

## Motivation letter

To: The Centre of Excellence in Simulation of Weather and Climate in Europe (ESiWACE)  
University of Reading

Dear Organizing committee, The summer school on Effective HPC for Climate and Weather is exceptional opportunity for me!!!!

I am writing to apply for **Summer School on Effective HPC for Climate and Weather**, in which I am enormously interested. As a person who has academic background on both meteorology and hydrology by studying in six different universities( see my CV) and having professional experience on climate and related sectors, getting short time course on can HPC fundamentally change my knowledge baseline on dealing complex data. I believe that having strong skill, knowledge and computational capacity in big data and related computational programs are key resources that scientific world crated facilities(resources) to understand the current and future scientific opportunity and to deal complex climate and environmental related challenges.

I am **self sponsored PhD** student in Addis Ababa University, at Ethiopian Institute of Water Resource Management. My PhD research work focuses on "**transforming and mainstream hydromet services under limited resources, case of Ethiopia**". As most part of the country is known for limited meteorological and hydrological stations, it is inevitable the move to use the opportunity of open source resources( data, tools, programs, methods, etc). It is important to improve stations coverage; however, having excellent temporal data needs time and open source data can be used as a substitute . Effective utilization of open source data need knowledge on handling the data and related analysis techniques to deliver usable information. One of key issue needed to be changed (transformed) are creating the capacity of service providing institutions and their experts on dealing complexity open sourced data.

The Summer School on Effective HPC for Climate and Weather will provide me an opportunity to learn how to handle big dataset (middleware and File Formats, modern storage) and related programming languages(codes) and computational techniques (Extreme-Scale Computation, machine learning). Eventually, it is the research work that I am going to implement to develop institutional capacity of National Met, Universities and Research Centers on HPC. On this regard, I supposed to show practical works on my PhD stud and I considered this summer school as timely opportunity.

Ethiopian is known for climate sensitive economy and the country needs strong institutional capability to deal any climate driven challenges ( periodic drought, flood, etc) that could impact its development. I already imagined transforming the meteorological sector is key sector to develop effective program and plan in various economic disciplines, including water, energy DRM, etc. It is unthinkable with transform hydromet sector without having effective **HPC**. That is why this exceptional opportunity for me!

The roundtrip expenses could high as ~~620~~620. As I am young self sponsored PhD student working on PhD research work strong related with the training contents of this summer school, the organizing committee to consider my application for **full package registration scholarship**. If full package is not covered with your scholarship, would you help me by providing information on finding other scholarship opportunities that may cover part of the expenses in order to attend on this summer school? Thank you in advance for considering my application.