Report #2 Submitted on 07 Sep 2015 Referee #1: Dr. Neil Macdonald, neil.macdonald@liverpool.ac.uk

The authors may wish to consider if the use of an approach in which time is only divided into flood rich/flood poor is sufficient, should there be a period where flooding is about normal? The authors could consider the potential of a flood rich period representing a percentage of time above a threshold, e.g the top 20%, rather than 50% of the time (as presented in Fig 4), a threshold approach would permit this, flood poor could also be 20%, with 60% of the time representing normal conditions.

• Dear Sirs,

based on the data density in context of the chosen methods (31-year running mean and polynomial function) the above mentioned approach could not be implemented without changing the continuous text substantially and implementing another method to define the different periods. Potential weaknesses in general have been discussed detailed in context of major revisions. The rudimentary adoption of the applied threshold is furthermore provided by changing values at the end resp. beginning of defined periods (c.f. t-test values). In that context we have decided not to implement the suggested minor revision but the general idea to designate floodnormal periods should be implemented in further works/papers. Due to the main focus with respect to atmospheric parameters which contributes to increasing flood activities we are convinced that the arbitrary chosen threshold by polynomial is reasonable although not perfect.

• All suggestions to improve English language have been implemented but not marked into the manuscript.

In Figure 6 it would be good to use a dashed line so that the graph was legible in black and white.

• Will be changed for final revised paper

Report #1 Submitted on 31 Aug 2015 Anonymous Referee #4

Some minor suggestions:

1) The Abstract is too long, and contains information that fits more the Introduction than the Abstract. I recommend the authors to remove the sentences between lines 26 and 35 (starting with "Will recent...; ending with: most important.). If needed, these sentences can be placed in the Introduction. Furthermore, I suggest to cut/shorten to half the sentences between lines 41 and 49.

2) There is a typo in the Abstract, in line 24: the authors probably wanted to write 14th century instead of 13th century.

3) In line 316 instead of "former neighbors" I suggest "nearby communities"4) Fig. 5: please, correct the text in this figure to "number of floods per annum" - i.e. use double 'n' in th word 'annum'.

5) In References, please, correct the name of P. Alexandre, in line 810.

• All minor suggestions have been implemented except cutting the sentences between lines 41 and 49.