We appreciate the reviewers' and the editor's time and effort spent on our revised manuscript. We are glad to see that both reviewers are highly supportive of the revision. For further minor comments from the reviewer and the editor, we have addressed them carefully below.

From the reviewer 2:

All the points I raised in my previous review have been thoroughly addressed in the revised manuscript. The mechanism behind the cloud oscillation phenomenon is now much clearer. I believe the manuscript is almost ready for publication, with one exception. The authors mention that deactivation can still occur even when s > 0. While this is correct, it only occurs conditionally. As the figure below indicates, the size of the droplet has to be smaller than the unstable fixed point denoted by the white circle. If I understand correctly, this occurs when the phase relaxation time is shorter than the droplet activation time (which I think is also closely relevant to the onset of the catastrophe discussed in Arabas and Shima (2017)). I suggest that the authors expand their discussion on this point a bit. A further review of the revised manuscript will not be necessary.

We totally agree with the reviewer's comments about why droplets deactivate when s>0. It is consistent with ours, but it is interpreted in a different way. We extend our discussion based on the reviewer's comments in the revised manuscript.

"...***Droplet deactivation in supersaturated conditions occurs when the phase relaxation time is much shorter than the droplet activation time. This phenomenon is closely relevant to the onset of the catastrophe discussed in Arabas and Shima (2017)***...."

From the editor:

Thank you for the revisions of this fascinating manuscript using the Pi chamber. The reviewers are now both highly supportive with only a couple recommendations I hope you will consider.

I confess to one concern about the work. The results are highly interesting, of course, especially as an important reference. However an immediate question that springs to mind is about their applicability to natural clouds where the boundary conditions are changing over timescales of perhaps 10 minutes. Would the regimes identified still be as clear?

We appreciate the editor for raising this good point. We add some discussions about it in the manuscript.

"...***Furthermore, unlike well-controlled environmental conditions in the cloud chamber, the boundary conditions of natural clouds or fogs change over time, which would also affect the microphysical regimes. The impact of haze-cloud interactions under real cloud conditions is worth exploring in the future***."