



Simulating Heinrich Events in a Complex Climate Model

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The climate during the last glacial showed a much higher variability than the Holocene climate. The strongest variations were caused by Heinrich events with a recurrence interval of 7 000 yrs. They are manifested in ice rafted debris layers in North Atlantic sediment cores and in many other climate proxies. The debris stems mainly from the Laurentide Ice Sheet which experienced massive surges during the Heinrich events.

We use the modified Parallel Ice Sheet Model mPISM coupled with the Atmosphere-Ocean General Circulation Model ECHAM5/MPIOM to study Heinrich events in transient simulations. We show first results from coupled simulations and compare them with stand-alone runs.