

Interactive comment on “Technical note: Towards a continuous classification of climate using bivariate colour mapping” by A. J. Teuling

Anonymous Referee #1

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This small note describes a new continuous classification system using bivariate color mapping. This new classification scheme is explained in a clear way and the author demonstrates its usefulness by comparing it with the well-known Köppen-Geiger classification. The advantage of the new classification system is that it uses only two variables (T and RH), that it is continuous and can be applied over all time scales. My opinion is that this classification scheme can be very useful in climate research especially because of the three aspects mentioned above. My background is climate modeling and from this perspective I judge that this classification system appears to be very useful to transfer data from climate models into information that is useful for impact studies. My advise is: accept.

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I have only two minor comments:

The first comment is on the interpretation of Fig. 3. The author argues that during dry and warm summer conditions air masses over the Netherlands often originate from the Sahara. In addition he argues that cold extremes in the winter have arctic origin. Although I do not deny the influence of advection on extremes, I want to add that hot summer and cold winter days can be also due to local radiation and air-surface interactions that transform the air masses. This becomes especially more important during the later stages of a heat wave or cold spell. So the notion that during certain episodes the weather in the Netherlands has the same characteristics as the Sahara or the Arctic does not necessarily mean that it is due to advection from these regions.

The second comment is about the size of Figure 2. If possible I would like it to be a bit larger in the final version.

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