

I am a postdoctoral researcher using the Weather Research and Forecasting model to create climate output over the Peruvian Andes. I am currently working at the British Antarctic Survey on the Peru GROWS project looking at water resources in the Rio Santa Basin, but will move to Leeds University in April to work on the PEGASUS (Producing EnerGy and preventing hAzards from SURface water Storage in Peru) project. Please excuse me submitting my personal email address, I do not yet have an email address for Leeds University.

During my PhD (submitted in April 2019) I ran the WRF model over the Nepalese Himalaya. As such, I have had considerable experience with running the WRF model, and analysing the output using python. However, I have had no formal training in high performance computing and would really like to further my knowledge of the systems on which I work! I often rely on others to solve any problems with the high performance computer at the British Antarctic Survey, and would really like to become more self-sufficient in this. For example, I have had considerable trouble in the past installing the WRF model, and also writing scripts to submit the model to the HPC, and I think that improving my knowledge of the general high performance computing structure would help considerably with future problems. I am also particularly keen to understand different storage types, firstly as my climate data is often very large and I would like to better understand compaction options, and secondly because I am attempting to setup a JASMIN workspace for the project I am working on, and am keen to understand more clearly how this and other large storage computers operate.

One idea for a project that I would be keen to develop on the course would be learning to write python code that could be run in parallel. This could be, for example, writing a python script which performed some analysis on every grid cell in a climate model in parallel. I am happy to provide some climate model output! I would also be keen to join a project based on shell scripting or machine learning.

I am always keen to help others informally with computing issues, where I can. If I were accepted on to the course, I would also plan to give a talk within Leeds to share the parts of the course that I felt would be most useful to others in the department.