Abstract View

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A Simple Model of the Thermocline in a Bounded Ocean

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ABSTRACT

A linear model of the thermocline is examined for an ocean bounded by both eastern and western coasts. The analysis is carried out on a β-plane for an ocean in which diffusion of heat but not of momentum is important. Particular attention is devoted to the structure of the thermocline in the vicinity of the western coast along which a boundary layer exists. A unique feature of the present thermocline is the absence of any vertical velocity below the thermocline.