

Response to reviewers for manuscript

Dear Senior Editor,

Thank you for the opportunity to revise our manuscript and for the feedback on these minor points. We implemented all the changes, and we believe that the manuscript has now improved its quality.

We look forward to your decision.

Best Regards,

Johan Mellqvist, Nathalia Thygesen Vechi, and co-authors

Reviewer Comment	Author' Response	Revised Text – Line numbers refer to clean (without track changes) version of the revised paper.
Line 105: Consider removing one “ideally”. Line 110: “ introduce” should be “introducing”. Maybe consider if this entire sentence is even necessary.	Suggestion implemented according to the editor suggestions	
Section 2.2.1 and 3.3: the mathematical symbol /alpha is used for two different quantities in the manuscript (relative wind angle in eq 1 and in eq. 10). Please rename it for one of these instances.	Suggestion implemented We change the α from equation 10 to an “r” of ratio.	Changes in Eq. 10 and 11 and on line 328. $r = \frac{\log(U_2/U_1)}{\log(z_2/z_1)}$ $U_{(z)} = U_2 \left(\frac{z}{z_2}\right)^r$ Thereafter, the obtained r factor was ...
Line 185: Ineris is an acronym. Please spell out the full name. Line 193. Add “Inc.” to Fluxsense. Not everyone knows this is a company.	Suggestion implemented according to the editor suggestions	

<p>Line 199. Add “distance” after 250 – 900m (assuming this is what you meant)</p>		
<p>Line 258: I agree with reviewer 1 that adding a sentence explaining the factor 1.96 would improve the manuscript. It is not well enough known for every reader to understand where this number is coming from.</p>	<p>Suggestion implemented. An extra comment was added in the sentence.</p>	<p>Line 260: Therefore, it (U_{cross}) was calculated using absorption strength ($U_{\text{abs-NH}_3}$) (Kleiner et al., 2003), further divided by 1.96, which is the coverage factor used for 95 % confidence interval, as this error was considered a normal distribution (Eq. 5).</p>
<p>Line 489: replace “their” with “its” since you are referring to the “stickiness” of NH3 not of its emissions. Line 507: Replace “very” with “vary” Line 539: “instrument” should be “instruments”</p>	<p>Suggestion implemented according to the editor suggestions</p>	