



## **Subannual layer variability in Greenland firn cores**

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Ice cores are used to infer information about the past and modern techniques allow for high resolution (< cm) continuous flow analysis (CFA) of the ice. Such analysis is often used to inform on annual layers to constrain dating of ice cores, but can also be extended to provide information on sub-annual deposition patterns.

In this study we use available high resolution data from multiple shallow cores around Greenland to investigate the seasonality and trends in the most often continuously measured components sodium, insoluble dust, calcium, ammonium and conductivity (or acidity) from 1800 AD to today.

We evaluate the similarities and differences between the records and discuss the causes from different sources and transport to deposition and post-deposition effects over differences in measurement set up.

Further we add to the array of cores already published with measurements from the newly drilled ReCAP ice core from a coastal ice cap in eastern Greenland and from a shallow core drilled at the high accumulation site at the Greenland South Dome.