Hello,

Greetings from Rajasthan (India)

I am Sumitra Sharma, pursuing my final semester of Masters in Atmospheric Science from the Central University of Rajasthan, India. I am very much interested in "**Summer School on Effective HPC for Climate and Weather"** at the University of Reading, UK. A brief review of my background and motivations are as follows:

I have completed my Bachelor's in Physics (Honours) from Miranda House, University of Delhi, Delhi, India. During my masters, I have done an internship at Physical Research Laboratory, a unit of Indian Space Research Organization (ISRO), India and worked on "Investigation of Atmospheric Boundary Layer (ABL) Height over Ahmedabad using Ceilometer". I have estimated the ABL height by applying the Gradient Method on backscatter data collected from the ceilometer and compared the outputs with different data sets like Radiosonde data, Satellite (MODIS) data, and ERA5 Reanalysis data, that gave the in-depth knowledge of the Boundary layer which is the medium of exchange of energy, momentum and fluxes between the surface and Earth's Atmosphere. I am also an e-Astronomer at RAD@home, a citizen astronomy research group, which focuses on finding unknown objects in the sky using Giant Metrewave Radio Telescope (GMRT) data using SAOimageDS9 software. At present I am working on my Master's thesis which is about "Forecasting of Evapotranspiration and Precipitation over Rajasthan using Numerical Weather Prediction, WRF model outputs".

Recently, I came across this amazing opportunity "Summer School on Effective HPC for Climate and Weather". During internship my research interest has been developed, there I learned that in the Meteorology domain, especially in forecasting, only the theoretical knowledge of Atmosphere cannot predict the future, we need to work on climatological data to understand it and for this we need to have extremely good command on visualizing software so that we can explain our results to general public in a very simple and attractive way. My aim is to make Indian people aware of upcoming hazards which can destroy their livelihood, especially the farmers of India who are not much educated to understand the scientific warnings and instructions. So for this purpose I want to learn more techniques to analyse and visualize the meteorological data for my Research.

The historic magnificence of this university and the exposure to the field of science would add firmness to my personal growth. India is also a land of culture; here being unity in diversity made me very flexible to adjust and adapt in different cultures and environments. I am very much hopeful that this Summer School would help me to develop my technical knowledge in handling the meteorological data in its best way.

I will be glad to answer any questions you may have and to see if you need any other information in this regard.

I am very thankful for your valuable time and considerations.
Looking forward to hearing from you,
Sumitra Sharma
Master of Science, Department of Atmospheric Science,
Central University of Rajasthan, India.