



Observations in the upstream branches of the Agulhas during ACSEX, the Agulhas Current Sources Experiment.

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The circulation of the southwest Indian Ocean is characterized by its high variability, clearly reflected in the pattern of sea surface height (SSH)-variability, with the highest values in the Agulhas retroflection region, southwest of Africa. This region of strong eddy activity and ring formation is connected in upstream direction by a forked pattern of enhanced variability, with one branch reaching into the Mozambique Channel, the other one into the East Madagascar Current. Analysis of satellite altimetry data has shown a clear connection between the, variation of, the eddy activity in the upstream Agulhas and the subsequent behaviour of the retroflection and ring formation. Over the past years a series of cruises has taken place into these upstream source regions of the Agulhas as part of the Netherlands-South African collaborative programme ACSEX (Agulhas Current Sources EXperiment). In this talk highlights from the ACSEX programme will shortly be presented.