Motivational letter of Adolfo Chamorro

I am a research scientist in the Modelling Center from the Peruvian Marine Research Institute (IMARPE) where I work using a HPC for climate and wheater modeling. One of our goals is make effective use of our HPC enviroments in terms of processing, data storage and tools for post-processing and visualization.

Currently, we execute in our HPC two regional models: the atmospheric model WRF and the ocean model ROMS. We use linux system and many program lenguage to process the data model, but we need to improve the pre-processing, time compunting, post-processing and visualization of simulations using new methods, tools and theoretical knowledge.

My tentative idea for the project in the school is to design a strategy to do a benchmarking and evaluation of the WRF and ROMS models on the IMARPE cluster to allow to improve the performace of our numerical simulations. I am also interested in the analysis of climate data using modern tools and exchange our knowledge with other scientists on challenges and strategies for HPC for climate and weather.

For all theses reasons, I think that summer school on Effective HPC for Climate and Weather in the University of Reading will be very useful for me and my laboratory and I hope that my profesional profile to be suitable to attend the school.

Sincerely,

Adolfo Chamorro
PhD in Enviromental Sciences / Sorbonne Université – France
Research Scientist / IMARPE