

AGULHAS RETURN CURRENT

After the Agulhas Current has retroflected, the remainder of the warm water flows east into the South Indian Ocean as the Agulhas Return Current (refer to Figure 1). The trajectory of this current is believed to be variable. A variable equatorward meander over the Agulhas Plateau occurs before the current proceeds eastwards. The general motion of the current is zonal with extensive varying meridional meanders, which could be related to the bottom topography (Lutjeharms and Ansorge, 2001).

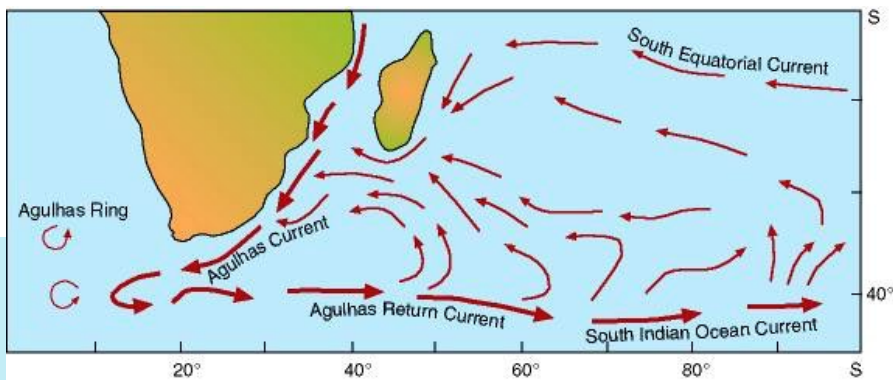


Figure 1 - A theoretical representation of the Agulhas Return Current as a part of the greater Agulhas Current system. (Diagram reproduced and altered from Lutjeharms and Ansorge, 2001).

The Agulhas Return Current tends to follow the Subtropical Convergence, which is a weak front in the South Atlantic. Occasionally there is separation between the two and a definite Agulhas Front can be observed along with the Subtropical Convergence proper. The Agulhas Return Current has been found to extend as far as 72°E, but so far there are no certainties on how rapidly it dissipates.



CLASSIC PAPER

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