Supplement to "Too cold, too saturated? Evaluating climate models at the gateway to the Arctic"

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S1: Robustness of changes in supersaturation with respect to ice

A shift of the relative humidity histogram towards a broader distribution and more frequent occurrence of supersaturation with respect to ice is visible for each individual day of the ICON simulation. The change to the histogram one seen between the ICON 1-moment and 2-moment schemes is thus unlikely to be produced by internal variability.
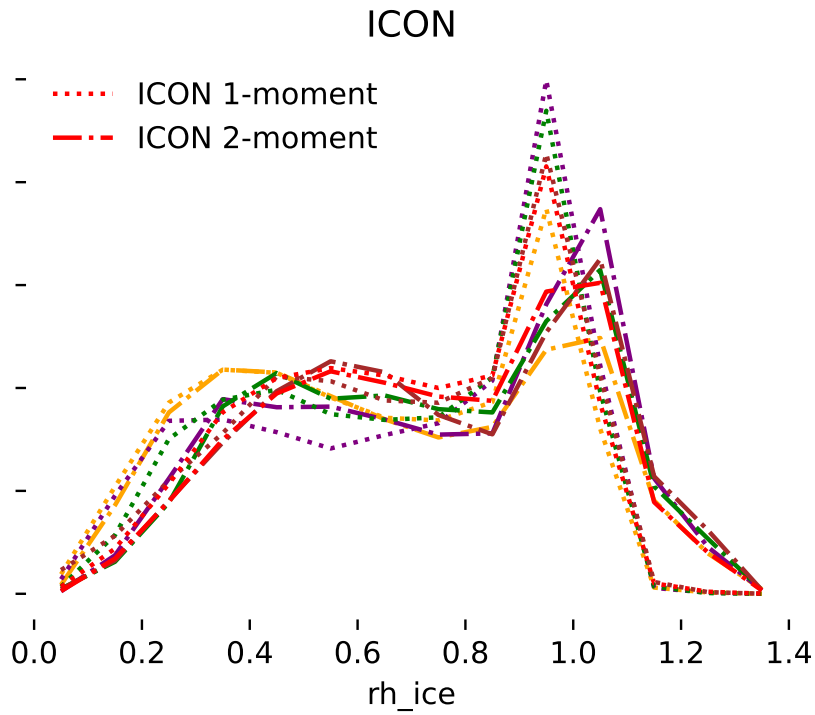
Figure S1. Histogram of relative humidity with respect to ice for individual days in the high-resolution ICON run with 1-moment (dotted) and 2-moment (dash-dotted) microphysics (top left). All panels show data for the central Arctic ocean (70 to 90 N), as used for ICON in the main paper.