

Thanks to the authors for their clear and quick replies to the reviews.

The comments have been generally answered properly. The manuscript can be published in ACP after minor revisions and a thorough grammatical check.

5 The main point to fix is the consistency of the revisions with the sections kept as in the previous version of the manuscript. In some sections, it seems that the manuscript has been corrected locally according to the reviews and resubmitted without checking for the general consistency between updated sections and other sections. Some sentences should be reformulated in the non-updated sections to account for the changes in the reviewed sections. The authors are asked to re-read and check the full manuscript thoroughly to fix this point before submitting the final manuscript.

10 The authors will find below some minor technical details to be addressed before the manuscript can be published in ACP.

**Technical details:**

- p.2 1.12: I agree with the reviewer 3 about this reference and the 70% of global emissions from cities. The sentence should be reformulated.
- 15 - Section 2.1: please refer somewhere to the new figure S1
- p.8 1.8: please define from the beginning what is referred as "Summer" and "Winter"
- p.9 1.5-7: this assumption is not needed for what follows in the manuscript and is highly speculative as it is based on no observed evidence; though it might indeed be true. Please reformulate as a possible extension of your conclusions, but not as an assumption.
- 20 - p.9 1.15-29: This paragraph makes a point but is still not clear. The reference to Gioli looks artificial and is not need. The structure of the paragraph should be put upside-down: 1) diurnal cycle is observed, 2) only small lag between the two height and high similarities + lower emissions during weekends, 3) pressure rate cannot be constant in the distribution system, or emissions come from elsewhere. Actually, the discussion about the seasonal variability in
- 25 Sect. 3.4.2 is much clearer though the underlying arguments are similar... Please make the two sections consistent with each others.
- Conclusion: the presentation with paragraph title still looks clumsy. Some connection words would be sufficient to remove the paragraph titles and make the conclusion easier to read.