

## **SIGNATURE OF EQUATORIAL ELECTROJET OVER WEST AND EAST AFRICA FROM MAGDAS OBSERVATIONS**

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Space Environment Research Centre of Kyushu University has installed 13 units of Magnetic Data Acquisition Systems MAGDAS over Africa during the International Heliophysical Year IHY. Equatorial electrojet is a component of global electric circuit. Data from 2 magnetic observatories within equatorial electrojet EEJ strip and 2 stations outside the EEJ strip were employed to evaluate and study the signatures of the Equatorial electrojet over the African sector. The transient variations of the EEJ at two almost parallel axes using Lagos-Ilorin and Nairobi-Addis pairs were examined. The magnitudes and patterns of variation of EEJ strength along the two axes were examined for any simultaneity or otherwise of responses to ionospheric processes. The flow gradient of EEJ along the African sector was estimated and its diurnal variation studied. A case is made for establishment of more pairs of magnetic stations along the Equatorial Africa.