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## LGM to Holocene changes in the climate variability deduced from high-resolution chemistry records of the EPICA Dronning Maud Land ice core

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The EPICA Dronning Maud Land (EDML) ice core has been drilled to the depth of 2564m so far, representing a climate record over the last 200'000 years. The mass concentrations of different chemical species  $(NH_4^+, Na^+, Ca^{2+})$  and dust particles were measured by Continuous Flow Analysis (CFA) along the whole core. The time resolution is seasonal in the Holocene and sub-annual to annual at the Last Glacial Maximum (LGM). The chemical records investigated are proxies for a variety of important climate parameters such as atmospheric transport patterns, dust and sea salt source strengths, and the marine biological productivity. The goal of the present study is to identify statistically significant changes in the periodicity and the variability in the high-resolution chemical records is examined. We focus on the transition from LGM to Holocene and compare our results with the corresponding EPICA Dome C records.