

Funding justification

Kenya is an agricultural country that depends upon rainfed agriculture to feed its population. With the changing climate leading to erratic weather, more accurate weather forecasts will play a critical role in addressing issues of food security. Currently the Kenya Meteorological Department depends upon weather research and forecasting (wrf) model initialised with coarse resolution global model such as GFS. Therefore, there is need to incorporate data assimilation in running the wrf model for more accurate weather forecast for Kenya. This requirement coupled with available observable data in Kenya enticed me in seeking a placement at the University of Nairobi to pursue a PhD in meteorology basing my research in data assimilation. Data assimilation will improve the accuracy for heavy rainfall events in Kenya. Critical decisions reached based on accurate weather forecast especially for rare events such as heavy rainfall that results in flooding will lead to protection of life and property.

The courses taught during the summer school on effective HPC for climate and weather will assist me build capacity in the field of NWP and visualizing and manipulating various data sets which is lacking in Kenya. Kenya is a developing country and therefore unable to provide funding to enable me pursue this course. For this course I'm requesting for the travel subsidy. The return ticket from Kenya to Heathrow (UK) is approximately 850 GBP. This course will be a stepping stone in shaping my PhD research in data assimilation.