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Temperatures and salinities, 1967, at Station 27  
and in the St. John's-Flemish Cap section

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At Station 27 near St. John's (Fig. 1), late winter, early spring, and summer deep-water temperatures in 1967 were considerably lower than in 1966, a little lower than in 1963 and 1965, close to but on the average a little lower than those of 1964, and lower than the average for 1950-62 (Templeman, 1965). Surface temperatures from August to November were higher than usual and well above the 1950-62 average. The salinity picture was not much different from those of 1965 and 1966.

Because of shortage in vessel time, only one (St. John's to Flemish Cap) of the 6 standard hydrographic sections across the Labrador Current was occupied.

In this section, taken on July 25-27 (Fig. 2), the temperatures of the colder cores of the Labrador Current were considerably lower than in 1966 and bottom temperatures in the Avalon Channel and over the surface of the Grand Bank were lower also.

Surface temperatures in 1967 were higher than the averages for 1951-65, though not as high as the highest surface temperatures for this period. In the eastern part of the section, surface temperatures were a little lower, and over the Avalon Channel they were generally approximately the same as in 1966.

Although the temperatures of the colder water cores of the Labrador Current were below the 1951-65 averages and contained temperatures as low as any obtained during this period, the temperatures in Flemish Channel and on the seaward face of Flemish Cap were higher than the 1951-65 averages and were approximately as high as the highest temperatures of this period. Those in Flemish Channel, however, were only slightly higher than those of 1966. In 1966 the stations seaward of Flemish Cap were not occupied.

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Bottom salinities in the Avalon Channel were a little lower than in 1965 or 1966 but otherwise the salinity picture did not change very much.

#### Acknowledgments

I am grateful to the various scientists and technicians of the St. John's Station who have taken the various hydrographic observations and especially to Mr G. H. Winters who, as scientist-in-charge of the A.T. Cameron cruise, carried out the Flemish Cap section and to Mr. W. G. Kelland, the technician most closely associated with hydrographic work at the St. John's Station.

#### Reference

Templeman, Wilfred. 1965. Anomalies of sea temperature at Station 27 off Cape Spear and of air temperature at Torbay-St. John's. Int. Comm. Northw. Atlantic Fish., Special Pub. No. 6, p. 79-806.

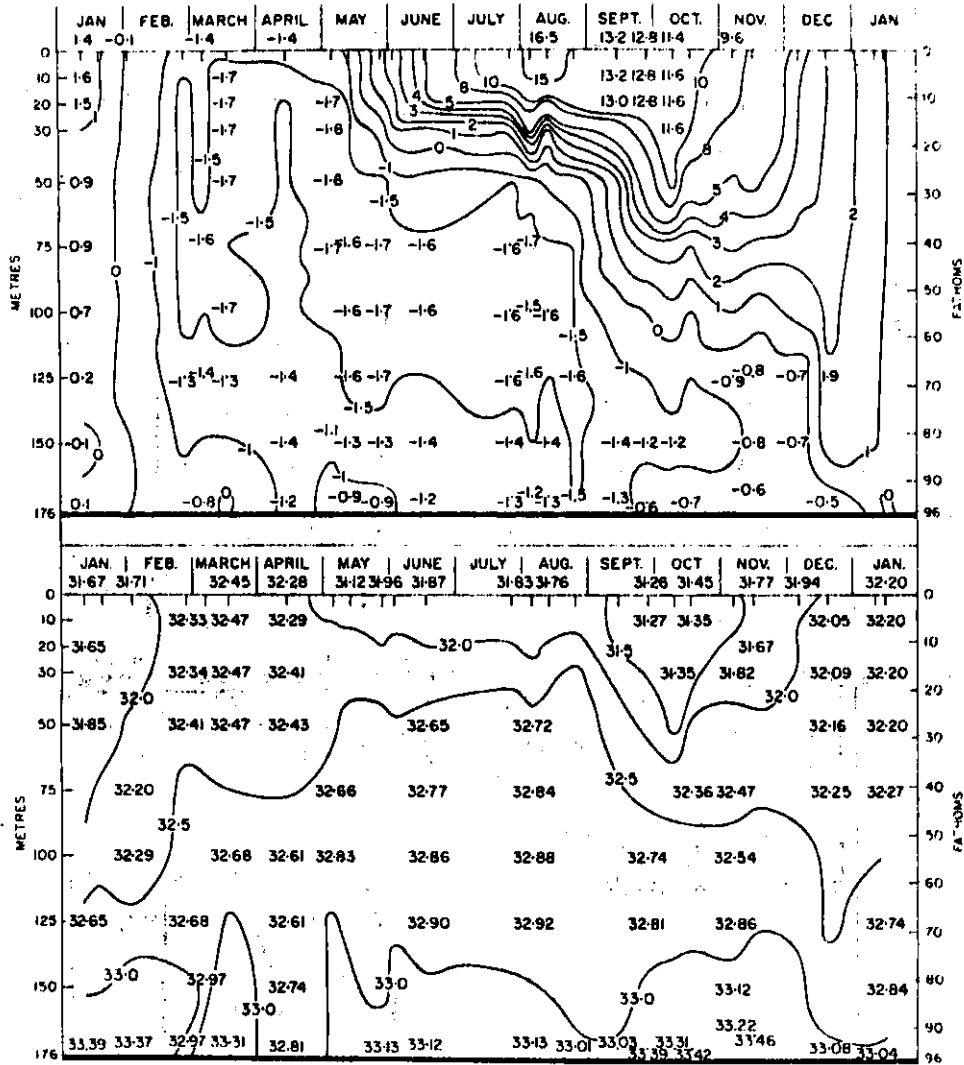


Fig. 1. Above, temperature (°C) and below, salinity ‰ from surface to bottom at Station 27 (see Fig. 2 insert), 2 nautical miles off Cape Spear near St. John's, January 1967 to January 1968.

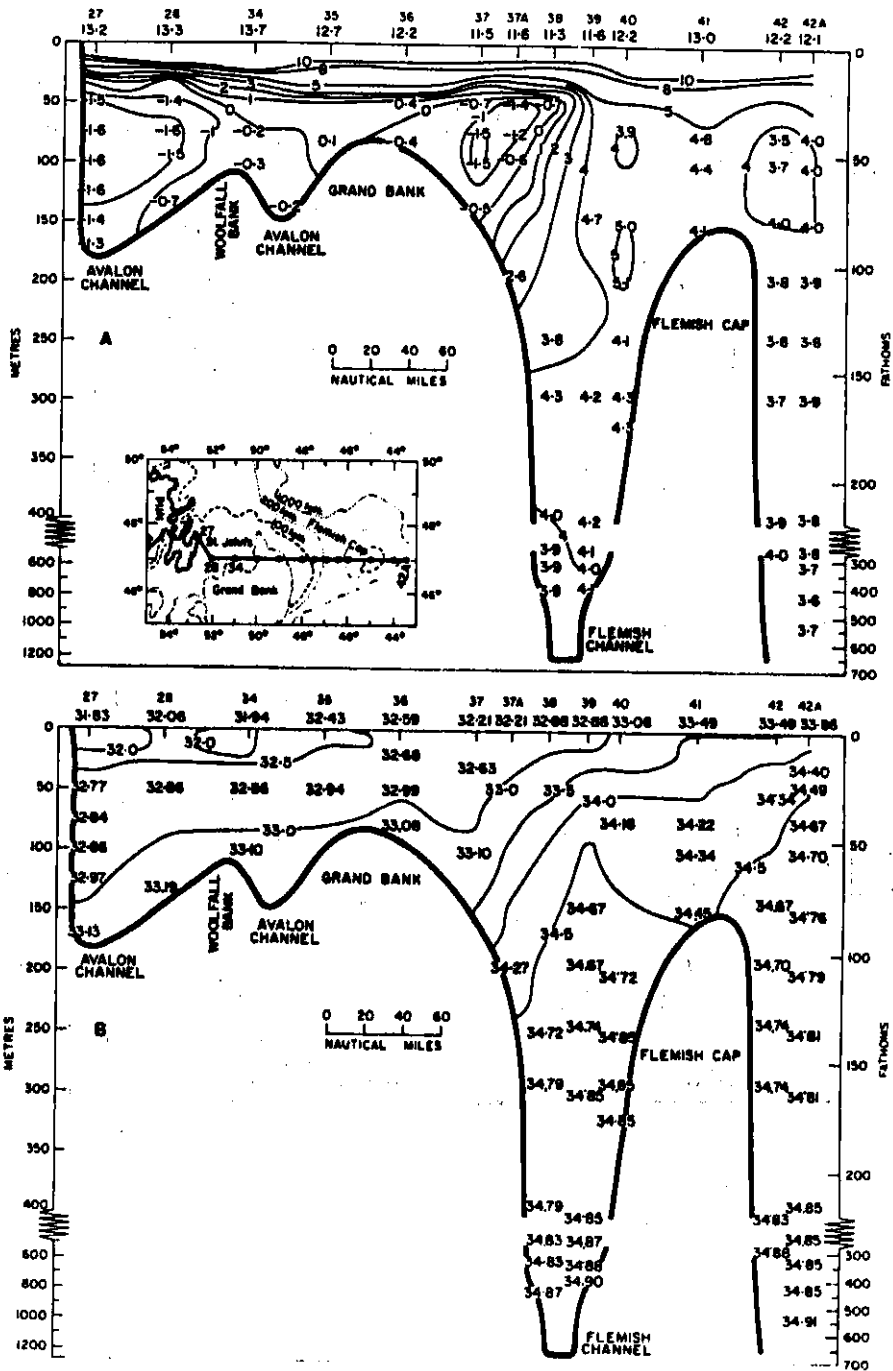


Fig. 2. Above, temperature ( $^{\circ}\text{C}$ ) and below, salinity ‰ sections, St. John's-Grand Bank-Flemish Cap, July 25-27, 1967.