



Contribution ID: 82

Type: **Talk**

Convective scale modelling on the CHPC: ICON vs COSMO models

Tuesday, 3 December 2019 12:00 (20 minutes)

The South African Weather Service has recently embarked on a business case to address its computational needs. Part of this was to identify the most suitable convective scale Numerical Weather Prediction (NWP) model for the Southern African region. The Unified model (UM), the main model run by SAWS for operational purposes, the Weather Research and Forecasting (WRF) Model and the Consortium for Small-scale Modeling (COSMO) model were used for the study. A number of weather parameters were selected for the study, and results generally showed that the three models are comparable. However, with much model development taking place around the world, the COSMO will soon be replaced by the Icosahedral Non-hydrostatic (ICON) model. It, therefore, makes sense to conduct the same study for the ICON as for the COSMO in order to investigate whether the new model is an improvement of the former one. Simulations for both the COSMO and ICON are run on the CHPC.

Supported Student

Primary author: Mrs MULOVEDZI, Patience (South African Weather Service)

Co-author: Mr RAMBUWANI, Gift (South African Weather Service)

Presenter: Mrs MULOVEDZI, Patience (South African Weather Service)

Session Classification: HPC Applications

Track Classification: Earth Systems Modelling