Assessment of ice cloud - aerosol interactions from satellite observations

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Aerosols & ice clouds in a combined satellite - reanalysis

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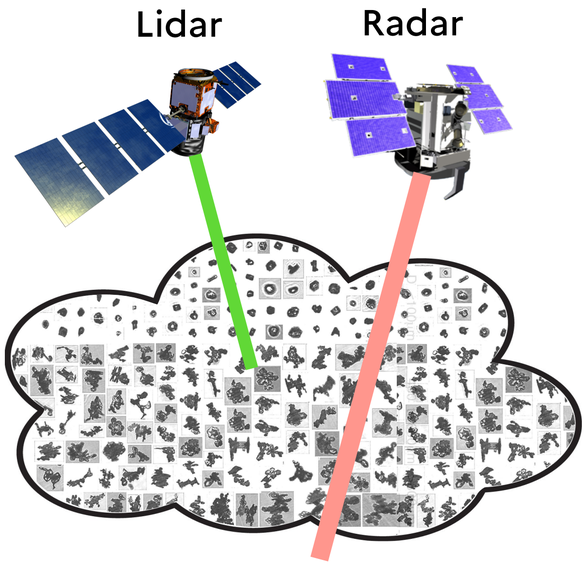

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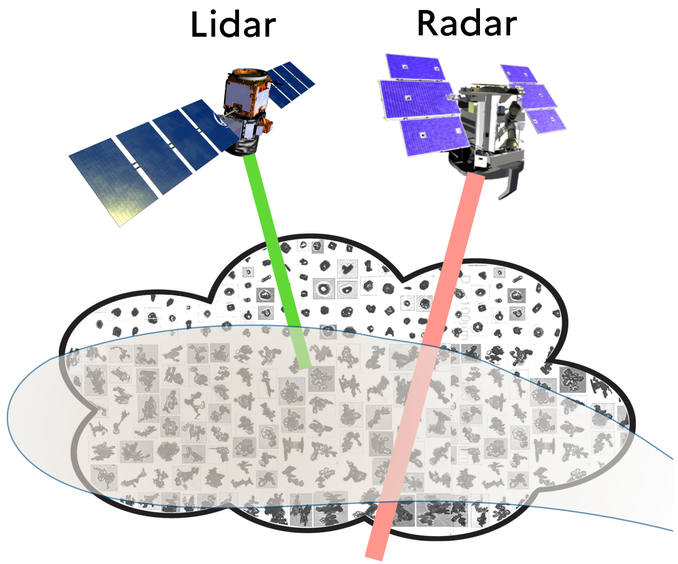

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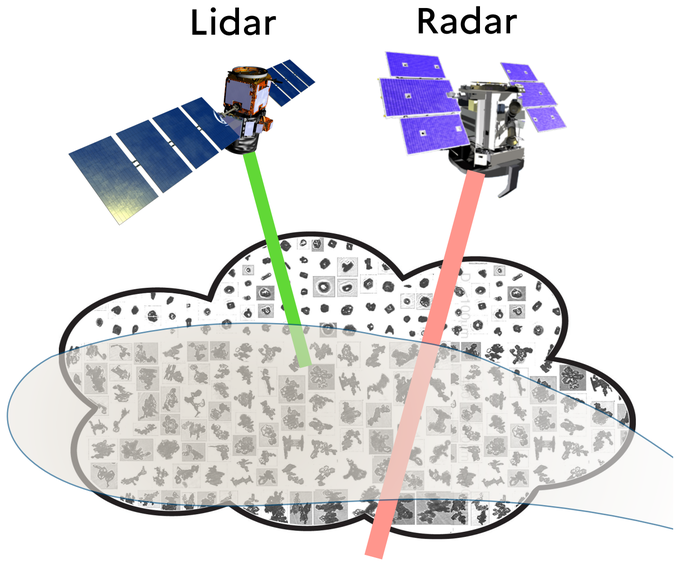

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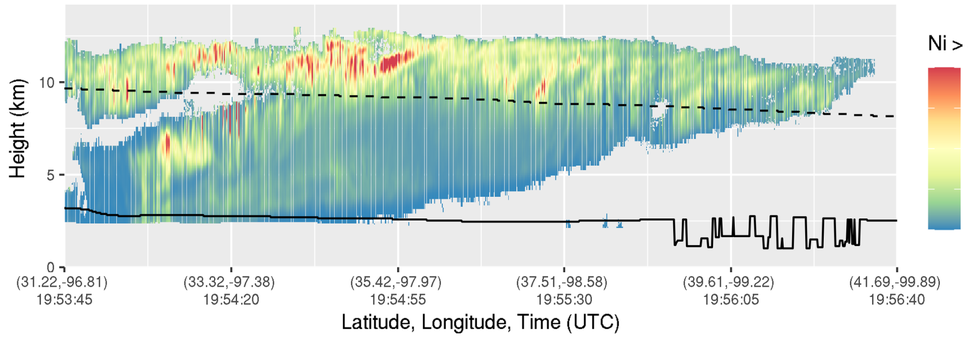
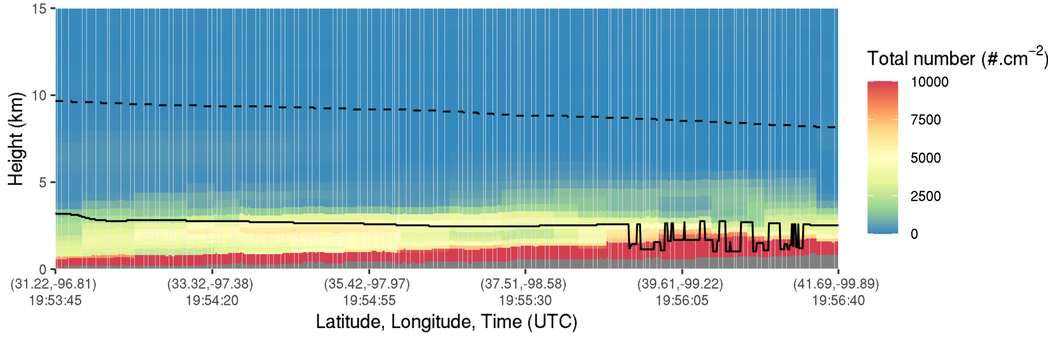


Collocation along lidar track

2006-2016



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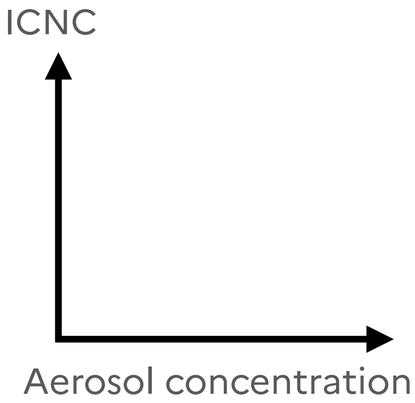

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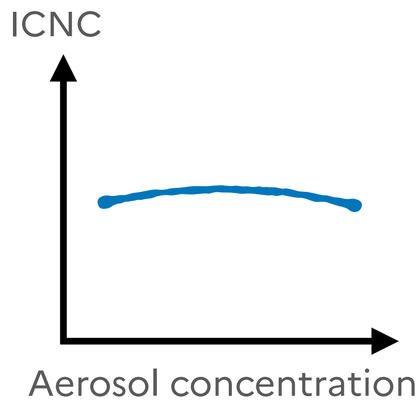

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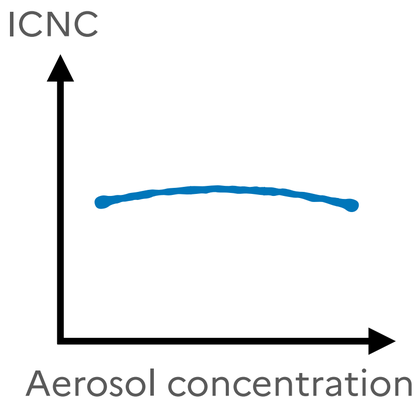

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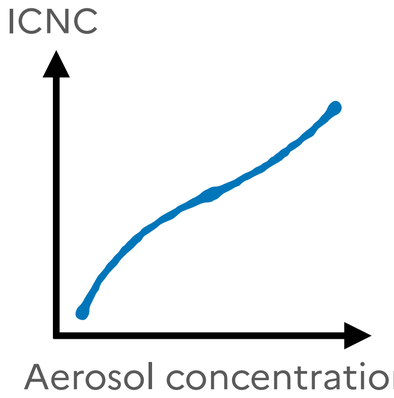

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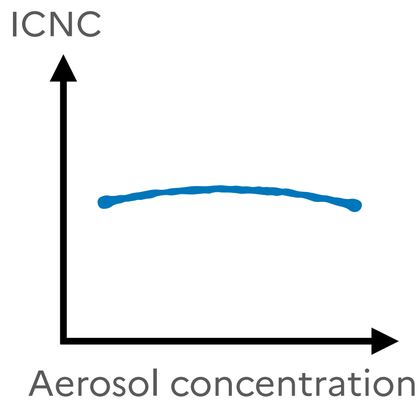

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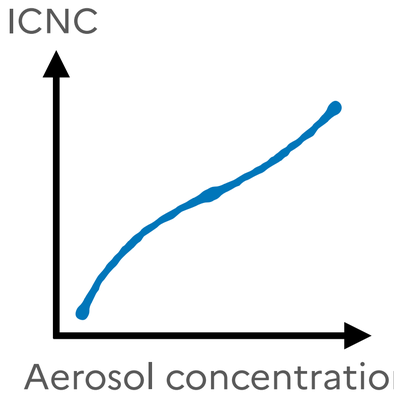

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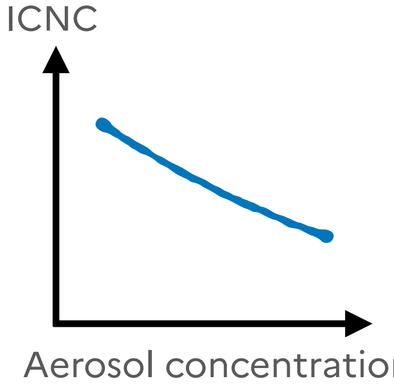
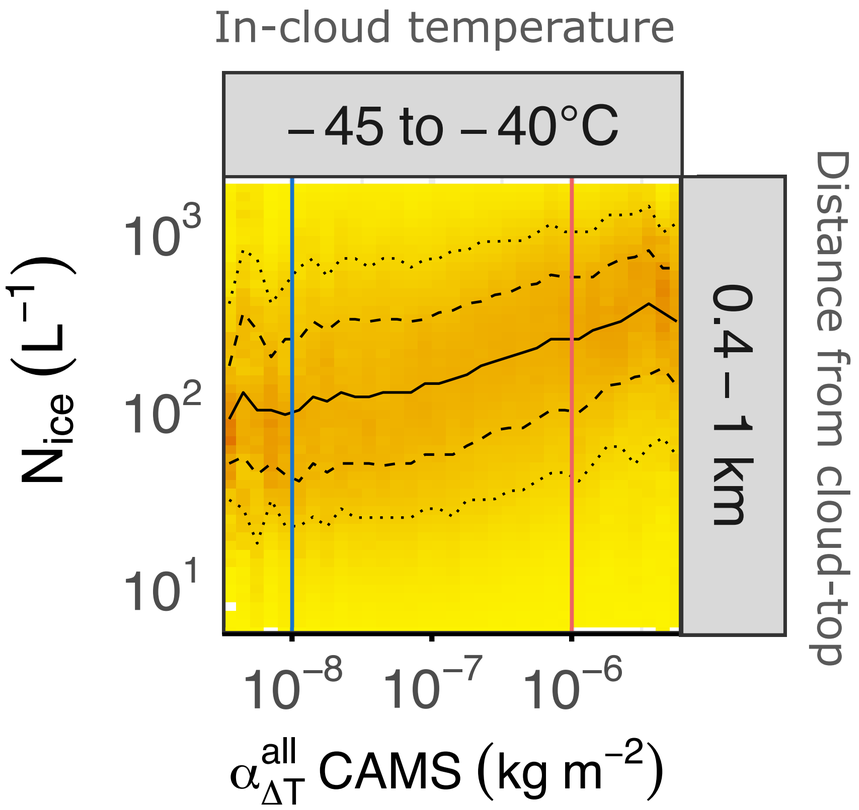
Negative



Reported (e.g. Zhao et al, 2018) for drier conditions (vapour modulation)

Example for frontal cirrus (mid-latitudes; DJF)



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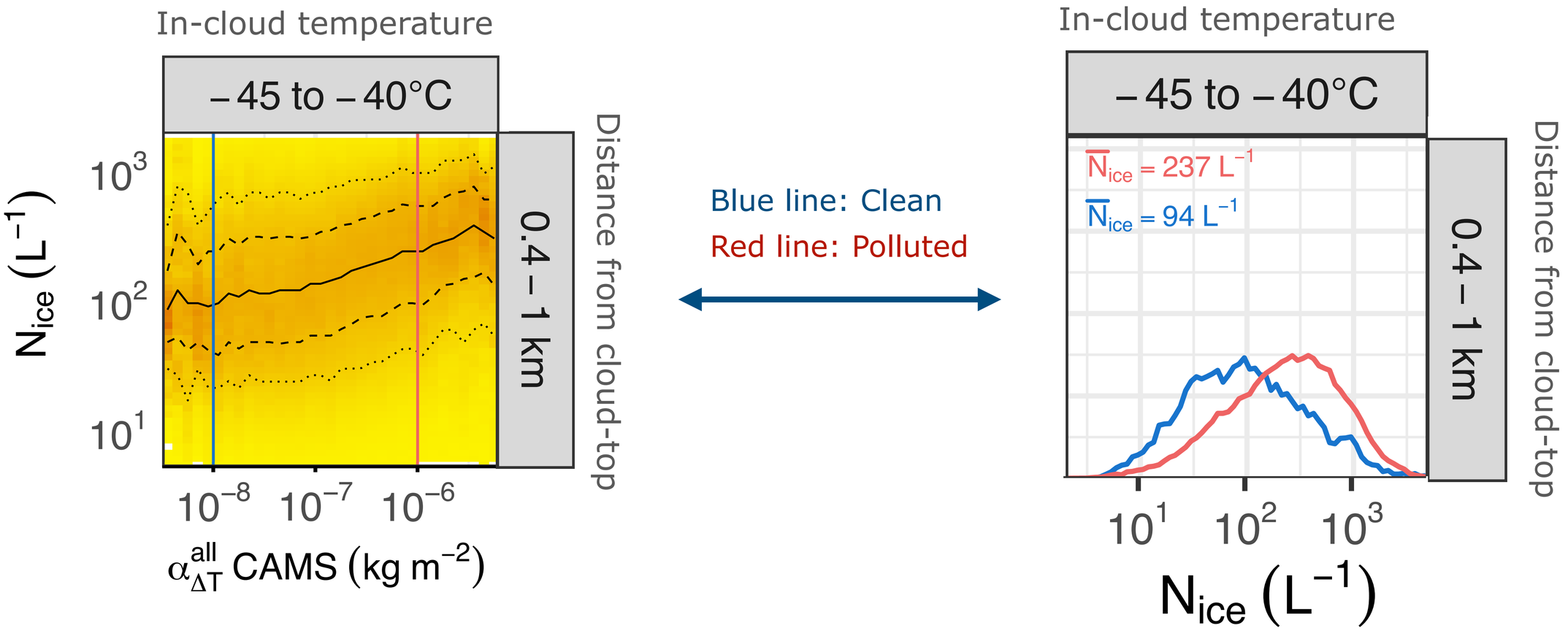

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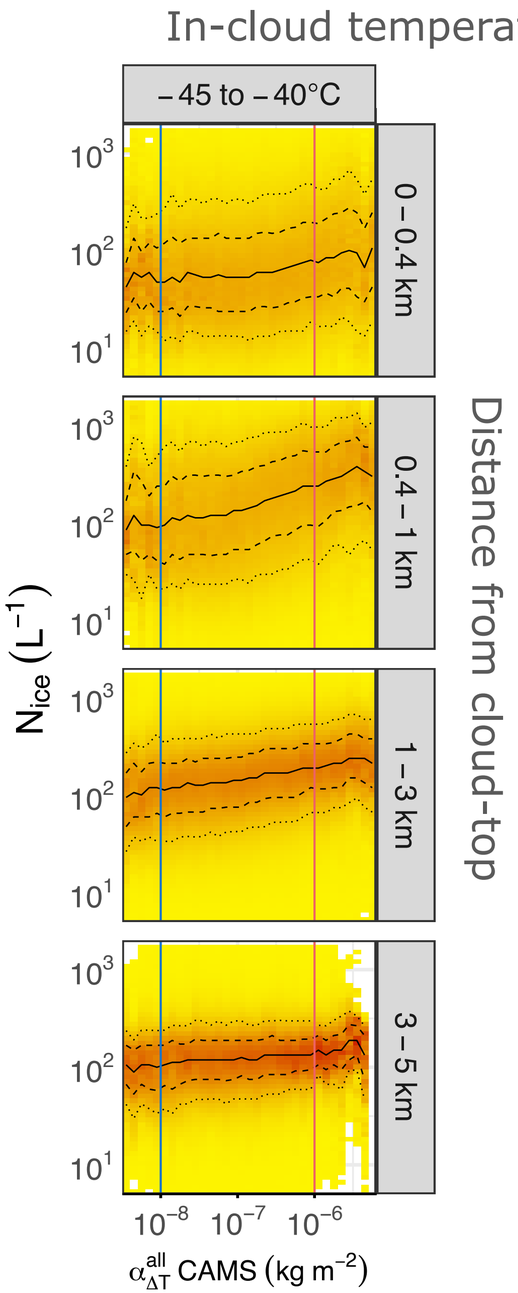
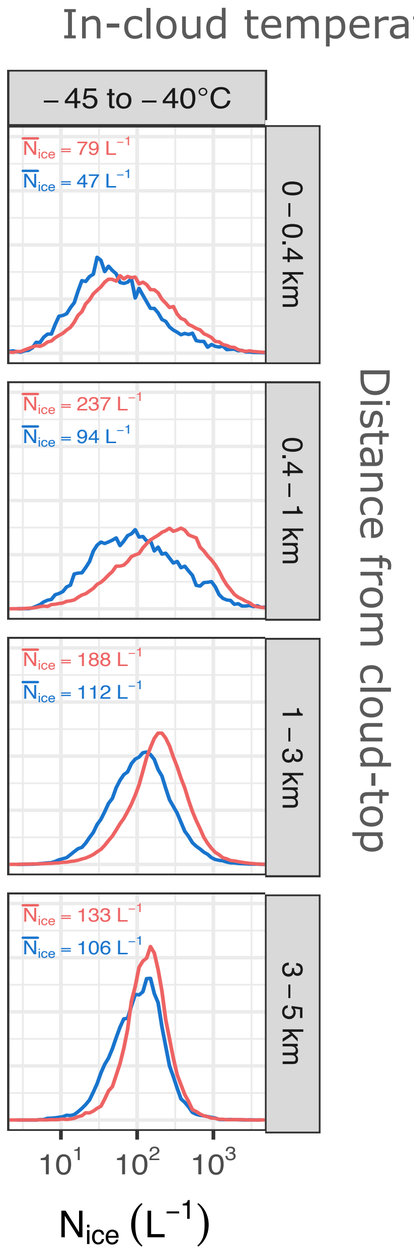


Blue line: Clean

Red line: Polluted



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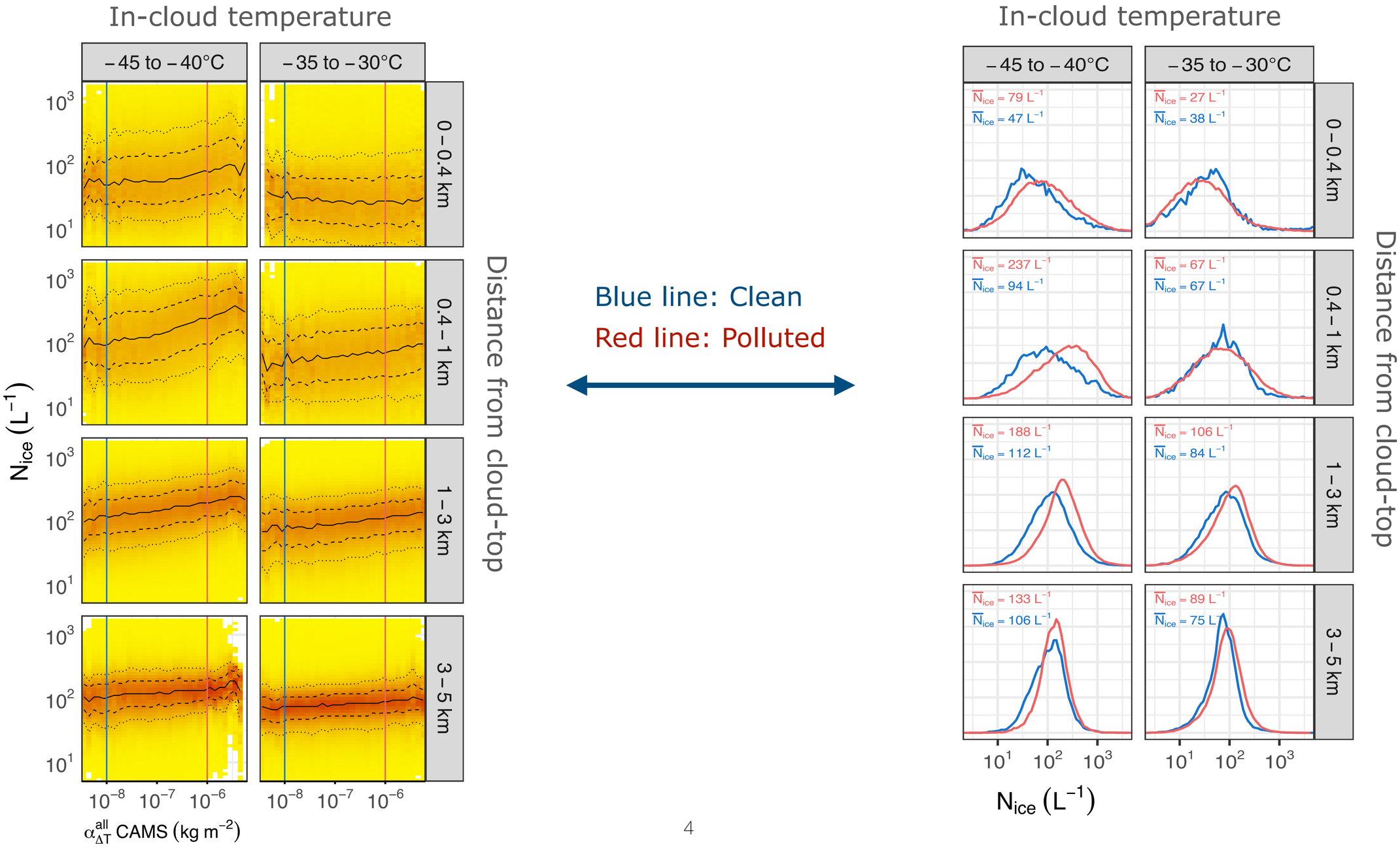
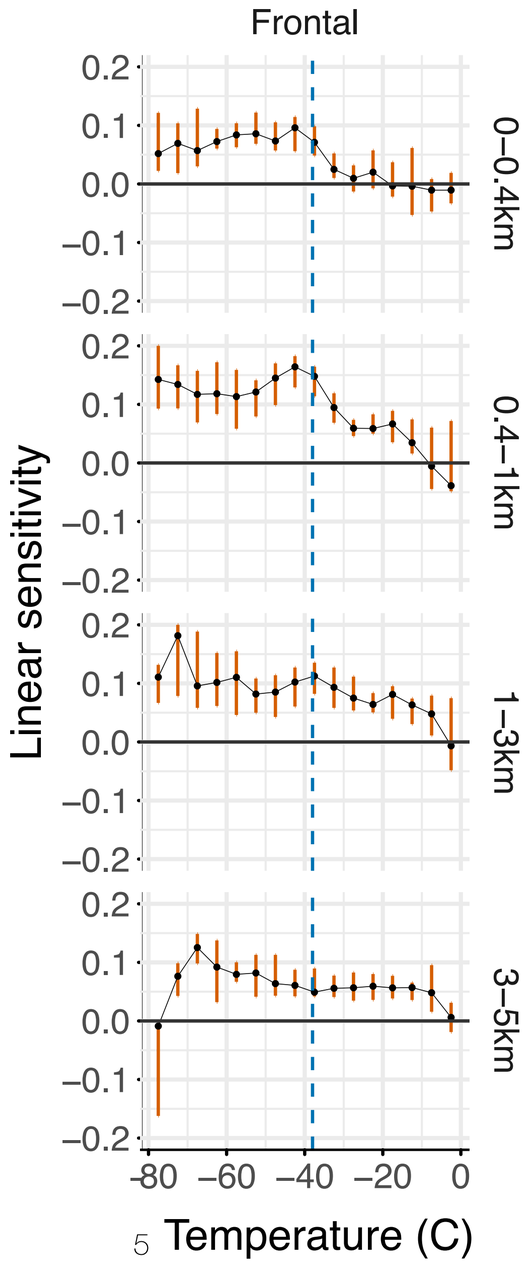


Overview of the sensitivity for multiple cloud types



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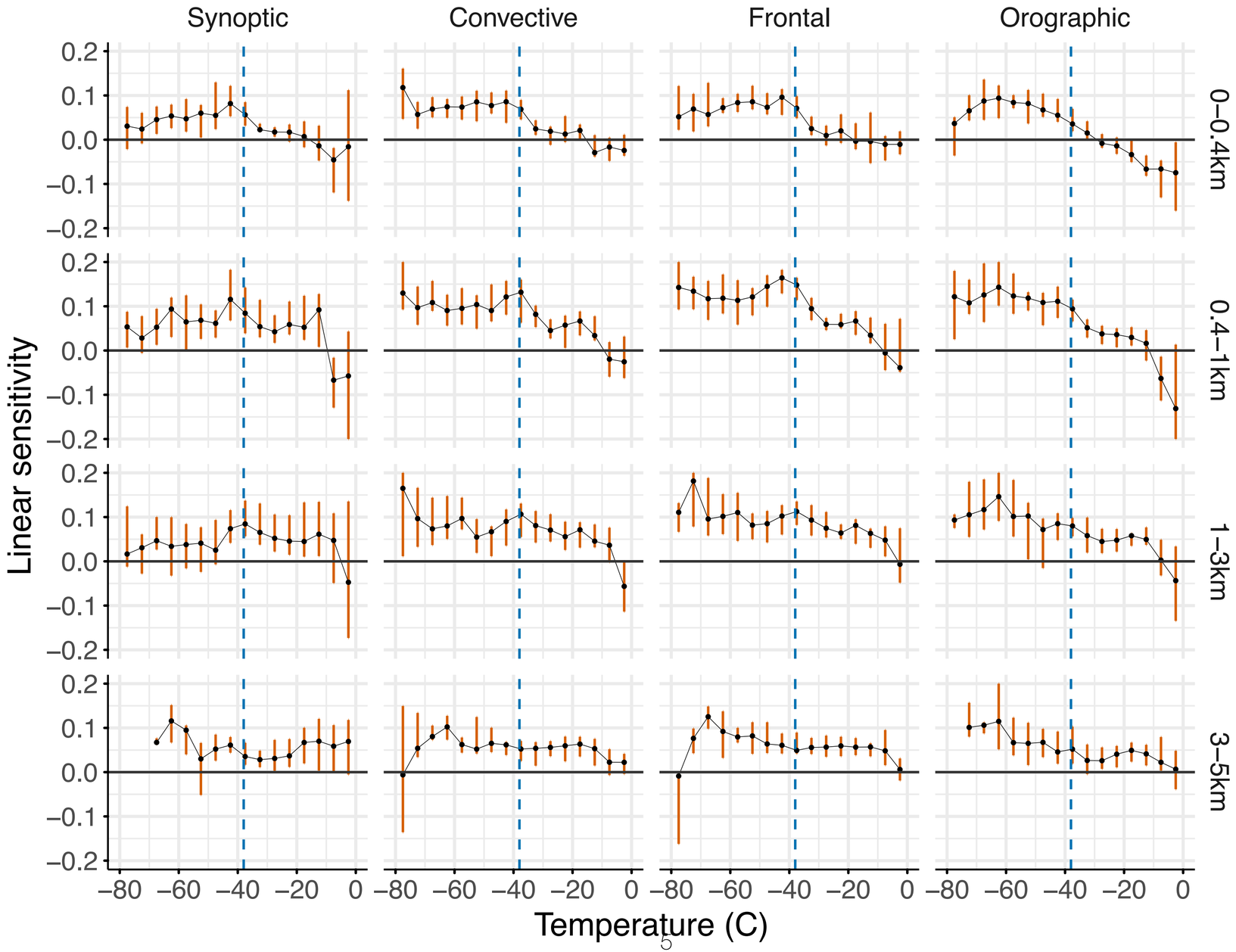

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