



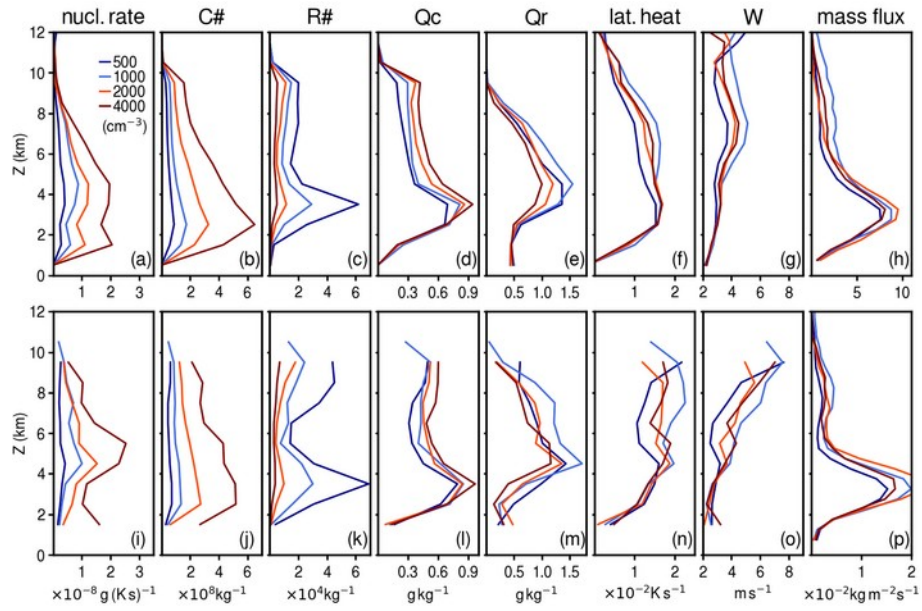
*Supplement of*

## **Updraft dynamics and microphysics: on the added value of the cumulus thermal reference frame in simulations of aerosol–deep convection interactions**

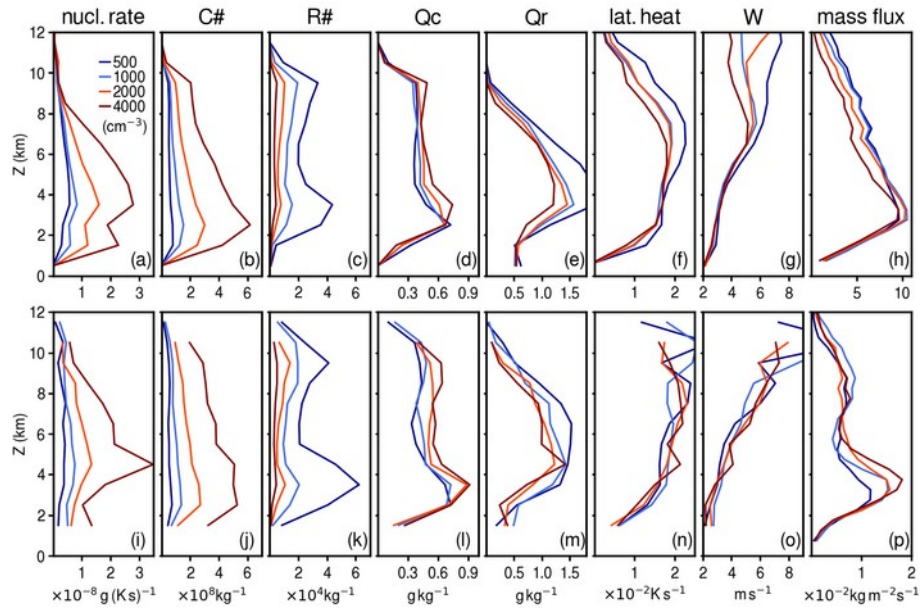
**Daniel Hernandez-Deckers et al.**

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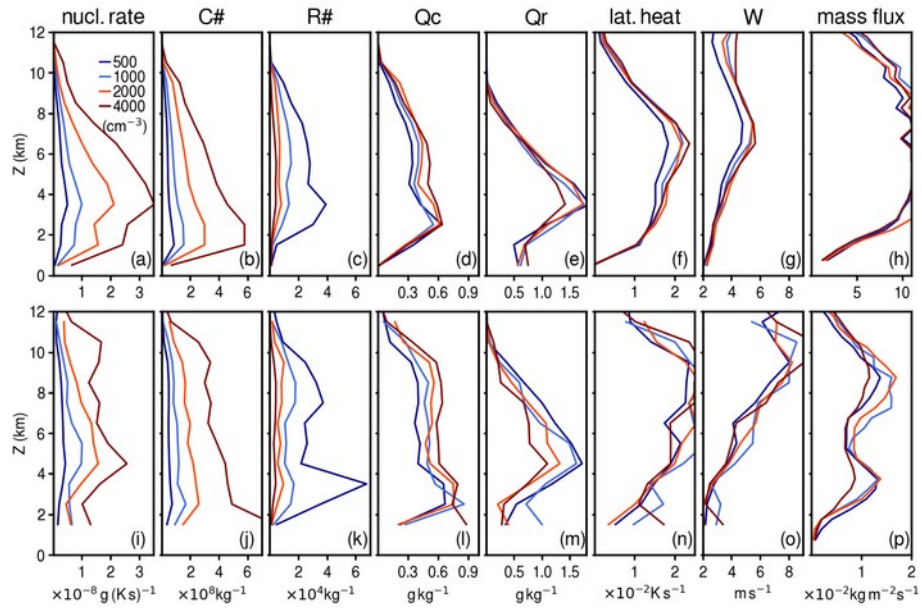
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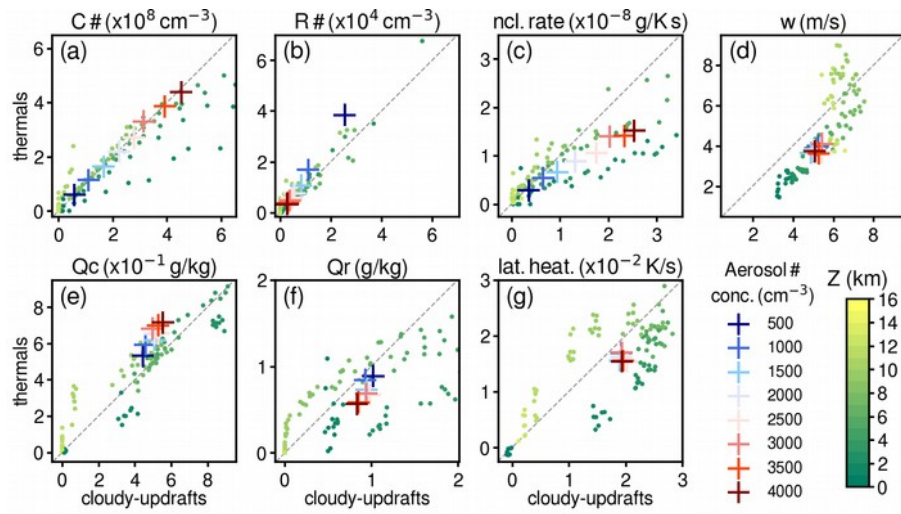
**Fig. S1:** As in Fig. 4, but for the early stage of the simulation, between 21:00 UTC and 21:45 UTC.



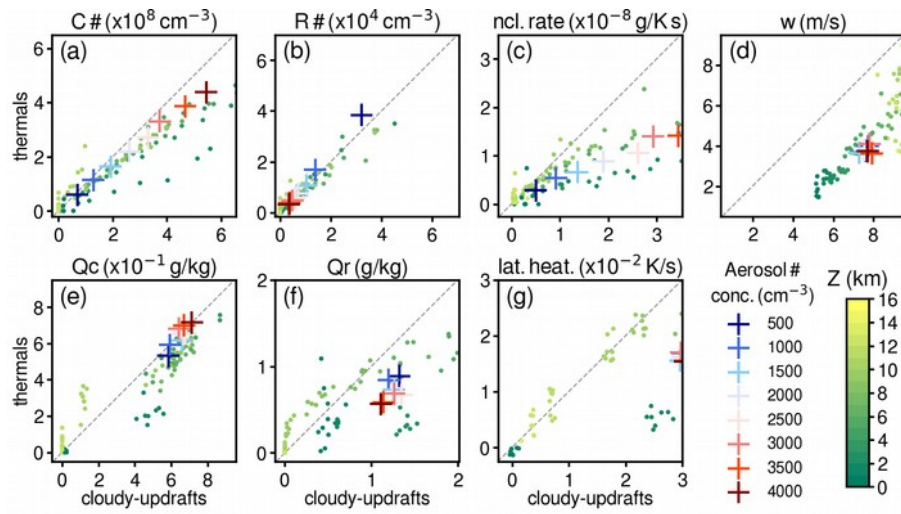
**Fig. S2:** As in Fig. 4, but for the middle stage of the simulation, between 22:00 UTC and 22:45 UTC.



**Fig. S3:** As in Fig. 4, but for the later stage of the simulation, between 23:00 UTC and 23:45 UTC.



**Fig. S4:** As in Fig. 7, but using  $w > 2 \text{ m/s}$  for the cloudy updraft grid point definition.



**Fig. S5:** As in Fig. 7, but using  $w > 4$  m/s for the cloudy updraft grid point definition.