

Date: November 1, 1994

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Captain EWING Captain Files
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RESEARCH CRUISE REPORT

R/V MAURICE EWING, LEG 93-08

"BEST III

P.I. Dr. Silvia Garzoli, Lamont-Doherty Earth Observatory
Dates: 24 October to 10 November, 1993
Ports: Cape Town to Cape Town, South Africa

Michael Rawson
Marine Department

November 1, 1994

BEST III Cruise Report

**R/V Maurice Ewing
Voyage 93-060**

**Silvia L. Garzoli,
Chief Scientist
November 1993**

BEST III Cruise Report

The BEST III Cruise aboard the R/V Maurice Ewing departed from Cape Town, South Africa, October 24, 1993 and returned to Cape Town November 10, 1993.

The objectives of the cruise were:

- to recover the moorings deployed during the BEST I cruise and to obtain CTD stations at the location of the deployments for further calibration of the records
- to perform extensive hydrographic work (CTD/XBT's) jointly with South African scientists to obtain the hydrographic conditions along the line of deployments and to search for eddies.
- to recover a South African CMM and
- to recover and redeploy a Pressure Gauge from Texas A & M.

The scientific crew, their affiliations* and responsibilities are listed here:

Silvia L. Garzoli	Senior Research Scientists/LDEO	Chief Scientist
Chris Duncombe Rae	Senior Oceanographer, SFRI.	CTD
Miguel Maccio	Electrical Engineer, LDEO,	IES
Marcela Stern	Electrical Engineer, LDEO,	IES
Anthony Martino	Systems Analyst, LDEO	XBT's
Jay Simpkins	Senior Research Assistant, OSU	CMM's
Dennis Root	Senior Research Assistant, OSU	CMM's
Brian Super	Principal Oceanographic Technician, SFRI	CTD
Peter Downes	Pupil Oceanographic Technician, SFRI	CTD
P.J. Claasen	Principal Industrial Technician, SFRI	CTD
Sarah Searson	Research Assistant, SFRI	CTD
Joseph Stennett	Science Officer, LDEO	
Claudia Melo	Technician, SFRI	Nutrients
S. Budhypramono	Systems Manager, LDEO	

*LDEO Lamont-Doherty Earth Observatory, USA
 OSU Oregon State University, USA
 SFRI Sea Fisheries Research Institute, South Africa

where,	CTD	Conductivity, Temperature, Depth Station
	IES	Inverted Echo Sounder
	PIES	Inverted Echo Sounder with Bottom Pressure Sensor
	CMM	Current Meter Mooring
	XBT	Expendable Bathythermograph

During the course of the cruise the following was achieved:

- 33 CTD's were obtained,
- 93 XBT's were launched,
- 2 IES were recovered
- 4 PIES were recovered.
- 4 CMM's were recovered

The cruise track as well as the locations of the moorings are given in Figure 1.

An eddy was located centered at approximately 36° 20'S, 10° 30'E. It was sampled with XBT probes and CTD stations were obtained at the edges, middle and center. Simultaneously and during the survey, ADCP data were collected. The eddy has a thermostat of 13° to 14° and salinity that suggest the possibility of being a Brazil Current eddy.

In addition, a test for a CHIRP, a new version of inverted echo sounder developed at LDEO was performed. It was deployed off Cape Town at the beginning of the cruise and recovered on the way back of the cruise.

A Pressure Gauge from Texas A &M was recovered and redeployed at 34° 35.32'S, 17°48.69'E.

BEST

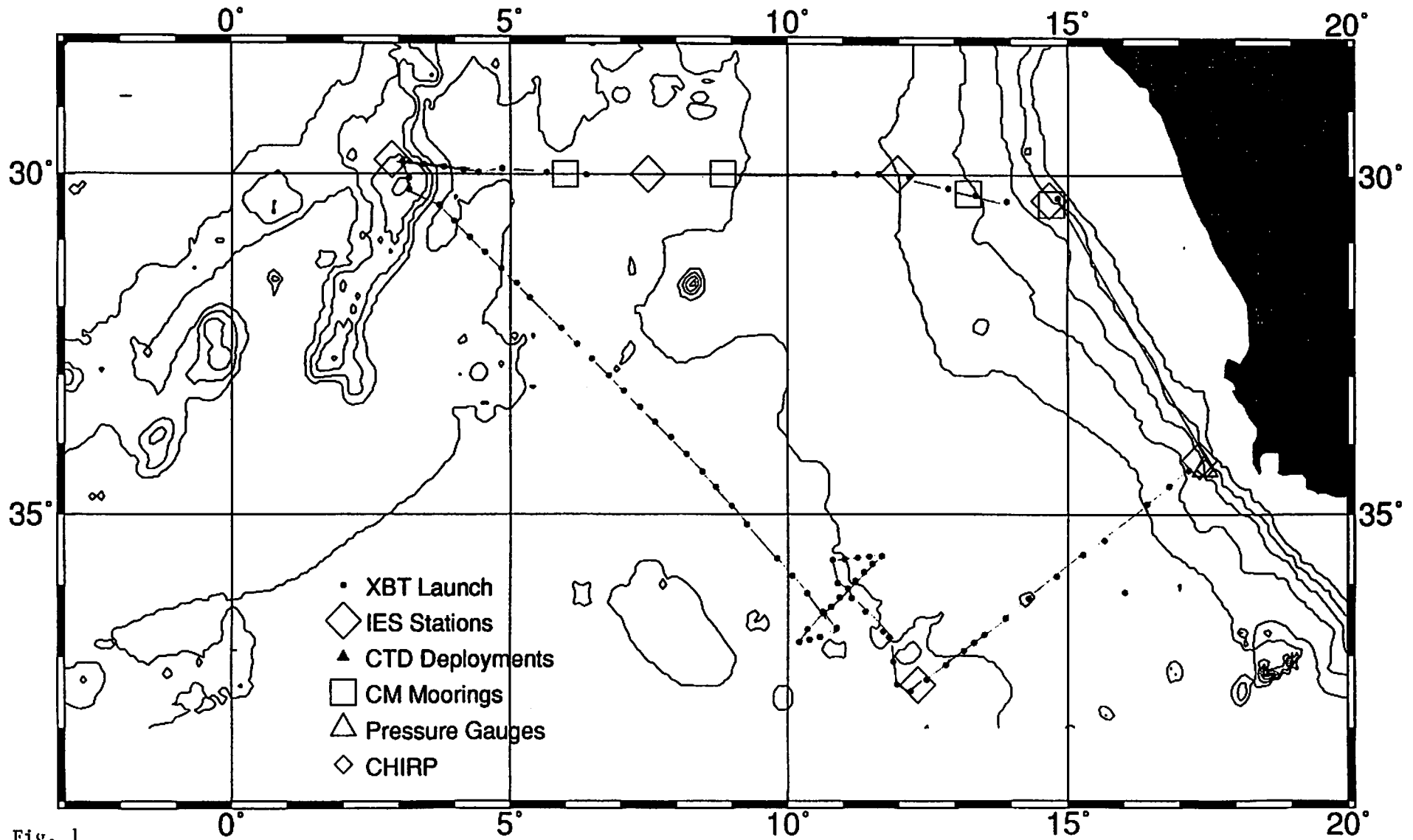


Fig. 1