Contributor Identification:

Lora Van Uffelen
Scripps Institution of Oceanography
9500 Gilman Drive, Mail Code 0238
La Jolla, CA 92093-0238
Phone: 858-822-4908
lvanuffe@ucsd.edu

Data Collector Identification:

Dr. Peter Worcester
Scripps Institution of Oceanography
Institute of Geophysics and Planetary Physics
9500 Gilman Drive, Mail Code 0225
La Jolla, CA 92093-0225
Phone: 858-534-4688
FAX: 858-534-6251
pworcester@ucsd.edu

General Dataset Description:

This dataset is a collection of 15 CTD casts taken in the North Pacific in early June, 2004. The purpose of the cruise was the deployment of acoustic sources and hydrophone arrays as part of the North Pacific Acoustic Laboratory experiment. CTD casts were performed at each of the transceiver location as well as on the acoustic path between the transceiver moorings. The purpose of obtaining this CTD data was to derive sound speed profiles for the interpretation of acoustic tomographic data.

Dataset Collection Dates: 6/3/04 – 6/17/04
Dataset Location: Latitude: 22.3492 - 34.8915 N
Longitude: -137.7427 - -159.5700 W
Ocean Area: North Pacific
Platform: R/V Roger Revelle
Instrument Used: SeaBird SBE 911/917plus CTD
Parameters Measured: Conductivity, Temperature, Pressure
Project Name: SPICE04
Cruise Name: KRUS01RR

Scientific Content and Format:

All data was processed using SBE Data Processing Software Verstion 5.30a.

1. *Data Conversion* was run to convert to ASCII.
2. *Wild Edit* was run on pressure, temperature, and conductivity data. The data was kept within two standard deviations for pass 1 and ten standard deviations for pass 2. This was done for twenty scans per block, and then repeated for one hundred scans per block.
3. *Cell Thermal Mass* was run on both primary and secondary temperature sensors with a thermal anomaly amplitude (alpha) of 0.03 and a thermal anomaly time constant (1/beta) of 7.
4. *Filter* was used to low pass filter pressure with a time constant of 0.15.
5. *Loopedit* was run with a minimum velocity of .1 m/s.
6. *Bin Average* was used to average the data by pressure into bins of 2 decibars.
7. *Derive* was used to calculate salinity and sound velocity.
8. *Split* was run to divide the data into an upcast and downcast.

Data is presented in ascii form with 111 lines of processing information followed by 10 columns of data. The columns of data listed are the following:

1. Pressure (db)
2. Temperature (ITS-90, degrees C)
3. Conductivity (S/m)
4. Temperature for secondary sensor (ITS-90,degrees C)
5. Conductivity for secondary sensor (S/m)
6. Salinity (PSU)
7. Salinity for secondary sensor (PSU)
8. Sound Velocity (m/s, Del Grosso)
9. Sound Velocity for secondary sensor (m/s Del Grosso)
10. Temperature Difference T2-T1 (ITS-90, degrees C)