

*A numerical index to monitor the Afro-Asian monsoon during the northern summers**

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ABSTRACT

The identification of the core of the major low-level air current of the Afro-Asian summer monsoon at a topographically-fixed position over eastern Africa has allowed an attempt to be made to monitor the low-level flow and relate it to rainfall downstream over western India. An index of the southerly flow over eastern Africa at a station a few degrees south of the equator for the month of July for a period of 24 years, is compared with the July rainfall of ten stations in the western part of Maharashtra Province of India.

It is found that months of high or low wind index correspond well with months of high or low rainfall respectively, especially when two-year overlapping averages are used. An interesting feature of the analysis is that there is a one-year lag between maxima and minima of the wind index over eastern Africa and the corresponding features of the rainfall of western India. A tentative calculation is made to illustrate how the lag might be used for long-range rainfall prediction.

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