

CTD Data for Cruise Discovery 201
(23 March - 3 May 1993)

1. INTRODUCTION

The cruise Discovery 201, as reported by Pollard et al. (1994), was the SWINDEX(I) 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 201 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)
CFC-12 (pmol/kg)

3. INSTRUMENTATION

CTD-profile: Neil Brown Systems MkIIIb (DEEP01) CTD, with a SensorMedic dissolved oxygen sensor.

CTD-bottle: General Oceanics 24 bottle rosette equipped with 24 10-litre Niskin bottles. 5 SIS digital reversing thermometers (T219, T220, T238, T400, T401).

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 loaded to our database and compared with the bottle data to check that the data was up to WOCE standards.

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. (1994) RRS Discovery Cruise 201 Institute of Oceanographic Sciences Deacon Laboratory, Cruise report No 240 96pp

Martin Gould, BODC
30/07/1997