Review on
Analysis of the mass balance times series of glaciers in the Italian Alps
By Carturan and others, tc-2015-182

This paper is under the second review process and I understand that the main changes recommended by the 2 reviewers have been introduced almost accordingly.
In this new version, the connection of the mass balance terms of investigated glacier with NAO anomalies is quantitatively analyzed. Correlation matrixes have been supplemented.
I think the paper has gain in strength but nevertheless still needs some improvements in lying on more substantial analyses. Here follow some points that could be developed in that way:

Line 362: It is stated in the abstract that ablations season have lengthened but I have missed later in the core of the paper where this is mentioned and how it is demonstrated. Can the authors provide an ablation duration time plot for few glaciers showing this trend? Or a time plot of the number of days with positive temperatures at the glacier elevation along the period of record of the mass balance series?

Line 478 and section 3.2 therein: As one of the covariates now analyzed with temperatures and precipitations time series, NAO anomaly series worth a specific paragraph here, and I suggest particularly to detail which monthly standardized series has been used, the choice of the cumulated anomalies (DJF, December to February; etc…) and the retained data process for smoothing.
Figure 5 could be completed with a time plot of the raw-annual (DFJ) NAO anomalies, the smoothed signal and trends to display the well-known break points in 1970 and 1990.

Line 526 and section 4.1. I wonder how this section could be somewhat reorganized and divided in (unnumbered) subparts. I get a little bit lost by the succeeding results of $B_w$, $B_a$, $B_s$ and AAR series…

Lines 634-642. I would strongly encourage the authors to derive at sensitivity of summer balance to temperature from the correlations of $B_s$ to temperature, and to analyze the result for instance with respect to “median elevation” of the glacier provided in Table 1.

Line 650. Remarkable is the finding of the change point for winter precipitations in 1977 in Ortles-Cevedale and Val Ridanna ranges. Until present this has been identified to have a rather regional significance limited to the western Alps.

Line 667. Indicate here or in section 3.2/3.3 the way NAO monthly anomalies are smoothed (5 years=current +/- 2 years?) and the way the authors chose this low-pass filter. Noteworthy to mention in the text is that smoothing is proceed to highlight mainly possible convergent low-frequency patterns which are not detectable at the annual scale.

Some comments/questions arise from the new analyses:
- Most of the studied Eastern Italian glaciers have their $B_w$ anti-correlated with DFJ NAO anomalies. This is in conflict with the result from Marzeion and and Nesje (2012) who reported positive connections.
- Some glaciers have stronger connection with the winter NAO through their summer balance (Pendente) or with their winter balance (La Mare, Careser), some glaciers neither on summer or winter balance components (Ciardoney). For Pendente, the links are balanced and cancel in the annual balance. The figure then is quite composite. When significant, the link is always negative with the winter balance. However, this link is found (surprisingly) positive for Vernagtferner and Sarenne.
- How local precipitations are connected to the larger NAO signal? This may help to make clear the preceding question.

Line 752. Conclusion
Add between points 3-4 a conclusion on the NAO analysis; Important is that some of the mass balance series are connected to the synoptic signal held by NAO index through both summer and winter components, sometimes with a strong link. But sometimes the link is weak and there is not a unique figure and an understandable spatial structure.