

MERIDIONAL TEMPERATURE GRADIENT IN THE EASTERN
DRAKE PASSAGE IN DECEMBER 1984
(ABSTRACT)

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This paper describes regional differences of oceanic fronts by analyzing the temperature records obtained by the KAIYO MARU along 60°W in the eastern Drake Passage in December 1984. The XBT data together with thermograph records of about 3 m in depth were used for analysis. The XBT data were used to draw a temperature section down to 1800 m along 60°W, which showed a sharp drop in surface temperature from 6.5°C at 56°30'S to 1.5°C at 58°00'S. The thermograph record also showed two sharp temperature decreases, showing a Subantarctic Front with an apparent width of about 30 nautical miles, and a 54 miles wide Polar Front. The distance between these fronts was 21 miles.

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