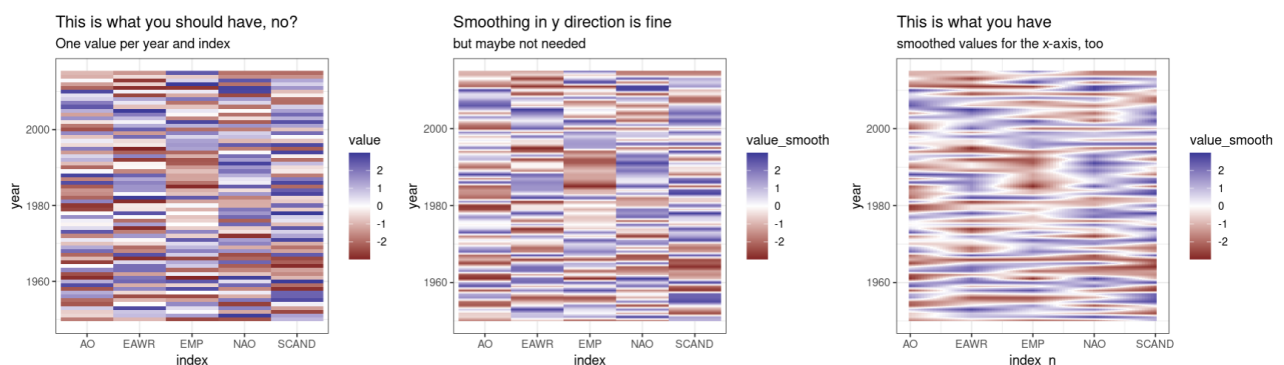


The authors are to be commended for the effort that they have put into revising the manuscript. They addressed all comments and included all my suggestions. Thank you. The manuscript has considerably improved.

One thing I still do not agree with is the Hovmöller-type diagram. Please correct me if I'm wrong, but I think you have annual values for all five teleconnection indices? So what is shown between, e.g., AO and EAWR for one year? For me it looks like a gradient between the two winter values of AO and EAWR, but this does not make sense. I agree with the authors, that the plot could serve as a nice overview between all teleconnection indices and HNS, but I think it's technically wrong and thus potentially misleading. You can still keep the type of plot, but need to separate the x-axis into a discrete one. See also the figure below (with some random values):



Otherwise, there are only a few minor technical things left:

- Regarding the monthly sums: Did you calculate them only when all (28-31) daily observations were available? Did you not have any gaps of few days in between? Usually, one calculates monthly means, if 90% or 95% of daily observations are available.
- New Figure 4: the top right panel should be “moving average” without “standard deviation”, no?
- Table 3: Please add one column with the correlations using all years.
- All correlation tables: The choice of using a soft grey colour for denoting  $0.05 < p < 0.1$  is unlucky, since the natural visibility order would be **bold**, normal, grey. I think one p-value threshold is enough. For correlations 0.1 (90%) is well accepted, especially since you have only 20 observations (time periods) in some cases. Then you can use bold for significant and normal for not. You can use 0.1 (90%) consistently for all correlation tables (now you have sometimes only 0.05, and sometimes both 0.05 and 0.1).
- L395ff: Again, t-test is standard, so no need to specify hypotheses. But the t-test is a pair comparison. From the response to the comment to referee 2, I understand what you did, but not from what you wrote in the manuscript. Maybe you can clarify into something like “HNS was significantly different between the high (ST<sub>x</sub>, ST<sub>y</sub>, ST<sub>z</sub>) and low group (ST...) ( $p < 0.05$ , t-test).”