

Comments on the revised version of the manuscript: HESS-2023-55-AC2:

## **Assessment Downscaling Techniques to develop Frequency Analysis and Estimate Total Precipitation and number of Rainy Days per Hydrological Year from CMIP6 Simulations**

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Thank you to the authors for addressing many of the reviewers' comments. However, this second version still needs a full revision in terms of English grammar and presentation.

The manuscript includes valuable results in terms of comparing different downscaling techniques for different rainfall properties. However, the paper is poorly written, and it needs extensive revision in its general presentation. The title also needs modification. Consider for example:

*Assessing Downscaling Techniques for Frequency Analysis, Total Precipitation and Rainy Days Estimation in CMIP6 Simulations over Hydrological Years*

There are still many sentences incorrectly phrased and grammar errors, as well as acronyms that are not properly defined or are used before a full description of the acronym is given. Please check for example the following lines:

- Line 45: ANN
- Line 50: PG is used instead of GP
- Line 100: Please review this sentence: "The analysis allowed the identification that only 29 presented consistent series."
- Line 115: "tale 1" instead of Table 1
- Line 120: "are" repeated twice.
- Line 120: Please review this sentence: "In the case of DM, are stand out the investigations developed by Salehnia et al., "
- Line 120: Please review: "Under SDS. ". This does not make sense.
- Line 125: Temperature in capital letters
- Line 145: Please review this paragraph. It has many errors as using "e" as a connector instead of "and". Also this sentence does not make sense: **to developed of downscaling of satellite precipitation, the evaluation 145 showed RT as the best technique.**
- Line 150: Please review the whole paragraph. Consider using "Once the simulated series was obtained", instead of "Once it was obtained the simulated series."
- Line 160: Please review the grammar as well.
- Line 200: Please review grammar as well. Consider changing "At the same way".
- Line 215: Please review grammar.
- Line 220: Hydrological instead of "Hidrological"
- There are many other that I might had missed. Please proofread your article carefully. Correct all gramma issues. If possible, have the article reviewed by a native English speaker.
- Line 275: There is one wrong number.

- Caption Figure 10: Please capitalize first letter.
- The added conclusion paragraphs need to be re-written. Please check grammar carefully.

Other issues related with the methodology are as follows:

- Please comment on why models described in Table 1 were selected. Why do you opt for selecting several ensembles from a single model, like EC-Earth3 ensembles?
- Line 215: Please explain why 156 analyses?
- Figures 2 and 4 are not useful for comparison if the scale in the x axis is not the same for all graphs. Please consider modifying the scale.
- Figures 3 and 5: There is no explanation about what the orange color means. What do you mean with “prevailing condition”? What is the message you want to communicate with these figures? Please include the meaning of the acronyms (WDS, etc.) in the captions.
- Table 3 caption: “original datasets” means without downscaling? Please make this clear.
- Both words “pluriannual” and “multiyear” are used interchangeable. Please be consistent if possible.
- Figure 7: Why are you having two separated panels? There is no explanation to differentiate the top from the bottom panel. Please include different labels and explanations in the figure caption.