

MOTIVATION LETTER

The Summer School on Effective HPC for Climate and Weather provides a sought-after platform which besides providing me a platform to network with peers will give me the chance to be an effective user of HPC environments. This is very important in this age of scientific computing where despite the availability of numerous tools, lack of understanding of how these tools can enhance productivity leaves us as scientists not to using them and continue doing tasks the way we have done them which is usually time consuming and might result in errors.

The training session also gives attendants tips on effective data processing and the analysis of climate data using Python. These will go a long way in assisting me as a PhD researcher working on African climate science entitled "Nature, drivers and predictability of dry spells over Southern Africa." One area that has fascinated me over the years in the use of machine learning in improving weather and climate predictions. This will be useful in my research as I aim to be able to predict dry spells in the sub-seasonal to seasonal timescale.

Effective data visualisation is one area that every climate scientist should be aware of since this is the basis of ensuring that research is understood by the intended recipients. This area is also covered in the ESIWACE Summer School and I would be very much appreciate the chance to attend it.