



those present in the signal of the identified fluorinated compounds (Fig. S12), and more generally there is a strong correlation between the signal of C4 amines and that of  $H(CF_2)_4COOH \cdot NO_3^-$  ( $R^2 = 0.60$ ) and  $H(CF_2)_5COOH \cdot NO_3^-$  ( $R^2 = 0.70$ ). The suspicion of a contamination is therefore high for these compounds, which will not be investigated further. For C2 amines, in contrast, there is no such correlation with fluorinated compounds, and there is also no correlation with temperature (Fig. 10), which further rules out the possibility that these compounds are the result of a temperature modulated contamination by the instrument or the sampling line (volatilization-related)."

P20: "The other masses (UMR 246, 260, 310, 344 and 362 Th) have a different behaviour (Fig. S15.b), which is actually comparable to that observed for the peaks attributed to C4 amines (Figs. 8 and 9) and fluorinated compounds (Fig. S12), suggesting that these compounds could once again be the result of a contamination. In particular, as illustrated on the mass defect plot shown in Fig. S11, the peaks identified at UMR 260 and 310 Th have a mass difference corresponding to the mass of the  $CF_2$  group, suggesting that these compounds may actually be fluorinated species."

### Regarding Comment 3

In order to avoid introducing any approximations in the nomenclature, we have followed the Reviewer's recommendations and proscribed the use of the expression "molecular clusters" or completed it where it was not the most relevant (including in the title). We have also removed the sentence added at the previous review stage (and mentioned by the Reviewer in this new comment), whose purpose was to warn of the use of the approximation that we have finally avoided.