



ID: P1.1-416

Type: e-Poster

## and Evaluation of a Statistical Model of Seasonal Forecasts in Cameroon.

*Tuesday 29 June 2021 11:45 (15 minutes)*

The objective of this study is to build and then evaluate a statistical model of seasonal forecasts in Cameroon. A study was carried out in the five agro-ecological zones of Cameroon with the test stations of Kaélé, Meiganga, Nkongsamba, Yaoundé and Kribi. This study consisted of developing statistical forecast models at each of these stations which were then evaluated first over their calibration period (1958-1987), then over an earlier period (1989-1993). It emerges from this evaluation that the sea surface temperatures so far used during the PRESACs explain “roughly” the rainfall in Cameroon and especially in the cities of Yaoundé and Kribi where the multiple correlations between the sea surface temperature and rainfall indices are 0.70 and 0.71 respectively. It also follows that the Hit Skill Score and the rate of coincidence between forecast and observed rainfall indices vary from 65% to 85% and 76.66 % to 90% respectively. No model has false alarms. Strong connections between rainfall in Cameroon and the oceanic areas of the Atlantic coast of Africa located on the course of the African monsoon, the engine of rainfall in the region have been established. These results argue in favor of exploring other predictors to improve predictions.

### Promotional text

This study then allows to know what will be the rainy season to come, through a qualitative evaluation of the seasonal accumulation of precipitations. This makes it possible to define strategies for the management of natural resources.

**Primary author:** Mr NANA, Hermann (University of Yaounde I, Cameroon)

**Co-author:** Mr TANESSONG, Roméo Stève (University of Dschang, Cameroon)

**Presenter:** Mr NANA, Hermann (University of Yaounde I, Cameroon)

**Session Classification:** T1.1 e-poster session

**Track Classification:** Theme 1. The Earth as a Complex System: T1.1 - The Atmosphere and its Dynamic