Distribution de Densité à la Surface d’un Océan de Longueur Indéfinie en Fonction de la Latitude*

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Abstract: I make an attempt to determine, in a long canal infinitely extended in the east-west direction, the density of water at the surface subject to the wind stress and the heat flux effectively transferred from the sun and the atmosphere to the water surface. The salinity is supposed to be constant. The result is very variable with the value of the eddy diffusivity. It is nevertheless shown that the heat flux non uniformly distributed at the surface is probably much more important than the wind stress to the variation of the density with the latitude observed at the surface in the Pacific Ocean or the Atlantic Ocean.

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