



## Abstract View

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# Measurements in the Source Region of the Somali Current during the Monsoon Reversal

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### ABSTRACT

Temperature and current records were obtained from four subsurface moorings deployed in the source region of the Somali Current from mid-January to mid-July 1976.

The first part of the records from January until early April showed that the array straddled the convergence zone of the northward-flowing East African Coast Current and the southward-flowing Somali Current. During this time, except for the southernmost location off Mombasa, the mean flow at all locations was weak and variable. The predominant variability had a time-scale of 4–5 days.

Around 20 April the wind shifted to the southeast and three days later the flow in the upper 80 m turned northward and intensified. Development of strong northward flows below the thermocline took several more weeks. The observations imply that a switching mechanism took place at that time. The initially eastward-flowing Equatorial Counter Current is shifted rapidly 45° to the left to run northward along the coast. This mechanism may, in part, be responsible for the impulsive beginning of the Somali Current during the early stages of the monsoon onset south of the equator.

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