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Interactive comment

Interactive comment on "Varying regional δ^{18} O-temperature relationship in high resolution stable water isotopes from East Greenland" by Christian Holme et al.

Kern

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Dear Authors,

Congratulations to the interesting study. I've two points for this short comment.

1, Can you make available the raw d18O series of the Renland ice cores? or the annualized d18O records? I cannot find any link either to a data repository or to a supplementary source where the ice core derived d18O data could be available.

2, Changes in the seasonal distribution of precipitation could be also a potential explanation for temporal changes is d18O-temperature relation. Even seasonal distribu-



Discussion paper



tion of precipitation since 1910 might explain the good correlation with annual mean air temperature. However, an increased seasonal contrast in the intraanual distribution of precipitation before 1910 might introduce a seasonal bias to the depositional d180 record and it can disturb the correlation with the annual mean air temperature. It can be tested if amount-weigthed mean temperatures could be calculated and involved also into the correlation analysis. A recent study from Polish Polar Research (https://content.sciendo.com/view/journals/popore/38/2/article-p105.xml) can be potentially considered in this idea.

best regards, Zoltan Kern

Interactive comment on Clim. Past Discuss., https://doi.org/10.5194/cp-2018-169, 2018.

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