HOT-69: Chief Scientist Report

Chief Scientist: L. TUPAS

Loading: January 12, 1996
Departed: January 15, 1996 at 0900
Returned: January 19, 1996 at 0730
Vessel: R/V Moana Wave
Chief Scientist: Dr. Louie Tupas
Master: Captain Robert Hayes
Deck Operations: Mr. Luigi Pozzi
Electronics Technician: Mr. Will Hervig

1. SCIENCE PERSONNEL

Dave Foley - UH, JGOFS
Luis Tupas - UH, JGOFS
Lance Fujieki - UH, JGOFS
Terrence Houlihan - UH, JGOFS
Albert Colman - UH JGOFS
Angie Thomson - UH, JGOFS
Jefrey Snyder - UH, WOCE
Craig Nosse - UH, WOCE
Molly Lucas - UH, WOCE
Fernando Santiago-Mandujano - UH, WOCE
Daniel Sadler - UH, Carbon Project
John Rooney - UH, Zooplankton Project
Karen Selph - UH, Zooplankton
Mai Lopez - SIO, OPC/ADCP
Sylvia Pinca - SIO, OPC/ADCP

2. GENERAL SUMMARY

All objectives of the JGOFS and WOCE programs were accomplished. All planned stations were occupied. All core samples were taken and the 36 hour CTD burst sampling period was not interrupted. All samples for ancillary projects were taken. Floating sediment trap array and primary production array deployed and recovered succrsfully. No samples were lost during the in-situ incubation. There were no major equipment failures. The optical plankton counter was towed from Station ALOHA to Honolulu without any problem.

3. R/V MOANA WAVE, OFFICERS AND CREW, TECHNICAL SUPPORT

The R/V Moana Wave continues to maintain the excellent ship support for our work. The officers and crew were most helpful and accommodating. They showed enthusiasm and concern for our work and were very flexible in receiving changes in our operational schedule. Technical support during this cruise was excellent. STAG personnel were abvailable at any time to assist in our work and made things much easier for us.

4. DAILY REPORT OF ACTIVITIES

January 12, 1996; Loading Day

All equipment were moved into the ship from either SNUG Harbor labs or UH on this day. All electrical and electronic connections were made for the CTD and the OPC/v-fin. All lab equipment were stowed away and secured. All instruments were tested and appeared functioning. No problems were encountered.

January 15, 1996

All hands arrived on ship at 0830 and we departed at 0900. Fire and emergency drills were conducted at 1000 followed by a safety briefing by the first mate and a short science meeting. Arrived at Station Kahe at 1130. Conducted weight cast and 1000 m CTD cast. All operations and sampling accomplished by 1400. Started transit to Station ALOHA. Arrived at Station ALOHA at 2200. Sediment trap array deployment procedures began at 2300, accomplished at 2400 (0000).

January 16, 1996

WOCE deep cast at 0030, completed at 0800. CTD burst sampling commenced at 0900. CTD casts maintained at 3 hour intervals. Noon and midnight zooplankton tows accomplished.

January 17, 1996

CTD casts continued at 3 hour intervals. Go-Flo cast conducted at 0230, finished at 0330. Primary production array deployment commenced at 0600. CTD casts continued at 3 hour intervals. Zooplankton tows conducted at noon. Retrieval of primary production array commenced at 1800. No samples were lost. CTD casts continued at 3 hour intervals. One night tow was accomplished. Last 1000 meter cast conducted at 2100. Transit to pump tanks at 2300.

January 18, 1995

Returned to the center at 0100. Deep cast conducted at 0130, completed at 0500. Proceeded to location of sediment trap array. Arrived at site and commenced recovery at 0800, accomplished at 1000. OPC deployed to conduct transects through Station ALOHA. Break-off from transect at 2100 and proceeded to Honolulu with OPC in tow.

January 19, 1996

Arrived at Snug Harbor at 0800. Proceeded with unloading, accomplished at 1200.

ANCILLARY INVESTIGATIONS

1. Zooplankton sampling - K. Selph, J. Rooney
2. DIC sampling - D. Sadler
3. Optical Plankton counts - M. Lopez, S. Pinca

SAMPLES TAKEN FOR OTHER INVESTIGATORS

1. DIC water samples for C.D. Keeling, SIO-UCSD
2. DIC water samples for P. Quay, UW
3. Microscopy samples for H. Thierstein, ETH-Zurich
4. Surface seawater for E. Laws, UH
5. Surface seawater for C. Measures, UH