

AeroCom aircraft comparison experiment

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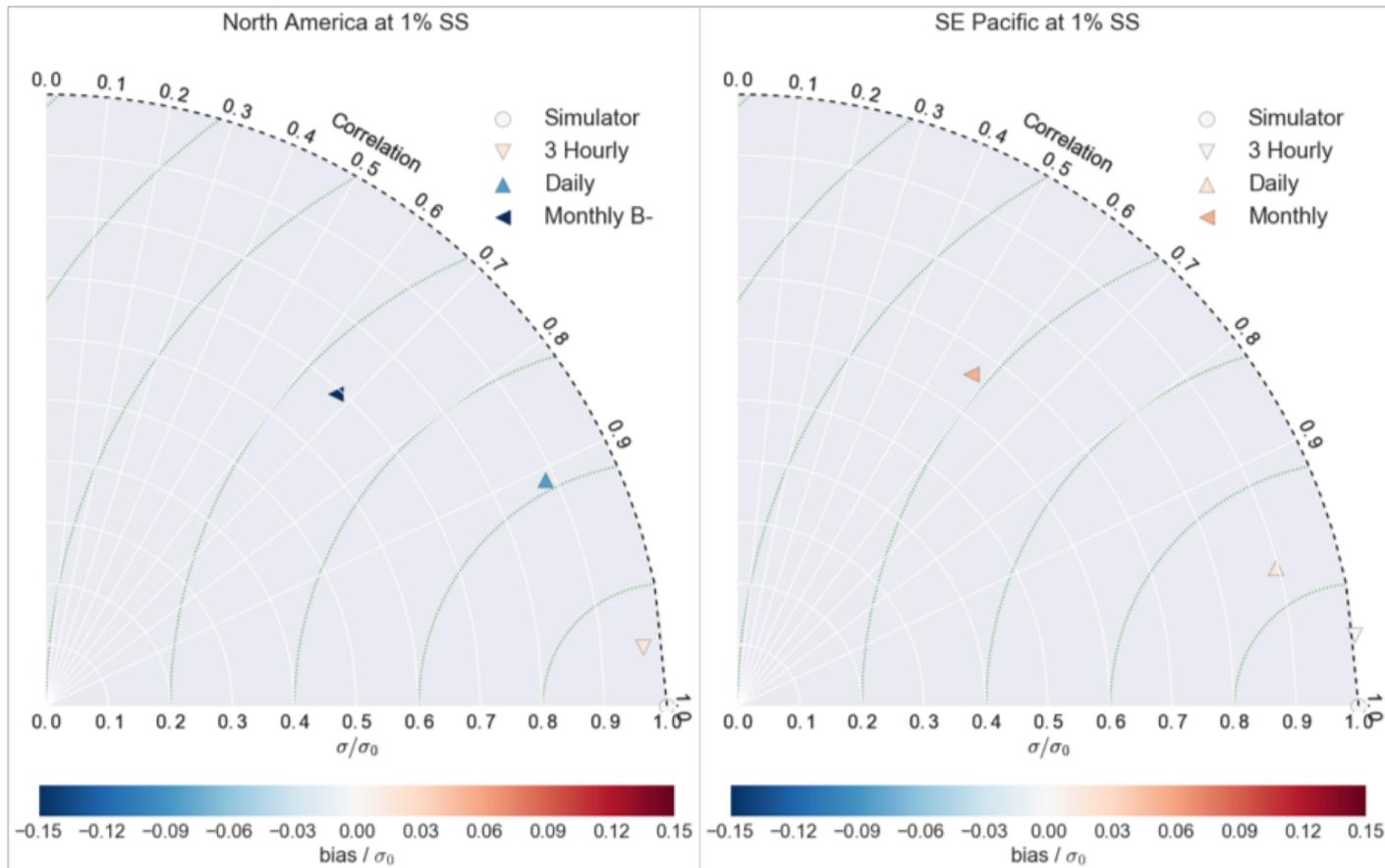
Outline



E.g. C. L. Reddington et al., BAMS 2017

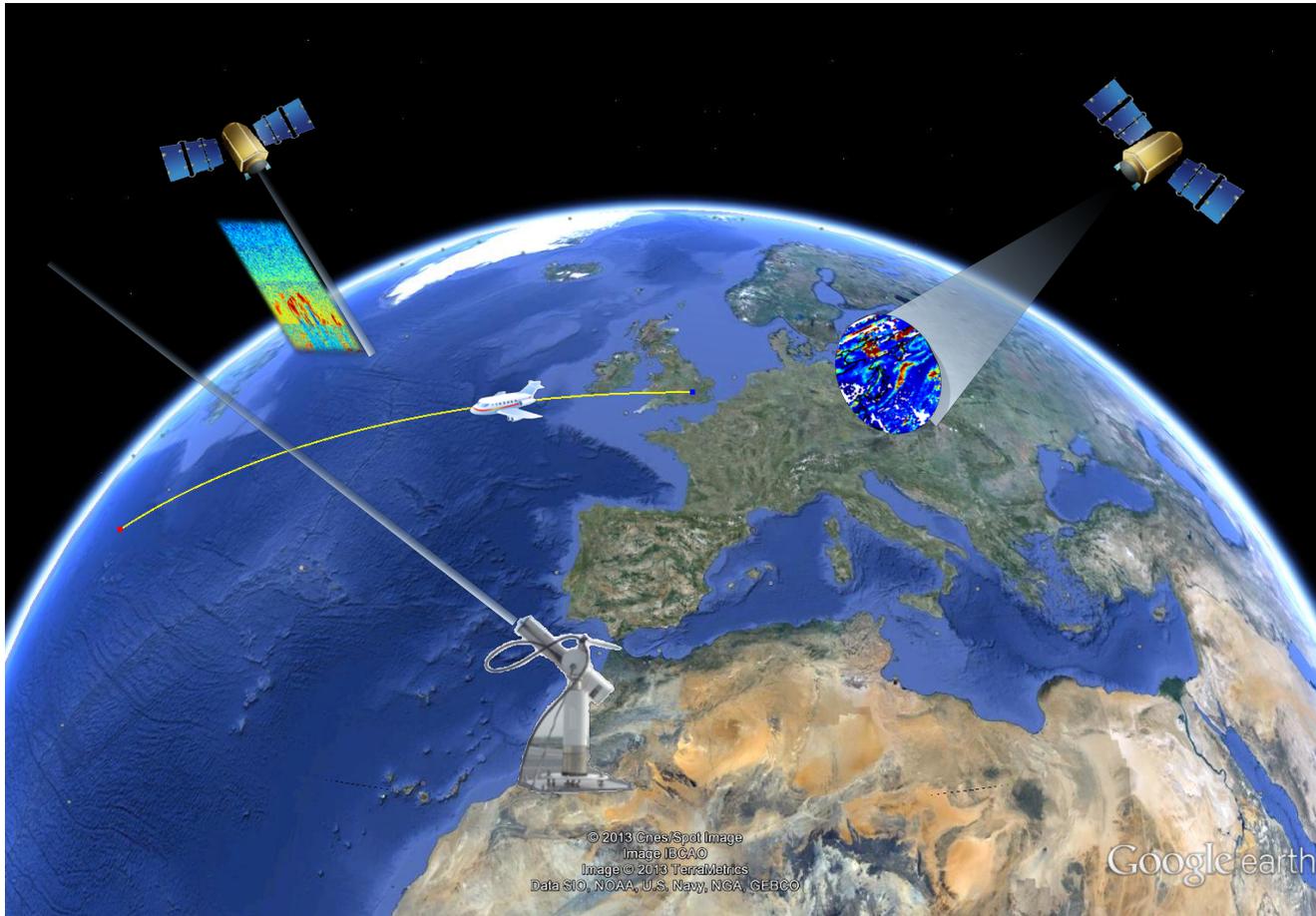
Climate Processes Group

Setup - sampling



See e.g. M. Lund et al., *npj Climate and Atmospheric Science* (2018)

The Community Inter-comparison Suite (CIS)

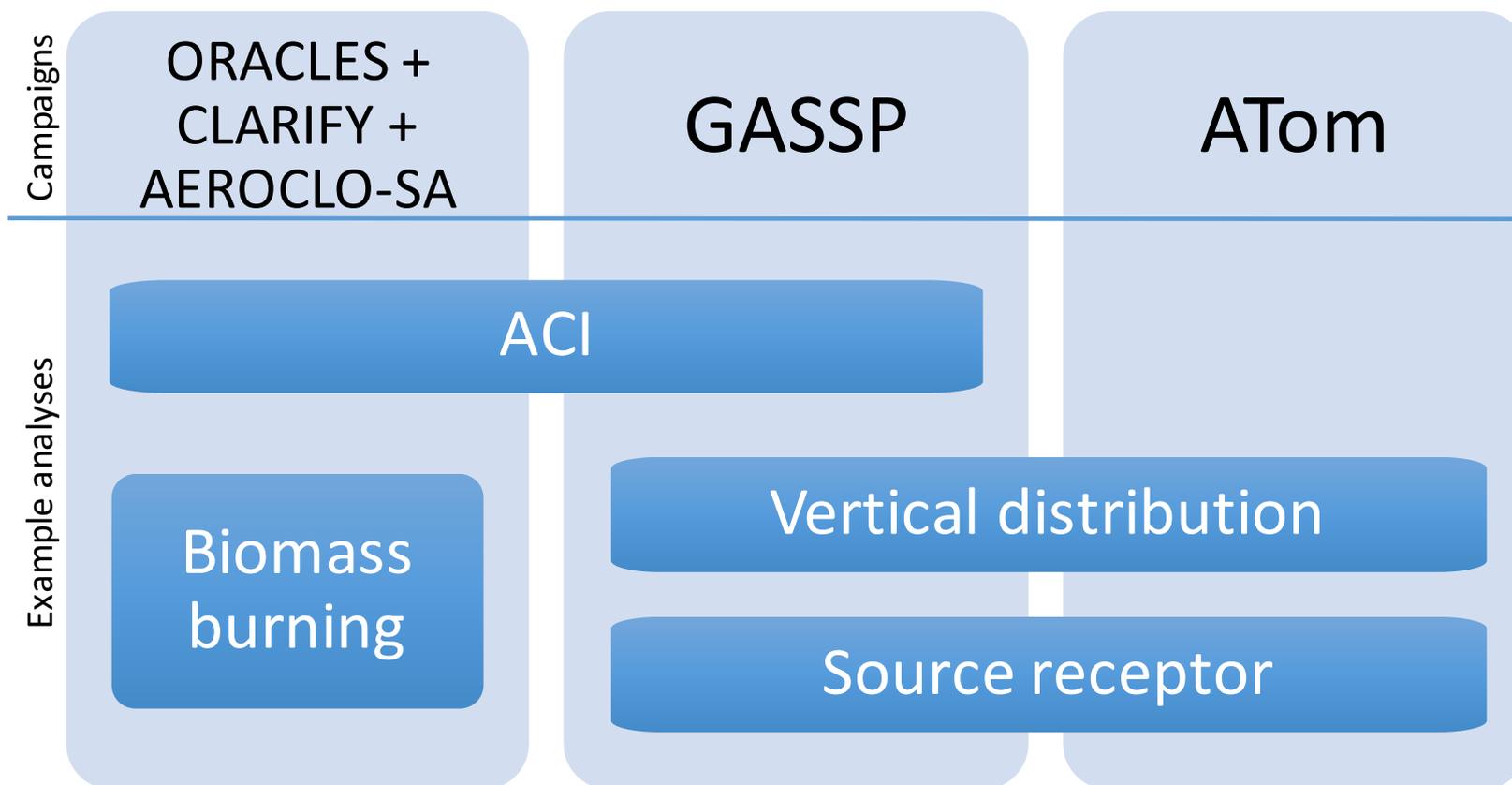


D. Watson-Parris et al., Geosci. Model Dev. 2016

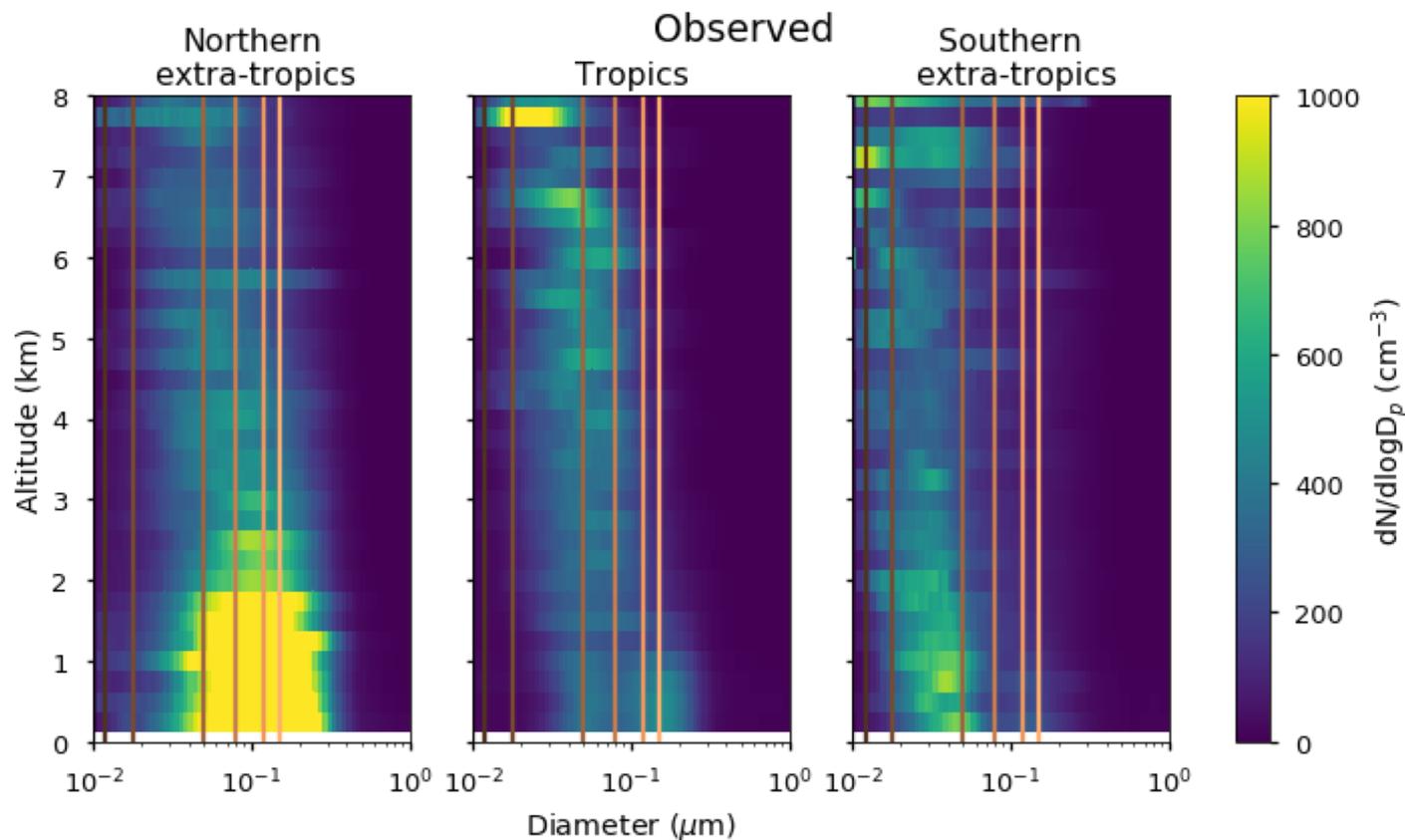
Diagnostics

Aerosol	Cloud	Thermodynamics	Radiation
CCN at: 0.05%, 0.08%, 0.12%, 0.16%, 0.20%, 0.25%, 0.3%, 0.35%, 0.45%, 0.55%, 0.60%, 0.75%, 1.0%	Cloud droplet effective radius	Air temperature	Ambient aerosol scattering coefficient at 550nm
	Cloud droplet number concentration	Air density	Ambient aerosol absorption coefficient at 550nm
	Liquid water path	Specific humidity	Single scattering albedo at 550nm
N4, N10, N18, N50, N80, N120, N150		Relative humidity	Dry aerosol Scattering coefficient at 550nm
		Omega (dp/dt)	Dry aerosol absorption coefficient at 550nm
Concentrations of BC, OC, Sea Salt, DMS, MSA, NO3, ...			

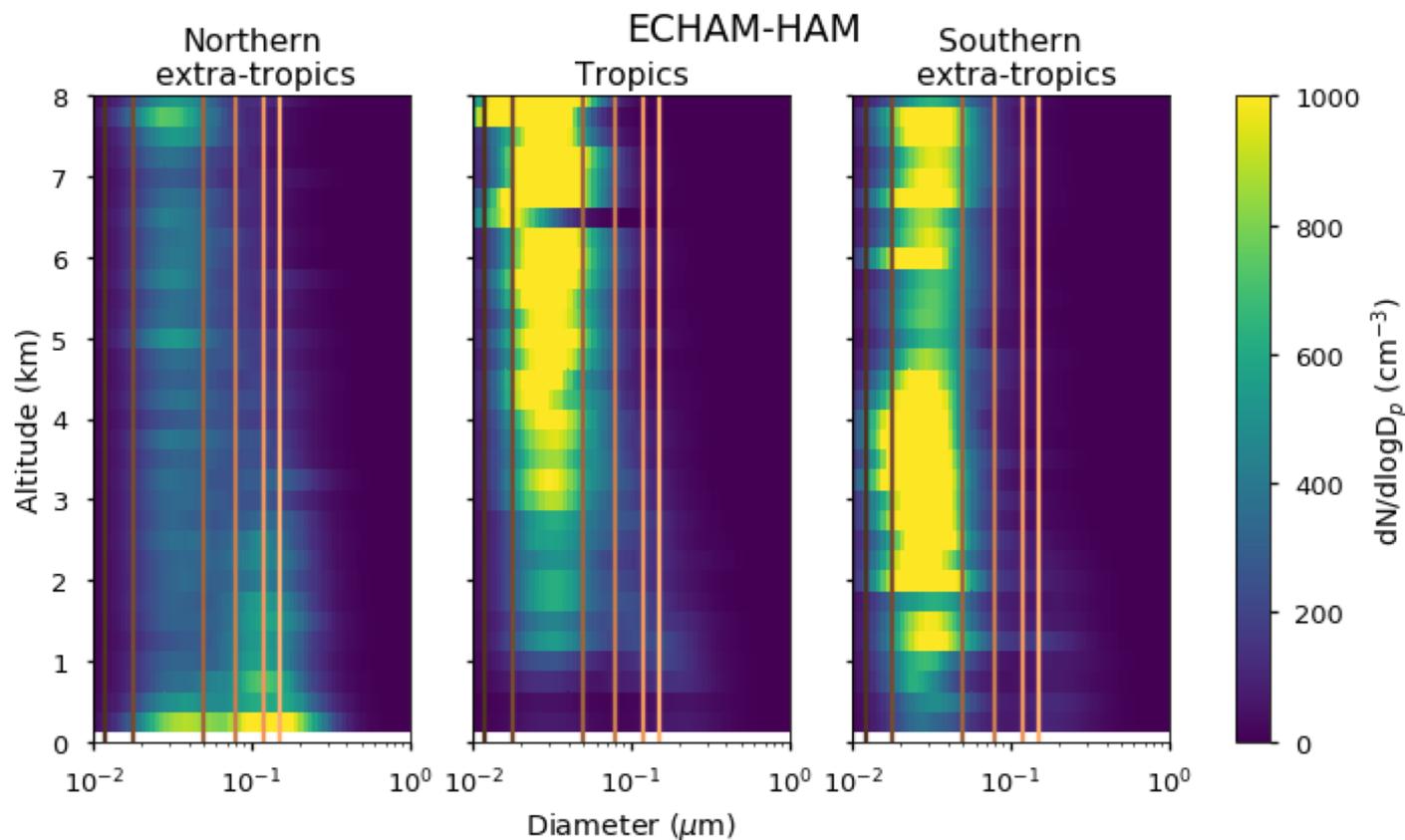
Analyses



Example analysis: Vertical distribution

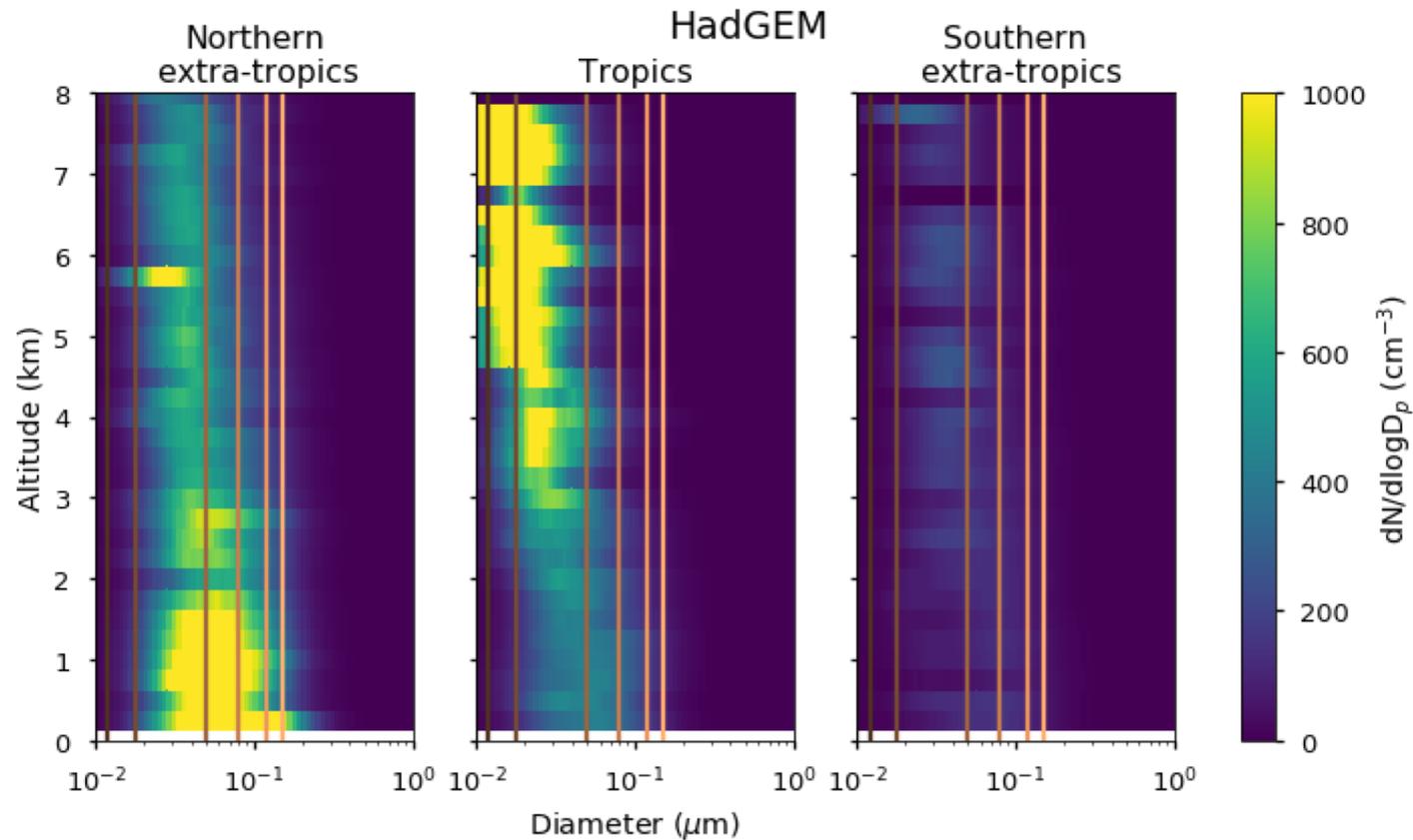


Example analysis: Vertical distribution

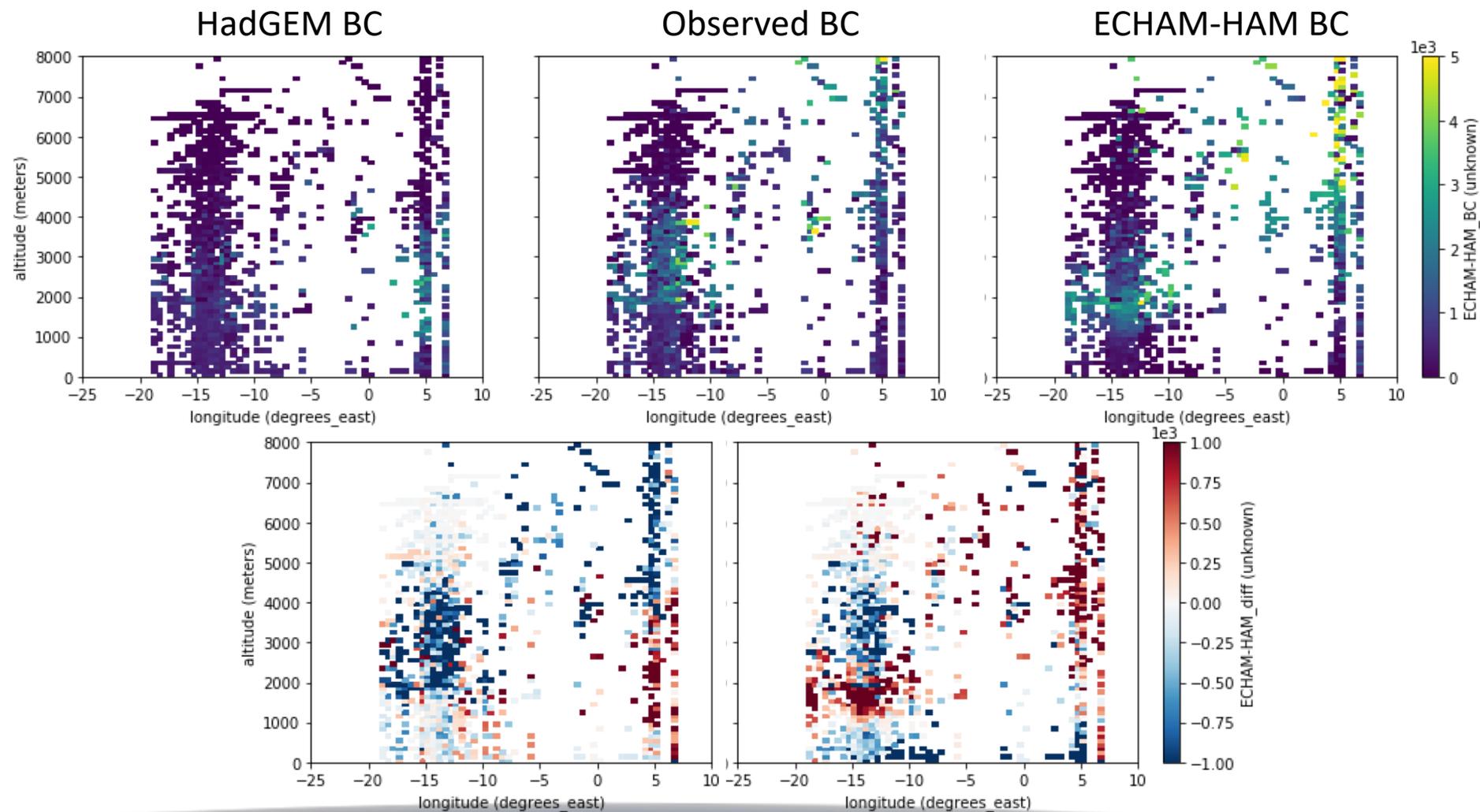


D. Watson-Parris et al., Atmos. Chem. Phys. (in prep.)

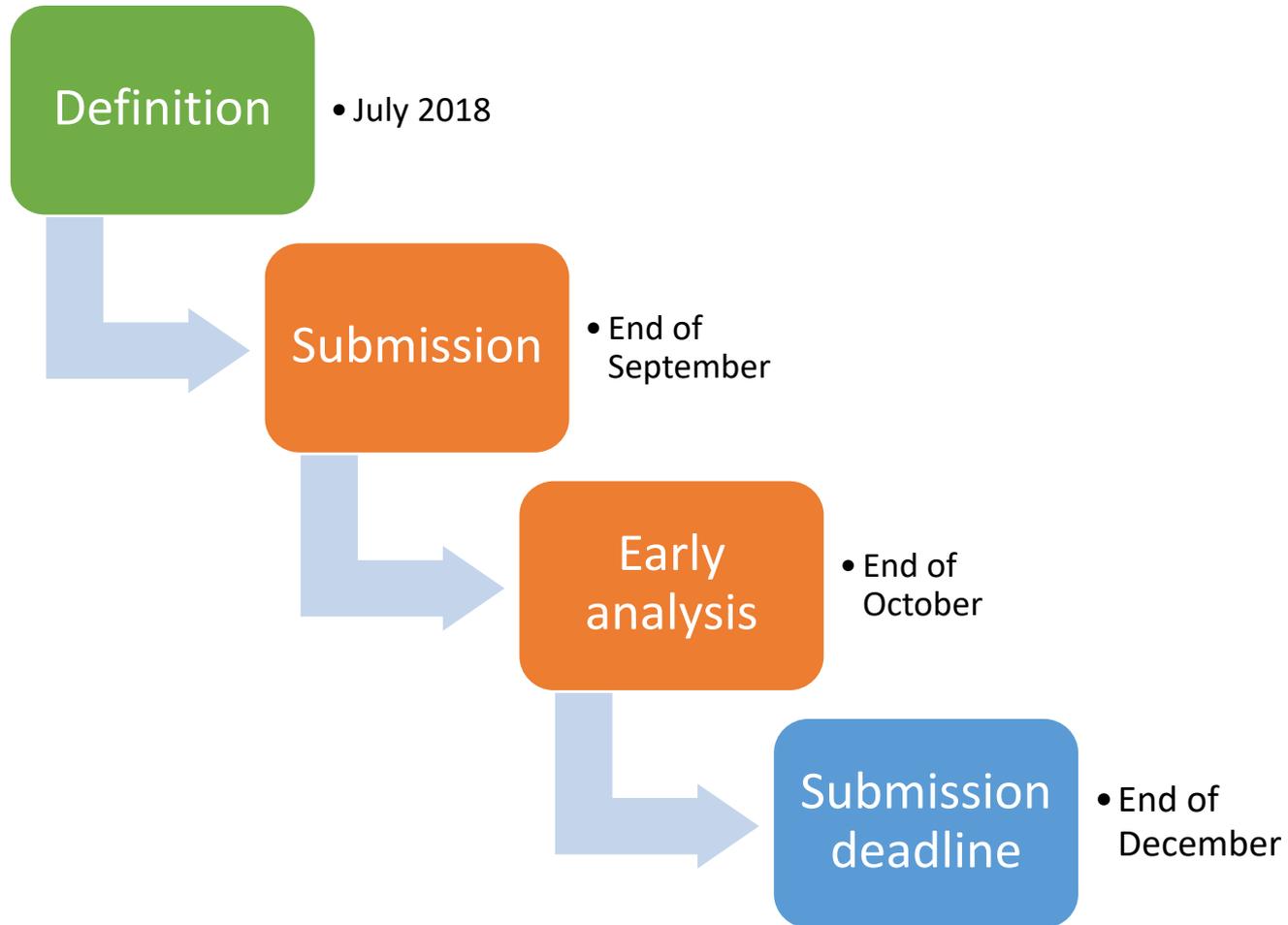
Example analysis: Vertical distribution



Example analysis: Biomass burning



Timeline



Summary



Email me to join!
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