

Interactive comment on “Discrepancies of surface temperature trends in the CMIP5 simulations and observations on the global and regional scales” by L. Zhao et al.

Anonymous Referee #1

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This paper calculates trends in surface temperature over the historical period (1850–2012) in 16 CMIP 5 simulations. The trends are computed over successive 10 year periods. The paper presents figures with the model trends together with trends in observed temperatures.

The major shortcoming of this paper is that it does not aim to give any physical interpretations or insights. The main result (p11) that "the CMIP model simulations reproduced a common feature with global surface warming, but the trends displayed a significant discrepancy from one region to another region" does not add new information to the understanding of climate.

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For a paper comparing temperature trends between climate models and observations to be publishable, we expect some insight on possible physical reasons for the disagreements where they occur, and persuasive suggestions for the modeling community on how to improve the models.

Interactive comment on Clim. Past Discuss., 9, 6161, 2013.

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