

DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE
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c 1st line of header

```
    irec=irec+1
    read (16,99101,err=998,end=999)
    % moods_hdr_key,latitude,longitude,observation_dtg,
    % number_of_parameters,instrument_type, quality_review_code,
    % number_of_data_cycles, dsnum
```

99101 FORMAT (I8,1x,f8.4,1x,f9.4,1x,a14,
% 1x,i1,1x,i4,1x, i3, 1x, i5,1x,i7)

c 2nd line of header

```
    read(16,99102,err=998)
    % first_data_depth,last_data_depth,ocean_floor_depth,
    % bottom_depth_source,profile_over_land,
    % questionable_dtg_code,
    % all_salinities_zeros,all_temperatures_zeros,
    % salinity_spike,temperature_spike,
    % observation_too_deep,cast_number,cast_direction_code,ocl_tsproble_code
```

99102 FORMAT (3(I5,1x),8(i1,1x),i5,1x,a1,1x, i4)

c 3rd line quality control

```
    read(16,99103,err=998)
    % program_version,
    % depth_exceed_env_levitus_temp,
    % mod_levitus_std_dev_temp,percent_levitus_temp_disagree,
    % depth_exceed_env_levitus_sal,
    % mod_levitus_std_dev_sal,percent_levitus_sal_disagree,
    % depth_exceed_env_navoclim_temp,
    % navoclim_std_dev_temp,percent_navoclim_temp_disagree,
    % depth_exceed_env_navoclim_sal,
    % navoclim_std_dev_sal,percent_navoclim_sal_disagree,
    % date_of_quality_review,
    % header_edit_history_flag,profile_edit_history_flag,
    % ctd_serial_number_flag
```

99103 FORMAT (f3.1,1x,4(i1,1x,f3.1,1x,i3,1x),a8,1x,
% i1,1x,i1,1x,i1)

c 4th line

```
read(16,99104,err=998)

% depth_precision,temperature_precision,salinity_precision,
% sound_speed_precision, lat_precision,lon_precision,
% wmo1770_instrument_code,wmo4770_recorder_code,
% temperature_atypical,salinity_atypical,sound_speed_atypical,
% wrong_location_code,

99104 FORMAT(i1,1x,i1,1x,i1,1x,i1,i1,i1,1x
%i3,1x,i3,1x,3(i3,1x),i1)
```

c 5th line

```
read(16,99105,err=998)
% temperature_method, salinity_method,
% nodc_station_qc_code,ref_sst,ref_sst_instrument,
% digitization_method,digitization_interval,depth_fix_code,
% temperature_noisy,high_vertical_gradient,
% temperature_suspect,salinity_noisy,salinity_suspect,
% density_inversion,temperature_coarse_resolution,
% salinity_coarse_resolution,temperature_marked_as_salinity,
% salinity_marked_as_temperature,nodc_temperature_code,
% nodc_salinity_code,temperature_general_quality,
% salinity_general_quality,sound_speed_general_quality,
% edit_flag_program_version

99105 FORMAT(i3,1x,i3,1x,i1,1x,f8.4,1x,i2,1x,i2,1x,i2,1x,i1,1x,
% 12(i2,1x),i3,1x,i3,1x,i3,f3.1)
cccccccccccc
```

```
do 500 imax= 1,NUMBER_OF_DATA_CYCLES
```

c read data arrays

```
if(number_of_parameters.eq.4)then
read(16,904,err=998)observation_depth(imax),
& water_temperature(imax),salinity(imax),sound_speed(imax)
endif
ccccccc
if(number_of_parameters.eq.3)then
read(16,903,err=998)observation_depth(imax),
& water_temperature(imax),salinity(imax)
endif
cccccccccccccccccccccccccccccccccccc
if(number_of_parameters.eq.2)then
read(16,902,err=998)observation_depth(imax),
```

```

& water_temperature(imax)
endif

904  FORMAT(f10.4,1x,f8.4,1x,f8.4,1x,f10.4)
903  FORMAT(f10.4,1x,f8.4,1x,f8.4)
902  FORMAT(f10.4,1x,f8.4)

500  continue
      write(*,*)'depth1',observation_depth(1)

cccccccccccccccccccccccccccccccccccccccccccccccccccccccc
cccccccccccccccccccccccccccccccccccccccccccccccccccccccc
c finished reading data arrays.
cccccccccccccccccccccccccccccccccccccccccccccccccccccccc
c read extra line if ctd_serial_number_flag=1
cccccccccccccccccccccccccccccccccccccccccccccccccccccccc
c 10/2/00
      if(ctd_serial_number_flag.eq.1)then

c if serial numbers
      read(16,9016,err=998)pressure_sn,
& temp1_sn,temp2_sn,cond1_sn,cond2_sn
      read(16,9017,err=998) sound_speed1_sn, sound_speed2_sn

      endif
      write(*,'(a)')pressure_sn

9016  FORMAT(a16,a16,a16,a16,a16)
9017  FORMAT (a16,a16)
cccccccccccccccccccccccccccccccccccccccccccccccccccccccc
c reading header changes history

      if(header_edit_history_flag.eq.1)then
          read(16,1041)hf,number_of_header_edits

          do 200 i=1,number_of_header_edits
              read(16,1043,err=998)header_attribute_name(i),
% old_header_attribute_value(i),header_edit_code(i),
% header_edit_date(i),person_identifier_h(i)
200    continue

          endif
          write(*,*)'nl-1',number_of_header_edits

1041  FORMAT (a3,1x,i5)
1043  FORMAT (a30,1x,a16,1x,i3,1x,a8,1x,i4)

```


37 Sippican XCTD
38 Seabird CTD SBE-19 (Seacat profiler)
39 Temperature, salinity microstructure profiler
40 Some unknown current profile instrument
41 Seabird CTD SBE-911 (deep ocean)
42 Seabird CTD SBE-25
43 Falmouth CTD
44 Idronaut CTD
.
60 Some unknown optical profile instruments

* = time series data

**(Section 7) Column definitions for all columns
updated: 11/28/2001**

ALL_SALINITIES_ZEROS

definition: flag to indicate that no valid salinities exist in a profile if the number_of_parameters is 3 or 4.
special usage:
domain range: 0 or 1

ALL_TEMPERATURES_ZEROS

definition: flag to indicate that no valid temperature exist in a profile if the number_of_parameters is 3 or 4.
special usage:
domain range: 0 or 1

BOTTOM_DEPTH_SOURCE

definition: flag to indicate that the ocean_floor_depth value came from a bathymetry database, otherwise it was a collected measurement
special usage:
domain range: 0 = ship, 1 = dbdb5, 2 = dbdbv

DATE_OF_QUALITY_REVIEW

definition: date envelop checking routine was run on the profile
domain range: SEP-19-1995 to present

DEPTH_EXCEED_ENV_NAVOCLIM_SAL

definition: profile exceeded the maximum depth of the GDEM envelop for salinity
domain range: 0 or 1
note: NOT AVAILABLE AT PRESENT TIME

DEPTH_EXCEED_ENV_NAVOCLIM_TEMP

definition: profile exceeded the maximum depth of the GDEM envelop for temperature
domain range: 0 or 1

DEPTH_EXCEED_ENV_LEVITUS_SAL

definition: profile exceeded the maximum depth of the Levitus envelop for salinity
domain range: 0 or 1

DEPTH_EXCEED_ENV_LEVITUS_TEMP

definition: profile exceeded the maximum depth of the Levitus envelop for temperature
domain range: 0 or 1

FIRST_DATA_DEPTH

definition: the first depth (in meters) in the profile
special usage: used in retrievals to obtain data that extends from a desired depth

domain range: 0 to 6500 meters

INSTRUMENT_TYPE

definition: codes to designate the instrument that acquired the data

special usage: none

domain range: 0 to 99

LAST_DATA_DEPTH

definition: the last depth (in meters) in the profile

special usage: used in retrievals to obtain data that extends to a desired depth

domain range: 0 to 6500 meters

LATITUDE

definition: observation latitude in decimal degrees

special usage: north is positive, south is negative

domain range: -90 to +90

LONGITUDE

definition: observation longitude in decimal degrees east is positive, west is negative special usage: care must be taken around the date line. Example: to obtain the 20 degrees between -170 and 170 two ranges must be used for longitude: 1) longitude between 170 and 180 and 2) longitude between -180 and -170.

domain range: -180 to +180

NAVOCLIM_STD_DEV_SAL

Definition: Standard deviation used with the GDEM envelop for salinity

NAVOCLIM_STD_DEV_TEMP

definition: standard deviation used with the GDEM envelop for temperature

domain range: 1.0 to 5.0

MOD_LEVITUS_STD_DEV_SAL

definition: standard deviation used with the Levitus envelop for salinity

domain range: 1.0 to 5.0

MOD_LEVITUS_STD_DEV_TEMP

definition: standard deviation used with the Levitus envelop for temperature

domain range: 1.0 to 5.0

MOODS_HDR_KEY

definition: unique number assigned to each observation using an oracle sequence number

special usage: cluster shared by the following tables:

1) moods_profile_header, 2) moods_profile_element, 3) moods_ctd_serial_numbers

4) moods_header_edit_history and 5) moods_profile_edit_history

domain range: 1 to 99999999

NUMBER_OF_DATA_CYCLES

definition: number of levels or elements in the observation profile

special usage: No special restrictions, although there are many level=1 profiles from message data (ship reports)

domain range: 1 to 6500

NUMBER_OF_PARAMETERS

definition: number of parameters in the profile

special usage:

2 = depth / temperature

3 = depth / temperature / salinity

4 = depth / temperature / salinity / sound speed
or 4 = depth / -99 / -99 / sound speed
or 4 = depth / temperature / -99 / sound speed
domain range: 2 to 4

OBSERVATION_DEPTH

definition: observation depth in meters
domain: 0 to 6500 meters

OBSERVATION_DTG

definition: date and time that the observation was collected in GMT
special usage: 1800 is used as a missing year designator
domain range: 1800 to current year

OBSERVATION_MONTH

definition: month that the observation was collected
special usage: No special restrictions
domain range: 1 to 12

OBSERVATION_TOO_DEEP

definition: flag to indicate the profile was too deep for the bathymetry of the ocean at that point.
special usage: according to guidelines from Steve Haeger, N3T memo of
May 1 1995 "Criteria for MOODS auto-editor"

1)

if(ocean_floor_depth is between 0 and 30
.and. last_data_depth.gt.60)OBSERVATION_TOO_DEEP=1

2)

if(ocean_floor_depth.is between 30 and 100
.and. last_data_depth.gt.(2*ocean_floor_depth))OBSERVATION_TOO_DEEP=1

3)

if(ocean_floor_depth between 100 and 500
.and. last_data_depth.gt.(4*ocean_floor_depth))OBSERVATION_TOO_DEEP=1

4)

if(ocean_floor_depth between 500 and 1000
last_data_depth.gt.(1.50*ocean_floor_depth))OBSERVATION_TOO_DEEP=1

5)

if(ocean_floor_depth.gt.1000
.and. last_data_depth.gt.(1.25*ocean_floor_depth))OBSERVATION_TOO_DEEP=1

domain range: 0 or 1

OBSERVATION_YEAR

definition: year that the observation was collected
special usage: 1800 is used as a missing year designator
domain range: 1800 to current year

OCEAN_FLOOR_DEPTH

definition: depth of ocean floor (measured or from DBDB5)
special usage: used in retrievals bases on bathymetry flag BOTTOM_DEPTH_DBDB5 designates value
source
domain range: 0 to 12000 meters

PERCENT_NAVOCLIM_SAL_DISAGREE

definition: percentage of the number of data cycles that fell outside of the GDEM salinity envelop
domain range: 0 to 100
note: NOT AVAILABLE AT PRESENT TIME

PERCENT_NAVOCLIM_TEMP_DISAGREE

definition: percentage of the number of data cycles that fell outside of the GDEM temperature envelop

domain range: 0 to 100

PERCENT_LEVITUS_SAL_DISAGREE

definition: percentage of the number of data cycles that fell outside of the Levitus salinity envelop

domain range: 0 to 100

PERCENT_LEVITUS_TEMP_DISAGREE

definition: percentage of the number of data cycles that fell outside of the Levitus temperature envelop

domain range: 0 to 100

PROFILE_OVER_LAND

definition: flag to inicate that the location is over land special usage:administrative use to possibly change location latitude or longitude to another hemisphere if data comparisons justify the change.

domain range: 0 – 3

0 = ocean, 1 = over land, 2 = over land(but in a lake or inland sea), 3 = not w/in lat/lon boundaries specified

PROGRAM_VERSION

definition: program version of envelop checking routine

domain range: 1.0

QUALITY_REVIEW_CODE

definition: quick reference for data quality based on flags and quality control results

special usage:

domain range: -9 – 31

- 9 not reviewed
- 0 accepted station
- 1 coarse salinity resolution flag
- 2 salinity atypical profile flag
- 3 noisy salinity profile flag
- 4 salinity spike flag
- 5 salinity marked as temperature
- 6 all salinities zero
- 7 salinity suspect
- 8 salinity general quality flag
- 9 coarse temperature resolution flag
- 10 temperature atypical profile flag
- 11 noisy temperature profile flag
- 12 temperature spike flag
- 13 temperature marked as salinity
- 14 all temperatures zero
- 15 temperature suspect
- 16 temperature general quality flag
- 17 sound speed atypical profile flag
- 18 sound speed general quality flag
- 19 *both coarse temperature and salinity flags*
- 20 *both temperature and salinity atypical flags*
- 21 *both noisy temperature and salinity profile flags*
- 22 *both temperature and salinity spike flags*
- 23 *both temperature and salinity suspect flags*
- 24 *both temperature and salinity general quality flags*
- 25 high vertical gradient flag
- 26 density inversion flag
- 27 observation too deep

- 28 wrong location
- 29 profile over land
- 30 questionable_dtg
- 31 *two or more header flags (27 through 30)*

QUESTIONABLE_DTG_CODE

definition: flag to indicate that the date/time was invalid and has been changed to allow insertion into the database.

special usage: If the year was unknown 1800 was substituted If the month was unknown the profile was not used. If the day was unknown the 15th was used.

domain range: any valid date

SALINITY

definition: salinity

domain: 0 to 50

SALINITY_SPIKE

definition: flag to indicate that the salinity values did not fluctuate more than .5 ppt/meter in opposite directions throughout the profile

special usage: Slope comparison of not more than 2 in one direction immediately followed by a slope of not more than 2 (in the opposite direction of the previous slope).

domain range: 0 to 1

SOUND_SPEED

definition: sound speed in meters/second

domain:

TEMPERATURE_SPIKE

definition: flag to indicate that the temperature values did not fluctuate more than .5 degrees/meter in opposite directions throughout the profile

special usage: Slope comparison of not more than 2 in one direction immediately followed by a slope of not more than 2 (in the opposite direction of the previous slope).

domain range: 0 to 1

WATER_TEMPERATURE

definition: water temperature in degrees Celcius

domain: -3 to 40

CAST_NUMBER

Definition: Sequential number representing each over-the side operation or discrete sampling at a station

Domain: 1 - 99999

CAST_DIRECTION_CODE

Definition: Direction of the cast (up or down)

Domain: D or U

DAY_OF_YEAR

Definition: Julian day of the year

Domain: 1 - 366

OCL_TSPROBE_CODE

Definition: Ocean Climate Laboratory probe codes

Domain: 1 - 9999

OCL_TSPROBE_CODE OCL_TSPROB_TYPE

0 BOT	BOTTLE DATA
1 MBT	MECHANICAL BATHYTHERMOGRAPH,TYPE UNKNOWN
2 XBT	EXPENDABLE BATHYTHERMOGRAPH,TYPE UNKNOWN
3 DBT	DIGITAL BATHYTHERMOGRAPH,TYPE UNKNOWN
4 CTD	CONDUCTIVITY/TEMPERATURE DEVICE,TYPE UNKNOWN
5 STD	SALINITY/TEMPERATURE DEVICE,TYPE UNKNOWN
6 XCTD	EXPENDABLE CONDUCTIVITY/TEMPERATURE DEVICE,TYPE KNOWN
101 MBT	GM-39 (RUSSIA)
207 XBT	T7 (SIPPICAN)
208 XBT	T4 (SIPPICAN)
209 XBT	T6 (SIPPICAN)
210 XBT	T5 (SIPPICAN)
211 XBT	T10(SIPPICAN)
212 XBT	T11(SIPPICAN)
213 XBT	FAST DEEP (SIPPICAN)
214 XBT	DEEP BLUE (SIPPICAN)
215 XBT	T4 (TSK)
216 XBT	T6 (TSK)
217 XBT	T7 (TSK)
218 XBT	(MHI, ACADEMY OF SCIENCE, UKRAINE)
219 XBT	T5 (TSK)
220 XBT	T10 (TSK)
221 XBT	XBT-1 (SPARTAN)
222 XBT	XBT-3 (SPARTAN)
223 XBT	XBT-4 (SPARTAN)
224 XBT	XBT-5 (SPARTAN)
225 XBT	XBT-5DB (SPARTAN)
226 XBT	XBT-6 (SPARTAN)
227 XBT	XBT-7 (SPARTAN)
228 XBT	XBT-7DB (SPARTAN)
229 XBT	XBT-10 (SPARTAN)
230 XBT	XBT-20 (SPARTAN)
231 XBT	XBT-20DB (SPARTAN)
201 XBT	T7 (UNKNOWN BRAND)
202 XBT	T4 (UNKNOWN BRAND)
203 XBT	T6 (UNKNOWN BRAND)
204 XBT	T5 (UNKNOWN BRAND)
205 XBT	T10(UNKNOWN BRAND)
206 XBT	T11(UNKNOWN BRAND)
401 CTD	SBE-9 (Deep ocean precision CTD, Seabird Elec)
402 CTD	ISTOK
403 CTD	EG+G MARK III (EG+G Ocean products)
404 CTD	NEIL BROWN (MARK) IIIB
405 CTD	SEACAT (Seabird Electronics, unspecified model)
406 CTD	GUILDLINE (type unknown)
407 CTD	(MHI, ACADEMY OF SCIENCE, UKRAINE)
408 CTD	(INST OCEANOGRAPHY),ACADEMY OF SCIENCE, RUSSIA
409 CTD	(STD KROSSBIM ROSSETTES)
410 CTD	SEABIRD (Seabird Electronics, type unknown)
411 CTD	SBE-911 PLUS (Seabird Electronics)
412 CTD	BISSETT-BERMAN (type unknown)
413 CTD	JASUS (by M. Du Chaffaut and T. Labadie)
414 CTD	PLESSEY 9040
415 CTD	PLESSEY 9400
416 CTD	PLESSEY 9041
417 CTD	PLESSEY 9060

418 CTD NEIL BROWN MARK III
 419 CTD HYDRO PRODUCTS 612/912S
 420 CTD NEIL BROWN SMART CTD
 421 CTD PLESSEY (type unknown)
 422 CTD PLESSEY/GRUNDY (type unknown)
 423 CTD NEIL BROWN DRCM
 424 CTD SBE-102 (Seabird Electronics)
 425 CTD SBE-911 (Seabird Electronics)
 426 CTD OCEAN CASSETTE
 427 CTD NEIL BROWN (type unknown)
 428 CTD BECKMAN RS5-3
 429 CTD SBE-19 (SEACAT profiler, Seabird Electronics)
 430 CTD GUILDLINE 8700 aka MARK II
 431 CTD GUILDLINE 8701 (analog CTD)
 432 CTD GUILDLINE 8701 MODIFIED
 433 CTD GUILDLINE 8705
 434 CTD GUILDLINE 8706
 435 CTD GUILDLINE 8709 (portable)
 436 CTD GUILDLINE 8755
 437 CTD GUILDLINE 8770 (portable)
 438 CTD GUILDLINE 8737 "WOCE" (WOCE-specifications)
 439 CTD FSI CTD (Falmouth Scientific, Inc.)
 440 CTD BISSETT-BERMAN 9006
 441 CTD BISSETT-BERMAN 9040-2A
 501 STD PLESSEY 9006
 502 STD PLESSEY 8400
 503 STD PLESSEY 9040
 504 STD PLESSEY 9041
 505 STD ED 9071
 506 STD APMCRO 12
 507 STD Hydrolab in situ salinometer (ca 1960s)
 508 STD AML STD-12 (aka AML CTD-12)
 509 STD BISSETT-BERMAN 9040
 601 XCTD STANDARD (SIPPICAN)
 602 XCTD DEEP (SIPPICAN)
 603 XCTD AXCTD (SIPPICAN)
 604 XCTD SXCTD (SIPPICAN)

HEADER_EDIT_HISTORY_FLAG

Definition: Flag set to determine if any edits have been made to the header of the profile
 Domain: 0 or 1

HEADER_ATTRIBUTE_NAME

Definition: The header attribute name which was edited
 Domain: 30 character field

OLD_HEADER_ATTRIBUTE_VALUE

Definition: The old header attribute value
 Domain: 16 character field

HEADER_EDIT_CODE

Definition: The code defining what change was made to the header
 Domain: 1 = security_key, 2 = moods_classification, 3 = enclosure, 4 = observation_dtg, 5 = probe_type, 6 = duplicate_suspect_code, 7 = latitude, 8 = longitude
 Domain: 1 - 999

HEADER_EDIT_DATE

Definition: The date the header edit was made

Domain: any valid date

PERSON_IDENTIFIER_H

Definition: The person who made the edit to the header.

Domain:

PROFILE_EDIT_HISTORY_FLAG

Definition: Flag set to determine if any edits have been made to any level of the profile itself.

Domain: 0 or 1

DEPTH_OF_CHANGE

Definition: The depth (or level) at which the profile was edited

Domain:

PARAMETER_CODE

Definition: The code defining which parameter was edited

Domain: 1 = depth 2 = temperature 3 = salinity 4 = sound speed

OLD_PARAMETER_VALUE

Definition: The old profile value

Domain:

PROFILE_EDIT_CODE

Definition: The code defining what change was made to the profile

Domain:

- 1 = surface chops (stores only the first level and last level chops...not the entire range)
- 2 = bottom chops (stores only the first level and last level chops...not the entire range)
- 3 – 5 = Nulling out (-99) of /t/s/ss (temperature,salinity,sound velocity) fields due to spikes, etc.
- 6 – 8 = Interpolation of /t/s/ss fields which includes smoothing algorithm for noisy data
- 9 = Temperature spike correction
- 10 = Salinity spike correction
- 11 = Sound speed spike correction
- 12 = Salinity corrections applied from bottle data analysis
- 13 = Salinity corrections applied due to re-calibration of the CTD
- 14 = delete level(s)
- 15 = Addition of a level
- 16 = surface nulls (stores only the first level and last level nulls...not the entire range)
- 17 = bottom nulls (stores only the first level and last level nulls...not the entire range)
- 996 – 999 = Any other corrections applied to d/t/s/ss fields
- 996 = change depth value
- 997 = change temperature value
- 998 = change salinity value

PROFILE_EDIT_DATE

Definition: The date the profile edit was made

Domain: any valid date

PERSON_IDENTIFIER_P

Definition: The person who made the edit to the profile (level)

Domain:

CTD_SERIAL_NUMBER_FLAG

Definition: Flag set to determine if sensor serial numbers are to follow in the format (ctd only)

Domain: 0 = No or 1 = Yes

PRESSURE_SN

Definition: The serial number of the pressure sensor used on a specific ctd package

Domain: 0 – 9999999999999999 A-Z

TEMP1_SN

Definition: The serial number of the primary temperature sensor on a specific ctd package

Domain: 0 – 9999999999999999 A-Z

TEMP2_SN

Definition: The serial number of the secondary temperature sensor on a specific ctd package

Domain: 0 – 9999999999999999 A-Z

COND1_SN

Definition: The serial number of the primary conductivity sensor on a specific ctd package

Domain: 0 – 9999999999999999 A-Z

COND2_SN

Definition: The serial number of the secondary conductivity sensor on a specific ctd package

Domain: 0 – 9999999999999999 A-Z

SOUND_SPEED1_SN

Definition: The serial number of the primary sound speed sensor on a specific ctd

Domain: 0 – 9999999999999999 A-Z

SOUND_SPEED2_SN

Definition: The serial number of the secondary sound speed sensor on a specific ctd

Domain: 0 – 9999999999999999 A-Z

DEPTH_PRECISION

Definition: The reported precision of the depth field (number of digits to the right of the decimal)

Domain: 0 - 4

TEMPERATURE_PRECISION

Definition: The reported precision of the temperature field (number of digits to the right of the decimal)

Domain: 0 - 4

SALINITY_PRECISION

Definition: The reported precision of the salinity field (number of digits to the right of the decimal)

Domain: 0 - 4

SOUND_SPEED_PRECISION

Definition: The reported precision of the sound speed field (number of digits to the right of the decimal)

Domain: 0 - 4

LAT_PRECISION

Definition: The reported precision of the latitude field (number of digits to the right of the decimal)

Domain: 0 - 7

LON_PRECISION

Definition: The reported precision of the longitude field (number of digits to the right of the decimal)

Domain: 0 - 7

WMO1770_INSTRUMENT_CODE

Definition: World Meteorological Organization instrument codes

Domain: 1 – 999

03/09/2001 NEW_MOODS_FALL_RATE_COEF.lst (WMO1770)

WMO1770_INSTRUMENT_CODE	WMO1770_INSTRUMENT_TYPE
1	Sippican T-4
2	Sippican T-4
11	Sippican T-5
21	Sippican Fast Deep
31	Sippican T-6
32	Sippican T-6
41	Sippican T-7
42	Sippican T-7
51	Sippican Deep Blue
52	Sippican Deep Blue
61	Sippican T-10
71	Sippican T-11
201	TSK T-4
202	TSK T-4
211	TSK T-6
212	TSK T-6
221	TSK T-7
222	TSK T-7
231	TSK T-5
241	TSK T-10
251	TSK Deep Blue
252	TSK Deep Blue
261	TSK Deep AXBT
401	Sparton XBT-1
411	Sparton XBT-3
421	Sparton XBT-4
431	Sparton XBT-5
441	Sparton XBT-5DB
451	Sparton XBT-6
461	Sparton XBT-7
462	Sparton XBT-7
471	Sparton XBT-7DB
481	Sparton XBT-10
491	Sparton XBT-20
501	Sparton XBT-20DB
700	Sippican XCTD standard
710	Sippican XCTD deep
720	Sippican AXCTD
730	Sippican SXCTD
741	TSK XCTD
751	TSK AXCTD
761	Sparton XCTD standard
800	Mechanical XBT
810	Hydrocast
820	Thermistor Chain
830	CTD
831	CTD - P-ALACE float
840	P-ALACE float-PROVOR- no conductivity sensor
841	P-ALACE float-PROVOR- Seabird conductivity sensor
842	P-ALACE float-PROVOR- FSI conductivity sensor
845	P-ALACE float-Web Research- no conductivity sensor

846 P-ALACE float-Web Research- Seabird conductivity sensor
 847 P-ALACE float-Web Research- FSI conductivity sensor
 850 P-ALACE float-SOLO- no conductivity sensor
 851 P-ALACE float-SOLO- Seabird conductivity sensor
 852 P-ALACE float-SOLO- FSI conductivity sensor

WMO4770_RECORDER_CODE

Definition: World Meteorological Organization recorder codes

Domain:

WMO4770_RECORDER_CODE WMO4770_RECORDER_TYPE

1	Sippican strip chart recorder
2	Sippican MK2ASSQ-61
3	Sippican MK-9
4	Sippican ANBHQ-7MK8
5	Sippican MK-12
10	Sparton SOC BTSV Processor Model 100
20	Argos XBT-ST
21	CLS-ARGOS Protecno XBT-ST Model-1
22	CLS-ARGOS Protecno XBT-ST Model-2
30	BATHY Systems SA-810
31	Scripps Metrobyte controller
32	Murayama Denki Z-60-16 III
33	Murayama Denki Z-60-16 II
34	Protecno ETSM2
35	Nautilus Marine Service NMS-XBT
40	TSK MK-2A
41	TSK MK-2S
42	TSK MK-30
43	TSK MK-30N
45	TSK MK-100
46	TSK MK-130 compatible recorder for both XBT and XCTD
48	TSK AXBT receiver MK-300
50	JMA ASTOS
60	P-ALACE float-ARGOS communications- sampling on up transit
61	P-ALACE float-ARGOS communications- sampling on down transit
62	P-ALACE float-Orbcomm communications- sampling on up transit
63	P-ALACE float-Orbcomm communications- sampling on down transit
99	Unknown

TEMPERATURE_ATYPICAL

Definition: Profiles that are probably good, but have a low probability of occurrence. An unusual (suspect) temperature profile

Domain: 0 - 999

-9 default not examined
 0 typical
 1 slightly atypical
 2 untypical
 3 very untypical
 4 untypical, not specified

SALINITY_ATYPICAL

Definition: Profiles that are probably good, but have a low probability of occurrence . An unusual (suspect) salinity profile

Domain: 0 - 999

-9 default not examined

- 0 typical
- 1 slightly atypical
- 2 untypical
- 3 very untypical
- 4 untypical, not specified

SOUND_SPEED_ATYPICAL

Definition: Profiles that are probably good, but have a low probability of occurrence. An unusual (suspect) sound speed profile

Domain: 0 - 999

-9 default not examined

- 0 typical
- 1 slightly
- 2 untypical
- 3 very untypical
- 4 untypical, not specified

WRONG_LOCATION_CODE

Definition: flag indicating that the profile is a candidate for possible re-location

Domain: 0 - 9

DIGITIZATION_INTERVAL

Definition: Defined interval of digitization

Domain: 1 - 34

DEPTH_FIX_CODE

Definition: A one is assigned if a correction was applied to XBT using re-calculated drop rate

Domain: 0 or 1

SEA_SURFACE_TEMPERATURE

Definition: The sea surface temperature at depth 0.

Domain:

TEMPERATURE_NOISY number(2,0) null

Code that denotes temperature values fluctuate in opposite directions throughout the profile. Quantitative description under development.

-9 default, not examined

- 0 needs no repair
- 1 repaired
- 2 needs repair

SALINITY_NOISY number(2,0) null

Code that denotes salinity values fluctuate in opposite directions throughout the profile. Quantitative description under development.

-9 default, not examined

- 0 needs no repair
- 1 repaired
- 2 needs repair

TEMPERATURE_SUSPECT number(2,0) null

Code that denotes a temperature profile is questionable.

-9 default, not examined

- 0 needs no repair
- 1 repaired
- 2 needs repair

SALINITY_SUSPECT number (2,0) null

Code that denotes a salinity profile is questionable.

-9 default, not examined

0 needs no repair

1 repaired

2 needs repair

TEMPERATURE_COARSE_RESOLUTION number (2,0) null

Code that denotes temperature values are sparsely located throughout the water column.

-9 default, not examined

0 needs no repair

1 repaired

2 needs repair

SALINITY_COARSE_RESOLUTION number (2,0) null

Code that denotes temperature values are sparsely located throughout the water column.

-9 default, not examined

0 needs no repair

1 repaired

2 needs repair

SALINITY_MARKED_AS_TEMPERATURE number (2,0) null

Code that denotes a salinity profile is marked as temperature.

-9 default, not examined

0 needs no repair

1 repaired

2 needs repair

TEMPERATURE_MARKED_AS_SALINITY number (2,0) null

Code that denotes a temperature profile is marked as salinity.

-9 default, not examined

0 needs no repair

1 repaired

2 needs repair

TEMPERATURE_GENERAL_QUALITY number(3,0) null

Code that describes the general quality of the temperature data for a particular profile.

-9 default, not examined

0 good, needs no repair

1 repaired

2 bad, fixable

3 bad, not fixable

4 bad, not specified

100-999 Bad with number

100 needs bottom chop

101 needs top chop

200 depths out of order

SALINITY_GENERAL_QUALITY number(3,0) null

Code that describes the general quality of the salinity data for a particular profile.

-9 default, not examined

0 good, needs no repair

1 repaired

2 bad, fixable
3 bad, not fixable
4 bad, not specified
100-999 Bad with number
 100 needs bottom chop
 101 needs top chop
 200 depths out of order

SOUND_SPEED_GENERAL_QUALITY number(3,0) null
Code that describes the general quality of the sound speed data for a particular profile.
-9 default, not examined
0 good, needs no repair
1 repaired
2 bad, fixable
3 bad, not fixable
4 bad, not specified
100-999 Bad with number
 100 needs bottom chop
 101 needs top chop
 200 depths out of order

HIGH_VERTICAL_GRADIENT number(2,0) null
Code that denotes suspiciously high decreases/increases of profile data over depth. Quantitative description under development.
-9 default, not examined
0 needs no repair
1 repaired
2 needs repair

DENSITY_INVERSION number (2,0) null
Code that denotes decreases in density by more than 0.1 sigma units between observed depths. Quantitative description under development.
-9 default, not examined
0 needs no repair
1 repaired
2 needs repair

NODC_TEMPERATURE_CODE number (2,0) null
Definition: NODC error codes for temperature (-9 = default, meaning no error code)
Domain: 9,-,0,1,2,3,4,5,6,7,8,9

NODC_SALINITY_CODE number (2,0) null
Definition: NODC error codes for salinity (-9 = default, meaning no error code)
Domain: 9,-,0,1,2,3,4,5,6,7,8,9

EDIT_FLAG_PROGRAM_VERSION
Definition: Program version used to set the edit flags

DSNUM (i7)
Definition: sequential data set number

