

Plagiarism

Anonymous Referee #1

Referee comment on "A 1-km global dataset of historical (1979–2017) and future (2020–2100) Köppen-Geiger climate classification and bioclimatic variables" by Diyang Cui et al., Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2021-53-RC1>, 2021

I wonder what the editorial policy is for plagiarism, because I am concerned with the degree of copying and rewording in this paper. Below are some examples I found. I wouldn't be surprised if lots of other sentences were lifted from other papers.

Beck et al. (2018): "The Köppen-Geiger climate classification is a highly suitable means to aggregate complex climate gradients into a simple but ecologically meaningful classification scheme."

Cui et al. (2021): "The Köppen climate classification demonstrates the ability to aggregate complex and diverse climate gradients into ecologically meaningful classes and simplify spatial variability."

Beck et al. (2018): "This can lead to widespread misclassifications, particularly in regions with a low station density and/or strong climatic gradients such as mountain ranges (Karger et al., 2017)."

Cui et al. (2021): "This eventually led to widespread misclassifications of Köppen climates, particularly in mountainous regions with strong climatic gradients and often low station density (Karger et al., 2017)."

Beck et al. (2018): "However, caution should be exerted not to equate those changes directly with changes in actual biomes."

Cui et al. (2021): "However, we should take cautions when relating the changes to changes in actual biome distributions."

Beck et al. (2018): "vegetation changes by 2100 may lag the change in climate zones."

Cui et al. (2021): "Vegetation changes may lag the climate changes when climate become less favourable."

Beck et al. (2018): "Secondly, factors not accounted for in the Köppen-Geiger classification, such as higher atmospheric CO2 levels, may alter the relationship between climate classes and vegetation."

Cui et al. (2021): "Additionally, other factors not considered in the Köppen classification scheme, such as CO2 or nitrogen levels, may influence the relationship between climate and vegetation."

"The highest confidence was given to the most common climate class for each grid cell." Maybe mention that this approach was adopted from Beck et al. (2018).

"The Köppen-Geiger climate maps currently available are limited by relatively low spatial resolution, poor accuracy, and noncomparable time periods." The "low spatial resolution" argument is of course incorrect as the authors well know. Poor accuracy is also incorrect (the Beck et al., 2018, map has only slightly lower accuracy according to your evaluation). And what are noncomparable time periods? Noncomparable to what? Does it really matter that much whether the climatology represents 1988-2017 or 1980-2016 given the input uncertainty?