

CTD Data for Cruise Discovery 213  
(6 January - 21 February 1995)

## 1. INTRODUCTION

The cruise Discovery 213, as reported by Pollard et al. (1995), was the SWINDEX(II) cruise and formed part of the UK's contribution to WOCE. Most of the data received by BODC had already been worked up by the scientists concerned and BODC was mainly concerned with the checking of the data.

## 2. COMPONENTS OF THE DATA SET

The CTD data set for the cruise Discovery 213 consists of CTD-profile and CTD-bottle data:

CTD-profile: Salinity (pss-78)  
Temperature (degc90)  
Pressure (dbar)  
Oxygen (umol/kg)

CTD-bottle: Salinity (pss-78)  
Oxygen (umol/kg)  
Reversing temperature (degc90)  
Nitrate + nitrite (umol/kg)  
Silicate (umol/kg)  
Phosphate (umol/kg)  
CFC-11 (pmol/kg)  
Chlorophyll-a (mg/m\*\*3)  
Phaeopigments (mg/m\*\*3)

## 3. INSTRUMENTATION

CTD-profile: Neil Brown Systems MkIIIc CTD with a dissolved oxygen sensor.

CTD-bottle: General Oceanics 24 bottle rosette equipped with 24 10-litre Niskin bottles. 8 SIS digital reversing thermometers (T253, T895, T891, T890, T892, T399, T219, T255).

## 4. BODC DATA PROCESSING

### 4.1 CTD-Profile:

BODC received processed 2db averaged down cast CTD-profile data, and no further calibrations were applied by BODC.

The data were converted into the BODC internal format (PXF) and manually screened for spikes etc. and such occurrences were flagged. The CTD data were then loaded to our database.

The following screening comments are made:

Some profiles have linearly interpolated regions for many parameters.  
12687: no data between 2723-2843db for all parameters.

Temperature and Salinity: few instabilities and spikes flagged suspect.

Oxygen: first 1 or 2 bins may be suspect. In general the top ~1000db has ~2umol/kg scatter, >1000db has ~0.5umol/kg scatter.  
12713, 12714: noisier, upper ~1000db has ~5umol/kg scatter, >1000db has ~2umol/kg scatter.

#### 4.2 CTD-bottle:

Extensive quality control was conducted on the data to eliminate rosette misfiring and incorrectly assigned flag codes. Data being averaged if bottles fired within +/- 4db of each other.

#### 5. BIBLIOGRAPHY

Pollard R.T. et al. (1995) RRS Discovery Cruise 213 Institute of Oceanographic Sciences Deacon Laboratory, Cruise report No

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