We corrected all the technique questions raise below.

I think the revised manuscript has demonstrate its significance and provided detailed description of the experiment design. I noticed some textual elements (words and/or numbers) are partially covered by Figure 5, which need to be corrected.

The authors have adequately addressed comments raised in the previous review steps. I recommend the manuscript to be published in GMD after considering the following technical corrections:

Table 2: Please try to avoid the unhyphenated breaks of words in the table. (And why is the number of ensemble members indicated as "-" for Exp2, instead of "1"?)

1.282: "HTHHMOC-Exp1 and 4" may be outdated as there is no Exp4 anymore in the revised version, as I understand? Anyway, I find the detailed description of the file naming convention including several examples unnecessary for the paper body text.

Table 4: "clyne et al." -> "Clyne et al."

1.410: What does "between boundary layer and 100 hPa" mean? Above the boundary layer? Or all levels between surface and 100 hPa?

1.414 is there a reference, url or doi that can be given?