

Demystifying fog microphysics

A high-resolution Large-Eddy Simulation study with coupled particle based microphysics

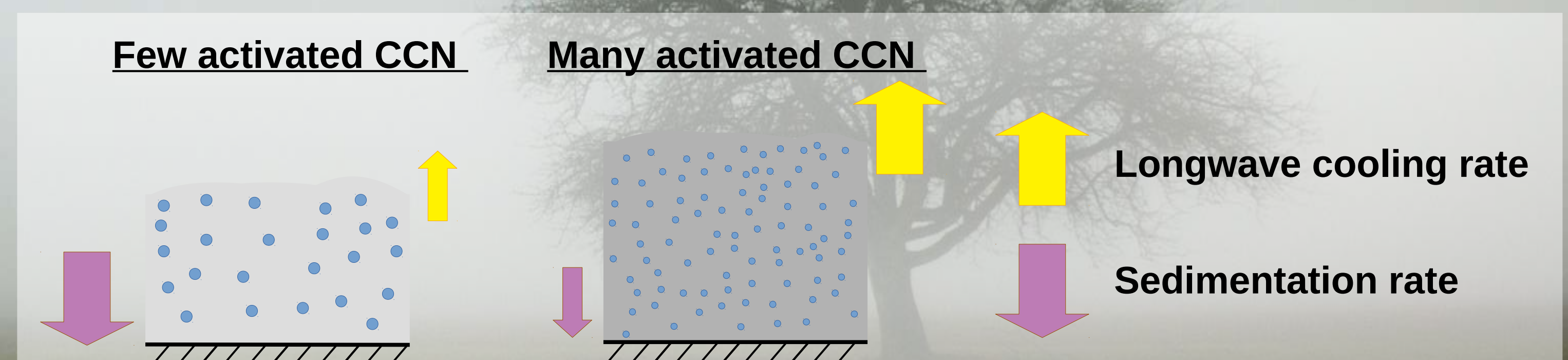


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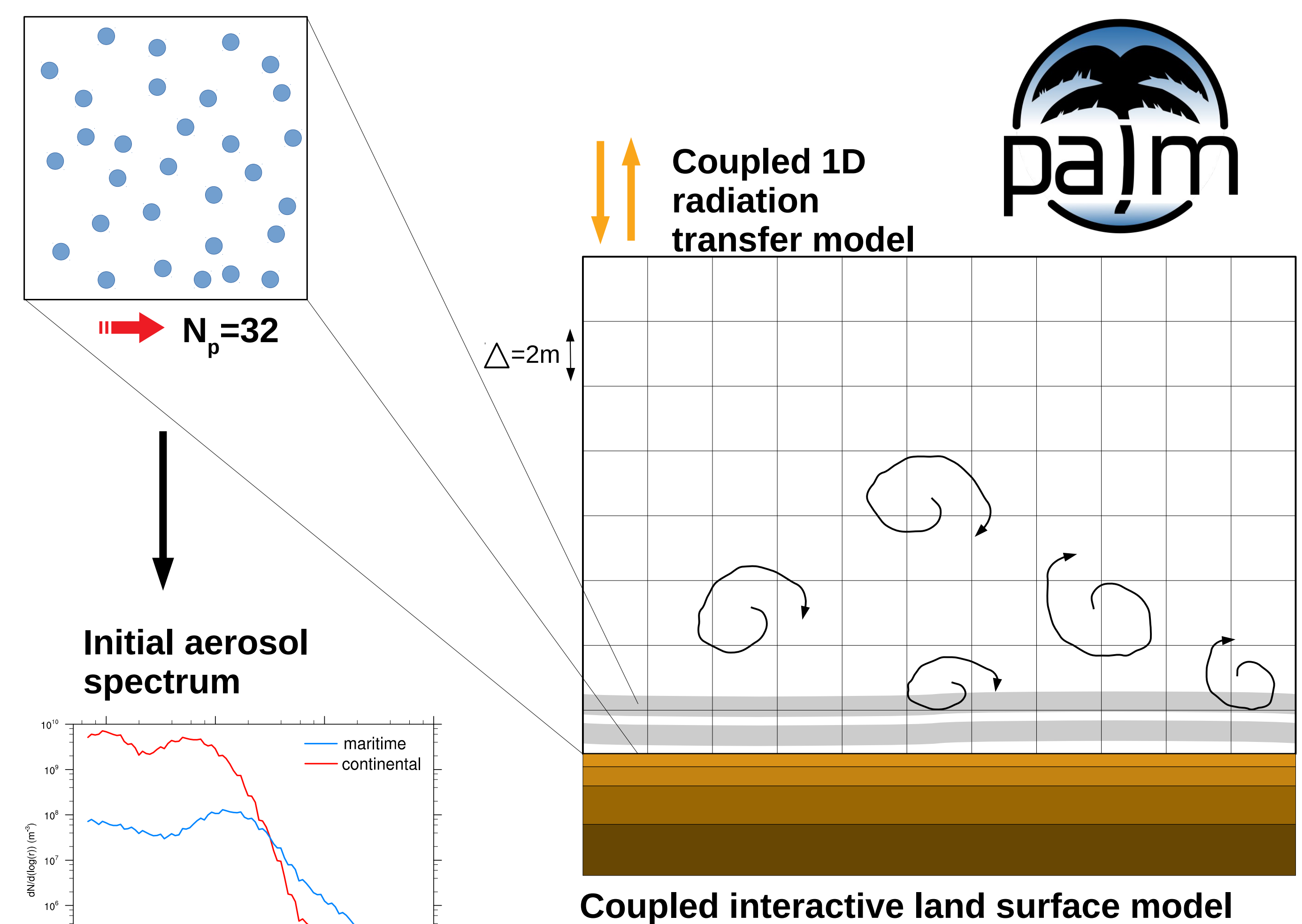
1. Objective

What is the impact on explicit consideration of aerosol properties for fog?

How does radiation fog spectra look like?

3. Results

2. Methods

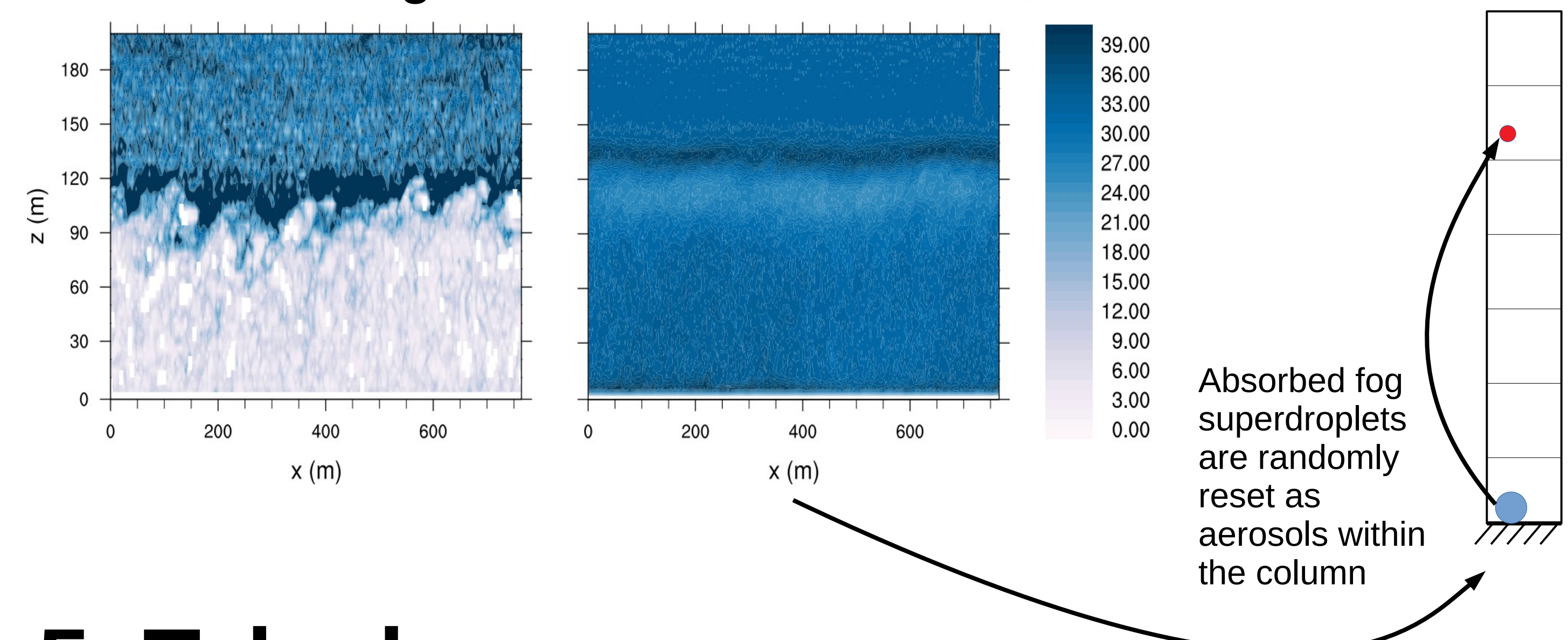


4. To Discuss ...

Problem: Sedimentation leads to too strong superdroplet removal

Absorbing

Reset method



5. Take home

- First time simulating fog with 3D-LES and coupled LCM
- Droplet spectra show bimodal behaviour
- Method to ensure appropriate superdroplet concentration (e.g. Reset method) must be applied.

Contact

Please do stop me if you see me in the hallway. I'd love to address any questions or comments!



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