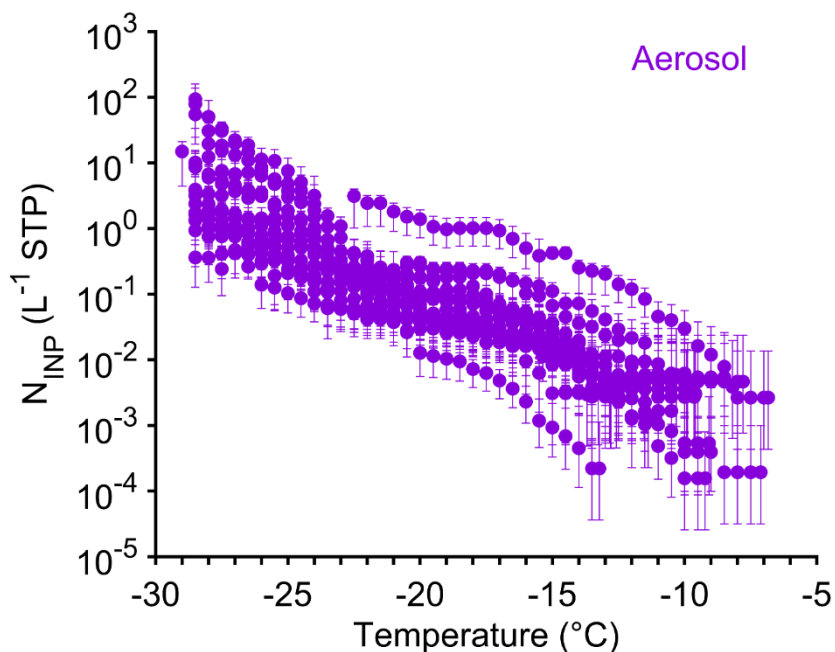# Supplement for:
Active thermokarst regions contain rich sources of ice nucleating particles

5 Kevin R. Barry[1]*, Thomas C. J. Hill[1], Marina Nieto-Caballero[1], Thomas A. Douglas[2], Sonia M. Kreidenweis[1], Paul J. DeMott[1], and Jessie M. Creamean[1]

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Figure S1: Complete INP-temperature spectra for all aerosol samples. 95% confidence intervals are plotted (any confidence
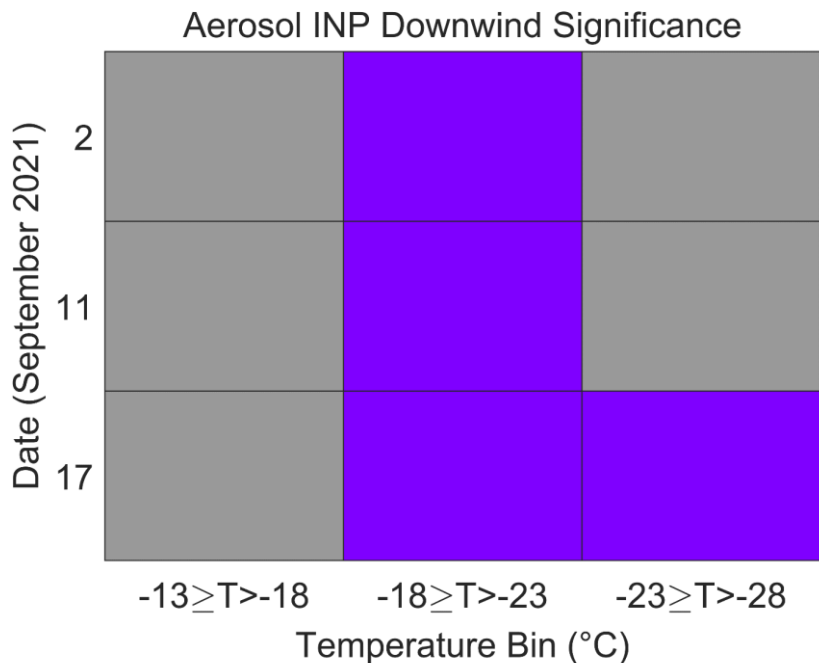15 intervals overlapping with 0 are not shown).

Figure S2: A heatmap indicating results of statistical testing for downwind versus upwind aerosol INP concentrations. Purple represents an increase over upwind at 95% confidence, while gray represents no difference at 95% confidence.
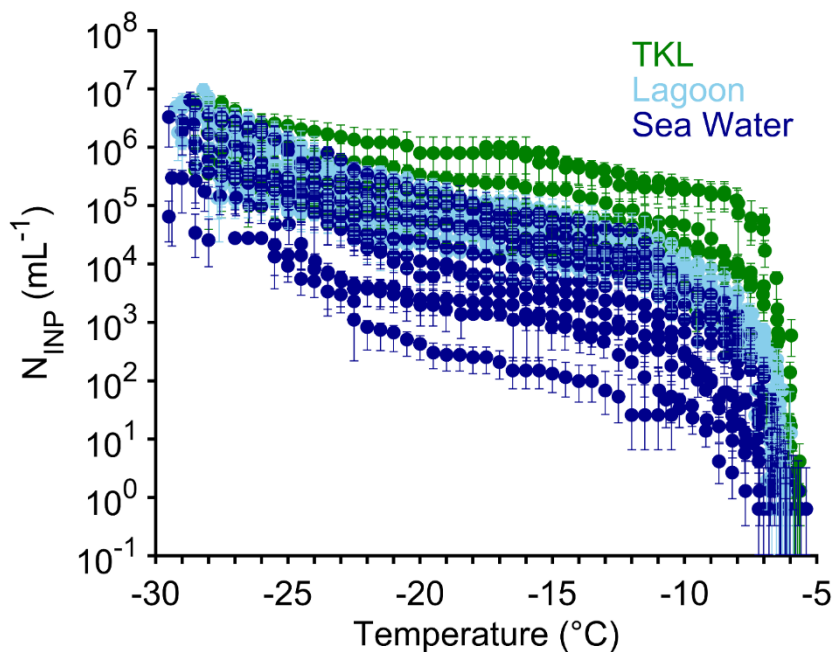
20

Figure S3: Complete INP-temperature spectra for all water samples (thermokarst lake water: green; lagoon: light blue; seawater: dark blue). 95% confidence intervals are plotted (any confidence intervals overlapping with 0 are not shown).
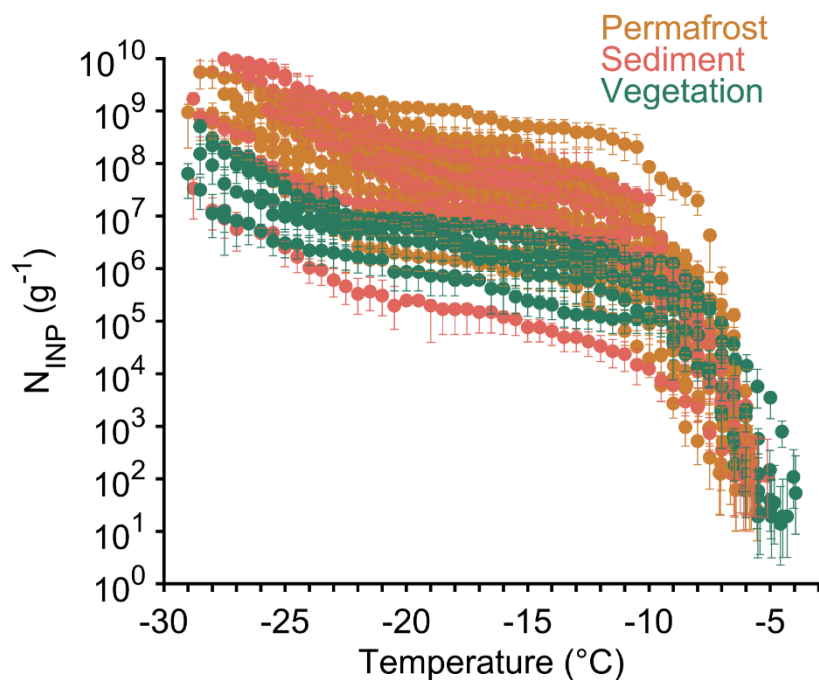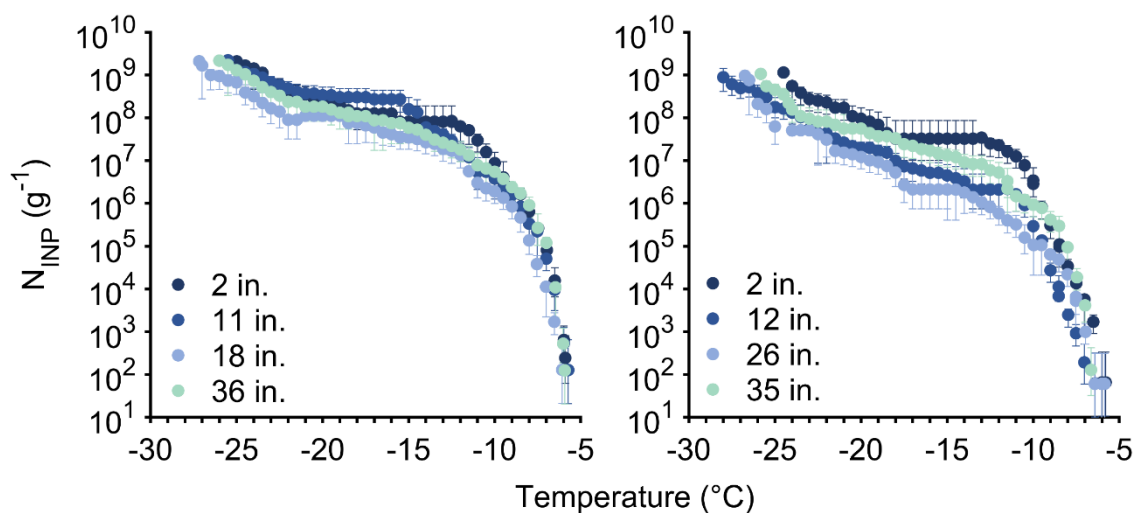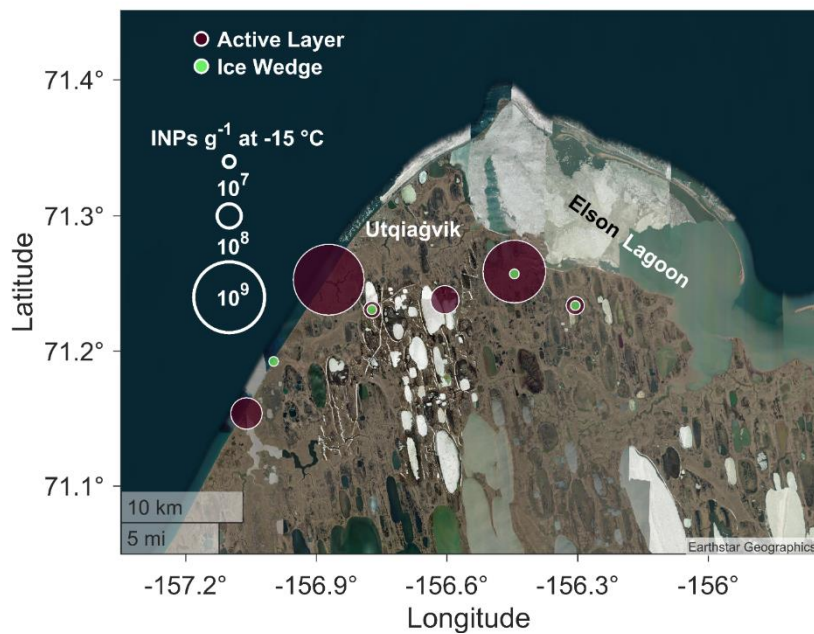
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Figure S4: Complete INP-temperature spectra for terrestrial samples (permafrost: tan; sediment: salmon; vegetation: dark green). 95% confidence intervals are plotted (any confidence intervals overlapping with 0 are not shown).

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Figure S5: Complete INP-temperature spectra from permafrost cores collected on September 11 (left) and September 17 (right). The different colors represent depth of sample taken in relation to the top of the permafrost core. 95% confidence intervals are plotted (any confidence intervals overlapping with 0 are not shown).

Figure S6: INP concentration per g at -15 °C for active layer (maroon) and ice wedge (bright green) samples. The size of the markers corresponds to the INP concentration.
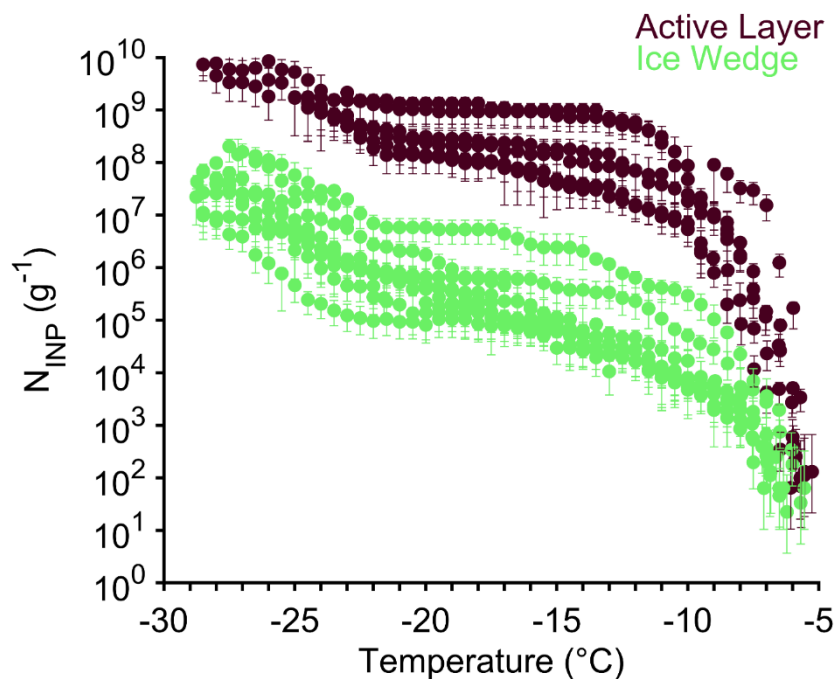
Figure S7: Complete INP-temperature spectra for terrestrial samples (active layer: maroon; ice wedge: bright green). 95% confidence intervals are plotted (any confidence intervals overlapping with 0 are not shown).