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Interactive Comment

Interactive comment on "Updated world map of the Köppen-Geiger climate classification" *by* M. C. Peel et al.

Anonymous Referee #1

Received and published: 1 August 2007

This is another recent update of the Köppen climate classification scheme. The paper should be published as it presents a station-based approach in contrast to a grid-based approach of data analysis.

Three specific comments suffice:

1. Although the authors have set their theme, I like to note time/space inhomogeneities. I guess, not everybody is really convinced that

(i) one can break up the monthly precipitation-temperature pairs at a station allowing for stations with one variable only, and that

(ii) one can allow for inconsistency in climate averaging periods.

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Why? The authors have used many (30) climate type subdivisions and they do not confine themselves to the broader class partitioning (16, see Trewartha 1980). Thus, local inhomogeneities in space and time will affect the boundaries of the highly resolved climate types (as presented in the figures) more than they would for broader class resolutions (in relative terms).

2a. Area coverage of climate types is given in % of the continental area. It is probably useful to know what 100% is in km² for each continent, or did I overlook that?

2b. And far from Oz, it is at the Bosperus, where Europe meets Asia - and not as shown in the Figure.

3. As the authors elaborate extensively on past work about the Koeppen climate classification, which I highly appreciate, some missing references are necessary for the interested readers:

Trewartha, G.T.: An Introduction to Climate, 5. Edition, New York und London 1980

Rudloff, W.: World Climates, Wiss. Verlagsges mbH, Stuttgart 1981

Plus one, which may be particularly useful and needs to be discussed as (i) tests on stability have been performed, (ii) climate change has been estimated with (iii) dynamical causes being analysed, and all that related to the Koeppen climate classification (even before many of the recently published papers appeared):

Fraedrich, K., F.W. Gerstengarbe, and P.C. Werner, 2001: Climate shifts in the last century. *Climatic Change*, 50, 405-417

Finally, if the authors like to hang up a world map with updated Koeppen climates on the wall of their lecture hall (provided it is sufficiently large and empty) they may look into:

Werner, P.C., Gerstengarbe, F.-W., Oesterle, H., Wodinski, M. (2005): Climate of the Earth, Klett-Perthes Verlag, Gotha,... in English, by the way (not the colours).

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