The manuscript presents General TAMSAT-ALERT which is an updated and extended version of an existing tool (TAMSAT-ALERT) to combine historical times series and climatological forecasts to obtain probabilistic forecasts that can consider climate variability and climate change by weighting members of the ensemble. It seems that General TAMSAT-ALERT is a very useful tool; it seems to be simple and easily applicable, and I think the presentation of General TAMSAT-ALERT deserves publication.

However, I feel that the manuscript is, in its current version, not very accessible to readers that are not deeply familiar with (meteorological) forecasting. Sentences like "… A key innovation is the option to increment variables from the initialisation date, enabling forecasts to account for persistence in time…" (Line 70) are not easy to understand outside the forecasting community. I had quite some problems in understanding the manuscript, and I could have provided a more detailed review if I had better understood the details. So, my main recommendation is to provide more information and to improve the understandability for readers outside the forecasting community.

Thank you for your constructive comments. I very much want this method to be accessible as possible, and I appreciate the feedback.

In addition to addressing your specific concerns, I have included an additional appendix explaining the methodology in a way that is, I hope, accessible to non-meteorologists. I hope that this additional methodological detail will complement the user guide and jupyter notebook, enabling the forecasting method to be useful to as wide a community as possible.

Specific comments:

The manuscript needs careful correction, as it contains a few typos. Some examples: Line 82: "… the …" instead of "… tThe …"; Line 87 and Figure 1 (bottom right box): bracket missing; Line 169: "… perfect forecast and the observed …" instead of "… perfect forecast, in the observed …"

Apologies – I have given the manuscript a thorough proof read.

Title, abstract and short summary: The authors should make it very clear that they mean climatological forecasting when they speak about forecasting. This is mentioned in the abstract but not in the title and the short summary. I was confused about that. For instance, the sentence in Line 120 (enabling users to derive forecasts directly from observations and reanalysis, without the need for the use of land-surface/crop models or NWP forecasts) should come much earlier.

Although the system is designed to be capable of combining meteorological forecasts with time series observations, it is not only capable of climatological forecasts, since not all weather-related hazards are climatological variables. For example, case study 2 is for NDVI. The confusion may be because of my use of the term 'climatological' for multi-year. I have clarified these points in the abstract, short summary and main text.

Line 40: " … A more fundamental problem is the drift in predictions … If model predictions were to be spliced directly onto historical observations, the drift would cause systematic bias in yield assessments, the magnitude of which would depend on the stage of the growing season at which the meteorological forecasts were initiated. The TAMSAT-ALERT approach addresses these issues by splicing together historical time series for the past with a climatology for the future …": Here, I am not sure whether I understand this argument correctly. Do you compare the TAMSAT-ALERT approach where you combine historical time series with forecasts (of today) to a situation where you combine historical time series with a model prediction that started in the past? In the latter approach: why would you not use historical data until today and then start the simulation?

See also response to Reviewer 1, and the additional text, which I think clarifies what I mean by this point. We do use historical until today and then start the simulation. The issue with using a model to generate the simulation is that the model output will exhibit a trend, as the model moves towards a state consistent with its internal physics. The TAMSAT-ALERT method is one possible approach to avoiding this problem.

Line 55: "… A strength of the methodology is that NWP output can be incorporated, even when forecasts are not available for the variable being assessed. In Kenya, for example, incorporation of skilful precipitation tercile forecast probabilities output by the ECMWF dynamical forecasting system improves the skill of NDVI and yield forecasts during the secondary rainy season …": Here, I would like to have more information on how the use one variable as proxy for another variables works.

I have included a new Appendix, which outlines the TAMSAT-ALERT approach and explains this.

Section 2.1 and Fig. 1: I propose to align the 9 steps in the text with Fig. 1. Currently, it is not obvious which step belongs to which box in Fig. 1 and why there are much more boxes than steps. It should also be shown in this figure (if possible) what the change/additions in comparison to TAMSAR-ALERT are.

Excellent suggestion (see also R1). I have re-made the figure.

Line 120: Do I understand correctly that the predecessor system TAMSAT-ALERT needed simulations models (land-surface/crop models or NWP forecasts) but General TAMSAT-ALERT does not need them? I am confused. Please provide a more comprehensive description of TAMSAT-ALERT.

This is explained in the new appendix

Line 166: in the introduction of the 2 skill scores, the predictand should be general, as only in the second case study NDVI is predicted.

ok

Figure 3: Please add (A), (B), (C), (D) to the subplots.

ok

Figure 5: This figure needs much more information to be understood. Please add the scale; what do the polygons mean? Where are the boundaries of your case study are? Maybe also show a few main cities, so that the reader can easily understand the figure. Why does the color bar end at 500 mm while in the text you write that there is rain up to 1000 mm?

I have remade the figure using a better colour scale and just including the Pakistan country outline to orientate readers.

Line 420: Please add a short Conclusions section.

I have included a short conclusions section.

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