

「かいよう」 KY97-09 Leg1 水温・塩分・深度計 (CTD)

最終更新日: 2013-01-25

ReadMe 観測データ

航海番号: KY97-09 Leg1

水温・塩分・深度計 (CTD): Processed (PI)

データポリシー: JAMSTEC

観測データ項目: 圧力, 水温, 塩分, 溶存酸素

サイエンスキーワード:

海洋 > 海洋化学 > 酸素

海洋 > 海水温 > 水温

海洋 > 塩分/密度 > 塩分

クルーズレポート

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/KY97-09_all.pdf

① データのご利用にあたって

データ責任者

Temperature: 柏野 祐二 (海洋科学技術センター)

Salinity: 柏野 祐二 (海洋科学技術センター)

データの利用制限

データ利用の制限については [注意事項](#) をご参照ください。

引用方法

データの引用については [注意事項](#) をご参照ください。

概要

Please see the [cruise report](#)(PDF file) for details of data.

Readme for CTD data

Nov.30, 2005
by Yuji Kashino

Sea-Bird Electronics CTD (SBE9/11) and a winch (Tsurumi Seiki Co. Ltd.) with a 10.6mm armored cable was used during the cruises. The CTD casts were usually carried out from sea surface to 1,000m depth at descent rates of 1 m/s to 1.5 m/s and a sampling rate of 24 Hz. On each cast, we stopped a CTD fish at around 10 m depth until the CTD pump could be activated in order to remove air bubbles in the T-C sensor of the CTD.

Two temperature sensors, two conductivity sensors, and one dissolved oxygen sensor were installed in the CTD. We usually processed the data from primary temperature and conductivity sensors.

The sensor calibrations were performed before and after cruises. Temperature and conductivity sensors were calibrated by the manufacturer (Sea-Bird Electronics Inc.), and pressure sensors by technicians of Nippon Marine Enterprise Co Ltd. or Marine Works Japan Ltd. The calibration results suggested that sensor drifts were less than the accuracy required for this project (temperature, 0.01K; salinity, 0.01PSU; pressure, 1dbar). Therefore, we do not correct sensor drift. We just removed large noise and created a 1 dbar-averaged data set. We also checked conductivity sensor performance using Autosal during the cruises.

Although the dissolved oxygen sensor had been calibrated annually by the manufacturer, its data had large errors. We think that we may be able to use CTD DO data if we correct it using DO values from adequately sampled water. Therefore, we do not correct CTD DO values and just flag the non-calibrated data as questionable.

Data format is almost the same as that defined in the WOCE Hydrographic Programme (WHP) considering data processing as follows:

1st line:

Expedition designation (country code(49), ship code(XK), cruise/leg designation), line name and date(month/day/year).

format(9x,a10,12x,a5,6x,3i2)

2nd line:

Station number and the number of records.

format(7x,i3,12x,i5)

3rd line:

date(day/month/year), time(hour/minute) and location(latitude/longitude, N/S: North/South, E/W: East/West).

format(i2,1x,a3,1x,i4,1x,i2,1x,i2,2x,i2,1x,f5.2,1x,a1,1x,i3,1x,f5.1,1x,a1)

4th line:

Headers for data columns.

5th line:

Units headers for data columns.

Pressure: deci-bar,

Temperature: degree (ITS-90),

Salinity: Practical Salinity Unit,

Dissolved oxygen: Milli-liter/liter

6th line:

Separation

7th line-End of file:

Data lines (pressure, in-situ temperature, salinity and dissolved oxygen). Pressure interval is one deci-bar. Numbers of observation are -9.

Data flag are always as follows:

Pressure: 2 (acceptable measurement)

Temperature: 2

Salinity: 2

Oxygen: 1 (non-calibrated)

format(f8.1,2f8.3,f8.2)

Following is a sample FORTRAN program.

```
-----  
c  
c Sample program  
c  
character expocode*10,lineid*5,NS*1,EW*2,cmonth*3,dummy*48  
dimension p(5000),t(5000),s(5000),o(5000)  
c  
open(10,file='F:TOCSKy0111CTDK0111001.CTD',status='old')  
c  
read(10,101) expocode,lineid,imo,idy,iyr  
101 format(9x,a10,12x,a5,6x,3i2)  
write(6,201) expocode,lineid,imo,idy,iyr  
201 format('EXPOCODE='a10,1x,'Line id='a5,1x,'Date='j2,'/',i2,'/',i2)  
c  
read(10,102) istnibr,irec  
102 format(7x,i3,12x,i5)  
write(6,202) istnibr,irec  
202 format('Stn No.=',i3,1x,'No of records=',i5)  
c  
read(10,103) idy,cmon,iyr,ihr,imi,ilat,flat,NS,ilon,flon,EW  
103 format(j2,1x,a3,1x,i4,1x,i2,1x,i2,2x,j2,1x,f5.2,1x,a1,1x,i3,  
@ 1x,f5.1,1x,a1)  
write(6,203) idy,cmon,iyr,ihr,imi,ilat,flat,NS,ilon,flon,EW  
203 format('Date='j2,'/',a3,'/',i4,1x,'Time='i2,':',i2,1x,  
@ 'Lat='j3,'-',f5.2,a1,1x,'Lon='j3,'-',f5.2,a1)  
c  
read(10,'(a)') dummy  
read(10,'(a)') dummy  
read(10,'(a)') dummy  
c  
do 10 n=1,irec  
read(10,104) p(n),t(n),s(n),o(n)  
104 format(f8.1,2f8.3,f8.2)  
if( n.eq.1 .or. n.eq.irec ) then  
write(6,204) p(n),t(n),s(n),o(n)  
204 format('P=',f8.1,1x,'T=',f8.3,1x,'S=',f8.3,1x,'O=',f8.2)  
endif  
10 continue  
close(10)  
stop  
end  
-----
```

その他

品質管理フラグ

Quality flags definitions for CTD/XCTD data

Byte Value	Definition
1	Not calibrated with water samples.
2	Acceptable measurement.
3	Quwstionable measurement.
4	Bad measurement.
5	Not reported.
6	Interpolated value.
7 - 8	Not assigned for CTD/XCTD data.
9	Not sampled.

Each CTD/XCTD parameter has two quality bytes, or flags, associated with it in two separate quality words. The definitions apply both to the analyst and the DQE quality words.

関連情報



KY97-09 Leg1

船舶名: かいよう
期間: 1997-08-03 - 1997-08-15
主席/首席: 米山 邦夫 (海洋科学技術センター)

更新履歴

2013-01-25 観測データを登録しました。

JAMSTEC
サイトポリシー
個人情報保護について
オフラインデータとサンブ
ルの利用申請
データポリシー

一覧
公表成果一覧
公開情報件数
データを探す
地図検索
データツリー

船舶の紹介
なつしま
かいよう
よこすか
みらい
かいいい

潜水船の紹介
かいこう
しんかい2000
しんかい6500
ディープ・トウ
ハイバードルフィン

航海情報へ

航海番号:

Go

潜航情報へ

更新情報
サイト更新履歴
フィード一覧

詳細検索

ちきゅう
かいめい
新青丸
白鳳丸

うらしま
よこすかディープ・トウ
6Kカメラディープ・トウ
6Kソーナーディープ・トウ
KM-ROV
シェル型パワーグラブ
爪型パワーグラブ
海底設置型掘削装置

潜航番号:

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JAMSTEC

国立研究開発法人
海洋研究開発機構

JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

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format(i2,1x,a3,1x,i4,1x,i2,1x,i2,2x,i2,1x,f5.2,1x,a1,1x,i3,1x,f5.1,1x,a1)

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@ 1x,f5.1,1x,a1)  
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203 format('Date='j2,'/',a3,'/',i4,1x,'Time='i2,':',i2,1x,  
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船舶名: かいよう
期間: 1997-08-03 - 1997-08-15
主席/首席: 米山 邦夫 (海洋科学技術センター)

更新履歴

2013-01-25 観測データを登録しました。

更新情報
サイト更新履歴
フィード一覧

詳細検索

ちきゅう
かいめい
新青丸
白鳳丸

うらしま
よこすかディープ・トウ
6Kカメラディープ・トウ
6Kソーナーディープ・トウ
KM-ROV
シェル型パワーグラブ
爪型パワーグラブ
海底設置型掘削装置

潜航番号:

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国立研究開発法人
海洋研究開発機構
JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

「かいよう」 KY97-09 Leg1 水温・塩分・深度計 (CTD)

最終更新日: 2013-01-25

ReadMe **観測データ**

航海番号: **KY97-09 Leg1**
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 データポリシー: **JAMSTEC**
 観測データ項目: 圧力, 水温, 塩分, 溶存酸素
 サイエンスキーワード:
 海洋 > 海洋化学 > 酸素
 海洋 > 海水温 > 水温
 海洋 > 塩分/密度 > 塩分

観測位置



— ... 測線 — ... 航跡 ● ... 観測点、潜航点、据拠点

Imagery reproduced from ...

データリスト

バスケットに追加

ファイル名
<input type="checkbox"/> K9709001.CTD
<input type="checkbox"/> K9709002.CTD
<input type="checkbox"/> K9709003.CTD
<input type="checkbox"/> K9709004.CTD
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<input type="checkbox"/> K9709017.CTD
<input type="checkbox"/> K9709018.CTD
<input type="checkbox"/> K9709019.CTD
<input type="checkbox"/> K9709020.CTD
<input type="checkbox"/> K9709021.CTD
<input type="checkbox"/> K9709022.CTD
<input type="checkbox"/> KY97-09_leg1.sum

関連情報



KY97-09 Leg1
 船舶名: かいよう
 期間: 1997-08-03 - 1997-08-15
 主席/首席: 米山 邦夫 (海洋科学技術センター)

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フィールド一覧

白鳳丸

BKソーナーディープ・トウ

KM-ROV

シェル型パワーグラブ

爪型パワーグラブ

海底設置型掘削装置

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JAMSTEC

国立研究開発法人
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