

2008 CTD Data Files

IOS Cruise Number 2008-30

Cruise

There were 73 CTD casts performed aboard the *CCGS Louis S. St-Laurent* between 17 July and 21 August 2008 in the Canada Basin using a SBE911+ CTD system with 24 10-L Niskins. XCTDs, vertical net tows for zooplankton, moorings and ice-tethered profilers were also conducted/deployed/recovered during this trip.

Data Summary

The CTD data for down and upcasts are provided in 1-db averaged files (*.cnv), in Seabird's text format with one file per cast and separate files for down and up direction. The files contain both processed and unprocessed variables, described below. **The downcast files are the primary data set however the upcast files are provided because of their usefulness for confirming unusual features seen in the downcast.** CTD Oxygen for Casts 3 to 22 have been held back waiting for further corrections.

Downcast

Filename: d200830_XXX.cnv where XXX is cast number

Standard seabird processing steps were used.

Pressure, primary and secondary temperature, primary and secondary conductivity, and oxygen have been calibrated.

Spikes in primary temperature, primary conductivity and oxygen have been interpolated over and where needed secondary values (when available) have replaced the primary values.

Derived variables, salinity, potential temperature, sigma-theta and sound velocity, were recalculated.

Transmission, fluorescence, CDOM fluorescence (v6) and altimetry have not been calibrated.

Upcast

Filename: u200830_XXX.cnv where XXX is cast number

Upcast is supplied only as it provides a reference for unusual features seen in the downcast.

Standard seabird processing steps were used.

No spikes have been removed.

Pressure, primary and secondary temperature, and primary and secondary conductivity have been calibrated.

CTD oxygen has not been calibrated (coefficients appropriate for the downcast have been applied however, hysteresis is pronounced)

Derived variables, salinity, potential temperature, sigma-theta and sound velocity, were recalculated.

Transmission, fluorescence, CDOM fluorescence (v6) and altimetry have not been calibrated.

Data Notes:

Three oxygen sensors were used during the cruise. Only one sensor was on at a time, however the first and then the second sensor failed requiring the use of the third. In summary: Casts 1-9, SBE43 Oxygen s/n 435; Casts 10-22 Oxygen SBE43 s/n 1115; Casts 23-73 SBE43 Oxygen s/n 398

Two transmissometers were used, but not for the entire cruise. When they were repositioned for cast35, it changed the naming of which instrument was called primary and which secondary. In summary:

Casts 1-5, Two Transmissometers, s/n 662 is primary, s/n 993 is secondary

Casts 6-34, One Transmissometer, s/n 662 is primary and column of zeros for secondary

Casts 35-73, Two Transmissometers, s/n 993 is now primary and 662 is secondary