Ocean Carbon and Biogeochemistry: CARIACO Data System

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CARIACO cruises
CTD comments

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13 February 2008: Prepared for OCB data system by Terry McKee (BCO-DMO) from documentation contributed by Laura Lorenzoni (IMaRS, USF).

These comments document irregularities in CTD Temperature or Salinity profiles noted during analysis.

C1 - CTD Used was SBE19 - does not seem to be providing good data
C2 - Potential temperature and density were recalculated. CTD Used was SBE19 - does not seem to be providing good data
C3 - CTD Used was SBE19 - does not seem to be providing good data
C4 - CTD Used was SBE19 - does not seem to be providing good data
C5 - CTD Salinity and temperature values seem low - not reliable. CTD Used was SBE19
C6 - CTD temperature seem low. Upcast profile was used instead of downcast. CTD Used was SBE19
C7 - CTD Salinity and temperature values seem low - not reliable. CTD Used was SBE19
C8 - CTD Used was SBE25.
C27 - Pressure sensor did not work during the upcast.
C28 - Deep cast was only down to 500m due to equipment malfunction.
C45 - Rosette stopped functioning during the deep cast. Salinity data looks lower than usual.
C49 - Salinity profile looks irregular
C88 - Salinities are high below 800m
C60 - Data has an error of +- 0.1 in Temperature. Salinity data was not corrected below 260m. This affected potential temperature and density calculations.
C61 - Data has an error of +- 0.1 in Temperature. This affected potential temperature and density calculations.
C62 - Data has an error of +- 0.08 in Temperature. There is a large error in salinity due to lack of sensor calibration. This affected potential temperature and density calculations.
C65 - Computer froze at 558m - it was restarted and the cast continued.
C66 - There was a malfunction of the CTD in the deep cast. It did not seem to affect the temperature data
C73 - No salinity correction was made
C75 - No salinity correction was made
C76 - No salinity correction was made
C79 - No salinity correction was made
C80 - No salinity correction was made
C81 - No salinity correction was made

C84 - No salinity correction was made

C87 - on: The way of reporting pressure and depth changed from C87 on (decimal places reported). This was changed in order to be able to calculate the buoyancy frequency and stability from the pressure bins using the SeaBird CTD processing software.

C89 - No salinity correction was made

C96 - Values from 164 to 214 m are missing; problems processing the cast.

C100 - Data was taken during the inter-deep (7:00 AM) cast since the shallow cast was not recorded. Salinity values were too high.

C104 - Deep cast data used for Salinity - malfunction of sensor in shallow cast. Salinity sensor was changed prior to the deep cast. No salinity correction was made.

C105 - Temperature sensor was changed, the new one increased T by 0.01 �C. No salinity correction was made

C107 - No salinity correction was made

C108 - No salinity correction was made

C110 - No salinity correction was made

C111 - Malfunction with the CTD due to battery problems. No salinity correction was made

C116 - SBE19 was used; old SBE25 and rosette ensemble lost at sea. SBE19 temperature sensor showed an increase of + 0.05�C than the data from the SBE25. Salinity data below 300m is not reliable.

C117 - on: New SBE25 used. Temperature sensor showed data +0.0009�C higher than the old SBE25.