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Cruise (folder name)	Cruise Dates	Ship Name	Operating Area	#vertical profiles	#tows
Vents85	June 1985	Surveyor	NE Pacific/JDFR	23	7
Vents86	Aug-Sept 1986	Discoverer	NE Pacific/JDFR	25	9
Vents87	Sept 1987	Discoverer	NE Pacific/JDFR	18	14
Vents88	Sept 1988	Discoverer	NE Pacific/JDFR	58	12
Vents89	Aug 1989	Discoverer	NE Pacific/JDFR	63	11
Vents90-leg1	July 1990	Discoverer	NE Pacific/JDFR	21	4
Vents90-leg4	Sept 1990	Discoverer	NE Pacific/JDFR	27	8
Vents91-A2	Aug 1991	Atlantis II	NE Pacific/JDFR	3	5
Vents91-EPR	Nov 1991	New Horizon	ERP/9-11°N	38	18
Vents91-leg2	June 1991	Discoverer	NE Pacific/JDFR	48	15
Vents92	May-June 1992	Discoverer	NE Pacific/JDFR	88	15
Vents93-A2	Oct 1993	Atlantis II	NE Pacific/JDFR	2	14
Vents93-EPR	Nov-Dec 1993	Melville	NE Pacific/JDFR	31	7
Vents93-leg1	June 1993	Discoverer	NE Pacific/JDFR	33	9
Vents93-leg2	July-Aug 1993	Discoverer	NE Pacific/JDFR	5	13
Vents93-leg3	Aug 1993	Discoverer	NE Pacific/JDFR	4	5
Vents94-A2	June-July 1994	Atlantis II	NE Pacific/JDFR	10	8
Vents94-leg1	Jul-Aug 1994	Discoverer	NE Pacific/JDFR	9	19
Vents94-leg3A	Sept 1994	Discoverer	NE Pacific/JDFR	14	3
Vents94-Surveyor	April 1994	Surveyor	NE Pacific/JDFR	18	6
Vents95-A2	Aug 1995	Atlantis II	NE Pacific/ 'Bare' outcrop sites	16	12
Vents95-leg1	June 1995	Discoverer	NE Pacific/JDFR	21	15
Vents96-leg1	June 1996	Discoverer	NE Pacific/ JDFR, Gorda	13	20
Vents96-McArthur	March 1996	McArthur	NE Pacific/Gorda	14	none
Vents96-Wecoma	April 1996	Wecoma	NE Pacific/Gorda	12	6
Vents97-RBleg2	Sept-Oct 1997	RH Brown	NE Pacific/JDFR	38	9
Vents98A-Melville	March-April 1998	Melville	SEPR/27-32°S	34	11
Vents98B-RBleg1	July-Aug 1998	RH Brown	NE Pacific/JDFR	29	21
Vents98C-RBleg2B	Aug-Sept 1998	RH Brown	NE Pacific/JDFR	11	2
Vents98D-Atlantis	Dec 1998 – Jan 1999	Atlantis	SEPR/4-32°S	11	7
Vents98-Wecoma-AxialResponse	Feb 1998	Wecoma	NE Pacific/Axial	16	none
Vents99A-Tangaroa	March 1999	Tangaroa	SW Pacific/ Kermadec Arc	64	13
Vents99B-Wecoma	June 1999	Wecoma	NE Pacific/JDFR	23	12
Vents2000A-Franklin	May 1999	Franklin	SW Pacific/ Solomon Islands	*not PMEL data	
Vents2000B-RBleg3	July-Aug 2000	RH Brown	NE Pacific/JDFR	39	16
Vents2001-NewHorizon-GordaResponse	April 2001	New Horizon	NE Pacific/Gorda	25	none
Vents2001-Wecoma	July-Aug 2001	Wecoma	NE Pacific/JDFR	44	14

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JDFR = Juan de Fuca Ridge, includes Cleft, N.Cleft, Axial, CoAxial, Vance and Endeavour segments, generally located between 44.25-48.0°N, 129.0-130.75°W. Some cruises also acquired samples in the Blanco Fracture Zone (generally located 40.5-44.25 °N, 127.5-129.0 °W).

Axial = Axial Volcano, located on the Juan de Fuca Ridge at about 46.0 °N, 130.0 °W

Gorda = Gorda Ridge, generally located 40.5-43. 0°N, 126.5-127.5°W

EPR = East Pacific Rise, latitudes of study areas indicated

SEPR = Southern East Pacific Rise, latitudes of study areas indicated

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NODC Platform Codes

1) Discoverer – 31DS
2) Surveyor – 31SU
3) Atlantis II – 31AN
4) Melville – 318M
5) New Horizon – 32NM
6) Ron Brown – 33RO
7) Wecoma – 32WC
8) Franklin – 09FA
9) Tangaroa – 0999

Institute – 313F

Project – 0222

File Alias

1) CTD – L303
2) Towed CTD – L301

Cover Letter

568.61 MB

January 18, 2002

Frank,

I have received from Ms. Sharon Walker, PMEL-OERD division, one CD Rom product containing the Hydrothermal VENTS project CTD data sets only (no cms), with some additional variables for cruises 1985 – 2001. Now, we have received over the past years, from Mr. Dave Pashinski (before he retired), the VENTS CTD vertical casts data sets and moored current meters data sets. Data previously submitted has included vertical casts CTDs through the Oct. 1997 field season (NODC access. No. 9800031) and the current meters data through August 1998 (NODC access. No. 9800144).

Much of the data on this CD are different from past data submissions in that it has not only the vertical casts CTDs, but also the tow-yo CTD data sets and some additional parameters. Please refer to Ms. Walkers transmittal that is included. The problem with the data submission, especially the older CTD data sets provided, is that the header information for each file is almost non existent, one has to refer to the transmittal for any additional information including platform. In addition, there is no positional information included with the files older than 1997. the later stuff has a separate file with this information. As mentioned, we already have the vertical cast CTD so the similar data sets on this CD are a rerun.

I was not able to negotiate for the data sets in any other form, this is way they keep the stuff and were not going to prepare any other format of the data for submission. Their reasoning is, this is the way they use the stuff and don't have the time, or staff to prepare the large data sets in another form.

I've been agonizing over sending this stuff to you. The greatest potential value of the data are in the newer stuff on the disk (1998 and newer). I finally decided to go ahead and send the submission along to your attention, let you decide if you want to keep it. About the best thing (and this is obvious) is to hold this originators data, if someone wants the stuff, send 'em what we have. Ms. Walker advised to go ahead and refer the requestor to her attention for more detailed data, additional information, etc. They're very willing to assist (thank goodness).

I've not created any metadata entry form for this submission, please use the transmittal Ms. Walker has prepared as background information.

Also, let me know what you decide (I already know what you'll be thinking as you pour over this stuff!).

Best Regards ..... Sid

Sid Stathoupoulos

January 9, 2001

To:	Sid Stillwaugh, NODC
From:	Sharon Walker, PMEL
Re:	Data submission

Per our conversation I am providing you with 2 copies (PC compatible CD) of CTD data collected by the VENTS program during the 1985-2001 time period. All files, with a few exceptions, are plain ASCII text files with data columns labeled. A few data files are either Excel (file type .xls) or Kaleidagraph (file type .qda) formats. Some comments may be included in Word (.doc) files within certain directories. Data is organized by cruise, with a separate folder for each cruise. Below is a list summarizing the cruises.

The CTD data acquired by the VENTS program includes both vertical profiles and tow-yo's. All data files are presented in a time-averaged format. For earlier cruises, data for tows were generally averaged in 15-sec time bins, vertical profiles in 10-sec time bins. For more recent cruises, all data are averaged in 5-sec time bins. Time (UTC as hh:mm:ss) is always in the first column and is the central time for that time bin. All files include the following variables:

Time

Pressure (db)

Depth (m)

Temperature (^{o}C)

Conductivity (Siemens/m)

Salinity (PSU)

Theta (^{o}C)

Sigma-Theta (kg/m^{3})

Altitude (m)

Data products specific to VENTS are optical measurements and the derived variable temperature anomaly (or Delta-Theta). Optical measurements were made with one of several types of transmissometers or Light Back Scattering Sensors (LBSS). Data is reported as light attenuation, attenuation anomaly, voltage, NTU (Nephelometric Turbidity Units) or dNTU (an anomaly value of NTU). Temperature anomaly (Delta-Theta), is an estimate of additional temperature due to hydrothermal input and is derived from a relationship between potential temperature (Theta) and potential density (Sigma-Theta). For each profile or tow where Delta-Theta was calculated, the specific relationship used is included in the first few lines of each file.

Tow data files also include Latitude, Longitude and cumulative distance along the tow in additional columns.

Station locations are available in summarized, tabular form in some of the directories (mostly later ones). Study areas are generally identified in the cruise summary list below. More detailed information for all cruises is available, but not tabulated in a convenient form for transmittal with these files. This information would, however, be readily available if there were a specific request for it.

Some of this data has been submitted previously either by Dave Pashinski or myself. I am including all data here, even if previously submitted, for convenience, completeness and perhaps redundancy since the media used for previous submissions may not be accessible anymore. Please do not hesitate to contact me if you need additional information or if requests for this data are received.

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7600 Sand Point Way NE, Bldg#3
Seattle, WA 98115

Project: VENTS

Time: 1985 – 2001

Contact: Sharon Walker
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OR

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(206)526-6251
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