

PREFACE Milestone Report

Milestone#: MS35

Milestone name: New climate prediction experiments to assess improvements for the tropical Atlantic in terms of forecast quality.

WP#: WP11

Lead beneficiary: BSC

Delivery date from annex I: 15.11.2017

Milestone achieved: Yes

Comments: The goal of MS35 is the assessment of impact on skill in the seasonal prediction of tropical Atlantic variability, coming from:

- model improvements, by comparing the skill in the new seasonal forecast systems, performed by BSC and UiB, to the skill in the older systems;
- model bias, by assessing the change in skill in the prediction experiments with bias correction, performed by UiB.

These analyses are performed by BSC, with the data shared by UiB and its in-house seasonal prediction data, and it will contribute to the Task 11.1: *“Impact of model improvement on climate predictions of the Tropical Atlantic and neighbouring regions”* and D11.1: *“Impact of model improvements on climate prediction”*.

BSC has completed a set of seasonal predictions with the CMIP6 version of the EC-Earth model v3.2, which consists of 10 ensembles that are 7 months long and are initialized every 1st of May and every 1st of November between 1980 - 2015.

UiB has completed two sets of seasonal predictions. One, performed with NorCMP, consists of sets of 9 ensemble members of 13 months long, initialized every 15th of January, April, July and October between 1980 and 2010. The second set is as the first one, but includes in addition an anomaly coupling where the model’s systematic (climatological) biases are suppressed during the prediction.