Comments from Reviewer 2

GENERAL COMMENTS:

The authors have satisfactorily addressed my comments on the previous version of this manuscript. In my opinion, the manuscript has been improved substantially and is acceptable for publication in Weather and Climate Dynamics. I have just a few minor comments for the authors to consider (see below). I look forward to the publication of this nice paper.

We would like to thank the Reviewer for all his/her help to improve the paper.

SPECIFIC COMMENTS:

line 74-75: It could be helpful to also explicitly state here that the stormy winter of 2013/14 involved serial clustering of extratropical cyclones (e.g., Priestley et al. 2017; https://doi.org/10.1002/wea.3025). Cyclone clustering seems like a highly relevant process for extreme seasons that occur in regions located along/near midlatitude storm tracks. Thus, perhaps this topic deserves a bit more discussion in this manuscript.

Thank you for suggesting this study. We now reference the study of Priestley et al. (2017) in lines 74-75 and later in section 4.1.

line 161: Change to "distinct ascending airstreams extending through a cyclone warm sector"

Done.

line 196: Insert "midlatitude" before "continental"?

Done.

line 430: The plots in Fig. 11 provide a nice global view of the relationships between extreme seasons and the different weather system types. That being said, the maps are rather noisy. Perhaps this is a naive question, but would plotting the average ratio value for all patches at each grid point, rather than overlaying all patches on the map, provide a clearer and cleaner depiction?

Thank you for this comment. We acknowledge a certain noisiness in Fig. 11 but unfortunately the proposed method did not provide a clearer illustration either. While in certain areas the field of ratios became smoother, other areas became even more noisy. This is due to overlapping patches of contrasting ratios that ended up with a sharp transition of colours. In any case, we agree with the Reviewer that Fig. 11 serves well the purpose of providing a global view of our results and we trust that, despite the certain degree of noisiness, the figure conveys a clear message. Therefore, we choose to keep the figure as it is.

TECHNICAL CORRECTIONS:

line 89: wave -> waves

Done.

line 200: change the semicolon to a comma

Done.

line 399: The contours for RWB occurrences in Fig. 9a appear yellow/brown instead of green.

Thanks, this was a typo, “green” is now changed to “brown”.