

**Project:** 1156

**Project title:** High-resolution ICON simulations for the EUREC<sup>4</sup>A field campaign

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**Report period:** 2020-11-01 to 2021-08-31

We finished a series of simulations around the observational supersite at Barbados (BCO) covering 1 month at the moment. This unique set of simulations in combination with the operational model output and the detailed observations allows us to investigate the resolution-dependency of the simulations as well as the general representation of the observed features. The analysis is ongoing at the moment and further resources are needed for the analysis.

Additionally first simulations for a larger region (to be comparable to the airborne measurements) and for specific cases observed by the research vessels have been performed. Both setups were depending on the processing of the observations and additional challenges regarding representativity. By this the simulations could only be started a bit later than expected and are still ongoing work. But the first simulations and analysis also showed new interesting scientific questions which we would like to focus on during the upcoming project phase.