

Dear Editor,

First of all, Happy New Year, and many thanks for the fast response!

I carefully revised the manuscript and inserted some responses to the comments/suggestions below. All the changes in the manuscript are highlighted in red fonts in the tracking file.

Best wishes,

Wenjuan

- l.270 - rephrase "w.r.t the MPI-ESM-HR contribution ..." with "compared to the MPI-ESM-HR contribution forced with CMIP5 data ...", or similar

→ Revised.

- l. 131 'stability' -> maybe "reproducibility" or "persistence" would be a better word here?

→ Thanks for the suggestion. We replaced it with "persistence".

- l. 133 - please spell out / define what CCR stands for (still not fully clear)

→ Revised, please see lines **131-132**.

- l. 134 - change "reduce the overall signal" with "reduce the overall signal-to-noise ratio compared to the response derived from the full period", or similar

→ Revised

- correct title formatting in the final manuscript

→ Corrected.

- l. 322 - "have large uncertainty in the early history periods". First, "history" should be replaced with "historical". Second - it's not clear what exactly do you mean here. Do you mean that the differences in model climatologies for those early periods are small compared to ERA5 (1960-2014), and hence not statistically significant? I find that hard to believe. Or do you mean that if you define those differences this way, these are not really true model 'biases', but rather just reflect a comparison between past and present-day periods? Either way, this should be made clear in the text, please.

→ Sorry for the confusing description. We rewrote the sentences. Please see lines **320-327**.