

**RV Wecoma 2002, Chief Scientist: Ev Sherr**  
**CTD data, Oregon upwelling system**  
**Additional notes: December 30, 2005**

**Section 4. Scientific content of dataset**

CTD data were obtained from the following instruments: SBE 911+ CTD (pressure, temperature, salinity, potential temperature, sigma-t, specific volume anomaly, and dynamic height), SeaTech fluorometer (fluorescence), SeaTech 25 cm transmissometer (% transmission), and a Biospherical Instruments PAR sensor (PAR). All CTD data were averaged into one meter bins

Units for the CTD data are as follows:

Station latitude	°N
Station longitude	°W
Pressure	decibars
Temperature	Celsius
Salinity	(none)
Potential T	Celsius
Sigma-t	kg m <sup>3</sup>
Specific volume anomaly	cL t <sup>-1</sup> (10 <sup>-8</sup> m <sup>3</sup> kg <sup>-1</sup> )
Dynamic height	J kg <sup>-1</sup> (m <sup>2</sup> s <sup>-2</sup> )
Fluorescence	Volts
Transmission	% transmission
PAR	Volts

**Section 5. Data format of dataset**

Data are in ASCII format (comma-separated), with 31,710 rows and the following columns:

- 1) Station latitude
- 2) Station longitude
- 3) Pressure
- 4) Temperature
- 5) salinity
- 6) potential temperature
- 7) sigma-t
- 8) specific volume anomaly
- 9) dynamic height
- 10) fluorescence
- 11) transmission
- 12) PAR

Contact people for the data are as follows:

Barry and Evelyn Sherr  
College of Oceanic and Atmospheric Sciences  
Oregon State University  
104 COAS Administration Building  
Corvallis, OR 97331-5503  
Phone: 541 737 4639  
Email: sherrb@coas.oregonstate.edu or sherre@coas.oregonstate.edu

The funding for the project was from the National Science Foundation OCE-0002236 to Barry and Evelyn Sherr (Oregon State University), and OCE-0002728 to Paul del Giorgio (then at University of Maryland Center for Environmental Sciences).

References (as of December 30, 2005) using these data include:

- Longnecker, K. (2004). Bacterioplankton in the Oregon upwelling system: distribution, cell-specific leucine incorporation, and diversity. Ph.D. thesis, Oregon State University.
- Longnecker, K., D.S. Homen, E.B. Sherr and B.F. Sherr (accepted). Similar community structure of biosynthetically active prokaryotes across a range of ecosystem trophic states. *Aquatic Microbial Ecology*.
- Longnecker, K., B.F. Sherr and E.B. Sherr (2005). Activity and phylogenetic diversity of high and low nucleic acid content, and ETS-active, bacterial cells in an upwelling ecosystem. *Applied and Environmental Microbiology* 65: 7737-7749.
- Morris, R.M., K. Longnecker and S.J. Giovannoni (submitted to *Environmental Microbiology*). *Pirellula* and OM43 are among the dominant lineages identified in an Oregon coast phytoplankton bloom.
- Sherr, E.B., B.F. Sherr and K. Longnecker (in revision for *Deep-Sea Research D*). Distribution of bacterial abundance and cell-specific nucleic acid content in the northeast Pacific Ocean.

## **Section 6. Calibration information**

### **Rosette Setup**

#### **1) SBE 911+ CTD**

Temperature sensors and conductivity sensors all calibrated November 12, 2001

#### **2) SeaTech fluorometer**

calibrated December 19, 2001

#### **3) SeaTech 25 cm transmissometer**

calibrated December 1, 1994

#### **4) Biospherical Instruments PAR sensor**

calibrated January 14, 1999