



## How fast was rapid climate change during the last glacial period?

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Glacial climate in Greenland was characterized by a series of rapid warming followed by periods of relatively mild climate, also known as Dansgaard-Oeschger events. Using high-resolution proxy data from a Greenland ice core that record climatic changes in Asia, the North Atlantic region and in Greenland, we determined the rate of change and the relative timing in those regions at the onset of a Dansgaard-Oeschger event. As all parameters used were measured on the same ice core, the relative timing of changes is known very accurately, as there is no uncertainty due to synchronizing different palaeoclimate records.

While there are discernible differences between the single Dansgaard-Oeschger events, all proxies normally show a very similar pattern of change. The timing of the changes was synchronous in all proxies within the uncertainty of the determination of the change points. This indicates a close link between atmospheric and oceanic processes and precludes a lead-lag pattern in the Northern Hemisphere.