ESiWACE Summer School on Effective HPC for Climate and Weather
August 23-28, 2020

Letter of Motivation

After dedicating the first part of my career to academic research in Oceanography and Climate Sciences, due to a strong appetence for applied work, four years ago I have decided to shift my career towards climate services. Since then, I have been developing and running the R&D activity of a small, but dynamic and innovation-oriented cocoa trading company, LBMS – Rockwinds (Bordeaux, France). Our research group's overarching objective is to provide novel, scientific information that adds to the company's skill in predicting climate-related variations in cocoa production.

My role as head of R&D operations makes it vital that I stay in close contact to the academic sector and that I keep up to date with the state-of-the art methodologies and tools used in climate monitoring and prediction. The ESiWACE summer school on effective HPC for climate and weather is the perfect opportunity to do just that, in a very time-efficient manner:

- I am in charge of setting up, developing and maintaining our entire research hardware and software, so keeping up with advances in storage, code development, I/O methods and file formats is critical for my work.
- A big part of my current and upcoming work is on developing seasonal predictions for specific target regions and variables – as far as statistical seasonal prediction system development goes, I want to tap into the potential of various machine learning methods. Getting an overview of the application of such methods on climate prediction problems will greatly benefit my research.
- I work with high-resolution, multi-variate global ERA5 data, as well as with the C3S multi-model dynamical seasonal prediction system – this implies working with very large volumes of data, which has, on several occasion, posed technical issues that I have had to spend a significant amount of time and energy to solve. I am very keen to learn what methods are/will shortly be available for handling such data volumes more efficiently than I do today.

Last, but not least, I am looking forward to the enriching exchanges between the ESiWACE summer school participants and to the networking opportunities within the international group that the school will create.

I would thus be very grateful for the opportunity to participate to the ESiWACE Summer School on Effective HPC for Climate and Weather.

May 12, 2020

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