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Interactive comment on "Historical (1750–2014) anthropogenic emissions of reactive gases and aerosols from the Community Emission Data System (CEDS)" *by* Rachel M. Hoesly et al.

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I have two very simple questions:

* Where has CH4 gone? It is mentioned in the abstract, but nothing afterwards. It is not shown in any figure, nor is it provided in the supplementary data.

* Where is N2O? It is not mentioned at all.

There may be good reasons for CH4 and N2O to be missing, but these reasons should be at the very least explained. (It looks like CH4 may become available at some point, but it's not very clear for someone who is not closely involved in CMIP6.) If the data

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can be found elsewhere, a reference should be given.

Otherwise, recommendation as to what data-sets could complement this one if one wanted to run a global simulation with consistent emission data would be extremely appreciated! (One typical issue, when using older data-sets, is how to extend these over the recent past.)

Even better, this whole work should be done for methane and nitrous oxide, even if it requires more simplistic assumptions. I'm perfectly aware it is no small endeavor, and it is obvious a lot of work has been put into the current version of the data-set. But even if most (all?) complex ESMs do not have interactive CH4- and N2O-cycling, some less complex models do, and the extra data would be very valuable! Ultimately, if CH4 and/or N2O are not required for CMIP6, I do hope another paper for these two gases is on its way...

Mention and recommendation as to the F-gases would be the icing on the cake. (With this same issue of having emission data up to 2014...)

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