Project:???Project title:Applied Atmospheric Modelling Course at University LeipzigAllocation period:06.2021 -Project lead:Ina Tegen (TROPOS)

1 Abstract

This proposal is to apply for a temporary computing-time project to educate students from the University of Leipzig in the field of applied atmospheric modelling in the summer term 2021. The planned activities are part of the Master education in Meteorology at the Leipzig Institute for Meteorology, which are hold as seminars with active hands-on training by TROPOS as a partner institute. Specifically, the course will be part of the master module 'Atmospheric Modeling - Scales and Parameterizations', and will take place each summer semester on one day a week over the course of six weeks in June and July. A variety of learning objectives are taught. Students will become familiar with HPC platforms in general, and the HLRE-3 computing resources in particular. Further learning objectives are: (i) to explore the content of netcdf data, (ii) to use post-processing platforms like jupyterhub for exploratory data analysis, (iii) to perform numerical experiments with state-of-the-art atmospheric models like ICON and ECHAM, and (iv) to get an conceptual understanding of computational workflows in atmospheric modelling.