

Thank you for your revised manuscript. You have addressed the questions and comments of the referees and I agree that this work will make a valuable contribution to the community. However, before I can accept it for publication in ACP, I have an additional comment regarding the exclusion of nitro-aromatic compounds in your study.

The authors thank the editor for reviewing our manuscript, and particularly providing valuable comments and suggestions. Our responses in form of point-by-point are given.

I agree with the authors that the large diversity of nitrogen-containing components in the particle phase makes it difficult to encompass all those species in one study. A selection of representative species could still support your key findings on the dominant influence of biomass combustion and cross-border transport on these species. However, it is important to note that nitro-aromatic compounds are not only oxidation products of aromatics like toluene. They are also emitted directly during biomass burning and can be produced from the oxidation of biomass burning emissions like phenolic compounds. Given the significant influence of biomass combustion at your sampling site, one would expect nitro-aromatics to be a considerable fraction of the particles.

Response: We appreciate your feedback and agree with your comments. In our future studies, we will focus on NOCs, including nitro-aromatic compounds.

There are also several minor comments:

1. Last sentence of your abstract: Replace “enhances” with “improves” and delete “the” before “climate stability”

Response: Revised. It now reads, “This study improves our understanding of NOCs’ contribution to PM_{2.5} in TP and their potential impacts on climate stability in high-altitude areas.”

2. Line 249, should be mechanisms.

Response: Revised. It now reads, “...despite no obvious direct local emission near the sampling site secondary formation of FAAs can occur through several mechanisms, including direct photolysis...”.

3. Figure 3 (c), please use the same sizes for y-axis labels as panels (a-b)

Response: We revised the y-axis labels of Figure 3 (c), it now shows below:

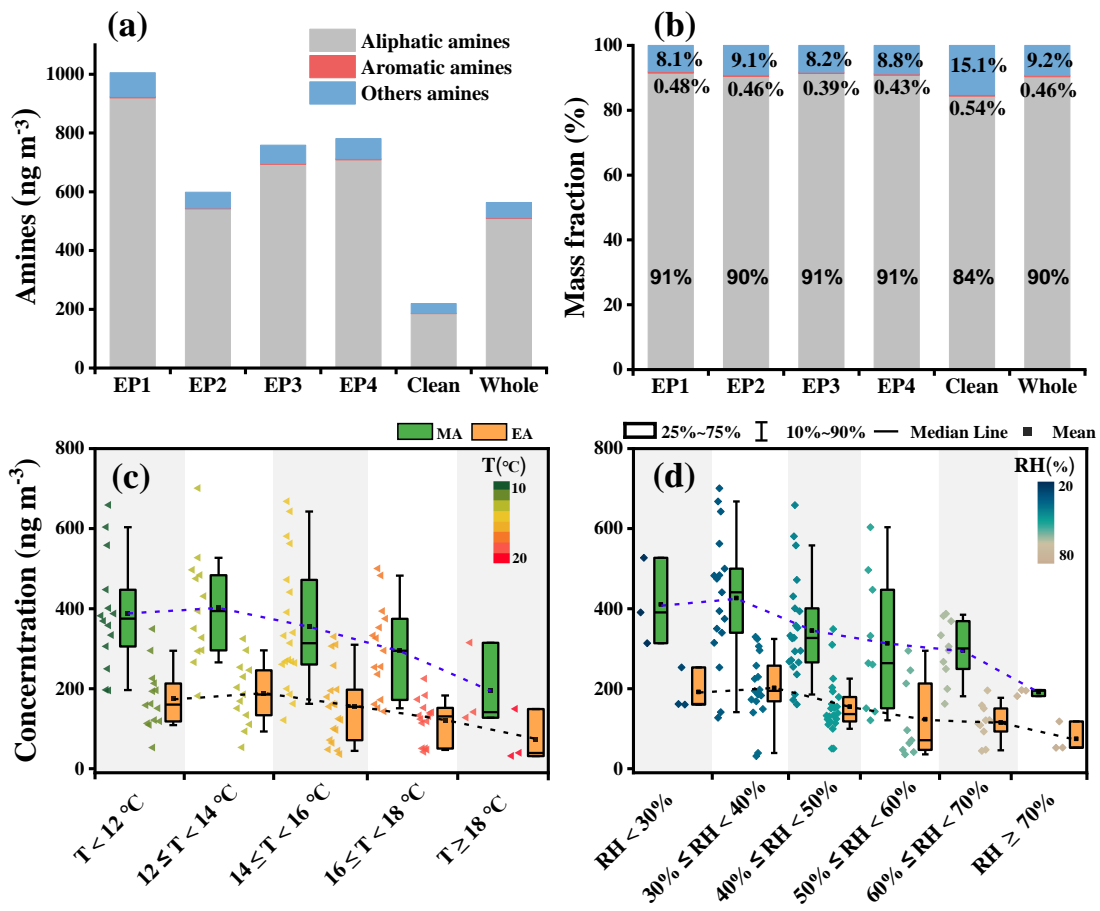


Figure 3 (a) Concentration and (b) composition of amines. (c) Temperature dependence of EA and MA, and (d) RH dependence of EA and MA. The box represents the 25th (bottom) and 75th percentiles (top), and the box-whisker data represents the 10th to 90th percentiles.