

Response to Comments from Reviewer 1

1. *The authors have revised the manuscript and it is much more clear to follow. However, I still have one concern. L200, authors didn't provide any explanation about the calculation of L. The re-write sentences do not make it clear for me.*

We thank the review for the comment, and we update the manuscript accordingly.

Line 200. The parameter L is an operational parameter that needs to be related to the extent of the plume. Since a plume dissipates in all directions due to turbulent diffusion, an explicit scaling function (i.e., an effective wind speed U_{eff}) that relates L and 10 m wind speed (U_{10}) to the true emission can be derived through large eddy simulations (Varon et al., 2018)