

We would like to honestly thank the reviewer for the positive review and his/her valuable comments. All of them are going to be taken into account for the final version of the manuscript.

Please, find below the list with the one-to-one reviewer's comments addressed.

First of all, some details must be added with reference to the data and methods chapter. It would be necessary to give information about the total number of flood events included in this study. Is any remarkable difference between COSTA and SIL number of flood events? Furthermore, I think this database contains flood events due to some causes as river flooding, drainage problems, flood events, etc. For a better understanding, it would be of interest mention if the manuscript takes into account all of them or it is focused on a selection.

We agree with the reviewer in the fact that it is necessary to include a discussion on the total number of flood events analyzed in this paper. The following paragraph is going to be included in the final version of the manuscript:

"A total number of 754 AR events have been detected for the Galician coast throughout the period 1978-2010. In the same period, 357 and 548 flood events have been registered for MIÑO-SIL and COSTA REGION respectively. The seasonal distribution of flood events is stated in Table 1".

Season	MIÑO-SIL Region	COSTA Region
DJF	206	190
MAM	45	102
JJA	9	102
SON	97	154

Table 1: Total number of flood events registered in Galicia throughout the period 1978-2010.

On the other hand, there is not a lot of information about the data used for the synoptic classification; is it supposed that SLP values are provided by NCAR for the same period? There is the reference to the paper carried out by Trigo et al., 2000; are the same 16 grid points used in both studies? The rules to define different types of circulation are supposed to be the same established by Trigo et al., 2000, can you confirm it?

For the index calculations we applied the equations, data and procedured outlined in Lorenzo et al. (2008). This means:

- 16 grid points and procedure obtained from Trigo et al. (2000). Our points are displaced 5 deg. northward in order to cover the region of Galicia instead of Portugal.
- SLP data obtained from NCAR 2.5x2.5 reanalysis data.

This point is going to be further clarified in the latest version of the manuscript in this way:

P4L25 “(...) (SLP) values collected for the 16 grid points shown in the supplementary material Figure A1 (Lorenzo et al., 2008).

For the index calculations, we applied the equations outlined in Lorenzo et al. (2008) to NCAR reanalysis 2.5deg · 2.5deg data.”

Finally, I suggest including a table in this chapter with the WTs associated to the extended winter and summer months with the description of each class of WTs.

The table suggested by the reviewer is going to be added to the “Section 2: Data and Methods” as a complement to Figure 3. The description has been obtained from :

Ramos, A.M. : *Improving circulation weather type classifications using a 3D framework: relationship with climate variability and projections for future climates*. PhD Thesis, UVIGO, 2012.

WT	Season	Brief description
NE	S	Days characterized by an extended high pressure settled over the west of Ireland and low pressure in the Mediterranean Sea.
E	S	Synoptic situations characterized by high pressure over the British Isles and low pressure dominating in North Africa.
SE	W	Low pressure extending towards Madeira and high pressure over Northern Europe.
S	S,W	Pressure over the British Isles and low pressure established in the North Atlantic (Azores region).
SW	W	Low-pressure system to the west of Ireland with a large anticyclone over the Mediterranean region.
W	S,W	Lowpressure system over the North Atlantic, with a high-pressure system over the Azores.
NW	S,W	Low-pressure system over the British Islands and an anticyclone system located over Azores.
N	S	Presence of the Azores high pressure near the Azores Islands and a low pressure over southern Europe and the Mediterranean basin.
C	S,W	Lowpressure centre over the NW Iberian Peninsula.
A	S,W	Extended highpressure centre between the Iberian Peninsula and the Azores Islands.

In section 3 the frequency of each WTs is presented. Are the results in concordance with other WTs studies carried out in the same area for precipitation episodes?

This manuscript concludes that flooding episodes in the months between October and March in the coastal areas of Galicia are associated with WTs of W, SW and C. To the best of our knowledge, all the WTs studies carried out including Galicia and/or Portugal are in agreement with this conclusion (Trigo and Dacamara, 2000; Lorenzo et al. 2008; Cortesi et al. 2013). WTs W, SW and C are identified as the most important precursors for precipitation in all of them.

We agree with the reviewer in the fact that this should be discussed in the manuscript. Thus, this idea is going to be included in the “Results” section in the final version of the manuscript as follows:

The section is going to include the paragraph:

“Previous works analyzing precipitation from the methodology of WTs conclude that most of the yearly and winter precipitation is associated with WTs C, SW and W (e.g. Trigo and DaCamara 2000; Lorenzo et al., 2008; Cortesi et al., 2014). Our results are in complete agreement with those obtained by the cited studies adding the idea that ARs are responsible for most of this precipitation.”

Cortesi, N., Gonzalez-Hidalgo, J. C., Trigo, R. M., & Ramos, A. M. (2014). Weather types and spatial variability of precipitation in the Iberian Peninsula. *International Journal of Climatology*, 34(8), 2661-2677.

Lorenzo, M. N., Taboada, J. J., & Gimeno, L. (2008). Links between circulation weather types and teleconnection patterns and their influence on precipitation patterns in Galicia (NW Spain). *International Journal of Climatology*, 28(11), 1493-1505.

Trigo, R. M., & DaCAMARA, C. C. (2000). Circulation weather types and their influence on the precipitation regime in Portugal. *International Journal of Climatology*, 20(13), 1559-1581.

In the introduction section is stated as one of the scopes that this study may be useful to properly understand and predict the damages caused by FEs. The flood events database includes damage information for each event (injured people, damages in property, etc). However, in the results section this information is not presented. Have you analyzed it? If a damage analysis has not been carried out, it would be necessary to eliminate any damage reference or replace by the prediction of precipitation amounts (presented in section 3.1).

Certainly, this manuscript does not foresee “damages” themselves. However, we kindly ask the referee to take into account that flooding episodes have been obtained from an Emergency System database. Thus, all of them were associated with damages one way or another. However, following the advice of the reviewer, this point is going to be clarified in the final version of the manuscript as follows:

“Next, we show that this study may be useful to properly understand and predict the damages caused by FEs.”

will be replaced by

“Next, we show that this study may be useful to properly understand and predict FEs.”

In the conclusions you sum up the most remarkable results obtained. In my opinion it is necessary to give some remarks about future work and how to integrate this information as a useful tool in emergency warnings.

Following the advice of the reviewer, we are going to add this paragraph to the conclusions:

"The ideas stated in this paper may only be useful to predict flood events together with an operative AR detection algorithm for the Iberian Atlantic Margin. With this aim, we have developed the first operative AR detection system for Europe, which can be accessed at <http://meteo.usc.es/ARs>. Regarding future work, flood catalogues will allow to perform higher resolution analyses, in order to improve the identification of risk areas, as well as the correlation between floods, ARs and WTs."

Finally, as specific suggestions on page number 6 lines 5-6 there is an internal comment.

The internal comment is going to be removed in the latest version of the manuscript.

Figure 5 description is not correct (precipitation ratio instead of frequency of occurrence).

This is a typo that will be fixed in the final version of the manuscript.

Description of Table A1 an A2 probably is in terms of amount of precipitation instead of damage.

Tables A1 and A2 show the most important precipitation in terms of damage, and they are listed in order of observed precipitation. *"Listed in order of measured precipitation"* is going to be added to the caption of the tables.

It would be better another English revision because some sentences are difficult to understand.

Following the reviewer's suggestion, we are going to order a new native english revision. Changes regarding specifically the language are going to be highlighted in blue instead of red in the final version of the manuscript