My previous comments have been adequately addressed in the author's response, I think the revised manuscript is more convincing, and it should been accepted after minor revisions with respect to the following suggestions:

- 1. The eddy diffusion K and decay constant λ were described with more details, however, it should be explicitly shown if they are constants or they vary with factors such as voltage, wind speed, humidity, temperature and pressure.
- 2. The steady-2D equation (1) seems not complex, and the results in Fig. 4 and Fig. 7 seems regular, thus I guess there may exist an analytic solution of ion density for varying wind speeds and voltages, at least along the x-axis. Is it possible to reach such a result in the further?
- 3. In comparison with the single-discharge-point results of simulation and indoor experiment in Fig. 5, I prefer to see the relevant multi-discharge-point results, which is more realistic.
- 4. In page 9: "the whole coverage volume was approximately 30m*20m*90m". Firstly, how the width of 90m was obtained? as in Fig. 1(b) the distance between two poles is only 60m. Secondly, according to Fig. 6(d), the superimposed ion density decays at the boundary, what is the length of boundary? should it be taken away from the width of 90m?
- 5. Although the coverage of ion density in Fig. 6(b) is coincident with that in Fig. 6(a), the ion density in Fig. 6(a) ranges between 10^6 and 10^5 at the distance of 20m~30m, while in Fig. 6(b) it is less with about one order of magnitude, ranging between 10^5 and 10^4. Please discuss where the difference results from and how to improve it. Besides, the x-ticks in Fig. 6(a) seems to be not in line with the x-names.
- 6. The results in Fig. 8 support that the ion density in the region of 30m-35m in Fig. 6(a) contributes to precipitation, however, the minimum of ion density which can enhance settling should be obtained in order to estimate the largest effective distance in Fig. 6(a).
- 7. The authors should carefully check the values, units, references (a lot errors), figures (obscures seen in printout) in the paper one by one, to avoid unnecessary mistakes.

Some of above suggestions maybe beyond the scope of this paper, it is preferable to add a section to discuss further works to make the paper more coherent.