Studying new particle formation and growth in portable captive aerosol chambers

Don Collins

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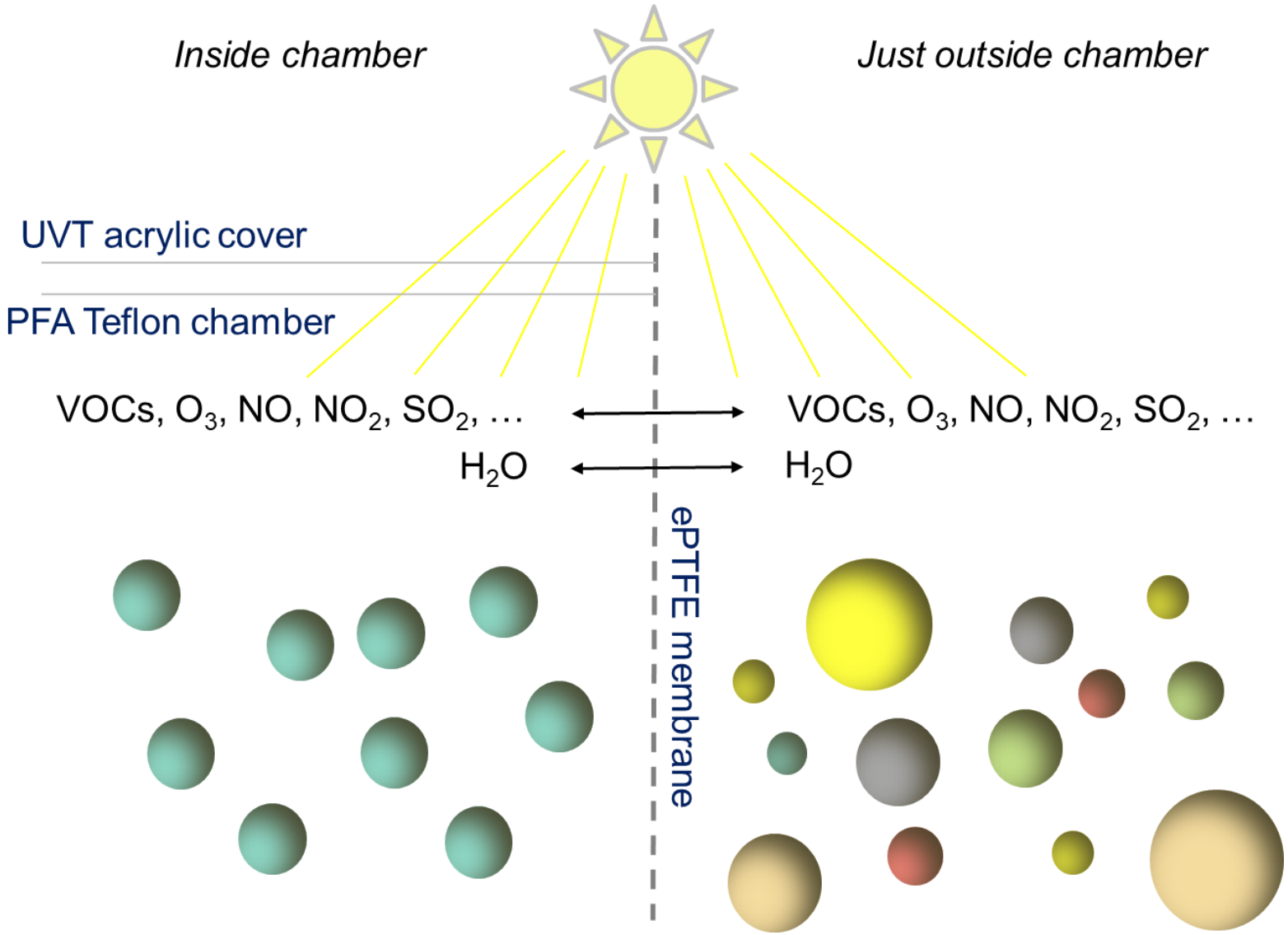
Captive aerosol chamber concept



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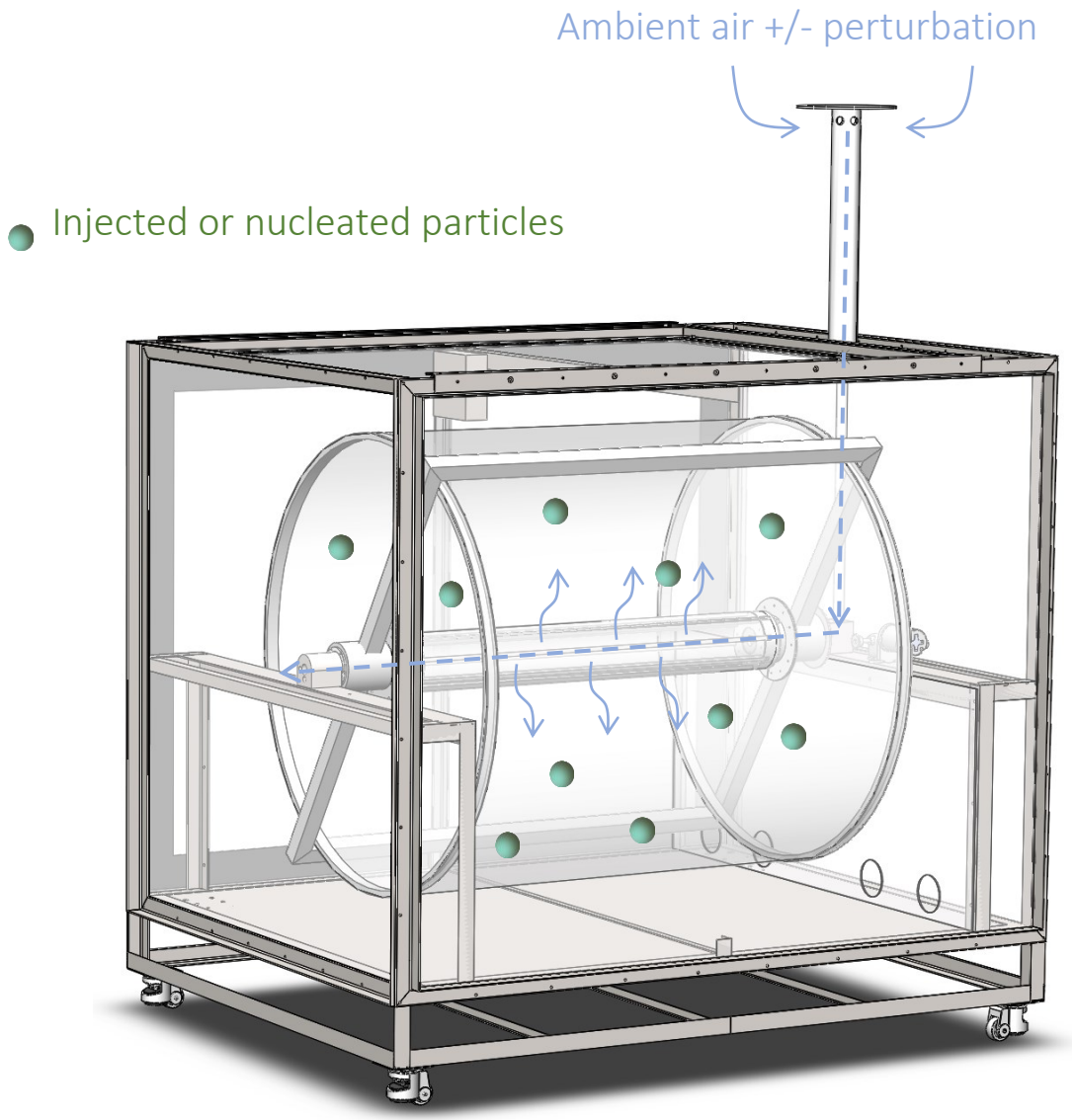
Captive Aerosol Growth and Evolution (CAGE) chamber



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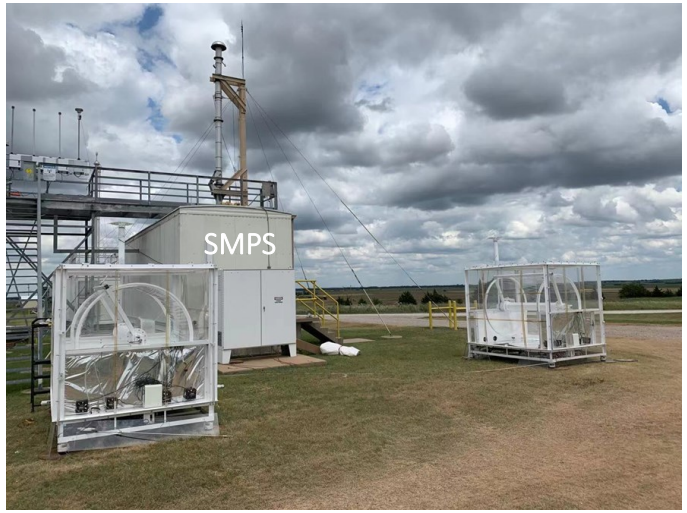
Use of CAGE chambers for ASR/ARM projects



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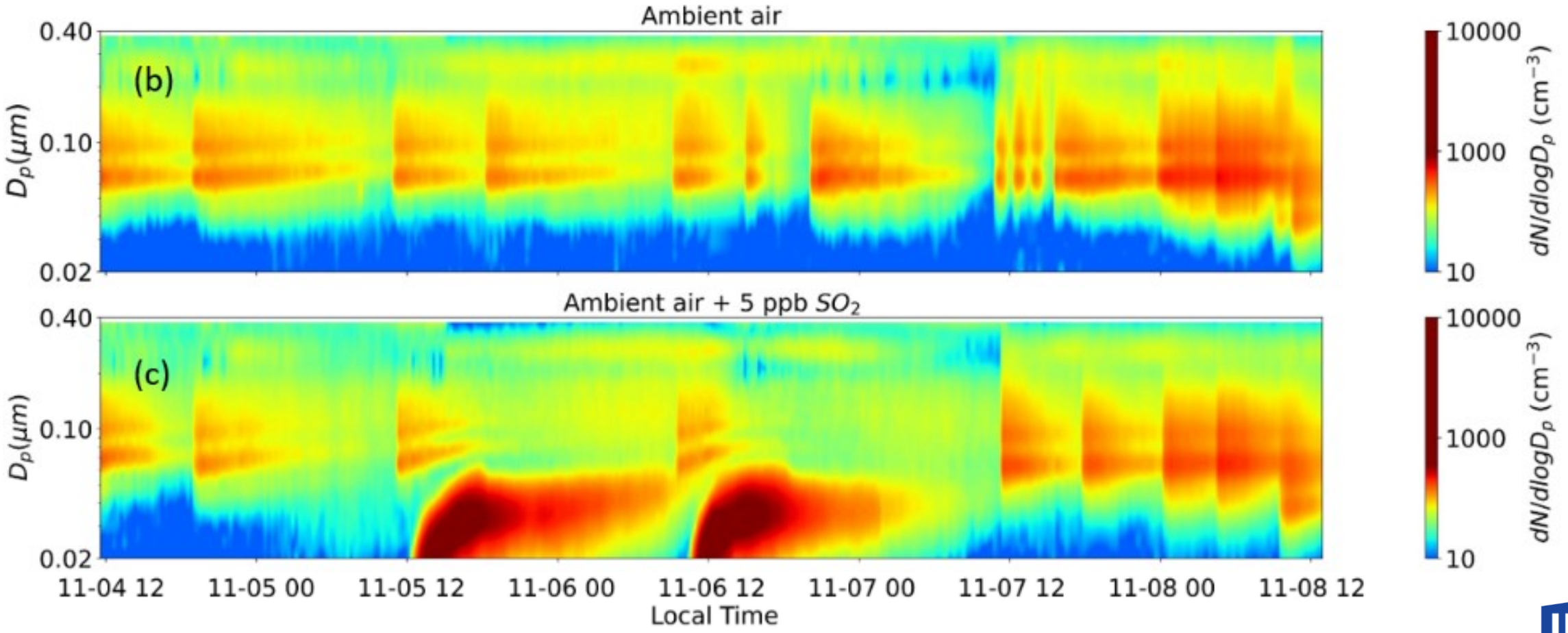
Ambient air only vs. ambient air + SO_2 at SGP



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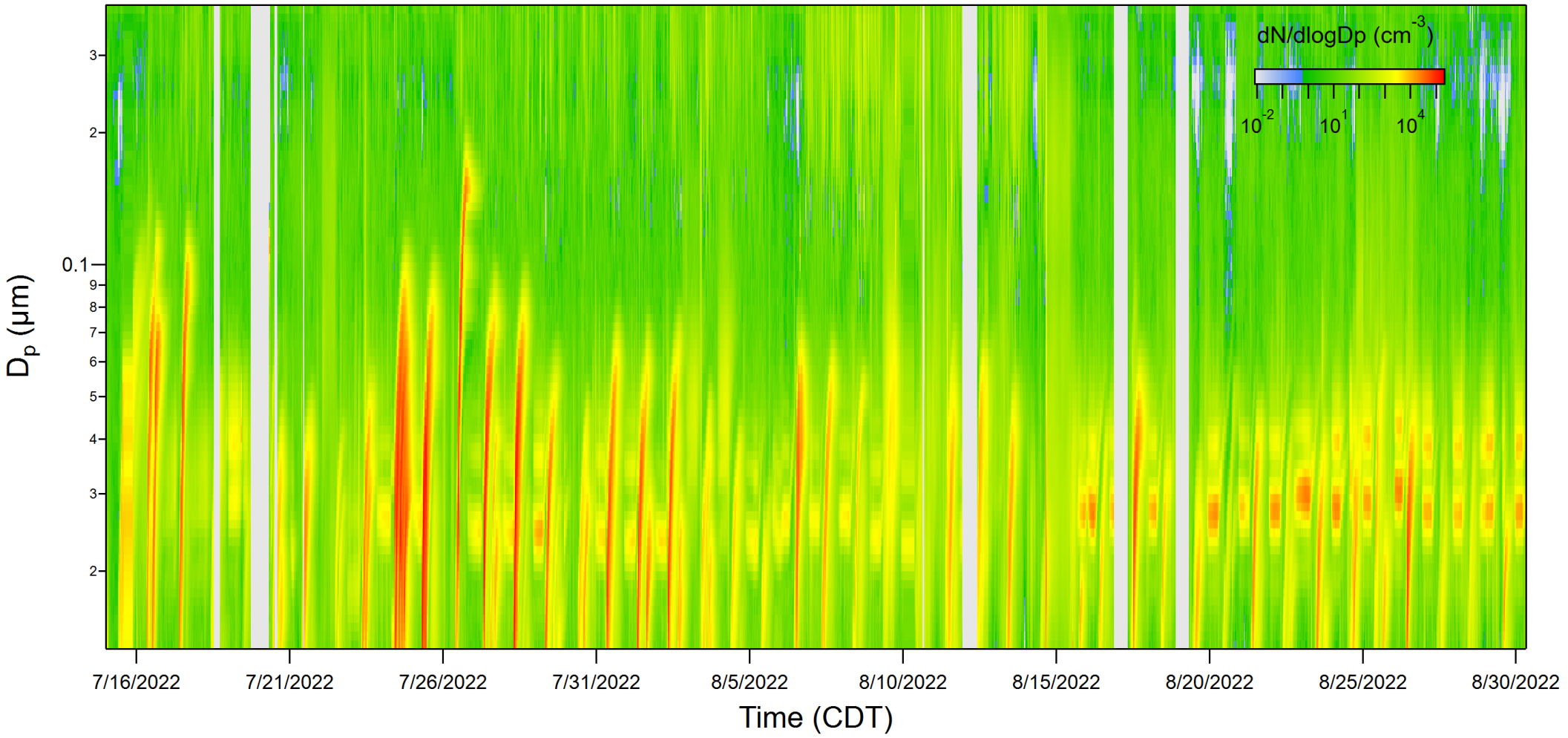
1.5 months of size distributions during TRACER-UFI



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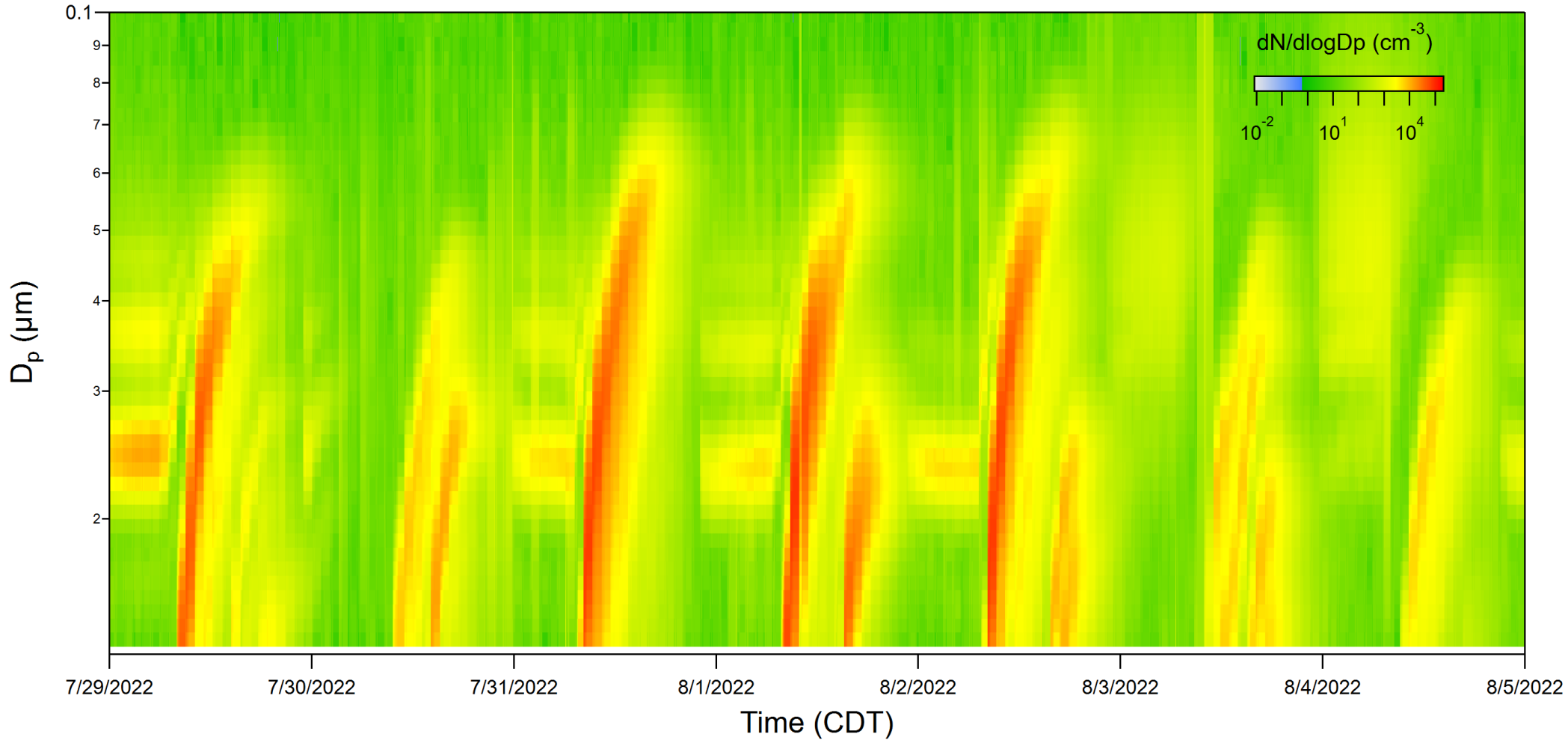
Example week of size distributions during TRACER-UFI



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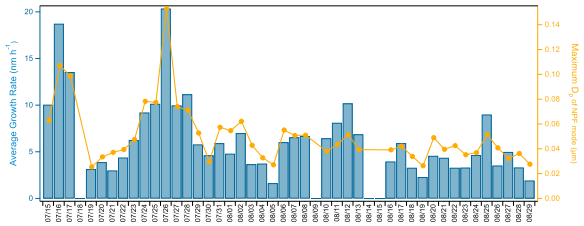
Daily averages of growth rate and final D_p of NPF events



Ongoing / upcoming analysis of TRACER dataset

- Continued analysis of CIMS (gas) and TDCIMS (aerosol) composition – Jim Smith
- Model simulation of NPF events – Jeffrey Pierce

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