data report

PHYSICAL AND CHEMICAL DATA

CCOFI Cruise 5603
4–19 March 1956

and

CCOFI Cruise 5604
5–27 April 1956

SIO Reference 60–6
10 November 1959
UNIVERSITY OF CALIFORNIA
SCRIPPS INSTITUTION OF OCEANOGRAPHY

PHYSICAL AND CHEMICAL DATA

CCOFI CRUISE 5603
4-19 March 1956

and

CCOFI CRUISE 5604
5-27 April 1956

Sponsored by

Marine Research Committee

SIO Reference 60-6
28 March 1960

Approved for distribution:

Roger Revelle, Director
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INTRODUCTION

The data presented in this report were collected on the eighty-second and eighty-third 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 Stranger of the Scripps Institution participated in the eighty-second and eighty-third cruises; the R/V Spencer F. Baird of the Scripps Institution also participated in the eighty-third cruise.

The data are tabulated at observed depths, and the interpolated and computed values are tabulated at standard depths. They are accompanied by charts of horizontal distribution. The presentation of data in this report does not constitute publication; however, the data contained in this report have been carefully edited and no modifications should be necessary before final publication.

The stations occupied in the Gulf of California are based on a special grid; therefore, they appear 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 Cruise 5604 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, messenger times and wire angles are given in the order of increasing depth. A line is left blank between the observed data of each cast.

1/ Klein, Hans T. A new technique for processing physical oceanographic data. MS.
FOOTNOTES

Footnotes which appear frequently are "loose bottle cap" and "possible evaporation." To avoid any confusion as to their meaning the following explanation is included.

Laboratory personnel, before titrating the salinity samples, note any possible imperfections in the sealing of the bottles as follows:

- **Loose bottle cap:** The cap is definitely loose so that it could be moved with very little applied pressure. The salinity values obtained from these samples may be usable depending on time and/or conditions of storage.

- **Possible evaporation:** Either the cap was sealed with less than usual pressure, the bottle edge chipped, the rubber washer cracked, or the bale broke on opening, etc.

Use of the above values in interpolation depends upon consistency with other values of salinity and other properties, and these footnotes are supplemented with "falls on property curve" or "does not fall on property curve," depending upon whether the property curve was drawn through the value or not.

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).

FORMAT

These data are typed in the format of the University of California Press publication, *Oceanic Observations of the Pacific*. So that these pages can be used as copy for the 1956 volume, the first page of the Cruise 5603 data is numbered 56.
FIGURES

1. CCOFI Cruise 5603, 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
CCOF1 CRUISE 5603
4-19 MARCH 1956
SURFACE CURRENTS
MEASURED BY GEK
CORRECTED FOR DROOP FACTOR

5 CM/SEC
10 CM/SEC

FIGURE 2
CCOFI CRUISE 5603
4-19 MARCH 1959
10 METER SALINITY
CONTOUR INTERVAL 0.20%
PERSONNEL
Cruise 5603

SHIPS' CAPTAINS

Davis, Laurence E., R/V Stranger
Forster, Charles W., R/V Black Douglas

PERSONNEL PARTICIPATING IN THE COLLECTION OF DATA

R/V Black Douglas

Casey, Harold., Fishery Aid, U. S. Fish and Wildlife Service
Jaynes, John M., Marine Technician

R/V Stranger

Vorobiov, Alexander V., Fishery Aid, U. S. Fish and Wildlife Service
Bryer, Bruce A., Marine Technician
Henson, Fred D., Marine Technician
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<th>Wind Dir</th>
<th>Weather</th>
<th>Sea</th>
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<td></td>
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<td>(fm)</td>
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<td></td>
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<td>Force</td>
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