Dear editor,

Thank for editor's and reviewer's suggestions. We have corrected some errors in the revised version based on reviewer's suggestions from point to point. The detailed revisions have been shown in the revised manuscript.

#RC 1

The revised manuscript of egusphere-2024-69 has been well addressed in my comments. I would like to agree with the publication from the journal of ACP. Before the final production, please consider including the following two minor points.

Response: Thank for reviewer's suggestions. I have significantly revised the manuscript based on reviewer's suggestions.

Comment 1: From Fig. 2 to Fig. 8, the caption and legend should be also expressed as "NO₃-N" and "NH₄-N" to be consistent with the main text.

Response: Thank for reviewer's suggestions. We have revised the caption and legend from Fig. 2 to Fig. 8.

Comment 2: In Table 1, "many countries" seems to be not a scientifical expression, so how about "selected countries"?

Response: Thank for reviewer's suggestions. We have replaced the "many countries" by "selected countries" in Table 1.