Centre for High Performance Computing 2022 National Conference



Contribution ID: 121 Type: Talk

SAEON's Research Data Infrastructures

Thursday, 1 December 2022 13:45 (20 minutes)

The Intergovernmental Panel on Climate Change (IPCC) Assessment Report six (AR6) shows that much of the globe will experience water and food insecurity, wellness challenges, and damage to infrastructure due to climate change. There is therefore a need for long term observation networks that that can provide clear information on the scale of the problem. Africa and the Southern hemisphere, however, have a sparse environmental observation network, which has a detrimental effect on the understanding of earth system process and on numerical modelling in general. The South African Environmental Observation Network (SAEON)'s vision is to provide world class environmental research platforms for a sustainable society. The presentation will provide information on SAEON's earth system observation network and research platforms, data policy and accessibility of the platforms from the seven nodes across South Africa. SAEON hosts three projects of the South African Research Infrastructure Roadmap (SARIR) namely 1) the Expanded Freshwater and Terrestrial Environmental Observation Network (EFTEON), 2) the Shallow Marine and Coastal Research Infrastructure (SMCRI) and the South African Polar Research Infrastructure (SAPRI). These observation networks are going to be used increasingly in numerical modelling studies, to inform model development, data assimilation and verification. Close collaboration between observation and modelling scientists will result in better understanding of earth system processes, skilful models, increased local model development capacity and the improvement of multi-hazard early warning systems.

Primary author: Dr BOPAPE, Mary-Jane (South African Environmental Observation Network (SAEON))

Presenter: Dr BOPAPE, Mary-Jane (South African Environmental Observation Network (SAEON))

Session Classification: DIRISA

Track Classification: DIRISA