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Long-term current observations in the Mozambique Channel

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Recent observations from an array of current meter moorings across the narrowest section of the Mozambique Channel will be presented and discussed. In 2000 and 2001 a pilot experiment was carried out in this area for a period of about 20 months. During this period the currents could be characterised by two different regimes: one with strong and coherent currents, the other one with weak currents. The former lasts much longer than the latter. During the strong current regime a southward jet seperates from the African coast and forms a large anti-cyclonic eddy which subsequently moves southward, interacts with the Agulhas Current and may trigger the formation of Agulhas Rings. Thus currents in the Mozambique Channel may be of importance for the transport of water from the Indian to the Atlantic ocean.

New observations, as part of the Dutch Long-term Ocean Climate Observations (LOCO) programme have started late 2003. Results from this new current meter array will be presented and compared to the previous observations.