

Interactive comment on “AtmoSwing: Analog Technique Model for Statistical Weather forecastING and downscaling” by Pascal Horton

Anonymous Referee #1

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General comments:

This paper presents AtmoSwing, an open source software that allows implementation of Analog Methods (AMs), from calibration to operational use. It can be used either in the field of forecasting (typically rainfall forecasting) or in that of climate studies. Being very versatile, this software might prove very useful for operational uses as well as for academic studies. Furthermore, this paper has a high educational interest as it presents a comprehensive bibliographic review of the AMs development, defining this way clearly the AMs state-of-the-art.

Specific comments:

P1 L1: I would not use the term “prediction” as, in my point of view, the AMs are not

C1

forecasting methods by themselves, but rather adaptation methods, which link predic-tand to predictors (as it is well explained by the author himself p.7, l6-25).

P2. L7-8: “(. . .) one describing the situation (. . .)” you should specify that these are ‘historical situations’ that will be compared to the situation at hand.

P3 L23-13 : I do not agree to the terms “partially independent forecast”. As express before, the AMs are not forecasting methods. The forecasting capacity is due to the NWP. The AMs are adapation methods that can enhance the forecasting skill of the NWP.

P4 L20-21 : these results were obtained considering daily rainfall (for shorter time-step, we may assume that we could use shorter archives).

P7 L31 : Indicate that the CRPSS score used in Fig. 1 is explained section 3.6.2. Indicate also what is the reference forecast used to compute the CRPSS

P15 equation (2) : I think the subscript i of H must be removed.

P17. Section 4 : All this section is very interesting. Is it possible to add the computing time requested by the Monte-Carlo simulation, the sequential calibration and the GAs calibration, for each case? The comparison of these computing times with the obtained skills might be quite interesting.

Technical corrections:

none

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2019-50, 2019.

C2