

/worm/unique/m00134/mwact/tba.com/ctd/kexue1
#DOCUMENTATION_FILE_NAME: Kexue1_CTD_ddf *
#NODC_ACCESSION_NUMBER: * 9400092
#NODC_REFERENCE_NUMBERS: *
#NODC_DOCUMENTATION_DATE: 19940620 \
#DOCUMENTOR:
#NODC_REVIEWER: Harry Iredale \

#DATE_RECEIVED: 19940615 \
#SUBMISSION_MEDIUM: ftp \
#SUBMITTOR_NAME: Ming Feng
#SUBMITTOR_INSTITUTION: University of Hawaii/JIMAR
#SUBMITTER_STREET_ADDRESS: 1000 Pope Road
#SUBMITTER_CITY: Honolulu
#SUBMITTER_STATE: Hawaii
#SUBMITTER_COUNTRY: USA
#SUBMITTER_ZIP_CODE: 96822
#SUBMITTER_TELEPHONE_NO: 808-956-7099
#SUBMITTER_INTERNET: mfeng@iniki.soest.hawaii.edu
#COLLECTION_INFORMATION:

CTD observation on board R/V Kexue 1 were made from Nov. 10, 1992 to Feb. 20, 1993. The cruise was divided into 3 legs due to port calls. Normally CTD casts were made every 3 hours, on the first, middle and last day of each leg casts were made every hour. One cast each day went down to 1000 m, the others went down to 300 m.

LEG1: Nov. 10 to Dec. 11, 1992, 301 casts, 4S, 156E;
LEG2: Dec. 19, 1992 to Jan. 23, 1993, 324 casts; 4S, 156E;
LEG3: Feb. 1 to Feb. 20, 1993, 200 casts, 4S, 156E

#PRINCIPAL_INVESTIGATOR_NAME: Dunxin Hu
#PI_INSTITUTION: University of Qingdao, Academia Sinica
#PI_STREET-ADDRESS: 7 Nanhai Road
#PI_CITY: Qingdao, Shandong 266071
#PI_COUNTRY: People's Republic of China
#PI_TELEPHONE_NO: (86) 532 287 9062
#PI_INTERNET: n/a
#PI_EMAIL: n/a
#PROJECT: TOGA COARE
#FUNDING_AGENCY: Chinese Academy of Sciences
#GRANT/CONTRACT-NO:
#PLATFORM_TYPE: research vessel
#PLATFORM_NAME: R/V Kexue #1
#COLLECTION_METHODS: CTD casting
#ANALYSIS_METHODS:

The CTD instruments we use were a SBE 25 and SBE 9/11 from Sea Bird Inc. The SBE 25 CTD was newly calibrated and it was therefore used to do most of the shallow casting. After preliminary processing we found some difference between salinity measurements between the two instruments, which was corrected at the University of Hawaii.

#PROCESSING_METHODS:
To process the data we used Seasoft version 4.0 and 2.0,
#INSTRUMENTS: SBE 25 and 9/11 Sea Bird Electronics Inc
#PUBLICATIONS:
#ASSOCIATED_DATASETS: n/a
#ASSOCIATED_VERSIONS: *
#DATA_SET_NAME: *
#DATA_FILES: 3

2342454	JUN 15 14:0	CTDdata.001	301 casts	58085 records
2682863	JUN 15 14:0	CTDdata.002	324 casts	66559
1676371	JUN 15 14:0	CTDdata.003	200 casts	41592
			825 total	

#DOCUMENTATION_FILES:

19217	JUN 15 14:0	headers.001
20666	JUN 15 14:0	headers.002
12854	JUN 15 14:0	headers.003

#NUMBER_OF_OBSERVATIONS: 825

#DATA_SET_VOLUME: 6701688 \

#SOURCE_COMPUTER: PC

#SOURCE_COMPUTER_OPERATING_SYSTEM: Dos

#SOURCE_LANGUAGE: Fortran

#COMPUTER_CODE: ASCII

#ORIGINATOR_DATASET_IDENTIFIER:

#DATA_DATES: 19921110-19930228 \

#LEFT_GEOGRAPHIC_UPPER_BOUND: 10N 140E

#RIGHT_GEOGRAPHIC_LOWER_BOUND: 10S 180

#GEOGRAPHIC_REGION:

Equatorial Pacific, north of Australia

TOGA COARE Large Scale Domain

Western Pacific Warm Pool \

#DATA_TYPE: CTD casts

#PARAMETERS: pressure (dbar), temperature (centigrade), salinity (psu) and density (sigma-t, kg/m3).

#FORMAT_DESCRIPTION:

number of stations, average depth (dbar), text
station series number, number of levels, number of parameters, date, month,
year, hour, minute, latitude, longitude, approximated Juliar day for plot

CTDdata.* files include the actual measurements

headers.* files summarize headers of all files

#FORMAT_PUBLICATION:

#FORMAT_COMMENTS:

#MISC_DOCUMENTATION: *

#SAMPLE_DATA:

HEADER FILE:

(number of stations, average depth (dbar), text)
(station series number, number of levels, number of parameters, date, month,
year, hour, minute, latitude, longitude, approximated Juliar day for plot)

301	2.00	COARE-IOP	4S	156E	10/11/92	to	11/12/92		
1	503	4	10	11	92	1	0	-3.995	155.999 315.042
2	300	4	10	11	92	1	59	-3.986	156.004 315.083
3	157	4	10	11	92	2	56	-3.977	156.011 315.125
4	161	4	10	11	92	3	56	-3.952	156.022 315.167
5	158	4	10	11	92	4	56	-3.952	156.022 315.208
6	161	4	10	11	92	5	57	-3.933	156.028 315.250
7	162	4	10	11	92	6	56	-3.917	156.032 315.292
8	161	4	10	11	92	7	56	-3.900	156.005 315.333
9	206	4	10	11	92	8	59	-3.883	156.051 315.375

10	161	4	10	11	92	9	58	-3.883	156.055	315.417
11	160	4	10	11	92	10	56	-3.867	156.065	315.458
12	159	4	10	11	92	11	56	-3.867	156.077	315.500
13	160	4	10	11	92	12	55	-3.861	156.085	315.542
14	160	4	10	11	92	13	58	-3.852	156.092	315.583
15	159	4	10	11	92	14	57	-3.843	156.103	315.625
16	158	4	10	11	92	15	56	-3.833	156.117	315.667
17	156	4	10	11	92	16	57	-3.822	156.132	315.708
18	155	4	10	11	92	17	58	-3.805	156.148	315.750

DATA FILE:

First record is file header, 301 is number of casts
Second record is station header record as in header file.

```

301  2.00COARE-IOP 4S 156E 10/11/92 to 11/12/92
 1 503   4   10  11  92   1   0   -3.995  155.999  315.042
   6.00000   29.3740   34.2960   21.4130
   8.00000   29.3250   34.2950   21.4290
  10.00000   29.3160   34.2950   21.4320
  12.0000   29.3120   34.2960   21.4340
  14.0000   29.3070   34.2950   21.4360
  16.0000   29.3040   34.2970   21.4380
  18.0000   29.2990   34.3000   21.4430
  20.0000   29.2950   34.3050   21.4480
  22.0000   29.2870   34.3160   21.4590
  24.0000   29.2850   34.3210   21.4630
  26.0000   29.2850   34.3240   21.4650

```

CAUTION: Blanks to the right of the decimal in the field are 0 filled.

Notice the depth 12., etc. is offset

98.0000	26.2670	34.9740	22.9390
100.0000	26.1110	35.0300	23.0300
102.0000	25.9840	35.0900	23.1150
104.0000	25.8130	35.1560	23.2180
106.000	25.7600	35.1780	23.2510
108.000	25.7500	35.1820	23.2580

Notice above when changes from 104 to 106.

SUBMITTER REPLIES: Sorry the shift of resolution is that I have used the
write(unit,*)depth,temperature,salinity,density
to write the data. In fact the resolution should be three numbers after the
decimal points.

The following module was run against the data files to correct the shifts

```

BEGIN  { i = 0
        inn = -1
        j = 0 }
{
  j=index($1, ".")
  if (j > 0) {

```

```

    printf "%9.3f %9.3f %9.3f %9.3f\n", $1, $2, $3, $4 > outfile
    inn=inn+1
}
else
    print $0 > outfile
}
END {
    print "\n"
}

```

Data file now looks like this:

```

324  2.00COARE-IOP 4S 156E 19/12/92 to 23/01/93
1 505  4  19  12  92  0  0      3.924  156.045  -12.000
 6.000  29.626  34.171  21.234
 8.000  29.611  34.170  21.239
10.000  29.596  34.168  21.243
12.000  29.565  34.166  21.252
14.000  29.556  34.165  21.255
16.000  29.558  34.167  21.256
18.000  29.558  34.169  21.257
20.000  29.553  34.175  21.263
24.000  29.529  34.174  21.271
26.000  29.496  34.177  21.284
28.000  29.468  34.172  21.291
30.000  29.439  34.170  21.299

```