data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5703
(MLR 94)
6-30 March 1957

and

CCOFI Cruise 5704
(MLR 95)
5-30 April 1957

SIO Reference 58-24
1 August 1958
UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5703
(MLR 94)
6-30 March 1957

and

CCOFI CRUISE 5704
(MLR 95)
5-30 April 1957

Sponsored by

Marine Research Committee

SIO Reference 58-24
1 August 1958

Approved for distribution:

Roger Revelle, Director
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CRUISE 5703

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INTRODUCTION

The data of this report were collected on the ninety-fourth and ninety-fifth consecutive cruises of the California Cooperative Oceanic Fisheries Investigations program. The R/V Black Douglas of the U. S. Fish and Wildlife Service and the R/V Orca of the Scripps Institution of Oceanography participated in the ninety-fourth cruise while the R/V Black Douglas, and the R/V Horizon and R/V Stranger of the Scripps Institution participated in the ninety-fifth cruise.

The data are tabulated at observed depths; the interpolated and computed values are tabulated at standard depths accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication, and the interpretations herein may be subject to modification as the program continues.

The stations occupied in the Gulf of California are based on a special grid; therefore, they will appear in each report following the data obtained in the normal station pattern. In each group stations are listed in numerical order. The designation "G" in the station number is used to denote Gulf of California stations.

STANDARD PROCEDURES

Processing of the data was carried out using the method described by Klein.1/ Certain approximations have been introduced for the determination of the integrated pressure terms which may result in errors whose maximum values are less than 0.5 dynamic centimeter at 0 over 200 decibars, 1.0 dynamic centimeter at 0 over 500 decibars, and 2.0 dynamic centimeters at 0 over 1000 decibars. The 125-meter level was introduced into the integration to obtain greater accuracy in the determination of ΔD. The interpolated values at 125 meters are not tabulated.

To indicate degree of accuracy, temperatures are recorded in tenths of a degree when obtained by bucket thermometer, thermograph, or bathythermograph, while temperatures from reversing thermometers are recorded in hundredths of a degree. Extrapolated values and values interpolated between remote observations

are entered within parentheses. A hyphen is used to indicate a missing observed value. The time is the time of messenger release. When more than one cast was made on a station, each messenger time and wire angle is given in the order of increasing depth. A line is left blank between the observed data of each cast.

FOOTNOTES

In addition to standard footnotes, three special notations are used without footnotes because their meaning is always the same.

To indicate a premature or a delayed reversal of the water-sampling device which results in certain depth and property errors, the following notation is used.

p: pretrip or posttrip,

Values which are not drawn through because they seem to be in error without apparent reason are indicated by one of the following notations.

r: rejected value (value seems to be definitely wrong),

u: uncertain value (value may be correct; occasionally it can influence the drawing of the property curve).
FIGURES

1. CCOFI Cruise 5703 (MLR 94), station positions
2. Surface currents measured by geomagnetic electrokinetograph (GEK)
3. Horizontal distribution of temperature at 10 meters
4. Horizontal distribution of salinity at 10 meters
CCOFI CRUISE 5703
6-30 MARCH 1957
SURFACE CURRENTS
MEASURED BY GEOMAGNETIC ELECTROKINETOGRAPH
CORRECTED FOR DROOP FACTOR

BLACK DOUGLAS
6-22 MARCH

FIGURE 2
CCOFI CRUISE 5703
6-30 MARCH 1957
10 METER SALINITY
CONTOUR INTERVAL 0.20%.

FIGURE 4
SHIPS' CAPTAINS

Forster, Charles W., R/V Black Douglas
Colbeth, Clifford W., R/V Orca

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Black Douglas

Farrar, Lloyd, Fishery Aid, U. S. Fish and Wildlife Service
Kaye, Hugh R., Marine Technician

R/V Orca

Justice, David K., Fishery Aid, U. S. Fish and Wildlife Service
*Froerer, Arthur I., Marine Technician
Tuve, J. Michael, Marine Technician

*Did not complete cruise
CCOFI Cruise 5703

Observations at 10 and 50 Meters (Net-Tow Stations)
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<th>Weather</th>
<th>Sea</th>
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a) Depth, 40 meters.
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