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New insight into the Holocene environment of the Central Alps of Austria based on recent peat findings at Pasterze Glacier, Central Austria

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Knowledge regarding the regional climate and its effects on vegetation and glaciation in Central Austria during the Holocene is still far from being complete. Ongoing global warming and its effects on the cryosphere reveal previously glaciated terrain and its underlying minerogenic and biogenic sediments. During the 1990s (lesser early this century) a number of fragments of prehistoric biogenic material (pieces of *Pinus cembra*, *Larix decidua* and compressed peat) were found in the proglacial sandur of Pasterze Glacier, the largest glacier in the Eastern Alps (47˚05'N, 12˚44'E, ca. 17.5 km^2), Central Austria, and were subsequently studied. These earlier studies focused on radiocarbon and dendrochronological analyses and less on palynological investigations. After a remarkable break in peat findings for several years at this glacier, relatively large peat pieces were found in autumn 2006 and summer 2007. The temporal break in findings for several years might suggest that the new findings belong to a different sediment stratum as the ones found previously. These findings are important, both for achieving better information on the Holocene climate history of the Alps and for getting indirect indications of the areal extent of Pasterze Glacier. In this poster, preliminary results on radiocarbon dating and in particular detailed palynological investigations (both are currently in progress and brand-new results will be presented during the conference) of our recent findings in the proglacial area of the Pasterze

Glacier will be discussed in a local as well as a regional (i.e. Central Alps) context.