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We thank Reviewer 2 for carefully reading and commenting our manuscript. Below are our responses in blue, with the original reviewers' comments in black.

The paper by Baer et al. monitored changes in rainfall, soil, and runoff chemistry (pH, acidity and ions) in the preAlps during more than 20 years during which actions were taken to abate atmospheric pollution in Europe. They also added N to plots to simulate an increase in N deposition. This is an important contribution to understanding the long-term effects of increased N deposition in forest catchments, as well as of the importance of abatements measurements. As such, the current study is a highly valuable contribution to understanding patterns of N deposition and its consequences for the biogeochemistry of European forests.

We much appreciate the overall positive assessment of the reviewer.

On the negative aspect, more care should have been taken to avoid incomplete sentences, colloquial expressions, and grammatical errors and typos. Thus, the paper should be carefully revised in this aspect.

The manuscript will be given a thorough revision to correct for grammatical errors, typos, redundancies and incomplete sentences while avoiding and replacing colloquial expressions. The text will also be revised by a third party (non author) competent in both English language and scientific writing.

Moreover, some questions remain untested. For example, one of the most intriguing results is the increase in the pH of rainfall across time, indicative of reduced acid rain due to political action, but the continuous decrease of soil pH and pH in runoff water across the same time period.

It is indeed not an obvious but an important result. In the discussion we consider the cause-to-effect relationships and their timing. It is especially important to distinguish between fluxes and buffering mechanisms. We could add here in a very short manner: it is not because there are less acidifying inputs that there is no longer any acidification. The discussion will be made more explicit in this regard.

I wonder whether there is any temporal correlation among these variables. Or in other words, are shifting pH values across time in rainfall, soil and runoff coupled or decoupled? Are these couplings/decouplings maintained across soil horizons and experimental treatments? The same can be asked for other variables like total acidity, etc. Analyzing these types of questions would, in my opinion, increase the novelty of the paper beyond what could be considered as a very informative and highly valuable report by providing more novel insights.

As shown by our results, precipitation pH, soil pH, soil exchangeable acidity and runoff pH have each a different time-course over the duration of the experiment. At a multi-year time-scale, they are clearly decoupled. Nevertheless, we gladly retain the reviewer's question to examine whether pH measurements in precipitation and in runoff water are correlated in the shorter term. After excluding the cold-season data that may be affected by a snowpack and after removing the long-term trends, we did not find any significant short-term correlation. This is not really surprising if we consider the large buffering capacity of the soil. We will add this new aspect to the revised manuscript. In terms of soil pH and exchangeable acidity, we have too few time points to try any such statistical approach and have to stay with the contrasting long-term trends of these time-series.

Other than that, I consider this paper as a very valuable contribution to the field. (Detailed comments not repeated here)

Most of these suggestions will be directly implemented. It is true that chemical equations are not commonly shown in ecological research articles. Nevertheless, we consider them useful because readers in this field often don't remember exactly what these reactions are and which (quantitative) consequences they have.
The sentence on lines 168-171 is about the replicated plot design. It is always a bit difficult to explain that we used two statistical designs for a single experiment: a paired-catchment design (with the advantage of being able to measure export fluxes in runoff water) and a replicated block design (with the advantage of the replications). We believe that everything will be more understandable by adding here a reference to Fig. 1, on which both designs are visible.