WOCE P26 及 P27 之 One Time Hydrographic Survey 時的一大考驗，因爲鹽度測定者，勢必要在航行中使用 Autosal 測定鹽度，其困難已突破。

如果我們不修正 CTD 資料，溫鹽度的誤差有多大？以 1990 年的 PR20 航次爲例，溫度會偏高 0.022°C，鹽度會偏低 0.056 psu。再以 1985 年的 CHIPS-1 航次例，溫度會偏低 0.0639°C，鹽度會偏高 0.073 psu。對於表層 400 m 的水文研究，也許不嚴重，但對研究中層水及深層水而言，這些偏差值皆太大，所以修正 CTD 溫度及鹽度資料的工作乃是處理 CTD 資料的必要步驟。

誌　　謝

WOCE 航次要受到謝在治船長及海研一號全體船員之協助，方得順利完成，在此謹致謝意。手測鹽度資料是由郭廷瑜先生提供，WOCE 探測及資料分析工作係由國科會 NSC 80-0209-M002A-24，NSC 80-0209-M002A-26，NSC 80-0209-M002A-20，NSC 79-2006-P056-01 及 CS 80-0210-D002-30 計畫經費所資助。

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CALIBRATION AND CORRECTION OF CTD TEMPERATURE AND SALINITY DATA

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ABSTRACT

The correction methods for temperature and salinity data obtained by a CTD unit are evaluated. The accuracy of temperature and salinity data obtained by a CTD unit require careful correction, even when the instrument has been frequently calibrated by the manufacturer. Several correction processes have been evaluated by comparing their availabilities in treating data of the past cruises. The best method has been proved to be consistent with historical data within 0.002°C in tempreature and 0.004 psu in salinity.