

## ***Interactive comment on “Large-scale ion generation for precipitation of atmospheric aerosols” by Shaoxiang Ma et al.***

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### General comments

In this paper, a large-scale device was installed in the open air, ions generation and ion transport were measured; A 2-D model was developed which shown that ion concentration is pretty sensitive to wind speeds; Cloud chamber experiment further proved that ions can enhance the growth of droplets, implying a potential application of the device for rain enhancement. On the whole, this work was well designed, a heavy workload was completed, and the results are interesting and convincing. It is definitely in scope for the journal of ACP, and a decent article would be present if more details of the model and the cloud chamber experiment are given. However, frankly speaking, I

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don't like the writing style of this paper, and the author seems not realize that readers with atmospheric background may not be familiar with the details of plasma science. Overall, I recommend that the paper should be published once the following comments have been addressed.

The specific comments and technical corrections are present in the supplement file.

Please also note the supplement to this comment:

<https://www.atmos-chem-phys-discuss.net/acp-2020-23/acp-2020-23-RC1-supplement.pdf>

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Interactive comment on Atmos. Chem. Phys. Discuss., <https://doi.org/10.5194/acp-2020-23>, 2020.

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