Abstract View

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Eddies at the Subtropical Convergence South of Africa

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ABSTRACT

A descriptive analysis of the occurrence and kinematics of mesoscale eddies at the subtropical convergence south of Africa is presented. Data used in this study include thermal infrared imagery from satellites since 1978 and a number of expendable hathythermogaph sections in the geographic area, supported by drift tracks of free-drifting buoys since 1975. The distribution of intense cold eddies to the north and warm eddies to the south of the subtropical convergence shows distinct geographic patterns. The morphology of these eddies is such as to allow them to be categorized into four distinct classes, each with a specific origin and kinematic behavior. This implies consistent underlying dynamics which is shown to include the influence of bottom topography as well as meridional current shear.