

The paper deals with the synoptic and thermodynamic evolution of a case of extreme cyclone with a destructive impact in southwestern Europe. It is an interesting paper, that analyses in details the mechanisms of the explosive deepening. Especially, I found especially attracting the approach to identify the moisture source region. I think that the paper could be accepted for publication in a journal of the standards of Natural Hazards, subject to some suggested changes.

- I suggest that the structure of the paper could be changed:
 - a) Section 3.1 describing the impacts should be removed to the introduction (before the objective of the study) or to separate section 2 that will describe the main characteristics of the case, explaining why this cyclone deserves further analysis. I suggest this because the results of the paper do not focus on the impacts but rather on the mechanisms.
 - b) Section 3.2 refers to model verification and should be removed to the section where the model is described
 - c) Section 3.3 should appear as a separate section 3, since this is an important part of the results.
 - d) Section 3.4 should appear as a separate section 4 since comprises the main core of the study
- Although the authors characterize the cyclone explosive they do not mention if the pressure drop satisfies the criterion of explosive deepening. In the bibliography, many cases of cyclones are rapidly deepening but they cannot be characterized explosive, despite their serious impacts (see recent papers for explosive cyclones by Kouroutzoglou et al 2011, 2012). This point should be clarified.
- The term “southeastern North Atlantic” in the title is very confusing.
- In section 2.1, a map displaying the examined area and the station locations is required
- In section 2.2, a map displaying the simulated area is required.