

Project: 1111**Title: KIT-ELVIC – Climate Extremes in the Lake Victoria Basin****Report for period 01.07.2023 - 30.06.2024**

During the application period 07/2023 – 06/2024 we finished the ERA5 driven runs for present day for comparison with the envisaged pseudo global warming (PGW) experiments. KIT contributes to the CORDEX-FPS-ELVIC project with a dynamical downscaling approach using the regional climate model WRF to achieve the overall project aims: the generation of a high-resolution (3 km grid spacing) convective permitting multi-model ensemble over the Eastern African Lake Region with a specific focus on the Lake Victoria to analyze the regional climate over this vulnerable region.

However, due to general personal shortcomings in the ELVIC project, no progress for the PGW experiments have been made in the last allocation period. The planned PGW simulations (except some resources were used for initial configurations tests) could not be started as the whole initiative is currently on hold. However, we still hope to find the required personal and to continue the work in the next allocation period. Thus we only ask for reduced resources in the computing time proposal for 2024/2025 to keep the project (and data) alive at DKRZ, with the option ask for more resources in autumn. If no progress will be achieved in the next allocation period, we need to think about closing the project.

Published Paper:

Lipzig, N.P.M.v., Walle, J.V.d., Belušić, D. et al. Representation of precipitation and top-of-atmosphere radiation in a multi-model convection-permitting ensemble for the Lake Victoria Basin (East-Africa). Clim Dyn 60, 4033–4054 (2023). <https://doi.org/10.1007/s00382-022-06541-5>