.712
1950.0	2.915	34.802	207.1	2.768	5200.0	1.158	34.735	216.8	0.711
2000.0	2.796	34.794	206.9	2.647	5221.0	1.161	34.735	216.8	0.711
2050.0	2.750	34.800	208.3	2.597					
2100.0	2.749	34.812	211.3	2.591					
2150.0	2.734	34.819	213.5	2.572					
2200.0	2.701	34.823	215.1	2.535					
2250.0	2.663	34.825	215.9	2.494					
2300.0	2.635	34.828	217.1	2.461					
2350.0	2.613	34.831	218.4	2.435					
2400.0	2.601	34.834	219.5	2.419					
2450.0	2.589	34.836	220.4	2.402					
2500.0	2.567	34.839	221.8	2.376					
2550.0	2.531	34.839	222.2	2.335					
2600.0	2.507	34.841	223.2	2.307					
2650.0	2.491	34.842	223.8	2.287					
2700.0	2.470	34.843	224.9	2.261					
2750.0	2.445	34.843	224.7	2.231					
2800.0	2.433	34.845	225.5	2.215					
2850.0	2.419	34.846	225.9	2.196					
2900.0	2.405	34.847	226.8	2.178					
2950.0	2.394	34.849	227.3	2.162					
3000.0	2.371	34.848	227.4	2.134					



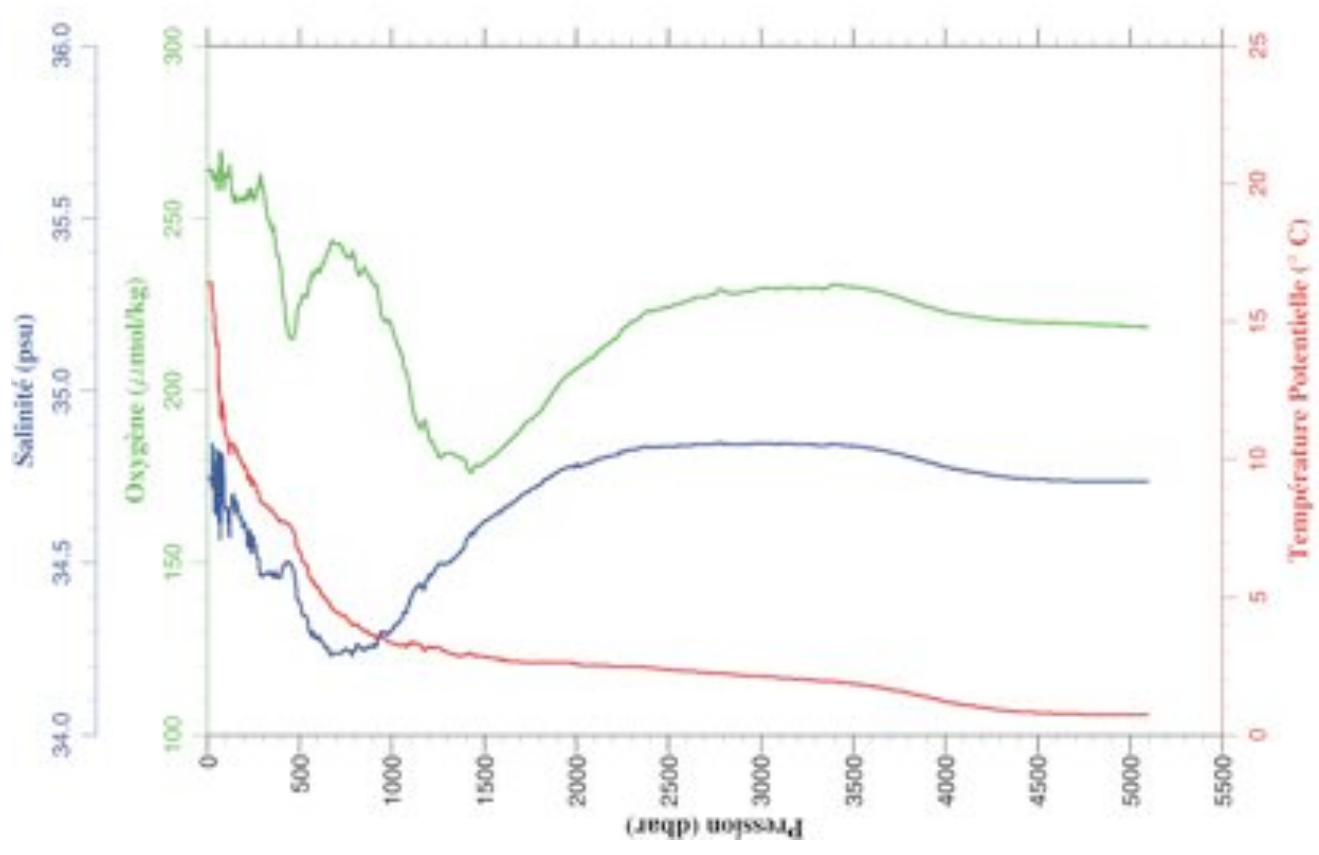
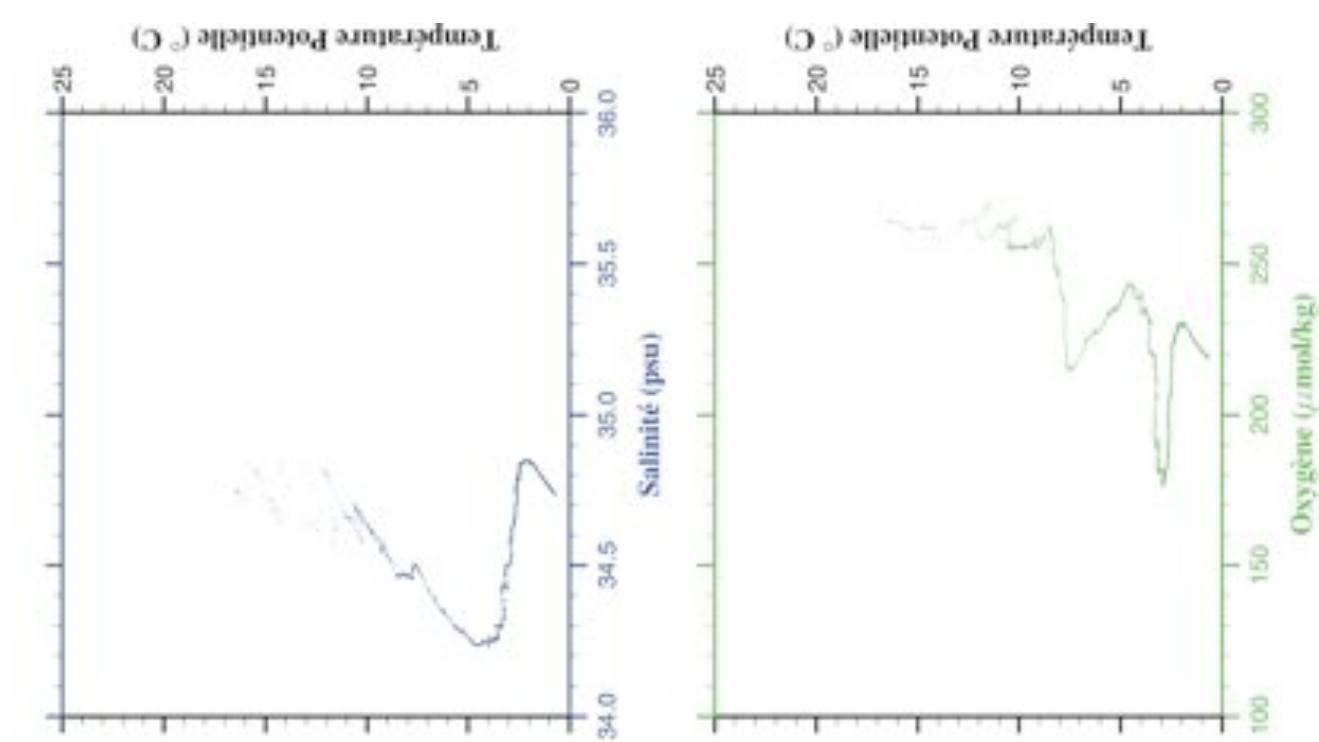
**STATION 28**

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| Station   : 29           Campagne  : GOODHOPE 2008 |
| Date     : 23-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 5044      Organisme  : IFREMER |
| Position  : S 38 27.54 |
|           : E 11 49.80 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	16.419	34.747	263.9	16.419	3050.0	2.346	34.845	229.7	2.105
10.0	16.420	34.745	264.1	16.418	3100.0	2.328	34.845	229.5	2.082
20.0	16.410	34.746	263.8	16.407	3150.0	2.309	34.845	229.8	2.058
30.0	15.600	34.823	261.8	15.595	3200.0	2.283	34.843	229.5	2.028
40.0	14.692	34.674	262.6	14.686	3250.0	2.269	34.843	229.7	2.009
50.0	14.169	34.643	261.9	14.162	3300.0	2.229	34.841	229.8	1.965
100.0	10.961	34.653	262.8	10.949	3350.0	2.220	34.842	229.6	1.951
150.0	10.298	34.650	256.5	10.281	3400.0	2.220	34.844	230.7	1.945
200.0	9.750	34.604	256.0	9.727	3450.0	2.181	34.841	230.3	1.902
250.0	9.251	34.573	255.1	9.223	3500.0	2.145	34.839	230.1	1.862
300.0	8.455	34.464	258.9	8.424	3550.0	2.114	34.836	229.7	1.826
350.0	8.186	34.472	246.5	8.150	3600.0	2.069	34.832	229.2	1.777
400.0	7.798	34.474	233.3	7.758	3650.0	2.014	34.827	228.6	1.718
450.0	7.633	34.498	215.1	7.588	3700.0	1.960	34.822	227.9	1.660
500.0	6.699	34.385	224.9	6.653	3750.0	1.910	34.816	227.1	1.606
550.0	5.867	34.309	230.1	5.819	3800.0	1.827	34.807	226.0	1.520
600.0	5.400	34.286	234.6	5.350	3850.0	1.767	34.801	225.2	1.456
650.0	4.935	34.252	239.9	4.883	3900.0	1.691	34.793	224.4	1.377
700.0	4.502	34.236	242.6	4.449	3950.0	1.623	34.786	223.6	1.305
750.0	4.339	34.248	239.2	4.282	4000.0	1.523	34.777	222.8	1.203
800.0	4.042	34.246	238.0	3.983	4050.0	1.480	34.772	222.3	1.155
850.0	3.825	34.244	235.7	3.764	4100.0	1.424	34.767	221.9	1.096
900.0	3.685	34.261	231.2	3.620	4150.0	1.396	34.764	221.5	1.063
950.0	3.656	34.299	220.7	3.588	4200.0	1.355	34.760	221.1	1.018
1000.0	3.409	34.307	218.4	3.339	4250.0	1.290	34.754	220.8	0.949
1050.0	3.298	34.334	210.9	3.224	4300.0	1.258	34.751	220.5	0.913
1100.0	3.435	34.401	199.1	3.356	4350.0	1.223	34.748	220.3	0.873
1150.0	3.381	34.439	189.3	3.298	4400.0	1.197	34.745	220.0	0.842
1200.0	3.297	34.464	186.3	3.211	4450.0	1.188	34.744	219.9	0.828
1250.0	3.288	34.495	181.2	3.198	4500.0	1.179	34.742	219.8	0.814
1300.0	3.092	34.500	181.8	3.000	4550.0	1.165	34.741	219.7	0.795
1350.0	2.998	34.521	180.9	2.902	4600.0	1.156	34.740	219.7	0.780
1400.0	3.039	34.563	179.0	2.940	4650.0	1.151	34.739	219.6	0.769
1450.0	2.966	34.589	178.2	2.863	4700.0	1.144	34.738	219.4	0.757
1500.0	2.953	34.620	178.9	2.845	4750.0	1.140	34.737	219.3	0.747
1550.0	2.908	34.635	181.0	2.797	4800.0	1.137	34.736	219.2	0.738
1600.0	2.834	34.654	183.5	2.719	4850.0	1.136	34.736	219.1	0.732
1650.0	2.796	34.672	186.0	2.678	4900.0	1.138	34.735	219.0	0.728
1700.0	2.785	34.696	188.8	2.663	4950.0	1.143	34.735	218.8	0.726
1750.0	2.759	34.711	191.4	2.633	5000.0	1.148	34.735	218.7	0.725
1800.0	2.762	34.727	193.9	2.631	5050.0	1.152	34.735	218.6	0.724
1850.0	2.777	34.747	197.5	2.642	5096.0	1.156	34.735	218.5	0.721
1900.0	2.783	34.765	201.3	2.643					
1950.0	2.769	34.776	204.3	2.625					
2000.0	2.740	34.783	206.3	2.591					
2050.0	2.684	34.786	208.3	2.532					
2100.0	2.689	34.796	210.0	2.532					
2150.0	2.677	34.806	212.7	2.516					
2200.0	2.658	34.812	214.7	2.493					
2250.0	2.651	34.821	217.9	2.482					
2300.0	2.668	34.830	220.1	2.493					
2350.0	2.653	34.834	221.7	2.474					
2400.0	2.619	34.835	223.0	2.436					
2450.0	2.592	34.837	223.6	2.405					
2500.0	2.565	34.838	224.2	2.373					
2550.0	2.541	34.839	225.1	2.345					
2600.0	2.523	34.841	226.0	2.323					
2650.0	2.506	34.843	227.0	2.301					
2700.0	2.477	34.843	227.2	2.268					
2750.0	2.468	34.845	228.0	2.254					
2800.0	2.447	34.845	228.7	2.229					
2850.0	2.423	34.844	228.1	2.200					
2900.0	2.393	34.844	228.6	2.166					
2950.0	2.372	34.845	228.9	2.140					
3000.0	2.363	34.846	229.6	2.127					



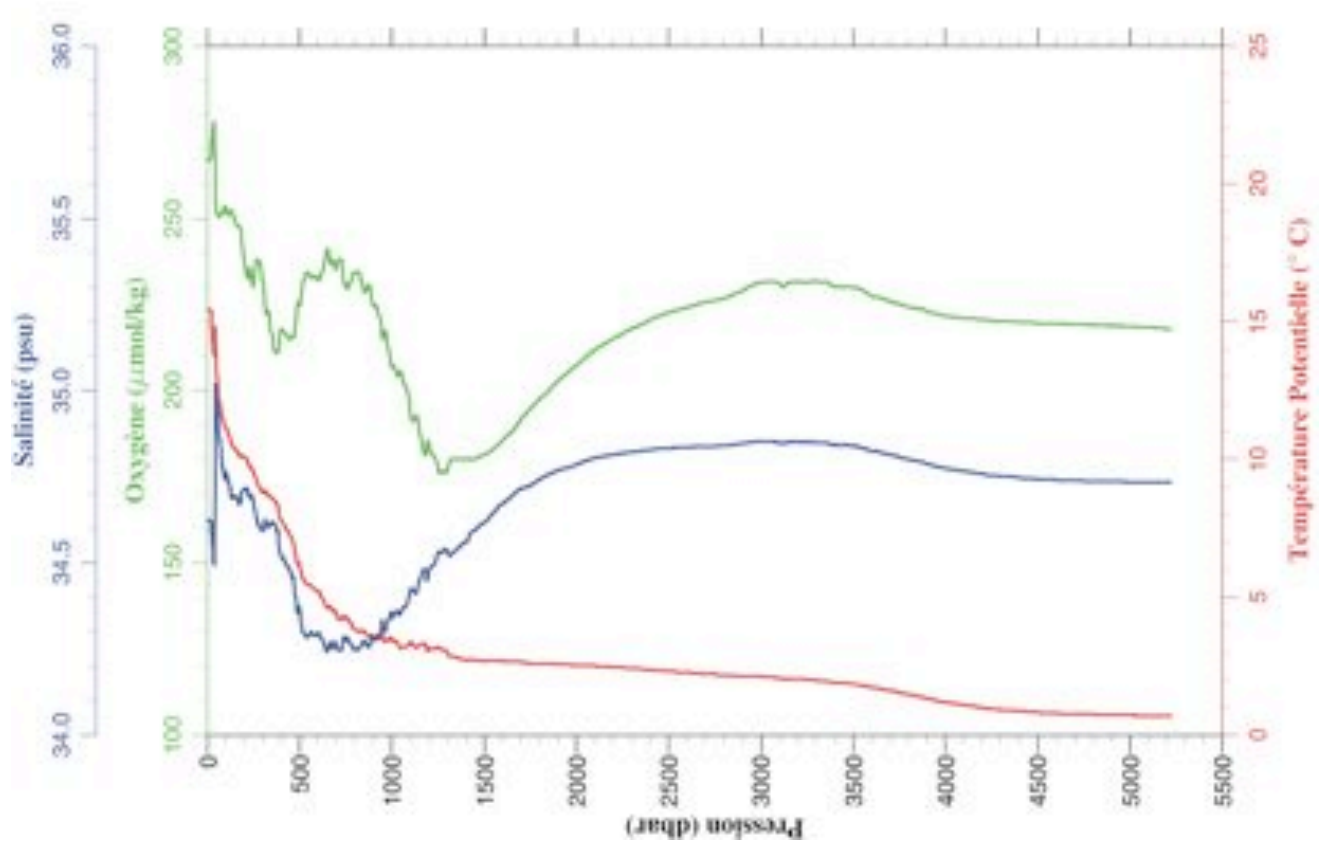
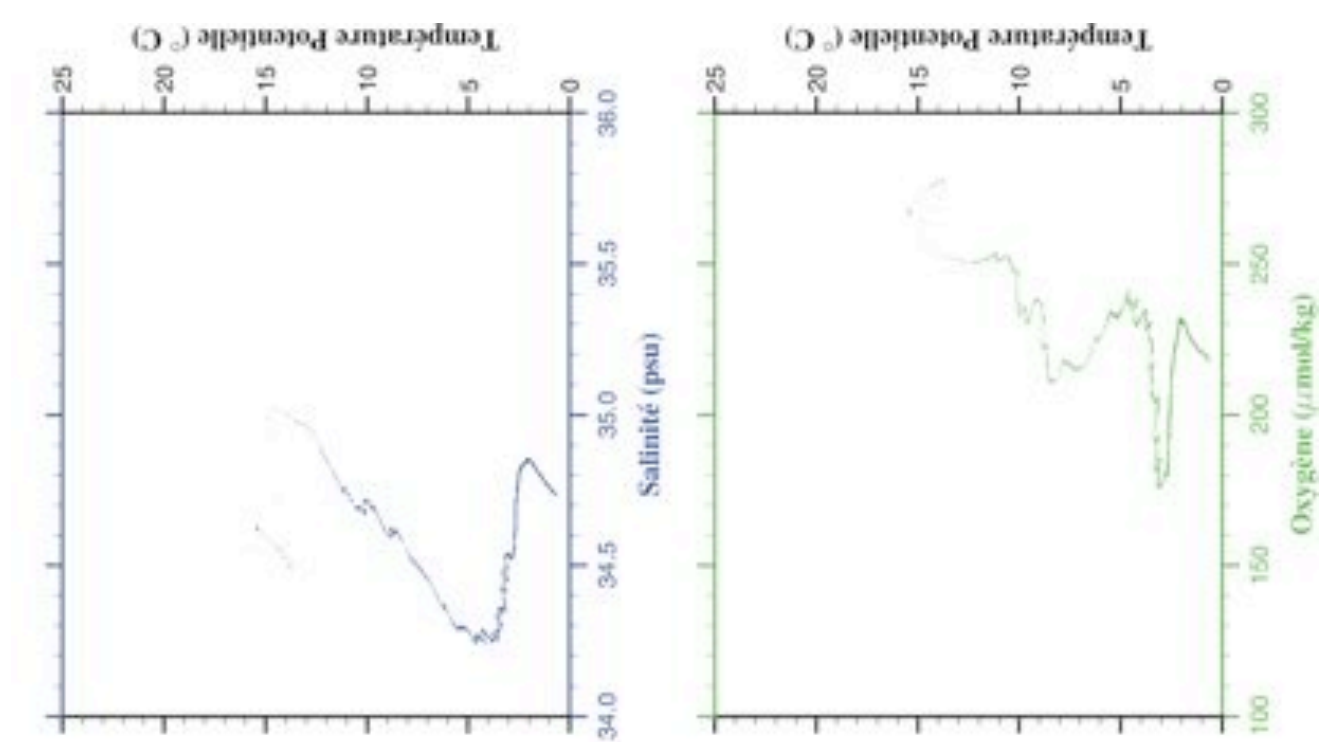
**STATION 29**

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| Station   : 30           Campagne  : GOODHOPE 2008 |
| Date      : 24-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 5175       Organisme : IFREMER |
| Position  : S 38 49.59 |
|           : E 11 34.51 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	15.426	34.623	267.1	15.426	3050.0	2.346	34.852	231.6	2.105
10.0	15.429	34.624	266.8	15.428	3100.0	2.304	34.847	231.1	2.059
20.0	15.409	34.619	267.7	15.406	3150.0	2.297	34.850	231.3	2.047
30.0	14.210	34.542	276.0	14.205	3200.0	2.291	34.851	231.7	2.036
40.0	13.929	34.572	271.9	13.923	3250.0	2.267	34.849	231.4	2.007
50.0	13.159	34.968	251.9	13.152	3300.0	2.252	34.849	231.7	1.987
100.0	11.153	34.753	252.7	11.141	3350.0	2.227	34.848	231.5	1.958
150.0	10.388	34.691	249.0	10.371	3400.0	2.180	34.842	230.0	1.906
200.0	10.111	34.713	237.6	10.088	3450.0	2.166	34.842	229.8	1.887
250.0	9.570	34.676	231.0	9.541	3500.0	2.136	34.840	229.8	1.853
300.0	8.840	34.595	232.1	8.808	3550.0	2.085	34.833	229.0	1.798
350.0	8.645	34.611	216.2	8.608	3600.0	2.024	34.824	227.4	1.733
400.0	7.831	34.517	217.9	7.791	3650.0	1.969	34.819	226.8	1.675
450.0	7.275	34.474	215.1	7.232	3700.0	1.912	34.814	225.9	1.613
500.0	6.202	34.365	224.6	6.158	3750.0	1.846	34.807	225.1	1.544
550.0	5.501	34.289	233.9	5.455	3800.0	1.777	34.800	224.3	1.471
600.0	5.283	34.298	232.0	5.234	3850.0	1.721	34.796	223.8	1.411
650.0	4.657	34.241	241.0	4.607	3900.0	1.642	34.786	223.0	1.329
700.0	4.356	34.249	236.1	4.303	3950.0	1.558	34.779	222.3	1.243
750.0	4.276	34.272	230.9	4.219	4000.0	1.514	34.774	221.7	1.194
800.0	3.898	34.252	234.2	3.840	4050.0	1.465	34.770	221.3	1.141
850.0	3.824	34.270	228.6	3.762	4100.0	1.426	34.766	221.0	1.098
900.0	3.633	34.282	224.7	3.568	4150.0	1.385	34.762	220.9	1.052
950.0	3.685	34.329	214.6	3.616	4200.0	1.337	34.758	220.6	1.001
1000.0	3.533	34.349	206.7	3.461	4250.0	1.282	34.753	220.3	0.941
1050.0	3.254	34.360	205.2	3.181	4300.0	1.261	34.751	220.2	0.916
1100.0	3.442	34.422	193.4	3.363	4350.0	1.251	34.750	220.1	0.900
1150.0	3.335	34.449	188.0	3.253	4400.0	1.230	34.747	219.9	0.874
1200.0	3.227	34.477	184.7	3.142	4450.0	1.202	34.744	219.7	0.841
1250.0	3.275	34.528	177.1	3.185	4500.0	1.188	34.743	219.6	0.822
1300.0	3.092	34.534	176.7	2.999	4550.0	1.179	34.742	219.5	0.808
1350.0	2.916	34.538	180.1	2.821	4600.0	1.165	34.740	219.5	0.789
1400.0	2.811	34.560	180.1	2.713	4650.0	1.159	34.740	219.4	0.777
1450.0	2.838	34.595	180.0	2.736	4700.0	1.153	34.738	219.3	0.766
1500.0	2.788	34.616	181.4	2.683	4750.0	1.148	34.738	219.2	0.755
1550.0	2.799	34.644	183.0	2.690	4800.0	1.150	34.737	219.1	0.751
1600.0	2.781	34.671	185.6	2.667	4850.0	1.149	34.737	219.0	0.744
1650.0	2.799	34.694	188.0	2.681	4900.0	1.150	34.736	218.8	0.739
1700.0	2.779	34.717	191.7	2.656	4950.0	1.147	34.736	218.8	0.731
1750.0	2.734	34.725	194.8	2.608	5000.0	1.143	34.735	218.6	0.720
1800.0	2.735	34.744	197.5	2.605	5050.0	1.142	34.734	218.4	0.714
1850.0	2.728	34.756	200.0	2.594	5100.0	1.143	34.734	218.3	0.709
1900.0	2.711	34.767	202.7	2.573	5150.0	1.146	34.734	218.1	0.705
1950.0	2.695	34.775	205.1	2.552	5200.0	1.152	34.734	217.9	0.705
2000.0	2.687	34.784	207.3	2.539	5221.0	1.154	34.734	217.7	0.705
2050.0	2.676	34.796	209.7	2.525					
2100.0	2.666	34.804	211.7	2.510					
2150.0	2.650	34.810	213.6	2.489					
2200.0	2.632	34.814	215.1	2.467					
2250.0	2.613	34.818	216.5	2.444					
2300.0	2.591	34.822	218.0	2.418					
2350.0	2.576	34.825	219.1	2.399					
2400.0	2.550	34.828	220.5	2.369					
2450.0	2.530	34.831	221.7	2.344					
2500.0	2.510	34.833	222.7	2.320					
2550.0	2.489	34.834	223.4	2.294					
2600.0	2.472	34.836	224.1	2.273					
2650.0	2.448	34.837	224.9	2.244					
2700.0	2.426	34.838	225.6	2.218					
2750.0	2.412	34.839	226.1	2.200					
2800.0	2.393	34.840	226.8	2.176					
2850.0	2.390	34.845	228.0	2.168					
2900.0	2.373	34.847	229.0	2.146					
2950.0	2.372	34.850	230.5	2.140					
3000.0	2.359	34.852	231.4	2.123					

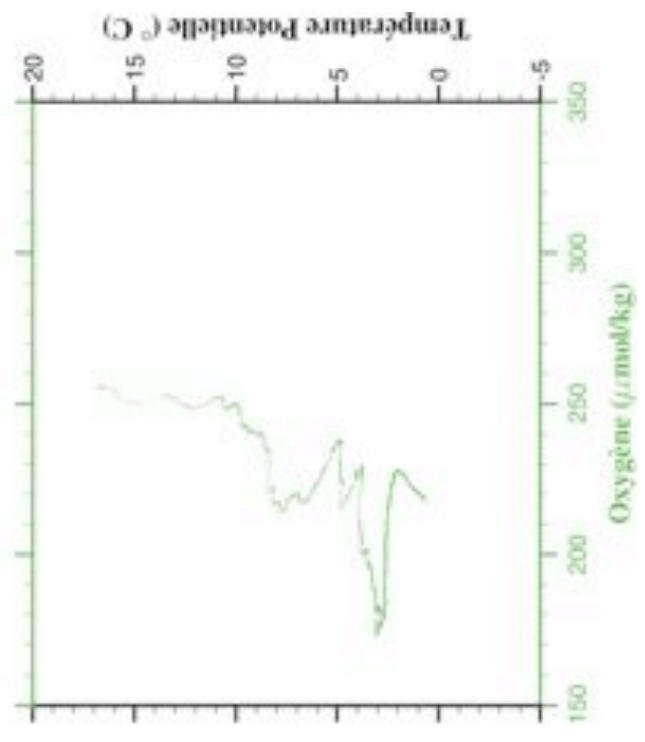
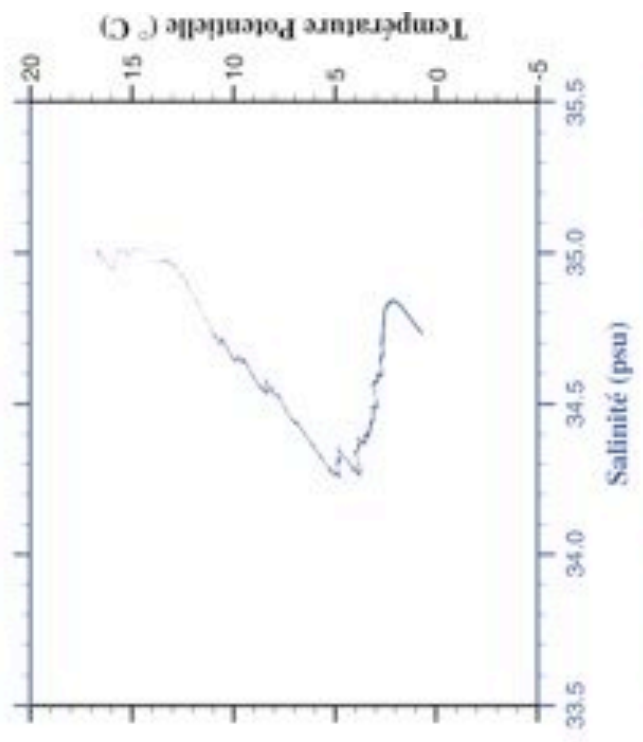
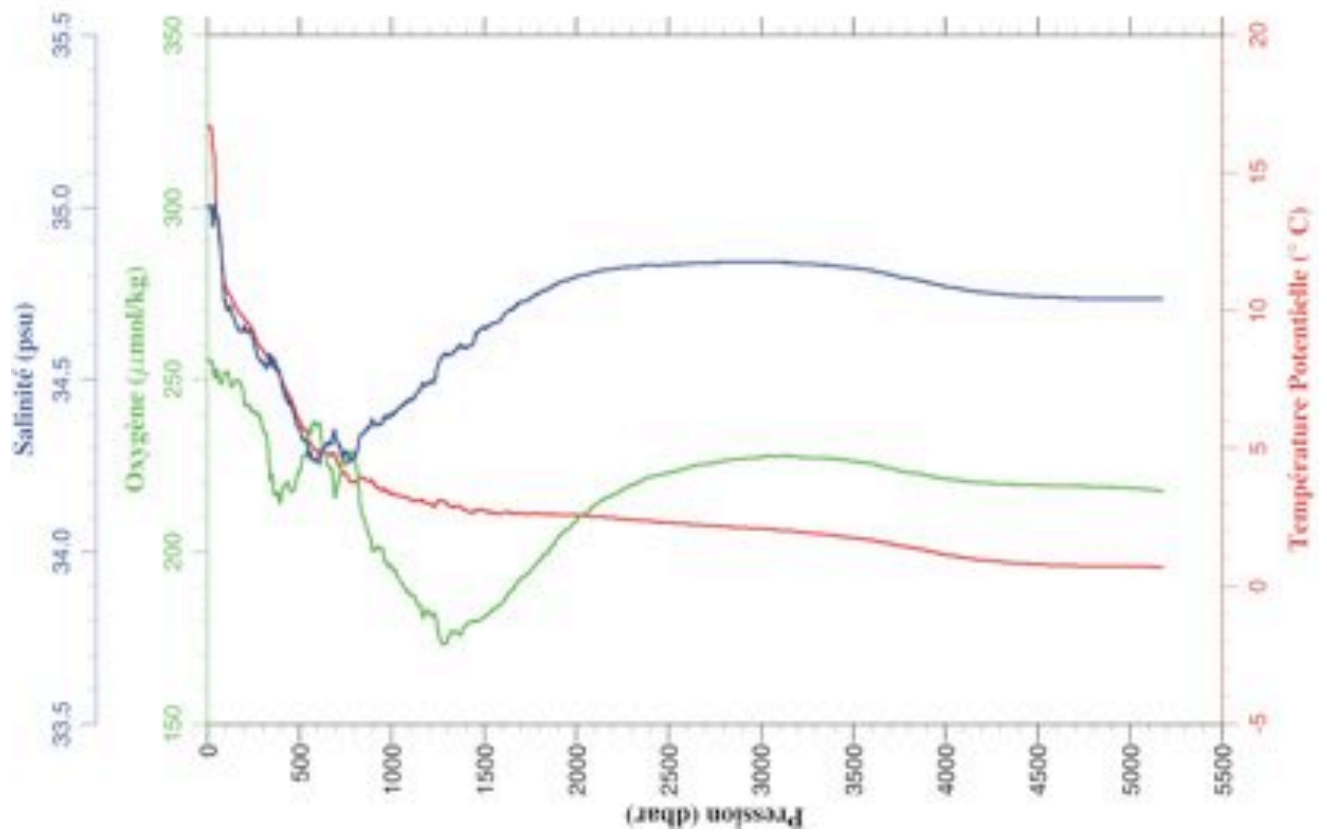


**STATION 30**

Station	: 31	Campagne	: GOODHOPE 2008
Date	: 24-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 5160	Organisme	: IFREMER
Position	: S 39 11.49		
	E 11 19.15		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	16.696	35.005	255.9	16.696	3050.0	2.301	34.841	227.9	2.060
10.0	16.698	35.005	255.7	16.696	3100.0	2.282	34.841	227.9	2.037
20.0	16.627	34.997	255.5	16.624	3150.0	2.266	34.840	227.7	2.016
30.0	15.909	34.946	254.0	15.904	3200.0	2.230	34.837	227.5	1.976
40.0	15.147	34.999	250.4	15.141	3250.0	2.202	34.835	227.3	1.943
50.0	13.411	34.975	252.9	13.404	3300.0	2.177	34.834	227.3	1.914
100.0	10.859	34.720	251.7	10.846	3350.0	2.142	34.831	227.0	1.875
150.0	10.213	34.669	249.5	10.196	3400.0	2.115	34.830	227.0	1.843
200.0	9.761	34.655	243.4	9.738	3450.0	2.072	34.827	226.7	1.796
250.0	9.224	34.604	240.8	9.197	3500.0	2.038	34.823	226.3	1.758
300.0	8.629	34.553	236.0	8.597	3550.0	2.007	34.820	225.9	1.722
350.0	8.179	34.539	222.6	8.143	3600.0	1.967	34.817	225.7	1.677
400.0	7.586	34.495	216.1	7.546	3650.0	1.904	34.811	224.9	1.611
450.0	6.884	34.433	217.4	6.842	3700.0	1.846	34.805	224.3	1.549
500.0	6.046	34.354	223.6	6.002	3750.0	1.761	34.798	223.5	1.461
550.0	5.268	34.275	234.4	5.223	3800.0	1.718	34.793	223.0	1.414
600.0	4.860	34.259	237.1	4.812	3850.0	1.672	34.789	222.7	1.364
650.0	4.898	34.316	225.3	4.846	3900.0	1.601	34.782	222.2	1.289
700.0	4.645	34.326	218.2	4.590	3950.0	1.529	34.776	221.7	1.214
750.0	4.160	34.292	225.2	4.104	4000.0	1.462	34.770	221.2	1.144
800.0	3.826	34.279	226.6	3.768	4050.0	1.419	34.766	220.8	1.097
850.0	3.952	34.346	209.3	3.889	4100.0	1.360	34.760	220.5	1.034
900.0	3.815	34.378	200.2	3.749	4150.0	1.320	34.757	220.2	0.989
950.0	3.567	34.377	200.5	3.499	4200.0	1.285	34.753	220.0	0.950
1000.0	3.464	34.403	195.2	3.392	4250.0	1.254	34.750	219.9	0.914
1050.0	3.341	34.421	191.2	3.266	4300.0	1.233	34.748	219.7	0.888
1100.0	3.234	34.442	187.4	3.157	4350.0	1.207	34.746	219.6	0.857
1150.0	3.187	34.468	184.5	3.106	4400.0	1.185	34.743	219.5	0.831
1200.0	3.087	34.492	182.4	3.002	4450.0	1.177	34.742	219.4	0.818
1250.0	3.161	34.541	177.0	3.072	4500.0	1.159	34.740	219.3	0.794
1300.0	3.069	34.569	174.2	2.977	4550.0	1.143	34.739	219.1	0.773
1350.0	2.990	34.588	176.5	2.894	4600.0	1.149	34.739	219.3	0.774
1400.0	2.835	34.591	178.6	2.738	4650.0	1.137	34.737	219.1	0.756
1450.0	2.843	34.623	179.9	2.741	4700.0	1.131	34.736	219.1	0.745
1500.0	2.878	34.652	181.0	2.772	4750.0	1.130	34.736	219.0	0.737
1550.0	2.782	34.665	183.5	2.673	4800.0	1.125	34.735	218.9	0.727
1600.0	2.771	34.683	185.2	2.657	4850.0	1.126	34.734	218.8	0.722
1650.0	2.759	34.701	188.8	2.641	4900.0	1.126	34.734	218.7	0.716
1700.0	2.782	34.725	192.3	2.660	4950.0	1.129	34.734	218.6	0.713
1750.0	2.745	34.736	194.4	2.619	5000.0	1.134	34.734	218.5	0.711
1800.0	2.746	34.750	197.3	2.615	5050.0	1.137	34.734	218.3	0.709
1850.0	2.741	34.763	200.2	2.606	5100.0	1.143	34.734	218.1	0.709
1900.0	2.744	34.779	204.0	2.605	5150.0	1.141	34.734	217.9	0.701
1950.0	2.730	34.788	206.6	2.586	5172.0	1.138	34.733	217.4	0.695
2000.0	2.717	34.797	208.9	2.569					
2050.0	2.701	34.804	211.2	2.549					
2100.0	2.678	34.812	213.5	2.522					
2150.0	2.665	34.817	215.3	2.504					
2200.0	2.647	34.820	216.5	2.482					
2250.0	2.611	34.824	218.0	2.442					
2300.0	2.587	34.827	219.5	2.414					
2350.0	2.556	34.829	220.5	2.378					
2400.0	2.544	34.833	221.8	2.363					
2450.0	2.511	34.831	222.3	2.325					
2500.0	2.500	34.833	222.9	2.310					
2550.0	2.476	34.834	223.5	2.281					
2600.0	2.456	34.837	224.3	2.257					
2650.0	2.439	34.839	225.2	2.236					
2700.0	2.423	34.839	225.4	2.215					
2750.0	2.404	34.840	225.9	2.191					
2800.0	2.386	34.841	226.5	2.169					
2850.0	2.366	34.840	226.8	2.145					
2900.0	2.348	34.841	227.0	2.122					
2950.0	2.337	34.841	227.3	2.106					
3000.0	2.327	34.842	227.5	2.091					





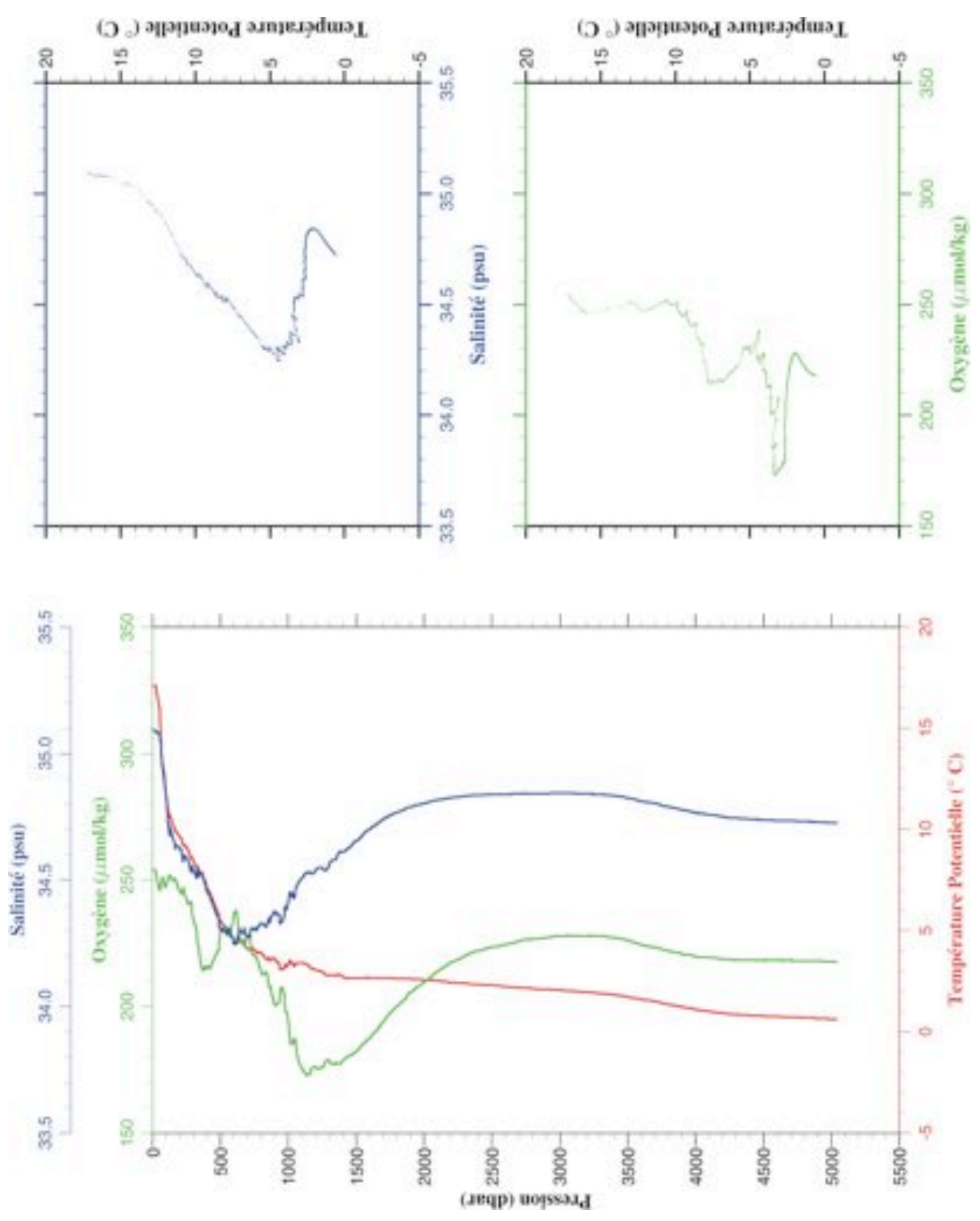
**STATION 31**

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| Station   : 32           Campagne  : GOODHOPE 2008 |
| Date      : 24-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4990       Organisme  : IFREMER |
| Position  : S 39 33.54 |
|           : E 11 3.74  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	17.125	35.092	253.9	17.125	3050.0	2.277	34.844	228.0	2.037
10.0	17.122	35.093	253.9	17.120	3100.0	2.255	34.843	228.0	2.011
20.0	17.119	35.092	253.7	17.115	3150.0	2.229	34.842	228.0	1.980
30.0	16.793	35.081	251.2	16.788	3200.0	2.202	34.841	228.0	1.949
40.0	16.365	35.081	248.1	16.359	3250.0	2.186	34.840	227.9	1.928
50.0	16.010	35.082	246.3	16.002	3300.0	2.159	34.838	227.9	1.897
100.0	11.655	34.820	248.1	11.642	3350.0	2.124	34.835	227.5	1.857
150.0	10.262	34.667	249.9	10.245	3400.0	2.097	34.833	227.2	1.826
200.0	9.669	34.624	245.5	9.646	3450.0	2.067	34.830	226.7	1.791
250.0	9.118	34.586	242.6	9.090	3500.0	2.006	34.824	226.1	1.726
300.0	8.455	34.533	234.5	8.423	3550.0	1.948	34.818	225.3	1.664
350.0	7.942	34.527	219.0	7.906	3600.0	1.880	34.811	224.4	1.593
400.0	7.146	34.453	215.7	7.108	3650.0	1.851	34.808	223.8	1.559
450.0	6.394	34.391	218.6	6.353	3700.0	1.802	34.803	223.3	1.506
500.0	5.486	34.302	229.2	5.445	3750.0	1.713	34.795	222.6	1.414
550.0	5.046	34.283	231.6	5.002	3800.0	1.653	34.789	222.0	1.350
600.0	4.500	34.246	236.9	4.455	3850.0	1.602	34.784	221.4	1.296
650.0	4.518	34.296	225.4	4.469	3900.0	1.537	34.776	220.8	1.228
700.0	4.142	34.275	227.9	4.090	3950.0	1.497	34.774	220.5	1.183
750.0	4.054	34.303	220.0	3.999	4000.0	1.434	34.768	219.7	1.117
800.0	3.935	34.327	213.6	3.876	4050.0	1.376	34.762	219.4	1.054
850.0	3.683	34.337	211.1	3.622	4100.0	1.328	34.758	219.4	1.002
900.0	3.660	34.370	200.6	3.595	4150.0	1.295	34.755	219.1	0.966
950.0	3.140	34.332	207.6	3.076	4200.0	1.248	34.749	218.9	0.914
1000.0	3.444	34.417	193.8	3.372	4250.0	1.219	34.746	218.5	0.881
1050.0	3.336	34.438	187.2	3.262	4300.0	1.207	34.745	218.4	0.864
1100.0	3.488	34.508	175.7	3.408	4350.0	1.184	34.743	218.3	0.835
1150.0	3.359	34.529	173.3	3.277	4400.0	1.163	34.741	218.3	0.810
1200.0	3.169	34.535	175.9	3.084	4450.0	1.147	34.739	218.2	0.788
1250.0	3.076	34.547	175.7	2.988	4500.0	1.137	34.738	218.2	0.773
1300.0	2.883	34.559	178.6	2.793	4550.0	1.128	34.736	218.2	0.758
1350.0	2.861	34.581	177.8	2.767	4600.0	1.122	34.736	218.2	0.747
1400.0	2.803	34.610	178.5	2.706	4650.0	1.119	34.735	218.2	0.738
1450.0	2.754	34.628	180.5	2.653	4700.0	1.111	34.734	218.2	0.725
1500.0	2.773	34.657	182.3	2.667	4750.0	1.103	34.733	218.1	0.711
1550.0	2.770	34.680	185.2	2.660	4800.0	1.092	34.731	218.1	0.695
1600.0	2.779	34.701	187.5	2.665	4850.0	1.081	34.730	218.0	0.678
1650.0	2.770	34.720	190.4	2.652	4900.0	1.073	34.729	217.9	0.665
1700.0	2.788	34.740	194.0	2.665	4950.0	1.063	34.728	217.9	0.649
1750.0	2.778	34.755	197.3	2.651	5000.0	1.044	34.726	217.8	0.625
1800.0	2.767	34.766	200.0	2.636	5039.0	1.043	34.725	217.5	0.620
1850.0	2.757	34.778	202.4	2.622					
1900.0	2.747	34.789	205.7	2.608					
1950.0	2.737	34.795	207.7	2.594					
2000.0	2.717	34.803	209.5	2.569					
2050.0	2.697	34.810	211.7	2.545					
2100.0	2.666	34.816	213.9	2.510					
2150.0	2.642	34.821	215.6	2.481					
2200.0	2.608	34.825	217.4	2.444					
2250.0	2.584	34.828	218.4	2.415					
2300.0	2.563	34.832	220.0	2.391					
2350.0	2.535	34.834	221.2	2.358					
2400.0	2.514	34.835	221.9	2.333					
2450.0	2.502	34.837	222.8	2.317					
2500.0	2.484	34.838	223.5	2.294					
2550.0	2.463	34.839	223.9	2.269					
2600.0	2.431	34.839	224.6	2.232					
2650.0	2.410	34.840	225.1	2.207					
2700.0	2.387	34.841	225.8	2.180					
2750.0	2.375	34.842	226.5	2.163					
2800.0	2.352	34.842	226.7	2.135					
2850.0	2.327	34.841	226.8	2.106					
2900.0	2.321	34.842	227.2	2.095					
2950.0	2.304	34.844	227.6	2.074					
3000.0	2.291	34.844	227.8	2.056					



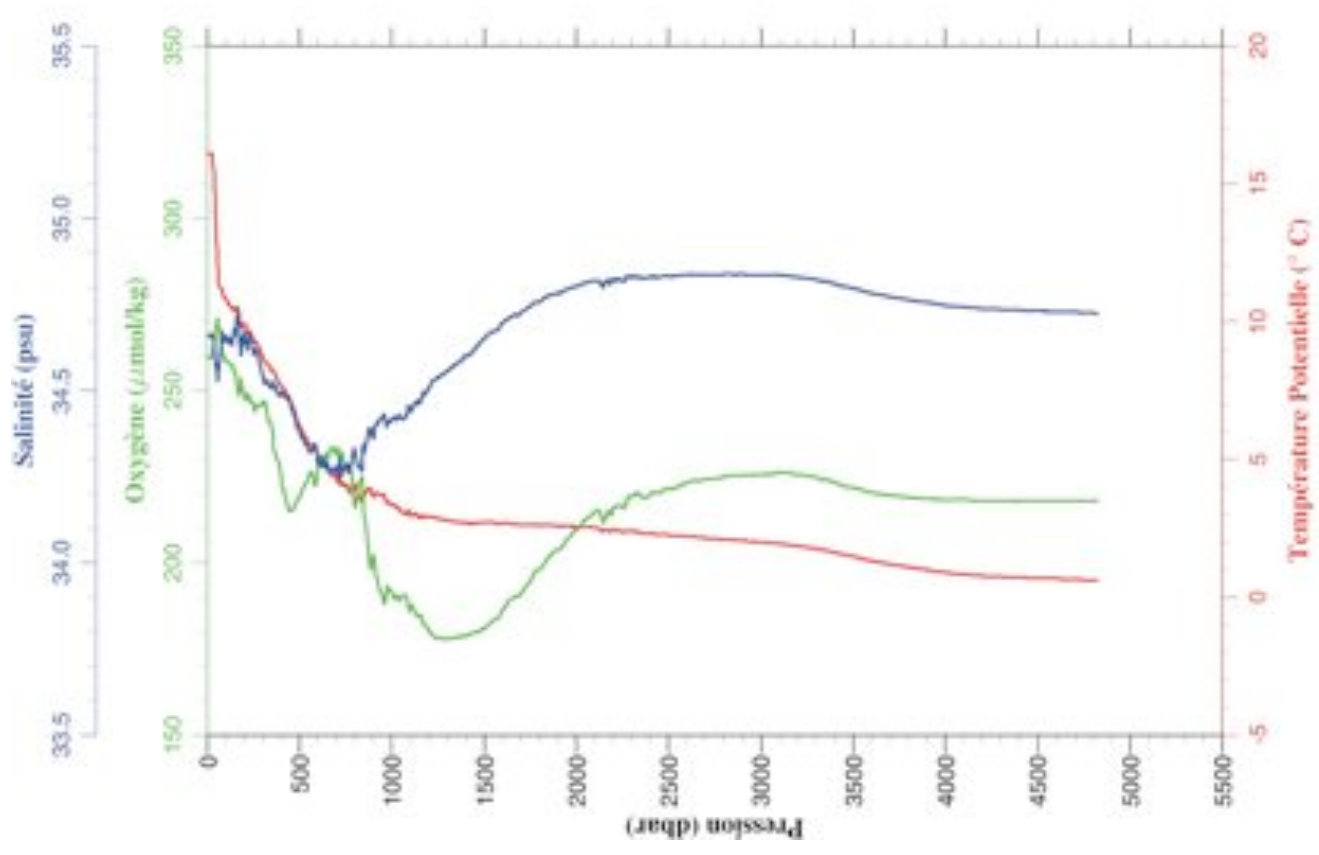
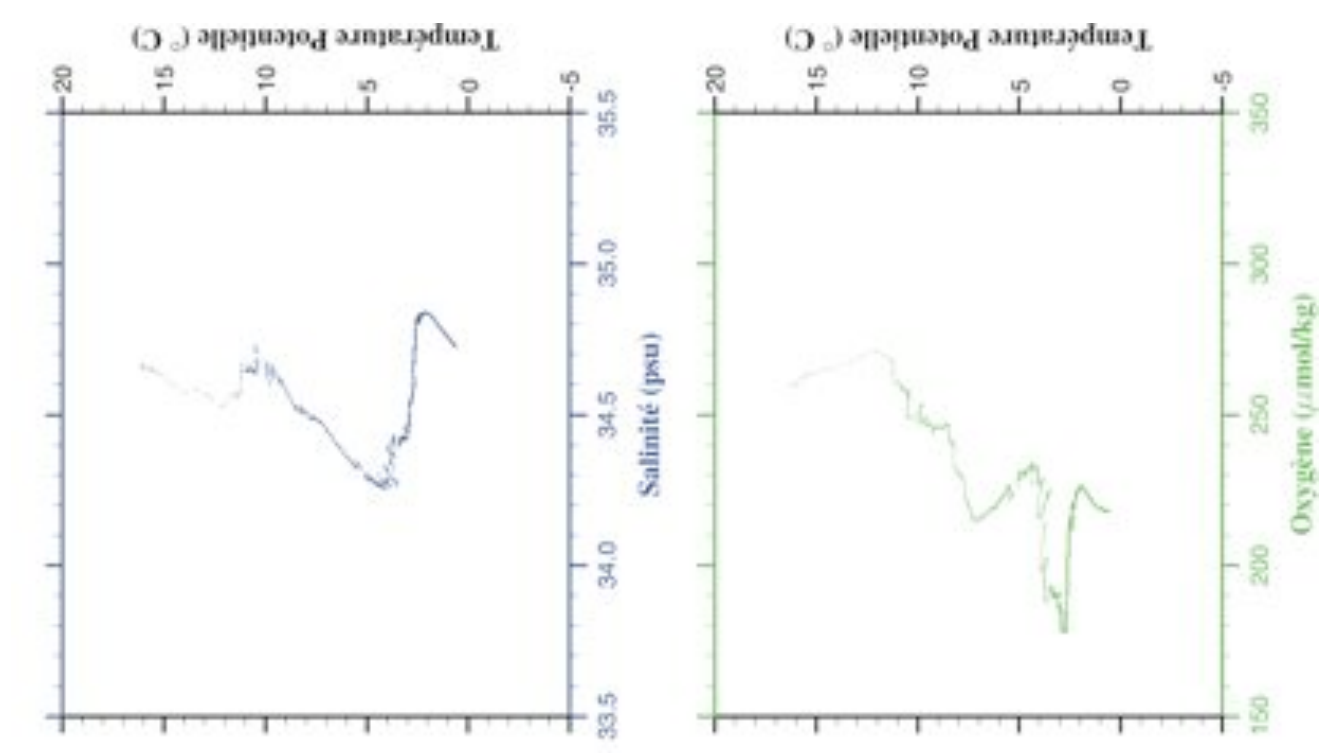
**STATION 32**

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| Station   : 33           Campagne  : GOODHOPE 2008 |
| Date      : 24-02-08    Navire     : R/V Marion Dufresne |
| Profondeur : 4780       Organisme  : IFREMER |
| Position  : S 39 55.54 |
|            : E 10 48.37 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	16.097	34.658	259.7	16.097	3050.0	2.203	34.834	225.7	1.965
10.0	16.097	34.658	259.6	16.095	3100.0	2.188	34.835	226.4	1.945
20.0	16.094	34.659	259.5	16.091	3150.0	2.150	34.833	226.2	1.903
30.0	15.722	34.652	261.9	15.717	3200.0	2.115	34.830	225.6	1.863
40.0	14.760	34.607	264.5	14.754	3250.0	2.068	34.826	225.4	1.812
50.0	12.816	34.559	269.3	12.810	3300.0	2.022	34.822	224.8	1.763
100.0	10.842	34.657	258.7	10.830	3350.0	1.968	34.817	224.1	1.705
150.0	10.401	34.660	255.5	10.383	3400.0	1.887	34.809	223.3	1.621
200.0	9.939	34.666	248.3	9.916	3450.0	1.822	34.802	222.3	1.553
250.0	9.304	34.604	245.5	9.277	3500.0	1.756	34.797	221.8	1.483
300.0	8.709	34.539	246.3	8.677	3550.0	1.672	34.789	221.1	1.396
350.0	8.254	34.507	238.8	8.218	3600.0	1.607	34.783	220.3	1.327
400.0	7.724	34.495	224.2	7.684	3650.0	1.550	34.778	219.9	1.267
450.0	7.174	34.463	214.9	7.130	3700.0	1.484	34.772	219.6	1.197
500.0	6.260	34.380	219.1	6.215	3750.0	1.433	34.767	219.3	1.142
550.0	5.633	34.327	225.1	5.586	3800.0	1.394	34.764	219.0	1.099
600.0	5.131	34.296	228.0	5.082	3850.0	1.338	34.759	218.8	1.040
650.0	4.775	34.290	230.5	4.724	3900.0	1.302	34.756	218.6	0.999
700.0	4.348	34.264	231.7	4.295	3950.0	1.243	34.751	218.4	0.937
750.0	4.129	34.283	227.4	4.073	4000.0	1.203	34.747	218.3	0.892
800.0	4.048	34.315	216.1	3.988	4050.0	1.174	34.745	218.3	0.859
850.0	3.798	34.324	213.5	3.736	4100.0	1.148	34.742	218.3	0.828
900.0	3.706	34.361	202.2	3.641	4150.0	1.129	34.740	218.1	0.804
950.0	3.778	34.423	190.2	3.709	4200.0	1.107	34.738	218.0	0.778
1000.0	3.439	34.420	191.4	3.368	4250.0	1.096	34.737	218.1	0.762
1050.0	3.199	34.423	189.9	3.126	4300.0	1.086	34.735	218.0	0.746
1100.0	3.045	34.440	187.0	2.969	4350.0	1.084	34.735	218.0	0.738
1150.0	2.950	34.461	184.7	2.871	4400.0	1.072	34.733	217.9	0.722
1200.0	2.994	34.505	180.4	2.911	4450.0	1.060	34.732	217.9	0.704
1250.0	2.933	34.536	178.1	2.846	4500.0	1.057	34.731	218.1	0.696
1300.0	2.893	34.556	177.9	2.803	4550.0	1.050	34.730	218.1	0.684
1350.0	2.817	34.575	178.4	2.724	4600.0	1.046	34.729	218.1	0.674
1400.0	2.807	34.601	178.7	2.710	4650.0	1.043	34.729	218.1	0.665
1450.0	2.797	34.622	179.7	2.696	4700.0	1.039	34.728	218.0	0.655
1500.0	2.826	34.652	180.9	2.720	4750.0	1.024	34.726	218.0	0.635
1550.0	2.828	34.673	183.4	2.717	4800.0	1.013	34.725	218.0	0.619
1600.0	2.804	34.697	186.3	2.690	4824.0	1.010	34.724	217.9	0.613
1650.0	2.790	34.713	189.5	2.671					
1700.0	2.748	34.724	191.0	2.626					
1750.0	2.748	34.743	194.6	2.622					
1800.0	2.735	34.758	198.0	2.604					
1850.0	2.750	34.775	201.8	2.615					
1900.0	2.727	34.782	203.8	2.588					
1950.0	2.723	34.794	206.8	2.580					
2000.0	2.714	34.803	209.6	2.566					
2050.0	2.707	34.813	212.6	2.555					
2100.0	2.683	34.819	214.8	2.527					
2150.0	2.597	34.814	211.9	2.438					
2200.0	2.600	34.822	215.9	2.436					
2250.0	2.534	34.818	216.3	2.367					
2300.0	2.548	34.827	219.2	2.375					
2350.0	2.510	34.826	219.4	2.333					
2400.0	2.507	34.832	219.7	2.326					
2450.0	2.464	34.831	220.6	2.279					
2500.0	2.445	34.833	221.6	2.256					
2550.0	2.417	34.833	221.9	2.224					
2600.0	2.408	34.836	223.2	2.210					
2650.0	2.383	34.836	223.8	2.181					
2700.0	2.355	34.836	224.2	2.148					
2750.0	2.336	34.837	224.5	2.125					
2800.0	2.318	34.837	224.9	2.102					
2850.0	2.299	34.837	225.3	2.079					
2900.0	2.278	34.837	225.4	2.053					
2950.0	2.250	34.836	225.5	2.021					
3000.0	2.228	34.835	225.5	1.994					



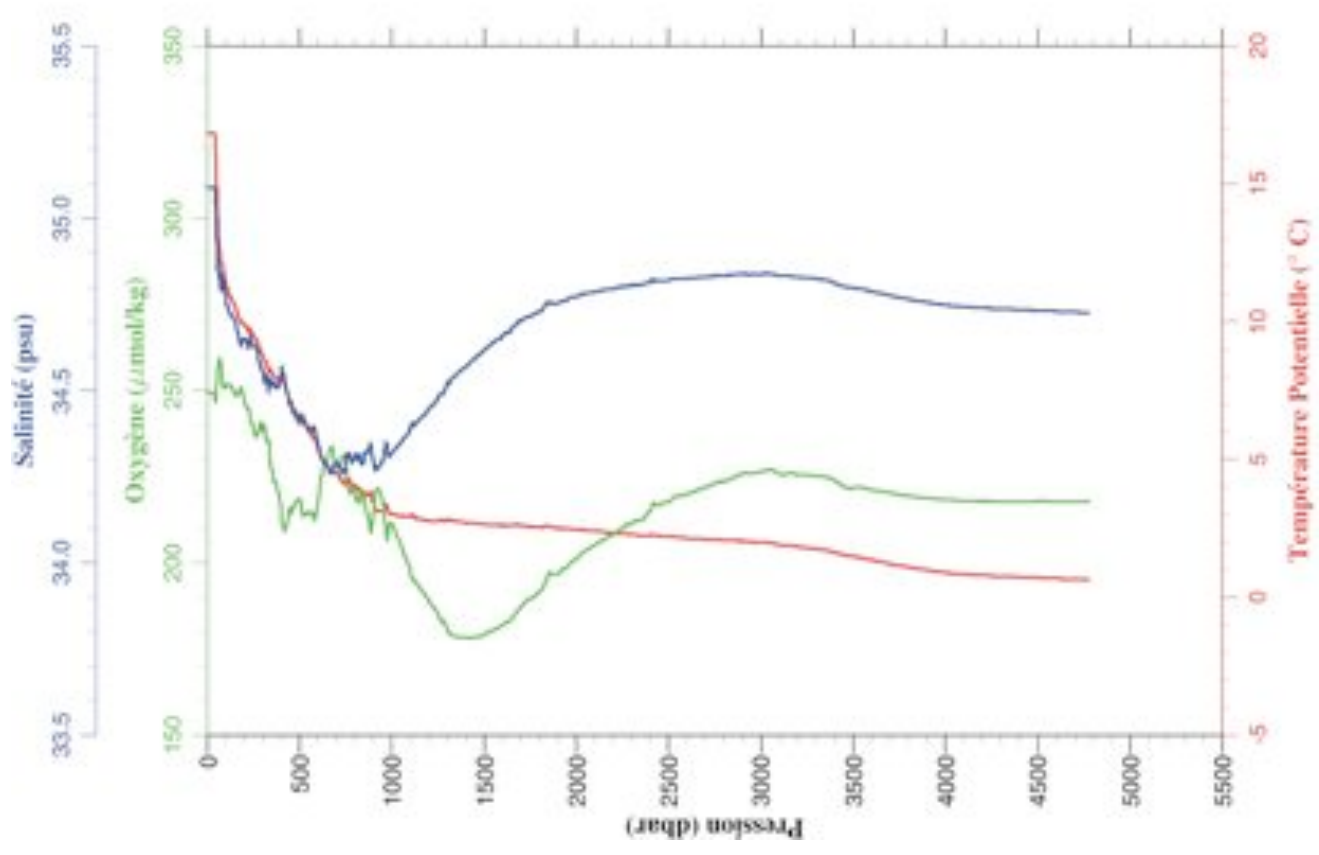
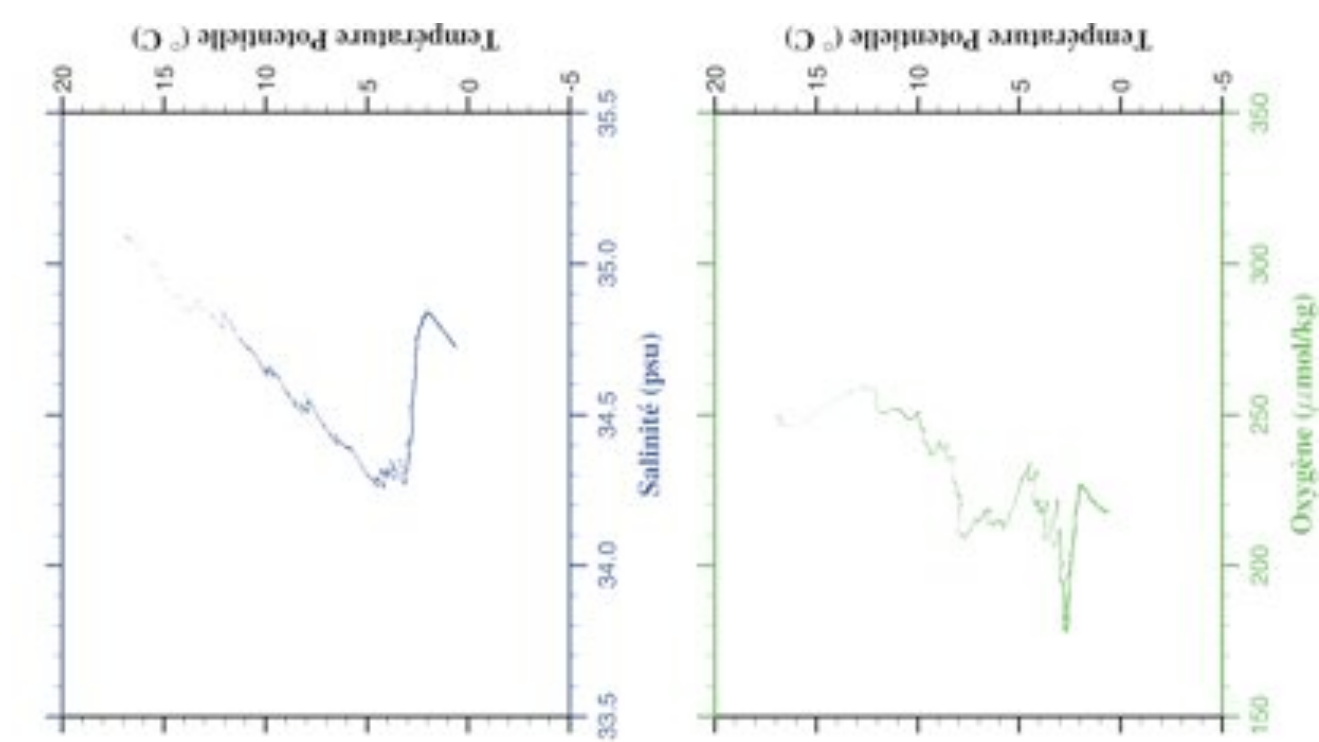
**STATION 33**

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| Station   : 34           Campagne  : GOODHOPE 2008 |
| Date      : 25-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4733       Organisme  : IFREMER |
| Position  : S 40 17.48 |
|           : E 10 33.05 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	16.834	35.088	249.5	16.834	3050.0	2.203	34.839	226.9	1.965
10.0	16.835	35.088	249.5	16.834	3100.0	2.148	34.832	225.7	1.906
20.0	16.836	35.088	249.3	16.833	3150.0	2.119	34.832	225.9	1.873
30.0	16.835	35.088	249.2	16.830	3200.0	2.087	34.830	225.7	1.837
40.0	16.786	35.088	247.8	16.780	3250.0	2.048	34.826	225.4	1.793
50.0	15.054	34.948	251.0	15.046	3300.0	2.015	34.824	225.1	1.756
100.0	11.319	34.753	251.4	11.307	3350.0	1.973	34.821	224.9	1.709
150.0	10.572	34.703	248.9	10.554	3400.0	1.884	34.811	223.9	1.618
200.0	9.913	34.646	247.2	9.890	3450.0	1.808	34.801	222.0	1.539
250.0	9.503	34.630	238.8	9.475	3500.0	1.754	34.798	221.8	1.481
300.0	8.820	34.561	238.1	8.788	3550.0	1.698	34.795	221.9	1.421
350.0	8.136	34.515	226.9	8.100	3600.0	1.635	34.788	221.2	1.355
400.0	7.999	34.548	214.1	7.958	3650.0	1.563	34.782	220.7	1.279
450.0	7.162	34.462	215.5	7.119	3700.0	1.497	34.776	220.3	1.209
500.0	6.539	34.404	218.6	6.494	3750.0	1.439	34.770	219.7	1.148
550.0	6.059	34.390	214.8	6.010	3800.0	1.386	34.765	219.4	1.091
600.0	5.437	34.345	217.7	5.387	3850.0	1.325	34.759	219.0	1.027
650.0	4.787	34.283	230.0	4.736	3900.0	1.296	34.757	218.8	0.993
700.0	4.570	34.290	228.0	4.515	3950.0	1.242	34.751	218.5	0.935
750.0	4.236	34.283	229.4	4.179	4000.0	1.211	34.749	218.2	0.900
800.0	4.064	34.302	220.0	4.004	4050.0	1.178	34.746	218.2	0.862
850.0	3.740	34.300	220.3	3.678	4100.0	1.154	34.743	218.1	0.834
900.0	3.454	34.294	214.7	3.391	4150.0	1.135	34.741	217.9	0.810
950.0	3.246	34.302	217.6	3.181	4200.0	1.128	34.740	217.9	0.798
1000.0	3.090	34.319	211.2	3.021	4250.0	1.112	34.738	217.9	0.776
1050.0	3.023	34.347	205.2	2.952	4300.0	1.103	34.737	217.8	0.763
1100.0	3.054	34.392	197.2	2.979	4350.0	1.097	34.736	217.8	0.751
1150.0	2.909	34.417	192.8	2.831	4400.0	1.088	34.735	217.8	0.737
1200.0	2.861	34.447	188.9	2.779	4450.0	1.082	34.734	217.8	0.725
1250.0	2.872	34.478	185.2	2.786	4500.0	1.071	34.732	217.9	0.709
1300.0	2.933	34.522	180.4	2.843	4550.0	1.062	34.731	217.9	0.695
1350.0	2.854	34.546	178.6	2.760	4600.0	1.056	34.730	217.8	0.683
1400.0	2.807	34.569	178.3	2.709	4650.0	1.043	34.729	217.8	0.665
1450.0	2.782	34.593	178.4	2.681	4700.0	1.039	34.728	217.8	0.655
1500.0	2.755	34.617	179.1	2.649	4750.0	1.031	34.727	217.8	0.642
1550.0	2.729	34.639	180.5	2.620	4777.0	1.020	34.726	217.9	0.628
1600.0	2.708	34.658	181.9	2.595					
1650.0	2.723	34.680	183.9	2.605					
1700.0	2.727	34.702	187.2	2.605					
1750.0	2.697	34.717	189.4	2.571					
1800.0	2.669	34.729	191.7	2.540					
1850.0	2.735	34.756	197.0	2.600					
1900.0	2.644	34.753	196.8	2.506					
1950.0	2.618	34.763	198.8	2.476					
2000.0	2.599	34.772	201.0	2.453					
2050.0	2.579	34.781	203.6	2.429					
2100.0	2.560	34.787	205.2	2.406					
2150.0	2.531	34.792	206.8	2.373					
2200.0	2.498	34.796	208.2	2.335					
2250.0	2.467	34.800	210.0	2.301					
2300.0	2.456	34.806	211.5	2.285					
2350.0	2.423	34.807	212.3	2.248					
2400.0	2.420	34.814	215.1	2.241					
2450.0	2.405	34.819	216.9	2.221					
2500.0	2.378	34.821	217.7	2.190					
2550.0	2.364	34.824	219.5	2.172					
2600.0	2.340	34.825	219.9	2.143					
2650.0	2.326	34.828	221.0	2.124					
2700.0	2.314	34.829	221.9	2.108					
2750.0	2.313	34.834	223.1	2.102					
2800.0	2.288	34.833	223.6	2.073					
2850.0	2.265	34.835	224.6	2.046					
2900.0	2.269	34.839	226.0	2.044					
2950.0	2.233	34.837	225.9	2.005					
3000.0	2.218	34.839	226.2	1.985					



**STATION 34**

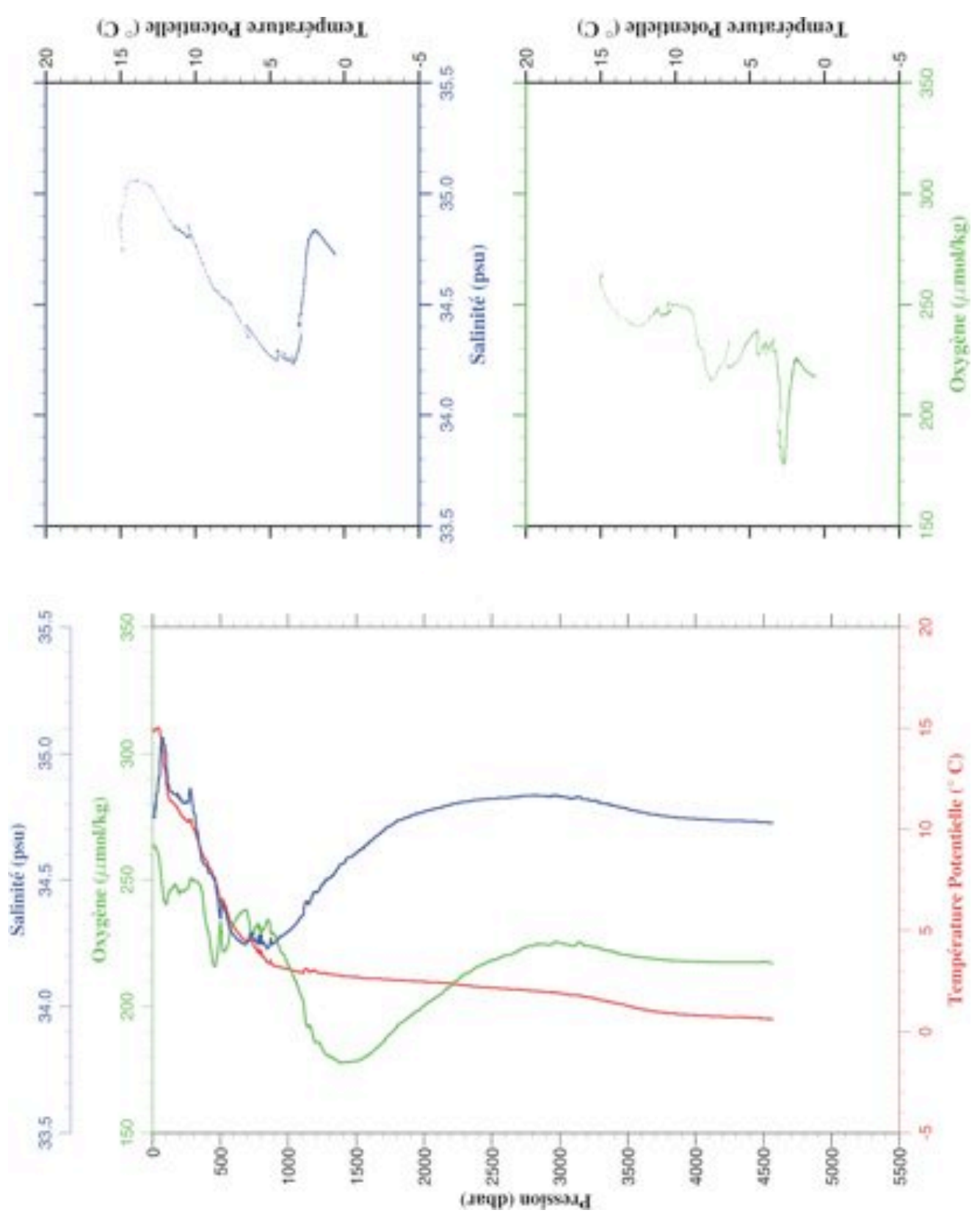
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| Station   : 35           Campagne  : GOODHOPE 2008 |
| Date      : 25-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4510       Organisme  : IFREMER |
| Position  : S 40 43.40 |
|           : E 10 12.89 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	14.882	34.747	263.5	14.882	3050.0	2.091	34.827	224.6	1.855
10.0	14.897	34.750	263.4	14.895	3100.0	2.037	34.822	223.9	1.798
20.0	14.962	34.806	263.2	14.959	3150.0	2.038	34.827	225.4	1.794
30.0	15.009	34.836	262.1	15.005	3200.0	1.966	34.819	224.0	1.719
40.0	15.029	34.881	260.1	15.023	3250.0	1.909	34.814	223.4	1.658
50.0	14.971	34.903	257.9	14.964	3300.0	1.825	34.806	222.7	1.570
100.0	12.459	34.973	240.2	12.446	3350.0	1.772	34.801	222.2	1.514
150.0	11.332	34.841	246.9	11.313	3400.0	1.680	34.792	221.5	1.419
200.0	10.884	34.826	244.9	10.860	3450.0	1.624	34.787	220.6	1.360
250.0	10.474	34.807	246.7	10.444	3500.0	1.566	34.781	220.3	1.297
300.0	10.106	34.780	249.5	10.071	3550.0	1.466	34.773	219.8	1.195
350.0	9.154	34.621	248.0	9.115	3600.0	1.393	34.767	219.4	1.119
400.0	8.498	34.555	231.3	8.456	3650.0	1.337	34.763	219.1	1.059
450.0	7.714	34.506	216.4	7.669	3700.0	1.290	34.758	218.8	1.009
500.0	6.431	34.347	233.1	6.385	3750.0	1.251	34.755	218.5	0.965
550.0	5.990	34.347	223.5	5.942	3800.0	1.206	34.750	218.3	0.917
600.0	5.200	34.280	232.9	5.151	3850.0	1.185	34.748	218.0	0.891
650.0	4.774	34.253	236.8	4.723	3900.0	1.154	34.745	217.9	0.855
700.0	4.538	34.256	236.5	4.484	3950.0	1.135	34.743	217.8	0.832
750.0	4.212	34.260	230.7	4.156	4000.0	1.122	34.741	217.8	0.813
800.0	4.056	34.279	227.6	3.996	4050.0	1.104	34.739	217.7	0.791
850.0	3.472	34.232	234.2	3.413	4100.0	1.100	34.739	217.6	0.781
900.0	3.320	34.254	228.1	3.257	4150.0	1.086	34.737	217.5	0.763
950.0	3.227	34.278	221.4	3.161	4200.0	1.072	34.736	217.5	0.744
1000.0	3.142	34.298	216.3	3.073	4250.0	1.064	34.734	217.5	0.731
1050.0	3.067	34.323	210.4	2.996	4300.0	1.062	34.734	217.4	0.723
1100.0	3.009	34.358	203.1	2.933	4350.0	1.062	34.733	217.4	0.717
1150.0	3.047	34.402	192.5	2.967	4400.0	1.051	34.732	217.4	0.701
1200.0	3.087	34.452	185.8	3.003	4450.0	1.038	34.730	217.5	0.683
1250.0	2.990	34.482	183.3	2.902	4500.0	1.027	34.729	217.6	0.667
1300.0	2.929	34.505	180.5	2.839	4550.0	0.992	34.725	217.3	0.627
1350.0	2.898	34.535	178.7	2.803	4567.0	0.990	34.725	217.1	0.623
1400.0	2.842	34.564	177.8	2.744					
1450.0	2.820	34.589	178.0	2.718					
1500.0	2.819	34.606	178.3	2.713					
1550.0	2.764	34.626	179.6	2.654					
1600.0	2.737	34.652	181.2	2.624					
1650.0	2.731	34.674	183.5	2.614					
1700.0	2.718	34.694	186.1	2.597					
1750.0	2.701	34.713	189.0	2.575					
1800.0	2.669	34.734	191.9	2.540					
1850.0	2.668	34.743	194.1	2.534					
1900.0	2.656	34.752	196.2	2.518					
1950.0	2.635	34.761	198.4	2.493					
2000.0	2.616	34.769	200.2	2.470					
2050.0	2.602	34.777	202.3	2.452					
2100.0	2.592	34.784	204.0	2.437					
2150.0	2.582	34.793	206.3	2.422					
2200.0	2.535	34.798	208.4	2.372					
2250.0	2.496	34.804	210.5	2.329					
2300.0	2.464	34.809	212.7	2.293					
2350.0	2.430	34.813	214.2	2.255					
2400.0	2.404	34.816	215.9	2.224					
2450.0	2.389	34.819	217.0	2.206					
2500.0	2.358	34.822	218.3	2.171					
2550.0	2.343	34.824	219.1	2.151					
2600.0	2.320	34.825	220.2	2.124					
2650.0	2.305	34.826	220.7	2.104					
2700.0	2.288	34.830	222.1	2.083					
2750.0	2.266	34.833	223.5	2.056					
2800.0	2.247	34.833	223.9	2.033					
2850.0	2.216	34.833	224.6	1.998					
2900.0	2.185	34.831	224.5	1.963					
2950.0	2.169	34.834	224.8	1.941					
3000.0	2.142	34.832	225.1	1.910					

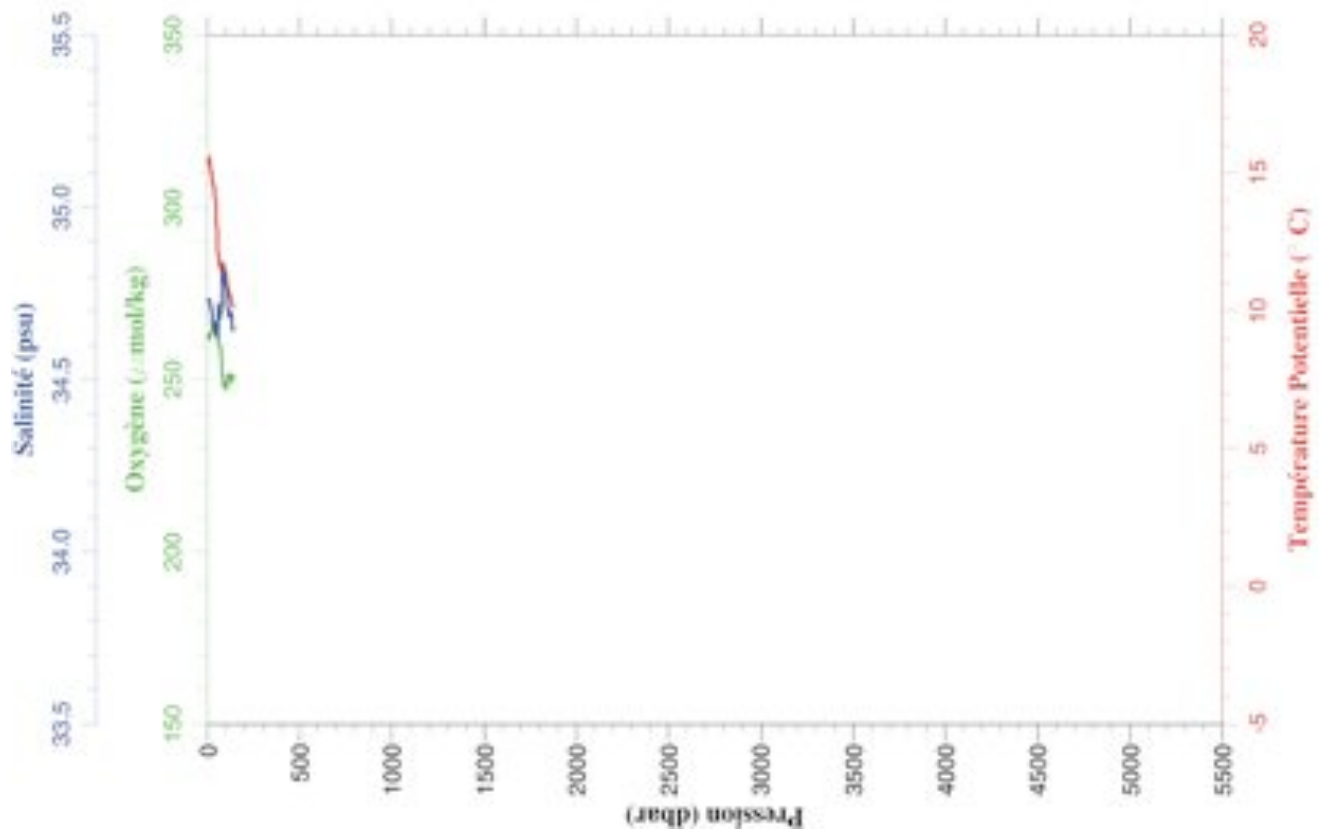




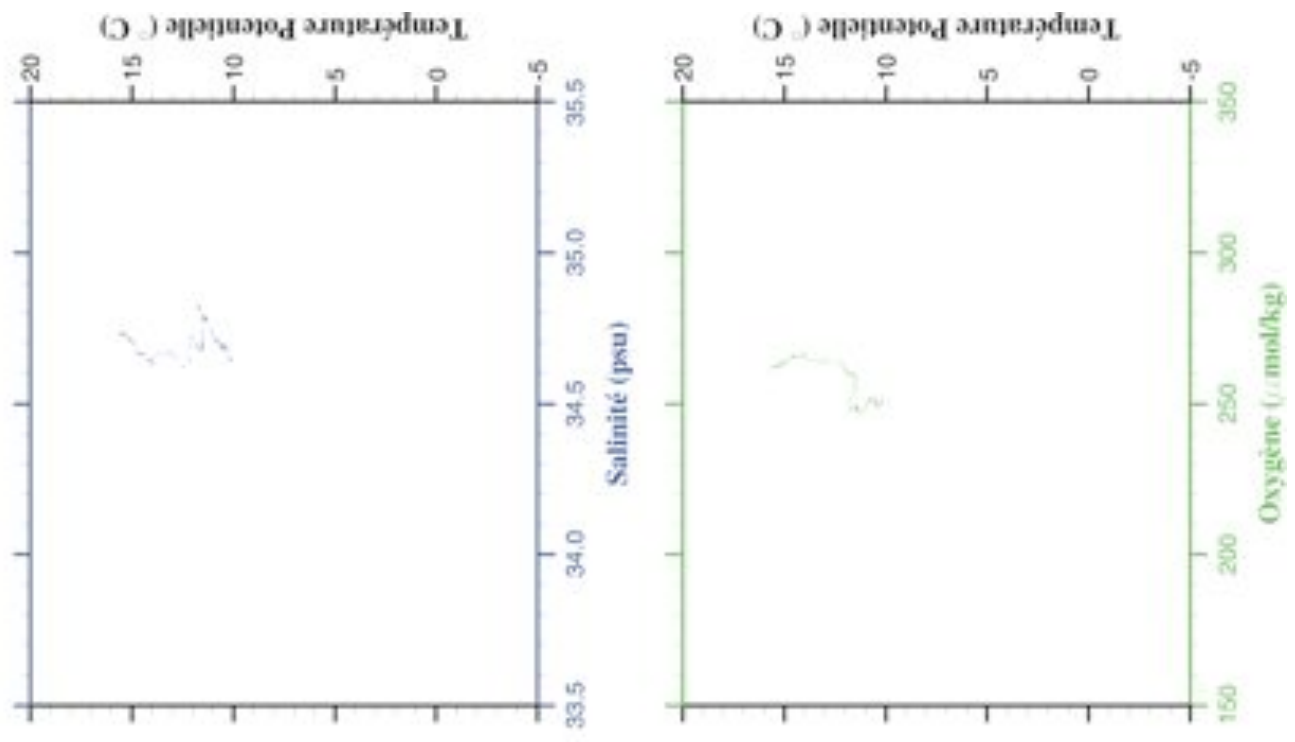
**STATION 35**

Station	: 36	Campagne	: GOODHOPE 2008
Date	: 25-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 4521	Organisme	: IFREMER
Position	: S 41 10.60		
	E 9 55.04		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	15.359	34.729	262.6	15.359
10.0	15.567	34.731	261.8	15.565
20.0	15.040	34.708	263.5	15.037
30.0	14.595	34.662	265.6	14.591
40.0	14.171	34.643	266.1	14.165
50.0	13.086	34.667	263.9	13.079
100.0	11.425	34.786	247.5	11.413
140.0	10.151	34.647	251.2	10.135



**STATION 36**

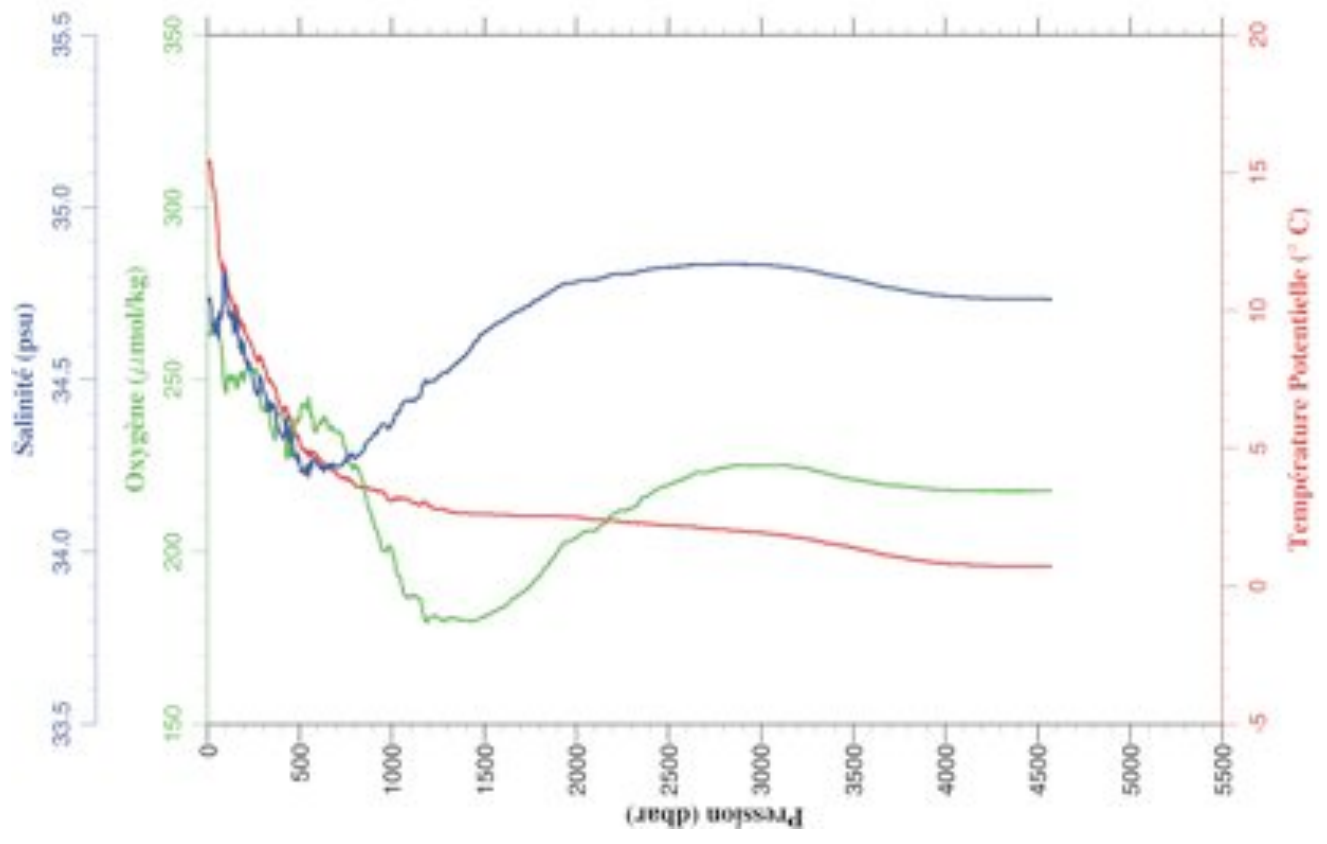
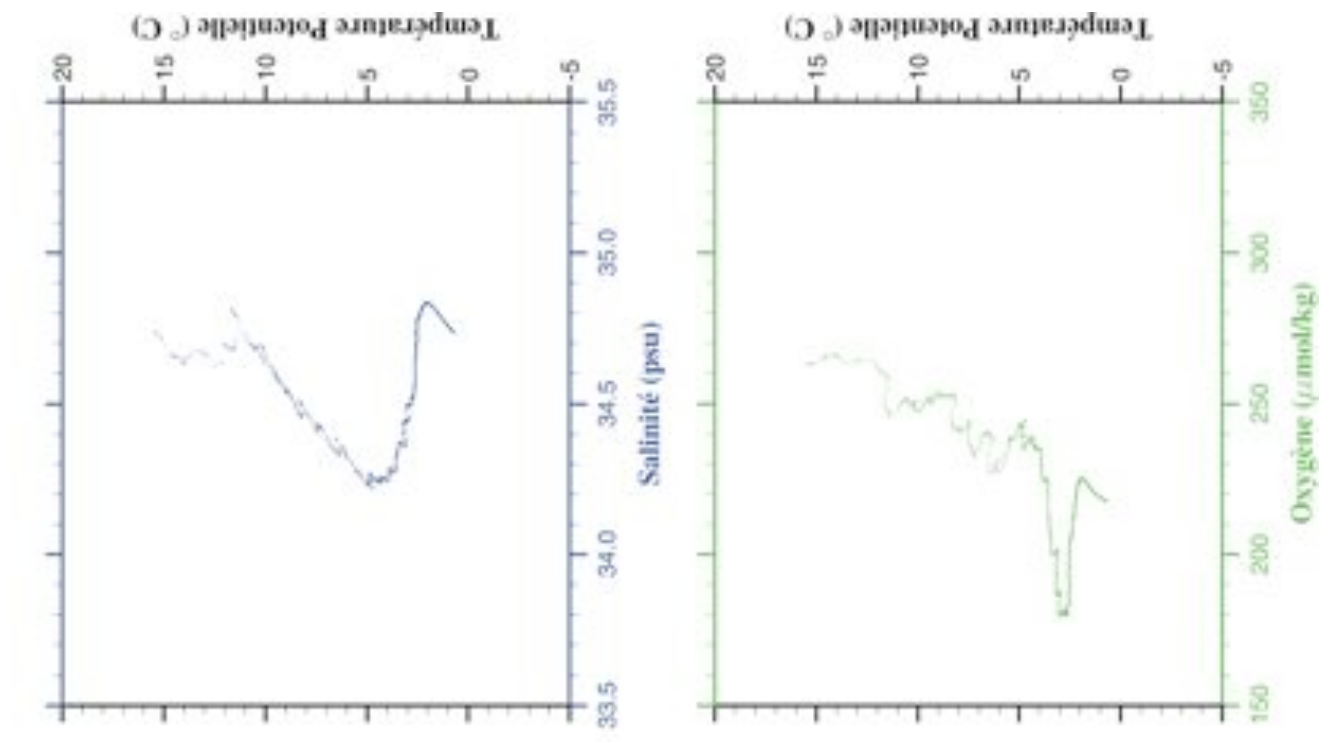


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| Station   : 37           Campagne  : GOODHOPE 2008 |
| Date      : 25-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4525      Organisme  : IFREMER |
| Position  : S 41 10.60 |
|           : E 9 55.03  |
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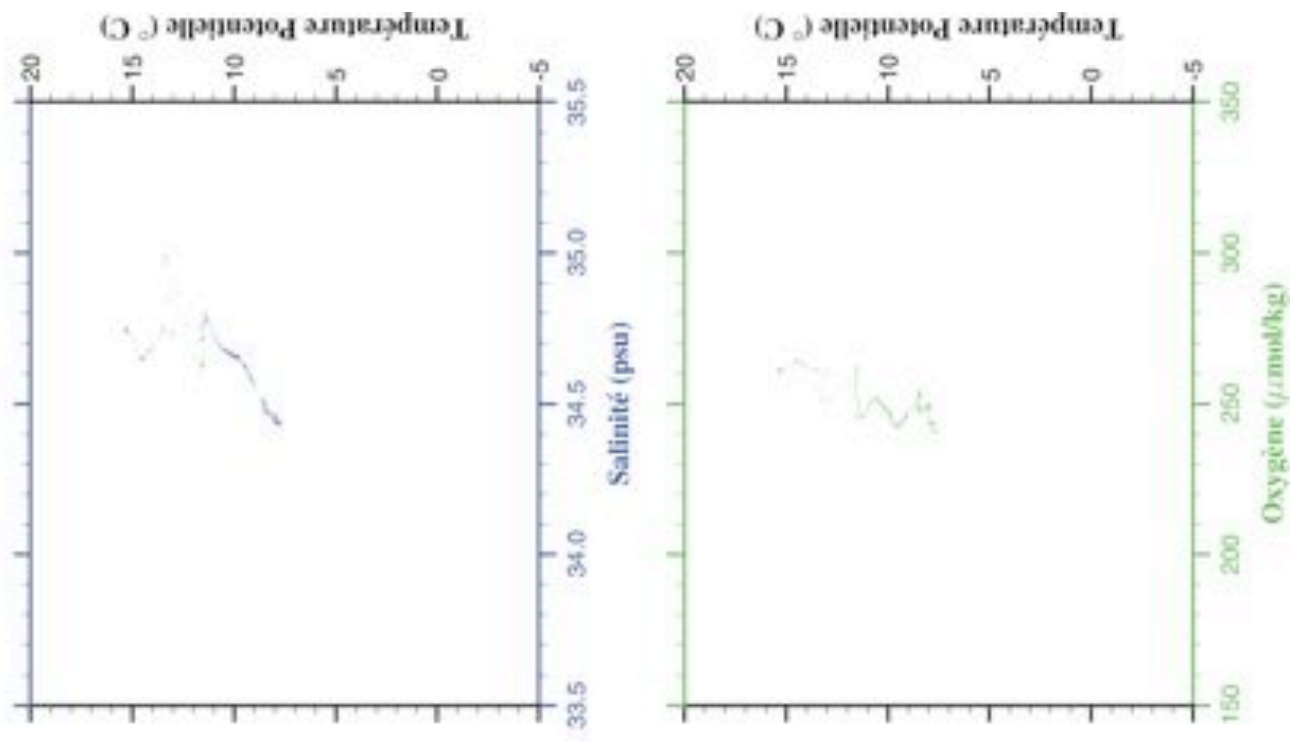
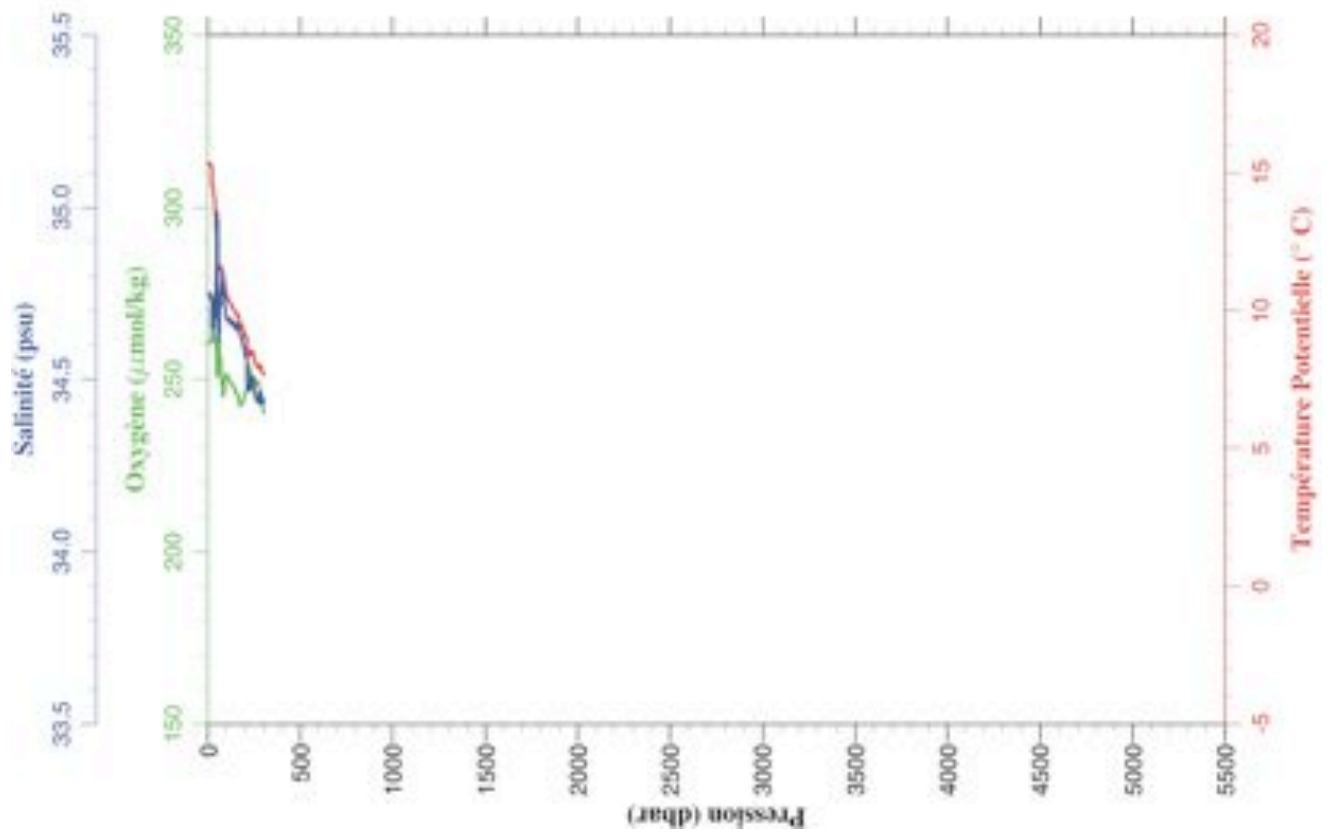
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	15.347	34.732	263.2	15.347	3050.0	2.148	34.831	225.2	1.911
10.0	15.432	34.737	263.2	15.431	3100.0	2.108	34.829	225.1	1.867
20.0	15.109	34.714	263.3	15.106	3150.0	2.068	34.826	225.0	1.823
30.0	14.490	34.658	265.8	14.485	3200.0	2.016	34.823	224.4	1.767
40.0	14.060	34.634	266.3	14.054	3250.0	1.971	34.818	224.2	1.718
50.0	13.422	34.677	263.5	13.415	3300.0	1.925	34.814	223.5	1.668
100.0	11.449	34.792	246.0	11.436	3350.0	1.838	34.806	222.8	1.578
150.0	10.217	34.691	249.9	10.199	3400.0	1.790	34.801	222.1	1.527
200.0	9.456	34.599	249.7	9.434	3450.0	1.740	34.796	221.5	1.472
250.0	8.526	34.488	252.4	8.500	3500.0	1.674	34.791	221.0	1.403
300.0	8.118	34.480	241.2	8.088	3550.0	1.598	34.784	220.6	1.323
350.0	7.341	34.414	235.6	7.307	3600.0	1.527	34.778	220.2	1.250
400.0	6.533	34.339	240.0	6.496	3650.0	1.444	34.770	219.7	1.163
450.0	6.117	34.346	227.7	6.078	3700.0	1.391	34.766	219.3	1.107
500.0	5.332	34.263	238.5	5.292	3750.0	1.347	34.762	219.2	1.058
550.0	4.762	34.221	244.8	4.720	3800.0	1.289	34.757	218.8	0.996
600.0	4.708	34.251	236.5	4.662	3850.0	1.237	34.752	218.5	0.941
650.0	4.362	34.246	237.5	4.313	3900.0	1.194	34.748	218.3	0.894
700.0	4.126	34.247	234.9	4.074	3950.0	1.163	34.745	218.1	0.858
750.0	3.956	34.266	229.4	3.901	4000.0	1.140	34.743	218.0	0.831
800.0	3.706	34.272	225.2	3.649	4050.0	1.116	34.740	217.9	0.802
850.0	3.627	34.298	218.9	3.566	4100.0	1.104	34.739	217.7	0.785
900.0	3.578	34.341	208.4	3.514	4150.0	1.096	34.738	217.7	0.772
950.0	3.472	34.368	200.3	3.405	4200.0	1.079	34.736	217.7	0.750
1000.0	3.181	34.372	200.4	3.112	4250.0	1.077	34.735	217.6	0.743
1050.0	3.289	34.426	191.0	3.215	4300.0	1.077	34.735	217.6	0.737
1100.0	3.143	34.436	187.0	3.066	4350.0	1.083	34.735	217.6	0.737
1150.0	3.017	34.449	186.4	2.938	4400.0	1.087	34.735	217.6	0.736
1200.0	2.982	34.492	180.6	2.899	4450.0	1.079	34.734	217.6	0.722
1250.0	2.893	34.507	180.8	2.806	4500.0	1.082	34.733	217.7	0.719
1300.0	2.830	34.522	180.4	2.741	4550.0	1.082	34.733	217.7	0.714
1350.0	2.753	34.546	180.5	2.660	4571.0	1.082	34.733	217.7	0.712
1400.0	2.741	34.570	180.0	2.644					
1450.0	2.731	34.610	180.1	2.630					
1500.0	2.721	34.635	181.1	2.617					
1550.0	2.713	34.657	182.5	2.605					
1600.0	2.706	34.670	183.8	2.593					
1650.0	2.686	34.690	186.2	2.570					
1700.0	2.679	34.701	187.9	2.558					
1750.0	2.670	34.716	189.9	2.545					
1800.0	2.688	34.732	192.9	2.558					
1850.0	2.687	34.752	196.2	2.553					
1900.0	2.695	34.769	200.4	2.556					
1950.0	2.665	34.778	203.1	2.522					
2000.0	2.653	34.783	204.0	2.506					
2050.0	2.620	34.789	206.0	2.469					
2100.0	2.561	34.788	206.1	2.407					
2150.0	2.564	34.796	208.2	2.405					
2200.0	2.551	34.805	211.0	2.388					
2250.0	2.502	34.806	212.1	2.335					
2300.0	2.465	34.808	212.7	2.294					
2350.0	2.472	34.817	215.3	2.296					
2400.0	2.444	34.821	216.8	2.264					
2450.0	2.422	34.824	218.6	2.238					
2500.0	2.396	34.826	219.5	2.207					
2550.0	2.381	34.829	220.7	2.188					
2600.0	2.366	34.831	221.7	2.169					
2650.0	2.344	34.833	223.0	2.143					
2700.0	2.318	34.833	223.1	2.112					
2750.0	2.285	34.834	223.8	2.075					
2800.0	2.270	34.835	224.4	2.055					
2850.0	2.244	34.835	224.9	2.025					
2900.0	2.223	34.834	225.0	2.000					
2950.0	2.196	34.833	224.9	1.968					
3000.0	2.174	34.832	225.1	1.942					



**STATION 37**

Station	: 38	Campagne	: GOODHOPE 2008
Date	: 26-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 4500	Organisme	: IFREMER
Position	: S 41 11.40		
	E 9 55.31		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	15.364	34.751	260.4	15.364
10.0	15.312	34.745	261.1	15.311
20.0	15.228	34.735	261.2	15.225
30.0	14.475	34.652	264.2	14.471
40.0	13.549	34.745	261.0	13.543
50.0	13.339	34.988	251.3	13.332
100.0	10.569	34.680	251.5	10.557
150.0	9.937	34.653	246.5	9.920
200.0	9.176	34.582	245.7	9.154
250.0	8.255	34.467	248.0	8.229
300.0	7.760	34.439	241.0	7.730
303.0	7.707	34.436	240.1	7.678



**STATION 38**

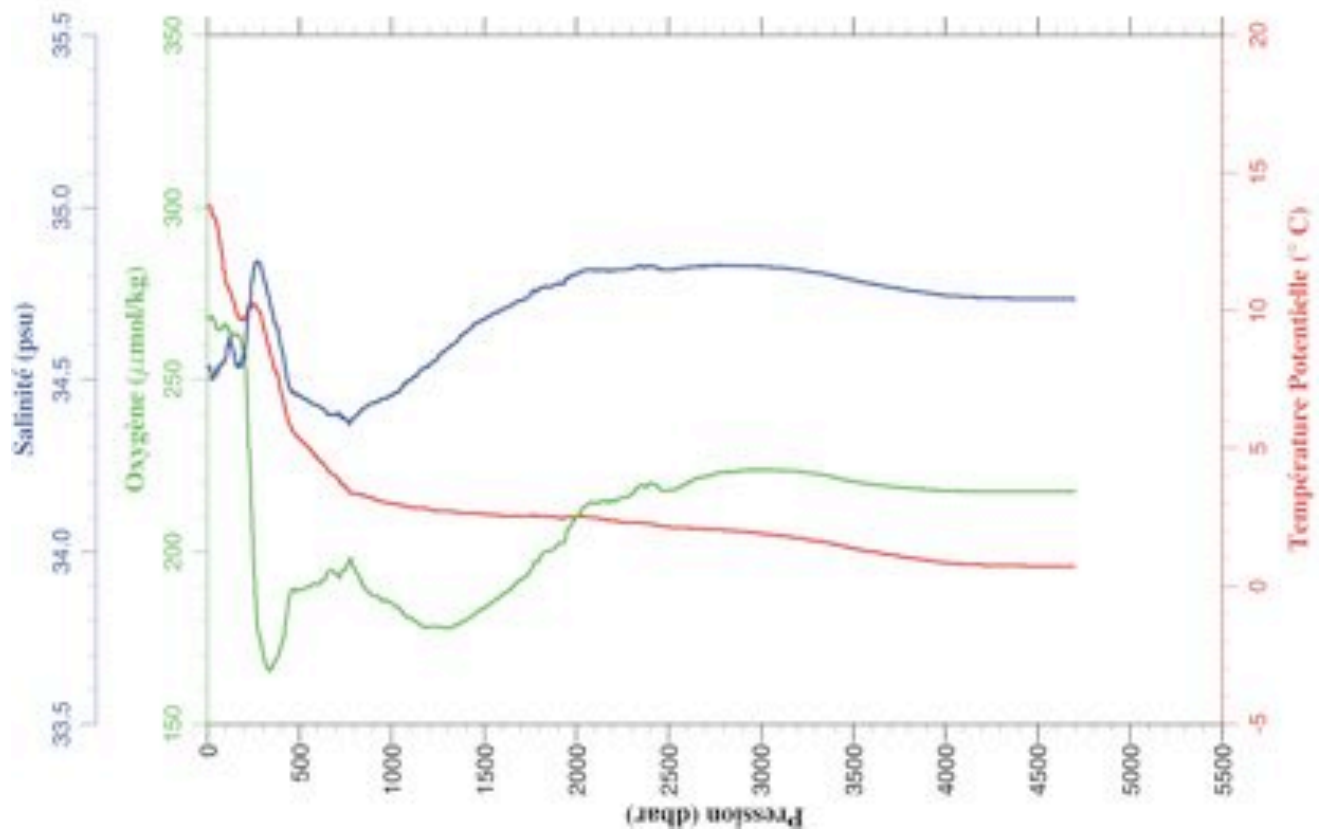
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| Station   : 39           Campagne  : GOODHOPE 2008 |
| Date     : 26-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4643      Organisme  : IFREMER |
| Position  : S 41 36.52 |
|           : E 9 35.01  |
|-----

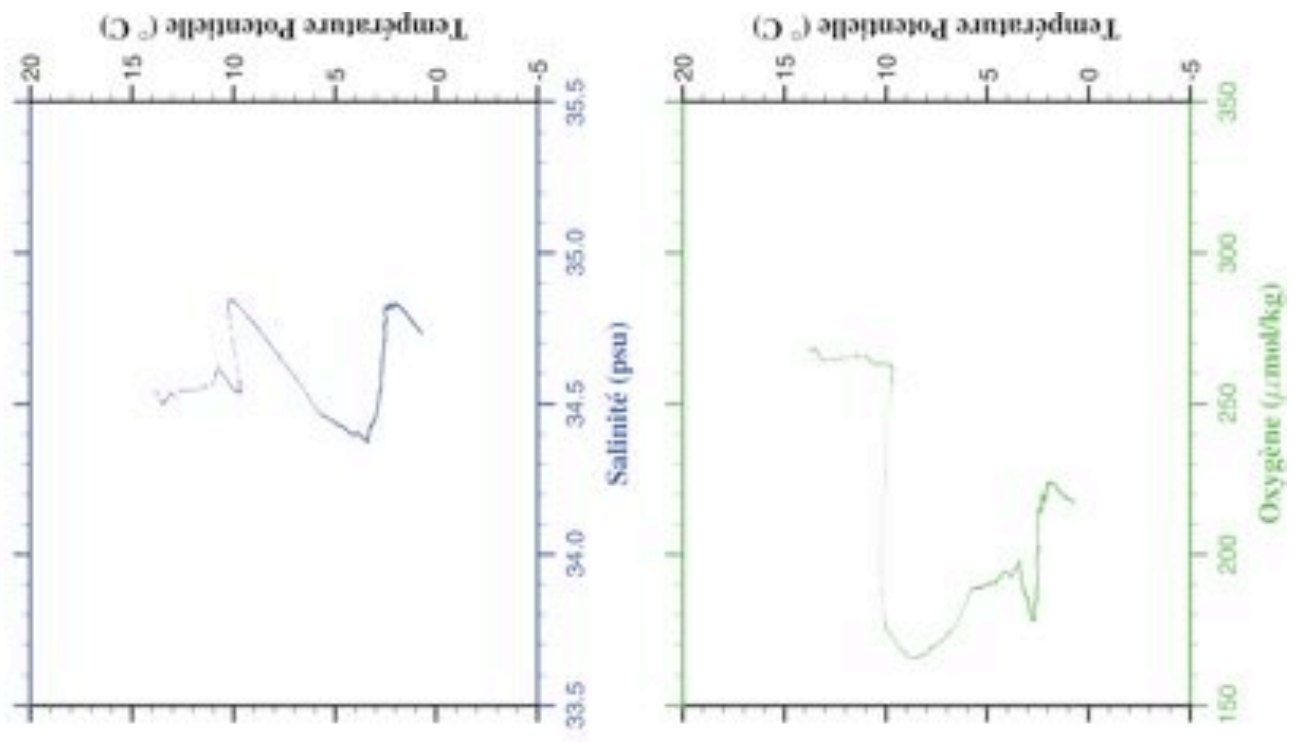
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	13.799	34.538	268.0	13.799	3050.0	2.110	34.826	223.7	1.874
10.0	13.802	34.537	268.0	13.800	3100.0	2.075	34.823	223.5	1.835
20.0	13.701	34.521	267.9	13.698	3150.0	2.045	34.822	223.5	1.800
30.0	13.481	34.501	267.9	13.477	3200.0	1.996	34.818	223.3	1.748
40.0	13.361	34.508	266.8	13.355	3250.0	1.950	34.815	223.1	1.698
50.0	13.136	34.531	264.8	13.129	3300.0	1.898	34.811	222.6	1.642
100.0	10.974	34.567	265.9	10.962	3350.0	1.859	34.807	222.2	1.599
150.0	10.151	34.559	263.1	10.133	3400.0	1.788	34.801	221.6	1.524
200.0	9.690	34.562	257.4	9.667	3450.0	1.718	34.794	220.9	1.451
250.0	10.280	34.818	198.1	10.250	3500.0	1.649	34.788	220.4	1.379
300.0	9.555	34.805	171.1	9.521	3550.0	1.577	34.782	220.0	1.304
350.0	8.257	34.698	166.4	8.221	3600.0	1.536	34.778	219.6	1.258
400.0	7.073	34.592	173.1	7.035	3650.0	1.475	34.772	219.4	1.194
450.0	5.855	34.471	188.2	5.817	3700.0	1.432	34.769	218.9	1.147
500.0	5.389	34.452	189.0	5.348	3750.0	1.372	34.763	218.7	1.082
550.0	5.059	34.437	189.7	5.015	3800.0	1.311	34.758	218.5	1.019
600.0	4.654	34.424	190.4	4.607	3850.0	1.287	34.756	218.2	0.990
650.0	4.286	34.399	193.8	4.237	3900.0	1.232	34.751	218.1	0.931
700.0	3.981	34.398	193.5	3.930	3950.0	1.195	34.748	217.9	0.890
750.0	3.654	34.386	195.2	3.601	4000.0	1.161	34.744	217.8	0.851
800.0	3.423	34.392	194.8	3.367	4050.0	1.148	34.743	217.6	0.834
850.0	3.347	34.418	189.7	3.289	4100.0	1.120	34.740	217.5	0.801
900.0	3.243	34.432	187.2	3.181	4150.0	1.114	34.739	217.6	0.789
950.0	3.125	34.444	185.8	3.060	4200.0	1.105	34.738	217.5	0.776
1000.0	3.071	34.454	185.0	3.003	4250.0	1.098	34.737	217.4	0.763
1050.0	3.005	34.472	183.0	2.934	4300.0	1.093	34.736	217.4	0.752
1100.0	2.930	34.497	181.0	2.855	4350.0	1.095	34.736	217.4	0.749
1150.0	2.905	34.523	179.0	2.826	4400.0	1.097	34.736	217.4	0.745
1200.0	2.863	34.537	178.2	2.781	4450.0	1.094	34.735	217.4	0.737
1250.0	2.798	34.563	178.4	2.712	4500.0	1.093	34.734	217.5	0.730
1300.0	2.813	34.589	177.9	2.723	4550.0	1.096	34.734	217.5	0.728
1350.0	2.776	34.611	178.7	2.682	4600.0	1.097	34.734	217.6	0.723
1400.0	2.748	34.635	180.1	2.651	4650.0	1.098	34.733	217.4	0.718
1450.0	2.753	34.661	182.2	2.652	4696.0	1.101	34.733	217.3	0.715
1500.0	2.732	34.675	183.8	2.627					
1550.0	2.692	34.691	185.6	2.583					
1600.0	2.675	34.706	187.7	2.562					
1650.0	2.671	34.717	189.6	2.554					
1700.0	2.660	34.729	192.0	2.539					
1750.0	2.673	34.744	194.5	2.548					
1800.0	2.685	34.764	198.0	2.555					
1850.0	2.653	34.769	200.2	2.519					
1900.0	2.632	34.778	202.1	2.494					
1950.0	2.674	34.797	206.2	2.531					
2000.0	2.687	34.809	210.3	2.540					
2050.0	2.675	34.817	213.4	2.524					
2100.0	2.626	34.817	214.0	2.471					
2150.0	2.598	34.820	215.0	2.439					
2200.0	2.529	34.816	214.6	2.366					
2250.0	2.499	34.819	215.7	2.332					
2300.0	2.474	34.822	216.8	2.303					
2350.0	2.479	34.829	219.4	2.304					
2400.0	2.450	34.830	220.0	2.270					
2450.0	2.370	34.819	218.4	2.187					
2500.0	2.344	34.820	217.9	2.156					
2550.0	2.320	34.821	218.6	2.128					
2600.0	2.313	34.825	220.0	2.117					
2650.0	2.295	34.827	221.2	2.094					
2700.0	2.280	34.828	221.8	2.075					
2750.0	2.268	34.831	222.6	2.058					
2800.0	2.256	34.831	223.1	2.042					
2850.0	2.231	34.830	223.1	2.013					
2900.0	2.214	34.831	223.6	1.991					
2950.0	2.189	34.830	223.8	1.961					
3000.0	2.146	34.828	223.9	1.915					





**STATION 39**

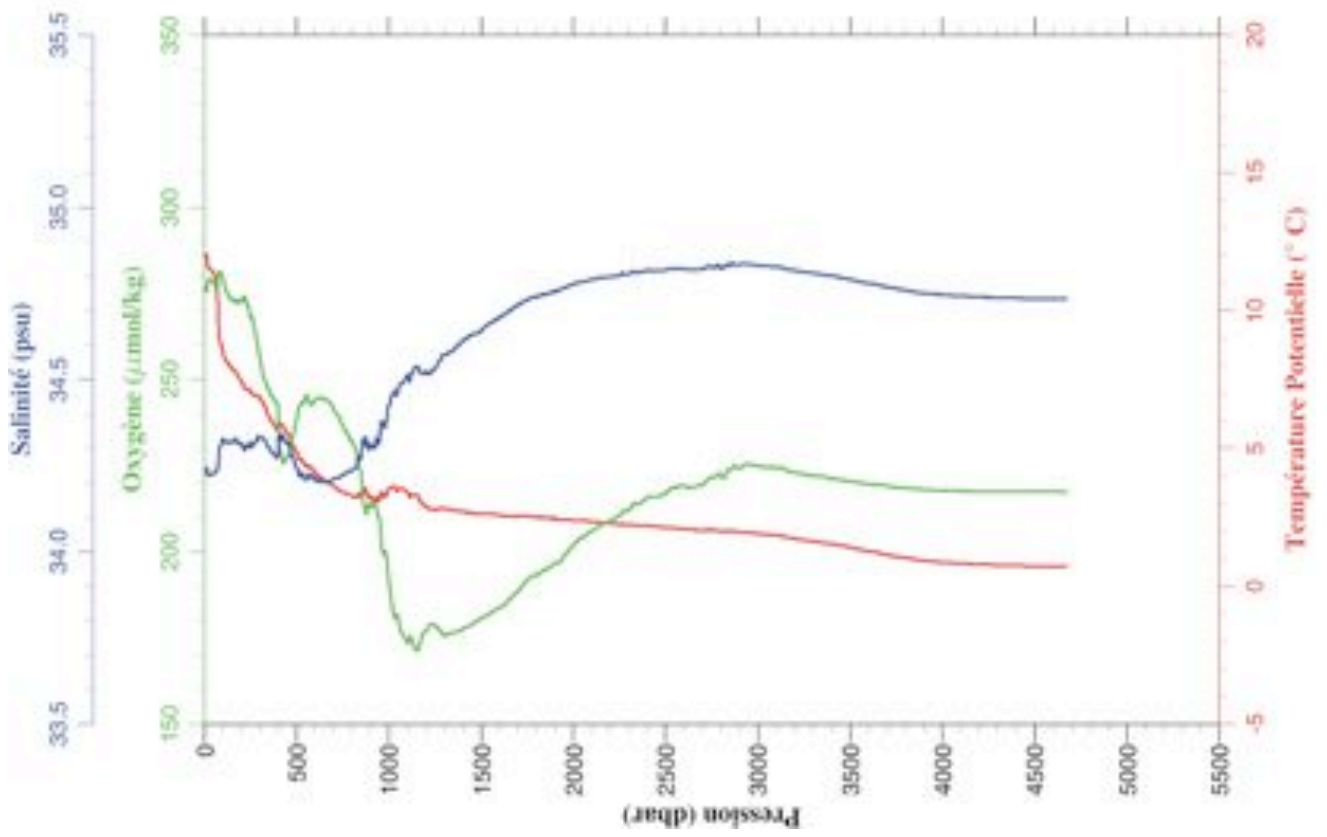


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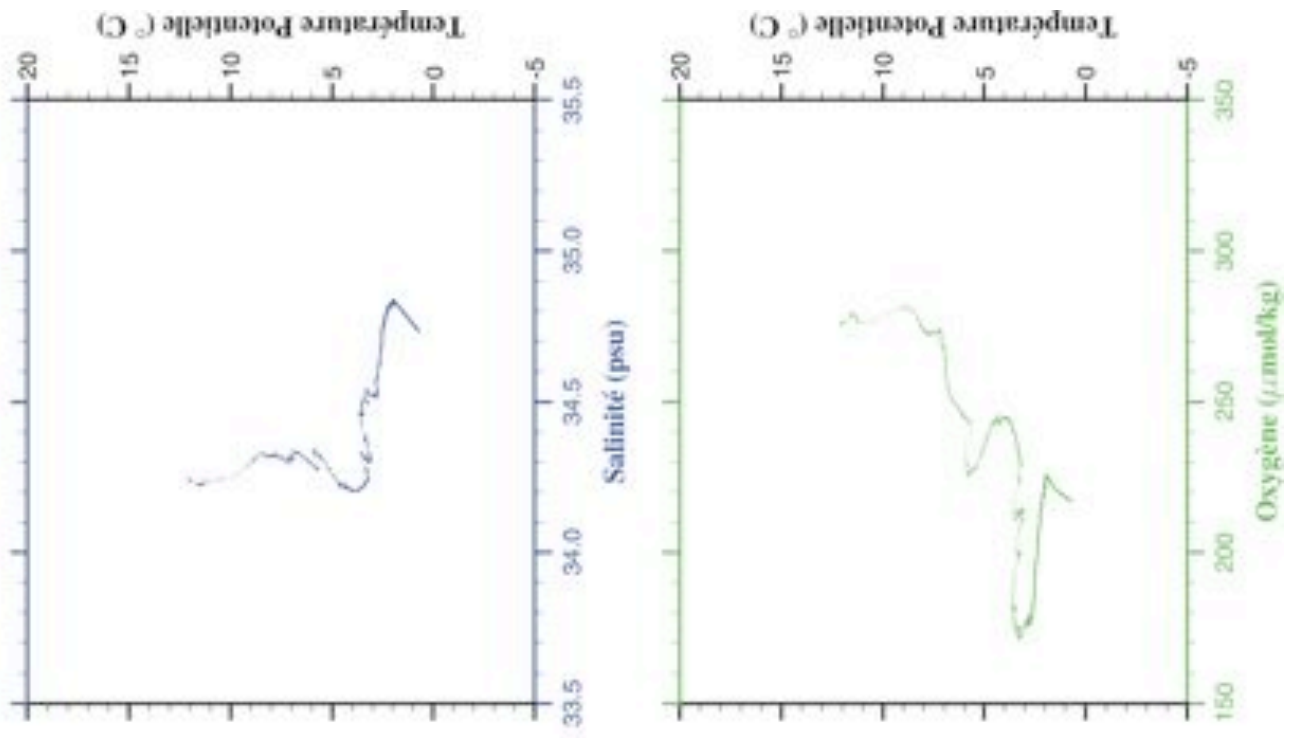
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| Station   : 40           Campagne  : GOODHOPE 2008 |
| Date      : 26-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4628       Organisme  : IFREMER |
| Position  : S 42 2.00   |
|           : E 9 16.00   |
|           :              |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	11.985	34.237	276.5	11.985	3050.0	2.115	34.829	224.6	1.879
10.0	12.063	34.241	275.6	12.062	3100.0	2.076	34.826	224.3	1.836
20.0	11.599	34.223	278.2	11.597	3150.0	2.022	34.820	223.8	1.779
30.0	11.532	34.224	279.2	11.529	3200.0	1.979	34.816	223.0	1.731
40.0	11.470	34.224	279.0	11.465	3250.0	1.923	34.812	222.5	1.671
50.0	11.346	34.228	278.2	11.339	3300.0	1.886	34.809	222.1	1.630
100.0	8.466	34.327	279.7	8.456	3350.0	1.842	34.805	221.9	1.582
150.0	7.910	34.321	273.0	7.895	3400.0	1.805	34.801	221.3	1.541
200.0	7.457	34.315	272.7	7.438	3450.0	1.744	34.796	220.9	1.476
250.0	7.105	34.315	267.9	7.082	3500.0	1.690	34.791	220.5	1.419
300.0	6.861	34.332	256.3	6.834	3550.0	1.610	34.784	220.0	1.335
350.0	6.187	34.301	247.0	6.156	3600.0	1.546	34.779	219.7	1.268
400.0	5.770	34.296	239.8	5.737	3650.0	1.501	34.775	219.6	1.219
450.0	5.577	34.314	227.7	5.539	3700.0	1.428	34.769	219.1	1.143
500.0	4.923	34.250	238.5	4.884	3750.0	1.377	34.764	218.7	1.088
550.0	4.380	34.210	245.1	4.339	3800.0	1.317	34.759	218.5	1.024
600.0	4.151	34.208	243.9	4.107	3850.0	1.274	34.755	218.3	0.977
650.0	3.894	34.203	244.5	3.847	3900.0	1.229	34.751	218.1	0.928
700.0	3.684	34.211	241.4	3.634	3950.0	1.195	34.748	217.9	0.890
750.0	3.457	34.223	236.8	3.405	4000.0	1.182	34.746	217.8	0.871
800.0	3.332	34.236	232.1	3.278	4050.0	1.164	34.744	217.7	0.849
850.0	3.329	34.275	223.1	3.270	4100.0	1.144	34.742	217.6	0.824
900.0	3.328	34.313	213.1	3.265	4150.0	1.138	34.741	217.6	0.813
950.0	3.361	34.353	208.7	3.294	4200.0	1.129	34.740	217.5	0.798
1000.0	3.605	34.426	191.4	3.532	4250.0	1.119	34.739	217.5	0.784
1050.0	3.579	34.472	180.9	3.503	4300.0	1.111	34.737	217.5	0.770
1100.0	3.492	34.513	173.7	3.413	4350.0	1.108	34.737	217.4	0.762
1150.0	3.372	34.537	171.4	3.290	4400.0	1.105	34.736	217.4	0.753
1200.0	2.994	34.523	177.0	2.911	4450.0	1.099	34.735	217.4	0.742
1250.0	2.861	34.532	178.6	2.775	4500.0	1.096	34.735	217.5	0.733
1300.0	2.926	34.571	175.5	2.836	4550.0	1.097	34.734	217.4	0.728
1350.0	2.856	34.584	176.5	2.762	4600.0	1.100	34.734	217.4	0.726
1400.0	2.808	34.614	177.6	2.710	4650.0	1.100	34.734	217.4	0.720
1450.0	2.762	34.630	178.9	2.661	4668.0	1.101	34.733	217.2	0.719
1500.0	2.717	34.639	180.7	2.612					
1550.0	2.732	34.664	182.2	2.623					
1600.0	2.690	34.679	183.7	2.578					
1650.0	2.661	34.697	186.2	2.545					
1700.0	2.660	34.716	188.6	2.540					
1750.0	2.664	34.732	191.7	2.539					
1800.0	2.627	34.738	193.1	2.498					
1850.0	2.604	34.746	194.8	2.471					
1900.0	2.606	34.757	196.7	2.469					
1950.0	2.551	34.766	198.9	2.410					
2000.0	2.523	34.776	201.7	2.378					
2050.0	2.515	34.783	204.2	2.366					
2100.0	2.499	34.790	206.1	2.346					
2150.0	2.475	34.795	207.8	2.318					
2200.0	2.441	34.798	209.0	2.279					
2250.0	2.413	34.802	210.5	2.247					
2300.0	2.397	34.806	212.1	2.227					
2350.0	2.383	34.809	213.8	2.209					
2400.0	2.390	34.818	215.8	2.211					
2450.0	2.347	34.815	215.9	2.164					
2500.0	2.323	34.818	217.2	2.136					
2550.0	2.304	34.821	218.7	2.112					
2600.0	2.279	34.821	219.1	2.084					
2650.0	2.247	34.819	218.9	2.047					
2700.0	2.237	34.821	219.5	2.033					
2750.0	2.233	34.825	221.8	2.024					
2800.0	2.196	34.822	222.3	1.983					
2850.0	2.211	34.831	223.8	1.992					
2900.0	2.188	34.832	224.3	1.965					
2950.0	2.181	34.835	225.4	1.953					
3000.0	2.140	34.831	224.9	1.908					



**STATION 40**

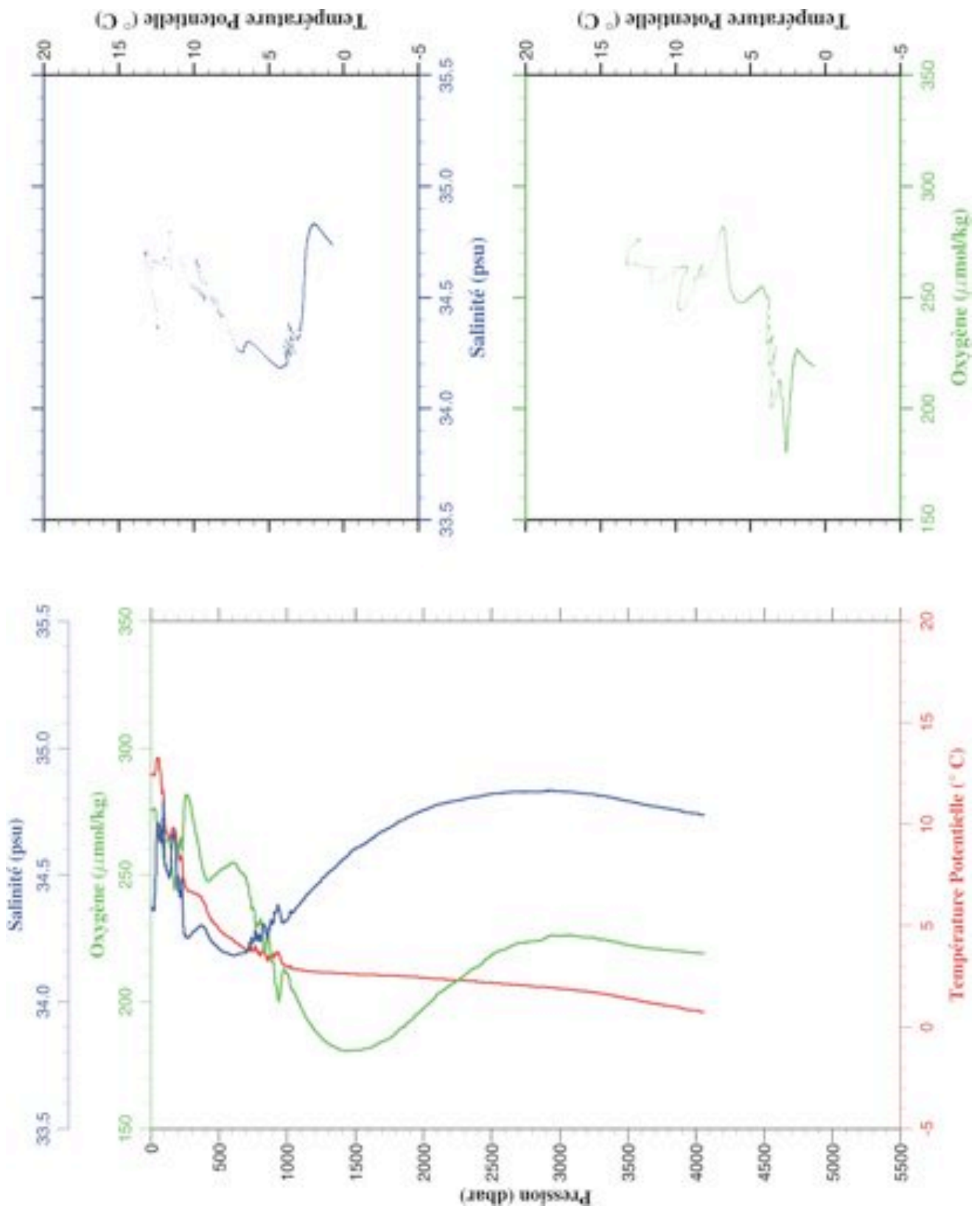


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| Station   : 41           Campagne  : GOODHOPE 2008 |
| Date     : 26-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4070      Organisme  : IFREMER |
| Position  : S 42 28.17 |
|           : E 8 55.69  |
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PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.466	34.373	275.5	12.466	3050.0	2.111	34.828	226.1	1.875
10.0	12.443	34.367	275.6	12.442	3100.0	2.076	34.825	226.2	1.835
20.0	12.419	34.361	276.0	12.416	3150.0	2.039	34.822	225.6	1.795
30.0	12.499	34.437	276.1	12.495	3200.0	2.007	34.820	225.4	1.759
40.0	13.048	34.613	271.7	13.043	3250.0	1.968	34.817	225.4	1.715
50.0	13.257	34.696	266.1	13.250	3300.0	1.924	34.813	224.5	1.668
100.0	10.095	34.544	261.9	10.084	3350.0	1.870	34.808	224.3	1.609
150.0	9.611	34.590	256.8	9.594	3400.0	1.816	34.803	223.7	1.552
200.0	8.694	34.489	259.0	8.673	3450.0	1.742	34.796	223.0	1.475
250.0	7.009	34.260	280.1	6.986	3500.0	1.681	34.791	222.5	1.410
300.0	6.673	34.271	274.4	6.646	3550.0	1.628	34.786	222.0	1.353
350.0	6.529	34.295	261.2	6.498	3600.0	1.565	34.780	221.6	1.287
400.0	6.057	34.288	248.9	6.022	3650.0	1.502	34.774	221.2	1.219
450.0	5.294	34.237	248.9	5.258	3700.0	1.460	34.771	220.9	1.174
500.0	4.861	34.208	251.6	4.822	3750.0	1.395	34.765	220.6	1.105
550.0	4.557	34.193	253.1	4.516	3800.0	1.351	34.761	220.4	1.057
600.0	4.372	34.183	254.8	4.327	3850.0	1.303	34.757	220.1	1.005
650.0	4.095	34.190	251.8	4.048	3900.0	1.223	34.750	219.9	0.922
700.0	3.850	34.201	248.4	3.799	3950.0	1.171	34.746	219.6	0.866
750.0	3.839	34.241	237.0	3.784	4000.0	1.137	34.742	219.4	0.828
800.0	3.650	34.249	231.3	3.593	4050.0	1.089	34.738	219.3	0.776
850.0	3.525	34.271	224.0	3.465	4058.0	1.087	34.738	219.1	0.773
900.0	3.476	34.311	215.5	3.413					
950.0	3.459	34.343	204.2	3.391					
1000.0	3.040	34.322	211.2	2.972					
1050.0	2.947	34.359	203.9	2.876					
1100.0	2.902	34.391	198.0	2.827					
1150.0	2.846	34.426	192.7	2.768					
1200.0	2.805	34.452	189.0	2.724					
1250.0	2.792	34.478	186.1	2.707					
1300.0	2.776	34.509	183.5	2.687					
1350.0	2.767	34.528	182.2	2.674					
1400.0	2.753	34.557	181.0	2.656					
1450.0	2.737	34.578	180.7	2.636					
1500.0	2.717	34.603	180.8	2.613					
1550.0	2.708	34.619	181.1	2.600					
1600.0	2.700	34.634	181.7	2.587					
1650.0	2.693	34.657	183.0	2.576					
1700.0	2.683	34.671	184.5	2.562					
1750.0	2.674	34.685	185.6	2.549					
1800.0	2.668	34.704	187.9	2.538					
1850.0	2.649	34.716	190.0	2.515					
1900.0	2.629	34.731	192.4	2.491					
1950.0	2.615	34.744	195.1	2.473					
2000.0	2.593	34.755	197.5	2.448					
2050.0	2.560	34.764	199.7	2.410					
2100.0	2.542	34.776	203.0	2.388					
2150.0	2.521	34.783	204.9	2.363					
2200.0	2.499	34.789	206.7	2.336					
2250.0	2.474	34.793	208.5	2.308					
2300.0	2.470	34.799	210.5	2.299					
2350.0	2.447	34.805	212.7	2.272					
2400.0	2.432	34.807	213.8	2.252					
2450.0	2.390	34.815	216.3	2.206					
2500.0	2.374	34.819	218.5	2.186					
2550.0	2.350	34.822	219.9	2.158					
2600.0	2.330	34.824	220.9	2.133					
2650.0	2.309	34.826	222.2	2.109					
2700.0	2.285	34.828	223.1	2.080					
2750.0	2.255	34.827	223.4	2.045					
2800.0	2.235	34.828	223.9	2.021					
2850.0	2.203	34.827	224.2	1.985					
2900.0	2.199	34.832	225.4	1.976					
2950.0	2.167	34.832	226.3	1.940					
3000.0	2.130	34.829	226.1	1.899					



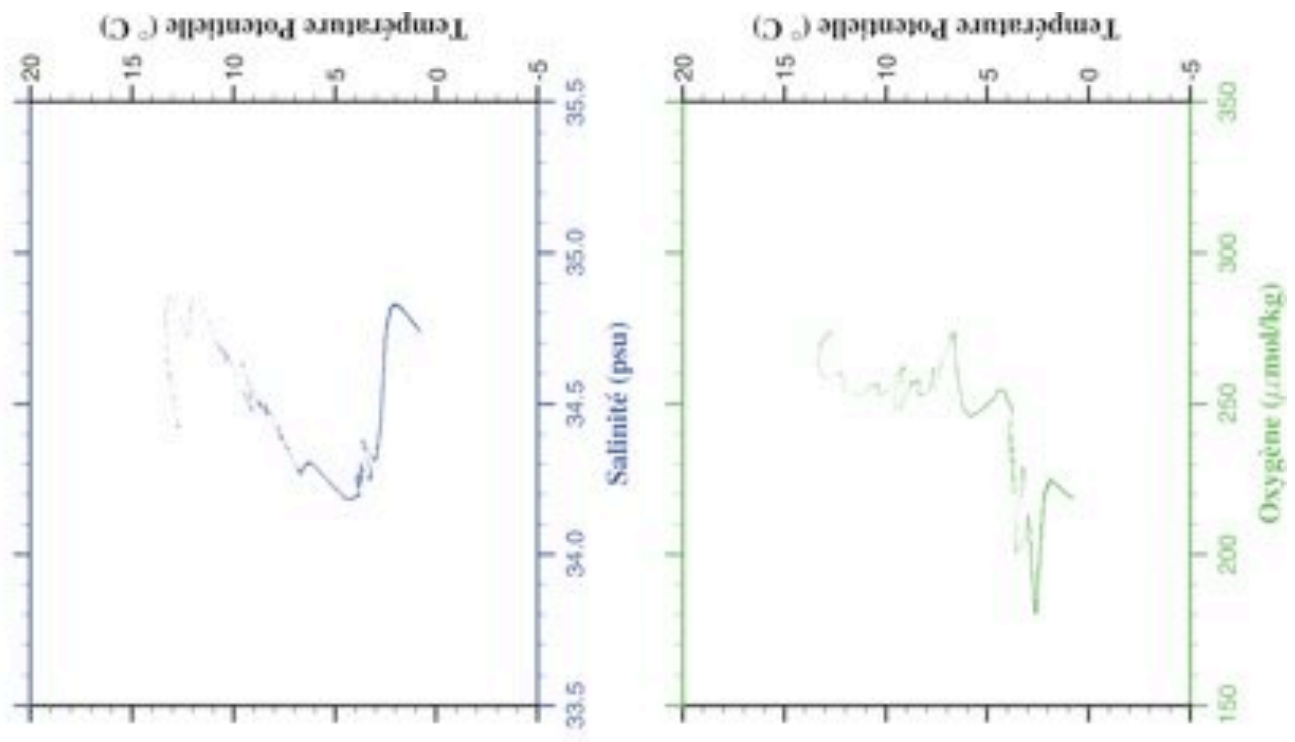
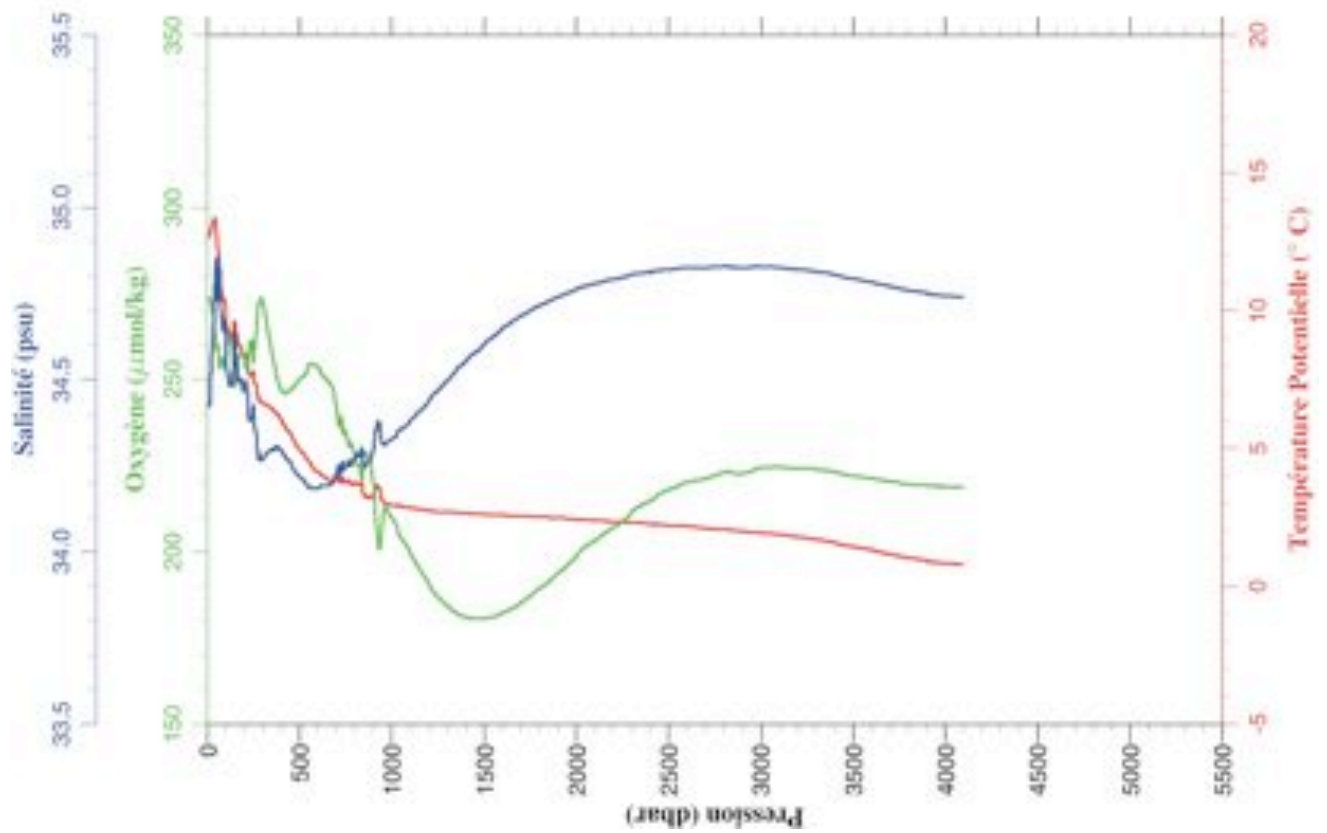
**STATION 41**

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| Station   : 42           Campagne  : GOODHOPE 2008 |
| Date     : 27-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4070      Organisme  : IFREMER |
| Position  : S 42 28.20 |
|           : E 8 55.84  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.723	34.422	273.7	12.723	3050.0	2.148	34.827	224.6	1.912
10.0	12.731	34.427	273.5	12.730	3100.0	2.121	34.825	224.6	1.880
20.0	12.954	34.521	272.3	12.951	3150.0	2.073	34.822	224.4	1.828
30.0	13.227	34.621	269.7	13.222	3200.0	2.042	34.820	224.2	1.793
40.0	13.345	34.773	264.1	13.339	3250.0	2.001	34.817	224.3	1.748
50.0	12.894	34.825	258.9	12.887	3300.0	1.952	34.813	223.9	1.695
100.0	10.071	34.625	253.8	10.059	3350.0	1.907	34.809	223.5	1.645
150.0	9.568	34.629	248.5	9.551	3400.0	1.844	34.804	223.2	1.579
200.0	8.372	34.471	256.7	8.351	3450.0	1.762	34.797	222.4	1.494
250.0	7.805	34.421	254.8	7.780	3500.0	1.699	34.792	222.0	1.427
300.0	6.668	34.270	272.5	6.641	3550.0	1.653	34.788	221.6	1.377
350.0	6.480	34.298	257.6	6.449	3600.0	1.594	34.782	221.3	1.314
400.0	6.058	34.293	246.9	6.023	3650.0	1.516	34.776	220.9	1.233
450.0	5.615	34.261	246.6	5.577	3700.0	1.451	34.770	220.4	1.165
500.0	5.014	34.218	250.1	4.975	3750.0	1.382	34.764	220.0	1.092
550.0	4.552	34.187	254.3	4.510	3800.0	1.309	34.758	219.7	1.016
600.0	4.187	34.184	253.7	4.143	3850.0	1.279	34.755	219.4	0.981
650.0	3.938	34.192	249.8	3.892	3900.0	1.233	34.751	219.3	0.932
700.0	3.947	34.228	242.1	3.896	3950.0	1.175	34.746	219.0	0.870
750.0	3.837	34.250	234.6	3.783	4000.0	1.147	34.743	218.9	0.838
800.0	3.798	34.274	227.5	3.741	4050.0	1.127	34.741	218.7	0.812
850.0	3.353	34.246	228.3	3.294	4094.0	1.128	34.741	218.7	0.809
900.0	3.389	34.300	219.9	3.326					
950.0	3.140	34.313	209.6	3.075					
1000.0	3.012	34.328	209.8	2.945					
1050.0	2.966	34.355	203.8	2.895					
1100.0	2.919	34.383	199.5	2.844					
1150.0	2.875	34.407	195.0	2.797					
1200.0	2.824	34.438	190.8	2.742					
1250.0	2.788	34.468	186.9	2.703					
1300.0	2.786	34.496	184.2	2.697					
1350.0	2.766	34.525	182.2	2.674					
1400.0	2.750	34.552	181.0	2.653					
1450.0	2.730	34.576	180.5	2.630					
1500.0	2.714	34.603	180.6	2.609					
1550.0	2.702	34.624	181.1	2.593					
1600.0	2.687	34.650	182.3	2.574					
1650.0	2.679	34.667	183.4	2.562					
1700.0	2.669	34.685	185.2	2.548					
1750.0	2.661	34.699	187.1	2.536					
1800.0	2.645	34.716	189.4	2.516					
1850.0	2.634	34.726	191.2	2.500					
1900.0	2.620	34.740	193.8	2.482					
1950.0	2.600	34.750	196.1	2.458					
2000.0	2.576	34.762	198.7	2.430					
2050.0	2.560	34.771	201.5	2.410					
2100.0	2.541	34.778	203.3	2.387					
2150.0	2.526	34.785	205.3	2.367					
2200.0	2.509	34.790	207.2	2.346					
2250.0	2.498	34.796	208.8	2.331					
2300.0	2.478	34.805	211.6	2.307					
2350.0	2.468	34.809	213.3	2.292					
2400.0	2.437	34.812	214.9	2.257					
2450.0	2.425	34.817	216.8	2.241					
2500.0	2.403	34.820	218.1	2.215					
2550.0	2.387	34.822	219.0	2.194					
2600.0	2.370	34.824	220.2	2.173					
2650.0	2.343	34.825	220.8	2.141					
2700.0	2.313	34.825	221.3	2.107					
2750.0	2.285	34.827	222.2	2.075					
2800.0	2.279	34.829	223.0	2.064					
2850.0	2.253	34.827	222.8	2.034					
2900.0	2.210	34.824	222.7	1.987					
2950.0	2.194	34.827	223.4	1.967					
3000.0	2.171	34.828	224.5	1.939					

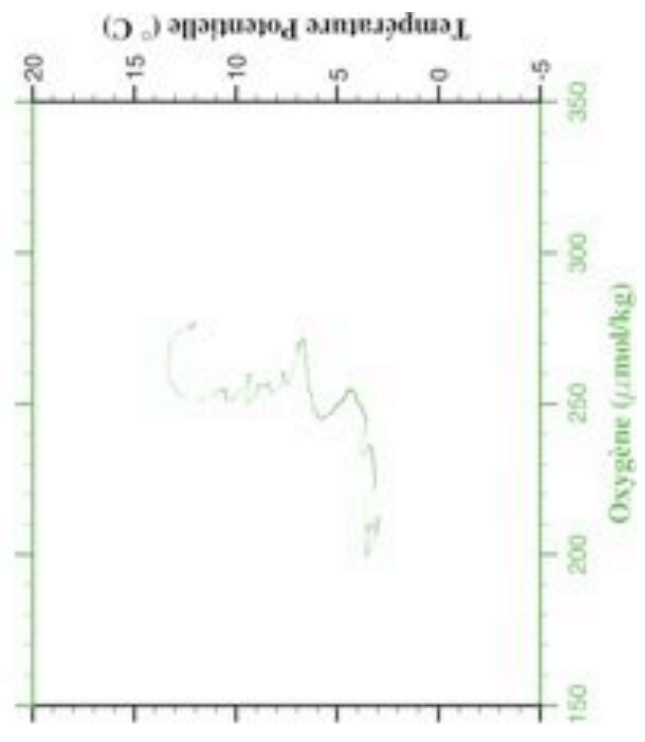
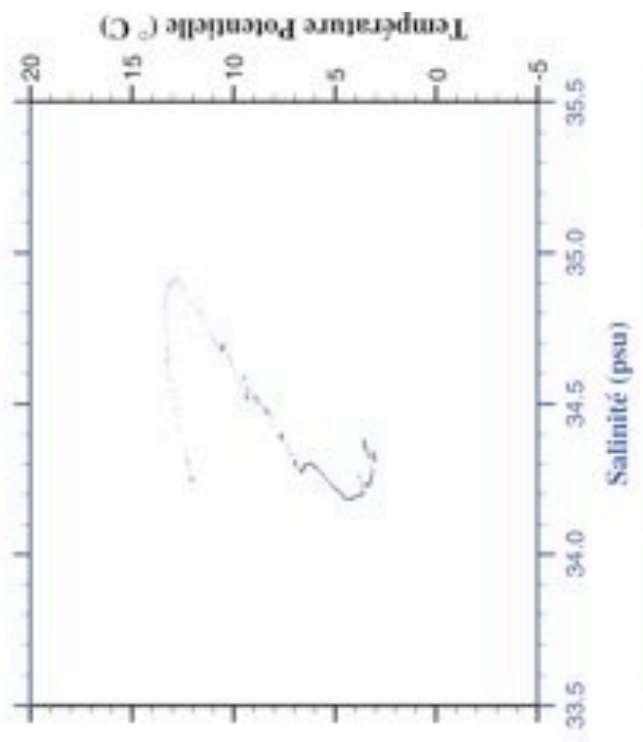
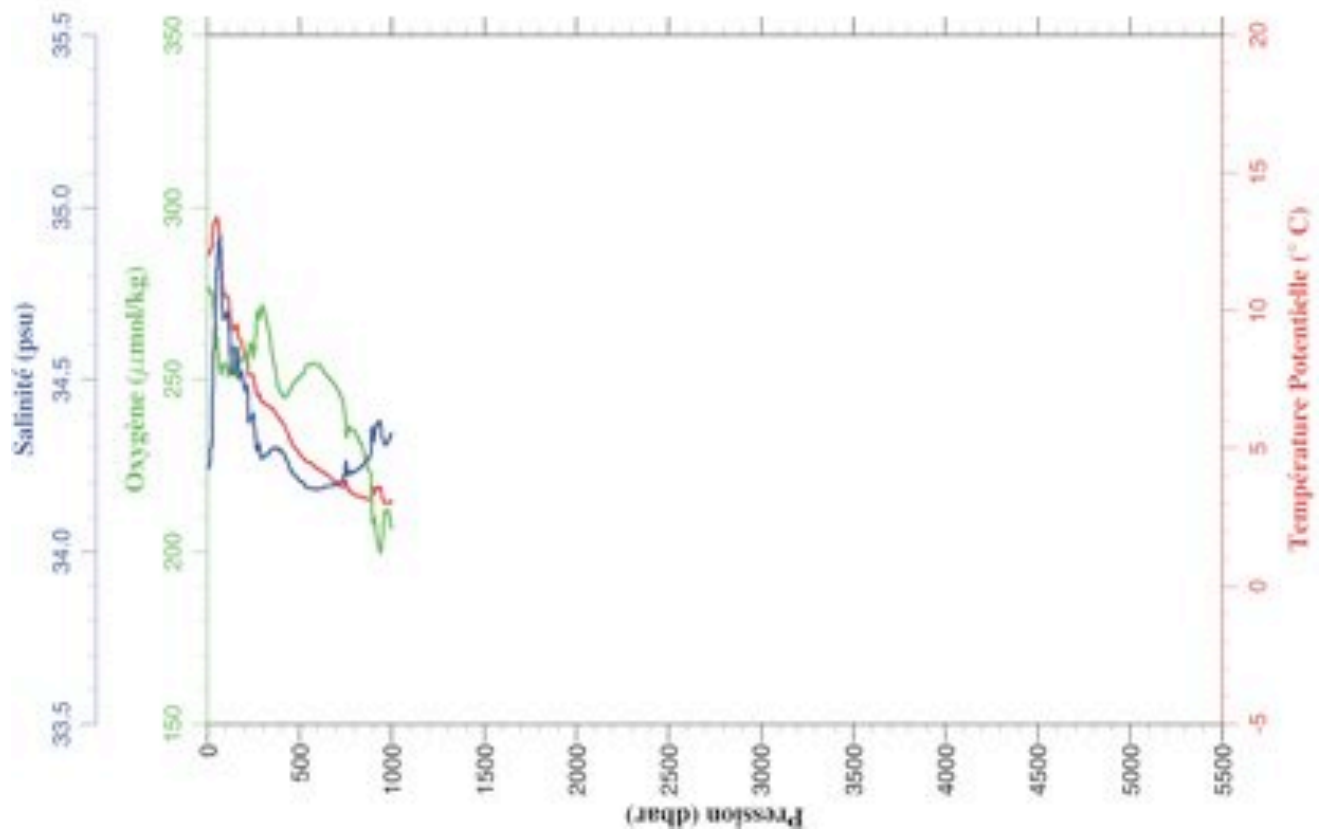


**STATION 42**

Station	: 43	Campagne	: GOODHOPE 2008
Date	: 27-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 4070	Organisme	: IFREMER
Position	: S 42 28.30		
	E 8 56.01		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.053	34.246	276.5	12.053
10.0	12.052	34.247	275.9	12.050
20.0	12.251	34.307	275.2	12.249
30.0	12.821	34.483	273.8	12.817
40.0	13.262	34.647	268.5	13.256
50.0	13.396	34.820	262.8	13.389
100.0	10.570	34.685	253.8	10.558
150.0	9.384	34.547	257.0	9.368
200.0	8.488	34.478	256.4	8.468
250.0	7.631	34.401	256.7	7.607
300.0	6.718	34.274	271.1	6.691
350.0	6.493	34.300	257.8	6.461
400.0	6.029	34.292	245.9	5.994
450.0	5.360	34.241	247.1	5.323
500.0	4.834	34.207	250.5	4.795
550.0	4.530	34.186	254.3	4.488
600.0	4.274	34.181	254.3	4.230
650.0	4.077	34.190	251.0	4.030
700.0	3.803	34.195	247.8	3.753
750.0	3.882	34.257	235.8	3.828
800.0	3.363	34.234	234.5	3.308
850.0	3.267	34.256	228.5	3.209
900.0	3.458	34.328	208.2	3.394
950.0	3.184	34.320	205.8	3.119
999.0	3.118	34.341	206.8	3.050





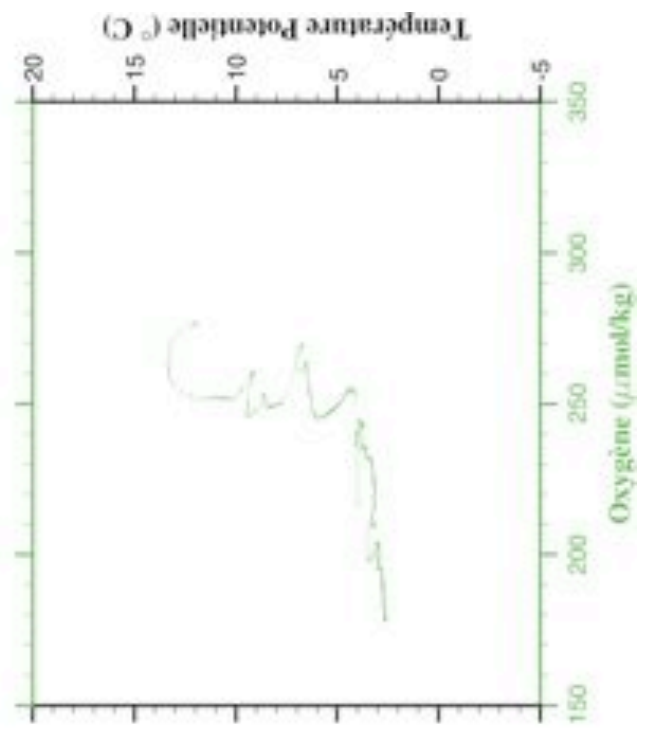
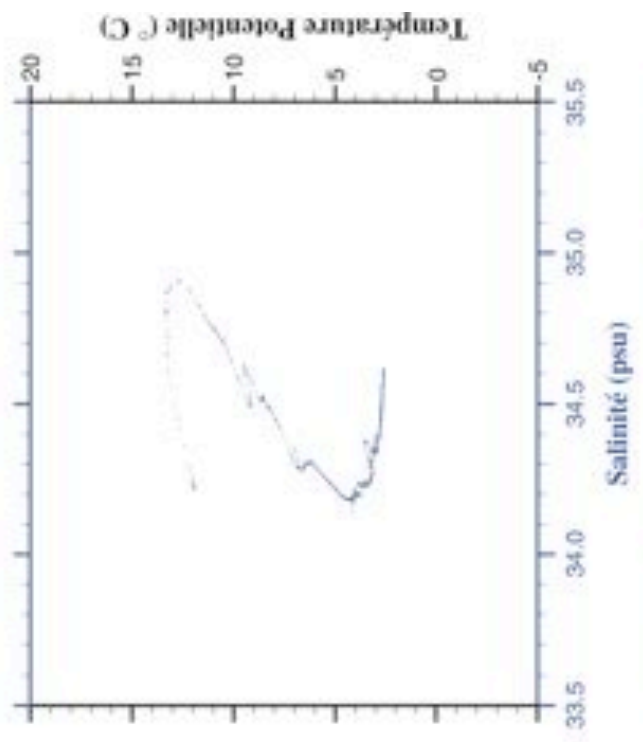
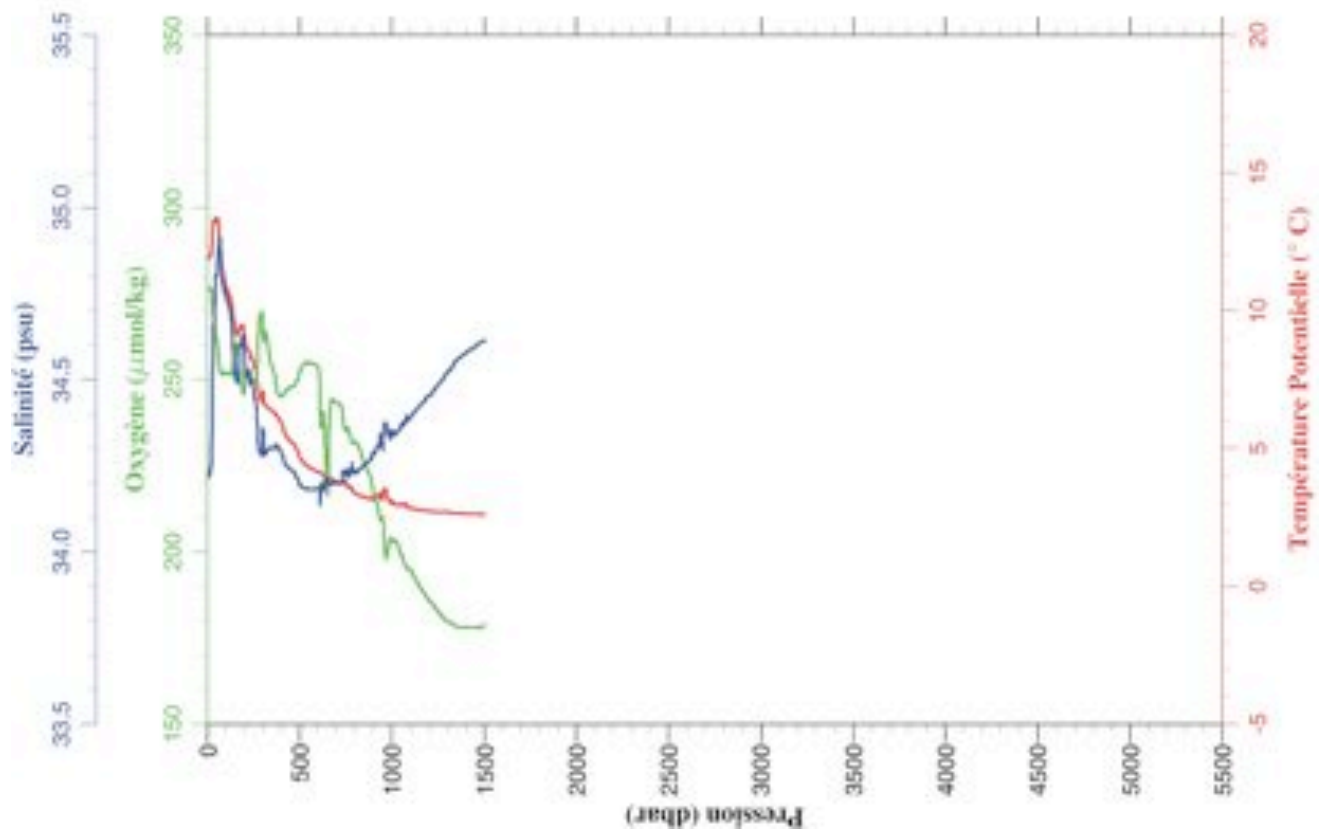
**STATION 43**

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| Station   : 44           Campagne  : GOODHOPE 2008 |
| Date      : 27-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 3846       Organisme  : IFREMER |
| Position  : S 42 28.12 |
|           : E 8 55.92  |
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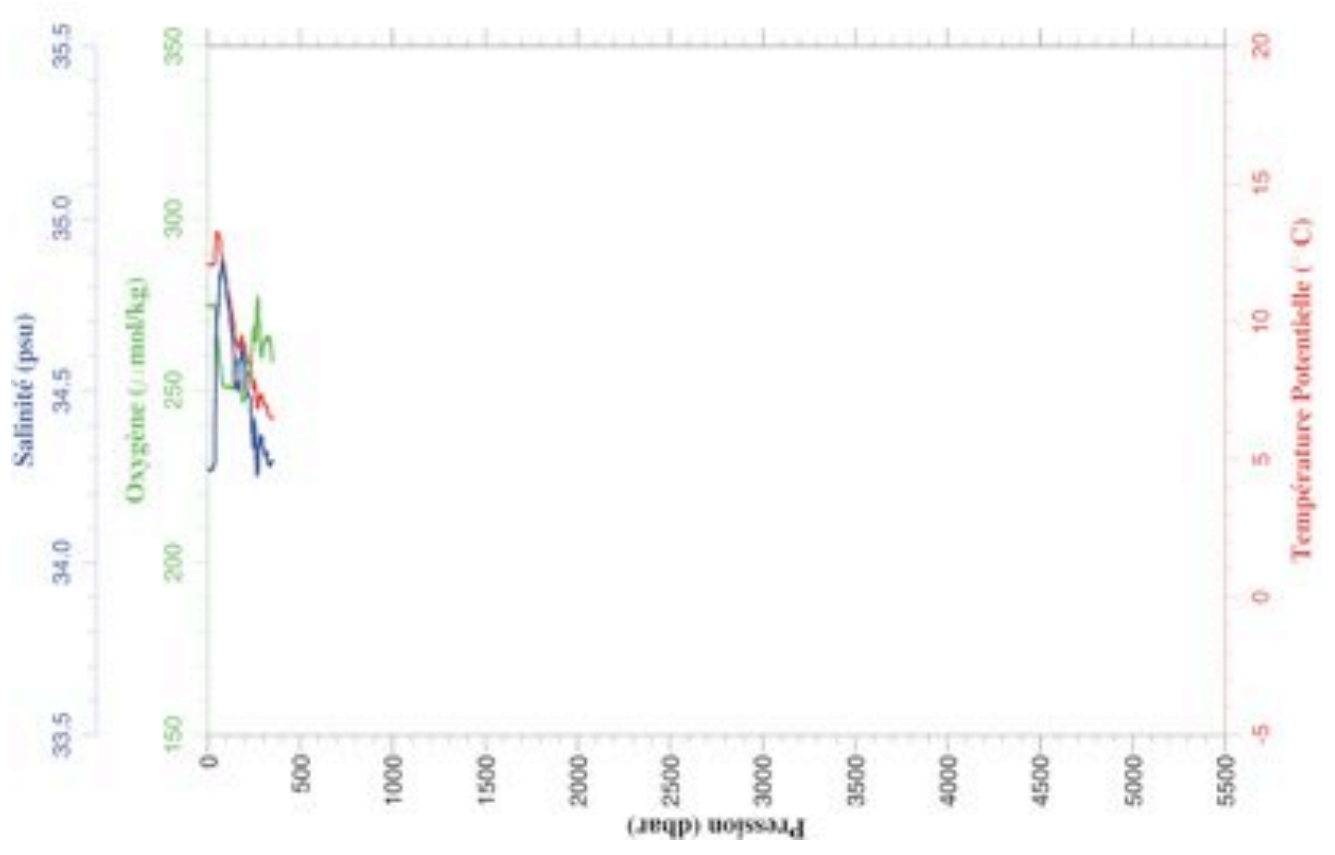
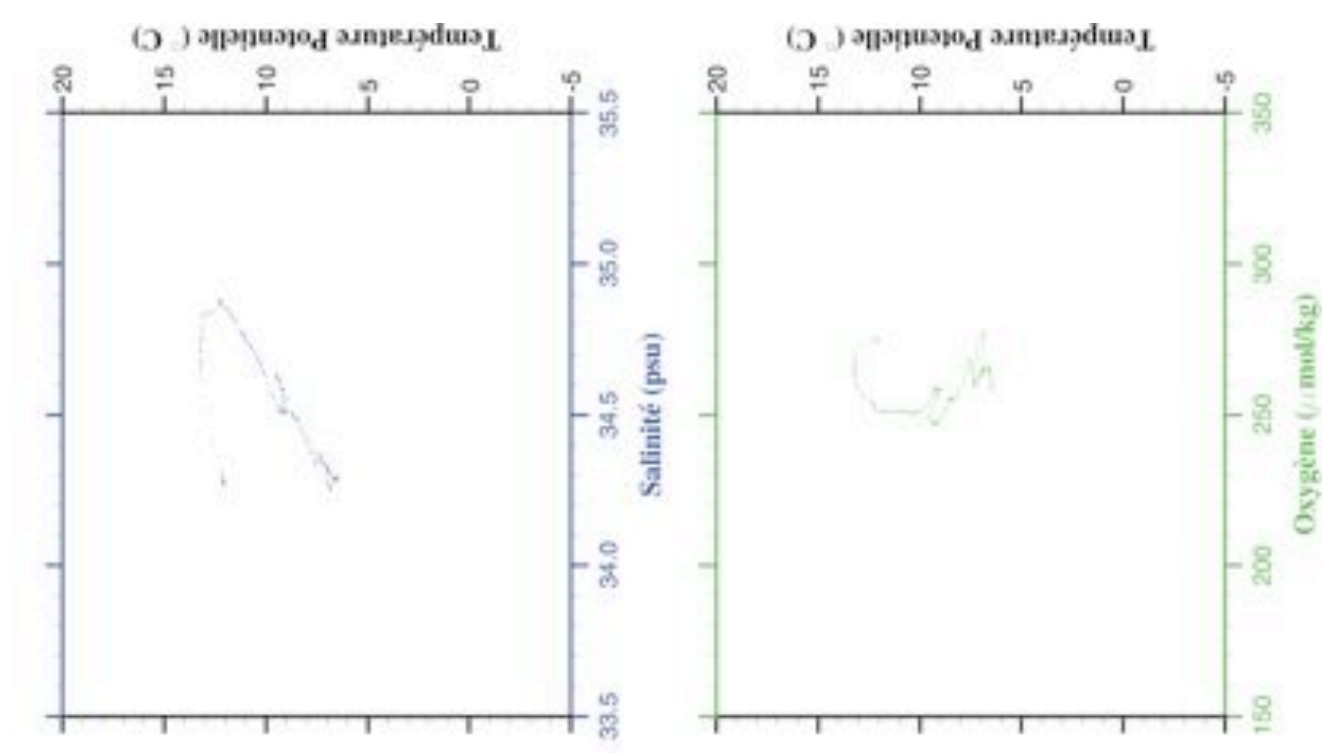
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	11.914	34.217	276.5	11.914
10.0	11.967	34.231	276.4	11.966
20.0	12.030	34.246	276.2	12.028
30.0	13.065	34.556	271.6	13.061
40.0	13.230	34.722	265.7	13.224
50.0	13.321	34.802	261.5	13.315
100.0	10.912	34.744	251.7	10.900
150.0	9.302	34.507	258.5	9.285
200.0	9.204	34.584	246.8	9.182
250.0	8.153	34.471	249.1	8.127
300.0	7.014	34.340	266.0	6.986
350.0	6.417	34.302	253.9	6.385
400.0	5.961	34.287	245.1	5.927
450.0	5.299	34.238	247.7	5.262
500.0	4.714	34.193	252.3	4.675
550.0	4.368	34.182	254.7	4.327
600.0	4.199	34.183	253.6	4.155
650.0	4.049	34.204	216.7	4.002
700.0	3.851	34.197	243.4	3.801
750.0	3.796	34.237	235.0	3.742
800.0	3.430	34.228	231.8	3.375
850.0	3.287	34.251	226.0	3.229
900.0	3.227	34.288	217.1	3.165
950.0	3.227	34.304	210.0	3.161
1000.0	3.082	34.335	203.8	3.014
1050.0	3.027	34.359	199.2	2.955
1100.0	2.910	34.390	195.1	2.836
1150.0	2.851	34.423	189.8	2.773
1200.0	2.802	34.454	185.9	2.721
1250.0	2.792	34.484	182.6	2.707
1300.0	2.769	34.520	179.8	2.680
1350.0	2.751	34.555	178.2	2.658
1400.0	2.730	34.578	177.9	2.633
1450.0	2.716	34.596	178.1	2.615
1500.0	2.707	34.612	178.4	2.602
1503.0	2.707	34.613	178.5	2.602



**STATION 44**

Station	: 45	Campagne	: GOODHOPE 2008
Date	: 28-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 4070	Organisme	: IFREMER
Position	: S 42 28.12		
	E 8 56.03		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.100	34.273	275.1	12.100
10.0	12.082	34.270	274.3	12.081
20.0	12.059	34.269	274.6	12.057
30.0	12.089	34.282	274.7	12.085
40.0	12.540	34.406	273.9	12.535
50.0	13.221	34.708	265.9	13.214
100.0	11.436	34.803	250.9	11.423
150.0	9.291	34.510	258.0	9.275
200.0	9.196	34.583	247.1	9.174
250.0	7.563	34.337	268.6	7.539
300.0	7.083	34.327	262.6	7.054
350.0	6.510	34.297	258.6	6.478
351.0	6.519	34.295	258.6	6.487



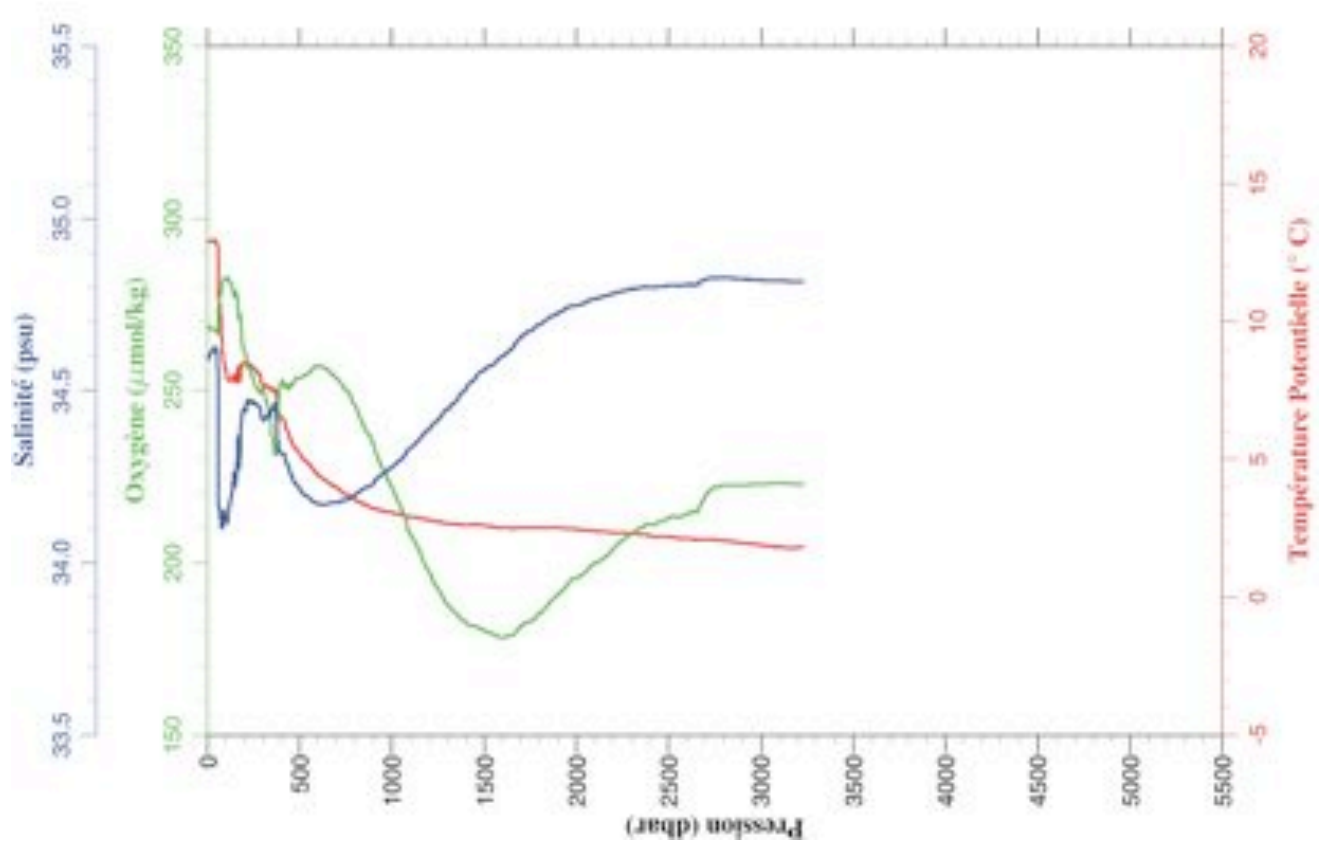
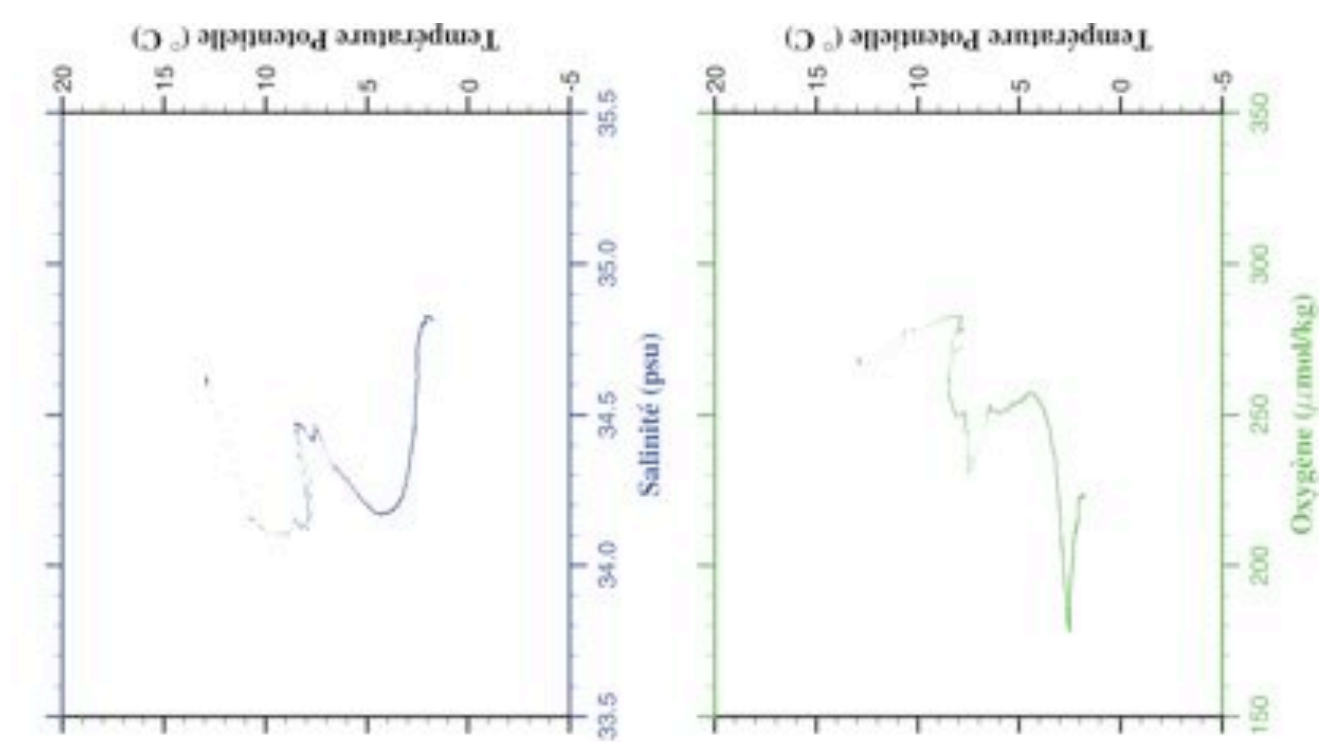
**STATION 45**

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| Station   : 46           Campagne  : GOODHOPE 2008 |
| Date      : 28-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 3220       Organisme  : IFREMER |
| Position  : S 42 53.61 |
|           : E 8 33.90  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	12.887	34.594	268.6	12.887	3050.0	2.088	34.820	223.1	1.853
10.0	12.892	34.596	268.1	12.890	3100.0	2.071	34.819	223.2	1.831
20.0	12.929	34.611	267.9	12.926	3150.0	2.035	34.816	223.1	1.791
30.0	12.940	34.615	267.8	12.935	3200.0	2.060	34.817	222.9	1.811
40.0	12.924	34.621	267.6	12.919	3226.0	2.055	34.817	222.8	1.803
50.0	12.856	34.607	267.3	12.849					
100.0	8.218	34.122	282.8	8.208					
150.0	7.845	34.228	277.7	7.830					
200.0	8.479	34.440	261.2	8.459					
250.0	8.343	34.465	253.1	8.317					
300.0	7.760	34.418	250.7	7.730					
350.0	7.566	34.449	236.4	7.532					
400.0	6.524	34.316	252.5	6.488					
450.0	5.763	34.258	251.7	5.725					
500.0	5.264	34.216	253.5	5.223					
550.0	4.879	34.189	255.1	4.836					
600.0	4.484	34.172	257.0	4.439					
650.0	4.228	34.171	256.1	4.180					
700.0	4.025	34.176	253.7	3.974					
750.0	3.784	34.182	250.1	3.730					
800.0	3.579	34.195	245.7	3.522					
850.0	3.440	34.216	239.4	3.381					
900.0	3.276	34.231	234.3	3.214					
950.0	3.205	34.257	227.2	3.139					
1000.0	3.144	34.275	222.0	3.075					
1050.0	3.070	34.300	216.0	2.998					
1100.0	2.984	34.334	208.3	2.909					
1150.0	2.949	34.358	203.4	2.871					
1200.0	2.892	34.386	197.6	2.809					
1250.0	2.814	34.415	192.4	2.729					
1300.0	2.763	34.446	187.8	2.675					
1350.0	2.737	34.471	185.1	2.644					
1400.0	2.729	34.505	182.9	2.633					
1450.0	2.745	34.535	181.5	2.644					
1500.0	2.707	34.558	180.4	2.603					
1550.0	2.665	34.575	179.3	2.557					
1600.0	2.631	34.600	178.3	2.519					
1650.0	2.615	34.621	178.9	2.499					
1700.0	2.657	34.658	181.8	2.536					
1750.0	2.634	34.673	183.0	2.509					
1800.0	2.643	34.692	185.4	2.514					
1850.0	2.653	34.711	188.1	2.519					
1900.0	2.649	34.725	190.8	2.511					
1950.0	2.627	34.739	193.6	2.485					
2000.0	2.613	34.747	195.6	2.467					
2050.0	2.600	34.755	197.2	2.449					
2100.0	2.555	34.766	199.9	2.401					
2150.0	2.524	34.773	201.5	2.366					
2200.0	2.510	34.781	204.0	2.347					
2250.0	2.497	34.789	206.6	2.330					
2300.0	2.486	34.795	208.7	2.315					
2350.0	2.457	34.798	210.2	2.282					
2400.0	2.416	34.798	211.0	2.237					
2450.0	2.387	34.801	212.0	2.204					
2500.0	2.387	34.805	213.0	2.199					
2550.0	2.342	34.804	213.3	2.150					
2600.0	2.328	34.807	214.4	2.131					
2650.0	2.279	34.805	214.6	2.079					
2700.0	2.307	34.822	219.4	2.101					
2750.0	2.296	34.826	221.9	2.086					
2800.0	2.266	34.827	222.5	2.051					
2850.0	2.239	34.826	222.6	2.020					
2900.0	2.190	34.823	222.5	1.967					
2950.0	2.166	34.822	222.7	1.939					
3000.0	2.136	34.820	222.7	1.905					

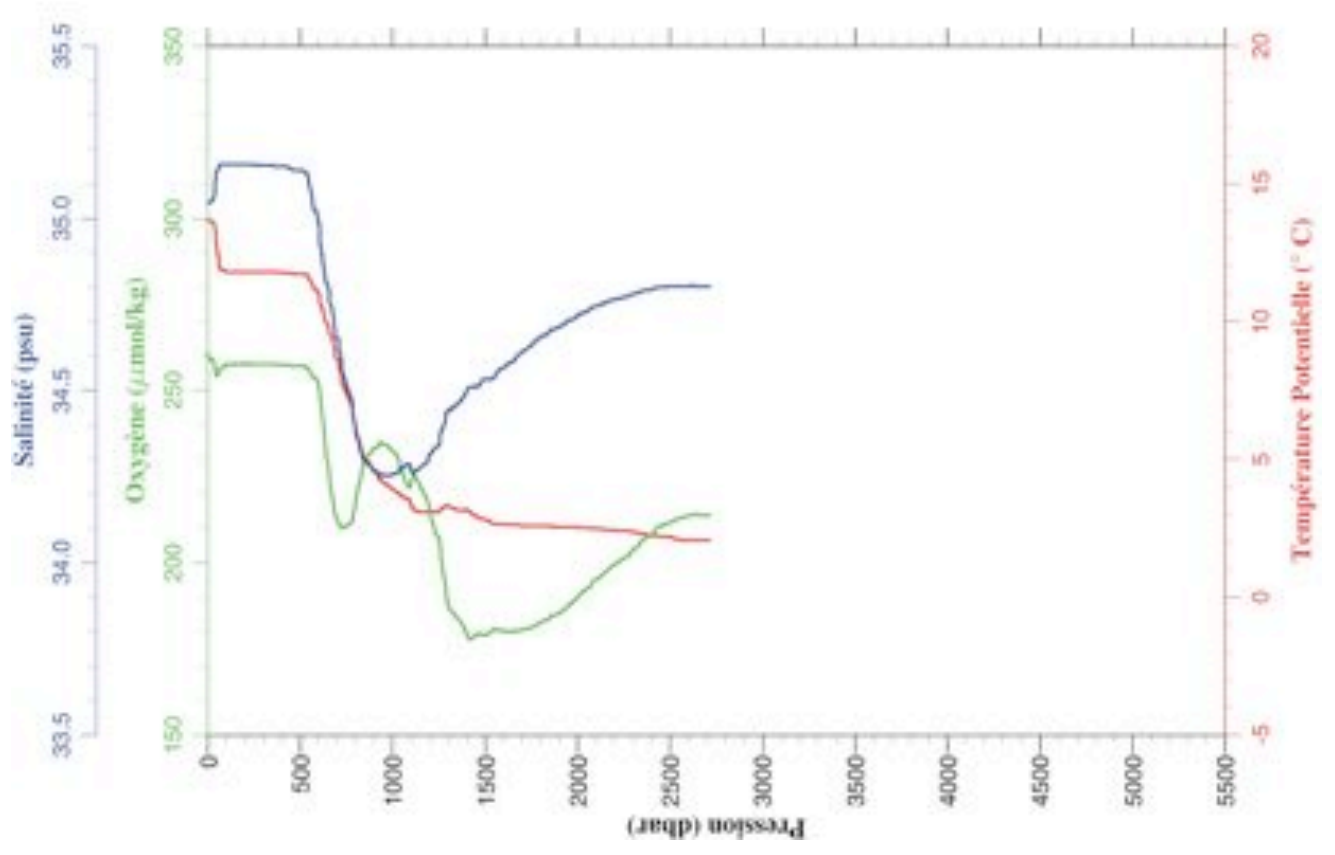
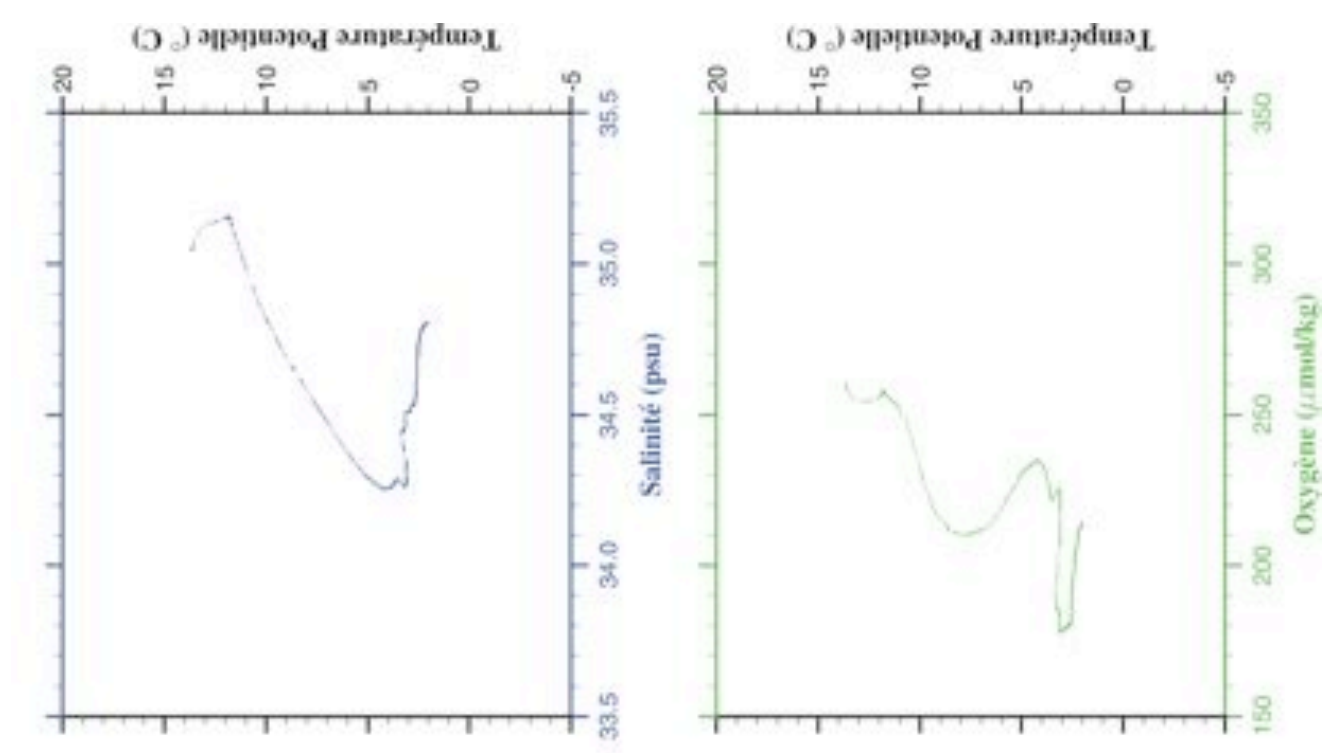


**STATION 46**

Station	: 47	Campagne	: GOODHOPE 2008
Date	: 28-02-08	Navire	: R/V Marion Dufresne
Profondeur	: 2700	Organisme	: IFREMER
Position	: S 43 19.48		
	E 8 14.18		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	13.657	35.045	260.9	13.656
10.0	13.657	35.046	258.9	13.655
20.0	13.640	35.049	259.0	13.637
30.0	13.613	35.056	258.8	13.609
40.0	13.312	35.104	255.6	13.307
50.0	12.550	35.137	254.4	12.543
100.0	11.826	35.156	257.6	11.814
150.0	11.830	35.156	257.8	11.811
200.0	11.835	35.156	257.7	11.809
250.0	11.838	35.155	257.6	11.805
300.0	11.840	35.154	257.7	11.801
350.0	11.842	35.153	257.7	11.796
400.0	11.835	35.149	257.6	11.783
450.0	11.810	35.142	257.2	11.752
500.0	11.805	35.139	257.1	11.739
550.0	11.611	35.096	255.7	11.539
600.0	11.064	34.986	251.5	10.988
650.0	9.962	34.804	228.3	9.885
700.0	8.704	34.651	212.4	8.627
750.0	7.479	34.517	210.8	7.404
800.0	6.082	34.374	218.2	6.010
850.0	5.123	34.295	229.9	5.052
900.0	4.622	34.268	233.2	4.551
950.0	4.227	34.255	234.3	4.154
1000.0	3.987	34.256	232.3	3.912
1050.0	3.708	34.274	226.0	3.631
1100.0	3.445	34.272	223.2	3.367
1150.0	3.176	34.277	221.9	3.095
1200.0	3.202	34.312	214.5	3.118
1250.0	3.173	34.341	207.1	3.085
1300.0	3.407	34.441	187.4	3.311
1350.0	3.266	34.462	183.9	3.168
1400.0	3.272	34.498	179.2	3.170
1450.0	3.037	34.509	179.2	2.933
1500.0	2.916	34.532	179.1	2.809
1550.0	2.780	34.538	180.8	2.671
1600.0	2.761	34.568	180.2	2.648
1650.0	2.748	34.585	180.2	2.631
1700.0	2.724	34.614	180.5	2.602
1750.0	2.716	34.631	181.2	2.590
1800.0	2.712	34.657	182.8	2.582
1850.0	2.707	34.673	184.2	2.573
1900.0	2.701	34.683	185.4	2.563
1950.0	2.695	34.703	187.7	2.552
2000.0	2.680	34.719	190.1	2.533
2050.0	2.666	34.730	192.5	2.515
2100.0	2.639	34.745	195.1	2.484
2150.0	2.615	34.755	197.3	2.456
2200.0	2.598	34.763	199.4	2.434
2250.0	2.577	34.770	201.4	2.409
2300.0	2.536	34.780	203.9	2.364
2350.0	2.472	34.789	206.6	2.296
2400.0	2.422	34.793	208.0	2.243
2450.0	2.385	34.800	210.9	2.202
2500.0	2.372	34.801	211.7	2.184
2550.0	2.281	34.802	212.8	2.090
2600.0	2.259	34.802	213.5	2.064
2650.0	2.253	34.803	214.0	2.054
2700.0	2.255	34.802	213.7	2.050
2712.0	2.250	34.803	214.0	2.045





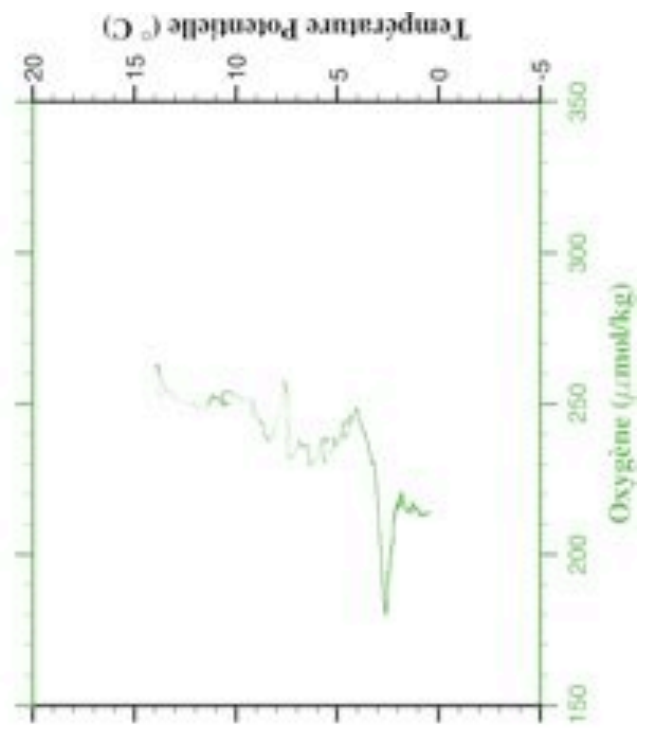
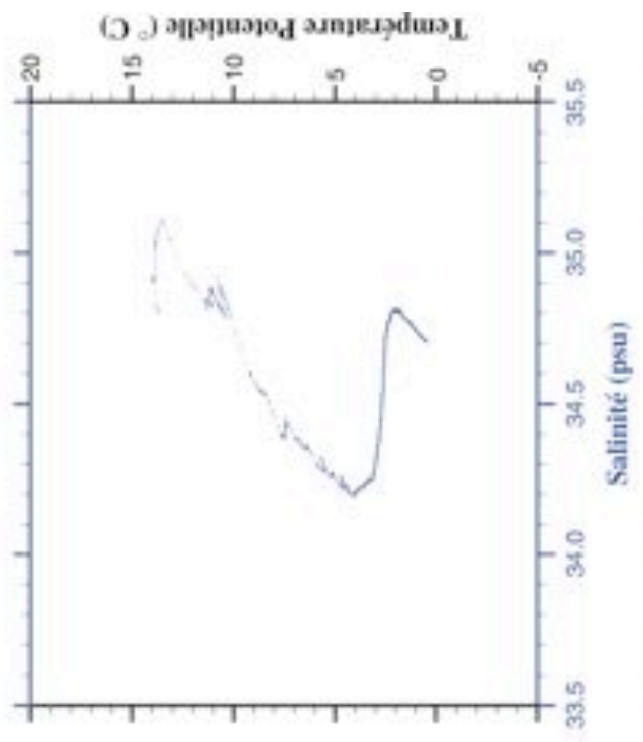
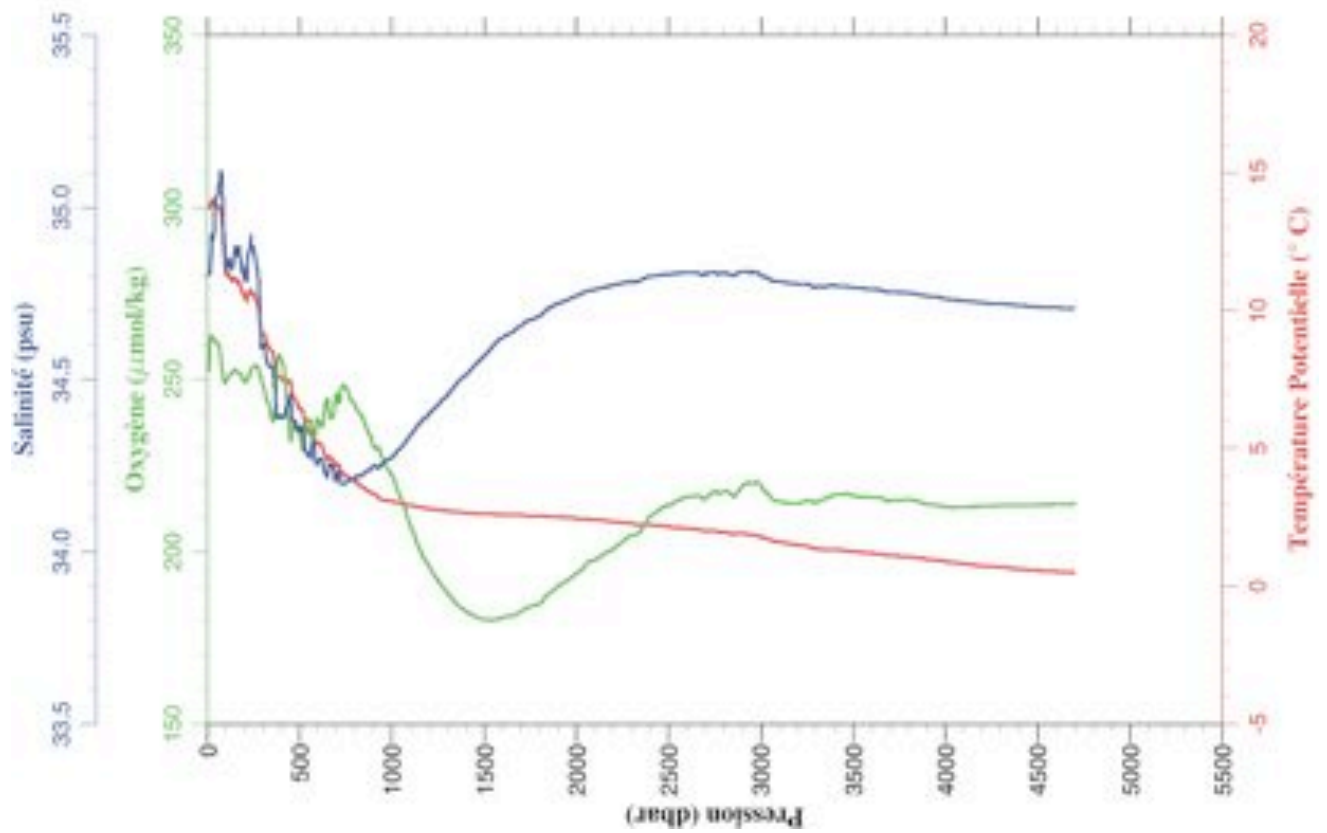
**STATION 47**

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| Station   : 48           Campagne  : GOODHOPE 2008
| Date     : 29-02-08    Navire    : R/V Marion Dufresne
| Profondeur : 4678      Organisme : IFREMER
| Position  : S 43 41.05
|           : E 7 57.89
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	13.721	34.806	252.8	13.721	3050.0	1.911	34.789	216.1	1.679
10.0	13.727	34.806	256.8	13.725	3100.0	1.843	34.785	214.6	1.608
20.0	13.892	34.868	262.7	13.889	3150.0	1.783	34.779	214.2	1.544
30.0	13.905	34.906	262.2	13.901	3200.0	1.745	34.777	214.2	1.503
40.0	13.846	34.988	260.9	13.840	3250.0	1.698	34.777	214.8	1.451
50.0	13.838	35.029	260.4	13.831	3300.0	1.595	34.769	214.1	1.346
100.0	11.351	34.815	249.4	11.339	3350.0	1.572	34.770	215.4	1.318
150.0	11.211	34.882	252.9	11.193	3400.0	1.579	34.772	216.6	1.321
200.0	10.494	34.792	249.9	10.470	3450.0	1.566	34.772	216.8	1.303
250.0	10.654	34.883	253.8	10.624	3500.0	1.525	34.767	216.3	1.258
300.0	9.190	34.598	248.4	9.157	3550.0	1.503	34.765	215.9	1.231
350.0	8.535	34.535	238.6	8.498	3600.0	1.476	34.762	215.9	1.199
400.0	7.626	34.394	255.6	7.586	3650.0	1.445	34.758	215.8	1.164
450.0	7.472	34.450	232.1	7.428	3700.0	1.401	34.754	214.8	1.116
500.0	6.450	34.351	234.9	6.405	3750.0	1.381	34.752	215.0	1.091
550.0	5.633	34.283	238.1	5.586	3800.0	1.360	34.751	215.2	1.066
600.0	5.242	34.260	238.5	5.193	3850.0	1.330	34.747	214.7	1.031
650.0	4.621	34.215	244.5	4.570	3900.0	1.282	34.742	213.9	0.980
700.0	4.426	34.215	245.9	4.373	3950.0	1.260	34.739	213.5	0.952
750.0	4.044	34.200	247.8	3.988	4000.0	1.210	34.734	213.0	0.898
800.0	3.874	34.213	243.0	3.816	4050.0	1.182	34.732	212.8	0.866
850.0	3.597	34.228	237.6	3.536	4100.0	1.142	34.729	213.0	0.822
900.0	3.414	34.249	230.7	3.351	4150.0	1.101	34.726	213.1	0.777
950.0	3.197	34.257	227.1	3.132	4200.0	1.060	34.723	213.2	0.731
1000.0	3.145	34.275	222.1	3.076	4250.0	1.045	34.721	213.2	0.711
1050.0	3.077	34.303	215.4	3.005	4300.0	1.032	34.720	213.4	0.693
1100.0	3.007	34.339	207.4	2.931	4350.0	1.001	34.717	213.4	0.658
1150.0	2.948	34.372	200.8	2.869	4400.0	0.970	34.715	213.5	0.623
1200.0	2.888	34.397	196.0	2.806	4450.0	0.945	34.713	213.5	0.593
1250.0	2.851	34.426	191.7	2.766	4500.0	0.927	34.711	213.6	0.570
1300.0	2.801	34.453	188.2	2.711	4550.0	0.912	34.709	213.7	0.549
1350.0	2.798	34.488	184.9	2.705	4600.0	0.901	34.708	213.7	0.533
1400.0	2.768	34.513	182.8	2.671	4650.0	0.882	34.707	213.9	0.509
1450.0	2.741	34.542	181.3	2.640	4699.0	0.871	34.706	213.8	0.493
1500.0	2.728	34.568	180.3	2.623					
1550.0	2.724	34.597	180.3	2.615					
1600.0	2.712	34.623	180.9	2.599					
1650.0	2.705	34.636	181.4	2.588					
1700.0	2.699	34.656	182.6	2.577					
1750.0	2.686	34.673	184.1	2.560					
1800.0	2.674	34.683	184.9	2.544					
1850.0	2.660	34.707	187.8	2.526					
1900.0	2.649	34.721	190.1	2.512					
1950.0	2.637	34.730	191.6	2.495					
2000.0	2.607	34.742	193.7	2.461					
2050.0	2.589	34.756	196.2	2.439					
2100.0	2.565	34.761	197.6	2.411					
2150.0	2.540	34.768	199.4	2.382					
2200.0	2.511	34.773	200.9	2.349					
2250.0	2.478	34.780	203.1	2.311					
2300.0	2.450	34.784	204.7	2.279					
2350.0	2.412	34.789	206.1	2.237					
2400.0	2.406	34.799	210.2	2.227					
2450.0	2.380	34.802	212.0	2.197					
2500.0	2.345	34.806	213.3	2.157					
2550.0	2.315	34.809	215.1	2.124					
2600.0	2.299	34.810	216.0	2.103					
2650.0	2.269	34.810	216.4	2.069					
2700.0	2.234	34.809	215.6	2.029					
2750.0	2.211	34.811	217.6	2.002					
2800.0	2.172	34.808	217.4	1.960					
2850.0	2.112	34.802	216.0	1.896					
2900.0	2.137	34.814	219.2	1.916					
2950.0	2.077	34.810	219.7	1.852					
3000.0	1.998	34.801	219.2	1.769					



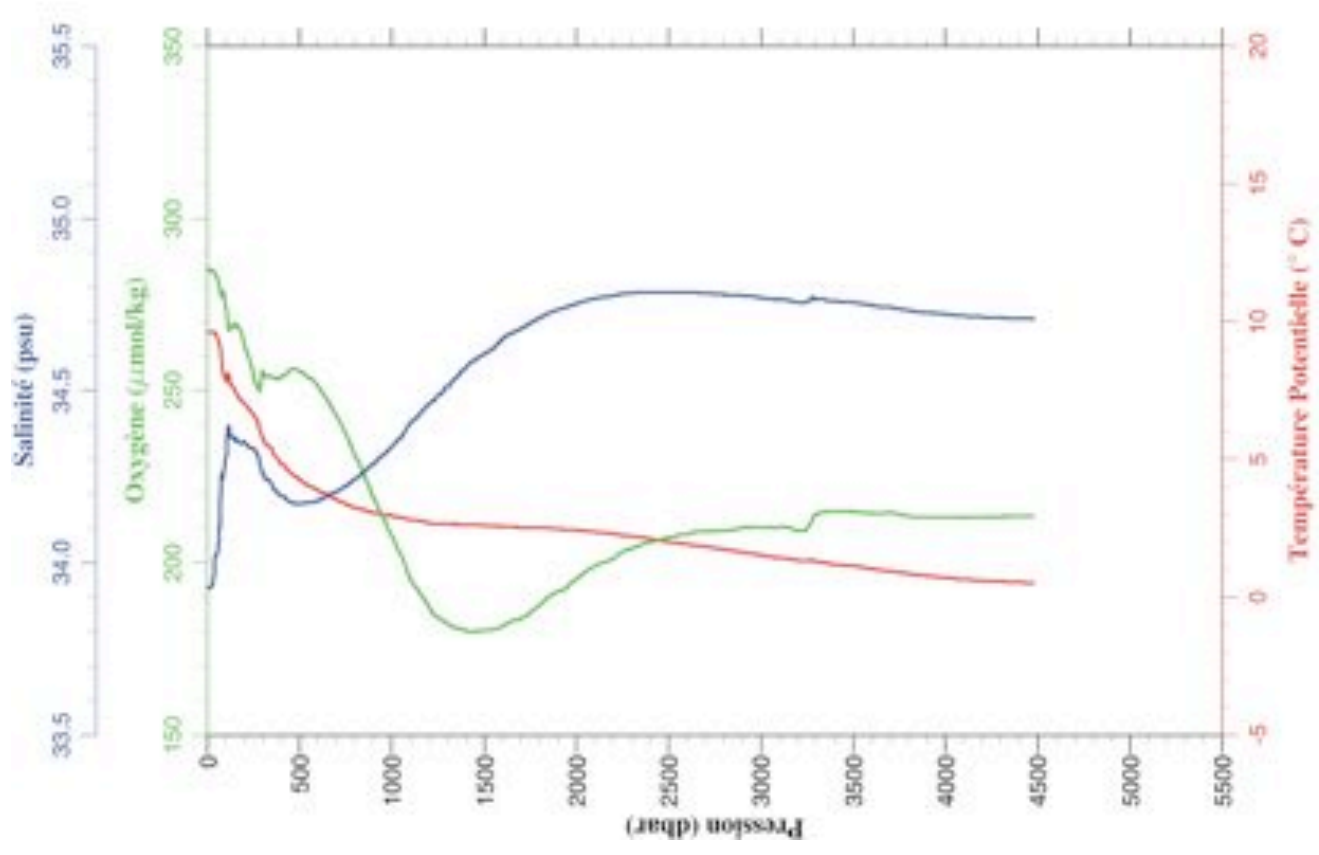
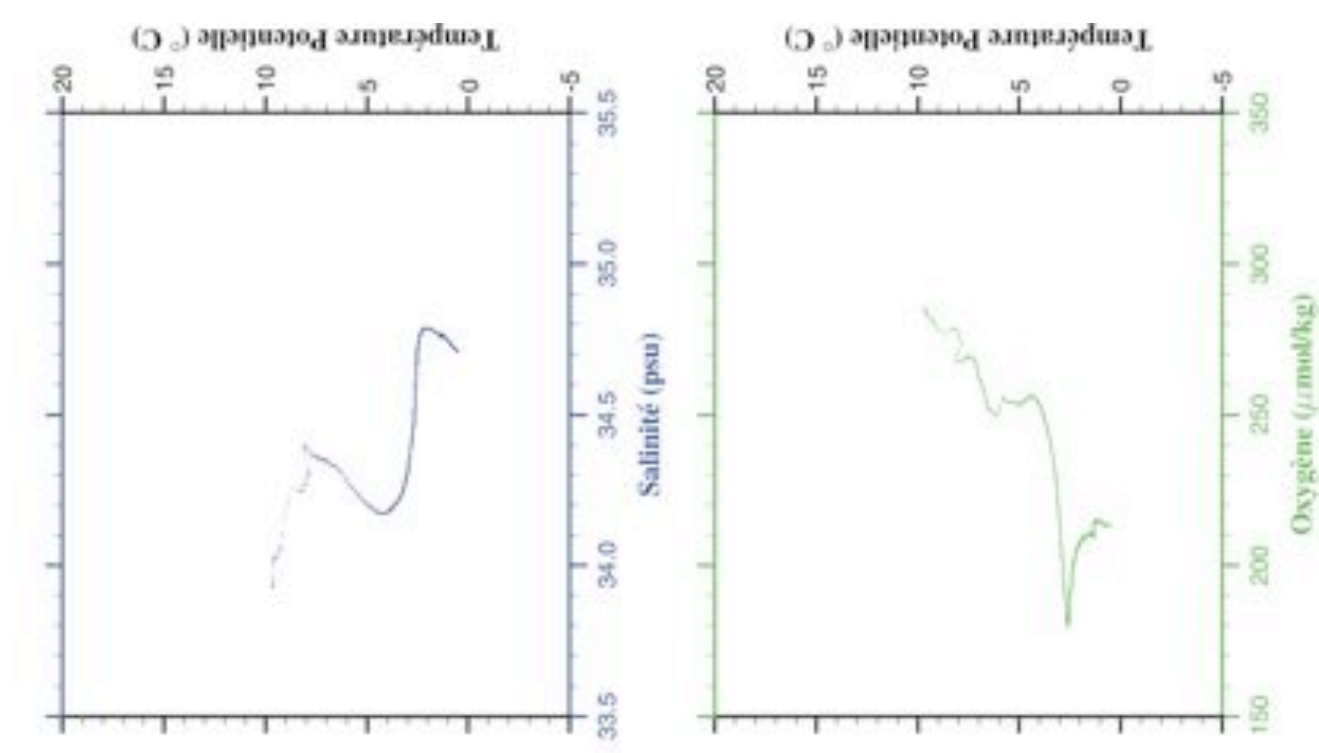
**STATION 48**

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| Station   : 49           Campagne  : GOODHOPE 2008 |
| Date     : 29-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4432      Organisme  : IFREMER |
| Position  : S 44 2.44 |
|           : E 7 37.84 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.636	33.928	285.5	9.636	3050.0	1.699	34.766	210.3	1.473
10.0	9.635	33.928	284.7	9.634	3100.0	1.664	34.765	210.2	1.434
20.0	9.634	33.932	284.9	9.631	3150.0	1.634	34.761	210.2	1.399
30.0	9.634	33.944	284.8	9.630	3200.0	1.574	34.756	209.4	1.336
40.0	9.632	34.012	283.9	9.628	3250.0	1.571	34.761	209.9	1.327
50.0	9.498	34.026	283.0	9.492	3300.0	1.552	34.766	214.0	1.304
100.0	7.863	34.302	274.1	7.853	3350.0	1.499	34.763	214.8	1.248
150.0	7.505	34.355	269.4	7.490	3400.0	1.435	34.759	215.0	1.180
200.0	7.063	34.351	263.3	7.045	3450.0	1.414	34.757	214.8	1.155
250.0	6.643	34.331	254.0	6.620	3500.0	1.401	34.756	214.8	1.136
300.0	5.800	34.260	255.7	5.775	3550.0	1.352	34.751	214.6	1.084
350.0	5.388	34.226	254.0	5.360	3600.0	1.305	34.748	214.5	1.033
400.0	4.872	34.194	253.9	4.842	3650.0	1.254	34.743	214.3	0.978
450.0	4.554	34.177	255.9	4.520	3700.0	1.232	34.742	214.6	0.952
500.0	4.317	34.172	255.8	4.280	3750.0	1.180	34.736	214.1	0.896
550.0	4.098	34.176	253.6	4.058	3800.0	1.144	34.732	213.5	0.856
600.0	3.915	34.181	251.2	3.872	3850.0	1.106	34.729	213.2	0.814
650.0	3.769	34.193	247.2	3.723	3900.0	1.074	34.726	213.3	0.777
700.0	3.587	34.207	242.7	3.539	3950.0	1.038	34.723	213.2	0.737
750.0	3.429	34.223	237.4	3.377	4000.0	1.022	34.722	213.3	0.716
800.0	3.295	34.244	230.8	3.240	4050.0	0.984	34.719	213.2	0.674
850.0	3.231	34.265	225.6	3.173	4100.0	0.959	34.716	213.2	0.645
900.0	3.122	34.288	219.0	3.061	4150.0	0.938	34.714	213.2	0.619
950.0	3.055	34.310	213.3	2.991	4200.0	0.926	34.713	213.2	0.602
1000.0	3.021	34.337	207.7	2.953	4250.0	0.913	34.712	213.4	0.584
1050.0	2.963	34.364	202.3	2.891	4300.0	0.912	34.711	213.4	0.577
1100.0	2.879	34.407	195.2	2.805	4350.0	0.895	34.710	213.4	0.555
1150.0	2.849	34.433	191.4	2.771	4400.0	0.884	34.709	213.5	0.539
1200.0	2.788	34.459	187.1	2.706	4450.0	0.879	34.708	213.6	0.529
1250.0	2.756	34.486	184.0	2.671	4478.0	0.877	34.708	213.5	0.524
1300.0	2.746	34.513	182.2	2.658					
1350.0	2.736	34.537	181.2	2.643					
1400.0	2.719	34.566	180.4	2.623					
1450.0	2.714	34.589	180.2	2.614					
1500.0	2.710	34.606	180.3	2.605					
1550.0	2.699	34.622	180.8	2.590					
1600.0	2.683	34.647	181.6	2.570					
1650.0	2.674	34.667	183.0	2.557					
1700.0	2.647	34.679	183.8	2.526					
1750.0	2.645	34.695	185.6	2.520					
1800.0	2.647	34.710	187.7	2.518					
1850.0	2.638	34.725	190.1	2.504					
1900.0	2.616	34.734	191.6	2.479					
1950.0	2.600	34.743	192.8	2.459					
2000.0	2.587	34.751	195.2	2.441					
2050.0	2.558	34.760	197.4	2.408					
2100.0	2.521	34.767	199.0	2.367					
2150.0	2.497	34.771	200.3	2.339					
2200.0	2.463	34.775	201.2	2.301					
2250.0	2.414	34.780	203.2	2.249					
2300.0	2.388	34.783	204.2	2.219					
2350.0	2.343	34.785	205.3	2.170					
2400.0	2.294	34.785	206.2	2.117					
2450.0	2.242	34.786	206.8	2.061					
2500.0	2.201	34.786	207.4	2.017					
2550.0	2.159	34.785	207.9	1.971					
2600.0	2.107	34.784	208.2	1.914					
2650.0	2.073	34.784	208.9	1.877					
2700.0	2.034	34.783	209.1	1.834					
2750.0	1.990	34.780	209.1	1.787					
2800.0	1.940	34.778	209.4	1.732					
2850.0	1.890	34.776	209.6	1.679					
2900.0	1.846	34.775	210.3	1.631					
2950.0	1.799	34.772	210.2	1.580					
3000.0	1.749	34.769	210.2	1.526					



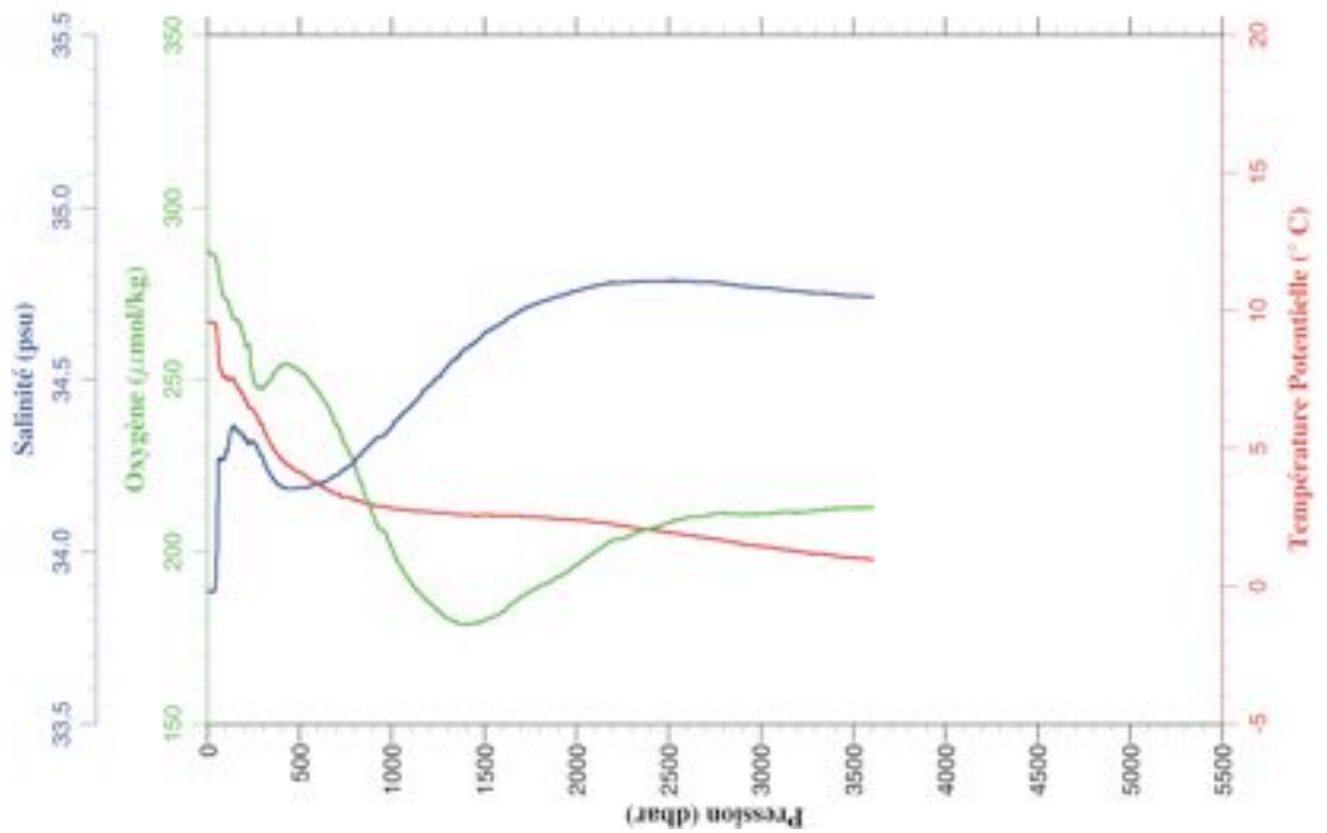
**STATION 49**

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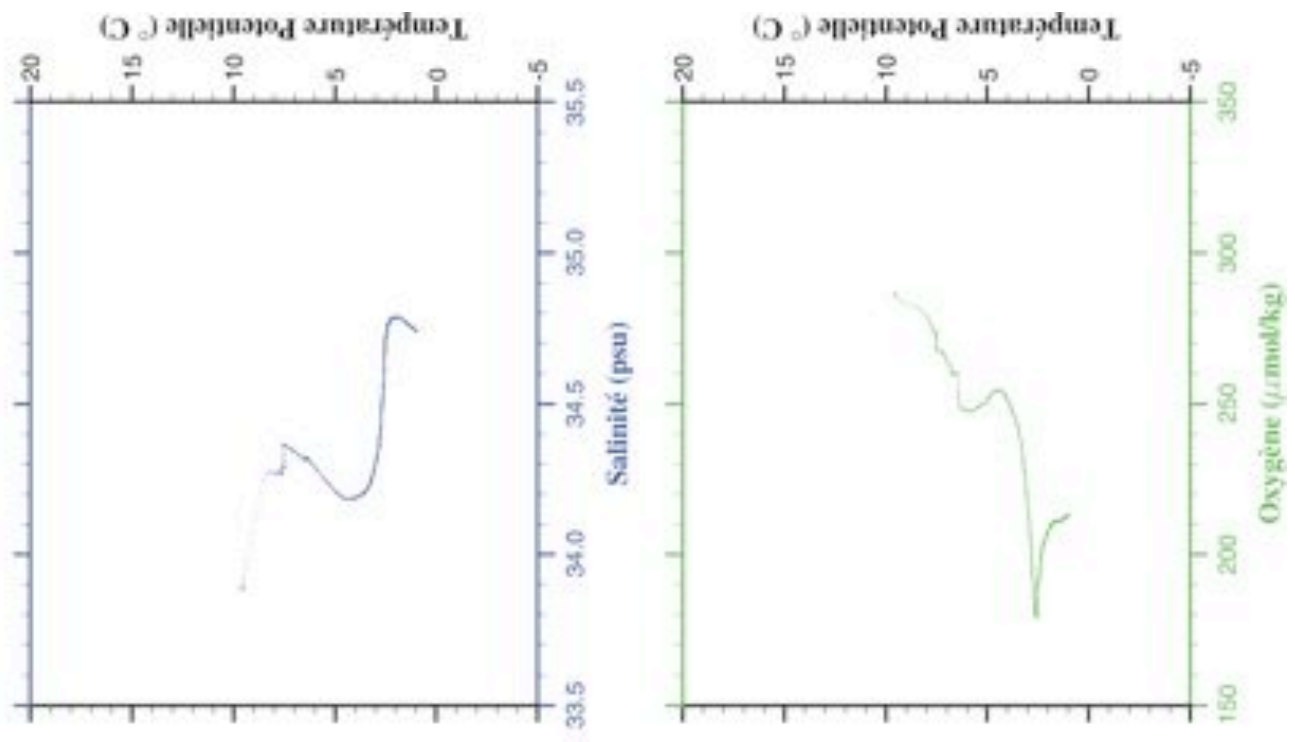
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| Station   : 50           Campagne  : GOODHOPE 2008
| Date     : 29-02-08    Navire    : R/V Marion Dufresne
| Profondeur : 3580      Organisme : IFREMER
| Position  : S 44 19.79
|           : E 7 23.02
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.596	33.884	287.2	9.596	3050.0	1.641	34.765	211.1	1.416
10.0	9.596	33.884	287.2	9.595	3100.0	1.578	34.761	211.4	1.349
20.0	9.583	33.885	286.5	9.581	3150.0	1.538	34.759	211.5	1.306
30.0	9.580	33.886	286.2	9.577	3200.0	1.509	34.756	211.4	1.272
40.0	9.568	33.888	286.0	9.564	3250.0	1.452	34.753	211.7	1.212
50.0	9.306	33.982	284.5	9.300	3300.0	1.420	34.751	212.0	1.175
100.0	7.592	34.289	273.4	7.582	3350.0	1.408	34.751	212.2	1.159
150.0	7.424	34.361	267.5	7.410	3400.0	1.346	34.747	212.5	1.094
200.0	6.843	34.328	262.4	6.825	3450.0	1.310	34.745	212.7	1.053
250.0	6.412	34.321	249.8	6.390	3500.0	1.293	34.743	212.8	1.031
300.0	5.847	34.275	247.6	5.821	3550.0	1.273	34.742	212.8	1.007
350.0	5.118	34.218	250.5	5.091	3600.0	1.246	34.740	212.9	0.976
400.0	4.651	34.189	253.9	4.621	3606.0	1.244	34.739	212.9	0.973
450.0	4.380	34.183	254.2	4.347					
500.0	4.161	34.186	252.4	4.125					
550.0	3.924	34.189	250.0	3.884					
600.0	3.773	34.197	246.6	3.731					
650.0	3.560	34.207	242.4	3.515					
700.0	3.409	34.223	236.7	3.362					
750.0	3.277	34.243	230.9	3.226					
800.0	3.190	34.265	225.3	3.136					
850.0	3.080	34.296	217.0	3.023					
900.0	2.992	34.321	210.4	2.932					
950.0	2.957	34.335	206.3	2.893					
1000.0	2.889	34.363	200.9	2.822					
1050.0	2.857	34.394	195.6	2.787					
1100.0	2.821	34.420	191.4	2.747					
1150.0	2.801	34.450	188.0	2.723					
1200.0	2.784	34.482	185.4	2.702					
1250.0	2.753	34.505	182.8	2.668					
1300.0	2.735	34.535	180.8	2.647					
1350.0	2.690	34.561	179.6	2.597					
1400.0	2.676	34.588	179.1	2.580					
1450.0	2.671	34.609	179.4	2.571					
1500.0	2.681	34.634	180.0	2.576					
1550.0	2.679	34.650	181.3	2.571					
1600.0	2.672	34.665	182.5	2.559					
1650.0	2.666	34.684	185.0	2.549					
1700.0	2.658	34.701	186.9	2.537					
1750.0	2.642	34.714	188.6	2.517					
1800.0	2.627	34.724	189.9	2.498					
1850.0	2.604	34.732	191.0	2.471					
1900.0	2.590	34.742	192.8	2.453					
1950.0	2.568	34.748	194.1	2.427					
2000.0	2.542	34.758	196.2	2.397					
2050.0	2.523	34.765	198.2	2.374					
2100.0	2.487	34.772	200.0	2.334					
2150.0	2.456	34.778	201.9	2.299					
2200.0	2.403	34.781	203.5	2.242					
2250.0	2.362	34.781	203.7	2.198					
2300.0	2.307	34.783	205.0	2.139					
2350.0	2.263	34.785	206.1	2.091					
2400.0	2.222	34.785	206.7	2.047					
2450.0	2.190	34.785	207.4	2.010					
2500.0	2.136	34.786	208.4	1.953					
2550.0	2.098	34.786	209.3	1.910					
2600.0	2.051	34.786	209.9	1.860					
2650.0	2.005	34.783	210.0	1.811					
2700.0	1.963	34.782	210.4	1.764					
2750.0	1.914	34.781	211.0	1.712					
2800.0	1.860	34.778	211.2	1.654					
2850.0	1.804	34.774	211.0	1.595					
2900.0	1.738	34.770	210.8	1.525					
2950.0	1.705	34.768	210.8	1.488					
3000.0	1.666	34.766	211.0	1.445					



**STATION 50**



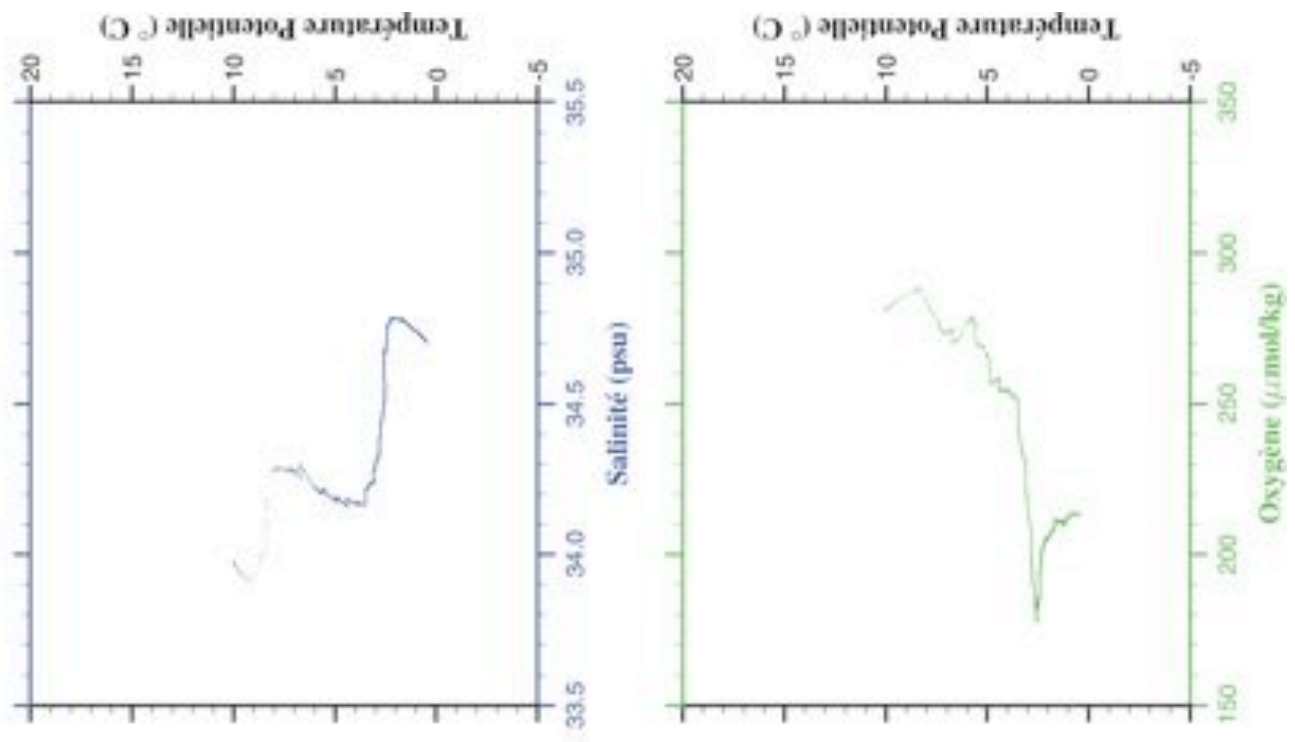
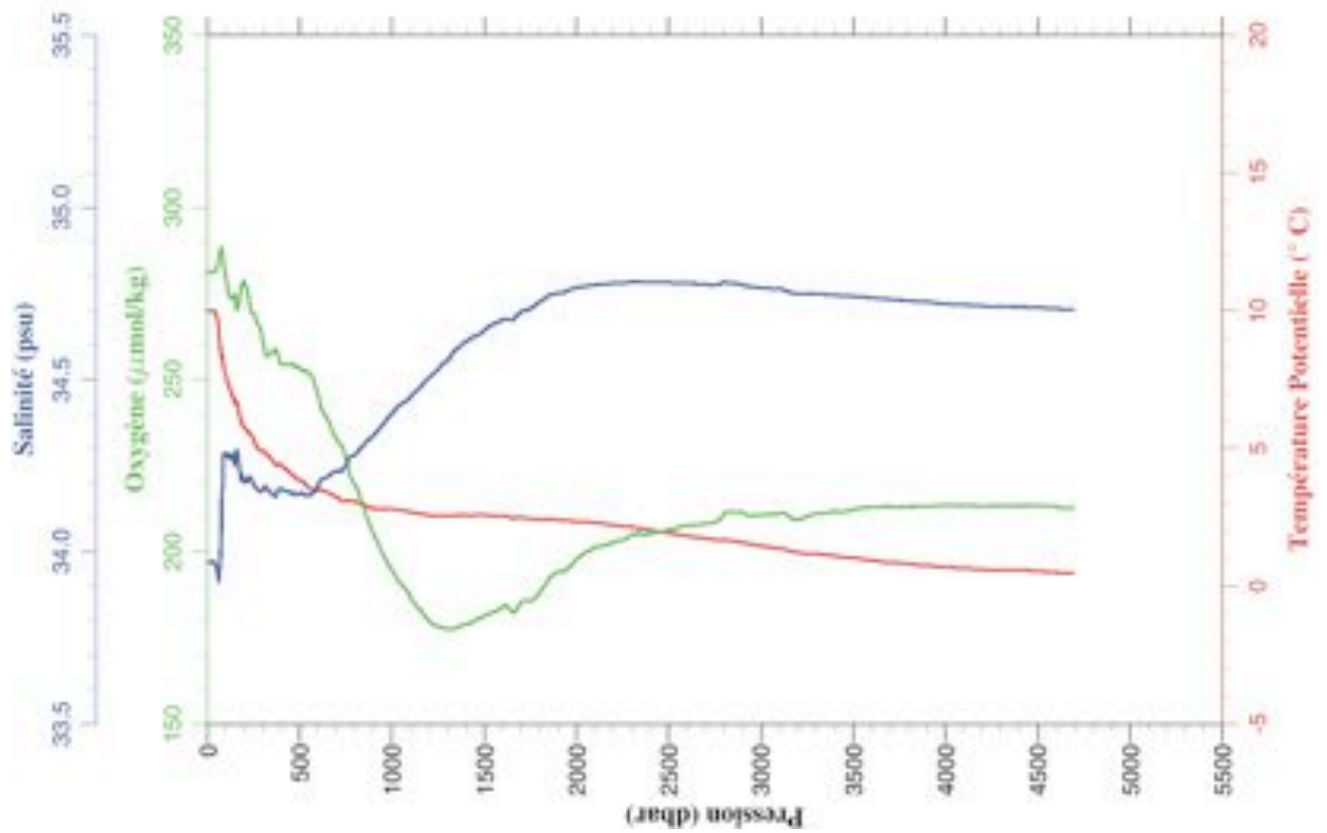
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| Station   : 51           Campagne  : GOODHOPE 2008 |
| Date      : 29-02-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4649       Organisme  : IFREMER |
| Position  : S 44 36.68 |
|           : E 7 8.28 |
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PRESSION	TEMPERA-TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA-TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.984	33.970	281.4	9.984	3050.0	1.642	34.764	210.8	1.417
10.0	9.984	33.970	281.4	9.983	3100.0	1.588	34.762	211.1	1.359
20.0	9.987	33.971	281.2	9.985	3150.0	1.527	34.754	210.3	1.295
30.0	9.978	33.971	281.2	9.975	3200.0	1.453	34.748	209.4	1.217
40.0	9.979	33.970	281.3	9.974	3250.0	1.433	34.749	210.1	1.193
50.0	9.802	33.951	282.2	9.796	3300.0	1.423	34.749	211.1	1.178
100.0	7.687	34.284	280.2	7.677	3350.0	1.383	34.747	211.2	1.134
150.0	6.775	34.286	274.2	6.762	3400.0	1.355	34.746	211.7	1.102
200.0	5.807	34.211	278.2	5.791	3450.0	1.310	34.742	211.6	1.054
250.0	5.328	34.194	269.3	5.308	3500.0	1.276	34.741	212.2	1.015
300.0	4.905	34.180	261.3	4.882	3550.0	1.244	34.740	212.8	0.979
350.0	4.614	34.168	258.0	4.587	3600.0	1.210	34.737	212.9	0.941
400.0	4.439	34.182	254.4	4.409	3650.0	1.166	34.734	213.1	0.892
450.0	4.112	34.169	254.5	4.079	3700.0	1.147	34.733	213.1	0.869
500.0	3.895	34.170	253.2	3.859	3750.0	1.129	34.731	213.0	0.847
550.0	3.610	34.164	251.9	3.572	3800.0	1.105	34.729	213.0	0.818
600.0	3.518	34.193	245.7	3.477	3850.0	1.067	34.726	213.2	0.775
650.0	3.448	34.218	238.7	3.404	3900.0	1.057	34.725	213.3	0.761
700.0	3.296	34.234	232.7	3.249	3950.0	1.018	34.722	213.4	0.717
750.0	3.131	34.251	227.5	3.081	4000.0	0.988	34.719	213.5	0.683
800.0	3.121	34.281	219.5	3.067	4050.0	0.981	34.718	213.4	0.671
850.0	3.025	34.312	212.5	2.968	4100.0	0.971	34.717	213.5	0.657
900.0	2.876	34.336	205.3	2.817	4150.0	0.950	34.715	213.4	0.631
950.0	2.881	34.369	199.5	2.818	4200.0	0.935	34.713	213.3	0.610
1000.0	2.854	34.400	194.7	2.788	4250.0	0.917	34.712	213.4	0.587
1050.0	2.820	34.428	190.6	2.750	4300.0	0.919	34.712	213.4	0.584
1100.0	2.755	34.446	186.8	2.682	4350.0	0.915	34.711	213.3	0.575
1150.0	2.710	34.476	183.3	2.634	4400.0	0.920	34.711	213.3	0.574
1200.0	2.654	34.505	180.0	2.574	4450.0	0.921	34.710	213.4	0.569
1250.0	2.640	34.528	178.4	2.556	4500.0	0.907	34.709	213.5	0.550
1300.0	2.634	34.558	177.6	2.546	4550.0	0.874	34.706	213.3	0.513
1350.0	2.668	34.590	178.1	2.576	4600.0	0.863	34.705	213.2	0.497
1400.0	2.673	34.608	179.0	2.577	4650.0	0.865	34.705	212.7	0.492
1450.0	2.679	34.625	180.1	2.579	4691.0	0.867	34.704	212.8	0.491
1500.0	2.683	34.642	181.3	2.578					
1550.0	2.672	34.662	182.5	2.563					
1600.0	2.673	34.674	184.1	2.561					
1650.0	2.591	34.673	182.6	2.475					
1700.0	2.617	34.698	185.2	2.497					
1750.0	2.567	34.704	185.6	2.444					
1800.0	2.565	34.724	188.1	2.437					
1850.0	2.574	34.745	192.0	2.442					
1900.0	2.549	34.752	194.3	2.413					
1950.0	2.512	34.758	195.2	2.372					
2000.0	2.500	34.767	198.1	2.356					
2050.0	2.483	34.771	200.0	2.334					
2100.0	2.457	34.775	201.3	2.305					
2150.0	2.422	34.776	201.9	2.266					
2200.0	2.379	34.779	202.7	2.219					
2250.0	2.343	34.780	203.4	2.179					
2300.0	2.317	34.783	205.2	2.149					
2350.0	2.262	34.783	205.0	2.091					
2400.0	2.209	34.782	205.2	2.033					
2450.0	2.169	34.782	205.7	1.989					
2500.0	2.113	34.781	206.4	1.930					
2550.0	2.054	34.780	207.0	1.867					
2600.0	2.014	34.779	207.6	1.824					
2650.0	1.979	34.778	207.9	1.785					
2700.0	1.930	34.776	208.2	1.732					
2750.0	1.885	34.775	208.6	1.684					
2800.0	1.900	34.782	211.1	1.693					
2850.0	1.855	34.779	211.5	1.644					
2900.0	1.793	34.774	211.6	1.579					
2950.0	1.737	34.769	210.4	1.519					
3000.0	1.682	34.766	210.6	1.461					

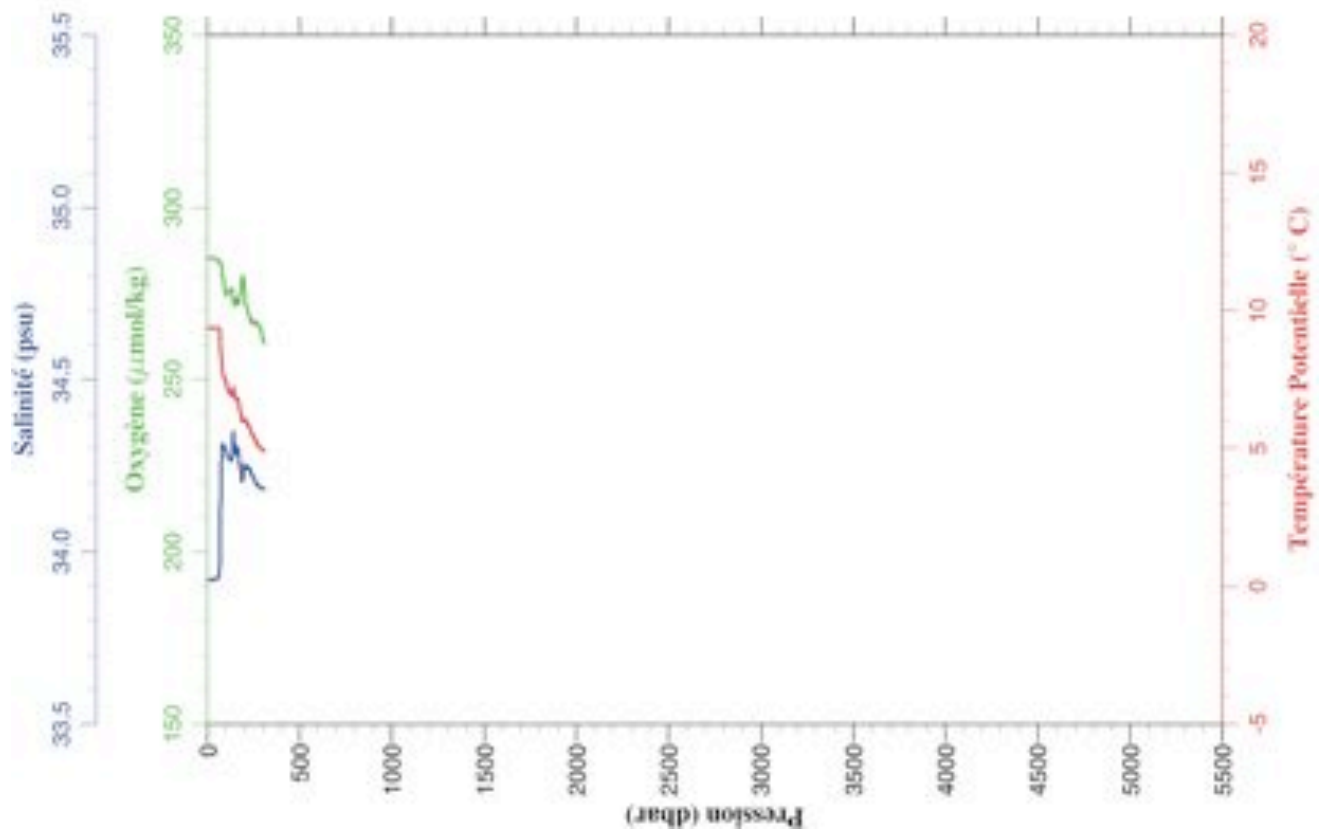




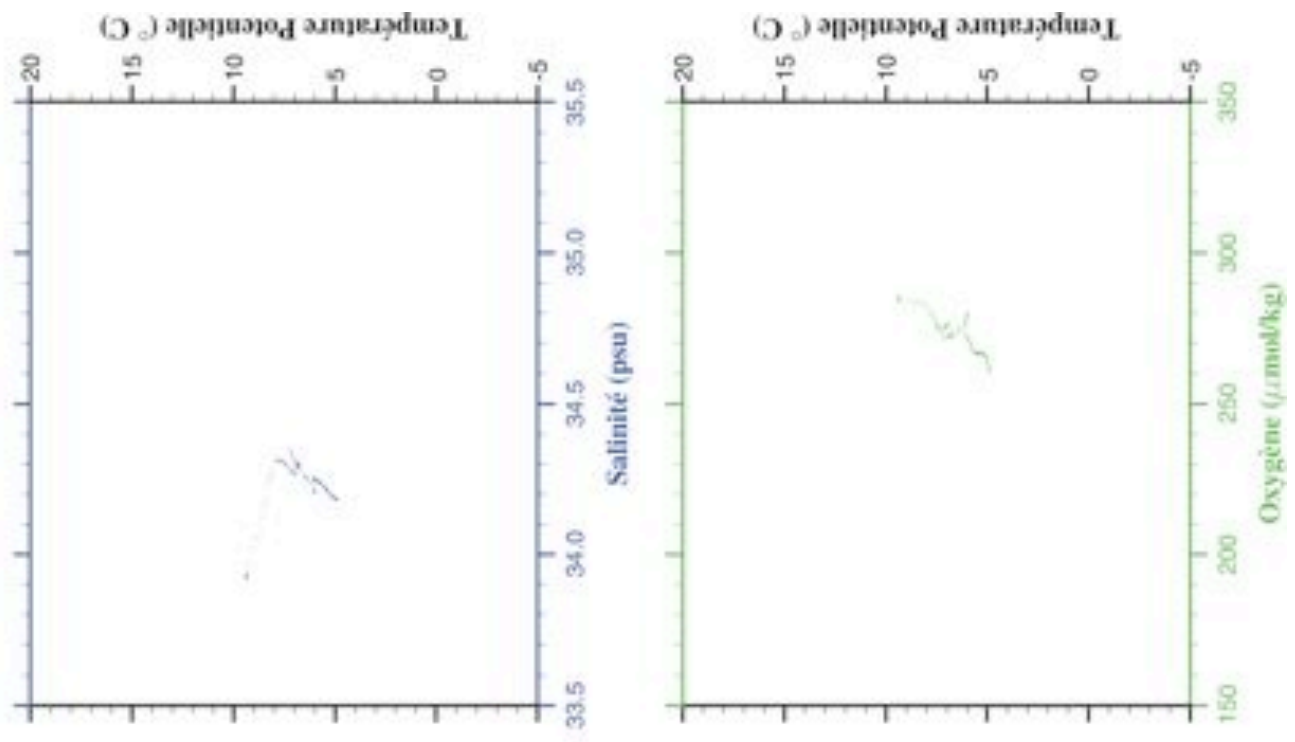
**STATION 51**

Station	: 52	Campagne	: GOODHOPE 2008
Date	: 01-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4315	Organisme	: IFREMER
Position	: S 44 53.92		
	E 6 53.18		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.379	33.919	285.3	9.378
10.0	9.379	33.919	285.3	9.377
20.0	9.380	33.919	285.2	9.378
30.0	9.383	33.920	285.1	9.380
40.0	9.378	33.920	285.0	9.374
50.0	9.380	33.922	284.8	9.374
100.0	7.425	34.298	274.8	7.416
150.0	6.904	34.296	272.8	6.890
200.0	6.094	34.247	276.7	6.077
250.0	5.440	34.215	266.1	5.420
300.0	4.955	34.183	261.8	4.931
309.0	4.916	34.182	260.5	4.892



**STATION 52**

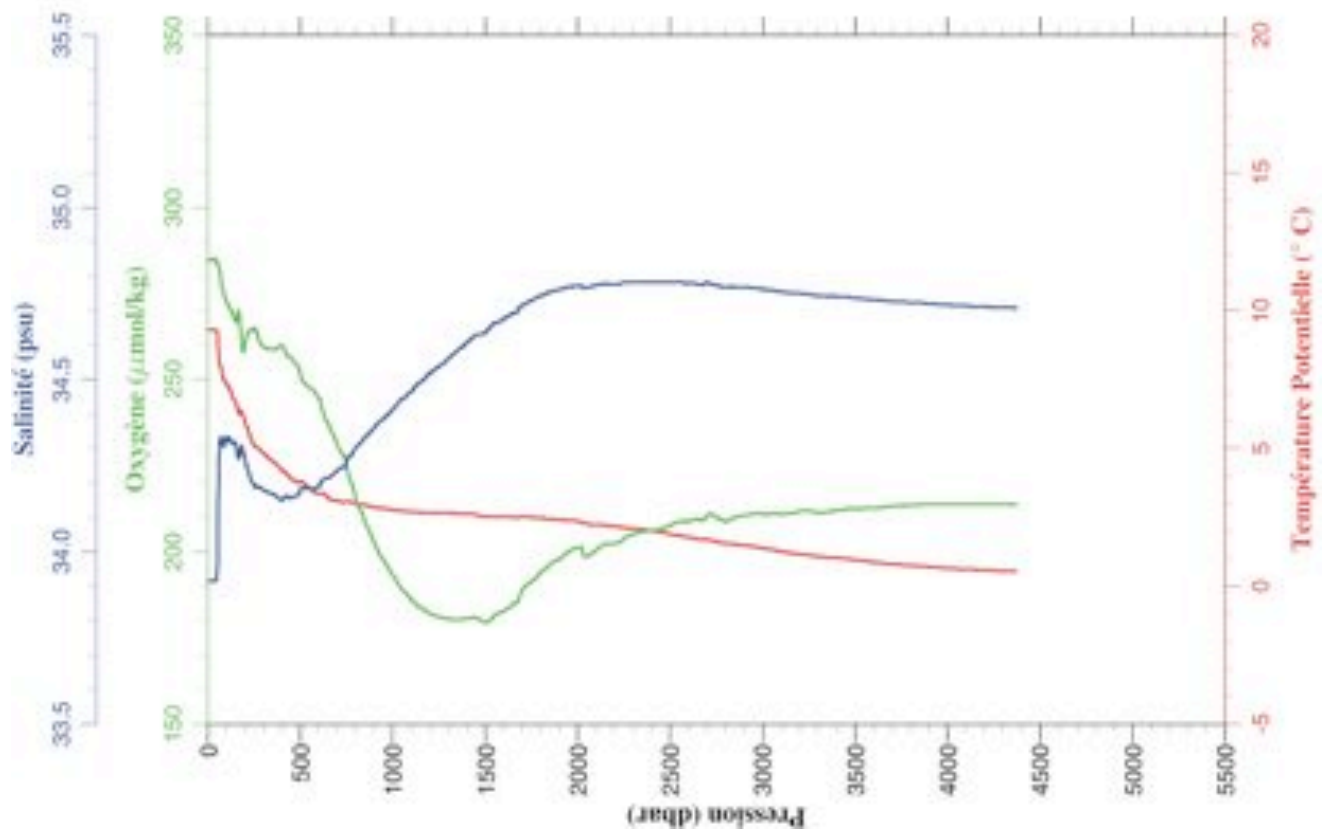


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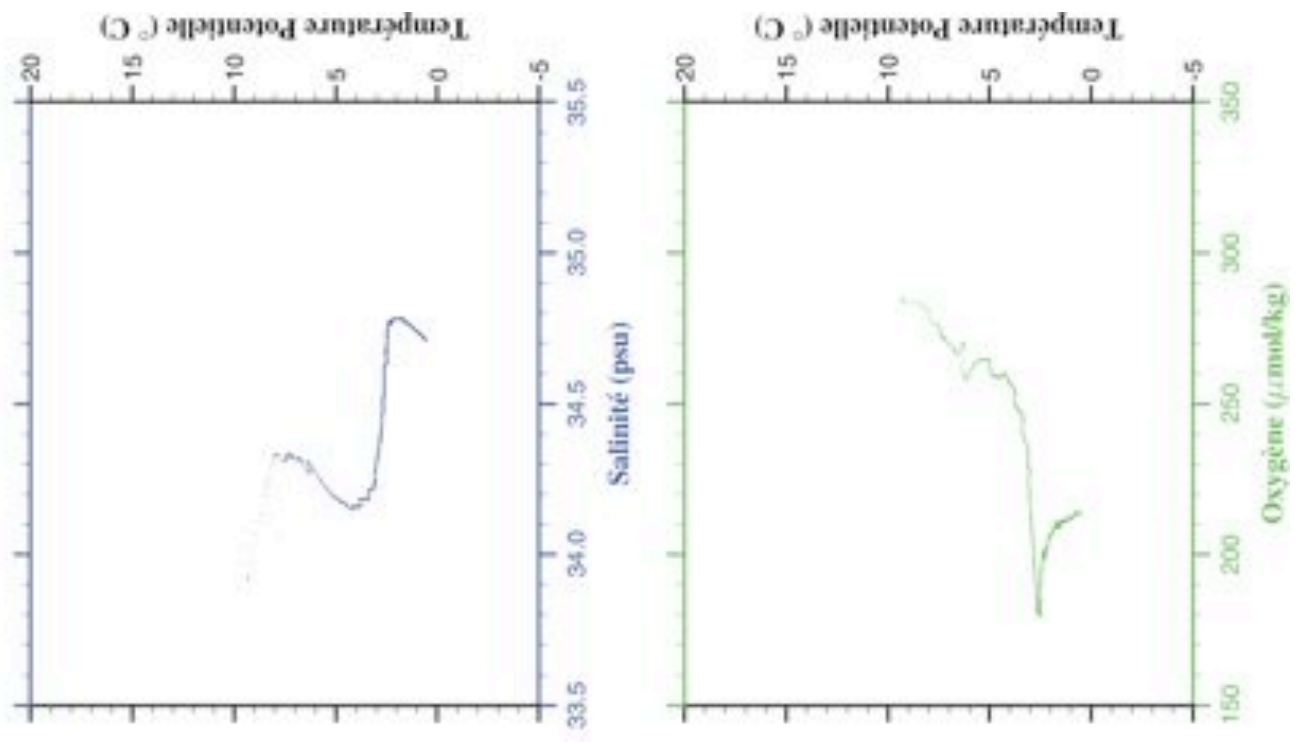
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| Station   : 53           Campagne  : GOODHOPE 2008 |
| Date      : 01-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4328       Organisme  : IFREMER |
| Position  : S 44 53.55 |
|            : E 6 53.63 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.311	33.916	284.5	9.311	3050.0	1.551	34.759	211.1	1.328
10.0	9.311	33.916	284.5	9.310	3100.0	1.491	34.755	210.8	1.264
20.0	9.312	33.916	284.9	9.310	3150.0	1.435	34.752	211.2	1.204
30.0	9.316	33.917	284.8	9.312	3200.0	1.403	34.751	211.8	1.169
40.0	9.315	33.917	284.9	9.311	3250.0	1.366	34.747	211.8	1.128
50.0	9.295	33.926	283.6	9.289	3300.0	1.316	34.742	211.3	1.074
100.0	7.372	34.326	272.3	7.362	3350.0	1.293	34.741	211.6	1.047
150.0	6.723	34.314	267.0	6.709	3400.0	1.279	34.741	212.1	1.028
200.0	6.031	34.272	259.8	6.014	3450.0	1.250	34.740	212.3	0.995
250.0	5.115	34.190	264.3	5.095	3500.0	1.219	34.737	212.5	0.960
300.0	4.846	34.179	259.5	4.823	3550.0	1.187	34.735	212.6	0.923
350.0	4.579	34.168	258.7	4.553	3600.0	1.149	34.732	212.7	0.881
400.0	4.227	34.150	260.1	4.198	3650.0	1.107	34.729	213.0	0.835
450.0	3.922	34.156	256.3	3.891	3700.0	1.077	34.727	213.1	0.801
500.0	3.860	34.183	251.7	3.825	3750.0	1.055	34.725	213.5	0.774
550.0	3.595	34.183	247.7	3.557	3800.0	1.045	34.724	213.4	0.760
600.0	3.411	34.189	244.5	3.371	3850.0	1.025	34.723	213.6	0.735
650.0	3.272	34.215	237.2	3.229	3900.0	1.000	34.721	213.8	0.706
700.0	3.145	34.237	231.0	3.098	3950.0	0.978	34.718	213.8	0.679
750.0	3.144	34.268	225.2	3.094	4000.0	0.961	34.717	213.8	0.657
800.0	3.047	34.305	215.4	2.994	4050.0	0.946	34.715	213.8	0.637
850.0	2.990	34.333	208.5	2.934	4100.0	0.931	34.714	213.8	0.618
900.0	2.932	34.360	202.8	2.872	4150.0	0.923	34.713	213.8	0.604
950.0	2.883	34.386	197.6	2.820	4200.0	0.909	34.711	213.8	0.586
1000.0	2.842	34.412	193.3	2.775	4250.0	0.897	34.709	213.9	0.569
1050.0	2.792	34.444	188.8	2.722	4300.0	0.890	34.708	213.8	0.556
1100.0	2.770	34.465	186.2	2.697	4350.0	0.885	34.708	213.7	0.545
1150.0	2.754	34.493	183.9	2.676	4370.0	0.885	34.708	213.7	0.543
1200.0	2.740	34.518	182.0	2.659					
1250.0	2.733	34.537	181.1	2.648					
1300.0	2.739	34.559	180.5	2.650					
1350.0	2.733	34.585	180.4	2.641					
1400.0	2.727	34.608	180.6	2.630					
1450.0	2.694	34.629	180.9	2.594					
1500.0	2.605	34.636	179.4	2.502					
1550.0	2.637	34.664	181.7	2.529					
1600.0	2.623	34.674	182.7	2.511					
1650.0	2.617	34.693	184.7	2.501					
1700.0	2.631	34.714	188.8	2.511					
1750.0	2.622	34.729	191.3	2.497					
1800.0	2.601	34.743	193.9	2.473					
1850.0	2.576	34.755	196.5	2.444					
1900.0	2.557	34.760	197.8	2.420					
1950.0	2.531	34.768	200.1	2.390					
2000.0	2.504	34.772	201.1	2.360					
2050.0	2.405	34.767	198.5	2.258					
2100.0	2.381	34.774	200.5	2.229					
2150.0	2.373	34.779	202.2	2.218					
2200.0	2.315	34.777	202.4	2.156					
2250.0	2.303	34.781	203.6	2.140					
2300.0	2.266	34.783	205.3	2.099					
2350.0	2.232	34.783	205.8	2.060					
2400.0	2.184	34.782	206.1	2.009					
2450.0	2.135	34.782	206.6	1.956					
2500.0	2.080	34.782	207.6	1.898					
2550.0	2.028	34.782	208.7	1.842					
2600.0	1.959	34.778	208.6	1.770					
2650.0	1.907	34.776	209.4	1.714					
2700.0	1.897	34.781	210.5	1.700					
2750.0	1.820	34.773	209.8	1.620					
2800.0	1.756	34.767	208.8	1.552					
2850.0	1.734	34.769	210.0	1.526					
2900.0	1.701	34.768	210.6	1.489					
2950.0	1.659	34.766	210.9	1.443					
3000.0	1.598	34.762	210.9	1.379					



**STATION 53**

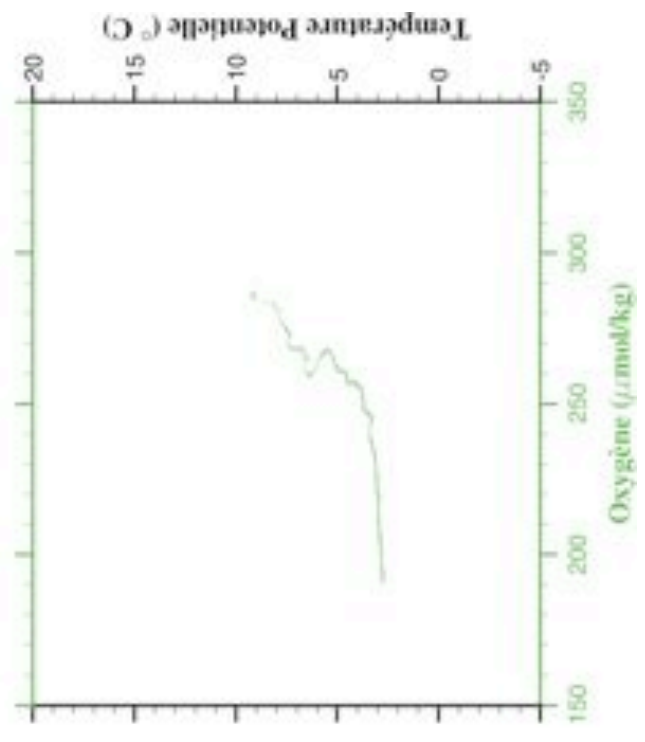
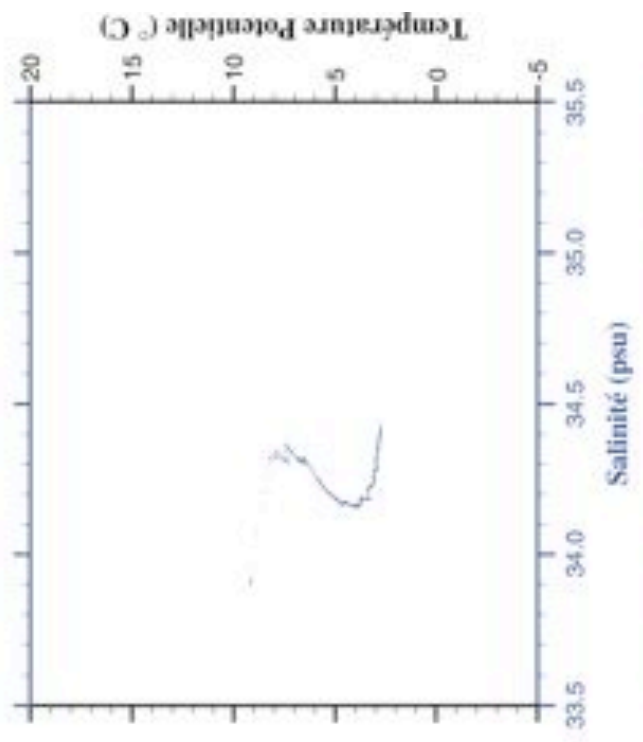
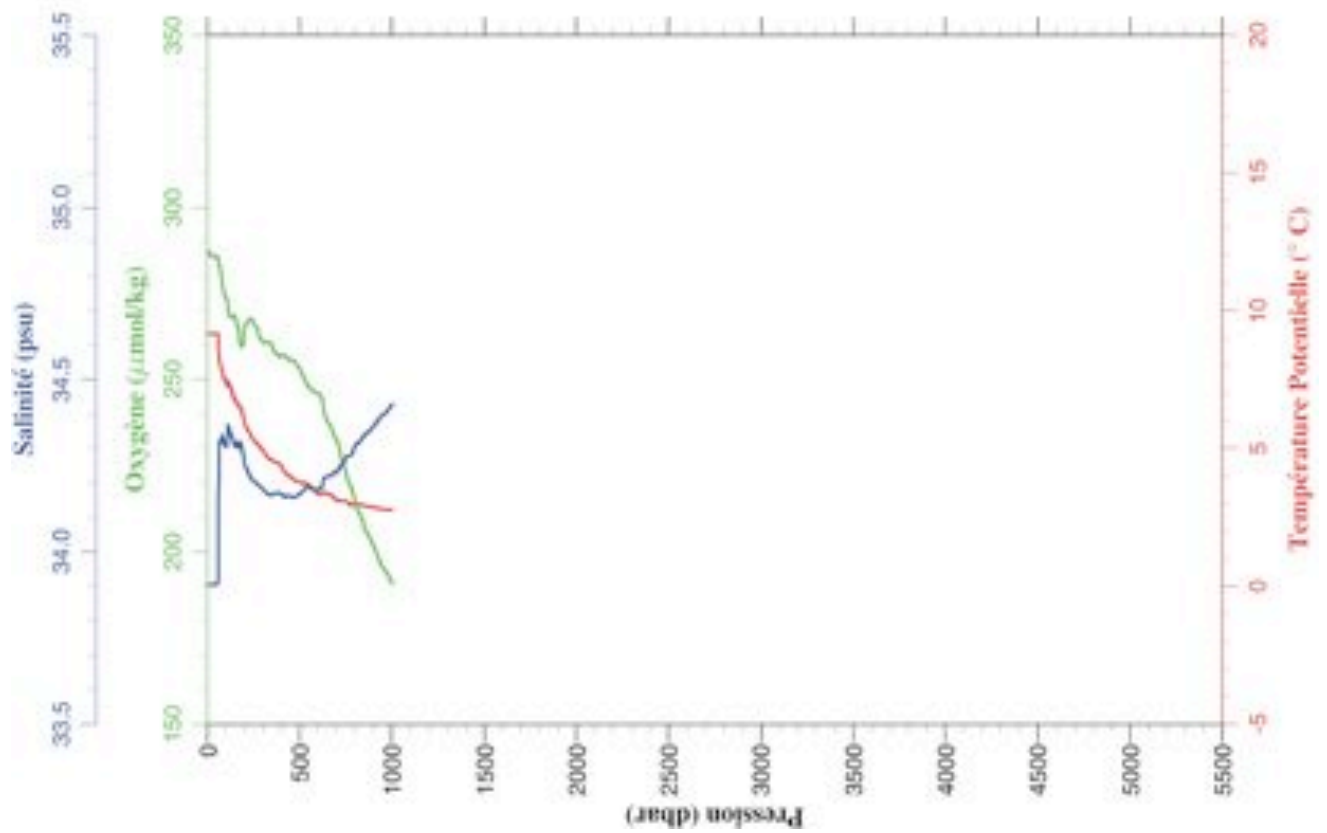


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| Station   : 54           Campagne  : GOODHOPE 2008 |
| Date      : 02-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4328       Organisme  : IFREMER |
| Position  : S 44 53.74 |
|           : E 6 53.13  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	9.165	33.905	287.3	9.165
10.0	9.163	33.905	286.8	9.162
20.0	9.163	33.905	286.0	9.161
30.0	9.164	33.905	285.9	9.161
40.0	9.165	33.906	285.6	9.161
50.0	9.164	33.907	285.8	9.158
100.0	7.449	34.315	273.6	7.439
150.0	6.789	34.316	267.9	6.775
200.0	5.982	34.261	263.2	5.965
250.0	5.319	34.205	266.4	5.299
300.0	4.951	34.183	260.7	4.928
350.0	4.592	34.168	259.8	4.566
400.0	4.362	34.166	256.6	4.333
450.0	3.991	34.159	255.7	3.959
500.0	3.812	34.168	253.2	3.777
550.0	3.726	34.187	247.8	3.687
600.0	3.397	34.180	245.9	3.357
650.0	3.399	34.218	237.9	3.355
700.0	3.139	34.228	232.4	3.093
750.0	3.120	34.275	223.0	3.070
800.0	3.035	34.308	214.4	2.982
850.0	2.979	34.338	207.0	2.923
900.0	2.918	34.365	201.7	2.859
950.0	2.859	34.398	195.4	2.796
1000.0	2.822	34.424	191.2	2.755
1003.0	2.818	34.427	190.8	2.751



**STATION 54**

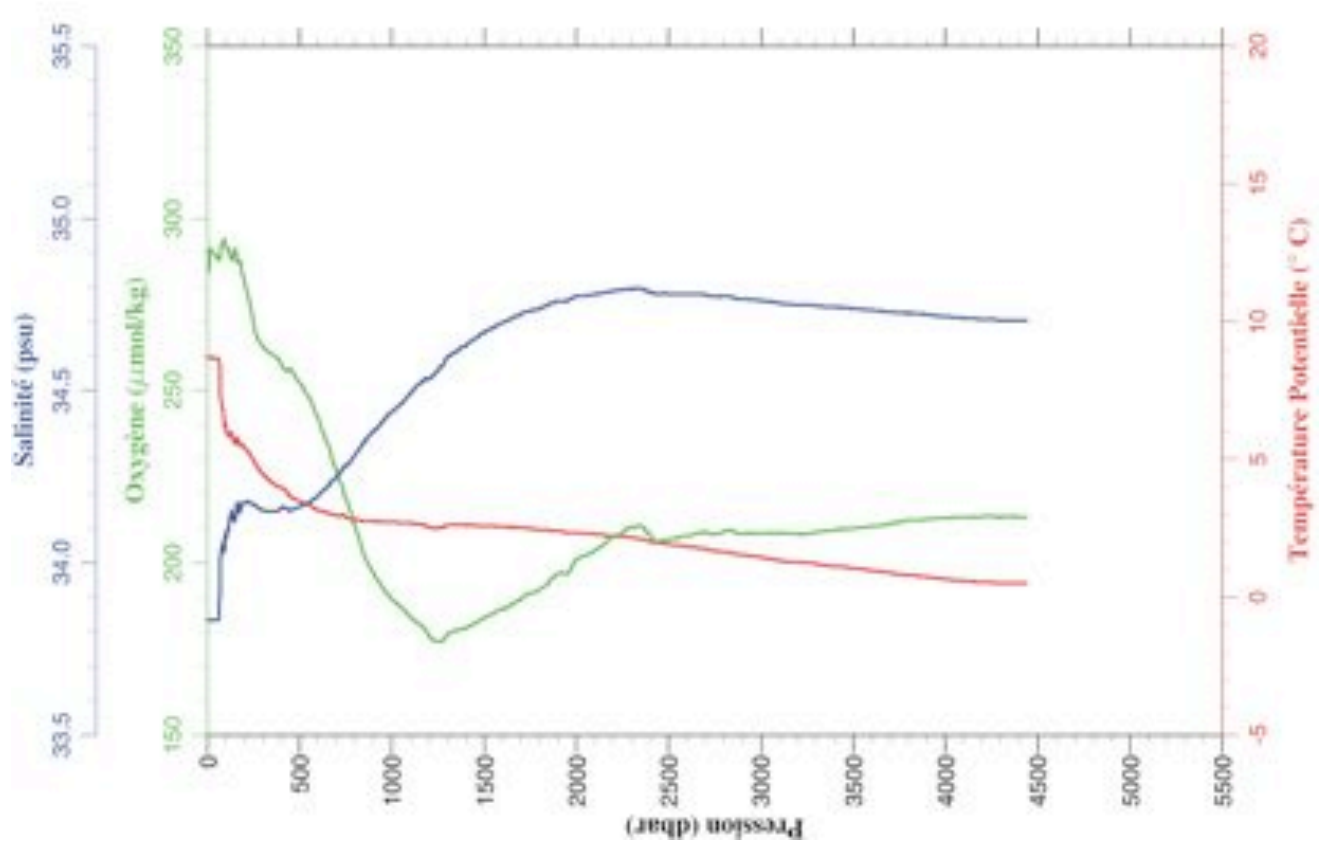
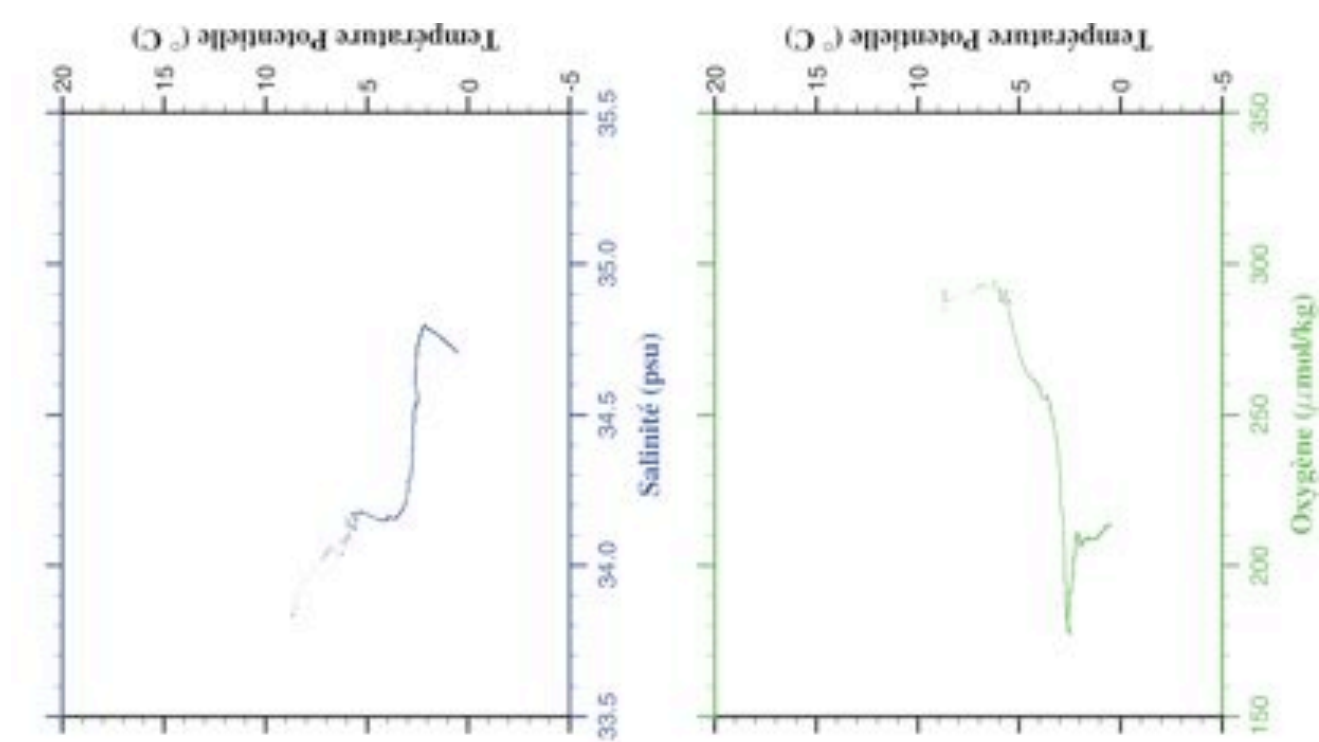
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| Station   : 55           Campagne  : GOODHOPE 2008 |
| Date     : 02-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4380      Organisme  : IFREMER |
| Position  : S 45 19.69 |
|           : E 6 30.83  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.698	33.834	284.6	8.698	3050.0	1.631	34.758	208.6	1.406
10.0	8.698	33.834	287.4	8.697	3100.0	1.562	34.754	208.6	1.334
20.0	8.693	33.834	290.7	8.691	3150.0	1.526	34.751	208.5	1.293
30.0	8.686	33.834	290.0	8.683	3200.0	1.510	34.749	208.3	1.273
40.0	8.686	33.834	289.7	8.682	3250.0	1.496	34.748	208.5	1.254
50.0	8.677	33.834	288.5	8.672	3300.0	1.448	34.746	208.9	1.203
100.0	6.245	34.082	291.4	6.236	3350.0	1.408	34.744	209.2	1.159
150.0	5.579	34.123	291.1	5.566	3400.0	1.371	34.742	209.5	1.118
200.0	5.461	34.174	281.8	5.445	3450.0	1.362	34.741	209.7	1.105
250.0	4.969	34.169	269.4	4.949	3500.0	1.315	34.738	210.0	1.053
300.0	4.494	34.153	262.8	4.472	3550.0	1.288	34.736	210.3	1.022
350.0	4.207	34.149	260.6	4.182	3600.0	1.251	34.734	210.6	0.980
400.0	4.012	34.160	257.4	3.984	3650.0	1.204	34.731	210.8	0.929
450.0	3.687	34.152	256.3	3.656	3700.0	1.170	34.729	211.4	0.891
500.0	3.529	34.163	252.1	3.495	3750.0	1.113	34.726	211.8	0.831
550.0	3.390	34.174	248.1	3.353	3800.0	1.090	34.725	212.3	0.803
600.0	3.210	34.194	241.9	3.171	3850.0	1.066	34.723	212.5	0.775
650.0	3.109	34.219	234.6	3.067	3900.0	1.041	34.721	212.7	0.745
700.0	3.013	34.249	226.7	2.967	3950.0	0.982	34.717	212.9	0.682
750.0	2.956	34.280	218.5	2.907	4000.0	0.953	34.714	213.0	0.649
800.0	2.880	34.311	210.5	2.828	4050.0	0.938	34.713	213.1	0.629
850.0	2.825	34.351	202.0	2.769	4100.0	0.908	34.710	213.3	0.595
900.0	2.826	34.382	197.0	2.767	4150.0	0.888	34.708	213.4	0.570
950.0	2.798	34.410	192.7	2.735	4200.0	0.871	34.707	213.4	0.549
1000.0	2.788	34.439	189.3	2.722	4250.0	0.862	34.706	213.4	0.534
1050.0	2.776	34.462	187.0	2.706	4300.0	0.852	34.704	213.4	0.519
1100.0	2.757	34.492	184.3	2.683	4350.0	0.855	34.704	213.4	0.516
1150.0	2.736	34.519	182.1	2.658	4400.0	0.857	34.704	213.3	0.513
1200.0	2.628	34.535	178.9	2.548	4441.0	0.861	34.704	213.3	0.513
1250.0	2.584	34.556	177.1	2.501					
1300.0	2.708	34.597	179.3	2.619					
1350.0	2.704	34.613	180.4	2.611					
1400.0	2.701	34.629	181.0	2.605					
1450.0	2.705	34.651	182.5	2.604					
1500.0	2.687	34.670	184.0	2.582					
1550.0	2.683	34.682	185.3	2.575					
1600.0	2.667	34.697	186.7	2.554					
1650.0	2.647	34.708	187.8	2.531					
1700.0	2.644	34.721	189.4	2.524					
1750.0	2.620	34.730	191.1	2.496					
1800.0	2.582	34.738	192.2	2.454					
1850.0	2.566	34.751	194.3	2.434					
1900.0	2.545	34.759	196.9	2.408					
1950.0	2.470	34.759	196.8	2.330					
2000.0	2.481	34.773	201.1	2.337					
2050.0	2.461	34.776	202.2	2.313					
2100.0	2.444	34.780	203.7	2.291					
2150.0	2.404	34.785	205.3	2.248					
2200.0	2.384	34.790	207.6	2.224					
2250.0	2.364	34.792	208.9	2.199					
2300.0	2.330	34.795	210.4	2.161					
2350.0	2.291	34.795	210.7	2.119					
2400.0	2.198	34.785	208.2	2.023					
2450.0	2.141	34.781	206.3	1.962					
2500.0	2.102	34.780	206.8	1.919					
2550.0	2.061	34.780	207.2	1.874					
2600.0	2.027	34.780	207.9	1.836					
2650.0	1.996	34.780	208.6	1.801					
2700.0	1.941	34.776	208.8	1.743					
2750.0	1.883	34.773	208.3	1.681					
2800.0	1.849	34.773	209.2	1.644					
2850.0	1.803	34.769	209.1	1.594					
2900.0	1.748	34.765	208.6	1.535					
2950.0	1.708	34.763	208.6	1.491					
3000.0	1.673	34.760	208.4	1.452					





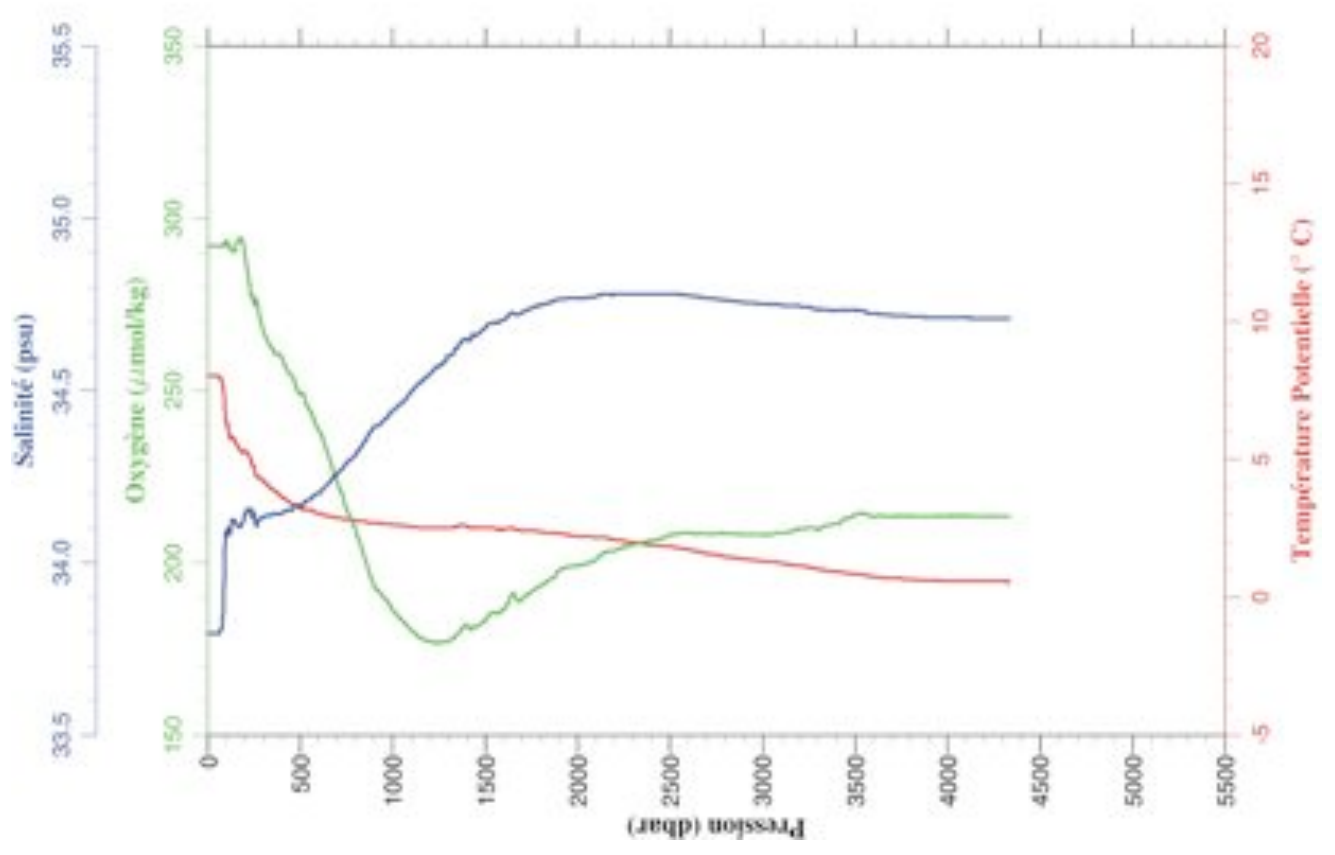
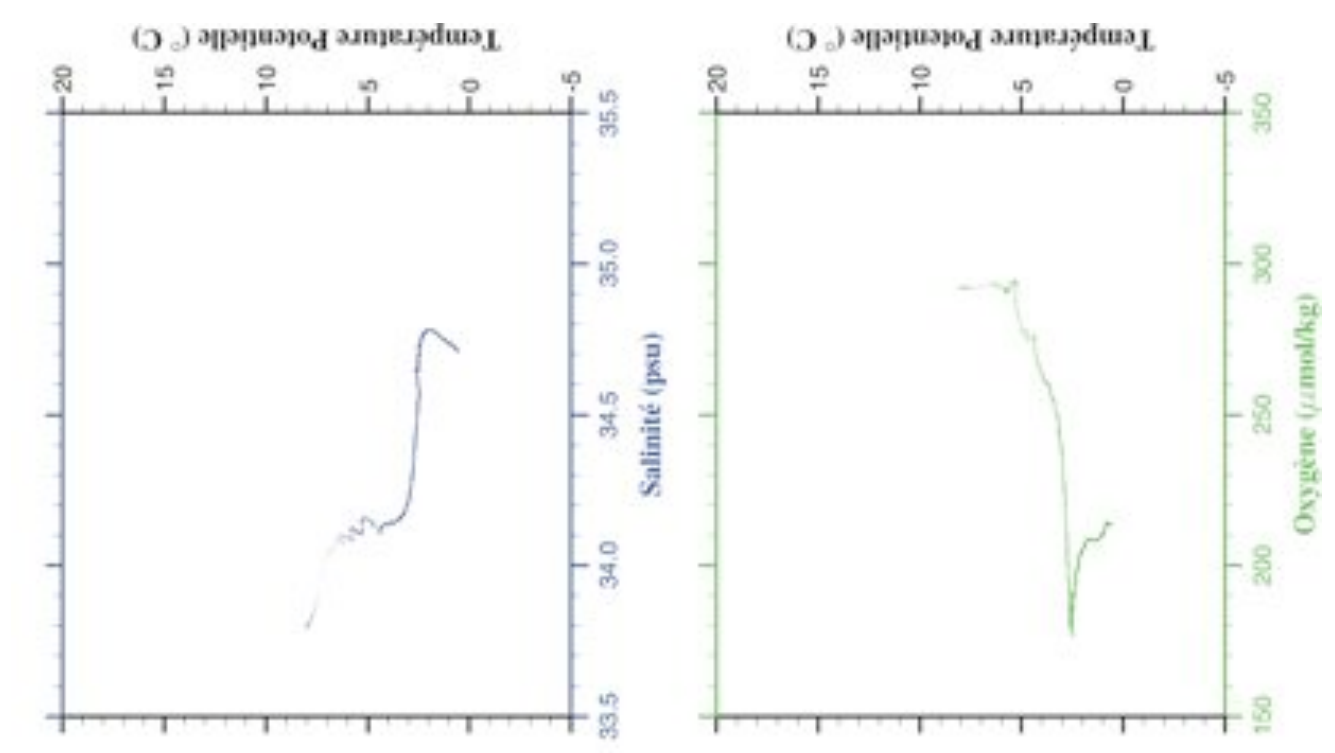
**STATION 55**

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| Station   : 56           Campagne  : GOODHOPE 2008 |
| Date     : 02-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4300      Organisme  : IFREMER |
| Position  : S 45 36.82 |
|           : E 6 13.81 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	8.036	33.794	292.1	8.036	3050.0	1.500	34.750	208.3	1.279
10.0	8.036	33.794	292.1	8.035	3100.0	1.461	34.747	208.7	1.235
20.0	8.036	33.794	292.1	8.034	3150.0	1.409	34.745	209.0	1.179
30.0	8.036	33.794	292.1	8.033	3200.0	1.381	34.744	209.8	1.148
40.0	8.030	33.794	292.1	8.026	3250.0	1.331	34.741	210.0	1.093
50.0	8.039	33.794	292.0	8.034	3300.0	1.264	34.735	209.7	1.023
100.0	6.304	34.079	293.4	6.295	3350.0	1.203	34.733	210.9	0.959
150.0	5.636	34.116	291.2	5.624	3400.0	1.169	34.731	211.3	0.921
200.0	5.327	34.142	289.3	5.311	3450.0	1.128	34.731	213.1	0.876
250.0	4.740	34.145	274.8	4.721	3500.0	1.104	34.733	214.0	0.847
300.0	4.236	34.133	267.5	4.215	3550.0	1.071	34.730	214.3	0.811
350.0	3.941	34.142	262.1	3.917	3600.0	1.010	34.723	213.3	0.746
400.0	3.644	34.142	259.5	3.617	3650.0	0.974	34.720	213.5	0.706
450.0	3.429	34.152	254.6	3.399	3700.0	0.958	34.719	213.6	0.686
500.0	3.247	34.166	249.2	3.214	3750.0	0.952	34.718	213.6	0.675
550.0	3.211	34.183	244.2	3.175	3800.0	0.927	34.716	213.7	0.645
600.0	3.093	34.202	238.3	3.054	3850.0	0.915	34.714	213.6	0.628
650.0	2.994	34.230	231.4	2.952	3900.0	0.904	34.713	213.6	0.612
700.0	2.928	34.260	223.4	2.883	3950.0	0.899	34.712	213.7	0.602
750.0	2.882	34.288	215.7	2.834	4000.0	0.899	34.712	213.7	0.597
800.0	2.834	34.316	209.5	2.783	4050.0	0.897	34.711	213.7	0.590
850.0	2.803	34.354	201.1	2.748	4100.0	0.901	34.711	213.7	0.588
900.0	2.752	34.394	193.1	2.693	4150.0	0.900	34.710	213.6	0.582
950.0	2.727	34.413	189.9	2.665	4200.0	0.903	34.710	213.5	0.580
1000.0	2.700	34.442	186.1	2.635	4250.0	0.901	34.710	213.6	0.572
1050.0	2.657	34.465	183.3	2.588	4300.0	0.903	34.709	213.5	0.568
1100.0	2.634	34.498	180.4	2.561	4335.0	0.903	34.709	213.6	0.565
1150.0	2.604	34.523	178.2	2.528					
1200.0	2.591	34.547	177.2	2.512					
1250.0	2.590	34.571	176.8	2.507					
1300.0	2.606	34.600	177.4	2.519					
1350.0	2.650	34.624	179.4	2.558					
1400.0	2.690	34.651	182.0	2.594					
1450.0	2.619	34.661	181.5	2.519					
1500.0	2.618	34.681	183.3	2.514					
1550.0	2.610	34.698	185.6	2.502					
1600.0	2.571	34.705	186.5	2.460					
1650.0	2.622	34.727	191.2	2.506					
1700.0	2.548	34.727	189.3	2.429					
1750.0	2.529	34.739	191.6	2.406					
1800.0	2.508	34.747	193.3	2.381					
1850.0	2.466	34.756	195.2	2.335					
1900.0	2.449	34.765	197.9	2.314					
1950.0	2.403	34.767	198.8	2.264					
2000.0	2.360	34.768	199.3	2.218					
2050.0	2.338	34.769	199.8	2.192					
2100.0	2.327	34.774	201.1	2.177					
2150.0	2.314	34.779	203.1	2.160					
2200.0	2.247	34.778	203.6	2.089					
2250.0	2.201	34.779	204.7	2.039					
2300.0	2.159	34.780	205.4	1.994					
2350.0	2.108	34.779	206.0	1.939					
2400.0	2.072	34.779	206.5	1.899					
2450.0	2.044	34.778	207.1	1.867					
2500.0	2.018	34.780	208.2	1.837					
2550.0	1.973	34.778	208.5	1.788					
2600.0	1.924	34.777	208.7	1.736					
2650.0	1.849	34.772	208.6	1.657					
2700.0	1.781	34.768	208.4	1.586					
2750.0	1.739	34.765	208.3	1.541					
2800.0	1.680	34.762	208.5	1.478					
2850.0	1.639	34.759	208.4	1.433					
2900.0	1.592	34.755	208.2	1.383					
2950.0	1.565	34.754	208.1	1.351					
3000.0	1.531	34.751	208.2	1.313					



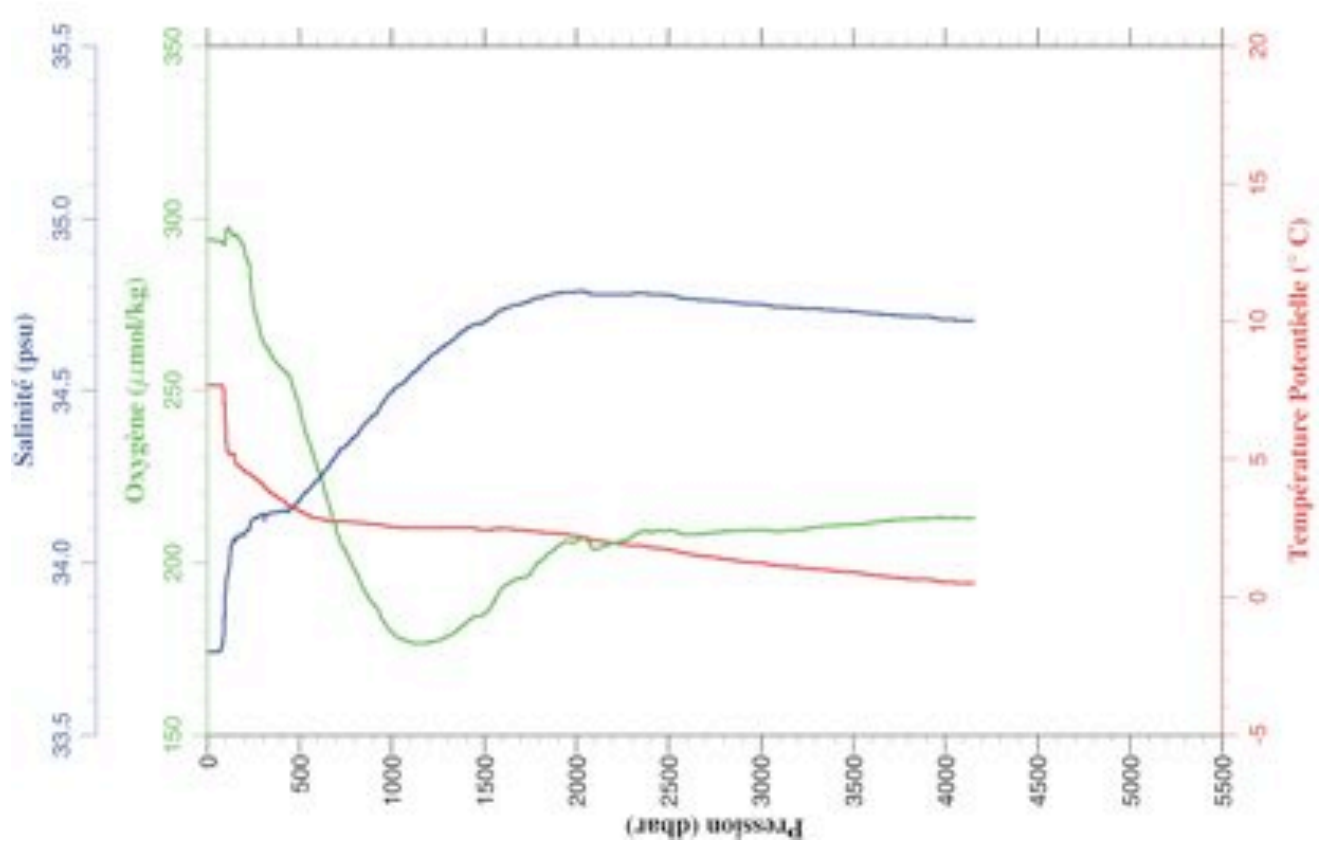
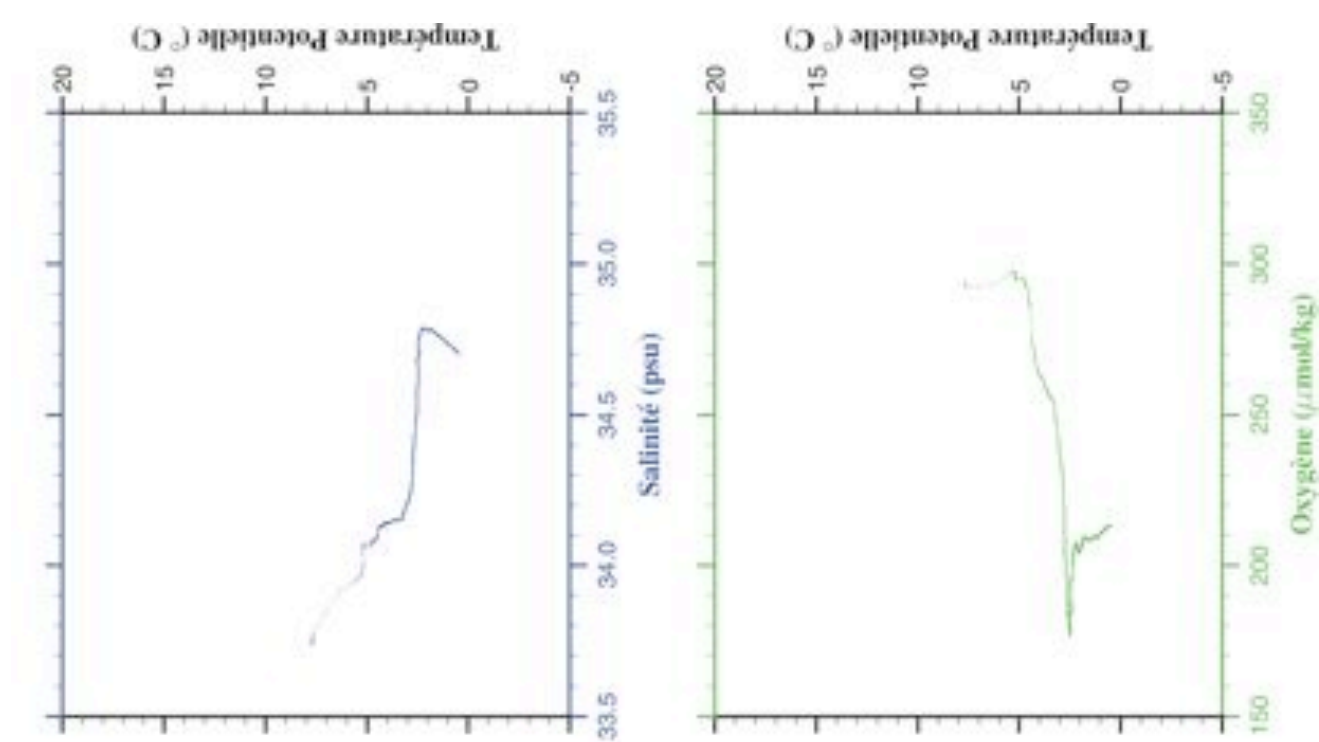
**STATION 56**

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| Station   : 57           Campagne  : GOODHOPE 2008
| Date     : 02-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4100      Organisme : IFREMER
| Position  : S 46 1.47
|           : E 5 51.86
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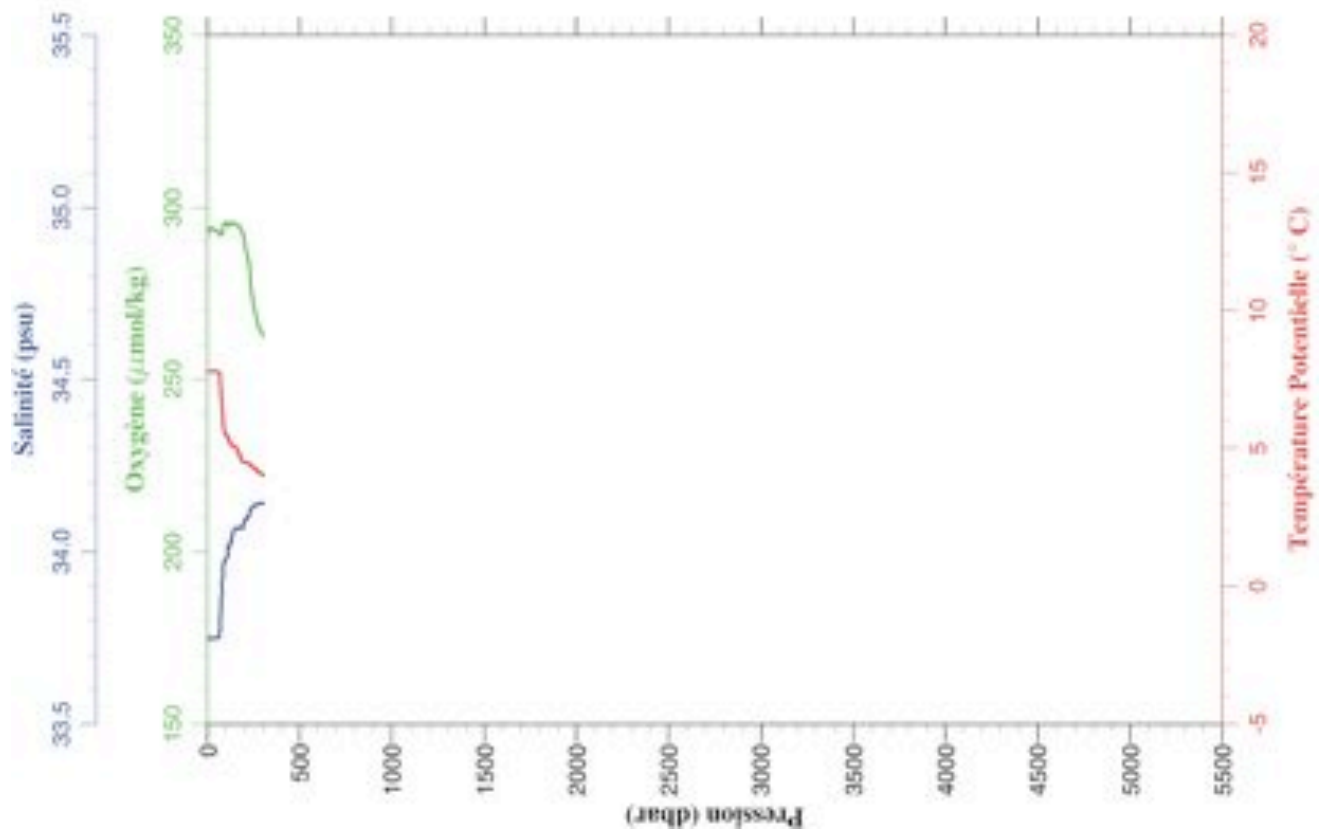
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.689	33.740	294.0	7.689	3050.0	1.408	34.745	209.3	1.188
10.0	7.691	33.740	294.0	7.690	3100.0	1.369	34.742	209.1	1.146
20.0	7.687	33.741	293.7	7.685	3150.0	1.343	34.741	209.5	1.115
30.0	7.692	33.741	293.6	7.689	3200.0	1.325	34.740	209.6	1.092
40.0	7.692	33.741	293.6	7.688	3250.0	1.281	34.737	209.9	1.044
50.0	7.698	33.740	293.4	7.694	3300.0	1.262	34.737	210.5	1.021
100.0	5.818	33.937	294.7	5.810	3350.0	1.235	34.735	210.7	0.991
150.0	5.021	34.067	295.0	5.010	3400.0	1.209	34.733	210.8	0.960
200.0	4.600	34.083	291.2	4.585	3450.0	1.182	34.731	211.1	0.928
250.0	4.392	34.127	274.3	4.374	3500.0	1.164	34.730	211.2	0.906
300.0	4.129	34.140	264.4	4.108	3550.0	1.115	34.726	211.3	0.853
350.0	3.796	34.146	259.9	3.772	3600.0	1.077	34.724	211.6	0.812
400.0	3.579	34.149	256.6	3.552	3650.0	1.044	34.722	212.1	0.774
450.0	3.316	34.155	253.5	3.287	3700.0	1.013	34.720	212.2	0.739
500.0	3.177	34.185	245.1	3.145	3750.0	0.976	34.717	212.7	0.698
550.0	2.984	34.212	235.3	2.949	3800.0	0.946	34.715	212.7	0.664
600.0	2.897	34.243	226.9	2.859	3850.0	0.939	34.714	212.8	0.652
650.0	2.823	34.274	218.5	2.782	3900.0	0.941	34.714	212.8	0.649
700.0	2.796	34.313	209.2	2.752	3950.0	0.881	34.709	213.0	0.585
750.0	2.792	34.340	203.2	2.744	4000.0	0.852	34.707	213.0	0.551
800.0	2.767	34.368	197.7	2.716	4050.0	0.833	34.705	213.1	0.527
850.0	2.742	34.401	192.0	2.687	4100.0	0.828	34.704	212.9	0.517
900.0	2.721	34.428	187.8	2.663	4150.0	0.815	34.702	212.9	0.499
950.0	2.671	34.463	183.5	2.610					
1000.0	2.628	34.495	179.9	2.563					
1050.0	2.597	34.518	177.9	2.528					
1100.0	2.585	34.543	177.0	2.513					
1150.0	2.597	34.567	176.7	2.521					
1200.0	2.591	34.593	176.8	2.512					
1250.0	2.585	34.616	177.4	2.501					
1300.0	2.592	34.634	178.6	2.505					
1350.0	2.599	34.655	180.2	2.507					
1400.0	2.610	34.677	182.4	2.514					
1450.0	2.598	34.693	184.4	2.498					
1500.0	2.557	34.700	185.2	2.454					
1550.0	2.586	34.719	188.3	2.478					
1600.0	2.608	34.736	192.8	2.496					
1650.0	2.588	34.745	194.7	2.473					
1700.0	2.572	34.751	195.6	2.453					
1750.0	2.520	34.761	196.7	2.397					
1800.0	2.495	34.771	200.3	2.368					
1850.0	2.469	34.777	202.7	2.338					
1900.0	2.446	34.782	204.9	2.311					
1950.0	2.407	34.786	206.3	2.268					
2000.0	2.372	34.787	206.4	2.229					
2050.0	2.305	34.785	206.9	2.159					
2100.0	2.219	34.779	204.0	2.070					
2150.0	2.170	34.780	204.9	2.018					
2200.0	2.121	34.780	205.7	1.965					
2250.0	2.079	34.780	206.4	1.919					
2300.0	2.042	34.780	207.4	1.879					
2350.0	2.041	34.783	208.9	1.873					
2400.0	1.986	34.779	208.9	1.814					
2450.0	1.946	34.779	209.3	1.771					
2500.0	1.916	34.778	209.5	1.737					
2550.0	1.834	34.771	208.7	1.652					
2600.0	1.772	34.767	208.1	1.587					
2650.0	1.720	34.764	208.3	1.531					
2700.0	1.673	34.762	208.5	1.480					
2750.0	1.645	34.761	208.8	1.448					
2800.0	1.602	34.758	209.2	1.402					
2850.0	1.550	34.755	209.3	1.345					
2900.0	1.503	34.753	209.2	1.295					
2950.0	1.480	34.751	209.6	1.268					
3000.0	1.465	34.750	209.6	1.249					



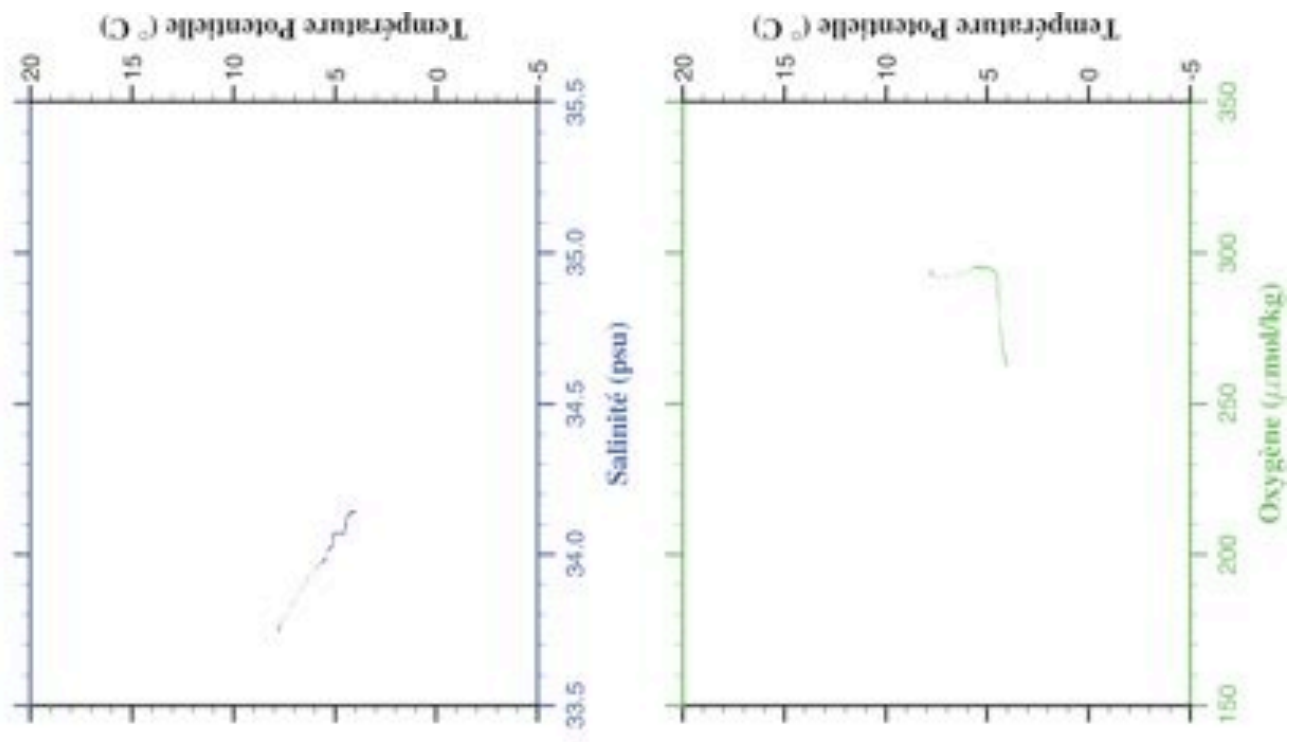
**STATION 57**

Station	: 58	Campagne	: GOODHOPE 2008
Date	: 03-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4100	Organisme	: IFREMER
Position	: S 46 1.02		
	E 5 52.45		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.796	33.748	292.7	7.796
10.0	7.796	33.749	293.5	7.795
20.0	7.798	33.749	294.1	7.796
30.0	7.800	33.749	293.6	7.797
40.0	7.802	33.749	293.4	7.798
50.0	7.803	33.749	293.2	7.798
100.0	5.525	33.981	295.4	5.517
150.0	5.083	34.065	295.2	5.071
200.0	4.497	34.087	290.3	4.482
250.0	4.310	34.132	271.9	4.292
300.0	4.067	34.141	263.1	4.046
304.0	4.060	34.141	262.7	4.038



**STATION 58**



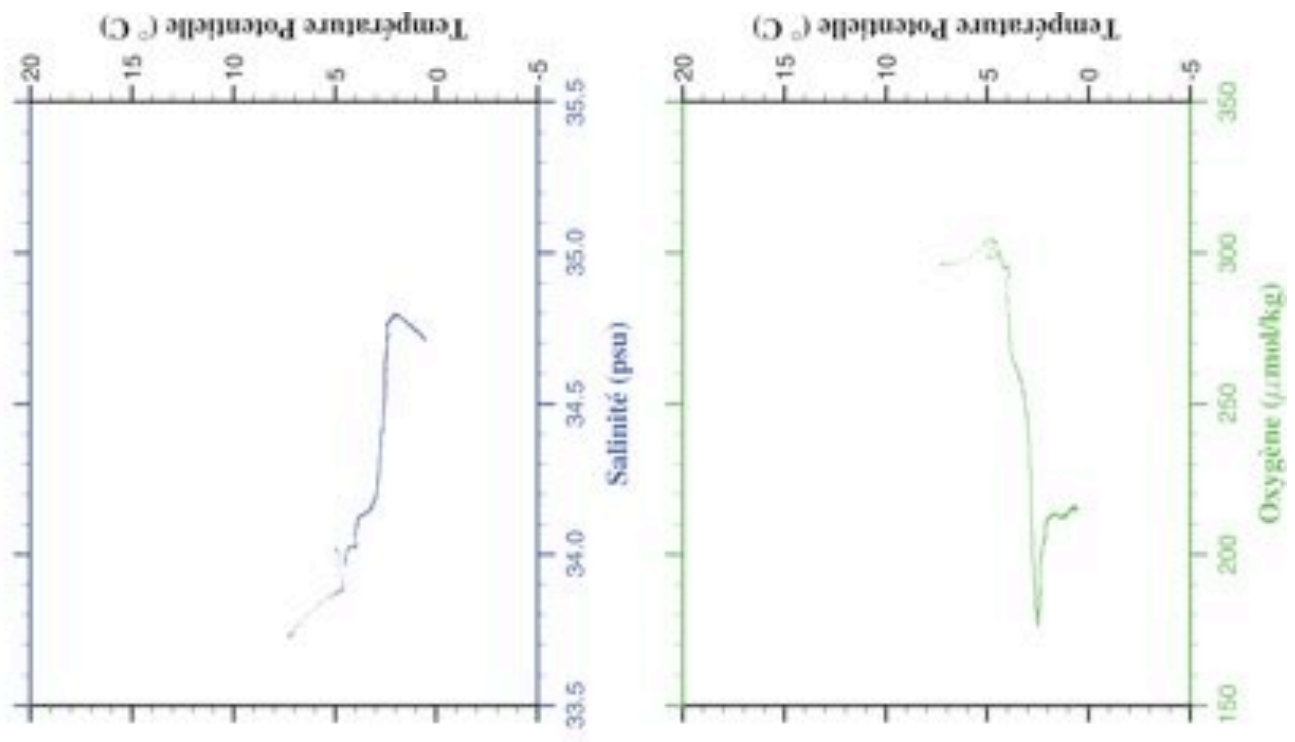
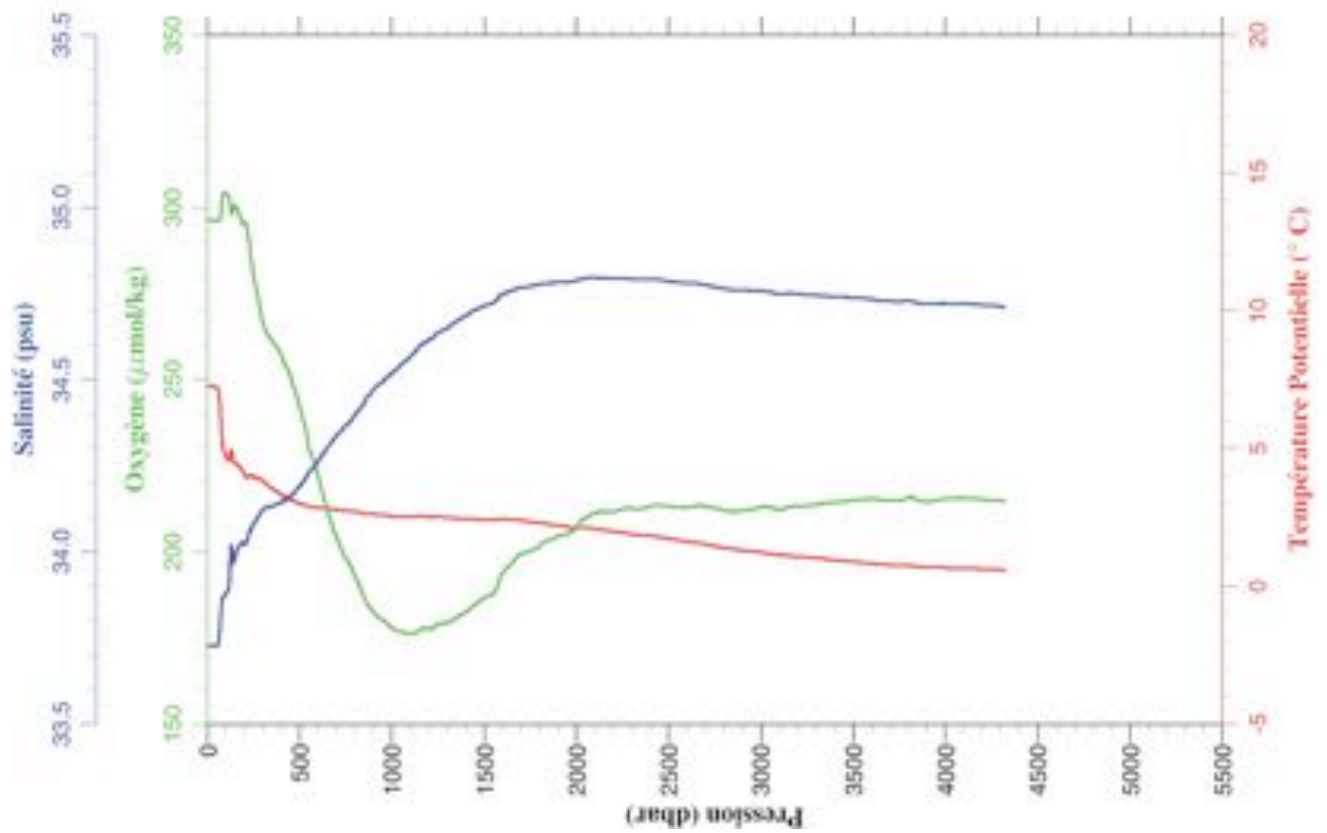
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| Station   : 59           Campagne  : GOODHOPE 2008
| Date     : 03-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4282      Organisme : IFREMER
| Position  : S 46 21.39
|           : E 5 32.65
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	7.260	33.727	296.2	7.259	3050.0	1.407	34.754	212.7	1.187
10.0	7.259	33.726	296.3	7.259	3100.0	1.351	34.748	212.2	1.128
20.0	7.262	33.727	296.2	7.260	3150.0	1.350	34.751	213.0	1.122
30.0	7.246	33.727	296.2	7.244	3200.0	1.315	34.747	213.3	1.083
40.0	7.245	33.727	296.2	7.241	3250.0	1.290	34.746	213.4	1.053
50.0	7.213	33.728	296.1	7.208	3300.0	1.266	34.744	213.7	1.025
100.0	4.732	33.876	304.1	4.724	3350.0	1.227	34.742	214.1	0.982
150.0	4.479	33.984	300.6	4.468	3400.0	1.194	34.740	214.4	0.945
200.0	4.038	34.020	295.5	4.024	3450.0	1.171	34.739	214.7	0.918
250.0	3.974	34.081	279.8	3.957	3500.0	1.154	34.738	214.9	0.896
300.0	3.828	34.122	266.4	3.808	3550.0	1.123	34.736	215.3	0.861
350.0	3.578	34.133	261.3	3.555	3600.0	1.089	34.734	215.5	0.823
400.0	3.352	34.143	257.3	3.326	3650.0	1.060	34.729	215.0	0.789
450.0	3.178	34.162	251.0	3.149	3700.0	1.045	34.728	215.0	0.770
500.0	3.024	34.189	242.1	2.992	3750.0	1.031	34.727	215.0	0.751
550.0	2.954	34.231	230.5	2.919	3800.0	1.038	34.729	215.8	0.753
600.0	2.888	34.264	221.7	2.850	3850.0	1.005	34.723	215.0	0.716
650.0	2.869	34.303	212.1	2.828	3900.0	0.983	34.720	214.5	0.689
700.0	2.823	34.334	204.2	2.778	3950.0	0.980	34.721	214.9	0.681
750.0	2.792	34.367	197.9	2.743	4000.0	0.977	34.721	215.5	0.673
800.0	2.758	34.398	192.7	2.706	4050.0	0.973	34.721	215.6	0.663
850.0	2.689	34.434	186.8	2.635	4100.0	0.970	34.720	215.6	0.655
900.0	2.667	34.472	182.5	2.609	4150.0	0.966	34.719	215.5	0.646
950.0	2.649	34.492	180.3	2.588	4200.0	0.952	34.716	215.2	0.627
1000.0	2.597	34.518	177.9	2.532	4250.0	0.941	34.714	215.0	0.611
1050.0	2.592	34.542	176.8	2.524	4300.0	0.915	34.711	214.8	0.580
1100.0	2.583	34.567	176.2	2.511	4320.0	0.900	34.709	214.6	0.564
1150.0	2.625	34.598	177.3	2.549					
1200.0	2.613	34.615	177.7	2.533					
1250.0	2.613	34.635	179.1	2.529					
1300.0	2.570	34.649	179.4	2.483					
1350.0	2.555	34.670	180.8	2.464					
1400.0	2.544	34.686	182.6	2.449					
1450.0	2.538	34.702	184.8	2.439					
1500.0	2.525	34.715	186.6	2.422					
1550.0	2.507	34.724	188.0	2.400					
1600.0	2.549	34.745	193.9	2.438					
1650.0	2.538	34.759	196.8	2.423					
1700.0	2.502	34.767	199.4	2.383					
1750.0	2.465	34.772	200.3	2.343					
1800.0	2.427	34.776	201.6	2.300					
1850.0	2.377	34.781	203.4	2.248					
1900.0	2.348	34.783	204.7	2.214					
1950.0	2.297	34.783	205.1	2.160					
2000.0	2.268	34.786	206.7	2.127					
2050.0	2.266	34.793	209.8	2.121					
2100.0	2.237	34.795	211.3	2.088					
2150.0	2.194	34.794	211.4	2.041					
2200.0	2.137	34.792	211.6	1.981					
2250.0	2.112	34.794	212.3	1.952					
2300.0	2.054	34.791	212.5	1.890					
2350.0	2.020	34.790	212.5	1.852					
2400.0	2.001	34.791	213.1	1.829					
2450.0	1.958	34.789	213.6	1.782					
2500.0	1.896	34.784	213.2	1.717					
2550.0	1.868	34.783	212.9	1.685					
2600.0	1.807	34.779	213.0	1.621					
2650.0	1.773	34.778	213.4	1.583					
2700.0	1.722	34.775	213.2	1.529					
2750.0	1.646	34.769	212.6	1.449					
2800.0	1.592	34.764	212.0	1.392					
2850.0	1.553	34.761	211.7	1.349					
2900.0	1.513	34.759	212.0	1.304					
2950.0	1.485	34.758	212.5	1.273					
3000.0	1.450	34.757	213.0	1.234					





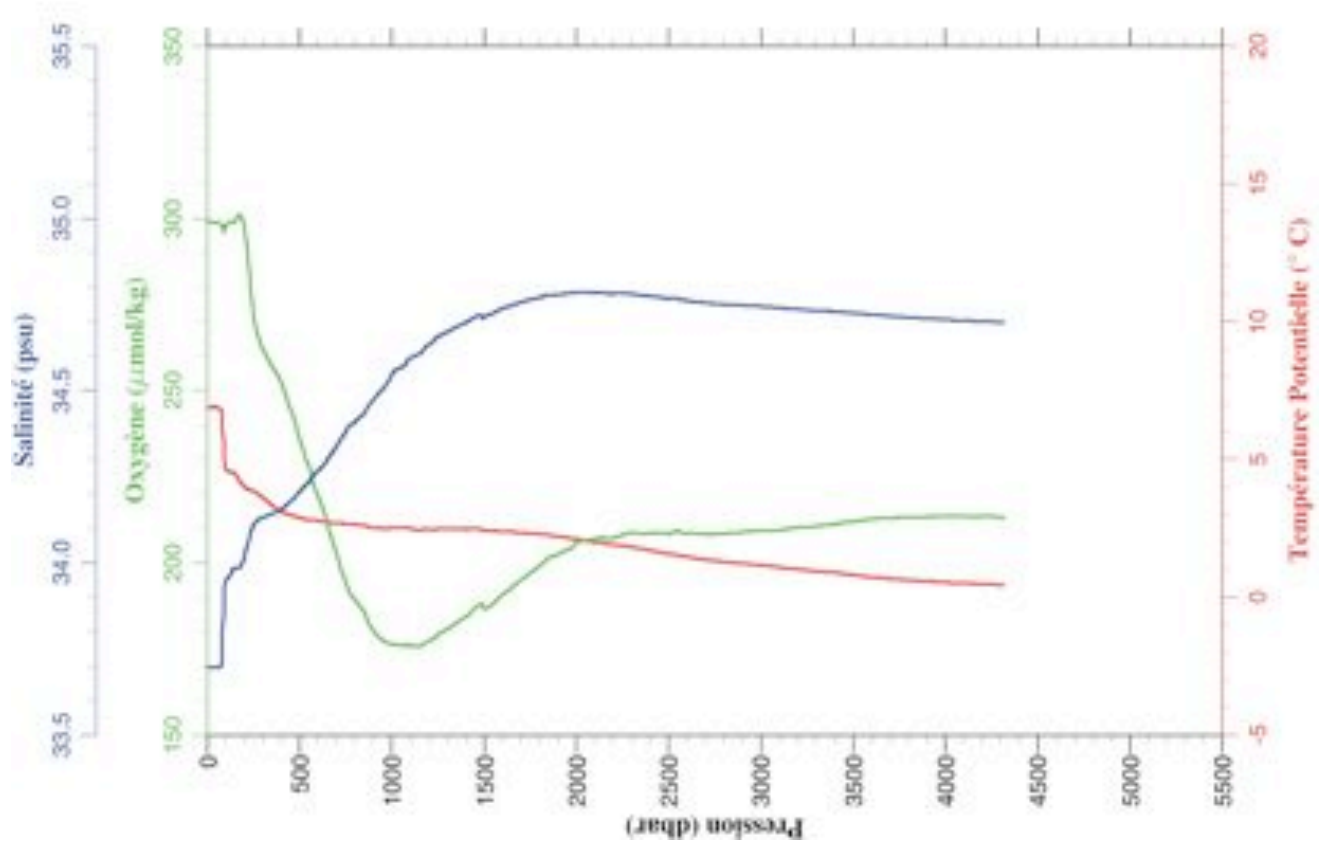
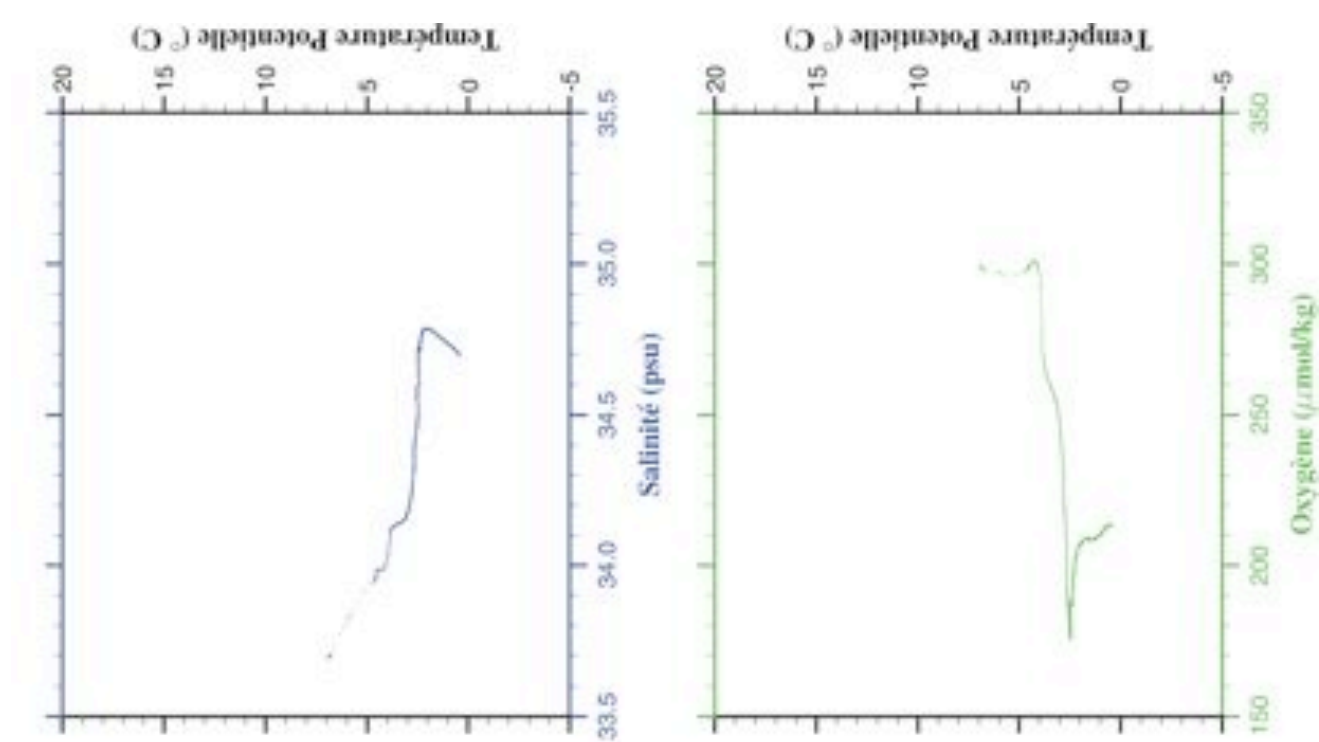
**STATION 59**

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| Station   : 60           Campagne  : GOODHOPE 2008
| Date     : 03-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4278      Organisme : IFREMER
| Position  : S 46 43.33
|           : E 5 11.77
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.892	33.696	299.3	6.892	3050.0	1.353	34.742	209.4	1.134
10.0	6.893	33.696	299.1	6.893	3100.0	1.312	34.740	209.6	1.090
20.0	6.895	33.696	299.1	6.893	3150.0	1.279	34.738	209.9	1.053
30.0	6.900	33.696	298.8	6.897	3200.0	1.250	34.736	210.3	1.019
40.0	6.902	33.696	298.9	6.899	3250.0	1.215	34.734	210.5	0.981
50.0	6.904	33.696	298.8	6.899	3300.0	1.182	34.732	210.6	0.943
100.0	4.614	33.950	298.0	4.607	3350.0	1.164	34.731	211.0	0.921
150.0	4.494	33.983	299.1	4.483	3400.0	1.145	34.730	211.2	0.898
200.0	4.023	34.018	297.6	4.010	3450.0	1.106	34.727	211.7	0.854
250.0	3.864	34.112	271.8	3.846	3500.0	1.062	34.725	211.9	0.806
300.0	3.630	34.133	262.0	3.610	3550.0	1.026	34.722	212.4	0.766
350.0	3.347	34.143	257.0	3.324	3600.0	0.993	34.720	212.7	0.730
400.0	3.137	34.154	252.4	3.111	3650.0	0.975	34.719	213.0	0.707
450.0	3.017	34.178	244.5	2.989	3700.0	0.942	34.716	212.9	0.670
500.0	2.913	34.204	236.2	2.882	3750.0	0.924	34.714	213.2	0.647
550.0	2.854	34.234	228.3	2.820	3800.0	0.906	34.713	213.2	0.624
600.0	2.817	34.266	219.1	2.779	3850.0	0.888	34.711	213.3	0.602
650.0	2.761	34.300	211.2	2.721	3900.0	0.875	34.710	213.3	0.584
700.0	2.737	34.338	202.5	2.693	3950.0	0.854	34.707	213.5	0.558
750.0	2.722	34.380	194.5	2.674	4000.0	0.839	34.706	213.5	0.539
800.0	2.693	34.408	189.4	2.642	4050.0	0.830	34.705	213.4	0.525
850.0	2.659	34.434	185.8	2.605	4100.0	0.822	34.704	213.4	0.512
900.0	2.585	34.471	180.3	2.528	4150.0	0.810	34.702	213.4	0.495
950.0	2.556	34.501	177.7	2.495	4200.0	0.801	34.701	213.5	0.480
1000.0	2.576	34.548	176.3	2.511	4250.0	0.793	34.699	213.4	0.467
1050.0	2.582	34.566	176.2	2.513	4300.0	0.784	34.698	213.2	0.453
1100.0	2.555	34.593	176.1	2.484	4315.0	0.782	34.698	213.1	0.449
1150.0	2.537	34.607	175.8	2.461					
1200.0	2.543	34.634	177.4	2.464					
1250.0	2.567	34.656	179.2	2.483					
1300.0	2.561	34.670	180.7	2.474					
1350.0	2.571	34.684	182.6	2.479					
1400.0	2.561	34.697	184.3	2.466					
1450.0	2.583	34.713	186.8	2.483					
1500.0	2.517	34.714	186.7	2.415					
1550.0	2.501	34.725	188.1	2.395					
1600.0	2.490	34.739	190.9	2.379					
1650.0	2.480	34.747	192.8	2.365					
1700.0	2.456	34.756	195.2	2.338					
1750.0	2.438	34.764	197.1	2.316					
1800.0	2.417	34.771	199.1	2.291					
1850.0	2.393	34.776	201.5	2.263					
1900.0	2.336	34.779	202.5	2.203					
1950.0	2.297	34.781	203.9	2.160					
2000.0	2.261	34.786	206.0	2.120					
2050.0	2.190	34.784	206.5	2.045					
2100.0	2.142	34.783	206.9	1.994					
2150.0	2.099	34.782	207.2	1.948					
2200.0	2.060	34.781	207.2	1.905					
2250.0	2.036	34.782	208.1	1.877					
2300.0	1.980	34.780	208.7	1.818					
2350.0	1.924	34.776	208.3	1.758					
2400.0	1.871	34.774	208.7	1.702					
2450.0	1.813	34.771	208.7	1.640					
2500.0	1.740	34.766	208.3	1.564					
2550.0	1.719	34.767	209.2	1.539					
2600.0	1.655	34.761	208.4	1.472					
2650.0	1.598	34.757	208.5	1.411					
2700.0	1.554	34.755	208.3	1.364					
2750.0	1.512	34.752	208.4	1.318					
2800.0	1.482	34.750	208.4	1.284					
2850.0	1.461	34.749	208.6	1.259					
2900.0	1.430	34.747	208.9	1.224					
2950.0	1.401	34.746	209.2	1.191					
3000.0	1.379	34.744	209.3	1.165					



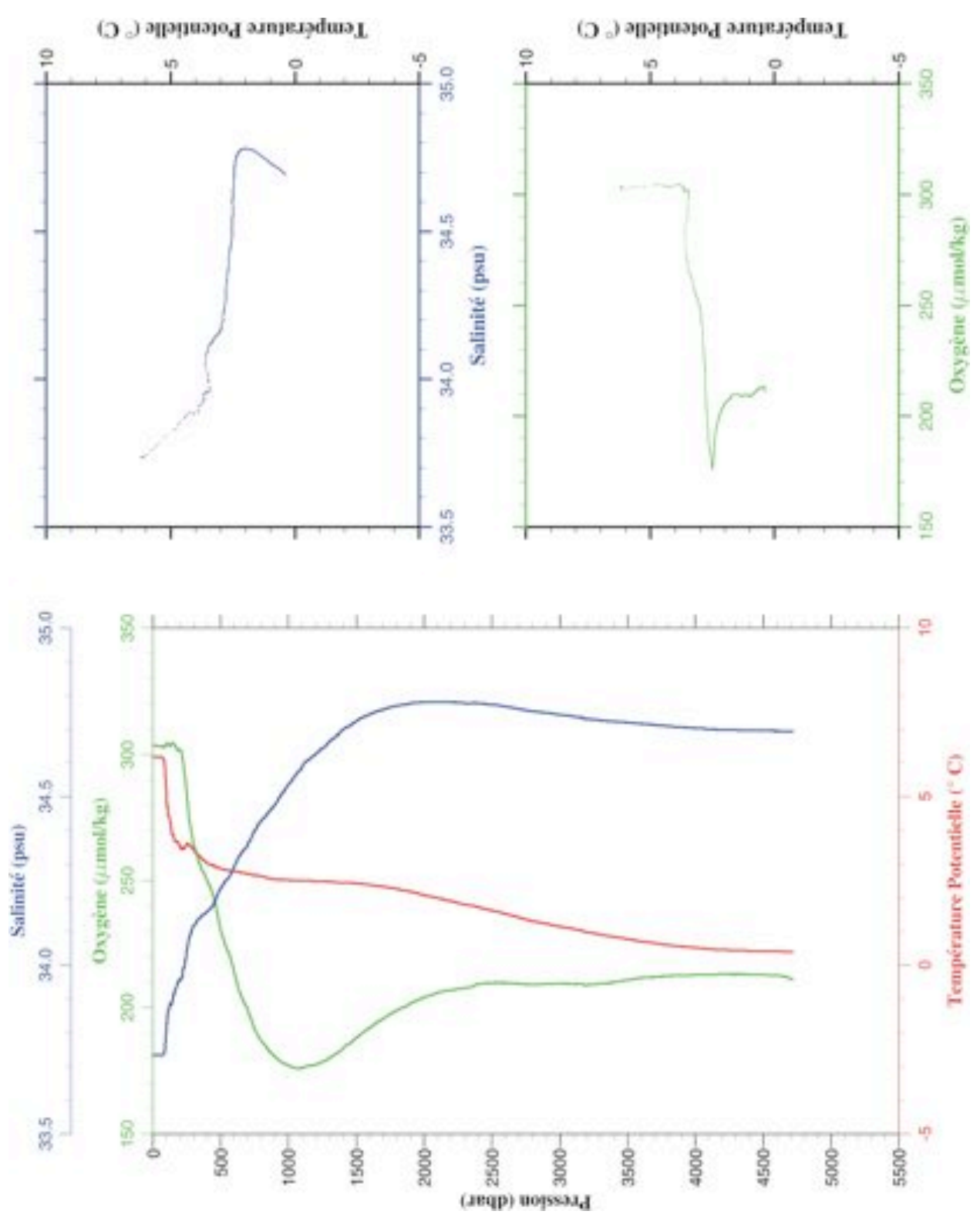
**STATION 60**

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| Station   : 61           Campagne  : GOODHOPE 2008
| Date     : 04-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4670      Organisme : IFREMER
| Position  : S 47 8.32
|           : E 4 47.44
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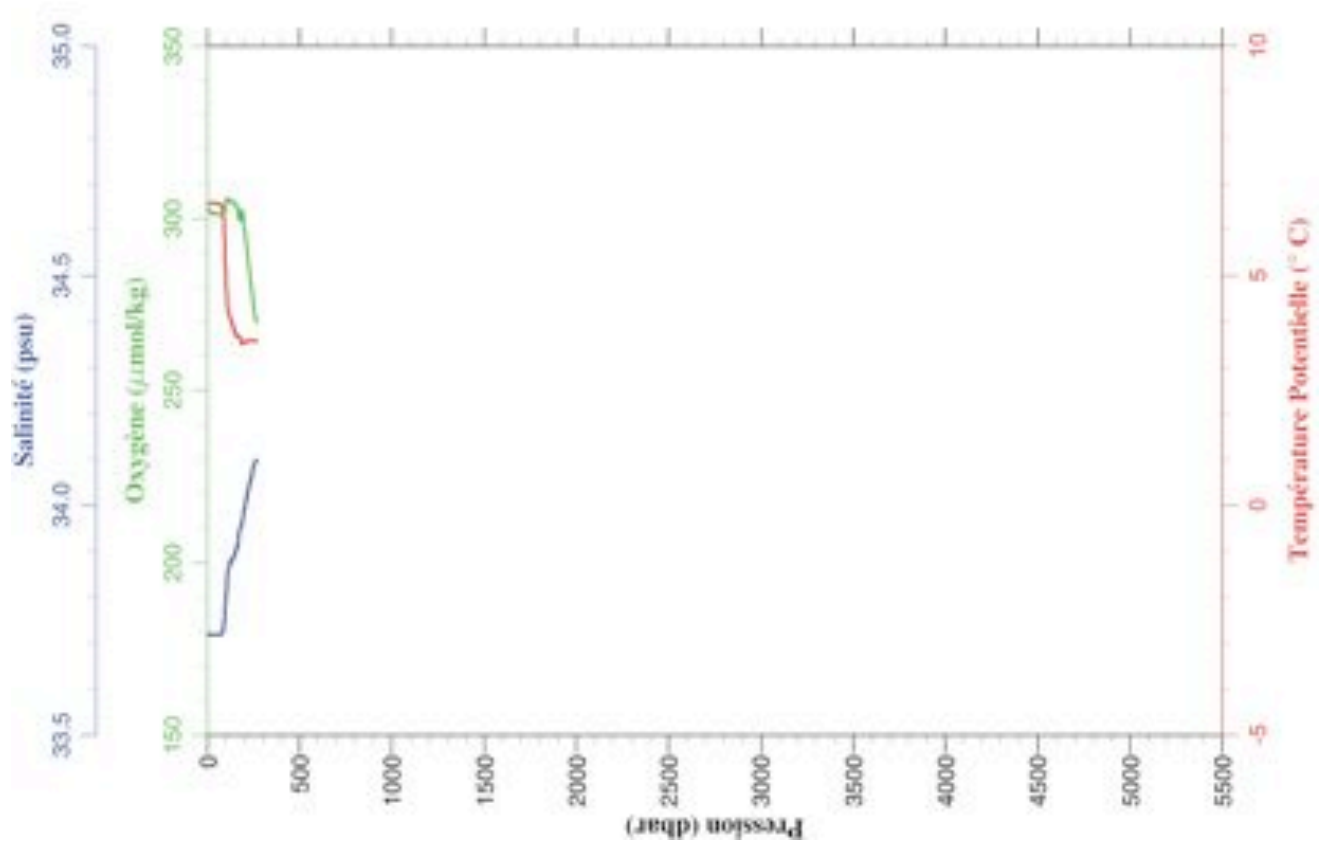
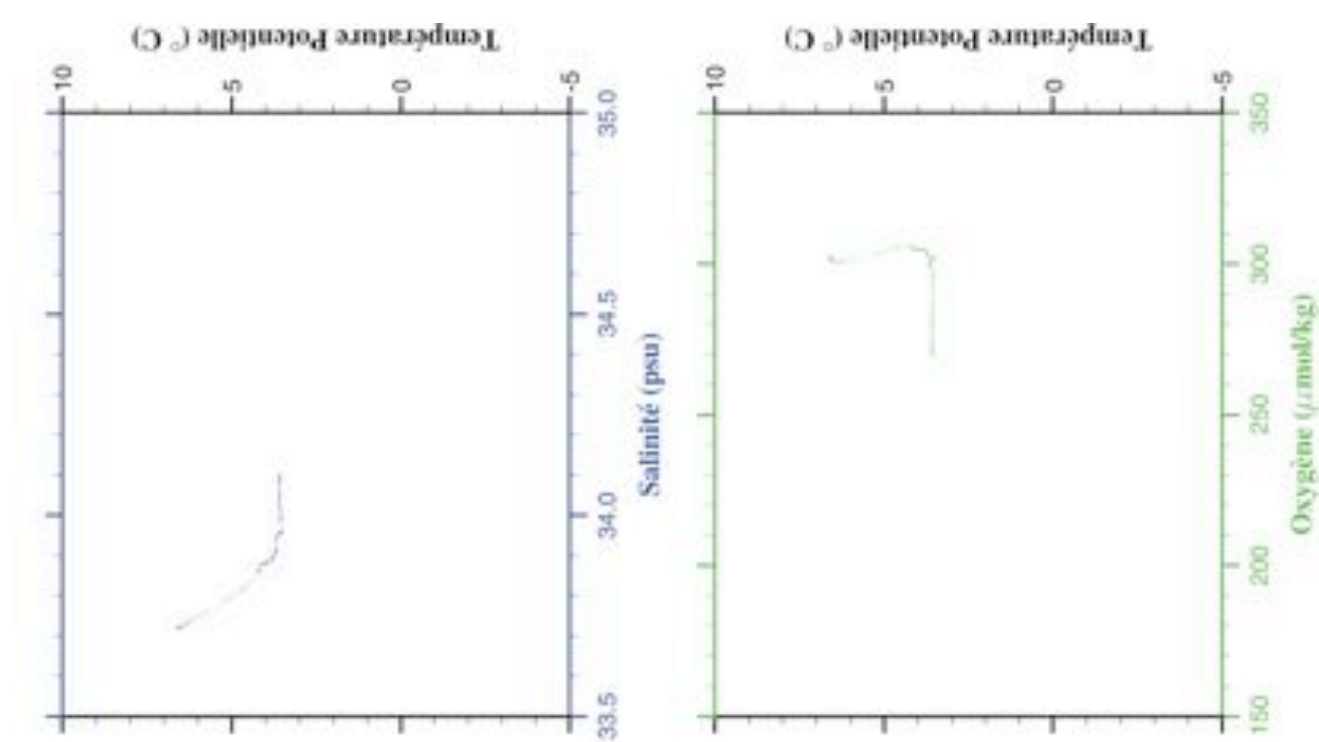
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.184	33.733	303.6	6.184	3050.0	1.332	34.741	209.4	1.114
10.0	6.183	33.733	303.6	6.183	3100.0	1.297	34.738	209.2	1.075
20.0	6.186	33.733	303.5	6.184	3150.0	1.266	34.735	209.3	1.039
30.0	6.185	33.733	303.3	6.182	3200.0	1.215	34.731	208.8	0.986
40.0	6.185	33.733	303.4	6.182	3250.0	1.179	34.728	209.0	0.946
50.0	6.190	33.733	303.2	6.185	3300.0	1.143	34.726	209.5	0.906
100.0	5.198	33.808	303.7	5.191	3350.0	1.115	34.724	209.7	0.873
150.0	3.895	33.909	304.6	3.885	3400.0	1.089	34.723	210.0	0.843
200.0	3.533	33.955	301.9	3.520	3450.0	1.059	34.721	210.4	0.809
250.0	3.616	34.044	284.3	3.600	3500.0	1.027	34.719	210.9	0.772
300.0	3.442	34.116	264.7	3.422	3550.0	1.001	34.718	211.3	0.742
350.0	3.225	34.143	256.2	3.203	3600.0	0.970	34.716	211.7	0.707
400.0	3.054	34.159	250.2	3.029	3650.0	0.950	34.714	211.9	0.682
450.0	2.996	34.185	243.3	2.967	3700.0	0.928	34.713	212.0	0.657
500.0	2.895	34.228	230.6	2.863	3750.0	0.897	34.710	212.2	0.620
550.0	2.852	34.257	222.4	2.818	3800.0	0.881	34.709	212.5	0.600
600.0	2.830	34.293	213.8	2.793	3850.0	0.859	34.707	212.6	0.574
650.0	2.790	34.328	204.8	2.749	3900.0	0.848	34.706	212.7	0.558
700.0	2.759	34.358	199.2	2.715	3950.0	0.838	34.705	212.8	0.543
750.0	2.712	34.397	191.4	2.664	4000.0	0.818	34.703	212.8	0.518
800.0	2.685	34.430	186.7	2.634	4050.0	0.806	34.702	212.9	0.501
850.0	2.640	34.453	183.3	2.586	4100.0	0.793	34.700	213.0	0.483
900.0	2.600	34.475	180.6	2.543	4150.0	0.780	34.699	213.0	0.466
950.0	2.605	34.508	178.4	2.544	4200.0	0.776	34.698	213.1	0.456
1000.0	2.590	34.536	177.1	2.526	4250.0	0.772	34.698	213.2	0.448
1050.0	2.572	34.560	176.1	2.504	4300.0	0.771	34.697	213.1	0.441
1100.0	2.573	34.585	176.0	2.501	4350.0	0.769	34.696	213.2	0.433
1150.0	2.580	34.608	176.9	2.504	4400.0	0.768	34.696	213.0	0.427
1200.0	2.567	34.626	177.5	2.488	4450.0	0.768	34.696	213.0	0.422
1250.0	2.570	34.643	178.5	2.486	4500.0	0.770	34.695	212.9	0.418
1300.0	2.563	34.663	180.0	2.475	4550.0	0.771	34.695	212.7	0.414
1350.0	2.562	34.679	181.7	2.470	4600.0	0.773	34.695	212.6	0.410
1400.0	2.542	34.698	183.8	2.447	4650.0	0.774	34.694	212.3	0.405
1450.0	2.544	34.709	185.7	2.445	4700.0	0.777	34.694	211.4	0.402
1500.0	2.525	34.723	188.0	2.422	4715.0	0.778	34.694	211.1	0.402
1550.0	2.514	34.736	190.2	2.407					
1600.0	2.493	34.743	192.0	2.382					
1650.0	2.468	34.752	193.9	2.354					
1700.0	2.450	34.758	195.4	2.332					
1750.0	2.418	34.764	197.4	2.296					
1800.0	2.391	34.769	198.9	2.265					
1850.0	2.344	34.772	200.2	2.214					
1900.0	2.315	34.776	201.5	2.182					
1950.0	2.275	34.778	202.7	2.139					
2000.0	2.222	34.780	204.0	2.082					
2050.0	2.178	34.781	204.9	2.034					
2100.0	2.141	34.781	205.9	1.993					
2150.0	2.098	34.781	206.6	1.946					
2200.0	2.048	34.779	206.9	1.893					
2250.0	2.008	34.778	207.4	1.849					
2300.0	1.964	34.777	207.7	1.801					
2350.0	1.935	34.777	208.2	1.769					
2400.0	1.889	34.776	209.2	1.719					
2450.0	1.846	34.775	209.6	1.672					
2500.0	1.795	34.772	209.6	1.618					
2550.0	1.763	34.770	209.8	1.582					
2600.0	1.710	34.767	209.8	1.525					
2650.0	1.657	34.763	209.6	1.469					
2700.0	1.606	34.760	209.4	1.415					
2750.0	1.554	34.756	209.2	1.359					
2800.0	1.502	34.752	209.0	1.304					
2850.0	1.472	34.750	209.0	1.270					
2900.0	1.441	34.749	209.2	1.234					
2950.0	1.402	34.746	209.4	1.192					
3000.0	1.358	34.743	209.5	1.144					



**STATION 61**

Station	: 62	Campagne	: GOODHOPE 2008
Date	: 04-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4489	Organisme	: IFREMER
Position	: S 47 33.25		
	E 4 22.58		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.587	33.718	302.6	6.587
10.0	6.587	33.718	302.4	6.586
20.0	6.578	33.718	301.5	6.577
30.0	6.575	33.719	301.4	6.572
40.0	6.572	33.719	301.4	6.569
50.0	6.578	33.719	301.3	6.573
100.0	4.972	33.797	304.1	4.965
150.0	3.774	33.895	304.3	3.764
200.0	3.557	33.992	296.9	3.544
250.0	3.602	34.085	274.3	3.586
268.0	3.585	34.099	269.6	3.568



**STATION 62**

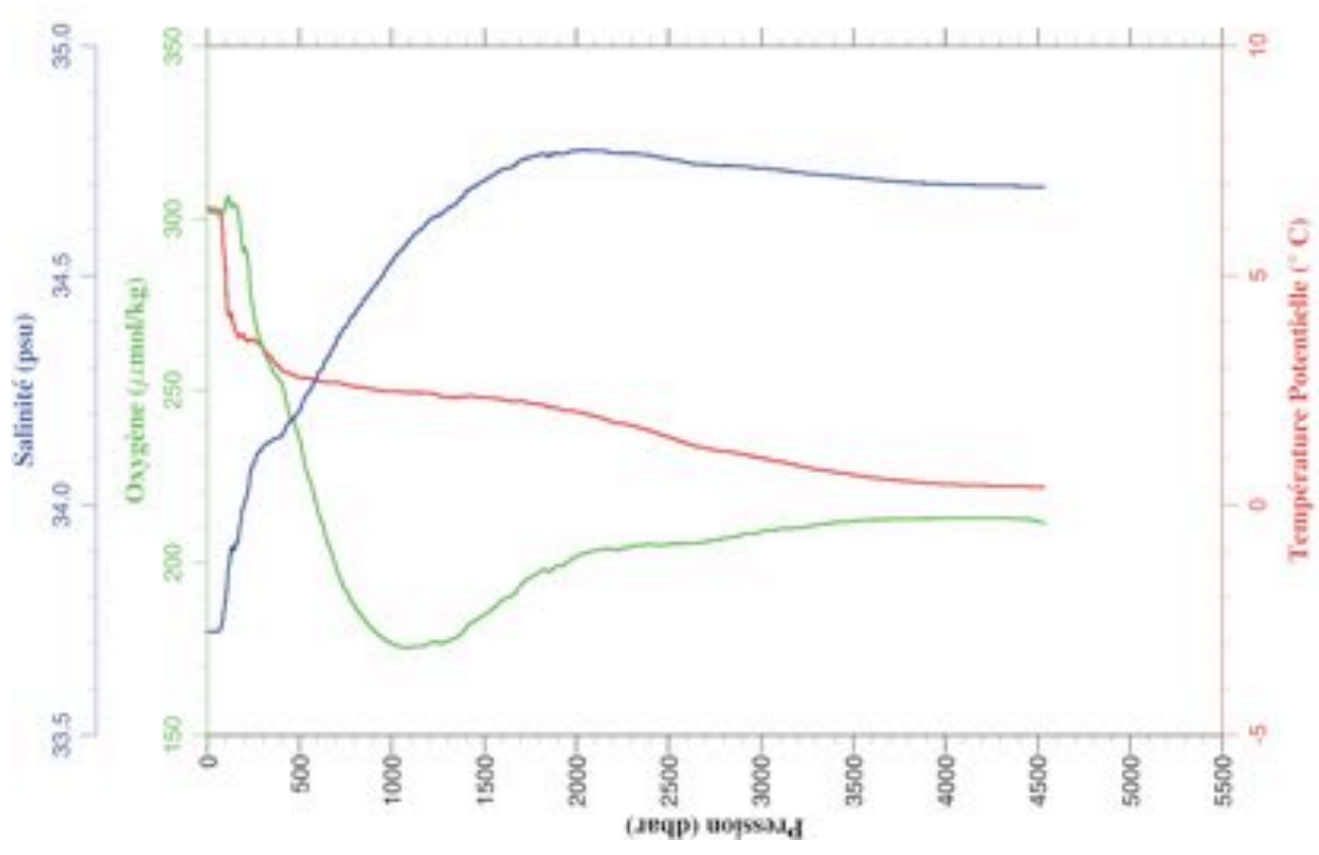
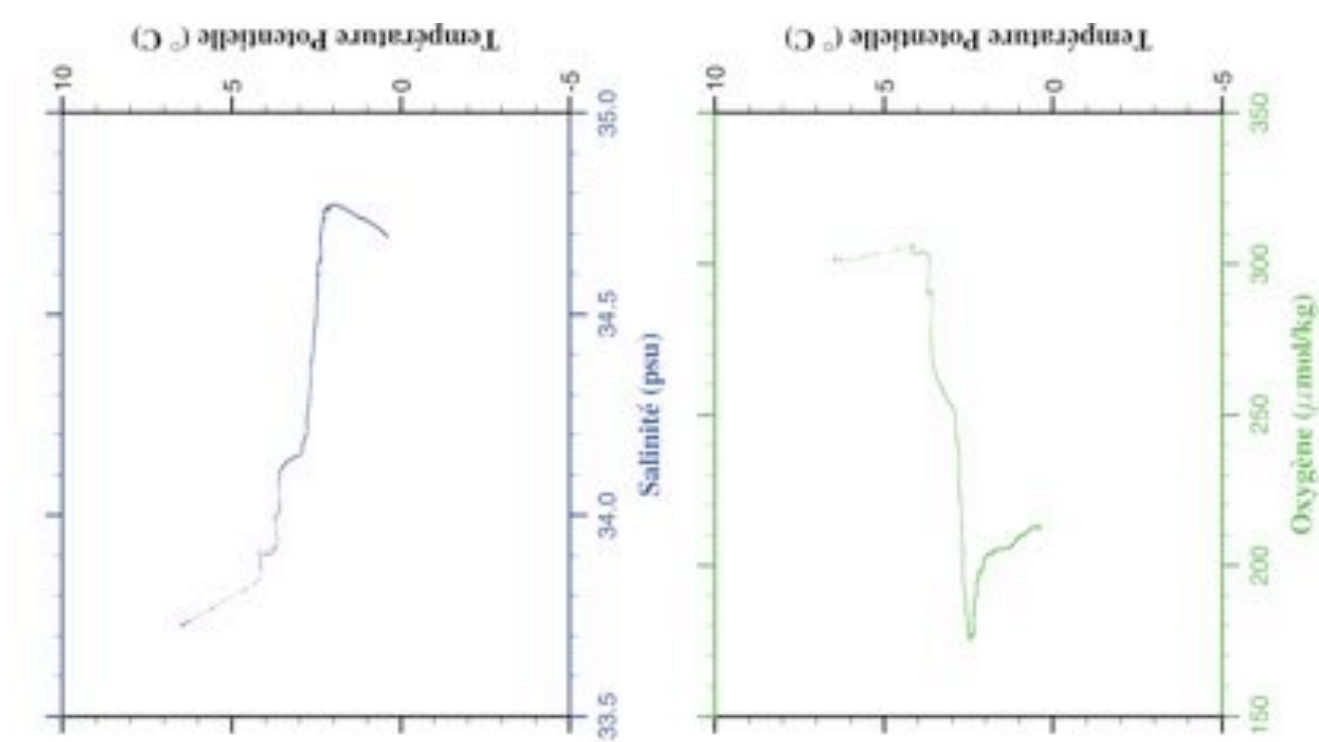
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| Station   : 63           Campagne  : GOODHOPE 2008 |
| Date      : 04-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4480       Organisme  : IFREMER |
| Position  : S 47 33.24 |
|           : E 4 22.56  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.472	33.725	302.3	6.472	3050.0	1.207	34.732	209.5	0.992
10.0	6.470	33.725	302.2	6.469	3100.0	1.173	34.730	209.8	0.954
20.0	6.460	33.726	302.0	6.458	3150.0	1.131	34.727	209.9	0.908
30.0	6.453	33.726	301.5	6.450	3200.0	1.097	34.725	210.2	0.871
40.0	6.449	33.726	301.4	6.445	3250.0	1.058	34.723	210.5	0.827
50.0	6.450	33.726	301.3	6.446	3300.0	1.020	34.720	210.9	0.786
100.0	4.786	33.807	303.9	4.779	3350.0	0.997	34.719	211.4	0.758
150.0	3.830	33.905	304.2	3.820	3400.0	0.967	34.717	211.7	0.724
200.0	3.654	34.000	290.6	3.641	3450.0	0.943	34.716	211.9	0.696
250.0	3.617	34.093	272.6	3.600	3500.0	0.915	34.714	212.1	0.664
300.0	3.450	34.127	262.4	3.430	3550.0	0.892	34.712	212.3	0.636
350.0	3.224	34.141	256.3	3.201	3600.0	0.866	34.710	212.5	0.606
400.0	2.982	34.151	252.3	2.957	3650.0	0.845	34.708	212.6	0.580
450.0	2.892	34.184	242.3	2.864	3700.0	0.828	34.706	212.6	0.559
500.0	2.810	34.205	236.1	2.779	3750.0	0.815	34.705	212.7	0.541
550.0	2.804	34.247	224.7	2.769	3800.0	0.800	34.704	212.7	0.521
600.0	2.747	34.286	215.0	2.710	3850.0	0.786	34.702	212.8	0.503
650.0	2.717	34.321	206.1	2.676	3900.0	0.776	34.701	212.9	0.488
700.0	2.715	34.360	198.3	2.671	3950.0	0.768	34.700	212.9	0.475
750.0	2.680	34.388	192.0	2.632	4000.0	0.761	34.699	212.9	0.463
800.0	2.633	34.417	187.4	2.582	4050.0	0.756	34.698	212.9	0.453
850.0	2.618	34.450	183.5	2.564	4100.0	0.755	34.697	213.0	0.446
900.0	2.579	34.473	180.5	2.521	4150.0	0.753	34.697	212.9	0.440
950.0	2.558	34.498	178.2	2.497	4200.0	0.751	34.696	213.1	0.432
1000.0	2.553	34.530	176.5	2.488	4250.0	0.750	34.696	213.0	0.426
1050.0	2.540	34.555	175.6	2.472	4300.0	0.751	34.696	213.0	0.422
1100.0	2.524	34.579	175.4	2.453	4350.0	0.752	34.695	212.9	0.417
1150.0	2.529	34.599	175.9	2.453	4400.0	0.753	34.695	212.7	0.412
1200.0	2.531	34.621	176.5	2.452	4450.0	0.754	34.694	212.6	0.408
1250.0	2.485	34.631	176.8	2.403	4500.0	0.756	34.694	212.0	0.404
1300.0	2.444	34.646	177.3	2.358	4536.0	0.757	34.694	211.5	0.401
1350.0	2.435	34.656	178.2	2.345					
1400.0	2.474	34.682	181.0	2.380					
1450.0	2.462	34.695	183.2	2.364					
1500.0	2.450	34.708	184.8	2.348					
1550.0	2.435	34.719	186.9	2.329					
1600.0	2.421	34.731	189.1	2.312					
1650.0	2.366	34.736	190.5	2.253					
1700.0	2.379	34.751	193.7	2.261					
1750.0	2.352	34.758	195.8	2.231					
1800.0	2.324	34.763	197.3	2.199					
1850.0	2.262	34.761	197.2	2.134					
1900.0	2.239	34.765	199.2	2.107					
1950.0	2.197	34.768	200.2	2.061					
2000.0	2.174	34.772	201.7	2.034					
2050.0	2.138	34.773	202.9	1.994					
2100.0	2.086	34.772	203.5	1.939					
2150.0	2.034	34.771	204.1	1.884					
2200.0	1.964	34.767	203.9	1.811					
2250.0	1.938	34.767	204.1	1.781					
2300.0	1.899	34.766	204.7	1.738					
2350.0	1.844	34.764	205.2	1.679					
2400.0	1.796	34.762	205.4	1.628					
2450.0	1.727	34.757	205.1	1.556					
2500.0	1.659	34.754	205.4	1.485					
2550.0	1.594	34.750	205.4	1.416					
2600.0	1.529	34.746	205.6	1.348					
2650.0	1.469	34.743	205.7	1.285					
2700.0	1.432	34.741	206.0	1.245					
2750.0	1.395	34.740	206.7	1.204					
2800.0	1.369	34.738	207.1	1.173					
2850.0	1.349	34.739	207.6	1.150					
2900.0	1.318	34.738	208.3	1.114					
2950.0	1.279	34.735	208.4	1.071					
3000.0	1.237	34.734	209.0	1.026					





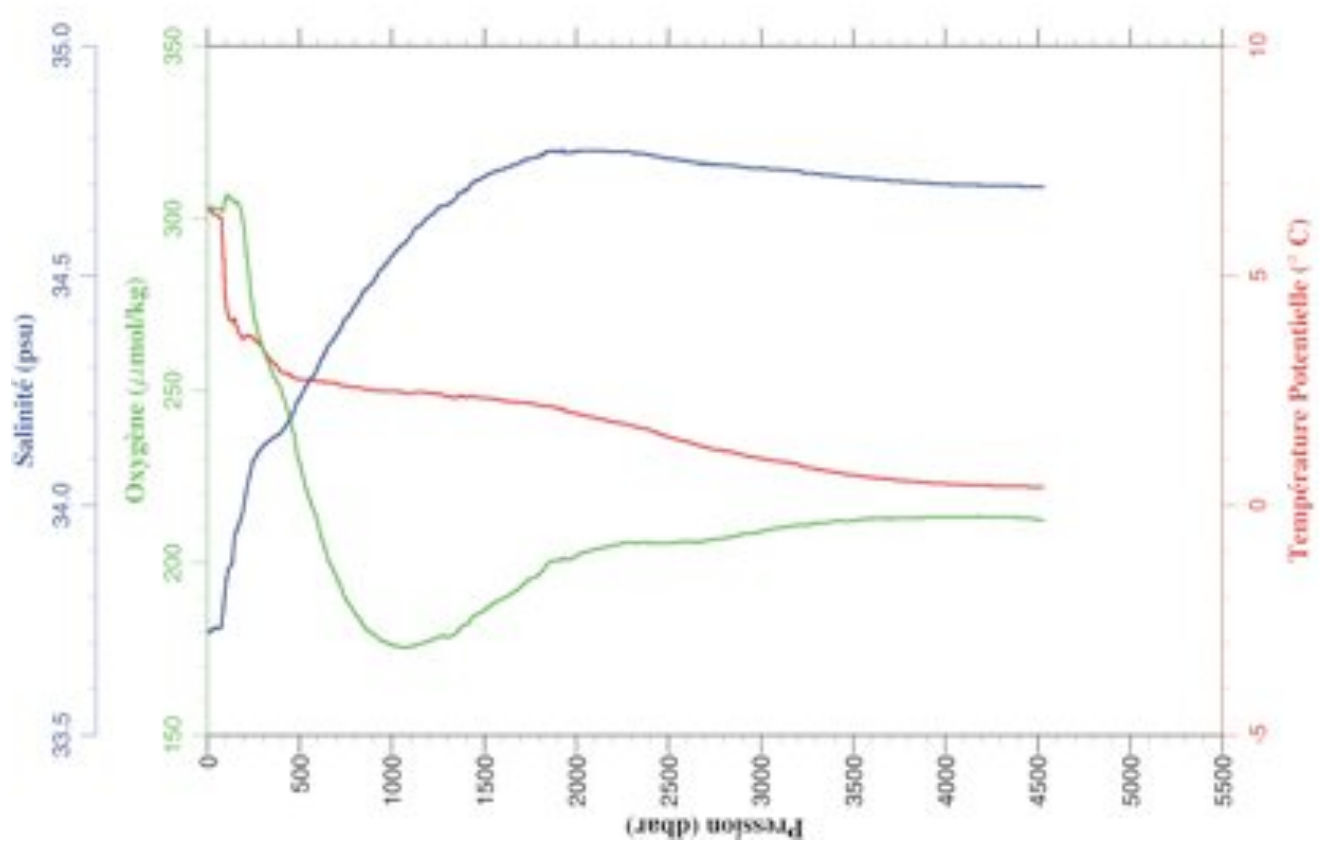
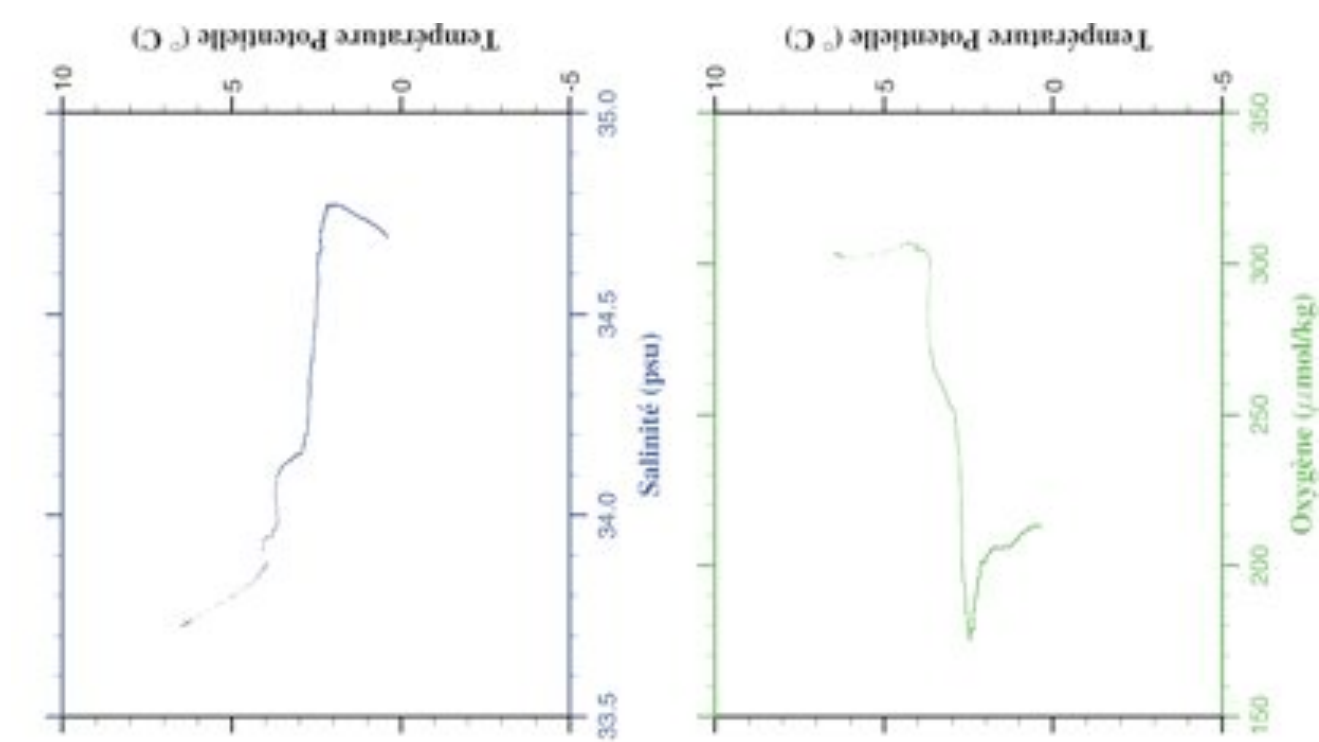
**STATION 63**

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| Station   : 64           Campagne  : GOODHOPE 2008 |
| Date      : 05-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4479       Organisme  : IFREMER |
| Position  : S 47 32.73 |
|           : E 4 22.05  |
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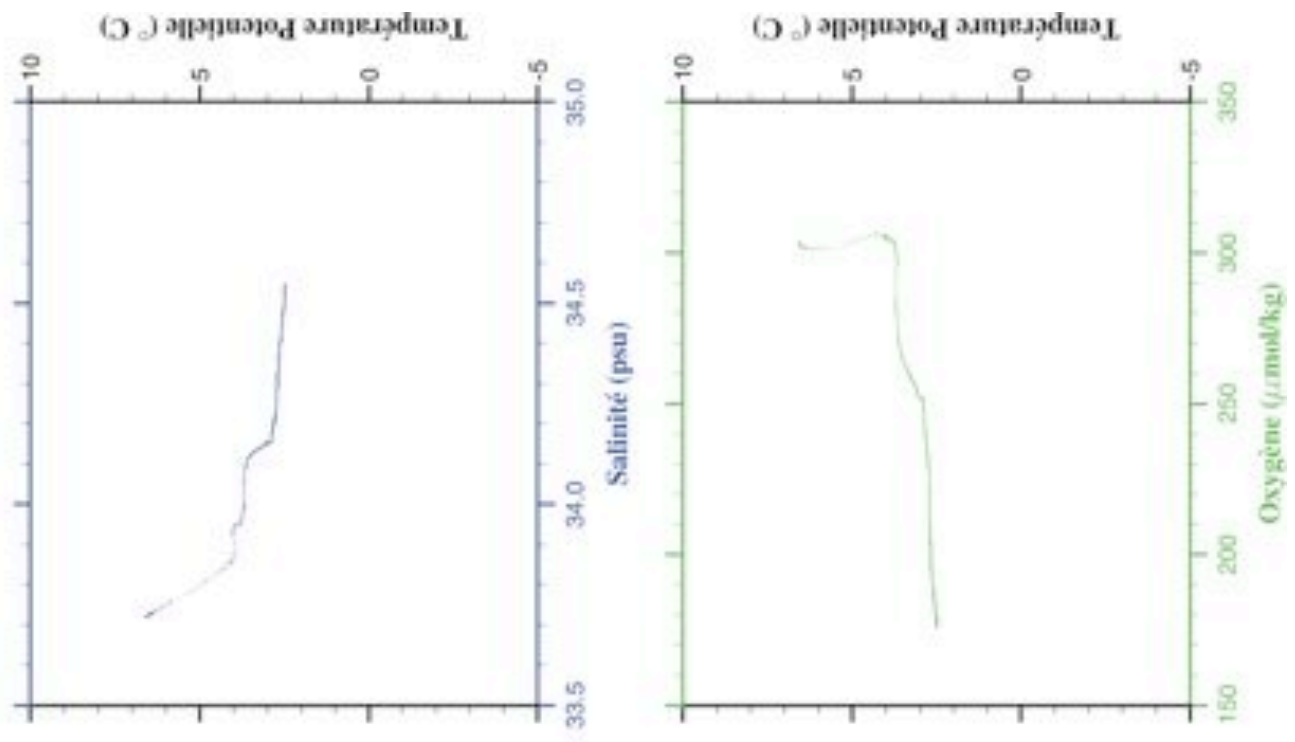
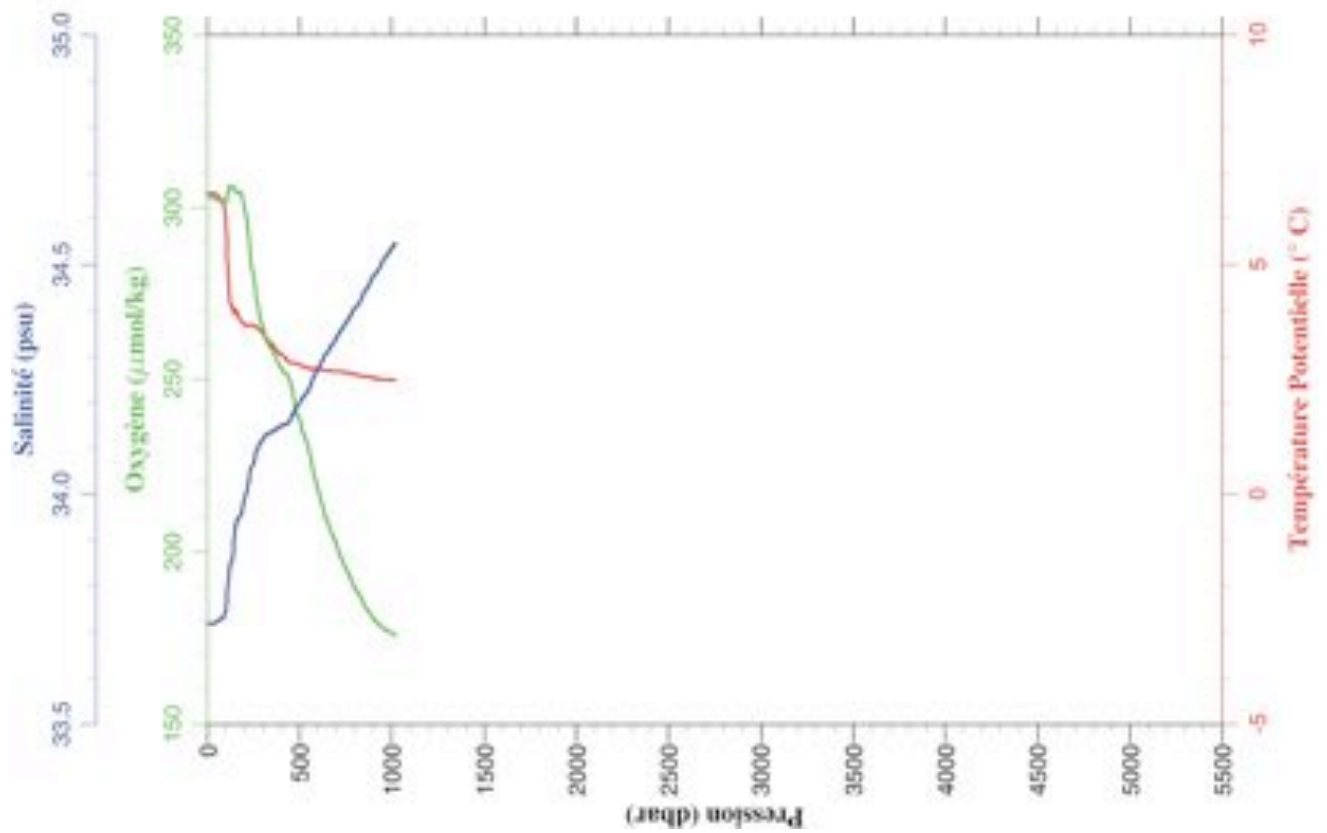
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.450	33.724	303.4	6.450	3050.0	1.199	34.732	209.7	0.984
10.0	6.450	33.725	303.4	6.449	3100.0	1.174	34.731	210.1	0.955
20.0	6.417	33.727	303.1	6.415	3150.0	1.160	34.730	210.4	0.936
30.0	6.366	33.730	303.1	6.363	3200.0	1.108	34.727	210.9	0.881
40.0	6.323	33.733	302.9	6.320	3250.0	1.051	34.723	211.0	0.820
50.0	6.319	33.733	302.7	6.315	3300.0	1.022	34.721	211.4	0.787
100.0	4.518	33.826	306.3	4.510	3350.0	0.992	34.719	211.6	0.753
150.0	4.051	33.938	304.4	4.041	3400.0	0.966	34.718	212.0	0.723
200.0	3.674	34.009	296.2	3.661	3450.0	0.934	34.715	212.1	0.687
250.0	3.650	34.101	272.1	3.633	3500.0	0.915	34.713	212.2	0.663
300.0	3.424	34.129	262.3	3.405	3550.0	0.888	34.712	212.6	0.633
350.0	3.152	34.146	255.3	3.130	3600.0	0.870	34.711	212.8	0.609
400.0	2.924	34.160	250.1	2.899	3650.0	0.849	34.708	212.8	0.585
450.0	2.864	34.192	241.5	2.836	3700.0	0.834	34.707	212.8	0.565
500.0	2.770	34.233	228.9	2.739	3750.0	0.819	34.705	213.0	0.545
550.0	2.763	34.269	219.1	2.729	3800.0	0.806	34.704	213.0	0.528
600.0	2.735	34.300	211.2	2.698	3850.0	0.797	34.703	213.1	0.513
650.0	2.720	34.344	201.6	2.679	3900.0	0.785	34.702	213.1	0.497
700.0	2.704	34.371	195.8	2.660	3950.0	0.775	34.701	213.1	0.482
750.0	2.638	34.407	189.2	2.591	4000.0	0.770	34.700	213.1	0.471
800.0	2.624	34.434	185.2	2.573	4050.0	0.763	34.699	213.2	0.459
850.0	2.588	34.468	181.5	2.534	4100.0	0.758	34.698	213.2	0.450
900.0	2.568	34.489	179.3	2.510	4150.0	0.755	34.697	213.2	0.441
950.0	2.552	34.516	177.2	2.491	4200.0	0.754	34.697	213.3	0.435
1000.0	2.546	34.542	176.3	2.482	4250.0	0.752	34.696	213.3	0.428
1050.0	2.534	34.565	175.6	2.466	4300.0	0.752	34.696	213.3	0.422
1100.0	2.519	34.587	175.5	2.448	4350.0	0.752	34.695	213.3	0.417
1150.0	2.533	34.608	176.5	2.458	4400.0	0.754	34.695	213.1	0.413
1200.0	2.532	34.628	177.4	2.453	4450.0	0.754	34.694	213.0	0.407
1250.0	2.514	34.646	178.4	2.431	4500.0	0.755	34.694	212.6	0.403
1300.0	2.450	34.656	178.5	2.363	4526.0	0.756	34.694	212.3	0.402
1350.0	2.430	34.669	179.6	2.341					
1400.0	2.459	34.687	182.1	2.365					
1450.0	2.459	34.705	184.8	2.361					
1500.0	2.436	34.716	186.1	2.334					
1550.0	2.425	34.726	188.2	2.320					
1600.0	2.388	34.732	189.7	2.279					
1650.0	2.372	34.739	191.0	2.259					
1700.0	2.343	34.747	193.1	2.227					
1750.0	2.340	34.755	195.4	2.220					
1800.0	2.304	34.760	196.8	2.180					
1850.0	2.291	34.770	200.0	2.162					
1900.0	2.259	34.772	200.8	2.126					
1950.0	2.172	34.767	200.8	2.037					
2000.0	2.143	34.771	202.1	2.004					
2050.0	2.089	34.772	203.2	1.947					
2100.0	2.051	34.771	203.8	1.905					
2150.0	2.020	34.772	204.5	1.870					
2200.0	1.969	34.771	205.1	1.815					
2250.0	1.941	34.770	205.6	1.783					
2300.0	1.897	34.767	205.8	1.736					
2350.0	1.855	34.766	205.9	1.690					
2400.0	1.803	34.763	205.9	1.635					
2450.0	1.729	34.759	205.7	1.558					
2500.0	1.666	34.754	205.7	1.492					
2550.0	1.605	34.752	206.0	1.427					
2600.0	1.568	34.750	206.1	1.387					
2650.0	1.512	34.746	206.0	1.327					
2700.0	1.453	34.743	206.4	1.265					
2750.0	1.413	34.741	206.8	1.221					
2800.0	1.385	34.740	207.1	1.189					
2850.0	1.355	34.739	207.6	1.155					
2900.0	1.303	34.737	208.3	1.099					
2950.0	1.263	34.735	208.5	1.056					
3000.0	1.229	34.733	209.1	1.018					



**STATION 64**

Station	: 65	Campagne	: GOODHOPE 2008
Date	: 05-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4490	Organisme	: IFREMER
Position	: S 47 33.30		
	E 4 22.52		

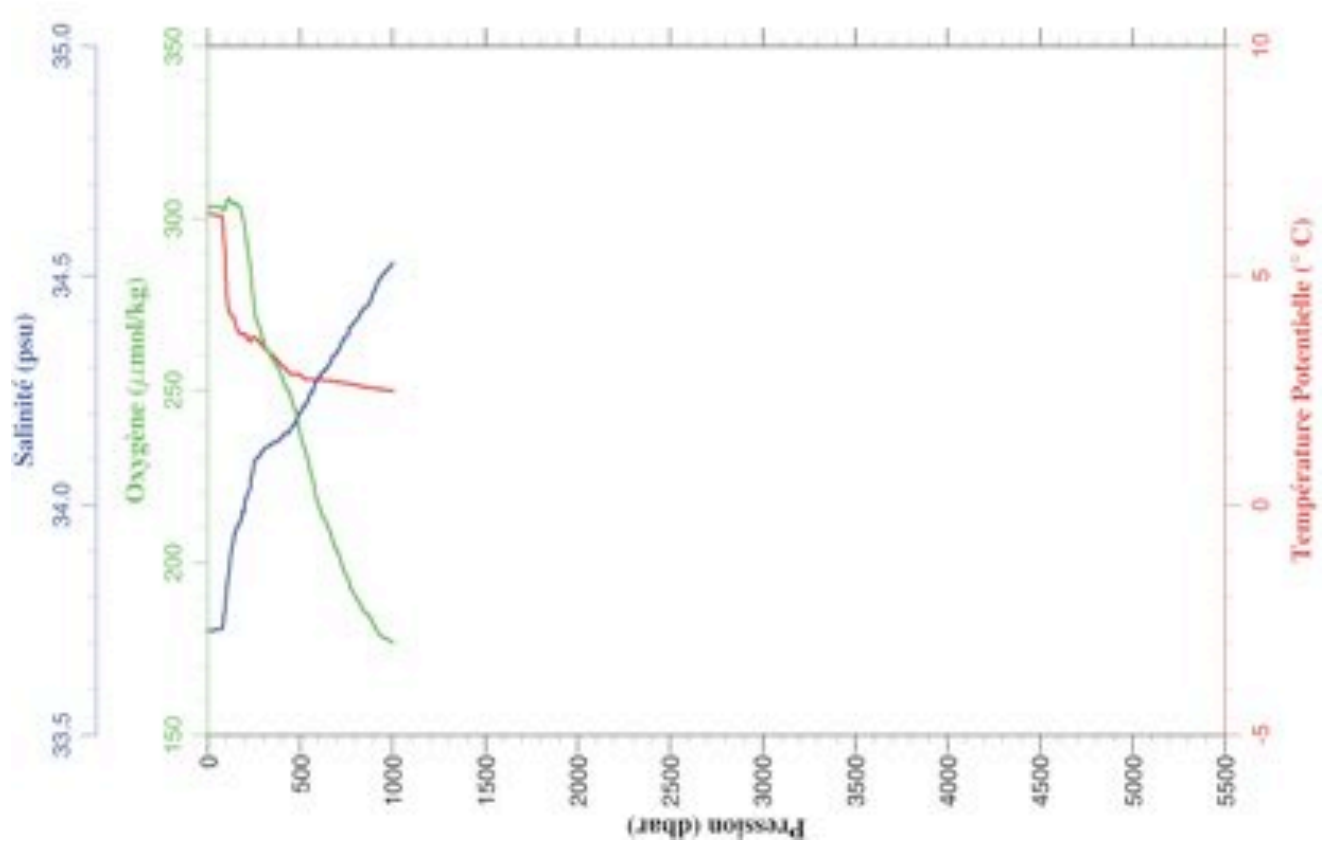
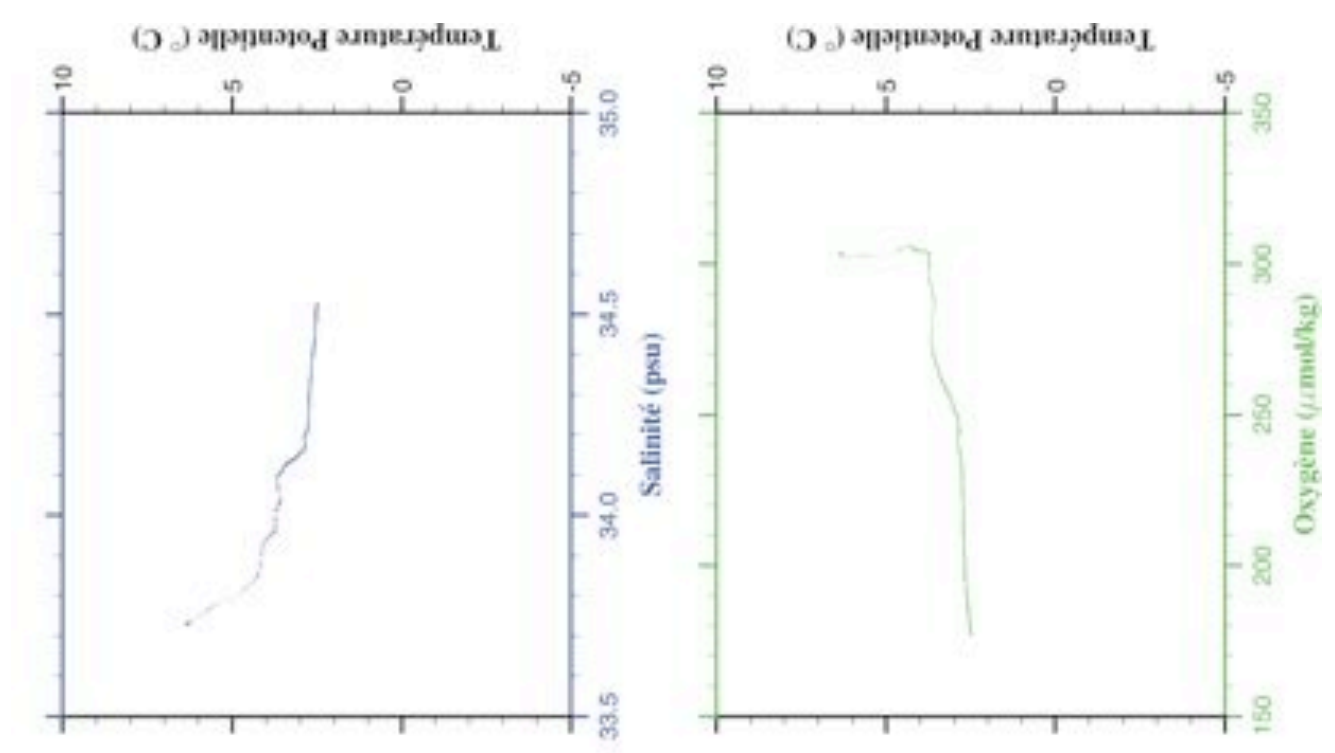
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.557	33.720	303.6	6.557
10.0	6.556	33.720	303.6	6.555
20.0	6.556	33.720	303.1	6.554
30.0	6.556	33.720	302.7	6.553
40.0	6.543	33.721	302.5	6.540
50.0	6.532	33.722	302.3	6.528
100.0	5.897	33.754	301.5	5.888
150.0	4.035	33.925	304.9	4.025
200.0	3.706	33.991	300.0	3.693
250.0	3.698	34.068	280.2	3.682
300.0	3.543	34.119	265.4	3.523
350.0	3.284	34.136	258.7	3.262
400.0	3.084	34.149	253.5	3.059
450.0	2.898	34.163	249.1	2.870
500.0	2.847	34.198	238.4	2.816
550.0	2.780	34.230	229.5	2.746
600.0	2.759	34.275	217.9	2.722
650.0	2.734	34.309	208.9	2.693
700.0	2.719	34.341	201.8	2.675
750.0	2.701	34.371	195.2	2.654
800.0	2.656	34.406	189.2	2.605
850.0	2.619	34.443	184.5	2.565
900.0	2.594	34.476	180.6	2.536
950.0	2.563	34.508	178.0	2.502
1000.0	2.551	34.537	176.3	2.486
1020.0	2.544	34.545	176.0	2.478



**STATION 65**

Station	: 66	Campagne	: GOODHOPE 2008
Date	: 06-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4490	Organisme	: IFREMER
Position	: S 47 33.19		
	E 4 22.73		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.359	33.727	303.4	6.359
10.0	6.356	33.728	303.3	6.355
20.0	6.352	33.728	303.4	6.351
30.0	6.334	33.728	303.4	6.331
40.0	6.327	33.729	303.5	6.323
50.0	6.319	33.729	303.3	6.315
100.0	4.654	33.813	304.3	4.647
150.0	3.963	33.943	304.1	3.953
200.0	3.747	34.010	297.0	3.734
250.0	3.692	34.092	274.7	3.675
300.0	3.487	34.120	264.6	3.467
350.0	3.287	34.135	259.0	3.265
400.0	3.072	34.148	254.2	3.047
450.0	2.887	34.167	248.0	2.859
500.0	2.862	34.203	237.5	2.831
550.0	2.779	34.239	227.8	2.745
600.0	2.768	34.279	216.6	2.730
650.0	2.759	34.302	210.4	2.718
700.0	2.729	34.333	203.5	2.684
750.0	2.710	34.369	195.9	2.662
800.0	2.669	34.403	190.0	2.618
850.0	2.626	34.432	185.5	2.572
900.0	2.607	34.466	181.8	2.550
950.0	2.579	34.503	178.4	2.518
1000.0	2.559	34.526	176.9	2.494
1002.0	2.558	34.528	176.9	2.493



**STATION 66**

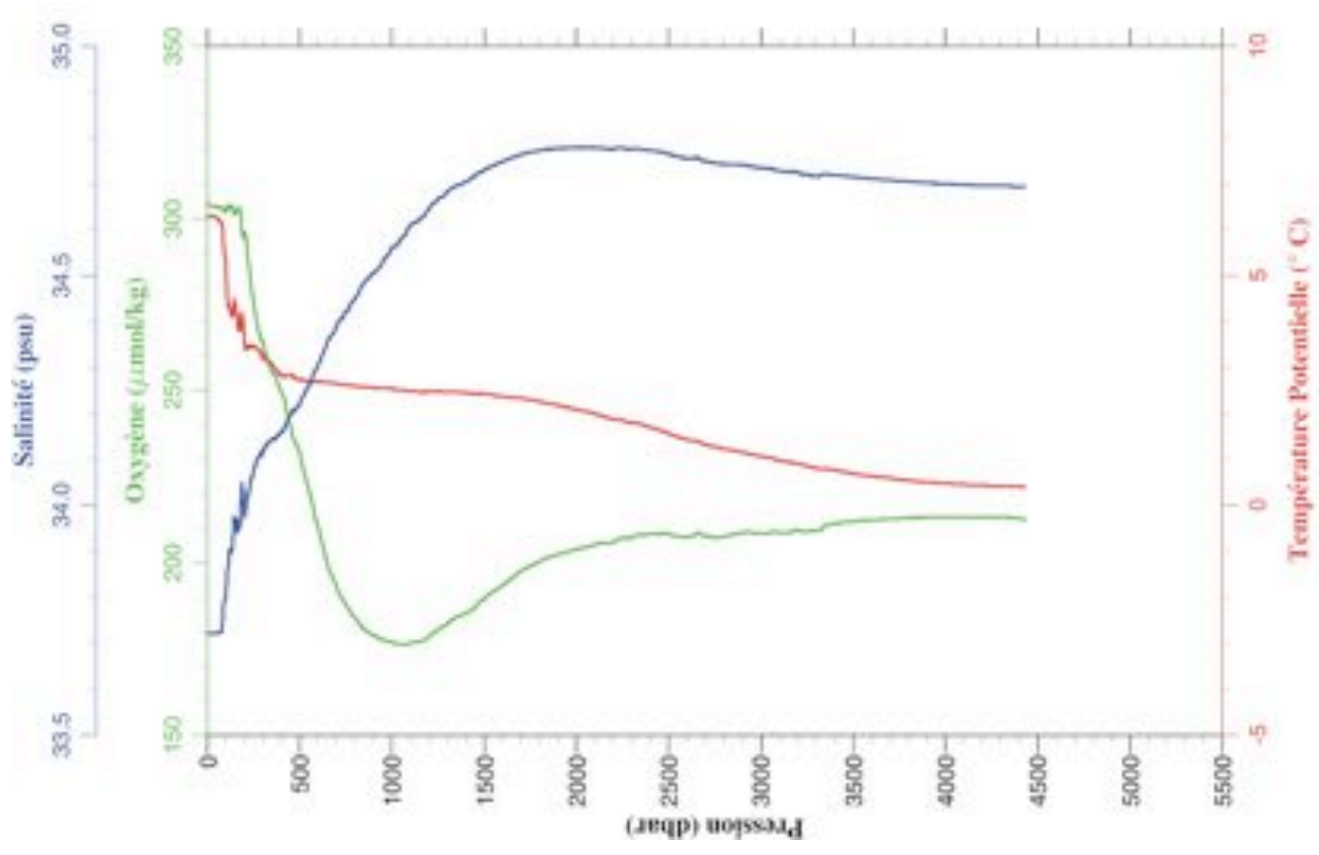
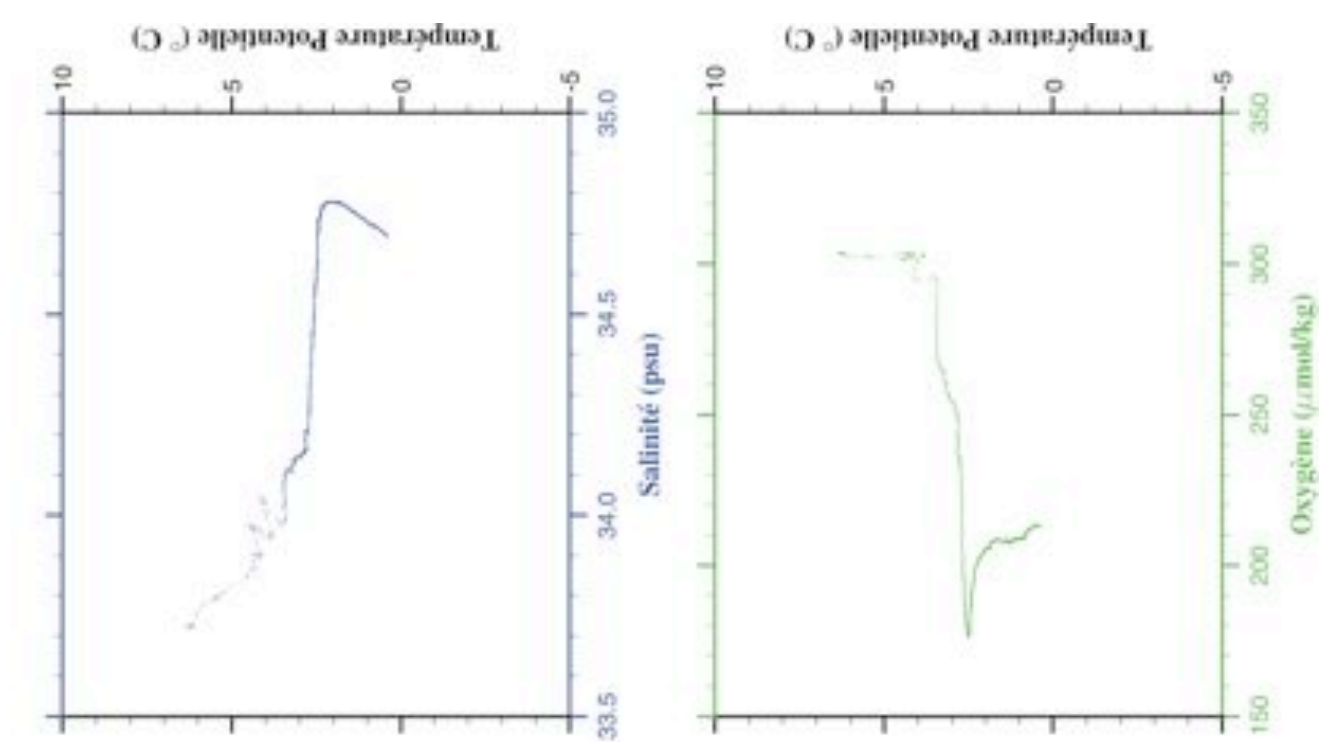
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| Station   : 67           Campagne  : GOODHOPE 2008
| Date     : 06-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4391      Organisme : IFREMER
| Position  : S 47 58.24
|           : E 3 57.42
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	6.291	33.720	304.0	6.291	3050.0	1.246	34.733	208.8	1.030
10.0	6.300	33.721	304.0	6.299	3100.0	1.197	34.728	208.7	0.977
20.0	6.295	33.721	303.5	6.293	3150.0	1.162	34.725	208.8	0.939
30.0	6.293	33.721	303.5	6.291	3200.0	1.140	34.725	209.4	0.912
40.0	6.291	33.721	303.4	6.287	3250.0	1.099	34.722	209.1	0.868
50.0	6.283	33.721	303.4	6.278	3300.0	1.038	34.716	209.3	0.803
100.0	5.338	33.802	302.0	5.330	3350.0	1.037	34.721	210.8	0.797
150.0	4.350	33.963	301.4	4.339	3400.0	1.011	34.719	211.4	0.767
200.0	3.600	33.981	295.2	3.587	3450.0	0.976	34.717	211.8	0.728
250.0	3.487	34.080	275.7	3.471	3500.0	0.942	34.715	212.0	0.690
300.0	3.232	34.110	264.5	3.213	3550.0	0.914	34.713	212.4	0.658
350.0	3.099	34.145	255.2	3.077	3600.0	0.897	34.711	212.4	0.636
400.0	2.856	34.159	249.7	2.832	3650.0	0.875	34.709	212.5	0.610
450.0	2.844	34.195	239.6	2.816	3700.0	0.866	34.709	212.6	0.596
500.0	2.770	34.221	232.0	2.739	3750.0	0.839	34.707	212.9	0.565
550.0	2.738	34.260	221.2	2.704	3800.0	0.825	34.705	213.1	0.545
600.0	2.717	34.306	210.6	2.680	3850.0	0.808	34.703	213.1	0.524
650.0	2.713	34.356	199.7	2.672	3900.0	0.794	34.702	213.2	0.505
700.0	2.693	34.388	193.1	2.649	3950.0	0.783	34.701	213.2	0.490
750.0	2.666	34.422	187.6	2.619	4000.0	0.777	34.700	213.2	0.478
800.0	2.648	34.451	184.0	2.597	4050.0	0.768	34.699	213.3	0.465
850.0	2.630	34.484	180.8	2.576	4100.0	0.761	34.698	213.3	0.452
900.0	2.616	34.506	179.0	2.558	4150.0	0.753	34.697	213.3	0.440
950.0	2.609	34.528	177.7	2.548	4200.0	0.751	34.696	213.3	0.432
1000.0	2.607	34.562	176.9	2.542	4250.0	0.751	34.696	213.3	0.426
1050.0	2.576	34.581	176.4	2.507	4300.0	0.751	34.695	213.2	0.421
1100.0	2.559	34.610	176.8	2.487	4350.0	0.751	34.695	213.1	0.416
1150.0	2.542	34.623	177.1	2.466	4400.0	0.749	34.694	212.9	0.409
1200.0	2.562	34.647	178.5	2.482	4431.0	0.750	34.694	212.4	0.406
1250.0	2.558	34.665	180.5	2.475					
1300.0	2.558	34.683	182.2	2.470					
1350.0	2.556	34.695	184.3	2.465					
1400.0	2.539	34.704	185.5	2.445					
1450.0	2.521	34.718	187.0	2.422					
1500.0	2.527	34.728	189.5	2.424					
1550.0	2.502	34.739	191.7	2.395					
1600.0	2.485	34.748	193.7	2.374					
1650.0	2.468	34.756	195.6	2.354					
1700.0	2.450	34.764	197.7	2.331					
1750.0	2.423	34.769	199.2	2.301					
1800.0	2.385	34.772	200.3	2.260					
1850.0	2.348	34.775	201.6	2.219					
1900.0	2.317	34.777	202.5	2.184					
1950.0	2.269	34.779	203.2	2.132					
2000.0	2.223	34.779	203.9	2.083					
2050.0	2.194	34.779	204.5	2.050					
2100.0	2.138	34.779	205.3	1.991					
2150.0	2.080	34.777	205.7	1.929					
2200.0	2.034	34.776	205.8	1.879					
2250.0	2.011	34.778	207.3	1.853					
2300.0	1.963	34.776	207.4	1.801					
2350.0	1.930	34.775	208.1	1.764					
2400.0	1.871	34.772	208.3	1.702					
2450.0	1.812	34.769	208.3	1.639					
2500.0	1.742	34.765	208.5	1.566					
2550.0	1.671	34.759	207.7	1.492					
2600.0	1.610	34.755	207.5	1.428					
2650.0	1.588	34.757	208.4	1.401					
2700.0	1.517	34.750	207.6	1.327					
2750.0	1.467	34.745	207.3	1.274					
2800.0	1.424	34.743	207.6	1.227					
2850.0	1.393	34.742	208.1	1.192					
2900.0	1.357	34.741	208.9	1.152					
2950.0	1.321	34.738	208.7	1.113					
3000.0	1.286	34.735	208.7	1.074					





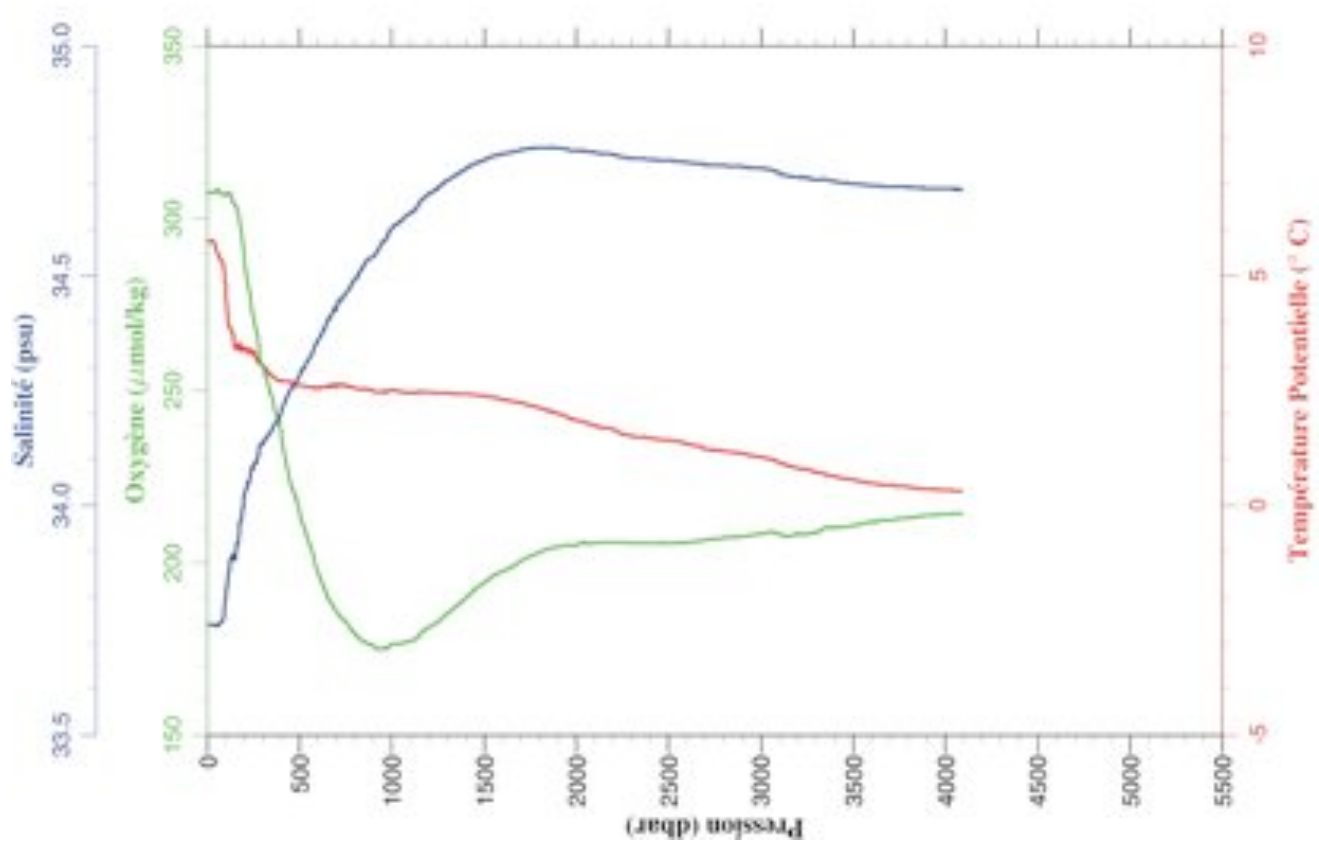
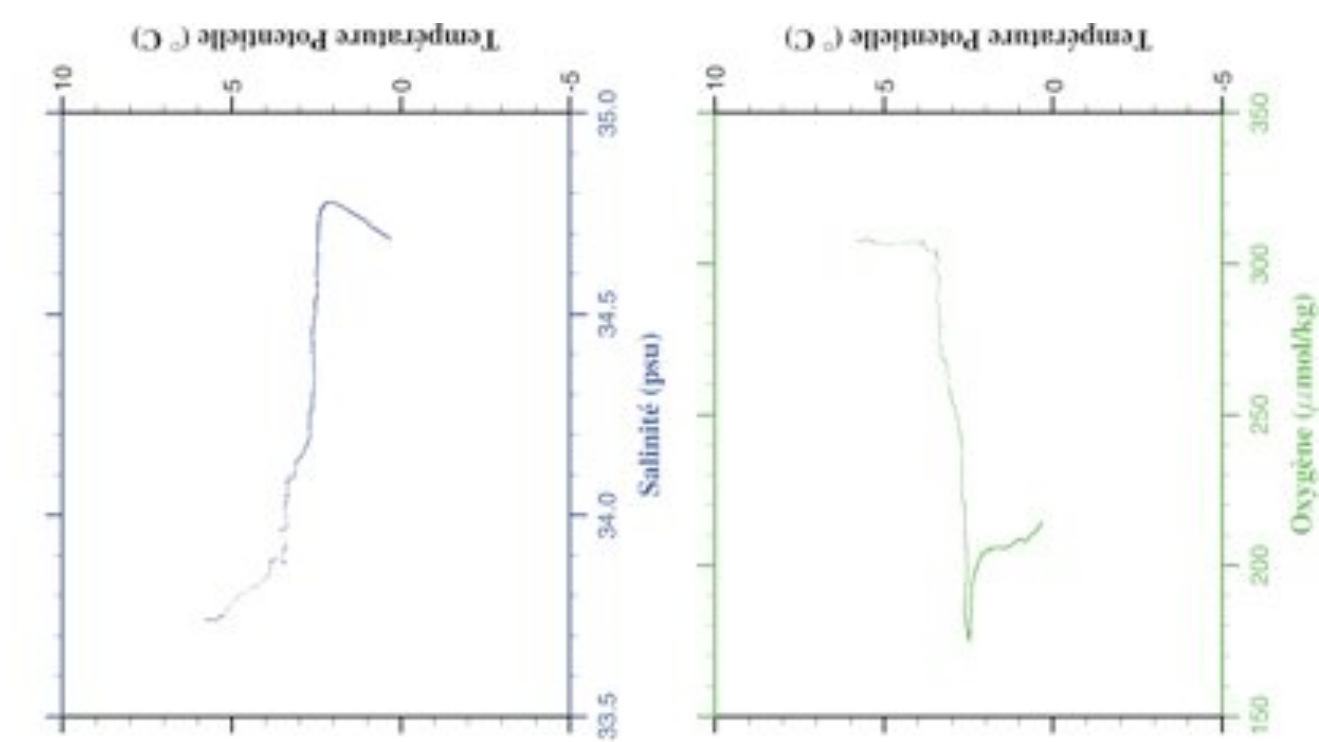
**STATION 67**

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| Station   : 68           Campagne  : GOODHOPE 2008 |
| Date     : 06-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 4056      Organisme  : IFREMER |
| Position  : S 48 22.73 |
|           : E 3 31.45 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.742	33.739	307.2	5.742	3050.0	1.224	34.731	209.0	1.008
10.0	5.744	33.739	307.4	5.743	3100.0	1.149	34.723	208.3	0.931
20.0	5.752	33.740	307.4	5.750	3150.0	1.086	34.717	207.8	0.864
30.0	5.753	33.740	307.4	5.751	3200.0	1.040	34.715	208.3	0.814
40.0	5.647	33.739	307.7	5.644	3250.0	1.024	34.713	208.4	0.794
50.0	5.539	33.737	308.0	5.535	3300.0	0.954	34.709	208.9	0.721
100.0	4.722	33.804	306.6	4.715	3350.0	0.918	34.710	210.1	0.681
150.0	3.433	33.881	304.0	3.423	3400.0	0.874	34.705	210.3	0.634
200.0	3.459	34.022	288.3	3.446	3450.0	0.831	34.702	210.4	0.586
250.0	3.325	34.084	271.4	3.309	3500.0	0.805	34.701	210.8	0.557
300.0	3.049	34.134	257.1	3.030	3550.0	0.770	34.698	211.4	0.518
350.0	2.843	34.164	248.2	2.821	3600.0	0.739	34.697	211.9	0.483
400.0	2.733	34.201	237.3	2.708	3650.0	0.711	34.695	212.3	0.450
450.0	2.714	34.253	223.1	2.686	3700.0	0.702	34.694	212.5	0.437
500.0	2.639	34.282	214.7	2.609	3750.0	0.683	34.693	212.8	0.413
550.0	2.613	34.320	205.9	2.580	3800.0	0.676	34.693	213.0	0.401
600.0	2.597	34.361	197.1	2.560	3850.0	0.650	34.691	213.4	0.371
650.0	2.616	34.399	190.2	2.575	3900.0	0.637	34.690	213.8	0.353
700.0	2.631	34.430	185.9	2.587	3950.0	0.634	34.690	213.9	0.344
750.0	2.648	34.460	182.8	2.601	4000.0	0.628	34.689	214.1	0.333
800.0	2.610	34.493	179.2	2.560	4050.0	0.621	34.688	214.3	0.322
850.0	2.595	34.523	177.2	2.541	4089.0	0.625	34.688	214.3	0.322
900.0	2.540	34.541	175.8	2.482					
950.0	2.537	34.572	175.1	2.477					
1000.0	2.566	34.603	176.3	2.502					
1050.0	2.537	34.620	176.6	2.469					
1100.0	2.527	34.636	177.3	2.455					
1150.0	2.540	34.658	178.9	2.464					
1200.0	2.540	34.678	181.3	2.461					
1250.0	2.530	34.692	182.9	2.447					
1300.0	2.522	34.708	185.3	2.435					
1350.0	2.519	34.720	187.5	2.429					
1400.0	2.516	34.733	189.9	2.421					
1450.0	2.500	34.744	192.3	2.402					
1500.0	2.484	34.752	194.1	2.382					
1550.0	2.456	34.761	196.3	2.350					
1600.0	2.409	34.765	197.5	2.300					
1650.0	2.381	34.769	198.8	2.268					
1700.0	2.349	34.773	200.5	2.232					
1750.0	2.301	34.776	201.9	2.181					
1800.0	2.249	34.778	203.0	2.125					
1850.0	2.182	34.778	204.1	2.055					
1900.0	2.128	34.778	204.7	1.998					
1950.0	2.059	34.775	205.2	1.926					
2000.0	1.992	34.772	205.2	1.855					
2050.0	1.933	34.770	205.6	1.793					
2100.0	1.886	34.768	205.8	1.743					
2150.0	1.831	34.765	205.9	1.684					
2200.0	1.805	34.764	205.9	1.654					
2250.0	1.699	34.758	205.9	1.546					
2300.0	1.668	34.755	205.7	1.511					
2350.0	1.653	34.754	205.7	1.492					
2400.0	1.629	34.753	205.7	1.464					
2450.0	1.604	34.751	205.7	1.435					
2500.0	1.592	34.750	205.7	1.419					
2550.0	1.567	34.749	205.8	1.390					
2600.0	1.530	34.747	205.8	1.349					
2650.0	1.483	34.745	206.3	1.299					
2700.0	1.416	34.741	206.8	1.228					
2750.0	1.400	34.740	206.9	1.208					
2800.0	1.376	34.739	207.2	1.181					
2850.0	1.357	34.738	207.4	1.157					
2900.0	1.340	34.737	207.6	1.136					
2950.0	1.285	34.734	208.1	1.077					
3000.0	1.266	34.733	208.4	1.054					



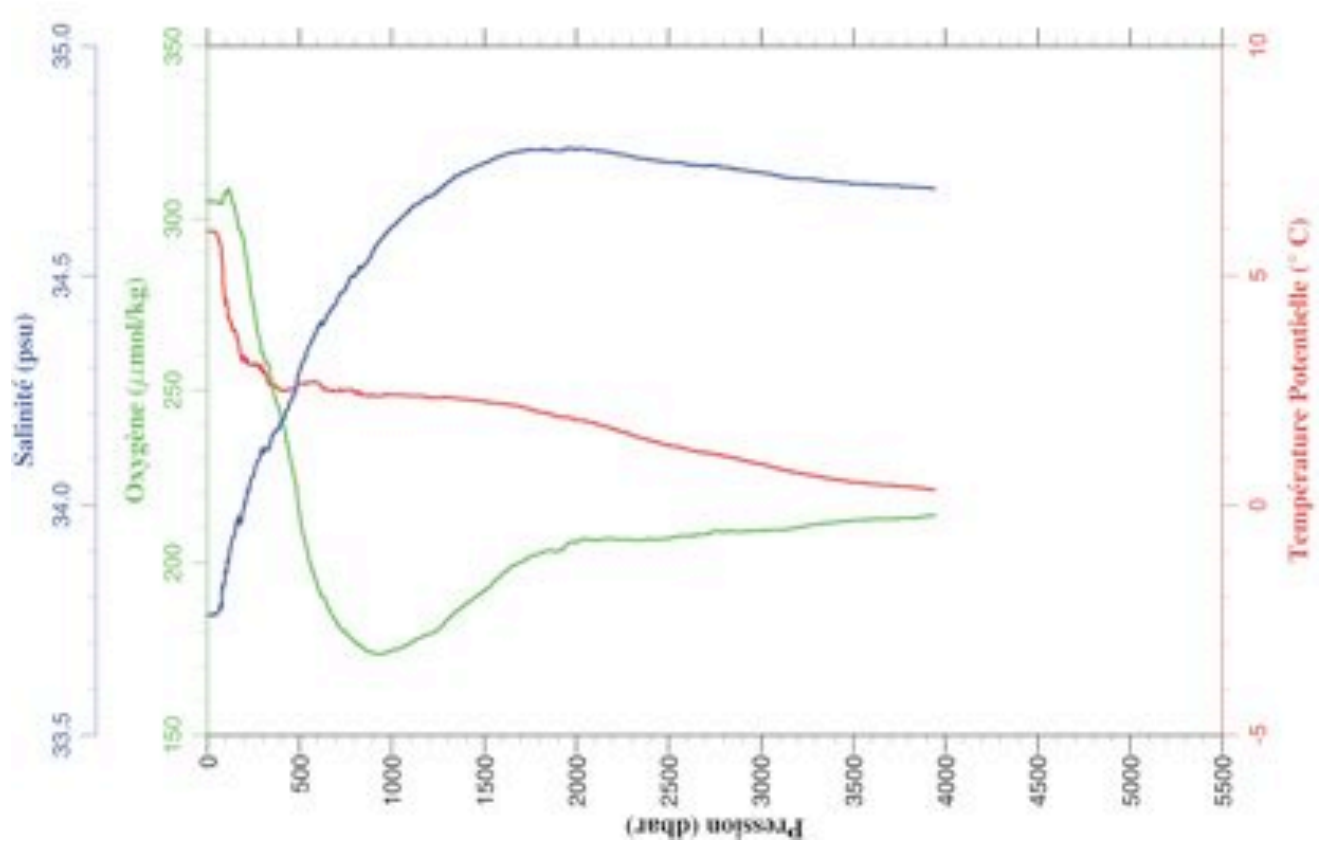
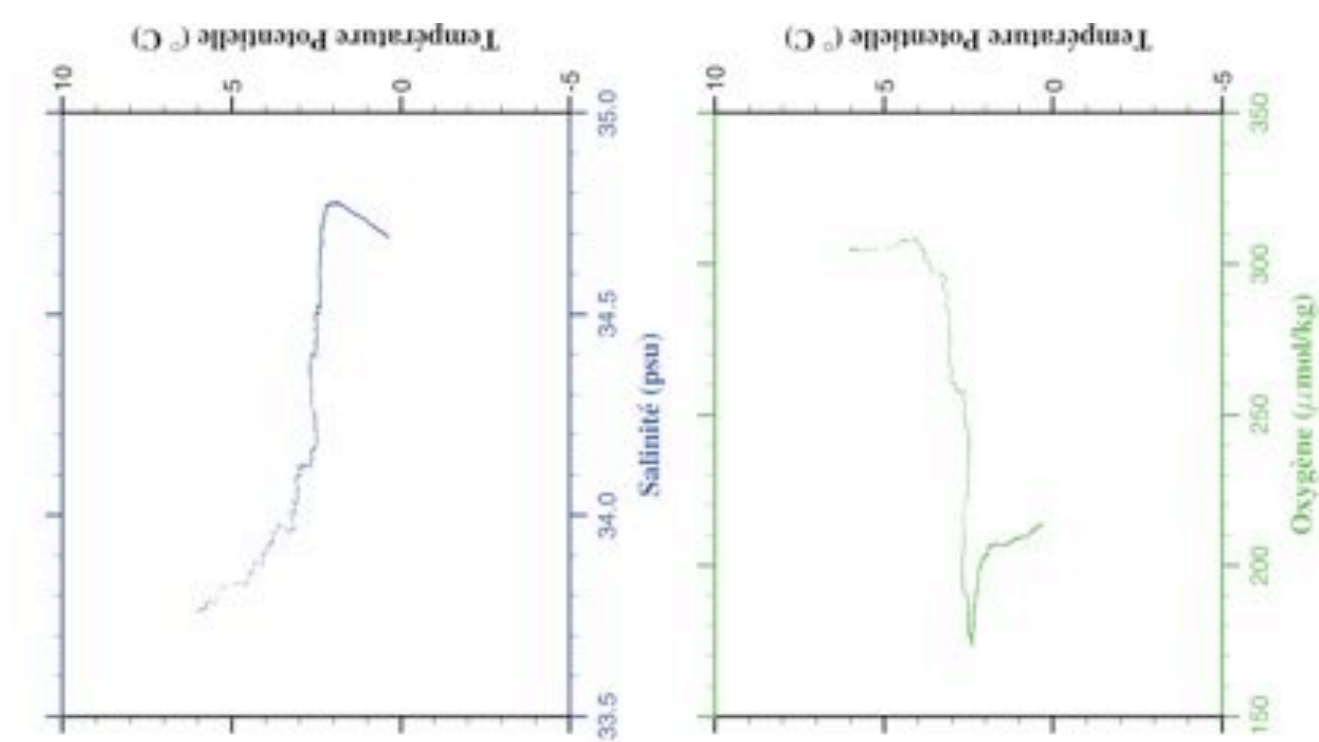
**STATION 68**

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| Station   : 69           Campagne  : GOODHOPE 2008 |
| Date      : 07-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 3915       Organisme  : IFREMER |
| Position  : S 48 42.08 |
|           : E 3 10.68  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.976	33.762	304.6	5.976	3050.0	1.060	34.721	209.5	0.848
10.0	5.969	33.762	305.1	5.968	3100.0	1.005	34.716	209.7	0.790
20.0	5.969	33.762	304.9	5.968	3150.0	0.965	34.713	209.8	0.746
30.0	5.970	33.762	304.8	5.968	3200.0	0.927	34.711	210.3	0.704
40.0	5.965	33.762	304.8	5.961	3250.0	0.898	34.710	210.7	0.671
50.0	5.949	33.763	304.7	5.944	3300.0	0.869	34.708	211.2	0.638
100.0	4.411	33.858	308.0	4.404	3350.0	0.835	34.706	211.5	0.600
150.0	3.808	33.942	302.7	3.798	3400.0	0.809	34.705	211.8	0.570
200.0	3.272	34.007	292.0	3.259	3450.0	0.783	34.703	212.0	0.540
250.0	3.064	34.063	274.5	3.048	3500.0	0.751	34.700	212.4	0.503
300.0	2.922	34.113	260.9	2.904	3550.0	0.744	34.700	212.5	0.492
350.0	2.649	34.150	251.9	2.628	3600.0	0.722	34.698	212.6	0.465
400.0	2.528	34.181	241.8	2.505	3650.0	0.708	34.697	212.6	0.447
450.0	2.549	34.227	229.8	2.522	3700.0	0.701	34.696	212.7	0.435
500.0	2.682	34.294	213.8	2.651	3750.0	0.694	34.695	212.8	0.423
550.0	2.715	34.346	201.1	2.681	3800.0	0.681	34.694	213.0	0.406
600.0	2.703	34.389	192.8	2.666	3850.0	0.664	34.692	213.2	0.384
650.0	2.549	34.413	187.3	2.509	3900.0	0.643	34.691	213.6	0.358
700.0	2.523	34.442	182.7	2.480	3942.0	0.628	34.690	213.8	0.340
750.0	2.555	34.471	180.0	2.508					
800.0	2.507	34.500	177.2	2.457					
850.0	2.455	34.523	175.0	2.402					
900.0	2.459	34.556	173.7	2.402					
950.0	2.456	34.584	173.6	2.396					
1000.0	2.474	34.606	174.6	2.410					
1050.0	2.469	34.624	175.4	2.401					
1100.0	2.461	34.645	176.6	2.390					
1150.0	2.461	34.659	178.2	2.386					
1200.0	2.424	34.672	179.3	2.346					
1250.0	2.425	34.685	180.7	2.343					
1300.0	2.430	34.701	183.4	2.344					
1350.0	2.426	34.717	186.1	2.336					
1400.0	2.397	34.727	188.0	2.303					
1450.0	2.379	34.736	189.9	2.281					
1500.0	2.360	34.745	191.9	2.259					
1550.0	2.337	34.754	194.3	2.232					
1600.0	2.320	34.762	196.9	2.212					
1650.0	2.297	34.767	198.9	2.185					
1700.0	2.269	34.771	200.2	2.153					
1750.0	2.217	34.775	201.9	2.098					
1800.0	2.154	34.774	202.7	2.031					
1850.0	2.128	34.775	203.5	2.002					
1900.0	2.064	34.772	203.4	1.935					
1950.0	2.046	34.777	205.5	1.912					
2000.0	1.991	34.774	205.8	1.854					
2050.0	1.975	34.776	206.9	1.834					
2100.0	1.940	34.774	206.8	1.796					
2150.0	1.873	34.771	206.9	1.725					
2200.0	1.817	34.767	207.0	1.666					
2250.0	1.756	34.763	206.7	1.602					
2300.0	1.685	34.759	206.7	1.528					
2350.0	1.626	34.755	206.5	1.465					
2400.0	1.580	34.753	207.0	1.416					
2450.0	1.523	34.749	206.7	1.356					
2500.0	1.477	34.747	207.1	1.306					
2550.0	1.450	34.747	207.6	1.275					
2600.0	1.393	34.742	207.8	1.215					
2650.0	1.358	34.741	208.1	1.176					
2700.0	1.333	34.740	208.3	1.147					
2750.0	1.306	34.739	209.1	1.116					
2800.0	1.273	34.736	209.0	1.079					
2850.0	1.227	34.733	209.1	1.030					
2900.0	1.184	34.730	209.1	0.983					
2950.0	1.146	34.727	209.3	0.941					
3000.0	1.112	34.725	209.3	0.904					



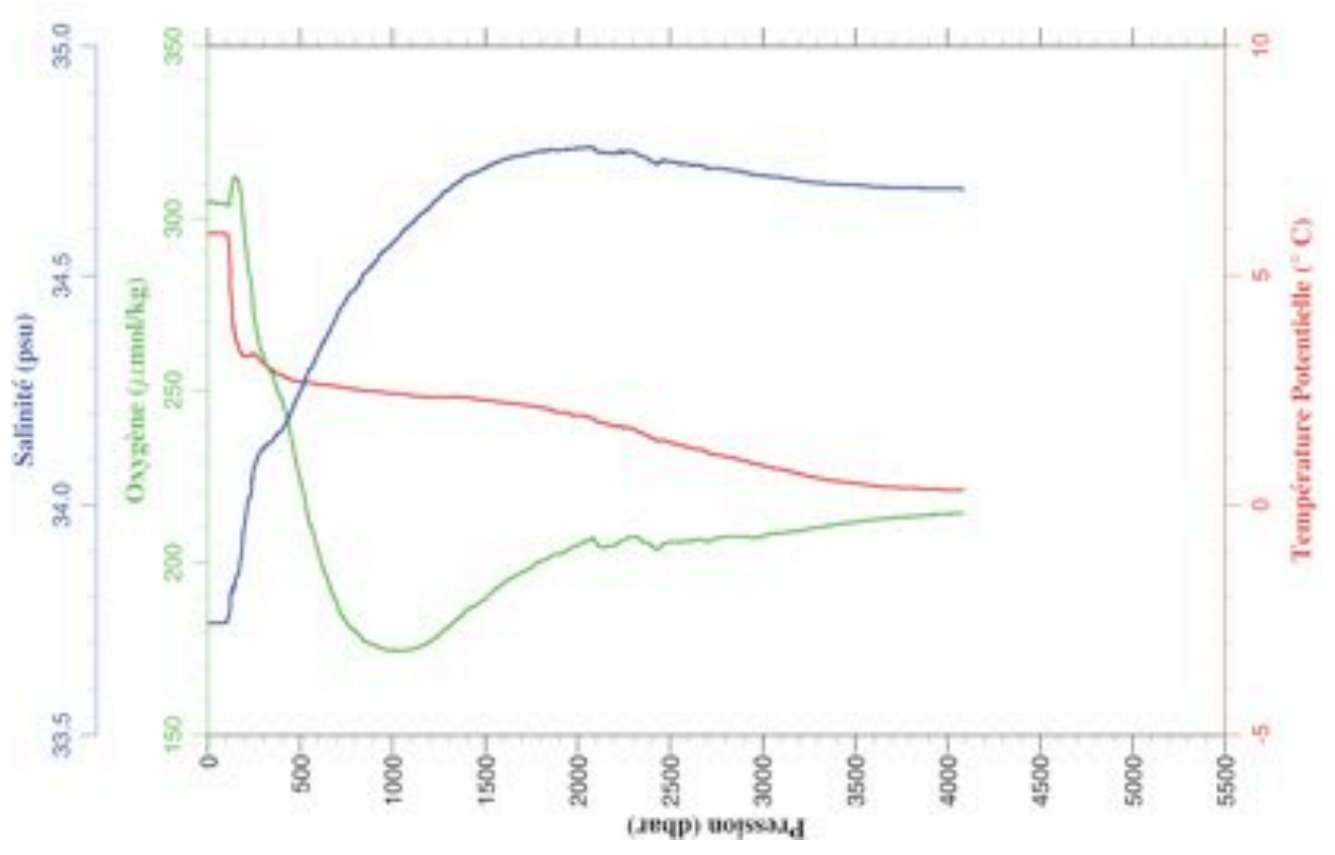
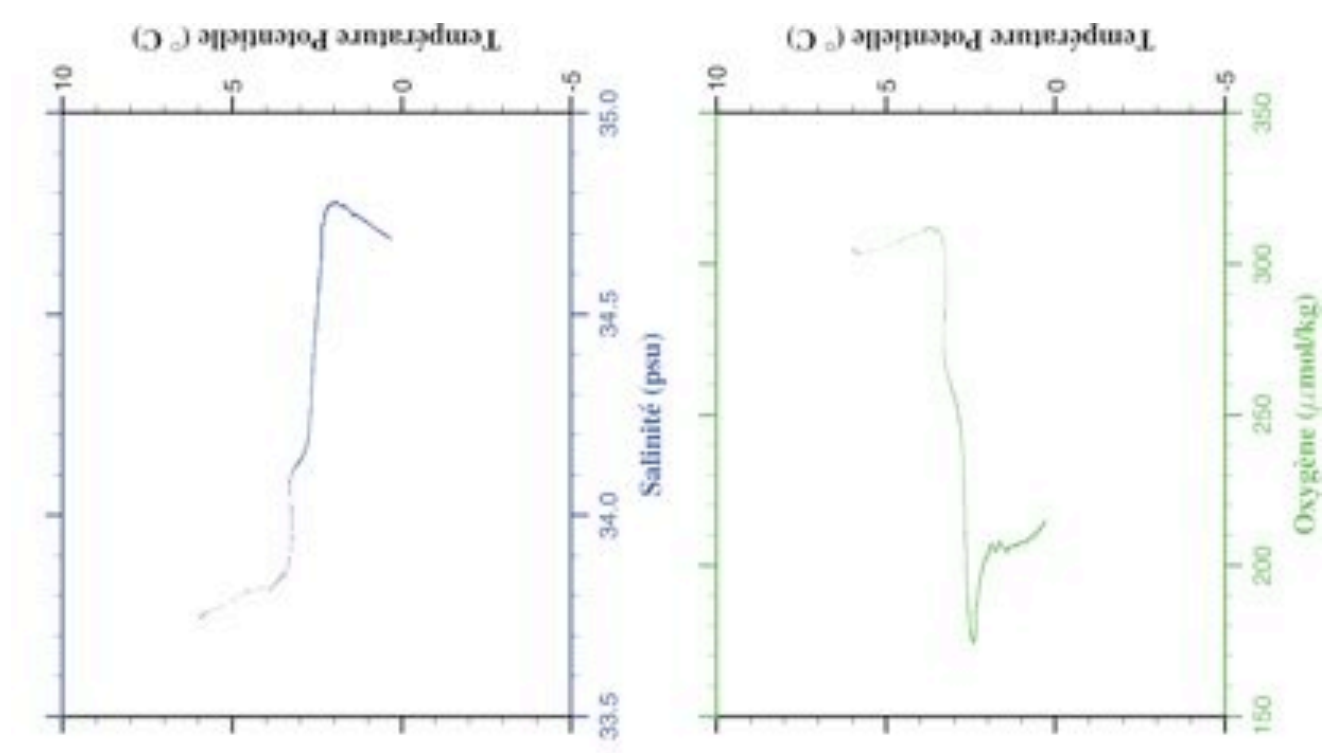
**STATION 69**

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| Station   : 70           Campagne  : GOODHOPE 2008
| Date      : 07-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4002       Organisme : IFREMER
| Position  : S 49 1.69
|           : E 2 49.88
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.928	33.744	304.4	5.928	3050.0	1.022	34.715	208.5	0.811
10.0	5.926	33.744	304.8	5.925	3100.0	1.002	34.714	208.6	0.786
20.0	5.925	33.744	304.9	5.924	3150.0	0.955	34.711	209.0	0.737
30.0	5.926	33.744	304.6	5.924	3200.0	0.904	34.707	209.3	0.682
40.0	5.927	33.744	304.5	5.924	3250.0	0.862	34.705	209.9	0.636
50.0	5.930	33.745	304.2	5.926	3300.0	0.825	34.702	210.2	0.595
100.0	5.920	33.745	304.2	5.911	3350.0	0.788	34.700	210.7	0.554
150.0	3.649	33.838	311.8	3.640	3400.0	0.764	34.699	211.2	0.526
200.0	3.263	33.969	294.7	3.251	3450.0	0.748	34.698	211.5	0.505
250.0	3.308	34.083	271.2	3.292	3500.0	0.736	34.697	211.8	0.489
300.0	3.106	34.125	259.9	3.088	3550.0	0.708	34.696	212.2	0.457
350.0	2.967	34.142	254.3	2.946	3600.0	0.683	34.694	212.5	0.428
400.0	2.864	34.163	247.6	2.839	3650.0	0.669	34.693	212.8	0.409
450.0	2.761	34.203	236.3	2.734	3700.0	0.660	34.692	213.0	0.395
500.0	2.719	34.248	224.0	2.689	3750.0	0.652	34.691	213.3	0.382
550.0	2.700	34.296	211.2	2.666	3800.0	0.649	34.691	213.4	0.375
600.0	2.673	34.334	202.4	2.636	3850.0	0.643	34.691	213.6	0.364
650.0	2.658	34.371	194.6	2.617	3900.0	0.640	34.690	213.8	0.356
700.0	2.632	34.414	187.7	2.589	3950.0	0.635	34.690	214.0	0.346
750.0	2.599	34.448	182.8	2.552	4000.0	0.632	34.689	214.1	0.338
800.0	2.581	34.473	180.1	2.530	4050.0	0.628	34.689	214.4	0.329
850.0	2.549	34.508	177.2	2.495	4082.0	0.627	34.688	214.4	0.324
900.0	2.536	34.528	176.0	2.479					
950.0	2.519	34.553	175.0	2.459					
1000.0	2.507	34.571	174.6	2.442					
1050.0	2.492	34.592	174.5	2.424					
1100.0	2.468	34.612	174.9	2.396					
1150.0	2.448	34.634	175.9	2.373					
1200.0	2.444	34.650	177.2	2.366					
1250.0	2.444	34.669	179.0	2.362					
1300.0	2.442	34.687	181.3	2.355					
1350.0	2.459	34.703	183.8	2.369					
1400.0	2.435	34.717	186.3	2.341					
1450.0	2.411	34.725	187.7	2.314					
1500.0	2.399	34.734	189.5	2.298					
1550.0	2.375	34.744	192.1	2.270					
1600.0	2.349	34.753	194.2	2.240					
1650.0	2.330	34.758	195.9	2.218					
1700.0	2.309	34.762	197.2	2.193					
1750.0	2.284	34.767	198.6	2.164					
1800.0	2.255	34.771	200.5	2.131					
1850.0	2.223	34.774	201.7	2.095					
1900.0	2.152	34.773	202.5	2.021					
1950.0	2.131	34.775	203.7	1.996					
2000.0	2.096	34.777	205.1	1.957					
2050.0	2.063	34.778	206.3	1.921					
2100.0	1.989	34.772	205.9	1.844					
2150.0	1.928	34.767	204.6	1.779					
2200.0	1.871	34.765	205.1	1.720					
2250.0	1.852	34.770	206.5	1.697					
2300.0	1.828	34.769	207.6	1.668					
2350.0	1.735	34.759	206.2	1.573					
2400.0	1.628	34.749	204.8	1.463					
2450.0	1.605	34.751	204.8	1.436					
2500.0	1.543	34.748	206.0	1.371					
2550.0	1.475	34.742	206.0	1.300					
2600.0	1.446	34.742	206.3	1.266					
2650.0	1.406	34.740	206.7	1.223					
2700.0	1.349	34.735	206.2	1.163					
2750.0	1.292	34.734	207.2	1.103					
2800.0	1.254	34.732	207.6	1.061					
2850.0	1.230	34.730	207.7	1.032					
2900.0	1.180	34.726	207.7	0.979					
2950.0	1.119	34.720	207.2	0.915					
3000.0	1.073	34.718	207.8	0.865					

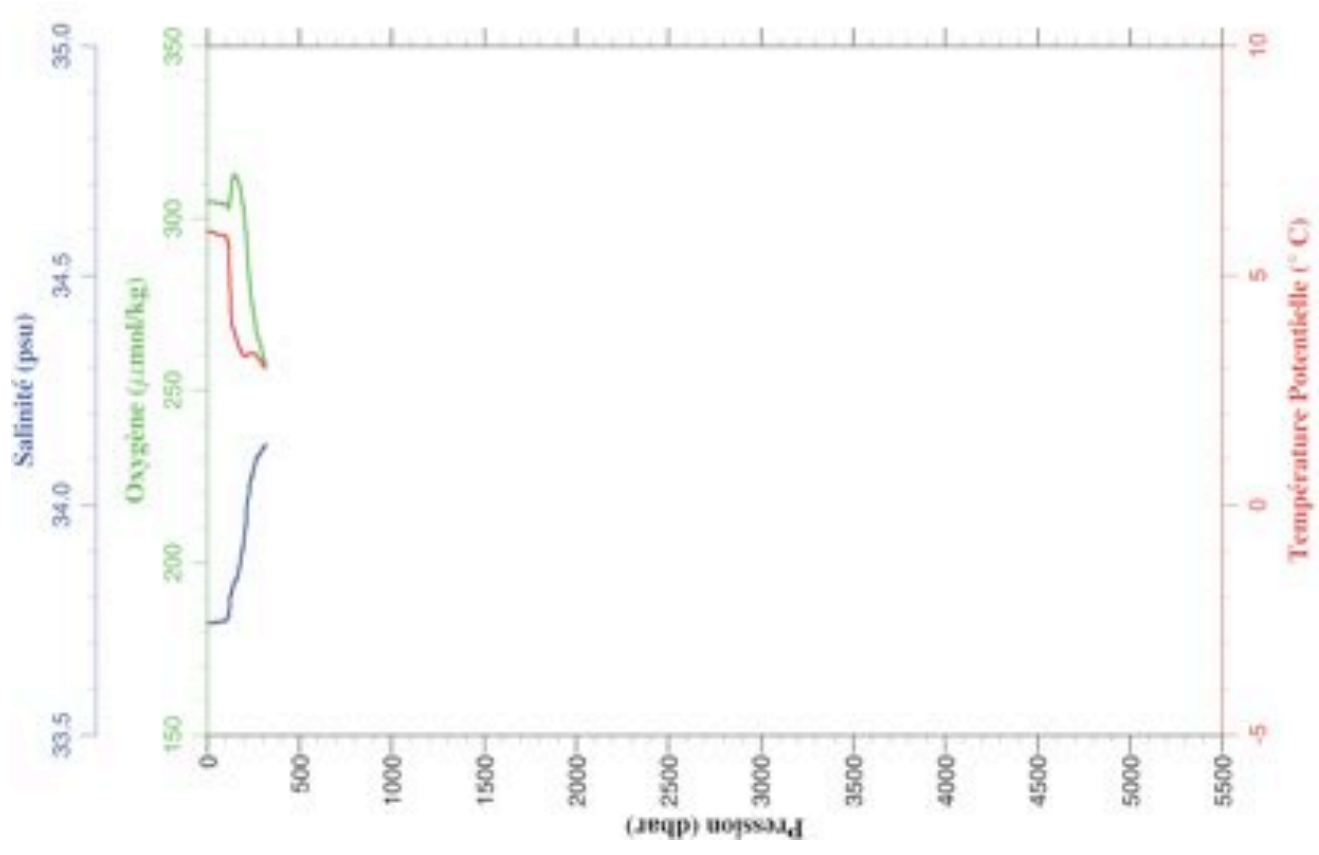
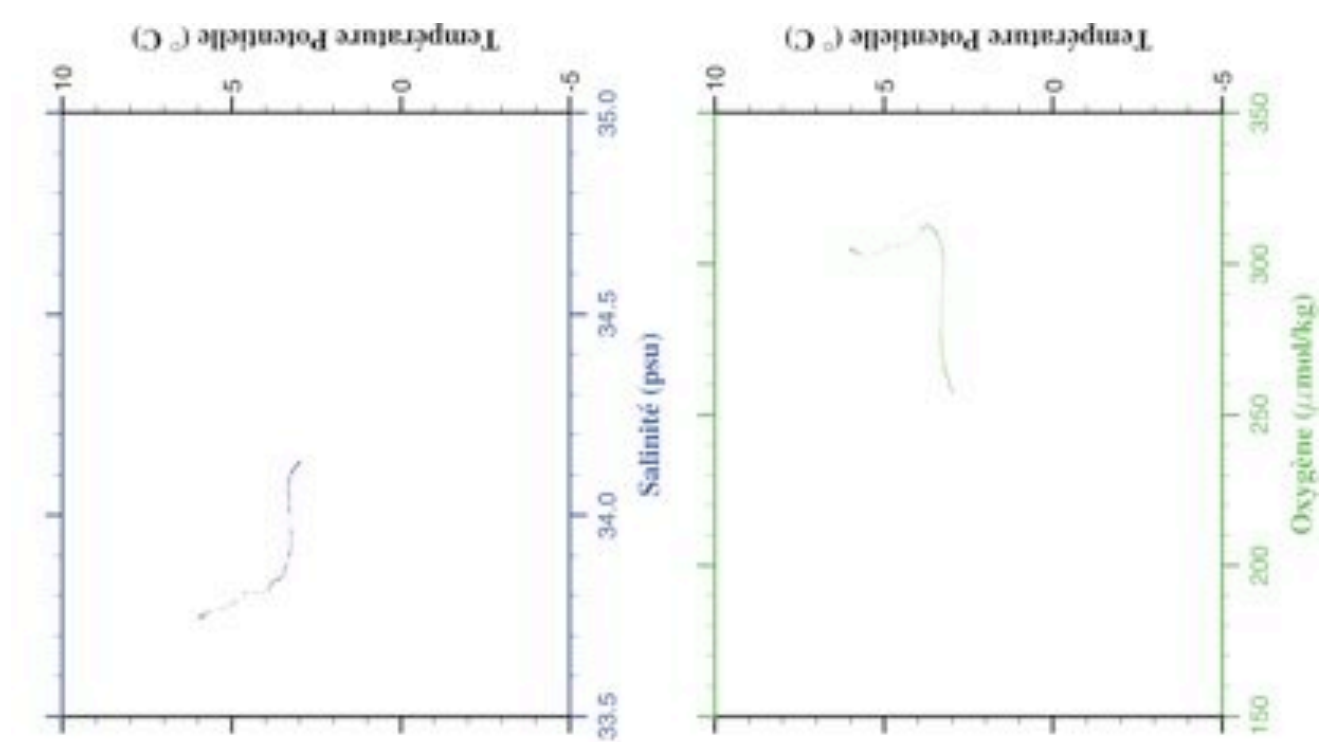


**STATION 70**

Station	: 71	Campagne	: GOODHOPE 2008
Date	: 07-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4025	Organisme	: IFREMER
Position	: S 49 1.69		
	E 2 49.93		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.963	33.744	304.3	5.963
10.0	5.966	33.745	304.9	5.966
20.0	5.960	33.745	305.0	5.959
30.0	5.941	33.745	304.9	5.938
40.0	5.933	33.745	304.7	5.929
50.0	5.910	33.746	304.5	5.905
100.0	5.870	33.749	304.0	5.862
150.0	3.755	33.837	312.7	3.745
200.0	3.249	33.930	300.8	3.237
250.0	3.326	34.078	273.0	3.310
300.0	3.083	34.123	260.3	3.064
316.0	3.011	34.133	257.4	2.992

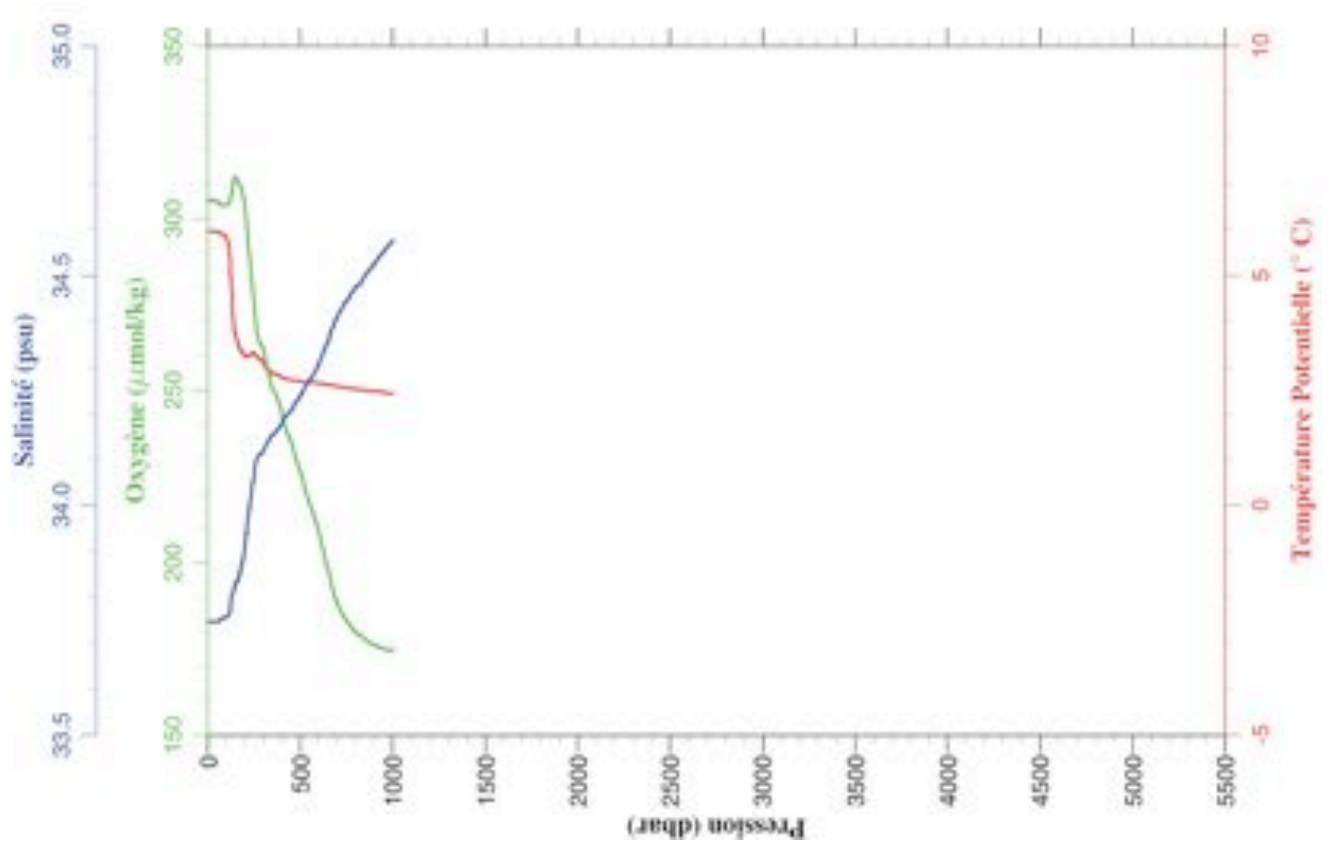
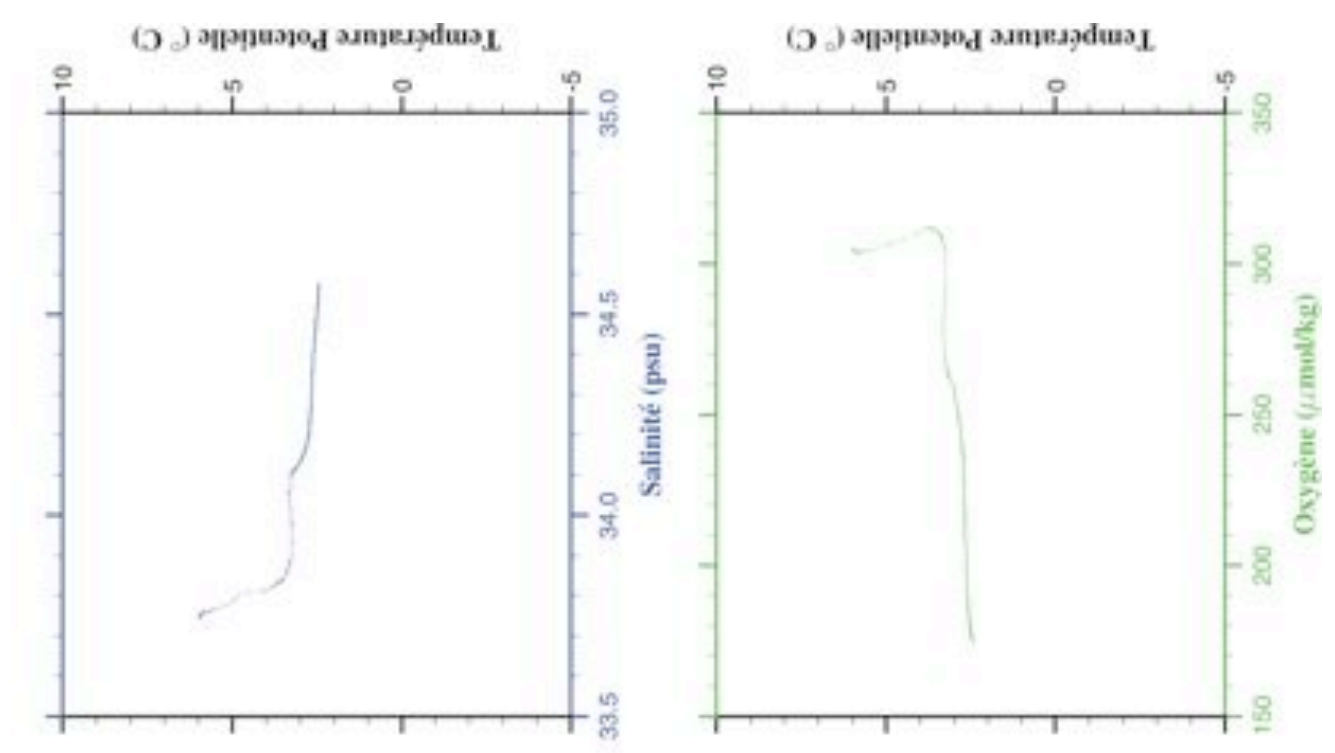




**STATION 71**

Station	: 72	Campagne	: GOODHOPE 2008
Date	: 07-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 4025	Organisme	: IFREMER
Position	: S 49 1.68		
	E 2 49.87		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.970	33.746	305.1	5.970
10.0	5.968	33.746	305.1	5.967
20.0	5.969	33.747	305.1	5.967
30.0	5.969	33.747	305.1	5.966
40.0	5.970	33.747	305.1	5.967
50.0	5.972	33.747	305.0	5.968
100.0	5.842	33.757	303.8	5.834
150.0	3.699	33.831	311.8	3.690
200.0	3.253	33.901	303.9	3.241
250.0	3.324	34.063	275.5	3.308
300.0	3.129	34.118	262.0	3.111
350.0	2.901	34.154	250.4	2.879
400.0	2.809	34.180	243.3	2.784
450.0	2.760	34.206	235.1	2.732
500.0	2.722	34.239	226.5	2.692
550.0	2.711	34.274	217.1	2.677
600.0	2.691	34.308	208.9	2.654
650.0	2.670	34.356	197.9	2.629
700.0	2.634	34.409	188.1	2.590
750.0	2.607	34.445	183.1	2.560
800.0	2.578	34.476	179.9	2.528
850.0	2.557	34.501	177.6	2.503
900.0	2.537	34.525	176.1	2.479
950.0	2.525	34.553	175.1	2.464
1000.0	2.503	34.575	174.6	2.439
1002.0	2.502	34.576	174.7	2.437



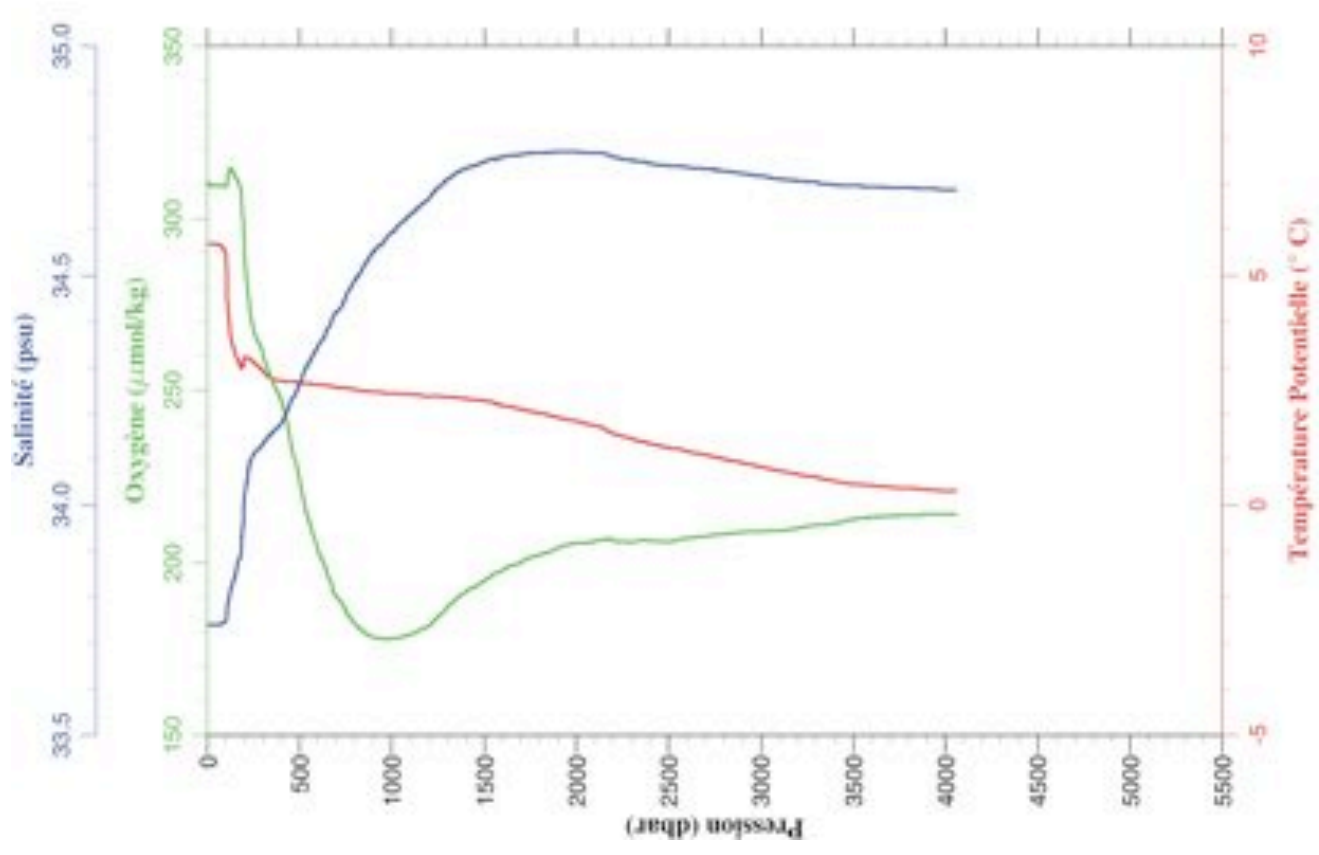
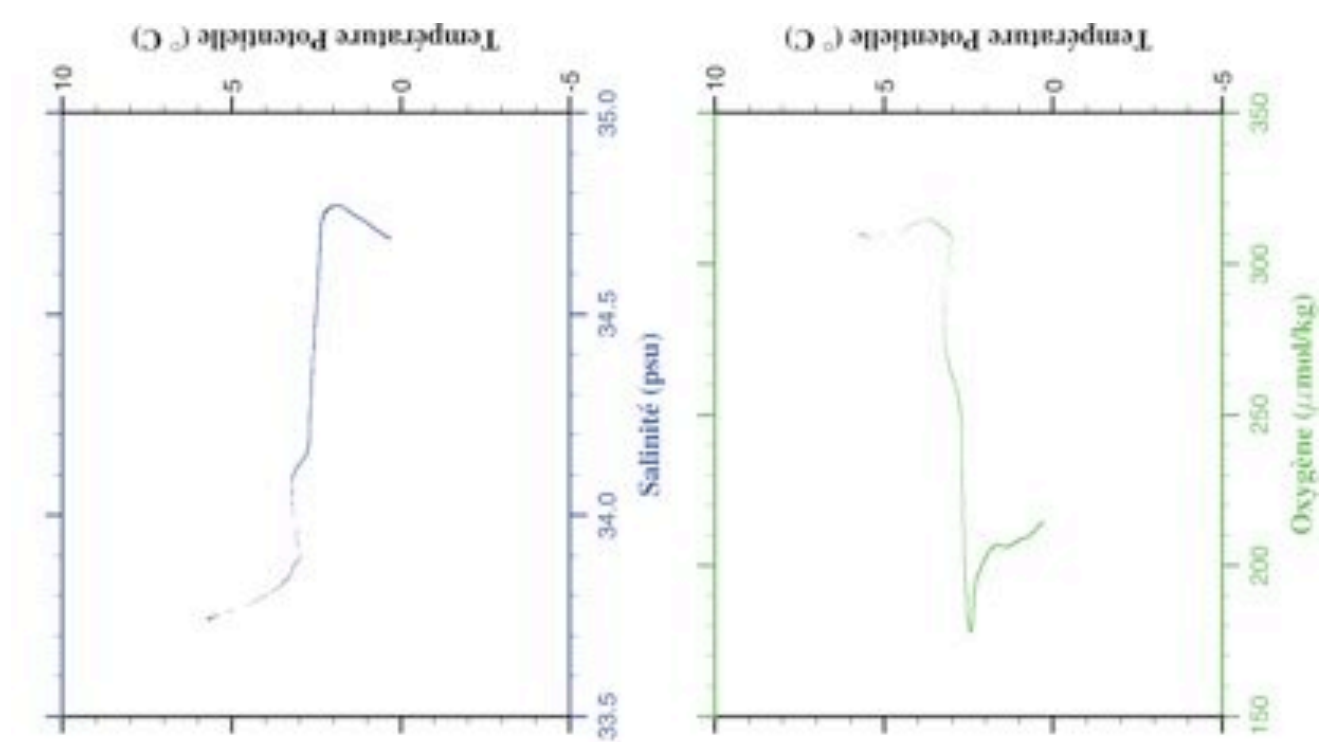
**STATION 72**

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| Station   : 73           Campagne  : GOODHOPE 2008
| Date     : 07-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 4025      Organisme : IFREMER
| Position  : S 49 18.05
|           : E 2 32.20
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.702	33.740	310.2	5.702	3050.0	1.010	34.714	209.2	0.800
10.0	5.700	33.740	309.8	5.700	3100.0	0.969	34.710	209.4	0.755
20.0	5.701	33.740	309.6	5.699	3150.0	0.939	34.709	209.6	0.721
30.0	5.700	33.740	309.6	5.698	3200.0	0.900	34.707	210.0	0.678
40.0	5.702	33.740	309.7	5.699	3250.0	0.864	34.705	210.6	0.638
50.0	5.688	33.740	309.6	5.684	3300.0	0.850	34.704	210.9	0.620
100.0	5.462	33.750	309.1	5.454	3350.0	0.801	34.700	211.1	0.567
150.0	3.309	33.845	312.3	3.300	3400.0	0.765	34.698	211.5	0.527
200.0	3.189	34.004	291.8	3.176	3450.0	0.729	34.696	212.0	0.487
250.0	3.118	34.112	267.9	3.102	3500.0	0.711	34.695	212.6	0.464
300.0	2.964	34.132	261.0	2.945	3550.0	0.698	34.695	213.1	0.447
350.0	2.789	34.157	253.2	2.768	3600.0	0.688	34.694	213.1	0.433
400.0	2.739	34.179	247.2	2.715	3650.0	0.676	34.693	213.3	0.416
450.0	2.730	34.226	235.1	2.702	3700.0	0.661	34.692	213.6	0.397
500.0	2.707	34.266	223.8	2.676	3750.0	0.650	34.691	213.7	0.381
550.0	2.683	34.309	212.3	2.649	3800.0	0.651	34.691	213.7	0.376
600.0	2.664	34.347	203.7	2.627	3850.0	0.640	34.690	213.9	0.361
650.0	2.646	34.384	196.6	2.606	3900.0	0.631	34.690	214.0	0.347
700.0	2.608	34.421	190.0	2.565	3950.0	0.616	34.688	214.1	0.327
750.0	2.597	34.453	186.0	2.550	4000.0	0.610	34.688	214.0	0.317
800.0	2.570	34.491	182.1	2.520	4050.0	0.604	34.687	214.0	0.306
850.0	2.537	34.523	179.8	2.483	4056.0	0.605	34.687	214.1	0.305
900.0	2.525	34.552	178.4	2.468					
950.0	2.517	34.568	178.0	2.456					
1000.0	2.511	34.594	178.0	2.447					
1050.0	2.494	34.614	178.4	2.426					
1100.0	2.489	34.634	179.2	2.418					
1150.0	2.477	34.650	180.4	2.402					
1200.0	2.451	34.667	181.7	2.373					
1250.0	2.457	34.692	184.5	2.374					
1300.0	2.446	34.709	187.1	2.359					
1350.0	2.437	34.724	189.7	2.347					
1400.0	2.420	34.733	191.5	2.326					
1450.0	2.391	34.740	193.1	2.294					
1500.0	2.378	34.748	194.7	2.277					
1550.0	2.347	34.755	196.8	2.242					
1600.0	2.284	34.758	197.7	2.176					
1650.0	2.255	34.762	199.3	2.143					
1700.0	2.212	34.764	200.1	2.097					
1750.0	2.168	34.766	201.5	2.050					
1800.0	2.127	34.768	202.4	2.005					
1850.0	2.086	34.768	203.1	1.960					
1900.0	2.043	34.770	204.2	1.914					
1950.0	2.001	34.770	205.3	1.869					
2000.0	1.969	34.770	205.7	1.833					
2050.0	1.918	34.768	205.7	1.778					
2100.0	1.887	34.768	206.3	1.743					
2150.0	1.826	34.766	206.8	1.679					
2200.0	1.715	34.758	206.4	1.566					
2250.0	1.653	34.754	206.3	1.501					
2300.0	1.615	34.751	206.0	1.459					
2350.0	1.553	34.749	206.5	1.394					
2400.0	1.501	34.744	206.3	1.338					
2450.0	1.464	34.741	206.1	1.298					
2500.0	1.424	34.739	206.2	1.254					
2550.0	1.402	34.739	206.6	1.228					
2600.0	1.353	34.736	207.0	1.176					
2650.0	1.320	34.735	207.5	1.139					
2700.0	1.278	34.732	207.7	1.093					
2750.0	1.245	34.731	208.2	1.056					
2800.0	1.203	34.727	208.3	1.011					
2850.0	1.158	34.725	208.7	0.962					
2900.0	1.121	34.723	208.8	0.922					
2950.0	1.085	34.720	209.0	0.882					
3000.0	1.048	34.717	209.0	0.841					



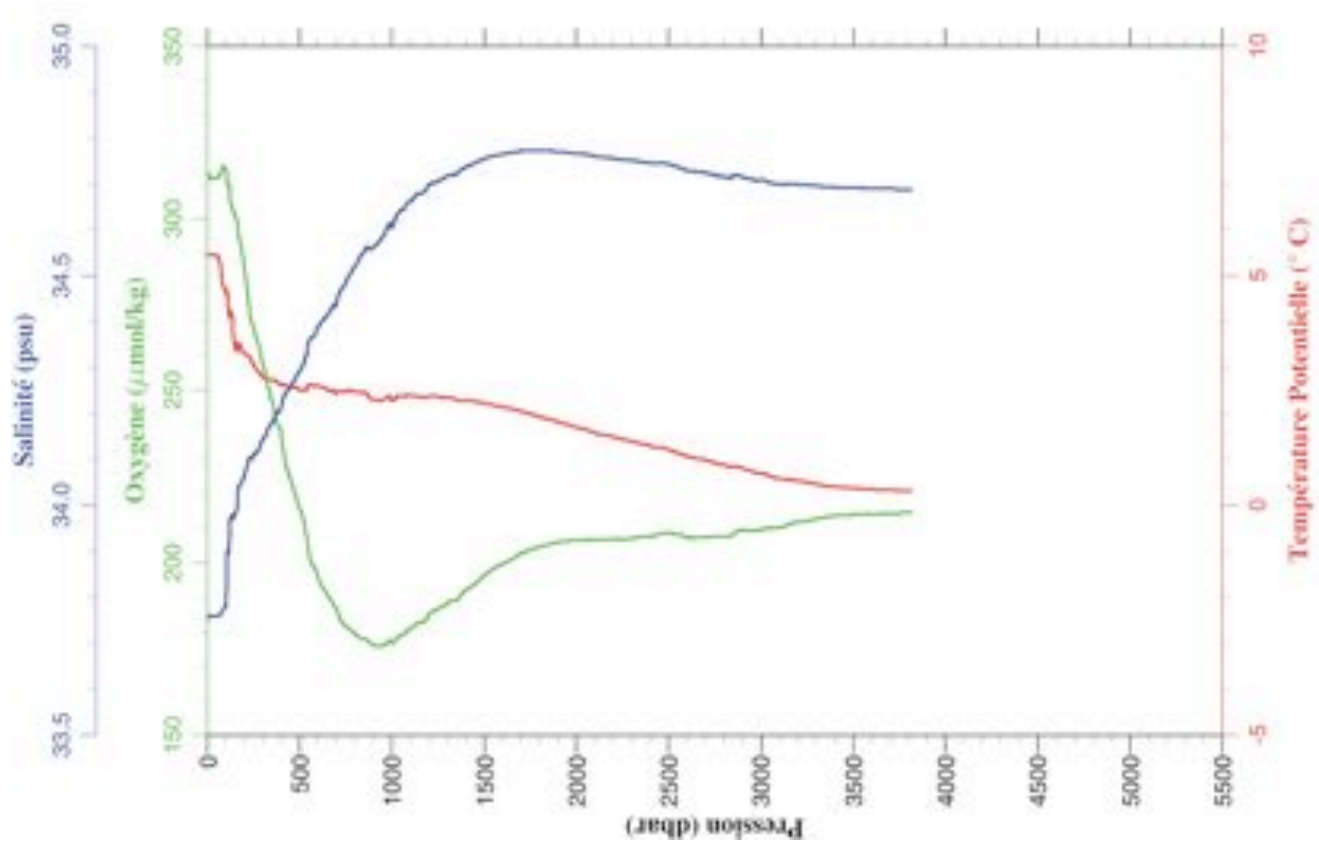
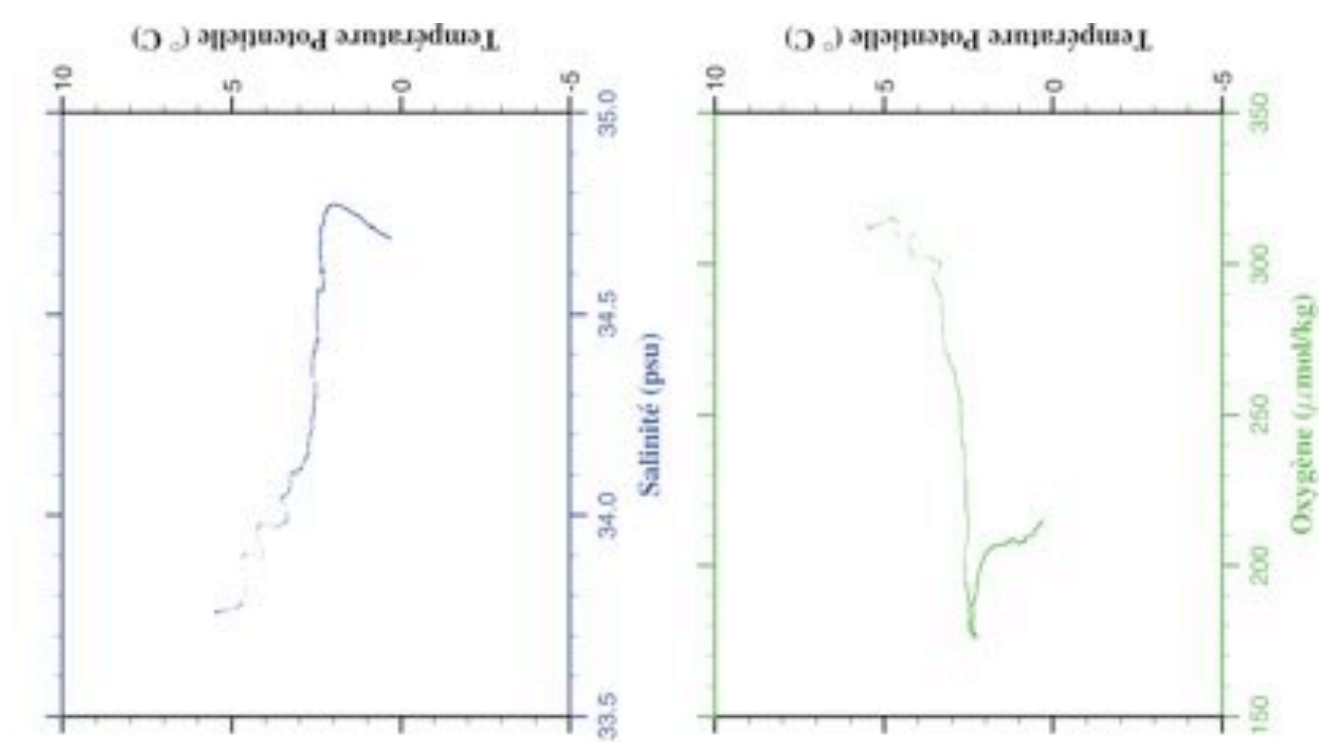
**STATION 73**

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| Station   : 74           Campagne  : GOODHOPE 2008
| Date     : 08-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 3794      Organisme : IFREMER
| Position  : S 49 34.10
|           : E 2 14.18
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	5.450	33.756	313.2	5.450	3050.0	0.842	34.702	209.9	0.635
10.0	5.453	33.759	311.8	5.452	3100.0	0.803	34.700	210.3	0.592
20.0	5.457	33.759	311.5	5.455	3150.0	0.770	34.699	211.1	0.555
30.0	5.462	33.759	311.6	5.460	3200.0	0.753	34.699	211.8	0.534
40.0	5.447	33.759	311.7	5.444	3250.0	0.730	34.698	212.2	0.507
50.0	5.450	33.759	311.7	5.446	3300.0	0.688	34.696	212.8	0.461
100.0	4.722	33.781	314.5	4.715	3350.0	0.655	34.694	213.2	0.424
150.0	3.421	33.980	300.8	3.412	3400.0	0.636	34.692	213.6	0.401
200.0	3.313	34.064	285.7	3.301	3450.0	0.628	34.692	213.8	0.388
250.0	3.092	34.109	268.2	3.076	3500.0	0.615	34.691	214.0	0.371
300.0	2.821	34.142	257.9	2.803	3550.0	0.608	34.691	214.1	0.360
350.0	2.753	34.179	247.0	2.732	3600.0	0.600	34.690	214.2	0.347
400.0	2.649	34.216	237.1	2.625	3650.0	0.594	34.689	214.1	0.336
450.0	2.609	34.259	224.2	2.582	3700.0	0.592	34.689	214.3	0.329
500.0	2.543	34.291	215.8	2.514	3750.0	0.586	34.688	214.4	0.318
550.0	2.661	34.358	202.9	2.628	3800.0	0.579	34.688	214.6	0.307
600.0	2.646	34.388	195.7	2.609	3813.0	0.580	34.688	214.7	0.306
650.0	2.555	34.415	190.7	2.516					
700.0	2.496	34.441	186.9	2.453					
750.0	2.522	34.483	181.7	2.476					
800.0	2.518	34.520	179.3	2.468					
850.0	2.508	34.554	177.8	2.455					
900.0	2.360	34.563	176.1	2.304					
950.0	2.363	34.585	176.0	2.304					
1000.0	2.335	34.603	176.8	2.272					
1050.0	2.449	34.643	179.0	2.382					
1100.0	2.456	34.662	181.0	2.385					
1150.0	2.439	34.678	182.7	2.365					
1200.0	2.454	34.699	184.8	2.375					
1250.0	2.452	34.706	186.7	2.369					
1300.0	2.432	34.717	188.4	2.346					
1350.0	2.381	34.721	189.1	2.291					
1400.0	2.365	34.737	192.2	2.272					
1450.0	2.355	34.745	193.7	2.258					
1500.0	2.324	34.754	196.3	2.224					
1550.0	2.282	34.761	198.3	2.178					
1600.0	2.245	34.765	199.7	2.138					
1650.0	2.219	34.767	200.9	2.108					
1700.0	2.165	34.771	202.7	2.050					
1750.0	2.110	34.773	203.9	1.992					
1800.0	2.055	34.772	204.8	1.934					
1850.0	2.002	34.772	205.3	1.877					
1900.0	1.945	34.770	205.8	1.817					
1950.0	1.887	34.768	206.2	1.756					
2000.0	1.833	34.766	206.4	1.699					
2050.0	1.798	34.764	206.7	1.660					
2100.0	1.718	34.760	206.7	1.577					
2150.0	1.678	34.758	206.8	1.534					
2200.0	1.634	34.755	206.9	1.486					
2250.0	1.585	34.752	206.9	1.434					
2300.0	1.554	34.750	207.1	1.399					
2350.0	1.502	34.748	207.5	1.344					
2400.0	1.445	34.745	207.7	1.284					
2450.0	1.427	34.745	208.3	1.261					
2500.0	1.387	34.743	208.7	1.218					
2550.0	1.320	34.737	208.1	1.148					
2600.0	1.241	34.728	207.4	1.066					
2650.0	1.195	34.725	207.4	1.016					
2700.0	1.171	34.724	207.5	0.988					
2750.0	1.109	34.719	207.6	0.924					
2800.0	1.068	34.716	207.7	0.879					
2850.0	1.036	34.716	208.2	0.843					
2900.0	1.006	34.715	209.4	0.809					
2950.0	0.952	34.711	209.3	0.752					
3000.0	0.907	34.708	209.7	0.703					



**STATION 74**

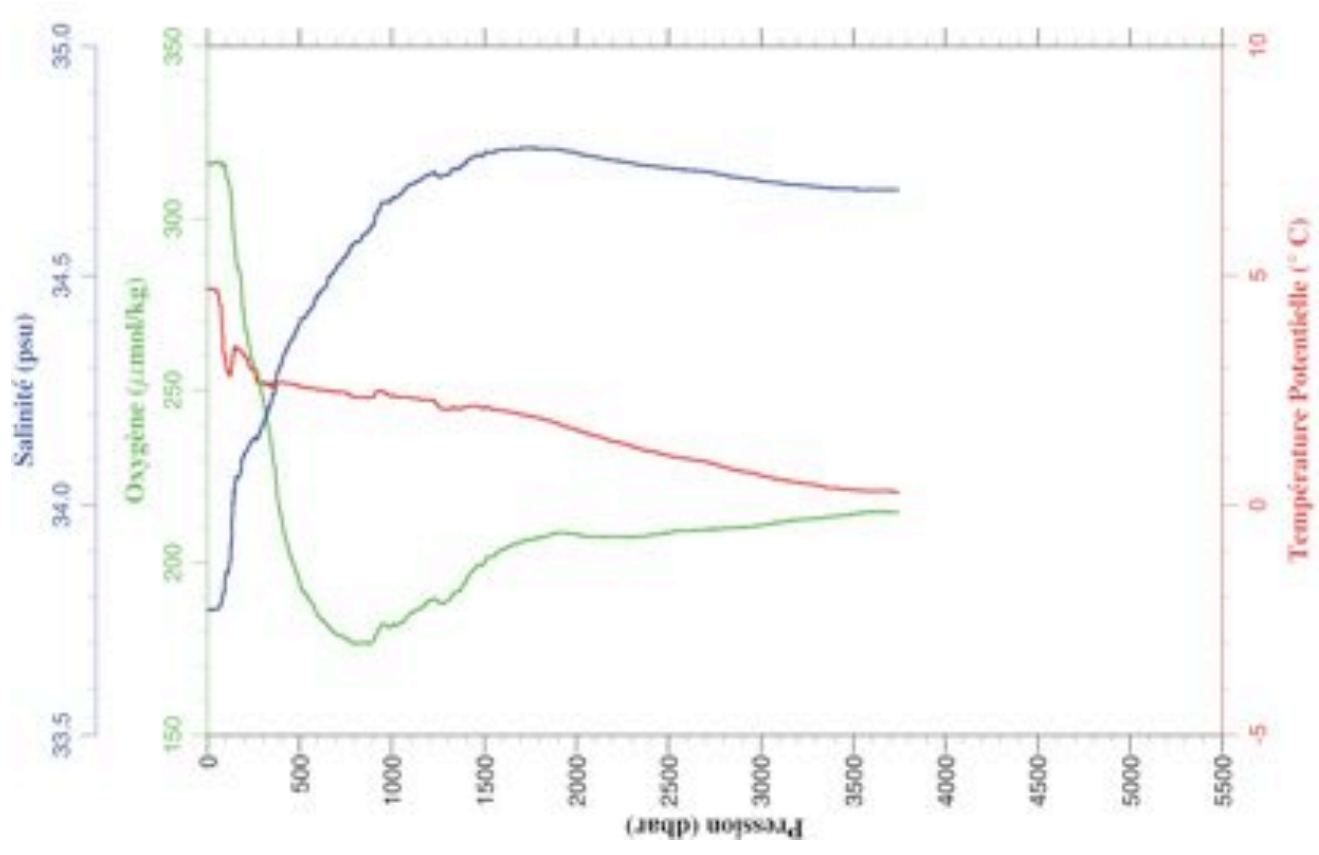
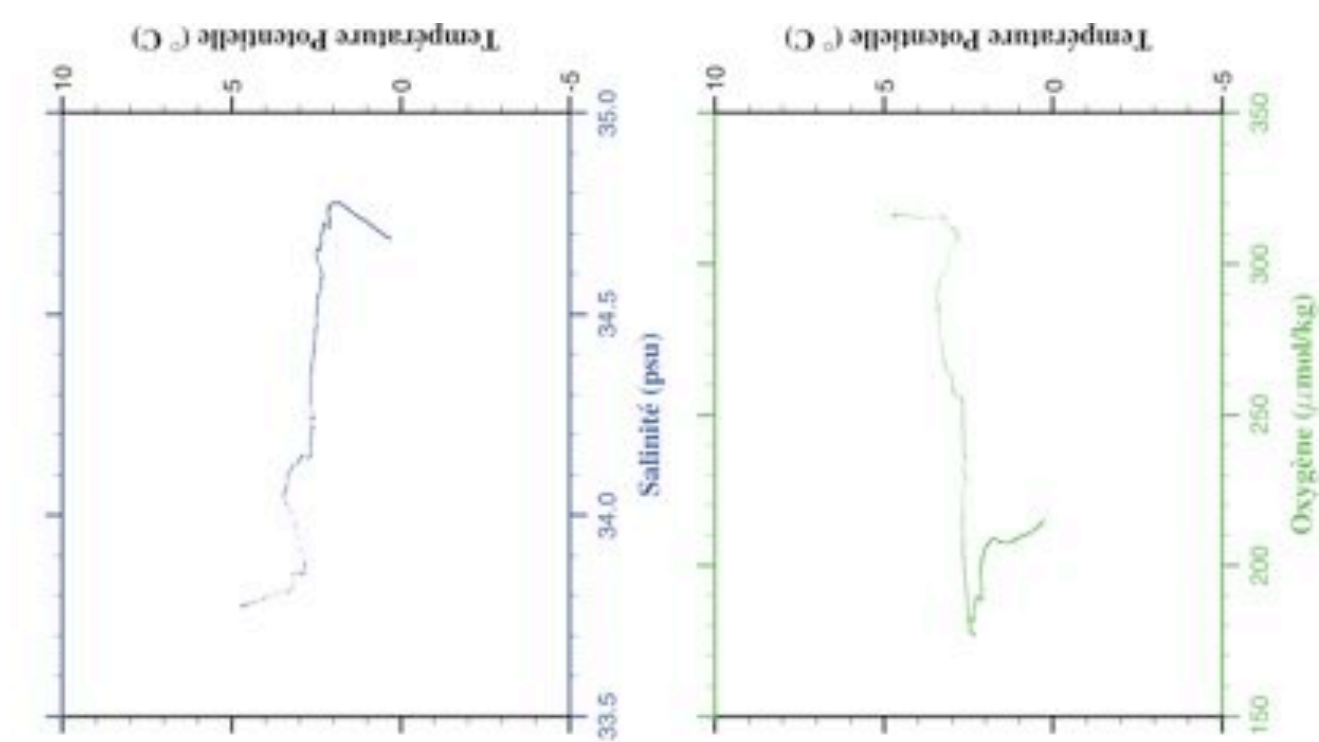
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| Station   : 75           Campagne  : GOODHOPE 2008
| Date     : 08-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 3719      Organisme : IFREMER
| Position  : S 49 49.60
|           : E 1 56.14
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	4.709	33.773	315.3	4.709	3050.0	0.812	34.704	211.3	0.606
10.0	4.712	33.773	316.0	4.712	3100.0	0.784	34.701	211.6	0.574
20.0	4.713	33.773	315.9	4.711	3150.0	0.732	34.699	212.2	0.518
30.0	4.699	33.773	316.0	4.697	3200.0	0.718	34.698	212.5	0.500
40.0	4.698	33.773	316.1	4.695	3250.0	0.693	34.696	212.7	0.471
50.0	4.676	33.774	316.1	4.673	3300.0	0.672	34.694	212.9	0.446
100.0	3.178	33.853	313.5	3.172	3350.0	0.630	34.692	213.3	0.400
150.0	3.469	34.047	291.4	3.459	3400.0	0.607	34.690	213.7	0.373
200.0	3.262	34.112	270.3	3.250	3450.0	0.597	34.690	213.8	0.359
250.0	2.960	34.144	257.7	2.945	3500.0	0.578	34.689	214.2	0.335
300.0	2.704	34.177	248.0	2.686	3550.0	0.569	34.688	214.5	0.322
350.0	2.671	34.233	232.7	2.650	3600.0	0.565	34.688	214.8	0.313
400.0	2.703	34.307	213.2	2.679	3650.0	0.566	34.688	214.9	0.309
450.0	2.674	34.359	201.9	2.646	3700.0	0.566	34.687	214.7	0.304
500.0	2.620	34.397	194.2	2.590	3742.0	0.567	34.687	214.7	0.301
550.0	2.586	34.422	189.3	2.552					
600.0	2.552	34.459	184.8	2.515					
650.0	2.540	34.487	182.0	2.500					
700.0	2.515	34.519	179.2	2.472					
750.0	2.503	34.541	178.1	2.457					
800.0	2.405	34.572	176.5	2.356					
850.0	2.408	34.591	176.7	2.355					
900.0	2.417	34.609	177.3	2.360					
950.0	2.544	34.659	182.3	2.483					
1000.0	2.466	34.669	181.7	2.402					
1050.0	2.419	34.680	182.6	2.352					
1100.0	2.417	34.699	185.3	2.346					
1150.0	2.385	34.707	186.7	2.311					
1200.0	2.379	34.721	189.0	2.301					
1250.0	2.248	34.718	188.9	2.167					
1300.0	2.176	34.720	188.9	2.092					
1350.0	2.196	34.732	191.5	2.109					
1400.0	2.219	34.745	194.6	2.128					
1450.0	2.256	34.760	198.2	2.161					
1500.0	2.218	34.764	199.8	2.119					
1550.0	2.185	34.767	201.6	2.082					
1600.0	2.166	34.774	204.0	2.060					
1650.0	2.135	34.776	205.1	2.025					
1700.0	2.096	34.777	206.0	1.983					
1750.0	2.063	34.777	206.7	1.946					
1800.0	2.022	34.777	207.2	1.902					
1850.0	1.962	34.776	207.9	1.838					
1900.0	1.907	34.775	208.7	1.780					
1950.0	1.835	34.771	208.6	1.705					
2000.0	1.782	34.767	208.3	1.649					
2050.0	1.719	34.762	207.7	1.582					
2100.0	1.653	34.758	207.7	1.513					
2150.0	1.606	34.755	207.5	1.462					
2200.0	1.534	34.750	207.6	1.388					
2250.0	1.502	34.748	207.5	1.352					
2300.0	1.442	34.744	207.5	1.289					
2350.0	1.383	34.741	207.6	1.227					
2400.0	1.332	34.738	208.1	1.173					
2450.0	1.296	34.736	208.3	1.133					
2500.0	1.251	34.734	208.7	1.084					
2550.0	1.211	34.732	209.2	1.040					
2600.0	1.187	34.730	209.3	1.013					
2650.0	1.163	34.729	209.5	0.985					
2700.0	1.131	34.726	209.6	0.949					
2750.0	1.080	34.722	209.8	0.895					
2800.0	1.029	34.719	209.9	0.841					
2850.0	0.972	34.714	210.1	0.780					
2900.0	0.937	34.712	210.3	0.741					
2950.0	0.905	34.710	210.5	0.705					
3000.0	0.850	34.706	210.9	0.647					





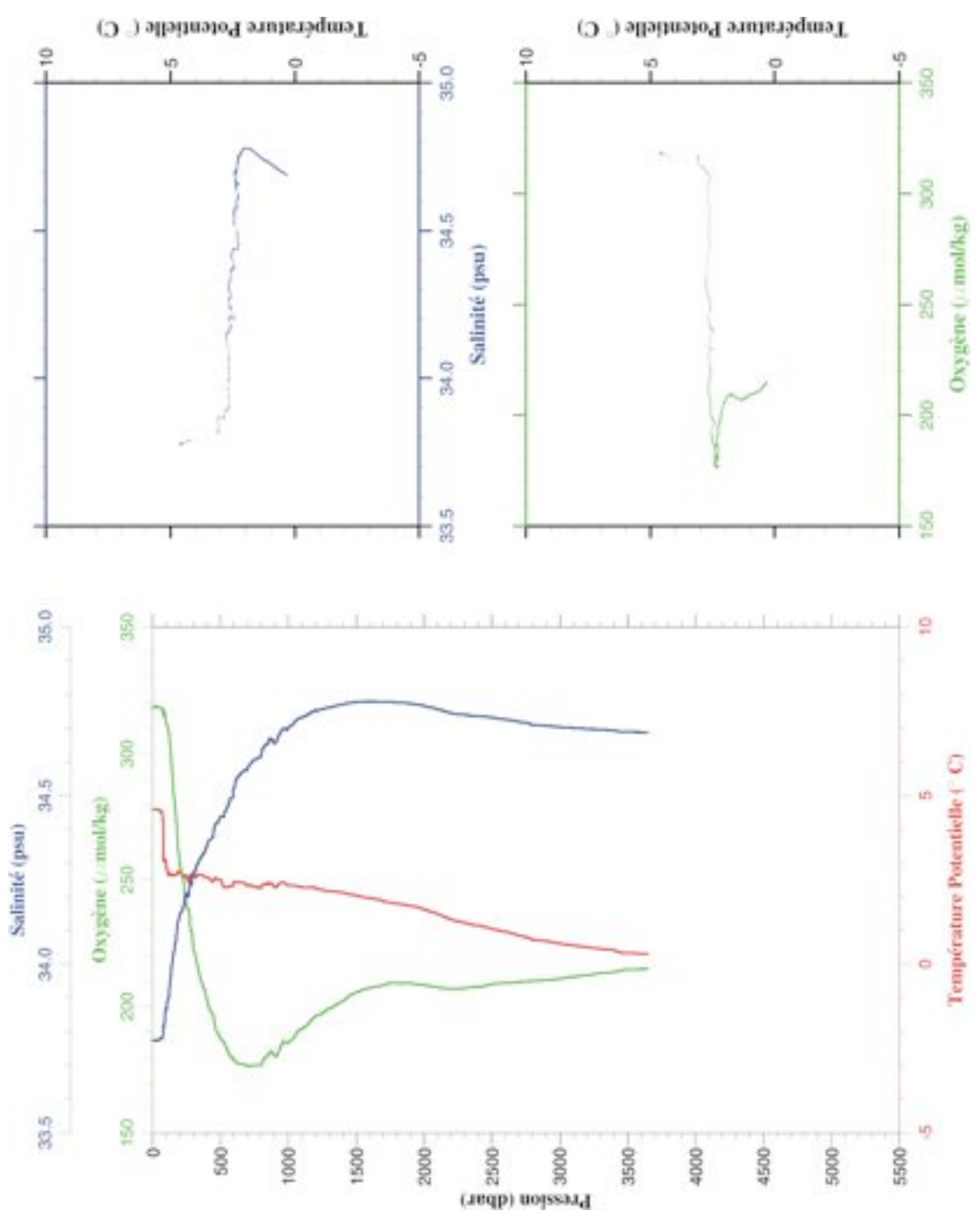
**STATION 75**

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| Station   : 76           Campagne  : GOODHOPE 2008
| Date     : 08-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 3622      Organisme : IFREMER
| Position  : S 50 6.45
|           : E 1 36.96
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	4.586	33.775	317.8	4.586	3050.0	0.782	34.701	211.5	0.577
10.0	4.591	33.774	318.3	4.590	3100.0	0.770	34.701	211.7	0.560
20.0	4.589	33.775	318.8	4.588	3150.0	0.746	34.699	212.2	0.532
30.0	4.597	33.774	318.4	4.594	3200.0	0.727	34.698	212.3	0.509
40.0	4.600	33.774	318.2	4.598	3250.0	0.698	34.697	212.8	0.476
50.0	4.556	33.778	318.2	4.553	3300.0	0.678	34.695	213.1	0.451
100.0	2.909	33.863	312.3	2.903	3350.0	0.668	34.695	213.3	0.438
150.0	2.643	34.022	288.3	2.634	3400.0	0.649	34.693	213.6	0.414
200.0	2.771	34.146	257.2	2.759	3450.0	0.591	34.690	214.3	0.352
250.0	2.614	34.209	239.7	2.600	3500.0	0.581	34.689	214.5	0.338
300.0	2.678	34.270	223.5	2.660	3550.0	0.574	34.689	214.7	0.327
350.0	2.678	34.312	211.7	2.657	3600.0	0.572	34.688	214.8	0.320
400.0	2.613	34.350	202.9	2.589	3646.0	0.571	34.688	214.8	0.314
450.0	2.501	34.393	195.7	2.474					
500.0	2.535	34.437	187.2	2.505					
550.0	2.328	34.467	182.8	2.296					
600.0	2.474	34.525	178.8	2.438					
650.0	2.468	34.567	177.3	2.429					
700.0	2.370	34.581	176.3	2.327					
750.0	2.357	34.607	176.8	2.311					
800.0	2.327	34.623	176.9	2.278					
850.0	2.415	34.654	180.5	2.362					
900.0	2.333	34.655	180.2	2.278					
950.0	2.477	34.691	184.7	2.416					
1000.0	2.405	34.703	185.7	2.341					
1050.0	2.394	34.719	188.5	2.327					
1100.0	2.359	34.731	191.2	2.288					
1150.0	2.354	34.742	193.5	2.280					
1200.0	2.358	34.754	196.3	2.281					
1250.0	2.284	34.757	197.4	2.203					
1300.0	2.256	34.762	199.2	2.171					
1350.0	2.240	34.766	200.5	2.152					
1400.0	2.222	34.770	202.1	2.130					
1450.0	2.167	34.776	204.3	2.072					
1500.0	2.140	34.777	205.5	2.042					
1550.0	2.098	34.779	206.6	1.996					
1600.0	2.073	34.779	207.3	1.968					
1650.0	2.036	34.779	207.9	1.927					
1700.0	1.982	34.778	208.5	1.869					
1750.0	1.941	34.778	209.3	1.826					
1800.0	1.916	34.776	209.3	1.797					
1850.0	1.891	34.775	209.2	1.768					
1900.0	1.857	34.773	209.2	1.730					
1950.0	1.830	34.771	208.8	1.700					
2000.0	1.767	34.766	208.4	1.633					
2050.0	1.698	34.761	207.9	1.562					
2100.0	1.634	34.756	207.6	1.495					
2150.0	1.551	34.750	207.3	1.408					
2200.0	1.474	34.745	207.0	1.329					
2250.0	1.422	34.741	207.0	1.273					
2300.0	1.386	34.740	207.2	1.234					
2350.0	1.334	34.737	207.6	1.178					
2400.0	1.317	34.736	207.8	1.158					
2450.0	1.270	34.734	208.1	1.108					
2500.0	1.217	34.731	208.9	1.051					
2550.0	1.172	34.728	209.1	1.002					
2600.0	1.137	34.726	209.4	0.964					
2650.0	1.092	34.723	209.4	0.916					
2700.0	1.031	34.719	209.8	0.852					
2750.0	0.993	34.716	209.9	0.810					
2800.0	0.927	34.711	210.0	0.741					
2850.0	0.894	34.708	210.3	0.704					
2900.0	0.877	34.707	210.4	0.683					
2950.0	0.847	34.705	210.6	0.649					
3000.0	0.819	34.703	210.9	0.617					



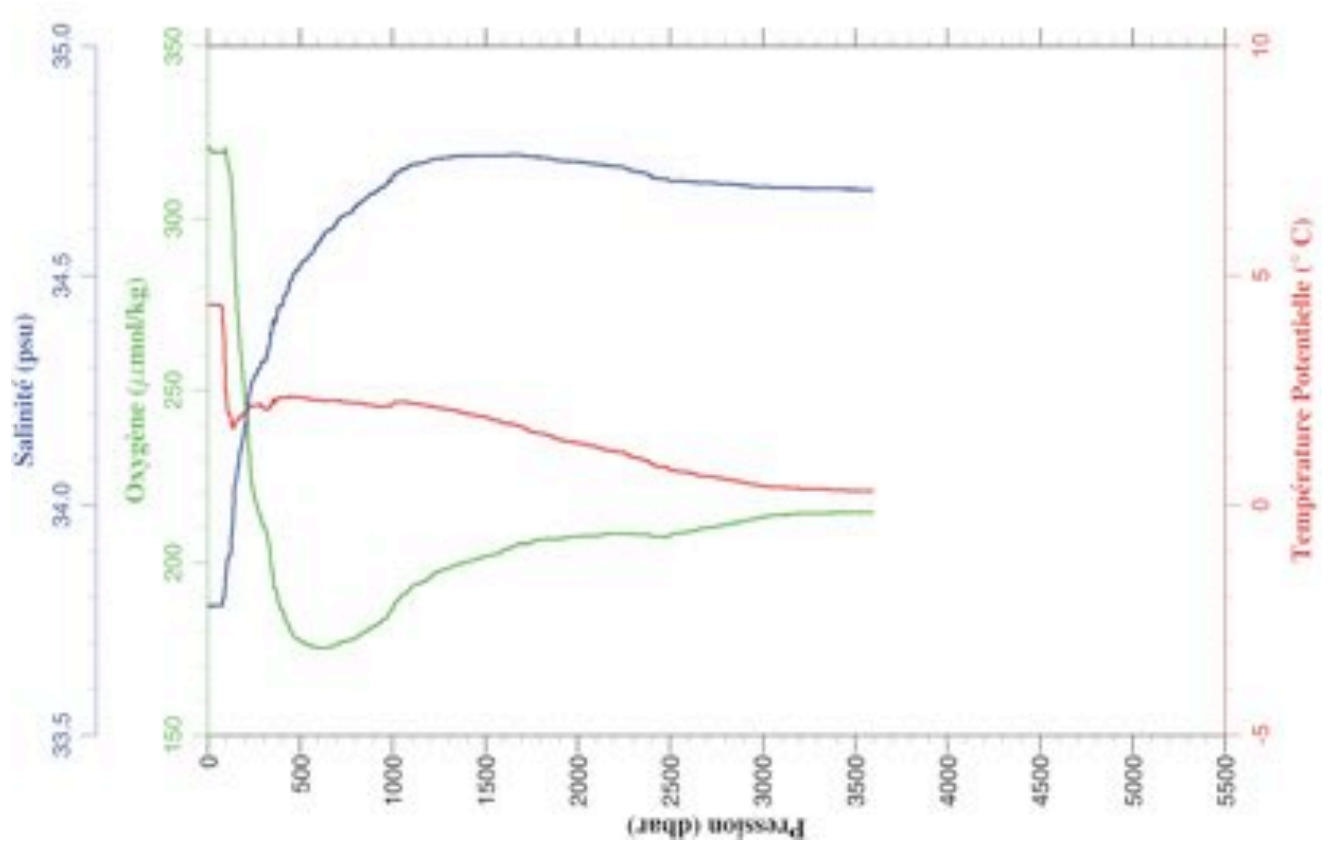
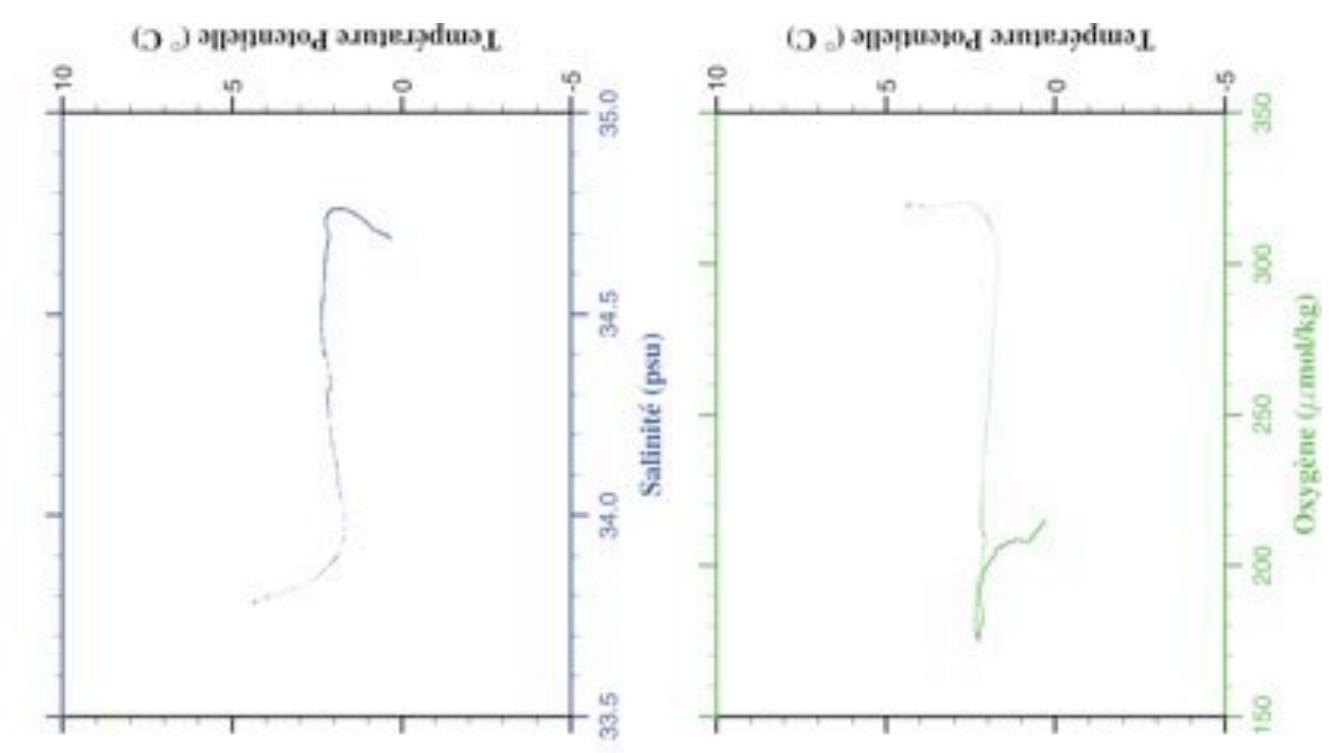
**STATION 76**

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| Station   : 77           Campagne  : GOODHOPE 2008
| Date      : 08-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 3576       Organisme : IFREMER
| Position  : S 50 22.39
|            E 1 18.08
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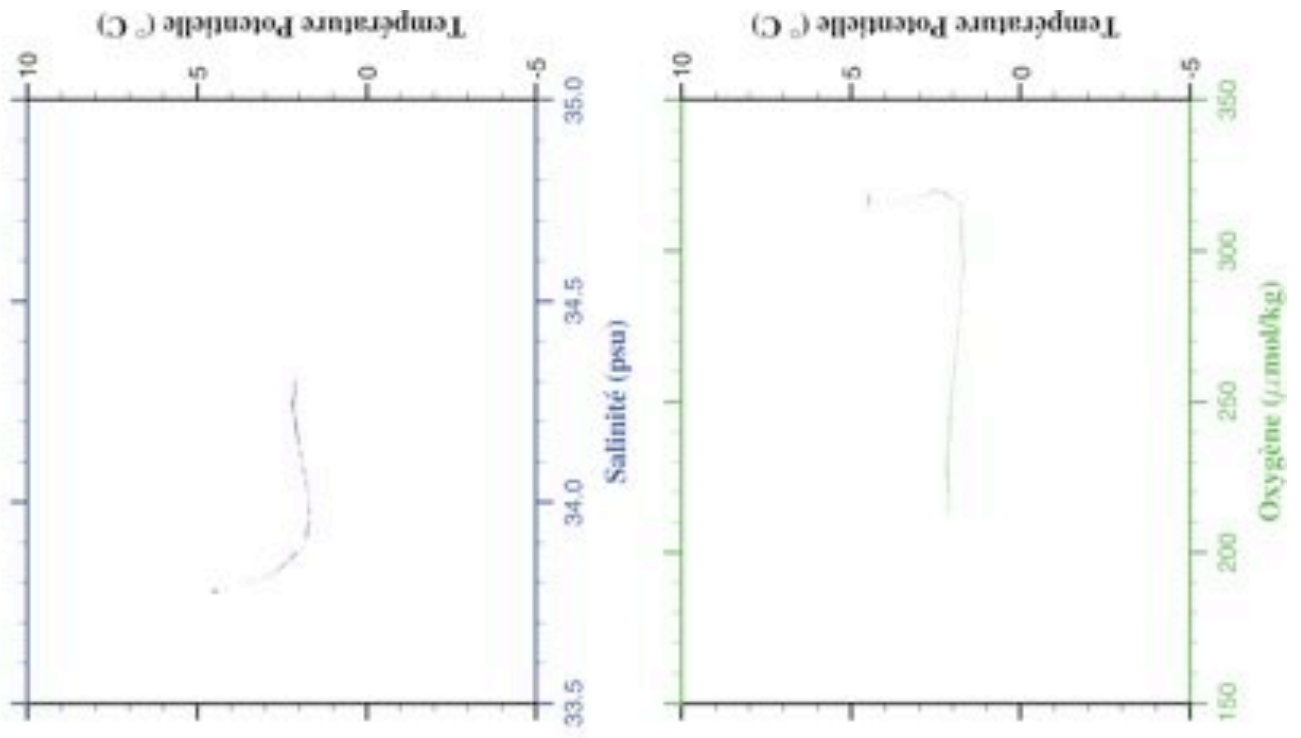
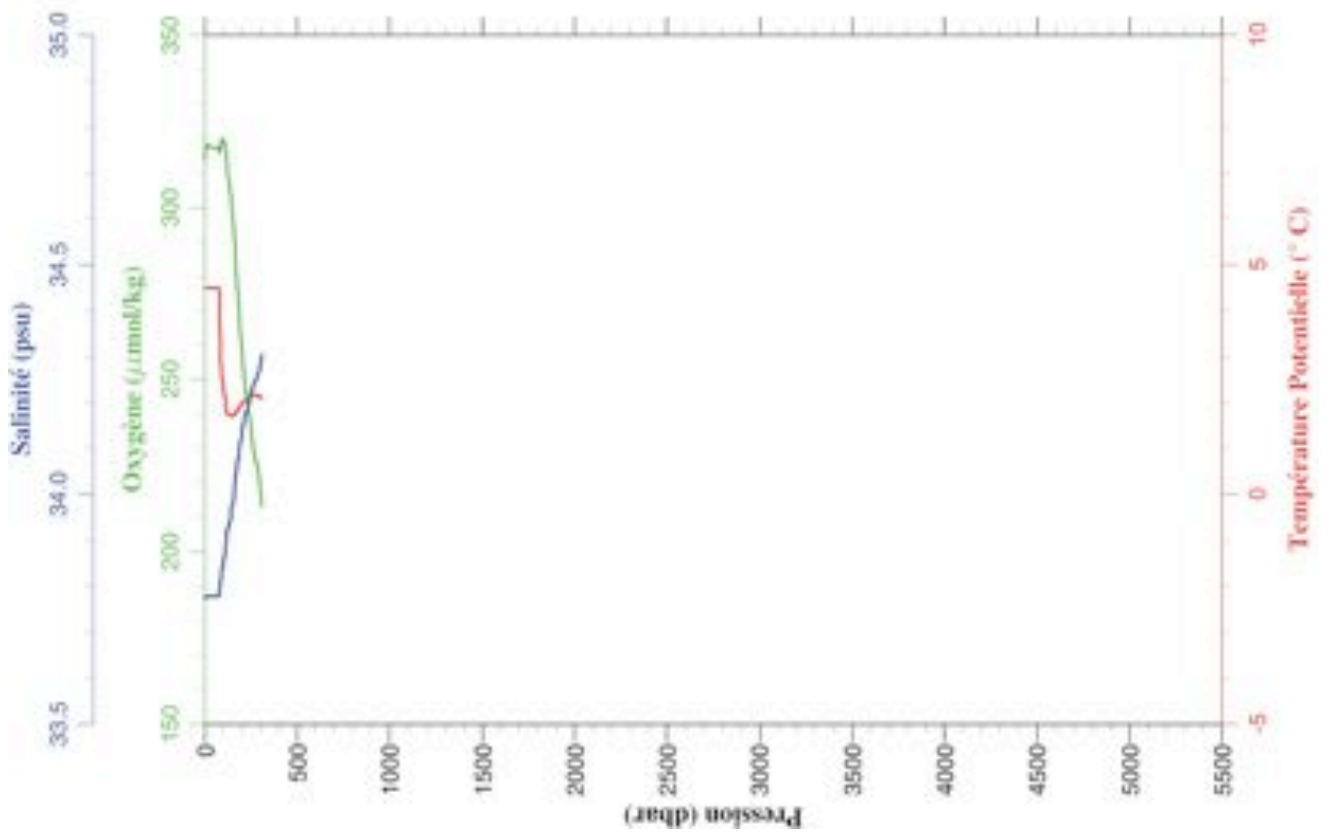
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	4.362	33.781	320.4	4.362	3050.0	0.599	34.693	213.7	0.398
10.0	4.362	33.781	320.3	4.361	3100.0	0.595	34.692	213.9	0.389
20.0	4.363	33.781	319.5	4.361	3150.0	0.593	34.692	214.0	0.382
30.0	4.362	33.781	319.1	4.360	3200.0	0.582	34.691	214.3	0.367
40.0	4.363	33.782	319.2	4.360	3250.0	0.577	34.690	214.3	0.357
50.0	4.364	33.782	319.2	4.361	3300.0	0.576	34.690	214.4	0.352
100.0	2.374	33.856	319.1	2.368	3350.0	0.577	34.690	214.4	0.348
150.0	1.812	34.050	282.1	1.804	3400.0	0.570	34.689	214.5	0.337
200.0	2.044	34.173	247.2	2.034	3450.0	0.561	34.689	214.7	0.323
250.0	2.192	34.278	219.5	2.178	3500.0	0.563	34.688	214.7	0.321
300.0	2.140	34.313	210.7	2.124	3550.0	0.562	34.688	214.6	0.315
350.0	2.277	34.392	196.6	2.257	3597.0	0.564	34.688	214.7	0.312
400.0	2.361	34.435	186.3	2.338					
450.0	2.397	34.490	180.0	2.371					
500.0	2.379	34.522	177.3	2.349					
550.0	2.343	34.544	176.0	2.311					
600.0	2.326	34.570	175.4	2.290					
650.0	2.313	34.599	175.5	2.274					
700.0	2.317	34.617	176.4	2.275					
750.0	2.294	34.634	177.2	2.248					
800.0	2.280	34.649	178.2	2.231					
850.0	2.258	34.665	179.9	2.206					
900.0	2.233	34.679	181.6	2.178					
950.0	2.212	34.693	183.6	2.153					
1000.0	2.262	34.713	186.7	2.200					
1050.0	2.316	34.731	190.6	2.250					
1100.0	2.296	34.742	192.9	2.226					
1150.0	2.270	34.745	194.2	2.197					
1200.0	2.233	34.751	195.6	2.156					
1250.0	2.201	34.755	197.4	2.121					
1300.0	2.177	34.757	198.3	2.093					
1350.0	2.140	34.760	199.5	2.053					
1400.0	2.081	34.760	200.4	1.991					
1450.0	2.046	34.761	200.9	1.953					
1500.0	2.012	34.761	201.9	1.915					
1550.0	1.955	34.761	202.5	1.855					
1600.0	1.892	34.762	203.8	1.789					
1650.0	1.868	34.764	204.7	1.762					
1700.0	1.809	34.762	205.6	1.699					
1750.0	1.721	34.759	206.0	1.608					
1800.0	1.681	34.758	206.8	1.565					
1850.0	1.628	34.755	206.9	1.508					
1900.0	1.562	34.751	206.9	1.440					
1950.0	1.520	34.750	207.5	1.394					
2000.0	1.488	34.748	207.7	1.359					
2050.0	1.451	34.746	207.7	1.318					
2100.0	1.408	34.743	207.8	1.272					
2150.0	1.339	34.739	208.3	1.200					
2200.0	1.316	34.738	208.4	1.174					
2250.0	1.296	34.736	208.4	1.150					
2300.0	1.193	34.727	208.2	1.045					
2350.0	1.151	34.725	208.2	0.999					
2400.0	1.053	34.715	207.8	0.899					
2450.0	1.006	34.711	207.5	0.849					
2500.0	0.916	34.706	208.0	0.756					
2550.0	0.897	34.706	208.7	0.733					
2600.0	0.886	34.705	208.9	0.717					
2650.0	0.828	34.703	209.7	0.657					
2700.0	0.811	34.702	210.2	0.636					
2750.0	0.786	34.701	210.4	0.607					
2800.0	0.750	34.699	211.0	0.568					
2850.0	0.717	34.698	211.7	0.531					
2900.0	0.696	34.697	212.1	0.506					
2950.0	0.649	34.695	212.7	0.456					
3000.0	0.620	34.694	213.4	0.422					



**STATION 77**

Station	: 78	Campagne	: GOODHOPE 2008
Date	: 09-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 3506	Organisme	: IFREMER
Position	: S 50 22.58		
	E 1 19.11		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	4.485	33.772	314.1	4.485
10.0	4.486	33.778	318.2	4.485
20.0	4.489	33.778	317.7	4.488
30.0	4.489	33.779	317.4	4.487
40.0	4.491	33.779	317.3	4.488
50.0	4.492	33.778	317.2	4.489
100.0	2.332	33.850	319.6	2.327
150.0	1.713	33.977	297.7	1.705
200.0	1.970	34.128	259.2	1.960
250.0	2.166	34.223	234.8	2.152
300.0	2.144	34.279	218.3	2.128
308.0	2.132	34.303	213.3	2.115



**STATION 78**

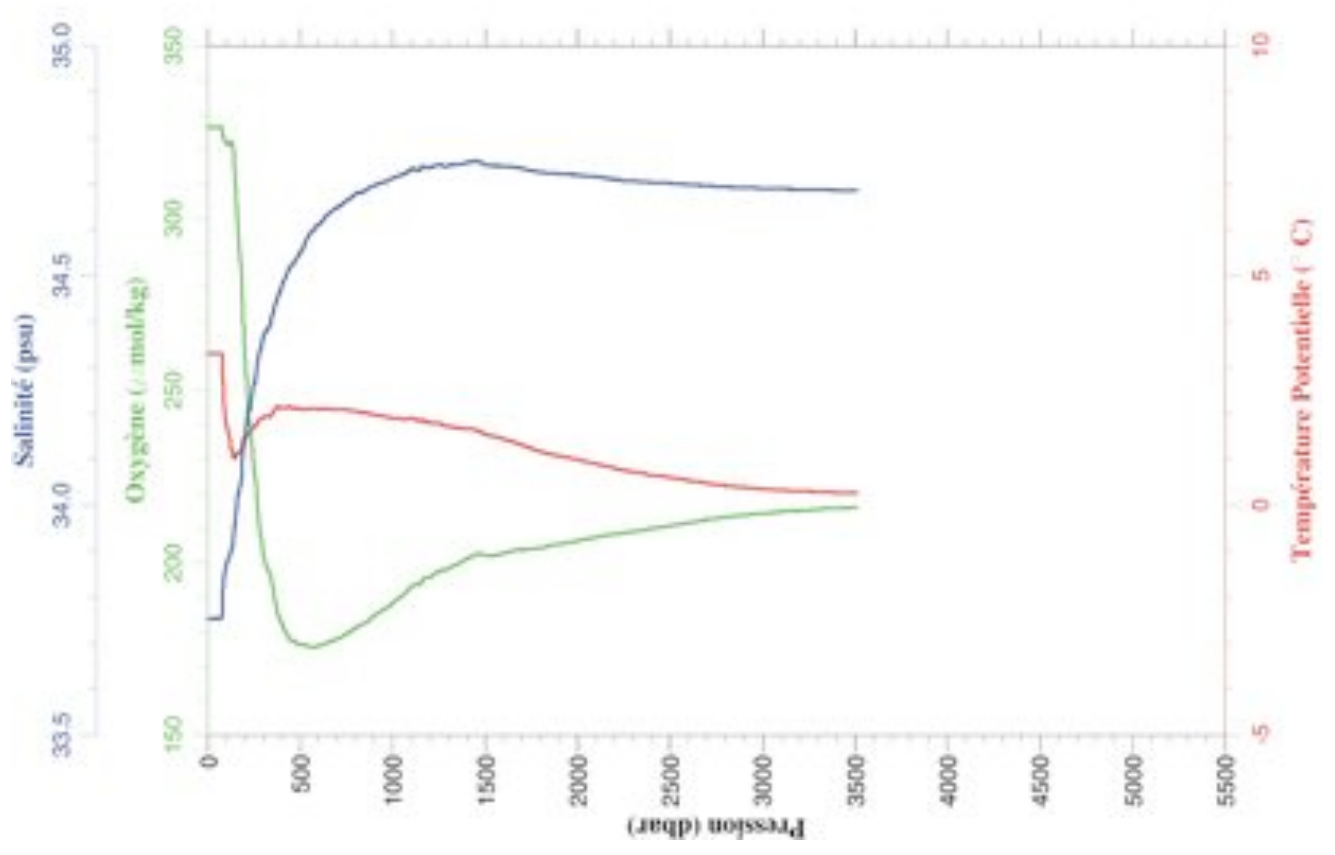
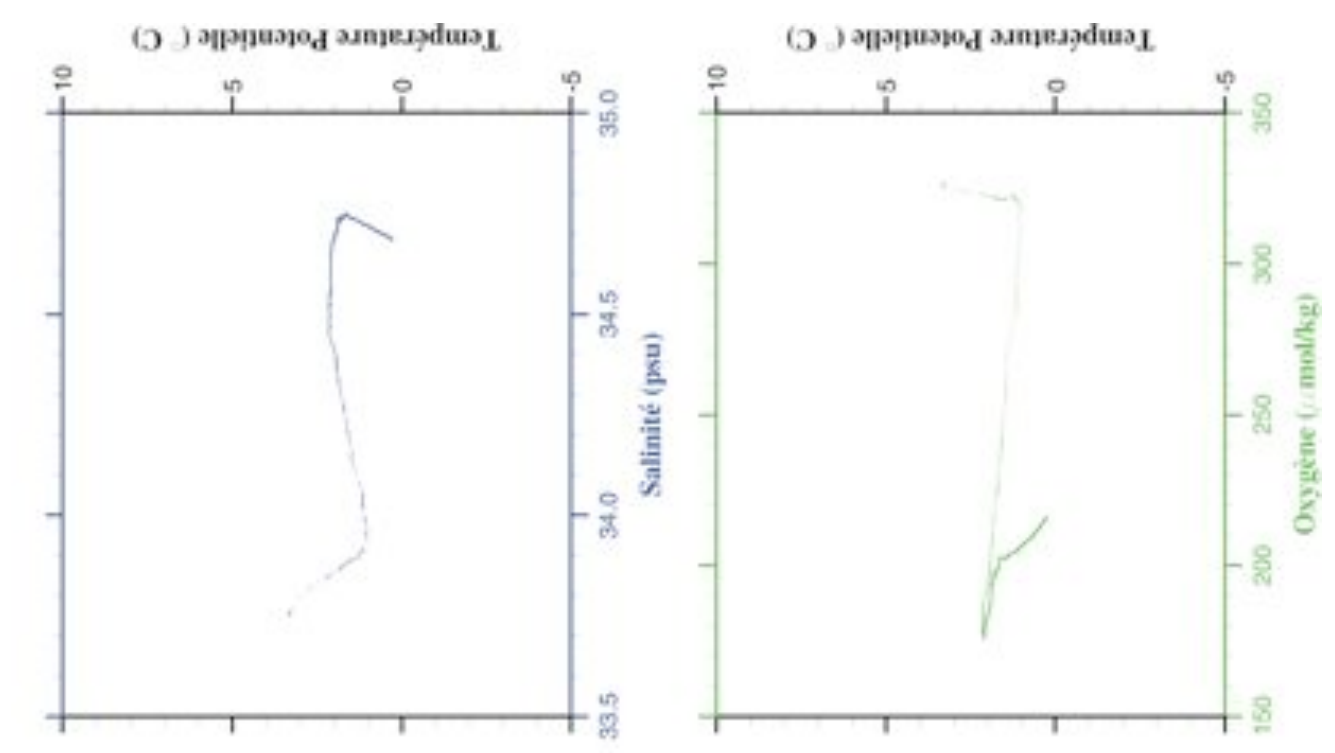
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| Station   : 79           Campagne  : GOODHOPE 2008
| Date     : 09-03-08    Navire    : R/V Marion Dufresne
| Profondeur : 3504      Organisme : IFREMER
| Position  : S 50 38.41
|           : E 0 58.55
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	3.311	33.752	326.4	3.310	3050.0	0.543	34.689	214.5	0.343
10.0	3.309	33.753	326.4	3.308	3100.0	0.533	34.689	214.8	0.329
20.0	3.310	33.754	326.4	3.308	3150.0	0.531	34.688	215.1	0.322
30.0	3.311	33.754	326.2	3.309	3200.0	0.531	34.688	215.1	0.317
40.0	3.312	33.754	326.3	3.309	3250.0	0.523	34.688	215.3	0.305
50.0	3.312	33.754	326.3	3.309	3300.0	0.515	34.687	215.6	0.292
100.0	1.763	33.870	321.8	1.758	3350.0	0.511	34.687	215.8	0.284
150.0	1.064	33.978	309.5	1.057	3400.0	0.507	34.686	215.8	0.275
200.0	1.492	34.146	260.6	1.483	3450.0	0.508	34.686	215.9	0.271
250.0	1.715	34.264	226.6	1.702	3500.0	0.509	34.686	215.9	0.268
300.0	1.947	34.367	202.5	1.931	3509.0	0.509	34.686	216.0	0.267
350.0	2.018	34.416	193.3	1.999					
400.0	2.143	34.474	182.3	2.121					
450.0	2.160	34.522	177.3	2.134					
500.0	2.141	34.550	176.0	2.113					
550.0	2.132	34.592	175.7	2.101					
600.0	2.126	34.611	176.0	2.091					
650.0	2.135	34.635	176.9	2.097					
700.0	2.131	34.649	178.0	2.090					
750.0	2.122	34.663	179.3	2.078					
800.0	2.101	34.677	181.2	2.053					
850.0	2.063	34.684	182.5	2.013					
900.0	2.022	34.696	184.5	1.968					
950.0	1.997	34.703	186.4	1.940					
1000.0	1.963	34.711	188.4	1.903					
1050.0	1.947	34.720	190.4	1.884					
1100.0	1.968	34.732	192.9	1.901					
1150.0	1.905	34.731	194.0	1.835					
1200.0	1.875	34.735	195.8	1.802					
1250.0	1.867	34.741	197.4	1.790					
1300.0	1.801	34.739	198.2	1.722					
1350.0	1.776	34.742	199.6	1.693					
1400.0	1.748	34.746	201.1	1.662					
1450.0	1.736	34.750	202.5	1.646					
1500.0	1.631	34.741	202.2	1.539					
1550.0	1.586	34.739	202.2	1.490					
1600.0	1.534	34.738	202.7	1.435					
1650.0	1.491	34.737	203.4	1.389					
1700.0	1.419	34.733	203.9	1.314					
1750.0	1.343	34.729	204.0	1.235					
1800.0	1.285	34.726	204.3	1.174					
1850.0	1.220	34.724	205.1	1.107					
1900.0	1.187	34.721	205.4	1.071					
1950.0	1.159	34.721	205.9	1.039					
2000.0	1.124	34.720	206.4	1.001					
2050.0	1.077	34.717	207.0	0.950					
2100.0	1.033	34.715	207.3	0.903					
2150.0	0.994	34.713	208.0	0.861					
2200.0	0.944	34.709	208.1	0.808					
2250.0	0.896	34.707	208.7	0.757					
2300.0	0.869	34.706	209.1	0.727					
2350.0	0.849	34.705	209.5	0.703					
2400.0	0.807	34.703	210.0	0.657					
2450.0	0.796	34.703	210.2	0.642					
2500.0	0.764	34.701	210.8	0.607					
2550.0	0.741	34.700	211.0	0.580					
2600.0	0.700	34.698	211.7	0.536					
2650.0	0.685	34.697	212.1	0.517					
2700.0	0.649	34.695	212.7	0.477					
2750.0	0.632	34.694	212.9	0.457					
2800.0	0.608	34.693	213.3	0.428					
2850.0	0.591	34.692	213.6	0.408					
2900.0	0.580	34.692	213.9	0.392					
2950.0	0.566	34.691	214.1	0.374					
3000.0	0.554	34.690	214.4	0.359					

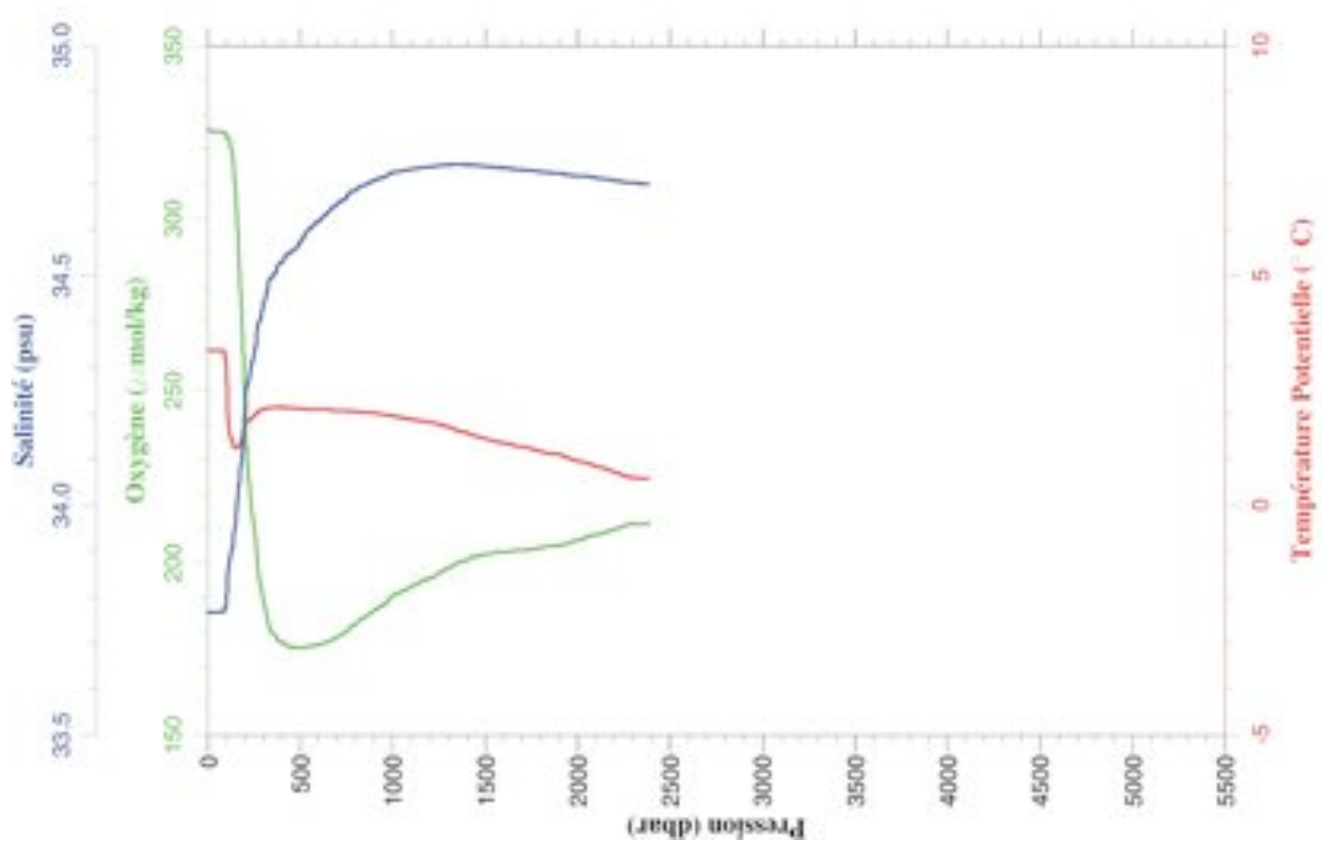
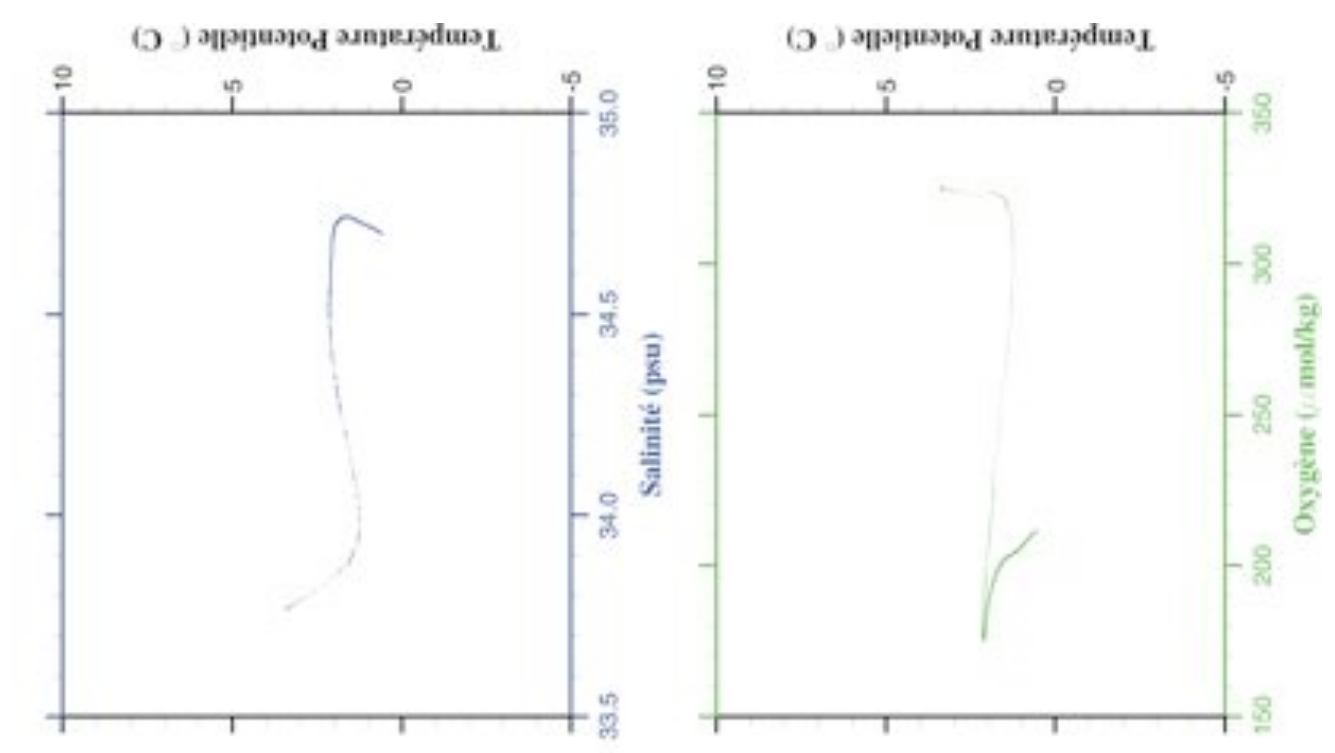




**STATION 79**

Station	: 80	Campagne	: GOODHOPE 2008
Date	: 09-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2400	Organisme	: IFREMER
Position	: S 50 54.24		
	E 0 39.35		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	3.384	33.766	325.5	3.384
10.0	3.383	33.767	325.7	3.382
20.0	3.380	33.767	325.2	3.379
30.0	3.380	33.767	325.3	3.378
40.0	3.380	33.767	325.2	3.378
50.0	3.381	33.767	325.2	3.378
100.0	2.938	33.791	324.4	2.932
150.0	1.261	33.958	307.9	1.254
200.0	1.660	34.202	246.5	1.650
250.0	1.950	34.329	210.2	1.937
300.0	2.117	34.438	189.2	2.101
350.0	2.155	34.499	179.7	2.135
400.0	2.152	34.529	176.9	2.130
450.0	2.149	34.550	175.6	2.123
500.0	2.139	34.575	175.3	2.110
550.0	2.122	34.603	175.8	2.090
600.0	2.124	34.618	176.2	2.089
650.0	2.121	34.637	177.1	2.083
700.0	2.107	34.656	178.5	2.066
750.0	2.099	34.671	180.0	2.054
800.0	2.095	34.686	182.3	2.047
850.0	2.078	34.697	184.2	2.027
900.0	2.064	34.707	186.1	2.010
950.0	2.044	34.713	187.6	1.986
1000.0	2.008	34.725	190.4	1.948
1050.0	1.968	34.728	191.7	1.904
1100.0	1.940	34.732	193.0	1.873
1150.0	1.900	34.735	194.4	1.830
1200.0	1.880	34.737	195.6	1.806
1250.0	1.842	34.739	197.0	1.765
1300.0	1.787	34.741	198.5	1.707
1350.0	1.705	34.742	200.1	1.623
1400.0	1.675	34.741	200.7	1.589
1450.0	1.606	34.741	201.8	1.517
1500.0	1.542	34.738	202.5	1.451
1550.0	1.494	34.736	203.0	1.400
1600.0	1.466	34.735	203.1	1.369
1650.0	1.417	34.732	203.4	1.316
1700.0	1.377	34.731	203.7	1.273
1750.0	1.341	34.729	203.9	1.233
1800.0	1.272	34.725	204.3	1.162
1850.0	1.244	34.724	204.9	1.130
1900.0	1.221	34.723	205.1	1.104
1950.0	1.143	34.720	205.8	1.023
2000.0	1.092	34.717	206.5	0.969
2050.0	1.039	34.717	207.4	0.913
2100.0	0.975	34.712	208.2	0.846
2150.0	0.937	34.711	208.9	0.805
2200.0	0.854	34.707	209.7	0.720
2250.0	0.782	34.704	210.7	0.644
2300.0	0.742	34.701	211.2	0.601
2350.0	0.737	34.701	211.3	0.592
2384.0	0.733	34.701	211.5	0.586



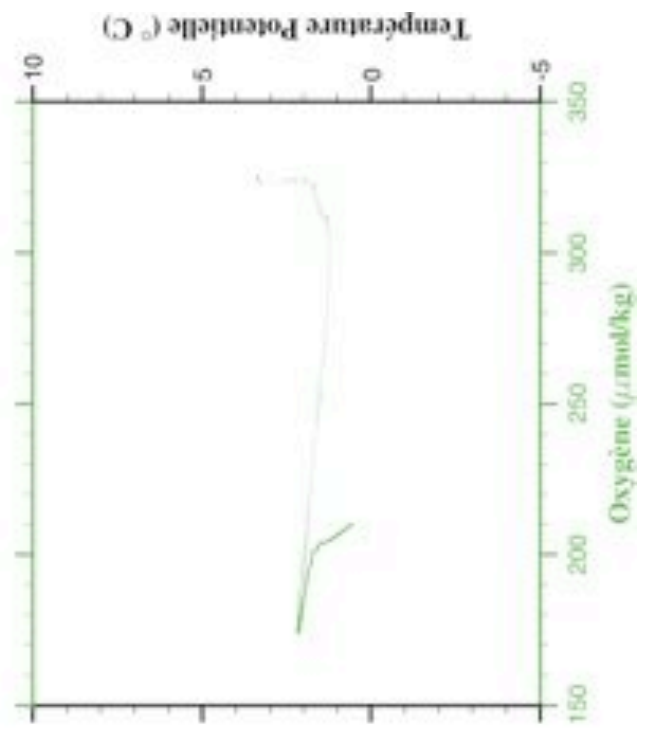
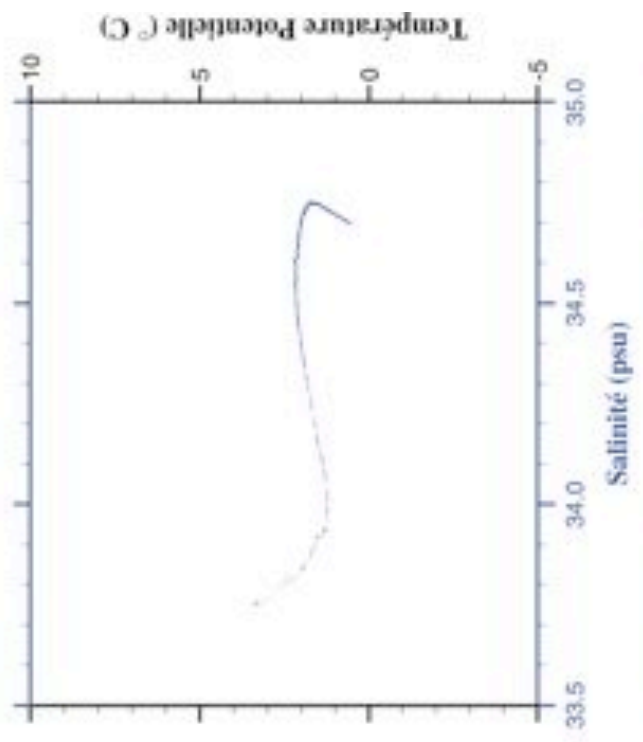
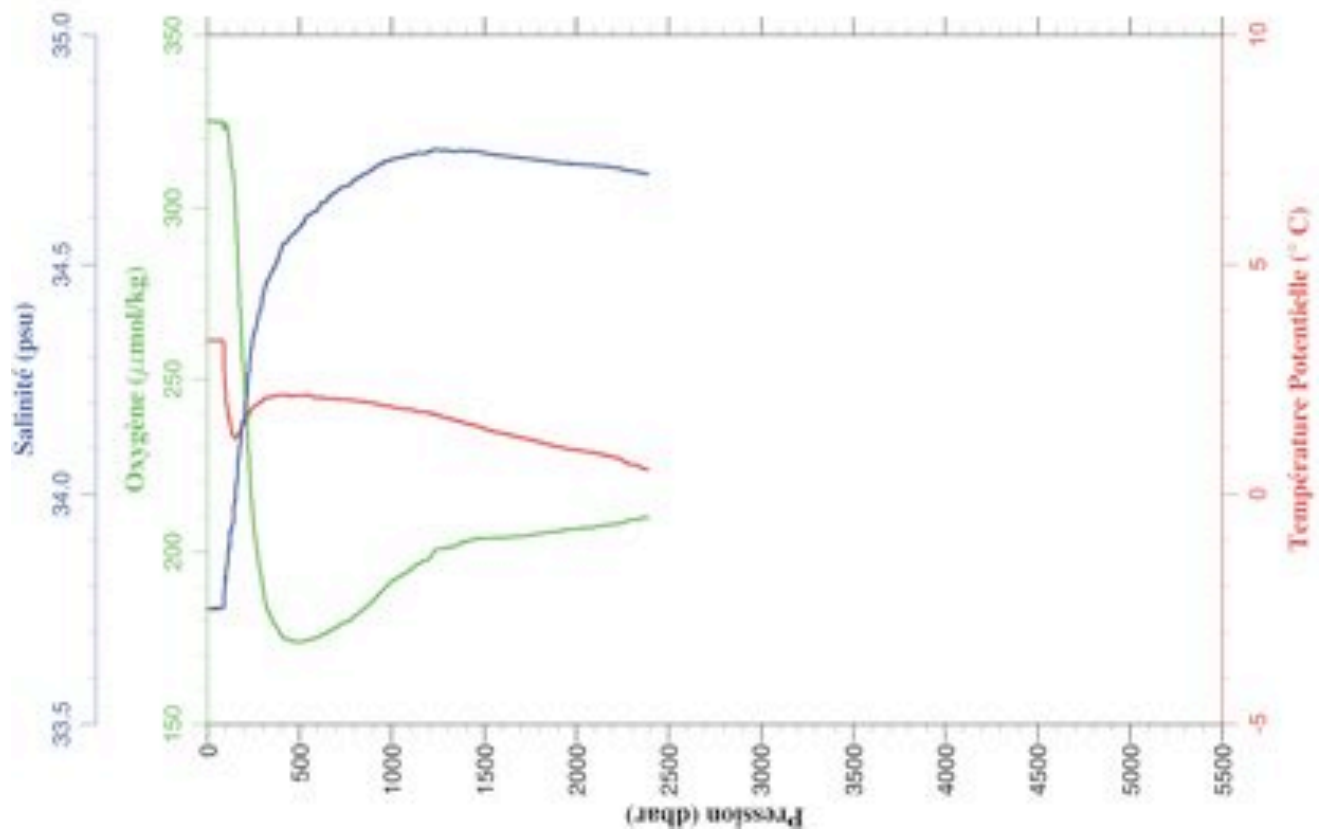
**STATION 80**

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| Station   : 81           Campagne  : GOODHOPE 2008 |
| Date      : 09-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 2396       Organisme : IFREMER |
| Position  : S 51 10.14 |
|           : E 0 19.91  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	3.349	33.751	325.2	3.348
10.0	3.348	33.751	325.2	3.348
20.0	3.355	33.751	324.9	3.354
30.0	3.357	33.751	325.0	3.355
40.0	3.356	33.752	324.8	3.354
50.0	3.356	33.752	324.7	3.353
100.0	2.150	33.821	324.0	2.145
150.0	1.236	33.985	301.7	1.229
200.0	1.543	34.165	251.1	1.533
250.0	1.919	34.346	208.3	1.906
300.0	2.066	34.430	190.1	2.049
350.0	2.150	34.485	180.2	2.131
400.0	2.185	34.533	175.9	2.162
450.0	2.163	34.561	174.3	2.137
500.0	2.178	34.578	173.9	2.149
550.0	2.201	34.607	174.5	2.169
600.0	2.149	34.620	175.1	2.114
650.0	2.119	34.641	176.5	2.081
700.0	2.118	34.660	178.0	2.077
750.0	2.109	34.670	179.6	2.065
800.0	2.087	34.684	181.4	2.039
850.0	2.068	34.696	183.5	2.018
900.0	2.041	34.709	186.0	1.987
950.0	1.994	34.721	188.8	1.937
1000.0	1.963	34.729	191.4	1.903
1050.0	1.935	34.734	193.2	1.871
1100.0	1.911	34.738	194.7	1.845
1150.0	1.872	34.742	196.7	1.803
1200.0	1.835	34.744	197.9	1.762
1250.0	1.794	34.750	200.8	1.718
1300.0	1.744	34.749	201.2	1.665
1350.0	1.687	34.747	201.7	1.605
1400.0	1.628	34.747	202.9	1.543
1450.0	1.589	34.747	203.8	1.501
1500.0	1.518	34.743	204.0	1.427
1550.0	1.461	34.739	204.0	1.367
1600.0	1.433	34.738	204.1	1.336
1650.0	1.378	34.735	204.3	1.278
1700.0	1.335	34.732	204.6	1.231
1750.0	1.299	34.730	204.8	1.192
1800.0	1.247	34.727	205.3	1.137
1850.0	1.199	34.725	205.7	1.086
1900.0	1.151	34.722	206.0	1.035
1950.0	1.114	34.721	206.5	0.994
2000.0	1.084	34.719	206.7	0.962
2050.0	1.061	34.718	206.9	0.935
2100.0	1.030	34.716	207.2	0.900
2150.0	0.991	34.714	207.7	0.858
2200.0	0.947	34.712	208.0	0.811
2250.0	0.874	34.708	208.4	0.735
2300.0	0.794	34.704	209.3	0.652
2350.0	0.740	34.701	209.7	0.595
2387.0	0.688	34.698	210.0	0.541



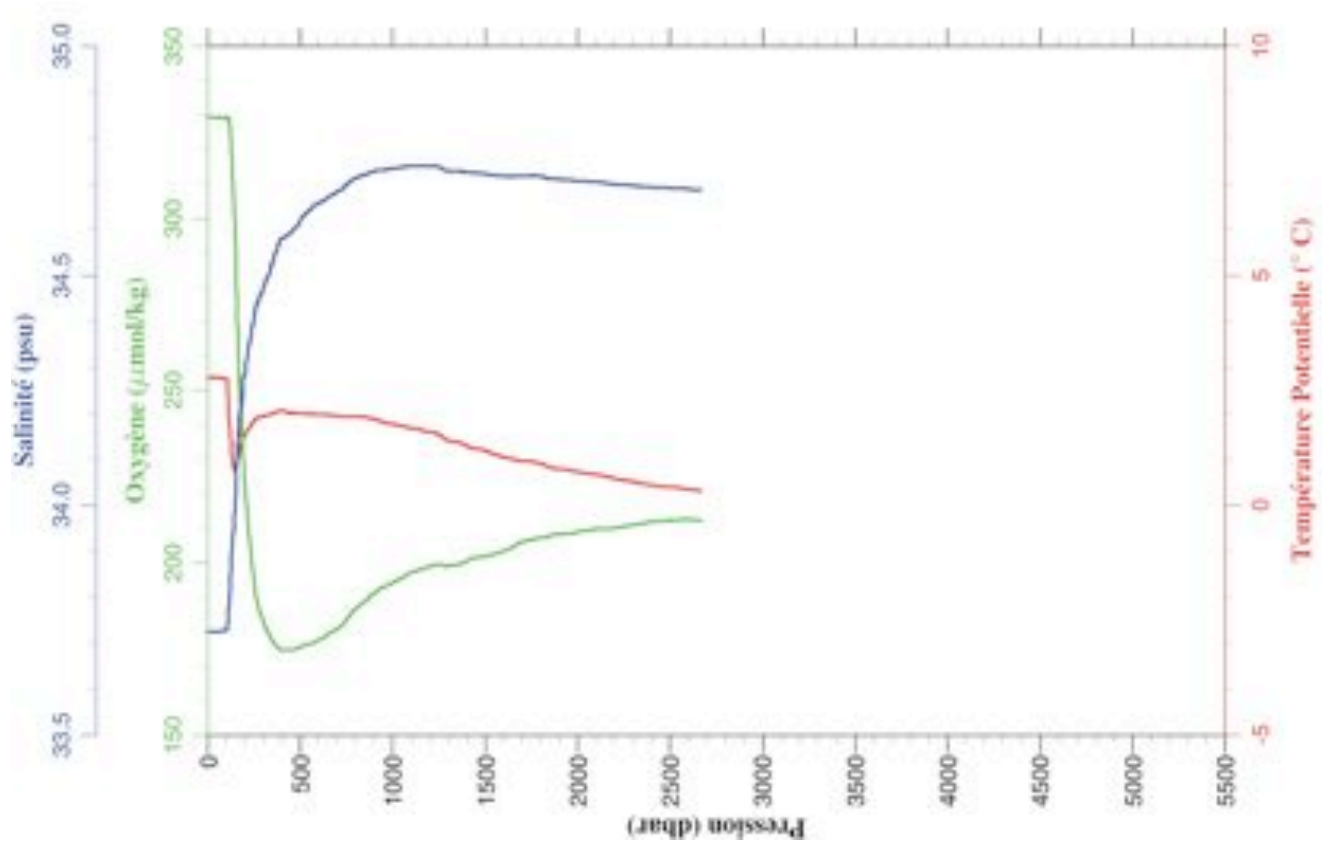
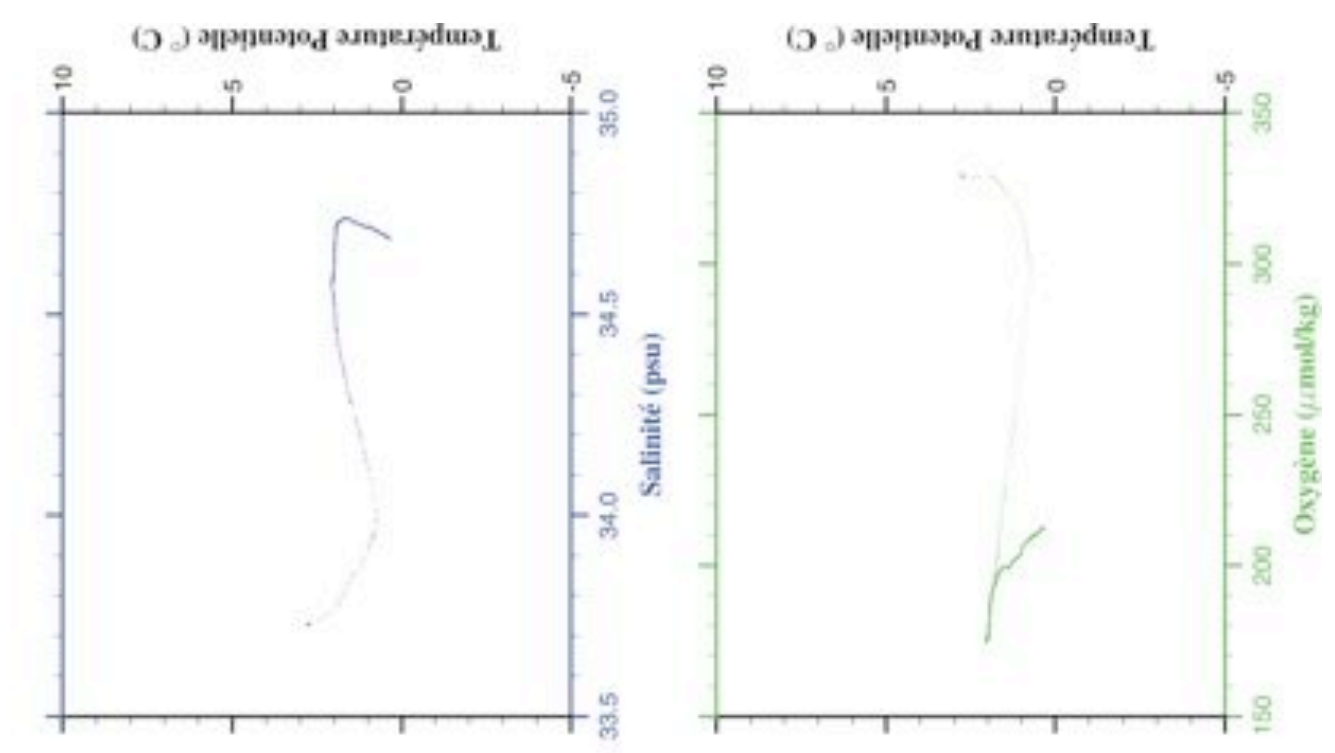
**STATION 81**

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| Station   : 82           Campagne  : GOODHOPE 2008 |
| Date      : 09-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 2674       Organisme  : IFREMER |
| Position  : S 51 25.86 |
|           : E 0 0.55  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.762	33.725	329.5	2.762
10.0	2.786	33.726	329.5	2.785
20.0	2.791	33.726	329.5	2.790
30.0	2.793	33.726	329.4	2.791
40.0	2.793	33.726	329.2	2.791
50.0	2.790	33.726	329.1	2.787
100.0	2.769	33.728	329.2	2.763
150.0	0.765	34.009	293.4	0.759
200.0	1.524	34.286	223.0	1.515
250.0	1.853	34.409	194.9	1.840
300.0	1.961	34.473	183.1	1.945
350.0	2.015	34.529	177.2	1.996
400.0	2.077	34.580	174.7	2.055
450.0	2.030	34.593	174.8	2.005
500.0	2.022	34.617	175.6	1.993
550.0	2.019	34.642	176.4	1.988
600.0	2.010	34.658	177.6	1.976
650.0	2.007	34.672	179.4	1.969
700.0	1.992	34.684	180.7	1.952
750.0	1.979	34.699	183.6	1.935
800.0	1.987	34.712	186.6	1.941
850.0	1.973	34.719	188.9	1.923
900.0	1.933	34.727	191.1	1.879
950.0	1.875	34.731	193.0	1.818
1000.0	1.825	34.733	194.2	1.766
1050.0	1.796	34.735	195.5	1.734
1100.0	1.754	34.738	197.2	1.689
1150.0	1.719	34.739	198.0	1.651
1200.0	1.669	34.738	198.9	1.598
1250.0	1.620	34.737	199.6	1.546
1300.0	1.489	34.728	198.9	1.413
1350.0	1.455	34.727	199.4	1.375
1400.0	1.376	34.725	200.5	1.294
1450.0	1.330	34.724	201.3	1.245
1500.0	1.277	34.722	201.9	1.188
1550.0	1.205	34.719	202.6	1.114
1600.0	1.146	34.717	203.4	1.052
1650.0	1.100	34.717	204.6	1.003
1700.0	1.063	34.717	206.0	0.963
1750.0	1.060	34.718	206.7	0.956
1800.0	1.022	34.716	207.3	0.915
1850.0	0.940	34.712	207.8	0.831
1900.0	0.902	34.709	208.3	0.789
1950.0	0.885	34.709	208.5	0.769
2000.0	0.850	34.707	209.0	0.731
2050.0	0.822	34.705	209.4	0.699
2100.0	0.800	34.704	209.9	0.674
2150.0	0.760	34.701	209.9	0.631
2200.0	0.719	34.699	210.0	0.586
2250.0	0.687	34.698	210.5	0.551
2300.0	0.654	34.696	211.1	0.515
2350.0	0.614	34.694	211.5	0.472
2400.0	0.588	34.693	211.8	0.442
2450.0	0.567	34.692	212.2	0.417
2500.0	0.549	34.691	212.2	0.396
2550.0	0.536	34.690	212.4	0.379
2600.0	0.511	34.688	212.6	0.350
2650.0	0.488	34.687	212.4	0.324
2668.0	0.486	34.687	212.3	0.320

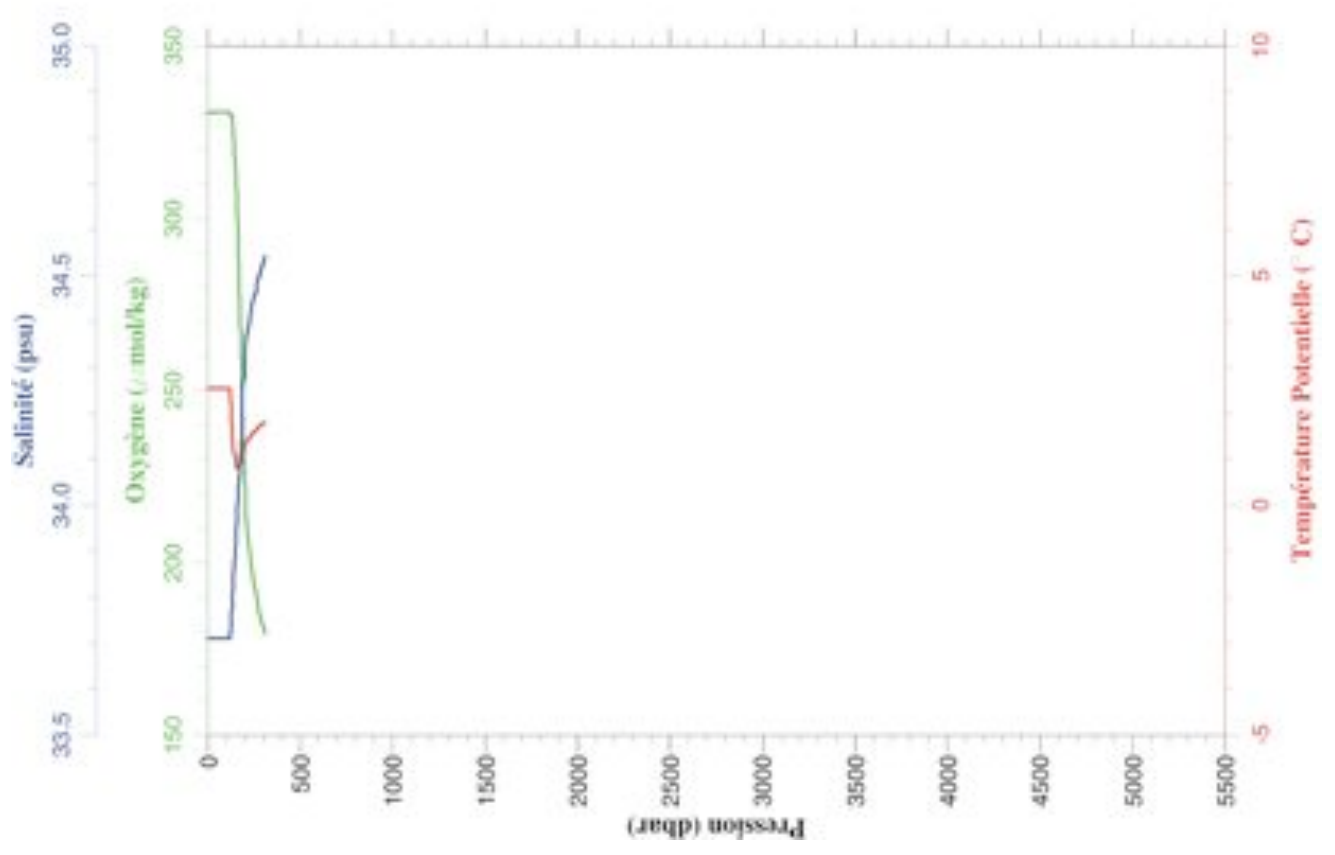
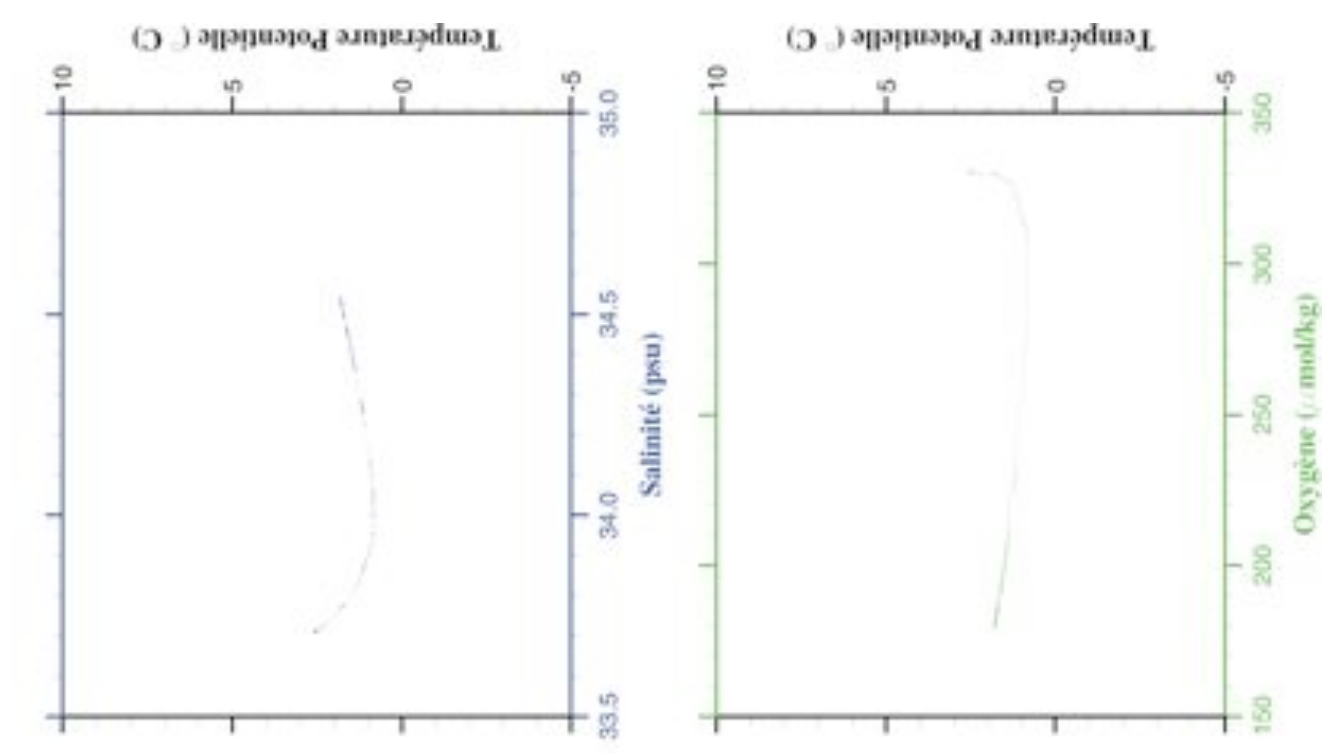


**STATION 82**

Station	: 83	Campagne	: GOODHOPE 2008
Date	: 10-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2640	Organisme	: IFREMER
Position	: S 51 51.13		
	E 0 0.01		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.548	33.710	330.5	2.548
10.0	2.542	33.710	330.7	2.541
20.0	2.543	33.710	330.9	2.542
30.0	2.543	33.710	331.0	2.542
40.0	2.545	33.710	330.7	2.543
50.0	2.544	33.710	330.9	2.542
100.0	2.547	33.711	330.8	2.542
150.0	0.955	33.908	313.9	0.949
200.0	1.214	34.288	226.5	1.205
250.0	1.616	34.457	193.5	1.603
300.0	1.792	34.527	181.5	1.776
309.0	1.821	34.542	179.5	1.805





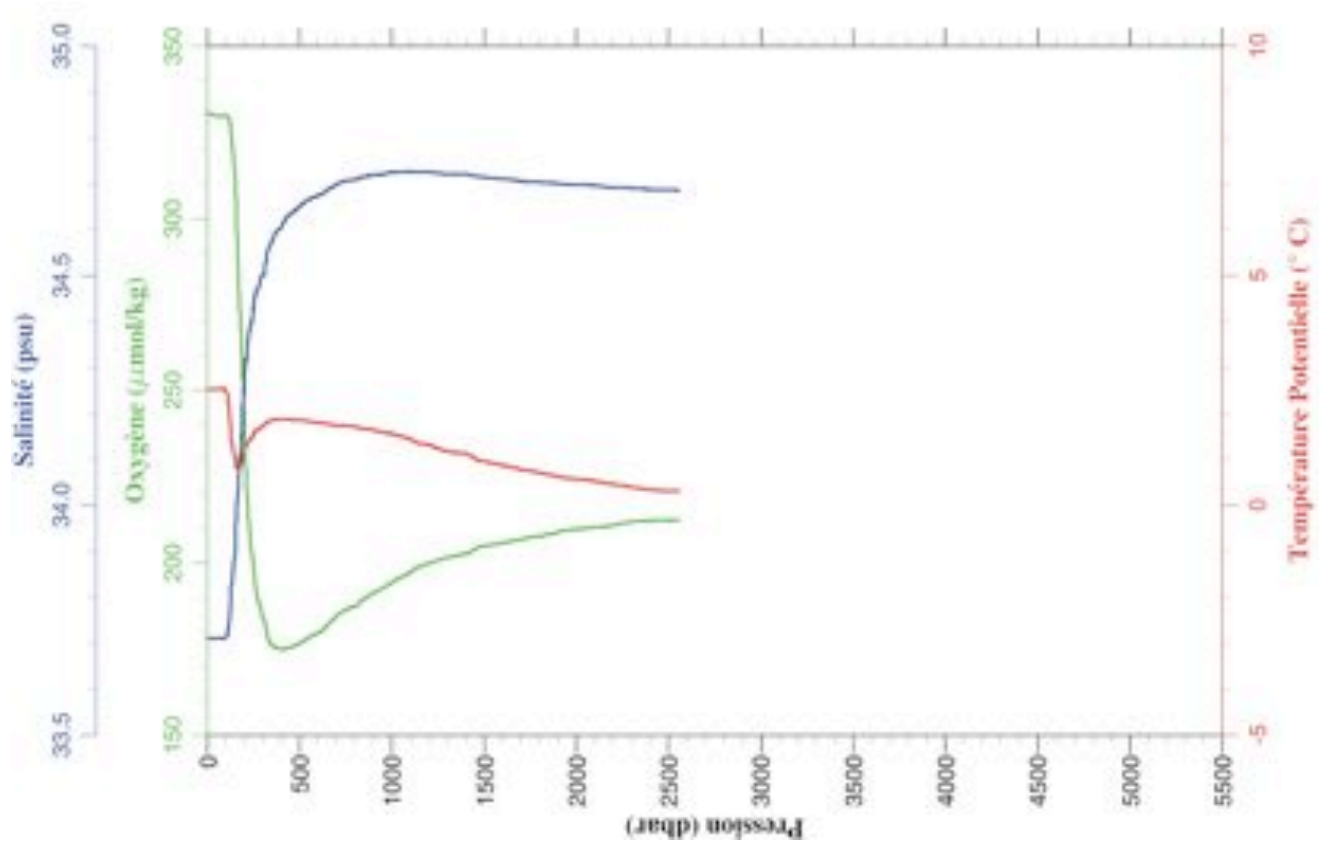
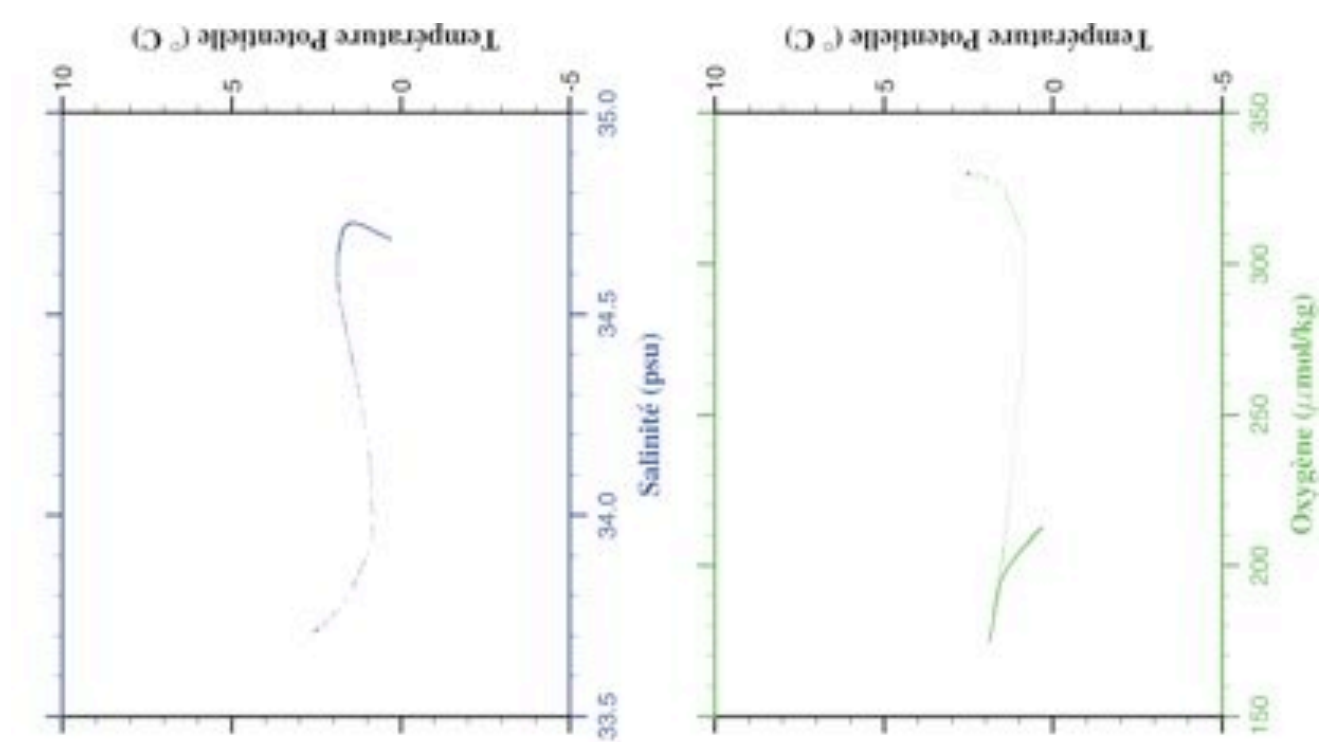
**STATION 83**

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| Station   : 84           Campagne  : GOODHOPE 2008 |
| Date      : 10-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 2580       Organisme : IFREMER |
| Position  : S 51 52.07 |
|            : E 0 0.71  |
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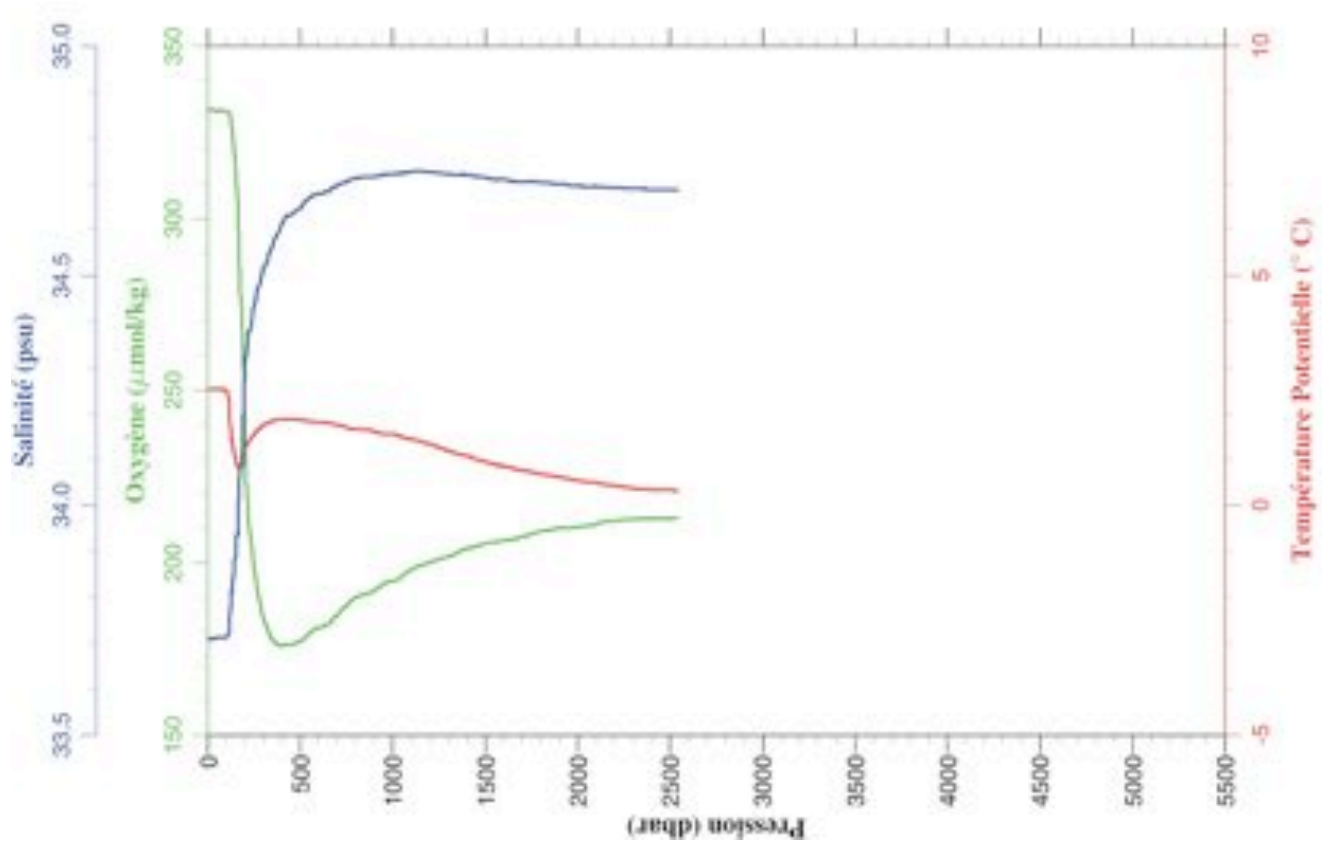
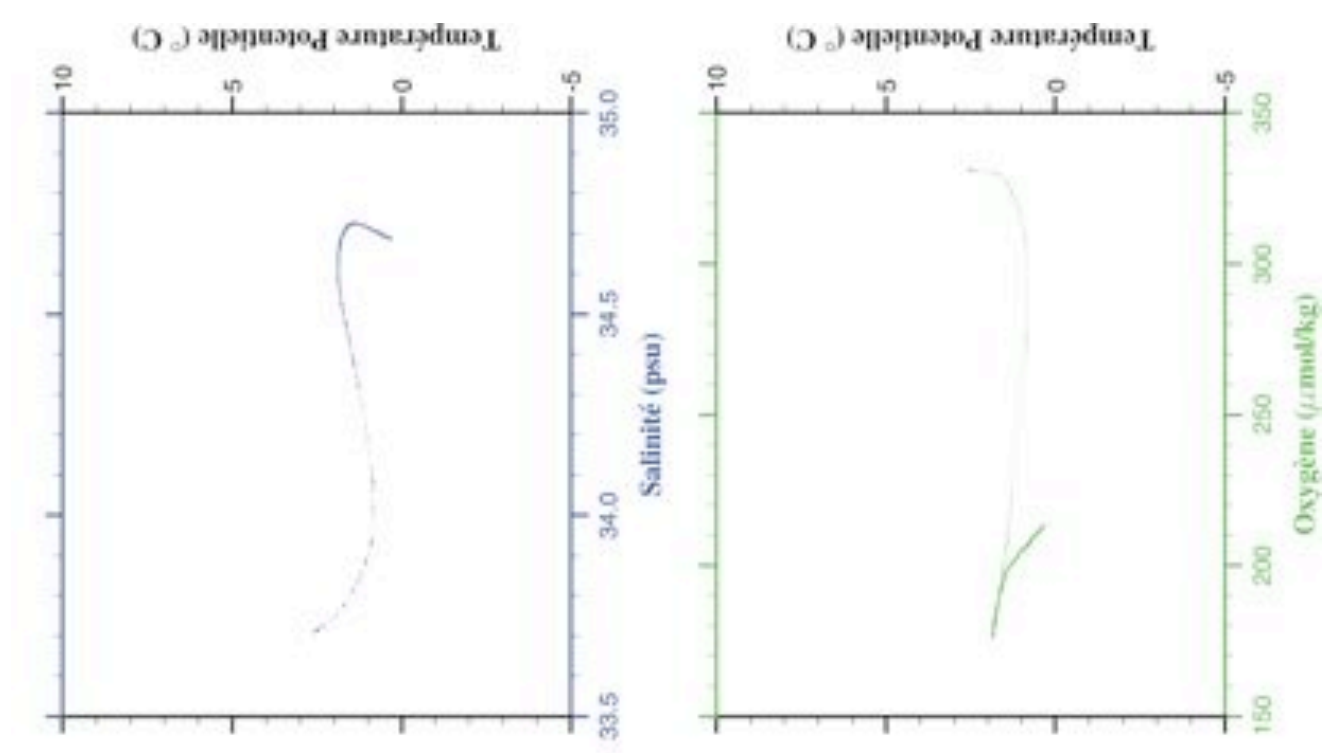
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.538	33.710	330.4	2.538
10.0	2.537	33.710	330.5	2.537
20.0	2.538	33.711	330.1	2.537
30.0	2.539	33.711	329.9	2.537
40.0	2.539	33.710	329.8	2.537
50.0	2.539	33.710	329.7	2.536
100.0	2.517	33.713	329.8	2.511
150.0	1.054	33.888	312.5	1.047
200.0	1.116	34.243	238.9	1.107
250.0	1.549	34.427	198.8	1.536
300.0	1.736	34.501	184.1	1.721
350.0	1.874	34.576	176.1	1.855
400.0	1.899	34.605	174.9	1.877
450.0	1.895	34.632	175.4	1.870
500.0	1.880	34.652	176.6	1.852
550.0	1.857	34.666	178.3	1.827
600.0	1.844	34.674	179.6	1.811
650.0	1.806	34.687	181.8	1.770
700.0	1.778	34.698	184.6	1.739
750.0	1.775	34.706	186.3	1.733
800.0	1.761	34.709	187.4	1.716
850.0	1.719	34.715	189.5	1.671
900.0	1.689	34.719	191.3	1.638
950.0	1.646	34.720	192.5	1.592
1000.0	1.618	34.725	194.3	1.560
1050.0	1.566	34.726	195.9	1.506
1100.0	1.507	34.727	197.2	1.444
1150.0	1.419	34.725	198.9	1.353
1200.0	1.391	34.726	199.7	1.322
1250.0	1.310	34.723	200.7	1.239
1300.0	1.258	34.722	201.5	1.184
1350.0	1.223	34.721	202.1	1.146
1400.0	1.209	34.721	202.7	1.128
1450.0	1.097	34.717	204.0	1.014
1500.0	1.040	34.714	204.9	0.954
1550.0	1.006	34.713	205.3	0.917
1600.0	0.962	34.710	205.8	0.871
1650.0	0.923	34.708	206.3	0.828
1700.0	0.875	34.705	206.8	0.778
1750.0	0.851	34.705	207.3	0.751
1800.0	0.826	34.704	207.8	0.722
1850.0	0.781	34.702	208.3	0.674
1900.0	0.738	34.700	208.9	0.628
1950.0	0.700	34.698	209.5	0.587
2000.0	0.691	34.698	209.8	0.575
2050.0	0.683	34.698	210.0	0.563
2100.0	0.643	34.695	210.4	0.520
2150.0	0.612	34.693	210.6	0.485
2200.0	0.589	34.692	210.9	0.459
2250.0	0.566	34.692	211.7	0.432
2300.0	0.533	34.691	211.9	0.396
2350.0	0.512	34.689	212.1	0.371
2400.0	0.489	34.688	212.2	0.345
2450.0	0.470	34.687	212.4	0.322
2500.0	0.470	34.687	212.3	0.318
2550.0	0.463	34.686	212.4	0.308
2555.0	0.463	34.686	212.5	0.307



**STATION 84**

Station	: 85	Campagne	: GOODHOPE 2008
Date	: 10-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2568	Organisme	: IFREMER
Position	: S 51 51.47		
	W 0 0.72		

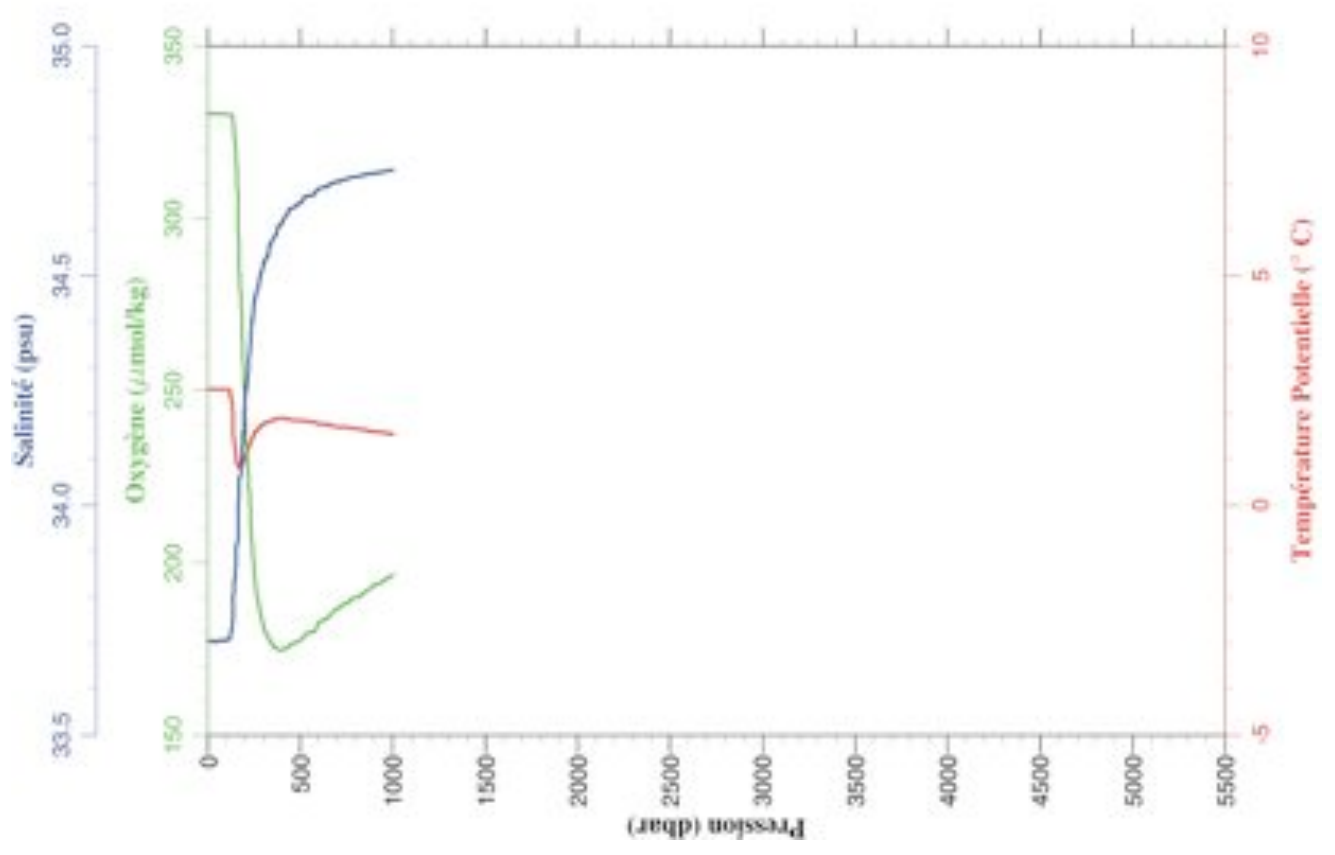
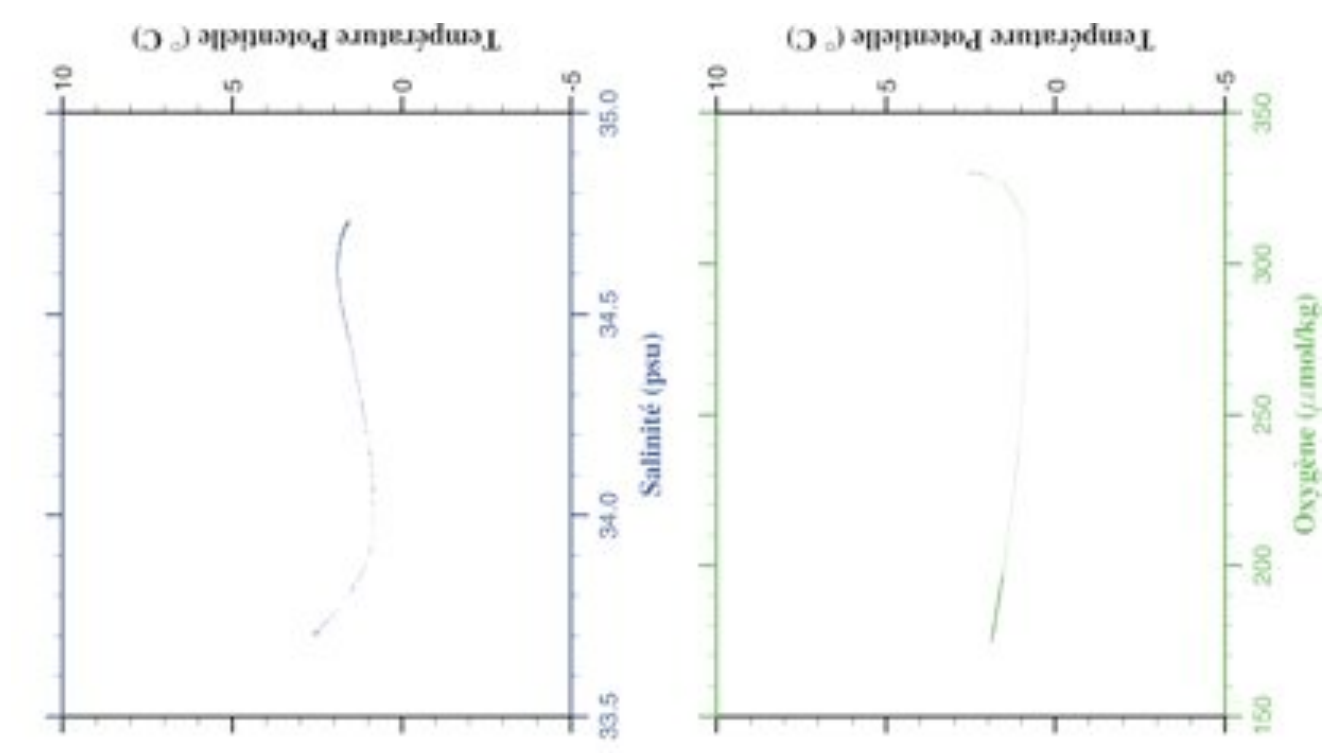
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.525	33.709	331.5	2.525
10.0	2.527	33.710	331.6	2.526
20.0	2.525	33.708	331.4	2.523
30.0	2.528	33.711	331.4	2.526
40.0	2.527	33.711	331.2	2.524
50.0	2.521	33.712	331.1	2.518
100.0	2.518	33.713	331.1	2.513
150.0	1.066	33.885	314.7	1.060
200.0	1.209	34.287	237.3	1.200
250.0	1.556	34.433	198.1	1.543
300.0	1.765	34.516	184.0	1.749
350.0	1.861	34.565	177.7	1.842
400.0	1.888	34.614	175.9	1.866
450.0	1.898	34.633	176.2	1.874
500.0	1.889	34.647	177.2	1.862
550.0	1.864	34.669	179.5	1.833
600.0	1.847	34.678	181.1	1.813
650.0	1.836	34.683	182.1	1.800
700.0	1.794	34.698	184.6	1.755
750.0	1.744	34.704	187.4	1.702
800.0	1.702	34.712	189.9	1.657
850.0	1.689	34.714	190.8	1.640
900.0	1.656	34.716	191.9	1.605
950.0	1.611	34.720	193.9	1.557
1000.0	1.605	34.722	194.7	1.548
1050.0	1.557	34.722	196.0	1.496
1100.0	1.502	34.725	197.9	1.439
1150.0	1.467	34.727	199.2	1.401
1200.0	1.407	34.726	200.2	1.338
1250.0	1.333	34.723	201.0	1.261
1300.0	1.262	34.721	201.8	1.188
1350.0	1.192	34.719	203.1	1.115
1400.0	1.146	34.719	204.1	1.066
1450.0	1.086	34.716	204.9	1.003
1500.0	1.038	34.713	205.5	0.952
1550.0	0.973	34.709	206.0	0.885
1600.0	0.955	34.709	206.5	0.864
1650.0	0.902	34.706	206.8	0.808
1700.0	0.852	34.704	207.7	0.755
1750.0	0.834	34.705	208.4	0.734
1800.0	0.785	34.703	209.1	0.682
1850.0	0.756	34.702	209.5	0.650
1900.0	0.723	34.700	210.1	0.614
1950.0	0.694	34.698	210.2	0.581
2000.0	0.659	34.696	210.4	0.543
2050.0	0.632	34.694	210.7	0.513
2100.0	0.622	34.695	211.2	0.499
2150.0	0.585	34.693	211.9	0.459
2200.0	0.566	34.692	212.2	0.436
2250.0	0.531	34.690	212.5	0.398
2300.0	0.509	34.689	212.6	0.372
2350.0	0.498	34.689	212.8	0.357
2400.0	0.487	34.688	212.8	0.344
2450.0	0.479	34.687	212.8	0.332
2500.0	0.481	34.687	212.8	0.329
2540.0	0.472	34.687	212.9	0.317



**STATION 85**

Station	: 86	Campagne	: GOODHOPE 2008
Date	: 11-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2568	Organisme	: IFREMER
Position	: S 51 51.90		
	W 0 0.11		

PRESSION	TEMPERATURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.527	33.704	330.3	2.527
10.0	2.527	33.704	330.3	2.527
20.0	2.528	33.705	330.4	2.527
30.0	2.529	33.704	330.4	2.527
40.0	2.530	33.702	330.3	2.528
50.0	2.530	33.703	330.2	2.528
100.0	2.530	33.707	330.1	2.524
150.0	1.164	33.862	320.0	1.158
200.0	1.048	34.213	245.6	1.039
250.0	1.574	34.443	198.0	1.562
300.0	1.791	34.525	181.7	1.776
350.0	1.881	34.579	176.2	1.862
400.0	1.913	34.615	174.8	1.891
450.0	1.887	34.648	176.4	1.862
500.0	1.873	34.659	177.6	1.845
550.0	1.852	34.674	179.8	1.821
600.0	1.811	34.690	182.7	1.778
650.0	1.793	34.695	184.1	1.757
700.0	1.749	34.705	186.9	1.710
750.0	1.739	34.710	188.2	1.697
800.0	1.717	34.715	189.9	1.672
850.0	1.694	34.720	191.5	1.646
900.0	1.656	34.723	193.5	1.605
950.0	1.634	34.726	194.7	1.579
1000.0	1.605	34.730	196.5	1.548
1002.0	1.603	34.731	196.7	1.545



**STATION 86**

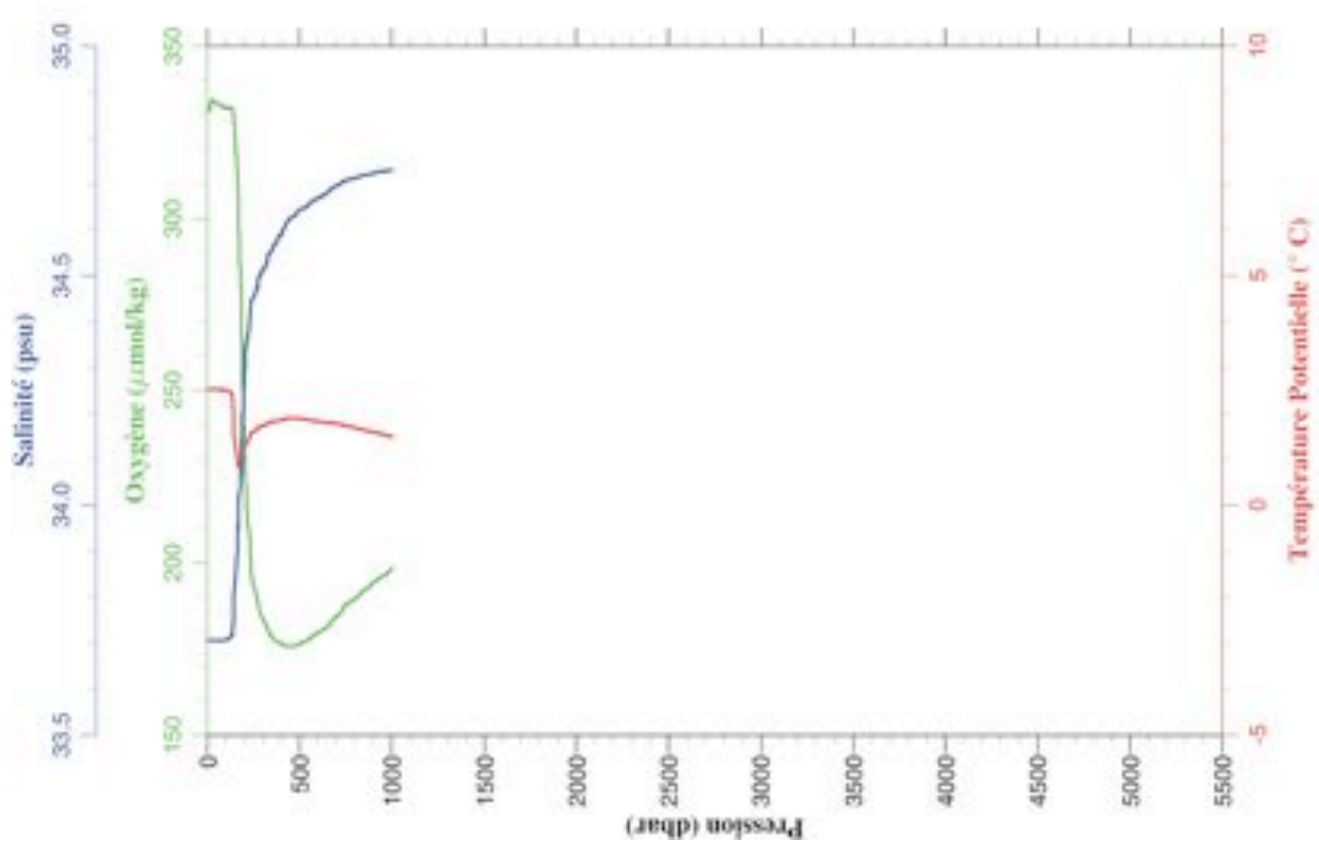
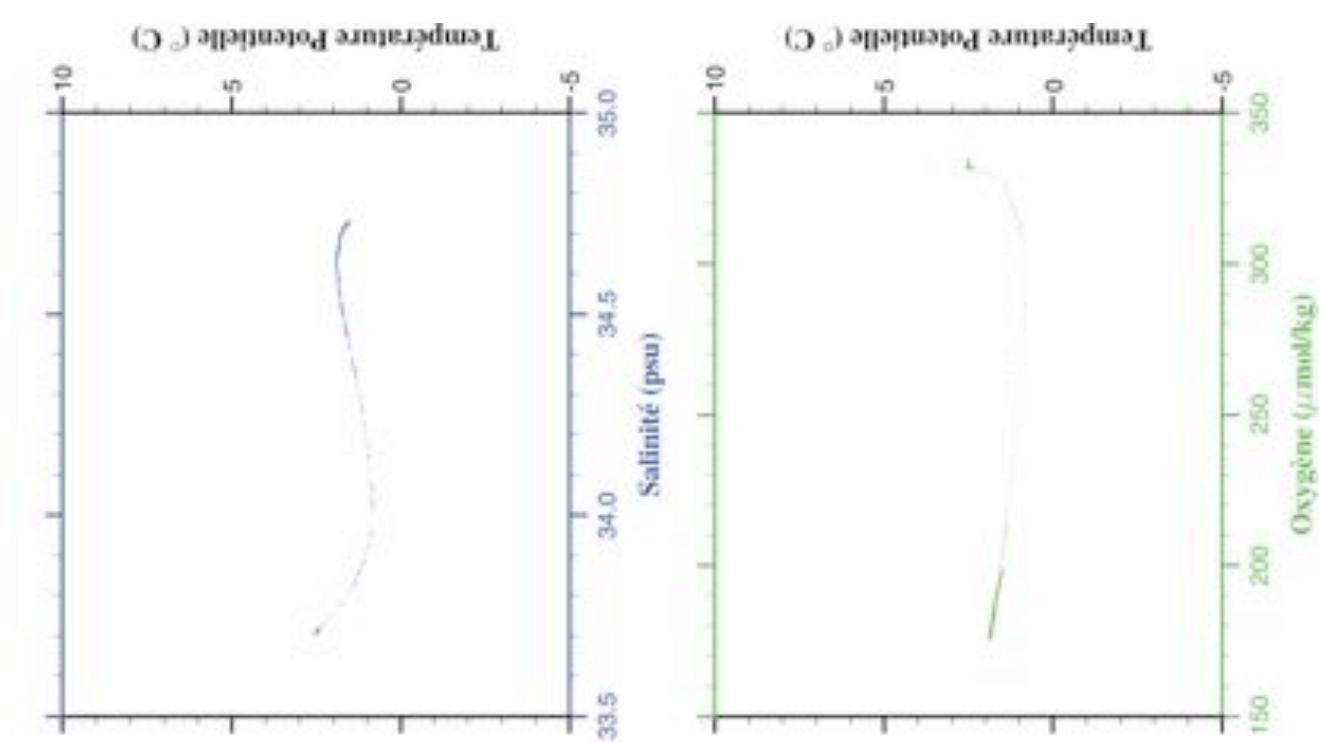
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| Station   : 87           Campagne  : GOODHOPE 2008 |
| Date      : 11-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 2554       Organisme  : IFREMER          |
| Position  : S 51 52.68  |
|            : E 0 0.22   |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.522	33.705	331.3	2.522
10.0	2.522	33.705	331.3	2.522
20.0	2.522	33.706	333.8	2.521
30.0	2.522	33.706	334.3	2.520
40.0	2.522	33.705	333.6	2.520
50.0	2.523	33.706	333.4	2.520
100.0	2.520	33.707	332.1	2.514
150.0	1.351	33.836	323.8	1.344
200.0	1.173	34.273	235.0	1.164
250.0	1.616	34.454	193.5	1.603
300.0	1.752	34.509	183.8	1.736
350.0	1.838	34.554	178.5	1.820
400.0	1.875	34.591	176.5	1.853
450.0	1.920	34.626	175.8	1.895
500.0	1.920	34.642	176.5	1.892
550.0	1.889	34.655	177.8	1.859
600.0	1.857	34.669	179.8	1.824
650.0	1.836	34.680	181.5	1.799
700.0	1.815	34.697	184.4	1.776
750.0	1.766	34.707	187.7	1.723
800.0	1.739	34.712	189.5	1.694
850.0	1.686	34.719	192.2	1.638
900.0	1.635	34.724	194.4	1.584
950.0	1.606	34.726	196.2	1.552
1000.0	1.556	34.730	198.2	1.499
1005.0	1.553	34.729	198.4	1.496

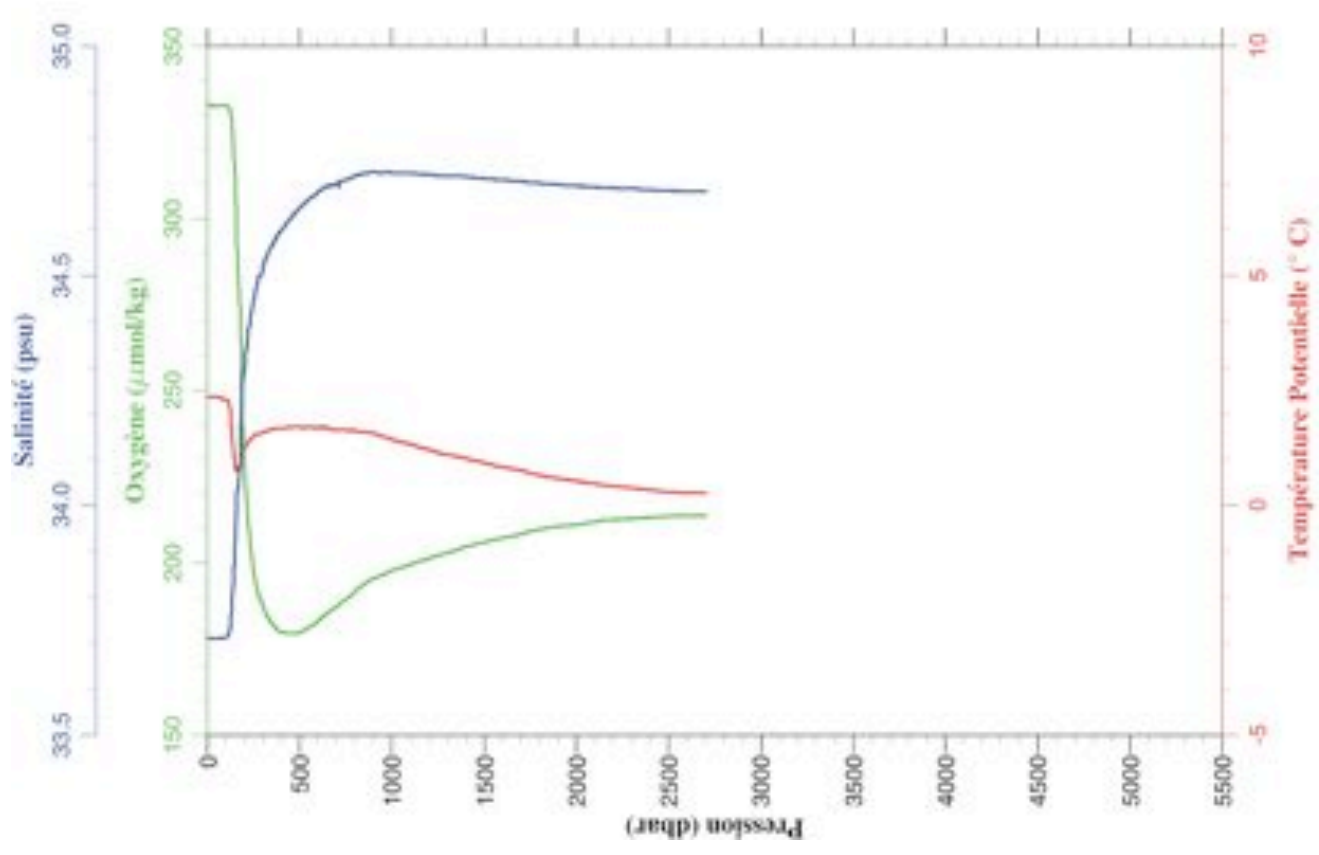
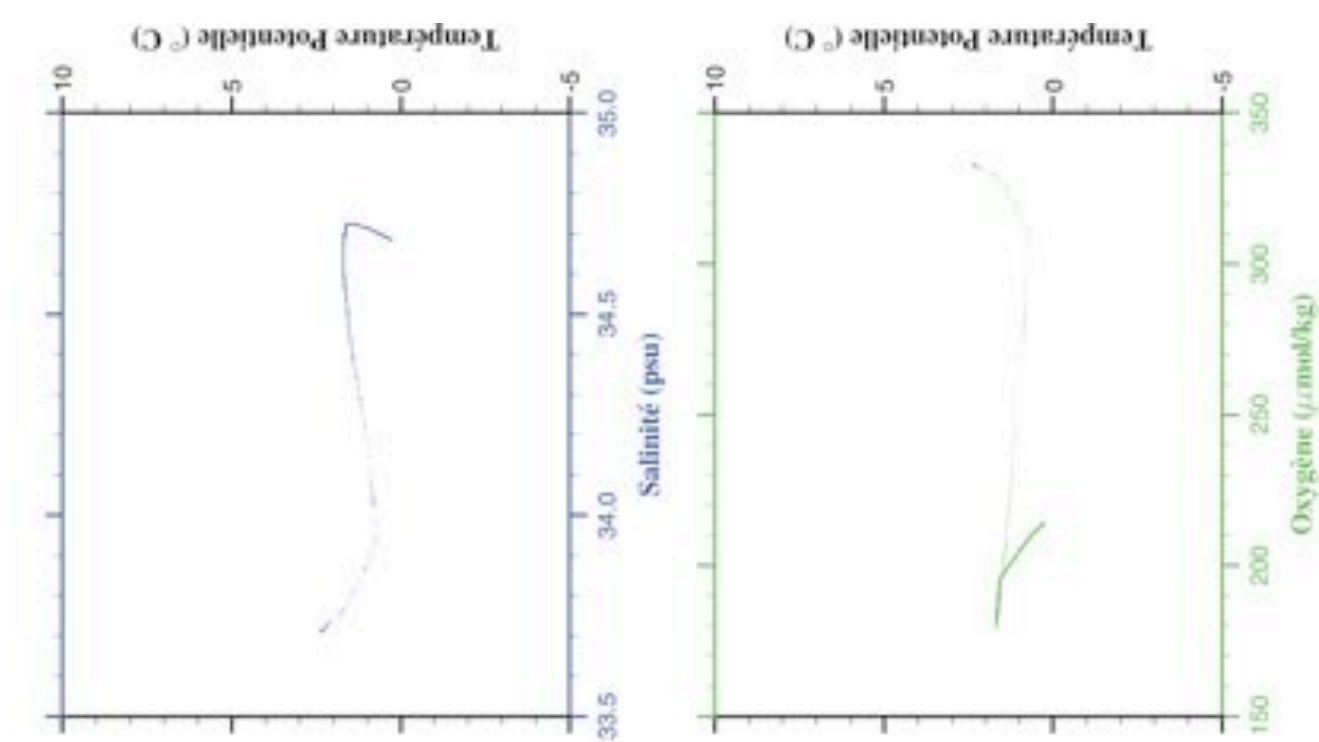




**STATION 87**

Station	: 88	Campagne	: GOODHOPE 2008
Date	: 11-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2715	Organisme	: IFREMER
Position	: S 52 16.38		
	E 0 0.10		

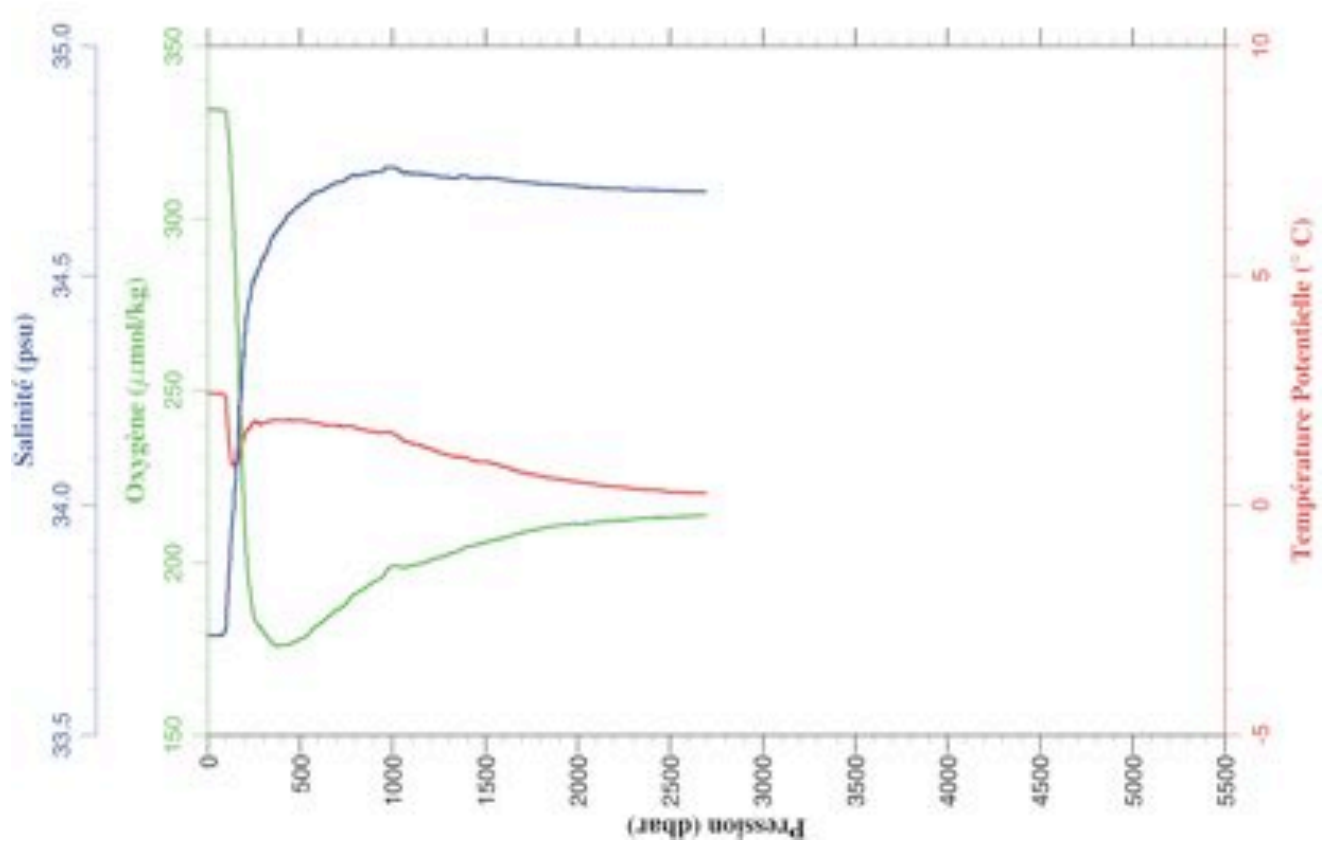
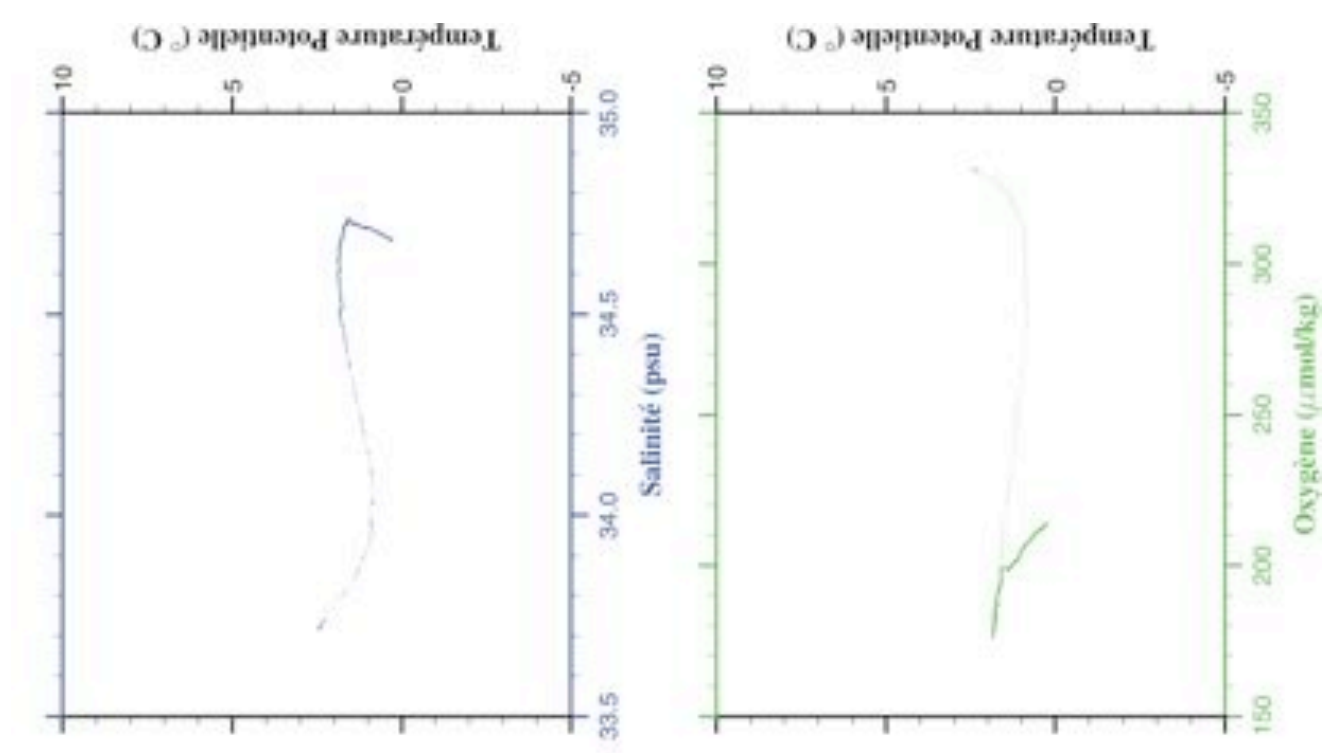
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.356	33.710	333.2	2.356
10.0	2.354	33.710	333.0	2.353
20.0	2.355	33.710	332.6	2.354
30.0	2.357	33.710	332.8	2.355
40.0	2.358	33.710	332.7	2.356
50.0	2.356	33.710	332.6	2.353
100.0	2.306	33.712	332.8	2.301
150.0	0.838	33.911	312.8	0.831
200.0	1.207	34.291	229.3	1.197
250.0	1.522	34.446	197.9	1.510
300.0	1.600	34.515	188.1	1.585
350.0	1.672	34.565	182.2	1.654
400.0	1.703	34.597	179.9	1.682
450.0	1.722	34.624	179.4	1.698
500.0	1.729	34.648	179.8	1.702
550.0	1.726	34.665	181.2	1.696
600.0	1.726	34.682	183.0	1.694
650.0	1.731	34.695	185.4	1.695
700.0	1.671	34.699	187.3	1.632
750.0	1.680	34.709	189.3	1.638
800.0	1.668	34.717	191.7	1.623
850.0	1.648	34.723	193.8	1.600
900.0	1.620	34.725	195.4	1.569
950.0	1.551	34.724	196.5	1.498
1000.0	1.488	34.724	197.8	1.432
1050.0	1.435	34.723	198.7	1.376
1100.0	1.390	34.723	199.5	1.328
1150.0	1.334	34.721	200.5	1.269
1200.0	1.290	34.721	201.2	1.223
1250.0	1.213	34.717	202.0	1.143
1300.0	1.178	34.717	202.9	1.105
1350.0	1.148	34.716	203.7	1.071
1400.0	1.099	34.715	204.7	1.020
1450.0	1.044	34.713	205.4	0.962
1500.0	1.012	34.712	206.0	0.927
1550.0	0.961	34.710	206.7	0.873
1600.0	0.924	34.708	207.2	0.833
1650.0	0.894	34.707	207.7	0.800
1700.0	0.856	34.705	208.3	0.758
1750.0	0.798	34.703	209.2	0.698
1800.0	0.767	34.702	209.6	0.664
1850.0	0.720	34.700	210.4	0.614
1900.0	0.698	34.698	210.5	0.589
1950.0	0.671	34.697	210.8	0.559
2000.0	0.649	34.695	211.0	0.533
2050.0	0.620	34.694	211.5	0.501
2100.0	0.595	34.693	211.9	0.473
2150.0	0.561	34.692	212.4	0.435
2200.0	0.544	34.691	212.5	0.415
2250.0	0.530	34.690	212.6	0.397
2300.0	0.519	34.689	212.8	0.382
2350.0	0.500	34.688	213.1	0.359
2400.0	0.479	34.687	213.1	0.335
2450.0	0.455	34.686	213.3	0.308
2500.0	0.443	34.685	213.6	0.292
2550.0	0.439	34.684	213.7	0.284
2600.0	0.436	34.684	213.8	0.277
2650.0	0.439	34.684	213.7	0.276
2700.0	0.441	34.684	213.7	0.274
2703.0	0.442	34.684	213.7	0.274



**STATION 88**

Station	: 89	Campagne	: GOODHOPE 2008
Date	: 12-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2701	Organisme	: IFREMER
Position	: S 52 36.10		
	E 0 0.02		

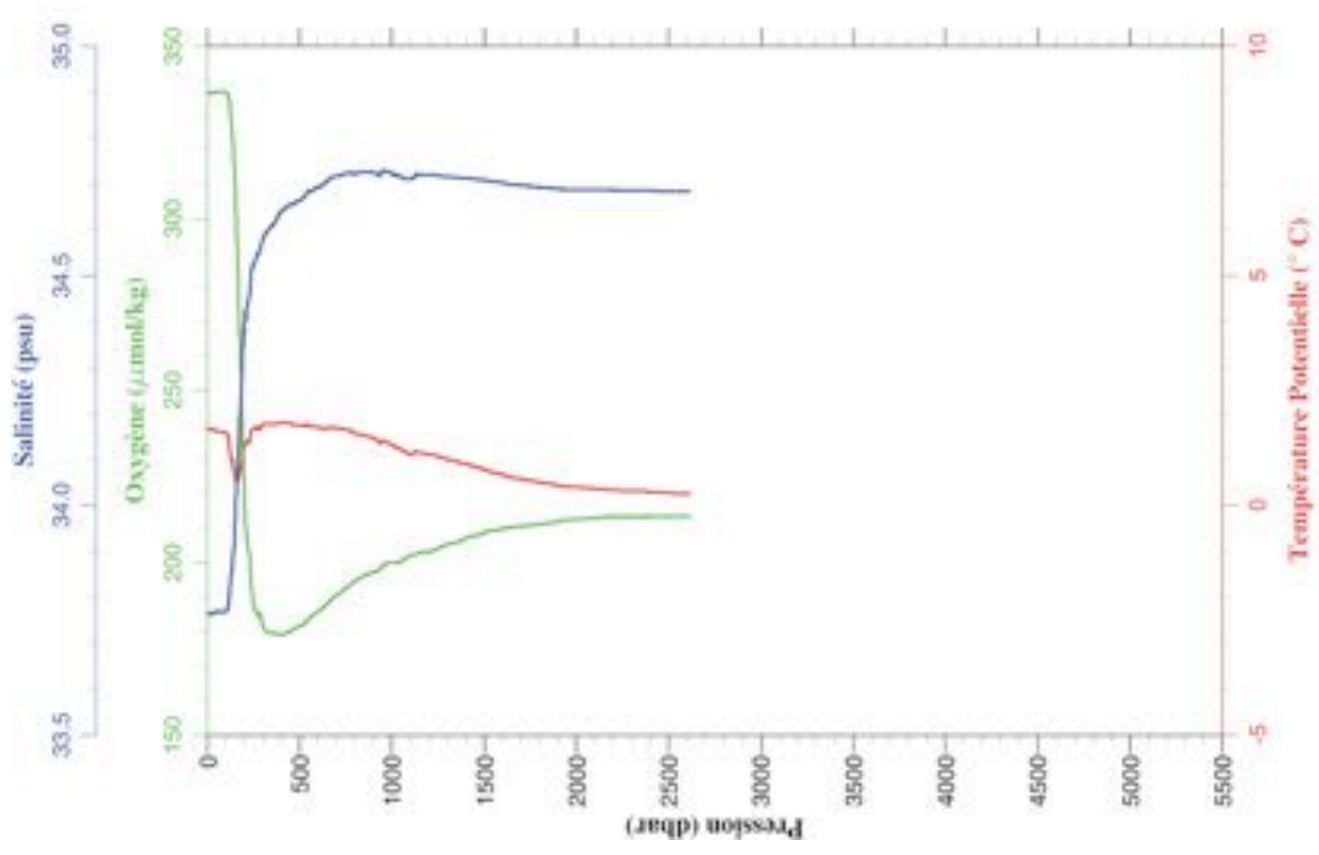
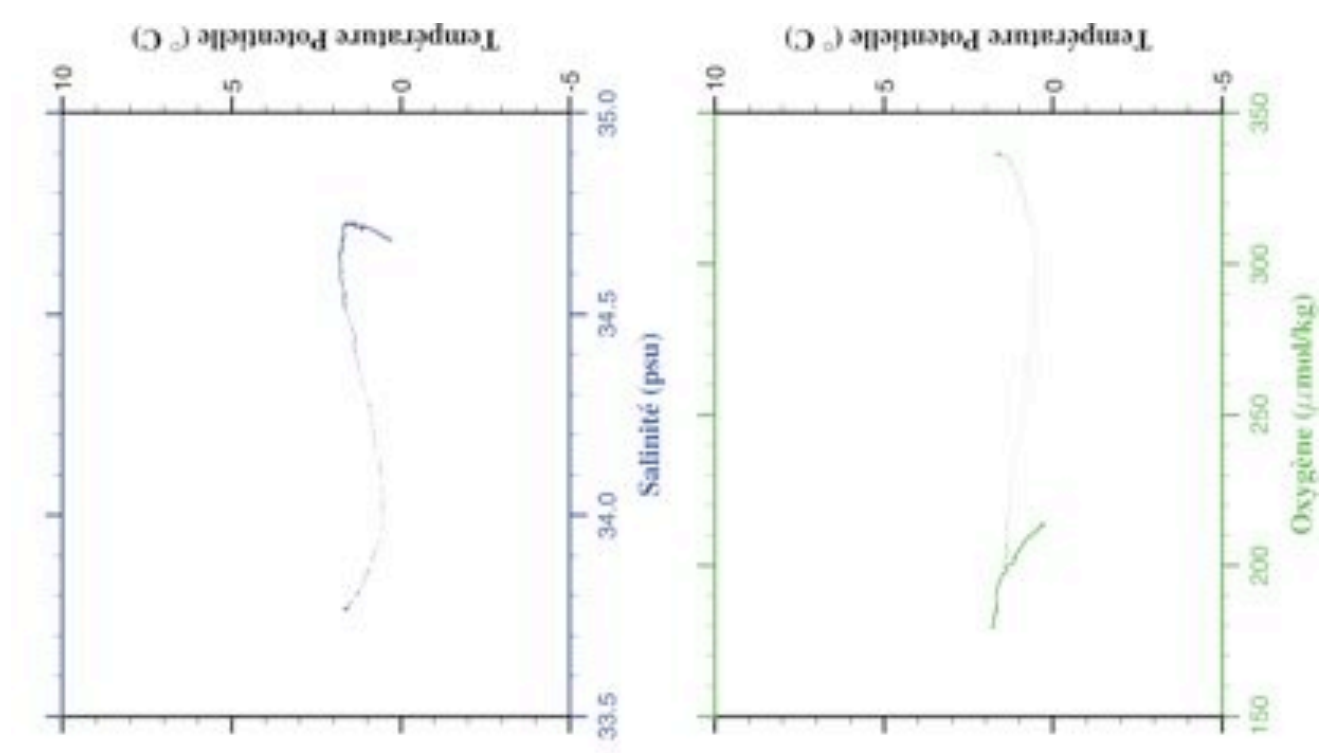
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	2.448	33.717	331.6	2.448
10.0	2.448	33.717	331.5	2.447
20.0	2.448	33.717	331.6	2.447
30.0	2.448	33.717	331.5	2.447
40.0	2.449	33.717	331.4	2.447
50.0	2.449	33.717	331.5	2.446
100.0	2.304	33.737	330.2	2.299
150.0	0.842	34.042	285.2	0.836
200.0	1.559	34.374	209.6	1.549
250.0	1.816	34.487	184.2	1.803
300.0	1.815	34.540	179.8	1.799
350.0	1.872	34.587	176.6	1.854
400.0	1.864	34.611	176.0	1.843
450.0	1.870	34.638	176.6	1.845
500.0	1.875	34.655	177.8	1.848
550.0	1.854	34.673	179.7	1.823
600.0	1.820	34.683	182.0	1.787
650.0	1.786	34.693	184.4	1.749
700.0	1.773	34.701	186.4	1.734
750.0	1.767	34.710	188.4	1.725
800.0	1.737	34.718	191.1	1.691
850.0	1.685	34.721	192.7	1.637
900.0	1.652	34.725	194.6	1.601
950.0	1.644	34.730	196.3	1.589
1000.0	1.623	34.736	198.9	1.566
1050.0	1.498	34.725	198.6	1.438
1100.0	1.416	34.722	199.1	1.354
1150.0	1.366	34.720	199.8	1.301
1200.0	1.301	34.719	200.7	1.234
1250.0	1.225	34.715	201.5	1.154
1300.0	1.168	34.714	202.3	1.095
1350.0	1.127	34.713	203.4	1.051
1400.0	1.112	34.716	204.6	1.032
1450.0	1.045	34.712	205.2	0.963
1500.0	1.027	34.713	206.0	0.942
1550.0	0.999	34.712	206.6	0.910
1600.0	0.937	34.710	207.2	0.846
1650.0	0.865	34.706	207.9	0.772
1700.0	0.819	34.704	208.7	0.722
1750.0	0.770	34.702	209.5	0.671
1800.0	0.744	34.701	209.9	0.641
1850.0	0.710	34.699	210.5	0.605
1900.0	0.678	34.698	210.9	0.569
1950.0	0.648	34.696	211.1	0.536
2000.0	0.625	34.694	211.4	0.509
2050.0	0.603	34.693	211.4	0.484
2100.0	0.575	34.692	211.8	0.453
2150.0	0.551	34.690	212.1	0.425
2200.0	0.544	34.690	212.2	0.414
2250.0	0.525	34.689	212.3	0.392
2300.0	0.499	34.687	212.7	0.363
2350.0	0.489	34.687	213.0	0.349
2400.0	0.477	34.687	213.0	0.333
2450.0	0.469	34.686	213.1	0.322
2500.0	0.446	34.685	213.3	0.295
2550.0	0.439	34.684	213.4	0.284
2600.0	0.436	34.684	213.5	0.277
2650.0	0.430	34.683	213.7	0.267
2692.0	0.428	34.683	213.9	0.262



**STATION 89**

Station	: 90	Campagne	: GOODHOPE 2008
Date	: 12-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2624	Organisme	: IFREMER
Position	: S 52 55.83		
	W 0 0.02		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.663	33.764	336.2	1.663
10.0	1.664	33.764	336.3	1.663
20.0	1.650	33.765	336.3	1.649
30.0	1.649	33.765	336.5	1.647
40.0	1.640	33.766	336.6	1.639
50.0	1.617	33.769	336.5	1.615
100.0	1.580	33.770	336.5	1.575
150.0	0.569	33.961	311.0	0.563
200.0	1.261	34.370	219.8	1.251
250.0	1.691	34.527	187.7	1.678
300.0	1.777	34.580	181.9	1.761
350.0	1.784	34.607	179.6	1.765
400.0	1.823	34.640	179.3	1.801
450.0	1.815	34.655	180.2	1.791
500.0	1.773	34.664	181.6	1.745
550.0	1.771	34.684	183.8	1.741
600.0	1.737	34.693	185.9	1.704
650.0	1.729	34.706	188.2	1.693
700.0	1.732	34.716	190.6	1.693
750.0	1.695	34.722	192.8	1.654
800.0	1.606	34.722	194.6	1.561
850.0	1.570	34.725	196.5	1.523
900.0	1.516	34.724	197.2	1.466
950.0	1.461	34.728	199.2	1.408
1000.0	1.389	34.724	200.1	1.333
1050.0	1.266	34.714	200.3	1.208
1100.0	1.177	34.710	202.1	1.117
1150.0	1.216	34.720	202.8	1.152
1200.0	1.183	34.718	203.3	1.116
1250.0	1.142	34.718	204.2	1.072
1300.0	1.074	34.716	205.3	1.002
1350.0	1.027	34.713	205.8	0.952
1400.0	0.982	34.713	207.1	0.904
1450.0	0.932	34.711	207.8	0.851
1500.0	0.865	34.708	208.8	0.782
1550.0	0.805	34.705	209.4	0.719
1600.0	0.761	34.702	209.8	0.672
1650.0	0.693	34.698	210.3	0.602
1700.0	0.667	34.696	210.5	0.573
1750.0	0.638	34.695	210.9	0.540
1800.0	0.606	34.693	211.3	0.506
1850.0	0.577	34.691	211.6	0.473
1900.0	0.544	34.689	212.0	0.437
1950.0	0.517	34.688	212.4	0.407
2000.0	0.507	34.688	212.7	0.393
2050.0	0.495	34.688	212.8	0.378
2100.0	0.484	34.688	213.0	0.363
2150.0	0.467	34.687	213.2	0.343
2200.0	0.462	34.686	213.3	0.334
2250.0	0.454	34.686	213.4	0.323
2300.0	0.451	34.685	213.4	0.315
2350.0	0.449	34.685	213.4	0.310
2400.0	0.440	34.685	213.4	0.297
2450.0	0.430	34.684	213.5	0.283
2500.0	0.423	34.683	213.4	0.272
2550.0	0.410	34.683	213.6	0.256
2600.0	0.413	34.682	213.5	0.254
2612.0	0.414	34.682	213.5	0.254

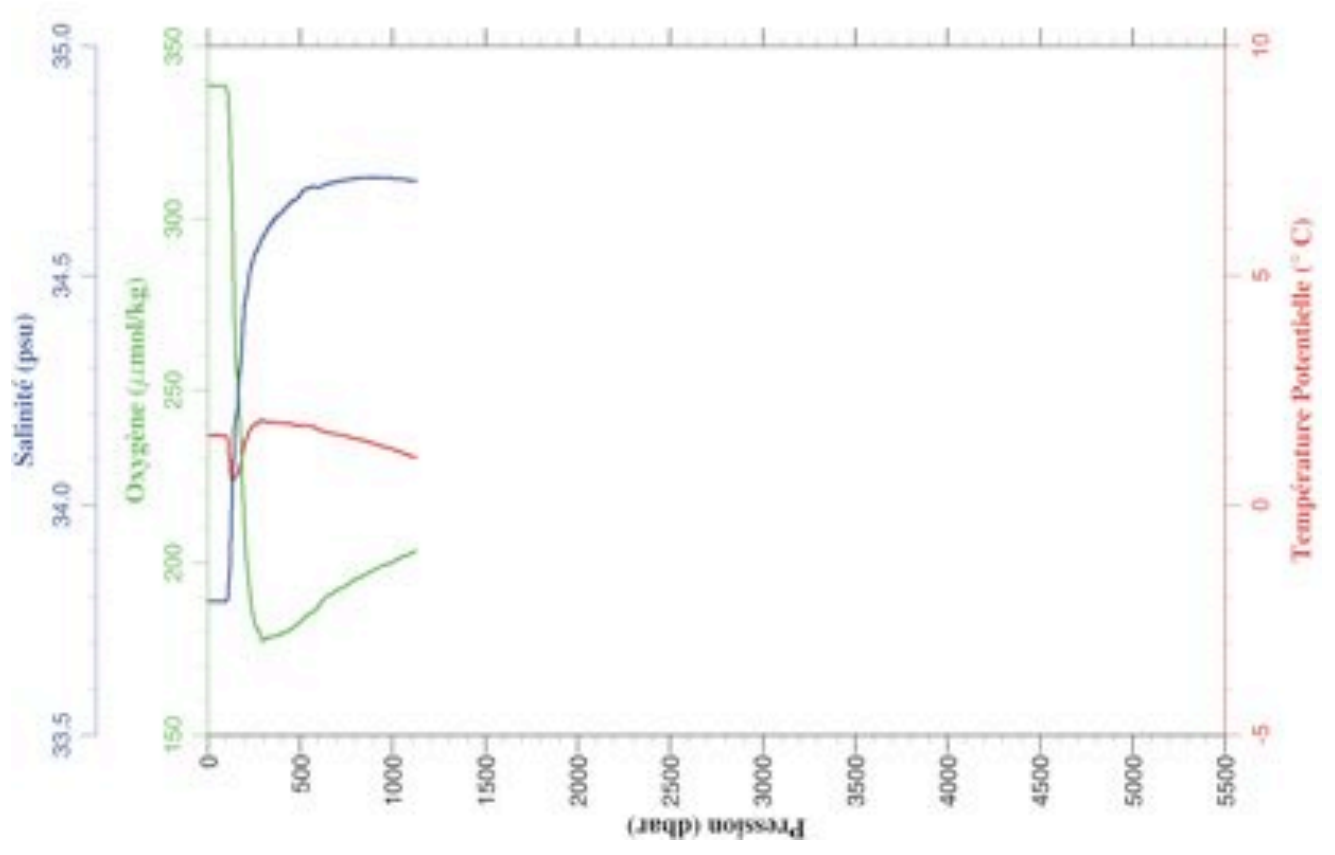
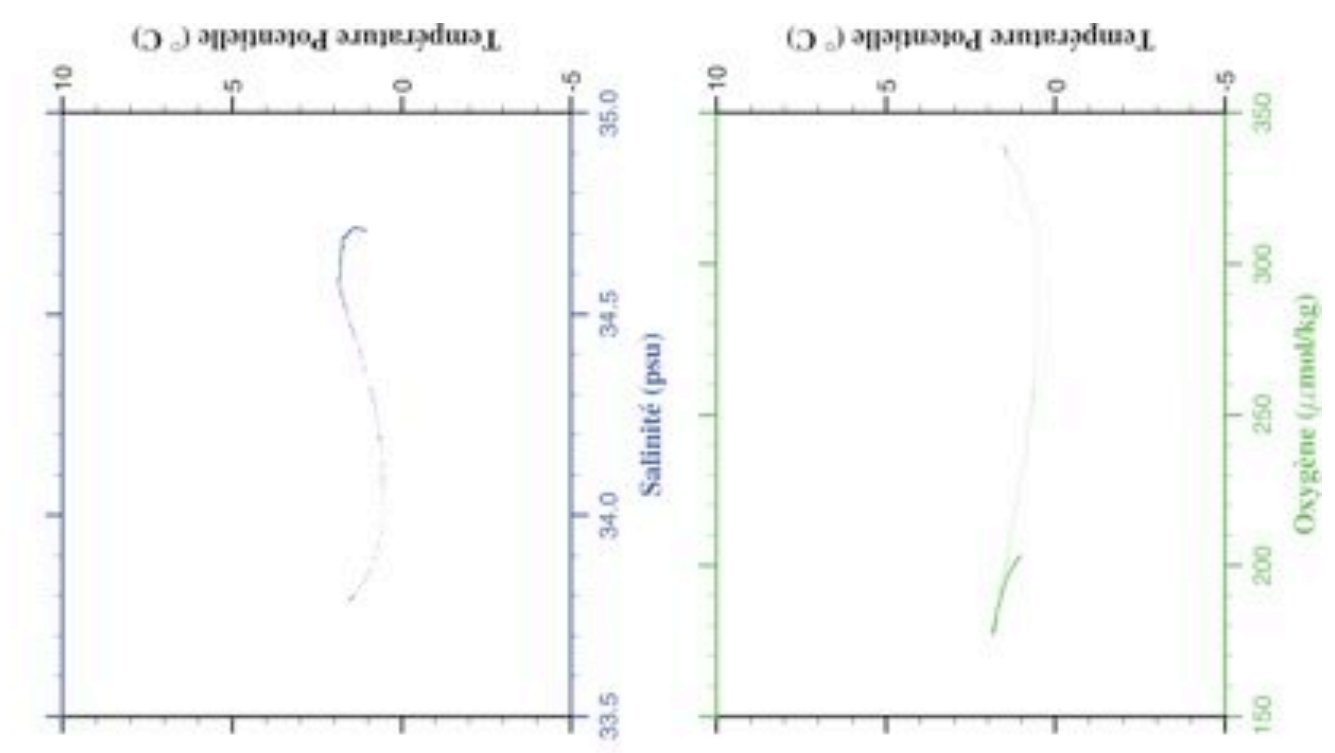


**STATION 90**

Station	: 91	Campagne	: GOODHOPE 2008
Date	: 12-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2624	Organisme	: IFREMER
Position	: S 52 58.92		
	E 0 0.02		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.523	33.790	338.5	1.523
10.0	1.523	33.790	338.5	1.523
20.0	1.524	33.790	338.5	1.523
30.0	1.528	33.790	338.5	1.527
40.0	1.524	33.790	338.4	1.522
50.0	1.529	33.790	338.4	1.527
100.0	1.479	33.794	337.7	1.474
150.0	0.657	34.192	260.0	0.650
200.0	1.399	34.446	207.6	1.389
250.0	1.777	34.543	183.4	1.764
300.0	1.873	34.586	177.3	1.857
350.0	1.826	34.617	178.6	1.808
400.0	1.818	34.638	179.4	1.797
450.0	1.795	34.661	180.7	1.770
500.0	1.778	34.677	182.6	1.751
550.0	1.764	34.692	185.2	1.733
600.0	1.669	34.692	187.6	1.636
650.0	1.618	34.701	190.6	1.583
700.0	1.582	34.705	192.1	1.544
750.0	1.553	34.708	193.4	1.512
800.0	1.497	34.711	195.3	1.453
850.0	1.453	34.713	196.4	1.406
900.0	1.390	34.714	197.9	1.341
950.0	1.322	34.713	199.3	1.270
1000.0	1.274	34.712	200.3	1.220
1050.0	1.202	34.710	201.6	1.145
1100.0	1.128	34.707	202.8	1.068
1121.0	1.103	34.706	203.3	1.043





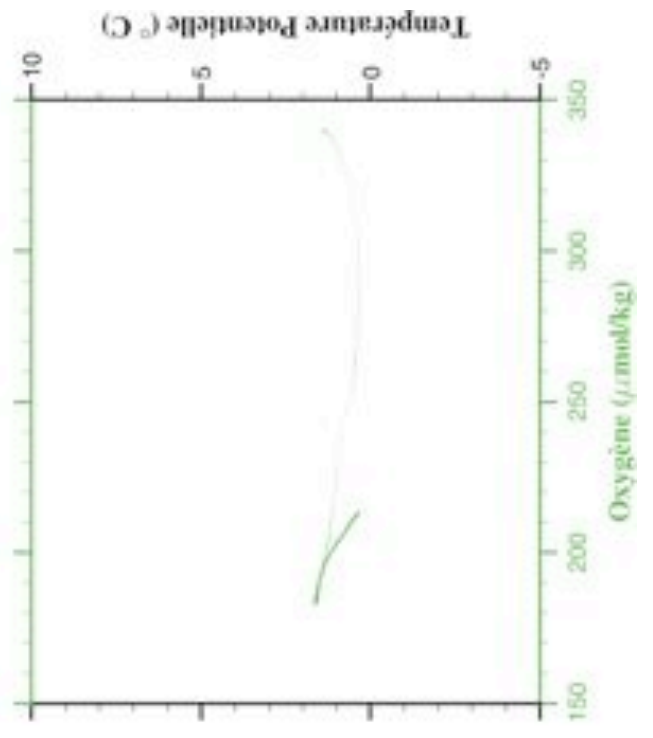
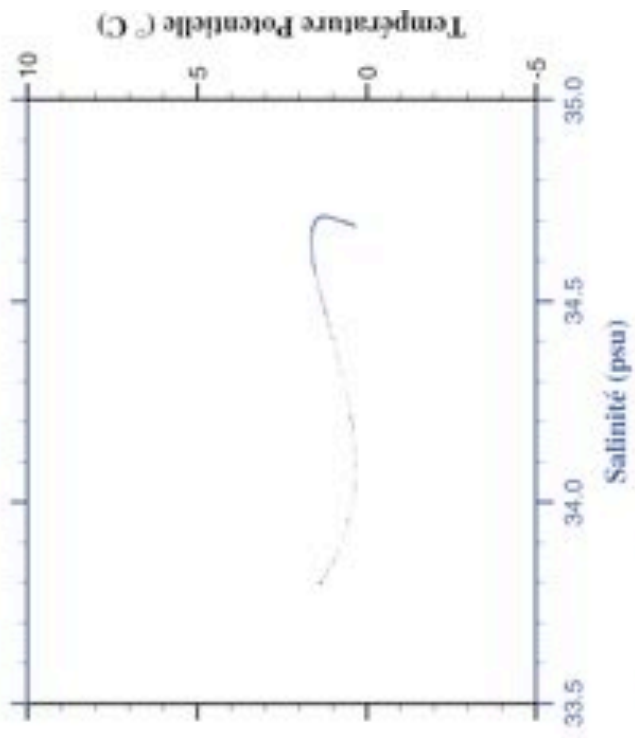
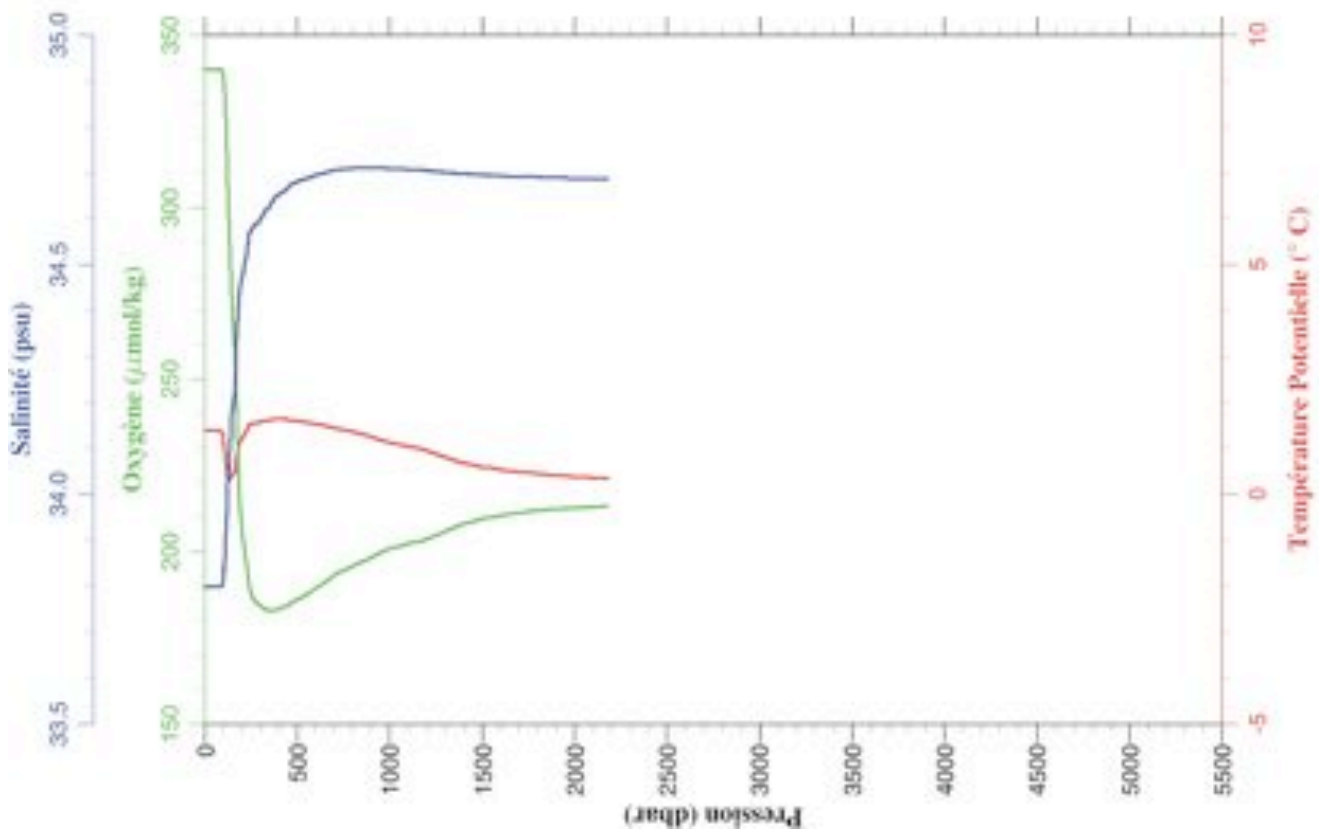
**STATION 91**

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| Station      : 92           Campagne   : GOODHOPE 2008 |
| Date        : 12-03-08    Navire     : R/V Marion Dufresne |
| Profondeur  : 2200        Organisme : IFREMER          |
| Position    : S 53 15.66  |
|              E 0 0.05    |
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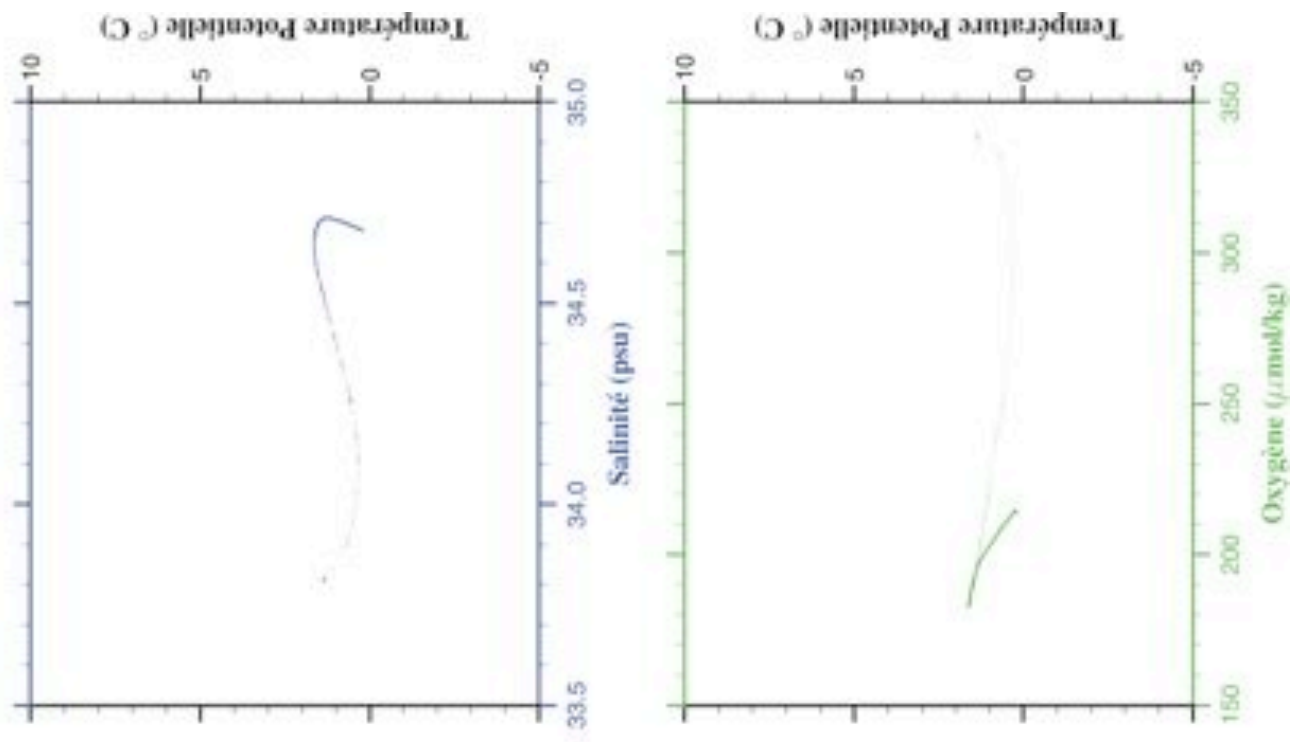
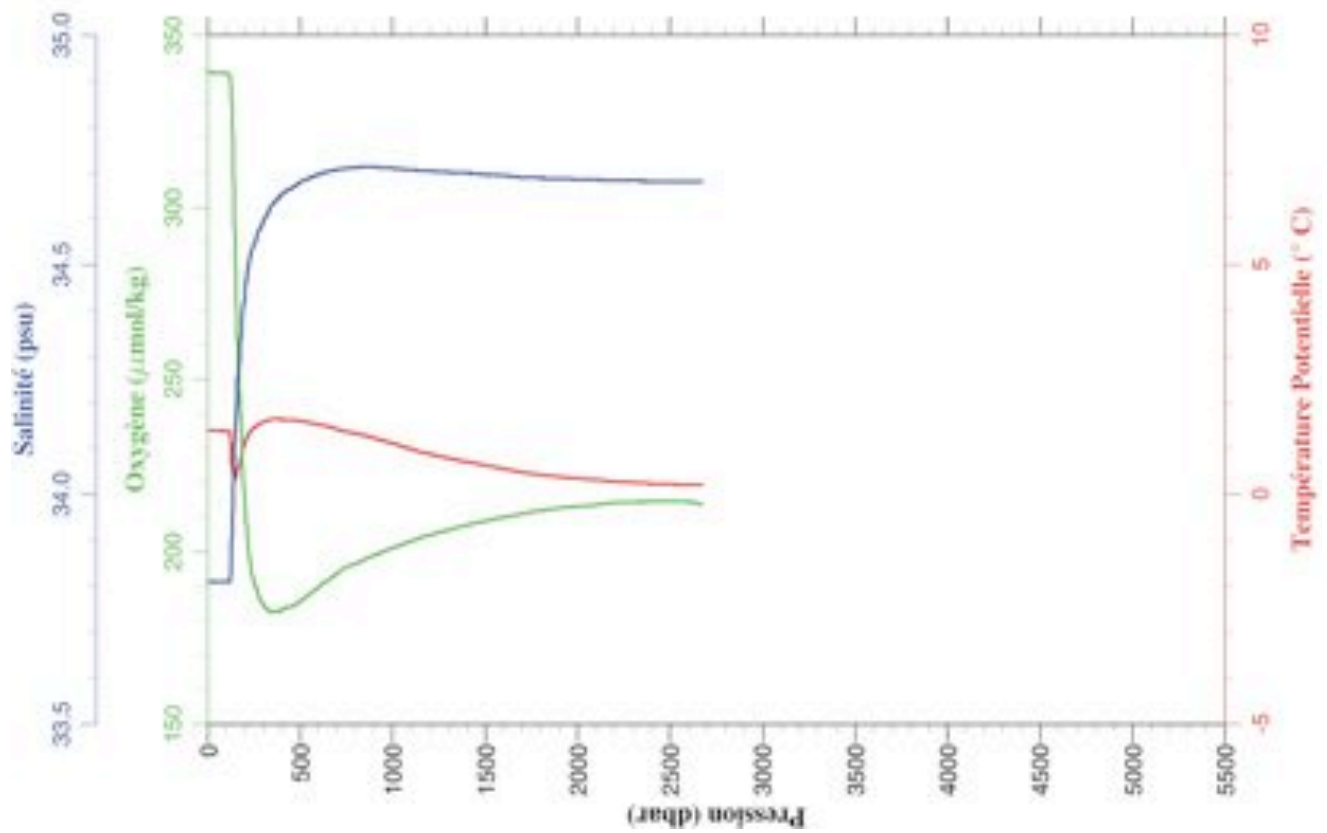
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.388	33.798	340.2	1.388
10.0	1.387	33.798	340.2	1.387
20.0	1.387	33.798	340.1	1.386
30.0	1.386	33.799	339.9	1.384
40.0	1.388	33.799	339.9	1.386
50.0	1.388	33.798	340.0	1.385
100.0	1.200	33.819	338.2	1.195
150.0	0.419	34.185	268.7	0.413
200.0	1.225	34.472	206.7	1.216
250.0	1.543	34.575	187.8	1.531
300.0	1.594	34.598	184.5	1.579
350.0	1.634	34.627	183.0	1.616
400.0	1.659	34.652	183.5	1.638
450.0	1.646	34.667	184.4	1.623
500.0	1.621	34.681	186.1	1.594
550.0	1.594	34.688	187.7	1.564
600.0	1.569	34.694	189.4	1.537
650.0	1.531	34.700	191.1	1.496
700.0	1.477	34.706	193.2	1.440
750.0	1.443	34.708	194.5	1.402
800.0	1.407	34.710	195.7	1.364
850.0	1.356	34.711	197.1	1.310
900.0	1.301	34.711	198.2	1.253
950.0	1.235	34.710	199.7	1.184
1000.0	1.185	34.709	200.8	1.132
1050.0	1.149	34.709	201.5	1.092
1100.0	1.099	34.707	202.4	1.040
1150.0	1.069	34.706	203.0	1.007
1200.0	1.022	34.705	203.6	0.957
1250.0	0.950	34.703	204.7	0.882
1300.0	0.869	34.701	205.8	0.799
1350.0	0.812	34.699	207.0	0.740
1400.0	0.757	34.698	208.1	0.682
1450.0	0.718	34.696	208.7	0.639
1500.0	0.675	34.695	209.7	0.594
1550.0	0.662	34.695	210.0	0.578
1600.0	0.625	34.693	210.6	0.538
1650.0	0.601	34.692	210.9	0.511
1700.0	0.579	34.691	211.2	0.486
1750.0	0.572	34.692	211.7	0.476
1800.0	0.548	34.691	212.0	0.448
1850.0	0.534	34.690	212.3	0.430
1900.0	0.525	34.689	212.5	0.419
1950.0	0.515	34.689	212.5	0.404
2000.0	0.499	34.688	212.7	0.385
2050.0	0.491	34.687	212.8	0.374
2100.0	0.483	34.687	212.9	0.363
2150.0	0.473	34.687	213.3	0.349
2180.0	0.471	34.686	213.3	0.344



**STATION 92**

Station	: 93	Campagne	: GOODHOPE 2008
Date	: 12-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2693	Organisme	: IFREMER
Position	: S 53 35.47		
	E 0 0.02		

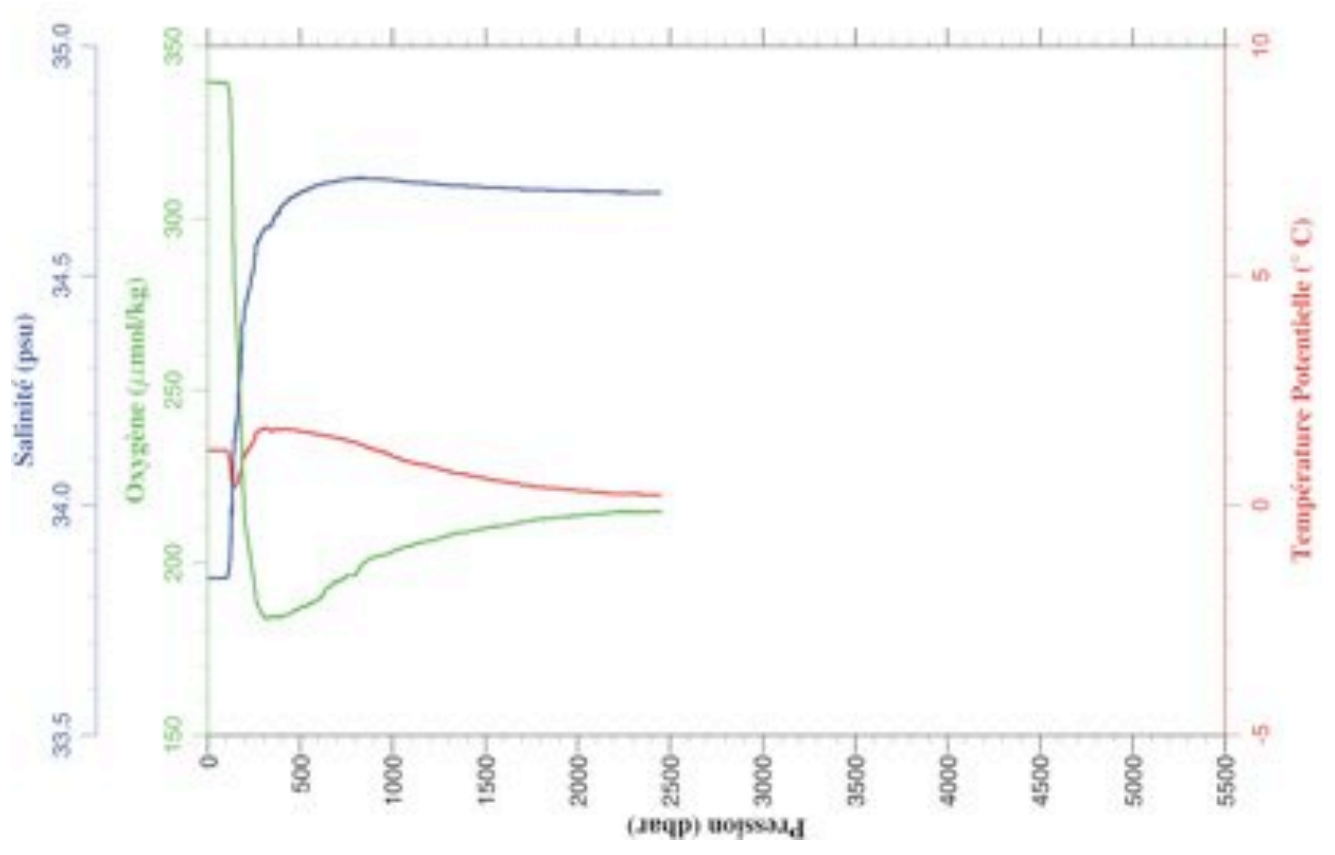
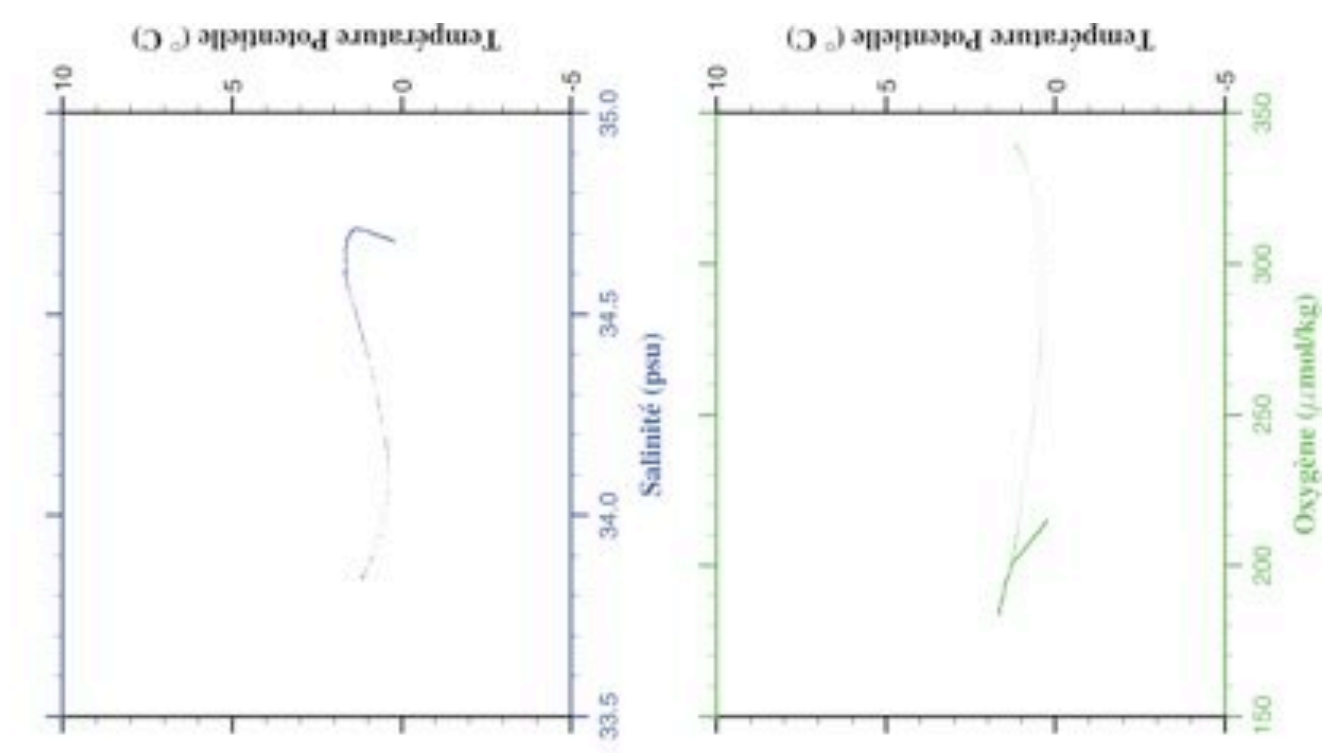
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.391	33.810	339.3	1.391
10.0	1.391	33.809	339.2	1.390
20.0	1.389	33.809	339.0	1.388
30.0	1.392	33.809	339.2	1.391
40.0	1.392	33.809	339.0	1.390
50.0	1.389	33.810	339.0	1.387
100.0	1.378	33.810	338.8	1.373
150.0	0.371	34.150	283.7	0.365
200.0	1.099	34.429	214.6	1.090
250.0	1.463	34.548	191.1	1.450
300.0	1.591	34.595	184.7	1.576
350.0	1.652	34.631	182.6	1.633
400.0	1.652	34.653	183.2	1.631
450.0	1.646	34.665	184.0	1.622
500.0	1.620	34.679	185.6	1.594
550.0	1.593	34.688	187.7	1.564
600.0	1.555	34.696	189.6	1.523
650.0	1.514	34.703	191.6	1.479
700.0	1.459	34.707	193.7	1.422
750.0	1.400	34.709	195.7	1.360
800.0	1.372	34.711	196.6	1.329
850.0	1.325	34.713	197.9	1.279
900.0	1.269	34.712	199.0	1.221
950.0	1.210	34.711	200.2	1.159
1000.0	1.161	34.710	201.1	1.107
1050.0	1.094	34.707	202.2	1.038
1100.0	1.050	34.706	203.1	0.991
1150.0	0.983	34.705	204.1	0.921
1200.0	0.942	34.704	204.7	0.878
1250.0	0.901	34.703	205.6	0.834
1300.0	0.861	34.701	206.4	0.791
1350.0	0.821	34.700	207.0	0.748
1400.0	0.783	34.699	207.8	0.708
1450.0	0.753	34.698	208.5	0.675
1500.0	0.716	34.696	208.8	0.635
1550.0	0.683	34.696	209.6	0.599
1600.0	0.645	34.694	210.1	0.557
1650.0	0.613	34.692	210.5	0.523
1700.0	0.573	34.690	211.0	0.480
1750.0	0.550	34.689	211.5	0.454
1800.0	0.527	34.689	211.9	0.427
1850.0	0.507	34.688	212.4	0.405
1900.0	0.487	34.687	212.7	0.381
1950.0	0.473	34.687	212.9	0.364
2000.0	0.462	34.686	213.1	0.349
2050.0	0.449	34.686	213.3	0.333
2100.0	0.435	34.685	213.6	0.315
2150.0	0.418	34.684	214.1	0.295
2200.0	0.409	34.684	214.2	0.282
2250.0	0.400	34.683	214.3	0.270
2300.0	0.392	34.682	214.4	0.258
2350.0	0.384	34.682	214.4	0.246
2400.0	0.378	34.682	214.6	0.236
2450.0	0.374	34.681	214.7	0.228
2500.0	0.372	34.681	214.6	0.222
2550.0	0.368	34.681	214.7	0.214
2600.0	0.364	34.681	214.5	0.207
2650.0	0.362	34.680	214.1	0.200
2670.0	0.364	34.680	213.8	0.200



**STATION 93**

Station	: 94	Campagne	: GOODHOPE 2008
Date	: 13-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2460	Organisme	: IFREMER
Position	: S 53 55.16		
	E 0 0.03		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.191	33.842	339.5	1.191
10.0	1.191	33.841	339.5	1.191
20.0	1.192	33.842	339.5	1.191
30.0	1.192	33.842	339.6	1.191
40.0	1.193	33.842	339.3	1.191
50.0	1.193	33.842	339.5	1.191
100.0	1.195	33.842	339.2	1.191
150.0	0.437	34.167	274.2	0.431
200.0	1.112	34.428	213.0	1.103
250.0	1.439	34.527	194.6	1.427
300.0	1.680	34.597	184.6	1.664
350.0	1.649	34.618	184.4	1.630
400.0	1.674	34.650	184.3	1.652
450.0	1.672	34.669	185.5	1.648
500.0	1.645	34.681	186.9	1.618
550.0	1.608	34.690	188.3	1.579
600.0	1.578	34.697	189.3	1.546
650.0	1.543	34.703	192.9	1.508
700.0	1.506	34.706	194.5	1.468
750.0	1.461	34.709	196.3	1.421
800.0	1.407	34.712	196.6	1.364
850.0	1.330	34.712	200.1	1.285
900.0	1.262	34.711	201.7	1.214
950.0	1.206	34.710	202.3	1.155
1000.0	1.125	34.707	203.3	1.072
1050.0	1.049	34.705	204.3	0.993
1100.0	0.999	34.703	204.9	0.940
1150.0	0.950	34.702	205.9	0.889
1200.0	0.921	34.700	206.3	0.857
1250.0	0.865	34.699	207.0	0.799
1300.0	0.811	34.697	207.9	0.741
1350.0	0.766	34.695	208.6	0.694
1400.0	0.753	34.695	208.9	0.678
1450.0	0.705	34.694	209.5	0.627
1500.0	0.663	34.692	210.1	0.582
1550.0	0.630	34.691	210.6	0.546
1600.0	0.609	34.691	210.6	0.523
1650.0	0.571	34.689	211.3	0.481
1700.0	0.539	34.689	211.9	0.447
1750.0	0.525	34.688	212.1	0.429
1800.0	0.492	34.687	212.8	0.393
1850.0	0.480	34.686	213.0	0.378
1900.0	0.470	34.686	213.1	0.364
1950.0	0.452	34.686	213.4	0.343
2000.0	0.434	34.685	213.5	0.321
2050.0	0.424	34.684	214.1	0.308
2100.0	0.410	34.684	214.2	0.290
2150.0	0.397	34.683	214.4	0.274
2200.0	0.375	34.682	214.7	0.248
2250.0	0.381	34.682	214.7	0.251
2300.0	0.375	34.682	214.8	0.241
2350.0	0.376	34.682	214.7	0.238
2400.0	0.377	34.681	214.9	0.235
2447.0	0.379	34.682	214.8	0.233

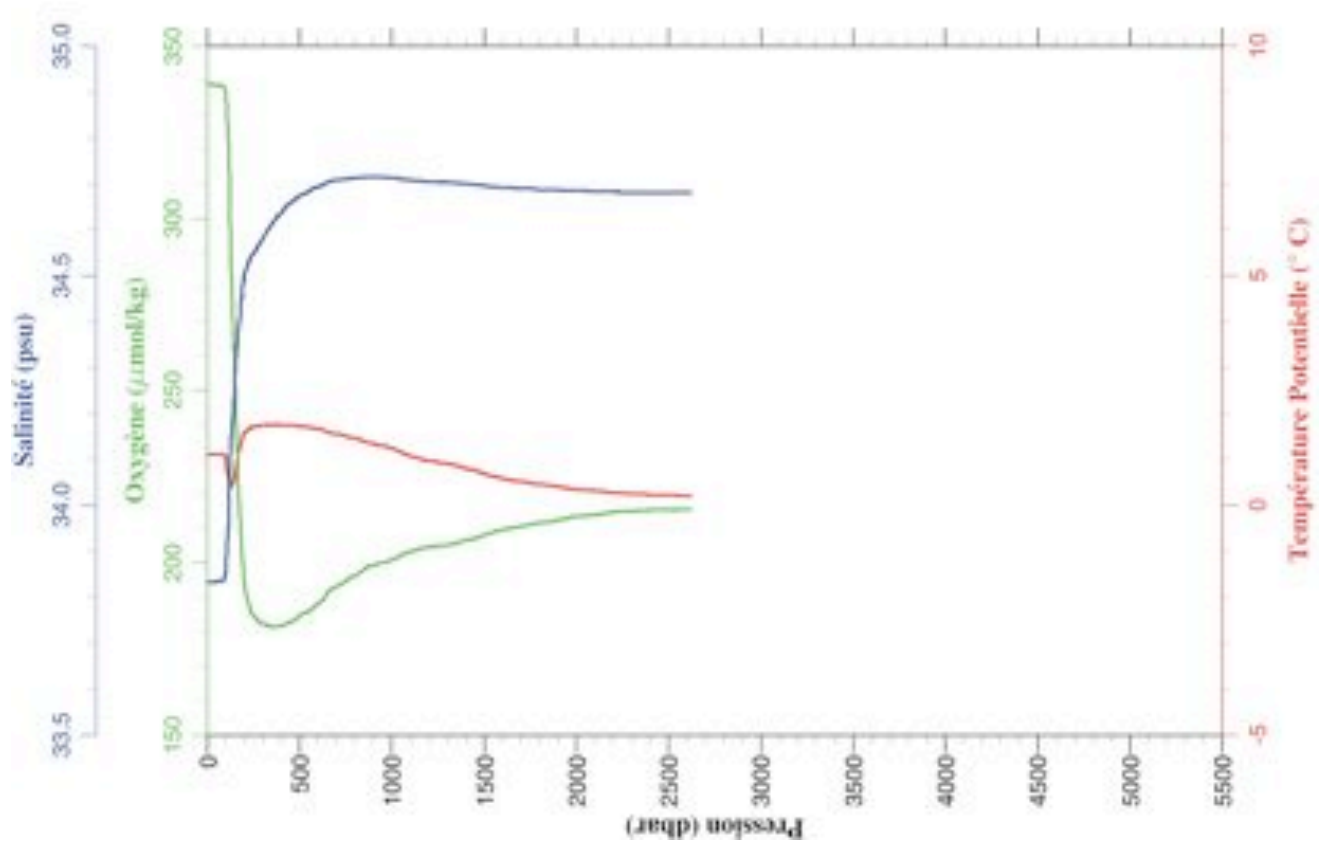
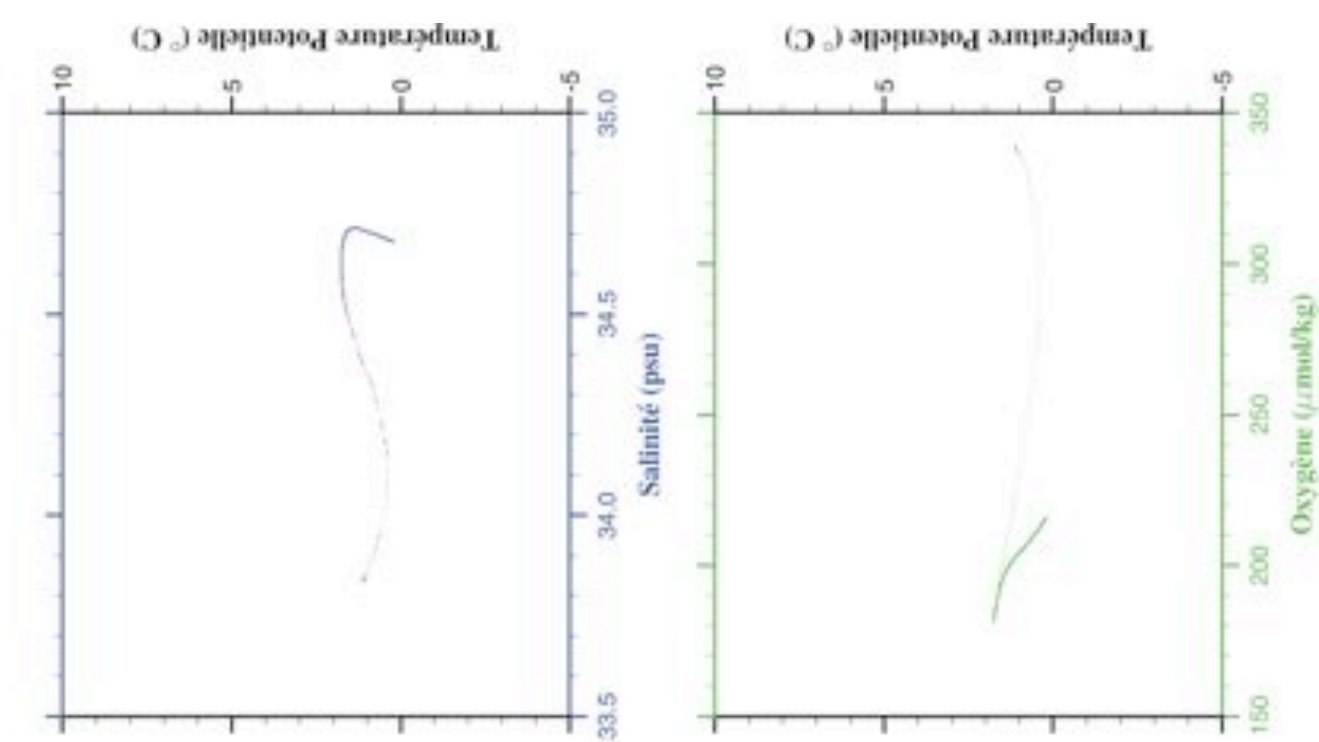


**STATION 94**

Station	: 95	Campagne	: GOODHOPE 2008
Date	: 13-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 2640	Organisme	: IFREMER
Position	: S 54 15.04		
	W 0 0.03		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.122	33.834	339.0	1.122
10.0	1.122	33.834	338.9	1.121
20.0	1.120	33.834	338.9	1.119
30.0	1.121	33.834	338.8	1.119
40.0	1.121	33.834	338.8	1.120
50.0	1.122	33.834	338.7	1.120
100.0	1.033	33.853	335.9	1.028
150.0	0.731	34.285	252.2	0.725
200.0	1.598	34.503	194.5	1.588
250.0	1.716	34.549	184.7	1.703
300.0	1.756	34.578	182.3	1.741
350.0	1.769	34.613	181.6	1.751
400.0	1.769	34.636	181.7	1.747
450.0	1.769	34.659	182.8	1.745
500.0	1.749	34.675	184.8	1.722
550.0	1.735	34.683	185.9	1.705
600.0	1.698	34.691	188.3	1.665
650.0	1.628	34.704	191.2	1.593
700.0	1.593	34.708	193.2	1.555
750.0	1.553	34.710	194.7	1.512
800.0	1.513	34.712	196.1	1.469
850.0	1.442	34.714	198.1	1.396
900.0	1.390	34.715	199.2	1.341
950.0	1.354	34.714	200.1	1.302
1000.0	1.293	34.713	200.9	1.238
1050.0	1.203	34.710	202.3	1.146
1100.0	1.140	34.708	203.2	1.080
1150.0	1.073	34.706	203.9	1.011
1200.0	1.036	34.704	204.7	0.971
1250.0	1.006	34.704	204.9	0.938
1300.0	0.977	34.703	205.1	0.906
1350.0	0.943	34.702	205.7	0.869
1400.0	0.882	34.699	206.6	0.806
1450.0	0.847	34.698	207.0	0.767
1500.0	0.768	34.696	208.1	0.686
1550.0	0.719	34.694	208.8	0.634
1600.0	0.675	34.692	209.6	0.587
1650.0	0.636	34.691	210.0	0.545
1700.0	0.610	34.690	210.6	0.516
1750.0	0.582	34.689	211.1	0.486
1800.0	0.557	34.688	211.6	0.457
1850.0	0.547	34.688	211.8	0.443
1900.0	0.514	34.686	212.4	0.407
1950.0	0.485	34.686	212.9	0.375
2000.0	0.459	34.685	213.5	0.346
2050.0	0.455	34.684	213.6	0.339
2100.0	0.438	34.684	214.0	0.318
2150.0	0.428	34.683	214.2	0.304
2200.0	0.403	34.682	214.8	0.276
2250.0	0.393	34.682	215.0	0.262
2300.0	0.389	34.682	215.0	0.255
2350.0	0.384	34.681	215.2	0.246
2400.0	0.377	34.681	215.4	0.235
2450.0	0.377	34.681	215.4	0.231
2500.0	0.376	34.681	215.4	0.226
2550.0	0.371	34.681	215.3	0.217
2600.0	0.370	34.680	215.4	0.212
2621.0	0.370	34.680	215.5	0.211

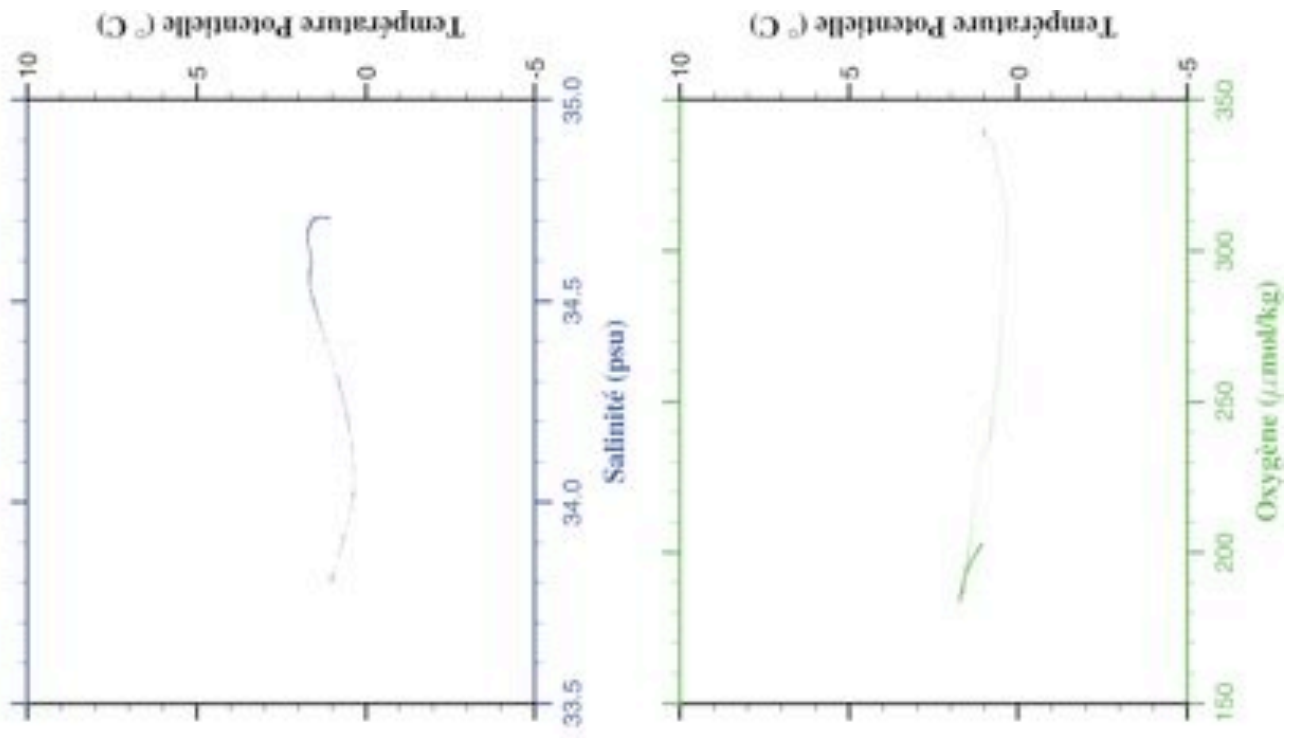
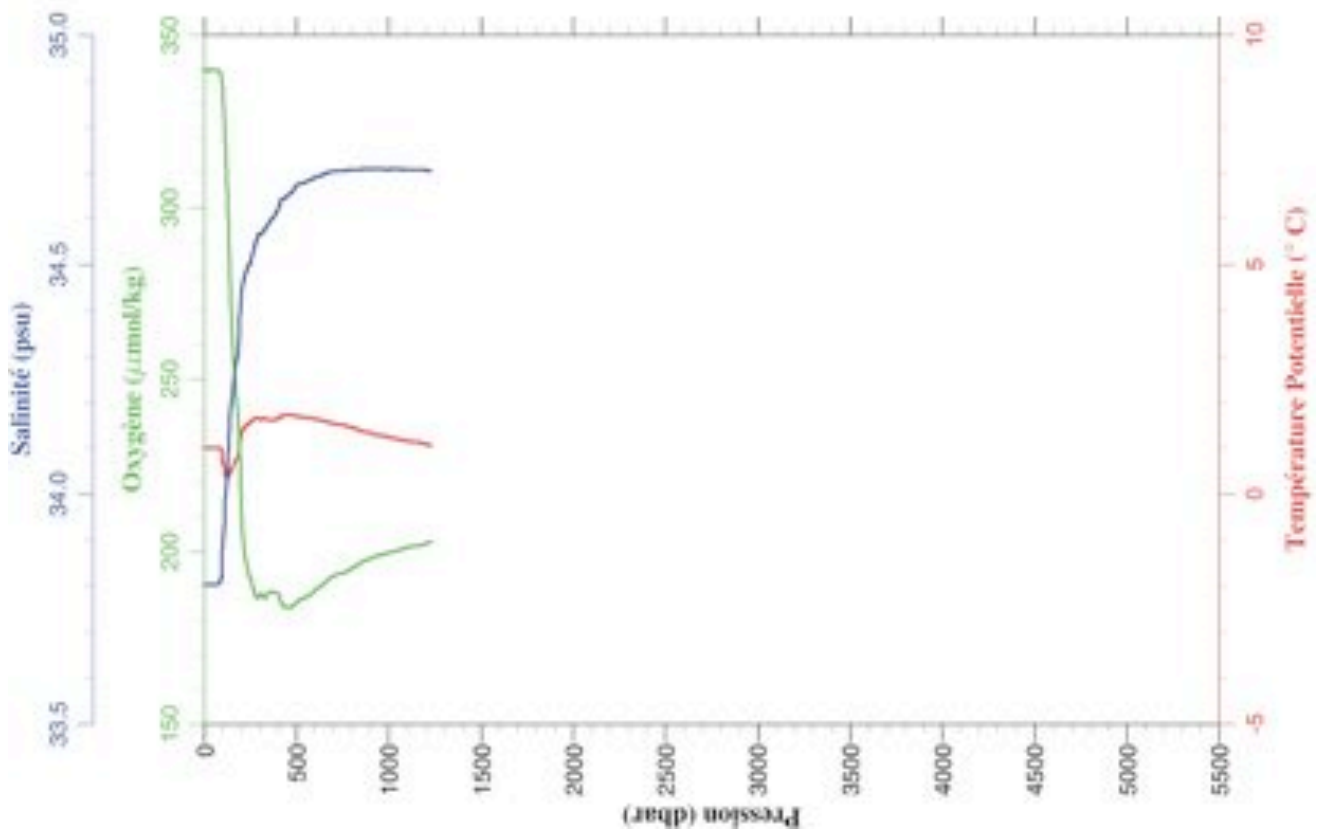




**STATION 95**

Station	: 96	Campagne	: GOODHOPE 2008
Date	: 13-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 1234	Organisme	: IFREMER
Position	: S 54 34.83		
	W 0 0.03		

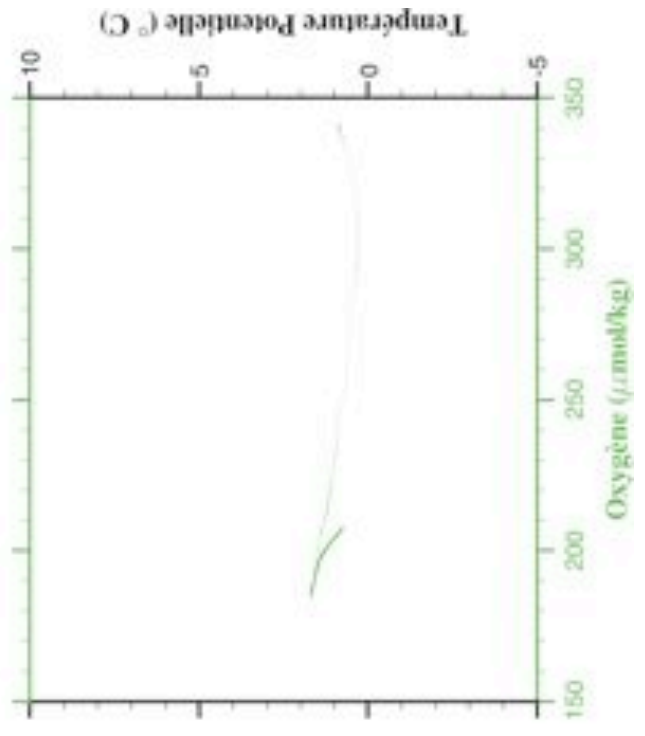
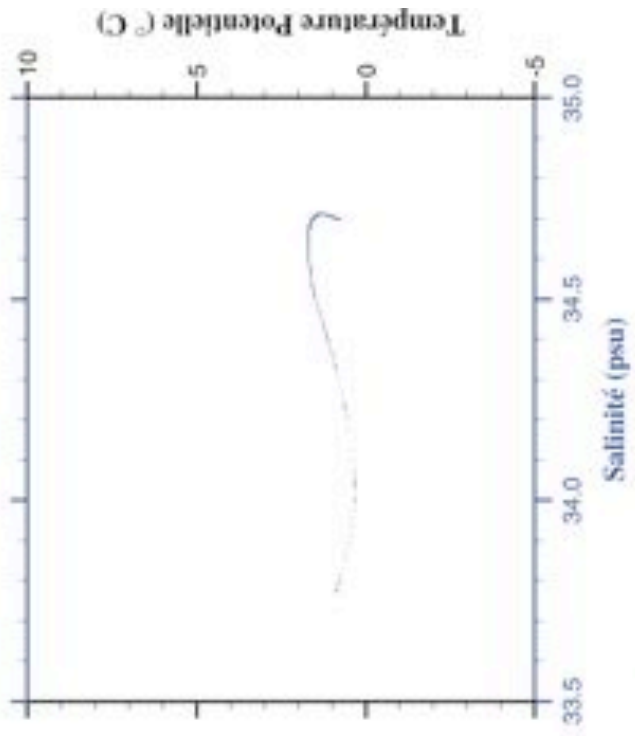
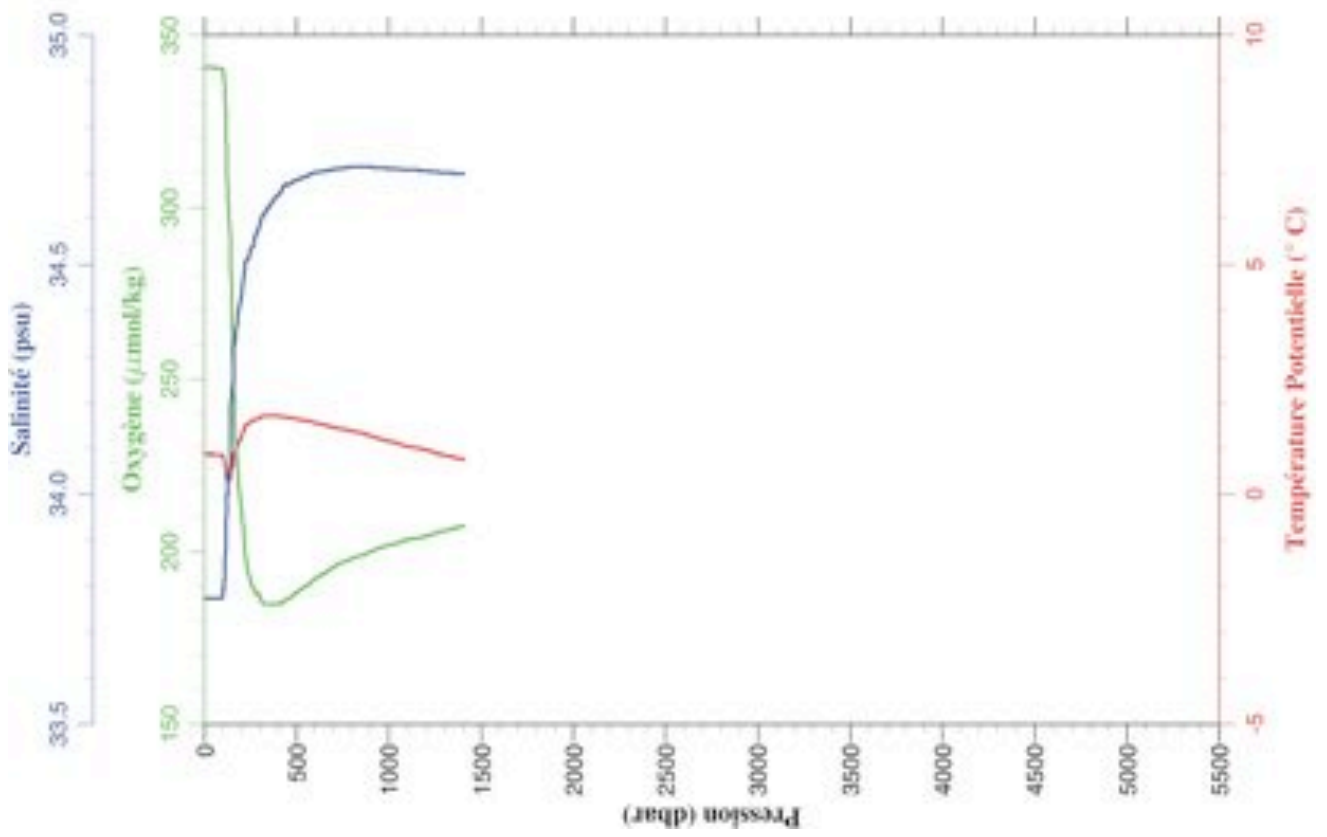
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	1.018	33.803	340.1	1.018
10.0	1.019	33.803	339.6	1.018
20.0	1.015	33.803	339.7	1.014
30.0	1.015	33.804	339.7	1.014
40.0	1.017	33.804	339.8	1.015
50.0	1.016	33.804	339.8	1.014
100.0	0.705	33.897	333.2	0.701
150.0	0.556	34.211	264.3	0.550
200.0	1.316	34.432	213.4	1.306
250.0	1.580	34.504	192.1	1.567
300.0	1.651	34.566	187.3	1.636
350.0	1.635	34.591	188.4	1.617
400.0	1.657	34.621	187.9	1.636
450.0	1.755	34.652	183.7	1.731
500.0	1.730	34.672	185.4	1.703
550.0	1.714	34.679	186.7	1.684
600.0	1.670	34.690	188.9	1.637
650.0	1.628	34.697	190.8	1.593
700.0	1.582	34.703	192.9	1.543
750.0	1.563	34.704	193.8	1.521
800.0	1.503	34.706	195.1	1.459
850.0	1.418	34.707	197.0	1.371
900.0	1.388	34.708	197.9	1.338
950.0	1.338	34.708	199.0	1.286
1000.0	1.298	34.707	199.7	1.244
1050.0	1.262	34.708	200.4	1.205
1100.0	1.223	34.707	201.3	1.162
1150.0	1.197	34.706	201.7	1.133
1200.0	1.153	34.705	202.4	1.087
1231.0	1.132	34.705	202.9	1.063



**STATION 96**

Station	: 97	Campagne	: GOODHOPE 2008
Date	: 13-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 1433	Organisme	: IFREMER
Position	: S 54 54.79		
	E 0 0.24		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.872	33.773	340.5	0.872
10.0	0.873	33.773	340.6	0.873
20.0	0.873	33.773	340.6	0.872
30.0	0.874	33.774	340.7	0.873
40.0	0.874	33.773	340.7	0.872
50.0	0.872	33.774	340.5	0.870
100.0	0.862	33.778	339.6	0.858
150.0	0.614	34.228	265.5	0.608
200.0	1.235	34.428	212.7	1.226
250.0	1.590	34.531	191.5	1.577
300.0	1.672	34.584	187.4	1.657
350.0	1.721	34.625	184.9	1.702
400.0	1.721	34.652	185.0	1.700
450.0	1.703	34.674	186.2	1.678
500.0	1.676	34.683	188.1	1.649
550.0	1.639	34.692	190.1	1.609
600.0	1.595	34.700	192.1	1.563
650.0	1.555	34.702	193.7	1.520
700.0	1.500	34.708	195.6	1.462
750.0	1.467	34.710	196.9	1.427
800.0	1.413	34.713	198.1	1.370
850.0	1.384	34.713	199.0	1.338
900.0	1.325	34.712	200.1	1.277
950.0	1.256	34.710	201.1	1.205
1000.0	1.213	34.709	201.9	1.159
1050.0	1.170	34.708	202.6	1.113
1100.0	1.107	34.707	203.5	1.047
1150.0	1.077	34.706	203.9	1.015
1200.0	1.034	34.704	204.5	0.968
1250.0	0.978	34.702	205.4	0.910
1300.0	0.926	34.700	206.1	0.855
1350.0	0.881	34.699	206.7	0.808
1400.0	0.847	34.697	207.4	0.771
1409.0	0.840	34.697	207.5	0.763



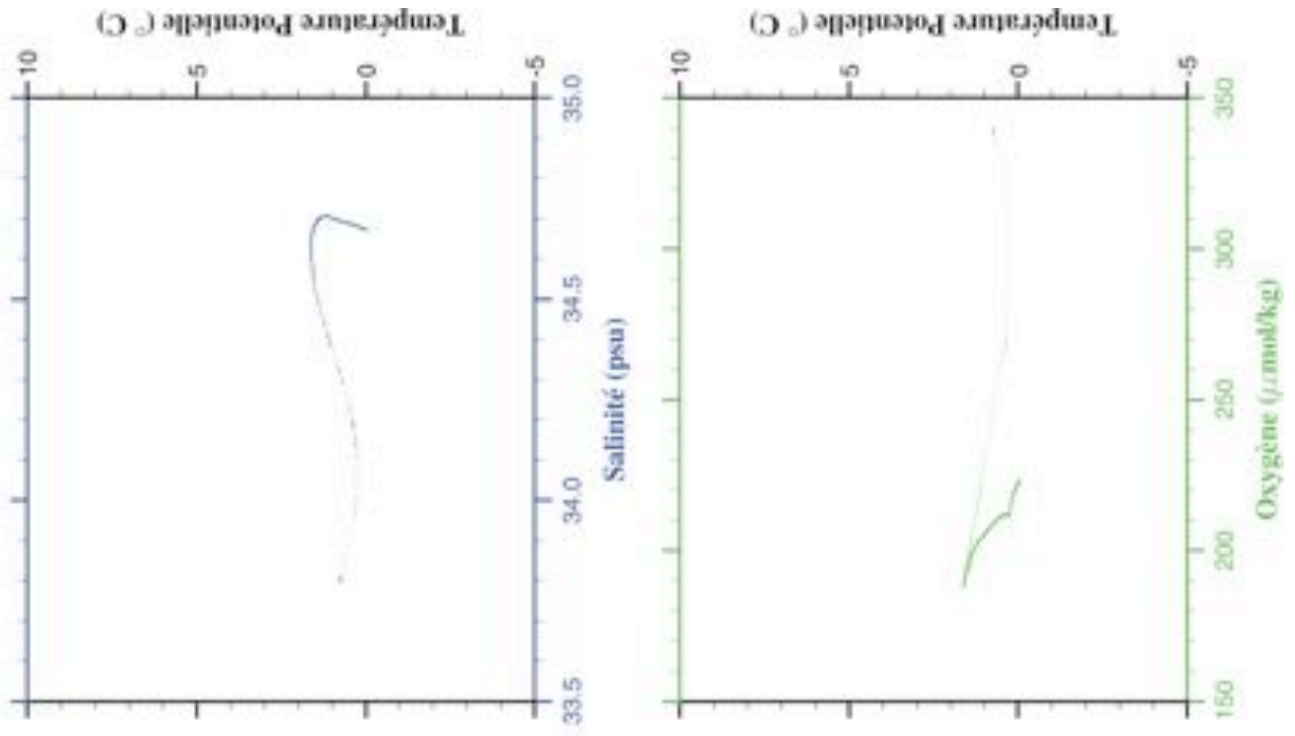
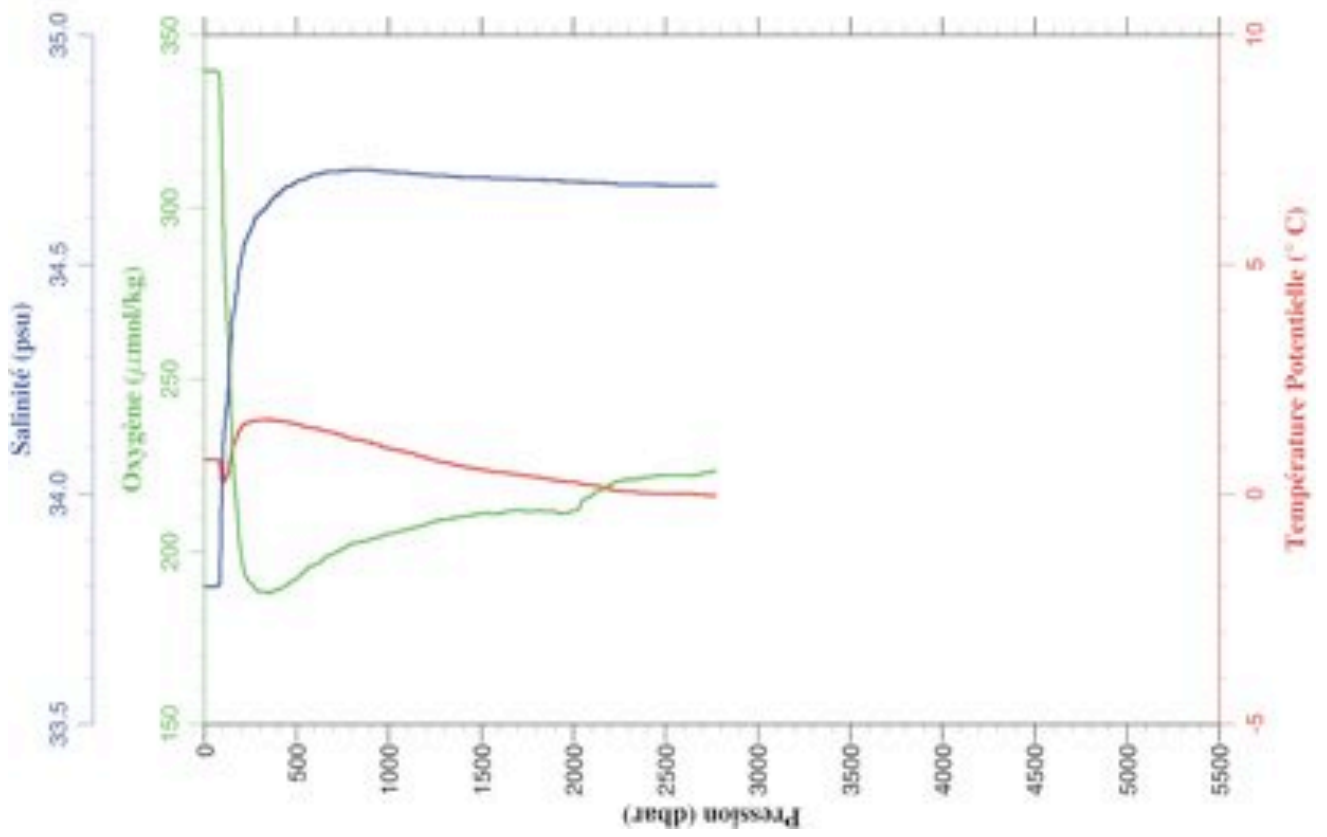
**STATION 97**

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| Station   : 98           Campagne  : GOODHOPE 2008 |
| Date     : 13-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 2770      Organisme  : IFREMER           |
| Position  : S 55 13.80 |
|            E 0 1.47   |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.752	33.799	339.8	0.752
10.0	0.753	33.799	339.4	0.752
20.0	0.754	33.799	339.5	0.753
30.0	0.755	33.799	339.5	0.753
40.0	0.756	33.799	339.7	0.755
50.0	0.754	33.799	339.7	0.752
100.0	0.253	34.069	304.1	0.249
150.0	1.014	34.377	232.1	1.007
200.0	1.482	34.515	199.0	1.472
250.0	1.582	34.574	190.9	1.570
300.0	1.636	34.611	188.4	1.621
350.0	1.652	34.633	188.0	1.633
400.0	1.628	34.653	188.9	1.607
450.0	1.595	34.671	190.6	1.571
500.0	1.563	34.681	192.2	1.537
550.0	1.493	34.686	194.7	1.464
600.0	1.466	34.695	196.3	1.435
650.0	1.409	34.701	198.2	1.374
700.0	1.374	34.703	199.5	1.337
750.0	1.322	34.704	200.9	1.283
800.0	1.242	34.706	202.5	1.200
850.0	1.218	34.706	203.0	1.173
900.0	1.181	34.706	203.5	1.133
950.0	1.129	34.705	204.3	1.079
1000.0	1.057	34.702	205.3	1.004
1050.0	1.011	34.701	205.8	0.955
1100.0	0.972	34.699	206.5	0.913
1150.0	0.927	34.698	207.2	0.866
1200.0	0.869	34.696	207.9	0.805
1250.0	0.810	34.695	208.7	0.744
1300.0	0.768	34.693	209.4	0.699
1350.0	0.730	34.692	209.7	0.658
1400.0	0.683	34.690	210.3	0.608
1450.0	0.650	34.690	210.6	0.573
1500.0	0.621	34.689	211.1	0.540
1550.0	0.580	34.688	211.0	0.497
1600.0	0.571	34.688	211.1	0.484
1650.0	0.547	34.687	211.9	0.458
1700.0	0.531	34.687	212.0	0.438
1750.0	0.503	34.686	211.6	0.407
1800.0	0.482	34.685	211.9	0.383
1850.0	0.455	34.684	211.7	0.353
1900.0	0.410	34.683	211.6	0.305
1950.0	0.391	34.682	211.2	0.282
2000.0	0.373	34.681	211.8	0.261
2050.0	0.333	34.680	214.9	0.219
2100.0	0.313	34.679	216.3	0.195
2150.0	0.285	34.678	217.8	0.164
2200.0	0.232	34.677	219.4	0.108
2250.0	0.205	34.676	220.6	0.078
2300.0	0.194	34.675	220.9	0.063
2350.0	0.179	34.674	221.3	0.045
2400.0	0.168	34.674	221.7	0.030
2450.0	0.159	34.674	222.1	0.018
2500.0	0.159	34.674	222.1	0.013
2550.0	0.158	34.673	222.3	0.008
2600.0	0.163	34.673	222.3	0.009
2650.0	0.168	34.673	222.1	0.010
2700.0	0.151	34.673	222.7	-0.010
2750.0	0.139	34.672	223.2	-0.027
2769.0	0.135	34.672	223.5	-0.032



**STATION 98**

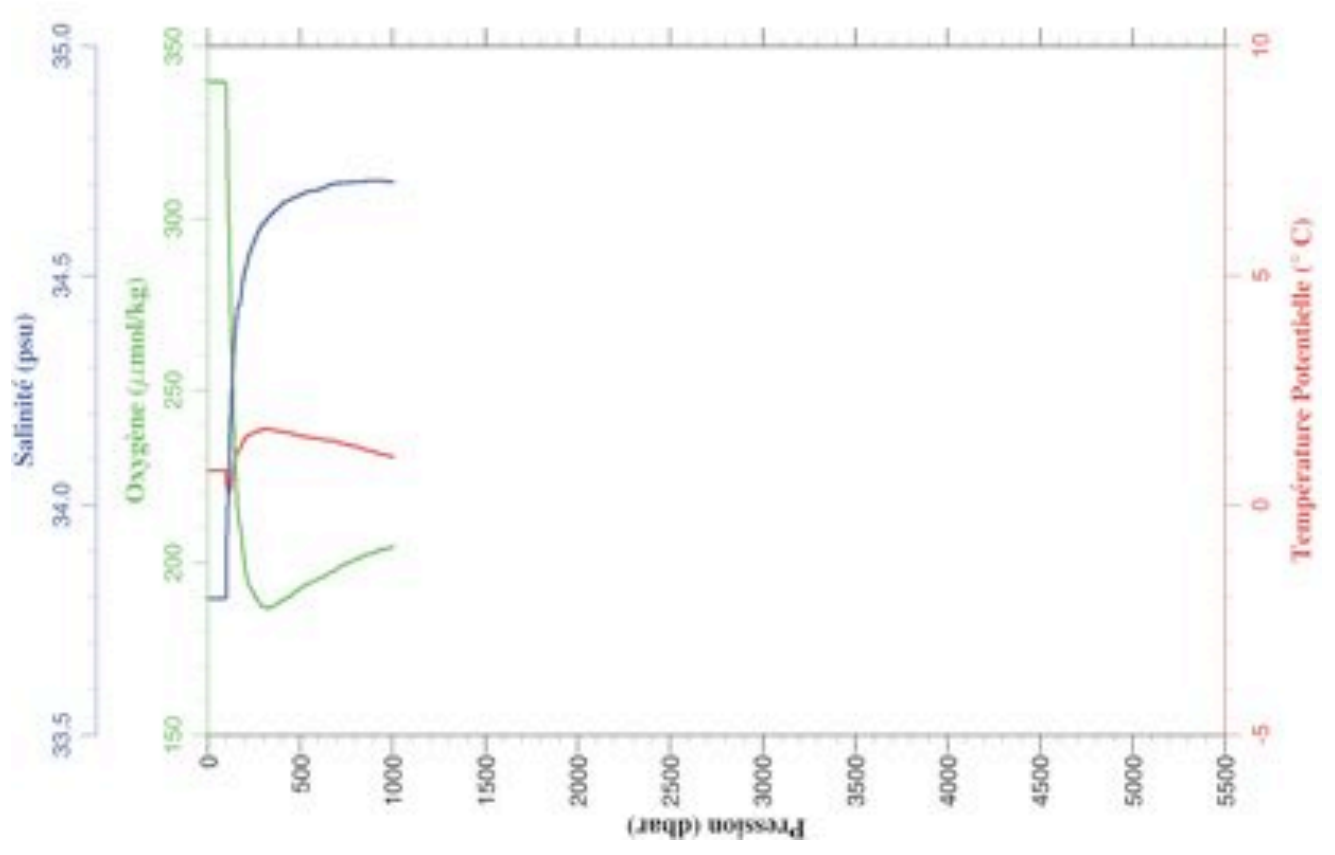
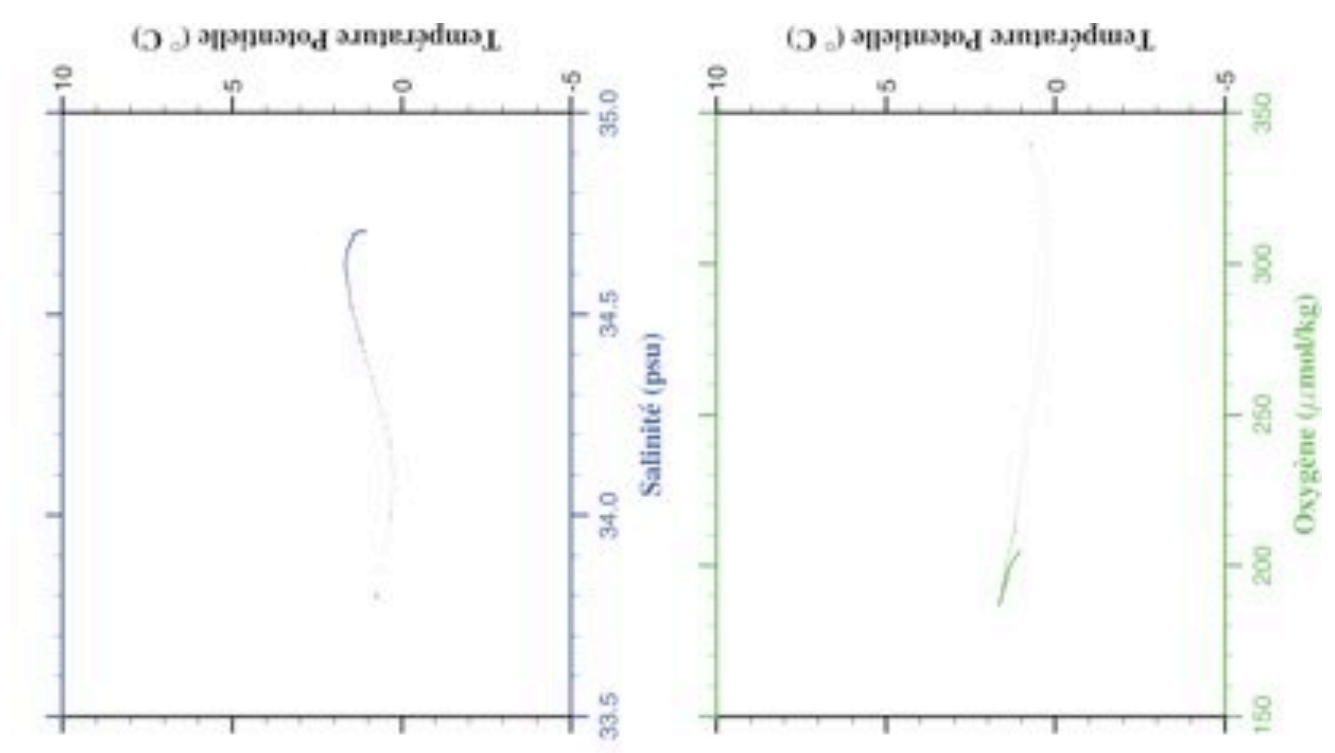
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| Station   : 99           Campagne  : GOODHOPE 2008 |
| Date     : 14-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 2770      Organisme  : IFREMER          |
| Position  : S 55 13.95 |
|           : E 0 2.61  |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.749	33.797	339.8	0.749
10.0	0.750	33.797	339.8	0.749
20.0	0.752	33.797	339.7	0.751
30.0	0.755	33.797	339.6	0.754
40.0	0.755	33.797	339.5	0.754
50.0	0.755	33.797	339.7	0.753
100.0	0.710	33.816	335.5	0.706
150.0	1.039	34.382	226.3	1.032
200.0	1.458	34.507	198.9	1.448
250.0	1.595	34.576	190.7	1.582
300.0	1.662	34.615	187.5	1.647
350.0	1.668	34.635	187.2	1.649
400.0	1.625	34.654	189.0	1.604
450.0	1.595	34.667	190.4	1.571
500.0	1.543	34.675	192.5	1.517
550.0	1.506	34.683	194.0	1.477
600.0	1.477	34.688	195.5	1.446
650.0	1.448	34.695	196.8	1.414
700.0	1.416	34.701	198.1	1.379
750.0	1.368	34.702	199.7	1.328
800.0	1.328	34.704	201.0	1.286
850.0	1.254	34.705	202.2	1.208
900.0	1.220	34.706	203.0	1.172
950.0	1.165	34.706	203.8	1.114
1000.0	1.101	34.704	204.7	1.048
1001.0	1.098	34.704	204.8	1.045

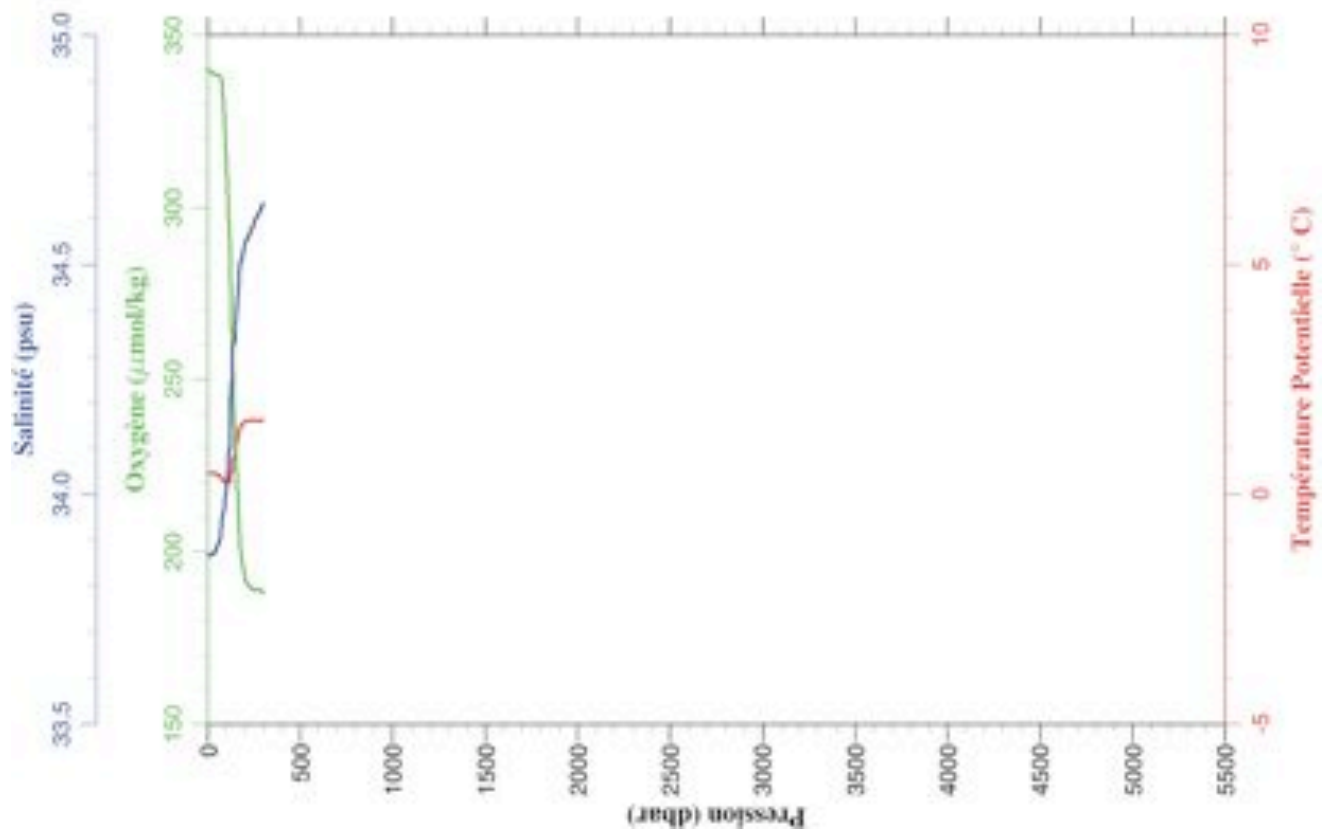




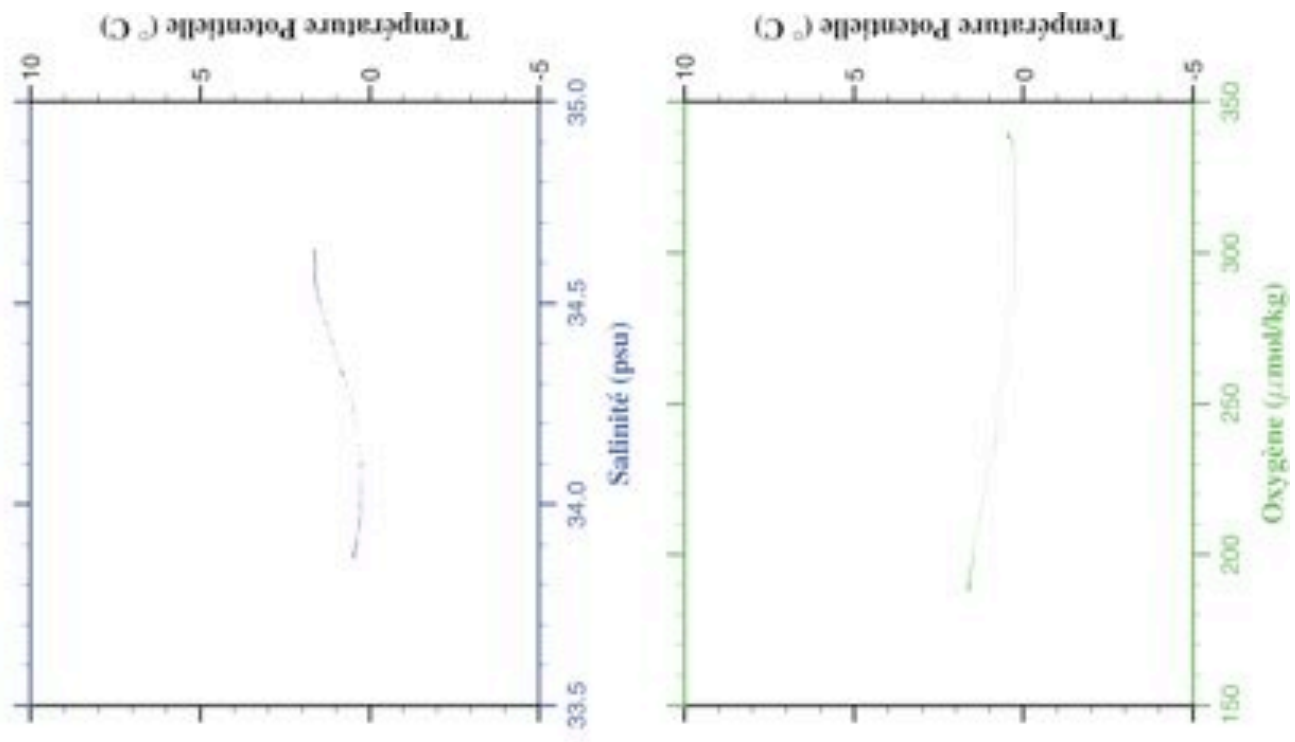
**STATION 99**

Station	: 100	Campagne	: GOODHOPE 2008
Date	: 14-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 3600	Organisme	: IFREMER
Position	: S 55 34.14		
	E 0 0.21		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.470	33.867	339.8	0.470
10.0	0.470	33.867	339.6	0.470
20.0	0.468	33.870	339.2	0.467
30.0	0.465	33.872	338.7	0.464
40.0	0.457	33.876	338.6	0.456
50.0	0.437	33.887	338.5	0.435
100.0	0.276	34.012	312.8	0.272
150.0	0.983	34.368	231.0	0.976
200.0	1.598	34.545	192.9	1.588
250.0	1.636	34.591	188.8	1.624
300.0	1.635	34.632	188.3	1.620
302.0	1.635	34.632	188.4	1.619



**STATION 100**

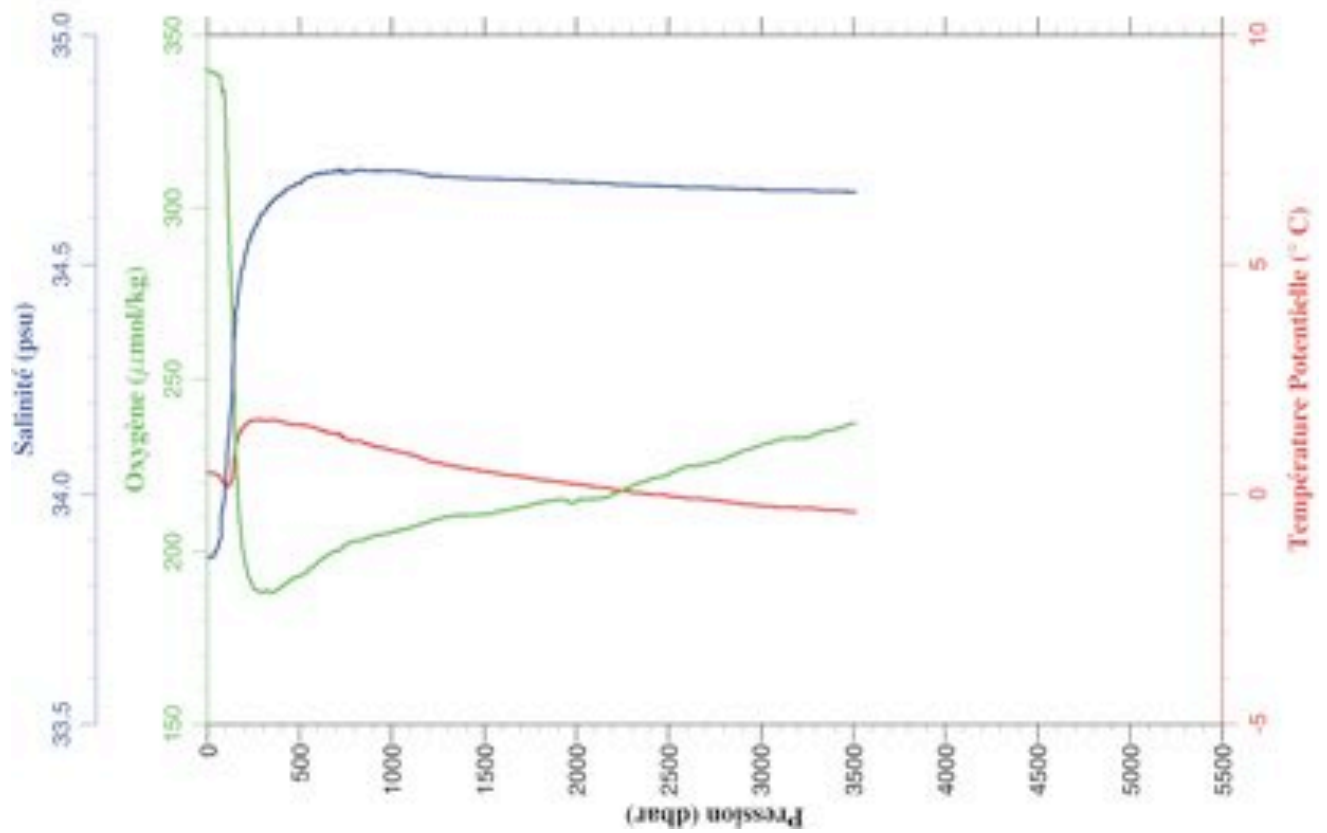


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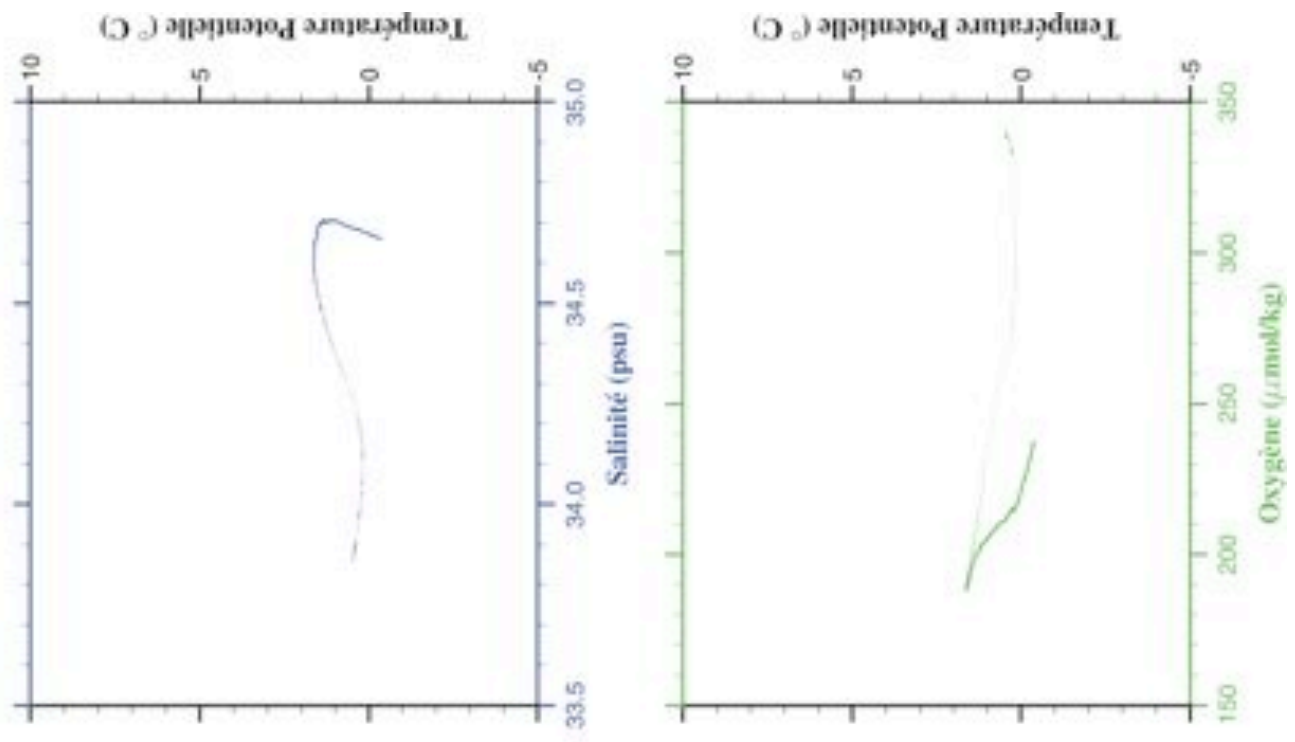
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| Station   : 101           Campagne  : GOODHOPE 2008 |
| Date      : 14-03-08     Navire    : R/V Marion Dufresne |
| Profondeur : 3584        Organisme : IFREMER          |
| Position  : S 55 34.22   |
|            E 0 0.27     |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.474	33.863	339.8	0.474	3050.0	-0.073	34.663	231.6	-0.259
10.0	0.473	33.863	339.6	0.473	3100.0	-0.089	34.662	232.5	-0.279
20.0	0.467	33.864	339.2	0.467	3150.0	-0.094	34.662	232.9	-0.288
30.0	0.468	33.865	339.0	0.467	3200.0	-0.090	34.662	233.1	-0.289
40.0	0.450	33.874	339.0	0.449	3250.0	-0.089	34.662	233.1	-0.292
50.0	0.441	33.879	338.6	0.439	3300.0	-0.106	34.661	234.2	-0.313
100.0	0.218	34.032	321.7	0.214	3350.0	-0.120	34.660	235.1	-0.331
150.0	0.956	34.363	236.9	0.950	3400.0	-0.130	34.660	235.6	-0.345
200.0	1.501	34.515	198.2	1.492	3450.0	-0.144	34.659	236.2	-0.364
250.0	1.634	34.575	189.5	1.621	3500.0	-0.156	34.659	237.2	-0.380
300.0	1.641	34.612	188.3	1.625	3512.0	-0.159	34.659	237.5	-0.384
350.0	1.641	34.636	188.1	1.623					
400.0	1.600	34.653	189.6	1.579					
450.0	1.560	34.668	191.6	1.536					
500.0	1.535	34.677	193.0	1.509					
550.0	1.507	34.692	195.0	1.478					
600.0	1.461	34.699	197.0	1.429					
650.0	1.397	34.701	198.8	1.362					
700.0	1.349	34.703	200.3	1.313					
750.0	1.245	34.700	202.1	1.206					
800.0	1.204	34.705	203.2	1.162					
850.0	1.168	34.705	203.5	1.124					
900.0	1.105	34.704	204.5	1.058					
950.0	1.063	34.705	205.1	1.013					
1000.0	1.012	34.705	205.6	0.959					
1050.0	0.975	34.703	206.3	0.920					
1100.0	0.928	34.701	207.0	0.870					
1150.0	0.873	34.699	207.8	0.812					
1200.0	0.788	34.693	208.8	0.725					
1250.0	0.761	34.693	209.6	0.695					
1300.0	0.711	34.691	210.3	0.643					
1350.0	0.678	34.690	210.5	0.607					
1400.0	0.645	34.689	210.6	0.571					
1450.0	0.614	34.687	210.6	0.537					
1500.0	0.584	34.687	210.8	0.504					
1550.0	0.554	34.687	211.3	0.472					
1600.0	0.524	34.686	211.9	0.438					
1650.0	0.503	34.686	212.4	0.414					
1700.0	0.479	34.685	213.1	0.387					
1750.0	0.450	34.684	213.6	0.355					
1800.0	0.415	34.683	214.3	0.317					
1850.0	0.400	34.682	214.7	0.299					
1900.0	0.377	34.681	215.1	0.272					
1950.0	0.359	34.680	214.8	0.251					
2000.0	0.336	34.680	214.6	0.225					
2050.0	0.306	34.679	215.1	0.192					
2100.0	0.287	34.678	215.4	0.169					
2150.0	0.265	34.677	215.7	0.144					
2200.0	0.231	34.676	216.7	0.107					
2250.0	0.210	34.675	217.9	0.083					
2300.0	0.179	34.673	219.1	0.048					
2350.0	0.164	34.673	220.1	0.030					
2400.0	0.142	34.672	221.1	0.005					
2450.0	0.136	34.672	221.7	-0.005					
2500.0	0.117	34.671	222.6	-0.028					
2550.0	0.092	34.670	223.8	-0.057					
2600.0	0.071	34.669	224.8	-0.081					
2650.0	0.063	34.668	225.0	-0.093					
2700.0	0.052	34.668	225.6	-0.107					
2750.0	0.039	34.667	226.2	-0.124					
2800.0	0.015	34.666	227.0	-0.152					
2850.0	-0.010	34.665	228.1	-0.180					
2900.0	-0.032	34.665	229.3	-0.206					
2950.0	-0.047	34.664	230.0	-0.225					
3000.0	-0.066	34.663	231.0	-0.248					



**STATION 101**

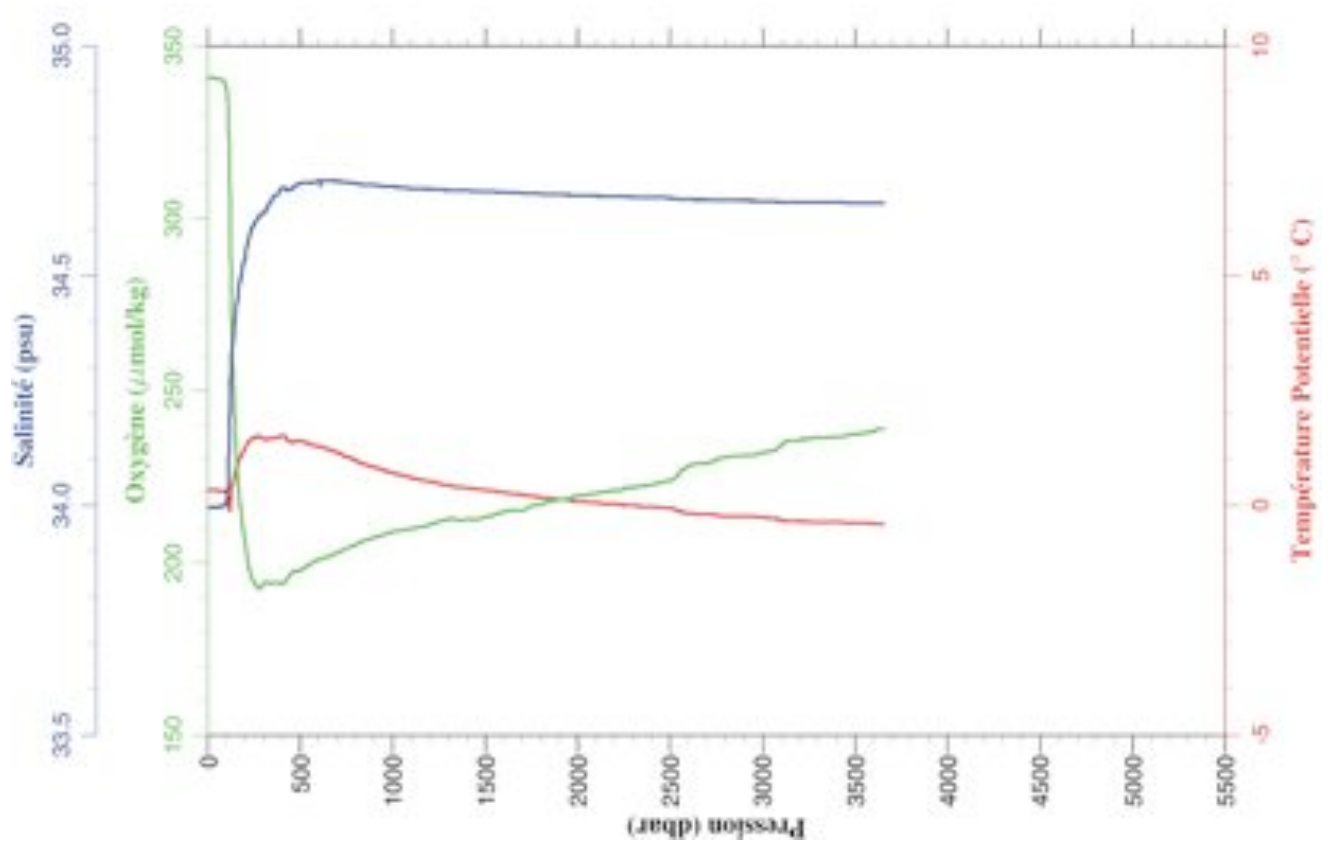
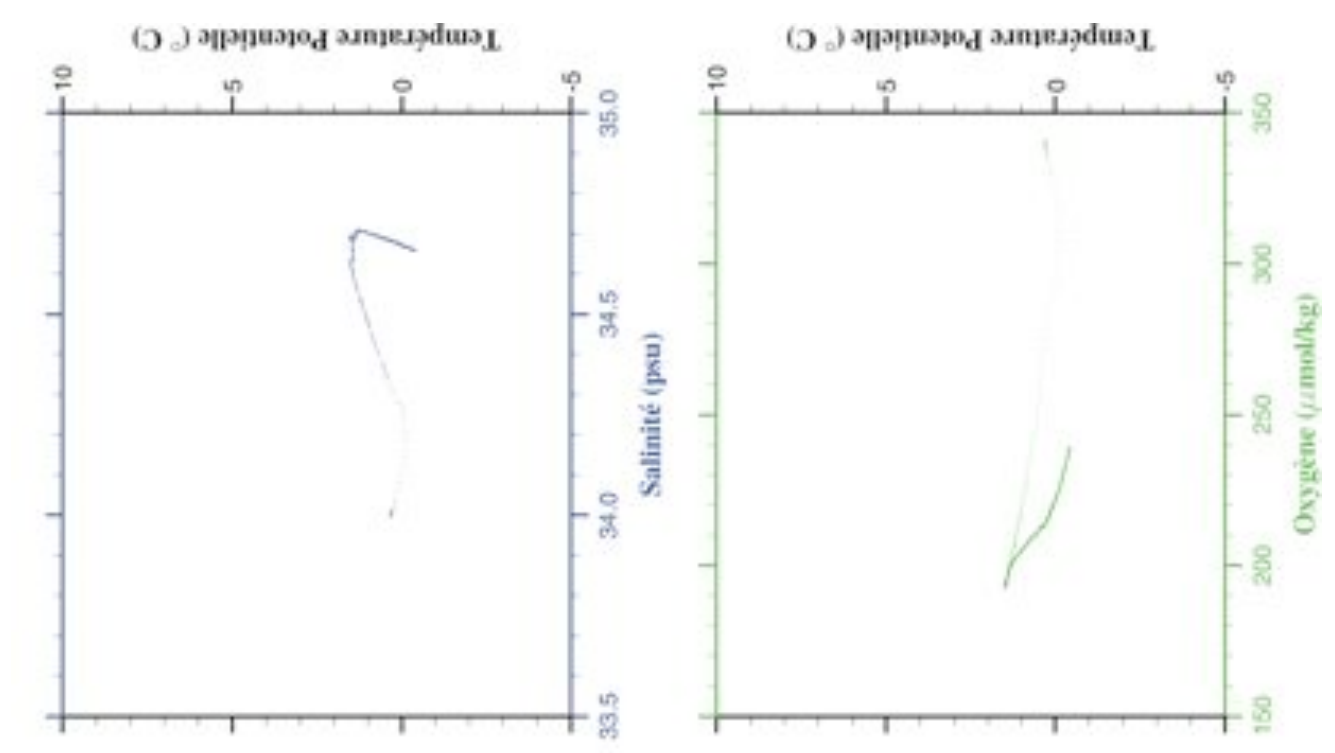


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| Station   : 102           Campagne  : GOODHOPE 2008 |
| Date      : 14-03-08    Navire     : R/V Marion Dufresne |
| Profondeur : 3695       Organisme  : IFREMER |
| Position  : S 55 54.24 |
|           : W 0 6.85 |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.327	33.996	340.9	0.327	3050.0	-0.093	34.662	232.6	-0.278
10.0	0.330	33.996	341.0	0.330	3100.0	-0.139	34.660	234.2	-0.327
20.0	0.334	33.996	340.8	0.333	3150.0	-0.149	34.660	235.4	-0.342
30.0	0.332	33.996	340.7	0.331	3200.0	-0.155	34.660	235.7	-0.352
40.0	0.325	33.996	340.6	0.324	3250.0	-0.154	34.659	236.1	-0.356
50.0	0.325	33.997	340.4	0.323	3300.0	-0.152	34.659	236.4	-0.358
100.0	0.288	34.008	338.0	0.285	3350.0	-0.151	34.659	236.4	-0.361
150.0	0.755	34.417	236.5	0.748	3400.0	-0.150	34.659	236.6	-0.365
200.0	1.224	34.536	206.6	1.214	3450.0	-0.154	34.659	236.9	-0.374
250.0	1.465	34.609	194.3	1.453	3500.0	-0.155	34.658	237.4	-0.378
300.0	1.462	34.636	193.9	1.447	3550.0	-0.158	34.658	237.6	-0.386
350.0	1.474	34.668	194.3	1.456	3600.0	-0.170	34.658	238.2	-0.403
400.0	1.540	34.690	194.0	1.519	3650.0	-0.176	34.657	238.9	-0.413
450.0	1.403	34.688	196.7	1.380	3652.0	-0.175	34.657	238.9	-0.413
500.0	1.427	34.701	197.8	1.401					
550.0	1.365	34.702	199.4	1.337					
600.0	1.324	34.707	200.8	1.293					
650.0	1.260	34.707	201.8	1.226					
700.0	1.185	34.705	202.9	1.149					
750.0	1.099	34.703	204.2	1.060					
800.0	1.018	34.701	205.2	0.977					
850.0	0.936	34.698	206.5	0.893					
900.0	0.873	34.698	207.4	0.828					
950.0	0.815	34.695	208.1	0.767					
1000.0	0.754	34.693	209.1	0.703					
1050.0	0.712	34.692	209.5	0.659					
1100.0	0.659	34.690	209.9	0.604					
1150.0	0.612	34.689	210.5	0.554					
1200.0	0.579	34.688	211.2	0.519					
1250.0	0.546	34.688	211.9	0.482					
1300.0	0.496	34.686	212.6	0.430					
1350.0	0.471	34.685	212.4	0.402					
1400.0	0.454	34.685	212.6	0.382					
1450.0	0.433	34.684	212.7	0.358					
1500.0	0.407	34.683	213.4	0.329					
1550.0	0.386	34.682	214.0	0.305					
1600.0	0.365	34.681	214.8	0.281					
1650.0	0.340	34.681	215.3	0.253					
1700.0	0.322	34.680	215.3	0.232					
1750.0	0.293	34.679	216.5	0.200					
1800.0	0.269	34.678	216.9	0.174					
1850.0	0.253	34.677	217.7	0.154					
1900.0	0.233	34.676	218.3	0.130					
1950.0	0.223	34.676	218.6	0.117					
2000.0	0.192	34.675	219.5	0.084					
2050.0	0.185	34.674	219.8	0.073					
2100.0	0.172	34.674	220.1	0.056					
2150.0	0.160	34.673	220.6	0.041					
2200.0	0.153	34.673	220.9	0.031					
2250.0	0.132	34.672	221.5	0.006					
2300.0	0.122	34.671	222.0	-0.008					
2350.0	0.116	34.671	222.3	-0.017					
2400.0	0.108	34.671	222.6	-0.029					
2450.0	0.094	34.670	223.3	-0.047					
2500.0	0.081	34.669	223.9	-0.063					
2550.0	0.013	34.667	226.2	-0.133					
2600.0	-0.023	34.666	228.2	-0.173					
2650.0	-0.036	34.665	228.8	-0.190					
2700.0	-0.026	34.665	228.9	-0.184					
2750.0	-0.061	34.664	229.9	-0.222					
2800.0	-0.065	34.664	230.6	-0.230					
2850.0	-0.068	34.663	230.9	-0.237					
2900.0	-0.068	34.663	231.2	-0.241					
2950.0	-0.066	34.663	231.2	-0.244					
3000.0	-0.086	34.662	232.0	-0.267					



**STATION 102**

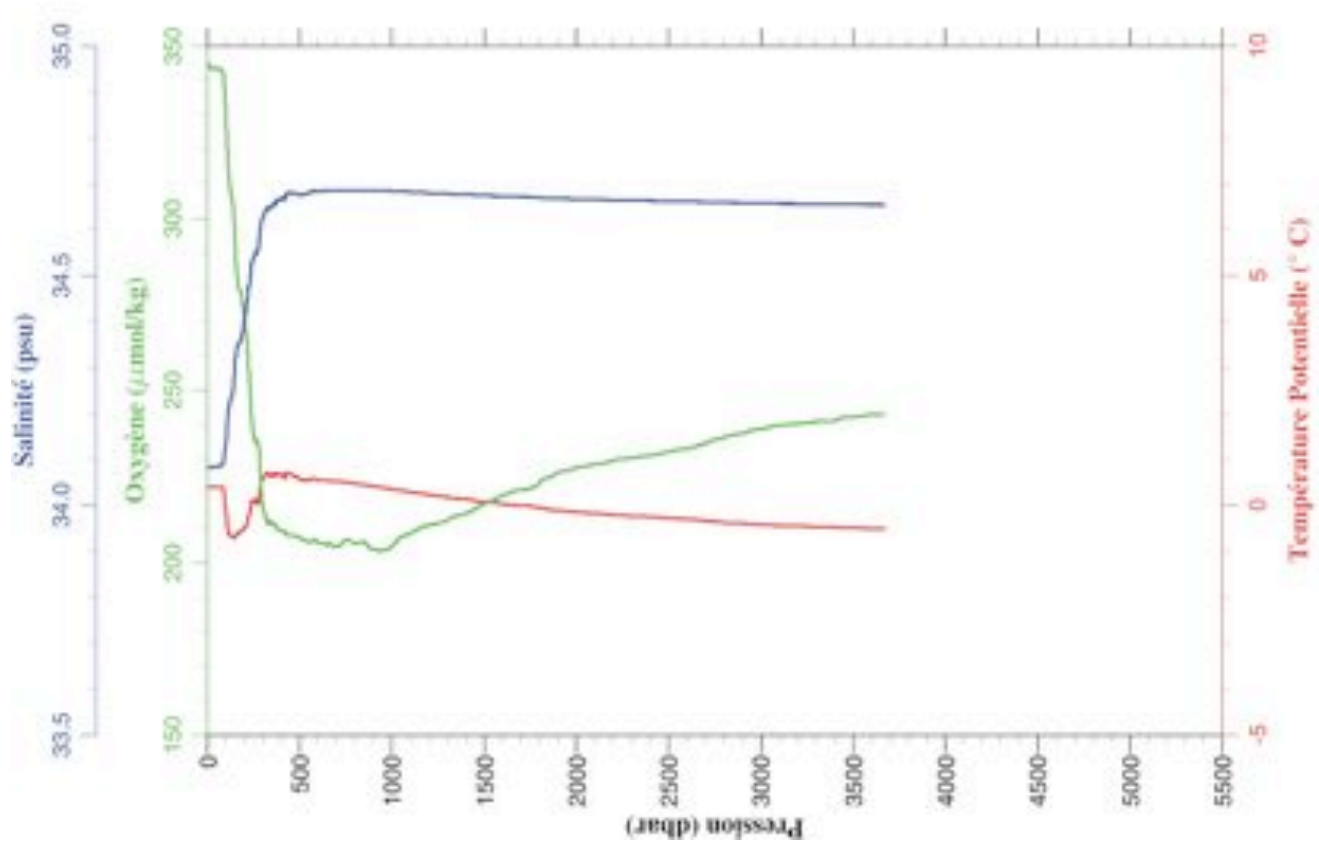
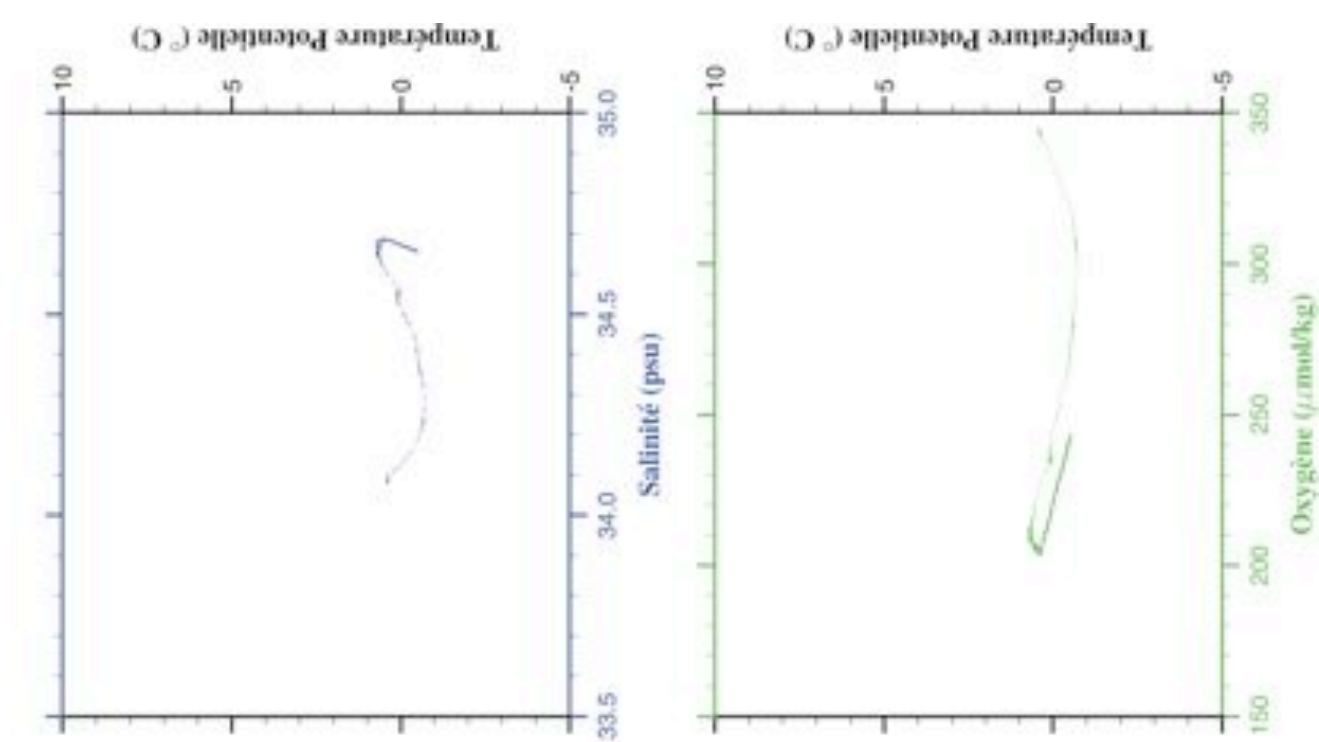
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| Station   : 103           Campagne  : GOODHOPE 2008 |
| Date      : 14-03-08     Navire    : R/V Marion Dufresne |
| Profondeur : 3650        Organisme : IFREMER          |
| Position  : S 56 13.93   |
|            W 0 0.24      |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.407	34.082	344.7	0.407	3050.0	-0.250	34.657	239.4	-0.432
10.0	0.405	34.082	344.3	0.405	3100.0	-0.253	34.657	239.9	-0.439
20.0	0.402	34.083	343.6	0.401	3150.0	-0.255	34.657	240.1	-0.445
30.0	0.400	34.084	343.4	0.399	3200.0	-0.256	34.657	240.4	-0.451
40.0	0.399	34.084	343.5	0.398	3250.0	-0.257	34.656	240.6	-0.456
50.0	0.400	34.084	343.6	0.398	3300.0	-0.260	34.656	241.0	-0.463
100.0	-0.086	34.135	329.9	-0.089	3350.0	-0.256	34.656	241.1	-0.464
150.0	-0.669	34.318	293.3	-0.674	3400.0	-0.254	34.656	241.1	-0.466
200.0	-0.478	34.404	270.9	-0.484	3450.0	-0.273	34.655	242.2	-0.489
250.0	0.102	34.538	237.0	0.092	3500.0	-0.273	34.655	242.4	-0.494
300.0	0.600	34.625	216.6	0.587	3550.0	-0.272	34.655	242.6	-0.497
350.0	0.702	34.652	211.3	0.687	3600.0	-0.275	34.655	243.0	-0.505
400.0	0.684	34.667	209.3	0.666	3650.0	-0.271	34.654	243.0	-0.506
450.0	0.701	34.680	207.8	0.681	3668.0	-0.272	34.655	243.1	-0.509
500.0	0.590	34.676	207.3	0.567					
550.0	0.576	34.680	205.9	0.551					
600.0	0.579	34.683	205.7	0.551					
650.0	0.570	34.685	205.2	0.541					
700.0	0.549	34.685	204.7	0.517					
750.0	0.535	34.686	206.5	0.500					
800.0	0.513	34.686	205.6	0.476					
850.0	0.484	34.686	206.3	0.444					
900.0	0.464	34.685	203.9	0.421					
950.0	0.428	34.684	203.6	0.383					
1000.0	0.401	34.684	204.7	0.354					
1050.0	0.372	34.683	207.5	0.322					
1100.0	0.344	34.682	208.6	0.291					
1150.0	0.315	34.681	209.9	0.260					
1200.0	0.287	34.680	211.0	0.229					
1250.0	0.267	34.679	211.6	0.207					
1300.0	0.239	34.678	212.3	0.176					
1350.0	0.220	34.677	213.7	0.154					
1400.0	0.205	34.677	214.5	0.136					
1450.0	0.173	34.675	215.7	0.101					
1500.0	0.152	34.674	217.1	0.077					
1550.0	0.137	34.674	218.2	0.059					
1600.0	0.113	34.673	219.6	0.032					
1650.0	0.094	34.672	220.7	0.010					
1700.0	0.088	34.672	221.2	0.001					
1750.0	0.075	34.671	221.4	-0.015					
1800.0	0.040	34.670	223.3	-0.053					
1850.0	0.015	34.669	224.7	-0.081					
1900.0	-0.017	34.668	226.3	-0.115					
1950.0	-0.023	34.667	226.9	-0.125					
2000.0	-0.041	34.667	227.7	-0.146					
2050.0	-0.049	34.666	228.1	-0.157					
2100.0	-0.063	34.666	228.6	-0.175					
2150.0	-0.072	34.665	229.0	-0.187					
2200.0	-0.091	34.665	229.8	-0.210					
2250.0	-0.096	34.664	230.1	-0.218					
2300.0	-0.104	34.664	230.5	-0.229					
2350.0	-0.111	34.664	230.8	-0.240					
2400.0	-0.118	34.663	231.3	-0.251					
2450.0	-0.126	34.663	231.6	-0.262					
2500.0	-0.135	34.662	232.2	-0.275					
2550.0	-0.147	34.662	232.9	-0.290					
2600.0	-0.148	34.662	233.1	-0.296					
2650.0	-0.164	34.661	233.8	-0.315					
2700.0	-0.183	34.660	234.7	-0.338					
2750.0	-0.193	34.660	235.7	-0.351					
2800.0	-0.211	34.659	236.5	-0.373					
2850.0	-0.217	34.659	237.1	-0.383					
2900.0	-0.219	34.659	237.6	-0.389					
2950.0	-0.238	34.658	238.5	-0.412					
3000.0	-0.239	34.658	238.9	-0.417					





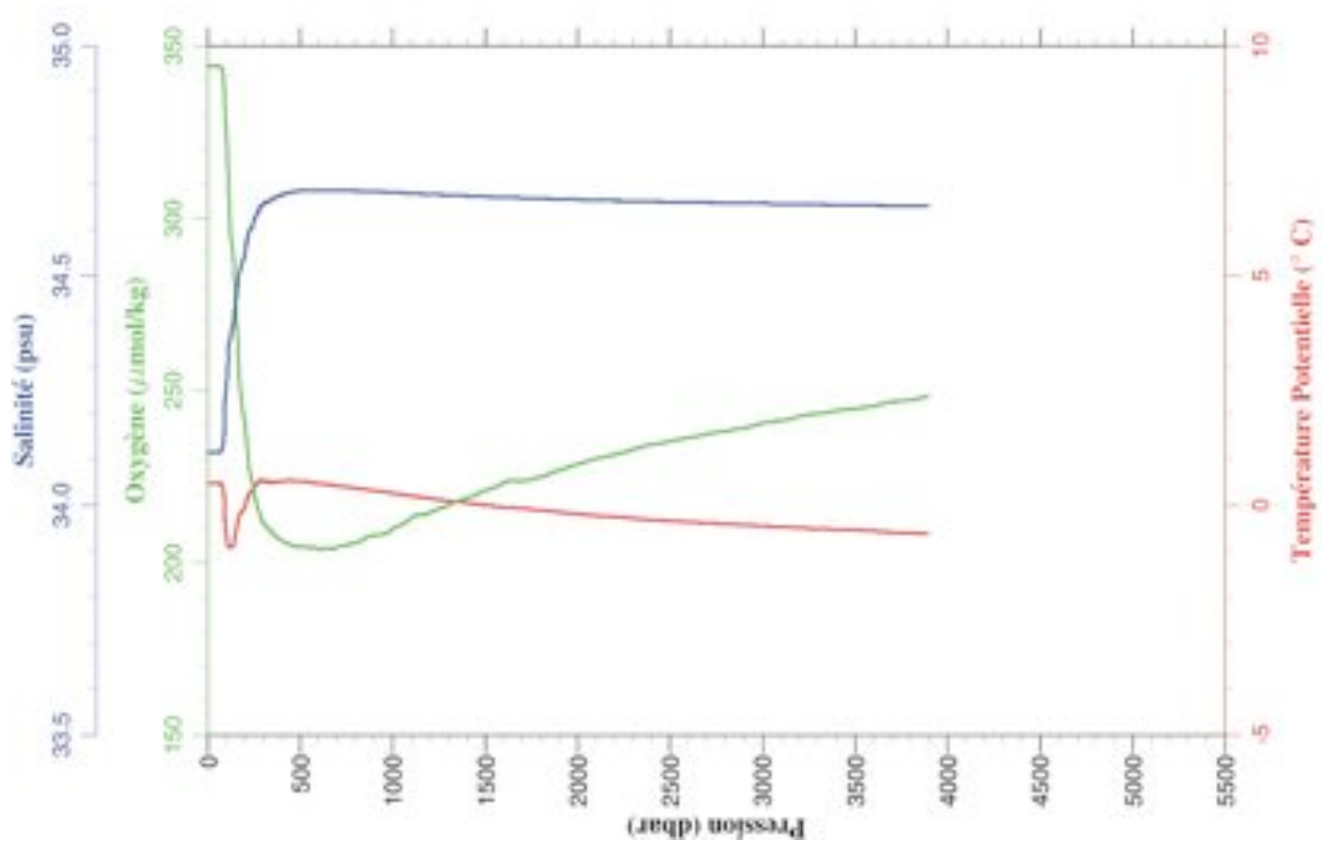
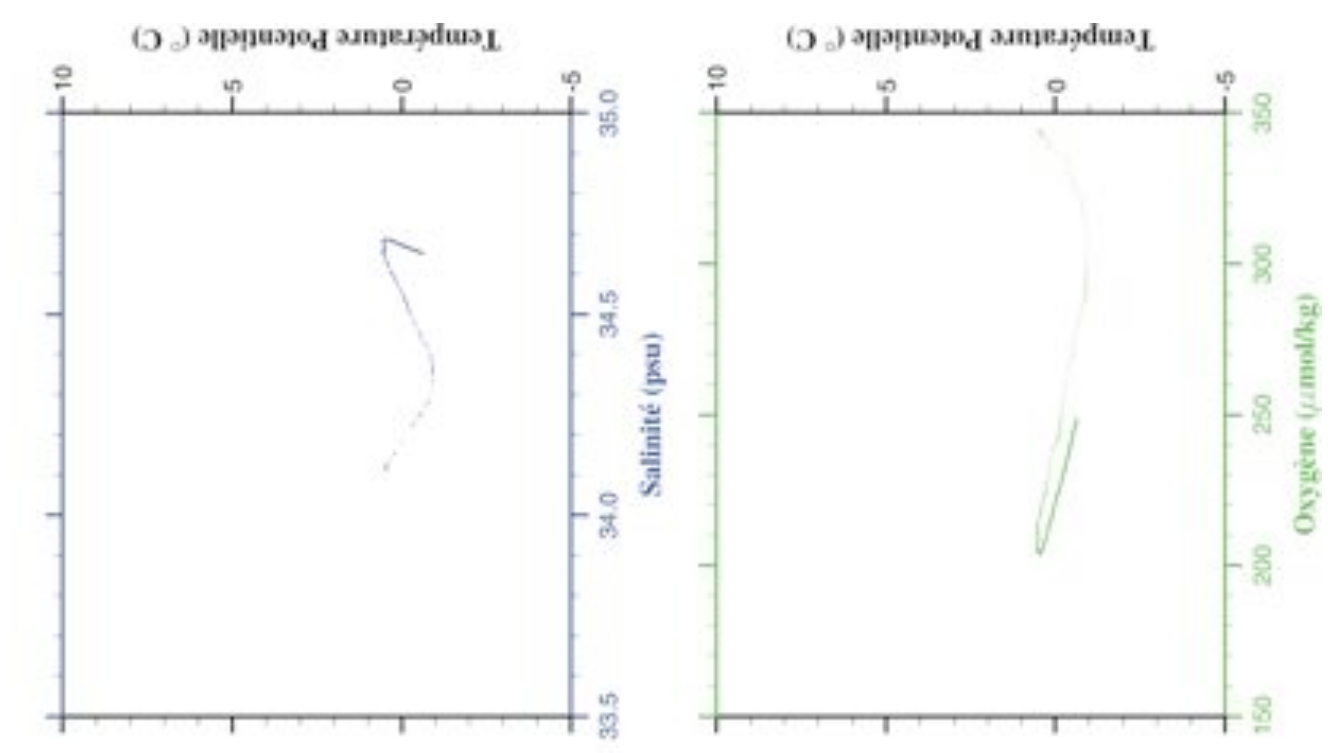
**STATION 103**

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| Station   : 104           Campagne  : GOODHOPE 2008 |
| Date      : 15-03-08    Navire    : R/V Marion Dufresne |
| Profondeur : 3867       Organisme  : IFREMER |
| Position  : S 56 45.73 |
|            W 0 0.86   |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.484	34.115	343.9	0.484	3050.0	-0.281	34.657	240.9	-0.462
10.0	0.483	34.115	344.3	0.483	3100.0	-0.282	34.656	241.3	-0.467
20.0	0.481	34.115	344.0	0.481	3150.0	-0.287	34.656	241.7	-0.477
30.0	0.483	34.115	344.0	0.482	3200.0	-0.300	34.656	242.5	-0.494
40.0	0.482	34.115	344.1	0.480	3250.0	-0.304	34.655	243.1	-0.502
50.0	0.484	34.115	344.2	0.482	3300.0	-0.303	34.655	243.3	-0.506
100.0	-0.531	34.251	324.3	-0.534	3350.0	-0.308	34.655	243.6	-0.514
150.0	-0.573	34.441	276.2	-0.577	3400.0	-0.315	34.654	244.2	-0.526
200.0	-0.052	34.542	241.0	-0.059	3450.0	-0.318	34.654	244.5	-0.533
250.0	0.413	34.622	220.7	0.403	3500.0	-0.319	34.654	244.7	-0.538
300.0	0.532	34.655	211.6	0.520	3550.0	-0.324	34.654	245.2	-0.548
350.0	0.527	34.668	208.7	0.512	3600.0	-0.327	34.653	245.4	-0.556
400.0	0.547	34.676	206.4	0.530	3650.0	-0.342	34.652	246.2	-0.575
450.0	0.559	34.681	205.2	0.539	3700.0	-0.349	34.652	246.8	-0.586
500.0	0.548	34.685	204.8	0.526	3750.0	-0.349	34.652	247.0	-0.591
550.0	0.533	34.685	204.3	0.509	3800.0	-0.349	34.651	247.3	-0.596
600.0	0.505	34.685	203.9	0.478	3850.0	-0.359	34.651	247.7	-0.611
650.0	0.481	34.686	204.1	0.452	3895.0	-0.368	34.651	248.4	-0.623
700.0	0.456	34.685	204.5	0.424					
750.0	0.439	34.685	205.2	0.405					
800.0	0.412	34.684	205.8	0.375					
850.0	0.385	34.684	207.1	0.346					
900.0	0.362	34.683	207.9	0.320					
950.0	0.341	34.682	208.3	0.297					
1000.0	0.304	34.681	209.8	0.258					
1050.0	0.288	34.680	211.0	0.238					
1100.0	0.257	34.679	213.0	0.205					
1150.0	0.231	34.678	214.0	0.177					
1200.0	0.208	34.677	214.6	0.151					
1250.0	0.180	34.676	215.7	0.120					
1300.0	0.166	34.675	216.7	0.103					
1350.0	0.143	34.674	217.9	0.077					
1400.0	0.122	34.674	218.9	0.054					
1450.0	0.105	34.673	219.7	0.034					
1500.0	0.076	34.672	221.1	0.002					
1550.0	0.059	34.671	221.9	-0.018					
1600.0	0.040	34.670	223.2	-0.039					
1650.0	0.029	34.670	223.9	-0.054					
1700.0	0.015	34.669	223.9	-0.070					
1750.0	-0.001	34.669	224.2	-0.090					
1800.0	-0.015	34.668	224.9	-0.107					
1850.0	-0.034	34.667	225.9	-0.129					
1900.0	-0.050	34.667	226.8	-0.148					
1950.0	-0.066	34.666	227.8	-0.167					
2000.0	-0.082	34.665	228.7	-0.187					
2050.0	-0.097	34.665	229.5	-0.205					
2100.0	-0.112	34.664	230.2	-0.223					
2150.0	-0.120	34.664	230.8	-0.235					
2200.0	-0.137	34.663	231.5	-0.255					
2250.0	-0.143	34.663	232.1	-0.264					
2300.0	-0.161	34.662	233.0	-0.286					
2350.0	-0.178	34.662	233.8	-0.305					
2400.0	-0.184	34.661	234.4	-0.315					
2450.0	-0.193	34.661	234.8	-0.328					
2500.0	-0.199	34.661	235.3	-0.337					
2550.0	-0.208	34.660	235.8	-0.350					
2600.0	-0.215	34.660	236.4	-0.361					
2650.0	-0.222	34.660	236.8	-0.372					
2700.0	-0.231	34.659	237.4	-0.384					
2750.0	-0.237	34.659	237.8	-0.394					
2800.0	-0.240	34.659	238.1	-0.401					
2850.0	-0.250	34.658	238.8	-0.415					
2900.0	-0.251	34.658	239.0	-0.421					
2950.0	-0.263	34.658	239.7	-0.436					
3000.0	-0.276	34.657	240.5	-0.453					



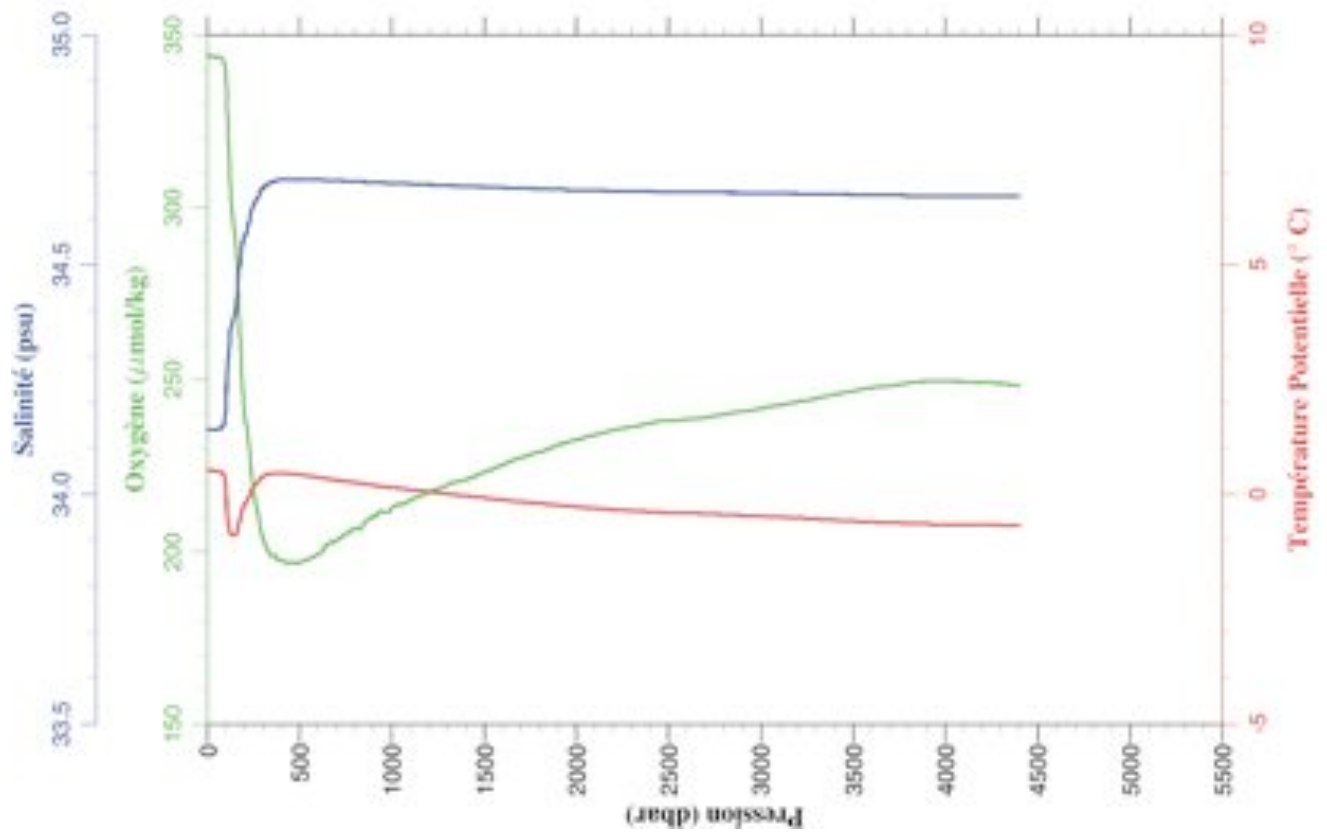
**STATION 104**

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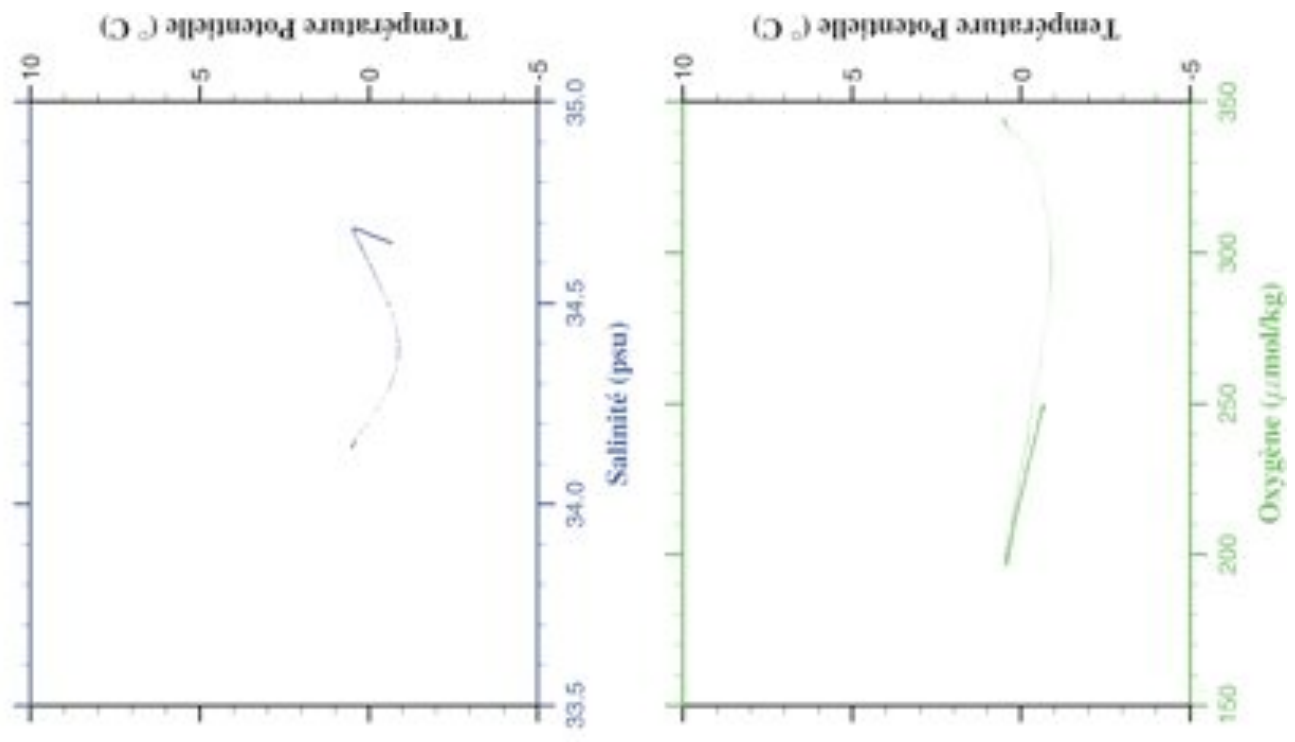
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| Station   : 105           Campagne  : GOODHOPE 2008 |
| Date     : 15-03-08     Navire    : R/V Marion Dufresne |
| Profondeur : 4364       Organisme  : IFREMER          |
| Position  : S 57 12.69  |
|            W 0 6.85     |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.516	34.141	344.3	0.516	3050.0	-0.307	34.656	242.2	-0.487
10.0	0.520	34.141	344.1	0.519	3100.0	-0.310	34.655	242.6	-0.495
20.0	0.518	34.141	343.8	0.518	3150.0	-0.318	34.655	243.0	-0.506
30.0	0.513	34.141	343.8	0.512	3200.0	-0.325	34.655	243.6	-0.518
40.0	0.512	34.141	343.7	0.511	3250.0	-0.327	34.654	243.9	-0.524
50.0	0.503	34.142	343.6	0.502	3300.0	-0.333	34.654	244.5	-0.534
100.0	0.129	34.193	338.7	0.126	3350.0	-0.344	34.654	245.1	-0.550
150.0	-0.876	34.392	291.9	-0.880	3400.0	-0.352	34.653	245.7	-0.562
200.0	-0.209	34.564	241.2	-0.216	3450.0	-0.356	34.653	246.2	-0.570
250.0	0.192	34.632	217.9	0.182	3500.0	-0.363	34.652	246.7	-0.581
300.0	0.389	34.665	204.3	0.377	3550.0	-0.371	34.652	247.3	-0.594
350.0	0.473	34.680	198.8	0.458	3600.0	-0.372	34.652	247.6	-0.600
400.0	0.481	34.685	197.5	0.464	3650.0	-0.376	34.651	248.0	-0.608
450.0	0.466	34.686	196.8	0.447	3700.0	-0.378	34.651	248.2	-0.615
500.0	0.451	34.684	196.9	0.429	3750.0	-0.383	34.651	248.6	-0.624
550.0	0.423	34.686	197.9	0.399	3800.0	-0.389	34.650	249.0	-0.634
600.0	0.398	34.685	199.2	0.372	3850.0	-0.391	34.650	249.3	-0.641
650.0	0.364	34.684	202.0	0.335	3900.0	-0.392	34.650	249.5	-0.647
700.0	0.341	34.683	203.2	0.310	3950.0	-0.392	34.649	249.6	-0.652
750.0	0.314	34.682	205.1	0.280	4000.0	-0.388	34.650	249.5	-0.653
800.0	0.292	34.681	206.9	0.256	4050.0	-0.385	34.649	249.5	-0.655
850.0	0.267	34.680	208.3	0.228	4100.0	-0.382	34.649	249.3	-0.657
900.0	0.240	34.679	210.3	0.199	4150.0	-0.380	34.649	249.2	-0.660
950.0	0.215	34.678	211.6	0.172	4200.0	-0.378	34.649	249.2	-0.663
1000.0	0.195	34.677	212.8	0.149	4250.0	-0.376	34.649	249.1	-0.666
1050.0	0.174	34.677	213.6	0.125	4300.0	-0.374	34.649	248.8	-0.669
1100.0	0.153	34.676	214.9	0.102	4350.0	-0.373	34.649	248.5	-0.673
1150.0	0.134	34.675	216.1	0.081	4400.0	-0.371	34.649	248.3	-0.677
1200.0	0.115	34.674	217.3	0.059					
1250.0	0.097	34.673	218.2	0.038					
1300.0	0.075	34.672	219.3	0.014					
1350.0	0.053	34.671	220.2	-0.012					
1400.0	0.037	34.671	220.9	-0.030					
1450.0	0.020	34.670	221.9	-0.050					
1500.0	-0.001	34.669	223.2	-0.074					
1550.0	-0.022	34.668	224.1	-0.098					
1600.0	-0.040	34.667	225.2	-0.119					
1650.0	-0.064	34.667	226.6	-0.145					
1700.0	-0.074	34.666	227.3	-0.159					
1750.0	-0.090	34.666	228.3	-0.177					
1800.0	-0.104	34.665	229.0	-0.194					
1850.0	-0.125	34.664	229.9	-0.218					
1900.0	-0.141	34.664	231.0	-0.238					
1950.0	-0.154	34.663	231.8	-0.254					
2000.0	-0.166	34.663	232.4	-0.269					
2050.0	-0.184	34.662	233.3	-0.290					
2100.0	-0.195	34.662	234.0	-0.305					
2150.0	-0.205	34.661	234.5	-0.318					
2200.0	-0.218	34.661	235.3	-0.334					
2250.0	-0.225	34.660	235.8	-0.344					
2300.0	-0.233	34.660	236.3	-0.356					
2350.0	-0.241	34.660	236.7	-0.367					
2400.0	-0.249	34.659	237.3	-0.380					
2450.0	-0.257	34.658	237.9	-0.391					
2500.0	-0.259	34.658	238.0	-0.397					
2550.0	-0.261	34.658	238.1	-0.402					
2600.0	-0.265	34.658	238.5	-0.410					
2650.0	-0.263	34.658	238.6	-0.412					
2700.0	-0.269	34.658	239.0	-0.422					
2750.0	-0.273	34.657	239.5	-0.430					
2800.0	-0.280	34.657	239.9	-0.440					
2850.0	-0.285	34.657	240.4	-0.449					
2900.0	-0.289	34.657	240.7	-0.458					
2950.0	-0.294	34.656	241.0	-0.467					
3000.0	-0.297	34.656	241.6	-0.473					



**STATION 105**

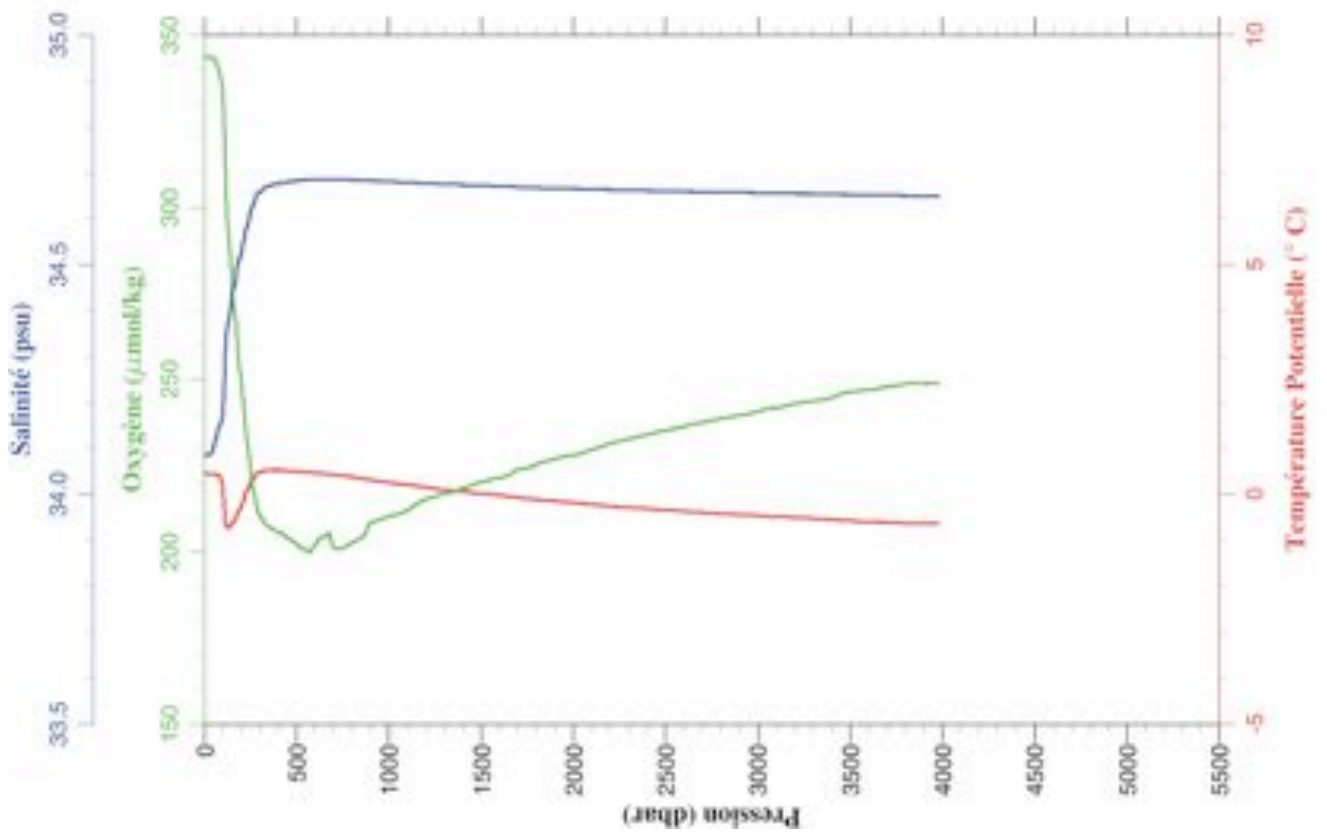


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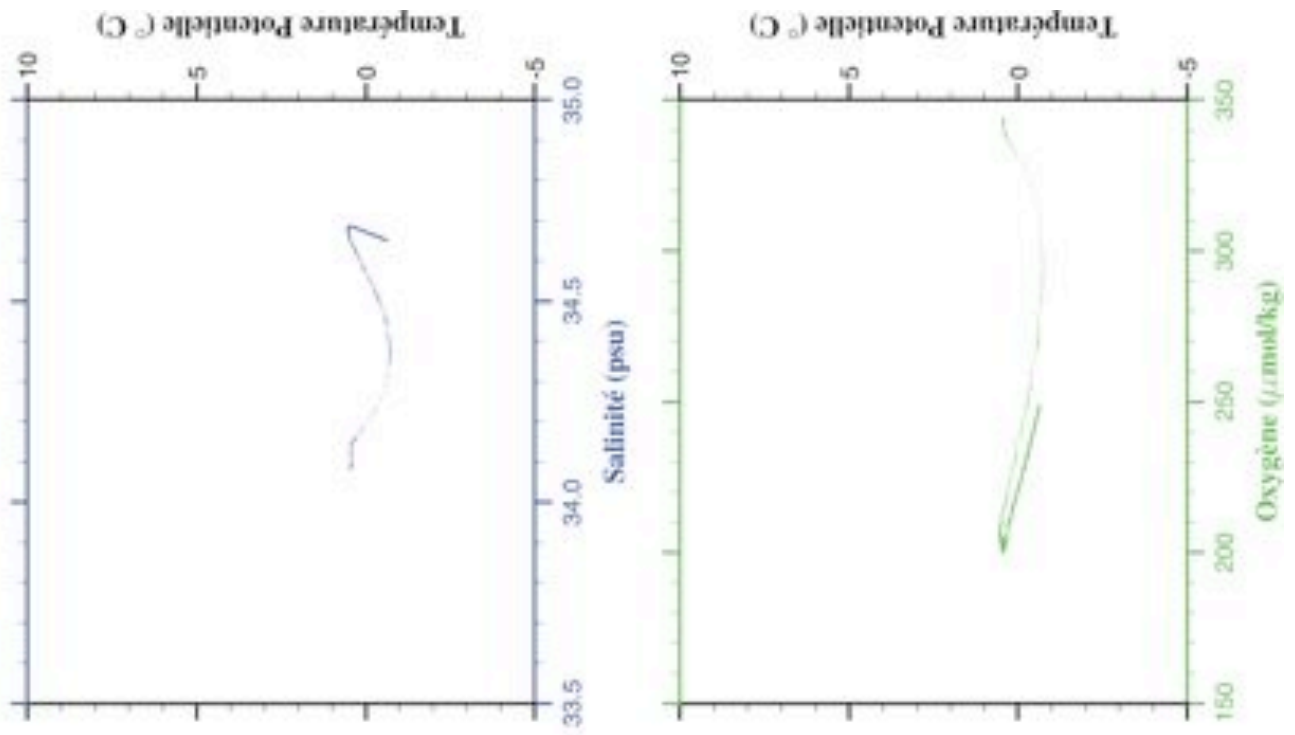
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| Station   : 106           Campagne  : GOODHOPE 2008 |
| Date      : 15-03-08     Navire    : R/V Marion Dufresne |
| Profondeur : 3932        Organisme : IFREMER          |
| Position  : S 57 33.14   |
|            W 0 2.26      |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.454	34.086	343.8	0.454	3050.0	-0.297	34.656	241.6	-0.478
10.0	0.452	34.086	343.4	0.451	3100.0	-0.295	34.656	241.8	-0.480
20.0	0.443	34.087	343.5	0.442	3150.0	-0.307	34.655	242.4	-0.496
30.0	0.442	34.088	343.5	0.440	3200.0	-0.316	34.655	243.1	-0.509
40.0	0.434	34.090	343.4	0.432	3250.0	-0.319	34.654	243.5	-0.516
50.0	0.445	34.103	343.2	0.443	3300.0	-0.322	34.654	243.7	-0.523
100.0	0.117	34.181	333.0	0.113	3350.0	-0.326	34.654	244.2	-0.532
150.0	-0.591	34.441	277.7	-0.596	3400.0	-0.336	34.654	244.7	-0.546
200.0	-0.265	34.526	249.5	-0.272	3450.0	-0.356	34.653	245.9	-0.570
250.0	0.261	34.615	223.5	0.251	3500.0	-0.362	34.653	246.4	-0.581
300.0	0.501	34.658	210.5	0.488	3550.0	-0.363	34.652	246.7	-0.586
350.0	0.544	34.671	207.2	0.529	3600.0	-0.363	34.652	247.0	-0.590
400.0	0.528	34.675	205.5	0.510	3650.0	-0.369	34.652	247.3	-0.601
450.0	0.531	34.680	203.9	0.511	3700.0	-0.375	34.651	247.8	-0.611
500.0	0.515	34.682	202.1	0.493	3750.0	-0.378	34.651	248.4	-0.619
550.0	0.506	34.685	200.5	0.482	3800.0	-0.387	34.650	248.7	-0.633
600.0	0.494	34.685	201.8	0.467	3850.0	-0.385	34.650	248.9	-0.635
650.0	0.478	34.686	204.7	0.448	3900.0	-0.381	34.650	248.9	-0.636
700.0	0.462	34.685	201.1	0.430	3950.0	-0.376	34.650	249.0	-0.636
750.0	0.443	34.685	200.9	0.409	3979.0	-0.373	34.650	248.8	-0.636
800.0	0.415	34.684	202.7	0.378					
850.0	0.382	34.684	204.2	0.343					
900.0	0.357	34.683	208.2	0.315					
950.0	0.335	34.682	209.3	0.290					
1000.0	0.302	34.681	210.2	0.256					
1050.0	0.282	34.680	210.9	0.232					
1100.0	0.265	34.679	212.0	0.213					
1150.0	0.240	34.678	213.8	0.185					
1200.0	0.214	34.677	215.2	0.156					
1250.0	0.185	34.676	215.9	0.126					
1300.0	0.165	34.675	216.8	0.102					
1350.0	0.149	34.675	217.4	0.084					
1400.0	0.130	34.674	218.5	0.062					
1450.0	0.108	34.673	219.3	0.037					
1500.0	0.095	34.672	220.2	0.021					
1550.0	0.078	34.672	220.8	0.001					
1600.0	0.061	34.671	221.5	-0.019					
1650.0	0.042	34.670	222.2	-0.041					
1700.0	0.012	34.669	223.9	-0.074					
1750.0	-0.001	34.669	224.3	-0.089					
1800.0	-0.017	34.668	225.4	-0.109					
1850.0	-0.035	34.667	226.4	-0.130					
1900.0	-0.047	34.667	227.0	-0.145					
1950.0	-0.062	34.666	227.6	-0.163					
2000.0	-0.078	34.665	228.2	-0.182					
2050.0	-0.091	34.665	228.8	-0.199					
2100.0	-0.108	34.664	229.6	-0.219					
2150.0	-0.124	34.663	230.6	-0.239					
2200.0	-0.139	34.663	231.4	-0.257					
2250.0	-0.150	34.663	232.0	-0.271					
2300.0	-0.162	34.662	232.8	-0.287					
2350.0	-0.173	34.662	233.4	-0.301					
2400.0	-0.182	34.661	234.0	-0.313					
2450.0	-0.196	34.661	234.7	-0.331					
2500.0	-0.203	34.660	235.2	-0.342					
2550.0	-0.212	34.660	235.7	-0.354					
2600.0	-0.222	34.659	236.3	-0.367					
2650.0	-0.235	34.659	237.2	-0.384					
2700.0	-0.240	34.659	237.6	-0.393					
2750.0	-0.250	34.658	238.1	-0.407					
2800.0	-0.262	34.658	238.8	-0.423					
2850.0	-0.262	34.658	239.0	-0.427					
2900.0	-0.270	34.657	239.6	-0.439					
2950.0	-0.273	34.657	240.0	-0.446					
3000.0	-0.283	34.656	240.7	-0.460					



**STATION 106**



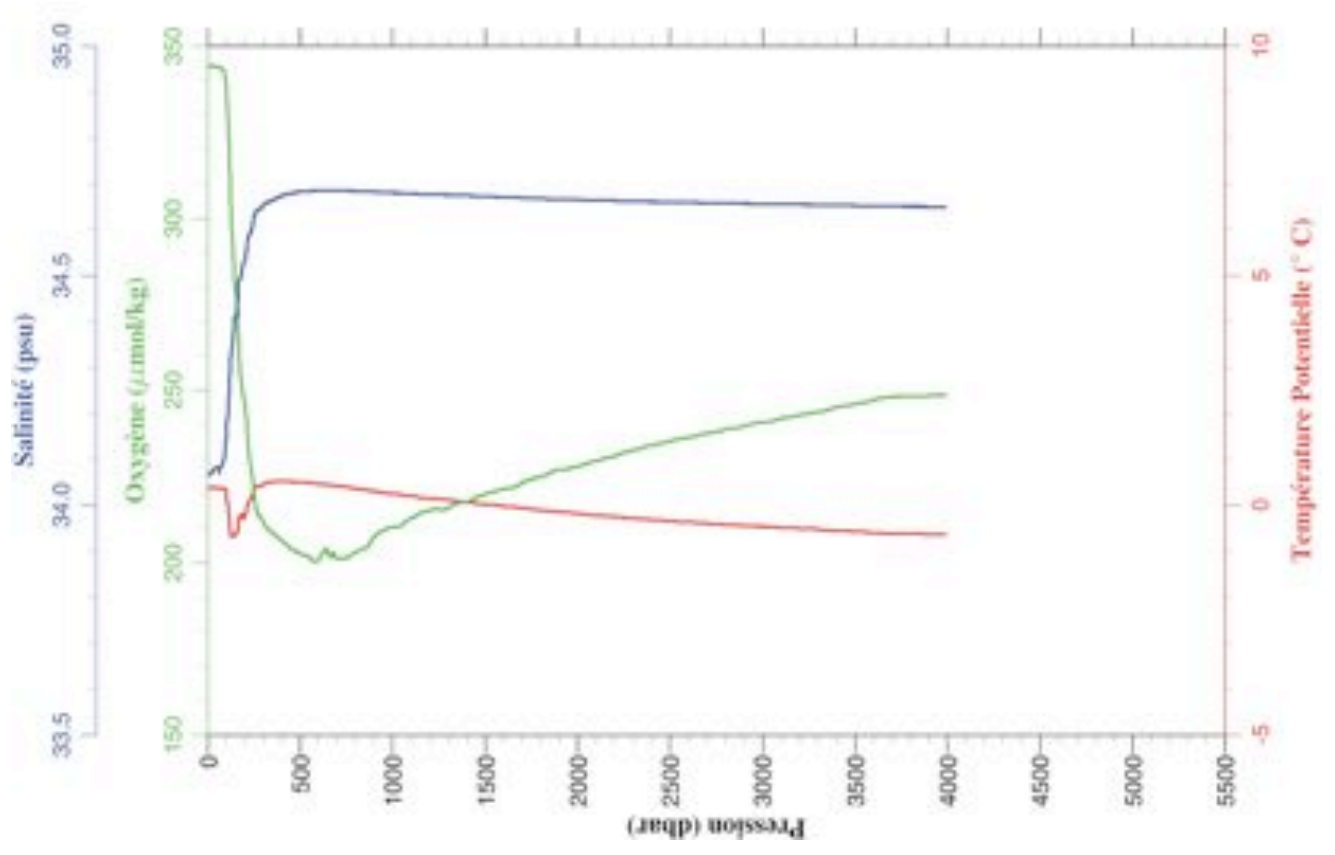
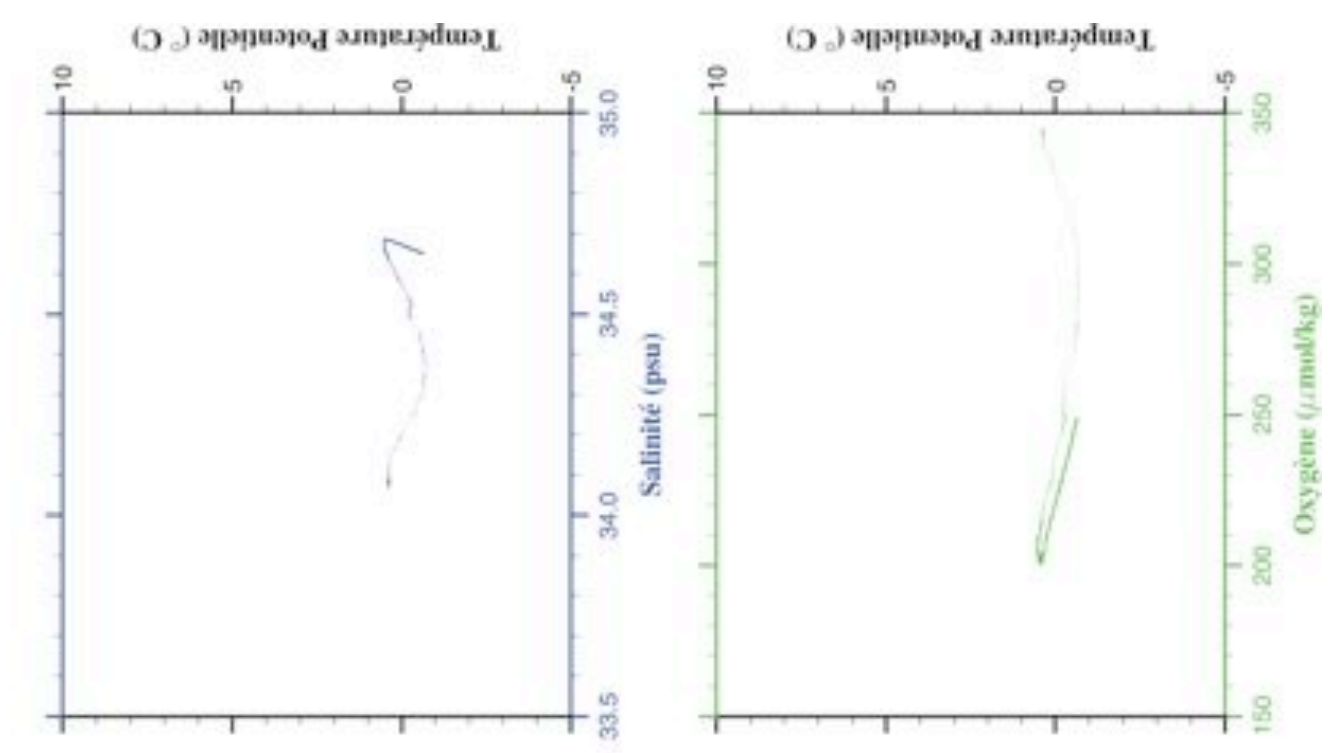
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| Station   : 107           Campagne  : GOODHOPE 2008 |
| Date      : 16-03-08     Navire    : R/V Marion Dufresne |
| Profondeur : 3932        Organisme  : IFREMER |
| Position  : S 57 33.15   |
|            W 0 2.19     |
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PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.	PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.	dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.382	34.068	344.0	0.382	3050.0	-0.285	34.656	241.1	-0.467
10.0	0.381	34.068	344.2	0.381	3100.0	-0.301	34.656	242.0	-0.486
20.0	0.386	34.070	344.2	0.385	3150.0	-0.304	34.655	242.4	-0.493
30.0	0.398	34.078	344.1	0.397	3200.0	-0.309	34.655	242.8	-0.502
40.0	0.386	34.080	344.1	0.385	3250.0	-0.315	34.655	243.4	-0.513
50.0	0.374	34.082	344.0	0.372	3300.0	-0.319	34.654	243.8	-0.521
100.0	0.214	34.166	336.7	0.210	3350.0	-0.329	34.654	244.3	-0.534
150.0	-0.622	34.409	279.1	-0.626	3400.0	-0.342	34.654	245.2	-0.552
200.0	-0.218	34.534	246.3	-0.225	3450.0	-0.344	34.653	245.6	-0.558
250.0	0.363	34.630	220.1	0.353	3500.0	-0.351	34.653	246.0	-0.570
300.0	0.468	34.652	211.7	0.455	3550.0	-0.359	34.652	246.6	-0.582
350.0	0.527	34.664	208.8	0.512	3600.0	-0.367	34.652	247.2	-0.595
400.0	0.546	34.674	206.4	0.529	3650.0	-0.375	34.651	247.8	-0.607
450.0	0.533	34.679	204.1	0.513	3700.0	-0.380	34.651	248.2	-0.616
500.0	0.524	34.682	202.6	0.502	3750.0	-0.378	34.651	248.4	-0.619
550.0	0.512	34.684	201.6	0.488	3800.0	-0.376	34.651	248.4	-0.622
600.0	0.495	34.685	200.9	0.468	3850.0	-0.373	34.650	248.4	-0.623
650.0	0.477	34.685	202.9	0.448	3900.0	-0.374	34.650	248.5	-0.630
700.0	0.454	34.685	201.1	0.422	3950.0	-0.372	34.650	248.6	-0.632
750.0	0.434	34.685	201.3	0.400	3988.0	-0.372	34.650	248.7	-0.636
800.0	0.403	34.684	203.1	0.366					
850.0	0.377	34.683	204.2	0.338					
900.0	0.353	34.682	207.5	0.311					
950.0	0.318	34.681	209.3	0.273					
1000.0	0.294	34.680	210.3	0.248					
1050.0	0.276	34.680	210.8	0.226					
1100.0	0.253	34.679	213.0	0.201					
1150.0	0.224	34.677	214.4	0.170					
1200.0	0.211	34.677	215.2	0.154					
1250.0	0.195	34.676	215.5	0.135					
1300.0	0.183	34.676	215.9	0.120					
1350.0	0.161	34.675	217.2	0.095					
1400.0	0.142	34.674	217.7	0.074					
1450.0	0.114	34.673	219.0	0.043					
1500.0	0.096	34.672	219.9	0.022					
1550.0	0.085	34.672	220.7	0.008					
1600.0	0.063	34.671	221.5	-0.017					
1650.0	0.056	34.670	221.7	-0.027					
1700.0	0.022	34.669	223.3	-0.064					
1750.0	0.006	34.669	224.3	-0.083					
1800.0	-0.012	34.668	224.9	-0.104					
1850.0	-0.034	34.667	226.2	-0.128					
1900.0	-0.042	34.667	226.9	-0.140					
1950.0	-0.053	34.666	227.3	-0.154					
2000.0	-0.073	34.665	228.0	-0.178					
2050.0	-0.092	34.665	228.8	-0.199					
2100.0	-0.104	34.664	229.5	-0.215					
2150.0	-0.119	34.664	230.4	-0.234					
2200.0	-0.129	34.663	231.0	-0.247					
2250.0	-0.146	34.663	232.0	-0.267					
2300.0	-0.156	34.662	232.6	-0.280					
2350.0	-0.173	34.661	233.4	-0.301					
2400.0	-0.182	34.661	234.0	-0.313					
2450.0	-0.194	34.660	234.7	-0.329					
2500.0	-0.207	34.660	235.4	-0.346					
2550.0	-0.216	34.660	236.0	-0.358					
2600.0	-0.221	34.660	236.4	-0.367					
2650.0	-0.234	34.659	237.1	-0.384					
2700.0	-0.240	34.659	237.6	-0.394					
2750.0	-0.246	34.658	238.0	-0.403					
2800.0	-0.259	34.658	238.8	-0.420					
2850.0	-0.262	34.657	239.2	-0.427					
2900.0	-0.272	34.657	239.7	-0.441					
2950.0	-0.282	34.657	240.4	-0.455					
3000.0	-0.280	34.656	240.8	-0.457					

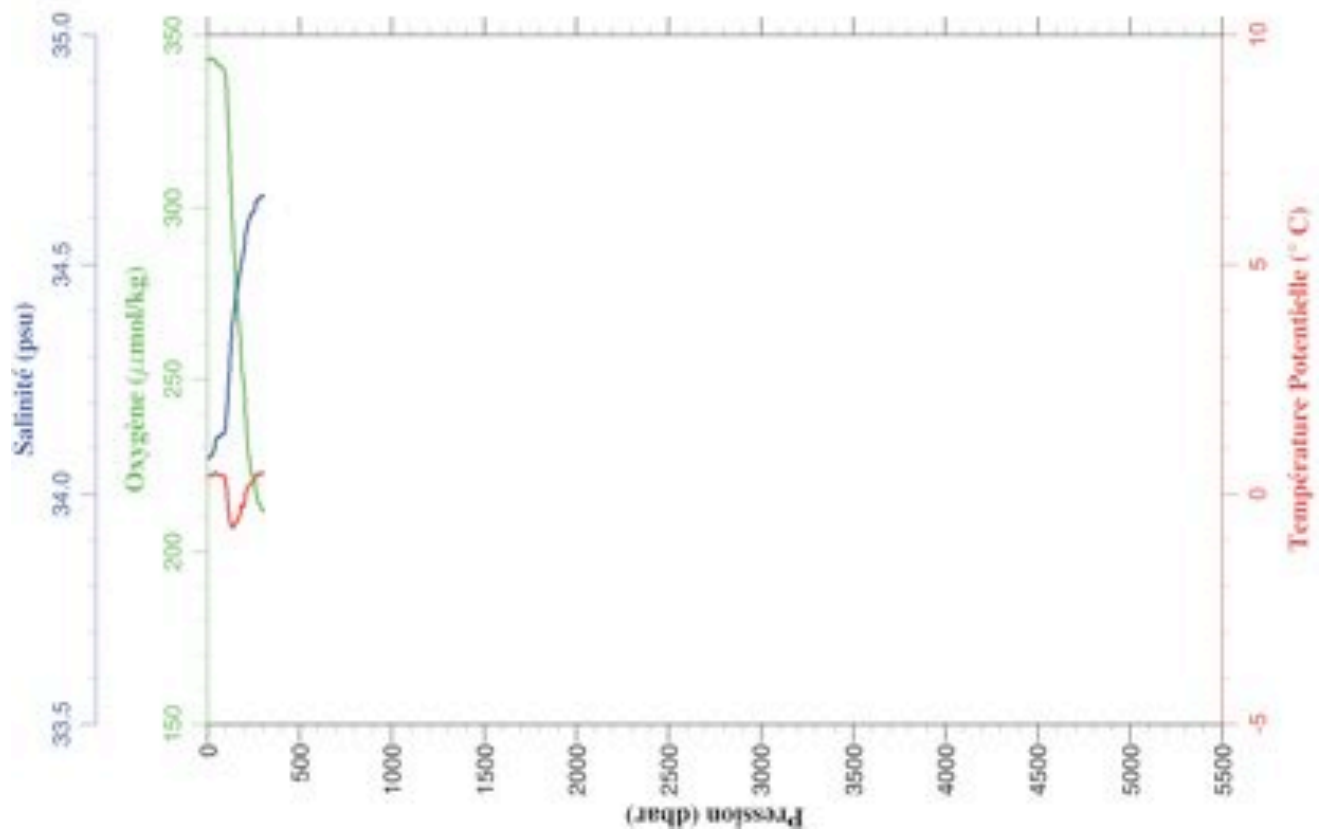




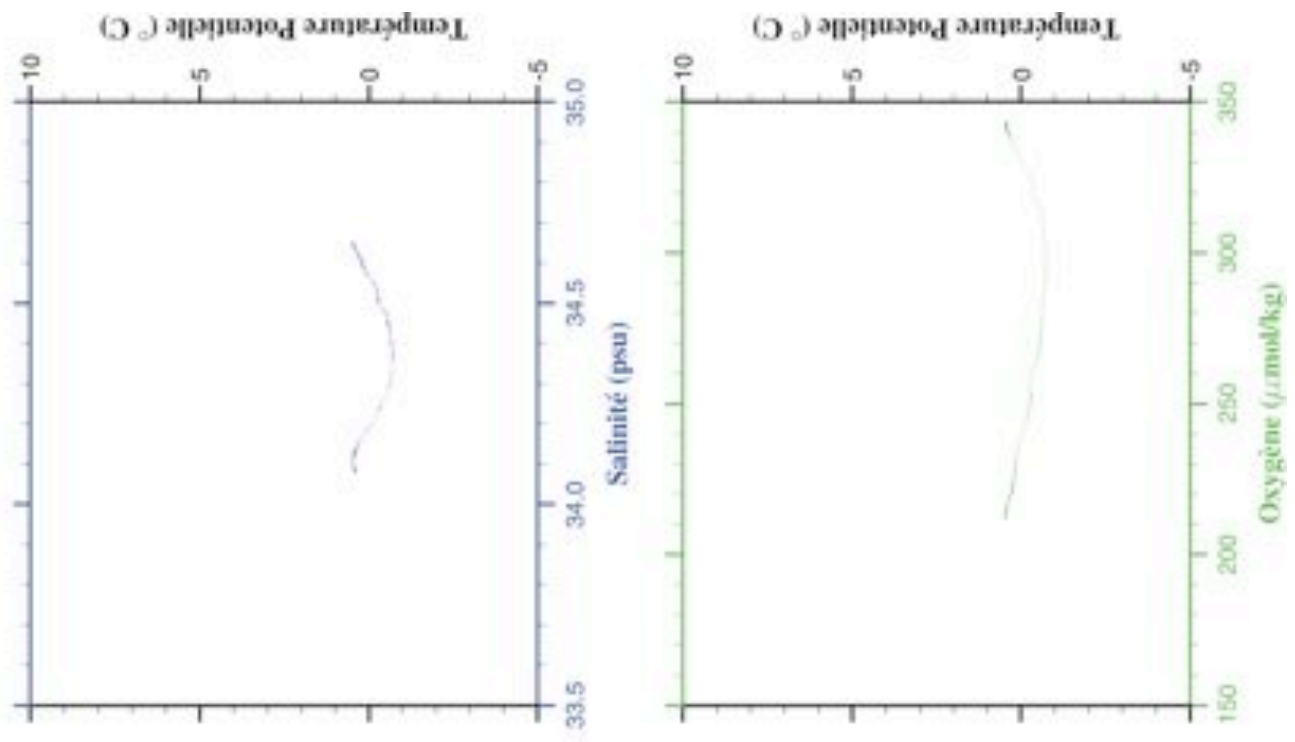
**STATION 107**

Station	: 108	Campagne	: GOODHOPE 2008
Date	: 16-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 3940	Organisme	: IFREMER
Position	: S 57 33.16		
	W 0 2.26		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.407	34.080	342.7	0.407
10.0	0.408	34.081	343.1	0.408
20.0	0.417	34.084	343.1	0.416
30.0	0.429	34.087	342.9	0.428
40.0	0.476	34.106	342.5	0.474
50.0	0.443	34.122	341.7	0.441
100.0	0.297	34.153	337.1	0.293
150.0	-0.628	34.413	282.0	-0.632
200.0	-0.197	34.540	246.6	-0.204
250.0	0.299	34.617	220.9	0.289
300.0	0.475	34.649	212.1	0.462
304.0	0.472	34.650	211.8	0.459



**STATION 108**

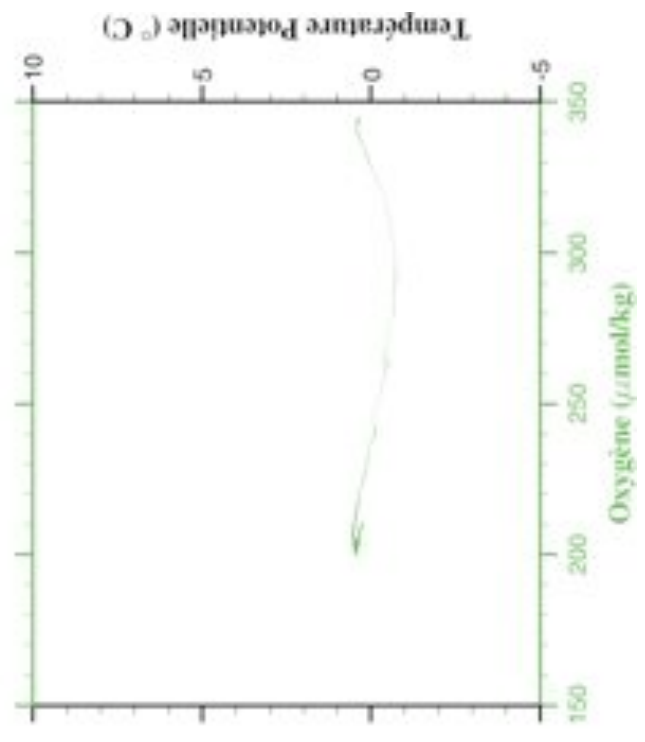
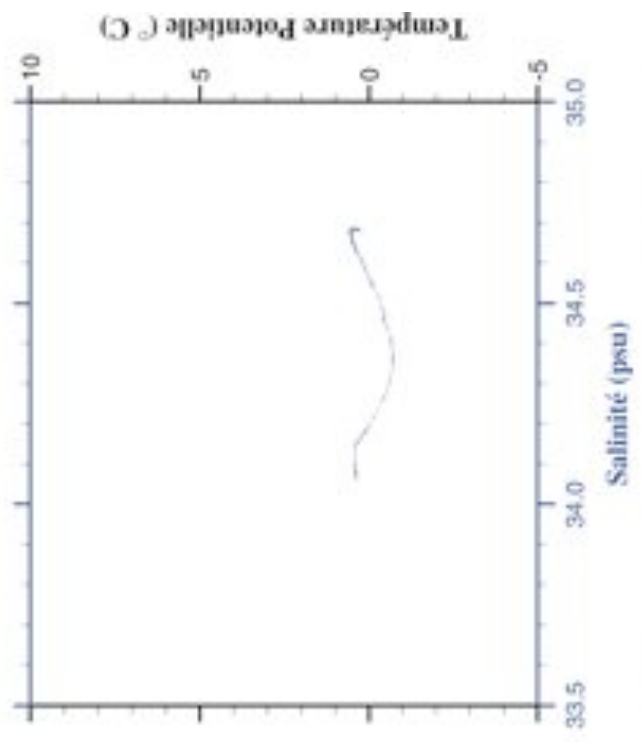
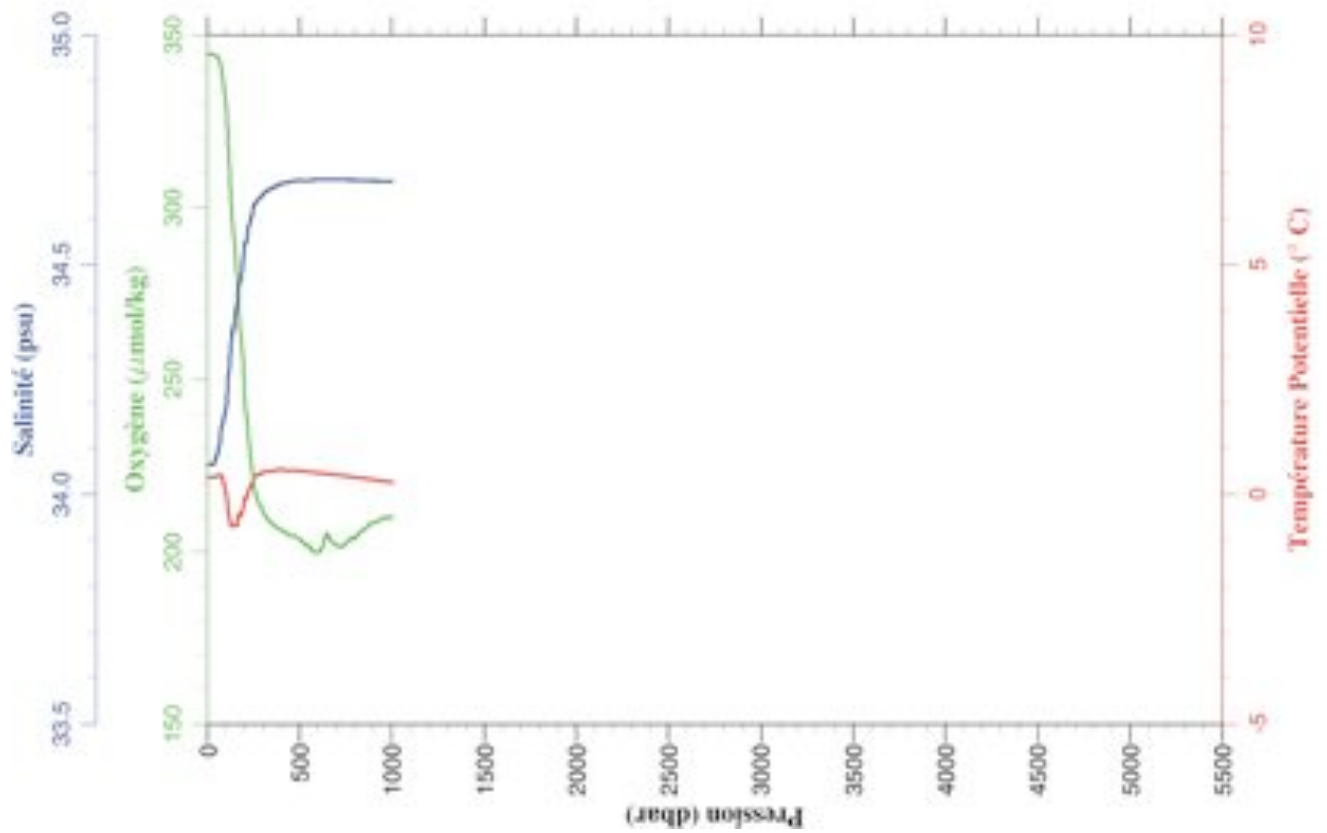


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| Station   : 109           Campagne  : GOODHOPE 2008 |
| Date      : 16-03-08     Navire    : R/V Marion Dufresne |
| Profondeur : 3940        Organisme : IFREMER          |
| Position  : S 57 33.15   |
|           : W 0 2.28     |
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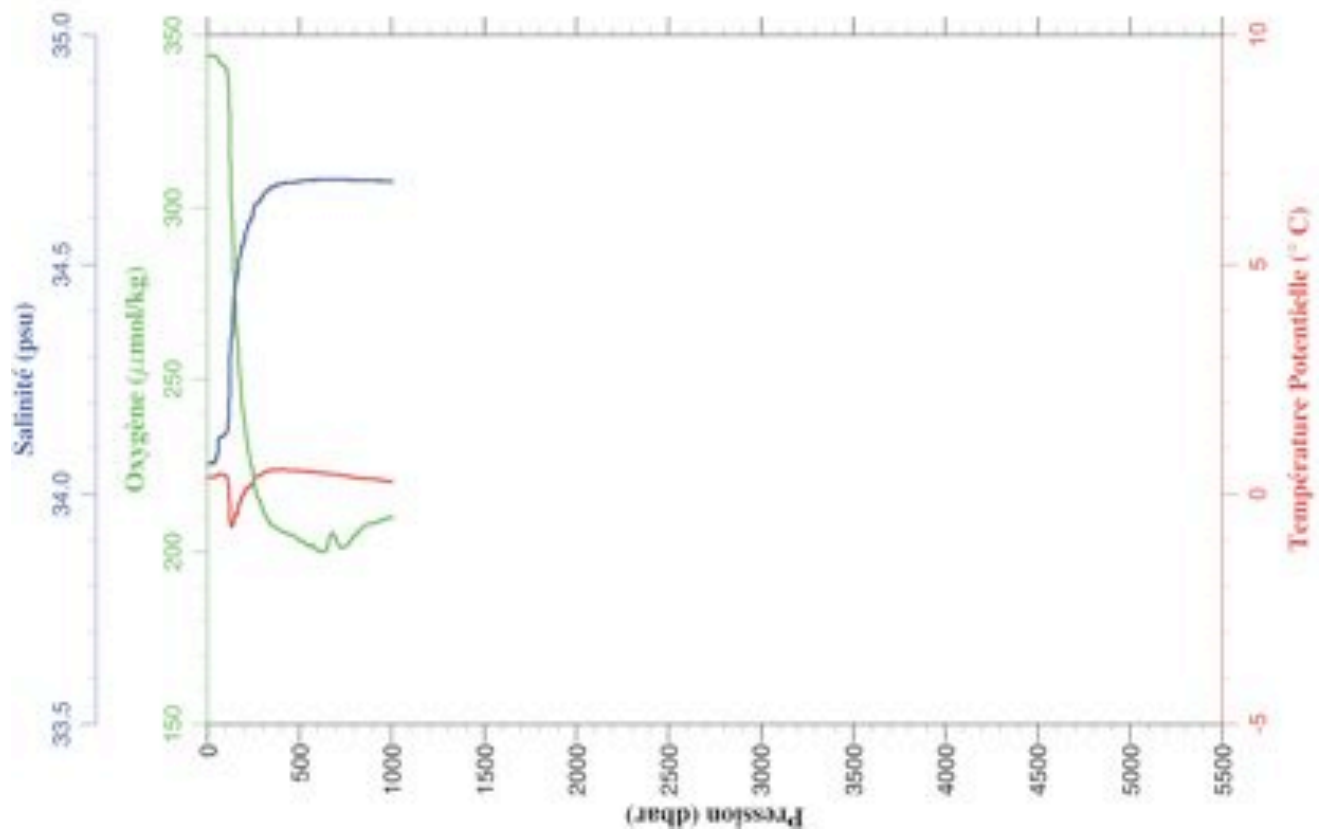
PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.370	34.066	344.3	0.370
10.0	0.369	34.065	344.6	0.369
20.0	0.369	34.065	344.4	0.369
30.0	0.372	34.066	344.4	0.371
40.0	0.382	34.071	344.1	0.380
50.0	0.393	34.084	343.7	0.391
100.0	0.064	34.185	329.9	0.061
150.0	-0.676	34.391	288.0	-0.680
200.0	-0.096	34.542	247.4	-0.103
250.0	0.369	34.627	220.0	0.359
300.0	0.486	34.652	211.9	0.473
350.0	0.520	34.666	208.3	0.505
400.0	0.560	34.676	206.4	0.543
450.0	0.545	34.680	204.6	0.525
500.0	0.534	34.683	203.6	0.512
550.0	0.514	34.684	201.7	0.490
600.0	0.494	34.685	199.9	0.467
650.0	0.470	34.685	205.3	0.441
700.0	0.452	34.685	201.7	0.420
750.0	0.430	34.685	202.6	0.396
800.0	0.414	34.684	203.6	0.377
850.0	0.387	34.683	206.5	0.348
900.0	0.357	34.682	208.5	0.315
950.0	0.332	34.682	209.8	0.288
1000.0	0.308	34.681	210.1	0.261
1004.0	0.306	34.680	210.2	0.260



**STATION 109**

Station	: 110	Campagne	: GOODHOPE 2008
Date	: 16-03-08	Navire	: R/V Marion Dufresne
Profondeur	: 3950	Organisme	: IFREMER
Position	: S 57 33.15		
	W 0 2.26		

PRESSION	TEMPERA- TURE	SALINITE	OXYGENE DISSOUS	TEMP. POTENT.
dbar	deg.cels.	psu	umol/kg	deg.cels.
1.0	0.373	34.068	343.8	0.373
10.0	0.371	34.067	343.8	0.371
20.0	0.372	34.068	344.0	0.371
30.0	0.381	34.071	344.0	0.380
40.0	0.381	34.071	344.0	0.380
50.0	0.408	34.083	343.7	0.406
100.0	0.416	34.131	340.5	0.412
150.0	-0.465	34.444	273.1	-0.470
200.0	0.027	34.554	238.1	0.019
250.0	0.315	34.618	221.7	0.305
300.0	0.472	34.650	212.3	0.460
350.0	0.546	34.668	207.8	0.531
400.0	0.556	34.677	206.0	0.538
450.0	0.547	34.679	205.0	0.527
500.0	0.533	34.681	203.3	0.511
550.0	0.516	34.683	201.6	0.491
600.0	0.501	34.684	200.3	0.475
650.0	0.484	34.685	201.4	0.454
700.0	0.467	34.685	203.1	0.435
750.0	0.434	34.685	201.5	0.400
800.0	0.402	34.684	205.0	0.366
850.0	0.379	34.683	207.5	0.340
900.0	0.371	34.683	208.3	0.330
950.0	0.347	34.682	209.1	0.302
1000.0	0.323	34.681	209.9	0.276
1003.0	0.322	34.681	210.0	0.275



**STATION 110**

