

**MESOSCALE CIRCULATION OVER THE JOS PLATEAU (NIGERIA)  
NUMERICAL STUDIES**

*B.J. Abiodun and V.O. Ajayi*

Dept of meteorology federal university of technology P.M.B 704 Akure 340001 Nigeria

A three-dimensional mesoscale model (**MIUU**) is used to study the development and characteristics of mesoscale circulation over the Jos plateau (Long: 9<sup>o</sup>E Lat.: 10<sup>o</sup>N. In this particular study emphasis is laid on the slope winds. The model results show that under a calm synoptic flow there is strong vertical motion on the plateau, the interaction of the circulation with the synoptic flow is simulated. The effect of various synoptic wind flows on the characteristics of the circulation was studied. In some synoptic wind directions the Katabatic and anabatic wind developed are strong while in some directions they are weak.

The usefulness of the results from this study on the climate, forecasting and agriculture in the area is discussed. The application of the results in improving the weather forecast over the area is also presented.