

Abstract Submitted
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Gulf-Stream Separation and the Modeling of Subgrid Scales B.T.

NADIGA — The formation of the cyclonic Northern Recirculation Gyre (in the absence of direct wind forcing) north of the Gulf-Stream is essential to the separation of the Gulf-Stream at Cape Hatteras. A poor representation of this process in ocean models is a reason for why the models have a difficult time getting Gulf-Stream separation right. We consider regularization of resolved small scales as a method for modeling the effects of subgrid scales and study its effect on Gulf-Stream separation. An explanation of the improved representation of the dynamics in the model is offered.

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