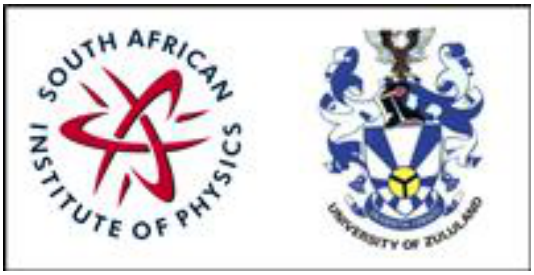

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Development of Durban LIDAR system for aerosol and temperature measurements in the neutral atmosphere

Tuesday, 9 July 2013 17:40 (1 hour)

Abstract content
   (Max 300 words)

Durban (29.9deg;S, 31.0deg;E), a region of industrial activities in the South Coast together with sugar-cane burning along the KwaZulu Natal coast will affect the aerosols concentration and transport in the troposphere. LiDAR observation of these aerosols at Westville will help to characterize the regional extent of aerosol plumes and also their optical properties.

We briefly describe the earlier Durban atmospheric LIDAR (Light Detection and Ranging) system for the measurements of vertical profiles of temperature and aerosol. Early years (1999 to 2004), the Durban LIDAR has been operated at University of KwaZulu-Natal (UKZN) as a part of co-operation between the Reunion University and the Service d'Aéronomie (CNRS, IPSL, Paris) for climate research studies. Currently, the LIDAR system in Durban is not in functional from it is being transported to Westville campus (back to 7 years), the current aim is to refurbish/develop the system into working condition. Here, we shall present the current status and different plans (including CSIR-NLC Rental Pool programme) aimed to overcome.

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