

HOT-44: Chief Scientist Report

Chief Scientist: C. WINN

Personnel list

Chris Winn - Chief Scientist
Terry Houlihan
Jim Christian
Chris Carrillo
Jef Snyder
Sean Kennan
Jinchun Yuan
Dale Hebel
Happy William
John Dore

Schedule

We departed Snug Harbor at 0903 on January 18th on the R/V Townsend Cromwell. The cruise schedule did not deviate significantly from the plan. We returned to Snug Harbor at 1400 on the 22nd of January. Weather was good throughout the cruise. Seas were 3 to 4 feet and wind speeds generally less than 10 knots.

This was the first HOT cruise to the R/V Townsend Cromwell. The ship was equipped with only 1200 meters of CTD cable so CTD casts were limited to 1000m. In addition, the HOT 24-place rosette was too large to fit through the ship's A-frame, and we used a 12-place rosette provided by the Cromwell. This rosette was equipped with a combination of standard 10 and 12 liter Niskin bottles.

Sample

With the exception of the WOCE deep cast, which was not obtained because of the limited amount of CTD cable available, all of the standard WOCE and GOFs sampling was completed on this cruise. Because the 12-place rosette was used, the cast schedule on HOT-44 was different than that used on most HOT cruises. The difference was mainly due to the need to spread our water sampling out over more casts than is necessary when the 24-place rosette is used.

CTD Operating

CTD operations went reasonably well on this cruise. There were some problems with double trips on the first few casts. This problem was a result of the use of a high-power deck-box with the relatively short CTD cable available. The problem was solved by placing a resistor between the deck-box and the CTD cable.

Sediment Trap and Primary Production

The sediment trap and primary production work went smoothly this cruise, and no problems were encountered with the recovery or the deployment of either array.

Ancillary Program

Dave Keeling	CO2 (Carbon dioxide)
Lisa Cambell	Phyltoplankton taxonomy