

Lamont - Doherty Geological Observatory | Palisades, N.Y. 10964
of Columbia University

CADIS: LAMONTGLU

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Palisades New York State

1WX-710-576-2653

CRUISE REPORT

Ship Name: CONRAD

Cruise No: 22-07

Departure: 22 May 1979
Date

from Halifax
Port

Arrival: 7 June 1979
Date

at Bermuda
Port

Days at Sea: 16 days
(Count day of departure but
not day of arrival in port)

Days Foreign Port: 8 days
(number of days in arrival port
before next leg)

Area of Operation: Shelf-break region between 70°W and 72°E south of
Rhode Islands Sound in the New York Bight.

Program Description: Most of our work involved (1) underway mapping of
surface temperature, salinity, and chlorophyll using the ship's sea
water system, (2) underway mapping of scattering layers using a
towed transducer, and (3) vertical profiling of temperature, salinity
and chlorophyll using CTD and FTD systems.

Program supported by what contract: OCE78-19799, IA439-5069-5973

Participants: (All L-DGO unless otherwise specified)

<u>Name</u>	<u>Title</u>
Malone	Chief Scientist
Houghton	hydrography
Marra	phytoplankton
Stepien	phytoplankton
Boardman	phytoplankton
Aikman	hydrography
Szelag	"
Woodroffe	"
Hibbard	"
Haines	"
Rennie	"
Walter	Acoustics
Puig	Acoustics
Cuttillo	ET

All inquiries regarding cruise should be made to the chief scientist.

Cruise Report

22 - 07

T.C. Malone, Chief Scientist

Scientific Program

Our strategy was to observe the large scale geometry of the shelf-break front and the associated distribution of phytoplankton and to increase our time and space resolution of smaller scale features that might be related to the exchange of properties between shelf and slope water masses and the development and dissipation of phytoplankton blooms. To these ends we completed a large scale map of surface temperature, salinity and chlorophyll and vertical temperature structure over a 5,000 km² area during 24-26 May. This was followed by a series of medium (40 km and small (10-15 km) scale transects. A total of 152 XBTs, 211 CTD casts and 190 FTD casts were performed.

Status of Equipment

No major problems were encountered. Of the ship's facilities we only made use of the sea water system, the CTD winch and the 12 kc PDR.

