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Is there a difference between Heinrich and non-Heinrich stadials and what we can learn from it

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While it is almost universally accepted that abrupt climate changes recorded during past glacial cycles (known as Dansgaard-Oeschger events) are related to reorganizations of the Atlantic ocean circulations, the mechanisms and causes of such reorganizations are still poorly understood. Using recent modeling results and new paleoclimate records, I will argue that observed differences in magnitude and spatial patterns of climate change between stadials, associated with Heinrich events, and non-Heinrich stadials provide strong constraints on the possible mechanisms of abrupt climate change, types of reorganizations of the Atlantic ocean circulation and the role of sea ice and other climate feedbacks in high latitudes.