Kizito Amua Oundo, Box 19653 – 00100.

Nairobi.

The Centre of Excellence in Simulation of Weather and Climate in Europe (ESiWACE). University of Reading, UK.

Dear Sir/Madam,

REF: Motivational Letter

My name is Kizito Amua Oundo and I work with Kenya Meteorological Department as an aviation weather forecaster based at Jomo Kenyatta International Airport. I have applied for a PhD placement at the University of Nairobi Kenya, envisaging to assess the impact of assimilation of GEOS and in situ data in NWP as part of my thesis.

Dependence on numerical weather prediction models has tremendously improved the accuracy of weather forecasts especially for adverse weather events like flooding which affects Kenya. In the past years Kenya has experienced heavy rainfall events that have resulted in flooding affecting various sectors of economy such as agriculture, tourism, transport to mention a few. The fore mentioned losses can be averted or effect reduced if decisions made by the stakeholders in these sectors are based on more accurate weather forecasts.

One critical way of achieving a more accurate NWP forecast involves inclusion of observable data in setting up the initial conditions. Currently, Kenya relies on weather research and forecast (wrf) forecasts which are run using the initial conditions from the global models (GFS) that have coarse resolution thus compromising the accuracy of the model forecasts. Therefore, at the end of my PhD, KMD will be able to utilises the available data through data assimilation in improving the accuracy of wrf forecasts thus contributing to protection of life and properties.

The topics included in the effective HPC for climate and weather such as code development, big data analytics, post-processing and visualization as well as knowledge sharing with other scientists and visit to ECMWF a major NWP centre whose products KMD utilises in forecasting will enable me build capacity in running and interacting with NWP which is lacking in Kenya. Further, knowledge sharing will enhance what I envision in my research especially with how data assimilation is being applied by other countries and organizations.

My vision is curtailed by inadequacy of funding therefore, I wish to request for a full attendance subsidy to the effective HPC for climate and weather course to enable me expand knowledge in the NWP field. The return ticket between Nairobi (Kenya) and Heathrow is approximately £850.

I appreciate your consideration. With your assistance I will be able to contribute towards protection of life and property by use of accurate weather information in decision making.

Yours Sincerely,

Kizito Amua Oundo.