

The paper touches an interesting topic that should definitively be receiving further attention particularly in the context of climatic change studies, so required nowadays that the new IPCC-AR5 has become public.

The paper in general terms is well structured and conceived. However it should address explicitly the applicability of this technique to projected time series and how it could be used in the climatic change context (future, not only past).

More specifically the paper should describe more carefully the following points:

- The criteria for selecting an event (threshold of wind velocity of 15m/sec), specifying which wind velocity we are talking about (e.g. height with respect to the land or sea level) and the sensitivity of the performed analysis to different thresholds.
- The paper should also discuss why the magnitude of the event (maximum 10min averaged velocity during the event) is selected and again how the results would change with a different definition.
- The paper should also make some reference to the randomness assumption for the time between events. The self-sustainability of convective low pressure centres in areas as the Mediterranean makes the occurrence of twin storms a relatively common pattern and that clearly goes against the hypothesis of randomness for time between events.
- The paper should explain the sensitivity of the inhomogeneous Poisson process to model occurrences of events over a threshold to the functional dependence of  $\lambda$  with time.
- The paper should also discuss the importance of the available wind data and their quality for carrying out the proposed analysis.
- The variation of  $\lambda$  with time in a linear manner should be related to the projections which consider a concentration of storm events in a shorter interval during the year, and probably a reduction of the expected numbers of events with a likely increase in intensity. The inhomogeneous Poisson process should be discussed also from that perspective.
- The paper should also discuss why the logarithmic scale enhances the compatibility in statistical terms of observed data and simulated data. In particular why the introduction of the logarithmic scale brings both data sets closer to the same domain of attraction in a GPD.
- The paper should discuss further a physical meaning of a linear trend in time for the assumed variables. In particular for the “ $v$ ” variable in equation 8 so as to relate this linear variation in time with the expected projections from climatic models or even the expected qualitative change in patterns (e.g. northward shift of storm tracks) under future scenarios.
- The paper should also discuss if larger records to estimate trends are needed and how long should those records should be. The practical implications for maintaining observations should also be highlighted since for instance in figure 4 it appears that larger records for  $\delta_v$  and  $\alpha_v$  would be desirable.

- The paper should also discuss more in detail the strength of the evidence that the upper limit for the studied variable (wind velocity) is the same for simulations and observations and what would happen if that is not the case.
- The paper should also discuss the robustness of the obtained conclusions particularly considering if the definition of storms is modified and how that would change their frequency, intensity, etc., independently of climatic change.
- The paper should rephrase carefully the sentences about the consistency of the locally obtained results with IPCC projections, since these IPCC projections are global and are not necessarily coincident with local ones such as the ones considered in the paper.
- The paper should also discuss more in detail the implications of using the same averaging intervals for measurements and observations, as a function of the data availability and the variability apparent in the series.
- The paper should also discuss the implications of the observations suggesting a slightly larger number of events per year (about 2). How that would affect the analysis if explicitly considered in the proposed equations.
- The paper should also consider if the joint analysis of observations and simulations could be repeated for a sub-sample of simulations corrected against the observations and how that would affect the obtained conclusions.
- Finally the paper should be read by a native English speaker to improve some of the sentences.