

Reviewer's comments:

Recommendation: Subject to minor revision. If revised paper is resubmitted, it needs to be reconsidered and re-reviewed.

Comments: on egusphere-2026-1175: **RHITA: a web tool for real-time detection of extreme weather events.**

The manuscript entitled “*RHITA: a web tool for real-time detection of extreme weather events*” presents an open-source framework for near real-time detection and tracking of weather-related hazards across Europe using ECMWF forecasts and ERA5 reanalysis data (1950–2024). The study focuses on four hazard types: heatwaves, cold spells, heavy precipitation, and strong winds. The work addresses an important and timely topic, particularly in the context of climate change and the growing need for operational, user-friendly tools to support hazard monitoring and risk assessment. The integration of real-time capability with a historical climatology is a clear strength, and the web-based interface enhances accessibility and usability.

However, several methodological and conceptual aspects require clarification and strengthening before the manuscript can be considered for publication. It would be suitable for publication after addressing minor revisions. The following are some suggestions for improvement:

While making the revision, please highlight the corrections added to the manuscript, so it will be easier to track the changes.

General comments:

- 1) The study does not consider droughts, which are a major category of natural disasters and are included in the EM-DAT database. The authors should either: provide a clear justification for excluding droughts, or discuss the feasibility and limitations of incorporating drought detection within the RHITA framework.
- 2) The Discussion section would benefit from a dedicated paragraph addressing uncertainties associated with: ERA5 reanalysis and ECMWF forecasts, EM-DAT data biases, parameter selection in the algorithm. Additionally, the potential impact of these uncertainties on the results and conclusions should be explicitly discussed.
- 3) Please clarify whether any preprocessing steps were applied to ECMWF forecasts and ERA5 data.
- 4) The current evaluation relies primarily on sensitivity. Including additional performance metrics such as precision and F1-score would provide a more balanced and comprehensive assessment of the algorithm's performance.

Specific comments:

- 1) Lines 22-24 : Please add the appropriate references to support the statements made in this section.
- 2) Line 66: It is recommended to include the date of data access/download for all datasets to ensure reproducibility and traceability.
- 3) Line 110 : Consider including a sensitivity analysis to evaluate how the results vary with different threshold choices. This would strengthen confidence in the robustness of the methodology.

- 4) Line 120 : The use of fixed quantile thresholds (e.g., 0.99 and 0.01) should be further justified. Please: provide references to previous studies that have used similar thresholds, and/or explain the rationale behind selecting these specific values.